ACCELERATOR CONTROL, FUEL & EXHAUST SYSTEMS

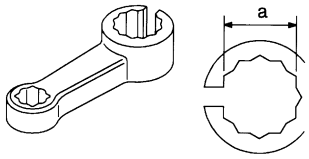
SECTION FE

CONTENTS

Special Service Tool

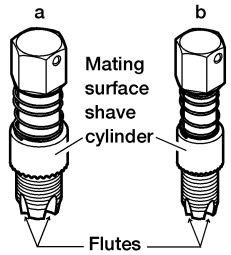
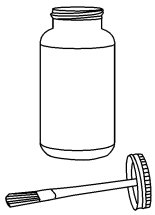
NGFE0001

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description	
KV10114400 (J38365) Heated oxygen sensor wrench	 NT636	Loosening or tightening rear heated oxygen sensor **a: 22 mm (0.87 in)**

Commercial Service Tool

NGFE0007

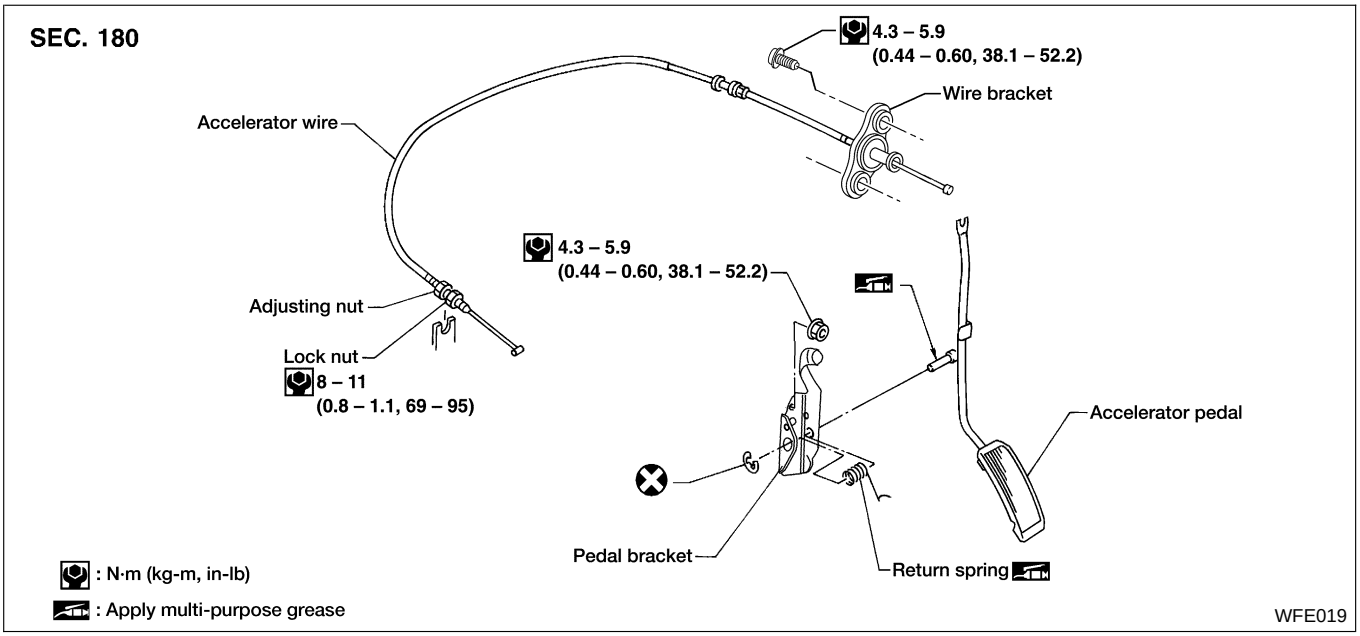
Tool name	Description	
(J-43897-18) (J-43897-12) Oxygen sensor thread cleaner	 AEM488	Reconditioning the exhaust system threads before installing a new oxygen sensor. Use with anti-seize lubricant shown in Commercial Service Tools. **a: J-43897-18 18mm diameter, for Zirconia Oxygen Sensor** **b: J-43897-12 12mm diameter, for Titania Oxygen Sensor**
Anti-seize lubricant Permatex™ 133AR or equivalent meeting MIL specification MIL-A-907	 AEM489	Lubricating oxygen sensor thread cleaning tool when reconditioning exhaust system threads.

