ALTO-SHAAM

Service Manual

Prodigi™

Classic Control

6-10E	6-10G
10-10E	10-10G
7-20E	7-20G
10-20E	10-20G
20-10E	20-10G
20-20E	20-20G

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REV.02
3/24

EN

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Manufacturer’s Information

Manufacturer

Alto-Shaam, Inc.

P.O. Box 450

W164 N9221 Water Street

Menomonee Falls, WI 53052

Original instructions

The content in this manual is written in American English.

Alto-Shaam 24/7 Emergency Repair Service

Call	Call 800-558-8744 to reach our 24-hour emergency service call center for immediate access to local authorized service agencies outside standard business hours. The emergency service access is provided exclusively for Alto-Shaam equipment and is available throughout the United States through Alto-Shaam's toll free number.
Availability	Emergency service access is available seven days a week, including holidays.

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The Meaning of Signal Words

This manual contains signal words where needed. These signal words must be obeyed to reduce the risk of death, personal injury, or equipment damage. The meaning of these signal words is explained below.

DANGER

Danger indicates a hazardous situation which, if not avoided, will result in serious injury or death.

WARNING

Warning indicates a hazardous situation which, if not avoided, could result in serious injury or death.

CAUTION

Caution indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE Notice indicates a situation which, if not avoided, could result in property damage.

NOTE: Note indicates additional information that is important to a concept or procedure.

Safety Precautions

Before you begin

Read and understand all instructions in this manual.

Electrical precautions

Obey these electrical precautions when using the appliance:

- Connect the appliance to a properly grounded outlet. Do not use the appliance if it is not properly grounded. Consult an electrician if there is any doubt that the outlet used is properly grounded.
- Keep the cord away from hot surfaces.
- Do not attempt to service the appliance or its cord and plug.
- Do not operate the appliance if it has a damaged cord or plug.
- Do not immerse the cord or plug in water.
- Do not let the cord hang over the edge of a table or counter.
- Do not use an extension cord.

Usage precautions

Obey these usage precautions when using the appliance:

- Only use this appliance for its intended use of heating or cooking.
- Always keep liquids, or foods that can become liquid when heated, level and at or below eye level where they can be seen.
- Use utensils and protective clothing such as dry oven mitts when loading and unloading the appliance.
- Use caution when using the appliance. Floors adjacent to the appliance may become slippery.
- Do not cover or block any of the openings of this appliance.
- Do not cover racks or any other part of this appliance with metal foil.
- Do not use this appliance near water such as a sink, in a wet location, near a swimming pool, or similar locations.
- Do not unplug or disconnect the appliance immediately after cooking. The cooling fans must stay on to protect electrical components.

Maintenance precautions

Obey these maintenance precautions when maintaining the appliance:

- Obey precautions in the manual, on tags, and on labels attached to or shipped with the appliance.
- Only clean the appliance when oven is OFF.
- Do not store the appliance outdoors.
- Do not clean the appliance with metal scouring pads.
- Do not use corrosive chemicals when cleaning the appliance.
- Do not use a hose or water jet to clean the appliance.
- Do not use the appliance cavity for storage.
- Do not leave flammable materials, cooking utensils, or food inside the appliance when it is not in use.
- Do not remove the top cover or side panels. There are no user-serviceable components inside.

Operator training

All personnel using the appliance must have proper operator training. Before using the appliance:

- Read and understand the operating instructions contained in all the documentation delivered with the appliance.
- Know the location and proper use of all controls.
- Keep this manual and all supplied instructions, diagrams, schematics, parts lists, notices, and labels with the appliance if the appliance is sold or moved to another location.
- Contact Alto-Shaam for additional training if needed.

Operator qualifications

Only trained personnel with the following operator qualifications are permitted to use the appliance:

- Have received proper instruction on how to use the appliance.
- Have demonstrated their ability with commercial kitchens and commercial appliances.

The appliance must not be used by:

- Persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision concerning use of the appliance by person responsible for their safety.
- People impaired by drugs or alcohol.

- Children should be supervised to ensure that they do not play with the appliance.
- Children shall neither clean nor maintain the appliance.

Condition of appliance

Only use the appliance when:

- All controls operate correctly.
- The appliance is installed correctly.
- The appliance is clean.
- The appliance labels are legible.

Servicing the appliance

- Only trained personnel are permitted to service or repair the appliance. Repairs that are not performed by an authorized service partner or trained technician will void the warranty and relieve Alto-Shaam of all liability. Original manufacturer's replacement parts may be substituted; however, these parts must be of equal quality and specifications as those provided by Alto-Shaam.
- To prevent serious injury, death or property damage, have the appliance inspected and serviced at least every twelve (12) months by an authorized service partner or trained technician.
- Contact Alto-Shaam for the authorized service partner in your area.

Sound power

The A-weighted sound pressure level is below 70 dB(A).

Personal Protective Equipment (PPE)

Wear the following Personal Protective Equipment (PPE) while cleaning the appliance:

- Protective gloves
- Protective clothing
- Eye protection
- Face protection

Service Technician Training

Only trained personnel are permitted to service or repair the appliance. Service technicians must be knowledgeable in current codes and standards as stated by the appropriate agencies, such as:

- The National Fire Protection Association (NFPA)
- National Electrical Code (NEC)
- The Service Technician's employer

How to Turn On and Turn Off the Oven

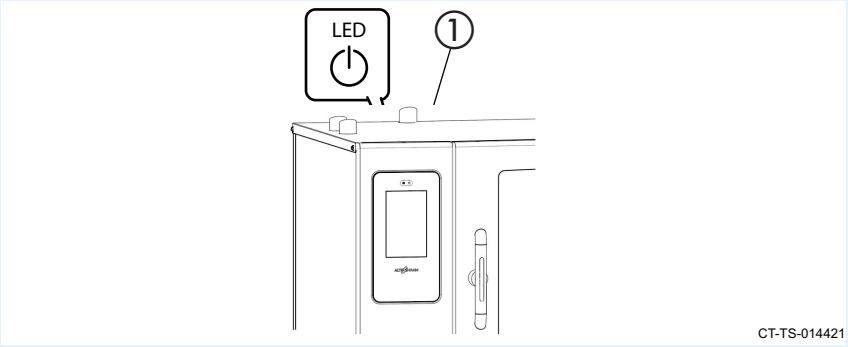
Before you begin

- The oven must be connected to electric power.
- Make sure the gas supply is connected.
- Make sure the water supply is connected.

Turning on the oven

To turn on the oven, do the following.

Step	Action
1.	**Touch** the ON/OFF button ①.

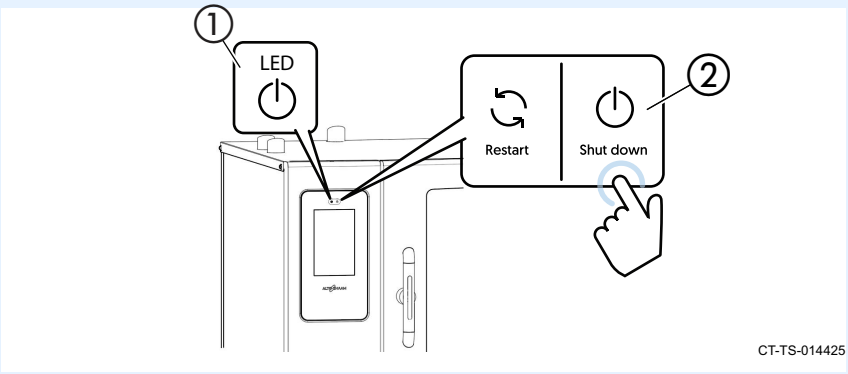


The oven is now on.

Turning off the oven

To turn off the oven, do the following.

2.	**Touch** and hold the ON/OFF button ① until the “Shut Down Options” screen displays. **Touch** “Shut down” ②.



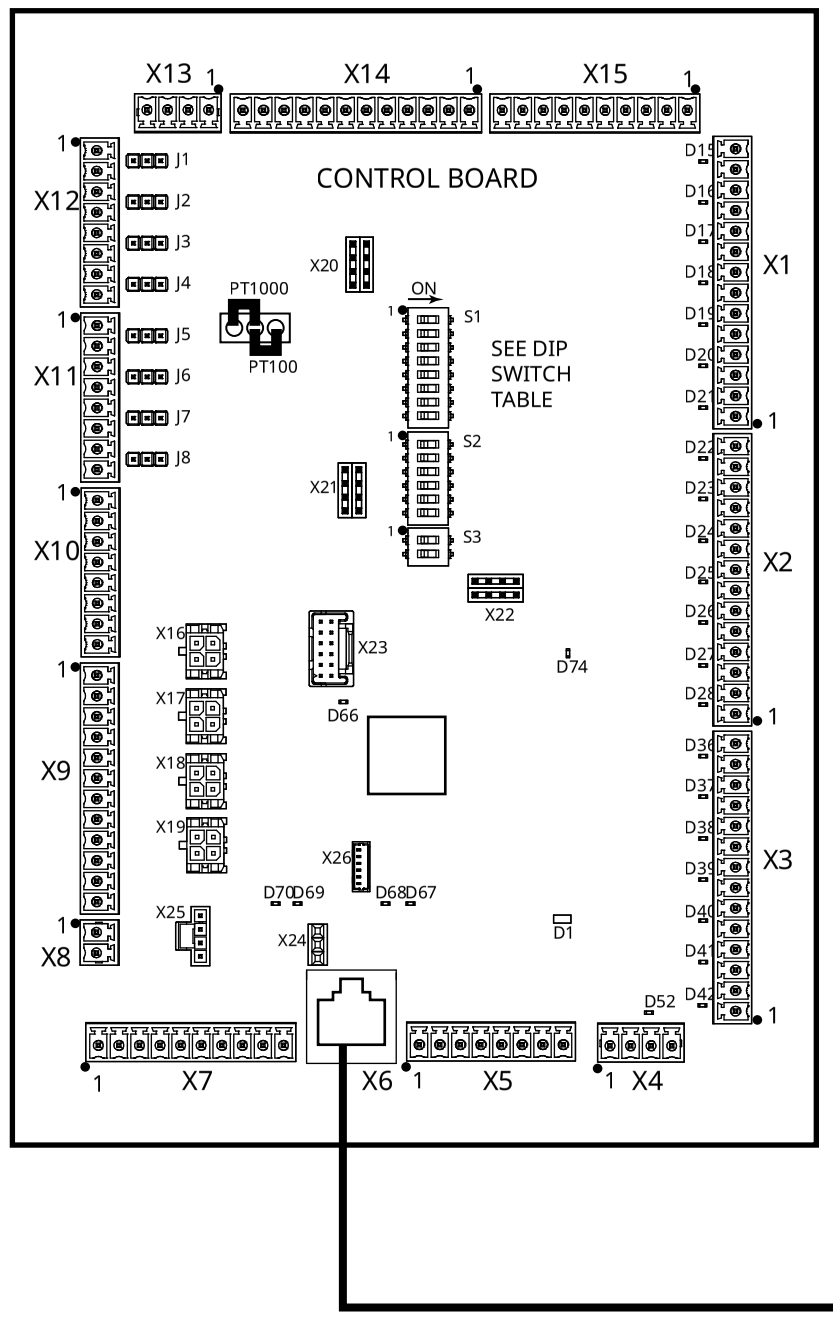
The oven is now off.

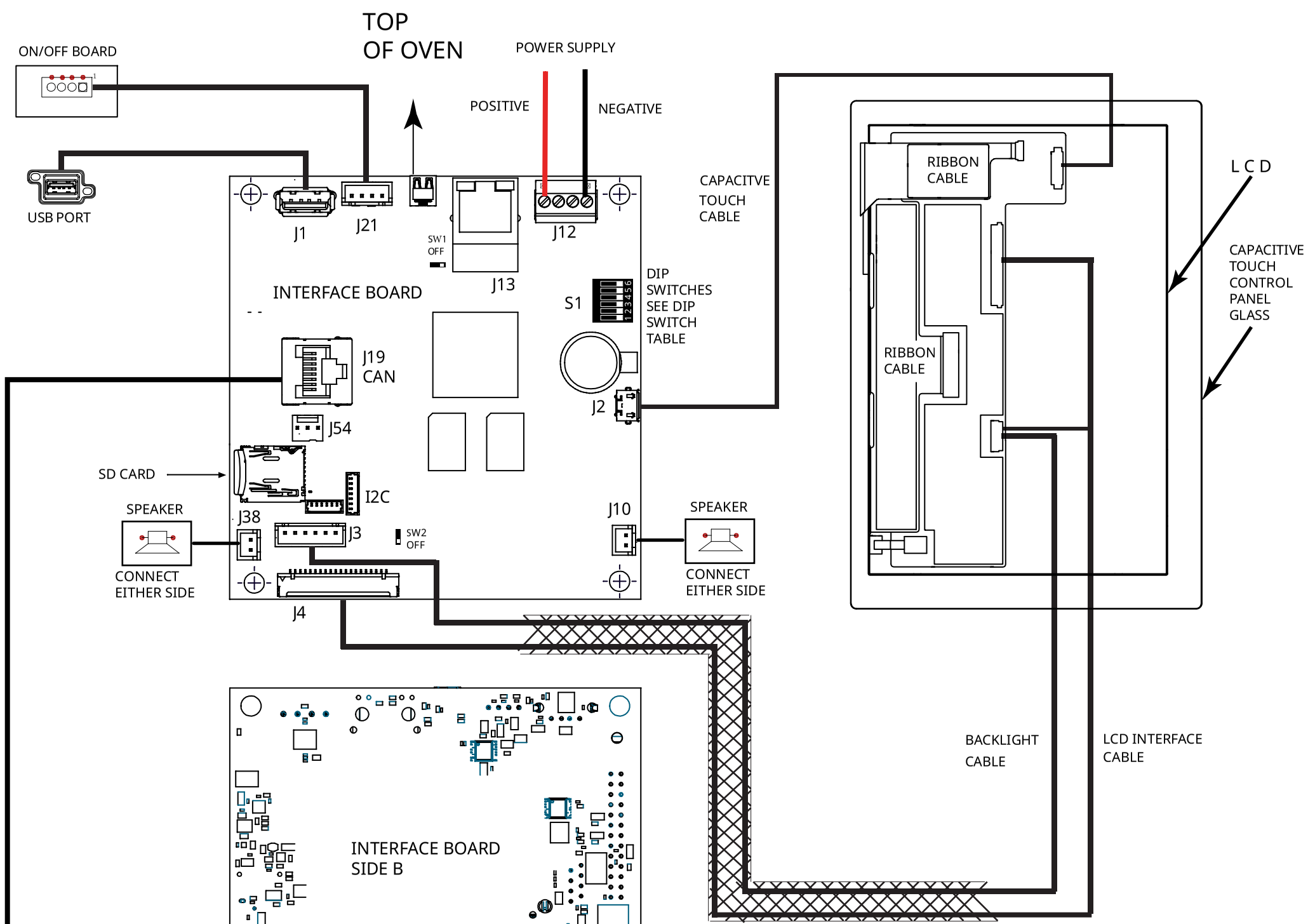
THIS DIAGRAM IS SUBJECT TO CHANGE WITHOUT NOTICE

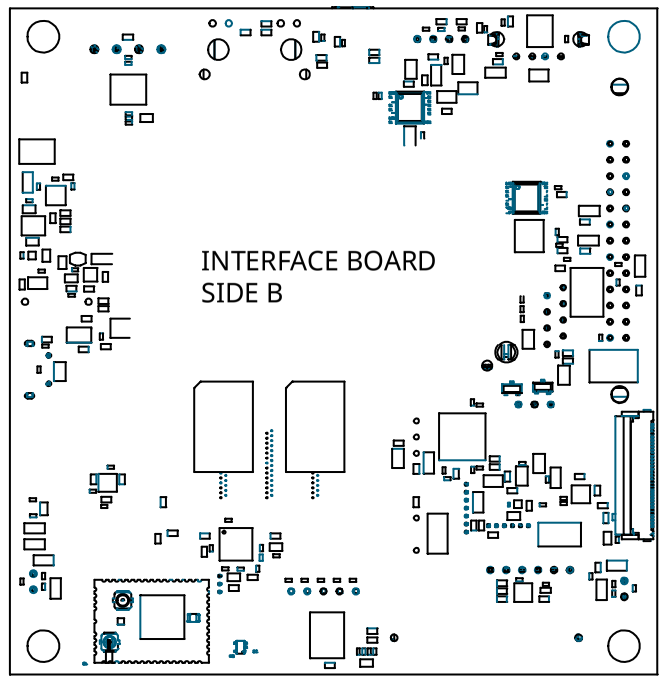
ALWAYS USE THE ELECTRICAL SCHEMATIC FOR ACTUAL CONNECTIONS

PRODIGI - CLASSIC
CAPACITIVE TOUCH

NOT TO SCALE







INTERFACE BOARD

J1 USB Host
J2 Capacitive touch
J3 Backlight
J4 LCD interface
J10 Speaker
J12 12 VDC power
J13 Ethernet - PRO
J19 CAN Communication
J21 ON/OFF
J38 Speaker
S1 DIP switches

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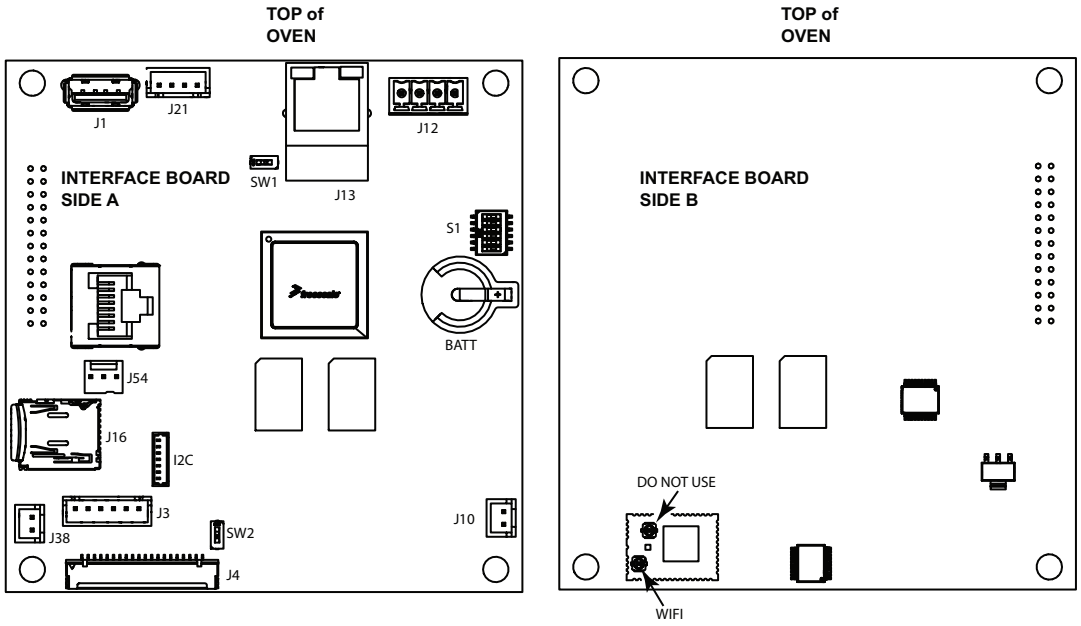
Interface Board



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Ref.	Description
BATT	Clock battery
I2C	Capacitive touch cable
J1	USB connections
J3	Display back light
J4	LCD interface
J10	Speaker
J12	12 VDC power
J13	Ethernet - PRO
J16	8 GB micro SD card
J21	ON/OFF board
J38	Speaker
J54	RS 485/232 LVIO
S1	DIP switches (see table)
SW1	DIP switch (off)
SW2	DIP switch (off)

Product	Screen Orientation	SW 6	SW 5	SW 4	SW 3	SW 2	SW 1
Vector H	Landscape	OFF	OFF	OFF	OFF	OFF	OFF
Cook & Hold	Landscape	OFF	OFF	ON	OFF	OFF	OFF
Vector F Electric	Portrait	OFF	ON	ON	OFF	OFF	ON
Vector F Gas	Portrait	OFF	ON	ON	ON	OFF	ON
-	-	-	-	-	-	-	-
Converge DX	Landscape	ON	OFF	OFF	OFF	OFF	OFF
Converge SX	Landscape	ON	OFF	OFF	OFF	ON	OFF
Prodigi Pro Electric	Portrait	OFF	OFF	OFF	ON	OFF	ON
Prodigi Pro Gas	Portrait	ON	OFF	ON	ON	OFF	ON
Prodigi Classic Elect	Portrait	OFF	OFF	OFF	ON	ON	ON
Prodigi Classic Gas	Portrait	ON	OFF	ON	ON	ON	ON

