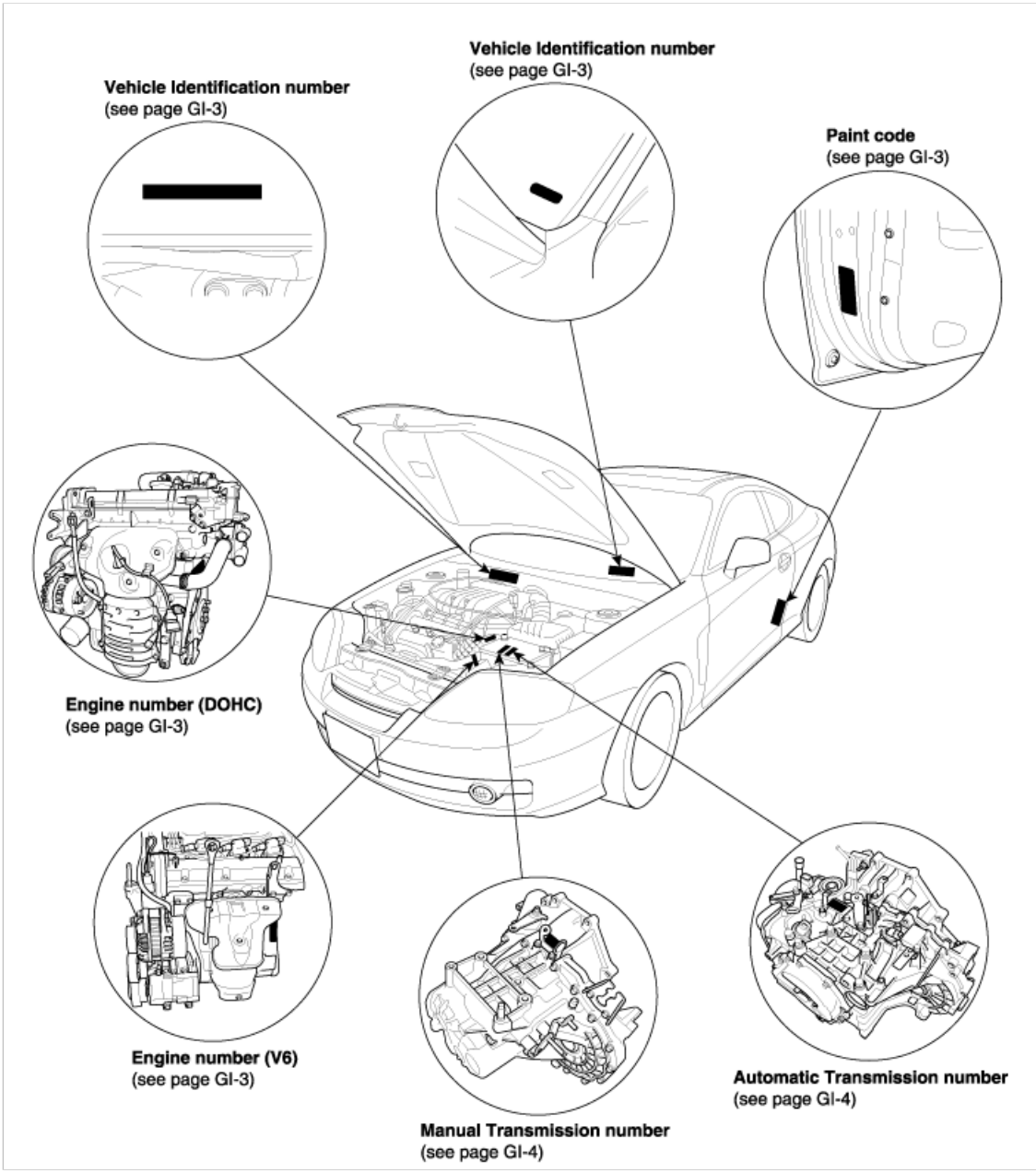
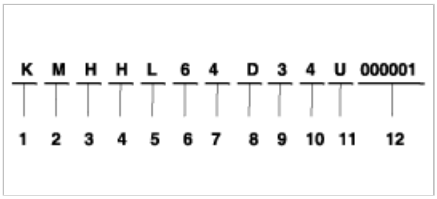
IDENTIFICATION NUMBER LOCATIONS



