KOHLER GENERATORS

TT-582-B
INSTRUCTIONS

Space Heater for Enclosed Transfer Switches

Heater Kits Without Thermostats

Voltage	Ampere Rating of Transfer Switch		
	30-150	225-400	600-800
110-120	PA-297010 (50 W.)	PA-297015 (100 W.)	PA-297020 (200 W.)
190-208	PA-297011 (50 W.)	PA-297016 (100 W.)	PA-297021 (200 W.)
220-240	PA-297023 (50 W.)	PA-297017 (100 W.)	PA-297022 (200 W.)
380-416	PA-297013 (100 W.)	PA-297018 (200 W.)	PA-297024 (200 W.)
440-600	PA-297014 (50 W.)	PA-297019 (100 W.)	PA-297024 (200 W.)

Heater Kits With Thermostats

Voltage	Ampere Rating of Transfer Switch		
	30-150	225-400	600-800
110-120	PA-297025 (50 W.)	PA-297030 (100 W.)	PA-297035 (200 W.)
190-208	PA-297026 (50 W.)	PA-297031 (100 W.)	PA-297036 (200 W.)
220-240	PA-297027 (50 W.)	PA-297032 (100 W.)	PA-297037 (200 W.)
380-416	PA-297028 (100 W.)	PA-297033 (200 W.)	PA-297038 (200 W.)
440-600	PA-297029 (50 W.)	PA-297034 (100 W.)	PA-297038 (200 W.)

WARNING

UNIT STARTS WITHOUT NOTICE! Units with Automatic Transfer Switches start automatically. Turn Generator Main 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

ELECTRICAL SHOCK! Open circuit breakers of normal electrical source going to Automatic Transfer Switch before working on any equipment connected to transfer switch.

The space heater for Automatic Transfer Switch enclosures is intended to prevent condensation and will raise the ambient temperature inside the enclosure by about 20° F (11° C). The available thermostat will automatically activate the heater until the preset temperature is reached. The thermostat can be adjusted from 30° F (-1° C) to 110° F (43° C). When applied voltage is over 240 Volts, a transformer with multi-tap primaries is used to provide a secondary voltage of 120 Volts.

Mounting and Connection

1. Disconnect generator set battery, negative lead first, and open normal line circuit breaker.

WARNING

ELECTRICAL SHOCK! Verify that normal and emergency lines are open by using a voltmeter.

2. Before attaching heater to heat sink, check to be sure heat sink is clean and dry. Attach heater along end of heat sink farthest from holes and with leads facing holes. See Figure 1.

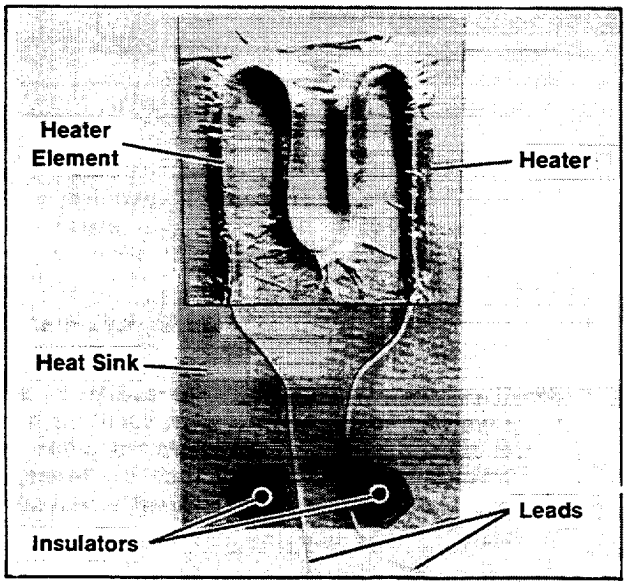

Figure 1. Heater Assembly

Peel off paper backing and press firmly against heat sink so that adhesive makes positive contact.

CAUTION

Do not use any sharp object to attach heater to heat sink as damage and failure to heater may result.

