

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. 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 d-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 d-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 d-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 d-energized.

OPERATION CONTINUED

The manual reset safety high limit shall d-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, d-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/CLEANING

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 is 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.

IMPORTANT INSTRUCTIONS

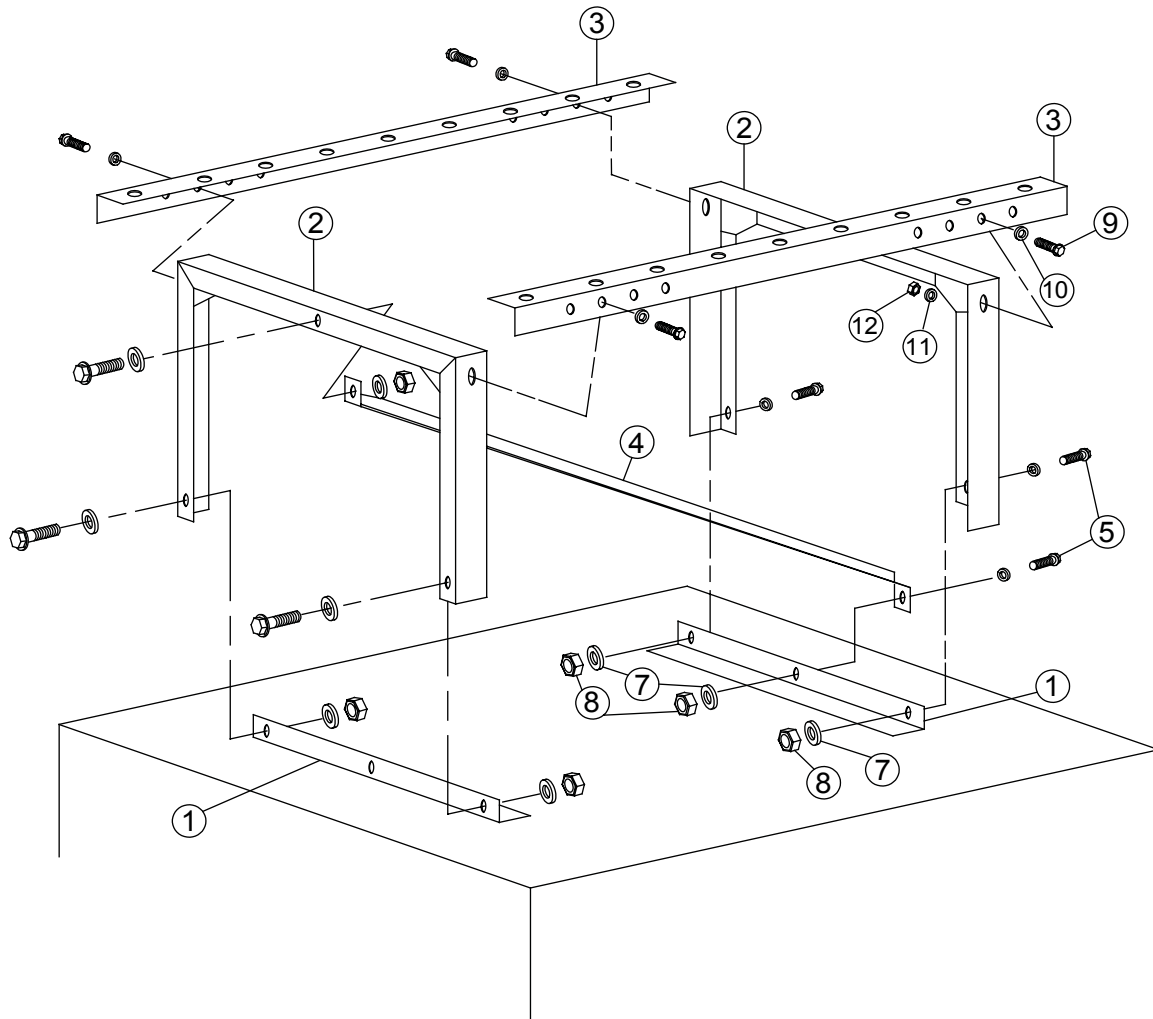
When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electrical shock, and injury to persons, including the following:

1. Read all instructions before using this heater.
 2. **CAUTION:** High temperatures. Keep cords and all other combustible material, such as furniture, papers, clothes and curtains away from the heater. For safe and efficient operation, keep an open space around heater of three feet in front and 12 inches at ends and rear.

