OPERATING INSTRUCTIONS UTILITY UNIT HEATERS 680 SERIES

MODEL NO	WATTS	втин	VOLTS 60 HZ	LINE AMPS	PLUG ON CORD SET
HF684TC	4000/3000	13,562/10,239	240/208	16.7/14.4	
HF685TC	4800/3600	16,393/12,295	240/208	20.0/17.3	30AMP
HF686TC	5600/4200	19,113/14,335	240/208	23.3/20.2	30AMP



CAUTION



Check heater voltage and phase on data tape on back of heater to make sure they are the same as the electrical service supplied. Heater coded with "HF" will operate on either 240 or 208 volts. High Temperature, Keep Electrical Cords, Drapery, And Other Furnishings At Least 0.9M (3 ft.) Away From The Front, Side And Rear Of Heater.

INSTALLATION INSTRUCTIONS

Be sure that the electrical receptacle is of the configuration and capacity appropriate for the heater. The heater may be used as a heavy duty portable. It may also be hung on the wall or ceiling by loosening the vertical adjustment knobs on each side of the heater and swinging the cradle to a position where the "bottom" of the cradle is to the rear or above the heater. The heater may be hung to the wall or ceiling using the keyhole slots in the base or holes provided for threaded rod (supplied by others). The wall/ceiling hanging structure and anchoring provisions must be of sufficient strength to support the combined weight of the heater and hanging bracket. To facilitate hanging of the heater, it may be removed from the cradle and replaced after the cradle is hung. The proper receptacle can be installed adjacent to the hanging location.

OPERATION

To operate heater, turn thermostat knob as far as it will go in a clockwise direction. When temperature reaches desired comfort level, slowly turn thermostat counterclockwise until heater shuts off. One or two minor adjustments may be necessary as the heat becomes better distributed throughout the area.

MAINTENANCE

Heaters are equipment with a permanently lubricated motor and, therefore, no maintenance other than occasional cleaning is required.

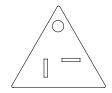
"WHEN CLEANING OR DISASSEMBLING HEATER, BE SURE TO DISCONNECT HEATER CIRCUIT."

THERMAL CUTOFF DEVICE

All heaters are equipped with a thermally actuated manual reset limit control which automatically disconnects heating element and motor in the event normal operating temperatures are exceeded. If heater should fail to operate with thermostat turned clockwise to its limit, disconnect heater and wait a few minutes allowing heater to cool. Using a small straight object such as a pencil, push in button located inside small hole marked RESET. The thermal cutout almost invariably indicates a partial or complete blockage of the air intake or exit. Be sure to keep these areas clear in order to allow proper circulation of air.



30 Amp Plug Configuration2 NEMA #6-30PN



0 Amp Plug Configuration EMA #6-20P

IMPORTANT INSTRUCTIONS

- 1. When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:
- 2. Read all instructions before using this heater.
- 3. This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. If provided, use handles when moving this heater. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, and curtains at least 3 feet (0.9m) from the front of the heater and keep them away form the sides and rear.
- 4. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
- 5. Always unplug heater when not in use.
- Do not operate any heater with a damaged cord or plug or after the heater malfunctions, has been dropped or damaged in any manner. Return heater to authorized service facility for examination, electrical or mechanical adjustment or repair.
- 7. Do not use outdoors.
- 8. This heater is not intended for use in bathrooms, laundry areas and similar indoor locations. Never locate heater where it may fall into a bathtub or other water container.
- 9. Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Arrange cord away from traffic area and where it will not be tripped over.
- 10. To disconnect heater, turn controls to off, then remove plug from outlet.
- 11. Connect to properly grounded outlets only.
- 12. 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.
- 13. To prevent a possible fire, do not block air intakes or exhaust in any manner. Do not use on soft surfaces, like a bed, where openings may become blocked.
- 14. A 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.
- 15. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
- 16. Always plug heaters directly into a wall outlet/receptacle. Never use with an extension cord or relocatable power tap (outlet/power strip).
- 17. This heater may include an audible (a visual) alarm to warn that parts of the heater are getting excessively hot. If the alarm sounds (flashes), immediately turn the heater off and inspect for any objects on or adjacent to the heater that may cause high temperatures. DO NOT OPERATE THE HEATER WITH THE ALARM SOUNDING (FLASHING).

"SAVE THESE INSTRUCTIONS"

CLEANING AND STORAGE

Turn thermostat off and remove plug from electrical outlet before cleaning heater. Use a soft cloth for dusting. Use a damp rag and non-abrasive dish detergent only for cleaning. Do not use abrasive chemical cleaners as these will harm finish. If the heater is used in a very duct area, use a vacuum cleaner dust brush to remove dust and other foreign material from grilles. When the heater is not in use, always unplug cord and wrap around heater handle. Move the heater to a safe area for storage.

WARNING

When the heater was subjected to some abnormal conditions, it is recommended that the heater be checked by an authorized service representative to insure the heater has not been damaged.