

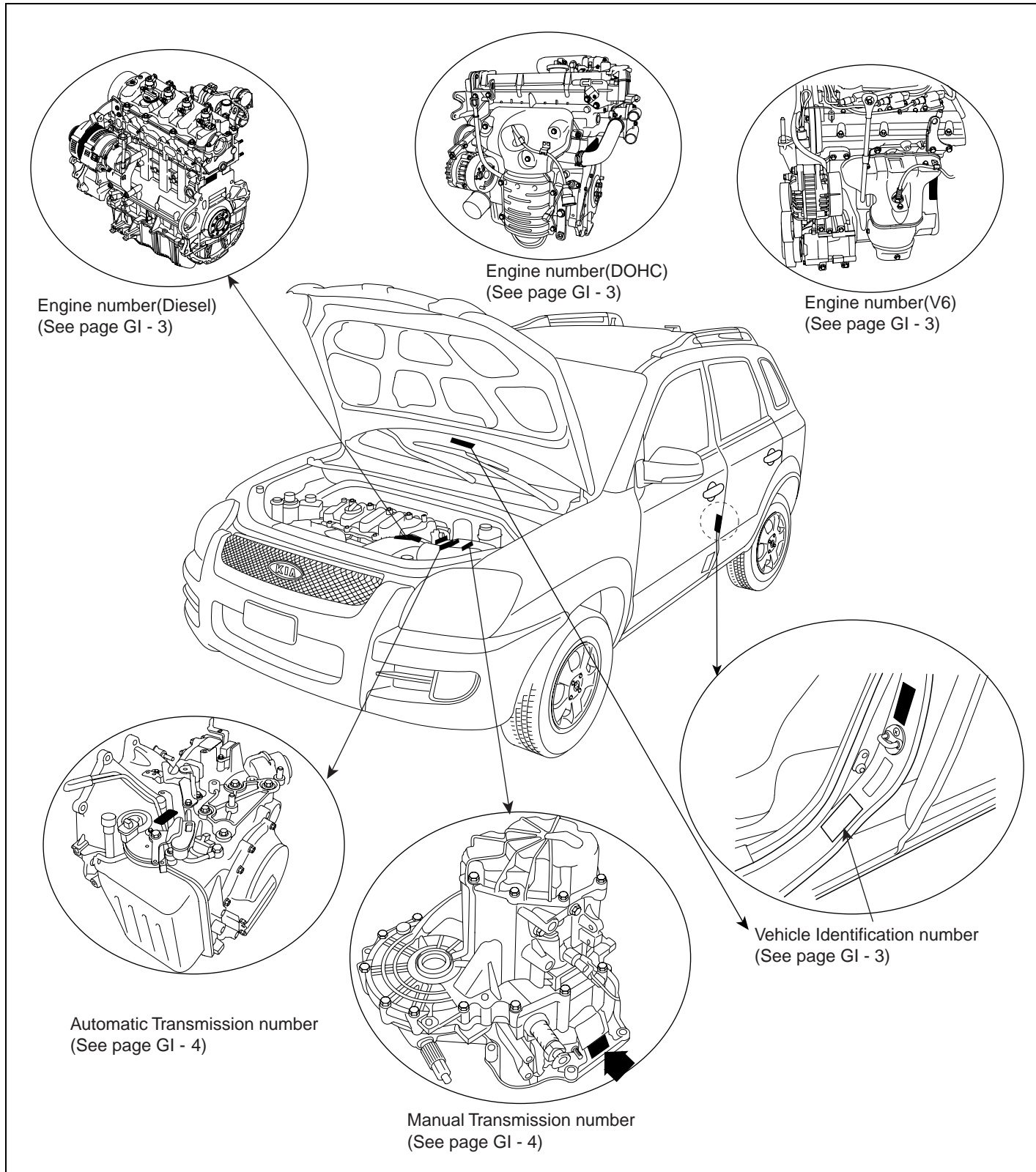
General Information

GENERAL

GENERAL

IDENTIFICATION NUMBER

LOCATIONS EFAD3205



GENERAL

IDENTIFICATION NUMBER DESCRIPTION

VEHICLE IDENTIFICATION NUMBER

K	N	E	J	E	5	5	1	2	4	K	000001
1	2	3	4	5	6	7	8	9	10	11	12~17

LAIF007A

1 - 3 : Make / Vehicle type
 - KNE, KNA = Kia Passenger Car

4 - 5 : Vehicle Line /Series
 - JE = SPORTAGE

6 - 7: Body type
 - 55 = 4Door Sport Utility Vehicle

8 : Engine type
 - 1 = 2.0 Diesel (D4EA)
 - 2 = 2.0 Gasoline (G4GC)
 - 3 = 2.7 Gasoline (G6BA)

9 : Transmission type
 - Check digit
 - 2 = 5 speed manual (4x2)
 - 3 = Automatic (4x2)
 - 5 = 5 speed manual (4x4)
 - 8 = Automatic (4x4)

10 : Model year
 - 4 = 2004, 5 = 2005

11 : Plant location
 - K = Kwang-ju plant

12 - 17 : Sequential number
 - 000001 ~ 999999

PAINT CODE

CODE	COLOR
UD	Clear White
S4	Grayish Silver
S6	Satin Silver
Y3	Greenish Gold
9L	Natural Oliv
1L	Vert Jade Pearl
K6	Smart Blue
3P	Volcanic Red
6D	Smokey Brown
9D	Black Cherry

ENGINE IDENTIFICATION NUMBER

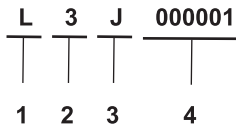
G	4	G	C	4	000001
1	2	3	4	5	6

EAQF102A

1. Engine fuel
 - G : Gasoline
 - D : Diesel
2. Engine range
 - 4 : 4 cycle 4 cylinder
 - 6 : 4 cycle 6 cylinder
3. Engine development order
 - B : DELTA Engine
 - E : D-engine
 - G : BETA Engine
4. Engine capacity
 - A : 1991cc (Diesel), 2656cc (Gosoline)
 - C : 1975 cc (Gasoline)
5. Production year
 - 4 : 2004, 5 : 2005, 6 : 2006
6. Engine production sequence number
 - 000001 ~ 999999

TRANSMISSION IDENTIFICATION NUMBER
MANUAL

AUTOMATIC



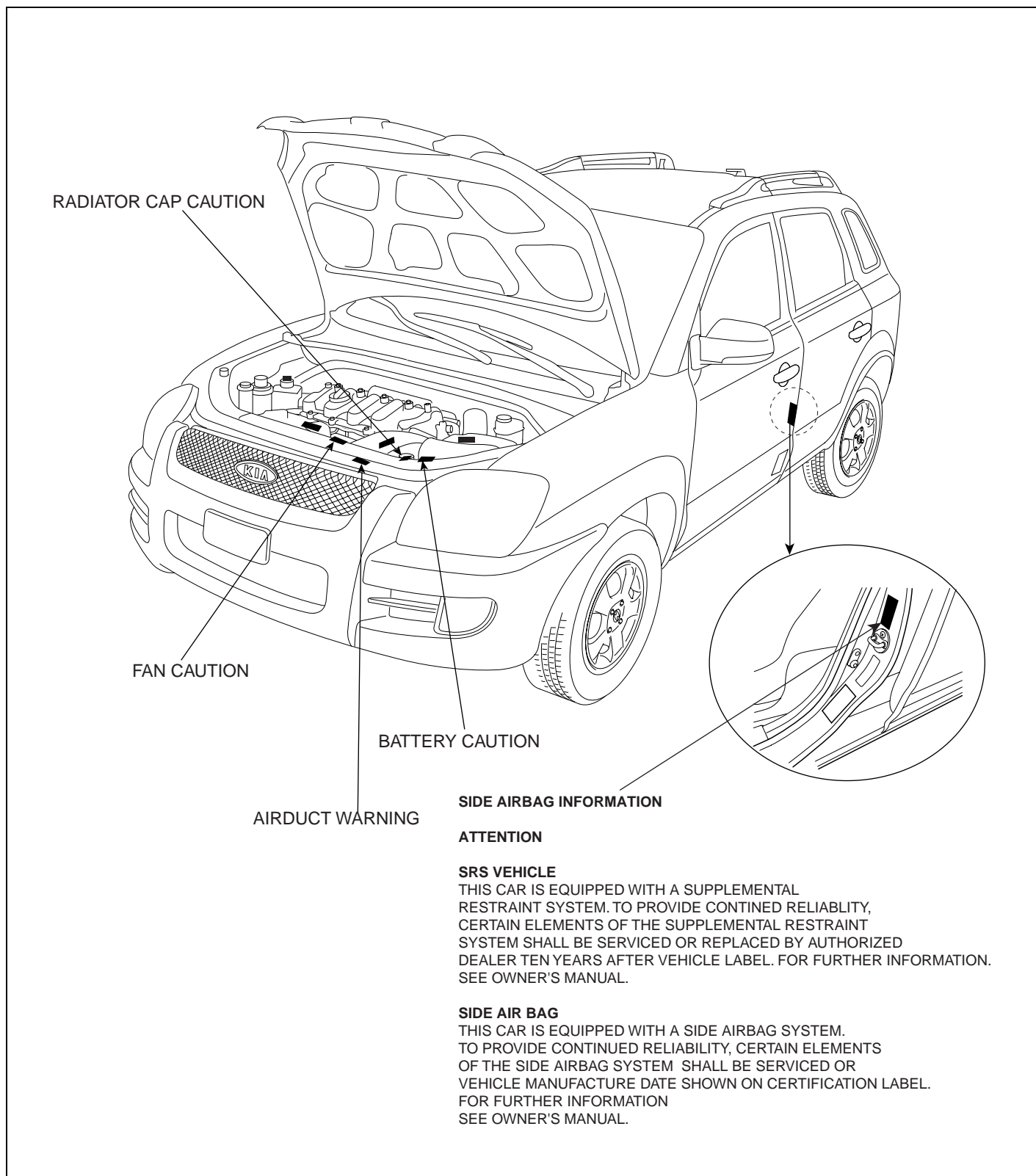
EAQF104A

EAQF103A

1. Model
- L : M5GF1
2. Production year
- 4 : 2004, 5 : 2005, 6 : 2006, 7 : 2007
3. Gear ratio
- H : 4.063
- J : 4.533
4. Transaxle production sequence number
- 000001 ~ 999999

