



48/50LJ008-014 50LJQ008,012

Single-Package Cooling/Heating and Heat Pump Units

Wiring Diagrams

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UNIT LABEL DIAGRAM				
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50LJ008-012	208/230, 460	Schematic	50DK503493	5
50LJ014	208/230	Schematic	50DK503650	6
50LJ008-014	460	Schematic	50DK503493	5
50LJ008-014	575	Schematic	50DK503494	7
50LJQ008,012	208/230	Schematic	50DK503495	8
	460	Schematic	50DK503496	9
	575	Schematic	50DK503497	10
	All	Component Arrangement	50DK503539	11

ELECTRIC HEAT				
Unit Voltage	Unit Model Size	Label, Electric Heater (kW)	Number	Fig. No.
208/230	50LJ008, 009; 50LJQ008	18.6/24 8	3-05626	12
	50LJ008-014; 50LJQ008,012	7.8/10 4	3-05623	13
		12.0/16 0		
		24.0/32 0	3-05626	12
		31.8/42 4		
460	50LJ012, 014; 50LJQ012	37.5/50.0	3-05626	12
	50LJ008, 009; 50LJQ008	13.9	3-05624	14
		16.5	3-05624	14
		27.8	3-05625	15
		33.0		
575	50LJ012,014; 50LJQ012	41.7	3-05625	15
		50.0		
	50LJ008-014, 50LJQ008,012	18 0	3-05624	14
		36.0	3-05625	15
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*All units are 3-phase

OPERATING SEQUENCE

48LJ Units

COOLING, UNITS WITHOUT ECONOMIZER — When thermostat calls for cooling, terminals G and Y1 are energized. The indoor-fan contactor (IFC) and Compressor contactor no. 1 (C1) are energized, and indoor-fan motor (IFM), Compressor no. 1 and outdoor fan start. The outdoor-fan motor (OFM) runs continuously while unit is cooling. If the thermostat calls for a second stage of cooling by energizing Y2, Compressor contactor no. 2 (C2) is energized and Compressor no. 2 starts.

HEATING, UNITS WITHOUT ECONOMIZER — When thermostat calls for heating, terminal W1 is energized, induced-draft relay (IDR) is energized and burner ignition sequence begins. The IFC is energized and the IFM starts. On units equipped for 2 stages of heat, when additional heat is needed, W2 is energized and the high-fire solenoid on the main gas valve (MGV) is energized.

When the thermostat is satisfied and W1 is deenergized, the IFM stops.

COOLING, UNITS WITH ECONOMIZER — When the outdoor ambient temperature is above the outdoor-air thermostat (OAT) or enthalpy control (EC) setting and the thermostat calls for cooling, terminals G and Y1 are energized. The IFC is energized and the economizer damper blade opens to the minimum position.

If the outdoor ambient temperature is below the OAT setting and the thermostat calls for cooling, the IFC is energized, the indoor fan is started and the economizer modulates open. The economizer damper blade opens for 5 seconds and stops for 30 seconds until fully open. The economizer acts as the first stage of cooling, providing free cooling with outdoor air. The position of the damper blade is determined by the discharge temperature sensor.

If outdoor air alone cannot satisfy the cooling requirements of the conditioned space, Y2 on the thermostat is energized and Compressor no. 1 starts.

As conditioned-space temperature approaches the thermostat's cooling set point, the mechanical cooling stage cycles off. After mechanical cooling shuts off, the economizer modulates to the minimum position.

HEATING, UNITS WITH ECONOMIZER — Upon a call for heat through W1, the IDR is energized to start the induced draft motor. The main burner lights, the IFC energizes to start the indoor fan, and the economizer damper blade opens to the minimum position. If the two-position damper is used, the outdoor-air damper opens to the minimum position whenever the indoor fan runs.

After W1 is deenergized, the IFM stops.

As space temperature approaches the heating temperature set point, heating stage cycles off. Economizer or two-position damper returns to a fully closed position when fan shuts off.

50LJ Units

COOLING, UNITS WITHOUT ECONOMIZER — When thermostat calls for cooling, terminals G and Y1 are energized. The indoor-fan contactor (IFC) and Compressor contactor no. 1 (C1) are energized and indoor-fan motor (IFM), Compressor no. 1 and outdoor fan start. The outdoor-fan motor (OFM) runs continuously while unit is cooling. If the thermostat calls for a second stage of cooling by energizing Y2, Compressor contactor no. 2 (C2) is energized and Compressor no. 2 starts.

HEATING, UNITS WITHOUT ECONOMIZER — Upon a call for heating through terminal W1, IFC and heater contactor (HC) no. 1 are energized. On units equipped for 2 stages of heat, when additional heat is needed, HC is energized through W2.

COOLING, UNITS WITH ECONOMIZER — When the outdoor ambient temperature is above the outdoor-air thermostat (OAT) or enthalpy control (EC) setting and the thermostat calls for cooling, terminals G and Y1 are energized. The IFC is energized and the economizer damper blade opens to the minimum position.

If the outdoor ambient temperature is below the OAT setting and the thermostat calls for cooling, the IFC is energized, the indoor fan is started and the economizer modulates open. The economizer damper blade opens for 5 seconds and stops for 30 seconds until fully open. The economizer acts as the first stage of cooling, providing free cooling with the outdoor air. The position of the damper blade is determined by the discharge-temperature sensor.

If outdoor air alone cannot satisfy the cooling requirements of the conditioned space, Y2 on the thermostat is energized and Compressor no. 1 starts.

As conditioned-space temperature approaches the thermostat's cooling set point, the mechanical cooling stage cycles off. After mechanical cooling shuts off, the economizer modulates to the minimum position.

HEATING, UNITS WITH ECONOMIZER — Upon a call for heat through W1, the IFC energizes to start the indoor fan and the economizer damper blade opens to the minimum position. If the two-position damper is used, the outdoor-air damper opens to the minimum position whenever the indoor fan runs. If unit is equipped with 2 stages of heat, when additional heat is needed, a call is made through W2.

As space temperature approaches the heating temperature set point, heating stages cycle off. Economizer or two-position damper returns to a fully closed position.

50LJQ Units

COOLING, UNITS WITHOUT ECONOMIZER — Upon a request for cooling from the space thermostat, terminals Y1 and G will be energized with 24 v. As a result, the indoor-fan contactor (IFC), outdoor-fan contactor (OFC) and compressor contactor no. 1 (C1) will be energized, which in turn will energize the indoor fan, outdoor fan and Compressor no. 1, respectively.

If the space thermostat calls for a second stage of cooling by supplying 24 v to Y2, Compressor contactor no. 2 (C2) will be energized, thus energizing Compressor no. 2.

When the space thermostat is satisfied, Y2 will be deenergized first, which will deenergize Compressor no. 2.

Upon a further drop in space temperature, Y1 will be deenergized which will deenergize Compressor no. 1, and the outdoor and indoor fans.

HEATING, UNITS WITHOUT ECONOMIZER — Upon a request for heating from the space thermostat, terminal W1 will be energized with 24 v. The IFC, OFC, C1 and C2 will be energized. The reversing valves switch position and the indoor fan, outdoor fan, Compressor no. 1, and Compressor no. 2 are energized.

If the space temperature continues to fall while W1 is energized, W2 will be energized with 24 v, and the heater contactor(s) (HC) will be energized, which will energize the electric heater(s).

When the space thermostat is satisfied, W2 will be deenergized first, and the electric heater(s) will be deenergized.

Upon a further rise in space temperature, W1 will be deenergized, and the reversing valve solenoids (RVS1 and RVS2) will be energized. On units with economizer the economizer damper blade will move to the fully closed position.

COOLING, UNITS WITH ECONOMIZER — Upon a request for cooling from the space thermostat, terminals Y1 and G will be energized with 24 v. As a result, the indoor-fan contactor (IFC) and indoor-fan motor (IFM) will be energized and the economizer damper blade will open to minimum position. Note that if the indoor fan is on when the space thermostat calls for cooling, terminal G is already energized and the economizer damper blade is at minimum position.

If the outdoor-air temperature is below the outdoor-air thermostat (OAT) setting, then the position of the damper blade will be determined by the temperature of the discharge air as sensed by the discharge-air thermistor (DAT). The damper blade will slide open for 5 seconds, and rest

for 30 seconds until the proper discharge-air temperature is obtained. The damper blade will modulate to different positions to maintain this discharge-air temperature.

If the thermostat calls for a second stage of cooling by supplying 24 v to Y2, the outdoor-fan contactor (OFC) and Compressor contactor no. 1 (C1) will be energized, which will bring on the outdoor fan and Compressor no. 1, respectively.

When the thermostat is satisfied, Y2 will be deenergized first, which will deenergize the outdoor fan and Compressor no. 1. When the indoor fan is deenergized, the economizer will return to a fully closed position.

If the outdoor-air temperature is above the OAT setting, the economizer will move to the minimum position and the unit will operate as described in Cooling, Units Without Economizer section above.

HEATING, UNITS WITH ECONOMIZER — Upon a request for heating from the space thermostat, terminal W1 will be energized with 24 v. The economizer damper blade will move to minimum position regardless of the outdoor-air temperature, and the unit will operate as described in Cooling, Units Without Economizer section above.

DEFROST — When the temperature of the outdoor coil drops below 28 F as sensed by the defrost thermostat (DFT2) and the defrost timer is at the end of a timed period (adjustable at 30, 50 or 90 minutes), RVS1 and RVS2 are energized and the OFC is deenergized. This switches the position of the reversing valves and shuts off the outdoor fan. The electric heaters (if installed) will be energized. On units with economizer, the economizer damper blade will move to the fully closed position.

The unit continues to defrost until the coil temperature as measured by DFT2 reaches 65 F, or the duration of defrost cycle completes a 10-minute period.

During the defrost mode, if circuit 1 defrosts first, RVS1 will oscillate between heating and cooling modes until the defrost mode is complete.

At the end of the defrost cycle, the electric heaters (if installed) will be deenergized; the reversing valves switch and the outdoor-fan motor will be energized. On units with economizer, the economizer damper blade will move to the minimum position. The unit will now operate in the heating mode.

If the space thermostat is satisfied during a defrost cycle, the unit will continue in the defrost mode until the time or temperature constraints are satisfied.

LEGEND (Fig. 1-18, 21-24)

AHA	Adjustable Heat Anticipator	OFR	Outdoor-Fan Relay
AWG	American Wire Gauge	P	Plug
APS	Air Pressure Switch	PL	Plug Assembly
AUX	Auxiliary	QT	Quadruple Terminal
BAT	Battery	R	Relay
C	Contactor, Compressor	RES	Resistor
CAP	Capacitor	RS	Rollout Switch
CB	Circuit Breaker	RVS	Reversing Valve Solenoid
CC	Cooling Compensator	SC	Start Capacitor
CH	Crankcase Heater	SEN	Sensor
CLO	Compressor Lockout	STAT	Thermostat
COM	Common	SW	Switch
COMP	Compressor Motor	SW1	Switch, Fully Open
CR	Control Relay	SW2	Switch, Fully Closed
CS	Centrifugal Switch	SW3	Switch, Minimum Vent Position
CV	Constant Volume	SW4	Switch, Maximum Vent Position
DAT	Discharge-Air Thermistor	TB	Terminal Block
DB	Defrost Board	TC	Thermostat, Cooling
DFT	Defrost Thermostat	TL	Timer Logic
DR	Defrost Relay	TH	Thermostat, Heating
EC	Enthalpy Control	TRAN	Transformer
ECON	Economizer		Circuit Board Run
EMC/EMFC	Energy Management Closed (Economizer)		Field Splice
EMFC.L	Energy Management Fully Closed (Two-Position Damper)		Marked Wire
EMO/EMFO	Energy Management Open		Terminal (Marked)
EQUIP	Equipment		Terminal (Unmarked)
FP	Flame Prove		Terminal Block
FPT	Freeze Protection Thermostat		Terminal ECON Two-Position Board
FU	Fuse		Terminal CV Board
GND	Ground		Splice
HC	Heater Contactor		Splice (Marked)
HP	Heat Pump		Factory Wiring
HPS	High-Pressure Switch		Field Control Wiring
HR	Heater Relay		Field Power Wiring
I	Ignitor		Accessory or Optional Wiring
ICP	Ignitor Control Pack		To indicate common potential only
IDM	Induced-Draft Motor		Not to represent wiring
IDR	Induced-Draft Relay		
IFC	Indoor-Fan Contactor		
IFM	Indoor-Fan Motor		
IFR	Indoor-Fan Relay		
LED	Light-Emitting Diode		
LPS	Low-Pressure Switch		
LS	Limit Switch		
LSM	Limit Switch (Manual Reset)		
MGV	Main Gas Valve		
MTR	Motor		
MV	Main Valve		
NEC	National Electrical Code		
OAT	Outdoor-Air Thermostat		
OFC	Outdoor-Fan Contactor		
OFM	Outdoor-Fan Motor		

NOTES

- If any of the original wire furnished must be replaced, it must be replaced with type 90 C wire or its equivalent.
- 3-phase motors are protected under primary single-phasing conditions.
- Thermostat: HH07AT172 and P272-2783
Subbase: HH93AZ176, 178 and P272-1882, 1883
- Use copper, copper clad aluminum or aluminum conductors.
- Circuit breaker information is as follows:

VOLTAGE RATING	CB	MUST TRIP AMPS
	Mfg. Pt. No. Potter & Brumfield	
24 V	W28X-1024-3.2	3 2

- Set heat anticipator for all units without electric heat at 1.0 amp for first stage and 0.6 amp for second stage. For 50LJ and LJQ units with electric heat, set heat anticipator settings as shown below:

UNIT MODEL	UNIT VOLTAGE											
	208/230					460				575		
	Heater kW	Configuration			Heater kW	Configuration			Heater kW	Configuration		
		1 Stage	2 Stage			1 Stage	2 Stage			1 Stage	2 Stage	
		Stage 1	Stage 1	Stage 2		Stage 1	Stage 1	Stage 2		Stage 1	Stage 1	Stage 2
50LJ	10.4, 16 0	0 3	NA	NA	13 9, 16 5 27 8, 33 0	0 3	NA	NA	18 0, 36 0	0 3	NA	NA
	32 0, 24 8	0.6	0 3	0 3								
	42.4, 50.0	0 9	0.6	0 3	41.7, 50 0	0 6	0 3	0.3	54.0	0.6	0 3	0.3
50LJQ	10.4, 16 0	NA	1.0	0.3	13.9, 16 5 27 8, 33 0	NA	1 0	0 3	18 0, 36 0	NA	1 0	0 3
	32 0, 24.8	NA	1.0	0.6								
	42 4, 50.0	NA	1 0	0 9	41 7, 50 0	NA	1.0	0.6	54.0	NA	1 0	0.6

- Economizer can be driven open by installing a jumper between terminals EMO/EMFO and GND or driven closed by installing a jumper between terminals EMC/EMFC and GND.
- Two-position damper can be driven closed by installing a jumper between terminals EMFC.L and GND.

