

A-12142 HEATER KIT

With Diesel Engine Connection Fittings

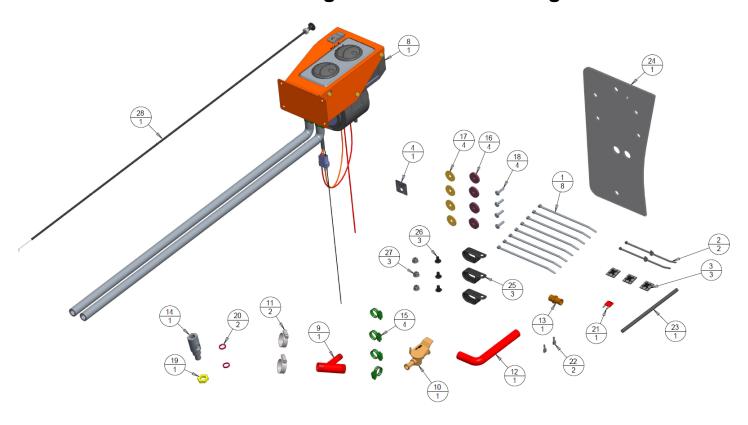


Figure 1 (General Layout and Parts I.D.)

Read these instructions and identify all components. Please retain these instructions for future reference and parts ordering information. Refer to kit components and Figure 1 for general layout.

Note: Cab kit A-11858 must be installed prior to installing this kit!

Kit Components:

	· <u>-</u>					
ITEM	CP NUMBER	QTY	UOM	DESCRIPTION	SECOND DESCRIPTION	
1	1-49570	1	EA	HOSE, ELBOW 90	MODIFIED 3-11861	
2	3-10670	2	EA	TERMINAL, 14-16 GA, .250 BLADE	FEMALE, FULLY INSULATED	
3	3-10704	1	EA	WIRE DUCT, .350 ID X .51 OD	BLACK LOOM 76" LG	
4	3-10858	4	EA	CLAMP, HOSE, #10, .562-1.062	H10	
5	3-11220	1	EA	VALVE, HEATER, TEMP CONTROL,	CABLE OPERATED, PULL TO OPEN	
6	3-11255	3	EA	CLAMP, HEATER HOSE, DOUBLE		
7	3-12119	1	EA	FITTING, .375 NPT TO .625 HOSE	1.56 LONG BRASS	
8	3-12683	1	EA	BOX, 18.00 X 12.00 X 7.00	200 LB	
9	3-13442	2	EA	CLAMP, HOSE, #16, .625-1.500	H16	
10	3-16057	1	EA	FUSE, ATO\ATC, 10 AMP, RED	AUTOMOTIVE BLADE TYPE	
11	3-16217	4	EA	WASHER, SHOULDER, GLASS MOUNT	1.250 DIA X .313, BLACK EPDM	
12	3-16629	8	EA	WIRE TIE, NYLON, BLACK, 7.50L		
13	3-16823	2	EA	O-RING, DOUBLE SEAL, BUNA-N	3\32 X .563 ID X .750 OD	
14	3-17100	1	EA	CABLE, PUSH-PULL, 48" LONG	TEMP CONTROL, W/KNOB	
15	3-17517	3	EA	WIRE TIE MOUNT, BLACK NYLON	1.12 X 1.12, PSA BACK VHB ADHV	
16	3-17839	1	EA	PAINT, BLACK SEMI 45	2 OZ	
17	3-18187	4	EA	WASHER, FENDER, .344 ID X 1.25	COATED BLACK PER RIE4900/4037A	
18	3-18259	1	EA	NUT, HEX, JAM, M16 X 1.50	COATED BLACK PER RIE4900/4037A	
19	3-18439	1	EA	BAG, 9.00 X 12.00, ZIPLOCK	4 MIL, CLEAR	
20	3-18819	1	EA	DECAL, PULL FOR HEAT		
21	3-19335	4	EA	MSCR, .25-20 NC X 1.00 TH TORX	COATED BLACK PER RIE4900/4037A	
22	3-19338	3	EA	MSCR, .312-18 NC X .50 TH TRX	COATED BLACK PER RIE4900/4037A	
23	3-19594	2	EA	WIRE TIE, NYLON WITH RETAINER	FIR TREE TYPE FOR 1/4" HOLE	
24	3-20137	1	EA	FITTING, Y, HOSE, 1.125 THRU	X .625 AT 40 DEG, BLACK	
25	3-20284	1	EA	FITTING, ALUMINUM, JAM TYPE	M16M X 3/8 NPT F X M16F	
26	3-20329	3	EA	NUT, HEX, .312-18 NC	FLANGED, NYLOCK	
27	3-20500	1	EA	POLYCARB, WINDOW, 20 SERIES	.22 X 10.89 X 16.98, CLEAR	
28	4-15815	1	EA	HEATER ASSEMBLY	JD CABS	
29	05-11578	2	EA	MOUNTING INSTR	JD S20 A-12142	
30	05-11579	2	EA	LABEL, BOX	A-12142 JD S20 HK	

