



## Prodigi®

### PRO 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



**MN-48155-EN**

REV.01  
5/23

**EN**

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# Manufacturer's Information

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**Manufacturer**

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Menomonee Falls, WI 53052

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**Original instructions**

The content in this manual is written in American English.

# Alto-Shaam 24/7 Emergency Repair Service

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<b>Call</b>	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.
<b>Availability</b>	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

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**Before you begin**

Read and understand all instructions in this manual.

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**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

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### **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

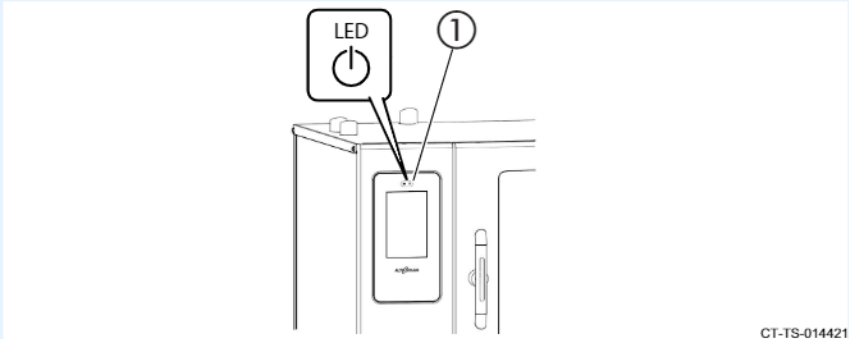
## Before you begin

- 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.	<b>Touch</b> the ON/OFF button ①.



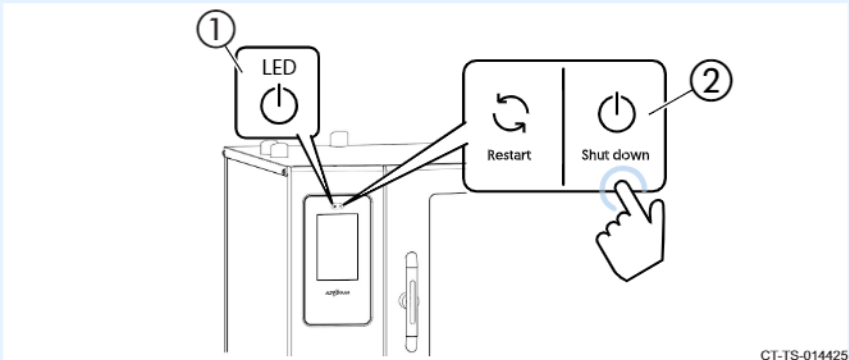
CT-TS-014421

The oven is now on.

## Turning off the oven

To turn off the oven, do the following.

2.	<b>Touch</b> and hold the ON/OFF button ① until the "Shut Down Options" screen displays. <b>Touch</b> "Shut down" ②.
----	--



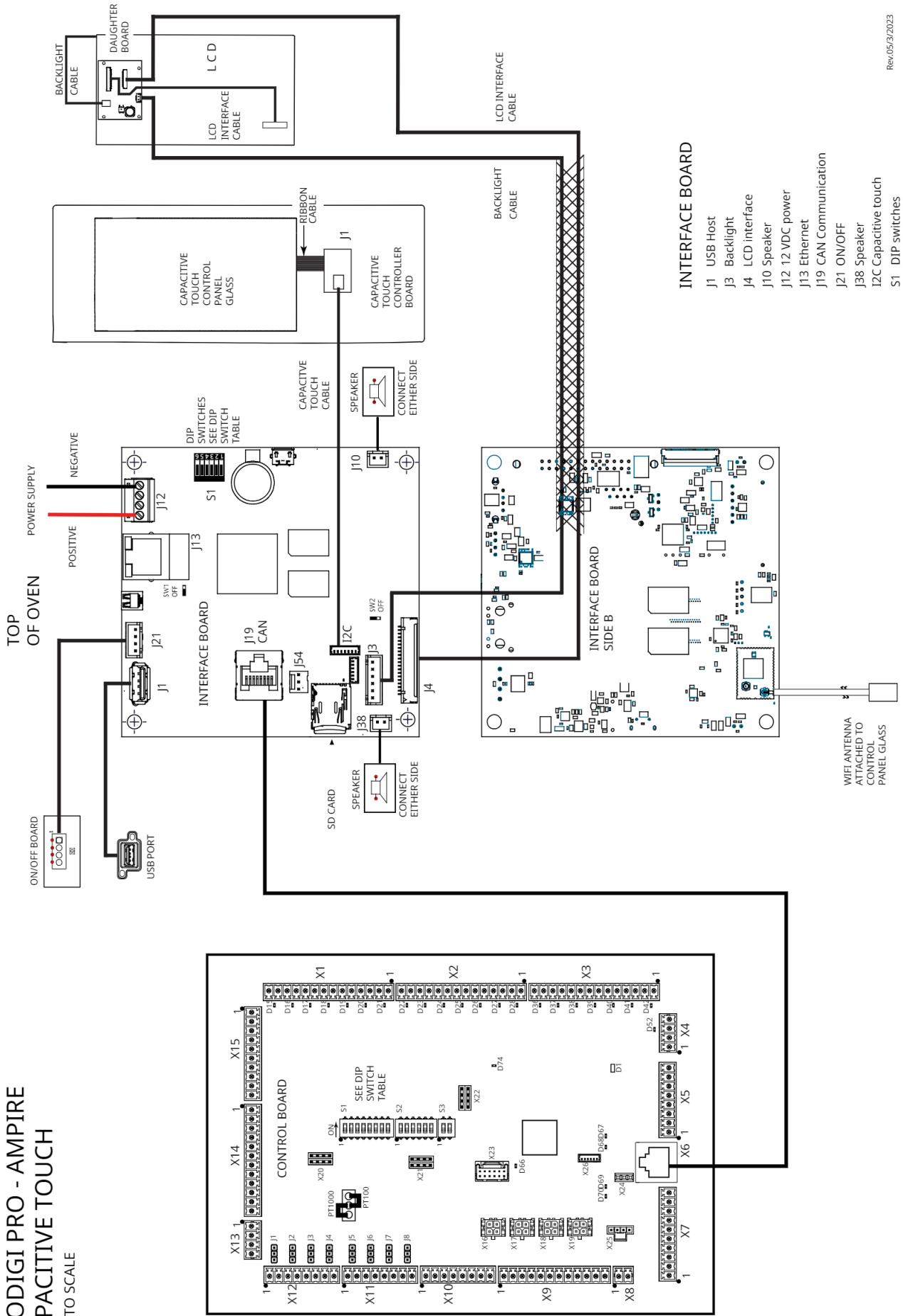
CT-TS-014425

The oven is now off.

THIS DIAGRAM IS SUBJECT TO CHANGE WITHOUT NOTICE

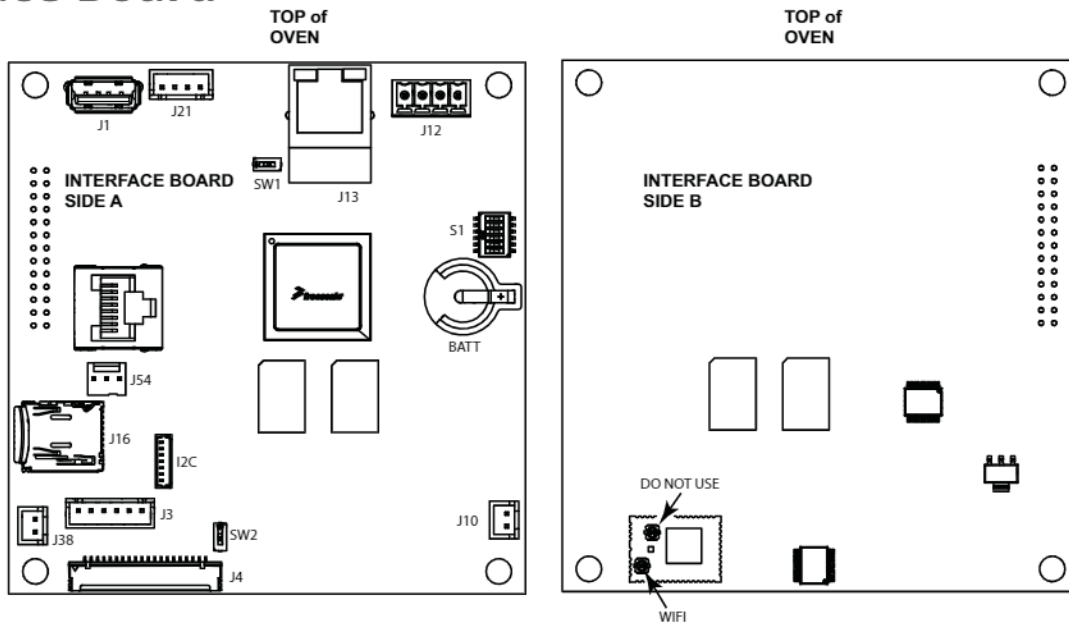
# ALWAYS USE THE ELECTRICAL SCHEMATIC FOR ACTUAL CONNECTIONS

**PRODIGI PRO - AMPIRE  
CAPACITIVE TOUCH**  
NOT TO SCALE



- INTERFACE BOARD**
- J1 USB Host
  - J3 Backlight
  - J4 LCD interface
  - J10 Speaker
  - J12 12 VDC power
  - J13 Ethernet
  - J19 CAN Communication
  - J21 ON/OFF
  - J38 Speaker
  - J2C Capacitive touch
  - S1 DIP switches

