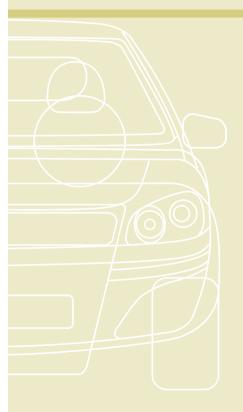
# HYUNDAI



# OWNER'S MANUAL

Operation Maintenance Specifications

All information in this Owner's Manual is current at the time of publication. However, Hyundai reserves the right to make changes at any time so that our policy of continual product improvement may be carried out.

This manual applies to all Hyundai models and includes descriptions and explanations of optional as well as standard equipment. As a result, you may find material in this manual that does not apply to your specific vehicle.

Please note that some models are equipped with Right-Hand Drive (RHD). The explanations and illustrations for some operations in RHD models are opposite of those written in this manual.

#### **CAUTION: MODIFICATIONS TO YOUR HYUNDAI**

Your Hyundai should not be modified in any way. Such modifications may adversely affect the performance, safety or durability of your Hyundai and may, in addition, violate conditions of the limited warranties covering the vehicle. Certain modifications may also be in violation of regulations established by the Department of Transportation and other government agencies in your country.

#### TWO-WAY RADIO OR CELLULAR TELEPHONE INSTALLATION

Your vehicle is equipped with electronic fuel injection and other electronic components. It is possible for an improperly installed/adjusted two-way radio or cellular telephone to adversely affect electronic systems. For this reason, we recommend that you carefully follow the radio manufacturer's instructions or consult your Hyundai dealer for precautionary measures or special instructions if you choose to install one of these devices.

## SAFETY AND VEHICLE DAMAGE WARNING

This manual includes information titled as WARNING, CAUTION and NOTICE.

These titles indicate the following:

# **WARNING**

This indicates that a condition may result in harm, serious injury or death to you or other persons if the warning is not heeded. Follow the advice provided with the warning.

# **!** CAUTION

This indicates that a condition may result in damage to your vehicle or its equipment if the caution is not heeded. Follow the advice provided with the caution.

# \* NOTICE

This indicates that interesting or helpful information is being provided.

#### **FOREWORD**

Thank you for choosing Hyundai. We are pleased to welcome you to the growing number of discriminating people who drive Hyundais. The advanced engineering and high-quality construction of each Hyundai we build is something of which we're very proud.

Your Owner's Manual will introduce you to the features and operation of your new Hyundai. It is suggested that you read it carefully because the information it contains can contribute greatly to the satisfaction you receive from your new car.

The manufacturer also recommends that service and maintenance on your vehicle be performed by an authorized Hyundai dealer.

#### HYUNDAI MOTOR MANUFACTURING CZECH S.R.O.

Note: Because future owners will also need the information included in this manual, if you sell this Hyundai, please leave the manual in the vehicle for their use. Thank you.



# ∴ CAUTION

Severe engine and transaxle damage may result from the use of poor quality fuels and lubricants that do not meet Hyundai specifications. You must always use high quality fuels and lubricants that meet the specifications listed on Page 8-6 in the Vehicle Specifications section of the Owner's Manual.

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# Introduction

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## **HOW TO USE THIS MANUAL**

We want to help you get the greatest possible driving pleasure from your vehicle. Your Owner's Manual can assist you in many ways. We strongly recommend that you read the entire manual. In order to minimize the chance of death or injury, you must read the WARNING and CAUTION sections in the manual.

Illustrations complement the words in this manual to best explain how to enjoy your vehicle. By reading your manual, you will learn about features, important safety information, and driving tips under various road conditions.

The general layout of the manual is provided in the Table of Contents. Use the index when looking for a specific area or subject; it has an alphabetical listing of all information in your manual.

Sections: This manual has eight sections plus an index. Each section begins with a brief list of contents so you can tell at a glance if that section has the information you want.

You will find various WARNINGS, CAUTIONS, and NOTICES in this manual. These were prepared to enhance your personal safety. You should carefully read and follow ALL procedures and recommendations provided in these WARNINGS, CAUTIONS and NOTICES.

# **A** WARNING

A WARNING indicates a situation in which harm, serious bodily injury or death could result if the warning is ignored.

# **A** CAUTION

A CAUTION indicates a situation in which damage to your vehicle could result if the caution is ignored.

# \* NOTICE

A NOTICE indicates interesting or helpful information is being provided.

## **FUEL REQUIREMENTS**

# Gasoline engine

Unleaded

# For Europe

For the optimal vehicle performance, we recommend you to use unleaded gasoline which complies with EN 228 and has an octane rating of RON (Research Octane Number) 95 / AKI (Anti Knock Index) 91 or higher. You may use unleaded gasoline with an octane rating of RON 91-94 / AKI 87-90 but it may result in slight performance reduction of the vehicle.

#### **Except Europe**

Your new vehicle is designed to use only unleaded fuel having an Octane Rating of RON (Research Octane Number) 91 / AKI (Anti-Knock Index) 87 or higher.

Your new vehicle is designed to obtain maximum performance with UNLEADED FUEL, as well as minimize exhaust emissions and spark plug fouling.

## /!\ CAUTION

NEVER USE LEADED FUEL. The use of leaded fuel is detrimental to the catalytic converter and will damage the engine control system's oxygen sensor and affect emission control.

Never add any fuel system cleaning agents to the fuel tank other than what has been specified. We recommend that the system be checked by an authorized HYUNDAI dealer.

# **WARNING**

- Do not "top off" after the nozzle automatically shuts off when refueling.
- Always check that the fuel cap is installed securely to prevent fuel spillage in the event of an accident.

#### Gasoline containing alcohol and methanol

Gasohol, a mixture of gasoline and ethanol (also known as grain alcohol), and gasoline or gasohol containing methanol (also known as wood alcohol) are being marketed along with or instead of leaded or unleaded gasoline.

Do not use gasohol containing more than 10% ethanol, and do not use gasoline or gasohol containing any methanol. Either of these fuels may cause drivability problems and damage to the fuel system.

Discontinue using gasohol of any kind if drivability problems occur.

Vehicle damage or driveability problems may not be covered by the manufacturer's warranty if they result from the use of.

- 1. Gasohol containing more than 10% ethanol.
- 2. Gasoline or gasohol containing methanol.
- 3. Leaded fuel or leaded gasohol.

# A CAUTION

Never use gasohol which contains methanol. Discontinue use of any gasohol product which impairs drivability.

#### Use of MTRF

HYUNDAI recommends avoiding fuels containing MTBE (Methyl Tertiary Butyl Ether) over 15.0% vol. (Oxygen Content 2.7% weight) in your vehicle.

Fuel containing MTBE over 15.0% vol. (Oxygen Content 2.7% weight) may reduce vehicle performance and produce vapor lock or hard starting.



# ∴ CAUTION

Your New Vehicle Limited Warranty may not cover damage to the fuel system and any performance problems that are caused by the use of fuels containing methanol or fuels containing MTBE (Methyl Tertiary Butyl Ether) over 15.0% vol. (Oxygen Content 2.7% weight.)

#### Do not use methanol

Fuels containing methanol (wood alcohol) should not be used in your vehicle. This type of fuel can reduce vehicle performance and damage components of the fuel system.

#### Fuel Additives

HYUNDAI recommends that you use good quality gasolines meet Europe Fuel standards (EN228) or equivalents.

For customers who do not use good quality gasolines including fuel additives regularly, and have problems starting or the engine does not run smoothly, one bottle of additives added to the fuel tank at every 15,000km (for Europe)/ 5,000km (except Europe). Additives are available from your authorized HYUNDAI dealer along with information on how to use them. Do not mix other additives.

# Operation in foreign countries

If you are going to drive your vehicle in another country, be sure to:

- Observe all regulations regarding registration and insurance.
- Determine that acceptable fuel is available.

# **Diesel engine**

#### Diesel fuel

Diesel engine must be operated only on commercially available diesel fuel that complies with EN 590 or comparable standard. (EN stands for "European Norm"). Do not use marine diesel fuel, heating oils, or non-approved fuel additives, as this will increase wear and cause damage to the engine and fuel system. The use of non-approved fuels and / or fuel additives will result in a limitation of your warranty rights.

Diesel fuel of above cetane 51 is used in your vehicle. If two types of diesel fuel are available, use summer or winter fuel properly according to the following temperature conditions.

- Above -5°C (23°F) ... Summer type diesel fuel.
- Below -5°C (23°F) ... Winter type diesel fuel.

Watch the fuel level in the tank very carefully: If the engine stops through fuel failure, the circuits must be completely purged to permit restarting.

# !\ CAUTION

Do not let any gasoline or water enter the tank. This would make it necessary to drain it out and to bleed the lines to avoid iamming the injection pump and damaging the enaine.

# ! CAUTION - Diesel Fuel (if equipped with DPF)

It is recommended to use the reaulated automotive diesel fuel for diesel vehicle equipped with the DPF system.

If you use diesel fuel including high sulfur (more than 50 ppm sulfur) and unspecified additives, it can cause the DPF system to be damaged and white smoke can be emitted.

#### **Biodiesel**

Commercially supplied Diesel blends of no more than 7% biodiesel, commonly known as "B7 Diesel" may be used in vour vehicle if Biodiesel meets EN 14214 or equivalent specifications. (EN stands for "European Norm"). The use of biofuels exceeding 7% made from rapeseed methyl ester (RME), fatty acid methyl ester (FAME), vegetable oil methyl ester (VME) etc. or mixing diesel exceeding 7% with biodiesel will cause increased wear or damage to the engine and fuel system. Repair or replacement of worn or damaged components due to the use of non approved fuels will not be covered by the manufactures warranty.

# ∴ CAUTION

- Never use any fuel, whether diesel, B7 biodiesel or otherwise, that fails to meet the latest petroleum industry specification.
- · Never use any fuel additives or treatments that are not recommended or approved by the vehicle manufacturer.

# **VEHICLE BREAK-IN PROCESS**

No special break-in period is needed. By following a few simple precautions for the first 1,000 km (600 miles) you may add to the performance, economy and life of vour vehicle.

- . Do not race the engine.
- While driving, keep your engine speed (rpm. or revolutions per minute) between 2.000 rpm and 4.000 rpm.
- Do not maintain a single speed for long periods of time, either fast or slow. Varving engine speed is needed to properly break-in the engine.
- · Avoid hard stops, except in emergencies, to allow the brakes to seat properlv.
- Don't let the engine idle longer than 3 minutes at one time.
- Don't tow a trailer during the first 2,000 km (1,200 miles) of operation.

# INDICATOR SYMBOLS ON THE INSTRUMENT CLUSTER



Seat belt warning light



Air bag warning light



Immobilizer indicator



Door ajar warning light



Tailgate open warning light



Low fuel level warning light



Electronic power steering (EPS) system warning light



Turn signal indicator



Light on indicator



Low beam indicator\*



High beam indicator



Adaptive Front Lighting System (AFLS) malfunction indicator\*



Front fog light indicator\*



Rear fog light indicator\*



Icy road warning light\*



Parking brake & Brake fluid warning light



Electric parking brake (EPB) malfunction indicator



ABS warning light



Electronic stability control (ESC) indicator



Electronic stability control (ESC) OFF indicator



Cruise control indicator\*



Cruise SET indicator\*



Auto stop for ISG system indicator\*



Low tire pressure telltale\*/
TPMS malfunction indicator\*



Engine oil pressure warning light



Engine oil level warning light\*



CO Active ECO indicator\*



Malfunction indicator



Engine coolant temperature warning light



Glow indicator (Diesel only)



Fuel filter warning light (Diesel only)



Charging system warning light

\*: if equipped

★ For more detailed explanations, refer to section 4, "Instrument cluster". Exterior overview (front) / 2-2 Exterior overview (rear) / 2-3 Interior overview / 2-4 Instrument panel overview / 2-5 Engine compartment / 2-6

# **EXTERIOR OVERVIEW (FRONT)**



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 $\ensuremath{\mbox{\#}}$  The actual shape may differ from the illustration.

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# **EXTERIOR OVERVIEW (REAR)**

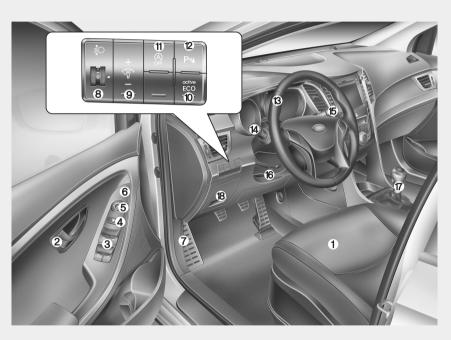


1. Roof antenna	4-140
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\* The actual shape may differ from the illustration.

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17. Manual transaxle shift lever/
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\* The actual shape may differ from the illustration.

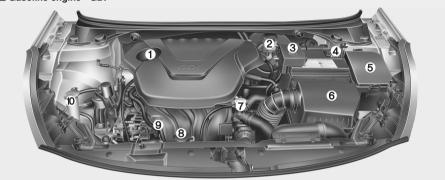
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# **INSTRUMENT PANEL OVERVIEW**



# **ENGINE COMPARTMENT**

■ Gasoline engine - GDI



■ Gasoline engine - MPI

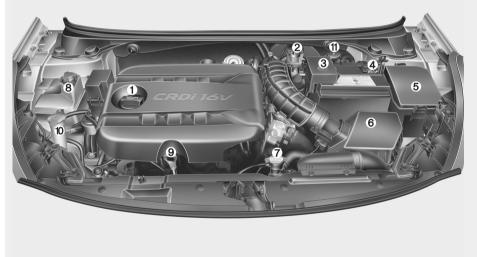


★ The actual engine room in the vehicle may differ from the illustration.

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8. Engine coolant reservoir	.7-38
9. Engine oil dipstick	.7-35
10. Windshield washer fluid reservoir	.7-41

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# ■ Diesel engine



1. Engine oil filler cap	7-35
2. Brake/clutch fluid reservoir	7-40
3. Positive battery terminal	7-50
4. Negative battery terminal	7-50
5. Fuse box	7-63
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★ The actual engine room in the vehicle may differ from the illustration.

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# Safety features of your vehicle

## Seat / 3-2 /

- Front seat / 3-5
- Rear seat / 3-11

#### Seat belt / 3-16

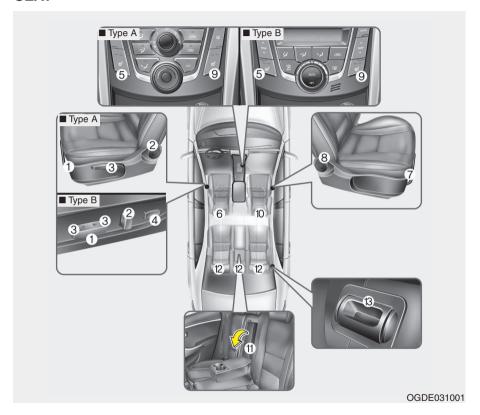
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# **SEAT**



## Driver's seat

- (1) Seat adjustment, forward/backward
- (2) Seatback recliner
- (3) Seat adjustment, height
- (4) Lumber support\*
- (5) Seat warmer\*
- (6) Headrest adjustment

# Front passenger seat

- (7) Seat adjustment, forward/backward
- (8) Seatback recliner
- (9) Seat warmer\*
- (10) Headrest adjustment

## Rear seat

- (11) Armrest\*
- (12) Headrest adjustment
- (13) Split folding rear seat
- \* if equipped

WARNING - Loose objects
Loose objects in the driver's foot
area could interfere with the operation of the foot pedals, possibly
causing an accident. Do not place
anything under the front seats.

# WARNING - Driver responsibility for front seat passenger

Riding in a vehicle with a front seatback reclined could lead to serious or fatal injury in an accident. If a front seat is reclined during an accident, the occupant's hips may slide under the lap portion of the seat belt applying great force to the unprotected abdomen. Serious or fatal internal injuries could result. The driver must advise the front passenger to keep the seatback in an upright position whenever the vehicle is in motion.

# **A WARNING**

Do not use a sitting cushion that reduces friction between the seat and passenger. The passenger's hips may slide under the lap portion of the seat belt during an accident or a sudden stop. Serious or fatal internal injuries could result because the seat belt can't operate normally.

# A WARNING - Driver's seat

- Never attempt to adjust seat while the vehicle is moving. This could result in loss of control, and an accident causing death, serious injury, or property damage.
- Do not allow anything to interfere with the normal position of the seatback. Storing items against a seatback or in any other way interfering with proper locking of a seatback could result in serious or fatal injury in a sudden stop or collision.
- Always drive and ride with your seatback upright and the lap portion of the seat belt snug and low across the hips. This is the best position to protect you in case of an accident.
- In order to avoid unnecessary and perhaps severe air bag injuries, always sit as far back as possible from the steering wheel while maintaining comfortable control of the vehicle. It is recommended that your chest is at least 250 mm (10 inches) away from the steering wheel.

# MARNING - Rear seatbacks

- The rear seatback must be securely latched. If not, passengers and objects could be thrown forward resulting in serious injury or death in the event of a sudden stop or collision.
- Luggage and other cargo should be laid flat in the cargo area. If objects are large, heavy, or must be piled, they must be secured. Under no circumstances should cargo be piled higher than the seatbacks. Failure to follow these warnings could result in serious injury or death in the event of a sudden stop, collision or rollover.
- No passenger should ride in the cargo area or sit or lie on folded seatbacks while the vehicle is moving. All passengers must be properly seated in seats and restrained properly while riding.

(Continued)

# (Continued)

 When resetting the seatback to the upright position, make sure it is securely latched by pushing it forward and backwards.

# **A** WARNING

After adjusting the seat, always check that it is securely locked into place by attempting to move the seat forward or backward without using the lock release lever. Sudden or unexpected movement of the driver's seat could cause you to lose control of the vehicle resulting in an accident.

# **A** WARNING

- Use extreme caution so that hands or other objects are not caught in the seat mechanisms while the seat is moving.
- Do not put a cigarette lighter on the floor or seat. When you operate the seat, gas may gush out of the lighter and cause fire.



# Front seat

# Manual adjustment

# Forward and backward

To move the seat forward or backward:

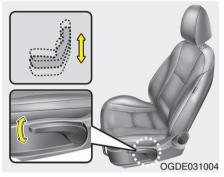
- Pull the seat slide adjustment lever up and hold it.
- 2. Slide the seat to the position you desire.
- 3. Release the lever and make sure the seat is locked in place.

Adjust the seat before driving, and make sure the seat is locked securely by trying to move forward and backward without using the lever. If the seat moves, it is not locked properly.



# Seatback angle

Turn the control knob forward or rearward to move the seatback to the desired angle.



# Seat cushion height (if equipped)

To change the height of the seat cushion, push the lever upwards or downwards.

- To lower the seat cushion, push down the lever several times.
- To raise the seat cushion, pull up the lever several times.

# Automatic adjustment (if equipped)

The driver's seat can be adjusted by using the control switches located on the outside of the seat cushion. Before driving, adjust the seat to the proper position so as to easily control the steering wheel, pedals and switches on the instrument panel.



# **WARNING**

The power seat is operable with the ignition OFF.

Therefore, children should never be left unattended in the car.

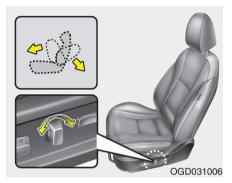
# A CAUTION

- The power seat is driven by an electric motor. Stop operating once the adjustment is completed. Excessive operation may damage the electrical equipment.
- When in operation, the power seat consumes a large amount of electrical power. To prevent unnecessary charging system drain, don't adjust the power seat longer than necessary while the engine is not running.
- Do not operate two or more power seat control switches at the same time. Doing so may result in power seat motor or electrical component malfunction.



#### Forward and rearward

- 1. Push the control switch forward or rearward to move the seat to the desired position.
- 2. Release the switch once the seat reaches the desired position.



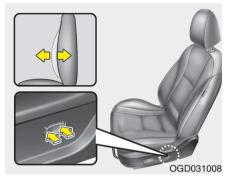
# Seatback angle

- Push the control switch forward or rearward to move the seatback to the desired angle.
- 2. Release the switch once the seat reaches the desired position.



# Seat cushion height (if equipped)

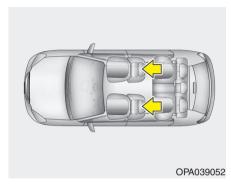
- Pull the front portion of the control switch up to raise or down to lower the front part of the seat cushion. Pull the rear portion of the control switch up to raise or down to lower the rear part of the seat cushion.
- 2. Release the switch once the seat reaches the desired position.



# **Lumbar support (if equipped)**

The lumbar support can be adjusted by pressing the lumbar support switch on the side of the seat.

- Press the front portion of the switch to increase support, or the rear portion of the switch, to decrease support.
- 2. Release the switch once it reaches the desired position.



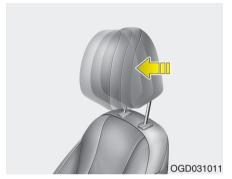
# Headrest

The driver's and front passenger's seats are equipped with a headrest for the occupant's safety and comfort.

The headrest not only provides comfort for the driver and front passenger, but also helps protect the head and neck in the event of a collision.

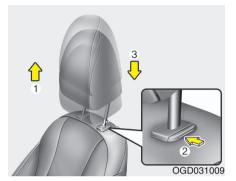
# **WARNING**

- For maximum effectiveness in case of an accident, the headrest should be adjusted so the middle of the headrest is at the same height of the center of gravity of an occupant's head. Generally, the center of gravity of most people's head is similar with the height of the top of their eyes. Also, adjust the headrest as close to your head as possible. For this reason, the use of a cushion that holds the body away from the seatback is not recommended.
- Do not operate the vehicle with the headrests removed as severe injury to the occupants may occur in the event of an accident. Headrests may provide protection against neck injuries when properly adjusted.
- Do not adjust the headrest position of the driver's seat while the vehicle is in motion.



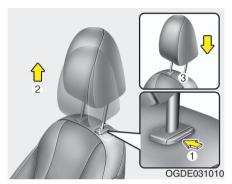
# Forward and rearward adjustment (if equipped)

The headrest may be adjusted forward to 4 different positions by pulling the headrest forward to the desired detent. To adjust the headrest to it's furthest rearwards position, pull it fully forward to the farthest position and release it. Adjust the headrest so that it properly supports the head and neck.



# Adjusting the height up and down

To raise the headrest, pull it up to the desired position (1). To lower the headrest, push and hold the release button (2) on the headrest support and lower the headrest to the desired position (3).



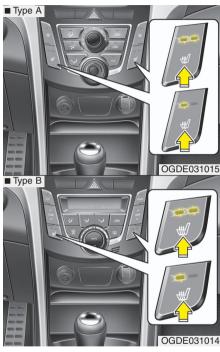
# Removal and installation

To remove the headrest, raise it as far as it can go then press the release button (1) while pulling upward (2).

To reinstall the headrest, put the headrest poles (3) into the holes while pressing the release button (1). Then adjust it to the appropriate height.

# **A** WARNING

Make sure the headrest locks in position after adjusting it to properly protect the occupants.



Seat warmer (if equipped)

The seat warmer is provided to warm the front seats during cold weather. With the ignition switch in the ON position, push either of the switches to warm the driver's seat or the front passenger's seat.

During mild weather or under conditions where the operation of the seat warmer is not needed, keep the switches in the "OFF" position.

 Each time you press the switch, the temperature setting of the seat will change as follows:



 The seat warmer defaults to the OFF position whenever the ignition switch is turned on.

# \* NOTICE

With the seat warmer switch in ON position, the heating system in the seat turns off or on automatically depending on the seat temperature.

# **⚠** CAUTION - Seat damage

- When cleaning the seats, do not use an organic solvent such as paint thinner, benzene, alcohol and gasoline. Doing so may damage the surface of the heater or seats.
- To prevent overheating the seat warmer, do not place anything on the seats that insulates against heat, such as blankets, cushions or seat covers on the seats while the seat warmer is in operation.
- Do not place heavy or sharp objects on seats equipped with seat warmers. Damage to the seat warming components could occur.

# WARNING - Seat warmer burns

Passengers should use extreme caution when using seat warmers due to the possibility of excess heating or burns. The occupants must be able to feel if the seat is becoming too warm and to turn the seat warmer off. The seat warmer may cause burns even at low temperatures, especially if used for long periods of time.

In particular, the driver must exercise extreme care for the following types of passengers:

- 1. Infants, children, elderly or disabled persons, or hospital outpatients
- 2. Persons with sensitive skin or those that burn easily
- 3. Fatiqued individuals
- 4. Intoxicated individuals
- 5. Individuals taking medication that can cause drowsiness or sleepiness (sleeping pills, cold tablets, etc.)

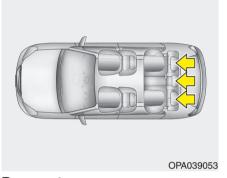


# Seatback pocket

The seatback pocket is provided on the back of the front passenger's and driver's seatbacks.

# A WARNING - Seatback pockets

Do not put heavy or sharp objects in the seatback pockets. In an accident they could come loose from the pocket and injure vehicle occupants.



# Rear seat

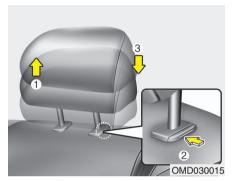
#### Headrest

The rear seat is equipped with headrests in all the seating positions for the occupant's safety and comfort.

The headrest not only provides comfort for passengers, but also helps protect the head and neck in the event of a collision.

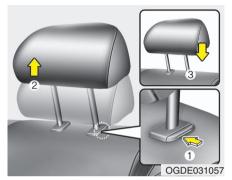
# **WARNING**

- For maximum effectiveness in case of an accident, the headrest should be adjusted so the middle of the headrest is at the same height of the center of gravity of an occupant's head. Generally, the center of gravity of most people's head is similar with the height of the top of their eyes. Also adjust the headrest as close to your head as possible. For this reason, the use of a cushion that holds the body away from the seatback is not recommended.
- Do not operate the vehicle with the headrests removed. Severe injury to an occupant may occur in the event of an accident. Headrests may provide protection against severe neck injuries when properly adjusted.



# Adjusting the height up and down

To raise the headrest, pull it up to the desired position (1). To lower the headrest, push and hold the release button (2) on the headrest support and lower the headrest to the desired position (3).



# Removal and installation

To remove the headrest, raise it as far as it can go then press the release button (1) while pulling the headrest up (2).

To reinstall the headrest, put the headrest poles (3) into the holes while pressing the release button (1). Then adjust it to the appropriate height.



Make sure the headrest locks in position after adjusting it to properly protect the occupants.



Armrest (if equipped)

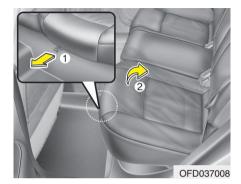
To use the armrest, pull it forward from the seatback.

# Folding the rear seat

The rear seatbacks (or cushions) may be folded to facilitate carrying long items or to increase the luggage capacity of the vehicle.

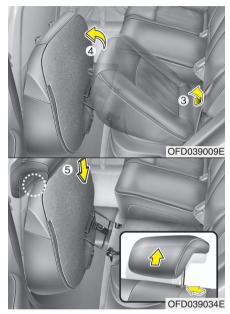
# A WARNING

The purpose of the fold-down rear seatbacks (or cushions) is to allow you to carry longer objects than could otherwise be accommodated. Never allow passengers to sit on top of the folded down seatback while the car is moving as this is not a proper seating position and no seat belts are available for use. This could result in serious injury or death in case of an accident or sudden stop. Objects carried on the folded down seatback should not extend higher than the top of the front seats. This could allow cargo to slide forward and cause injury or damage during sudden stops.

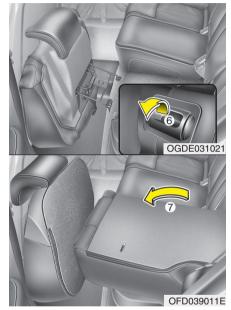


# To fold the rear seat cushion and back

- Set the front seatback to the upright position and if necessary, slide the front seat forward.
- 2. Pull the cushion folding strap (1) and lift the front portion of the seat cushion.

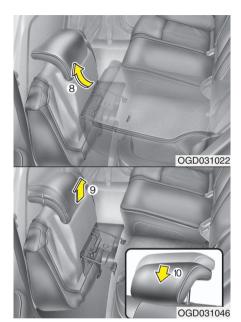


- Lift the rear portion of the seat cushion. Stand the rear seat cushion vertically.
- 4. Remove the headrest from the rear seatback.
- Stow the headrest by inserting the headrest poles into the holder on the bottom of the seat cushion.

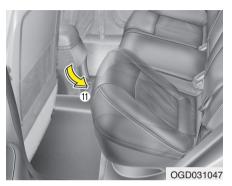


6. Pull the lock release lever (red visible).

Fold the rear seatback forward and down firmly.



- 8. To use the rear seat, lift and push the seatback backward firmly until it clicks into place. Make sure the seatback is locked in place (red invisible).
- Reposition the headrest on the seatback and adjust it to the desired position.



- 10. Return the seat cushion to the original position by pushing down the rear side of the seat cushion first. Make sure the seat cushion is locked in place.
- 11. Return the rear seat belt to the proper position.

# **A** WARNING

When you return the rear seatback to its upright position after being folded down:

Be careful not to damage the seat belt webbing or buckle. Do not allow the seat belt webbing or buckle to get caught or pinched in the rear seat. Ensure that the seat-back is completely locked into its upright position by pushing on the top of the seatback. Otherwise, in an accident or sudden stop, the seat could fold down and allow cargo to enter the passenger compartment, which could result in serious injury or death.

**CAUTION** - Rear seat belts When returning the rear seatbacks to the upright position, remember to return the rear shoulder belts to their proper position.

# **A** WARNING - Cargo

Cargo should always be secured to prevent it from being thrown about the vehicle in a collision and causing injury to the vehicle occupants. Special care should be taken of objects placed in the rear seats, since those may hit the front seat occupants in a frontal collision.

WARNING - Cargo loading Make sure the engine is off, the automatic transaxle is in P (Park) or the manual transaxle is in R (Reverse) or 1st, and the parking brake is securely applied whenever loading or unloading cargo. Failure to take these steps may allow the vehicle to move if the shift lever is inadvertently moved to another position.

## **SEAT BELTS**

# Seat belt restraint system

# **WARNING**

- For maximum restraint system protection, the seat belts must always be used whenever the car is moving.
- Seat belts are most effective when seatbacks are in the upright position.
- Children age 12 and younger must always be properly restrained in the rear seat. Never allow children to ride in the front passenger seat. If a child over 12 must be seated in the front seat, he/she must be properly belted and the seat should be moved as far back as possible.
- Never wear the shoulder belt under your arm or behind your back. An improperly positioned shoulder belt can cause serious injuries in a crash. The shoulder belt should be positioned midway over your shoulder across your collarbone.

(Continued)

# (Continued)

- Avoid wearing twisted seat belts.
   A twisted belt can't do its job as well. In a collision, it could even cut into you. Be sure the belt webbing is straight and not twisted.
- Be careful not to damage the belt webbing or hardware. If the belt webbing or hardware is damaged, replace it.

# **A WARNING**

Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.

Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.

(Continued)

# (Continued)

Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid.

Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged. It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious. Belts should not be worn with straps twisted. Each belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.

# **A** WARNING

- No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.
- When you fasten the seat belt, be careful not to latch the seat belt in buckles of other seat. It's very dangerous and you may not be protected by the seat belt properly.
- Do not unfasten the seat belt and do not fasten and unfasten the seat belt repeatedly while driving. This could result in loss of control, and an accident causing death, serious injury, or property damage.
- When fastening the seat belt, make sure that the seat belt does not pass over objects that are hard or can break easily.
- Make sure there is nothing in the buckle. The seat belt may not be fastened securely.



Seat belt warning

# **Driver's seat belt warning (1)**

As a reminder to the driver, the seat belt warning light will illuminate for approximately 6 seconds each time you turn the ignition switch ON regardless of belt fastening.

If the driver's seat belt is unfastened after the ignition switch is ON, the seat belt warning light illuminates until the belt is fastened. If you continue not to fasten the seat belt and you drive over 9km/h, the illuminated warning light will start to blink until you drive under 6km/h. (if equipped)

If you continue not to fasten the seat belt and you drive over 20km/h the seat belt warning chime will sound for approximately 100 seconds and the corresponding warning light will blink. (if equipped)



# Front passenger's seat belt warning (2)

As a reminder to the front passenger, the front passenger's seat belt warning lights will illuminate for approximately 6 seconds each time you turn the ignition switch ON regardless of belt fastening.

If the front passenger's seat belt is not fastened when the ignition switch is turned ON or if it is disconnected after the ignition switch is turned ON, the corresponding seat belt warning light will illuminate until the belt is fastened.

If you continue not to fasten the seat belt and you drive over 9km/h, the illuminated warning light will start to blink until you drive under 6km/h.

If you continue not to fasten the seat belt and you drive over 20km/h the seat belt warning chime will sound for approximately 100 seconds and the corresponding warning light will blink.

# \* NOTICE

- You can find the front passenger's seat belt warning light on the center fascia panel.
- Although the front passenger seat is not occupied, the seat belt warning light will blink or illuminate for 6 seconds.
- The front passenger's seat belt warning may operate when luggage is placed on the front passenger seat.



Rear passenger's seat belt warning (3,4,5) If the ignition switch is turned ON(engine is not running) when the rear passenger's lap/shoulder belt is not fastened, the corresponding seat belt warning light will illuminate until the belt is fastened.

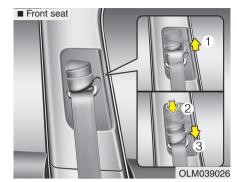
And then, the rear corresponding seat belt warning light will illuminate for approximately 35 seconds, if any of following occurs;

- You start the engine when the rear belt is not fastened.
- You drive over 9km/h when the rear belt is not fastened.
- The rear belt is disconnected when driving under 20km/h.

If the rear seat belt is fastened, the warning light will turn off immediately.

If the rear seat belt is disconnected when you drive over the 20km/h, the corresponding seat belt warning light will blink and warning chime will sound for 35 seconds.

But, if the rear passenger's lap/shoulder belt is/are connected and disconnected twice within 9 seconds after the belt is fastened, the corresponding seat belt warning light will not operate.



Lap/shoulder belt

#### Height adjustment

You can adjust the height of the shoulder belt anchor to one of 4 positions for maximum comfort and safety.

The height of the adjusting seat belt should not be too close to your neck. You will not be getting the most effective protection. The shoulder portion should be adjusted so that it lies across your chest and midway over your shoulder near the door and not your neck.

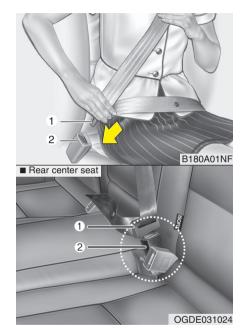
To adjust the height of the seat belt anchor, lower or raise the height adjuster into an appropriate position.

To raise the height adjuster, pull it up (1). To lower it, push it down (3) while pressing the height adjuster button (2).

Release the button to lock the anchor into position. Try sliding the height adjuster to make sure that it has locked into position.

# **WARNING**

- Verify the shoulder belt anchor is locked into position at the appropriate height. Never position the shoulder belt across your neck or face. Improperly positioned seat belts can cause serious injuries in an accident.
- Failure to replace seat belts after an accident could leave you with damaged seat belts that will not provide protection in the event of another collision leading to personal injury or death. Replace your seat belts after being in an accident as soon as possible.



To fasten your seat belt:

To fasten your seat belt, pull it out of the retractor and insert the metal tab (1) into the buckle (2). There will be an audible "click" when the tab locks into the buckle.

The seat belt automatically adjusts to the proper length only after the lap belt portion is adjusted manually so that it fits snugly around your hips. If you lean forward in a slow, easy motion, the belt will extend and let you move around. If there is a sudden stop or impact, however, the belt will lock into position. It will also lock if you try to lean forward too quickly.

# **!** CAUTION

When using the rear center seat belt, the buckle with the "CENTER" mark must be used.

#### \* NOTICE

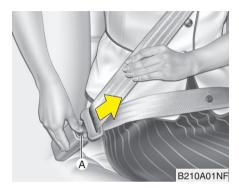
If you are not able to pull out the seat belt from the retractor, firmly pull the belt out and release it. Then you will be able to pull the belt out smoothly.



# **A** WARNING

You should place the lap belt portion as low as possible and snugly across your hips, not on your waist. If the lap belt is located too high on your waist, it may increase the chance of injury in the event of a collision. Both arms should not be under or over the belt. Rather, one should be over and the other under, as shown in the illustration.

Never wear the seat belt under the arm near the door.



#### To release the seat belt:

The seat belt is released by pressing the release button (A) in the locking buckle. When it is released, the belt should automatically draw back into the retractor. If this does not happen, check the belt to be sure it is not twisted, then try again.



#### Pre-tensioner seat belt

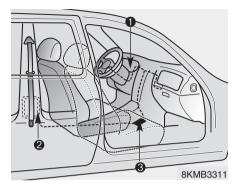
Your vehicle is equipped with driver's and front passenger's pre-tensioner seat belts. The purpose of the pre-tensioner is to make sure that the seat belts fit tightly against the occupant's body in certain frontal collisions. The pre-tensioner seat belts may be activated in crashes where the frontal collision is severe enough.

When the vehicle stops suddenly, or if the occupant tries to lean forward too quickly, the seat belt retractor will lock into position. In certain frontal collisions, the pre-tensioner will activate and pull the seat belt into tighter contact against the occupant's body.

If the system senses excessive seat belt tension on the driver or passenger's seat belt when the pre-tensioner activates, the load limiter inside the pre-tensioner will release some of the pressure on the affected seat belt.

# **A** WARNING

For your safety, be sure that the belt webbing is not loose or twisted and always sit properly on your seat.



The seat belt pre-tensioner system consists mainly of the following components. Their locations are shown in the illustration:

- 1. SRS air bag warning light
- 2. Retractor pre-tensioner assembly
- 3. SRS control module

# **WARNING**

To obtain maximum benefit from a pre-tensioner seat belt:

- 1. The seat belt must be worn correctly and adjusted to the proper position. Please read and follow all of the important information and precautions about your vehicle's occupant safety features including seat belts and air bags that are provided in this manual.
- 2. Be sure you and your passengers always wear seat belts properly.

#### \* NOTICE

- When the pre-tensioner seat belts are activated, a loud noise may be heard and fine dust, which may appear to be smoke, may be visible in the passenger compartment. These are normal operating conditions and are not hazardous.
- Although it is harmless, the fine dust may cause skin irritation and should not be breathed for prolonged periods. Wash all exposed skin areas thoroughly after an accident in which the pre-tensioner seat belts were activated.
- Because the sensor that activates the SRS air bag is connected with the pretensioner seat belt, the SRS air bag warning light on the instrument panel will illuminate for approximately 6 seconds after the ignition switch has been turned to the ON position, and then it should turn off.

#### **!** CAUTION

If the pre-tensioner seat belt is not working properly, the SRS air bag warning light will illuminate even if there is no malfunction of the SRS air bag. If the SRS air bag warning light does not illuminate when the ignition kev is turned to ON. or if it remains illuminated after illuminating for approximately 6 seconds, or if it illuminates while the vehicle is being driven, we recommend that the system be inspected by an authorized HYUNDAI dealer.

# **WARNING**

 Pre-tensioners are designed to operate only one time. After activation, pre-tensioner seat belts must be replaced. All seat belts, of any type, should always be replaced after they have been worn during a collision.

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#### (Continued)

- The pre-tensioner seat belt assembly mechanisms become hot during activation. Do not touch the pre-tensioner seat belt assemblies for several minutes after they have been activated.
- Do not attempt to inspect or replace the pre-tensioner seat belts vourself. We recommend that the system be inspected by an authorized HYUNDAI dealer.
- Do not attempt to service or repair the pre-tensioner seat belt system in any manner.
- Improper handling of the pre-tensioner seat belt assemblies, and failure to heed the warnings not to strike, modify, inspect, replace, service or repair the pre-tensioner seat belt assemblies may lead to improper operation or inadvertent activation and serious injury.
- Always wear the seat belts when driving or riding in a motor vehicle.
- If the vehicle or pre-tensioner seat belt must be discarded, we recommend that you contact an authorized HYUNDAI dealer.

#### Seat belt precautions

#### **WARNING**

All occupants of the vehicle must wear their seat belts at all times. Seat belts and child restraints reduce the risk of serious or fatal injuries for all occupants in the event of a collision or sudden stop. Without a seat belt, occupants could be shifted too close to a deploying air bag, strike the interior structure or be thrown from the vehicle. Properly worn seat belts greatly reduce these hazards.

Always follow the precautions about seat belts, air bags and occupant seat contained in this manual.

#### Infant or small child

You should be aware of the specific requirements in your country. Child and/or infant seats must be properly placed and installed in the rear seat. For more information about the use of these restraints, refer to "Child restraint system" in this section.

# **A** WARNING

Every person in your vehicle needs to be properly restrained at all times, including infants and children. Never hold a child in your arms or lap when riding in a vehicle. The violent forces created during a crash will tear the child from your arms and throw the child against the interior. Always use a child restraint appropriate for your child's height and weight.

#### \* NOTICE

Small children are best protected from injury in an accident when properly restrained in the rear seat by a child restraint system that meets the requirements of the Safety Standards of your country. Before buying any child restraint system, make sure that it has a label certifying that it meets Safety Standards of your country. The restraint must be appropriate for your child's height and weight. Check the label on the child restraint for this information. Refer to "Child restraint system" in this section.

#### Larger children

Children who are too large for child restraint systems should always occupy the rear seat and use the available lap/shoulder belts. The lap portion should be fastened and snugged on the hips and as low as possible. Check if the belt fits periodically. A child's squirming could put the belt out of position. Children are afforded the most safety in the event of an accident when they are restrained by a proper restraint system in the rear seat. If a larger child (over age 12) must be seated in the front seat, the child should be securely restrained by the available lap/shoulder belt and the seat should be placed in the rearmost position. Children age 12 and under should be restrained securely in the rear seat. NEVER place a child age 12 and under in the front seat. NEVER place a rear facing child seat in the front seat of a vehicle.

If the shoulder belt portion slightly touches the child's neck or face, try placing the child closer to the center of the vehicle. If the shoulder belt still touches their face or neck they need to be returned to a child restraint system.

# WARNING - Shoulder belts on small children

- Never allow a shoulder belt to be in contact with a child's neck or face while the vehicle is in motion.
- If seat belts are not properly worn and adjusted on children, there is a risk of death or serious injury.

#### Pregnant women

The use of a seat belt is recommended for pregnant women to lessen the chance of injury in an accident. When a seat belt is used, the lap belt portion should be placed as low and snugly as possible on the hips, not across the abdomen. For specific recommendations, consult a physician.

# WARNING - Pregnant women

Pregnant women must never place the lap portion of the safety belt over the area of the abdomen where the fetus is located or above the abdomen where the belt could crush the fetus during an impact.

#### Injured person

A seat belt should be used when an injured person is being transported. When this is necessary, you should consult a physician for recommendations.

#### One person per belt

Two people (including children) should never attempt to use a single seat belt. This could increase the severity of injuries in case of an accident.

#### Do not lie down

To reduce the chance of injuries in the event of an accident and to achieve maximum effectiveness of the restraint system, all passengers should be sitting up and the front seats should be in an upright position when the car is moving. A seat belt cannot provide proper protection if the person is lying down in the rear seat or if the front seat is in a reclined position.

# **A** WARNING

Riding with a reclined seatback increases your chance of serious or fatal injuries in the event of a collision or sudden stop. The protection of your restraint system (seat belts and air bags) is greatly reduced by reclining your seat. Seat belts must be snug against your hips and chest to work properly. The more the seatback is reclined, the greater the chance that an occupant's hips will slide under the lap belt causing serious internal injuries or the occupant's neck could strike the shoulder belt. Drivers and passengers should always sit well back in their seats. properly belted, and with the seatbacks upright.

#### Care of seat belts

Seat belt systems should never be disassembled or modified. In addition, care should be taken to assure that seat belts and belt hardware are not damaged by seat hinges, doors or other abuse.

# **WARNING**

When you return the rear seatback to its upright position after the rear seatback was folded down, be careful not to damage the seat belt webbing or buckle. Be sure that the webbing or buckle does not get caught or pinched in the rear seat. A seat belt with damaged webbing or buckle will not be as strong and could possibly fail during a collision or sudden stop, resulting in serious injury. If the webbing or buckles are damaged, get them replaced immediately.

#### Periodic inspection

It is recommended that all seat belts be inspected periodically for wear or damage of any kind. Any damaged parts should be replaced as soon as possible.

### Keep belts clean and dry

Seat belts should be kept clean and dry. If belts become dirty, they can be cleaned by using a mild soap solution and warm water. Bleach, dye, strong detergents or abrasives should not be used because they may damage and weaken the fabric.

#### When to replace seat belts

Entire in-use seat belt assembly or assemblies should be replaced if the vehicle has been involved in an accident. This should be done even if no damage is visible. We recommend that you consult an authorized HYUNDAI dealer.

# **CHILD RESTRAINT SYSTEM (IF EQUIPPED)**

Children riding in the car should sit in the rear seat and must always be properly restrained to minimize the risk of injury in an accident, sudden stop or sudden maneuver. According to accident statistics, children are safer when properly restrained in the rear seats than in the front seat. Larger children not in a child restraint should use one of the seat belts provided.

You should be aware of the specific requirements in your country. Child and/or infant safety seats must be properly placed and installed in the rear seat. You must use a commercially available child restraint system that meets the requirements of the Safety Standards of your country. Child restraint systems are designed to be secured in vehicle seats by the lap belt portion of a lap/shoulder belt, or by a tether anchor and/or ISOFIX anchors.

Children could be injured or killed in a crash if their restraints are not properly secured. For small children and babies, a child seat or infant seat must be used. Before buying a particular child restraint system, make sure it fits your car seat and seat belts, and fits your child. Follow all the instructions provided by the manufacturer when installing the child restraint system.

### **A WARNING**

- A child restraint system must be placed in the rear seat. Never install a child or infant seat on the front passenger's seat. Should an accident occur and cause the passenger side air bag to deploy, it could severely injure or kill an infant or child seated in an infant or child seat. Thus only use a child restraint in the rear seat of your vehicle.
- A seat belt or child restraint system can become very hot if it is left in a closed vehicle on a sunny day, even if the outside temperature does not feel hot. Be sure to check the seat cover and buckles before placing a child there.
- When the child restraint system is not in use, store it in the luggage area or fasten it with a seat belt so that it will not be thrown forward in case of a sudden stop or an accident.
- Children may be seriously injured or killed by an inflating air bag.
   All children, even those too large for child restraints, must ride in the rear seat.

# **WARNING**

To reduce a risk of serious or fatal injuries:

- Children of all ages are safer when restrained in the rear seat. A child riding in the front passenger seat can be forcefully struck by an inflating air bag resulting in serious or fatal injuries.
- Always follow the instructions for installation and use of the child restraint maker.
- Always make sure the child seat is secured properly in the car and your child is securely restrained in the child seat.
- Never hold a child in your arms or lap when riding in a vehicle. The violent forces created during a crash will tear the child from your arms and throw the child against the car's interior.
- Never put a seat belt over yourself and a child. During a crash, the belt could press deep into the child causing serious internal injuries.

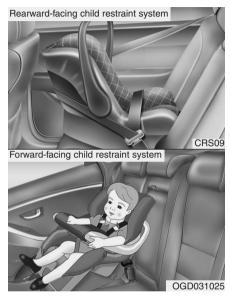
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#### (Continued)

- Never leave children unattended in a vehicle – not even for a short time. The car can heat up very quickly, resulting in serious injuries to children inside. Even very young children may inadvertently cause the vehicle to move, entangle themselves in the windows, or lock themselves or others inside the vehicle.
- Never allow two children, or any two persons, to use the same seat belt.
- Children often squirm and reposition themselves improperly.
   Never let a child ride with the shoulder belt under their arm or behind their back. Always properly position and secure children in the rear seat.
- Never allow a child to stand-up or kneel on the seat or floorboard of a moving vehicle. During a collision or sudden stop, the child can be violently thrown against the vehicles interior, resulting in serious injury.

(Continued)

- Never use an infant carrier or a child safety seat that "hooks" over a seatback, it may not provide adequate security in an accident
- Seat belts can become very hot, especially when the car is parked in direct sunlight. Always check seat belt buckles before fastening them over a child.
- After an accident, we recommend that the system be checked by an authorized HYUNDAI dealer.
- If there is not enough space to place the child restraint system because of the driver's seat, install the child restraint system in the rear right seat.



# Using a child restraint system

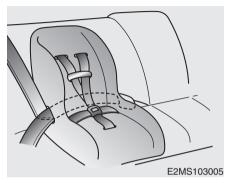
For small children and babies, the use of a child seat or infant seat is required. This child seat or infant seat should be of appropriate size for the child and should be installed in accordance with the manufacturer's instructions. For safety reasons, we recommend that the child restraint system be used in the rear seats.

# **WARNING**

Never place a rear-facing child restraint in the front passenger seat, because of the danger that an inflating passenger-side air bag could impact the rear-facing child restraint and kill the child.

# A WARNING - Child seat installation

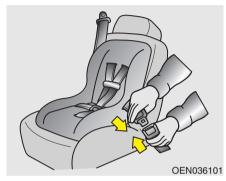
- A child can be seriously injured or killed in a collision if the child restraint is not properly anchored to the vehicle and the child is not properly restrained in the child restraint. Before installing the child restraint system, read the instructions supplied by the child restraint system manufacturer.
- If the seat belt does not operate as described in this section, we recommend that the system be checked by an authorized HYUNDAI dealer.
- Failure to observe this manual's instructions regarding child restraint system and the instructions provided with the child restraint system could increase the chance and/or severity of injury in an accident.



Installing a child restraint system by lap/shoulder belt

To install a child restraint system on the outboard or center rear seats, do the following:

 Place the child restraint system in the seat and route the lap/shoulder belt around or through the restraint, following the restraint manufacturer's instructions. Be sure the seat belt webbing is not twisted.



Fasten the lap/shoulder belt latch into the buckle. Listen for the distinct "click" sound.

Position the release button so that it is easy to access in case of an emergency.



 Buckle the seat belt and allow the seat belt to take up any slack. After installation of the child restraint system, try to move it in all directions to be sure the child restraint system is securely installed.

If you need to tighten the belt, pull more webbing toward the retractor. When you unbuckle the seat belt and allow it to retract, the retractor will automatically revert back to its normal seated passenger emergency locking usage condition.

# Child Seat Restraint Suitability for Seat Position using the Seat Belt - For Europe

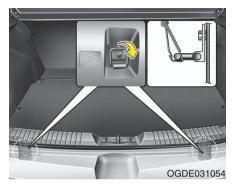
Use child safety seats that have been officially approved and are appropriate for your children. When using the child safety seats, refer to the following table.

Age Group	Seating Position				
Age Group	Front passenger	Rear outboard	Rear center		
0 : Up to 10 kg (0 - 9 months)	U	U	U		
0+ : Up to 13 kg (0 - 2 years)	U	U	U		
I : 9 kg to 18 kg (9 months - 4 years)	U	U	U		
II & III : 15 kg to 36 kg (4 - 12 years)	U	U	U		

U : Suitable for "universal" category restraints approved for use in this mass group

# **WARNING**

We recommend that a child restraint seat be installed in the rear seat, even if the front passenger's air bag ON/OFF switch is set to the OFF position. To ensure the safety of your child, the front passenger's air bag must be deactivated when it should be necessary to install a child restraint seat on the front passenger seat in exceptional circumstances.



Securing a child restraint seat with "Tether Anchor" system (if equipped) Child restraint hook holders are located on the transverse trim behind the rear seats.



1. Route the child restraint seat strap over the seatback.

For vehicles with adjustable headrest, route the tether strap under the headrest and between the headrest posts, otherwise route the tether strap over the top of the seatback.

Connect the tether strap hook to the appropriate child restraint hook holder and tighten to secure the seat.

# **WARNING**

A child can be seriously injured or killed in a collision if the child restraint is not properly anchored to the car and the child is not properly restrained in the child restraint. Always follow the child seat manufacturer's instructions for installation and use.

WARNING - Tether strap

Never mount more than one child
restraint to a single tether or to a
single lower anchorage point. The
increased load caused by multiple
seats may cause the tethers or
anchorage points to break, causing
serious injury or death.

# **WARNING**

Do not install a child restraint seat at the center of the rear seat using the tether anchors. The tether anchors are only provided for the left and right outboard rear seating positions.

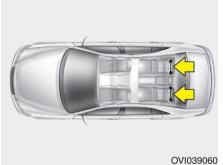
In a crash, the child restraint seat tether anchor attachments may not be strong enough to secure the child restraint seat properly in the center of the rear seat and may break, causing serious injury or death.

# A WARNING - Child restraint check

Check that the child restraint system is secure by pushing and pulling it in different directions. **Incorrectly fitted child restraints** may swing, twist, tip or separate causing death or serious injury.

# **WARNING**

- Child restraint anchorage
- Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses or for attaching other items or equipment to the vehicle.
- The tether strap may not work properly if attached somewhere other than the correct tether anchor.

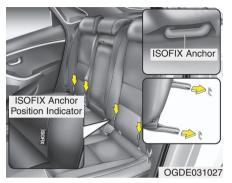


#### Securing a child restraint system with "ISOFIX" system and "Tether Anchorage" system (if equipped)

ISOFIX is a standardised method of fitting child seats that eliminates the need to use the standard adult seat belt to secure the seat in the vehicle. This enables a much more secure and positive location with the added benefit of easier and quicker installation.

An ISOFIX-seat may only be installed if it has vehicle-specific or universal approval in accordance with the requirements of ECE-R 44.

\* ISOFIX: International Standards Origanisation FIX



There are ISOFIX symbols located on the lower portion of each side of the rear seatbacks. These symbols indicate the position of the lower anchors for child restraints so equipped. Both rear outboard seats are equipped with a pair of ISOFIX anchorages as well as a corresponding top tether anchorage on the floor behind the rear seats. The ISOFIX anchorages are located between seat cushion and backrest, marked with the ISOFIX icon.

For installation, CRS ISOFIX connecters have to engage with the vehicles ISOFIX anchorages (listen for a CLICK, check potential visual indicators on the CRS and cross-check by pulling).

CRS with universal approval to ECE-R 44 need to be fixed additionally with a top tether strap connected to the corresponding top tether anchorage point on the floor behind the rear seats.

The installing and the use of a child-seat has to be done according to the installing-manual, which is added to the ISOFIX-seat.

# **WARNING**

- When using vehicle's the "ISOFIX" system to install a child restraint system in the rear seat. all unused vehicle rear seat belt metal latch plates or tabs must be latched securely in their seat belt buckles and the seat belt webbing must be retracted behind the child restraint to prevent the child from reaching and taking hold of unretracted seat belts. Unlatched metal latch plates or tabs may allow the child to reach the unretracted seat belts which may result in strangulation and a serious injury or death to the child in the child restraint.
- Do not place anything around the ISOFIX anchors. Also make sure that the seat belt is not caught in the ISOFIX anchors.

#### To secure the child restraint seat

 To engage the child restraint seat to the ISOFIX anchor, insert the child restraint seat latch into the ISOFIX anchor. Listen for the audible "click" sound.

# **!** CAUTION

Do not allow the rear seat belt webbing to get scratched or pinched by the ISOFIX-seat latch and ISOFIX anchor during installation.

Connect the tether strap hook to the child restraint hook holder and tighten to secure the seat. (Refer to the previous page.)

#### **WARNING**

 Do not install a child restraint seat at the center of the rear seat using the vehicle's ISOFIX anchors. The ISOFIX anchors are only provided for the left and right outboard rear seating positions. Do not misuse the ISOFIX anchors by attempting to attach a child restraint seat in the middle of the rear seat to the ISOFIX anchors.

In a crash, the child restraint seat ISOFIX attachments may not be strong enough to secure the child restraint seat properly in the center of the rear seat and may break, causing serious injury or death.

 Do not mount more than one child restraint to a child restraint lower anchorage point. The improper increased load may cause the anchorage points or tether anchor to break, causing serious injury or death.

(Continued)

- Attach the ISOFIX or ISOFIX-compatible child restraint seat only to the appropriate locations shown in the illustration.
- Always follow the installation and use instructions provided by the manufacturer of the child restraint.

Child seat restraint suitability for vehicle ISOFIX positions - For Europe

Mass Group Size			Vehicle ISOFIX positions			
	Size Class	Fixture	Front Passenger	Rear Outboard (Driver side)	Rear Outboard (Passenger side)	Rear Centre
Carrycot	F	ISO/L1	-	Х	X	-
	G	ISO/L2	-	Х	X	-
0 : UP to 10kg	E	ISO/R1	-	IUF	IUF	-
0+ : UP to 13kg	E	ISO/R1	-	IUF	IUF	-
	D	ISO/R2	-	IUF	IUF	-
	С	ISO/R3	-	IUF	IUF	-
I : 9 to 18kg	D	ISO/R2	-	IUF	IUF	-
	С	ISO/R3	-	IUF	IUF	-
	В	ISO/F2	-	IUF	IUF	-
	B1	ISO/F2X	-	IUF	IUF	-
	Α	ISO/F3	-	IUF	IUF	-

IUF = Suitable for ISOFIX forward child restraints systems of universal category approved for use in the mass group.

IL = Suitable for particular ISOFIX child restraints systems (CRS) given in the attached list. These ISOFIX CRS are those of the "specific vehicle", "restricted" or "semi-universal" categories.

X = ISOFIX position not suitable for ISOFIX child restraint system in this mass group and/or this size class.

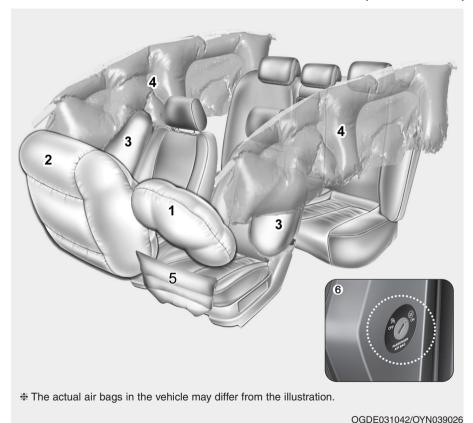
# Recommended child restraint systems – For Europe

Mass Group	Name	Manufacturer	Type of Fixation	ECE-R44 Approval No.	
Group 0+ (0-13kg)	Baby Safe Plus II	Britax Römer	Rearward facing with ISOFIX adapter	E1 04301146	
Group 1 (9-18kg)	Duo Plus	Britax Römer	Forward facing with vehicle ISOFIX lower anchorage + Top Tether	E1 04301133	
			Forward facing with vehicle 3-point seat belt	L1 04301133	

**CRS Manufacturer information** 

Britax Römer http://www.britax.com

# AIR BAG - SUPPLEMENTAL RESTRAINT SYSTEM (IF EQUIPPED)



- (1) Driver's front air bag
- (2) Passenger's front air bag
- (3) Side impact air bag\*
- (4) Curtain air bag\*
- (5) Driver's knee air bag\*
- (6) Passenger's front air bag ON/OFF switch
- \*: if equipped

# **WARNING**

Even in vehicles with air bags, you and your passengers must always wear the safety belts provided in order to minimize the risk and severity of injury in the event of a collision or rollover.

# How does the air bag system operate

- Air bags are activated (able to inflate if necessary) only when the ignition switch is turned to the ON or START position.
- Air bags inflate instantly in the event of serious frontal or side collision (if equipped with side impact air bag or curtain air bag) in order to help protect the occupants from serious physical injury.
- There is no single speed at which the air bags will inflate.
  - Generally, air bags are designed to inflate based upon the severity of a collision and its direction. These two factors determine whether the sensors produce an electronic deployment/inflation signal.
- Air bag deployment depends on a number of factors including vehicle speed, angles of impact and the density and stiffness of the vehicles or objects which your vehicle hits in the collision. The determining, factors are not limited to those mentioned above.
- The front air bags will completely inflate and deflate in an instant.

- It is virtually impossible for you to see the air bags inflate during an accident. It is much more likely that you will simply see the deflated air bags hanging out of their storage compartments after the collision.
- In order to help provide protection in a severe collision, the air bags must inflate rapidly. The speed of air bag inflation is a consequence of extremely short time in which a collision occurs and the need to get the air bag between the occupant and the vehicle structures before the occupant impacts those structures. This speed of inflation reduces the risk of serious or lifethreatening injuries in a severe collision and is thus a necessary part of air bag design.

However, air bag inflation can also cause injuries which can include facial abrasions, bruises and broken bones because the inflation speed also causes the air bags to expand with a great deal of force.

 There are even circumstances under which contact with the steering wheel air bag can cause fatal injuries, especially if the occupant is positioned excessively close to the steering wheel.

# **A** WARNING

- To avoid severe personal injury or death caused by deploying air bags in a collision, the driver should sit as far back from the steering wheel air bag as possible (at least 250 mm (10 inches) away). The front passenger should always move their seat as far back as possible and sit back in their seat.
- Air bag inflates instantly in an event of a collision, passengers may be injured by the air bag expansion force if they are not in a proper position.
- Air bag inflation may cause injuries including facial or bodily abrasions, injuries from broken glasses or burns.

#### Noise and smoke

When the air bags inflate, they make a loud noise and they leave smoke and powder in the air inside of the vehicle. This is normal and is a result of the ignition of the air bag inflator. After the air bag inflates, you may feel substantial discomfort in breathing due to the contact of your chest with both the seat belt and the air bag, as well as from breathing the smoke and powder. Open your doors and/or windows as soon as possible after impact in order to reduce discomfort and prevent prolonged exposure to the smoke and powder.

Though smoke and powder are nontoxic, it may cause irritation to the skin (eyes, nose and throat, etc.). If this is the case, wash and rinse with cold water immediately and consult the doctor if the symptom persists.

### **WARNING**

When the air bags deploy, the air bag related parts in the steering wheel and/or instrument panel and/or in both sides of the roof rails above the front and rear doors are very hot. To prevent injury, do not touch the air bag storage areas internal components immediately after an air bag has inflated.



Installing a child restraint on a front passenger's seat is forbidden when the air bag is active

Never place a rear-facing child restraint in the front passenger's seat. If the air bag deploys, it would impact the rear-facing child restraint, causing serious or fatal injury.

In addition, do not place front-facing child restraints in the front passenger's seat either. If the front passenger air bag inflates, it would cause serious or fatal injuries to the child.

If your vehicle is equipped with the passenger's front air bag ON/OFF switch, you can activate or deactivate the front passenger's air bag when necessary.

For more details, please refer to 3-49 page.

# **WARNING**

- Extreme Hazard! Do not use a rearward facing child restraint on a seat protected by an air bag in front of it!
- Never put a child restraint in the front passenger's seat. If the front passenger air bag inflates, it would cause serious or fatal injuries.
- When children are seated in the rear outboard seats of vehicle equipped with curtain air bags, be sure to install the child restraint system as far away from the door side as possible, and securely lock the child restraint system in position.

Inflation of curtain air bags could cause serious injury or death to an infant or child.



# Air bag warning and indicator

Air bag warning light

The purpose of the air bag warning light in your instrument panel is to alert you of a potential problem with your air bag - Supplemental Restraint System (SRS).

When the ignition switch is turned ON, the warning light should illuminate for approximately 6 seconds, then go off.

Have the system checked if:

- The light does not turn on briefly when you turn the ignition ON.
- The light stays on after illuminating for approximately 6 seconds.
- The light comes on while the vehicle is in motion.
- The light blinks when the ignition switch is in ON position.



Passenger's front air bag ON indicator



The passenger's front air bag ON indicator illuminates for approximately 4 seconds after the ignition switch is turned to the ON position.

The passenger's front air bag ON indicator also comes on when the passenger's front air bag ON/OFF switch is set to the ON position and goes off after approximately 60 seconds.



Passenger's front air bag OFF indicator



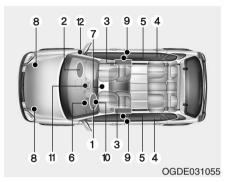
The passenger's front air bag OFF indicator illuminates for about 4 seconds after the ignition switch is turned to the ON position.

The passenger's front air bag OFF indicator also comes on when the passenger's front air bag ON/OFF switch is set to the OFF position and goes off when the passenger's front air bag ON/OFF switch is set to the ON position.

# **!** CAUTION

If the passenger's front air bag ON/OFF switch malfunctions, the passenger's front air bag OFF indicator will not illuminate (The passenger's front air bag ON indicator comes on and goes off after approximately 60 seconds) and the passenger's front air bag will inflate in a frontal impact even if the passenger's front air bag ON/OFF switch is set to the OFF position.

If this occurs, we recommend that the passenger's front air bag ON/OFF switch and the SRS air bag system be inspected by an authorized HYUNDAI dealer.



# SRS components and functions

The SRS consists of the following components:

- 1. Driver's front air bag module
- 2. Passenger's front air bag module
- 3. Side air bag modules\*
- 4. Curtain air bag modules\*
- 5. Retractor pre-tensioner assemblies
- 6. Air bag warning light
- 7. SRS control module (SRSCM)
- 8. Front impact sensors
- 9. Side impact sensors\*
- 10. Driver's knee air bag module\*
- Passenger's front air bag ON/OFF indicator

- Passenger's front air bag ON/OFF switch
- \*: if equipped

The SRSCM continually monitors all elements while the ignition switch is ON to determine if a frontal, near-frontal impact or side impact is severe enough to require air bag deployment or pre-tensioner seat belt deployment.

The SRS air bag warning light on the instrument panel will illuminate for about 6 seconds after the ignition switch is turned to the ON position, after which the air bag warning light should go out.

### **WARNING**

If any of the following conditions occurs, this indicates a malfunction of the SRS. We recommend that the system be inspected by an authorized HYUNDAI dealer.

- The light does not turn on briefly when you turn the ignition ON.
- The light stays on after illuminating for approximately 6 seconds.
- The light comes on while the vehicle is in motion.
- The light blinks when the ignition switch is in ON position.



The front air bag modules are located both in the center of the steering wheel, in the front passenger's panel above the glove box and/or in the driver's side knee bolster. When the SRSCM detects a sufficiently severe impact to the front of the vehicle, it will automatically deploy the front air bags.



Upon deployment, tear seams molded directly into the pad covers will separate under pressure from the expansion of the air bags. Further opening of the covers then allows full inflation of the air bags.



A fully inflated air bag, in combination with a properly worn seat belt, slows the driver's or the passenger's forward motion, reducing the risk of head and chest injury.

After complete inflation, the air bag immediately starts deflating, enabling the driver to maintain forward visibility and the ability to steer or operate other controls.



# **A WARNING**

- Do not install or place any accessories (drink holder, cassette holder, sticker, etc.) on the front passenger's panel above the glove box in a vehicle with a passenger's air bag. Such objects may become dangerous projectiles and cause injury if the passenger's air bag inflates.
- When installing a container of liquid air freshener inside the vehicle, do not place it near the instrument cluster nor on the instrument panel surface.
   It may become dangerous projection.

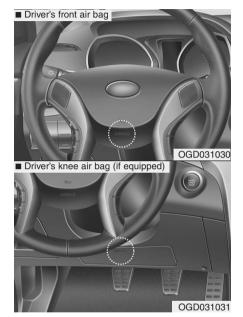
It may become dangerous projectiles and cause injury if the passenger's air bag inflates.

#### **WARNING**

 If an air bag deploys, there may be a loud noise followed by a fine dust released in the vehicle. These conditions are normal and are not hazardous - the air bags are packed in this fine powder. The dust generated during air bag deployment may cause skin or eye irritation as well as aggravate asthma for some persons. Always wash all exposed skin areas thoroughly with lukewarm water and a mild soap after an accident in which the air bags were deployed.

(Continued)

- The SRS can function only when the ignition key is in the ON position. If the SRS air bag warning light does not illuminate, or continuously remains on after illuminating for about 6 seconds when the ignition key is turned to the ON position, or after the engine is started, comes on while driving, the SRS is not working properly. If this occurs, we recommend that the system be inspected by an authorized HYUNDAI dealer.
- Before you replace a fuse or disconnect a battery terminal, turn the ignition switch to the LOCK position and remove the ignition key. Never remove or replace the air bag related fuse(s) when the ignition switch is in the ON position. Failure to heed this warning will cause the SRS air bag warning light to illuminate.



Driver's and passenger's front air bag

Your vehicle is equipped with a Supplemental Restraint (Air Bag) System and lap/shoulder belts at both the driver and passenger seating positions.

The indications of the system's presence are the letters "AIR BAG" embossed on the air bag pad cover in the steering wheel and/or on the cover of the driver's side knee bolster located below the steering wheel and the passenger's side front panel pad above the glove box.

The SRS consists of air bags installed under the pad covers in the center of the steering wheel, in the knee bolster below the steering wheel column and the passenger's side front panel above the glove box.



The purpose of the SRS is to provide the vehicle's driver and/or the front passenger with additional protection than that offered by the seat belt system alone in case of a frontal impact of sufficient severity.

# **WARNING**

Always use seat belts and child restraints – every trip, every time, everyone! Air bags inflate with considerable force and in the blink of an eye. Seat belts help keep occupants in proper position to obtain maximum benefit from the air bag. Even with air bags, improperly and unbelted occupants can be severely injured when the air bag inflates. Always follow the precautions about seat belts, air bags and occupant safety contained in this manual.

To reduce the chance of serious or fatal injuries and receive the maximum safety benefit from your restraint system:

- Never place a child in any child or booster seat in the front seat.
- ABC Always Buckle Children in the back seat. It is the safest place for children of any age to ride.
- Front and side impact air bags can injure occupants improperly positioned in the front seats.

(Continued)

#### (Continued)

- Move your seat as far back as practical from the front air bags, while still maintaining control of the vehicle.
- You and your passengers should never sit or lean unnecessarily close to the air bags. Improperly positioned drivers and passengers can be severely injured by inflating air bags.
- Never lean against the door or center console – always sit in an upright position.
- No objects should be placed over or near the air bag modules on the steering wheel, instrument panel, and the front passenger's panel above the glove box, because any such object could cause harm if the vehicle is in a crash severe enough to cause the air bags to deploy.

(Continued)

#### (Continued)

- Do not tamper with or disconnect SRS wiring or other components of the SRS system. Doing so could result in injury, due to accidental deployment of the air bags or by rendering the SRS inoperative.
- If the SRS air bag warning light remains illuminated while the vehicle is being driven, we recommend that the system be inspected by an authorized HYUNDAI dealer.
- Air bags can only be used once we recommend that the system be replaced by an authorized HYUNDAI dealer.
- The SRS is designed to deploy the front air bags only when an impact is sufficiently severe and when the impact angle is less than 30° from the forward longitudinal axis of the vehicle. Additionally, the air bags will only deploy once. Seat belts must be worn at all times.

#### (Continued)

- Front air bags are not intended to deploy in side-impact, rearimpact or rollover crashes. In addition, front air bags will not deploy in frontal crashes below the deployment threshold.
- A child restraint system must never be placed in the front seat. The infant or child could be severely injured or killed by an air bag deployment in case of an accident.
- Children age 12 and under must always be properly restrained in the rear seat. Never allow children to ride in the front passenger seat. If a child over 12 must be seated in the front seat, he or she must be properly belted and the seat should be moved as far back as possible.

(Continued)

#### (Continued)

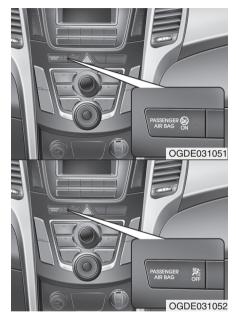
- For maximum safety protection in all types of crashes, all occupants including the driver should always wear their seat belts whether or not an air bag is also provided at their seating position to minimize the risk of severe injury or death in the event of a crash. Do not sit or lean unnecessarily close to the air bag while the vehicle is in motion.
- Sitting improperly or out of position can result in serious or fatal injury in a crash. All occupants should sit upright with the seat back in an upright position, centered on the seat cushion with their seat belt on, legs comfortably extended and their feet on the floor until the vehicle is parked and the ignition key is removed.
- The SRS air bag system must deploy very rapidly to provide protection in a crash. If an occupant is out of position because of not wearing a seat belt, the air bag may forcefully contact the occupant causing serious or fatal injuries.



Passenger's front air bag ON/OFF switch (if equipped)

The passenger's front air bag can be deactivated by the passenger's front air bag ON/OFF switch if a child restraint is installed on the front passenger's seat or if the front passenger's seat is unoccupied by a person.

To ensure the safety of your child, the passenger's front air bag must be deactivated when it should be necessary to install a rearward facing child seat on the front passenger seat in exceptional circumstances.



To deactivate or reactivate the passenger's front air bag:

To deactivate the passenger's front air bag, insert the mechanical key into the passenger's front air bag ON/OFF switch and turn it to the OFF position.