ATTENTION: Les températures élevées. Gardez les cordons et tout autre matériau combustible, tels que les meubles, papiers, vêtements et rideaux à l'extérieur de l'appareil de chauffage. Pour un fonctionnement sûr et efficace, garder un espace ouvert autour de chauffage de trois pieds à l'avant et 12 pouces aux extrémités et à l'arrière.
 3. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
 4. Do not operate any heater after it malfunctions, has been dropped or damaged in any manner. Return heater to authorized service facility for examination, electrical or mechanical adjustment, or repair.
 5. Do not use outdoors.
 6. To disconnect heater, turn controls to off, and turn off power to heater circuit at main disconnect panel (or operate internal disconnect switch if provided).
 7. Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the heater.
 8. To prevent a possible fire, do not block air intakes or exhaust in any manner.
 9. A heater has hot and arcing or sparking parts inside. **WARNING:** Do not use it in area where gasoline, paint, or flammable liquids are used or stored.
 10. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
 11. This heater may include an audible or visual alarm to warn that parts of the heater are getting excessively hot. If the alarm sounds (or illuminates), immediately turn the heater off and inspect for any objects on or adjacent to the heater that may have blocked the airflow or otherwise caused high temperatures to have occurred.
DO NOT OPERATE THE HEATER WITH THE ALARM SOUNDING (OR ILLUMINATING).
11. **SAVE THESE INSTRUCTIONS**

CEILING MOUNTING BRACKET

MODEL NO. :A1600, A1601

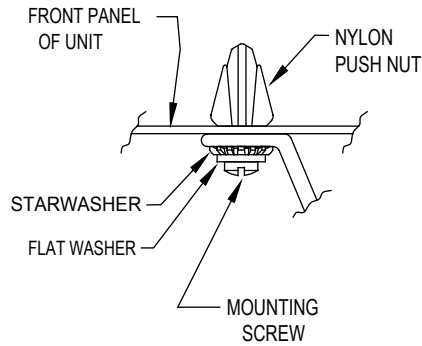


1. ATTACH FRAMES (#2) TO ANGLE BRACKETS (#1) ON HEATER TOP AS SHOWN WITH 5/16 -18 BOLTS (#5), WASHERS (#6) , LOCKWASHERS (#7) AND NUTS (#8).
2. ATTACH CHANNELS (#3) TO FRAMES (#2) AS SHOWN WITH 3/8 -16 BOLTS (#9), WASHERS (#10), LOCKWASHERS (#11) AND NUTS (#12).
3. ATTACH ONE END OF CROSS MEMBER (#4)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

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

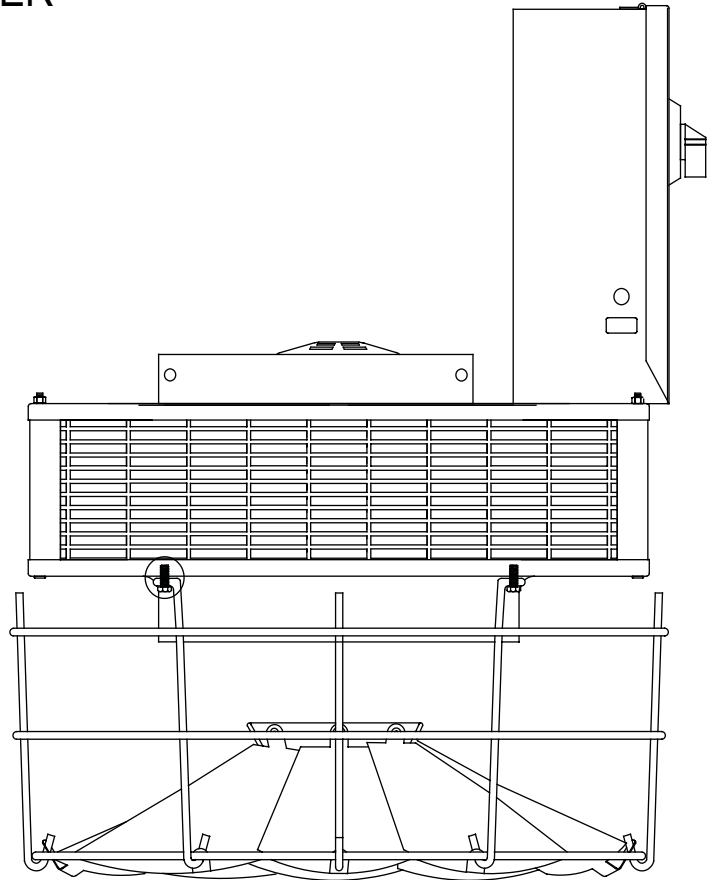
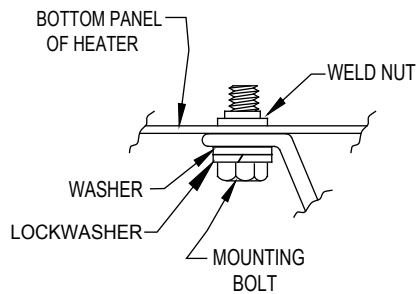
MOUNTING BOLT DETAIL