SCHEMATIC

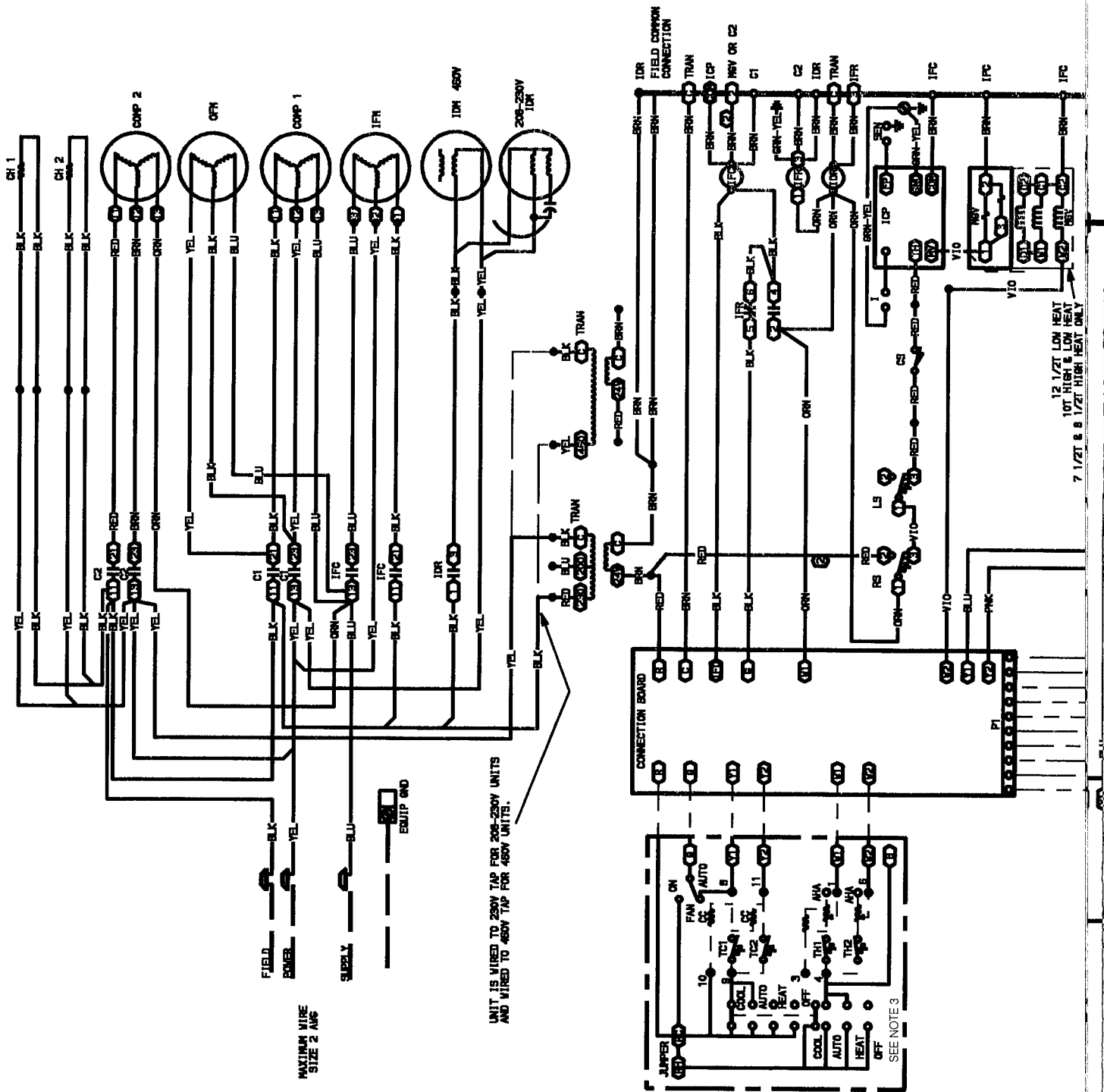
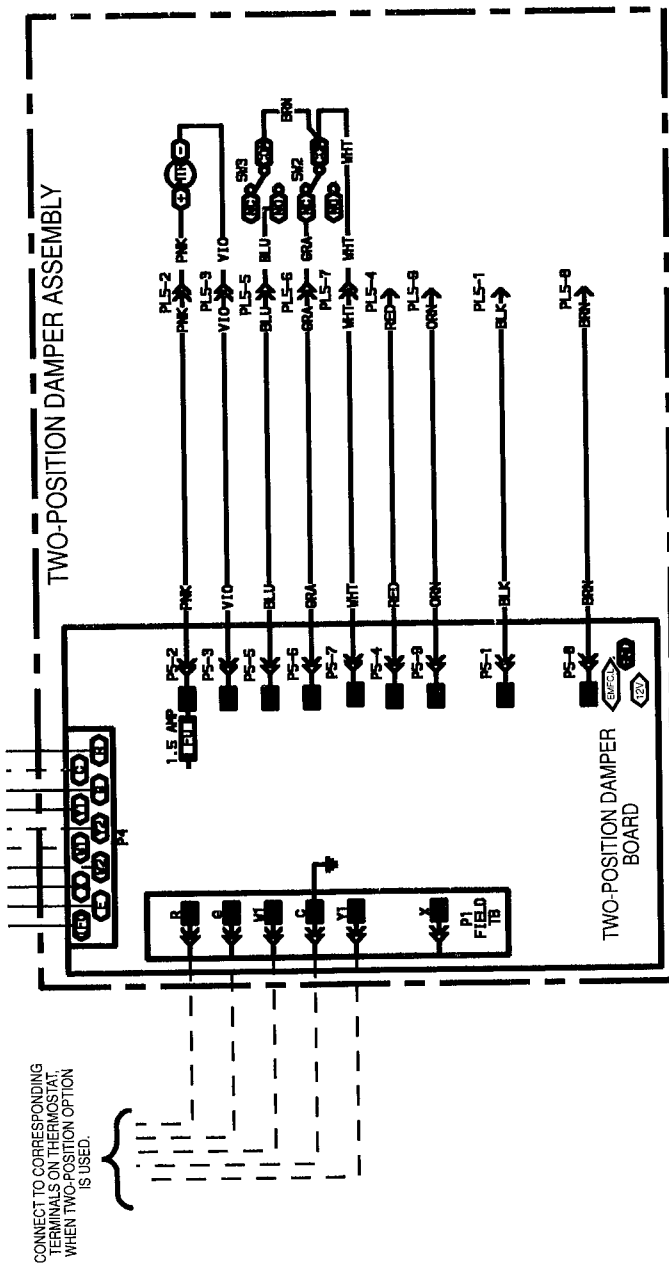
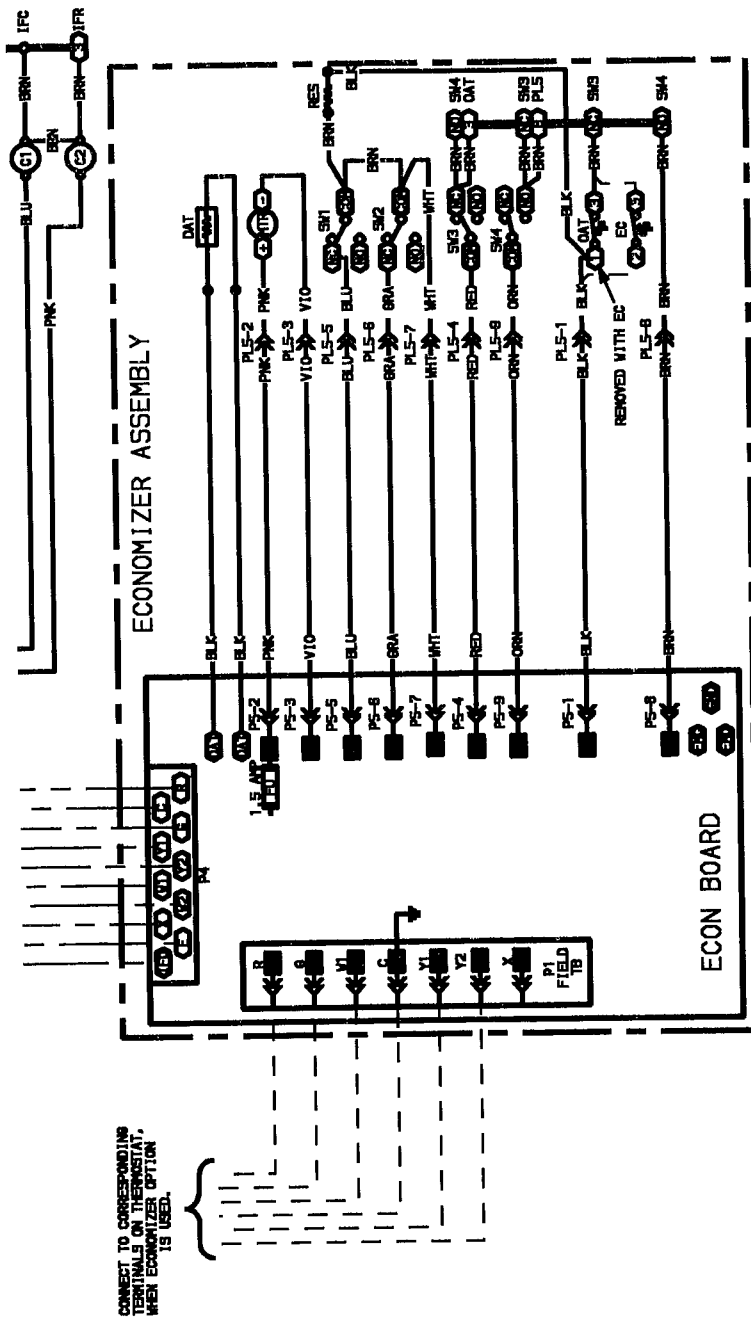


Fig. 1 - Label Diagram, Schem



SCHEMATIC

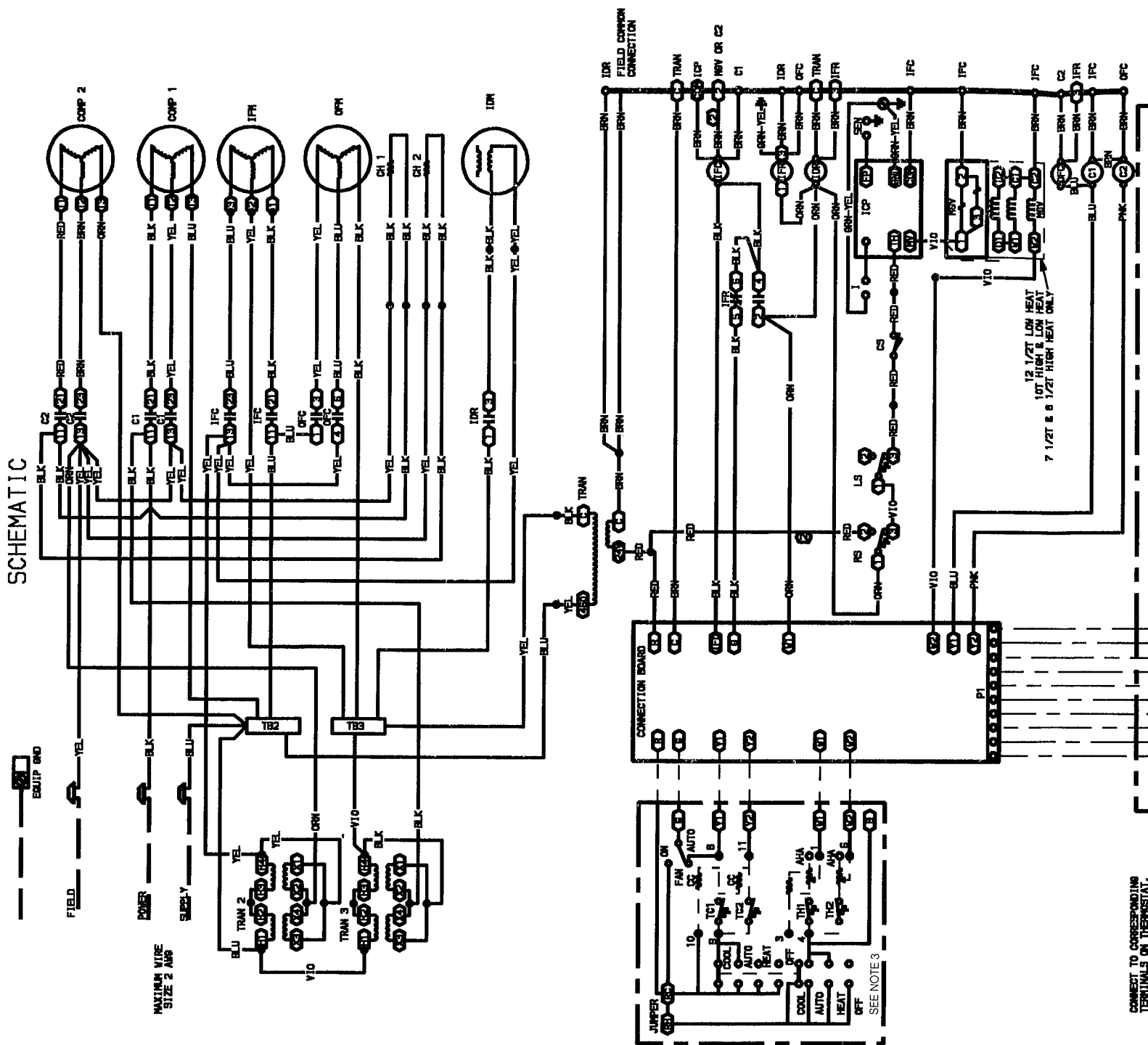
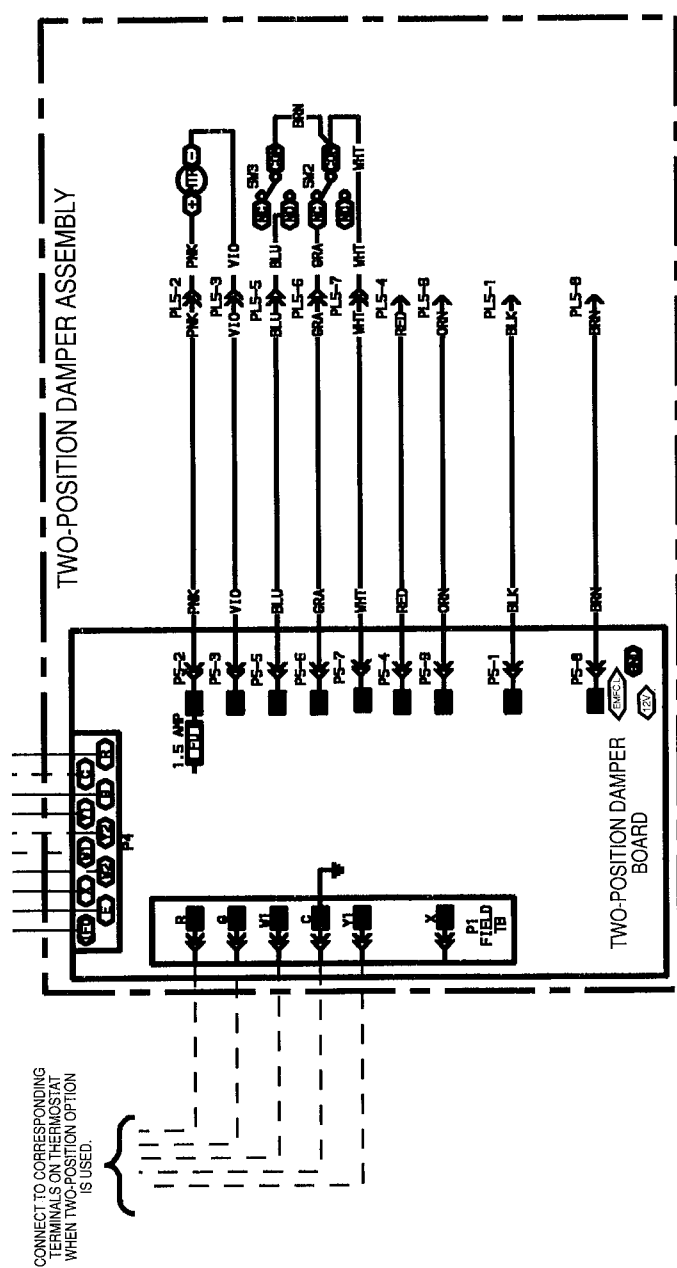
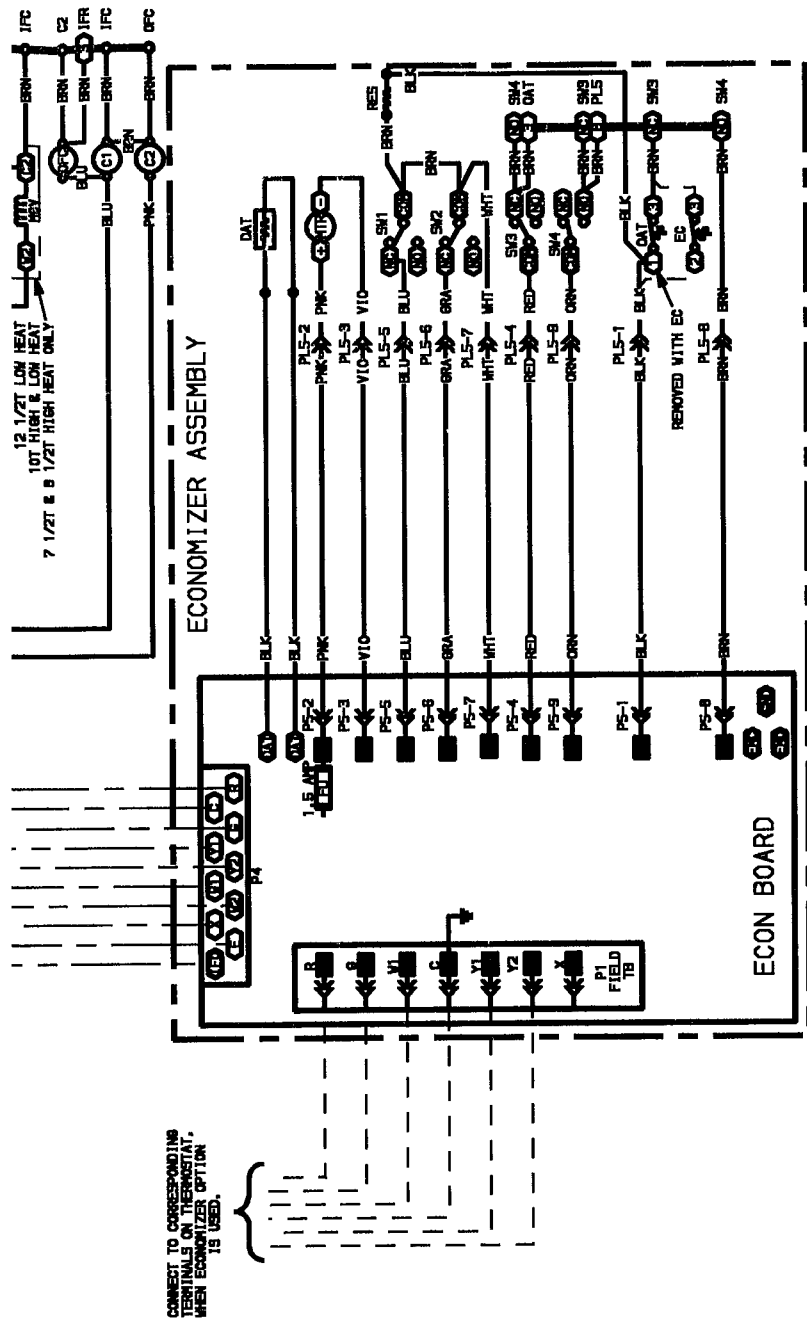


