

User's Manual – Heat Force Inline Heater

Description	Hydro-Force Heat Force Inline Heater
Item #	2645-8428
PID	282445

Give your cleaning jobs a boost by dramatically increasing your water temperature with the extractor from a basic spotting machine up to and including the 1200 psi hard surface extractors.

Simply stated, heat cleans better, and hotter water (combined with proper procedure) means better cleaning efficiency and shorter dry times.

This unit comes complete with a high-pressure high temp solution hose with attached quick connects and a GFI power cord to ensure fast easy setup and take down. The Heat Force is compact and lightweight. Its stainless-steel construction will hold up to the rigors of everyday use with the following specifications that make it a unique piece of equipment:

- Internal operating temperatures up to 190° F
- Lightweight at only 17 lbs with heavy duty easy grab handle
- Rubber non-marking feet so unit can be set safely on any surface.
- Stainless steel construction for durability and industrial look
- 120 VAC, 1750 W, 15A heater with industrial grade heater core.
- 50' 12 gage power cord with GFI
- 8' high temp high pressure solution hose with quick connects
- Power indicator light



Heat Force Inline Heater

User's Manual

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All users must read and understand this manual completely before operating the heater.

This manual will provide users with the knowledge required to operate the Heat Force Inline Heater safely, understand how to properly operate and maintain the heater, and to ensure that the equipment operates at its maximum performance level.

Always maintain this manual in legible condition adjacent to the Heat Force Inline Heater, or place in a secure location for future reference.

Any questions pertaining to the operating or servicing of this unit should be directed to your nearest Hydro-Force distributor.

This manual is written specifically for **the Hydro-Force Heat Force Inline Heater** units manufactured by:

AramSCO
4282 South 590 West
Salt Lake City, UT 84123
801-268-2673
801-268-3856 FAX



Information in this manual is subject to change without notice and does not represent a commitment on the part of Hydro-Force or its parent or affiliated companies.

Technical Specifications

Weight 17 lbs

Heater 120 VAC 60Hz 1750W

READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE OPERATING THE HEATER.

The Hydro-Force Heat Force is intended for commercial use only. This heater is intended for providing hot water solution for the purpose of cleaning.

It is not designed for providing hot water for food, cooking, or other uses.

Alteration or changes to heater may result in injury or fire. Repair and maintenance must be performed by a qualified technician.

Do not exceed working pressure of 1200psi (8.2MPa).

This machine is an electrical appliance. Care must be taken to reduce the risk of electrical shock.

To reduce the risk of property damage or injury, repairs to electrical systems should only be performed by experienced technicians. Contact your distributor for assistance. Unplug machine power cord from outlet before performing any repairs on the heater. Part replacement with OEM parts only.

Do not use the Heater in standing water or on wet surfaces. Do not store the heater in wet conditions.

This heater shall be grounded while in use to protect the operator from electric shock. The heater is provided with a three-conductor cord and a three-contact grounding type attachment plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. **Never connect this wire to other than the grounding pin of the attachment plug.**

This heater is for use on a nominal 110/120-volt circuit and has a grounding plug. Make sure that the heater is connected to an outlet having the same configuration as the plug. Heater will draw between 14 and 15 Amps use 20 Amp power outlets to ensure adequate electrical current.

No plug adapter should be used with this heater.

The power cord supplied with this heater are properly sized to handle the electrical load of this machine and properly grounded as described above. Additionally, this cord is equipped with GFI protection.

Any extension cords used with this heater must be similarly sized with an equal or greater load rating, grounded to assure safe operation, and have GFI protection.

Do not unplug power cord by pulling on the cord. Grasp the plug end when unplugging the cord. Do not pull the heater by the cord. If cord or plug is damaged, do not use cord. Replace with new cord or repair as needed before use.

Do not use a heater with excessive leakage. Internal wiring must not become wet from leaks as this may result in electrical shock, or damage to heater. If heater is leaking internally or becomes wet disconnect electrical power before approaching or touching heater. Make proper repairs and ensure heater is dry before putting back into service.

This heater must be protected from conditions which may damage any of the components. Water may be spilled, or drip while connection, disconnecting, or operation. Place unit in area where water will not cause damage or use drop cloth to protect surfaces.

