

INSTALLATION INSTRUCTIONS

2600 SERIES DOWNFLOW HEATER

CHECK HEATER VOLTAGE AND PHASE ON DATA LABEL ON CONTROL PANEL DOOR TO MAKE SURE THEY ARE THE SAME AS THE ELECTRIC SERVICE SUPPLY.

INSTALL SO THAT CENTERLINE OF HEATER IS NO CLOSER THAN 48" TO ADJACENT WALLS AND TOP OF HEATING ELEMENT ENCLOSURE IS NO CLOSER THAN 15 1/2" TO CEILING (FACTORY SUPPLIED MOUNTING BRACKET WILL MAINTAIN CORRECT DISTANCE TO CEILING).

NOTE: Wiring diagrams of the heaters and supply connections are permanently attached to the inside of the heater power wiring enclosure. All terminals are coded in accordance with the wiring diagram.

INSTALLATION INSTRUCTIONS

Heaters may be mounted using factory supplied accessory mounting equipment or using special facilities supplied by user.

- 1) Mount heater securely in the desired location.
- 2) Remove desired knockout(s) on side of control panel.
- 3) Open control panel cover at top of heater by loosening two screws, opening latch, and turning disconnect handle to off position.
- 4) Following wiring diagram, connect power supply in accordance with local and/or national codes. Be sure heater is properly grounded using grounding lug provided.
- 5) Floor level thermostat control may be either low or line voltage depending on individual heater control voltage, check heater data plate before thermostat installation.

NOTE: Only one heater may be controlled by a thermostat.

Wiring instructions, where required for remote controls are packed with each individual control. See wiring diagram on heater access panel for wiring to heater.

After installation is complete, depress RED reset button(s) to insure continuity before applying power to unit.

OPERATION

Upon a call for heat from the floor level accessory thermostat, the unit fan motor and the heating element(s) shall be energized and remain so until the temperature reaches the setting of the thermostat; at which time, the heating element(s) shall be de-energized. The fan motor shall continue to run and purge the heater casing of residual heat until the setting of the fan override is reached, then the fan motor shall be de-energized. For those units available with sub-divided circuits, the floor level accessory 2 stage thermostat will upon a call for heat energize the fan motor and the first stage heating element. Should the temperature continue to fall, the thermostat shall energize the second stage heating element. Upon a rise in space conditions towards the setting of the thermostat, the two stages of heating elements shall be de-energized in sequence. The fan motor shall continue to run and purge the heater casing of residual heat until the setting of the fan override is reached, then the fan motor shall be de-energized.

OPERATION CONTINUED

The manual reset safety high limit shall de-energize the heating element(s) and/or control circuit should the temperature exceed the setting of this device.

The fan safety override shall energize the fan motor any time the setting of this device is exceeded so as to purge the heater casing of excess residual heat.

When accessory floor level fan switch is placed in the ON position (for summer air circulation) the unit heater fan motor shall be energized.

NOTE: The thermostat is to be set to the OFF position during this mode of operation.

NOTE: EXCEPT IN CASES OF EMERGENCY, DO NOT OPEN MAIN DISCONNECT WHILE HEATER IS IN OPERATION. THIS DISCONNECTS ALL POWER TO THE HEATER PREVENTING THE FAN FROM PURGING THE HEATING ELEMENTS OF RESIDUAL HEAT AND MAY RESULT IN THE THERMAL CUT-OUT(S) OPENING.

THERMAL CUT-OUTS

If for any reason heater temperatures increase beyond normal limits, safety thermal cut-out(s) will open, de-energizing the heating element(s) and/or control circuits. Check entire installation to determine cause of overheating and after corrective measures have been taken, push thermal reset button(s) on side of power wiring enclosure.

MAINTENANCE

IN CLEANING OR DISASSEMBLING HEATER, BE SURE TO DISCONNECT HEATER POWER CIRCUIT.

