ESCAPE Repair Manual

FOREWORD

This manual contains on-vehicle service and diagnosis for the ESCAPE.

For proper repair and maintenance, a thorough familiarization with this manual is important, and it should always be kept in a handy place for quick and easy reference.

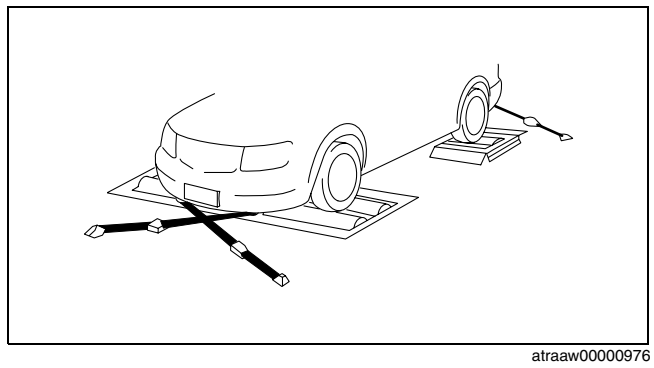
All the contents of this manual, including drawings and specifications, are the latest available at the time of printing. As modifications affecting repair or maintenance occur, relevant information supplementary to this volume will be made available at Ford dealers. This manual should be kept up-to-date.

Ford Motor Company reserves the right to alter the specifications and contents of this manual without obligation or advance notice.

CONTENTS

Free roller type

1. Align the free rollers with the wheel base and tread, then set them on the floor properly.
2. Drive the vehicle slowly onto the tester roller and free rollers.
3. Start the engine and accelerate gradually to inspect the speedometer.
4. After inspection, decelerate gradually with gentle braking.



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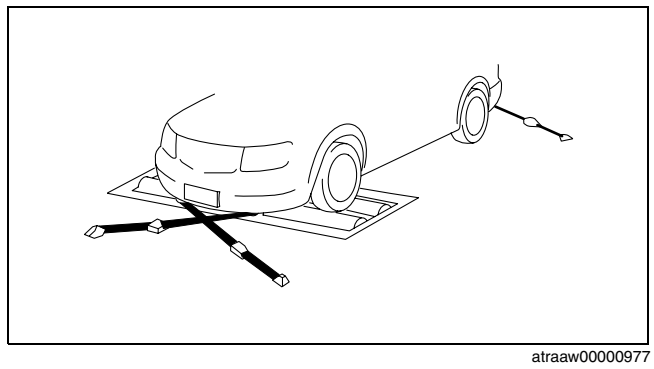
Propeller shaft removal type

1. Remove the propeller shaft. (See 03-15-4 PROPELLER SHAFT REMOVAL/ INSTALLATION.)
2. Place the front wheels on the tester roller.
3. Accelerate gradually and inspect the speedometer.
4. After inspection, decelerate gradually with gentle braking.
5. Install the propeller shaft.



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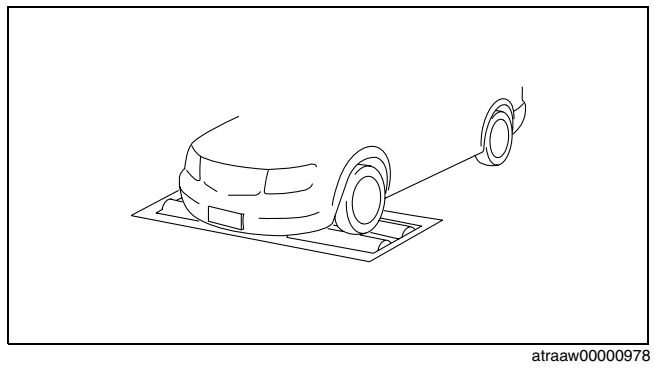
Brake tester measurement

1. Place the wheels (front or rear) to be measured on the tester roller.
2. Shift to the N position/neutral.
3. Activate the tester roller and measure braking force.
   If there is a large amount of brake drag force, the electronic control system coupling may be affected. Jack up all four wheels to eliminate the effect of the coupling and rotate each wheel by hand to verify the rotation condition.



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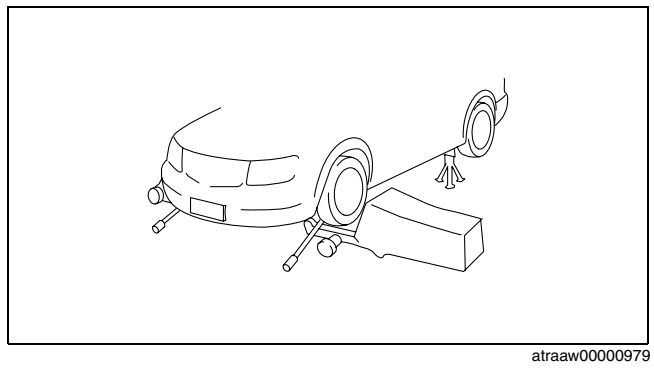
Wheel balancer (on the vehicle balancer)

1. Jack up all four wheels.
2. Support the wheels (front or rear) on the side to be measured (near the wheels) using a wheel balancer sensor stand.
3. Support the wheels on the side not to be measured (near the wheels) using safety stands.
4. Set up the wheel balancer and rotate the wheels using engine drive to measure the wheel balance.



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STEP	INSPECTION		ACTION
10	**VERIFY TROUBLESHOOTING OF DTC P0481 COMPLETED** • Make sure to reconnect all disconnected connectors. • Clear the DTC from the PCM memory using the IDS/PDS. • Perform the KOEO or KOER self-test. (See 01-02A-11 KOEO/KOER SELF TEST[L3].) • Is the DTC P0481 present?	Yes	Replace the PCM, then go to the next step. (See 01-40A-7 PCM REMOVAL/INSTALLATION[L3].)
		No	Go to the next step.
11	**VERIFY AFTER REPAIR PROCEDURE** • Perform the “AFTER REPAIR PROCEDURE”. (See 01-02A-11 AFTER REPAIR PROCEDURE[L3].) • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See 01-02A-13 DTC TABLE[L3].)
		No	Troubleshooting completed.

