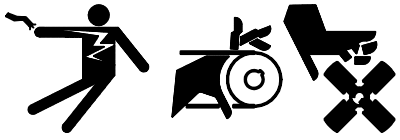
Anticipatory Alarm Kit PA-273696
For 80-100ROZJ
John Deere-Powered (6059T Engine) Generators

The Anticipatory Alarm Kit provides the switch senders which allow monitoring of three additional functions: low water temperature, anticipatory high water temperature, and anticipatory low oil pressure. These switches are used with the Decision Monitor and the Remote Annunciator options and do the following: The low water temperature indicator activates if the optional engine block heater is not working and/or the engine coolant temperature is too low (below 60°F, 16°C). The anticipatory high water temperature indicator activates if the engine coolant is within 5°F of shutdown temperature. The anticipatory low oil pressure indicator activates if the engine oil pressure approaches shutdown pressure.

⚠ WARNING



Accidental starting.
Can cause severe injury or death.

Disconnect battery cables before working on generator set (negative lead first and reconnect it last).

Accidental starting can cause severe injury or death. 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 and steam.
Can cause severe injury or death.

Before removing pressure cap stop generator, allow to cool and loosen pressure cap to relieve pressure.

Hot coolant can cause severe injury or death. 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.

Installation

1. Place the controller main switch to the OFF position. Disconnect the battery from the generator set, negative lead first.
2. With the generator set sufficiently cooled, drain the coolant into a suitable container.

NOTE

The petcock valve is located on the radiator bottom and/or on the engine block.

3. Remove the pipe plugs for the Low Water Temp. Switch, the Anticipatory High Water Temp. Switch and the Anticipatory Low Oil Pressure Switch. See Figure 1 for locations. Some older units have the High Water Temp. Sender installed (standard) in the position indicated for Low Water Temp. Switch 290090 in Figure 1. It must be moved to the High Water Temp. Sender position (top left side of engine, in front of starter) indicated in Figure 1. If the High Water Temp. Sender must be moved, go to step 4. If the High Water Temp. Sender is already located where indicated in Figure 1, go to step 5.

4. Remove the High Water Temp. Sender from its location near the back of the starter. Leave the adapter bushing in place. Replace the plug in front of the starter with 273692 tapped plug and 273693 O-ring, and then install the High Water Temp. Sender into the plug.

5. Some units might require rewiring of the engine wiring harness. Figure 2 shows the required wiring. If necessary, modify the engine wiring harness using the diagram and the lead information in Figure 2. Refer to the wiring diagrams in the service literature if needed.

6. Coat the threads of the switches with a high temperature pipe joint compound and install them in the locations shown in Figure 1.

7. Connect lead 35A of the engine wiring harness to one screw terminal of Low Water Temp. Switch 290090. Connect the ground lead of the engine wiring harness from the bell housing ground screw to the other screw terminal of the switch.

8. Connect lead 40A of the engine wiring harness to the screw terminal of Anticipatory High Water Temperature Switch 273759.

