

**Engine Block Heater Service Kits (Tank-Type) 125-180ROZJ
6076T and 6076A
(John Deere-Powered Standby Generator Sets)**

Model	Voltage	Kit No.
125-150ROZJ	120	276511
125-150ROZJ	240	276512
150*-180ROZJ	120	276513
150*-180ROZJ	240	276514

*Oversized Generator Set

This service kit details removal of the immersion type block heater (or earlier version tank-type block heater) and installation of a new tank type block heater kit. These instructions cover the installation of several block heater kits. In instances where two different part numbers are mentioned, refer to Figure 3 to determine which part number applies to your application.

The engine block heater kit (tank-type) heats engine coolant, making starting easier and warm-up quicker. The thermostat will automatically turn off when coolant temperature reaches 120°F (49°C).

 **CAUTION**



Engine block heater can cause electrical shock. Remove engine block heater plug from electrical outlet before working on block heater electrical connections.

NOTE

Block heater will fail if not immersed in water. Always unplug block heater(s) before draining coolant and fill engine block with coolant prior to plugging in block heater(s). Block heater element **MUST** be immersed in engine coolant before being energized.



 **WARNING**

Accidental starting can cause death or serious personal injury. Turn Generator Master Switch to OFF position, disconnect power to battery charger, and remove battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator. The generator set can be started by automatic transfer switch or remote start/stop switch unless these precautions are followed.

 **WARNING**



Hot coolant can cause severe burns.

Allow engine to cool and release pressure from cooling system before opening pressure cap. To release pressure, cover the pressure cap with a thick cloth then turn it slowly counterclockwise to the first stop. After pressure has been completely released and the engine has cooled, remove cap. If generator set is equipped with a coolant recovery tank, check coolant level at tank.

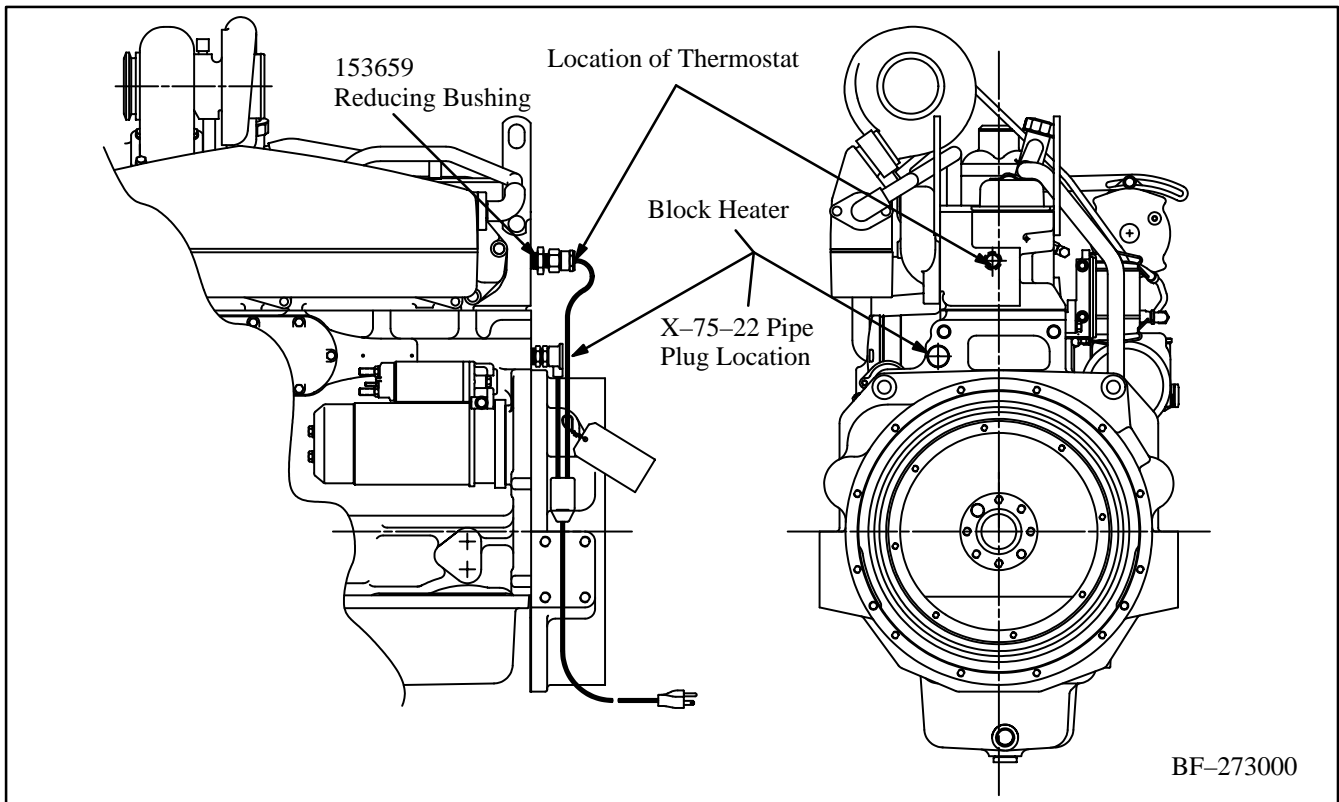


Figure 1. Block Heater Kit Removal (Immersion Type)

