ERRATA

pg.iv At the top of the page the following paragraph should be added: "Caution: If the directions in this manual are not followed, not only could the solar system perform poorly, but a dangerous situation could result. For example, if the instruction for power venting the roof collector were not carried out, the resulting high temperature would seriously degrade the nearby wood and this situation could eventually result in fire. No one should modify the design unless they are qualified to fully understand all the ramifications of any modification."

pg. 25 par. 1 Only end closure strips of 100% EPDM should be used in the MODEL-TEA. (If the aluminum siding distributer cannot get them, contact American National Rubber at 304-453-1311.)

pg. 76 par. 6 The glass comes in two standard widths (34 in. and 46 in.) and two standard heights (76 in. and 96 in.).

pg. 77 par. 2, 3 Collector width in inches = (glass width in inches x no. of panels) + (1 x no. of panels) + 2-1/2 in.

Collector height in inches = (glass height in inches x no. of panels) + (1 x no. of panels) + 2-1/2 in.

Note: This dimension change, changes the examples on pages 78, 93, 94.

pg. 78 par. 1 For example, if the collector was to be glazed with eight panels of 34 in. wide glass side-by-side, the collector width wouldbe: (34 x 8) + (1 x 8) + 2-1/2 = 282 in. or 23' - 6-1/2".

pg. 83 par. 2 Measure in the width of the manifold pan plus 4-1/4 in. from the side lines.

pg. 88 par. 6 Cut CDX plywood the same thickness as the existing roof sheathing to these widths and fill in these gaps, caulking each side edge of the plywood as it goes in.

pg. 102 par. 3 Cut a piece of plywood with a horizontal dimension equal to the glazing width minus 1-1/2 inches, and a vertical dimension equal to the glazing height minus 1-1/2 inches.

pg. 108 new par. before par. 1 Before each pane of glass is placed on the collector, place two 1/4 in. by 1/4 in. by 2 in. neoprene (70-90 Shore-A Durometer) setting blocks at the two quarter-points of each bay. These will keep each pane of glass from sliding down, and are available from local glaziers.

DRAWING R6 BATTENS A = glazing width plus 1" B = glazing height plus 1"
DRAWING R8 GLAZING AND FINISHING Detail 27 "Rigid Fiberglass Insulation behind Manifold Pans"
pg. 114 par. 2 Collector width in inches = (glass width in inches x no. of panels) + (1 x no. of panels) + 2-1/2 in. Note: This dimension changes the examples on page 114, 132, 133.

pg. 116 par. 2 One, the actual depth of the pan in a 2 x 6 stud wall will be 4-1/2 inches, and in a 2 x 4 wall it will be 2-1/2 inches. This dimension allows for the one inch thick insulation that is located between the back of the manifold pans and the interior face of the studs.

pg. 124 new par. before par. 3 Install one inch rigid fiberglass insulation behind the band joists in the manifold bays, before installing duct collars.

pg. 138 par. 2 Fasten vertically through every rib valley at the ends of the sheet, and through every other rib valley at every stud (for 4 in. rib, and through every rib valley for 8 in. rib).

pg. 141 par. 3 Cut a piece of plywood with a horizontal dimension equal to the glazing width minus 1-1/2 inches, and a vertical dimension equal to the glazing height minus 1-1/2 inches.

pg. 141 par. 4 Fasten with #14 x 1-1/2 in. aluminum or 18-8 stainless steel Phillips flat head wood screws through every other rib (for 4 in. rib, and through every rib for 8 in. rib).

pg. 145 par. 1 The clear distance from inside to inside of this blocking must be equal to the collector width minus 3-1/2 in. to allow for glass expansion (2-W7).

pg. 150 par. 1 (The glass must be 1/2 in. from the center-line of the batten.)

pg. 150 par. 2 Fasten the top horizontal batten across the collector, overlapping the clamping bar 3/4 in. over the glass.