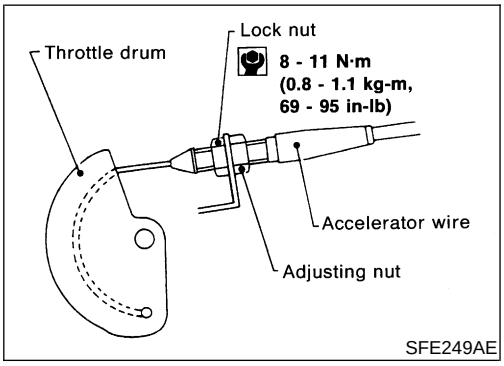
Removal and Installation

NGFE0002

CAUTION:

- **When removing accelerator wire, make a mark to indicate lock nut's initial position.**
- **Check that throttle valve opens fully when accelerator pedal is fully depressed. Also check that it returns to idle position when pedal is released.**
- **Check accelerator control parts for improper contact with any adjacent parts.**
- **When connecting accelerator wire, be careful not to twist or scratch its inner wire.**
- **Refer to *EL-168*, "ASCD Wire Adjustment".**





Adjusting Accelerator Wire

NGFE0003

NOTE:

Adjust accelerator wire with the engine warmed up to normal operating temperature and ignition switch turned to OFF.

1. Loosen lock nut, and tighten adjusting nut until throttle drum starts to move.
2. From that position, turn back adjusting nut 1.5 to 2 turns, and secure lock nut.

Removal and Installation

NGFE0004

WARNING:

When replacing fuel line parts, be sure to observe the following:

- **Put a "CAUTION: INFLAMMABLE" sign in workshop.**
- **Do not smoke while servicing fuel system. Keep open flames and sparks away from work area.**
- **Be sure to furnish the workshop with a CO_2 fire extinguisher.**

CAUTION:

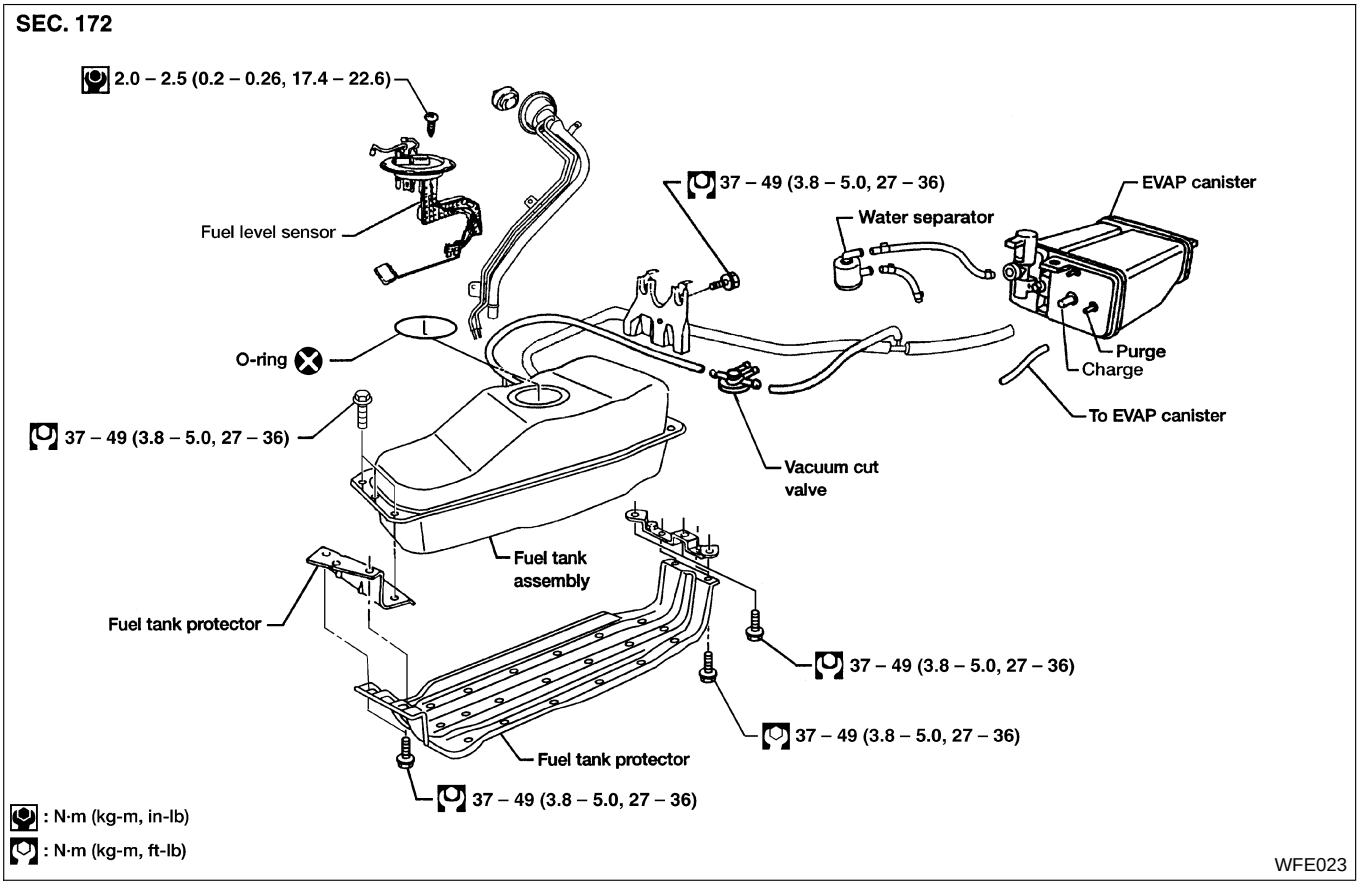
- **Before removing fuel line parts, carry out the following procedures:**