# Interface Board

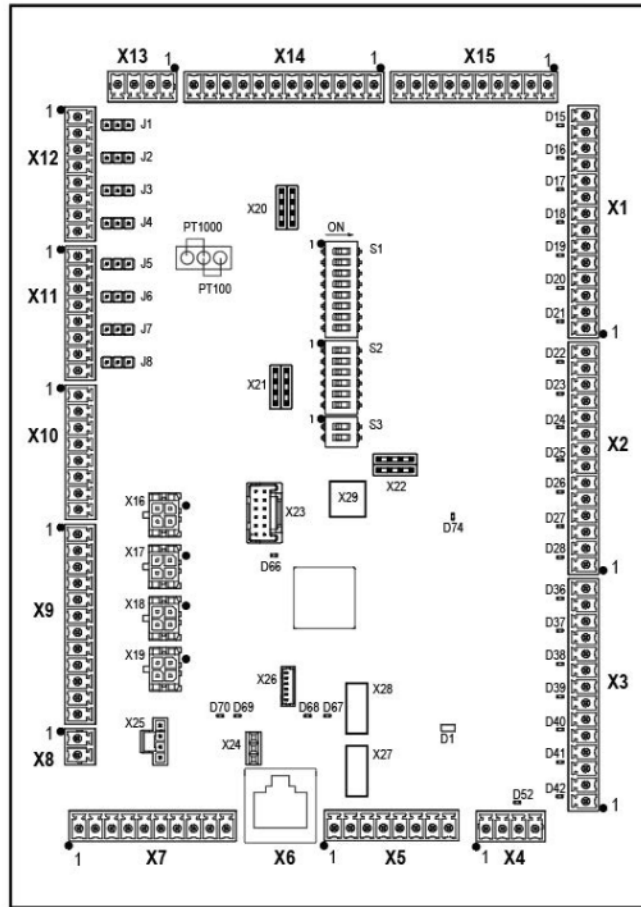


VMC-TS-008222.ai

Ref.	Description	Product	Screen Orientation	SW 6	SW 5	SW 4	SW 3	SW 2	SW 1
BATT	Clock battery	Vector H	Landscape	OFF	OFF	OFF	OFF	OFF	OFF
I2C	Capacitive touch cable	Cook & Hold	Landscape	OFF	OFF	ON	OFF	OFF	OFF
J1	USB connections	Vector F Electric	Portrait	OFF	ON	ON	OFF	OFF	ON
J3	Display back light	Vector F Gas	Portrait	OFF	ON	ON	ON	OFF	ON
J4	LCD interface	-	-	-	-	-	-	-	-
J10	Speaker	Converge DX	Landscape	ON	OFF	OFF	OFF	OFF	OFF
J12	12 VDC power	Converge SX	Landscape	ON	OFF	OFF	OFF	ON	OFF
J13	Ethernet	Prodigy Pro Electric	Portrait	OFF	OFF	OFF	ON	OFF	ON
J16	8 GB micro SD card	Prodigy Pro Gas	Portrait	ON	OFF	ON	ON	OFF	ON
J21	ON/OFF board	Prodigy Classic Elect	Portrait	OFF	OFF	OFF	ON	ON	ON
J38	Speaker	Prodigy Classic Gas	Portrait	ON	OFF	ON	ON	ON	ON
J54	RS 485/232 LVIO								
S1	DIP switches (see table)								
SW1	DIP switch (off)								
SW2	DIP switch (off)								

AS-PHD-014227

# Control Board



CT-PHD-014167\_ Prodigy

**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**

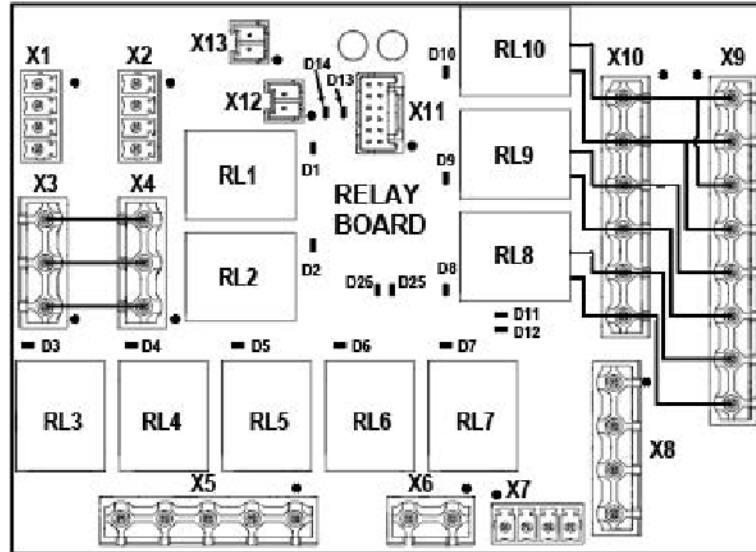
	1	2	3	4	5	6
ON	N/A	PRODIGI	N/A	N/A	N/A	N/A
OFF	N/A	CMC	N/A	N/A	N/A	N/A

**DIP SWITCH TABLE S3**

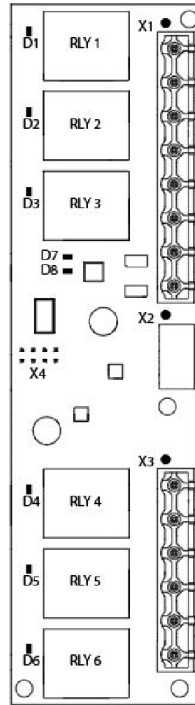
	1	2
ON	N/A	N/A
OFF	N/A	N/A

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	-	-	-



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



# Maintenance Schedule

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## 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.

*Continued on next page*

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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

*Continued from previous page*

- **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	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-5	2 - Convection fan	Lower convection fan under speed	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-10	44 - Cavity sensor	Cavity sensor short	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-10	47 - Food probe	Food probe short	<ol style="list-style-type: none"> <li>1. Investigate food probe for damage. Replace if damaged.</li> <li>2. Power down control using on/off icon.</li> <li>3. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>4. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-10	52 - Steam injector	Steam injector sensor short	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-10	55 - Tank	Tank sensor short	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-11	44 - Cavity sensor	Cavity sensor open	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>

Code	Component	Description	Troubleshooting steps
E-11	52 - Steam injector	Stem injector sensor open	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-11	55 - Tank	Tank sensor open	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-31	2 - Convection fan (Classic control)	Motor (upper) over temperature	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-31	2 - Convection fan (Classic control)	Lower motor over temperature	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-31	2 - Convection fan	Motor VFD (upper) over temperature	<ol style="list-style-type: none"> <li>1. Make sure cooling fan(s) are operating.</li> <li>2. Make sure exhaust vents are clean and free of debris.</li> <li>3. Make sure oven clearances are met.</li> <li>4. Ambient temperature greater than 105°F (41°C).</li> </ol>
E-31	2 - Convection fan	Lower motor VFD over temperature	<ol style="list-style-type: none"> <li>1. Make sure cooling fan(s) are operating.</li> <li>2. Make sure exhaust vents are clean and free of debris.</li> <li>3. Make sure oven clearances are met.</li> <li>4. Ambient temperature greater than 105°F (41°C).</li> </ol>
E-31	44 - Cavity sensor	Chamber over temperature	<ol style="list-style-type: none"> <li>1. If the oven has experienced an over temperature condition allow the oven to cool down for a minimum of 30 minutes.</li> <li>2. Press the high limit reset button.</li> <li>3. Resume cooking operation. If error reappears contact service provider.</li> </ol>
E-31	55 - Tank	Tank sensor over temperature	<ol style="list-style-type: none"> <li>1. If the oven has experienced an over temperature condition allow the oven to cool down for a minimum of 30 minutes.</li> <li>2. Press the high limit reset button.</li> <li>3. Resume cooking operation. If error reappears contact service provider.</li> </ol>

Code	Component	Description	Troubleshooting steps
E-31	8 - Control Board	Control board too warm	<ol style="list-style-type: none"> <li>1. Make sure cooling fan(s) are operating.</li> <li>2. Make sure exhaust vents are clean and free of debris.</li> <li>3. Make sure oven clearances are met.</li> <li>4. Ambient temperature greater than 105°F (41°C).</li> <li>5. Check the door gasket for damage and proper seal.</li> </ol>
E-31	9 - Interface Board	Interface board too warm	<ol style="list-style-type: none"> <li>1. Make sure cooling fan(s) are operating.</li> <li>2. Make sure exhaust vents are clean and free of debris.</li> <li>3. Make sure oven clearances are met.</li> <li>4. Ambient temperature greater than 105°F (41°C).</li> <li>5. Check the door gasket for damage and proper seal.</li> </ol>
E-55	56 - Vent valve	Vent (upper) not open	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-55	56 - Vent valve	Lower vent valve not open	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-62	2 - Convection fan	Motor VFD (upper) over current	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-62	2 - Convection fan	Lower motor VFD over current	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-66	2 - Convection fan	VFD (upper) error	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-66	2 - Convection fan	Lower VFD error	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>