DTC P0505[L3]

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DTC P0505	IAC system problem
DETECTION CONDITION	• The PCM cannot control idle speed toward target idle speed while KOER self test.
POSSIBLE CAUSE	• Air cleaner element clogged • Air intake passage clogged • A/C relay control circuit malfunction • Generator control circuit malfunction • Low engine compression (Over capacity of blow-by gas) • Electronic throttle control system improper operation • PCM malfunction

Diagnostic procedure

STEP	INSPECTION		ACTION
1	**VERIFY FREEZE FRAME DATA AND DIAGNOSTIC MONITORING TEST RESULTS HAS BEEN RECORDED** • Has FREEZE FRAME DATA been recorded?	Yes	Go to the next step.
		No	Record the FREEZE FRAME on the repair order, then go to the next step.
2	**VERIFY RELATED SERVICE INFORMATION AVAILABILITY** • Verify related Service Information availability. • Is any related Service Information available?	Yes	Perform repair or diagnosis according to the available Service Information. If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
3	**VERIFY ELECTRONIC THROTTLE CONTROL SYSTEM OPERATION** • Perform the TP sweep inspection. (See 01-03A-59 ENGINE CONTROL SYSTEM OPERATION INSPECTION[L3].) • Does the electronic throttle control system work properly?	Yes	Go to the next step.
		No	Repair or replace malfunctioning part according to inspection result. Then go to Step 9.
4	**INSPECT A/C MAGNETIC CLUTCH OPERATION** **Note** • The following test should be performed for the A/C. Go to the next step for vehicles without A/C • Turn the fan switch off. • Is the magnetic clutch still on?	Yes	Go to “A/C ALWAYS ON / A/C COMPRESSOR RUNS CONTINUOUSLY.” of ENGINE SYMPTOM TROUBLESHOOTING then go to Step 9. (See 01-03A-6 ENGINE SYMPTOM TROUBLESHOOTING[L3].)
		No	Go to the next step.
5	**INSPECT GENERATOR CONTROL CIRCUIT MALFUNCTION** • Apply electrical load. • Is the engine speed increased?	Yes	Go to the next step.
		No	Repair short to power supply in generator control circuit, then go to Step 9.
6	**INSPECT AIR CLEANER ELEMENT** • Remove air cleaner element with the engine running. • Is the engine speed increased?	Yes	Clean or replace the air cleaner element, then go to Step 8.
		No	Go to the next step.

STEP	INSPECTION		ACTION
29	**CHECK FUEL INJECTOR HARNESS RESISTANCE** • Disconnect the malfunctioning fuel injector in Step 27. • Measure the resistance for the following at the harness side connector: — Between fuel injector No.1 terminal B and PCM terminal 71, 97 (INJ1_F, P0201) — Between fuel injector No.1 terminal A and PCM terminal 75 (INJ1_F, P0201) — Between fuel injector No.2 terminal B and PCM terminal 71, 97 (INJ2_F, P0202) — Between fuel injector No.2 terminal A and PCM terminal 101(INJ2_F, P0202) — Between fuel injector No.3 terminal B and PCM terminal 71, 97 (INJ3_F, P0203) — Between fuel injector No.3 terminal A and PCM terminal 74 (INJ3_F, P0203) • Is each resistance **less than 5.0 ohms**?	Yes	Go to the next step.
		No	Repair for open circuit, then go to Step 48.
30	**CHECK FUEL INJECTOR HARNESS CIRCUIT FOR SHORT TO POWER AND GROUND** • Disconnect the PCM. • Malfunctioning fuel injector in Step 28 disconnected. • Measure resistance for following at the PCM harness side connector. — Terminal 75 and 24, 51, 71, 76, 97, 103 (INJ1_F, P0201) — Terminal 101 and 24, 51, 71, 76, 97, 103 (INJ2_F, P0202) — Terminal 74 and 24, 51, 71, 76, 97, 103 (INJ3_F, P0203) • Is each resistance **greater than 10,000 ohms**?	Yes	Go to the next step.
		No	Repair for short circuit, then go to Step 48.
31	**INSPECT FUEL INJECTOR(S)** • Inspect fuel injector No.1, No.2 and No.3. (See 01-14B-17 FUEL INJECTOR INSPECTION[AJ (3.0L Duratec)].) • Are fuel injectors normal?	Yes	Go to the next step.
		No	Replace suspected fuel injector, then go to Step 48.
32	**INSPECT INDUCTION SYSTEM FOR AIR LEAKS** • Inspect the following areas for signs of air leaks: • Inlet tube(s) from air cleaner to throttle body • Gaskets which seal the upper and lower intake manifold • Vacuum hoses and lines for cracks and proper connections. • Are there any signs of leaks or damage?	Yes	Repair or replace malfunctioning part, then go to Step 48.
		No	Go to the next step.

STEP	INSPECTION		ACTION
7	**CHECK D.P.F. EGR SENSOR OUTPUT BY APPLYING VACUUM WITH HAND PUMP** • Connect the PDS/IDS to DLC-2. • Disconnect pressure hoses at D.P.F. EGR sensor. • Connect a hand vacuum pump to the downstream connection at sensor (intake manifold side of sensor or smaller diameter pickup tube.) • Turn the ignition switch to the ON position. • Access DPFEGR PID and note PID value. • Apply **27—30 kPa {8—9 in Hg}** vacuum to the D.P.F EGR sensor and hold for **a few seconds**. • Quickly release vacuum. — The DPFEGR PID voltage must be **between 0.2 and 1.3 V** with the ignition switch ON and no vacuum applied. — The DPFEGR PID voltage must increase to **greater than 4.0 V** with the vacuum applied. — The DPFEGR PID must drop to **less than 1.5 V** in **less than 3 seconds** when vacuum is released. • Does DPFEGR PID voltage indicate a fault in the D.P.F. EGR sensor?	Yes	Replace D.P.F. EGR sensor, then go to the next step.
		No	Unable to duplication or identify fault at this time. Go to the next step.
8	**VERIFY TROUBLESHOOTING OF DTC P1406 COMPLETED** • Make sure to reconnect all disconnected connectors. • Clear the DTC from the PCM memory using the PDS/IDS. • Drive the vehicles from a stop, accelerate to **72 km/h {45 MPH}** at **1/2 to 3/4** throttle. Repeat **3 times**. • Is the PENDING CODE same DTC present?	Yes	Replace PCM, then go to next step. (See 01-40B-6 PCM REMOVAL/INSTALLATION[AJ (3.0L Duratec)].)
		No	Go to the next step.
9	**VERIFY AFTER REPAIR PROCEDURE** • Perform "AFTER REPAIR PROCEDURE". (See 01-02B-7 AFTER REPAIR PROCEDURE[AJ (3.0L Duratec)].) • Is there any DTC present?	Yes	Go to applicable DTC inspection. (See 01-02B-9 DTC TABLE[AJ (3.0L Duratec)].)
		No	Troubleshooting completed.

