



Universal Heater

20,000 B.T.U. – P/N: 9PHWH20S



Installation & Mounting Instructions

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Other patents pending.

Cab Heater Unit and Bracket Installation

- 1.) Determine desired location for Heater unit. Ensure there is ample room for Hose connections.



NOTE

Locate Heater as low as possible to avoid circulation problems.
It is strongly recommended to mount Heater lower than the top of Radiator.

Figure 1. Heater Unit Mounting Location



- 2.) Mount Heater Bracket to Heater unit using the four (4) 1/4-20 Bolts in the Heater unit.
- 3.) Position Heater/Bracket in desired location. Mark and drill three (3) 7/16" holes aligned with mounting holes in Heater Bracket.
- 4.) Install Heater/Bracket using 3/8" x 7/8" Bolts and Nuts.

Heater Plumbing



WARNING

To avoid injury caused by hot engine coolant, ensure that engine is completely cooled down before beginning installation of Universal Heater.

- 1.) At Installer's discretion, determine the best possible Engine/Radiator hose connections for supply and return of coolant to Heater. (i.e.: Radiator hose/T-fitting splice or engine block/water pump/Nipples or a combination of both). Refer to Figure 2.

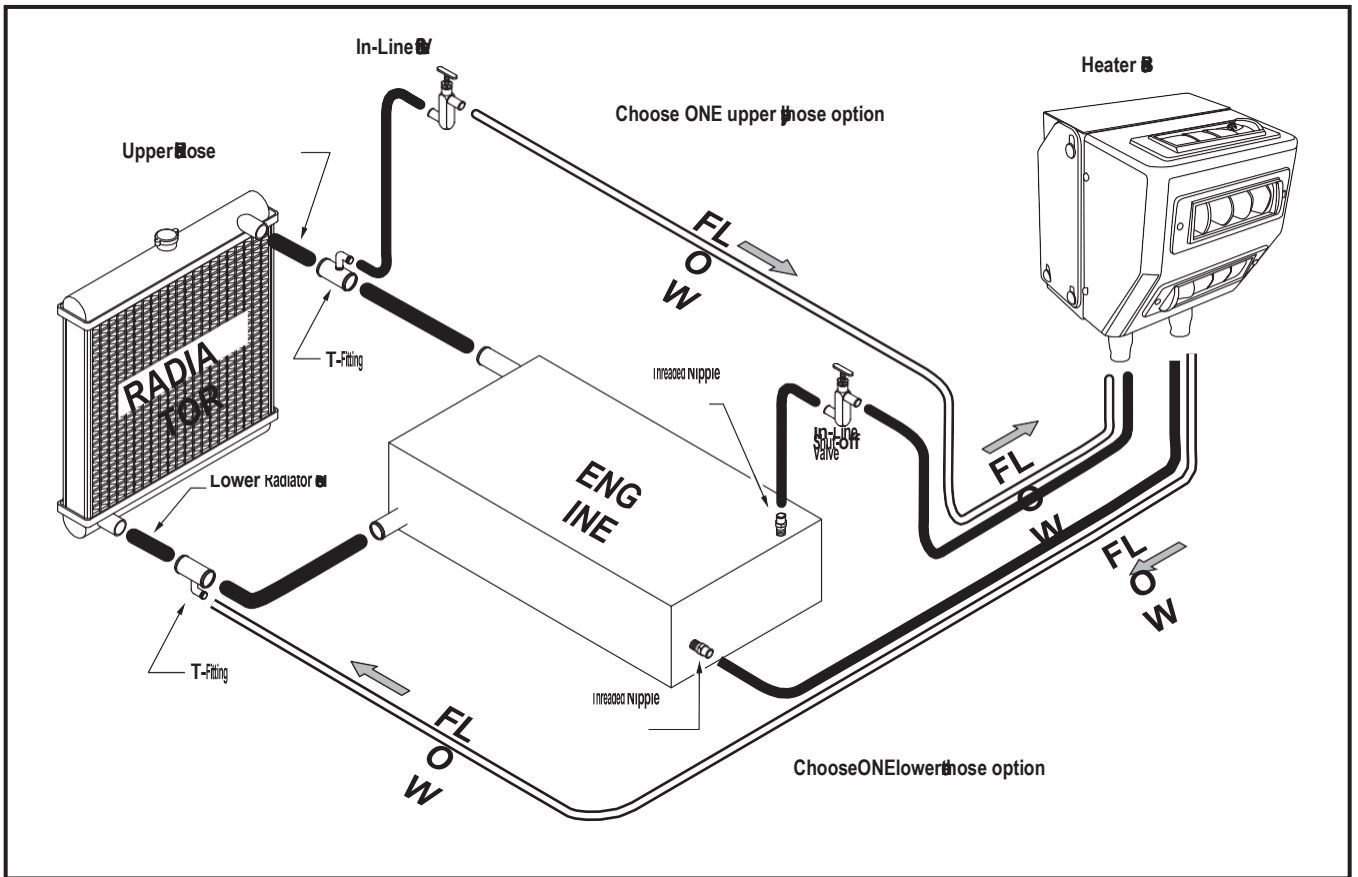
IMPORTANT

**Before you
Start...**