The passenger's front air bag OFF indicator (\*\*) will illuminate and stay on until the passenger's front air bag is reactivated.

To reactivate the passenger's front air bag, insert the mechanical key into the passenger's front air bag ON/OFF switch and turn it to the ON position. The passenger's front air bag OFF indicator will go out and the passenger's front air bag ON indicator ((\*\*)) will illuminate for approximately 60 seconds.

# **A WARNING**

On some models, the front air bag ON/OFF switch could turn by using a similar small rigid device. Always check the status of the front air bag ON/OFF switch and passenger's front air bag ON/OFF indicator.

#### \* NOTICE

- When the passenger's front air bag ON/OFF switch is set to the ON position, the passenger's front air bag is activated and child or infant seat should not be installed on the front passenger seat.
- When the passenger's front air bag ON/OFF switch is set to the OFF position, the passenger's front air bag is deactivated.

#### **⚠** CAUTION

 If the passenger's front air bag ON/OFF switch is not working properly, the air bag warning light (\*) on the instrument panel will illuminate.

And, the passenger's front air bag OFF indicator ( ( ) will not illuminate (The passenger's front air bag ON indicator comes on and goes off after approximately 60 seconds), the SRS Control Module reactivates the passenger's front air bag and the passenger's front air bag will inflate in frontal impact crashes even if the passenger's front air bag ON/OFF switch is set to the OFF position.

#### (Continued)

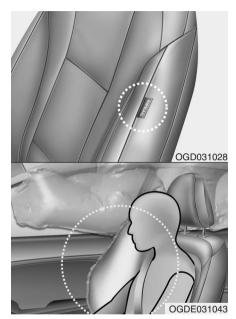
- If this occurs, we recommend that the system be inspected by an authorized HYUNDAI dealer.
- If the SRS air bag warning light blinks or does not illuminate when the ignition switch is turned to the ON position, or if it illuminates while the vehicle is being driven, we recommend that the system be inspected by an authorized HYUNDAI dealer.

#### **WARNING**

- The driver is responsible for the proper position of the passenger's front air bag ON/OFF switch.
- Deactivate the passenger's front air bag only when the ignition switch is switched off, or the malfunction may occur in the SRS Control Module.
  - And there may be a danger that the driver's and/or front passenger's and/or side and curtain air bag may fail to trigger, or not trigger correctly during a collision.
- Never install a rearward facing child seat on the front passenger's seat unless the passenger's front air bag has been deactivated. The infant or child could be severely injured or killed by an air bag deployment in case of an accident.

(Continued)

- Even though your vehicle is equipped with the passenger's front air bag ON/OFF switch, do not install a child restraint system in the front passenger's seat. A child restraint system must never be placed in the front seat. Children who are too large for child restraint systems should always occupy the rear seat and use the available lap/shoulder belts. Children are afforded the most safety in the event of an accident when thev restrained by a proper restraint system in the rear seat.
- As soon as the child seat is no longer needed on the front passenger's seat, reactivate the front passenger's air bag.



# Side impact air bag (if equipped)

Your vehicle is equipped with a side impact air bag in each front seat. The purpose of the air bag is to provide the vehicle's driver and/or the front passenger with additional protection than that offered by the seat belt alone.

The side impact air bags are designed to deploy only during certain side-impact collisions, depending on the crash severity, angle, speed and point of impact. The side air bags are not designed to deploy in all side impact situations.

# **WARNING**

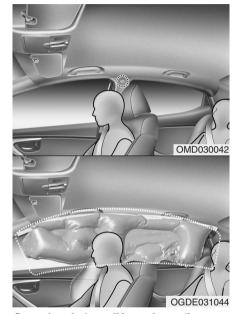
Do not allow the passengers to lean their heads or bodies onto doors, put their arms on the doors, stretch their arms out of the window, or place objects between the doors and passengers when they are seated on seats equipped with side and/or curtain air bags.

# **A** WARNING

- The side impact air bag is supplemental to the driver's and the passenger's seat belt systems and is not a substitute for them. Therefore your seat belts must be worn at all times while the vehicle is in motion. The air bags deploy only in certain side impact conditions severe enough to cause significant injury to the vehicle occupants.
- For best protection from the side impact air bag system and to avoid being injured by the deploying side impact air bag, both front seat occupants should sit in an upright position with the seat belt properly fastened. The driver's hands should be placed on the steering wheel at the 9:00 and 3:00 positions. The passenger's arms and hands should be placed on their laps.
- Do not use any accessory seat covers.

#### (Continued)

- Use of seat covers could reduce or prevent the effectiveness of the system.
- Do not install any accessories on the side or near the side impact air bag.
- Do not place any objects over the air bag or between the air bag and yourself.
- Do not place any objects (an umbrella, bag, etc.) between the front door and the front seat.
   Such objects may become dangerous projectiles and cause injury if the supplemental side impact air bag inflates.
- To prevent unexpected deployment of the side impact air bag that may result in personal injury, avoid impact to the side impact sensor when the ignition key is on.
- If the seat or seat cover is damaged, we recommend that the system be serviced by an authorized HYUNDAI dealer.



# Curtain air bag (if equipped)

Curtain air bags are located along both sides of the roof rails above the front and rear doors.

They are designed to help protect the heads of the front seat occupants and the rear outboard seat occupants in certain side impact collisions.

The curtain air bags are designed to deploy during certain side impact collisions, depending on the crash severity, angle, speed and point of impact. The curtain air bags are not designed to deploy in all side impact situations, collisions from the front or rear of the vehicle or in most rollover situations.

# **A** WARNING

- In order for side impact and curtain air bags to provide the best protection, both front seat occupants and both outboard rear occupants should sit in an upright position with the seat belts properly fastened. Importantly, children should sit in a proper child restraint system in the rear seat.
- When children are seated in the rear outboard seats, they must be seated in the proper child restraint system.
  - Make sure to put the child restraint system as far away from the door side as possible, and secure the child restraint system in a locked position.

(Continued)

#### (Continued)

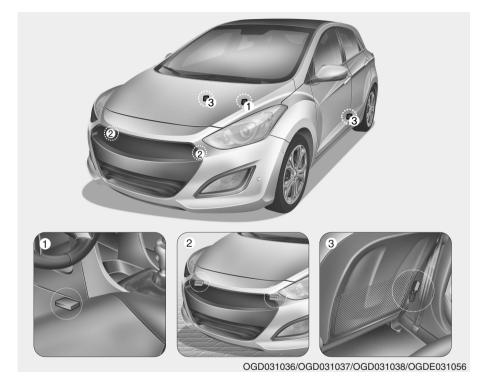
- Do not allow the passengers to lean their heads or bodies onto doors, put their arms on the doors, stretch their arms out of the window, or place objects between the doors and passengers when they are seated on seats equipped with side and/or curtain air bags.
- Never try to open or repair any components of the side curtain air bag system. We recommend that the system be serviced by an authorized HYUNDAI dealer.

Failure to follow the above mentioned instructions can result in injury or death to the vehicle occupants in an accident.

Why didn't my air bag go off in a collision? (Inflation and non-inflation conditions of the air bag)

There are many types of accidents in which the air bag would not be expected to provide additional protection.

These include rear impacts, second or third collisions in multiple impact accidents, as well as low speed



Air bag collision sensors

- (1) SRS control module
- (2) Front impact sensor

(3) Side impact sensor (if equipped)

impacts.

### **WARNING**

- Do not hit or allow any objects to impact the locations where air bag or sensors are installed.
  - This may cause unexpected air bag deployment, which could result in serious personal injury or death.
- If the installation location or angle of the sensors is altered in any way, the air bags may deploy when they should not or they may not deploy when they should, causing severe injury or death.
  - Therefore, do not try to perform maintenance on or around the air bag sensors. We recommend that the system be serviced by an authorized HYUNDAI dealer.

(Continued)

#### (Continued)

- Problems may arise if the sensor installation angles are changed due to the deformation of the front bumper, body or B pillar and C pillars where side collision sensors are installed. We recommend that the system be serviced by an authorized HYUNDAI dealer.
- Your vehicle has been designed to absorb impact and deploy the air bag(s) in certain collisions. Installing bumper guards or replacing a bumper with non-genuine parts may adversely affect your vehicles collision and air bag deployment performance.



Air bag inflation conditions

#### Front air bags

Front air bags are designed to inflate in a frontal collision depending on the intensity, speed or angles of impact of the front collision.



Side impact and curtain air bags (if equipped)

Side impact and/or curtain air bags are designed to inflate when an impact is detected by side collision sensors depending on the strength, speed or angles of impact resulting from a side impact collision.

Although the front air bags (driver's and front passenger's air bags) are designed to inflate only in frontal collisions, they also may inflate in other types of collisions if the front impact sensors detect a sufficient impact. Side air bags (side impact and/or curtain air bags) are designed to inflate only in side impact collisions, but they may inflate in other collisions if the side impact sensors detect a sufficient impact.

If the vehicle chassis is impacted by bumps or objects on unimproved roads or sidewalks, air bags may deploy. Drive carefully on unimproved roads or on surfaces not designed for vehicle traffic to prevent unintended air bag deployment.



## Air bag non-inflation conditions

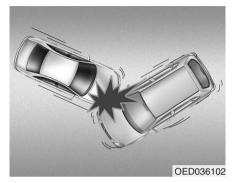
 In certain low-speed collisions the air bags may not deploy. The air bags are designed not to deploy in such cases because they may not provide benefits beyond the protection of the seat belts in such collisions.



 Air bags are not designed to inflate in rear collisions, because occupants are moved backward by the force of the impact. In this case, inflated air bags would not be able to provide any additional benefit.



- Front air bags may not inflate in side impact collisions, because occupants move to the direction of the collision, and thus in side impacts, frontal air bag deployment would not provide additional occupant protection.
- However, if equipped with side impact and curtain air bags, the air bags may inflate depending on the intensity, vehicle speed and angles of impact.

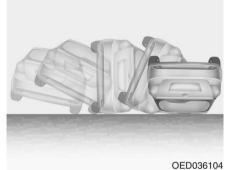


 In an angled collision, the force of impact may direct the occupants in a direction where the air bags would not be able to provide any additional benefit, and thus the sensors may not deploy any air bags.

# Safety system of your vehicle

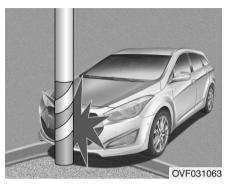


 Just before impact, drivers often brake heavily. Such heavy braking lowers the front portion of the vehicle causing it to "ride" under a vehicle with a higher ground clearance. Air bags may not inflate in this "under-ride" situation because deceleration forces that are detected by sensors may be significantly replaced by such "under-ride" collisions.



 Air bags may not inflate in rollover accidents because air bag deployment would not provide protection to the occupants.

However, side and/or curtain air bags may inflate when the vehicle is rolled over by a side impact collision, if the vehicle is equipped with side impact air bags and curtain air bags.



 Air bags may not inflate if the vehicle collides with objects such as utility poles or trees, where the point of impact is concentrated to one area and the full force of the impact is not delivered to the sensors.

#### **SRS Care**

The SRS is virtually maintenance-free and so there are no parts you can safely service by yourself. If the SRS air bag warning light does not illuminate, or continuously remains on, we recommend that the system be inspected by an authorized HYUNDAI dealer.

### **WARNING**

- Modification to SRS components or wiring, including the addition of any kind of badges to the pad covers or modifications to the body structure, can adversely affect SRS performance and lead to possible injury.
- For cleaning the air bag pad covers, use only a soft, dry cloth or one which has been moistened with plain water. Solvents or cleaners could adversely affect the air bag covers and proper deployment of the system.
- No objects should be placed over or near the air bag modules on the steering wheel, instrument panel, and the front passenger's panel above the glove box, because any such object could cause harm if the vehicle is in a crash severe enough to cause the air bags to inflate.

(Continued)

#### (Continued)

- If the air bags inflate, we recommend that the system be replaced by an authorized HYUNDAI dealer.
- Do not tamper with or disconnect SRS wiring, or other components of the SRS system. Doing so could result in injury, due to accidental inflation of the air bags or by rendering the SRS inoperative.
- If components of the air bag system must be discarded, or if the vehicle must be scrapped, certain safety precautions must be observed. An authorized HYUNDAI dealer knows these precautions and can give you the necessary information. Failure to follow these precautions and procedures could increase the risk of personal injury.
- If your car was flooded and has soaked carpeting or water on flooring, you shouldn't try to start the engine; we recommend that you contact an authorized HYUNDAI dealer.

#### Additional safety precautions

- Never let passengers ride in the cargo area or on top of a foldeddown back seat. All occupants should sit upright, fully back in their seats with their seat belts on and their feet on the floor.
- Passengers should not move out of or change seats while the vehicle is moving. A passenger who is not wearing a seat belt during a crash or emergency stop can be thrown against the inside of the vehicle, against other occupants, or out of the vehicle.
- Each seat belt is designed to restrain one occupant. If more than one person uses the same seat belt, they could be seriously injured or killed in a collision.
- Do not use any accessories on seat belts. Devices claiming to improve occupant comfort or reposition the seat belt can reduce the protection provided by the seat belt and increase the chance of serious injury in a crash.
- Passengers should not place hard or sharp objects between themselves and the air bags. Carrying hard or sharp objects on your lap or in your mouth can result in injuries if an air bag inflates.

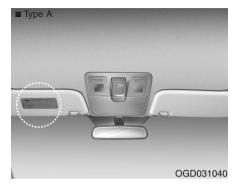
- Keep occupants away from the air bag covers. All occupants should sit upright, fully back in their seats with their seat belts on and their feet on the floor. If occupants are too close to the air bag covers, they could be injured if the air bags inflate.
- Do not attach or place objects on or near the air bag covers. Any object attached to or placed on the front or side impact air bag covers could interfere with the proper operation of the air bags.
- Do not modify the front seats.
   Modification of the front seats could interfere with the operation of the supplemental restraint system sensing components or side air bags.
- Do not place items under the front seats. Placing items under the front seats could interfere with the operation of the supplemental restraint system sensing components and wiring harnesses.
- Never hold an infant or child on your lap. The infant or child could be seriously injured or killed in the event of a crash. All infants and children should be properly restrained in appropriate child safety seats or seat belts in the rear seat.

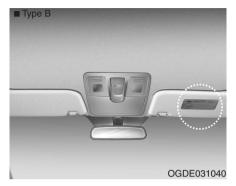
# **WARNING**

- Sitting improperly or out of position can cause occupants to be shifted too close to a deploying air bag, strike the interior structure or be thrown from the vehicle resulting in serious injury or death.
- Always sit upright with the seatback in an upright position, centered on the seat cushion with your seat belt on, legs comfortably extended and your feet on the floor.

# Adding equipment to or modifying your air bag-equipped vehicle

If you modify your vehicle by changing your vehicle's frame, bumper system, front end or side sheet metal or ride height, this may affect the operation of your vehicle's air bag system.





# Air bag warning label (if equipped)

Air bag warning labels are attached to alert driver and passengers of potential risk of air bag system.

Note that these government warnings focus on the risk of children. We also want you to be aware of the risks adults are exposed to which have been described in previous pages.

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#### **KEYS**

#### Record your key number



The key code number is stamped on the bar code tag attached to the kev set. Should you lose your keys, we recom-

mend that you contact an authorized HYUNDAI dealer. Remove the bar code tag and store it in a safe place. Also, record the code number and keep it in a safe and handy place, but not in the vehicle.

### **Key operations**

- Used to start the engine.
- · Used to lock and unlock the doors.

#### **WARNING**

We recommend that you use parts for replacement from an authorized HYUNDAL dealer. If an aftermarket key is used, the ignition switch may not return to ON after START. If this happens, the starter will continue to operate causing damage to the starter motor and possible fire due to excessive current in the wiring.

# WARNING - Ignition key

Leaving children unattended in a vehicle with the ignition key is dangerous even if the key is not in the ignition. Children copy adults and they could place the key in the ignition. The ignition key would enable children to operate power windows or other controls, or even make the vehicle move, which could result in serious bodily injury or even death. Never leave the keys in your vehicle with unsupervised children.

#### Immobilizer system

Your vehicle may be equipped with an electronic engine immobilizer system to reduce the risk of unauthorized vehicle use

Your immobilizer system is comprised of a small transponder in the key and electronic devices inside the vehicle

#### Vehicles without smart key system

With the immobilizer system, whenever you insert your ignition key into the ignition switch and turn it to ON, it checks and determines and verifies if the ignition kev is valid or not.

If the key is valid, the engine will start. If the key is invalid, the engine will not start.

#### To deactivate the immobilizer system:

Insert the ignition key into the key cylinder and turn it to the ON position.

#### To activate the immobilizer system:

Turn the ignition key to the OFF position. The immobilizer system activates automatically. Without a valid ignition key for your vehicle, the engine will not start.

#### Vehicles with smart key system

Whenever the engine start/stop button is changed to the ON position, the immobilizer system checks and verifies if the key is valid or not

If the key is valid, the engine will start. If the key is invalid, the engine will not start.

To deactivate the immobilizer system Change the engine start/stop button to the ON position.

#### To activate the immobilizer system

Change the engine start/stop button to the OFF position. The immobilizer system activates automatically. Without a valid smart key for your vehicle, the engine will not start.

#### **WARNING**

In order to prevent theft of your vehicle, do not leave spare kevs anvwhere in your vehicle. Your immobilizer password is a customer unique password and should be kept confidential. Do not leave this number anywhere in your vehicle.

#### \* NOTICE

When starting the engine, do not use the key with other immobilizer keys around. Otherwise the engine may not start or may stop soon after it starts. Keep each key separate in order to avoid a starting malfuntioin.

#### ⚠ CAUTION

Do not put metal accessories near the ignition switch.

The engine may not start because the metal accessories may interrupt the transponder signal from normally transmitting.

#### \* NOTICE

If you need additional keys or lose your keys, we recommend that you consult an authorized HYUNDAI dealer.

#### **⚠** CAUTION

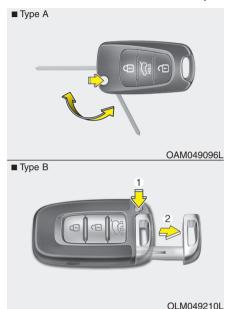
The transponder in your ignition kev is an important part of the immobilizer system. It is designed to give years of trouble-free service. however vou should avoid exposure to moisture, static electricity and rough handling. Immobilizer system malfunction could occur.

### **CAUTION**

Do not change, alter or adjust the immobilizer system because it could cause the immobilizer system to malfunction. We recommend that the system be serviced by an authorized HYUNDAI dealer.

Malfunctions caused by improper alterations, adjustments or modifications to the immobilizer system are not covered by your vehicle manufacturer warranty.

# REMOTE KEYLESS ENTRY (IF EQUIPPED)



# Remote keyless entry system operations

#### Type A

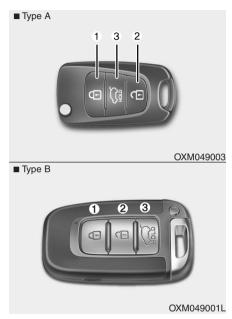
- To unfold the key, press the release button then the key will unfold automatically.
- To fold the key, fold the key manually while pressing the release button.

# **!** CAUTION

Do not fold the key without pressing the release button. This may damage the key.

### Type B

- To remove the mechanical key, press and hold the release button and remove the mechanical key.
- To reinstall the mechanical key, put the key into the hole and push it until a click sound is heard.



Lock (1)

- 1. Close all doors.
- 2. Press the lock button.

3. The hazard warning light will blink once to indicate that all doors are locked (the engine hood and tailgate must be closed). Also, the outside rearview mirror will automatically fold if the outside rearview mirror folding switch (Type B) is in the AUTO position (if equipped).

#### \* NOTICE

The doors will not lock if any door is opened.

#### Unlock (2)

- 1. Press the unlock button.
- The hazard warning lights will blink twice to indicate that all doors are unlocked. Also, the outside rearview mirror will automatically unfold if the outside rearview mirror folding switch (Type B) is in the AUTO position (if equipped).

#### \* NOTICE

After unlocking all doors, the doors will lock and the outside rearview mirror will unfold if the outside rearview mirror folding switch (Type B) is in the AUTO position (if equipped) unless a door is opened within 30 seconds.

#### Tailgate unlock (3)

- 1. Press the tailgate unlock button for more than 1 second.
- The hazard warning light will blink twice to indicate the tailgate is unlocked.

#### \* NOTICE

- After unlocking the tailgate, the tailgate will lock automatically unless it is opened within 30 seconds.
- Once the tailgate is opened and then closed, the tailgate will lock automatically.
- The word "HOLD" is written on the button to inform you that you must press and hold the button.

### **Transmitter precautions**

#### \* NOTICE

The transmitter will not work if any of following occur:

- The ignition key is in ignition switch.
- You exceed the operating distance limit (about 10 m [30 feet]).
- The battery in the transmitter is weak.
- Other vehicles or objects may be blocking the signal.
- The weather is extremely cold.
- The transmitter is close to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the transmitter.

When the transmitter does not work correctly, open and close the door with the ignition key. If you have a problem with the transmitter, we recommend that you contact an authorized HYUNDAI dealer.

(Continued)

#### (Continued)

• If the transmitter is in close proximity to your cell phone or smart phone, the signal from the transmitter could be blocked by normal operation of your cell phone or smart phone. This is especially important when the phone is active such as making call, receiving calls, text messaging, and/or sending/receiving emails. Avoid placing the transmitter and your cell phone or smart phone in the same pants or jacket pocket and maintain adequate distance between the two devices.

# **!** CAUTION

Keep the transmitter away from water or any liquid. If the keyless entry system is inoperative due to exposure to water or liquids, it will not be covered by your manufacturer vehicle warranty.

# **A** CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If the keyless entry system is inoperative due to changes or modifications not expressly approved by the party responsible for compliance, it will not be covered by your manufacturer's vehicle warranty.



#### **Battery replacement**

A battery should last for several years, but if the transmitter or smart key is not working properly, try replacing the battery with a new one. If you are unsure how to use or replace the battery, we recommend that you contact an authorized HYUNDAI dealer.

- 1. Insert a slim tool into the slot and gently pry open the cover.
- 2. Replace the battery with a new battery (CR2032). When replacing the battery, make sure the battery positive "+" symbol faces up as indicated in the illustration.
- 3. Install the rear cover.

For transmitter or smart key replacement, we recommend that you contact an authorized HYUNDAI dealer.



- · The transmitter or smart key is designed to give you years of trouble-free use, however it can malfunction if exposed to moisture or static electricity. If you are unsure how to use or replace the battery, we recommend that you contact an authorized HYUNDAI dealer.
- Using the wrong battery can cause the transmitter or smart key to malfunction. Be sure to use the correct battery.
- To avoid damaging the transmitter or smart key, don't drop it, get it wet, or expose it to heat or sunlight.

#### ∴ CAUTION

An inappropriately disposed battery can be harmful to the environment and human health.

Dispose the battery according to your local law(s) or regulation.

### **SMART KEY (IF EQUIPPED)**

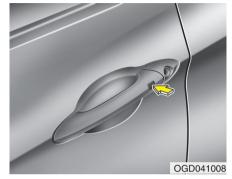


### **Smart key function**

- 1. Door lock
- 2. Door unlock
- 3. Tailgate unlock

With a smart key, you can lock or unlock a door and tailgate and even start the engine without inserting the key.

The functions of the buttons on a smart key are similar to the remote keyless entry. Refer to the "Remote keyless entry" in this section.



Carrying the smart key, you may lock and unlock the vehicle doors and tailgate.

Also, you may start the engine. Refer to the following, for more details.

#### Locking

- 1. Carry the smart key.
- 2. Close all doors.
- Press the button of the outside door handle.
- 4. The hazard warning lights will blink once (the engine hood and tailgate must be closed). Also, the outside rearview mirror will automatically fold if the outside rearview mirror folding switch (Type B) is in the AUTO position (if equipped).
- 5. Make sure that doors are locked by pulling the outside door handle.

### \* NOTICE

- The button will only operate when the smart key is within 0.7 m (28 in.) from the outside door handle.
- Even though you press the outside door handle button, the doors will not lock and the chime will sound for 3 seconds if any of following occur:
  - The smart key is in the vehicle.
  - The engine start/stop button is in ACC or ON position.
  - -Any door except the tailgate is opened.

#### Unlocking

- 1. Carry the smart key.
- 2. Press the button of the front outside door handle.
- 3. All doors will unlock and the hazard warning lights will blink twice. Also, the outside rearview mirror will automatically unfold if the outside rearview mirror folding switch (Type B) is in the AUTO position (if equipped).

#### \* NOTICE

- The button will only operate when the smart key is within 0.7 m (28 in.) from the outside door handle.
- When the smart key is recognized in the area of 0.7 m (28 in.) from the front outside door handle, other people can also open the doors.
- After unlocking all doors, the doors will lock and the outside rearview mirror will unfold if the outside rearview mirror folding switch (Type B) is in the AUTO position (if equipped) unless a door is opened within 30 seconds.



Tailgate unlocking

- 1. Carry the smart key.
- 2. Press the tailgate handle switch.
- 3. The tailgate will unlock.

#### \* NOTICE

- Once the tailgate is opened and then closed, the tailgate will lock automatically.
- The button will only operate when the smart key is within 0.7 m (28 in.) from the tailgate handle.

#### **Smart key precautions**

#### \* NOTICE

- If, for some reason, you happen to lose your smart key, you will not be able to start the engine. Tow the vehicle, if necessary, we recommend that you contact an authorized HYUNDAI dealer.
- A maximum of 2 smart keys can be registered to a single vehicle. If you lose a smart key, we recommend that you contact an authorized HYUNDAI dealer.
- The smart key will not work if any of the following occurs:
  - The smart key is close to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the smart key.
  - The smart key is near a mobile twoway radio system or a cellular phone.
  - Another vehicle's smart key is being operated close to your vehicle.

When the smart key does not work properly, open and close the door with the mechanical key. If you have a problem with the smart key, we recommend that you contact an authorized HYUNDAI dealer.

(Continued)

#### (Continued)

• If the smart key is in close proximity to your cell phone or smart phone, the signal from the smart key could be blocked by normal operation of your cell phone or smart phone. This is especially important when the phone is active such as making call, receiving calls, text messaging, and/or sending/receiving emails. Avoid placing the smart key and your cell phone or smart phone in the same pants or jacket pocket and maintain adequate distance between the two devices.

# **!** CAUTION

Keep the smart key away from water or any liquid. If the keyless entry system is inoperative due to exposure to water or liquids, it will not be covered by your manufacturer's vehicle warranty.



# Door lock/unlock in an emergency situation

If the smart key does not operate normally, you can lock or unlock the doors by using the mechanical key.

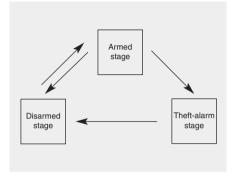
- 1. Press and hold the release button (1) and remove the mechanical key (2).
- Insert the key into the hole of the outside door handle. Turn the key toward the rear of the vehicle to unlock and toward the front of the vehicle to lock.
- To reinstall the mechanical key, put the key into the hole and push it until a click sound is heard.

### THEFT-ALARM SYSTEM (IF EQUIPPED)



Vehicles equipped with a theft alarm system will have a label attached to the vehicle with the following words:

- 1. WARNING
- 2. SECURITY SYSTEM



This system is designed to provide protection from unauthorized entry into the vehicle. This system is operated in three stages: the first is the "Armed" stage, the second is the "Theft-alarm" stage, and the third is the "Disarmed" stage. If triggered, the system provides an audible alarm with blinking of the hazard warning lights.

#### Armed stage

Using the smart key

Park the vehicle and stop the engine. Arm the system as described below.

- 1. Turn off the engine.
- Make sure that all doors, the engine hood and tailgate are closed and latched.
- 3.• Lock the doors by pressing the button of the front outside door handle with the smart key in your possession.

After completion of the steps above, the hazard warning lights will operate once to indicate that the system is armed.

If the tailgate or engine hood remains opened, the hazard warning lights will not operate and theft-alarm will not arm. After this, if the tailgate and engine hood are closed, the hazard warning lights will blink once and the theft-alarm will arm.

 Lock the doors by pressing the lock button on the smart key.

After completion of the steps above, the hazard warning lights will operate once to indicate that the system is armed.

If the tailgate or engine hood remains opened, the hazard warning lights will not operate and theft-alarm will not arm. After this, if the tailgate and engine hood are closed, the hazard warning lights will blink once and the theft-alarm will arm.

#### Using the transmitter

Park the vehicle and stop the engine. Arm the system as described below.

- 1. Turn off the engine and remove the ignition key from the ignition switch.
- Make sure that all doors, the engine hood and tailgate are closed and latched.
- 3. Lock the doors by pressing the lock button on the transmitter.

After completion of the steps above, the hazard warning lights will blink once to indicate that the system is armed.

If the tailgate or engine hood remains opened, the hazard warning lights will not operate and theft-alarm will not arm. After this, if the tailgate and engine hood are closed, the hazard warning lights will blink once and the theft-alarm will arm.

Do not arm the system until all passengers have left the vehicle. If the system is armed while a passenger(s) remains in the vehicle, the alarm may be activated when the remaining passenger(s) leave the vehicle. If any door, tailgate or engine hood is opened within 30 seconds after entering the armed stage, the system is disarmed to prevent unnecessary alarm.

#### Theft-alarm stage

The alarm will be activated if any of the following occurs while the system is armed.

- A front or rear door is opened without using transmitter or smart key.
- The tailgate is opened without using transmitter or smart key.
- The engine hood is opened.

The siren will sound and the hazard warning lights will blink continuously for 27 seconds, unless the system is disarmed. To turn off the system, unlock the doors with the transmitter or smart key.

### Disarmed stage

The system will be disarmed when: *Transmitter* 

- The door unlock button is pressed.
- The engine is started.
- The ignition switch is in the "ON" position for 30 seconds or more.

#### Smart key

- The door unlock button is pressed.
- The button of the front outside door is pressed while carrying the smart key.
- The engine is started.

After the doors are unlocked, the hazard warning lights will blink twice to indicate that the system is disarmed.

After pressing the unlock button, if any door (or tailgate) is not opened within 30 seconds, the system will be rearmed.

#### \* NOTICE

- Without smart key system
  If the system is not disarmed with the transmitter, insert the key into the ignition switch and start the engine.
  Then the system will be disarmed.
- With smart key system
  If the system is not disarmed with the smart key, open the door with the mechanical key and start the engine.
  Then the system will be disarmed.
- If you lose your keys, we recommend that you consult an authorized HYUNDAI dealer.

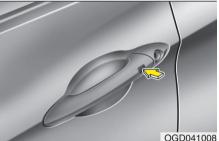
# **⚠** CAUTION

Do not change, alter or adjust the theft-alarm system because it could cause the theft-alarm system to malfunction and we recommend that the system be serviced by an authorized HYUNDAI dealer.

Malfunctions caused by improper alterations, adjustments or modifications to the theft-alarm system are not covered by your vehicle manufacturer warranty.

#### **DOOR LOCKS**





# Operating door locks from outside the vehicle

#### Transmitter/Smart key

- Doors can be locked and unlocked with the transmitter or smart key.
- Doors can be locked and unlocked by pressing the button of the outside door handle with the smart key in your possession. (vehicles equipped with smart key system)

- Once the doors are unlocked, they may be opened by pulling the door handle.
- When closing the door, push the door by hand. Make sure that doors are closed securely.

#### Mechanical key

- If the transmitter or smart key does not operate normally, you can lock or unlock the doors by the mechanical key.
  - Insert the key into the key hole of the outside door handle. Turn the key toward the rear of the vehicle to unlock and toward the front of the vehicle to lock.
- If you lock/unlock the driver's door with a key while the power door lock switch does not operate normally, only the driver's door will lock/unlock.
- Once the door is unlocked, it may be opened by pulling the door handle.
- When closing the door, push the door by hand. Make sure that doors are closed securely.

#### \* NOTICE

- In cold and wet climates, door lock and door mechanisms may not work properly due to freezing conditions.
- If the door is locked/unlocked multiple times in rapid succession with either the vehicle key or door lock switch, the system may stop operating temporarily in order to protect the circuit and prevent damage to system components.

# **A** WARNING

- If you don't close the door securely, the door may open again.
- Be careful that someone's body and hands are not trapped when closing the door.



### In case of an emergency

If the power door lock switch does not operate electrically, the only way to lock the door(s) is with the mechanical key from the outside key hole.

You can lock the doors without the outside key hole as follows:

- 1. Open the door.
- Insert the key into the emergency door lock hole and turn the key horizontally to lock.
- 3. Close the door securely.



# Operating door locks from inside the vehicle

With the door handle

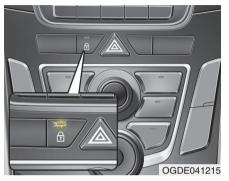
# Driver's door and front passanger's door (if equipped)

If the inner door handle is pulled when the door is locked, the door will unlock and open.

# Rear door and front passanger's door (if equipped)

If the inner door handle is pulled once when the door is locked, the door will unlock.

If the inner door handle is pulled once more, the door will open.



With central door lock/unlock switch It is operated by pressing the door lock/unlock switch.

- When you press the central door lock switch, all vehicle doors will lock and the indicator light on the switch will illuminate.
- If any door is opened when the switch is pressed, all doors will not lock.
- If any door is unlocked, the indicator of the central door lock switch will go off.
- When you press the central door unlock switch, all vehicle doors will unlock.

#### \* NOTICE

Once the doors are locked with the transmitter or smart key, the doors cannot be unlocked with the central door lock/unlock switch.

# WARNING - Door lock malfunction

If a power door lock ever fails to function while you are in the vehicle, try one or more of the following:

- Operate the other door locks and handles.
- Lower the driver's window and use the key to unlock the door from outside.
- Move to the cargo area and open the tailgate.

# **WARNING - Doors**

- The doors should always be fully closed and locked while the vehicle is in motion to prevent accidental opening of the door. Locked doors will also discourage potential intruders when the vehicle stops or slows down.
- Be careful when opening doors and watch for vehicles, motorcycles, bicycles or pedestrians approaching the vehicle in the path of the door. Opening a door when something is approaching can cause damage or injury.

# WARNING - Unlocked vehicles

Leaving your vehicle unlocked can invite theft or possible harm to you or others from someone hiding in your vehicle while you are gone. Always remove the ignition key, engage the parking brake, close all windows and lock all doors when leaving your vehicle unattended.

# WARNING - Unattended children

An enclosed vehicle can become extremely hot, causing death or severe injury to unattended children or animals who cannot escape the vehicle. Furthermore, children might operate features of the vehicle that could injure them, or they could encounter other harm, possibly from someone gaining entry to the vehicle. Never leave children or animals unattended in your vehicle.

#### Deadlocks (if equipped)

Some vehicles are equipped with a deadlock system. Deadlocks prevent opening of a door from either inside or outside the vehicle once the deadlocks have been activated providing an additional measure of vehicle security.

To lock the vehicle using the deadlock function, the doors must be locked by using the transmitter or smart key. To unlock the vehicle, the transmitter or smart key must be used again.

# **A** WARNING

Do not lock the doors with the transmitter or the smart key with anybody left in the vehicle. The passenger in the vehicle cannot unlock the doors with the door lock button. For example, if the door is locked with the transmitter, the passenger in the vehicle cannot unlock the door without the transmitter.

#### Door lock/unlock features

Impact sensing door unlock system
All doors will automatically unlock when
an impact causes the air bags to deploy.

# Speed sensing door lock system (if equipped)

All doors will automatically lock after the vehicle speed exceeds 15 km/h.

# Engine off door unlock system (if equipped)

All doors will automatically unlock:

#### Without smart key system

When the key is removed from the ignition switch.

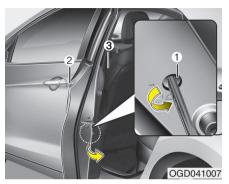
#### With smart key system

When the engine start/stop button is in the OFF position.

#### Shift lever door lock/unlock system

- All doors will automatically lock when the shift lever is moved out of P (Park).
- All doors will automatically unlock when the shift lever is moved into P (Park).

You can activate or deactivate the auto door lock/unlock features in the vehicle. Refer to "User setting" in this section.



# Child-protector rear door lock

The child safety lock is provided to help prevent children from accidentally opening the rear doors from inside the vehicle. The rear door safety locks should be used whenever children are in the vehicle.

- 1. Open the rear door.
- 2. Insert a key (or screwdriver) into the hole (1) and turn it to the "lock( )" )" position. When the child safety lock is in the lock position, the rear door will not open even though the inner door handle (3) is pulled inside the vehicle.

3. Close the rear door.

To open the rear door, pull the outside door handle (2).

Even though the doors may be unlocked, the rear door will not open by pulling the inner door handle (3) until rear door child safety lock is unlocked.

# WARNING - Rear door locks

If children accidentally open the rear doors while the vehicle is in motion, they could fall out and be severely injured or killed. To prevent children from opening the rear doors from the inside, the rear door safety locks should be used whenever children are in the vehicle.

#### **TAILGATE**



### Opening the tailgate

- The tailgate is locked or unlocked when all doors are locked or unlocked with the key, transmitter, smart key or central door lock/unlock switch.
- Only the tailgate is unlocked if the tailgate unlock button on the transmitter or smart key is pressed for approximately 1 second or the tailgate handle switch is pressed with the smart key in your possession.
- If unlocked, the tailgate can be opened by pressing the handle and pulling it up.
- Once the tailgate is opened and then closed, the tailgate locks automatically. (All doors must be locked.)

#### \* NOTICE

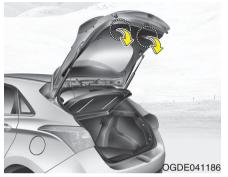
In cold and wet climates, door lock and door mechanisms may not work properly due to freezing conditions.

# **A** WARNING

The tailgate swings upward. Make sure no objects or people are near the rear of the vehicle when opening the tailgate.

# **A** CAUTION

Make certain that you close the tailgate before driving your vehicle. Possible damage may occur to the tailgate lift cylinders and attaching hardware if the tailgate is not closed prior to driving.



### Closing the tailgate

Lower and push down the tailgate firmly. Make sure that the tailgate is securely latched.

### **WARNING**

Make sure your hands, feet and other parts of your body are safely out of the way before closing the tailgate.

# **A** CAUTION

Make sure nothing is near the tailgate latch and striker while closing the tailgate. It may damage the tailgate's latch.

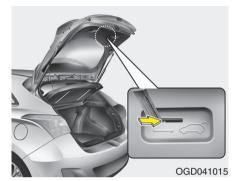
# WARNING - Exhaust

If you drive with the tailgate opened, you will draw dangerous exhaust fumes into your vehicle which can cause serious injury or death to vehicle occupants.

If you must drive with the tailgate opened, keep the air vents and all windows open so that additional outside air comes into the vehicle.



Occupants should never ride in the rear cargo area where no restraints are available. To avoid injury in the event of an accident or sudden stops, occupants should always be properly restrained.



# **Emergency tailgate safety release**

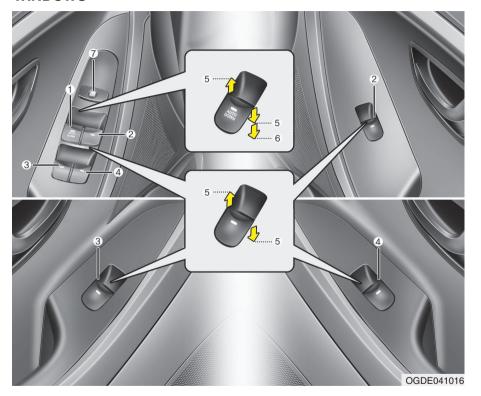
Your vehicle is equipped with the emergency tailgate safety release lever located on the bottom of the tailgate. When someone is inadvertently locked in the luggage compartment. The tailgate can be opened by doing as follows:

- 1. Input the machanical key into the hole.
- 2. Push the machanical key to the right.
- 3. Push up the tailgate.

#### **WARNING**

- For emergencies, be fully aware of the location of the emergency tailgate safety release lever in the vehicle and how to open the tailgate if you are accidentally locked in the luggage compartment.
- No one should be allowed to occupy the luggage compartment of the vehicle at any time. The luggage compartment is a very dangerous location in the event of a crash.
- Use the release lever for emergencies only. Use with extreme caution, especially while the vehicle is in motion.

#### **WINDOWS**



- (1) Driver's door power window switch
- (2) Front passenger's door power window switch
- (3) Rear door (left) power window switch\*
- (4) Rear door (right) power window switch\*
- (5) Window opening and closing
- (6) Automatic power window up\*/down\*
- (7) Power window lock switch

#### \* NOTICE

In cold and wet climates, power windows may not work properly due to freezing conditions.

<sup>\*:</sup> if equipped

#### **Power windows**

The ignition switch must be in the ON position for power windows to operate. Each door has a power window switch that controls the door's window. The driver's door has a master power window switch that controls all the windows in the vehicle. Also, the driver has a power window lock switch which can block the operation of rear passenger windows.

The power windows can be operated for approximately 30 seconds after the ignition key is removed or turned to the ACC or LOCK position. However, if the front doors are opened, the power windows cannot be operated even within the 30 seconds period.

#### \* NOTICE

While driving with the rear windows down or with the sunroof (if equipped) in an open (or partially open position), your vehicle may demonstrate a wind buffeting or pulsation noise. This noise is a normal occurrence and can be reduced or eliminated by taking the following actions. If the noise occurs with one or both of the rear windows down, partially lower both front windows approximately one inch. If you experience the noise with the sunroof open, slightly reduce the size of the sunroof opening.



Window opening and closing Type A

To open or close a window, press down or pull up the front portion of the corresponding switch to the first detent position (5).



Type B - Auto down window (if equipped) Pressing the power window switch momentarily to the second detent position (6) completely lowers the window even when the switch is released. To stop the window at the desired position while the window is in operation, pull up the switch momentarily to the opposite direction of the window movement.



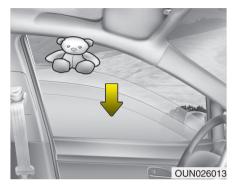
Type C - Auto up/down window (if equipped)

Pressing or pulling up the power window switch momentarily to the second detent position (6) completely lowers or lifts the window even when the switch is released. To stop the window at the desired position while the window is in operation, pull up or press down and release the switch.

#### \* NOTICE

If the power window does not operate normally, the automatic power window system must be reset as follows:

- 1. Turn the ignition switch to the ON position.
- 2. Close the window and continue pulling up the power window switch for at least 1 second after the window is completely closed.



#### Automatic reversal

If the upward movement of the window is blocked by an object or part of the body, the window will detect the resistance and will stop upward movement. The window will then lower approximately 30 cm (11.8 in.) to allow the object to be cleared.

If the window detects the resistance while the power window switch is pulled up continuously, the window will stop upward movement then lower approximately 2.5 cm (1 in.). And if the power window switch is pulled up continuously again within 5 seconds after the window is lowered by the automatic window reversal feature, the automatic window reversal will not operate.

#### \* NOTICE

The automatic reverse feature is only active when the "auto up" feature is used by fully pulling up the switch. The automatic reverse feature will not operate if the window is raised using the halfway position on the power window switch.

# **WARNING**

Always check for obstructions before raising any window to avoid injuries or vehicle damage. If an object less than 4 mm (0.16 in.) in diameter is caught between the window glass and the upper window channel, the automatic reverse window may not detect the resistance and will not stop and reverse direction.



Power window lock button

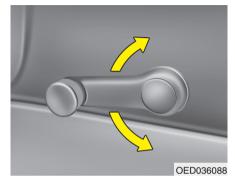
The driver can disable the power window switches on rear passenger doors by pressing the power window lock button located on the driver's door to the LOCK position (pressed).

# **A** CAUTION

- To prevent possible damage to the power window system, do not open or close two windows or more at the same time. This will also ensure the longevity of the fuse.
- Never try to operate the main switch on the driver's door and the individual door window switch in opposing directions at the same time. If this is done, the window will stop and cannot be opened or closed.

### **WARNING - Windows**

- NEVER leave the ignition key in the vehicle.
- NEVER leave any child unattended in the vehicle. Even very young children may inadvertently cause the vehicle to move, entangle themselves in the windows, or otherwise injure themselves or others.
- Always double check to make sure all arms, hands, head and other obstructions are safely out of the way before closing a window.
- Do not allow children to play with the power windows. Keep the driver's door power window lock switch in the LOCK position (pressed). Serious injury can result from unintentional window operation by the child.
- Do not extend face or arms outside the window while driving.



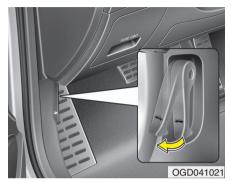
## Manual windows (if equipped)

To raise or lower the window, turn the window regulator handle clockwise or counterclockwise.

# **A** WARNING

When opening or closing the windows, make sure your passenger's arms, hands and body are safely out of the way.

#### HOOD



### Opening the hood

1. Pull the release lever to unlatch the hood. The hood should pop open slightly.

# **A WARNING**

Open the hood after turning off the engine on a flat surface, shifting the shift lever to the P(Park) position for automatic transaxle and to the 1(First) gear or R(Reverse) for manual transaxle, and setting the parking brake.



Go to the front of the vehicle, raise the hood slightly, push the secondary latch inside of the hood center and lift the hood.



- 3. Pull out the support rod.
- 4. Hold the hood opened with the support rod.

# **WARNING** - Hot parts

Be very careful not to touch the support rod when the engine and parts are hot. You could get burned or get seriously injured.

### Closing the hood

- 1. Before closing the hood, check the following:
  - All filler caps in engine compartment must be correctly installed.
  - Gloves, rags or any other combustible material must be removed from the engine compartment.
- 2. Return the support rod to its clip to prevent it from rattling.
- Lower the hood until it is about 30 cm (1 ft.) above the closed position and let it drop. Make sure that it locks into place.

# **WARNING - Hood**

- Before closing the hood, ensure that all obstructions are removed from the hood opening. Closing the hood with an obstruction present in the hood opening may result in property damage or severe personal injury.
- Do not leave gloves, rags or any other combustible material in the engine compartment. Doing so may cause a heat-induced fire.

### **A** WARNING

- Always double check to be sure that the hood is firmly latched before driving away. If it is not latched, the hood could fly open while the vehicle is being driven, causing a total loss of visibility, which might result in an accident.
- The support rod must be inserted completely into the hole whenever you inspect the engine compartment. This will prevent the hood from falling and possibly injuring you.
- Do not move the vehicle with the hood raised. The view will be blocked and the hood could fall or be damaged.

#### **FUEL FILLER LID**



## Opening the fuel filler lid

1. To open the lid, press the center edge of the lid when all doors are unlocked.

## \* NOTICE

The lid will open and close only when all doors are unlocked.



- 2. Fully open the lid (1).
- 3. To open the cap, turn it counterclockwise (2).
- 4. Refuel as needed.

## \* NOTICE

If the fuel-filler lid does not open because ice has formed around it, tap lightly or push on the lid to break the ice and release the lid. Do not pry on the lid. If necessary, spray around the lid with an approved de-icer fluid (do not use radiator anti-freeze) or move the vehicle to a warm place and allow the ice to melt.

## Closing the fuel filler lid

- To install the cap, turn it clockwise until it "clicks". This indicates that the cap is securely tightened.
- 2. To close the lid, press the edge of the lid. Make sure it is securely closed.

# **A WARNING - Refueling**

- If pressurized fuel sprays out, it can cover your clothes or skin and thus subject you to the risk of fire and burns. Always remove the fuel cap carefully and slowly. If the cap is venting fuel or if you hear a hissing sound, wait until the condition stops before completely removing the cap.
- Do not "top off" after the nozzle automatically shuts off when refueling.
- Always check that the fuel cap is installed securely to prevent fuel spillage in the event of an accident.

# **WARNING - Refueling dan-**gers

Automotive fuels are flammable materials. When refueling, please note the following guidelines carefully. Failure to follow these guidelines may result in severe personal injury, severe burns or death by fire or explosion.

- Read and follow all warning posted at the gas station facility.
- Before refueling note the location of the Emergency Gasoline Shut-Off, if available, at the gas station facility.
- Before touching the fuel nozzle, you should eliminate potentially dangerous static electricity discharge by touching another metal part of the vehicle, a safe distance away from the fuel filler neck, nozzle, or other gas source.

### (Continued)

- Do not get back into a vehicle once you have begun refueling since vou can generate static electricity by touching, rubbing or sliding against any item or fabric (polyester, satin, nylon, etc.) capable of producing static electricity. Static electricity discharge can ignite fuel vapors resulting in rapid burning. If you must reenter the vehicle, you should once again eliminate potentially dangerous static electricity discharge by touching a metal part of the vehicle, away from the fuel filler neck, nozzle or other gasoline source.
- When using an approved portable fuel container, be sure to place the container on the ground prior to refueling. Static electricity discharge from the container can ignite fuel vapors causing a fire. Once refueling has begun, contact with the vehicle should be maintained until the filling is complete.

(Continued)

## (Continued)

Use only portable plastic fuel containers designed to carry and store gasoline.

- Do not use cellular phones while refueling. Electric current and/or electronic interference from cellular phones can potentially ignite fuel vapors causing a fire.
- When refueling, always shut the engine off. Sparks produced by electrical components related to the engine can ignite fuel vapors causing a fire. Once refueling is complete, check to make sure the filler cap and filler door are securely closed, before starting the engine.
- DO NOT use matches or a lighter and DO NOT SMOKE or leave a lit cigarette in your vehicle while at a gas station especially during refueling. Automotive fuel is highly flammable and can, when ignited, result in fire.

(Continued)

### (Continued)

 If a fire breaks out during refueling, leave the vicinity of the vehicle, and immediately contact the manager of the gas station and then contact the local fire department. Follow any safety instructions they provide.

# **A** CAUTION

- Make sure to refuel your vehicle according to the "Fuel requirements" suggested in section 1.
- If the fuel filler cap requires replacement, please make sure that you use parts designed for replacement in your vehicle. An incorrect fuel filler cap can result in a serious malfunction of the fuel system or emission control system. For more detailed information, we recommend that you contact an authorized HYUNDAI dealer.
- Do not spill fuel on the exterior surfaces of the vehicle. Any type of fuel spilled on painted surfaces may damage the paint.
- After refueling, make sure the fuel cap is installed securely to prevent fuel spillage in the event of an accident.

# PANORAMA SUNROOF (IF EQUIPPED)



If your vehicle is equipped with a sunroof, you can slide or tilt your sunroof with the sunroof control lever located on the overhead console.

The sunroof can only be opened, closed, or tilted when the ignition switch is in the ON position.

- In cold and wet climates, the sunroof may not work properly due to freezing conditions
- After the vehicle is washed or in a rainstorm, be sure to wipe off any water that is on the sunroof before operating it.

# ⚠ CAUTION - Sunroof control lever

Do not continue to move the sunroof control lever after the sunroof is fully opened, closed, or tilted. Damage to the motor or system components could occur.



# Sunroof open warning (if equipped)

If the driver removes the ignition key (smart key: turns off the engine) and opens the driver-side door when the sunroof is not fully closed, the warning chime will sound for approximately 7 seconds and a message "Panorama Roof Open" will appear on the LCD display.

Close the sunroof securely when leaving your vehicle.



### Sunshade

- To open the sunshade, press the sunshade control switch(1).
- To close the sunshade when the sunroof glass is closed.
  - Press the sunshade control switch(2).
  - Push the sunroof control lever forward or pull it down.

To stop the sliding at any point, press the sunshade control switch momentarily.



## Sliding the sunroof

### When the sunshade is closed

If you pull the sunroof control lever backward, the sunshade will slide all the way open then the sunroof glass will slide all the way open. To stop the sunroof movement at any point, pull or push the sunroof control lever momentarily.

### When the sunshade is opened

If you pull the sunroof control lever backward, the sunroof glass will slide all the way open. To stop the sunroof movement at any point, pull or push the sunroof control lever momentarily.



## Tilting the sunroof

#### When the sunshade is closed

If you push the sunroof control lever upward, the sunshade will slide all the way open then the sunroof glass will tilt. To stop the sunroof movement at any point, pull or push the sunroof control lever momentarily.

#### When the sunshade is opened

If you push the sunroof control lever upward, the sunroof glass will tilt.

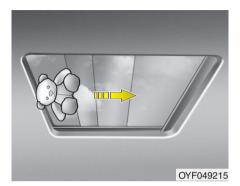
To stop the sunroof movement at any point, pull or push the sunroof control lever momentarily.

## Closing the sunroof

To close the sunroof glass with the sunshade

Push the sunroof control lever forward. The sunroof glass will close then the sunshade will close automatically.

To stop the sunroof movement at any point, pull or push the sunroof control lever momentarily.



### Automatic reversal

If an object or part of the body is detected while the sunroof glass or sunshade is closing automatically, it will reverse the direction, and then stop.

The auto reverse function does not work if a tiny obstacle is between the sliding glass or sunshade and the sunroof sash. You should always check that all passengers and objects are away from the sunroof before closing it.

Do not extend the face, neck, arms or body outside the sunroof while driving.

Periodically remove any dirt that may accumulate on the guide rail. The sunroof is made to slide together with the sunshade. Do not leave the sunshade closed while the sunroof is opened.

While using sunroof for a long time, a dust between sunroof and roof panel can make a noise. Open the sunroof and remove regularly the dust using clean cloth.

# ⚠ CAUTION - Sunroof motor damage

If you try to open the sunroof when the temperature is below freezing or when the sunroof is covered with snow or ice, the glass or the motor could be damaged.

# Resetting the sunroof

Whenever the vehicle battery is disconnected or discharged, or related fuse is blown, you must reset your sunroof system as follows:

- 1. Turn the engine on and close the sunroof glass and sunshade completely.
- 2. Release the control lever.
- Push the sunroof control lever forward in the direction of close (about 10 seconds) until the sunroof operates as follows;

SUNSHADE OPEN → TILT OPEN

Then, release the control lever.

 Push the sunroof control lever forward in the direction of close until the sunroof operates as follows;

SLIDE OPEN → SLIDE CLOSE

Then, release the control lever.

When this is complete, the sunroof system is reset.

For more detailed information, we recommend that you contact an authorized HYUNDAI dealer.

#### \* NOTICE

If you do not reset the sunroof, it may not work properly.

#### STEERING WHEEL

## **Electronic power steering**

Power steering uses the motor to assist you in steering the vehicle. If the engine is off or if the power steering system becomes inoperative, the vehicle may still be steered, but it will require increased steering effort.

The motor driven power steering is controlled by the power steering control unit which senses the steering wheel torque and vehicle speed to command the motor.

The steering wheel becomes heavier as the vehicle's speed increases and becomes lighter as the vehicle's speed decreases for better control of the steering wheel.

Should you notice any change in the effort required to steer during normal vehicle operation, we recommend that the system be checked by an authorized HYUNDAI dealer.

## \* NOTICE

The following symptoms may occur during normal vehicle operation:

- The EPS warning light does not illuminate.
- The steering effort is high immediately after turning the ignition switch on. This happens as the system performs the EPS system diagnostics. When the diagnostics is completed, the steering wheel will return to its normal condition.
- A click noise may be heard from the EPS relay after the ignition switch is turned to the ON or LOCK/OFF position.
- Motor noise may be heard when the vehicle is at a stop or at a low driving speed.
- The steering effort increases if the steering wheel is rotated continuously when the vehicle is not in motion. However, after a few minutes, it will return to its normal conditions.

(Continued)

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- If the Électronic Power Steering System does not operate normally, the warning light will illuminate on the instrument cluster. The steering wheel may become difficult to control or operate abnormally. We recommend that you contact an authorized HYUNDAI dealer.
- When you operate the steering wheel in low temperature, abnormal noise could occur. If temperature rises, the noise will disappear. This is a normal condition.

### Tilt & telescopic steering

A tilt steering wheel allows you to adjust the steering wheel before you drive. You can also raise it to give your legs more room when you exit and enter the vehicle.

The steering wheel should be positioned so that it is comfortable for you to drive, while permitting you to see the instrument panel warning lights and gauges.

## **WARNING**

- Never adjust the angle and height of steering wheel while driving. You may lose your steering control and cause severe personal injury or accidents.
- After adjusting, push the steering wheel both up and down to be certain it is locked in position.



To change the steering wheel angle, pull down the lock release lever (1), adjust the steering wheel to the desired angle (2) and height (3), then pull up the lock-release lever to lock the steering wheel in place. Be sure to adjust the steering wheel to the desired position before driving.



#### Horn

To sound the horn, press the horn symbol on your steering wheel. Check the horn regularly to be sure it operates properly.

#### \* NOTICE

To sound the horn, press the area indicated by the horn symbol on your steering wheel (see illustration). The horn will operate only when this area is pressed.

## **!** CAUTION

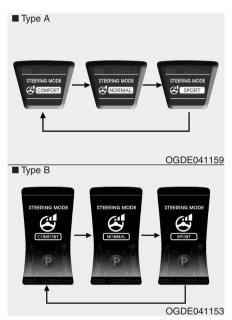
Do not strike the horn severely to operate it, or hit it with your fist. Do not press on the horn with a sharppointed object.



# Flex steering wheel (if equipped)

The flex steering wheel controls steering effort as driver's preference or road condition.

You can select the desired steering mode by pressing the steering mode button.



When the steering mode button is pressed, the selected steering mode will appear on the LCD display.

If the steering mode button is pressed within 4 seconds, the steering mode will change as above pictures.

If the steering wheel mode button is not pressed for about 4 seconds, the LCD display will change to the previous



screen.

## Normal mode

The normal mode offers medium steering effort.



#### Comfort mode

The steering wheel becomes lighter. The comfort mode is usually used when driving in downtown or parking the vehicle. Also, the comfort mode helps weak people to drive easily.



## Sport mode

The steering wheel becomes heavier. The sport mode is usually used when driving in highway.

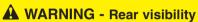
# **!** CAUTION

- For your safety, if you press the steering mode button while operating the steering wheel, the LCD display will change, but the steering effort will not change immediately. After operating the steering wheel, the steering effort will change automatically to the selected mode.
- Be careful when changing the steering mode while driving.
- When the electronic power steering is not working properly, the flex steering wheel will not work.

#### **MIRRORS**

#### Inside rearview mirror

Adjust the rearview mirror so that the center view through the rear window is seen. Make this adjustment before you start driving.



Do not place objects in the rear seat or cargo area which would interfere with your vision out the rear window.

# **A WARNING**

Do not adjust the rearview mirror while the vehicle is moving. This could result in loss of control, and an accident which could cause death, serious injury or property damage.

# **WARNING**

Do not modify the inside mirror and do not install a wide mirror. It could result in injury, during an accident or deployment of the air bag.



# Day/night rearview mirror (if equipped)

Make this adjustment before you start driving and while the day/night lever is in the day position.

Pull the day/night lever toward you to reduce glare from the headlights of vehicles behind you during night driving.

Remember that you lose some rearview clarity in the night position.

# Electric chromic mirror (ECM) (if equipped)

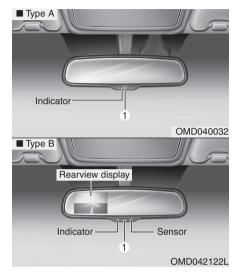
The electric rearview mirror automatically controls the glare from the headlights of the car behind you in nighttime or low light driving conditions. The sensor mounted in the mirror senses the light level around the vehicle, and automatically controls the headlight glare from vehicles behind you.

When the engine is running, the glare is automatically controlled by the sensor mounted in the rearview mirror.

Whenever the shift lever is shifted into R (Reverse), the mirror will automatically go to the brightest setting in order to improve the drivers view behind the vehicle.

# **⚠** CAUTION

When cleaning the mirror, use a paper towel or similar material dampened with glass cleaner. Do not spray glass cleaner directly on the mirror as that may cause the liquid cleaner to enter the mirror housing.



## To operate the electric rearview mirror:

- Press the ON/OFF button (1) to turn the automatic dimming function on. The mirror indicator light will illuminate.
   Press the ON/OFF button to turn the automatic dimming function off. The mirror indicator light will turn off.
- The mirror defaults to the ON position whenever the ignition switch is turned on.

#### **Outside rearview mirror**

Be sure to adjust mirror angles before driving.

Your vehicle is equipped with both lefthand and right-hand outside rearview mirrors. The mirrors can be adjusted remotely with the remote switch. The mirror heads can be folded back to prevent damage during an automatic car wash or when passing in a narrow street.

# **▲** WARNING - Rearview mirrors

- The outside rearview mirror is convex. Objects seen in the mirror are closer than they appear.
- Use your interior rearview mirror or direct observation to determine the actual distance of following vehicles when changing lanes.

# **⚠** CAUTION

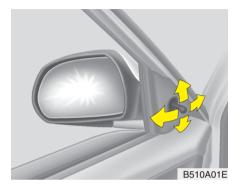
Do not scrape ice off the mirror face; this may damage the surface of the glass. If ice should restrict movement of the mirror, do not force the mirror for adjustment. To remove ice, use a deicer spray, or a sponge or soft cloth with very warm water.

# **A** CAUTION

If the mirror is jammed with ice, do not adjust the mirror by force. Use an approved spray de-icer (not radiator antifreeze) to release the frozen mechanism or move the vehicle to a warm place and allow the ice to melt.

## **WARNING**

Do not adjust or fold the outside rearview mirrors while the vehicle is moving. This could result in loss of control, and an accident which could cause death, serious injury or property damage.



Remote control
Manual type

To adjust an outside mirror, move the control lever.



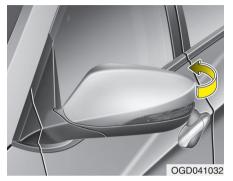
## **Electric type (if equipped)**

The electric remote control mirror switch allows you to adjust the position of the left and right outside rearview mirrors. To adjust the position of either mirror, move the lever (1) to R (Right) or L (Left) to select the right side mirror or the left side mirror, then press a corresponding point on the mirror adjustment control to position the selected mirror up, down, left or right.

After adjustment, put the lever into neutral (center) position to prevent inadvertent adjustment.

# **!** CAUTION

- The mirrors stop moving when they reach the maximum adjusting angles, but the motor continues to operate while the switch is pressed. Do not press the switch longer than necessary, the motor may be damaged.
- Do not attempt to adjust the outside rearview mirror by hand.
   Doing so may damage the parts.



Folding the outside rearview mirror Manual type

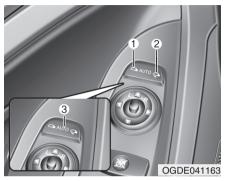
To fold outside rearview mirror, grasp the housing of mirror and then fold it toward the rear of the vehicle.



Electric type A

To fold the outside rearview mirror, press the button.

To unfold it, press the button again.



Electric type B

The outside rearview mirror can be folded or unfolded by pressing the switch as below.

Left (1): The mirror will unfold.

Right (2): The mirror will fold.

Center (AUTO, 3):

The mirror will fold or unfold automatically as follows:

- · Without smart key system
  - The mirror will fold or unfold when the door is locked or unlocked by the transmitter.

- · With smart key system
  - The mirror will fold or unfold when the door is locked or unlocked by the smart key.
  - The mirror will fold or unfold when the door is locked or unlocked by the button on the outside door handle.
  - The mirror will unfold when you approach the vehicle (all doors closed and locked) with a smart key in possession. (if equipped)

# **!** CAUTION

The electric type outside rearview mirror operates even though the ignition switch is in the OFF position. However, to prevent unnecessary battery discharge, do not adjust the mirrors longer than necessary while the engine is not running.

# **A** CAUTION

In case it is an electric type outside rearview mirror, don't fold it by hand. It could cause motor failure.

## **INSTRUMENT CLUSTER**

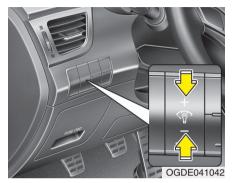


- 1. Tachometer
- 2. Speedometer
- 3. Engine coolant temperature gauge
- 4. Fuel gauge
- 5. Warning and indicator lights (if equipped)
- 6. Turn signal indicators
- 7. LCD display



- \* The actual cluster in the vehicle may differ from the illustration.
- For more details, refer to "Gauges" in the following pages.

OGDE041040/OGDE041041

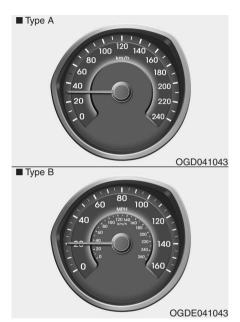


## Instrument panel illumination

The instrument panel illumination intensity can be adjusted as follows:

- Ignition switch in the ON position
- Pressing the upper or lower part of the switch

The illumination intensity is shown on the instrument cluster LCD display.

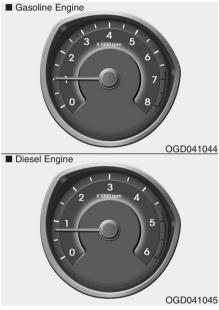


# Gauges

### Speedometer

The speedometer indicates the vehicle speed.

The speedometer is calibrated in kilometers per hour and/or miles per hour.

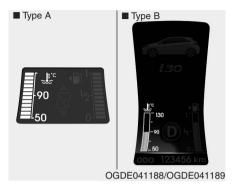


#### **Tachometer**

The tachometer indicates the engine speed in revolutions per minute (rpm). Use the tachometer to select the correct shift points and to prevent lugging and/or over-revving the engine.

# $\triangle$ CAUTION

Do not operate the engine within the tachometer's RED ZONE. This may cause severe engine damage.



# Engine coolant temperature gauge

This gauge shows the temperature of the engine coolant when the ignition switch is ON.

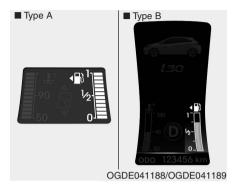
Do not continue driving with an overheated engine. If your vehicle overheats, refer to "If the engine overheats" in section 6.

# **A** CAUTION

If the gauge pointer moves beyond the normal range area toward the High position, it indicates overheating that may damage the engine.

# **WARNING**

Never remove the radiator cap when the engine is hot. The engine coolant is under pressure and could cause severe burns. Wait until the engine is cool before adding coolant to the reservoir.



## Fuel gauge

The fuel gauge indicates the approximate amount of fuel remaining in the fuel tank.

## \* NOTICE

- The fuel tank capacity is given in section 8.
- The fuel gauge is supplemented by a low fuel warning light, which will illuminate when the fuel tank is nearly empty.
- On inclines or curves, the fuel gauge may fluctuate or the low fuel warning light may come on earlier than usual due to the movement of fuel in the tank.

WARNING - Fuel gauge
Running out of fuel can expose vehicle occupants to danger.
You must stop and obtain additional fuel as soon as possible after the warning light comes on or when the gauge indicator comes close to the "O (Empty)" level.

# **!** CAUTION

Avoid driving with a extremely low fuel level. Running out of fuel could cause the engine to misfire damaging the catalytic converter.



## **Outside temperature**

The current outside temperature is displayed in 1°C (1°F) increments. The temperature range is between -40°C  $\sim$  60°C (-40°F  $\sim$  140°F).

- The outside temperature on the display may not change immediately like a general thermometer to prevent the driver from being inattentive.
- You can convert from °C to °F or °F to °C. Refer to "User setting" in this section.



# Manual transaxle shift indicator (if equipped)

This indicator informs you which gear is desired while driving to save fuel.

#### For example

- ▲∃: Indicates that shifting up to the 3rd gear is desired (currently the shift lever is in the 2nd or 1st gear).
- √3: Indicates that shifting down to the 3rd gear is desired (currently the shift lever is in the 4th or 5th gear).

You can turn off the indicator. Refer to "User setting" in this section.



# Automatic transaxle shift position indicator (if equipped)

The indicator displays which automatic transaxle shift lever is selected.



# Icy road warning light (if equipped)

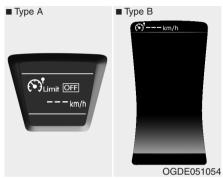
This warning light is to warn the driver the road may be icy when:

- Ignition ON
- Temperature range: approximately below 4°C (39.2°F).

The warning light will blink for 10 seconds and then illuminate. Also, the warning chime will sound.

## \* NOTICE

If the icy road warning light appears while driving, you should drive more attentively and safely refraining from over-speeding, rapid acceleration, sudden braking or sharp turning, etc.



# Speed limiter indicator (if equipped)

The indicator illuminates when the speed limit control system is enabled by pressing (5) button on the steering wheel.

The indicator goes off when the  $\fill \fill \f$ 

If there is a problem with the speed limit control system, the "OFF" indicator for type A and the "---" indicator for type B will blink.

If this occurs, we recommend that the system be checked by an authorized HYUNDAI dealer.

For more details, refer to "Speed limit control system" in section 5.

The speed limiter indicators illuminates on the LCD display.



## Odometer (km or mi.)

The odometer indicates the total distance the vehicle has been driven.

You will also find the odometer useful to determine when periodic maintenance should be performed.



## **Trip computer**

The trip computer is a microcomputercontrolled driver information system that displays information related to driving when the ignition switch is in the ON position. All stored driving information (except odometer, distance to empty and instant fuel economy) resets if the battery is disconnected. Press the TRIP button for less than 1 second to select any mode as follows:

Tripmeter A

Tripmeter B

Distance to empty\*

Average fuel consumption\*

Instant fuel consumption\*

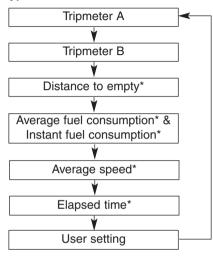
Average speed\*

Elapsed time\*

User setting

\* if equipped

Type B



\* if equipped



#### Tripmeter (km or mi.)

This mode indicates the distance of individual trips selected since the last tripmeter reset.

The meter's working range is from 0.0 to 9999.9 km (0.0 to 9999.9 miles).

Pressing the RESET button for more than 1 second, clears the tripmeter to zero (0.0).



### Distance to empty (km or mi.)

This mode indicates the estimated distance the vehicle can be driven with the remaining fuel. When the remaining distance is below 50 km (30 miles), "---" will be displayed.

The meter's working range is from 50 to 999 km (30 to 999 miles).

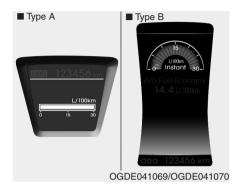


# Average fuel economy (if equipped) (L/100 km or MPG)

This mode calculates the average fuel consumption from the total fuel used and the distance since the last average fuel economy reset. The total fuel used is calculated from the fuel consumption input. For an accurate calculation, drive more than 50 m (0.03 miles).

To clear the average fuel economy to zero (--.-), do as follow;

- When the "AVG Fuel Economy" of "User Setting" is in the "Auto Reset" If the vehicle speed exceeds 1 km/h after refueling more than 6 *l*, the average fuel consumption will be cleared to zero (---).
- When the "AVG Fuel Economy" of "User Setting" is in the "Manual Reset" Pressing the RESET button for more than 1 second, when the average fuel consumption is displayed, clears the average fuel consumption to zero (--.-).



Instant fuel economy (if equipped) (L/100 km or MPG)

This mode calculates the instant fuel consumption during the last few seconds.

#### \* NOTICE

- If the vehicle is not on level ground or the battery power has been interrupted, the "Distance to empty" function may not operate correctly.
  - The trip computer may not register additional fuel if less than 6 liters (1.6 gallons) of fuel are added to the vehicle.
- The fuel economy and distance to empty may vary significantly based on driving conditions, driving habits, and condition of the vehicle.
- The distance to empty is an estimate of the available driving distance. This value may differ from the actual driving distance.



## Average speed (km/h or MPH)

This mode calculates the average speed of the vehicle since the last average speed reset.

Even if the vehicle is not in motion, the average speed keeps going while the engine is running.

Pressing the RESET button for more than 1 second, when the average speed is displayed, clears the average speed to zero (---).



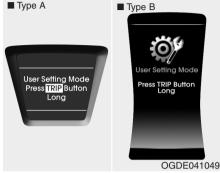
## Elapsed time

This mode indicates the total time traveled since the last driving time reset.

Even if the vehicle is not in motion, the driving time keeps going while the engine is running.

The meter's working range is from  $0:00\sim99:59$ .

Pressing the RESET button for more than 1 second, when the driving time is being displayed, clears the driving time to zero (0:00).



#### **User Settings**

- Stop the vehicle with the ignition switch in the ON position or engine running.
- 2. Press the TRIP button until the User setting mode is displayed.
- 3. With the User setting mode displayed, press the TRIP button until the screen is changed.
- 4. You can change the item by pressing the TRIP button and select an item by pressing the RESET button.

