

DRAPER

EN

Original Instructions
Version 2 June 2026

DIESEL AND KEROSENE

SPACE HEATER

04175, 04176



**UK
CA** **CE**

1. Preface

These are the original product instructions. Read the instruction manual in full and retain for future reference.

Please visit drapertools.com/manuals for the latest version of this manual and the associated parts list, if applicable.

1.1 Product Reference

User Manual for: Diesel and Kerosene Space Heater

Stock No's: 04175, 04176

Part No's: DSH68, DSH108

1.2 Revisions

Version 1: June 2021

First release

Version 2: June 2026

1.3 Understanding the Safety Content of This Manual



WARNING! – Situations or actions that may result in personal injury or death.



CAUTION! – Situations or actions that may result in damage to the product or surroundings.

Important: – Information or instructions of particular importance.

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3. Product Introduction

3.1 Intended Use


This heater is designed to heat open and well ventilated spaces through the combustion of diesel or kerosene fuels.

Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

Read this manual in full before attempting to assemble, operate or maintain the product, and retain it for later use.


3.2 Specification

Stock No.	04175	04176
Part No.	DSH68	DSH108
Rated voltage	230V/50Hz	230V/50Hz
Rated Input	220W	200W
Fuse rating	13A	13A
Maximum heating area	180M ²	230M ²
Heat output	20kW	30kW
Air output	450m ³ /h	600m ³ /h
Fuel type	Diesel/Kerosene	Diesel/Kerosene
Fuel tank capacity	19L	33L
Operation time (full tank)	12 hours (approx.)	11.5 hours (approx.)
Fuel consumption	1.87L/h	2.8L/h
Cord length (approx.)	1.2M	1.2M
Dimensions	830 × 390 × 490mm	950 × 480 × 590mm
Net weight	16.5Kg	19.5Kg


 **WARNING!** Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.

4.1 General Health and Safety Precautions

 **WARNING!** In order to avoid overheating, **DO NOT** cover the heater.

 **CAUTION!** Some parts of this product can become very hot and cause burns. Particular attention **MUST** be given where children and vulnerable people are present.


- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- Observe all standard safety precautions and good practices when working with electrical equipment.
- Inspect the product before every use for cracked, corroded or broken parts and any leakages


 **WARNING! DO NOT** use this product if it is damaged or leaking in any way. Contact Draper Tools for repair and replacement options.

- Use the product **ONLY** for its intended purpose and as instructed in this manual.
- **DO NOT** attempt to disassemble or modify this product in any way.
- If the heater is not working properly. Switch off and disconnect the heater and move to a well-ventilated area **IMMEDIATELY**. Have the heater checked for correct operation by a qualified engineer before next use.
- If the supply cord is damaged, it **MUST** be replaced by Draper Tools or their authorised representative in order to avoid a hazard.
- **NEVER** abuse the power cord:
 - Unwind the power cord fully before connecting it to the power supply.
 - **NEVER** remove the plug from the power supply by pulling on the cord.


- **DO NOT** move the product using the cord or plug.
- Keep the power cord away from sources of heat, liquids, sharp edges and moving parts.
- The power cord attached to this product is not suitable for use on building sites.

4.2 Additional Safety Information for this Heater

 **WARNING!** Improper use of this heater may result in serious injury or death from burns, fire, explosions, electrical shock and carbon monoxide poisoning.

 **DANGER! ONLY** use this heater in well-ventilated areas and ensure continuous ventilation is provided.

- This heater is intended for use in commercial/ industrial buildings where adequate ventilation is provided. **DO NOT** use this heater in residential living areas.

- **DO NOT** use the heater in dusty environments.
 - **DO NOT** expose this product to temperatures greater than 60°C.
 - Position the heater on a firm and level surface during use and ensure that it is correctly and safely positioned.
 - The heater must **ONLY** be used in its normal operating position.
 - **ALWAYS** observe the correct clearances between the heater and surrounding objects:
 - **Front and rear outlet: 2.5m.**
 - **DO NOT** position the heater near to curtains or other combustible materials that may move and come into contact with the heater.
-  **WARNING! DO NOT** position this heater in the vicinity of combustible materials, in explosive environments or in the presence of flammable or combustible gases and vapours.
- **DO NOT** position this heater below or pointing towards a power socket or outlet.
 - **DO NOT** use the heater if the wheels have not been fitted or have been removed.
 - Ensure that the power switch is in the '**OFF/O**' position before connecting the heater to the power supply.
 - **ALWAYS** check that the heater is positioned safely before turning it on.

