

# GENERAL

## SPECIFICATIONS ESMB0010

|   |   |
|---|---|
| <b>Hood</b><br>Type   | Rear hinged, front opening type, gas lifter type                          |
| <b>Front door</b><br>Construction<br>Regulator system<br>Locking system   | Front hinged, full door construction<br>Wire drum type<br>Pin-fork system |
| <b>Rear door</b><br>Construction<br>Regulator system<br>Locking system  | Front hinged, full door construction<br>Wire drum type<br>Pin-fork system |
| <b>Tailgate</b><br>Type   | Inner hinged, gas lifter type   |
| <b>Glass thickness</b> mm (in)<br>Windshield glass<br>Front door glass<br>Rear door glass<br>Rear fixed glass<br>Tailgate glass | 5 (0.20)<br>3.2 (0.13)<br>3.2 (0.13)<br>3.2 (0.13)<br>3.2 (0.13)          |
| <b>Seat belt</b>  | E.L.R (Emergency Locking Retractor)                                       |

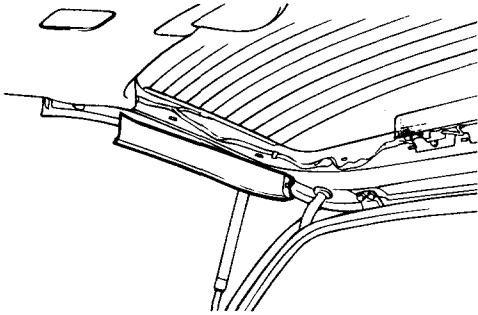
## TIGHTENING TORQUE ESMB0050

|  | Nm   | kg-cm  | lb-ft  |
|--|--|--|--|
| <b>Front and rear doors</b><br>Door hinge to body<br>Door hinge to door  | 21-33<br>17-26                                     | 210-330<br>170-260   | 15.5-24.3<br>12.5-19.2   |
| <b>Tailgate</b><br>Tailgate hinge to body<br>Tailgate hinge to tailgate<br>Gas lifter to body<br>Gas lifter to tailgate  | 11-16<br>11-16<br>11-16<br>11-16                   | 110-160<br>110-160<br>110-160<br>110-160                       | 8.1-11.8<br>8.1-11.8<br>8.1-11.8<br>8.1-11.8                               |
| <b>Hood</b><br>Hood hinge to body<br>Hood hinge to hood<br>Hood latch to body<br>Gas lifter mounting bolts   | 9-14<br>9-14<br>7-11<br>7-11                       | 90-140<br>90-140<br>70-110<br>70-110                           | 6.6-10.3<br>6.6-10.3<br>5.2-8.1<br>5.2-8.1                                 |
| <b>Seat belt</b><br>Front seat belt upper anchor<br>Front seat belt retractor<br>Height adjuster<br>Second and third seat belt upper anchor<br>Second and third seat belt lower anchor<br>Second and third seat belt retractor | 35-55<br>35-55<br>35-55<br>35-55<br>35-55<br>35-55 | 350-550<br>350-550<br>350-550<br>350-550<br>350-550<br>350-550 | 25.8-40.6<br>25.8-40.6<br>25.8-40.6<br>25.8-40.6<br>25.8-40.6<br>25.8-40.6 |
| <b>Seat</b><br>Front seat mounting bolts<br>Rear seat mounting bolts   | 35-55<br>35-55                                     | 350-550<br>350-550   | 25.8-40.6<br>25.8-40.6   |

