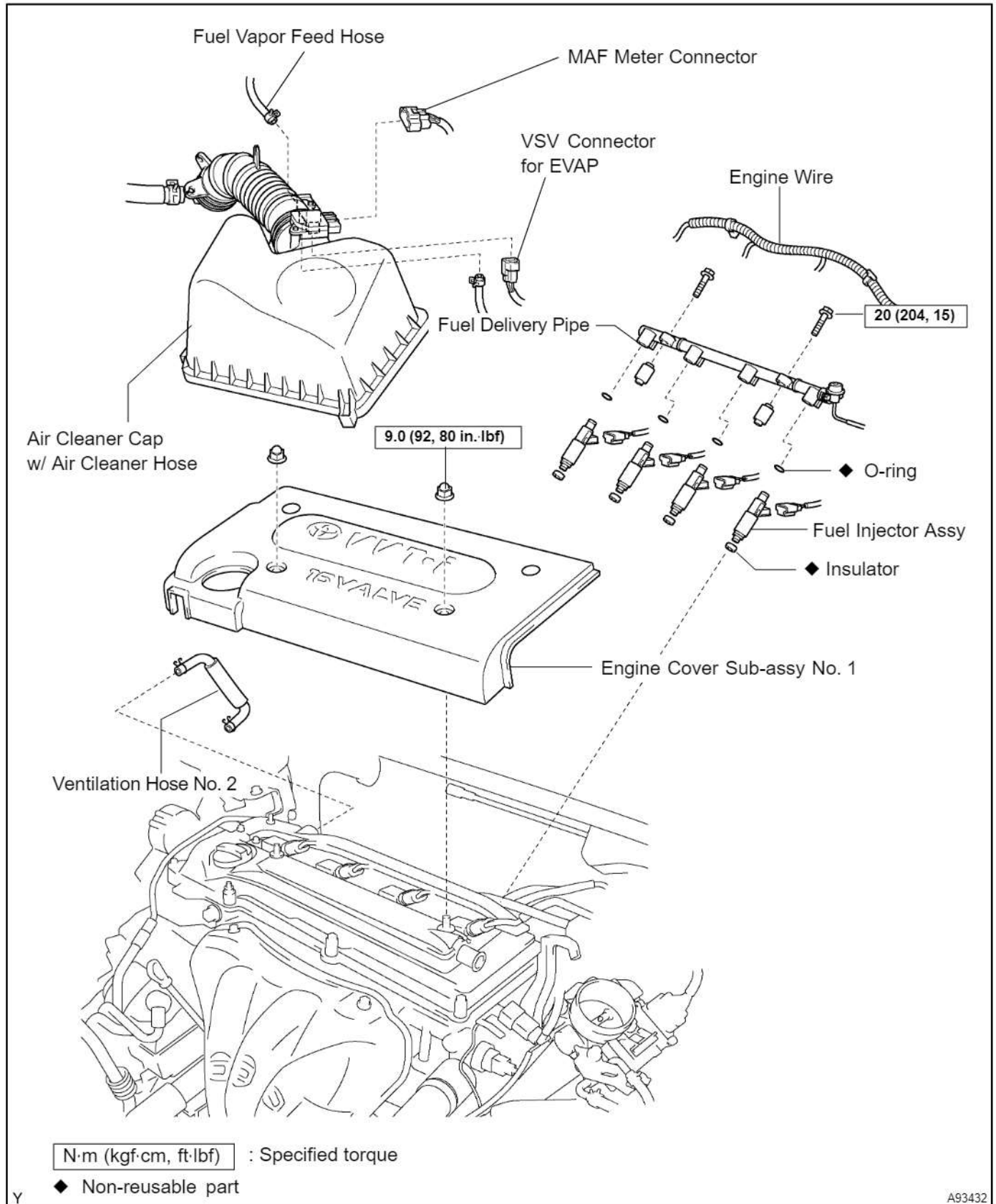


FUEL INJECTOR ASSY (2AZ-FE) COMPONENTS

1109L-05

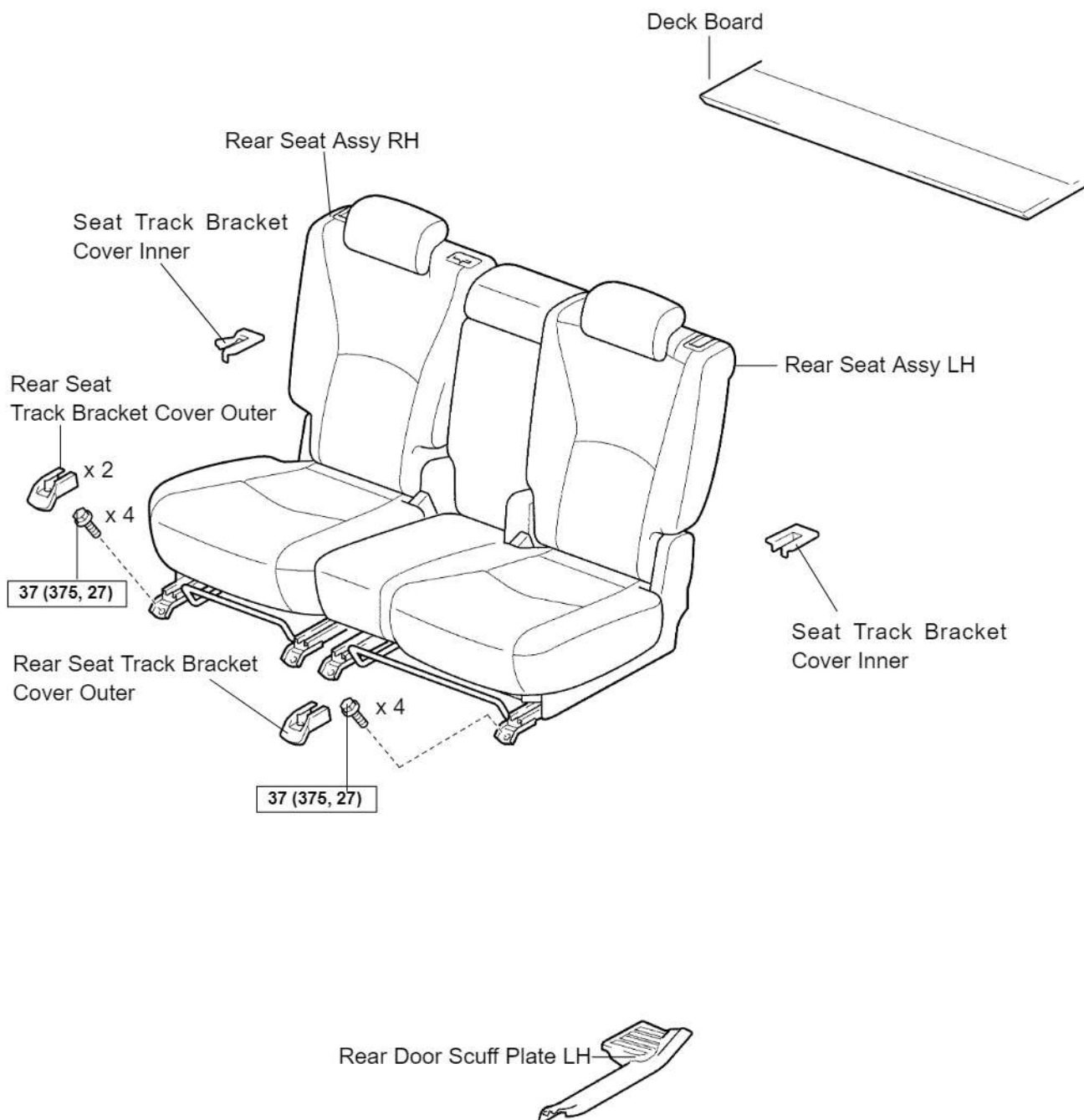


FUEL PUMP ASSY (2AZ-FE)

COMPONENTS

1111T-01

w/ Rear No. 2 Seat

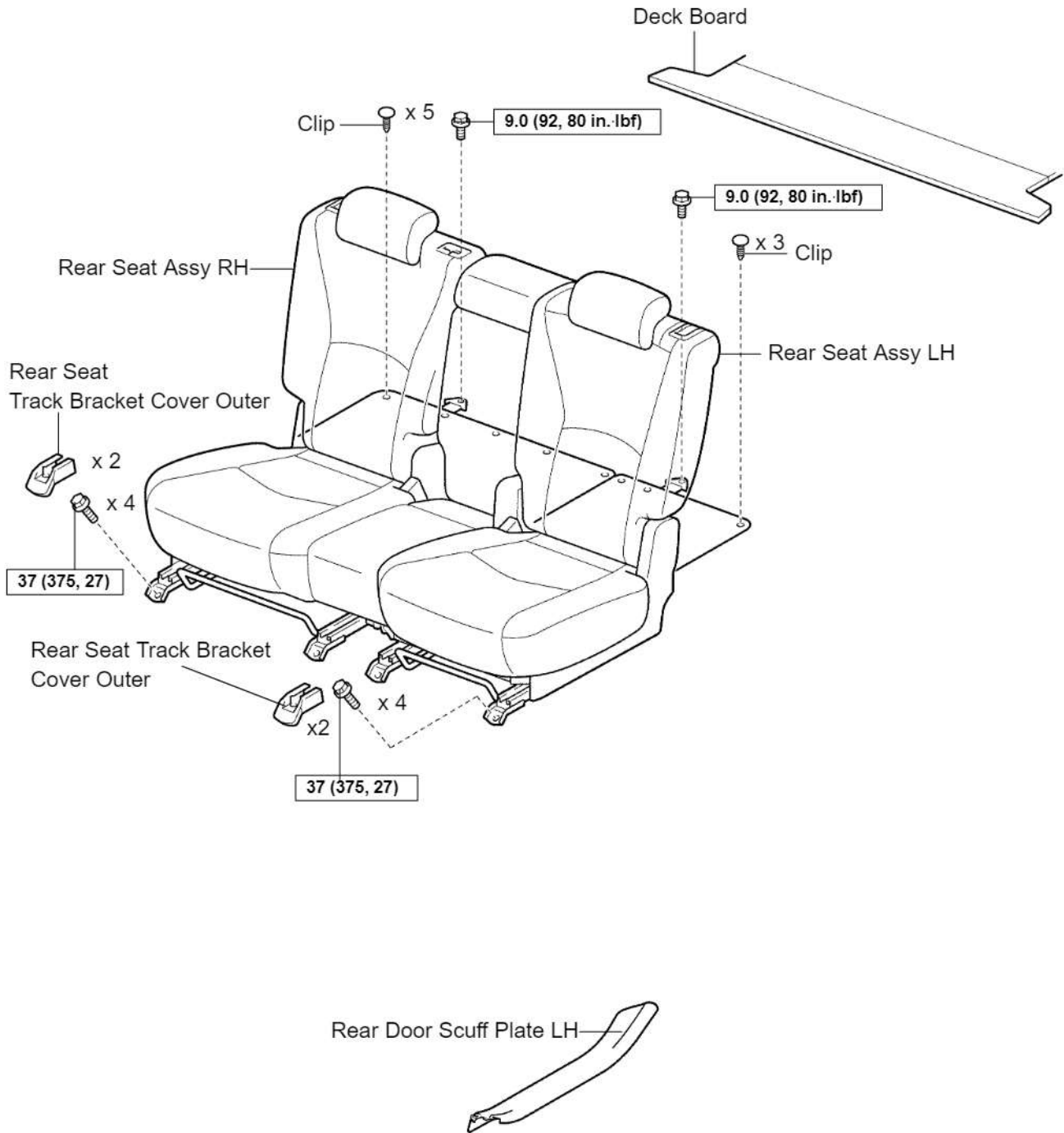


N·m (kgf·cm, ft·lbf) : Specified torque

P

A92780

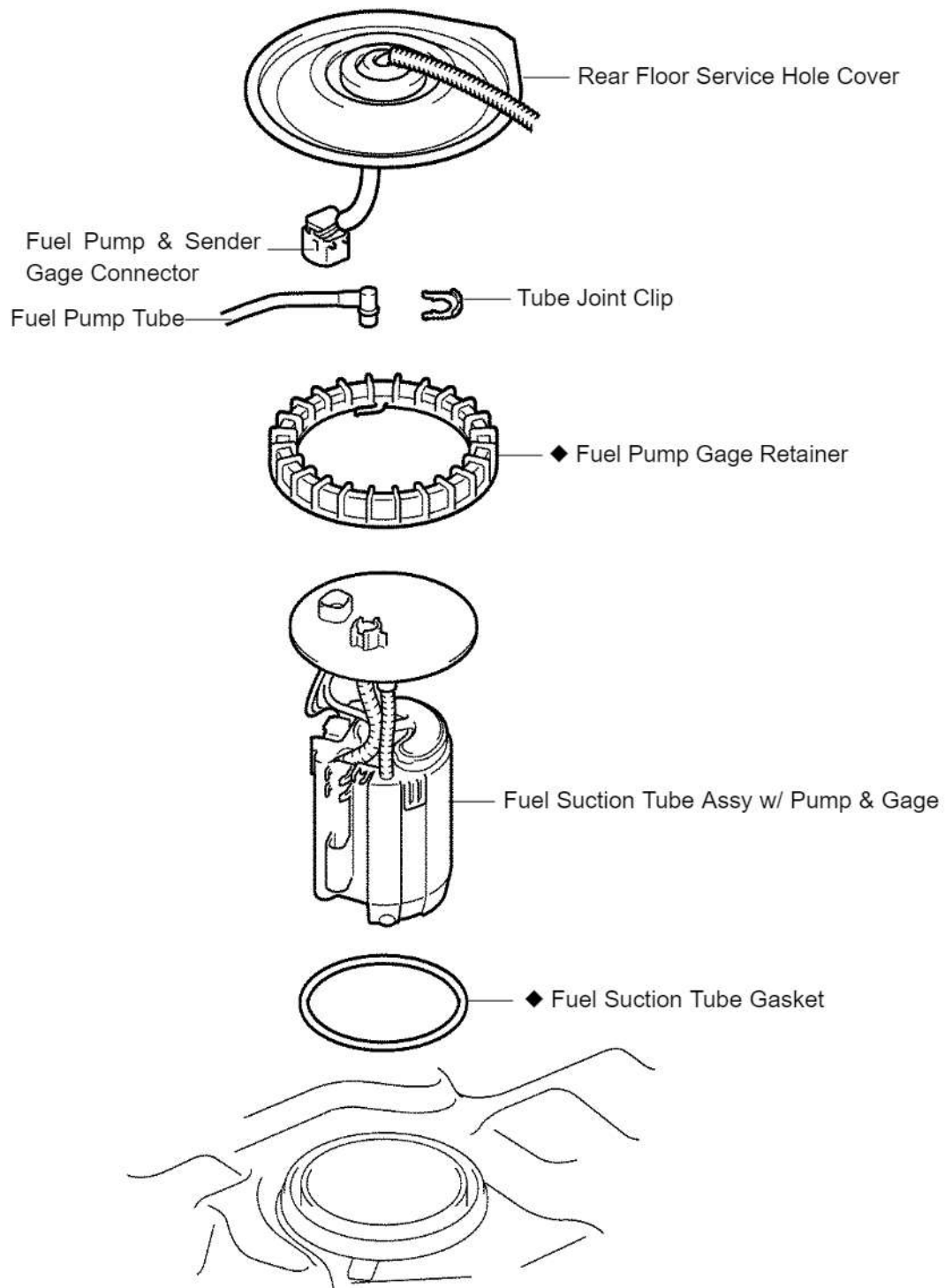
w/o Rear No. 2 Seat



N·m (kgf·cm, ft·lbf) : Specified torque

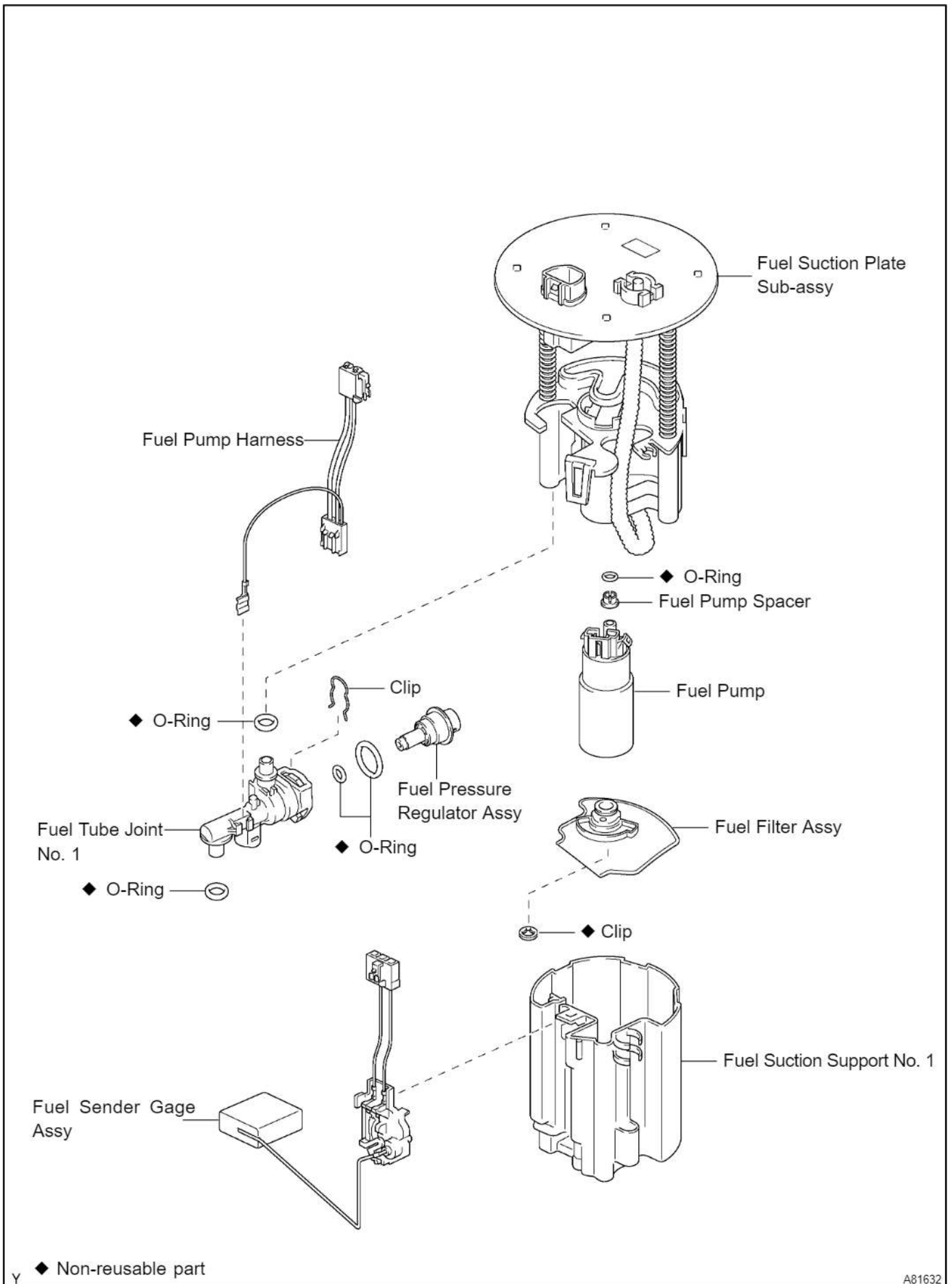
P

A92781



◆ Non-reusable part_p

A92785



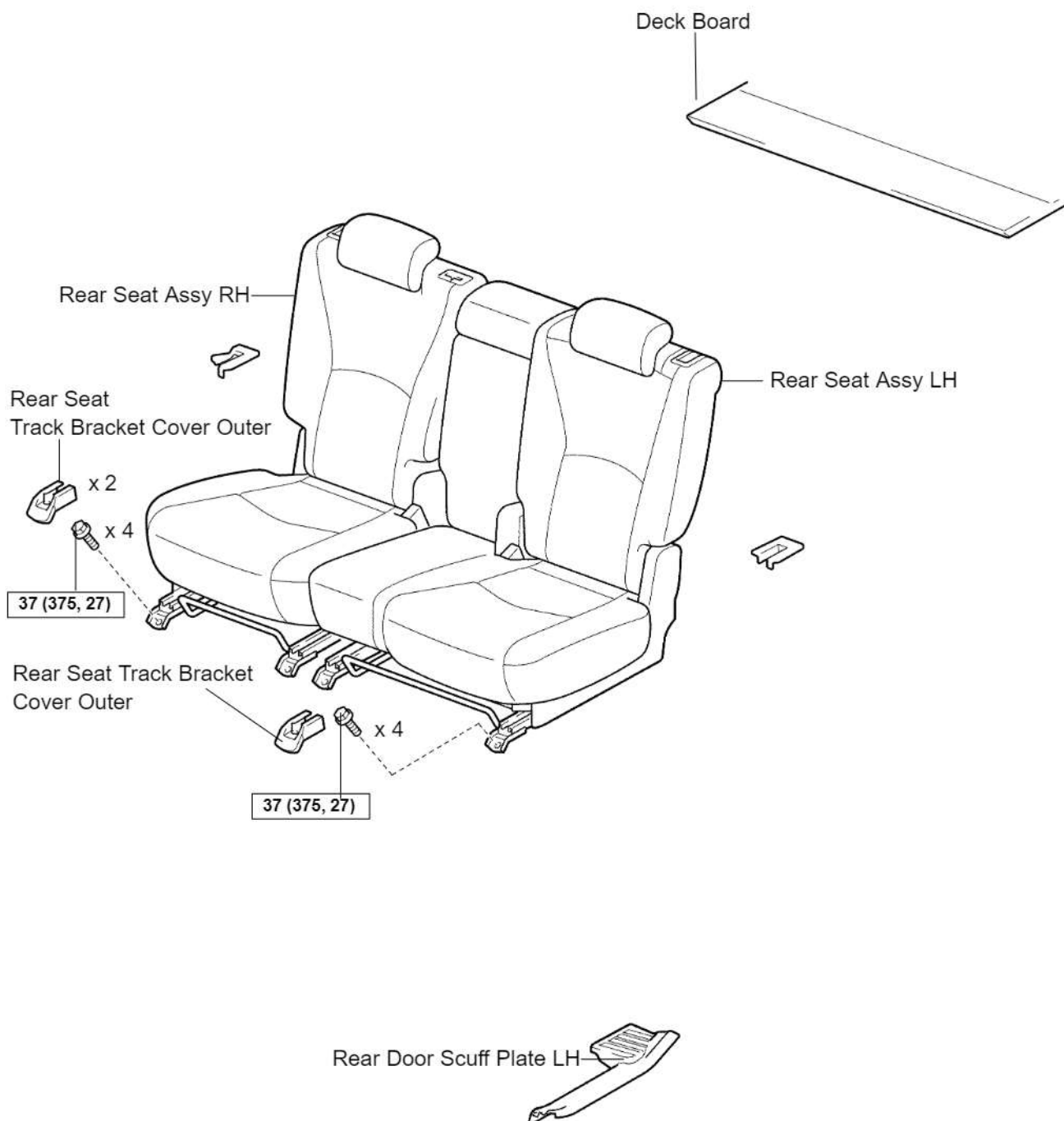
A81632

FUEL TANK ASSY (2AZ-FE)

COMPONENTS

1111V-01

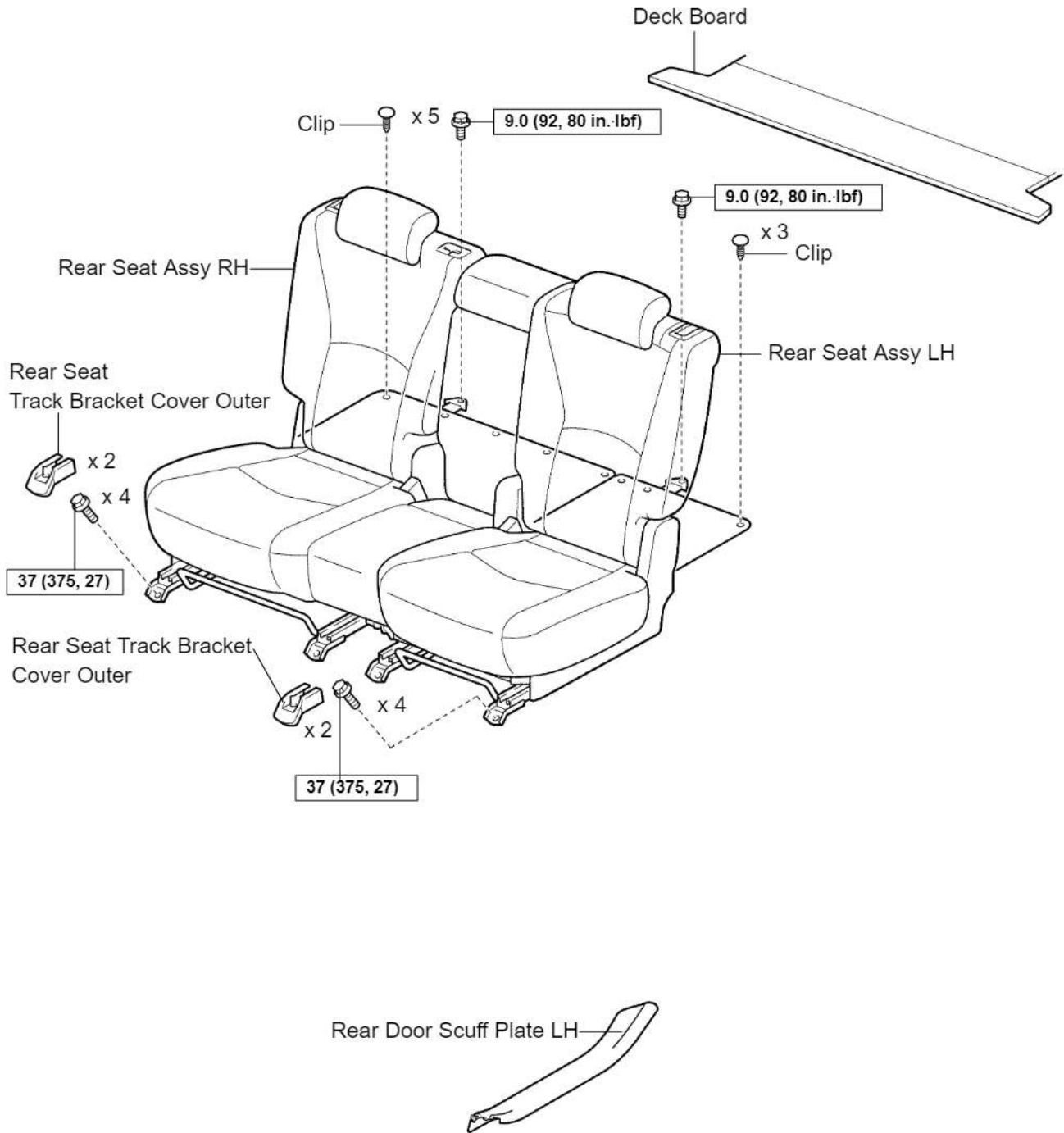
w/ Rear No. 2 Seat



N·m (kgf·cm, ft·lbf): Specified torque

A92780

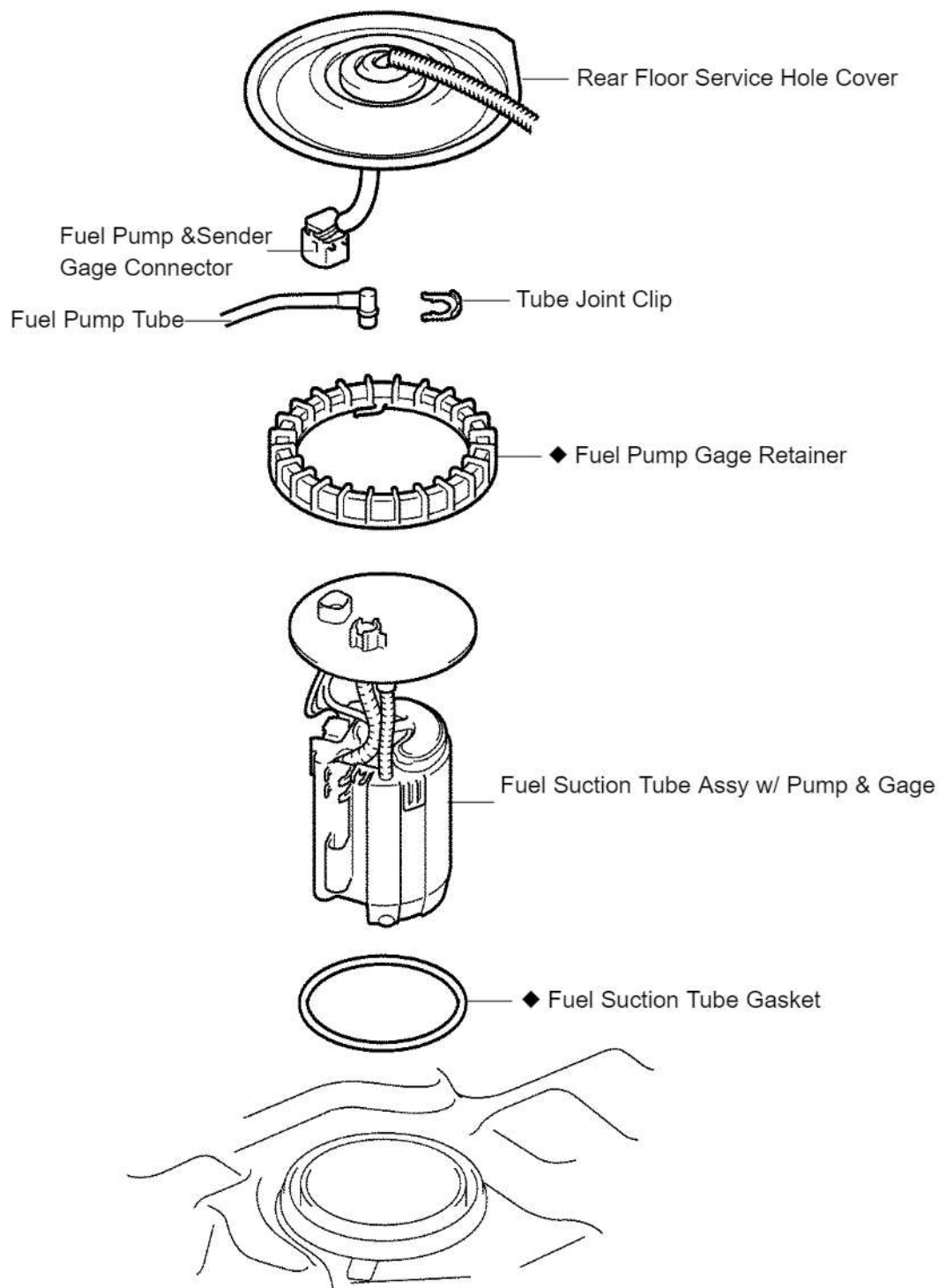
w/o Rear No. 2 Seat:



N·m (kgf·cm, ft·lbf) : Specified torque

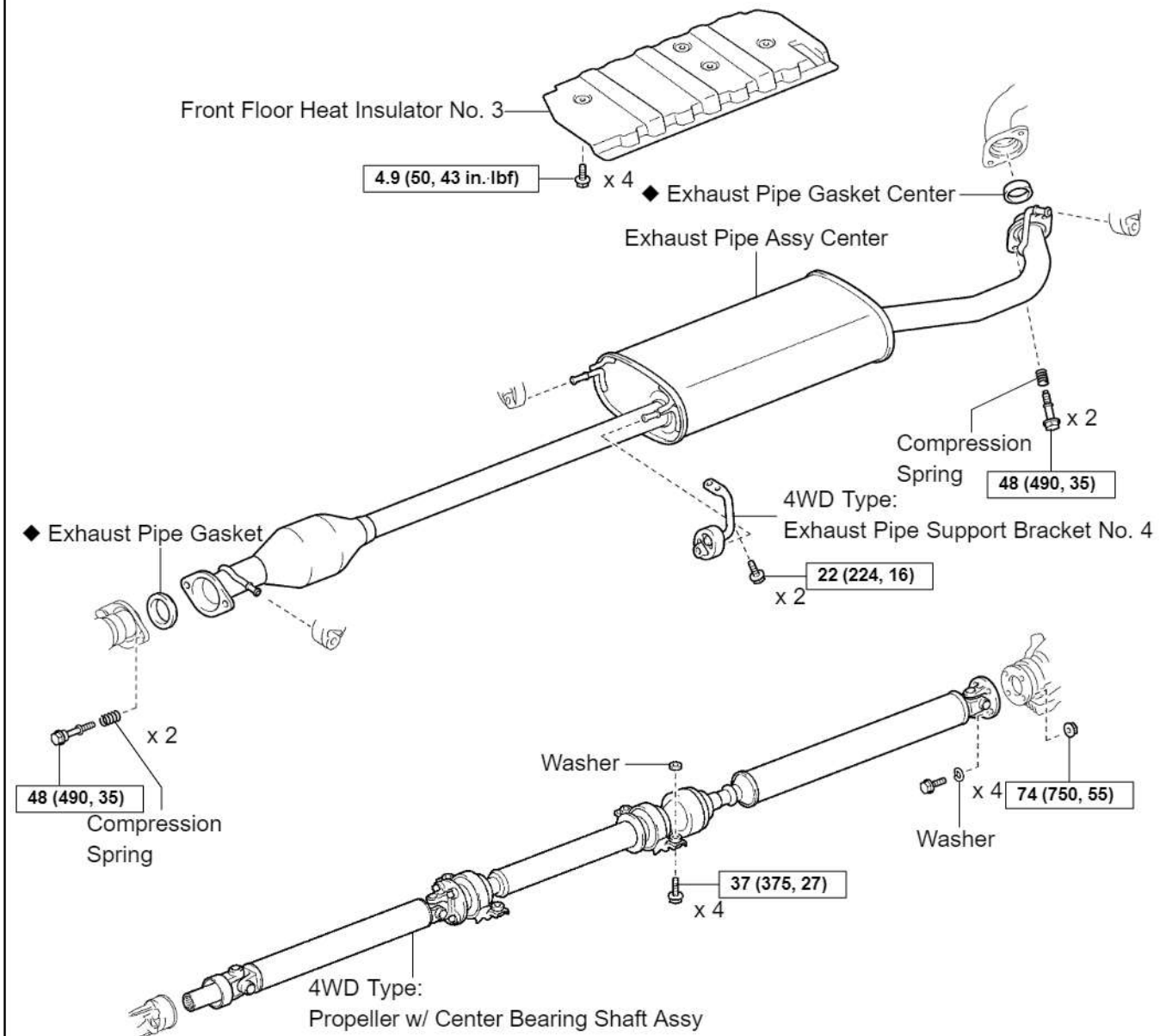
P

A92781



◆ Non-reusable part_p

A92785

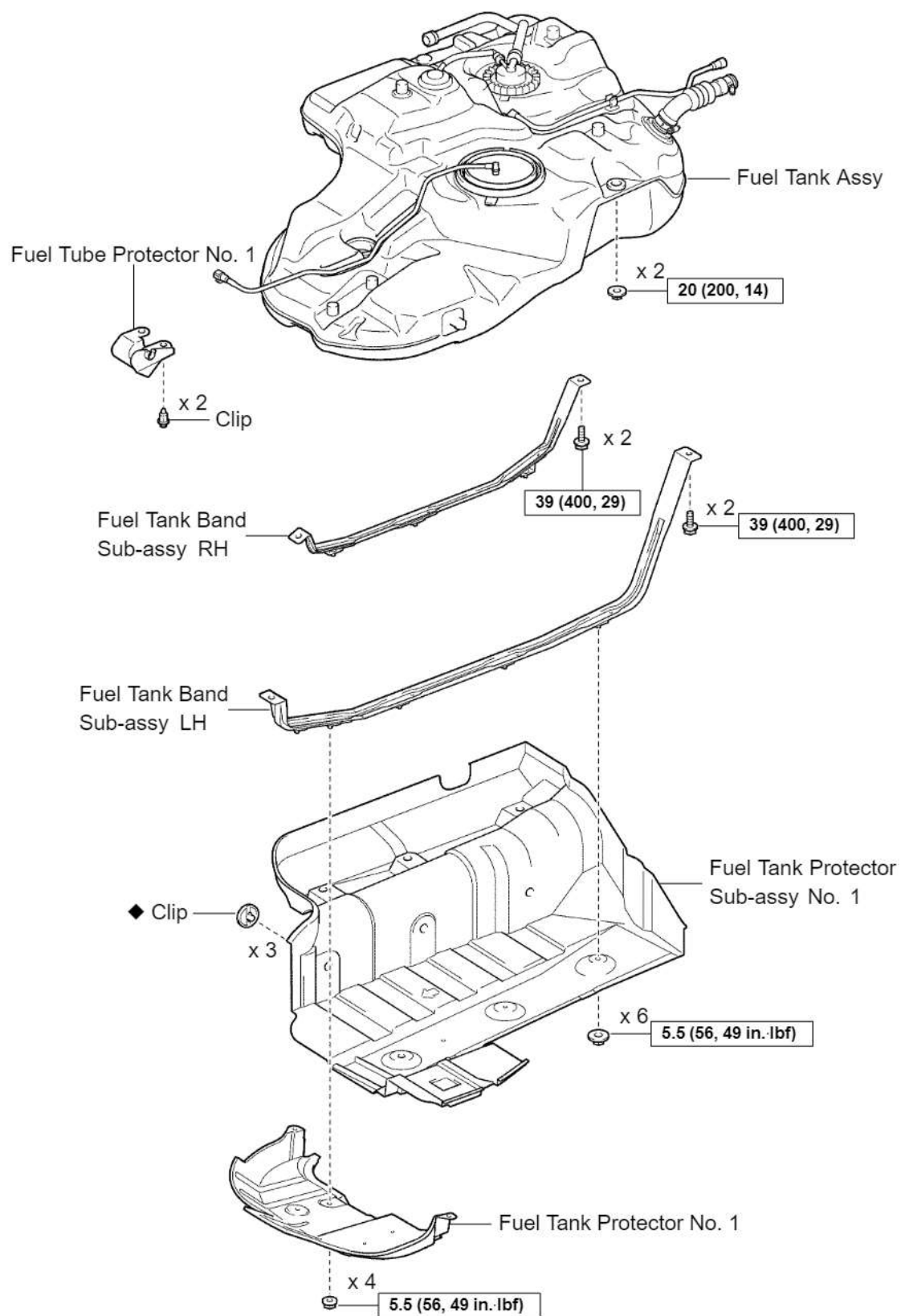


N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non-reusable part

P

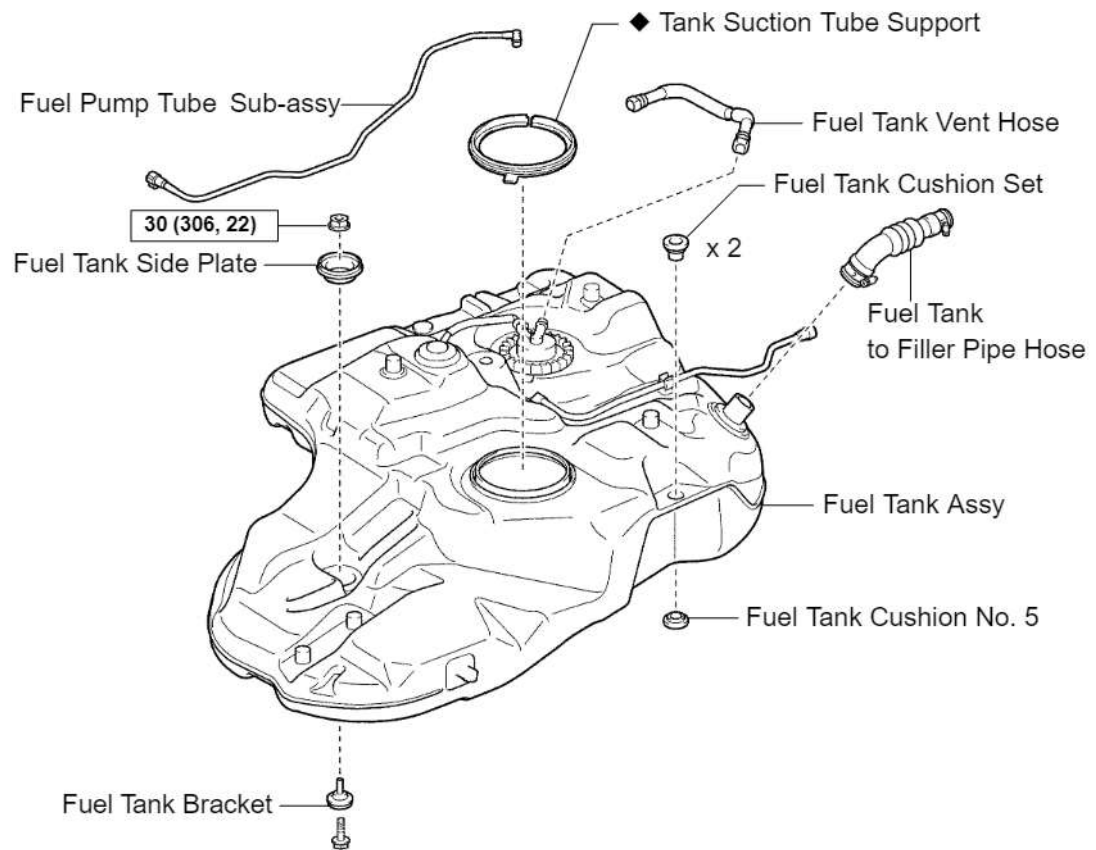
A93064



N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non-reusable part

A94218



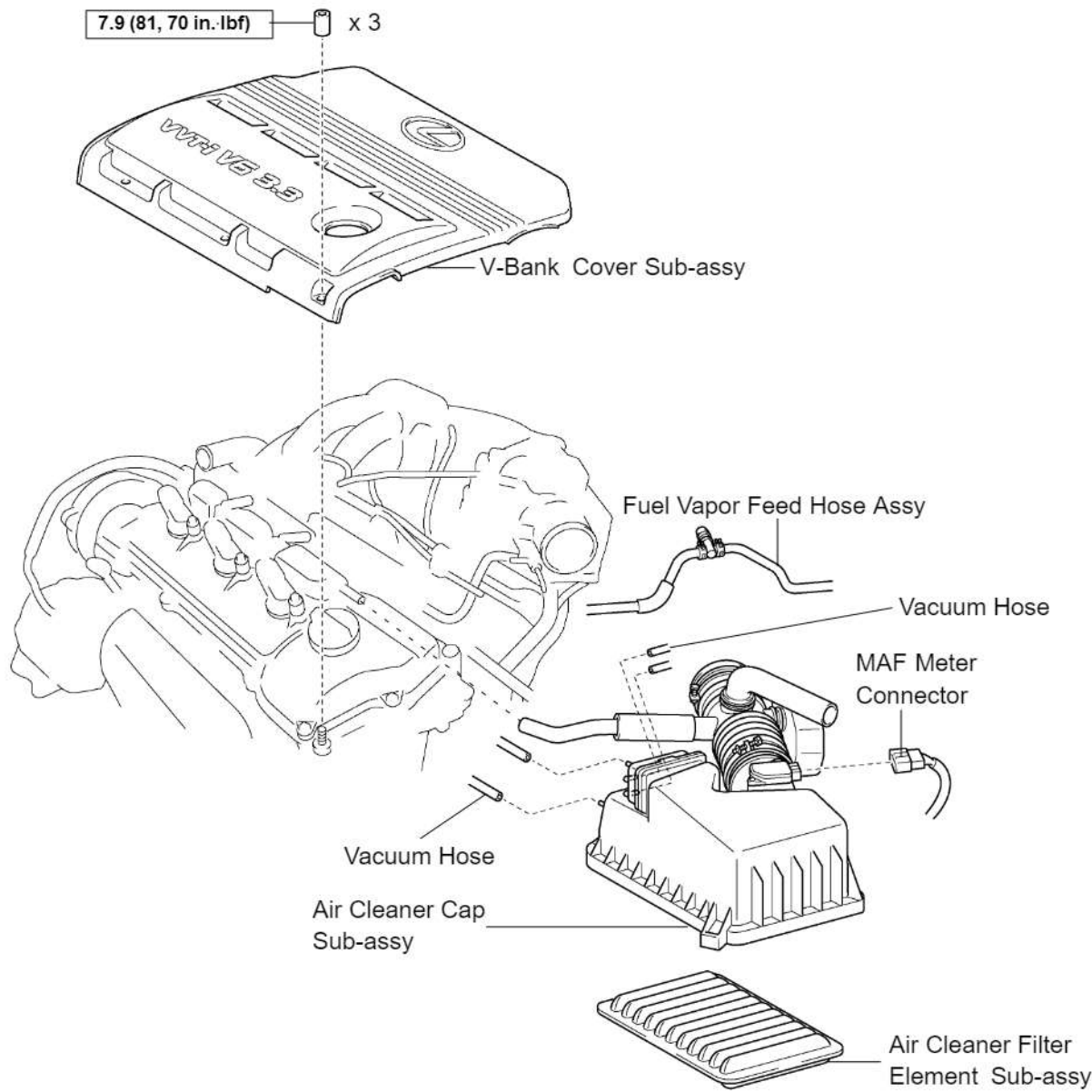
N·m (kgf·cm, ft·lbf) : Specified torque

P ◆ Non-reusable part

A94219

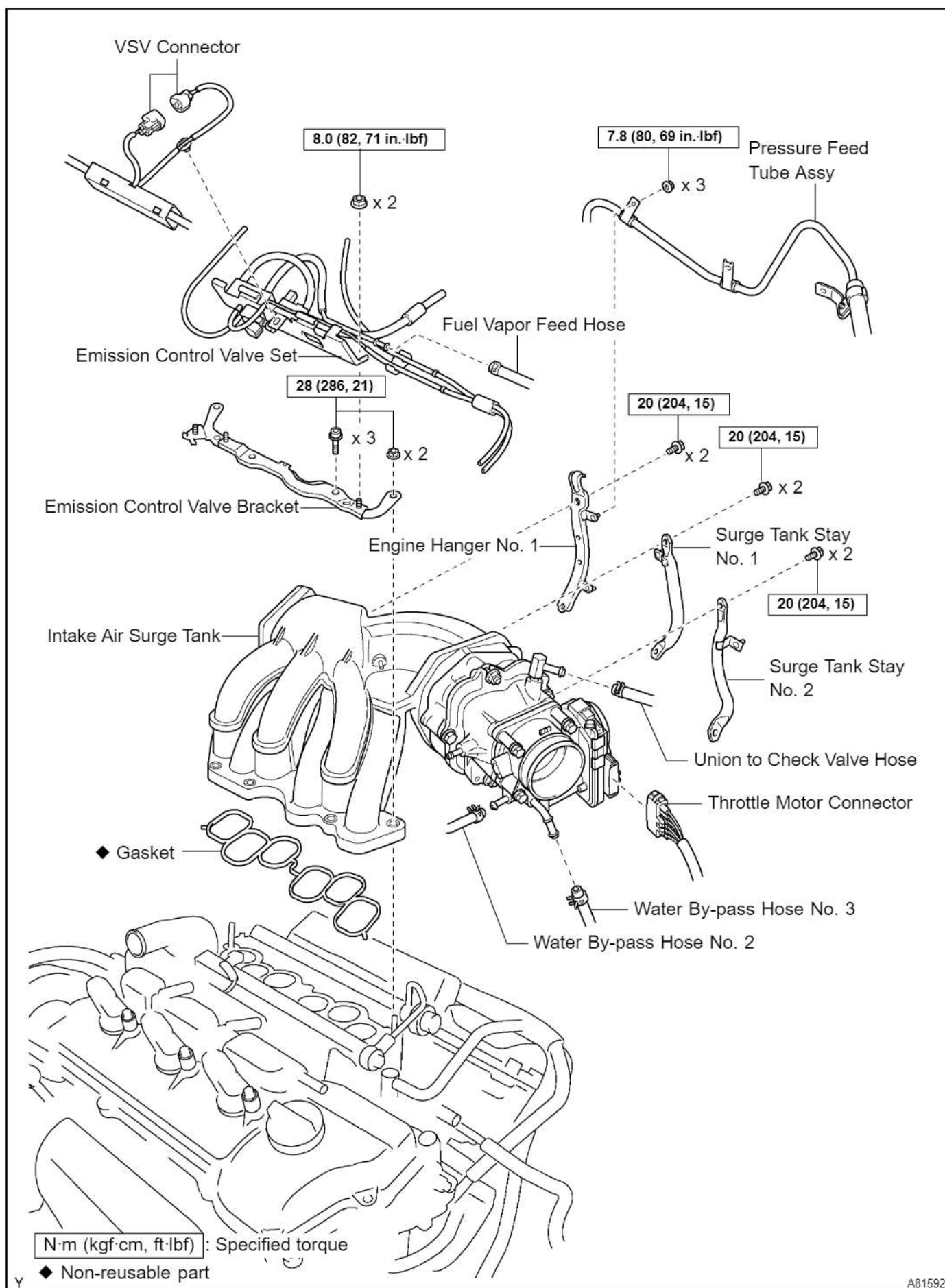
FUEL INJECTOR ASSY (3MZ-FE) COMPONENTS

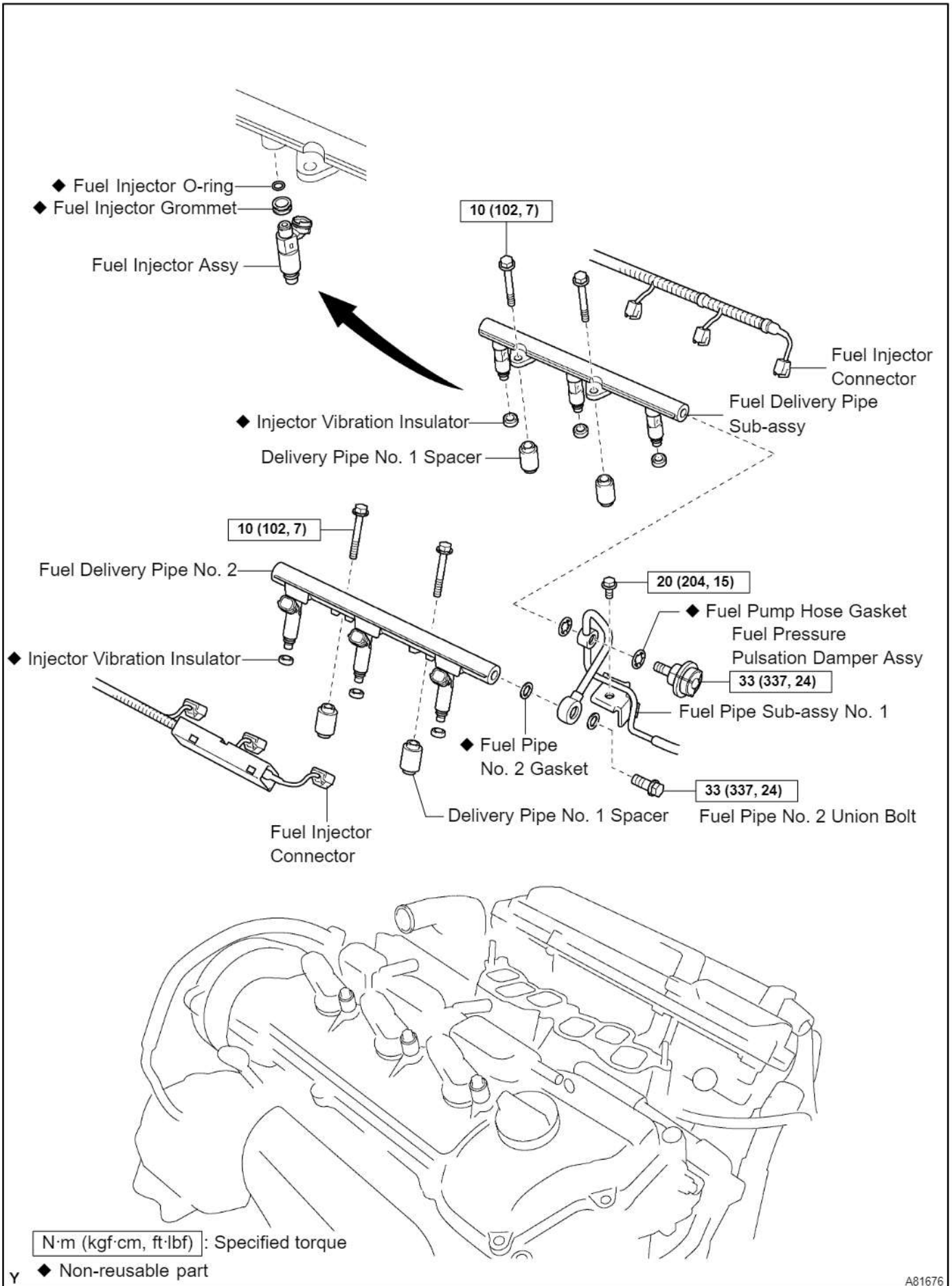
110X01-02



N·m (kgf·cm, ft·lbf) : Specified torque
Y

A93429

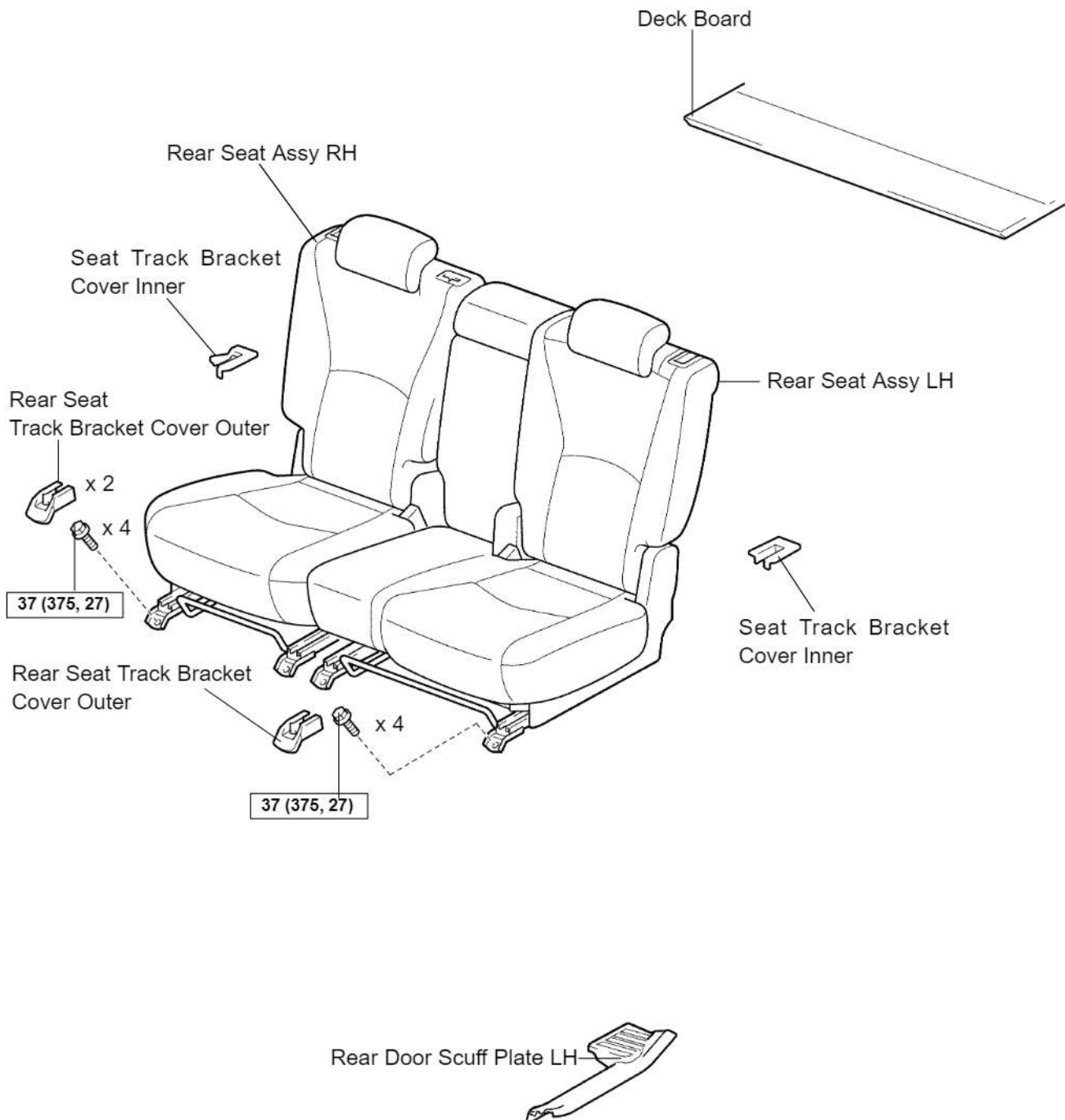




FUEL PUMP ASSY (3MZ-FE) COMPONENTS

1111W-01

w/ Rear No. 2 Seat

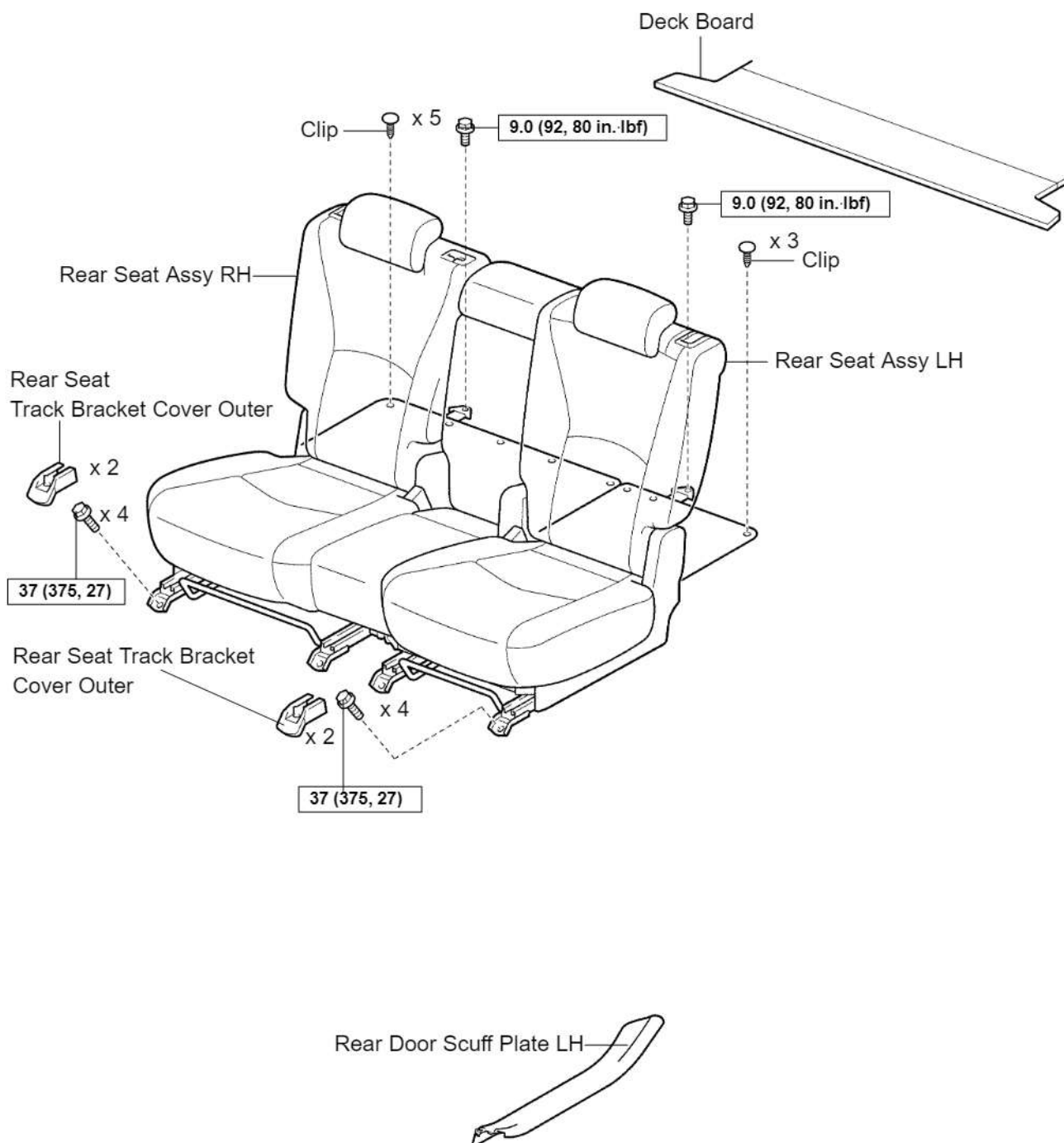


N·m (kgf·cm, ft·lbf) : Specified torque

P

A92780

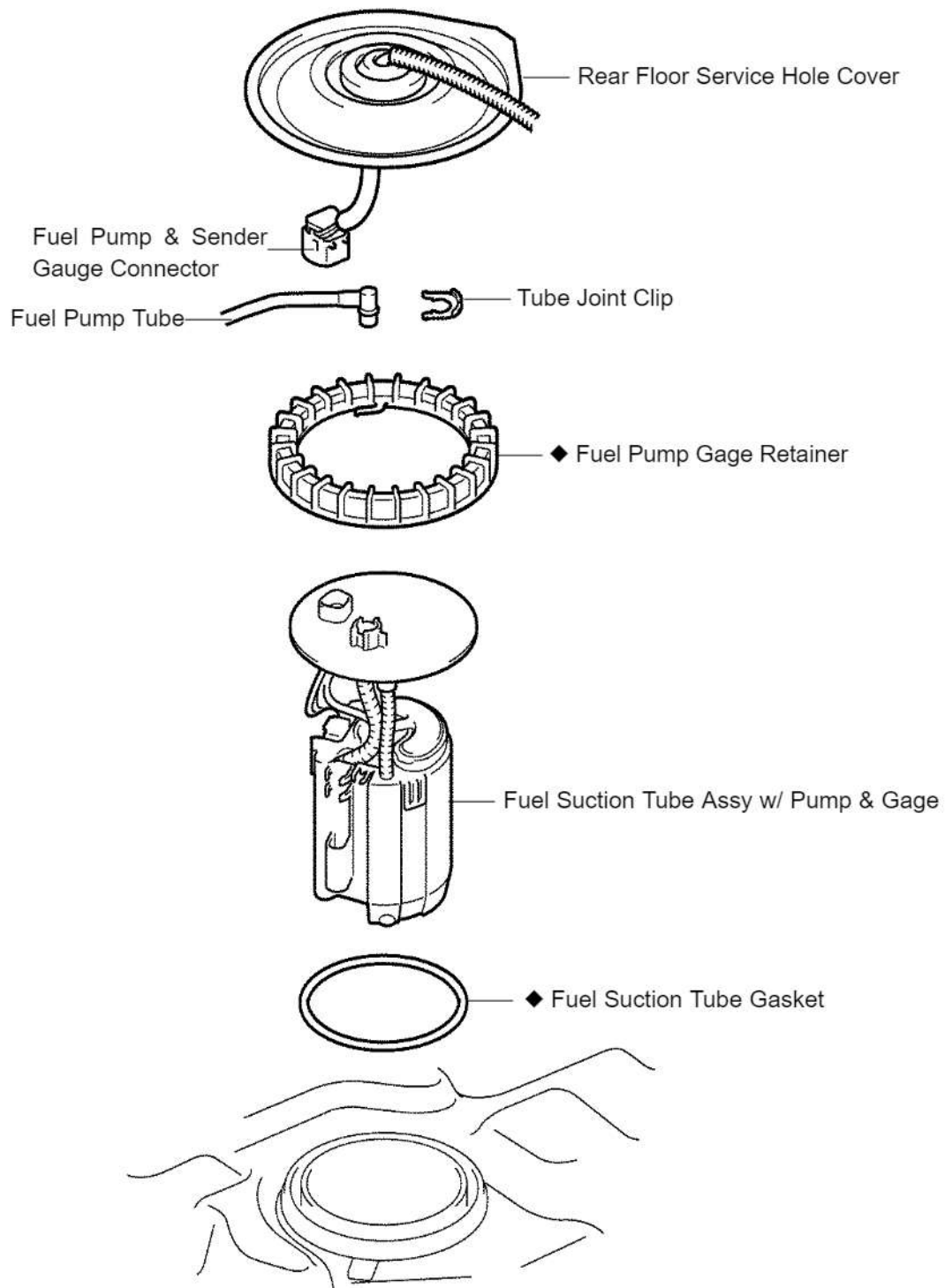
w/o Rear No. 2 Seat



N·m (kgf·cm, ft·lbf): Specified torque

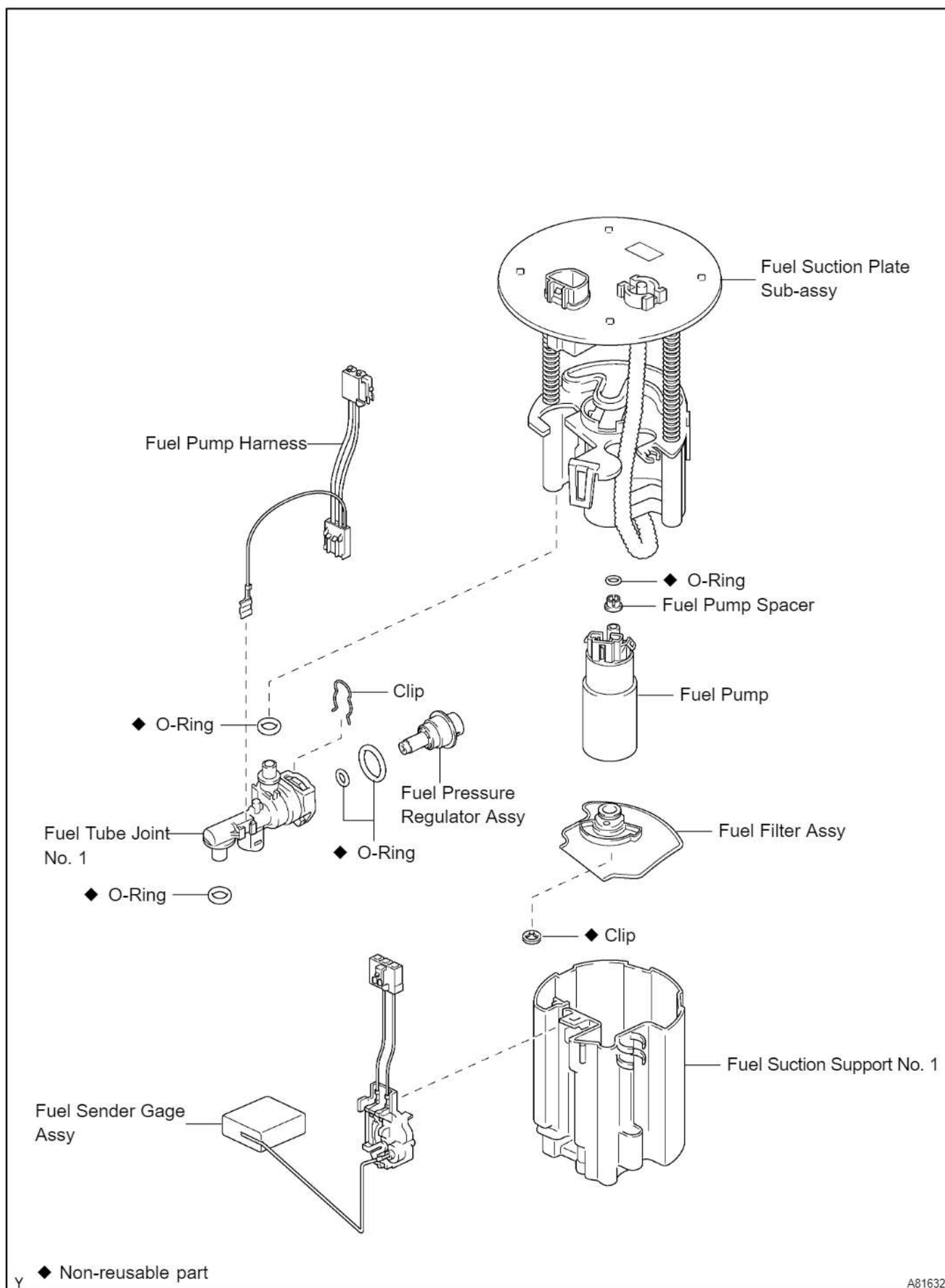
P

A92630



◆ Non-reusable part_p

A92785

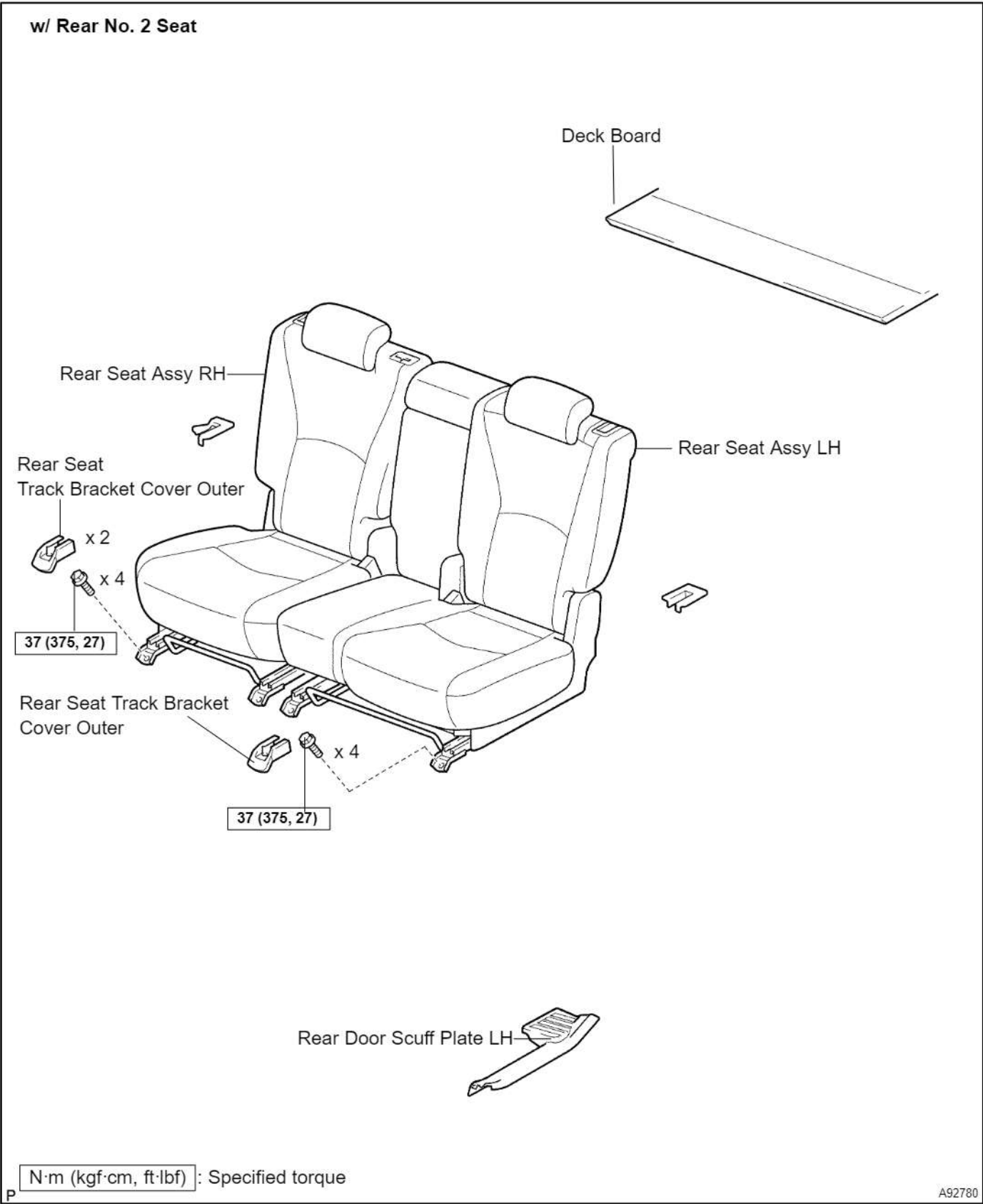


A81632

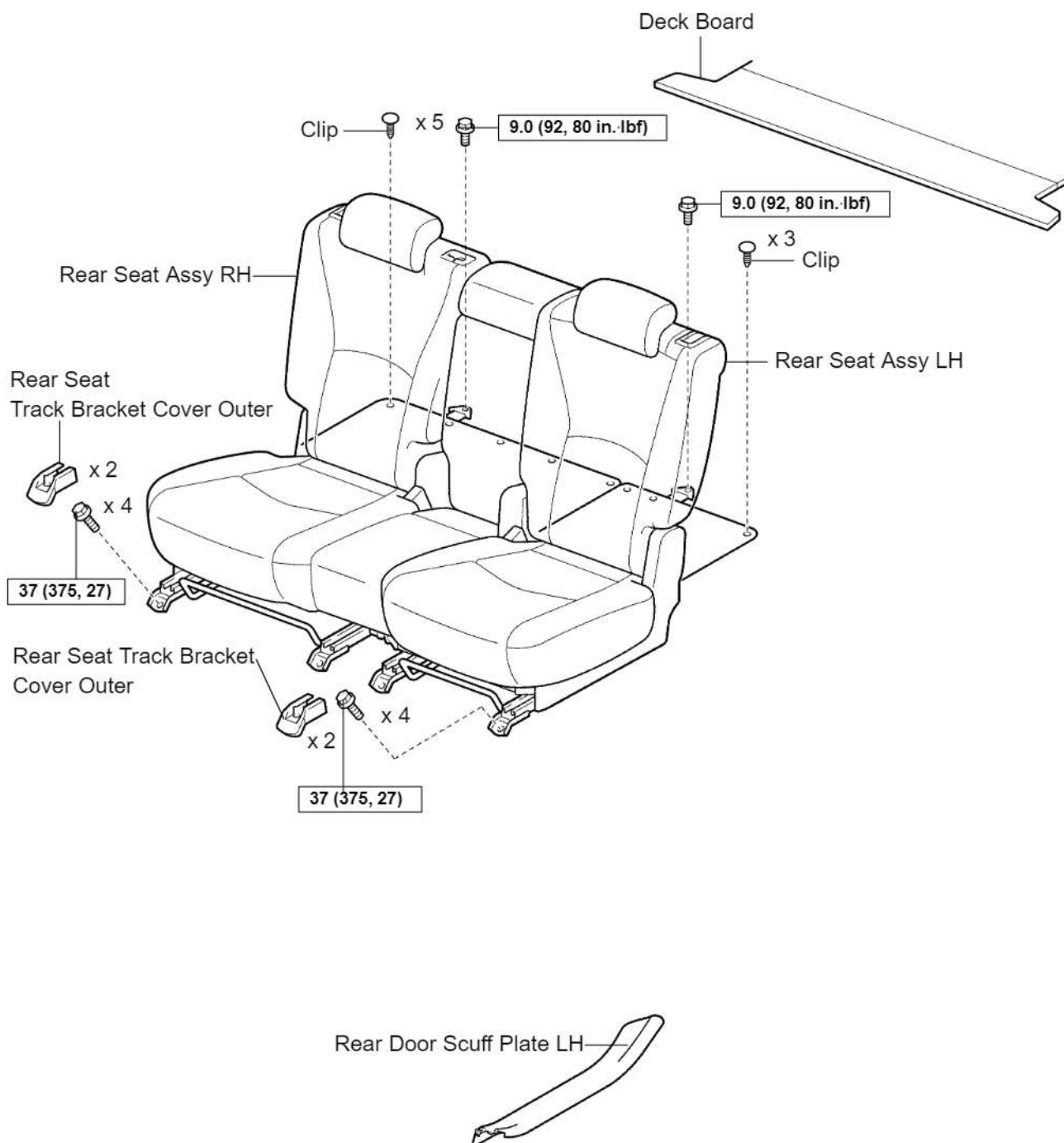
FUEL TANK ASSY (3MZ-FE)

COMPONENTS

1111Y-01



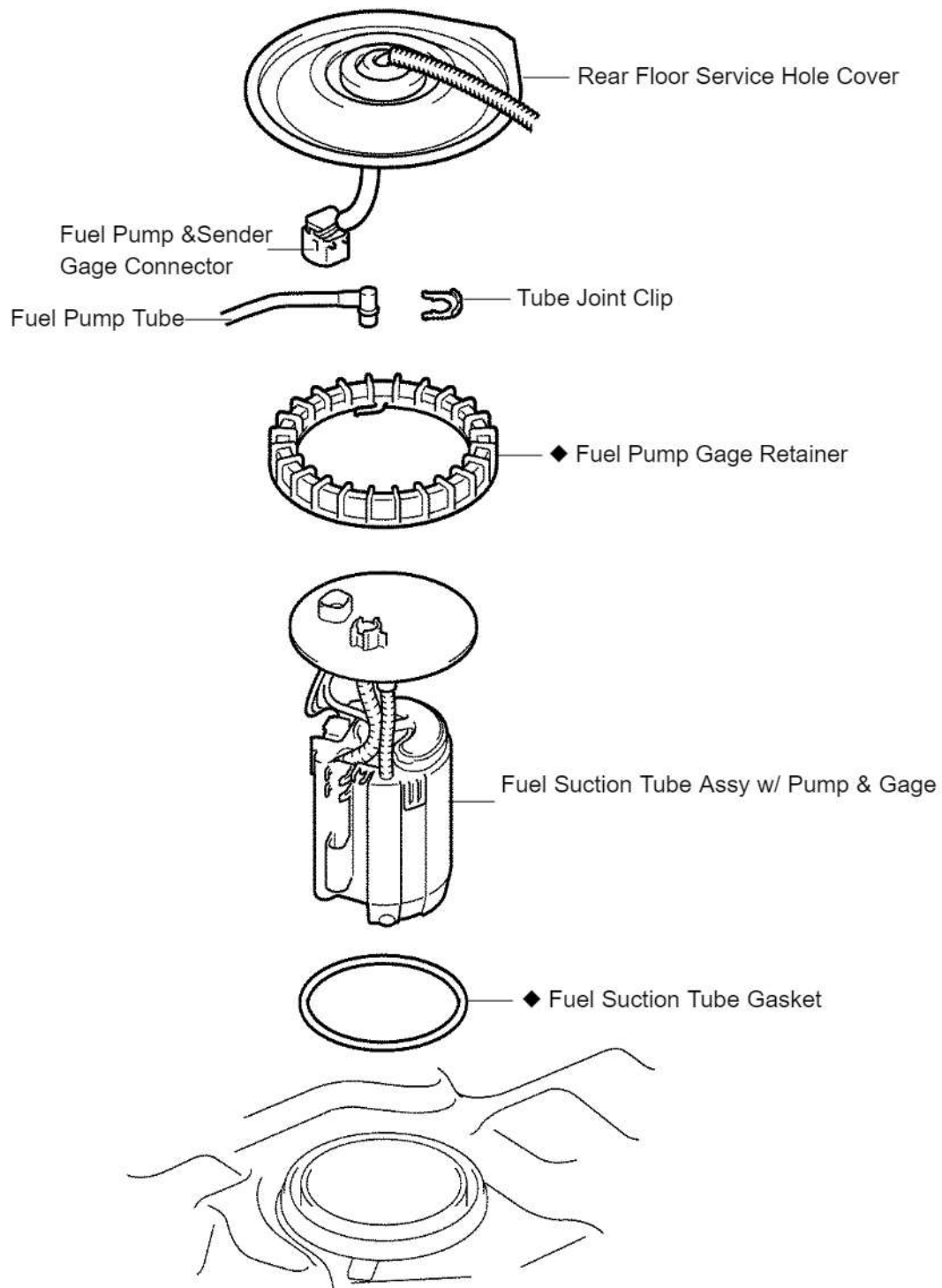
w/o Rear No. 2 Seat:



N·m (kgf·cm, ft·lbf) : Specified torque

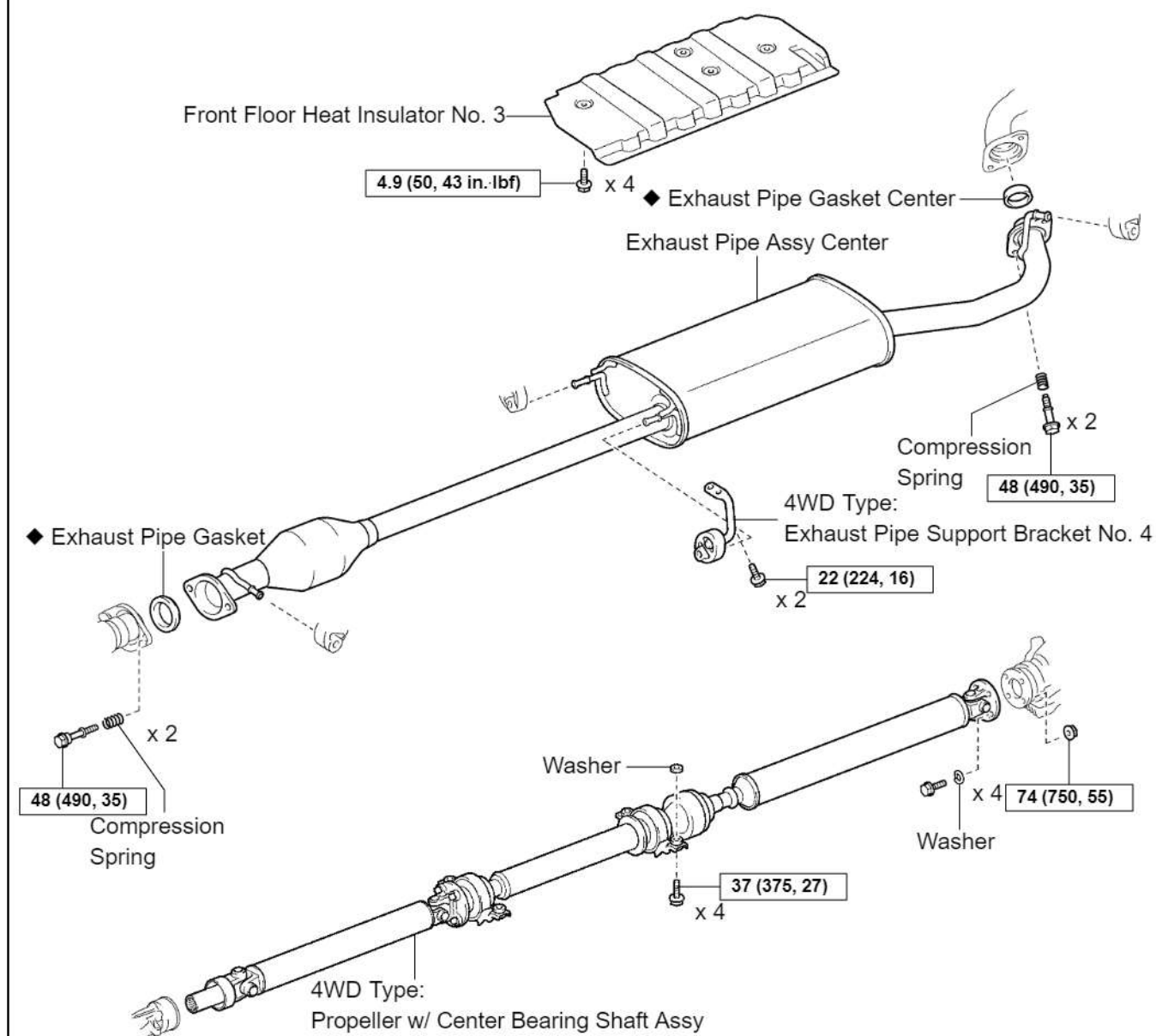
P

A92630



◆ Non-reusable part_p

A92785

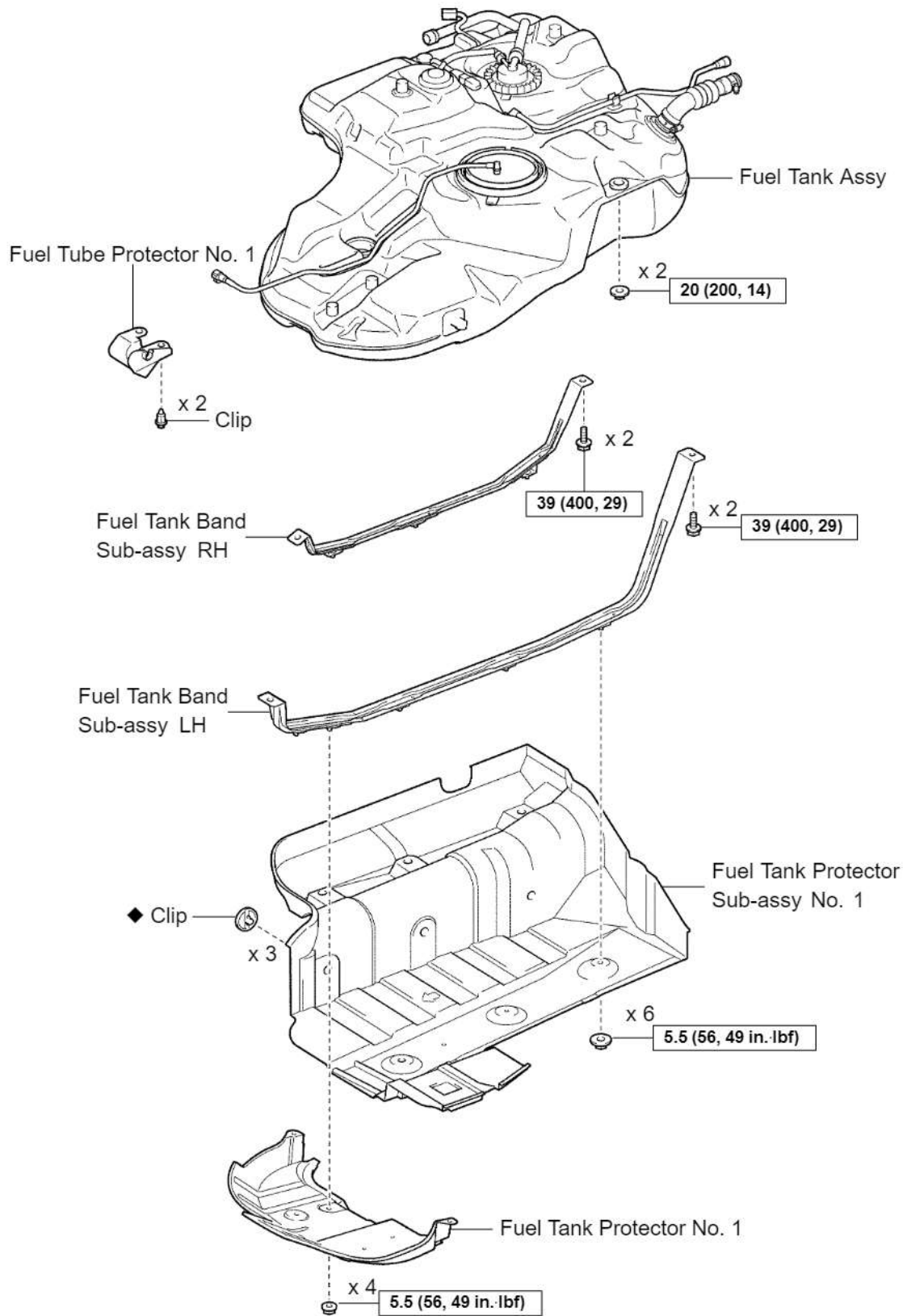


