



SERVICE MANUAL

FOR

6795B,C,D SERIES

PACKAGED AIR CONDITIONERS

TABLE OF CONTENTS

1.	Warnings	2
2.	Unit Dimensions And Specifications	3
3.	6795-6651 Series Thermostat Operation And Specifications	5
4.	6795-3451 Series Thermostat Operation And Specifications	8
5.	Unit Depiction Figures	10
6.	Blower Performance Chart	12
7.	Wiring Diagram - Electric Thermostat	12
8.	Accessibility Of Appliance	13
9.	Indoor Blower Motor Removal	13
10.	Outdoor Blower Motor Removal	14
11.	Cap Tube Replacement	17
12.	Evaporator Coil Replacement	18
13.	Condenser Coil Replacement	19
14.	Compressor Replacement	19
15.	Wiring Diagram - Thermostat	20
16.	Wirebox Component Checkout	21
17.	Quick Troubleshooting Hints	22
18.	Electrical Flow Charts - Sequence Of Operation	23

1. WARNINGS

IMPORTANT NOTICE

These instructions are for the use of qualified individuals specially trained and experienced in installation of this type equipment and related system components.

Installation and service personnel are required by some states to be licensed. PERSONS NOT QUALIFIED SHALL NOT INSTALL NOR SERVICE THIS EQUIPMENT.

NOTE

The words “Shall” or “Must” indicate a requirement which is essential to satisfactory and safe product performance.

The words “Should” or “May” indicate a recommendation or advice which is not essential and not required but which may be useful or helpful.

WARNING - SHOCK HAZARD

To prevent the possibility of severe personal injury or equipment damage due to electrical shock, always be sure the electrical power to the appliance is disconnected.

CAREFULLY FOLLOW ALL INSTRUCTIONS AND WARNINGS IN THIS BOOKLET TO AVOID DAMAGE TO THE EQUIPMENT, PERSONAL INJURY OR FIRE.

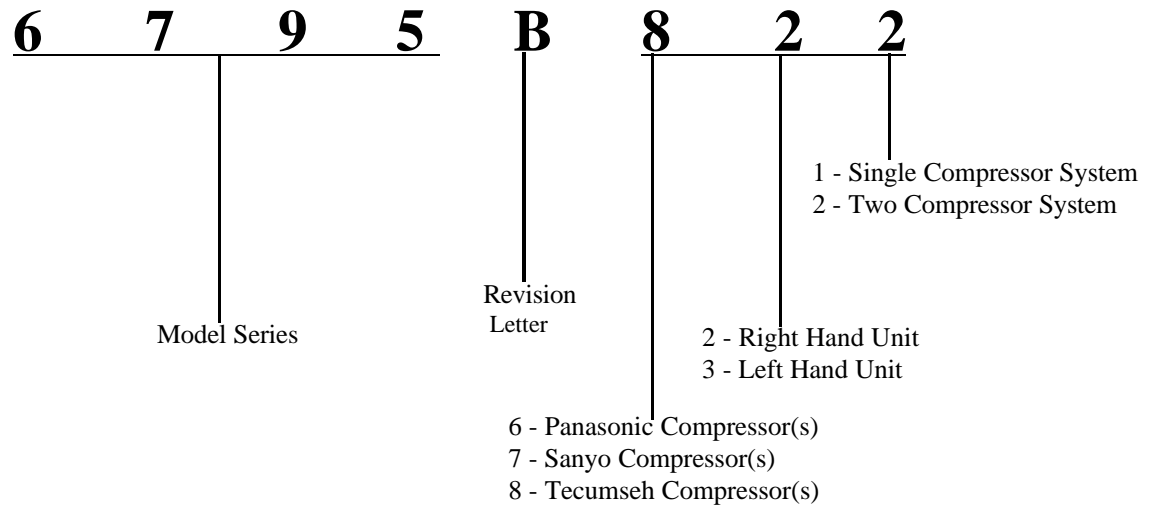
WARNING

Improper installation may damage equipment, can create a hazard and will void the warranty.

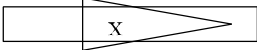
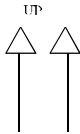


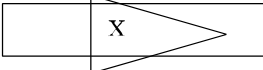
The use of components not tested in combination with these units will void the warranty, may make the equipment in violation of state codes, may create a hazard and may ruin the equipment.

2. UNIT DIMENSIONS AND SPECIFICATIONS

PACKAGE AIR CONDITIONER MODEL NUMBER BREAKDOWN FOLLOWS:



UNIT SPECIFICATIONS AND IDENTIFICATION

6795B832	
MODEL NUMBER	SERIAL NUMBER
FOR OUTDOOR USE	
USE THERMOSTAT 6795*345 ELECTRICAL RATINGS: 115 VAC, 60 HZ, 1 PHASE	
	
CIRCUIT #1	CIRCUIT #2
10.6 RLA	10.6 RLA
67.0 LRA	67.0 LRA
11.4 BCSC	11.4 BCSC
COMPRESSOR 1450A200 MOTOR THERMALLY PROTECTED	
2.4 FLA	I.D. BLOWER MOTOR DATA HORSEPOWER 1/5
2.8 FLA	O.D. BLOWER MOTOR DATA HORSEPOWER 1/3
19.5 AMP	MINIMUM CIRCUIT CAPACITY
20 AMP	MAXIMUM OVERCURRENT PROTECTIVE DEVICE
21.5 OZ.	R-22 CHARGE WEIGHT
MINIMUM EXTERNAL STATIC PRESSURE .4 IN H ₂ O	
#12 0' - 25'	MIN. SUPPLY CONDUCTOR GAUGE (COPPER)
#10 25' - 40'	UTILISER DES FILS D'ALIMENTATION EN CURVE
#8 40' - 63'	
CAUTION: RISK OF ELECTRIC SHOCK! DISCONNECT ALL POWER BEFORE OPENING PANEL. TWO DISCONNECT SWITCHES REQUIRED. ATTENTION: DEBRANCHER LE BLOCK D'ALIMENTATION INSTALLE A DISTANCE AVANT D'ENTREPRENDRE LE DEPANNAGE.	
RV PRODUCTS A DIVISION OF AIRXCEL, INC. WICHITA, KS 67204	
	
LISTED ROOM AIR CONDITIONER 5K09	6795C181
DESIGN PRESSURES HI SIDE 300 PSIG/LO SIDE 150 PSIG	
6795B832	
MODEL NUMBER	SERIAL NUMBER

3. 6795-6651 SERIES

THERMOSTAT OPERATION AND SPECIFICATIONS

SET TEMPERATURE RANGE:	40° TO 90°F.
DISPLAY TEMPERATURE:	14° TO 135.9°F.
SCALE:	DEGREES FAHRENHEIT
DISPLAY FORMAT:	LIQUID CRYSTAL DISPLAY
RESOLUTION:	1/10 DEGREES FAHRENHEIT
ACCURACY:	± 1% OF DISPLAY TEMPERATURE RANGE
SAMPLING RATE:	EVERY 10 TO 15 SECONDS
POWER SOURCE:	12 VDC NON-REGULATED, NON-FILTERED ± 2 VOLTS
OPERATING TEMPERATURE:	-10 TO +55 DEGREES CELSIUS
OUTPUT LOAD:	40 mA MINIMUM TO 1.5 AMP MAXIMUM FOR EACH OUTPUT

- SAFEGUARDS:
- * STATIC ELECTRICITY PROTECTION TO END USER AFTER INSTALLATION.
 - * ANTI-STATIC PACKAGING TO BE USED FOR SHIPMENT.
 - * REVERSE POLARITY PROTECTION ON R+ AND B- TERMS.
 - * SPIKE PROTECTION TO 400 VDC ON R+ TERMINAL
 - * CONFORMAL COATING ON P.C. BOARD PROTECTION FROM MOISTURE.

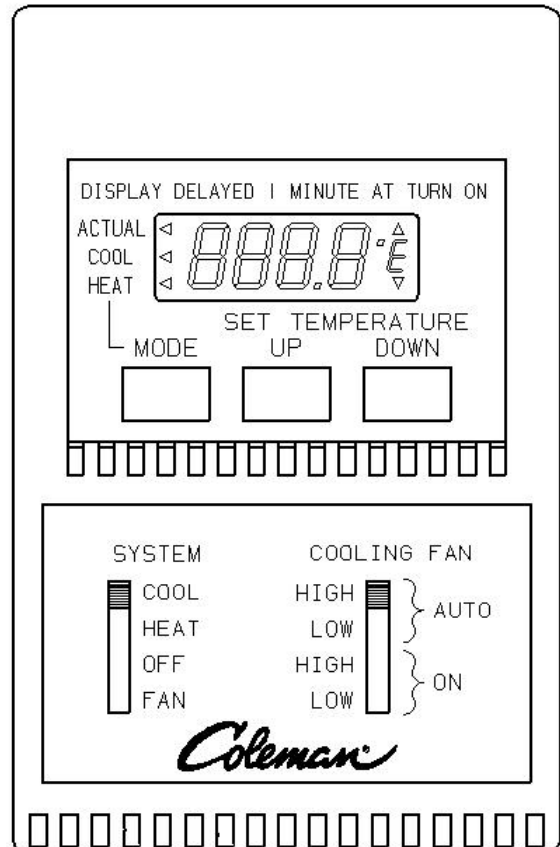
DEFAULT MODE: USER SELECTED SETPOINTS TO BE RETAINED MINIMUM 2 MINUTES AFTER POWER HAS BEEN REMOVED. AFTER 2 MINUTES, DEFAULT VALUES OF 68°F. HEATING, 78°F. COOLING ARE AUTOMATICALLY PROVIDED UPON RESTORATION OF POWER.

THERMOSTAT CONTROL PANEL

The control panel is built into the wall mounted thermostat.
The thermostat and control panel are operated from a 12 VDC electrical circuit.

The control panel contains the following switches:

- A Liquid Crystal Display
- 2 Slide Switches
 - 1 System Switch
 - 1 Cooling Fan Switch
- 3 Momentary Buttons
 - 1 Up Button
 - 1 Down Button
 - 1 Mode Button



A. OPERATION

Your air conditioner is operated from the control panel located on the electronic wall mounted thermostat. When the furnace is connected to this thermostat, it will be operated from the same control panel.

Identification and operational descriptions for all control panel switches and display are listed below:

1. Liquid Crystal Display - We will start with the display because the display will be illuminated any time the system is in operation. The display will remain illuminated as long as either:
 - a) the system switch hasn't been placed into the off position for longer than 2 minutes.
 - b) the power to the thermostat hasn't been disconnected for longer than 2 minutes.

The display shows the operator both the mode of the display (indicated by the arrow at the left side of the display) and the temperature for that mode.

There are three display modes, they are: ACTUAL, COOL SET and HEAT SET.

The operator may choose the mode they desire to view by depressing the "MODE" switch. Each time the MODE switch is depressed, the display advances to the next mode. If the display is left in either COOL SET or HEAT SET, the thermostat will automatically return the display to ACTUAL in approximately three minutes.

A description of the three modes follows:

ACTUAL - When in ACTUAL mode, the display is indicating current room temperature.

COOL SET - When in COOL SET mode, the display is indicating the current cooling system setpoint temperature. At this time the cooling system setpoint temperature may be adjusted up or down to meet individual comfort needs. See "Adjusting Setpoint" for further instructions.

HEAT SET - When in the HEAT SET mode, the display is indicating the current heating system setpoint temperature. At this time, the heating system setpoint temperature may be adjusted up or down to meet individual comfort needs. See "Adjusting Setpoint" for further instructions.

All three display modes can be accessed without affecting the operation of the system. System operation will remain normal unless a change in a setpoint temperature forces a change in system operation.

2. System Switch - The system switch has four positions to control the operation of the heating and air conditioning systems. They are as follows:

COOL - When in the COOL position, 1st and 2nd stage cooling will cycle from the cooling system setpoint. Blower operation will be controlled by the position of the Cooling Fan switch.

