

YONEDA HEP-02A

YONEDA HEP-02A 12V Electric Fuel Pump Instruction Manual

Universal Low Pressure Gas & Diesel Fuel Pump

1. INTRODUCTION

This manual provides comprehensive instructions for the safe installation, operation, and maintenance of the YONEDA HEP-02A 12V Electric Fuel Pump. Designed for universal application, this low-pressure fuel pump is suitable for various 12-volt systems requiring fuel transfer for gasoline or diesel engines, including cars, trucks, boats, carburetors, lawnmowers, and generators. Please read this manual thoroughly before installation and use to ensure proper function and safety.

2. SAFETY INFORMATION

Adherence to the following safety guidelines is crucial to prevent injury, damage to the product, or property damage:

- **Electrical Safety:** Always disconnect the vehicle's battery or power source before performing any electrical work. Ensure all electrical connections are secure and properly insulated to prevent short circuits.
- **Fuel Safety:** Fuel is highly flammable. Work in a well-ventilated area, away from open flames, sparks, or other ignition sources. Have a fire extinguisher readily available.
- **Personal Protective Equipment:** Wear appropriate safety glasses and gloves when handling fuel and working with tools.
- **Proper Installation:** Ensure the pump is installed correctly according to the instructions. Incorrect installation can lead to fuel leaks or electrical hazards.
- **Compatibility:** This pump is designed for 12-volt systems and low-pressure applications (2.5-4 PSI). Do not use it with high-pressure fuel injection systems or voltages other than 12V.
- **Professional Installation:** If you are unsure about any part of the installation process, consult a qualified mechanic.

3. PRODUCT OVERVIEW

The YONEDA HEP-02A is a compact and reliable electric fuel pump designed for efficient fuel transfer. Its robust construction and internal valving ensure consistent performance and prevent fuel backflow.



Figure 1: YONEDA HEP-02A Electric Fuel Pump. This image shows the overall view of the fuel pump with its gold-colored body, black inlet and outlet nozzles, and red and black electrical wires connected to a white connector.

Key Features:

- **Input Voltage:** 12 Volts DC
- **Output Pressure:** 2.5-4 PSI
- **Inlet & Outlet Diameter:** 8mm
- **Internal Valving:** Prevents fuel backflow
- **Strong Suction:** Ensures stable fuel feeding
- **Universal Compatibility:** Suitable for various 12V vehicles and equipment.

4. SETUP AND INSTALLATION

Follow these steps for proper installation of your YONEDA HEP-02A Electric Fuel Pump:

1. **Choose a Mounting Location:** Select a secure, dry location close to the fuel tank, preferably lower than the tank to aid gravity feed, but above the lowest point of the fuel line to prevent debris accumulation. The pump is designed for bolt mounting.
2. **Mount the Pump:** Securely fasten the pump using its integrated mounting brackets. Ensure it is stable and

free from excessive vibration.

3. Connect Fuel Lines:

- Identify the "IN" (inlet) and "OUT" (outlet) ports on the pump. The "IN" port typically points towards the fuel tank, and the "OUT" port towards the engine/carburetor.
- Connect the fuel supply line from the tank to the 8mm inlet port.
- Connect the fuel line to the engine/carburetor to the 8mm outlet port.
- Use appropriate fuel-resistant hoses and secure all connections with hose clamps to prevent leaks.