Preparation of Tractor;

- 1. Park tractor on level surface and turn ignition key off.
- 2. Allow engine to cool. Drain coolant from radiator.

Mounting the heater unit;

- 3. Remove lower RH front window from cab and remove seals from window.
- 4. Install seals onto new acrylic window (Figure 2).
- 5. Apply pull for heat decal onto acrylic window at 7/16" hole location (Figure 2).
- 6. Install push/pull cable into acrylic window 7/16" hole and secure to window using hardware supplied with push/pull cable (Figure 2).
- 7. Secure heater assembly onto the inside surface of the acrylic window using (Figure 2);
 - (4) 5/16" x 1.00" button torx head bolts
 - (4) 5/16" rubber washers
 - (4) 5/16" fender washers
- 8. Install new window with seals and heater unit onto lower RH front cab location.

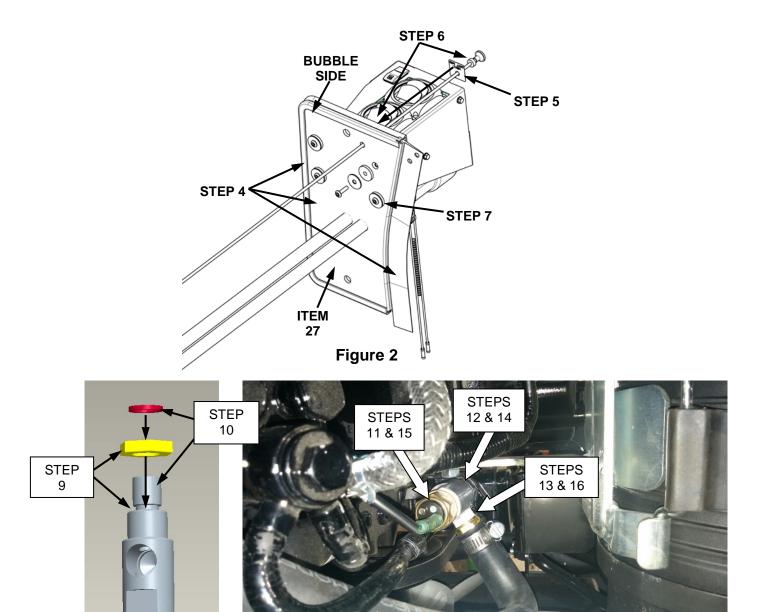
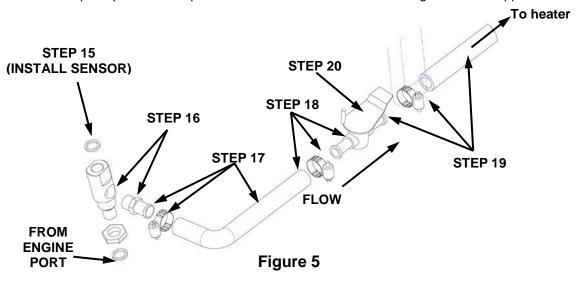


Figure 3 Figure 4

Supply connection from engine to heater unit;

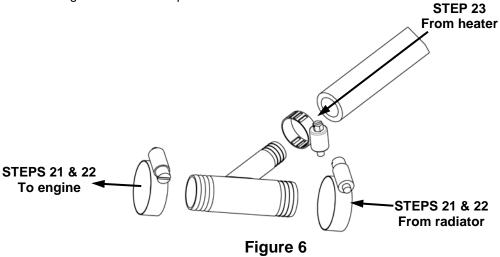
- 8. Locate temperate sensor near engine's thermostat area. Remove temperature sensor with washer.
- 9. Thread M16 jam nut onto M16 male thread on aluminum fitting, to the fitting shoulder (Figure 3).
- 10. Thread 4-way O-ring washer onto M16 male thread on aluminum fitting (Figure 3).
- 11. Disconnect engine temperature sensor wire and remove engine temperature sensor (Figure 4).
- 12. Install aluminum fitting with O-ring and nut, into sensor port until O-ring makes contact **(Figure 4)**Thread tape may be used.
- 13. Orientate fitting so that the brass fitting for the heater hose can be easily installed (Figure 4).
- 14. Using the M16 jam nut, unscrew the nut until the nut makes contact with the O-ring and becomes tight, preventing the aluminum fitting from rotating (Figures 4 & 5).