IDENTIFICATION NUMBER DESCRIPTION

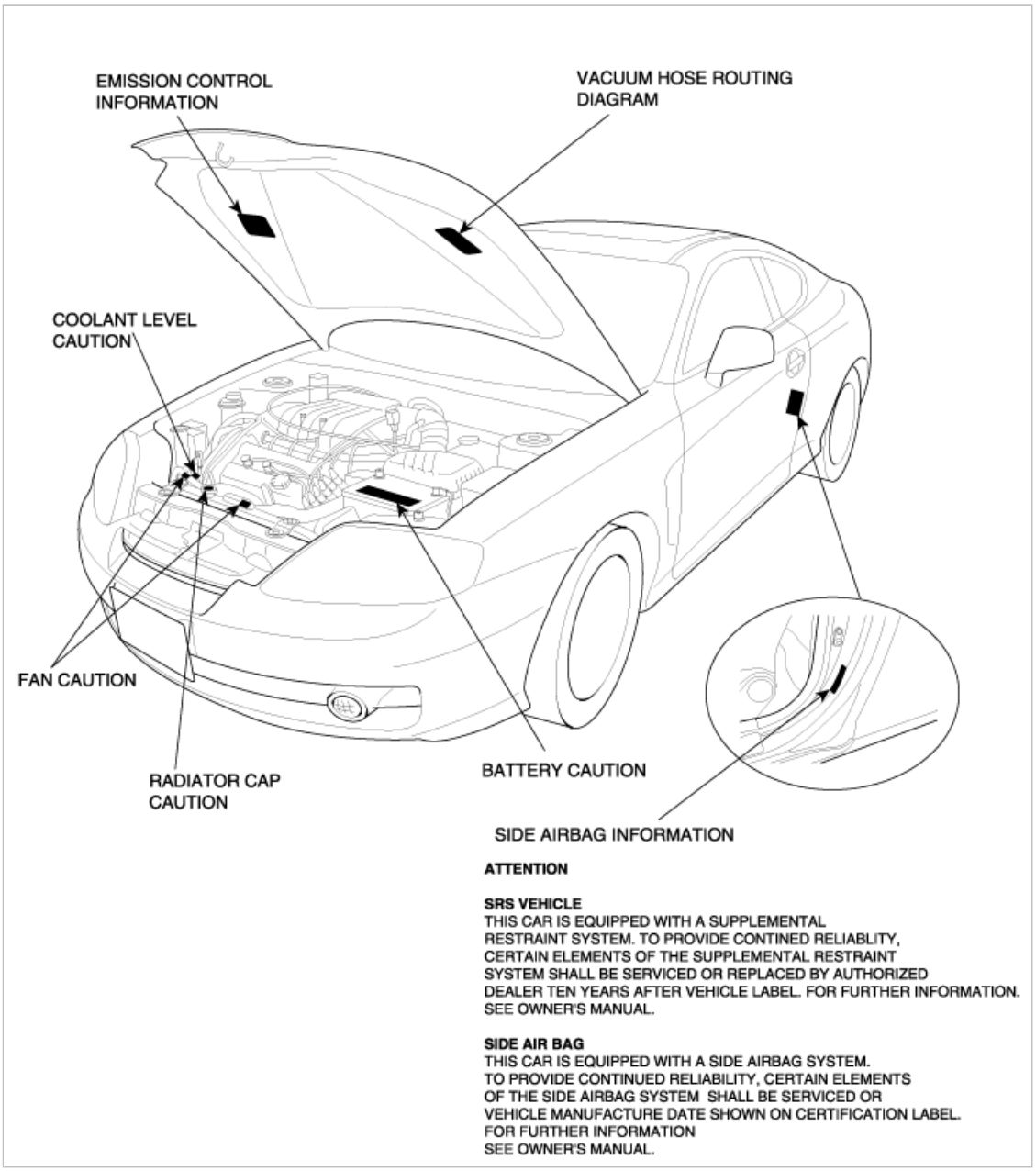
VEHICLE IDENTIFICATION NUMBER



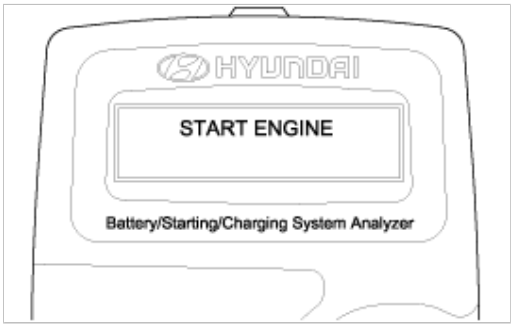
1. Geographic zone
   - K : Korea
2. Manufacturer
   - M : Hyundai motor company
3. Vehicle type

- 000000 ~ 999999

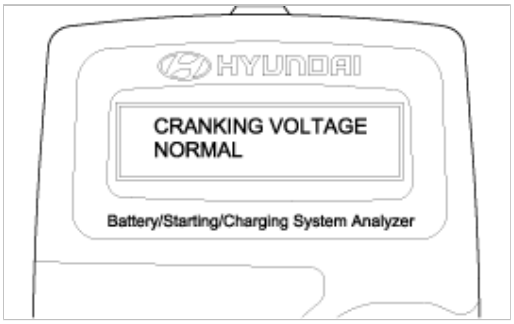
WARNING / CAUTION LABEL LOCATIONS



AIR BAG WARNING / CAUTION LABEL



3. Cranking voltage and starter test results will be displayed on the screen.
   Take relevant action according to the test results by referring to the starter test results as given below.



4. To continue charging system test, press ENTER.
   STARTER TEST RESULTS

RESULT ON PRINTER	REMEDY
Cranking voltage normal	System shows a normal starter draw
Cranking voltage low	Cranking voltage is lower than normal level → Check starter
Charge battery	The state of battery charge is too low to test → Charge the battery and retest
Replace battery	→ Replace battery → Check wiring for open circuit, battery cable connection, starter and repair or replace as necessary. → If the engine does crank, check fuel system.

CHARGING SYSTEM TEST PROCEDURE

1. Press ENTER to begin charging system test.

2. If ENTER button is pressed, the tester displays the actual voltage of alternator.
   Press ENTER to test the charging system.

63A min.
84A min

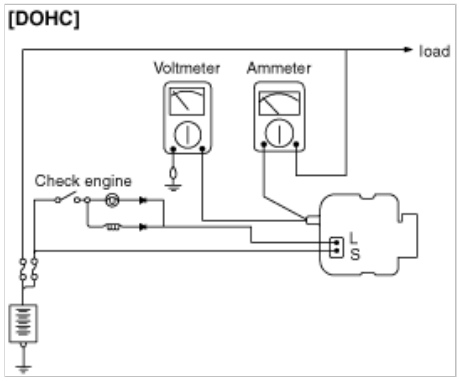
NOTE

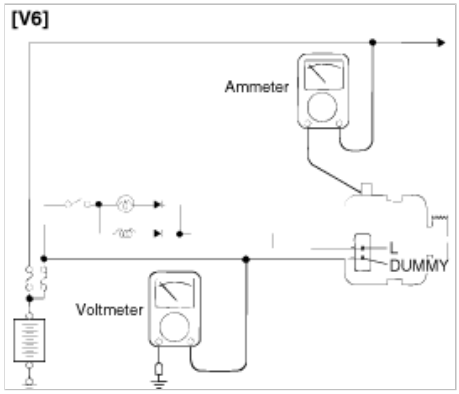
- The nominal output current value is shown on the nameplate affixed to the generator body.
- The output current value changes with the electrical load and the temperature of the generator itself. Therefore, the nominal output current may not be obtained. If such is the case, keep the headlights on to cause discharge of the battery.
  The nominal output current may not be obtained if the temperature of the generator itself or ambient temperature is too high.
  In such a case, reduce the temperature before testing again.

2. Upon completion of the output current test, lower the engine speed to idle and turn off the ignition switch.
3. Disconnect the battery ground cable.
4. Remove the ammeter and voltmeter and the engine tachometer.
5. Connect the generator output wire to the generator "B" terminal.
6. Connect the battery ground cable.