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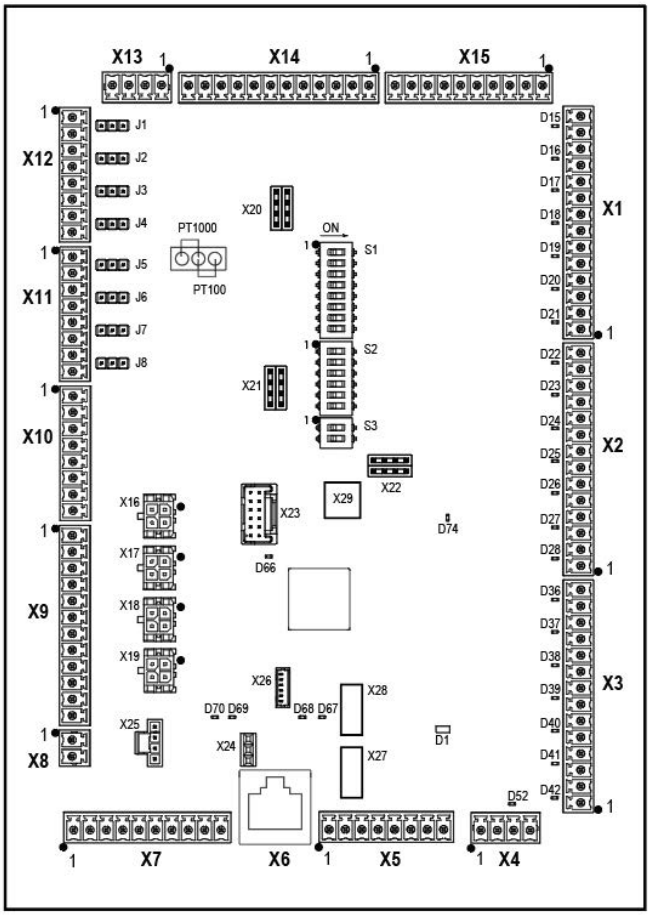
Control Board



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DIP SWITCH TABLE S1

	1	2	3	4	5	6	7	8
ON	BOILER	GAS	CLASSIC	ROLL-IN	OPTION	V-HOOD	MULTI-POINT PROBE	SPARE
OFF	BOILER-LESS	ELECTRIC	PRO	TABLE TOP	NO OPTION	NO V-HOOD	SINGLE-POINT PROBE	SPARE

DIP SWITCH TABLE S2

	1	2	3	4	5	6
ON	N/A	PRODIGI	N/A	N/A	N/A	N/A
OFF	N/A	CMC	N/A	N/A	N/A	N/A

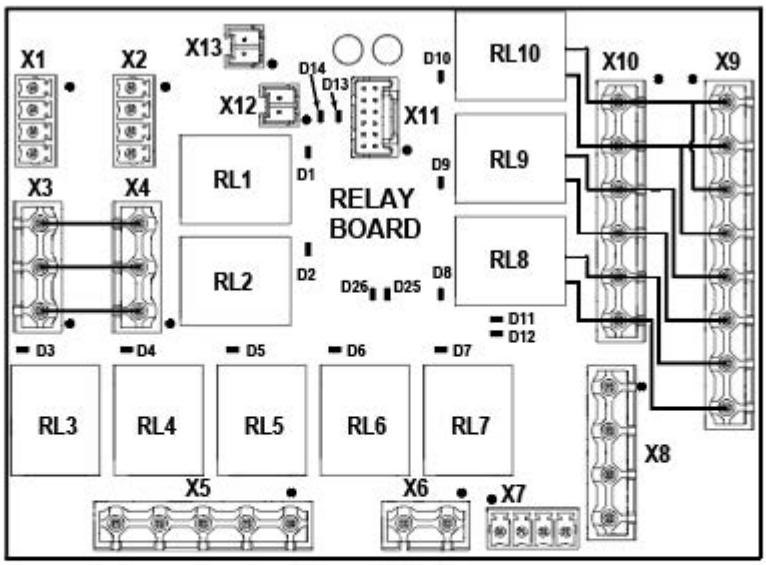
DIP SWITCH TABLE S3

	1	2
ON	N/A	N/A
OFF	N/A	N/A

Control Board

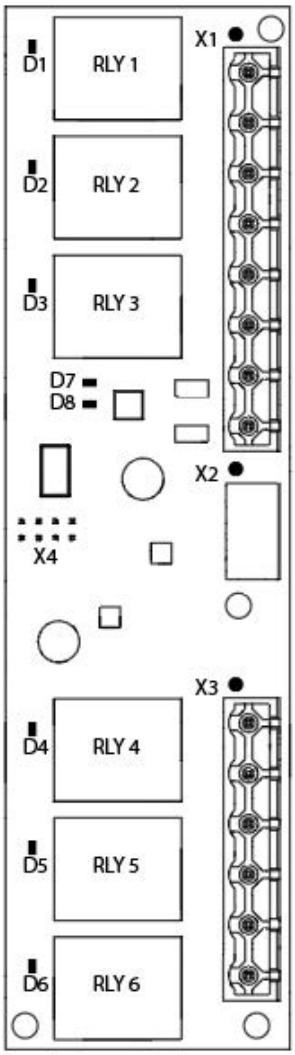
Ref.	Pin(s)	Description	Ref.	Pin(s)	Description
D1	-	Green / Red LED 5V	**X11**	**1-2**	B10, Product Temp Probe
D15-D28	-	Yellow LEDs - Function Outputs	-	**3-8**	Not Used
D36-D42	-	Yellow LEDs - Function Outputs	**X12**	**1-2**	N6, Cavity Temp Probe
D52	-	Amber LED 12V at 5V Converter	-	**3-8**	Not Used
D66	-	White Led - Heart Beat Blinking	**X13**	**1-4**	RGB Door Handle Lights
D67-D68	-	Blue LEDs - Rx - Tx Blinking	**X14**	**1-2**	Pressure Switch - Water Supply
D69-D70	-	Not Used	-	**3-12**	Not Used
D74	-	Green LED 3.3V	**X15**	**1-2**	Door Switch
J1- J8	-	Probe Jumpers 100Ω, or 1000Ω	-	**3-4**	Not used
S1	-	DIP Switches - See Table on EI Schematic	-	**5-6**	Steam Relief Valve Switch 1 (SW-1)
S2	-	DIP Switches - See Table on EI Schematic	-	**7-8**	Steam Relief Valve Switch 2 (SW-2)
S3	-	DIP Switches - See Table on EI Schematic	-	**9-10**	Not Used
X1	**1-14**	Not Used	**X16**	**1**	PWM to RB - Upper Burner
X2	**1-2**	RLY 50 VFD(s) - Power Enable	-	**2**	Not Used
-	**3-4**	RLY 51 VFD - 20.20 - Lower - 440-480 Volt	-	**3**	Not Used
-	**5-14**	Not Used	-	**4**	Hall Effect from RB - Upper Burner
X3	**1**	Not Used	**X17**	**1**	PWM to RB - Lower Burner
-	**2**	Cavity LED	-	**2**	Not Used
-	**3**	Not Used	-	**3**	Not Used
-	**4**	Cavity LED - 20.10, 20.20	-	**4**	Hall Effect from RB - Lower Burner
-	**5-8**	Not Used	**X18**	-	Not Used
-	**9-12**	Steam Relief Valves (RV) Browning Valves	**X19**	-	Not Used
-	**13-14**	Not Used	**X20**	-	Not Used
X4	-	12 VDC Supply - Jumpers to IB	**X21**	-	Not Used
X5	**1-2**	N7, High Limit - Test	**X22**	-	Interface to Option Board X4
-	**3-8**	Not Used	**X23**	-	Comm Cable to Relay Board X11
X6	-	CB - IB Communication	**X24**	-	Not Used
X7	**1-2**	Fan Motor - High Limit - Upper - Classic	**X25**	-	Not Used
-	**3-4**	Fan Motor - High Limit - Lower - Classic	**X26**	-	Not Used
-	**5-10**	Not Used	**X27**	-	VFD(s) Communication - S600
X8	-	Not Used	**X28**	-	Not Used
X9	-	Not Used	**X29**	-	Not Used
X10	**1-2**	B3 - Water Temp Probe - Condensate	-	-	-
-	**3-4**	Not Used	-	-	-
-	**5-6**	B5 - Probe- Steam Bypass	-	-	-
-	**7-8**	Not Used	-	-	-

Relay Board



Ref.	Pin(s)	Description	Ref.	Pin(s)	Description
D1 - D10	-	Yellow LEDs - Function Outputs	X3	1-3	Fan Motor - Upper - Classic
D11	-	Green LED Lower Gas Function Check	X4	1-3	Fan Motor - Lower - Classic
D12	-	Green LED Upper Gas Function Check	X5	1	NO Contact RL6 - Y4 Cleaning Pump
D13	-	Amber LED 12V	-	2	NO Contact RL5 - Y3 Water
D14	-	Green LED - 5VDC	-	3	NO Contact RL4 - Y2 Water
D25	-	Red LED - Lower Gas Alarm	-	4	NO Contact RL3 - Y1 Steam Valve
D26	-	Red LED - Upper Gas Alarm	-	5	Common RL 3 - RL 6
RL-1	-	Fan Motor - High Speed - Classic	X6	1-2	RL7 - Smoker
RL-2	-	Fan Motor - Low Speed - Classic	X7	1-2	Flame Sensor - Upper (Gas)
RL-3	-	Y1 Water Solenoid	-	3-4	Flame Sensor - Lower (Gas)
RL-4	-	Y2 Water solenoid	X8	1-2	Upper Alarm (Gas)
RL-5	-	Y3 Water solenoid	-	3-4	Lower Alarm (Gas)
RL-6	-	Y4 Cleaning Pump	X9	1-2	Heat Demand - Upper (Gas)
RL-7	-	Smoker	-	3-4	Heat Demand - Lower (Gas)
RL-8	-	Reset - Lower (Gas)	-	5-6	Reset - Upper (Gas)
-	-	K45 Contactor (Electric)	-	7-8	Reset - Lower (Gas)
RL-9	-	Reset - Upper (Gas)	X10	1-2	K41 Contactor (Electric)
-	-	K44 Contactor (Electric)	-	3-4	K44 Contactor (Electric)
RL-10	-	Heat Demand Upper and Lower (Gas)	-	5-6	K45 Contactor (Electric)
-	-	K41 Contactor (Electric)	X11	-	Comm Cable to Control Board X23
X1	1	Combustion Blower - Upper - GND	X12	1	Combustion Blower Lower - HES to CB
-	2	Hall Effect (HES) - In	-	2	CB PWM Signal
-	3	Pulse Width Modulation (PWM) - Out	X13	1	Combustion Blower Upper - HES to CB
-	4	12 VDC	-	2	CB PWM Signal
X2	1	Combustion Blower - Lower - GND	-	-	-
-	2	Hall Effect (HES) - In	-	-	-
-	3	Pulse Width Modulation (PWM) - Out	-	-	-
-	4	12 VDC	-	-	-

Option Board



Ref.	Description	Ref.	Pin(s)	Description
RLY 1	Relay - Hood Low	X 1	1-2	Hood Low
RLY 2	Relay - Hood High	-	3-4	Hood High
RLY 3	Relay - Grease Pump - PRO ONLY	-	5-6	Grease Pump - PRO ONLY
RLY 4	Relay - Liquid Soap - PRO ONLY	-	7-8	Hood Function Test
RLY 5	Relay - Not Used	X 2	-	Not Used
RLY 6	Relay - Not Used	X 3	1-2	Soap Pump - PRO ONLY
D 1- 6	LED - Function Outputs	-	3-6	Not Used
D-7	12 VDC	X 4	-	Interface Pins to CB
D-8	5 VDC	-	-	-

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Maintenance Schedule

Requirements

- See topic *How to Clean the Oven*.
- Make sure the oven is cooled down and off—inside of chamber 140°F (60°C) or less.

Daily

For daily maintenance, do the following.

- **Remove** any spills with disposable paper wipes or a damp cloth.
- **Wipe** the outside of the oven with a damp cloth.
- **Wipe** the oven gaskets with soap and water.
- **Inspect** the oven gaskets for damage.
- **Wipe** the front door glass.
- **Check** the product probe.
- **Check** the screen for cracking or peeling. Contact Technical Service if needed.

Weekly

For weekly maintenance, do the following.

- **Clean** the entire oven. **Make sure** to use a non-abrasive nylon scrub pad.
- Do not spray the cleaner directly into the fan openings located in the rear of the oven.
- **Inspect** the oven cavity lamp.
- **Inspect** the oven cavity for signs of grease/carbon buildup.
- **Check** behind the fan panel inside the oven cavity for signs of grease/carbon buildup.
- **Check** behind the fan panel inside the oven cavity for signs of scale buildup.
- **Inspect** the heat exchanger for any signs of major deformation. If yes, immediately remove from service and take corrective action.
- **Inspect** the heat exchanger for any loose/disconnected pipes or flanges. If yes, immediately remove from service and take corrective action.
- **Inspect** the convection elements for signs of cracking, deformation, or damage.
- **Clean** the ventless hood grease filters.

Monthly

For monthly maintenance, do the following.

- **Clean** out the drip tray line.
- **Check** the supplied water filtration and change as needed.
- **Check** for software updates.
- **Check** lighting.
- **Inspect** and test the proper draining of the oven cavity.
- **Inspect** the drain lines for leaks or clogs.

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- **Inspect** the oven cavity for any signs of scale buildup.
- **Inspect** the ventless hood paper filter (replace as needed).
- **Test** the ventless hood drain for proper drainage and signs of leaking.
- De-scale as needed.

Yearly

For yearly maintenance, do the following.

> **NOTE:** Must be performed by a qualified professional.

- **Replace** the steam bypass hose.
- **Inspect** and test the humidity control.
- **Inspect** all drain hoses and clamps.
- **Inspect** all steam water injection lines and clamps for leaks or potential issues.
- **Inspect** wiring to heating elements. Re-tighten or secure as needed. Record the amp draw.
- **Inspect** the cleaning system pump and hoses for leaks and proper operation.
- **Inspect** and test the proper draining of the oven cavity.
- **Inspect** the upper browning valve hose.
- **Inspect** the low pressure relief valve and hose.
- **Inspect** the convection element seal from the electrical compartment.
- **Inspect** the gas heat exchanger seal from the electrical compartment.
- **Inspect** the N6 oven temperature probe seal.
- **Inspect** the hand shower handle and hose.
- **Check** operation of all electrical cooling fans.
- **Test** steam injection solenoid.
- **Test** condensate solenoid.
- **Check** all electrical connections are properly connected and secure to the boards.
- **Check** door hinges and handles. Tighten, secure, or adjust as needed.
- **Check** door gaskets for damage and seal.
- **Run** the oven in convection mode and test operation.
- **Run** the oven in steam mode and test operation.
- De-scale as needed.
- For ovens shipped to New Zealand or Australia, **inspect** the back flow preventer check valve per AS/NZ3500.1 and AS/NZ3500.2

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- **Inspect** all drain hoses and clamps.
- **Inspect** all steam water injection lines and clamps for leaks or potential issues.
- **Inspect** wiring to heating elements. Re-tighten or secure as needed. Record the amp draw.
- **Inspect** wiring to the steam element. Re-tighten or secure as needed. Record the amp draw.
- **Inspect** the cleaning system pump and hoses for leaks and proper operation.
- For ovens shipped to New Zealand or Australia, **inspect** the back flow preventer check valve per AS/NZ3500.1 and AS/NZ3500.2

- **Check** operation of all electrical cooling fans.
- **Check** all electrical connections are properly connected and secure to the boards.
- **Check** door hinges and handles. Tighten, secure, or adjust as needed.
- **Check** door gaskets for damage and seal.

- **Test** steam injection solenoid.
- **Test** condensate solenoid.
- **Run** each chamber in convection mode and test operation.
- **Run** each chamber in steam mode and test operation.

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Error Codes

Code	Component	Description	Troubleshooting steps
E-5	2 - Convection fan	Convection fan (upper) under speed	1. Motor or fan wheel locked. 2. Check all connectors on the motor control. Inspect pins and confirm wires are secure in the connector. 3. If LED on motor control flashes, see error codes for motor control. 4. Hall Effect sensor does not detect motor rotation.
E-5	2 - Convection fan	Lower convection fan under speed	1. Motor or fan wheel locked. 2. Check all connectors on the motor control. Inspect pins and confirm wires are secure in the connector. 3. If LED on motor control flashes, see error codes for motor control. 4. Hall Effect sensor does not detect motor rotation.
E-10	44 - Cavity sensor	Cavity sensor short	Sensor (N6) mis-wired or has malfunctioned.
E-10	47 - Food probe	Food probe short	Probe (B10, B11) mis-wired or has malfunctioned.
E-10	52 - Steam injector	Steam injector sensor short	Sensor (B5) mis-wired or has malfunctioned.
E-10	55 - Tank	Tank sensor short	Sensor (B3) mis-wired or has malfunctioned.
E-11	44 - Cavity sensor	Cavity sensor open	1. Oven cavity temperature sensor (N6) has malfunctioned. 2. Oven cavity temperature sensor (N6) wires disconnected.
E-11	52 - Steam injector	Steam injector sensor open	1. Bypass steam temperature sensor (B5) has malfunctioned. 2. Bypass steam temperature sensor (B5) wires disconnected.
E-11	55 - Tank	Tank sensor open	1. Condenser temperature sensor (B3) has malfunctioned. 2. Condenser temperature sensor (B3) wires disconnected.
E-31	2 - Convection fan (Classic control)	Motor (upper) over temperature	1. Check for a blocked fan blade. 2. Check for physical damage of the motor. 3. Check motor high limit.
E-31	2 - Convection fan (Classic control)	Lower motor over temperature	1. Check for a blocked fan blade. 2. Check for physical damage of the motor. 3. Check motor high limit.
E-31	2 - Convection fan	Motor VFD (upper) over temperature	1. Make sure cooling fan(s) are operating. 2. Make sure exhaust vents are clean and free of debris. 3. Make sure oven clearances are met. 4. Ambient temperature greater than 105°F (41°C).