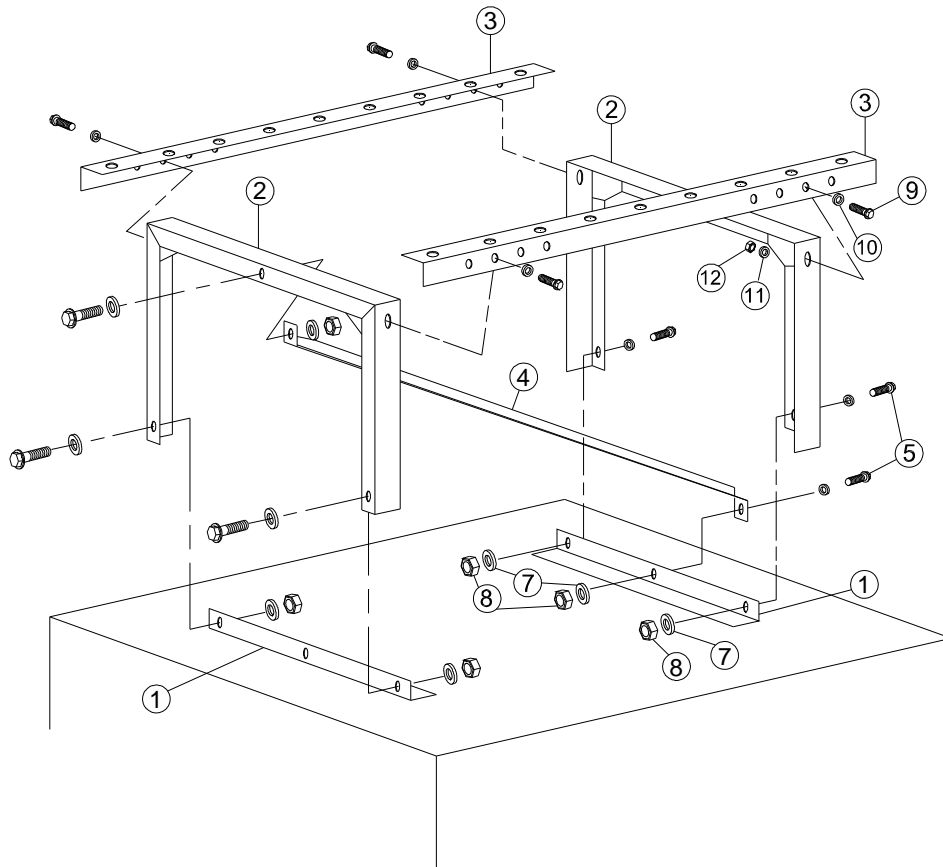
Heaters up to capacities of 20KW have permanently lubricated motors and therefore no maintenance other than occasional cleaning is required.

Heaters over 20KW have motors which should be oiled once a season with S.A.E. No. 10 motor oil.

Motor and guard assembly can be removed for cleaning without removing heater from the ceiling as follows:

Remove optional diffuser if heater is so equipped. Disconnect motor and the capacitor leads inside power wiring enclosure. Remove motor conduit locknut. Remove four nuts and lockwashers which hold motor mount assembly to inside top of heater. To reassemble, reverse the above procedure.

CEILING MOUNTING BRACKET MODEL NO. :A1600, A1601



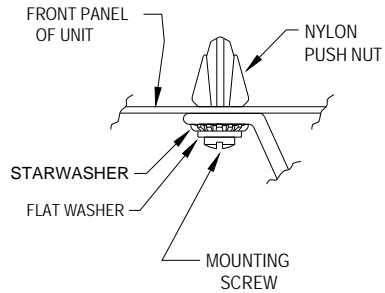
ASSEMBLY INSTRUCTIONS:

- (1) ATTACH FRAMES (#2) TO ANGLE BRACKETS (#1) ON HEATER TOP AS SHOWN WITH $\frac{5}{16}$ -18 BOLTS (#5), WASHERS (#6), LOCKWASHERS (#7) AND NUTS (#8).
- (2) ATTACH CHANNELS (#3) TO FRAMES (#2) AS SHOWN WITH $\frac{3}{8}$ -16 BOLTS (#9), WASHERS (#10), LOCKWASHERS (#11) AND NUTS (#12).
- (3) ATTACH ONE END OF CROSS MEMBER (#4)(USED ONLY ON 2625THRU 2650) TO FRAME (#2) AND THE OTHER END TO ANGLE BRACKET ON HEATER TOP (#1) AS SHOWN WITH $\frac{5}{16}$ -18 BOLTS (#5), WASHERS (#6), LOCKWASHERS (#7) AND NUTS (#8).