#### **Auto Door Lock**

- Off The auto door lock operation will be canceled.
- Speed All doors will be automatically locked when the vehicle speed exceeds 15km/h (9.3mph).
- Shift Lever All doors will be automatically locked if the shift lever is shifted from the P(Park) position to the R(Reverse), N(Neutral) or D(Drive) position. (for automatic transaxle shift lever)

#### **Auto Door Unlock**

- Off The auto door unlock operation will be canceled.
- Key Out All doors will be automatically unlocked when the ignition key is removed from ignition switch (or smart key is in the OFF position).
- Shift Lever All doors will be automatically unlocked if the shift lever is shifted to the P(Park) position. (for automatic transaxle shift lever)

## Headlamp delay (if equipped)

- On The Headlamp delay and Headlamp Welcome function will be activated.
- Off The Headlamp delay and Headlamp Welcome function will be deactivated.

# Auto Triple Turn (One-touch triple turn signal)

- On The lane change signals will blink 3 times when the turn signal lever is moved slightly.
- Off The Auto Triple Turn function will be deactivated.

### Welcome Light (if equipped)

- On The welcome light function of puddle lamp and pocket lamp will activate.
- Off The welcome light function of puddle lamp and pocket lamp will deactivate.

#### Welcome Sound (if equipped)

- On The Welcome Sound function will be activated.
- Off The Welcome Sound function will be deactivated.

#### AVG fuel economy

- Auto Reset The average fuel economy will reset automatically when you drive after refueling.
- Manual Reset The average fuel economy will not reset automatically when you drive after refueling. You can reset the average fuel economy by pressing the RESET button for more than 1 second when the average fuel economy is displayed.

#### **Temperature Unit**

Convert the temperature unit from °C to °F from °F to °C.

#### Eco driving (for manual transaxle)

- On The manual transaxle shift indicator will illuminate.
- Off The manual transaxle shift indicator will turn off.

### Language

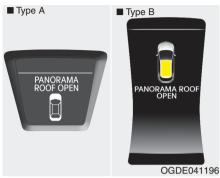
Choose the language you prefer within the LCD display.



# LCD display informations

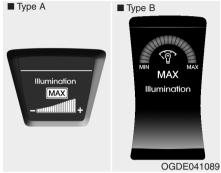
### Door/Tailgate open

The indicator appears to inform the driver which door or tailgate is opened.



## Panorama roof open

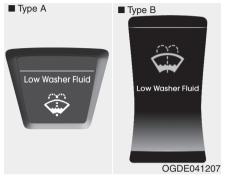
If driver removes the ignition key (Smart key: turns off the engine) and opens the driver-side door when the sunroof is not fully closed, a message "Panorama Roof Open" will appear on the LCD display. Also, the warning chime sounds for approximately 7 seconds.



### Illumination intensity

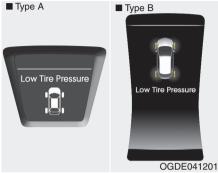
The illumination intensity of the instrument panel is shown when adjusting it with the illumination control switch.

For more details, refer to "Instrument panel illumination" in section 4.



Low washer fluid (if equipped)

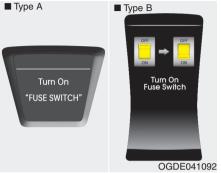
This warning light illuminates when the washer fluid reservoir is nearly empty. If you press the TRIP button while the warning light is illuminating, LCD display mode is changed to the trip mode for 4 seconds and then will return to the low washer fluid mode. Refill the washer fluid as soon as possible.



Low tire pressure (if equipped)

The low tire pressure position telltale will appear when one or more of your tires are under-inflated. It will indicate the corresponding under-inflated tire.

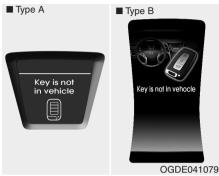
For more details, refer to "TPMS" in section 6.



Turn on fuse switch (mode switch)

The notice appears to inform the driver to turn on the fuse switch in the instrument panel under the steering wheel.

For more details, refer to "Fuses" in section 7.

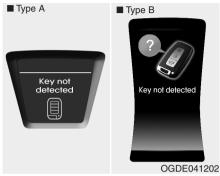


For vehicle's equipped with smart key system

#### Key is not in vehicle

If the smart key is not in the vehicle and if any door is opened or closed with the engine start/stop button in the ACC, ON, or START position, the warning illuminates on the LCD display. Also, the chime sounds for 5 seconds when the smart key is not in the vehicle and the door is closed.

Always have the smart key with you.



Key is not detected

If the smart key is not in the vehicle or is not detected and you press the engine start/stop button, the warning illuminates on the LCD display for 10 seconds. Also, the immobilizer indicator blinks for 10 seconds.



#### Press start with smart key

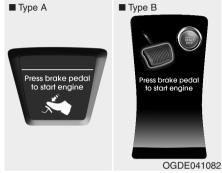
If you press the engine start/stop button while the warning "Key is not detected" illuminates the warning "Press the start button with smart key" illuminates for 10 seconds on the LCD display. Also, the immobilizer indicator blinks for 10 seconds.



## Low key battery

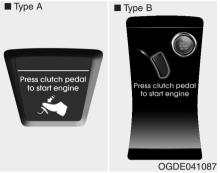
If the engine start/stop button changes to the OFF position when the smart key in the vehicle discharges, the warning illuminates on the LCD display for about 10 seconds. Also, the warning chime sounds once.

Replace the battery with a new one.



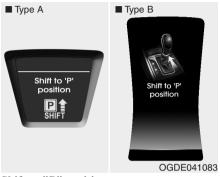
# Press brake pedal to start engine (for automatic transaxle)

If the engine start/stop button changes to the ACC position twice by pressing the button repeatedly without depressing the brake pedal, the warning illuminates on the LCD display for about 10 seconds to indicate that you should depress the brake pedal to start the engine.



# Press clutch pedal to start engine (for manual transaxle)

If the engine start/stop button turns to the ACC position twice by pressing the button repeatedly without depressing the clutch pedal, the warning illuminates on the LCD display for about 10 seconds to indicate that you should depress the clutch pedal to start the engine.



## Shift to "P" position

If you try to turn off the engine without the shift lever in the P (Park) position, the engine start/stop button will turn to the ACC position. If the button is pressed once more it will turn to the ON position. The warning illuminates on the LCD display for about 10 seconds to indicate that you should press the engine start/stop button with the shift lever in the P (Park) position to turn off the engine.

Also, the warning chime sounds for about 10 seconds. (if equipped)



#### Press start button again

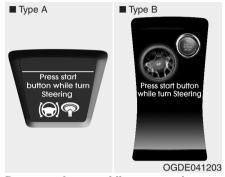
If you can not operate the engine start/stop button when there is a problem with the engine start/stop button system, the warning illuminates for 10 seconds and the chime sounds continuously to indicate that you could start the engine by pressing the engine start/stop button once more.

The chime will stop if the engine start/stop button system works normally or the theft alarm system is armed.

If the warning illuminates each time you press the engine start/stop button, we recommend that the system be checked by an authorized HYUNDAI dealer.



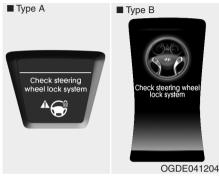
Shift to "P" or "N" to start the engine If you try to start the engine with the shift lever not in the P(Park) or N(Neutral) position, the warning illuminates for about 10 seconds on the LCD display. You can also start the engine with the shift lever in the N(Neutral) position, but for your safety start the engine with the shift lever in the P(Park) position.



# Press start button while turn steering (if equipped)

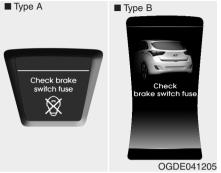
If the steering wheel does not unlock normally when the engine start/stop button is pressed, the warning illuminates for 10 seconds on the LCD display. Also, the warning chime sounds once and the engine start/stop button light blinks for 10 seconds.

When you are warned, press the engine start/stop button while turning the steering wheel right and left.



# Check steering wheel lock system (if equipped)

If the steering wheel does not lock normally when the engine start/stop button changes to the OFF position, the warning illuminates for 10 seconds on the LCD display. Also, the warning chime sounds for 3 seconds and the engine start/stop button light blinks for 10 seconds.



#### Check brake switch fuse

When the brake switch fuse is disconnected, the warning illuminates for 10 seconds on the LCD display.

Replace the fuse with a new one. If that is not possible you can start the engine by pressing the engine start/stop button for 10 seconds in ACC.

# Warnings and indicators (Instrument cluster)

All warning lights are checked by turning the ignition switch ON (do not start the engine). If any light that does not illuminate, we recommend that the system be checked by an authorized HYUNDAI dealer.

After starting the engine, check to make sure that all warning lights are off. If any are still on, this indicates a situation that needs attention.

The following warning and indicators are introduced in the previous pages.

- Automatic transaxle shift lever indicator
- · Manual transaxle shift indicator
- · Icy road warning
- Door/tailgate open (LCD display)
- Parking assist warning (LCD display)
- Low tire pressure (LCD display)

Active ECO indicator (if equipped)

**ECO** 

When the active ECO is operating the ECO indicator illuminates green. For more detailed information, refer to "Active ECO" in chapter 5.

# Seat belt warning and chime light



Air bag warning light



Immobilizer indicator



As a reminder to the driver, the seat belt warning light will blink or illuminate for approximately 6 seconds each time you turn the ignition switch ON regardless of belt fastening.

For more details, refer to the "Seat belt" in section 3.

This warning light will illuminate for approximately 6 seconds each time you turn the ignition switch to the ON position.

This light also comes on when the SRS is not working properly. If the air bag warning light does not come on, or continuously remains on after operating for about 6 seconds when you turn the ignition switch to the ON position or started the engine, or if it comes on while driving, we recommend that the system be inspected by an authorized HYUNDAI dealer.

#### Without smart key system

This indicator illuminates when the immobilizer key is inserted and turned to the ON position to start the engine.

At this time, you can start the engine. The indicator goes out after the engine is running.

If this indicator blinks when the ignition switch is in the ON position before starting the engine, we recommend that the system be checked by an authorized HYUNDAI dealer.

#### With smart key system

If any of the following occurs in a vehicle equipped with the smart key, the immobilizer indicator illuminates, blinks or goes off.

- When the smart key is in the vehicle, if the engine start/stop button is in the ACC or ON position, the indicator will illuminate for approximately 30 seconds to indicate that you are able to start the engine. However, when the smart key is not in the vehicle, if the engine start/stop button is pressed, the indicator will blink for a few seconds to indicate that you are not be able to start the engine.
- If the indicator illuminates only for 2 seconds and goes out when the engine start/stop button is turned to ON position with the smart key in the vehicle, we recommend that the system be checked by an authorized HYUNDAI dealer.
- When the battery is weak, if the engine start/stop button is pressed, the indicator will blink and you are not able to start the engine. However, you are able to start the engine by pressing the engine start/stop button directly with the smart key. Also, if the smart key system related parts have a problem, the indicator will blink.

Door ajar warning light



This warning light illuminates when a door is not closed securely.

Tailgate open warning light



This warning light illuminates when the tailgate is not closed securely.

Low fuel level warning



This warning light indicates the fuel tank is nearly empty. When it comes on, you should add fuel as soon as possible. Driving with the fuel level warning light on or with the fuel level below "O/E" can cause the engine to misfire and damage the catalytic converter (if equipped).

### EPS (Electronic Power Steering) system warning light



Turn signal indicator lights



Light on indicator



This indicator light comes on after the ignition key is turned to the ON position and then it will go out.

This light also comes on when the EPS has some problems. If it comes on while driving, we recommend that the system be checked by an authorized HYUNDAI dealer.

The blinking green arrows on the instrument panel show the direction indicated by the turn signals. If the arrow comes on but does not blink, blinks more rapidly than normal, or does not illuminate at all, a malfunction in the turn signal system is indicated. Your dealer should be consulted for repairs.

The indicator illuminates when the tail lights or headlights are ON.

Low Beam Indicator Light (if equipped)



This indicator light illuminates when the headlights are on.

High beam indicator



This indicator illuminates when the headlights are on and in the high beam position or when the turn signal lever is pulled into the Flash-to-Pass position. AFLS (Adaptive Front Lighting System) malfunction indicator (if equipped)

**AFLS** 

If the AFLS malfunction indicator illuminates, the AFLS is not working properly. Drive to the nearest safe location and restart the engine. If the indicator continuously remains on, we recommend that the system be checked by an authorized HYUNDAI dealer.

Front fog light indicator (if equipped)



The indicator illuminates when the front fog lights are ON.

Rear fog light indicator (if equipped)



This indicator illuminates when the rear fog lights are ON.

# Parking brake & brake fluid warning



#### Parking brake warning

This light illuminates when the parking brake is applied with the ignition switch in the START or ON position. The warning light should go off when the parking brake is released.

#### Low brake fluid level warning

If the warning light remains on, it may indicate that the brake fluid level in the reservoir is low.

If the warning light remains on:

- 1. Drive carefully to the nearest safe location and stop your vehicle.
- With the engine stopped, check the brake fluid level immediately and add fluid as required. Then check all brake components for fluid leaks.
- Do not drive the vehicle if leaks are found, the warning light remains on or the brakes do not operate properly. We recommend that you contact an authorized HYUNDAI dealer.

Your vehicle is equipped with dual-diagonal braking systems. This means you still have braking on two wheels even if one of the dual systems should fail. With only one of the dual systems working, more than normal pedal travel and greater pedal pressure are required to stop the car. Also, the car will not stop in as short a distance with only a portion of the brake system working. If the brakes fail while you are driving, shift to a lower gear for additional engine braking and stop the car as soon as it is safe to do so.

To check bulb operation, check whether the parking brake and brake fluid warning light illuminates when the ignition switch is in the ON position.

# **WARNING**

Driving the vehicle with a warning light on is dangerous. If the brake warning light remains on, we recommend that the system be checked by an authorized HYUNDAI dealer.

EPB (Electric Parking Brake) malfunction indicator

**EPB** 

The EPB malfunction indicator will illuminate when the ignition switch is turned ON, but should go off after approximately 3 seconds. If the warning light does not come on, or continuously remains on we recommend that the system be checked by an authorized HYUNDAI dealer.

Also, the EPB malfunction indicator may illuminate when the ESC indicator comes on to indicate that the ESC is not working properly, but if this occurs, it does not indicate the EPB has malfunctioned.

For more details, refer to "EPB" in section 5.

Anti-lock brake system (ABS) warning light



This light illuminates if the ignition switch is turned ON and goes off in approximately 3 seconds if the system is operating normally.

If the ABS warning light remains on, comes on while driving, or does not come on when the ignition switch is turned to the ON position, this indicates that there may be a problem with the ABS.

If this occurs, we recommend that the system be checked by an authorized HYUNDAI dealer. The normal braking system will still be operational, but without the assistance of the anti-lock brake system.

Electronic brake force distribution (EBD) system warning light





If two warning lights illuminate at the same time while driving, your vehicle's ABS and EBD system may have malfunctioned.

In this case, your ABS and regular brake system may not work normally. We recommend that the system be checked by an authorized HYUNDAI dealer.

#### \* NOTICE

If the ABS warning light or EBD warning light is on and stays on, the speedometer or odometer/tripmeter may not work. Also, the EPS warning light may illuminate and the steering effort may increase or decrease. In this case, we recommend that the system be checked by an authorized HYUNDAI dealer.

# **WARNING**

If both ABS and Brake warning lights are on and stay on, your vehicle's brake system will not work normally. So you may experience an unexpected and dangerous situation during sudden braking. In this case, avoid high speed driving and abrupt braking.

We recommend that the system be checked by an authorized HYUNDAI dealer.

# ESC (Electronic Stability Control) indicator



The ESC indicator will illuminate when the ignition switch is turned ON, but should go off after approximately 3 seconds. When the ESC is on, it monitors the driving conditions. Under normal driving conditions, the ESC indicator will remain off. When a slippery or low traction condition is encountered, the ESC will operate, and the ESC indicator will blink to indicate the ESC is operating. But, if the ESC system malfunctions the indicator illuminates and stays on. We recommend that the system be checked by an authorized HYUNDAI dealer.

ESC OFF indicator



The ESC OFF indicator will illuminate when the ignition switch is turned ON, but should go off after approximately 3 seconds. To switch to ESC OFF mode, press the ESC OFF button. The ESC OFF indicator will illuminate indicating the ESC is deactivated.

# Auto stop indicator (if equipped)



This indicator will illuminate when the engine enters the Idle Stop mode of the ISG (Idle Stop and Go) system.

When the automatic starting occurrs, the auto stop indicator on the cluster will blink for 5 seconds.

For more details, refer to the ISG (Idle Stop and Go) system in section 5.

For vehicles equipped with instrument cluster type B, the indicator illuminates on the LCD display.

#### \* NOTICE

When the engine automatically starts by the ISG system, some warning lights (ABS, ESC, ESC OFF, EPS or Parking brake warning light) may turn on for a few seconds.

This happens because of low battery voltage. It does not mean the system is malfunctioning.

### Cruise indicator (if equipped)

#### **CRUISE** indicator



The indicator illuminates when the cruise control system is enabled.

The cruise indicator in the instrument cluster is illuminated when the cruise control ON-OFF button (5) on the steering wheel is pushed.

The indicator goes off when the cruise control ON-OFF button (5) is pushed again. For more information about the use of cruise control, refer to "Cruise control system" in section 5.

#### **Cruise SET indicator**

**SET** 

The indicator illuminates when the cruise control switch (SET- or RES+) is ON.

The cruise SET indicator in the instrument cluster illuminats when the cruise control switch (SET- or RES+) is pushed. The cruise SET indicator does not illuminate when the cruise control cancel button O is pushed or the system is disengaged.

### TPMS (Tire Pressure Monitoring System) indicator (if equipped)

Low tire pressure telltale/ TPMS malfunction indicator



The low tire pressure telltale comes on for 3 seconds after the ignition switch is turned to the ON position.

The low tire pressure and position telltales illuminates when one or more of your tires is significantly underinflated.

The TPMS malfunction indicator will illuminate after it blinks for approximately one minute when there is a problem with the Tire Pressure Monitoring System.

If this occurs, we recommend that the system be checked by an authorized HYUNDAI dealer.

For more details, refer to the TPMS in section 6.

The low tire pressure position telltale illuminates on the LCD display.

# MARNING - Safe stopping

- The TPMS cannot alert you to severe and sudden tire damage caused by external factors.
- If you notice any vehicle instabilitv. immediately take your foot off the accelerator pedal, apply the brakes gradually and with light force, and slowly move to a safe position off the road.

### Engine oil pressure warnina



This warning light indicates the engine oil pressure is low.

If the warning light illuminates while driv-

- 1. Drive safely to the side of the road and stop.
- 2. With the engine off, check the engine oil level. If the level is low, add oil as required.

If the warning light remains on after adding oil or if oil is not available, we recommend that you call an authorized HYUNDAI dealer.



#### ∴ CAUTION

If the engine does not stop immediately after the engine oil pressure warning light is illuminated, severe damage could result.

# **A** CAUTION

If the oil pressure warning light stays on while the engine is running, serious engine damage may result. The oil pressure warning light comes on whenever there is insufficient oil pressure. In normal operation, it should come on when the ignition switch is turned on, then go out when the engine is started. If the oil pressure warning light stays on while the engine is running, there is a serious malfunction.

If this happens, stop the car as soon as it is safe to do so, turn off the engine and check the oil level. If the oil level is low, fill the engine oil to the proper level and start the engine again. If the light stays on with the engine running, turn the engine off immediately. In any instance where the oil light stays on when the engine is running, we recommend that the system be checked by an authorized HYUNDAI dealer.

# Engine oil level warning light (if equipped)



The engine oil level warning light illuminates when the engine oil level should be checked.

If the warning light comes on, check the engine oil level as soon as possible and add engine oil as required.

Slowly pour the recommended oil little by little into a funnel. (Oil refill capacity : approximately 0.6  $\sim$  1.0  $\it l$ )

Use only the specified engine oil. (Refer to "Recommended lubricants and capacities" in section 8.)

Do not overfill the engine oil to ensure the oil level is not above F mark on the dipstick.

#### \* NOTICE

- If you travel approximately 50 km~100 km after the engine warms up, after adding the engine oil, the warning light will go off.
- Cycle the ignition from OFF to ON 3 times within 10 seconds, the warning light will go off immediately. However, when you turn off the warning light without adding the engine oil, the light will come on again after traveling approximately 50 km  $\sim$  100 km after the engine warms up.

# **⚠** CAUTION

If the light comes on continuously after adding the engine oil and traveling approximately 50 km~100 km after the engine warms up, we recommend that the system be checked by an authorized HYUNDAI dealer.

Even if this light doesn't come on after the engine has started, the engine oil should be checked and supplied periodically.

# Malfunction indicator lamp (MIL) (check engine light)



This indicator light is part of the Engine Control System which monitors various emission control system components. If this light illuminates while driving, it indicates that a potential problem has been detected somewhere in the emission control system.

This light will also illuminate when the ignition switch is turned to the ON position, and will go out in a few seconds after the engine is started. If it illuminates while driving, or does not illuminate when the ignition key is turned to the ON position, we recommend that the system be checked by an authorized HYUNDAI dealer.

Generally, your vehicle will continue to be drivable, but we recommend that the system be checked by an authorized HYUNDAI dealer.

# **!** CAUTION

Prolonged driving with the Emission Control System Malfunction Indicator Light illuminated may cause damage to the emission control systems which could effect drivability and/or fuel economy.

A CAUTION - Gasoline engine If the Emission Control System Malfunction Indicator Light illuminates, potential catalytic converter damage is possible which could result in loss of engine power. We recommend that the system be inspected by an authorized HYUNDAI dealer.

# ⚠ CAUTION - Diesel engine (if equipped with DPF)

When the malfunction indicator light blinks, it may stop blinking after driving the vehicle at more than 60km/h (37 mph) or at more than second gear with 1500 ~ 2000 engine rpm for a certain time (for about 25 minutes).

If the malfunction indicator light continues to blink in spite of the procedure, we recommend that the system be checked by an authorized HYUNDAI dealer.

If you continue to drive with the malfunction indicator light blinking for a long time, the DPF system can be damaged and fuel consumption can worsen.

# **!** CAUTION - Diesel engine

If the Emission Control System Malfunction Indicator Light blinks, some error related to the injection quantity adjustment occurs which could result in loss of engine power, combustion noise and poor emission. We recommend that the system be inspected by an authorized HYUNDAI dealer.

Engine coolant temperature warning light (if equipped)



The warning light illuminates if the temperature of the engine coolant is above 120±3°C (248±5.4°F).

Do not continue driving with an overheated engine. If your vehicle overheats, refer to "Overheating" in section 6.

#### \* NOTICE

If the engine coolant temperature warning light illuminates, it indicates overheating that may damage the engine.

Glow indicator (Diesel engine)



The indicator light illuminates when the ignition switch is placed at the ON position. The engine can be started after the preheat indicator light goes off. The illuminating time varies with the water temperature, air temperature and battery condition.

#### \* NOTICE

If the engine does not start within 10 seconds after the preheating is completed, turn the ignition key once more to the LOCK/OFF position for 10 seconds. and then to the ON position, in order to preheat again.

# ♠ CAUTION

If the preheat indicator light continues to illuminate or flash on and off after the engine has warmed up or while driving, we recommend that the system be checked by an authorized HYUNDAI dealer.

Fuel filter warning light (Diesel engine)



This warning light illuminates for 3 seconds after the ignition switch is set to the ON position and then it will go out. If it lights up while the engine is running, it indicates that water has accumulated inside the fuel filter. If this happens. remove the water from the fuel filter.

For more details, refer to "Fuel filter" in section 7.

#### ∴ CAUTION

When the fuel filter warning light illuminates, engine power (vehicle speed & idle speed) may decrease. If you keep driving with the warning light on, you can damage your vehicle's engine parts and injection system of the Common Rail. If this occurs, we recommend that the system be checked by an authorized HYUNDAI dealer.

### Charging system warning

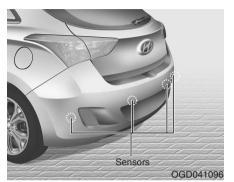


This warning light indicates a malfunction of either the generator or electrical charging system.

If the warning light comes on while the vehicle is in motion:

- 1. Drive to the nearest safe location.
- With the engine off, check the generator drive belt for looseness or breakage.
- If the belt is adjusted properly, a problem exists somewhere in the electrical charging system. We recommend that the system be checked by an authorized HYUNDAI dealer.

# REAR PARKING ASSIST SYSTEM (IF EQUIPPED)



The rear parking assist system assists the driver during backward movement of the vehicle by chiming if any object is sensed within a distance of 120 cm (47 in.) behind the vehicle. This system is a supplemental system and it is not intended to nor does it replace the need for extreme care and attention of the driver. The sensing range and objects detectable by the back sensors are limited. Whenever backing-up, pay as much attention to what is behind you as you would in a vehicle without a rear parking assist system.

### **WARNING**

The rear parking assist system is a supplementary function only. The operation of the rear parking assist system can be affected by several factors (including environmental conditions). It is the responsibility of the driver to always check the area behind the vehicle before and while backing up.



# Operation of the rear parking assist system

#### Operating condition

- This system will activate when the indicator on the rear parking assist OFF button is not illuminated.
  - If you desire to deactivate the rear parking assist system, press the rear parking assist OFF button again. (The indicator on the button will illuminate.) To turn the system on, press the button again. (The indicator on the button will go off.)
- This system will activate when backing up with the ignition switch ON.
  - If the vehicle is moving at a speed over 5 km/h (3 mph), the system may not be activated correctly.

- The sensing distance while the rear parking assist system is in operation is approximately 120 cm (47 in.).
- When more than two objects are sensed at the same time, the closest one will be recognized first.

### Types of warning sound

- When an object is 120 cm to 61 cm (47 in. to 23.6 in.) from the rear bumper: Buzzer beeps intermittently
- When an object is 60 cm to 31 cm (23.6 in. to 12.2 in.) from the rear bumper: Buzzer beeps more frequently
- When an object is within 30 cm (11.8 in.) of the rear bumper:
   Buzzer sounds continuously.

# Type of the warning indicator (if equipped)

Distance from object	Warning indicator
61cm ~ 120 cm (24 in. ~ 47 in.)	
31cm ~ 60 cm (12.2 in. ~ 23.6 in.)	*1
Less than 30 cm (11.8 in.)	*

- \*1: It indicates the range of sensed object by each sensor. (Left, Center, Right)
- # In case the object is between or close to the sensors, the indicator could be different.

# Non-operational conditions of rear parking assist system

# The rear parking assist system may not operate properly when:

- Moisture is frozen to the sensor. (It will operate normally when the moisture has been cleared.)
- The sensor is covered with foreign matter, such as snow or water, or the sensor cover is blocked. (It will operate normally when the material is removed or the sensor is no longer blocked.)
- Driving on uneven road surfaces (unpaved roads, gravel, bumps, gradient).
- Objects generating excessive noise (vehicle horns, loud motorcycle engines, or truck air brakes) are within range of the sensor.
- 5. Heavy rain or water spray exists.
- Wireless transmitters or mobile phones are within range of the sensor.
- 7. Trailer towing.

# The detecting range may decrease when:

- The sensor is stained with foreign matter such as snow or water. (The sensing range will return to normal when removed.)
- Outside air temperature is extremely hot or cold.

# The following objects may not be recognized by the sensor:

- 1. Sharp or slim objects such as ropes, chains or small poles.
- Objects which tend to absorb the sensor frequency such as clothes, spongy material or snow.
- 3. Undetectable objects smaller than 1 m (40 in.) and narrower than 14 cm (6 in.) in diameter.

#### Rear parking assist system precautions

- The rear parking assist system may not sound sequentially depending on the speed and shapes of the objects detected.
- The rear parking assist system may malfunction if the vehicle bumper height or sensor installation has been modified or damaged. Any non-factory installed equipment or accessories may also interfere with the sensor performance.
- The sensor may not recognize objects less than 30 cm (11.8 in.) from the sensor, or it may sense an incorrect distance. Use caution.
- When the sensor is frozen or stained with snow, dirt, or water, the sensor may be inoperative until the stains are removed using a soft cloth.
- Do not push, scratch or strike the sensor. Sensor damage could occur.

### \* NOTICE

This system can only sense objects within the range and location of the sensors; it can not detect objects in other areas where sensors are not installed. Also, small or slim objects, such as poles or objects located between sensors may not be detected by the sensors.

Always visually check behind the vehicle when backing up.

Be sure to inform any drivers of the vehicle that may be unfamiliar with the system regarding the systems capabilities and limitations.

# **WARNING**

Pay close attention when the vehicle is driven close to objects on the road, particularly pedestrians, and especially children. Be aware that some objects may not be detected by the sensors, due to the object's distance, size or material, all of which can limit the effectiveness of the sensor. Always perform a visual inspection to make sure the vehicle is clear of all obstructions before moving the vehicle in any direction.

# Self-diagnosis

When you shift the gear to the R (Reverse) position and if one or more of the below occurs you may have a malfunction in the rear parking assist system

· You don't hear an audible warning sound or if the buzzer sounds intermittently.



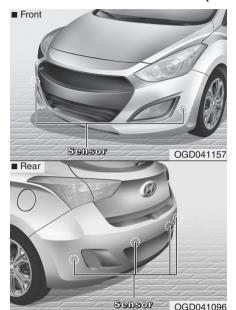
is displayed. (if equipped)

If this occurs, we recommend that the system be checked by an authorized HYUNDAI dealer

#### **WARNING**

Your new vehicle warranty does not cover any accidents or damage to the vehicle or injuries to its occupants due to a rear parking assist system malfunction. Always drive safely and cautiously.

### PARKING ASSIST SYSTEM (IF EQUIPPED)



The parking assist system assists the driver during movement of the vehicle by chiming or displaying the area an obstacle is detected on the instrument cluster if any object is sensed within the distance of 60 cm (24 in.) in front and 120 cm (47 in.) behind the vehicle.

This system is a supplemental system and it is not intended to nor does it replace the need for extreme care and attention of the driver.

The sensing range and objects detectable by the sensors are limited.

Whenever moving pay as much attention to what is in front and behind of you as you would in a vehicle without a parking assist system.

# **WARNING**

The parking assist system should only be considered as a supplementary function. The driver must check the front and rear view. The operational function of the parking assist system can be affected by many factors and conditions of the surroundings, so the responsibility rests always with the driver.



# Operation of the parking assist system

#### Operating condition

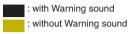
- The indicator of the parking assist system button turns on automatically and activates the parking assist system when you shift the gear to the R (Reverse) position. It will turn off automatically when you shift out of R (Reverse) and drive above 10 km/h (6.2 mph).
- You can turn off the parking assist system by pressing the button.

- The sensing distance while moving forward is approximately 60 cm (24 in.) when you are driving less than 10 km/h (6.2 mph).
- When more than two objects are sensed at the same time, the closest one will be recognized first.

#### \* NOTICE

It may not operate if it's distance from the object is already less than approximately 25 cm when the system is ON.

### Type of warning indicator and sound



Distance from object		Warning indicator		
		When driving forward	When driving rearward	Warning sound
120cm~61cm	Front	-	-	-
	Rear	-	8	Buzzer beeps intermittently
60cm~31cm	Front			Buzzer beeps frequently
	Rear	-		Buzzer beeps frequently
30cm	Front	<b>:</b>		Buzzer sounds continuously
	Rear	-		Buzzer sounds continuously

### \* NOTICE

- The actual warning sound and indicator may differ from the illustration according to objects or sensor status.
- Do not wash the vehicle's sensor with high pressure water.

# **A** CAUTION

 This system can only sense objects within the range and location of the sensors;

It can not detect objects in other areas where sensors are not installed. Also, small or slim objects, such as poles or objects located between sensors may not be detected by the sensors.

Always visually check behind the vehicle when backing up.

 Be sure to inform any drivers of the vehicle that may be unfamiliar with the system regarding the systems capabilities and limitations.

# Non-operational conditions of parking assist system

Parking assist system may not operate normally when:

- Moisture is frozen to the sensor. (It will operate normally when moisture melts.)
- Sensor is covered with foreign matter, such as snow or water, or the sensor cover is blocked. (It will operate normally when the material is removed or the sensor is no longer blocked.)
- Sensor is stained with foreign matter such as snow or water. (Sensing range will return to normal when removed.)
- 4. The parking assist button is off.

# There is a possibility of parking assist system malfunction when:

- Driving on uneven road surfaces such as unpaved roads, gravel, bumps, or gradient.
- Objects generating excessive noise such as vehicle horns, loud motorcycle engines, or truck air brakes can interfere with the sensor.
- 3. Heavy rain or water spray.
- 4. Wireless transmitters or mobile phones present near the sensor.
- 5. Sensor is covered with snow.

#### Detecting range may decrease when:

- 1. Outside air temperature is extremely hot or cold.
- 2. Undetectable objects smaller than 1 m and narrower than 14 cm in diameter.

# The following objects may not be recognized by the sensor:

- 1. Sharp or slim objects such as ropes, chains or small poles.
- Objects, which tend to absorb sensor frequency such as clothes, spongy material or snow.

#### \* NOTICE

- 1. The warning may not sound sequentially depending on the speed and shapes of the objects detected.
- 2. The parking assist system may malfunction if the vehicle bumper height or sensor installation has been modified. Any non-factory installed equipment or accessories may also interfere with the sensor performance.
- 3. Sensor may not recognize objects less than 30 cm from the sensor, or it may sense an incorrect distance. Use with caution.
- 4. When the sensor is frozen or stained with snow or water, the sensor may be inoperative until the stains are removed using a soft cloth.
- 5. Do not push, scratch or strike the sensor with any hard objects that could damage the surface of the sensor. Sensor damage could occur.

#### \* NOTICE

This system can only sense objects within the range and location of the sensors, it can not detect objects in other areas where sensors are not installed. Also, small or slim objects, or objects located between sensors may not be detected. Always visually check in front and behind the vehicle when driving. Be sure to inform any drivers in the vehicle that may be unfamiliar with the system regarding the systems capabili-

# **WARNING**

ties and limitations.

Pay close attention when the vehicle is driven close to objects on the road, particularly pedestrians, and especially children. Be aware that some objects may not be detected by the sensors, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor. Always perform a visual inspection to make sure the vehicle is clear of all obstructions before moving the vehicle in any direction.

### Self-diagnosis

When you shift the gear to the R (Reverse) position and if one or more of the below occurs you may have a malfunction in the rear parking assist system

 You don't hear an audible warning sound or if the buzzer sounds intermittently.



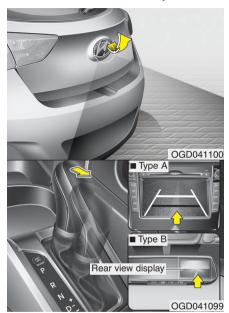
is displayed. (if equipped)

If this occurs, we recommend that the system be checked by an authorized HYUNDAI dealer.

# **A** WARNING

Your new vehicle warranty does not cover any accidents or damage to the vehicle or injuries to its occupants related to a parking assist system. Always drive safely and cautiously.

# REARVIEW CAMERA (IF EQUIPPED)



If you move the shift lever to the R (Reverse) position with the ignition switch on, the back-up light will illuminate, the rearview camera cover will open and then the rearview camera will activate.

When moving the shift lever from R (Reverse) into P (Park), D (Drive) or N (Neutral), the rearview camera cover will close after 10 seconds.

#### \* NOTICE

Closing the rearview camera cover makes a sound, but it is normal condition.

### Type B

The rearview camera may be turned off by pressing the ON/OFF button when the rearview camera is activated.

To turn the camera on again, press the ON/OFF button again when the ignition switch is on and the shift lever in R (Reverse). Also, the camera will turn on automatically whenever the ignition switch is turned off and on again.

### **⚠** CAUTION

- Before washing the vehicle, check that the rearview camera cover is closed. If you wash the vehicle while the rearview camera cover is opened, the rearview camera may be damaged.
- Do not try to open the rearview camera cover manually. The rearview camera may be damaged.

# **A** WARNING

- This system is a supplementary function only. It is the responsibility of the driver to always check the inside/outside rearview mirror and the area behind the vehicle before and while backing up because there is a dead zone that cannot be seen through the camera.
- Always keep the camera lens clean. If the lens is covered with foreign matter, the camera may not operate normally.

#### HAZARD WARNING FLASHER



The hazard warning flasher should be used whenever you find it necessary to stop the car in a hazardous location. When you must make such an emergency stop, always pull off the road as far as possible.

The hazard warning lights are turned on by pushing in the hazard switch. This causes all turn signal lights to blink. The hazard warning lights will operate even though the key is not in the ignition switch.

To turn the hazard warning lights off, push the switch a second time.

#### LIGHTING

### **Battery saver function**

- The purpose of this feature is to prevent the battery from being discharged. The system automatically turns off the parking lights when the driver removes the ignition key (Smart key: turns off the engine) and opens the driver- side door.
- With this feature, the parking lights will be turned off automatically if the driver parks on the side of road at night.
   If necessary, to keep the lights on when the ignition key is removed, perform the following:
  - 1) Open the driver-side door.
  - Turn the parking lights OFF and ON again using the light switch on the steering column.

# Headlamp delay function (if equipped)

The headlamps (and/or taillights) remain on for approximately 20 minutes after the ignition key is removed or turned to the ACC or LOCK position. However, if the driver's door is opened and closed, the headlights are turned off after 30 seconds.

The headlights can be turned off by pressing the lock button on the transmitter or smart key twice or turning off the light switch from the headlight or Auto light position.

You can activate or deactivate the headlamp delay fuction. Refer to "User setting" in this section.

# **A** CAUTION

If the driver gets out of the vehicle through other doors (except driver's door), the battery saver function does not operate and the headlamp delay function does not turn off automatically. Therefore, it causes the battery to be discharged. In this case, make sure to turn off the lamp before getting out of the vehicle.

# Headlight (Headlamp) welcome function (if equipped)

When the headlight switch is in the ON or AUTO position and all doors (and tailgate) are closed and locked, if you press the door unlock button on the transmitter or smart key, the headlights will come on for about 15 seconds.

If the headlight switch is in the AUTO position, the function can only operate at night.

At this time, if you press the door unlock button again or door lock button on the transmitter or smart key, the headlights will turn off immediately.

You can activate or deactivate the headlamp welcome fuction. Refer to "User setting" in this section.

### Static bending light (if equipped)

While driving the corner, for your sight and safety, the static bending light turns on automatically. The system will operate automatically as follows:

- When vehicle speed is under 10km/h and steering wheel angle approximately 80 degrees.
- When vehicle speed is over 10km/h and steering wheel angle approximately 35 degrees.
- · When the vehicle is at a standstill.
- When moving rearwards with one of the above conditions satisfied the lights will light up the opposite direction.



# **Lighting control**

The light switch has a Headlight and a Parking light position.

To operate the lights, turn the knob at the end of the control lever to one of the following positions:

- (1) OFF position
- (2) Parking light position
- (3) Headlight position
- (4) Auto light position (if equipped)



Parking light position (2005)
When the light switch is in the parking light position, the tail, position, license and instrument panel lights are ON.

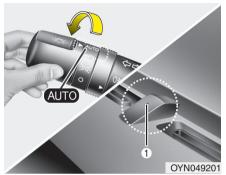


Headlight position (₺)

When the light switch is in the headlight position the head, tail, position, license and instrument panel lights are ON.

### \* NOTICE

The ignition switch must be in the ON position to turn on the headlights.



Auto light/AFLS position (if equipped)

When the light switch is in the AUTO light position, the taillights and headlights will be turned ON or OFF automatically depending on the amount of light outside the vehicle.

If your vehicle is equipped with the adaptive front lighting system (AFLS), it will also operate when the headlamp is ON.

# **!** CAUTION

- Never place anything over the sensor (1) located on the instrument panel, this will ensure better auto-light system control.
- Don't clean the sensor using a window cleaner, the cleaner may leave a light film which could interfere with sensor operation.
- If your vehicle has window tint or other types of coating on the front windshield, the Auto light system may not work properly.



High - beam operation

- 1. Turn the light switch to the headlight position.
- 2. Push the lever away from you.

- The high-beam indicator will light when the headlight high beams are switched on.
- To prevent the battery from being discharged, do not leave the lights on for a prolonged time while the engine is not running.

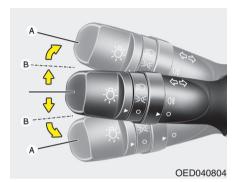
# **WARNING**

Do not use high beam when there are other vehicles. Using high beam could obstruct the other driver's vision.



Flashing headlights

Pull the lever towards you. It will return to the normal position when released. The headlight switch does not need to be on to use this flashing feature.



# Turn signals and lane change signals

The ignition switch must be on for the turn signals to function. To turn on the turn signals, move the lever up or down (A). Green arrow indicators on the instrument panel indicate which turn signal is operating.

They will self-cancel after a turn is completed. If the indicator continues to flash after a turn, manually return the lever to the OFF position.

To signal a lane change, move the turn signal lever slightly and hold it in position (B). The lever will return to the OFF position when released.

If an indicator stays on and does not flash or if it flashes abnormally, one of the turn signal bulbs may be burned out and will require replacement.

# One-touch lane change function (if equipped)

To activate an one-touch lane change function, move the turn signal lever slightly and then release it. The lane change signals will blink 3 times.

You can inactivate one-touch lane change function in "Auto triple turn" of "User setting". Refer to "User setting" in chapter 4.

#### \* NOTICE

If an indicator flash is abnormally quick or slow, bulb may be burned out or have a poor electrical connection in the circuit.



# Front fog light (if equipped)

Fog lights are used to provide improved visibility when visibility is poor due to fog, rain or snow, etc. The fog lights will turn on when the fog light switch (1) is turned on after the parklight is turned on.

To turn off the fog lights, turn the fog light switch (1) to the O (Off) position.

# **A** CAUTION

When in operation, the fog lights consume large amounts of vehicle electrical power. Only use the fog lights when visibility is poor.



# Rear fog light

To turn the rear fog lights on, turn the rear fog light switch (1) to the on position when the headlight is turned on.

Also, the rear fog lights turn on when the rear fog light switch is turned on after the front fog light switch (if equipped) is turned on and the headlight switch is in the parklight position.

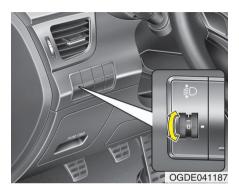
To turn the rear fog lights off, turn the rear fog light switch to the on position again.

# Daytime running light (if equipped)

Daytime Running Lights (DRL) can make it easier for others to see the front of your vehicle during the day. DRL can be helpful in many different driving conditions, and it is especially helpful after dawn and before sunset.

The DRL system will turn off the dedicated lamp when:

- 1. The parklight or headlight (low beam) switch is ON.
- 2. The engine is OFF.



# Headlight leveling device (if equipped)

#### Manual type

To adjust the headlight beam level according to the number of the passengers and the loading weight in the luggage area, turn the beam leveling switch.

The higher the number of the switch is positioned, the lower the headlight beam level. Always keep the headlight beam at the proper leveling position, or headlights may dazzle other road users.

Listed below are the examples of proper switch settings. For loading conditions other than those listed below, adjust the switch position so that the beam level may be the nearest as the condition obtained according to the list.

Loading condition	Switch position
Driver only	0
Driver + Front passenger	0
Full passengers (including driver)	1
Full passengers (including driver) + Maximum permissible loading	2
Driver + Maximum permissible loading	3

### Automatic type

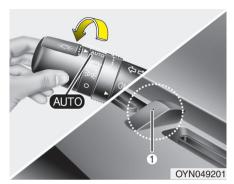
It automatically adjusts the headlight beam level according to the number of passengers and loading weight in the luggage area.

And it offers proper headlight beam under various conditions.

# **WARNING**

If it does not work properly even though your car is inclined backward according to passenger's posture, or the headlight beam is irradiated to the high or low position, we recommend that the system be inspected by an authorized HYUNDAI dealer.

Do not attempt to inspect or replace the wiring yourself.



# AFLS (Adaptive Front Lighting System) (if equipped)

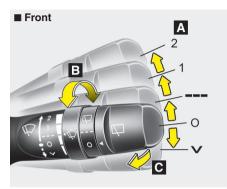
Adaptive front lighting system uses the steering angle and vehicle speed, to keep your field of vision wide by swiveling and leveling the headlamp.

Change the switch to the AUTO position when the engine is running. The adaptive front lighting system will operate when the headlamp is ON. To turn off the AFLS, change the switch to other positions. After turning the AFLS off, headlamp swiveling no longer occurs, but leveling operates continuously.



If the AFLS malfunction indicator comes on, the AFLS is not working properly. Drive to the nearest safe location and restart the engine. If the indicator continuously remains on, we recommend that the system be checked by an authorized HYUNDAI dealer.

#### **WIPERS AND WASHERS**



Rear (if equipped)

#### A: Wiper speed control (front)

- · 2 High wiper speed
- · 1 Low wiper speed
- · --- Intermittent wipe
- · AUTO\* Automatic control wipe
- $\cdot$  O Off
- ✓ Single wipe

# B : Intermittent control wipe time adjustment

C: Wash with brief wipes (front)

#### D : Rear wiper/washer control

- □ Continuous wipe
- · --- Intermittent wipe
- O − Off

#### E: Wash with brief wipes (rear)

\*: if equipped

### Windshield wipers (front)

Operates as follows when the ignition switch is turned ON.

- : For a single wiping cycle, move the lever to this position and release it. The wipers will operate continuously if the lever is held in this position.
- O: Wiper is not in operation
- ---: Wiper operates intermittently at the same wiping intervals. Use this mode in light rain or mist. To vary the speed setting, turn the speed control knob.
- 1: Normal wiper speed
- 2 : Fast wiper speed

#### \* NOTICE

If there is heavy accumulation of snow or ice on the windshield, defrost the windshield for about 10 minutes, or until the snow and/or ice is removed before using the windshield wipers to ensure proper operation.



AUTO (Automatic) control (if equipped)

The rain sensor located on the upper end of the windshield glass senses the amount of rainfall and controls the wiping cycle for the proper interval. The more it rains, the faster the wiper operates. When the rain stops, the wiper stops.

To vary the speed setting, turn the speed control knob (1).

If the wiper switch is set in AUTO mode when the ignition switch is ON, the wiper will operate once to perform a self-check of the system. Set the wiper to off position when the wiper is not in use.

# **A** CAUTION

When the ignition switch is ON and the windshield wiper switch is placed in the AUTO mode, use caution in the following situations to avoid any injury to the hands or other parts of the body:

- Do not touch the upper end of the windshield glass facing the rain sensor.
- Do not wipe the upper end of the windshield glass with a damp or wet cloth.
- Do not put pressure on the windshield glass.

# **A** CAUTION

When washing the vehicle, set the wiper switch in the off position to stop the auto wiper operation.

The wiper may operate and be damaged if the switch is set in the AUTO mode while washing the vehicle.

Do not remove the sensor cover located on the upper end of the passenger side windshield glass. Damage to system parts could occur and may not be covered by your vehicle warranty.

When starting the vehicle in winter, set the wiper switch in the off position. Otherwise, wipers may operate and ice may damage the windshield wiper blades. Always remove all snow and ice and defrost the windshield properly prior to operating the windshield wipers.



# Windshield washers (front)

In the O (Off) position, pull the lever gently toward you to spray washer fluid on the windshield and to run the wipers 1-3 cycles.

Use this function when the windshield is dirty.

The spray and wiper operation will continue until you release the lever.

If the washer does not work, check the washer fluid level. If the fluid level is not sufficient, you will need to add appropriate non-abrasive windshield washer fluid to the washer reservoir.

The reservoir filler neck is located in the front of the engine compartment on the passenger side.

# **A** CAUTION

To prevent possible damage to the washer pump, do not operate the washer when the fluid reservoir is empty.

# **A** WARNING

Do not use the washer in freezing temperatures without first warming the windshield with the defrosters; the washer solution could freeze on the windshield and obscure your vision.

# **!** CAUTION

- To prevent possible damage to the wipers or windshield, do not operate the wipers when the windshield is dry.
- To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.
- To prevent damage to the wiper arms and other components, do not attempt to move the wipers manually.

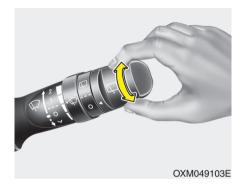
### Headlight washer (if equipped)

If your vehicle is equipped with the headlight washer it will operate at the same time when you operate the windshield washer. It will operate when the headlight switch is in the first or second position and the ignition switch or engine start/stop button is in the ON position.

The washer fluid will be sprayed on to the headlights.

#### \* NOTICE

Check the headlight washers periodically to confirm that the washer fluid is being sprayed properly onto the headlight lenses.



# Rear window wiper and washer switch

The rear window wiper and washer switch is located at the end of the wiper and washer switch lever. Turn the switch to desired position to operate the rear wiper and washer.

Normal wiper operation

--- - Intermittent wipe

O - Wiper is not in operation



Push the lever away from you to spray rear washer fluid and to run the rear wipers 1~3 cycles. The spray and wiper operation will continue until you release the lever

#### INTERIOR LIGHT



Do not use the interior lights for extended periods when the engine is not running.

It may cause battery discharge.

# **A** WARNING

Do not use the interior lights when driving in the dark. Accidents could happen because the view may be obscured by interior lights.

### **Interior lamp AUTO cut**

- When all entrances are closed, if you lock the vehicle by using the transmitter or the smart key, all interior lamp will be off after a few seconds.
- If you do not operate anything in the vehicle after turning off the engine, the lights will turn off after 20 minutes.



# Map lamp

Press the lens (1) to turn the map lamp on or off

•  $\bigcirc$  /OFF (2) : The lamps are off even if a door is opened.

# • ወ /DOOR (3) :

- The map lamp comes on when a door is opened. If you close the door, the lamps go out after approximately 30 seconds.
- The map lamp comes on for approximately 30 seconds when doors are unlocked with a transmitter or smart key as long as the doors are not opened.
- The map lamp will stay on for approximately 20 minutes if a door is opened with the ignition switch in the ACC or LOCK/OFF position.
- The map lamp will stay on continuously if the door is opened with the ignition switch in the ON position.
- The map lamp will go out immediately if the ignition switch is changed to the ON position or all doors are locked.
- $\sum$  /ON (4) : The map lamp stays on at all times.

### \* NOTICE

When the lamp is turned on by pressing the lens (1), the lamp does not turn off even if the switch is in the OFF position (2).



**Room lamp** Type A Press the button to turn the light on or off. If the map lamp turns on by the map lamp switch, the room lamp will turn on.

### Type B

Press the switch to turn on the room lamp.

Press the switch O to turn off the room lamp.



# Vanity mirror lamp (if equipped)

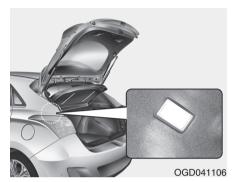
Push the switch to turn the light on or off.

- 😾 : The lamp will turn on if this button is pressed.
- ( ): The lamp will turn off if this button is pressed.

### **!** CAUTION

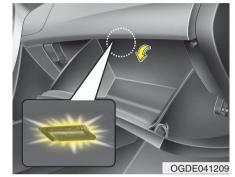
- Vanity mirror lamp

Always have the switch in the off position when the vanity mirror lamp is not in use. If the sunvisor is closed without the lamp off, it may discharge the battery or damage the sunvisor.



Luggage room lamp

The luggage room lamp comes on when the tailgate is opened.



Glove box lamp

The glove box lamp comes on when the glove box is opened.

# **WELCOME SYSTEM (IF EQUIPPED)**

## Headlamp welcome

When the headlight(light switch in the headlight or AUTO position) is on and all doors (and tailgate) are locked and closed, the headlight, position light and tail light will come on for 15 seconds if any of the below is performed.

- Without smart key system
- When the door unlock button is pressed on the transmitter.
- With the smart key system
- When the door unlock button is pressed on the smart key.

At this time, if you press the door lock button (on the transmitter or smart key), the lights will turn off immediately.

# Interior light

When the interior light switch is in the DOOR position and all doors (and tailgate) are locked and closed, the room lamp will come on for 30 seconds if any of the below is performed.

- Without smart key system
- When the door unlock button is pressed on the transmitter.
- · With the smart key system
- When the door unlock button is pressed on the smart key.
- When the button of the outside door handle is pressed.

At this time, if you press the door lock button, the lamps will turn off immediately.

# Puddle lamp and pocket lamp (if equipped)

When all doors are locked and closed, the puddle lamp and pocket lamp will come on for 15 seconds if any of the below is performed.

- Without smart key system
- When the door unlock button is pressed on the transmitter.
- With the smart key system
- When the door unlock button is pressed on the smart key.
- When the button of the outside door handle is pressed.
- When the vehicle is approached with the smart key in possession.

At this time, if you press the door lock button, the lamps will turn off immediately.

#### **DEFROSTER**

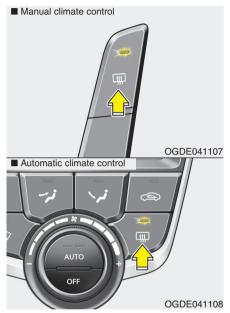


#### /!\ CAUTION

To prevent damage to the conductors bonded to the inside surface of the rear window, never use sharp instruments or window cleaners containing abrasives to clean the window.

#### \* NOTICE

If you want to defrost and defog the front windshield, refer to "Windshield Defrosting and Defogging" in this section.



#### Rear window defroster

The defroster heats the window to remove frost, fog and thin ice from the interior and exterior of the rear window. while engine is running.

- · To activate the rear window defroster. press the rear window defroster button located in the center facia switch panel. The indicator on the rear window defroster button illuminates when the defroster is ON.
- To turn off the defroster, press the rear window defroster button again.

#### \* NOTICE

- If there is heavy accumulation of snow on the rear window, brush it off before operating the rear defroster.
- · The rear window defroster automatically turns off after approximately 20 minutes or when the ignition switch is turned off.

## Outside mirror defroster (if equipped)

The outside mirror defroster will operate at the same time you turn on the rear window defroster.

## Front wiper deicer (if equipped)

The front wiper deicer will operate at the same time you turn on the rear window defroster.

# MANUAL CLIMATE CONTROL SYSTEM (IF EQUIPPED)

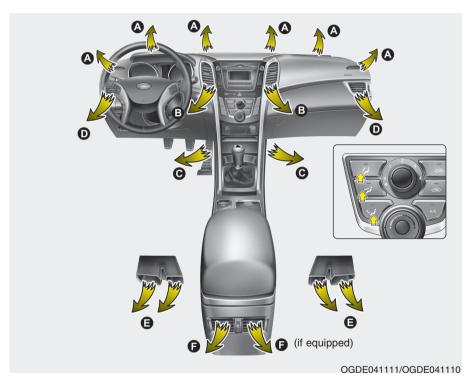


- 1. Front windshield defroster button
- 2. Mode selection button
- 3. Fan speed control knob
- 4. Air intake control button
- 5. Air conditioning button
- 6. Temperature control switch
- 7. Rear window defroster button

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## Heating and air conditioning

- 1. Start the engine.
- Set the mode to the desired position.To improve the effectiveness of heating and cooling:
- Heating: 🕶
- Cooling: 🛪
- 3. Set the temperature control to the desired position.
- 4. Set the air intake control to the outside (fresh) air position.
- 5. Set the fan speed control to the desired speed.
- 6. If air conditioning is desired, turn the air conditioning system on.



## Mode selection

The mode selection button controls the direction of the airflow in the vehicle. If you push the button once, the corresponding switch will turn on, and if you push the button again, the switch will turn off.



# Face-Level (B, D, F\*)

Air flow is directed toward the upper body and face. Additionally, each outlet can be controlled to direct the air discharged from the outlet.

Most of the air flow is directed to the floor.



Most of the air flow is directed to the windshield.

Also you may select 2~3 modes at the same time.

- face (نرَّ ) + floor (ريرُ) mode
- face ( نر ) + defrost ( نر ) mode
- floor (نرم) + defrost (نرم) mode
- face ( نر ً ) + floor ( ر بر ً ) + defrost ( الر ً ) mode
- \*: if equipped

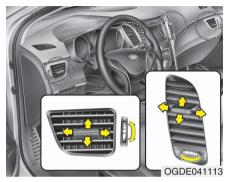


#### Maximum (MAX) defrost mode

When you select the MAX defrost mode, the following system will set automatically:

- The air conditioning system will be turn on.
- The outside(fresh) air position will be selected.

To turn the MAX defrost mode off, press the mode button or MAX defrost button again.



### **Instrument panel vents**

The outlet vents can be opened or closed separately using the thumbwheel.

Also, you can adjust the direction of air delivery from these vents using the vent control lever as shown.



# Temperature control

The temperature control switch allows you to control the temperature of the air-flow in the vehicle.

To change the temperature:

- Turn the knob to the right to increase temperature.
- Turn the knob to the left to decrease temperature.



#### Air intake control

The air intake control is used to select the outside (fresh) air position or recirculated air position.

To change the air intake control position, press the control button.

#### Recirculated air position



With the recirculated air position selected, air from the passenger compartment will be drawn through the heating system and heated or cooled according to the function selected.

#### Outside (fresh) air position



With the outside (fresh) air position selected, air enters the vehicle from outside and is heated or cooled according to the function selected.

#### \* NOTICE

Prolonged operation of the heater in the recirculated air position (without air conditioning selected) may cause fogging of the windshield and side windows and the air within the passenger compartment may become stale.

In addition, prolonged use of the air conditioning with the recirculated air position selected will result in excessively dry air in the passenger compartment.

## **WARNING**

- The continuous use of recirculated air in the climate control system may increase humidity inside the vehicle, causing the glass to fog and obscuring visibility.
- Do not sleep in a vehicle with the air conditioning or heating system on. It may cause serious harm or death due to a drop in the oxygen level and/or body temperature.
- The continuous use of recirculated air in the climate control system can produce drowsiness or sleepiness, which may result in a loss of vehicle control. Set the air intake control to the outside (fresh) air position as much as possible while driving.



## Fan speed control

The ignition switch must be in the ON position for fan operation.

The fan speed control knob allows you to control the fan speed of the air flowing from the ventilation system. To change the fan speed, turn the knob to the right for higher speed or left for lower speed.

Setting the fan speed control knob to the "0" position turns off the fan.



Air conditioning (if equipped)

Press the A/C button to turn the air conditioning system on (indicator light will illuminate). Press the button again to turn the air conditioning system off.

#### **System operation**

#### Ventilation

- 1. Set the mode to the 🔀 position.
- 2. Set the air intake control to the outside (fresh) air position.
- 3. Set the temperature control to the desired position.
- 4. Set the fan speed control to the desired speed.

#### Heating

- 1. Set the mode to the vi position.
- 2. Set the air intake control to the outside (fresh) air position.
- 3. Set the temperature control to the desired position.
- 4. Set the fan speed control to the desired speed.
- 5. If dehumidified heating is desired, turn the air conditioning system on.
- If the windshield fogs up, set the mode to the or ',i position.

#### **Operation Tips**

- To keep dust or unpleasant fumes from entering the vehicle through the ventilation system, temporarily set the air intake control to the recirculated air position. Be sure to return the control to the fresh air position when the irritation has passed to keep fresh air in the vehicle. This will help keep the driver alert and comfortable.
- Air for the heating/cooling system is drawn in through the grilles just ahead of the windshield. Care should be taken that these are not blocked by leaves, snow, ice or other obstructions.
- To prevent interior fog on the windshield, set the air intake control to the fresh air position and fan speed to the desired position, turn on the air conditioning system, and adjust the temperature control to desired temperature.

#### Air conditioning (if equipped)

All HYUNDAI Air Conditioning Systems are filled with environmentally friendly refrigerant\* which does not damage to the ozone layer.

- 1. Start the engine. Push the air conditioning button.
- 2. Set the mode to the 🔰 position.
- 3. Set the air intake control to the outside air or recirculated air position.
- Adjust the fan speed control and temperature control to maintain maximum comfort.
- \*: Your vehicle is filled with R-134a or R-1234yf according to the regulation in your country at the time of producing. Check your country regulation before servicing the air conditioning system.

# **A** CAUTION

- The refrigerant system should only be serviced by trained and certified technicians to insure proper and safe operation.
- The refrigerant system should be serviced in a well-ventilated place.
- The air conditioning evaporator (cooling coil) shall never be repaired or replaced with one removed from a used or salvaged vehicle and new replacement MAC evaporators shall be certified (and labeled) as meeting SAE Standard J2842.

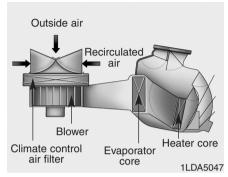
## \* NOTICE

- When using the air conditioning system, monitor the temperature gauge closely while driving up hills or in heavy traffic when outside temperatures are high. Air conditioning system operation may cause engine overheating. Continue to use the blower fan but turn the air conditioning system off if the temperature gauge indicates engine overheating.
- When opening the windows in humid weather air conditioning may create water droplets inside the vehicle. Since excessive water droplets may cause damage to electrical equipment, air conditioning should only be used with the windows closed.

#### Air conditioning system operation tips

- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let the hot air inside the vehicle escape.
- Use air conditioning to reduce humidity and moisture inside the vehicle on rainy or humid days.
- During air conditioning system operation, you may occasionally notice a slight change in engine speed as the air conditioning compressor cycles. This is a normal system operation characteristic.
- Use the air conditioning system every month only for a few minutes to ensure maximum system performance.

- When using the air conditioning system, you may notice clear water dripping (or even puddling) on the ground under the passenger side of the vehicle. This is a normal system operation characteristic.
- Operating the air conditioning system in the recirculated air position provides maximum cooling, however, continual operation in this mode may cause the air inside the vehicle to become stale.
- During cooling operation, you may occasionally notice a misty air flow because of rapid cooling and humid air intake. This is a normal system operation characteristic.



#### Climate control air filter

The climate control air filter installed behind the glove box filters the dust or other pollutants that come into the vehicle from the outside through the heating and air conditioning system. If dust or other pollutants accumulate in the filter over a period of time, the air flow from the air vents may decrease, resulting in moisture accumulation on the inside of the windshield even when the outside (fresh) air position is selected. If this happens, we recommend that the climate control air filter be replaced by an authorized HYUNDAI dealer.

#### \* NOTICE

- Replace the filter according to the Maintenance Schedule. If the car is being driven in severe conditions such as dusty, rough roads, more frequent climate control air filter inspections and changes are required.
- When the air flow rate suddenly decreases, we recommend that the system be checked by an authorized HYUNDAI dealer.

### Checking the amount of air conditioner refrigerant and compressor lubricant

When the amount of refrigerant is low. the performance of the air conditioning is reduced. Overfilling also has a bad influence on the air conditioning system.

Therefore, if abnormal operation is found, we recommend that the system be inspected by an authorized HYUNDAI dealer.



**WARNING** - Vehicles equipped with R-134a\*



Because the refrigerant is at very high pressure, the air conditioning system should only be serviced by trained and

certified technicians. It is important that the correct type and amount of oil and refrigerant is used.

Otherwise, it may cause damage to the vehicle and personal injury.

# WARNING - Vehicles equipped with R-1234vf\*



Because the refrigerant is mildly inflammable and at very high pressure, the air conditioning system should only

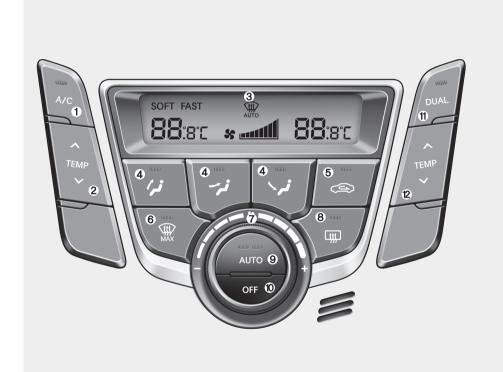


be serviced by trained and certified technicians. It is important that the correct type and

amount of oil and refrigerant is used. Otherwise, it may cause damage to the vehicle and personal iniurv.

\*: Your vehicle is filled with R-134a or R-1234vf according to the regulation in your country at the time of producing. Check your country regulation before servicing the air conditioning system.

# **AUTOMATIC CLIMATE CONTROL SYSTEM (IF EQUIPPED)**



- 1. Air conditioning button
- 2. Driver's temperature control button
- 3. Climate control display
- 4. Mode selection button
- 5. Air intake control button
- 6. Front windshield defroster button
- 7. Fan speed control knob
- 8. Rear window defroster button
- 9. AUTO (automatic control) button
- 10. OFF button
- 11. Dual temperature control selection button
- 12. Passenger's temperature control button

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# Automatic heating and air conditioning

The automatic climate control system is controlled by simply setting the desired temperature.

You can choose either the soft mode or fast mode to select the fan speed.

Soft mode: The wind blows gently.

Fast mode: The wind blows heavier than the soft mode to reach the selected temperature fast.

Each time you press the AUTO button, the mode will change as follows:

#### Soft mode $\leftrightarrow$ Fast mode

The Full Automatic Temperature Control (FATC) system automatically controls the heating and cooling system as follows:

- Select the soft mode or fast mode by pressing the AUTO button. The modes, fan speeds, air intake and air-conditioning will be controlled automatically by setting the temperature.
- 2. Set the temperature to the desired temperature.
- 3. To turn the automatic operation off, select any button of the following:
  - Mode selection button
- Front windshield defroster button
- Fan speed control knob

The selected function will be controlled manually while other functions operate automatically.

For your convenience and to improve the effectiveness of the climate control, use the AUTO button and set the temperature to 22°C/71°F (23°C/73°F-Except Europe).



#### \* NOTICE

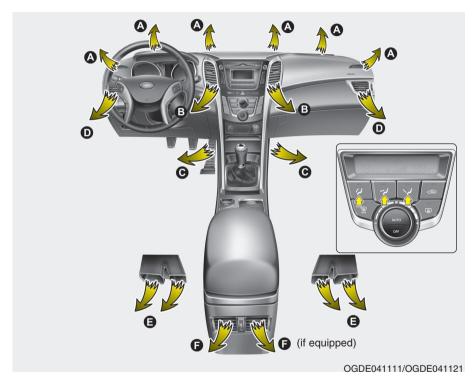
Placing any object over the sensor on the instrument panel may interfere with the heating and cooling system.

# Manual heating and air conditioning

The heating and cooling system can be controlled manually by pressing buttons or turning knob(s) other than the AUTO button. In this case, the system works sequentially according to the order of buttons or knob(s) selected.

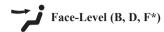
- 1. Start the engine.
- Set the mode to the desired position.To improve the effectiveness of heating and cooling:
- Heating: 🚙
- Cooling: 🛫
- 3. Set the temperature control to the desired position.
- 4. Set the air intake control to the outside (fresh) air position.
- 5. Set the fan speed control to the desired speed.
- 6. If air conditioning is desired, turn the air conditioning system on.

Press the AUTO button in order to convert to full automatic control of the system.



### Mode selection

The mode selection button controls the direction of the airflow in the vehicle. If you push the button once, the corresponding switch will turn on, and if you push the button again, the switch will turn off.



Air flow is directed toward the upper body and face. Additionally, each outlet can be controlled to direct the air discharged from the outlet.

Most of the air flow is directed to the floor.



Most of the air flow is directed to the windshield.

Also you may select 2~3 modes at the same time.

- face (نرَّ ) + floor (ريرُ) mode
- face ( نر ) + defrost ( نر ) mode
- floor (نرم) + defrost (نرم) mode
- face ( نر ً ) + floor ( ر بر ً ) + defrost ( الر ً ) mode

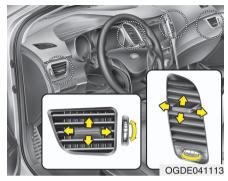


#### Maximum (MAX) defrost mode

When you select the MAX defrost mode, the following system will set automatically:

- The air conditioning system will be turn on.
- The outside(fresh) air position will be selected.
- The fan speed will set to the high speed.

To turn the MAX defrost mode off, press the mode button or MAX defrost button again or AUTO button.

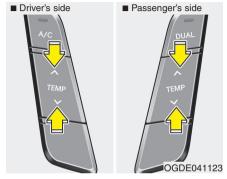


## **Instrument panel vents**

The outlet vents can be opened or closed separately using the thumbwheel.

Also, you can adjust the direction of air delivery from these vents using the vent control lever as shown.

<sup>\*:</sup> if equipped



# Temperature control

The temperature will increase to the maximum (HIGH) by holding the  $\bigwedge$  button.

The temperature will decrease to the minimum (LOW) by holding the  $\bigvee$  button.

The temperature will increase or decrease by 0.5°C/1°F. When set to the lowest temperature, the air conditioning will operate continuously.



Adjusting the driver and passenger side temperature individually

 Press the DUAL button to operate the driver and passenger side temperature individually. Also, if the passenger side temperature control button is operated, it will automatically change to the DUAL mode as well. Operate the driver side temperature control to adjust the driver side temperature. Operate the passenger side temperature control to adjust the passenger side temperature.

When the driver side temperature is set to the highest (HIGH) or lowest (LOW) temperature, the DUAL mode deactivates for maximum heating or cooling.

# Adjusting the driver and passenger side temperature equally

- Press the DUAL button again to deactivate DUAL mode. The passenger side temperature will be set to the same temperature as the driver side.
- Operate the driver side temperature control button. The driver and passenger side temperature will be adjusted equally.

#### **Temperature conversion**

You can switch the temperature mode between Centigrade to Fahrenheit as follows:

While pressing the DUAL button, press the Face-Level selection button  $\vec{\phantom{a}}$  for 3 seconds or more.

The display will change from Centigrade to Fahrenheit, or from Fahrenheit to Centigrade.

#### \* NOTICE

If the battery has been discharged or disconnected, the temperature mode display will reset to Centigrade.



#### Air intake control

This is used to select the outside (fresh) air position or recirculated air position. To change the air intake control position, push the control button.

#### Recirculated air position



With the recirculated air position selected, air from the passenger compartment will be drawn through the heating system and heated or cooled according to the function selected.

#### Outside (fresh) air position



With the outside (fresh) air position selected, air enters the vehicle from outside and is heated or cooled according to the function selected.

#### \* NOTICE

Prolonged operation of the heater in the recirculated air position (without air conditioning selected) may cause fogging of the windshield and side windows and the air within the passenger compartment may become stale.

In addition, prolonged use of the air conditioning with the recirculated air position selected will result in excessively dry air in the passenger compartment.

# **WARNING**

- The continuous use of recirculated air in the climate control system may increase humidity inside the vehicle, causing the glass to fog and obscuring visibility.
- Do not sleep in a vehicle with the air conditioning or heating system on. It may cause serious harm or death due to a drop in the oxygen level and/or body temperature.
- The continuous use of recirculated air in the climate control system can produce drowsiness or sleepiness, which may result in a loss of vehicle control. Set the air intake control to the outside (fresh) air position as much as possible while driving.



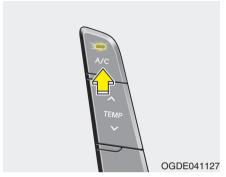
## Fan speed control

The fan speed control knob allows you to control the fan speed of the airflow in the vehicle.

To change the fan speed:

- Turn the knob to the right (+) to increase fan speed.
- Turn the knob to the left (-) to decrease fan speed.

To turn off the fan speed, press the OFF button.



### Air conditioning

Press the A/C button to turn the air conditioning system on (indicator light will illuminate).

Press the button again to turn the air conditioning system off.



#### OFF mode

Press the OFF button to turn off the air climate control system. However, you can still operate the air intake buttons as long as the ignition switch is in the ON position.

## System operation

#### Ventilation

- 1. Set the mode to the 🔀 position.
- 2. Set the air intake control to the outside (fresh) air position.
- 3. Set the temperature control to the desired position.
- 4. Set the fan speed control to the desired speed.

#### Heating

- 1. Set the mode to the vi position.
- 2. Set the air intake control to the outside (fresh) air position.
- 3. Set the temperature control to the desired position.
- 4. Set the fan speed control to the desired speed.
- 5. If dehumidified heating is desired, turn the air conditioning system on.
- If the windshield fogs up, set the mode to the or ',i position.

#### **Operation Tips**

- To keep dust or unpleasant fumes from entering the vehicle through the ventilation system, temporarily set the air intake control to the recirculated air position. Be sure to return the control to the fresh air position when the irritation has passed to keep fresh air in the vehicle. This will help keep the driver alert and comfortable.
- Air for the heating/cooling system is drawn in through the grilles just ahead of the windshield. Care should be taken that these are not blocked by leaves, snow, ice or other obstructions.
- To prevent interior fog on the windshield, set the air intake control to the fresh air position and fan speed to the desired position, turn on the air conditioning system, and adjust the temperature control to desired temperature.

#### Air conditioning (if equipped)

All HYUNDAI Air Conditioning Systems are filled with environmentally friendly refrigerant\* which does not damage to the ozone layer.

- 1. Start the engine. Push the air conditioning button.
- 2. Set the mode to the 🔰 position.
- 3. Set the air intake control to the outside air or recirculated air position.
- Adjust the fan speed control and temperature control to maintain maximum comfort.
- \*: Your vehicle is filled with R-134a or R-1234yf according to the regulation in your country at the time of producing. Check your country regulation before servicing the air conditioning system.

