

INSTALLATION INSTRUCTIONS

Original Issue Date: 4/14

Model: 20RESB

Market: Residential/Light Commercial

Subject: Fuel System Thermostat Kit GM92506-KP1-QS

Introduction

This thermostat kit detects excess heat in the engine compartment. The thermostat contacts will open when surface or ambient temperature reaches $121^{\circ}\pm 6^{\circ}\text{C}$ ($250^{\circ}\pm 10^{\circ}\text{F}$), closing the fuel solenoid valve and shutting off the engine.

Read the entire installation procedure and compare the kit parts with the parts list at the end of this publication before beginning installation. Perform the steps in the order shown.

See Figure 1 for the installed kit illustration.

Tools required:

- Safety glasses
- Socket wrench and 10 mm socket
- Tape measure
- Drill with 1/8 in. bit
- Phillips head screwdriver
- Utility knife

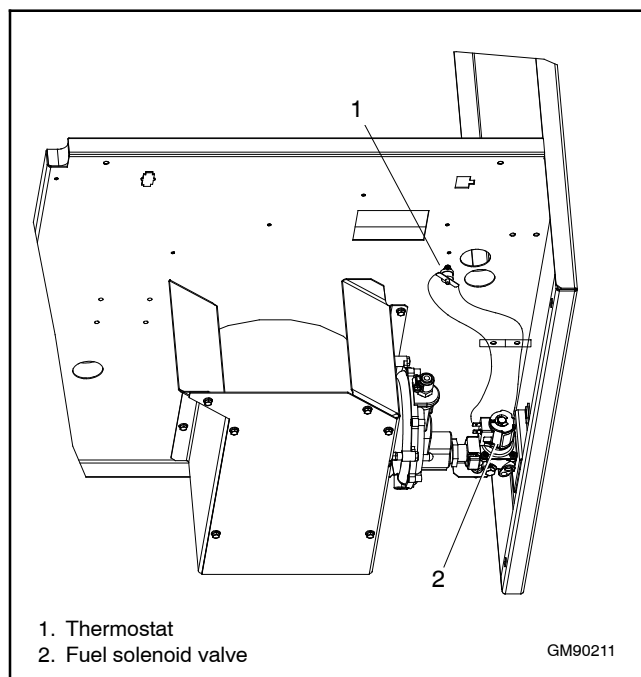


Figure 1 Thermostat Kit

Safety Precautions

Observe the following safety precautions while installing the kit.

⚠ WARNING

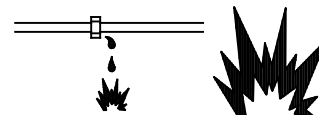


Accidental starting.
Can cause severe injury or death.

Disconnect the battery cables before working on the generator set. Remove the negative (-) lead first when disconnecting the battery. Reconnect the negative (-) lead last when reconnecting the battery.

Disabling the generator set. Accidental starting can cause severe injury or death. Before working on the generator set or equipment connected to the set, disable the generator set as follows: (1) Press the generator set off/reset button to shut down the generator set. (2) Disconnect the power to the battery charger, if equipped. (3) Remove the battery cables, negative (-) lead first. Reconnect the negative (-) lead last when reconnecting the battery. Follow these precautions to prevent the starting of the generator set by the remote start/stop switch.

⚠ WARNING



Explosive fuel vapors.
Can cause severe injury or death.

Use extreme care when handling, storing, and using fuels.

Gas fuel leaks. Explosive fuel vapors can cause severe injury or death. Fuel leakage can cause an explosion. Check the LPG vapor or natural gas fuel system for leakage by using a soap and water solution with the fuel system test pressurized to 6–8 ounces per square inch (10–14 inches water column). Do not use a soap solution containing either ammonia or chlorine because both prevent bubble formation. A successful test depends on the ability of the solution to bubble.

Installation Procedure

1. Open the enclosure roof and secure it with the roof stay on the left side of the enclosure.
2. Press the OFF button on the generator set controller.
3. Utility power is connected to the generator set for the built-in battery charger. Disconnect the utility power by opening (turning OFF) the corresponding circuit breaker at the building's distribution panel.
4. Turn off the fuel to the generator by closing the manual fuel supply valve.
5. Remove the service door from the right side of the enclosure by removing the plug and two screws. See Figure 2. Lift the door up and off.

