GE APPLIANCES
a Haier company

Technical Service Guide

January 2021

UltraFresh Dryer

GFD55ESSN
GFD55GSSN
GFD55ESPN
GFD55GSPN
GFD65ESSN
GFD65GSSN
GFD65ESPN
GFD65GSPN
GFD85ESSN
GFD85GSSN
GFD85ESPN
GFD85GSPN
GFV55ESSN



31-9349
Rev. 1 ~ *1/05/22*

Safety Information



IMPORTANT SAFETY NOTICE

The information in this service guide is intended for use by individuals possessing adequate backgrounds of electrical, electronic, and mechanical experience. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

WARNING

To avoid personal injury, disconnect power before servicing this product. If electrical power is required for diagnosis or test purposes, disconnect the power immediately after performing the necessary checks.

RECONNECT ALL GROUNDING DEVICES

If grounding wires, screws, straps, clips, nuts, or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

Warranty

For Warranty Information:

1. Go to http://products.geappliances.com
2. Search the model number.
3. Click on the Literature tab.
4. Click on Use and Care Manual.
5. Locate the Warranty page.

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Safety Requirements

GEA Factory Service Employees are required to use safety glasses with side shields, safety gloves and steel toe shoes for all repairs.





Brazing Glasses



Plano Type Safety Glasses



Prescription Safety Glasses

Safety Glasses must be ANSI Z87.1-2003 compliant



Dyneema®Cut Resistant Glove



Cut Resistant Sleeve(s)



Electrically Rated Glove and Dyneema® Cut Resistant Glove Keeper



Steel Toed Work Boot

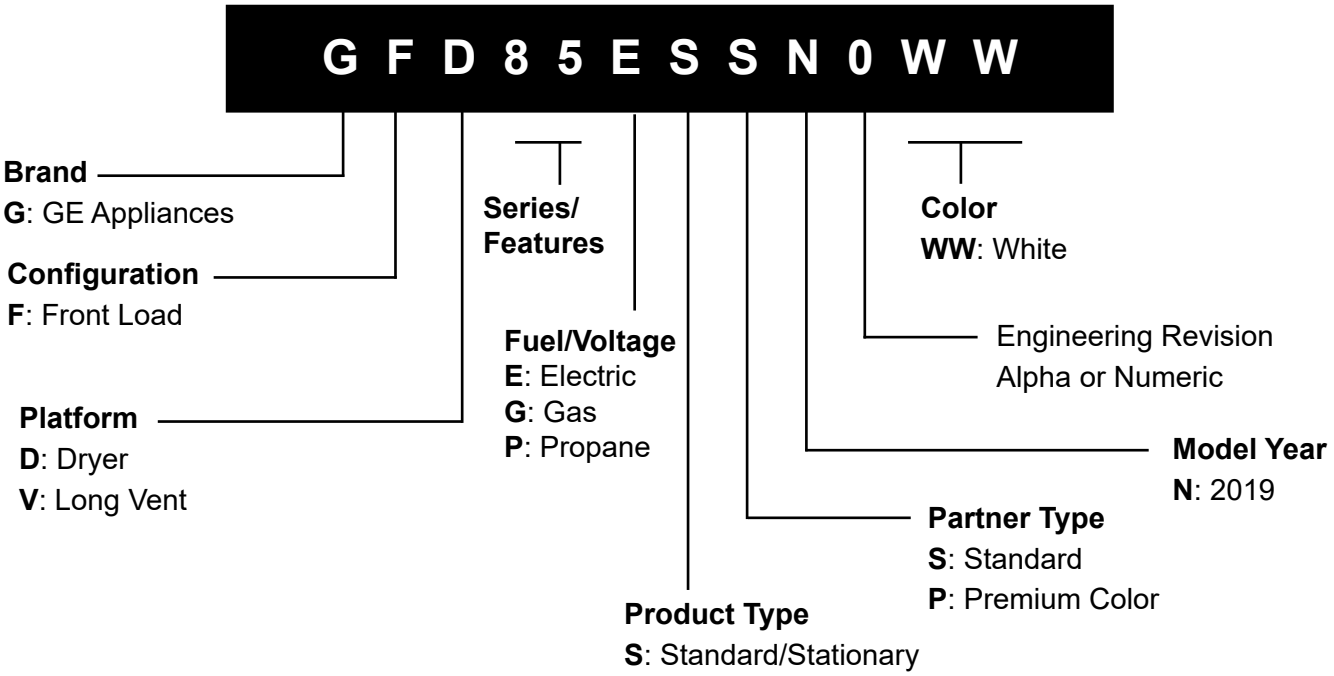
⚠ WARNING

Prior to disassembly of the washer to access components, GE Factory Service technicians are REQUIRED to follow the Lockout / Tagout (LOTO) 6 Step Process:

Step 1 Plan and Prepare	**Step 4** Apply LOTO device and lock
Step 2 Shut down the appliance	**Step 5** Control (discharge) stored energy
Step 3 Isolate the appliance	**Step 6** “Try It” verify that the appliance is locked out

Nomenclature

Model Number



The nomenclature breaks down and explains what the letters and numbers mean in the model number.

Serial Number

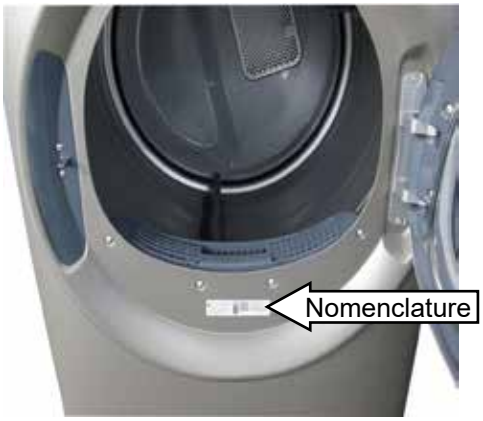
The first two characters of the serial number identify the month and year of manufacture. The letter designating the year repeats every 12 years.

Example: TR123456S = October, 2020

A: JAN	2030: L
D: FEB	2029: H
F: MAR	2028: G
G: APR	2027: F
H: MAY	2026: D
L: JUN	2025: A
M: JUL	2024: Z
R: AUG	2023: V
S: SEP	2022: T
T: OCT	2021: S
V: NOV	2020: R
Z: DEC	2019: M



The Mini Manual is located behind the control panel on the right side.



The nomenclature tag is located behind the door at the bottom of the door opening.

Specifications Electric Models

DC Voltage Output				
Board	**Component**	**Connector**	**Pin**	**DC Volts**
Dryer Main Control Board	User Interface	J601	8	13.5
			2	GND
	Outlet Thermistor	J302	1	5
			2	GND
	Inlet Thermistor	J302	3	5
			4	GND
	RJ45	J302	5	13.5
			8	GND
	LED Lamp	J303	1	5
			3	GND
	Wi-Fi	J604	1	5
			5	GND
Dryer User Interface Board	UI	J101	5	13.5
			4	GND
Dryer Wi-Fi Board	Wi-Fi	J103	1	5
			5	GND

Windings and Coils Resistance Values (Ω)		
Main Motor Normal Vent Models	Run	2.84 to 3.27
	Start	2.82 to 3.12
Main Motor Long Vent Models	Run	2.72 to 3.12
	Start	2.25 to 2.48
Heater Coils	Upper	18.26 to 20.18
	Lower	18.26 to 20.18
Water Valve	-	891 to 1089

Thermistors Resistance Values (Ω)		
K OHMS	**TEMP.** °F	**TEMP.** °C
76 to 84	86	30
95 to 105	77	25
118 to 132	68	20

Thermostat	**TEMP.** °F		**TEMP.** °C	
	Open	**Close**	**Open**	**Close**
Outlet Control Backup	165	155	74	68
Inlet Control Backup	255	232	124	111
High Limit	290	-31 or below	143	-35 or below