PREPARATION

1. Prior to the test, check the following items and correct if necessary.
   Check that the battery installed in the vehicle is fully charged. For battery checking method, see "BATTERY".
   Check the generator drive belt tension. For belt tension check, see "COOLING" section.
2. Turn ignition switch to "OFF".
3. Disconnect the battery ground cable.
4. Connect a digital voltmeter between the "B" terminal of the generator and ground. Connect the (+) lead of the voltmeter to the "B" terminal of the generator. Connect the (-) lead to good ground or the battery (-) terminal.
5. Disconnect the generator output wire from the generator "B" terminal.
6. Connect a DC ammeter (0 to 150A) in series between the "B" terminal and the disconnected output wire. Connect the (-) lead wire of the ammeter to the disconnected output wire.
7. Attach the engine tachometer and connect the battery ground cable.





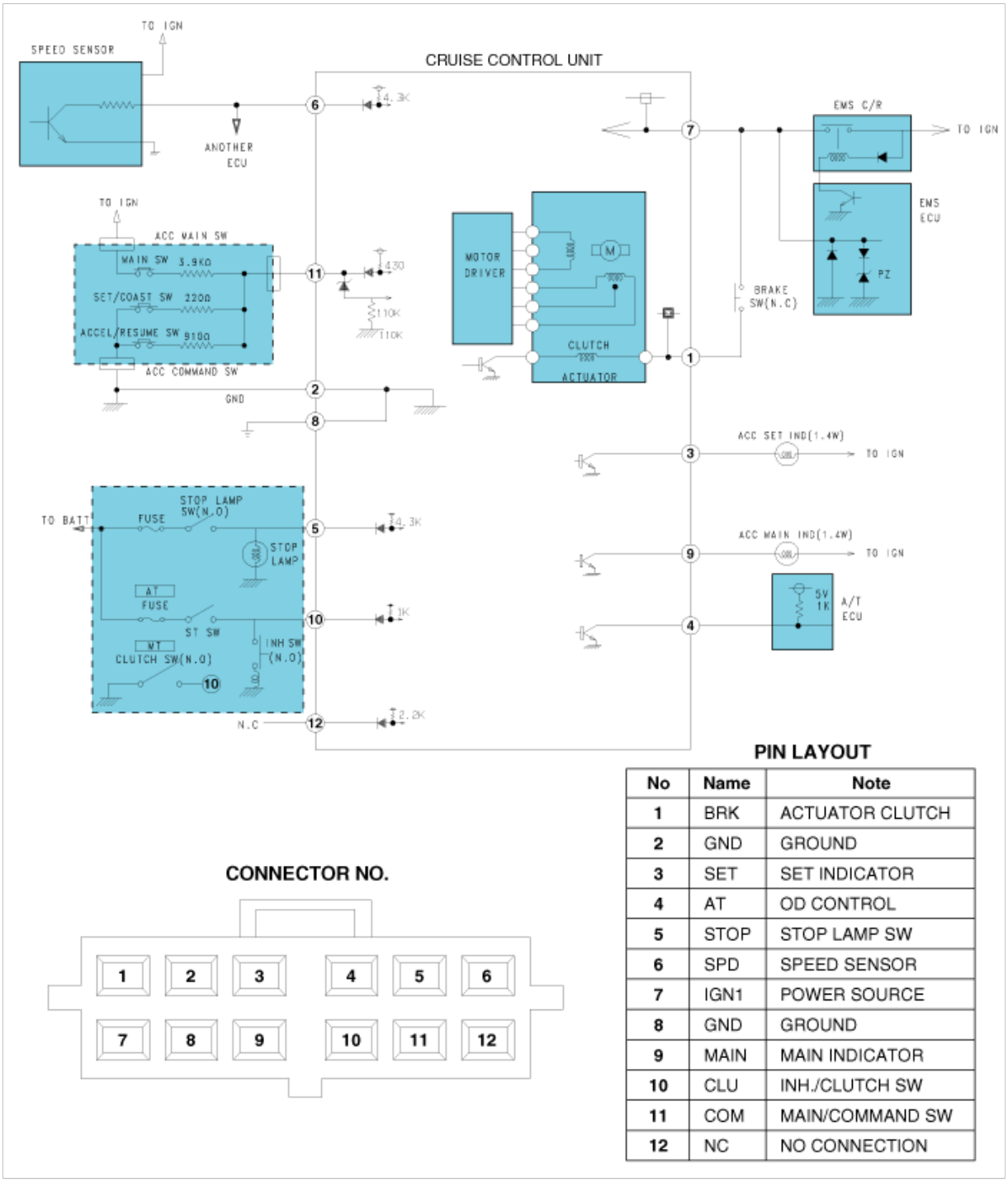
TEST

1. Turn on the ignition switch and check to see that the voltmeter indicates the following value.

Battery voltage

TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Engine Electrical System > Cruise Control System > Schematic Diagrams, TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Engine Electrical System > Cruise Control System > Schematic Diagrams

