FUEL SYSTEM (2TR–FE)

1118N–01

PRECAUTION

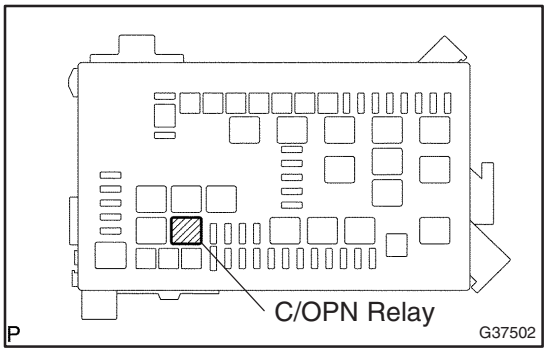
1. PRECAUTION

(a) Before inspecting and repairing the fuel system, disconnect the negative (–) battery cable.
(b) Do not smoke or work near fire when handling the fuel system.
(c) Keep gasoline away from rubber or leather parts.

2. 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 to prevent fuel splashing on yourself or in the engine compartment when separating the fittings.**



(a) Remove the circuit opening relay from the engine room relay block.
(b) Start the engine, then stop it.

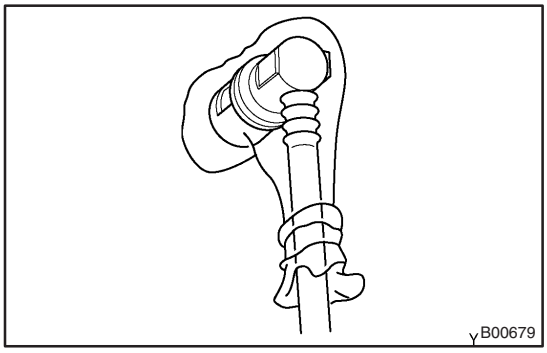
HINT:

DTC P0171 (system too lean) may be set.

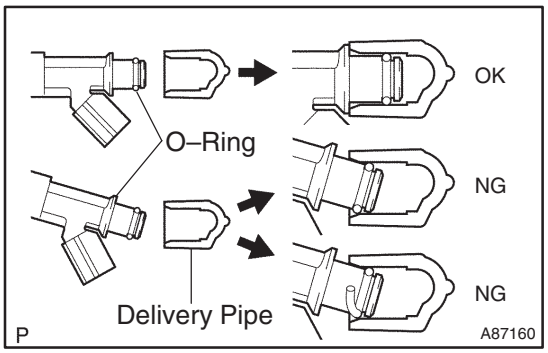
(c) Check that the engine does not start.
(d) Remove the fuel tank cap, and let the air out of the fuel tank.
(e) Disconnect the negative (–) battery cable.
(f) Reinstall the circuit opening relay.

3. FUEL SYSTEM

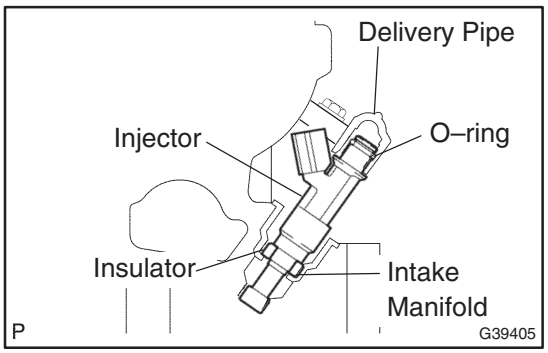
(a) When disconnecting the high fuel pressure line, a large amount of gasoline will spill out, so observe the following procedures.
    (1) Disconnect the fuel pump tube.
    (2) Drain the fuel that remained inside the fuel pump tube.



    (3) Cover the disconnected fuel pump tubes with a plastic bag to prevent damage and foreign objects from being introduced.
    (4) Place a tray under the vehicle or connecting part to catch any fuel that may spill.

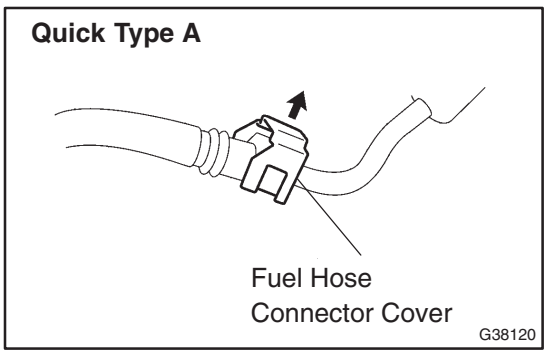


(b) Observe the following precautions when removing and installing fuel injectors.
(1) Never reuse the O–ring.
(2) When placing a new O–ring on the injector, do not damage the O–ring.
(3) Coat new O–rings with grease or gasoline before installing. Do not use engine oil, gear oil or brake fluid.

