

<p align="center">Electric Heater Model WT Series 208/240-60-1, 277-60-1 208/240-60-3, 460/480-60-3</p>	<p align="center">INSTALLATION INSTRUCTIONS  WARREN TECHNOLOGY Date: 06-25-2010</p>	<p align="center">Air Handler Models Trane/American Standard TWHV, BWHV, BPCB, B/TWE B/TEV-B, BTE, TWG, TEC3F, 2/4TGB3F, 2/4TEE3F, 2/4TEH3F</p>
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GENERAL

This Warren Technology electric heater is engineered, designed, and listed to be installed in the Trane/General Electric air handlers referenced above. Before proceeding, check the heater label for correct voltage and KW requirements. Before installing the heater inspect thoroughly for shipping damage. Notify carrier immediately if any damage is found. Check all porcelain insulators for breakage and inspect heater element wire to see that none have been deformed. Clean all dirt, dust, and moisture from equipment. Check for proper clearances of live parts, between phases and to ground and make sure that all required barriers are in place. Check conductors run in multiple to insure that they are properly phased.

WARNING

Before performing service or maintenance operations on system, turn off all main power switches. There may be more than one disconnect. Turn off accessory heater power switch if applicable. Electrical shock can cause personal injury. **TAG DISCONNECT SWITCH(ES) WITH A SUITABLE WARNING LABEL.**

HEATER INSTALLATION

Refer to base unit installation instructions as required. Affix Warren installer label to equipment access door.

Remove access panel(s) of the air handler.

Remove air handler heater cavity cover plate or knockout as required.

Note 1: The 018 through 036 remove the plastic strain relief in the field wiring compartment and remove the wires to the male polarized plug attached to the front left hand side of the heater compartment. Discard the 2 wires, bracket, and male polarized plug. (480 VAC heaters require male polarized plug and 2 wires to be used for dual volt configuration).

ATTACH SINGLE POINT AUTOFORMER IF PROVIDED BY WARREN TECHNOLOGY (ONLY ON 480 VOLT HEATERS BEING WIRED INTO 208/240 VOLT, SINGLE PHASE AIR HANDLER) See Figure 2.

Refer to schematic provided for wiring information and electrical connections.

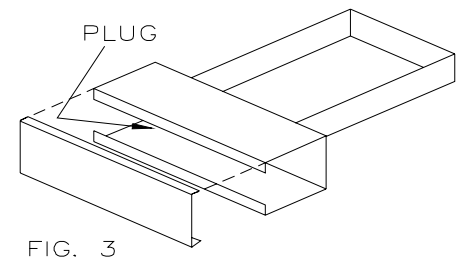
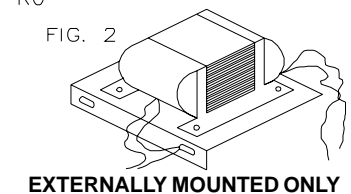
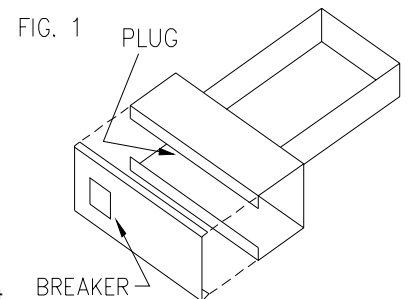
Autoformer wiring is color coded. Color coding illustrated on schematic.

Note 2: The 048 and 060 have a plate covering the lower 1.2" of the heater cavity. This plate must be left in place for a blower barrier seal. The plate is removed only when the WTEB2592 heater is used.

Remove the cover of the heater control box. Disconnect the polarized plug(s) of the air handler and connect to the corresponding plug(s) of the heater. Secure or detach and discard the unused unit plug assembly(ies). (480 VAC heaters require male polarized plug and 2 wires to be used for dual volt configuration).

Insert the heater assembly into the heater compartment cavity of the air handler with the male polarized plug on the heater control box adjacent to the low voltage control wiring terminal board.

Secure the heater to the air handler heater compartment with four screws provided. **(WTG models up to 15Kw attach the adapter plate (provided) to the right back side of the heater using 2 screws (see fig. 4)).** Remove the appropriate knockouts in the air handler for making electrical connections to the heater.

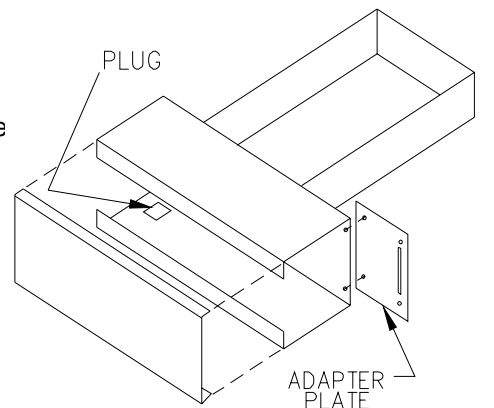


Make all wiring connections per applicable field wiring diagrams.

All electrical connections should be made inside the air handler and comply with the National Electrical Code, State and Local Codes. Main power supply, minimum wire sizes, circuits, fusing, etc. is shown on the corresponding schematic wiring diagram and/or installer label.

Be sure all electrical terminal connections are tight and secure.

Replace access panel(s) of the air handler.



WTG – ADAPTER PLATE INSTALLATION

MODELS W/CIRCUIT BREAKERS (WTG)

1. Remove breaker cover panel on the AHU door. (Save Screws)
2. Install breaker access cover provided with heater kit.
3. Using the cut-out in the breaker access cover as a template, cut out insulation as needed.
4. Apply gasket provided around breaker knockout on the heater cover plate.

START -UP and CHECK-OUT

Refer to base unit installation instructions as required.

Check that all circuit breakers short circuit interrupting ratings are adequate.

Check for loose terminal connections.

Turn on unit and power heater.

Check that airflow across heater is at or above the minimum recommended. Adjust if required. **CAUTION:** When commissioning any AHU with electric heat, **ALWAYS** check to see if the heater is cycling on its automatic reset high temperature limit when the system is producing the highest temperature leaving the AHU coil (Heat pump on, etc.). **If** the heater is cycling, increase the air flow by increasing the fan speed or lowering the ductwork static pressure until cycling stops.

Set thermostat to call for heat.

Check operation of heater.

SERVICE

CAUTION: Verify that all wiring is correct per the factory approved schematic before proceeding. Notify factory immediately of any discrepancies.

Any modifications or repairs to this equipment without written permission from the factory will be done at the installers own risk and expense.

Circuit Breakers - Malfunction will interrupt power to unit. *Check for cause of failure, correct, and reset circuit breaker.*

Limit Switches - Malfunction prevents heating element(s) from being energized. *Replace switch if malfunction occurs.*

Contactor - Malfunction will cause heater to not come on or not shut off. *Replace faulty contactor. Do not attempt to replace coil or dress contacts.*

Parts List

1. Limit Switch - F165, L165 for 208/240 VAC, F165X for 480 VAC
2. Heater Relay - 9100-211Q132 (2P-24VAC-25A), 3100-20Q15132 (2P-24VAC-50A), T9CP1D52-22 (1P-DC22-30A)
3. Circuit Breaker - QOU(Q)20 (25, 30, 35, 40, 45, 50, 60)
4. Ground Lug - CMCLA50-1
5. Line Terminal - CMCLA50-1
6. Schematic
7. Installation Instructions
8. Installer Label

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.