

T-4000-610 Conversion Kit
Single Temperature T-400 Series to T-4000 Series Thermostats
and H-100 Series to H-4100 Humidistats using
Existing Bakelite® Back

This kit is used to convert an existing T-400 series single temperature thermostat to a T-4000 series vertical mounting thermostat or an existing H-100 series humidistat to an H-4100 humidistat. It can be used for room instruments with a **flush or surface mounted pipehead**; also for room instruments with wire or case guards.

The following additional items must be ordered separately to complete the conversion:

- a. Proper T-4000 Series Vertical Mounting Thermostat (or H-4100 Humidistat)
- b. Cover to match room instrument
- c. Guard Adapter Kit if the converted installation is to make use of existing wire or cast guard (T-4000-604)

**Table I: Single Function Instruments
(Temp. or Humidity)**

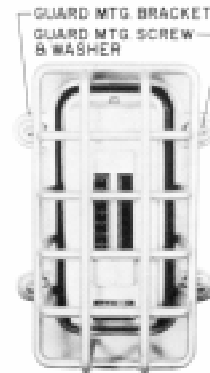
Original Controller		Recommended Conversion (Using This Kit)
Model	Pipehead Style (See Back Page)	
T-400	I	T-4002
T-401		
T-402	I	T-4002 & Two-Position Air Switching Device
T-403	I	T-4002
T-408	I	No Direct Replacement *
T-425	I	T-4002 & Two-Position Air Switching Device
T-441	II a	T-4004
	II b	No Direct Replacement *
T-1210	I	T-5002
H-102	I	H-4100
H-103		
H-104	I	H-4100 & Two-Position Air Switching Device
H-105	I	H-4100
H-107		
H-1210	I	H-5100

* Contact Branch Office or Field Engineering for custom conversion possibility.

The following procedures are written in description of thermostat conversions; however, the same procedures apply to humidistat conversions.

STEP 1: Remove and discard the four guard mounting screws and washers. NOTE: The guard

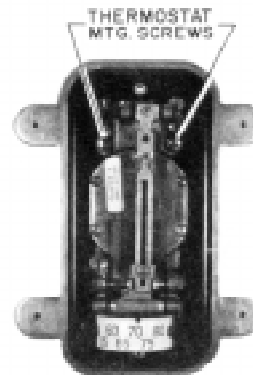
mounting bracket is not removed if a wire or cast guard is used on the converted installation.



STEP 2: Remove and discard the two cover mounting screws and cover.



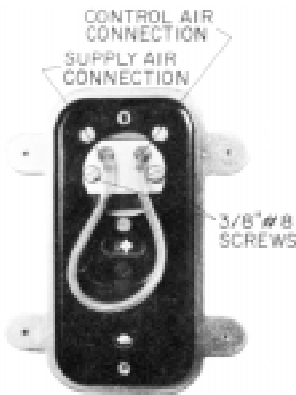
STEP 3: Remove and discard the thermostat mounting screws, thermostat and gasket.



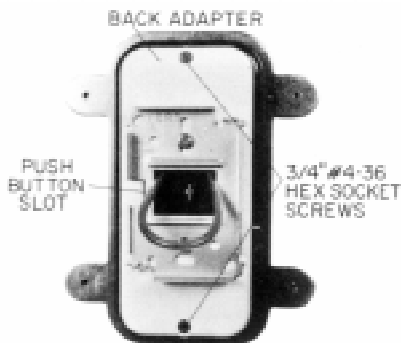
STEP 4: Before beginning to assemble the conversion kit to the existing installation; make sure that the gasket surface is clean and free of foreign material. Remove the pin valve from the pipehead.



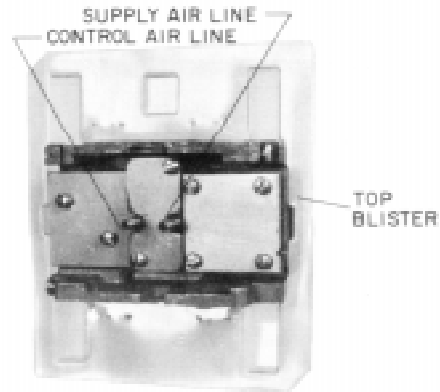
STEP 5: Assemble the new gasket and pipehead adapter (refer to the chart on the back for gasket orientation) to the existing installation with the 3/8 in. #8 screws furnished. Note: Gasket must be aligned with two holes on top and single hole on the bottom left side, when facing the installation as shown in the chart.



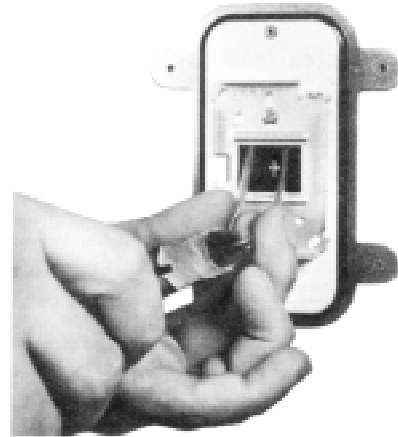
STEP 6: Assemble the back adapter to the existing installation with the two 3/4 in. #4-36 hex socket screws furnished.



