

DRAPER

EN

Original Instructions
Version 1 May 2026

230V RADIANT
**DIESEL
HEATER**

36635



**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: 230V Radiant Diesel Heater

Stock No: 36635

Part No: BG01402-20

1.2 Revisions

Version 1: May 2026

First release

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 radiant heater is designed to heat open and well ventilated spaces through the combustion of diesel or kerosene fuels. Supplied with automatic ignition and fitted with a photocell safety device with heat protection.

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.	36635
Part No.	BG01402-20
Rated voltage	230V/50Hz
Rated Input	110W
Heat output	20KW
Fuel type	Diesel/Kerosene
Tank capacity	10.5L
Operation time (full tank)	6hours (approx.)
Fuel consumption	1.9L/h
Maximum heating area	375m ³
Air output	613m ³ /h
IP rating	IPX4
Cord length(approx.)	1.5m
Dimensions (W×D×H)	575 × 340 × 635mm
Net weight	16.6Kg

 **WARNING!** Read all the safety warnings and 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.
- Children of less than 3 years should be kept away unless continuously supervised.
- Children aged from 3 years, and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children aged from 3 years, and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.
- 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

 **DANGER!** 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 50°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:
 - Outlet: 2.5m (8ft)
 - Sides, top and rear: 1.25m (4ft)

4. Health and Safety Information

- **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 stand is not fitted or has 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.
- **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 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 machine, 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.



DANGER! 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.



DANGER! 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 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 cut from the cord, shall be disabled to prevent connection to a live electrical outlet.

This product is Class I[†] and is designed for connection 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. This should only be performed by suitably qualified personnel.

ASTA

BSI



CAUTION! DO NOT use this product with an extension lead or multi-socket.

† 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

5.1 Product Overview



- | | | | | | |
|---|------------------|---|----------------------------|----|---------------------------|
| 1 | Safety guard | 5 | Power indicator light | 9 | Fuel cap |
| 2 | Reflector | 6 | Temperature display screen | 10 | Fuel gauge |
| 3 | Heater element | 7 | ON/OFF switch | 11 | Stand |
| 4 | Transport handle | 8 | Temperature control dial | 12 | Cord and plug (not shown) |

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](https://www.drapertools.com) for our full range of accessories and consumables.

6.1 Fitting Safety Guard and Reflector (Fig.1 – Fig.2)

- Fit the safety guard **1** and reflector **2** using the screws supplied.