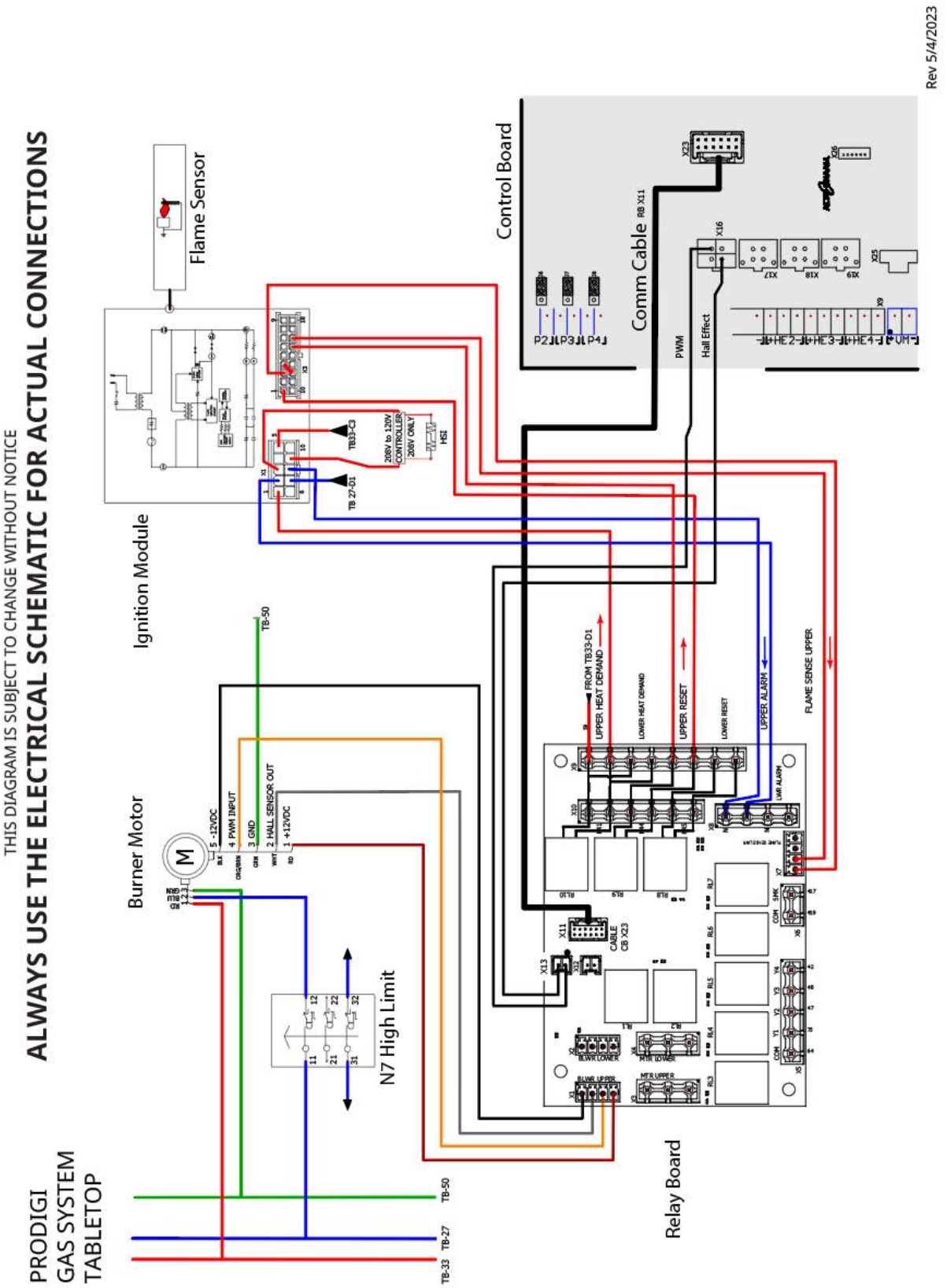
Code	Component	Description	Troubleshooting steps
E-31	2 - Convection fan	Lower motor VFD over temperature	1. Make sure cooling fan(s) are operating. 2. Make sure exhaust vents are clean and free of debris. 3. Make sure oven clearances are met. 4. Ambient temperature greater than 105°F (41°C).
E-31	44 - Cavity sensor	Chamber over temperature	1. Oven cavity temperature sensor (N6) has malfunctioned. 2. Oven cavity temperature sensor (N6) wires disconnected.
E-31	55 - Tank	Tank sensor over temperature	1. Water supply is shut off. 2. Plugged steam bypass hose. 3. Mis-wired condenser temperature sensor (B3). 4. Condenser temperature sensor (B3) has malfunctioned. 5. Cooling-water-solenoid valve (Y2) has malfunctioned.
E-31	8 - Control Board	Control board too warm	1. Make sure cooling fan(s) are operating. 2. Make sure exhaust vents are clean and free of debris. 3. Make sure oven clearances are met. 4. Ambient temperature greater than 105°F (41°C). 5. Check door gasket for damage and proper seal.
E-31	9 - Interface Board	Interface board too warm	1. Make sure cooling fan(s) are operating. 2. Make sure exhaust vents are clean and free of debris. 3. Make sure oven clearances are met. 4. Ambient temperature greater than 105°F (41°C). 5. Check door gasket for damage and proper seal.
E-55	56 - Vent valve	Vent (upper) not open	1. Vent valve monitoring switch has malfunctioned. 2. Vent valve (motor) has malfunctioned. Check for 12 VDC on the motor.
E-55	56 - Vent valve	Lower vent valve not open	1. Vent valve monitoring switch has malfunctioned. 2. Vent valve (motor) has malfunctioned. Check for 12 VDC on the motor.

Code	Component	Description	Troubleshooting steps
E-62	2 - Convection fan	Motor VFD (upper) over current	1. Check oven fan wheel for obstruction. 2. Check all connectors on the motor control. Inspect pins and confirm wires are secure in the connector. 3. If LED on motor control flashes, see error codes for motor control 4. Inspect power down control using on/off button. 5. Cycle power to the oven by unplugging the oven or by turning the main disconnect switch off and then back on. 6. Resume operation of oven. If error code reappears, contact a service provider.
E-62	2 - Convection fan	Lower motor VFD over current	1. Check oven fan wheel for obstruction. 2. Check all connectors on the motor control. Inspect pins and confirm wires are secure in the connector. 3. If LED on motor control flashes, see error codes for motor control 4. Inspect power down control using on/off button. 5. Cycle power to the oven by unplugging the oven or by turning the main disconnect switch off and then back on. 6. Resume operation of oven. If error code reappears, contact a service provider.
E-66	2 - Convection fan	VFD (upper) error	1. Check oven fan wheel for obstruction. 2. Check all connectors on the motor control. Inspect pins and confirm wires are secure in the connector. 3. If LED on motor control flashes, see error codes for motor control 4. Inspect power down control using on/off button. 5. Cycle power to the oven by unplugging the oven or by turning the main disconnect switch off and then back on. 6. Resume operation of oven. If error code reappears, contact a service provider.
E-66	2 - Convection fan	Lower VFD error	1. Check oven fan wheel for obstruction. 2. Check all connectors on the motor control. Inspect pins and confirm wires are secure in the connector. 3. If LED on motor control flashes, see error codes for motor control 4. Inspect power down control using on/off button. 5. Cycle power to the oven by unplugging the oven or by turning the main disconnect switch off and then back on. 6. Resume operation of oven. If error code reappears, contact a service provider.

Code	Component	Description	Troubleshooting steps
E-78	19 - Voltage sensor	Voltage monitor too low	1. Possible VFD failure. 2. Check supply voltage at the main terminal block. 3. Check supply voltage to the VFD.
E-78	2 - Convection fan	VFD (upper) under voltage	1. Possible VFD failure. 2. Check supply voltage at the main terminal block. 3. Check supply voltage to the VFD.
E-78	2 - Convection fan	Lower VFD under voltage	1. Possible VFD failure. 2. Check supply voltage at the main terminal block. 3. Check supply voltage to the VFD.
E-79	19 - Voltage sensor	Voltage monitor too high	1. Possible VFD failure. 2. Check supply voltage at the main terminal block. 3. Check supply voltage to the VFD.
E-79	2 - Convection fan	VFD (upper) over voltage	1. Possible VFD failure. 2. Check supply voltage at the main terminal block. 3. Check supply voltage to the VFD.
E-79	2 - Convection fan	Lower VFD over voltage	1. Possible VFD failure. 2. Check supply voltage at the main terminal block. 3. Check supply voltage to the VFD.
E-80	2 - Convection fan	VFD (upper) memory error	1. Possible VFD failure. 2. Check supply voltage at the main terminal block. 3. Check supply voltage to the VFD. 4. Replace the VFD.
E-80	2 - Convection fan	Lower VFD memory error	1. Possible VFD failure. 2. Check supply voltage at the main terminal block. 3. Check supply voltage to the VFD. 4. Replace the VFD.
E-88	1 - Heater	Gas ignition failure (upper)	1. Power down control using ON/OFF button. 2. Cycle power to the oven by unplugging the oven or turning off the breaker. 3. Inspect top of oven for anything blocking the exhaust flue of the oven. 4. Make sure ventilation hood is turned on and working properly. 5. Make sure gas line is properly connected to the oven and the gas shut off valve is in the open position. 6. Check gas pressure on the inlet of the gas valve. (NG 5.5"-14" w.c., LP 7"-14" required). 7. Follow troubleshooting tree in the service manual.

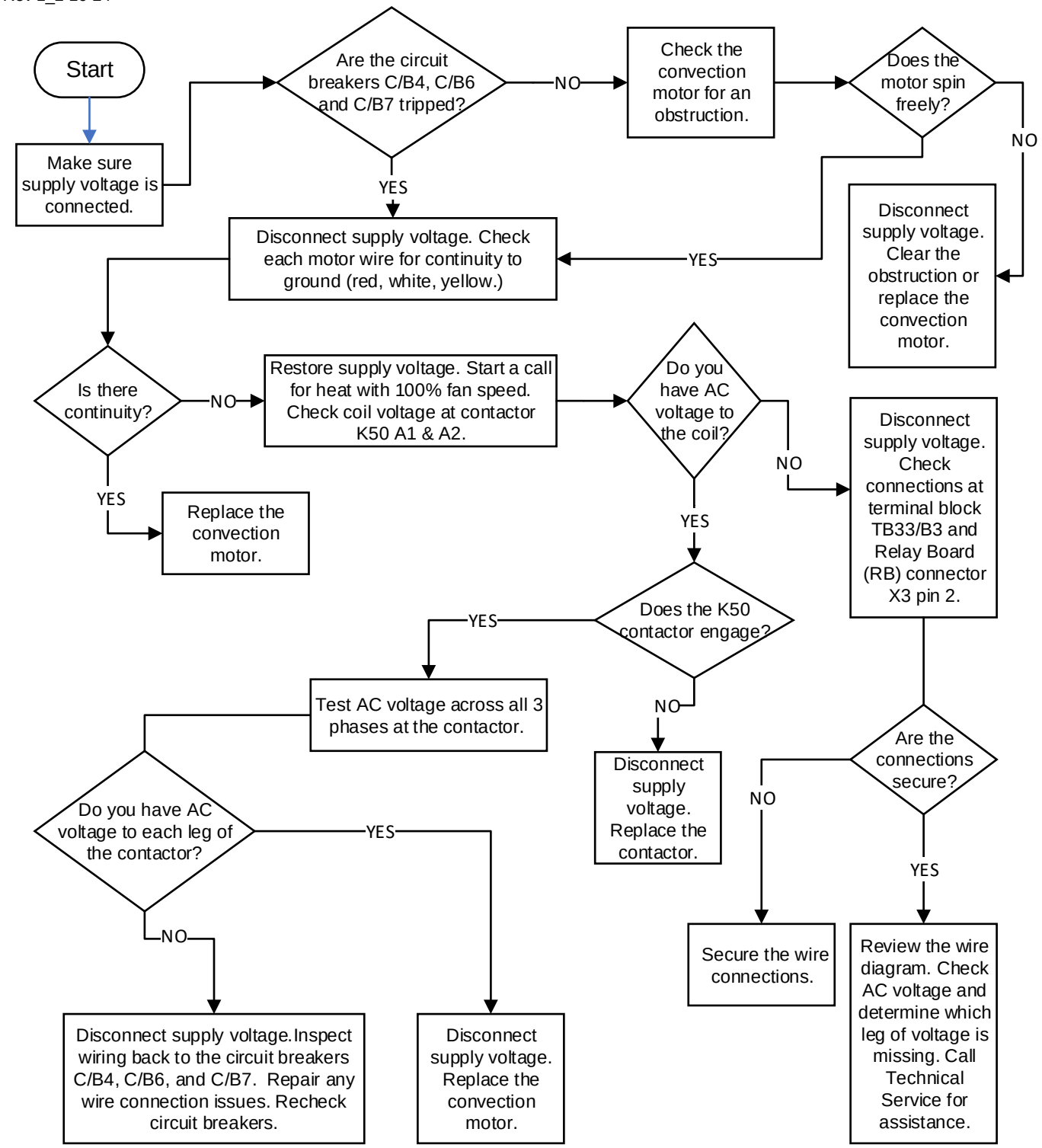
Code	Component	Description	Troubleshooting steps
E-88	1 - Heater	Lower gas ignition failure	1. Power down control using ON/OFF button. 2. Cycle power to the oven by unplugging the oven or turning off the breaker. 3. Inspect top of oven for anything blocking the exhaust flue of the oven. 4. Make sure ventilation hood is turned on and working properly. 5. Make sure gas line is properly connected to the oven and the gas shut off valve is in the open position. 6. Check gas pressure on the inlet of the gas valve. (NG 5.5"-14" w.c., LP 7"-14" required). 7. Follow troubleshooting tree in the service manual.
E-90	1 - Heater	Gas blower failure (upper)	1. Power supply cable is not connected to combustion blower motor. 2. Speed control cable is not connected to combustion blower motor. 3. Combustion blower motor is blocked, rotation is impeded, or motor has malfunctioned. 4. Faulty control board.
E-90	1 - Heater	Lower gas blower failure	1. Power supply cable is not connected to combustion blower motor. 2. Speed control cable is not connected to combustion blower motor. 3. Combustion blower motor is blocked, rotation is impeded, or motor has malfunctioned. 4. Faulty control board.
E-93	8 - Control Board	State synchronization error between the interface board and control board	1. Power supply cable is not connected to combustion blower motor. 2. Speed control cable is not connected to combustion blower motor. 3. Combustion blower motor is blocked, rotation is impeded, or motor has malfunctioned. 4. Faulty control board.
E-94	10 - Control Board Communications	Communication error between Interface Board and Control Board	1. Cycle power by unplugging or turning off the breaker, then turn it back on. 2. Check CAN cable connections. 3. CAN cable defective. 4. Control board, low voltage, connector defective. 5. Display board connector defective.
E-94	2 - Convection fan	VFD (upper) communication error	1. Cycle power by unplugging or turning off the breaker, then turn it back on. 2. Check communication cable between the motor control and the control board. 3. Cable defective. 4. Motor control connector defective. 5. Control board connector defective.

Code	Component	Description	Troubleshooting steps
E-94	2 - Convection fan	Lower VFD communication error	1. Cycle power by unplugging or turning off the breaker, then turn it back on. 2. Check communication cable between the motor control and the control board. 3. Cable defective. 4. Motor control connector defective. 5. Control board connector defective.
E-102	59 - Ventless hood	Ventless hood filter Fault	1. Check if filters are installed. 2. Check if filters are clogged. 3. Check operation of hood motor.
E-105	6 - Chamber	Low water pressure	1. Water supply not connected. 2. Water supply is shut off. 3. Water supply to oven blocked or obstructed (check filter).
E-109	6 - Chamber	Chamber high limit	1. Oven has experienced an overheat condition. 2. Cooling fan has malfunctioned. 3. Heat relay is stuck closed. 4. Connection between high limit switch and Control Board (CB) is faulty. 5. High limit switch has malfunctioned.
E-606	6 - Chamber	Error during cleaning cycle	1. Manually clean the oven. 2. Manually rinse the oven. 3. Make sure to remove chemicals before resuming operation of oven. 4. Contact a service provider.
E-999	48 - Personality handler	IB and CB dip switch settings not set correctly	1. Power down control using ON/OFF button. 2. Cycle power to the oven by unplugging the oven or by turning the main disconnect switch off and then back on. 3. Resume operation of oven. If error reappears, contact a service provider.


PRODIGI
GAS SYSTEM
TABLETOP
THIS DIAGRAM IS SUBJECT TO CHANGE WITHOUT NOTICE
ALWAYS USE THE ELECTRICAL SCHEMATIC FOR ACTUAL CONNECTIONS
Rev 5/4/2023
Flame Sensor
Control Board
Comm Cable RB X11
Ignition Module
Burner Motor
N7 High Limit
Relay Board
PWM
Hall Effect
5 -12VDC
4 PWM INPUT
3 GND
2 HALL SENSOR OUT
1 +12VDC
TB-50
TB-27
TB-33
UPPER HEAT DEMAND
LOWER HEAT DEMAND
UPPER RESET
LOWER RESET
UPPER ALARM
FLAME SENSE UPPER
FROM TB33-D1
208V to 120V CONTROLLER
208V ONLY

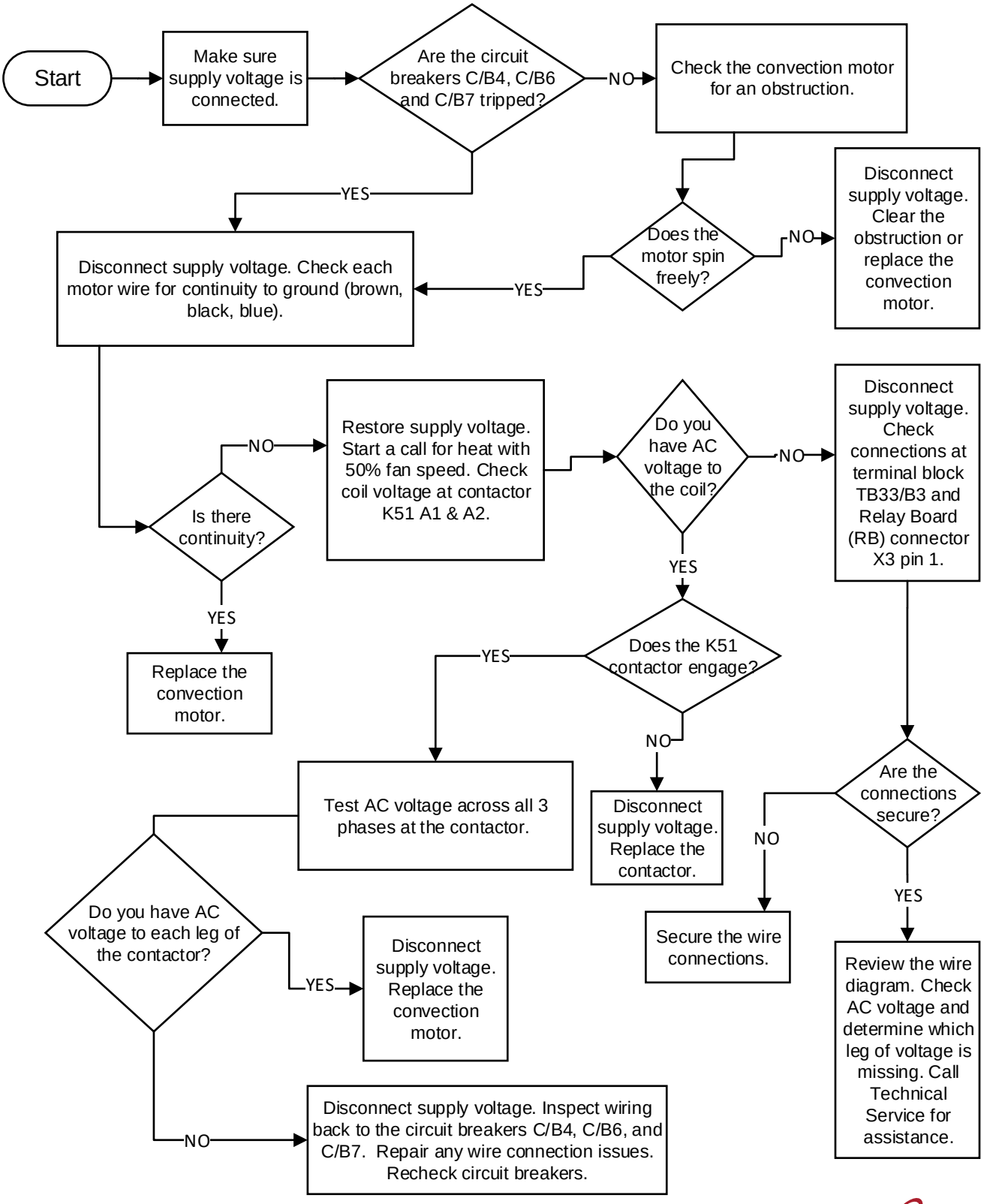
E5 No Motor Operation on High Speed (Classic)

Rev 1_2-16-24



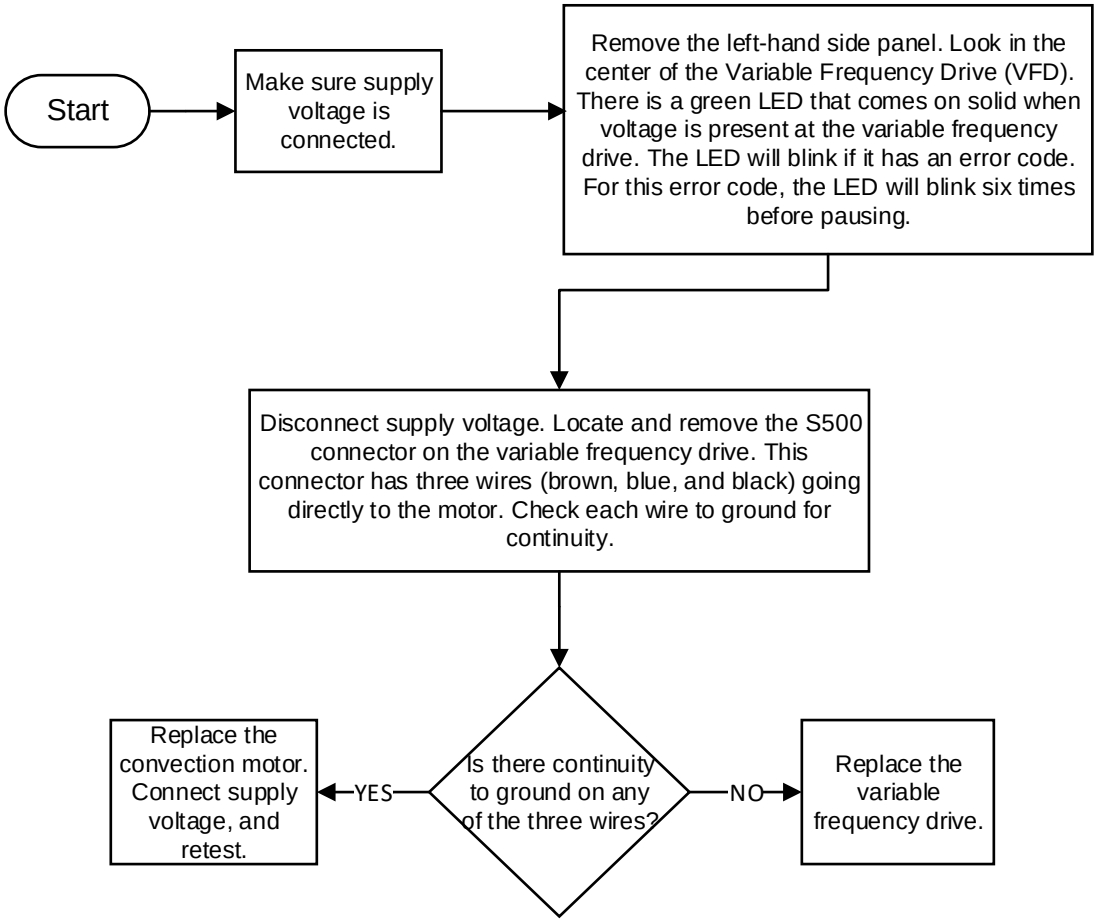
E5 No Motor Operation on Low Speed (Classic)

