

Owners Manual

Product Code: 1097T

**MADE FOR THE
TRADE**

TQ TRADEQUIP
the trusted brand in equipment

WORKSHOP HEATER



Specifications:

- Power Output: 50kW - 170,600 Btu/h
- Motor: 240V/50Hz 340W
- Noise Level: 77dB(A)
- Air Delivery: 1100 cubic metres per hour
- Fuel Consumption: 4kg per hour
- Tank Capacity: 56 Litres
- Dimensions: 1090 x 490 x 585mm
- Nett Weight: 27kg
- Carton: 1046 x 465 x 570mm
- Gross Weight: 31.8kg

About the TradeQuip brand

The 'TradeQuip' brand of workshop equipment, is designed for use in a demanding workshop environment by professional users. With proven and trusted "Made for the Trade" reliability, 'TradeQuip' branded products offer the very best in performance for an affordable price. All backed by a 1year trade guarantee across 1,000+ distributors Australia wide.

TQ TRADEQUIP
the trusted brand in equipment

TQ PRO
Trusted by serious professionals

BORUM
INDUSTRIAL WORKSHOP EQUIPMENT

WARNING**IMPORTANT: READ ALL INSTRUCTIONS BEFORE USE****WARNING**

The instructions and warnings contained in this manual should be read and understood before using or operating this equipment. Do not allow anyone to use or operate this equipment until they have read this manual and have developed a thorough understanding of how this equipment works. Failure to observe any of the instructions contained in the manual could result in severe personal injury to the user or bystanders, or cause damage to the equipment and property. Keep this manual in a convenient and safe place for future reference.

Whilst every effort has been made to ensure accuracy of information contained in this manual, the TQB Brands Pty Ltd policy of continuous improvement determines the right to make modifications without prior warning.

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STANDARD OPERATING PROCEDURE

DO NOT use this equipment unless you have been trained and assessed to a competent level in its safe use and operation, and have been given permission to use this



DO NOT tilt the unit



DO NOT operate the unit with wet or damp hands

PRE-OPERATIONAL SAFETY CHECKS

Please read the following very carefully as failure to comply may invalidate your guarantee. When using electrical appliance basic precautions should always be followed including below:

- The use of gasoline is strictly prohibited. It is a highly volatile fuel that can result in explosions or uncontrolled fires. It is essential that only kerosene or diesel is used in this unit.
- If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.
- Service must be performed by a qualified service agency.
- Unvented workshop heaters use air (oxygen) from the area in which it is used. Adequate combustion and ventilation air must be provided. Refer to instructions.
- DO NOT store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.
- Fire, burn, inhalation, and explosion hazard. Keep solid combustibles, such as building materials, paper or cardboard, a safe distance away from the heater as recommended by the instructions.
- DO NOT use the Workshop Heater in spaces which do or may contain volatile or airborne combustibles, or products such as gasoline, solvents, paint thinner, dust particles or unknown chemicals.
- Direct-fired heaters may cause carbon monoxide (CO) poisoning when incorrectly used, e.g. indoors without adequate air circulation, or if not properly working. CO poisoning may lead to death.
- Failure to comply with the precautions and instructions provided with this heater, can result in death, serious bodily injury and property loss or damage from hazards of fire, explosion, burn, asphyxiation, carbon monoxide poisoning, and/or electrical shock.
- DO NOT use for home or recreational use.
- Please read these instructions before you operate this Workshop Heater
- The electrical system to which the appliance is connected must comply with current legislation. Installation requires a residual current circuit breaker in the main electrical distribution board.
- Unplug the appliance before performing any maintenance operations.
- Always check the power cable before using the appliance. It must not be bent, taut, stretched, crushed or any way damaged.
- The power cable must be replaced by qualified personnel only. Use an original power cable only with a 3-pin approved plug.
- DO NOT touch the front outlet is very hot during operation due to high heat.
- When servicing, use only TradeQuip identical replacement parts. Use of any other parts will void the warranty. Ensure the Workshop Heater is disconnected from power before servicing.
- Use the right product for the job. There are certain applications for which the Workshop Heater was designed. Do not modify the Workshop Heater and do not use the Workshop Heater for a purpose for which it was not intended.

