

# BRASCH

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## INSTRUCTIONS BH-940 Series



### WARNING



When using electrical appliances, basic precautions should always be taken to reduce the risk of fire, electrical shock and injury, including the following.

Read carefully these instructions before installation, operation of the heater. Failure to adhere to the instructions could result in fire, electric shock, serious personal injury, and death or property damage. Review frequently for continuing safe operation and advise future users, if necessary.

## IMPORTANT INSTRUCTIONS

- 1- Read all instructions before installing or using this heater.
- 2- This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Keep combustible materials, like furniture, pillows, bedding, papers, clothes, and curtains at least 36 in. (915 mm) from the front of the heater and away from the sides.
- 3- Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
- 4- Do not operate any heater after it malfunctions. Disconnect power at service panel and have heater inspected by a reputable electrician before reusing.
- 5- Do not use outdoors.
- 6- To disconnect heater, turn controls to off, and turn off power to heater circuit at main disconnect panel.
- 7- Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the heater.
- 8- To prevent a possible fire, do not block air intakes or exhaust in any way whatsoever.
- 9- This heater has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint, or flammable liquids are used or stored.
- 10- Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury.
- 11- AMERICAN VERSION ONLY: This heater includes a visual alarm to warn parts of the heater are getting excessively hot. If the alarms illuminates, turn immediately the heater off and inspect for any objects on or adjacent to the heater that may have blocked the airflow or otherwise caused high temperatures to have occurred. DO NOT OPERATE THE HEATER WITH THE ALARM ILLUMINATING.
- 12- The thermostat should not be considered as an infallible system where maintaining a temperature is considered critical. Examples: Hazardous material storage, computer room, etc. In these particular cases, it is imperative to add a monitoring system to avoid the consequences of a failure of the thermostat.

## SAVE THESE INSTRUCTIONS

## INSTALLATION INSTRUCTIONS

### CAUTION:

Use supply wires suitable for 194 °F (90 °C). High temperature, risk of fire, keep electrical cords, drapery, furnishings, and other combustibles at least 36 in. (915 mm) from the front of the heater and away from the sides. To reduce the risk of fire, do not store or use gasoline or other flammable vapors and liquids in the vicinity of the heater.

### IMPORTANT:

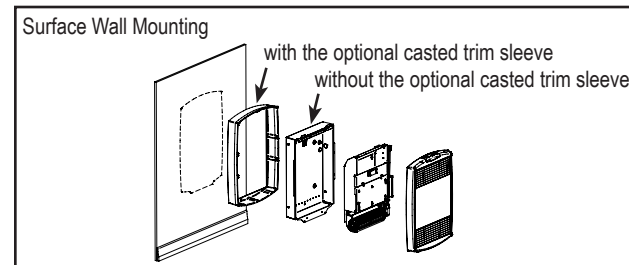
Do not obstruct the front of the heater for at least 48 in. (1200 mm). Deep a clearance of 1 in. (25 mm) to any walls.

### RECESS WALL MOUNTING:

- 1- Make a hole within the wall at least 2 3/4 in. (70 mm) of depth. Recommended installation height is 12 in. (305 mm) or 4 in. (102 mm) minimum below heater. (Fig. 1). The hole must be 18 5/8 in. (473 mm) by 13 3/8 in. (340 mm); use the template printed on the cardbox of the heater. CAUTION: HOLE MUST BE CUT PRECISELY.
- 2- Remove front cover by unscrewing both screws at the bottom.
- 3- Remove the junction box cover by unscrewing the screw. Note the plastic connector secured inside the junction box will be connected outside the box once the heater is fully installed. This connector links the enclosure with the display located on the front cover.
- 4- Remove the inside module to which the fan is fixed by loosening the four (4) RED screws (Fig. 2).
- 5- Use the appropriate knock-out hole (KOE 7/8 in. [22.2 mm]) within the junction box and run the power cable inside the enclosure.
- 6- Fix the heater using the provided screws and mounting holes or knock-outs suitable for your installation (A, B or C) (Fig. 3).
- 7- Put inside module back and tighten the four (4) RED screws.
- 8- Wire the heater according to national and local codes and as per wiring of this instruction (Fig. 4a, 4b).
- 9- Replace junction box cover and remove the front cover from its protective bag.
- 10- Fix the plastic connector on the outlet located in the top of the front cover (Fig. 5).
- 11- Put front cover back making sure the cable linking the cover with the heater does not get stuck.
- 12- Test the heater to insure control works properly.

### SURFACE WALL MOUNTING:

- 1- To install the optional cast trim sleeve, refer to instructions provided with the optional casted trim sleeve. Heater may be surface mounted without the optional cast trim sleeve. Recommended installation height below the heater is 12 in. (305 mm), 4 in. (102 mm) minimum. Use the template printed on the cardbox of the heater to locate positioning of the supply wire.
- 2- Follow steps #2 to #11 of RECESSED WALL MOUNTING.