Rev 1_2-16-24



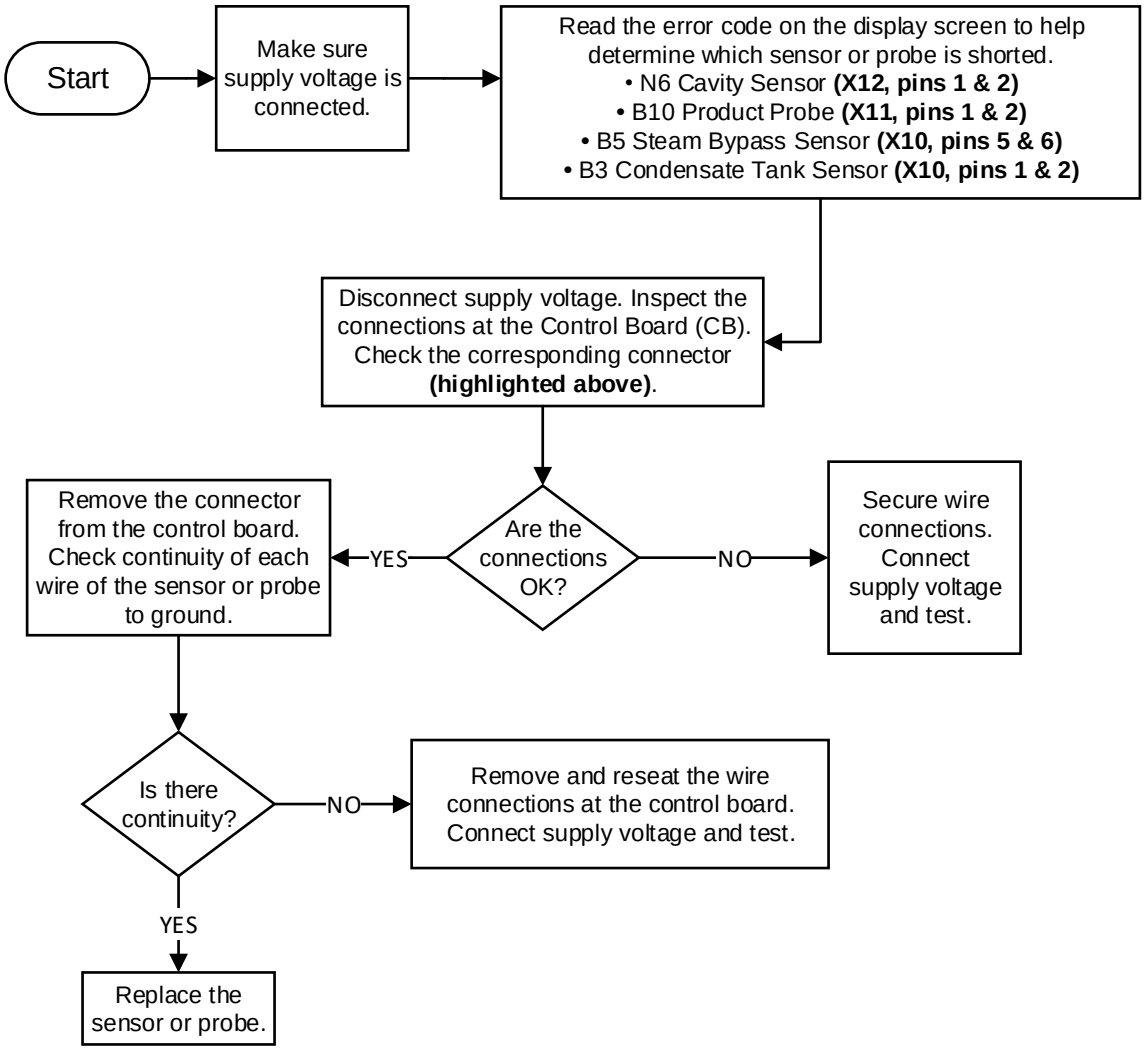
E10 Convection Motor Short Circuit

Rev 1_2-16-24



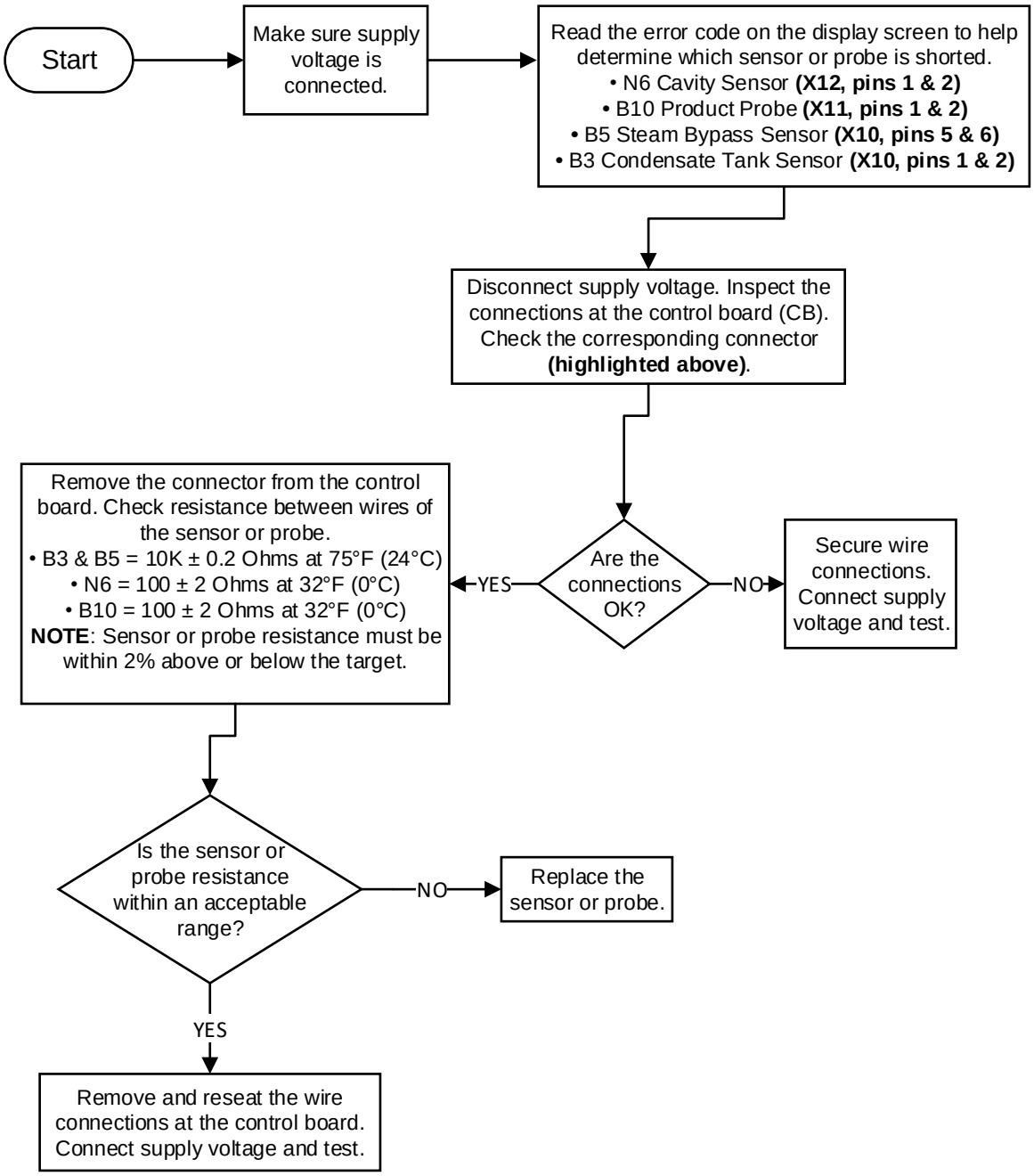
E10 Shorted Sensor or Probe

Rev 1_2-16-24



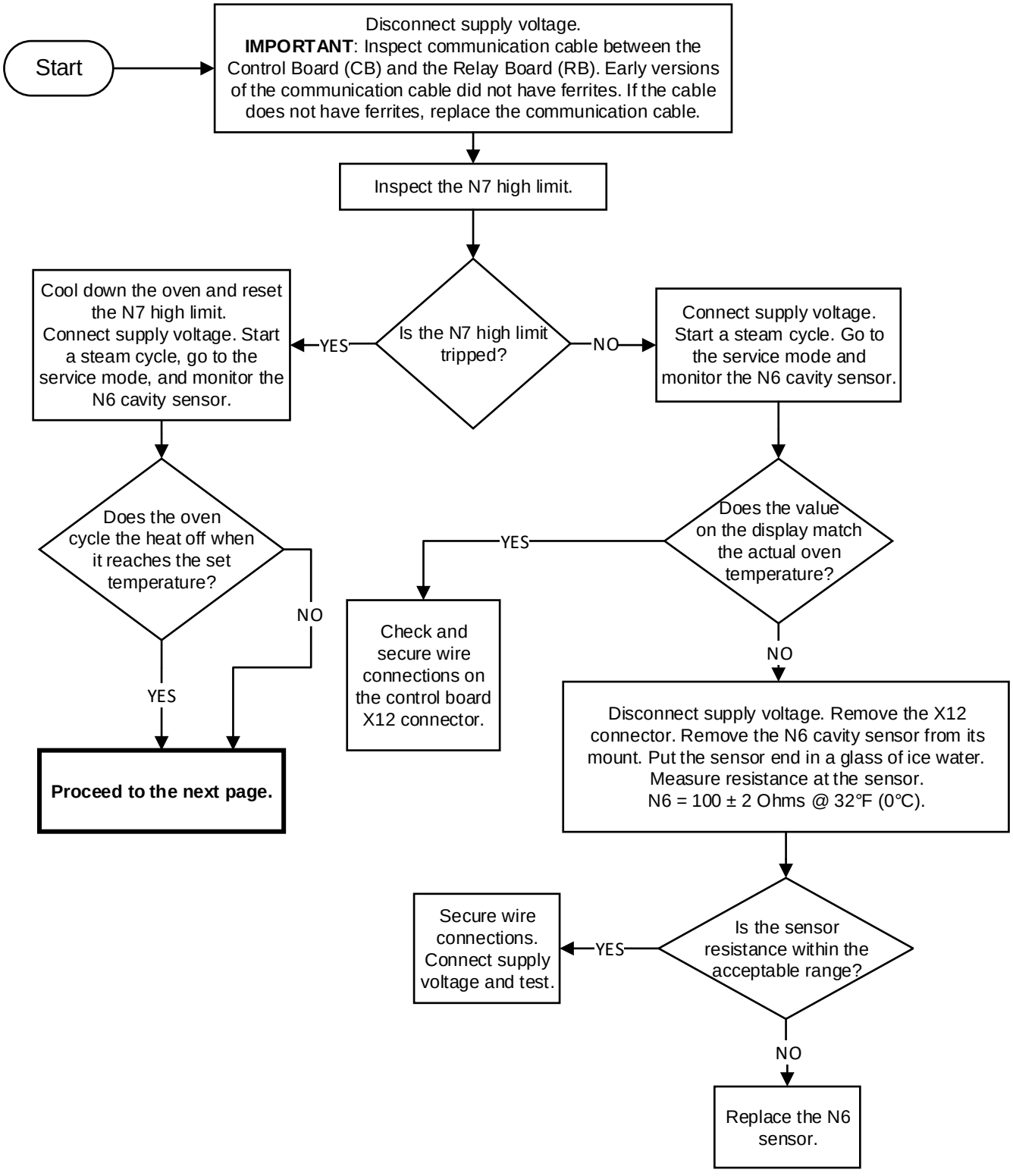
E11 Open Sensor or Probe

Rev 1_2-16-24



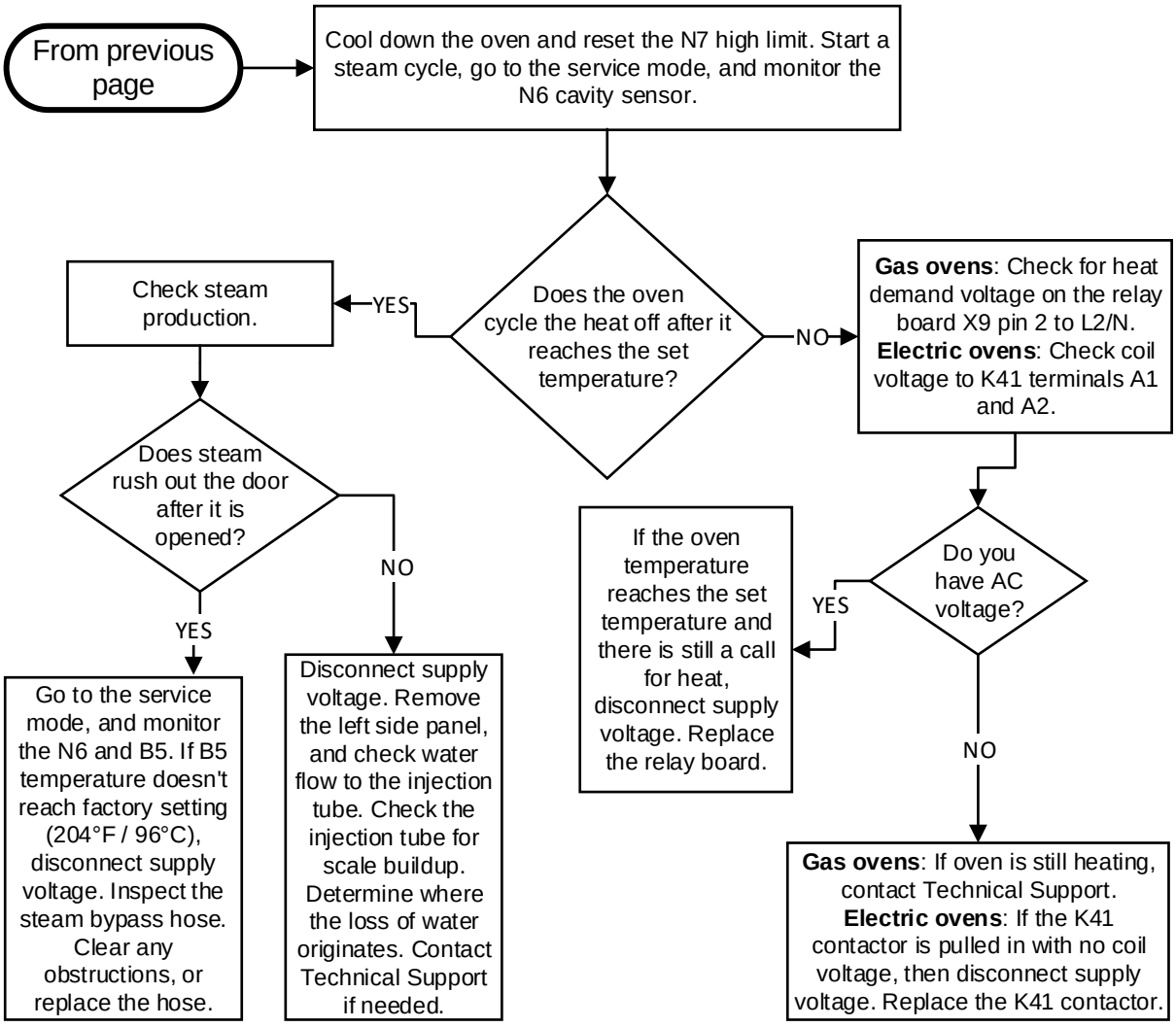
E31 Cavity Sensor Over Temp

Rev 1_2-16-24



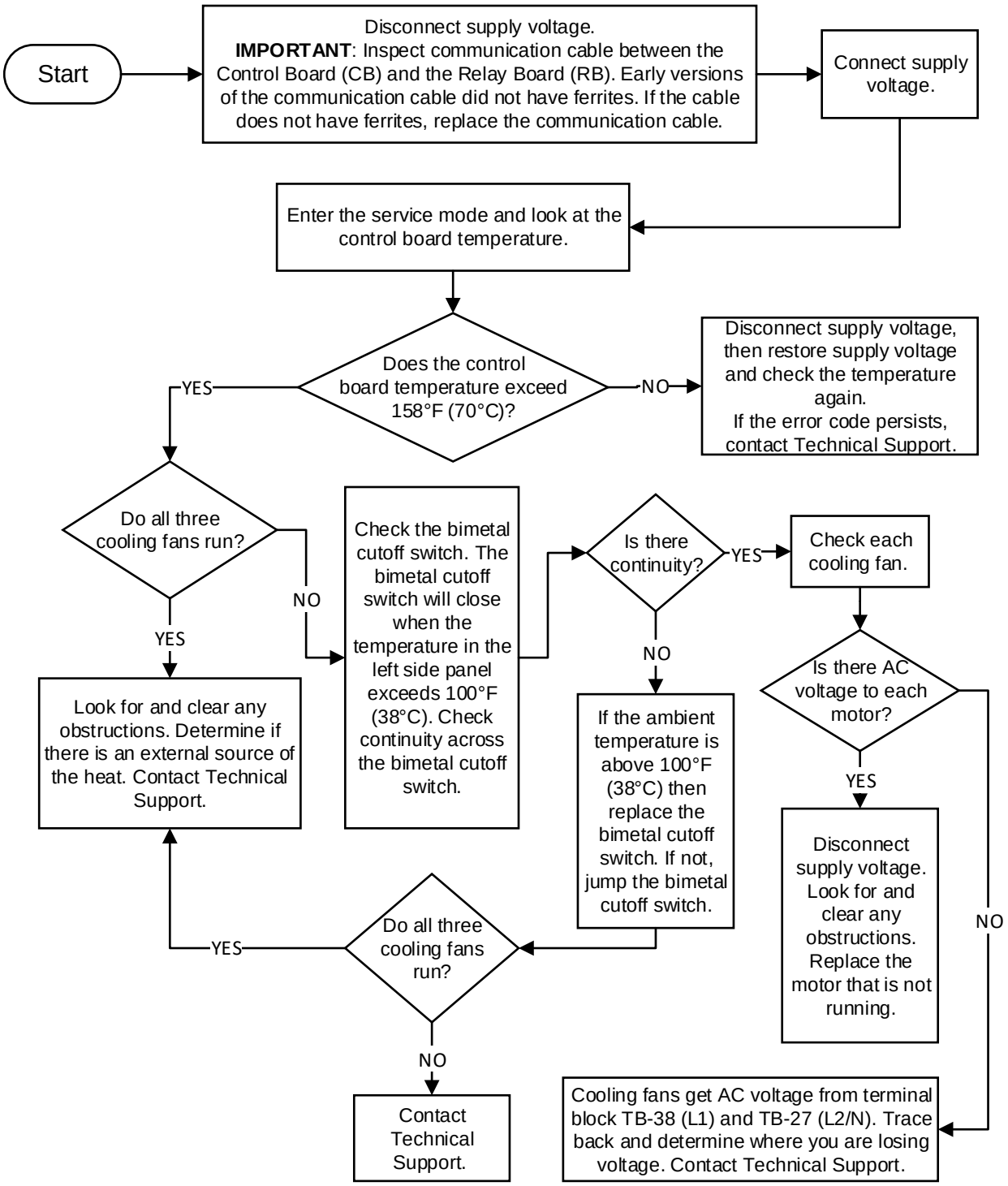
E31 Cavity Sensor Over Temp (continued)