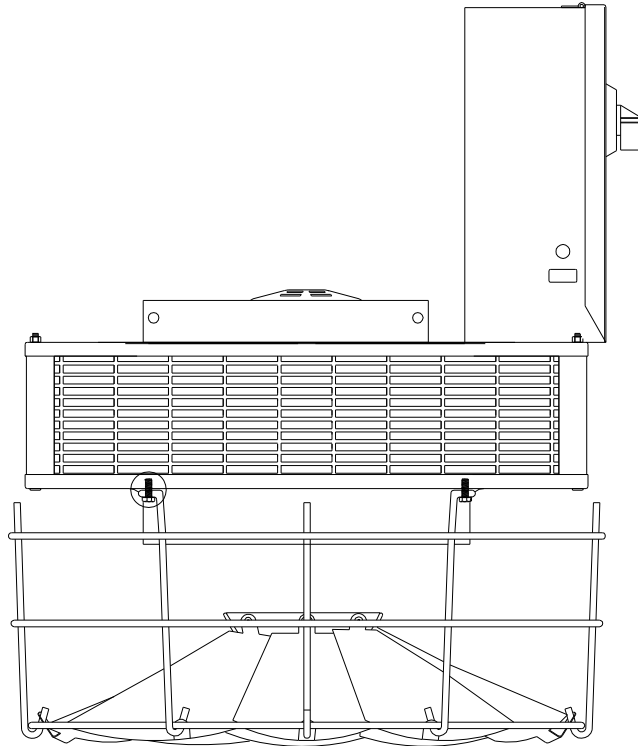
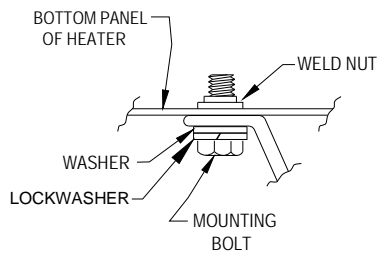
FORM 8933
12-02-03

UNIVERSAL ADJUSTABLE RADIAL LOUVERED CONE DIFFUSER MODEL NO. D1600, D1610

MOUNTING BOLT DETAIL
D1600



MOUNTING BOLT DETAIL
D1610

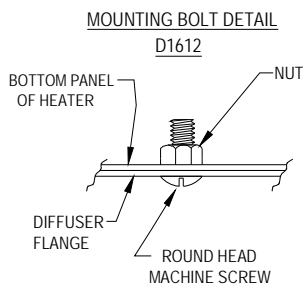
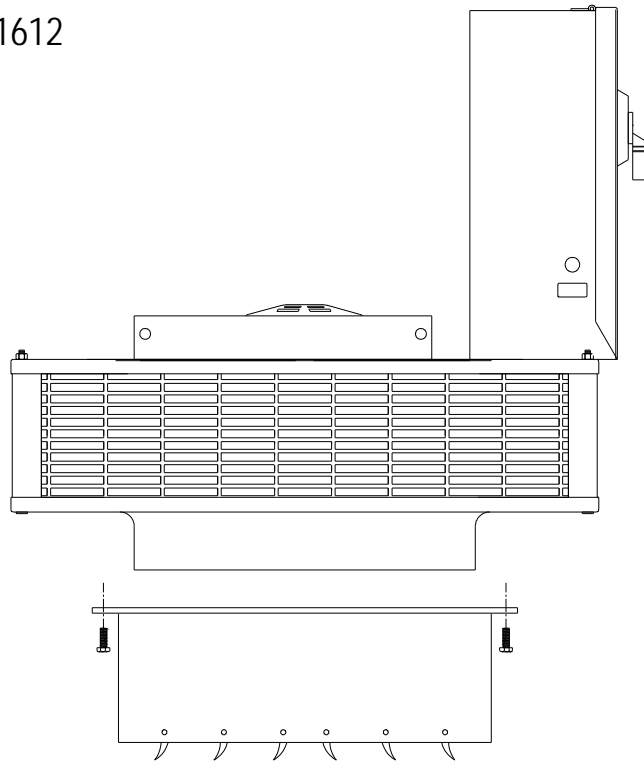
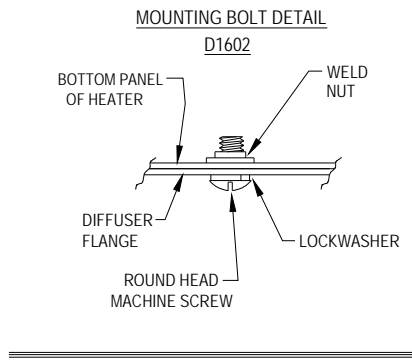


