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Valparaiso, IN 46383  
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[www.heatwagon.com](http://www.heatwagon.com)

## Installation and Maintenance Manual

Please retain this manual for future reference.

# ***P1800***

## ***Construction Heater***



*For your safety: Do not use this heater in a space where gasoline or other liquids having flammable vapors are stored.*

# **IMPORTANT INFORMATION! READ FIRST**

The heater is designed for use as a construction heater under ANSI Z83.7a-1993. The primary purpose of construction heaters is to provide temporary heating of buildings under construction, alteration, or repair and to provide emergency heat. Properly used, the heater provides safe, economical heating. Products of combustion are vented into the area being heated.

The heater **IS NOT** designed as an Unvented Gas Fired Room Heater under ANSI-Z21.11.2 and **SHOULD NOT** be used in the home.

ANSI A119.2(NFPA 501C)-1987 Recreational Vehicle Standard prohibits the installation or storage of LP-gas containers even temporarily inside any recreational vehicle. The standard also prohibits the use of Unvented Heaters in such vehicles.

## **NFPA-58 1989 STANDARD FOR THE STORAGE AND HANDLING OF LIQUEFIED PETROLEUM GASES**

Use of the heater must be in accordance with this Standard and in compliance with all governing state and local codes. Storage and handling of propane gas and propane cylinders must be in accordance with NFPA 58 and all local governing codes.

We cannot anticipate every use which may be made for our heaters. **CHECK WITH YOUR LOCAL FIRE SAFETY AUTHORITY IF YOU HAVE QUESTIONS ABOUT LOCAL REGULATIONS.**

Other standards govern the use of fuel gases and heat producing products in specific applications. Your local authority can advise you about these.

## **FOR YOUR SAFETY**

**DO NOT USE THIS HEATER IN A SPACE WHERE GASOLINE OR OTHER LIQUIDS HAVING FLAMMABLE VAPORS ARE STORED OR USED.**

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### **CONSTRUCTION HEATER GENERAL HAZARD WARNING:**

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.

Only persons who can understand and follow the instructions should use or service this heater.

If you need assistance or heater information such as an instruction manual, labels, etc. Contact your local Heat Wagon dealer or the manufacturer.

## **W A R N I N G**

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. Never use the 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.

**Not for home or recreational vehicle use!**

# Installation and Maintenance Manual Model P1800 Construction Heater

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## WARRANTY

All new Heat Wagon and Sure Flame heaters and fans are guaranteed against defective materials and workmanship for one (1) year from invoice date.

Warranty repairs may be made only by an authorized, trained and certified Heat Wagon dealer. Warranty repairs by other entities will not be considered. Warranty claims must include model number and serial number.

## LIMITATIONS

Warrant claims for service parts (wear parts) such as spark plugs, igniters, flame rods will not be allowed. Diagnostic parts such as voltage meters and pressure gauges are not warrantable.

Evidence of improper fuel usage, fuel pressures outside of manufacturer's specification, poor fuel quality, and improper electric power, misapplication or evidence of abuse may be cause for rejection of warranty claims.