Rev 1_2-16-24



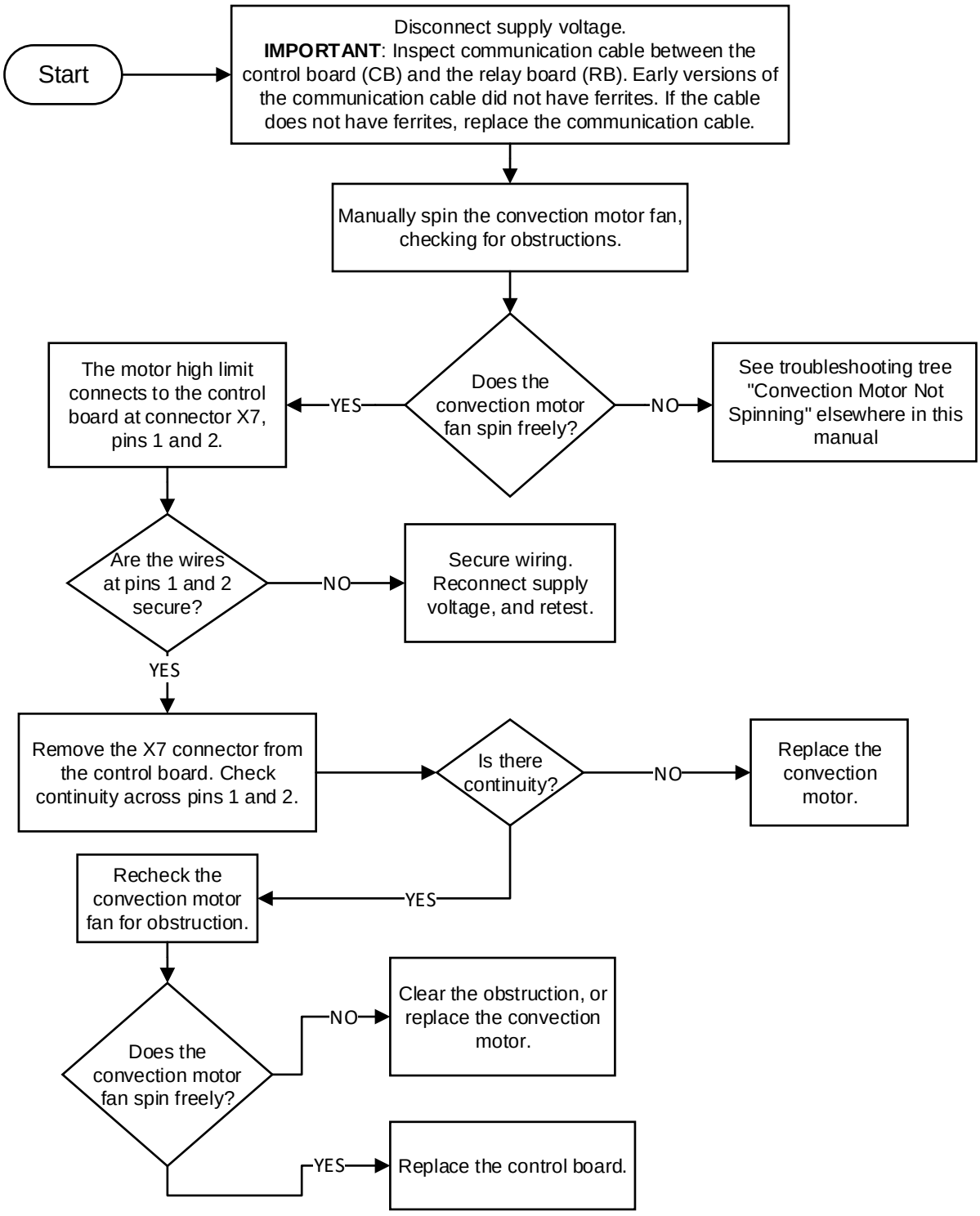
E31 Control Board (CB) Over Temp

Rev 1_2-16-24



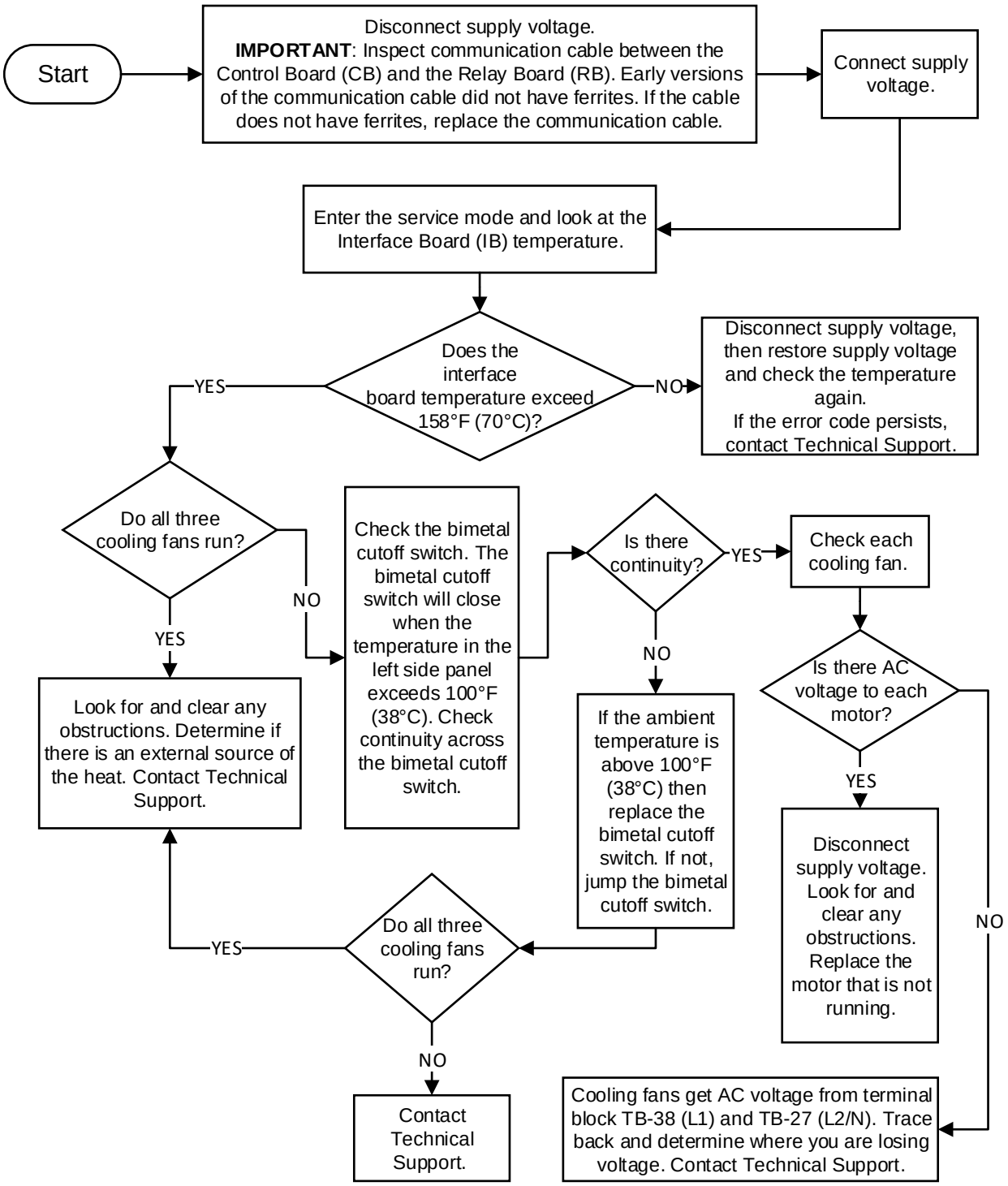
E31 Convection Motor Over Temp (Classic)

Rev 1_2/16/2024

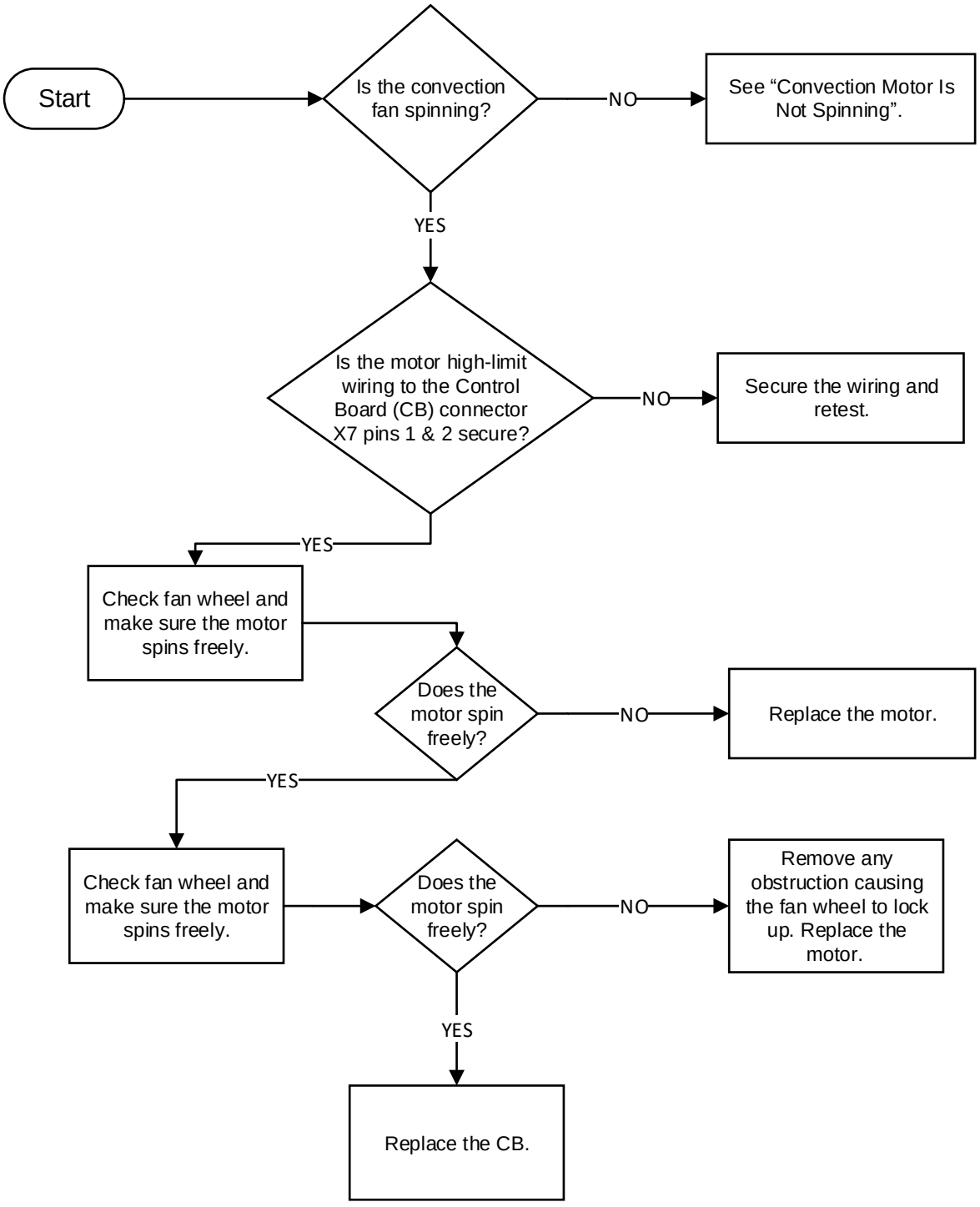


E31 Interface Board (IB) Over Temp

Rev 1_2-16-24

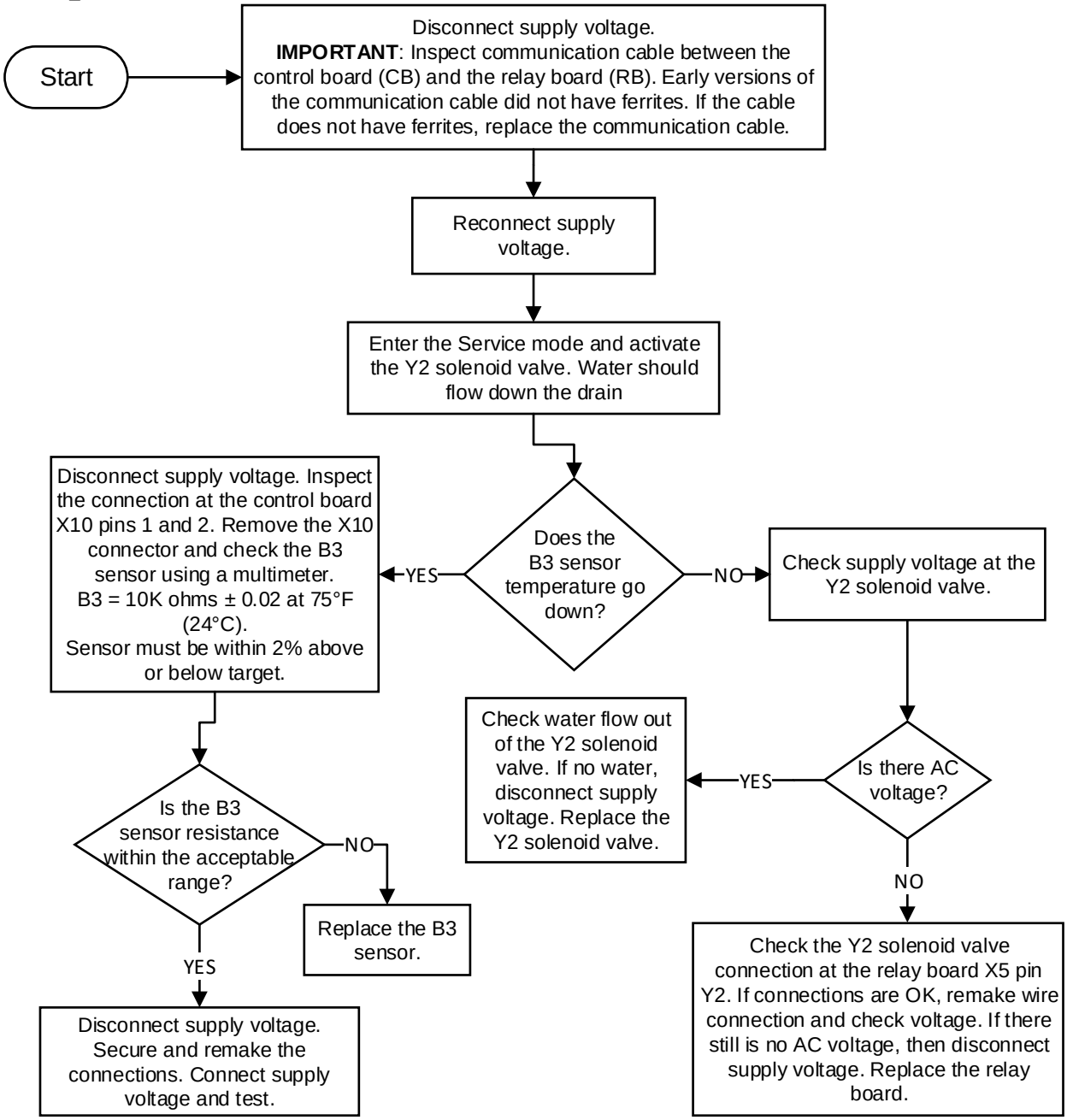


E31 Prodigi Classic: Fan Motor Over Temp



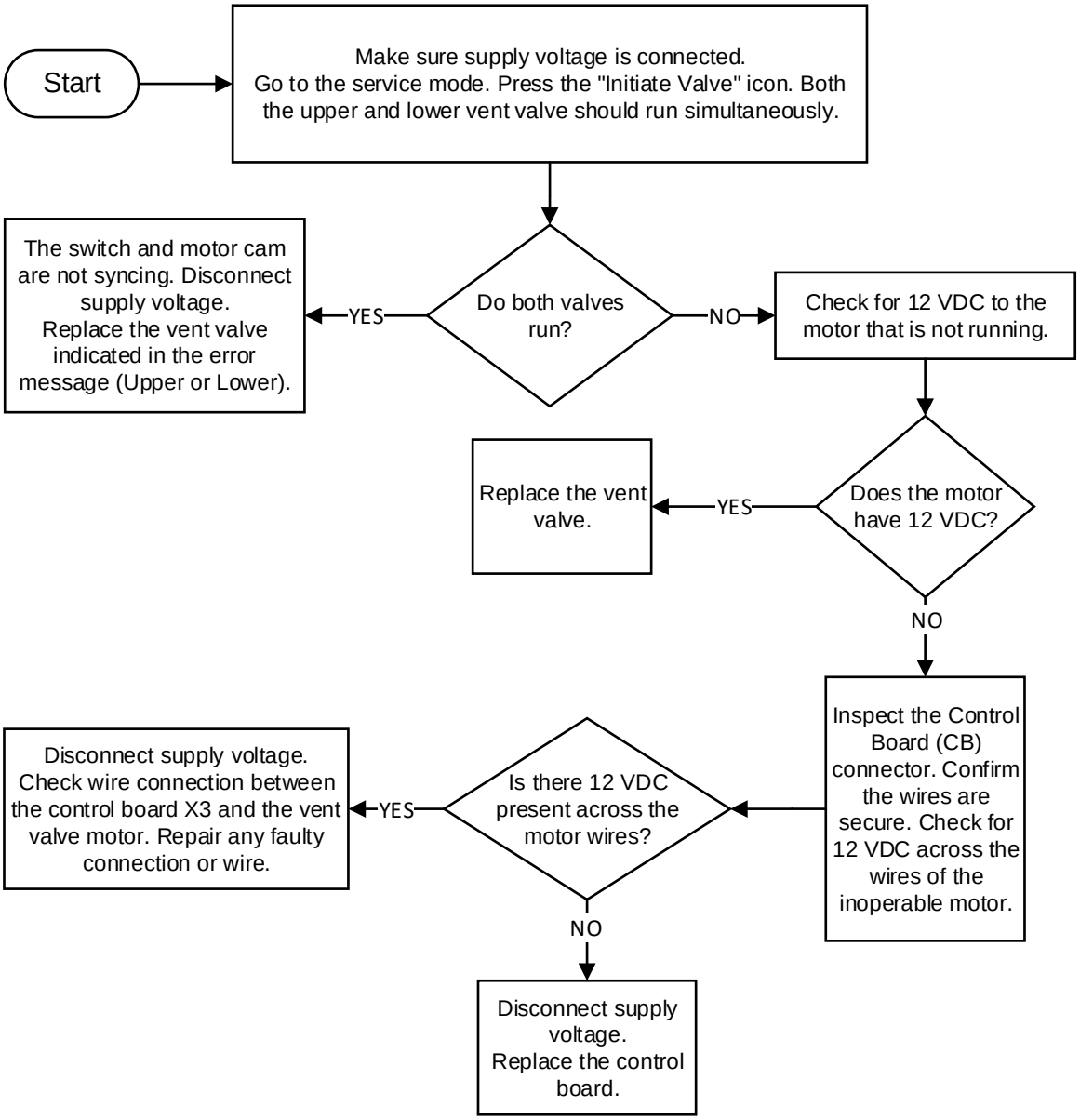
E31 Tank Sensor Over Temp

Rev 1_2-16-24



E55 Vent Valve (Upper or Lower)

Rev 1_2-16-24



E88 Error - Gas Ignition Failure

NOTE: This troubleshooting tree is based on a 7-20 120 volt oven.

Start

Remove the side panel.
Open the control panel and place it onto the support hooks.
Install a manometer onto the MIN test port.
Monitor the LEDs on the relay board.

Inspect the flue for blockage.

Is the flue clear of any blockage?

NO

Clear the blockage.

YES

Is the fuel supply pressure between 5.5-14 inches of water column for natural gas (NG) or 9-14 inches of water column for propane (LP)?

NO

Correct the fuel supply issue to the oven.

YES

Measure the ignitors ohm value between pins 3 and 9 of the X1 10 pin connector.

Is the ohm value between 30-60 ohms at room temperature?

NO

Repair or replace the ignitor.

