

FUEL PRESSURE RELEASE

Fuel Rail With Fuel Pressure Test Port

1. Disconnect negative battery cable. Remove fuel tank cap to release fuel tank pressure.
2. Remove protective cap from fuel pressure test port on fuel rail. Place one end of Fuel Pressure Gauge (5069) hose into approved gasoline container. Screw remaining end of fuel pressure gauge hose onto fuel pressure test port. Fuel pressure will be released into gasoline container.
3. After fuel pressure is released, remove fuel pressure gauge hose from fuel pressure test port. Reinstall protective cap on fuel pressure test port and fuel tank cap. Reinstall negative battery cable.

Fuel Rail Without Fuel Pressure Test Port

1. Remove fuel pump relay from Power Distribution Center (PDC), located near windshield washer reservoir. Refer to label on PDC cover for relay location.
2. Start engine and allow to idle until engine stalls. Attempt to start engine several times. Once engine will not restart, turn ignition off.
3. Disconnect electrical connector from any fuel injector. Connect a jumper wire between one fuel injector terminal and positive battery terminal. Connect another jumper wire to remaining fuel injector terminal.

CAUTION: DO NOT apply battery voltage to fuel injector for more than 4 seconds, or fuel injector may be damaged.

4. Momentarily touch remaining end of jumper wire to negative battery terminal for no more than 4 seconds. Cover fuel line at fuel rail with shop towel before disconnecting. Disconnect fuel line.
5. Disconnect jumper wires. Reinstall electrical connector on fuel injector. Reinstall fuel pump relay. Diagnostic Trouble Codes (DTCs) may be stored in Powertrain Control Module (PCM) when ASD relay is removed. To clear DTCs from PCM, see **TESTS W/CODES - 2.5L** article.

FUEL PRESSURE TEST

NOTE: For additional information on fuel pressure and fuel pump testing procedures, see TEST NTC-3A and appropriate NS TEST in **TESTS W/CODES - 2.5L** article.

NOTE: All models are equipped with a mechanical fuel pressure regulator located in fuel tank, inside fuel pump module. Excess fuel is returned to tank through fuel pressure regulator.

Fuel Rail With Fuel Pressure Test Port

1. Release fuel pressure. See **FUEL PRESSURE RELEASE**. Remove test port cap. Install a 0-60 psi (0-4.2 kg/cm²) fuel pressure gauge at test port.
2. Start engine and allow to idle. Fuel pressure should be 47-51 psi (3.4-3.7 kg/cm²). If no fuel pressure exists, fuel pump control circuit may be defective. See TEST TC-101A in **TESTS W/CODES - 2.5L**

article. No further information is available from manufacturer.

3. If fuel pressure exceeds specification, fuel pump is okay, but fuel pressure regulator is defective. Release fuel pressure and replace fuel pump module. See **REMOVE/INSTALL/OVERHAUL - 2.5L** article.
4. If fuel pressure is okay, release fuel pressure. Remove test gauge hose. Install test port cap.

Fuel Rail Without Fuel Pressure Test Port

1. Release fuel pressure. See **FUEL PRESSURE RELEASE** . Ensure area around fuel supply line and fuel rail are clean. Note direction of latch clip installation. Latch clip is located on top of fuel supply line at fuel rail. Using 2 screwdrivers, pry latch clip upward, and remove from fuel rail.
2. Pull fuel supply line from fuel rail. Install appropriate adapter into fuel rail. See FUEL RAIL ADAPTER APPLICATION table below. Ensure adapter is fully seated in fuel rail. Install adapter latch clip into fuel rail, with latch clip fingers pointing downward. If latch clip will not fully seat so latch clip fingers extend downward below fitting on fuel rail, adapter may not be fully seated in fuel rail.