1. Modle
- N : F4A42-2
2. Production year
- 4 : 2004, 5 : 2005, 6 : 2006, 7 : 2007
3. Gear ratio
- N : 4.042
- O : 4.407
- R : 4.626
4. Detailed chassification
- AD : 2.0 2WD
- BD : 2.0 4WD
- FD : 2.7 4WD
- HD : 2.7 2WD
- ID : 2.0 DSL 2WD + LSD
- JD : 2.0 DSL 4WD
- KD : 2.0 DSL 2WD
5. Spare
6. Transaxle production sequence number
- 000001 ~ 999999

WARNING / CAUTION LABEL LOCATIONS

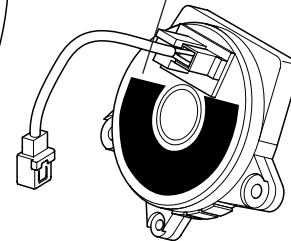
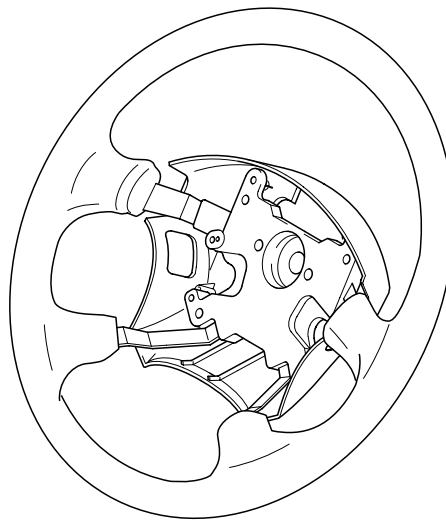
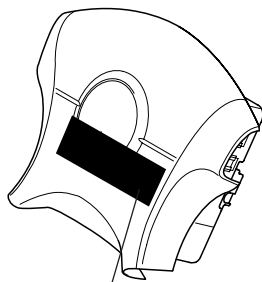


LAIF002A

AIR BAG WARNING / CAUTION LABEL

CAUTION

AIRBAG : Handling is limited to trained personnel.
To be used only in prescribed vehicles. If not properly installed, device may become a dangerous projectile.
See service manual instruction



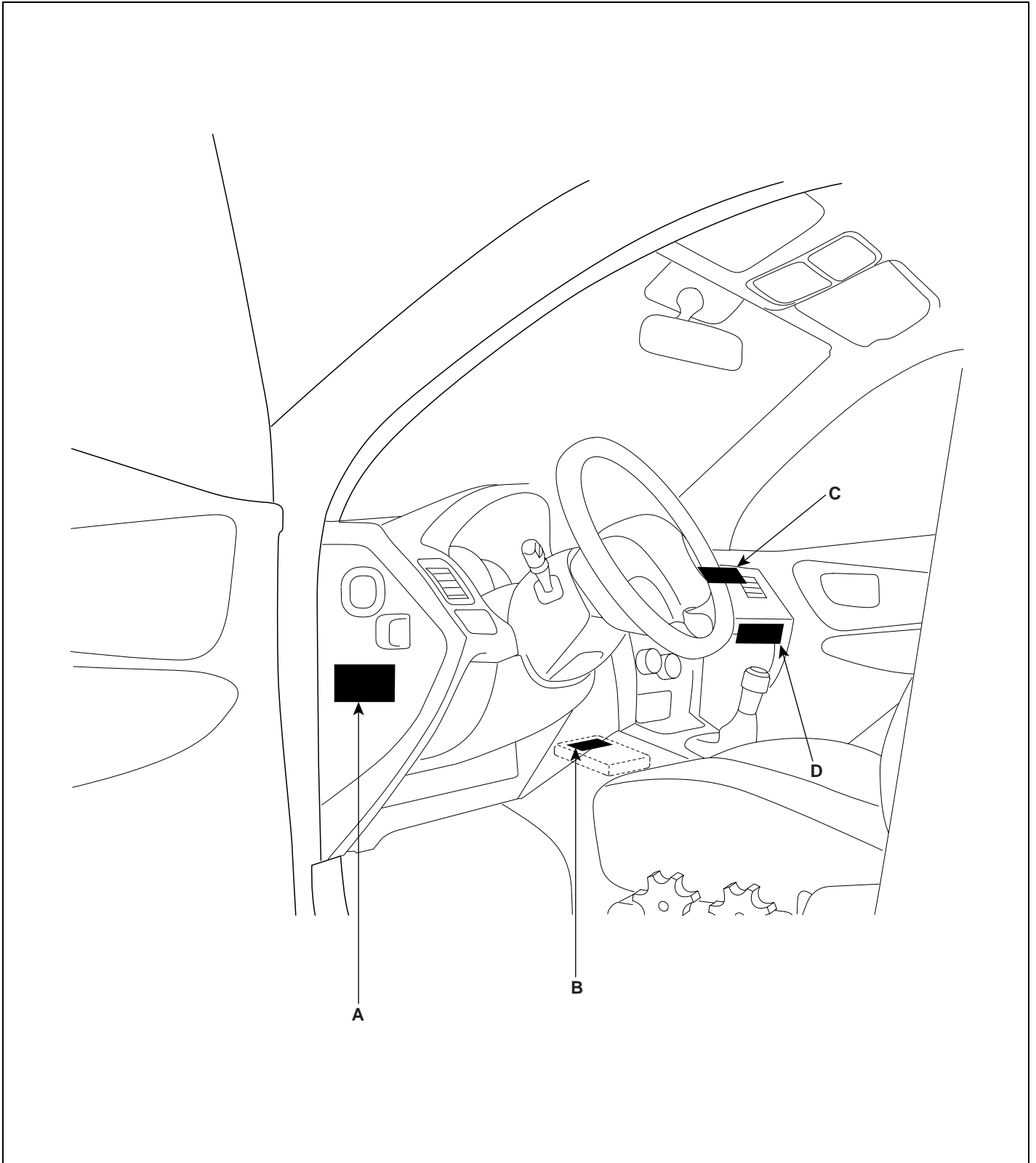
DRIVE MODULE CAUTION

Caution

Don't open, remove or transfer to another vehicle. Risk of malfunction and bodily injury!

This unit is to be installed and/or dismantled by trained personnel only. This item contains an explosive to be installed igniter.

AIR BAG WARNING / CAUTION LABEL (CONT'D)



KAQF400A

WARNING / CAUTION LABEL (CONT'D)

A : WARNING

SEE OWNER'S MANUAL.

This car is equipped a side airbag for each front seat.

- Do not use any accessory seat covers.
- Use of other seat covers could reduce the effect of the system.
- Do not install any accessories on the side or near the side airbag.
- Do not use excessive force on the side of the seat.
- For further information, see the owner's manual.

B : CAUTION

AIRBAG ESPE UNIT

Detach connector before unmounting. Assemble strictly according to manual instructions.

C : PASSENGER MODULE CAUTION

CAUTION

Don't open, remove or transfer to another vehicle.

Risk of malfunction and bodily injury!

This unit is to be installed and/or dismantled by trained personnel only. This item contains an explosive to be installed igniter.

D : SUPPLEMENTAL RESTRAINT SYSTEM (AIRBAG) INFORMATION

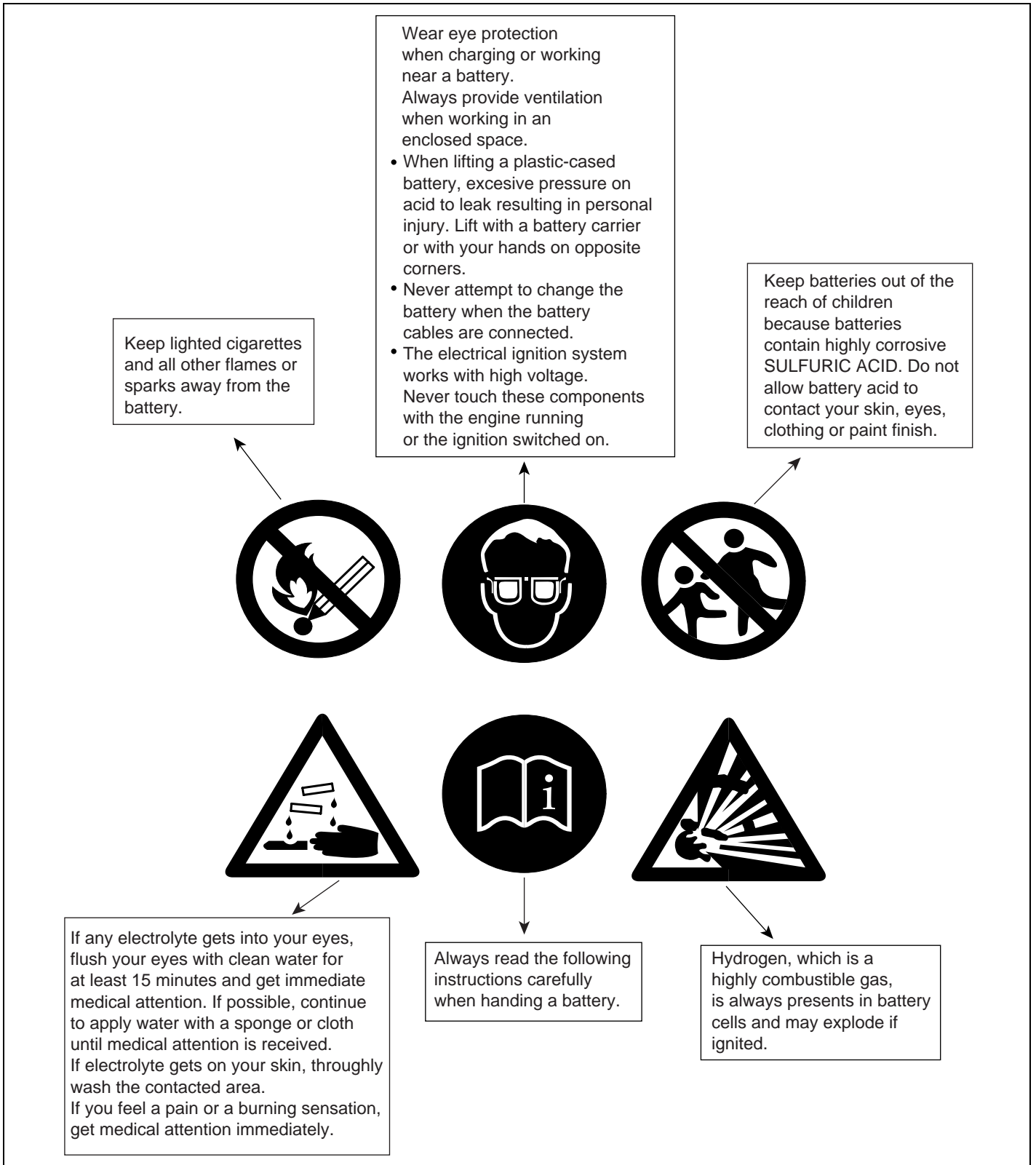
- The airbag is a Supplement Restraint System (SRS).
You must always wear the seat belts.
- The airbag system condition is normal when the "SRS" lamp in the cluster flashes approximately 6 times after the ignition key is turned on and then goes off.
- If any of the following condition occur, the system must be serviced.
 - "SRS" lamp does not light up when the key is turned on.
 - "SRS" lamp stays lit or flashes continuously.
 - The airbag has inflated.
- The airbag system must be inspected by an authorized dealer ten years after the vehicle manufacture date shown on the certification label, located on left front door opening area.