Freezing of water in this heater will cause serious damage. Store, transport, and use this heater only in temperatures above freezing. (32°F or 0°C). If the heater cannot be stored or transported in a non-freezing environment, then it must be protected against freezing damage. This can be accomplished by either one of the two following processes:

- First option is to remove the water from the heater by running compressed air through the heater to blow out the water. When putting heater back into use it must be filled with water or cleaning solution before turning on power.
- Second option is replacing the water/cleaning solution in the heater with an anti-freeze solution (see instructions for doing so in the Nautilus or Olympus User's Manual) and pump antifreeze through heater. Anti-freeze solution must be completely flushed from the heater before returning to service.

Solvent-based or water-based solutions containing solvents may damage components. Do not assume chemical compatibility. **Contact your distributor or Hydro-Force if you have questions regarding the compatibility of your chemicals with the machine.**

The Heat Force Inline Heater utilizes the same heater core that is used in the heated versions of the Olympus and Nautilus machines and will have the same chemical compatibility.

High pressure hoses may rupture if worn or damaged. Pin hole leaks may result in fluid jets. To avoid damage or injury, do not use high pressure solution hoses if hose covering is cut, bulging, abraded, has holes, leaking, or otherwise damaged. Examine high pressure solution hoses daily and replace or repair hoses as needed.

Hose connections and other surfaces may become hot. Allow heater to properly vent or radiate excessive heat away. Do not cover heater or place in a non-vented enclosure when in use.

Keep pets and children away from the heater while in use, and until all surfaces cool to the touch. Always wear appropriate work clothing and safety equipment when operating heater.

Follow all the instructions for using your Nautilus or Olympus machine.

Make sure to place the heater on the floor on a level surface away from stairways or places that it may fall. Make sure heater is in a well-ventilated area to allow excessive heat to dissipate. Also place where any spillage or leaks do not damage flooring or put proper protection beneath the heater.

Using the 8' high pressure hose that comes with the heater connect the heater to the Nautilus or Olympus. Attach the pressure hose connection to tool that will be used to the heater.

Use the extension cord with GFI to provide power to the heater. Make sure to use a separate circuit that is used for either cord that powers the Nautilus or Olympus. The heater will need to be on a 20 Amp circuit as it may trip a 15 Amp breaker.

Turn on the solution pump on your Nautilus or Olympus machine and run solution until any air is out of the system.

To prevent damage to the heater, the heater must have water in it before it is turned **ON**. Connect solution hoses and run solution through heater before turning it **ON**.