3. Mount red insulators to heat sink on same side as heater with two screws and lock washers.
4. Relocate owner's manual and other paper material to the left-hand side of transfer switch enclosure. Packet can be reused.
5. If a transformer is required select a location on the bottom of the transfer switch enclosure and as close to the right-hand side as possible. Drill four .250 inch (6.35 mm) holes through bottom of enclosure using transformer as a template. See Figure 2.

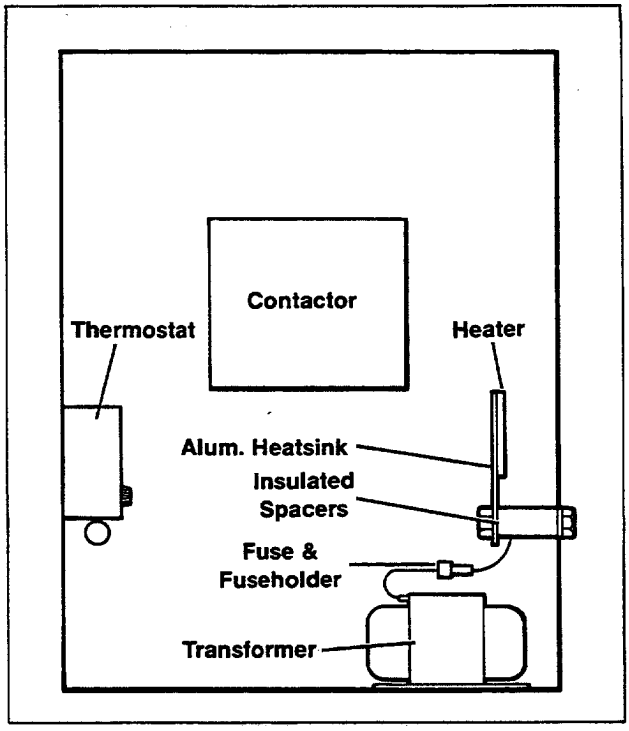

Figure 2. Heater Kit Assembly

NOTE

The exact location of components will be determined by clearance restrictions caused by entrance of load, normal and emergency lines.

6. Mount transformer using four screws, lock washers and nuts.
7. Select a location to mount heater assembly on lower right-hand side of enclosure. If a transformer is used, mount directly above and with insulators to the bottom. The two holes should be .281 inches (7.14 mm) in diameter and two inches (5.08 cm) apart horizontally. See Figures 2 and 3.

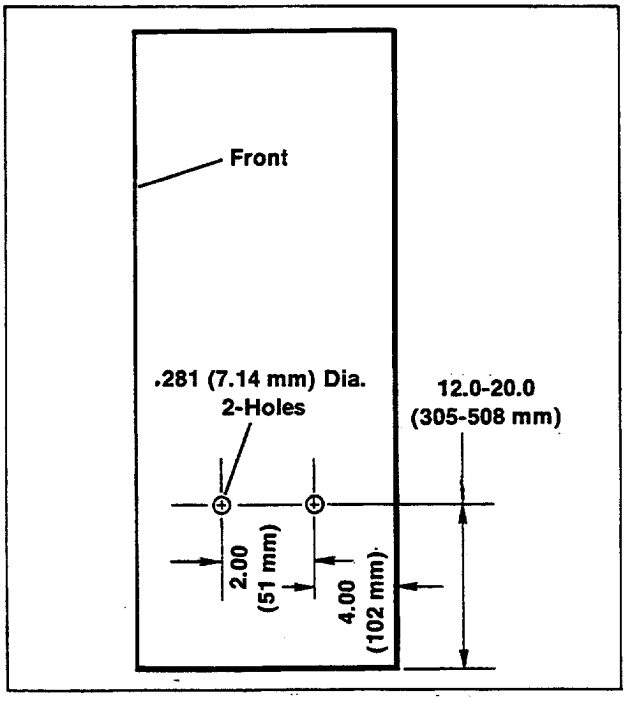

Figure 3. Heater Assembly Mounting

8. Mount heater assembly to enclosure with two screws and lock washers. Leads should be between insulators.
9. If a thermostat is used, locate on left-hand side of enclosure near ground lug. Remove cover of thermostat and use backplate as a template to drill two .250 inch (6.35 mm) holes diagonally apart. Position of thermostat must be with sensing coil to the bottom. See Figures 2 and 4.