D1600



MOUNTING BOLT DETAIL

D1610



ASSEMBLY INSTRUCTIONS:

D1600

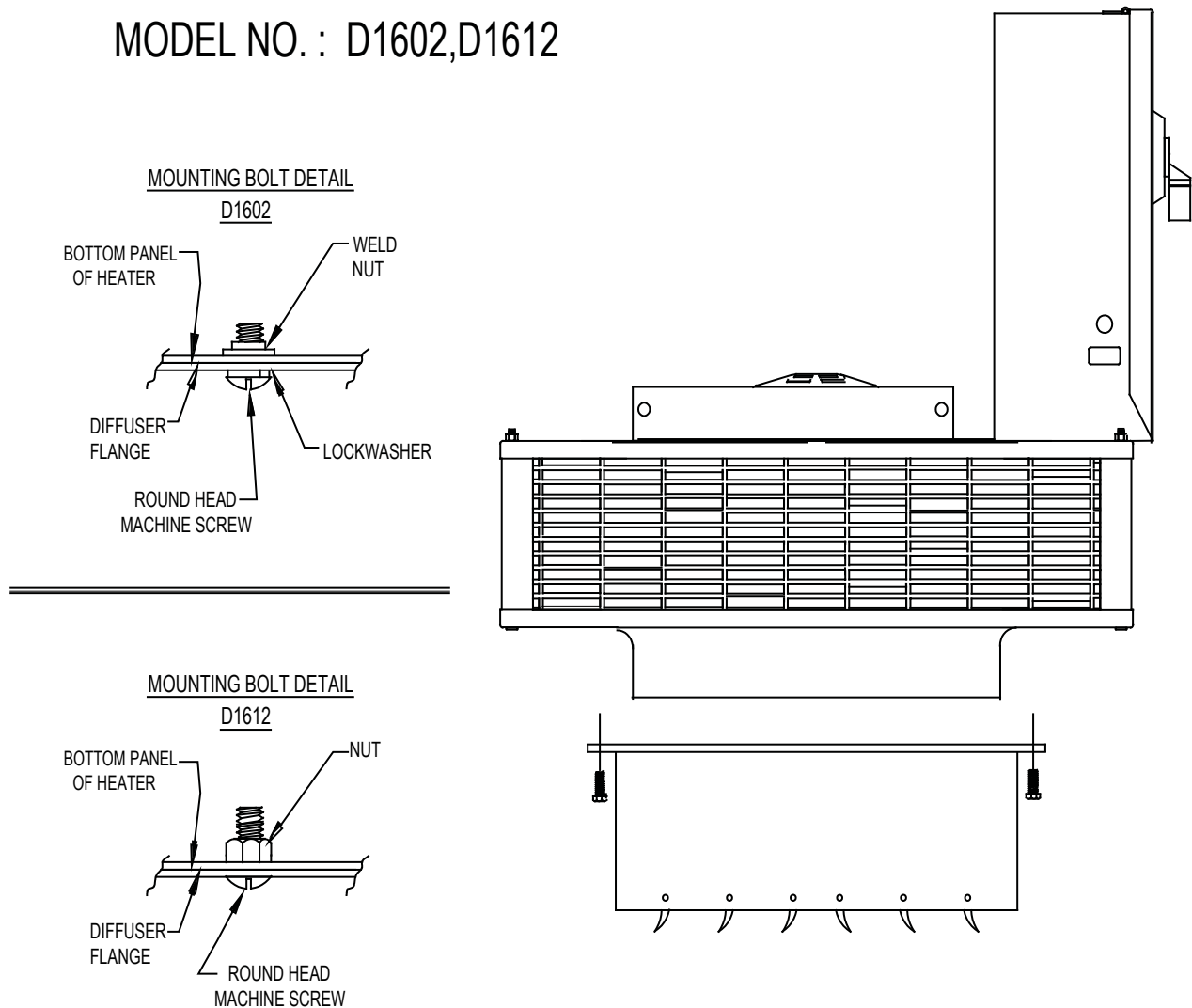
1. INSERT NYLON PUSH NUTS INTO SQUARE HOLES LOCATED CLOSEST TO VENTURI ON BOTTOM PANEL OF HEATER.
2. ASSEMBLE WASHERS TO MOUNTING BOLTS AS SHOWN - LINE UP MOUNTING HOLES OF DIFFUSER WITH HOLES IN BOTTOM PANEL OF HEATER.
3. INSERT MOUNTING BOLTS THROUGH DIFFUSER & BOTTOM PANEL OF HEATER AND TIGHTEN..
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