4. Health and Safety Information

- **NEVER** leave the heater unattended while it is on under any circumstances.
- **NEVER** cover any part of the heater as this may cause the heater to overheat or the covering item to ignite or burn.
- **NEVER** insert foreign objects through the heat plate or other openings in the heater body.
- **NEVER** place objects on the heater while it is in use and keep all air vents clear of dust, dirt and other obstructions.



WARNING! Risk of shock!

- **DO NOT** expose to rain or use in humid areas.
- **DO NOT** allow the heater to come into contact with water or any other liquid.
- **DO NOT** use this heater in the vicinity of a bath, shower, swimming pool or other bodies of water.
- **DO NOT** touch the heater with wet hands.



WARNING! Some parts of the product become extremely hot during use and may cause burns.

- **DO NOT** touch any metal part of the heater other than the handle or wheels during or immediately after use.
- **DO NOT** touch or otherwise interfere with the fuel tank while the heater is in use or is still hot.
- **ALWAYS** switch off the heater, disconnect it from the power supply and allow it to cool for at least 20 minutes before attempting to move or reposition it.
- **ALWAYS** keep children and animals away from the heater.

4.3 Electrical Safety

- **ONLY** use this product with a power supply with a power supply that matches the rated voltage of the heater.
- **NEVER** use this heater with an extension lead, multi-socket or plug adaptor; it must be plugged directly into the power supply.
- **NEVER** plug more than one heater into the same power outlet.
- **NEVER** allow the power cord to come into contact with other heated objects or direct the heater at the power cord or supply.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.

- **DO NOT** use this heater with a programmer, timer, separate remote-control system or any other device that switches the heater on automatically as it may be covered or positioned incorrectly when activated and pose a fire risk.

4.4 Health and Safety Information for the use of diesel and Kerosene Fuels

Important: ALWAYS read and understand the fuel product label before use.

- **ONLY** use clean diesel or kerosene fuel with this heater.



WARNING! DO NOT use fuels such as petrol, benzene, paint thinners or other oil compounds in this heater under any circumstances.

- **NEVER** smoke in the vicinity of the heater, especially during refuelling.
- **NEVER** refuel the heater while it is switched on or is still hot.
- **ALWAYS** wear suitable protective gloves and other clothing during refuelling.
- **NEVER** transport the heater with fuel in the fuel tank; drain and store or dispose of all fuel responsibly before transporting the heater.
- **NEVER** start the heater if you can smell fuel vapour in the air. If fuel vapour is present, wait for it to dissipate or move to a new location.
- The heater and fuel get hot during use. **DO NOT** touch the heater during or immediately after use and allow it to cool before refuelling.
- **NEVER** remove the fuel cap while the heater is running or immediately after use. Take care when opening the fuel cap after use as hot vapour may be released from the opening.
- Store all fuels in a cool, clean and dry environment, away from direct sunlight and out of reach of children. Adhere to all local guidance relating to the correct storage of fuel.



WARNING! Diesel is a carcinogenic substance, and kerosene is known to have health implications if handled improperly. Exercise extreme caution when transporting and storing fuel and during refuelling. Clean up spillages IMMEDIATELY and dispose of fuel responsibly and in accordance with local regulations.



WARNING! Burning diesel emits toxic carbon monoxide: a colourless and odourless gas. Breathing exhaust fumes can cause loss of consciousness, permanent respiratory damage and eventually death. **ONLY** operate this machine in a well-ventilated environment. **NEVER** use this heater in living or sleeping areas.

4.5 Service

- Have your heater serviced by a qualified repair person using **ONLY** identical replacement parts. This will ensure that the safety of the heater is maintained.

4.6 Connection to the Power Supply

This appliance is supplied with an approved rewirable plug and cord for your safety.

If the power supply cord is damaged, it must be replaced by Draper Tools, an authorised service agent or similarly qualified personnel in order to avoid a hazard.

