Section 06 ENGINE MANAGEMENT (DI)

Subsection 03 (COMPONENT INSPECTION AND ADJUSTMENT)

Air/Fuel Rail Replacement

Removal

Release the fuel pressure in the system.

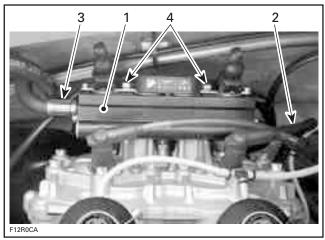
Disconnect air compressor supply hose from rail.

Disconnect fuel hoses (supply and return) at their inline connectors.

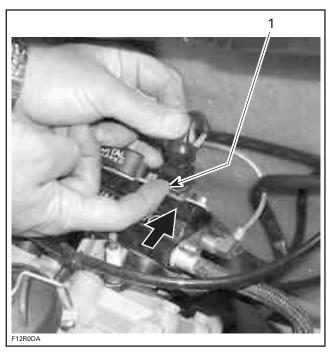
Temporarily connect those hose ends together to prevent rail draining.

Disconnect spark plug cables from spark plugs and fuel injector wires. Cut locking ties of wiring.

Unscrew rail retaining screws.



- 1. Air/fuel rail
- 2. Air supply hose
- 3. Fuel supply hose
- 4. Retaining screws



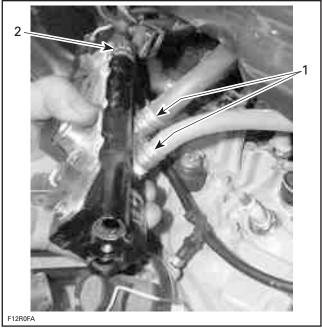
1. Push clip toward injector to release connector

Gently pull rail up by hand, working each side slightly at a time.

Pull rail out.

Disconnect hose ends at their inline connectors and drain fuel rail.

Disconnect air and fuel hoses from rail.



- 1. Air and fuel return hoses
- 2. Fuel supply hose

NOTE: When lifting/removing air/fuel rail, we recommend replacing carbon dams on direct injectors that have been running for 50 hours or more.

Remove fuel injector, fuel pressure regulator and air pressure regulator.

Installation

For installation, reverse the removal process but pay attention to the following.

A thin film of injection oil may be applied to O-rings of fuel injectors to ease rail installation.

Apply Loctite 243 on rail retaining screws then torque to 25 N•m (18 lbf•ft).

When installing fuel or air hoses fitting to the air/fuel rail, use Loctite Krylox (no. 29-719).

DIRECT INJECTOR

When one direct injector is defective, both have to be replaced at the same time. Be sure to check the other one. Also replace fuel injectors.

The direct injectors can be replaced by lifting the air/fuel rail.