- 15. Re-install temperature sensor with remaining rubber O-ring, into the end of aluminum fitting **(Figures 4 & 5).** Thread tape may be used.
- 16. Install brass fitting into aluminum fitting side using thread seal tape (Figures 4 & 5).
- 17. Connect 5/8" x 17.00" long heater hose elbow to brass fitting and secure using a small hose clamp.
- 18. Connect shut-off valve to remaining end of 5/8" x 17" long heater hose elbow and secure using a small hose clamp as show in **Figure 5**. Connect valve as shown.
- 19. Select one of the two 5/8" heater hose from heater assembly to remaining end of shut-off valve and secure using a small hose clamp.
- 20. Connect push/pull cable loop end to shut-off valve and secure using hardware supplied with valve.



Return connection from heater unit to engine (Figure 6);

- 21. Locate lower radiator hose. Cut hose and install the Y-fitting as shown in Figure 6.
- 22. Secure using large hose clamps.
- 23. Connect remaining end of 5/8" heater hose from heater assembly to 5/8" nipple on Y-fitting and secure using small hose clamp.



Connecting power;

- 24. Route red and black wires upward to overhead switch panel.
- 25. Remove (4) over head switch panel bolts and lower switch panel.
- 26. Select an empty fuse block location.
- 27. Using a crimping tool, connect red wire with a ¼" female terminal connector to empty fuse location. Trim excess wire.

- 28. Using a crimping tool, connect black wire with a ¼" female terminal connector, to ground terminal located on fuse block ground bar. Trim excess wire.
- 29. Install protective wire loom over wires and secure using nylon ties.
- 30. Install 10 amp fuse into fuse location.

Completing Installation;

- 31. Refill radiator.
- 32. Start tractor and turn heater switch on and off to check blower operation.
- 33. Pull and push cable several times to activate valve and allow coolant to circulate through the heater.
- 34. Shut engine off and check coolant. This may take several attempts to purge all the air from the system.

Securing heater hoses;

- 35. Measure 4 inches from front window and secure heater hoses together using (Figure 5);
 - (1) Double P-clamp
 - (1) 5/16" x 1/2" long bolt
 - (1) 5/16" hex flange nylock nut
- 36. Secure remaining locations of heater hoses together and to frame use existing holes already in the frame. Secure to frame using **(Figure 6)**;
 - (2) Double P-clamp
 - (2) 5/16" x 1/2" long bolt
 - (2) 5/16" hex flange nylock nut



Figure 7

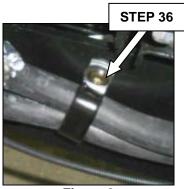


Figure 8

37. Secure loose wires and hoses using nylon ties supplied with kit. <u>**Do not</u>** secure wires or hoses to high pressure fuel lines, hot surfaces or moving components.</u>

Note: Shut-off valve should be in the "OFF" position when heat is not needed. If overhead panel is wired correctly, the heater fan should turn off when ignition key is turned off.

MODEL	FUEL	HP	BRAND	TRANS	ALTERNATOR AMPS	SOURCE CONNECTION	RETURN CONNECTION
2520	DIESEL	26.4	YANMAR	4WD	40	M16 SENSOR PORT	LOWER RADIATOR HOSE Y
2025R	DIESEL	24.2	YANMAR	4WD	20	M16 SENSOR PORT	LOWER RADIATOR HOSE Y
2720	DIESEL	31.4	YANMAR	4WD	40	M16 SENSOR PORT	LOWER RADIATOR HOSE Y
2032R	DIESEL	31.7	YANMAR	4WD	40	M16 SENSOR PORT	LOWER RADIATOR HOSE Y

Installation is now complete. If you have any questions or comments, contact;



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Revised instructions 10-10-14 by CAD; Added jam nut (20) & aluminum fitting (15) was 3-17262.

Revised instructions 12-16-14 by CAD; Added (1) additional O-ring, 3-16823.

Revised instructions 02-27-17 by CAD; Replaced Red Dot unit with Aurora unit