The damaged or incomplete plug, when removed from the cord, shall be disabled to prevent connection to a live electrical outlet. To replace the plug, follow the wiring instruction card supplied attached over the plug cover pins.

This product is Class I[†] and is designed for connection **ONLY** to a power supply matching that detailed on the rating label and compatible with the plug fitted.

The value of the fuse fitted is marked on the pin face of the plug. Should the fuse need replacing, ensure the substitute is of the correct rating, approved to BS1362 and ASTA or BS Kite marked. The fuse can be replaced by unscrewing the plug front cover and removing the broken fuse from its holder. This should only be performed by suitably qualified personnel.

ASTA

BSI

If an extension lead is required, use an approved and compatible lead rated for this appliance. **Important:** **ALWAYS** follow the extension lead instructions regarding maximum load while the cable is wound. If in doubt, unwind the entire cable. A coiled extension lead generates heat which could melt the lead and cause a fire.

[†] **Earthed**

This product requires an earth connection to protect against electric shock from accessible conductive parts in the event of failure of the basic insulation.

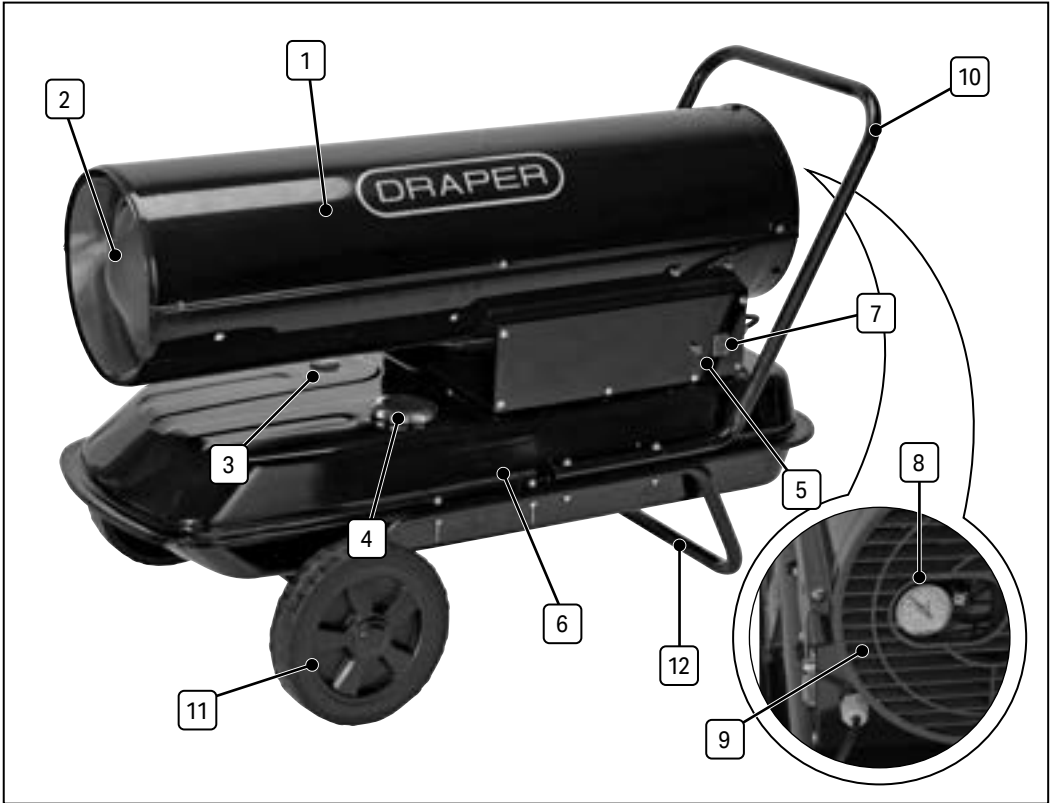
4.7 Residual Risk

The safety instructions in this manual cannot account for all possible conditions and situations that may occur. Exercise common sense and caution when using this product and protect against any additional conceivable risks.

5. Identification and Unpacking

Carefully remove the product from the packaging and examine it for any signs of damage that may have occurred during shipment. If any part is damaged or missing, **DO NOT** attempt to use the product. Please contact the Draper Helpline; contact details can be found at the back of this manual.