Fig. 2 — Label Diagram, Schematic; 48LJ008-



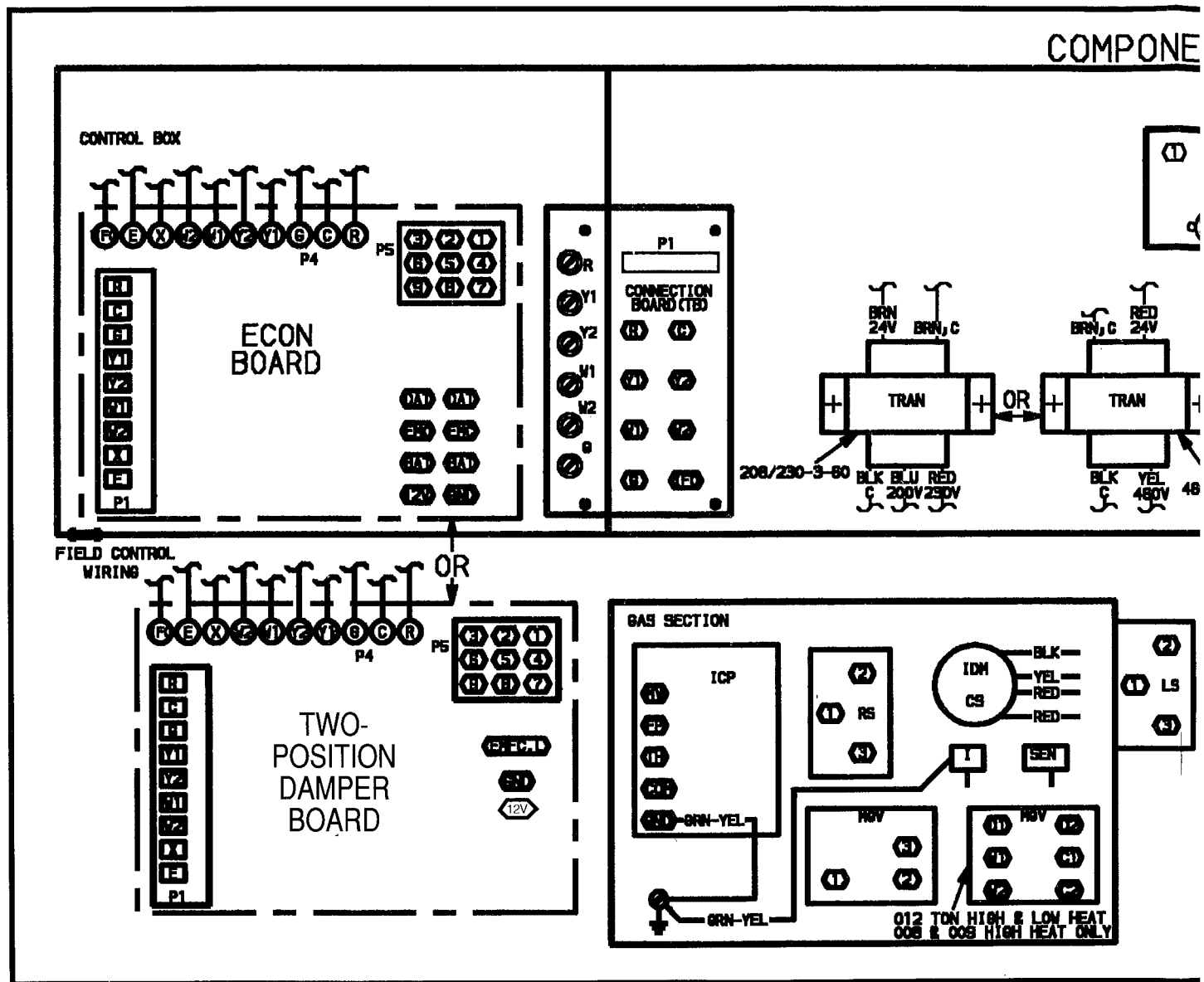
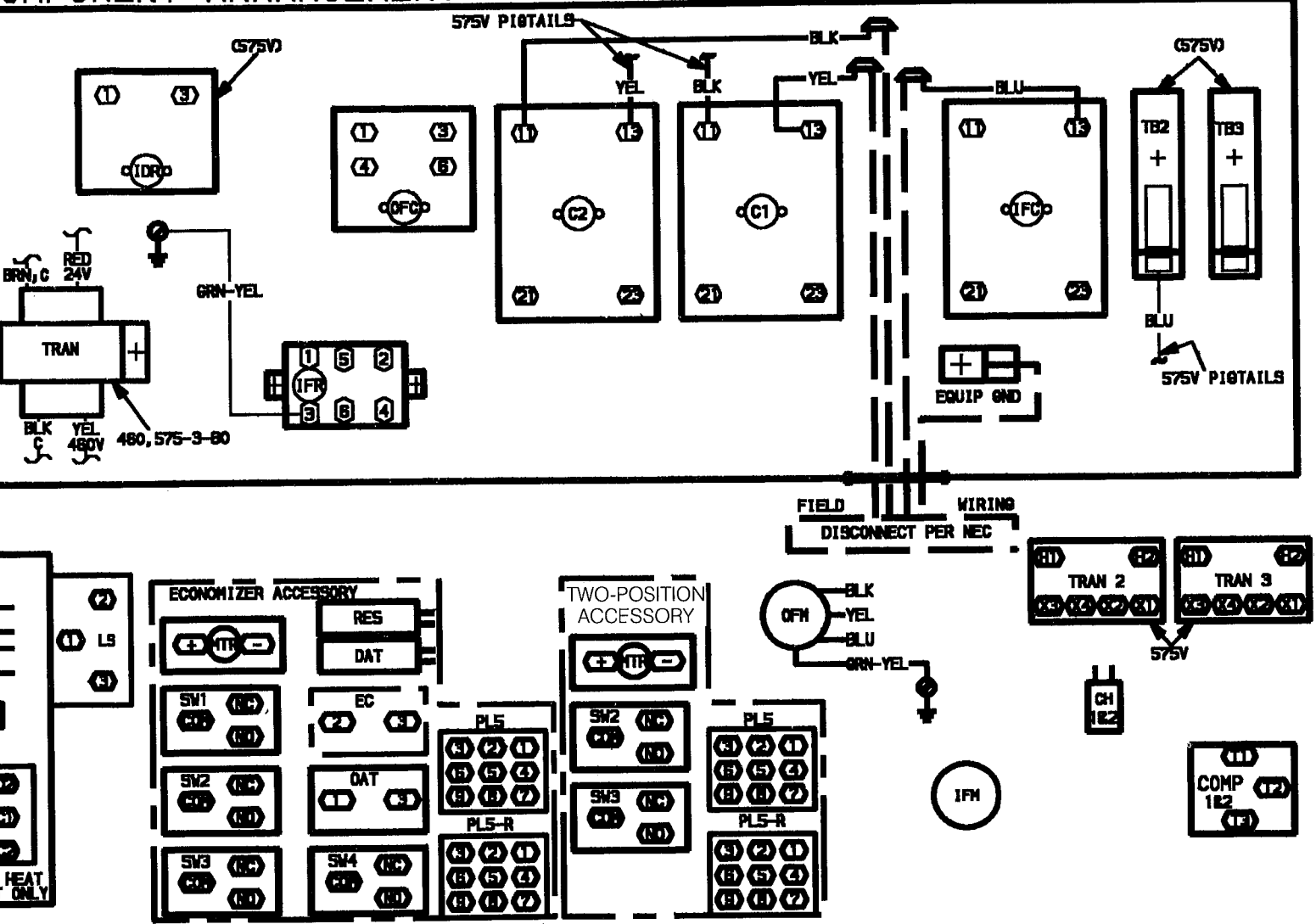


Fig. 3 — Label Diagram, Compone

COMPONENT ARRANGEMENT



Program, Component Arrangement; 48LJ008-014

COMPONENT ARR

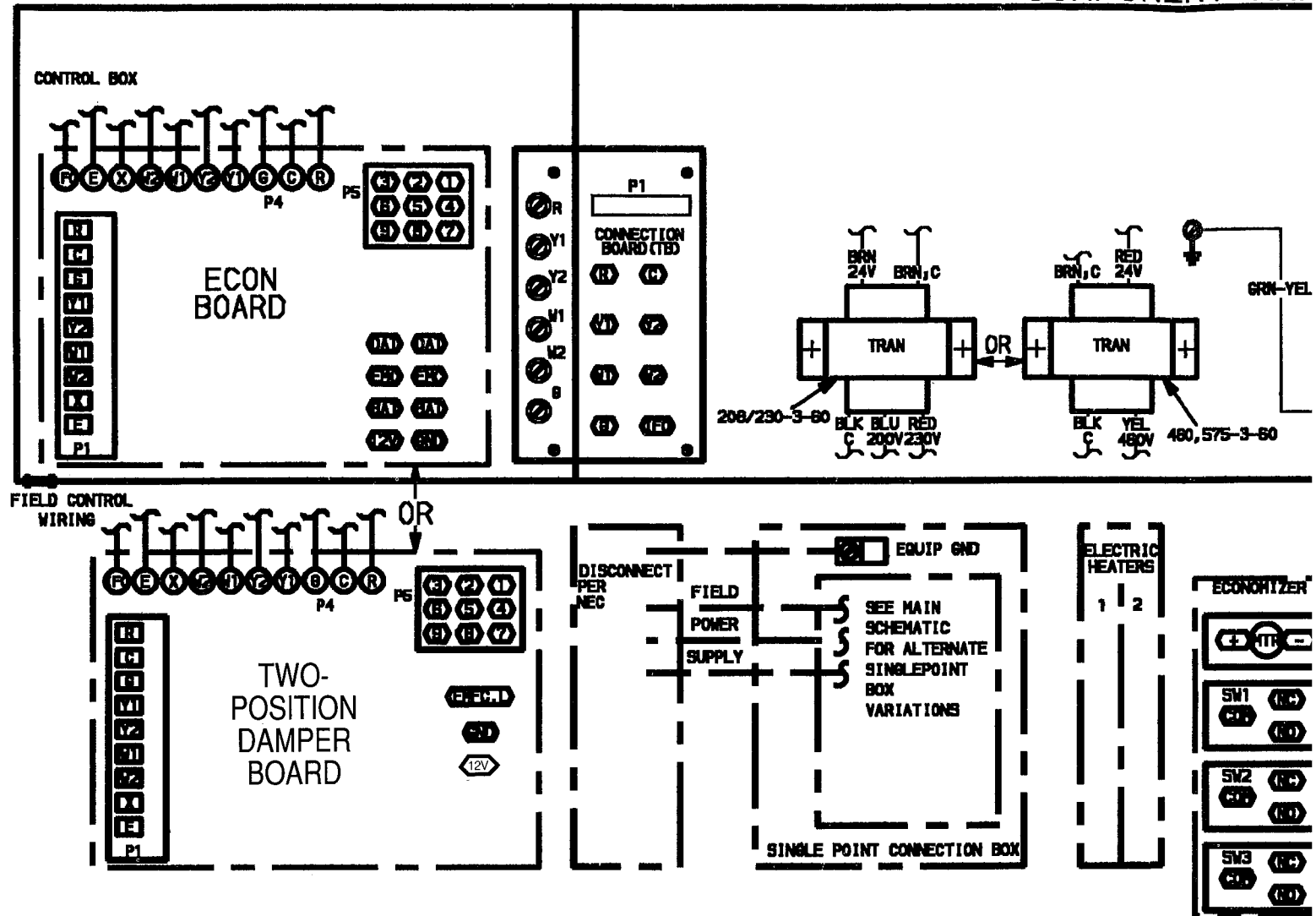
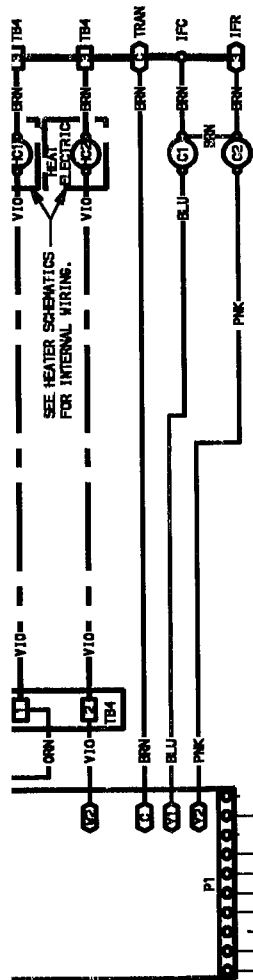


Fig. 4 – Label Diagram, Component Arrangement

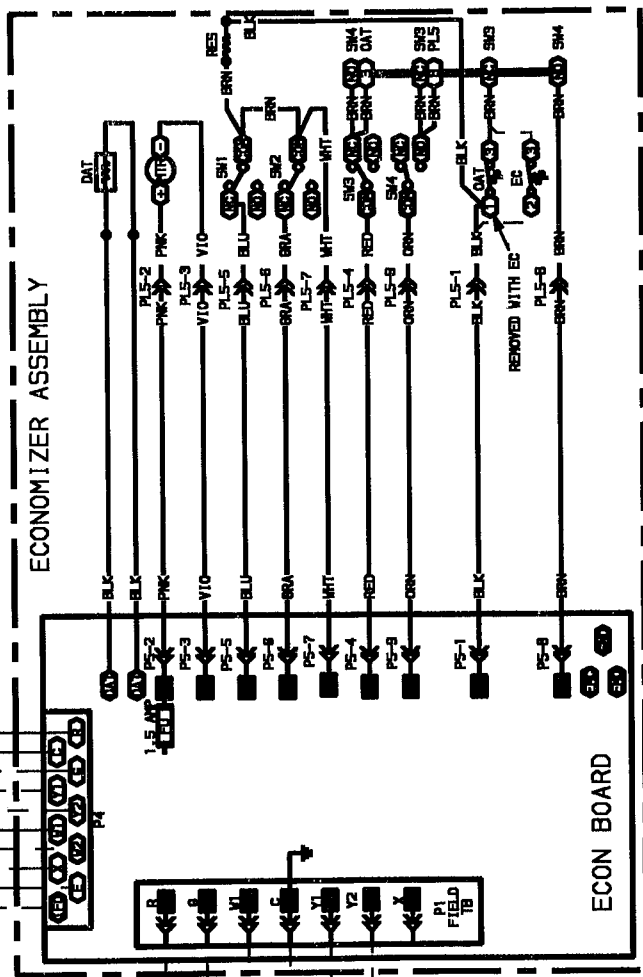
The diagram illustrates the electrical connections for a 575V motor control system. It includes the following components and wiring:

- Motor (Top):** A 575V motor with terminals 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100. It is connected to a 575V power source via 575V PISTAILS.
- Control Panel (Bottom):** A control panel with terminals 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100. It includes a 575V PISTAILS connection and a 575V PISTAILS connection.
- Accessories:**
 - ECONOMIZER ACCESSORY:** Includes a RES (Resistor) and a DAT (Data) terminal block.
 - TWO-POSITION ACCESSORY:** Includes a SW1 (Switch 1) and a SW2 (Switch 2) terminal block.
 - PL5 (Phase Locking):** Includes a PL5 (Phase Locking) terminal block.
 - PL5-R (Phase Locking - Reverse):** Includes a PL5-R (Phase Locking - Reverse) terminal block.
 - CH (Control):** Includes a CH (Control) terminal block.
 - COMP (Compressor):** Includes a COMP (Compressor) terminal block.
 - IFM (Interlocking):** Includes an IFM (Interlocking) terminal block.
 - SW3 (Switch 3):** Includes a SW3 (Switch 3) terminal block.
 - SW4 (Switch 4):** Includes a SW4 (Switch 4) terminal block.
 - SW5 (Switch 5):** Includes a SW5 (Switch 5) terminal block.
 - SW6 (Switch 6):** Includes a SW6 (Switch 6) terminal block.
 - SW7 (Switch 7):** Includes a SW7 (Switch 7) terminal block.
 - SW8 (Switch 8):** Includes a SW8 (Switch 8) terminal block.
 - SW9 (Switch 9):** Includes a SW9 (Switch 9) terminal block.
 - SW10 (Switch 10):** Includes a SW10 (Switch 10) terminal block.
 - SW11 (Switch 11):** Includes a SW11 (Switch 11) terminal block.
 - SW12 (Switch 12):** Includes a SW12 (Switch 12) terminal block.
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 - SW86 (Switch 86):** Includes a SW86 (Switch 86) terminal block.
 - SW87 (Switch 87):** Includes a SW87 (Switch 87) terminal block.
 - SW88 (Switch 88):** Includes a SW88 (Switch 88) terminal block.
 - SW89 (Switch 89):** Includes a SW89 (Switch 89) terminal block.
 - SW90 (Switch 90):** Includes a SW90 (Switch 90) terminal block.
 - SW91 (Switch 91):** Includes a SW91 (Switch 91) terminal block.
 - SW92 (Switch 92):** Includes a SW92 (Switch 92) terminal block

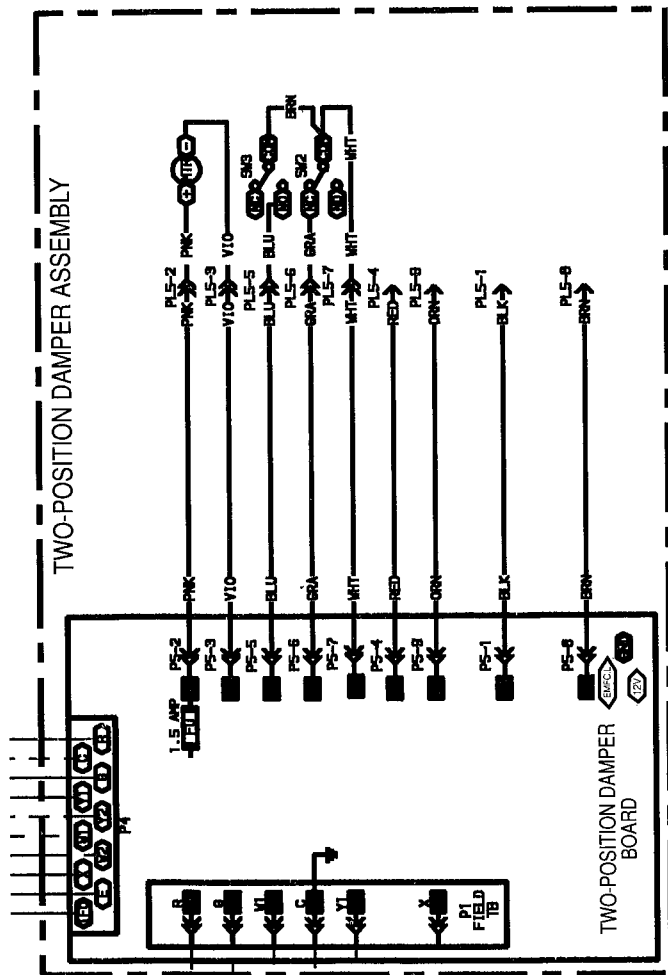
8



CONNECT TO CORRESPONDING
TERMINALS ON THERMOSTAT
WHEN ECONOMIZER OPTION
IS USED.



CONNECT TO CORRESPONDING
TERMINALS ON THERMOSTAT
WHEN TWO-POSITION OPTION
IS USED.



