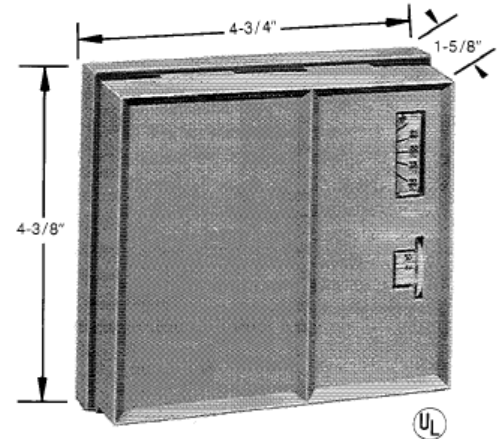
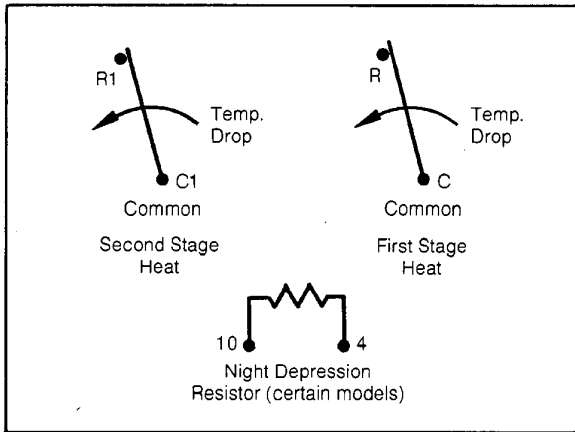


## Electric Two-Stage Room Thermostats General Instructions



### APPLICATION

For on-off control applications requiring sequenced switching of two devices, heating only.

Two bimetal operated snap action SPST switches. Coded screw terminals. Switch differential adjustable 1.5 to 2.5°F. Differential between stages adjustable 2 to 10°F. Factory set at 2 to 3°F. Units have plastic covers as standard. Mounts on flush 2-gang switch box, 4" x 4" surface box with 2-gang plaster ring.

**Dimensions:** 4-3/8" H x 4-3/4" W x 1-5/8" D.

### ACCESSORIES

- |         |   |
|---------|---|
| AT-101  | Lock cover kit                                      |
| AT-104  | Dial stop pins (note: pins included with each unit) |
| AT-136  | Title plates (day, night, heat, cool)               |
| AT-607  | Selector switch sub-base DP4T                       |
| AT-608  | Selector switch sub-base one DP4T, one DPDT         |
| AT-1155 | Plastic guard                                       |
| AT-1163 | Wire guard  |
| AT-1165 | Plastic guard                                       |
| TOOL-11 | Calibration wrench                                  |
| TOOL-13 | Contact burnishing tool                             |

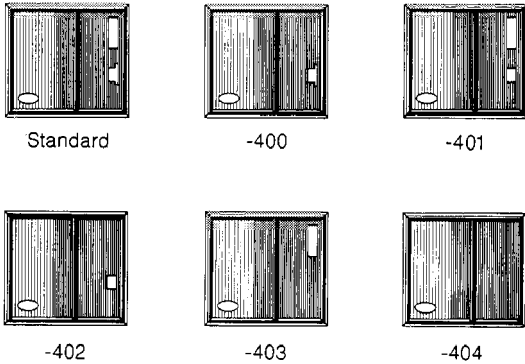
**Table-1 Specifications.**

Part Number	Control <sup>a</sup> Dial Range	Full Load Amps		Non-Inductive Amps			Pilot Duty (VA)
		24/120 Vac	240 Vac	120 Vac	240 Vac	277 Vac	14/120/240 Vac
TA-1151	55 to 85°F (13 to 29°C)	7.2	3.6	7.5	7.5	7.0	68 @ 24 Vac
TA-1152	45 to 75°F (7 to 23°C)						340 @ 120/240 Vac

<sup>a</sup> Units marked in both °F and °C; dial stop pins included to limit control range.

## Options

Add "dash-number" (-XXX) suffix to base part number for desired option.