CIRCUIT DIAGRAM FOR CRUISE CONTROL SYSTEM



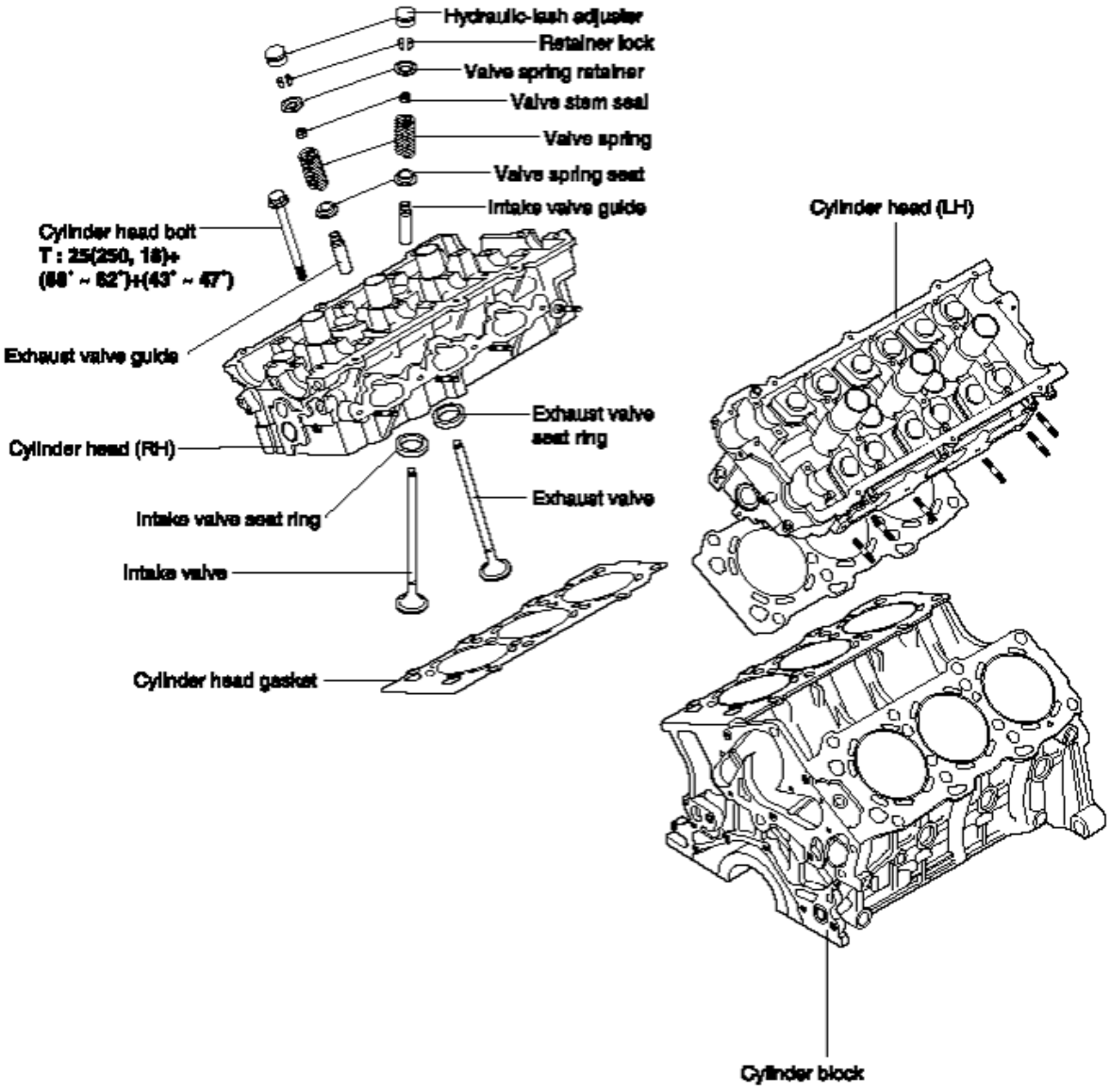
CONNECTOR NO.

PIN LAYOUT

No	Name	Note
1	BRK	ACTUATOR CLUTCH
2	GND	GROUND
3	SET	SET INDICATOR
4	AT	OD CONTROL
5	STOP	STOP LAMP SW
6	SPD	SPEED SENSOR
7	IGN1	POWER SOURCE
8	GND	GROUND
9	MAIN	MAIN INDICATOR
10	CLU	INH./CLUTCH SW
11	COM	MAIN/COMMAND SW
12	NC	NO CONNECTION

TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Engine Mechanical System > Cylinder Head Assembly > Valve > Components and Components Location, TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Engine Mechanical System > Cylinder Head Assembly > Valve > Components and Components Location

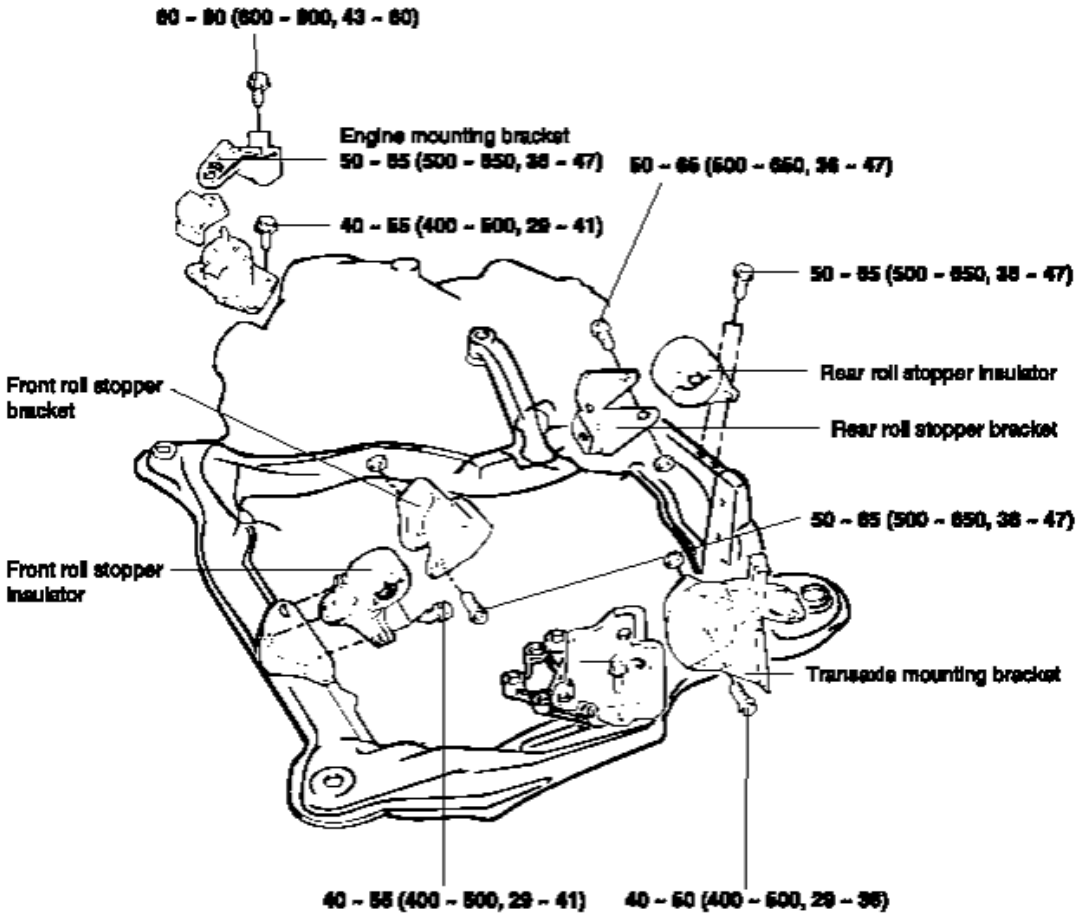
COMPONENTS



TORQUE : Nm (kg-cm, lb-ft)

TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Engine Mechanical System > Cylinder Block > Engine Mounts > Components and Components Location, TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Engine Mechanical System > Cylinder Block > Engine Mounts > Components and Components Location