HEAT - When in the HEAT position, the heating system will cycle from the heating system setpoint. The heating blower will operate per the heating system manufacturer specifications.

OFF - When in the OFF position, no thermostat of system operation will occur. The liquid crystal display will indicate room temperature until backup power is depleted (approximately 2 minutes).

FAN - When in the FAN position, the cooling blower will operate continuously at high speed.

3. Cooling Fan Switch - The fan switch has four positions from which to control the operation of the cooling blower. The fan switch controls operation of the cooling blower only after the system switch is placed into the COOL position. With the system switch in any other position, the fan switch will have no effect on the operation of the cooling blower. Fan switch positions and their resulting function are listed below:

HIGH AUTO - When in the HIGH AUTOMATIC position, the cooling blower operates at high speed and cycles off and on with the 1st stage compressor. 2nd stage cooling will cycle on and off as needed having no effect on cooling blower operation.

LOW AUTO - When in the LOW AUTOMATIC position, the cooling blower operates at low speed and cycles off and on with the 1st stage compressor. 2nd stage cooling will cycle on and off as needed having no effect on cooling blower operation.

LOW ON - When in the LOW ON position, the cooling blower operates continuously at low speed. Stage 1 and Stage 2 compressors cycle on and off as needed.

HIGH ON - When in HIGH ON position, the cooling blower operates continuously at high speed. Stage 1 and Stage 2 compressors cycle on and off as needed.

4. Momentary Buttons - There are three momentary buttons. Momentary buttons are activated by depressing the center of the button. The buttons are as follows:

MODE - Depressing this momentary button advances the display mode from ACTUAL to COOL SET, HEAT SET and back to ACTUAL.

When using the mode button, you are indicating your desire to check or adjust the setpoint temperatures for either COOL SET or HEAT SET.

The cool setting determines the temperatures at which the air conditioner will start operating. The heat setting determines the temperature at which the heating system will start operating. For instructions concerning changing these setpoints, see "Adjusting Setpoint".

Up Button - Increases the temperature setpoint.

Down Button - Decreases the temperature setpoint.

ADJUSTING SETPOINT

To adjust the setpoint of either heating or cooling, press the MODE button until the arrow on the left side of the display indicates the desired setpoint to be changed, either COOL SET or HEAT SET. The display will indicate the current setpoint of the thermostat. Press the UP button or the DOWN button to change the setpoint. Once the new desired setpoint

is displayed, press the MODE button until the arrow is pointing to ACTUAL. If the thermostat is left in the COOL SET or HEAT SET modes, the display will return to ACTUAL in approximately three minutes. After the display has been returned to ACTUAL, it takes 15 to 30 seconds for the thermostat to recognize the changes made to the setpoints.

B. TESTING

Place the thermostat system switch into the "OFF" position. Once all safety precautions have been met, reinstate power to all systems; thermostat, cooling and heating.

OFF

Starting with the system switch in the OFF position, the display will be blank and no part of either the cooling or heating systems will be operating.

FAN

Move the system switch to FAN. The display indicates room temperature. The cooling system fan operates continuously at high speed. No other components or systems are operating.

HEATING

Move the system switch to HEAT. The display will indicate room temperature. Adjust the HEAT SET setpoint of the thermostat above the room temperature displayed and return the arrow to the ACTUAL position. After 15 to 30 seconds, the heat circuit of the thermostat will activate the heating controls. Once the heat has turned on and is running, adjust the HEAT SET setpoint below the room temperature displayed and return the arrow to the ACTUAL position. After 15 to 30 seconds, the heat circuit of the thermostat will turn off and deactivate the heating controls.

COOLING

Move the system switch to COOL. The display will indicate room temperature. Adjust the COOL SET setpoint to 3° to 5° above room temperature and return to actual. Move the fan switch to LOW ON. The fan operates continuously at low speed.

Move the fan switch to HIGH ON. The fan operates continuously at high speed. Move the fan switch to LOW AUTO, the fan will stop. Move the fan switch to HIGH AUTO, the fan will remain off.

Adjust the COOL SET setpoint 5° below room temperature and return to ACTUAL (if the thermostat has been powered for more than 3 minutes, 1st stage cooling and the cooling fan will come on approximately 1 minute later). If the thermostat has not been powered for more than 3 minutes, 1st stage cooling and the cooling fan will come on anywhere from 30 seconds to 3 minutes later. 2nd stage cooling will come on approximately 30 seconds after the 1st stage.

With the fan switch in HIGH AUTO, the fan will operate at high speed and cycle with stage 1 compressor. Move the fan switch to LOW AUTO. The fan will operate at low speed and cycle with stage 1 compressor. Once both stages of cooling and both fan speeds have been verified, adjust COOL SET setpoint 1° below room temperature and return to ACTUAL. After 15 to 30 seconds, 2nd stage cooling will turn off while 1st stage remains on.

A. OPERATION

1. System Switch - The system switch has four positions to control the operation of the heating and air conditioning systems. They are as follows:

COOL - When in the COOL position, 1st and 2nd stage cooling will cycle from the cooling system setpoint. Blower operation will be controlled by the position of the Cooling Fan switch.

HEAT - When in the HEAT position, the heating system will cycle from the heating system setpoint. The heating blower will operate per the heating system manufacturer specifications.

OFF - When in the OFF position, no thermostat or system operation will occur. The liquid crystal display will indicate room temperature until backup power is depleted (approximately 2 minutes).

FAN - When in the FAN position, the cooling blower will operate continuously at high speed.

2. Cooling Fan Switch - The fan switch has four positions from which to control the operation of the cooling blower. The fan switch controls operation of the cooling blower only after the system switch is placed into the COOL position. With the system

switch in any other position, the fan switch will have no effect on the operation of the cooling blower. Fan switch positions and their resulting function are listed below:

HIGH AUTO - When in the HIGH AUTOMATIC position, the cooling blower operates at high speed and cycles off and on with the 1st stage compressor. 2nd stage cooling will cycle on and off as needed having no effect on cooling blower operation.

LOW AUTO - When in the LOW AUTOMATIC position, the cooling blower operates at low speed and cycles off and on with the 1st stage compressor. 2nd stage cooling will cycle on and off as needed having no effect on cooling blower operation.

LOW ON - When in the LOW ON position, the cooling blower operates continuously at low speed. Stage 1 and Stage 2 compressors cycle on and off as needed.

HIGH ON - When in the HIGH ON position, the cooling blower operates continuously at high speed. Stage 1 and Stage 2 compressors cycle on and off as needed.

B. TESTING

Place the thermostat system switch into the "OFF" position. Once all safety precautions have been met, reinstate power to all systems; thermostat, cooling and heating.

OFF

Starting with the system switch in the OFF position, the display will be blank and no part of either the cooling or heating systems will be operating.

FAN

Move the system switch to FAN. The display indicates room temperature. The cooling system fan operates continuously at high speed. No other components or systems are operating.

HEATING

Move the system switch to HEAT. The display will indicate room temperature. Adjust the setpoint of the thermostat above the room temperature displayed. After 15 to 30 seconds, the heat circuit of the thermostat will activate the heating controls. Once the heat has turned on and is running, adjust the setpoint below the room temperature displayed.

After 15 to 30 seconds, the heat circuit of the thermostat will turn off and deactivate the heating controls.

COOLING

Move the system switch to COOL. The display will indicate room temperature. Adjust the setpoint above room temperature. Move the fan switch to LOW ON. The fan operates continuously at low speed.

Move the fan switch to HIGH ON. The fan operates continuously at high speed. Move the fan switch to LOW AUTO, the fan will stop. Move the fan switch to HIGH AUTO, the fan will remain off.

Adjust the setpoint 5° below room temperature (if the thermostat has been powered for more than 3 minutes, 1st stage cooling and the cooling fan will come on approximately 1 minute later). If the thermostat has not been powered for more than 3 minutes, 1st stage cooling and the cooling fan will come on anywhere from 30 seconds to 3 minutes later. 2nd stage cooling will come on approximately 30 seconds after the 1st stage.

With the fan switch to HIGH AUTO, the fan will operate at high speed and cycle with stage 1 compressor. Move then fan switch to LOW AUTO. The fan will operate at low speed and cycle with stage 1 compressor. Once both stages of cooling and both fan speeds have been verified, adjust setpoint 1° below room temperature. After 15 to 30 seconds, 2nd stage cooling will turn off while 1st stage remains on.

Adjust COOL SET setpoint to a temperature above room temperature and return to ACTUAL. After 15 to 30 seconds, both 1st stage cooling and the cooling fan will cycle off. 1st stage cooling cannot be restarted until a 3 to 3-1/2 minute time delay has occurred.