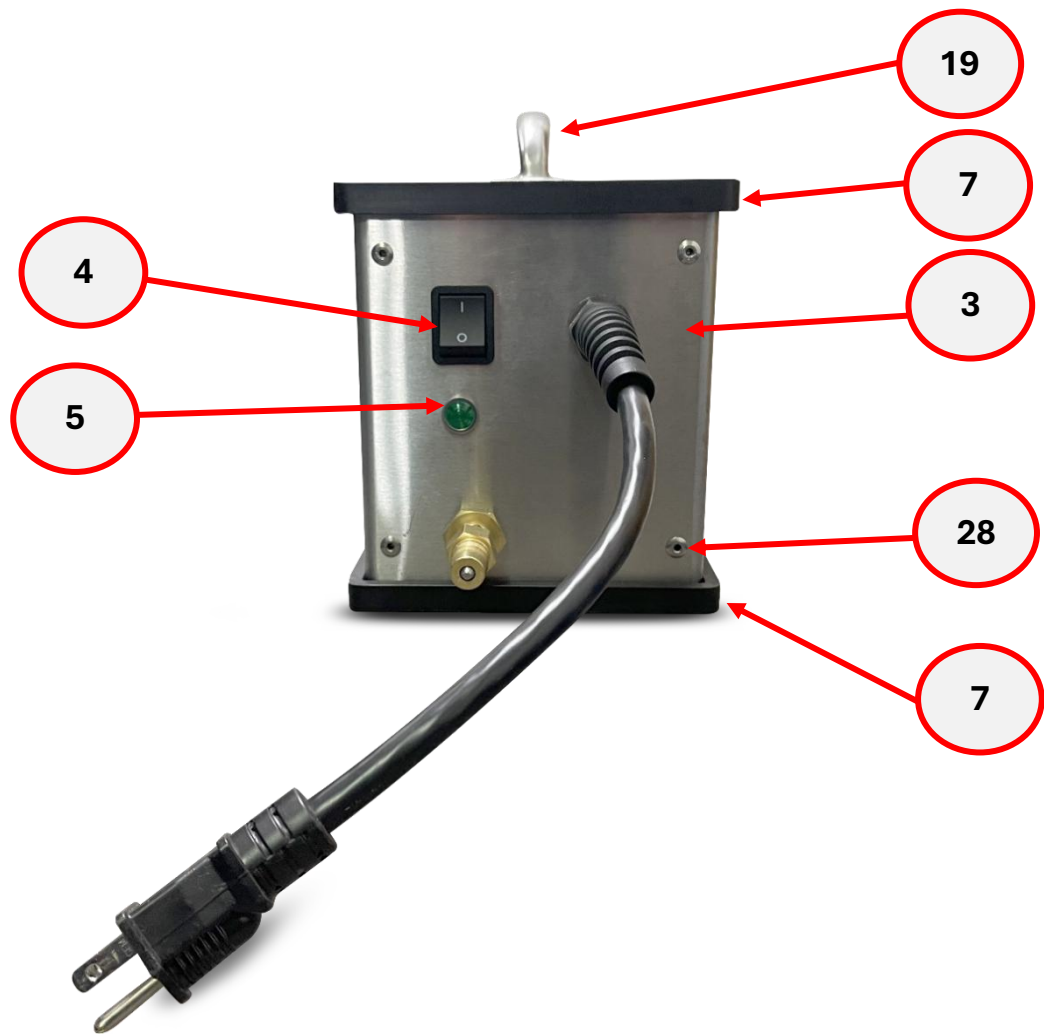
Turn the heater on and allow to come to temperature (about 3 to 5 minutes). Light will come on when the heater switch is turned on and has power.