COMPONENTS



TORQUE : Nm (kg-cm, lb.ft)

SPECIFICATIONS

Front suspension system	**Macpherson strut type**	
Shock absorber		
Type	Gas type	
Stroke mm (in)	160.4 (6.32)	
Damping force at 0.3 m/s	**Normal**	**Sports**
Expansion N(kg)	940 ± 140 (94 ± 14)	2080 ± 290 (209 ± 29)
Compression N(kg)	260 ± 60 (26 ± 6)	430 ± 90 (43 ± 9)
ID color	Red	Blue

Coil spring free height and identification color

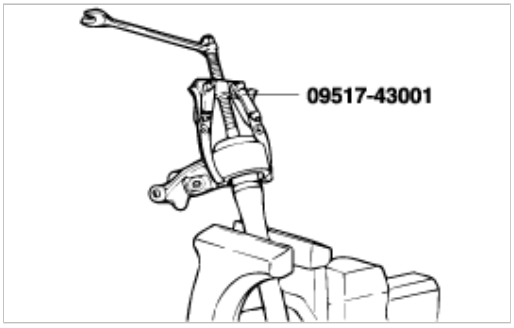
Model	Classification	Free height mm (in.)	ID color
2.0L GL M/T (-A/CON) 2.0L GLS M/T (-A/CON)	Sports	323.3 (12.73)	Blue-Blue
2.0L GLS 6M/T (-A/CON)	Normal	340.9 (13.42)	Yellow-Yellow
2.0L GL A/T (-A/CON) 2.0L GL M/T (+A/CON) 2.0L GLS M/T (+A/CON)	Sports	329.2 (12.96)	Green-Green
2.0L GLS 6M/T (+A/CON) 2.0L GLS A/T (-A/CON)	Normal	347.6 (13.69)	Pink-Pink
2.0L GL A/T (+A/CON) 2.0L GLS A/T (+A/CON) 2.7L GL 6M/T (+A/CON)	Sports	335.1 (13.19)	Violet-Violet
2.7L GL A/T (+A/CON) 2.7L GLS 6M/T (+A/CON) 2.7L GLS A/T (+A/CON)	Normal	354.3 (13.95)	Red-Red

* GL, GLS : Trim level
* M/T : 5 speed manual transaxle
* A/T : Automatic transaxle
* ID : Identification
* A/CON : With air conditioning
* N-A/CON : Without air conditioning
* 6M/T : 6 Speed Manual transaxle

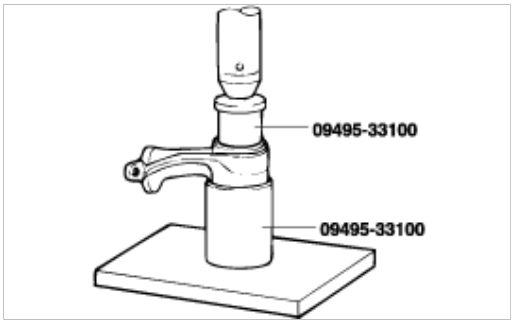
TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Driveshaft and axle > Driveshaft Assembly > Center Bearing And Inner Shaft > Repair procedures, TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Driveshaft and axle > Driveshaft Assembly > Center Bearing And Inner Shaft > Repair procedures

DISASSEMBLY

1. Using the special tool (09517-43001), disassemble the center bearing bracket from the inner shaft.



2. Using the special tools (09216-21100, 09495-33100), press out the center bearing from the outside to the inside direction of the center bearingbracket as shown in the illustration.

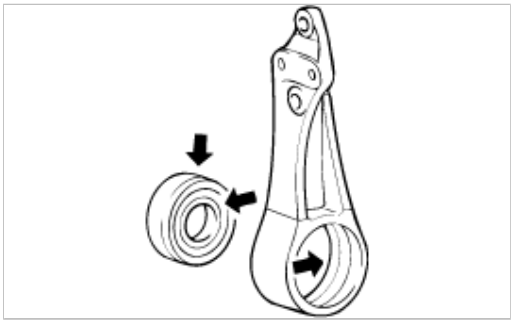


INSPECTION

1. Check the inner shaft for damage, bending or rust.
2. Check the inner shaft splines for wear or damage.
3. Check the center bearing for scoring, discoloration and roughness of the roller journals moving surfaces.

REASSEMBLY

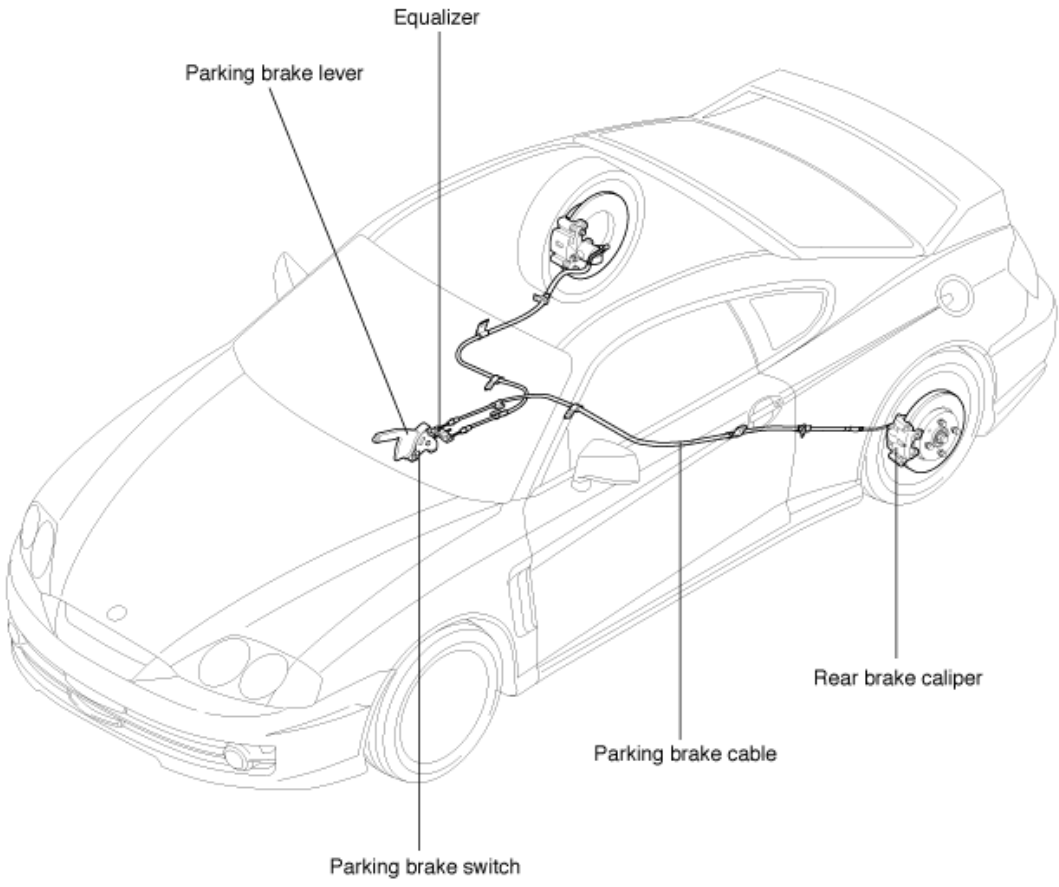
1. Apply multipurpose grease to the center bearing and inside the center bearing bracket.