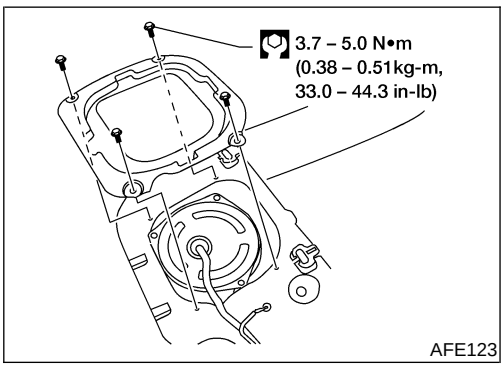
a) Put drained fuel in an explosion-proof container and put lid on securely.

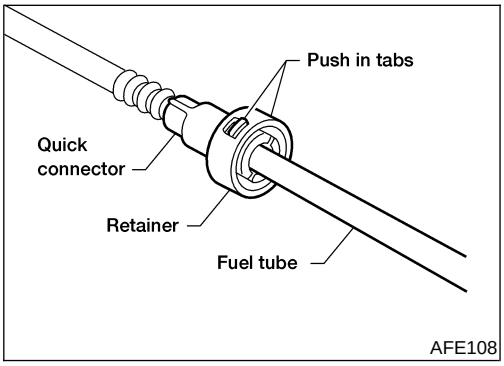
b) Release fuel pressure from fuel line. Refer to *EC-51* (KA24DE), *EC-637* (VG33E), "Fuel Pressure Release".

c) Disconnect battery ground cable.

- **Remove quick connectors with commercial service tool.**
- **Always replace O-ring with a new one.**
- **Do not kink or twist hoses and tubes when installed.**
- **Do not tighten hose clamps excessively to avoid damaging hoses.**
- **Perform an inspection and installation of EVAP system parts as necessary. Refer to *EC-34* (KA24DE), *EC-619* (VG33E), "Evaporative Emission System".**
- **For inspection and installation of ORVR system parts, refer to *EC-39* (KA24DE), *EC-625* (VG33E), "On-Board Refueling Vapor Recovery (ORVR)".**
- **After installation, run engine and check for fuel leaks at connections.**
- **Use only a genuine NISSAN fuel filler cap as a replacement. If an incorrect fuel filler cap is used, the MIL may come on.**







FUEL TANK

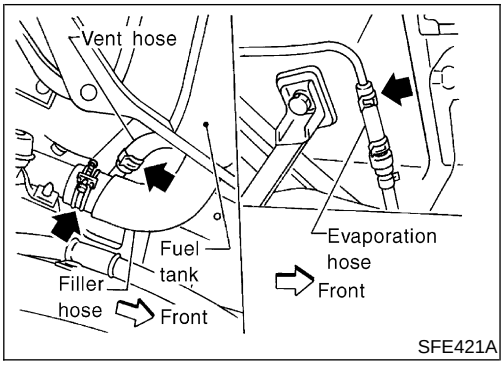
NGFE0004S01

1. Release fuel pressure from fuel line.
   Refer to ***EC-51*** (KA24DE), ***EC-637*** (VG33E), "Fuel Pressure Release".
2. Disconnect battery ground cable.
3. Remove back seat bottom. Refer to ***BT-38***, "Removal and Installation".
4. Remove inspection hole cover located under rear seat.
5. Drain fuel from fuel tank.
6. Disconnect electrical connectors.
7. Remove filler protector.
8. Remove the quick connectors as follows.