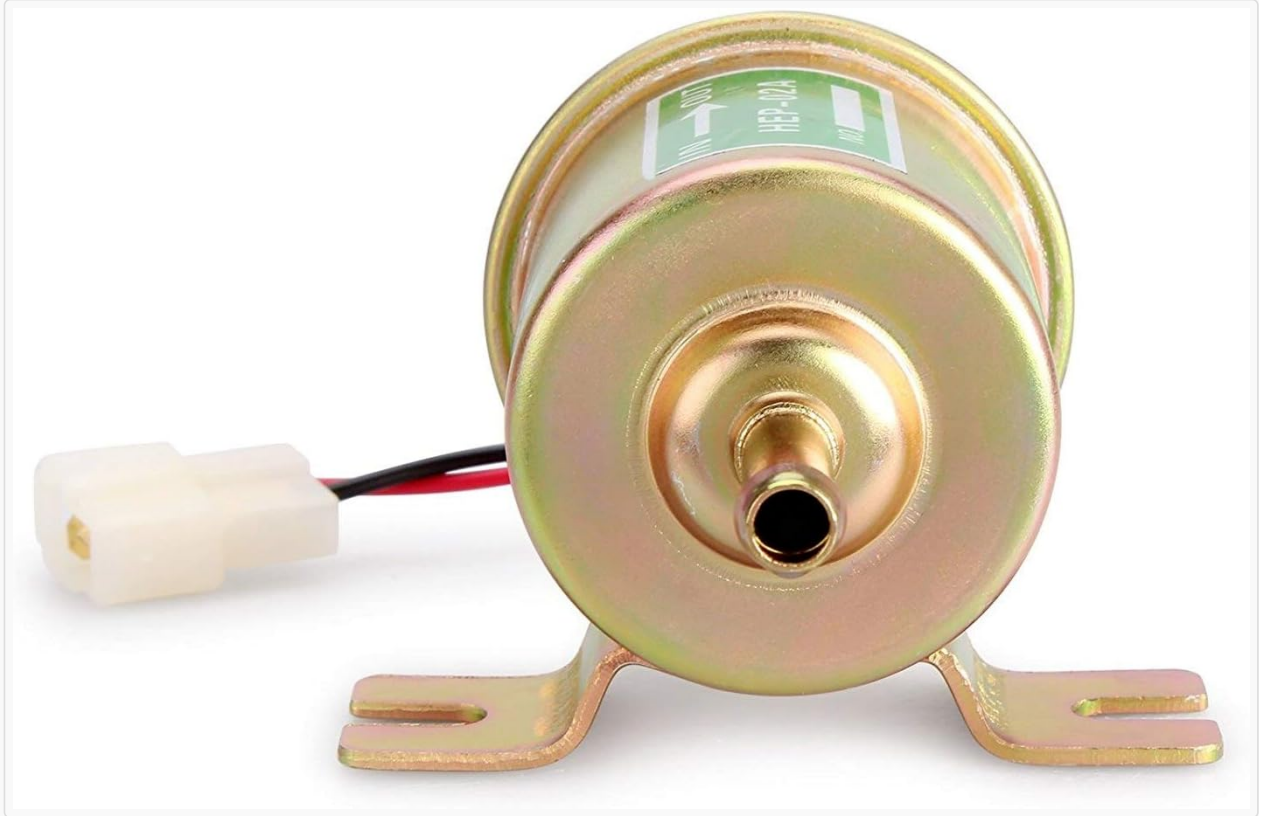


Figure 2: Close-up view of the fuel pump showing the "IN" and "OUT" markings for fuel line connections. The inlet and outlet ports are 8mm barb fittings.

4. Electrical Connections:

- Locate the red and black wires extending from the pump.
- Connect the **red wire** to a switched 12-volt positive (+) power source. This source should only be active when the ignition is on.
- Connect the **black wire** to a reliable ground (-) point on the vehicle chassis or battery negative terminal.
- Ensure all electrical connections are clean, tight, and protected from moisture and abrasion. Consider using a fuse (not included) in the positive line for added protection.



Figure 3: Rear view of the fuel pump showing the 12VDC marking and the red and black electrical wires with their connector. The red wire connects to positive, and the black wire to negative.