The supplied Nipples may or may not fit the engine block or Water Pump tap holes. It may be necessary to use an adaptor (not supplied) or plumb the Heater into Radiator Hoses.

- 2.) For the Supply line to the Heater, splice into the upper Radiator hose with a T-fitting or tap off an engine coolant plug or the Water Pump with supplied Nipples. Feed the Heater Hose from engine compartment to Heater. Splice into Heater supply line and install the In-line Shut-off Valve. Use a supplied Grommet to protect Hose if a hole is drilled in the cab or Tractor. Secure Hoses with Hose Clamps.

Figure 2. Heater Plumbing Diagram



NOTE

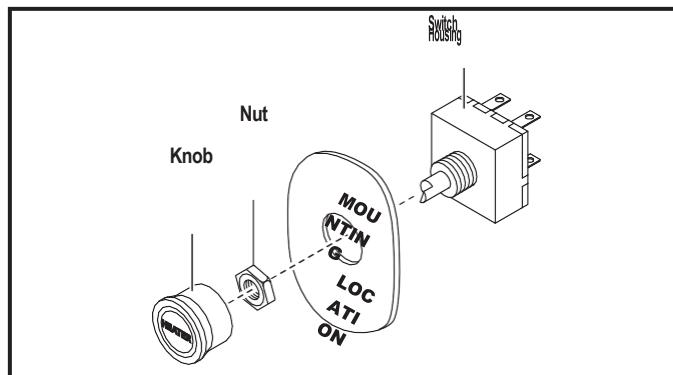
The In-Line Shut-off Valve should be closed in warmer weather to prevent hot coolant from flowing to the Heater core. Heater can be used as a Blower in warm weather with Shut-off Valve closed.

- 3.) For return line from Heater, splice into the lower Radiator Hose with a T-fitting or tap into the lowest engine coolant plug possible. Use a supplied Grommet to protect Hose if a hole is drilled into the cab or Tractor. Secure Hoses with Hose Clamps.
- 4.) Refill cooling system. Be sure to back-fill all Heater Hoses.
- 5.) Bleed all air from cooling system. Cooling system will not function correctly with air present in lines.