ASSEMBLY INSTRUCTIONS:

- D1600 (1) INSERT NYLON PUSH NUTS INTO SQUARE HOLES LOCATED CLOSEST TO VENTURI ON BOTTOM PANEL OF HEATER.
(2) ASSEMBLE WASHERS TO MOUNTING BOLTS AS SHOWN - LINE UP MOUNTING HOLES OF DIFFUSER WITH HOLES IN BOTTOM PANEL OF HEATER.
(3) INSERT MOUNTING BOLTS THROUGH DIFFUSER & BOTTOM PANEL OF HEATER AND TIGHTEN..
(4) ADJUST DIFFUSER BLADES FOR DESIRED AIR DEFLECTION.
- D1610 (1) ASSEMBLE WASHERS TO MOUNTING BOLTS AS SHOWN - LINE UP MOUNTING HOLES OF DIFFUSER WITH HOLES IN BOTTOM PANEL OF HEATER.
(2) INSERT MOUNTING BOLTS THROUGH DIFFUSER & BOTTOM PANEL OF HEATER AND TIGHTEN..
(3) ADJUST DIFFUSER BLADES FOR DESIRED AIR DEFLECTION.

FORM 8934
ECO# 1-5734

ADJUSTABLE LINEAR LOUVERED DIFFUSER MODEL NO. : D1602,D1612



ASSEMBLY INSTRUCTIONS:

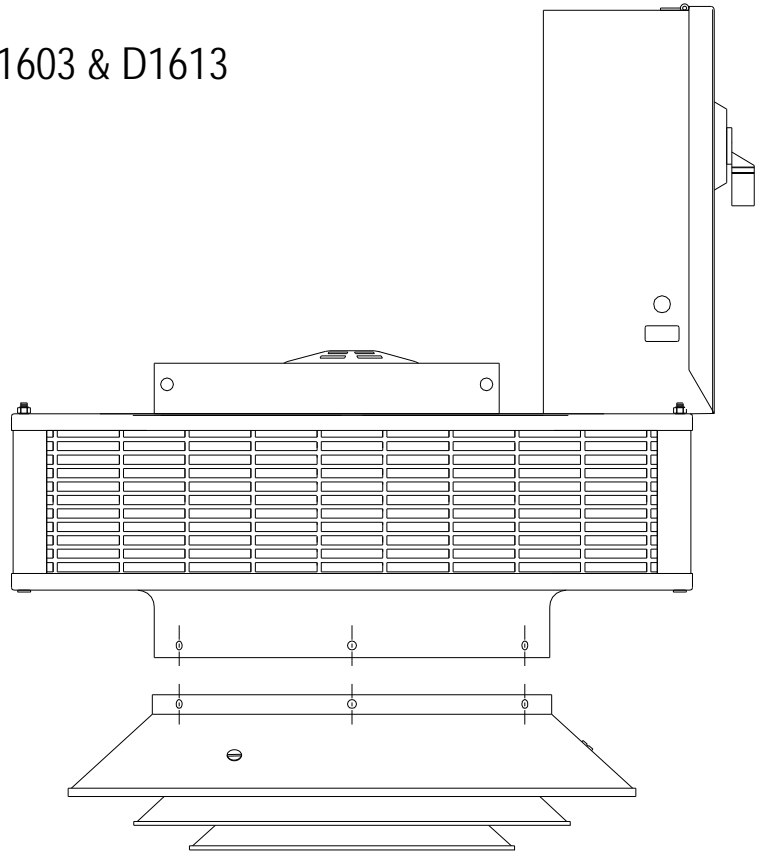
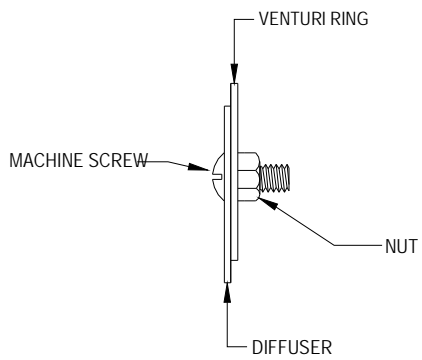
- (1) REMOVE LOUVERS FROM DIFFUSER NEEDED TO INSTALL NUTS ON D1612.
- (2) PLACE DIFFUSER FRAME AGAINST BOTTOM PANEL OF HEATER.
- (3) INSERT MACHINE SCREWS THROUGH FLANGE IN DIFFUSER & HOLES IN BOTTOM PANEL OF HEATER.
- (4) ASSEMBLE NUTS FOR D1612 AND TIGHTEN.
- (5) RE-ASSEMBLE LOUVER BLADES FOR D1612.
- (6) ADJUST LOUVER BLADES FOR DESIRED AIR PATTERN.