DTC P1408[AJ (3.0L Duratec)]

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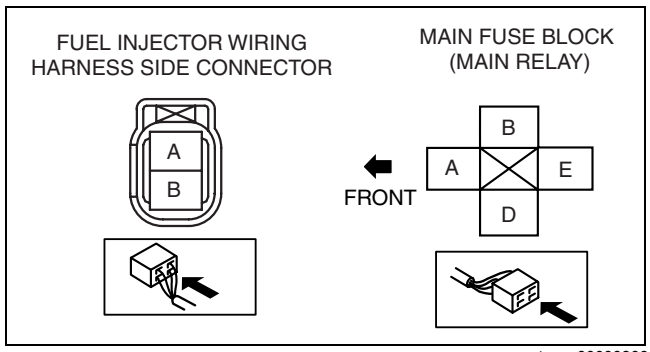
DTC P1408	EGR flow out of self test range
DETECTION CONDITION	• The PCM monitors EGR flow using the D.P.F. EGR sensor during KOER self test (the EGR system is commanded on at a fixed engine speed). If the PCM detects that the measure EGR flow falls above or below the required calibration, the PCM determines that EGR flow out of self test range.
POSSIBLE CAUSE	• Vacuum hose malfunction (damaged, insufficient connected) • EGR valve stuck close • Vacuum leakage at EGR valve • EGR flow pass restricted • Short to power supply circuit in wiring EGR control valve terminal B and PCM terminal 47 • Open circuit in wiring between EGR control valve terminal B and PCM terminal 47 • Open circuit in wiring between EGR control valve terminal A and main relay terminal B • Open circuit in wiring between D.P.F. EGR sensor terminal A and PCM terminal 90 • D.P.F. EGR sensor downstream hose off or plugged • D.P.F. EGR sensor hoses both off • D.P.F. EGR sensor hoses connected reverse • EGR orifice tube damaged • Damaged EGR control valve • Damaged PCM

Circuit Open/Short Inspection

1. Disconnect the PCM connector. (See 01-40A-7 PCM REMOVAL/INSTALLATION[L3].)



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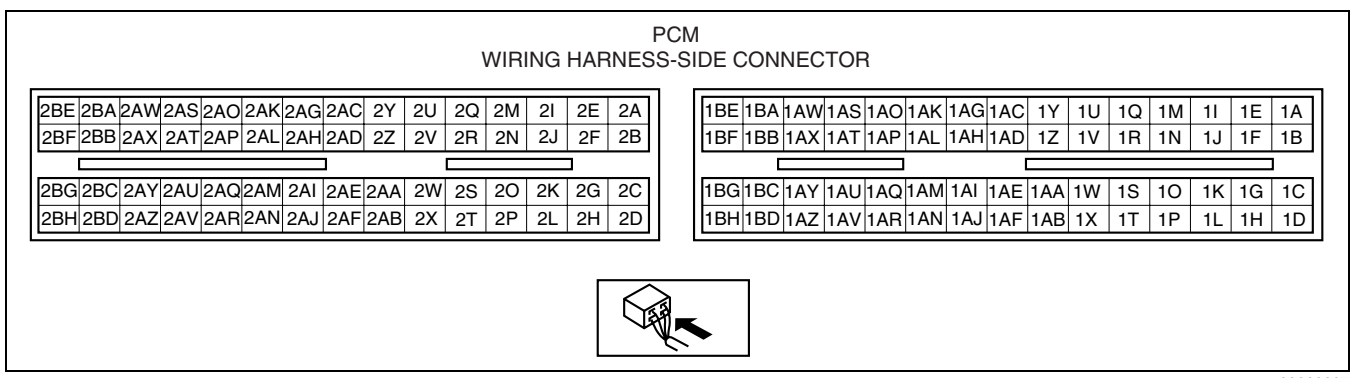

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2. Inspect the following wiring harnesses for an open or short circuit (continuity check).
   Open circuit
   - If there is no continuity, the circuit is open. Repair or replace the harness.
     - — Fuel injector No.1 terminal A and PCM terminal 2BB
     - — Fuel injector No.2 terminal A and PCM terminal 2BC
     - — Fuel injector No.3 terminal A and PCM terminal 2BD
     - — Fuel injector No.4 terminal A and PCM terminal 2AZ
     - — Fuel injector No.1 terminal B and main relay terminal A
     - — Fuel injector No.2 terminal B and main relay terminal A
     - — Fuel injector No.3 terminal B and main relay terminal A
     - — Fuel injector No.4 terminal B and main relay terminal A

   Short circuit
   - If there is continuity, the circuit is short. Repair or replace the harness.
     - — Fuel injector No.1 terminal B and body ground
     - — Fuel injector No.2 terminal B and body ground
     - — Fuel injector No.3 terminal B and body ground
     - — Fuel injector No.4 terminal B and body ground

Leakage Inspection

Warning
- **Fuel line spills and leakage from the pressurized fuel system are dangerous. To prevent this, complete the following inspection with the engine stopped.**

1. Perform the "Fuel Line Safety Procedure" referring to the BEFORE SERVICE PRECAUTION. (See 01-14A-3 BEFORE SERVICE PRECAUTION[L3].)
2. Disconnect the negative battery cable.
3. Remove the fuel injector and fuel distributor as a single unit. (See 01-14A-18 FUEL INJECTOR REMOVAL/INSTALLATION[L3].)

GENERATOR DISASSEMBLY/ASSEMBLY[L3]

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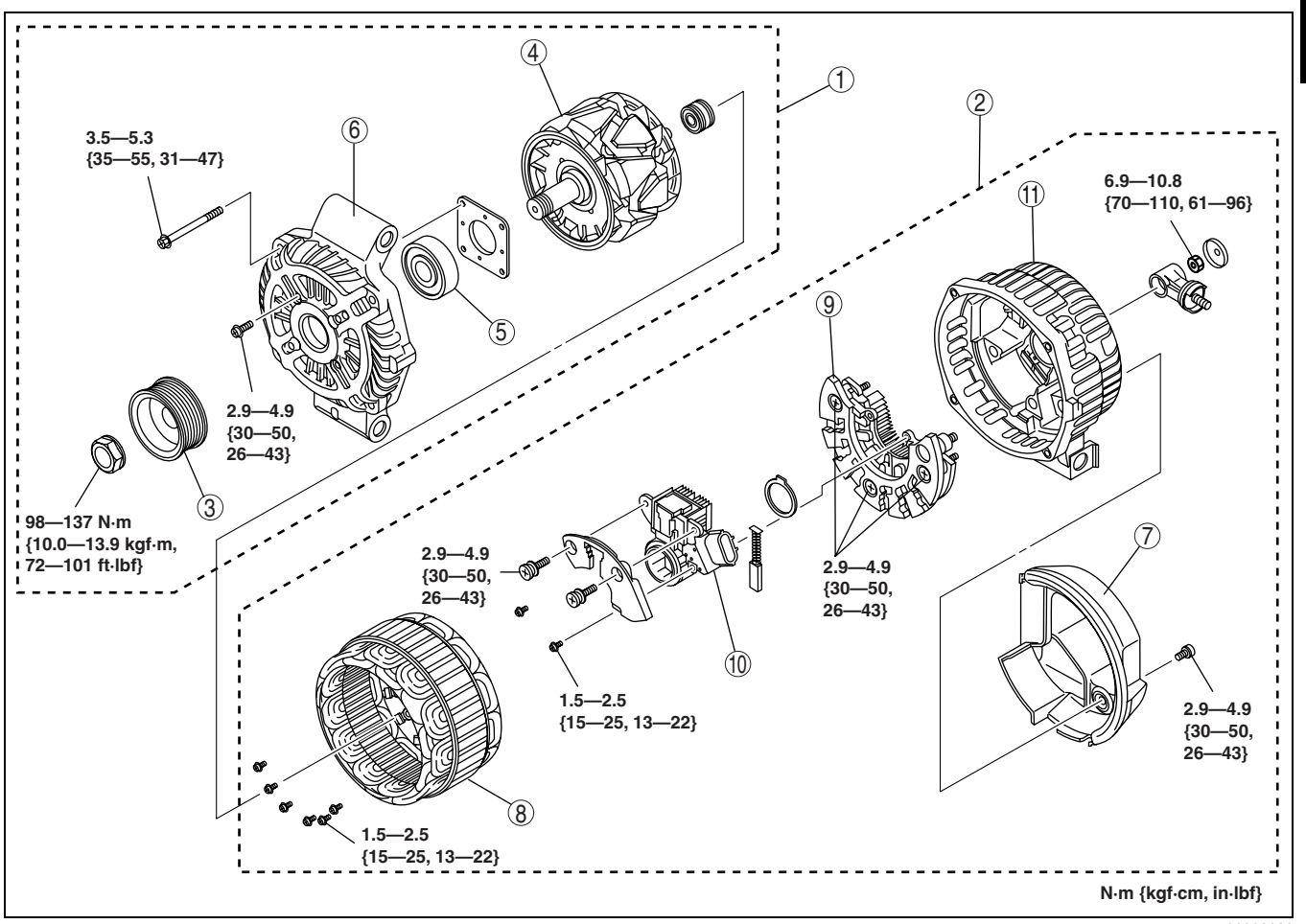
Caution
- **Melt the solder quickly, otherwise the diodes (rectifier) and regulator will be damaged by excessive heat.**