N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non-reusable part

P

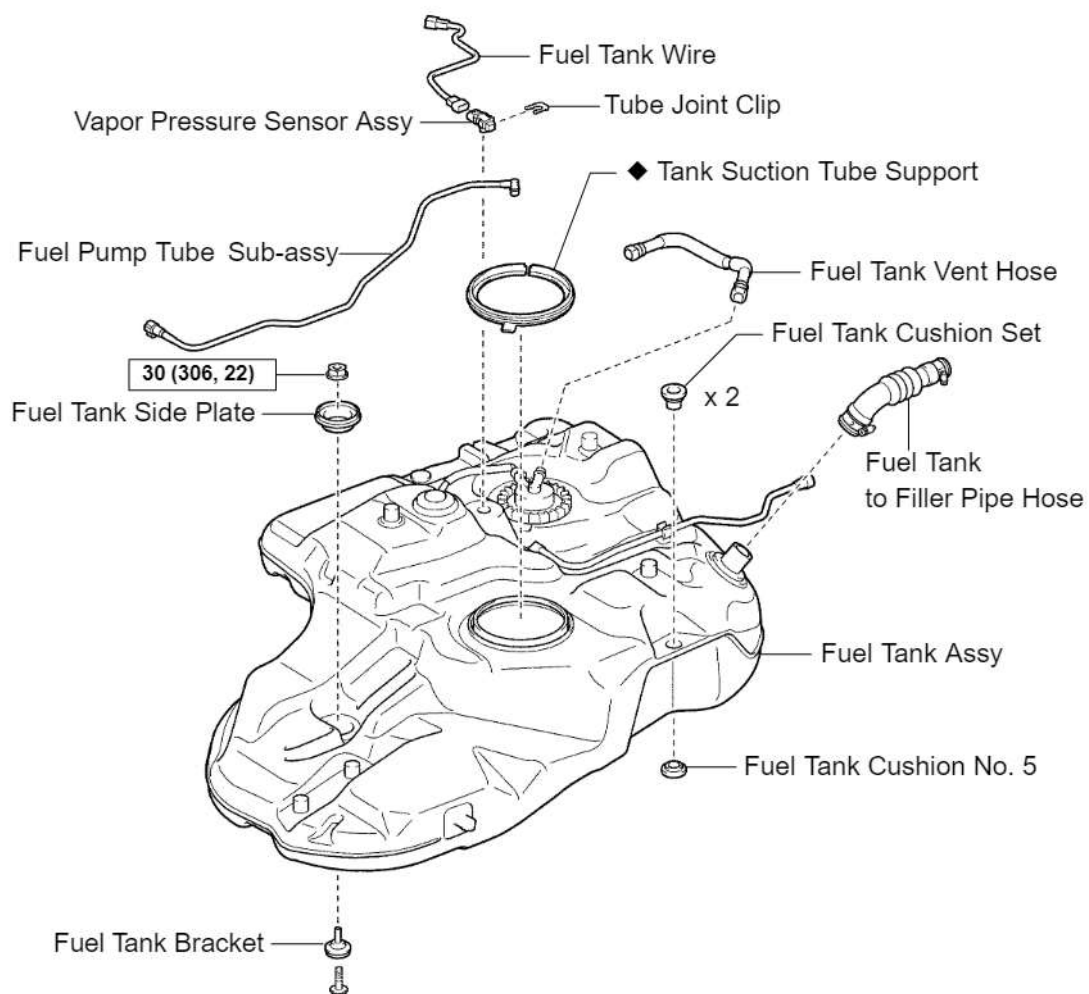
A93064



N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non-reusable part

A81215



N·m (kgf·cm, ft·lbf) : Specified torque

P ◆ Non-reusable part

A81216

INSPECTION

1. INSPECT FUEL INJECTOR ASSY

(a) Check the injector resistance.

(1) Measure the resistance between the terminals.

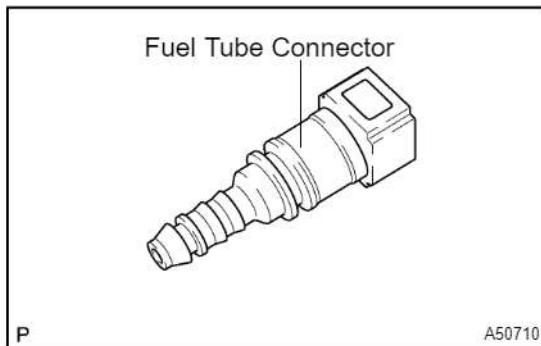
Standard: 11.6 to 12.4 Ω at 20°C (68°F)

If the result is not as specified, replace the injector.

(b) Check the injector injection.

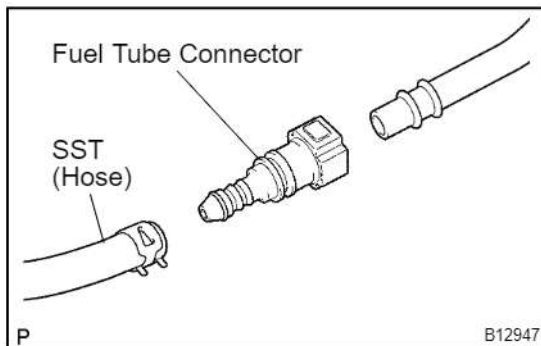
CAUTION:

- This test involves high-pressure fuel and electricity.
- Take every precaution regarding safe handling of both the fuel and the electricity.
- Perform this test in a safe area, and avoid any sparks or flame.
- Do not smoke.



(1) Purchase a new fuel tube and disconnect the fuel tube connector from its pipe.

Fuel tube: Part No. 23801-20180

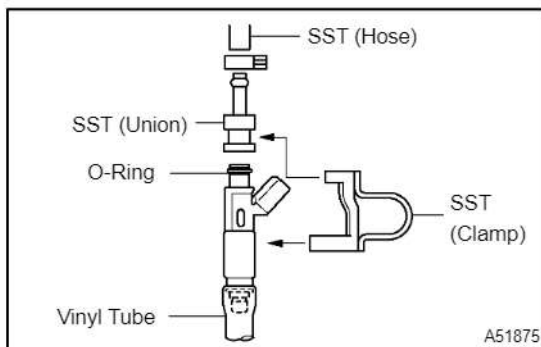


(2) Connect SST and fuel tube connector to the fuel pipe.

SST 09268-41047

CAUTION:

Always read the precautions (see page 11-1) before connecting the fuel tube connector (quick type).



(3) Install the O-ring to the injector.

(4) Connect SST (union and hose) to the injector, and hold the injector and union with SST (clamp).

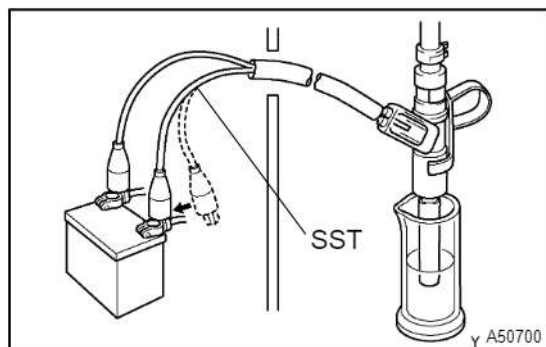
SST 09268-41047 (09268-41110, 09268-41300)

(5) Put the injector into a graduated cylinder.