WARNING

Failure to the above instructions may result in injury to you or other occupants in the vehicle

- See the "SRS" section in Owner's Manual for more information about airbags.

BATTERY CAUTION LABEL DESCRIPTION



EAKE007E

LIFT AND SUPPORT POINTS

⊗ WARNING

When heavy rear components such as suspension, fuel tank, spare tire, tailgate and trunk lid are to be removed, place additional weight in the luggage area before hoisting. When substantial weight is removed from the rear of the vehicle, the center of gravity may change and can cause the vehicle to tip forward on the hoist.

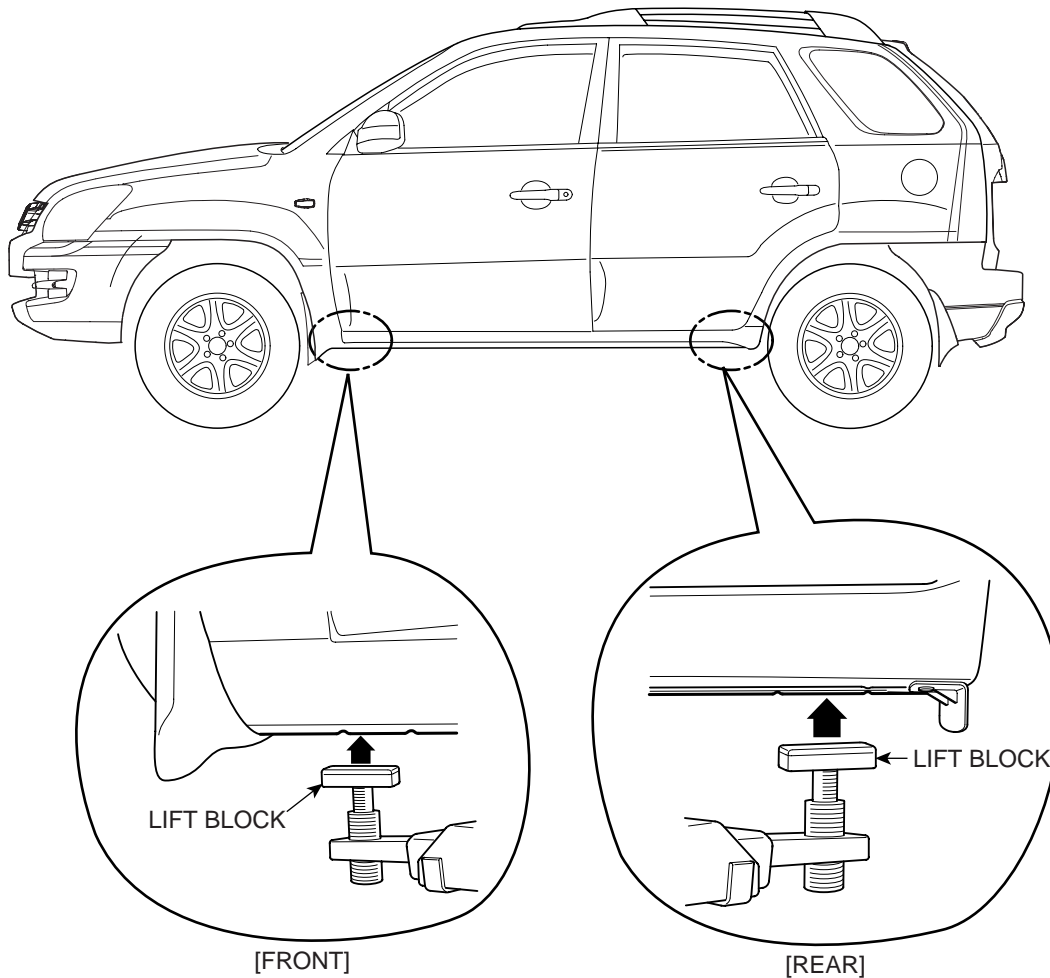
📖 NOTE

- Since each tire/wheel assembly weights approximately 30lbs (14kg), placing the front wheels in

the luggage area can assist with the weight distribution.

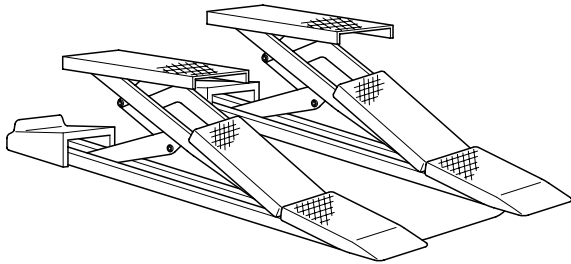
- Use the same support points to support the vehicle on safety stands.

1. Place the lift blocks under the support points as shown in the illustration.
2. Raise the hoist a few inches (centimeters) and rock the vehicle to be sure it is firmly supported.
3. Raise the hoist to full height to inspect the lift points for secure support.



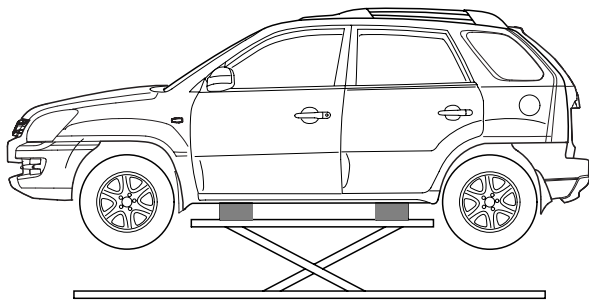
LAIF004A

⊗ WARNING



KAQF800A

Fuel tank could be damaged or broken when using the lift in the illustration above. So, install the rubber or wooden block on the position supporting the lift and then lift up the vehicle. Minimum height of the block is 8cm.



LAI F005A

TOWING

If the vehicle needs to be towed, call a professional towing service. Never tow vehicle with just a rope or chain. It is very dangerous.

EMERGENCY TOWING

There are three popular methods of towing a vehicle :

Flat - bed Equipment - The operator loads the vehicle on the back of truck. This is best way of transporting the vehicle.

Wheel Lift Equipment - The tow truck uses two pivoting arms that go under the tires (front or rear) and lift them off the ground. The other two wheels remain on the ground.

Sling type Equipment - The tow truck metal cables with hooks on the ends. These hooks go around parts of the frame or suspension, and the cables lift that end of the vehicle off the ground. The vehicle's suspension and body can be seriously damaged if this method of towing is attempted.

If the vehicle cannot be transported by flat-bed, it should be towed with the front wheels off the ground. If due to damage, the vehicle must be towed with the front wheels on the ground, do not following :

Manual Transmission

- Release the parking brake.
- Shift the transmission to neutral

Automatic Transmission

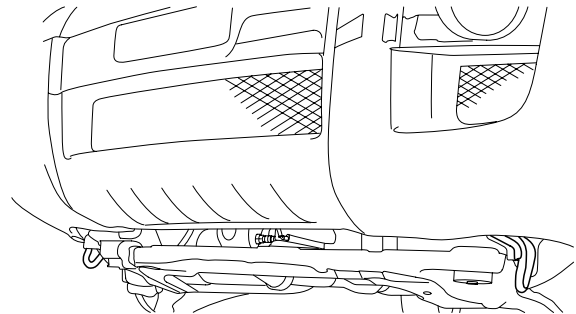
- Release the parking brake.
- Start the engine.
- Shift to [D] position, then [N] position.
- Turn off the engine.



