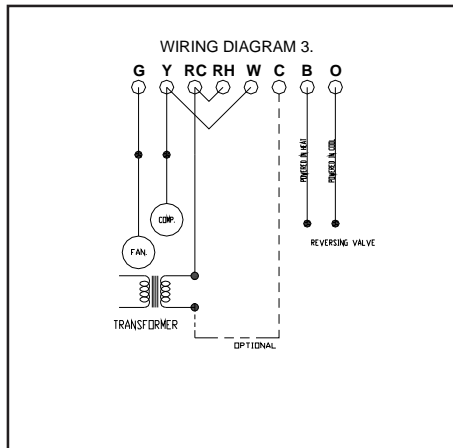


TE8001 Installation & Operation Manual

Diagram 3: Single Stage Heat Pump

- 1: Connect the transformer hot wire to the RC terminal.
- 2: Connect jumper between RC and RH terminals
- 3: Connect compressor to the Y terminal.
- 4: Connect jumper wire between the Y and W terminals.
- 5: Connect Fan to G terminal
- 6: Connect reversing valve to O terminals if reversing valve is activated in the cool mode (most common), or to the B terminal if reversing valve is to be activated in the heating model.
- 7: Connect transformer common wire to C terminal (optional) if you wish thermostat to be powered from the transformer. Without this connection, thermostat will be powered from AAA batteries.



Installing Thermostat onto base:

Once the wires have been connected to the base, and the options selected, it is time to install thermostat onto the base. Close the battery compartment door. Do not install batteries yet. Align the thermostat with base, and push together. Open battery door and install batteries.

Operation:

- 1: Select Heat or Cool with Heat/Off/Cool Switch:
- 2: The display will indicate current room temperature, and display a flame if the heat mode has been selected or a snow flake if the cool mode has been selected.
- 3: Press up or down arrow to set desired temperature. "SET TEMP" will appear in the display to indicate you are setting the temperature.
- 4: Whenever the thermostat is activating the heating or cooling system, the word "ON" will appear in the display.
- 5: Whenever you change modes (from heat to cool or cool to heat), the thermostat will remember the last temperature set in that mode. The heat setting and cooling setting do not have to be the same.

The TE8001 is an electronic non-programmable thermostat. It is designed to work with most standard single stage heating and/or single stage cooling systems. These include single or dual transformer 24 VAC gas, oil or electric heating, and 24 VAC cooling systems. This thermostat is also compatible with single stage heat pumps.

The TE8001 is designed to operate entirely on two AAA alkaline batteries, or 24 volts from the heating/cooling system's transformer, using the batteries only for memory back up.

Installation:

Important: Read the entire instructions before beginning installation. Failure to follow these instructions could result in personal injury and/or property damage.

Location:

The thermostat should be mounted 4 to 5 feet above the floor in a location where it will be exposed to average room temperature. The thermostat must not be mounted where it will be effected by a source of heat such as lamps, sunlight, fireplaces, pipes, registers, etc..., or sources of cold such as windows, doors, drafts, etc... The thermostat must not be mounted on an exterior wall, behind a door, or in an alcove. Such locations will inhibit the thermostat's ability to accurately control room temperature

Removing existing thermostat:

Caution:

Power must be disconnected before removing existing wiring connections from thermostat to prevent possible electrical shock and/or equipment damage. All wiring must conform to local and national electrical codes and regulations.

- 1: Remove existing wiring by writing down each of the wire's colors and the designation of the terminals that they are connected to. If more than one wire has the same color, tag the wire with some form of identification.
- 2: Remove wires from thermostat.

Mounting:

This thermostat may be mounted directly to the wall, by using the mounting screws supplied. Remove base from front section, by opening battery door, remove batteries. Pull case apart. To mount directly to a wall use holes located in top and bottom of case. Pull wires through hole in center of case.

⚠ WARNING *Do not depend upon the thermostat as the sole means of disconnecting power when installing or servicing the product it is controlling. Always disconnect power at the main circuit breaker as described above. Failure to do so may result in fatal electric shock.*

Wiring:

The chart is a cross reference for terminal functionality. No application will require connections to all terminals. If connecting to a single transformer system, only the RC or RH terminals will be used.

The C terminal is only used if the thermostat is powered from the system transformer.

The B & O terminals will only be used for a single stage heat pump application.

Terminal	Description
G	Fan
Y	Compressor
RC	Cool Transformer
RH	Heat Transformer
W	Heat
C	Transformer Common
B	Heat Reversing Valve
O	Cool Reversing Valve

Option Jumpers:

The option jumpers are located to the right edge of the circuit board, directly above the white relay. These jumpers are set at the time of installation. The following table lists the 4 options. The factory settings are in bold. The options include:

Option	Jumper On	Jumper Off
C	Celsius	Fahrenheit
1F	Closer Differential	Wider Differential
HBY	No Heat Delay	5Min. Delay
CBY	No Cool Delay	5Min. Delay

Fan Option:

An additional option jumper (J1) is located between the two switches, near the bottom edge of the circuit board.. This selects fan operation for single transformer systems: The factory setting has the jumper on the middle and lower two pins (TH). This activates the fan whenever the thermostat turns the cooling on. For an electric heat system, place the jumper on the middle and upper pins (H/C), which will allow the fan to turn on whenever the thermostats turns on the cooling or the heating.

Wiring Diagrams:

The following wiring diagrams illustrate how to connect the system wires to the TE1001 thermostat depending on application:

Diagram 1: Four Wire Heat/Cool system.