1. Disassemble in the order indicated in the table.
2. Assemble in the reverse order of disassembly.



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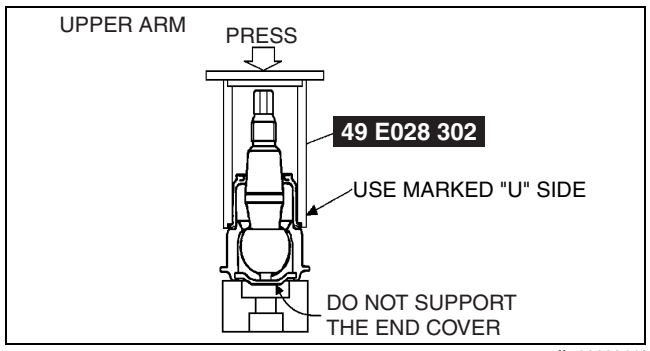
1	Rotor component
2	Stator coil component
3	Pulley
4	Rotor
5	Bearing
6	Front cover

7	Generator heat insulator
8	Stator coil
9	Rectifier
10	Brush holder
11	Rear bracket

5. Install a new dust boot using the **SST**.



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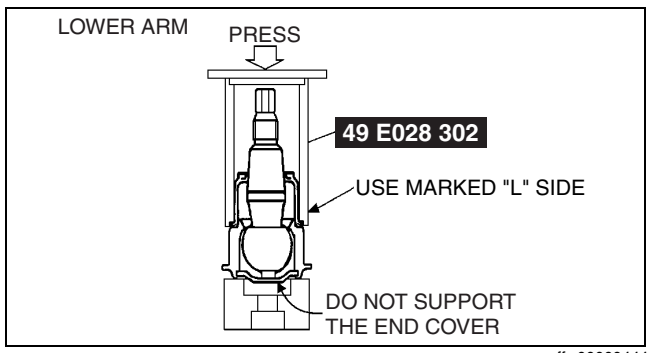
Caution
- **Do not press or support the end cover of the housing.**
- **Wipe away excess grease.**

6. Inspect for any damage or deformation of the dust boot and any gap between the housing and the dust boot bottom flange.



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REAR UPPER ARM REMOVAL/ INSTALLATION

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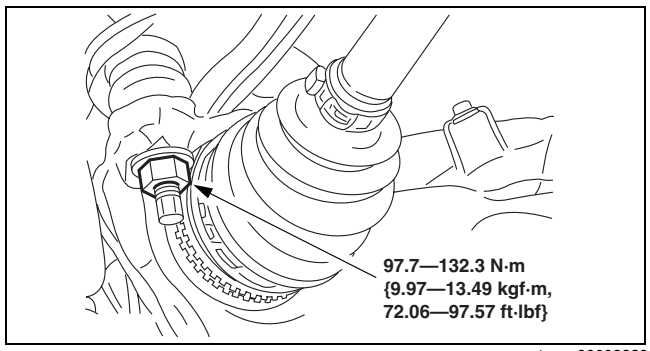
1. Remove the wheel and tire assembly. (See 02-12-7 WHEEL AND TIRE REMOVAL/INSTALLATION.)
2. Separate the upper arm from the wheel knuckle.
   (1) Remove the upper ball joint nut.

Note
- It may be necessary to hold the ball joint stud to keep it from turning while removing the nut.



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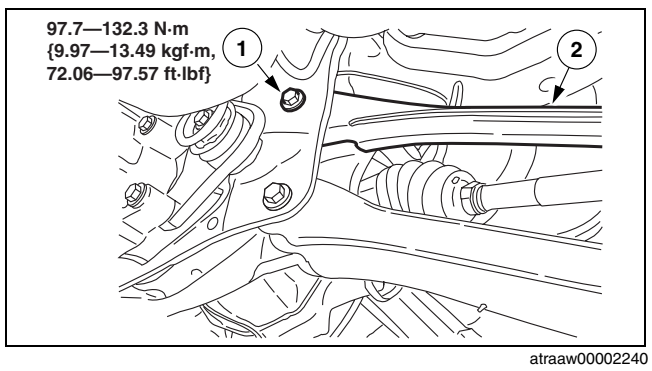
3. Remove the upper arm.
   (1) Remove the upper arm inner bolt.
   (2) Remove the upper arm.
4. Remove in the reverse order of removal.