# **A** CAUTION

- The refrigerant system should only be serviced by trained and certified technicians to insure proper and safe operation.
- The refrigerant system should be serviced in a well-ventilated place.
- The air conditioning evaporator (cooling coil) shall never be repaired or replaced with one removed from a used or salvaged vehicle and new replacement MAC evaporators shall be certified (and labeled) as meeting SAE Standard J2842.

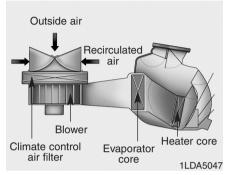
## \* NOTICE

- When using the air conditioning system, monitor the temperature gauge closely while driving up hills or in heavy traffic when outside temperatures are high. Air conditioning system operation may cause engine overheating. Continue to use the blower fan but turn the air conditioning system off if the temperature gauge indicates engine overheating.
- When opening the windows in humid weather air conditioning may create water droplets inside the vehicle. Since excessive water droplets may cause damage to electrical equipment, air conditioning should only be used with the windows closed.

#### Air conditioning system operation tips

- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let the hot air inside the vehicle escape.
- Use air conditioning to reduce humidity and moisture inside the vehicle on rainy or humid days.
- During air conditioning system operation, you may occasionally notice a slight change in engine speed as the air conditioning compressor cycles. This is a normal system operation characteristic.
- Use the air conditioning system every month only for a few minutes to ensure maximum system performance.

- When using the air conditioning system, you may notice clear water dripping (or even puddling) on the ground under the passenger side of the vehicle. This is a normal system operation characteristic.
- Operating the air conditioning system in the recirculated air position provides maximum cooling, however, continual operation in this mode may cause the air inside the vehicle to become stale.
- During cooling operation, you may occasionally notice a misty air flow because of rapid cooling and humid air intake. This is a normal system operation characteristic.



#### Climate control air filter

The climate control air filter installed behind the glove box filters the dust or other pollutants that come into the vehicle from the outside through the heating and air conditioning system. If dust or other pollutants accumulate in the filter over a period of time, the air flow from the air vents may decrease, resulting in moisture accumulation on the inside of the windshield even when the outside (fresh) air position is selected. If this happens, we recommend that the climate control air filter be replaced by an authorized HYUNDAI dealer.

#### \* NOTICE

- Replace the filter according to the Maintenance Schedule. If the car is being driven in severe conditions such as dusty, rough roads, more frequent climate control air filter inspections and changes are required.
- When the air flow rate suddenly decreases, we recommend that the system be checked by an authorized HYUNDAI dealer.

## Checking the amount of air conditioner refrigerant and compressor lubricant

When the amount of refrigerant is low. the performance of the air conditioning is reduced. Overfilling also has a bad influence on the air conditioning system.

Therefore, if abnormal operation is found, we recommend that the system be inspected by an authorized HYUNDAI dealer.



WARNING - Vehicles equipped with R-134a\*



Because the refrigerant is at very high pressure, the air conditioning system should only be serviced by trained and

certified technicians. It is important that the correct type and amount of oil and refrigerant is used.

Otherwise, it may cause damage to the vehicle and personal injury.

# WARNING - Vehicles equipped with R-1234vf\*



Because the refrigerant is mildly inflammable and at very high pressure, the air conditioning system should only be serviced by trained and certified techni-

cians. It is important



that the correct type and amount of oil and refrigerant is used. Otherwise, it may cause damage to the vehicle and personal iniurv.

\*: Your vehicle is filled with R-134a or R-1234vf according to the regulation in your country at the time of producing. Check your country regulation before servicing the air conditioning system.

#### WINDSHIELD DEFROSTING AND DEFOGGING

# WARNING - Windshield heating

Do not use the position during cooling operation in extremely humid weather. The difference between the temperature of the outside air and the windshield could cause the outer surface of the windshield to fog up, causing loss of visibility. In this case, set the mode selection to the position and fan speed control to the lower speed.

- For maximum defrosting, set the temperature control to the hottest position and the fan speed control to the highest speed.
- If warm air to the floor is desired while defrosting or defogging, set the mode to the floor-defrost position.
- Before driving, clear all snow and ice from the windshield, rear window, outside rear view mirrors, and all side windows.
- Clear all snow and ice from the hood and air inlet in the cowl grill to improve heater and defroster efficiency and to reduce the probability of fogging up the inside of the windshield.



# Manual climate control system

To defog inside windshield

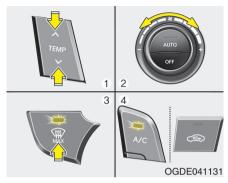
- 1. Set the fan speed to the desired position.
- 2. Select desired temperature.
- 3. Select the mosition.
- 4. The outside (fresh) air will be selected automatically. If the position is selected, air conditioning (if equipped) will also be selected automatically.

If the air conditioning and/or outside (fresh) air position are not selected automatically, press the corresponding button manually.



To defrost outside windshield

- Set the fan speed to the highest position.
- 2. Set the temperature to the hottest position.
- 3. Select the mosition.
- 4. The outside (fresh) air and air conditioning will be selected automatically.

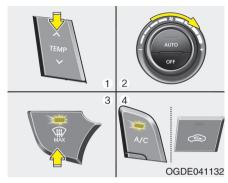


## Automatic climate control system

To defog inside windshield

- 1. Select desired temperature.
- Set the fan speed to the desired position.
- 3. Press the m button.
- 4. The air conditioning will turn on according to the detected ambient temperature and outside (fresh) air position will be selected automatically.

If the air conditioning is not selected automatically, adjust the corresponding button manually. If the more position is selected, lower fan speed is adjusted to a higher fan speed.



To defrost outside windshield

- 1. Set the temperature to the hottest (HIGH) position.
- 2. Set the fan speed to the highest position.
- 3. Press the mb button.
- The air conditioning will turn on according to the detected ambient temperature and outside (fresh) air position will be selected automatically.



Auto defogging system (Only for automatic climate control system, if equipped)

Auto defogging reduces the possibility of fogging up the inside of the windshield by automatically sensing the moisture of inside the windshield.

The auto defogging system operates when the climate control system is on.

#### \* NOTICE

The auto defogging system may not operate normally, when the outside temperture is below -10  $^{\circ}$ C.



This indicator illuminates when the auto defogging system senses the moisture of inside the windshield and operates.

If more moisture is in the vehicle, higher steps operate as follow.

Step 1: Operating the air conditioning

Step 2: Outside air position

Step 3: Blowing air flow toward the windshield

Step 4: Increasing air flow toward the windshield

If your vehicle is equipped with the auto defogging system, it is automatically activated when the conditions are met. However, if you would like to cancel the auto defogging system, press the front defroster button 4 times within 2 seconds while pressing the AUTO button. The indicator will blink 3 times to notify you that the system is cancelled. To use the auto defogging system again, follow the procedures mentioned above.

If the battery has been disconnected or discharged, it resets to the auto defogging status.

#### \* NOTICE

If the A/C off is manually selected while the auto defogging system is on, the auto defogging indicator will blink 3 times to give notice that the A/C off can not be selected.

# **⚠** CAUTION

Do not remove the sensor cover located on the upper end of the driver side windshield glass. Damage to the system parts could occur and may not be covered by your vehicle warranty.

# **CLEAN AIR (IF EQUIPPED)**



When the ignition switch is in the ON position, the clean air function turns on automatically.

Also, the clean air function turns off automatically, when the ignition switch turns to the OFF position.

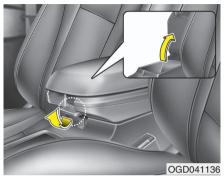
#### STORAGE COMPARTMENT

# **⚠** CAUTION

- To avoid possible theft, do not leave valuables in the storage compartment.
- Always keep the storage compartment covers closed while driving. Do not attempt to place so many items in the storage compartment that the storage compartment cover can not close securely.

# A WARNING - Flammable

Do not store cigarette lighters, propane cylinders, or other flammable/explosive materials in the vehicle. These items may catch fire and/or explode if the vehicle is exposed to hot temperatures for extended periods.



## Center console storage

To open the center console storage, push the lever and then lift up the cover.



# Sliding armrest (if equipped)

To move forward

Grab the front portion of

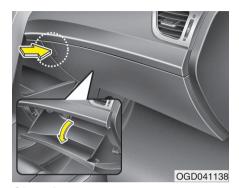
Grab the front portion of the armrest (1) then pull it forward

#### To move rearward

Push the armrest rearward with your palm.



Do not grab the front portion of the armrest (1) when moving the armrest rearward. It may pinch your fingers.



#### Glove box

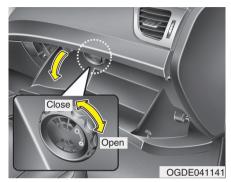
To open the glove box, push the button and the glove box will automatically open. Close the glove box after use.

# **A** WARNING

To reduce the risk of injury in an accident or sudden stop, always keep the glove box door closed while driving.

# **A** CAUTION

Do not keep food in the glove box for a long time.



# Cool box (if equipped)

You can keep beverage cans or other items cool in the glove box.

- Turn on the air conditioning. The temperature of the cool box will change according to the temperature of air conditioning.
- 2. Turn the knob to the open position.
- 3. When the cool box is not used, turn the knob to the close position.

#### \* NOTICE

If some items in the cool box block the vent, the cooling effectiveness of the cool box is reduced.

## **WARNING**

Do not put perishable food in the cool box because it may not maintain the necessary consistent temperature to keep the food fresh.



# Sunglass holder

To open the sunglass holder, press the cover and the holder will slowly open. Place your sunglasses in the compartment door with the lenses facing out. Push to close.

# **A** WARNING

- Do not keep objects except sunglasses inside the sunglass holder.
   Such objects can be thrown from the holder in the event of a sudden stop or an accident, possibly injuring the passengers in the vehicle.
- Do not open the sunglasses holder while the vehicle is moving. The rear view mirror of the vehicle can be blocked by an open sunglass holder.



# Luggage side tray (if equipped)

The luggage side tray can be used for storing small items.

• To open the cover, pull up the handle and lift the cover.

#### **INTERIOR FEATURES**



# Cigarette lighter (if equipped)

For the cigarette lighter to work, the ignition switch must be in the ACC position or the ON position.

To use the cigarette lighter:

Push the lighter all the way into the socket.

When the element has heated, the lighter will pop out to the "ready" position.

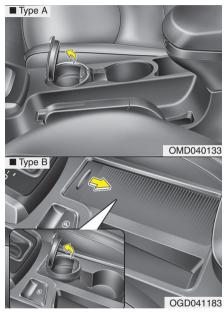
We recommend that you use parts for replacement from an authorized HYUNDAI dealer.

## **WARNING**

- Holding the lighter in after it is heated will cause it to overheat.
- If the lighter does not pop out within 30 seconds, remove it to prevent overheating.

# **!** CAUTION

The use of plug-in accessories (shavers, hand-held vacuums, and coffee pots, etc.) may damage the socket or cause electrical failure.



# Ashtray (if equipped)

To use the ashtray, open the cover. To clean or empty the ashtray, pull it out.

# **WARNING** - Ashtrav use

- Do not use the vehicle's ashtray as a waste receptacle.
- Putting lit cigarettes or matches in an ashtray with other combustible materials may cause a fire.

## **!** CAUTION

When cleaning spilled liquid, do not dry the cup holder at high temperatures. This may damage the chrome part of the cup holder.

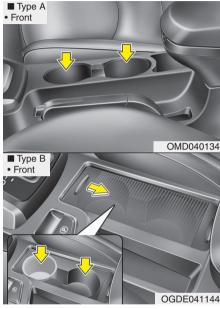
## Cup holder

# **WARNING** - Hot liquids

- Do not place uncovered cups of hot liquid in the cup holder while the vehicle is in motion. If the hot liquid spills, you may burn yourself. Such a burn to the driver could lead to loss of control of the vehicle.
- To reduce the risk of personal injury in the event of sudden stop or collision, do not place uncovered or unsecured bottles, glasses, cans, etc., in the cup holder while the vehicle is in motion.

# **WARNING**

Keep cans and bottles out of direct sunlight. Placing them in a hot vehicle can cause them to explode.



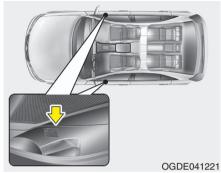
Cups or small beverage cans may be placed in the cup holders.

Type B To use the cup holder, open the cover.



#### Rear

To use the cup holder, pull down the armrest.

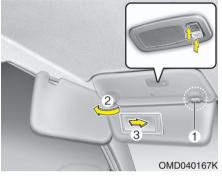


#### **Bottle holder**

Bottles may be placed in the holder.

### \* NOTICE

Only bottles should be placee in the holder as it is written in the vehicle "BOTTLE ONLY".



#### **Sunvisor**

Use the sunvisor to shield direct light through the front or side windows.

To use a sunvisor, pull it downward.

To use a sunvisor for a side window, pull it downward, unsnap it from the bracket (1) and swing it to the side.

To use the vanity mirror, pull down the visor and open the mirror cover (2).

To use the vanity mirror lamp, switch it on. (if equipped)

#### \* NOTICE

Close the vanity mirror cover securely and return the sunvisor to its original position after use.

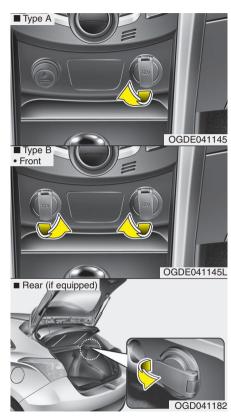
# ⚠ CAUTION - Vanity mirror lamp (if equipped)

Always have the switch in the off position when the vanity mirror lamp is not in use. If the sunvisor is closed without the lamp off, it may discharge the battery or damage the sunvisor.

## **WARNING**

For your safety, do not obstruct your vision when using the sunvisor.

\*To learn how to use the vanity mirror lamp, refer to "Interior light" in this section.



Power outlet

The power outlet is designed to provide power for mobile telephones or other devices designed to operate with vehicle electrical systems. The devices should draw less than 10 amps with the engine running.

#### ∴ CAUTION

- Use power outlet only when the engine is running and remove the accessory plug after use. Using the accessory plug for prolonged periods of time with the engine off could cause the battery to discharge.
- Only use 12V electric accessories which are less than 10A in electric capacity.
- Adjust the air-conditioner or heater to the lowest operating level when using the power outlet.
- · Close the cover when not in use.
- Some electronic devices can cause electronic interference when plugged into a vehicle's power outlet. These devices may cause excessive audio static and malfunctions in other electronic systems or devices used in your vehicle.

# **WARNING**

Do not put a finger or a foreign element (pin, etc.) into a power outlet and do not touch with a wet hand. You may get electrocuted or fire may occur.



# Aux, USB and iPod (if equipped)

If your vehicle has an aux and/or USB(universal serial bus) port or iPod port, you can use an aux port to connect audio devices and an USB port to plug in an USB and also an iPod port to plug in an iPod.

# \* NOTICE

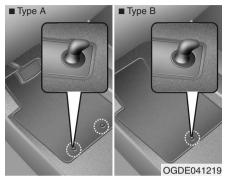
When using a portable audio device connected to the power outlet, noise may occur during playback. If this happens, use the power source of the portable audio device.



**Clothes hanger** 

# **!** CAUTION

- Do not hang heavy clothes, since those may damage the hook.
- Be careful when opening and closing the doors. Clothes, etc. may get caught between the door gap.



# Floor mat anchor(s) (if equipped)

When using a floor mat on the front floor carpet, make sure it attaches to the floor mat anchor(s) in your vehicle. This keeps the floor mat from sliding forward.

## **WARNING**

The following must be observed when installing ANY floor mat to the vehicle.

- Ensure that the floor mats are securely attached to the vehicle's floor mat anchor(s) before driving the vehicle.
- Do not use ANY floor mat that cannot be firmly attached to the vehicle's floor mat anchors.
- Do not stack floor mats on top of one another (e.g. all-weather rubber mat on top of a carpeted floor mat). Only a single floor mat should be installed in each position.

IMPORTANT – Your vehicle was manufactured with driver's side floor mat anchors that are designed to securely hold the floor mat in place. To avoid any interference with pedal operation, HYUNDAI recommends that the HYUNDAI floor mat designed for use in your vehicle be installed.



# Luggage net (holder) (if equipped)

To keep items from shifting in the cargo area, you can use the four holders located in the cargo area to attach the luggage net.

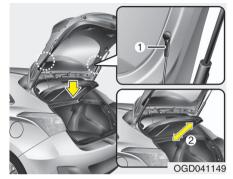
If necessary, we recommend that you contact an authorized HYUNDAI dealer.

# **A** CAUTION

To prevent damage to the goods or the vehicle, care should be taken when carrying fragile or bulky objects in the luggage compartment.

# **A** WARNING

To avoid eye injury, DO NOT overstretch the luggage net. ALWAYS keep your face and body out of the luggage net's recoil path. DO NOT use the luggage net when the strap has visible signs of wear or damage.



# Cargo area cover (if equipped)

Use the cover to hide items stored in the cargo area.

The cargo area cover will be lifted when the tailgate is opened. Disconnect the strap (1) from holder if you want to return the cover to original position. To remove the cargo area cover completely, lift the cover to a 50-degree angle and pull it out to the full (2). For installation of the cover, reverse the removal procedure.

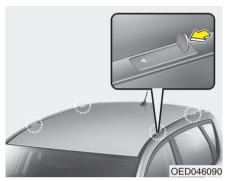
## **!** CAUTION

- When you return the cargo area cover to its original position, hold the cover and lower it.
- Do not operate the vehicle with the cover removed. It may damage to the cover.
- The cargo area cover may be lifted when the tailgate is opened.
   Ensure that the luggage on the cover is moved to a safe place.
- Since the cargo area cover may be damaged or malformed, do not apply excessive force to the cover or do not put the heavy loads on it.

# **A** WARNING

- Do not place objects on the cargo area cover while driving. Such objects may be thrown about inside the vehicle and possibly injure vehicle occupants during an accident or when braking.
- Never allow anyone to ride in the luggage compartment. It is designed for luggage only.
- Maintain the balance of the vehicle and locate the weight as far forward as possible.

### **EXTERIOR FEATURES**



# Mounting bracket for roof carrier (if equipped)

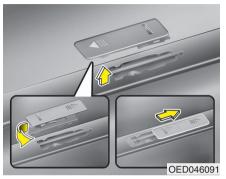
To install or remove a roof carrier, you can use the mounting bracket and cover on the roof.

When you install a roof carrier, use the following procedure.

 Insert a slim tool(coin or flat blade driver) into the slot and slide the cover toward the arrow on the cover.

# **A** WARNING

Use a coin or flat blade driver when you remove the roof carrier cover. If you use your fingernail, it may damage your fingernail.



Rotate the cover half way and insert the cover on the roof hole as the illustration

## \* NOTICE

To prevent loosing the roof carrier cover, install the cover on the roof before you install the roof carrier.

After using the roof carrier, install the cover back on the roof in the reverse order.

## \* NOTICE

If the vehicle is equipped with a sunroof, be sure not to position cargo onto the roof in such a way that it could interfere with sunroof operation.

# **!** CAUTION

- · When carrying cargo on the roof. take the necessary precautions to make sure the cargo does not damage the roof of the vehicle.
- · When carrying large objects on the roof, make sure they do not exceed the overall roof length or width.

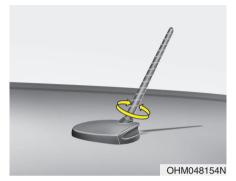
# **WARNING**

- The vehicle center of gravity will be higher when items are loaded onto the roof. Avoid sudden starts, braking, sharp turns, abrupt maneuvers or high speeds that may result in loss of vehicle control or rollover resulting in an accident.
- Always drive slowly and turn corners carefully when carrying items on the roof. Severe wind updrafts, caused by passing vehicles or natural causes, can cause sudden upward pressure on items loaded on the roof. This is especially true when carrying large, flat items such as wood panels or mattresses. This could cause the items to fall off the roof and cause damage to your vehicle or others around you.
- To prevent damage or loss of cargo while driving, check frequently before or while driving to make sure the items on the roof are securely fastened.

### **AUDIO SYSTEM**

## \* NOTICE

If you install an aftermarket HID head lamp, your vehicle's audio and electronic device may malfunction.



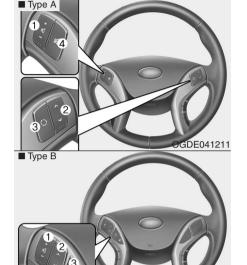
#### **Antenna**

#### Roof antenna

Your car uses a roof antenna to receive both AM and FM broadcast signals. This antenna is a removable type. To remove the antenna, turn it counterclockwise. To install the antenna, turn it clockwise.

# **A** CAUTION

- Before entering a place with a low height clearance or a car wash, remove the antenna by rotating it counterclockwise. If not, the antenna may be damaged.
- When reinstalling your antenna, it is important that it is fully tightened and adjusted to the upright position to ensure proper reception. But it could be removed when parking the vehicle or when loading cargo on the roof rack.
- When cargo is loaded on the roof rack, do not place the cargo near the antenna pole to ensure proper reception.



# Audio remote control (if equipped)

The steering wheel audio remote control button is installed to promote safe driving.

# **A** CAUTION

Do not operate the audio remote control buttons simultaneously.

## VOL(+/-)(1)

- Push up the lever to increase volume.
- Push down the lever to decrease volume.

# SEEK ( $^{\wedge}$ , $^{\vee}$ ) (2)

The SEEK/PRESET button has different functions base on the system mode. For the following functions the button should be pressed for 0.8 seconds or more.

#### RADIO mode

It will function as the AUTO SEEK select button.

#### CDP mode

OGDE041212

It will function as the FF/REW button.

If the SEEK button is pressed for less than 0.8 second, it will work as follows in each mode.

#### RADIO mode

It will function as the PRESET STATION select buttons.

#### CDP mode

It will function as the TRACK UP/DOWN button.

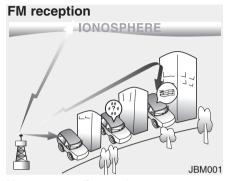
Detailed information for audio control buttons are described in the following pages in this section.

## **MODE** (3)

Press the button to select Radio or CD (compact disc).

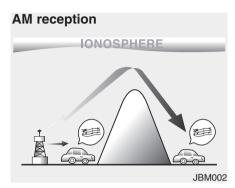
## **MUTE** (4)

- Press the MUTE button to cancel the sound.
- Press the MUTE button again to activate the sound.

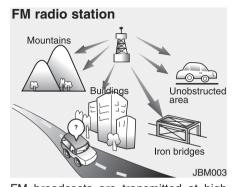


## How car audio works

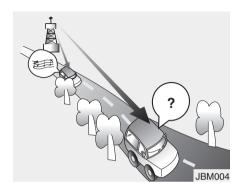
AM and FM radio signals are broadcast from transmitter towers located around your city. They are intercepted by the radio antenna on your car. This signal is then received by the radio and sent to your car speakers. When a strong radio signal has reached your vehicle, the precise engineering of your audio system ensures the best possible quality reproduction. However, in some cases the signal coming to your vehicle may not be strong and clear. This can be due to factors such as the distance from the radio station, closeness of other strong radio stations or the presence of buildings, bridges or other large obstructions in the area.



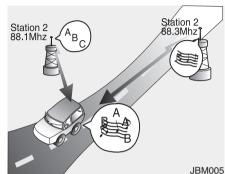
AM broadcasts can be received at greater distances than FM broadcasts. This is because AM radio waves are transmitted at low frequencies. These long, low frequency radio waves can follow the curvature of the earth rather than travelling straight out into the atmosphere. In addition, they curve around obstructions so that they can provide better signal coverage.



FM broadcasts are transmitted at high frequencies and do not bend to follow the earth's surface. Because of this, FM broadcasts generally begin to fade at short distances from the station. Also, FM signals are easily affected by buildings, mountains, or other obstructions. These can result in certain listening conditions which might lead you to believe a problem exists with your radio. The following conditions are normal and do not indicate radio trouble:



- Fading As your car moves away from the radio station, the signal will weaken and sound will begin to fade. When this occurs, we suggest that you select another stronger station.
- Flutter/Static Weak FM signals or large obstructions between the transmitter and your radio can disturb the signal causing static or fluttering noises to occur. Reducing the treble level may lessen this effect until the disturbance clears.



- Station Swapping As a FM signal weakens, another more powerful signal near the same frequency may begin to play. This is because your radio is designed to lock onto the clearest signal. If this occurs, select another station with a stronger signal.
- Multi-Path Cancellation Radio signals being received from several directions can cause distortion or fluttering. This can be caused by a direct and reflected signal from the same station, or by signals from two stations with close frequencies. If this occurs, select another station until the condition has passed.

## Using a cellular phone or a twoway radio

When a cellular phone is used inside the vehicle, noise may be produced from the audio equipment. This does not mean that something is wrong with the audio equipment. In such a case, use the cellular phone at a place as far as possible from the audio equipment.

# **!** CAUTION

When using a communication system such a cellular phone or a radio set inside the vehicle, a separate external antenna must be fitted. When a cellular phone or a radio set is used with an internal antenna alone, it may interfere with the vehicle's electrical system and adversely affect safe operation of the vehicle.

# **A** WARNING

Don't use a cellular phone when you are driving. You must stop at a safe place to use a cellular phone.

# Care of cassette tapes (if equipped)

- Because the thickness of a cassette tape with the total playback time of over 60 minutes (C-60) are too thin, we suggest that you do not use any of them to avoid having tapes being tangled.
- To achieve better sound quality, periodically clean the tape head using a cotton stick with colorless alcohol (once per month).
- If a tape is too loose, fasten it to reel by winding with objects like a pencil.
- Because dust or foreign objects on a cassette tape may damage the playback head, always store tapes in their cases when not in use.
- Make sure cassette tapes are kept away from magnetic devices (TV, stereo system, etc) in order to achieve better sound quality.
- Be certain that no objects or substances other than cassette tapes are inserted into the cassette tape player.
- Because tape media can be distorted when exposed to direct sunlight, do not leave cassette tapes on the seats, dashboard or near the back windshield.

# Care of disc (if equipped)

- If the temperature inside the car is too high, open the car windows for ventilation before using your car audio.
- It is illegal to copy and use MP3/WMA/AAC/WAVE files without permission. Use CDs that are created only by lawful means.
- Do not apply volatile agents such as benzene and thinner, normal cleaners and magnetic sprays made for analogue disc onto CDs.
- To prevent the disc surface from getting damaged. Hold and carry CDs by the edges or the edges of the center hole only.
- Clean the disc surface with a piece of soft cloth before playback (wipe it from the center to the outside edge).
- Do not damage the disc surface or attach pieces of sticky tape or paper onto it.
- Make sure on undesirable matter other than CDs are inserted into the CD player (Do not insert more than one CD at a time).
- Keep CDs in their cases after use to protect them from scratches or dirt.

Depending on the type of CD-R/CD-RW CDs, certain CDs may not operate normally according to manufacturing companies or making and recording methods. In such circumstances, if you still continue to use those CDs, they may cause the malfunction of your car audio system.

## \* NOTICE - Playing an Incompatible Copy-Protected Audio CD

Some copy protected CDs, which do not comply with the international audio CD standards (Red Book), may not play on your car audio. Please note that if you try to play copy protected CDs and the CD player does not perform correctly the CDs maybe defective, not the CD player.

# ■ CD Player : AC110A6EE / AC100A6EE





\*No **§ Bluetooth** logo will be shown if the *Bluetooth®* Wireless Technology feature is not supported.

# ■ CD Player: AC110A6EG / AC110A6EN / AC111A6EE / AC100A6EG / AC100A6EN / AC101A6EE





\* NO Bluetooth, R.D.s logo will be shown if the Bluetooth® Wireless Technology, RDS feature is not supported.



# SYSTEM CONTROLLERS AND FUNCTIONS

Display and settings may differ depending on the selected audio.

## **Audio Head Unit**

- 1. (EJECT)
- · Ejects the disc.

#### 2. RADIO

- · Changes to FM/AM mode.
- Each time the key is pressed, the mode is changed in order of FM1 → FM2 → FMA → AM → AMA. (\*\* For RDS Model)
- Each time the key is pressed, the mode is changed in order of FM1 → FM2 → AM.
- In Setup>Display, the radio pop up screen will be displayed when [Mode Pop up] is turned On.

When the pop up screen is displayed, use the TUNE knob or keys

~ 6 to select the desired mode.

#### 3. MEDIA

- Changes to CD, USB MP3, iPod, BT MP3, AUX modes.
- Each time the key is pressed, the mode is changed in order of CD, USB, iPod, AUX, My Music, BT Audio.
- \*In Setup>Display, the media pop up screen will be displayed when [Mode Pop up] is turned On.

When the pop up screen is displayed, use the TUNE knob or keys

~ 5 to select the desired mode.

#### 4. PHONE

- Operates Phone Screen
- ₩ When a phone is not connected, the connection screen is displayed.

# 5. SÉEK , TR

- Radio Mode : Automatically searches for broadcast frequencies.
- · CD, USB, iPod, My Music modes
  - Shortly press the key (under 0.8 seconds): Moves to next or previous song (file)
  - Press and hold the key (over 0.8 seconds): Rewinds or fast-forwards the current song.

#### 6. PWR/VOL knob

- Power Knob: Turns power On/Off by pressing the knob
- Volume Knob: Sets volume by turning the knob left/right



#### 7. FM

- · Changes to FM mode.
- Each time the key is pressed, the mode changed in order of FM1 → FM2 → FMA.

### 8. AM

- Changes to AM mode.
- Each time the key is pressed, the mode changed in order of AM → AMA.



- 9. 1 ~ 6 (Preset)
- Radio Mode: Saves frequencies (channels) or receives saved frequencies (channels)
- CD, USB, iPod, My Music mode
  - 1 RPT : Repeat
  - 2 RDM: Random
- In the Radio, Media, Setup, and Menu pop up screen, the number menu is selected.



- MP3, CD, USB mode : Folder Search
- iPod mode: Moves to parent folder
- FM : RDS Program Type Search



## 11. ( DISP

- Each time the button is shortly pressed (under 0.8 seconds), sets screen Off → Screen On → Screen Off
- \*Audio operation is maintained and only the screen will be turned Off. In the screen Off state, press any key to turn the screen On again.

# 12. SCAN / SCAN

- Radio Mode
  - Press and hold the key (over 0.8 seconds): Previews each broadcast for 5 seconds each
- CD, USB, iPod mode
  - Press and hold the key (over 0.8 seconds): Previews each song (file) for 10 seconds each
- \*Press the SCAN key again to continue listening to the current song (file).

# 13. SETUP

- Shortly press the key (under 0.8 seconds): Moves to the Display, Sound, Clock, Phone, System setting modes
- Press and hold the key (over 0.8 seconds): Move to the Time setting screen

## 14. MEMU

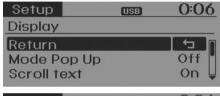
Displays menus for the current mode.

# 15. TUNE knob

- Radio mode : Changes frequency by turning the knob left/right
- CD, USB, iPod mode: Searches songs (files) by turning the knob left/right
- ₩ When the desired song is displayed, press the knob to play the song.
- Moves focus in all selection menus and selects menus

# **DISPLAY SETTINGS**

Press the SETUP key ▶ Select [Display] through TUNE knob or TRPT key ▶ Select menu through TUNE knob





# Mode Pop up

[Mode Pop up] ▶ Changes On. selection mode

 During On state, press the RADIO or MEDIA key to display the mode change pop up screen.

## **Scroll Text**

[Scroll Text] ▶ Set On // Off

- On : Maintains scroll
- Off : Scrolls only one (1) time.

# Song Info

When playing an MP3 file, select the desired display info from 'Folder/File' or 'Album/Artist/Sona'.



## **SOUND SETTINGS**

Press the SETUP key ► Select [Sound] through ☐ TUNE knob or 2 RDM key ► Select menu through ☐ TUNE knob





# **Audio Settings**

This menu allows you to set the 'Bass, Middle, Treble' and the Sound Fader and Balance.

Select [Sound Settings] ▶ Select menu through © TUNE knob ▶ Turn © TUNE knob left/right to set

- Bass, Middle, Treble: Selects the sound tone.
- Fader, Balance : Moves the sound fader and balance.
- Default : Restores default settings.





#### **Power Bass**

This is a sound system feature that provides live bass.

Select [Power Bass] ▶ Set On / Off through O TUNE knob

# **Speed Dependent Volume Control**

This feature is used to automatically control the volume level according to the speed of the vehicle.

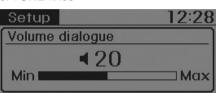
Select [SDVC] ▶ Set in 4 levels [Off/Low/Mid/High] of © TUNE knob



# **Volume Dialogue**

Adjusts voice recognition volume.

Select [Volume Dialogue] ▶ Set volume of TUNE knob



#### **CLOCK SETTINGS**







# **Clock Settings**

This menu is used to set the time.

Select [Clock Settings] ▶ Set through 
TUNE knob ▶ Press 
TUNE knob

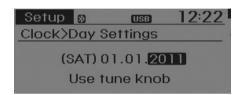


\* Adjust the number currently in focus to set the [hour] and press the tune knob to set the [minute].

# **Day Settings**

This menu is used to set the date (DD/MM/YYYY).

Select [Day Settings]▶Set through 
TUNE knob▶Press 
TUNE knob



\* Adjust the number currently in focus to make the settings and press the tune knob to move to the next setting. (Set in order of Dav/Month/Year)

# Clock Display when Power is OFF

Select [Clock Disp].(Pwr Off) ▶ Set On/
Off through © TUNE
knob

- On : Displays time/date on screen
- Off : Turn off.

### **Time Format**

This function is used to set the 12/24 hour time format of the audio system.

Select [Time Format] ▶ Set 12Hr / 24Hr through ■ TUNE knob

#### **Automatic RDS Time**

This option is used to automatically set the time by synchronizing with RDS.

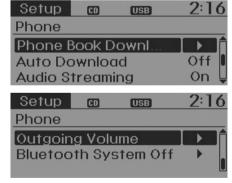
Select [Automatic RDS Time] Set On / Off through TUNE knob

- On : Turn on Automatic Time
- Off : Turn off.

# PHONE SETUP (if equipped)

Press the SETUP key ▶ Select [Phone] through ◎ TUNE knob or 4 key ▶ Select menu through ◎ TUNE knob





### **Pair Phone**

# **!** CAUTION

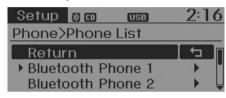
To pair a Bluetooth® Wireless Technology enabled mobile phone, authentication and connection processes are first required. As a result, you cannot pair your mobile phone while driving the vehicle. First park your vehicle before use. Select [Pair Phone] ▶ Set through 
TUNE knob

- ① Search for device names as displayed on your mobile phone and connect.
- ② Input the passkey displayed on the screen. (Passkey: 0000)
- \* The device name and passkey will be displayed on the screen for up to 3 minutes. If pairing is not completed within the 3 minutes, the mobile phone pairing process will automatically be canceled.
- 3 Pairing completion is displayed.
- \*In some mobile phones, pairing will automatically be followed by connection.
- \*It is possible to pair up to five Bluetooth® Wireless Technology enabled mobile phones.

# Phone List

The names of up to 5 paired phones will be displayed.

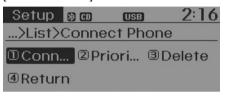
A  $[\, \blacktriangleright \,]$  is displayed in front of the currently connected phone.



Select the desired name to setup the selected phone.

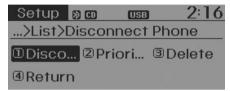
Connecting a phone

Select [Phone List] ▶ Select mobile phone through ◎ TUNE knob ▶ Select [Connect Phone]



- ① Select a mobile phone that is not currently connected.
- ② Connect the selected mobile phone.
- 3 Connection completion is displayed.
- # If a phone is already connected, disconnect the currently connected phone and select a new phone to connect.

Disconnecting a connected phone
 Select [Phone List] ► Select mobile
 phone through © TUNE knob ► Select
 [Disconnect Phone]



- ① Select the currently connected mobile phone.
- ② Disconnect the selected mobile phone.
- ③ Disconnection completion is displayed.

 Changing connection sequence (Priority)

This is used to change the order (priority) of automatic connection for the paired mobile phones.

Select [Phone List] ▶ Select [Priority] through 
TUNE knob ▶ Select No. 1 Priority mobile phone

- ① Select [Priority].
- ② From the paired phones, select the phone desired for No.1 priority.
- The changed priority sequence is displayed.
- \* Once the connection sequence (priority) is changed, the new no. 1 priority mobile phone will be connected.
- when the no. 1 priority cannot be connected: Automatically attempts to connect the most recently connected phone.
- Cases when the most recently connected phone cannot be connected:
   Attempts to connect in the order in which paired phones are listed.
- The connected phone will automatically be changed to No. 1 priority.

#### Delete

Select [Phone List] ▶ Select mobile phone through ◎ TUNE knob ▶ Select [Delete]

- ① Select the desired mobile phone.
- ② Delete the selected mobile phone.
- 3 Deletion completion is displayed.
- \* When attempting to delete a currently connected phone, the phone is first disconnected.

# **!** CAUTION

- When you delete a mobile phone, the mobile phone contacts will also be erased.
- For stable Bluetooth® Wireless Technology communication, delete the mobile phone from the audio and also delete the audio from your mobile phone.

### **Contacts Download**

This feature is used to download contacts and call histories into the audio system.

Select [Contacts Download] ▶ Select through TUNE knob



- The download feature may not be supported in some mobile phones.
- If a different operation is performed while Contacts are being downloaded, downloading will be discontinued. Contacts already downloaded will be saved.
- When downloading new Contacts, delete all previously saved Contacts before starting download.

#### **Auto Download**

When connecting a mobile phone, it is possible to automatically download new Contacts and Call Histories.

Select [Auto Download] ▶ Set On / Off through TUNE knob

# **Audio Streaming**

Songs (files) saved in your *Bluetooth®* Wireless Technology enabled mobile phone can be played through the audio system.

Select [Audio Streaming]▶Set On / Off through © TUNE knob

# **⚠** CAUTION

The Bluetooth® Wireless Technology audio streaming feature may not be supported in some mobile phones.

# **Outgoing Volume**

This is used to set the volume of your voice as heard by the other party while on a *Bluetooth®* Wireless Technology enabled handsfree call.

Select [Outgoing Volume]▶Set volume through TUNE knob

\* Even while on a call, the volume can be changed by using the SEEK, TRACK key.

# Bluetooth® Wireless Technology System Off

This feature is used when you do not wish to use the *Bluetooth®* Wireless Technology system.

Select [Bluetooth® Wireless Technology System Off] ▶ Set through ☐ TUNE knob

# If a phone is already connected, disconnect the currently connected phone and turn the Bluetooth® Wireless Technology system off.

# Using the *Bluetooth®* Wireless Technology System

To use *Bluetooth®* Wireless Technology when the system is currently off, follow these next steps.

- Turning On Bluetooth® Wireless Technology through the PHONE Key
   Press the PHONE key ► Screen
   Guidance
- \* Moves to the screen where Bluetooth® Wireless Technology functions can be used and displays guidance.
- Turning On Bluetooth® Wireless Technology through the SETUP Key

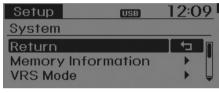
  Press the SETUP key ▶ Select [Phone] through © TUNE knob or 3 key
- ① A screen asking whether to turn on Bluetooth® Wireless Technology will be displayed.
- ② On the screen, select YES to turn on Bluetooth® Wireless Technology and display guidance.
- # If the Bluetooth® Wireless Technology system is turned on, the system will automatically try to connect the most recently connected Bluetooth® Wireless Technology mobile phone.

# **A** CAUTION

- Bluetooth® Wireless Technology connection may become intermittently disconnected in some mobile phones. Follow these next steps to try again.
  - 1) Turn the Bluetooth® Wireless Technology function within the mobile phone ON/OFF and try to connect again.
  - 2) Turn the mobile phone power ON/OFF and try to connect again.
  - 3) Completely remove the mobile phone battery, reboot, and then try to connect again.
  - 4) Reboot the audio system and try to connect again
  - 5) Delete all paired devices in your mobile phone and the audio system and pair again for use.

## SYSTEM SETTINGS

Press the **SETUP** key Select [System] through tune knob or 5 key Select menu through TUNE knob





# Memory Information (if equipped)

Displays currently used memory and total system memory.

Select [Memory Information] ▶ OK

The currently used memory is displayed on the left side while the total system memory is displayed on the right side.



#### VRS mode

This feature is used to change voice command feedback between Normal and Expert modes.

Select [VRS mode] ▶ Set through TUNE knob



- · Normal: This mode is for beginner users and provides detailed instructions during voice command operation.
- Expert : This mode is for expert users and omits some information during voice command operation. (When using Expert mode, guidance instructions can be heard through the [Help] or [Menu] commands.

### Language

This menu is used to set the display and voice recognition language.

TUNE knob





- \* The system will reboot after the language is changed.
- \* Language support by region
- Deutsch, English(UK), Français, Italiano, Español, Nederlands, Svenska, Dansk, Русский, Polski

# RADIO (for RDS equipped model) Changing RADIO mode



Press the RADIO key to change the mode in order of FM1 → FM2 → FMA → AM → AMA.

Press the FM or AM key to change the mode in order of FM1 → FM2 and AM.

• When the power is off, press the RADIO key to turn on the audio system and receive radio broadcasts.

[Mode Pop up] On state: Displays the change radio mode pop up screen.

While the pop up screen is displayed, you can change the radio mode (RADIO: FM1 → FM2 → FMA → AM → AMA / FM : FM1 → FM2 / AM : AM) through the tune knob or 5 keys.

# **Adjust Volume**

Turn the VOL knob left/right to adjust the volume.

## **SEEK**

Press the RADIO (FM , AM )key

TRACK

- Shortly pressing the key (under 0.8 seconds): Changes the frequency.
- Pressing and holding the key (over 0.8 seconds): Automatically searches for the next frequency.

#### Preset SEEK

Press the RADIO (FM, AM) key

- Shortly pressing the key (under 0.8 seconds): Plays the frequency saved in the corresponding key.
- Pressing and holding the key (over 0.8 seconds): Pressing and holding the desired key from 1 ~ 6 will save the currently playing broadcast to the selected key and sound a BEEP.

#### **SCAN**

Press the RADIO (FM , AM ) key

- Shortly pressing the key (under 0.8 seconds): The broadcast frequency increases and previews each broadcast for 5 seconds each. After scanning all frequencies, returns and plays the current broadcast frequency.
- Pressing and holding the key (over 0.8 seconds): Previews the broadcasts saved in Preset 6 for 5 seconds each.

Press the RADIO (FM , AM ) key

TA
SCAN

 Pressing and holding the key (over 0.8 seconds): The broadcast frequency increases and previews each broadcast for 5 seconds each. After scanning all frequencies, returns and plays the current broadcast frequency.

# Selecting through manual search

Turn the TUNE knob left/right to adjust the frequency.

- AC100A6EE/AC110A6EE/ AC101A6EE/AC111A6EE
- FM : Changes by 50KHz
- AM : Changes by 9khz
- AC100A6EG/AC110A6EG
- FM : Changes by 100KHz
- AM : Changes by 9khz
- AC100A6EN/AC110A6EN
- FM : Changes by 200KHz
- AM: Changes by 10khz

# **Traffic Announcement (TA)**

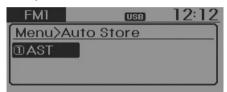
Shortly pressing the SCAN key (under 0.8 seconds): Set On Off TA Traffic Announcement) mode.

### PTY Up/Down

• Press the PTY / FORDER key when searching PTY in RDS Broadcasting Program Type selection.

#### **MENU**

Within MENU key are the A.Store (Auto Store) and Info functions.



# **AST (Auto Store)**

Press the MENU key Set [①AST] through © TUNE knob or 1 RPT key. Select AST (Auto Store) to save frequencies with superior reception to presets 6. If no frequencies are received, then the most recently received frequency will be broadcast.

\* Saves only to the Preset memory

1 ~ 6 of FMA or AMA mode.

# **AF (Alternative Frequency)**

Press the MENU key Set [2AF] through TUNE knob or Press the MENU key. The Alternative Frequency option can be turned On/Off.

# Region

Press the MENU key Set [③Region] through ① TUNE knob or 3 key.

The Region option can be turned On/Off.

#### News

Press the MENU key ► Set [4]News] through TUNE knob or 4 key.

The News option can be turned On/Off.

## **Info Volume**

Info Volume refers to the sound volume upon receiving News or Traffic information.

The info volume can be controlled by turning the VOL knob left/right while a news or traffic broadcast is playing.

AF, Region, and News are RDS Radio menus.

# RADIO Changing RADIO mode



Press the RADIO key to change the mode in order of FM1  $\rightarrow$  FM2  $\rightarrow$  AM.

Press the FM or AM key to change the mode in order of FM1 → FM2 and AM

 When the power is off, press the RADIO or FM AM key to turn on the audio system and receive radio broadcasts.

[Mode Pop up] On state: Displays the change radio mode pop up screen. While the pop up screen is displayed, you can change the radio mode (RADIO: FM1 → FM2 → AM / FM: AM) through the tune knob or 1 ~ 5 keys.

# **Adjust Volume**

Turn the VOL knob left/right to adjust the volume.

#### **SEEK**

Press the RADIO (FM , AM )key

SEEK , TRACK

- Shortly pressing the key (under 0.8 seconds): Changes the frequency.
- Pressing and holding the key (over 0.8 seconds): Automatically searches for the next frequency.

#### **Preset SEEK**

Press the RADIO (FM, AM) key 1 ~ 6

- Shortly pressing the key (under 0.8 seconds): Plays the frequency saved in the corresponding key.
- Pressing and holding the key (over 0.8 seconds): Pressing and holding the desired key from 1 ~ 6 will save the currently playing broadcast to the selected key and sound a BEEP.

#### **SCAN**

Press the RADIO (FM, AM)

- Shortly pressing the key (under 0.8 seconds): The broadcast frequency increases and previews each broadcast for 5 seconds each. After scanning all frequencies, returns and plays the current broadcast frequency.
- Pressing and holding the key (over 0.8 seconds): Previews the broadcasts saved in Preset 6 for 5 seconds each.

Press the RADIO (FM , AM )
key▶ SCAN

 Pressing and holding the key (over 0.8 seconds): The broadcast frequency increases and previews each broadcast for 5 seconds each. After scanning all frequencies, returns and plays the current broadcast frequency.

# Selecting through manual search

Turn the TUNE knob left/right to adjust the frequency.

- AC100A6EE / AC110A6EE / AC101A6EE / AC111A6EE
- FM : Changes by 50KHz
- AM : Changes by 9khz
- AC100A6EG / AC110A6EG
- FM : Changes by 100KHz
- AM : Changes by 9khz
- AC100A6EN / AC110A6EN
- FM : Changes by 200KHz
- AM : Changes by 10khz

### **MENU**

Within MENU key are the A.Store (Auto Store) and Info functions.



# **AST (Auto Store)**

Press the MENU key ► Set [①AST] through © TUNE knob or 1 PPT key. Select AST (Auto Store) to save frequencies with superior reception to presets 1 ~ 6. If no frequencies are received, then the most recently received frequency will be broadcast

# BASIC METHOD OF USE: Audio CD / MP3 CD / USB / iPod / My Music

Press the MEDIA key to change the mod mode in order of CD → USB (iPod) → AUX → My Music → BT Audio.

The folder/file name is displayed on the screen.

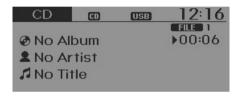


- The CD is automatically played when a CD is inserted.
- \* The USB music is automatically played when a USB is connected.

Press the SETUP key ▶ Select [①
Display] through the ② TUNE knob or

1 RPT key ▶ Select [Song Info] ▶ Media
Display

• [Song Info] : The screen display info can be changed to Album/Artist/ Song name.



## Repeat

While song (file) is playing ▶ 1 RPT (RPT) key

Audio CD, MP3 CD, USB, iPod, My Music mode: RPT on screen

 To repeat one song (Shortly pressing the key (under 0.8 seconds)): Repeats the current song.

MP3 CD, USB mode: FLD.RPT on screen

- To repeat folder (Pressing and holding the key (over 0.8 seconds)): repeats all files within the current folder.

#### Random

While song (file) is playing ▶ 2 RDM (RDM) key

Audio CD, My Music mode: RDM on screen

 Random (Shortly pressing the key (under 0.8 seconds)): Plays all songs in random order.

MP3 CD, USB mode: FLD.RDM on screen

 Folder Random (Shortly pressing the key (under 0.8 seconds)): Plays all files within the current folder in random order.

iPod mode: ALB RDM on screen

 Album Random (Shortly pressing the key (under 0.8 seconds)): Plays all files within albums of the current category in random order.

MP3 CD, USB, iPod mode: ALL RDM on screen

- All Random (pressing and holding the key (over 0.8 seconds)): Plays all files in random order.
- ★ Press the Pres

# **Changing Song/File**

While song (file) is playing ► TRACK key

- Shortly pressing the key (under 0.8 seconds): Plays the current song from the beginning.
- \* If the TRACK key is pressed again within 1 second, the previous song is played.
- Pressing and holding the key (over 0.8 seconds): Rewinds the song.

While song (file) is playing ▶ seek key

- Shortly pressing the key (under 0.8 seconds): Plays the next song.
- Pressing and holding the key (over 0.8 seconds): Fast forwards the song.

#### Scan

While song (file) is playing ► SCAN key

• Shortly pressing the key (under 0.8 seconds): Scans all songs from the next song for 10 seconds each.

While song (file) is playing ▶ SCAN key

- Pressing and holding the key (over 0.8 seconds): Scans all songs for 10 seconds starting from the next song.
- \* Press the SCAN key again to turn off.
- ★ The SCAN function is not supported in iPod mode.

# Folder Search : MP3 CD, USB Mode

While file is playing ► PTY (Folder Up) key



· Searches the next folder.

While file is playing ► FORDER (Folder Down) key

- Searches the parent folder.
- # If a folder is selected by pressing the TUNE knob, the first file within the selected folder will be played.
- \* In iPod mode, moves to the Parent Folder.

# Searching Songs (File)

- Turning TUNE knob : Searches for songs (files)
- Pressing TUNE knob : Plays selected song (file).

#### **MENU: Audio CD**

Press the CD MP3 mode MENU key to set the Repeat, Random, Information features.



### Repeat

Press the MENU key Set [1]RPT] through the TUNE knob or RPT key to repeat the current song.

\* Press RPT again to turn off.

#### Random

Press the MENU key ► Set [②RDM] through the ○ TUNE knob or 2 RDM key to randomly play songs within the current folder.

★ Press RDM again to turn off.

#### Information

Press the MENU key Set [3]Info] through the TUNE knob or key to display information of the current song.

\* Press the MENU key to turn off info display.

### MENU: MP3 CD / USB

Press the CD MP3 mode MENU key to set the Repeat, Folder Random, Folder Repeat, All Random, Information, and Copy features.



# Repeat

Press the MENU key Set [TRPT] through the TUNE knob or TRPT key to repeat the current song.

\* Press RPT again to turn off.

#### **Folder Random**

Press the MENU key ▶ Set [②F.RDM] through the ◎ TUNE knob or 2 RDM key to randomly play songs within the current folder

\* Press F.RDM again to turn off.

# **Folder Repeat**

Press the MENU key Set [③F.RPT] through the ⑥ TUNE knob or 3 key to repeat songs within the current folder. 
# Press F.RPT again to turn off.

#### **All Random**

Press the MENU key ▶ Set [4]A.RDM] through the © TUNE knob or 4 key to randomly play all songs within the CD. 

★ Press A.RDM again to turn off.

#### Information

Press the MENU key ► Set [⑤Info] through the ⑥ TUNE knob or ⑤ key to display information of the current song.

\* Press the MENU key to turn off info display.

# Copy

Press the MENU key ► Set [⑤Copy] through the ⑥ TUNE knob or 6 key.

This is used to copy the current song into My Music. You can play the copied Music in My Music mode.

- # If another key is pressed while copying is in progress, a pop up asking you whether to cancel copying is displayed.
- # If another media is connected or inserted (USB, CD, iPod, AUX) while copying is in progress, copying is canceled.
- ₩ Music will not be played while copying is in progress.

## MENU: iPod

In iPod mode, press the MENU key to set the Repeat, Album Random, All Random, and Information features.



# Repeat

Press the MENU key ▶ Set [①RPT] through the ② TUNE knob or 1 RPT key to repeat the current song.

\* Press RPT again to turn repeat off.

#### **Album Random**

Press the MENU key ► Set [2] Alb.RDM] through the ☐ TUNE knob or 2 RDM key. Plays albums within the currently playing category in random order.

₩ Press Alb.RDM again to turn off.

#### **All Random**

Press the MENU key ▶ Set [③A.RDM] through the ⑥ TUNE knob or ③ key. Plays all songs within the currently playing category in random order.

\* Press A.RDM again to turn off.

## Information

Press the MENU key ▶ Set [4]Info] through the ○ TUNE knob or 4 key. Displays information of the current song. 

♣ Press the MENU key to turn off info display.

# MENU: My Music Mode (if equipped)

In My Music mode, press the MENU key to set the Repeat, Random, Information, Delete, Delete All, and Delete Selection features.



### Repeat

Press the MENU key Set [①RPT] through the ©TUNE knob or 1 RPT key. Repeats the currently playing song.

\* Press RPT again to turn repeat off.

#### Random

Press the MENU key Set [2]RDM] through the TUNE knob or 2 RDM key. Plays all songs within the currently playing folder in random order.

\* Press RDM again to turn random off.

#### Information

Press the MENU key ▶ Set [③Info] through the ⑥ TUNE knob or ③ key. Displays information of the current song. 

♣ Press the MENU key to turn off info display.

#### Delete

Press the MENU key Set [4] Delete] through the TUNE knob or 4 key. Deletes currently playing file In the play screen, pressing delete will delete the currently playing song.

Deletes file from list



- ① Select the file you wish to delete by using the © TUNE knob.
- ② Press the MENU key and select the delete menu to delete the selected file.

#### **Delete All**

Press the MENU key Set [5]Del.All] through the TUNE knob or 5 key. Deletes all songs of My Music.

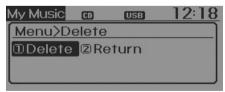
## **Delete Selection**

Press the MENU key ▶ Set [⑤Del.Sel] through the ⑥ TUNE knob or ⑥ key. Songs within My Music are selected and deleted.

① Select the songs you wish to delete from the list.



② After selecting, press the MENU key and select the delete menu.



#### ΔIJΧ

AUX is used to play external MEDIA currently connected with the AUX terminal. AUX mode will automatically start when an external device is connected with the AUX terminal.

If an external device is connected, you can also press the MEDIA key to change to AUX mode.



\* AUX mode cannot be started unless there is an external device connected to the AUX terminal.

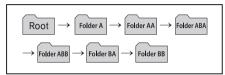
# \* NOTICE FOR USING THE AUX

Fully insert the AUX cable into the AUX terminal for use.

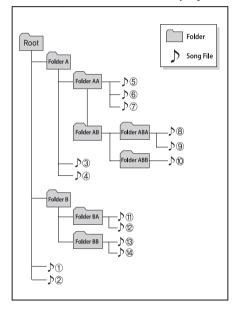
## NOTE:

Order of playing files (folders):

1. Song playing order : 1 to 4 sequentially.



- 2. Folder playing order:
- \* If no song file is contained in the folder, that folder is not displayed.



# **A** CAUTION IN USING USB DEVICE

- To use an external USB device, make sure the device is not connected when starting up the vehicle. Connect the device after starting up.
- If you start the engine when the USB device is connected, it may damage the USB device. (USB flashdrives are very sensitive to electric shock.)
- If the engine is started up or turned off while the external USB device is connected, the external USB device may not work.
- The System may not play inauthentic MP3 or WMA files.
  - 1) It can only play MP3 files with the compression rate between 8Kbps~320Kbps.
  - It can only play WMA music files with the compression rate between 8Kbps~320Kbps.
- Take precautions for static electricity when connecting or disconnecting the external USB device.

(Continued)

## (Continued)

- An encrypted MP3 PLAYER is not recognizable.
- Depending on the condition of the external USB device, the connected external USB device can be unrecognizable.
- When the formatted byte/sector setting of External USB device is not either 512BYTE or 2048BYTE, then the device will not be recognized.
- Use only a USB device formatted to FAT 12/16/32.
- USB devices without USB I/F authentication may not be recognizable.
- Make sure the USB connection terminal does not come in contact with the human body or other objects.
- If you repeatedly connect or disconnect the USB device in a short period of time, it may break the device.
- You may hear a strange noise when connecting or disconnecting a USB device.

(Continued)

## (Continued)

- If you disconnect the external USB device during playback in USB mode, the external USB device can be damaged or may malfunction. Therefore, disconnect the external USB device when the audio is turned off or in another mode. (e.g, Radio, CD)
- Depending on the type and capacity of the external USB device or the type of the files stored in the device, there is a difference in the time taken for recognition of the device.
- Do not use the USB device for purposes other than playing music files.
- Playing videos through the USB is not supported.
- Use of USB accessories such as rechargers or heaters using USB I/F may lower performance or cause trouble.

(Continued)

## (Continued)

- If you use devices such as a USB hub purchased separately, the vehicle's audio system may not recognize the USB device. In that case, connect the USB device directly to the multimedia terminal of the vehicle.
- If the USB device is divided by logical drives, only the music files on the highest-priority drive are recognized by car audio.
- Devices such as MP3 Player/ Cellular phone/Digital camera can be unrecognizable by standard USB I/F can be unrecognizable.
- Charging through the USB may not be supported in some mobile devices.
- USB HDD or USB types liable to connection failures due to vehicle vibrations are not supported. (i-stick type)
- Some non-standard USB devices (METAL COVER TYPE USB) can be unrecognizable.

(Continued)

# (Continued)

- Some USB flash memory readers (such as CF, SD, micro SD, etc.) or external-HDD type devices can be unrecognizable.
- Music files protected by DRM (DIGITAL RIGHTS MANAGEMENT) are not recognizable.
- The data in the USB memory may be lost while using this audio. Always back up important data on a personal storage device.
- Please avoid using USB memory products which can be used as key chains or cellular phone accessories as they could cause damage to the USB jack. Please make certain only to use plug type connector products as shown below.

# \* NOTICE FOR USING THE iPod® DEVICE

- Some iPod models may not support communication protocol and files may not properly play.
  - **Supported iPod models:**
  - iPod Mini
  - iPod 4th (Photo) ~ 6th (Classic) generation
  - iPod Nano 1st~4th generation
  - iPod Touch 1st~2nd generation
- The order of search or playback of songs in the iPod can be different from the order searched in the audio system.
- If the iPod disabled due to its own malfunction, reset the iPod. (Reset: Refer to iPod manual)
- An iPod may not operate normally on low battery.
- Some iPod devices, such as the iPhone, can be connected through the Bluetooth® Wireless Technology interface. The device must have audio Bluetooth® Wireless Technology capability (such as for stereo headphone Bluetooth® Wireless Technology). The device can play, but it will not be controlled by the audio system.

(Continued)

#### (Continued)

- To use iPod features within the audio, use the cable provided upon purchasing an iPod device.
- Skipping or improper operation may occur depending on the characteristics of your iPod/Phone device.
- If your iPhone is connected to both the Bluetooth® Wireless Technology and USB, the sound may not be properly played. In your iPhone, select the Dock connector or Bluetooth® Wireless Technology to change the sound output (source).

# ⚠ CAUTION IN USING THE iPod® DEVICE

- When connecting iPod with the iPod Power Cable, insert the connector to the multimedia socket completely. If not inserted completely, communications between iPod and audio may be interrupted.
- When adjusting the sound effects of the iPod and the audio system, the sound effects of both devices will overlap and might reduce or distort the quality of the sound.
- Deactivate (turn off) the equalizer function of an iPod when adjusting the audio system's volume, and turn off the equalizer of the audio system when using the equalizer of an iPod.
- When not using iPod with car audio, detach the iPod cable from iPod. Otherwise, iPod may remain in accessory mode, and may not work properly.

### \* NOTICE FOR USING THE Music

- Even if memory is available, a maximum of 6,000 songs can be stored.

  • The same song can be copied up to
- 1,000 times.
- Memory info can be checked in the System menu of Setup.

# Bluetooth® Wireless Technology AUDIO

# What is *Bluetooth®* Wireless Technology?

Bluetooth® Wireless Technology is a wireless technology that allows multiple devices to be connected in a short range, low-powered devices like hands-free, stereo headset, wireless remote controller, etc. For more information, visit the Bluetooth® Wireless Technology website at www.Bluetooth.com

Before using *Bluetooth®* Wireless Technology audio features

- Bluetooth® Wireless Technology audio may not be supported depending on the compatibility of your Bluetooth® Wireless Technology mobile phone.
- In order to use *Bluetooth®* Wireless Technology audio, you must first pair and connect the *Bluetooth®* Wireless Technology mobile phone.
- Bluetooth® Wireless Technology audio can be used only when the [Audio Streaming] of Phone is turned On.

# Starting *Bluetooth®* Wireless Technology Audio

- Press the MEDIA key to change the mode in order of CD→USB→AUX→My Music→BT Audio.
- If BT Audio is selected, *Bluetooth®* Wireless Technology audio will start playing.
- \* Audio may not automatically start playing in some mobile phones.

# Using the *Bluetooth®* Wireless Technology audio features

• Play / Stop

Press the TUNE knob to play and pause the current song.



\* The previous song / next song / play / pause functions may not be supported in some mobile phones.

### PHONE (if equipped)

Before using the *Bluetooth*<sup>®</sup> Wireless Technology phone features

- In order to use *Bluetooth®* Wireless Technology phone, you must first pair and connect the *Bluetooth®* Wireless Technology mobile phone.
- If the mobile phone is not paired or connected, it is not possible to enter Phone mode. Once a phone is paired or connected, the guidance screen will be displayed.
- If Priority is set upon vehicle ignition (IGN/ACC ON), the Bluetooth® Wireless Technology phone will be automatically connected. Even if you are outside, the Bluetooth® Wireless Technology phone will be automatically connected once you are in the vicinity of the vehicle. If you do not want automatic Bluetooth® Wireless Technology phone connection, set the Bluetooth® Wireless Technology power to OFF.

# Making a call using the Steering remote controller

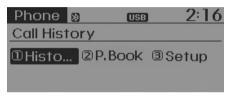


- 1. **VOLUME** button: Raises or lowers speaker volume.
- 2. MUTE button : Mute the microphone during a call.
- 3. button : Activates voice recognition.
- 4. button : Places and transfers calls.
- 5. button: Ends calls or cancels functions.

- Check call history and making call
- Shortly press (under 0.8 seconds) the key on the steering remote controller.
- ② The call history list will be displayed on the screen.
- ③ Press the key again to connect a call to the selected number.
- Redialing the most recently called number
- Press and hold (over 0.8 seconds) the key on the steering remote controller.
- ② The most recently called number is redialed.

#### **Phone MENU**

Press the **PHONE** key to display three menus (Call History, Phone book, Phone Setup).



### **Call history**

Press the PHONE key ▶ Set [① Call History] through the ◎ TUNE knob or 1 RPT key.

The call history is displayed and can be used to select a number and make a call. If call history does not exist, a screen asking whether to download call history is displayed. (The download feature may not be supported in some mobile phones)

#### Contacts

Press the PHONE key ▶ Set [② Phone book] through the ⑥ TUNE knob or 2 RDM key.

The Contacts are displayed and can be used to select a number and make a call.

- If more than one number is saved to one contact, then a screen showing the mobile phone number, house and office number is displayed. Select the desired number to make the call.
- # If Contacts do not exist, a screen asking whether to download Contacts is displayed. (The download feature may not be supported in some mobile phones)

### **Phone Setup**

Press the PHONE key ▶ Set [③] Phone Setup] through the ○ TUNE knob or 3 key.

The *Bluetooth®* Wireless Technology mobile phone setup screen is displayed. For more information, refer to "Phone Setup".

# ⚠ CAUTION IN USING BLUETOOTH® WIRELESS TECHNOLOGY CELLULAR PHONE

- Do not use a cellular phone or perform Bluetooth® Wireless Technology settings (e.g. pairing a phone) while driving.
- Some Bluetooth® Wireless Technology -enabled phones may not be recognized by the system or fully compatible with the system.
- Before using Bluetooth® Wireless Technology related features of the audio system, refer your phone's User's Manual for phoneside Bluetooth® Wireless Technology operations.
- The phone must be paired to the audio system to use Bluetooth<sup>®</sup> Wireless Technology related features.
- You will not be able to use the hands-free feature when your phone (in the car) is outside of the cellular service area (e.g. in a tunnel, in a underground, in a mountainous area, etc.).

(Continued)

### (Continued)

- If the cellular phone signal is poor or the vehicles interior noise is too loud, it may be difficult to hear the other person's voice during a call.
- Do not place the phone near or inside metallic objects, otherwise communications with Bluetooth® Wireless Technology system or cellular service stations can be disturbed.
- While a phone is connected through Bluetooth® Wireless Technology your phone may discharge quicker than usual for additional Bluetooth® Wireless Technology-related operations.
- Some cellular phones or other devices may cause interference noise or malfunction to audio system. In this case, store the device in a different location may resolve the condition.
- Phone contact names should be saved in English or they may not be displayed correctly.

(Continued)

### (Continued)

- If Priority is set upon vehicle ignition (IGN/ACC ON), the Bluetooth®
  Wireless Technology phone will be automatically connected.
  - Even if you are outside, the Bluetooth® Wireless Technology phone will be automatically connected once you are in the vicinity of the vehicle.
- If you do not want automatic Bluetooth® Wireless Technology connection, turn the Bluetooth® Wireless Technology feature off.
- The hands-free call volume and quality may differ depending on the mobile phone type.

### **!** CAUTION

 Bluetooth® Wireless Technology features can be used only when the mobile phone has been paired and connected with the device. For more information on pairing and connecting Bluetooth® Wireless Technology enabled mobile phones, refer to the "Phone Setup" section.

When a Bluetooth® Wireless Technology mobile phone is connected, a (2) icon will appear at the top of the screen. If a (2) icon is not displayed, this indicates that a Bluetooth® Wireless Technology enabled device has not been connected. Your must connect the device before use. For more information on Bluetooth® Wireless Technology mobile phones, refer to the "Phone Setup" section.

(Continued)

### (Continued)

Pairing and connecting a Bluetooth® Wireless Technology enabled mobile phone will work only when the Bluetooth® Wireless Technology option within your mobile phone has been turned on. (Methods of turning on the Bluetooth® Wireless Technology enabled feature may differ depending on the mobile phone.)

In some mobile phones, starting the ignition while talking through Bluetooth® Wireless Technology enabled handsfree call will result in the call becoming disconnected. (Switch the call back to your mobile phone when starting the ignition.)

Some features may not be supported in some Bluetooth® Wireless Technology mobile phone and devices.

Bluetooth® Wireless Technology enabled operation may be unstable depending on the communication state.

# **A** CAUTION IN USING VOICE COMMAND

• The voice recognition feature of this product supports recognition of the commands listed within this user's manual.

While using voice recognition, operating the steering remote control or the device will terminate voice recognition and allow you to manually operate desired functions.

Position the microphone above the head of the driver's seat. For superior performance, maintain good posture when saying voice commands.

Voice recognition may not function properly due to outside noise. The following conditions can affect the performance of Voice Recognition:

- When the windows and sunroof are open
- When the heating/cooling system is on
- When passing a tunnel
- When driving on rugged and uneven roads

(Continued)

### (Continued)

After downloading Bluetooth® Wireless Technology contacts, the system requires some times to convert the contacts into voice information. During this time, voice recognition may not operate properly.

Upon inputting your contacts, special symbols and numbers cannot be recognized by voice. For example, "# John Doe%&" will be recognized as "John Doe".

### **VOICE COMMAND** (if equipped)

### **Starting Voice Command**

- To start voice command, shortly press the key on the steering wheel remote controller.
- If voice command is in [Normal Mode], then the system will say "Please say a command. Beep"
- ★ If voice command is in [Expert Mode], then the system will only say a "Beep-"
- ★ Setting Voice command [Normal Mode]/[Expert Mode]: Press the SETUP key ► Select [System] through the TUNE knob or Select [Voice Command Mode] through the TUNE knob ► Set [Normal Mode]/[Expert Mode]
- Say the voice command.

### **A** CAUTION

For proper voice recognition, say the voice command after the guidance message and the "Beep" sound.

### **Skipping the Guidance Message**

While the guidance message is being stated, shortly press the key (under 0.8 seconds) to discontinue the guidance message and sound the "beep".

After the "beep", say the voice command.

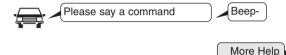


### **Ending Voice Command**

- While using voice command, press and hold the key (over 0.8 seconds) to end voice command.
- While using voice command, pressing the steering wheel remote controller or a different key will end voice command.
- In a state where the system is waiting for your voice command, say "cancel" or "end" to end voice command.
- In a state where the system is waiting for your voice command, shortly press the key (under 0.8 seconds) to end voice command.

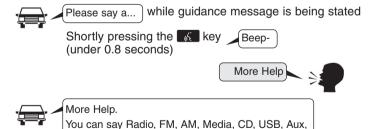
- \* Illustration on using voice commands
- Starting voice command.

  Shortly pressing the key (under 0.8 seconds):





• Skipping Voice Recognition
Shortly pressing the key (under 0.8 seconds):

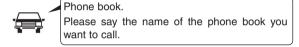


My Music, iPod, Bluetooth Audio, Phone, Call History or Phone book. Please say a command.

• End voice command.

Shortly pressing the key (under 0.8 seconds):







### **Voice Command List**

• Common Commands: These are commands that can be used in all situations. (However, some commands may not be supported in special circumstances.)

Command	Function	
More Help	Provides guidance on commands that can be used anywhere in the system.	
Help	Provides guidance on commands that can be used within the current mode.	
Call <name></name>	Calls <name> saved in phone book Ex) Call "John"</name>	
Phone	Provides guidance on Phone related commands. After saying this command, say "Call History", "Phone book", "Dial Number" to execute corresponding functions.	
Call History	Displays the Call History screen.	
Phone book	Displays the phone book screen. After saying this command, say the name of a phone book saved in the phone book to automatically connect the call.	
Dial Number	Display the Dial number screen. After saying this command, you can say the number what you want to call.	
Redial	Connects the most recently called number.	
Radio	When listening to the radio, displays the next radio screen. (FM1→ FM2→ FMA → AM → AMA)	
	When listening to a different mode, displays the most recently played radio screen.	

Command	Function	
FM	When currently listening to the FM radio maintains the current state.	
	When listening to a different mode, displays the most recently played FM screen.	
FM1(FM One)	Displays the FM1 screen.	
FM2(FM Two)	Displays the FM2 screen.	
FMA	Displays the FMA screen.	
AM	Displays the AM screen.	
AMA	Displays the AMA screen.	
FM Preset 1~6	Plays the most recently played broadcas saved in FM Preset 1~6.	
AM Preset 1~6	Plays the broadcast saved in AM Preset 1~6.	
FM 87.5~107.9	Plays the FM broadcast of the corresponding frequency.	
AM 530~1710	Plays the AM broadcast of the corresponding frequency.	
TA on	Enable Traffic Announcement	
TA off	Disable Traffic Announcement	
News on	Enable RDS News feature	
News off	Disable RDS News feature	

Command	Function	
Media	Moves to the most recently played media screen.	
Play Track 1~30	If a music CD has been inserted, plays the corresponding track.	
CD	Plays the music saved in the CD.	
Search CD	Moves to the CD track or file selection screen.  • For audio CDs, move to the screen and say the track number to play the corresponding track.	
	<ul> <li>Moves to MP3 CD file selection screen. After manually operate the device to select and play music.</li> </ul>	
USB	Plays USB music.	
Search USB	Moves to USB file selection screen. After manually operate the device to select and play music.	
iPod	Plays iPod music.	
Search iPod	Moves to the iPod file selection screen. After, manually operate the device to select and play music.	
My Music	Plays the music saved in My Music.	
Search My Music	Moves to My Music file selection screen. After manually operate the device to select and play music.	

Command	Function	
AUX (Auxiliary)	Plays the connected external device.	
Bluetooth Audio	Plays the music saved in connected Bluetooth® Wireless Technology device.	
Mute	Mutes the radio or music volume.	
Pardon?	Repeats the most recent comment.	
Cancel (Exit)	Ends voice command.	

• FM/AM radio commands: Commands that can be used while listening to FM, AM radio.