Code	Component	Description	Troubleshooting steps
E-78	19 - Voltage sensor	Voltage monitor too low	<ol style="list-style-type: none"> <li>1. Check to make sure the unit plug is fully seated in the electrical outlet.</li> <li>2. Reset the main circuit breaker for the oven. If error reappears contact service provider.</li> </ol>
E-78	2 - Convection fan	VFD (upper) under voltage	<ol style="list-style-type: none"> <li>1. Check to make sure the unit plug is fully seated in the electrical outlet.</li> <li>2. Reset the main circuit breaker for the oven. If error reappears contact service provider.</li> </ol>
E-78	2 - Convection fan	Lower VFD under voltage	<ol style="list-style-type: none"> <li>1. Check to make sure the unit plug is fully seated in the electrical outlet.</li> <li>2. Reset the main circuit breaker for the oven. If error reappears contact service provider.</li> </ol>
E-79	19 - Voltage sensor	Voltage monitor too high	<ol style="list-style-type: none"> <li>1. Check to make sure the unit plug is fully seated in the electrical outlet.</li> <li>2. Reset the main circuit breaker for the oven. If error reappears contact service provider.</li> </ol>
E-79	2 - Convection fan	VFD (upper) over voltage	<ol style="list-style-type: none"> <li>1. Check to make sure the unit plug is fully seated in the electrical outlet.</li> <li>2. Reset the main circuit breaker for the oven. If error reappears contact service provider.</li> </ol>
E-79	2 - Convection fan	Lower VFD over voltage	<ol style="list-style-type: none"> <li>1. Check to make sure the unit plug is fully seated in the electrical outlet.</li> <li>2. Reset the main circuit breaker for the oven. If error reappears contact service provider.</li> </ol>
E-80	2 - Convection fan	VFD (upper) memory error	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-80	2 - Convection fan	Lower VFD memory error	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-88	1 - Heater	Gas ignition failure (upper)	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or turning off the breaker.</li> <li>3. Inspect the top of oven for anything blocking the exhaust flue of the oven.</li> <li>4. Make sure the ventilation hood is turned on and working properly.</li> <li>5. Make sure the gas line is properly connected to the unit and the gas shut off valve is in the open position.</li> <li>6. Resume cook operation. If error reappears turn the oven off, shut off the gas supply to the oven and immediately contact service provider.</li> </ol>



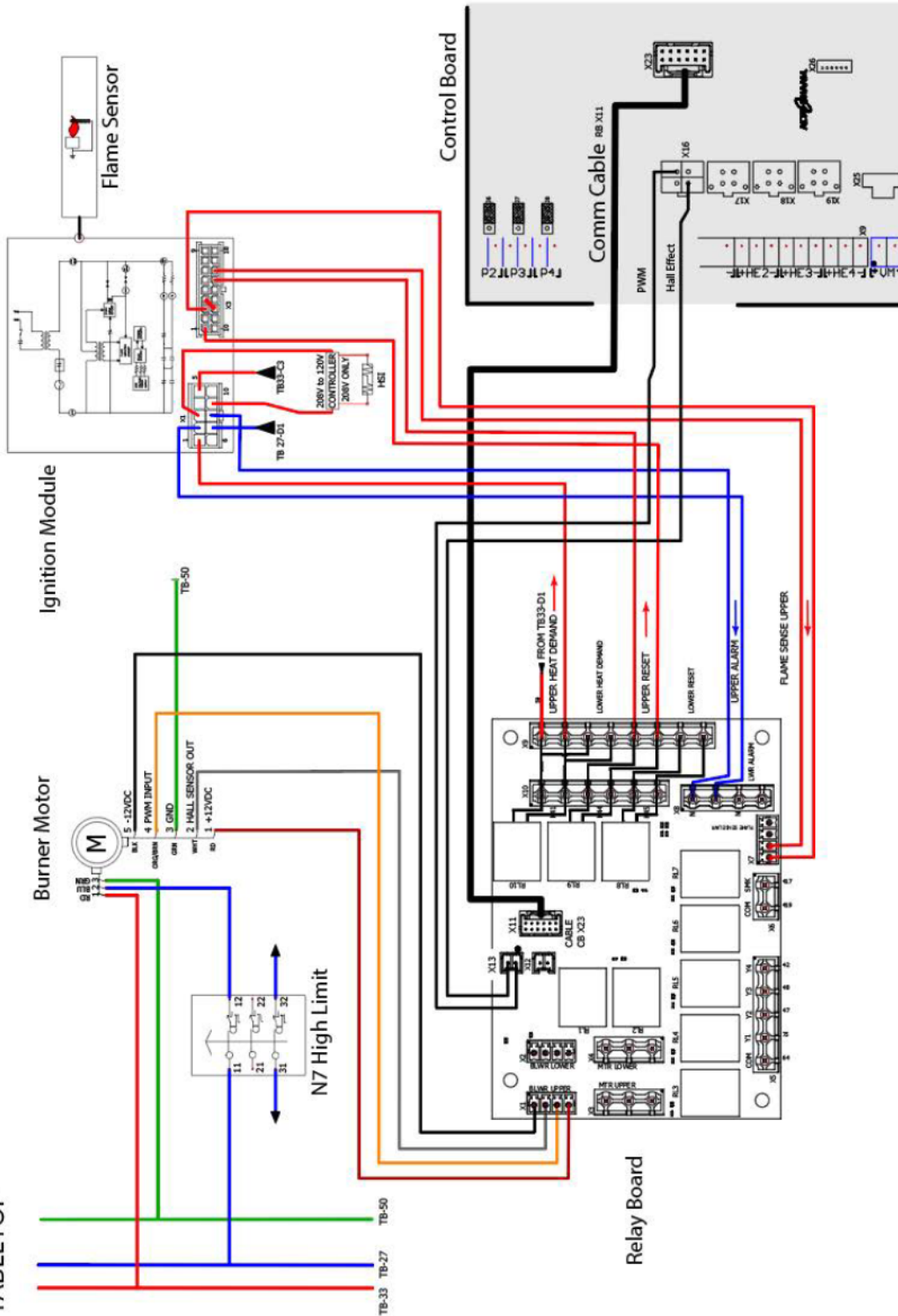
Code	Component	Description	Troubleshooting steps
E-88	1 - Heater	Lower gas ignition failure	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or turning off the breaker.</li> <li>3. Inspect the top of oven for anything blocking the exhaust flue of the oven.</li> <li>4. Make sure the ventilation hood is turned on and working properly.</li> <li>5. Make sure the gas line is properly connected to the unit and the gas shut off valve is in the open position.</li> <li>6. Resume cook operation. If error reappears turn the oven off, shut off the gas supply to the oven and immediately contact service provider.</li> </ol>
E-90	1 - Heater	Gas blower failure (upper)	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-90	1 - Heater	Lower gas blower failure	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-93	8 - Control Board	State synchronization error between the interface board and control board	<ol style="list-style-type: none"> <li>1. Clear error by pressing the check mark on the display to accept the error.</li> <li>2. If the error persists contact Alto-Shaam Technical Support.</li> </ol>
E-94	10 - Control Board Communications	Communication error between Interface Board and Control Board	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-94	2 - Convection fan	VFD (upper) communication error	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-94	2 - Convection fan	Lower VFD communication error	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>
E-102	59 - Ventless hood	Ventless hood filter Fault	<ol style="list-style-type: none"> <li>1. Check if filters are installed.</li> <li>2. Check if filters are clogged.</li> <li>3. Check operation of hood fan.</li> </ol>

## TROUBLESHOOTING

Code	Component	Description	Troubleshooting steps
E-105	6 - Chamber	Low water pressure	<ol style="list-style-type: none"> <li>1. Water supply not connected.</li> <li>2. Water supply is shut off.</li> <li>3) Water supply to unit blocked or obstructed (check filter).</li> </ol>
E-109	6 - Chamber	Chamber high limit	<ol style="list-style-type: none"> <li>1. If the oven has experienced an over temperature condition, allow the oven to cool down for a minimum of 30 minutes.</li> <li>2. Press the high limit reset button.</li> <li>3. Resume cooking operation. If error reappears contact service provider.</li> </ol>
E-606	6 - Chamber	Error during cleaning cycle	<ol style="list-style-type: none"> <li>1. Manually Clean Oven.</li> <li>2. Manually Rinse Oven.</li> <li>3. Ensure chemicals removed before use.</li> <li>4. Resume use of oven. If error repeats contact service provider.</li> </ol>
E-999	48 - Personality handler	IB and CB dip switch settings not set correctly	<ol style="list-style-type: none"> <li>1. Power down control using on/off icon.</li> <li>2. Cycle power to the oven either by unplugging the unit or by turning the main power switch off and then back on.</li> <li>3. Resume use of oven. If error reappears contact a service provider.</li> </ol>