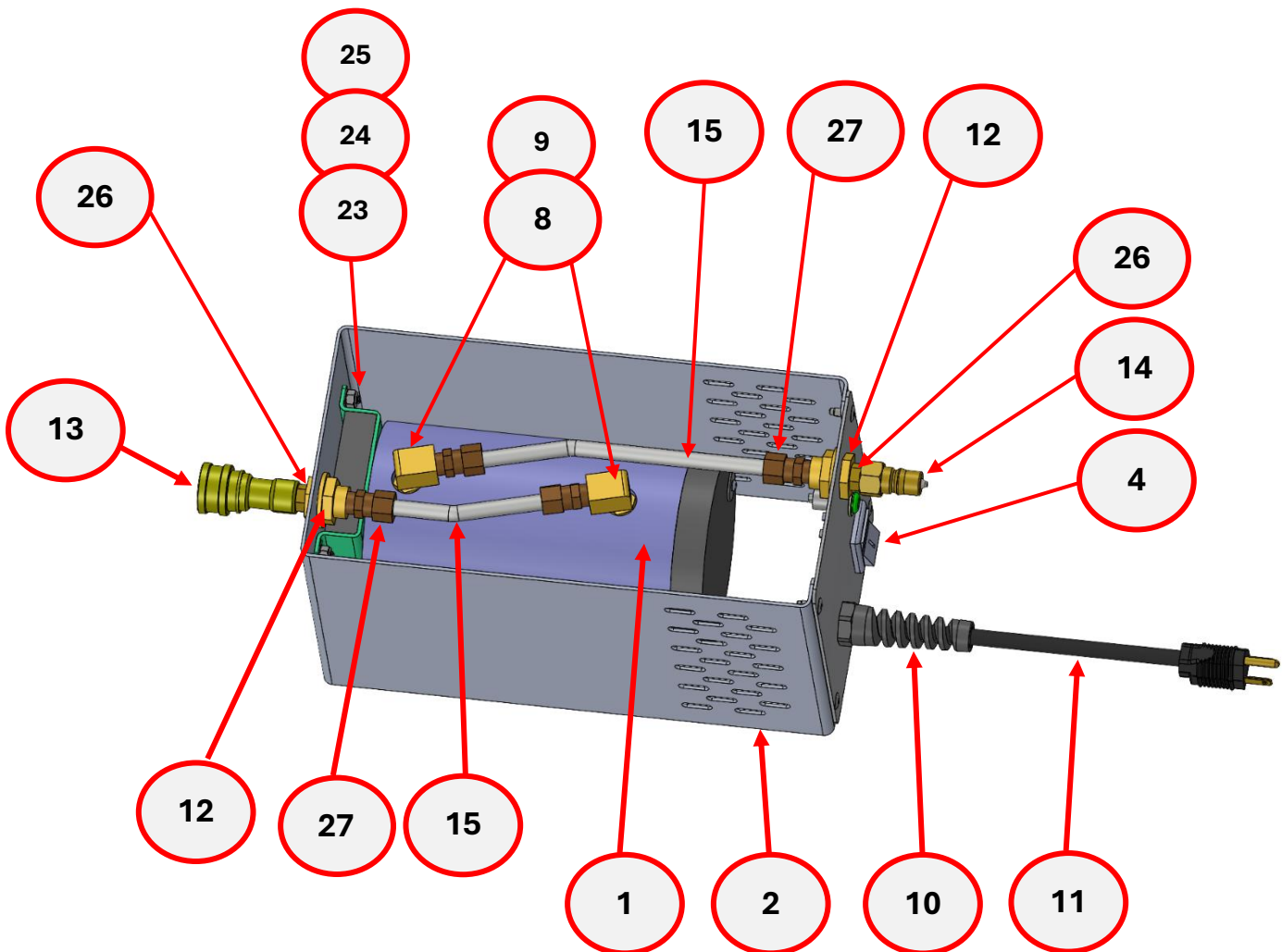
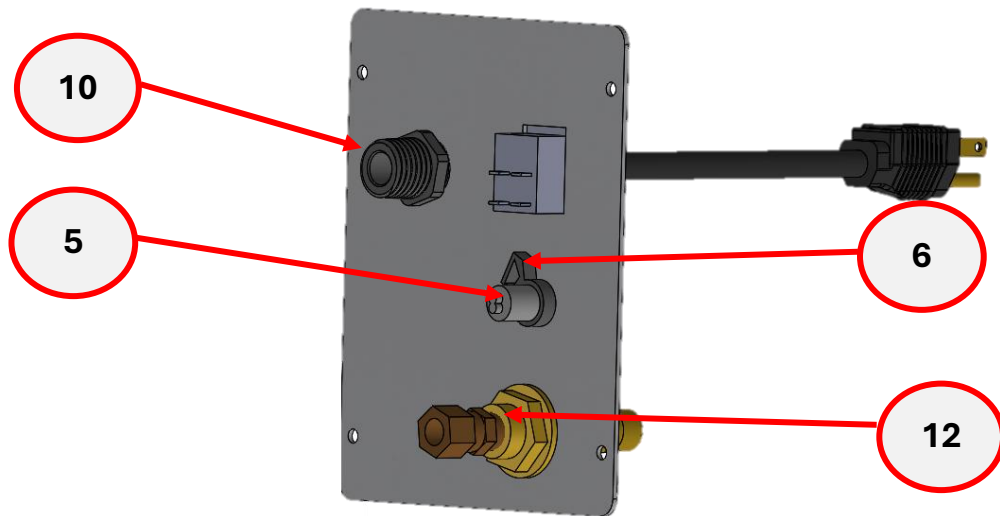
While the heater allows for maximum internal operating temperature of approximately 190°F, the temperature of the cleaning solution delivered to the tool will vary depending on several factors. These include the temperature of the solution being supplied to the heater, the flow rate of the solution, the length of the hose being used, and other factors.