CAUTION

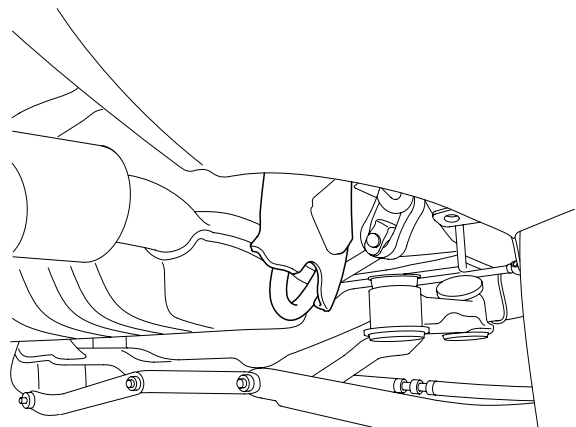
- *Improper towing preparation will damage the transmission. Follow the above procedure exactly. If you cannot shift the transmission or start the engine(automatic transmission), your vehicle must be transported on a flatbed.*
- *It is the best to tow vehicle no farther than 19miles (30km), and keep the speed below 30mph (50km/h).*
- *Trying to lift or tow your vehicle by the bumpers will cause serious damage. The bumpers are not designed to support the vehicle's weight.*

FRONT :



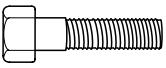
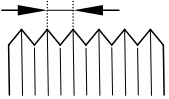
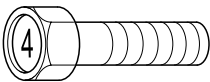
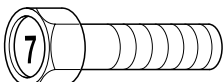
EAQF003A

REAR :



EAQF002A

TIGHTENING TORQUE TABLE OF STANDARD PARTS

Bolt nominal diameter (mm)	Pitch (mm)	Torque Nm (kg.cm, lb.ft)	
		Head Mark 4	Head Mark 7
 EAKE004E	 KASD100Y	 EAKE004F	 EAKE004G
M5	0.8	3 ~ 4 (30 ~ 40, 2.2 ~ 2.9)	5 ~ 6 (50 ~ 60, 3.6 ~ 4.3)
M6	1.0	5 ~ 6 (50 ~ 50, 3.6 ~ 4.3)	9 ~ 11 (90 ~ 110, 6.5 ~ 8.0)
M8	1.25	12 ~ 15 (120 ~ 150, 9 ~ 11)	20 ~ 25 (200 ~ 250, 14.5 ~ 18.0)
M10	1.25	25 ~ 30 (250 ~ 300, 18 ~ 22)	30 ~ 50 (300 ~ 500, 22 ~ 36)
M12	1.25	35 ~ 45 (350 ~ 450, 25 ~ 33)	60 ~ 80 (600 ~ 800, 43 ~ 58)
M14	1.5	75 ~ 85 (750 ~ 850, 54 ~ 61)	120 ~ 140 (1,200 ~ 1,400, 85 ~ 100)
M16	1.5	110 ~ 130 (1,100 ~ 1,300, 80 ~ 94)	180 ~ 210 (1,800 ~ 2,100, 130 ~ 150)
M18	1.5	160 ~ 180 (1,600 ~ 1,800, 116 ~ 130)	260 ~ 300 (2,600 ~ 3,000, 190 ~ 215)
M20	1.5	220 ~ 250 (2,200 ~ 2,500, 160 ~ 180)	360 ~ 420 (3,600 ~ 4,200, 260 ~ 300)
M22	1.5	290 ~ 330 (2,900 ~ 3,300, 210 ~ 240)	480 ~ 550 (4,800 ~ 5,500, 350 ~ 400)
M24	1.5	360 ~ 420 (3,600 ~ 4,200, 260 ~ 300)	610 ~ 700 (6,100 ~ 7,000, 440 ~ 505)

 NOTE

- The torques shown in the table are standard values under the following conditions :
 - Nuts and bolts are made of galvanized steel bar.
 - Galvanized plain steel washers are inserted.
 - All nuts, bolts and plain washers are dry.
- The torques shown in the table are not applicable :
 - When spring washers, toothed washers and the like are inserted.
 - If plastic parts are fastened.
 - If self-tapping screws or self-locking nuts are used.
 - If threads and surfaces are coated with oil.
- If you reduce the torques in the table to the percentage indicated below, under the following conditions, it will be the standard value.
 - If spring washers are used : 85%
 - If threads and bearing surfaces are stained with oil : 85%

LUBRICANTS

RECOMMENDED LUBRICANTS

Parts		OIL & GREASE STANDARD
Engine Oil	Gasoline	API SL(SJ) or ABOVE, ILSAS GF-3 and ABOVE
	Diesel	API CF -4 or ABOVE, ACEA B4 or ABOVE
Transaxle	Manual	GENUINE PART MTF 75W/90 (API GL - 4)
	Auto	DIAMOND ATF SP-III, SK ATF SP-III
Power Steering		PSF -3
Brake Steering		DOT 3, DOT 4 or equivalent
Coolant		Ethylene glycol base for aluminium radiator
Transaxle linkage, parking brake cable mechanism, hood, door latch, seat adjuster, tailgate latch, door hinges, tailgate hinge		Multipurpose grease NIGL grade #2

 **WARNING**

Always use Genuine Hyundai parts and recommended fluid.

Using any other type of parts and fluid can cause serious damaged if the vehicle. **RECOMMENDED LUBRICANTS**

LUBRICANTS CAPACITIES

Description		2.7	2.0	Diesel
Engine oil	Oil pan	4.2 (4.44, 3.70)	3.7 (3.90, 3.26)	5.4 (5.70, 4.75)
	Oil filter	0.3 (0.32, 0.26)	0.3 (0.32, 0.26)	0.5 (0.583, 0.44)
	Total	4.5 (4.75, 3.96)	4.0 (4.23, 3.52)	5.9 (6.3, 5.2)
Cooling system		7.8 (8.2, 6.8)	6.0 (6.4, 5.31)	7.9 (8.35, 6.95)
Manual transaxle		2.15 (2.3, 1.86)	2.15 (2.3, 1.86)	2.15 (2.3, 1.86)
Automatic transaxle		7.8 (8.2, 6.8)	7.8 (8.2, 6.8)	7.8 (8.2, 6.8)
Power steering		0.9 (0.95, 0.79)	0.9 (0.95, 0.79)	0.9 (0.95, 0.79)

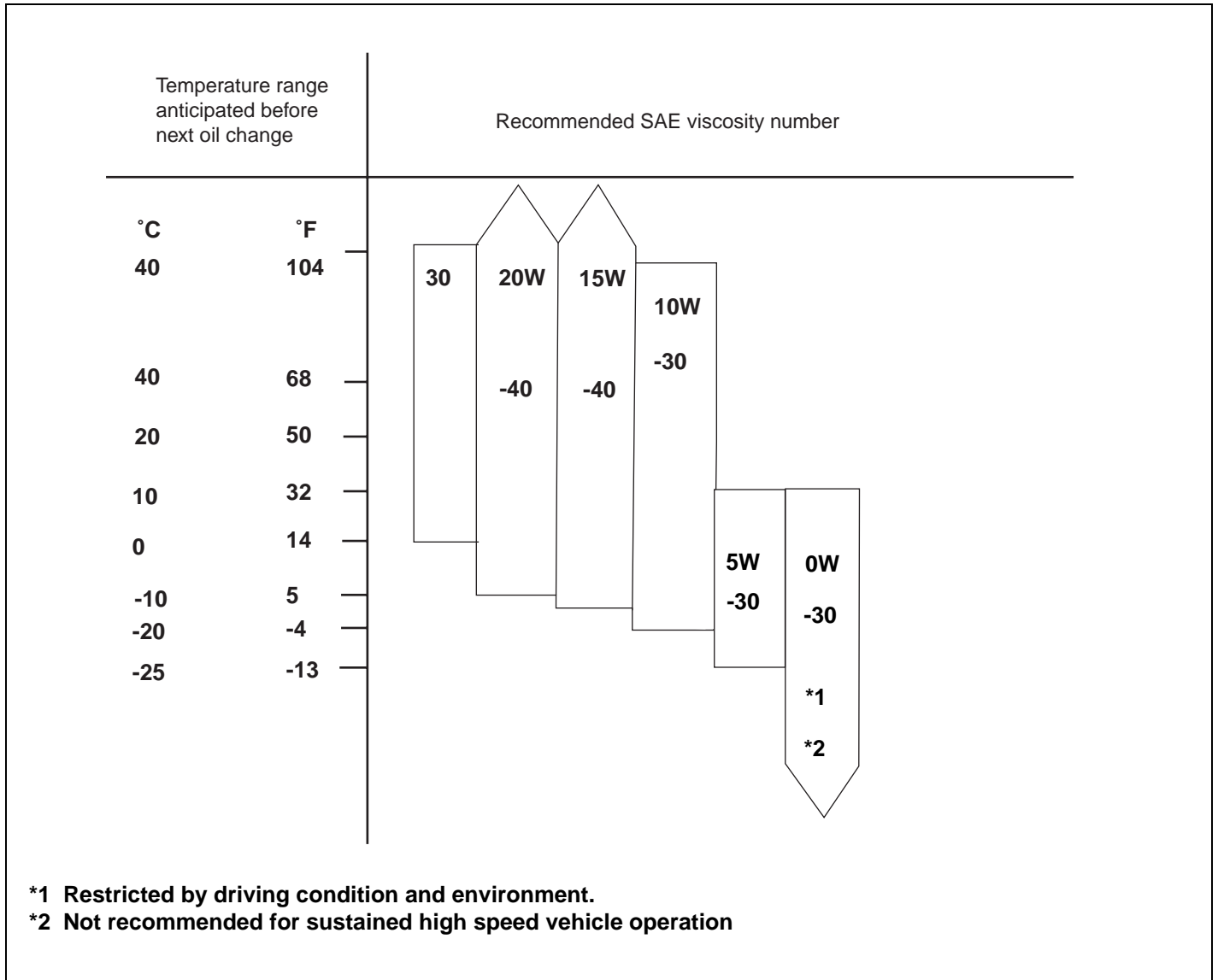
Capacities : [liter (U.S.qus, Imp.qts)]

SELECTION OF ENGINE OIL (DIESEL)

RECOMMENDED API classification : CF -4 OR ABOVE

RECOMMENDED ACEA classification : B4 OR ABOVE

RECOMMENDED SAE VISCOSITY GRADES :



KCSE900A

For best performance and maximum protection of all types of operation, selection only those lubricants which :

1. Satisfy the requirements of the API classification.
2. Have the proper SAE grade number for expected ambient temperature range.