THIS DIAGRAM IS SUBJECT TO CHANGE WITHOUT NOTICE  
**ALWAYS USE THE ELECTRICAL SCHEMATIC FOR ACTUAL CONNECTIONS**

PRODIGI  
 GAS SYSTEM  
 TABLETOP



Rev 5/4/2023

# E88 Error - Gas Ignition Failure

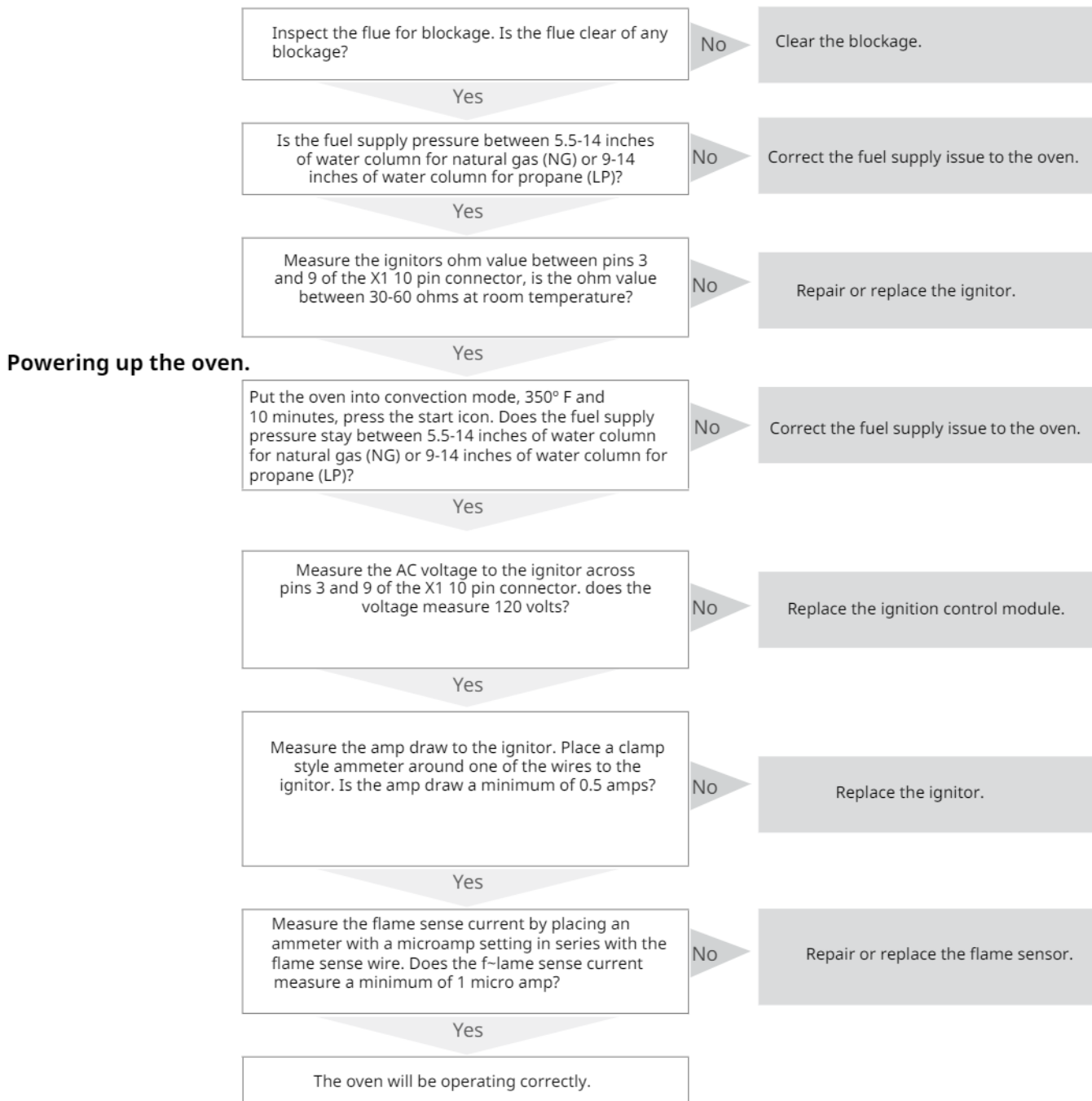
This troubleshooting tree is based on a 7-20 120 volt oven.

Remove the side panel.

Open the control panel and place it onto the support hooks.

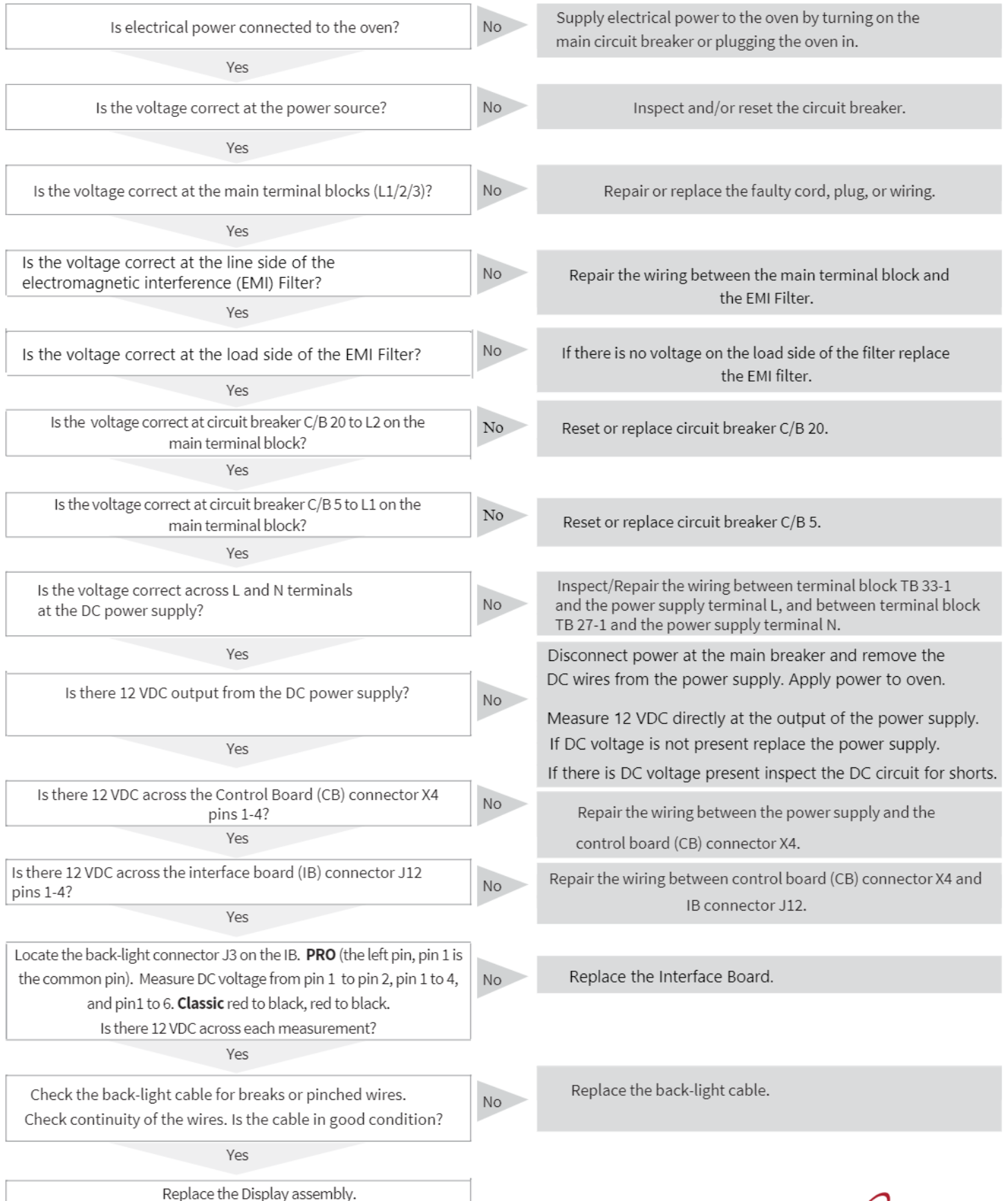
Install a manometer onto the MIN test port.

Monitor the LEDs on the relay board.

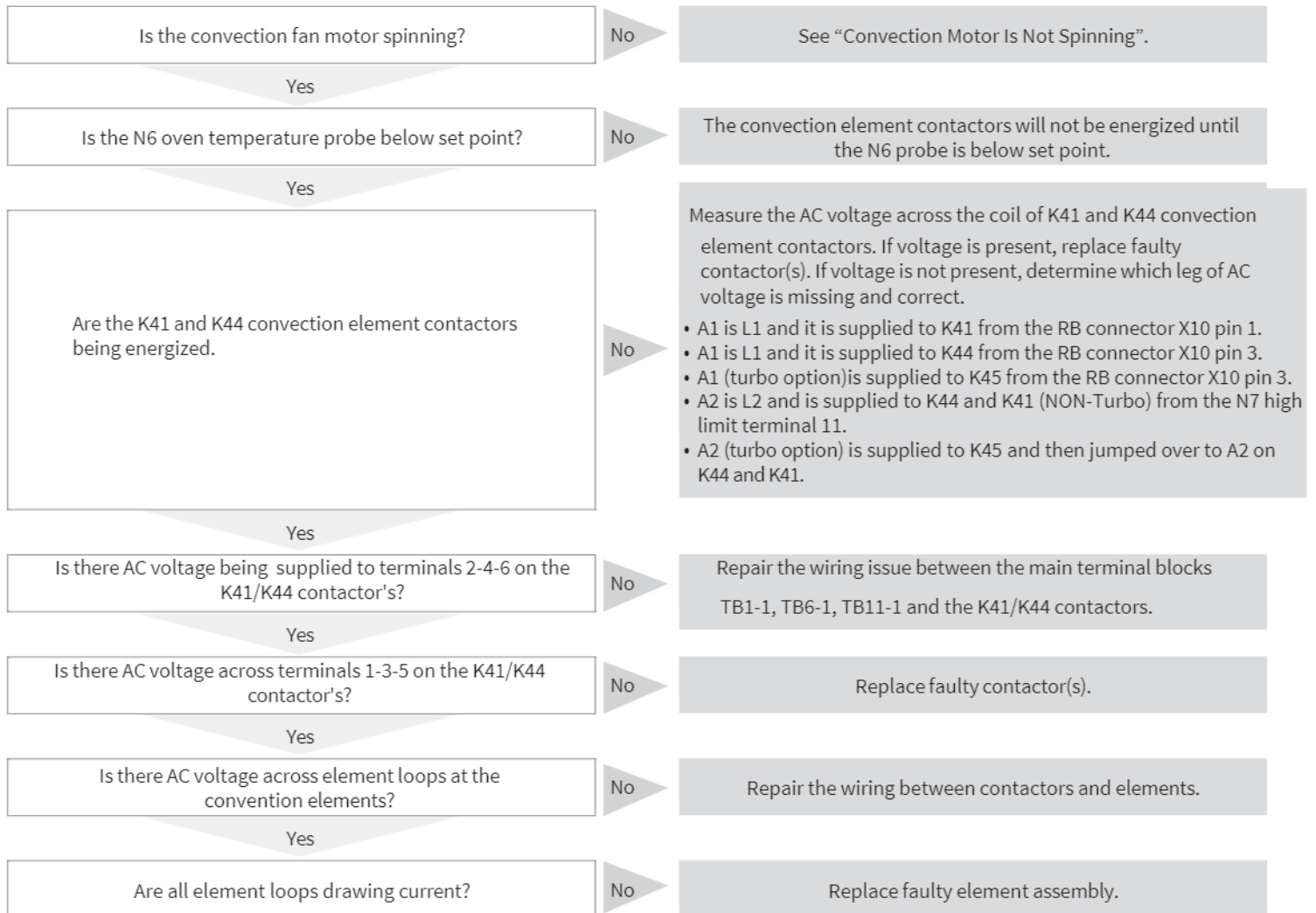


• This troubleshooting tree is based on a 7-20 208/240V 3ph oven.