9. Connect lead 41A of the engine wiring harness to the push-on terminal of Anticipatory Low Oil Pressure Switch 271662.

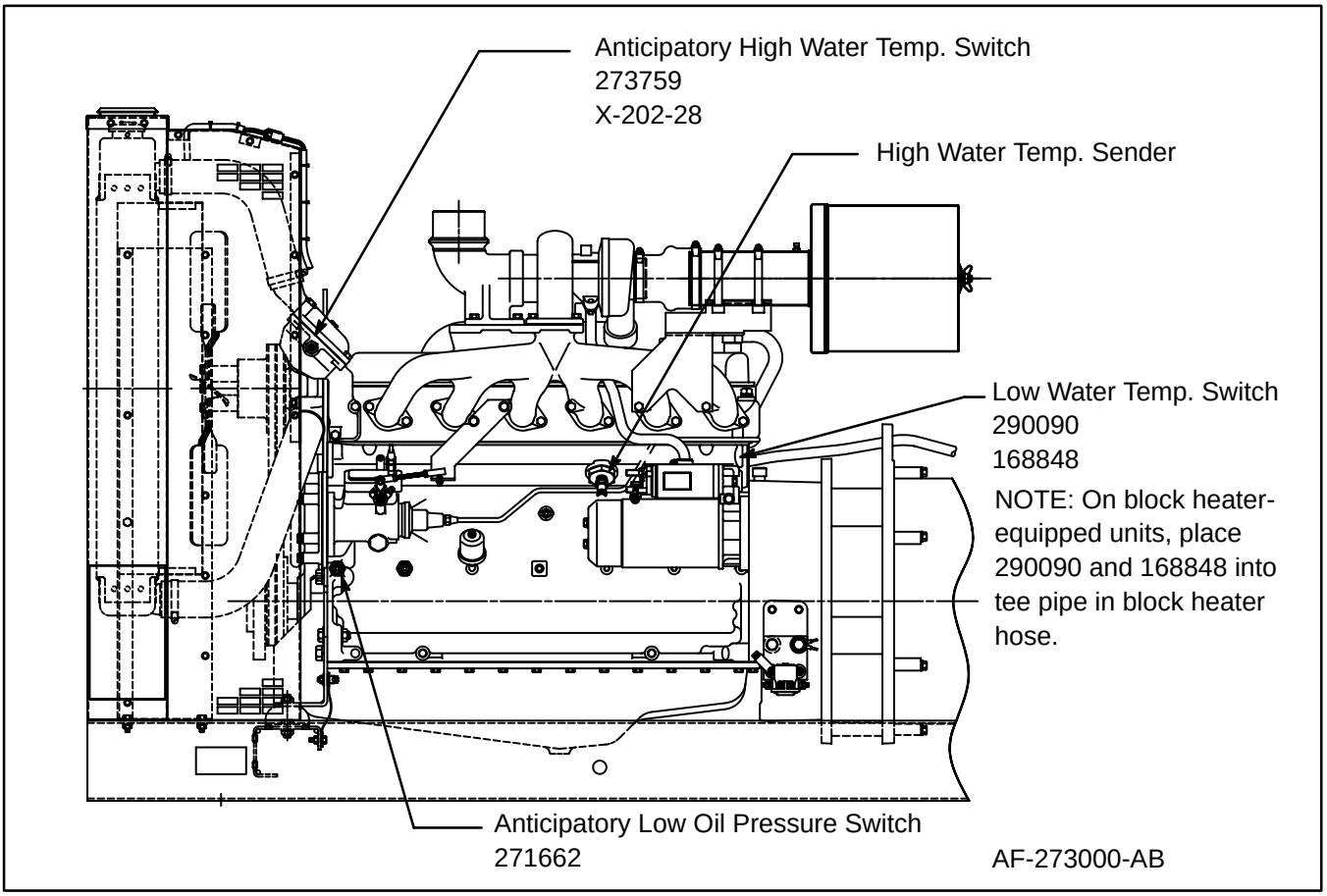


Figure 1. Plug Removal and Switch Installation Locations.

