Davies Craig EBP40

Davies Craig DC-9040 EBP40 Electric Booster Pump Kit User Manual

Model: EBP40 (DC-9040)

1. Introduction

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Davies Craig DC-9040 EBP40 Electric Booster Pump Kit. Please read this manual thoroughly before installation and use to ensure proper function and longevity of the product.
The EBP40 Electric Booster Pump is designed for various automotive and industrial applications requiring efficient fluid transfer. It features a durable nylon housing and is engineered for reliable performance.

2. Safety Information

Always observe the following safety precautions to prevent injury or damage to the product and surrounding equipment.

- Ensure the power source is disconnected before performing any installation, maintenance, or troubleshooting.
- Wear appropriate personal protective equipment (PPE) such as safety glasses and gloves during installation and handling.
- Verify that the pump's voltage (12-Volt) matches the vehicle's or system's electrical supply.
- Do not operate the pump dry. Ensure fluid is present before activation to prevent damage.
- Mount the pump securely to prevent vibration and movement during operation.
- Keep all electrical connections clean and free from moisture.
- Refer to a qualified technician for complex installations or if you are unsure about any procedure.

3. Package Contents

Upon opening the package, verify that all components are present and undamaged.

- Davies Craig EBP40 Electric Booster Pump (DC-9040)
- Mounting Bracket
- Wiring Harness (if included in kit)

- Installation Hardware (screws, nuts, washers - if included in kit)
- User Manual (this document)

Figure 3.1: EBP40 Electric Booster Pump and Mounting Bracket.

This image displays the main components of the Davies Craig EBP40 Electric Booster Pump Kit. On the right is the black nylon-housed pump with its inlet and outlet ports visible, along with the attached electrical wiring harness. To the left is the black, semi-circular mounting bracket, designed to securely hold the pump in place, with two mounting holes visible at its base.

4. Specifications

Feature	Specification
Model Number	EBP40 (DC-9040)
Housing Material	Nylon
Maximum Flow Rate	9.77 Gallons Per Minute
Inlet / Outlet Diameter	3/4" (19mm) O.D.
Operating Voltage	12 Volts (DC)
Item Weight	1.81 pounds
Product Dimensions (L x W x H)	5.1 x 3.4 x 7.9 inches

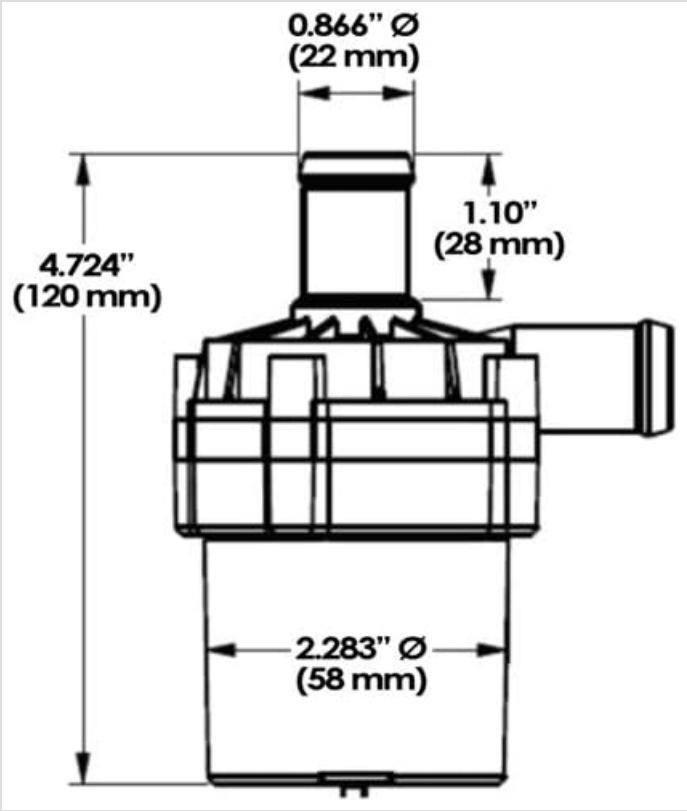

Figure 4.1: EBP40 Pump Dimensions.