HINT:

Install a suitable vinyl tube onto the injector to contain the gasoline spray.

(6) Operate the fuel pump (see page 11-4).



- (7) Connect SST to the connector of injector.
- (8) Connect SST (wire) to the battery for 15 seconds, and measure the injection volume with a graduated cylinder. Test each injector 2 or 3 time.

SST 09842-30080

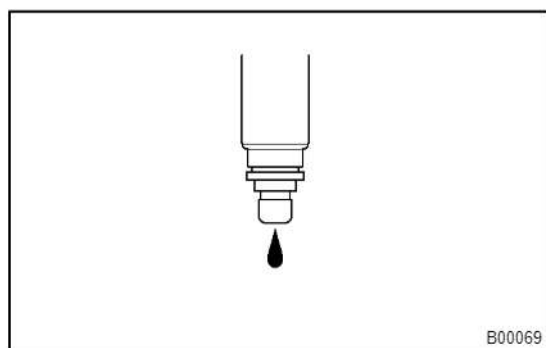
Standard:

Item	Specified Condition
Injection Volume	76 to 92 cm ³ (4.6 to 5.6 cu in.) per 15 seconds
Difference Between Each Injector	16 cm ³ (1.0 cu in.) or less

NOTICE:

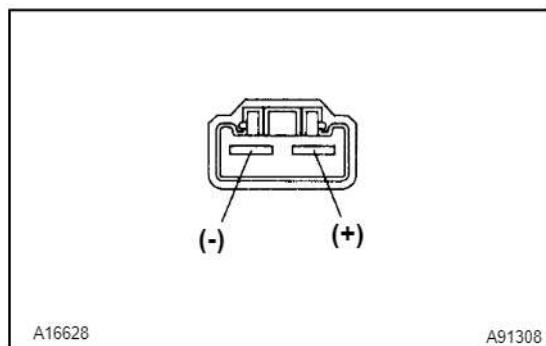
Always turn on and off the voltage on the battery side, not the fuel pump side.

If the injection volume is not as specified, replace the injector.



- (c) Check fuel leakage.
 - (1) In the condition above, disconnect the test probes of SST (wire) from the battery and check the fuel leakage from the injector.

Fuel drop: 1 drop or less per 12 minutes



2. INSPECT FUEL PUMP ASSY

- (a) Check fuel pump resistance.
 - (1) Measure the resistance between the terminals.
Resistance: 0.2 to 3.0 Ω at 20°C (68°F)
- (b) Check fuel pump operation.
 - (1) Apply battery voltage to both terminals. Check that the pump operates.

NOTICE:

- These tests must be done within 10 seconds to prevent the coil from burning out.
- Keep the fuel pump as far away from the battery as possible.
- Always turn on and off the voltage on the battery side, not the fuel pump side.

INSPECTION

1. INSPECT FUEL INJECTOR ASSY

(a) Check the injector resistance.

(1) Measure the resistance between the terminals.

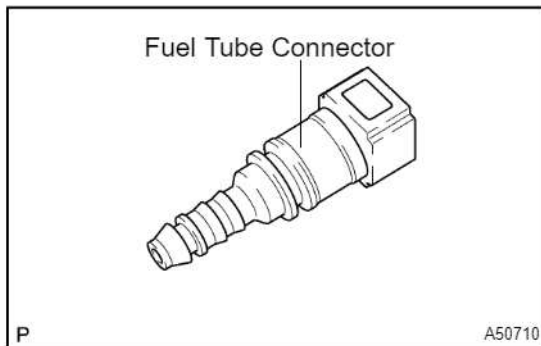
Standard: 13.4 to 14.2 Ω at 20°C (68°F)

If the result is not as specified, replace the injector.

(b) Check the injector injection.

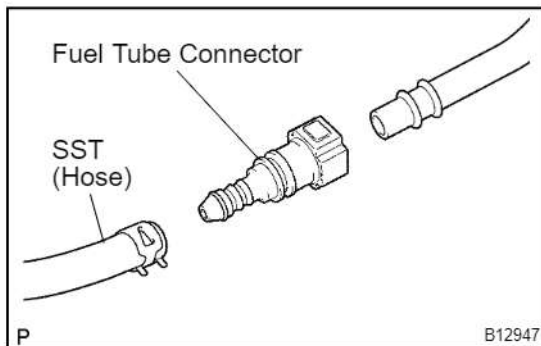
CAUTION:

- This test involves high-pressure fuel and electricity.
- Take every precaution regarding safe handling of both the fuel and the electricity.
- Perform this test in a safe area, and avoid any sparks or flame.
- Do not smoke.



(1) Purchase a new fuel tube and disconnect fuel tube connector from its pipe.

Fuel tube: Parts No. 23801-20180

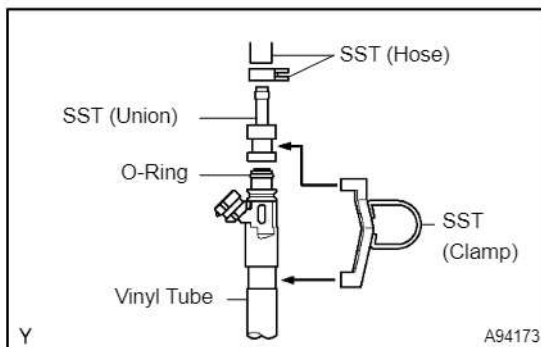


(2) Connect SST and the fuel tube connector to the fuel pipe.

SST 09268-41047

CAUTION:

Always read the precautions (see page 11-35) before connecting the fuel tube connector (quick type).



(3) Install the O-ring to the injector.

(4) Connect SST (union and hose) to the injector, and hold the injector and union with SST (clamp).

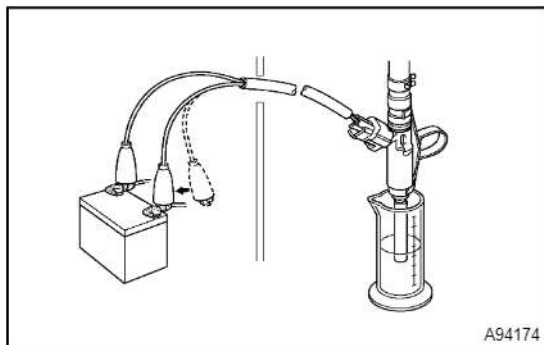
SST 09268-41047 (09268-41110, 09268-41300)

(5) Put the injector into a graduated cylinder.

HINT:

Install a suitable vinyl tube onto the injector to contain the gasoline spray.

(6) Operate the fuel pump (see page 11-38).



- (7) Connect SST to the connector of injector
- (8) Connect SST (wire) to the battery for 15 seconds, and measure the injector volume with a graduated cylinder. Test each injector 2 or 3 times.

SST 09842-30070

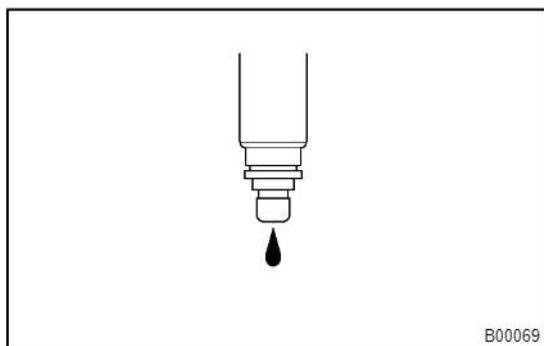
Standard:

Item	Specified Condition
Injection Volume	60 to 73 cm ³ (3.7 to 4.5 cu in.) per 15 seconds
Difference Between Each Injector	13 cm ³ (0.8 cu in.) or less

NOTICE:

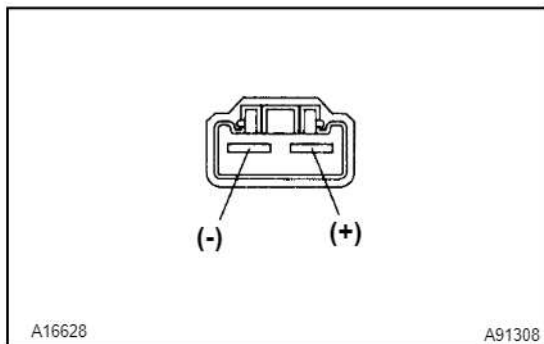
Always turn on and off the voltage on the battery side, not the fuel pump side.

If the injection volume is not as specified, replace the injector.



- (c) Check fuel leakage.
 - (1) In the condition above, disconnect the test probes of SST (wire) from the battery and check the fuel leakage from the injector.

Fuel drop: 1 drop or less per 12 minutes



2. INSPECT FUEL PUMP

- (a) Check the fuel pump resistance.
 - (1) Measure the resistance between the terminals.
Standard: 0.2 to 3.0 Ω at 20°C (68°F)
- (b) Check fuel pump operation.
 - (1) Apply battery voltage to both terminals. Check that the pump operates.

NOTICE:

- These tests must be done within 10 seconds to prevent the coil from burning out.
- Keep the fuel pump as far away from the battery as possible.
- Always turn on and off the voltage on the battery side, not the fuel pump side.

ON-VEHICLE INSPECTION

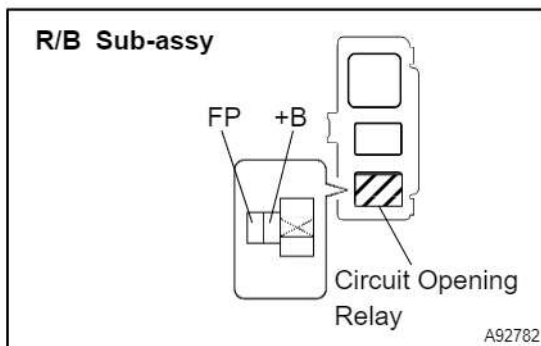
1. CHECK FUEL PUMP OPERATION AND FUEL LEAKS

- (a) When using the hand-held tester:
Check fuel pump operation.
- (1) Connect the hand-held tester to the DLC3.
 - (2) Turn the ignition switch ON and push the hand-held tester main switch ON.

NOTICE:

Do not start the engine.

- (3) Select the ACTIVE TEST mode on the hand-held tester.
- (4) Please refer to the hand-held tester's instruction manual for further details.
- (5) Turn the ignition switch OFF.
- (6) Disconnect the hand-held tester from the DLC3.



- (b) When not using the hand-held tester:
Check fuel pump operation.
- (1) Remove the circuit opening relay from the R/B sub-assy.
 - (2) Using a service wire, connect terminals FP and +B of the R/B sub-assy.

NOTICE:

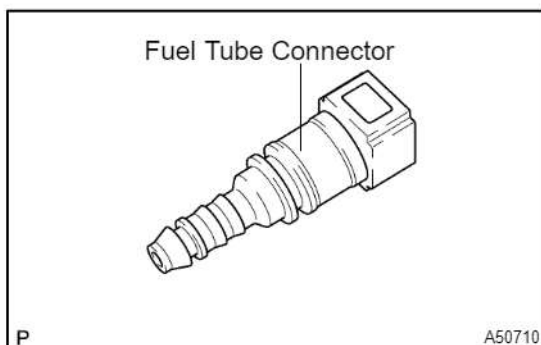
Pay close attention to the terminal connecting position to avoid a malfunction.

- (3) Turn the ignition switch ON and check that the fuel pump operates.

NOTICE:

Do not start the engine.

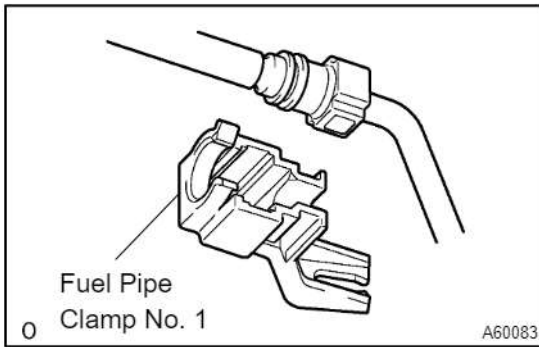
- (c) Check that there are no fuel leaks after doing maintenance anywhere on the fuel system.
- (d) Turn the ignition switch OFF.
- (e) Remove the service wire from the R/B sub-assy.
- (f) Install the circuit opening relay to the R/B sub-assy.



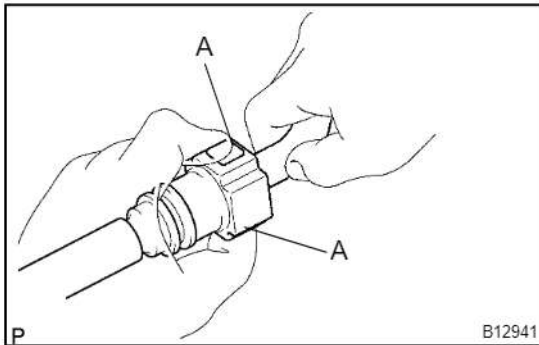
2. CHECK FUEL PRESSURE

- (a) Check that the battery positive voltage is above 12 V.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Purchase a new fuel tube and take out the fuel tube connector from its pipe.

Fuel tube: Part No. 23801-20180



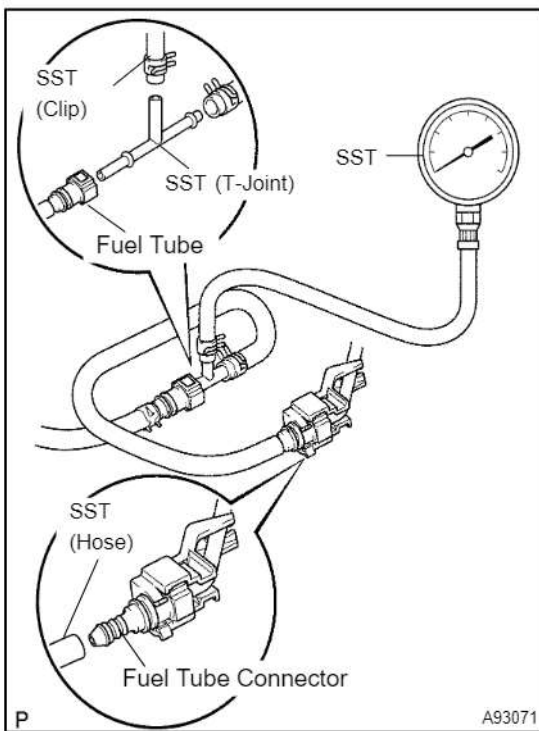
- (d) Remove the fuel pipe clamp No. 1 from the fuel tube connector.



- (e) Disconnect the fuel tube connector from the fuel pipe by pinching part A with fingers, as shown in the illustration.

CAUTION:

- Always read the precautions (see page 11-1) before disconnecting the fuel tube connector (quick type).
- The fuel pipe line may spray fuel as a result of retained pressure that remains in it. Do not allow fuel to be sprayed in the engine compartment.



- (f) Install SST (pressure gauge) and fuel tube connector using SST as shown in the illustration.

SST 09268-41047, 09268-45014 (09268-41250)

- (g) Wipe up any gasoline.
- (h) Reconnect the negative (-) battery cable.
- (i) When using the hand-held tester:
Operate the fuel pump (see step 1 (a)).
- (j) When not using the hand-held tester:
Operate the fuel pump (see step 1 (b)).
- (k) Measure the fuel pressure.

Fuel pressure:

304 to 343 kPa (3.1 to 3.5 kgf/cm², 44 to 50 psi)

If the pressure is high, replace the fuel pressure regulator.

If the pressure is low, check the fuel hoses and connections, fuel pump, fuel filter and fuel pressure regulator.

- (l) Start the engine.
- (m) Measure the fuel pressure at idle.

Fuel pressure:

304 to 343 kPa (3.1 to 3.5 kgf/cm², 44 to 50 psi)

- (n) Stop the engine.
- (o) Check that the fuel pressure remains as specified for 5 minutes after the engine has stopped.

Fuel pressure: 147 kPa (1.5 kgf/cm², 21 psi)

If the pressure is not as specified, check the fuel pump, pressure regulator and/or injectors.

- (p) After checking the fuel pressure, disconnect the negative (-) battery cable and carefully remove SST and fuel tube connector to prevent gasoline from spraying.
- (q) Reconnect the fuel inlet tube (fuel tube connector).

CAUTION:

Always read the precautions (see page [11-1](#)) before connecting the fuel tube connector (quick type).

ON-VEHICLE INSPECTION

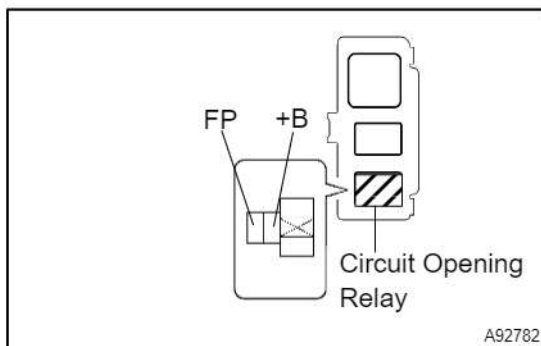
1. CHECK FUEL PUMP OPERATION AND FUEL LEAKS

- (a) When using the hand-held tester:
Check fuel pump operation.
- (1) Connect the hand-held tester to the DLC3.
 - (2) Turn the ignition switch ON and push the hand-held tester main switch ON.

NOTICE:

Do not start the engine.

- (3) Select the ACTIVE TEST mode on the hand-held tester.
- (4) Please refer to the hand-held tester's instruction manual for further details.
- (5) Turn the ignition switch OFF.
- (6) Disconnect the hand-held tester from the DLC3.



- (b) When not using the hand-held tester:
Check fuel pump operation.
- (1) Remove the circuit opening relay from the R/B sub-assy.
 - (2) Using a service wire, connect terminals FP and +B of the R/B sub-assy.

NOTICE:

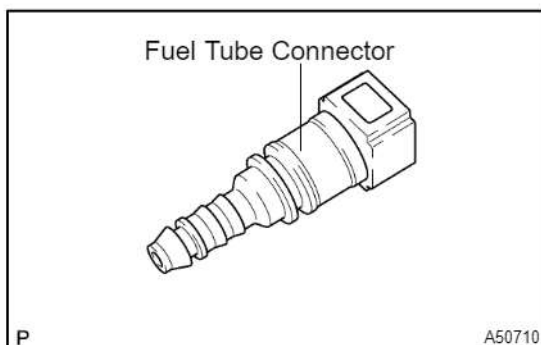
Pay close attention to the terminal connecting position to avoid a malfunction.

- (3) Turn the ignition switch ON and check that the fuel pump operates.

NOTICE:

Do not start the engine.

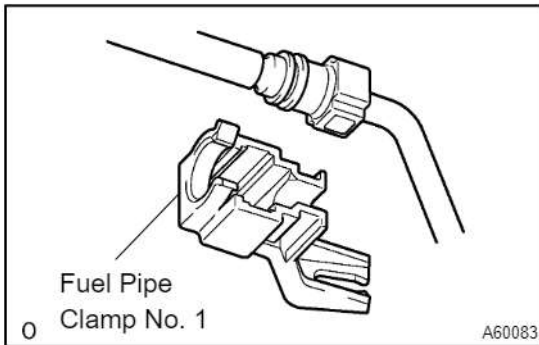
- (c) Check that there are no fuel leaks after doing maintenance anywhere on the fuel system.
- (d) Turn the ignition switch OFF.
- (e) Remove the service wire from the R/B sub-assy.
- (f) Install the circuit opening relay to the R/B sub-assy.



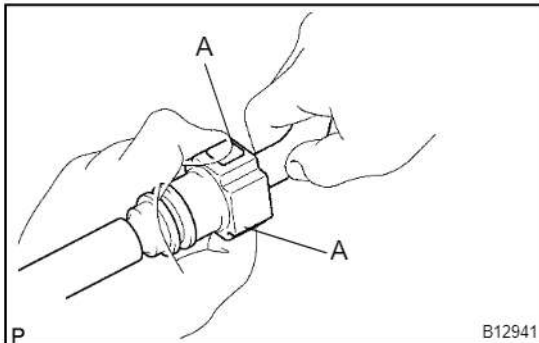
2. CHECK FUEL PRESSURE

- (a) Check that the battery positive voltage is above 12 V.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Purchase a new fuel tube and take out the fuel tube connector from its pipe.

Fuel tube: Part No. 23801-20180



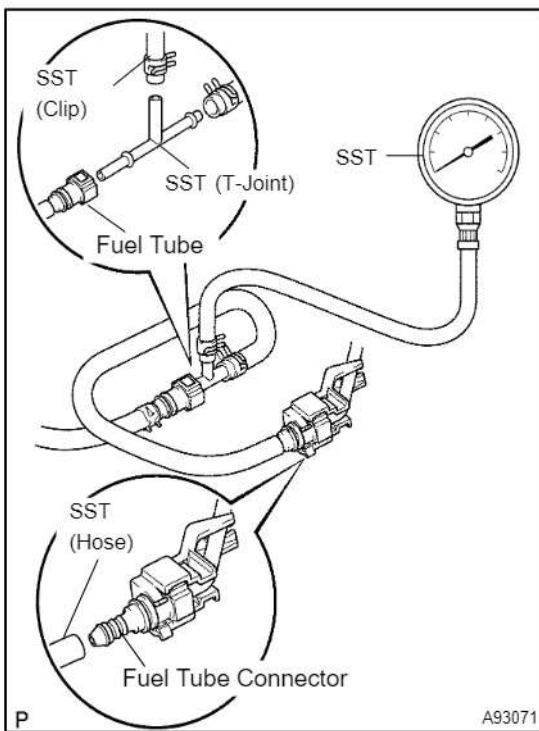
- (d) Remove the fuel pipe clamp No. 1 from the fuel tube connector.



- (e) Disconnect the fuel tube connector from the fuel pipe by pinching part A with fingers, as shown in the illustration.

CAUTION:

- Always read the precautions (see page 11-35) before disconnecting the fuel tube connector (quick type).
- The fuel pipe line may spray fuel as a result of retained pressure that remains in it. Do not allow fuel to be sprayed in the engine compartment.



- (f) Install SST (pressure gauge) and fuel tube connector using SST as shown in the illustration.

SST 09268-41047, 09268-45014 (09268-41250)

- (g) Wipe up any gasoline.
- (h) Reconnect the negative (-) battery cable.
- (i) When using the hand-held tester:
Operate the fuel pump (see step 1 (a)).
- (j) When not using the hand-held tester:
Operate the fuel pump (see step 1 (b)).
- (k) Measure the fuel pressure.

Fuel pressure:

304 to 343 kPa (3.1 to 3.5 kgf/cm², 44 to 50 psi)

If the pressure is high, replace the fuel pressure regulator.

If the pressure is low, check the fuel hoses and connections, fuel pump, fuel filter and fuel pressure regulator.

- (l) Start the engine.
- (m) Measure the fuel pressure at idle.

Fuel pressure:

304 to 343 kPa (3.1 to 3.5 kgf/cm², 44 to 50 psi)

- (n) Stop the engine.
- (o) Check that the fuel pressure remains as specified for 5 minutes after the engine has stopped.

Fuel pressure: 147 kPa (1.5 kgf/cm², 21 psi)

If the pressure is not as specified, check the fuel pump, pressure regulator and/or injectors.

- (p) After checking the fuel pressure, disconnect the negative (-) battery cable and carefully remove SST and fuel tube connector to prevent gasoline from spraying.
- (q) Reconnect the fuel inlet tube (fuel tube connector).

CAUTION:

Always read the precautions (see page [11-35](#)) before connecting the fuel tube connector (quick type).

FUEL SYSTEM (2AZ-FE)

PRECAUTION

110XE-03

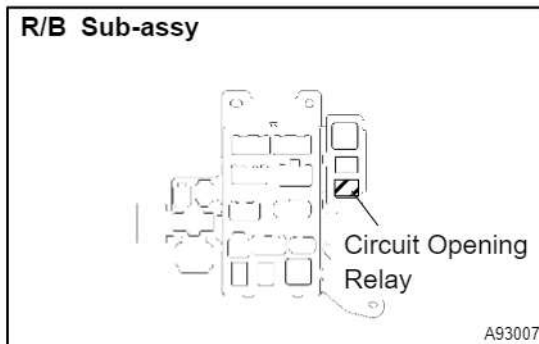
CAUTION:

- Before working on the fuel system, disconnect the negative (-) terminal cable from the battery.
- Do not smoke or be near an open flame when working on the fuel system.
- Keep gasoline away from rubber or leather parts.

1. DISCHARGE FUEL SYSTEM PRESSURE

CAUTION:

- Do not disconnect any part of the fuel system until you have discharged the fuel system pressure.
- Even after discharging the fuel pressure, place a shop rag over fittings as you separate them to reduce risk of fuel spray on yourself or in the engine compartment.



- Remove the circuit opening relay from the R/B sub-assy.
- Start the engine. After the engine has stopped, turn the ignition switch OFF.

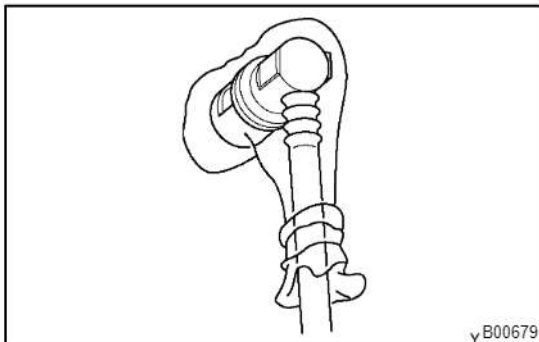
HINT:

There is a case that DTC P0171 (system too lean) is output.

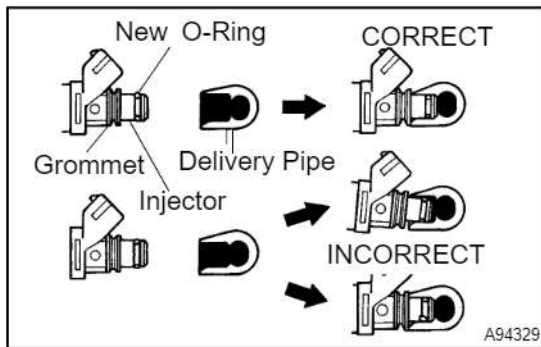
- Check that the engine does not start.
- Remove the fuel tank cap, and let the air out of the fuel tank.
- Reinstall the circuit opening relay.

2. FUEL SYSTEM

- When disconnecting the high fuel pressure line, a large amount of gasoline will spill out, so observe these procedures.
 - Perform step 2 to prevent gasoline from spilling out.
 - Put a container under the connection.
 - Disconnect the fuel pump tube (see page 11-16).
 - Drain the fuel remained inside the fuel pump tube.

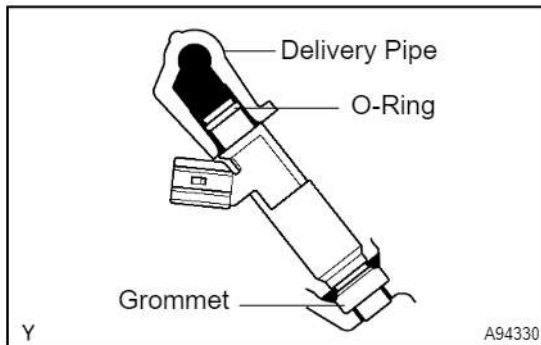


- To protect the disconnected fuel pump tube from damage and contamination, cover it with a vinyl bag.

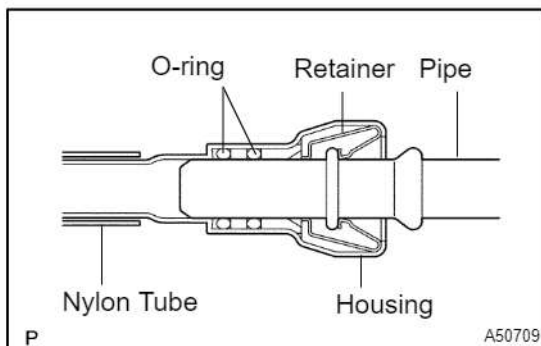


- (b) Observe these precautions when removing and installing the injector.

- (1) Never reuse O-rings.
- (2) When placing a new O-ring on the injector, take care not to damage it.
- (3) Coat a new O-rings with grease or gasoline before installing. Never use engine, gear or brake oil.



- (c) Install the injector to the delivery pipe and cylinder head, as shown in the illustration. Before installing the injector, be sure to apply grease or gasoline on the place where the delivery pipe touches the O-ring of the injector.

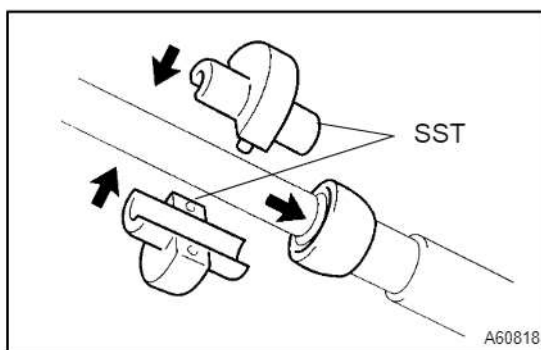


- (d) Observe these precautions when disconnecting the fuel delivery pipe.

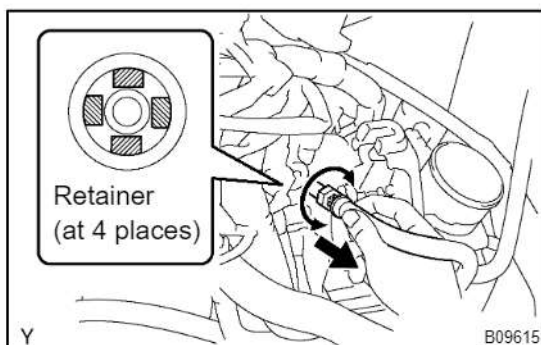
HINT:

The structure of the metallic connector is shown as left.

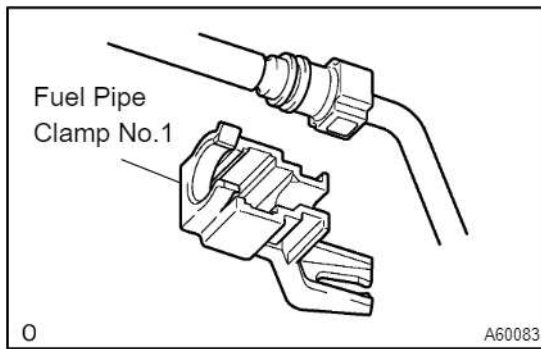
- (1) Remove the fuel pipe clamp No. 2.



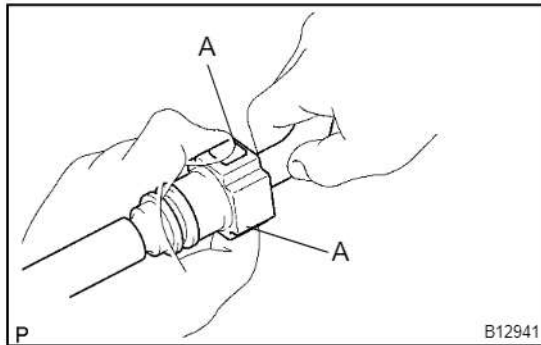
- (2) Find the metallic connector of the fuel tube assembly, pull it out towards the rear and hold it as it is.
- (3) Assemble SST to the connection as shown.
SST 09268-21010



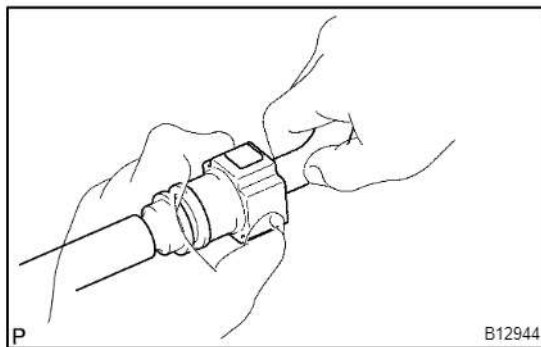
- (4) Turn SST, align the retainers inside the connector with SST chamfered parts and insert SST into the connector.
- (5) Slide SST and the connector together towards the fuel tube assembly.



