
INSTALLATION INSTRUCTIONS

Original Issue Date: **4/96**
 Model: **125-180ROZJ (6081 Engine)**
 Market: **Industrial**
 Subject: **Anticipatory Alarm Kit PA-336689**

The anticipatory alarm kit switches monitor three functions: low water temperature, anticipatory high water temperature, and anticipatory low oil pressure. Use the switches with the microprocessor controller and the remote annunciator options. The low water temperature indicator activates if the optional engine block heater malfunctions and/or the engine coolant temperature is too low. The anticipatory high water temperature indicator activates if the engine coolant approaches shutdown range. The anticipatory low oil pressure indicator activates if the engine oil pressure approaches shutdown range.



⚠ WARNING
Accidental starting.
Can cause severe injury or death.

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

Disabling generator set. Accidental starting can cause severe injury or death. Turn generator set 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 the generator set or connected equipment. The generator set can be started by an 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 set and allow it to cool. Then loosen pressure cap to relieve pressure.

Checking coolant level. Hot coolant can cause severe injury or death. Allow engine to cool. Release pressure from cooling system before opening pressure cap. To release pressure, cover the pressure cap with a thick cloth; then slowly turn it counterclockwise to the first stop. Remove cap after pressure has been completely released and the engine has cooled. Check coolant level at tank if generator set is equipped with a coolant recovery tank.

Installation

1. Place the generator set master switch in the OFF position.
2. Disconnect the generator set engine starting battery, negative (–) lead first.
3. Allow generator set to cool.
4. Remove the radiator pressure cap to relieve radiator pressure.
5. Drain coolant into a suitable container.

NOTE

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

NOTE

It may not be necessary to completely drain coolant in order to install the engine temperature switch. Drain just enough coolant to prevent leakage when the engine temperature switch is removed.

6. Remove the existing pipe plug for the anticipatory high water temperature switch. See Figure 1 for location. Pipe plug will not be reused.
7. Coat the threads of the anticipatory high water temperature switch (241481) with pipe sealant and install where pipe plug was removed in step 6.
8. Remove the existing pipe plug for the low water temperature switch. See Figure 1 for location. Pipe plug will not be reused.
9. Coat the male threads of the reducer bushing (X-202-41) with pipe sealant and install where pipe plug was removed in step 8.
10. Coat the threads of the low water temperature switch (290090) with pipe sealant and install into reducer bushing installed in step 9.
11. Remove pipe plug for anticipatory low oil pressure switch. See Figure 1 for location. Pipe plug will not be reused.
12. Coat the threads on both ends of pipe nipple (X-217-6) and apply where pipe plug was removed in step 11.
13. Install pipe coupling (X-216-24) onto pipe nipple installed in step 12.
14. Coat the threads of the anticipatory low oil pressure switch (271425) with pipe sealant and install onto coupling.

15. Connect engine wiring harness lead 35a to one terminal of the low water temperature switch (290090).
16. Connect the engine wiring harness ground lead N from the engine block ground screw to the other terminal of the low water temperature switch.
17. Connect engine wiring harness lead 40a to the terminal of the anticipatory high water temperature switch (241481).
18. Connect engine wiring harness lead 41a to the push-on terminal of the anticipatory low oil pressure switch (271425).
19. Close the petcock valve on the bottom of the radiator and/or engine block.
20. Fill the cooling system. Dispose of all waste materials (engine oil, fuel, coolant, etc.) in an environmentally safe manner. Contact local authorities for correct disposal procedures and location.
21. Check that the generator set master switch is in the OFF position.
22. Reconnect generator set engine starting battery, negative (–) lead last.
23. Test-run generator set for a few minutes and check for leaks at switches. Stop generator set.

