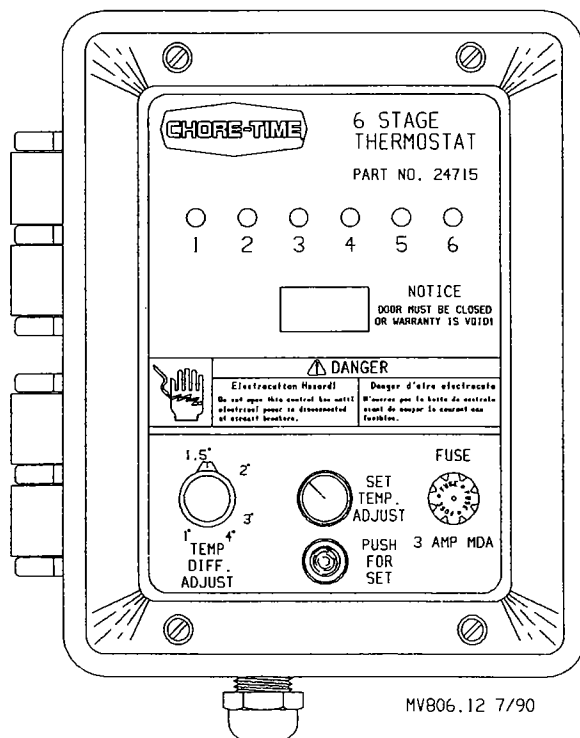




PART NO. 24715
SIX STAGE THERMOSTAT
Installation and Operator's Manual



MV806.12 7/90

WARRANTY INFORMATION

Chore-Time Equipment warrants each new product manufactured by it to be free from defects in material or workmanship for one year from the date of initial installation by the original purchaser. If such a defect is found by Chore-Time to exist within the one year period, Chore-Time will, at its option, (a) repair or replace such product free of charge, F.O.B. the factory of manufacture, or (b) refund to the original purchaser the original purchase price, in lieu of such repair or replacement.

Additional extended warranties are herewith provided to the original purchaser as follows:

1. RLX Fans, less motors, for three years from date of installation.
- *2. Poultry feeder pans that become unusable within five years from date of installation. Warranty prorated after three years usage.
3. MEAL-TIME® Hog Feeder pans that become unusable within five years of installation.
4. Rotating centerless augers, excluding applications involving High Moisture Corn (exceeding 18%), for ten years from date of installation. Note: MULTIFLO® and applications involving High Moisture Corn are subject to a one year warranty.
5. Chore-Time manufactured roll-formed steel auger tubes for ten years from date of installation.
- *6. Laying cages that become unusable within ten years. Warranty prorated after three years usage.
- *7. ULTRAFLO® Auger and ULTRAFLO® Feed Trough (except ULTRAFLO® Trough Liners) are warranted for a period of five (5) years from date of original purchase against repeated breakage of the auger or wear-through of the feed trough.

Conditions and limitations:

1. The product must be installed and operated in accordance with instructions published by Chore-Time or warranty will be void.
2. Warranty is void if all components of a system are not supplied by Chore-Time.
3. This product must be purchased from and installed by an authorized Chore-Time dealer or certified representative thereof, or the warranty will be void.
4. Malfunctions or failure resulting from misuse, abuse, negligence, alteration, accident, or lack of proper maintenance shall not be considered defects under this warranty.
5. This warranty applies only to systems for the care of poultry and livestock. Other applications in industry or commerce are not covered by this warranty.

Chore-Time shall not be liable for any consequential or special damage which any purchaser may suffer or claim to have suffered as a result of any defect in the product. "Consequential" or "special damages" as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs and operational inefficiencies.

THIS WARRANTY CONSTITUTES CHORE-TIME'S ENTIRE AND SOLE WARRANTY AND CHORE-TIME EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE SOLD AND DESCRIPTION OR QUALITY OF THE PRODUCT FURNISHED HEREUNDER.

Any exceptions to this warranty must be authorized in writing by an officer of the company. Chore-Time reserves the right to change models and specifications at any time without notice or obligation to improve previous models.

*See separate "WARRANTY ADDITION" as to these products

CHORE-TIME EQUIPMENT, A Division of CTB, Inc.
P.O. Box 2000, Milford, Indiana 46542-2000 U.S.A.