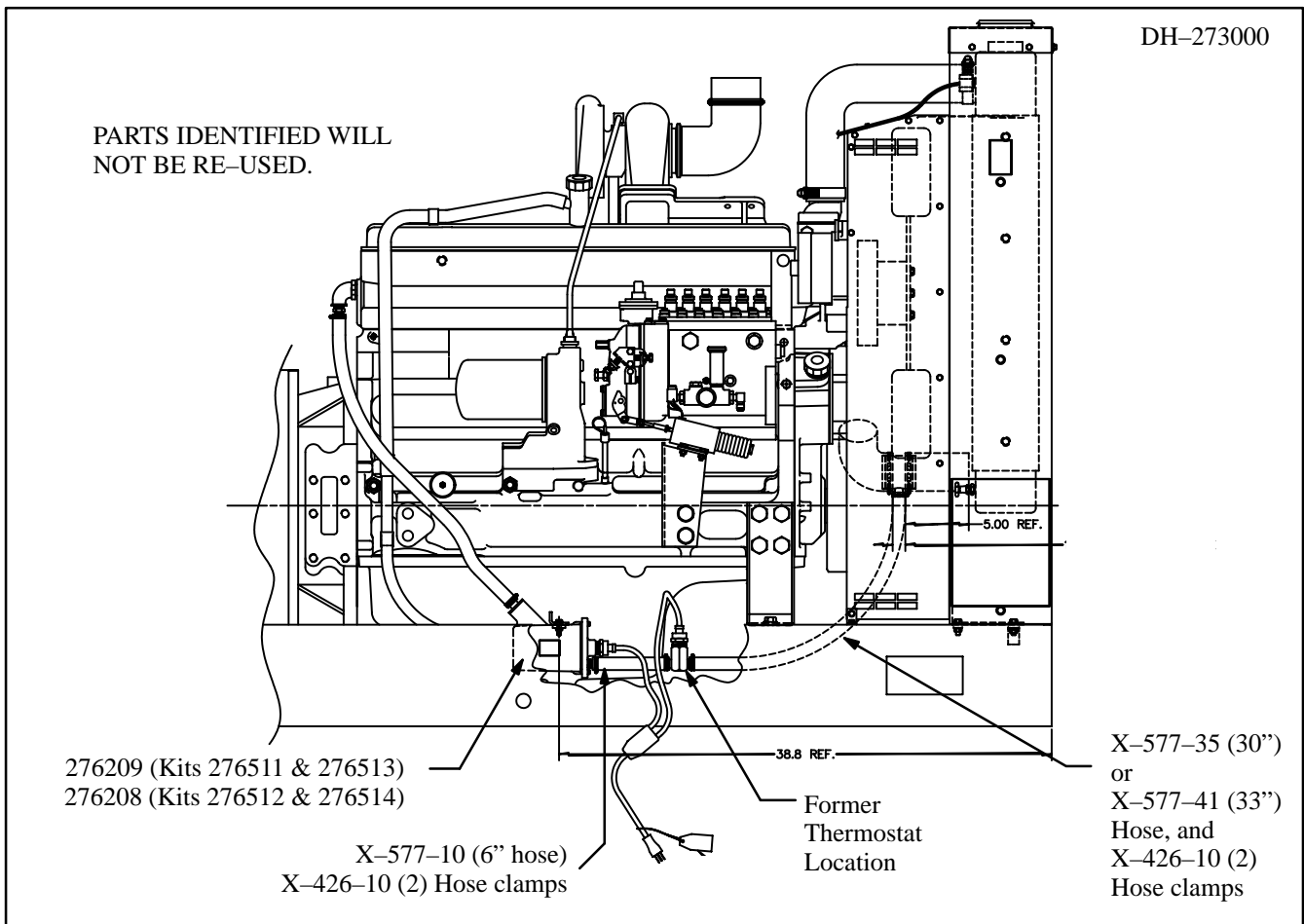


Figure 2. Block Heater Kit Removal (Early Version Tank-Type)