5. UNIT DEPICTION FIGURES

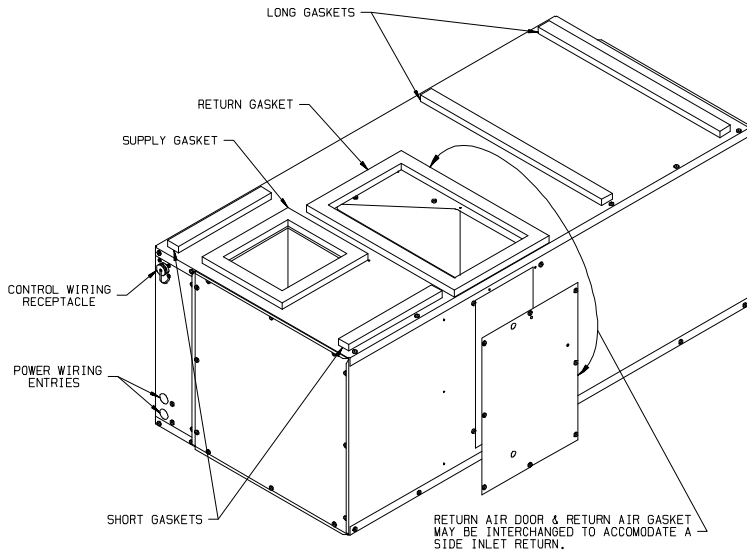


FIGURE 1

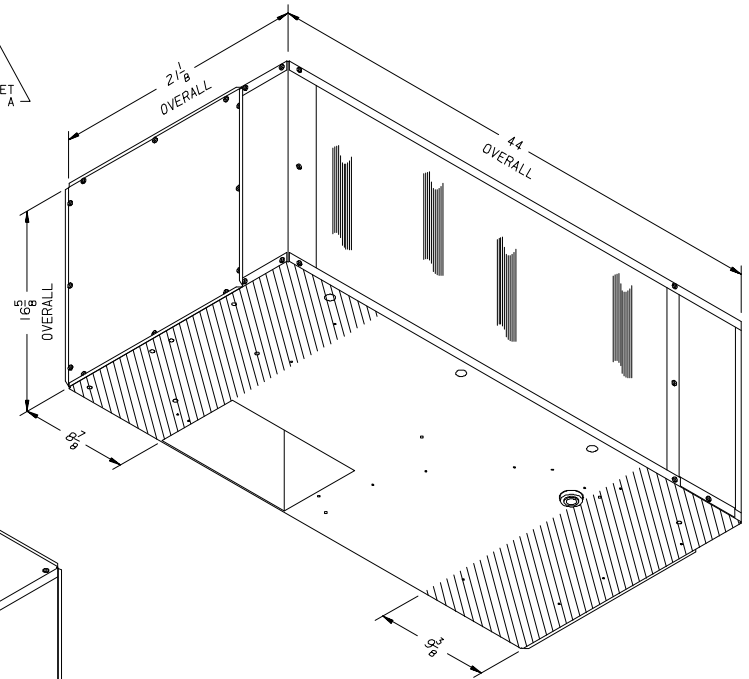


FIGURE 2

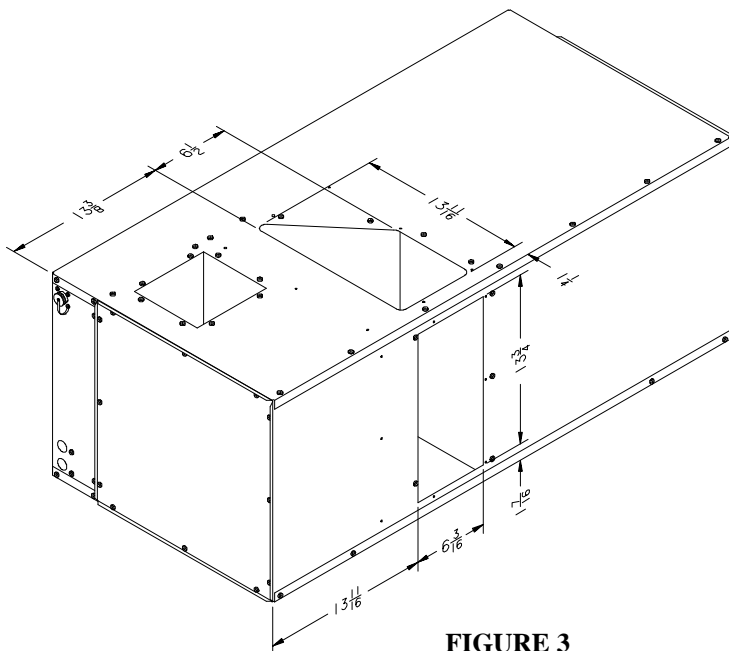


FIGURE 3

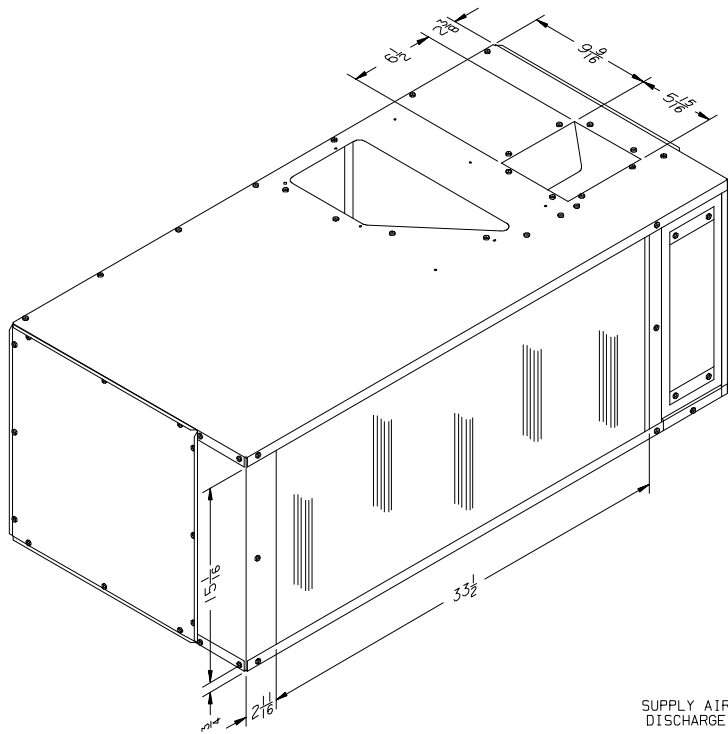


FIGURE 4

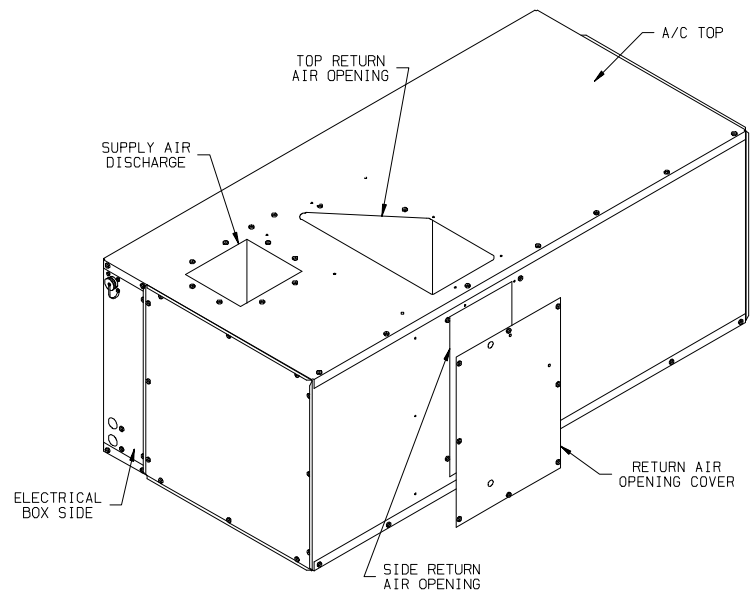


FIGURE 5

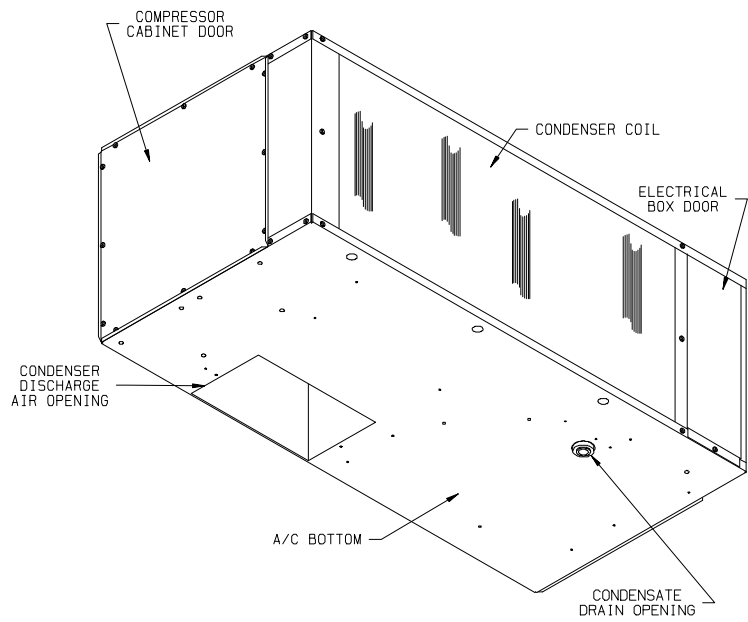


FIGURE 6

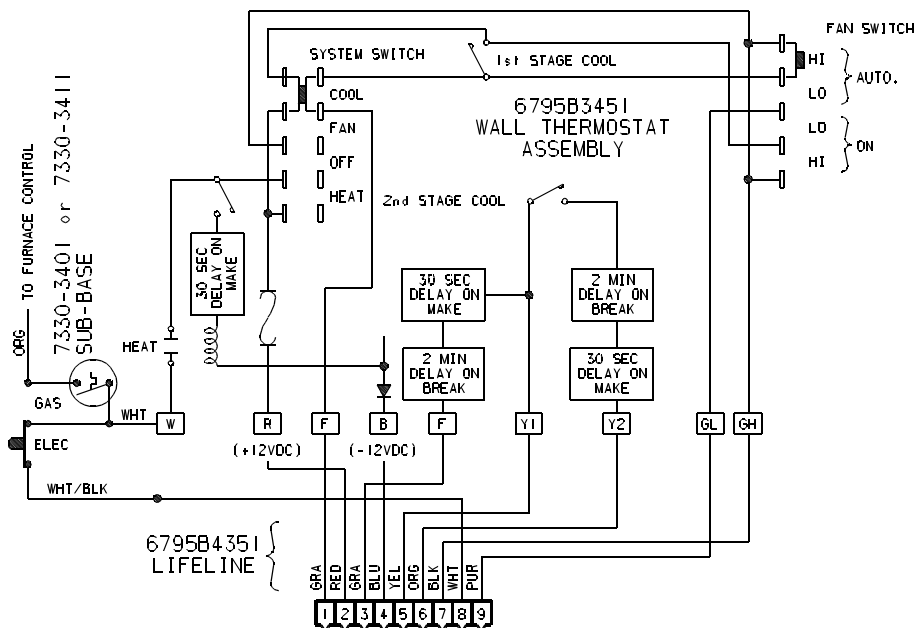
6. PACKAGED AIR CONDITIONER BLOWER PERFORMANCE DATA TEST CONDITION: 115 VAC, 60 HZ, 1 PH, DRY COIL

CHART 1

EXTERNAL STATIC PRESSURE (INCHES OF WATER COLUMN)		0	.1	.2	.3	.4	.5	.6	.7	.8	.9
LOW SPEED OPERATION	SCFM	438	423	419	415	415	401	385	351	315	113
	AMPS	1.65	1.61	1.55	1.49	1.42	1.35	1.3	1.2	1.12	6
	WATTS	190	185	178	171	163	155	149	138	128	69
	RPM	648	724	762	845	899	939	993	1029	1060	1140

EXTERNAL STATIC PRESSURE (INCHES OF WATER COLUMN)		0	.1	.2	.3	.4	.5	.6	.7	.8	.9
HIGH SPEED OPERATION	SCFM	779	748	722	677	648	603	587	509	454	400
	AMPS	2.95	2.82	2.72	2.6	2.52	2.43	2.32	2.18	2.05	1.95
	WATTS	339	324	312	299	289	279	266	250	235	224
	RPM	1090	1099	1109	1116	1120	1125	1133	1140	1146	1153

7. WIRING DIAGRAM ELECTRIC THERMOSTAT Electronic Wall Thermostat Assembly (12 VDC)



8. ACCESSIBILITY OF APPLIANCE

The accessibility of this appliance will vary from one installation to another. It shall be left to the service

technicians judgement, the best method of attaining access to perform service.

9. INDOOR BLOWER MOTOR REMOVAL

Remove indoor blower access panel.

1. Disconnect wiring from motor terminal block and capacitor.
2. Remove 4 screws from venturi (See #1, Figure 7).
3. Remove 3 screws from motor mount bracket (See #2, Figure 7).

4. Remove motor assembly from scroll.
5. Remove blower wheel and motor mounting bracket.

Note: Upon reassembly, the references made on Figures 7 and 8 shall be used for proper reassembly.

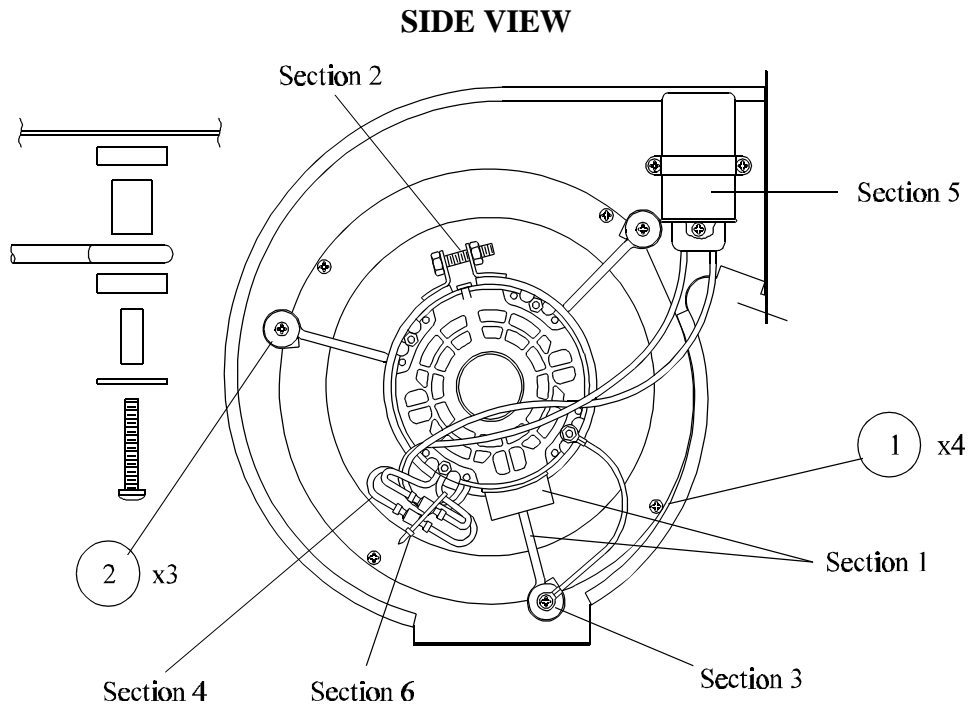


FIGURE 7

- Section 1. Position motor with terminal block parallel to motor mount leg opposite motor clamp. Assemble motor mount into scroll in orientation shown.
- Section 2. Torque nut to 65 in. lbs. min.
- Section 3. Ground wire terminal assemblies between screw head and washer.
- Section 4. Motor rotation wires to be connected: Yellow to Yellow and Orange to Orange (6795X822). Yellow to Orange and Yellow to Orange (6795X832).
- Section 5. Alternate capacitor: 1499-546
- Section 6. Bundle the rotation and capacitor wires up and wire tie together.