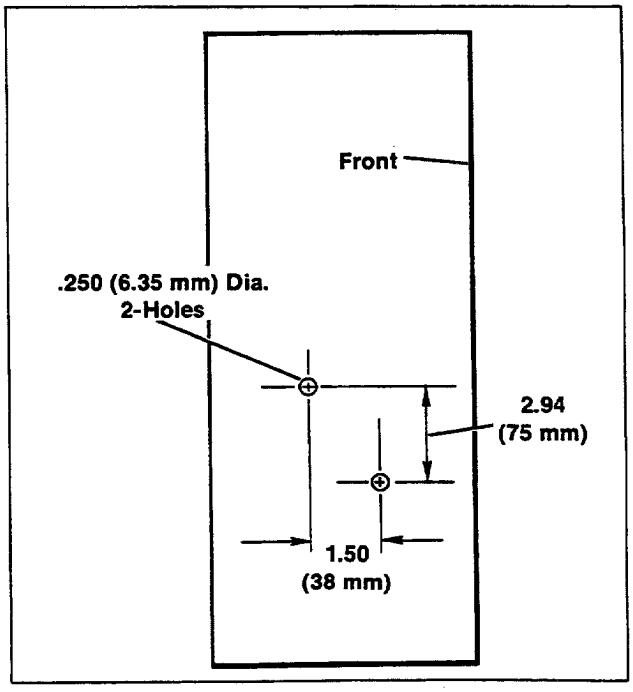

Figure 4. Thermostat Mounting

10. Mount thermostat using two screws, lock washers and nuts; do not replace cover at this time.

11. Connect black lead of fuse holder to either lead of heater using an insulink. Install cap and fuse into fuse holder.

12. With the supplied leads and terminals, connect components using the appropriate wiring diagram, see Figure 5.

    Keep wires as short as possible, but long enough to accommodate movement of enclosure door.

CAUTION

Make sure all connections are properly insulated and will not come into contact with each other or any metal parts.

13. Use cable ties to secure leads to each other and to prevent damage caused by movement of enclosure door.

14. Replace cover on thermostat and set control knob to desired setting.

15. Reconnect battery, negative lead last, and close normal line circuit breakers.

MAJOR PARTS LISTING

Kit No.	Fuse 6-A	Heater		Transformer	Thermostat
PA-297010	239179	295936	120 Volt 50 W.		
PA-297011	239179	297061	208 Volt 50 W.		
PA-297013	239179	295938	120 Volt 100 W.	297048	
PA-297014	239179	295936	120 Volt 50 W.	297048	
PA-297015	239179	295938	120 Volt 100 W.		
PA-297016	239179	297062	208 Volt 100 W.		
PA-297017	239179	295937	240 Volt 100 W.		
PA-297018	239179	295939	120 Volt 200 W.	297048	
PA-297019	239179	295938	120 Volt 100 W.	297048	
PA-297020	239179	295939	120 Volt 200 W.		
PA-297021	239179	297063	208 Volt 200 W.		
PA-297022	239179	297047	240 Volt 200 W.		
PA-297023	239179	297040	240 Volt 50 W.		
PA-297024	239179	295939	120 Volt 200 W.	297048	
PA-297025	239179	295936	120 Volt 50 W.		295940
PA-297026	239179	297061	208 Volt 50 W.		295940
PA-297027	239179	297040	240 Volt 50 W.		295940
PA-297028	239179	295938	120 Volt 100 W.	297048	295940
PA-297029	239179	295936	120 Volt 50 W.	297048	295940
PA-297030	239179	295938	120 Volt 100 W.		295940
PA-297031	239179	297062	208 Volt 100 W.		295940
PA-297032	239179	295937	240 Volt 100 W.		295940
PA-297033	239179	295939	120 Volt 200 W.	297048	295940
PA-297034	239179	295938	120 Volt 100 W.	297048	295940
PA-297035	239179	295939	120 Volt 200 W.		295940
PA-297036	239179	297063	208 Volt 200 W.		295940
PA-297037	239179	297047	240 Volt 200 W.		295940
PA-297038	239179	295939	120 Volt 200 W.	297048	295940