## TAILGATE

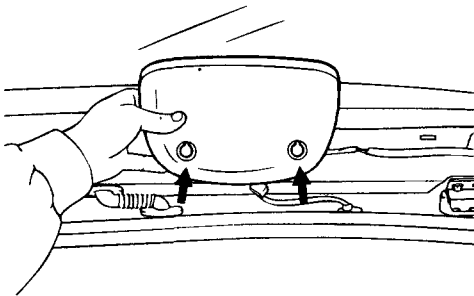
### REMOVAL AND INSTALLATION ESMB0200

1. Remove the side trim from the tailgate frame.



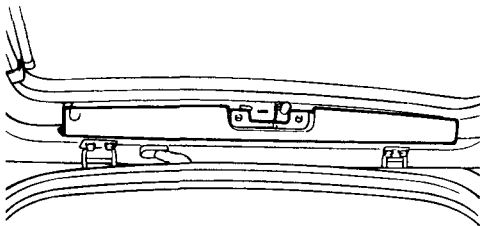
ESHA010B

2. Remove the high mounted stop lamp after removing the mounting bolts (2EA).



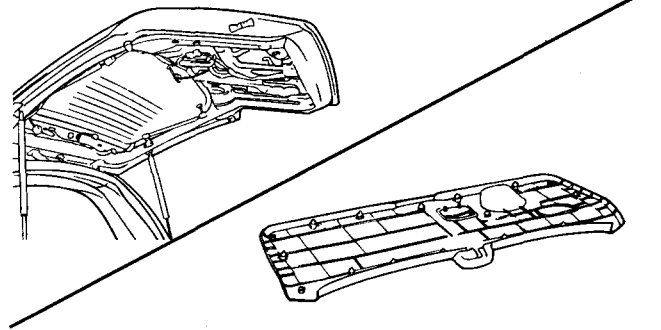
ESJA040N

3. Remove the upper trim from the tailgate frame.



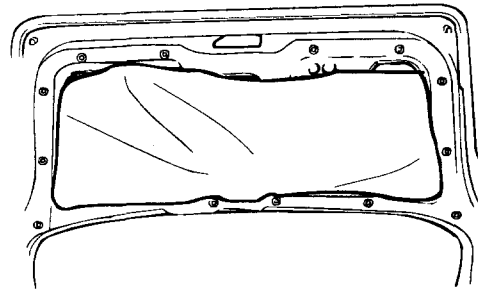
ESJA040A

4. Remove the tapping screw and the trim grip and then the tailgate trim panel.



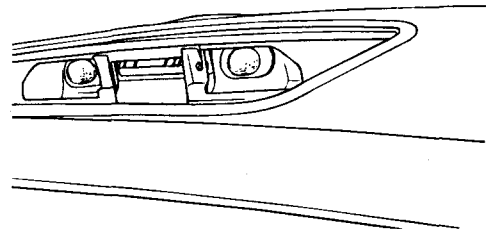
ESJA100D

5. Remove the tailgate trim seal.



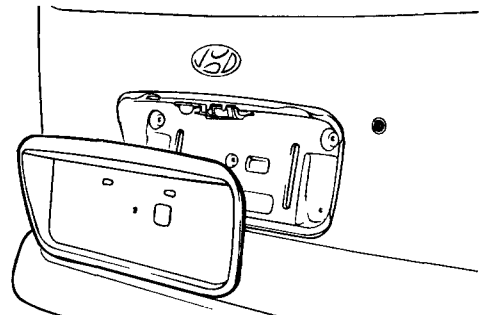
KSMB004A

6. Remove the license lamp.



KSMB004B

7. Remove the back panel molding after removing the mounting nuts (5EA).

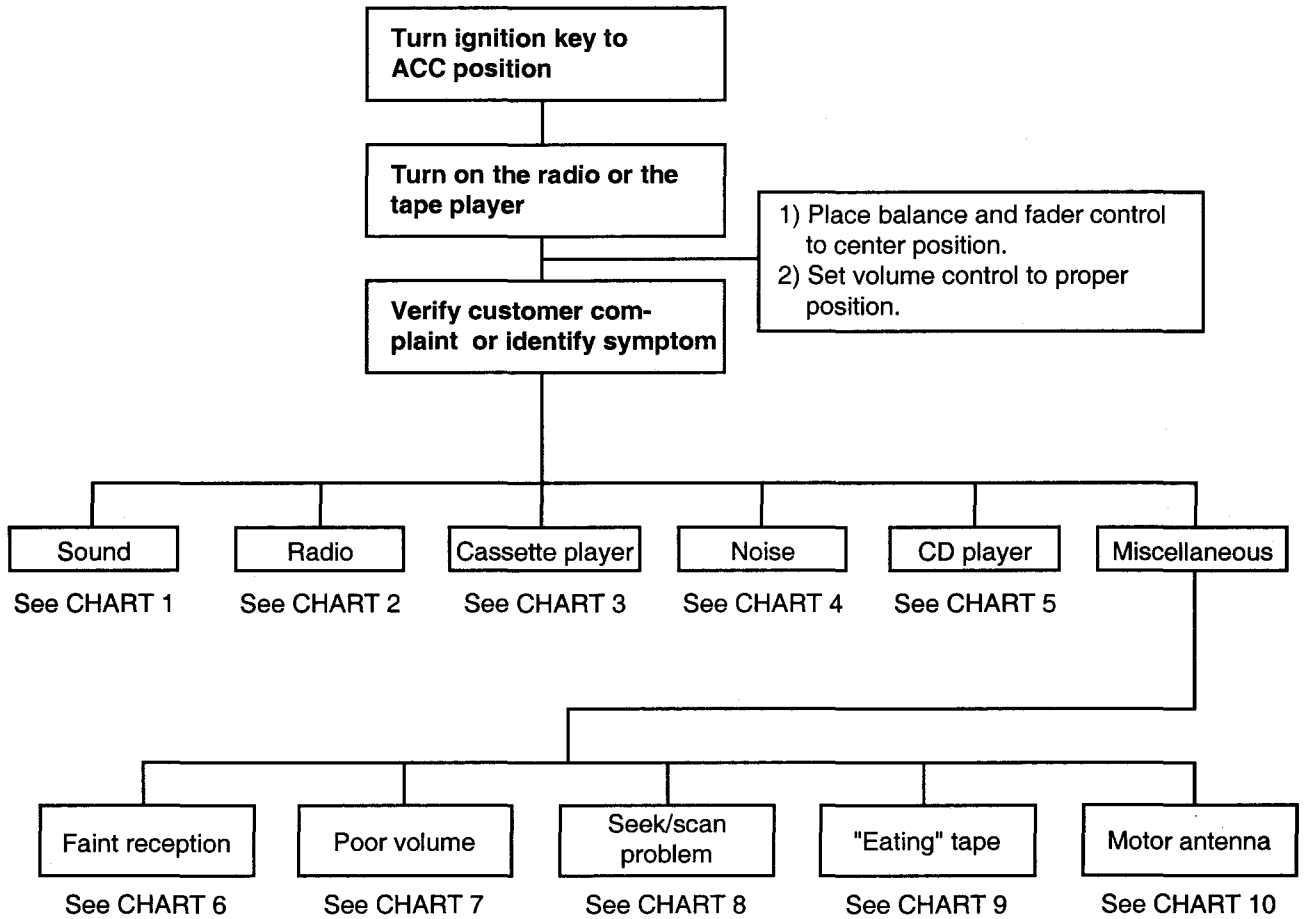


KSMB004C

8. Remove the tailgate outside handle after removing the mounting nuts (2EA), and then disconnect the rod.

AUDIO

There are six areas where a problem can occur: wiring harness, the radio, the cassette tape deck, the CD player, the speaker, and antenna. Troubleshooting enables you to confine the problem to a particular area.



## THE L.C.R VALVE CONSISTS OF EJMB0090

1. Load sensing part : sensing spring, Lever
2. Linkage part : Connecting link, Operating lever, Bell crank
3. Pressure control part : Machine body, Piston, Valve seal
4. By-pass part : By-pass piston, O-ring

## INSTALLATION EJMB0100

When the L.C.R valve is set, the adjustment procedure is unnecessary.

1. When the fuel tank is full, position the vehicle on a level surface. Don't load things or people in the vehicle.
2. Set the valve body to the vehicle with the hole of the mounting bracket.

### Tightening torque

11 - 14 Nm (110 - 140 kg·cm, 8.14 - 10.36 lb·ft)

3. Tighten the bolt of the connecting rod end in the valve mounting bracket.

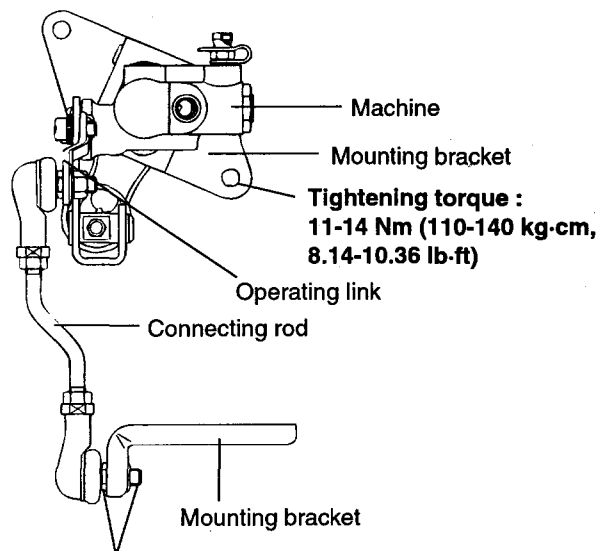
### Tightening torque

11 - 14 Nm (110 - 140 kg·cm, 8.14 - 10.36 lb·ft)

4. When the machine body and the bolt of the connecting rod are fixed, tighten the flange bolt in the bell crank so that the connecting rod and operating lever can't move.