Electrical Connections

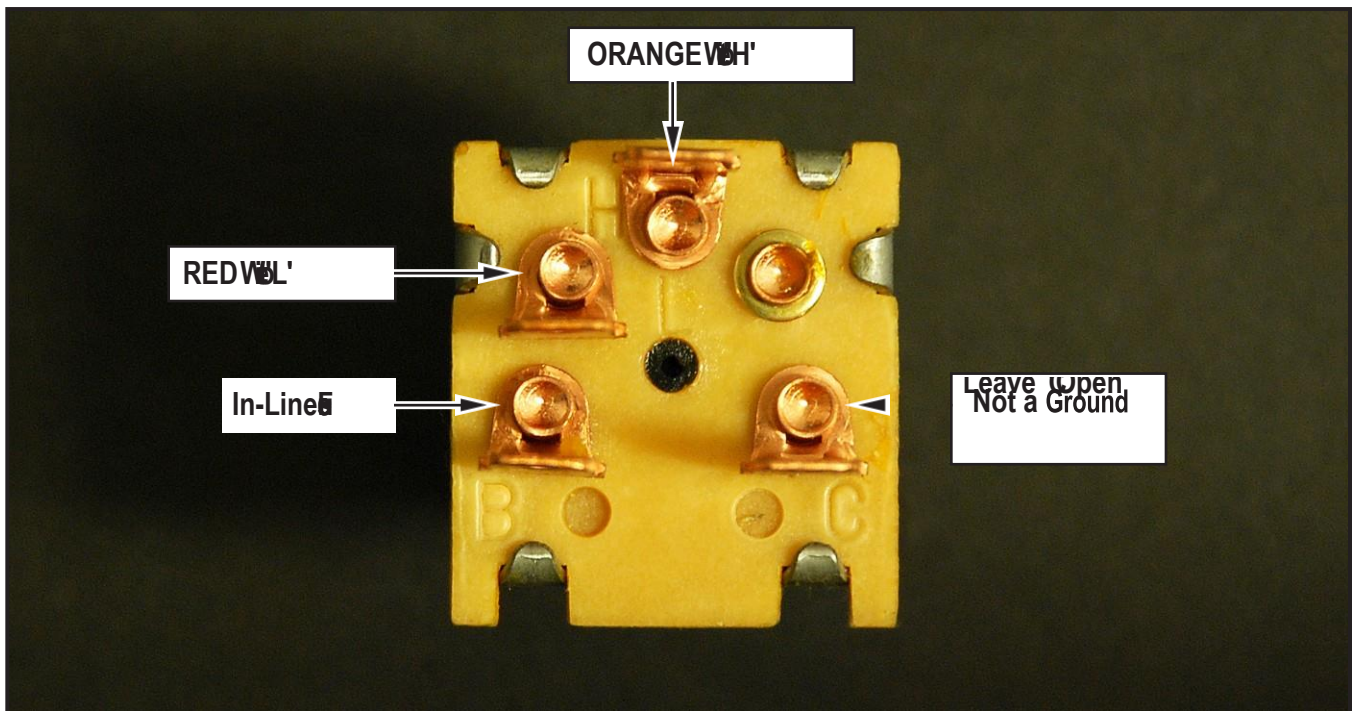
- 1.)** At Installer's discretion, mount the Two-speed Rotary Heater Switch in desired location.

