

INSTALLER'S GUIDE

EHTR-IN-39
18-HB13D5-1

Library	Service Literature
Product Section	Unitary
Product	Unitary Accessories
Model	TVF
Literature Type	Electric, Steam, Hot Water Coils
Sequence	39
Date	September 1998
File No.	SU-UN-ACC-EHTR-IN-39 9/98
Supercedes	New

**ALL phases of this installation must comply with
NATIONAL, STATE AND LOCAL CODES**

Model:

BAYHTR1405A	BAYHTR1410
BAYHTR1405	BAYHTR3410
BAYHTR1408A	BAYHTR1415A
BAYHTR1408	BAYHTR3415
BAYHTR1410A	BAYHTR1419B

Supplementary Electric Heaters for Air Handler Installations

IMPORTANT—This Document is customer property and is to remain with this unit. Please return to service information pack upon completion of work.

⚠ WARNING: HAZARDOUS VOLTAGE - DISCONNECT POWER BEFORE SERVICING

A. GENERAL

These air handlers and heaters are designed so that all wiring between the heater and air handler is accomplished via mating polarized plugs, power for the air handler is provided from heater circuit 1, so that only one conduit (power source) is needed to provide power to the unit on single circuit applications.

1. Check the applicable tables to insure that the Heater selected is approved for use with the air handler in which it is to be applied, in the configuration in which it is to be installed.
2. Check the components received for damage. Report any defects or shortages to the transportation company immediately.
3. Be sure power supply agrees with listing shown on heater nameplate.

B. INSTALLATION With *TWG* Air Handlers

1. Remove the blower access panel from the front of the air handler unit.
2. Unplug the female polarized plug from the air handler electrical junction box and remove the junction box, male polarized plug, power wiring and discard .
3. Remove the cover from the heater compartment of the air handler and discard.
4. Remove the cover from the heater field wiring and control compartment box. ***An adapter plate is provided for heaters which are used with air handlers that are 21.5" wide or wider. When required, attach the adapter plate to the back of the heater on the side opposite the knockouts using 2 screws.***

5. Remove the appropriate knockouts in the heater field wiring compartment. See Figure 1 on page 2. Remove the appropriate knockouts in the air handler for making electrical connections to the heater. The holes in the air handler must align with the holes in the heater field wiring compartment.
6. Insert the heater assembly into the heater cavity of the air handler so that the field wiring holes in the air handler and the heater will align. Secure the heater compartment to the air handler with the four screws removed from the hardware envelope.

IMPORTANT: Conduit must attach directly to the heater control box.

7. Make all wiring connections per applicable field wiring diagrams in these instructions. All instructions **must** conform to national and local electrical codes.
8. Connect the female polarized plug (disconnected in item 2) from the air handler control box to the male polarized plug on the bottom of the heater control box
9. Refer to the heater airflow chart on the air handler rating nameplate for the appropriate minimum blower speed tap selection to be used with an approved heater installed.
10. For heaters with self contained circuit breakers, an opening in the blower access panel is provided so that the breakers may be operated without removal of the blower access panel. Remove the metal cover from the circuit breaker opening in the air handler access panel and discard, cut out the fiberglass insulation only in the areas where the circuit breakers will extend through the opening. Install the plastic "AirTite" circuit breaker cover in the front panel opening with the two screws provided.
11. Replace all panels removed during the heater installation.

Since the manufacturer has a policy of continuous product improvement, it reserves the right to change specifications and design without notice.

