

### Anticipatory Alarm Kit #PA-255486 30-60 ROZ (4-Cylinder Engines) Fast-Response II

The Anticipatory Alarm Kit provides the switches which allow monitoring of three functions—low water temperature, anticipatory high water temperature, and anticipatory low oil pressure. This kit is used in conjunction with either the Decision Maker II or the Remote Annunciator option. The low water temperature indicator activates if optional engine block heater is not working and/or water temperature may be too low (below 80°F, 27°C) for ten-second start-up. The anticipatory high water temperature indicator activates if engine coolant approaches shutdown level. The anticipatory low oil pressure indicator activates if engine oil pressure approaches shutdown level. See Figure 1 and use the following procedure to install kit.

#### **⚠ WARNING**

**UNIT STARTS WITHOUT NOTICE!** Units with Automatic Transfer Switches start automatically. Potential injury or electrocution can result. Turn Generator Master Switch on controller to OFF position and remove battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator.

#### **⚠ WARNING**

**HOT COOLANT!** Engine coolant is pressurized and hot enough to cause severe burns. If generator set is equipped with a coolant recovery tank, check coolant level at tank. If necessary to check coolant level at radiator or surge tank (on city-water or remote radiator-cooled sets), place a rag over the cap and turn slowly to release pressure before removing cap.

#### **NOTE**

Reroute leads in plastic conduit as necessary to reach switches. In some cases, earlier wiring harnesses may require extension of leads and/or terminal changes.

#### **MOUNTING AND CONNECTION**

1. Place 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.

#### **NOTE**

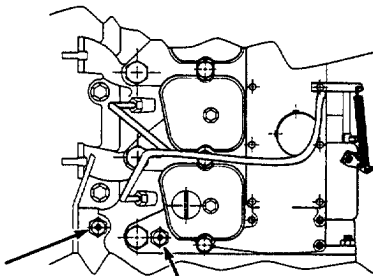
Petcock valve is located on radiator bottom and/or on engine block.

3. Disconnect lead 34 from 241308 High Water Temperature Switch (Switch color - black) and remove switch. Switch will not be reused. Coat threads of 290090 Low Water Temperature Switch with pipe sealant and install into top of cylinder head.
4. Connect lead 35A to one screw terminal of low water temperature switch. Connect ground lead N to the other screw terminal of switch.
5. Disconnect lead 5 from 268298 Water Temperature Sender and remove switch. Remove pipe plug from front mounting location. Coat threads of Water Temperature Sender with pipe sealant and install into front mounting location.
6. Connect lead 5 to stud terminal of water temperature sender.
7. Coat male threads of X-202-28 reducer bushing with pipe sealant and install into rear mounting location. Coat threads of 253743 Dual-Purpose Water Temperature Switch and install into reducer bushing.
8. Connect lead 34 to one screw terminal designated as #225 (High Water Temperature) on Dual-Purpose Water Temperature Switch.
9. Connect lead 40A to one screw terminal designated as #205 (Anticipatory High Water Temperature) on Dual-Purpose Water Temperature Switch.
10. Fabricate a ground lead N that connects to the remaining two screw terminals on the Dual-Purpose Water Temperature Switch and to the starter solenoid bracket mounting screw or other suitable ground.
11. Remove pipe plug for anticipatory low oil pressure switch. Coat threads of 271662 Anticipatory Low Oil Pressure Switch and install into oil filter adapter.
12. Connect lead 41A to push-on terminal at anticipatory low oil pressure switch.
13. Close petcock valve on bottom of radiator and/or engine block. Fill cooling system to proper level with fresh coolant.
14. Check that controller master switch is in the OFF position. Reconnect battery, negative lead last.
15. Test run the generator set for a few minutes and check for leaks at switches.

#### **CAUTION**

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.