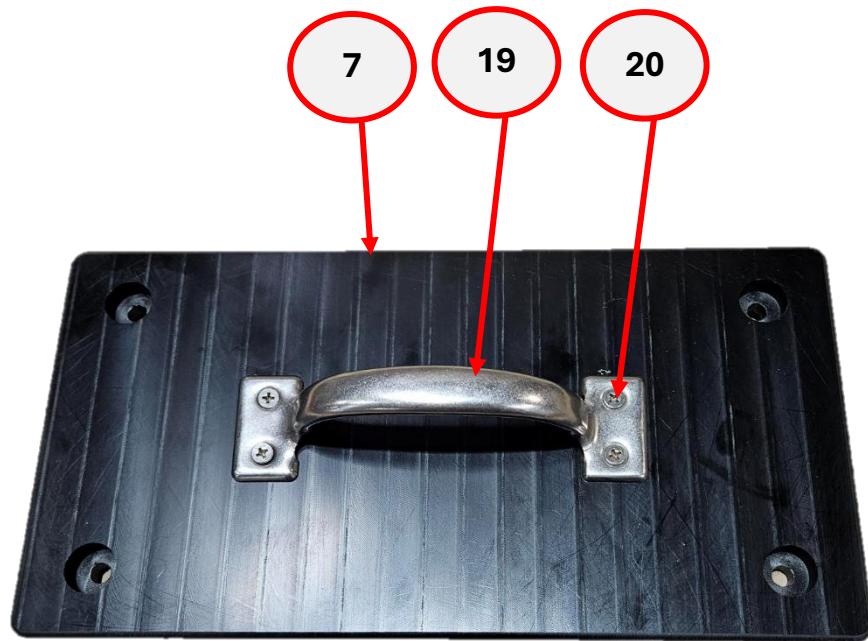
Shut Down

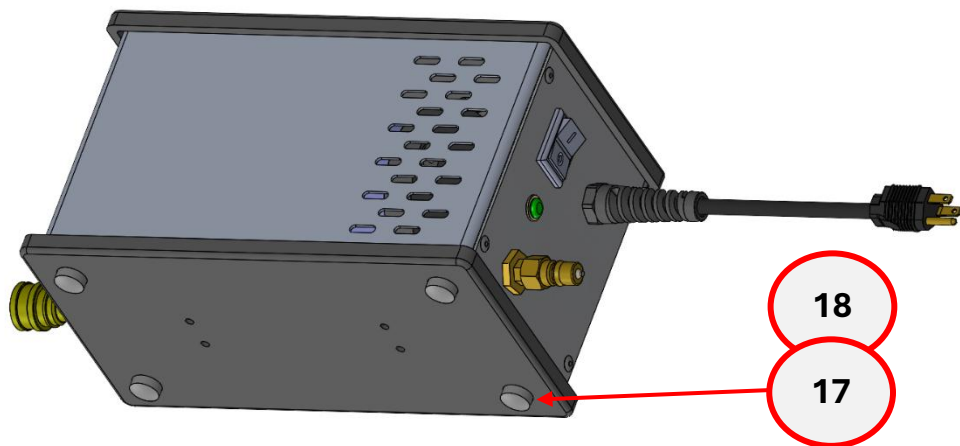
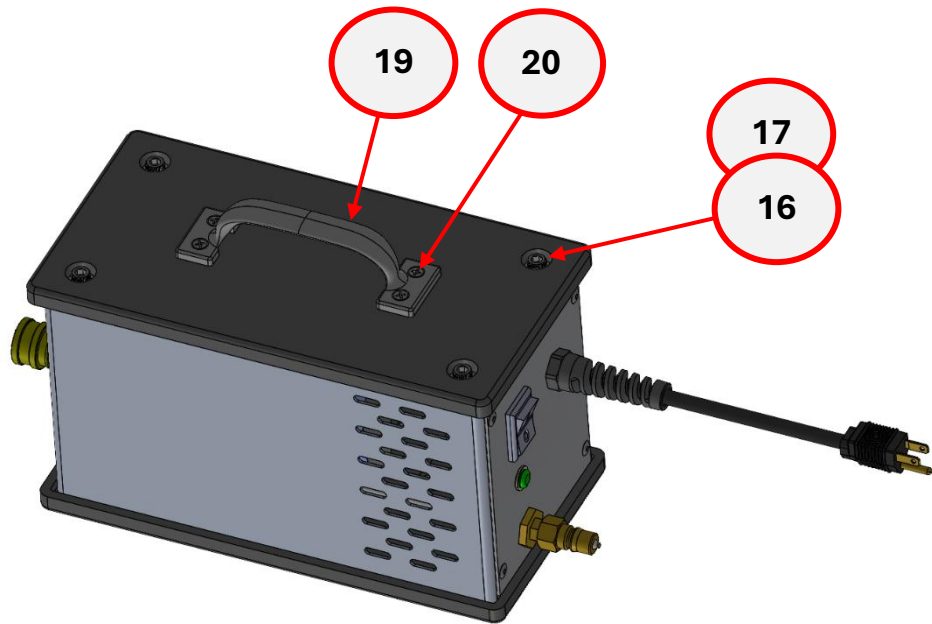
- Turn the heater off before finishing each job and allow cooler solution to flow through heater. This will allow the water to cool the heater as you finish the job.
- Relieve pressure in heater by turning off pump on your Olympus or Nautilus machine. Then opening valve on tool to relieve pressure.
- Disconnect power then hoses power.