Specifications Gas Models

DC Voltage Output				
Board	**Component**	**Connector**	**Pin**	**DC Volts**
Dryer Main Control Board	User Interface	J601	8	13.5
			2	GND
	Outlet Thermistor	J302	1	5
			2	GND
	Inlet Thermistor	J302	3	5
			4	GND
	RJ45	J302	5	13.5
			8	GND
	LED Lamp	J303	1	5
			3	GND
	Wi-Fi	J604	1	5
			5	GND
Dryer User Interface Board	UI	J101	5	13.5
			4	GND
Dryer Wi-Fi Board	Wi-Fi	J103	1	5
			5	GND

Windings and Coils Resistance Values (Ω)		
Main Motor Normal Vent Models	Run	2.84 to 3.27
	Start	2.82 to 3.12
Main Motor Long Vent Models	Run	2.72 to 3.12
	Start	2.25 to 2.48
Gas Valve	Main	1135 to 1595
	Booster	460 to 660
	Safety	1095 to 1555
Igniter	-	40 to 400 @ 75°F
Water Valve	-	891-1089

Thermistors Resistance Values (Ω)		
K OHMS	**TEMP.** °F	**TEMP.** °C
76 to 84	86	30
95 to 105	77	25
118 to 132	68	20

Thermostat	**TEMP.** °F		**TEMP.** °C	
	Open	**Close**	**Open**	**Close**
Outlet Control Backup	165	155	74	68
Inlet Control Backup	221	200	105	93
High Limit	302	-31 or below	150	-35 or below
Safety	190	151	88	66

Control Features

Quick Start

1. Clean lint filter. Loosely add items. Close door.

NOTE: Dryer will not start with door open.



2. If the screen is dark, press the Power pad or turn the knob to “wake up” the display.



3. Turn the knob to select the desired cycle.



4. Press Start/Pause pad.



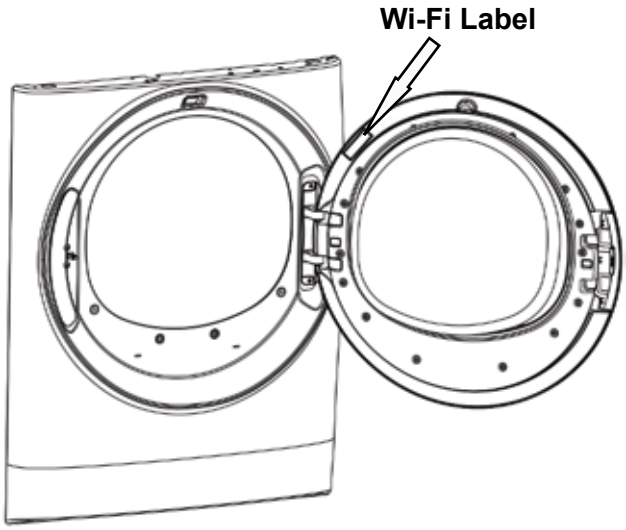
Wi-Fi Connect

The dryer is GE Appliances Wi-Fi Connect enabled.

Visit geappliances.com/connect and enter the model number to show the proper steps to connect the appliance.

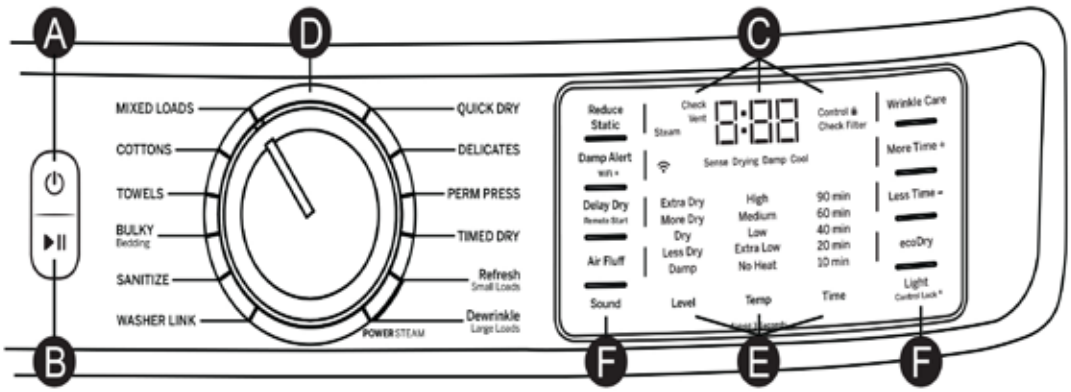
Please visit GEAppliances.com/connect to learn more about connected appliance features, to learn what connected appliance apps will work with smartphones.

Wi-Fi Connectivity: For assistance with the appliance or the ConnectPlus network connectivity, please call GE Appliances at 800. GE.CARES.

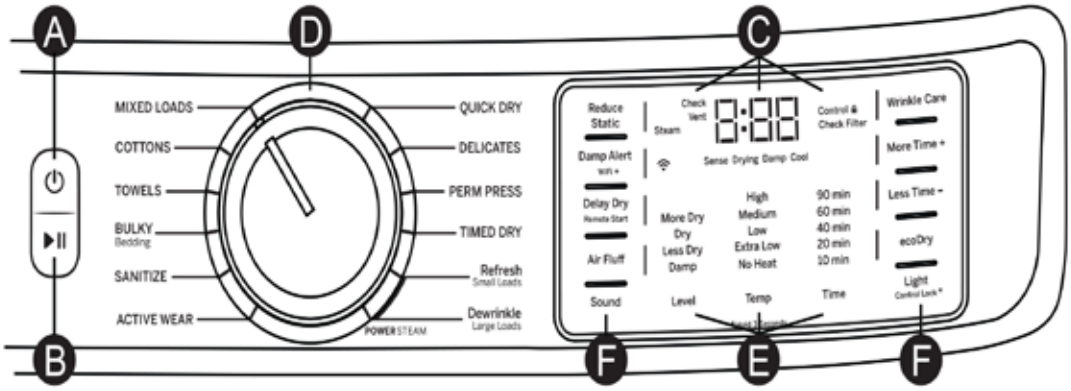


Dryer Features

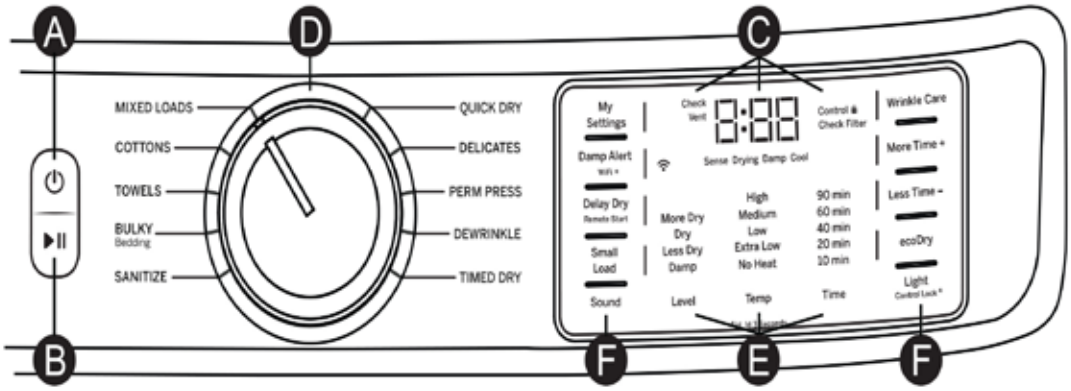
Models:
GFD85



Models:
GFD65



Models:
GFD55
GFV55



(Continued next page)

Ⓐ **Power**

Press to “wake up” the display. If the display is active, press to put the dryer into idle mode. **NOTE**: Pressing Power does not disconnect the appliance from the power supply.

Ⓑ **Start and Pause**

Press Start to begin the cycle. **NOTE**: The door must be closed for the dryer to start the cycle. Pressing Start again will pause the cycle, the Start light will blink and “Pause” will display. To continue the cycle, press Start again.

