

[Manuals.plus](#) /

› [Delphi](#) /

› Delphi FP10266 Fuel Pressure Regulator User Manual

Delphi FP10266

Delphi FP10266 Fuel Pressure Regulator User Manual

Model: FP10266 | Brand: Delphi

INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Delphi FP10266 Fuel Pressure Regulator. Designed with 139 years of OE experience, Delphi ensures high-quality, reliable performance for your vehicle's fuel system. Please read this manual thoroughly before proceeding with any installation or service.

SAFETY INFORMATION

Always observe the following safety precautions when working with fuel systems:

- Ensure the vehicle's engine is off and cool before beginning any work.
- Disconnect the vehicle's battery to prevent accidental starting or electrical shorts.
- Relieve fuel system pressure before disconnecting any fuel lines. Refer to your vehicle's service manual for specific procedures.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Work in a well-ventilated area to avoid inhaling fuel vapors.
- Keep fire extinguishers or other fire suppression equipment readily available.
- Fuel is highly flammable. Avoid sparks, open flames, or hot surfaces.
- Dispose of fuel and contaminated materials according to local regulations.
- If unsure about any procedure, consult a qualified automotive technician.

WHAT'S IN THE BOX

Upon unpacking, please verify that all components are present and undamaged:

- 1x Delphi FP10266 Fuel Injection Pressure Regulator



Figure 1: The Delphi FP10266 Fuel Pressure Regulator, showing its overall design and connection points.

SETUP AND INSTALLATION

The Delphi FP10266 Fuel Pressure Regulator is designed for direct replacement in compatible vehicles. Always refer to your vehicle's specific service manual for detailed installation procedures and torque specifications.

Pre-Installation Steps:

1. **Identify the Regulator:** Locate the existing fuel pressure regulator on your vehicle. It is typically found on the fuel rail or near the fuel pump.
2. **Relieve Fuel Pressure:** Before disconnecting any fuel lines, it is critical to relieve the fuel system pressure. Consult your vehicle's repair manual for the correct procedure, which often involves disabling the fuel pump and cranking the engine, or using a fuel pressure gauge with a bleed-off valve.
3. **Disconnect Battery:** Disconnect the negative terminal of the vehicle's battery.
4. **Prepare Work Area:** Place absorbent rags or containers beneath the fuel lines to catch any residual fuel.

Removal of Old Regulator:

1. Carefully disconnect the vacuum line (if present) from the old regulator.
2. Disconnect the fuel lines connected to the regulator. Be prepared for a small amount of fuel to escape.
3. Remove any mounting bolts or clips securing the old regulator.
4. Gently remove the old fuel pressure regulator from its mounting location.

Installation of New Regulator:

1. Inspect the new Delphi FP10266 regulator for any visible damage.
2. Ensure all O-rings and seals are correctly seated on the new regulator.
3. Carefully insert the new regulator into its mounting position. Ensure it seats properly.
4. Secure the regulator with its mounting bolts or clips. Tighten to vehicle manufacturer's specifications.
5. Reconnect the fuel lines to the new regulator. Ensure connections are secure and free of leaks.
6. Reconnect the vacuum line (if present).



Figure 2: Side view of the regulator, showing the pressure rating (e.g., 2.7 bar) and connection points. Ensure proper orientation during installation.

Post-Installation Steps:

1. Reconnect the vehicle's battery.
2. Turn the ignition key to the "ON" position (without starting the engine) for a few seconds to allow the fuel pump to prime the system. Repeat this step a few times.
3. Inspect all connections for any signs of fuel leaks. Address any leaks immediately before proceeding.
4. Start the engine and allow it to idle. Re-check for leaks.
5. Monitor engine performance and fuel pressure (if a gauge is available) to ensure proper operation.

OPERATING PRINCIPLES

The Delphi FP10266 Fuel Pressure Regulator is a critical component in your vehicle's fuel injection system. Its primary function is to maintain a consistent fuel pressure differential across the fuel injectors, ensuring optimal fuel delivery under various engine

loads and speeds.