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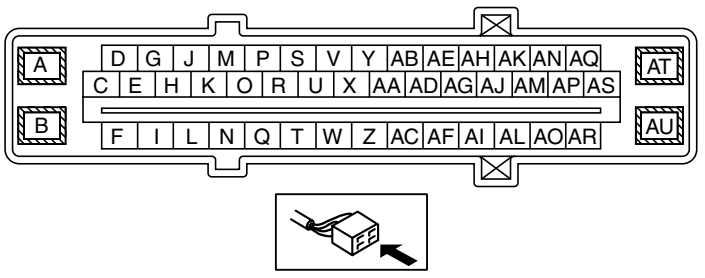
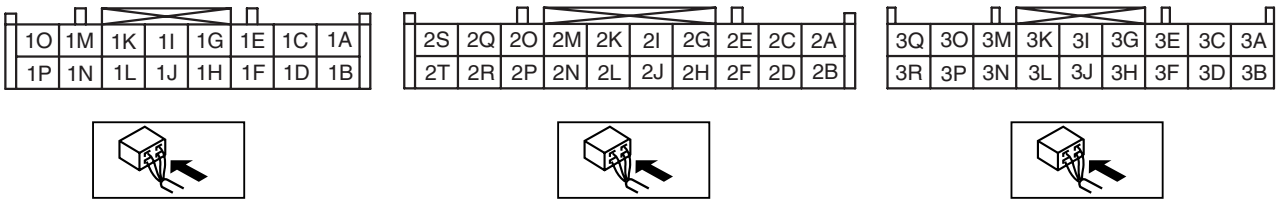
STEP	INSPECTION		ACTION
*4	**INSPECT WIRING HARNESS BETWEEN ABS HU/CM AND DLC -2 FOR CONTINUITY** • Disconnect the ABS HU/CM connector. • Is there continuity between connector terminal AQ and DLC-2?	Yes	Go to the next step.
		No	Repair the wiring harness between the ABS HU/CM and DLC-2.
*5	**INSPECT WIRING HARNESS BETWEEN ABS/ HU/CM AND DLC-2 FOR SHORT TO POWER SUPPLY** Is the voltage **approx. 12 V** at connector terminal AQ?	Yes	Repair the wiring harness between the ABS HU/CM and DLC-2.
		No	Go to the next step.
*6	**INSPECT WIRING HARNESS BETWEEN ABS HU/CM AND DLC-2 FOR SHORT TO GROUND** Is there continuity between connector terminal AQ and ground?	Yes	Repair the wiring harness between the ABS HU/CM and DLC-2.
		No	Replace the ABS HU/CM (communication circuit malfunction in ABS HU/CM). (See 04-13-2 ABS HU REMOVAL/INSTALLATION.)

ABS HU/CM WIRING HARNESS-SIDE CONNECTOR



INSTRUMENT CLUSTER WIRING HARNESS-SIDE CONNECTOR



- When performing an asterisked (*) troubleshooting inspection, slightly shake the wiring harness and connectors while performing the inspection to discover whether poor contact points are the cause of any intermittent malfunction. If there is a problem, verify that the connectors, terminals and wiring harness are connected correctly and undamaged.

NO.7 THERE IS MALFUNCTION IN THE SYSTEM EVEN THOUGH ABS WARNING LIGHT, BRAKE SYSTEM WARNING LIGHT, DO NOT ILLUMINATE[L3]

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7	**There is a malfunction in system even though ABS warning light, BRAKE system warning light, do not illuminate.**
[TROUBLESHOOTING HINTS] • **There is a difference in size or air pressure between the front and rear tires.**	

Diagnostic procedure

STEP	INSPECTION		ACTION
1	**INSPECT FOR DTCs IN ABS HU/CM** Have DTCs been stored in memory?	Yes	Perform the applicable DTC inspection. (See 04-02A-2 ON-BOARD DIAGNOSIS[L3].)
		No	Go to the next step.
2	**INSPECT ABS HYDRAULIC UNIT** Perform the ABS hydraulic unit system inspection. Is the system normal?	Yes	Inspect the conventional brake system.
		No	**If the wheels do not rotate:** Replace the ABS HU/CM. (See 04-13-2 ABS HU REMOVAL/INSTALLATION.) **If the wheels rotate but order in which wheels rotate is incorrect:** Inspect the brake pipe passage to the ABS HU/CM.

DTC No.	Condition	Page
P1751	Shift solenoid A malfunction	(See 05-02B-16 DTC P0731, P0732, P0733, P0734, P0751, P0756, P1751, P1756[LA4AX-EL (CD4E)].)
P1756	Shift solenoid B malfunction	(See 05-02B-16 DTC P0731, P0732, P0733, P0734, P0751, P0756, P1751, P1756[LA4AX-EL (CD4E)].)
P1760	Electronic pressure control (EPC) solenoid malfunction	(See 05-02B-26 DTC P1746, P1747, P1760[LA4AX-EL (CD4E)].)
P1780	O/D OFF switch circuit malfunction (open circuit/short to circuit)	(See 05-02B-28 DTC P1780[LA4AX-EL (CD4E)].)
P1783	ATF overheating	(See 05-02B-24 DTC P1711, P1783[LA4AX-EL (CD4E)].)
P1788	3-2 timing/coast clutch solenoid (3-2 T/CCS) circuit malfunction (open circuit/short to power supply)	(See 05-02B-30 DTC P1788, P1789[LA4AX-EL (CD4E)].)
P1789	3-2 timing/coast clutch solenoid (3-2 T/CCS) circuit malfunction (short to ground)	(See 05-02B-30 DTC P1788, P1789[LA4AX-EL (CD4E)].)
P2195	Lack of front HO2S (RH) switch, sensor indicates lean	(See 01-02B-9 DTC TABLE[AJ (3.0L Duratec)].)
P2196	Lack of front HO2S (RH) switch, sensor indicates rich	(See 01-02B-9 DTC TABLE[AJ (3.0L Duratec)].)
P2197	Lack of front HO2S (LH) switch, sensor indicates lean	(See 01-02B-9 DTC TABLE[AJ (3.0L Duratec)].)
P2198	Lack of front HO2S (LH) switch, sensor indicates rich	(See 01-02B-9 DTC TABLE[AJ (3.0L Duratec)].)
P2270	Lack of rear HO2S (RH) switch, sensor indicates lean	(See 01-02B-9 DTC TABLE[AJ (3.0L Duratec)].)
P2271	Lack of rear HO2S (RH) switch, sensor indicates rich	(See 01-02B-9 DTC TABLE[AJ (3.0L Duratec)].)
P2272	Lack of rear HO2S (LH) switch, sensor indicates lean	(See 01-02B-9 DTC TABLE[AJ (3.0L Duratec)].)
P2273	Lack of rear HO2S (LH) switch, sensor indicates rich	(See 01-02B-9 DTC TABLE[AJ (3.0L Duratec)].)