Item	Part#	PID	Description
1	S-2672-0274		Heater core - sub assembly
2	2693-7627	262963	Housing frame
3	2696-7620	272966	Control plate
4	1658-2025	122508	Switch rocker single
5	1643-2027	122403	Green light
6	1654-3567	136554	Hose clamp black
7	2694-7628	272964	Heater box top
8	1641-1415	111441	Adapter
9	1653-0382	108533	Elbow 90-degree street
10	1609-2025	122009	Strain relief
11	1662-2514	121652	Power cord
12	1683-0679	107863	Bulkhead fitting
13	1625-0324	102235	AH101B HF quick connect 1/4" fm
14	1626-0325	102236	AH102B HF quick connect 1/4" male
15	2628-8821	282288	3/8 thick wall stainless steel tube (od .375")
16	2629-8822	282289	Ss socket head screw
17	2622-8926	282292	Flat washer ss
18	2630-8623	282360	Bumper / foot non-marking
19	2623-8927	282293	Handle
20	2626-8920	282296	Phillips flat head screw
21	1698-240	120948	Washer flat ss 5/16
22	1602-241	121042	Nut nyloc ss
23	2628-8922	282298	Pan head phillips screw ss
24	1698-240	120948	Washer flat ss 10
25	1602-2410	121042	Nut nyloc ss
26	1680-0070	107800	Nipple hex
27	2629-8923	282299	Fitting brass tube compression
28	2630-8027	282300	Rivet
29	1603-2219	121023	Electrical term spade fem
30	2634-5342	254334	Wago connector
31	1642-336	136432	Black wire 14 GA
32	1605-2211	121025	Electrical wire splice
33	LB301		Decal
34	2643-8630	263463	8' SOL HOSE HYDRCL GRAY 1/4 With QD fittings M and FM
35	1690-1656	115960	Gfi cord auto reset