SCHEMATIC

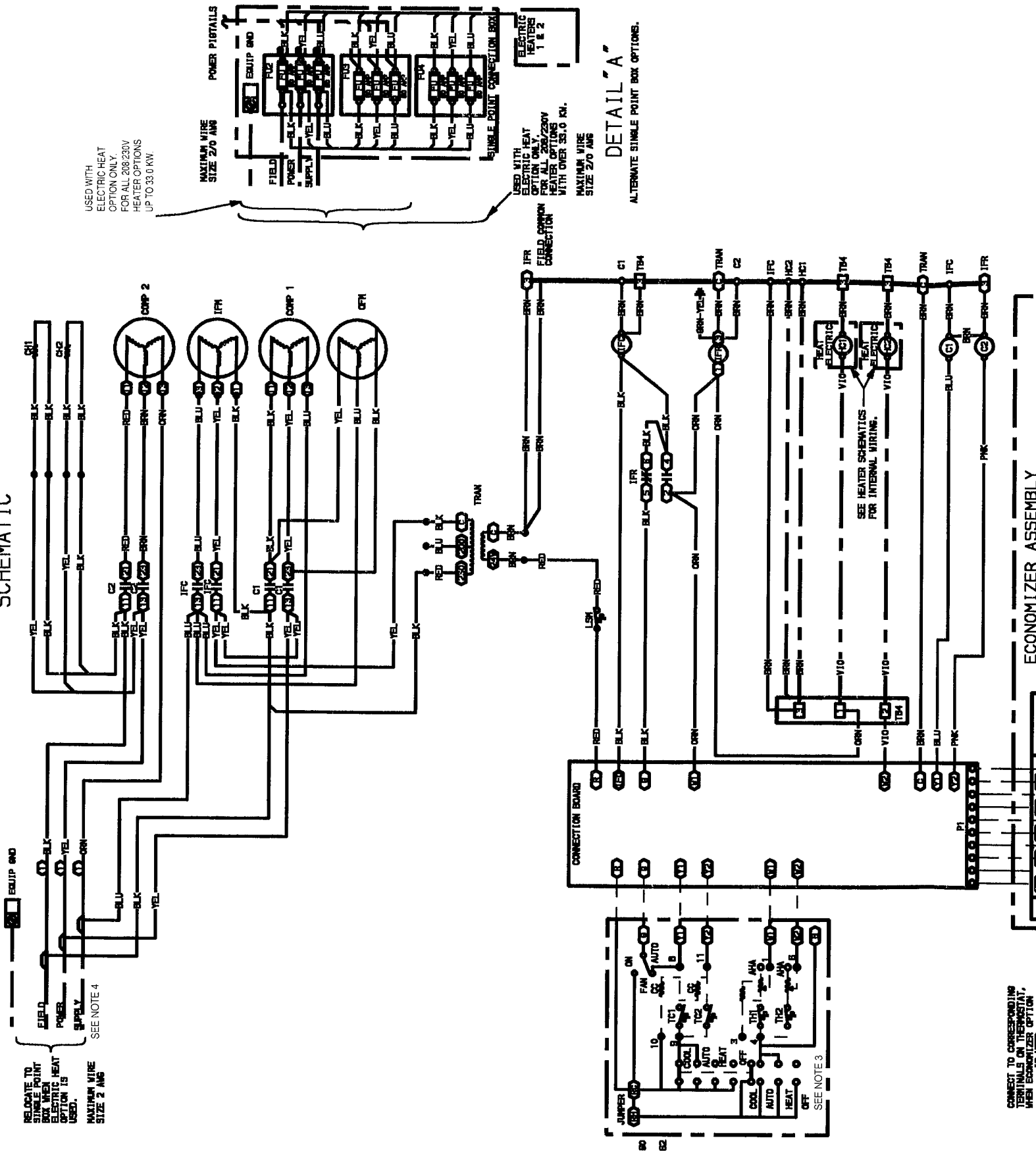
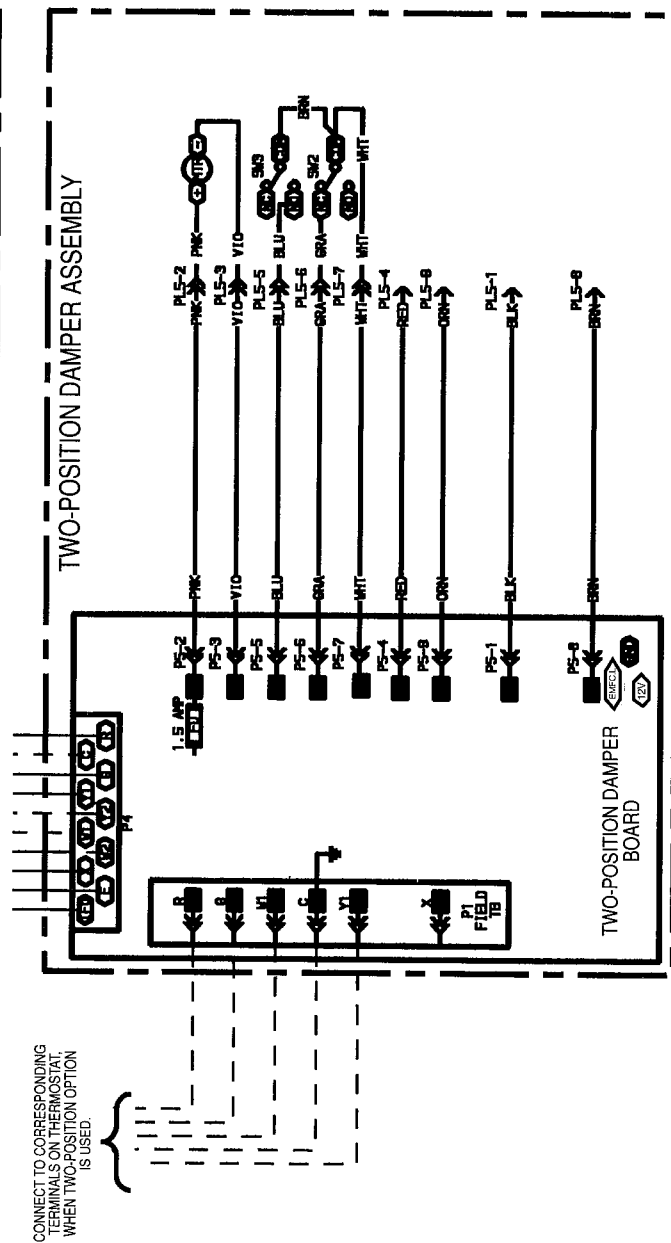
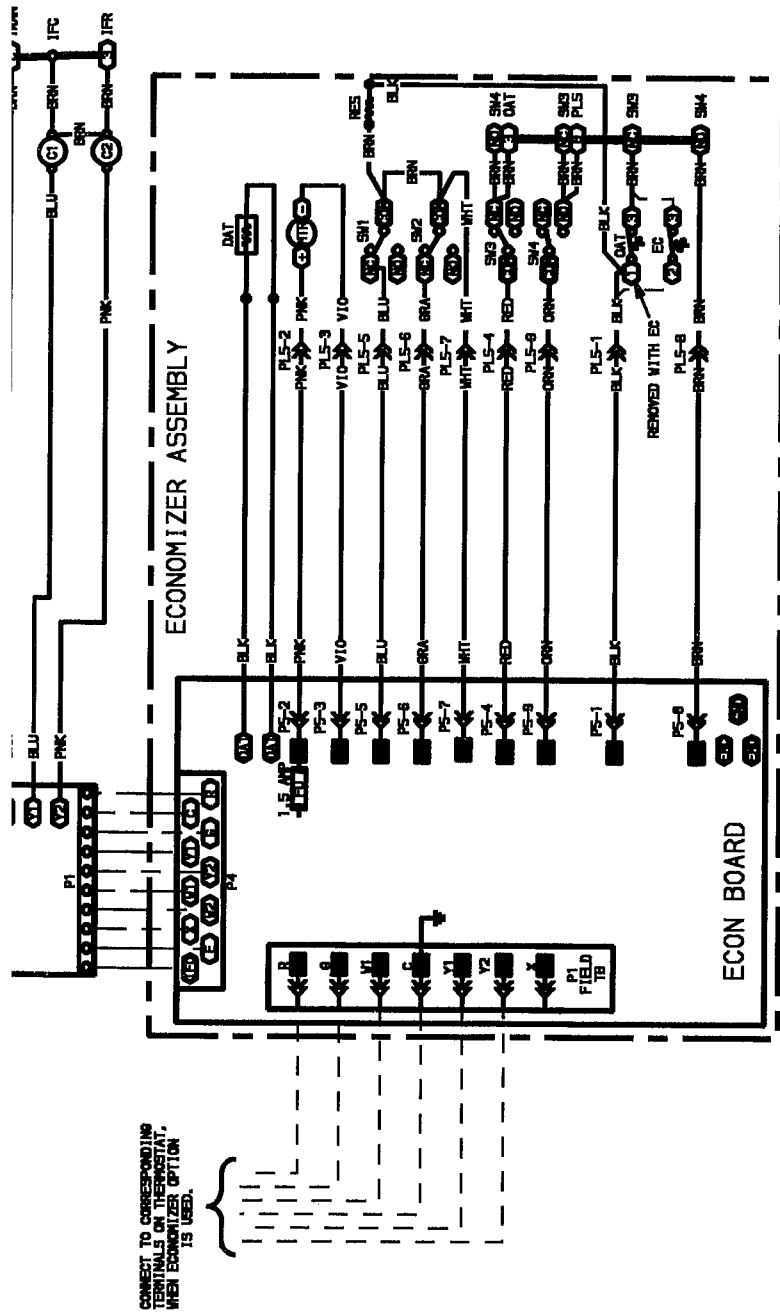


Fig. 6 — Label Diagram, Schematic; 50LJ014, 2



RELOCATE TO

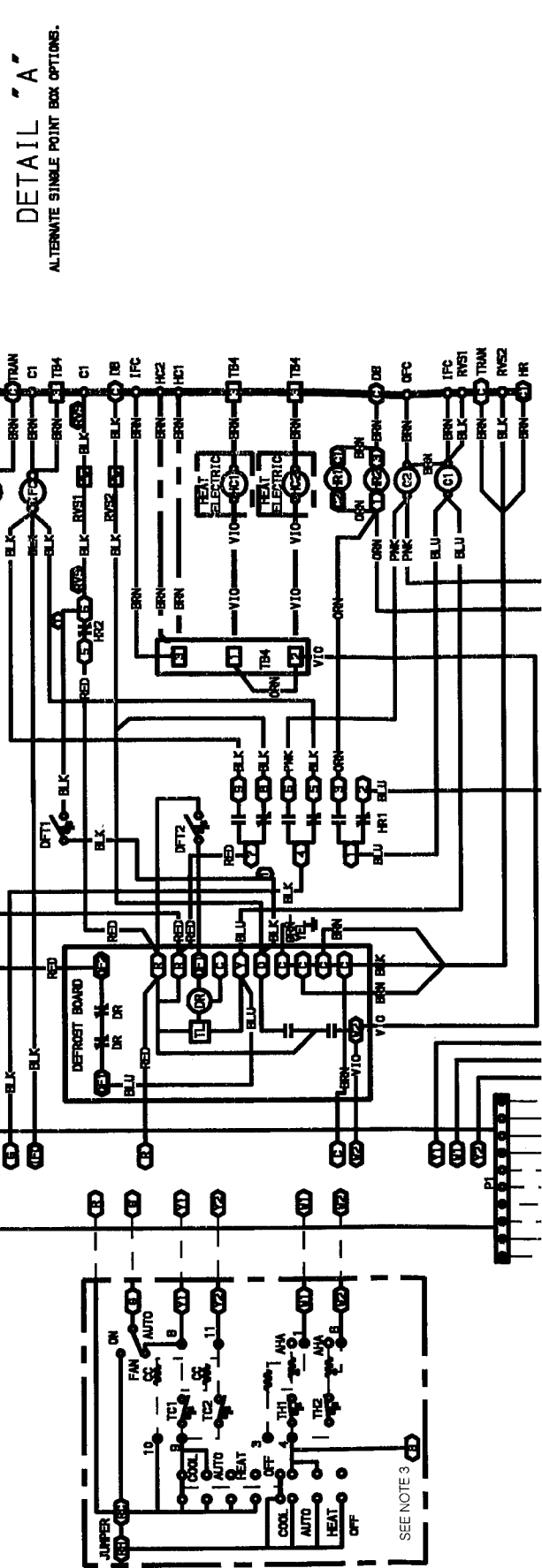
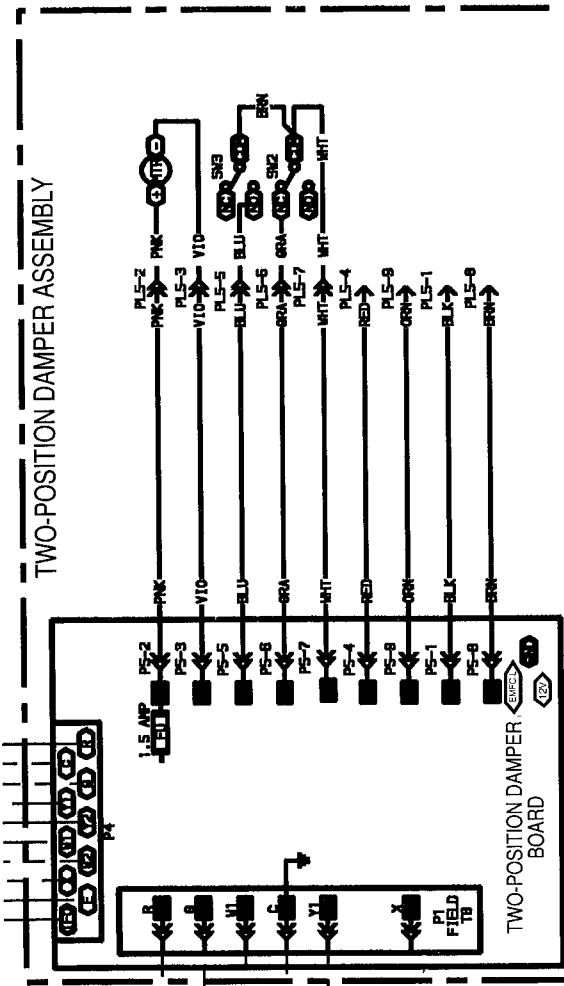
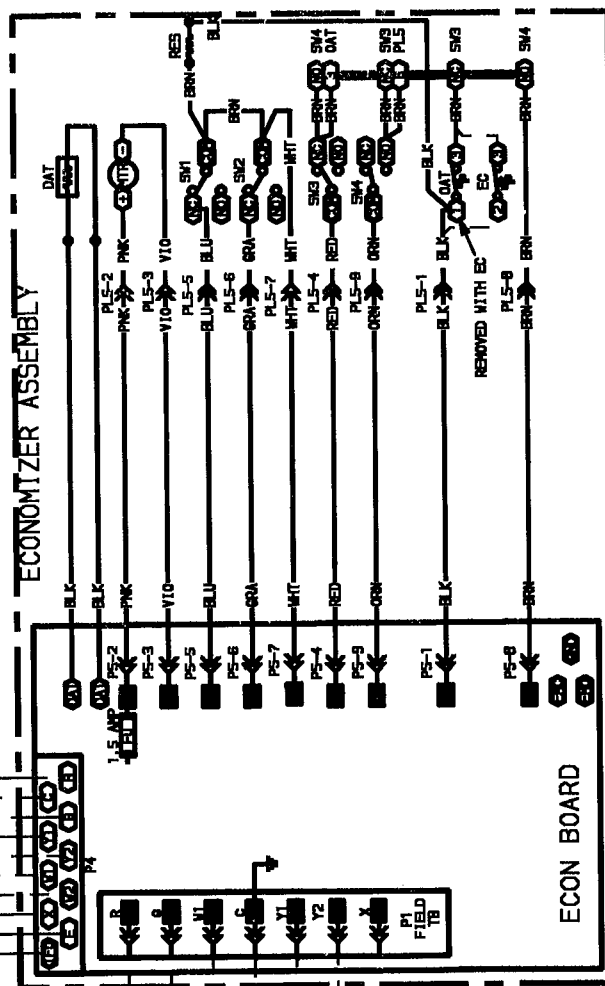
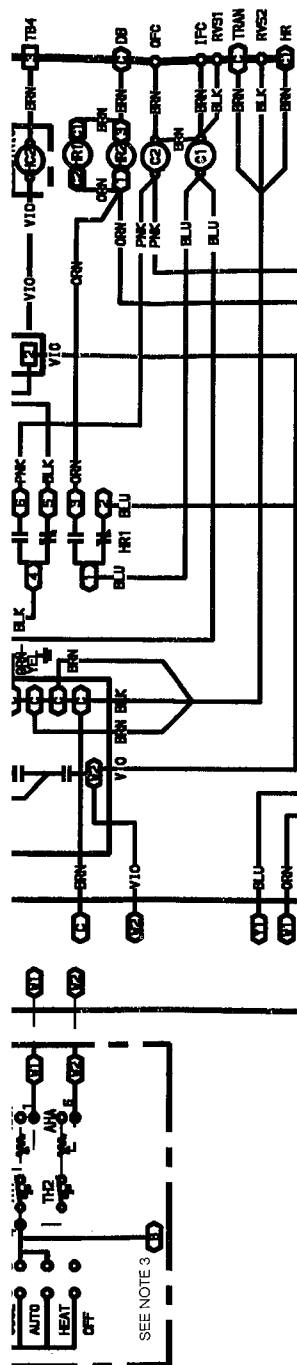


