



111 HIGGINS STREET, WORCESTER, MA 01606
JOHN DEERE 2320 / 2520 / 2720 / 4100 / 4110 / 4115
OPTIONAL AUXILIARY HEATER INSTALLATION (p/n: 9PH20S8)

HEATER PLUMBING:

***** CAUTION *** To avoid injury caused by hot engine coolant, make sure the engine is completely cooled down before beginning installation of auxiliary heater.**

- A. Remove right side engine cover. Drain coolant at petcock.
- B. Remove plastic plugs from right front leg of cab and install plastic bushings from the electrical kit.
- C. Remove the sending unit from underneath the thermostat and install a nylon washer, and the universal sending unit adaptor. Reinstall the sending unit to the end of the adaptor. Install the nipple to the side of the sending unit adaptor (**SEE FIGURE 1**). If nipple can't be installed due to alignment of adaptor, install an additional nylon on adaptor and re-align.
- D. For the supply line to the heater, cut a 6 foot length from the supplied heater hose. Place a small hose clamp over the end of the heater hose, press it onto the nipple and tighten the hose clamp. Feed the heater hose from the engine compartment to the right front leg of the cab and feed it through one of the bushings installed in step B. The suggested location for the in-line shut-off valve is in the engine compartment. Splice into the heater supply line and install the in-line shut-off valve with small hose clamps.
NOTE: The in-line shut-off valve quickly converts the heater into a summer time blower by preventing hot water from flowing to the heater core (**SEE FIGURES 2 & 3**).
- E. For the return line to the heater, splice into the lower radiator hose with the T fitting and large hose clamps provided. Install remaining heater hose onto T with a small hose clamp and route to the right front leg and feed through remaining bushing from step B (**SEE FIGURES 2 & 3**).
- F. Temporarily install the 20,000 BTU MEGA BURNER heater to the bracket on the right unitized side frame using the 1/4" bolts located on the side of the heater. Check hose routing and secure with large wire ties making sure that they do not rub against any moving parts, do not interfere with right side engine cover, kink when cover is installed, or rub against right front tire when turned. Trim hoses to length at heater, remove plugs from heater core (if equipped) and install hoses to the heater with the remaining hose clamps. Place heater on tractor floor (**SEE FIGURE 2, 3 & 4**).
- G. Refill the cooling system. The system will not operate correctly with air present in the lines. Start tractor and check system for leaks. Let the tractor run and confirm that both heater hoses get warm. If they do not, let the system cool and try the following:
 - Back fill the heater and hoses with coolant.
 - Only while bleeding the lines, restrict flow to the radiator by clamping the upper hose to force water to flow through the heater. **REMOVE CLAMP** when bleeding the lines is complete.
 - Add coolant to the reservoir through several heating and cooling cycles to bleed air from the lines.

Once both hoses warm up, install the heater to the mounting bracket.

ELECTRICAL CONNECTIONS: (SEE FIG 5)

- A. At the installer's discretion, mount the two speed rotary heater switch in desired location.
- B. Install the supplied 18 gauge wires to the heater with the female bullet connectors on the end of the wires. Route the wires to the switch location and cut to desired length. Connect to "H"-high, and "L"-low, male plugs on the back of the rotary switch with female push on connectors. **NOTE:** Connect the wire from the ORANGE motor wire to the switch "H"-high terminal, and the wire from the RED motor wire to the switch "L"-low terminal.

- C. Install the fuse in the in-line fuse holder and cut the wire loop. Install a butt connector to one end of the fuse holder. Connect a piece of the remaining 18 gauge wire to the butt connector. Connect the other end of the in-line fuse holder to a positive feed (through the ignition or fuse box is recommended). Route the wire to the back of the switch and connect to the "B" terminal with a female push-on connector.
- *** **WARNING** *** LEAVE the "C" switch terminal OPEN. This is NOT a ground connection.