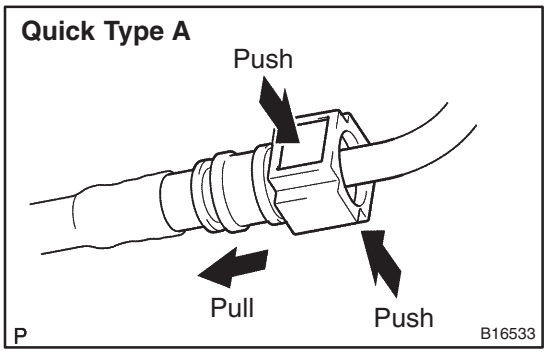


(c) Install the injector to the delivery pipe and lower intake manifold as shown in the illustration.

NOTICE:
Before installing the injector, be sure to apply grease or gasoline where the delivery pipe or cylinder head contacts an O–ring of the injector.

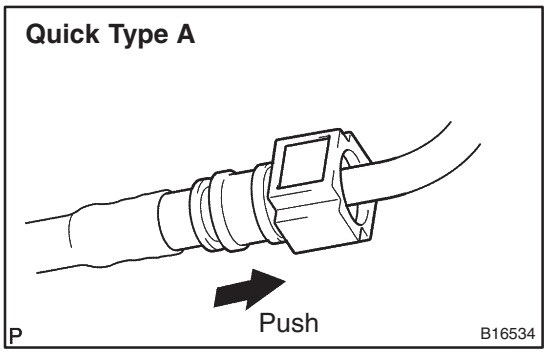


(d) Observe the following precautions when disconnecting the fuel tube connector (Quick type A):
(1) Pull the fuel hose connector cover up to release the lock.

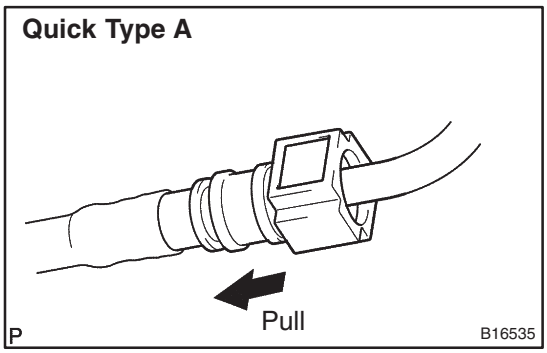


(2) Check that there is any dirt in the pipe and around the connector before disconnecting them and clean the dirt away.
(3) Be sure to disconnect them by hand.
(4) When the connector and the pipe are stuck, pinch the fuel pipe between the hands, and push and pull the connector. Disconnect and pull it out. Do not use any tool at this time.
(5) Check if there is any dirt or other foreign objects on the seal surface of the disconnected pipe and clean it away.
(6) Do not damage the disconnected pipe and connector, and prevent intrusion of foreign objects by covering them with a plastic bag.

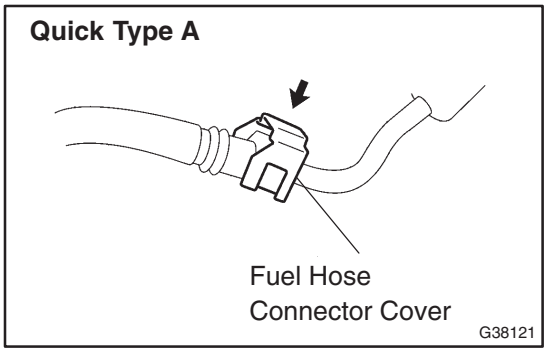
11



(e) Observe the following precautions when connecting the fuel tube connector (Quick Type A):
(1) Check that there is any damage or foreign objects in the connected part of the pipe.
(2) Match the axis of the connector with the axis of the pipe, and push into the connector until the connector makes a ”click” sound. In case that the connection is tight, apply a small amount of fresh engine oil to the tip of the pipe.



(3) After finishing the connection, check if the pipe and the connector are securely connected by pulling them.

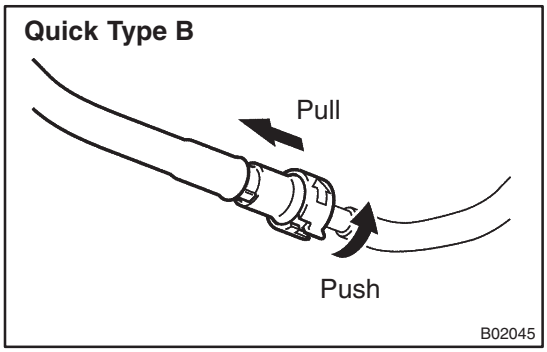


(4) Lock the fuel hose connector cover.

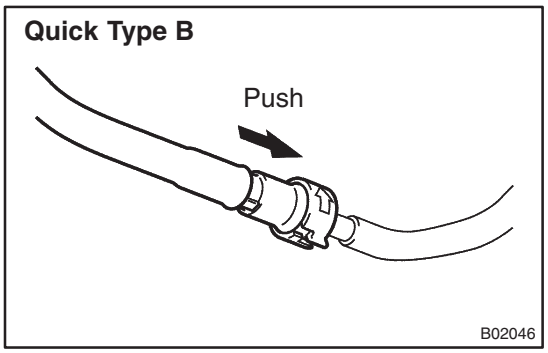
HINT:
If the fuel tube is not completely connected, the half connection prevention connector prevents the fuel hose connector cover from being locked.