## Prodigy: Oven Dead — No Display or Operation

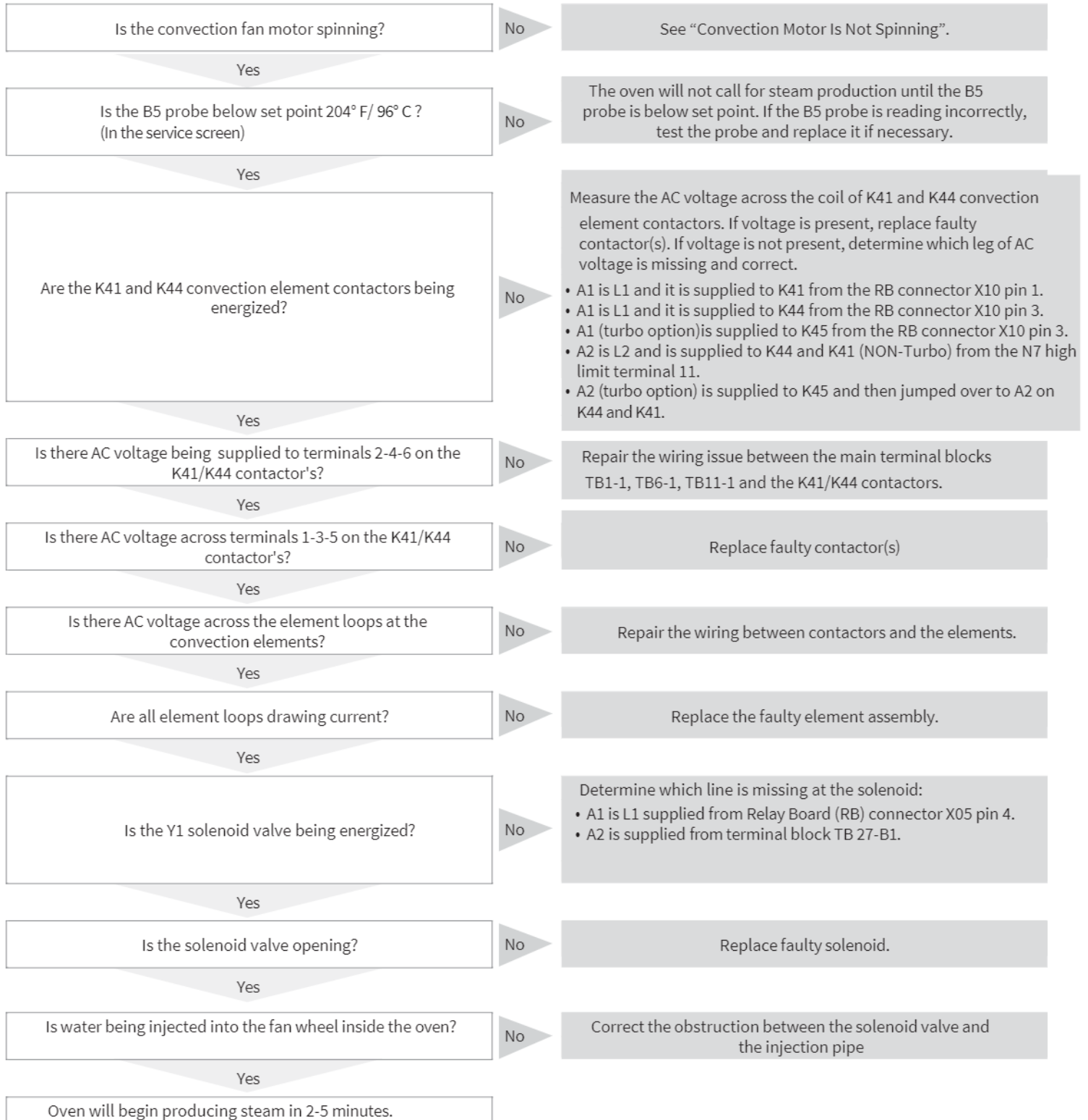


## Prodigy Pro, Electric: No Convection Heat



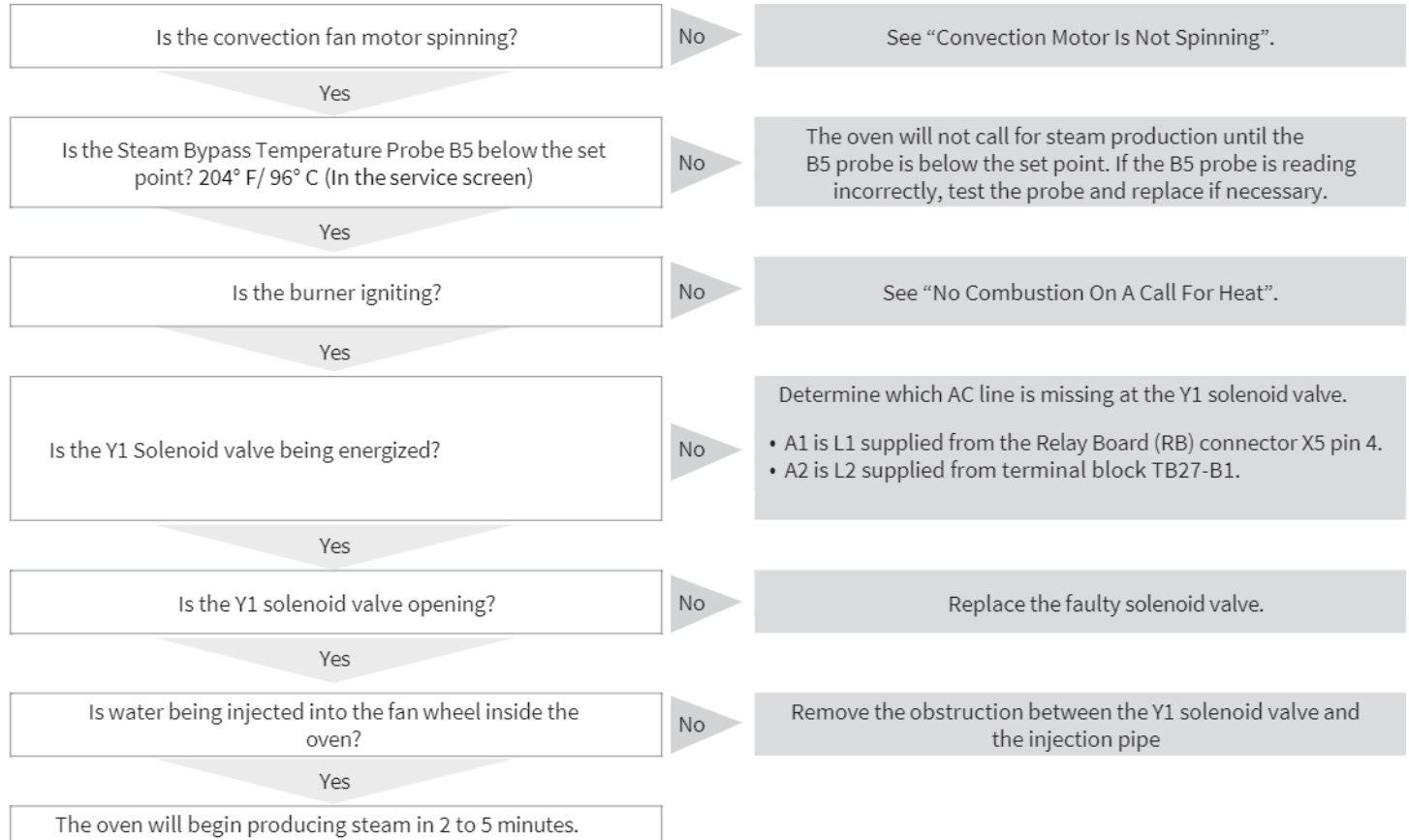
**Prodigy: Electric, No Steam Production — Steam at 212°F (100°C)**

\*\*Steam below 212°F (100°C) – B5 will cycle off the Y1 solenoid at 10°F below the set temperature (example: Set Temp 200°F, B5 cycles Y1 off at 190°F)



