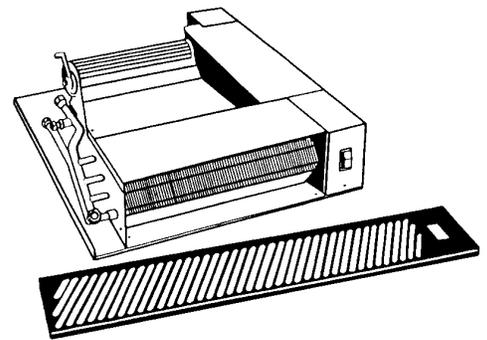


# The KICKER

## Multi-purpose fan convection heater



## INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS

### Introduction

The Kicker, by Slant/Fin meets a wide range of supplementary heating requirements. It is commonly installed horizontally at floor level in the toe space ("kickspace") under a kitchen cabinet or bathroom vanity.

The Kicker can also be wall mounted vertically using a Slant/Fin accessory kit (sold separately). For a recessed wall application use Accessory Kit RMK. For surface wall mounting use Accessory Kit SMK. Each recessed or surface mounted accessory wall kit includes the front panel and all other necessary hardware and instructions for installation.

*To ensure years of dependable and efficient service, follow all installation, operation and maintenance instructions.*

### Locating and Securing The Kicker Under a Cabinet

1. Remove drawers and/or shelves from kitchen or vanity cabinet to reveal the cabinet base (floor of cabinet). See Figure 1.
2. Remove or cut an opening in the cabinet base that is large enough to provide ample clearance to solder (nominal) 1/2" tube connections, to wire 120 volt electrical power, and to install The Kicker through this opening. Also, cut an opening beginning at the floor level, or 3 7/8" x 19 3/4" in the toe plate of the cabinet. Then secure the grille over this opening using the screws provided.
3. Rough in plumbing connections from the building's hot water space heating system. Rough in 120V electrical wiring. See Fig. 1 and instructions for "Plumbing Connections" and "Electrical Connections".
4. Place The Kicker through the cutout and secure to floor through holes in chassis (fasteners NOT provided). The discharge opening of The Kicker should be tight against the inside of the toe plate grille, with switch centered in switch cutout opening of grille on the right side.

**CAUTION:** DO NOT exert pressure on the blower wheel or coil when handling the chassis. This may cause permanent damage and impair the performance of the unit.

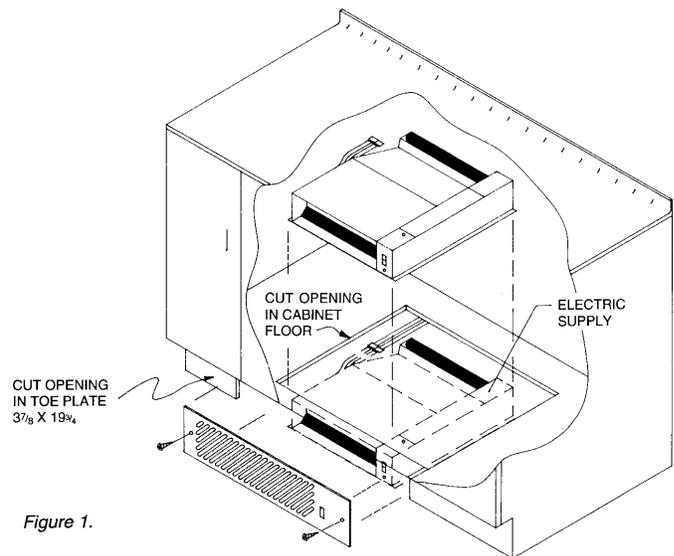
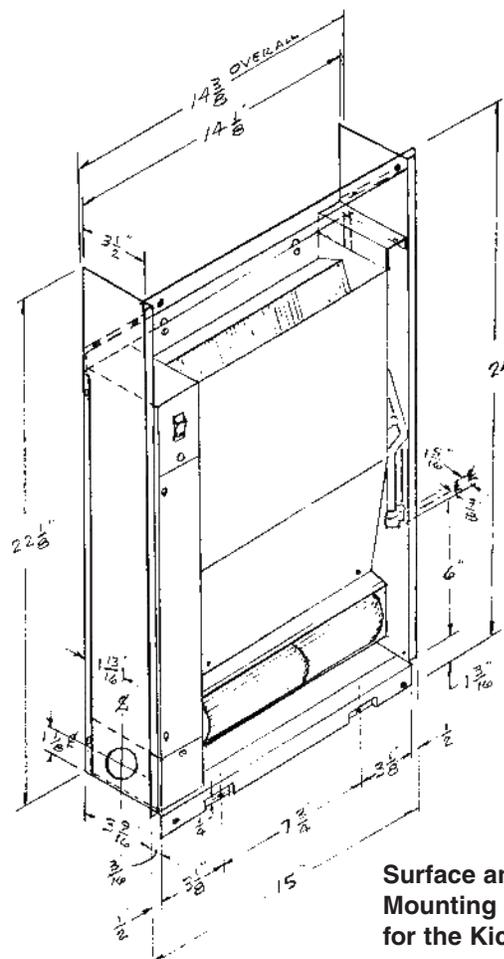


Figure 1.



