



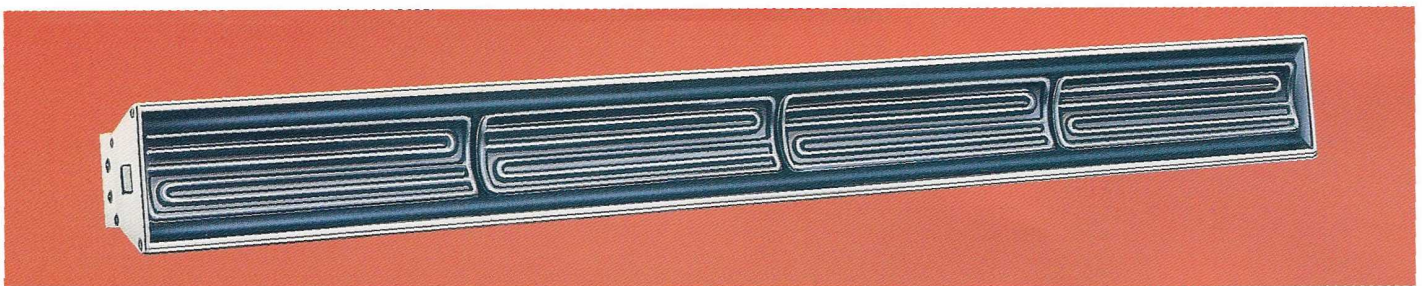
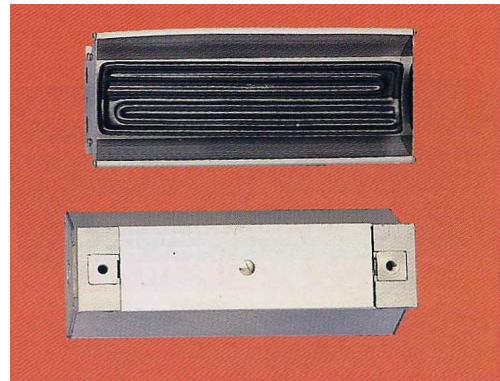
# SOUTHEAST THERMAL SYSTEMS

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## Installation Manual for Ceramic Infrared Heaters with AF Housings



**NOTE:** The drawing on the facing page shows a heater assembly with one element only. Assemblies containing up to five elements are available. *These instructions are used for all assemblies.*

1.) Disassemble the entire reflector housing as shown in the drawing. This is accomplished by removing the top cover screw (1), the top cover (2), the eight end cover screws (3), the two end covers (4), the reflector nuts (5), and then remove the reflector(s) (6) from the main housing (9).

2.) Place the two heater element leads through the oval cut-out in the reflector (6). Attach the heater element (8) to the reflector (6) by pushing the retaining clips (7) over the slot located in the top of the heater element (8).

3.) Assemble the heater element (8) and reflector (6) into the main housing (9) by placing each heater element lead through the holes in the main housing (9). If there is a thermocouple located in the heater, then also feed the thermocouple leads through the holes in the main housing (9). Assemble and tighten the reflector (6) with the main housing (9). Assemble and tighten the reflector nuts (5) to the main housing.

4.) Attach the end covers (4) with the end cover screws (3).

5.) Attach the heater unit housing to the customer supplied mounting brackets using the mounting bolts (11) and flat washers (10). The unit is now ready for connections to electrical power.

6.) **WARNING:** To prevent personal injury, make sure the power wiring has been disconnected from the source and install the proper lock-out devices before performing any wiring. All wiring must be in accordance with local and national codes and must be performed by qualified personnel only.