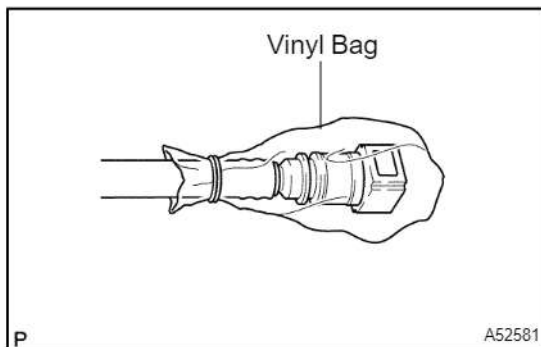
- (e) Observe these following precautions when disconnecting the fuel tube connector (quick type).
- (1) Remove the fuel pipe clamp No. 1.
 - (2) Check for dirt or mud on the pipe and around the connector before disconnection. Clean if necessary.



- (3) Disconnect the connector from the hose while pinching part A with fingers as shown in the illustration.



- (4) If the connector and the pipe are stuck, pinch the fuel pipe, push and pull the connector to disconnect and pull it out. Do not use any tools.
- (5) Inspect for dirt or mud on the seal surface of the disconnected pipe. Clean if necessary.



- (6) To protect the disconnected pipe and connector from damage and contamination, cover it with a vinyl bag.

3. CHECK FUEL LEAK

- (a) Check that there are no fuel leaks after doing maintenance anywhere on the fuel system (see page 11-4).

FUEL SYSTEM (3MZ-FE)

PRECAUTION

110UM-04

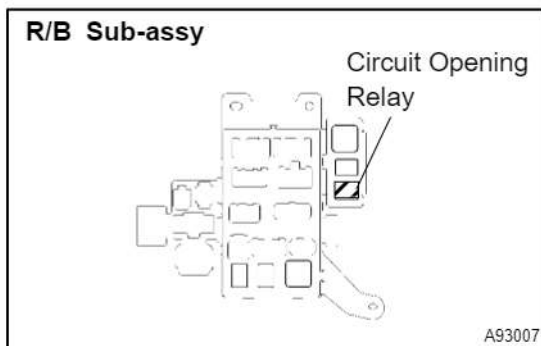
CAUTION:

- Before working on the fuel system, disconnect the negative (-) terminal cable from the battery.
- Do not smoke or be near an open flame when working on the fuel system.
- Keep gasoline away from rubber or leather parts.

1. DISCHARGE FUEL SYSTEM PRESSURE

CAUTION:

- Do not disconnect any part of the fuel system until you have discharged the fuel system pressure.
- Even after discharging the fuel pressure, place a shop rag over fittings as you separate them to reduce risk of fuel spray on yourself or in the engine compartment.



- Remove the circuit opening relay from the R/B sub-assy.
- Start the engine. After the engine has stopped, turn the ignition switch OFF.

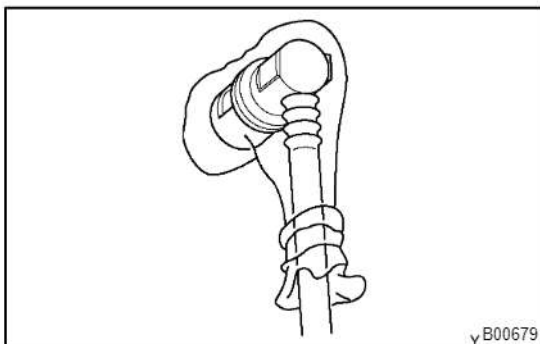
HINT:

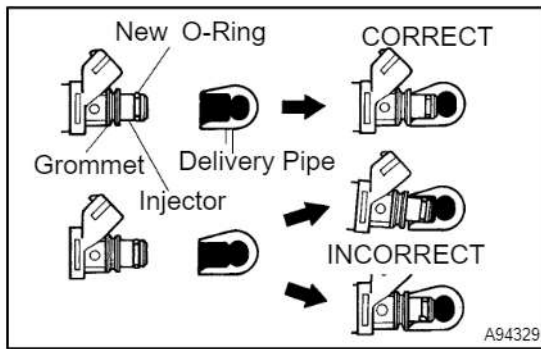
There is a case that DTC P0171 (system too lean) is output.

- Check that the engine does not start.
- Remove the fuel tank cap, and allow the air out of the fuel tank.
- Reinstall the circuit opening relay.

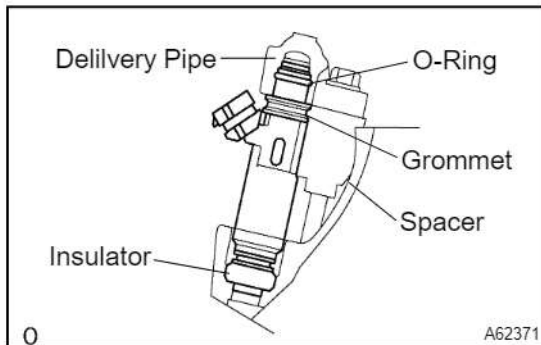
2. FUEL SYSTEM

- When disconnecting the high fuel pressure line, a large amount of gasoline will spill out, so observe these procedures.
 - Perform the step 2 to prevent gasoline from spilling out.
 - Put a container under the connection.
 - Disconnect the fuel pump tube (see page 11-55).
 - Drain the fuel remaining inside the fuel pump tube.
- To protect the disconnected fuel pump tube from damage and contamination, cover it with a vinyl bag.

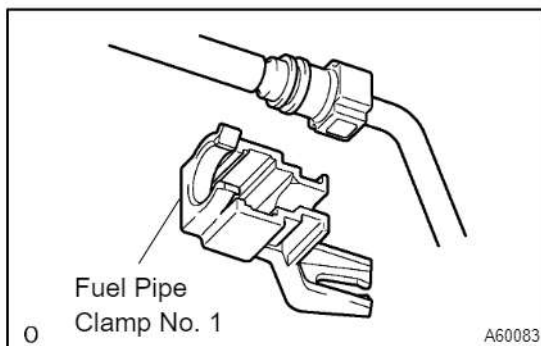




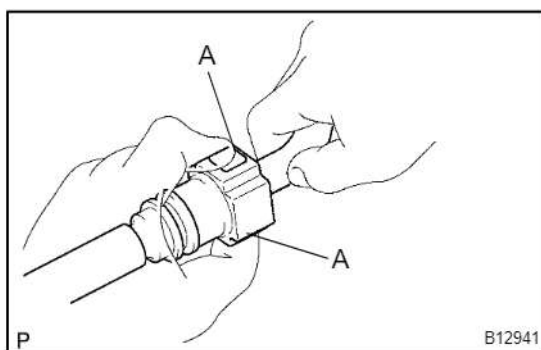
- (b) Observe the following precautions when removing and installing the fuel injectors.
- (1) Never reuse O-rings.
 - (2) When installing a new O-ring on the injector, be careful not to damage it.
 - (3) Coat new O-rings with grease or gasoline before installing. Never use engine oil, gear oil or brake oil.



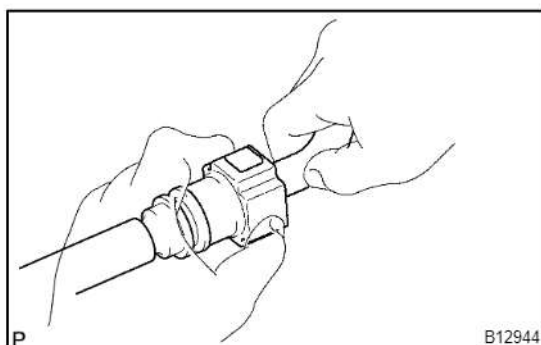
- (c) Install the injector to the delivery pipe and cylinder head, as shown in the illustration. Before installing the injector, be sure to apply grease or gasoline on the place where the delivery pipe touches the O-ring of the injector.



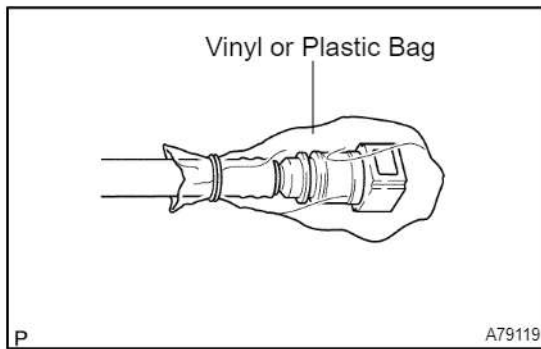
- (d) Observe these precautions when disconnecting the fuel tube connectors.
- (1) Remove the fuel pipe clamp from the connector.
 - (2) Check for dirt or mud on the pipe and around the connector before disconnection. Clean if necessary.



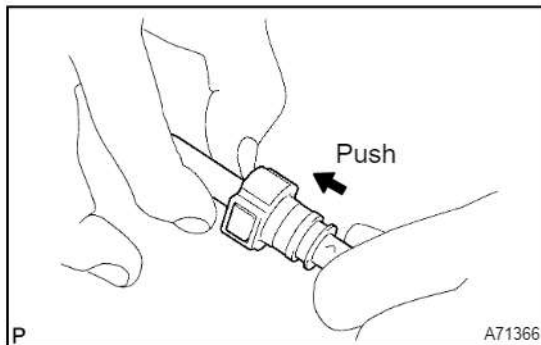
- (3) Disconnect the connector from the hose while pinching part A with fingers, as shown in the illustration.



- (4) If the connector and the pipe are stuck, pinch the fuel pipe, push and pull the connector to disconnect it and pull it out. Do not use any tools.
- (5) If dirt or any other substance is found on the sealing surface that might interfere with the seal, clean the area thoroughly before assembly.

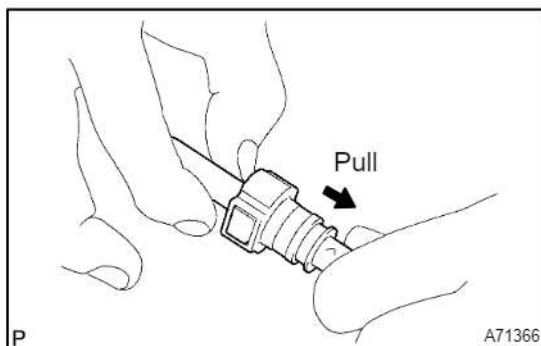


- (6) To protect the disconnected pipe and connector from damage and contamination, cover it with a vinyl bag.



- (e) Observe these precautions when connecting the fuel tube connector.

- (1) Check that there is no damage or contamination in the connected part of the pipe.
- (2) Align the axis of the connector with the axis of the pipe. Push the pipe into the connector until the connector makes a "click" sound. If the connection is tight, apply little amount of fresh engine oil on the tip of the pipe.



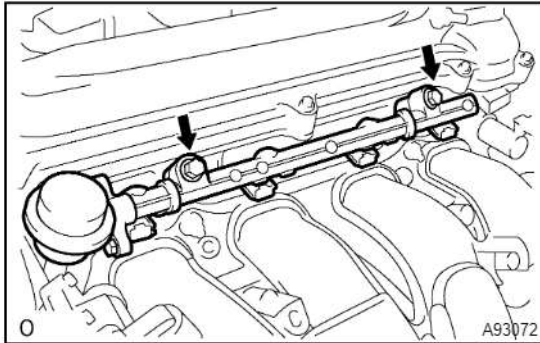
- (3) After having finished the connection, check if the pipe and the connector are securely connected by trying to pull them apart.
- (4) Install the fuel pipe clamp to the connector.
- (5) Check if there is any fuel leakage.

3. CHECK FOR FUEL LEAKS

- (a) Check that there are no fuel leaks after doing maintenance anywhere on the fuel system (see page 11-38).

REPLACEMENT

1. WORK FOR PREVENTING GASOLINE FROM SPILLING OUT (See page 11-1)
2. REMOVE AIR CLEANER CAP WITH AIR CLEANER HOSE
3. REMOVE ENGINE COVER SUB-ASSY NO.1
4. DISCONNECT FUEL TUBE SUB-ASSY (See page 16-6)



5. REMOVE FUEL DELIVERY PIPE W/INJECTOR

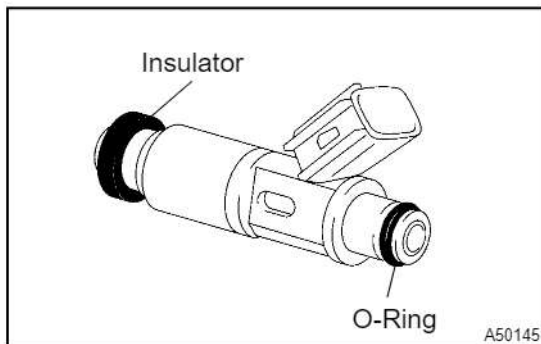
NOTICE:

Be careful not to drop the injectors when removing the delivery pipe.

- (a) Remove the ventilation hose No. 2.
- (b) Disconnect the 4 injector connectors from the injector.
- (c) Remove the 2 clamps and wire harnesses from the delivery pipe.
- (d) Remove the 2 bolts and the delivery pipe together with the 4 injectors.
- (e) Remove the 2 spacers from the cylinder head.

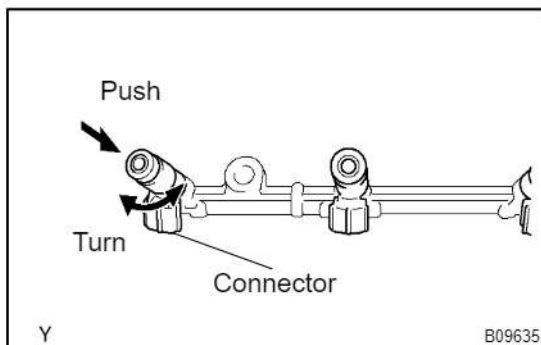
6. REMOVE FUEL INJECTOR ASSY

- (a) Pull out the 4 injectors from the delivery pipe.



7. INSTALL FUEL INJECTOR ASSY

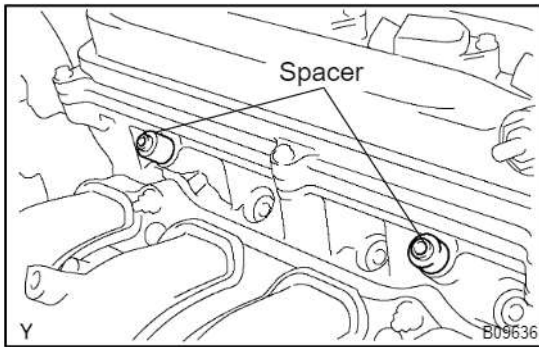
- (a) Install a new insulator to each injector.
- (b) Apply a light coat of grease or gasoline to a new O-ring and install to each injector.



- (c) Apply a light coat of grease or gasoline on the place where a delivery pipe touches the O-ring.
- (d) To install the fuel injector into the fuel delivery pipe, push the fuel injector while twisting it back and forth.
- (e) Install the 4 injectors.

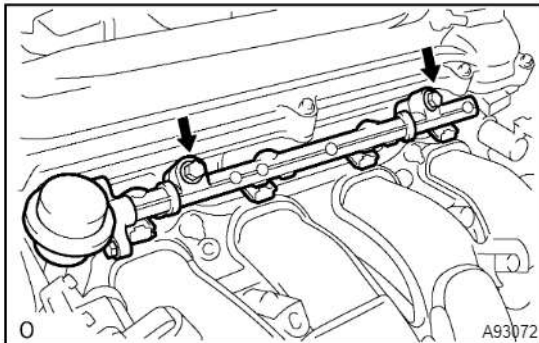
NOTICE:

- Be careful not to twist the O-ring.
 - After installing the fuel injector, check that it turns smoothly. If not, reinstall it with a new O-ring.
- (f) Position the injector connector downward.



8. INSTALL FUEL DELIVERY PIPE W/INJECTOR

- (a) Place the 2 spacers in position on the cylinder head.
- (b) Place the delivery pipe together with the 4 injectors in position on the cylinder head.



- (c) Temporarily install the 2 bolts holding the delivery pipe to the cylinder.

NOTICE:

After installing the fuel injector, check that it turns smoothly. If not, reinstall it with a new O-ring.

- (d) Position the injector connector outward.
- (e) Tighten the 2 bolts holding the delivery pipe to the cylinder head.

Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)

9. CONNECT FUEL TUBE SUB-ASSY

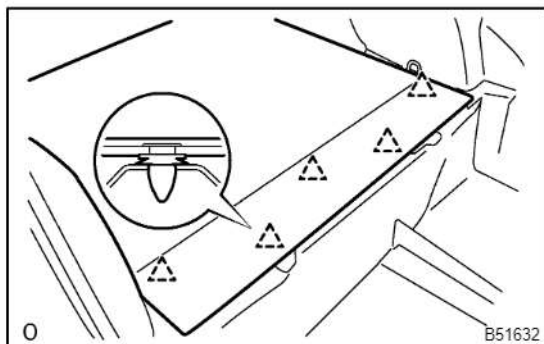
10. INSPECT FOR FUEL LEAKS (See page 11-4)

11. INSTALL ENGINE COVER SUB-ASSY NO.1 (See page 14-24)

12. INSTALL AIR CLEANER CAP WITH AIR CLEANER HOSE (See page 14-24)

REPLACEMENT

1. DISCHARGE FUEL SYSTEM PRESSURE (See page 11-1)



2. REMOVE DECK BOARD SUB-ASSY

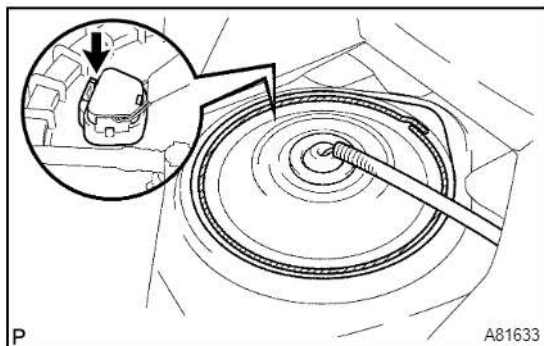
- (a) Disengage the 5 clips and turn up the front side of the deck board.

3. REMOVE REAR SEAT TRACK BRACKET COVER OUTER

4. REMOVE REAR SEAT ASSY RH (See page 72-35)

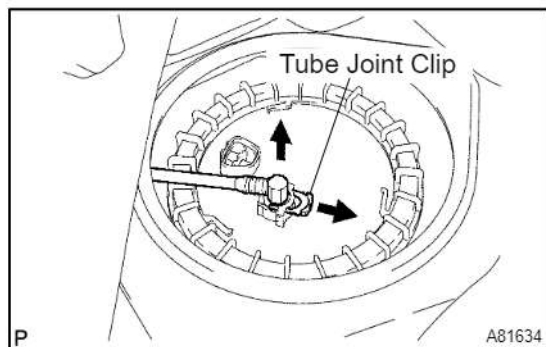
5. REMOVE REAR SEAT ASSY LH (See page 72-28)

6. REMOVE REAR DOOR SCUFF PLATE LH



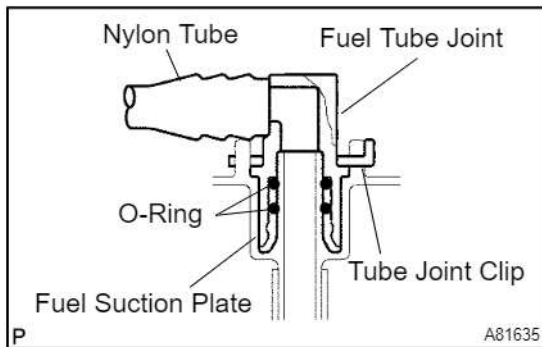
7. REMOVE REAR FLOOR SERVICE HOLE COVER

- (a) Remove the rear floor service hole cover.
(b) Disconnect the fuel pump & sender gage connector.

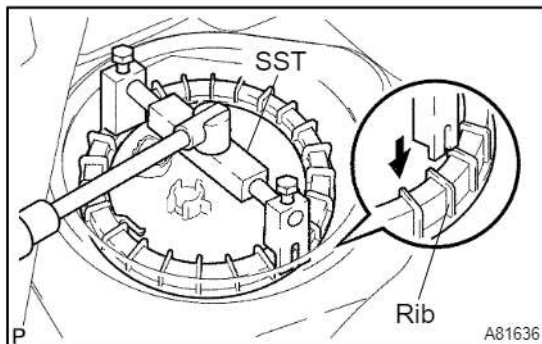


8. REMOVE FUEL SUCTION TUBE ASSY W/ PUMP & GAGE

- (a) Disconnect the fuel pump tube.
(1) Remove the tube joint clip, and pull out the fuel pump tube.

**NOTICE:**

- Before this operation, check the connector for dirt, mud or other contamination. Clean if necessary.
- Be careful of mud. The connector's O-ring, which seals the pipe and connector, becomes contaminated easily.
- Do not use any tool in this operation.
- Do not bend or twist the nylon tube. Protect the connector by covering it with a vinyl or plastic bag.
- When the pipe and connector are stuck, push and pull the connector to release and pull the connector out carefully.



(b) Using SST, loosen the fuel pump gage retainer.

SST 09808-14020 (09808-01410, 09808-01420, 09808-01430)

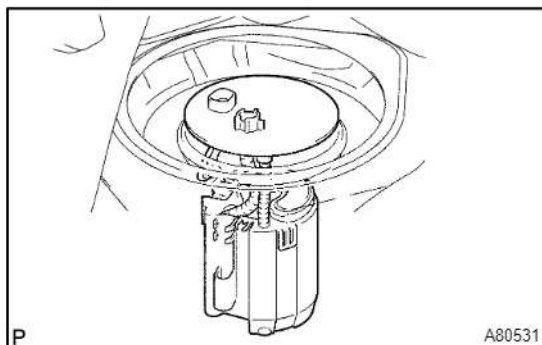
NOTICE:

Loosen the retainer by turning it counterclockwise while holding the SST down. Do not allow the claw of the tank suction tube support to slip out of its groove on the fuel tank.

HINT:

A rib on the fuel pump gage retainer can be fitted into a tip of the SST.

(c) Remove the fuel pump gage retainer.

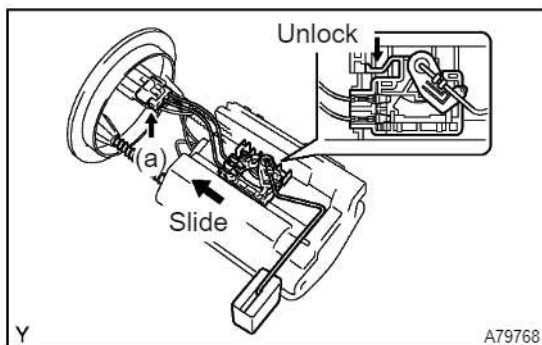


(d) Remove the fuel suction tube.

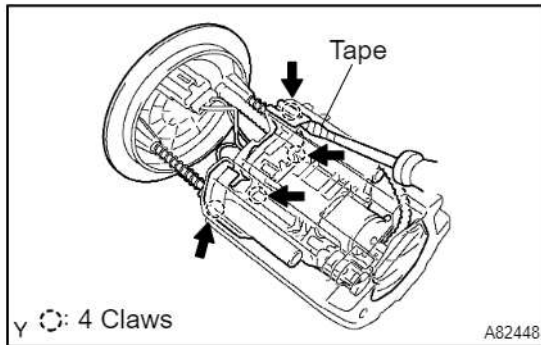
NOTICE:

Be careful not to bend the arm of the fuel sender gage.

(e) Remove the gasket from the fuel tank.

**9. REMOVE FUEL SENDER GAGE ASSY**

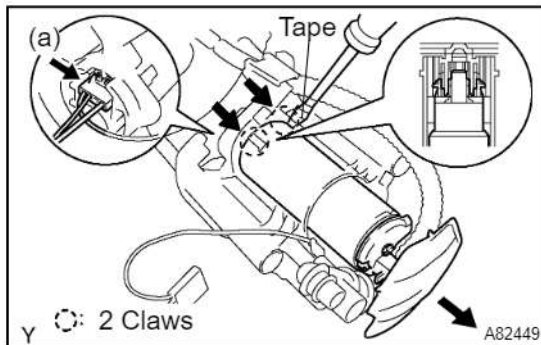
- Disconnect the fuel sender gage connector.
- Unlock the fuel sender gage and slide it to remove.

**10. REMOVE FUEL SUCTION PLATE SUB-ASSY**

- (a) Using a screwdriver with the tip wrapped in tape, disconnect the 4 snap-claws from the claw holes and remove the fuel suction plate.

NOTICE:

Do not damage the fuel suction plate and fuel suction support No. 1.

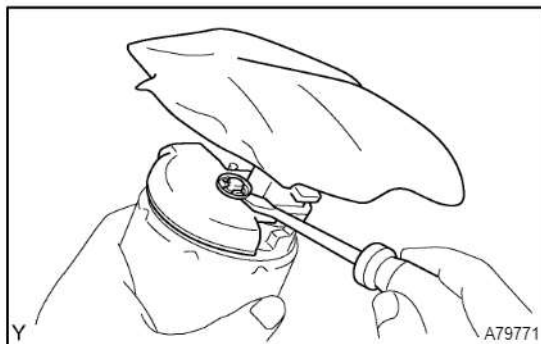
**11. REMOVE FUEL PUMP ASSY**

- (a) Disconnect the fuel pump connector.
(b) Using a small screwdriver with its tip wrapped in tape, disconnect the 2 snap-claws from the claw holes and pull out the fuel pump.

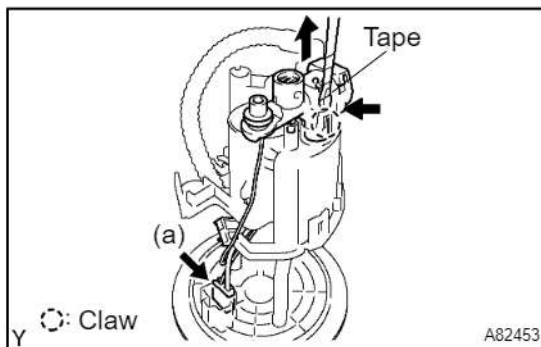
NOTICE:

Do not damage the fuel pump and fuel suction plate.

- (c) Remove the O-ring and fuel pump spacer from the fuel pump.

**12. REMOVE FUEL PUMP FILTER**

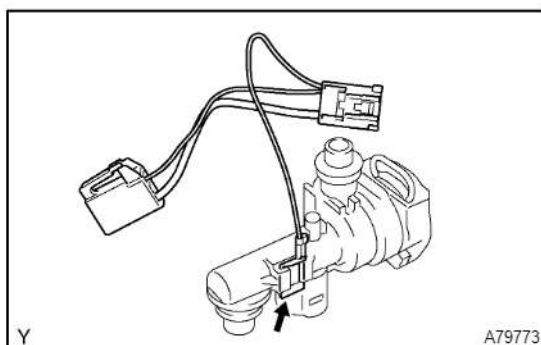
- (a) Using a small screwdriver, pry out the clip.
(b) Remove the fuel filter from the fuel pump.

**13. REMOVE FUEL TUBE JOINT NO.1**

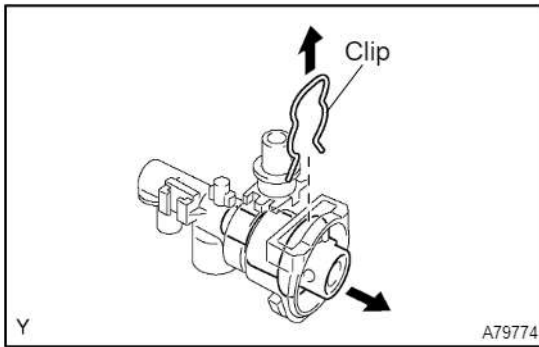
- (a) Disconnect the connector.
(b) Using a screwdriver with its tip wrapped in tape, disconnect the snap-claw from the claw hole and pull out the fuel tube joint.

NOTICE:

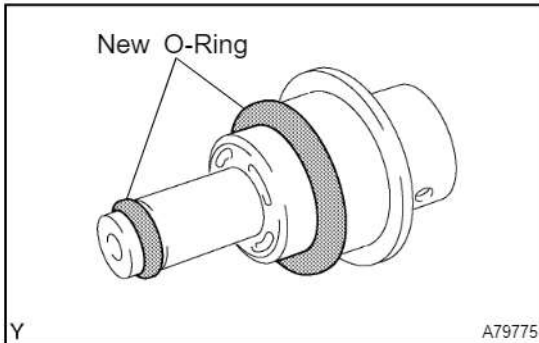
Do not damage the fuel tube joint and fuel suction plate.

**14. REMOVE FUEL PUMP HARNESS**

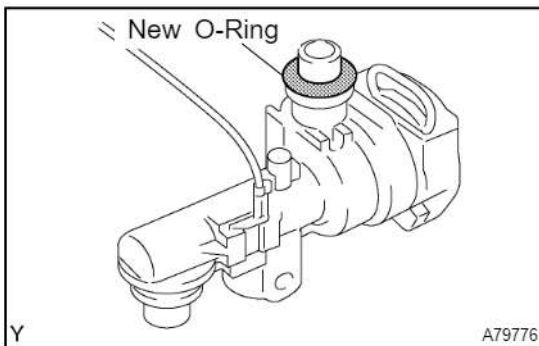
- (a) Remove the harness from the fuel tube joint No. 1.

**15. REMOVE FUEL PRESSURE REGULATOR ASSY**

- Remove the clip.
- Pull out the pressure regulator from the fuel tube joint No. 1.
- Remove the 2 O-rings from the fuel tube joint No. 1.

**16. INSTALL FUEL PRESSURE REGULATOR ASSY**

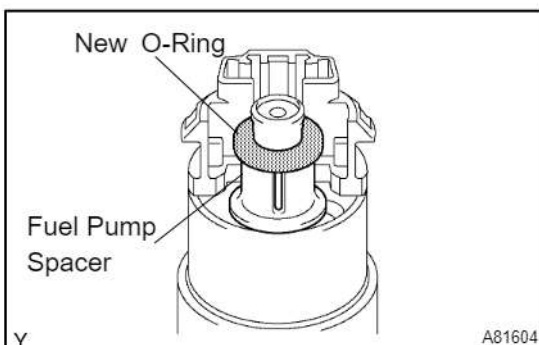
- Apply a light coat of gasoline or spindle oil to the 2 new O-rings, and install them to the fuel pressure regulator.
- Apply a light coat of gasoline or spindle oil to the 2 O-rings again, and install the fuel pressure regulator to the fuel tube joint No. 1.
- Install the clip.

17. INSTALL FUEL PUMP HARNESS**18. INSTALL FUEL TUBE JOINT NO.1**

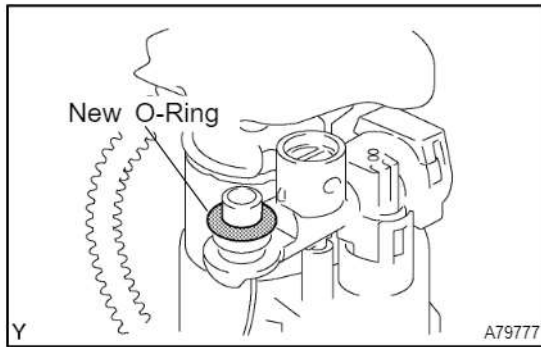
- Apply a light coat of gasoline or spindle oil to a new O-ring, and install it to the fuel tube joint No. 1.
- Apply a light coat of gasoline or spindle oil to the O-ring again, and install the fuel tube joint No. 1 to the fuel suction plate.
- Connect the connector.