## OPERATING INSTRUCTIONS

Once the unit is powered up the blue display indicates the ambient temperature in degree Celsius (°C) or Fahrenheit (°F). To change the units from °C to °F or vice versa, press the two buttons with arrow signs on the right side of display simultaneously for two (2) seconds.



For the **set point temperature**, use the top arrow button (Δ) and the down arrow button (▽) to adjust the setting between 10 to 35 °C (50 to 95 °F). When heater is on, four gradated lines indicate the power level on the left side of the display.

For **timer mode (boost heating)**, use the hour-glass button located on the left side of display. Press once to activate this mode and to see the remaining time flashing ("min" is now displayed in the bottom right corner). Display will stop flashing after five (5) seconds. While the remaining time flashes, press again the button on the left to set the minutes to **5, 10, 15, 20, 25 or 30**. If display does not flash any more, press again the button on the left to turn off the timer. Whenever needed in the timer mode, use the arrows located on the right side to increase or decrease remaining time. When in the timer mode ambient temperature is not displayed.

To turn on and off the **night light** use the button located underneath. The night light is a low-consuming device due to its technology.

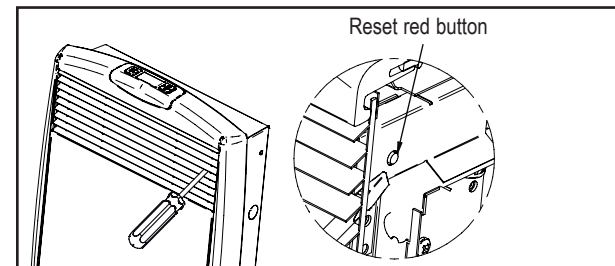
### 2-Stage of heating

The 1<sup>st</sup> stage of heating (1000W) is a natural convection type, it is normal that you feel heat coming out of the grille even if the fan is not running. The fan will start only with the 2<sup>nd</sup> stage of heating or in timer mode.

When starting up the heater for the first time, some smoke will come out of the louvers; this is totally normal and will stop after a few minutes of use. Also, under normal use the heater may become hot.

### Hi-Limit with Manual Reset (AMERICAN VERSION ONLY)

This heater includes a manual reset limiting control to turn off power when parts of the heater are getting excessively hot. When it operates, a visual alarm is illuminating. In that situation, immediately disconnect all power at the main service panel and inspect for any objects on or adjacent to the heater. Wait until the heater comes back at room temperature. Insert a flat screw driver through the upper grille, on it's right side and press the manual reset red button. If the problem persists, contact a qualified technician.



## MAINTENANCE INSTRUCTIONS

- Cleaning should be done while the heater is disconnected from the main service panel.
- Once a year or if needed, use a vacuum cleaner to remove the dust accumulation through openings of the front grilles.
- Any other servicing should be performed by a qualified technician.

## TROUBLESHOOTING

PROBLEMS	TIPS
Heater stops working in timer mode (boost mode).	Make sure front of heater has at least 1219 mm (48 in.) of clearance and is free of any objects.
Displayed temperature differs from ambient temperature.	Wait for a while that temperature stabilizes. This thermostat uses proportional integral adaptive technology; temperature will remain precise except when important cold or hot air flows occur. Fan operation as well as room recognition have to be considered and may influenced precision of temperature readings.
Interior of heater glows red.	Make sure voltage applied is appropriate (120V or 240V depending on model) and that interior of heater is free of dust blocking heating wires.
Grilles are getting darker.	Clean grilles using water and mild soap.

