FUEL SYSTEM (3RZ–FE)

1100F–02

PRECAUTION

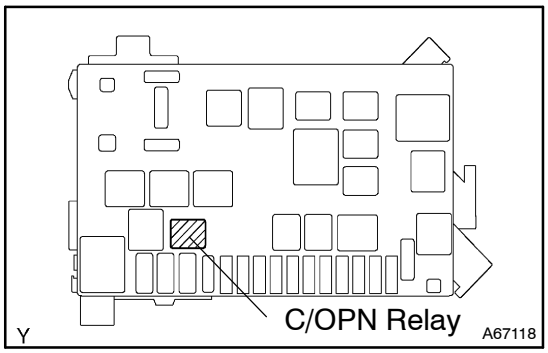
1. PRECAUTION

(a) Before working on fuel system, disconnect negative (–) terminal cable from battery.
(b) Do not smoke or work near an open flame when working on fuel system.
(c) Keep gasoline away from rubber or leather parts.

2. WORK FOR PREVENT GASOLINE FROM SPILLING OUT

CAUTION:

- **Perform disconnecting operation of the fuel system parts after working for prevent gasoline form spilling out.**
- **As there is 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.**



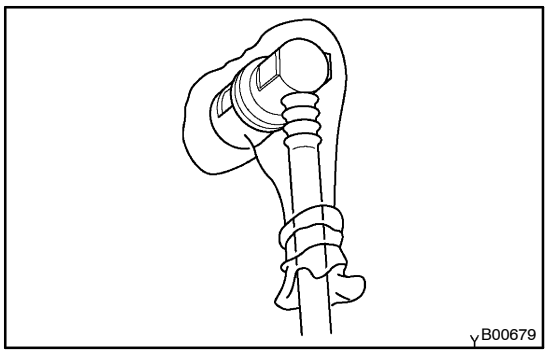
(a) Remove the circuit opening relay in the engine room relay block.
(b) Start the engine. After the engine has stopped on its own, turn the ignition switch OFF.

HINT:
There is a case that DTC P0171 (system to lean) is output.

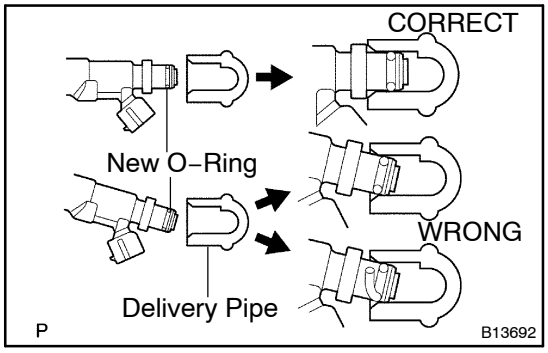
(c) Check that the engine does not start.
(d) Remove the fuel tank cap, and let the air out of the fuel tank.
(e) Disconnect negative (–) terminal cable from battery.
(f) Reinstall the circuit opening relay.

3. FUEL SYSTEM

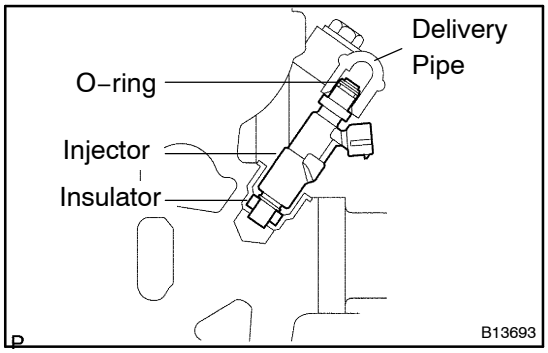
(a) When disconnecting the high fuel pressure line, a large amount of gasoline will spill out, so observe these procedures.
  (1) Work for prevent gasoline from spilling out.
  (2) Disconnect the fuel pump tube.
  (See page 11–25)
  (3) Drain the fuel remained inside the fuel pump tube.



  (4) Prevent the disconnected fuel pump tube from damaging and mixing foreign objects by covering them with a vinyl bag.
  (5) Put a container under the connection.

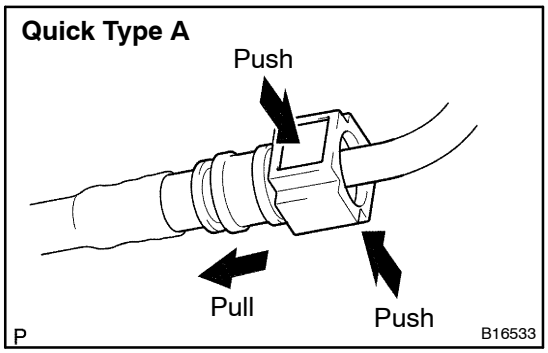


(b) Observe these precautions when removing and installing the injector.
(1) Never reuse the O–ring.
(2) When placing the new O–rings on the injector, take care not to damage it in any way.
(3) Coat a new O–rings with spindle oil or gasoline before installing. Never use engine, gear or brake oil.