INTENDED USE

Ideal for space heating, frost protection and condensation control in commercial and industrial workshops, factories, and warehouses.

ASSEMBLY, OPERATION, PREVENTITIVE MAINTENANCE

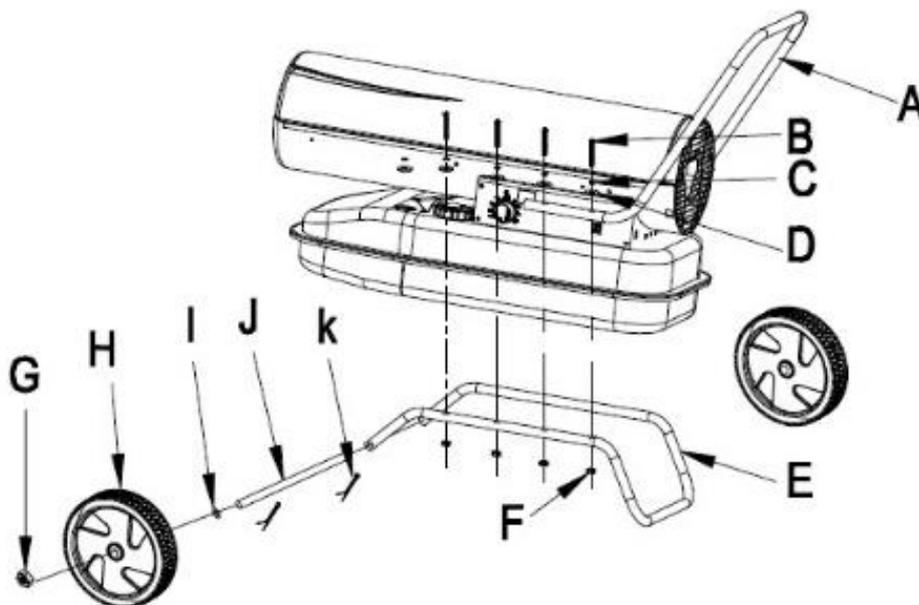
1. FEATURES

TradeQuip "Made for the Trade" Direct-Fired Forced Air Workshop Heaters are ideal for workshops, garages and warehouses, reducing concrete freeze and emergency heating. Ideal for quickly and efficiently heating cold condition workshops, this forced air heater can be used in a variety of commercial and industrial settings and is fueled by kerosene or diesel. It is a reliable heating solution for a cold work space and is easy to move and position as required thanks to the ergonomically designed inbuilt handle.

2. ASSEMBLY

Unpacking: after removing the packing material, make sure the product is in perfect condition and that there are no visible damaged parts. The packaging materials (Polyethylene bags, polystyrene etc.), must be disposed of in an appropriate refuse collection container. Recycle cardboard.

1. To assemble the heater, proceed as follows:
2. Insert the wheel shaft J to the corresponding hole of feet pipe E, insert the cotter K to the corresponding holes; put plain washer I to the two sides of shaft, slide the wheel H over the wheel shaft J, screw the nut G to fix the wheel on the shaft.
3. Put the heater body on the feet pipe assembly, make sure the 4 holes of handle A point towards the corresponding 4 holes on the feet pipe respectively.
4. Using the screw B, spring washer C, plain washer D and nut F to fix the feet pipe assembly and handle to the tank.



Part	Description	Qty
A	Handle	1
B	Screw	8
C	Spring washer	8
D	Plain washer	8
E	Feet pipe	1
F	Nut M5	8
G	Nut M12	2
H	Wheel	2
I	Plain washer $\phi 12$	2
J	Wheel shaft	1
K	Cotter	2

3. BEFORE USE

Prior to each use conduct a visual inspection by checking for abnormal conditions, such as cracked joints and damaged, loose, or missing parts.

