

USER MANUAL v.1.1

Jefferson 44,000 BTU Infrared Oil Heater JEFHTINFR044 Jefferson 60,000 BTU Infrared Oil Heater JEFHTINFR060

# **Infrared Oil Heater** 44,000 BTU & 60,000 BTU







**JEFHTINFR060** 













### **SAVE THESE INSTRUCTIONS**

Please read and comply with these original instructions prior to the initial operation of your appliance and store them for later use or subsequent owners. Apart from the notes contained herein the general safety provisions and rules for the prevention of accidents of the legislator must be observed.

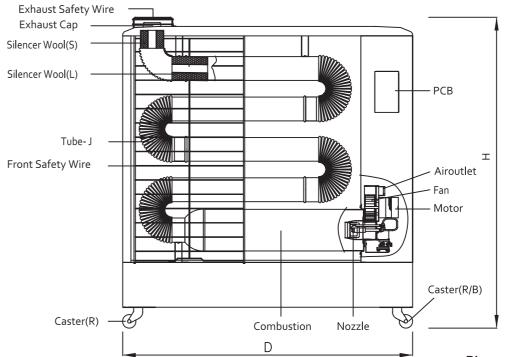
Warnings and notes that are attached on the appliance provide important notes for the safe operation.



### Specification

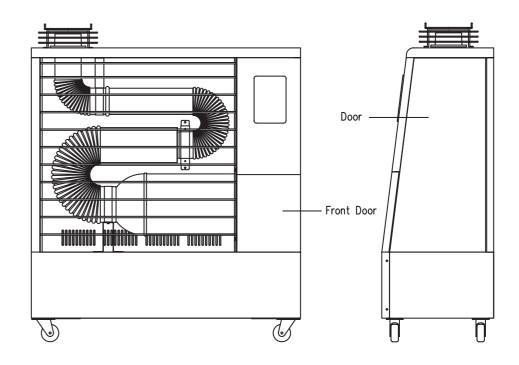
MODEL	JEFHTINFR044	JEFHTINFR060			
ITEM					
FUEL	KEROSENE / DIESEL	KEROSENE / DIESEL			
FUEL CONSUMPTION (L/H)	1.2	1.7			
CALORIC VALUE (KAL/H)	13,000	17,000			
BTU	44,000	60,000			
HEATING AREA	99M2	132M2			
USAGE	HEATING	HEATING			
PSI	9.0 kgf/cm2	10.0 kgf/cm2			
POWER	AC230V/50Hz	AC230V/50Hz			
POWER CONSUMPTION DURING IGNITION	80W	80W			
POWER CONSUMPTION DURING COMBUSTION	50W	50W			
SIZE (W x D x H)	920 X 320 X 1120	1235 X 320 X 1120			
FUEL TANK SIZE	30L	45L			
STOVEPIPE DIAMETER (WHEN CONNECTED)	75mm	75mm			
FUEL DURATION HOURS	25HRS	26HRS			
SAFETY EQUIPMENT	Flame detecting equipment, Overheat prevention equipment, Over-current shorting equipment, Motor overheat prevention equipment, over turning safety equipment, Indoor temperature detect equipment, Motor rotation detect equipment				

### Part List

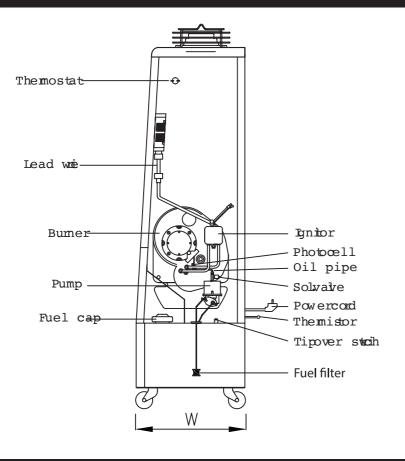


Dimensions:

JEFHTINFR044 - 920 x 320 x 1120 JEFHTINFR060 - 1235 x 320 x 1120



### **Part List Cont**

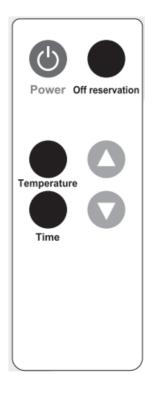


### Operation

- Put the plug into an outlet
- Current temp and setting temp are displayed during operation.
- The setting temp must be higher than the current temp for the heater to operate
- Press the power button
- In case of initial usage after the installation, please flow out air.
- Select temperature or time control mode by pressing settings button
- When the temperature control icon lights up:
  - Set the desired temperature between  $0{\sim}40^{\circ}\text{C}$  by pressing up/down button
- The heater will stop operating when the desired temp. is lower than the current temp.
- When the time control icon lights up:
  - The heater will operate and stop every 30 mins.
  - Repetition cycle can be set from 5~25 mins. by 5 min. increments.
  - Ex) When the cycle is set at 15 mins., heater will operate for 15 mins. and stop for 15 mins. \*Time will decrease in 1 min. increments (15-14-13....1)
- Press Off Time button to activate off timer mode
- When off timer icon lights up:
- Press the up/down button to change the set time by 1 hour increment (up to 24 hours)
- Set temp. or Set time will be indicated 2 seconds after the setting.
- Remaining time will flicker 10 times every 5 mins.
- Ex) When the off timer is set for 5 hours, remaining time will be indicated as shown on the right (5hr-4hr-3hr 55min-50min ... 5min)
- To cancel the off timer function, press the Off Timer button one more time
- When Fuel icon lights up: When fuel is low, melody will play for 1 min. and the heater will shut off. Refill the fuel tank with fuel.

**Control Panel** 



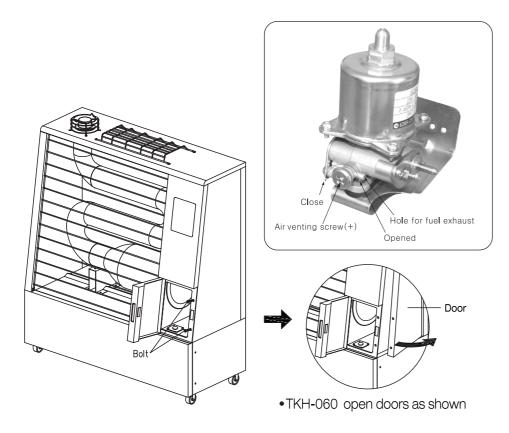




### **Operation Cont.**

- Child Safety Lock, Press and hold the lock button for 5 seconds to activate child safety lock function. While the function is
  activated, control on the heater such as temp control will be restricted. To turn off the safety lock, press and hold the lock
  button for 5 seconds.
- Reset Function (Applies to WI-FI models only) Models with WI-FI control function: used to update the WI-FI software.
   Models without WI-FI control function: no change in function when the button is pressed

### Method to flow-out air



If you experience loud noise coming from the electric pump and the burner cannot ignite, the air flow into the electric pump and distribution of oil could be the problem. If the oil is consumed, this can cause air in the electric pump.

### Method to flow-out air.

- 1. Turn the air venting screw (+) anticlockwise for 2-3 times.
- 2. Press the Power button once.
- 3. Bubbles (fuel) will leave the air-hole (After 10 seconds)
- 4. When the ignition is on, turn the screw (+) in the clockwise position. If it does not work, try again. (If after 4 failed attempts, contact your dealer)

### **Daily Checks**

### Warning!

- Daily checks and cleaning must be done after stopping combustion of the heater.
- Check if fuel leaks from any place near the fuel tank.
- Check if combustion furnace or heating tube is corroded and damaged.
- If heater-reflecting board is dusty, clean it thoroughly.
- Check if the heater makes soot from the exhaust pipe.
- Burner is adjusted to be suitable for function of the heater. User should not control it manually. If it is controlled voluntarily,
  please contact the store you purchased the heated.