(5) Check for fuel leaks.

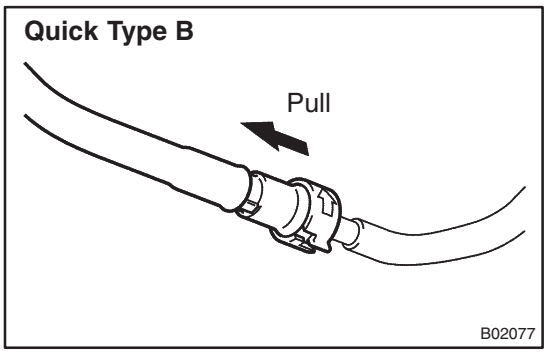
(f) Observe the following precautions when disconnecting the fuel tube connector (Quick type B):
(1) Check if there is any dirt on the pipe and around the connector before disconnecting them and clean the dirt away.
(2) Be sure to disconnect by hand.



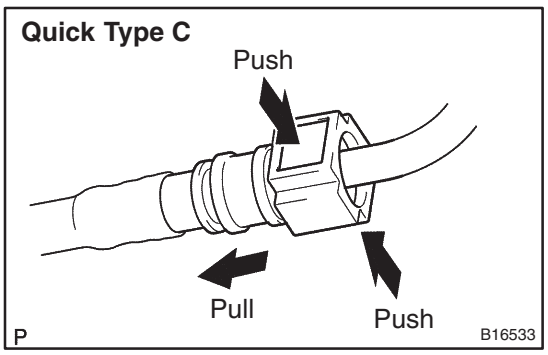
(3) When the connector and the pipe are stuck, push and pull the connector. Disconnect and pull it out. Do not use any tool at this time.
(4) Check if there is any dirt or other foreign objects on the seal surface of the disconnected pipe and clean it away.
(5) Do not damage the disconnected pipe and connector, and prevent intrusion of foreign objects by covering them with a plastic bag.



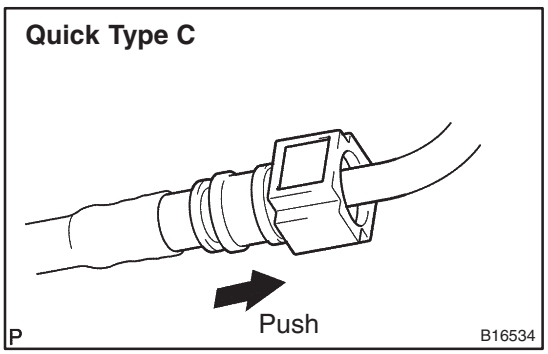
(g) Observe the following precautions when connecting the fuel tube connector (quick type B):
(1) Match the axis of the connector with axis of the pipe, and push in the connector until the connector makes a ”click” sound. In case that the connections is tight, apply a small amount of new engine oil to the tip of the pipe.
(2) After finishing the connection, check if the pipe and the connector are securely connected by pulling them.
(3) Check for fuel leaks.



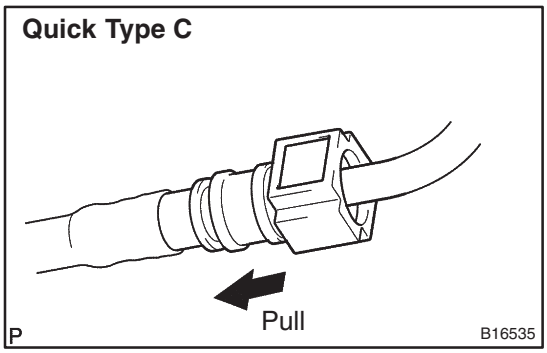
(h) Observe the following precautions when disconnecting the fuel tube connector (Quick type C):



(1) Check that there is any dirt in the pipe and around the connector before disconnecting them and clean the dirt away.
(2) Be sure to disconnect them by hand.
(3) When the connector and the pipe are stuck, pinch the fuel pipe between the hands, and push and pull the connector. Disconnect and pull it out. Do not use any tool at this time.
(4) Check if there is any dirt or other foreign objects on the seal surface of the disconnected pipe and clean it away.
(5) Do not damage the disconnected pipe and connector, and prevent intrusion of foreign objects by covering them with a plastic bag.



(i) Observe the following precautions when connecting the fuel tube connector (Quick Type C):
(1) Check that there is any damage or foreign objects in the connected part of the pipe.
(2) Match the axis of the connector with the axis of the pipe, and push into the connector until the connector makes a ”click” sound. In case that the connection is tight, apply a small amount of fresh engine oil to the tip of the pipe.



(3) After finishing the connection, check if the pipe and the connector are securely connected by pulling them.
(4) Check for fuel leaks.

4. CHECK FUEL LEAK

(a) Check that there are no fuel leaks anywhere on the fuel system after doing maintenance.
(See page 11–6)