Ⓒ **Display and Status Lights**

The display shows the approximate time remaining until the end of the cycle and the dryer cycle status (Sense, Drying, Damp and Cool). In addition, the display will show:



Wi-Fi Will allow the appliance to communicate with a smartphone for remote appliance monitoring control and notifications.



Controls The dryer is locked; will blink once if any pad is pressed or the cycle knob is turned.

Check Filter The Check Filter light will stay on for 15 seconds after the cycle stops.

Check Vent The Check Vent light indicates an issue has been found due to reduced airflow from a possible blocked or restricted vent. Checking and/or cleaning the vent system is recommended.

(Continued next page)

Drying Cycles	Sensor cycles automatically determine fabric dryness.
	Timed cycles run for the selected time.
Mixed Loads	For loads consisting of cottons and poly-blends.
Cottons	For cottons and most linens. **NOTE**: ENERGY STAR® models are tested on COTTONS cycle with default settings (Temp setting on Low, Level setting on Dry, and ecoDry default on).
Towels	For most towels and linens.
Bulky	For large coats, bedspreads, mattress covers, sleeping bags, and similar large/bulky items such as blankets, comforters, jackets, and small rugs.
Sanitize	This option reduces certain types of bacteria including: Staphylococcus aureus, Pseudomonas aeruginosa and Klebsiella pneumoniae. The anti-bacterial process occurs when high heat is used during a portion of the drying cycle; cool down also will be longer to protect from a hot garment. **NOTE: Do not use this cycle on delicate fabrics.**
Washer Link	When selected (and if connected to a compatible washer through Wi-Fi communication), the dryer receives load information from the washer to automatically make cycle, dryness, temperature and time recommendations to optimize drying.
Active Wear	Clothing worn for active sports exercise and some casual wear. Fabrics include new technology finishes and stretch fibers such as Spandex. Also, for clothing labeled Easy Care or Perma Press: For wrinkle-free and permanent-press items.
Quick Dry	For small loads that are needed in a hurry, such as sport or school uniforms. Can also be used if the previous cycle left some items damp, such as collars or waistbands. **NOTE: On some models, the time remaining in the cycle will show counting down in the display.**
Delicates	For delicate items, special-care fabrics and knits.
Perm Press	For wrinkle-free, permanent press and special sports items that need extra drying care.
Dewrinkle	For removing wrinkles from items that are dry or slightly damp. This cycle is not recommended for delicate fabrics.
Steam Dewrinkle	For use with larger loads than STEAM Refresh. Ideal for loads left in the dryer for an extended time. STEAM Dewrinkle is recommended for larger loads (9 to 13 garments). **NOTE:** Steam cycles are not intended for use with towels. **Important**: The temperature setting must be set to High and water must be turned on before running the STEAM Dewrinkle cycle.

(Continued next page)

Steam Refresh	For slightly wrinkled dry garments. Significantly reduces wrinkles. After the STEAM Refresh cycle, the unit will beep (if Sound is selected) and display “00”. STEAM Refresh is recommended for small loads (3 to 5 garments). **NOTE**: Steam cycles are not intended for use with towels. **NOTE**: A single extremely light fabric item may need to have an additional item included in the STEAM Refresh cycle to achieve optimum results. **Important**: The temperature setting must be set to High and water must be turned on before running the STEAM Refresh cycle.
Timed Dry	Use to set specific dry time. To use: 1. Turn cycle dial to TIMED DRY. 2. Increase the drying time by pressing the Time pad. **NOTE**: This pad only increases the time. When max time is reached, pressing the pad again will reset the counter to the lowest setting. 3. Select the Temp. 4. Close the door. 5. Press Start/Pause pad.

Settings	Individual settings for cycle minutes (Time), dryness level (Level) and temperature (Temp) can be set from the minimum (lowest in column) to maximum (highest in column). In general, the higher up the column, the more energy will be used. **NOTE**: The selected cycle set Time can be further adjusted, in 1-minute increments, by pressing the More Time (+) and Less Time (-) pads. **Dryness Level**: Selection only used for Sensor cycles. Timed cycles run for the selected time.
Extra Dry	Use for heavy-duty fabrics or items that should be very dry, such as towels.
More Dry	Use for heavy-duty or mixed type fabrics.
Dry	Use for a normal dryness level suitable for most loads. This is the preferred cycle for energy savings.
Less Dry	Use for lighter fabrics.
Damp	**For leaving items partially damp.**
Temperature	
High	For regular to heavy cottons. **NOTE**: STEAM Dewrinkle and STEAM Refresh require the High temperature setting.
Medium	**For synthetics, blends, delicates and items labeled permanent press.**
Low	For delicates, synthetics and items labeled tumble dry low.
Extra Low	For lingerie and special-care fabrics.
No Heat	For fluffing items without heat. For use only with the AIR FLUFF cycle.

(Continued next page)

Ⓕ Options

Reduce Static (on some models).

When selected, the dryer will spray a mist of water onto the load, at the end of the drying cycle, to reduce static. This option is not available with BULKY, SANITIZE or STEAM cycles.

Damp Alert (Damp Alert/WiFi Pad): This option causes the dryer to beep when clothes have dried to a damp level. Remove items that are wished to hang dry. The Damp Alert will only beep when this option is selected (but the dry cycle will keep running). Removing clothes and hanging them when they are damp can reduce the need to iron some items.

Delay Dry

Press the Delay Dry pad to set the delay start time in 1 hour increments up to 24 hours, and then back to clear (0 hours). After selecting the delay start time, press Start, and the delay time will count down the time remaining until the cycle starts. **NOTE**: To set the amount of delay time faster, press and hold the Delay Dry pad.

Delay Dry for Wi-Fi Connected Dryers

There are two options to set Delay Dry using a smartphone.

- **Option 1**: Follow Delay Dry instructions. Use the GE Appliances Laundry App to adjust the amount of time via smartphone.
- **Option 2**: Remote Start: Set dryer to “AP” using the Delay Dry pad. This allows use of the GE Appliances Laundry App via smartphone to start the dryer remotely at the time of choosing. If the dryer is set to AP with no activity, it will start the dryer 24 hours later.

Air Fluff (on some models)

Provides 10 minutes of tumbling time with no heat. NOTE: On models without AIR FLUFF cycle, select TIMED DRY and set Temp to No Heat.

Sound

Use the Sound pad to change the volume of the pad presses and the end of cycle signal. Press the pad until the desired volume is reached (High, Med, Low) or is turned off. The clothes should be removed when the end of cycle signal goes off, so wrinkles do not set in.

NOTE:

- Remove garments promptly at the sound of signal. Place clothes on hangers so wrinkles will not set in.
- Use the Sound especially when drying fabrics like polyester, knits and permanent press. These fabrics should be removed so wrinkles will not set in.

(Continued next page)

Options (Cont.)

Wrinkle Care

Use this option to minimize the wrinkles in clothes. It provides 1 hour of no-heat tumbling after the clothes are dry. If using the cycle Sound, and select the Wrinkle Care option, a signal will sound at the end of the drying time and several times during the Wrinkle Care cycle. This will remind the user that it is time to remove the clothes.

More Time (+) / Less Time (-)

The selected cycle set Time can be further adjusted, in 1-minute increments, by pressing the More Time (+) and Less Time (-) pads.

ecoDry

Available for **BULKY**, **TOWELS**, **COTTONS**, **MIXED LOADS**, **ACTIVE WEAR** and **DELICATES**. When the **ecoDry** pad is pressed, cycle settings change to reduce the total energy consumption of the selected sensor cycle. **NOTE**: Cycle times will change when **ecoDry** is selected. The **ecoDry** option will default to ON for **COTTONS**. For optimal energy savings, turn **ecoDry** ON. For optimal drying times, turn **ecoDry** OFF. **NOTE**: Energy savings will vary across loads and cycles.

Light

The drum light will turn on if the Light pad is pressed or the door is opened. It will turn off when the door is shut, the Light pad is pressed again or after 5 minutes if the door is left open.

Small Load (on some models)

Select to use for a small load with any sensor cycle (except SANITIZE).