Pat. No. Des. D571,906 S

Fig. 1

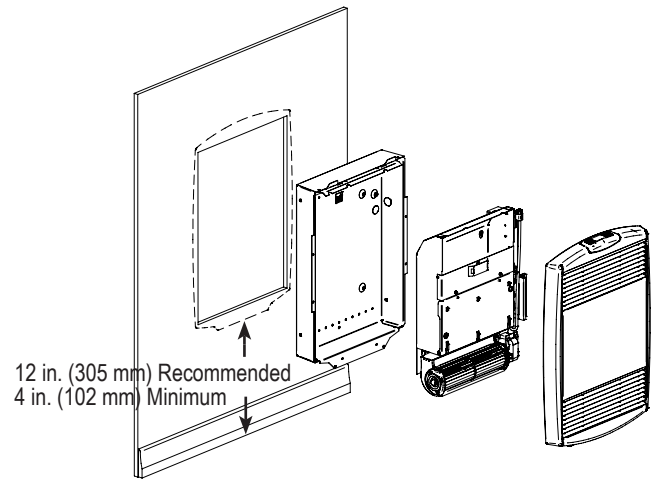


Fig. 2

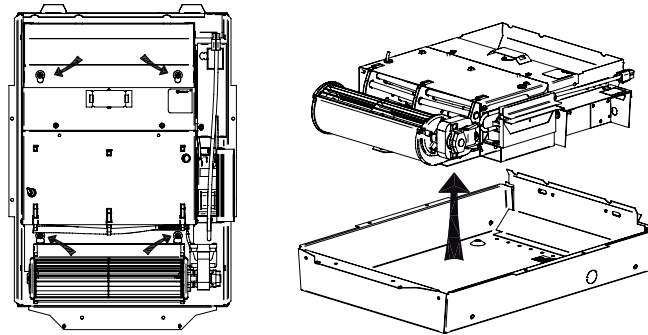


Fig. 3

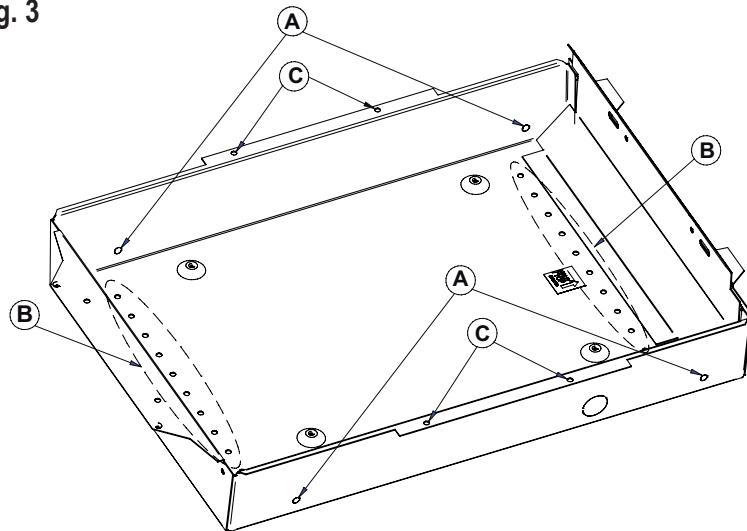


Fig. 4a

**CANADIAN VERSION**  
1500W (120V) / 2000W (240V)

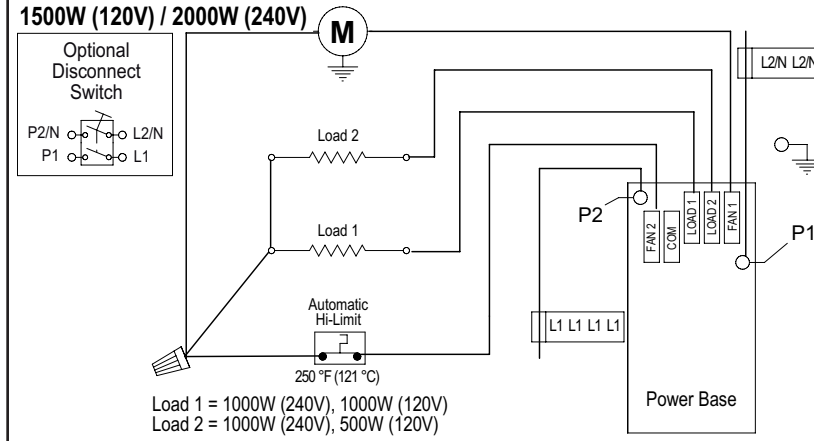


Fig. 4b

**AMERICAN VERSION**  
1500W (120V) / 2000W (240V)

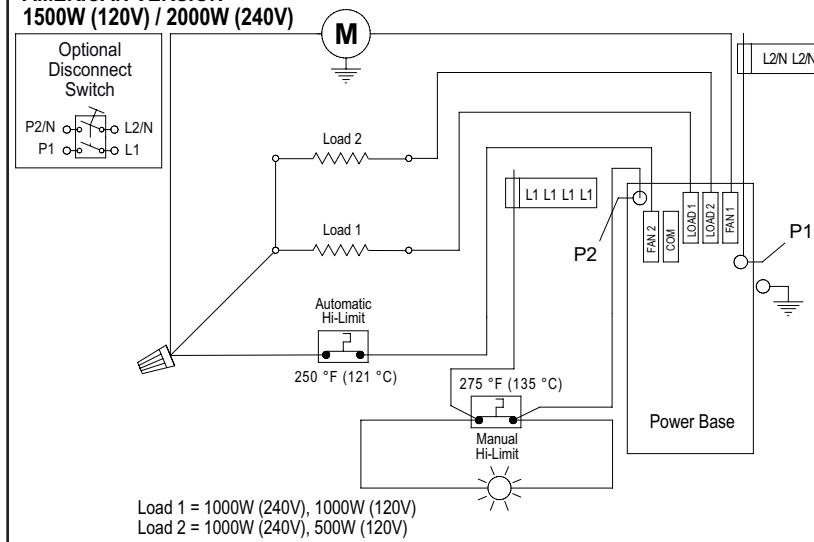


Fig. 5

