

## Delphi FE0737

# Delphi FE0737 Fuel Pump and Strainer Set User Manual

Model: FE0737

Brand: Delphi

## 1. PRODUCT OVERVIEW

The Delphi FE0737 Fuel Pump and Strainer Set is engineered to deliver an immediate and consistent flow of fuel to the engine's fuel rail and injectors at the specified system pressure. This design ensures efficient engine operation and reliable performance. Delphi fuel pumps are manufactured to meet Original Equipment (OE) standards, ensuring high quality and compatibility with the intended vehicle applications.



Image 1.1: The Delphi FE0737 Fuel Pump, showcasing its compact design and primary components.

Key design considerations include operation under extreme temperatures, quick engine starts, and prevention of low-fuel hesitation, even with alcohol fuels and blends. The pump's design also contributes to lower amperage draws, reducing the load on the vehicle's electrical system. For optimal performance and longevity,

it is crucial to always replace the fuel strainer when performing a fuel pump repair and to ensure the fuel tank is clean.

## 2. PRODUCT CONTENTS

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The Delphi FE0737 Fuel Pump and Strainer Set typically includes the following components:

- Delphi FE0737 Fuel Pump
- Fuel Strainer



Image 2.1: All components included in the Delphi FE0737 Fuel Pump and Strainer Set, showing the fuel pump, strainer, and associated small parts.

## 3. SAFETY INFORMATION

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Working with automotive fuel systems requires adherence to strict safety precautions. Failure to follow these guidelines can result in serious injury or damage to the vehicle.

- **Disconnect Battery:** Always disconnect the vehicle's battery before beginning any work on the fuel system to prevent electrical hazards.

- **Ventilation:** Work in a well-ventilated area to avoid inhaling fuel vapors.
- **Fire Hazards:** Keep open flames, sparks, and other ignition sources away from the work area. Fuel is highly flammable.
- **Eye Protection:** Wear appropriate eye protection to shield against fuel splashes or debris.
- **Fuel Pressure:** Be aware that the fuel system may be under pressure. Follow vehicle-specific procedures to relieve fuel pressure safely before disconnecting any fuel lines.
- **Professional Assistance:** If you are not experienced with automotive repairs, it is highly recommended to seek assistance from a qualified professional technician.

## 4. INSTALLATION GUIDELINES

Installation of the Delphi FE0737 Fuel Pump and Strainer Set should be performed by a qualified technician or an individual with extensive experience in automotive fuel system repairs. The following are general guidelines; always refer to your vehicle's specific service manual for detailed, model-specific instructions.

1. **Preparation:** Ensure the vehicle is on a level surface, the engine is cool, and the battery is disconnected. Relieve fuel system pressure as per the vehicle manufacturer's instructions.
2. **Access:** Gain access to the fuel pump assembly, which is typically located within the fuel tank. This may involve removing rear seats or accessing from underneath the vehicle.
3. **Disconnect Old Pump:** Carefully disconnect electrical connectors and fuel lines from the old fuel pump module. Be prepared for residual fuel spillage.
4. **Remove Old Pump:** Remove the retaining ring or fasteners securing the old fuel pump module to the fuel tank. Carefully extract the old module.
5. **Inspect Fuel Tank:** Thoroughly inspect and clean the inside of the fuel tank to remove any debris, rust, or contaminants. This step is critical for the longevity of the new fuel pump.
6. **Install New Strainer:** Attach the new fuel strainer to the inlet of the new Delphi fuel pump. Ensure it is securely fastened.
7. **Install New Pump:** Carefully insert the new Delphi FE0737 Fuel Pump and Strainer Set into the fuel tank opening. Ensure proper alignment and seating.
8. **Secure and Reconnect:** Secure the new fuel pump module with its retaining ring or fasteners. Reconnect all fuel lines and electrical connectors, ensuring they are properly seated and leak-free.
9. **Final Checks:** Reconnect the vehicle's battery. Turn the ignition to the 'ON' position (without starting the engine) for a few seconds to allow the fuel pump to prime the system. Check for any fuel leaks.
10. **Test Operation:** Start the engine and check for proper operation and any warning lights.



Image 4.1: Side view (left) and top view (right) of the Delphi FE0737 Fuel Pump, illustrating its form factor for installation reference.



Image 4.2: Close-up of the electrical connector (left) and fuel outlet (right) on the Delphi FE0737 Fuel Pump, showing connection points.