5.1 Product Overview



- | | | | | | |
|---|----------------|---|---------------------------------|----|---------------------|
| 1 | Upper shell | 5 | Power ON Indicator light | 9 | Fan guard |
| 2 | Hot air outlet | 6 | Fuel tank | 10 | Transport handle |
| 3 | Fuel gauge | 7 | ON/OFF switch | 11 | 2 × Wheels |
| 4 | Fuel cap | 8 | Pressure gauge | 12 | Wheel support frame |

5.2 Packaging

Keep the product packaging for the duration of the warranty period for reference should the product need to be returned for repair.



WARNING! Keep packaging materials out of reach of children. Dispose of packaging correctly and responsibly and in accordance with local regulations.

Please visit drapertools.com for our full range of accessories and consumables.

6.1 Fitting Wheels & Transport Handle (Fig.1)

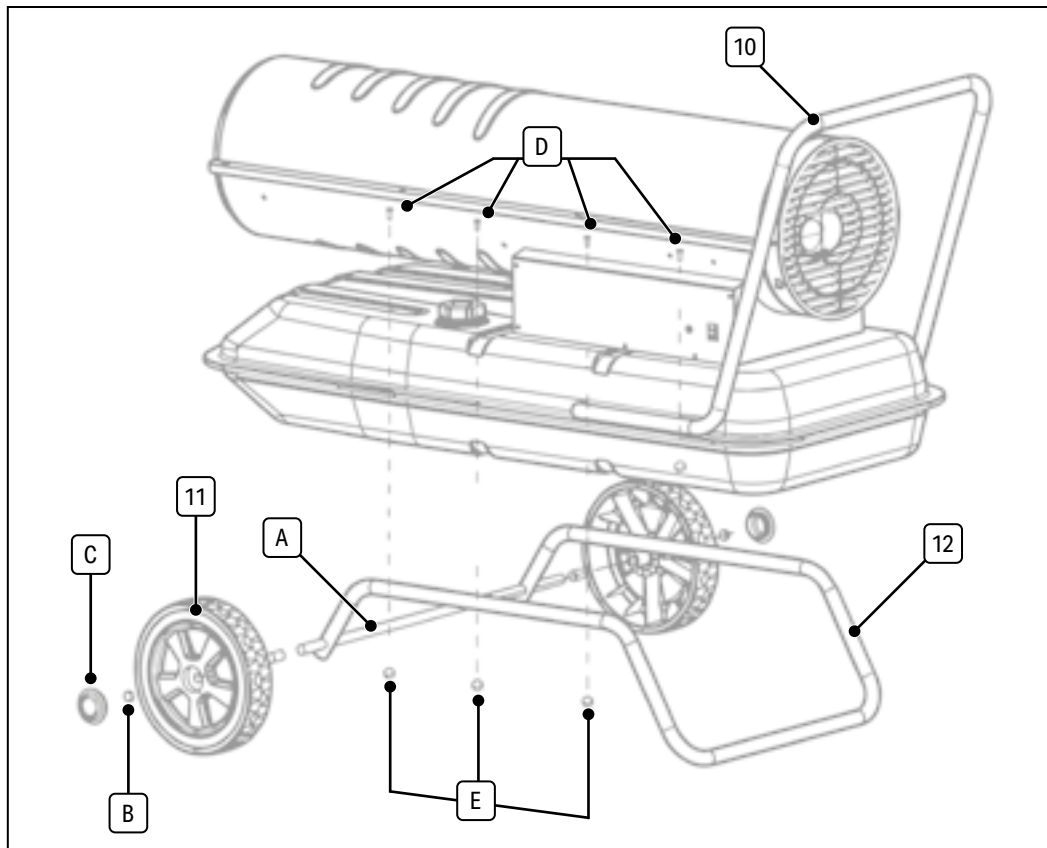


Fig. 1

Wheel assembly

1. Slide the axle (A) through the wheel support frame (12).
2. Attach the wheels (11) to either end of the axle.
3. Secure the wheels onto the axle using the split pins (B).
4. Place the cap nuts (C) onto the ends of the axles and secure in place.