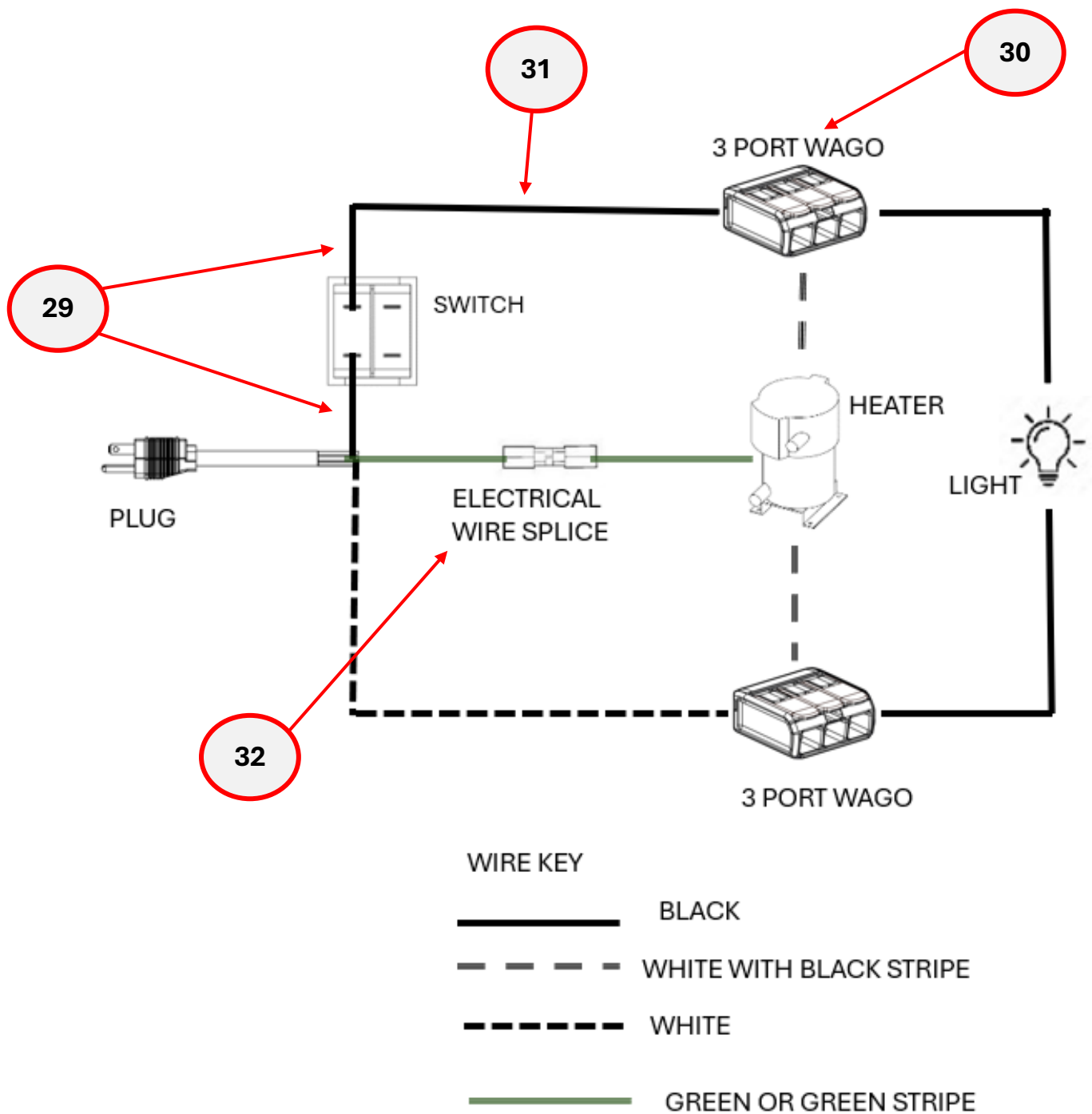


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Wiring Diagram



Your Heater is designed to give you years of reliable service. If a problem should arise use the troubleshooting section in the operation manual to diagnose and correct the problem if possible.

If you are unable to determine the cause or solution to the problem, contact your distributor or Hydro-Force for assistance.

Hydro-Force warrants the Heat Force Inline Heater to be free of defects in material and workmanship for one year from the date of purchase.

During the warranty period, Hydro-Force will, at its option, repair or replace components which prove to be defective. This warranty does not provide for replacement of complete units due to defective components. Replacement parts are warranted only for the remainder of the original warranty period.

Any costs for transportation or related service labor are not covered in this warranty.

To obtain warranty service for the heater, contact your distributor or Hydro-Force. If the heater must be returned to Hydro-Force or an authorized service center, the purchaser shall prepay shipping charges for products returned for warranty service. All returns must have a return authorization number, issued by Hydro-Force, clearly marked on the exterior of the package.

No returned items will be accepted by Hydro-Force without prior authorization.

The remedies provided herein are the purchaser's sole and exclusive remedies. In no event shall Hydro-Force be liable for any direct, indirect, special, incidental, or consequential damages.

This warranty shall **not apply** to defects resulting from improper operation, lack of maintenance, unauthorized modification, chemical incompatibility, misuse, abuse or exposure to freezing temperature conditions. It does not cover **normal wear** items such as O-rings, valve seals, pump seals, hoses, jets, cords, batteries, or other items which require replacement because of ordinary usage.

Hydro-Force makes no other warranty either expressed or implied with respect to this product.

This warranty gives you specific legal rights. You may also have other rights which vary from jurisdiction to jurisdiction.