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INSTALLER'S GUIDE

C. INSTALLATION with *TWE/TVF* Air Handlers

1. Position the air handler in the vertical position for ease of installing the heater .
2. Remove the blower access panel from the front of the air handler.
3. Unplug the female polarized plug from the male side. The male side is mounted in a bracket on the upper left hand corner of the air handler. The female side of the polarized plug will be connected to the male polarized plug of the heater.
4. Remove the cover from the heater field wiring and control compartment box. ***An adapter plate is provided for heaters which are used with air handlers that are 21.5" wide or wider. When required, attach the adapter plate to the back of the heater on the side opposite the knockouts using 2 screws.***
5. Remove the appropriate knockouts in the heater field wiring compartment. See Figure 1 on page 2. Remove the appropriate knockouts in the air handler for making electrical connections to the heater. The holes in the air handler must align with the holes in the heater field wiring compartment.
6. Insert the heater assembly into the heater cavity of the air handler so that the field wiring holes in the air handler and the heater will align. Secure the heater to the air handler compartment with the 4 screws provided in the hardware envelope.
7. Install the hole plug from the hardware envelope in the

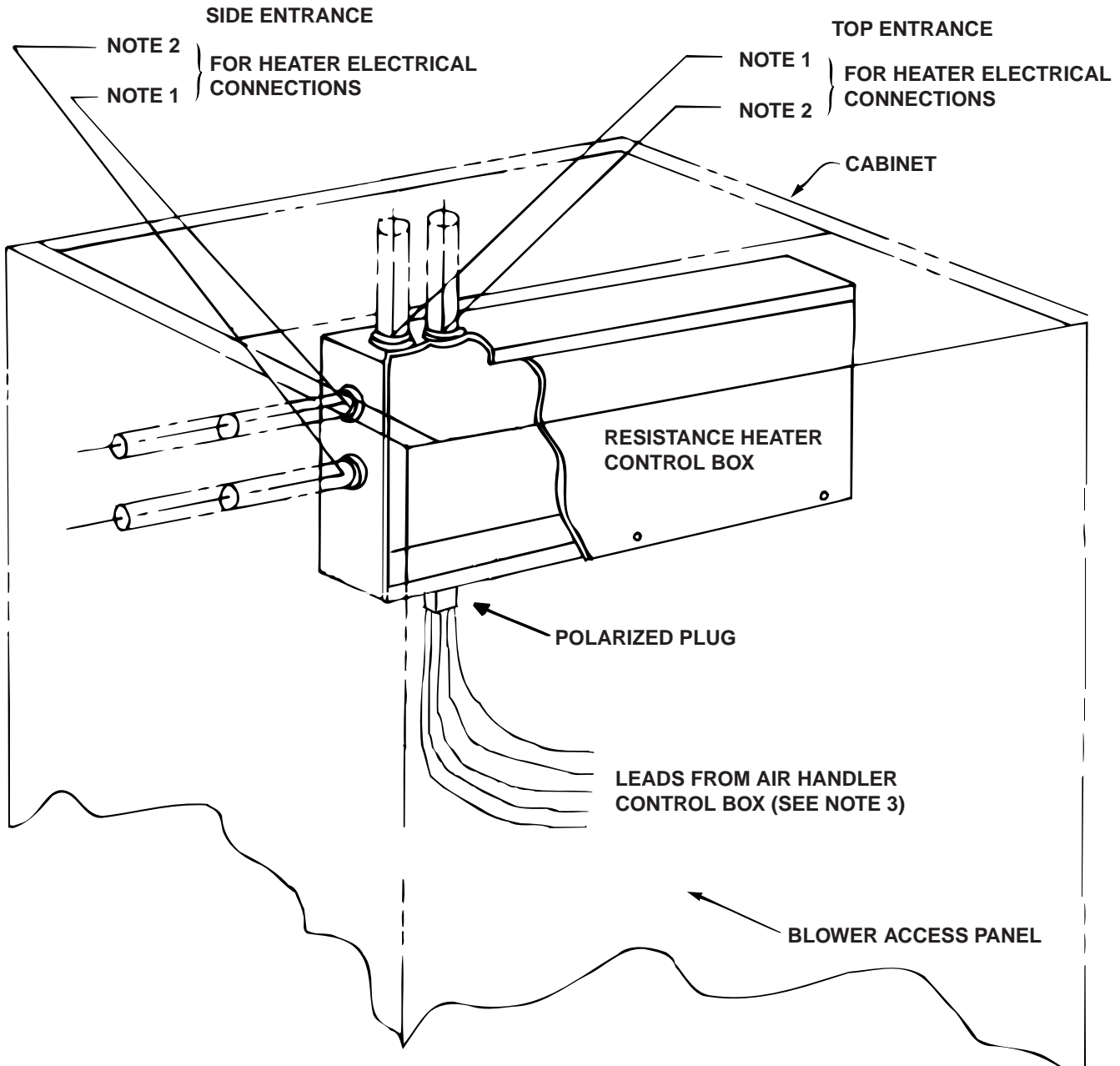
7/8" diameter hole in the side panel of the air handler, adjacent to the air handler control box.