YES

Power up the oven and set the oven in convection mode. Set temperature at 350º F (177º C) and time at 10 minutes. Press the start icon.

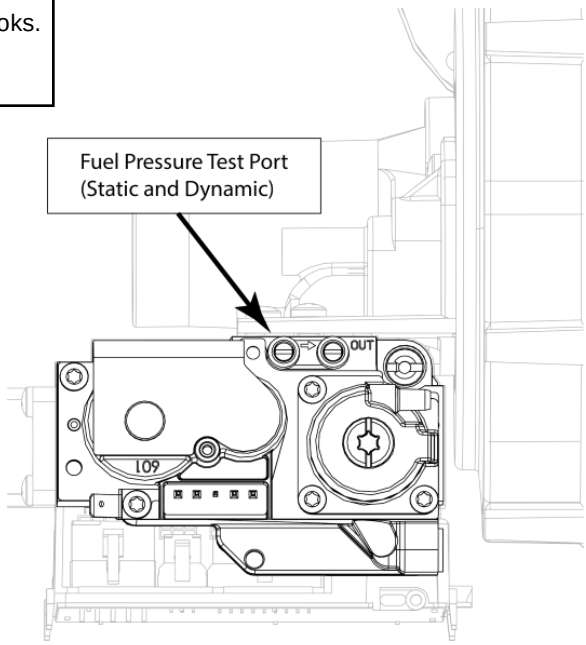
Does the fuel supply pressure stay between 5.5-14 inches of water column for natural gas (NG) or 9-14 inches of water column for propane (LP)?

NO

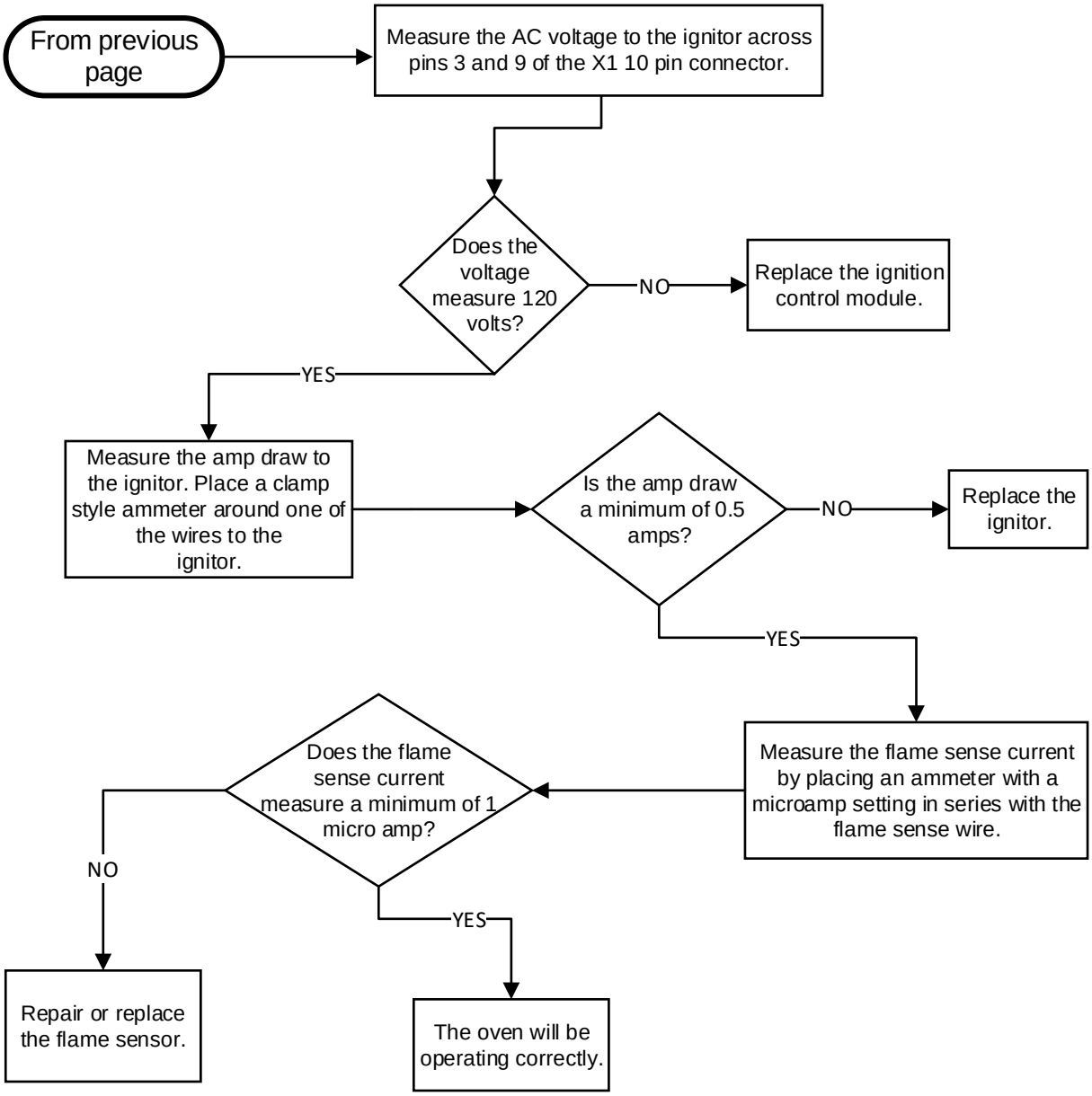
Correct the fuel supply issue to the oven.

YES

Proceed to the next page.

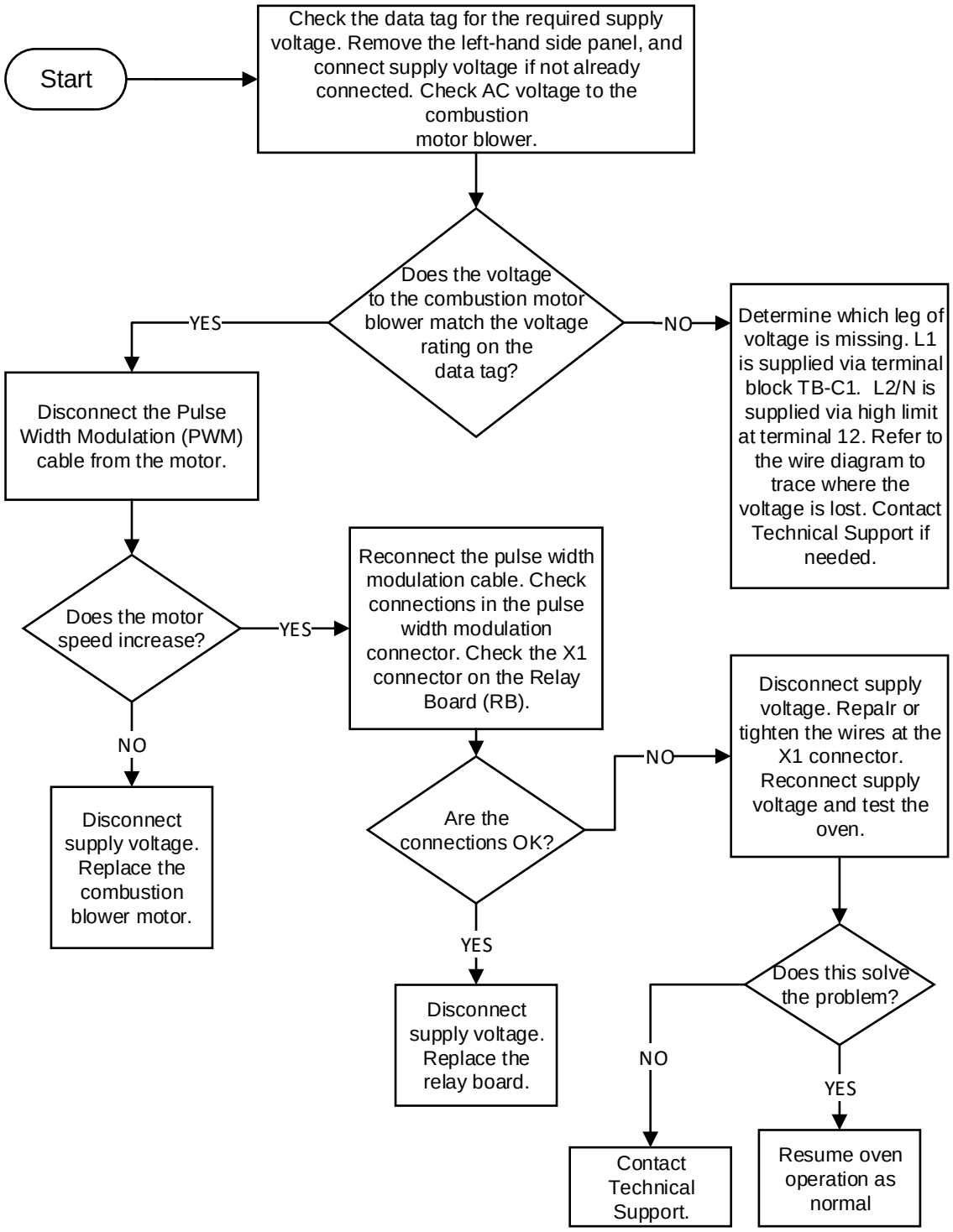


E88 Error - Gas Ignition Failure (Continued)



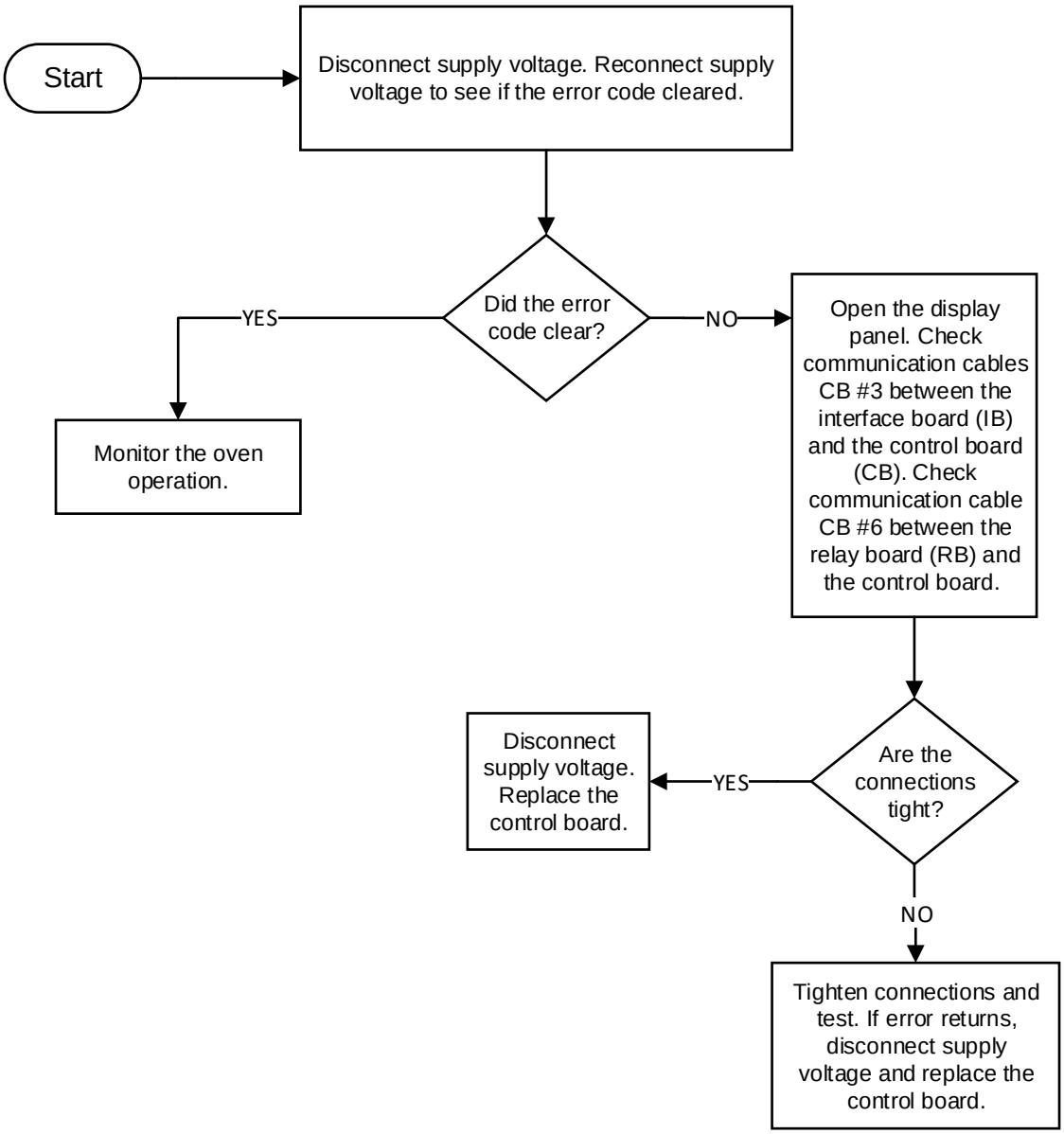
E90 Gas Combustion Motor Failure (upper or lower)

Rev 1_2-16-24



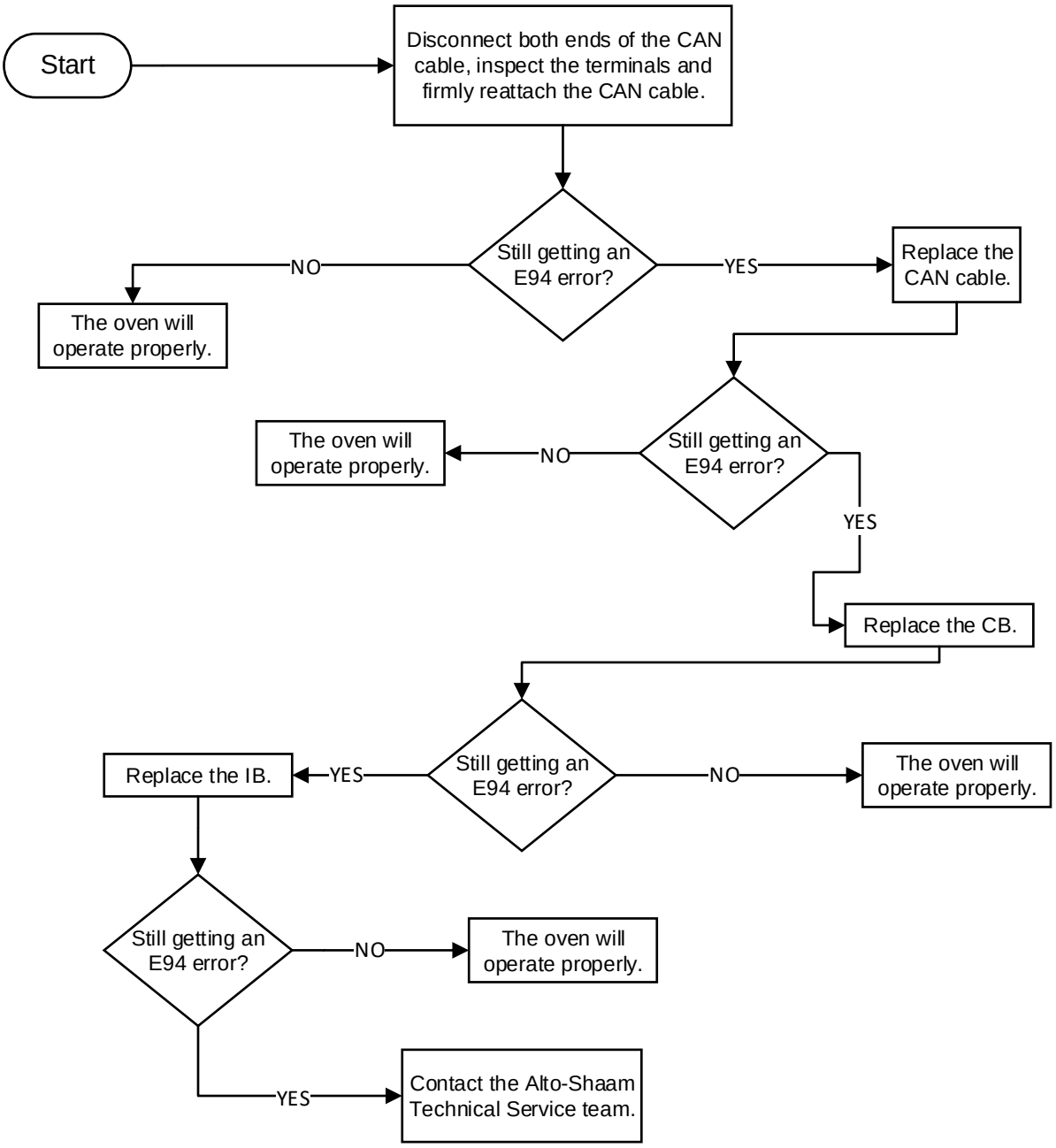
E93 Control Board (CB) Synchronization Error

Rev 1_2-16-24



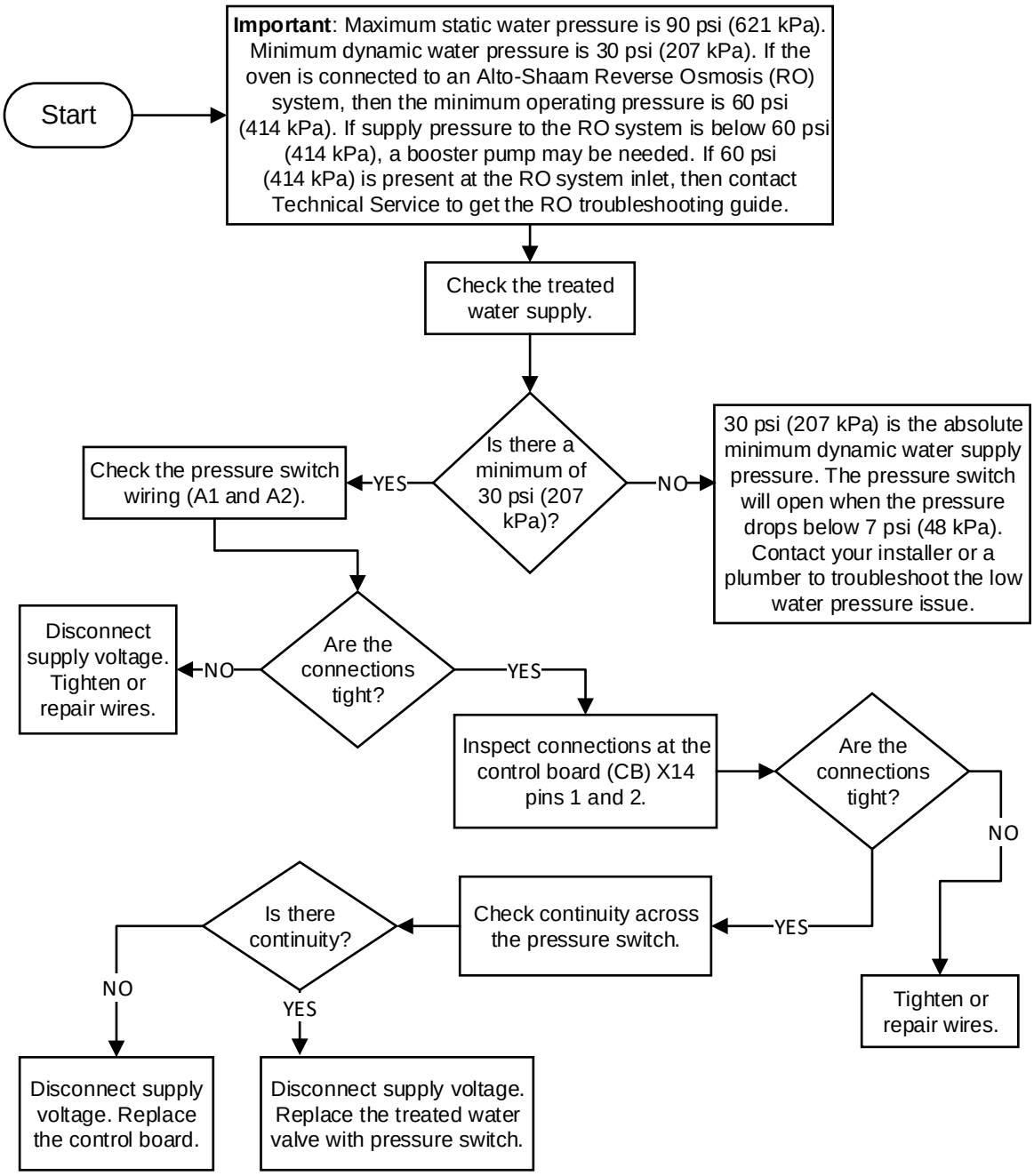
E94 Prodigi Classic Only: Communication Error

NOTE: The computer area network (CAN) cable is connected to the control board (CB) at connector X6 and the interface board (IB) at connector J19.