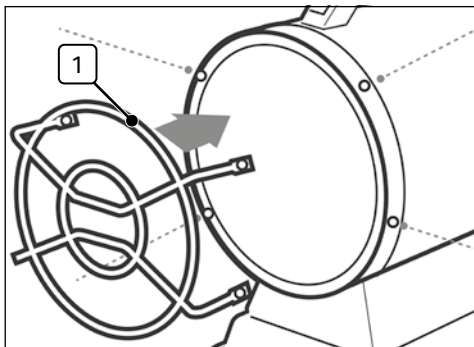


Fig. 1

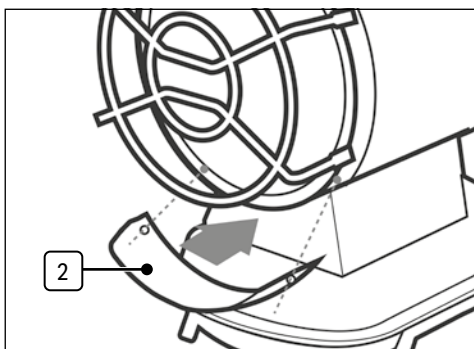


Fig. 2

6.2 Fitting Transport Handle (Fig.3)

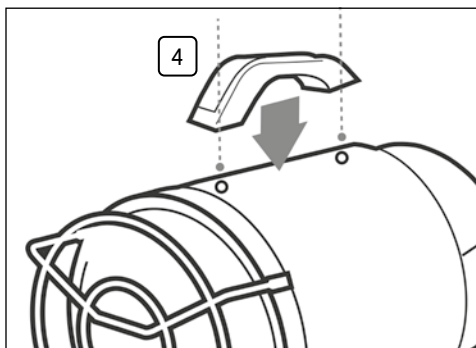


Fig. 3

6.3 Fitting Stand (Fig.4)

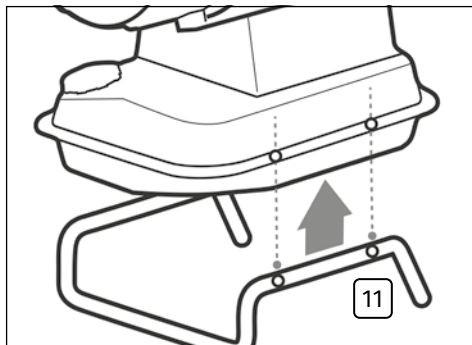


Fig. 4

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.5)

 **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 (9) and pour the fuel directly into the fuel tank until the fuel gauge (10) shows 'F', observing the following conditions:

- **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.**

- Provide a fresh air opening of at least 0.28m² (3ft²) for every 30,000kCal/h (189,000 BTU). This heater requires 0.292m² (3.15ft²), which can be approximated as:
 - A two-car garage door raised 15.25cm (6").
 - A single-car garage door raised 22.9cm (9").
 - Two 76.2cm (30") windows raised 38.1cm (15").
- 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.

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

8.1 Switching the Heater On (Fig.6)

 **WARNING!** This heater emits infrared radiation. **ALWAYS** ensure that there are no combustible materials in the vicinity of the heater.

 **WARNING! DO NOT** move the heater during or immediately after use. **ALWAYS** switch off the heater, disconnect the power supply and allow it to cool before moving.

- **Important:** If the heater has recently been switched off, allow at least ten seconds before switching it back on again.

1. Ensure that the fuel tank has been sufficiently filled and the fuel cap has been securely and correctly fitted.

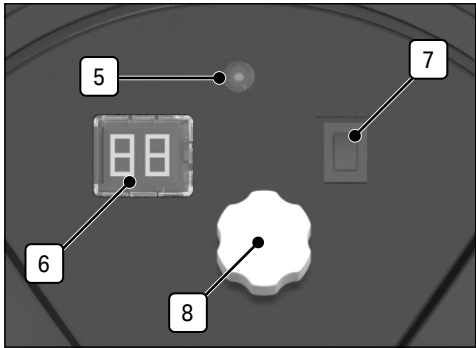


Fig. 6

8.4 Safety Features

This heater is equipped with four safety features that will automatically switch off the device under specific circumstances:

Feature	Shutdown conditions
Thermal cut out	The internal temperature of the heater has reached an unsafe level. Switch off the heater, disconnect it from the mains power and allow it to cool for at least 20 minutes before attempting to restart it.
Short-circuit protection	The circuitry has short-circuited or overloaded and the internal fuse has blown. Have the device checked by a qualified and authorised engineer before reuse.
Flame out sensor	An internal photocell monitors the condition of the flame in the combustion chamber during normal operation. If the flame is extinguished while the heater is switched on, it will automatically shut down.
Anti tilt sensor	The heater automatically shuts down if the unit is tilted in order to protect the ground from heat damage.

2. Ensure that the power switch (7) is in the 'OFF/O' position and the temperature control dial is set to the lowest position.
3. Connect the heater to a mains power supply.
4. Move the power switch (7) to the 'ON/I' position.
5. Turn the temperature control dial (8) to the desired setting; the current temperature is shown on the digital display (6). **Important:** If the target temperature is less than the current ambient temperature, the heater will not start.

8.2 Switching the Heater Off

When switching off the heater:

1. Turn the temperature control dial (8) to the lowest setting, then move the power switch (7) to the 'OFF' position.
2. Wait for approximately 5minutes for the heater to cool down before unplugging from the power supply.