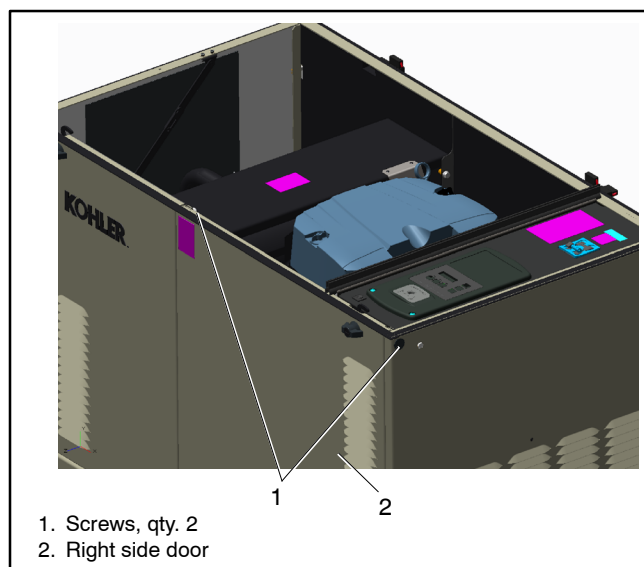


Figure 2 Removing the Service Door

6. Remove the front panel by removing four screws shown in Figure 3.
7. Disconnect the generator set engine starting battery(ies), negative (-) lead first.

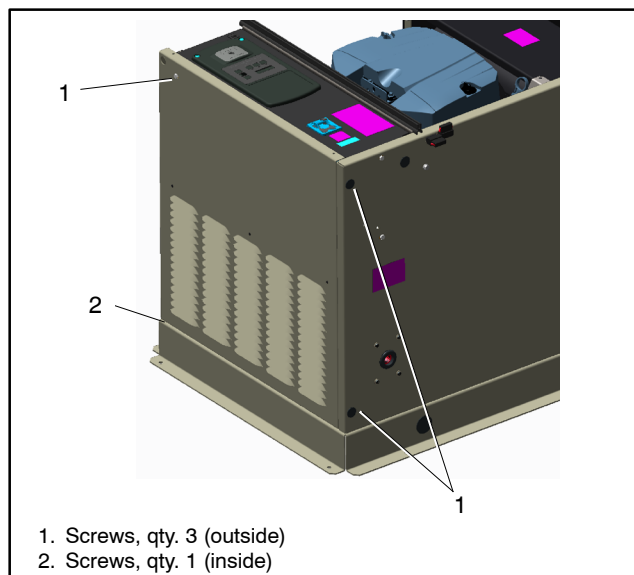


Figure 3 Removing the Front Panel

8. To avoid damaging the fuel line when drilling, disconnect the fuel line from the fuel regulator.

Note: Two possible locations exist for the thermostat. Use the bulkhead hole patterns shown in Figure 4 to determine the appropriate thermostat location.

9. Use the dimensions in Figure 4 to determine the screw hole locations.

10. Starting from the metal (uninsulated) side of the bulkhead, mark and drill two 1/8 in. pilot holes at the locations specified in Figure 4.

11. Secure the thermostat to the bulkhead with two self-tapping screws (X-67-152) provided.

Note: On the bulkhead in the area directly opposite the thermostat, the insulation must be removed to allow the thermostat to sense the temperature in the engine compartment.