2. Using the special tool (09495-33100), press the center bearing into the center bearing bracket.

TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Brake System > Parking Brake System > Parking Brake Assembly > Components and Components Location, TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Brake System > Parking Brake System > Parking Brake Assembly > Components and Components Location

COMPONENTS



TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Manual Transaxle System > General Information > Specifications (M5GF1), TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Manual Transaxle System > General Information > Specifications (M5GF1)

SPECIFICATIONS (M/T)

Model		M5BF2 (5-speed)	M5GF1 (5-speed)	MFA60 (6-speed)	
Engine		2.0 DOHC	2.7 DOHC	2.0 DOHC	2.7 DOHC
Gear ratio	1st	3.462	3.231	3.153	←
	2nd	2.053	1.952	1.944	←
	3rd	1.393	1.296	1.333	←
	4th	1.061	0.943	1.055	←
	5th	0.837	0.775	0.857	←
	6th	-	-	0.704	←
	Reverse	3.250	3.455	3.002	←
	Final gear ratio	4.056	4.063	4.678	4.428
Oil quantity (ℓ)		2.15	2.1	2.2 ± 0.1	

SERVICE STANDARD (6-SPEED M/T)

Item	Standard	Limit
Input shaft 6th gear end play	0 ~ 0.1	-
Output shaft 6th gear end play	0 ~ 0.1	-
Output shaft 6th gear bearing play	0 ~ 0.06	-
Clearance between 3rd gear and synchronizer ring	0.9 ~ 1.45	0.7
Clearance between 4th gear and synchronizer ring	0.9 ~ 1.45	↑
Clearance between 5th gear and synchronizer ring	0.95 ~ 1.4	↑
Clearance between 6th gear and synchronizer ring	0.95 ~ 1.4	↑
Clearance between reverse gear and synchronizer ring	0.95 ~ 1.4	↑

TIGHTENG TORQUE (6-SPEED M/T)

Item	N·m	kg·cm	lb·ft
Manual transaxle case to clutch housing bolt	63 ~ 67	630 ~ 670	46 ~ 49
Drain plug	30 ~ 39	300 ~ 390	22 ~ 28
Reverse lever	11.8 ~ 15.6	118 ~ 156	8.7 ~ 11.5
Shift check plug	12.7 ~ 17.0	127 ~ 170	9.3 ~ 12.5
Shift check	22.5 ~ 25.5	225 ~ 255	16.6 ~ 18.8
Stopper bolt	26.5 ~ 30.4	26.5 ~ 304	19.6 ~ 22.4
Control shaft bolt	6.3 ~ 8.3	63 ~ 83	4.6 ~ 6.0
Shift lever mounting plate	2 ~ 3	20 ~ 30	1 ~ 2
Differential final gear bolt	112.7 ~ 127.4	1127 ~ 1274	83 ~ 94

BASIC INSPECTION ADJUSTMENT

AUTOMATIC TRANSAXLE FLUID CHECK

1. Drive the vehicle until the fluid temperature rises to the normal temperature (70~80℃).
2. Park the vehicle on a level surface.
3. Move the selector lever through all positions to fill the torque converter and the hydraulic circuits with fluid, and then move the selector lever to the N position.
4. After wiping off any dirt around the oil level gauge, reinsert and remove the oil level gauge and check the condition of the fluid.

> NOTE
>
> If the fluid smells as if it is burning, it means that the fluid has been contaminated by fine particles from the bushes and friction materials, a transaxle overhaul may be necessary.

5. Check that the fluid level is at the HOT mark on the oil level gauge. If the fluid level is lower than this, add more fluid until the level reaches the HOT mark.
   Automatic transaxle fluid : DIAMOND ATF SP-III., SK ATF SP-III.

> NOTE
>
> If the fluid level is low, the oil pump will draw in air along with the fluid, which will cause bubbles to form inside the hydraulic circuit. This will in turn cause the hydraulic pressure to drop, which will result in late shifting and slipping of the clutches and brakes. If there is too much fluid, the gears can churn it up into foam and cause the same conditions that can occur with low fluid levels. In either case, air bubbles can cause overheating and oxidation of the fluid which can interfere with normal valve, clutch, and brake operation. Foaming can also result in fluid escaping from the transaxle vent, in which case it may be mistaken for a leak.

6. Insert the oil level gauge securely.
7. The fluid and the oil filters should always be replaced when overhauling the transaxle or after the vehicle has been driven under severe conditions. The replacement procedures are given below. Furthermore, the oil filters are special filters which are only to be used for the automatic transaxle.

> NOTE
>
> When new, automatic transmission fluid should be red. The red dye is added so distinguish it from engine oil or antifreeze. As the vehicle is driven the transmission fluid will begin to look darker. The color may eventually appear light brown
> Also, the dye, which is not an indicator of fluid quality, is not permanent
> Therefore, further investigation of the automatic transaxle is required if,
> - the fluid is dark brown or black.
> - the fluid smells burnt.
> - metal particles can be seen or felt on the dipstick.

AUTOMATIC TRANSAXLE FLUID

1. Remove the drain plug from the bottom of the transaxle case to drain the fluid.
2. Install the drain plug and gasket, and tighten to the specified torque.