Command	Function
Preset 1~6	Plays the broadcast saved in Preset 1~6.
Auto Store	Automatically selects radio broadcast frequencies with superior reception and saves in Presets 1~6.
Preset Save 1~6	Saves the current broadcast frequency to Preset 1~6.
Seek up	Plays the next receivable broadcast.
Seek down	Plays the previous receivable broadcast.
Next Preset	Selects the preset number next to the most recently selected preset. (Example: When currently listening to preset no. 3, then preset no. 4 will be selected.)
Previous Preset	Selects the preset number previous to the most recently selected preset. (Example: When currently listening to preset no. 3, then preset no. 2 will be selected.)
Scan	Scans receivable frequencies from the current broadcast and plays for 10 seconds each.
Preset Scan	Moves to the next preset from the current present and plays for 10 seconds each.
AF on	Enable Alternative Frequency feature
AF off	Disable Alternative Frequency feature
Region	Enable Region feature

 Audio CD commands: Commands that can be used while listening to Audio CD.

	I
Command	Function
Region off	Disable Region feature
Program Type	Moves to the RDS Program type selection screen. After, manually operate the device to select a desired program type.
Random	Randomly plays the tracks within the CD.
Random Off	Cancels random play to play tracks in sequential order.
Repeat	Repeats the current track.
Repeat Off	Cancels repeat play to play tracks in sequential order.
Next Track	Plays the next track.
Previous Track	Plays the previous track.
Scan	Scans the tracks from the next track for 10 seconds each.
Track 1~30	Plays the desired track number.
Search Track	Moves to the track selection screen. After, say the track name to play the corresponding track.
Information	Displays the information screen of the current track.

• MP3 CD / USB commands: Commands that can be used while listening to music files saved in CD and USB.

Command	Function	
Random	Randomly plays the files within the current folder.	
All Random	Randomly plays all saved files.	
Random Off	Cancels random play to play files in sequential order.	
Repeat	Repeats the current file.	
Folder Repeat	Repeats all files in the current folder.	
Repeat Off	Cancels repeat play to play files in sequential order.	
Next File	Plays the next file.	
Previous File	Plays the previous file.	
Scan	Scans the files from the next files for 10 seconds each.	
Search File	Moves to the file selection screen.	
Search Folder	Moves to the folder selection screen.	
Information	Displays the information screen of the current file.	
Сору	Copies the current file into My Music.	

• iPod Commands: Commands that can be used while playing iPod.

Command	Function
All Random	Randomly plays all saved songs.
Random	Randomly plays the songs within the current category.
Random Off	Cancels random play to play songs in sequential order.
Repeat	Repeats the current song.
Repeat Off	Cancels repeat play to play songs in sequential order.
Next Song	Plays the next song.
Previous Song	Plays the previous song.
Search Song	Moves to the song selection screen.
Information	Displays the information screen of the current song.

• My Music Commands: Commands that can be used while playing My Music.

Command	Function
Random	Randomly plays all saved files.
Random Off	Cancels random play to play files in sequential order.
Repeat	Repeats the current file.
Repeat Off	Cancels repeat play to play files in sequential order.
Next File	Plays the next file.
Previous File	Plays the previous file.
Scan	Scans the files from the next files for 10 seconds each.
Search File	Moves to the file selection screen.
Information	Displays the information screen of the current file.
Delete	Deletes the current file. You will bypass an additional confirmation process.
Delete All	Deletes all files saved in My Music. You will bypass an additional confirmation process.

• Bluetooth® Wireless Technology Audio Commands: Commands that can be used while playing Phone Music.

Command	Function	
Play	Plays the currently paused song.	
Pause	Pauses the current song.	

channels  No Media  Empty media file in CD or USB  No File  Empty media file in CD or USB  Empty File  Empty media file in MY MUSIC  Info (Information)  Artist  Artist name, MP3/CD file currently being played  Title  Song name, MP3/CD file currently being played  Album  Album name, MP3/CD file currently being played  Genres  "Genres" is keyword for searching mode of playlists for iPod  Composers  "Composers" is filtering keyword	Monday	Monday
Thursday Friday Saturday Saturday Sunday Use tune knob Volume Max Min AST (Auto store) No Media No File Empty media file in CD or USB Empty File Info (Information) Artist Artist name, MP3/CD file currently being played Title Song name, MP3/CD file currently being played Album Album Album name, MP3/CD file currently being played Genres "Genres" is keyword for searching mode of playlists for iPod Composers "Composers" is filtering keyword	Tuesday	Tuesday
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Use tune knob  Volume  Max  Volume maxinmum  Min  AST (Auto store)  No Media  No File  Empty media file in CD or USB  Empty File  Empty media file in MY MUSIC  Info (Information)  Artist  Artist name, MP3/CD file currently being played  Album  Album  Album name, MP3/CD file currently being played  Genres  "Genres" is keyword for searching mode of playlists for iPod  Composers  "Composers" is filtering keyword	Saturday	Saturday
Volume  Max  Volume maxinmum  Min  AST (Auto store)  No Media  No File  Empty media file in CD or USB  Empty File  Empty media file in MY MUSIC  Info (Information)  Artist  Artist name, MP3/CD file currently being played  Title  Song name, MP3/CD file currently being played  Album  Album name, MP3/CD file currently being played  Genres  "Genres" is keyword for searching mode of playlists for iPod  Composers  "Composers" is filtering keyword	Sunday	Sunday
Max  Min  Volume maxinmum  Volume mininmum  AST (Auto store)  Automatically selects and saves channels  No Media  Empty media file in CD or USB  Empty File  Empty media file in MY MUSIC  Info (Information)  Artist  Artist name, MP3/CD file currently being played  Title  Song name, MP3/CD file currently being played  Album  Album name, MP3/CD file currently being played  Genres  "Genres" is keyword for searching mode of playlists for iPod  Composers  "Composers" is filtering keyword	Use tune knob	Use tune knob
Min  AST (Auto store)  Automatically selects and saves channels  No Media  Empty media file in CD or USB  No File  Empty media file in CD or USB  Empty File  Empty media file in MY MUSIC  Info (Information)  Artist  Artist name, MP3/CD file currently being played  Title  Song name, MP3/CD file currently being played  Album  Album name, MP3/CD file currently being played  Genres  "Genres" is keyword for searching mode of playlists for iPod  Composers  "Composers" is filtering keyword	Volume	Volume
AST (Auto store)  Automatically selects and saves channels  No Media  Empty media file in CD or USB  Empty File  Empty media file in MY MUSIC  Info (Information)  Artist  Artist name, MP3/CD file currently being played  Title  Song name, MP3/CD file currently being played  Album  Album name, MP3/CD file currently being played  Genres  "Genres" is keyword for searching mode of playlists for iPod  Composers  "Composers" is filtering keyword	Max	Volume maxinmum
channels  No Media  Empty media file in CD or USB  No File  Empty media file in CD or USB  Empty File  Empty media file in MY MUSIC  Info (Information)  Artist  Artist name, MP3/CD file currently being played  Title  Song name, MP3/CD file currently being played  Album  Album name, MP3/CD file currently being played  Genres  "Genres" is keyword for searching mode of playlists for iPod  Composers  "Composers" is filtering keyword	Min	Volume mininmum
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Empty File	No Media	Empty media file in CD or USB
Info (Information)  Artist  Artist name, MP3/CD file currently being played  Title  Song name, MP3/CD file currently being played  Album  Album name, MP3/CD file currently being played  Genres  "Genres" is keyword for searching mode of playlists for iPod  Composers  "Composers" is filtering keyword	No File	Empty media file in CD or USB
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rently being played  Title  Song name, MP3/CD file currently being played  Album  Album name, MP3/CD file currently being played  Genres  "Genres" is keyword for searching mode of playlists for iPod  Composers  "Composers" is filtering keyword	Info (Information)	Information of playing files
Title  Song name, MP3/CD file currently being played  Album  Album name, MP3/CD file currently being played  Genres  "Genres" is keyword for searching mode of playlists for iPod  Composers  "Composers" is filtering keyword	Artist	Artist name, MP3/CD file cur-
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rently being played  Genres "Genres" is keyword for searching mode of playlists for iPod  Composers "Composers" is filtering keyword		rently being played
Genres "Genres" is keyword for searching mode of playlists for iPod Composers "Composers" is filtering keyword	Album	Album name, MP3/CD file cur-
ing mode of playlists for iPod Composers "Composers" is filtering keyword		rently being played
Composers "Composers" is filtering keyword	Genres	"Genres" is keyword for search-
		ing mode of playlists for iPod
for searching mode of playlists	Composers	"Composers" is filtering keyword
lor scarsing mode or playing		for searching mode of playlists
for iPod		for iPod

Playlists	"Playlists" is filtering keyword for
	searching mode of playlists for iPod
Songs	"Songs" is filtering keyword for
	searching mode of playlists for iPod
Audiobooks	"Audiobooks" is filtering keyword
	for searching mode of playlists
	for iPod
Podcasts	"Podcasts" is filtering keyword
	for searching mode of playlists
	for iPod
RPT (Repeat)	Audio play mode of Reapeat
F.RPT (Folder Repeat)	Audio play mode of Folder
	Reapeat
RDM (Random)	Audio play mode of Random
F.RDM(Folder Random)	Audio play mode of Folder
	Random
A.RDM (All Random)	Audio play mode of All Random
COPY	Copy MP3 file to flash memory
	for MY MUSIC
Cancel copy	Cancel copy mode
File copied	Completed File copy
Free	Free size of memory
Copy failed	Copy failed
Search	Search files
Loading CD	Loading CD
Reading CD	Reading CD
Reading Error	Reading Error
Mechanism Error	Mechanism Error
Ejecting CD	Ejecting CD

Audio CD	Audio CD	Mode Pop up	This function is used to select
Track	Audio CD song order	Mode i op ap	popup menu on or off
Reading Media	Reading Media	Scroll text	This function is used to display
Not supported	Not supported file format	Coron toxt	characters longer than the LCD
Empty iPod	Empty iPod, iPod don't have		text displays
	playable data	Song Info	Setup display information being
Communication Error	Communication error between	Song me	played
	audio and iPod or usb	Folder/File	Display Folder/file name, file
Delete	Delete the paired phone or files		currently being played
	in MY MUSIC	Album/Artist/Song	Display Album/Artist/Song
Del.All	Delete all files	9	name, file currently being played
Del.Sel	Select files to delete	Sound	Setup sound mode
Return	Return menu	Audio Settings	Setup Audio settings that con-
List	List files or paired phones		sist BASS,Middle,Treble,Fader
Select Files	Select Files		and Balance
Memory is full, Delete files	Memory is full, Delete	PowerBass	This function is used to improve
	files		bass sound quality
Over 6000 files. can	Over 6000 files, can not be	Speed Dependent Vol.	Automatically adjust the volume
not be copied	copied		according to the car speed
Over 1000 same files can not be copied	Over 1000 same files can not	Volume Dialogue	Adjust volume level of Dialogue
	be copied	Bass	Bass is sound of low frequency.
System will automati	System will automatically		It can be adjusted sound by
cally switchoff after 1	switchoff after 1 hour with igni-		user
hour with ignition off	tion off	Middle	Middle is sound of middle fre-
Battery discharge	Battery discharge		quency. It can be adjusted
Start the engine	Start the engine		sound by user
Setup	Setup	Treble	Treble is sound of high frequency. It
Display	Setup display mode		can be adjusted sound by user

Fader	Fader is sound positon between
	FRONT and REAR. It can be
	adjusted sound by user
Balance	Balance is sound positon
	between Right and Left. It can
	be adjusted sound by user
Default	This function is used to initialize
	setting value
Clock	Setup time
Clock Settings	Enters time advanced settings
Day Settings	Enters day advanced settings
Time Format	Refer to the time display The
	time can be displayedin 12
	hours or 24 hours
Clock Disp.(Pwr Off)	This function is used to select
	clock display mode in power off
System	Setup system or system infor-
	mation
Memory Information	Display used memory size
VRS Mode	Setup Voice command mode
Normal	Normal mode. This function is
	used to set default value of
	voice recognition factor
Expert	Expert mode. This function is
	used to set exercised value of
	voice recognition factor
Language	This function is used to select
	user language
Deutsch	Deutsch

English(UK)	English(UK)
Français	French
Italiano	Italian
Español	Spanish
Nederlands	dutch
Svenska	swedish
Dansk	Danish
Русский	Polish
Polski	Russian
The system will be	The system will be
rebooted	rebooted
Please change language	Please change language when
when ignition ON	ignition ON
Bluetooth not ready	You can use BT System for a
Please wait	moment Because BT system is
	being initialized
Add a new Bluetooth	Add a new Bluetooth® Wireless
device from your phone	Technology device from your phone
Processing Bluetooth	You can use BT System for a
Please try later	moment Because BT system is
	being initialized or processing
	other command
Incoming Call	Receivng phone
Call Ended	Call Ended
Call Rejected	When there is unwanted call,
	You push the button on the
	steering remote controller
Unknown	"Unknown" mean Headunit or
	phone don't have any informa-
	tion about phone number

Call is not possible	Call is not possible
MIC Mute	Microphone mute
Activate Bluetooth	Activate Bluetooth® Wireless
System?	Technology System
Bluetooth System	Bluetooth® Wireless
activated	Technology system activated
No phone paired.	Empty phone paired.
Pair a phone?	Pair a phone?
No connected phone.	No connected phone. Connect a
Connect a phone?	phone?
Phone book is empty.	Phone book is empty
Download?	
Available only when	This is a warning, Do not enter
vehicle is stationary	the MENU about BT Setup.
	When vehicle is moving
Listening	Listen to instruction of audio
Phone book Download	Downloading phone book from
	phone paired to audio
Auto Download	After pairing phone, audio sys-
	tem automatically download
	phone book
Audio Streaming	After pairing phone, audio system
	can support Bluetooth® Wireless
	Technology streaming mode
Outgoing Volume	Set outoging volume "0 ~ 5"
Bluetooth System Off	Turn off Bluetooth® Wireless
	Technology System
Bluetooth System ON	Turn on Bluetooth® Wireless
	Technology System

Device :	Bluetooth® Wireless
	Technology device name
Passkey	Passkey for pairing a phone
Pairing complete	Pair a Bluetooth® Wireless
	Technology phone to the audio
Pairing failed	Audio & Phone connection have
-	failed
Already 5 devices	All 5 phones have already been
paired. Delete a	paired. Delete a previously
paired phone?	paired phone to pair new phone
Connection complete	Audio & Phone connection have
	succeed
Connection failed.	Audio & Phone connection have
Retry?	failed
Priority changed	Changed priority about the reg-
	istered phones
Overwrite previous	Overwrite previous phone book
phone book?	information
Phone does not support	Phone does not support Phone
Phone book download	book download
No connected	There are phone in the
Bluetooth device	connection list
Phone does not support	But it was actually not connect-
Bluetooth audio	ed BT pairing
Downloading stopped	Downloading stopped

### **Driving your vehicle**

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- Necessary inspections / 5-4
- Before starting / 5-4

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#### Engine START/STOP button / 5-9

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### **WARNING - ENGINE EXHAUST CAN BE DANGEROUS!**

Engine exhaust fumes can be extremely dangerous. If, at any time, you smell exhaust fumes inside the vehicle, open the windows immediately.

#### Do not inhale exhaust fumes.

Exhaust fumes contain carbon monoxide, a colorless, odorless gas that can cause unconsciousness and death by asphyxia-

### • Be sure the exhaust system does not leak.

The exhaust system should be checked whenever the vehicle is raised to change the oil or for any other purpose. If you hear a change in the sound of the exhaust or if you drive over something that strikes the underneath side of the vehicle, we recommend that the system be checked by an authorized HYUNDAI dealer.

### Do not run the engine in an enclosed area.

Letting the engine idle in your garage, even with the garage door open, is a hazardous practice. Never run the engine in your garage any longer than it takes to start the engine and back the vehicle out.

### Avoid idling the engine for prolonged periods with people inside the vehicle.

If it is necessary to idle the engine for a prolonged period with people inside the vehicle, be sure to do so only in an open area with the air intake set at "Fresh" and fan operating at one of the higher speeds so fresh air is drawn into the interior.

If you must drive with the tailgate/trunk open because you are carrying objects that make this necessary:

- 1. Close all windows.
- 2. Open side vents.
- 3. Set the air intake control at "Fresh", the air flow control at "Floor" or "Face" and the fan at one of the higher speeds.

To assure proper operation of the ventilation system, be sure the ventilation air intakes located just in front of the windshield are kept clear of snow, ice, leaves or other obstructions.

### **BEFORE DRIVING**

### Before entering vehicle

- Be sure that all windows, outside mirror(s), and outside lights are clean.
- · Check the condition of the tires.
- Check under the vehicle for any sign of leaks.
- Be sure there are no obstacles behind you if you intend to back up.

### **Necessary inspections**

Fluid levels, such as engine oil, engine coolant, brake fluid, and washer fluid should be checked on a regular basis, with the exact interval depending on the fluid. Further details are provided in section 7, "Maintenance".

### **WARNING**

Driving while distracted can result in a loss of vehicle control, that may lead to an accident, severe personal injury, and death. The driver's primary responsibility is in the safe and legal operation of a vehicle, and use of any handheld devices, other equipment, or vehicle systems which take the driver's eyes, attention and focus away from the safe operation of a vehicle or which are not permissible by law should never be used during operation of the vehicle.

### Before starting

- · Close and lock all doors.
- Position the seat so that all controls are easily reached.
- Adjust the inside and outside rearview mirrors.
- · Be sure that all lights work.
- · Check all gauges.
- Check the operation of warning lights when the ignition switch is turned to the ON position.
- Release the parking brake and make sure the brake warning light goes out.

For safe operation, be sure you are familiar with your vehicle and its equipment.

### **A WARNING**

All passengers must be properly belted whenever the vehicle is moving. Refer to "Seat belts" in section 3 for more information on their proper use.

### **A** WARNING

Always check the surrounding areas near your vehicle for people, especially children, before putting a vehicle into "D (Drive)" or "R (Reverse)".

### WARNING - Driving under the influence of alcohol or drugs

Drinking and driving is dangerous. Drunk driving is the number one contributor to the highway death toll each year. Even a small amount of alcohol will affect your reflexes, perceptions and judgement. Driving while under the influence of drugs is as dangerous or more dangerous than driving drunk.

You are much more likely to have a serious accident if you drink or take drugs and drive.

If you are drinking or taking drugs, don't drive. Do not ride with a driver who has been drinking or taking drugs. Choose a designated driver or call a cab.

### **WARNING**

- When you intend to park or stop the vehicle with the engine on, be careful not to depress the accelerator pedal for a long period of time. It may overheat the engine or exhaust system and cause fire.
- When you make a sudden stop or turn the steering wheel rapidly, loose objects may drop on the floor and it could interfere with the operation of the foot pedals, possibly causing an accident. Keep all things in the vehicle safely stored.
- If you do not focus on driving, it may cause an accident. Be careful when operating what may disturb driving such as audio or heater. It is the responsibility of the driver to always drive safely.

### **KEY POSITIONS**



### Illuminated ignition switch

Whenever a front door is opened, the ignition switch will be illuminated for your convenience, provided the ignition switch is not in the ON position. The light will go off immediately when the ignition switch is turned on or go off after about 30 seconds when the door is closed.

### Ignition switch position

#### LOCK

The steering wheel locks to protect against theft. The ignition key can be removed only in the LOCK position. When turning the ignition switch to the LOCK position, push the key inward at the ACC position and turn the key toward the LOCK position.

### ACC (Accessory)

The steering wheel is unlocked and electrical accessories are operative.

### \* NOTICE

If difficulty is experienced turning the ignition switch to the ACC position, turn the key while turning the steering wheel right and left to release the tension.

#### ON

The warning lights can be checked before the engine is started. This is the normal running position after the engine is started.

Do not leave the ignition switch ON if the engine is not running to prevent battery discharge.

#### START

Turn the ignition key to the START position to start the engine. The engine will crank until you release the key; then it returns to the ON position. The brake warning lamp can be checked in this position.

### **WARNING** - Ignition key

- Never turn the ignition switch to LOCK or ACC while the vehicle is moving. This would result in loss of directional control and braking function, which could cause an accident.
- The anti-theft steering column lock (if equipped) is not a substitute for the parking brake. Before leaving the driver's seat, always make sure the shift lever is engaged in 1st gear for the manual transaxle or P (Park) for the automatic transaxle, set the parking brake fully and shut the engine off. Unexpected and sudden vehicle movement may occur if these precautions are not taken.
- Never reach for the ignition switch, or any other controls through the steering wheel while the vehicle is in motion. The presence of your hand or arm in this area could cause a loss of vehicle control, an accident and serious bodily injury or death.
- Do not place any movable objects around the driver's seat as they may move while driving, interfere with the driver and lead to an accident.

### Starting the engine

### **WARNING**

Always wear appropriate shoes when operating your vehicle. Unsuitable shoes (high heels, ski boots,etc.) may interfere with your ability to use the brake and accelerator pedal, and clutch (if equipped).

# \* NOTICE - Kick down mechanism

If your vehicle is equipped with a kick down mechanism in the accelerator pedal, it prevents you from driving at full throttle unintentionally by making the driver require increased effort to depress the accelerator pedal. However, if you depress the pedal more than approximately 80%, the vehicle can be at full throttle and the accelerator pedal will be easier to depress. This is not a malfunction but a normal condition.

### Starting the gasoline engine

- 1. Make sure the parking brake is applied.
- 2. Manual Transaxle Depress the clutch pedal fully and shift the transaxle into Neutral. Keep the clutch pedal and brake pedal depressed while turning the ignition switch to the start position.

**Automatic Transaxle** - Place the transaxle shift lever in P (Park). Depress the brake pedal fully.

You can also start the engine when the shift lever is in the N (Neutral) position.

- 3. Turn the ignition switch to START and hold it there until the engine starts (a maximum of 10 seconds), then release the key.
- 4. In extremely cold weather (below -18°C / 0°F) or after the vehicle has not been operated for several days, let the engine warm up without depressing the accelerator pedal.

Whether the engine is cold or warm, it should be started without depressing the accelerator pedal.

### **⚠** CAUTION

If the engine stalls while you are in motion, do not attempt to move the shift lever to the P (Park) position. If traffic and road conditions permit, you may put the shift lever in the N (Neutral) position while the vehicle is still moving and turn the ignition switch to the START position in an attempt to restart the engine.

### **A** CAUTION

Do not engage the starter for more than 10 seconds. If the engine stalls or fails to start, wait 5 to 10 seconds before re-engaging the starter. Improper use of the starter may damage it.

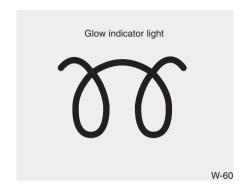
### Starting the diesel engine

To start the diesel engine when the engine is cold, it has to be pre-heated before starting the engine and then have to be warmed up before starting to drive.

- 1. Make sure the parking brake is applied.
- Manual Transaxle Depress the clutch pedal fully and shift the transaxle into Neutral. Keep the clutch pedal and brake pedal depressed while turning the ignition switch to the start position.

**Automatic Transaxle** - Place the transaxle shift lever in P(park). Depress the brake pedal fully.

You can also start the engine when the shift lever is in the N(neutral) position.



- Turn the ignition switch to the ON position to pre-heat the engine. Then the glow indicator light will illuminate.
- If the glow indicator light goes out, turn the ignition switch to the START position and hold it there until the engine starts (a maximum of 10 seconds), then release the key.

### \* NOTICE

If the engine does not start within 10 seconds after the preheating is completed, turn the ignition key once more to the LOCK position for 10 seconds, and then to the ON position, in order to preheat again.

# Starting and stopping the engine for turbocharger intercooler

- Do not race or accelerate the engine immediately after starting.
   If the engine is cold, idle for several seconds before sufficient lubrication is ensured in the turbocharger unit.
- After high speed or extended driving, requiring a heavy engine load, run the engine on idle condition about 1 minute before turning it off.
   This idle time will allow the turbocharger to cool prior to shutting the engine off.

### **⚠** CAUTION

Do not turn off the engine immediately after it has been subjected to a heavy load. Doing so may cause severe damage to the engine or turbo charger unit.

### **ENGINE START/STOP BUTTON (IF EQUIPPED)**



# Illuminated engine start/stop button

Whenever the front door is opened, the engine start/stop button will illuminate for your convenience. The light will go off after about 30 seconds when the door is closed. It will also go off immediately when the theft-alarm system is armed.

# Engine start/stop button position *OFF*



#### With manual transaxle

To turn off the engine (START/RUN position) or vehicle power (ON position), stop the vehicle then press the engine start/stop button.

#### With automatic transaxle

To turn off the engine (START/RUN position) or vehicle power (ON position), press the engine start/stop button with the shift lever in the P (Park) position. When you press the engine start/stop button without the shift lever in the P (Park) position, the engine start/stop button will not change to the OFF position but to the ACC position.

## Vehicles equipped with anti-theft steering column lock

The steering wheel locks when the engine start/stop button is in the OFF position to protect you against theft. It locks when the door is opened.

If the steering wheel is not locked properly when you open the driver's door, the warning chime will sound. Try locking the steering wheel again. If the problem is not solved, we recommend that the system be checked by an authorized HYUNDAI dealer.

In addition, if the engine start/stop button is in the OFF position after the driver's door is opened, the steering wheel will not lock and the warning chime will sound. In such a situation, close the door. Then the steering wheel will lock and the warning chime will stop.

### \* NOTICE

If the steering wheel doesn't unlock properly, the engine start/stop button will not work. Press the engine start/stop button while turning the steering wheel right and left to release the tension.

### **A** CAUTION

You are able to turn off the engine (START/RUN) or vehicle power (ON), only when the vehicle is not in motion. In an emergency situation while the vehicle is in motion, you are able to turn the engine off and to the ACC position by pressing the engine start/stop button for more than 2 seconds or 3 times successively within 3 seconds. If the vehicle is still moving, you can restart the engine without depressing the brake pedal by pressing the engine start/stop button with the shift lever in the N (Neutral) position.

### ACC(Accessory)



#### ON



#### With manual transaxle

Press the engine start/stop button when the button is in the OFF position without depressing the clutch pedal.

#### With automatic transaxle

Press the engine start/stop button while it is in the OFF position without depressing the brake pedal.

The steering wheel unlocks (if equipped with anti-theft steering column lock) and electrical accessories are operational. If the engine start/stop button is in the ACC position for more than 1 hour, the button is turned off automatically to prevent battery discharge.

#### With manual transaxle

Press the engine start/stop button when the button is in the ACC position without depressing the clutch pedal.

#### With automatic transaxle

Press the engine start/stop button while it is in the ACC position without depressing the brake pedal.

The warning lights can be checked before the engine is started. Do not leave the engine start/stop button in the ON position for a long time. The battery may discharge, because the engine is not running.

#### START/RUN



### With manual transaxle

To start the engine, depress the clutch pedal and brake pedal, then press the engine start/stop button with the shift lever in the N (Neutral) position.

#### With automatic transaxle

To start the engine, depress the brake pedal and press the engine start/stop button with the shift lever in the P (Park) or the N (Neutral) position. For your safety, start the engine with the shift lever in the P (Park) position.

#### \* NOTICE

If you press the engine start/stop button without depressing the clutch pedal for manual transaxle vehicles or without depressing the brake pedal for automatic transaxle vehicles, the engine will not start and the engine start/stop button changes as follow:

OFF  $\rightarrow$ ACC  $\rightarrow$  ON  $\rightarrow$  OFF or ACC

### \* NOTICE

If you leave the engine start/stop button in the ACC or ON position for a long time, the battery will discharge.

### **WARNING**

- Never press the engine start/stop button while the vehicle is in motion. This would result in loss of directional control and braking function, which could cause an accident.
- The anti-theft steering column lock (if equipped) is not a substitute for the parking brake. Before leaving the driver's seat, always make sure the shift lever is engaged in P (Park), set the parking brake fully and shut the engine off. Unexpected and sudden vehicle movement may occur if these precautions are not taken.

(Continued)

### (Continued)

- Never reach for the engine start/ stop button or any other controls through the steering wheel while the vehicle is in motion. The presence of your hand or arm in the area could cause loss of vehicle control, an accident and serious bodily injury or death.
- Do not place any movable objects around the driver's seat as they may move while driving, interfere with the driver and lead to an accident.

### Starting the engine



#### **WARNING**

Always wear appropriate shoes when operating your vehicle. Unsuitable shoes (high heels, ski boots,etc.) may interfere with your ability to use the brake and accelerator pedal.

#### Starting the gasoline engine

- 1. Carry the smart key or leave it inside the vehicle
- 2. Make sure the parking brake is firmly applied.
- 3. Manual Transaxle Depress the clutch pedal fully and shift the transaxle into Neutral. Keep the clutch pedal and brake pedal depressed while starting the engine.

Automatic Transaxle - Place the transaxle shift lever in P (Park). Depress the brake pedal fully.

You can also start the engine when the shift lever is in the N (Neutral) position.

- 4. Press the engine start/stop button.
- 5. In extremely cold weather (below -18°C / 0°F) or after the vehicle has not been operated for several days, let the engine warm up without depressing the accelerator.

Whether the engine is cold or warm, it should be started without depressing the accelerator.

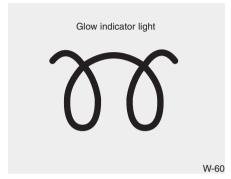
### Starting the diesel engine

To start the diesel engine when the engine is cold, it has to be pre-heated before starting the engine and then have to be warmed up before starting to drive.

- 1. Make sure the parking brake is applied.
- 2. Manual Transaxle Depress the clutch pedal fully and shift the transaxle into Neutral. Keep the clutch pedal and brake pedal depressed while pressing the engine start/stop button to the START position.

Automatic Transaxle - Place the transaxle shift lever in P (Park). Depress the brake pedal fully.

You can also start the engine when the shift lever is in the N (Neutral) position.



- 3. Press the engine start/stop button while depressing the brake pedal.
- Continue depressing the brake pedal until the illuminated glow indicator goes off. (approximately 5 seconds)
- 5. The engine starts running when the glow indicator goes off.

### \* NOTICE

If the engine start/stop button is pressed once more while the engine is pre-heating, the engine may start.

# Starting and stopping the engine for turbocharger intercooler

- Do not race or accelerate the engine immediately after starting.
   If the engine is cold, idle for several seconds before sufficient lubrication is ensured in the turbocharger unit.
- After high speed or extended driving, requiring a heavy engine load, idle the engine about 1 minute before turning it off.

This idle time will allow the turbocharger to cool prior to shutting the engine off.

### **!** CAUTION

Do not turn the engine off immediately after it has been subjected to a heavy load. Doing so may cause severe damage to the engine or turbocharger unit.

- Even if the smart key is in the vehicle, if it is far away from you, the engine may not start.
- When the engine start/stop button is in the ACC position or above, if any door is opened, the system checks for the smart key. If the smart key is not in the vehicle, a message "Key is not in the vehicle" will appear on the LCD display. And if all doors are closed, the chime will sound for 5 seconds. The indicator or warning will turn off while the vehicle is moving. Always have the smart key with you.

### **WARNING**

The engine will start, only when the smart key is in the vehicle.

Never allow children or any person who is unfamiliar with the vehicle touch the engine start/stop button or related parts.

### ∴ CAUTION

If the engine stalls while the vehicle is in motion, do not attempt to move the shift lever to the P (Park) position. If the traffic and road conditions permit, you may put the shift lever in the N (Neutral) position while the vehicle is still moving and press the engine start/stop button in an attempt to restart the engine.



### \* NOTICE

- · If the battery is weak or the smart key does not work correctly, you can start the engine by pressing the engine start/stop button with the smart key.
- When the stop lamp fuse is blown, you cannot start the engine normally. Replace the fuse with a new one. If it is not possible, you can start the engine by pressing the engine start/stop button for 10 seconds while it is in the ACC position. The engine can start without depressing the brake pedal. But for your safety always depress the brake pedal before starting the engine.

### **⚠** CAUTION

Do not press the engine start/stop button for more than 10 seconds except when the stop lamp fuse is blown.

### ISG (IDLE STOP AND GO) SYSTEM (IF EQUIPPED)

Your vehicle may be equipped with the ISG system, which reduces fuel consumption by automatically shutting down the engine, when the vehicle is at a standstill. (For example : red light, stop sign and traffic jam)

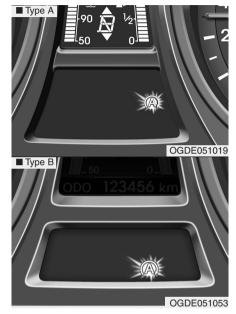
The engine starts automatically as soon as the starting conditions are met.

The ISG system is ON whenever the engine is running.

### \* NOTICE

When the engine automatically starts by the ISG system, some warning lights (ABS, ESC, ESC OFF, EPS or Parking brake warning light) may turn on for a few seconds.

This happens because of low battery voltage. It does not mean the system has malfunctioned.



The engine will stop and the green AUTO STOP(A) indicator on the instrument cluster will illuminate.

### **Auto stop**

To stop the engine in idle stop mode

- 1. Decrease the vehicle speed to less than 5 km/h (3 mph).
- 2. Shift into N (Neutral) position.
- 3. Release the clutch pedal.



Also, a message "Auto Stop" will appear on the LCD display.

### \* NOTICE

You must reach a speed of at least 10 km/h (6 mph) since last idle stop.

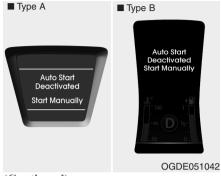


### \* NOTICE

If you unfasten the seatbelt or open the driver's door (or engine hood) in auto stop mode, the following will happen:

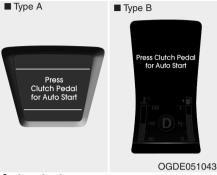
 The ISG system will deactivate (the light on the ISG OFF button will illuminate).

(Continued)



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 A message "Auto Start Deactivated Start Manually" will appear on the LCD display.



#### **Auto start**

To restart the engine from idle stop mode

- Press the clutch pedal when the shift lever is in the N (Neutral) position.
- A message "Press Clutch Pedal for Auto Start" will appear on the LCD display.
- The engine will start and the green AUTO STOP (A) indicator on the instrument cluster will go out.

The engine will also restart automatically without the driver's any actions if the following occurs:

- The fan speed of manual climate control system is set above the 3rd position when the air conditioning is on.
- The fan speed of automatic climate control system is set above the 6th position when the air conditioning is on.
- When a certain amount of time has passed with the climate control system on.
- When the defroster is on.
- The brake vaccum pressure is low.
- The battery charging status is low.
- The vehicle speed exceeds 5 km/h (3 mph).



The green AUTO STOP ((A)) indicator on the instrument cluster will blink for 5 seconds and a message "Auto Start" will appear on the LCD display.

# Condition of ISG system operation

The ISG system will operate under the following condition:

- The driver's seat belt is fastened.
- The driver's door and engine hood are closed.
- The brake vaccum pressure is adequate.
- The battery is sufficiently charged.
- -The outside temperature is between -2°C to 35°C (28.4°F to 95°F).
- The engine coolant temperature is not too low.



### \* NOTICE

• If the ISG system does not meet the operation condition, the ISG system is deactivated. The light on the ISG OFF button will illuminate and a message "Auto Stop Deactivated" will appear on the LCD display.

(Continued)

### (Continued)

 If the light or notice comes on continuously, please check the operation condition.



## ISG system deactivation

- If you wish to deactivate the ISG system, press the ISG OFF button. The light on the ISG OFF button will illuminate and a message "Auto Stop Off" will appear on the LCD display.
- If you press the ISG OFF button again, the system will be activated and the light on the ISG OFF button will turn off.

#### ISG system malfunction

The system may not operate when: The ISG related sensors or system error occurs.

The following will happen:

The yellow AUTO STOP ((A)) indicator on the instrument cluster will stay on after blinking for 5 seconds.



- The light on the ISG OFF button will illuminate.
- A message "Please Enable Battery Sensor" will appear on the LCD display.

#### \* NOTICE

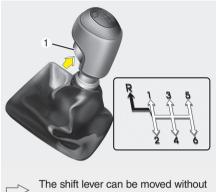
- If the ISG OFF button light is not turned off by pressing the ISG OFF button again or if the ISG system continuously does not work correctly, we recommend that you contact an authorized HYUNDAI dealer.
- When the ISG OFF button light comes on, it may stop illuminating after driving your vehicle at approximately 80 km/h for a maximum of two hours and setting the fan speed control below the 2nd position. If the ISG OFF button light continues to illuminate in spite of the procedure, we recommend that you contact an authorized HYUNDAI dealer.

### **A WARNING**

When the engine is in Idle Stop mode, it's possible to restart the engine without the driver taking any action.

Before leaving the car or doing anything in the engine room area, stop the engine by turning the ignition switch to the LOCK/OFF position or removing the ignition key.

## MANUAL TRANSAXLE (IF EQUIPPED)



pushing the button (1).

The button (1) must be pushed while moving the shift lever.

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## Manual transaxle operation

 The manual transaxle has 6 forward gears.

This shift pattern is imprinted on the shift knob. The transaxle is fully synchronized in all forward gears so shifting to either a higher or a lower gear is easily accomplished.

- Depress the clutch pedal down fully while shifting, then release it slowly.
   If your vehicle is equipped with an ignition lock switch, the engine will not start when starting the engine without depressing the clutch pedal.
- The shift lever must return to the neutral position before shifting into R (Reverse). The button located immediately below the shift knob must be pushed upward while moving the shift lever to the R (Reverse) position.
- Make sure the vehicle is completely stopped before shifting into R (Reverse).

Never operate the engine with the tachometer (rpm) in the red zone.

## **A** CAUTION

- When downshifting from 5 (Fifth) gear to 4 (Fourth) gear, caution should be taken not to inadvertently move the shift lever sideways in such a manner that second gear is engaged. Such a drastic downshift may cause the engine speed to increase to the point that the tachometer will enter the red-zone. Such overrevving of the engine may possibly cause engine and transaxle damage.
- Do not downshift more than 2 gears or downshift the gear when the engine is running at high speed (5,000 RPM or higher). Such a downshifting may damage the engine.

- During cold weather, shifting may be difficult until the transaxle lubricant has warmed up. This is normal and not harmful to the transaxle.
- If you've come to a complete stop and it's hard to shift into 1 (First) or R (Reverse), put the shift lever in neutral position and release the clutch. Press the clutch pedal back down, and then shift into 1 (First) or R (Reverse) gear position.

## **⚠** CAUTION

- To avoid premature clutch wear and damage, do not drive with your foot resting on the clutch pedal. Also, don't use the clutch to hold the vehicle stopped on an uphill grade, while waiting for a traffic light, etc.
- Do not use the shift lever as a handrest during driving, as this can result in premature wear of the transaxle shift forks.

## **WARNING**

 Before leaving the driver's seat, always set the parking brake fully and shut the engine off. Then make sure the transaxle is shifted into 1 (First) gear when the vehicle is parked on a level or uphill grade, and shifted into R (Reverse) on a downhill grade.

Unexpected and sudden vehicle movement can occur if these precautions are not followed in the order identified.

 If your vehicle has a manual transaxle not equipped with a ignition lock switch, it may move and cause a serious accident when starting the engine without depressing the clutch pedal while the parking brake is released and the shift lever not in the neutral position.

### Using the clutch

The clutch pedal should be depressed all the way to the floor before shifting, then released slowly. The clutch pedal should always be fully released while driving. Do not rest your foot on the clutch pedal while driving. This can cause unnecessary wear. Do not partially engage the clutch to hold the vehicle on an incline. This causes unnecessary wear. Use the foot brake or parking brake to hold the vehicle on an incline. Do not operate the clutch pedal rapidly and repeatedly.

## **A** CAUTION

When operating the clutch pedal, depress the clutch pedal down fully. If you don't depress the clutch pedal fully, the clutch may be damaged or noise may occur.

#### **Downshifting**

When you must slow down in heavy traffic or while driving up steep hills, downshift before the engine starts to labor. Downshifting reduces the chance of stalling and gives better acceleration when you again need to increase your speed. When the vehicle is traveling down steep hills, downshifting helps maintain safe speed and prolongs brake life.

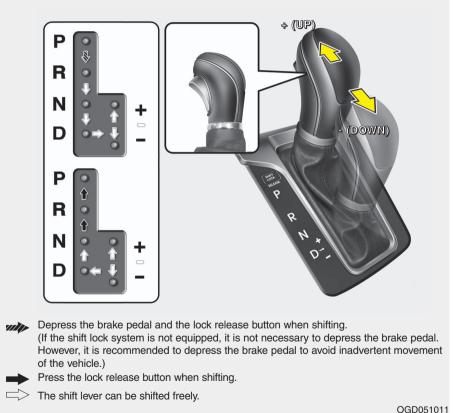
### Good driving practices

- Never take the vehicle out of gear and coast down a hill. This is extremely hazardous. Always leave the vehicle in gear.
- Don't "ride" the brakes. This can cause them to overheat and malfunction. Instead, when you are driving down a long hill, slow down and shift to a lower gear. When you do this, engine braking will help slow down the vehicle.
- Slow down before shifting to a lower gear. This will help avoid over-revving the engine, which can cause damage.
- Slow down when you encounter cross winds. This gives you much better control of your vehicle.
- Be sure the vehicle is completely stopped before you attempt to shift into R (Reverse). The transaxle can be damaged if you do not. To shift into R (Reverse), depress the clutch, move the shift lever to neutral, wait three seconds, then shift to the R (Reverse) position.
- Exercise extreme caution when driving on a slippery surface. Be especially careful when braking, accelerating or shifting gears. On a slippery surface, an abrupt change in vehicle speed can cause the drive wheels to lose traction and the vehicle to go out of control.

## **WARNING**

- Always buckle-up! In a collision, an unbelted occupant is significantly more likely to be seriously injured or killed than a properly belted occupant.
- Avoid high speeds when cornering or turning.
- Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.
- The risk of rollover is greatly increased if you lose control of your vehicle at highway speeds.
- Loss of control often occurs if two or more wheels drop off the roadway and the driver oversteers to reenter the roadway.
- In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.
- Never exceed posted speed limits.

## **AUTOMATIC TRANSAXLE (IF EQUIPPED)**



## **Automatic transaxle operation**

The highly efficient automatic transaxle has 6 forward speeds and one reverse speed. The individual speeds are selected automatically, depending on the position of the shift lever

#### \* NOTICE

The first few shifts on a new vehicle, if the battery has been disconnected, may be somewhat abrupt. This is a normal condition, and the shifting sequence will adjust after shifts are cycled a few times by the TCM (Transaxle Control Module) or PCM (Powertrain Control Module).

For smooth operation, depress the brake pedal when shifting from N (Neutral) to a forward or reverse gear.

## A WARNING - Automatic transaxle

- Always check the surrounding areas near your vehicle for people, especially children, before shifting a vehicle into D (Drive) or R (Reverse).
- Before leaving the driver's seat, always make sure the shift lever is in the P (Park) position; then set the parking brake fully and shut the engine off. Unexpected and sudden vehicle movement can occur if these precautions are not followed in the order identified.

## **!** CAUTION

- To avoid damage to your transaxle, do not accelerate the engine in R (Reverse) or any forward gear position with the brakes on.
- When stopped on an upgrade, do not hold the vehicle stationary with engine power. Use the service brake or the parking brake.
- Do not shift from N (Neutral) or P (Park) into D (Drive), or R (Reverse) when the engine is above idle speed.

#### Transaxle ranges

The indicator lights in the instrument cluster displays the shift lever position when the ignition switch is in the ON position.

#### P (Park)

Always come to a complete stop before shifting into P (Park). This position locks the transaxle and prevents the front wheels from rotating.

## **WARNING**

- Shifting into P (Park) while the vehicle is in motion will cause the drive wheels to lock which will cause you to lose control of the vehicle.
- Do not use the P (Park) position in place of the parking brake. Always make sure the shift lever is latched in the P (Park) position and set the parking brake fully.
- Never leave a child unattended in a vehicle.

## **A** CAUTION

The transaxle may be damaged if you shift into P (Park) while the vehicle is in motion.

#### R (Reverse)

Use this position to drive the vehicle backward.

## **!** CAUTION

Always come to a complete stop before shifting into or out of R (Reverse); you may damage the transaxle if you shift into R (Reverse) while the vehicle is in motion, except as explained in "Rocking the vehicle", in this manual.

#### N (Neutral)

The wheels and transaxle are not engaged. The vehicle will roll freely even on the slightest incline unless the parking brake or service brakes are applied.

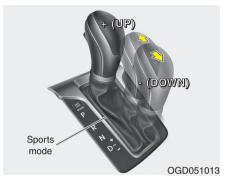
#### D (Drive)

This is the normal forward driving position. The transaxle will automatically shift through a 6-gear sequence, providing the best fuel economy and power.

For extra power when passing another vehicle or climbing grades, depress the accelerator pedal fully (more than 80%) until the kick down mechanism works with a clicking noise, at which time the transaxle will automatically downshift to the next lower gear.

#### \* NOTICE

- Always come to a complete stop before shifting into D (Drive).
- A clicking noise heard from the kick down mechanism by depressing the accelerator pedal fully is a normal condition.



#### Sports mode

Whether the vehicle is stationary or in motion, sports mode is selected by pushing the shift lever from the D (Drive) position into the manual gate. To return to D (Drive) range operation, push the shift lever back into the main gate.

In sports mode, moving the shift lever backwards and forwards will allow you to make gearshifts rapidly. In contrast to a manual transaxle, the sports mode allows gearshifts with the accelerator pedal depressed.

Up (+) : Push the lever forward once to shift up one gear.

Down (-): Pull the lever backwards once to shift down one gear.

#### \* NOTICE

- In sports mode, the driver must execute upshifts in accordance with road conditions, taking care to keep the engine speed below the red zone.
- In sports mode, only the 6 forward gears can be selected. To reverse or park the vehicle, move the shift lever to the R (Reverse) or P (Park) position as required.
- In sports mode, downshifts are made automatically when the vehicle slows down. When the vehicle stops, 1st gear is automatically selected.
- In sports mode, when the engine rpm approaches the red zone shift points are varied to upshift automatically.
- To maintain the required levels of vehicle performance and safety, the system may not execute certain gearshifts when the shift lever is operated.
- When driving on a slippery road, push the shift lever forward into the +(up) position. This causes the transaxle to shift into the 2nd gear which is better for smooth driving on a slippery road. Push the shift lever to the -(down) side to shift back to the 1st gear.

#### Shift lock system (if equipped)

For your safety, the automatic transaxle has a shift lock system which prevents shifting the transaxle from P (Park) or N (Neutral) into R (Reverse) unless the brake pedal is depressed.

To shift the transaxle from P (Park) or N (Neutral) into R (Reverse):

- 1. Depress and hold the brake pedal.
- 2. Start the engine or turn the ignition switch to the ON position.
- 3. Move the shift lever.

If the brake pedal is repeatedly depressed and released with the shift lever in the P (Park) position, a chattering noise near the shift lever may be heard. This is a normal condition.

## **A** WARNING

Always fully depress the brake pedal before and while shifting out of the P (Park) position into another position to avoid inadvertent motion of the vehicle which could injure persons in or around the vehicle.



#### Shift-lock override

If the shift lever cannot be moved from the P (Park) or N (Neutral) position into R (Reverse) position with the brake pedal depressed, continue depressing the brake, then do the following:

- 1. Press the shift-lock release button.
- 2. Move the shift lever.
- We recommend that the system be inspected by an authorized HYUNDAI dealer.

## Ignition key interlock system (if equipped)

The ignition key cannot be removed unless the shift lever is in the P (Park) position.

## Good driving practices

- Never move the shift lever from P (Park) or N (Neutral) to any other position with the accelerator pedal depressed.
- Never move the shift lever into P (Park) when the vehicle is in motion.
- Be sure the vehicle is completely stopped before you attempt to shift into R (Reverse) or D (Drive).
- Never take the vehicle out of gear and coast down a hill. This may be extremely hazardous. Always leave the vehicle in gear when moving.
- Do not "ride" the brakes. This can cause them to overheat and malfunction. Instead, when you are driving down a long hill, slow down and shift to a lower gear. When you do this, engine braking will help slow down the vehicle.
- Slow down before shifting to a lower gear. Otherwise, the lower gear may not be engaged.
- Always use the parking brake. Do not depend on placing the transaxle in P (Park) to keep the vehicle from moving.

- Exercise extreme caution when driving on a slippery surface. Be especially careful when braking, accelerating or shifting gears. On a slippery surface, an abrupt change in vehicle speed can cause the drive wheels to lose traction and the vehicle to go out of control.
- Optimum vehicle performance and economy is obtained by smoothly depressing and releasing the accelerator pedal.

## **A WARNING**

- Always buckle-up! In a collision, an unbelted occupant is significantly more likely to be seriously injured or killed than a properly belted occupant.
- Avoid high speeds when cornering or turning.
- Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.
- The risk of rollover is greatly increased if you lose control of your vehicle at highway speeds.
- Loss of control often occurs if two or more wheels drop off the roadway and the driver oversteers to reenter the roadway.
- In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.
- Never exceed posted speed limits.

## **A WARNING**

If your vehicle becomes stuck in snow, mud, sand, etc., then you may attempt to rock the vehicle free by moving it forward and backward. Do not attempt this procedure if people or objects are anywhere near the vehicle. During the rocking operation the vehicle may suddenly move forward of backward as it becomes unstuck, causing injury or damage to nearby people or objects.

## Moving up a steep grade from a standing start

To move up a steep grade from a standing start, depress the brake pedal, shift the shift lever to D (Drive). Select the appropriate gear depending on load weight and steepness of the grade, and release the parking brake. Depress the accelerator gradually while releasing the service brakes.

## **ACTIVE ECO SYSTEM (IF EQUIPPED)**



### **Active ECO operation**

Active ECO helps improve fuel efficiency by controlling the engine and transaxle. But fuel-efficiency can be changed by the driver's driving habits and road conditions.

- When the Active ECO button is pressed the ECO indicator (green) will illuminate to show that the Active ECO is operating.
- When the Active ECO is activated, it does not turn off even though the engine is restarted again. To turn off the system, press the active ECO button again.
- If Active ECO is turned off, it will return to the normal mode.

## Limitation of Active ECO operation:

If the following conditions occur while Active ECO is operating, the system operation is limited even though there is no change in the ECO indicator.

- When the coolant temperature is low: The system will be limited until engine performance becomes normal.
- When driving up a hill: The system will be limited to gain power when driving uphill because the engine torque is restricted.
- When using sports mode: The system will be limited according to the shift location.
- When the accelerator pedal is deeply pressed for a few seconds: The system will be limited, judging that the driver wants to speed up.

#### **BRAKE SYSTEM**

#### Power brakes

Your vehicle has power-assisted brakes that adjust automatically through normal usage.

In the event that the power-assisted brakes lose power because of a stalled engine or some other reason, you can still stop your vehicle by applying greater force to the brake pedal than you normally would. The stopping distance, however, will be longer.

When the engine is not running, the reserve brake power is partially depleted each time the brake pedal is applied. Do not pump the brake pedal when the power assist has been interrupted.

Pump the brake pedal only when necessary to maintain steering control on slippery surfaces.

## **WARNING** - Brakes

- Do not drive with your foot resting on the brake pedal. This will create abnormal high brake temperatures, excessive brake lining and pad wear, and increased stopping distances.
- When descending a long or steep hill, shift to a lower gear and avoid continuous application of the brakes. Continuous brake application will cause the brakes to overheat and could result in a temporary loss of braking performance.
- Wet brakes may impair the vehicle's ability to sefely slow down; the vehicle may also pull to one side when the brakes are applied. Applying the brakes lightly will indicate whether they have been affected in this way. Always test your brakes in this fashion after driving through deep water. To dry the brakes, apply them lightly while maintaining a safe forward speed until brake performance returns to normal.

(Continued)

#### (Continued)

 Always, confirm the position of the brake and accelerator pedal before driving. If you don't check the position of the accelerator and brake pedal before driving, you may depress the accelerator instead of the brake pedal. It may cause a serious accident.

#### In the event of brake failure

If service brakes fail to operate while the vehicle is in motion, you can make an emergency stop with the parking brake. The stopping distance, however, will be much greater than normal.

WARNING - Parking brake Applying the parking brake while the vehicle is moving at normal speeds can cause a sudden loss of control of the vehicle. If you must use the parking brake to stop the vehicle, use great caution in applying the brake.

#### Disc brakes wear indicator

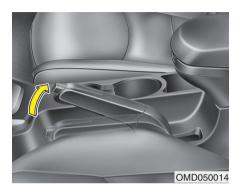
When your brake pads are worn and new pads are required, you will hear a high-pitched warning sound from your front brakes or rear brakes. You may hear this sound come and go or it may occur whenever you depress the brake pedal. Please remember that some driving conditions or climates may cause a brake squeal when you first apply (or lightly apply) the brakes. This is normal and does not indicate a problem with your brakes.

## **A** CAUTION

- To avoid costly brake repairs, do not continue to drive with worn brake pads.
- Always replace the front or rear brake pads as pairs.

## A WARNING - Brake wear

This brake wear warning sound means your vehicle needs service. If you ignore this audible warning, you will eventually lose braking performance, which could lead to a serious accident.



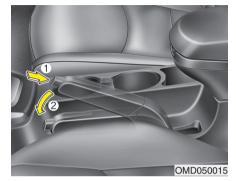
## Parking brake - Hand type

### Applying the parking brake

To engage the parking brake, first apply the foot brake and then without pressing the release button in, pull the parking brake lever up as far as possible. In addition it is recommended that when parking the vehicle on a gradient, the shift lever should be positioned in the appropriate low gear for manual transaxle vehicles or in the P (Park) position for automatic transaxle vehicles.

## **!** CAUTION

- Driving with the parking brake applied will cause excessive brake pad (or lining) and brake rotor wear.
- Do not operate the parking brake while the vehicle is moving except in an emergency situation. It could damage the vehicle system and make endanger driving safety.



Releasing the parking brake

To release the parking brake, first apply the foot brake and pull up the parking brake lever slightly. Secondly press the release button (1) and lower the parking brake lever (2) while pressing the button.

## **A** WARNING

- To prevent unintentional movement when stopped and leaving the vehicle, do not use the shift lever instead of the parking brake. Set the parking brake AND make sure the shift lever is securely positioned in 1st (First) gear or R (Reverse) for manual transaxle equipped vehicles and in P (Park) for automatic transaxle equipped vehicles.
- Never allow anyone who is unfamiliar with the vehicle to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.
- All vehicles should always have the parking brake fully engaged when parking to avoid inadvertent movement of the vehicle which can injure occupants or pedestrians.



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Check the brake warning light by turning the ignition switch ON (do not start the engine). This light will illuminate when the parking brake is applied with the ignition switch in the START or ON position.

Before driving, be sure the parking brake is fully released and the brake warning light is off.

If the brake warning light remains on after the parking brake is released while the engine is running, there may be a malfunction in the brake system. Immediate attention is necessary.

If at all possible, cease driving the vehicle immediately. If that is not possible, use extreme caution while operating the vehicle and only continue to drive the vehicle until you can reach a safe location or repair shop.



## Electric parking brake (EPB) (if equipped)

Applying the parking brake
To apply the EPB (electric parking brake):

- 1. Depress the brake pedal.
- 2. Pull up the EPB switch.

Make sure the warning light comes on.

#### \* NOTICE

On a steep incline or when pulling a trailer if the vehicle does not stand still, do as follows:

- 1. Apply the EPB.
- 2. Pull up the EPB switch for more than 3 seconds.

## **!** CAUTION

Do not operate the parking brake while the vehicle is moving except in an emergency situation. It could damage the vehicle system and endanger driving safety.



Releasing the parking brake
To release the EPB (electric parking brake), press the EPB switch in the following condition:

- Have the ignition switch or engine start/stop button in the ON position.
- Depress the brake pedal.

Make sure the brake warning light goes off.

## To release EPB (electric parking brake) automatically:

- · Manual transaxle vehicle
  - 1. Start the engine.
  - 2. Fasten the driver's seat belt.
  - 3. Close the driver's door, engine hood and tailgate.
  - 4. Depress the clutch pedal with the gear engaged.
  - 5. Depress the accelerator pedal while releasing the clutch pedal.
- · Automatic transaxle vehicle
  - 1. Start the engine.
  - 2. Fasten the driver's seat belt.
  - 3. Close the driver's door, engine hood and tailgate.
  - Depress the accelerator pedal while the shift lever is in R (Rear), D (Drive) or Sports mode.
- Shift lever in P (Park)
   With the engine running depress the brake pedal and shift out of P (Park) to R (Rear) or D (Drive).
- Shift lever in N (Neutral)
   With the engine running depress the
   brake pedal and shift out of N (Neutral)
   to R (Rear) or D (Drive).

Make sure the brake warning light goes off.

#### \* NOTICE

- For your safety, you can engage the EPB even though the ignition switch or engine stop/start button is in the OFF position, but you cannot release it.
- For your safety, depress the brake pedal and release the parking brake manually with the EPB switch when you drive downhill or when backing up the vehicle.

#### \* NOTICE - Manual transaxle

A vehicle towing a trailer on a hill or on an incline may slightly roll backwards when starting the vehicle. To prevent the situation follow the below instructions.

- 1. Depress the clutch pedal and select a gear.
- 2. Keep pulling up the EPB switch.
- 3. Depress the accelerator pedal and slowly release the clutch pedal.
- 4. If the vehicle starts off with enough driving power release the EPB switch.

Do not follow the above procedure when driving on a flat level ground. The vehicle may suddenly move forward.

## **A** CAUTION

- If the parking brake warning light is still on even though the EPB has been released, we recommend that the system be checked by an authorized HYUNDAI dealer.
- Do not drive your vehicle with the EPB applied. It may cause excessive brake pad and brake rotor wear.

## EPB (electric parking brake) may be automatically applied when:

- · The EPB is overheated
- · Requested by other systems



- If you try to drive off depressing the accelerator pedal with the EPB applied, but doesn't release automatically, a warning will sound and a message will appear.
- If the driver's seat belt is not fastened and any door, the engine hood or tailgate is opened, a warning will sound and a message will appear.
- If there is a problem with the vehicle, a warning may sound and a message may appear.

If the above situation occurs, depress the brake pedal and release EPB by pressing the EPB switch.

## **WARNING**

- To prevent unintentional movement when stopped and leaving the vehicle, do not use the shift lever in place of the parking brake. Set the parking brake and make sure the shift lever is securely positioned in P (Park).
- Never allow anyone who is unfamiliar with the vehicle to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.
- All vehicles should always have the parking brake fully engaged when parking to avoid inadvertent movement of the car which can injure occupants or pedestrians.

## **A** CAUTION

- A click sound may be heard while operating or releasing the EPB, but these conditions are normal and indicate that the EPB is functioning properly.
- When leaving your keys with a parking lot attendant or valet, make sure to inform him/her how to operate the EPB.
- The EPB may malfunction if you drive with the EPB applied.
- When you automatically release EPB by depressing the accelerator pedal, depress it slowly.



EPB malfunction indicator (if equipped)

This warning light illuminates if the engine start/stop button is changed to the ON position and goes off in approximately 3 seconds if the system is operation normally.

If the EPB malfunction indicator remains on, comes on while driving, or does not come on when the ignition switch or the engine start/stop button is changed to the ON position, this indicates that the EPB may have malfunctioned.

If this occurs, we recommend that the system be checked by an authorized HYUNDAI dealer.

The EPB malfunction indicator may illuminate when the ESC indicator comes on to indicate that the ESC is not working properly, but it does not indicate a malfunction of the EPB.

## **!** CAUTION

- The EPB warning light may illuminate if the EPB switch operates abnormally. Shut the engine off and turn it on again after a few minutes. The warning light will go off and the EPB switch will operate normally. However, if the EPB warning light is still on, we recommend that the system be checked by an authorized HYUNDAI dealer.
- If the parking brake warning light does not illuminate or blinks even though the EPB switch was pulled up, the EPB is not applied.
- If the parking brake warning light blinks when the EPB warning light is on, press the switch, then pull it up. Once more press it back to its original position and pull it back up. If the EPB warning does not go off, we recommend that the system be checked by an authorized HYUNDAI dealer.

#### Emergency braking

If there is a problem with the brake pedal while driving, emergency braking is possible by pulling up and holding the EPB switch. Braking is possible only while you are holding the EPB switch.



## **WARNING**

Do not operate the parking brake while the vehicle is moving except in an emergency situation.

#### \* NOTICE

During emergency braking by the EPB, the parking brake warning light will illuminate to indicate that the system is operating.



#### ∴ CAUTION

If you continuously notice a noise or burning smell when the EPB is used for emergency braking, we recommend that the system be checked by an authorized HYUNDAI dealer.

#### When the EPB (electric parking brake) does not release

If the EPB does not release normally, we recommend that you take your vehicle to an authorized HYUNDAI dealer by loading the vehicle on a flatbed tow truck and have the system checked.

## Anti-lock brake system (ABS)



### **WARNING**

ABS (or ESC) will not prevent accidents due to improper or dangerous driving maneuvers. Even though vehicle control is improved during emergency braking, always maintain a safe distance between vou and objects ahead. Vehicle speeds should always be reduced during extreme road conditions.

The braking distance for vehicle equipped with an anti-lock braking system (or Electronic Stability 'Control) may be longer than for those without it in the following road conditions.

**During these conditions the vehicle** should be driven at reduced speeds:

- Rough, gravel or snow-covered roads.
- With tire chains installed.
- On roads where the road surface is pitted or has different surface height.

(Continued)

### (Continued)

The safety features of an ABS (or ESC) equipped vehicle should not be tested by high speed driving or cornering. This could endanger the safety of yourself or others.

The ABS continuously senses the speed of the wheels. If the wheels are going to lock, the ABS system repeatedly modulates the hydraulic brake pressure to the wheels.

When you apply your brakes under conditions which may lock the wheels, you may hear a "tik-tik" sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ABS is active.

In order to obtain the maximum benefit from your ABS in an emergency situation, do not attempt to modulate your brake pressure and do not try to pump your brakes. Press your brake pedal as hard as possible or as hard as the situation warrants and allow the ABS to control the force being delivered to the brakes.

#### \* NOTICE

A click sound may be heard in the engine compartment when the vehicle begins to move after the engine is started. These conditions are normal and indicate that the anti-lock brake system is functioning properly.

- Even with the anti-lock brake system, your vehicle still requires sufficient stopping distance. Always maintain a safe distance from the vehicle in front of you.
- Always slow down when cornering. The anti-lock brake system cannot prevent accidents resulting from excessive speeds.
- On loose or uneven road surfaces, operation of the anti-lock brake system may result in a longer stopping distance than for vehicles equipped with a conventional brake system.



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## **A** CAUTION

- If the ABS warning light is on and stays on, you may have a problem with the ABS. In this case, however, your regular brakes will work normally.
- The ABS warning light will stay on for approximately 3 seconds after the ignition switch is ON. During that time, the ABS will go through self-diagnosis and the light will go off if everything is normal. If the light stays on, you may have a problem with your ABS. We recommend that you contact an authorized HYUNDAI dealer.

## **!** CAUTION

- When you drive on a road having poor traction, such as an icy road, and operate your brakes continuously, the ABS will be active continuously and the ABS warning light may illuminate. Pull your vehicle over to a safe place and stop the engine.
- Restart the engine. If the ABS warning light is off, then your ABS system is normal. Otherwise, you may have a problem with the ABS. We recommend that you contact an authorized HYUNDAI dealer.

#### \* NOTICE

When you jump start your vehicle because of a drained battery, the engine may not run as smoothly and the ABS warning light may turn on at the same time. This happens because of the low battery voltage. It does not mean your ABS is malfunctioning.

- Do not pump your brakes!
- Have the battery recharged before driving the vehicle.



## Electronic stability control (ESC) (if equipped)

The Electronic Stability Control (ESC) system is designed to stabilize the vehicle during cornering maneuvers. ESC checks where you are steering and where the vehicle is actually going. ESC applies the brakes at individual wheels and intervenes with engine management system to stabilize the vehicle.

## **WARNING**

Never drive too fast for the road conditions or too quickly when cornering. Electronic stability control (ESC) will not prevent accidents. Excessive speed in turns, abrupt maneuvers and hydroplaning on wet surfaces can still result in serious accidents. Only a safe and attentive driver can prevent accidents by avoiding maneuvers that cause the vehicle to lose traction. Even with ESC installed, always follow all the normal precautions for driving - including driving at safe speeds for the conditions.

The Electronic stability control (ESC) system is an electronic system designed to help the driver maintain vehicle control under adverse conditions. It is not a substitute for safe driving practices. Factors including speed, road conditions and driver steering input can all affect whether ESC will be effective in preventing a loss of control. It is still your responsibility to drive and corner at reasonable speeds and to leave a sufficient margin of safety.

When you apply your brakes under conditions which may lock the wheels, you may hear a "tik-tik" sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ESC is active.

#### \* NOTICE

A click sound may be heard in the engine compartment when the vehicle begins to move after the engine is started. These conditions are normal and indicate that the Electronic stability control (ESC) System is functioning properly.

#### ESC operation

#### **ESC ON condition**

- When the ignition is turned ON, ESC and ESC OFF indicator lights illuminate for approximately 3 seconds, then ESC is turned on.
- Press the ESC OFF button for at least half a second after turning the ignition ON to turn ESC off. (ESC OFF indicator will illuminate). To turn the ESC on, press the ESC OFF button (ESC OFF indicator light will go off).
- When starting the engine, you may hear a slight ticking sound. This is the ESC performing an automatic system self-check and does not indicate a problem.

#### When operating



When the ESC is in operation, ESC indicator light blinks.

- When the Electronic Stability Control is operating properly, you can feel a slight pulsation in the vehicle. This is only the effect of brake control and indicates nothing unusual.
- When moving out of the mud or slippery road, the engine rpm (revolution per minute) may not increase even if you press the accelerator pedal deeply. This is to maintain the stability and traction of the vehicle and does not indicate a problem.

#### ESC operation off

#### **ESC OFF state**



- To cancel the engine management system of ESC, press the ESC OFF button for less than 3 seconds (ESC OFF indicator light illuminates). The brake control function still operates.
- To cancel the engine management and brake control function of ESC, press the ESC OFF button for more than 3 seconds (ESC OFF indicator light illuminates).
- If the ignition switch is turned to LOCK position when ESC is off, ESC remains off. Upon restarting the engine, the ESC will automatically turn on again.

■ ESC indicator light

■ ESC OFF indicator light

#### Indicator light

When ignition switch is turned to ON, the indicator light illuminates, then goes off if the ESC system is operating normally.

The ESC indicator light blinks whenever ESC is operating or illuminates when ESC fails to operate.

ESC OFF indicator light comes on when the ESC is turned off with the button.



Driving with varying tire or wheel sizes may cause the ESC system to malfunction. When replacing tires, make sure they are the same size as your original tires.

## **WARNING**

The Electronic Stability Control system is only a driving aid; use precautions for safe driving by slowing down on curved, snowy, or icy roads. Drive slowly and don't attempt to accelerate whenever the ESC indicator light is blinking, or when the road surface is slippery.

#### ESC OFF usage

#### When driving

- ESC should be turned on for daily driving whenever possible.
- To turn ESC off while driving, press the ESC OFF button while driving on a flat road surface.

## **WARNING**

Never press the ESC OFF button while ESC is operating (ESC indicator light blinks).

If ESC is turned off while ESC is operating, the vehicle may slip out of control.

## \* NOTICE

- When operating the vehicle on a dynamometer, ensure that the ESC is turned off by pressing the ESC OFF button for more than 3 seconds (ESC OFF light illuminated). If the ESC is left on, it may prevent the vehicle speed from increasing, and result in false diagnosis.
- Turning the ESC off does not affect ABS or brake system operation.

## Vehicle stability management (VSM) (if equipped)

This system provides further enhancements to vehicle stability and steering responses when a vehicle is driving on a slippery road or a vehicle detected changes in coefficient of friction between right wheels and left wheels when braking.

#### VSM operation

When the VSM is operating:

- ESC (Electronic Stability Control) ( \$\beta\$ ) light will blink.
- The steering wheel may be controlled. When the vehicle stability management is operating properly, you can feel a slight pulsation in the vehicle. This is only the effect of brake control and indicates nothing unusual.

#### The VSM does not operate when:

- Driving on bank road such as gradient or incline
- · Driving rearward
- ESC OFF indicator light ( \$\frac{1}{8}\$ ) remains on the instrument cluster
- EPS (Electronic Power Steering) indicator light remains on the instrument cluster

#### VSM operation off

If you press the ESC OFF button to turn off the ESC, the VSM will also cancel and the ESC OFF indicator light (  $\frac{3}{8}$  ) illuminates.

To turn on the VSM, press the button again. The ESC OFF indicator light goes out.

#### Malfunction indicator

The VSM can be deactivated even if you don't cancel the VSM operation by pressing the ESC OFF button. It indicates that a malfunction has been detected somewhere in the EPS (Electronic Power Steering) system or VSM system. If the ESC indicator light (\$\overline{\ove

#### \* NOTICE

- The VSM is designed to function above approximately 15 km/h (9 mph) on curves.
- The VSM is designed to function above approximately 30 km/h (18 mph) when a vehicle is braking on a split-mu road. The split-mu road is made of surfaces which have different friction forces.

## **WARNING**

- The Vehicle Stability Management system is not a substitute for safe driving practices but a supplementary function only. It is the responsibility of the driver to always check the speed and the distance to the vehicle ahead. Always hold the steering wheel firmly while driving.
- Your vehicle is designed to activate according to the driver's intention, even with the VSM installed. Always follow all the normal precautions for driving at safe speeds for the conditions including driving in inclement weather and on a slippery road.
- Driving with varying tire or wheel sizes may cause the VSM system to malfunction. When replacing tires, make sure they are the same size as your original tires.

### Hill-start assist control (HAC) (if equipped)

A vehicle has the tendency to slip back on a steep hill when it starts to go after stopping. The Hill-start Assist Control (HAC) prevents the vehicle from slipping back by operating the brakes automatically for about 1~2 seconds. The brakes are released when the accelerator pedal is depressed or after about 1~2 seconds.



## **WARNING**

The HAC is activated only for about 1~2 seconds, so when the vehicle is starting off always depress the accelerator pedal.

#### \* NOTICE

- The HAC does not operate when the transaxle shift lever is in the P (Park) or N (Neutral) position.
- The HAC activates even though the ESC is off but it does not activate when the ESC has malfunctioned.

### **Emergency Stop Signal (ESS)** (if equipped)

The Emergency Stop Signal system alerts the driver behind by blinking the stop light when the vehicle is braked rapidly and severely.

The system is activated when:

- The vehicle suddenly stops (vehicle speed is over 55km/h and the vehicle deceleration at greater than 7 m/s<sup>2</sup>)
- · The ABS is activating

When the vehicle speed is under 40 km/h and the ABS deactivates or the sudden stop situation is over, the stop light blinking will stop. Instead, the hazard warning flasher will turn on automatically.

The hazard warning flasher will turn off when vehicle speed is over 10km/h after the vehicle has stopped. Also, it will turn off when the vehicle is driven at low speed for some time. You can turn it off manually by pushing the hazard warning flasher switch.

#### / CAUTION

The Emergency Stop Signal (ESS) system will not work if the hazard warning flasher is already on.

## Good braking practices

## **WARNING**

- Whenever you leave or park your vehicle, always set the parking brake as far as possible and fully engage the vehicle's transaxle into the P (Park) position. If the parking brake is not fully engaged, the vehicle may move inadvertently and injure yourself and others.
- All vehicles should always have the parking brake fully engaged when parking to avoid inadvertent movement of the vehicle which can injure occupants or pedestrians.

- Check to be sure the parking brake is not engaged and that the parking brake indicator light is out before driving away.
- Driving through water may get the brakes wet. They can also get wet when the vehicle is washed. Wet brakes can be dangerous! Your vehicle will not stop as quickly if the brakes are wet. Wet brakes may cause the vehicle to pull to one side.

To dry the brakes, apply the brakes lightly until the braking action returns to normal, taking care to keep the vehicle under control at all times. If the braking action does not return to normal, stop as soon as it is safe to do so and we recommend that you call an authorized HYUNDAI dealer.

 Do not coast down hills with the vehicle out of gear. This is extremely hazardous. Keep the vehicle in gear at all times, use the brakes to slow down, then shift to a lower gear so that engine braking will help you maintain a safe speed.

- Do not "ride" the brake pedal. Resting your foot on the brake pedal while driving can be dangerous because it can result in the brakes overheating and losing their effectiveness. It also increases the wear of the brake components.
- If a tire goes flat while you are driving, apply the brakes gently and keep the vehicle pointed straight ahead while you slow down. When you are moving slowly enough for it to be safe to do so, pull off the road and stop in a safe place.
- If your vehicle is equipped with an automatic transaxle, do not let your vehicle creep forward. To avoid creeping forward, keep your foot firmly on the brake pedal when the vehicle is stopped.