12. Mark the thermostat location on the insulated side of the bulkhead. See Figure 5.

13. Cut a 40 mm (1-9/16 in.) square in the insulation and remove the insulation.

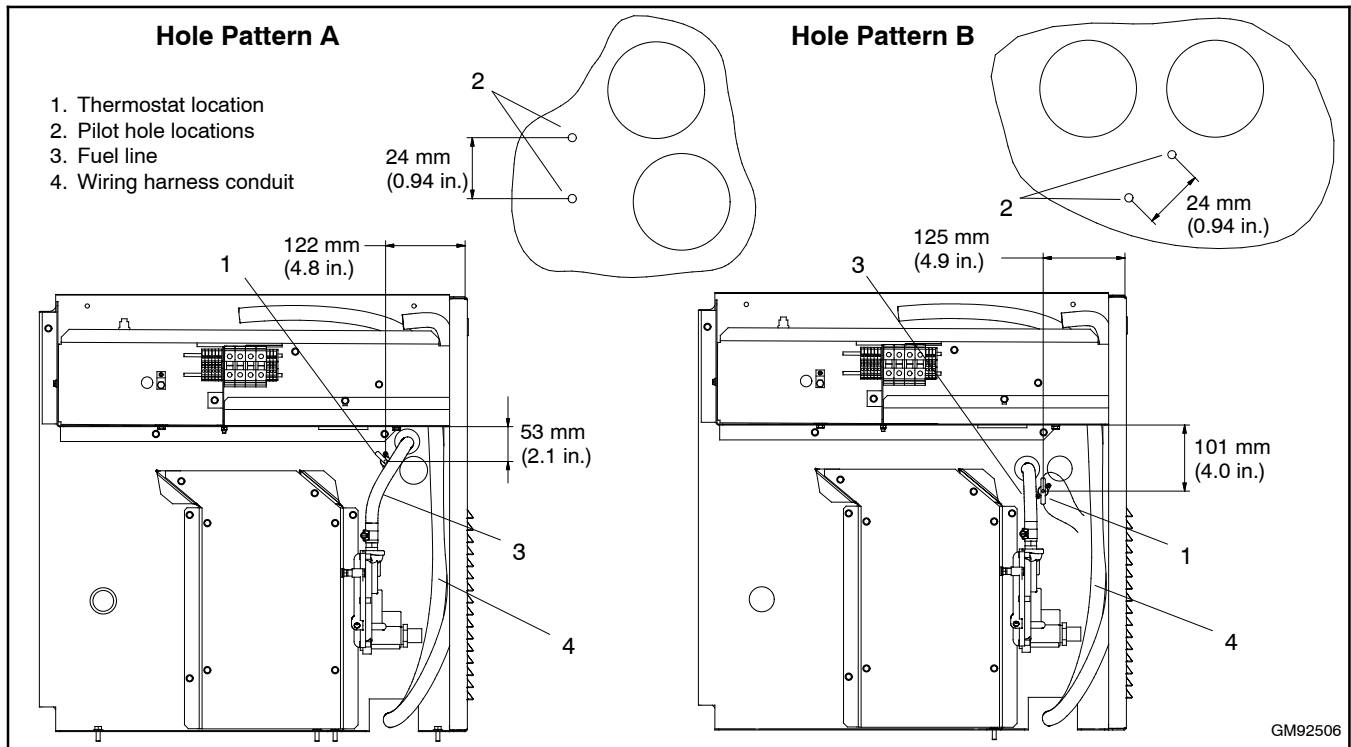


Figure 4 Thermostat Location Diagram

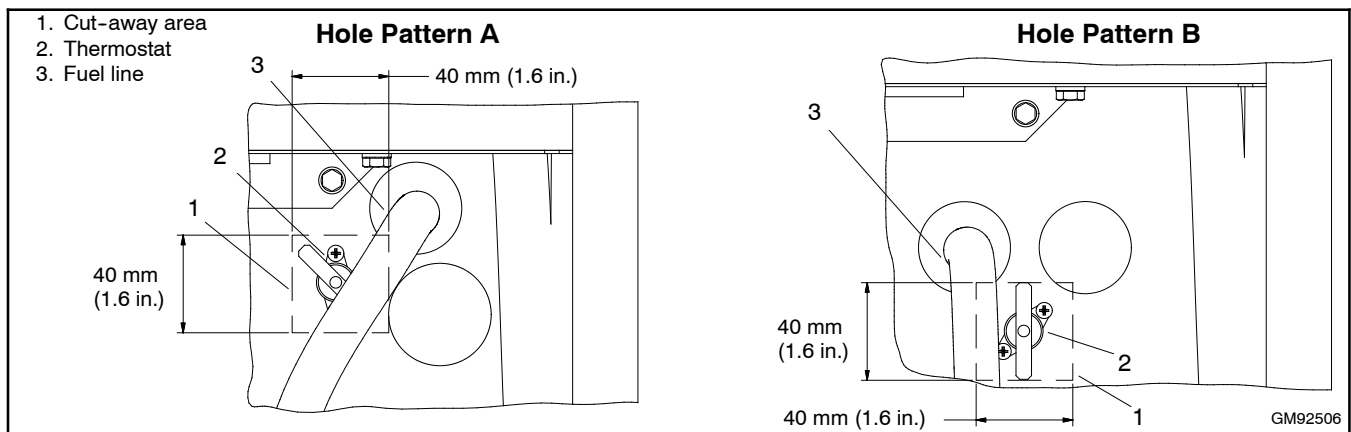


Figure 5 Insulation Removal Diagram

14. Disconnect lead N4 from the fuel solenoid valve.
15. Remove the cable tie from leads N4A and N4B, provided with the kit.
16. Use one of the wiring leads provided (N4A or N4B) to connect the disconnected lead (N4) to the thermostat. See Figure 7.
17. Use the remaining wiring lead (N4A or N4B) to connect the thermostat to the fuel solenoid valve. See Figure 7.
18. Use cable ties to secure the leads (N4A and N4B) to the wiring harness conduit. Ensure that the leads do not touch each other.