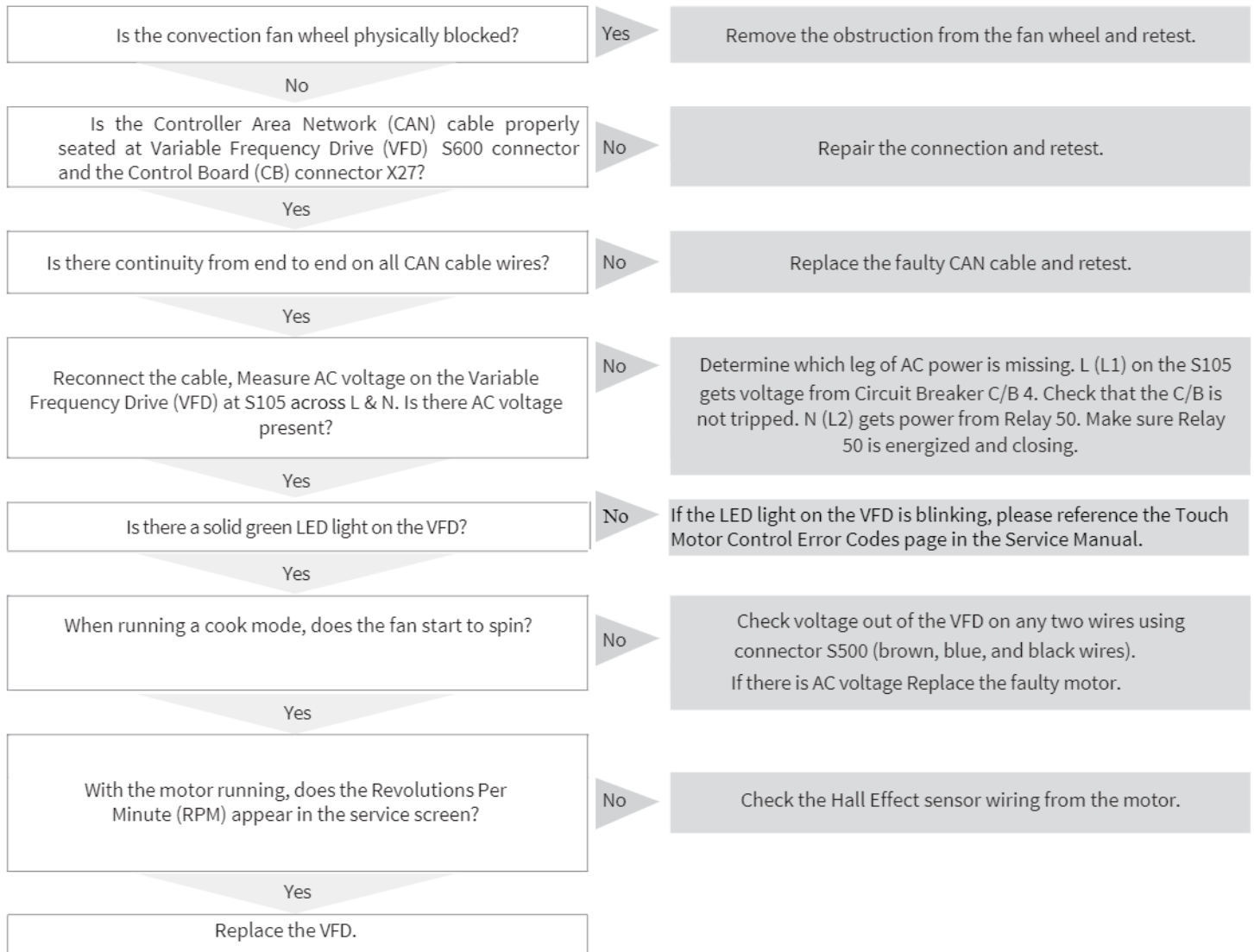
## Prodigy, Gas: No Steam Production — Steam at 212°F (100°C)

\*\*Steam below 212°F (100°C) – B5 will cycle off the Y1 solenoid at 10°F below the set temperature (example: Set Temp 200°F, B5 cycles Y1 off at 190°F)





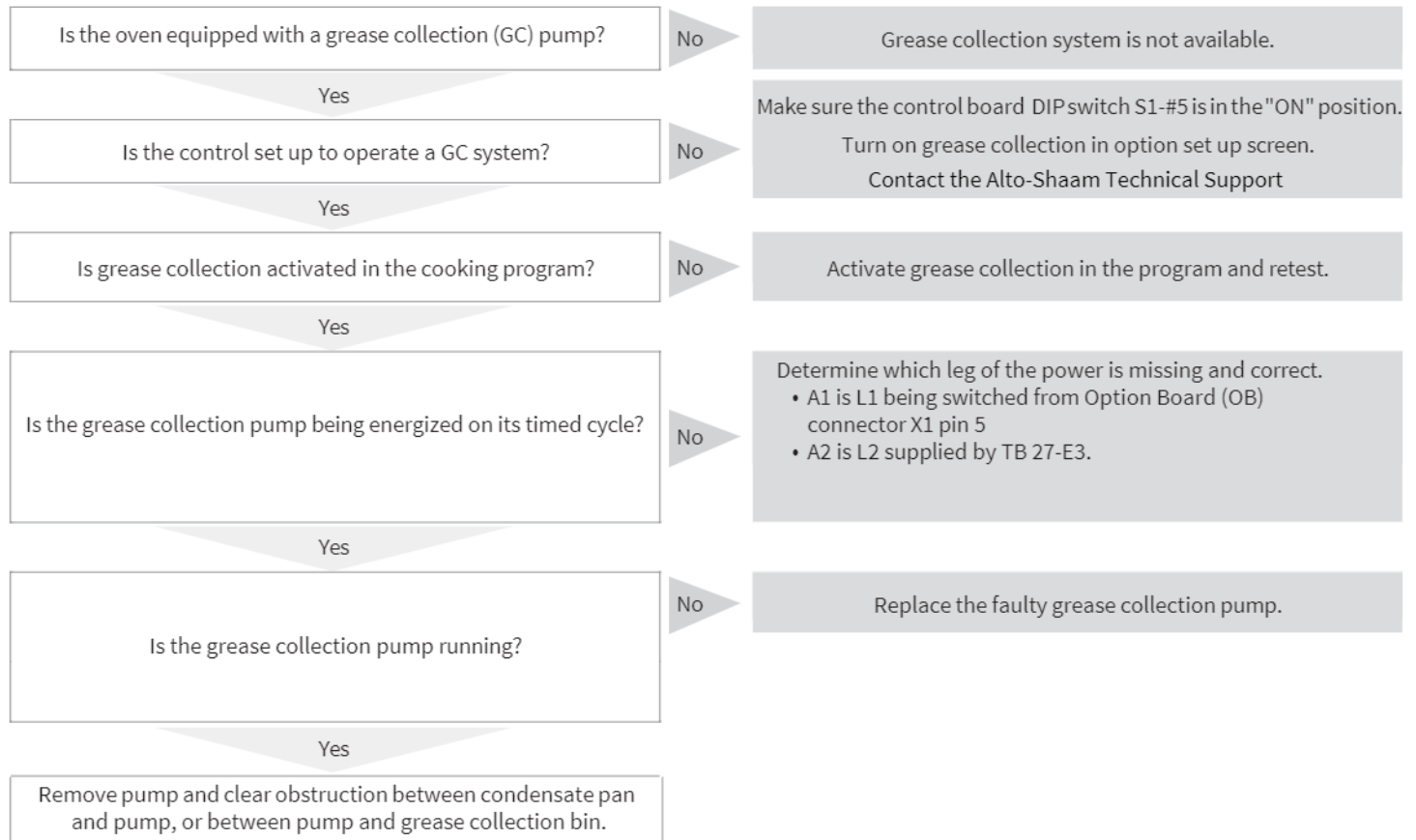
**Prodigi Pro Only: Convection Motor Is Not Spinning (E05)**



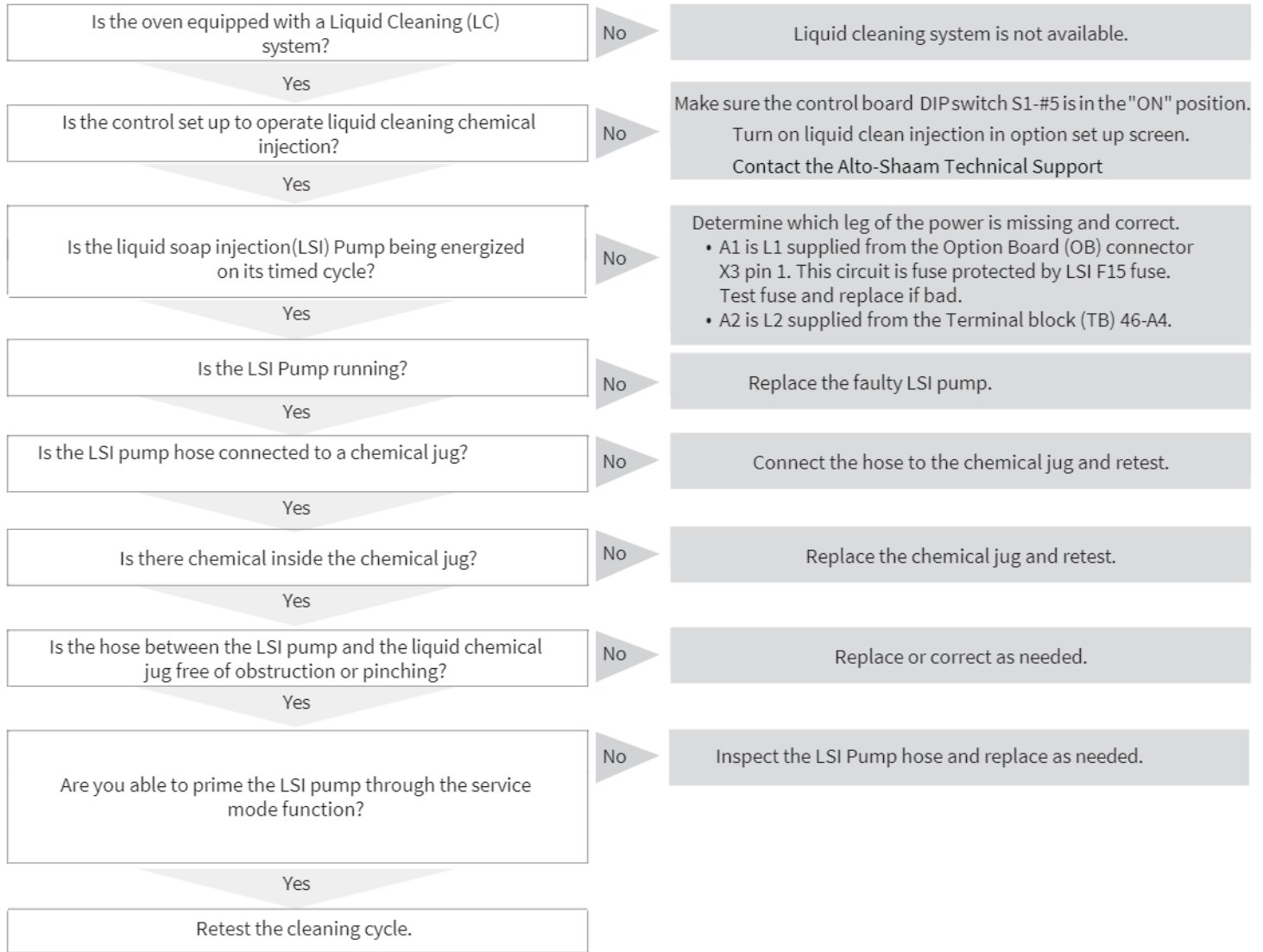
**Touch Motor Control Error Codes**

The LED is located on the variable frequency drive (VFD) ① of the oven.