SAFETY INFORMATION

CHORE-TIME is concerned about the safety of it's customers. Caution, Warning and Danger Decals have been placed on the equipment to warn of potentially dangerous situations. Care should be taken to keep this information intact and easy to read at all times. Replace missing or damaged safety signs.

Safety-Alert Symbol

This is a safety-alert symbol. When you see this symbol on your equipment, be alert to the potential for personal injury.



Signal Words

Signal words are used in conjunction with the safety-alert symbol to identify the severity of the warning.

DANGER..... identifies immediate hazards which WILL result in severe personal injury or death.

WARNING..... identifies hazards or unsafe practices which COULD result in severe personal injury or death.

CAUTION identifies hazards or unsafe practices which COULD result in minor personal injury or product or property damage.



DANGER



WARNING



CAUTION

DANGER--ELECTRICAL HAZARD

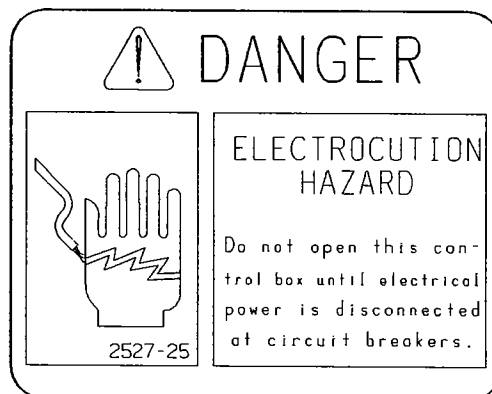
Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

Ground all electrical equipment for safety.

All electrical wiring must be done by a qualified electrician in accordance with local and national electric codes.

Ground all non-current carrying metal parts to guard against electrical shock.

With the exception of motor overload protection, electrical disconnects and over current protection are not supplied with the equipment.



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THANK-YOU

The employees of CHORE-TIME would like to thank you for your recent purchase of the Six Stage Thermostat. We are certain the equipment you have purchased, when properly installed, will provide years of trouble free service. If a problem should arise, your CHORE-TIME distributor can supply the necessary information to get your system running.

||||| This bar denotes changes made to this instruction since the last printing. It will appear in the left or right hand border, near the revised information.

TOOLS NEEDED FOR INSTALLATION

Side Cutters
Wire Cutters
Wire Strippers
Electric Drill and Bits
Tape Measure
Regular Screwdriver

The CHORE-TIME Six Stage Thermostat will allow a variety of heating/cooling stage combinations for environmental temperature control.

The Six Stage Thermostat **SHOULD NOT** be connected directly to any minimum ventilation controls.

INSTALLATION

TEMPERATURE TRANSMITTER AND SENSOR:

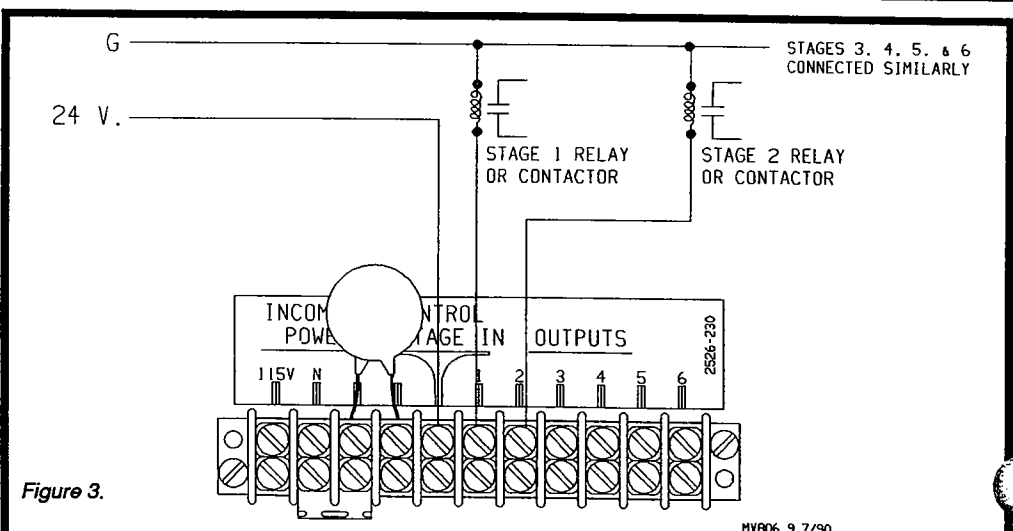
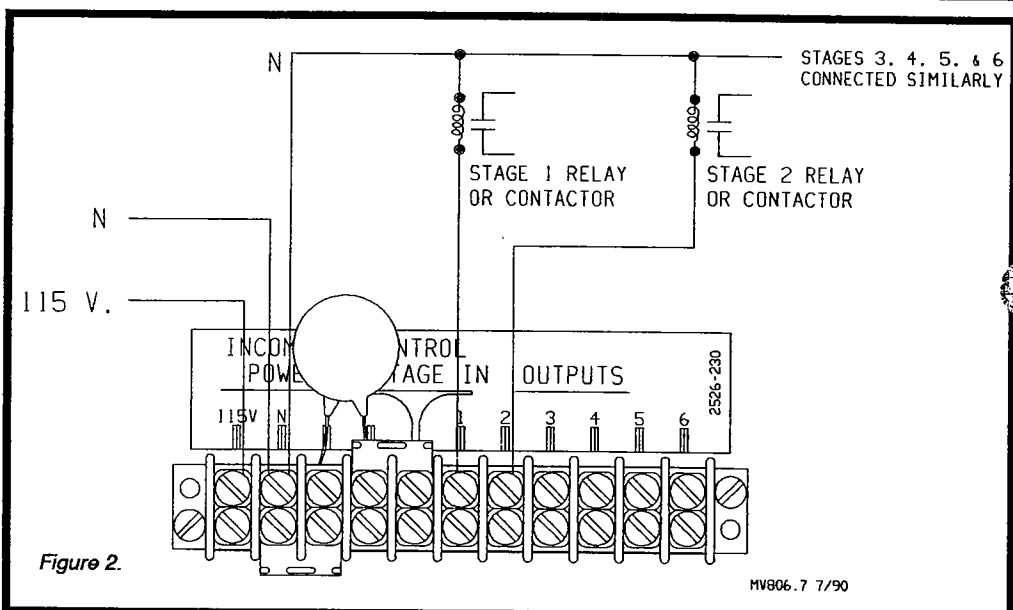
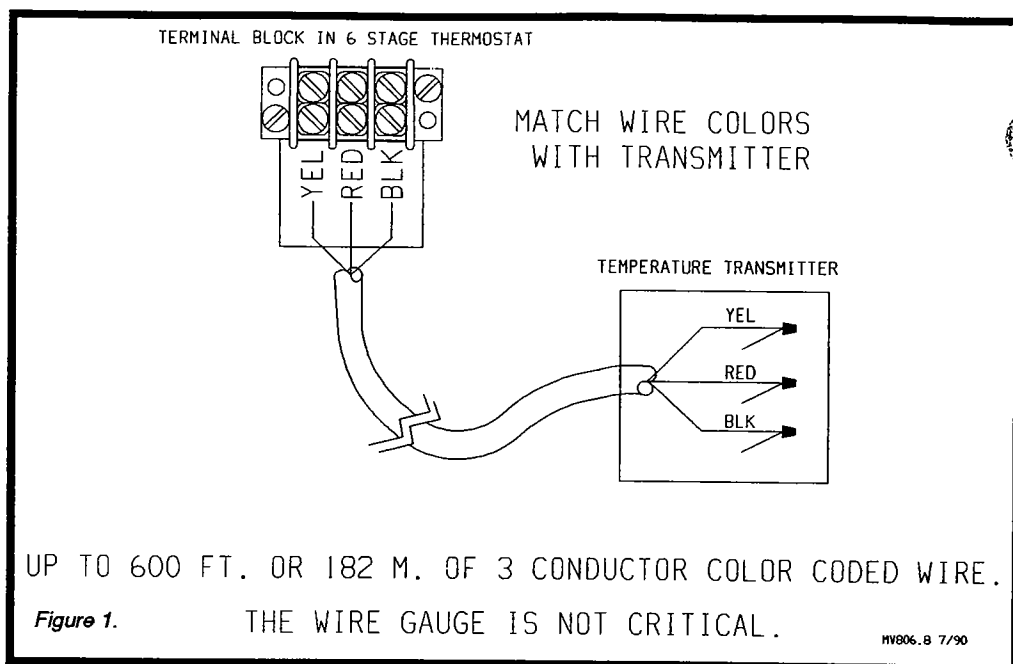
The Temperature Sensor and Transmitter may be located up to 600' (183 m) from the Six Stage Control, allowing the control to be mounted in an office or hallway, if needed. A color coded, three conductor wire is needed to connect the Temperature Sensor and Transmitter to the control. Be sure to match wire colors between the Transmitter and the control. The sensor wire gauge is not critical because the Transmitter operates on a low voltage circuit. The sensor wire must not run parallel to any other electrical wires. **ONLY** the sensor wire should enter the control through the black watertight connector at the bottom of the box. See Figure 1.