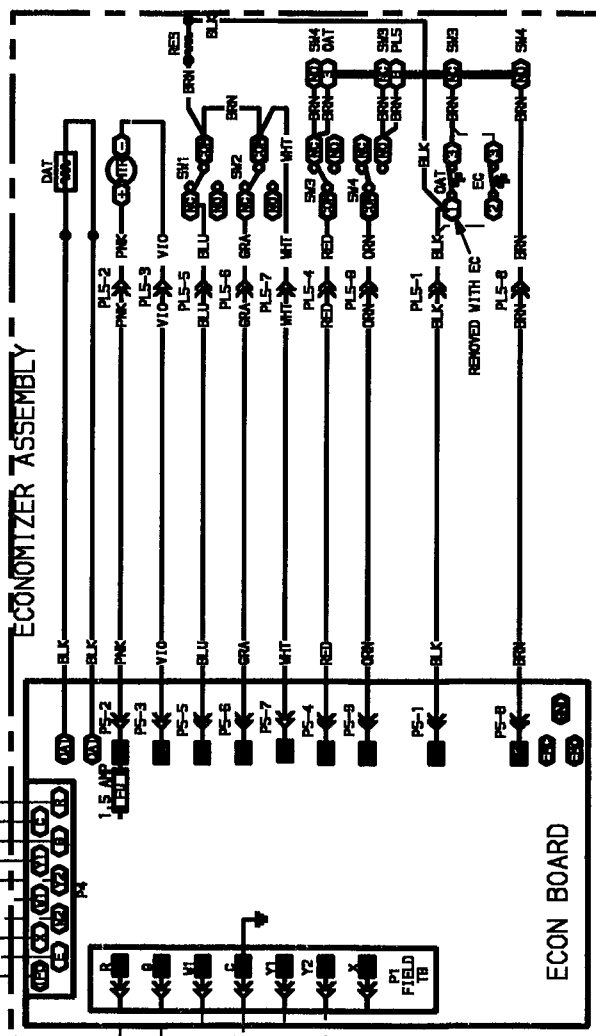
Fig. 8 – Label Diagram, Schematic; 50LJQ008



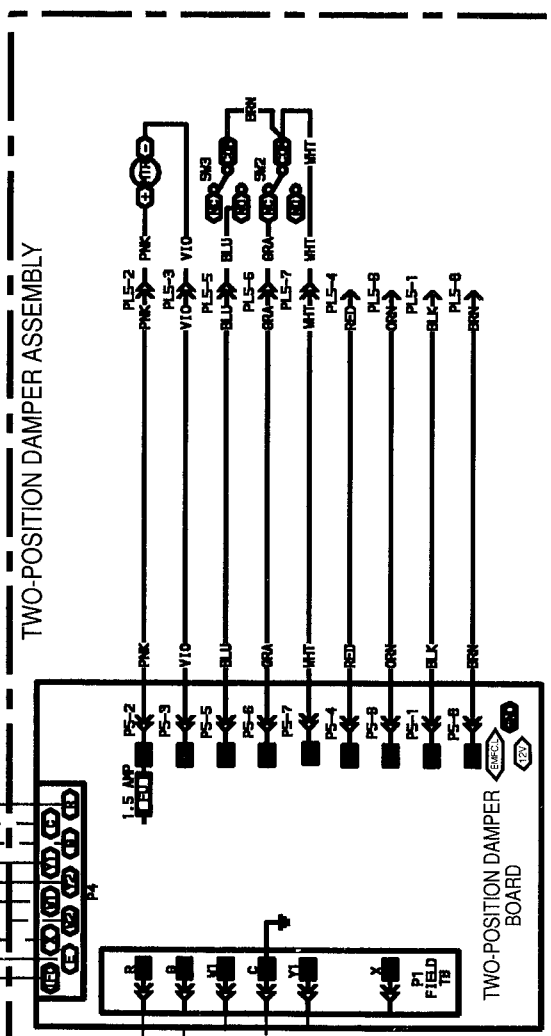




CONNECT TO CORRESPONDING
TERMINALS ON THERMOSTAT.
WHEN ECONOMIZER OPTION
IS USED.



CONNECT TO CORRESPONDING
TERMINALS ON THERMOSTAT.
WHEN TWO POSITION OPTION
IS USED.



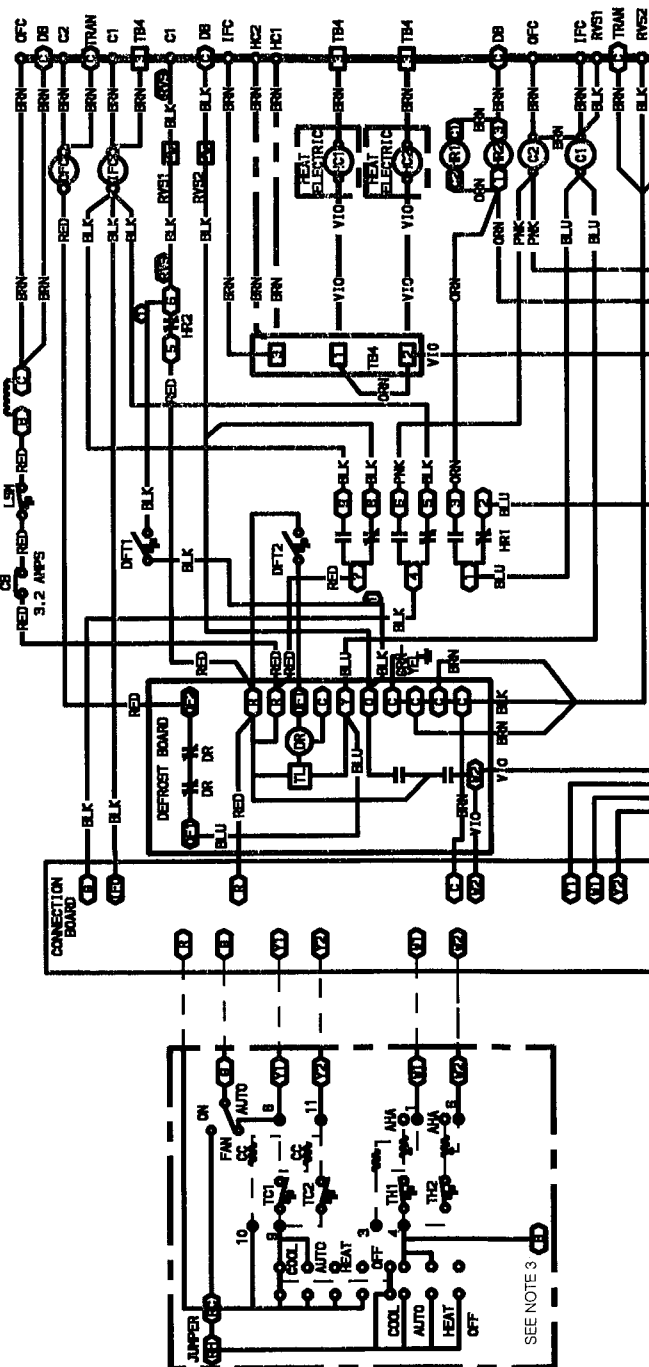
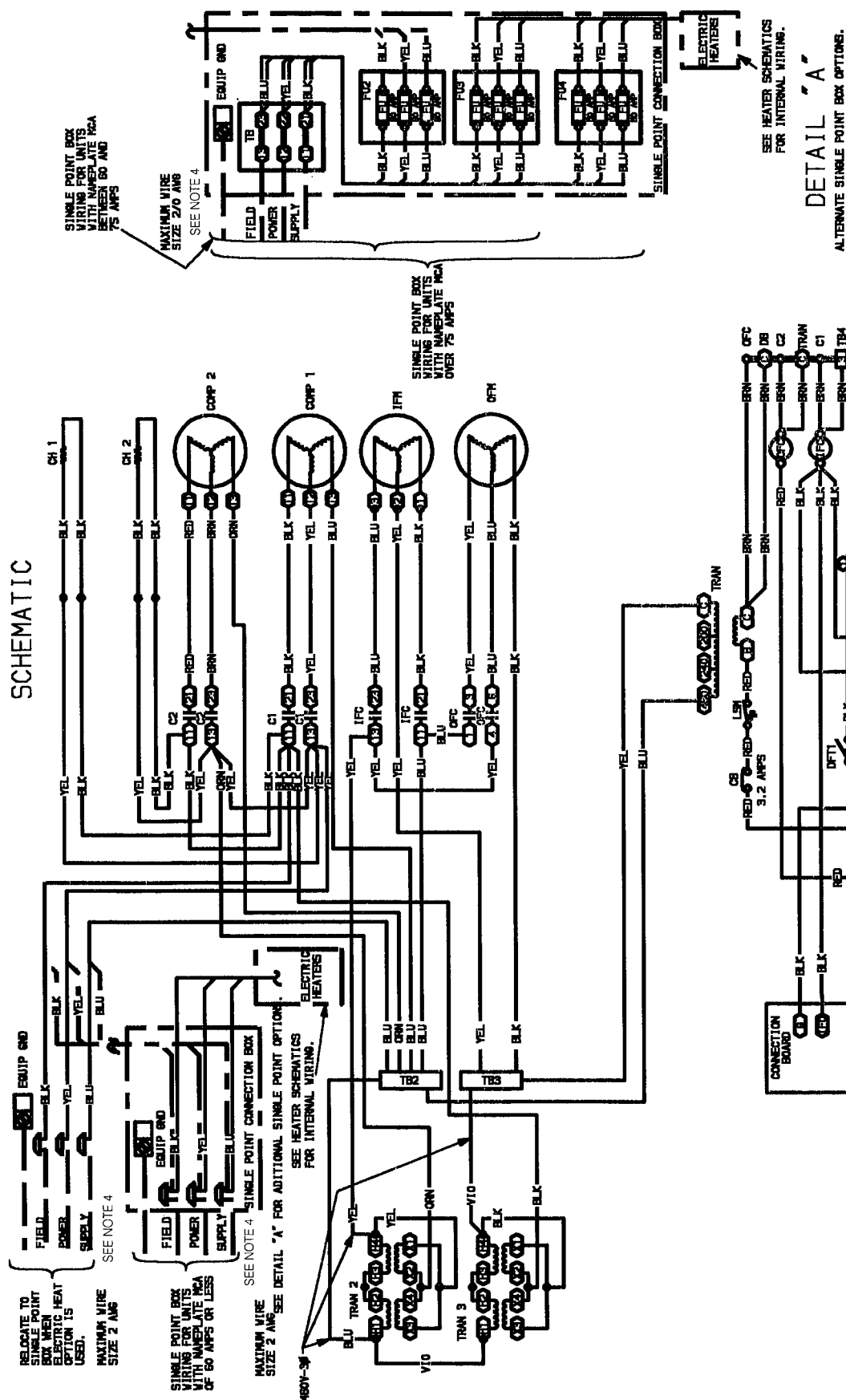
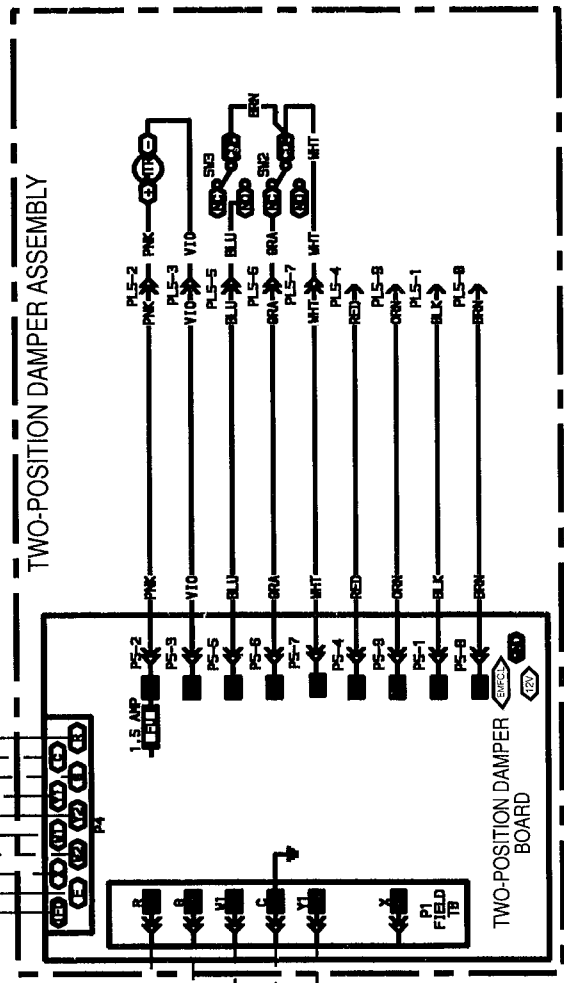
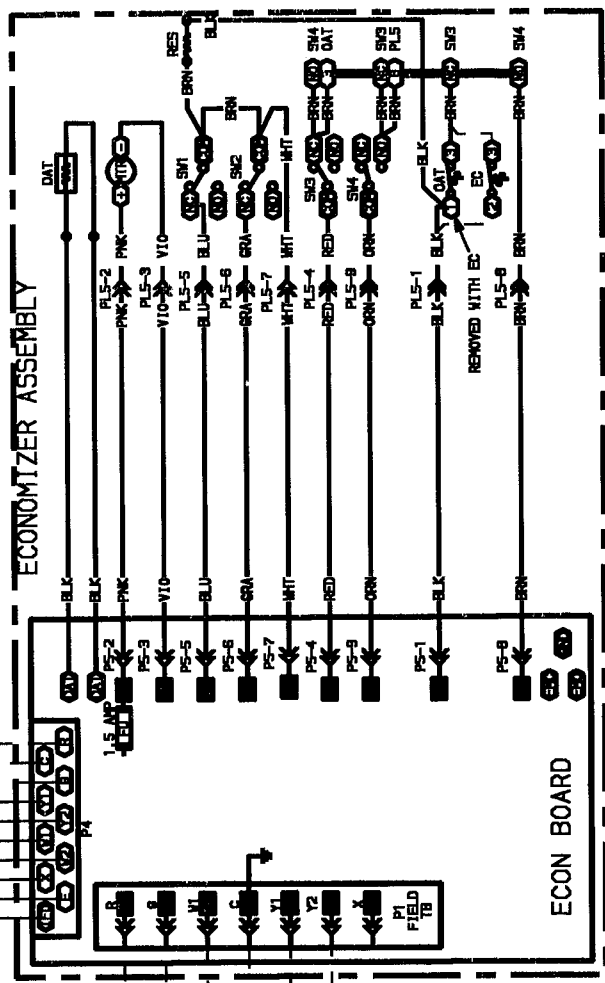
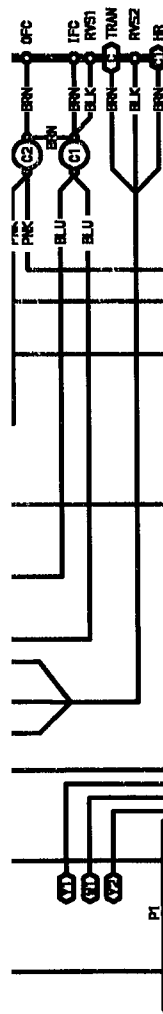


Fig. 10 – Label Diagram, Schematic: 50LJC



CONNECT TO CORRESPONDING
TERMINALS ON THERMOSTAT,
WHEN ECONOMIZER OPTION
IS USED.

CONNECT TO CORRESPONDING
TERMINALS ON THERMOSTAT
WHEN TWO-POSITION OPTION
IS USED.