My Settings

As the cycle selector knob is turned, the Time (timed dry), Level (dryness level) and Temp (temperature) settings change to automatic pre-set default settings. If a different setting is desired, press the appropriate pad(s). Then press and hold the My Settings pad for 3 seconds and the dryer will “remember” these settings for that Knob Selection. In the future, when turning the selector knob to that cycle, settings will be automatically recalled.

NOTE: Signal sound cannot be set for My Settings.

Control Lock

Lock the controls to prevent any selections from being made. Or lock the controls after a cycle has started. Children cannot accidentally start the dryer by touching pads with this option selected.

To lock/unlock the dryer controls, press and hold the Light pad for 3 seconds. The control lock icon will flash while locking/unlocking, stay on when locked, and turn off when unlocked.

NOTE: The Power pad can still be used when the machine is locked.

WiFi (Damp Alert/WiFi pad)

Press and hold the Damp Alert/WiFi pad for 3 seconds to activate.

Stacking Instructions

If planning to stack the washer and dryer, order Stacking Kit number GFA28KITN to be used for this dryer.

Kit sold separately.

Stack dryer only on washer. Do not stack washer on dryer, washer on washer or dryer on dryer.

Do not modify this installation kit. Any modification will void the product Warranty.

WARNING!

Make sure the dryer is unplugged.

Two or more people are recommended to safely lift the dryer into and out of position.

Avoid damage to the existing utility services.

DO NOT place the washer on top of the dryer.

Location Requirements

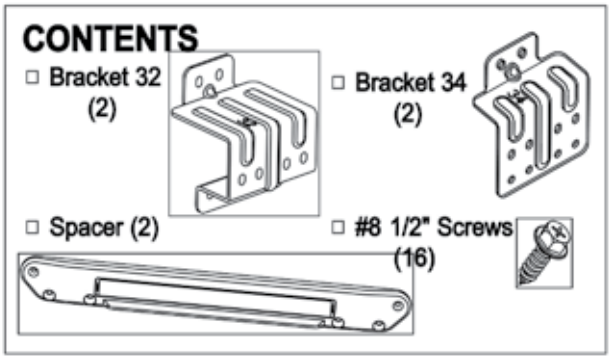
When installed in a location other than an alcove or closet, the minimal clearances to combustible surfaces and for air opening are: 1-inch on both sides, and 3-inches' front and rear, and 1-inch on top. Consideration must be given to provide adequate clearance for installation and service.

NOTE: If the dryer is approved for installation in an alcove or a closet, it will be stated on a label on the back.

When Installed in an Alcove or Closet

- The dryer MUST be vented to the outdoors.
- Minimum clearance between dryer cabinet and adjacent walls or other surfaces is:
  - 0-inches either side*
  - 0-inches front
  - 0-inches rear
  - 0-inches top
- Minimum vertical space from floor to overhead shelves, cabinets, ceilings, etc., is 67.7-inches.
- Closet doors must be louvered or otherwise ventilated and have at least 60 square inches of open area equally distributed. If the closet contains both a washer and a dryer, doors must contain a minimum of 120 square inches of open area equally distributed.

*For improved performance, a 1/2-in. clearance is suggested on either side.



Tools Needed

- Phillips-head Screw-driver
- Level
- Gloves
- Open End Wrench
- Pliers

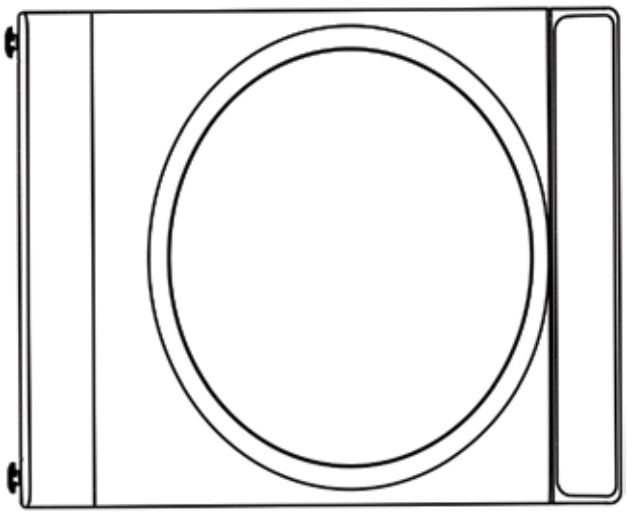
Installation Preparation

1. Remove the packaging.
2. Flatten the product carton to use as a pad to lay the dryer down on its side. Continue using the carton to protect the finished floor in front of the installation location.

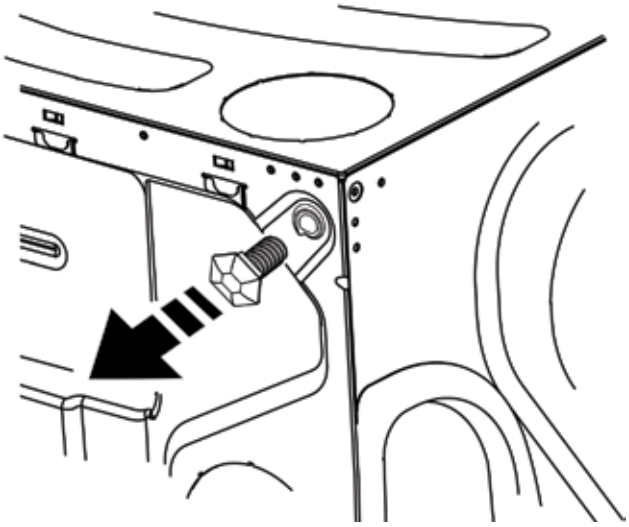
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Remove the Leveling Dryer Legs

1. Carefully lay the dryer on its side. Use the packing material so not to scratch the finish on the dryer.



2. Use an open-end wrench or pliers to remove all four dryer leveling legs. **NOTE**: Retain the leveling legs for future use.



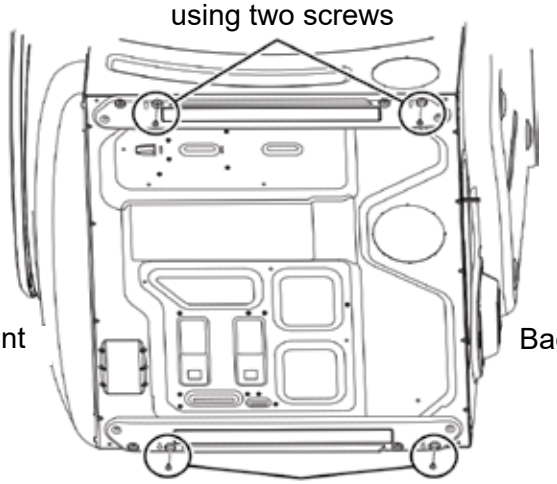
Install Spacers to Dryer Bottom

1. Locate a spacer on the bottom side with its holes over the leveling leg holes. Attach spacer using two screws. Attach the second spacer on the other bottom side using two screws. **NOTE**: The arrows on the spacers should point to the outside.



Make sure the arrows on the spacers point to the outside

Attach spacer using two screws



Front Back

Attach spacer using two screws

Make sure the arrows on the spacers point to the outside



Installing Appropriate Brackets

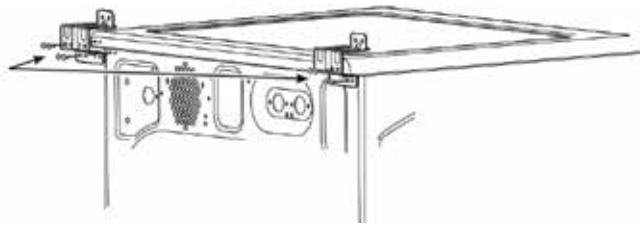
Washer Depth	Dryer Depth	Bracket Number
32-inch	32-inch	32-inch
34-inch	32-inch	34-inch

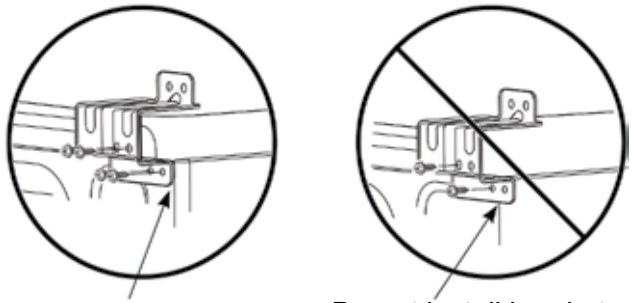
Select the appropriate brackets for the model sizes. Using the outside holes in the bracket, attach it to the top left corner of the washer back using four screws. Repeat on the top right corner of the washer back.