19. Reconnect the fuel line to the fuel regulator.
20. Press the OFF button on the generator set controller.
21. Reinstall the front panel onto the enclosure.
22. Reinstall the enclosure door.

23. Reconnect utility power to the generator set by closing the circuit breaker in the distribution panel.
24. Open the manual fuel supply valve.
25. Press AUTO on the generator set controller.
26. Close and lock the enclosure roof.

Parts List

Fuel System Thermostat

Kit: GM92506-KP1-QS

Qty.	Description	Part Number
1	Thermostat, 250°F	GM92505
1	Harness, Rework Leads	GM92520
1	Thermostat Kit, 20RESB, Res/Coml	TT-1629
2	Screw, Tapping	X-67-152

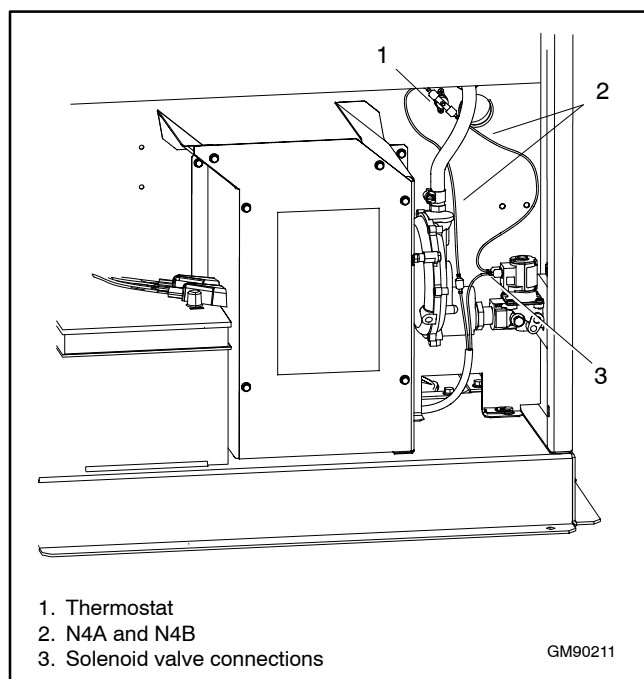


Figure 6 Thermostat Kit

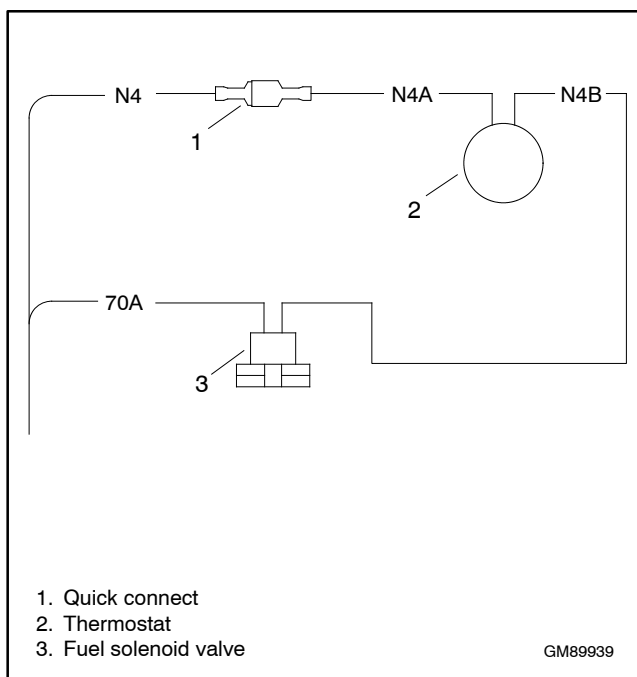


Figure 7 Wiring Diagram

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