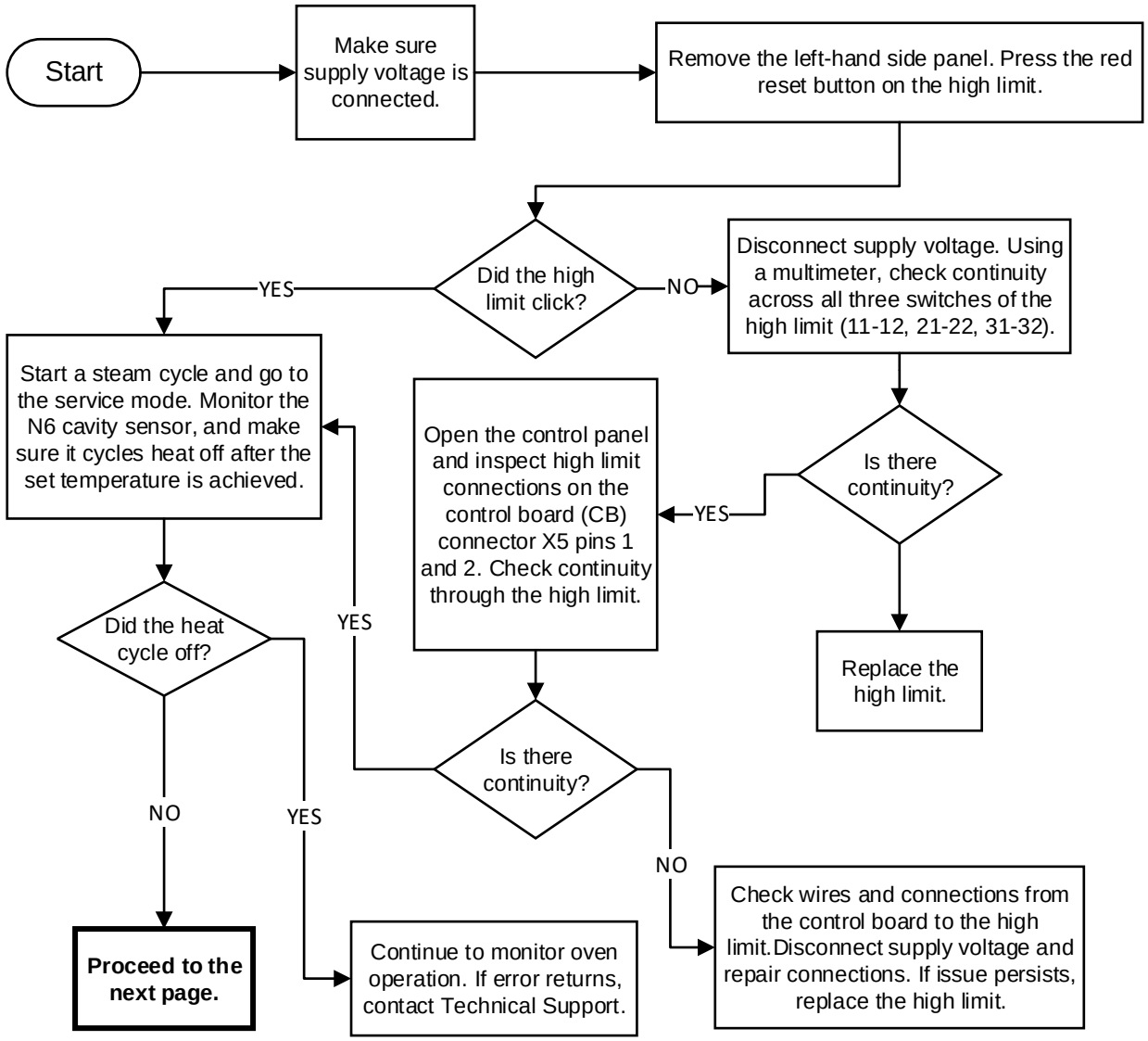
E105 Low Water Pressure

Rev 1_2-16-24



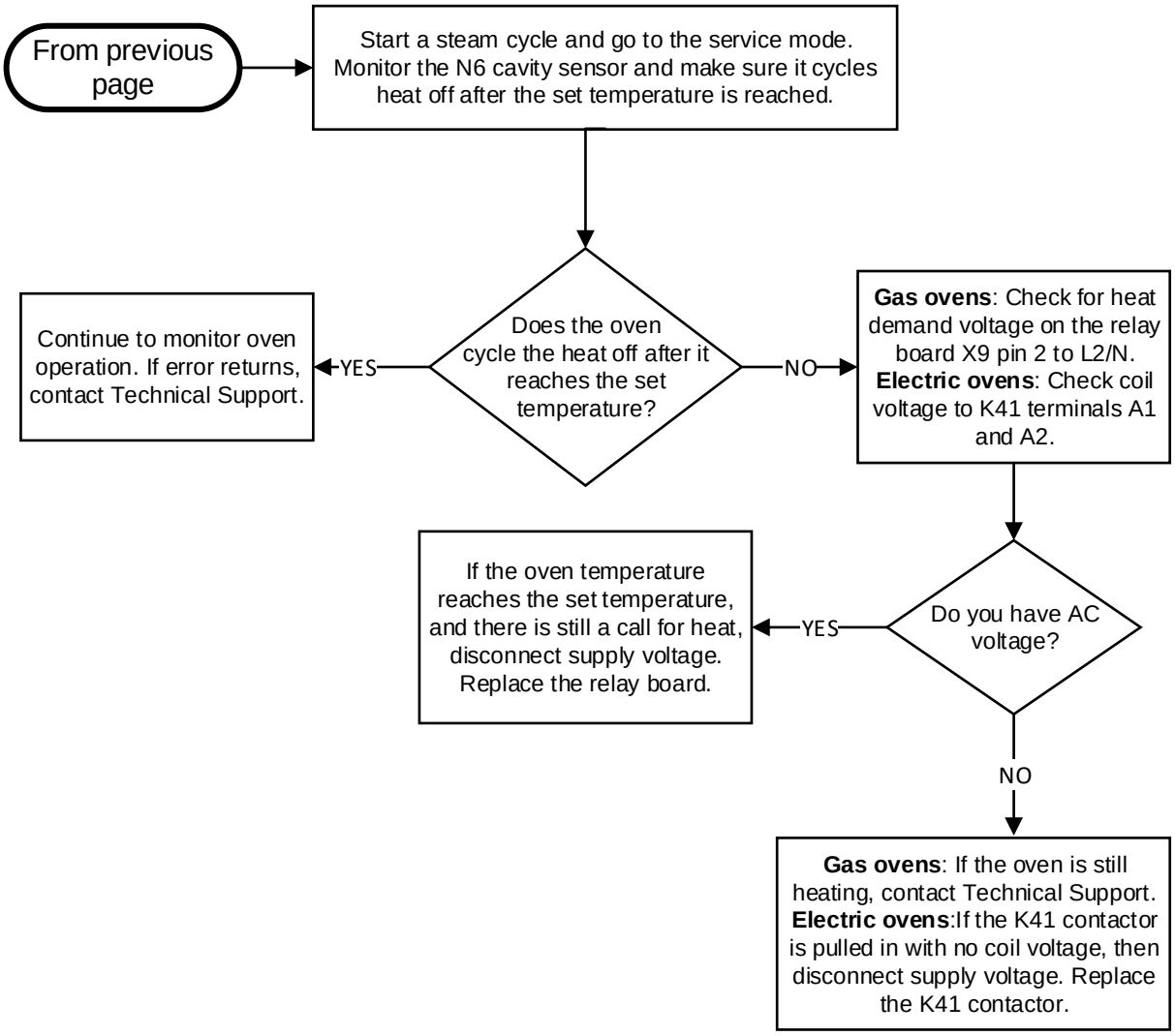
E109 High Limit Error

Rev 1_2-16-24



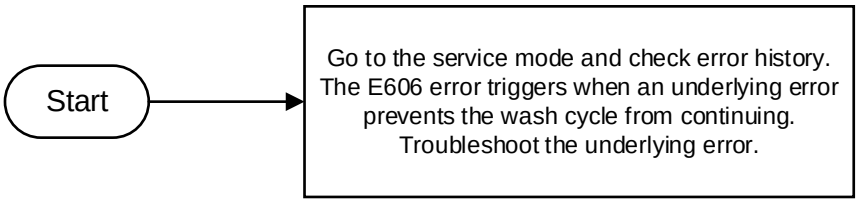
E109 High Limit Error (continued)

Rev 1_2-16-24



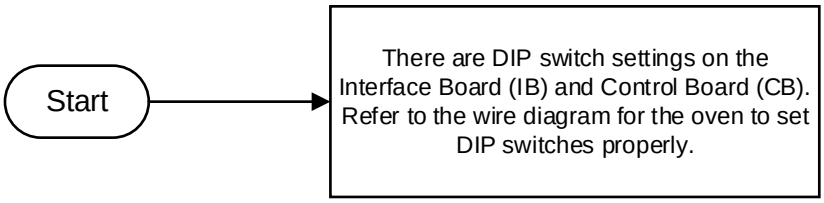
E606 Error During Clean Cycle

Rev 1_2-16-24

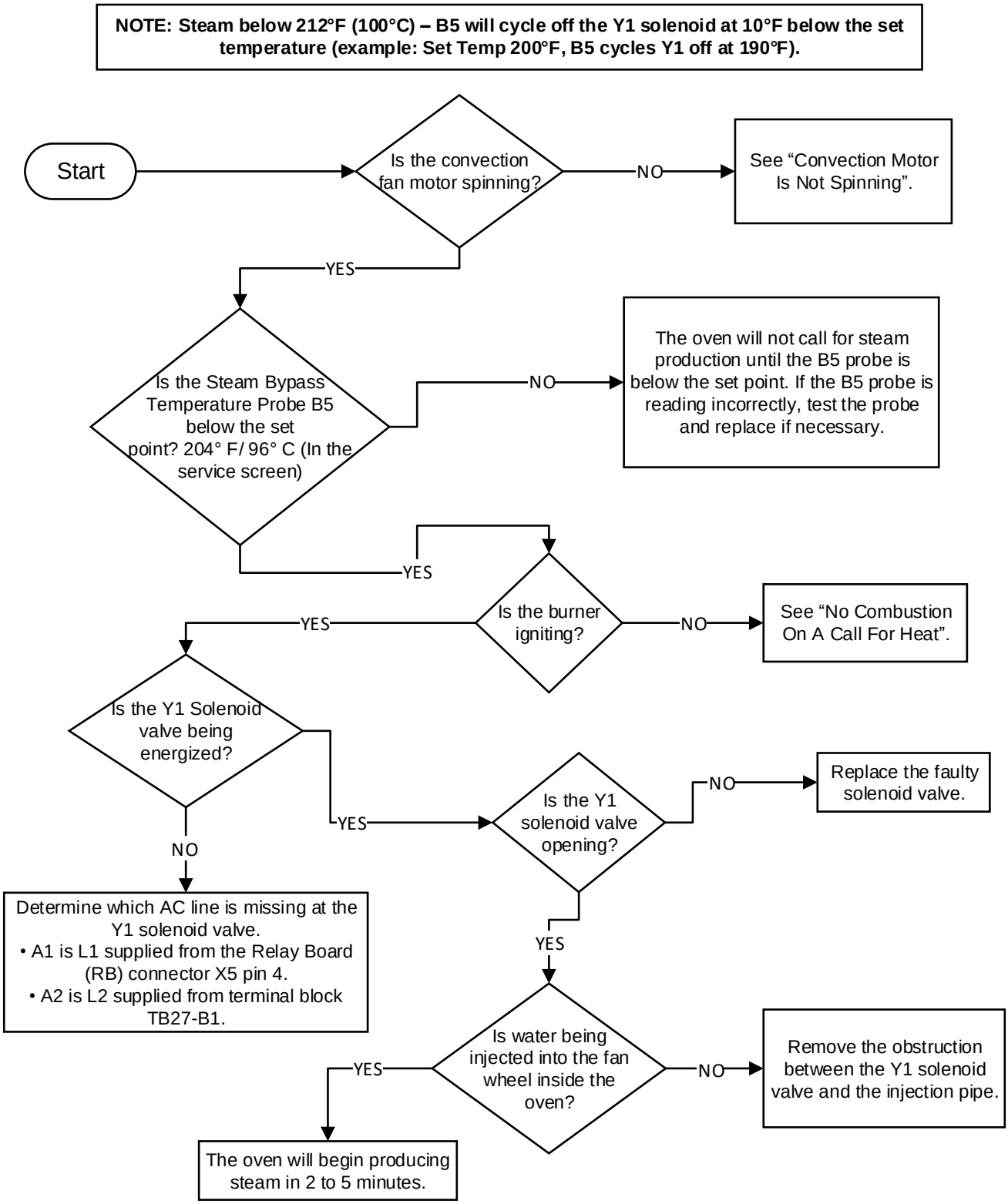


E999 DIP Switch Not Set Properly

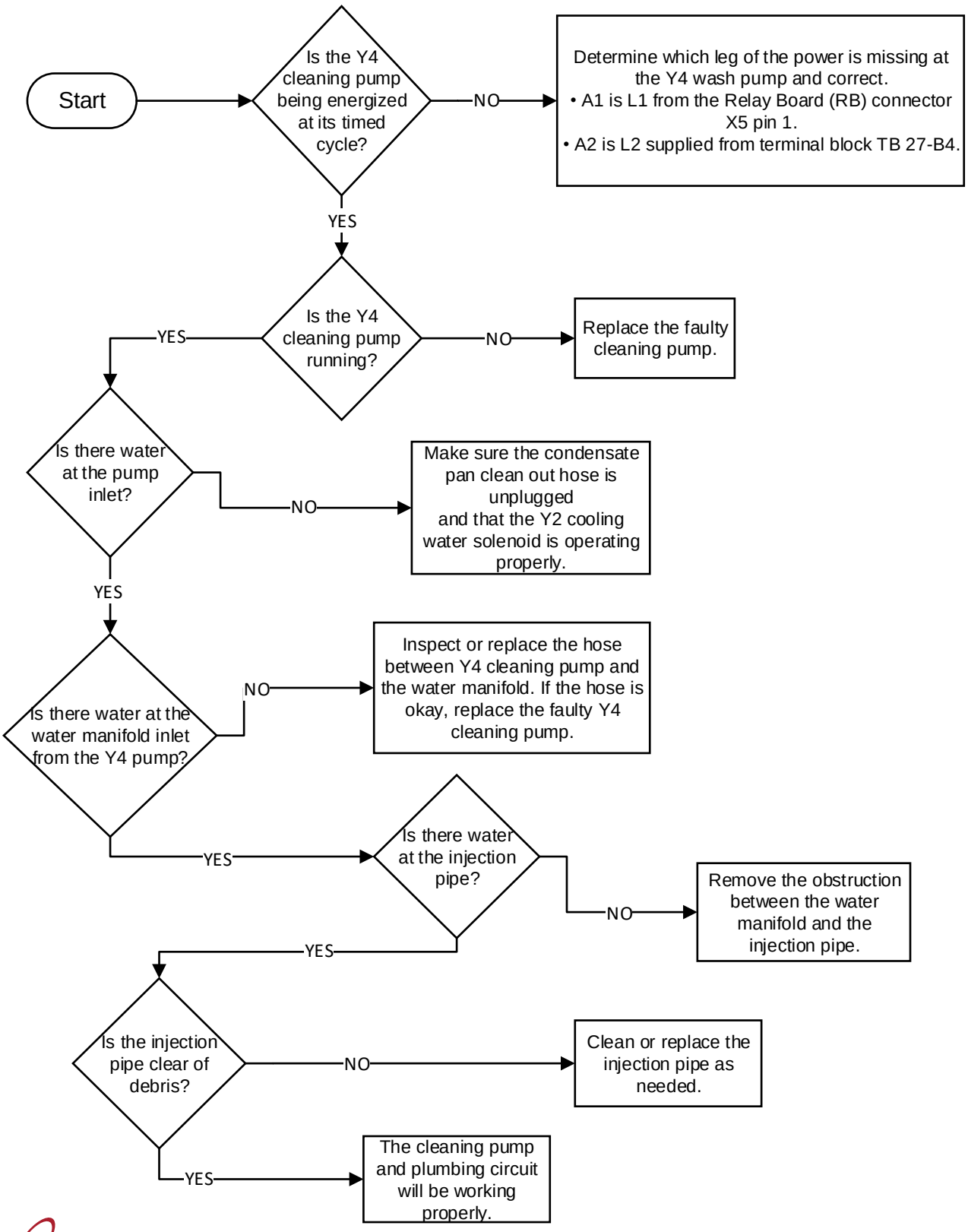
Rev 1_2-16-24



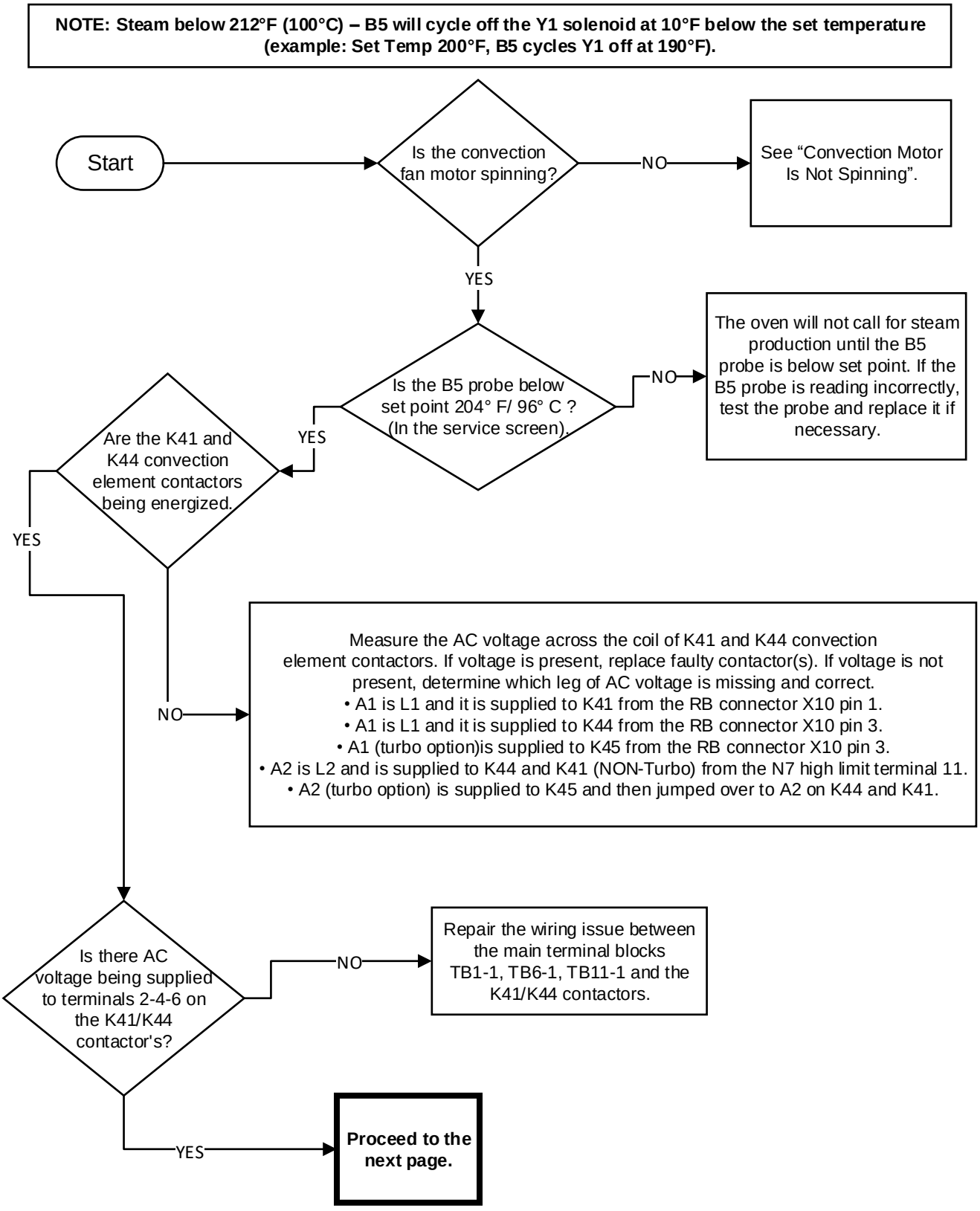
Prodigi, Gas: No Steam at 212°F (100°C)