CONTROL CIRCUIT VOLTAGE:

The Six Stage Thermostat Control operates on 115V, 60 hz input power. The six output circuits that the thermostat will may be wired for either 115 VAC or 24 VAC and should drive coils of relays or contactors only (3 amps max. either case).

See Figure 2 for 115 V wiring.

For 24 V control circuits, the metal jumper shown in Figure 3 must be removed and power from an external 24 V source must be connected at the terminal labeled "Control Voltage In" on the terminal strip inside the control.



NOTE: IF THE SIX STAGE THERMOSTAT IS TO BE OPERATED ON 24 VOLT, REMOVE THE JUMPER LOCATED ON THE "CONTROL VOLTAGE IN" TERMINAL.

HEAT/COOL STAGE SETTINGS

The Six Stage Thermostat can be used for six stages of cooling, one heat stage, and five cooling stages, or two heat and four cooling stages, depending on the switch settings on the circuit board. See Figure 4 for switch locations and description.

The top group of small toggle switches will be referred to as "Switch Group A". The lower group of small toggle switches will be referred to as "Switch Group B". The position of these switches determine the number of heating/cooling stages that the control will use. The four combinations of settings are as follows;

OPTION 1 - 0 HEAT STAGES, 6 COOLING STAGES. See Figure 5.

OPTION 2 - 1 HEAT STAGE, 5 COOLING STAGES. See Figure 6.

OPTION 3 - 2 HEAT STAGES, 4 COOLING STAGES. See Figure 7.

OPTION 4 - 1 HEAT STAGE, 5 COOLING STAGES with temperature difference between stages 2 and 3 twice the setting on the TEMP. DIFF. ADJUST. dial on the cover of the control. See Figure 8.