-601 10°F Night Depression 120V Standard Cover\*

-602 10°F Night Depression 24V Standard Cover\*

-603 10°F Night Depression 240V Standard Cover\*

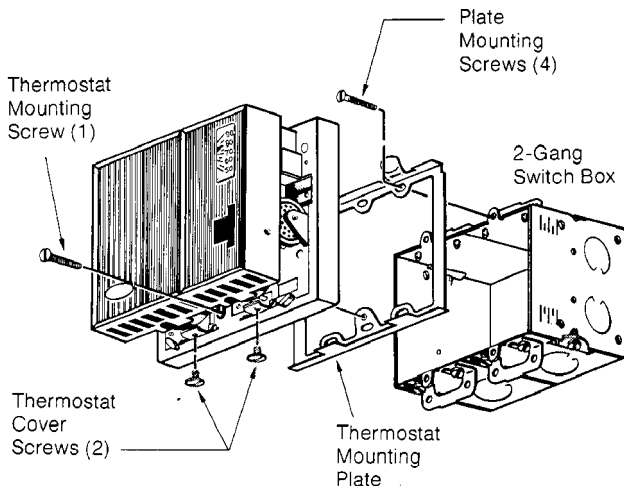
\*Normally, night depression is controlled by a centrally located time clock such as AE-174 or AE-178, or by selector switch sub-bases (AT-602 or AT-603).

## INSTALLATION

### Requirements

Locate thermostat where it will be exposed to unrestricted circulation of air which represents the average temperature of the controlled space. Do not locate the thermostat near sources of heat or cold, such as lamps, motors, sunlight or concealed ducts or pipes. The thermostat is designed for service in any normally encountered human environment.

### Procedure



1. Pull all wires. *Use copper wire only.*
2. Fasten mounting plate to box or wall.
3. Make electrical connections to thermostat screw type terminals. Make all connections in accordance with the job wiring diagram and in compliance with national and local electrical codes. Class I wiring is required unless all circuits to contacts are powered from a Class II source.

4. Hook thermostat on top of mounting plate and swing down into place.
5. Remove thermostat cover, attach thermostat to mounting plate with mounting screw, and attach thermostat cover.

## CHECKOUT

After installing a thermostat, make an initial check of the switching action. Verify the switch action by listening to and watching the switch contacts, using a voltmeter between the proper sides of the switch, or observing the controlled device.

1. Slowly turn the setpoint dial to a temperature above ambient. First the "R" contact should make and then "R1" contact should make.
2. Slowly turn the setpoint dial setting down gradually. The "R1" contact should break and "R" contact should break.

## CALIBRATION

All thermostats are calibrated at the factory and normally will not require any such attention. However, if recalibration is necessary for any reason, proceed as follows:

1. Disconnect power to thermostat.
2. Set the adjusting dial to correspond to actual stable room temperature.
3. Remove thermostat cover, remove screw that secures right-hand of insulator, fold back insulator, and remove contact covers, see Figure-1.  
  
Do not breathe on the thermostat or handle excessively as this will affect the accuracy of the final calibration.
4. If the right contact blade is not made to "R" contact, use a 3/16" open end wrench to turn dial calibration screw CW (looking at the head of the screw) until element makes to "R" contact.

---

*Note:* Each complete revolution of screw changes calibration approximately 6°F.

---

5. Turn dial calibration screw CCW until blade just breaks "R" contact.
6. Temporarily replace the cover and set the dial to a higher temperature setting. The difference between the two settings should be equal to the amount of desired differential between stages (2 to 10°F).
7. Remove the cover. If the left contact blade is not made to "R1", turn the between stage differential screw CW until element makes "R1" contact.
8. Turn the between stage differential screw CCW until the blade just breaks "R1" contact. Unit is now calibrated.
9. Replace contact covers, insulator and thermostat cover.
10. Turn on control power.
11. Recheck calibration about 30 minutes later to be sure heat from handling did not result in an erroneous setting.

## MAINTENANCE

Open areas at bottom and around base of thermostat should be kept clean and free from obstructions to allow proper flow of air. If switch contacts need cleaning, this may be done with a TOOL-13 contact burnishing tool.

## REPAIR

Field repair of the thermostat is not recommended. If the system is not operating correctly and the reason is traced to the thermostat, it should be replaced.

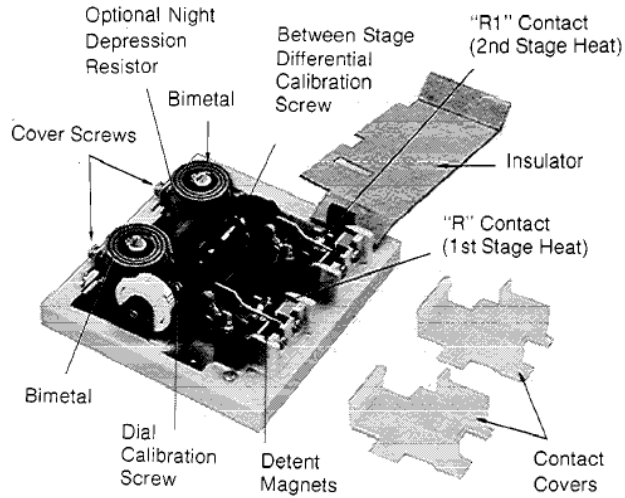


Figure-1 Part Identification.

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