- Be cautious when parking on a hill.
   Firmly engage the parking brake and place the shift lever in P (automatic transaxle) or in first or reverse gear (manual transaxle). If your vehicle is facing downhill, turn the front wheels into the curb to help keep the vehicle from rolling. If your vehicle is facing uphill, turn the front wheels away from the curb to help keep the vehicle from rolling. If there is no curb or if it is required by other conditions to keep the vehicle from rolling, block the wheels.
- Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk that the parking brake may freeze, apply it only temporarily while you put the shift lever in P (automatic transaxle) or in first or reverse gear (manual transaxle) and block the rear wheels so the vehicle cannot roll. Then release the parking brake.

 Do not hold the vehicle on the upgrade with the accelerator pedal. This can cause the transaxle to overheat. Always use the brake pedal or parking brake.

## **CRUISE CONTROL SYSTEM (IF EQUIPPED)**



- 1. Cruise indicator
- 2. Cruise set indicator

The cruise control system allows you to program the vehicle to maintain a constant speed without pressing the accelerator pedal.

This system is designed to function above approximately 30 km/h (20 mph).

#### **WARNING**

- If the cruise control is left on, (cruise indicator light is illuminated), the cruise control can be switched on accidentally. Keep the cruise control system off when the cruise control is not in use, to avoid inadvertently setting a speed.
- Use the cruise control system only when traveling on open highways in good weather.
- Do not use the cruise control when it may not be safe to keep the vehicle at a constant speed, for instance, driving in heavy or varying traffic, or on slippery (rainy, icy or snow-covered) or winding roads or over 6% up-hill or down-hill roads.
- Pay particular attention to the driving conditions whenever using the cruise control system.
- Be careful when driving downhill using the cruise control system, which may increase the vehicle speed.

## **!** CAUTION

During cruise-speed driving of a manual transaxle vehicle, do not shift into neutral without depressing the clutch pedal, since the engine will be overrevved. If this happens, depress the clutch pedal or release the cruise control ON-OFF switch.

### \* NOTICE

- During normal cruise control operation, when the SET switch is activated or reactivated after applying the brakes, the cruise control will energize after approximately 3 seconds. This delay is normal.
- To activate cruise control, depress the brake pedal at least once after turning the ignition switch to the ON position or starting the engine. This is to check if the brake switch which is important part to cancel cruise control is in normal condition.



#### Cruise control switch

O: Cancels cruise control operation.

: Turns cruise control system on or off.

RES+: Resumes or increases cruise control speed.

SET-: Sets or decreases cruise control speed.



## To set cruise control speed:

- Press the cruise button on the steering wheel, to turn the system on. The cruise indicator light will illuminate.
- 2. Accelerate to the desired speed, which must be more than 30 km/h (20 mph).

### \* NOTICE - Manual transaxle

For manual transaxle vehicles, you should depress the brake pedal at least once to set the cruise control after starting the engine.



 Press the SET- switch, and release it at the desired speed. The SET indicator light in the instrument cluster will illuminate. Release the accelerator at the same time. The desired speed will automatically be maintained.

On a steep grade, the vehicle may slow down or speed up slightly while going downhill.



## To increase cruise control set speed:

Follow either of these procedures:

- Press the +RES switch and hold it. Your vehicle will accelerate. Release the switch at the speed you want.
- Press the +RES switch and release it immediately. The cruising speed will increase by 1.6 km/h (1 mph) each time the +RES switch is operated in this manner.



## To decrease the cruising speed:

Follow either of these procedures:

- Press the SET- switch and hold it. Your vehicle will gradually slow down.
   Release the switch at the speed you want to maintain.
- Press the SET- switch and release it immediately. The cruising speed will decrease by 1.6 km/h (1 mph) each time the SET- switch is operated in this manner.

## To temporarily accelerate with the cruise control on:

If you want to speed up temporarily when the cruise control is on, depress the accelerator pedal. Increased speed will not interfere with cruise control operation or change the set speed.

To return to the set speed, take your foot off the accelerator pedal.



To cancel cruise control, do one of the following:

- Depress the brake pedal.
- Depress the clutch pedal if equpped with a manual transaxle.
- Shift into N (Neutral) if equpped with an automatic transaxle.
- Press the CANCEL switch located on the steering wheel.
- Decrease the vehicle speed lower than the memory speed by 20 km/h (12 mph).
- Decrease the vehicle speed to less than approximately 30 km/h (20 mph).

Each of these actions will cancel cruise control operation (the cruise set indicator light will go off), but it will not turn the system off. If you wish to resume cruise control operation, move up the lever (to RES+) located on your steering wheel. You will return to your previously preset speed.



# To resume cruising speed at more than approximately 30 km/h (20 mph):

If any method other than the CRUISE ON-OFF switch was used to cancel cruising speed and the system is still activated, the most recent set speed will automatically resume when the +RES switch is pushed.

It will not resume, however, if the vehicle speed has dropped below approximately 30 km/h (20 mph).

## To turn cruise control off, do one of the following:

- Press the cruise button.
- Turn the ignition off.

Both of these actions cancel cruise control operation. If you want to resume cruise control operation, repeat the steps provided in "To set cruise control speed" on the previous page.

## SPEED LIMIT CONTROL SYSTEM (IF EQUIPPED)

You can set the speed limit when you do not want to drive over a specific speed. If you drive over the preset speed limit, the warning system operates (set speed limit will blink and chime will sound) until the vehicle speed returns within the speed limit.

#### \* NOTICE

While speed limit control is in operation, the cruise control system cannot be activated.



## Speed limit control switch

O: Cancels set speed limit.

: Turns speed limit control system on or off.

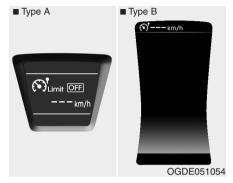
RES+: Resumes or increases speed limit control speed.

SET-: Sets or decreases speed limit control speed.



## To set speed limit:

1. Press the speed limit (\*) button on the steering wheel, to turn the system on.



The speed limit indicator light will illuminate.

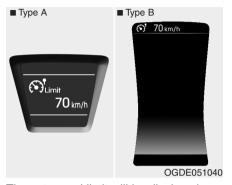


- 2. Press the SET- switch.
- 3. Press the +RES or SET- switch, and release it at the desired speed.

Press the +RES or SET- switch and hold it. The speed will increase or decrease by 5 km/h.

Press the +RES or SET- switch and release it immediately. The speed will increase or decrease by 1 km/h.

The set speed limit will display on the instrument cluster.



The set speed limit will be displayed.

To drive over the preset speed limit you must depress hard on the accelerator pedal (more than approximately 80%) until the kick down mechanism works with a clicking noise. Then the set speed limit will blink and chime will sound until you return the vehicle speed within the speed limit.

#### \* NOTICE

- Depressing the accelerator pedal less than approximately 50%, the vehicle will not speed over the preset speed limit but maintain the vehicle speed within the speed limit.
- A clicking noise heard from the kick down mechanism by depressing the accelerator pedal fully is a normal condition.



# To turn off the speed limit control, do one of the following:

- Press the speed limit button once again.
- Press the cruise switch (If you press cruise switch, the cruise system will turn on)

If you press the O (CANCEL) switch once, the set speed limit will cancel, but it will not turn the system off. If you wish to reset the speed limit, press the +RES or SET- switch on your steering wheel to your desired speed.



### **A** CAUTION

The "OFF" indicator for type A and the "---" indicator for type B will blink if there is a problem with speed limit control system.

If this occurs, we recommend that the system be checked by an authorized HYUNDAI dealer.

#### **ECONOMICAL OPERATION**

Your vehicle's fuel economy depends mainly on your style of driving, where you drive and when you drive.

Each of these factors affects how many kilometers (miles) you can get from a liter (gallon) of fuel. To operate your vehicle as economically as possible, use the following driving suggestions to help save money in both fuel and repairs:

- Drive smoothly. Accelerate at a moderate rate. Do not make "jack-rabbit" starts or full-throttle shifts and maintain a steady cruising speed. Do not race between stoplights. Try to adjust your speed to the traffic so you do not have to change speeds unnecessarily. Avoid heavy traffic whenever possible. Always maintain a safe distance from other vehicles so you can avoid unnecessary braking. This also reduces brake wear
- Drive at a moderate speed. The faster you drive, the more fuel your vehicle uses. Driving at a moderate speed, especially on the highway, is one of the most effective ways to reduce fuel consumption.

- Do not "ride" the brake or clutch pedal.
   This can increase fuel consumption and also increase wear on these components. In addition, driving with your foot resting on the brake pedal may cause the brakes to overheat, which reduces their effectiveness and may lead to more serious consequences.
- Take care of your tires. Keep them inflated to the recommended pressure. Incorrect inflation, either too much or too little, results in unnecessary tire wear. Check the tire pressures at least once a month.
- Be sure that the wheels are aligned correctly. Improper alignment can result from hitting curbs or driving too fast over irregular surfaces. Poor alignment causes faster tire wear and may also result in other problems as well as greater fuel consumption.

- Keep your vehicle in good condition. For better fuel economy and reduced maintenance costs, maintain your vehicle in accordance with the maintenance schedule. If you drive your vehicle in severe conditions, more frequent maintenance is required.
- Keep your vehicle clean. For maximum service, your vehicle should be kept clean and free of corrosive materials. It is especially important that mud, dirt, ice, etc. not be allowed to accumulate on the underside of the vehicle. This extra weight can result in increased fuel consumption and also contribute to corrosion.
- Travel lightly. Do not carry unnecessary weight in your vehicle. Weight reduces fuel economy.
- Do not let the engine idle longer than necessary. If you are waiting (and not in traffic), turn off your engine and restart only when you're ready to go.

- Remember, your vehicle does not require extended warm-up. After the engine has started, allow the engine to run for 10 to 20 seconds prior to placing the vehicle in gear. In very cold weather, however, give your engine a slightly longer warm-up period.
- Do not "lug" or "over-rev" the engine. Lugging is driving too slowly in too high a gear resulting engine bucking. If this happens, shift to a lower gear. Over-revving is racing the engine beyond its safe limit. This can be avoided by shifting at the recommended speeds.
- Use your air conditioning sparingly.
   The air conditioning system is operated by engine power so your fuel economy is reduced when you use it.
- Open windows at high speeds can reduce fuel economy.
- Fuel economy is less in crosswinds and headwinds. To help offset some of this loss, slow down when driving in these conditions.

Keeping a vehicle in good operating condition is important both for economy and safety. We recommend in general that the vehicle be serviced by an authorized HYUNDAI dealer.

# A WARNING - Engine off during motion

Never turn the engine off to coast down hills or anytime the vehicle is in motion. The power steering and power brakes will not function properly without the engine running. Instead, keep the engine on and downshift to an appropriate gear for engine braking effect. In addition, turning off the ignition while driving could engage the steering wheel lock (if equipped) resulting in loss of vehicle steering which could cause serious injury or death.

#### SPECIAL DRIVING CONDITIONS

#### Hazardous driving conditions

When hazardous driving conditions are encountered such as water, snow, ice, mud. sand. or similar hazards, follow these suggestions:

- · Drive cautiously and allow extra distance for braking.
- · Avoid sudden braking or steering.
- · When braking with non-ABS brakes pump the brake pedal with a light upand-down motion until the vehicle is stopped.

#### WARNING - ARS

Do not pump the brake pedal on a vehicle equipped with ABS.

- · If stalled in snow, mud, or sand, use second gear. Accelerate slowly to avoid spinning the drive wheels.
- · Use sand, rock salt, tire chains, or other non-slip material under the drive wheels to provide traction when stalled in ice, snow, or mud.

# **WARNING - Downshifting**

Downshifting with an automatic transaxle, while driving on slippery surfaces can cause an accident. The sudden change in tire speed could cause the tires to skid. Be careful when downshifting on slipperv surfaces.

#### Rocking the vehicle

If it is necessary to rock the vehicle to free it from snow, sand, or mud, first turn the steering wheel right and left to clear the area around your front wheels. Then, shift back and forth between 1 (First) and R (Reverse) in vehicles equipped with a manual transaxle or R (Reverse) and any forward gear in vehicles equipped with an automatic transaxle. Do not race the engine, and spin the wheels as little as possible. If you are still stuck after a few tries, have the vehicle pulled out by a tow vehicle to avoid engine overheating and possible damage to the transaxle.

#### **⚠** CAUTION

Prolonged rocking may cause engine over-heating, transaxle damage or failure, and tire damage.

# **WARNING - Spinning tires**

Do not spin the wheels, especially at speeds more than 56 km/h (35 mph). Spinning the wheels at high speeds when the vehicle is stationary could cause a tire to overheat which could result in tire damage that may injure bystanders.

#### \* NOTICE

The ESC system should be turned OFF prior to rocking the vehicle.

# A WARNING

If your vehicle becomes stuck in snow, mud, sand, etc., then you may attempt to rock the vehicle free by moving it forward and backward. Do not attempt this procedure if people or objects are anywhere near the vehicle. During the rocking operation the vehicle may suddenly move forward or backward as it becomes unstuck, causing injury or damage to nearby people or objects.

#### **Smooth cornering**

Avoid braking or gear changing in corners, especially when roads are wet. Ideally, corners should always be taken under gentle acceleration. If you follow these suggestions, tire wear will be held to a minimum.

#### **Driving at night**

Because night driving presents more hazards than driving in the daylight, here are some important tips to remember:

- Slow down and keep more distance between you and other vehicles, as it may be more difficult to see at night, especially in areas where there may not be any street lights.
- Adjust your mirrors to reduce the glare from other driver's headlights.
- Keep your headlights clean and properly aimed on vehicles not equipped with the automatic headlight aiming feature. Dirty or improperly aimed headlights will make it much more difficult to see at night.
- Avoid staring directly at the headlights of oncoming vehicles. You could be temporarily blinded, and it will take several seconds for your eyes to readjust to the darkness.

#### Driving in the rain

Rain and wet roads can make driving dangerous, especially if you're not prepared for the slick pavement. Here are a few things to consider when driving in the rain:

- A heavy rainfall will make it harder to see and will increase the distance needed to stop your vehicle, so slow down.
- Keep your windshield wiping equipment in good shape. Replace your windshield wiper blades when they show signs of streaking or missing areas on the windshield.
- If your tires are not in good condition, making a quick stop on wet pavement can cause a skid and possibly lead to an accident. Be sure your tires are in good shape.
- Turn on your headlights to make it easier for others to see you.
- Driving too fast through large puddles can affect your brakes. If you must go through puddles, try to drive through them slowly.
- If you believe you may have gotten your brakes wet, apply them lightly while driving until normal braking operation returns.

#### Driving in flooded areas

Avoid driving through flooded areas unless you are sure the water is no higher than the bottom of the wheel hub. Drive through any water slowly. Allow adequate stopping distance because brake performance may be affected. After driving through water, dry the brakes by gently applying them several times while the vehicle is moving slowly.

#### **Driving off-road**

Drive carefully off-road because your vehicle may be damaged by rocks of roots of trees. Become familiar with the off-road conditions where you are going to drive before you begin driving.

#### **Highway driving**

#### Tires

Adjust the tire inflation pressures to specification. Low tire inflation pressures will result in overheating and possible failure of the tires.

Avoid using worn or damaged tires which may result in reduced traction or tire failure.

#### \* NOTICE

Never exceed the maximum tire inflation pressure shown on the tires.

### **WARNING**

- Underinflated or overinflated tires can cause poor handling, loss of vehicle control, and sudden tire failure leading to accidents, injuries, and even death. Always check the tires for proper inflation before driving. For proper tire pressures, refer to section 8, "Tires and wheels".
- Driving on tires with no or insufficient tread is dangerous. Wornout tires can result in loss of vehicle control, collisions, injury, and even death. Worn-out tires should be replaced as soon as possible and should never be used for driving. Always check the tire tread before driving your vehicle. For further information and tread limits, refer to section 7, "Tires and wheels".

Fuel, engine coolant and engine oil
High speed travel consumes more fuel
than urban motoring. Do not forget to
check both engine coolant and engine
oil

#### Drive belt

A loose or damaged drive belt may result in overheating of the engine.

#### WINTER DRIVING



Severe weather conditions in the winter result in greater wear and other problems. To minimize the problems of winter driving, you should follow these suggestions:

#### Snowy or Icy conditions

To drive your vehicle in deep snow, it may be necessary to use snow tires or to install tire chains on your tires. If snow tires are needed, it is necessary to select tires equivalent in size and type of the original equipment tires. Failure to do so may adversely affect the safety and handling of your vehicle. Furthermore, speeding, rapid acceleration, sudden brake applications, and sharp turns are potentially very hazardous practices.

During deceleration, use engine braking to the fullest extent. Sudden brake applications on snowy or icy roads may cause skids to occur. You need to keep sufficient distance between the vehicle in operation in front and your vehicle. Also, apply the brake gently. It should be noted that installing tire chains on the tire will provide a greater driving force, but will not prevent side skids.

#### \* NOTICE

Tire chains are not legal in all countries. Check the country laws before fitting tire chains.

#### Snow tires

If you mount snow tires on your vehicle, make sure they are radial tires of the same size and load range as the original tires. Mount snow tires on all four wheels to balance your vehicle's handling in all weather conditions. Keep in mind that the traction provided by snow tires on dry roads may not be as high as your vehicle's original equipment tires. You should drive cautiously even when the roads are clear. Check with the tire dealer for maximum speed recommendations.

WARNING - Snow tire size Snow tires should be equivalent in size and type to the vehicle's standard tires. Otherwise, the safety and handling of your vehicle may be adversely affected.

Do not install studded tires without first checking local, state and municipal regulations for possible restrictions against their use.



#### Tire chains

Since the sidewalls of radial tires are thinner, they can be damaged by mounting some types of snow chains on them. Therefore, the use of snow tires is recommended instead of snow chains. Do not mount tire chains on vehicles equipped with aluminum wheels; snow chains may cause damage to the wheels. If snow chains must be used, use wiretype chains with a thickness of less than 15 mm (0.59 in). Damage to your vehicle caused by improper snow chain use is not covered by your vehicle manufacturers warranty.

Install tire chains only on the front tires.

#### **!** CAUTION

- Make sure the snow chains are the correct size and type for your tires. Incorrect snow chains can cause damage to the vehicle body and suspension and may not be covered by your vehicle manufacturer warranty. Also, the snow chain connecting hooks may be damaged from contacting vehicle components causing the snow chains to come loose from the tire. Make sure the snow chains are SAE class "S" certified.
- Always check chain installation for proper mounting after driving approximately 0.5 to 1 km (0.3 to 0.6 miles) to ensure safe mounting. Retighten or remount the chains if they are loose.

#### Chain installation

When installing chains, follow the manufacturer's instructions and mount them as tightly as you can. Drive slowly with chains installed. If you hear the chains contacting the body or chassis, stop and tighten them. If they still make contact, slow down until it stops. Remove the chains as soon as you begin driving on cleared roads.

# **WARNING**

- Mounting chains

When mounting snow chains, park the vehicle on level ground away from traffic. Turn on the vehicle Hazard Warning flashers and place a triangular emergency warning device behind the vehicle if available. Always place the vehicle in P (Park), apply the parking brake and turn off the engine before installing snow chains.

### **WARNING** - Tire chains

- The use of chains may adversely affect vehicle handling.
- Do not exceed 30 km/h (20 mph) or the chain manufacturer's recommended speed limit, whichever is lower.
- Drive carefully and avoid bumps, holes, sharp turns, and other road hazards, which may cause the vehicle to bounce.
- Avoid sharp turns or lockedwheel braking.

### **A** CAUTION

- Chains that are the wrong size or improperly installed can damage your vehicle's brake lines, suspension, body and wheels.
- Stop driving and retighten the chains any time you hear them hitting the vehicle.

# Use high quality ethylene glycol coolant

Your vehicle is delivered with high quality ethylene glycol coolant in the cooling system. It is the only type of coolant that should be used because it helps prevent corrosion in the cooling system, lubricates the water pump and prevents freezing. Be sure to replace or replenish your coolant in accordance with the maintenance schedule. Before winter, have your coolant tested to assure that its freezing point is sufficient for the temperatures anticipated during the winter.

#### **Check battery and cables**

Winter puts additional burdens on the battery system. Visually inspect the battery and cables as described in section 7. We recommend that the system be checked by an authorized HYUNDAI dealer.

# Change to "winter weight" oil if necessary

In some climates it is recommended that a lower viscosity "winter weight" oil be used during cold weather. See section 8 for recommendations. If you aren't sure what weight oil you should use, we recommend that you consult an authorized HYUNDAI dealer.

# Check spark plugs and ignition system

Inspect your spark plugs as described in section 7 and replace them if necessary. Also check all ignition wiring and components to be sure they are not cracked, worn or damaged in any way.

#### To keep locks from freezing

To keep the locks from freezing, squirt an approved de-icer fluid or glycerine into the key opening. If a lock is covered with ice, squirt it with an approved de-icing fluid to remove the ice. If the lock is frozen internally, you may be able to thaw it out by using a heated key. Handle the heated key with care to avoid injury.

# Use approved window washer anti-freeze in system

To keep the water in the window washer system from freezing, add an approved window washer anti-freeze solution in accordance with instructions on the container. Window washer anti-freeze is available from an authorized HYUNDAI dealer and most auto parts outlets. Do not use engine coolant or other types of anti-freeze as these may damage the paint finish.

# Don't let your parking brake freeze

Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk the parking brake may freeze, apply it only temporarily while you put the shift lever in P (automatic transaxle) or in first or reverse gear (manual transaxle) and block the rear wheels so the vehicle cannot roll. Then release the parking brake.

# Don't let ice and snow accumulate underneath

Under some conditions, snow and ice can build up under the fenders and interfere with the steering. When driving in severe winter conditions where this may happen, you should periodically check underneath the vehicle to be sure the movement of the front wheels and the steering components is not obstructed.

#### Carry emergency equipment

Depending on the severity of the weather, you should carry appropriate emergency equipment. Some of the items you may want to carry include tire chains, tow straps or chains, flashlight, emergency flares, sand, shovel, jumper cables, window scraper, gloves, ground cloth, coveralls, blanket, etc.

#### TRAILER TOWING

If you are considering towing with your vehicle, you should first check with your country's Department of Motor Vehicles to determine their legal requirements.

Since laws vary the requirements for towing trailers, cars, or other types of vehicles or apparatus may differ. We recommend that you ask an authorized HYUNDAI dealer.

WARNING - Towing a trailer If you don't use the correct equipment and/or drive improperly, you can lose control when you pull a trailer. For example, if the trailer is too heavy, the brakes may not work well - or even at all. You and your passengers could be seriously or fatally injured. Pull a trailer only if you have followed all the steps in this section.

WARNING - Weight limits
Before towing, make sure the total
trailer weight, GCW (gross combination weight), GVW (gross vehicle
weight), GAW (gross axle weight)
and trailer tongue load are all within the limits.

### \* NOTICE - For Europe

- The technically permissible maximum load on the rear axle(s) may be exceeded by not more than 15 % and the technically permissible maximum laden mass of the vehicle may be exceeded by not more than 10 % or 100 kg (220.4 lbs), whichever value is lower. In this case, do not exceed 100 km/h (62.1 mph) for vehicle of category M1 or 80 km/h (49.7 mph) for vehicle of category N1.
- When a vehicle of category M1 is towing a trailer, the additional load imposed at the trailer coupling device may cause the tire maximum load ratings to be exceeded, but not by more than 15 %. In this case, do not exceed 100 km/h (62.1 mph) and increase the tire inflation pressure by at least 0.2 bar.

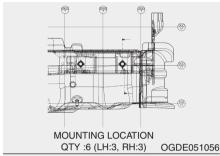
#### ∴ CAUTION

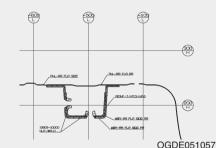
Pulling a trailer improperly can damage your vehicle and result in costly repairs not covered by your warranty. To pull a trailer correctly, follow the advice in this section. Your vehicle can tow a trailer. To identify what the vehicle trailering capacity is for your vehicle, you should read the information in "Weight of the trailer" that appears later in this section.

Remember that trailering is different than just driving your vehicle by itself. Trailering means changes in handling, durability, and fuel economy. Successful, safe trailering requires correct equipment, and it has to be used properly.

This section contains many time-tested, important trailering tips and safety rules. Many of these are important for your safety and that of your passengers. Please read this section carefully before you pull a trailer.

Load-pulling components such as the engine, transaxle, wheel assemblies, and tires are forced to work harder against the load of the added weight. The engine is required to operate at relatively higher speeds and under greater loads. This additional burden generates extra heat. The trailer also considerably adds wind resistance, increasing the pulling requirements.





#### **Hitches**

It's important to have the correct hitch equipment. Crosswinds, large trucks going by, and rough roads are a few reasons why you'll need the right hitch. Here are some rules to follow:

- Do you have to make any holes in the body of your vehicle when you install a trailer hitch? If you do, then be sure to seal the holes later when you remove the hitch.
  - If you do not seal them, deadly carbon monoxide (CO) from your exhaust can get into your vehicle, as well as dirt and water.
- The bumpers on your vehicle are not intended for hitches. Do not attach rental hitches or other bumper-type hitches to them. Use only a framemounted hitch that does not attach to the bumper.
- A HYUNDAI accessory trailer hitch is available at an authorized HYUNDAI dealer.

#### Safety chains

You should always attach chains between your vehicle and your trailer. Cross the safety chains under the tongue of the trailer so that the tongue will not drop to the road if it becomes separated from the hitch

Instructions about safety chains may be provided by the hitch manufacturer or by the trailer manufacturer. Follow the manufacturer's recommendation for attaching safety chains. Always leave just enough slack so you can turn with your trailer. And, never allow safety chains to drag on the ground.

#### **Trailer brakes**

If your trailer is equipped with a braking system, make sure it conforms to your country's regulations and that it is properly installed and operating correctly.

If your trailer weight exceeds the maximum allowed weight without trailer brakes, then the trailer will also require its own brakes as well. Be sure to read and follow the instructions for the trailer brakes so you'll be able to install, adjust and maintain them properly.

Do not tap into or modify your vehicle's brake system.

### **WARNING** - Trailer brakes

Do not use a trailer with its own brakes unless you are absolutely certain that you have properly set up the brake system. This is not a task for amateurs. Use an experienced, competent trailer shop for this work.

#### Driving with a trailer

Towing a trailer requires a certain amount of experience. Before setting out for the open road, you must get to know your trailer. Acquaint yourself with the feel of handling and braking with the added weight of the trailer. And always keep in mind that the vehicle you are driving is now a good deal longer and not nearly so responsive as your vehicle is by itself.

Before you start, check the trailer hitch and platform, safety chains, electrical connector(s), lights, tires and mirror adjustment. If the trailer has electric brakes, start your vehicle and trailer moving and then apply the trailer brake controller by hand to be sure the brakes are working. This lets you check your electrical connection at the same time.

During your trip, check occasionally to be sure that the load is secure, and that the lights and any trailer brakes are still working.

#### Following distance

Stay at least twice as far behind the vehicle ahead as you would when driving your vehicle without a trailer. This can help you avoid situations that require heavy braking and sudden turns.

#### Passing

You'll need more passing distance up ahead when you're towing a trailer. And, because of the increased vehicle length, you'll need to go much farther beyond the passed vehicle before you can return to your lane.

#### Backing up

Hold the bottom of the steering wheel with one hand. Then, to move the trailer to the left, just move your hand to the left. To move the trailer to the right, move your hand to the right. Always back up slowly and, if possible, have someone guide you.

#### Making turns

When you're turning with a trailer, make wider turns than normal. Do this so your trailer won't strike soft shoulders, curbs, road signs, trees, or other objects. Avoid jerky or sudden maneuvers. Signal well in advance.

#### Turn signals when towing a trailer

When you tow a trailer, your vehicle has to have a different turn signal flasher and extra wiring. The green arrows on your instrument panel will flash whenever you signal a turn or lane change. Properly connected, the trailer lights will also flash to alert other drivers you're about to turn, change lanes, or stop.

When towing a trailer, the green arrows on your instrument panel will flash for turns even if the bulbs on the trailer are burned out. Thus, you may think drivers behind you are seeing your signals when, in fact, they are not. It is important to check occasionally to be sure the trailer bulbs are still working. You must also check the lights every time you disconnect and then reconnect the wires.

Do not connect a trailer lighting system directly to your vehicle's lighting system. Use only an approved trailer wiring harness.

An authorized HYUNDAI dealer can assist you in installing the wiring harness.

# **WARNING**

Failure to use an approved trailer wiring harness could result in damage to the vehicle electrical system and/or personal injury.

#### Driving on grades

Reduce speed and shift to a lower gear before you start down a long or steep downgrade. If you don't shift down, you might have to use your brakes so much that they would get hot and no longer operate efficiently.

On a long uphill grade, shift down and reduce your speed to around 70 km/h (45 mph) to reduce the possibility of engine and transaxle overheating.

If your trailer weighs more than the maximum trailer weight without trailer brakes and you have an automatic transaxle, you should drive in D (Drive) when towing a trailer.

Operating your vehicle in D (Drive) when towing a trailer will minimize heat build up and extend the life of your transaxle.

# **A** CAUTION

 When towing a trailer on steep grades (in excess of 6%) pay close attention to the engine coolant temperature gauge to ensure the engine does not overheat.

If the needle of the coolant temperature gauge moves across the dial towards "130/H (HOT)", pull over and stop as soon as it is safe to do so, and allow the engine to idle until it cools down. You may proceed once the engine has cooled sufficiently.

 You must decide driving speed depending on trailer weight and uphill grade to reduce the possibility of engine and transaxle overheating.

#### Parking on hills

Generally, if you have a trailer attached to your vehicle, you should not park your vehicle on a hill. People can be seriously or fatally injured, and both your vehicle and the trailer can be damaged if unexpectedly roll down hill.

# WARNING - Parking on a

Parking your vehicle on a hill with a trailer attached could cause serious injury or death, should the trailer break loose.

However, if you ever have to park your trailer on a hill, here is how to do it:

- Pull the vehicle into the parking space. Turn the steering wheel in the direction of the curb (right if headed down hill, left if headed up hill).
- 2. If the vehicle has a manual transaxle, place the car in neutral. If the vehicle has an automatic transaxle, place the car in P (Park).
- Set the parking brake and shut off the vehicle.
- Place chocks under the trailer wheels on the down hill side of the wheels.
- 5. Start the vehicle, hold the brakes, shift to neutral, release the parking brake and slowly release the brakes until the trailer chocks absorb the load.
- Reapply the brakes, reapply the parking brake and shift the vehicle to R
  (Reverse) for manual transaxle or P
  (Park) for automatic transaxle.
- Shut off the vehicle and release the vehicle brakes but leave the parking brake set.

WARNING - Parking brake It can be dangerous to get out of your vehicle if the parking brake is not firmly set.

If you have left the engine running, the vehicle can move suddenly. You or others could be seriously or fatally injured.

# When you are ready to leave after parking on a hill

- With the manual transaxle in Neutral or automatic transaxle in P (Park), apply your brakes and hold the brake pedal down while you:
  - Start your engine;
  - · Shift into gear; and
  - Release the parking brake.
- 2. Slowly remove your foot from the brake pedal.
- 3. Drive slowly until the trailer is clear of the chocks.
- 4. Stop and have someone pick up and store the chocks.

### Maintenance when trailer towing

Your vehicle will need service more often when you regularly pull a trailer. Important items to pay particular attention to include engine oil, automatic transaxle fluid, axle lubricant and cooling system fluid. Brake condition is another important item to frequently check. Each item is covered in this manual, and the Index will help you find them quickly. If you're trailering, it is a good idea to review these sections before you start your trip.

Do not forget to also maintain your trailer and hitch. Follow the maintenance schedule that accompanied your trailer and check it periodically. Preferably, conduct the check at the start of each day's driving. Most importantly, all hitch nuts and bolts should be tight.

### **A** CAUTION

- Due to higher load during trailer usage, overheating might occur in hot days or during uphill driving. If the coolant gauge indicates over-heating, switch off the air conditioner and stop the vehicle in a safe area to cool down the engine.
- When towing check transaxle fluid more frequently.
- If your vehicle is not equipped with an air conditioner, you should install a condenser fan to improve engine performance when towing a trailer.

#### If you do decide to pull a trailer

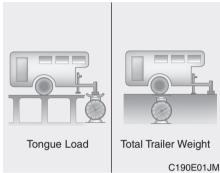
Here are some important points if you decide to pull a trailer:

- Consider using a sway control. You can ask a hitch dealer about sway control.
- Do not do any towing with your car during its first 2,000 km (1,200 miles) in order to allow the engine to properly break in. Failure to heed this caution may result in serious engine or transaxle damage.
- When towing a trailer, we recommend that you consult an authorized HYUNDAI dealer on additional requirements such as a towing kit, etc.
- Always drive your vehicle at a moderate speed (less than 100 km/h (60 mph)).
- On a long uphill grade, do not exceed 70 km/h (45 mph) or the posted towing speed limit, whichever is lower.
- The chart contains important considerations that have to do with weight:

#### For Europe

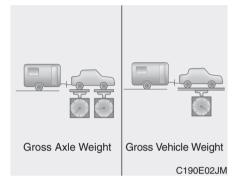
Engine		Gasoline 1.4L	Gasoline 1.6L MPI		Gasoline 1.6L GDI		Diesel 1.4L	Diesel 1.6L	
Item		M/T	M/T	A/T	M/T	A/T	M/T	M/T	A/T
Maximum trailer weight	Without brake System	600 (1,323)	600 (1,323)	600 (1,323)	600 (1,323)	600 (1,323)	650 (1,433)	650 (1,433)	650 (1,433)
kg (lbs.)	With brake System	1,200 (2,646)	1,300 (2,866)	1200 (2,646)	1,400 (3,086)	1,300 (2,866)	1,500 (3,307)	1,500 (3,307)	1,400 (3,086)
Maximum permissible static vertical load on the coupling device kg (lbs.)		60 (132)	60 (132)	60 (132)	60 (132)	60 (132)	75 (165)	75 (165)	75 (165)
Recommended distance from rear wheel center to coupling point		870 (34.3)							
mm (inch)									

M/T : Manual transaxle A/T : Automatic transaxle





What is the maximum safe weight of a trailer? It should never weigh more than the maximum trailer weight with trailer brakes. But even that can be too heavy. It depends on how you plan to use your trailer. For example, speed, altitude, road grades, outside temperature and how often your vehicle is used to pull a trailer are all important. The ideal trailer weight can also depend on any special equipment that you have on your vehicle.



#### Weight of the trailer tongue

The tongue load of any trailer is an important weight to measure because it affects the total gross vehicle weight (GVW) of your vehicle. This weight includes the curb weight of the vehicle, any cargo you may carry in it, and the people who will be riding in the vehicle. And if you will tow a trailer, you must add the tongue load to the GVW because your vehicle will also be carrying that weight.

The trailer tongue should weigh a maximum of 10% of the total loaded trailer weight, within the limits of the maximum permissible trailer tongue load. After you've loaded your trailer, weigh the trailer and then the tongue, separately, to see if the weights are proper. If they aren't, you may be able to correct them simply by moving some items around in the trailer.

### **WARNING** - Trailer

- Never load a trailer with more weight in the rear than in the front. The front should be loaded with approximately 60% of the total trailer load; the rear should be loaded with approximately 40% of the total trailer load.
- Never exceed the maximum weight limits of the trailer or trailer er towing equipment. Improper loading can result in damage to your vehicle and/or personal injury. Check weights and loading at a commercial scale or highway patrol office equipped with scales.
- An improperly loaded trailer can cause loss of vehicle control.

#### \* NOTICE

With increasing altitude the engine performance decreases. From 1.000 m above sea level and for every 1.000 m thereafter 10% of vehicle/trailer weight (trailer weighter + gross vehicle weight) must be deducted.

#### **VEHICLE WEIGHT**

This section will guide you in the proper loading of your vehicle and/or trailer, to keep your loaded vehicle weight within its design rating capability, with or without a trailer. Properly loading your vehicle will provide maximum return of the vehicle design performance. Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, with or without a trailer, from the vehicle's specifications and the certification label:

#### Base curb weight

This is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

#### Vehicle curb weight

This is the weight of your new vehicle when you picked it up from your dealer plus any aftermarket equipment.

#### Cargo weight

This figure includes all weight added to the Base Curb Weight, including cargo and optional equipment.

#### GAW (Gross axle weight)

This is the total weight placed on each axle (front and rear) - including vehicle curb weight and all payload.

### GAWR (Gross axle weight rating)

This is the maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the certification label.

The total load on each axle must never exceed its GAWR.

#### **GVW (Gross vehicle weight)**

This is the Base Curb Weight plus actual Cargo Weight plus passengers.

# GVWR (Gross vehicle weight rating)

This is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). The GVWR is shown on the certification label.

#### Overloading

WARNING - Vehicle weight
The gross axle weight rating
(GAWR) and the gross vehicle
weight rating (GVWR) for your vehicle are on the certification label
attached to the driver's (or front
passenger's) door. Exceeding
these ratings can cause an accident or vehicle damage. You can
calculate the weight of your load by
weighing the items (and people)
before putting them in the vehicle.
Be careful not to overload your
vehicle.

# What to do in an emergency

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#### **ROAD WARNING**



### Hazard warning flasher

The hazard warning flasher serves as a warning to other drivers to exercise extreme caution when approaching, overtaking, or passing your vehicle.

It should be used whenever emergency repairs are being made or when the vehicle is stopped near the edge of a roadway.

Press the flasher switch with the ignition switch in any position. The flasher switch is located in the center facia switch panel. All turn signal lights will flash simultaneously.

- The hazard warning flasher operates whether your vehicle is running or not.
- The turn signals do not work when the hazard flasher is on.
- The hazard warning flasher should always be on while the vehicle is being towed.

#### IN CASE OF AN EMERGENCY WHILE DRIVING

# If the engine stalls at a crossroad or crossing

- If the engine stalls at a crossroad or crossing, set the shift lever in the N (Neutral) position and then push the vehicle to a safe place.
- If your vehicle has a manual transaxle not equipped with a ignition lock switch, the vehicle can move forward by shifting to the 2(Second) or 3(Third) gear and then turning the starter without depressing the clutch pedal.

### If you have a flat tire while driving

If a tire goes flat while you are driving:

- 1. Take your foot off the accelerator pedal and let the vehicle slow down while driving straight ahead. Do not apply the brakes immediately or attempt to pull off the road as this may cause a loss of control. When the vehicle has slowed to such a speed that it is safe to do so, brake carefully and pull off the road. Drive off the road as far as possible and park on firm, level ground. If you are on a divided highway, do not park in the median area between the two traffic lanes.
- When the vehicle is stopped, turn on your emergency hazard flashers, set the parking brake and put the transaxle in P (automatic transaxle) or reverse (manual transaxle).
- Have all passengers get out of the vehicle. Be sure they all get out on the side of the vehicle that is away from traffic.
- When changing a flat tire, follow the instruction provided later in this section.

#### If engine stalls while driving

- Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
- 2. Turn on your emergency flashers.
- Try to start the engine again. If your vehicle does not start, we recommend that you consult an authorized HYUNDAI dealer.

#### IF THE ENGINE DOES NOT START

# If engine doesn't turn over or turns over slowly

- If your vehicle has an automatic transaxle, be sure the shift lever is in N (Neutral) or P (Park) and the emergency brake is set.
- 2. Check the battery connections to be sure they are clean and tight.
- 3. Turn on the interior light. If the light dims or goes out when you operate the starter, the battery is discharged.
- 4. Check the starter connections to be sure they are securely tightened.
- 5. Do not push or pull the vehicle to start it. See instructions for "Jump starting".

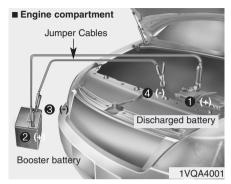
### **WARNING**

If the engine does not start, do not push or pull the vehicle to start it. This could result in a collision or cause other damage. In addition, push or pull starting may cause the catalytic converter (if equipped) to be overloaded and create a fire hazard.

# If engine turns over normally but does not start

- Check fuel level
- With the ignition switch in the LOCK/ OFF position, check all connectors at ignition, coil and spark plugs. Reconnect any that may be disconnected or loose.
- 3. Check the fuel line in the engine compartment.
- If the engine still does not start, we recommend that you call an authorized HYUNDAI dealer.

#### **EMERGENCY STARTING**



Connect cables in numerical order and disconnect in reverse order.

#### Jump starting

Jump starting can be dangerous if done incorrectly. Therefore, to avoid harm to yourself or damage to your vehicle or battery, follow the jump starting procedures. If in doubt, we strongly recommend that you have a competent technician or towing service jump start your vehicle.

### **A** CAUTION

Use only a 12-volt jumper system. You can damage a 12-volt starting motor, ignition system, and other electrical parts beyond repair by use of a 24-volt power supply (either two 12-volt batteries in series or a 24-volt motor generator set).

# **WARNING** - Battery

Never attempt to check the electrolyte level of the battery as this may cause the battery to rupture or explode causing serious injury.

# **A WARNING - Battery**

 Keep all flames or sparks away from the battery. The battery produces hydrogen gas which may explode if exposed to flame or sparks.

If these instructions are not followed exactly, serious personal injury and damage to the vehicle may occur! If you are not sure how to follow this procedure, seek qualified assistance. Automobile batteries contain sulfuric acid. This is poisonous and highly corrosive. When jump starting, wear protective glasses and be careful not to get acid on yourself, your clothing or on the vehicle.

 Do not attempt to jump start the vehicle if the discharged battery is frozen or if the electrolyte level is low; the battery may rupture or explode.

#### Jump starting procedure

# **!** CAUTION - AGM battery (if equipped)

- Absorbent Glass Matt (AGM) batteries are maintenance-free and we recommend that the AGM batteries be serviced by an authorized HYUNDAI dealer. For charging your AGM battery, use only fully automatic battery chargers that are specially developed for AGM batteries.
- When replacing the AGM battery, we recommend that you use parts for replacement from an authorized HYUNDAI dealer.
- Do not open or remove the cap on top of the battery. This may cause leaks of internal electrolyte that could result in severe injury.
- If the AGM battery is reconnected or replaced, ISG function will not operate immediately.

If you want to use the ISG function, the battery sensor needs to be calibrated for approximately 4 hours with the ignition off.

#### \* NOTICE

If the battery is discharged, the engine can be started using a battery of another vehicle and two jumper cables. Only use jumper cables with fully insulated clamp handles.

To prevent personal injury or damage to both vehicles, adhere strictly to the following procedure.

- Make sure the booster battery is 12volt and that its negative terminal is grounded.
- If the booster battery is in another vehicle, do not allow the vehicles to touch.
- 3. Turn off all unnecessary electrical loads.

4. Connect the jumper cables in the exact sequence shown in the illustration. First connect one end of a jumper cable to the positive terminal of the discharged battery (1), then connect the other end to the positive terminal on the booster battery (2). Proceed to connect one end of the other jumper cable to the negative terminal of the booster battery (3), then the other end to a solid, stationary, metallic point (for example, the engine lifting bracket) away from the battery (4). Do not connect it to or near any part that moves when the engine is cranked. Make sure that there is no contact between the bodywork of the two vehicles: otherwise, there is the danger of short circuits.

Do not allow the jumper cables to contact anything except the correct battery terminals or the correct ground. Do not lean over the battery when making connections.

# **⚠** CAUTION - Battery cables

Do not connect the jumper cable from the negative terminal of the booster battery to the negative terminal of the discharged battery. This can cause the discharged battery to overheat and crack, releasing battery acid. 5. Start the engine of the vehicle with the booster battery and let it run at 2,000 rpm, then start the engine of the vehicle with the discharged battery. If the first starting attempt is not successful, wait a few minutes before making another attempt in order to allow the discharged battery to recharge.

If the cause of your battery discharging is not apparent, we recommend that the system be checked by an authorized HYUNDAI dealer.

#### **Push-starting**

Your manual transaxle-equipped vehicle should not be push-started because it might damage the emission control system. Vehicles equipped with automatic transaxle cannot be push-started. Follow the directions in this section for jump-starting.

# **A WARNING**

Never tow a vehicle to start it because the sudden surge forward when the engine starts could cause a collision with the tow vehicle.

#### IF THE ENGINE OVERHEATS

If your temperature gauge indicates overheating, you will experience a loss of power, or hear loud pinging or knocking, the engine is probably too hot. If this happens, you should:

- 1. Pull off the road and stop as soon as it is safe to do so.
- 2. Place the shift lever in P (automatic transaxle) or neutral (manual transaxle) and set the parking brake. If the air conditioning is on, turn it off.
- 3. If engine coolant is running out under the vehicle or steam is coming out from the hood, stop the engine. Do not open the hood until the coolant has stopped running or the steaming has stopped. If there is no visible loss of engine coolant and no steam, leave the engine running and check to be sure the engine cooling fan is operating. If the fan is not running, turn the engine off.
- 4. Check to see if the water pump drive belt is missing. If it is not missing, check to see that it is tight. If the drive belt seems to be satisfactory, check for coolant leaking from the radiator, hoses or under the vehicle. (If the air conditioning had been in use, it is normal for cold water to be draining from it when you stop).

### **WARNING**

While the engine is running, keep hair, hands and clothing away from moving parts such as the fan and drive belts to prevent injury.

 If the water pump drive belt is broken or engine coolant is leaking out, stop the engine immediately and we recommend that you call an authorized HYUNDAI dealer.

### **A** WARNING

Do not remove the radiator cap when the engine is hot. This can allow coolant to blow out of the opening and cause serious burns.

- 6. If you cannot find the cause of the overheating, wait until the engine temperature has returned to normal. Then, if coolant has been lost, carefully add coolant to the reservoir to bring the fluid level in the reservoir up to the halfway mark.
- Proceed with caution, keeping alert for further signs of overheating. If overheating happens again, we recommend that you call an authorized HYUNDAI dealer.

#### **A** CAUTION

Serious loss of coolant indicates there is a leak in the cooling system and we recommend that the system be checked by an authorized HYUNDAI dealer.

### IF YOU HAVE A FLAT TIRE (WITH SPARE TIRE, IF EQUIPPED)



#### Jack and tools

The jack, jack handle, wheel lug nut wrench are stored in the luggage compartment.

Pull up the luggage box cover to reach this equipment.

- (1) Jack handle
- (2) Jack
- (3) Wheel lug nut wrench

Jacking instructions

The jack is provided for emergency tire changing only.

To prevent the jack from "rattling" while the vehicle is in motion, store it properly and fasten the jack screw fully.

Follow jacking instructions to reduce the possibility of personal injury.

# **WARNING** - Changing tires

- Never attempt vehicle repairs in the traffic lanes of a public road or highway.
- Always move the vehicle completely off the road and onto the shoulder before trying to change a tire. The jack should be used on firm level ground. If you cannot find a firm level place off the road, call a towing service company for assistance.
- Be sure to use the correct front and rear jacking positions on the vehicle; never use the bumpers or any other part of the vehicle for jacking support.

(Continued)

#### (Continued)

- The vehicle can easily roll off the jack causing serious injury or death.
- Do not get under a vehicle that is supported by a jack.
- Do not start or run the engine while the vehicle is on the jack.
- Do not allow anyone to remain in the vehicle while it is on the iack.
- Make sure any children present are in a secure place away from the road and from the vehicle to be raised with the jack.



# Removing and storing the spare tire

Turn the tire hold-down wing bolt (1) counterclockwise.

Store the tire in the reverse order of removal.

To prevent the spare tire and tools from "rattling" while the vehicle is in motion, store them properly.



### **Changing tires**

- 1. Park on a level surface and apply the parking brake firmly.
- 2. Shift the shift lever into R (Reverse) with manual transaxle or P (Park) with automatic transaxle.
- 3. Activate the hazard warning flasher.



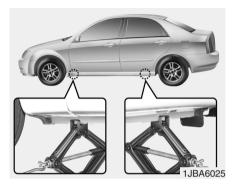
- Remove the wheel lug nut wrench, jack, jack handle, and spare tire from the vehicle.
- Block both the front and rear of the wheel that is diagonally opposite the jack position.

## **A** WARNING - Changing a tire

- To prevent vehicle movement while changing a tire, always set the parking brake fully, and always block the wheel diagonally opposite the wheel being changed.
- We recommend that the wheels of the vehicle be chocked, and that no person remain in a vehicle that is being jacked.



Loosen the wheel lug nuts counterclockwise one turn each, but do not remove any nut until the tire has been raised off the ground.



7. Place the jack at the front or rear jacking position closest to the tire you are changing. Place the jack at the designated locations under the frame. The jacking positions are plates welded to the frame with two tabs and a raised dot to index with the jack.

WARNING - Jack location
To reduce the possibility of injury, be sure to use only the jack provided with the vehicle and in the correct jack position; never use any other part of the vehicle for jack support.



8. Insert the jack handle into the jack and turn it clockwise, raising the vehicle until the tire just clears the ground. This measurement is approximately 30 mm (1.2 in). Before removing the wheel lug nuts, make sure the vehicle is stable and that there is no chance for movement or slippage.

9. Loosen the wheel nuts and remove them with your fingers. Slide the wheel off the studs and lay it flat so it cannot roll away. To put the wheel on the hub, pick up the spare tire, line up the holes with the studs and slide the wheel onto them. If this is difficult, tip the wheel slightly and get the top hole in the wheel lined up with the top stud. Then jiggle the wheel back and forth until the wheel can be slid over the other studs.

### **A** WARNING

- Wheels and wheel covers may have sharp edges. Handle them carefully to avoid possible severe injury.
- Before putting the wheel into place, be sure that there is nothing on the hub or wheel (such as mud, tar, gravel, etc.) that interferes with the wheel from fitting solidly against the hub. If there is, remove it. If the contact of the mounting surface between the wheel and hub is not good, the wheel nuts could come loose and cause loss of a wheel. Loss of a wheel may result in losing control of the vehicle. This may cause serious injury or death.
- 10. To reinstall the wheel, hold it on the studs, put the wheel nuts on the studs and tighten them finger tight. The nuts should be installed with their tapered small diameter ends directed inward. Jiggle the tire to be sure it is completely seated, then tighten the nuts as much as possible with your fingers again.
- 11. Lower the vehicle to the ground by turning the wheel nut wrench counterclockwise.



Then position the wrench as shown in the drawing and tighten the wheel nuts. Be sure the socket is seated completely over the nut. Do not stand on the wrench handle or use an extension pipe over the wrench handle. Go around the wheel tightening every nut following the numerical sequence shown in the image until they are all tight. Then double-check each nut for tightness. After changing wheels, we recommend that the system be checked by an authorized HYLINDAL dealer

#### Wheel nut tightening torque:

Steel wheel & aluminium alloy wheel: 9~11 kg.m (65~79 lb.ft)

If you have a tire gauge, remove the valve cap and check the air pressure. If the pressure is lower than recommended, drive slowly to the nearest service station and inflate to the correct pressure. If it is too high, adjust it until it is correct. Always reinstall the valve cap after checking or adjusting tire pressure. If the cap is not replaced, air may leak from the tire. If you lose a valve cap, buy another and install it as soon as possible

After you have changed wheels, always secure the flat tire in its place and return the jack and tools to their proper storage locations.

# **⚠** CAUTION

Your vehicle has metric threads on the wheel studs and nuts. Make certain during wheel removal that the same nuts that were removed are reinstalled or, if replaced, that nuts with metric threads and the same chamfer configuration are used. Installation of a non-metric thread nut on a metric stud or vice-versa will not secure the wheel to the hub properly and will damage the stud so that it must be replaced.

Note that most lug nuts do not have metric threads. Be sure to use extreme care in checking for thread style before installing aftermarket lug nuts or wheels. If in doubt, we recommend that you consult an authorized HYUNDAI dealer. WARNING - Wheel studs
If the studs are damaged, they
may lose their ability to retain
the wheel. This could lead to the
loss of the wheel and a collision
resulting in serious injuries.

To prevent the jack, jack handle, wheel lug nut wrench and spare tire from rattling while the vehicle is in motion, store them properly.

WARNING - Inadequate spare tire pressure

Check the inflation pressures as soon as possible after installing the spare tire. Adjust it to the specified pressure, if necessary. Refer to "Tires and wheels" in section 8.

Important - use of compact spare tire (if equipped)

Your vehicle is equipped with a compact spare tire. This compact spare tire takes up less space than a regular-size tire. This tire is smaller than a conventional tire and is designed for temporary use only.

### **!** CAUTION

- You should drive carefully when the compact spare is in use. The compact spare should be replaced by the proper conventional tire and rim at the first opportunity.
- The operation of this vehicle is not recommended with more than one compact spare tire in use at the same time.

### **A WARNING**

The compact spare tire is for emergency use only. Do not operate your vehicle on this compact spare at the speed over 80 km/h (50 mph). The original tire should be repaired or replaced as soon as possible to avoid failure of the spare possibly leading to personal injury or death.

The compact spare should be inflated to 420 kPa (60 psi).

#### \* NOTICE

Check the inflation pressure after installing the spare tire. Adjust it to the specified pressure, as necessary.

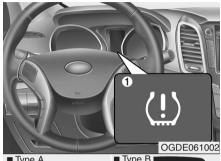
When using a compact spare tire, observe the following precautions:

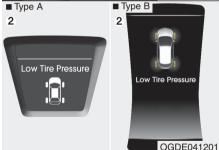
- Under no circumstances should you exceed 80 km/h (50 mph); a higher speed could damage the tire.
- Ensure that you drive slowly enough to avoid all hazards. Any road hazard, such as a pothole or debris, could seriously damage the compact spare.
- Any continuous road use of this tire could result in tire failure, loss of vehicle control, and possible personal injury.
- Do not exceed the vehicle's maximum load rating or the load-carrying capacity shown on the sidewall of the compact spare tire.
- Avoid driving over obstacles. The compact spare tire diameter is smaller than the diameter of a conventional tire and reduces the ground clearance approximately 25 mm (1 inch), which could result in damage to the vehicle.

- Do not take this vehicle through an automatic car wash while the compact spare tire is installed.
- Do not use tire chains on the compact spare tire. Because of the smaller size, a tire chain will not fit properly. This could damage the vehicle and result in loss of the chain.
- The compact spare tire should not be installed on the front axle if the vehicle must be driven in snow or on ice.
- Do not use the compact spare tire on any other vehicle because this tire has been designed especially for your vehicle.
- The compact spare tire's tread life is shorter than a regular tire. Inspect your compact spare tire regularly and replace worn compact spare tires with the same size and design, mounted on the same wheel.

- The compact spare tire should not be used on any other wheels, nor should standard tires, snow tires, wheel covers or trim rings be used with the compact spare wheel. If such use is attempted, damage to these items or other car components may occur.
- Do not use more than one compact spare tire at a time.
- Do not tow a trailer while the compact spare tire is installed.

### TIRE PRESSURE MONITORING SYSTEM (TPMS) (IF EQUIPPED)





- Low tire pressure telltale / TPMS malfunction indicator
- (2) Low tire pressure position telltale (Shown on the LCD display)

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction. the telltale will flash for approximately 1 minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the TPMS malfunction indicator remains illuminated after blinking for approximately 1 minute, the system may not be able to detect or signal low tire pressure as intended.

TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

#### \* NOTICE

If any of the below happens, we recommend that the system be checked by an authorized HYUNDAI dealer.

- 1. The low tire pressure telltale/ TPMS malfunction indicator and low tire pressure position telltale do not illuminate.
- 2. The TPMS malfunction indicator remains illuminated after blinking for approximately 1 minute.
- 3. The Low tire pressure position telltale remains illuminated.



# Low tire pressure tell-tale



# Low tire pressure position telltale

When the tire pressure monitoring system warning indicators are illuminated, one or more of your tires is significantly under-inflated. The low tire pressure position telltale light will indicate which tire is significantly under-inflated by illuminating the corresponding position light.

If either telltale illuminates, immediately reduce your speed, avoid hard cornering and anticipate increased stopping distances. You should stop and check your tires as soon as possible. Inflate the tires to the proper pressure as indicated on the vehicle's placard or tire inflation pressure label located on the driver's side center pillar outer panel. If you cannot reach a service station or if the tire cannot hold the newly added air, replace the low pressure tire with a spare tire.

After you replace the low pressure tire with the spare tire, one of the following will happen:

- The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated because the TPMS sensor is not mounted on the spare wheel. (changed tire equipped with a sensor not in the vehicle)
- The TPMS malfunction indicator will remain continuously illuminated while driving because the TPMS sensor is not mounted on the spare wheel. (changed tire equipped with a sensor in the vehicle)

# **A** CAUTION

In winter or cold weather, the low tire pressure telltale may illuminate if the tire pressure was adjusted to the recommended tire inflation pressure in warm weather. It does not mean your TPMS is malfunctioning because the decreased temperature leads to a proportional lowering of tire pressure.

When you drive your vehicle from a warm area to a cold area or from a cold area to a warm area, or the outside temperature is greatly higher or lower, you should check the tire inflation pressure and adjust the tires to the recommended tire inflation pressure.

# A WARNING - Low pressure damage

Significantly low tire pressure makes the vehicle unstable and can contribute to loss of vehicle control and increased braking distances.

Continued driving on low pressure tires can cause the tires to overheat and fail.



#### TPMS (Tire Pressure Monitoring System) malfunction indicator

The TPMS malfunction indicator will illuminate after it blinks for approximately one minute when there is a problem with the Tire Pressure Monitoring System. If the system is able to correctly detect an under inflation warning at the same time as system failure then the TPMS malfunction indicator remains illuminated after blinking for approximately 1 minute and the low tire pressure position telltale will illuminate e.g. if Front Left sensor fails, the TPMS malfunction indicator remains illuminated after blinking for approximately 1 minute, but if the Front Right, Rear Left, or Rear Right tire is under-inflated, the low tire pressure position telltales may illuminate together with the TPMS malfunction indicator.

We recommend that the system be checked by an authorized HYUNDAI dealer to determine the cause of the problem.

# **!** CAUTION

- The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated if the vehicle is moving around electric power supply cables or radios transmitter such as at police stations, government and public offices, broadcasting stations, military installations, airports, or transmitting towers, etc. This can interfere with normal operation of the Tire Pressure Monitoring System (TPMS).
- The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated if snow chains are used or some separate electronic devices such as notebook computer, mobile charger, remote starter or navigation etc., are used in the vehicle. This can interfere with normal operation of the Tire Pressure Monitoring System (TPMS).

#### Changing a tire with TPMS

If you have a flat tire, the low Tire Pressure and Position telltales will come on. We recommend that the system be checked by an authorized HYUNDAI dealer.

### **⚠** CAUTION

We recommend that you use the sealant approved by HYUNDAI.

The sealant on the tire pressure sensor and wheel shall be eleminated when you replace the tire with a new one.

Each wheel is equipped with a tire pressure sensor mounted inside the tire behind the valve stem. You must use TPMS specific wheels. It is recommended that you have your tires serviced by an authorized HYUNDAI dealer.

If you drive the vehicle for about 10 minutes at speeds above 25 km/h after replaceing the low pressure tire with the spare tire, one of the following will happen:

- The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated because the TPMS sensor is not mounted on the spare wheel. (changed tire equipped with a sensor not in the vehicle)
- The TPMS malfunction indicator will remain continuously illuminated while driving because the TPMS sensor is not mounted on the spare wheel. (changed tire equipped with a sensor in the vehicle)

You may not be able identify a low tire by simply looking at it. Always use a good quality tire pressure gauge to measure the tire's inflation pressure. Please note that a tire that is hot (from being driven) will have a higher pressure measurement than a tire that is cold (from sitting stationary for at least 3 hours and driven less than 1 mile (1.6 km) during that 3 hour period).

Allow the tire to cool before measuring the inflation pressure. Always be sure the tire is cold before inflating to the recommended pressure.

A cold tire means the vehicle has been sitting for 3 hours and driven for less than 1 mile (1.6 km) in that 3 hour period.

### **⚠** CAUTION

We recommend that you use the sealant approved by HYUNDAI if your vehicle is equipped with a Tire Pressure Monitoring System. The liquid sealant can damage the tire pressure sensors.

### **WARNING - TPMS**

- The TPMS cannot alert you to severe and sudden tire damage caused by external factors such as nails or road debris.
- If you feel any vehicle instability, immediately take your foot off the accelerator, apply the brakes gradually and with light force, and slowly move to a safe position off the road.

# WARNING - Protecting TPMS

Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may interfere with the system's ability to warn the driver of low tire pressure conditions and/or TPMS malfunctions. Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may void the warranty for that portion of the vehicle.

### IF YOU HAVE A FLAT TIRE (WITH TIREMOBILITYKIT, IF EQUIPPED)



Please read the instructions before using the TireMobilityKit.

- (1) Compressor
- (2) Sealant bottle



#### Introduction

With the TireMobilityKit you stay mobile even after experiencing a tire puncture.

The system of compressor and sealing compound effectively and comfortably seals most punctures in a passenger car tire caused by nails or similar objects and reinflates the tire. After you ensure that the tire is properly sealed you can drive cautiously on the tire (up to 200 km (120 miles)) at a max. speed of 80 km/h (50 mph) in order to reach a vehicle or tire dealer to have the tire replaced.

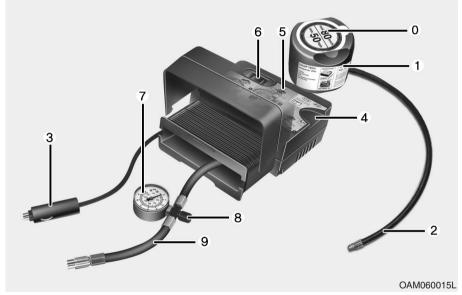
It is possible that some tires, especially with larger punctures or damage to the sidewall, cannot be sealed completely. Air pressure loss in the tire may adversely affect tire performance.

For this reason, you should avoid abrupt steering or other driving maneuvers, especially if the vehicle is heavily loaded or if a trailer is in use. The TireMobilityKit is not designed or intended as a permanent tire repair method and is to be used for one tire only.

This instruction shows you step by step how to temporarily seal the puncture simply and reliably. Read the section "Notes on the safe use of the TireMobilityKit".

### **WARNING**

Do not use the TireMobilityKit if a tire is severely damaged by driving run flat or with insufficient air pressure. Only punctured areas located within the tread region of the tire can be sealed using the TireMobilityKit. Damage to the sidewall must not be repaired due to safety reasons.



#### Components of the TireMobilityKit

- 0. Speed restriction label
- 1. Sealant bottle and label with speed restriction
- 2. Filling hose from sealant bottle to wheel
- 3. Connectors and cable for the power outlet direct connection
- 4. Holder for the sealant bottle
- 5. Compressor
- 6. On/off switch

- 7. Pressure gauge for displaying the tire inflation pressure
- 8. Button for reducing tire inflation pressure
- Hose to connect compressor and sealant bottle or compressor and wheel

Connectors, cable and connection hose are stored in the compressor housing.

### **WARNING**

Before using the TireMobilityKit, follow the instructions on the sealant bottle.

Remove the label with the speed restriction from the sealant bottle and apply it to the steering wheel.

Please note the expiry date on the sealant bottle.

#### Using the TireMobilityKit

1. Filling the sealant

Strictly follow the specified sequence, otherwise the sealant may escape under high pressure.

- 1) Shake the sealant bottle.
- 2) Screw connection hose 9 onto the connector of the sealant bottle.
- 3) Ensure that button 8 on the compressor is not pressed.
- 4) Unscrew the valve cap from the valve of the defective wheel and screw filling hose 2 of the sealant bottle onto the valve.
- 5) Insert the sealant bottle into the housing of the compressor so that the bottle is upright.



- 6) Ensure that the compressor is switched off, position 0.
- 7) Connect between compressor and the vehicle power outlet using the cable and connectors.
- 8) With the ignition switched on:

Switch on the compressor and let it run for approximately 3 minutes to fill the sealant. The inflation pressure of the tire after filling is unimportant.

- 9) Switch off the compressor.
- 10) Detach the hoses from the sealant bottle connector and from the tire valve

Return the TireMobilityKit to its storage location in the vehicle.



Carbon monoxide poisoning and suffocation is possible if the engine is left running in a poorly ventilated or unventilated location (such as inside a building).

#### Distributing the sealant

Immediately drive approximately 3 km (2 miles) to evenly distribute the sealant in the tire.

#### **⚠** CAUTION

Do not exceed a speed of 80 km/h (50 mph). If possible, do not fall below a speed of 20 km/h (12 mph).

While driving, if you experience any unusual vibration, ride disturbance or noise, reduce your speed and drive with caution until you can safely pull off of the side of the road.

Call for road side service or towing.

#### Producing the tire inflation pressure

- 1) After driving approximately 3 km (2 miles), stop at a suitable location.
- 2) Connect connection hose 9 of the compressor directly to the tire valve.
- 3) Connect between compressor and the vehicle power outlet using the cable and connectors
- 4) Adjust the tire inflation pressure to 220 kPa (32 psi). With the ignition switched on, proceed as follows.
- To increase the inflation pressure: Switch on the compressor. position I. To check the current inflation pressure setting, briefly switch off the compressor.



#### **WARNING**

Do not let the compressor run for more than 10 minutes, otherwise the device will overheat and may be damaged.

 To reduce the inflation pressure: Press the button 8 on the compressor.

# **♠** CAUTION

If the inflation pressure is not maintained, drive the vehicle a second time, refer to Distributing the sealant. Then repeat steps 1 to 4.

Use of the TireMobilityKit may be ineffectual for tire damage larger than approximately 4 mm (0.16 in). We recommend that you contact an authorized HYUNDAI dealer if the tire cannot be made roadworthy with the TireMobilityKit.

### **A** WARNING

The tire inflation pressure must be at least 220 kPa (32 psi). If it is not, do not continue driving. Call for road side service or towing.

# Notes on the safe use of the TireMobilityKit

- Park your car at the side of the road so that you can work with the TireMobilityKit away from moving traffic. Place your warning triangle in a prominent place to make passing vehicles aware of your location.
- To be sure your vehicle won't move, even when you're on fairly level ground, always set your parking brake.
- Only use the TireMobilityKit for sealing/inflation passenger car tires. Do not use on motorcycles, bicycles or any other type of tires.
- Do not remove any foreign objectssuch as nails or screws -that have penetrated the tire.
- Before using the TireMobilityKit, read the precautionary advice printed on the sealant bottle!
- Provided the car is outdoors, leave the engine running. Otherwise operating the compressor may eventually drain the car battery.

- Never leave the TireMobilityKit unattended while it is being used.
- Do not leave the compressor running for more than 10 min. at a time or it may overheat.
- Do not use the TireMobilityKit if the ambient temperature is below -30°C (-22°F).
- Do not use the sealing compound after its expiration date which can be found on the label of the bottle.
- Keep away from children.

# **A** CAUTION

The Tire Mobility Kit is a temporary fix to the tire and we recommend that the tire be inspected by an authorized HYUNDAI dealer as soon as possible.

# **A** WARNING

Have your tire repaired as soon as possible. The tire may loose air pressure at any time after inflating with the TMK.

# ⚠ CAUTION -TPMS (if equipped)

When using Tire Mobility Kit, the tire sealant can damage the tire pressure sensor. After using the Tire Mobility Kit, we recommend that the tire pressure sensor be checked by an authorized HYUNDAI dealer.

#### **Technical Data**

System voltage: DC 12 V Working voltage: DC 10 - 15 V Amperage rating: max. 15 A Suitable for use at temperatures:

-30 ~ +70°C (-22 ~ +158°F)

Max. working pressure: 6 bar (87 psi)

Size

Compressor: 170 x 150 x 60 mm

(6.7 x 5.9 x 2.4 in.)

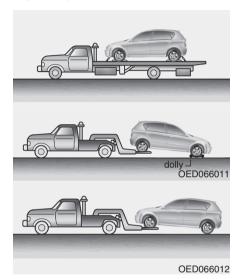
Sealant bottle: 85 x 77 ø mm (3.3 x 3.0 ø in.)

Compressor weight: 0.8 kg (1.8 lbs) Sealant volume:

200 ml (12.2 cu. in.)

\*\* Sealing compound and spare parts can be obtained and replaced at an authorized vehicle or tire dealer. Empty sealing compound bottles may be disposed of at home. Liquid residue from the sealing compound should be disposed of by your vehicle or tire dealer or in accordance with local waste disposal regulations.

#### **TOWING**



#### **Towing service**

If emergency towing is necessary, we recommend having it done by an authorized HYUNDAI dealer or a commercial tow-truck service. Proper lifting and towing procedures are necessary to prevent damage to the vehicle. The use of wheel dollies or flatbed is recommended.

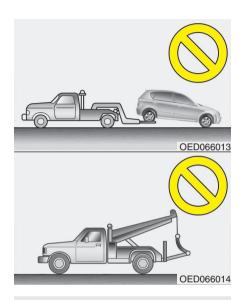
For trailer towing guidelines information, refer to "Trailer towing" in section 5.

It is acceptable to tow the vehicle with the rear wheels on the ground (without dollies) and the front wheels off the ground. If any of the loaded wheels or suspension components are damaged or the vehicle is being towed with the front wheels on the ground, use a towing dolly under the front wheels.

When being towed by a commercial tow truck and wheel dollies are not used, the front of the vehicle should always be lifted, not the rear.

#### \* NOTICE

If the EPB does not release normally, we recommend taking your vehicle to an authorized HYUNDAI dealer by loading the vehicle on a flatbed tow truck and have the system checked.



#### **!** CAUTION

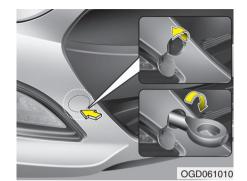
- Do not tow the vehicle backwards with the front wheels on the ground as this may cause damage to the vehicle.
- Do not tow with sling-type equipment. Use wheel lift or flatbed equipment.

When towing your vehicle in an emergency without wheel dollies:

- Set the ignition switch in the ACC position.
- 2. Place the transaxle shift lever in N (Neutral).
- 3. Release the parking brake.

### **A** CAUTION

Failure to place the transaxle shift lever in N (Neutral) may cause internal damage to the transaxle.



# Removable towing hook (if equipped)

- 1. Open the tailgate/trunk, and remove the towing hook from the tool case.
- 2. Remove the hole cover pressing the lower part of the cover on the front bumper.
- Install the towing hook by turning it clockwise into the hole until it is fully secured.
- 4. Remove the towing hook and install the cover after use.



#### **Emergency towing**

If towing is necessary, we recommend you to have it done by an authorized HYUNDAI dealer or a commercial tow truck service.

If towing service is not available in an emergency, your vehicle may be temporarily towed using a cable or chain secured to the emergency towing hook under the front (or rear) of the vehicle. Use extreme caution when towing the vehicle. A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard-surfaced roads for a short distance and at low speed. Also, the wheels, axles, power train, steering and brakes must all be in good condition.

- Do not use the towing hooks to pull a vehicle out of mud, sand or other conditions from which the vehicle cannot be driven out under its own power.
- Avoid towing a vehicle heavier than the vehicle doing the towing.
- The drivers of both vehicles should communicate with each other frequently.

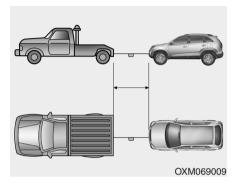
### **A** CAUTION

- Attach a towing strap to the tow hook.
- Using a portion of the vehicle other than the tow hooks for towing may damage the body of your vehicle.
- Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing hook provided.
- Before emergency towing, check that the hook is not broken or damaged.
- Fasten the towing cable or chain securely to the hook.
- Do not jerk the hook. Apply steady and even force.
- To avoid damaging the hook, do not pull from the side or at a vertical angle. Always pull straight ahead.

### **WARNING**

Use extreme caution when towing the vehicle.

- Avoid sudden starts or erratic driving maneuvers which would place excessive stress on the emergency towing hook and towing cable or chain. The hook and towing cable or chain may break and cause serious injury or damage.
- If the disabled vehicle is unable to be moved, do not forcibly continue the towing. We recommend that you contact an authorized HYUNDAI dealer or a commercial tow truck service for assistance.
- Tow the vehicle as straight ahead as possible.
- Keep away from the vehicle during towing.



- Use a towing strap less than 5 m (16 feet) long. Attach a white or red cloth (about 30 cm (12 inches) wide) in the middle of the strap for easy visibility.
- Drive carefully so that the towing strap is not loosened during towing.

#### Emergency towing precautions

- Turn the ignition switch to ACC so the steering wheel isn't locked.
- Place the transaxle shift lever in N (Neutral).
- Release the parking brake.
- Depress the brake pedal with more force than normal since you will have reduced brake performance.
- More steering effort will be required because the power steering system will be disabled.
- If you are driving down a long hill, the brakes may overheat and brake performance will be reduced. Stop often and let the brakes cool off.

# **CAUTION - Automatic** transaxle

- If the car is being towed with all four wheels on the ground, it can be towed only from the front. Be sure that the transaxle is in neutral. Be sure the steering is unlocked by placing the ignition switch in the ACC position. A driver must be in the towed vehicle to operate the steering and brakes.
- To avoid serious damage to the automatic transaxle, limit the vehicle speed to 15 km/h (10 mph) and drive less than 1.5 km (1 mile) when towing.
- Before towing, check the automatic transaxle fluid leak under your vehicle. If the automatic transaxle fluid is leaking, a flatbed equipment or towing dolly must be used.

