

ShockFlo 3471DAH0165UK

ShockFlo 8KW 12V Diesel Air Heater User Manual

Model: 3471DAH0165UK

1. IMPORTANT SAFETY INFORMATION

Please read and understand all safety instructions before installing or operating this diesel air heater. Failure to follow these instructions may result in property damage, personal injury, or death.

- **Professional Installation Recommended:** For optimal performance and safety, professional installation of this heater is strongly recommended.
- **Ventilation:** Ensure adequate ventilation when operating the heater, especially in enclosed spaces.
- **Fuel Type:** Use only diesel fuel as specified. Do not use gasoline or other flammable liquids.
- **Exhaust System:** Ensure the exhaust system is properly installed and sealed to prevent exhaust gases from entering the heated area.
- **Overheating Protection:** The unit is equipped with an overheating protection system. Do not tamper with safety features.
- **Electrical Connections:** Ensure all electrical connections are secure and correctly wired according to the 12V rating.
- **Children and Pets:** Keep children and pets away from the heater during operation.
- **Flammable Materials:** Keep flammable materials at a safe distance from the heater and its exhaust.

2. PRODUCT OVERVIEW

The ShockFlo 8KW 12V Diesel Air Heater is designed to provide efficient and rapid heating for various applications, including cars, trucks, RVs, boats, campers, and indoor spaces. It features a quiet operation with a silencer, remote control functionality, and an LCD display for user convenience.

3. PACKAGE CONTENTS

Verify that all items listed below are present in your package. If any components are missing or damaged, please contact customer support.



Image 3.1: Detailed view of all components included in the package, with main unit dimensions.

- 1 x Diesel Air Heater Unit
- 1 x Muffler
- 1 x Remote Control
- 1 x 10L (2.6 GAL) Fuel Tank
- 1 x Exhaust Pipe

- 1 x Inlet Pipe
- 2 x Air Outlet Pipes
- 2 x Gloves
- 1 x Hole Opener
- 1 x Mounting Accessories Kit (includes clamps, screws, fuel filter, fuel pump, etc.)

Note: A small amount of diesel fuel may be present in the unit due to factory testing. This is normal and does not indicate a used product.

4. SPECIFICATIONS

Technical specifications for the ShockFlo 8KW 12V Diesel Air Heater:

Parameter	Value
Heating Power	8KW
Fuel Type	Diesel
Rated Voltage	12V
Fuel Tank Capacity	10L / 2.6 GAL
Fuel Consumption	0.11-0.51 L/H (0.029 - 0.134 GAL/H)
Heater Operating Temperature	-40°C to +50°C (-104°F to +122°F)
Oil Pump Operating Temperature	-40°C to +40°C (-104°F to +104°F)
Maximum Altitude	5000 m (16404 feet)
Remote Control Distance	30 meters (98 feet)
Number of Air Outlets	1
Heater Dimension	39 x 11.5 x 14.5 cm (15.4 x 4.5 x 5.7 inches)
Exhaust Pipe Dimension	59 x 2.5 cm (23.2 x 0.98 inches)
Air Outlet Pipe Dimension	70 x 7.6 cm (27.6 x 2.99 inches)
Item Weight	6.8 pounds
Product Dimensions	17.32 x 16.93 x 10.24 inches (packaging)

5. SETUP AND INSTALLATION

Proper installation is crucial for the safe and efficient operation of your diesel air heater. Due to the complexity involving fuel lines, electrical connections, and exhaust routing, **professional installation is highly recommended.**

5.1 Component Identification:

Familiarize yourself with the main components of the heater system:

STRUCTURAL ANALYSIS

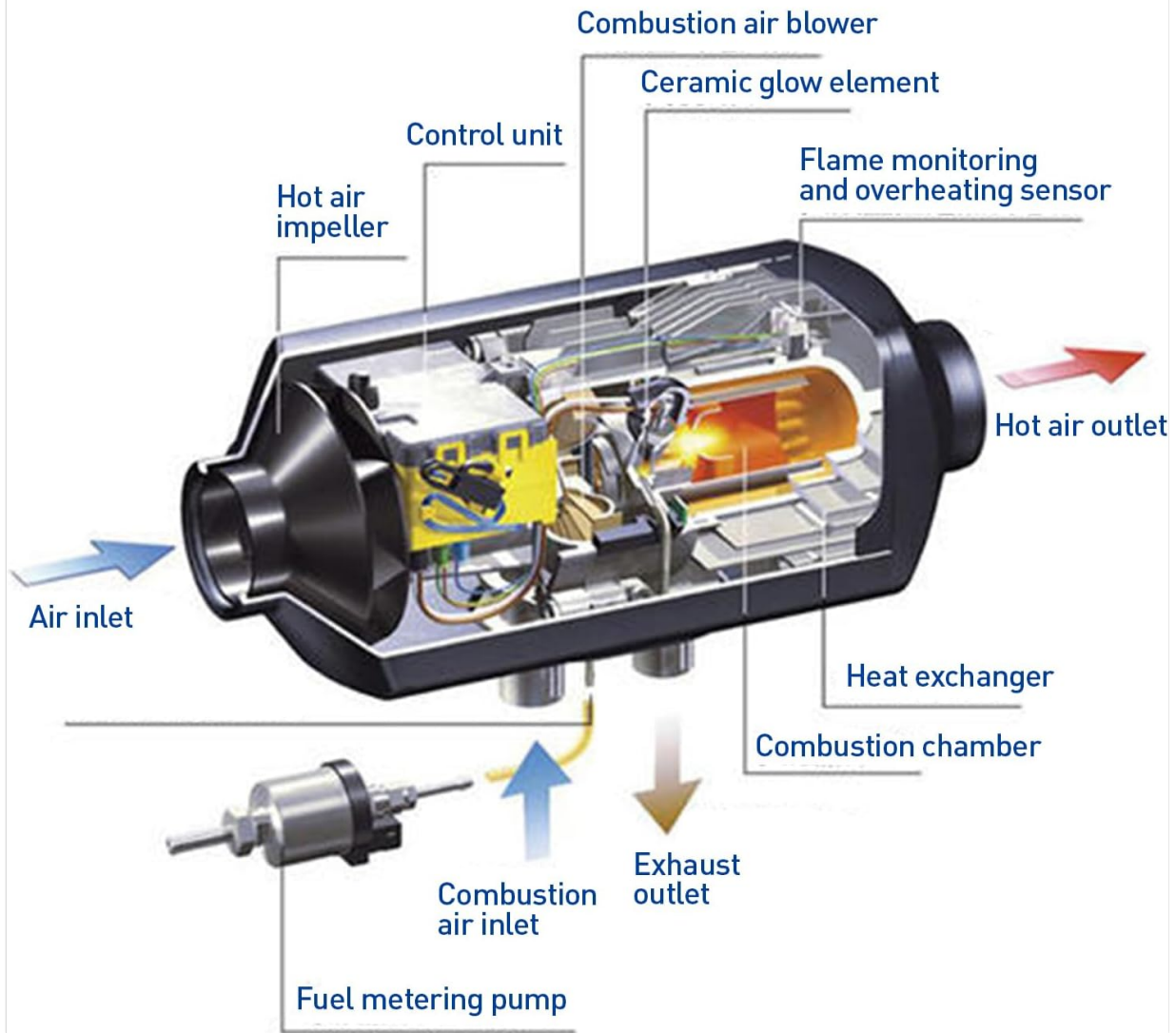


Image 5.1: Structural analysis diagram identifying key internal and external components such as the combustion air blower, ceramic glow element, control unit, hot air impeller, flame monitoring sensor, hot air outlet, air inlet, heat exchanger, combustion chamber, exhaust outlet, combustion air inlet, and fuel metering pump.