### Tightening torque

19 - 23 Nm (190 - 230 kg·cm, 14.06 - 17.02 lb·ft)



Machine

Mounting bracket

**Tightening torque :**  
11-14 Nm (110-140 kg·cm,  
8.14-10.36 lb·ft)

Operating link

Connecting rod

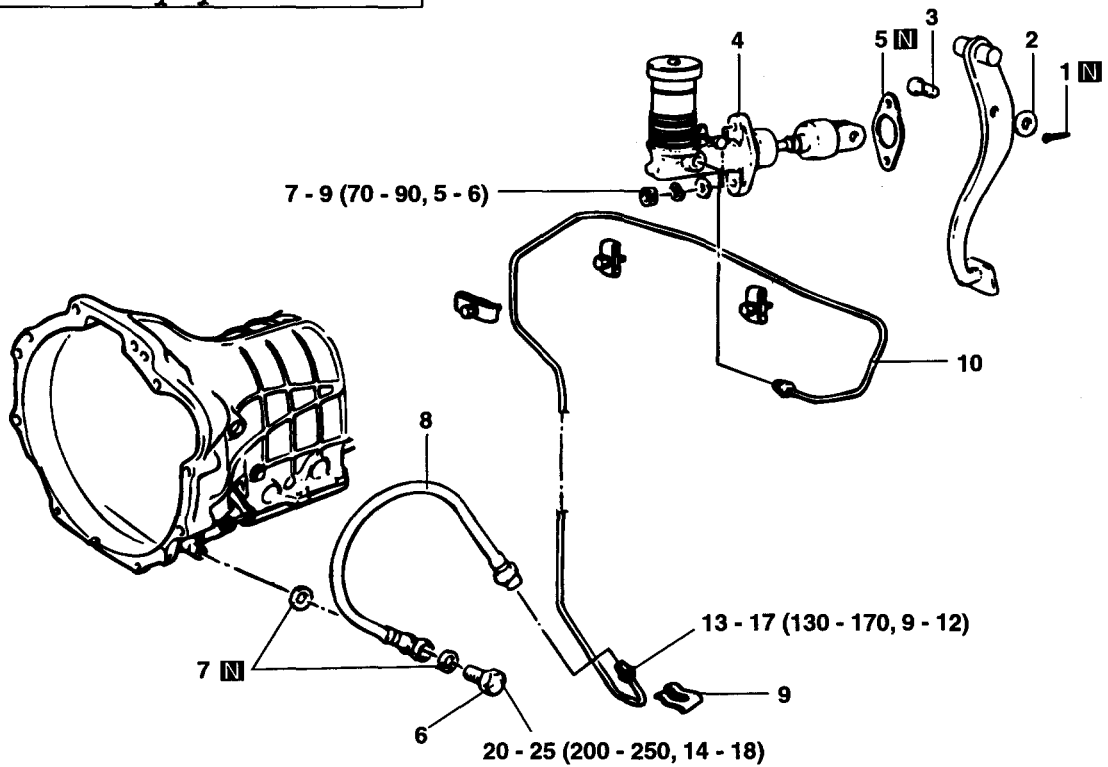
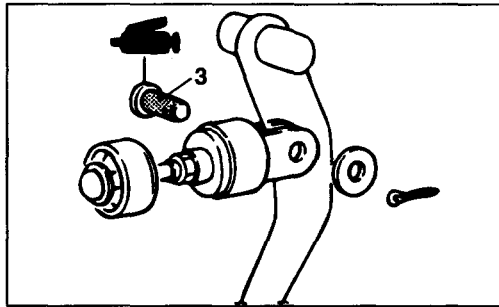
Mounting bracket

**Tightening torque :**

11-14 Nm (110-140 kg·cm, 8.14-10.36 lb·ft)

CLUTCH MASTER CYLINDER

COMPONENTS EOMB0130



[Removal procedure]

- |                           |                 |
|---------------------------|-----------------|
| 1. Cotter pin             | 6. Eye bolt     |
| 2. Washer                 | 7. Gasket       |
| 3. Clevis pin             | 8. Clutch hose  |
| 4. Clutch master cylinder | 9. Hose clip    |
| 5. Sealer                 | 10. Clutch tube |

TORQUE : N·m (kg·cm, lb·ft)

**TROUBLE SYMPTOM 7**

| Trouble symptom  | Probable cause   | Remedy  |
|--|--|---|
| CC system can be set while driving at a vehicle speed of less than 40km/h (25mph), or there is no automatic cancellation at that speed | Malfunction of the vehicle-speed sensor circuit                    | Repair the vehicle speed sensor system, or replace the part |
|  | Malfunction of the speedometer cable or the speedometer drive gear |   |
|  | Malfunction of the actuator and unit                               | Replace the actuator and unit                               |

**TROUBLE SYMPTOM 8**

| Trouble symptom   | Probable cause  | Remedy                                  |
|---|---|---|
| The cruise main switch indicator lamp does not illuminate (But CC system is normal) | Damaged or disconnected bulb of cruise main switch indicator lamp | Repair the harness or replace the part. |
|   | Harness damaged or disconnected                                   |   |