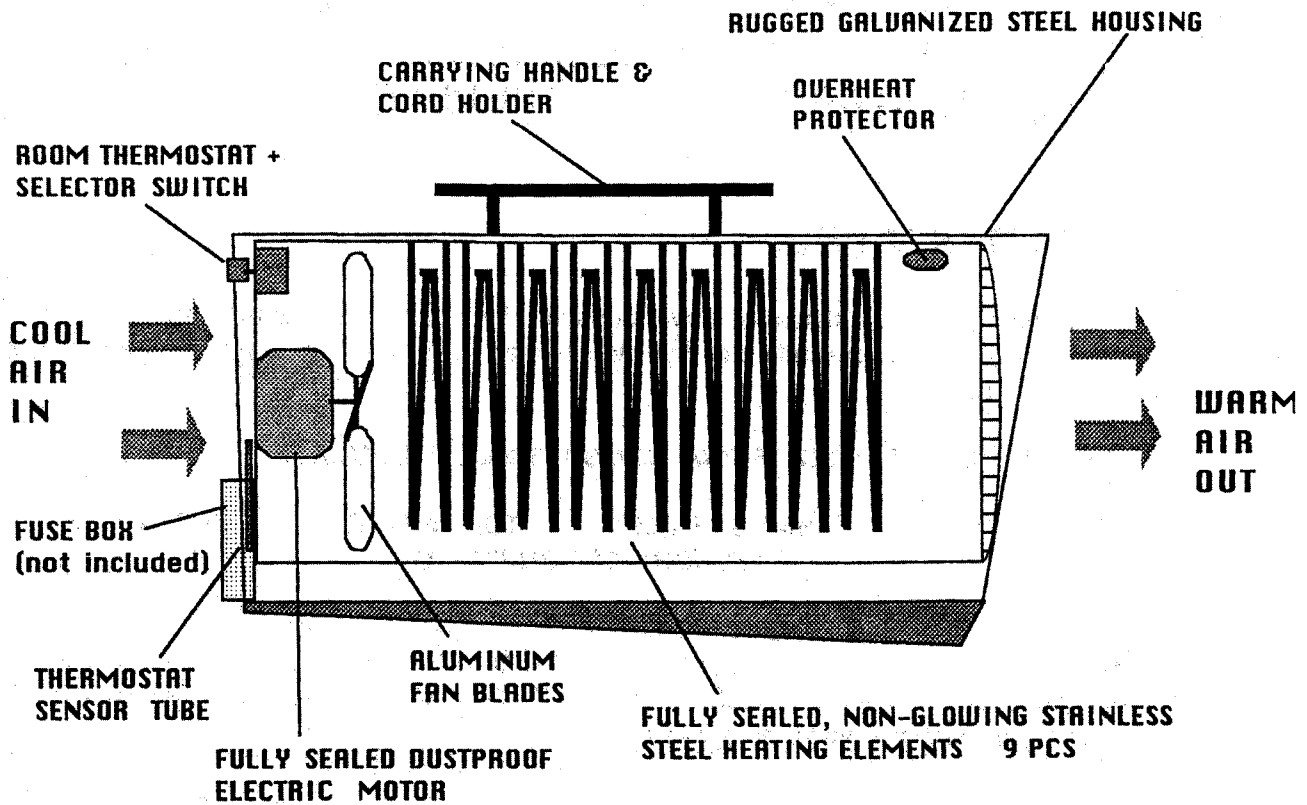
Travel time, mileage and shipping charges will not be allowed. Minor adjustments of heaters are dealers' responsibility. Defective parts must be tagged and held for possible return to the factory for 60 days from date of repair. The factory will provide a return goods authorization, (RGA) for defective parts to be returned.

No warranty will be allowed for parts not purchased from Heat Wagon.



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# Principal of Operation



## SPECIFICATIONS

### Model No. P1800

Heat Output (Two stage selector)	65,000 or 41,000 BTU/Hr
Watts	18,000 or 12,000
Air Flow	590 CFM, 1,000 Cu. m/hr
Electrical Rating:	240V 60Hz Single Phase
Single Phase Model	Amp draw 75 Amps or 50 Amps
Electrical Rating:	240V 60Hz Three Phase
Three Phase Model	Amp draw 25 Amps or 17 Amps/Phase
Ambient Thermostat	Temp. Range 32 to 100°F, 0-40°C
Dimensions	30"L x 14"W x 20"H
Weight	62 lbs

## OPERATION

**REVIEW AND UNDERSTAND ALL WARNINGS IN THIS MANUAL. THEY ARE ESSENTIAL FOR SAFE USE OF THE HEATER. FOLLOW ALL LOCAL CODES.**

### **To start heating:**

1. Place the heater on a stable and level surface. Make sure that no explosive or combustible fumes or dust are present. See that the heater is not exposed to water spray, rain, or dripping water.