DRAWING W1 WALL A = glazing width plus 1"

DRAWING W6 BATTENS A = glazing width plus 1"

pg. 173 par. 1... of the polystyrene (2-B7). Fasten with 2 in. drywall screws at 8 in. on center, and 12 in. on center into every framing member (note the nails in the polystyrene).

pg. 179 Tables 8.2 & 8.3 $T_{COL} > 180^{o}F$ in Power Vent and DHW Summer Modes

pg. 183 par. 1.. connect the collector supply and return ducts to the outside. When the temperature of the collector exceeds $180^{o}F$ (T_{COL}), the sensor in the collector closes, and the "Collector to Storage" mode is activated.

pg. 184 par. 1 FIG. 8.6 DHW AND POWER VENTING: In the summer, the domestic hot water mode can operate either in its normal mode (ΔT_{HW}), or it may operate during power venting, when the roof collector temperature exceeds $180^{o}F$ (T_{COL}).

pg. 189, 190, 191, 192, 200 Changes to systems with DHW, see diagrams on Errata Sheet 3

pg. 205

ΔT_{HW}	Differential Controller	Independent Energy C-30 Sun Switch
CR_{F2}	DPDT Relay - House Fan	
T_{COL}	Remote Bulb SPDT Thermostat	Honeywell T675A, 160 - $120^{o}F$ Range
T_{CSD}	Remote Bulb SPDT Thermostat	Honeywell T675A, 55 - $175^{o}F$ Range

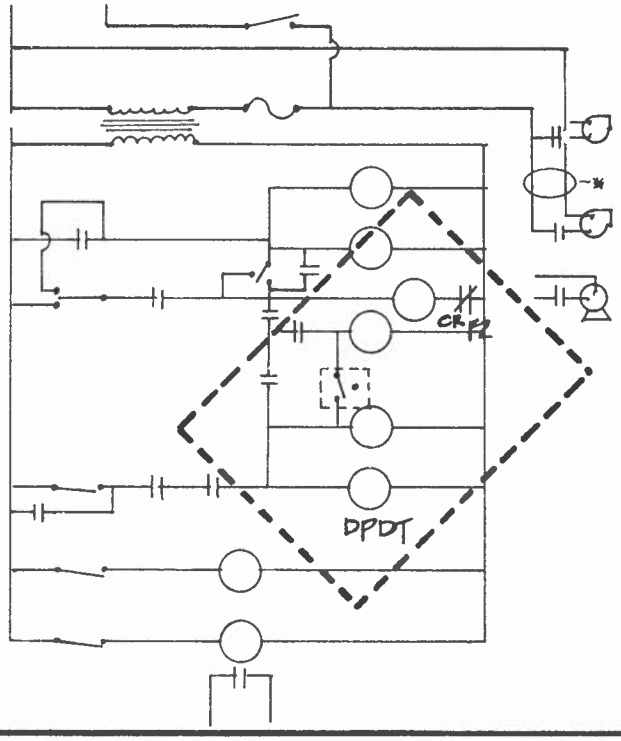
~~pg. 208 Fig. 9.1 MD_1 Normally Closed~~
MD_2 Normally Open

pg. 210 TABLE 9.1 STANDBY - MD_2 Open (eliminate asterisk and note)

pg. 211 FIGURE 9.4 see new diagram on Errata Sheet 3.

pg. 220 par. 4 Sun-lite is available in 4 and 5 foot wide rolls in thicknesses of 0.025, 0.040 and 0.060 inches.

pg. 231 par. 2, 3 Replace Dayton High Limit and SPST Snap Disc Thermostats with Honeywell T675A Series (Honeywell General Offices, Minneapolis, MN 55408)



Changes to Fig. 8.8, 8.10, 8.12, and 8.14:

The area enclosed within the dotted lines on this diagram is identical to the areas on Figures 8.8, 8.10, 8.12, and 8.14 with the addition of a Relay contact (CR_{F2}) to the right of CR_P, and the change of Relay CR_{F2} from a SPDT to a DPDT Relay. These two changes should be made on the Wiring Schematics above that include the DHW option.