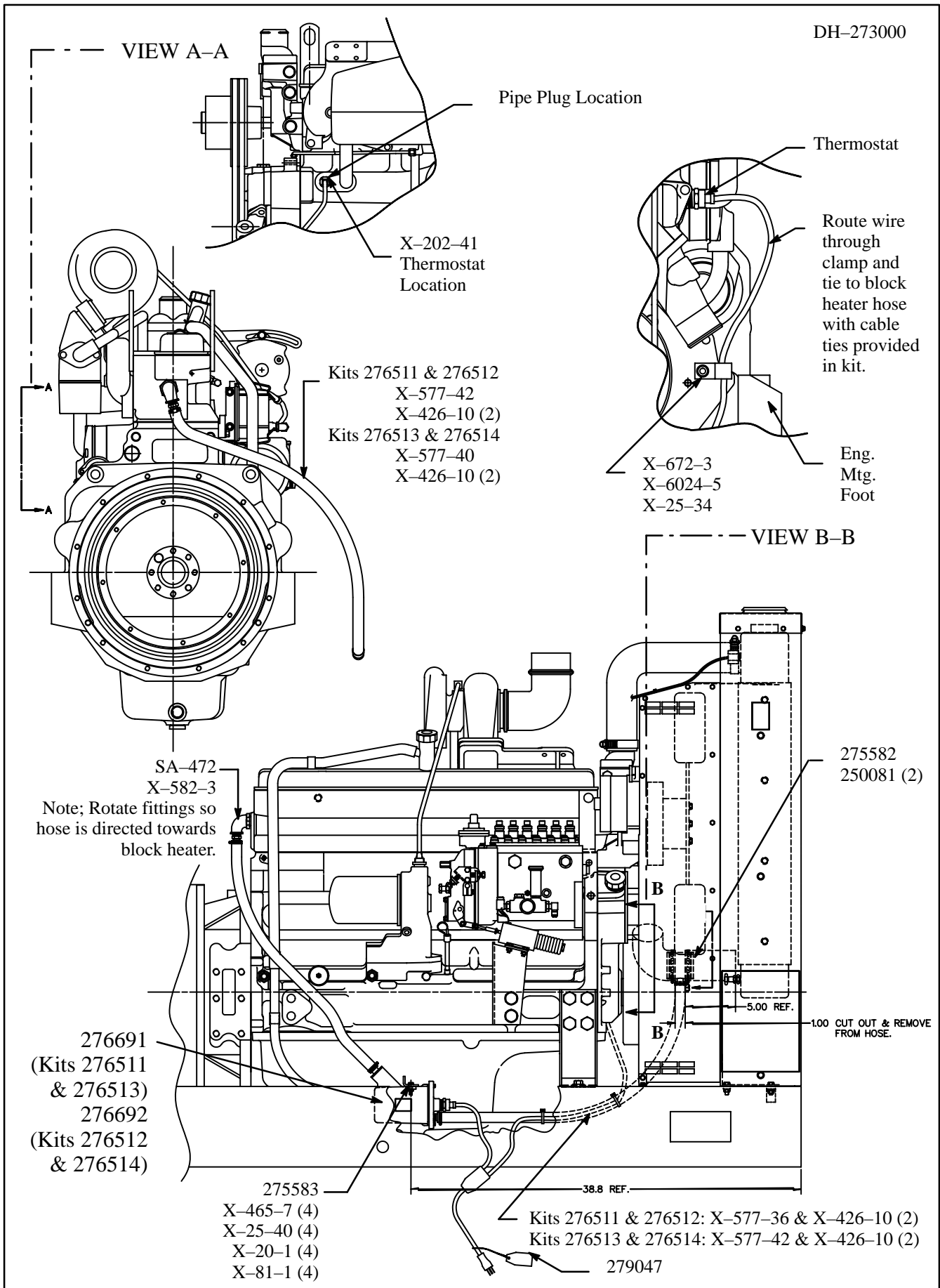


Figure 3. Block Heater Installation

Installation

1. Move controller master switch to OFF position. Disconnect battery of generator set, negative lead first. Disconnect power from existing block heater.
2. With generator set sufficiently cooled, drain the coolant into a suitable container. **Dispose of used engine coolant in an environmentally safe manner. Take used coolant to a suitable collection facility in your area. Do not pour used coolant on the ground, down sewers, or into streams and other bodies of water.**

NOTE

Drain valve is located on radiator bottom and/or side of engine crankcase.

NOTE

If set is already installed with a tank-type heater (as shown in Figure 2) proceed to Step #8. However, if component parts show wear or are damaged in some way, then replace with parts supplied in kit and follow all instructions provided.

3. Remove electrical connections to block heater and thermostat. Discard electrical connections. These parts will not be reused. See Figure 1.
4. Remove immersion-type block heater from engine block and discard. These parts will not be reused. Clean threads on engine and apply pipe sealant to 1 in. pipe plug (X-75-22) and install into block. See Figure 1.

NOTE

Apply pipe sealant to male threads of all components when assembling.