### **Minimum clearances from combustible materials:**

**Outlet 6 feet      Sides 1 foot      Top 2 feet      Rear 2 feet**  
**Floor: combustible**

2. Connect power cord of heater into 240 volt 60 herz three phase power source.  
**The power outlet has to be equipped with a circuit breaker!**  
See paragraph "Technical Specifications" in this manual for correct Amp rating.  
Check your heater to make sure whether it is wired for one or three phase use.
3. Set the remote thermostat to a temperature above the ambient room temperature by turning the knob. NOTE: The heater will start only if the thermostat "calls for heat" meaning that it is set to higher than prevailing ambient temperature.
4. Turn the main switch into position. 1. for ventilation, 2. for partial output 1 2 kw or 3. for full heat output 18 km.

**The heater will now operate automatically, controlled by the thermostat.**

### **To stop heating**

1. Turn the main switch to 0=off

**Allow fan to run until it stops automatically - Do not disconnect heater from power source!**

2. Unplug the power supply cable after the fan has stopped down cooling the heater.

**NOTE: The heater is equipped with an overheat limit switch which may cause the heater to stop. Check and remove the cause for overheating before re-starting.**

## STORAGE

Store heater in a dry, clean and safe place out of reach of children and unqualified persons.

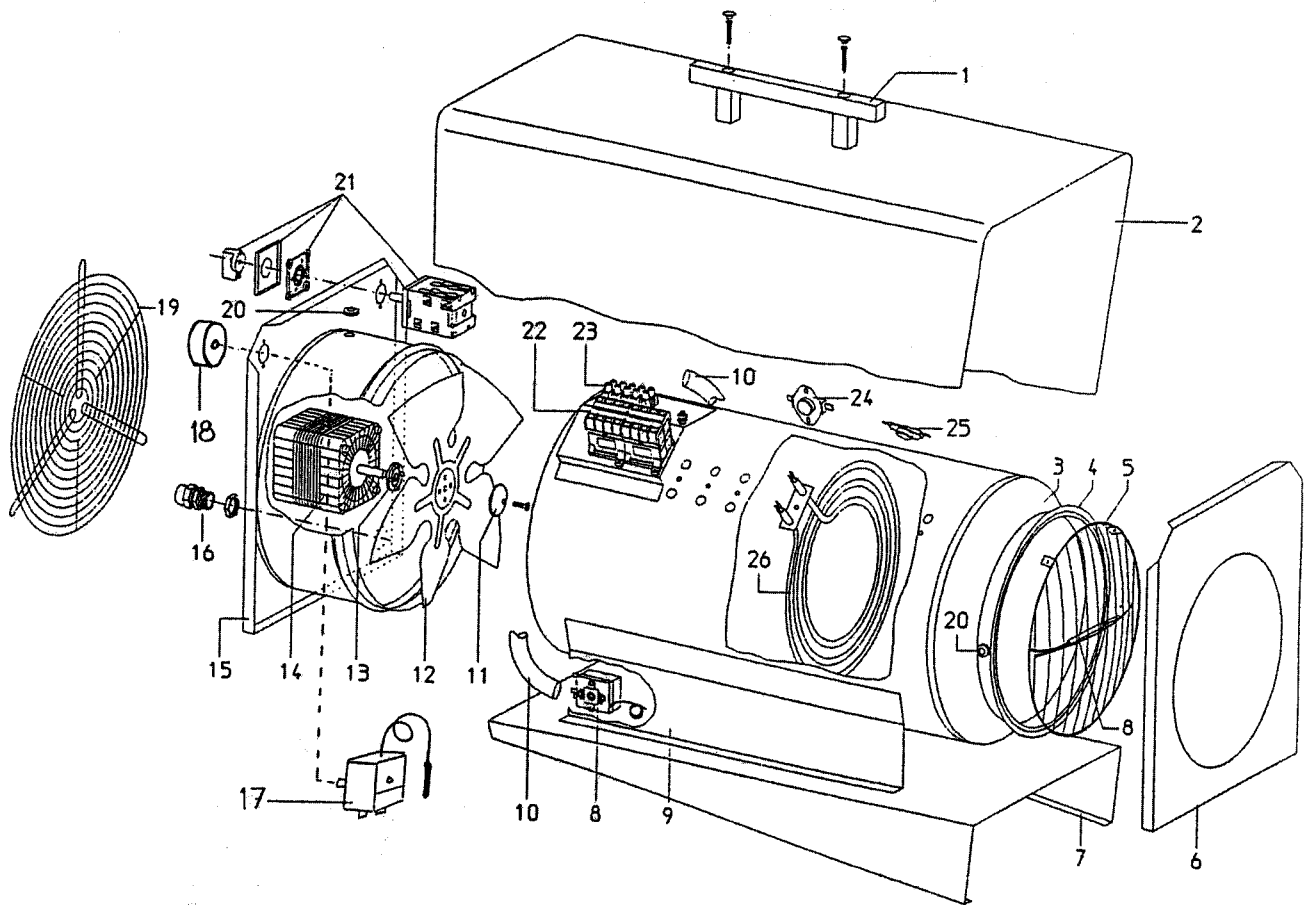
## MAINTENANCE

### **WARNING**

**Never service the heater while it is plugged in, running or hot. Severe bodily injury or electric shock may occur.**

**Only qualified persons are allowed to open heater for service.**

1. Keep heater clean. Use pressurized air to blow fan blades clean. NOTE: Use moderate pressure to avoid damage to fan blades.
2. Inspect heater before and after each use.
3. The bearings of the fan motor are permanently lubricated and sealed. No additional lubrication is needed.



Item	Part No.	Description
1	HWP 180001	HANDLE
2	HWP 180002	HOOD
3	HWP 180003	AIR CONE
4	HWP 180004	GASKET
5	HWP 180005	FRONT GRILL
6	HWP 180006	FRONT PANEL
7	HWP 180007	BOTTOM PLATE
8	HWP 180008	GUARD THERMOSTAT
9	HWP 180009	BRACKET
10	HWP 180010	WIRE CONDUIT
11	HWP 180011	FAN HUB CAP & BOLT
12	HWP 180012	FAN BLADE
13	HWP 180013	FAN HUB
14	HWP 180014	FAN MOTOR
15	HWP 180015	REAR PANEL
16	HWP 180016	STRAIN RELIEVER
17	HWP 180017	AMBIENT THERMOSTAT
18	HWP 180018	THERMOSTAT KNOB
19	HWP 180019	REAR GRILL
20	HWP 180020	WIRE BUSHING
21	HWP 180021	MAIN SWITCH ASSY.

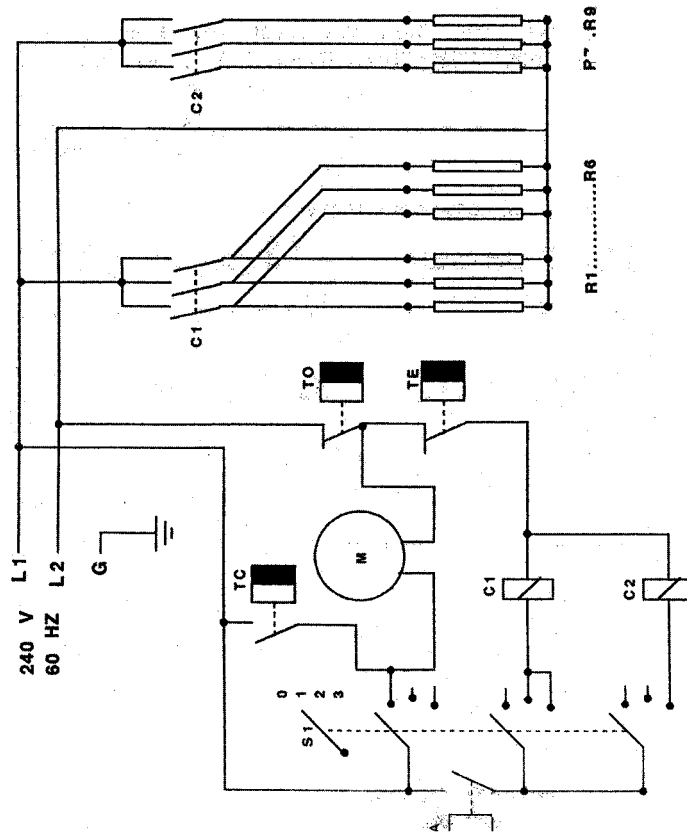
Item	Part No.	Description
22	HWP 180022	CONTRACTOR
23	HWP 180023	TERMINAL BLOCK
23A	HWP 180023A	TERMINAL BLOCK PACK
24	HWP 180024	OVERHEAT LIMIT SWITCH
25	HWP 180025	UNIT COOLDOWN SWITCH
26	HWP 180026	HEATING ELEMENT