Frame and handle assembly

5. Place the heater onto the wheel support frame (12).
6. Then align the holes on the fuel tank with the corresponding holes on the wheel support frame.
7. Place the handle (10) on top of the fuel tank flange. Insert the screws (D) on both sides through the handle, fuel tank and wheel support frame. Fit the washers and spring washers and secure each with a nut (E). After all screws are inserted tighten the nuts.

7. Preparation Instructions

Important: Before operating this product, read and understand all the safety instructions listed in this manual.

WARNING! DO NOT leave the heater unattended while it is connected to the power supply or switched on.

7.1 Acceptable Fuels

WARNING! This heater is suitable for use **ONLY** with standard diesel or kerosene. **NEVER** use petrol, oil, used oils, paint thinners, alcohol or other highly flammable fuels. Use of an incorrect fuel may cause an explosion and serious injury.

- **ALWAYS** ensure that the fuel tank is clean both before fuelling and once filled. Foreign matter such as rust, dirt or water may cause the ignition control to shut down the heater and may require regular cleaning of the fuel system.
- **ALWAYS** follow local guidance relating to the storage of diesel and kerosene.

WARNING! **NEVER** store diesel or kerosene in a living space. Store it in a well-ventilated area well away from any residential spaces and away from direct sunlight and sources of ignition and heat.

7.2 Fuelling the Heater (Fig.2)

WARNING! **ALWAYS** ensure that the heater is switched off, disconnected from the mains power and has completely cooled before adding fuel. **NEVER** add fuel to the heater while it is running.

Important: **ALWAYS** wear protective gloves during refuelling.

To add fuel to the heater (Fig.5):

- Remove the fuel cap (4) and pour the fuel directly into the fuel tank until the fuel gauge (3) shows 'F', observing the following conditions:

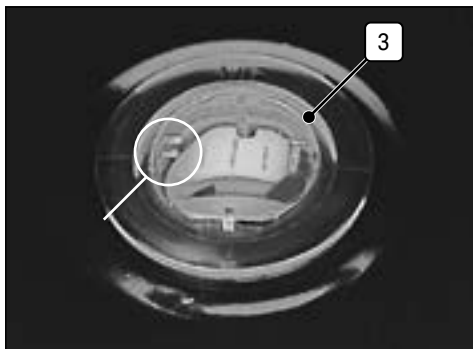


Fig. 2

- **ALWAYS** place the heater on a level surface when fuelling.
- **NEVER** overfill the heater and wipe up any spillages **IMMEDIATELY**.
- **NEVER** add fuel to the heater while indoors; fuel the heater **ONLY** in well-ventilated areas.
- **NEVER** use the heater without the fuel filter fitted.

7.3 Positioning the Heater

WARNING! This heater is designed for use **ONLY** in well-ventilated areas. Combustion of the fuels used in this heater produces toxic fumes that are dangerous if inhaled. **NEVER** use this heater to heat residential spaces.

- Position the heater so that it stands upright unaided on a firm, level and fire-resistant surface and is located a safe distance away from flammable objects and wet environments.
- Provide a fresh air opening of at least three square feet (2,800 sq. cm) for each 30,000 kcal/Hr. rating. Provide extra fresh air if more heaters are being used.

Important: Before use, read and understand all the safety instructions listed in this manual.

Important: When operating the heater for the first time, fill the tank completely to allow the pump to bed in during the initial running period.

8.1 Switching the Heater ON (Fig.3)

1. Ensure that the fuel tank has been sufficiently filled and the fuel cap has been securely and correctly fitted.
2. Ensure that the 'ON/OFF' switch (7) is in the 'OFF/O' position, then connect the heater to a mains power supply.

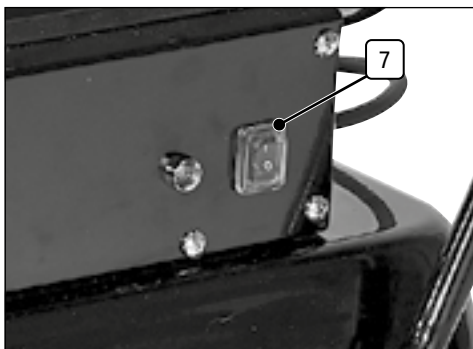


Fig. 3

3. Move the 'ON/OFF' switch (7) to the 'ON/I' position and the heater should start within 5 seconds.

Note:

- If the heater does not switch on, move the switch back to 'OFF/O' and then back to 'ON/I'.
- To restart after switching off, wait 10 seconds before switching on.