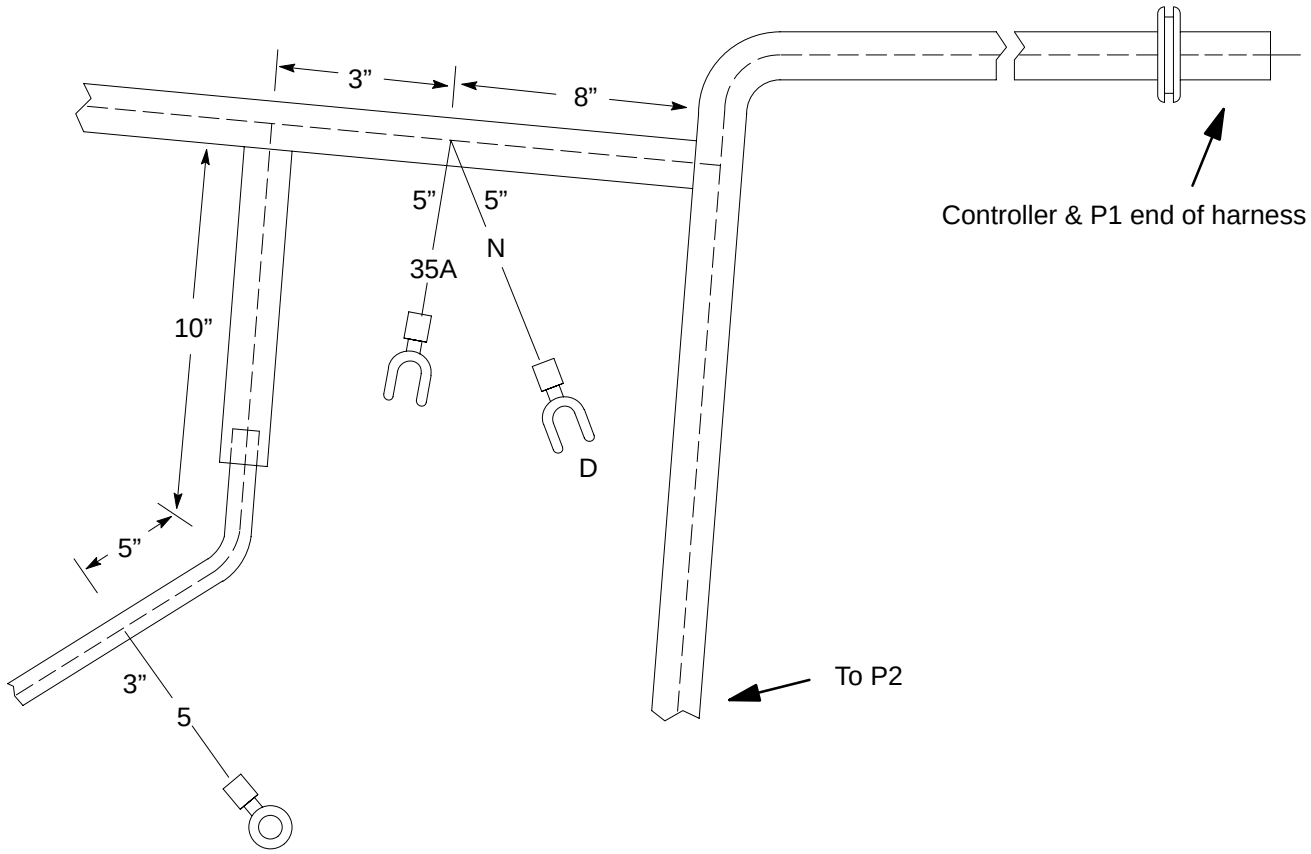
10. Close the petcock valve on the bottom of the radiator and/or the engine block. Fill the cooling system to the proper level with fresh coolant or properly recycled coolant of the correct Water/Glycol mixture.

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

12. Test run the generator set for a few minutes and check for leaks at the switches.

NOTE

Special attention should be given to 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.



Leads

Lead	Connections	Gauge and Length
35A	Low Water Temp. Switch to P1, pin 24	16 GA., 15 in.
N (D)	Low Water Temp. Switch to Engine Block Ground	16 GA., 29 in.
5	High Water Temp. Sender to Water Temp. Gauge	16 GA., 69 in.

Figure 2. Wiring Harness Configuration and Lead Information.

Parts List

Qty.	Description	Part No.
1	3/8 x1/2 in. Reducer Bushing	X-202-28
1	Anticipatory Low Oil Pressure Switch	271662
1	Anticipatory High Water Temp. Switch	273759
1	Low Water Temp. Switch	290090
1	1/2 in. Reducer Bushing	168848
1	Plug, 1-5/8–12 class 2A str. thd., 1/2–14 NPT tap	273692
1	O-ring, 1.475 ID x 0.118 in. rubber	273693

Notes