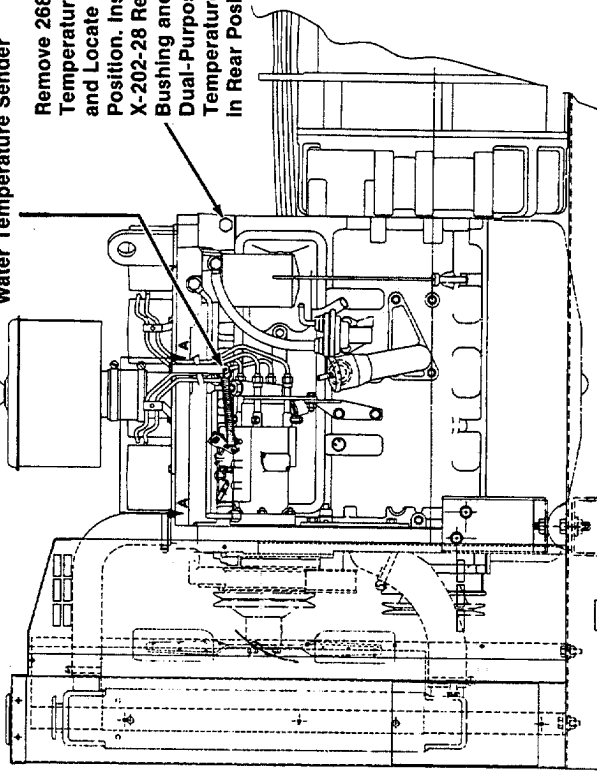
Block Heater Thermostat  
Should be Located Here



View A - A

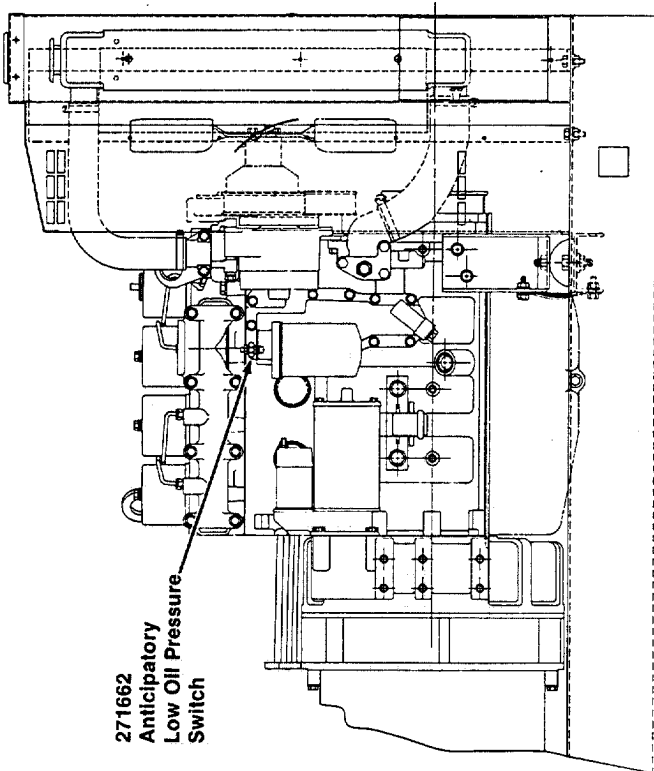
Remove 241308 High  
Water Temperature  
Switch (Switch color  
- Black) and discard.  
Install 290090 Low  
Water Temperature  
Switch

New Location for 268298  
Water Temperature Sender



Remove 268298 Water  
Temperature Sender  
and Locate in Front  
Position. Install  
X-202-28 Reducer  
Bushing and 253743  
Dual-Purpose Water  
Temperature Switch  
in Rear Position.

271662  
Anticipatory  
Low Oil Pressure  
Switch



**PARTS LISTING**

Part No.	Qty.	Description
X-202-28	1	Reducer Bushing
253743	1	High Water Temperature Switch and Antic. High Water Temperature Switch (Dual-Purpose Switch)
271662	1	Anticipatory Low Oil Pressure Switch
290090	1	Low Water Temperature Switch

Figure 1. Switch Locations