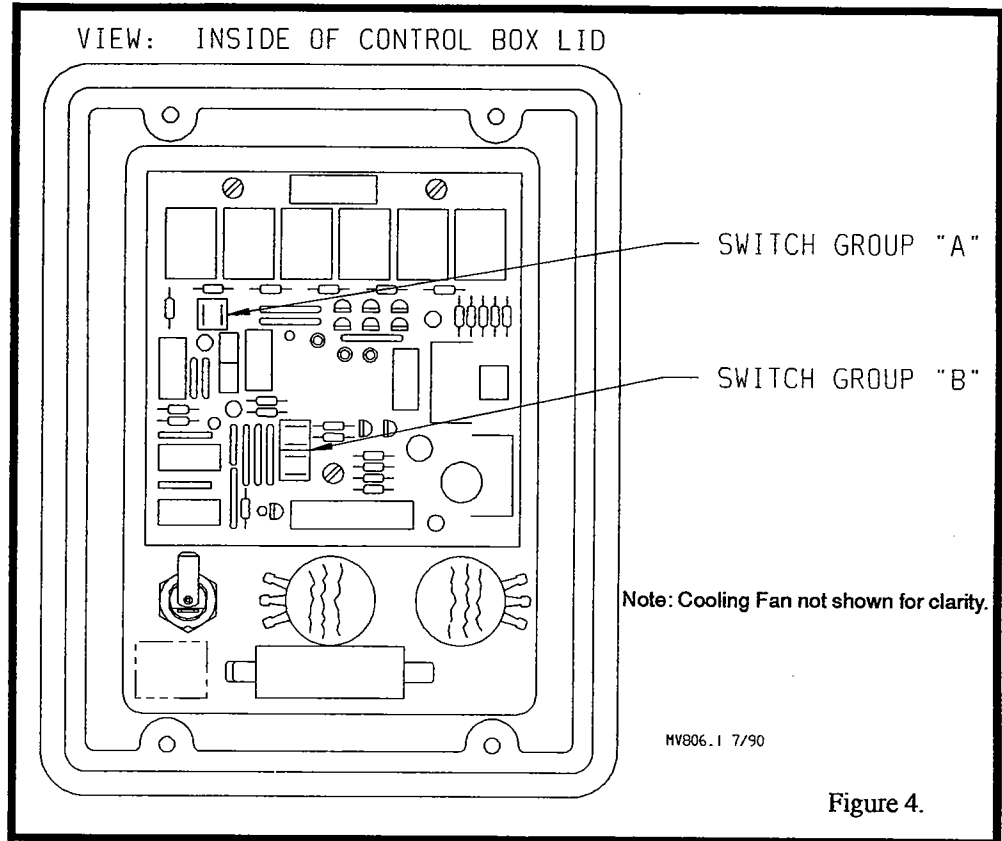
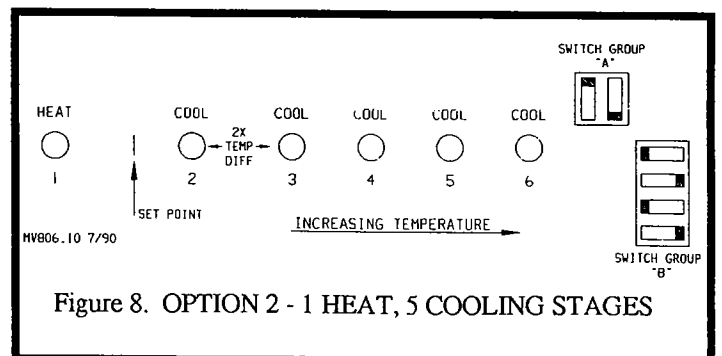
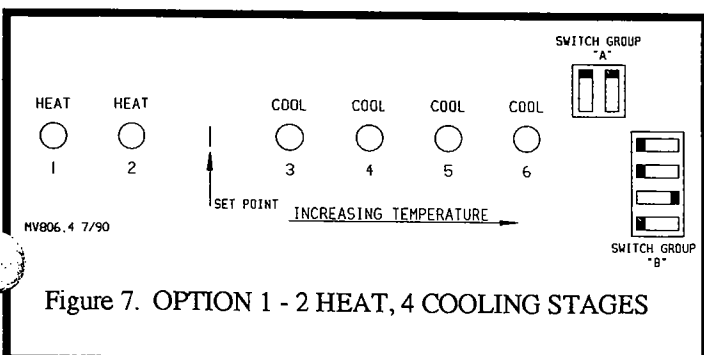
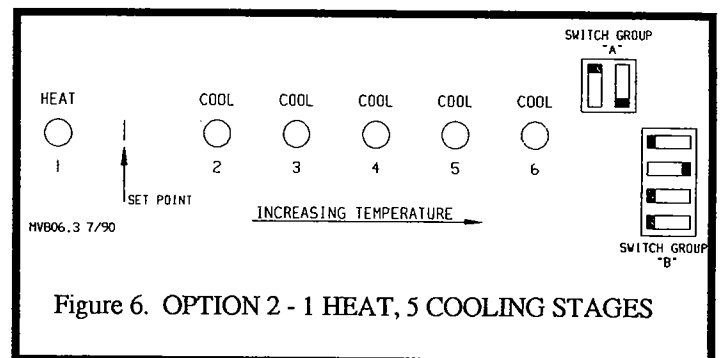
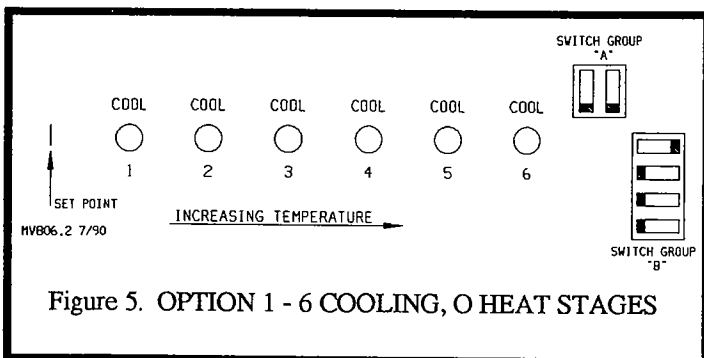


Figure 4.