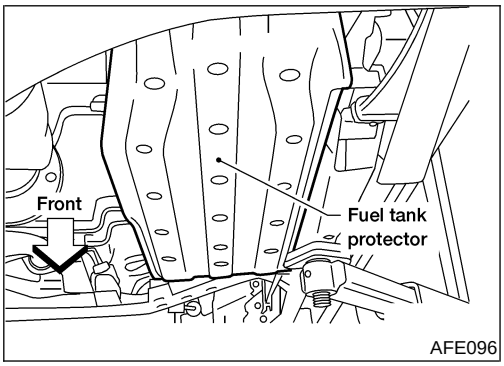
- Put mating marks on the connectors for correct installation.
- Hold the sides of the connector, push in tabs, and pull out the tube inserted in the retainer.

CAUTION:

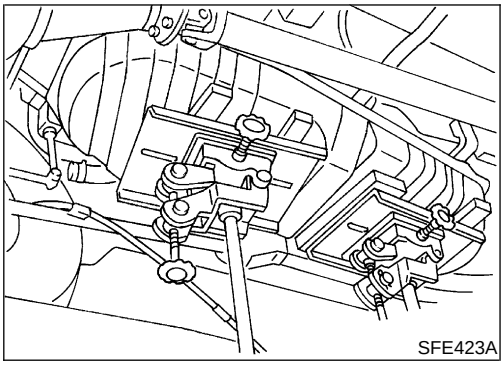
The tube can be removed when the push in tabs are completely depressed. Do not use any tools to remove the quick connector.



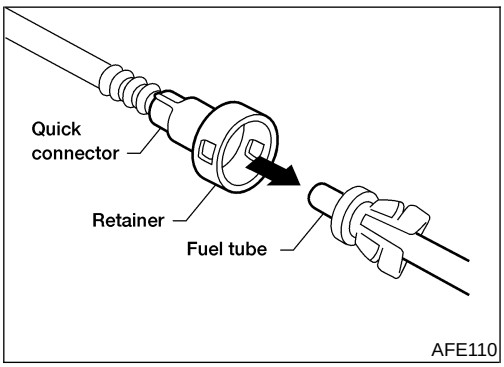
9. Disconnect filler hose, vent and evaporation hose at fuel tank side.



10. Remove fuel tank protector.

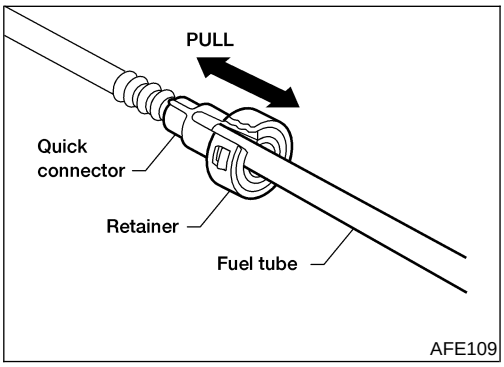


11. Remove fuel tank mounting bolts while supporting fuel tank.
12. Remove fuel tank.



To install, reverse the removal procedure. Connect the quick connectors as follows.

- Align push in tabs with retainer openings.
- Insert tube into the center of the connector until you hear a click.