**TROUBLE SYMPTOM 9**

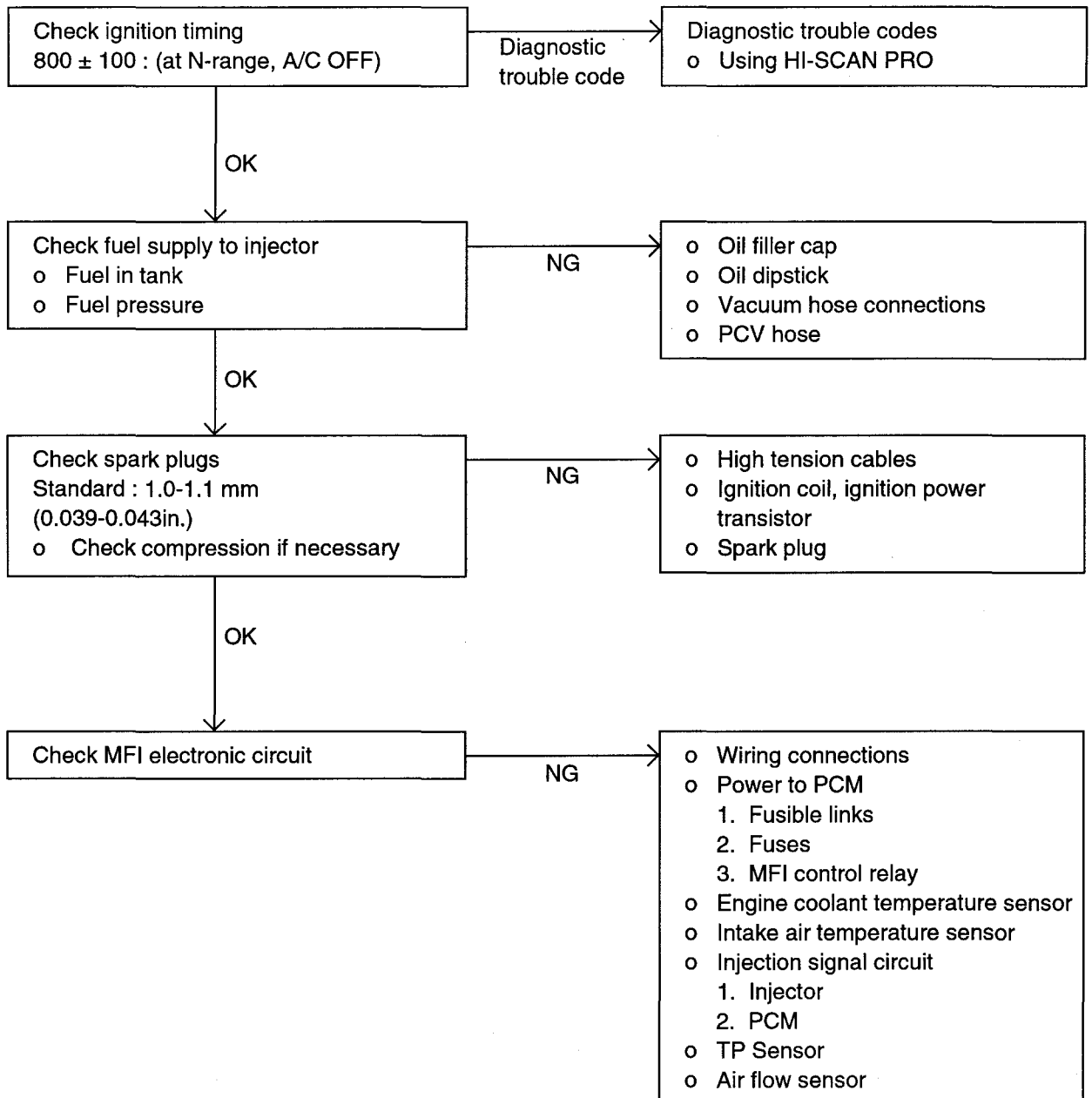
| Trouble symptom  | Probable cause   | Remedy                                 |
|--|--|--|
| Malfunction of control function by ON/OFF switching of idle switch | Malfunction of circuit related to idle switch function | Repair the harness or replace the part |
|  | Malfunction of the actuator and unit                   |  |

**TROUBLE SYMPTOM 10**

| Trouble symptom                                      | Probable cause   | Remedy                                 |
|--|--|--|
| Overdrive is not canceled during fixed speed driving | Malfunction of circuit related to overdrive cancelation, or malfunction of actuator and unit | Repair the harness or replace the part |
| No shift to overdrive during manual driving          |  |  |