(Continued next page)

32 Brackets for 32-Inch Washer and Dryer Combinations

Attach brackets to washer using four screws on each side.





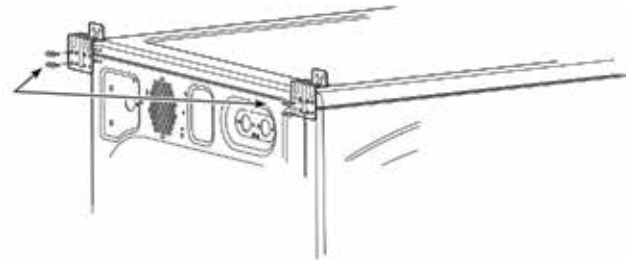
Install brackets flush at washers edges

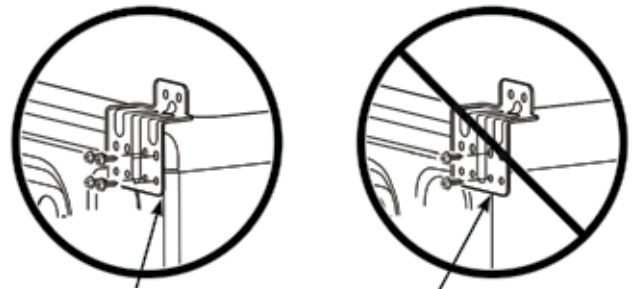
Do not install brackets overhanging washers edges

OR

34 Brackets for 34-Inch Washer and 32-Inch Dryer Combinations

Attach brackets to washer using four screws on each side.





Install brackets flush at washers' edges

Do not install brackets overhanging washers' edges

Prepare the Washer and Dryer

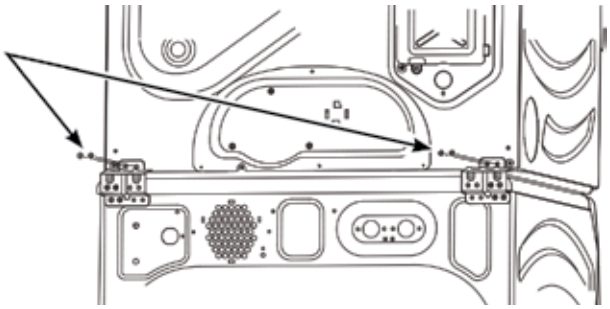
1. Place the washer in the approximate final installation location.
2. Make sure the washer is level. Refer to the washer Installation Instructions for details.
3. Upright the dryer.
4. Reverse the washer and dryer door swings, if desired, before stacking the dryer on the washer. See the washer and dryer Installation Instructions for details.

Install Dryer and Bracket on Washer

1. Lift the dryer onto the top of the washer. Be sure to lift the dryer high enough to clear the washer control panel. Be careful not to scratch the top of the washer with the spacers. Protect the washer control panel with cardboard or other protection.
2. Align the holes in the back of the dryer with the holes in the bracket sticking up from the washer. Attach both brackets to the dryer with two screws on each side.

32 Brackets for 32-Inch Washer and Dryer Combinations

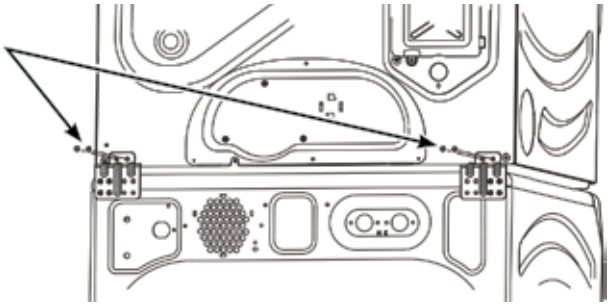
Attach brackets to washer using two screws on each side.



OR

34 Brackets for 34-Inch Washer and 32-Inch Dryer Combinations

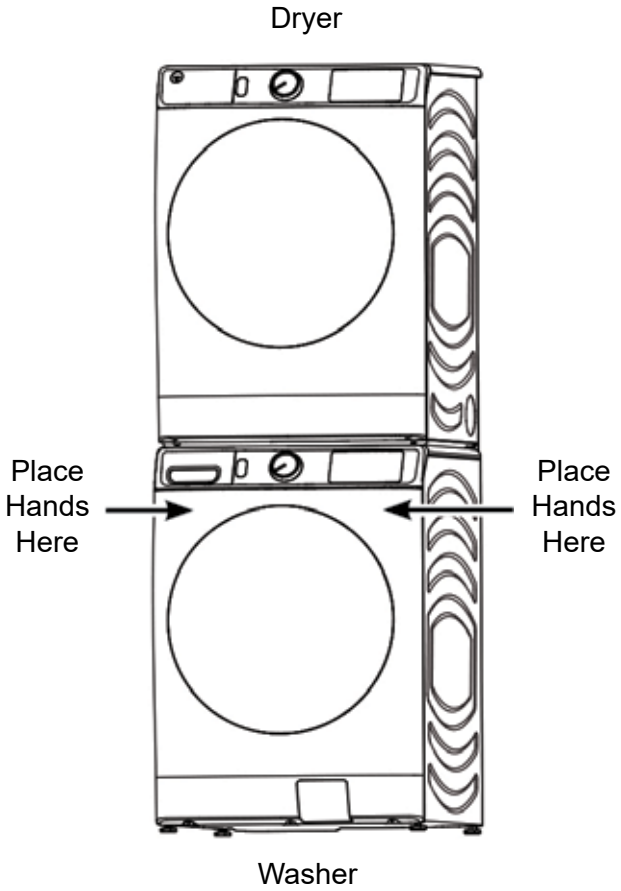
Attach brackets to washer using two screws on each side.



Finalize the Installation

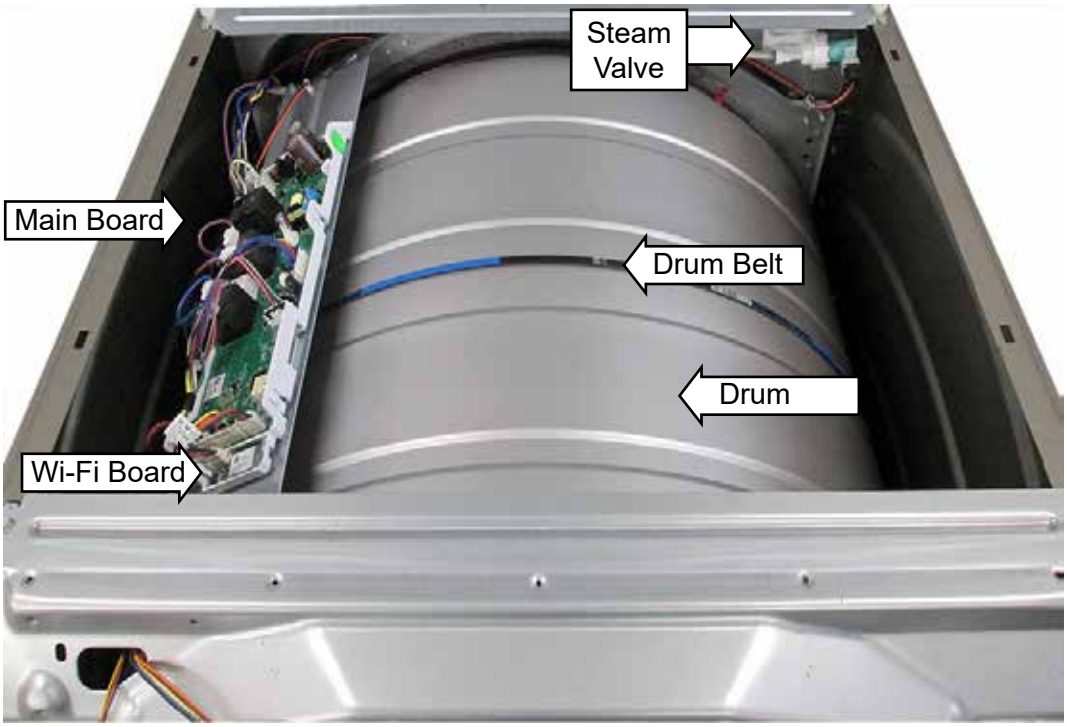
CAUTION: Do not push on the dryer once installed to top of the washer. Pushing on the dryer may result in pinched fingers.