1. Position the Workshop Heater on a flat, level, non-flammable, solid surface.
2. Direct-fired heaters are intended for use in outdoor open areas or in indoor well ventilated areas. For indoor use, provide permanent ventilation openings of at least 25 cm²/kW, equally distributed between floor and high level, with a minimum of 250 cm².

Minimum Opening Size
1097T
1250 cm ²

3. Only install the Workshop Heater in normal upright position.
4. Do not place the heater near walls, corners or low ceilings.
5. Do not place the heater below a socket outlet.
6. Do not place the heater on moving vehicles or where it can tip over.
7. Keep the heater away from flammable, combustible, explosive or corrosive materials.
8. Keep the heater away from curtains or similar materials that could block the air inlet and outlet.
9. Never block or restrict the air inlet and outlet for any reason.
10. Keep the power cable away from heat sources, sharp edges, cutting and moving parts.
11. Do not expose directly to the weather or to excessive humidity.
12. Do not place the heater in the immediate surroundings of a parts washer, shower or cleaning bath.
13. Follow general and special fire safety regulations in force in all fields of applications. In any case ensure the following minimum safety clearances from materials or objects in the surroundings of the heater:
 - Side: 0.6 m
 - Air inlet side: 1 m
 - Top: 1.5 m
 - Hot air outlet side: 3 m
 - Floor: 0 m
14. Floors and ceilings must be made of fireproof materials in the place where the heater is operated.
15. Do not connect direct-fired heaters to air ducts.

4. OPERATION

START UP:

1. Fill tank with clean fuel. Only use Diesel or Kerosene.
2. The fuel gauge on top of the tank allows to check fuel level
3. Connect the power cord plug to a 240V 50 Hz earthed electrical supply system.
4. Earthing is mandatory.

When above "start-up" complete, the left display window shows "--", the right display window shows ambient temperature value.

1. Push the power switch to "ON" position.
2. The default temperature setting is 20°C, be showed on the left display window.
3. If the ambient temperature is lower than default temperature, the electrodes start sparking, after 7 seconds, the heater starts.
4. If the ambient temperature is higher than default temperature, turn thermostat control knob to desired temperature, the electrodes start sparking, after 7 seconds, the heater starts.

COLD START-UP:

At low temperature keep the air vent hole closed by a finger during ignition to make start-up easier.

ABNORMAL OPERATION:

In the event of a malfunction (flame failure, reduced air flow, bad combustion, etc.) the heater stops and the indicator light starts FLASHING (THE LOCK-OUT MODE code will be showed on the display window).

MANUAL RESET/RESTART:

If the heater is in lock-out mode, check and remove the cause of lock-out before restarting the heater. To reset, turn the ON/OFF switch to 0 and then again to I. In case of repeated malfunction, call technical service. Turning the thermostat control knob will NOT reset the heater.

SHUT-DOWN

1. Move switch to "OFF" (O) position. Unplug the unit when not used for a long time.
2. Never disconnect the heater from mains to stop it while in operation. Always allow the cooling sequence to be completed otherwise the residual heat could damage internal components.
3. Do not cover the heater. Do not block the air inlet and outlet.
4. The heater outlet is very hot during operation and after use. Do not touch! Use personal protecting equipment if needed.
5. Children should be supervised to ensure that they do not play with the appliance.
6. The appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.
7. Unplug the heater before moving it. Never pull the cable to unplug or move the unit.
8. Do not leave the heater unattended when in use.
9. Never use the appliance with wet hands or when either the heater or the power cable is wet.
10. If the supply cable is damaged, it must be replaced by the manufacturer, by a service agent or a similar qualified person.

5. STORAGE

TradeQuip Workshop Heaters should always be stored in a dust free dry location on a level surface.

6. MAINTENANCE

Disconnect power prior to any maintenance. Before starting any maintenance task, shut down, unplug and let the heater cool down for at least 15 minutes.