TOP VIEW

1. Wheel must be mounted with a minimum of 5/16" clearance to scroll sides.
2. Apply grease to motor shaft before assembling wheel.
3. Torque set screw on flat of shaft to 110 #10 in. lbs.

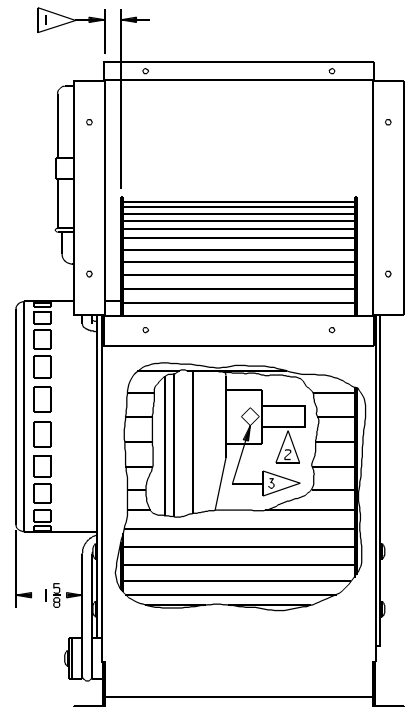


FIGURE 8

10. OUTDOOR BLOWER MOTOR REMOVAL

1. It will be necessary to remove the top panel of the unit.
 2. Remove 4 screws that attach scroll housing to basepan (See #1, Figure 9).
 3. Disconnect wiring from motor terminal block.
 4. Remove scroll/motor assembly from the unit.
 5. If at this point only the blower wheel needs replaced, then remove 4 screws from inboard venturi. Remove and replace blower wheel (see note) or else go to Step. 6.
 6. Disconnect wiring at capacitor.
 7. Remove 4 screws from venturi (See #1, Figure 10).
 8. Remove 4 screws from motor mount bracket (See #2, Figure 10).
 9. Remove motor assembly from scroll.
 10. Remove blower wheel and motor mounting bracket.
- Note: Upon reassembly, the references made on Figures 9 and 10 shall be used for proper reassembly.

BOTTOM VIEW

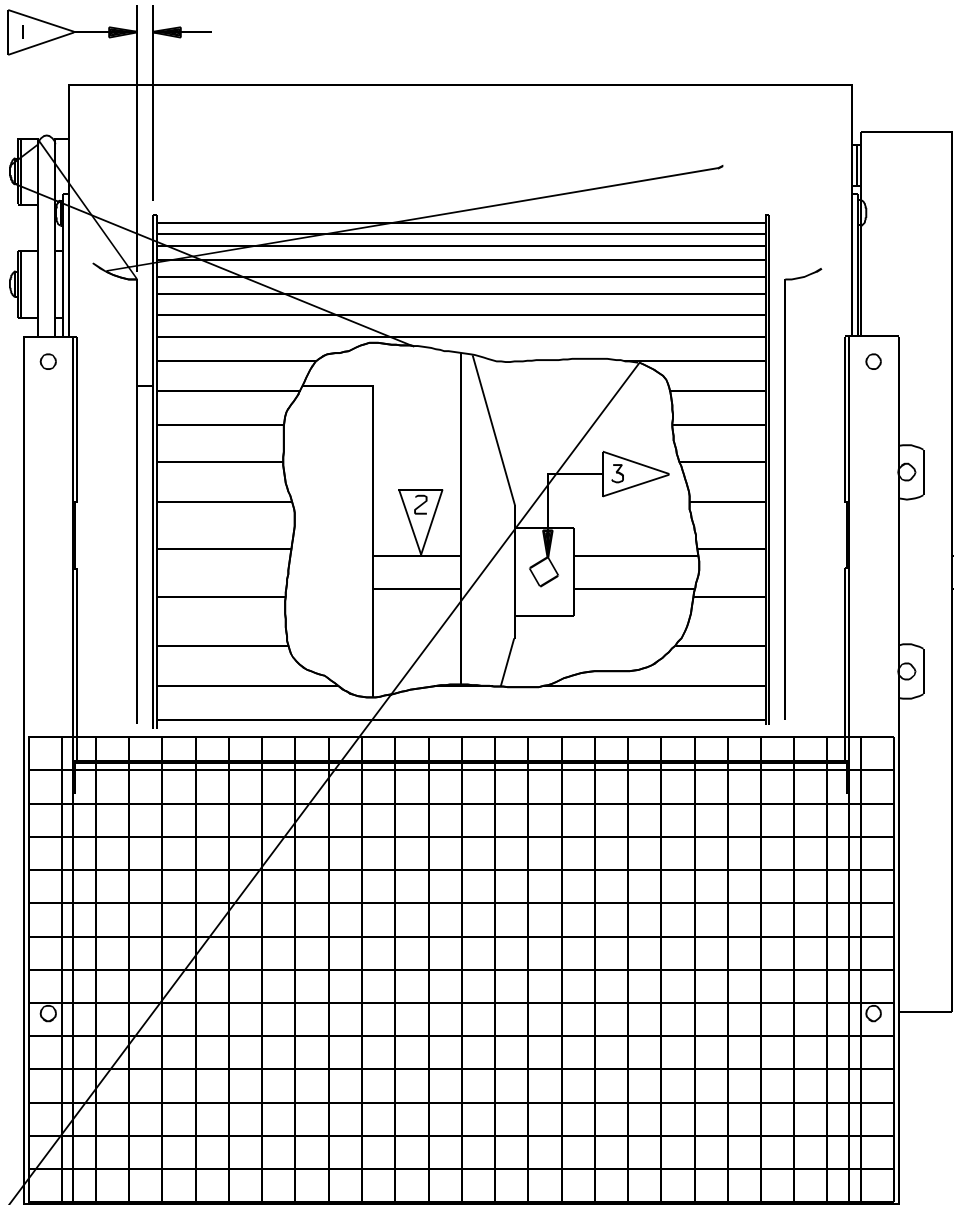


FIGURE 9

1. Wheel must be mounted with a minimum of 1/4" clearance to both venturis.
2. Apply grease to motor shaft before assembling wheel.
3. Torque set screw on flat of shaft to 150 in. lbs.

SIDE VIEWS

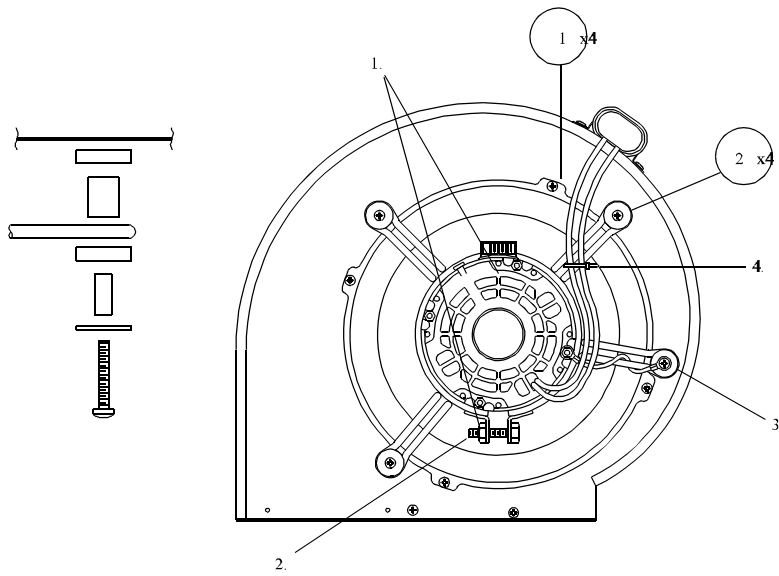
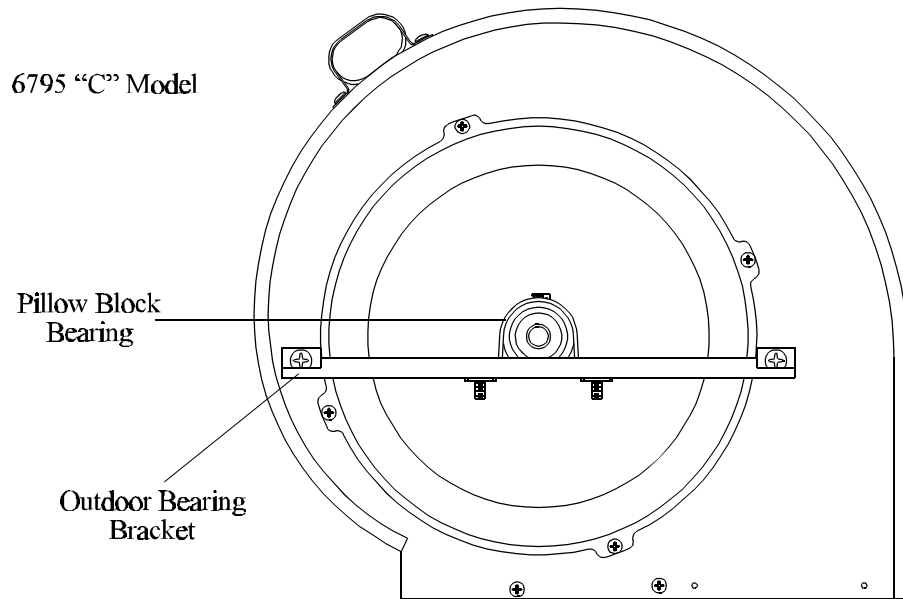


FIGURE 10

1. Position motor with terminal block opposite motor mount clamp.
2. Torque nut to 65 in. lbs. min.
3. Ground wire terminal assemblies between screw head and washer. Wrap wire around motor mount leg to take up slack.
4. Wire tie capacitor wires to mount leg.



11. CAP TUBE REPLACEMENT

1. Remove top panel.
 2. Remove indoor blower assembly access panel.
 3. Remove screws to wirebox. (See Section A, #1, Figure 11.) This will allow wirebox to be pulled slightly away from unit. (Freeze switch will probably pull off evaporator when wirebox is moved. Be sure to reattach it upon reassembly).
 4. Remove screws from step panel (See Section B, #2, Figure 11). Panel can now be pulled slightly away from cap tubes.
 5. Remove corner panel (See Section C, Figure 11).
 6. Be certain at this point that the refrigerant charge has been removed from the system/systems being serviced.
 7. Unbraid cap tube assembly/assemblies from points (See #1 and #2, Figure 12). Make note of plumbing and cap tube locations (the replacement tubes will have to go back to the same locations).
 8. Cut wire ties holding cap tube assemblies to other plumbing and remove assembly.
 9. Unbraid liquid line (See #3, Figure 12) from old strainer/cap tube and replace with new.
- Note: Upon reassembly, the references made on Figures 11 and 12 shall be used for proper reassembly. The assemblies shall be secured with wire ties in order to prevent excess chafing and vibration.