1. Refer to the washer Installation Instructions to complete the washer installation.
2. Refer to the dryer Installation Instructions to complete the dryer installation.
3. Carefully slide or walk the stacked washer and dryer into place. Use felt pads or other sliding device to assist moving and to protect flooring.
4. Verify the units are level. Make adjustments to the washer feet if necessary, to level. It is always best to set the washer feet to the minimum height necessary to level the washer and dryer properly.

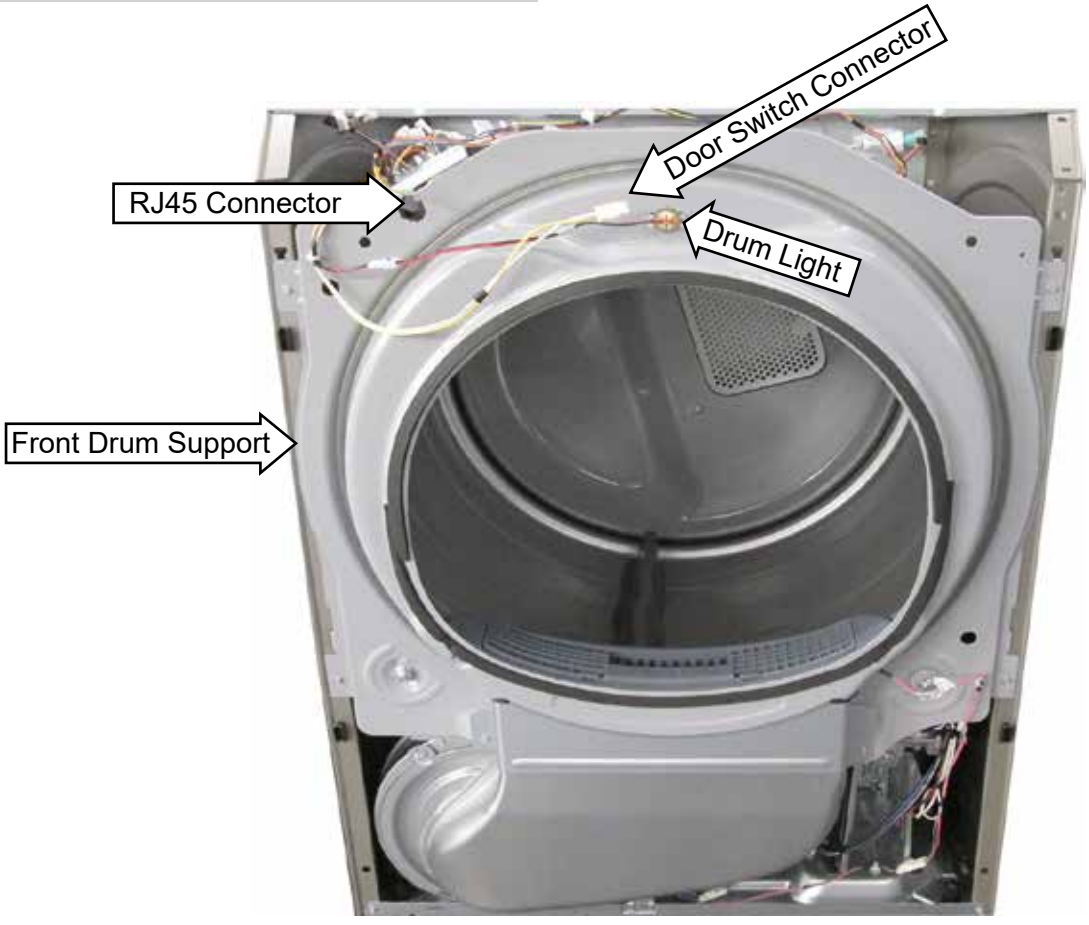


Component Locator Views

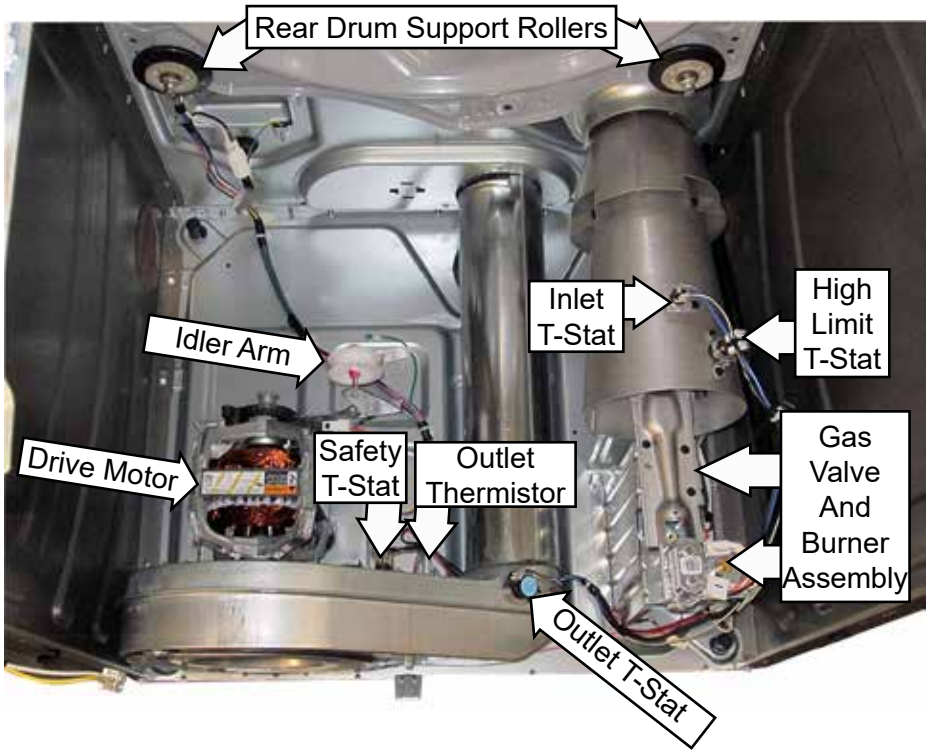
Top View



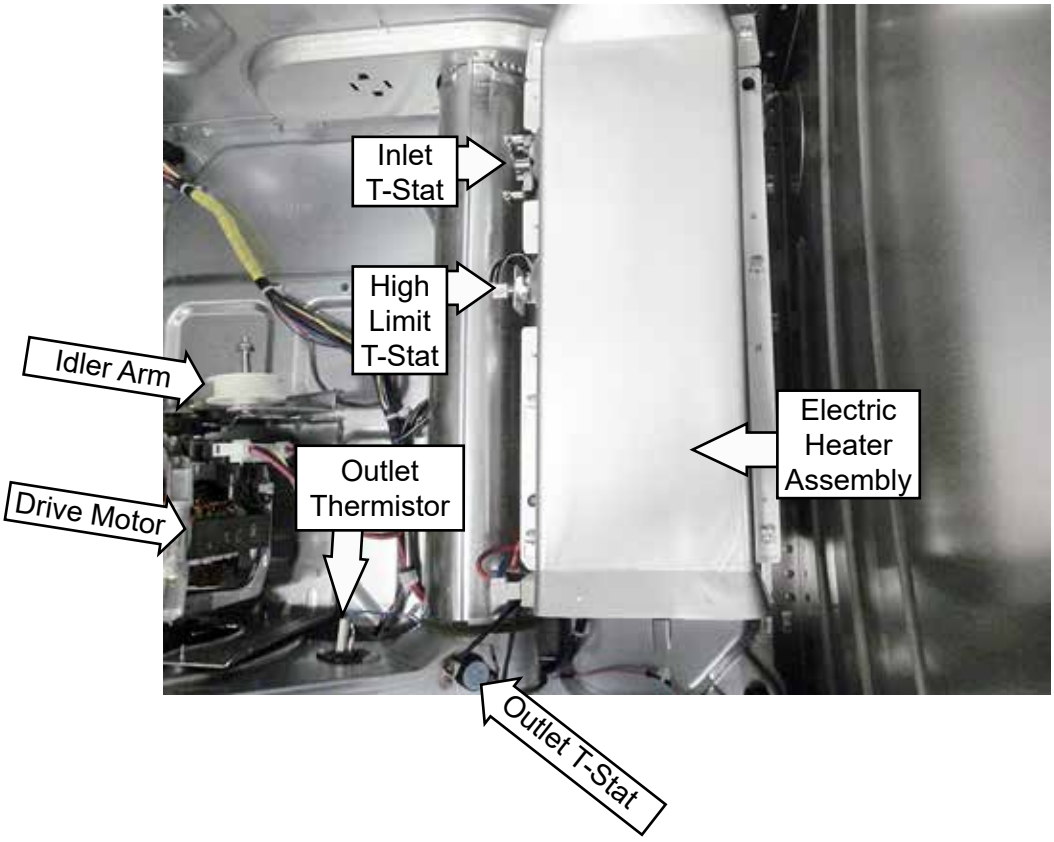
Front View



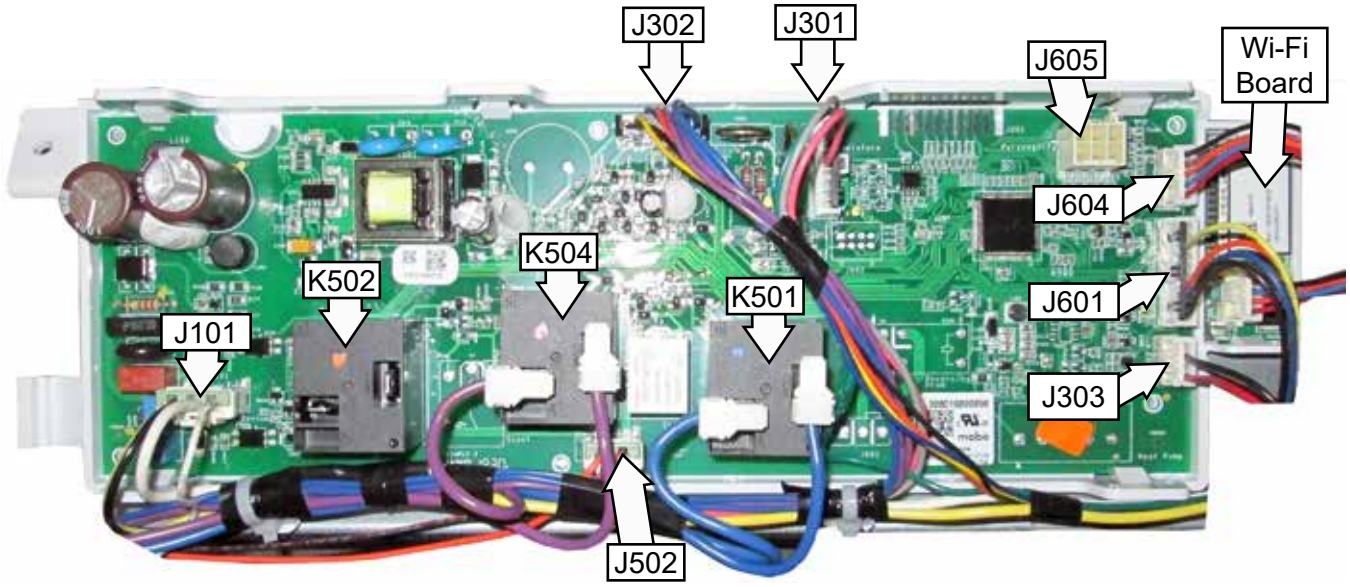
Bottom View (Gas)



Bottom View (Electric)

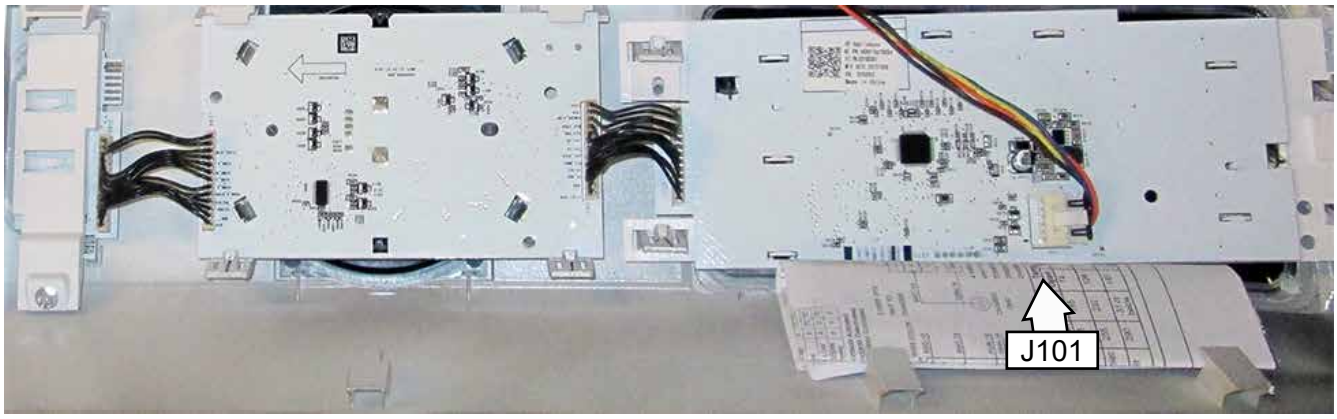


Main Board



J101	120 VAC in to Main Board
J301	5 VDC Out to Sensor Rods With Nothing Touching Sensor Rods. Pins 1 to 5.
J302	13.5 VDC Volts Out to RJ45. Pins 5 to 8. 5 VDC Out to Inlet Thermistor. Pins 3 to 4. 5 VDC Out to Outlet Thermistor. Pins 1 to 2
J303	5 VDC Out to Drum Light (LED). Pins 1 to 3.
J502	120 VAC Out to Water Valve.
J601	13.5 VDC Out to User Interface. Communication Between Main Board and User Interface. Pins 8 to 2.
J604	5 VDC Out to Wi-Fi Board and Communication Between Main Board and Wi-Fi Board. Pins 1 to 5.
J605	Not Used
K501	Relay. 120 VAC Out to Gas Valve (Top Heater on Electric Models).
K502	Relay. 120 VAC Out to Drive Motor.
K504	Relay. 120 VAC Out to Bottom Heater (Electric Models Only).

User Interface Board (UI)



J101	DC Voltage in from Main Board and Communication Out to Main Board

Wi-Fi Board



J103	DC Voltage in from Main Board and Communication Out to Main Board

Dryer Components

Warning: Sharp edges may be exposed when servicing the dryer. Use caution to avoid injury. Wear Kevlar gloves or equivalent protection.

Control Panel and Front RJ45 Access

The control panel is held in place with four Phillips-head screws and five tabs. One of the two RJ45 connections is located behind the control panel.