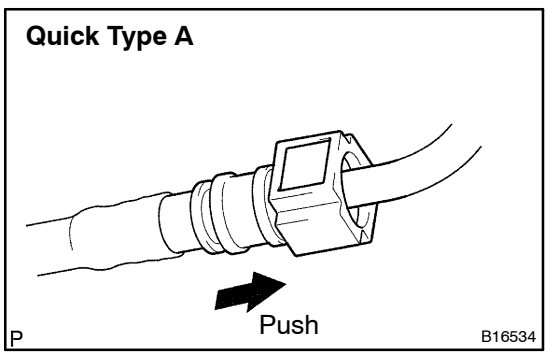


(c) Install the injector to the delivery pipe and cylinder head as shown in the illustration.

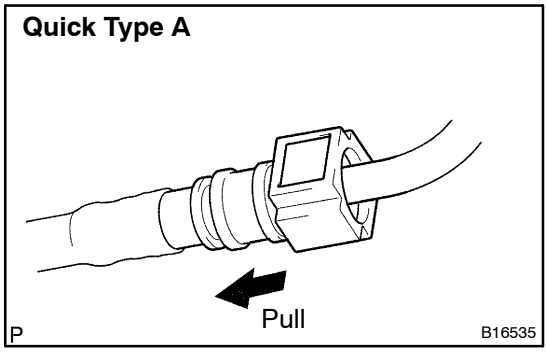
NOTICE:
Before installing the injector, must apply spindle oil or gasoline on the place where the delivery pipe or cylinder head touches an O–ring of the injector.



(d) Observe these precautions when disconnecting the fuel tube connector (Quick type A):
(1) Check that there is any dirt like mud in the pipe and around the connector before disconnecting them and clean the dirt away.
(2) Be sure to disconnect them with hands.
(3) When the connector and the pipe are stuck, pinch the fuel pipe between the hands, 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 likes on the seal surface of the disconnected pipe and clean it away.
(5) Prevent the disconnected pipe and connector from damaging and mixing foreign objects by covering them with a vinyl bag.

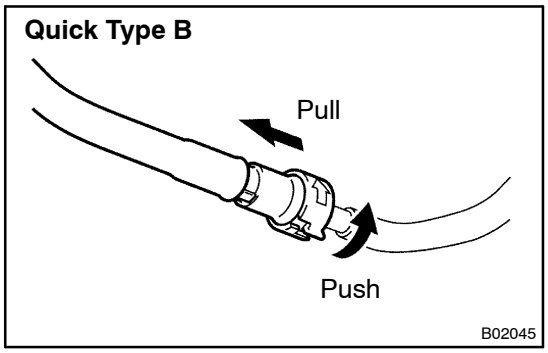


(e) Observe these precautions when connecting the fuel tube connector (Quick Type A):
(1) Check that there is any damage or foreign objects in the connected part of the pipe.
(2) Match the axis of the connector with the axis of the pipe, and push into the connector until the connector makes a ”click”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

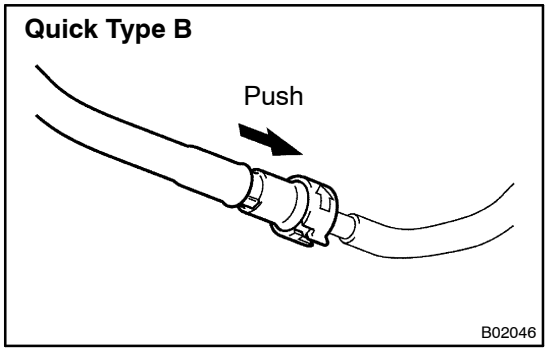


(3) After having finished the connection, check if the pipe and the connector are securely connected by pulling them.
(4) Check that there is any fuel leak.

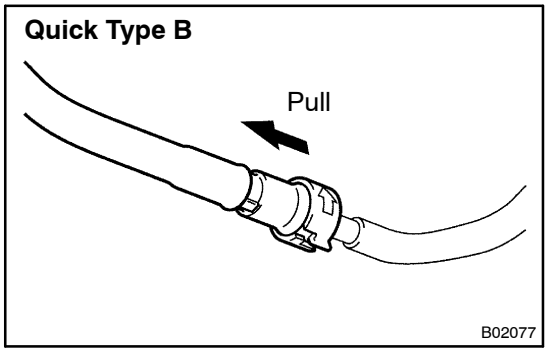
(f) Observe these precautions when disconnecting the fuel tube connector (Quick type B):
(1) Check if there is any dirt like mud on the pipe and around the connector before disconnecting them and clean the dirt away.
(2) Be sure to disconnect with hands.



(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 likes on the seal surface of the disconnected pipe and clean it away.
(5) Prevent the disconnected pipe and connector from damaging and mixing foreign objects 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 connections 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 if there is any fuel leakage.



(h) Observe these precautions when handling nylon tube.
(1) Pay attention not to turn the connected part of the nylon tube and the quick connector with force when connection them.
(2) Pay attention not to kink the nylon tube.
(3) Do not remove the EPDM protector on the outside of the nylon tube.
(4) Must 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 anywhere on the fuel system.
(See page 11–6)