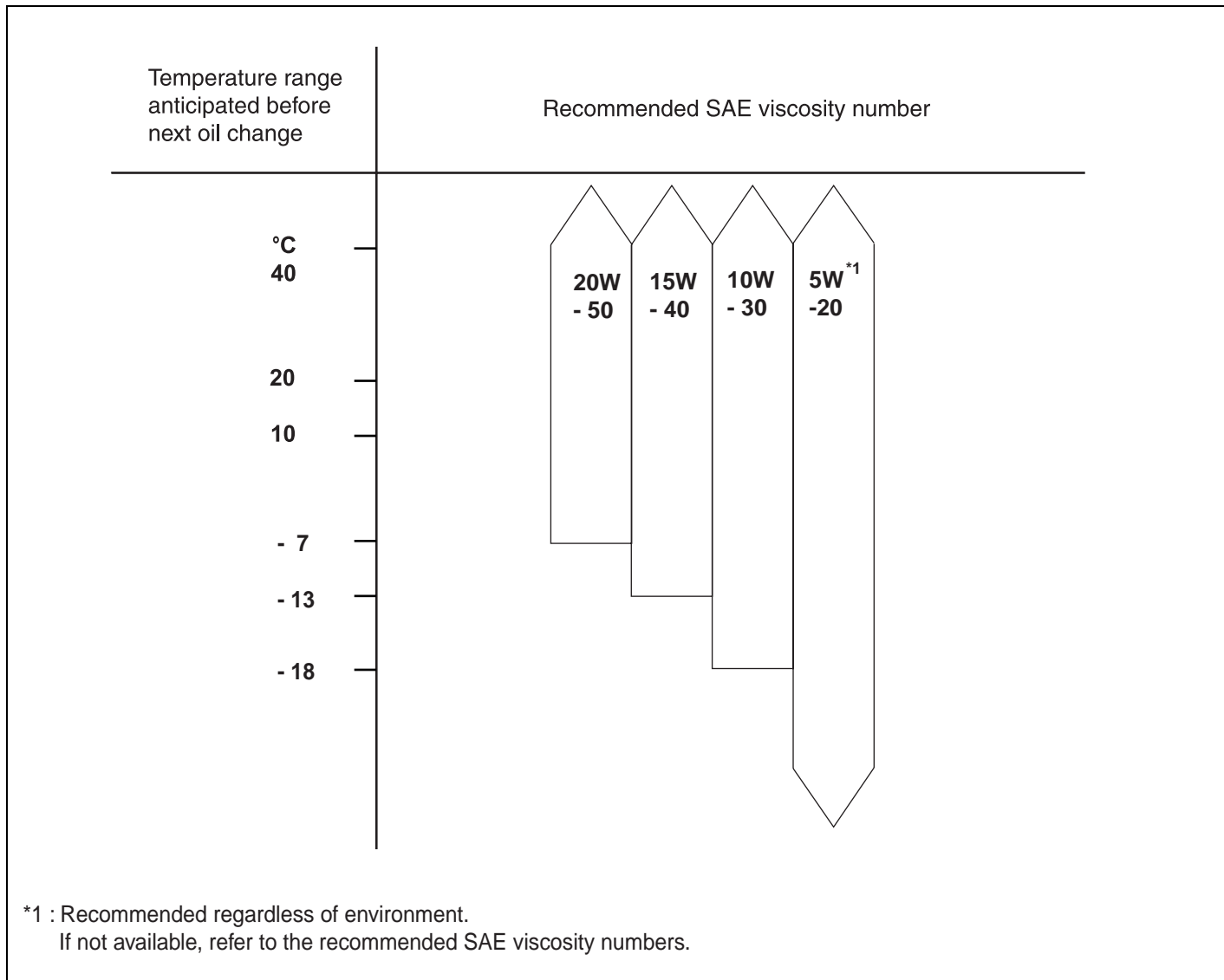
Lubricants which do not have both an SAE grade number and an API or ACEA service classification on the container should not be used.

SELECTION OF ENGINE OIL (GASOLINE)

RECOMMENDED ILSAC classification : GF-3 OR ABOVE

RECOMMENDED API classification : SL(SJ) OR ABOVE

RECOMMENDED SAE VISCOSITY GRADES :



LC8F002A

NOTE

For best performance and maximum protection of all types of operation, select only those lubricants which :

1. Satisfy the requirements of the API classification.
2. Have the proper SAE grade number for expected ambient temperature range.

Lubricants that do not have both an SAE grade number and API service classification on the container should not be used.

GENERAL SERVICE INFORMATION

PROTECTION OF THE VEHICLE

Always be sure to cover fenders, seats, and floor areas before starting work.

 CAUTION

The support rod must be inserted into the hole near the edge of the hood whenever you inspect the engine compartment to prevent the hood from falling and causing possible injury.

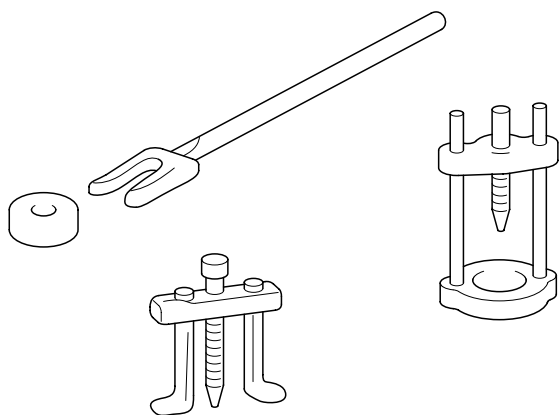
Make sure that the support rod has been released prior to closing the hood. Always check to be sure the hood is firmly latched before driving the vehicle.

PREPARATION OF TOOLS AND MEASURING EQUIPMENT

Be sure that all necessary tools and measuring equipment are available starting work.

SPECIAL TOOLS

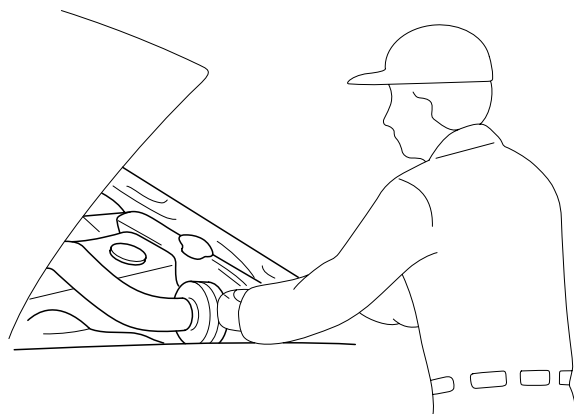
Use special tools when they are required.



EAKE005A

REMOVAL OF PARTS

First find the cause of the problem and then determine whether removal or disassembly before starting the job.



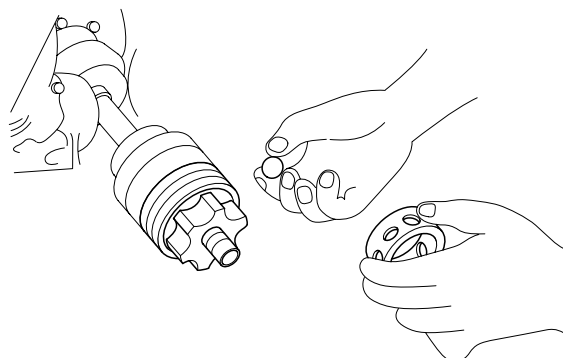
EAKE005B

DISASSEMBLY

If the disassembly procedure is complex, requiring many parts to be disassembled, all parts should be disassembled in a way that will not affect their performance or external appearance.

1. Inspection of parts

Each part, when removed, should be carefully inspected for malfunction, deformation, damage, and other problems.

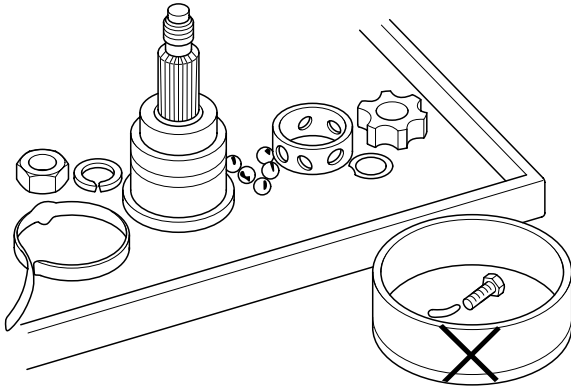


EAKE005C

2. **Arrangement of parts**

All disassembled parts should be carefully arranged for effective reassembly.

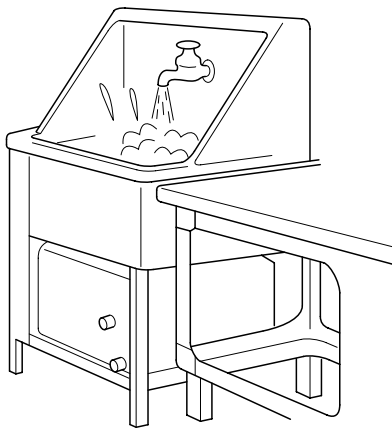
Be sure to separate and correctly identify the parts to be replaced from those that will be used again.



EAKE005D

3. **Cleaning parts for reuse**

All parts to be used again should be carefully and thoroughly cleaned by an appropriate method.

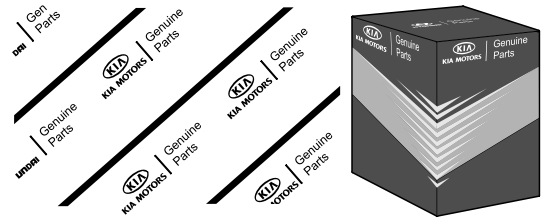


EAKE005E

PARTS

When replacing parts, use KIA MOTORS genuine parts.