SEE NOTE 3

COMPONENT

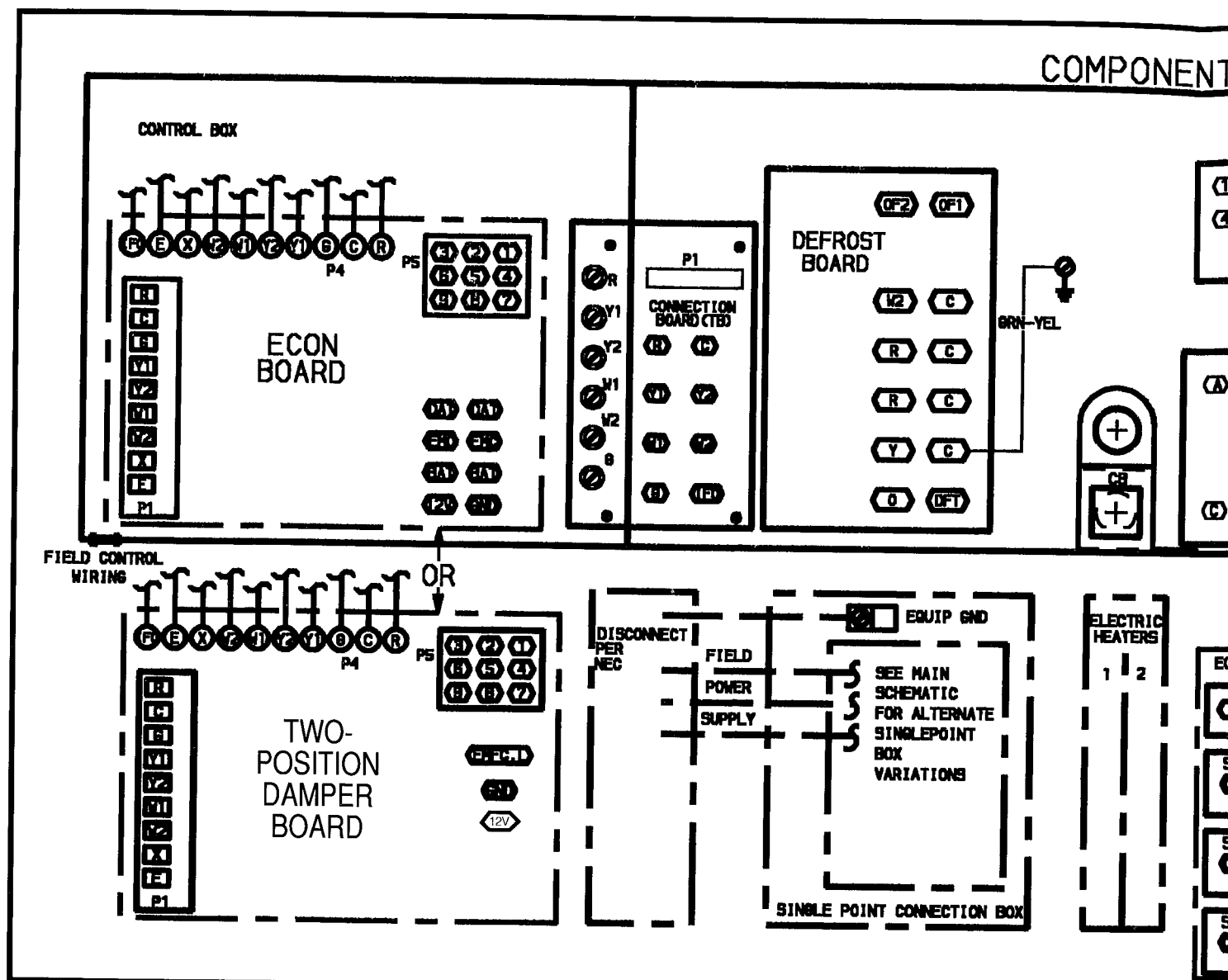
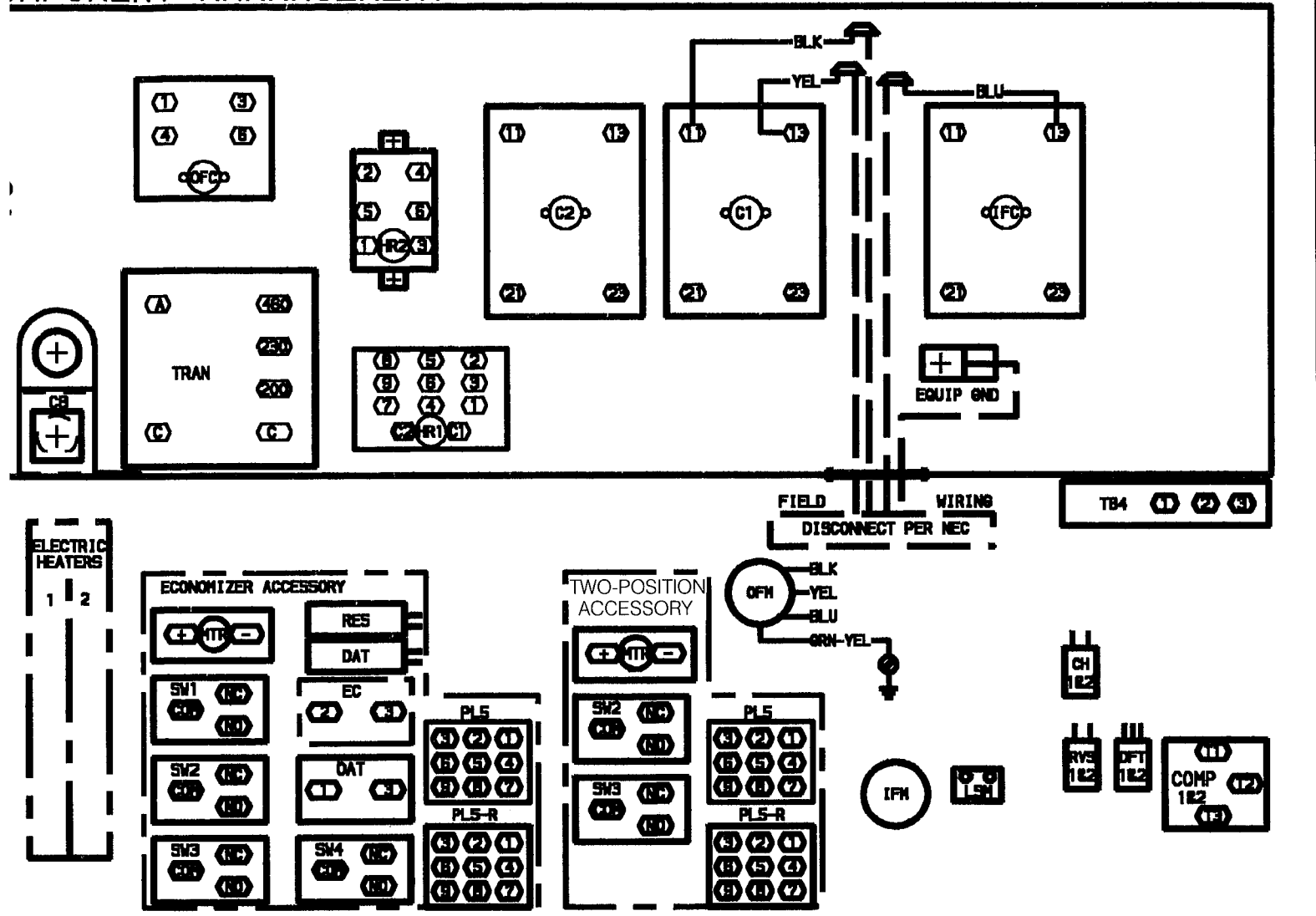
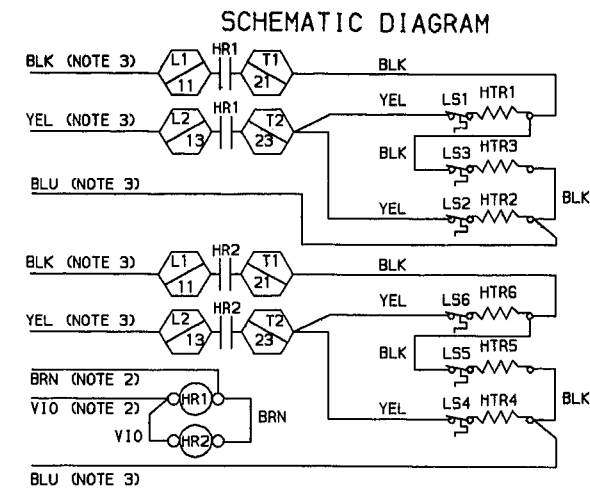


Fig. 11 — Label Diagram, Component

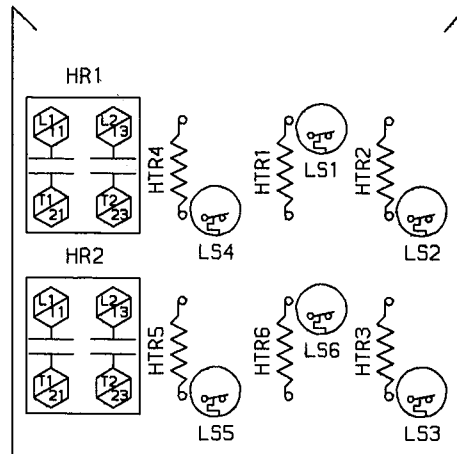
COMPONENT ARRANGEMENT



ram, Component Arrangement; 50LJQ008,012



COMPONENT ARRANGEMENT



⚠ WARNING

Electric shock hazard-disconnect all branch circuits before removing this cover.

NOTES:

- 1 To be wired in accordance with NEC and local codes.
- 2 Brown and violet 24-vac wires are supplied with heater and connected at installation to base unit as shown on base unit wiring diagram
- 3 Power wires are supplied with heater and connected at installation to base unit field power connection box as shown on base unit wiring diagram. For field installation of electric heaters, field power connection box shown on equipment nameplate must be used

LEGEND

- Sylvania Marked Terminal Elmwood
- Unmarked Terminal
- HTR** — Heater
- HR** — Heater Relay
- LS** — Limit Switch
- NEC** — National Electrical Code

Fig. 12 — Accessory Electric Heater Label Diagram, 18.6/24.8 kW, 24.0/32.0 kW, 31.8/42.4 kW and 37.5/50.0 kW; 208/230 V

Fig

BL

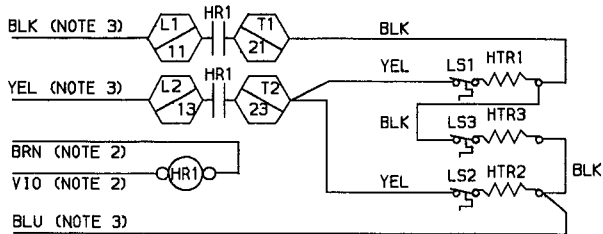
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VI

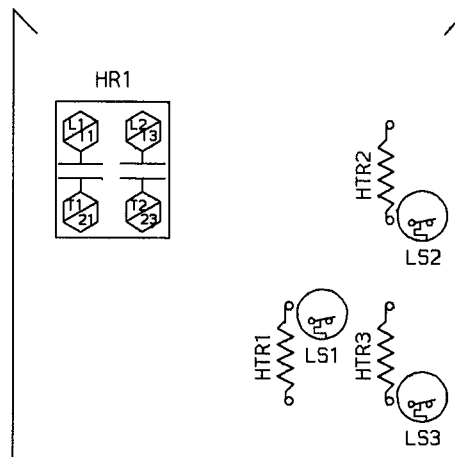
BL

YE

SCHEMATIC DIAGRAM



COMPONENT ARRANGEMENT



⚠ WARNING

Electric shock hazard-disconnect all branch circuits before removing this cover.

NOTES:

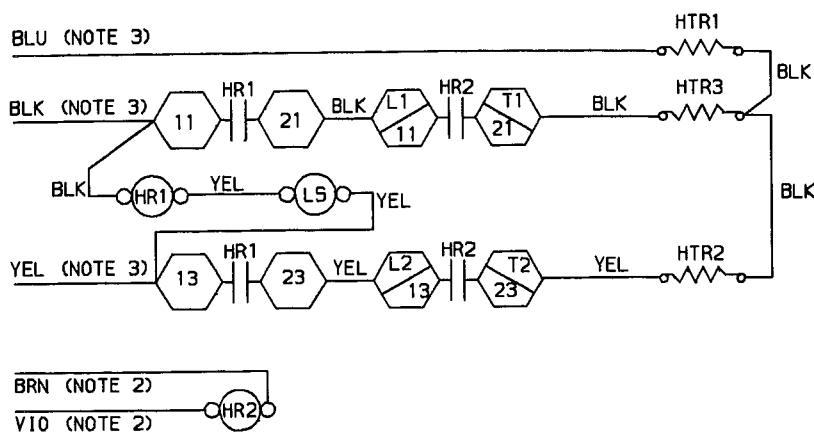
- 1 To be wired in accordance with NEC and local codes.
- 2 Brown and violet 24-vac wires are supplied with heater and connected at installation to base unit as shown on base unit wiring diagram
- 3 Power wires are supplied with heater and connected at installation to base unit field power connection box as shown on base unit wiring diagram. For field installation of electric heaters, field power connection box shown on equipment nameplate must be used

LEGEND

- Sylvania Marked Terminal Elmwood
- Unmarked Terminal
- HTR** — Heater
- HR** — Heater Relay
- LS** — Limit Switch
- NEC** — National Electrical Code

Fig. 13 — Accessory Electric Heater Label Diagram, 7.8/10.4 kW and 12.0/16.0 kW, 208/230 V

SCHEMATIC DIAGRAM



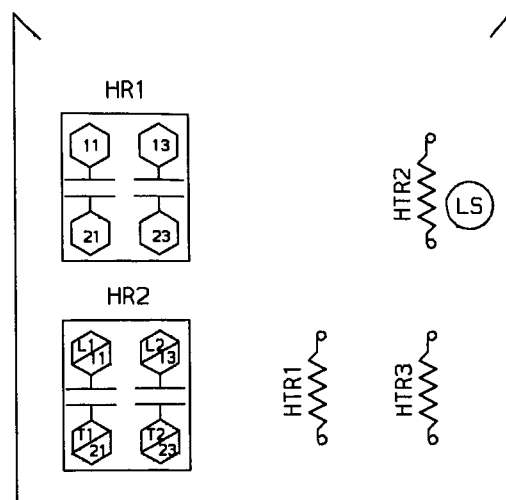
⚠ WARNING

Electric shock hazard-disconnect all branch circuits before removing this cover.

NOTES:

- 1 To be wired in accordance with NEC and local codes.
- 2 Brown and violet 24-vac wires are supplied with heater and connected at installation to base unit as shown on base unit wiring diagram
- 3 Power wires are supplied with heater and connected at installation to base unit field power connection box as shown on base unit wiring diagram. For field installation of electric heaters, field power connection box shown on equipment nameplate must be used

COMPONENT ARRANGEMENT

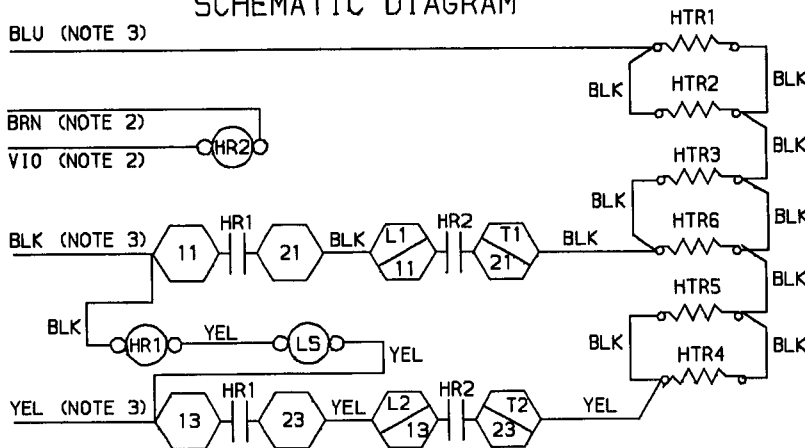


LEGEND

- Sylvania
- Marked Terminal HR2 Only
- Elmwood
- Unmarked Terminal
- HTR — Heater
- HR — Heater Relay
- LS — Limit Switch
- NEC — National Electrical Code

Fig. 14 — Accessory Electric Heater Label Diagram, 13.9 kW and 16.5 kW, 460 V; 18.0 kW, 575 V

SCHEMATIC DIAGRAM



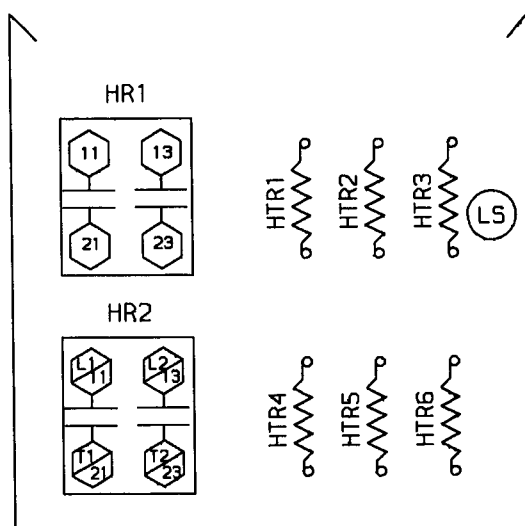
⚠ WARNING

Electric shock hazard-disconnect all branch circuits before removing this cover

NOTES:

- 1 To be wired in accordance with NEC and local codes.
- 2 Brown and violet 24-vac wires are supplied with heater and connected at installation to base unit as shown on base unit wiring diagram
- 3 Power wires are supplied with heater and connected at installation to base unit field power connection box as shown on base unit wiring diagram. For field installation of electric heaters, field power connection box shown on equipment nameplate must be used

COMPONENT ARRANGEMENT



LEGEND

- Sylvania
- Marked Terminal HR2 Only
- Elmwood
- Unmarked Terminal
- HTR — Heater
- HR — Heater Relay
- LS — Limit Switch
- NEC — National Electrical Code

Fig. 15 — Accessory Electric Heater Label Diagram, 27.8 kW, 33.0 kW, 41.7 kW and 50.0 kW, 460 V; 36.0 kW and 54.0 kW, 575 V

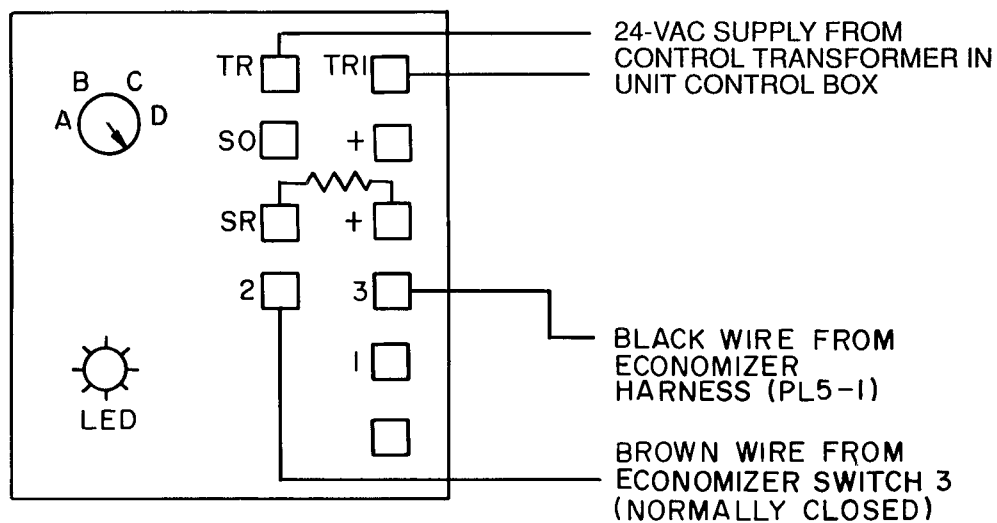
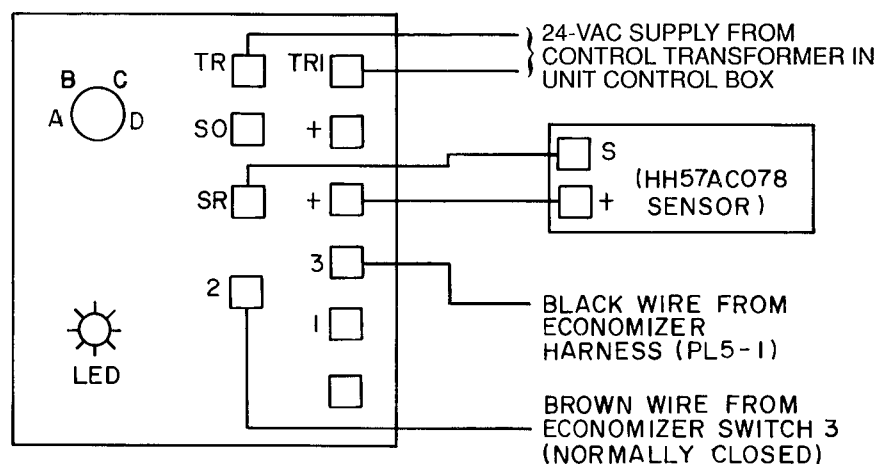


Fig. 16 — Wiring Connections for Accessory Solid-State Enthalpy Control (HH57AC077)

CONTROL SETTING	CONTROL POINT F (C) AT 50% RH
A	73 (23)
B	70 (21)
C	67 (19)
D	63 (17)



LED — Light-Emitting Diode

NOTE: Remove factory-installed jumper across SR and + before connecting wires from HH57AC078 sensor. Turn enthalpy set point knob fully clockwise past the D setting.