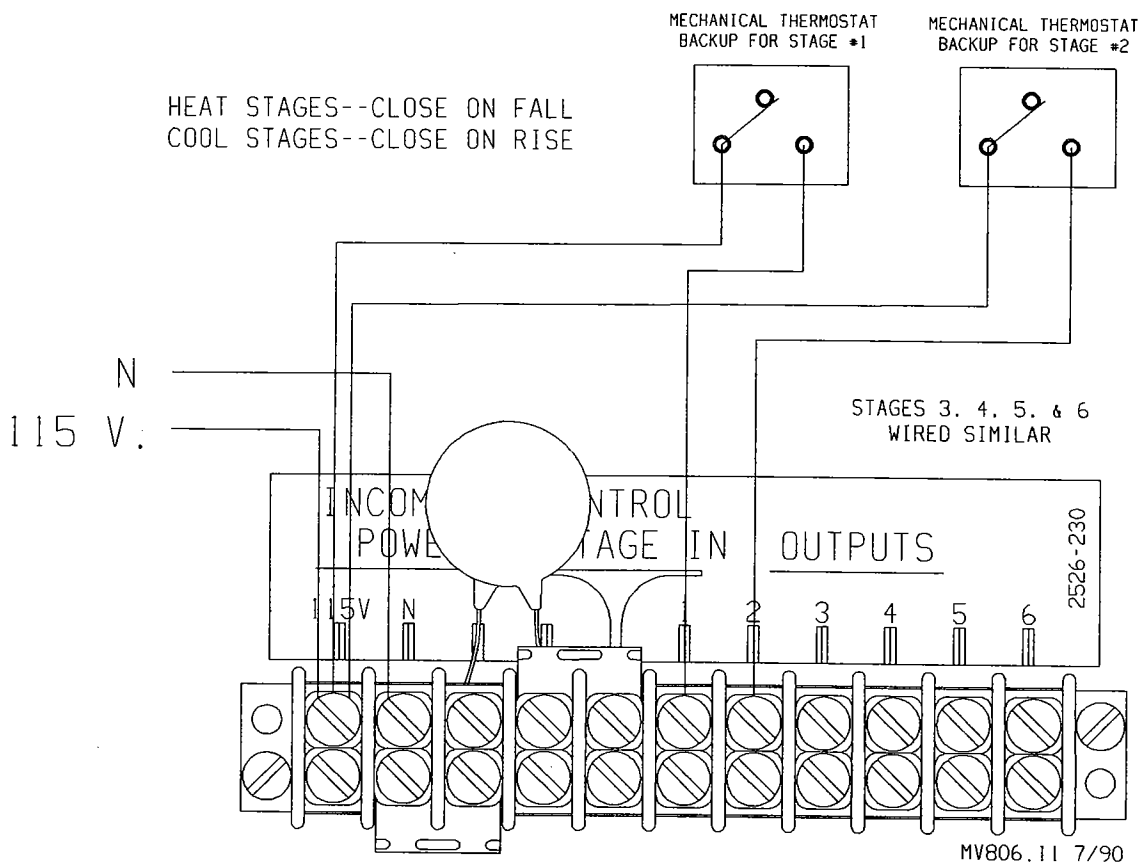
OPERATION

The lights at the top of the control tell what stages are on as determined by the set point and the set temperature. The digital readout on the cover of the control indicates what the temperature sensor is reading. To adjust the set point temperature, simply push and hold the "push for set" button and adjust the "set temp. adjust dial" until the desired temperature is shown on the digital readout.

The temperature difference between stages is adjustable from 1 degree to 4 degrees by setting the "Temp Diff Adjust" knob on the cover of the control. All temperature difference between stages and between the set point and adjacent stages are equal and change together, unless option 4 of the heat/cool stage settings for the circuit board toggle switches are used.