DTC P0707, P0708, P1702[LA4AX-EL (CD4E)]

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DTC P0707	**Transaxle range (TR) switch circuit malfunction (short to ground)**
DTC P0708	**Transaxle range (TR) switch circuit malfunction (open circuit/short to power supply)**
DTC P1702	**Transaxle range (TR) switch signal malfunction**
DETECTION CONDITION	• P0707: Short to ground in wiring harness between TR switch terminal and PCM terminal or short to ground in TR switch internal circuit • P0708: Open circuit in wiring harness between TR switch and PCM terminal or in TR switch internal circuit • P1702: PCM cannot detect a signal from TR switch
POSSIBLE CAUSE	• TR switch malfunction • Short to ground in wiring harness between TR switch terminal D and PCM terminal 64 • Short to ground in wiring harness between TR switch terminal A and PCM terminal 91 • Open circuit in wiring harness between TR switch terminal D and PCM terminal 64 • Open circuit in wiring harness between TR switch terminal A and PCM terminal 91 • Short to power supply in wiring harness between TR switch terminal D and PCM terminal 64 • Short to power supply in wiring harness between TR switch terminal A and PCM terminal 91 • Damaged connectors between TR switch and PCM • PCM malfunction

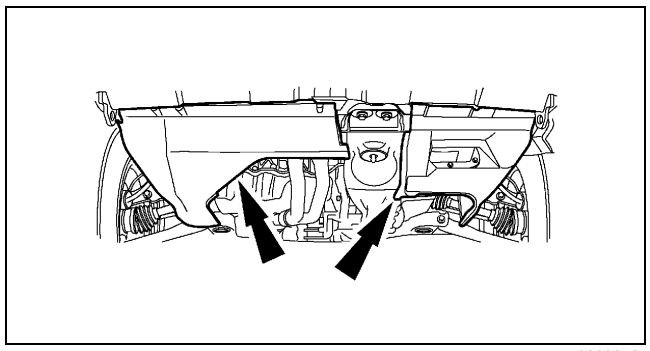
<table>
<tr><th>STEP</th><th>INSPECTION</th><th></th><th>ACTION</th></tr>
<tr><td rowspan="2">4</td><td rowspan="2">Engine mounts
• Do any of the following malfunctions exist?
— Damage
— Loose parts
— Missing
(See 05-17B-20 AUTOMATIC TRANSAXLE REMOVAL[LA4AX-EL (CD4E)].)
(See 05-17B-31 AUTOMATIC TRANSAXLE INSTALLATION[LA4AX-EL (CD4E)].)</td><td>Yes</td><td>Service if necessary</td></tr>
<tr><td>No</td><td>Go to the next step</td></tr>
<tr><td rowspan="2">5</td><td rowspan="2">Improper pressure
• Is the line pressure high?
(See 05-17B-2 MECHANICAL SYSTEM TEST[LA4AX-EL (CD4E)].)</td><td>Yes</td><td>Inspect the line pressure
Service if necessary
If the pressures are normal and a specific shift position is harsh, refer to the following chart:
<table><tr><th>Shift</th><th>Harsh</th></tr><tr><td>1-2</td><td>22</td></tr><tr><td>2-3</td><td>23</td></tr><tr><td>3-4</td><td>24</td></tr><tr><td>4-3</td><td>25</td></tr><tr><td>3-2</td><td>26</td></tr><tr><td>2-1</td><td>—</td></tr></table></td></tr>
<tr><td>No</td><td>Go to the next step</td></tr>
<tr><td rowspan="2">6</td><td rowspan="2">Control valve body
• Do any of the following malfunctions exist?
— Bolts are not tightened to the specification
— Gaskets are damaged
— Main regulator valve, by-pass valve, line modulator valve are stuck, damaged, or misassembled springs are tangled, missing, or damaged
— Electrical pressure control (EPC) solenoid is stuck or damaged
— Hydraulic passages are damaged
— Separator plate is damaged or blocked</td><td>Yes</td><td>Service if necessary</td></tr>
<tr><td>No</td><td>Go to the next step</td></tr>
<tr><td rowspan="2">7</td><td rowspan="2">Torque converter component
• TCC applied during shifts
• Do any of the following malfunctions exist?
— Piston is damaged
— Pump support seal #1 (CBY) is leaking, missing or damaged
— Case leakage
— Converter component is damaged</td><td>Yes</td><td>Service if necessary
If heat scorched, replace the converter</td></tr>
<tr><td>No</td><td>The problem is not in the automatic transaxle
Go to the engine symptom troubleshooting
(See 01-03B-4 ENGINE SYMPTOM TROUBLESHOOTING[AJ (3.0L Duratec)].)</td></tr>
<tr><td>8</td><td colspan="3">• Verify the test results.
— If normal, return to the diagnostic index to service any additional symptoms.
— If the malfunction remains, inspect the related Service Information and perform repair or diagnosis.
• If the vehicle is repaired, troubleshooting is completed.
• If the vehicle is not repaired or additional diagnostic information is not available, replace the PCM.</td></tr>
</table>

NO.11 SHIFT CONCERN: NO FIRST GEAR ENGAGEMENT IN HIGHER GEAR (D RANGE)[LA4AX-EL (CD4E)]

id0503a2803900

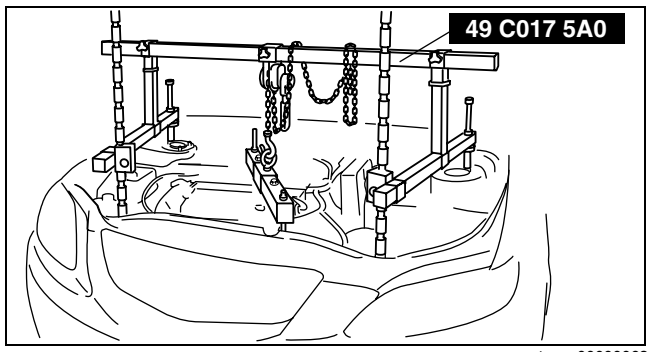
11	Shift concern: no first gear engagement in higher gear (D range)
POSSIBLE CAUSE	• Powertrain control system malfunction • Internal or external shift linkage malfunction • Control valve body malfunction • Seals malfunction • Direct clutch malfunction • 2/4 band and servo malfunction

30. Install the two splash shields.
31. Install both front wheels. (See 02-12-7 WHEEL AND TIRE REMOVAL/INSTALLATION.)
32. Lower the vehicle.



atraaw00002587

33. Lower the engine onto the engine mount (RH).



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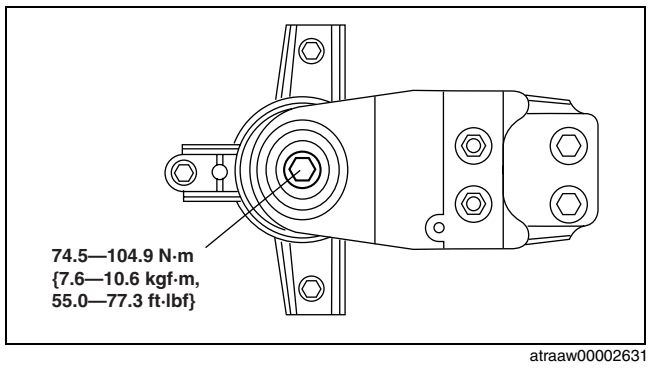
34. Install the bolt for the No.3 engine mount.