This technical drawing provides key dimensions of the EBP40 pump. It shows the overall height of 4.724 inches (120 mm), the main body diameter of 2.283 inches (58 mm), and the inlet/outlet diameter of 0.866 inches (22 mm) with a length of 1.10 inches (28 mm). These measurements are crucial for planning installation space and hose compatibility.

5. Installation and Setup

Proper installation is critical for the performance and longevity of the EBP40 pump.

5.1 Mounting the Pump

1. Select a secure, stable location for mounting the pump, away from excessive heat, vibration, and direct exposure to road debris or water spray.
2. Use the provided mounting bracket. Secure the bracket to a flat surface using appropriate fasteners (not always included, refer to kit contents).
3. Insert the pump into the mounting bracket, ensuring it is firmly seated.

Figure 5.1: EBP40 Mounting Bracket.

This image shows a close-up of the black, semi-circular mounting bracket included with the EBP40 pump. It features two pre-drilled holes at its base, designed for securing the bracket to a flat surface using screws or bolts. The robust design ensures stable support for the pump once installed.

5.2 Plumbing Connections

1. Connect appropriate hoses to the 3/4" (19mm) O.D. inlet and outlet ports of the pump.
2. Ensure all hose clamps are tightened securely to prevent leaks.
3. Orient the pump and hoses to minimize kinks and sharp bends, which can restrict flow.

5.3 Electrical Connections

1. Connect the pump's wiring harness to a fused 12-Volt DC power source.
2. Ensure correct polarity: typically, red wire to positive (+), black wire to negative (-). Refer to the wiring diagram if provided with your specific kit.
3. Use appropriate gauge wiring and ensure all connections are insulated and protected from environmental elements.

6. Operation

Once installed, the EBP40 pump is designed for continuous operation within its specified parameters.

- Before initial startup, ensure the system is filled with the appropriate fluid and purged of air. Operating the pump dry can cause damage.
- Activate the pump via its connected power switch or control system.
- Monitor the system for proper fluid flow and pressure.
- Listen for unusual noises, which may indicate air in the system or an obstruction.

7. Maintenance

The EBP40 pump is designed for low maintenance. However, periodic checks can extend its lifespan.

- **Regular Inspection:** Periodically check hoses, clamps, and electrical connections for signs of wear, leaks, or corrosion.
- **Cleanliness:** Keep the exterior of the pump clean and free from dirt and debris.
- **Fluid Quality:** Ensure the fluid being pumped is clean and free of contaminants that could damage the pump's

internal components.

- **Mounting Security:** Verify that the pump remains securely mounted and that mounting hardware is tight.

8. Troubleshooting

If you encounter issues with your EBP40 pump, refer to the following common troubleshooting steps.

Problem	Possible Cause	Solution
Pump does not turn on	No power, blown fuse, incorrect wiring, faulty switch	Check power supply, inspect fuse, verify wiring connections and polarity, test switch.
Low or no fluid flow	Air in system, clogged inlet/outlet, kinked hose, pump running dry, internal blockage	Bleed air from system, check for obstructions in hoses/ports, ensure fluid supply, inspect pump for debris.
Unusual noise or vibration	Air in system, loose mounting, internal wear/damage, foreign object	Bleed air, tighten mounting hardware, inspect pump for damage or foreign objects.
Leaks from connections	Loose hose clamps, damaged hoses, improper sealing	Tighten hose clamps, replace damaged hoses, ensure proper sealing at connections.

If the problem persists after attempting these solutions, contact Davies Craig customer support or a qualified technician.

9. Warranty and Support

Specific warranty details for the Davies Craig DC-9040 EBP40 Electric Booster Pump Kit are not provided in this manual. Please refer to the product packaging, your purchase receipt, or the official Davies Craig website for the most current warranty information.
For technical support, parts, or service inquiries, please contact Davies Craig customer service through their official channels.

- **Manufacturer:** Davies Craig
- **Website:** www.daviescraig.com.au (Example link, actual link may vary)