   Tightening torque : 32 Nm (320 kg·cm, 23 lb·ft)

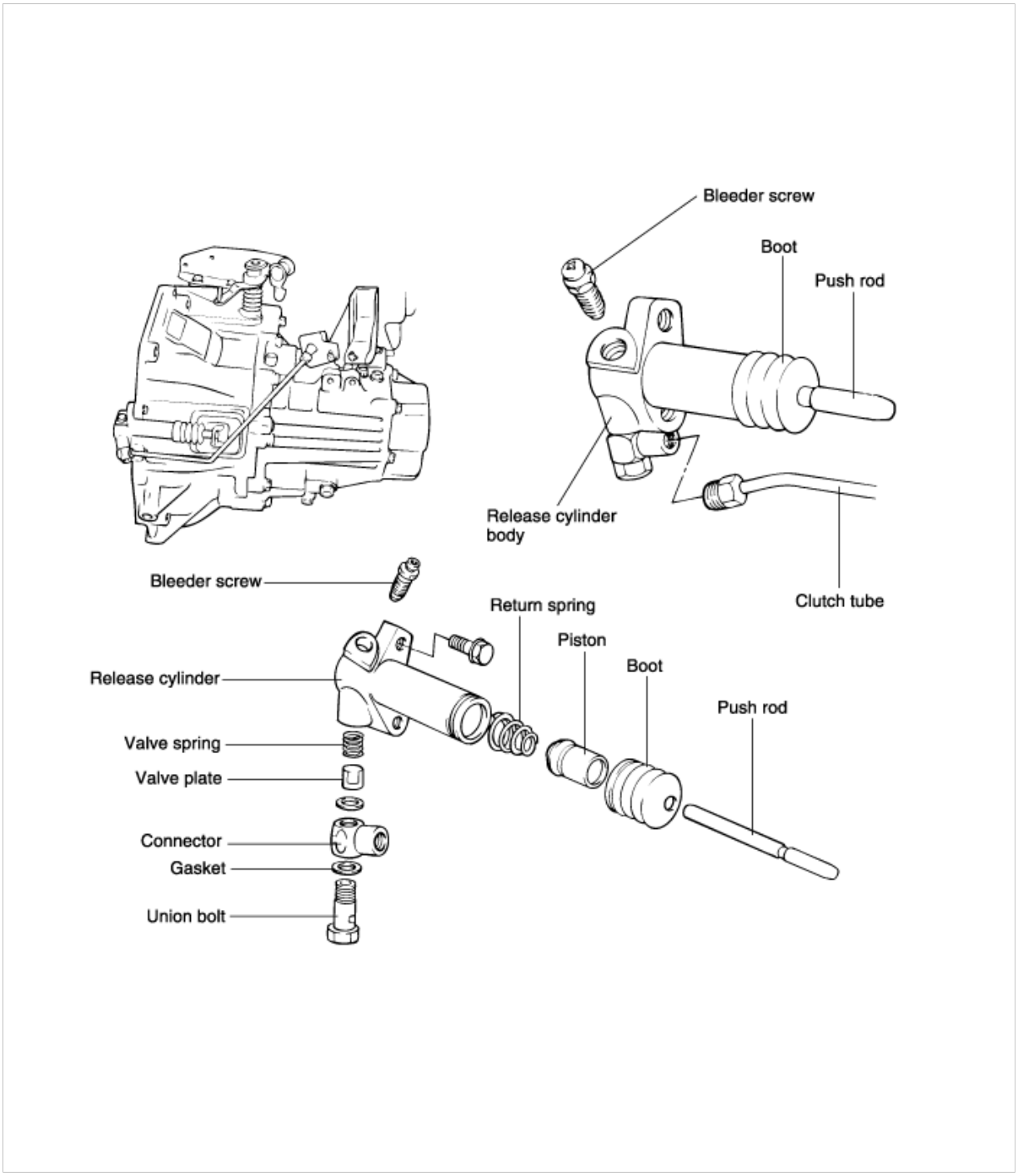
3. Pour the new fluid in through the oil filler tube.

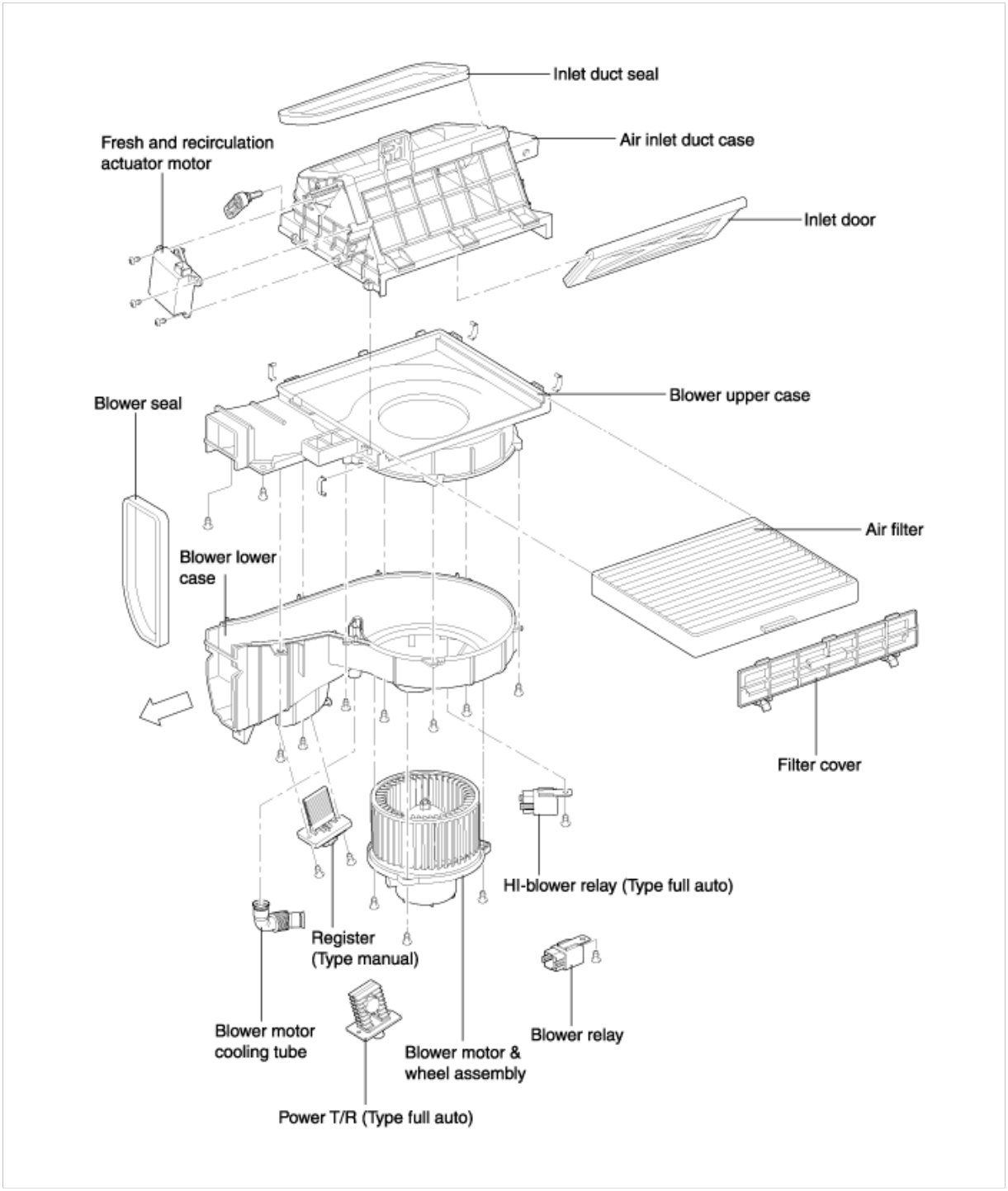
> CAUTION
>
> Stop pouring if the full volume of fluid cannot be poured in.