19. INSTALL FUEL PUMP FILTER

- Install the fuel filter with a new clip.

**20. INSTALL FUEL PUMP ASSY**

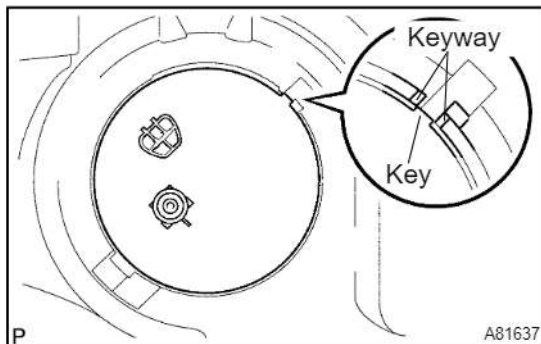
- Install the fuel pump spacer to the fuel pump.
- Apply a light coat of gasoline or spindle oil to a new O-ring, and install it to the fuel pump.
- Apply a light coat of gasoline or spindle oil to the O-ring again, and install the fuel pump to the fuel suction plate.
- Connect the fuel pump connector.



21. INSTALL FUEL SUCTION PLATE SUB-ASSY

- Apply a light coat of gasoline or spindle oil to a new O-ring, and install it to the fuel tube joint No. 1.
- Apply a light coat of gasoline or spindle oil to the O-ring again, and install the fuel suction plate to the fuel suction support No. 1.

22. INSTALL FUEL SENDER GAGE ASSY



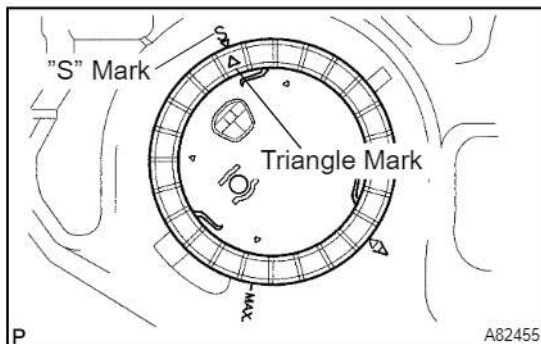
23. INSTALL FUEL SUCTION TUBE ASSY W/ PUMP & GAGE

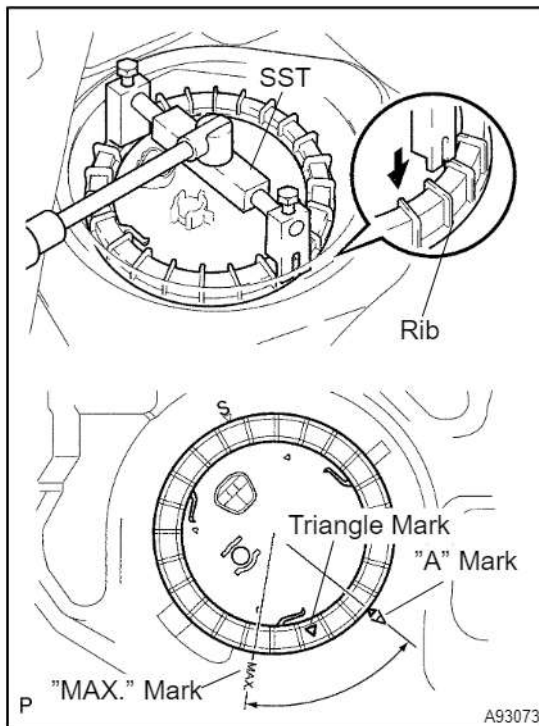
- Install a new gasket to the fuel tank.
- Attach the fuel suction tube to the fuel tank.

NOTICE:

Be careful not to bend the arm of the fuel sender gage.

- Align the keyway of the fuel suction tube support with the key of the fuel suction tube.
- Apply MP grease to the entire interior surface of the fuel pump gage retainer.
- Align the triangle mark on new fuel pump gage retainer with the "S" mark on the fuel tank while pushing down the fuel suction tube, attach the fuel pump gage retainer.





- (f) Rotate the fuel pump gage retainer by hand, then tighten it one complete turn and half using SST. Triangle mark on the fuel pump gage retainer must be positioned between "A" and "MAX." indications on the fuel tank.

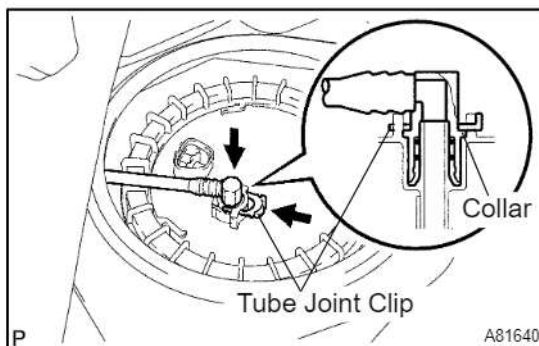
SST 09808-14020 (09808-01410, 09808-01420, 09808-01430)

NOTICE:

Do not use other tools in this operation. Damage to the fuel pump gage retainer and the fuel tank may result.

HINT:

A rib on the fuel pump gage retainer can be fitted into a tip of the SST.



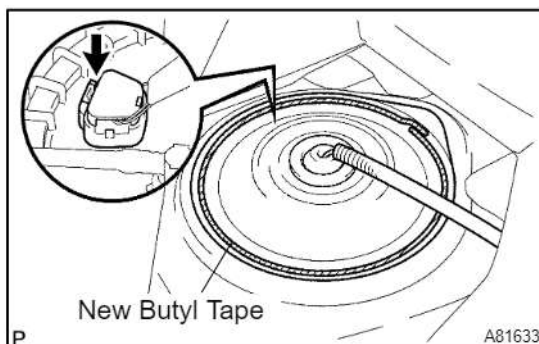
- (g) Connect the fuel pump tube.

- (1) Install the fuel pump tube and the tube joint clip.

NOTICE:

- Check that there are no scratches or foreign objects on the connecting part.
- Check that the fuel tube joint is inserted securely.
- Check that the tube joint clip is on the collar of the fuel tube joint.
- After installing the tube joint clip, check that the fuel tube joint has not been pulled off.

24. CHECK FOR FUEL LEAKS (See page 11-4)



25. INSTALL REAR FLOOR SERVICE HOLE COVER

- Install a new butyl tape to the rear floor service hole cover.
- Connect the fuel pump & sender gage connector.
- Install the rear floor service hole cover.

26. INSTALL REAR DOOR SCUFF PLATE LH

27. INSTALL REAR SEAT ASSY LH (See page 72-28)

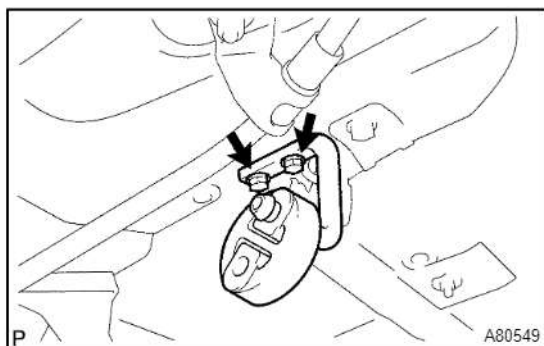
28. INSTALL REAR SEAT ASSY RH (See page 72-35)

29. INSTALL REAR SEAT TRACK BRACKET COVER OUTER

30. INSTALL DECK BOARD SUB-ASSY

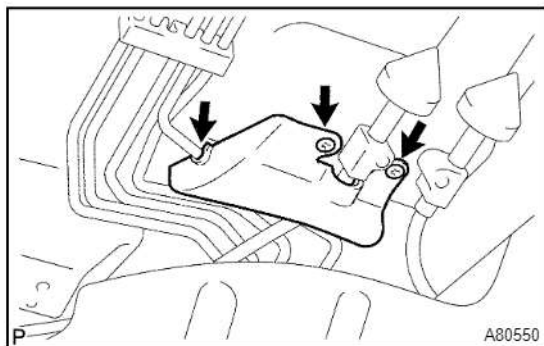
REPLACEMENT

1. DISCHARGE FUEL SYSTEM PRESSURE (See page 11-1)
2. REMOVE DECK BOARD SUB-ASSY
3. REMOVE REAR SEAT TRACK BRACKET COVER OUTER
4. REMOVE REAR SEAT ASSY RH (See page 72-35)
5. REMOVE REAR SEAT ASSY LH (See page 72-28)
6. REMOVE REAR DOOR SCUFF PLATE LH
7. REMOVE REAR FLOOR SERVICE HOLE COVER (See page 11-16)
8. REMOVE FUEL SUCTION TUBE ASSY W/ PUMP & GAGE (See page 11-16)
9. DRAIN FUEL
10. REMOVE PROPELLER W/CENTER BEARING SHAFT ASSY (4WD TYPE)
(See page 30-4)
11. REMOVE EXHAUST PIPE ASSY CENTER (See page 15-2)
12. REMOVE FRONT FLOOR HEAT INSULATOR NO.3 (See page 12-1 1)



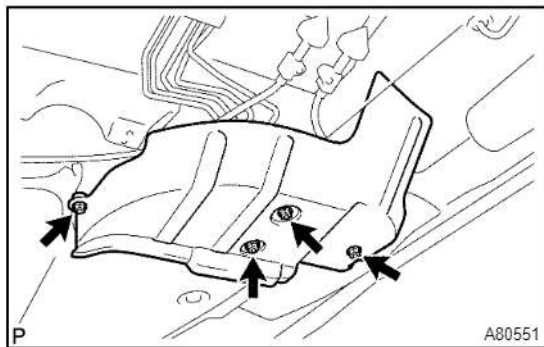
13. REMOVE EXHAUST PIPE SUPPORT BRACKET NO.4 (4WD TYPE)

(a) Remove the 2 bolts and support bracket.



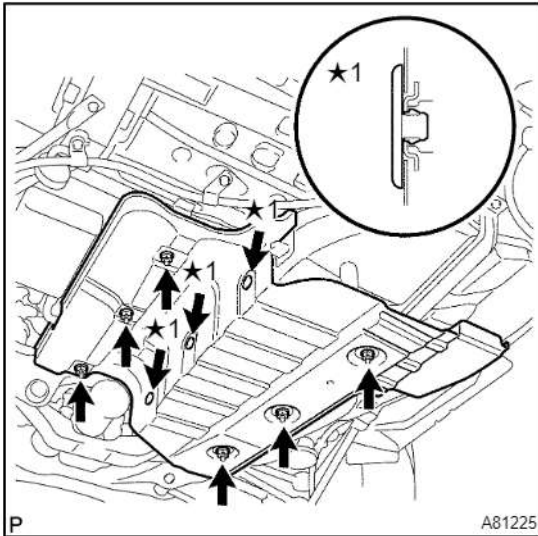
14. REMOVE FUEL TUBE PROTECTOR NO.1

(a) Remove the 2 clips and unfasten the claw, and remove the tube protector.



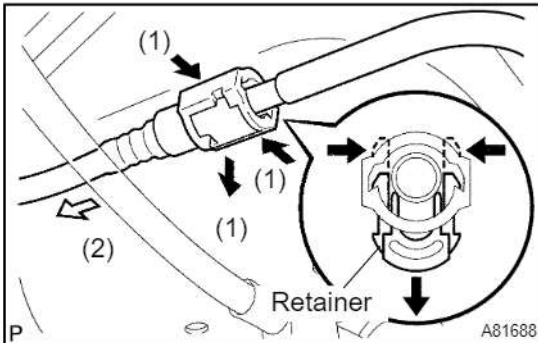
15. REMOVE FUEL TANK PROTECTOR NO.1

(a) Remove the 4 nuts and tank protector.



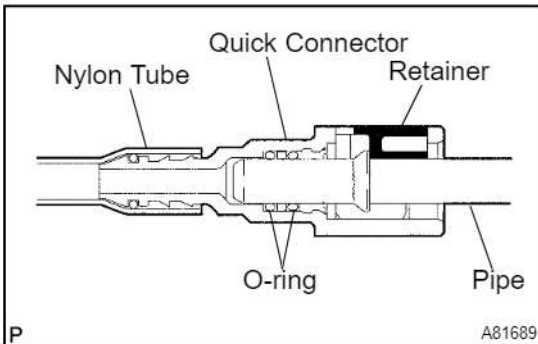
16. REMOVE FUEL TANK PROTECTOR SUB-ASSY NO.1

- (a) Remove the 3 clips (★1), 6 nuts and tank protector.



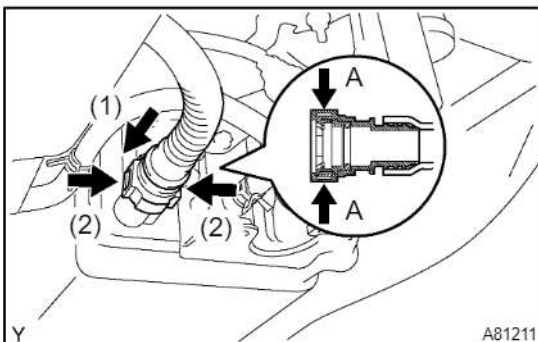
17. REMOVE FUEL TANK ASSY

- (a) Disconnect the fuel pump tube.
 - (1) Pinch the projection of the retainer to remove the lock claws and pull down it as shown in the illustration.
 - (2) Pull out the fuel pump tube.

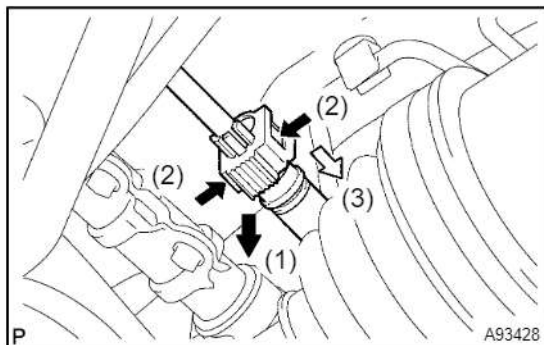


NOTICE:

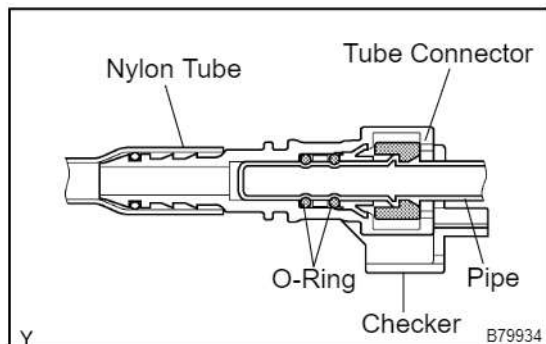
- Before this operation, check the connector for dirt, mud or other contamination. Clean if necessary.
- Be careful of mud. The connector's O-ring, which seals the pipe and connector, becomes contaminated easily.
- Do not use any tool in this operation.
- Do not bend or twist the nylon tube. Protect the connector by covering it with a vinyl or plastic bag.
- When the pipe and connector are stuck, push and pull the connector to release it. Then pull out the connector from the pipe.



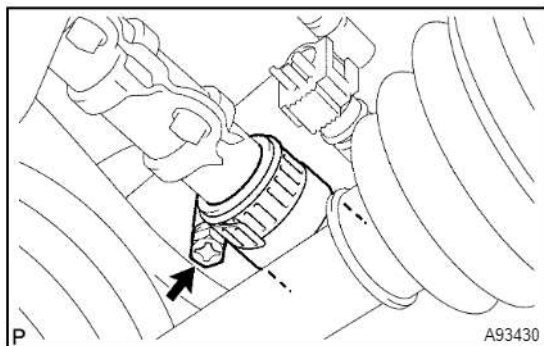
- (b) Disconnect the fuel tank vent hose.
 - (1) Push the connector deep into the charcoal canister to release the locking tab.
 - (2) Pinch portion A.
 - (3) Pull out the connector.



- (c) Disconnect the fuel tank breather tube No. 3.
- (1) Lower the connector checker slightly.
 - (2) Pinch the tube connector.
 - (3) Pull out the breather tube.

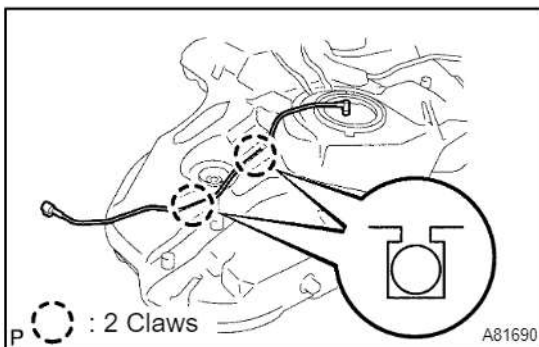
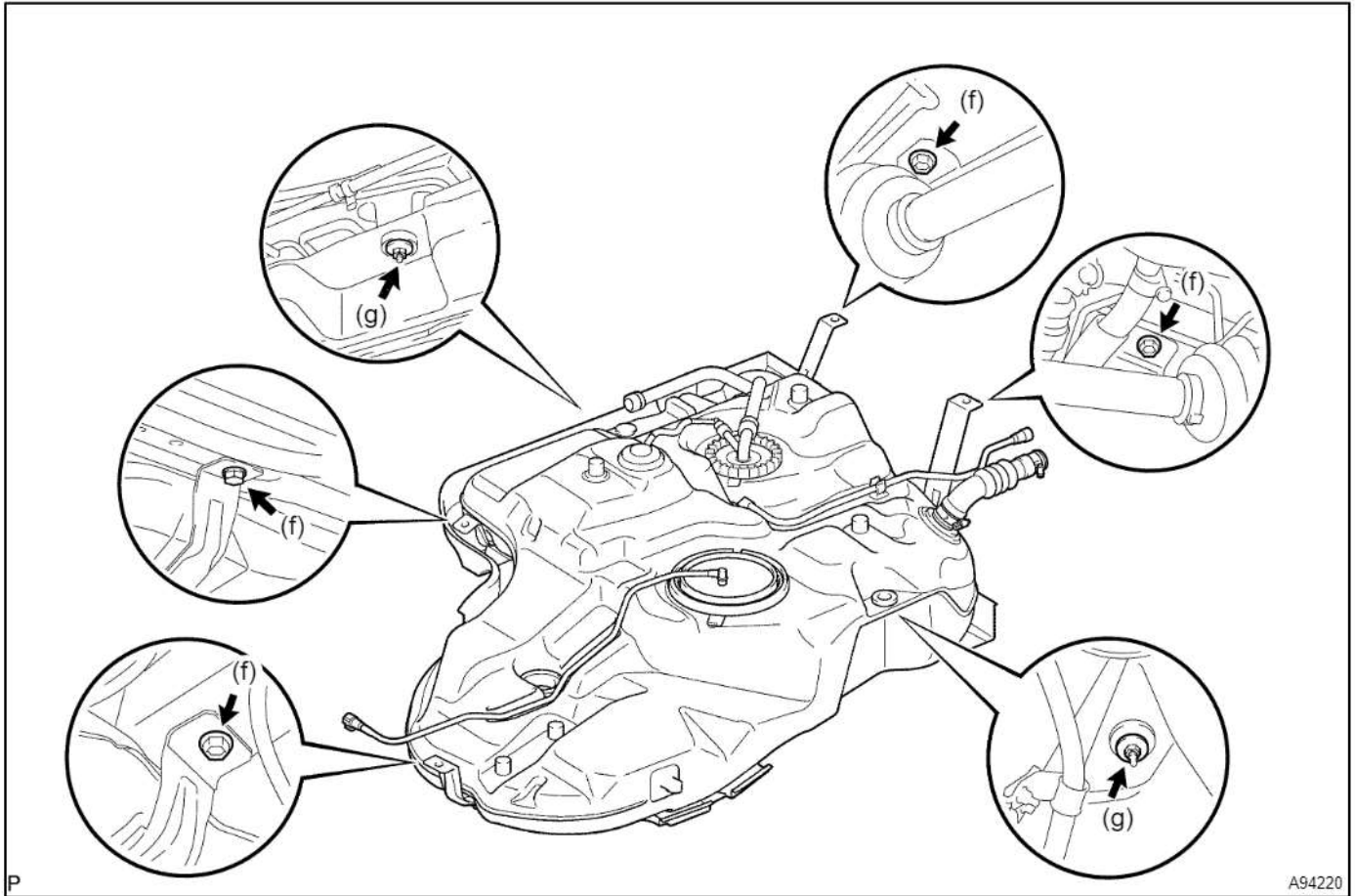
**NOTICE:**

- Before this operation, check the connector for dirt, mud or other contamination. Clean if necessary.
- Be careful of mud. The connector's O-ring, which seals the pipe and connector, becomes contaminated easily.
- Do not use any tool in this operation.
- Do not bend or twist the nylon tube. Protect the connector by covering it with a vinyl or plastic bag.
- When the pipe and connector are stuck, push and pull the connector to release it. Then pull out the connector from the pipe.



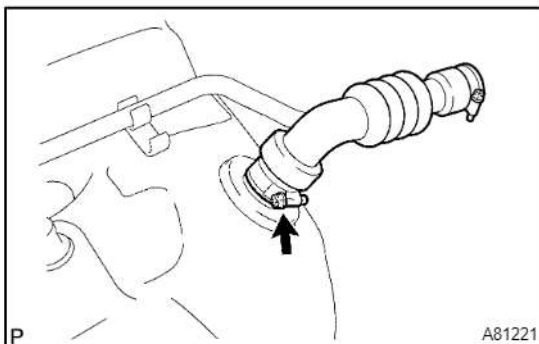
- (d) Loosen the hose clamp bolt and disconnect the fuel tank to filler pipe hose.

- (e) Set up a transmission jack under the fuel tank.
- (f) Remove the 4 bolts and 2 fuel tank bands.
- (g) Remove the 2 nuts.
- (h) Operate the transmission jack and remove the fuel tank.



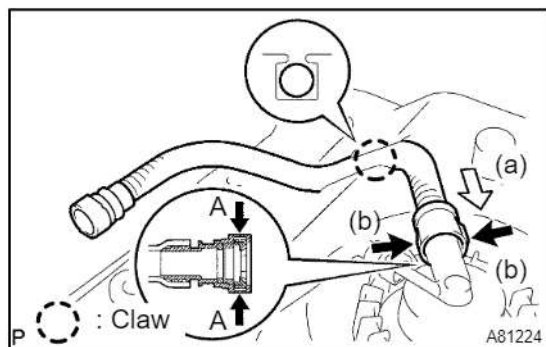
18. REMOVE FUEL PUMP TUBE SUB-ASSY

- (a) Unfasten the 2 claws and remove the tube.

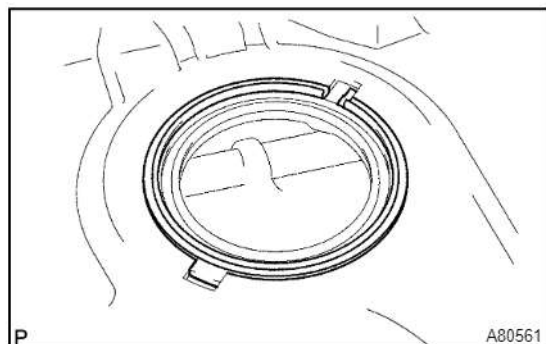


19. REMOVE FUEL TANK TO FILLER PIPE HOSE

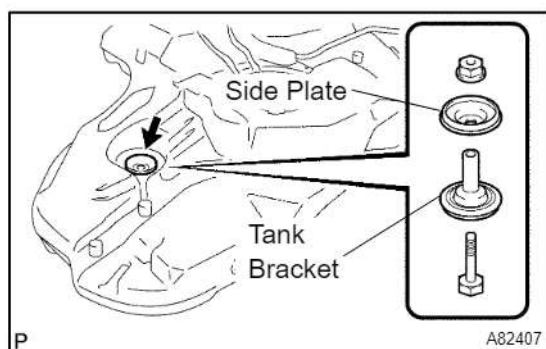
- (a) Loosen the hose clamp bolt and remove the hose.

**20. REMOVE FUEL TANK VENT HOSE**

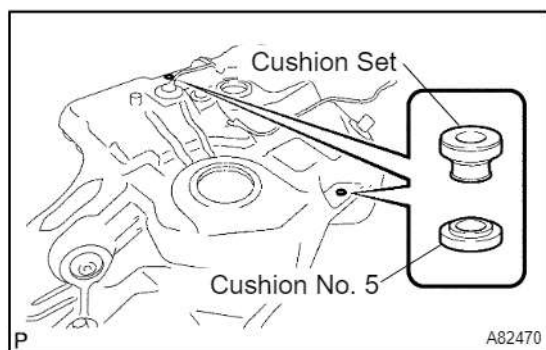
- (a) Push the connector deep into the charcoal canister to release the locking tab.
- (b) Pinch portion A.
- (c) Pull out the connector.
- (d) Unfasten the claw and remove the vent hose.

**21. REMOVE TANK SUCTION TUBE SUPPORT**

- (a) Remove the tube support from the fuel tank.

**22. REMOVE FUEL TANK SIDE PLATE**

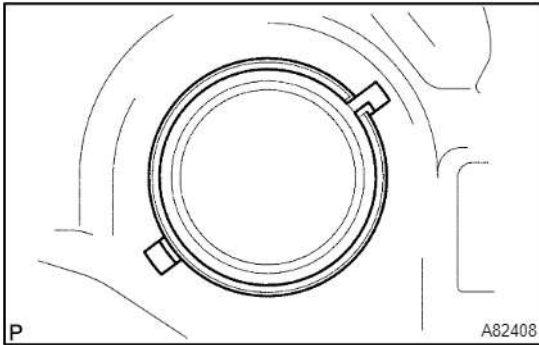
- (a) Remove the bolt and nut side plate and tank bracket.

**23. REMOVE FUEL TANK CUSHION SET**

- (a) Remove the cushion set and cushion No. 5.

24. INSTALL FUEL TANK CUSHION SET**25. INSTALL FUEL TANK SIDE PLATE**

Torque: 30 N·m (306 kgf·cm, 22 ft·lbf)

**26. INSTALL TANK SUCTION TUBE SUPPORT**

- (a) Install a new tube support as shown in the illustration.

27. INSTALL FUEL TANK VENT HOSE**28. INSTALL FUEL TANK TO FILLER PIPE HOSE****29. INSTALL FUEL PUMP TUBE SUB-ASSY****30. INSTALL FUEL TANK ASSY**

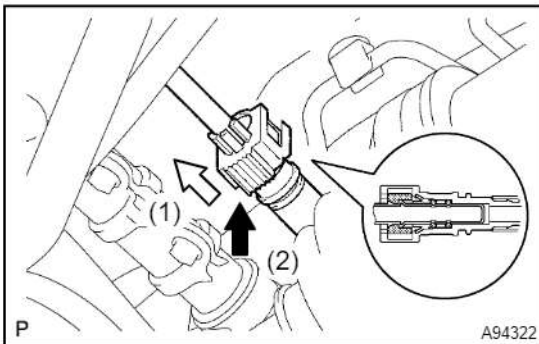
- (a) Set up the fuel tank to the transmission jack.
 (b) Operate the transmission jack and the install the fuel tank.
 (c) Tighten the 2 nuts.

Torque: 20 N·m (200 kgf·cm, 14 ft·lbf)

- (d) Install the 2 fuel tank bands with the 4 bolts.

Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)

- (e) Install the connector clamp.
 (f) Connect the fuel tank wire connector.
 (g) Connect the fuel tank to filler pipe hose.



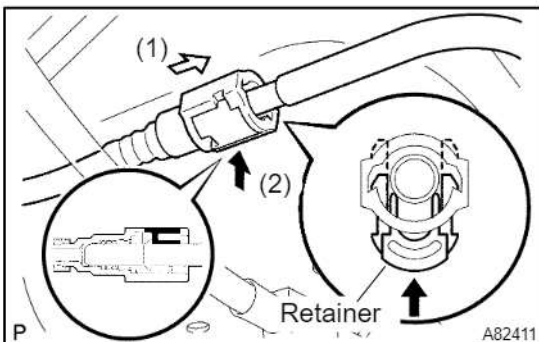
- (h) Connect the fuel tank breather tube No. 3.
 (1) Push the quick connector to the pipe until it makes "click" sound.

NOTICE:

- Check if there is any damage or foreign objects on the connected part.
- After connecting, check if the quick connector and the pipe are securely connected by trying to pull them apart.

- (2) Return the connector checker to its original position.

- (i) Connect the fuel tank vent hose.



- (j) Connect the fuel pump tube.
 (1) Push the quick connector in the direction of the white arrow.

NOTICE:

- Check if there is any damage or foreign objects on the connected part.
 - After connecting, check if the quick connector and the pipe are securely connected by pulling on them.
- (2) Push up on the retainer until the claws lock.

31. INSTALL FUEL TANK PROTECTOR SUB-ASSY NO.1

- (a) Install the tank protector with the 6 nuts.

Torque: 5.5 N·m (56 kgf·cm, 49 in·lbf)

- (b) Install 3 new clips.

32. INSTALL FUEL TANK PROTECTOR NO.1

Torque: 5.5 N·m (56 kgf·cm, 49 in·lbf)

33. INSTALL FUEL TUBE PROTECTOR NO.1**34. INSTALL EXHAUST PIPE SUPPORT BRACKET NO.4 (4WD TYPE)**

Torque: 22 N·m (224 kgf·cm, 16 ft·lbf)

35. INSTALL FRONT FLOOR HEAT INSULATOR NO.3 (See page 12-11)**36. INSTALL EXHAUST PIPE ASSY CENTER (See page 15-2)****37. ADD FUEL****38. INSTALL FUEL SUCTION TUBE ASSY W/ PUMP & GAGE (See page 11-16)****39. CHECK FOR FUEL LEAKS (See page 11-4)****40. CHECK FOR EXHAUST GAS LEAKS****41. INSTALL REAR FLOOR SERVICE HOLE COVER (See page 11-16)****42. INSTALL REAR DOOR SCUFF PLATE LH****43. INSTALL REAR SEAT ASSY LH (See page 72-28)****44. INSTALL REAR SEAT ASSY RH (See page 72-35)****45. INSTALL REAR SEAT TRACK BRACKET COVER OUTER****46. INSTALL DECK BOARD SUB-ASSY****47. INSTALL PROPELLER W/CENTER BEARING SHAFT ASSY (4WD TYPE)**

(See page 30-12)

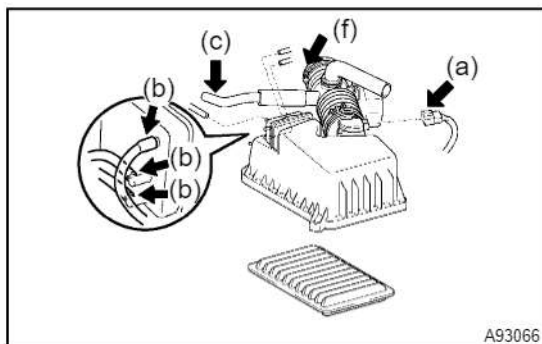
48. FULLY TIGHTEN PROPELLER W/CENTER BEARING SHAFT ASSY (4WD TYPE)

(See page 30-12)

49. ADD TRANSFER OIL (4WD TYPE) (See page 31-4)**50. INSPECT TRANSFER OIL (4WD TYPE) (See page 31-4)**

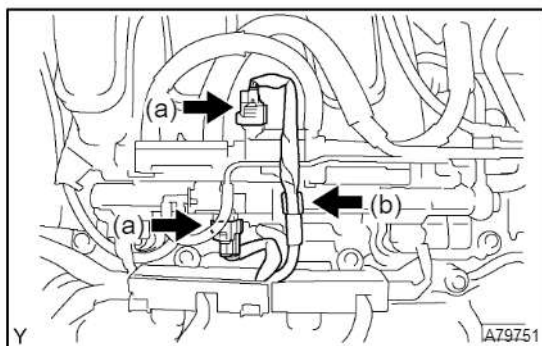
REPLACEMENT

1. DISCHARGE FUEL SYSTEM PRESSURE (See page 11-35)
2. DRAIN ENGINE COOLANT (See page 16-26)
3. REMOVE FRONT SUSPENSION BRACE SUB-ASSY UPPER CENTER (w/ Performance Rod)
 - (a) Remove the 2 nuts and upper brace.
4. REMOVE V-BANK COVER SUB-ASSY (See page 14-149)



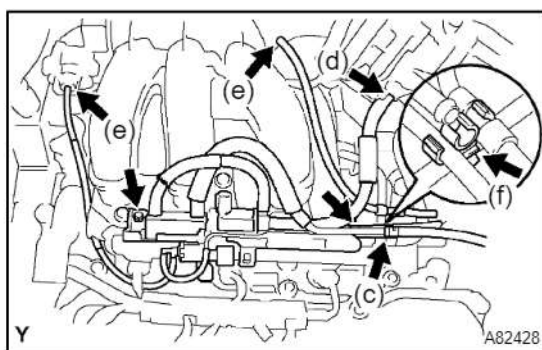
5. REMOVE AIR CLEANER CAP SUB-ASSY

- (a) Disconnect the MAF meter connector.
- (b) Disconnect the 3 vacuum hoses.
- (c) Disconnect the ventilation hose No. 2.
- (d) Loosen the air cleaner hose clamp bolt, and remove the air cleaner cap.
- (e) Remove the air cleaner filter element.

