

Component Procedures: Fuel Supply Line

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Component Procedures: Fuel Supply Line

Parts and Labor (itype_189)

Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Remove & Replace	Fuel Supply > Line, R&R	B	1.1	0.0

Fuel Line Replacement - Chassis (Article 11430)

Removal Procedure

- Relieve the fuel system pressure. Refer to Fuel Pressure Relief . Click for full-size image
- Disconnect the fuel feed connector (1) and the evaporative emission connector (2). Refer to Metal Collar Quick Connect Fitting Service and Plastic Collar Quick Connect Fitting Service .
- Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle .
- Remove the exhaust heat shield fasteners (3) and the exhaust heat shield (4).
- Remove the exhaust heat shield fastener (1) and the exhaust heat shield (2). Click for full-size image
- Remove the brake pipe heat shield fastener (1) and the heat shield (2). Click for full-size image
- Remove the plastic retainer (1) and the retaining nut (2). Click for full-size image
- Separate the fuel feed line and the evaporative emission line from the clips (1). Click for full-size image
- Remove the protector bracket fasteners (1) and remove the bracket (2). Click for full-size image
- Disconnect the fuel feed line (1) and the evaporative emission line (2). Refer to Metal Collar Quick Connect Fitting Service and Plastic Collar Quick Connect Fitting Service . Click for full-size image
- Remove the pipes (3) from the vehicle.

Installation Procedure

- Install the pipes (3) to the vehicle and connect the evaporative emission line (2) and the fuel fed line (1) Refer to Metal Collar Quick Connect Fitting Service and Plastic Collar Quick Connect Fitting Service . Click for full-size image
- Install the protector bracket (2) and the bracket fasteners (1) then tighten to 3 Nm(27 lb in) . Click for full-size image
- Install the fuel feed line and the evaporative emission line to the clips (1). Click for full-size image
- Install the plastic retainer (1) and the retaining nut (2), then tighten to 3 Nm (27 lb in) . Click for full-size image
- Install the heat shield (2) and the brake pipe heat shield fastener (1), then tighten to 22 Nm (16 lb ft) . Click for full-size image
- Install the exhaust heat shield (2) and the exhaust heat shield fastener (1), then tighten to 3 Nm (27 lb in) . Click for full-size image
- Install the exhaust heat shield (4) and the exhaust heat shield fasteners (3), then tighten to 6 Nm (53 lb in) . Click for full-size image
- Connect the fuel feed connector (1) and the evaporative emission connector (2). Refer to Metal Collar Quick Connect Fitting Service and Plastic Collar Quick Connect Fitting Service .
- Inspect for leaks using the following procedure:
- Turn ON the ignition, with the engine OFF for 2 seconds.
- Turn OFF the ignition, for 10 seconds.
- Turn ON the ignition, with the engine OFF.
- Inspect for fuel leaks.

Fuel Feed Pipe Replacement (Article 11424)

Callout Component Name

Note: High pressure fuel feed pipes are one time use only. ALWAYS install a NEW high pressure fuel feed pipe if the pipe is removed OR the fittings are loosened. Preliminary Procedures Relieve the fuel system pressure. Fuel Pressure Relief Fuel Pipe Shield Replacement Disconnect the fuel feed line quick connect fitting. Metal Collar Quick Connect Fitting Service If necessary, unclip the wiring harness from the fuel feed pipe bracket.

Preliminary Procedures

- Relieve the fuel system pressure. Fuel Pressure Relief
- Fuel Pipe Shield Replacement
- Disconnect the fuel feed line quick connect fitting. Metal Collar Quick Connect Fitting Service
- If necessary, unclip the wiring harness from the fuel feed pipe bracket.