4. Repeat the procedure in step 1 if too much fluid was added.
5. Reconnect the hose that was disconnected in step 1 above, and firmly replace the oil level gauge.
6. Start the engine and run it at idle for 1-2 minutes.
7. Move the select lever through all positions, and then move it to the N position.

TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Clutch System > Clutch System > Clutch Release Cylinder > Components and Components Location, TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Clutch System > Clutch System > Clutch Release Cylinder > Components and Components Location

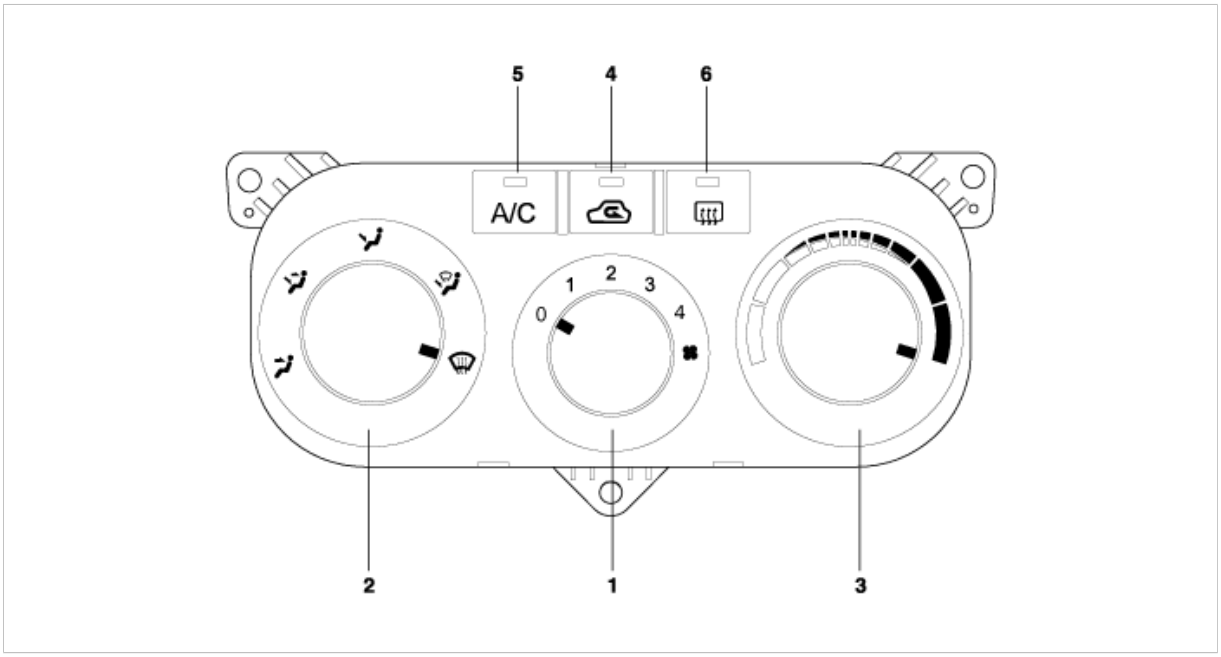
COMPONENTS




Inlet duct seal
Air inlet duct case
Fresh and recirculation actuator motor
Inlet door
Blower upper case
Blower seal
Air filter
Blower lower case
Filter cover
HI-blower relay (Type full auto)
Register (Type manual)
Blower motor cooling tube
Blower motor & wheel assembly
Blower relay
Power T/R (Type full auto)

TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Heating,Ventilation, Air Conditioning > Blower > Control Panel > Description and Operation, TIBURON(GK) > 2003 > G 2.7 V6 DOHC > Heating,Ventilation, Air Conditioning > Blower > Control Panel > Description and Operation

DESCRIPTION



1. **BLOWER SWITCH**
   The blower switch controls the blowing level of the air conditioning system by controlling blower motor speed. The switch has an electrical circuit containing a resister that will regulate blower motor input voltage to control the motor speed.
2. **MODE SWITCH**
   The mode switch controls air conditioning system discharge location. The switch contains an electrical circuit to control an actuator that is connected to the mode door for discharge control.
3. **TEMPERATURE SWITCH**
   The temperature switch controls the temperature door position that will be used to regulate the air conditioning system's discharge air temperature. The switch includes a rack & pinion and a cable.
4. **INTAKE SWITCH**
   The intake switch controls the intake door used to regulate the intake air flow of the air conditioning system. The switch contains an electrical circuit used to control the actuator that is connected to the intake door.
5. **AIR CONDITIONING SWITCH**
   The air conditioning switch controls the on/off position of the air conditioning system compressor. The switch contains an electrical circuit that will switch on/off the power supply to the relay that is connected to the compressor.
6. **REAR DEFOGGER SWITCH**
   The rear defogger switch is used to defog the rear glass. Switching the switch on, ETACS will output a signal to operate the rear glass heat wire.