

FUEL SYSTEM (1GR-FE)

110OI-01

PRECAUTION

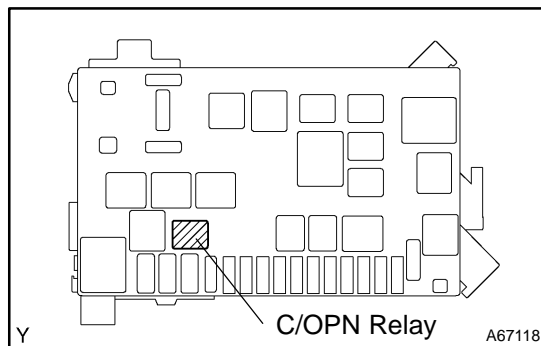
1. PRECAUTION

- Before starting on the work for the fuel system inspection and repair, disconnect the negative (-) terminal cable from the battery.
- Do not smoke or work near fire when handling the fuel system.
- Keep gasoline away from rubber or leather parts.

2. WORK FOR PREVENT GASOLINE FROM SPILLING OUT

CAUTION:

- Take precaution for preventing gasoline from spilling out before removing the fuel system parts.
- As there is the remained pressure in the fuel line after working for prevent gasoline from spilling out, prevent it from splashing inside the vehicle compartment by covering them with a shop rag.



- Remove the circuit opening relay from the engine room relay block.
- Start the engine. After the engine stopped, turn the ignition switch OFF.

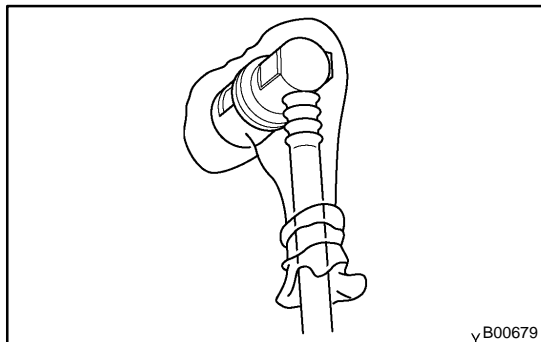
HINT:

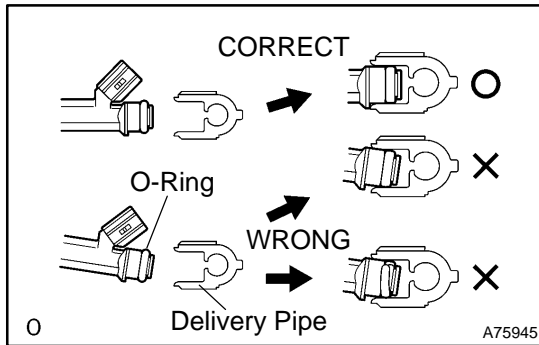
There is a case that DTC P0171 (system too lean) is output.

- Check that the engine does not start.
- Remove the fuel tank cap, and let the air out of the fuel tank.
- Disconnect the negative (-) terminal cable from the battery.
- Reinstall the circuit opening relay.

3. FUEL SYSTEM

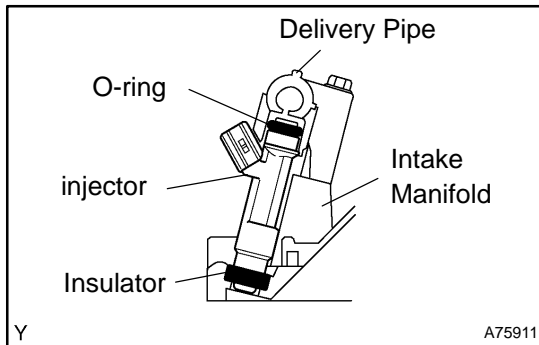
- When disconnecting the high fuel pressure line, a large amount of gasoline will spill out, so observe these procedures.
 - Disconnect the fuel pump tube.
(See page 11-20)
 - Drain the fuel remained inside the fuel pump tube.
 - In order to prevent the disconnected fuel pump tube from damaging and foreign objects being mixed into cover them with a vinyl bag.
 - Put a container under the connection.





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

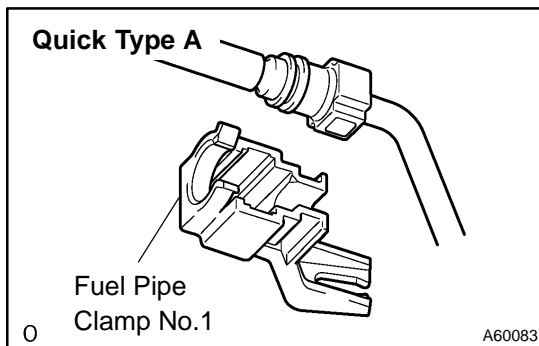
- (1) Never reuse the O-ring.
- (2) When placing the new O-ring on the injector, do not damage the O-ring.
- (3) Coat the new O-rings with spindle oil or gasoline before installing. Do not use engine oil, gear oil or brake oil.



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

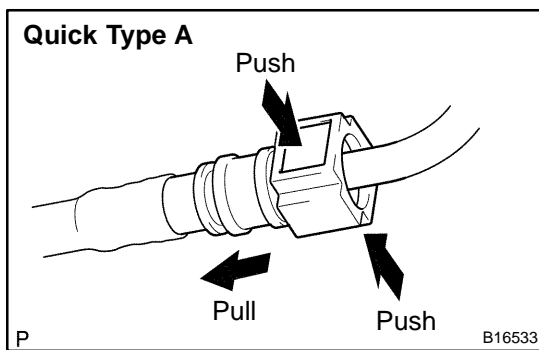
NOTICE:

Before installing the injector, must apply spindle oil or gasoline on the place where a delivery pipe or cylinder head contacts the O-ring of the injector.