- 1: Connect the transformer hot wire to the RH terminal.
- 2: Connect jumper between the RH and RC terminals.
- 3: Connect Heat to the W terminal.
- 4: Connect compressor to Y terminal.
- 5: Connect Fan to G terminal
- 6: Connect transformer common to C terminal (optional) if you wish thermostat to be powered from the transformer. Without this connection, thermostat will be powered from AAA batteries.

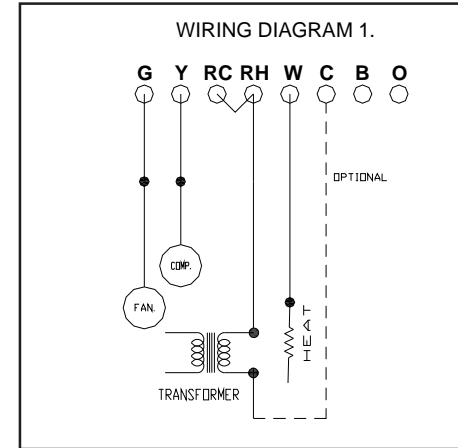
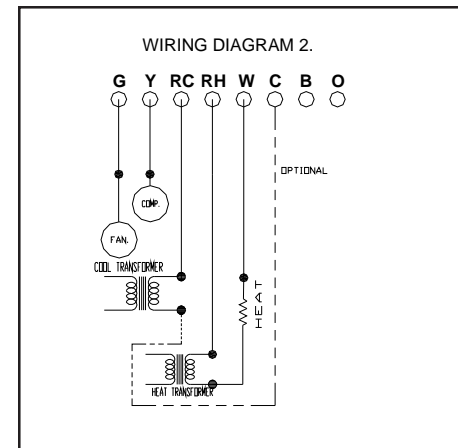


Diagram 2: Five Wire Heat/Cool system.

- 1: Connect the Cooling transformer hot wire to the RC terminal.
- 2: Connect the Heating Transformer hot wire to the RH terminal.
- 3: Connect Heat to the W terminal.
- 4: Connect compressor to Y terminal.
- 5: Connect Fan to G terminal
- 6: Connect cooling transformer common wire to C terminal (optional) if you wish thermostat to be powered from the transformer. Without this connection, thermostat will be powered from AAA batteries.



Low Battery Indicator:

Whenever the batteries start to get low, a low battery indicator '■' will appear in the display. Change batteries as soon as possible once the indicator appears.

LCD Pattern:**All Segments View****LCD Pattern Description:**

- a. 2 Large digits for room temperature readout.
- b. 4 small bars for 0.2/0.4/0.6/0.8 degree indication.
- c. "SET TEMP" indicator for control temperature setting indication.
- d. "ON" indicator for output control status indication.
- e. "■" symbol for low battery indicate.
- f. "🔥" symbol for Heat mode.
- g. "❄️" symbol for Cool mode.

WARRANTY

Products manufactured by TPI Corporation are warranted to the original consumer to be free from defects in material and workmanship for twelve (12) months from the original date of purchase. The TPI warranty does not cover products modified outside our factory, damage or failure caused by acts of God, abuse, misuse, connected to or placed on other than rated voltage, abnormal usage, faulty installation, failure to follow suggested maintenance procedures enclosed with the product, improper maintenance or any repairs other than those provided by an authorized TPI Corporation service center.

There are no obligations or liabilities on the part of the corporation for consequential damages arising out of, or in connection with, the use or performance of the product, or other indirect damages with respect to loss of property, revenues, or profit, or costs of removal, installation or reinstallation.

All implied warranties with respect to TPI products, including implied warranties for merchantability and implied warranties for fitness, are limited in duration to twelve (12) months from original date of purchase, except those products or parts of products which are warranted for longer periods. On such products or parts of products all implied warranties for merchantability and fitness are limited to the duration of the extended warranty period thereon.

Some states do not allow the exclusion or limitation of incidental or consequential damages and some states do not allow limitations on how long an implied warranty lasts. The above exclusions or limitations may not apply to you.

During the warranty period, TPI Corporation will, at its sole option, repair or replace any defective parts or products returned, freight prepaid, to the TPI Corporation factory or such other location as TPI Corporation may designate. Returned products must be packaged carefully and TPI Corporation shall not be responsible for damage in transit. When returning parts, the owner must provide the model number of the product and nature of difficulty being experienced. This warranty does not obligate TPI Corporation to bear the cost of labor in replacing any assembly, unit or component part thereof, nor does the company assume any liability for secondary charges, expenses for installing or removal, freight or damages. There will be charges rendered for product repairs made after out warranty period has expired. Proof of purchase, including date, must accompany request for in-warranty service. In any event, TPI Corporation's maximum liability shall not in any case exceed the list price for the product claimed to be defective. This warranty gives to you specific legal rights and you may have other rights, which may vary, from state to state. For the name of you nearest authorized TPI Corporation service center, please write to TPI Corporation, P.O. Box 4973, Johnson City, Tennessee, 37602.

In addition to the Limited Warranty stated above covering general products, TPI Corporation extends this warranty on the following listed products, which are warranted to the original consumer from the original date of purchase for the total time periods indicated herein below:

Heating Products

- | | |
|-------------------------------|----------|
| 1. Elements in Baseboards | 10 years |
| 2. All Other Heating Products | 1 year |
| 3. Thermostats and Controls | 2 years |

Manual For TE8001 Thermostat

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