KIA | Genuine
KIA MOTORS | Parts



LAIF006A

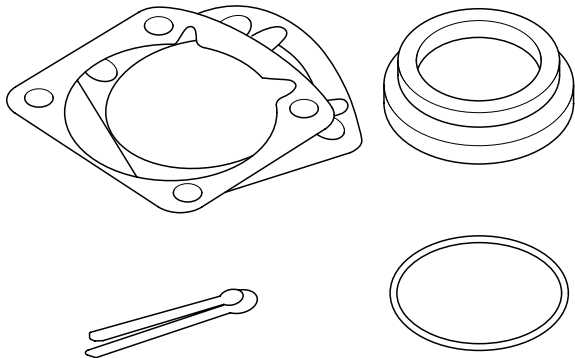
REPLACEMENT

Standard values, such as torques and certain adjustments, must be strictly observed in the reassembly of all parts.

If removed, the following parts should always be replaced with new ones.

1. Oil seals
2. Gaskets
3. O-rings
4. Lock washers
5. Cotter pins (split pins)

6. Plastic nuts



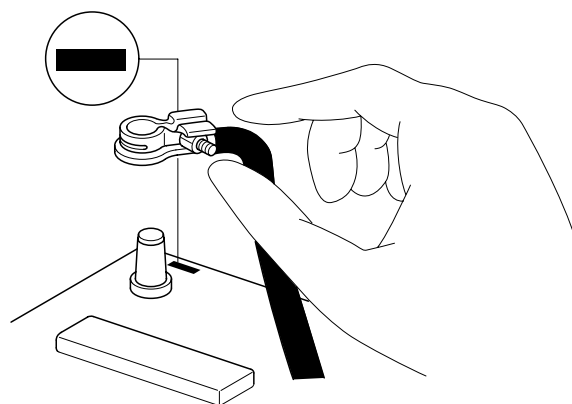
EAKE005G

Depending on their location.

- 7. Selalant should be applied to gaskets.
- 8. Oil should be applied to the moving components of parts.
- 9. Specified oil or grease should be applied to the prescribed locations (oil seals, etc.) before assembly.

ELECTRICAL SYSTEM

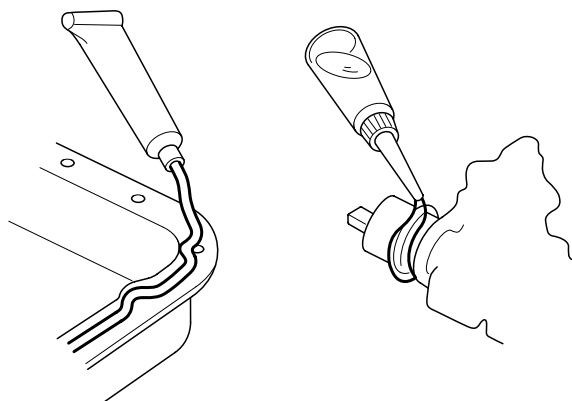
- 1. Be sure to disconnect the battery cable from the negative (-) terminal of the battery.
- 2. Never pull on the wires when disconnecting connectors.
- 3. Locking connectors will click when the connector is secure.
- 4. Handle sensors and relays carefully. Be careful not to drop them against other parts.



EAKE005I

RUBER PARTS AND TUBES

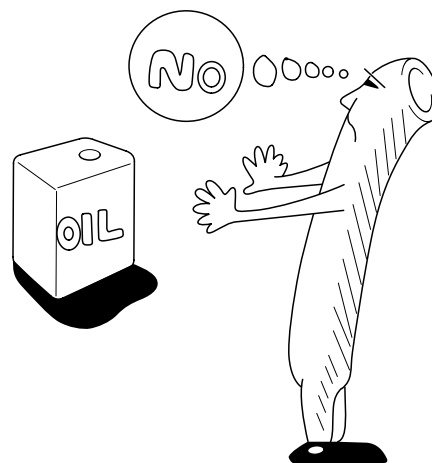
Always prevent gasoline or from touching rubber parts or tubing.



EAKE005H

ADJUSTMENT

Use gauges and testers to adjust correctly the parts to standard values correctly.



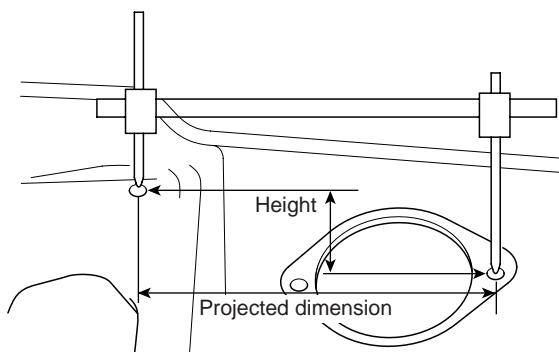
EAKE005J

MEASURING BODY DIMENSIONS

1. Basically, all measurements in this manual are taken with a tracking gauge.
2. When a measuring tape is used, check to be sure there is no elongation, twisting or bending.
3. For measuring dimensions, both projected dimensions and actual - measurement dimensions are used in this manual.

DIMENSIONS PROJECTED

1. These are the dimensions measured when the measurement points are projected from the vehicle's surface, and are the reference dimensions used for used for body alterations.
2. If the length of the tracking gauge probes is adjustable, measure it by lengthening one of two probes as long as the different value in height of the two surface.



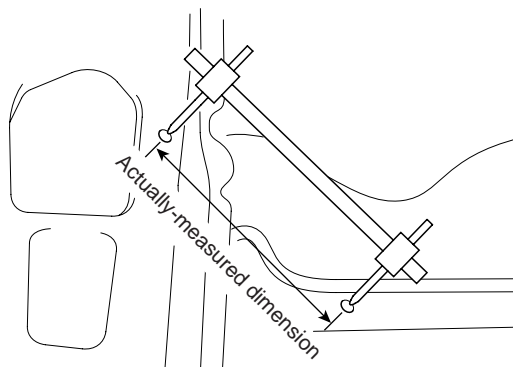
EAKE005K

MEASURING ACTUAL DIMENSIONS

1. These dimensions indicate the actual linear distance between measurement points, and are used as the reference dimensions when a tracking gauge is used for measurement.
2. First adjust both probes to the same length ($A=A'$) before measurement.

NOTE

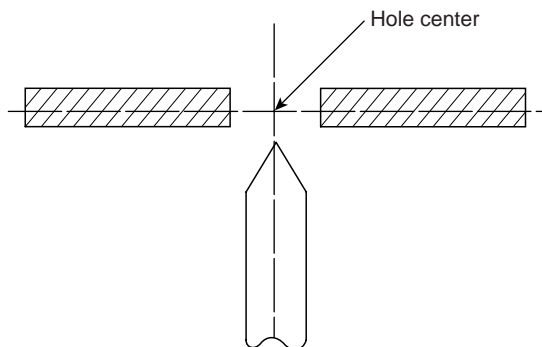
Check the probes and gauge itself to make sure there is no free play.



EAKE005L

MEASUREMENT POINT

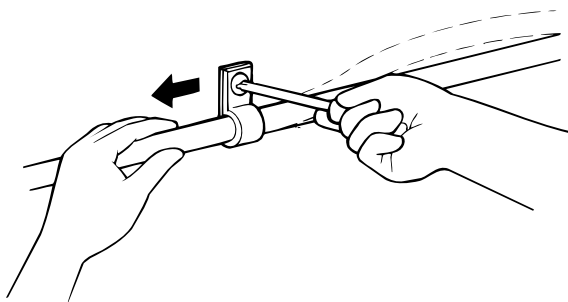
Measurements should be taken at the center of the hole.



EAKE005M

CHECKING CABLES AND WIRES

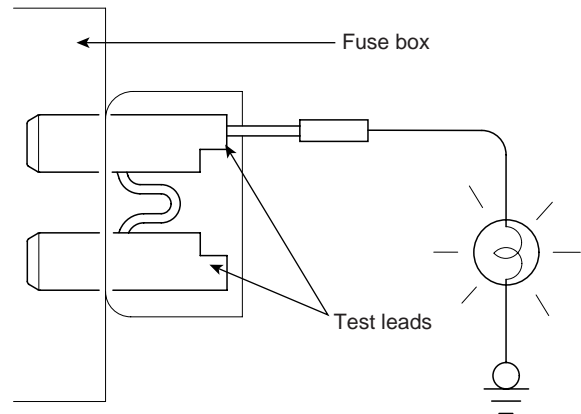
1. Check the terminal for tightness.
2. Check terminals and wires for corrosion from battery electrolyte, etc.
3. Check terminals and wires for open circuits.
4. Check wire insulation and coating for damage, cracks and degrading.
5. Check the conductive parts of terminals for contact with other metallic parts (vehicle body and other parts).
6. Check grounded parts to verify that there is complete continuity between their attaching bolt(s) and the vehicle's body.
7. Check for incorrect wiring.
8. Check that the wiring is so clamped to prevent contact with sharp corners of the vehicle body, etc. or hot parts (exhaust manifold, etc.)
9. Check that the wiring is clamped firmly to provide enough clearance from the fan pulley, fan belt and other rotating or moving parts.
10. Check that the wiring has a little space so that it can vibrate between fixed and moving parts such as the vehicle body and the engine.



EAKE005N

CHECK FUSES

A blade type fuse test taps provided to allow checking the fuse itself without removing it from the fuse box. The fuse is good if the test lamp lights up when one lead is connected to the test taps (one at a time) and the other lead is grounded. (Turn the ignition switch so that the fuse circuit becomes operative)



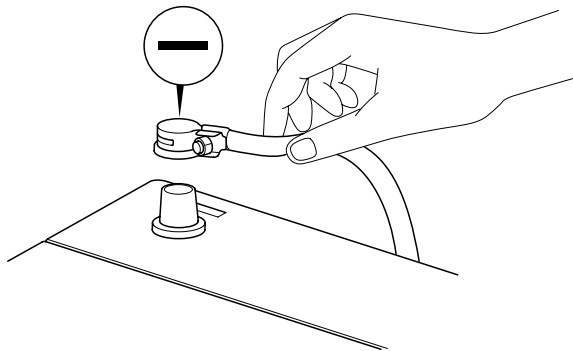
EAKE005O

SERVICING THE ELECTRICAL SYSTEM

1. Prior to servicing the electrical system, be sure to turn off the ignition switch and disconnect the battery ground cable.