Type of Error	Indication	Cause of Error
<b>Undervoltage</b>	LED flashing sequence, with 1 flash per period.	Voltage of intermediate circuit is less than 250V.
<b>Overvoltage</b>	LED flashing sequence, with 2 flashes per period.	Voltage of intermediate circuit exceeds 445V.
<b>Excess Temperature</b>	LED flashing sequence, with 3 flashes per period.	Temperature sensor in the power unit is more than 199°F (93°C).
<b>Current Peak</b>	LED flashing sequence, with 4 flashes per period.	Blocked motor, detected by current peak monitoring from 900 rpm rotating field.
<b>Overcurrent</b>	LED flashing sequence, with 5 flashes per period.	Intermediate circuit current exceeds 4.0A.
<b>Short-circuit</b>	LED flashing sequence, with 6 flashes per period.	Release of interrupt at intermediate circuit current larger than 53.0A.
<b>Power on</b>	LED flashing sequence, with 7 flashes per period.	Effective mains voltage does not correspond to jumper setting 115V/230V.
<b>Watchdog</b>	LED flashing sequence, with 8 flashes per period.	Watchdog of the microcontroller released, program crash.

**Prodigi: No Grease Collection Operation**

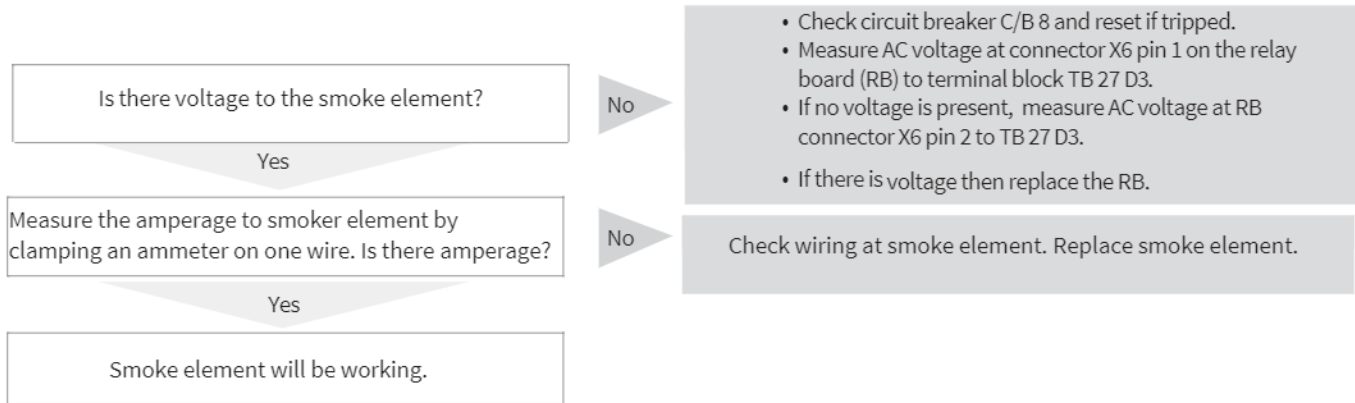
**Prodigi: No Liquid Clean Injection**



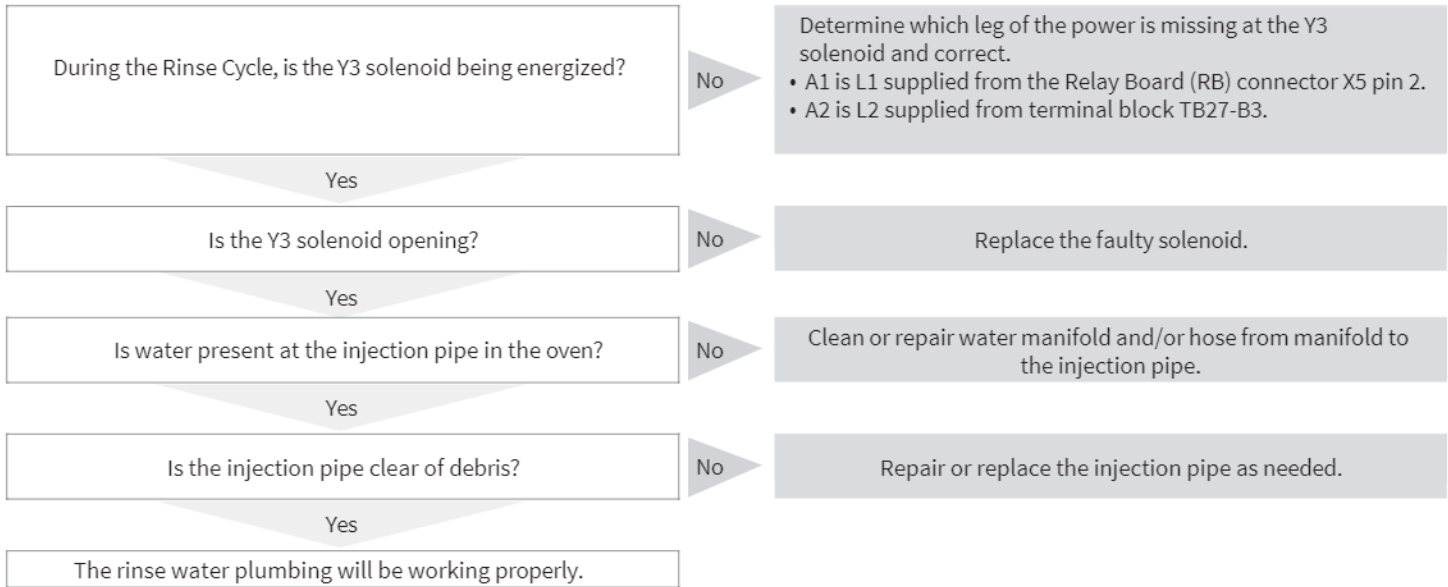
## Prodigi: No Smoke Production During the Smoke Cycle

Make sure the smoke tray is installed with soaked wood chips and that the smoke icon has been selected on the touch control. Steam production and humidity control vents take priority over smoke production.

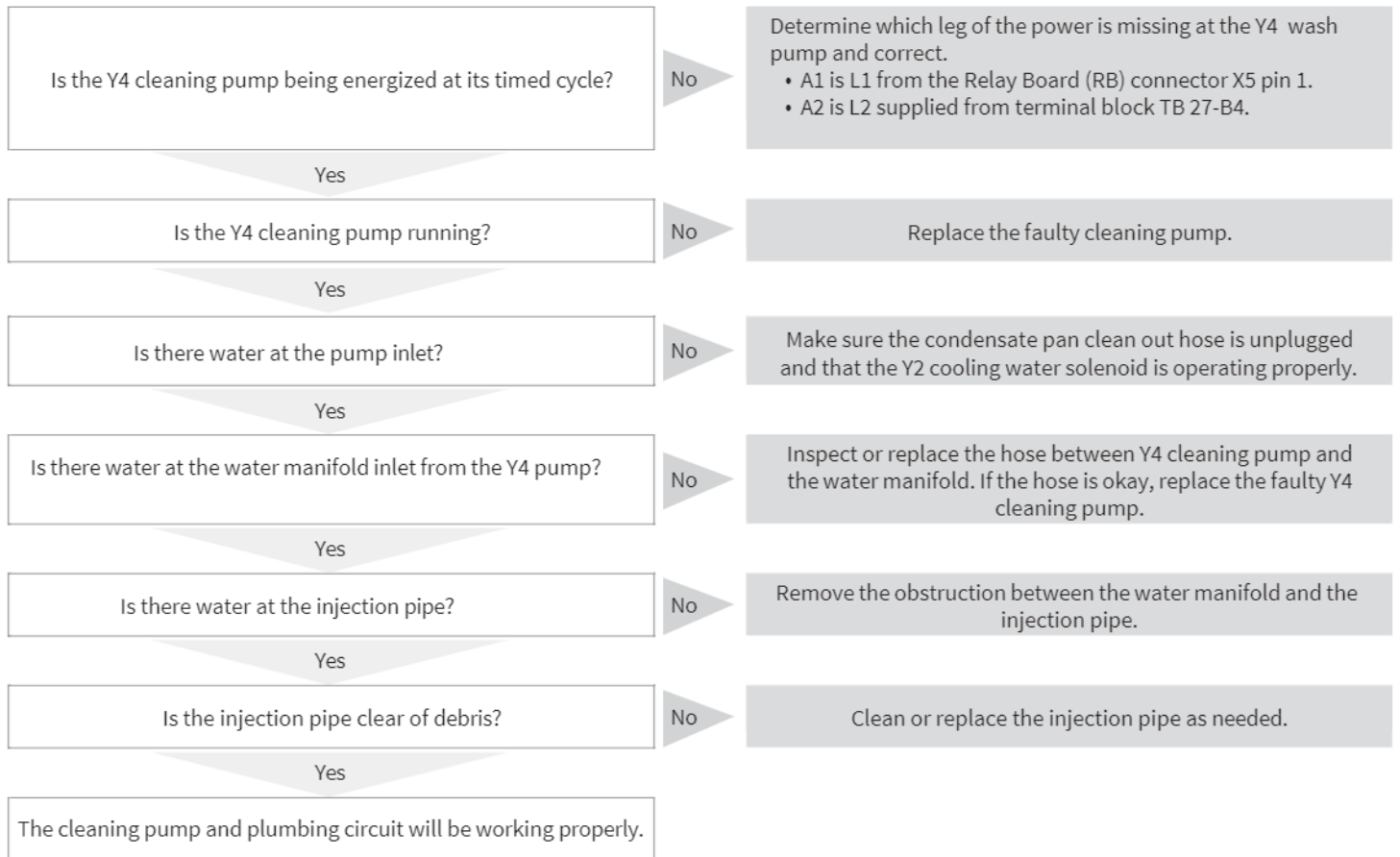
The smoke option is not available with a vent-less hood.