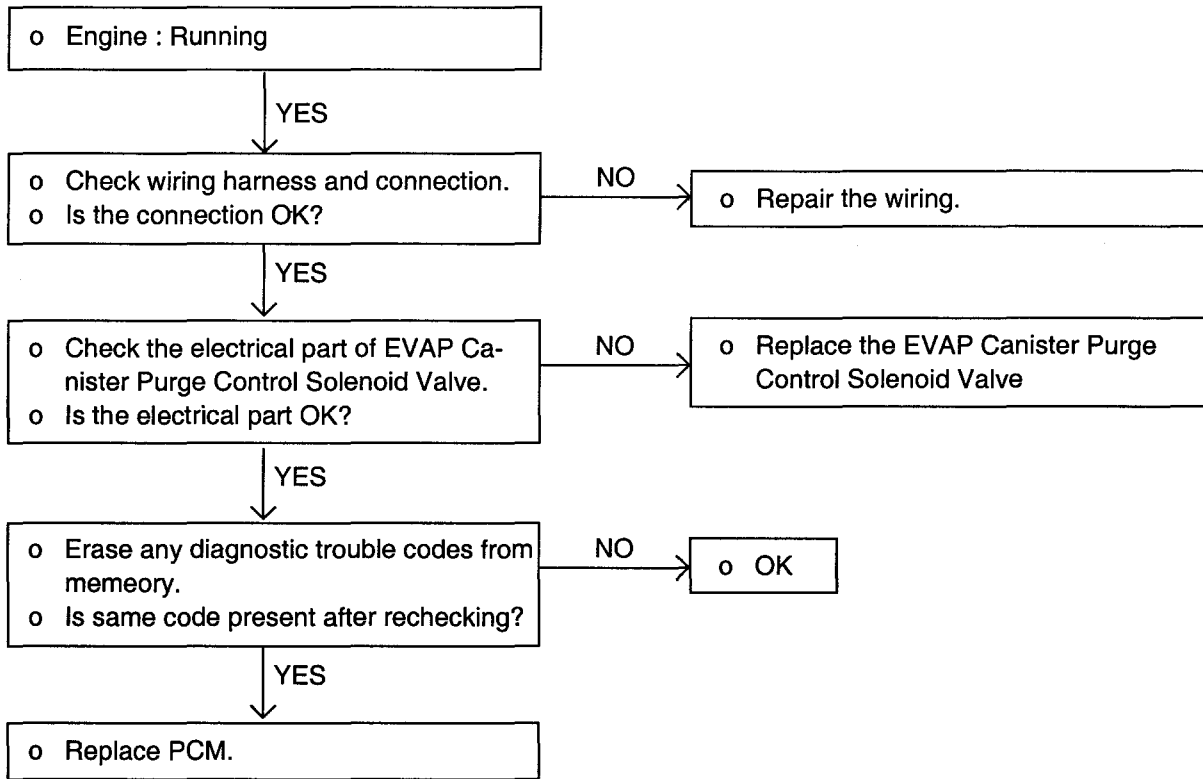
TROUBLESHOOTING GUIDE CHART EFDA0070

| Main Symptoms<br><br>Sub-Symptoms<br><br>Check points | STARTING                  |  |                       |                    |        |                         |                        | Poor Idling         |                 |                |              |  | Poor Driving |          |
|---|---------------------------|--|-----------------------|--------------------|--------|-------------------------|------------------------|---------------------|-----------------|----------------|--------------|--|--------------|----------|
|   | Unable to start           |  |                       | Difficult to start |        |                         |                        | Incorrect fast idle | High idle speed | Low idle speed | Rough idling | Engine hesitates or accelerates poorly | Surging      | Knocking |
|   | Engine does not turn over | Starter runs but engine does not turn over | Incomplete combustion | Engine turns over  | Always | When the engine is cold | When the engine is hot |                     |                 |                |              |  |              |          |
| Starter relay   | 1                         |  |                       |                    |        |                         |                        |                     |                 |                |              |  |              |          |
| Starter   | 2                         | 2  |                       | 1                  |        |                         |                        |                     |                 |                |              |  |              |          |
| Park/Neutral SW [A/T] or Clutch start SW [M/T]        | 3                         |  |                       |                    |        |                         |                        |                     |                 |                |              |  |              |          |
| Flywheel [M/T] or Drive plate [A/T]                   |                           | 4  |                       |                    |        |                         |                        |                     |                 |                |              |  |              |          |
| Mass air flow sensor circuit                          |                           |  | 3                     |                    |        |                         |                        |                     | 3               | 10             | 7            |  |              |          |
| Idle speed control actuator                           |                           |  | 4                     |                    | 3      | 3                       | 3                      | 3                   | 2               | 7              |              |  | 2            |          |
| Fuel pressure regulator                               |                           |  | 5                     |                    | 5      | 5                       | 5                      |                     |                 | 4              | 11           | 1                                      |              |          |
| ECT sensor circuit                                    |                           |  | 6                     |                    | 4      | 1                       | 1                      | 2                   | 2               | 1              | 2            | 8                                      | 6            |          |
| Compression   |                           |  | 7                     |                    | 8      |                         |                        |                     |                 |                | 8            | 5                                      |              |          |
| Piston rings  |                           |  | 8                     |                    | 9      |                         |                        |                     |                 |                | 9            |  |              |          |
| Ignition timing                                       |                           |  |                       |                    | 10     |                         |                        |                     |                 |                | 11           | 14                                     |              |          |
| Timing mark   |                           |  | 9                     |                    |        |                         |                        |                     |                 |                | 12           |  |              |          |
| Injectors   |                           |  | 10                    |                    | 13     | 8                       | 8                      |                     | 7               | 4              | 13           | 15                                     | 4            |          |
| PCM   |                           |  | 11                    |                    | 14     | 9                       | 9                      | 4                   | 8               | 5              | 14           | 16                                     | 5            |          |
| A/C circuit   |                           |  |                       | 2                  |        |                         |                        |                     | 6               |                |              |  |              |          |
| Connecting rod bearing                                |                           |  |                       | 3                  |        |                         |                        |                     |                 |                |              |  |              |          |
| Crankshaft bearing                                    |                           |  |                       | 4                  |        |                         |                        |                     |                 |                |              |  |              |          |
| Fuel quality  |                           |  |                       |                    | 1      | 2                       | 2                      |                     |                 |                | 1            | 3                                      | 3            |          |
| Spark plugs   |                           |  |                       |                    | 2      |                         |                        |                     |                 |                | 3            | 4                                      | 2            |          |
| Fuel pump   |                           |  |                       |                    | 6      | 6                       | 6                      |                     |                 |                | 5            | 12                                     |              |          |
| Fuel lines  |                           |  |                       |                    | 7      | 7                       | 7                      |                     |                 |                | 6            | 13                                     |              |          |
| Ignition circuit                                      |                           |  | 2                     |                    | 11     |                         |                        |                     |                 |                |              |  | 3            |          |
| Intake air temp. sensor circuit                       |                           |  |                       |                    | 12     | 4                       | 4                      |                     | 4               |                |              | 9                                      | 1            |          |
| Accelerator pedal link                                |                           |  |                       |                    |        |                         |                        | 1                   | 1               |                |              |  |              |          |
| TP Sensor circuit                                     |                           |  |                       |                    |        |                         |                        |                     | 5               |                |              | 6                                      |              |          |
| Cylinder head   |                           |  |                       |                    |        |                         |                        |                     |                 |                | 15           |  |              |          |
| Clutch [M/T]  |                           |  |                       |                    |        |                         |                        |                     |                 |                |              | 1                                      |              |          |
| Brakes not releasing properly                         |                           |  |                       |                    |        |                         |                        |                     |                 |                |              | 2                                      |              |          |
| Oxygen sensor circuit                                 |                           |  |                       |                    |        |                         |                        |                     |                 |                |              | 10                                     |              |          |
| Crankshaft position sensor                            |                           | 3  |                       |                    |        |                         |                        |                     |                 |                |              |  |              |          |
| Battery voltage                                       |                           | 1  | 1                     |                    |        |                         |                        |                     |                 |                |              |  |              |          |





**TROUBLESHOOTING PROCEDURES**

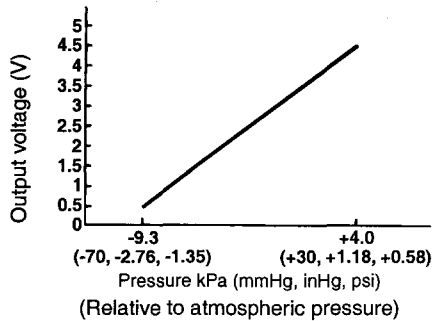


DTC : Diagnosis Trouble Code  
PCM : Powertrain Control Module

EFAA731B

**USING HI-SCAN (PRO)**

| Check Item  | Check conditions          | HI-SCAN display | Type     |
|---|---------------------------|-----------------|----------|
| Evaporative emission canister purge solenoid valve<br>• Actuator test | IG. S/W ON (Do not start) | PCSV            | Activate |



EFJB731E

CONTINUED FROM  
PREVIOUS PAGE

A

YES

- Turn the ignition off.
- Disconnect the VSS.
- Disconnect the PCM.
- Measure resistance between VSS harness connector terminal 3 and ground. Resistance should indicate an open circuit. Does it?