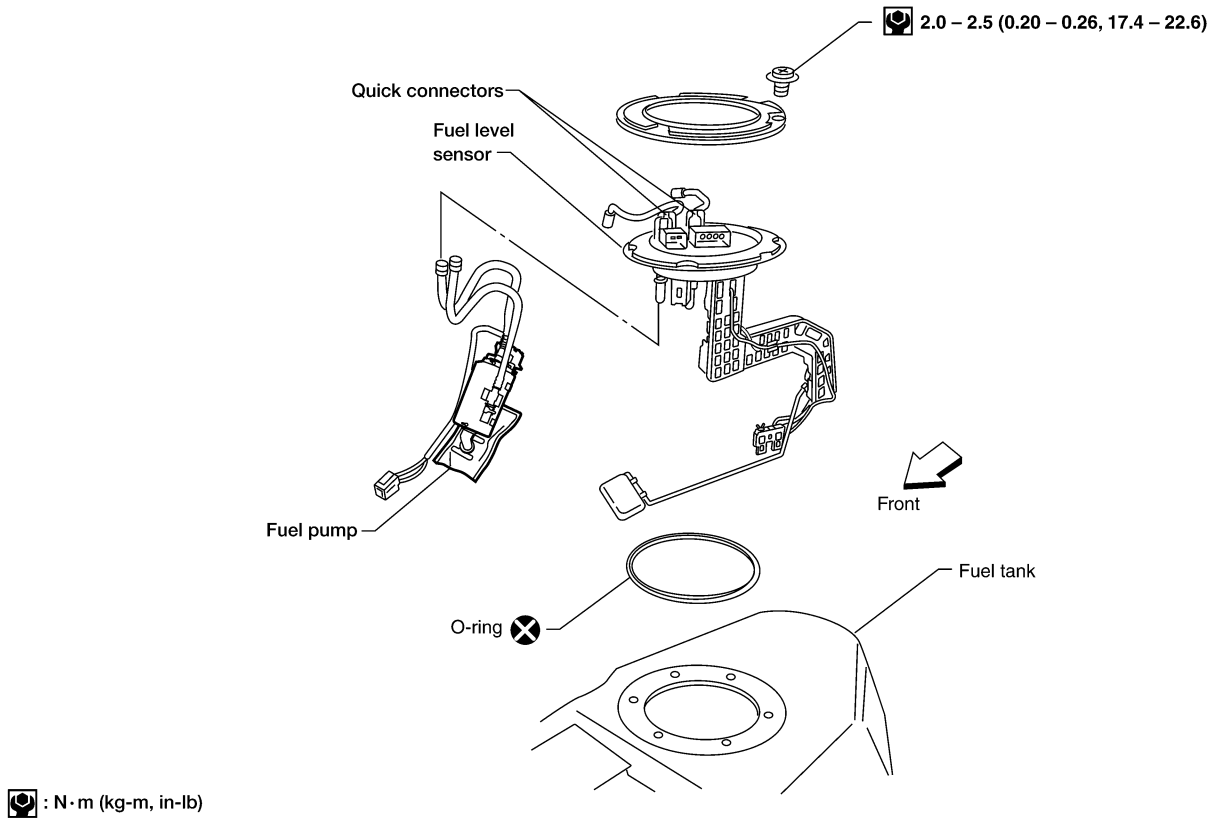
After connecting quick connectors, make sure the connection is firmly made using the following method.

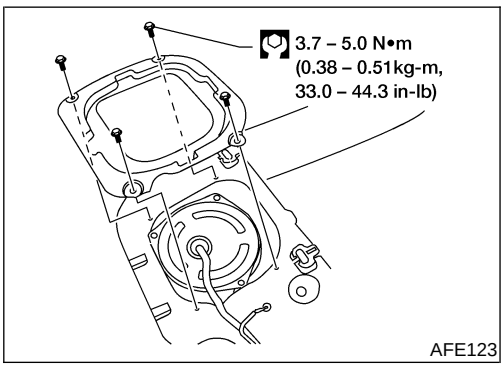
- Pull on the fuel tube and connector to make sure they are firmly connected.
- Start the engine, increase engine speed and verify that there are no leaks.

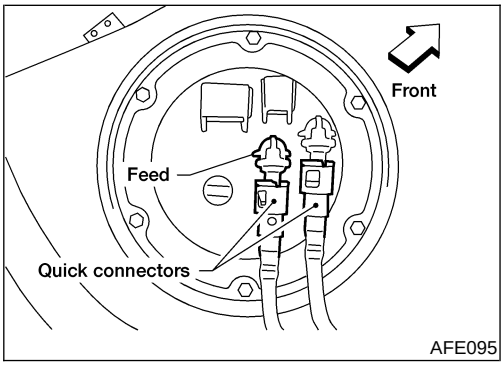
FUEL PUMP AND GAUGE

NGFE0004S02

SEC. 172







1. Release fuel pressure from fuel line.
   Refer to ***EC-51*** (KA24DE), ***EC-637*** (VG33E), "Fuel Pressure Release".
2. Disconnect battery ground cable.
3. Remove back seat bottom. Refer to ***BT-38***, "Removal and Installation".
4. Remove inspection hole cover located under rear seat.
5. Disconnect electrical connectors.
6. Remove the quick connectors as follows.

- Put mating marks on the connectors for correct installation.
- Hold the sides of the connector, push in tabs, and pull out the tube inserted in the retainer.

CAUTION:

The tube can be removed when the push in tabs are completely depressed. Do not use any tools to remove the quick connector.

7. Remove the six screws.
8. Remove fuel level sensor retainer and fuel level sensor.

9. Remove fuel pump with bracket while lifting the pawl of the fuel pump bracket upward.
10. Remove fuel level sensor assembly.