**Prodigi: No Rinse Water During the Cleaning Cycle**

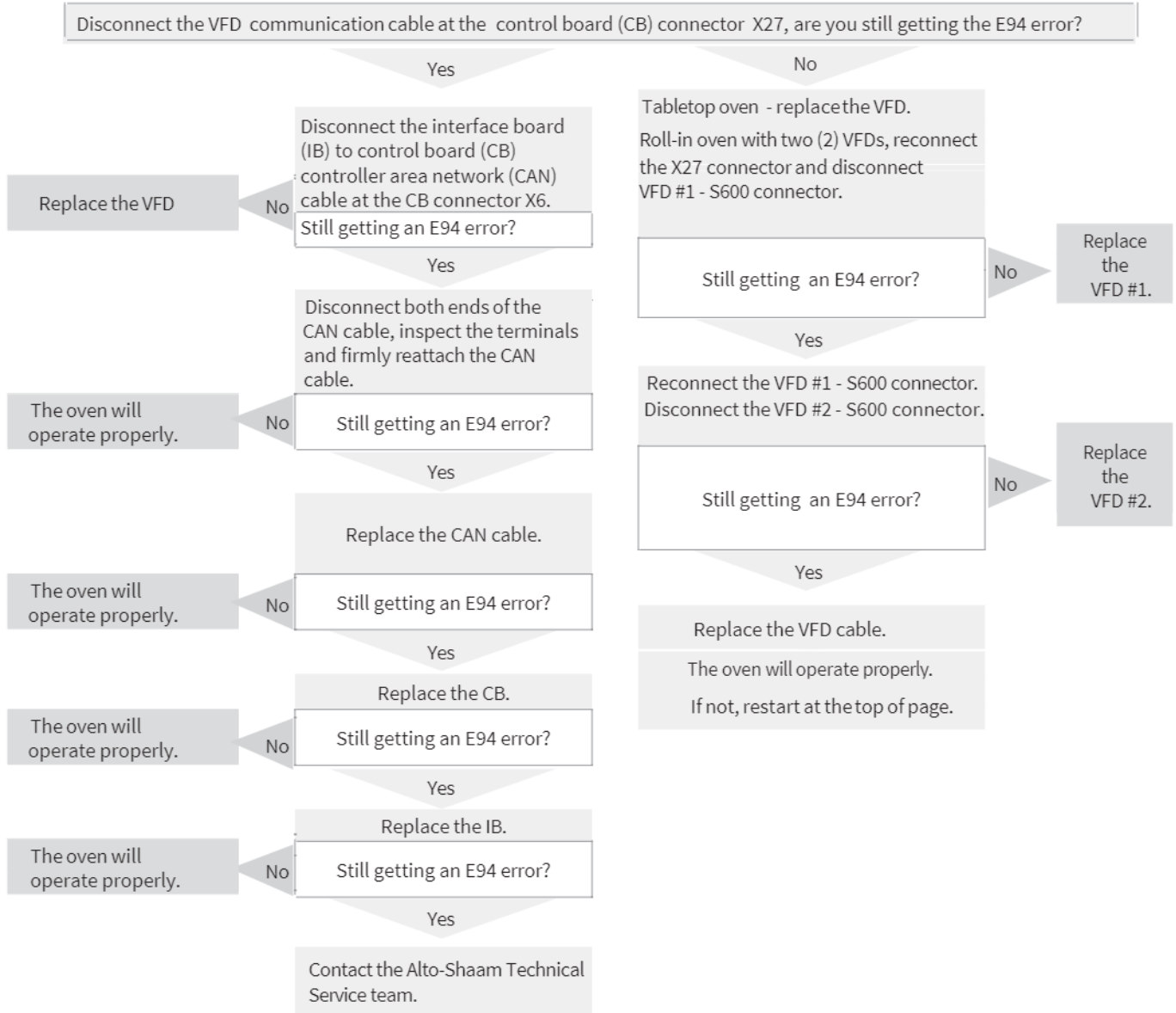


## Prodigy: Cleaning System is Not Operating

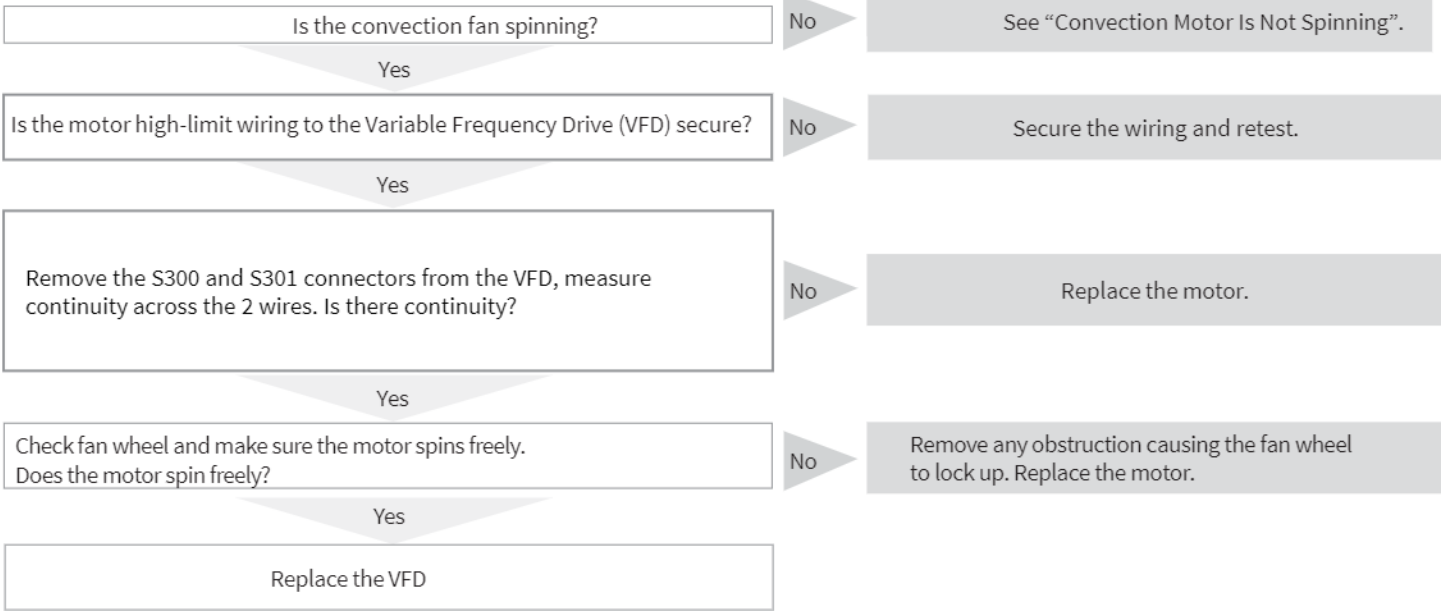


**Prodigi PRO ONLY: Error Code E94**

**NOTE:** The single variable frequency drive (VFD) in a tabletop oven will be identified as the "UPPER" or #1 VFD. The two VFDs in a roll-in oven will be identified as the "UPPER" or #1 and the "LOWER" or #2 VFD.



**Prodigi Pro: Fan Motor Over Temp E31**





## Schematics

**77790**

6.10,10.10,7.20  
380-415V 3Ph



**77801**

xx-xx xx-xx  
xx-xx Ph

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**77791**

6.10  
208-240V 1Ph



**77802**

20.20  
208-240V 3Ph



**77792**

6.10, 10.10, 7.20  
208-240V 3Ph



**77803**

20.20  
380-415V 3Ph



**77794**

6.10,10.10,7.20  
440-480V 3Ph



**77804**

20.20  
440-480V 3Ph



**77796**

10.20  
208-240V 3Ph



**77807**

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



**77797**

10.20  
380-415V 3Ph



**77808**

6.10,10.10,7.20,10.20  
208-240V / 380-415V GAS



**77798**

10.20  
440-480V 3Ph



**77809**

20.10,20.20  
120V GAS



**77799**

xx-xx xx-xx  
xx-xx Ph

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**77812**

20.10,20.20  
208-240V GAS



**77800**

xx-xx xx-xx  
xx-xx Ph

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