- Regularly wipe the enclosure using a soft sponge or cloth. For very dirty parts, use a damp sponge of lukewarm water and a mild detergent, then dry using a clean cloth.
- Keep air inlet and fan free from dust and dirt. To clean inner parts, gently blow compressed air through air inlet.
- Regularly inspect the power cable: if worn, cracked or damaged have it replaced by technical service.
- Before storing the heater, make sure it is perfectly cool and dry. Cover the unit with a plastic bag, put it in its packing box and store it in a dry, ventilated place.
- Do not attempt any electrical repair yourself. If the heater needs service or repair, contact a qualified technician.
- Do not use a faulty unit unless a qualified technician has inspected and repaired it.
- When cleaning, make sure that water does not enter the unit.
- Do not open the enclosure to clean the inner parts. Do not spray water into the heater.
- Never use solvents, gasoline, toluene and similar aggressive chemicals to clean the heater.

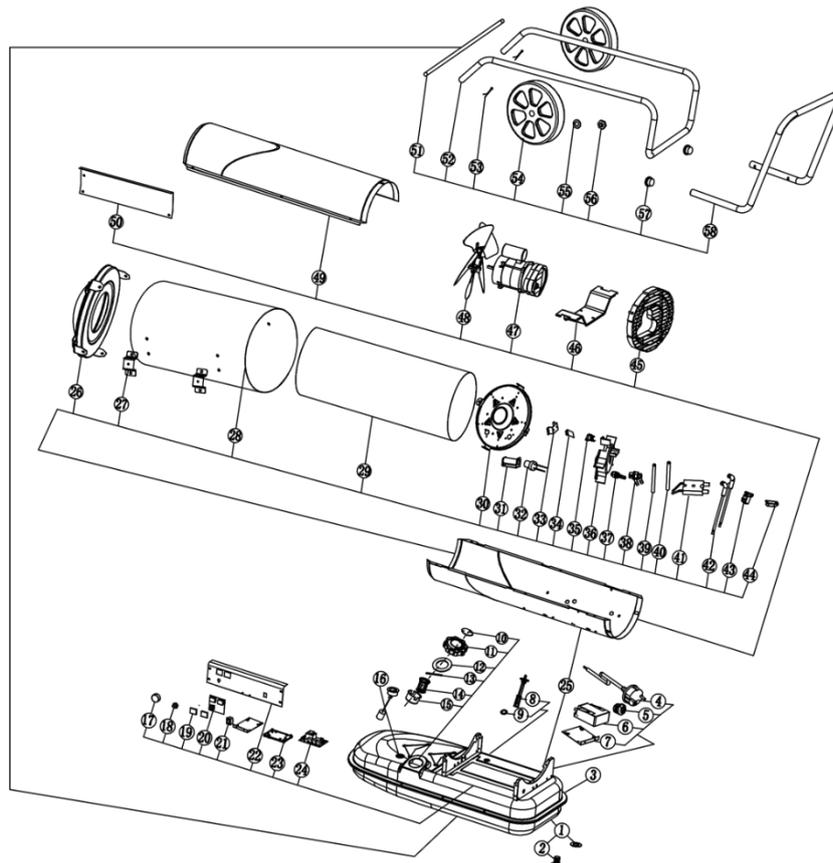
7. SERVICE & REPAIR

Any TradeQuip Workshop Heaters found damaged in any way, or found to be worn or operated abnormally, should be removed from service until repaired by an authorised service agent. Owners and / or operators should be aware that repair of this product may require specialised equipment and knowledge. Only authorised parts, labels and decals shall be used on this equipment. Annual inspection of the Workshop Heater is recommended and can be made by an authorised repair facility to ensure that your equipment is in optimum condition and that the equipment has the correct decals and safety labels specified by the manufacturer.

TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
Motor does not start	No power or low voltage	Check power cable and voltage Check fuse and replace if necessary
E1 displayed on the screen	Faulty or damaged power cord	Check and replace if needed
	Faulty motor/capacitor	Check and if necessary replace
	Lock-out of appliance due to previous overheating	Detect the cause of overheating Shut the appliance down Check air inlet and outlet Wait some minutes and restart the appliance
E2 displayed on the screen	The temperature probe has faulted or the connector for temperature probe is loose	Check and replace the temperature probe if needed
		Check and replace the PCB if needed
Motor runs, but the heater does not ignite and locks out after a short time	Empty fuel tank, dirty or wrong fuel	Remove wrong or dirty fuel Fill the tank with clean Diesel or kerosene
E1 displayed on the screen	Fuel filter clogged	Clean or replace fuel filter
	Air leaks in oil line	Check hoses, tighten connections, if necessary replace
	Burner nozzle clogged	Clean nozzle with compressed air, replace if necessary
	Fuel viscosity increased at low temperature	Mix Diesel with 10-20% kerosene
Flames come out of flue outlet E1 displayed on the screen	Insufficient airflow into combustion chamber	Check air inlet, fan, motor
	Compressor pressure too high	Check air pressure, adjust if needed*
Heater stops during operation Ambient temperature displayed on the screen	The room temperature set on room thermostat has been reached	Normal operation To start turn the temperature control knob clockwise on a higher setting
Heater stops during operation E1 displayed on the screen	Flame failure	Check and remove the cause(s) of malfunction To reset, turn On/Off switch to 0 and then to I Call technical service if the problem persists
	Bad combustion	
	Reduced airflow	
	Overheating	

PARTS LIST & DIAGRAM



Part	Description	Qty
1	Oil Drain Seal	1
2	Oil Drain Screw	1
3	Fuel Tank	1
4	Power Cord	1
5	Cable Fastener	1
6	Ignition Transformer	1
7	Bracket	2
8	Fuel Filter Assembly	1
9	Sealing Ring	1
10	Breather Cover	1
11	Fuel Tank Cap	1
12	Sealing Ring	1
13	Tank Cap Shaft	1
14	Oil Inlet Filter Holder	1
15	Oil Inlet Filter	1
16	Oil Leveller	1
17	Thermostat Knob	1
18	Thermostat Knob Nut	1
19	Display Window	1
20	Display PCB2	1
21	On/Off Switch	1
22	Control Panel	1
23	PCB Support	1
24	Power PCB1	1
25	Bottom Cover	1
26	Front Cover Assembly	1
27	Chamber Shield Bracket	4
28	Combustion Chamber Shield	1
29	Combustion Chamber	1

Part	Description	Qty
30	Burner Support Plate	1
31	Photocell Assembly Bracket	1
32	Photocell Assembly	1
33	Thermostat Bracket	1
34	Combustion Chamber Blade	2
35	Reset Thermostat	1
36	Burner Head	1
37	Nozzle Assembly	1
38	Nozzle Adaptor	1
39	Gas Hose	1
40	Oil Hose	1
41	Ignition Needle	1
42	High Voltage Cable	2
43	Solenoid Valve	1
44	Solenoid Valve Bracket	1
45	Air Inlet Grille	1
46	Motor Support	1
47	Motor Assembly	1
48	Fan	1
49	Top Cover	1
50	Side Plate	1
51	Wheel Axle	1
52	Feet Pipe	1
53	Cotter Pin	2
54	Wheel	2
55	Flat Gasket	2
56	Screw Nut	2
57	Steel Pipe Plug	2
58	Handle	1

WARRANTY

TradeQuip products have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship for a period of 12 months from the date of purchase except where tools are hired out when the guarantee period is ninety days from the date of purchase.

Should this piece of equipment develop any fault, please return the complete tool to your nearest authorised warranty repair agent or contact TQB Brands Pty Ltd Warranty team – warranty@tqbbrands.com.au.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accident, or repairs attempted or made by any personnel other than the authorised TQB Brands Pty Ltd repair agent.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your TQB Brands Pty Ltd guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the 12 month period.

Consumer Guarantee

Our goods come with a guarantee that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.



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