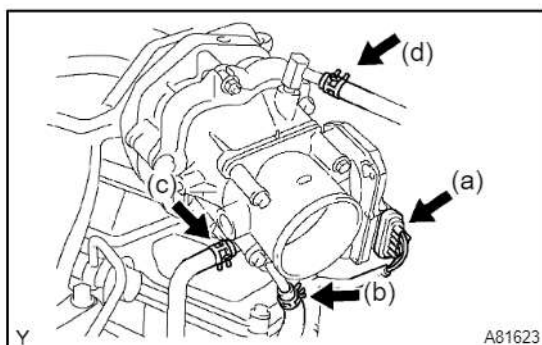


6. REMOVE EMISSION CONTROL VALVE SET

- (a) Disconnect the 2 VSV connectors.
- (b) Remove the wire harness clamp.

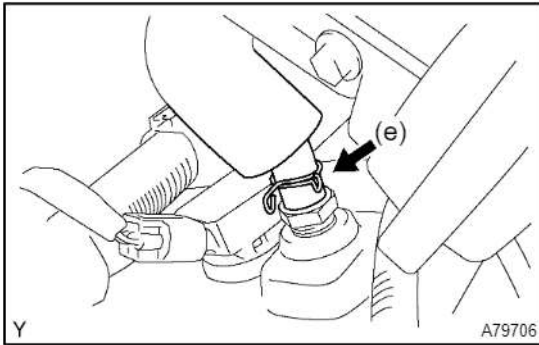


- (c) Disconnect the fuel vapor feed hose No. 1.
- (d) Disconnect the fuel vapor feed hose No. 2.
- (e) Disconnect the 2 vacuum hoses.
- (f) Remove the clamp.
- (g) Remove the 2 nuts and the emission control valve set.

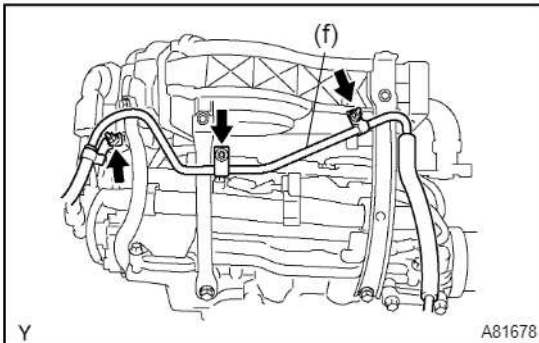


7. REMOVE INTAKE AIR SURGE TANK

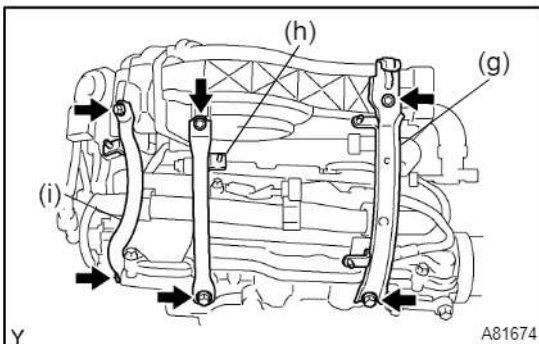
- (a) Disconnect the throttle motor connector.
- (b) Disconnect the water by-pass hose No. 3.
- (c) Disconnect the water by-pass hose No. 2.
- (d) Disconnect the union to check valve hose.



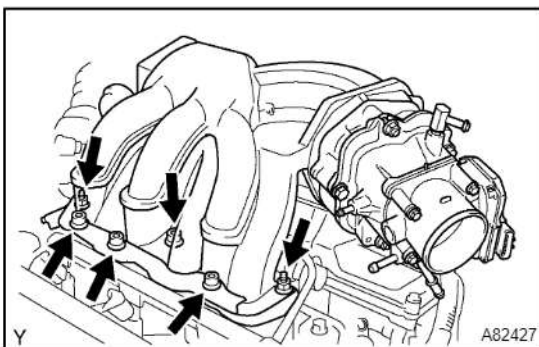
- (e) Disconnect the ventilation hose.



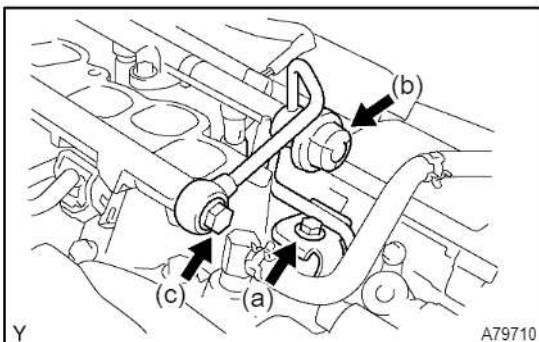
- (f) Remove the 3 nuts and separate the pressure feed tube.



- (g) Remove the 2 bolts and engine hanger No. 1.
 (h) Remove the 2 bolts and surge tank stay No. 1.
 (i) Remove the 2 bolts and surge tank stay No. 2.

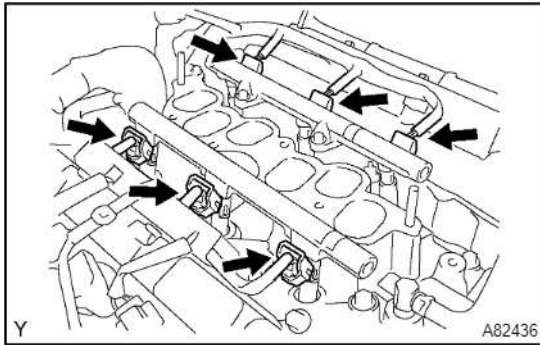


- (j) Using a socket hexagon wrench 8, remove the 4 bolts.
 (k) Remove the 2 nuts, emission control valve bracket and intake air surge tank.
 (l) Remove the gasket from the intake air surge tank.



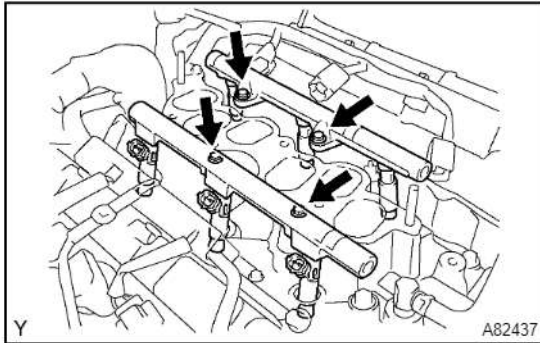
8. SEPARATE FUEL PIPE SUB-ASSY NO.1

- (a) Remove the bolt and disconnect the fuel pipe No. 1.
 (b) Remove the fuel pressure pulsation damper and 2 gaskets.
 (c) Remove the fuel pipe No. 2 union bolt and 2 gaskets.



9. REMOVE FUEL INJECTOR ASSY

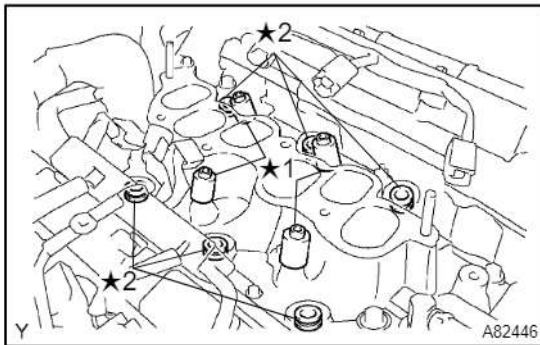
- (a) Disconnect the 6 fuel injector connectors.



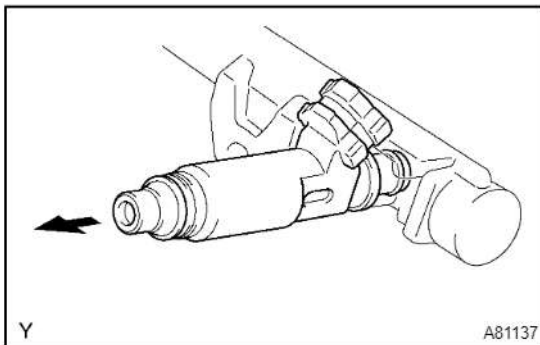
- (b) Remove the 4 bolts and 2 fuel delivery pipes together with the 6 fuel injectors.

NOTICE:

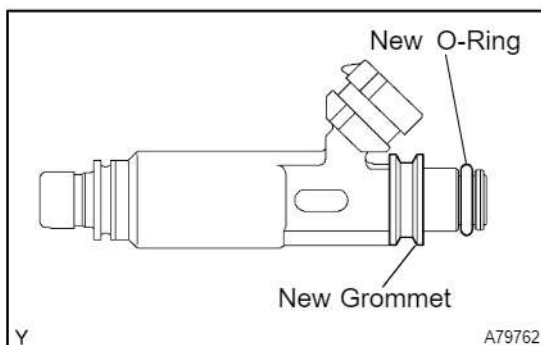
Be careful not to drop the fuel injectors when removing the fuel delivery pipe.



- (c) Remove the 4 delivery pipe No. 1 spacers (★1) and 6 insulators (★2) from the intake manifold.

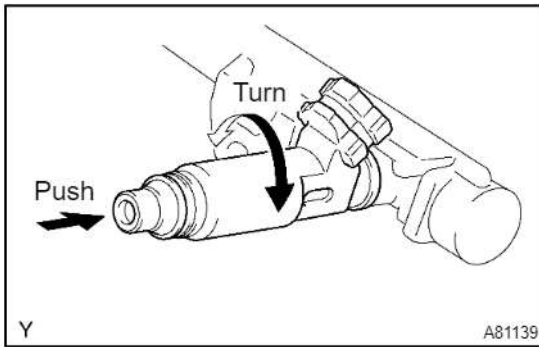


- (d) Pull out the fuel injector from the fuel delivery pipe.



10. INSTALL FUEL INJECTOR ASSY

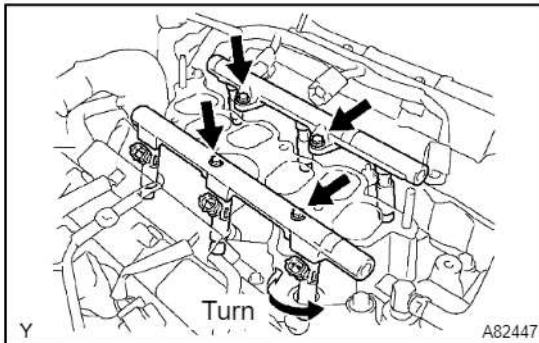
- (a) Install a new grommet to each injector.
 (b) Apply a light coat of grease or gasoline to a new O-ring, and install it to each injector.



- (c) Apply a light coat of grease or gasoline on the place where the fuel delivery pipe contacts the O-ring.
- (d) Push the fuel injector while twisting it back and forth to install it in the fuel delivery pipe.

NOTICE:

- Be careful not to twist the O-ring.
- After installing the fuel injector, check that it turns smoothly. If not, reinstall it with a new O-ring.



- (e) Install 6 new insulators and the 4 delivery pipe No. 1 spacers to the intake manifold.
- (f) Place the 2 fuel delivery pipes and 6 fuel injectors together on the intake manifold.

NOTICE:

Be careful not to drop the fuel injectors when installing the fuel delivery pipe.

- (g) Temporarily install the 4 bolts which are used to attach the fuel delivery pipe to the intake manifold.

NOTICE:

After installing the fuel injector, check that it turns smoothly. If not, reinstall it with a new O-ring.

- (h) Tighten the 4 bolts.

Torque: 10 N·m (102 kgf·cm, 7 ft·lbf)

- (i) Connect the 6 fuel injector connectors.

11. INSTALL FUEL PIPE SUB-ASSY NO.1

- (a) Install 2 new gaskets and the fuel pipe No. 2 union bolt.
Torque: 33 N·m (337 kgf·cm, 24 ft·lbf)
- (b) Install 2 new gaskets and the fuel pressure pulsation damper.
Torque: 33 N·m (337 kgf·cm, 24 ft·lbf)
- (c) Install the fuel pipe No. 1 with the bolt.
Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)

12. INSTALL INTAKE AIR SURGE TANK

- (a) Install a new gasket to the intake air surge tank.
- (b) Install the intake air surge tank and emission control valve bracket with the 2 nuts.
Torque: 28 N·m (286 kgf·cm, 21 ft·lbf)
- (c) Using a socket hexagon wrench 8, tighten the 4 bolts.
Torque: 28 N·m (286 kgf·cm, 21 ft·lbf)
- (d) Install the surge tank stay No. 2 with the 2 bolts.
Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)
- (e) Install the surge tank stay No. 1 with the 2 bolts.
Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)
- (f) Install the engine hanger No. 1 with the 2 bolts.
Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)
- (g) Install the pressure feed tube with the 3 nuts.
Torque: 7.8 N·m (80 kgf·cm, 69 in·lbf)
- (h) Connect the ventilation hose.
- (i) Connect the union to check valve hose.
- (j) Connect the water bypass hose No. 2.
- (k) Connect the water bypass hose No. 3.

(l) Connect the throttle motor connector.

13. INSTALL EMISSION CONTROL VALVE SET

Torque: 8.0 N·m (82 kgf·cm, 71 in·lbf)

14. INSTALL AIR CLEANER CAP SUB-ASSY

15. CHECK CONNECTION OF VACUUM HOSE (See page 14-149)

16. ADD ENGINE COOLANT (See page 16-26)

17. CHECK FOR ENGINE COOLANT LEAKS (See page 16-20)

18. CHECK FOR FUEL LEAKS (See page 11-38)

19. INSTALL V-BANK COVER SUB-ASSY (See page 14-149)

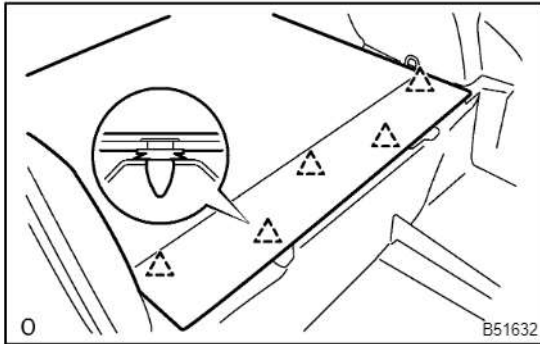
20. INSTALL FRONT SUSPENSION BRACE SUB-ASSY UPPER CENTER (w/ Performance Rod)

(a) Install the upper brace with the 2 nuts.

Torque: 80 N·m (815 kgf·cm, 59 ft·lbf)

REPLACEMENT

1. DISCHARGE FUEL SYSTEM PRESSURE (See page 11-35)



2. REMOVE DECK BOARD SUB-ASSY

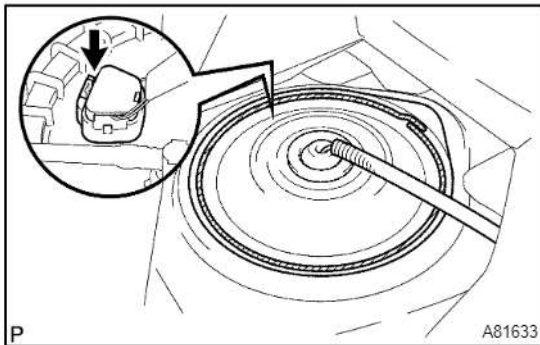
- (a) Disengage the 5 clips and turn up the front side of the deck board.

3. REMOVE REAR SEAT TRACK BRACKET COVER OUTER

4. REMOVE REAR SEAT ASSY RH (See page 72-35)

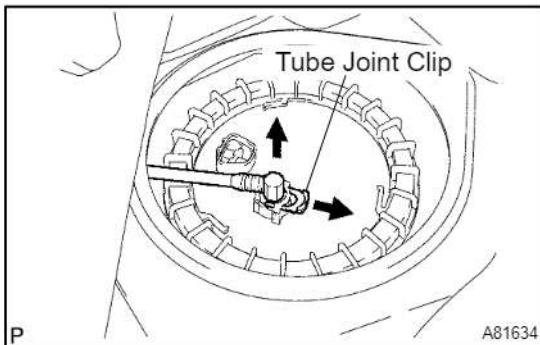
5. REMOVE REAR SEAT ASSY LH (See page 72-28)

6. REMOVE REAR DOOR SCUFF PLATE LH



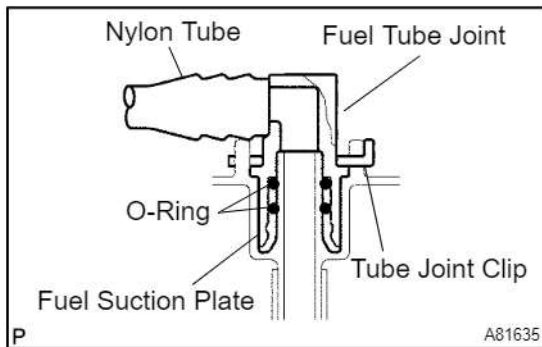
7. REMOVE REAR FLOOR SERVICE HOLE COVER

- (a) Remove the rear floor service hole cover.
(b) Disconnect the fuel pump & sender gauge connector.

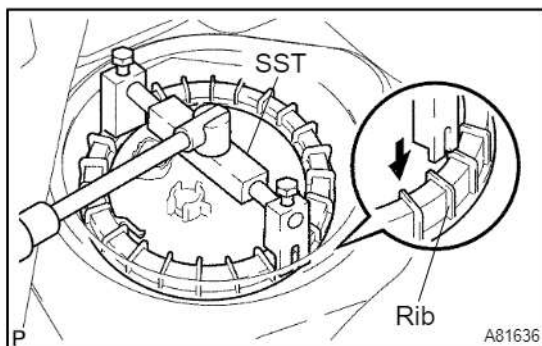


8. REMOVE FUEL SUCTION TUBE ASSY W/ PUMP & GAGE

- (a) Disconnect the fuel pump tube.
(1) Remove the tube joint clip, and pull out the fuel pump tube.

**NOTICE:**

- Before this operation, check the connector for dirt, mud or other contamination. Clean if necessary.
- Be careful of mud. The connector's O-ring, which seals the pipe and connector, becomes contaminated easily.
- Do not use any tool in this operation.
- Do not bend or twist the nylon tube. Protect the connector by covering it with a vinyl or plastic bag.
- When the pipe and connector are stuck, push and pull the connector to release it. Then pull the connector from the pipe.



- (b) Using SST, loosen the fuel pump gage retainer.

SST 09808-14020 (09808-01410, 09808-01420, 09808-01430)

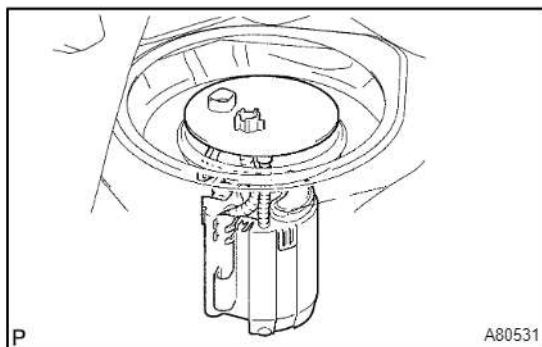
NOTICE:

Loosen the retainer by turning it counterclockwise while holding the SST down. Do not allow the claw of the tank suction tube support to slip out of its groove on the fuel tank.

HINT:

A rib on the fuel pump gage retainer can be fitted into a tip of the SST.

- (c) Remove the fuel pump gage retainer.

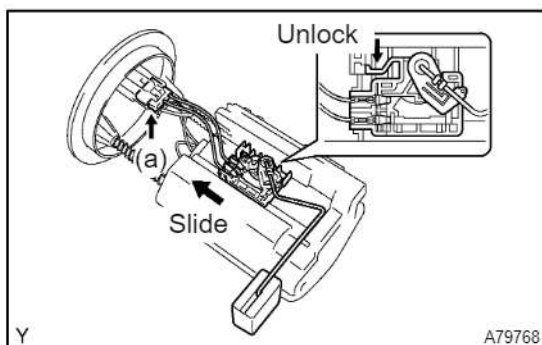


- (d) Remove the fuel suction tube.

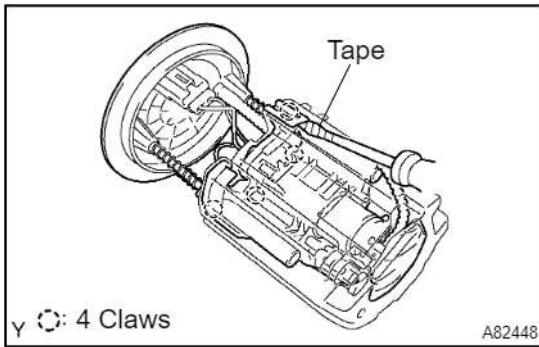
NOTICE:

Be careful not to bend the arm of the fuel sender gage.

- (e) Remove the gasket from the fuel tank.

**9. REMOVE FUEL SENDER GAGE ASSY**

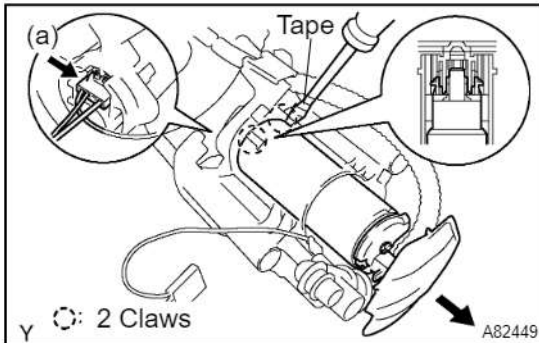
- Disconnect the fuel sender gage connector.
- Unlock the fuel sender gage and slide it to remove.

**10. REMOVE FUEL SUCTION PLATE SUB-ASSY**

- (a) Using a screwdriver with the its wrapped in tape, disconnect the 4 snap-claws from the claw holes and remove the fuel suction plate.

NOTICE:

Do not damage the fuel suction plate and fuel suction support No. 1.

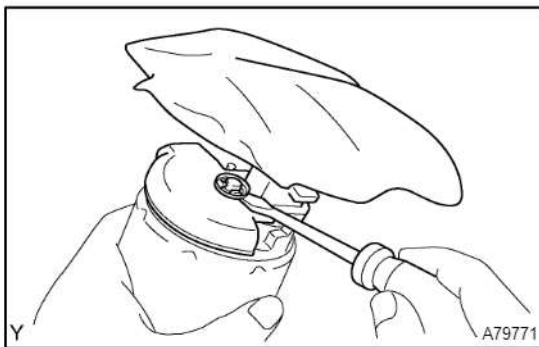
**11. REMOVE FUEL PUMP ASSY**

- (a) Disconnect the fuel pump connector.
(b) Using a small screwdriver with the its wrapped in tape, disconnect the 2 snap-claws from the claw holes and pull out the fuel pump.

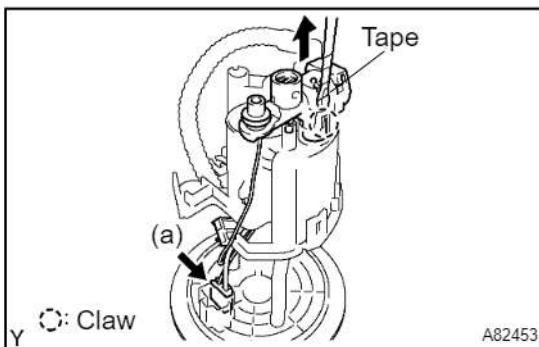
NOTICE:

Do not damage the fuel pump and fuel suction plate.

- (c) Remove the O-ring and fuel pump spacer from the fuel pump.

**12. REMOVE FUEL PUMP FILTER**

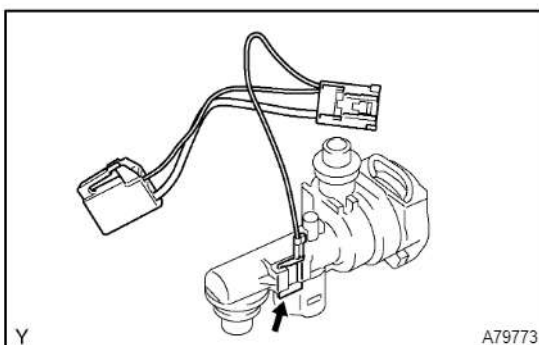
- (a) Using a small screwdriver, pry out the clip.
(b) Remove the fuel filter from the fuel pump.

**13. REMOVE FUEL TUBE JOINT NO.1**

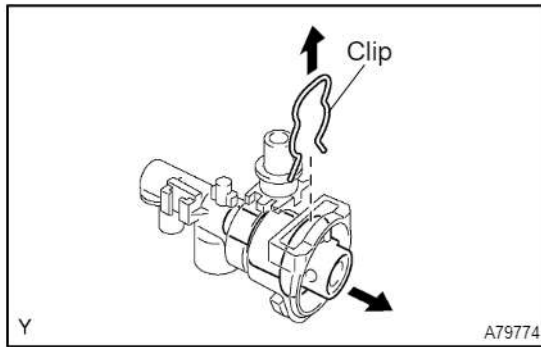
- (a) Disconnect the connector.
(b) Using a screwdriver with the its wrapped in tape, disconnect the snap-claw from the claw hole and pull out the fuel tube joint.

NOTICE:

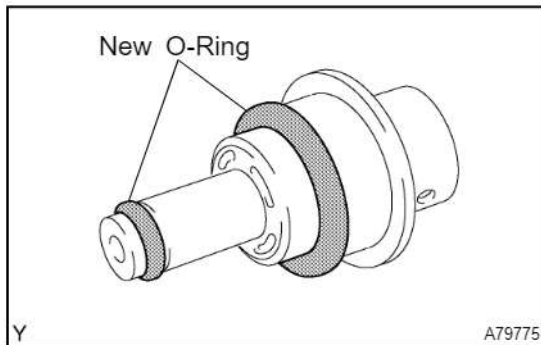
Do not damage the fuel tube joint and fuel suction plate.

**14. REMOVE FUEL PUMP HARNESS**

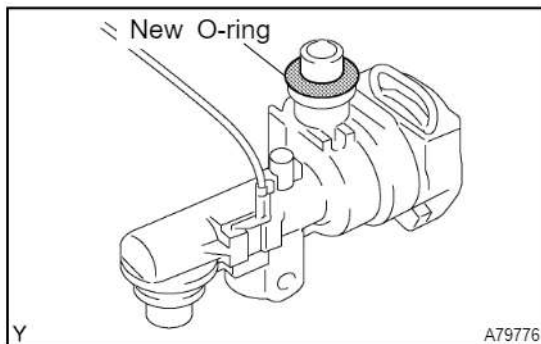
- (a) Remove the harness from the fuel tube joint No. 1.

**15. REMOVE FUEL PRESSURE REGULATOR ASSY**

- Remove the clip.
- Pull out the pressure regulator from the fuel tube joint No. 1.
- Remove the 2 O-rings from the fuel tube joint No. 1.

**16. INSTALL FUEL PRESSURE REGULATOR ASSY**

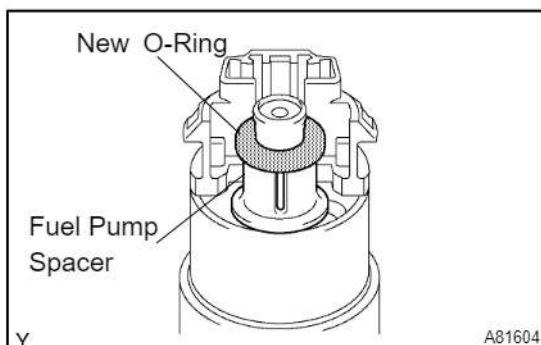
- Apply a light coat of gasoline or spindle oil to the 2 new O-rings, and install them to the fuel pressure regulator.
- Apply a light coat of gasoline or spindle oil to the 2 O-rings again, and install the fuel pressure regulator to the fuel tube joint No. 1.
- Install the clip.

17. INSTALL FUEL PUMP HARNESS**18. INSTALL FUEL TUBE JOINT NO.1**

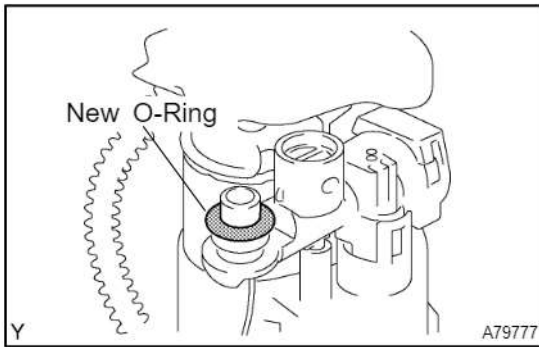
- Apply a light coat of gasoline or spindle oil to a new O-ring, and install it to the fuel tube joint No. 1.
- Apply a light coat of gasoline or spindle oil to the O-ring again, and install the fuel tube joint No. 1 to the fuel suction plate.
- Connect the connector.

19. INSTALL FUEL PUMP FILTER

- Install the fuel filter with a new clip.

**20. INSTALL FUEL PUMP ASSY**

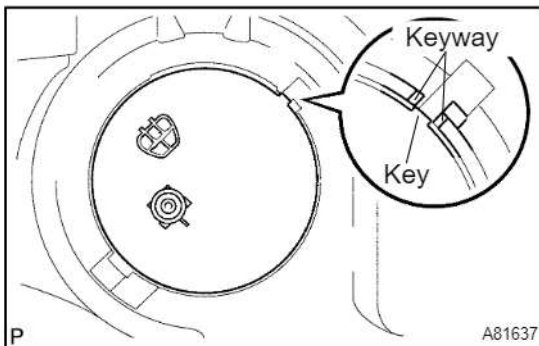
- Install the fuel pump spacer to the fuel pump.
- Apply a light coat of gasoline or spindle oil to a new O-ring, and install it to the fuel pump.
- Apply a light coat of gasoline or spindle oil to the O-ring again, and install the fuel pump to the fuel suction plate.
- Connect the fuel pump connector.