## 5. OPERATING PRINCIPLES

The Delphi FE0737 Fuel Pump is an electric fuel pump designed to draw fuel from the vehicle's fuel tank and deliver it under pressure to the engine's fuel injection system. It operates by an electric motor that drives a pumping mechanism, typically a turbine or roller-vane type, to create the necessary fuel flow and pressure. Upon ignition, the pump activates to build pressure in the fuel lines, ensuring that fuel is readily available at the injectors. A pressure regulator, often integrated into the fuel module or located elsewhere in the fuel system, maintains the correct fuel pressure for optimal engine performance across various operating conditions. The strainer included with the pump prevents contaminants from entering the pump and the fuel system, protecting sensitive components from damage.

## 6. MAINTENANCE

Proper maintenance of your vehicle's fuel system, including the fuel pump, is essential for long-term reliability and performance. While the Delphi FE0737 Fuel Pump itself is a sealed unit requiring no internal maintenance, certain practices can extend its lifespan and ensure efficient operation:

- **Fuel Strainer Replacement:** Always replace the fuel strainer when installing a new fuel pump. The strainer acts as a primary filter, preventing large particles from entering the pump.
- **Fuel Tank Cleanliness:** Regularly check and clean the fuel tank, especially if there are signs of contamination or rust. Contaminants in the fuel tank can clog the strainer and damage the fuel pump.
- **Fuel Filter Replacement:** Adhere to your vehicle manufacturer's recommended intervals for replacing the in-line fuel filter (if applicable). A clogged fuel filter can put excessive strain on the fuel pump.
- **Maintain Fuel Level:** Avoid consistently running the vehicle with a very low fuel level. Fuel helps cool and lubricate the fuel pump motor. Running dry can lead to premature wear and failure.
- **Use Quality Fuel:** Use clean, high-quality fuel from reputable sources to minimize contaminants and ensure proper fuel system function.

## 7. TROUBLESHOOTING COMMON ISSUES

If you experience issues with your vehicle's fuel system after installing the Delphi FE0737 Fuel Pump, consult the following table for common symptoms and potential solutions. Always ensure safety precautions are followed before attempting any troubleshooting.

Symptom	Possible Cause	Solution
Engine cranks but does not start	No fuel pressure; Clogged fuel strainer; Faulty electrical connection; Blown fuse	Check fuel pump fuse and relay; Verify electrical connections at the pump; Inspect fuel lines for kinks; Check for proper fuel pressure at the rail.
Engine misfires or runs rough	Insufficient fuel pressure; Contaminated fuel; Clogged fuel filter (if external)	Check fuel pressure; Inspect fuel for contaminants; Replace external fuel filter if necessary.
Loss of power under acceleration	Low fuel pressure; Restricted fuel flow	Verify fuel pressure; Check for clogged fuel strainer or external fuel filter.

Symptom	Possible Cause	Solution
Fuel pump noise (whining/humming)	Low fuel level; Contaminated fuel; Restricted fuel flow; Normal operation (some pumps make a slight hum)	Ensure adequate fuel level; Check for fuel contamination; Inspect strainer and fuel lines for restrictions.

If troubleshooting steps do not resolve the issue, it is recommended to consult a certified automotive technician for diagnosis and repair.

## 8. TECHNICAL SPECIFICATIONS

The following specifications apply to the Delphi FE0737 Fuel Pump and Strainer Set:

Specification	Value
Brand	Delphi
Model Number	FE0737
Fit Type	Vehicle Specific Fit
Item Weight	13.4 ounces (approx. 0.84 Pounds)
Specification Met	OE (Original Equipment)
Auto Part Position	Front (typically within the fuel tank)
Operation Mode	Mechanical (electrically driven)
UPC	689604286005
Package Dimensions	6.5 x 4.07 x 3.19 inches
OEM Part Numbers (Partial List)	E8820, E22000, 17040-S2A-A50, 17516-SDC-E00, 950-0215, 951-0018, 952-0083, CFE0737, SP1397, P76412, 69843

## 9. WARRANTY AND SUPPORT

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 assistance regarding the Delphi FE0737 Fuel Pump and Strainer Set, please refer to the contact information provided by your point of purchase or the seller from whom the product was acquired. Always provide your product model number (FE0737) and any relevant vehicle information when seeking support.