Installation procedure is the reverse order of removal.

- Install fuel level sensor as shown.

CAUTION:

- **Tighten bolts to specified torque.**

  : 2.0 - 2.5 N·m (0.20 - 0.26 kg-m, 17.4 - 22.6 in-lb)

- Always replace O-ring with a new one.
- After installation, run engine and check for leaks at connections.

Removal and Installation

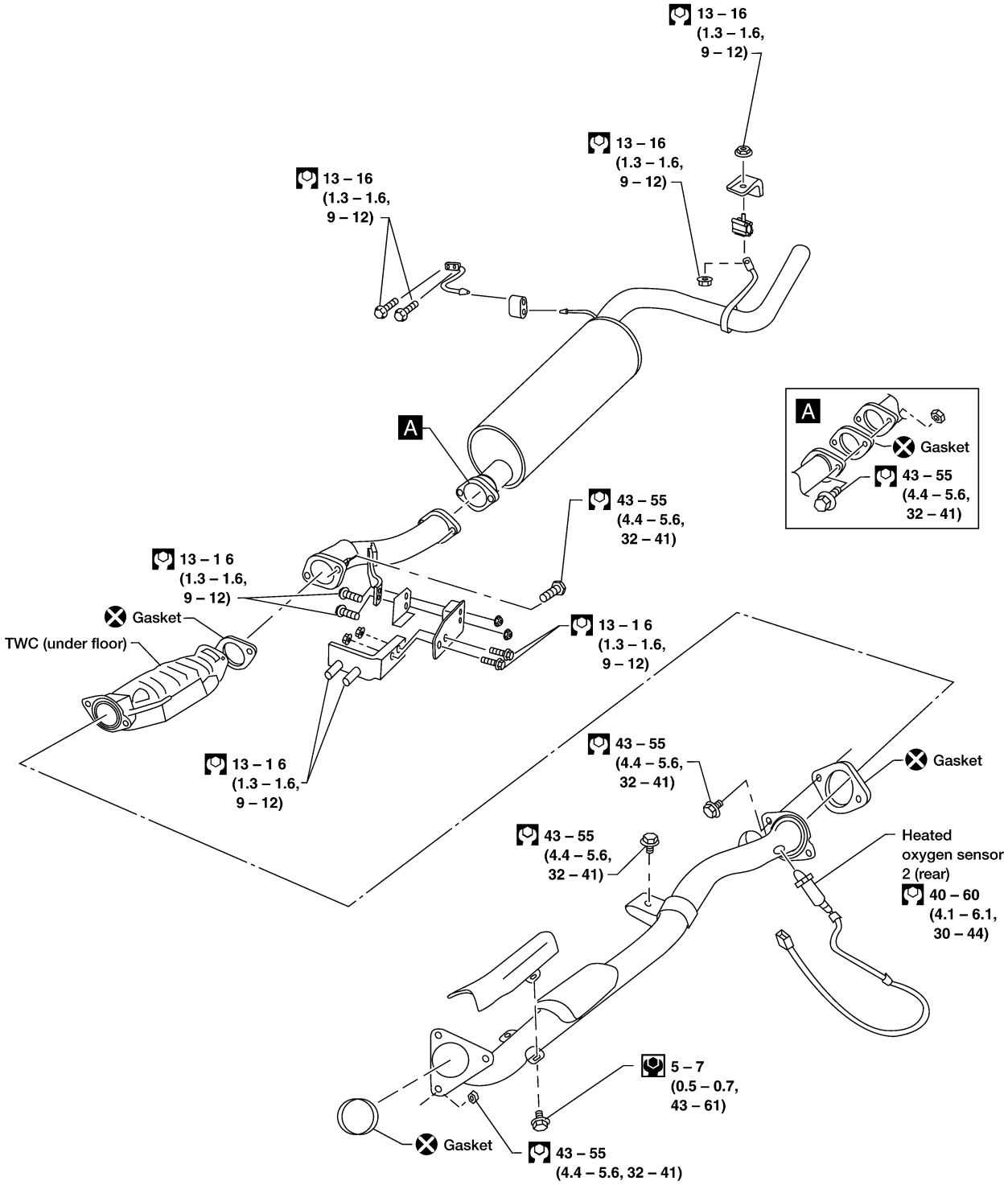
NGFE0005

CAUTION:

- **Always replace exhaust gaskets with new ones when reassembling.**
- **With engine running, check all tube connections for exhaust gas leaks, and entire system for unusual noises.**
- **Check to ensure that mounting brackets and mounting insulators are installed properly and free from undue stress. Improper installation could result in excessive noise or vibration.**
- **Discard any heated oxygen sensor which has been dropped from a height of more than 0.5 m (19.7 in) onto a hard surface such as a concrete floor; use a new one.**
- **Do not overtorque the oxygen sensor. Doing so may cause damage to the oxygen sensor, resulting in the MIL coming on.**

KA24DE Models

SEC. 200



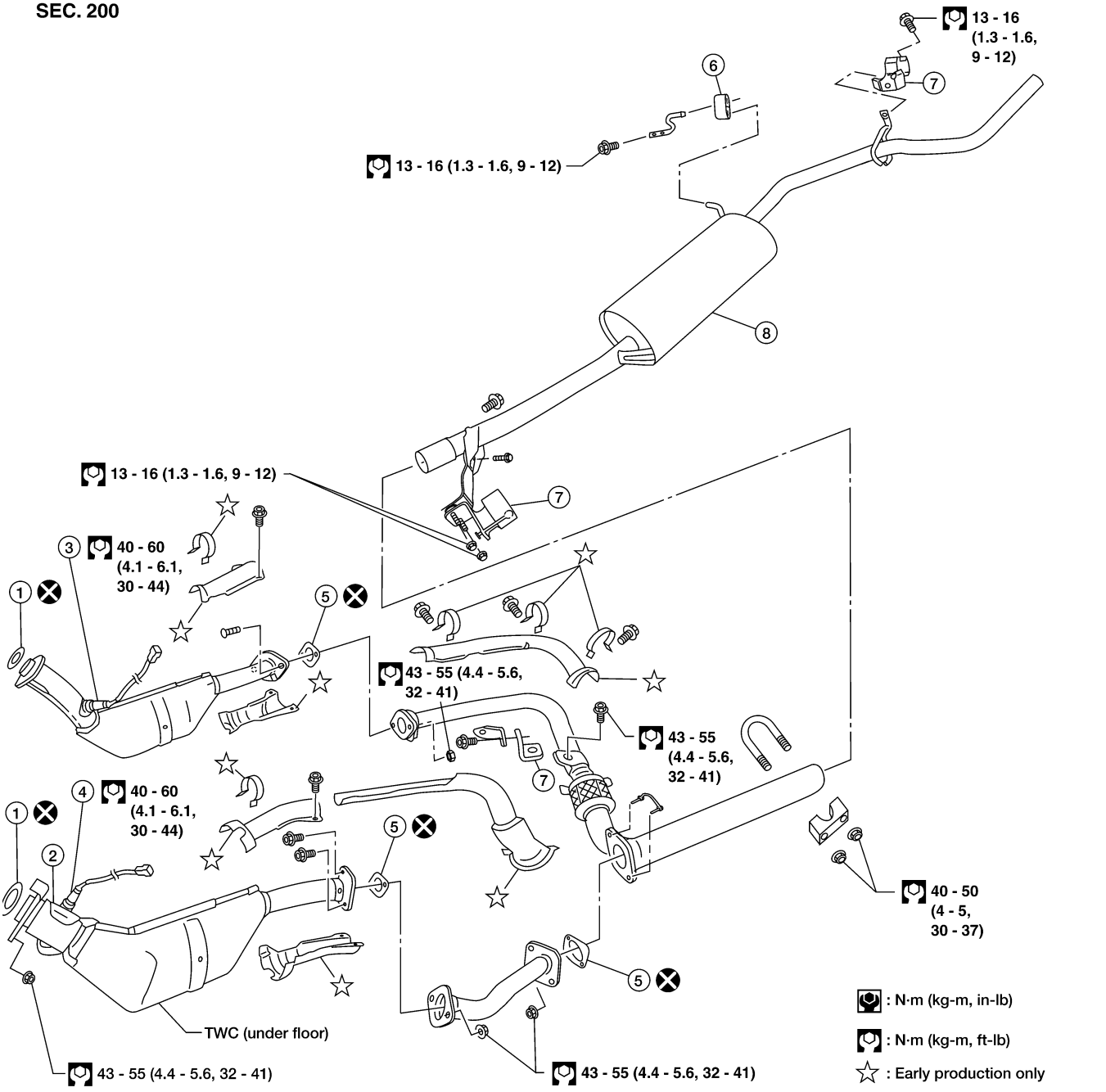
: N·m (kg-m, in-lb)

: N·m (kg-m, ft-lb)