Figure 3. Rotary Heater Switch Mounting



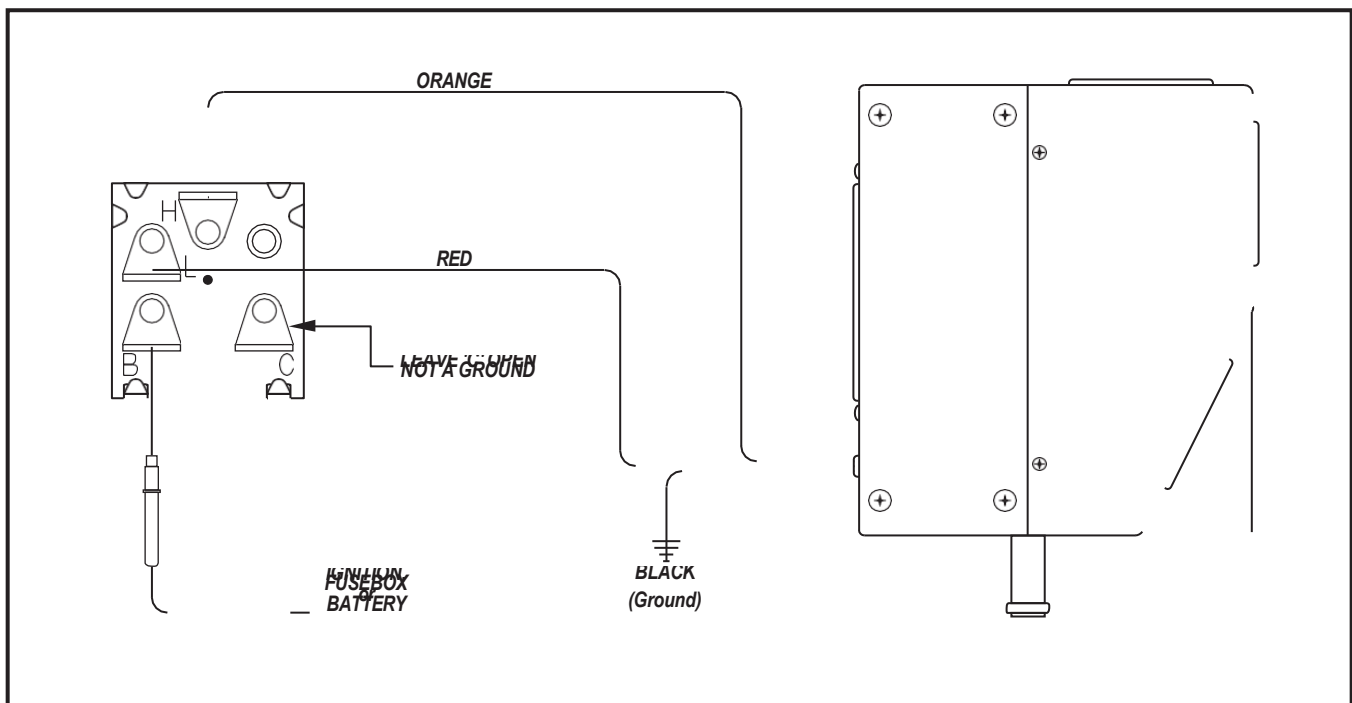
- 2.) Install two (2) female Push-on Connectors to ends of supplied 18ga. wires with female Bullet Connectors and connect to the 'H' (high), and 'L' (low), male Plugs on the back of the Rotary Heater Switch. Route wires to Heater location. Connect wire from Rotary Heater Switch 'H' (high) terminal to the Orange motor wire and the wire from Rotary Heater Switch 'L' (low) terminal to the Red motor wire.