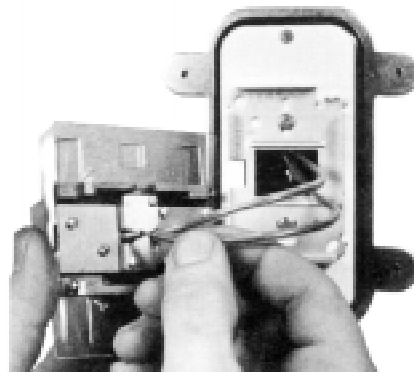
STEP 7: Determine the appropriate thermostat air line connections.



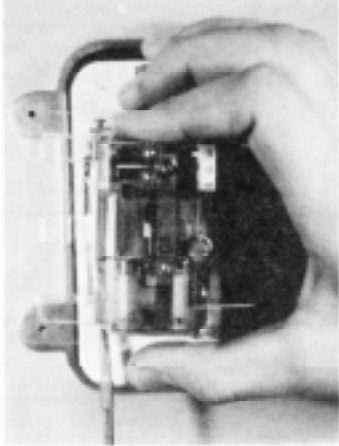
STEP 8: Cut the air line loop in half.



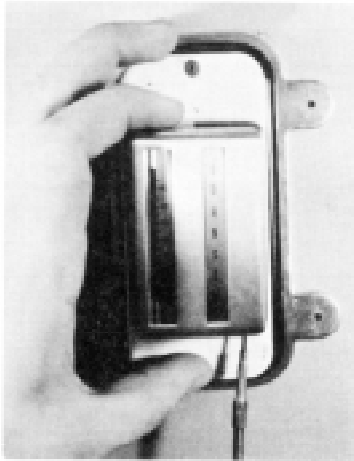
STEP 9: Attach air lines to thermostat barbed terminals; slide the tubing over the terminals at least 1/8 in. beyond the barb.



STEP 10: Secure the thermostat to the mounting bracket with the socket head mounting screws on the thermostat body. Remove and discard the top blister after the thermostat is secured to the mounting bracket.



STEP 11: Secure the thermostat cover with the socket head mounting screws on the mounting bracket. For thermostat with guard, go on to next step.



STEP 12: Place the guard adapter over the guard mounting bracket as shown. NOTE: If piping is exposed, cutouts must be made in the guard adapter.

Secure the guard and guard adapter as shown with the four #6 screws and washers furnished with the guard kit. NOTE: On installations using the cast guard, the four washers are not used.

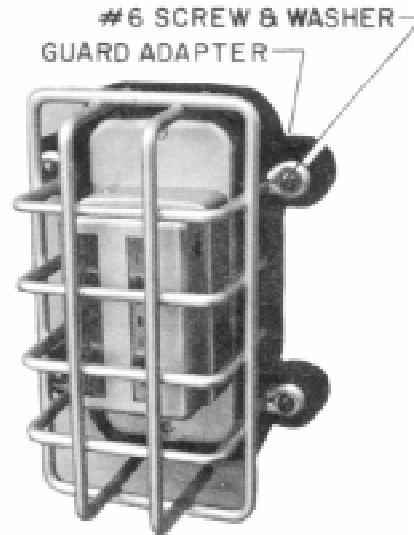
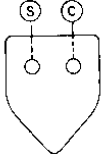
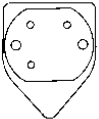
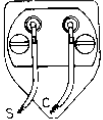
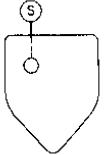

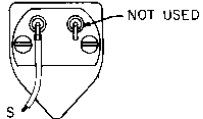
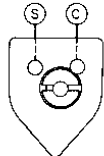


Chart of Pipehead, Gasket and Adapter Arrangements

STYLE	BASIC PIPEHEAD *	DESCRIPTION	GASKET REPLACEMENT	PIPEHEAD ADAPTER
I		SINGLE SIZE PIPEHEAD 2-PIPE		
IIa		SINGLE SIZE PIPEHEAD 1-PIPE (NON-RELAY)		
IIb		SINGLE SIZE PIPEHEAD 2-PIPE WITH INTEGRAL RESTRICTOR FOR NON-RELAY CONTROLLERS	CONTACT BRANCH OFFICE OR FIELD ENGINEERING FOR CUSTOMIZED CONVERSION POSSIBILITIES	

* S = MAIN SUPPLY AIR LINES
C, C₁, C₂ = CONTROL (BRANCH) AIR LINES

P = PILOT AIR LINE
SW = SWITCH AIR LINE

**JOHNSON
CONTROLS**

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