8.2 Switching the Heater Off

To switch off the heater: move the switch back to 'OFF/O' position and unplug from the power supply.

9. Maintenance and Troubleshooting

Important: Read all the Health and Safety information in this manual before attempting to maintain this product. All maintenance should be carried out **ONLY** by authorised and suitably qualified personnel.

WARNING! ALWAYS ensure that the heater is switched off, disconnected from the power supply and has fully cooled before attempting to maintain this product.

Important: it is recommended that your heater is serviced at least once a year by a qualified repair person using **ONLY** identical replacement parts. This will ensure that the safety of the heater is maintained. For aftersales servicing or warranty repairs enquires, contact the Draper Tools Helpline for assistance – contact details can be found **on the back of this manual**.

9.1 General Maintenance

- Keep the heater clean and dry. Clean the heater body using a dry cloth **ONLY**.
- Clean the heater guard/grille using a dry cloth or brush, ensuring that all dust and debris is collected and removed from the heater.
- Any maintenance or repairs to the heater, the plug or cord **MUST** be carried out by suitably qualified personnel.
- The heater should be inspected at least once a year by suitably qualified personnel.

9. Maintenance and Troubleshooting

9.2 Draining the Fuel (Fig.4)

Important: Read all the Health and Safety guidance for the use of diesel as a fuel before filling or draining this product (Refer to section 4.4).

- To drain the fuel from the product, place a suitable sized container under the drain plug (F) situated on the underside of the fuel tank. Remove the drain plug and drain the fuel.

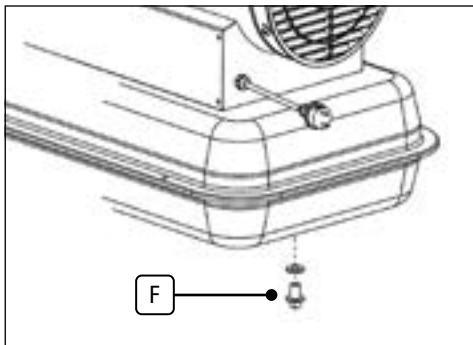


Fig. 4

- If dirt or debris is present in the drained fuel or tank, pour a couple of litres of clean fuel into the tank and manoeuvre it around to clean the tank interior. Then drain the fuel again to prevent the filters from clogging.
- Replace the drain plug securely.
- **ALWAYS** drain the tank before storing the heater.

CAUTION! DO NOT use water to clean the inside of the fuel tank.

Important: Wipe up any spillages **IMMEDIATELY** and dispose of old fuel responsibly and in accordance with local regulations.

9.3 Fuel Tank Care

- The fuel tank interior should be cleaned after every 200 hours of use or as necessary.

9.4 Filter Care

- Remove the fuel tank cap (4) and lift out the fuel filter, then clean with clean fuel. This should be carried out at least twice during the heating season by rinsing in clean diesel.

9.5 Fan Blades & Filter Care

- The fan blades, air intake, output and lint filters should be inspected and replaced every 500 hours of operation or once a year. This should be carried out by suitably qualified personnel. Contact Draper Tools to discuss servicing options.

9.6 Nozzle/Spark Plug/Photocell/Pump Care & Servicing

- The heater should be inspected at least once a year by suitably qualified personnel and the nozzle/spark plug/photocell/pump should be checked, cleaned and replaced where necessary.
- Contact Draper Tools to discuss servicing options.
- In the event that incorrect or contaminated fuel is used in the heater, it must be replaced immediately.

9.7 Pump Pressure Adjustment (Fig.5)

- While heater is operating, turn relief valve clockwise to increase and anticlockwise to decrease the pressure shown on the gauge (8). Use a flat blade screwdriver to turn valve.