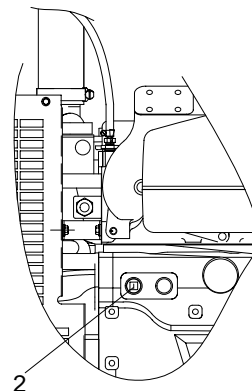
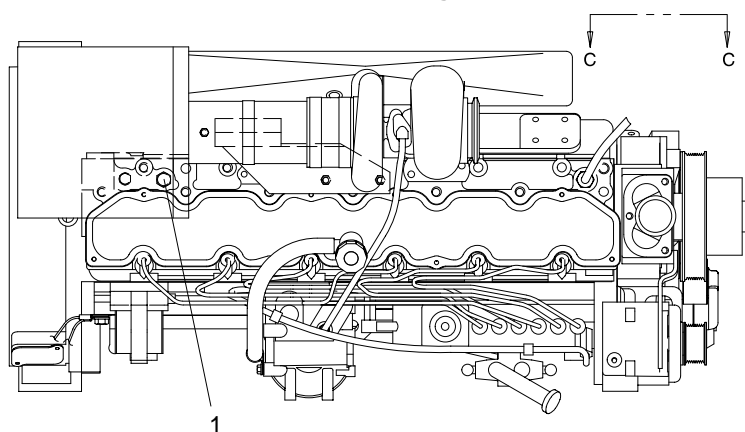
NOTE

Pay special attention to the coolant level. After draining the coolant, allow time for complete refill of the engine water jacket. Check coolant level as prescribed in the Prestart Checklist of the Operation Manual.

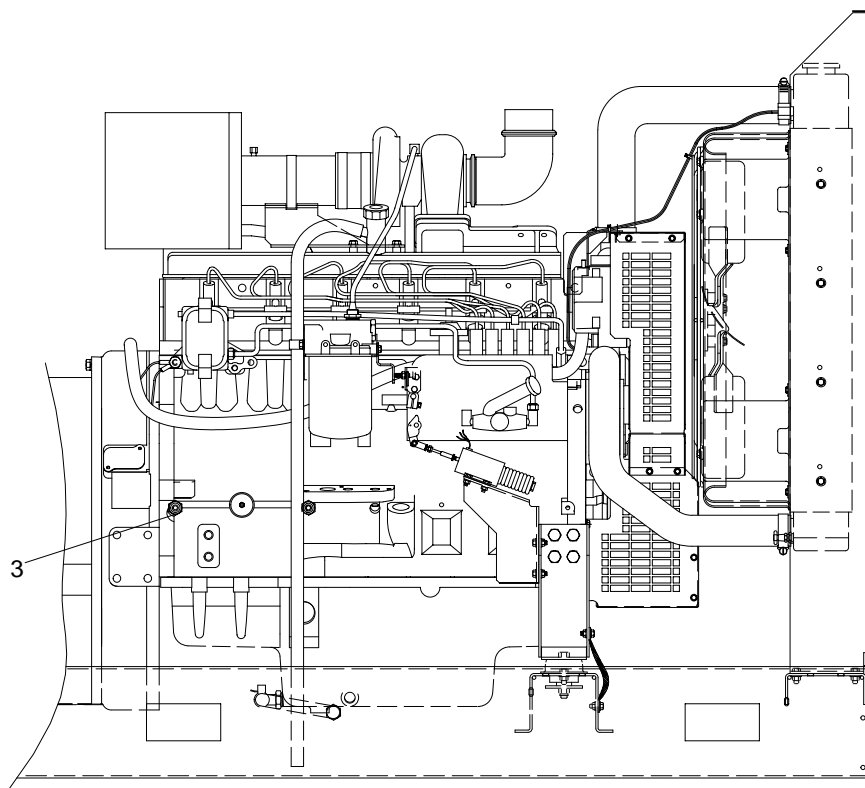
Anticipatory Alarm Kit

Parts List		
Kit: PA-336689		
Qty.	Description	Part Number
1	Bushing, reducer	X-202-41
1	Coupling, pipe 1/8 x 1-3	X-212-24
1	Nipple, pipe 1/8 x 3/4	X-217-6
1	Switch, high temperature shutdown	241481
1	Switch, low oil pressure	271425
1	Switch, low water temperature	290090

Top View Engine



View C-C



GP-273000B-

1. High water temperature shutdown switch
2. Low water temperature switch and reducer bushing
3. Low oil pressure switch, pipe nipple, and pipe coupling

Figure 1. Pipe Plug Removal and Switch Installation Locations