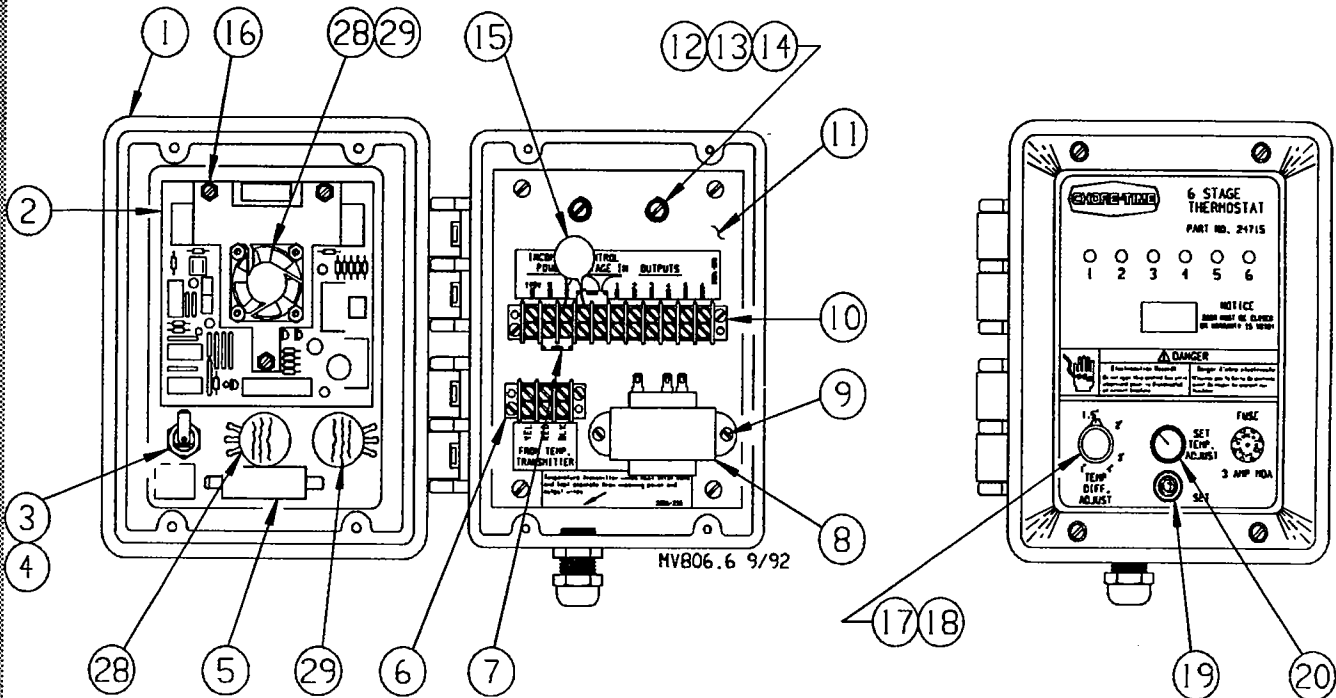
WIRING BACKUP FOR STAGES:

A backup circuit for each stage may be wired in case of a failure in the circuit board relays. Refer to the wiring diagram below.



Six Stage Thermostat and Temperature Transmitter

Part No. 24715



Item	Description	Part No.
1	Box and Cover (Noryl)	24839
2	Circuit Board	24350
3	Slow Blow Fuse	20472
4	Fuse Holder	24431
5	Push-Button Switch	20829
6	Terminal Block	26862
7	Jumper	7349
8	Transformer	26991
9	6-32 x 3/8" Pan Head Screw	4402-4
10	Terminal Block	7347
11	Base Plate	25417
12	#10-32 Ground Screw	4968
13	#10 Lockwasher	305
14	Cup Washer	5775
15	M.O.V.	14063-2
16	#6-32 x 1-1/2" Screw	2940
17	Pointer Knob	7906
18	Rotary Shaft Seal	7348
19	Push Button Boot	14447
20	Knob	7905
21	Terminal Box	25164
22	#10 Self Drilling Screw	28075
23	Switch Box Cover	6776
Not Shown	Gasket (for switch box base/cover)	6777
24	Circuit Board	24351
25	Thermistor Probe Assembly	24845
26	1/2" Liquid Tight Connector	23779
27	Mounting Cover	6956
28	Mini DC Fan	29185
29	Fan Mount Plate	28975

Note:

Items 1 through 20, 28 and 29 may be ordered as an assembly under Part No. 25393.

Items 21 through 27 may be ordered as an assembly under Part No. 24701.

Items 28 & 29 may be ordered as an assembly under Part No. 29184.



Made to work.

Built to last.



CHORE-TIME

**Made to work.
Built to last.**

! THINK SAFETY !

Contact your nearby Chore-Time distributor or representative for additional parts and information.
Chore-Time Equipment, A Division of CTB, Inc.
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