ADJUSTABLE LINEAR LOUVERED DIFFUSER MODEL NO. : D1602,D1612

MODEL NO. : D1602,D1612



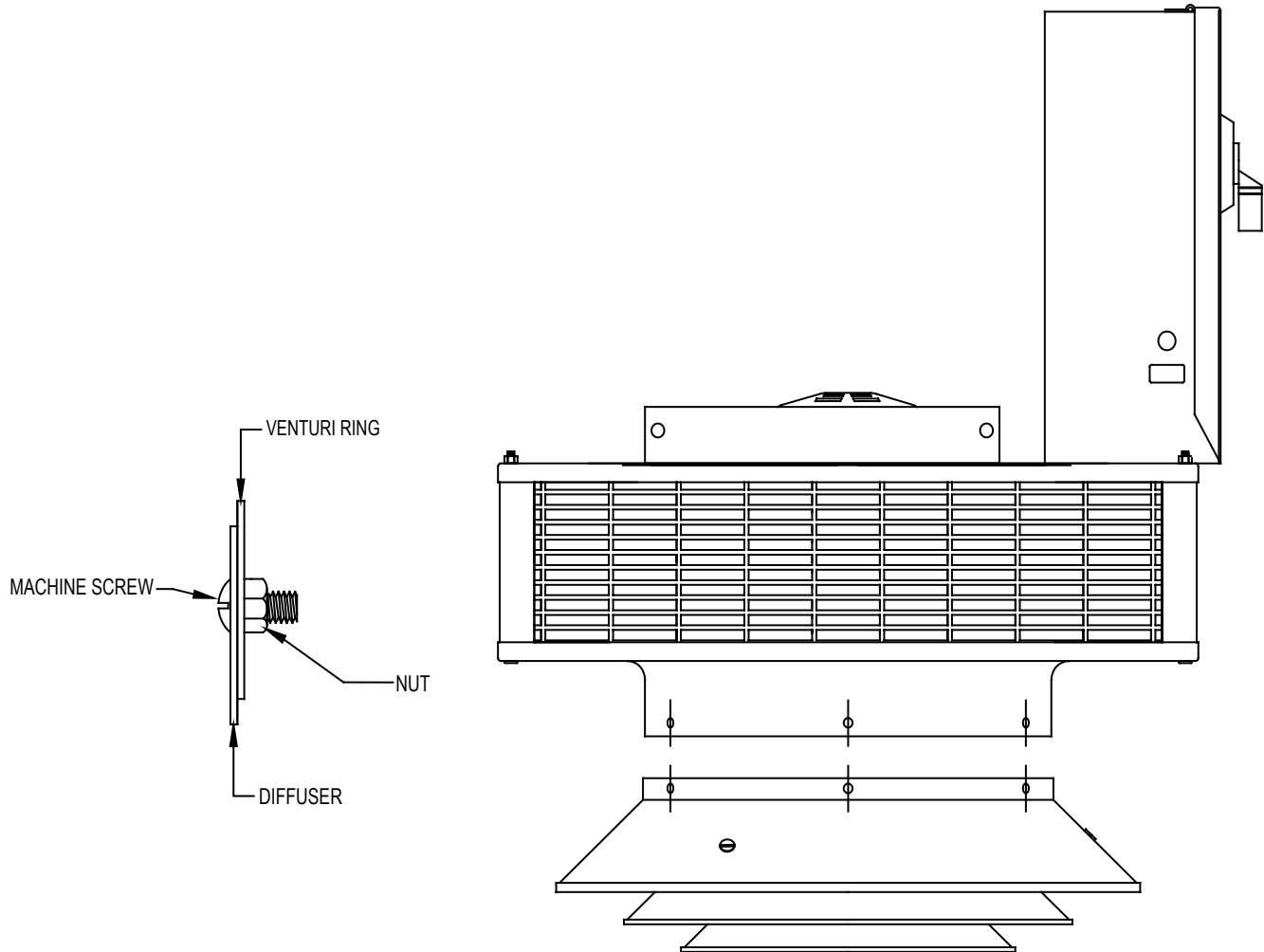
ASSEMBLY INSTRUCTIONS:

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°

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.

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.

