

# **Component Procedures: Fuel Pressure Sensor/Switch**

## **Table of Contents**

1. Parts and Labor (itype\_189)
2. Fuel Pressure Sensor Replacement - Fuel Feed Pipe (w/ Tee Fitting) (Article 11434)
3. Fuel Pressure Sensor Replacement - Fuel Injection Fuel Rail (Article 11435)
4. Fuel Rail Pressure Sensor Test (Article 11385)

# Component Procedures: Fuel Pressure Sensor/Switch

## Parts and Labor (itype\_189)

### Parts

Qualifier	Part #	Name	Price	Note
Pressure Sensor	12635273	Sensor	123.18	

### Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Remove & Replace	Fuel Injection > Pressure Sensor, R&R	B	1.4	1.1

## Fuel Pressure Sensor Replacement - Fuel Feed Pipe (w/ Tee Fitting) (Article 11434)

### Callout Component Name

Warning: Refer to Safety Glasses Warning . Warning: Refer to Diesel/Gasoline Vapors Warning . Warning: Refer to Relieving Fuel Pressure Warning . Preliminary Procedures Relieve the fuel pressure . Refer to Fuel Pressure Relief . Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle .

### Preliminary Procedures

- Relieve the fuel pressure . Refer to Fuel Pressure Relief .
- Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle .

1 Fuel Pressure Sensor Caution: Refer to Component Fastener Tightening Caution . Procedure Disconnect the electrical connector. Release the fuel pressure sensor from the retaining bracket. Remove the fuel pressure sensor from the tee fitting. Inspect the rubber O-ring seal and replace as necessary. Tighten 15 Nm (11 lb ft)

### Procedure

- Disconnect the electrical connector.
- Release the fuel pressure sensor from the retaining bracket.
- Remove the fuel pressure sensor from the tee fitting.
- Inspect the rubber O-ring seal and replace as necessary.

15 Nm (11 lb ft)

## Fuel Pressure Sensor Replacement - Fuel Injection Fuel Rail (Article 11435)

### Removal Procedure

- Fuel Pressure Relief » Relieve the fuel system pressure.
- Fuel Pipe Shield Replacement » Remove
- Electrical Connector (1) @ Fuel Injection Fuel Rail Fuel Pressure Sensor (2) » Disconnect Click for full-size image
- Fuel Injection Fuel Rail Fuel Pressure Sensor (2) @ Fuel Injection Fuel Rail (3) » Remove and DISCARD

### Installation Procedure

- Lubricate the threads and sealing surface of the NEW fuel injection fuel rail fuel pressure sensor with one drop of clean engine oil. Click for full-size image
- Install the NEW fuel injection fuel rail fuel pressure sensor (2) and hand tighten.
- Fuel Injection Fuel Rail Fuel Pressure Sensor (2) @ Fuel Injection Fuel Rail (3) » Remove and re-lubricate with one drop of clean engine oil.
- Fuel Injection Fuel Rail Fuel Pressure Sensor (2) @ Fuel Injection Fuel Rail (3) » Install and tighten 33 Nm (24 lb ft)
- Electrical Connector (1) @ Fuel Injection Fuel Rail Fuel Pressure Sensor (2) » Connect
- Pressurize the fuel system and inspect for leaks.
- Fuel Pipe Shield Replacement » Install

## Fuel Rail Pressure Sensor Test (Article 11385)

### Diagnostic Instructions

- Perform the Diagnostic System Check prior to using this diagnostic procedure: Diagnostic System Check - Vehicle
- Review the description of Strategy Based Diagnosis: Strategy Based Diagnosis
- An overview of each diagnostic category can be found here: Diagnostic Procedure Instructions

### Circuit/System Description

For an overview of the component/system, refer to: Fuel System Description  
Circuit/System Testing

- Perform the following procedure/test: Fuel Pressure Relief
- Install any previously removed components.
- Install » EN-37287 Fuel Line Shut-Off Adapter @ Fuel Feed Pipe
- Open the valve on the tool: EN-37287 Fuel Line Shut-Off Adapter
- Ignition » On / Vehicle » In Service Mode
- Perform the scan tool control function: Fuel Pump Enable » On — Command the function On several times.
- Verify the following parameters are within 68.9 kPa (10 PSI) of each other: Fuel Pressure Sensor & Fuel Rail Pressure Sensor
- If not within 68.9 kPa (10 PSI) of each other
- Ignition/Vehicle » Off
- Close the valve on the tool: EN-37287 Fuel Line Shut-Off Adapter
- Start and idle the engine until it stalls due to lack of fuel. » Repeat — 2 times
- Remove the component: B47B Fuel Rail Pressure Sensor » Refer to: Fuel Pressure Sensor Replacement - Fuel Injection Fuel Rail
- Connect the electrical connector: @ B47B Fuel Rail Pressure Sensor
- Verify the scan tool parameter: Fuel Rail Pressure Sensor = -20.7 to 20.7 kPa (-3 to 3 PSI)
- If not between -20.7 and 20.7 kPa (-3 and 3 PSI) » Replace the component: B47B Fuel Rail Pressure Sensor
- If between -20.7 and 20.7 kPa (-3 and 3 PSI) » Replace the component: B47 Fuel Pressure Sensor
- If within 68.9 kPa (10 PSI) of each other
- All OK.

#### Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: Diagnostic Repair Verification

- Fuel Pressure Sensor Replacement - Fuel Injection Fuel Rail
- Fuel Pressure Sensor Replacement - Fuel Feed Pipe