WFE034

VG33E 2WD Models

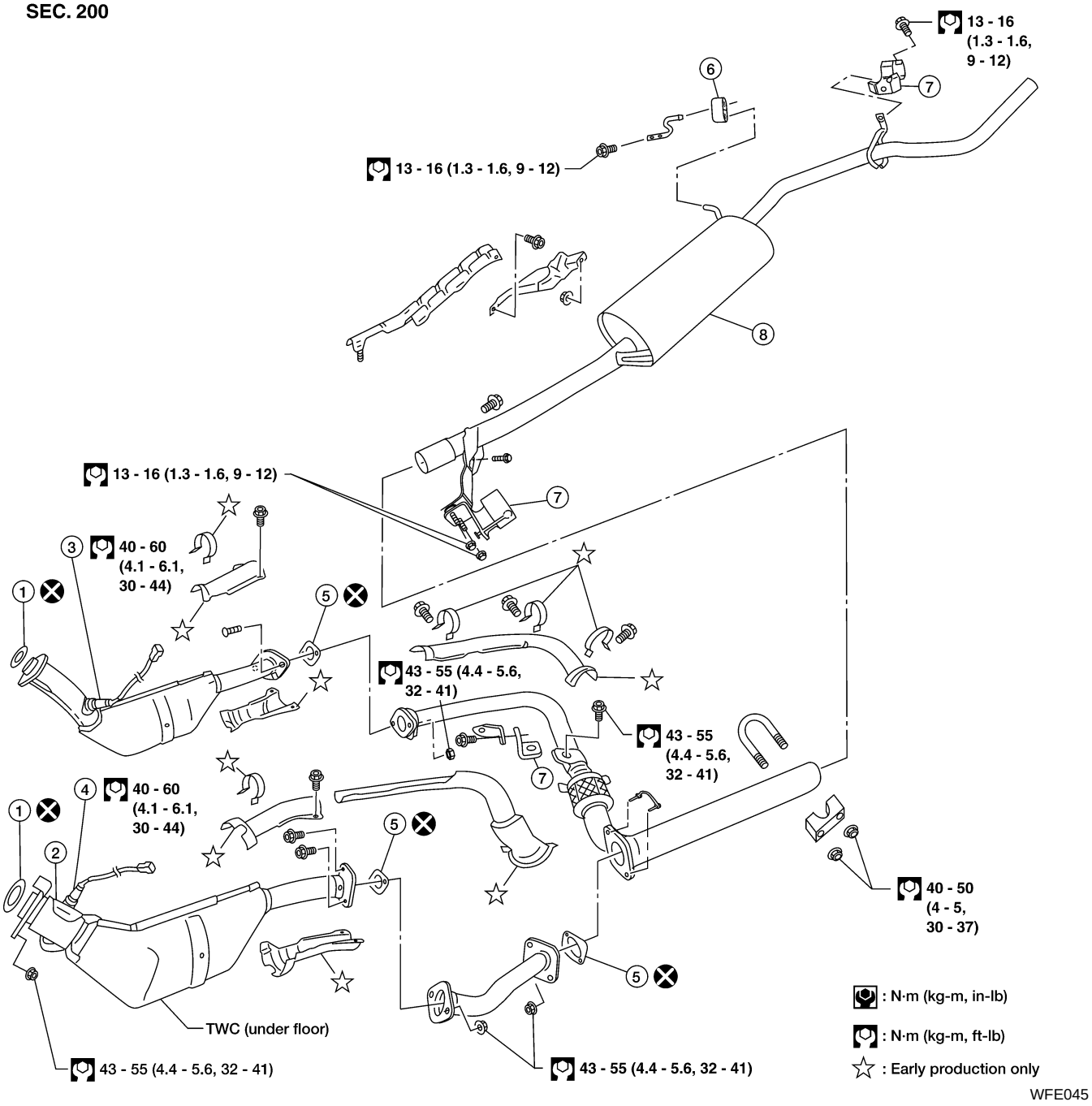
SEC. 200



1. Gasket
2. Front tube
3. Heated oxygen sensor 2 (rear) (bank 1)
4. Heated oxygen sensor 2 (rear) (bank 2)
5. Gasket
6. Mounting rubber
7. Mounting bracket
8. Center muffler

VG33E 4WD Models

SEC. 200



1. Gasket
2. Front tube
3. Heated oxygen sensor 2 (rear) (bank 1)
4. Heated oxygen sensor 2 (rear) (bank 2)
5. Gasket
6. Mounting rubber
7. Mounting bracket
8. Center muffler