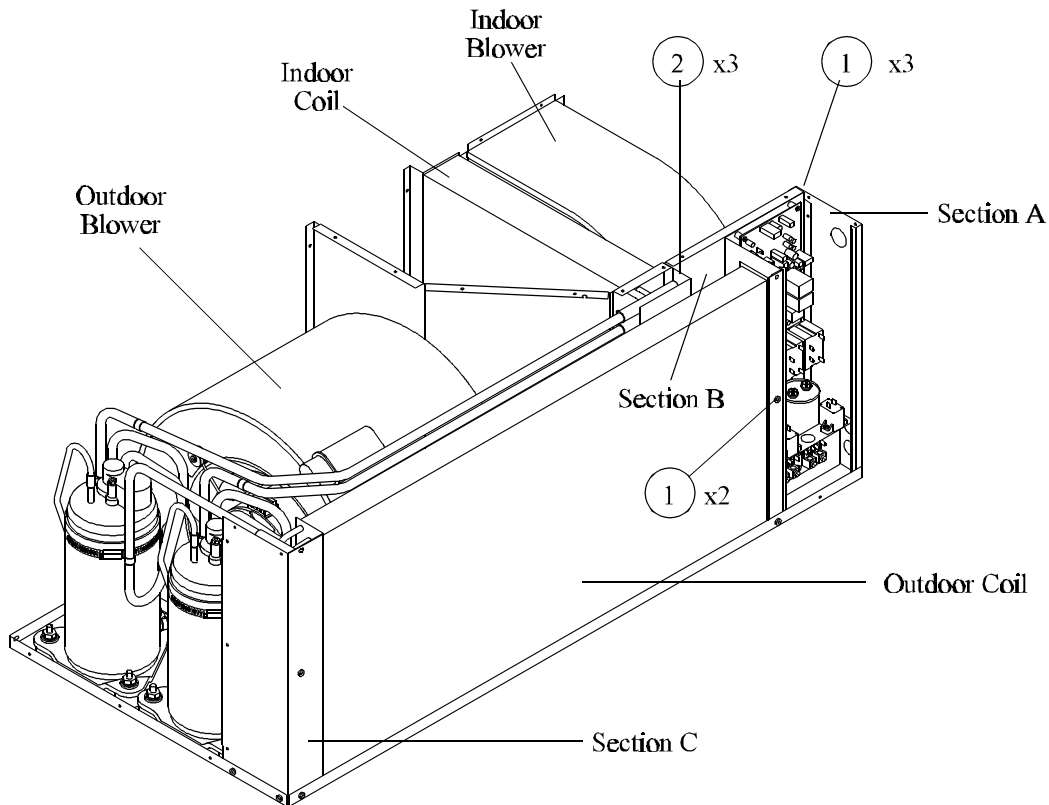
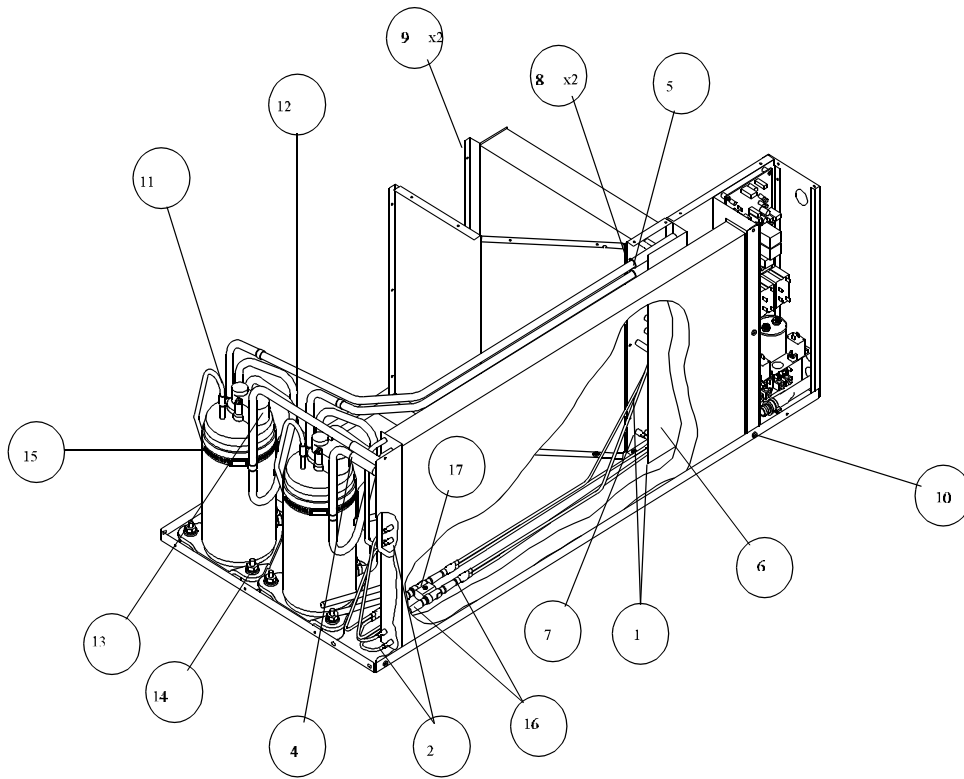


FIGURE 11



12. EVAPORATOR COIL REPLACEMENT

1. Refer to cap tube replacement (Steps 1 through 7).
2. Unbraid discharge lines from points (See #4, Figure 12) and remove condenser coil from unit.
3. Remove screws from bottom of step panel (See #6, Figure 12).
4. Unsnap freeze switch located on indoor blower side of evaporator coil (pull top of indoor blower assembly outward if necessary).
5. Pull step panel slightly off to one side.
6. Unbraid suction lines from points (See #5, Figure 12). Protect wiring and insulation from torch flame.

7. Remove screws (See #7, #8 & #9, Figure 12). Evaporator coil can now be removed.

Note: Upon reassembly, the references made on Figures 11 and 12 shall be used for proper reassembly. The assemblies shall be secured with wire ties in order to prevent excess chafing and vibration. If additional sealant is needed to seal coil header to drain pan (notched end), a silicone or perma-gum sealant is adequate. Do not use solvent base sealers that would harm the ABS plastic drain pan.

13. CONDENSER COIL REPLACEMENT

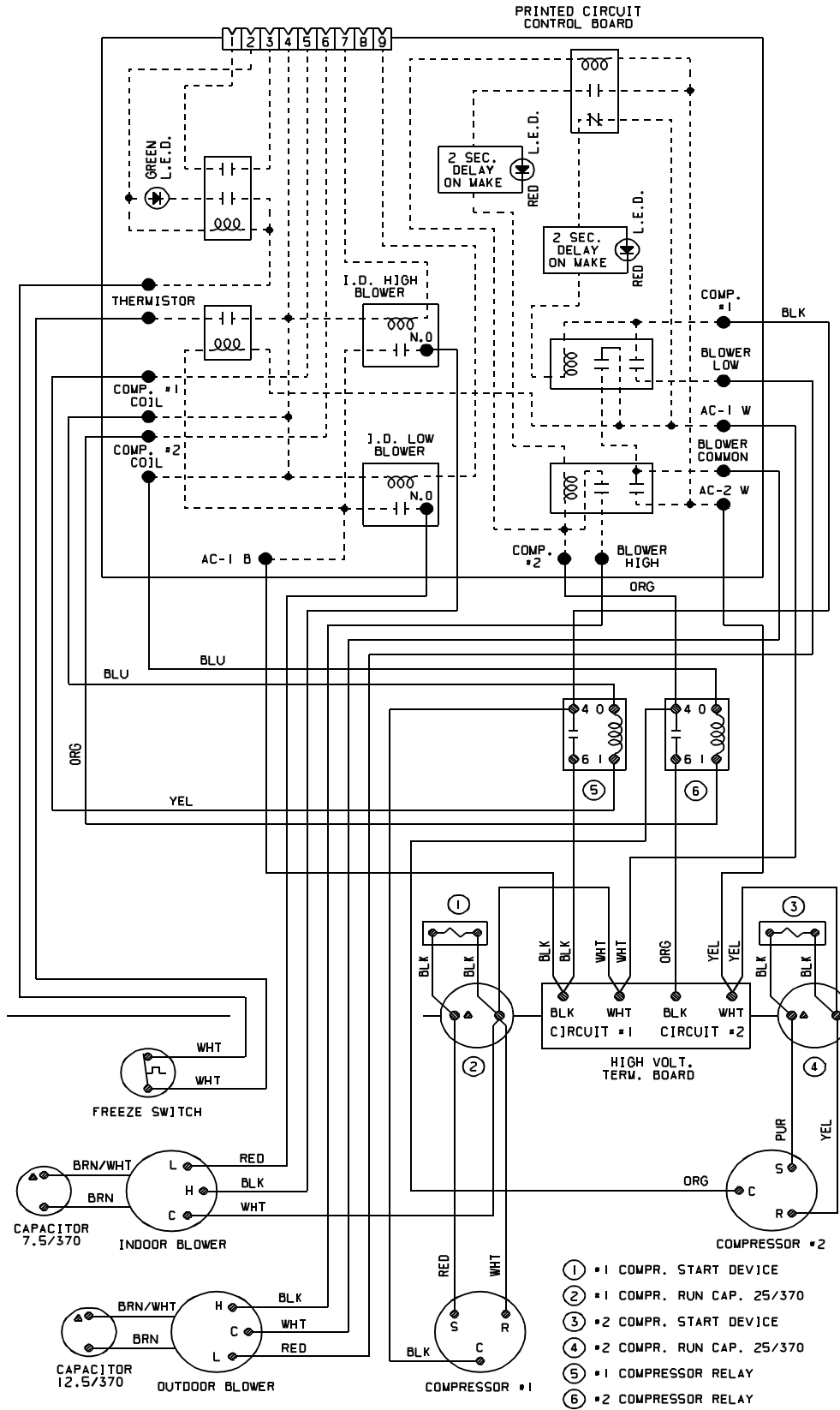
1. Remove top panel.
2. Remove screws along wirebox side of coil (See #10, Figure 12).
3. Remove corner panel (See Section C, Figure 11).
4. Be certain at this point that the refrigerant charge has been removed from the systems.
5. Make note of plumbing locations. The plumbing will have to go back to the same locations on the new coil.
6. Unbrazed discharge and liquid lines at points #2 and #4, Figure 12.
7. Remove condenser coil.

14. COMPRESSOR REPLACEMENT

1. Remove compressor access panel.
 2. The top panel may be removed at this point if it allows technician better access to perform service.
 3. Remove refrigerant charge from system/systems being serviced.
 4. Remove terminal caps (See #13, Figure 12).
 5. Remove wiring from compressor terminal block (cut wire ties on suction line).
 6. Unbrazed plumbing at points #11 and #12, Figure 12 (protect any wiring and insulation from torch flame).
 7. Remove mounting nuts and washers (See #14, Figure 12).
 8. Remove compressor from unit.
- Note: Upon reassembly, compressor wires shall be wire tied to suction lines to prevent excess chafing.