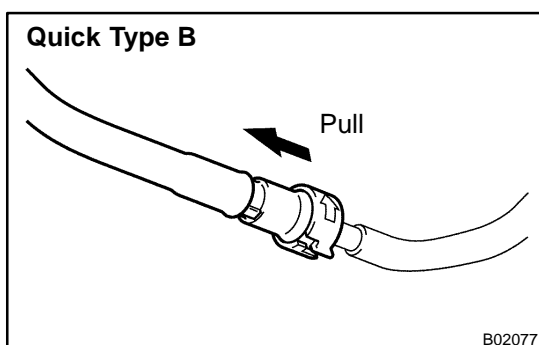
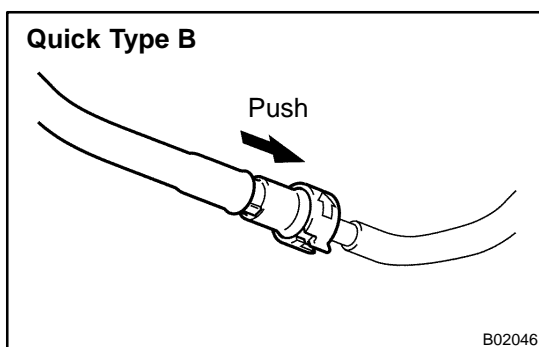
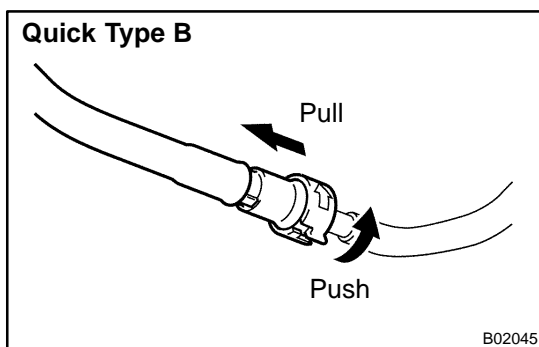
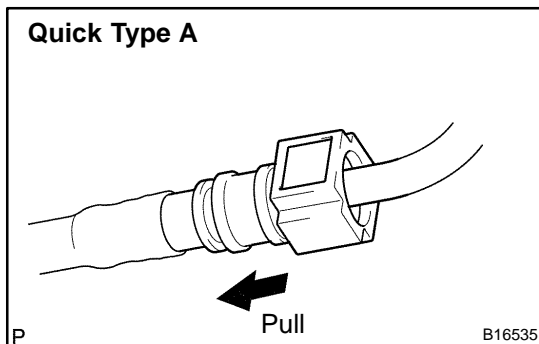
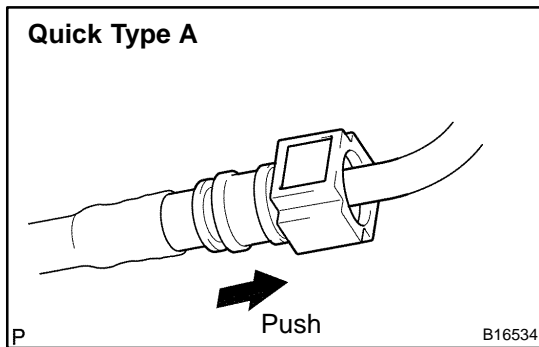


(d) Observe these precautions when disconnecting the fuel tube connector (Quick type A):

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



- (2) Check that there is no dirt like mud on the pipe and around the connector before disconnecting them. Clean them if necessary.
- (3) Disconnect them by hand.
- (4) When the connector and the pipe are stuck, pinch the fuel pipe with fingers and push the fuel tube connector to the fuel pipe by pressing the release buttons, then pull the connector out from the pipe.
- (5) Inspect that there is no dirt or the like on the seal surface of the disconnected pipe. Clean it away if necessary.
- (6) In order to prevent the disconnected pipe and connector from damaging and foreign objects being mixed into, cover them with a vinyl bag.



- (e) Observe these precautions when connecting the fuel tube connector (Quick Type A):
- (1) Check that there is no 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 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 pulling them.
 - (4) Check for any fuel leak.
- (f) Observe these precautions when disconnecting the fuel tube connector (Quick type B):
- (1) Check if there is any dirt like mud on the pipe and around the connector before disconnecting them. Clean the dirt away if necessary.
 - (2) Disconnect them by your hands.
 - (3) When the connector and the pipe are stuck, push and pull the connector to free to disconnect and pull it out. Do not use any tool at this time.
 - (4) Inspect if there is any dirt or the like on the seal surface of the disconnected pipe. Clean it away if necessary.
 - (5) Prevent the disconnected pipe and connector from damaging and foreign objects being mixed into by covering them with a vinyl bag.
- (g) Observe these 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 connection is tight, apply little amount of new engine oil on the tip of the pipe.
 - (2) After having finished the connection, check if the pipe and the connector are securely connected by pulling them.
 - (3) Check for fuel leakage.

(h) Observe these precautions when handling nylon tube.

CAUTION:

- **Be careful not to turn the connection part of the nylon tube and the quick connector when connecting them.**
- **Do not kink the nylon tube.**
- **Do not remove the EPDM protector on the outside of the nylon tube.**
- **Do not close the piping with the nylon tube by bending it.**

4. CHECK FUEL LEAK

(a) Check that there are no fuel leaks after doing maintenance the fuel system.(See page [11-5](#))