Surface and Recessed Mounting Dimensions for the Kicker

## Plumbing Connections

Use appropriate soft solder that conforms to the requirements of the local authority having jurisdiction.

1. Solder (nominal)  $\frac{1}{2}$ " copper tubing from the building's hot water space heating system to the hot water supply and return connections of the heating coil, which are located at the rear, left side of the unit.

NOTE: The RETURN is the header tube that contains the  $\frac{1}{8}$ " NPT air vent fitting.

2. **CAUTION:** Shield combustible materials from torch flame while soldering connections.
3. After soldering the hot water tubing, fill the system with water, vent the heat exchanger using air vent assembled to header, and check soldered joints for leaks and/or restrictions.

## Electrical Connections

1. **CAUTION:** SHUT OFF electrical power before wiring. DO NOT restore electrical power until installation is complete.
2. All electrical connections must comply with either the U.S. National Electrical Code, (latest ANSI/NFPA No. 70) or the latest Canadian Electrical Code, (CSA Standard C22.1, Part 1), whichever code applies, plus any current, applicable local codes.
3. Note that all electrical connections are located at the rear, right side of the unit.
4. Refer to the wiring diagram, Fig. 2, and connect the hot (120V) electrical service input to the black lead with a wire nut. Similarly connect the neutral to the white lead, and then fasten the ground wire to the green screw provided on the chassis. Field wire must be 75°C, minimum, and of adequate gauge and over-current protection.

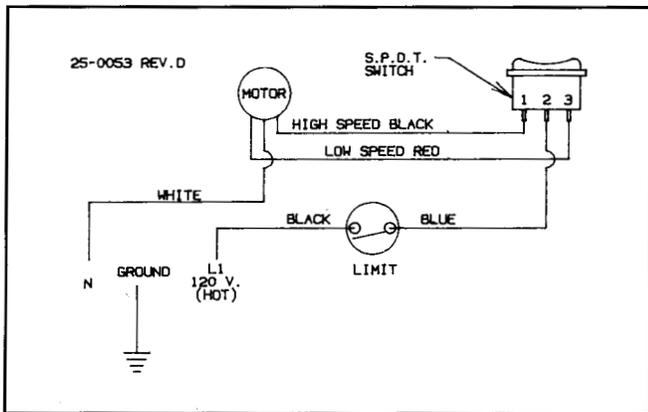


Figure 2.

Speed	Terminal	Color
High	#1	Black
Low	#3	Red

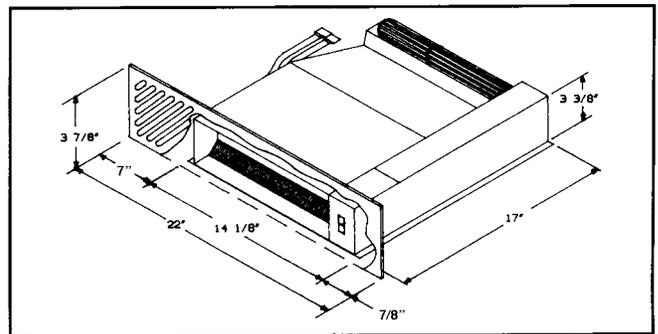
5. Upon completion of all plumbing and electrical connections, re-install or replace cabinet base, which must completely cover the opening through which chassis was placed on to the floor.
6. **CAUTION:** DO NOT electrically energize or run the unit until cabinet base and grille are in place and secured.

## Operation

1. Press top of toggle switch for high-speed fan operation and bottom of switch for low fan speed. The center position of the switch shuts the fan off.
2. Note that to prevent air drafts, The Kicker's fan turns on only when hot water is circulating through its coil. The circulation of hot water is generally controlled by the space thermostat. If water is circulating through the coil but the fan does not turn on, the boiler water temperature must be raised. The fan is activated when the temperature control senses that the water circulating through the coil is at a temperature of at least 130°F to 140°F.
3. When the fan is on, room air enters the left side of the grille and heated air is discharged into the room from the right side.
4. **CAUTION:**
  - a. DO NOT block air flow in or out of grille.
  - b. DO NOT store perishable food above heater.

## Maintenance

1. Turn off electrical power at the main supply (breaker) prior to servicing the unit.
2. Remove shelves, drawers and cabinet base to expose unit. Remove front grille if necessary.
3. Lightly clean blower wheel (fan) with a vacuum cleaner, using soft brush attachment.
4. Vacuum front grille to remove dirt, dust or lint.
5. Replace cabinet base, front grille (if removed), shelves and drawers of cabinet.
6. Turn on power at the main electrical supply panel.



Dimensions, Models TK-70 and TK-90.