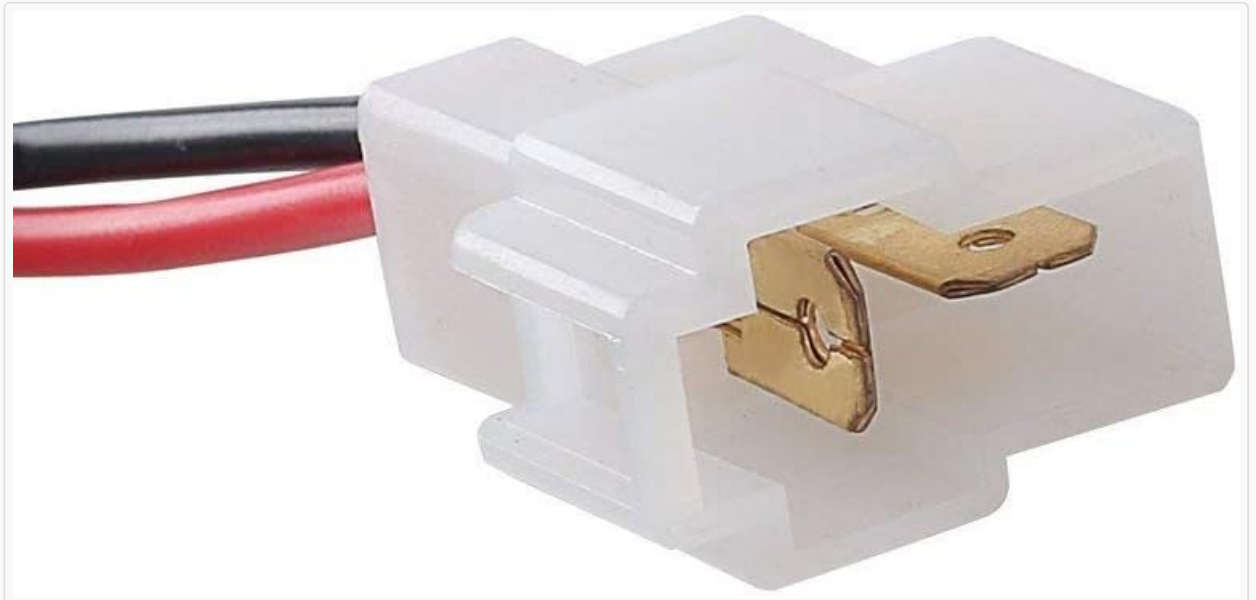


Figure 4: Close-up of the white electrical connector, showing the internal metal spade terminal. This connector facilitates easy and secure electrical hookup.

5. **Leak Check:** After installation, turn on the ignition (without starting the engine if possible) to allow the pump to prime and pressurize the fuel system. Carefully inspect all fuel line connections for any signs of leaks. Address any leaks immediately before operating the vehicle.



Figure 5: Example of the YONEDA HEP-02A fuel pump installed within an engine bay, demonstrating typical placement and hose routing. Note the secure mounting and connection to existing fuel lines.

5. OPERATING INSTRUCTIONS

The YONEDA HEP-02A Electric Fuel Pump operates automatically once properly installed and connected to a switched 12-volt power source. When the ignition is turned on, the pump will activate to supply fuel to the engine.

- **Priming:** Upon initial installation or after running out of fuel, the pump may need a few seconds to prime the fuel system. You might hear a clicking sound as it operates.
- **Normal Operation:** During normal operation, the pump will maintain the specified fuel pressure (2.5-4 PSI) to ensure a consistent fuel supply to the carburetor or low-pressure fuel system.
- **Monitoring:** Periodically check for unusual noises, vibrations, or fuel odors, which could indicate a problem.

6. MAINTENANCE

Regular maintenance helps ensure the longevity and reliable performance of your fuel pump:

- **Inspect Fuel Lines:** Regularly check fuel hoses and connections for cracks, wear, or leaks. Replace any damaged components immediately.
- **Check Electrical Connections:** Ensure electrical wiring is secure, free from corrosion, and properly insulated.
- **Cleanliness:** Keep the pump and surrounding area clean and free from dirt, debris, or excessive moisture.
- **Fuel Filter:** Ensure a clean fuel filter is installed upstream of the pump to protect it from contaminants. Replace the fuel filter according to your vehicle's or equipment's service schedule.

7. TROUBLESHOOTING

If you encounter issues with your fuel pump, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
Pump does not operate (no clicking sound)	No power to the pump, faulty ground connection, blown fuse, damaged wiring.	Check 12V power supply to the red wire. Verify ground connection. Inspect fuse and wiring for damage.
Engine not receiving fuel	Clogged fuel filter, empty fuel tank, kinked or blocked fuel line, incorrect pump installation (e.g., IN/OUT reversed).	Check fuel level. Inspect and replace fuel filter if necessary. Verify fuel line routing and ensure no kinks. Confirm IN/OUT connections are correct.
Fuel leaks	Loose hose clamps, damaged fuel lines, improper connection at pump ports.	Tighten all hose clamps. Inspect fuel lines for cracks or damage and replace if needed. Ensure connections to pump ports are secure.
Pump is excessively noisy	Air in the fuel system, pump running dry, debris in the pump.	Ensure fuel tank has sufficient fuel. Check for air leaks in the fuel line. If noise persists, the pump may be faulty.

If troubleshooting steps do not resolve the issue, contact customer support or a qualified mechanic.

8. SPECIFICATIONS

- **Brand:** YONEDA
- **Model:** HEP-02A
- **Input Voltage:** 12 Volts DC
- **Output Pressure:** 2.5-4 PSI
- **Inlet/Outlet Diameter:** 8 mm
- **Fit Type:** Universal Fit
- **Material:** Brass
- **Operation Mode:** Automatic
- **Mounting Type:** Bolt Mount
- **Compatible Fuel Types:** Gasoline, Diesel
- **Item Weight:** Approximately 13.4 ounces (380 grams)
- **Package Dimensions:** Approximately 5.28 x 4.02 x 3.62 inches

- **OEM Part Numbers:** 6414671, E8012S, EP12S, FD0002, P60430
- **UPC:** 736561477776

9. WARRANTY AND SUPPORT

The YONEDA HEP-02A Electric Fuel Pump comes with a **2-Year Guarantee** from the date of purchase. This warranty covers manufacturing defects under normal use conditions.

For warranty claims, technical assistance, or any questions regarding your product, please contact YONEDA customer support through your original point of purchase or visit the official YONEDA website for contact information.

Please retain your proof of purchase for warranty validation.