Change to Fig. 8.22 Control Wiring for DHW:
add to contact to left of CR_{F2}

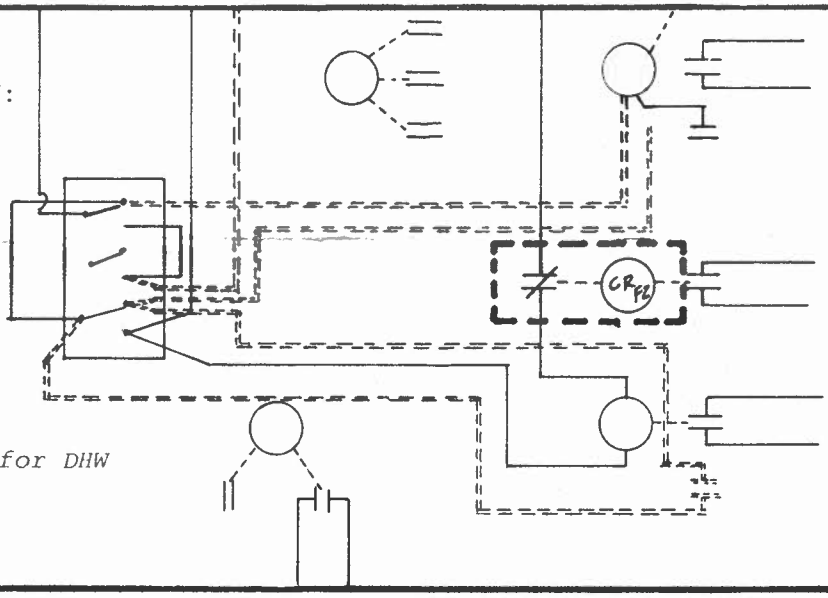


Figure 8.22 Control Wiring for DHW

(BOTTOM HALF ONLY)

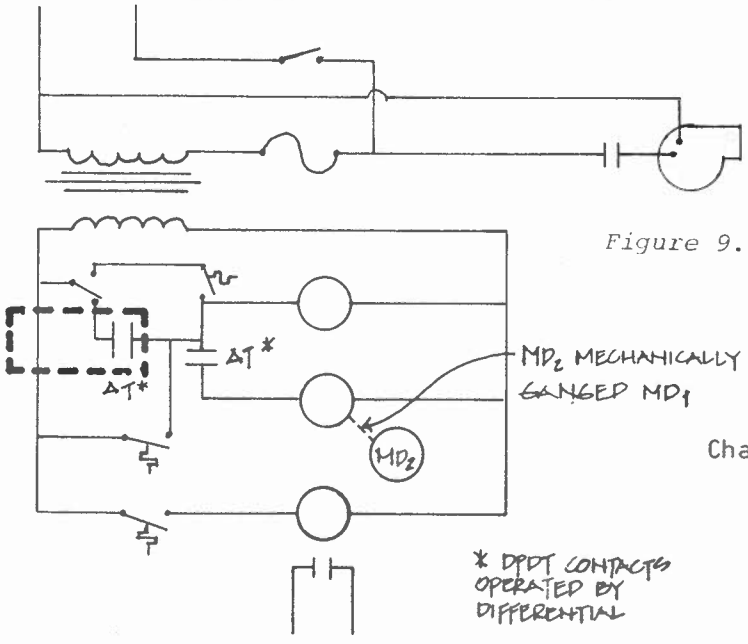


Figure 9.4 Innovative System Wiring Schematic

Change Fig. 9.4 Innovative System Wiring Schematic:
eliminate wire to left of ΔT*
add *DPDT contacts operated by Differential
add M to D_2 making MD_2