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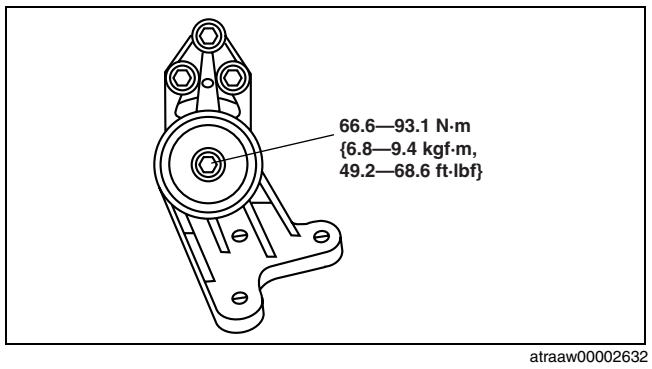
35. Install the No.1engine mount.



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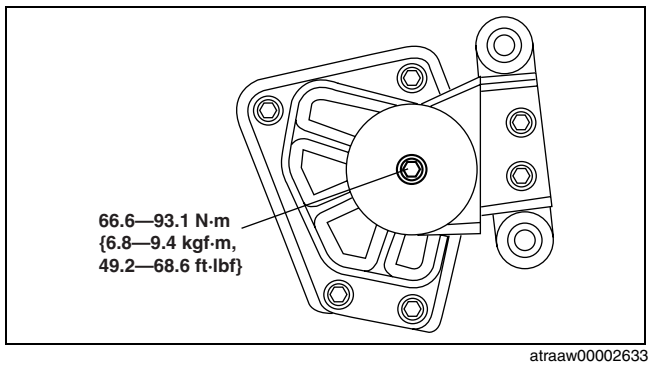
36. Install the No.4 engine mount
37. Install the EGR pipe. (See 01-16B-7 EGR PIPE REMOVAL/INSTALLATION[AJ (3.0L Duratec)].)



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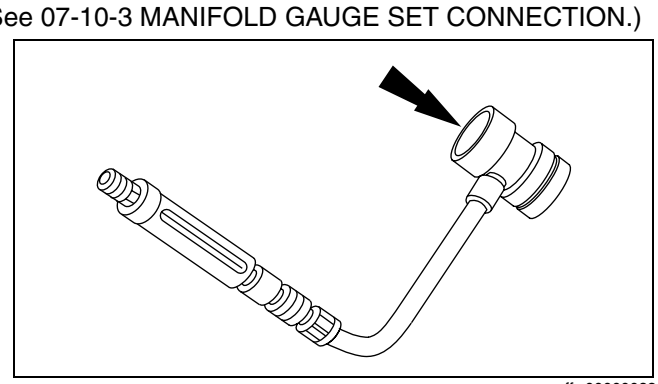
Tracer dye injection

Note

- System pressure should be between **413—551 kPa {4.22—5.61 kgf/cm^2, 60—80 psi}** at **24 °C {75 °F}** with the engine off.

1. Install the Manifold Gauge Set or a recovery station. (See 07-10-3 MANIFOLD GAUGE SET CONNECTION.)
2. Turn the valve on the fluorescent tracer dye injector all the way to the left to close the valve.



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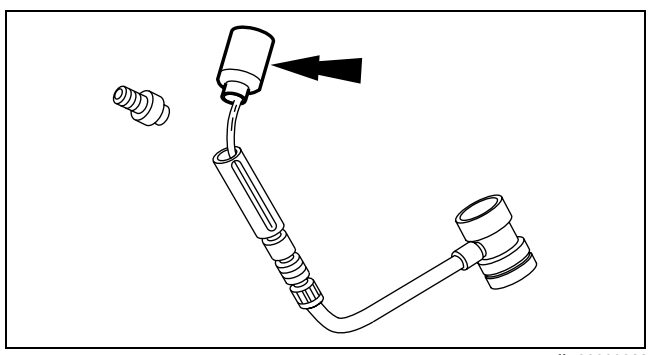
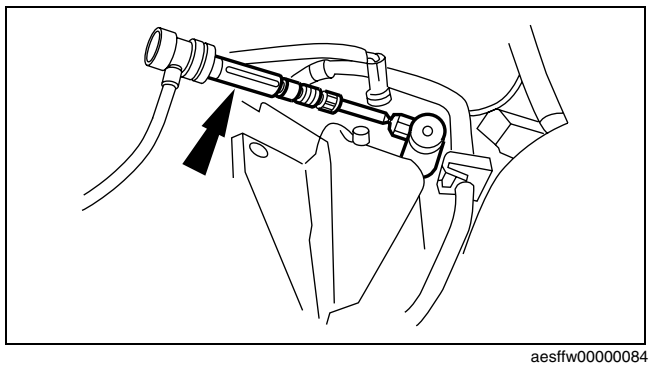
3. Fill the reservoir with **7 ml {0.25 oz}** of R-134a Fluorescent Tracer Dye 164-R3712.



aesffw00000083

4. Install the injector between the low-side quick disconnect and the vehicle low-pressure service gauge port valve.
5. Open all quick disconnect valves and charge the refrigerant system. (See 07-10-8 A/C SYSTEM EVACUATION AND CHARGING.)
6. When system charging is complete, recover the refrigerant from the dye injector.
7. Remove the dye injector from the low-side quick disconnect valve.



aesffw00000084

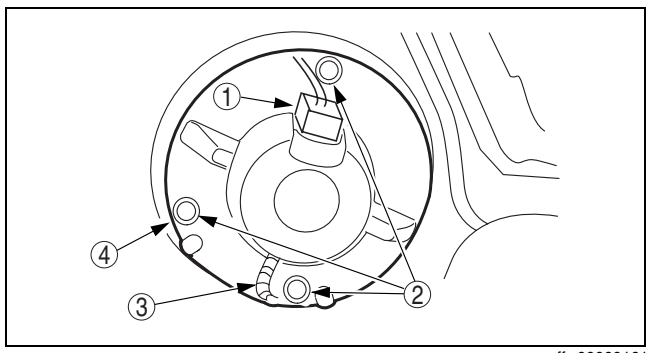
Note

- Only connect the dye-injector to the Manifold Gauge Set or the charging/recovery station when dye is to be injected. The dye injector has a one-way check valve that will prevent system refrigerant recovery and evacuation.

BLOWER MOTOR REMOVAL/INSTALLATION

id074000800900

1. Disconnect the negative battery cable.
2. Remove the blower motor.
   (1) Disconnect the connector.
   (2) Remove the three screws.
   (3) Remove the hose.
   (4) Remove the blower motor.
3. Install in the reverse order of removal.