NOTE: Air handlers approved to use the 1426 heater 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 1426 heater is used.

IMPORTANT: Conduit must attach directly to the heater control box.

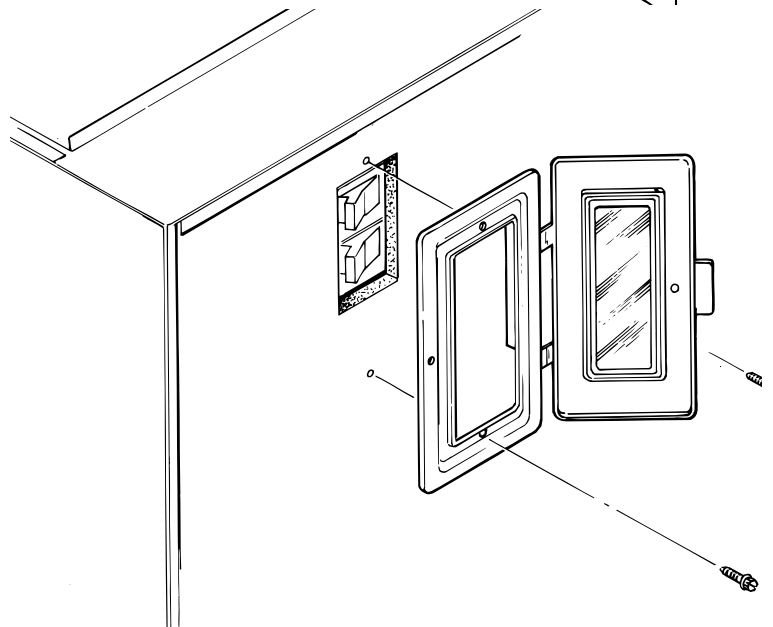
8. Make all wiring connections per applicable field wiring diagrams. All instructions **must** conform to national and local electrical codes.
9. Connect the female polarized plug (disconnected in item 3) from the air handler control box to the male polarized plug on the bottom of the heater control box.
10. Refer to the heater airflow chart on the air handler rating nameplate for the appropriate minimum blower speed tap selection to be used with the approved heater installed.
11. For heaters with self contained circuit breakers, an opening in the blower access panel is provided so that the breakers may be operated without removal of the blower access panel. Remove the metal cover from the circuit breaker opening on the air handler access panel and discard. Cut out the fiberglass insulation only in the areas where the circuit breakers will extend through the opening. Install the plastic "AirTite" circuit breaker cover in the front panel opening with the two screws provided.
12. Replace all panels removed during the heater installation.

BAYHTR -- HEATER DATA									
Heater Model No.	Circuit Breaker	Number of Circuits	Phase	240 VOLT			208 VOLT		
				Capacity		Heater Amps per Circuit	Capacity		Heater Amps per Circuit
				KW	BTUH		KW	BTUH	
BAYHTR1405A	Yes	1	1	4.80	16400	20	3.60	12300	17.3
BAYHTR1405	No	1	1	4.80	16400	20	3.60	12300	17.3
BAYHTR1408A	Yes	1	1	7.68	26200	32	5.76	19700	27.7
BAYHTR1408	No	1	1	7.68	26200	32	5.76	19700	27.7
BAYHTR1410A	Yes	1	1	9.60	32800	40	7.20	24600	34.6
BAYHTR1410	No	1	1	9.60	32800	40	7.20	24600	34.6
BAYHTR3410	No	1	3	9.60	32800	34.6	7.20	24600	30
BAYHTR1415A	Yes	2	1	15.36	52400	40/24	11.53	39300	34.6/20.8
BAYHTR3415	No	1	3	15.36	52400	38.2	11.53	39300	33.1
BAYHTR1419B	Yes	2	1	19.20	65500	40/40	14.42	49200	34.7/34.7