NOTE: DO NOT CLOSE LOUVER BLADES MORE THAN 45°

FORM 8935
ECO# 1-5734

ANEMOSTAT DIFFUSER

MODEL NO. : D1603 & D1613



ASSEMBLY INSTRUCTIONS:

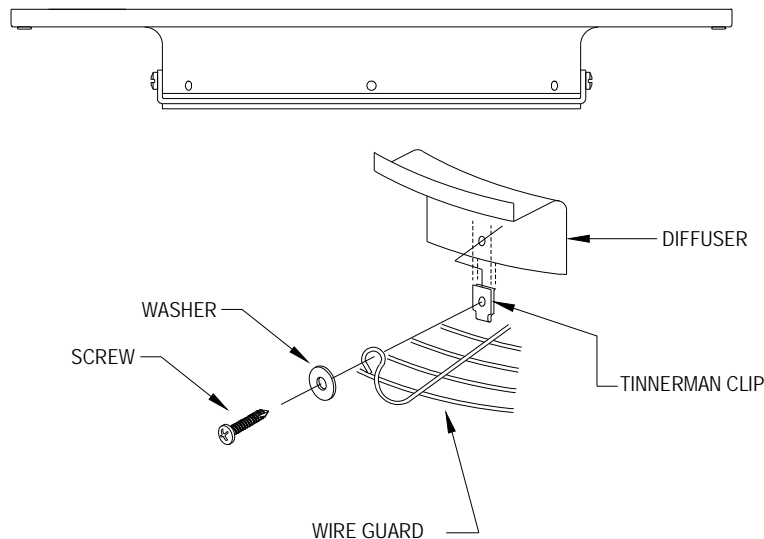
- (1) LINE UP MACHINE HOLES IN DIFFUSER AND VENTURI RING IN BOTTOM OF HEATER.
- (2) INSERT MACHINE SCREWS AND TIGHTEN NUTS.

FORM 8936
12-02-03

INSTALLATION INSTRUCTIONS:
D1604, D1614

WIRE GUARD
2600 SERIES UNIT HEATER

- (1) DISCONNECT HEATER FROM SUPPLY.
- (2) INSERT A TINNEMAN CLIP (BAG ASSY) IN EACH OF THE 3 HOLES IN THE DIFFUSER AS ILLUSTRATED.
- (3) PLACE THE GUARD ASSEMBLY OVER THE DIFFUSER, ALIGN THE HOLES ON THE GUARD WITH THOSE ON THE DIFFUSER AND THEN ATTACH USING THE SHEET METAL SCREW AND WASHER (BAG ASSY) AS ILLUSTRATED.
- (4) RESTORE POWER TO PLACE HEATER IN OPERATION.



FORM 8937
12-02-03