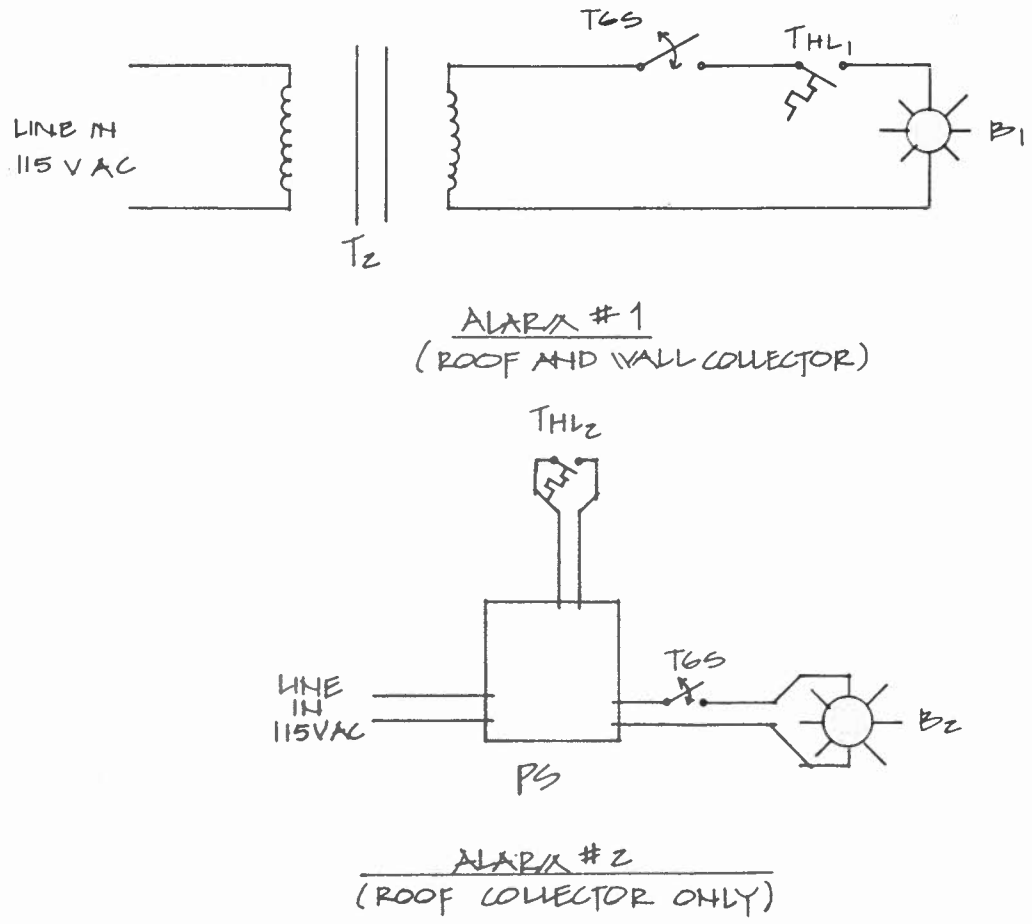


Figure 8.27 Overheating Protection

OVERHEATING ALARMS: T.E.A., Inc. recommends that alarms be added to all MODEL-TEA collectors. To protect against damage to the collector materials, the overheating sensor (T_{HL1}) will trigger the alarm system (B_1) when the collector temperature reaches 200°F, indicating that the normal heating or power venting modes are not operating. When the collector temperature drops below 198°F, the alarm will shut off.

If nothing is done to alleviate the overheating problem, the temperature of the collector will continue to rise. In the case of the roof collector, when the temperature reaches 210°F, the second overheating sensor (T_{HL2}) will trigger a second alarm (B_2).

Both alarms are equipped with a switch to turn them off. They are provided only for short-term relief, while arrangements are being made to repair the problem. The second alarm is provided on the roof collector as a reminder, in case the first alarm is disconnected and the problem overlooked. The alarms are wired separately from the system controls, and from each other, so that any problem with one will not electrically affect the other two.

T_2 - Transformer, match Voltage to B_1 Voltage

T_{GS} - Toggle Switch

T_{HL1} and T_{HL2} - Honeywell T675A , 160-260°F Range

B_1 and B_2 - Buzzer or Bell, 6V dc, 2 amps or less (1 amp preferred)

PS - Power Source/Battery Back Up, Ademco #AD-1028 with maintained contact switch #2174-70 (Ademco, 165 Eileen Way, Soyosset, NY 11791)