### Warning!

- Maintaining the exterior of the heater should be done after unplugging the power cord and when it is completely cooled down. It should be cleaned with a cloth and neutral detergent or just a dry cloth.
- · Pouring water on to heater while cleaning can cause electric shock or break down of heater.

### Regular Inspection and Fire Extinguisher Placement

### Regular Inspection.

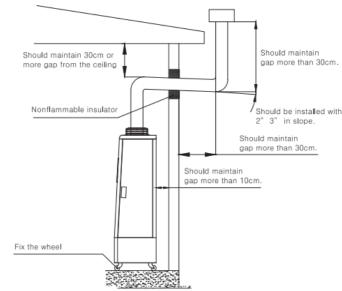
- Combustion Chamber and heating tube: Once a year, check for soot and clean it.
- Combustion chamber and reflection board: Once a year, check for corrosion and pollution and clean it, when the corrosion is excessive, replace it.
- Fuel Filter: Once a year, check for pollution visually and the exchange it.

### Fire Extinguisher Placement.

Keep a fire extinguisher next to the heater and check the expiry date frequently.

### Tips before installation

- Ground surface should be flat and level.
   Operating the heater on an uneven surface may cause failure due to imperfect combustion
- You need to have sufficient space surrounding the heater at least 1.5m from the wall and the left & right side, at least 1.5m distance from the ceiling and the front side without any obstacle.
- After you fix the installation, lock the caster to avoid unexpected movement.
- It is required to install exhaust duct for indoor use. Especially, Over 3cm insulated material is required to apply for the duct.
- Please use stainless duct.
   (Recommended Duct specification For JEFHTINFR044 and JEFHTINFR060 100mm (Diameter) x Max.
   4 meter long-stainless duct Max. Length 4m Max. Bend 2 times.



[Example of standard stovepipe installment]

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### **Fueling**

### **Fuelling Step**

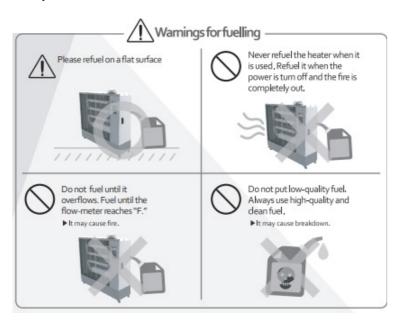
- 1. Open the fuel inlet cap for the fuel tank.
- 2. Carefully put in the fuel, try not to spill the fuel. Fill the fuel until the flow meter reaches "F".
- 3. Tightly close the inlet cap.
- 4. Check if fuel has leaked around fuel tank or each part of the heater. If it leaks, clean it.



### Warnings of ignition for the first time.

When the heater is used for the first time, fuel that is used during the manufacturing process and other substances can combust, so please ignite outside of the building. When the heater is used for the first time, it might have some smell due to above reasons. Smell will dissipate after 1~2 hours.

As it is not a breakdown, do not worry and continue to use heater.



### Safety Warnings.

- Do not put the heater an unstable surface of ground such as inclined or uneven surface.
- Do not install at a height or where there is a risk of falling.
- Do not operate the heater in a location where it gets wet by the humidity such as bathroom.
- Do not store for a long period of time outdoors in strong sun light or in humid place.
- Do not touch the heater during combustion or immediately after the heater is turned off.
- Keep infants and toddlers away from the heater.
- If you have children, install a safety net.
- If there is any strange noise or smoke coming from the heater, immediately unplug the power plug and contact
  the service center.
- Do not cover the heater with clothes or towels.
- Do not place kettles or beverages on the heater.
- Ventilate the room once or twice an hour when the heater is on.
- · Only repair, disassemble and modify the heater with a service center that the company have suggested.
- Do not place other inflammable objects such as chemicals and combustible materials near the heater
- Use caution when refuelling . If there are spills overflows, clean the excess fuel and close the fuel cap.
- Do not use fuels with high volatility such as clean fuel oil, benzene and thinner. Please use high quality and clear fuel.
- Never refuel the heater during operation. Please put in the fuel when the heater in turned off.
- Do not use at locations that are exposed to rain or strong winds.
- Do not store the heater with the fuel inside when it is not used for an extended period
- Please apply the connecting duct if heater is used indoors so that exhaust gas can be ventilated.