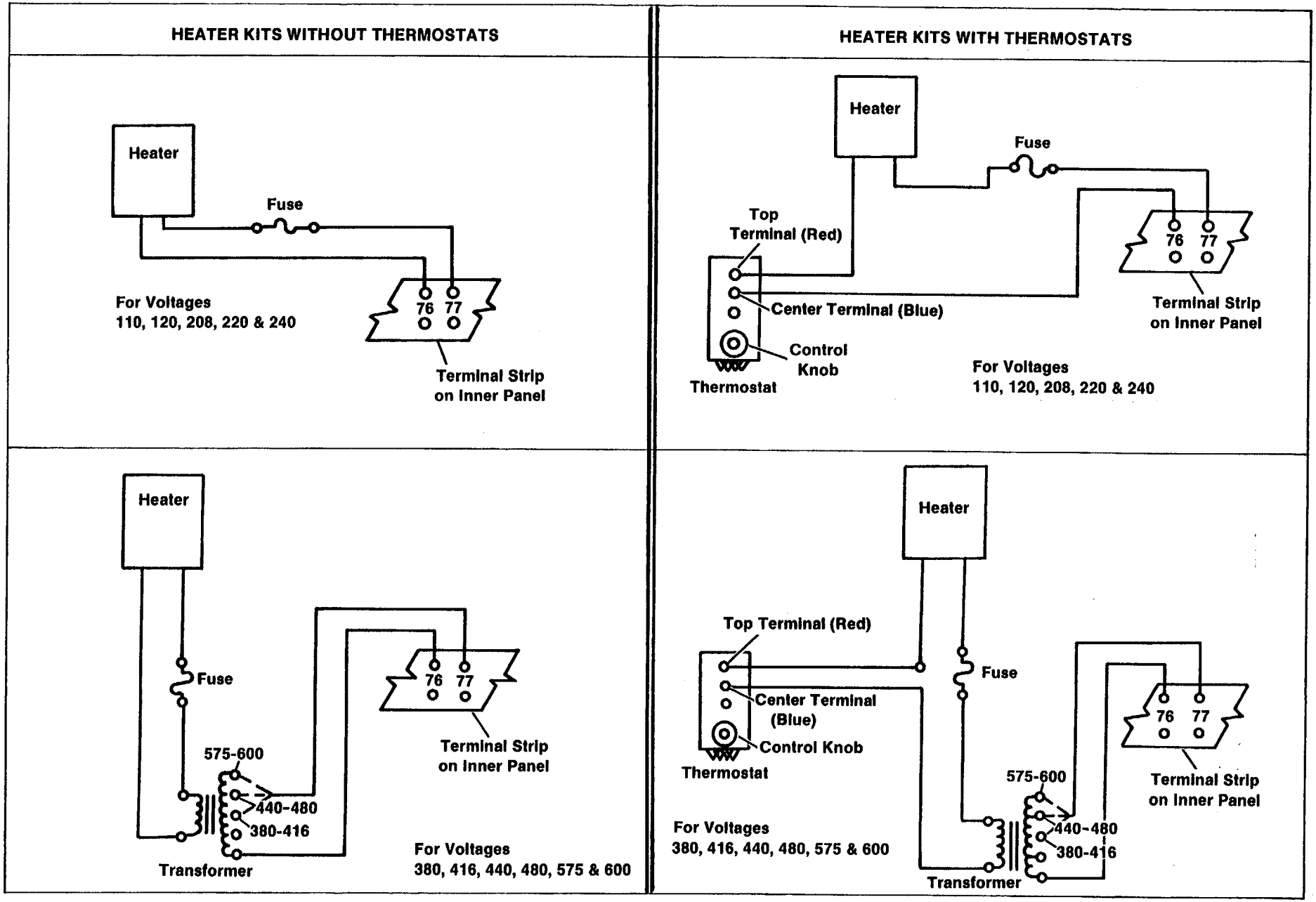

Figure 5. Wiring Diagrams