See wiring diagram for electric parts

Parts Not Shown

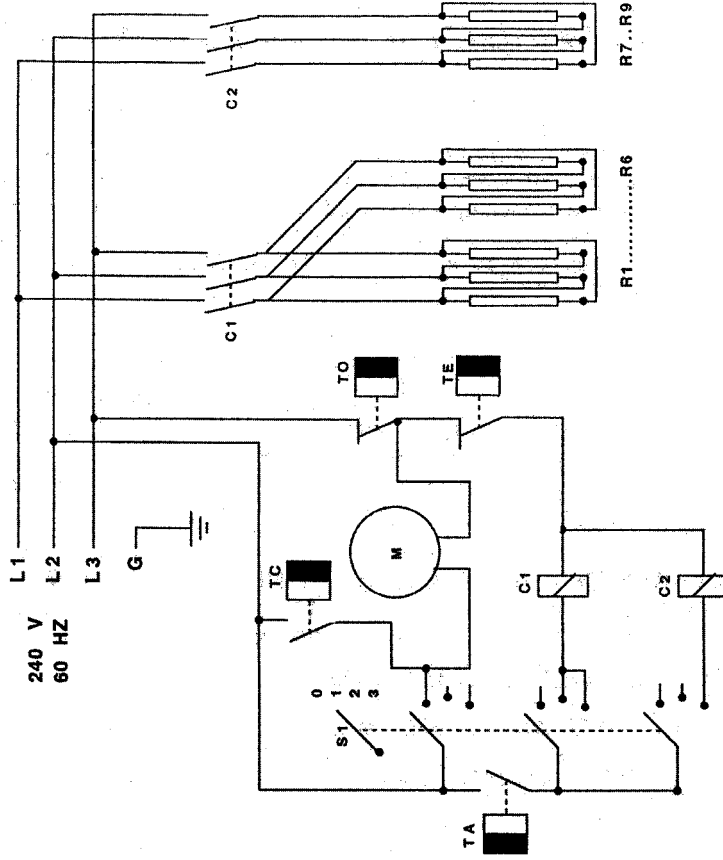
HWP 180027	CIRCUIT BREAKERS
HWP 180032	HOOD INCLUDES CONNECTION HATCH P1800
HWP 180033	FAN HUB, PLASTIC FOR P1800
HWP 180034	TERMINAL BLOCK P1800
HWP 180035	CONNECTION HATCH P1800
HWP 36616	LOCKING CLAMP FOR X1
HWP 37910	PLASTIC BRACKET
HWP 330	SPEC SHEETS
HWP 375	OPERATORS MANUAL

WIRING DIAGRAM HEAT WAGON P1800  
SINGLE PHASE



- C1, C2 = CONTACTORS & COILS
- M = FAN MOTOR
- S1 = MAIN SWITCH
- TA = AMBIENT THERMOSTAT
- TO = OVERHEAT LIMIT SWITCH
- TE = OUTLET AIR THERMOSTAT
- TC = UNIT COOLDOWN THERMOSTAT
- R1 . . .R9 = HEATING ELEMENTS

WIRING DIAGRAM HEAT WAGON P1800  
THREE PHASE



- C1, C2 = CONTACTORS & COILS
- M = FAN MOTOR
- S1 = MAIN SWITCH
- TA = AMBIENT THERMOSTAT
- TO = OVERHEAT LIMIT SWITCH
- TE = OUTLET AIR THERMOSTAT
- TC = UNIT COOLDOWN THERMOSTAT
- R1 . . .R9 = HEATING ELEMENTS

