

# Engine Block Heater Kits (Tank-Type) 125–180ROZJ 6076T and 6076A

# (John Deere-Powered Standby Generator Sets)

Voltage	Kit No.
120	PA-275586
240	PA-275591
120	PA-275587
240	PA-275592
	120 240 120

<sup>\*</sup>Oversized Generator Set

The engine block heater kit heats engine coolant, making starting easier and warm—up quicker. The thermostat will automatically turn off when coolant temperature reaches 120°F (49°C). These instructions cover the installation of several block heater kits. In instances where two different part numbers are mentioned, refer to Figure 1 to determine which part number applies to your application.



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.





### 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.





#### 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.

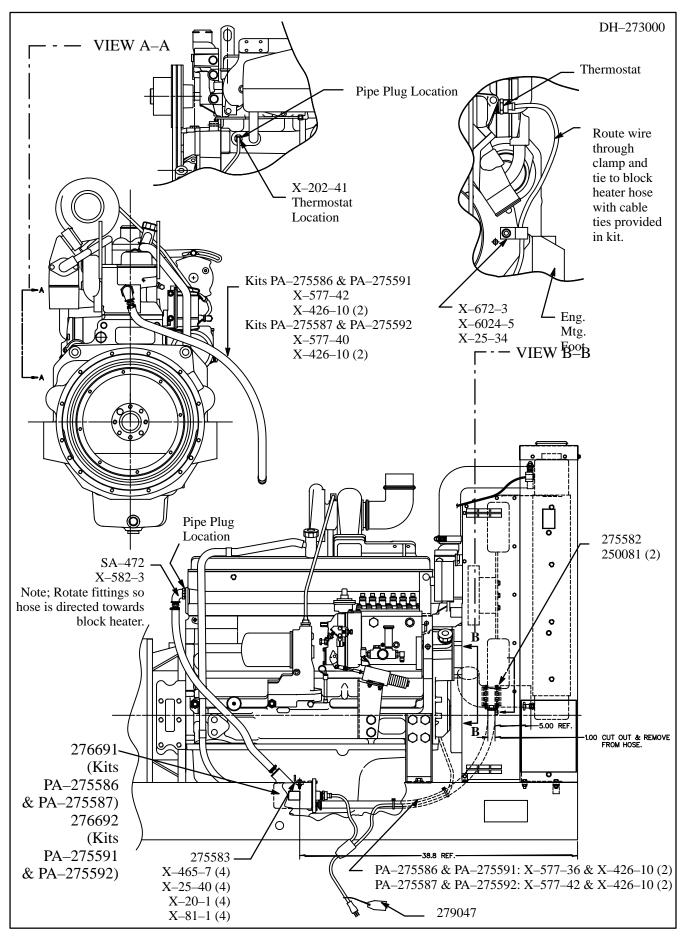


Figure 1. Block Heater Installation

# **Installation**

- Move controller master switch to OFF position. Disconnect battery of generator set, negative lead first.
- 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.

3. Remove pipe plug from engine using a 1/2 inch square head driver. Clean hole and remove burrs. See Figure 1 for location.

#### **NOTE**

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

- 4. Attach elbow (SA–472) and hose connector (X–582–3). See Figure 1.
- 5. 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 4.
- 6. Attach mounting bracket (275583) to skid using mounting hardware supplied.
- 7. Install block heater (276691 or 276692) to mounting bracket. 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.

- 8. Connect hose (X–577–36 or X–577–42) to block heater inlet and secure with hose clamp (X–426–10).
- 9. Remove pipe plug. Position thermostat at location shown in Figure 1 (View A–A), by first installing reducer bushing (X–202–41). Route wire through clamp. Install insulator clamp (X–672–3) using washer (X–25–34) and screw (X–6024–5). Tie to block heater hose with cable ties provided in kit. See Figure 1, view B–B.
- 10. 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.
- 11. Place two large hose clamps (250081) on cut radiator hose (one on each end). Install hose connector (275582) with nipple pointing downward. 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.
- 12. Use cable ties, as necessary, to protect and secure wiring from sharp objects, exhaust system, and any moving parts.
- 13. Close petcock valves on radiator and/or engine block.
- 14. 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.

		Rem	City–		
	Standard	Radiator		Water	
Model	Radiator	60HZ	<b>50HZ</b>	Cooled	
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)**

15. Check that the controller master switch is in the OFF position. Reconnect battery, negative lead last.

16. 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.

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

# **Parts Listing**

Qty	Description	Common Parts	PA-275586		umbers PA-275587	PA-275592
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, Hose	X-582-3				
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				