YES

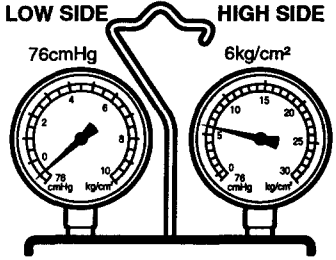
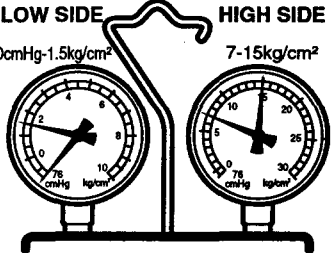
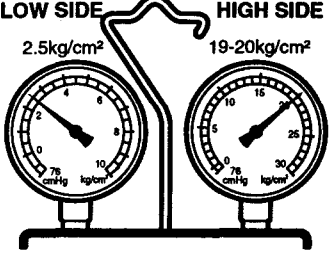
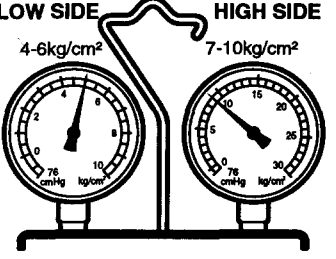
Verify PCM connector is secure. If OK, replace VSS with a known component of good quality. Clear code and verify VSS signal is within normal parameters. If problem persists, replace PCM.

NO

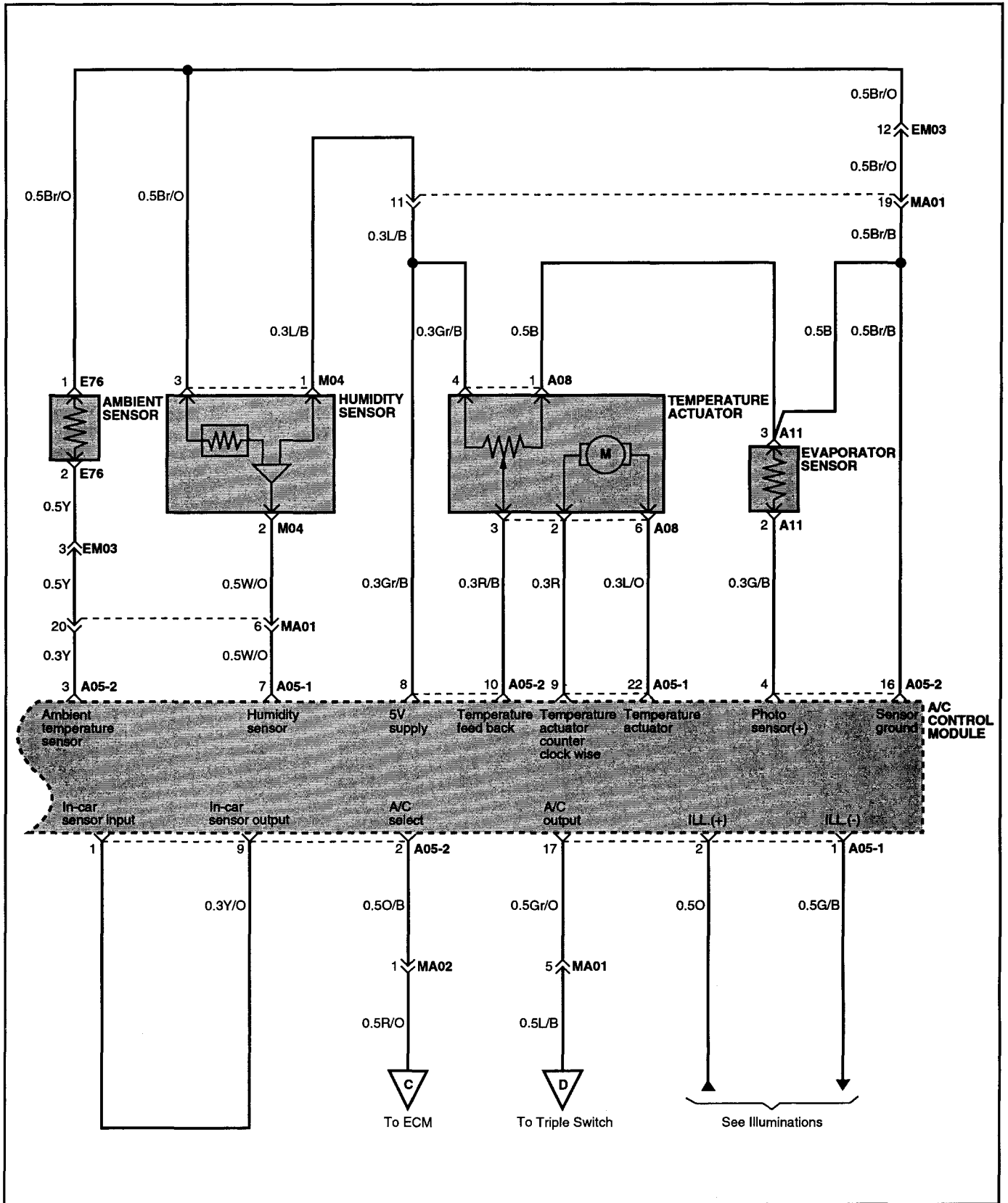
Repair wire between VSS harness connector terminal 3 and PCM harness connector E200-3 terminal 10. Clear code and verify VSS signal is within normal parameters.

NO

Repair short to ground or another circuit in wire between VSS harness connector terminal 3 and PCM harness connector E200-3 terminal 10. Clear code and verify VSS signal is within normal parameters.

