



**111 HIGGINS STREET, WORCESTER, MA 01606**

**MODEL: CURTIS - JOHN DEERE 2305, 2210  
OPTIONAL AUXILIARY HEATER INSTALLATION (p/n 9PH20S28)**

**HEATER INSTALLATION:**

- A. The location for the heater unit is on the left unitized side frame. Install the 20,000 BTU MEGA BURNER heater to the heater bracket, using two of the 1/4" bolts on the side of the heater.
- B. Remove plugs (if equipped) from heater inlet and outlet tubes.
- C. Remove plugs from the left front leg and install plastic bushings from the heater kit by pushing into the holes from the outside of the cab.

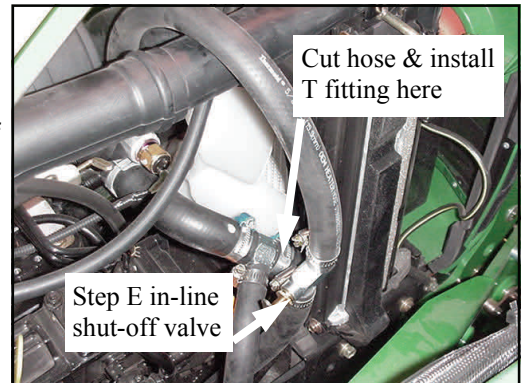
**HEATER PLUMBING:**

**\*\*\* 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 side engine covers and drain the cooling system. For the supply line to the heater, remove the sending unit. Install the sending unit in the end of the sending unit adaptor with one of the large nylon washers from the hardware kit. Install the hex bushing onto the male end of the adaptor with a small plastic washer. Install a large plastic washer onto the end of the hex bushing and install into the engine block where the sending unit was removed. If the sending unit adaptor does not tighten so that the port on the side for the 3/8" NPT nipple points up as shown then remove it and install another small plastic washer and try again. Install the nipple into the side port of the adaptor. **(SEE FIG. A)**
- B. For the return line from the heater, cut the lower radiator hose in the location shown and install the enclosed T fitting with large hose clamps provided. **(SEE FIG. B)**
- C. Cut the supplied heater hose in half. Feed the hose through the plastic bushings in the left front leg of the cab and connect to the heater with small hose clamps. **(SEE FIG. C)**
- D. Run the hoses down the leg and behind the left rear motor mount. Route under the engine oil pan and up the right side of the engine in front of the front motor mount. Run the return line to the T fitting installed in Step B. Run the supply line up and over the air intake to the sending unit adaptor. Check hose routing making sure it is not kinked or rubbing against any sharp edges. Also make sure the hoses will not interfere with installing the engine side covers. Trim hoses to length and attach to T fitting and the nipple on the sending unit adaptor. **(SEE FIG. D)**



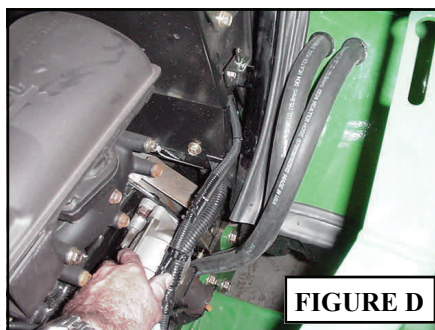
**FIGURE A**



**FIGURE B**



**FIGURE C**



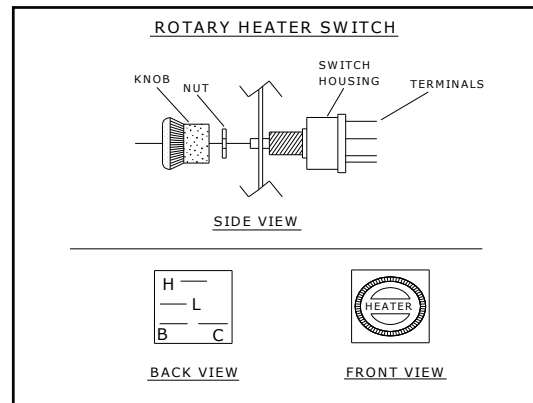
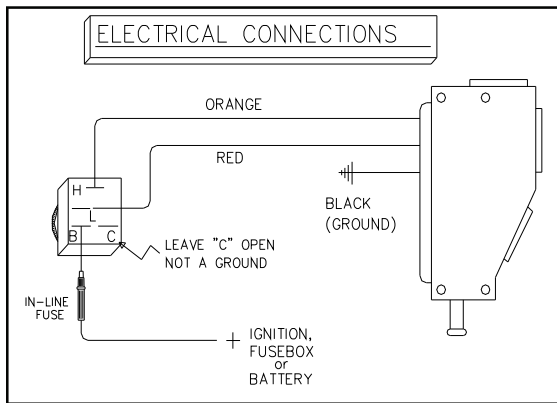
**FIGURE D**

- E. (SEE FIGURE B ON PREVIOUS PAGE) Splice into the heater supply line and install the in-line shut-off valve. **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. Refill the cooling system. Start the tractor and inspect system for leaks.

### ELECTRICAL CONNECTIONS:

- A. At the installer's discretion, mount the two speed rotary heater switch in desired location.
- B. Using the bullet connectors on the supplied 18 gauge wires, connect the wires to the orange and red wires on the heater. Route the wires to the switch location and cut to length. Connect the lead from the orange motor wire to the "H" terminal of the switch and the lead from the red motor wire to the "L" terminal using female push-on connectors.
- C. Install a female push-on connector to one end of the remaining 18 gauge red wire. Connect to the "B" terminal on the back of the rotary switch. Route the other end of this wire to a positive feed (through the ignition or fuse box is recommended). Attach to the in-line fuse with a butt connector. Attach the other end of the in-line fuse to the power source.

**WARNING \*\*\* LEAVE the "C" switch terminal OPEN. This is NOT a ground connection.**



### FINISHING TOUCHES:

If the fan motor will not run, check that the black wire on the back of the heater motor is reaching ground with an ohm meter. It may be necessary to file some of the paint off the heater bracket under one of the mounting screws or cut the black wire and connect directly to a ground.

Check heater hoses and make sure they get warm. If not, remove the heater from its mount and let hang from hoses as low as possible. Temporarily put a clamp on the upper radiator hose to force coolant through the heater. As soon as heater gets warm remove the clamp.

### HEATER COMPONENTS:

1	20,000 BTU HEATER	9PH20	1	HEATER MANUAL	N/A
1	Rotary Heater Switch	9HR0046	1	Heater wire kit	N/A
1	14 ft. heater hose	9HR0061	6	1" Hose clamps	9HR0060-1.0
2	1-1/2" Hose Clamps	9HR0060-1.5	1	1" TEE	9HR0042
1	Ext. Sending unit adaptor	9HR0051MF	1	In-Line Shut-off valve	9HR0044
2	12 mm nylon washers	N/A	1	3/8" NPT nipple	9HR0045
2	16 mm nylon washers	N/A			

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**OPTIONAL AUXILIARY HEATER SERVICE PARTS**

<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