FIGURE 1

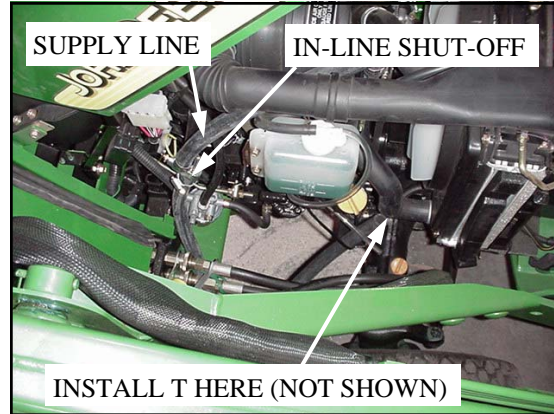


FIGURE 2



FIGURE 3

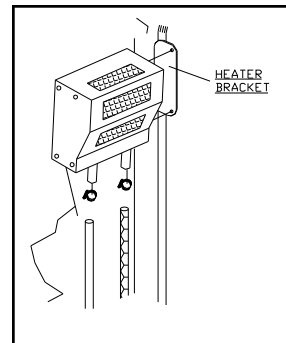


FIGURE 4

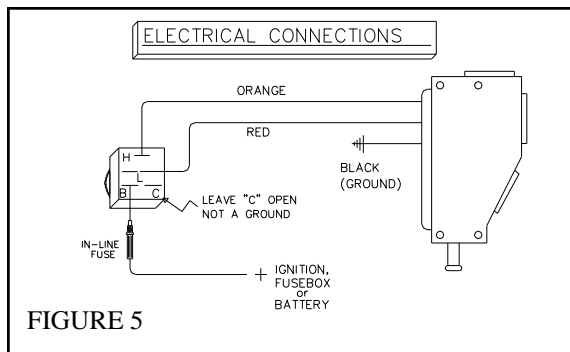


FIGURE 5

HEATER COMPONENTS

QTY	DESCRIPTION	P/N	QTY	DESCRIPTION	P/N
1)	20,000 BTU HEATER	9PH20	1)	STD HEATER ADAPTOR	9HR0051MF
1)	HEATER MANUAL	N/A		w/ HEX BUSHING	
1)	11' HEATER HOSE	9HR0061	3)	16MM NYLON WASHERS	N/A
1)	3/8" NPT NIPPLE	9HR0045	1)	HEATER WIRE KIT	N/A
6)	1" HOSE CLAMPS	9HR0060-1.0	2)	LARGE WIRE TIES	N/A
2)	1-1/2" HOSE CLAMPS	9HR0060-1.5	1)	ROTARY HEATER SWITCH	9HR0046
1)	IN-LINE SHUT OFF VALVE	9HR0044			
1)	1" x 5/8" x 1" T FITTING	9HR0042			

JOHN DEERE 2320 / 2520 / 2720 /4100 / 4110 / 4115 OPTIONAL AUXILIARY HEATER SERVICE PARTS
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<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>CODE NO.</u>	<u>QTY</u>
9PH20	HEATER	9PH20	1
9PH20-2	FAN/MOTOR 20,000 BTU	9PH20-2	1
9SV-HRH61-20	HEATER HOSE	9HR0061	20'
9SV-UHTRMP	MISCELLANEOUS PARTS KIT		
	VENT/LOUVER RECTANGLE	9HR-L	3
	HEATER SWITCH	9HR0046	1
	HEATER KNOB	9HR0046A	1
9SV-UHTRF	HEATER FITTINGS KIT		
	METAL T FITTING 1-1/4"		2
	METAL T FITTING 1"		2
	IN-LINE SHUT-OFF VALVE	9HR0044	1
	BLOCK ADAPTOR (3/8" NIPPLE)	9HR0045	2
	1" HOSE CLAMPS	9HR0060-1.0	6
	1.5" HOSE CLAMPS		4
9HR0051MF	Extended Sending Unit Adaptor		1