Figure 4. Back of Rotary Heater Switch

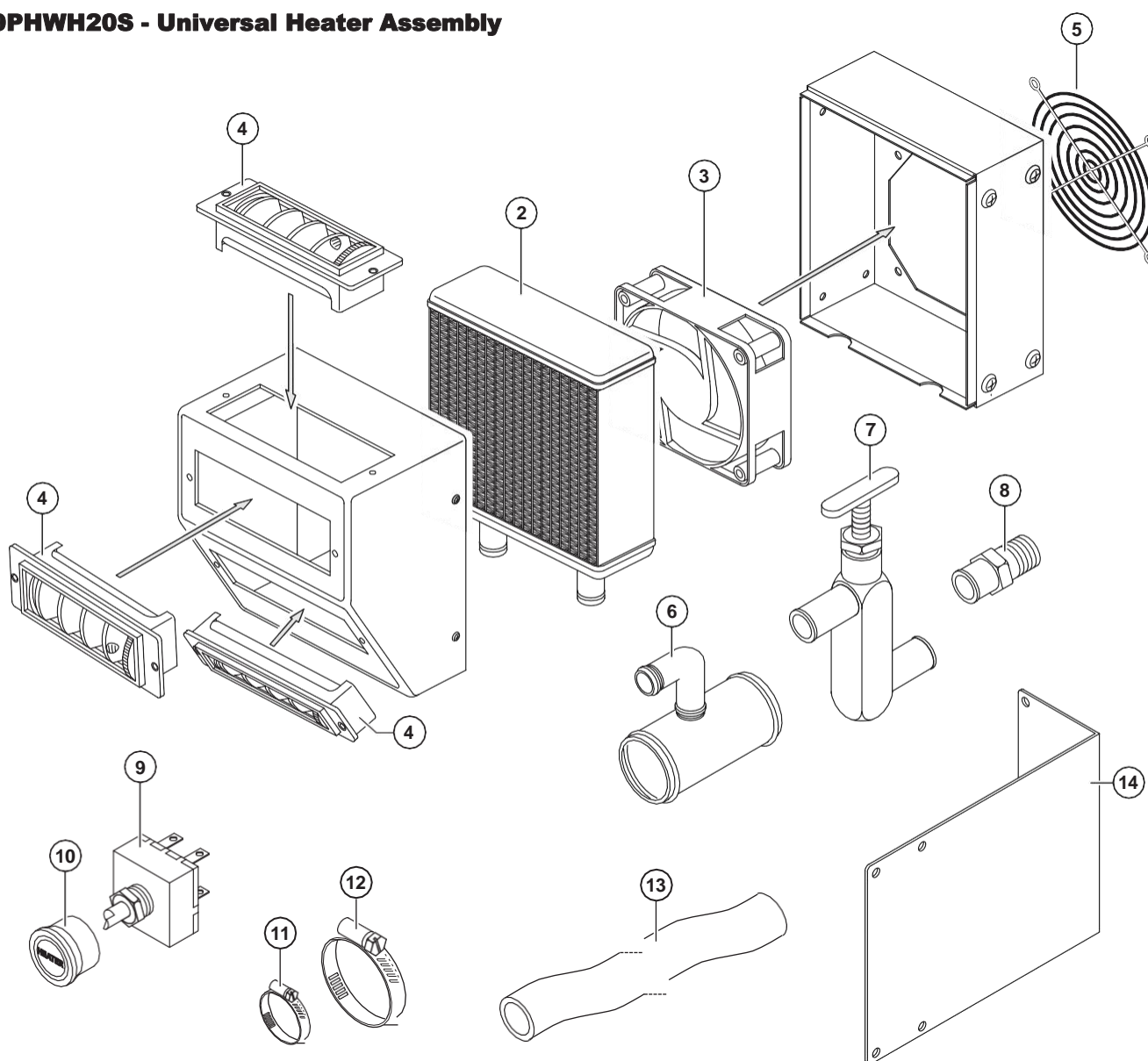


- 3.) Install a female Push-on Connector to one end of the In-line Fuse and connect the supplied 18ga. wire to the other end of the In-line Fuse with a Butt Connector. Connect the female Push-on Connector to the 'B' terminal on the back of Rotary Heater Switch. Connect other end of same wire to a positive feed. The ignition or Fusebox is recommended.

Figure 5. Wiring Diagram



9PHWH20S - Universal Heater Assembly



Callout Number	Part Number	Part Description	Qty.
1	9PH20	TUCK-AWAY HEATER - 20,000 BTU MEGA-BURNER, HEATER ONLY	1
2	9PH20-1A	HEATER CORE FOR 20,000 BTU MEGA-BURNER	1
3	9PH20-2	FAN/MOTOR FOR 20,000 BTU MEGA-BURNER	1
4	9HR-L	REPLACEMENT LOUVER-15,000 & 20,000 BTU HEATER	3
5	9PH20-4	FAN GUARD FOR 20,000 BTU MEGA-BURNER	1
6	9HR0041	METAL "T" FITTING - 1-1/4"	2
7	9HR0044	IN-LINE MANUAL SHUT-OFF VALVE	1
8	9HR0045	BLOCK ADAPTER (3/8" NIPPLE)	2
9	9HR0046	HEATER SWITCH	1
10	9HR0046-A	HEATER KNOB-PLASTIC	1
11	9HR0060-1.0	HOSE CLAMPS - 1"	6
12	9HR0060-1.5	HOSE CLAMPS - 1.5"	4
13	9HR0061	HEATER HOSE (5/8" I.D.)	12 Ft.
14	USC-0030	HEATER BRACKET STANDARD CAB	1
-	-	3/8-16 x 1" LONG HEX HEAD BOLTS (GR.5)	3
-	-	3/8-16 LOCKNUTS	3
-	-	3/8" FLAT STEEL WASHERS	3