15. WIRING DIAGRAM - THERMOSTAT

Wiring Diagram Electronic Thermostat - Page 12

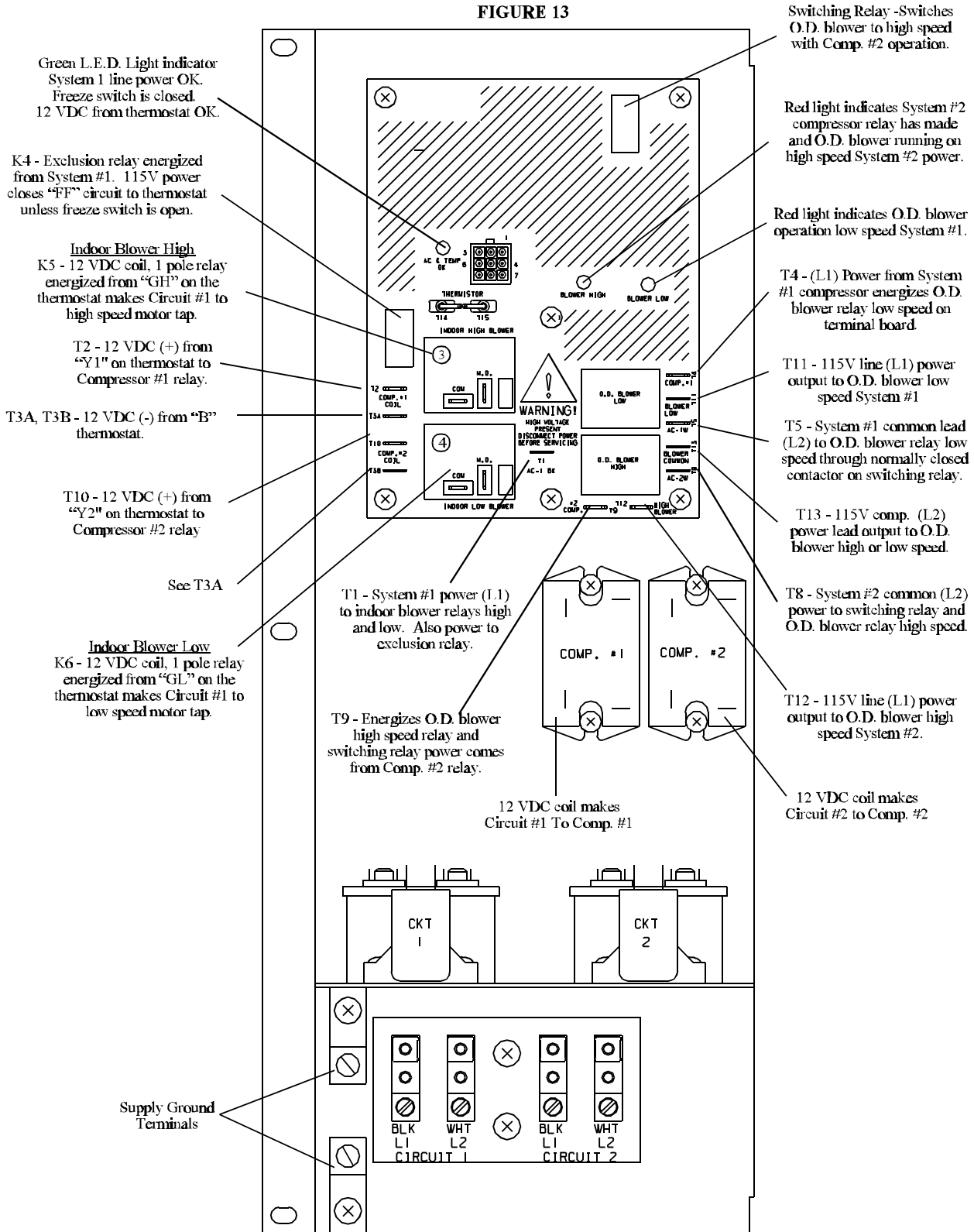


▲ IDENTIFIED TERMINAL

NOTE: HIGH VOLT. WIRING (115 V) SHOWN BOLD
 LOW VOLT. WIRING (12 V) SHOWN FINE
 P.C. BOARD CIRCUIT SHOWN DASHED

16. WIREBOX COMPONENT CHECKOUT

FIGURE 13



3	F Freeze Switch & Exclusion Relay	R +12 VDC	FY Freeze Switch & Exclusion Relay	
6	Y2 Cooling Compressor #2	Y1 Cooling Compressor #1	B 12-	4
	GL Indoor Fan Low	W Heat Pump	GH Indoor Fan High	7

FIGURE 14

Plug positions on the p.c. board. If no voltage is detected at the p.c. board connector, check for voltage at the thermostat.

All functions of this air conditioning unit are subject to thermostat time delays according to the operation manual.

17. QUICK TROUBLESHOOTING CHART

<u>Problems</u>	<u>Possible Solutions</u>
1. Nothing Runs, No Compressors, No Fans	No A/C Voltage, Thermostat, Wiring, P.C. Board
2. No Compressor, Indoor and Outdoor Fans Run	Insufficient Voltage to Unit, Wiring, P.C. Board, Start Device, Run Capacitors, Open Overload, Compressor - Refer to Compressor Flow Chart
3. Indoor Fan Runs, No Compressor, No Outdoor Fan	Wiring, Thermostat, Freeze Thermister, Insufficient Air Flow, Compressor Contactor, P.C. Board - Refer to No Green L.E.D. Flow Chart
4. Compressor Runs, Outdoor Fan Runs, No Indoor Fan	Wiring, P.C. Board, Fan Motor, Fan Capacitor - Refer to O.D. Blower Flow Chart
5. Compressor Runs, Indoor Fan Runs, No Outdoor Fan	Wiring, P.C. Board, Fan Motor, Fan Capacitor - Refer to I.D. Blower Flow Chart
6. Compressor Runs, Indoor and Outdoor Fans Run, Insufficient Cooling	Air Flow Restrictions, Too Much Heat Gain, Refrigerant Systems, Little or no Refrigerant Charge. (If You Have Not Been Trained in Refrigerant Sealed System Repairs, Do Not Attempt To Break Into Systems.)

18. ELECTRICAL FLOW CHARTS 6795B SERIES

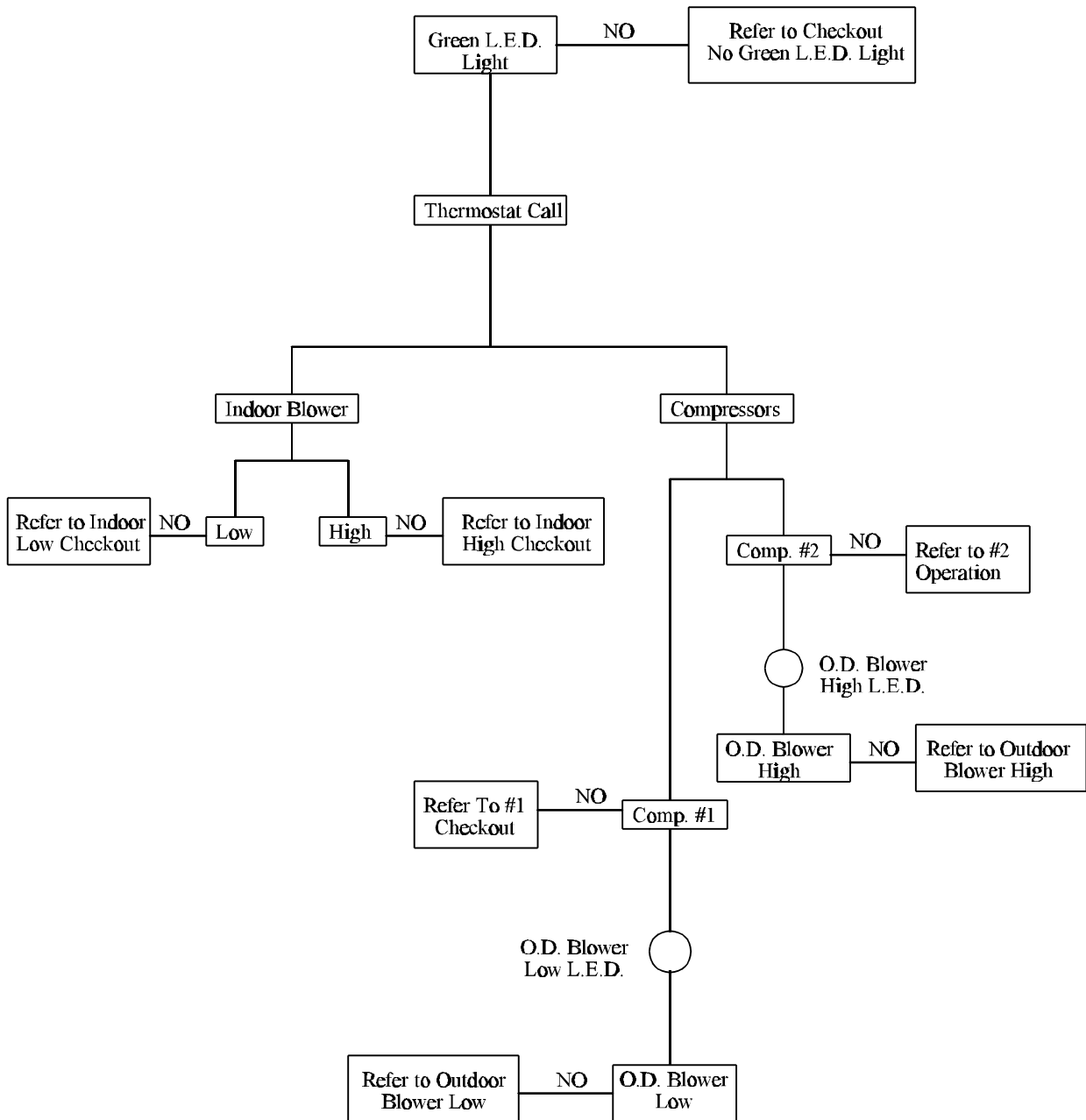
With the use of these flow charts, you will be able to quickly identify a non-working problem. Determine if the problem is high or low voltage and then solve the problem.

IMPORTANT NOTICE

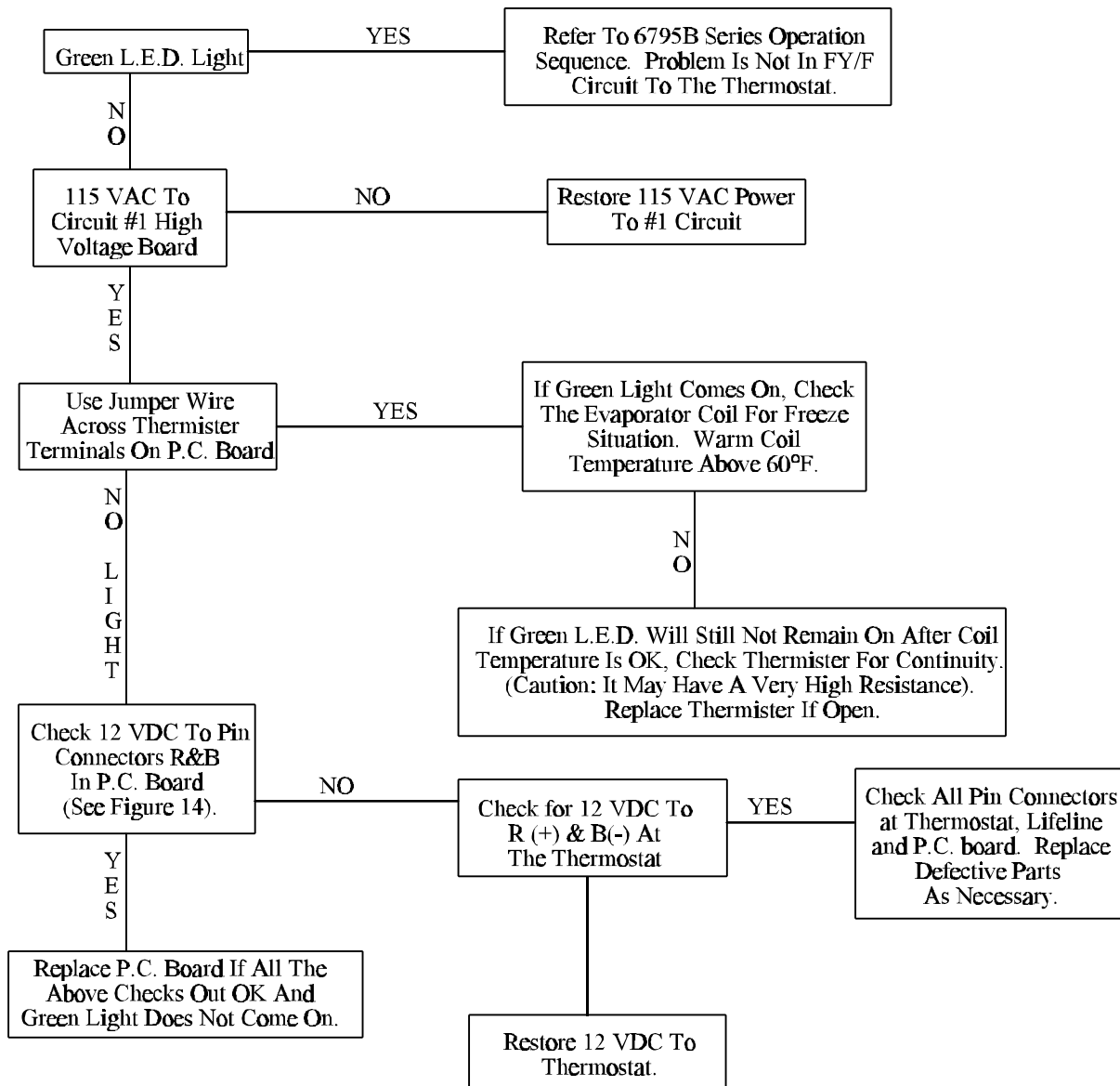
When using a jumper wire to diagnose a low voltage problem, **Never Short Any Positive Terminal to Ground or the Terminal Marked "B"**. Serious thermostat or p.c. board damage may occur.