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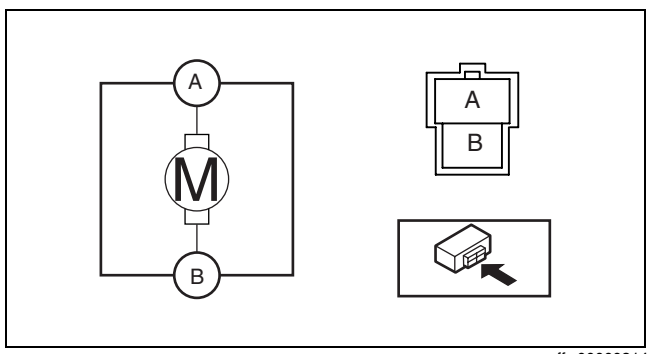
BLOWER MOTOR INSPECTION

id074000801000

1. Connect battery positive voltage to terminal A and ground to terminal B of the blower motor and verify its operation.
   - If not as specified, replace the blower motor.



aesffw00000314

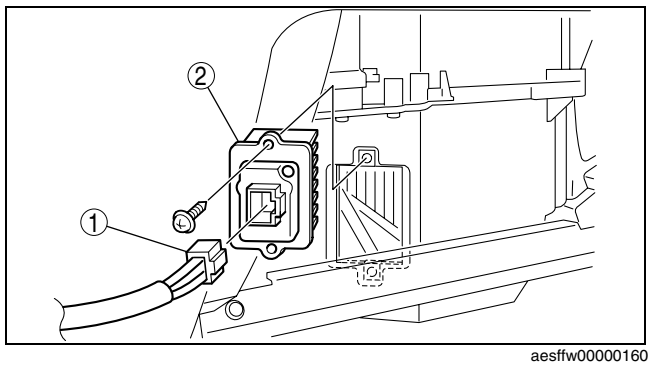
POWER METAL OXIDE SEMICONDUCTOR FIELD EFFECT TRANSISTOR (POWER MOS FET) REMOVAL/ INSTALLATION

id074000800200

1. Disconnect the negative battery cable.
2. Remove the glove compartment.
3. Remove in the order indicated in the table.

1	Power MOS FET connector
2	Power MOS FET

4. Install in the reverse order of removal.



aesffw00000160

FRONT SEAT DISASSEMBLY/ASSEMBLY

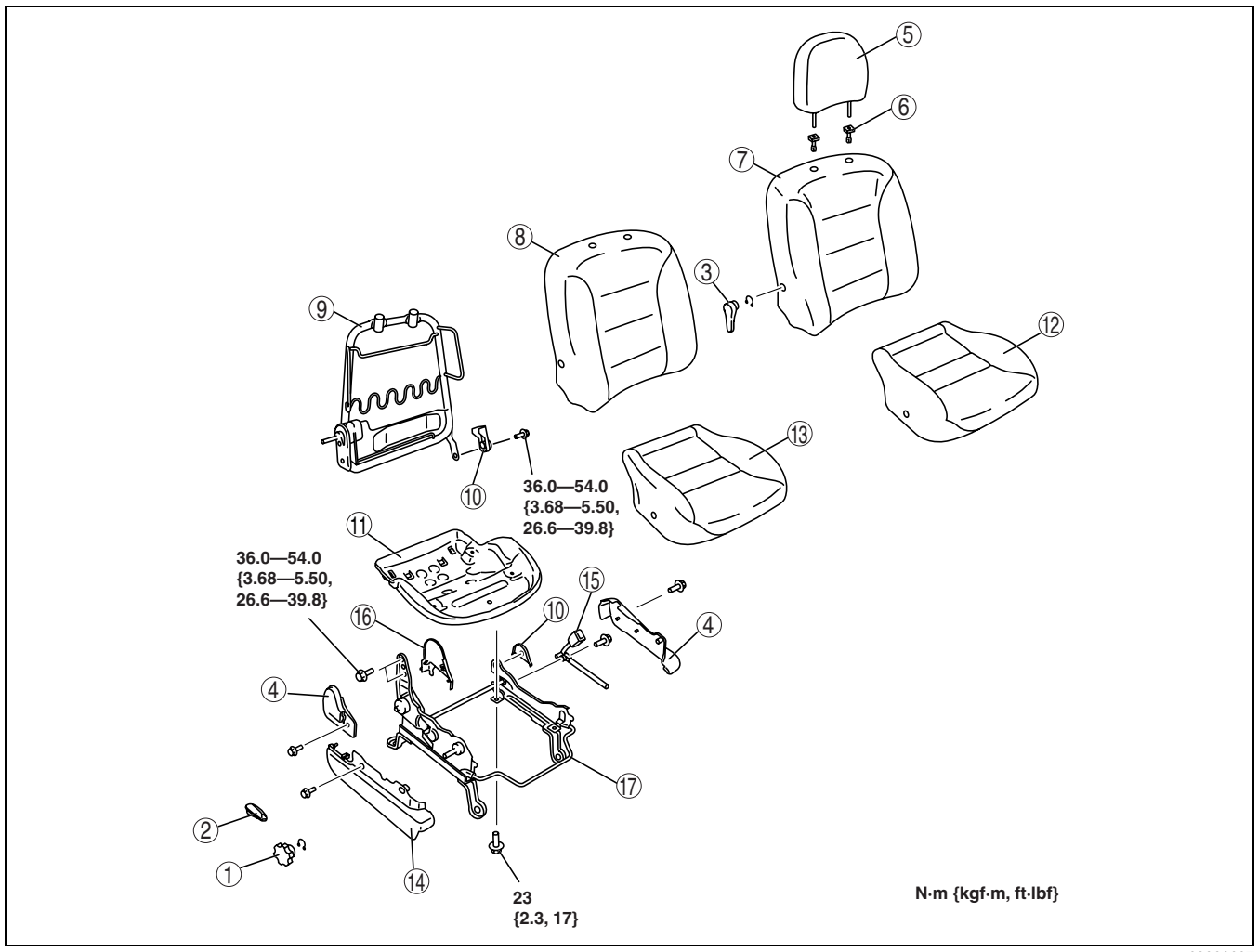
id091300800300

Warning
- **Handling the front seats improperly can accidentally deploy the side air bag, which may seriously injure you. Read air bag system service warnings and cautions before handling the front seats. (See 08-10-2 SERVICE WARNINGS.)(See 08-10-4 SERVICE CAUTIONS.)**

Note
- The driver's seat is shown, the passenger's seat is similar.
- The power's seat is shown, the manual seat is similar.

1. Turn the ignition switch to the LOCK position.
2. Disconnect the negative battery cable and wait for **1 min or more**.
3. Disassemble in the order indicated in the table.

Note
- Some component connectors may not exist due to vehicle options.



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1	Lift dial (Driver's seat only)
2	Recliner lever
3	Lumber support lever (Driver's seat only)
4	Side cover
5	Headrest
6	Pole guide
7	Seat back trim
8	Seat back pad
9	Seat back frame

10	Hinge cover
11	Seat cushion frame
12	Seat cushion trim
13	Seat cushion pad
14	Rail cover
15	Front buckle
16	Reverse cover
17	Slide adjuster

4. Assemble in the reverse order of disassembly.