1 Fuel Feed Pipe Fitting Caution: Refer to Component Fastener Tightening Caution . Procedure Ensure ALL fittings are clean and dry prior to assembly. Lubricate the fuel feed pipe fitting with silicon free engine

oil. Adhesives, Fluids, Lubricants, and Sealers Tighten 28 Nm (21 lb ft)

Procedure

- Ensure ALL fittings are clean and dry prior to assembly.
- Lubricate the fuel feed pipe fitting with silicon free engine oil. Adhesives, Fluids, Lubricants, and Sealers

Tighten

28 Nm (21 lb ft)

2 Fuel Feed Pipe Bolt [2x] Caution: Refer to Fastener Caution . Tighten 50 Nm (37 lb ft)

50 Nm (37 lb ft)

3 Fuel Feed Pipe Procedure Remove and DISCARD the pipe. Inspect for leaks using the following procedure: Turn ON the ignition with the engine OFF for 2 seconds. Turn OFF the ignition for 10 seconds. Turn ON the ignition with the engine OFF. Inspect for fuel leaks. Note: If a fuel leak occurs at the fuel pump , the fuel pump will need to be replaced.

- Remove and DISCARD the pipe.
- Inspect for leaks using the following procedure:
- Turn ON the ignition with the engine OFF for 2 seconds.
- Turn OFF the ignition for 10 seconds.
- Turn ON the ignition with the engine OFF.
- Inspect for fuel leaks.

Fuel Feed Intermediate Pipe Replacement (Article 11423)

Removal Procedure

- Relieve the fuel system pressure. Fuel Pressure Relief
- Remove the fuel pipe shield. Fuel Pipe Shield Replacement
- Loosen the fuel feed intermediate pipe fittings at the fuel pump (5) and the fuel injection fuel rails (1, 6). [Click for full-size image](#)
- Remove and DISCARD the fuel feed intermediate pipe (2).

Installation Procedure

- Ensure ALL fittings are clean and dry prior to assembly.
- Lubricate the fuel feed intermediate pipe fittings with silicon free engine oil. Adhesives, Fluids, Lubricants, and Sealers
- Position the NEW fuel feed intermediate pipe (2) to the fuel pump (5) and the fuel injection fuel rails (1, 6) and hand tighten the fittings. [Click for full-size image](#)
- Tighten the fuel feed intermediate pipe fittings to 28 Nm (21 lb ft) .
- Inspect for leaks using the following procedure:
- Turn ON the ignition with the engine OFF for 2 seconds.
- Turn OFF the ignition for 10 seconds.
- Turn ON the ignition with the engine OFF.
- Inspect for fuel leaks.
- Install the fuel pipe shield. Fuel Pipe Shield Replacement

Fuel Pipe Shield Replacement (Article 11431)

Removal Procedure

- Intake Manifold Replacement » Remove
- Engine Wiring Harness (1) @ Fuel Pipe Shield (2) » Unclip — Reposition away [Click for full-size image](#)
- Power Brake Booster Vacuum Hose (1) @ Fuel Pipe Shield (2) » Unclip — Reposition away [Click for full-size image](#)
- Fuel Pipe Shield Bolt (1) » Remove [Click for full-size image](#)
- Transmission Vent Hose (2) @ Fuel Pipe Shield (1) » Unclip [Click for full-size image](#)
- Fuel Pipe Shield (1) » Remove [Click for full-size image](#)

Installation Procedure

- Fuel Pipe Shield (1) » Install [Click for full-size image](#)
- Transmission Vent Hose (2) @ Fuel Pipe Shield (1) » Install [Click for full-size image](#)
- Fuel Pipe Shield Bolt (1) » Install and tighten 10 Nm (89 lb in) [Click for full-size image](#)
- Power Brake Booster Vacuum Hose (1) @ Fuel Pipe Shield (2) » Install [Click for full-size image](#)
- Engine Wiring Harness (1) @ Fuel Pipe Shield (2) » Install [Click for full-size image](#)
- Intake Manifold Replacement » Install

All New Technical Service Bulletins (itype_432)

Tsbs

- Diagnostic Tip: Fuel Injected Gasoline Engines Possible No Start Extended Crank No Power or Fuel Pressure
Related DTC's (PIP5596A, 2024/03/04)

All Technical Service Bulletins (itype_100)

Tsbs

- Diagnostic Tip: Fuel Injected Gasoline Engines Possible No Start Extended Crank No Power or Fuel Pressure
Related DTC's (PIP5596A, 2024/03/04)