### Fuel Usage

### Never use low quality Kerosene.

What is low quality kerosene:

- If it has a sour smell, or changed colour to yellow.
- Kerosene that is used last year or exposed to direct sunlight for a long time.
- Fuels other then kerosene, such a clean fuel oil or diesel, or if it is mixed with combustion improver or deodorizer.
- When the lid of storage unit is opened or other foreign substances suck as water or dust.

How to distinguish low quality kerosene:

- In a clear glass cup, half fill with kerosene and put white paper behind the glass.
- If kerosene has layers or changed its colour to yellow, it means "Low-quality" kerosene, and if does not have layers or clear as water, it is "Clean Kerosene"

How to store kerosene.

Tightly close the lid and store in a cool area, away from flammable substances and dust. Store in a dry area out of direct sunlight. Store in a cool, dark room.

### Fuel Usage

Displayed signals	Reasons of default	Check-ups and actions to take
E1: Ignite Failure	Burner does not ignite.	<ul> <li>Out of fuel</li> <li>Oil pipe is filled with air (→ Ventilate air)</li> <li>photocell is polluted (→ Clean it)</li> </ul>
E3: Temperature Sensor	Temperature sensor is broken down	<ul> <li>Temperature sensor connection terminal is disconnected. (→ Connect the terminal)</li> </ul>
E4: Overheat Sensor	Overheat sensor is broken down	Check for combustion trace due to flame inside the burner (→ Inquire for service)     Check if overtheat controller wiring is disconnected.     (→ Reconnect, then restart)
E5: Unbalanced	Heater is unbalanced	Check if the heater is moving (It can happen if the heater is shaken—restart).     Conduction switch is disconnected (→ Connect the switch and restart).
Fuel	No fuel	- Refuel (→ Restart)
Ні	Temperature is more than 50°C	<ul> <li>Check if temperature sensor detector is placed inside (→ Put the sensor outside)</li> </ul>

Errors	Check list	Measures		
All the icons in front control panel are turned off.	- Power failure - Power cable is unplugged - Fuse is disconnected	- Connect to power - Change the fuse		
The heater turns on and off regularly.	- Operation setting is selected as "Time"	- Select "Temperature"		
Flow-meter does not work but the heater operates	- Flow-meter is disconnected.	- Connect the line.		
Smoky smell is made during initial operation	The inner surface of the gasket burns and smells.	- Smell will dissipate in 1-2 hours.		
Fuel smell is too strong	As the heater turns off after the operation, it might have some smell - Fuel is spilled during refuelling	- Operate more than 15 minutes. - Clean out leaked fuel		
Internal temperature displays higher than normal	Check for location of temperature sensor at the back of the heater (If sensor is placed inside the heater).	- Fix the sensor in the right place.		

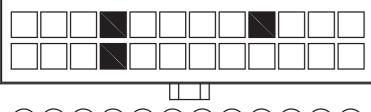
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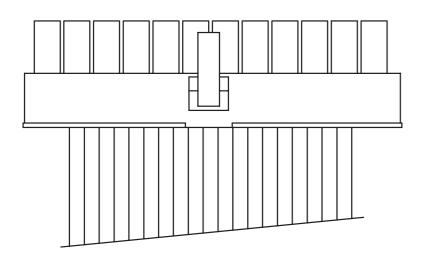