- **Heater Unit:** The main body containing the combustion chamber, heat exchanger, and control electronics.
- **Fuel Tank:** Stores diesel fuel for the heater.
- **Fuel Pump:** Delivers fuel from the tank to the heater.
- **Inlet Pipe:** Draws fresh air into the combustion chamber.
- **Exhaust Pipe:** Vents combustion gases safely outside. Ensure this is routed away from the heated area and any openings.
- **Air Outlet Pipes:** Distribute heated air into the desired space.
- **Muffler:** Reduces exhaust noise.
- **LCD Display & Remote Control:** For operating the unit.

5.2 General Installation Steps (Consult a professional for detailed guidance):

1. **Mounting:** Securely mount the heater unit in a suitable location, ensuring proper clearance for air intake and exhaust.

2. **Fuel System:** Install the fuel tank, fuel lines, and fuel pump. Ensure all connections are leak-free.
3. **Exhaust System:** Connect the exhaust pipe and muffler, routing them safely to the exterior.
4. **Air Ducts:** Connect the air inlet and air outlet pipes.
5. **Electrical Connections:** Connect the heater to a 12V power source, ensuring correct polarity and fusing.
6. **Testing:** After installation, perform a thorough test run to check for proper operation, leaks, and safety.

6. OPERATING INSTRUCTIONS

The heater can be operated using the integrated LCD display or the provided remote control.