5. Remove thermostat and reducing bushing (153659) and discard. These items will not be reused. Attach elbow (SA-472) and hose connector (X-582-3). See Figures 1 & 3. Rotate fittings so hose is directed towards block heater.

6. Locate hose clamp (X-426-10) 1/4 in. (6 mm) from end of hose (X-577-42 or X-577-40) and tighten to hose connector mentioned in Step 5.
7. Attach mounting bracket (275583) to skid using mounting hardware supplied.
8. Install block heater (276691 or 276692) to mounting bracket. (If installing on unit with tank-type heater, remove existing block heater, discard, and replace with new block heater supplied in kit.) Locate hose clamp (X-426-10) 1/4 in. (6 mm) from end of hose (X-577-42 or X-577-40) and tighten to block heater outlet.

NOTE

If set is already installed with a tank-type block heater, follow Step #9, otherwise proceed to Step #11.

9. Remove and discard 6" hose (X-577-10) and two hose clamps (X-426-10). See Figure 2.
10. Remove and discard 30" hose (X-577-35) or 33" hose (X-577-41) and two hose clamps (X-426-10). See Figure 2.
11. Connect hose (X-577-36 or X-577-42) to block heater inlet and secure with hose clamp (X-426-10).
12. Position thermostat at location shown in Figure 3 (view A-A), by first installing reducer bushing (X-202-41). Route wire through clamp (X-672-3). Install insulator clamp (X-672-3) using washer (X-25-34) and screw (X-6024-5). Tie wire to block heater hose with cable ties provided in kit. See Figure 1, view B-B.

NOTE

If set is already installed with a tank-type block heater, proceed to Step #15.

13. Locate lower radiator hose and mark hose at 5 in. (127 mm) and 6 in. (152 mm) from radiator outlet. Cut at these marks to remove 1 in. (25 mm) from hose.
14. Place two large hose clamps (250081) on cut radiator hose (one on each end). Install hose

connector (275582) with nipple pointing downward.

15. Locate hose clamp (X-426-10) 1/4 in. (6 mm) from end of hose (X-577-36 or X-577-42) and tighten to nipple on hose connector.
16. Use cable ties, as necessary, to protect and secure wiring from sharp objects, exhaust system, and any moving parts.
17. Close petcock valves on radiator and/or engine block.
18. Fill cooling system to proper level with fresh coolant. A solution of 50% ethylene glycol and 50% clean, softened water is recommended to inhibit rust/corrosion and provide freezing protection. See Table 1 for coolant capacities.

NOTE

Coolant mixtures exceeding 50% ethylene glycol may cause block heater element failure.

Model	Standard Radiator	Remote Radiator		City-Water Cooled
		60HZ	50HZ	
125ROZJ	7.5 (24)	11.8 (44.7)	12.8 (48.4)	5.05 (19.1)
150ROZJ	7.8 (25)	12 (45.4)	13 (49.2)	5.25 (19.9)
180ROZJ	7.8 (25)	13 (49.2)	15 (56.8)	6 (22.7)

NOTE: Capacities shown may vary from model to model and are subject to change.

Table 1. Coolant Capacities – U.S. Gal. (L)

19. Check that the controller master switch is in the OFF position. Reconnect battery, negative lead last.
20. Test run generator set for a few minutes and check for leaks. Stop generator set and after set has cooled check coolant level.

NOTE

Special attention should be given when checking for proper coolant level. After a radiator has been drained, it normally requires some time before complete refill of all air cavities takes place.

21. Connect block heater electrical plug to proper voltage outlet. Tie tag (279047) to electrical cord coming from block heater.

Parts Listing

Qty	Description	Common Parts	Kit Numbers			
			276511	276512	276513	276514
1	Elbow	SA-472				
4	Washer, Lock 1/4"	X-20-1				
4	Washer, Plain 9/32" x 5/8" x .05"	X-25-40				
4	Clamp, Hose (max. range 1.00)	X-426-10				
4	Screw, H.C. 1/4-20 x 1	X-465-7				
1	Hose 37"		X-577-36	X-577-36		
1	Hose 45"				X-577-40	X-577-40
1	Hose 40"	X-577-42				
1	Connector, Adapter Hose	X-582-3				
1	Plug, Pipe 1"	X-75-22				
4	Nut, Hex. 1/4"-20	X-81-1				
2	Clamp, Hose (max. range 3.00)	250081				
1	Connector, Hose	275582				
1	Bracket, Mounting	275583				
1	Heater, Block		276691	276692	276691	276692
1	Tag, Hang	279047				
1	Bushing, Reducer	X-202-41				
1	Washer, Plain 15/32" x 59/64" x .06"	X-25-34				
1	Screw, H.C. 7/16-14 x 3/4"	X-6024-5				
1	Clamp, Insulating	X-672-3				

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