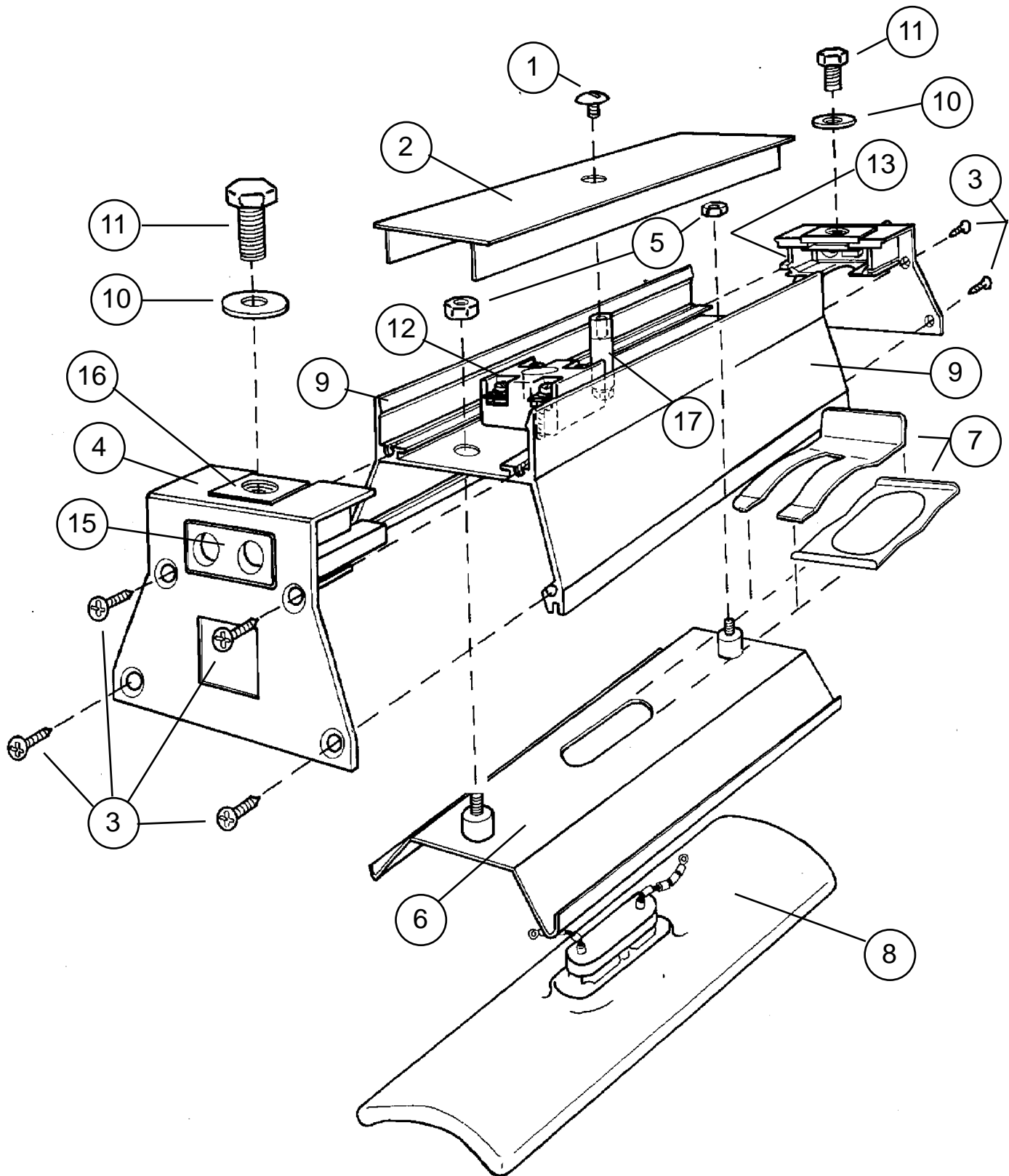
7.) Connect the heater element terminals to the ceramic terminal block(s) (12). Connect the incoming power by routing the power leads through the holes in the end covers (4) and connect to the ceramic terminal blocks (12). Wire used must be rated for a minimum temperature of 150°C. The voltage rating of the wire must exceed the operating voltage of the heater. A fiberglass braided type "SRML" wire usually is recommended.

**IMPORTANT:** Connect your ground lead to the green colored grounding lug (13). Check and tighten all electrical connections before applying power. Replace top cover (2) and top cover screw. (1). Heater is now ready for operation.

**WARNING:** Radiant heat can cause objects in the area of the heater to become very hot and possibly ignite into flames. Items must be moved from the area that you do not wish to heat. Caution must be used to prevent this damage. We also strongly recommend the use of temperature controls and monitors to prevent damage. This type of heater must not be operated while un-attended.

The ambient temperature near this housing must be held to 300 degree F maximum. This radiant heater is made of aluminum and is not to be placed inside an oven. Excessive temperatures will cause warpage. It is also NOT to be used in a hazardous location as defined by Articles 500 and 505 of the National Electric Code.

**Note 1: When energizing the heaters for the first time cycle the heaters at 200°F for 15 minutes.**



Part Number	Description
1	Top cover screw(s)
2	Top cover
3	End cover screws
4	EC-23 end covers
5	Reflector nuts
6	ITS-I-R-10 Reflector(s)
7	RC-10 2 pc. Heater retaining clip
8	Heater element(s)
9	Main housing

Part Number	Description
10	Flat Washers
11	Housing mounting bolts
12	ITS-1 Ceramic terminal blocks
13	Grounding screw
14 (Not shown)	Bus bar
15	Ceramic insert
16	SQNT-1 Square nut
17	Ceramic & Standoff
18 (Not shown)	CF-100 Ball & Socket Ins.