To use these flow charts, start at the **top left** corner. Using a volt-ohm meter, check what is indicated in that box. If the answer to what is indicated is **No**, **work horizontally** until you find the problem. When the answer is **Yes or OK**, **work the chart downward** until you locate the problem. **Do Not Move Downward** on any chart until all preceding steps have been confirmed good. **Do Not** start in the middle of any chart without knowing everything previous (upward on the chart) is OK or you may replace the wrong part.

6795B SERIES OPERATION SEQUENCE

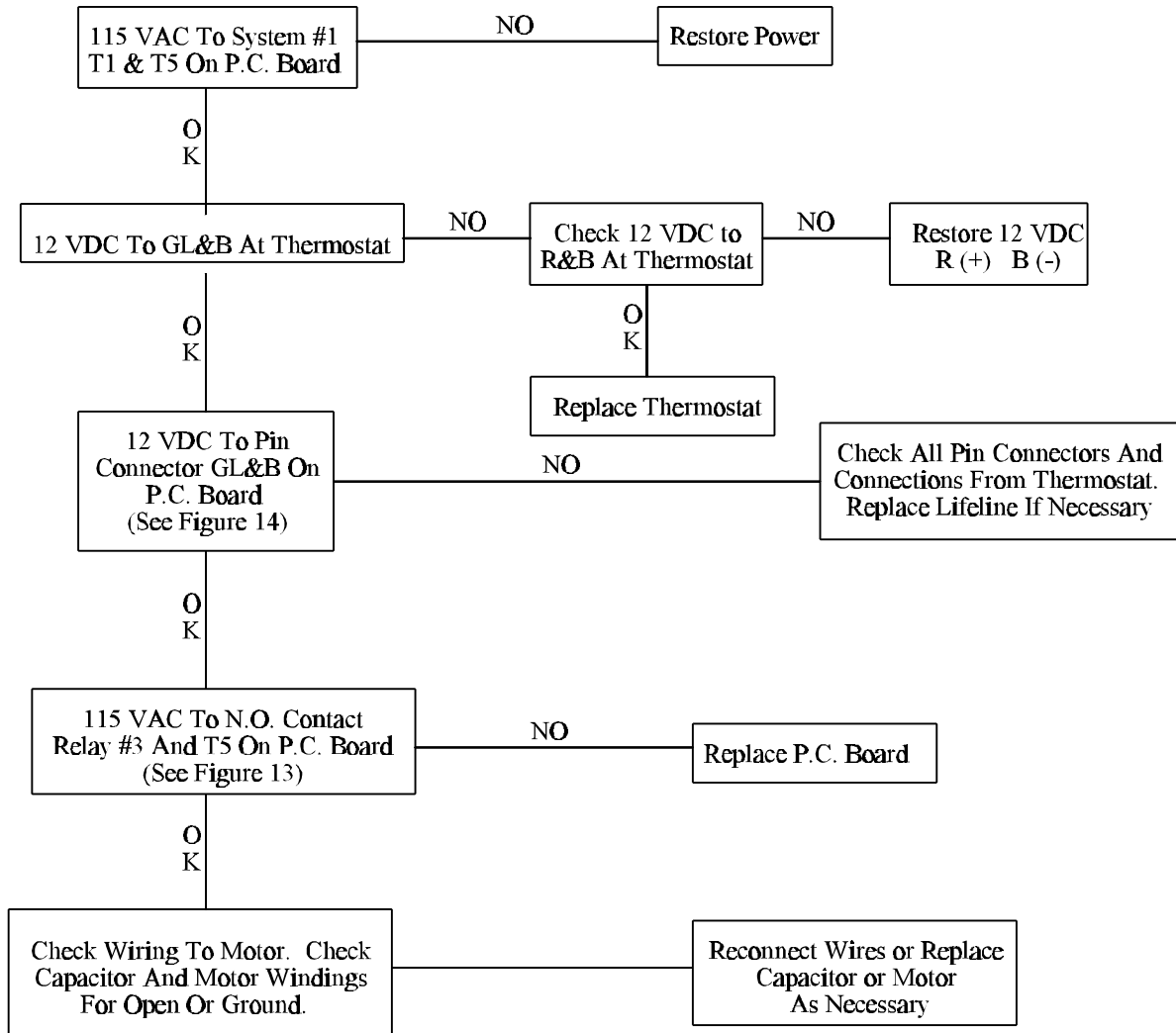


CHECK/NO GREEN L.E.D. LIGHT FY/Y CIRCUIT TO THE THERMOSTAT



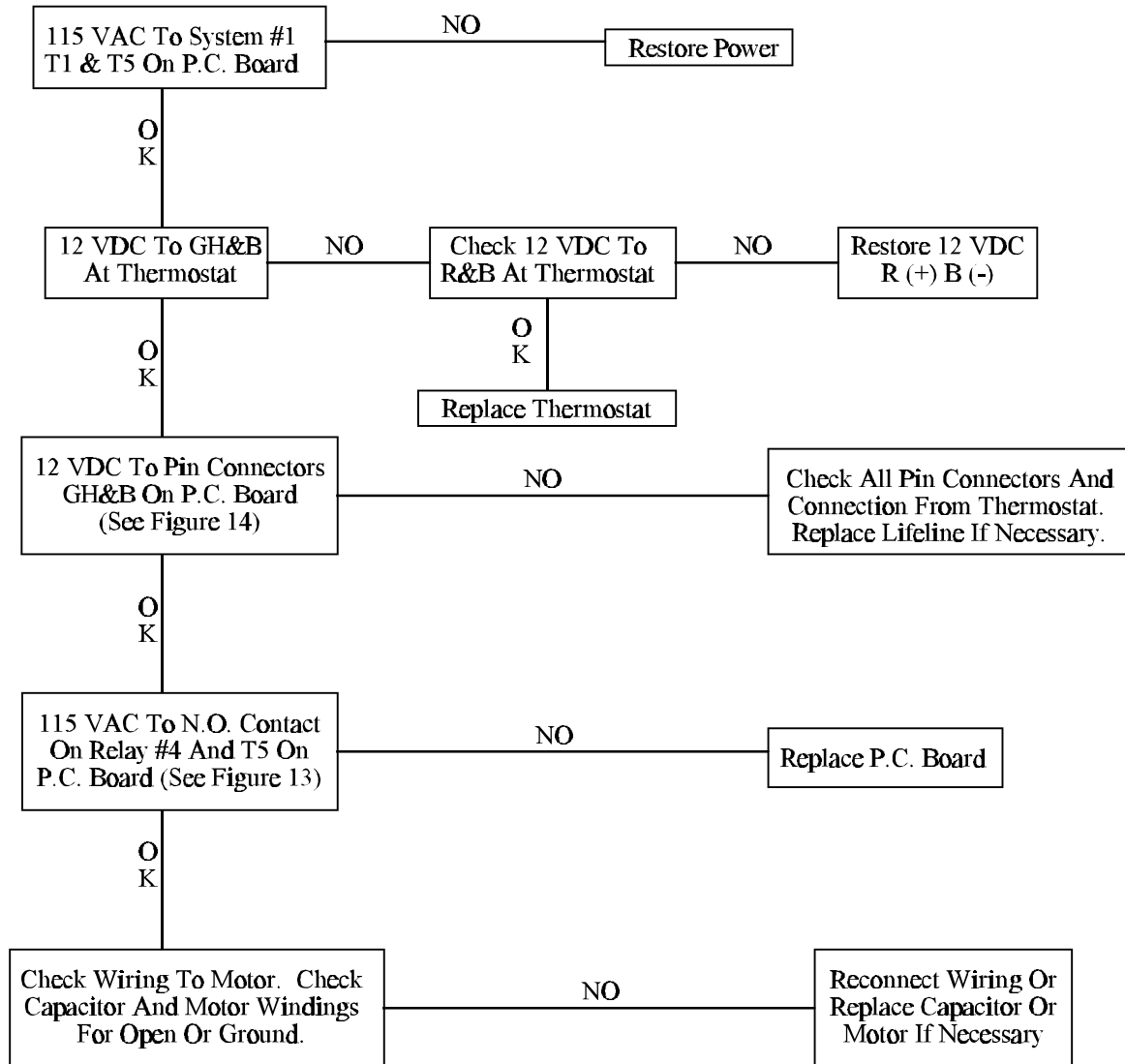
I.D. BLOWER LOW SPEED THERMOSTAT ON LOW FAN

Note: All operating functions subject to thermostat time delays.



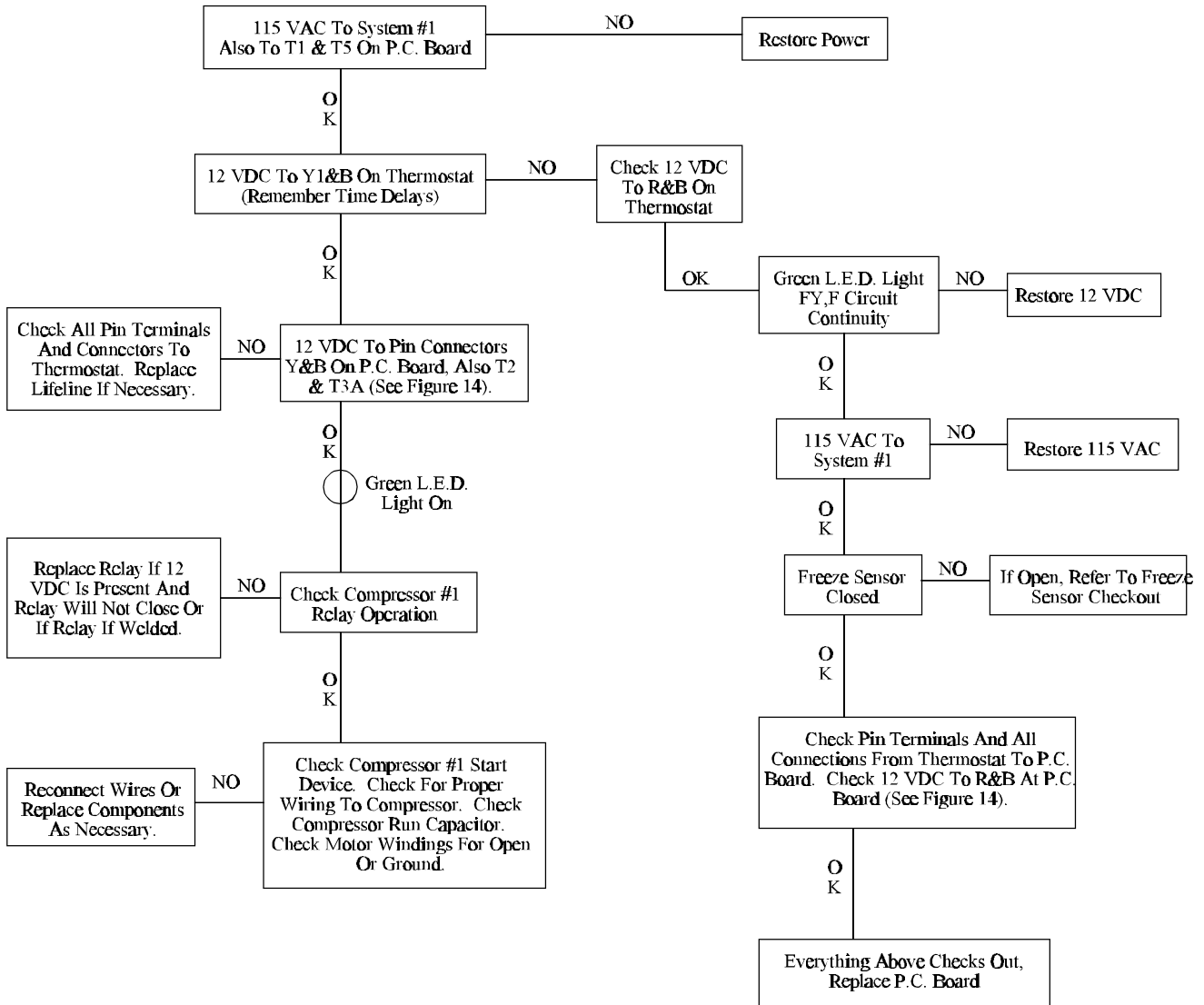
I.D. BLOWER HIGH SPEED THERMOSTAT ON HIGH FAN

Note: All operating functions subject to thermostat time delays.