WORK DEMONSTRATION

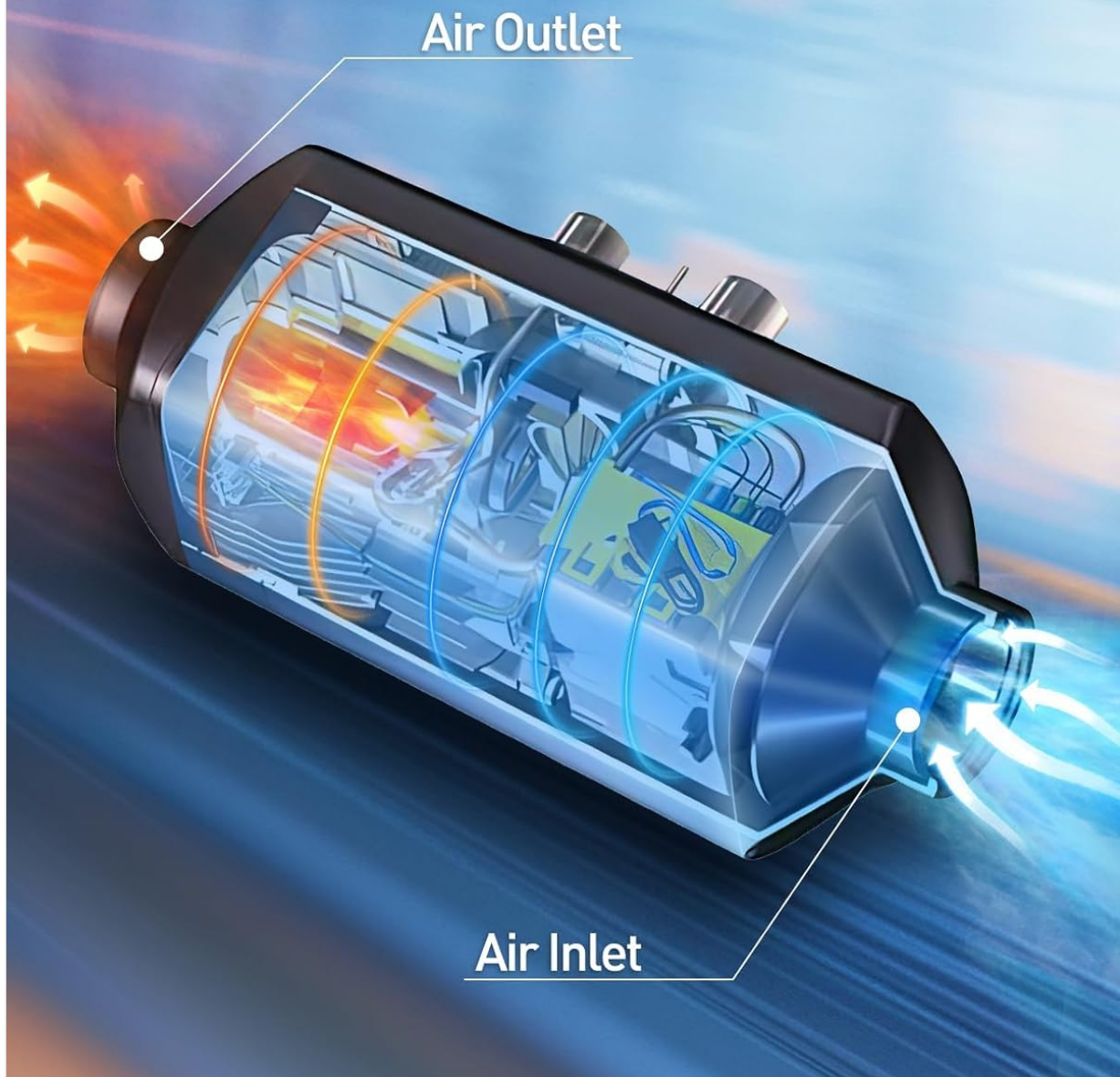


Image 6.1: Diagram showing the air intake and hot air output process of the heater.

6.1 Starting the Heater:

- **Via LCD Display:** Press the power button on the LCD panel. The display will show the current status and temperature.
- **Via Remote Control:** Press the power button on the remote control. The heater will initiate its startup sequence. The remote allows you to preheat your vehicle from up to 30 meters (98 feet) away.

6.2 Adjusting Settings:

- **Temperature:** Use the up/down arrows on the LCD or remote to set the desired temperature. The heater will automatically adjust its output to maintain this setting.

- **Airflow:** Adjust the fan speed to control the airflow.
- **Fuel Quantity:** Some models allow for adjustment of fuel delivery for fine-tuning heat output and consumption. Refer to the specific instructions on the LCD display for this feature.

6.3 Shutting Down the Heater:

Press the power button on the LCD or remote control. The heater will enter a cool-down cycle to prevent damage from residual heat. Do not disconnect power until the cool-down cycle is complete.

7. MAINTENANCE

Regular maintenance ensures the longevity and efficient operation of your ShockFlo diesel air heater.

- **Regular Cleaning:** Keep the air inlet and outlet free from dust, debris, and obstructions. Periodically clean the exterior of the unit.
- **Fuel Filter:** Inspect and replace the fuel filter as needed to ensure clean fuel delivery.
- **Exhaust System:** Check the exhaust pipe and muffler for any blockages, damage, or leaks. Ensure all connections are secure.
- **Electrical Connections:** Periodically check all electrical wiring and connections for signs of wear or corrosion.
- **Fuel Tank:** Keep the fuel tank clean and free of contaminants.

8. TROUBLESHOOTING

If you encounter issues with your heater, refer to the following basic troubleshooting steps. For complex problems, contact customer support or a qualified technician.

- **Heater Not Starting:**
 - Check power supply and connections (12V).
 - Ensure there is sufficient diesel fuel in the tank.
 - Verify the fuel lines are not blocked or kinked.
 - Check for error codes on the LCD display and consult the manual for their meaning.
- **Low Heat Output:**
 - Ensure air inlets and outlets are not obstructed.
 - Check fuel quality and filter.
 - Verify temperature settings.
- **Excessive Smoke:**
 - Check fuel quality.
 - Inspect exhaust system for blockages.
 - This may indicate a combustion issue; professional inspection is advised.
- **Unusual Noise:**
 - Check for loose components or obstructions in the fan.
 - Ensure the muffler is properly installed.

9. WARRANTY AND SUPPORT

For information regarding product warranty, please refer to the documentation included with your purchase or visit the official ShockFlo website. If you require technical assistance, have questions about installation, or need to report a defect, please contact ShockFlo customer support.

ShockFlo Customer Support: Refer to your product packaging or the manufacturer's website for contact details.