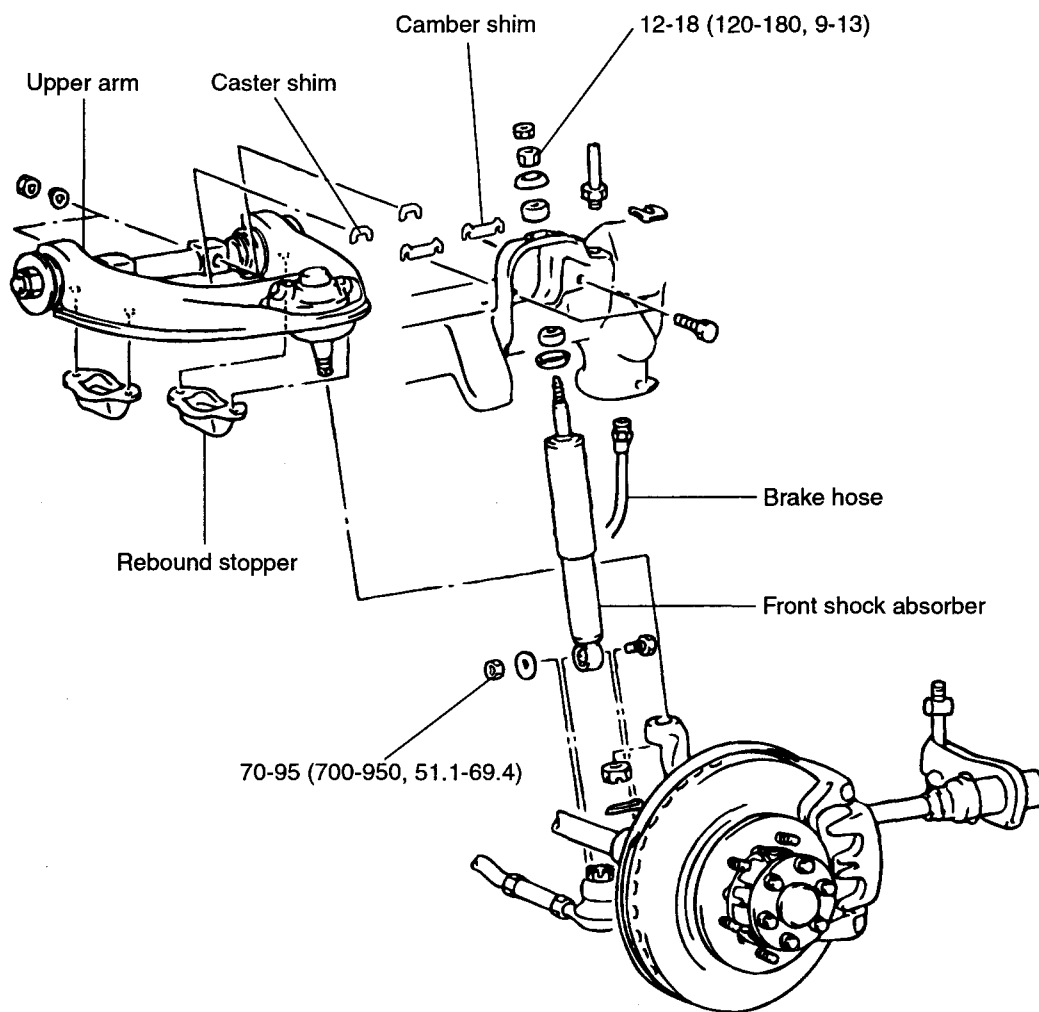
| SYMPTOMS  | PROBABLE CAUSES   | REMEDY   | MANIFOLD GAUGE READINGS   |
|---|---|--|---|
| <ol style="list-style-type: none"> <li>Low pressure side indicates negative pressure and high pressure side indicates low pressure.</li> <li>Front or dew on pipes connected with receiver or expansion valve.</li> </ol> | <ul style="list-style-type: none"> <li>Dust or moisture frozen at expansion valve.</li> <li>Gas leak.</li> </ul>                | <ul style="list-style-type: none"> <li>Repair the receiver drier and replace the expansion valve.</li> <li>Replace the expansion valve if the receiver-drier is faulty.</li> </ul> | <p><b>LOW SIDE</b>      <b>HIGH SIDE</b></p> <p>76cmHg      6kg/cm<sup>2</sup></p>  <p style="text-align: right;">KFWD005A</p>                         |
| <ol style="list-style-type: none"> <li>Low pressure side pressure sometimes goes to negative pressure or normal.</li> </ol>   | <ul style="list-style-type: none"> <li>Intaken moisture is frozen at expansion valve hole.</li> </ul>                           | <ul style="list-style-type: none"> <li>Repair and bleed receiver drier</li> </ul>  | <p><b>LOW SIDE</b>      <b>HIGH SIDE</b></p> <p>50cmHg-1.5kg/cm<sup>2</sup>      7-15kg/cm<sup>2</sup></p>  <p style="text-align: right;">KFWD006A</p> |
| <ol style="list-style-type: none"> <li>Low pressure and high pressure are high.</li> <li>Much frost or dew on the low pressure side piping.</li> </ol>  | <ul style="list-style-type: none"> <li>Expansion valve failure. Receiver-drier faulty.</li> <li>Flow control faulty.</li> </ul> | <ul style="list-style-type: none"> <li>Repair receiver drier.</li> <li>Check oil contamination.</li> </ul>   | <p><b>LOW SIDE</b>      <b>HIGH SIDE</b></p> <p>2.5kg/cm<sup>2</sup>      19-20kg/cm<sup>2</sup></p>  <p style="text-align: right;">KFWD007A</p>      |
| <ol style="list-style-type: none"> <li>Low pressure side pressure is high and pressure side pressure is low.</li> </ol>   | <ul style="list-style-type: none"> <li>Leak inside compressor.</li> </ul>   | <ul style="list-style-type: none"> <li>Replace compressor.</li> </ul>  | <p><b>LOW SIDE</b>      <b>HIGH SIDE</b></p> <p>4-6kg/cm<sup>2</sup>      7-10kg/cm<sup>2</sup></p>  <p style="text-align: right;">KFWD008A</p>      |

BLOWER AND A/C CONTROLS (FULL AUTO) (3)



# FRONT SHOCK ABSORBER

## COMPONENTS EHMB2300



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

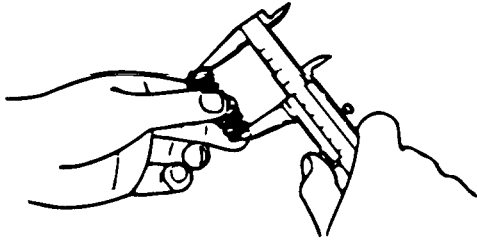
**INSPECTION** EPMB2200

1. Check the free length of the flow control spring.

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Free length of the flow control spring : 36.5 mm

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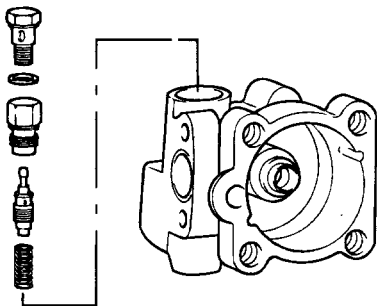


KPKA068A

2. Check that the flow control valve is not bent.
3. Check the shaft for wear and damage.
4. Check the V-belt for wear and deterioration.
5. Check the grooves of the rotor and vanes for stratified abrasion.
6. Check the contact surface of the cam ring and vanes for stratified abrasion.
7. Check vanes for damage.
8. Check that there is no striped wear in the side plate or contacting part between the shaft and the pump cover surface.