#### **EMERGENCY COMMODITY (IF EQUIPPED)**

There are some emergency commodities in the vehicle to help you respond to the emergency situation.

### Fire extinguisher

If there is small fire and you know how to use the fire extinguisher, take the following steps carefully.

- 1. Pull the pin at the top of the extinguisher that keeps the handle from being accidentally pressed.
- 2. Aim the nozzle toward the base of the fire.
- Stand approximately 2.5 m (8 ft) away from the fire and squeeze the handle to discharge the extinguisher. If you release the handle, the discharge will stop.
- Sweep the nozzle back and forth at the base of the fire. After the fire appears to be out, watch it carefully since it may re-ignite.

#### First aid kit

There are some items such as scissors, bandage and adhesive tape and etc. in the kit to give first aid to an injured person.

#### Triangle reflector

Place the triangle reflector on the road to warn oncoming vehicles during emergencies, such as when the vehicle is parked by the roadside due to any problems.

# Tire pressure gauge (If equipped)

Tires normally lose some air in day-today use, and you may have to add a few pounds of air periodically and it is not usually a sign of a leaking tire, but of normal wear. Always check tire pressure when the tires are cold because tire pressure increases with temperature. To check the tire pressure, take the following steps:

- 1. Unscrew the inflation valve cap that is located on the rim of the tire.
- Press and hold the gauge against the tire valve. Some air will escape as you begin and more will escape if you don't press the gauge in firmly.
- 3. A firm non-leaking push will activate the gauge.
- Read the tire pressure on the gauge to know whether the tire pressure is low or high.
- Adjust the tire pressures to the specified pressure. Refer to "Tires and wheels" in section 8.
- 6. Reinstall the inflation valve cap.

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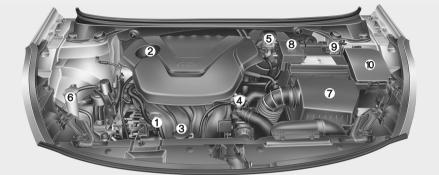
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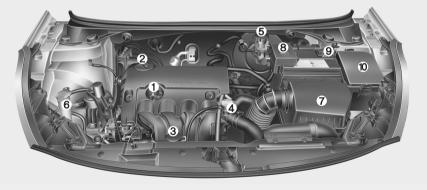
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#### **ENGINE COMPARTMENT**

■ Gasoline engine - GDI



■ Gasoline engine - MPI

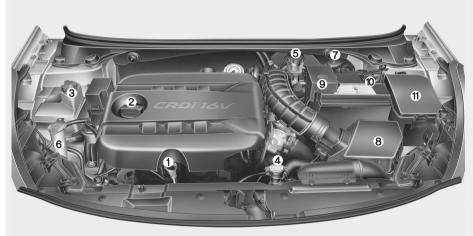


\* The actual engine room in the vehicle may differ from the illustration.

- 1. Engine oil dipstick
- 2. Engine oil filler cap
- 3. Engine coolant reservoir
- 4. Radiator cap
- 5. Brake/clutch\* fluid reservoir
- 6. Windshield washer fluid reservoir
- 7. Air cleaner
- 8. Positive battery terminal
- 9. Negative battery terminal
- 10. Fuse box
- \*: if equipped

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#### **■** Diesel Engine



- 1. Engine oil dipstick
- 2. Engine oil filler cap
- 3. Engine coolant reservoir
- 4. Radiator cap
- 5. Brake/clutch\* fluid reservoir
- 6. Windshield washer fluid reservoir
- 7. Fuel filter
- 8. Air cleaner
- 9. Positive battery terminal
- 10. Negative battery terminal
- 11. Fuse box
- \*: if equipped

 $\ensuremath{\mbox{\#}}$  The actual engine room in the vehicle may differ from the illustration.

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#### MAINTENANCE SERVICES

You should exercise the utmost care to prevent damage to your vehicle and injury to yourself whenever performing any maintenance or inspection procedures.

Inadequate, incomplete or insufficient servicing may result in operational problems with your vehicle that could lead to vehicle damage, an accident, or personal injury.

#### Owner's responsibility

#### \* NOTICE

Maintenance Service and Record Retention are the owner's responsibility.

We recommend in general that you have your vehicle serviced by an authorized HYUNDAI dealer. You should retain documents that show proper maintenance has been performed on your vehicle in accordance with the maintenance schedule. You need this information to establish your compliance with the servicing and maintenance requirements of your vehicle warranties. Detailed warranty information is provided in your Service Passport. Repairs and adjustments required as a result of improper maintenance or a lack of required maintenance are not covered when your vehicle is covered by warranty.

#### Owner maintenance precautions

Improper or incomplete service may result in problems. This section gives instructions only for the maintenance items that are easy to perform.

#### \* NOTICE

Improper owner maintenance during the warranty period may affect warranty coverage. For details, read the separate Service Passport provided with the vehicle. If you're unsure about any servicing or maintenance procedure, we recommend that the system be checked by an authorized HYUNDAI dealer.

# WARNING - Maintenance work

- Performing maintenance work on a vehicle can be dangerous. You can be seriously injured while performing some maintenance procedures. If you lack sufficient knowledge and experience or the proper tools and equipment to do the work, we recommend that the system be serviced by an authorized HYUNDAI dealer.
- Working under the hood with the engine running is dangerous. It becomes even more dangerous when you wear jewelry or loose clothing. These can become entangled in moving parts and result in injury. Therefore, if you must run the engine while working under the hood, make certain that you remove all jewelry (especially rings, bracelets, watches, and necklaces) and all neckties, scarves, and similar loose clothing before getting near the engine or cooling fans.

# Engine compartment precautions (Diesel engine)

- The injector operates at high voltage (maximum 200v). Therefore, the following accidents may occur.
  - Direct contact with the injector or injector wiring may cause electric shock or damage your muscle or nerve system.
  - The electromagnetic wave from the operating injector may cause the artificial heart pacemaker to malfunction.
- Follow the safety tips provided below, when you are checking the engine room while the engine is running.
  - Do not touch the injector, injector wirings, and the engine computer while the engine is running.
  - Do not remove the injector connector while the engine is running.
  - People using pacemakers must not go near the engine while the engine is starting or running.

# **WARNING** - Diesel Engine

Never work on injection system with engine running or within 30 seconds after shutting off engine. High-pressure pump, rail, injectors and high-pressure pipes are subject to high pressure even after the engine stopped. The fuel jet produced by fuel leaks may cause serious injury, if it touches the body. People using pacemakers should not move than 30cm closer to the ECU or wiring harness within the engine room while engine is running, since the high currents in the electronic engine control system produce considerable magnetic fields.

#### OWNER MAINTENANCE

We recommend that the following lists are vehicle checks and inspections that should be performed by the owner or an authorized HYUNDAI dealer at the frequencies indicated to help ensure safe, dependable operation of your vehicle.

If you have any question, we recommend that you consult an authorized HYUNDAI dealer.

These Owner Maintenance Checks are generally not covered by warranties and you may be charged for labor, parts and lubricants used.

#### Owner maintenance schedule

When you stop for fuel:

- Check the engine oil level.
- Check coolant level in coolant reservoir.
- Check the windshield washer fluid level.
- · Look for low or under-inflated tires.
- Check the radiator and condenser.
   Check if the front of the radiator and condenser are clean and not blocked with leaves, dirt or insects etc.

If any of the above parts are extremely dirty or you are not sure of their condition, we recommend that you contact an authorized HYUNDAI dealer.

# **A WARNING**

Be careful when checking your engine coolant level when the engine is hot. Scalding hot coolant and steam may blow out under pressure. This could cause burns or other serious injury.

While operating your vehicle:

- Note any changes in the sound of the exhaust or any smell of exhaust fumes in the vehicle.
- Check for vibrations in the steering wheel. Notice any increased steering effort or looseness in the steering wheel, or change in its straight-ahead position.
- Notice if your vehicle constantly turns slightly or "pulls" to one side when traveling on smooth, level road.
- When stopping, listen and check for unusual sounds, pulling to one side, increased brake pedal travel or "hardto-push" brake pedal.
- If any slipping or changes in the operation of your transaxle occurs, check the transaxle fluid level.
- Check manual transaxle operation, including clutch operation.
- Check automatic transaxle P (Park) function.
- · Check parking brake.
- Check for fluid leaks under your vehicle (water dripping from the air conditioning system during or after use is normal).

#### At least monthly:

- Check coolant level in the engine coolant reservoir.
- Check the operation of all exterior lights, including the stoplights, turn signals and hazard warning flashers.
- Check the inflation pressures of all tires including the spare.

# At least twice a year (i.e., every Spring and Fall) :

- Check radiator, heater and air conditioning hoses for leaks or damage.
- Check windshield washer spray and wiper operation. Clean wiper blades with clean cloth dampened with washer fluid.
- · Check headlight alignment.
- Check muffler, exhaust pipes, shields and clamps.
- Check the lap/shoulder belts for wear and function.
- Check for worn tires and loose wheel lug nuts.

#### At least once a year :

- Clean body and door drain holes.
- Lubricate door hinges and checks, and hood hinges.
- Lubricate door and hood locks and latches.
- · Lubricate door rubber weatherstrips.
- · Check the air conditioning system.
- Inspect and lubricate automatic transaxle linkage and controls.
- · Clean battery and terminals.
- Check the brake (and clutch) fluid level.

#### SCHEDULED MAINTENANCE SERVICE

Follow Normal Maintenance Schedule if the vehicle is usually operated where none of the following conditions apply. If any of the following conditions apply, follow Maintenance Under Severe Usage Conditions.

- · Repeated short distance driving.
- Driving in dusty conditions or sandy areas.
- · Extensive use of brakes.
- Driving in areas where salt or other corrosive materials are being used.
- · Driving on rough or muddy roads.
- · Driving in mountainous areas.
- Extended periods of idling or low speed operation.
- Driving for a prolonged period in cold temperatures and/or extremely humid climates.
- More than 50% driving in heavy city traffic during hot weather above 32°C (90°F).

If your vehicle is operated under the above conditions, you should inspect, replace or refill more frequently than the following Normal Maintenance Schedule. After the periods or distance shown in the chart, continue to follow the prescribed maintenance intervals.

The following maintenance services must be performed to ensure good emission control and performance. Keep receipts for all vehicle emission services to protect your warranty. Where both mileage and time are shown, the frequency of service is determined by whichever occurs first.

- \*1: Check the engine oil level and leak every 500 km (350 miles) or before starting a long trip.
- \*2: This maintenance schedule depends on fuel quality. It is applicable only when using a qualified fuel <"EN590 or equivalent">. If the diesel fuel specifications don't meet the EN590, it must be replaced according to the severe maintenance schedule.
- \*3: If the recommended oil is not available, replace engine oil and engine oil filter every 20,000 km or 12 months.
- \*4: If the recommended oil is not available, replace engine oil and filter every 15,000 km for MPI engine and replace engine oil and filter every 10,000 km for GDI engine.
- \*5: The engine oil level should be checked regularly and maintained properly. Operating with an insufficient amount of oil can damage the engine, and such damage is not covered by warranty.
- \*6: This maintenance schedule depends on fuel quality. It is applicable only when using a qualified fuel <"EN590 or equivalent">>. If the diesel fuel specifications don't meet the EN590, it must be replaced more frequently. If there are some important safety matters like fuel flow restriction, surging, loss of power, hard starting problem etc., replace the fuel filter immediately regardless of maintenance schedule and we recommanded that you consult an authorized HYUNDAI dealer for details.

- \*7: The fuel filter is considered to be maintenance free but periodic inspection is recommended for this maintenance schedule depends on fuel quality. If there are some important matters like fuel flow restriction, surging, loss of power, hard starting problem etc, replace the fuel filter immediately regardless of maintenance schedule and we recommanded that you consult an authorized HYUNDAI dealer for details.
- \*8: Manual transaxle fluid should be changed anytime they have been submerged in water.
- \*9: Inspect and if necessary correct or replace. Inspect drive belt tensioner, idler and alternator pulley and if necessary correct or replace.
- \*10: When adding coolant, use only deionized water or soft water for your vehicle and never mix hard water in the coolant filled at the factory. An improper coolant mixture can result in serious malfunction or engine damage.
- \*11 : Inspect for excessive valve noise and/or engine vibration and adjust if necessary. We recommended that the system should be checked by an authorized HYUNDAI dealer.
- \*12 : If good quality gasolines that meet Europe Fuel standards (EN228) or equivalents including fuel additives is not available, one bottle of additive is recommended. Additives are available from your authorized HYUNDAI dealer along with information on how to use them. Do not mix other additives.

30,000 km (20,000 miles) or 24 months
☐ Inspect air cleaner filter
☐ Inspect air conditioner refrigerant/compressor (if equipped)
☐ Inspect battery condition
☐ Inspect brake lines, hoses and connections
☐ Inspect brake pedal, clutch pedal (if equipped)
☐ Inspect all electrical system
☐ Inspect disc brakes and pads
☐ Inspect drive shafts and boots
☐ Inspect exhaust system
☐ Inspect front suspension ball joints
☐ Inspect fuel lines, fuel hoses and connections (Diesel)
☐ Inspect parking brake (Hand type)
☐ Inspect steering gear rack, linkage and boots
☐ Inspect tire (pressure & tread wear)
(30,000 km (20,000 miles) or 12 months)
☐ Replace brake/clutch(if equipped) fluid
☐ Replace climate control air filter
☐ Replace engine oil and filter (Diesel) *1 *2 *3*5
☐ Replace engine oil and filter (Gasoline) *1*4*5
(30,000 km (20,000 miles) or 12 months)
(Continued)

(Continued)	
☐ Add fuel additives (Gasoline) *12	
(Every 15,000 km or 12months)	
☐ Replace fuel filter cartridge (Diesel) *6	

 $\mbox{\#}$  Inspect : Inspect and if necessary, adjust, correct, clean or replace.

60,000 km (40,000 miles) or 48 months	(Continued)
□ Inspect air conditioner refrigerant/compressor (if equipped) □ Inspect battery condition □ Inspect brake lines, hoses and connections □ Inspect brake pedal, clutch pedal (if equipped) □ Inspect all electrical system □ Inspect disc brakes and pads □ Inspect drive shafts and boots □ Inspect exhaust system □ Inspect front suspension ball joints □ Inspect fuel filter (Gasoline) *7 □ Inspect fuel tank air filter (Gasoline, if equipped) □ Inspect fuel lines, fuel hoses and connections (Gasoline, Diesel) □ Inspect manual transaxle fluid (if equipped) *8	<ul> <li>□ Replace climate control air filter</li> <li>□ Replace engine oil and filter (Diesel) *1*2*3*5</li> <li>□ Replace engine oil and filter (Gasoline) *1*4*5</li> <li>(60,000 km (40,000 miles) or 24 months)</li> <li>□ Replace fuel filter cartridge (Diesel) *6</li> <li>□ Replace spark plugs (Gasoline - Nickel)</li> <li>□ Inspect cooling system</li> <li>(At first, 60,000 km (40,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months)</li> <li>□ Add fuel additives (Gasoline) *12</li> <li>(Every 15,000 km or 12months)</li> <li>□ Inspect drive belt (Diesel) *9</li> <li>(At first, 90,000 km (60,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months)</li> </ul>
<ul> <li>☐ Inspect parking brake (Hand type)</li> <li>☐ Inspect steering gear rack, linkage and boots</li> <li>☐ Inspect tire (pressure &amp; tread wear)</li> <li>(60,000 km (40,000 miles) or 24 months)</li> <li>☐ Inspect vapor hose and fuel filler cap</li> <li>☐ Replace air cleaner filter</li> <li>☐ Replace brake/clutch(if equipped) fluid</li> </ul>	∦ Inspect : Inspect and if necessary, adjust, correct, clean or replace.
(Continued)	

90,000 km (60,000 miles) or 72 months	(Continued)
Inspect air cleaner filter Inspect air conditioner refrigerant/compressor (if equipped) Inspect battery condition Inspect brake lines, hoses and connections Inspect brake pedal, clutch pedal (if equipped) Inspect all electrical system Inspect disc brakes and pads Inspect drive shafts and boots Inspect exhaust system Inspect front suspension ball joints Inspect fuel lines, fuel hoses and connections (Diesel) Inspect parking brake (Hand type)	□ Replace fuel filter cartridge (Diesel) *6 □ Inspect cooling system (At first, 60,000 km (40,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months) □ Inspect drive belt (Diesel) *9 (At first, 90,000 km (60,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months) □ Inspect drive belt (Gasoline) *9 (At first, 90,000 km (60,000 miles) or 72months after that, every 30,000 km (20,000 miles) or 24months) □ Add fuel additives (Gasoline) *12 (Every 15,000 km or 12months)
<ul> <li>☐ Inspect steering gear rack, linkage and boots</li> <li>☐ Inspect tire (pressure &amp; tread wear)</li> <li>(90,000 km (60,000 miles) or 36 months)</li> <li>☐ Inspect valve clearance (Gasoline) *¹¹</li> <li>☐ Replace brake/clutch(if equipped) fluid</li> <li>☐ Replace climate control air filter</li> <li>☐ Replace engine oil and filter (Diesel) *¹ *² *3*5</li> <li>☐ Replace engine oil and filter (Gasoline) *¹ *4 *5</li> <li>(90,000 km (60,000 miles) or 36 months)</li> </ul>	★ Inspect : Inspect and if necessary, adjust, correct, clean or replace.
(Continued)	

120,000 km (80,000 miles) or 96 months	(Continued)
□ Inspect air conditioner refrigerant/compressor (if equipped) □ Inspect battery condition □ Inspect brake lines, hoses and connections □ Inspect brake pedal, clutch pedal (if equipped) □ Inspect all electrical system □ Inspect disc brakes and pads □ Inspect drive shafts and boots □ Inspect exhaust system □ Inspect front suspension ball joints □ Inspect fuel filter (Gasoline) *7 □ Inspect fuel tank air filter (Gasoline, if equipped) □ Inspect fuel lines, fuel hoses and connections (Gasoline, Diesel) □ Inspect manual transaxle fluid (if equipped) *8 □ Inspect parking brake (Hand type) □ Inspect steering gear rack, linkage and boots □ Inspect tire (pressure & tread wear) (120,000 km (80,000 miles) or 48 months) □ Inspect vapor hose and fuel filler cap □ Replace air cleaner filter	<ul> <li>□ Replace climate control air filter</li> <li>□ Replace engine oil and filter (Diesel) *1*2*3*5</li> <li>□ Replace engine oil and filter (Gasoline) *1*4*5</li> <li>(120,000 km (80,000 miles) or 48 months)</li> <li>□ Replace fuel filter cartridge (Diesel) *6</li> <li>□ Replace spark plugs (Gasoline - Nickel)</li> <li>□ Inspect cooling system</li> <li>(At first, 60,000 km (40,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months)</li> <li>□ Inspect drive belt (Diesel) *9</li> <li>(At first, 90,000 km (60,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months)</li> <li>□ Inspect drive belt (Gasoline) *9</li> <li>(At first, 90,000 km (60,000 miles) or 72months after that, every 30,000 km (20,000 miles) or 24months)</li> <li>□ Add fuel additives (Gasoline) *12</li> <li>(Every 15,000 km or 12months)</li> <li>※ Inspect: Inspect and if necessary, adjust, correct, clean or replace.</li> </ul>
☐ Replace brake/clutch (if equipped) fluid (Continued)	

150,000 km (100,000 miles) or 120 months	(Continued)
□ Inspect air cleaner filter □ Inspect air conditioner refrigerant/compressor (if equipped) □ Inspect battery condition □ Inspect brake lines, hoses and connections □ Inspect brake pedal, clutch pedal (if equipped) □ Inspect all electrical system □ Inspect disc brakes and pads □ Inspect drive shafts and boots □ Inspect exhaust system □ Inspect front suspension ball joints □ Inspect fuel lines, fuel hoses and connections (Diesel) □ Inspect parking brake (Hand type)	□ Inspect cooling system (At first, 60,000 km (40,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months) □ Inspect drive belt (Diesel) *9 (At first, 90,000 km (60,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months) □ Inspect drive belt (Gasoline) *9 (At first, 90,000 km (60,000 miles) or 72months after that, every 30,000 km (20,000 miles) or 24months) □ Add fuel additives (Gasoline) *12 (Every 15,000 km or 12months) □ Replace spark plug (Gasoline - Iridium)
<ul> <li>□ Inspect steering gear rack, linkage and boots</li> <li>□ Inspect tire (pressure &amp; tread wear)         <ul> <li>(150,000 km (100,000 miles) or 60 months)</li> <li>□ Replace brake/clutch(if equipped) fluid</li> <li>□ Replace climate control air filter</li> <li>□ Replace engine oil and filter (Diesel) *1 *2 *3*5</li> <li>□ Replace engine oil and filter (Gasoline) *1 *4 *5</li> <li>(150,000 km (100,000 miles) or 60 months)</li> <li>□ Replace fuel filter cartridge (Diesel) *6</li> </ul> </li> </ul>	★ Inspect : Inspect and if necessary, adjust, correct, clean or replace.
(Continued)	

180,000 km (120,000 miles) or 144 months	(Continued)
□ Inspect air conditioner refrigerant/compressor (if equipped) □ Inspect battery condition □ Inspect brake lines, hoses and connections □ Inspect brake pedal, clutch pedal (if equipped) □ Inspect all electrical system □ Inspect disc brakes and pads □ Inspect drive shafts and boots □ Inspect exhaust system □ Inspect front suspension ball joints □ Inspect fuel filter (Gasoline) *7 □ Inspect fuel tank air filter (Gasoline, if equipped) □ Inspect fuel lines, fuel hoses and connections (Gasoline, Diesel) □ Inspect manual transaxle fluid (if equipped) *8 □ Inspect parking brake (Hand type) □ Inspect steering gear rack, linkage and boots □ Inspect tire (pressure & tread wear) (180,000 km (120,000 miles) or 72 months) □ Inspect valve clearance (Gasoline) *11 □ Inspect vapor hose and fuel filler cap □ Replace air cleaner filter	<ul> <li>□ Replace brake/clutch(if equipped) fluid</li> <li>□ Replace climate control air filter</li> <li>□ Replace engine oil and filter (Diesel) *1*2*3*5</li> <li>□ Replace engine oil and filter (Gasoline) *1*4*5</li> <li>(180,000 km (120,000 miles) or 72 months)</li> <li>□ Replace fuel filter cartridge (Diesel) *6</li> <li>□ Replace spark plugs (Gasoline - Nickel)</li> <li>□ Inspect cooling system</li> <li>(At first, 60,000 km (40,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months)</li> <li>□ Inspect drive belt (Diesel) *9</li> <li>(At first, 90,000 km (60,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months)</li> <li>□ Inspect drive belt (Gasoline) *9</li> <li>(At first, 90,000 km (60,000 miles) or 72months after that, every 30,000 km (20,000 miles) or 24months)</li> <li>□ Add fuel additives (Gasoline) *12</li> <li>(Every 15,000 km or 12months)</li> <li>※ Inspect : Inspect and if necessary, adjust, correct, clean or replace.</li> </ul>
(Continued)	

210,000 km (140,000 miles) or 168 months	(Continued)
□ Inspect air cleaner filter □ Inspect air conditioner refrigerant/compressor (if equipped) □ Inspect battery condition □ Inspect brake lines, hoses and connections □ Inspect brake pedal, clutch pedal (if equipped) □ Inspect all electrical system □ Inspect disc brakes and pads □ Inspect drive shafts and boots □ Inspect exhaust system □ Inspect front suspension ball joints □ Inspect fuel lines, fuel hoses and connections (Diesel) □ Inspect parking brake (Hand type) □ Inspect steering gear rack, linkage and boots □ Inspect tire (pressure & tread wear) (210,000 km (140,000 miles) or 84 months) □ Replace brake/clutch(if equipped) fluid □ Replace engine oil and filter (Diesel) *1 *2 *3*5 □ Replace engine oil and filter (Gasoline) *1*4 *5 (210,000 km (140,000 miles) or 84 months) □ Replace fuel filter cartridge (Diesel) *6	□ Inspect cooling system  (At first, 60,000 km (40,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months)  □ Inspect drive belt (Diesel) *9  (At first, 90,000 km (60,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months)  □ Inspect drive belt (Gasoline) *9  (At first, 90,000 km (60,000 miles) or 72months after that, every 30,000 km (20,000 miles) or 24months)  □ Replace coolant *10  (At first, 210,000 km (120,000 miles) or 120 months after that, every 30,000 km (20,000 miles) or 24months) □ Add fuel additives (Gasoline) *12  (Every 15,000 km or 12months)
	∦ Inspect : Inspect and if necessary, adjust, correct, clean or replace.
(Continued)	

240,000 km (160,000 miles) or 192 months	(Continued)	
□ Inspect air conditioner refrigerant/compressor (if equipped) □ Inspect battery condition □ Inspect brake lines, hoses and connections □ Inspect brake pedal, clutch pedal (if equipped) □ Inspect all electrical system □ Inspect disc brakes and pads □ Inspect drive shafts and boots □ Inspect exhaust system □ Inspect front suspension ball joints □ Inspect fuel filter (Gasoline) *7 □ Inspect fuel tank air filter (Gasoline, if equipped) □ Inspect fuel lines, fuel hoses and connections (Gasoline, Diesel) □ Inspect manual transaxle fluid (if equipped) *8 □ Inspect parking brake (Hand type) □ Inspect steering gear rack, linkage and boots □ Inspect tire (pressure & tread wear) (240,000 km (160,000 miles) or 96 months)	□ Replace engine oil and filter (Gasoline) *1*4*5 (240,000 km (160,000 miles) or 96 months) □ Replace fuel filter cartridge (Diesel) *6 □ Replace spark plugs (Gasoline - Nickel) □ Inspect cooling system (At first, 60,000 km (40,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months) □ Inspect drive belt (Diesel) *9 (At first, 90,000 km (60,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months) □ Inspect drive belt (Gasoline) *9 (At first, 90,000 km (60,000 miles) or 72months after that, every 30,000 km (20,000 miles) or 24months) □ Replace coolant *10 (At first, 210,000 km (120,000 miles) or 120 months after that, every 30,000 km (20,000 miles) or 24months) □ Add fuel additives (Gasoline) *12 (Every 15,000 km or 12months)	
☐ Inspect vapor hose and fuel filler cap☐ Replace air cleaner filter☐	No check, No service required	
☐ Replace brake/clutch(if equipped) fluid	·	
□ Replace climate control air filter	☐ Automatic transaxle fluid	
□ Replace engine oil and filter (Diesel) *1*2*3*5  (Continued)	* Inspect : Inspect and if necessary, adjust, correct, clean or replace.	

#### MAINTENANCE UNDER SEVERE USAGE CONDITIONS - FOR EUROPE, EXCEPT RUSSIA

The following items must be serviced more frequently on cars mainly used under severe driving conditions. Refer to the chart below for the appropriate maintenance intervals.

R: Replace I: Inspect and if necessary, adjust, correct, clean or replace

MAINTENANCE IT	ГЕМ	MAINTENANCE OPERATION	MAINTENANCE INTERVALS	DRIVING CONDITION
Engine oil and	Gasoline *1	R	Every 15,000 km (10,000 miles) or 6 months	A, B, C, D, E, F, G, H, I, J, K, L
engine oil filter	Diesel *2	R	Every 15,000 km (10,000 miles) or 12 months	A, B, C, F, G, H, I, J, K, L
Air cleaner filter		R	Replace more frequently depending on the condition	C, E
Manual transaxle fluid (if equipped)		R	Every 120,000 km (80,000 miles)	C, D, E, G, H, I, K
Automatic transaxle fluid (if equipped)		R	Every 90,000 km (60,000 miles)	A, C, D, E, F, G, H, I, K
Steering gear rack, linkage and boots		1	Inspect more frequently depending on the condition	C, D, E, F, G
Front suspension ball joints		I	Inspect more frequently depending on the condition	C, D, E, F, G
Disc brakes and pads, calipers and rotors		I	Inspect more frequently depending on the condition	C, D, E, G, H

<sup>\*1:</sup> If the recommended oil is not available, replace engine oil and engine oil filter every 7,500 km or 6 months for MPI engine and 5,000 km or 6 months for GDI engine.

<sup>\*2:</sup> If the recommended oil is not available, replace engine oil and engine oil filter every 10,000 km or 6 months.

MAINTENANCE ITEM	MAINTENANCE OPERATION	MAINTENANCE INTERVALS	DRIVING CONDITION
Parking brake (Hand type)	I	Inspect more frequently depending on the condition	C, D, G, H
Drive shaft and boots	1	Inspect more frequently depending on the condition	C, D, E, F, G, H, I, J, K
Climate control air filter	R	Replace more frequently depending on the condition	C, E, G

#### SEVERE DRIVING CONDITIONS

A: Repeated short distance driving

B: Extensive idling

C: Driving in dusty, rough roads

D: Driving in areas using salt or other corrosive materials or in very cold weather

E: Driving in sandy areas

F : More than 50 % driving in heavy city traffic during hot weather above 32  $^{\circ}\text{C}$  (90  $^{\circ}\text{F})$ 

G: Driving in mountainous areas.

H: Towing a trailer or using a camper on roof rack

I : Driving for patrol car, taxi, commercial car or vehicle towing

J: Driving in very cold weather

K: Driving over 170 km/h (106 mile/h)

L : Frequently driving in stop-and-go conditions

The following maintenance services must be performed to ensure good emission control and performance. Keep receipts for all vehicle emission services to protect your warranty. Where both mileage and time are shown, the frequency of service is determined by whichever occurs first.

- \*1 : Inspect drive belt tensioner, idler and alternator pulley and if necessary correct or replace.
- \*2 : Check the engine oil level and leak every 500 km (350 miles) or before starting a long trip.
- \*3 : The engine oil level should be checked regularly and maintained properly. Operating with an insufficient amount of oil can damage the engine, and such damage is not covered by warranty.
- \*4: This maintenance schedule depends on fuel quality. It is applicable only when using a qualified fuel <"EN590 or equivalent">. If the diesel fuel specifications don't meet the EN590, it must be replaced more frequently.
  - If there are some important safety matters like fuel flow restriction, surging, loss of power, hard starting problem etc., replace the fuel filter immediately regardless of maintenance schedule and we recommand that you consult an authorized HYUNDAI dealer for details
- \*5 : For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.

- \*6: Inspect for excessive valve noise and/or engine vibration and adjust if necessary. We recommended that the system should be checked by an authorized HYUNDAI dealer.
- \*7 : The fuel filter is considered to be maintenance free but periodic inspection is recommended for this maintenance schedule depends on fuel quality. If there are some important matters like fuel flow restriction, surging, loss of power, hard starting problem etc, replace the fuel filter immediately regardless of maintenance schedule and we recommand that you consult an authorized HYUNDAI dealer for details.
- \*8: When adding coolant, use only deionized water or soft water for your vehicle and never mix hard water in the coolant filled at the factory. An improper coolant mixture can result in serious malfunction or engine damage.
- \*9: Inspect and if necessary correct or replace. Inspect drive belt tensioner, idler and alternator pulley and if necessary correct or replace.
- \*10 : If good quality gasolines that meet Europe Fuel standards (EN228) or equivalents including fuel additives is not available, one bottle of additive is recommended. Additives are available from your authorized HYUNDAI dealer along with information on how to use them. Do not mix other additives.

15,000 km (10,000 miles) or 12months	(Continued)
☐ Inspect air cleaner filter - Except Middle East☐ Inspect air conditioner refrigerant/compressor (if equipped)	☐ Add fuel additives (Gasoline) *10 (Every 5,000 km or 6months)
□ Inspect battery condition □ Inspect brake lines, hoses and connections □ Inspect brake/clutch (if equipped) fluid □ Inspect disc brakes and pads □ Inspect front suspension ball joints □ Inspect steering gear rack, linkage and boots □ Inspect tire (pressure & tread wear) □ Replace air cleaner filter - For Middle East □ Replace climate control air filter □ Replace engine oil and filter (Gasoline - MPI) - Except Middle East *² □ Replace engine oil and filter (Gasoline - MPI) - For Middle East *² □ (Every 10,000 km (6,500 miles) or 12months*³) □ Replace engine oil and filter (Gasoline - GDI) *² (Every 10,000 km (6,500 miles) or 12months)	* Inspect : Inspect and if necessary, adjust, correct, clean or replace.
□ Replace engine oil and filter (Diesel) - For Russia *2 *3	
☐ Replace engine oil and filter (Diesel) - Except Russia *2 *3 (Every 10,000 km (6,500 miles) or 12months)	
(Continued)	

30,000 km (20,000 miles) or 24months	(Continued)
□ Inspect air cleaner filter - Except Middle East □ Inspect air conditioner refrigerant/compressor (if equipped) □ Inspect battery condition □ Inspect brake lines, hoses and connections □ Inspect all electrical system □ Inspect brake pedal, clutch pedal (if equipped) □ Inspect brake/clutch(if equipped) fluid □ Inspect disc brakes and pads □ Inspect drive belt (Gasoline) *¹ □ Inspect drive shafts and boots □ Inspect exhaust system □ Inspect front suspension ball joints	<ul> <li>□ Replace engine oil and filter (Gasoline - MPI)         <ul> <li>Except Middle East *²</li> </ul> </li> <li>□ Replace engine oil and filter (Gasoline - MPI)         <ul> <li>For Middle East *²</li> <li>(Every 10,000 km (6,500 miles) or 12months*³)</li> </ul> </li> <li>□ Replace engine oil and filter (Gasoline - GDI) *²</li> <li>(Every 10,000 km (6,500 miles) or 12months)</li> <li>□ Replace engine oil and filter (Diesel) - For Russia *² *³</li> <li>□ Replace engine oil and filter (Diesel) - Except Russia *² *³</li> <li>(Every 10,000 km (6,500 miles) or 12months)</li> <li>□ Add fuel additives (Gasoline) *¹¹⁰</li> <li>(Every 5,000 km or 6months)</li> </ul>
<ul> <li>☐ Inspect fuel filter (Gasoline) *7</li> <li>☐ Inspect fuel tank air filter (Gasoline, if equipped)</li> <li>☐ Inspect fuel filter cartridge (Diesel) *4</li> <li>☐ Inspect fuel lines, hoses and connections (Diesel)</li> <li>☐ Inspect parking brake (Hand type)</li> <li>☐ Inspect steering gear rack, linkage and boots</li> <li>☐ Inspect tire (pressure &amp; tread wear)</li> <li>☐ Replace air cleaner filter - For Middle East</li> <li>☐ Replace climate control air filter</li> </ul>	※ Inspect : Inspect and if necessary, adjust, correct, clean or replace.
(Continued)	

45,000 km (30,000 miles) or 36months	60,000 km (40,000 miles) or 48months
☐ Inspect air conditioner refrigerant/compressor (if equipped)	☐ Inspect air cleaner filter - Except Middle East
☐ Inspect battery condition	☐ Inspect air conditioner refrigerant/compressor (if equipped)
☐ Inspect brake lines, hoses and connections	☐ Inspect battery condition
☐ Inspect brake/clutch(if equipped) fluid	☐ Inspect brake lines, hoses and connections
☐ Inspect disc brakes and pads	☐ Inspect all electrical systems
☐ Inspect front suspension ball joints	☐ Inspect brake pedal, clutch pedal (if equipped)
☐ Inspect steering gear rack, linkage and boots	☐ Inspect brake/clutch (if equipped) fluid
☐ Inspect tire (pressure & tread wear)	☐ Inspect disc brakes and pads
☐ Replace air cleaner filter	☐ Inspect drive belt (Gasoline) *1
☐ Replace climate control air filter	☐ Inspect drive shafts and boots
☐ Replace engine oil and filter (Gasoline - MPI)	☐ Inspect exhaust system
- Except Middle East *2	☐ Inspect front suspension ball joints
☐ Replace engine oil and filter (Gasoline - MPI)	☐ Inspect fuel filler cap (Diesel)
- For Middle East *2	☐ Inspect fuel lines, hoses and connections
(Every 10,000 km (6,500 miles) or 12months*3)	(Gasoline, Diesel)
☐ Replace engine oil and filter (Gasoline - GDI) *2	☐ Inspect parking brake (Hand type)
(Every 10,000 km (6,500 miles) or 12months)	☐ Inspect steering gear rack, linkage and boots
☐ Replace engine oil and filter (Diesel) - For Russia *2 *3	☐ Inspect tire (pressure & tread wear)
☐ Replace engine oil and filter (Diesel) - Except Russia *2 *3	☐ Inspect manual transaxle fluid (if equipped)
(Every 10,000 km (6,500 miles) or 12months)	☐ Inspect vapor hose and fuel filler cap (Gasoline)
☐ Add fuel additives (Gasoline) *10	☐ Replace air cleaner filter - For Middle East
(Every 5,000 km or 6months)	☐ Replace fuel tank air filter (Gasoline, if equipped)
* Inspect : Inspect and if necessary, adjust, correct, clean or	(Continued)

(Continued)	75,000 km (50,000 miles) or 60months
<ul> <li>□ Replace climate control air filter</li> <li>□ Replace engine oil and filter (Gasoline - MPI)</li> <li>- Except Middle East *²</li> <li>□ Replace engine oil and filter (Gasoline - MPI)</li> <li>- For Middle East *²</li> <li>(Every 10,000 km (6,500 miles) or 12months*³)</li> <li>□ Replace engine oil and filter (Gasoline - GDI) *²</li> <li>(Every 10,000 km (6,500 miles) or 12months)</li> <li>□ Replace engine oil and filter (Diesel) - For Russia *² *³</li> <li>□ Replace engine oil and filter (Diesel) - Except Russia *² *³</li> <li>□ Replace fuel filter (Gasoline) or 12months)</li> <li>□ Replace fuel filter (Gasoline) *7</li> <li>□ Replace fuel filter cartridge (Diesel) *4</li> <li>□ Inspect cooling system</li> <li>(At first, 60,000 km (40,000 miles) or 48months after that, every 30,000 km (20,000 miles) or 24months)</li> <li>□ Add fuel additives (Gasoline) *10</li> <li>(Every 5,000 km or 6months)</li> <li>□ Replace spark plug (Gasoline - Nickel)</li> </ul>	□ Inspect air cleaner filter - Except Middle East □ Inspect air conditioner refrigerant/compressor (if equipped) □ Inspect battery condition □ Inspect brake lines, hoses and connections □ Inspect brake/clutch(if equipped) fluid □ Inspect disc brakes and pads □ Inspect front suspension ball joints □ Inspect steering gear rack, linkage and boots □ Inspect tire (pressure & tread wear) □ Inspect drive belt (Diesel) - Except Russia *9 (At first, 80,000km (50,000miles) or 48 months after that, every 20,000km (12,500miles) or 12 months) □ Replace air cleaner filter - For Middle East □ Replace climate control air filter □ Replace engine oil and filter (Gasoline - MPI) - Except Middle East *2 □ Replace engine oil and filter (Gasoline - MPI) - For Middle East *2 (Every 10,000 km (6,500 miles) or 12 months*3)
* Inspect : Inspect and if necessary, adjust, correct, clean or replace.	□ Replace engine oil and filter (Gasoline - GDI) *2 (Every 10,000 km (6,500 miles) or 12 months)
	(Continued)

(Continued)	90,000 km (60,000 miles) or 72months
<ul> <li>□ Replace engine oil and filter (Diesel) - For Russia *2 *3</li> <li>□ Replace engine oil and filter (Diesel) - Except Russia *2 *3</li> <li>(Every 10,000 km (6,500 miles) or 12 months)</li> <li>□ Add fuel additives (Gasoline) *10</li> <li>(Every 5,000 km or 6 months)</li> </ul>	<ul> <li>☐ Inspect air conditioner refrigerant/compressor (if equipped)</li> <li>☐ Inspect battery condition</li> <li>☐ Inspect brake lines, hoses and connections</li> <li>☐ Inspect all electrical system</li> <li>☐ Inspect brake pedal, clutch pedal (if equipped)</li> <li>☐ Inspect brake/clutch(if equipped) fluid</li> </ul>
★ Inspect : Inspect and if necessary, adjust, correct, clean or replace.	□ Inspect disc brakes and pads □ Inspect drive belt (Gasoline) *1 □ Inspect drive shafts and boots □ Inspect exhaust system □ Inspect front suspension ball joints □ Inspect fuel filter (Gasoline) *7 □ Inspect fuel tank air filter (Gasoline, if equipped) □ Inspect fuel filter cartridge (Diesel) *4 □ Inspect fuel lines, hoses and connections (Diesel) □ Inspect parking brake (Hand type) □ Inspect steering gear rack, linkage and boots □ Inspect tire (pressure & tread wear) □ Replace air cleaner filter □ Replace engine oil and filter (Gasoline - MPI) - Except Middle East *2
	(Continued)

A Replace engine oil and litter (Gasoline - MPI)	Inspect air cleaner filter - Except Middle East Inspect air conditioner refrigerant/compressor (if equipped)
- For Middle East *2  (Every 10,000 km (6,500 miles) or 12months*3)  Replace engine oil and filter (Gasoline - GDI) *2  (Every 10,000 km (6,500 miles) or 12months)  Replace engine oil and filter (Diesel) - For Russia *2 *3  Replace engine oil and filter (Diesel) - Except Russia *2 *3  Replace engine oil and filter (Diesel) - Except Russia *2 *3  Insepect cooling system  (At first, 60,000 km (6,500 miles) or 12months)  Inspect valve clearance *6  (Every 95,000 km (40,000 miles) or 48months after that, every 30,000 miles) or 48 months *5)  Add fuel additives (Gasoline) *10  (Every 5,000 km or 6months)  Inspect drive belt (Diesel) - For Russia *9  (At first, 90,000km (60,000 miles) or 48months after that, every 30,000km (20,000 miles) or 24 months)  Inspect drive belt (Diesel) - Except Russia *9  (At first, 90,000km (50,000 miles) or 24 months)  Recompleted the cool of the	Inspect battery condition Inspect brake lines, hoses and connections Inspect brake/clutch(if equipped) fluid Inspect disc brakes and pads Inspect front suspension ball joints Inspect parking brake Inspect steering gear rack, linkage and boots Inspect tire (pressure & tread wear) Inspect drive belt (Diesel) - Except Russia *9 (At first, 80,000km (50,000miles) or 48months after that, every 20,000km (12,500miles) or 12 months) Replace air cleaner filter - For Middle East Replace climate control air filter Replace engine oil and filter (Gasoline - MPI) - Except Middle East *2 Replace engine oil and filter (Gasoline - MPI) - For Middle East *2 (Every 10,000 km (6,500 miles) or 12months*3)

<sup>★</sup> Inspect : Inspect and if necessary, adjust, correct, clean or replace.

	, , , , , , , , , , , , , , , , , , , ,
(Continued)	120,000 km (80,000 miles) or 96months
(Continued)  □ Replace engine oil and filter (Gasoline - GDI) *² (Every 10,000 km (6,500 miles) or 12months)  □ Replace engine oil and filter (Diesel) - For Russia *² *³ □ Replace engine oil and filter (Diesel) - Except Russia *² *³ (Every 10,000 km (6,500 miles) or 12months)  □ Add fuel additives (Gasoline) *¹⁰ (Every 5,000 km or 6months)  ※ Inspect : Inspect and if necessary, adjust, correct, clean or replace.	□ Inspect air cleaner filter - Except Middle East □ Inspect air conditioner refrigerant/compressor (if equipped) □ Inspect battery condition □ Inspect brake lines, hoses and connections □ Inspect all electrical system □ Inspect brake pedal, clutch pedal (if equipped) □ Inspect brake/clutch(if equipped) fluid □ Inspect disc brakes and pads □ Inspect drive belt (Gasoline) *¹ □ Inspect drive shafts and boots □ Inspect exhaust system □ Inspect front suspension ball joints □ Inspect fuel filler cap (Diesel) □ Inspect fuel lines, hoses and connections (Gasoline, Diesel) □ Inspect steering gear rack, linkage and boots □ Inspect tire (pressure & tread wear) □ Inspect manual transaxle fluid (if equipped)
	<ul> <li>☐ Inspect vapor hose and fuel filler cap (Gasoline)</li> <li>☐ Inspect fuel tank air filter (Gasoline, if equipped)</li> </ul>
	□ Replace air cleaner filter - For Middle East
	(Continued)

(Continued)	(Continued)
□ Replace climate control air filter □ Replace engine oil and filter (Gasoline - MPI) - Except Middle East *² □ Replace engine oil and filter (Gasoline - MPI) - For Middle East *² (Every 10,000 km (6,500 miles) or 12months*³) □ Replace engine oil and filter (Gasoline - GDI) *² (Every 10,000 km (6,500 miles) or 12months)	<ul> <li>□ Add fuel additives (Gasoline) *10 (Every 5,000 km or 6months)</li> <li>□ Inspect drive belt (Diesel) - For Russia *9 (At first, 90,000km (60,000 miles) or 48months after that, every 30,000km (20,000 miles) or 24 months)</li> <li>□ Inspect drive belt (Diesel) - Except Russia *9 (At first, 80,000km (50,000miles) or 48months after that, every 20,000km (12,500miles) or 12 months)</li> </ul>
☐ Replace engine oil and filter (Diesel) - For Russia *² *³ ☐ Replace engine oil and filter (Diesel) - Except Russia *² *³	
(Every 10,000 km (6,500 miles) or 12months)	No check, No service required
☐ Replace fuel filter (Gasoline) *7	☐ Automatic transaxle fluid
☐ Replace fuel filter cartridge (Diesel) *4	
☐ Replace spark plug (Gasoline - Nickel)	* Inspect : Inspect and if necessary, adjust, correct, clean or replace.
□ Replace spark plugs (Gasoline - Iridium) *5	теріасе.
(Every 160,000 km (100,000 miles) or 120months)	
Replace coolant *8	
(At first, 210,000 km (120,000 miles) or 120months	
after that, every 30,000 km (20,000 miles) or 24months *5)	
☐ Inspect cooling system  (At first, 60,000 km (40,000 miles) or 49months	
(At first, 60,000 km (40,000 miles) or 48months	
(Continued)	
after that, every 30,000 km (20,000 miles) or 24months) (Continued)	

# MAINTENANCE UNDER SEVERE USAGE CONDITIONS - EXCEPT EUROPE, FOR RUSSIA

The following items must be serviced more frequently on cars mainly used under severe driving conditions. Refer to the chart below for the appropriate maintenance intervals.

R : Replace I : Inspect and if necessary, adjust, correct, clean or replace

Mai	ntenance i	tem	Maintenance operation	Maintenance intervals	Driving condition
	Gasoline	Except Middle East	R	Every 7,500 km (5,000 miles) or 6 months	A, B, C, D, E,
- MPI	For Middle East	R	Every 5,000 km (3,000 miles) or 6 months	F, G, H, I, J	
Engine oil and engine oil filter	Gas	soline - GDI	R	Every 5,000 km (3,000 miles) or 6 months	A, B, C, D, E, F, G, H, I, J
	Diesel	For Russia	R	Every 7,500 km (5,000 miles) or 6 months	A, B, C, F, G,
,	Diesei	Except Russia	R	Every 5,000 km (3,000 miles) or 6 months	H, I, J, K, L
Air cleaner filter		R	Replace more frequently depending on the condition	C, E	
Manual transaxle fluid (if equipped)		R	Every 120,000 km (80,000 miles)	C, D, E, G, H, I, J	
Automatic transaxle fluid (if equipped)		R	Every 100,000 km (62,500 miles)	A, C, D, E, F, G, H, I, J	

Maintenance item	Maintenance operation	Maintenance intervals	Driving condition
Steering gear rack, linkage and boots	I	Inspect more frequently depending on the condition	C, D, E, F, G
Front suspension ball joints	I	Inspect more frequently depending on the condition	C, D, E, F, G
Disc brakes and pads, calipers and rotors	ı	Inspect more frequently depending on the condition	C, D, E, G, H
Parking brake (Hand type)	I	Inspect more frequently depending on the condition	C, D, G, H
Driveshaft and boots	ı	Inspect more frequently depending on the condition	C, D, E, F, G, H, I, J
Climate control air filter	R	Replace more frequently depending on the condition	C, E, G

# Severe driving conditions

A: Repeated short distance driving

B: Extensive idling

C: Driving in dusty, rough roads

D : Driving in areas using salt or other corrosive materials or in very cold weather

E: Driving in sandy areas

F: More than 50 % driving in heavy city traffic during hot weather above 32°C (90°F)

G: Driving in mountainous areas.

H: Towing a trailer or using a camper on roof rack

I : Driving for patrol car, taxi, commercial car or vehicle towing

J: Driving over 170 km/h (106 mile/h)

K: Frequently driving in stop-and-go conditions

L: Driving in very cold weather

#### **EXPLANATION OF SCHEDULED MAINTENANCE ITEMS**

#### Engine oil and filter

The engine oil and filter should be changed at the intervals specified in the maintenance schedule. If the car is being driven in severe conditions, more frequent oil and filter changes are required.

#### **Drive belts**

Inspect all drive belts for evidence of cuts, cracks, excessive wear or oil saturation and replace if necessary. Drive belts should be checked periodically for proper tension and adjusted as necessary.

#### Fuel filter (cartridge)

A clogged filter can limit the speed at which the vehicle may be driven, damage the emission system and cause multiple issues such as hard starting. If an excessive amount of foreign matter accumulates in the fuel tank, the filter may require replacement more frequently.

After installing a new filter, run the engine for several minutes, and check for leaks at the connections. We recommend that the fuel filter be replaced by an authorized HYUNDAI dealer.

# Fuel lines, fuel hoses and connections

Check the fuel lines, fuel hoses and connections for leakage and damage. We recommend that the fuel lines, fuel hoses and connections be replaced by an authorized HYUNDAI dealer.

# **WARNING - Diesel only**

Never work on injection system with engine running or within 30 seconds after shutting off engine. High pressure pump, rail, injectors and high pressure pipes are subject to high pressure even after the engine stopped. The fuel jet produced by fuel leaks may cause serious injury, if it touch the body. People using pacemakers should not move more than 30cm closer to the ECU or wiring harness within the engine room while engine is running, since the high currents in the Common Rail system produce considerable magnetic fields.

#### Vapor hose and fuel filler cap

The vapor hose and fuel filler cap should be inspected at those intervals specified in the maintenance schedule. Make sure that a new vapor hose or fuel filler cap is correctly replaced.

# Vacuum crankcase ventilation hoses (if equipped)

Inspect the surface of hoses for evidence of heat and/or mechanical damage. Hard and brittle rubber, cracking, tears, cuts, abrasions, and excessive swelling indicate deterioration. Particular attention should be paid to examine those hose surfaces nearest to high heat sources, such as the exhaust manifold.

Inspect the hose routing to assure that the hoses do not come in contact with any heat source, sharp edges or moving component which might cause heat damage or mechanical wear. Inspect all hose connections, such as clamps and couplings, to make sure they are secure, and that no leaks are present. Hoses should be replaced immediately if there is any evidence of deterioration or damage.

#### Air cleaner filter

We recommend that you use parts for replacement from an authorized HYUNDAI dealer.

# Spark plugs (for gasoline engine)

Make sure to install new spark plugs of the correct heat range.

# Valve clearance (for gasoline engine)

Inspect excessive valve noise and/or engine vibration and adjust if necessary. We recommend that the valve clearance be serviced by an authorized HYUNDAI dealer.

### Cooling system

Check the cooling system parts, such as radiator, coolant reservoir, hoses and connections for leakage and damage. Replace any damaged parts.

#### Coolant

The coolant should be changed at the intervals specified in the maintenance schedule.

# Manual transaxle fluid (if equipped)

Inspect the manual transaxle fluid according to the maintenance schedule.

# Automatic transaxle fluid (if equipped)

But in severe conditions, we recommend that the automatic transaxle fluid be changed by an authorized HYUNDAI dealer in accordance to the maintenance schedule.

#### \* NOTICE

Automatic transaxle fluid color is basically red.

As the vehicle is driven, the automatic transaxle fluid will begin to look darker. It is normal condition and you should not judge the need to replace the fluid based upon the changed color.

#### ∴ CAUTION

The use of a non-specified fluid could result in transaxle malfunction and failure.

Use only specified automatic fluid. transaxle (Refer "Recommended lubricants and capacities" in section 8.)

#### Brake hoses and lines

Visually check for proper installation. chafing, cracks, deterioration and any leakage. Replace any deteriorated or damaged parts immediately.

#### Brake fluid

Check brake fluid level in the brake fluid reservoir. The level should be between "MIN" and "MAX" marks on the side of the reservoir. Use only hydraulic brake fluid conforming to DOT 3 or DOT 4 specification.

# Brake pads, calipers and rotors

Check the pads for excessive wear, discs for run out and wear, and calipers for fluid leakage.

For more information on checking the pads or lining wear limit, refer to the Hvundai web site.

(http://brakemanual.hmc.co.kr)

# Suspension mounting bolts

Check the suspension connections for looseness or damage. Retighten to the specified torque.

# Parking brake

Inspect the parking brake system including the EPB actuator, wiring and connectors.

# Steering gear box, linkage & boots/lower arm ball joint

With the vehicle stopped and engine off, check for excessive free-play in the steering wheel.

Check the linkage for bends or damage. Check the dust boots and ball joints for deterioration, cracks, or damage, Replace any damaged parts.

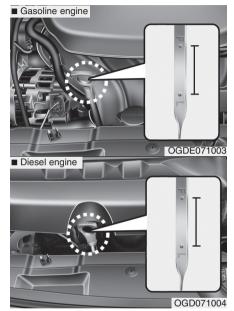
#### Drive shafts and boots

Check the drive shafts, boots and clamps for cracks, deterioration, or damage. Replace any damaged parts and, if necessary, repack the grease.

# Air conditioning refrigerant/ compressor (if equipped)

Check the air conditioning lines and connections for leakage and damage.

#### **ENGINE OIL**



# Checking the engine oil level

- 1. Be sure the vehicle is on level ground.
- 2. Start the engine and allow it to reach normal operating temperature.
- 3. Turn the engine off and wait for a few minutes (about 5 minutes) for the oil to return to the oil pan.
- 4. Pull the dipstick out, wipe it clean, and re-insert it fully.

WARNING - Radiator hose
Be very careful not to touch the
radiator hose when checking or
adding the engine oil as it may be
hot enough to burn you.

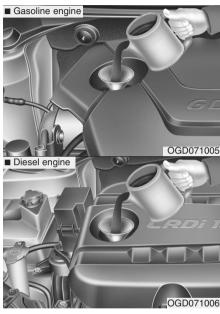
Pull the dipstick out again and check the level. The level should be between F and L.

# **A** CAUTION

- Do not overfill the engine oil. It may damage the engine.
- Do not spill engine oil, when adding or changing engine oil. If you drop the engine oil on the engine room, wipe it off immediately.

CAUTION - Diesel engine
Overfilling the engine oil may cause
severe dieseling due to churning
effect. It may lead to engine damage
accompanied with abrupt engine
speed increment, combustion noise

and white smoke emission.



If it is near or at L, add enough oil to bring the level to F. **Do not overfill.** 

Use a funnel to help prevent oil from being spilled on engine components.

Use only the specified engine oil. (Refer to "Recommended lubricants and capacities" in section 8.)

# Changing the engine oil and filter

We recommend that the engine oil and filter be replaced by an authorized HYUNDAI dealer.



# **WARNING**

Used engine oil may cause irritation or cancer of the skin if left in contact with the skin for prolonged periods of time. Used engine oil contains chemicals that have caused cancer in laboratory animals. Always protect your skin by washing your hands thoroughly with soap and warm water as soon as possible after handling used oil.

#### **ENGINE COOLANT**

The high-pressure cooling system has a reservoir filled with year-round antifreeze coolant. The reservoir is filled at the factory.

Check the antifreeze protection and coolant concentration level at least once a year, at the beginning of the winter season, and before traveling to a colder climate.

# Checking the coolant level



### **WARNING**



Removing radiator cap

- Never attempt to remove the radiator cap while the engine is operating or hot. Doing so might lead to cooling system and engine damage and could result in serious personal injury from escaping hot coolant or steam.
- Turn the engine off and wait until it cools down. Use extreme care when removing the radiator cap. Wrap a thick towel around it, and turn it counterclockwise slowly to the first stop. Step back while the pressure is released from the cooling system. When you are sure all the pressure has been released, press down on the cap, using a thick towel, and continue turning counterclockwise to remove it.

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#### (Continued)

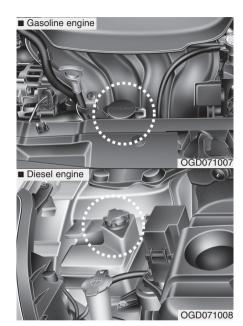
 Even if the engine is not operating, do not remove the radiator cap or the drain plug while the engine and radiator are hot. Hot coolant and steam may still blow out under pressure, causing serious injury.

# **A** WARNING



The electric motor (cooling fan) is controlled by engine coolant temperature, refrigerant pressure and vehicle speed.

It may sometimes operate even when the engine is not running. Use extreme caution when working near the blades of the cooling fan so that you are not injured by a rotating fan blades. As the engine coolant temperature decreases, the electric motor will automatically shut off. This is a normal condition. If your vehicle is equipped with GDI, the electric motor (cooling fan) may operate until you disconnect the negative battery cable.



Check the condition and connections of all cooling system hoses and heater hoses. Replace any swollen or deteriorated hoses.

The coolant level should be filled between F (MAX) and L (MIN) marks on the side of the coolant reservoir when the engine is cool.

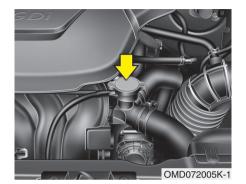
If the coolant level is low, add enough distilled (deionized) water. Bring the level to F (MAX), but do not overfill. If frequent coolant refill is required, we recommend that the system be inspected by an authorized HYUNDAI dealer.

#### Recommended engine coolant

- When adding coolant, use only deionized water or soft water for your vehicle and never mix hard water in the coolant filled at the factory. An improper coolant mixture can result in serious malfunction or engine damage.
- The engine in your vehicle has aluminum engine parts and must be protected by an ethylene-glycol-based coolant to prevent corrosion and freezing.
- DO NOT USE alcohol or methanol coolant or mix them with the specified coolant.
- Do not use a solution that contains more than 60% antifreeze or less than 35% antifreeze, which would reduce the effectiveness of the solution.

For mixture percentage, refer to the following table.

Ambient Temperature	Mixture Percentage (volume)  Antifreeze Water	
remperature		
-15°C (5°F)	35	65
-25°C (-13°F)	40	60
-35°C (-31°F)	50	50
-45°C (-49°F)	60	40







Radiator cap

Do not remove the radiator cap when the engine and radiator are hot. Scalding hot coolant and steam may blow out under pressure causing serious injury.

# Changing the coolant

We recommend that the coolant be replaced by an authorized HYUNDAI dealer.

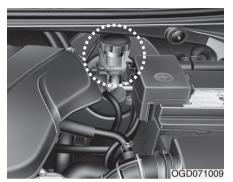
# **A** CAUTION

Put a thick cloth or fabric around the radiator cap before refilling the coolant in order to prevent the coolant from overflowing into engine parts such as generator.

# **WARNING - Coolant**

- Do not use radiator coolant or antifreeze in the washer fluid reservoir.
- Radiator coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control or damage to paint and body trim.

#### **BRAKE/CLUTCH FLUID**



# Checking the brake fluid level

Check the fluid level in the reservoir periodically. The fluid level should be between MAX and MIN marks on the side of the reservoir

Before removing the reservoir cap and adding brake fluid, clean the area around the reservoir cap thoroughly to prevent brake fluid contamination.

If the level is low, add fluid to the MAX level. The level will fall with accumulated mileage. This is a normal condition associated with the wear of the brake linings. If the fluid level is excessively low, we recommend that the system be checked by an authorized HYUNDAI dealer.

Use only the specified brake fluid. (Refer to "Recommended lubricants and capacities" in section 8.)

Never mix different types of fluid.

WARNING - Loss of brake

In the event the brake system requires frequent additions of fluid, we recommend that the system be inspected by an authorized HYUNDAI dealer.

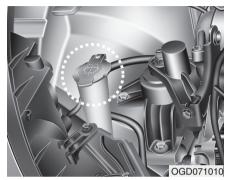
A WARNING - Brake fluid

When changing and adding brake fluid, handle it carefully. Do not let it come in contact with your eyes. If brake fluid should come in contact with your eyes, immediately flush them with a large quantity of fresh tap water. Have your eyes examined by a doctor as soon as possible.

# **!** CAUTION

Do not allow brake fluid to contact the vehicle's body paint, as paint damage will result. Brake fluid, which has been exposed to open air for an extended time should never be used as its quality cannot be guaranteed. It should be disposed of properly. Don't put in the wrong kind of fluid. A few drops of mineral-based oil, such as engine oil, in your brake system can damage brake system parts.

#### **WASHER FLUID**



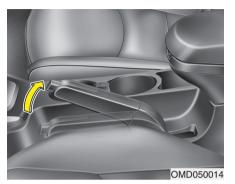
### Checking the washer fluid level

Check the fluid level in the washer fluid reservoir and add fluid if necessary. Plain water may be used if washer fluid is not available. However, use washer solvent with antifreeze characteristics in cold climates to prevent freezing.

### **WARNING - Coolant**

- Do not use radiator coolant or antifreeze in the washer fluid reservoir.
- Radiator coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control or damage to paint and body trim.
- Windshield Washer fluid agents contain some amounts of alcohol and can be flammable under certain circumstances. Do not allow sparks or flame to contact the washer fluid or the washer fluid reservoir. Damage to the vehicle or occupants could occur.
- Windshield washer fluid is poisonous to humans and animals.
   Do not drink and avoid contacting windshield washer fluid.
   Serious injury or death could occur.

#### **PARKING BRAKE - HAND TYPE**



# Checking the parking brake

Check the stroke of the parking brake by counting the number of "clicks" heard while fully applying it from the released position. Also, the parking brake alone should securely hold the vehicle on a fairly steep grade. If the stroke is more or less than specified, we recommend that the system be serviced by an authorized HYUNDAI dealer.

Stroke: 6~8 "clicks" at a force of 20 kg (44 lbs, 196 N).

# **FUEL FILTER (FOR DIESEL)**

# Draining water from fuel filter

The fuel filter for diesel engine plays an important role of separating water from fuel and accumulating the water in its bottom.

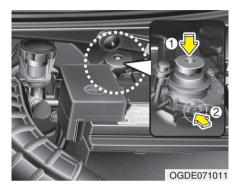
If water accumulates in the fuel filter, the warning light comes on when the ignition switch is in the ON position.



If this warning light illuminates, we recommend that the system be serviced by an authorized HYUNDAI dealer.

# **!** CAUTION

If the water accumulated in the fuel filter is not drained at proper times, damages to the major parts such as the fuel system can be caused by water permeation in the fuel filter.



# Extracting air from the fuel filter

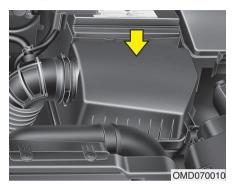
If you drive until you have no fuel left or if you replace the fuel filter, be sure to extract air from the fuel system as it makes it difficult to start the engine.

- 1. Pump up and down(1) approximately 50 times until the pump is hard.
- 2. Extract air from the fuel filter by removing the bolt(2) with a cross-tip screw driver and reinstall the bolt(2).
- 3. Pump up and down(1) approximately 15 times.
- 4. Extract air from the fuel filter by removing the bolt(2) with a cross-tip screw driver and reinstall the bolt(2).
- Pump up and down(1) approximately 5 times.

#### \* NOTICE

- Use cloths when you extract air so that the fuel is not sprayed around.
- Clean the fuel around the fuel filter or the injection pump before starting the engine to prevent fire.
- Finally, check each part if the fuel is leaking.

# **AIR CLEANER**

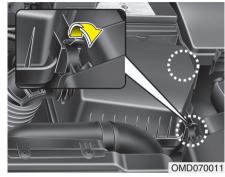


# Filter replacement

It must be replaced when necessary, and should not be washed.

You can clean the filter when inspecting the air cleaner element.

Clean the filter by using compressed air.



1. Loosen the air cleaner cover attaching clips and open the cover.



- 2. Wipe the inside of the air cleaner.
- 3. Replace the air cleaner filter.
- 4. Lock the cover with the cover attaching clips.

Replace the filter according to the Maintenance Schedule.

If the vehicle is operated in extremely dusty or sandy areas, replace the element more often than the usual recommended intervals. (Refer "Maintenance under severe usage conditions" in this section.)



### **⚠** CAUTION

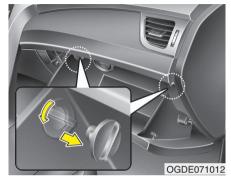
- Do not drive with the air cleaner removed; this will result in excessive engine wear.
- · When removing the air cleaner filter. be careful that dust or dirt does not enter the air intake, or damage may result.
- We recommend that you use parts for replacement from an authorized HYUNDAI dealer.

#### **CLIMATE CONTROL AIR FILTER**

### Filter inspection

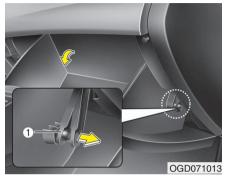
If the vehicle is operated in the severely air-polluted cities or on dusty rough roads for a long period, it should be inspected more frequently and replaced earlier. When you, the owner, replace the climate control air filter, replace it performing the following procedure, and be careful to avoid damaging other components.

Replace the filter according to the maintenance Schedule.

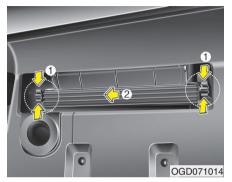


# Filter replacement

1. With the glove box open, remove the stoppers on both sides.



2. Open the glove box and remove the support strap (1).



3. Remove the cover while pressing the lock on both side of the cover and remove the climate control air filter.

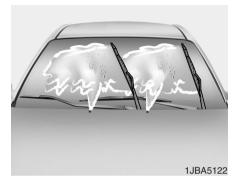


- 4. Replace the climate control air filter.
- 5. Reassemble in the reverse order of disassembly.

#### \* NOTICE

When replacing the climate control air filter install it properly. Otherwise, the system may produce noise and the effectiveness of the filter may be reduced.

#### **WIPER BLADES**



# Blade inspection \* NOTICE

Commercial hot waxes applied by automatic car washes have been known to make the windshield difficult to clean.

Contamination of either the windshield or the wiper blades with foreign matter can reduce the effectiveness of the windshield wipers. Common sources of contamination are insects, tree sap, and hot wax treatments used by some commercial car washes. If the blades are not wiping properly, clean both the window and the blades with a good cleaner or mild detergent, and rinse thoroughly with clean water.

# **!** CAUTION

To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.

# Blade replacement

When the wipers no longer clean adequately, the blades may be worn or cracked, and require replacement.

# **A** CAUTION

To prevent damage to the wiper arms or other components, do not attempt to move the wipers manually.

# **A** CAUTION

The use of a non-specified wiper blade could result in wiper malfunction and failure.

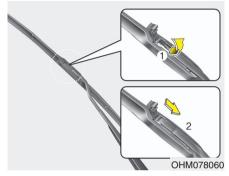


Front windshield wiper blade

1. Raise the wiper arm.

# \* NOTICE

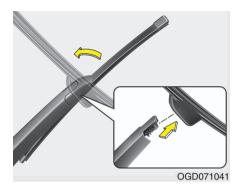
Do not allow the wiper arm to fall against the windshield, since it may chip or crack the windshield.



2. Lift up the wiper blade clip. Then pull down the blade assembly and remove it.

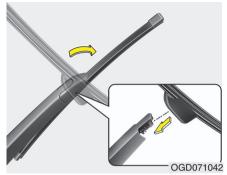


- 3. Install the blade assembly in the reverse order of removal.
- 4. Return the wiper arm to the original position.



# Rear window wiper blade

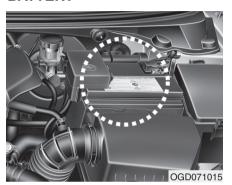
1. Raise the wiper arm and pull out the wiper blade assembly.



- 2. Install the new blade assembly by inserting the center part into the slot in the wiper arm until it clicks into place.
- Make sure the blade assembly is installed firmly by trying to pull it slightly.

To prevent damage to the wiper arms or other components, we recommend that the wiper blade be replaced by an authorized HYUNDAI dealer.

#### **BATTERY**



#### For best battery service

- Keep the battery securely mounted.
- · Keep the battery top clean and dry.
- Keep the terminals and connections clean, tight, and coated with petroleum jelly or terminal grease.
- · Rinse any spilled electrolyte from the battery immediately with a solution of water and baking soda.
- If the vehicle is not going to be used for an extended time, disconnect the battery cables.

# **WARNING** - Battery dangers



Always read the following instructions carefully when handling a battery.



Keep lighted cigarettes and all other flames or sparks away from the battery.



Hydrogen, a highly combustible gas, is always present in battery cells and may explode if ignited.



Keep batteries out of the reach of children because batteries contain highly corrosive SULFURIC ACID. Do not allow battery acid to contact your skin, eyes, clothing or paint finish.

(Continued)

# (Continued)



If any electrolyte gets into your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention.

If electrolyte gets on your skin, thoroughly wash the contacted area. If you feel a pain or a burning sensation, get medical attention immediately.



Wear eye protection when charging or working near a battery. Always provide ventilation when working in an enclosed space.



An inappropriately disposed battery can be harmful to the environment and human health. Dispose the battery according to your local law(s) or regulation.

(Continued)

#### (Continued)



The battery contains lead. Do not dispose of it after use. Please return the battery to an authorized HYUNDAI dealer to be recvcled

- When lifting a plastic-cased battery, excessive pressure on the case may cause battery acid to leak, resulting in personal injury. Lift with a battery carrier or with your hands on opposite corners.
- Never attempt to recharge the battery when the battery cables are connected.
- The electrical ignition system works with high voltage. Never touch these components with the engine running or the ignition switched on.

Failure to follow the above warnings can result in serious bodily injury or death.

#### ∴ CAUTION

If you use unauthorized electronic devices, the battery may be discharged. Never use unauthorized devices

#### **WARNING**

We recommend that the system be authorized serviced by an HYUNDAI dealer.

### **Battery recharging**

Your vehicle has a maintenance-free. calcium-based battery.

- · If the battery becomes discharged in a short time (because, for example, the headlights or interior lights were left on while the vehicle was not in use), recharge it by slow charging (trickle) for 10 hours.
- · If the battery gradually discharges because of high electric load while the vehicle is being used, recharge it at 20-30A for two hours

# **WARNING** - Recharging batterv

When recharging the battery. observe the following precautions:

- The battery must be removed from the vehicle and placed in an area with good ventilation.
- Do not allow cigarettes, sparks. or flame near the battery.
- Watch the battery during charge ing, and stop or reduce the charging rate if the battery cells begin gassing (boiling) violently or if the temperature of the electrolyte of any cell exceeds 49°C (120°F).
- Wear eye protection when checking the battery during charging. (Continued)

#### (Continued)

- Disconnect the battery charger in the following order.
  - 1. Turn off the battery charger main switch.
  - 2. Unhook the negative clamp from the negative battery terminal.
  - 3. Unhook the positive clamp from the positive battery terminal.
- Before performing maintenance or recharging the battery, turn off all accessories and stop the engine.
- The negative battery cable must be removed first and installed last when the battery is disconnected.

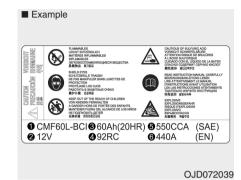
# **!** CAUTION

We recommend that you use parts for replacement from an authorized HYUNDAI dealer.

#### Reset items

Items should be reset after the battery has been discharged or the battery has been disconnected.

- Auto up/down window (See section 4)
- Sunroof (See section 4)
- Trip computer (See section 4)
- Climate control system (See section 4)
- Audio (See section 4)



\* The actual battery label in the vehicle may differ from the illustration.

#### **Battery capacity label**

- 1. CMF65L-BCI: The HYUNDAI model name of battery
- 2. 12V: The nominal voltage
- 3. 60Ah(20HR) : The nominal capacity (in Ampere hours)
- 4. 92RC : The nominal reserve capacity (in min.)
- 5. 550CCA: The cold-test current in amperes by SAE
- 6. 440A: The cold-test current in amperes by EN

#### **TIRES AND WHEELS**

#### Tire care

8.

For proper maintenance, safety, and maximum fuel economy, you must always maintain recommended tire inflation pressures and stay within the load limits and weight distribution recommended for your vehicle.

# Recommended cold tire inflation pressures

All tire pressures (including the spare) should be checked when the tires are cold. "Cold Tires" means the vehicle has not been driven for at least three hours or driven less than 1.6 km (1 mile).

Recommended pressures must be maintained for the best ride, top vehicle handling, and minimum tire wear. For recommended inflation pressure refer to "Tire and wheels" in section



All specifications (sizes and pressures) can be found on a label attached to the vehicle.