21. INSTALL FUEL SUCTION PLATE SUB-ASSY

- Apply a light coat of gasoline or spindle oil to a new O-ring, and install it to the fuel tube joint No. 1.
- Apply a light coat of gasoline or spindle oil to the O-ring again, and install the fuel suction plate to the fuel suction support No. 1.

22. INSTALL FUEL SENDER GAGE ASSY



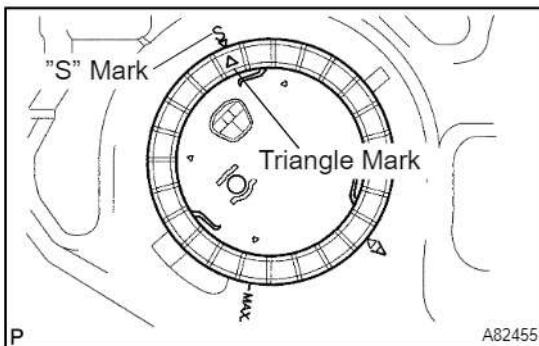
23. INSTALL FUEL SUCTION TUBE ASSY W/ PUMP & GAGE

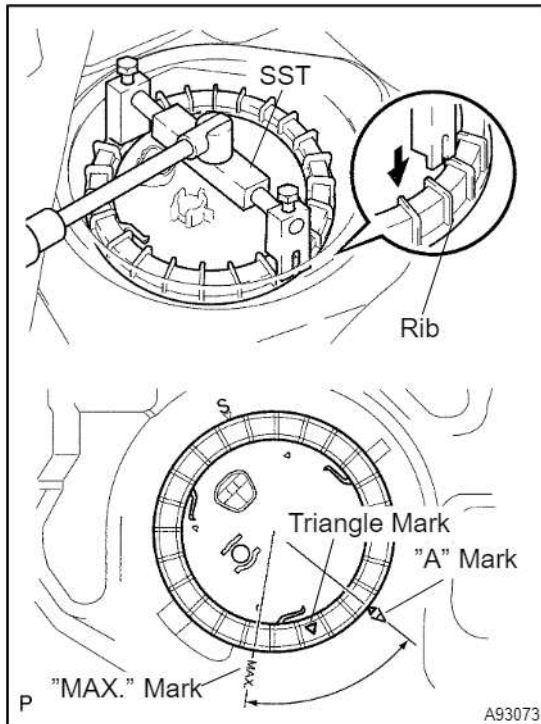
- Install a new gasket to the fuel tank.
- Attach the fuel suction tube to the fuel tank.

NOTICE:

Be careful not to bend the arm of the fuel sender gage.

- Align the keyway of the fuel suction tube support with the key of the fuel suction tube.
- Apply MP grease to the entire interior surface of the fuel pump gage retainer.
- Align the triangle mark on new fuel pump gauge retainer with the "S" mark on the fuel tank while pushing down the fuel suction tube, attach the fuel pump gauge retainer.





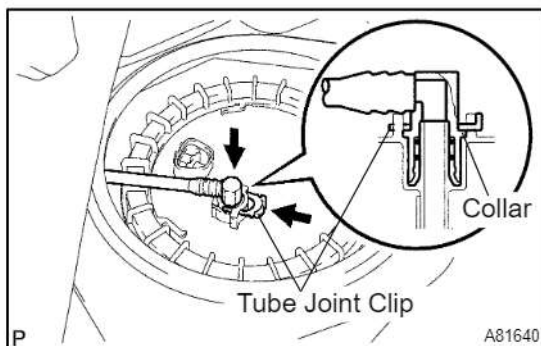
- (f) Rotate the fuel pump gage retainer by hand, then tighten it one complete turn and half using SST. Triangle mark on the fuel pump gage retainer must be positioned between "A" and "MAX." indications on the fuel tank.

NOTICE:

Do not use other tools in this operation. Damage to the fuel pump gage retainer and the fuel tank may result.

HINT:

A rib on the fuel pump gage retainer can be fitted into a tip of the SST.

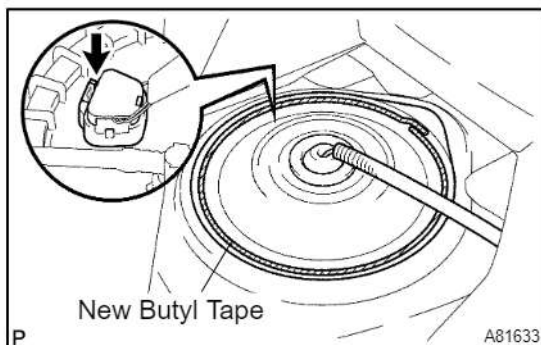


- (g) Connect the fuel pump tube.
(1) Install the fuel pump tube and the tube joint clip.

NOTICE:

- Check that there are no scratches or foreign objects on the connecting part.
- Check that the fuel tube joint is inserted securely.
- Check that the tube joint clip is on the collar of the fuel tube joint.
- After installing the tube joint clip, check that the fuel tube joint has not been pulled off.

24. CHECK FOR FUEL LEAKS (See page 11-38)



25. INSTALL REAR FLOOR SERVICE HOLE COVER

- Install a new butyl tape to the rear floor service hole cover.
- Connect the fuel pump & sender gage connector.
- Install the rear floor service hole cover.

26. INSTALL REAR DOOR SCUFF PLATE LH

27. INSTALL REAR SEAT ASSY LH (See page 72-28)

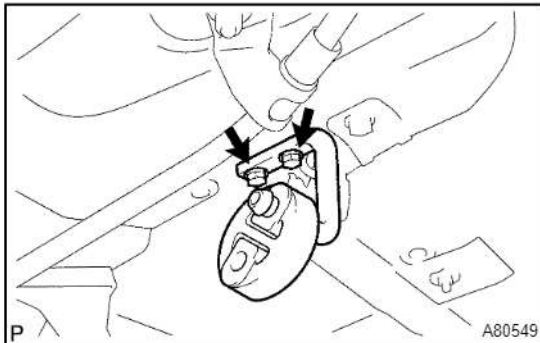
28. INSTALL REAR SEAT ASSY RH (See page 72-35)

29. INSTALL REAR SEAT TRACK BRACKET COVER OUTER

30. INSTALL DECK BOARD SUB-ASSY

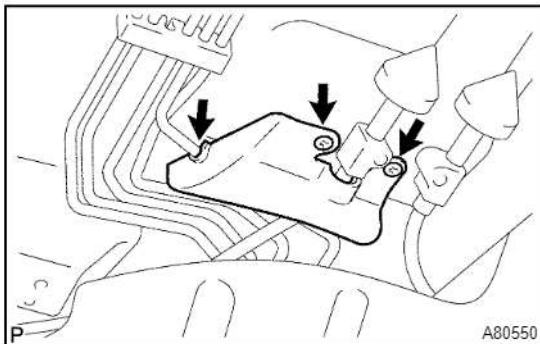
REPLACEMENT

1. DISCHARGE FUEL SYSTEM PRESSURE (See page 11-35)
2. REMOVE DECK BOARD SUB-ASSY
3. REMOVE REAR SEAT TRACK BRACKET COVER OUTER
4. REMOVE REAR SEAT ASSY RH (See page 72-35)
5. REMOVE REAR SEAT ASSY LH (See page 72-28)
6. REMOVE REAR DOOR SCUFF PLATE LH
7. REMOVE REAR FLOOR SERVICE HOLE COVER (See page 11-55)
8. REMOVE FUEL SUCTION TUBE ASSY W/ PUMP & GAGE (See page 11-55)
9. DRAIN FUEL
10. REMOVE PROPELLER W/CENTER BEARING SHAFT ASSY (4WD TYPE)
(See page 30-4)
11. REMOVE EXHAUST PIPE ASSY CENTER (See page 15-5)
12. REMOVE FRONT FLOOR HEAT INSULATOR NO.3 (See page 12-28)



13. REMOVE EXHAUST PIPE SUPPORT BRACKET NO.4 (4WD TYPE)

(a) Remove the 2 bolts and support bracket.



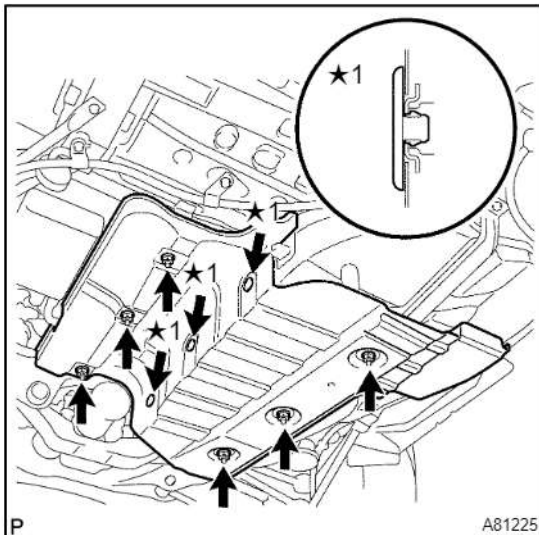
14. REMOVE FUEL TUBE PROTECTOR NO.1

(a) Remove the 2 clips and unfasten the claw, and remove the tube protector.

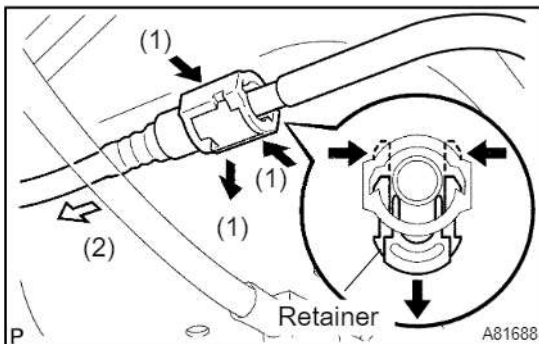


15. REMOVE FUEL TANK PROTECTOR NO.1

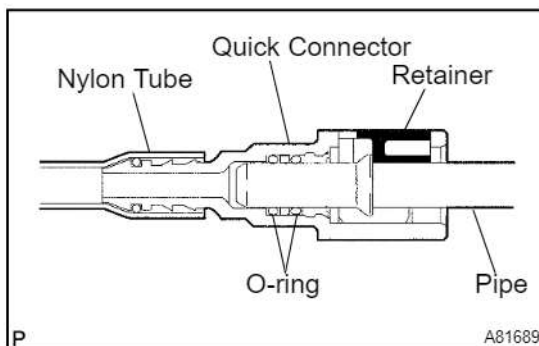
(a) Remove the 4 nuts and fuel tank protector.

**16. REMOVE FUEL TANK PROTECTOR SUB-ASSY NO.1**

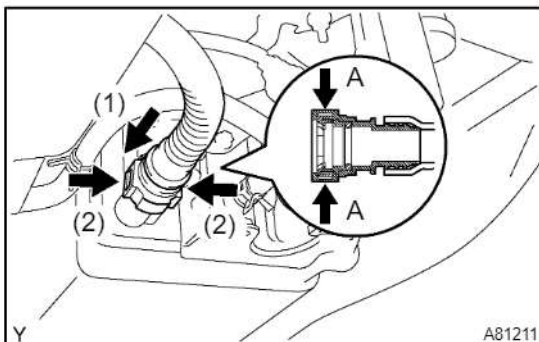
- (a) Remove the 3 clips (★1), 6 nuts and tank protector.

**17. REMOVE FUEL TANK ASSY**

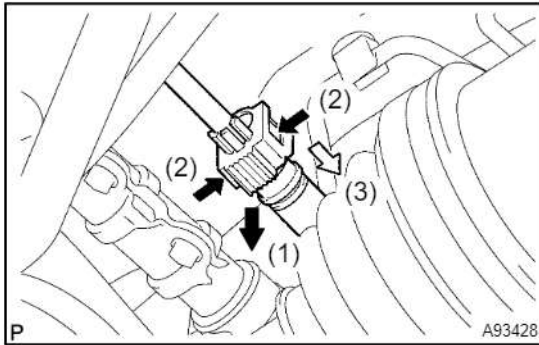
- (a) Disconnect the fuel pump tube.
- (1) Pinch the projection of the retainer to remove the lock claws and pull down it as shown in the illustration.
 - (2) Pull out the fuel pump tube.

**NOTICE:**

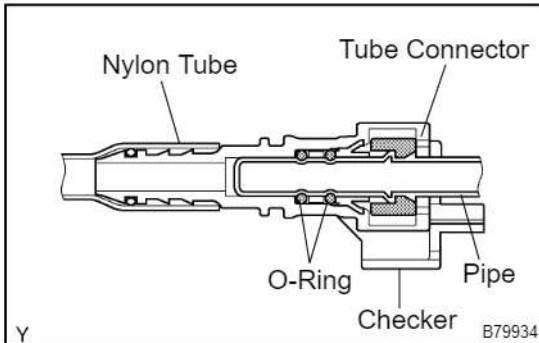
- Before this operation, check the connector for dirt, mud or other contamination. Clean if necessary.
- Be careful of mud. The connector's O-ring, which seals the pipe and connector, becomes contaminated easily.
- Do not use any tool in this operation.
- Do not bend or twist the nylon tube. Protect the connector by covering it with a vinyl or plastic bag.
- When the pipe and connector are stuck, push and pull the connector to release it. Then pull out the connector from the pipe.



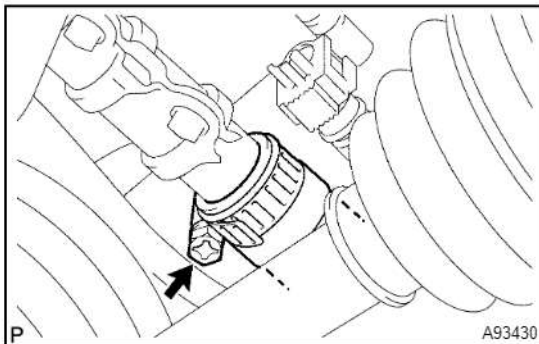
- (b) Disconnect the fuel tank vent hose.
- (1) Push the connector deep into the charcoal canister to release the locking tab.
 - (2) Pinch portion A.
 - (3) Pull out the connector.



- (c) Disconnect the fuel tank breather tube No.3.
- (1) Lower the connector checker slightly.
 - (2) Pinch the tube connector.
 - (3) Pull out the breather tube.

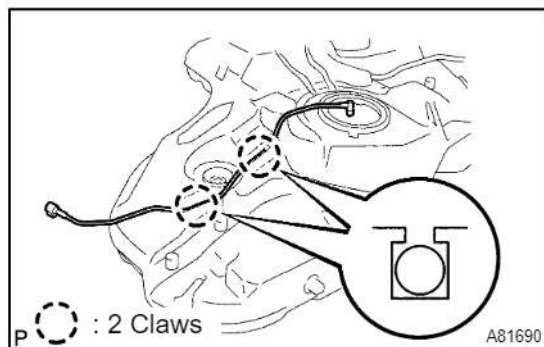
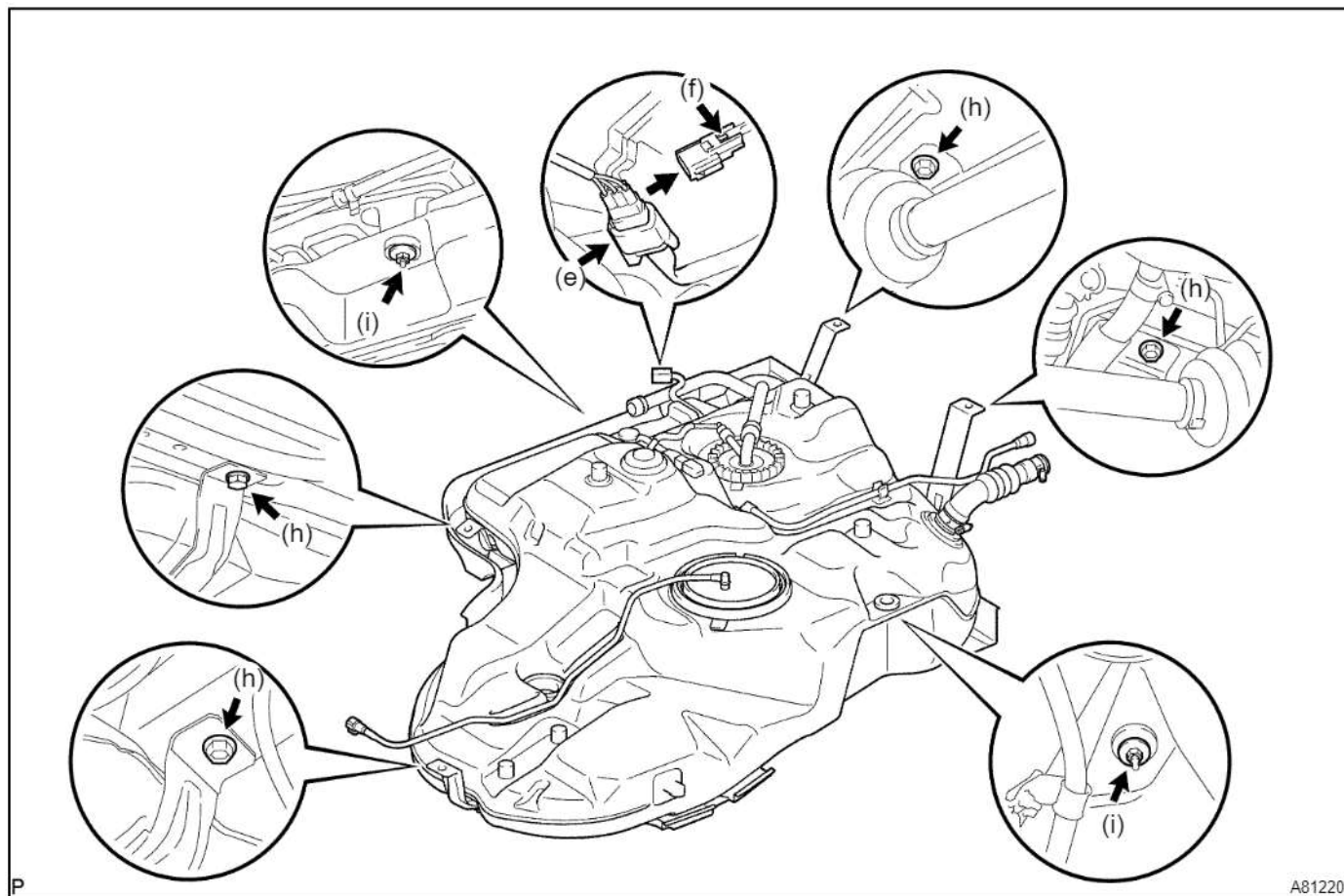
**NOTICE:**

- Before this operation, check the connector for dirt, mud or other contamination. Clean if necessary.
- Be careful of mud. The connector's O-ring, which seals the pipe and connector, becomes contaminated easily.
- Do not use any tool in this operation.
- Do not bend or twist the nylon tube. Protect the connector by covering it with a vinyl or plastic bag.
- When the pipe and connector are stuck, push and pull the connector to release it. Then pull out the connector from the pipe.



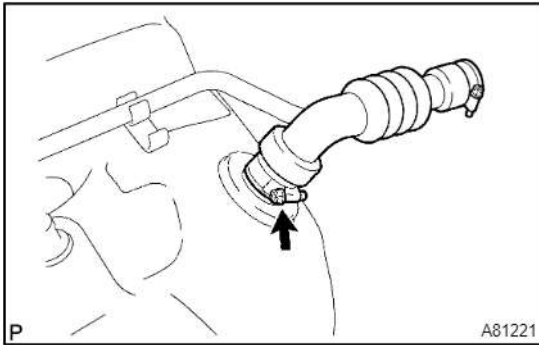
- (d) Loosen the hose clamp bolt and disconnect the fuel tank to filler pipe hose.

- (e) Disconnect the fuel tank wire connector.
- (f) Remove the connector clamp.
- (g) Set up a transmission jack under the fuel tank.
- (h) Remove the 4 bolts and 2 fuel tank bands.
- (i) Remove the 2 nuts.
- (j) Operate the transmission jack and remove the fuel tank.



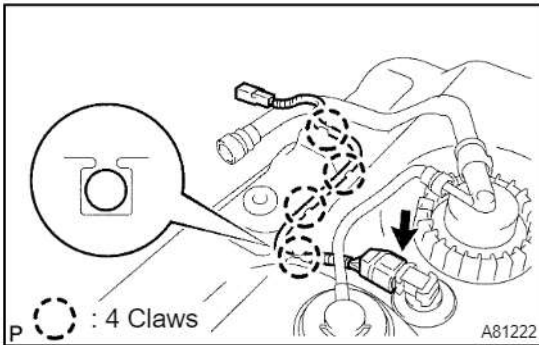
18. REMOVE FUEL PUMP TUBE SUB-ASSY

- (a) Unfasten the 2 claws and remove the tube.



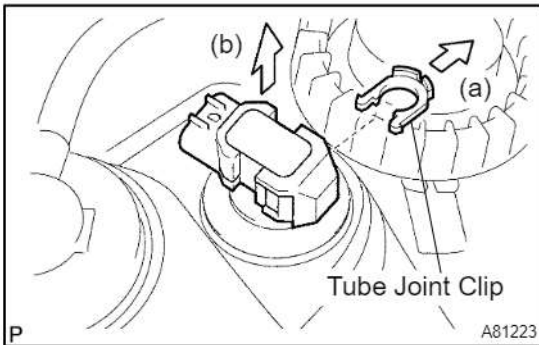
19. REMOVE FUEL TANK TO FILLER PIPE HOSE

- (a) Loosen the hose clamp bolt and remove the hose.



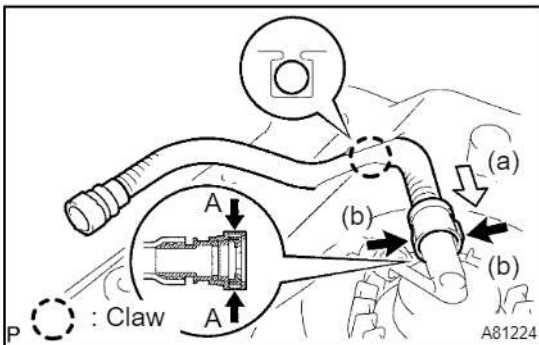
20. REMOVE FUEL TANK WIRE

- (a) Disconnect the vapor pressure sensor connector.
(b) Unfasten the 4 claws and remove the wire.



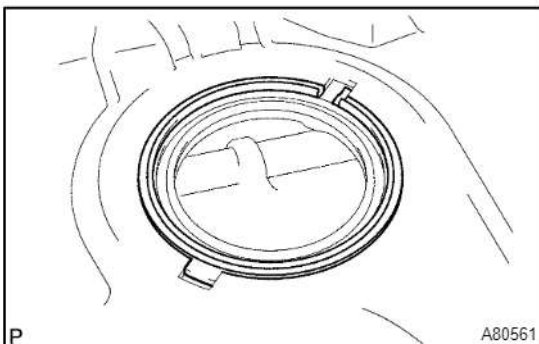
21. REMOVE VAPOR PRESSURE SENSOR ASSY

- (a) Remove the tube joint clip.
(b) Pull out the vapor pressure sensor.



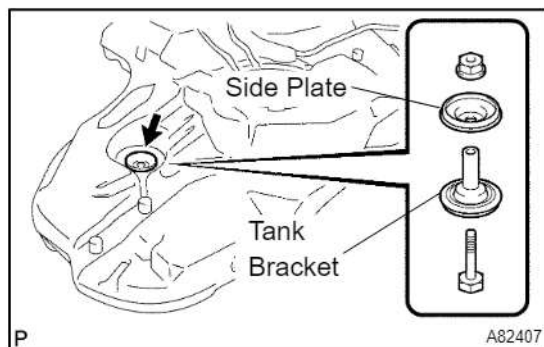
22. REMOVE FUEL TANK VENT HOSE

- (a) Push the connector deep into the charcoal canister to release the locking tab.
(b) Pinch portion A.
(c) Pull out the connector.
(d) Unfasten the claw and remove the vent hose.

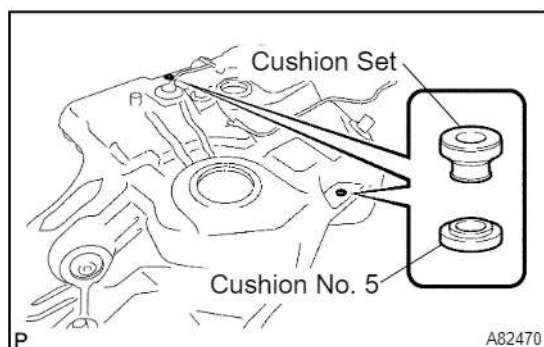


23. REMOVE TANK SUCTION TUBE SUPPORT

- (a) Remove the tube support from the fuel tank.

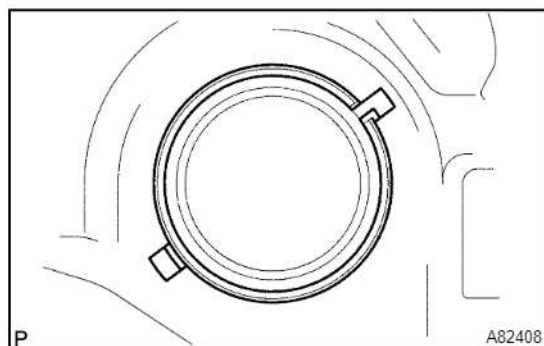
**24. REMOVE FUEL TANK SIDE PLATE**

- (a) Remove the bolt and nut, and then remove the fuel tank side plate and the fuel tank bracket.

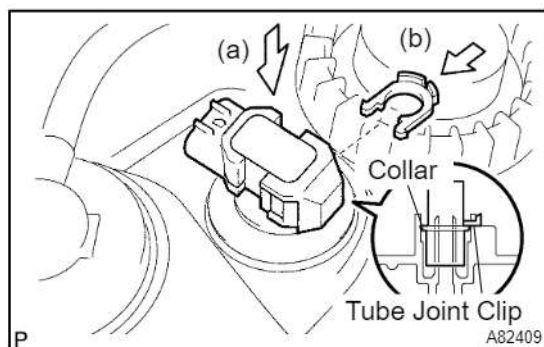
**25. REMOVE FUEL TANK CUSHION SET**

- (a) Remove the cushion set and cushion No. 5.

- 26. INSTALL FUEL TANK CUSHION SET**
27. INSTALL FUEL TANK SIDE PLATE
 Torque: 30 N·m (306 kgf·cm, 22 ft·lbf)

**28. INSTALL TANK SUCTION TUBE SUPPORT**

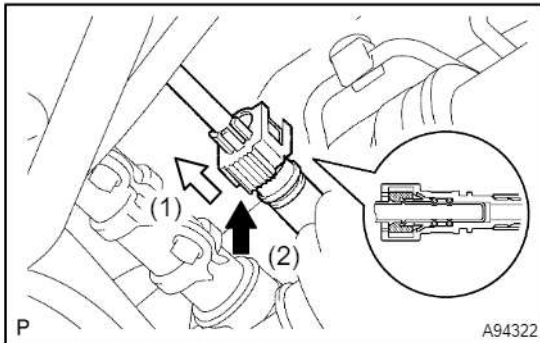
- (a) Install a new tube support as shown in the illustration.

29. INSTALL FUEL TANK VENT HOSE**30. INSTALL VAPOR PRESSURE SENSOR ASSY**

- (a) Push and hold down the vapor pressure sensor.
 (b) Install the fuel tube joint clip to the sensor.

NOTICE:

- Check that there are no scratches or foreign objects on the connecting parts.
- Check that the fuel tube joint is fully inserted.
- Check that the fuel tube joint clip is on the collar of the fuel tube joint.



- After installing the tube joint clip, check if the fuel joint is securely connected by trying to pull it.

31. INSTALL FUEL TANK WIRE

32. INSTALL FUEL TANK TO FILLER PIPE HOSE

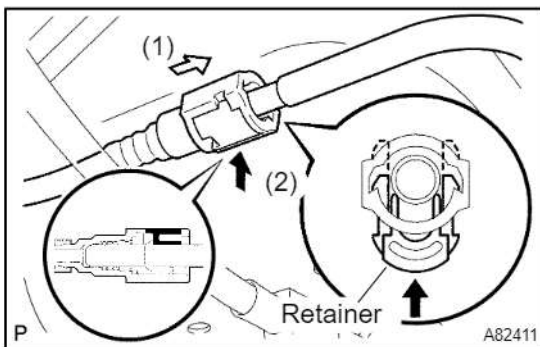
33. INSTALL FUEL PUMP TUBE SUB-ASSY

34. INSTALL FUEL TANK ASSY

- Set up the fuel tank to the transmission jack.
- Operate the transmission jack and install the fuel tank.
- Tighten the 2 nuts.
Torque: 20 N·m (200 kgf·cm, 14 ft·lbf)
- Install the 2 fuel tank bands with the 4 bolts.
Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)
- Install the connector clamp.
- Connect the fuel tank wire connector.
- Connect the fuel tank to filler pipe hose.
- Connect the fuel tank breather tube No. 3.
 - Push the quick connector to the pipe until it makes "click" sound.

NOTICE:

- Check if there is any damage or foreign objects on the connected part.
- After connecting, check if the quick connector and the pipe are securely connected by trying to pull them apart.
 - Return the connector checker to its original position.
- (i) Connect the fuel tank vent hose.



- Connect the fuel pump tube.
 - Push the quick connector in the direction of the white arrow.

NOTICE:

- Check if there is any damage or foreign objects on the connected part.
- After connecting, check if the quick connector and the pipe are securely connected by trying to pull them.
 - Push up on the retainer until the claws lock.

35. INSTALL FUEL TANK PROTECTOR SUB-ASSY NO.1

- Install the tank protector with the 6 nuts.
Torque: 5.5 N·m (56 kgf·cm, 49 in·lbf)

- Install 3 new clips.

36. INSTALL FUEL TANK PROTECTOR NO.1

Torque: 5.5 N·m (56 kgf·cm, 49 in·lbf)

37. INSTALL FUEL TUBE PROTECTOR NO.1

38. INSTALL EXHAUST PIPE SUPPORT BRACKET NO.4 (4WD TYPE)

Torque: 22 N·m (224 kgf·cm, 16 ft·lbf)

39. INSTALL FRONT FLOOR HEAT INSULATOR NO.3 (See page 12-28)

40. INSTALL EXHAUST PIPE ASSY CENTER (See page 15-5)
41. ADD FUEL
42. INSTALL FUEL SUCTION TUBE ASSY W/ PUMP & GAGE (See page 11-55)
43. CHECK FOR FUEL LEAKS (See page 11-38)
44. CHECK FOR EXHAUST GAS LEAKS
45. INSTALL REAR FLOOR SERVICE HOLE COVER (See page 11-55)
46. INSTALL REAR DOOR SCUFF PLATE LH
47. INSTALL REAR SEAT ASSY LH (See page 72-28)
48. INSTALL REAR SEAT ASSY RH (See page 72-35)
49. INSTALL REAR SEAT TRACK BRACKET COVER OUTER
50. INSTALL DECK BOARD SUB-ASSY
51. INSTALL PROPELLER W/CENTER BEARING SHAFT ASSY (4WD TYPE)
(See page 30-4)
52. FULLY TIGHTEN PROPELLER W/CENTER BEARING SHAFT ASSY (4WD TYPE)
(See page 30-4)
53. ADD TRANSFER OIL (4WD TYPE) (See page 31-4)
54. INSPECT TRANSFER OIL (4WD TYPE) (See page 31-4)