FUEL RAIL ADAPTER APPLICATION

Application	Adapter No.
2.5L	6539 Or 6631

3. Connect fuel supply line to adapter. Ensure fuel supply line fully seats in adapter. Remove protective cap from adapter test port, and install a 0-60 psi (0-4.2 kg/cm²) fuel pressure gauge at test port.
4. Start engine and allow to idle. Fuel pressure should be 47-51 psi (3.4-3.7 kg/cm²). If no fuel pressure exists, fuel pump control circuit may be defective. See TEST TC-101A in appropriate **TESTS W/CODES - 2.5L** article. No further information is available from manufacturer.
5. If fuel pressure exceeds specification, fuel pump is okay, but fuel pressure regulator is defective. Release fuel pressure and replace fuel pump module. See **REMOVE/INSTALL/OVERHAUL - 2.5L** article.
6. If fuel pressure is okay, release fuel pressure. Remove latch clip. Remove test equipment. Before reinstalling fuel supply line, ensure fuel supply line fitting and fitting on fuel rail are clean. Lubricate fuel supply line fitting and fitting on fuel rail with engine oil. Install fuel supply line on fuel rail.
7. Install latch clip into fuel rail, with latch clip fingers pointing downward. Ensure latch clip is fully seated. Latch clip fingers should extend downward below fitting on fuel rail when fully seated.
8. Pull on fuel supply line to ensure fuel supply line is fully locked on fuel rail. Start engine and check for fuel leaks.

FUEL SYSTEM PRESSURE LEAK DOWN TEST

1. Release fuel pressure. See **FUEL PRESSURE RELEASE** . Ensure area around fuel supply line and fuel rail are clean. Note direction of latch clip installation. Latch clip is located on top of fuel supply line at fuel rail. Using 2 screwdrivers, pry latch clip upward, and remove from fuel rail.
2. Pull fuel supply line from fuel rail. Install appropriate adapter into fuel rail. See FUEL RAIL ADAPTER APPLICATION table below. Ensure adapter is fully seated in fuel rail. Install adapter latch clip into fuel rail, with latch clip fingers pointing downward. If latch clip will not fully seat so latch clip fingers extend downward below fitting on fuel rail, adapter may not be fully seated in fuel rail.

FUEL RAIL ADAPTER APPLICATION

Application	Adapter No.
2.5L	6539 Or 6631

3. Connect fuel supply line to adapter. Ensure fuel supply line fully seats in adapter. Remove protective cap from adapter test port, and install a 0-60 psi (0-4.2 kg/cm²) fuel pressure gauge at test port.
4. Start engine and allow to reach operating temperature. Shut engine off. Wait 5 minutes and check fuel pressure. Fuel pressure should not drop to less than 24 psi (1.7 kg/cm²). If pressure is not as specified, go to next step.
5. Start engine and allow to reach operating temperature. Shut engine off. Clamp hose between fuel rail adapter and adapter test port. If pressure does not drop to less than 24 psi (1.7 kg/cm²) for 5 minutes, repair leaking fuel injector(s). If pressure is not as specified, go to next step.
6. Remove clamp from hose. Start engine and allow to reach operating temperature. Shut engine off. Clamp hose between fuel supply line and adapter test port. If pressure does not drop to less than 24 psi (1.7 kg/cm²) for 5 minutes, check and repair leaking fuel lines or connections. If lines and connections are okay, replace fuel pump module.

FUEL PUMP VOLUME TEST

1. Perform **FUEL PRESSURE TEST**. If fuel pressure is okay, relieve fuel system pressure. See **FUEL PRESSURE RELEASE**. Ensure area around fuel supply line and fuel rail are clean. Note direction of latch clip installation. Latch clip is located on top of fuel supply line at fuel rail. Using 2 screwdrivers, pry latch clip upward, and remove from fuel rail.
2. Pull fuel supply line from fuel rail. Install appropriate adapter into fuel rail. See FUEL RAIL ADAPTER APPLICATION table below. Ensure adapter is fully seated in fuel rail. Install adapter latch clip into fuel rail, with latch clip fingers pointing downward. If latch clip will not fully seat so latch clip fingers extend downward below fitting on fuel rail, adapter may not be fully seated in fuel rail.

FUEL RAIL ADAPTER APPLICATION

Application	Adapter No.
2.5L	6539 Or 6631