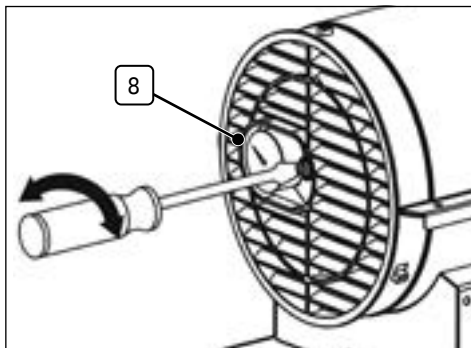


Fig. 5

- Correct pump pressure is as follows:

Stock Number	Pump pressure (Bars) +/-10%
04175	0.35
04176	0.37

- For best measurement of pressure, test with full tank of fuel. Optimum pressure occurs when the nose cone is cherry red and there are no extending flames from the heater.

9.8 Storing the Heater

Important: ALWAYS ensure that the heater is switched off, disconnected from the power supply and has cooled thoroughly before storing it.

- Drain the heater of all fuel before storing it; **see 9.2 Draining the Fuel.**

- Store the heater in a clean and dry location, out of reach of children.
- Keep the heater out of direct sunlight and away from combustible materials and sources of ignition when it is stored.

9.9 Troubleshooting

Problem	Possible Cause	Remedy
Heater does not switch on.	No power.	Ensure the heater is plugged in and the switch is in the ' ON/I ' position. Check fuse in plug and replace if necessary.
	No fuel.	Switch off, unplug the heater and refill the tank with fuel.
	Fuel or filter is contaminated or dirty.	Switch off, unplug and empty the tank – see 9.2. Clean the tank and fuel filter – see 7.2 and 9.4.
Heater shuts off after a short time and indicator light ⑤ is flashing.	Insufficient fuel in tank.	Refill tank with clean fuel – see 7.2.
	Fuel filter dirty.	Remove and clean – see 9.4.
	Incorrect pump pressure.	Adjust pump pressure – see 9.7.
	Dirty input, output or line filter.	Contact Draper Tools for support.
	Nozzle/ Photocell dirty or faulty.	Have the nozzle/photocell cleaned or replaced. Contact Draper Tools for support.
	Spark plug or ignitor defective.	Contact Draper Tools for support.
Fan does not operate when heater is plugged in and in 'ON' position. Indicator light ⑤ flashing.	Electrical issue between PCB and motor.	Contact Draper Tools for support.
	Temperature limit overheated.	Switch heater off and allow to cool for at least 10 minutes before retrying.
Poor combustion.	Dirty fuel filter/poor quality fuel used.	Clean or replace fuel filter. Only use clean diesel or kerosene.
	Pump pressure too high or low.	Check and adjust pump pressure – see 9.7.

10. Spares, Returns and Disposal

For spare parts, servicing, and repair and replacement options, please contact the Draper Tools Product Helpline for details of your nearest authorised agent.

Any servicing or repairs carried out by unauthorised personnel or installation of spare parts not supplied by Draper Tools will invalidate your warranty.

Important: For safety, **ALWAYS** drain and clean the product of any oil, fuel, chemicals or other substances before returning it to Draper Tools or its authorised agent. Store these materials in suitable containers and dispose of them in accordance with local regulations. Draper Tools and its agents cannot be responsible for the disposal of these substances.

At the end of its working life, dispose of the product responsibly and in line with local regulations. Recycle where possible.

11. Warranty

12 months from date of purchase – Visit drapertools.com for more information.

- **DO NOT** dispose of this product with domestic waste; most local authorities provide appropriate recycling facilities.



- Dispose of diesel and kerosene separately and in accordance with local regulations; **DO NOT** abandon it in the environment.



12. Explanation of Symbols



General Mandatory action required



Read the instruction manual



Warning! / Caution



Warning! DO NOT touch hot surfaces



Danger of electric shock



DO NOT cover



DO NOT expose to wet or damp conditions



Rated voltage



Rated input (Kilowatts)



Rated input (British Thermal Units)



Maximum heating area



Air output



Tank capacity



Run time per tank of fuel (approx.)



Fuel consumption (Litres per hour)



Power cord length



Net product weight



For indoor use **ONLY**
DO NOT expose to rain



Class I Appliance (Earthed)



WEEE –
Waste Electrical & Electronic Equipment
Do not dispose of Waste Electrical & Electronic Equipment
in with domestic rubbish



European conformity



UK Conformity Assessed

Contact Details

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Please contact the Draper Tools Product Helpline for repair and servicing enquiries.