**Wiring Diagram** 



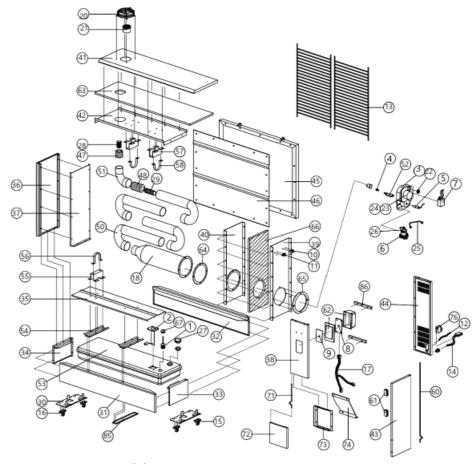


23(21)(17)(15)(13)(11)(9)(7)(5)(3)(1)



13	THERMOSTAT
4	F.G
26	POWER PLUG
8	N
57	MOTOR
5 11	PUMP
5 (13)	IGNITOR
9 10	SOL. VALVE
12 (14)	BLOWER FAN
15 (16)	TIP OVER S/W
17 (18)	N
1920	OIL GAUGE
21 22	PHOTO CELL
2324	THERMISTOR

## Parts Diagram



1	Filter	23	Fan	45	Rear Cover
2	Fuel Gauge	24	Motor	46	Rear Reflector
3	Burner	25	Oil Pipe	47	Silencer Wool(S)
4	Nozzle	26	Sol. Valve	48	Silencer Wool(L)
5	Photocell	27	Fuel Cap	49	Combustion Tube-L
6	Pump	28	Silencer Pipe(S)	50	Tube- J
7	Ignitor	29	Silencer Pipe(L)	51	Tube- L
8	P.C.B	30	Caster B/K	52	Spark Plug
9	Name Plate	31	Front Base	53	Tank
10	Tipover Switch	32	Rear Base	54	Tank Support B/K
11	Thermostat	33	Right Base	55	Combustion Support
12	Thermistor	34	Left Base	56	Combustion Bend
13	Front Safety Wire	35	Button Reflector	57	Tube Support
14	Power Cord	36	Left Cover	58	Tube Bend
15	Caster(R/B)	37	Left Reflector	59	
16	Caster(R)	38	Cont. Front Cover	60	Door Pin
17	Read Wire	39	Burner Cover	61	Magnet
18	Combustion	40	Right Reflector	62	Control Box
19	Air outlet Gasket	41	Top Cover	63	Top Insulator
20	Exhaust Safety Wire	42	Top Reflector	64	Combustion Gasket
21	Exhaust Cap	43	Door	65	Burner Gasket
22	Air outlet	44	Cont. Rear Cover	66	Right Insulator

Filter Packing
Remote Control
-----Front Door Pin
Front Door Support
Burner Divide Plate
----Noise Filter
----Base Bracket
PCB Support

67

68

69 70

71 72

73

74

75 76

77 78 85

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### **Declaration of Conformity**

We, Jefferson Professional Tools & Equipment, as the authorised European Community representative of the manufacturer, declare that the following equipment conforms to the requirements of the following:

EN 55014-1:2006/A2:2011 EN 55014-2:2015 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 60204-1:2018 EN 60335-2-102:2016 EN 60335-1:2012/A15:2021 EN 62233 2008 EN IEC 55014-1:2021 EN IEC 55014-2:2021 EN IEC 61000-3-2:2019 EN 61000-3-3:2013/A1:2019 EN 62321:2017



We, Jefferson Professional Tools & Equipment, as the authorised UK Community representative of the manufacturer, declare that the following equipment conforms to the requirements of the following:

EN 62321-1-2013 EN62321-2:2014 EN62321-3-1:2014 EN62321-4-2014/A1:2017 EN62321-6:2015 EN 62321-7-1;2015 EN62321-7-2:2017 EN62321-8:2017



Notified Testing Body:

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro,
Yeongdeungpo-gu, Seoul, 07326, Korea

Product Name:

Jefferson 44,000 BTU Infrared Oil Heater JEFHTINFR044

Jefferson 60,000 BTU Infrared Oil Heater JEFHTINFR060

Signed: Stephen McIntyre Operations Manager 15th April 2024

Date:

Name and address of manufacturer or authorised representative:

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