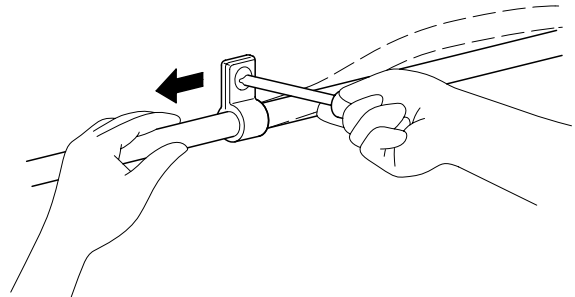
NOTE

In the course of MFI or ELC system diagnosis, when the battery cable is removed, any diagnostic trouble code retained by the computer will be cleared. Therefore, if necessary, read the diagnostic before removing the battery cable.



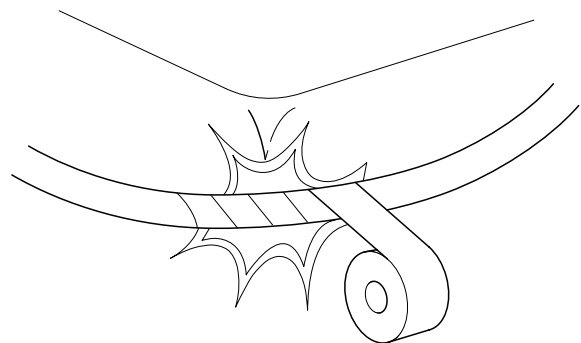
EAKE005P

2. Attach the wiring harnesses with clamps so that there is no slack. However, for any harness which passes the engine or other vibrating parts of the vehicle, allow some slack within a range that does not allow the engine vibrations to cause the harness to come into contact with any of the surrounding parts and then secure the harness by using a clamp.



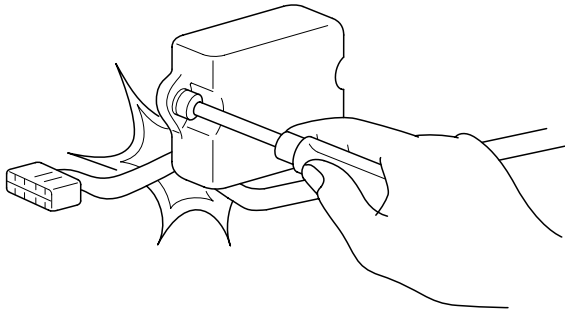
EAKE005R

3. If any section of a wiring harness interferes with the edge of a parts, or a corner, wrap the section of the harness with tape or something similar in order to protect it from damage.



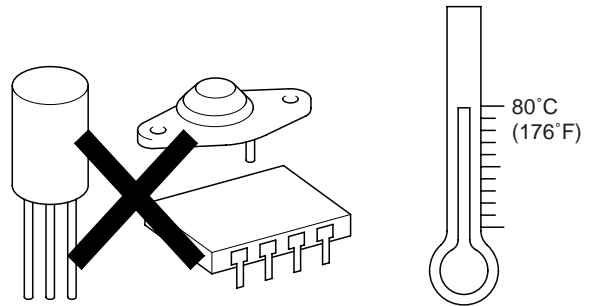
EAKE005S

4. When installing any parts, be careful not to pinch or damage any of the wiring harness.

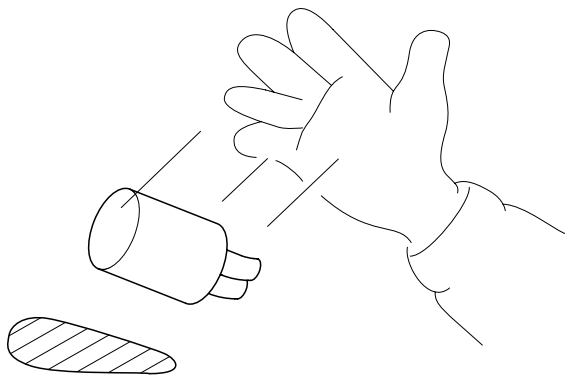


EAKE005T

6. The electronic parts used in the computer, relays, etc. are readily damaged by heat. If there is a need for service operations that may cause the temperature to exceed 80°C (176°F), remove the electronic parts before hand.



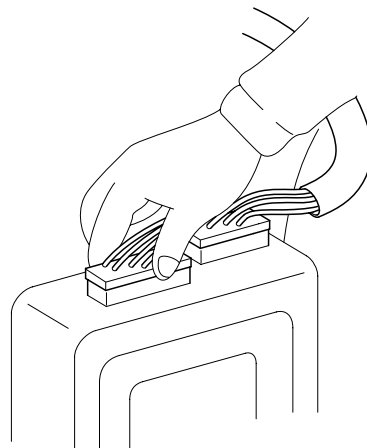
5. Never throw relays, sensors or electrical parts, or expose them to strong shock.



EAKE005U

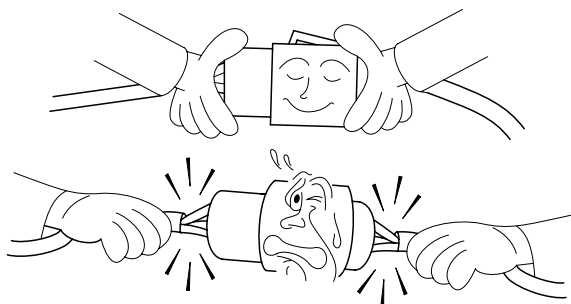
EAKE006A

7. Loose connectors cause problems. Make sure that the connectors are always securely fastened.



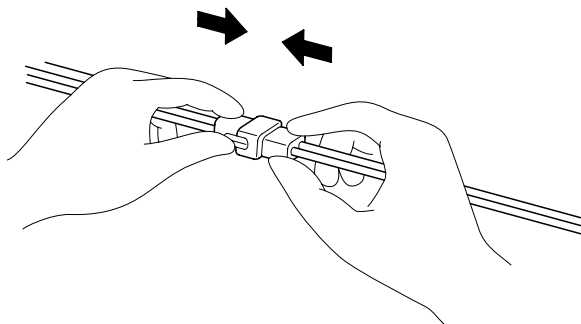
EAKE006B

8. When disconnecting a connector, be sure to grip only the connector, not the wires.



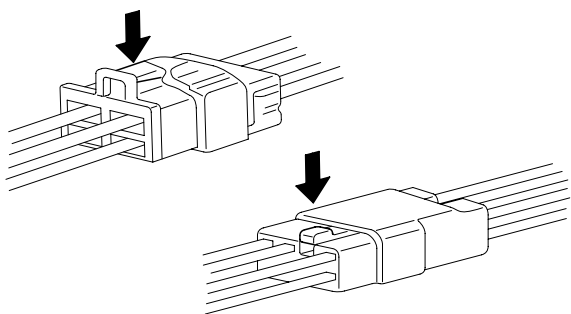
EAKE006C

10. Connect connectors which have catches by inserting the connectors until they make a clicking sound.



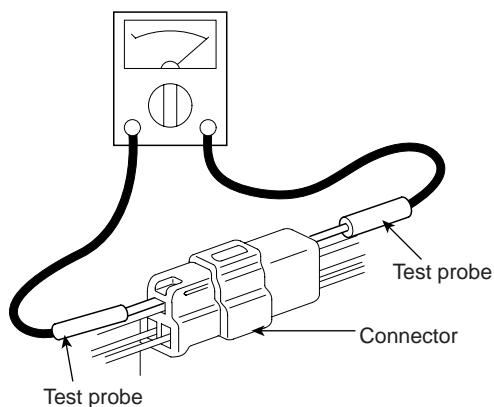
EAKE006E

9. Disconnect connector which have catches by pressing in the direction of the arrows shown the illustration.



EAKE006D

11. When using a circuit tester to check continuity or voltage on connector terminals, insert the test probe into the harness side. If the connector is a sealed connector, insert the test probe through the hole in the rubber cap until contacts the terminal, being careful not to damage the insulation of the wires.



EAKE006G

12. To avoid overloading the wiring, take the electrical current load of the optional equipment into consideration, and determine the appropriate wire size.

Nominal size	SAE gauge No.	Permissible current	
		In engine compartment	Other areas
0.3mm ²	AWG 22	-	5A
0.5mm ²	AWG 20	7A	13A
0.85mm ²	AWG 18	9A	17A
1.25mm ²	AWG 16	12A	22A
2.0mm ²	AWG 14	16A	30A
3.0mm ²	AWG 12	21A	40A
5.0mm ²	AWG 10	31A	54A