Fig. 17 — Wiring Connections for Accessory Differential Enthalpy Control (HH57AC077 and HH57AC078)

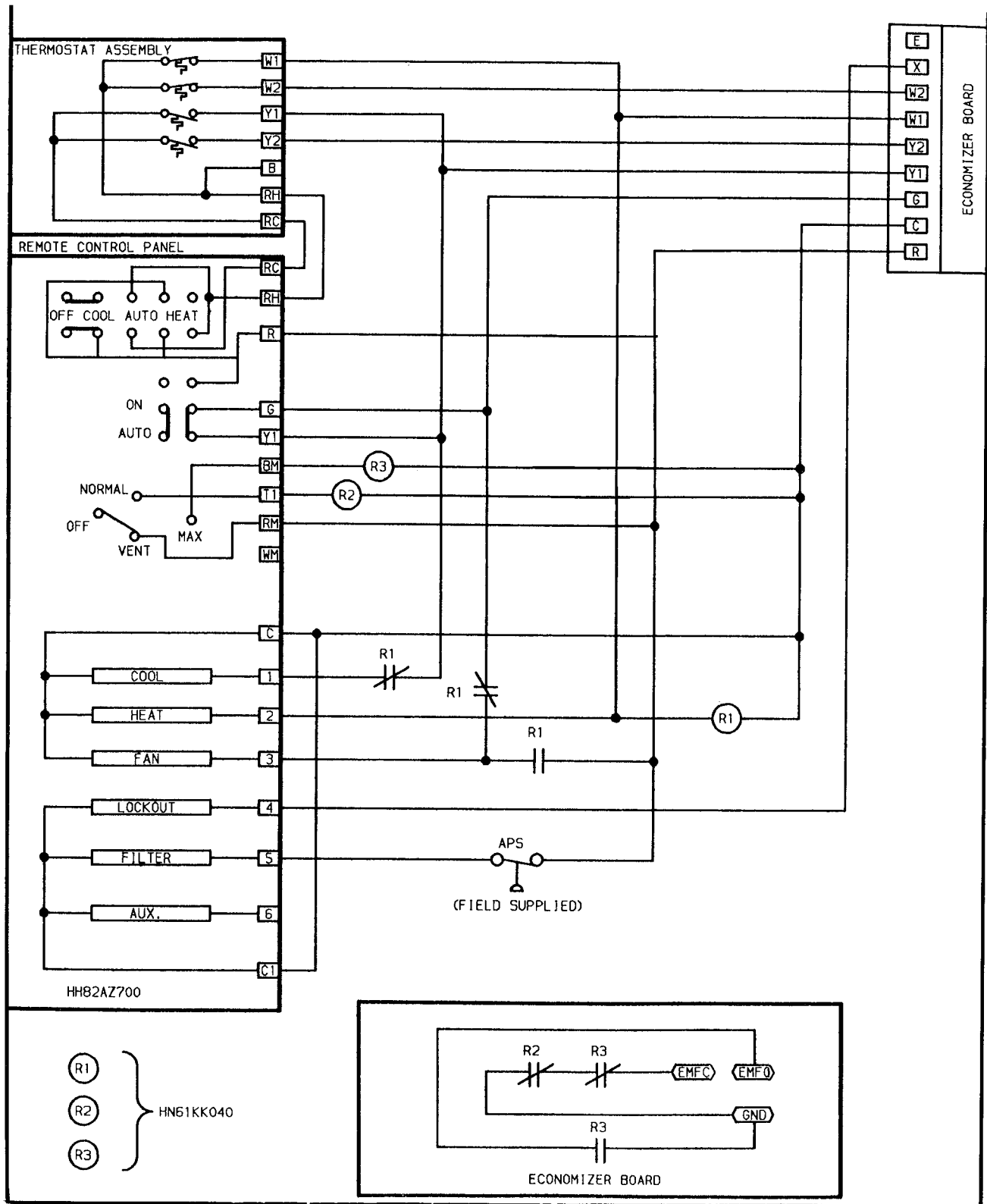
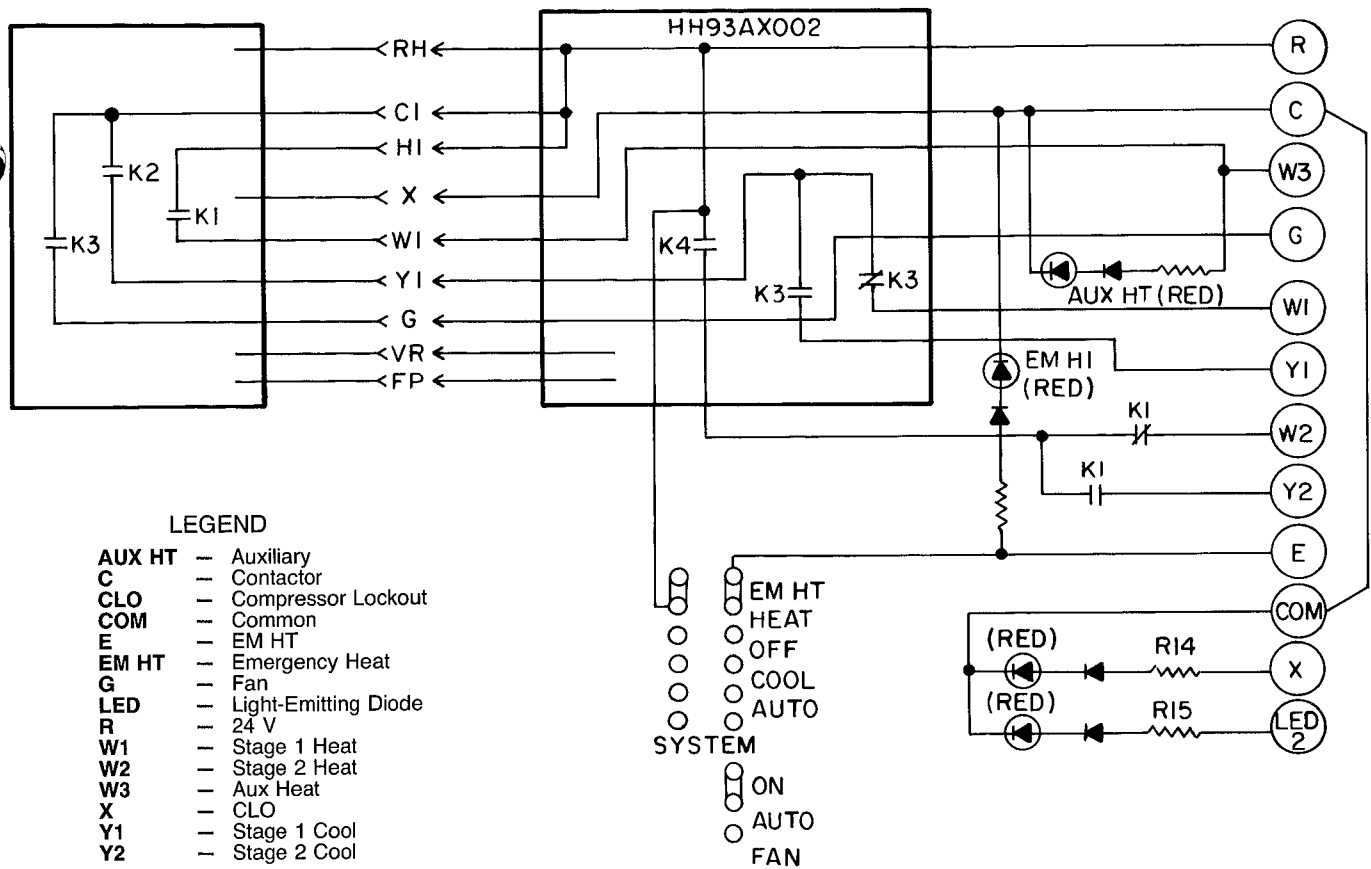
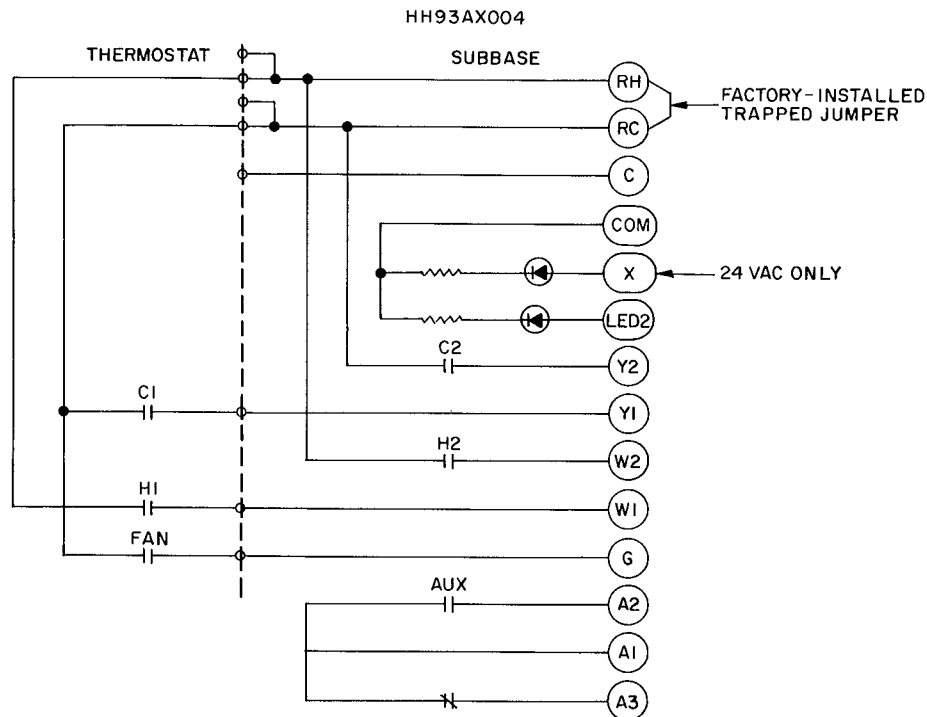
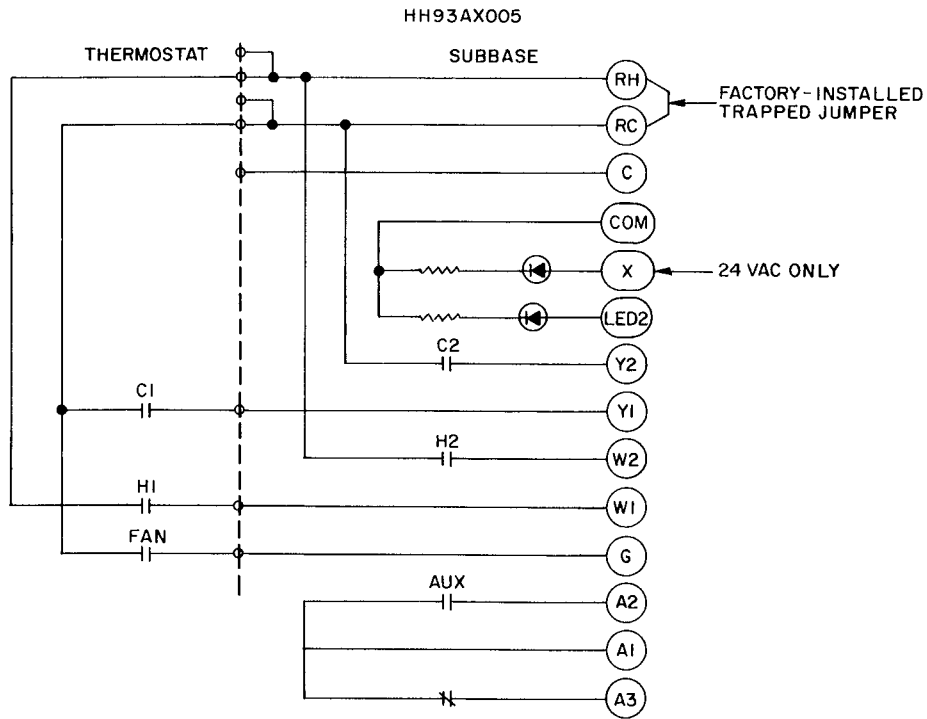


Fig. 18 — Accessory Remote Control Panel Wiring
(HH82AZ700)



2-COMPRESSOR HEAT PUMP

Fig. 19 - Accessory Electronic Thermostat Wiring, 50LJQ008, 012



LEGEND

AUX	— Auxiliary	W1	— Stage 1 Heat
C	— Contactor	W2	— Stage 2 Heat
CLO	— Compressor Lockout	X	— CLO
COM	— Common	Y1	— Stage 1 Cool
G	— Fan	Y2	— Stage 2 Cool

Fig. 20 — Accessory Electronic Thermostat Wiring, 48/50LJ008-014

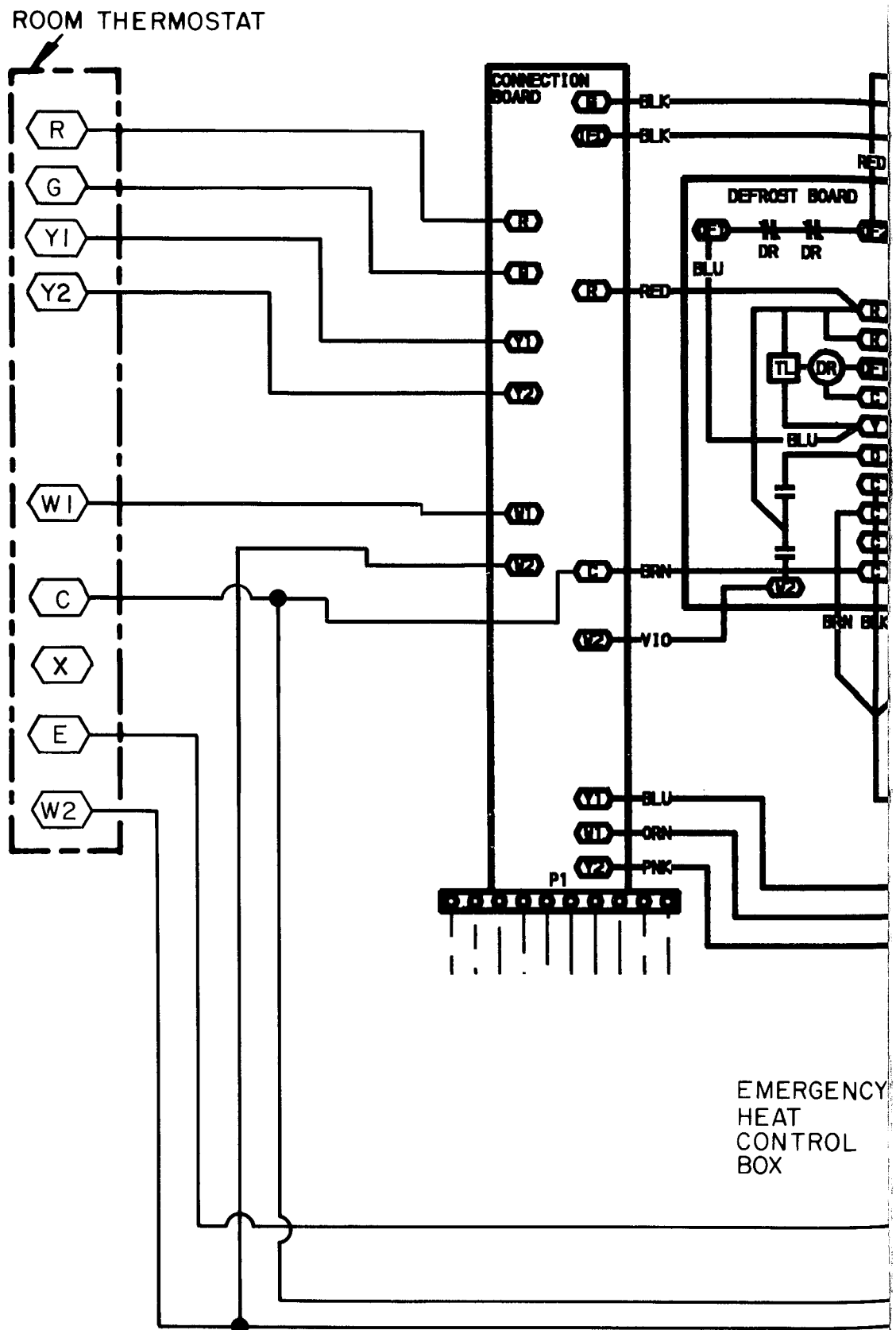
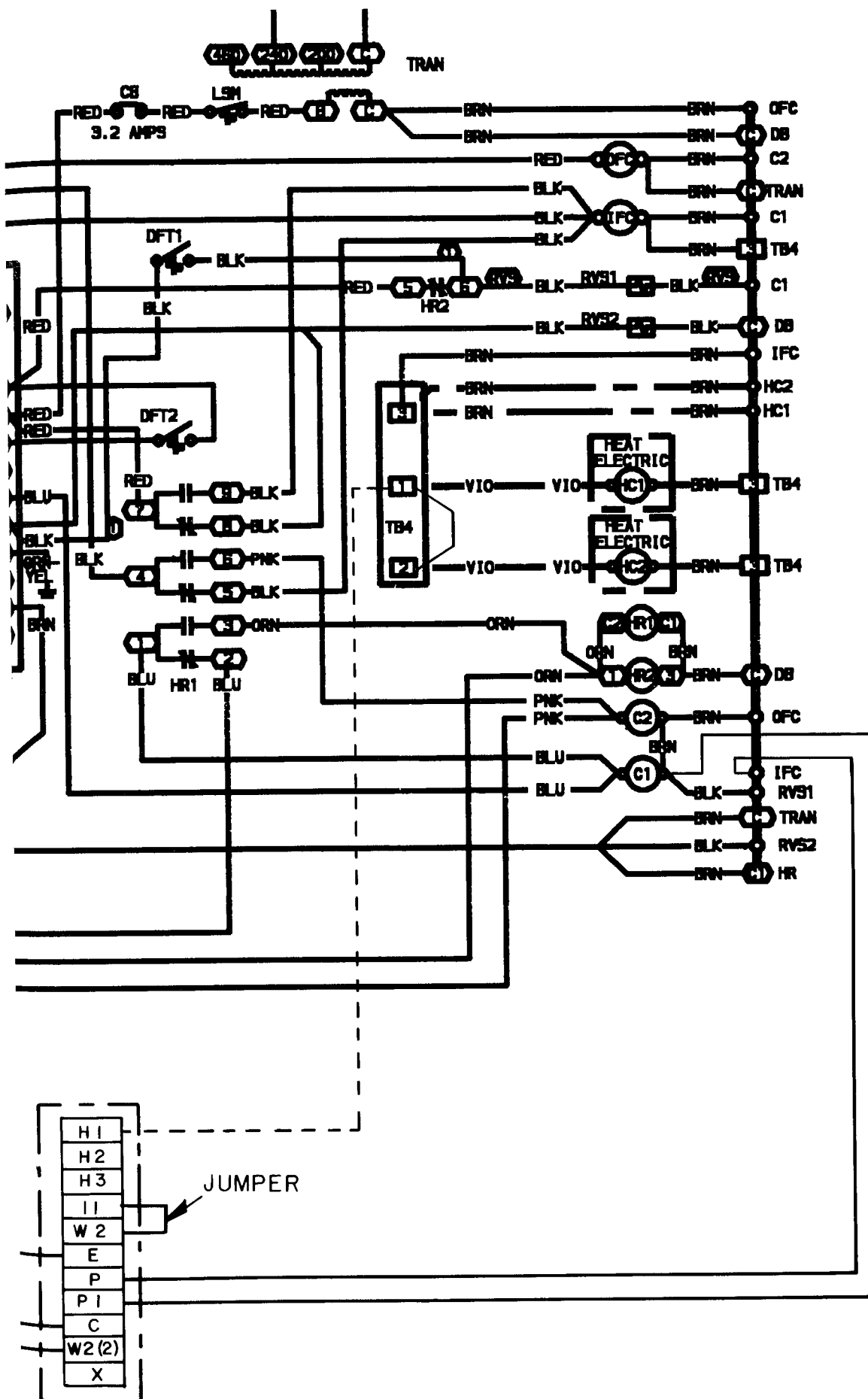