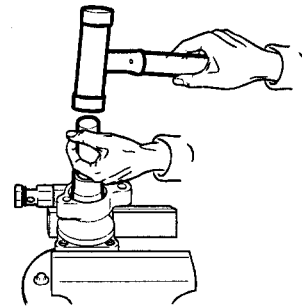
**REASSEMBLY** EPMB2300

1. Install the flow control spring the flow control valve and the connector in to the pump body.



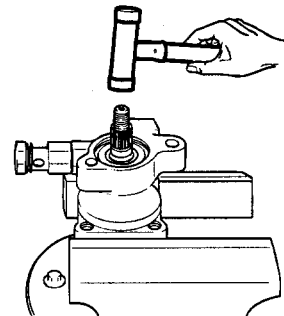
KPKA060A

2. Install the oil seal in the pump body by using the special tool.

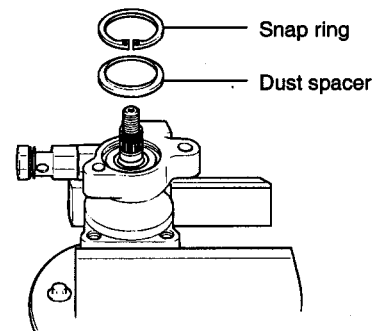


KPKA061A

3. After inserting the shaft assembly into the pump body, install the dust spacer and snap ring.



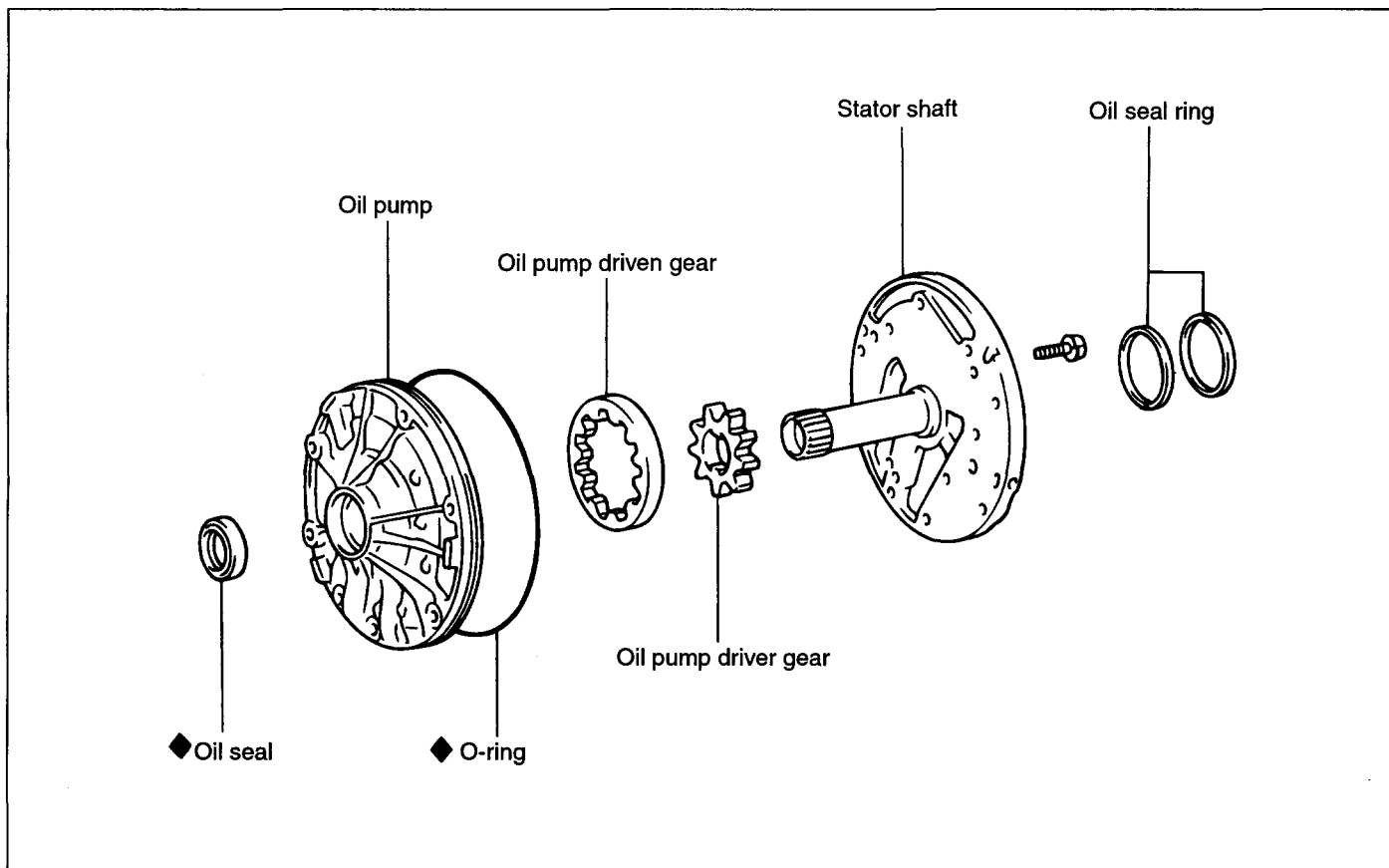
KPKA062A



KPKA057A

**OIL PUMP**

EKMB0730

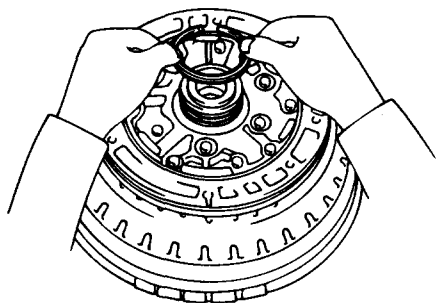


EKMB073A

**DISASSEMBLY**

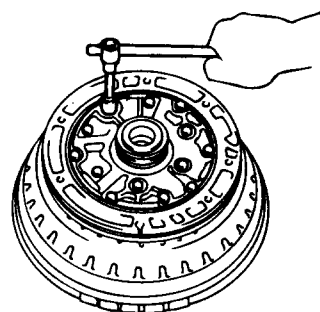
EKMB0740

1. Remove the oil seal ring.



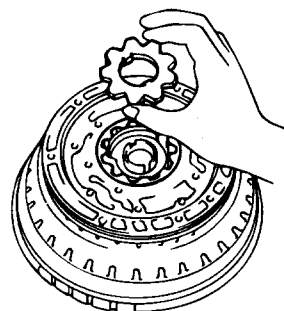
2. Remove the stator shaft.

EKLA089A



EKLA090A

3. Remove the drive and driven gear.



EKLA091A