NOTES

1. HEATER LINE VOLTAGE KNOCKOUT LOCATIONS FOR 1" OR 1-1/2" CONDUIT. CONDUIT MUST BE ATTACHED DIRECTLY TO THE HEATER CONTROL BOX. WIRE AND CONDUIT SIZE MUST COMPLY WITH N.E.C.
2. HEATER LINE VOLTAGE KNOCKOUT LOCATIONS FOR 3/4" OR 1-1/4" CONDUIT. CONDUIT MUST BE ATTACHED DIRECTLY TO THE HEATER CONTROL BOX. WIRE AND CONDUIT SIZE MUST COMPLY WITH N.E.C.
3. BLOWER CIRCUIT POWER SUPPLY LEADS & LOW VOLTAGE HEATER CONTROL LEADS FROM AIR HANDLER CONTROL BOX ARE CONNECTED TO THE HEATER VIA A POLARIZED PLUG



INSTALLER'S GUIDE

AIR HANDLER	HEATER MODEL NUMBER BAYHTR----								
	1405 4.80kw	1405A 4.80kw	1408 7.68kw	1408A 7.68kw	3410 1410 9.60kw	1410A 9.60kw	3415 15.36kw	1415A 15.36kw	1419B 19.20kw
NUMBER OF HEATER RACKS	1	1	2	2	2	2	2	2	4
NUMBER OF CIRCUITS	1	1	1	1	1	1	1	2	2
TVF018A	L / L	--	L / M	--	L / M	--	--	--	--
TVF024A	L / L	--	L / H	--	L / H	--	--	--	--
TVF025A	L / L	L / L	L / M	L / M	L / M	L / M	L / H	L / H	--
TVF030A	L / L	L / L	L / M	L / M	L / M	L / M	M / M	M / M	--
TVF036A	L / L	L / L	L / M	L / M	L / M	L / M	M / M	M / M	H / H
TWG018A	L / L	L / L	L / M	L / M	L / H	L / H	--	--	--
TWG025A	L / L	L / L	L / M	L / M	L / M	L / M	L / H	L / H	--
TWG030A	L / L	L / L	L / L	L / L	L / L	L / L	L / M	L / M	--
TWG036/037A	L / L	L / L	L / L	L / L	L / L	L / L	L / M	L / M	--
TWG042A	L / L	L / L	L / L	L / L	L / L	L / L	L / M	L / H	--
TWG048A	L / L	L / L	L / L	L / L	L / L	L / L	L / L	L / H	L / M
TWG060A	L / L	L / L	L / L	L / L	L / L	L / L	L / L	L / L	L / M
TWE018C						--	--	--	--
TWE024C								--	--
TWE030C									--
TWE036C									
TWEO42C									
TWE048C									
TWE060C									
TWE018P						--	--	--	--
TWE024P								--	--
TWE030P									--
TWE036P									
TWEO42P									
TWE048P									
TWE060P									
TWE063P									
TWE031E	700/1000	700/1000	700/1000	700/1000	700/1000	700/1000	700/1125	700/1125	1000/1350
TWE037E	600/700	600/700	600/900	600/900	600/900	600/900	1000/1300	1000/1300	1000/1300
TWE040E	600/1100	600/1100	600/1100	600/1100	600/1100	600/1100	1100/1400	1100/1400	1100/1400
TWE062E	900/1500	900/1500	900/1500	900/1500	900/1500	900/1500	1200/1800	1200/1800	1200/1800
TWE065E	900/1500	900/1500	900/1500	900/1500	900/1500	900/1500	1200/1800	1200/1800	1200/1800

MAY NOT BE APPROVED IN ALL CONFIGURATIONS - SEE AIR HANDLER NAMEPLATE.

The Trane Company
 Unitary Products Group
 6200 Troup Highway
 Tyler, TX 75707-9010