Cleaning System is Not Operating

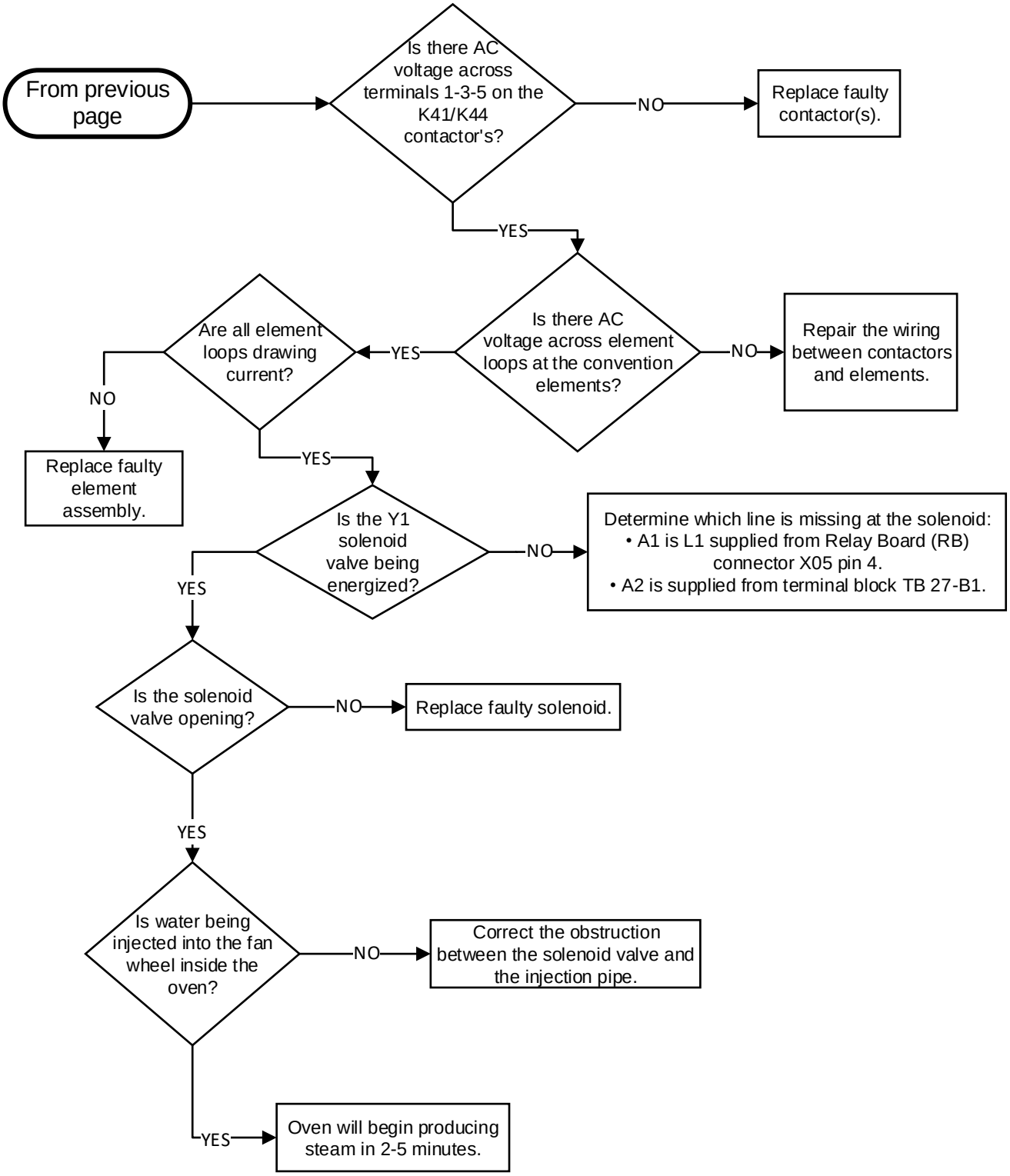


Prodigi: Electric, No Steam at 212°F (100°C)

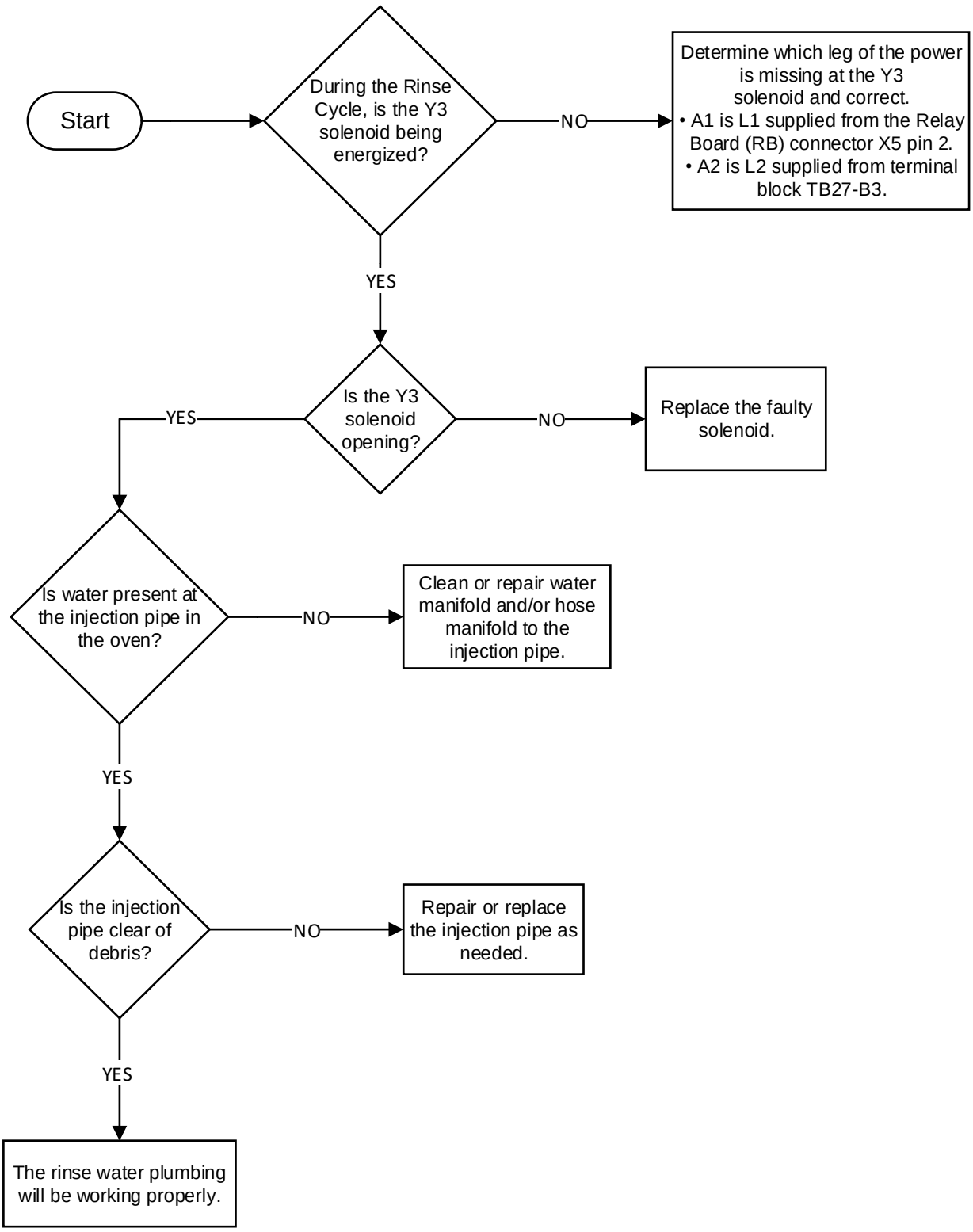


Prodigi: Electric, No Steam at 212°F (100°C)

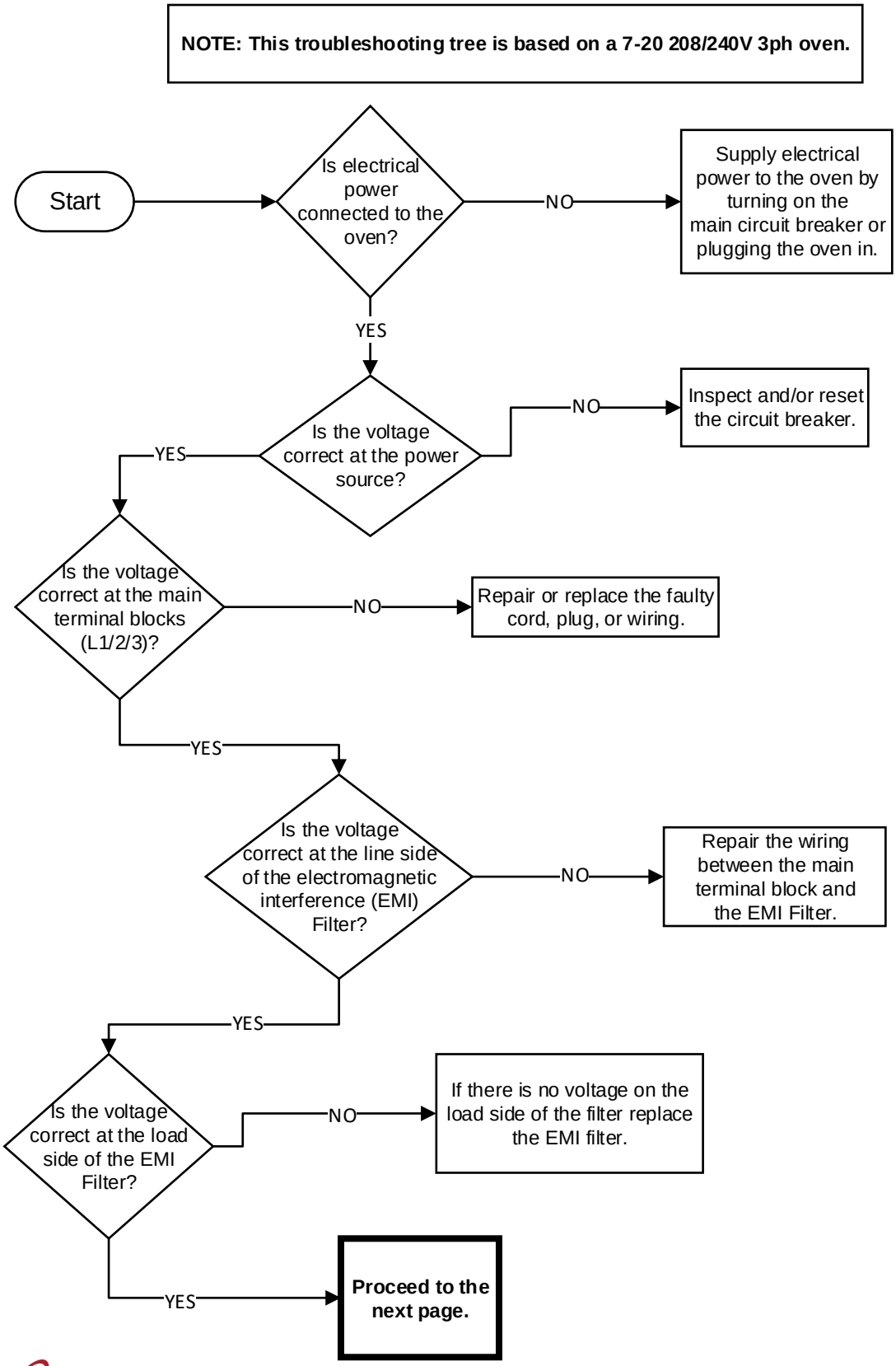
Continued



No Rinse Water During the Cleaning Cycle

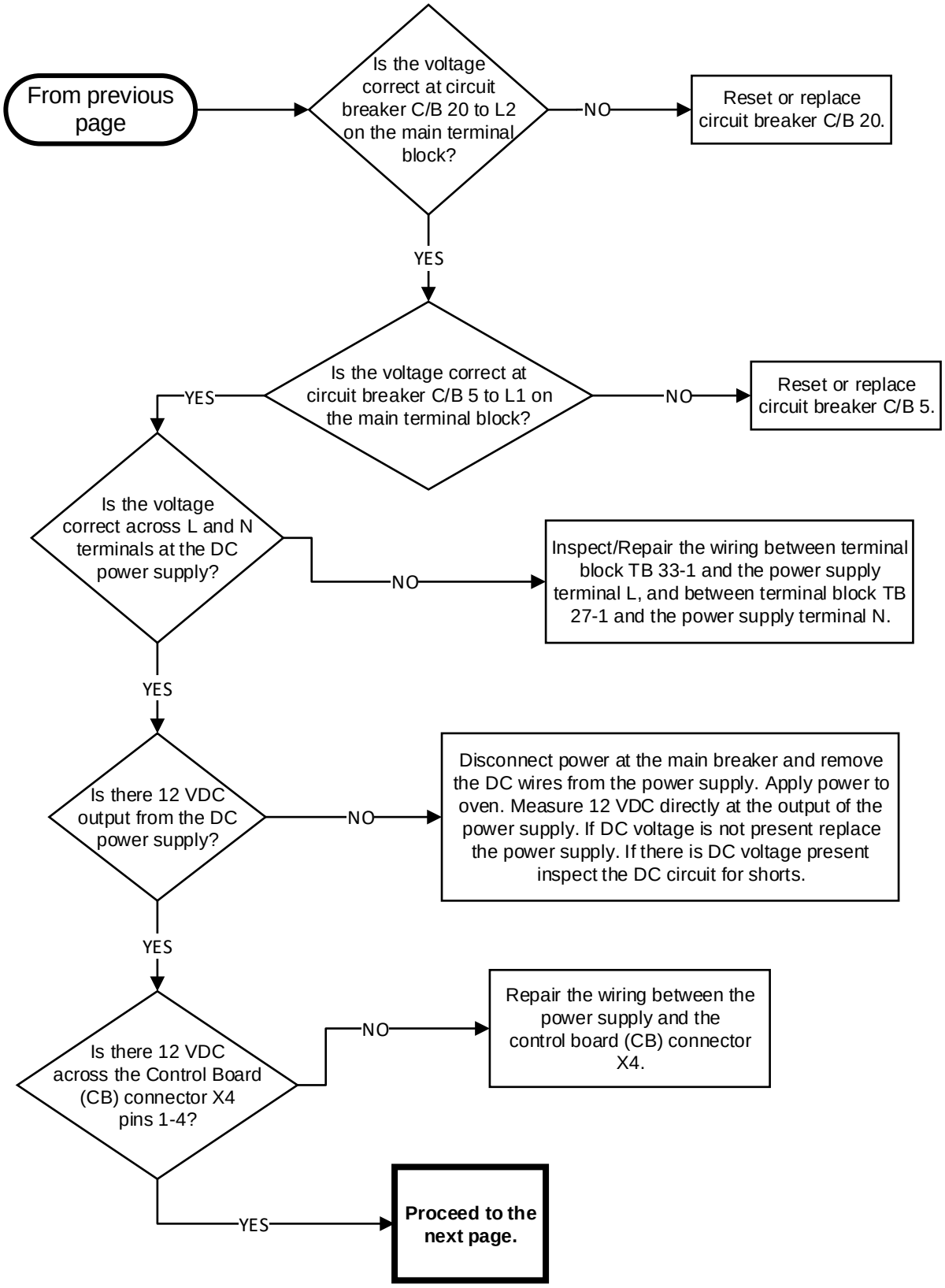


Oven Dead — No Display or Operation

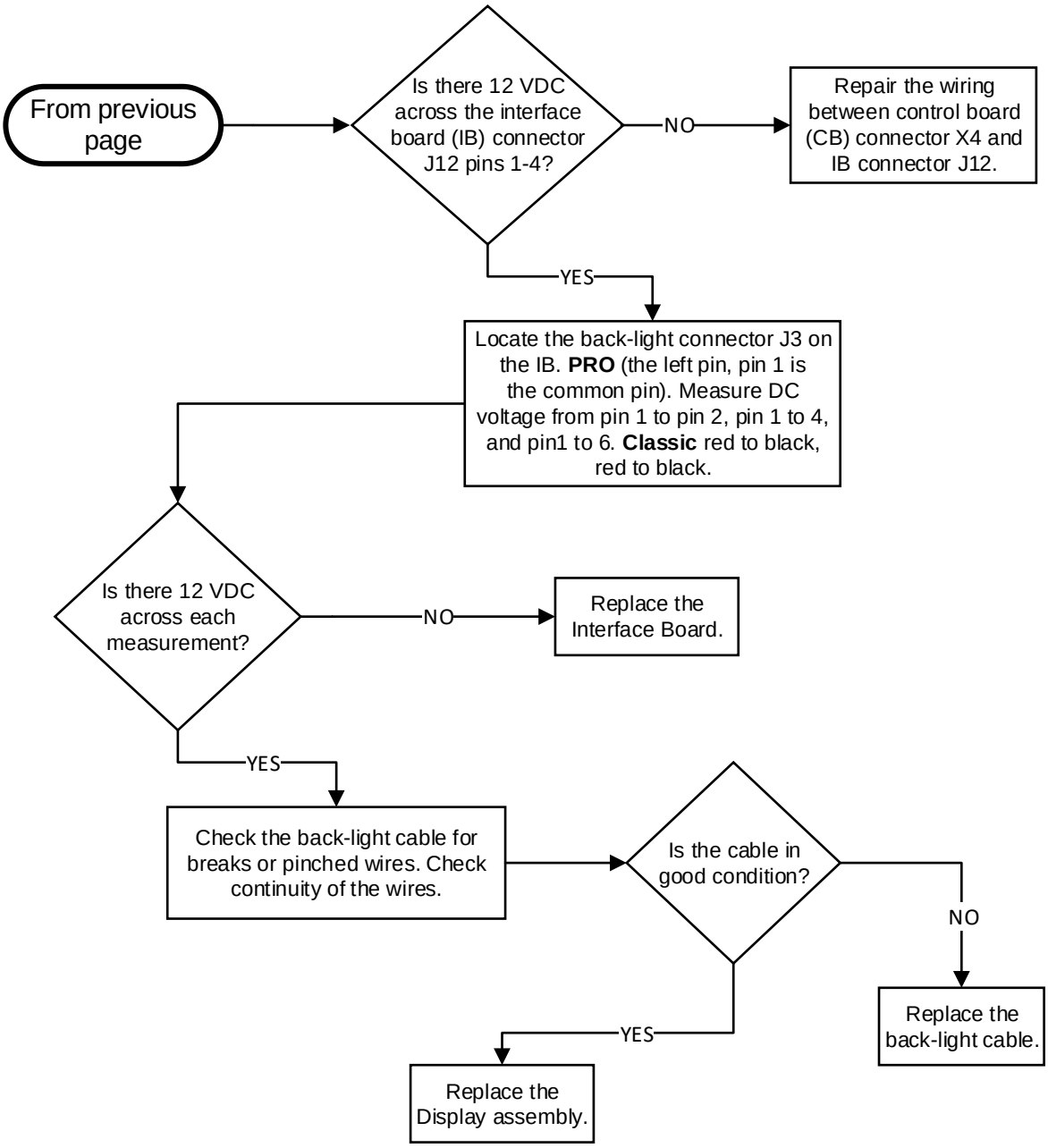


Oven Dead — No Display or Operation

(Continued, Page 2)



Oven Dead — No Display or Operation
(Continued, Page 3)



77790
6.10,10.10,7.20
380-415V 3Ph

77791
6.10
208-240V 1Ph

77792
6.10, 10.10, 7.20
208-240V 3Ph

77794
6.10,10.10,7.20
440-480V 3Ph

77796
10.20
208-240V 3Ph

77797
10.20
380-415V 3Ph

77798
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440-480V 3Ph

77799
20.10
208-240V 3Ph

77800
20.10
380-415V 3Ph

77801
20.10
440-480V 3Ph

77802
20.20
208-240V 3Ph

77803
20.20
380-415V 3Ph

77804
20.20
440-480V 3Ph

77807
6.10,10.10,7.20,10.20
120V **NG/LP**

77808
6.10,10.10,7.20,10.20
208-240V **GAS**

77809
20.10,20.20
120V **GAS**

77812
20.10,20.20
208-240V **GAS**

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