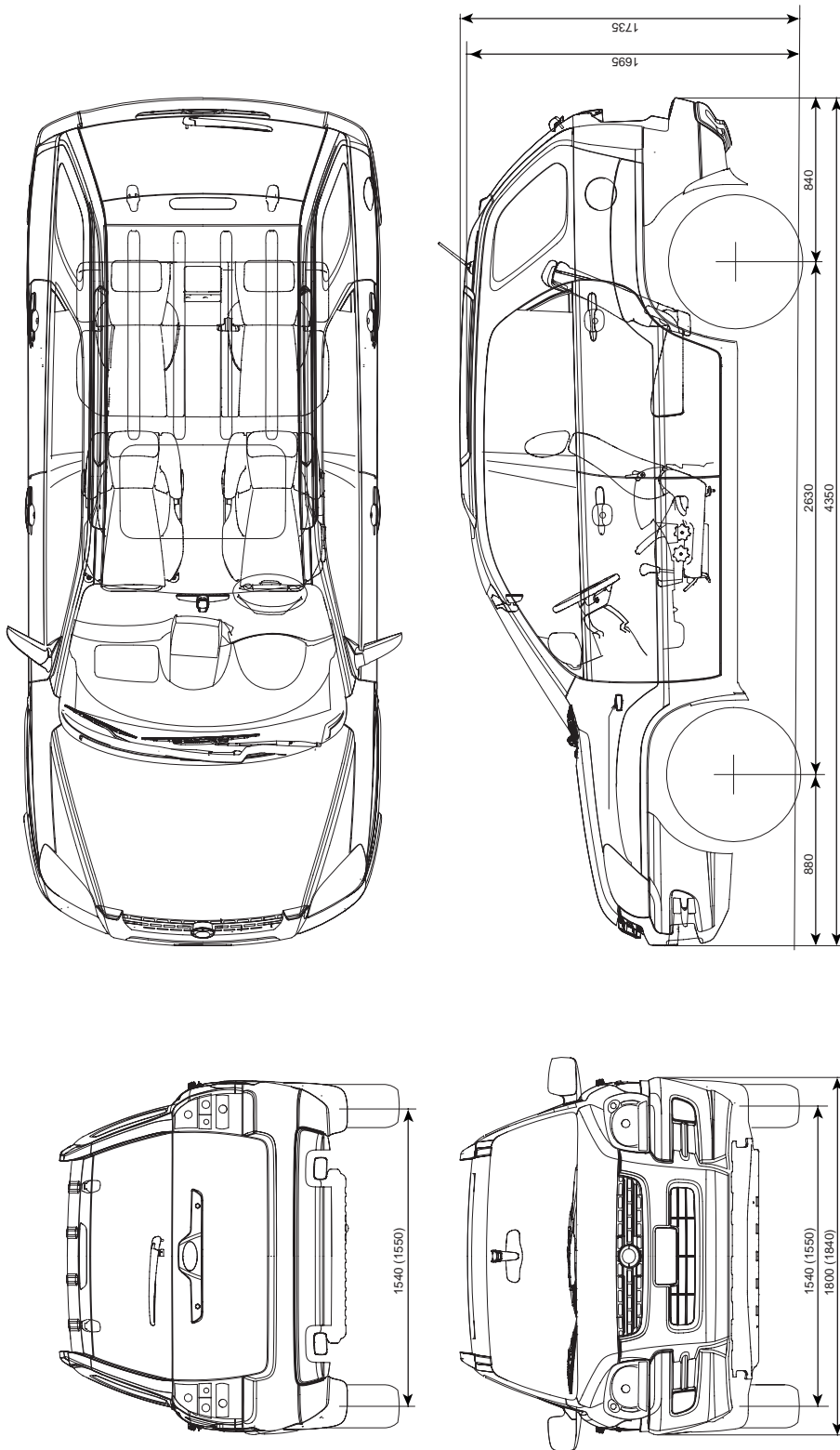
PRECAUTIONS FOR CATALYTIC CONVERTER

 CAUTION

If a large amount of unburned gasoline flow into the converter, it may overheat and create a fire hazard. To prevent this observe the following precautions and explain them to your customer.

1. Use only unleaded gasoline.
2. Do not run the engine while the car is at rest for a long time. Avoid running the engine at fast idle for more than 10 minutes and idle speed for more than 20 minutes.
3. Avoid start-jump tests. Do start-jumps only when absolutely necessary. Perform this test as rapidly as possible and, while testing, never race the engine.
4. Do not measure engine compression for an extended time. Engine compression tests must be made as rapidly as possible.
5. Avoid coasting with the ignition turned and during prolonged braking.
6. Do not dispose of used catalytic converter together with parts contaminated with gasoline or oil.

BODY - DIMENSION



Unit : mm

MAINTENANCE SCHEDULE

SCHEDULE 1 - NORMAL MAINTENANCE (1/2)

MAINTENANCE INTERVALS		Number of months or driving distance, whichever comes first								
		Months	12	24	36	48	60	72	84	96
		Milesx1,000	10	20	30	40	50	60	70	80
		Kmx1,000	15	30	45	60	75	90	105	120
Drive belts ¹	Gasoline	I	I	I	I	I	I	I	I	
	Diesel		I		I		R		I	
Engine oil and engine oil filter ²	Gasoline	R	R	R	R	R	R	R	R	
	Diesel	R	R	R	R	R	R	R	R	
Engine timing belt	Gasoline				I		R			
	Diesel	For Europe	Replace every 150,000 km (100,000 miles) or 120 months							
		Except Europe							R	
Air cleaner element	Gasoline	I	R	I	R	I	R	I	R	
	Diesel	I	R	I	R	I	R	I	R	
Spark plugs (Gasoline)	Nickel coated	For Europe		R		R		R		R
		Except Europe	Replace every 40,000 km (25,000 miles)							
	Platinum coated	For Europe						R		
		Except Europe	Replace every 100,000 km (60,000 miles)							
Iridium coated	For Europe	Replace every 150,000 km (100,000 miles)								
	Except Europe	Replace every 160,000 km (100,000 miles)								
Valve clearance	2.0L Gasoline	Inspect every 90,000 km (60,000 miles) or 48 months								
Vapor hose and fuel filler cap, air filter			I		I		I		I	
Vacuum and crankcase ventilation hoses	Gasoline			I			I			
Vacuum hose (for EGR & throttle body)	Diesel	I	I	I	I	I	I	I	I	
Alternator vacuum pump	Diesel	I	I	I	I	I	I	I	I	
Alternator oil hose and vacuum hose	Diesel	I	I	I	I	I	I	I	I	
Fuel filter	Gasoline				R				R	
Fuel filter cartridge	Diesel	For Europe		R		R		R		R
		Except Europe	Inspect every 7,500 km (5,000 miles) or 6 months and replace every 15,000 km (10,000 miles) or 12 month							
Fuel lines, hoses and connections		I	I	I	I	I	I	I	I	
Cooling system		Inspect "Coolant level adjustment and leak" every day Inspect "Water pump" when replacing the drive belt or timing belt								
Engine coolant	For Europe ³	At first, replace at 90,000 km (60,000 miles) or 60 months: after that, replace every 45,000 km (30,000 miles) or 24 months								
	Except Europe	Replace every 45,000 km (30,000 miles) or 24 months								

SCHEDULE 1 - NORMAL MAINTENANCE (2/2)

MAINTENANCE ITEM	MAINTENANCE INTERVALS	Number of months or driving distance, whichever comes first								
		Months	12	24	36	48	60	72	84	96
		Milesx1,000	10	20	30	40	50	60	70	80
		Kmx1,000	15	30	45	60	75	90	105	120
Battery condition		I	I	I	I	I	I	I	I	
All electrical systems			I		I		I		I	
Brake lines, hoses and connections		I	I	I	I	I	I	I	I	
Brake pedal, clutch pedal			I		I		I		I	
Parking brake			I		I		I		I	
Brake/clutch fluid	For Europe	I	R	I	R	I	R	I	R	
	Except Europe	I	I	I	I	I	I	I	I	
Disc brakes and pads		I	I	I	I	I	I	I	I	
Drum brakes and linings			I		I		I		I	
Exhaust pipe and muffler		I	I	I	I	I	I	I	I	
Throttle body cleaning (with removing carbon) *4		I	I	I	I	I	I	I	I	
Power steering fluid and hoses			I		I		I		I	
Steering gear rack, linkage and boots		I	I	I	I	I	I	I	I	
Driveshaft and boots			I		I		I		I	
Tire (pressure & tread wear)		I	I	I	I	I	I	I	I	
Front suspension ball joints		I	I	I	I	I	I	I	I	
Bolt and nuts on chassis and body		I	I	I	I	I	I	I	I	
Air conditioner refrigerant (if equipped)		I	I	I	I	I	I	I	I	
Air conditioner compressor (if equipped)		I	I	I	I	I	I	I	I	
Air conditioner air filter (if equipped)		R	R	R	R	R	R	R	R	
Transfer case fluid (4WD) *5	For Europe		I		I		R		I	
	Except Europe	Inspect every 40,000 km (25,000 miles) and replace every 100,000 km (60,000 miles)								
Rear differential fluid (4WD) *5	For Europe		I		I		I		I	
	Except Europe	Inspect every 40,000 km (25,000 miles)								
Propeller shaft clean, bolt retighten (4WD)			I		I		I		I	
Manual transaxle fluid			I		I		I		I	
Automatic transaxle fluid	For Europe		I		I		R		I	
	Except Europe		I		I		I		I	

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

*1 : Adjust alternator and power steering (and water pump drive belt) and air conditioner drive belt (if equipped).
Inspect 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 : When adding coolant, use only a qualified coolant additive 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.

*4 : Be careful not to damage to the emission control system when cleaning the throttle body

*5 : Transfer case fluid and rear differential fluid should be changed anytime they have been submerged in water

SCHEDULE 2 - SEVERE MAINTENANCE

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 ITEM		Maintenance operation	Maintenance intervals	Driving condition	
Engine oil and engine oil filter	Gasoline	R	Every 7,500 km (4,500 miles) or 6 moths	A, B, C, D, E	
	Diesel	R	Every 7,500 km (4,500 miles) or 6 moths	F, G, H, I, J	
Air cleaner element		I	Inspect more frequently depending on the condition	C, E	
Spark plugs		Gasoline	I	Inspect more frequently depending on the condition	B, H
Engine timing belt	Gasoline		R	Every 60,000 km (40,000 miles) or 48 months	D, E, F, G
	Diesel	For Europe	R	Every 75,000 km (50,000 Miles) or 60 months	
		Except europe	R	Every 60,000 km (40,000 Miles) or 48 months	
Manual transaxle fluid	For Europe	R	Every 90,000 km (60,000 Miles)	A,C,D,E,F,G,H,I,J	
	Except europe	R	Every 100,000 km (62,000 Miles)		
Automatic transaxle fluid	For Europe	R	Every 45,000 km (30,000 Miles)	A, C, E, F, G, H, I	
	Except europe	R	Every 40,000 km (25,000 Miles)		
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	

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