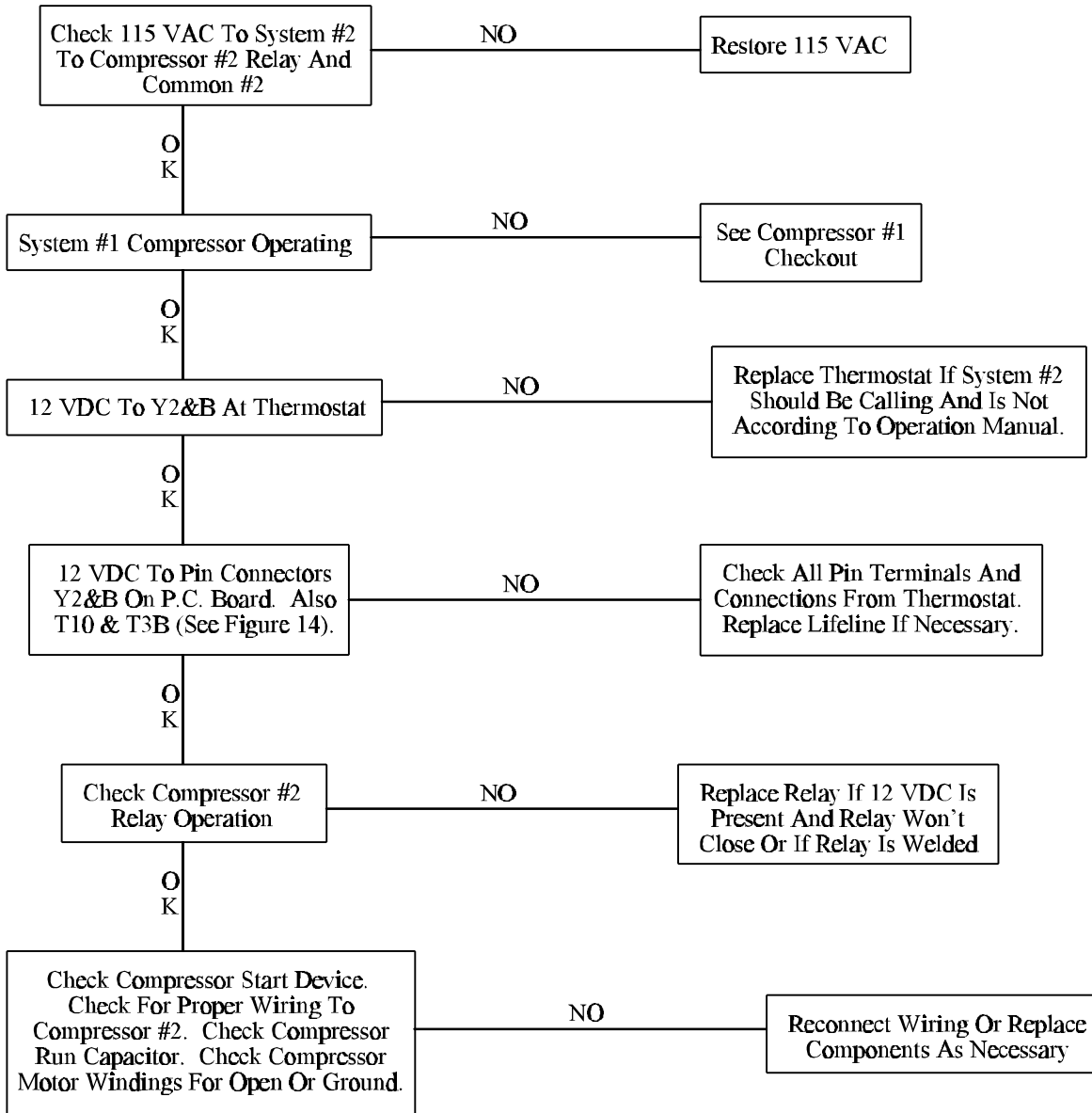
COMPRESSOR #1 CHECKOUT THERMOSTAT CALLING FOR COMPRESSOR

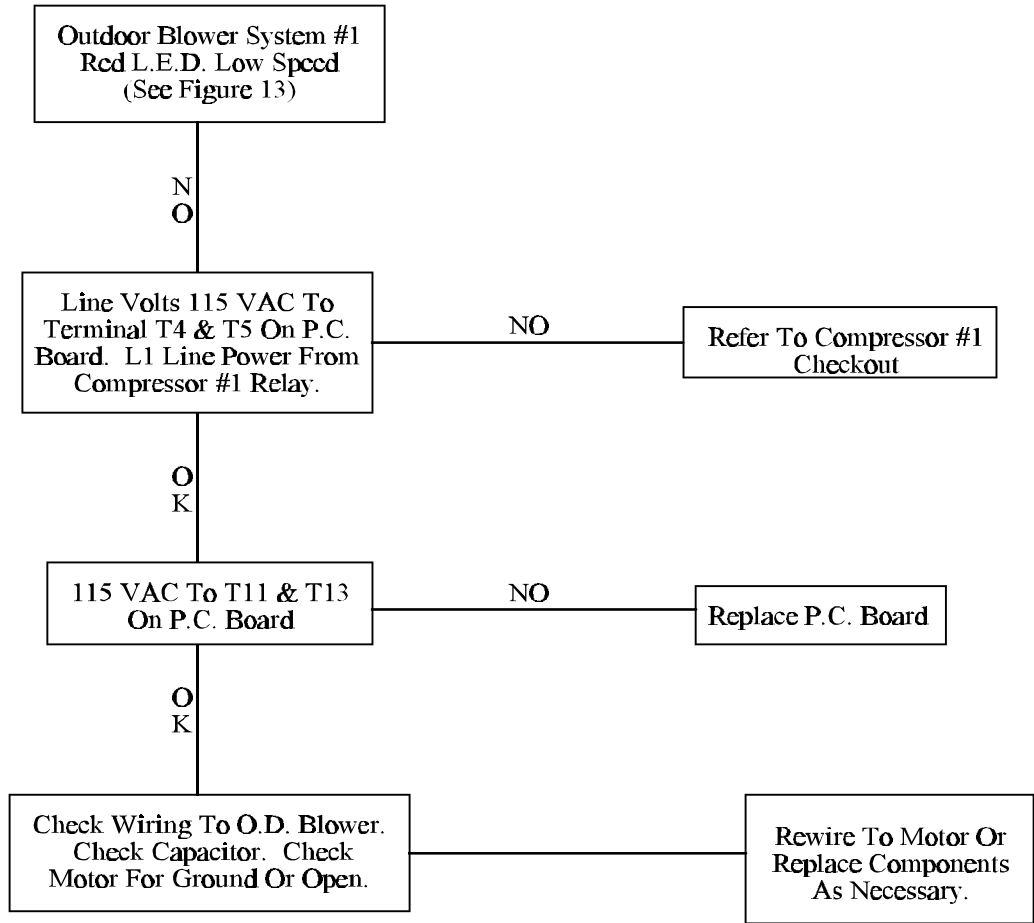
Note: All operating functions subject to thermostat time delays.

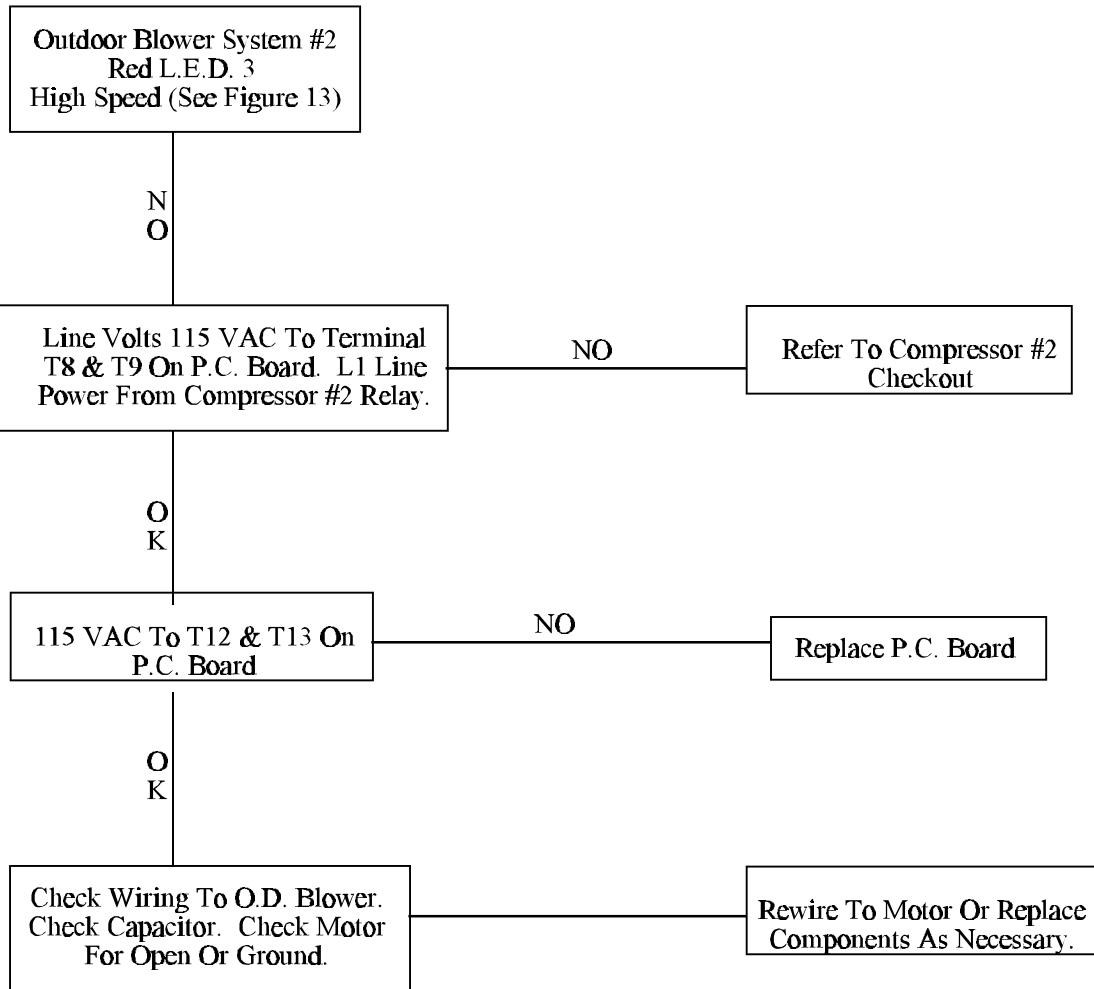


COMPRESSOR #2 CHECKOUT THERMOSTAT CALLING STAGE 2

Note: All Operating Functions Subject To Thermostat Time Delays









RV Products
A Division of Airxcel, Inc.
P.O. Box 4020
Wichita, KS 67204