8.3 Fuel System

- This heater is equipped with an electric pump that is connected to the fuel intake, and then through a nozzle in the burner head. This fuel is then sprayed into the combustion chamber in a fine mist. The electronic ignitor sends voltage to a specially designed spark plug. The spark plug ignites the fuel mixture described.
- The motor turns a fan that forces air into and around the combustion chamber, which warms the heater plate, emitting infra-red heat.

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.

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.

9.2 Draining the Fuel

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, remove the fuel cap and use a siphon to extract the fuel into a suitable container, ensuring that there is no fuel left in the tank.
- 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.

 **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.
- To clean the fuel tank, add a couple of litres of diesel or kerosene and manoeuvre it around the interior of the tank, ensuring that the whole surface is coated, then drain the fuel tank (see **9.2 Draining the Fuel**).

9.4 Filter Care

- Remove the fuel tank cap  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 Nozzle/Spark Plug/Photocell Care and Servicing

- The heater should be inspected at least once a year by suitably qualified personnel and the nozzle/ photocell/ignition device/fan blades 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.

9.6 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.

9.7 Troubleshooting

Problem/Error Code	Possible cause	Remedy
F0 Operator error	Power switch is in the ' ON/I ' before the heater is plugged in	Ensure the power switch is in the ' OFF/O ' before plugging in to the power supply
F1 Photocell error	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 9.2 and 9.4 .
	Photocell is dirty or damaged	Have the photocell cleaned or replaced Contact Draper Tools for support
	Ignition failed	Contact Draper Tools for support
F2 Temperature control sensor error	Sensor cable is damaged or disconnected	Contact Draper Tools for repair and replacement options
	Sensor is damaged or faulty	Contact Draper Tools for repair and replacement options
F3 Thermostat error	Internal temperature too high	Switch off, unplug and allow to cool down
	Anti-tilt sensor operated	Ensure the heater is on a level and stable surface
LO	External temperature below -9°C	The ambient temperature is outside of the operating temperatures of this heater
CH	Continuous operation	Normal operation
Heater does not operate	Power switch in ' OFF/O ' position.	Move the switch to the ' ON/I ' position
	No Power/Power cord unplugged	Check power cord plugged in. Check plug fuse
Motor/Pump runs but no flame generated	No fuel	Turn off and refill the tank.
	Ignition device is dirty	Contact Draper Tools for advice
	Fuel filter is dirty	Remove and clean the fuel filter
	Nozzle or photocell dirty or damaged	Contact Draper Tools for advice
	Fuel in tank contaminated	Empty and refill tank with clean fuel
Fan blocked or spins too slowly	Engine damaged	Contact Draper Tools for advice

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.

Draper Tools will endeavour to hold any spare parts, if applicable, for seven years from the date that it sells the final matching stock item.

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 fuel 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.

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



11. Warranty

12 months from date of purchase – Visit [drapertools.com/warranty](https://www.drapertools.com/warranty) for more information.

12. Explanation of Symbols

	General Mandatory action required		Air output
	Read the instruction manual		Tank capacity
	Warning! / Caution		Run time per tank of fuel (approx.)
	Warning! DO NOT touch hot surfaces		Fuel consumption (Litres per hour)
	Danger of electric shock		Power cord length
	DO NOT cover		Net product weight
	DO NOT expose to wet or damp conditions	IPX4	Ingress protection rating
	Rated voltage		For indoor use ONLY DO NOT expose to rain
	Rated input (Wattage)		Class I Appliance (Earthed)
	Rated input (Kilowatts)		WEEE – Waste Electrical & Electronic Equipment Do not dispose of Waste Electrical & Electronic Equipment in with domestic rubbish
	Rated input (British Thermal Units)		European conformity
	Maximum heating area		UK Conformity Assessed

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