Fig. 21 — Accessory Emergency Heat Co



Control Panel Wiring, One-Stage Electric Heat

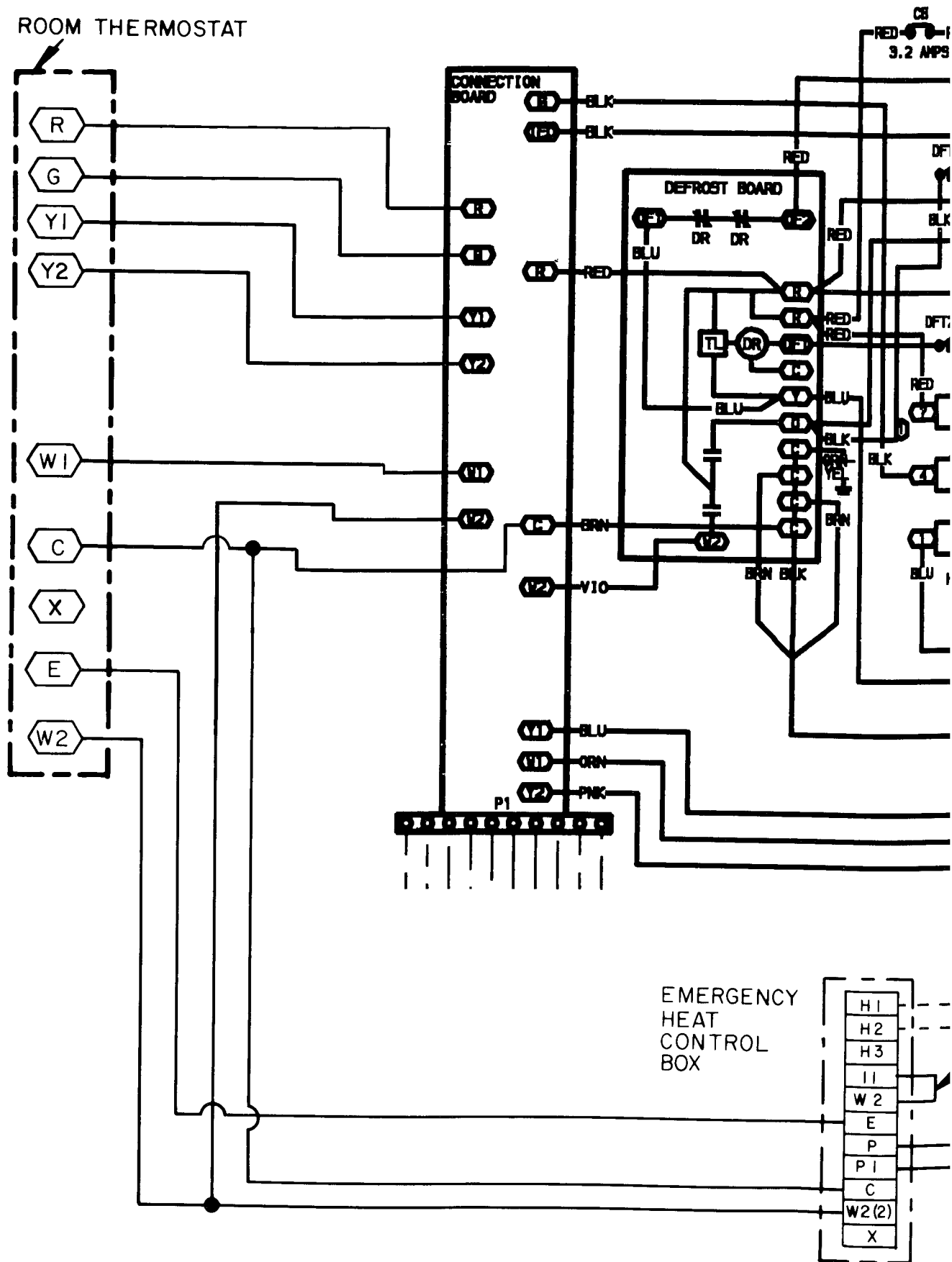
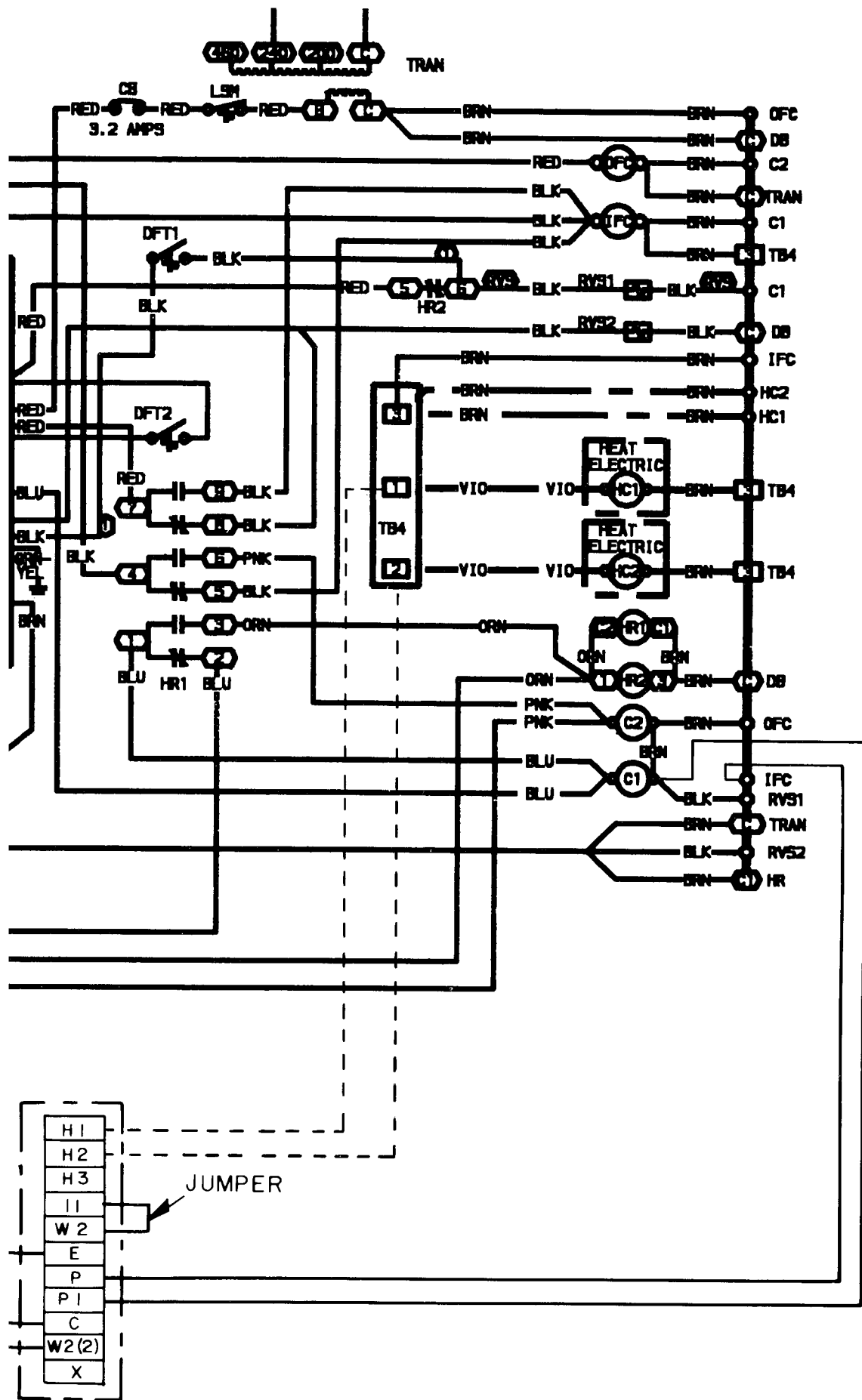


Fig. 22 — Accessory Emergency Heat Control Panel Wiring.



rol Panel Wiring, Two-Stage Electric Heat

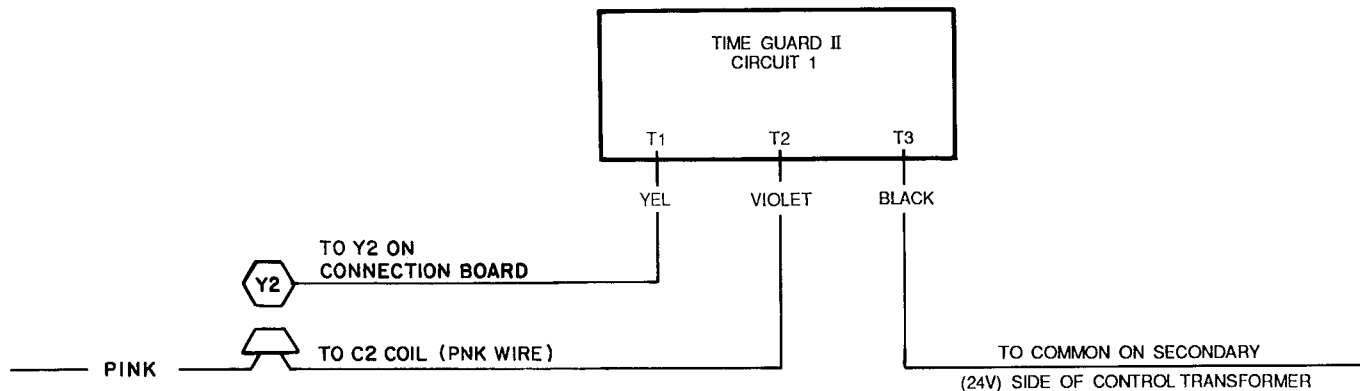
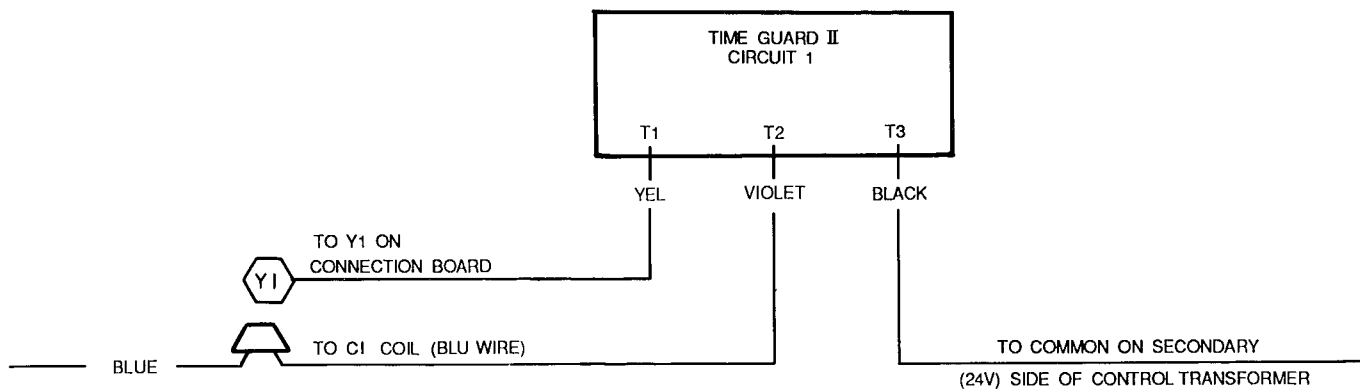
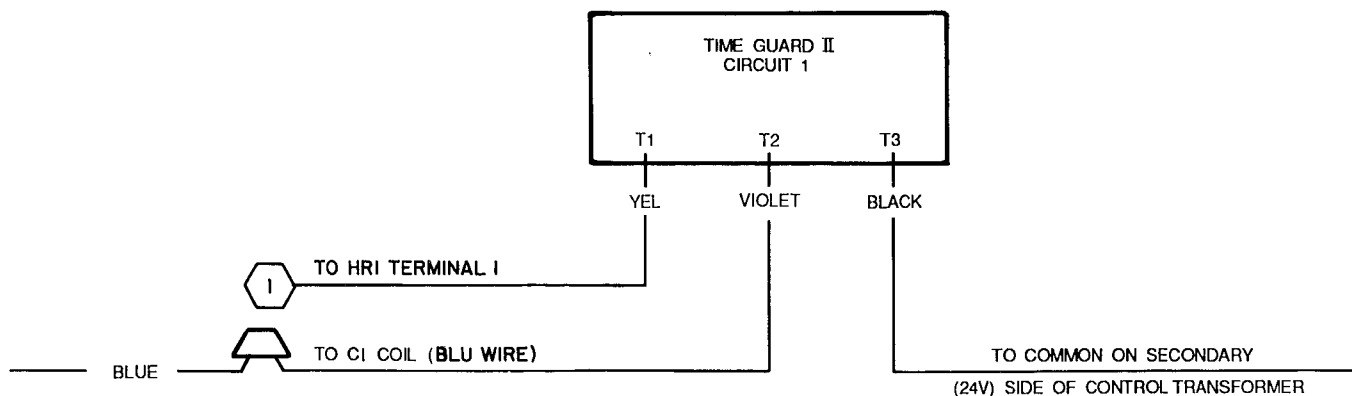


Fig. 23 – Time Guard® II Control Circuit Wiring, 48/50LJ008-014



48/50LJ004-007

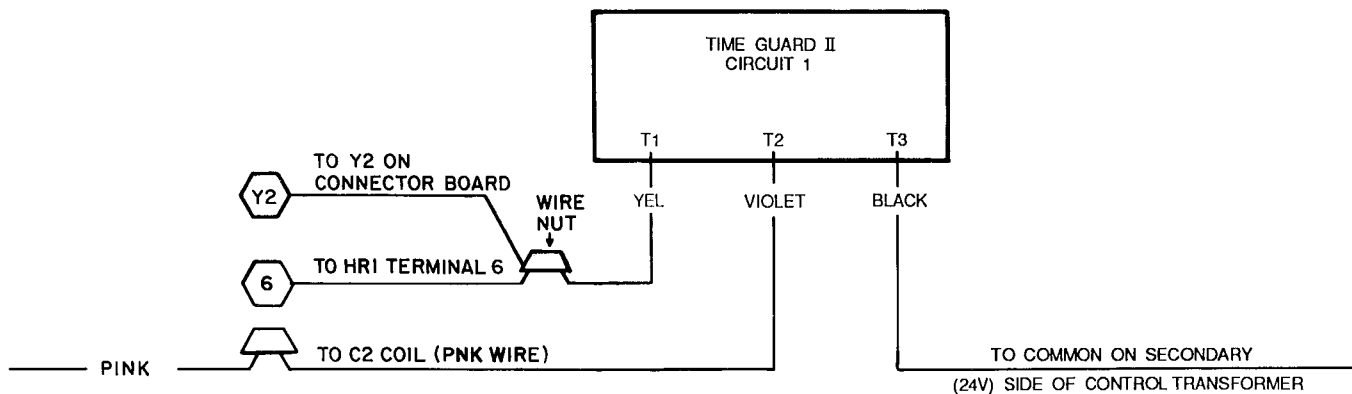


Fig. 24 – Time Guard® II Control Circuit Wiring, 50LJQ008,012