- **Consistent Fuel Pressure:** The regulator precisely controls the fuel pressure supplied to the injectors, which is essential for accurate fuel metering by the Engine Control Unit (ECU).
- **Vacuum Reference:** Many regulators, including this model, use a vacuum line connected to the engine intake manifold. This allows the regulator to adjust fuel pressure relative to manifold vacuum, maintaining a constant pressure differential across the injectors regardless of engine load.
- **Excess Fuel Return:** Any excess fuel not used by the engine is returned to the fuel tank via the return line, preventing pressure buildup and ensuring a continuous flow of cool fuel to the fuel rail.
- **Quality Construction:** Featuring precisely manufactured internal valves, diaphragms, and springs, this regulator ensures excellent performance and quiet operation under all engine operating conditions. Robust diaphragm materials contribute to longer life and compatibility with a wide range of fuels.

MAINTENANCE

The Delphi FP10266 Fuel Pressure Regulator is a sealed unit and does not require routine maintenance or lubrication. Its robust design ensures long-term reliability.

- **Regular Inspection:** Periodically inspect the regulator and its connections for any signs of fuel leaks, cracks, or damage to the fuel lines or vacuum line.
- **Cleanliness:** Keep the area around the fuel pressure regulator clean and free of debris.
- **Replacement:** If the regulator shows signs of failure (e.g., incorrect fuel pressure, engine performance issues, fuel leaks), it should be replaced immediately. Do not attempt to repair the unit.

TROUBLESHOOTING

If you experience issues that you suspect are related to the fuel pressure regulator, consider the following common symptoms and potential causes. Always consult a qualified technician for diagnosis and repair.

Symptom	Possible Cause	Action
Engine hard to start (especially when warm)	Leaking diaphragm in regulator, causing fuel pressure bleed-off.	Check fuel pressure. Replace regulator if pressure drops rapidly after engine shut-off.
Engine misfires or runs rough	Incorrect fuel pressure (too high or too low) due to faulty regulator.	Test fuel pressure at idle and under load. Replace regulator if out of specification.
Poor fuel economy	Regulator stuck open, causing excessively high fuel pressure.	Verify fuel pressure. Replace regulator if pressure is consistently too high.
Black smoke from exhaust	Excessively rich fuel mixture due to high fuel pressure.	Check fuel pressure. Replace regulator if pressure is too high.
Fuel smell in engine bay	External leak from regulator body or connections.	Visually inspect regulator and lines for leaks. Tighten connections or replace regulator if leaking.

SPECIFICATIONS

Key technical specifications for the Delphi FP10266 Fuel Pressure Regulator:

- **Manufacturer:** Delphi
- **Brand:** Delphi

- **Model:** Fuel Pressure Regulator
- **Part Number:** FP10266
- **Item Weight:** Approximately 0.01 ounces
- **Product Dimensions:** Approximately 3 x 2 x 4 inches
- **Country of Origin:** USA
- **Exterior Finish:** Machined
- **OEM Part Numbers (Cross-reference):** 21125, 24069, 5G1133, F7RZ 9C968-AA, PR226
- **ASIN:** B000CGK13S



Figure 3: Detailed view of one end of the regulator, showing connection details.



Figure 4: Detailed view of the opposite end of the regulator, highlighting its construction.

WARRANTY AND SUPPORT

Important Warranty Information:

Delphi products purchased through, from, or on Amazon do not qualify for Delphi’s standard LIMITED warranty. When purchased through, from, or on Amazon, any warranty on this product is offered by and is the sole responsibility of the seller identified on the shipment details of your order. Please review all warranties carefully and contact the identified seller for all warranty details and claims.

For technical support or further inquiries regarding the Delphi FP10266 Fuel Pressure Regulator, please refer to the contact information provided by the seller from whom you purchased this product. You may also visit the official Delphi website for general product information and resources, though direct warranty claims for Amazon purchases must go through the seller.

Delphi Official Website: www.delphi.com