# A WARNING - Tire underin-

Severe underinflation (70 kPa (10 psi) or more) can lead to severe heat build-up, causing blowouts, tread separation and other tire failures that can result in the loss of vehicle control leading to severe injury or death. This risk is much higher on hot days and when driving for long periods at high speeds.

# **!** CAUTION

- Underinflation also results in excessive wear, poor handling and reduced fuel economy. Wheel deformation also is possible. Keep your tire pressures at the proper levels. If a tire frequently needs refilling, we recommend that the system be checked by an authorized HYUNDAI dealer.
- Overinflation produces a harsh ride, excessive wear at the center of the tire tread, and a greater possibility of damage from road hazards.

# **!** CAUTION

- Warm tires normally exceed recommended cold tire pressures by 28 to 41 kPa (4 to 6 psi). Do not release air from warm tires to adjust the pressure or the tires will be underinflated.
- Be sure to reinstall the tire inflation valve caps. Without the valve cap, dirt or moisture could get into the valve core and cause air leakage. If a valve cap is missing, install a new one as soon as possible.

WARNING - Tire inflation
Overinflation or underinflation
can reduce tire life, adversely
affect vehicle handling, and
lead to sudden tire failure. This
could result in loss of vehicle
control and potential injury.

# **CAUTION** - Tire pressure Always observe the following:

- Check tire pressure when the tires are cold. (After vehicle has been parked for at least three hours or hasn't been driven more than 1.6 km (1 mile) since startup.)
- Check the pressure of your spare tire each time you check the pressure of other tires.
- Never overload your vehicle. Be careful not to overload a vehicle luggage rack if your vehicle is equipped with one.
- Worn, old tires can cause accidents. If your tread is badly worn, or if your tires have been damaged, replace them.

# Checking tire inflation pressure

Check your tires once a month or more.

Also, check the tire pressure of the spare tire.

#### How to check

Use a good quality gauge to check tire pressure. You can not tell if your tires are properly inflated simply by looking at them. Radial tires may look properly inflated even when they're underinflated.

Check the tire's inflation pressure when the tires are cold. - "Cold" means your vehicle has been sitting for at least three hours or driven no more than 1.6 km (1 mile).

Remove the valve cap from the tire valve stem. Press the tire gauge firmly onto the valve to get a pressure measurement. If the cold tire inflation. pressure matches the recommended pressure on the tire and loading information label, no further adjustment is necessary. If the pressure is low, add air until you reach the recommended amount

If you overfill the tire, release air by pushing on the metal stem in the center of the tire valve. Recheck the tire pressure with the tire gauge. Be sure to put the valve caps back on the valve stems. They help prevent leaks by keeping out dirt and moisture.

# **WARNING**

- Inspect your tires frequently for proper inflation as well as wear and damage. Always use a tire pressure gauge.
- Tires with too much or too little pressure wear unevenly causing poor handling, loss of vehicle control, and sudden tire failure leading to accidents, injuries, and even death. The recommended cold tire pressure for your vehicle can be found in this manual and on the tire label located on the driver's side center pillar.
- Worn tires can cause accidents. Replace tires that are worn, show uneven wear, or are damaged.
- Remember to check the pressure of your spare tire. **HYUNDAI** recommends that you check the spare every time you check the pressure of the other tires on your vehicle.

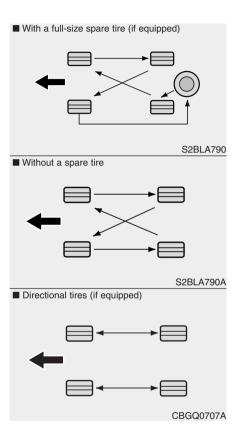
#### Tire rotation

To equalize tread wear, it is recommended that the tires be rotated every 12,000 km (7,500 miles) or sooner if irregular wear develops.

During rotation, check the tires for correct balance.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire pressure, improper wheel alignment, out-of-balance wheels, severe braking or severe cornering. Look for bumps or bulges in the tread or side of tire. Replace the tire if you find either of these conditions. Replace the tire if fabric or cord is visible. After rotation, be sure to bring the front and rear tire pressures to specification and check lug nut tightness.

Refer to "Tire and wheels" in section 8.



Disc brake pads should be inspected for wear whenever tires are rotated.

### \* NOTICE

Rotate radial tires that have an asymmetric tread pattern only from front to rear and not from right to left.

## **WARNING**

- Do not use the compact spare tire for tire rotation.
- Do not mix bias ply and radial ply tires under any circumstances. This may cause unusual handling characteristics that could result in death, severe injury, or property damage.

## Wheel alignment and tire balance

The wheels on your vehicle were aligned and balanced carefully at the factory to give you the longest tire life and best overall performance.

In most cases, you will not need to have your wheels aligned again. However, if you notice unusual tire wear or your vehicle pulling one way or the other, the alignment may need to be reset.

If you notice your vehicle vibrating when driving on a smooth road, your wheels may need to be rebalanced.

## **!** CAUTION

Improper wheel weights can damage your vehicle's aluminum wheels. Use only approved wheel weights.



## Tire replacement

If the tire is worn evenly, a tread wear indicator will appear as a solid band across the tread. This shows there is less than 1.6 mm (1/16 in.) of tread left on the tire. Replace the tire when this happens.

Do not wait for the band to appear across the entire tread before replacing the tire.

## WARNING - Replacing tires

- Driving on worn-out tires is very hazardous and will reduce braking effectiveness, steering accuracy, and traction.
- Your vehicle is equipped with tires designed to provide for safe ride and handling capability. Do not use a size and type of tire and wheel that is different from the one that is originally installed on your vehicle. It can affect the safety and performance of your vehicle, which could lead to handling failure or rollover and serious injury. When replacing the tires, be sure to equip all four tires with the tire and wheel of the same size, type, tread, brand and load-carrying capacity.

(Continued)

## (Continued)

- The use of any other tire size or type may seriously affect ride, handling, ground clearance, stopping distance, body to tire clearance, snow tire clearance, and speedometer reliability.
- It is best to replace all four tires at the same time. If that is not possible, or necessary, then replace the two front or two rear tires as a pair. Replacing just one tire can seriously affect your vehicle's handling.
- The ABS works by comparing the speed of the wheels. Tire size can affect wheel speed. When replacing tires, all 4 tires must use the same size originally supplied with the vehicle. Using tires of a different size can cause the ABS (Anti-lock Brake System) and ESC (Electronic Stability Control) to work irregularly.

## Compact spare tire replacement (if equipped)

A compact spare tire has a shorter tread life than a regular size tire. Replace it when you can see the tread wear indicator bars on the tire. The replacement compact spare tire should be the same size and design tire as the one provided with your new vehicle and should be mounted on the same compact spare tire wheel. The compact spare tire is not designed to be mounted on a regular size wheel, and the compact spare tire wheel is not designed for mounting a regular size tire.

## Wheel replacement

When replacing the metal wheels for any reason, make sure the new wheels are equivalent to the original factory units in diameter, rim width and offset.

## **WARNING**

A wheel that is not the correct size may adversely affect wheel and bearing life, braking and stopping abilities, handling characteristics, ground clearance, body-to-tire clearance, snow chain clearance, speedometer and odometer calibration, headlight aim and bumper height.

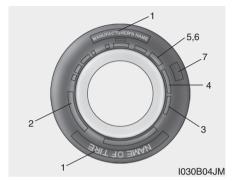
#### Tire traction

Tire traction can be reduced if you drive on worn tires, tires that are improperly inflated or on slippery road surfaces. Tires should be replaced when tread wear indicators appear. To reduce the possibility of losing control, slow down whenever there is rain, snow or ice on the road.

### Tire maintenance

In addition to proper inflation, correct wheel alignment helps to decrease tire wear. If you find a tire is worn unevenly, have your dealer check the wheel alignment.

When you have new tires installed, make sure they are balanced. This will increase vehicle ride comfort and tire life. Additionally, a tire should always be rebalanced if it is removed from the wheel.



## Tire sidewall labeling

This information identifies and describes the fundamental characteristics of the tire and also provides the tire identification number (TIN) for safety standard certification. The TIN can be used to identify the tire in case of a recall.

1. Manufacturer or brand name
Manufacturer or Brand name is shown.

## 2. Tire size designation

A tire's sidewall is marked with a tire size designation. You will need this information when selecting replacement tires for your car. The following explains what the letters and numbers in the tire size designation mean.

Example tire size designation:

(These numbers are provided as an example only; your tire size designator could vary depending on your vehicle.)

### 195/65R15 91H

- P Applicable vehicle type (tires marked with the prefix "P" are intended for use on passenger vehicles or light trucks; however, not all tires have this marking).
- 195 Tire width in millimeters.
- 65 Aspect ratio. The tire's section height as a percentage of its width.
- R Tire construction code (Radial).
- 15 Rim diameter in inches.

- 91 Load Index, a numerical code associated with the maximum load the tire can carry.
- H Speed Rating Symbol. See the speed rating chart in this section for additional information.

### Wheel size designation

Wheels are also marked with important information that you need if you ever have to replace one. The following explains what the letters and numbers in the wheel size designation mean.

Example wheel size designation: **6.0JX15** 

- 6.0 Rim width in inches.
- J Rim contour designation.
- 15 Rim diameter in inches.

#### Tire speed ratings

The chart below lists many of the different speed ratings currently being used for passenger cars. The speed rating is part of the tire size designation on the sidewall of the tire. This symbol corresponds to that tire's designed maximum safe operating speed.

Speed Rating Symbol	Maximum Speed
S	180 km/h (112 mph)
Т	190 km/h (118 mph)
Н	210 km/h (130 mph)
V	240 km/h (149 mph)
Z	Above 240 km/h (149 mph)

## 3. Checking tire life

(TIN : Tire Identification Number)

Any tires that are over 6 years, based on the manufacturing date, tire strength and performance, decline with age naturally (even unused spare tires). Therefore, the tires (including the spare tire) should be replaced by new ones. You can find the manufacturing date on the tire sidewall (possibly on the inside of the wheel), displaying the DOT Code. The DOT Code is a series of numbers on a tire consisting of numbers and English letters. The manufacturing date is designated by the last four digits (characters) of the DOT code.

#### DOT: XXXX XXXX OOOO

The front part of the DOT means a plant code number, tire size and tread pattern and the last four numbers indicate week and year manufactured.

## For example:

DOT XXXX XXXX 1611 represents that the tire was produced in the 16th week of 2011.

## **A** WARNING - Tire age

Tires degrade over time, even when they are not being used. Regardless of the remaining tread, it is recommended that tires generally be replaced after six (6) years of normal service. Heat caused by hot climates or frequent high loading conditions can accelerate the aging process. Failure to follow this Warning can result in sudden tire failure, which could lead to a loss of control and an accident involving serious injury or death.

## 4. Tire ply composition and material

The number of layers or plies of rubber-coated fabric are in the tire. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others. The letter "R" means radial ply construction; the letter "D" means diagonal or bias ply construction; and the letter "B" means belted-bias ply construction.

## 5. Maximum permissible inflation pressure

This number is the greatest amount of air pressure that should be put in the tire. Do not exceed the maximum permissible inflation pressure. Refer to the Tire and Loading Information label for recommended inflation pressure.

## 6. Maximum load rating

This number indicates the maximum load in kilograms and pounds that can be carried by the tire. When replacing the tires on the vehicle, always use a tire that has the same load rating as the factory installed tire.

## 7. Uniform tire quality grading

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width.

For example:

TREADWEAR 200 TRACTION AA TEMPERATURE A

#### Tread wear

The tread wear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one-and-a-half times (1½) as well on the government course as a tire graded 100.

The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm because of variations in driving habits, service practices and differences in road characteristics and climate.

These grades are molded on the side-walls of passenger vehicle tires. The tires available as standard or optional equipment on your vehicles may vary with respect to grade.

#### Traction - AA, A, B & C

The traction grades, from highest to lowest, are AA, A, B and C. Those grades represent the tires ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

## **WARNING**

The traction grade assigned to this tire is based on straightahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

## Temperature -A, B & C

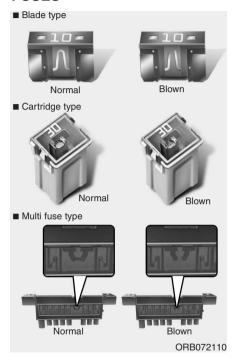
The temperature grades are A (the highest), B and C representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by the law.

# WARNING - Tire temperature

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat build-up and possible sudden tire failure. This can cause loss of vehicle control and serious injury or death.

#### **FUSES**



A vehicle's electrical system is protected from electrical overload damage by fuses.

This vehicle has 3 (or 4) fuse panels, one located in the driver's side panel bolster. others in the engine compartment near the battery.

If any of your vehicle's lights, accessories, or controls do not work, check the appropriate circuit fuse. If a fuse has blown, the element inside the fuse will be melted.

If the electrical system does not work, first check the driver's side fuse panel.

Always replace a blown fuse with one of the same rating.

If the replacement fuse blows, this indicates an electrical problem. Avoid using the system involved and we recommend that you consult an authorized HYUNDAI dealer.

Three kinds of fuses are used: blade type for lower amperage rating, cartridge type, and multi fuse type for higher amperage ratings.

## **WARNING** - Fuse replacement

- Never replace a fuse with anvthing but another fuse of the same rating.
- A higher capacity fuse could cause damage and possibly a fire.
- Never install a wire or aluminum foil instead of the proper fuse even as a temporary repair. It may cause extensive wiring damage and a possible fire.

## **A** CAUTION

Do not use a screwdriver or any other metal object to remove fuses because it may cause a short circuit and damage the system.

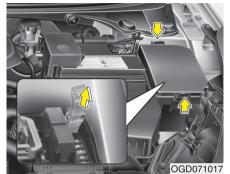
### \* NOTICE

The actual fuse/relay panel label may differ from equipped items.



Inner panel fuse replacement

- 1. Turn the ignition switch and all other switches off.
- 2. Open the fuse panel cover.



- 3. Pull the suspected fuse straight out. Use the removal tool provided in the engine compartment fuse panel.
- 4. Check the removed fuse; replace it if it is blown.
- 5. Push in a new fuse of the same rating, and make sure it fits tightly in the clips. If it fits loosely, we recommend that you consult an authorized HYUNDAI dealer. If you do not have a spare, use a fuse of the same rating from a circuit you may not need for operating the vehicle, such as the cigar lighter fuse.



Fuse switch

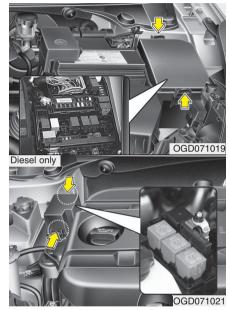
Always, put the fuse switch at the ON position.

If you move the switch to the OFF position, some items such as audio and digital clock must be reset and transmitter (or smart key) may not work properly.



## **⚠** CAUTION

Always place the fuse switch in the ON position while driving the vehicle.



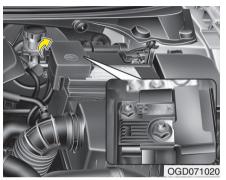
Engine compartment panel fuse replacement

- Turn the ignition switch and all other switches off.
- 2. Remove the fuse box cover by pressing the tap and pulling up.

- Check the removed fuse; replace it if it is blown. To remove or insert the fuse, use the fuse puller in the engine compartment fuse panel.
- Push in a new fuse of the same rating, and make sure it fits tightly in the clips.
   If it fits loosely, we recommend that you consult an authorized HYUNDAI dealer.

## ∴ CAUTION

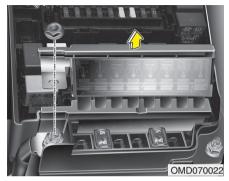
After checking the fuse box in the engine compartment, securely install the fuse box cover. If not, electrical failures may occur from water leaking in.



#### Main fuse

If the main fuse is blown, it must be removed as follows:

- 1. Turn off the engine.
- 2. Disconnect the negative battery cable.
- 3. Remove the nuts shown in the picture above.
- 4. Replace the fuse with a new one of the same rating.
- 5. Reinstall in the reverse order of removal.



## Multi fuse

If the multi fuse is blown, it must be removed as follows:

- 1. Turn off the engine.
- 2. Disconnect the negative battery cable.
- 3. Remove the fuse panel on the right side in the engine compartment.
- 4. Remove the nuts shown in the picture above.
- 5. Replace the fuse with a new one of the same rating.
- 6. Reinstall in the reverse order of removal.

## \* NOTICE

If the multi fuse or main fuse is blown, we recommend that you consult an authorized HYUNDAI dealer.

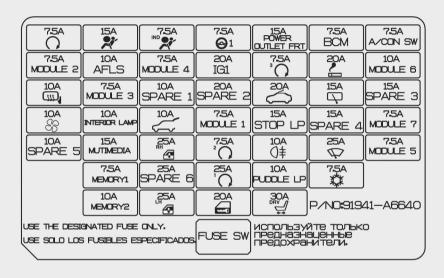


Fuse/relay panel description Inner fuse panel

Inside the fuse/relay panel covers, you can find the fuse/relay label describing fuse/relay name and capacity.

## \* NOTICE

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse panel in your vehicle, refer to the fuse panel label.



OGDE071061

## Instrument panel (Driver's side fuse panel)

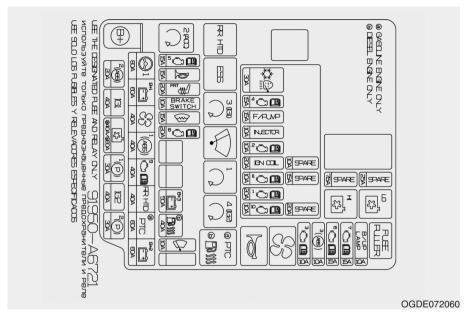
No.	Fuse rating	Symbol	Fuse Name	Protected component					
1	20A	CIGAR LIGHT		Console Cigar Light, Rear Power Outlet					
2	7.5A	MODULE 1	MODULE 1	Sport Mode Switch, Power Outside Mirror Switch					
3	7.5A <b>MODULE 4</b> MODULE 4		MODULE 4	ATM Shift Lever IND., Multipurpose Check Connector, Electro Chromic Mirror, A/C Control Module, Head Lamp Leveling Device Actuator LH/RH, Fuel Filter Warning Sensor(D4FD)					
4	7.5A	MODULE 3	MODULE 3	Instrument Cluster, BCM, Tire Pressure Monitoring Module, Audio, Driver/Passenger Seat Warmer Module					
5	15A	POWER OUTLET	POWER OUTLET	Front Power Outlet					
6	10A	(III)	HTD MIRR	Driver/Passenger Power Outside Mirror, A/C Control Module, ECU					
7	25A	5A WIPER FRT		ICM Relay Box (Rain Sensor Relay), Multifunction Switch, E/R Fuse & Relay Box (RLY. 7 Front Wiper Motor					
8	7.5A	*	A/CON	A/C Control Module, E/R Fuse & Relay Box (RLY. 4)					
9	25A	LH	P/WDW LH						
10	10A	\}	TAIL GATE	Tail Gate, Rear Camera Open Actuator					
11	30A	DRV	P/SEAT DRV	Driver Manual Switch					
12	7.5A	MODULE2	MODULE2	Lane Keeping Assist Module, ICM Relay Box (HAC Relay), Electric Parking Brake Module, Rear Camera Module					

No.	Fuse rating	Symbol	Fuse Name	Protected component				
13	15A	15A 🗘 WIPER RR		Rear Wiper Relay, Rear Wiper Motor, Multifunction Switch				
14	15A	STOP LP	STOP LP	Stop Lamp Switch, ICM Relay Box (HAC Relay)				
15	25A	RH	P/WDW RH					
16	7.5A	² <b>(</b> )	PDM 2	Smart Key Control Module, Start/Stop Button Switch				
17	7.5A	7.5A <b>MODULE 5</b> MODULE 5		EMS BOX (Head Lamp Washer Relay), Ionizer Unit, Panorama Sunroof, DC-DC Converter, DSL BOX (PTC Relay), E/R Fuse & Relay BOX(RLY.), Driver/Passenger Seat Warmer Module				
18	20A	A IG1 IG1		E/R Fuse & Relay Box (Fuse – F)				
19	10A	10A MODULE 6 MODULE 6		Outside Mirror Switch, Audio, Navigation Head Unit, Digital Clock, DC-DC Converter				
20	7.5A	<b>9</b> 1	MDPS	EPS Control Module				
21	20A		DR LOCK	Door Lock/Unlock Relay, ICM Relay BOX (Dead Lock Relay), Driver/Passenger Door Lock Actuator, Fuel filler actuator, Door Lock Actuator LH/RH				
22	10A	10A INTERIOR INTERIOR LAMP		Glove Box Lamp, Vanity Lamp LH/RH, Overhead Console Lamp, Room Lamp, Luggage Lamp, DR Warning Switch				
23	15A MULTI MULTI MEDIA		MULTI MEDIA	Audio, Navigation Head Unit, DC-DC Converter (Audio)				
24	15A	*	A/BAG	SRS Control Module				

No.	Fuse rating	Symbol	Fuse Name	Protected component					
25	7.5A	MEMORY 1	MEMORY 1	Jltrasonic instruction Protection Sensor					
26	7.5A	IND	A/BAG IND	Instrument Cluster					
27	7.5A	°C	PDM 3	Smart Key Control Module, Ultrasonic instrusion Protection Sensor					
28	10A	MEMORY 2	MEMORY 2	Outside Mirror Switch, Tire Pressure Monitoring Module, BCM, Auto Light & Photo Sensor, Instrument Cluster, OBD, Digital Clock, A/C Control Module					
29	25A	¹() PDM 1		Smart Key Control Module					
30	7.5A	C) START		W/O Button Start : E/R Fuse & Relay Box (RLY.) Ignition Lock Switch, Transaxle Range Switch With Button Start : ECM/PCM, Transaxle Range Switch					
31	20A	SUNROOF		Panorama Sunroof					
32	7.5A	BCM BCM		BCM, Smart Key Control Module					
33	7.5A	A/CON SW	A/CON SW	A/C Control Module					
34	10A	AFLS	AFLS	Adaptive Front Lighting System Module					
35	7.5A	5A <b>MODULE 7</b> MODULE 7		BCM, Smart Key Control Module					
36	10A	10A <b>()</b> ≢ FOG LAMP RR		Rear Fog Lamp					
37	10A	PUDDLE LAMP	PUDDLE LAMP	Driver/Passenger Power Outside Mirror					



Engine compartment fuse panel

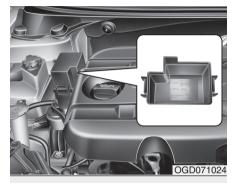


No.		Fuse rating	Symbol	Protected component			
	1	80A	<b>©</b> 1	EPS Control Module			
	2	60A	B+1	I/P Junction Box (IPS 0 (4CH), IPS 1 (4CH), IPS 2 (2CH), Fuse - F13/F14/F19/F20/F21/F26/ F36)			
MULTI	3	60A	1 ((ABS))	ESC Control Module, Multipurpose Check Connector			
FUSE	4	40A	SS	RLY. 4 (Blower Relay)			
	5	60A	B+2	I/P Junction Box (IPS 3 (4CH), IPS 4 (4CH), Fuse - F2/F7/F9/F15)			
	6	60A	PTC HTR	RLY. 12 (GASOLINE PTC Relay)			
	7	Gasoline engine 40A  Diesel engine 50A	T.	RLY. 1 (C/FAN LO Relay), RLY. 2 (C/FAN HI Relay)			
	8	20A	2 ((ABS))	ESC Control Module, Multipurpose Check Connector			
	9	40A	IG2	RLY. 9 (Start Relay), Ignition Switch (W/O Button Start), RLY. 6 (PDM 4 (IG2) Relay, With Button Start)			
FUSE	10	40A	IG1	W/O Button Start : Ignition Switch, With Button Start : RLY. 8 (PDM 2 (ACC) Relay)/RLY. 10 (PDM 3 (IG1) Relay			
	11	15A	₩	ICM Relay Box (Front Deicer Relay)			
	12	50A	B+3	I/P Junction Box (Leak Current Autocut Device, Fuse - F18/F25/F30/F34/F38)			
	13	10A	BRAKE SW	Smart Key Control Module, Stop Signal Relay			

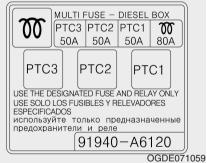
No.		Fuse rating	Symbol	Protected component				
	14	30A	¹(P)	Electric Parking Brake Module				
	15	30A	²(P)	Electric Parking Brake Module				
	16	20A	° () 🕮	D4FD & A/T : TCM				
	17	15A	<sup>5</sup> (=) <b>(11</b>	G4NA/G4NC : PCM (A/T), ECM (M/T)				
	18	20A	<sup>₽₹7</sup>	Driver/Passenger Seat Warmer Module				
	19	50A	PTC HTR	RLY. 12 (Fuel Filter Relay)				
FUSE	20	10A	Ø	PCM/ECM				
	21	15A		RLY. 5 (Horn Relay), ICM Relay Box (B/A Horn Relay)				
	22	15A	<sup>7</sup> (=) <b>(11</b>	A/T - TCM (D4FD), Transaxle Range Switch				
	23	15A	<sup>6</sup> (⊃) <b>∭</b>	RLY. 9 (D4FD, Start Relay), ECM/PCM				
	24	10A	3 ((ABS))	ESC Control Module, Multipurpose Check Connector				
	25	10A	3 (C) <b>(1</b>	ECM/PCM, Air Flow Sensor, Stop Lamp Switch				
	26	10A	B/UP LP	M/T - Back-Up Lamp Switch, A/T - Rear Combination Lamp (IN) LH/RH, Rear Curtain Module, Navigation Head Unit, Electro Chromic Mirror, IPS Control Module				

No.		Fuse rating	Symbol	Protected component
	27	20A	¹ 🗀 🕮	G4FD/D4FD : ECM G4NA/G4NC : PCM (A/T), ECM (M/T)
	28	20A	IGN COIL	G4NA : Ignition Coil #1/#2/#3/#4, Condenser
	29	10A	<sup>10</sup> (C) <b>(11</b>	G4FD: Oxygen Sensor (UP/DOWN), Variable Intake Solenoid Valve, Purge Control Solenoid Valve G4NA/G4NC: Oxygen Sensor (UP/DOWN), Variable Intake Solenoid Valve, Purge Control Solenoid Valve D4FD: Camshaft Position Sensor, EGR Cooling Bypass Solenoid Valve, Diesel Box (Glow Relay)
FUSE	30	10A	1 (C) <b>(1</b>	G4FD: Oil Control Valve #1/ #2, Oil Level Sensor, E/R Fuse & Relay Box (RLY. 1) G4NA/G4NC: Oil Control Valve #1/ #2, Camshaft Position Sensor (Intake/Exhaust), E/R Fuse & Relay Box (RLY. 1) D4FD: E/R Fuse & Relay Box (RLY. 1), Diesel Box (PTC Heater Relay#1), Lambda Sensor, VGT Control Solenoid Valve
	31	10A	² 🗀 🕮	G4FD : ECM G4NA : Fuel Pump Relay G4NC : Fuel Pump Relay, PCM (A/T), ECM (M/T) D4FD : Oil Level Sensor, Fuel Pressure Regulating Valve
	32	10A	INJECTOR	G4NA - Injector #1/#2/#3/#4
	33	15A	⁴⇔ 🕮	G4NA/G4NC : PCM (A/T), ECM (M/T)
	34	15A	F/PUMP	EMS Box (Fuel Pump Relay)
	35	30A	<b>I</b>	EMS Box (Head Lamp Washer Relay)
	36	30A	<sup>9</sup> (7) <b>(1</b>	EMS Box

No.		Symbol	Protected component	Туре
	37	ro 🟋	C/FAN LO RELAY	PLUG MICRO
	38	н 🛣	C/FAN HI RELAY	PLUG MICRO
	39	ESS	ESS RELAY	PLUG MICRO
	40	88	BLOWER RELAY	PLUG MICRO
	41		HORN RELAY	PLUG MICRO
	42	4 (IG2)	PDM 4 (IG2) RELAY	PLUG MICRO
FUSE	43	Ø	FRONT WIPER RELAY	PLUG MICRO
	44	2 (ACC)	PDM 2 (ACC) RELAY	PLUG MICRO
	45	10	START RELAY	PLUG MICRO
	46	3 (IG1)	PDM 3 (IG1) RELAY	PLUG MICRO
	47	RR HTD	RR HTD RELAY	PLUG MICRO
	48	Gasoline : PTC  Diesel : T)	PTC Heater/Fuel Filter	PLUG MINI



Description	Fuse rating	Protected Component
$\overline{\mathfrak{O}}$	80A	Glow Relay
PTC 1	50A	PTC 1 Relay
PTC 2	50A	PTC 2 Relay
PTC 3	50A	PTC 3 Relay



Engine compartment fuse panel (Diesel engine only)

#### LIGHT BULBS



Prior to working on the light, firmly apply the parking brake, ensure that the ignition switch is turned to the "LOCK" position (smart key: turn off the engine) and turn off the lights to avoid sudden movement of the vehicle and burning your fingers or getting an electric shock.

Use only the bulbs of the specified wattage.

## **!** CAUTION

Be sure to replace the burned-out bulb with one of the same wattage rating. Otherwise, it may cause damage to the fuse or electric wiring system.

## **⚠** CAUTION

If you do not have necessary tools, the correct bulbs and the expertise, we recommend that you consult an authorized HYUNDAI dealer. In many cases, it is difficult to replace vehicle light bulbs because other parts of the vehicle must be removed before you can get to the bulb. This is especially true if you have to remove the headlight assembly to get to the bulb(s). Removing/installing the headlight assembly can result in damage to the vehicle.

### \* NOTICE

After driving in heavy rain or washing the vehicle, headlight and taillight lenses could appear foggy. This condition is caused by the temperature difference between the lamp inside and outside. This is similar to the condensation on your windows inside your vehicle during rain and does not indicate a problem with your vehicle. If the water leaks into the lamp bulb circuitry, we recommend that the system be checked by an authorized HYUNDAI dealer.



## Front light replacement

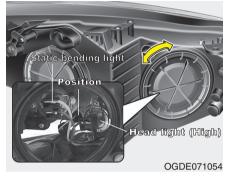
- (1) Front turn signal light
- (2) Headlight (Low)
- (3) Static bending light (if equipped)
- (4) Position light
- (5) Headlight (High)
- (6) Daytime running light (DRL) (if equipped)
- (7) Front fog light (if equipped)



- 1. Turn off the engine and open the hood.
- 2. Disconnect the negative battery cable.
- Loosen the assembly retaining screws and nuts.



- Pull out the both side of the front bumper and then pull out the front bumper.
- Remove the headlight assembly from the body of the vehicle. If you can reach the bulb without removing the headlight assembly, you do not need to do step 3,4 and 5.
- 6. Disconnect the power connector front the back of the headlight assembly.



## Headlight (High) and static bending light

Follow the steps 1 to 6 from the previous page.

- Remove the cover by turning it counterclockwise.
- Disconnect the headlight bulb socketconnector.
- Unsnap the headlight bulb retaining wire by depressing the end and pushing it upward.
- Remove the bulb from the headlight assembly.
- 11. Install a new headlight bulb and snap the headlight bulb retaining wire into position by aligning the wire with the groove on the bulb.

- 12. Connect the headlight bulb socket connector.
- 13. Install the headlight bulb cover by turning it clockwise.
- 14. Connect the power connector to the back of the headlight assembly.
- 15. Reinstall the headlight assembly to the body of the vehicle.

### Position light

Follow the steps 1 to 6 from the previous page.

- 7. Remove the cover by turning it counterclockwise.
- 8. Pull out the socket from the assembly.
- 9. Pull the bulb out of the socket.
- 10. Insert a new bulb into the socket.
- 11. Install the socket into the assembly.
- 12. Install the headlight bulb cover by turning it clockwise.



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## Headlight (Low, Non-HID Type)

Follow the steps 1 to 6 from the previous page.

- 7. Remove the cover by turning it counterclockwise.
- Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
- 9. Pull the bulb out of the socket.
- 10. Insert a new bulb into the socket.
- 11. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
- 12. Install the headlight bulb cover by turning it clockwise.

## Headlight (Low, HID type)

If the light does not operate, we recommend that the system be checked by an authorized HYUNDAI dealer.

## A WARNING - HID Headlight low beam (if equipped)

Do not attempt to replace or inspect the low beam (XENON bulb) due to electric shock danger. If the low beam (XENON bulb) is not working, we recommend that the system be checked by an authorized HYUNDAI dealer.

#### \* NOTICE

HID lamps have superior performance vs. halogen bulbs. HID lamps are estimated by the manufacturer to last twice as long or longer than halogen bulbs depending on their frequency of use. They will probably require replacement at some point in the life of the vehicle. Cycling the headlamps on and off more than typical use will shorten HID lamps life. HID lamps do not fail in the same manner as halogen incandescent lamps. If a headlamp goes out after a period of operation but will immediately relight when the headlamp switch is cycled it is likely the HID lamp needs to be replaced. HID lighting components are more complex than conventional halogen bulbs thus have higher replacement cost.

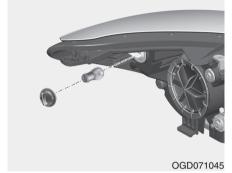
### \* Traffic Change (For Europe)

The low beam light distribution is asymmetric. If you go abroad to a country with opposite traffic direction, this asymmetric part will dazzle oncoming car driver. To prevent dazzle, ECE regulation demand several technical solutions (ex. automatic change system, adhesive sheet, down aiming). This headlamps are designed not to dazzle opposite drivers. So, you need not change your headlamps in a country with opposite traffic direction.



## **WARNING** - Halogen bulbs

- Halogen bulbs contain pressurized gas that will produce flying pieces of glass if broken.
- Always handle them carefully, and avoid scratches and abrasions. If the bulbs are lit, avoid contact with liquids. Never touch the glass with bare hands. Residual oil may cause the bulb to overheat and burst when lit. A bulb should be operated only when installed in a headlight.
- If a bulb is damaged or cracked, replace it immediately and carefully dispose of it.
- Wear eye protection when changing a bulb. Allow the bulb to cool down before handling it.



Turn signal light

Follow the steps 1 to 6 from the previous page.

- Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
- 8. Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket. Pull the bulb out of the socket.
- Insert a new bulb by inserting it into the socket and rotating it until it locks into place.

10. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.



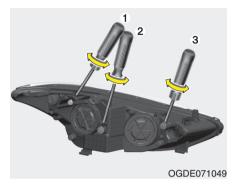
## Front fog light

Follow the steps 1 to 6 from the previous page.

- Pull out the connector while depressing the tabs both side of the bulb-socket.
- Remove the bulb-socket from the housing by turning the socket counter clockwise until the tabs on the socket align with the slots on the housing.
- Install a new bulb-socket into the housing by aligning the tabs on the socket with the slots in the housing. Push the socket into the housing and turn the socket clockwise.
- Connect the power connector to the socket.

## Daytime running light (LED)

If the light does not operate, we recommend that the system be checked by an authorized HYUNDAI dealer.



## Headlight and front fog light aiming (for Europe)

Headlight aiming

#### Without AFLS

- Inflate the tires to the specified pressure and remove any loads from the vehicle except the driver, spare tire, and tools.
- 2. The vehicle should be placed on a flat floor.
- Draw vertical lines (Vertical lines passing through respective head lamp centers) and a horizontal line (Horizontal line passing through center of head lamps) on the screen.

- With the head lamp and battery in normal condition, aim the head lamps so the brightest portion falls on the horizontal and vertical lines.
- 5. To aim the low beam left or right, turn the driver (1) clockwise or counterclockwise. To aim the low beam up or down, turn the driver (2) clockwise or counterclockwise.

To aim the high beam up or down, turn the driver (3) clockwise or counterclockwise.

#### With AFLS

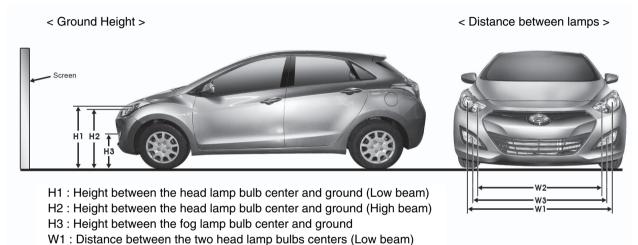
- 1. Turn off the engine
- Turn the light switch to the low beam position.
- 3. Position the tires straight ahead with the steering wheel.
- 4. Turn on the engine.
- Inflate the tires to the specified pressure and remove any loads from the vehicle except the driver, spare tire, and tools.
- 6. The vehicle should be placed on a flat floor.
- Draw vertical lines (Vertical lines passing through respective head lamp centers) and a horizontal line (Horizontal line passing through center of head lamps) on the screen.
- With the head lamp and battery in normal condition, aim the head lamps so the brightest portion falls on the horizontal and vertical lines.
- 9. To aim the low beam left or right, turn the driver (1) clockwise or counterclockwise. To aim the low beam up or down, turn the driver (2) clockwise or counterclockwise. To aim the high beam up or down, turn the driver (3) clockwise or counterclockwise.



Front fog light aiming

The front fog lamp can be aimed as the same manner of the head lamps aiming. With the front fog lamps and battery normal condition, aim the front fog lamps. To aim the front fog lamp up or down, turn the driver (1) clockwise or counterclockwise.

## Aiming point



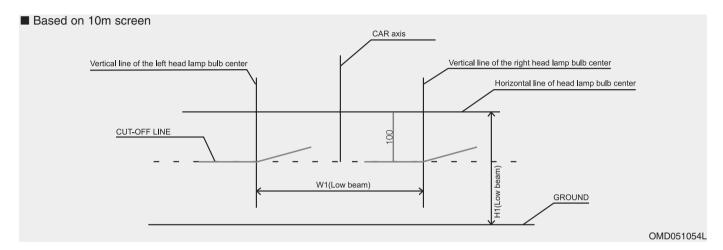
OGDE071048

Unit: mm (in)

Vehicle	H1			H3		W1			W3	
condition	Without AFLS	With AFLS	H2	With DRL	Without DRL	Without AFLS	With AFLS	W2	With DRL	Without DRL
Without	740	739	691	430	416	1,410	1,409	1,148	1,310	1,292
driver	(29.1)	(29.1)	(27.2)	(16.9)	(16.4)	(55.5)	(55.5)	(45.2)	(51.6)	(50.9)
With driver	733 (28.9)	732 (28.8)	684 (26.9)	423 (16.7)	409 (16.1)	1,410 (55.5)	1,409 (55.5)	1,148 (45.2)	1,310 (51.6)	1,292 (50.9)

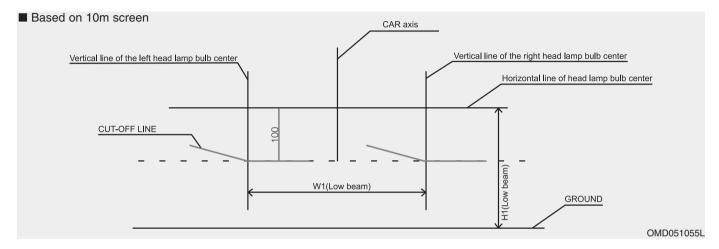
W2: Distance between the two head lamp bulbs centers (High beam)

W3: Distance between the two fog lamp bulbs centers



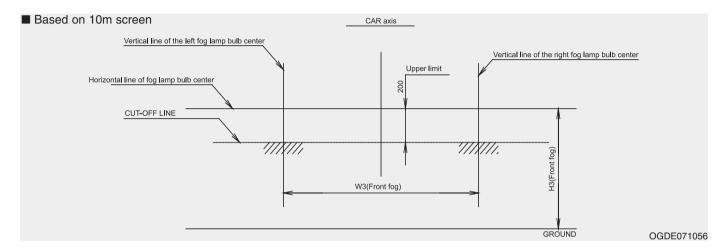
## Head lamp low beam (driver's side)

- 1. Turn the low beam on without driver aboard.
- 2. The cut-off line should be projected in the cut-off line shown in the picture.
- 3. When aiming the low beam, vertical aiming should be adjusted after adjusting the horizontal aiming.
- 4. If head lamp leveling device is equipped, adjust the head lamp leveling device switch with 0 positions.



## Head lamp low beam (front passenger's side)

- 1. Turn the low beam on without driver aboard.
- 2. The cut-off line should be projected in the cut-off line shown in the picture.
- 3. When aiming the low beam, vertical aiming should be adjusted after adjusting the horizontal aiming.
- 4. If head lamp leveling device is equipped, adjust the head lamp leveling device switch with 0 positions.



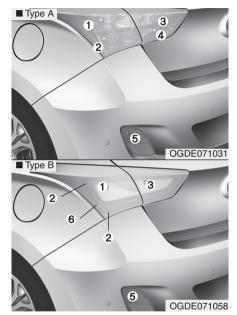
## Front fog light

- 1. Turn the front fog lamp on without the driver aboard.
- 2. The cut-off line should be projected in the allowable range (shaded region).



Side repeater light bulb replacement

If the light bulb does not operate, we recommend that the system be checked by an authorized HYUNDAI dealer.



## Rear combination light bulb replacement

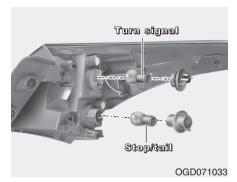
- (1) Rear turn signal light
- (2) Stop/tail light
- (3) Back-up light
- (4) Tail light
- (5) Rear fog light (if equipped)
- (6) Stop light



## Outside light

## Rear turn signal light and stop/tail light

- 1. Turn off the engine.
- 2. Open the tailgate.
- 3. Loosen the light assembly retaining screws with a cross-tip screwdriver.
- 4. Remove the rear combination light assembly from the body of the vehicle.



- Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
- Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket. Pull the bulb out of the socket.
- Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
- Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
- 10. Reinstall the light assembly to the body of the vehicle.

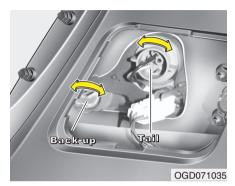
## Stop and tail light (LED type)

If the light does not operate, we recommend that the system be checked by an authorized HYUNDAI dealer.



## Inside light

- 1. Turn off the engine.
- 2. Open the tailgate.
- Remove the service cover using a flatblade screwdriver.



## Tail light (Bulb type)

- Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
- Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket. Pull the bulb out of the socket.
- Insert a new bulb by inserting it into the socket and rotating it until it locks into place.

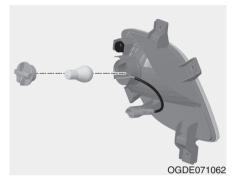
- 7. Install the socket in the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
- 8. Install the service cover by putting it into the service hole.

## Back-up light (Bulb type)

- Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
- 5. Pull the bulb out of the socket.
- 6. Insert a new bulb into the socket.
- Install the socket into the assembly by aligning the tabs on the socket with the slots on the assembly and turning the socket clockwise.
- 8. Reinstall the light assembly to the body of the vehicle

#### Stop and tailight (LED type )

If the light does not operate, we recommend that the system be checked by an authorized HYUNDAI dealer.



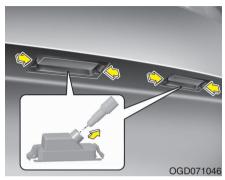
## Rear fog light

- 1. Remove the rear tire and wheel guard.
- 2. Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
- Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket. Pull the bulb out of the socket.
- 4. Insert a new bulb in the socket.
- 5. Reinstall the light assembly to the body of the vehicle.



## High mounted stop light bulb replacement

If the light does not operate, we recommend that the system be checked by an authorized HYUNDAI dealer.

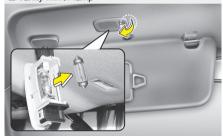


# License plate light bulb replacement

- 1. Turn off the engine.
- 2. Remove the bulb assembly by pressing the tabs.
- 3. Remove the socket by turning it counterclockwise.
- 4. Remove the bulb by pulling it straight out.
- 5. Install a new bulb.
- 6. Reinstall the bulb assembly securely with the retaining screws.

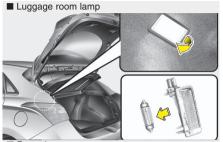
# Map lamp



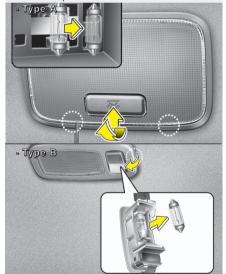


■ Glove box lamp





■ Room lamp



OGD071039/OTD079035/OVF071044/OGD071040/OGDE071057/OGD071038

### Interior light bulb replacement

Map lamp, vanity mirror lamp, room lamp, luggage room lamp and glove box lamp

- Using a flat-blade screwdriver, gently pry the lens from the interior light housing.
- 2. Remove the bulb by pulling it straight out.

### **WARNING**

Prior to working on the interior lights, ensure that the light is off to avoid burning your fingers or receiving an electric shock.

- 3. Install a new bulb in the socket.
- 4. Align the lens tabs with the interior light housing notches and snap the lens into place.

### ∴ CAUTION

Be careful not to dirt or damage lens, lens tab, and plastic housings.

### APPEARANCE CARE

#### **Exterior care**

Exterior general caution

It is very important to follow the label directions when using any chemical cleaner or polish. Read all warning and caution statements that appear on the label.

#### Finish maintenance

#### Washing

To help protect your vehicle's finish from rust and deterioration, wash it thoroughly and frequently at least once a month with lukewarm or cold water.

If you use your vehicle for off-road driving, you should wash it after each off-road trip. Pay special attention to the removal of any accumulation of salt, dirt, mud, and other foreign materials. Ensure drain holes in the lower edges of the doors and rocker panels are kept clean. Insects, tar, tree sap, bird droppings, industrial pollution and similar deposits can damage your vehicle's finish if not removed immediately.

Even prompt washing with plain water may not completely remove all these deposits.

A mild soap, safe for use on painted surfaces, may be used.

After washing, rinse the vehicle thoroughly with lukewarm or cold water. Do not allow soap to dry on the finish.

# **A** CAUTION

- Do not use strong soap, chemical detergents or hot water, and do not wash the vehicle in direct sunlight or when the body of the vehicle is warm.
- Be careful when washing the side windows of your vehicle.
   Especially, with high-pressure water, water may leak through the windows and wet the interior.
- To prevent damage to the plastic parts and lamps, do not clean with chemical solvents or strong detergents.

## **WARNING** - Wet brakes

After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.



### **!** CAUTION

- Water washing in the engine compartment including high pressure water washing may cause the failure of electrical circuits located in the engine compartment.
- Never allow water or other liquids to come in contact with electrical/electronic components and air duct inside the vehicle as this may damage them.

### Waxing

Wax the vehicle when water will no longer bead on the paint.

Always wash and dry the vehicle before waxing. Use a good quality liquid or paste wax, and follow the manufacturer's instructions. Wax all metal trim to protect it and to maintain its luster.

Removing oil, tar, and similar materials with a spot remover will usually strip the wax from the finish. Be sure to re-wax these areas even if the rest of the vehicle does not yet need waxing.

### **⚠** CAUTION

- Wiping dust or dirt off the body with a dry cloth will scratch the finish.
- Do not use steel wool, abrasive cleaners, or strong detergents containing highly alkaline or caustic agents on chrome-plated or anodized aluminum parts. This may result in damage to the protective coating and cause discoloration or paint deterioration.

### Finish damage repair

Deep scratches or stone chips in the painted surface must be repaired promptly. Exposed metal will quickly rust and may develop into a major repair expense.

### \* NOTICE

If your vehicle is damaged and requires any metal repair or replacement, be sure the body shop applies anti-corrosion materials to the parts repaired or replaced.

### Bright-metal maintenance

- To remove road tar and insects, use a tar remover, not a scraper or other sharp object.
- To protect the surfaces of bright-metal parts from corrosion, apply a coating of wax or chrome preservative and rub to a high luster.
- During winter weather or in coastal areas, cover the bright metal parts with a heavier coating of wax or preservative. If necessary, coat the parts with non-corrosive petroleum jelly or other protective compound.

### Underbody maintenance

Corrosive materials used for ice and snow removal and dust control may collect on the underbody. If these materials are not removed, accelerated rusting can occur on underbody parts such as the fuel lines, frame, floor pan and exhaust system, even though they have been treated with rust protection.

Thoroughly flush the vehicle underbody and wheel openings with lukewarm or cold water once a month, after off-road driving and at the end of each winter. Pay special attention to these areas because it is difficult to see all the mud and dirt. It will do more harm than good to wet down the road grime without removing it. The lower edges of doors, rocker panels, and frame members have drain holes that should not be allowed to clog with dirt; trapped water in these areas can cause rusting.

### **A** WARNING

After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.

# Aluminum or chrome wheel maintenance

The aluminum or chrome wheels are coated with a clear protective finish.

- Do not use any abrasive cleaner, polishing compound, solvent, or wire brushes on aluminum or chrome wheels. They may scratch or damage the finish.
- · Clean the wheel when it has cooled.
- Use only a mild soap or neutral detergent, and rinse thoroughly with water.
   Also, be sure to clean the wheels after driving on salted roads. This helps prevent corrosion.
- Avoid washing the wheels with highspeed car wash brushes.
- Do not use any alkaline or acid detergent. It may damage and corrode the aluminum or chrome wheels coated with a clear protective finish.

### Corrosion protection

### Protecting your vehicle from corrosion

By using the most advanced design and construction practices to combat corrosion, we produce cars of the highest quality. However, this is only part of the job. To achieve the long-term corrosion resistance your vehicle can deliver, the owner's cooperation and assistance is also required.

#### Common causes of corrosion

The most common causes of corrosion on your car are:

- Road salt, dirt and moisture that is allowed to accumulate underneath the car.
- Removal of paint or protective coatings by stones, gravel, abrasion or minor scrapes and dents which leave unprotected metal exposed to corrosion.

### **High-corrosion** areas

If you live in an area where your car is regularly exposed to corrosive materials, corrosion protection is particularly important. Some of the common causes of accelerated corrosion are road salts, dust control chemicals, ocean air and industrial pollution.

#### Moisture breeds corrosion

Moisture creates the conditions in which corrosion is most likely to occur. For example, corrosion is accelerated by high humidity, particularly when temperatures are just above freezing. In such conditions, the corrosive material is kept in contact with the car surfaces by moisture that is slow to evaporate.

Mud is particularly corrosive because it is slow to dry and holds moisture in contact with the vehicle. Although the mud appears to be dry, it can still retain the moisture and promote corrosion.

High temperatures can also accelerate corrosion of parts that are not properly ventilated so the moisture can be dispersed. For all these reasons, it is particularly important to keep your car clean and free of mud or accumulations of other materials. This applies not only to the visible surfaces but particularly to the underside of the car.

### To help prevent corrosion

You can help prevent corrosion from getting started by observing the following:

### Keep your car clean

The best way to prevent corrosion is to keep your car clean and free of corrosive materials. Attention to the underside of the car is particularly important.

- If you live in a high-corrosion area —
  where road salts are used, near the
  ocean, areas with industrial pollution,
  acid rain, etc.—, you should take extra
  care to prevent corrosion. In winter,
  hose off the underside of your car at
  least once a month and be sure to
  clean the underside thoroughly when
  winter is over.
- When cleaning underneath the car, give particular attention to the components under the fenders and other areas that are hidden from view. Do a thorough job; just dampening the accumulated mud rather than washing it away will accelerate corrosion rather than prevent it. Water under high pressure and steam are particularly effective in removing accumulated mud and corrosive materials.
- When cleaning lower door panels, rocker panels and frame members, be sure that drain holes are kept open so that moisture can escape and not be trapped inside to accelerate corrosion.

### Keep your garage dry

Don't park your car in a damp, poorly ventilated garage. This creates a favorable environment for corrosion. This is particularly true if you wash your car in the garage or drive it into the garage when it is still wet or covered with snow, ice or mud. Even a heated garage can contribute to corrosion unless it is well ventilated so moisture is dispersed.

### Keep paint and trim in good condition

Scratches or chips in the finish should be covered with "touch-up" paint as soon as possible to reduce the possibility of corrosion. If bare metal is showing through, the attention of a qualified body and paint shop is recommended.

Bird droppings: Bird droppings are highly corrosive and may damage painted surfaces in just a few hours. Always remove bird droppings as soon as possible.

### Don't neglect the interior

Moisture can collect under the floor mats and carpeting to cause corrosion. Check under the mats periodically to be sure the carpeting is dry. Use particular care if you carry fertilizers, cleaning materials or chemicals in the car.

These should be carried only in proper containers and any spills or leaks should be cleaned up, flushed with clean water and thoroughly dried.

#### Interior care

### Interior general precautions

Prevent chemicals such as perfume, cosmetic oil, sun cream, hand cleaner, and air freshener from contacting the interior parts because they may cause damage or discoloration. If they do contact the interior parts, wipe them off immediately. See the instructions that follow for the proper way to clean vinyl.



### **!** CAUTION

Never allow water or other liquids come in contact with electrical/electronic components inside the vehicle as this may damage them.



### ∴ CAUTION

When cleaning leather products (steering wheel, seats etc.), use neutral detergents or low alcohol content solutions. If you use high alcohol content solutions or acid/alkaline detergents, the color of the leather may fade or the surface may get stripped off.

#### Cleaning the upholstery and interior trim

### Vinvl

Remove dust and loose dirt from vinvl with a whisk broom or vacuum cleaner Clean vinyl surfaces with a vinvl cleaner.

#### Fahric

Remove dust and loose dirt from fabric with a whisk broom or vacuum cleaner. Clean with a mild soap solution recommended for upholstery or carpets. Remove fresh spots immediately with a fabric spot cleaner. If fresh spots do not receive immediate attention, the fabric can be stained and its color can be affected. Also, its fire-resistant properties can be reduced if the material is not properly maintained.

### ♠ CAUTION

Using anything but recommended cleaners and procedures may affect the fabric's appearance and fireresistant properties.

### Cleaning the lap/shoulder belt webbina

Clean the belt webbing with any mild soap solution recommended for cleaning upholstery or carpet. Follow the instructions provided with the soap. Do not bleach or re-dve the webbing because this may weaken it.

### Cleaning the interior window glass

If the interior glass surfaces of the vehicle become fogged (that is, covered with an oily, greasy or waxy film), they should be cleaned with glass cleaner. Follow the directions on the glass cleaner container.

### **⚠** CAUTION

Do not scrape or scratch the inside of the rear window. This may result in damage to the rear window defroster grid.

### **EMISSION CONTROL SYSTEM**

The emission control system of your vehicle is covered by a written limited warranty. Please see the warranty information contained in the Service Passport in your vehicle.

Your vehicle is equipped with an emission control system to meet all emission regulations.

There are three emission control systems which are as follows.

- (1) Crankcase emission control system
- (2) Evaporative emission control system
- (3) Exhaust emission control system

In order to assure the proper function of the emission control systems, it is recommended that you have your car inspected and maintained by an authorized HYUNDAI dealer in accordance with the maintenance schedule. Caution for the Inspection and Maintenance Test (With Electronic Stability Control (ESC) system)

- To prevent the vehicle from misfiring during dynamometer testing, turn the Electronic Stability Control (ESC) system off by pressing the ESC switch.
- After dynamometer testing is completed, turn the ESC system back on by pressing the ESC switch again.

# 1. Crankcase emission control system

The positive crankcase ventilation system is employed to prevent air pollution caused by blow-by gases being emitted from the crankcase. This system supplies fresh filtered air to the crankcase through the air intake hose. Inside the crankcase, the fresh air mixes with blow-by gases, which then pass through the PCV valve into the induction system.

# 2. Evaporative emission control System

The Evaporative Emission Control System is designed to prevent fuel vapors from escaping into the atmosphere.

#### Canister

Fuel vapors generated inside the fuel tank are absorbed and stored in the onboard canister. When the engine is running, the fuel vapors absorbed in the canister are drawn into the surge tank through the purge control solenoid valve.

### Purge Control Solenoid Valve (PCSV)

The purge control solenoid valve is controlled by the Engine Control Module (ECM); when the engine coolant temperature is low during idling, the PCSV closes so that evaporated fuel is not taken into the engine. After the engine warmsup during ordinary driving, the PCSV opens to introduce evaporated fuel to the engine.

# 3. Exhaust emission control system

The Exhaust Emission Control System is a highly effective system which controls exhaust emissions while maintaining good vehicle performance.

### Vehicle modifications

This vehicle should not be modified. Modification of your vehicle could affect its performance, safety or durability and may even violate governmental safety and emissions regulations.

In addition, damage or performance problems resulting from any modification may not be covered under warranty.

 If you use unauthorized electronic devices, it may cause the vehicle to operate abnormally, wire damage, battery discharge or fire. For your safety, do not use unauthorized electric devices.

# Engine exhaust gas precautions (carbon monoxide)

 Carbon monoxide can be present with other exhaust fumes. Therefore, if you smell exhaust fumes of any kind inside your vehicle, have it inspected and repaired immediately. If you ever suspect exhaust fumes are coming into your vehicle, drive it only with all the windows fully open. Have your vehicle checked and repaired immediately.

### **WARNING - Exhaust**

Engine exhaust gases contain carbon monoxide (CO). Though colorless and odorless, it is dangerous and could be lethal if inhaled. Follow the instructions following to avoid CO poisoning.

- Do not operate the engine in confined or closed areas (such as garages) any more than what is necessary to move the vehicle in or out of the area.
- When the vehicle is stopped in an open area for more than a short time with the engine running, adjust the ventilation system (as needed) to draw outside air into the vehicle.
- Never sit in a parked or stopped vehicle for any extended time with the engine running.
- When the engine stalls or fails to start, excessive attempts to restart the engine may cause damage to the emission control system.

Operating precautions for catalytic converters (if equipped)

### **WARNING** - Fire

- A hot exhaust system can ignite flammable items under your vehicle. Do not park, idle, or drive the vehicle over or near flammable objects, such as dry grass, paper, leaves, etc.
- The exhaust system and catalytic system are very hot while the engine is running or immediately after the engine is turned off. Keep away from the exhaust system and catalytic, you may get burned.

Also, do not remove the heat sink around the exhaust system, do not seal the bottom of the vehicle or do not coat the vehicle for corrosion control. It may present a fire risk under certain conditions.

Your vehicle is equipped with a catalytic converter emission control device.

Therefore, the following precautions must be observed:

- Make sure to refuel your vehicle according to the "Fuel requirements" suggested in section 1.
- Do not operate the vehicle when there are signs of engine malfunction, such as misfire or a noticeable loss of performance.
- Do not misuse or abuse the engine.
   Examples of misuse are coasting with the ignition off and descending steep grades in gear with the ignition off.
- Do not operate the engine at high idle speed for extended periods (5 minutes or more).
- Do not modify or tamper with any part of the engine or emission control system. We recommend that the system be inspected by an authorized HYUNDAI dealer.
- Avoid driving with a extremely low fuel level. Running out of fuel cause the engine to misfire, damaging the catalytic converter.

Failure to observe these precautions could result in damage to the catalytic converter and to your vehicle. Additionally, such actions could void your warranties.

### Diesel Particulate Filter (if equipped)

The Diesel Particulate Filter (DPF) system removes the soot emitted from the vehicle.

Unlike a disposable air filter, the DPF system automatically burns (oxidizes) and removes the accumulated soot according to the driving condition. In other words, the active burning by engine control system and high exhaust gas temperature caused by normal/high driving condition burns and removes the accumulated soot.

However, if the vehicle continues to be driven at low speed for long time, the accumulated soot may not be automatically removed because of low exhaust gas temperature. In this particular case, the amount of soot is out of detection limit, the soot oxidation process by engine control system may not happen and the malfunction indicator light may blink.

When the malfunction indicator light blinks, it may stop blinking by driving the vehicle at more than 60km/h (37 mph) or at more than second gear with 1500 ~ 2000 engine rpm for a certain time (for about 25 minutes).

If the malfunction indicator light continues to be blinked in spite of the procedure, we recommend that the system be checked by an authorized HYUNDAI dealer.

If you continue to drive with the malfunction indicator light blinking for a long time, the DPF system can be damaged and fuel consumption can be worsen.

# ⚠ CAUTION - Diesel Fuel (if equipped with DPF)

It is recommended to use the regulated automotive diesel fuel for diesel vehicle equipped with the DPF system.

If you use diesel fuel including high sulfur (more than 50 ppm sulfur) and unspecified additives, it can cause the DPF system to be damaged and white smoke can be emitted.

# **Specifications & Consumer information**

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# **DIMENSIONS**

Item	mm (in)						
Overall length		4,300 (169.3)					
Overall width		1,780 (70.	.1)				
Overall height	Exce	pt Russia	1,470 (57.9)				
Overall Height	Foi	<sup>r</sup> Russia	1,480 (58.3)				
Front tread	195/65R15	Steel wheel	1,563 (61.5)				
	193/03113	Aluminum wheel	1,569 (61.8)				
Front fread	205	5/55R16	1,555 (61.2)				
	225	5/45R17	1,549 (61.0)				
	195/65R15	Steel wheel	1,571 (61.9)				
Rear tread	195/05115	Aluminum wheel	1,577 (62.1)				
near treat	205	205/55R16 1,563					
	225	5/45R17	1,557 (61.3)				
Wheelbase		2,650 (104	.3)				

### **ENGINE**

Item		Gasoline 1.4	Gasoline 1.6	Diesel 1.4	Diesel 1.6
Displacement	cc (cu. in)	1,396 (85.19)	1,591 (97.09)	1,396 (85.12)	1,582 (96.53)
Bore x Stroke	mm	77x74.99	77x85.44	75x79	77.2x84.5
	(in.)	(3.03x2.95)	(3.03x3.36)	(2.95x3.11)	(3.03x3.32)
Firing order		1-3-4-2	1-3-4-2	1-3-4-2	1-3-4-2
No. of cylinders		4, In-line	4, In-line	4, In-line	4, In-line

### **AIR CONDITIONING SYSTEM**

### For vehicles equipped with R-1234yf \*

Item	Weight or Volume	Classification
Refrigerant	500±25g	R-1234yf
Compressor lubricant	150±10cc	PAG (FD46XG)

### For vehicles equipped with R-134a \*

Item	Weight or Volume	Classification
Refrigerant	500±25g	R-134a
Compressor lubricant	150±10cc	PAG (FD46XG)

<sup>\*:</sup> Your vehicle is filled with R-134a or R-1234yf according to the regulation in your country at the time of producing. Check your country regulation before servicing the air conditioning system.

### **WEIGHT AND VOLUME**

Item		Gasoline 1.4L	Gasoline 1.6L	Diesel 1.4L	Diesel 1.6L	
Gross vehicle weight	M/T	1,820 (4,012)	1,820 (4,012)	1,910 (4,211)	1,920 (4,211)	
kg (lbs.)	A/T	-	1,850 (4,079)	-	1,940 (4,277)	
Luggage volume	Min.	378 (13.55)				
l (cu ft)	Max.	1,316 (48.67)				

M/T : Manual transaxle A/T : Automatic transaxle

Min.: Behind rear seat to upper edge of the seat back.

Max.: Behind front seat to roof.

### **BULB WATTAGE**

Light Bulb		Wattage	Bulb type		
	Headlights	Low	55 or 35 (AFLS with HID)	H7S or D1S	
	rieadiigiits	High	55	H7L	
	Static bending light		55	H7L	
Front	Daytime running light (LI	ED)	LED	LED	
	Front turn signal lights		21	PY21W	
	Position lights		5	5W	
	Front fog lights		35	H8L	
	Rear fog light		21	21W	
	Stop and tail lights (LED)	)	LED	LED	
	Stop and tail lights (bulb)	)	21/5	P21/5W	
Rear	Rear turn signal lights		21	PY21W	
ricai	Tail light		5	P21/5W	
	Back-up lights		16	16W	
	High mounted stop light		LED	LED	
	License plate lights	nse plate lights 5		W5W	
	Map lamps		8	FESTOON	
	Room lamps		8	FESTOON	
Interior	Luggage lamp		8	FESTOON	
	Glove box lamp		5	FESTOON	
	Vanity mirror lamps		5	FESTOON	

HID : High Intensity Discharge

AFLS: Adaptive Front-Lighting System

### **TIRES AND WHEELS**

			Lo	ad	Speed		Inflat	ion pressu	, kPa)	Wheel lug nut	
Item	Tire size	Wheel size	Capacity		capacity		Norma	al load	Maximum load		torque Kgf⋅m
		0120	LI *1	Kg	SS *2	Km/h	Front	Rear	Front	Rear	(lb·ft, N·m)
	195/65R15 (For Blue Drive)	6.0J×15	91	615	Н	210	2.5 (36, 250)	2.5 (36, 250)	2.5 (36, 250)	2.5 (36, 250)	
Full size tire	195/65R15 (Non-Blue Drive)	6.0J×15	91	615	Н	210	2.2	2.2	2.2	2.2	9~11 (65~79,
	205/55R16	6.5J×16	91	615	Н	210	(32,220)	20) (32,220)	(32,220) (32,220)	(32,220)	88~107)
	225/45R17	7.0J×17	91	615	V	240					
Compact	T125/80D15	4.0T×15	95	690	М	130	4.2 (60, 420) (60, 420	4.2	4.2	4.2	
spare tire	T125/80D16	4.0T×16	97	730	М	130		0) (60, 420)	(60, 420)	(60, 420) (60, 420) (6	(60, 420)

\*1 : Load Index

\*2 : Speed Symbol

### RECOMMENDED LUBRICANTS AND CAPACITIES

To help achieve proper engine and powertrain performance and durability, use only lubricants of the proper quality. The correct lubricants also help promote engine efficiency that results in improved fuel economy.

These lubricants and fluids are recommended for use in your vehicle.

	Lubricant		Volume	Classification	
Engine oil *1 *2		1.4 MPI	3.3 l (3.5 US qt.)	For Europe API Service SL or SM, ACEA A5 or above	
(drain and refill)	Gasoline Engine	1.6 MPI	2 6 1 /2 9 LIC at \	Except Europe	
Recommends		1.6 GDI	3.6 <i>l</i> (3.8 US qt.)	API Service SM, ILSAC GF-4 or above	
Motor oils	Diesel	with DPF *3	5.3 l (5.60 US qt.)	ACEA C2 or C3	
	Engine	without DPF *3	5.3 l (5.60 US qt.)	ACEA B4	
	Gasoline I	Engine	1.8 <i>l</i> ~ 1.9 <i>l</i> (1.90 ~ 2.01US qt.)		
Manual transaxle fluid	Diesel	High	1.8 <i>l</i> ~ 1.9 <i>l</i> (1.90 ~ 2.01US qt.)	API GL-4, SAE 75W/85	
	Engine	Low	1.9 <i>l</i> ~ 2.0 <i>l</i> (2.01 ~ 2.11 US qt.)		
Automatic transaxle fluid	Gasoline I	Engine	7.3 <i>l</i> (7.71 US qt.)	MICHANG ATF SP-IV SK ATF SP-IV	
	Diesel En	gine	7.1 <i>l</i> (7.50 US qt.)	NOCA ATF SP-IV HYUNDAI genuine ATF SP-IV	

<sup>\*1</sup> Refer to the recommended SAE viscosity numbers on 8-8 page.

<sup>\*2</sup> Engine oils labeled Energy Conserving Oil are now available. Along with other additional benefits, they contribute to fuel economy by reducing the amount of fuel necessary to overcome engine friction. Often, these improvements are difficult to measure in everyday driving, but in a year's time, they can offer significant cost and energy savings.

<sup>\*3</sup> Diesel Particulate Filter

Lubrican	t	Volume	Classification	
Coolant	Automatic transaxle	6.5 <i>l</i> (6.87 US qt.)	Mixture of antifreeze and distilled water	
Coolain	Manual transaxle	6.4 <i>l</i> (6.76 US qt.)	(Ethylene glycol base coolant for aluminum radiator)	
Brake/clutch fluid		0.7~0.8 <i>l</i> (0.7~0.8 US qt.)	FMVSS116 DOT-3 or DOT-4	
Fuel		50 l (13.21 US gal.)	Refer to "Fuel requirements" in section 1	

# Recommends Engine oil (For Europe)

Cumplior		Product					
Supplier	Gasoline Engine	Diesel Engine					
SK	ZIC LD5W-30	ZIC LS 5W-30					
Chevron	KIXX G1 LL	KIXX D1 5W-30					
Total	QUARTZ HKS G-310	QUARTZ INEO MC3 5W-30					
Total	QUARTZ INEO MC3 5W-30	QUARTZ INEO WOS SW-SU					
Shell	HELIX ULTRA AH-E 5W-30	HELIX ULTRA AP 5W-30					
Sileii	HELIX ULTRA 5W-40	HELIX OLI NA AF SW-30					
Fuchs	TITAN SUPERSYN LONG LIFE 5W-30/40						

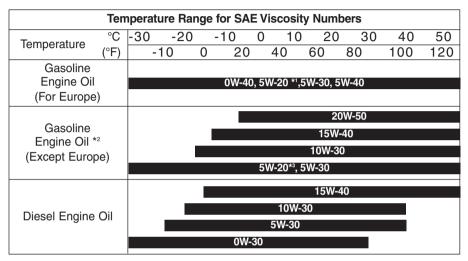
# Recommended SAE viscosity number

# **A** CAUTION

Always be sure to clean the area around any filler plug, drain plug, or dipstick before checking or draining any lubricant. This is especially important in dusty or sandy areas and when the vehicle is used on unpaved roads. Cleaning the plug and dipstick areas will prevent dirt and grit from entering the engine and other mechanisms that could be damaged.

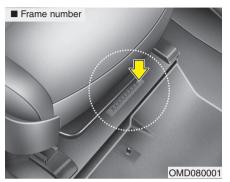
Engine oil viscosity (thickness) has an effect on fuel economy and cold weather operating (engine start and engine oil flowability). Lower viscosity engine oils can provide better fuel economy and cold weather performance, however, higher viscosity engine oils are required for satisfactory lubrication in hot weather. Using oils of any viscosity other than those recommended could result in engine damage.

When choosing an oil, consider the range of temperature your vehicle will be operated in before the next oil change. Proceed to select the recommended oil viscosity from the chart.



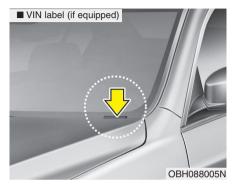
- \*1: If you use the engine oil of a viscosity grade SAE 5W-20, replace engine oil and filter after driving 15,000 km or 12 month with MPI engine (10,000 km or 6 month with GDI engine) in normal condition and replace engine oil and engine oil filter after driving 7,500 km or 6 month with MPI engine (5,000 km or 6 month with GDI engine) in severe condition.
- \*2: For better fuel economy, it is recommended to use the engine oil of a viscosity grade SAE 5W-20,5W-30 (API SM / ILSAC GF 4 or above). However, if the engine oil is not available in your country, select the proper engine oil using the engine oil viscosity chart.
- \*3: In Middle East, do not use the engine oil of viscosity grade SAE 5W-20.

### **VEHICLE IDENTIFICATION NUMBER (VIN)**



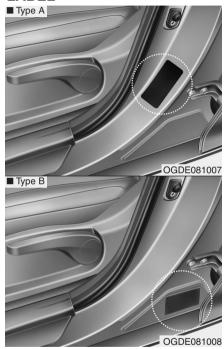
The vehicle identification number (VIN) is the number used in registering your vehicle and in all legal matters pertaining to its ownership, etc.

The number is punched on the floor under the passenger seat. To check the number, open the cover.



The VIN is also on a plate attached to the top of the dashboard. The number on the plate can easily be seen through the windshield from outside.

# VEHICLE CERTIFICATION LABEL



The vehicle certification label attached on the driver's (or front passenger's) side center pillar gives the vehicle identification number (VIN).

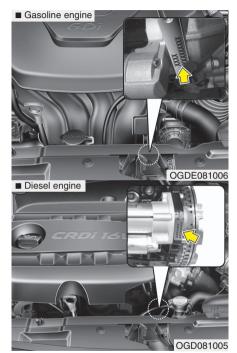
# TIRE SPECIFICATION AND PRESSURE LABEL



The tires supplied on your new vehicle are chosen to provide the best performance for normal driving.

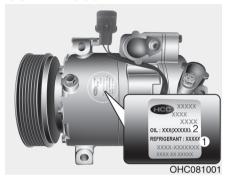
The tire label located on the driver's side center pillar gives the tire pressures recommended for your vehicle.

### **ENGINE NUMBER**



The engine number is stamped on the engine block as shown in the drawing.

# AIR CONDITIONER COMPRESSOR LABEL



A compressor label informs you the type of compressor your vehicle is equipped with such as model, supplier part number, production number, refrigerant (1) and refrigerant oil (2).

# E-MARK LABEL (FOR EUROPE) (IF EQUIPPED)



An E-mark label is located on the driver's side center pillar. The label certifies that your vehicle has satisfied the ECE Safety/Environment regulation. It contains the following information:

- · Country code
- · Regulation number
- · Regulation amendment number
- Approval number

# Α

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