Control Panel Removal

1. Using a small flat-blade screw-driver, remove the beauty cap from the left side of the control panel.

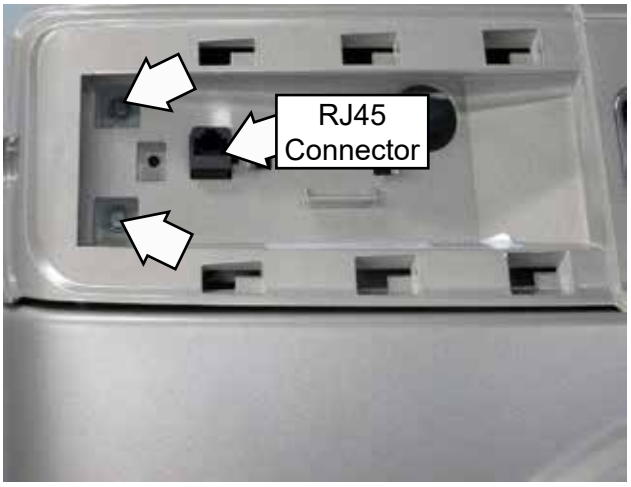


2. Remove the 1/4-inch hex-head screw that secures the access panel to the control panel.



3. Then slide the access panel to the left to reveal the RJ45 connector.





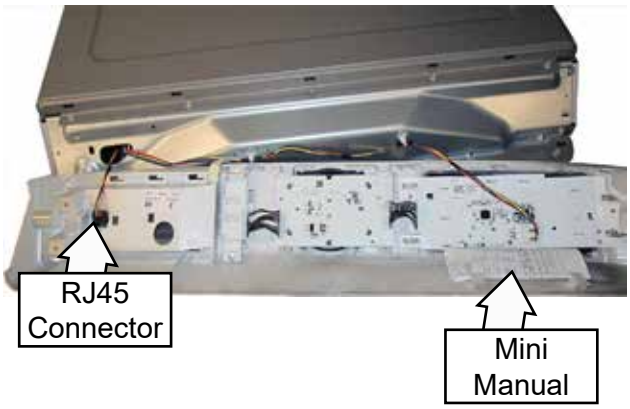
4. After the slide panel has been removed, remove two 1/4-inch hex-head screws.

5. Pull the left side of the control panel outward slightly to release the tabs. Then lift up to disengage the control panel from the mounting posts on the right side.



(Continued next page)

6. Lay the control panel over to access and disconnect the RJ45 connector and the user interface (UI) wire connector from the control panel. Notice the location of the mini manual.

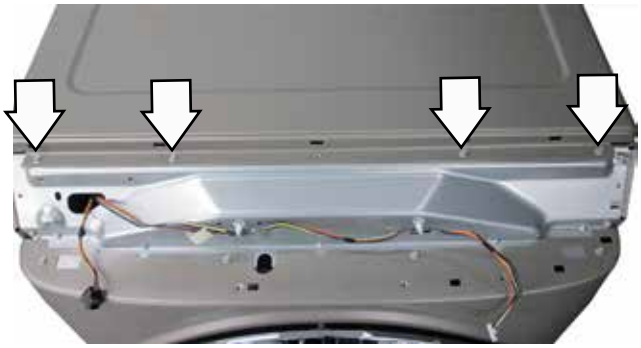


7. Disconnect the RJ45 from the control panel by pushing inward on the connector tab. Then roll the connector out of the control panel.



Top Panel

Removal of the control panel provides access to four 1/4-inch hex-head screws located at the front edge of the top panel. After removal of the screws, the panel can then be slid forward and then lifted to disengage it from the cabinet.



Door

The door is fastened to the front panel using two 1/4-inch hex-head screws.



Once they are removed, lift the door upwards to disengage the support hooks on the door hinge from the front panel.

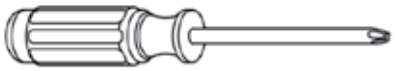
Door Reversal

WARNING: Shock Hazard

Unplug the appliance or turn off the circuit breaker before servicing. Pressing the Power pad DOES NOT disconnect power.

Tools Needed

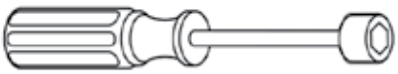
- Phillips-head Screw-driver



- T-25 Torx-driver

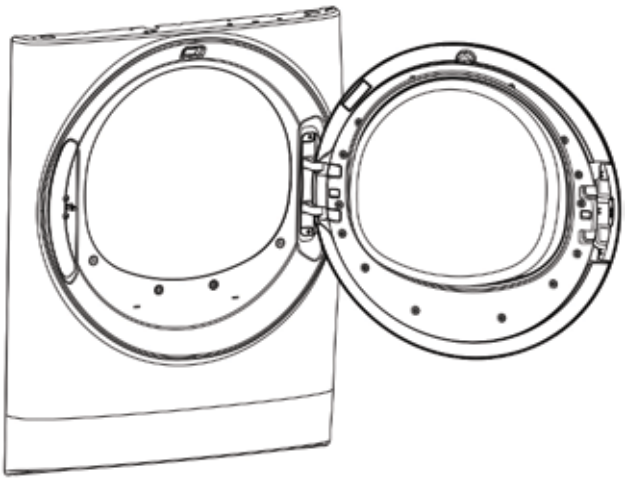


- 1/4-inch Nut-driver



Step 1: Remove the Strike Plate and Door Assembly

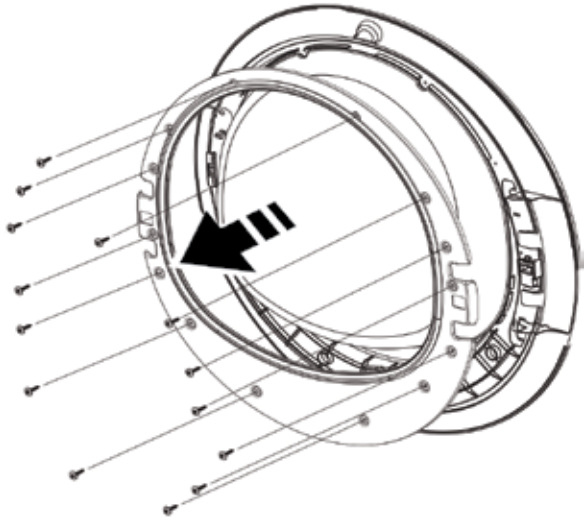
- Open the dryer door.
- Remove the two screws from the strike plate using a T-25 Torx-driver.
- Remove the strike plate and set it aside.
- While supporting the door, remove the two screws from the hinge in the dryer face using a 1/4-in. nut-driver.
- Lift the door assembly to remove it from the dryer front panel and set it on a protective surface.



Step 2: Remove the Inner Door

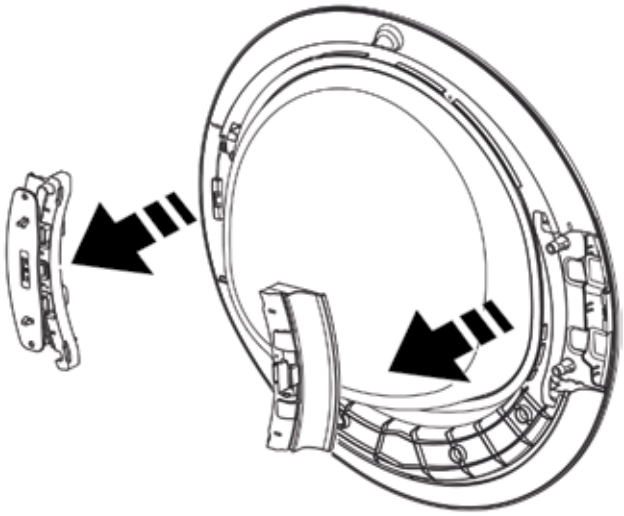
- Remove the fourteen screws from the inner door frame using a Phillips-head screw-driver and set them aside.
- Remove the inner door frame from the outer door.

NOTE: Do not remove the gasket from the inner door frame.

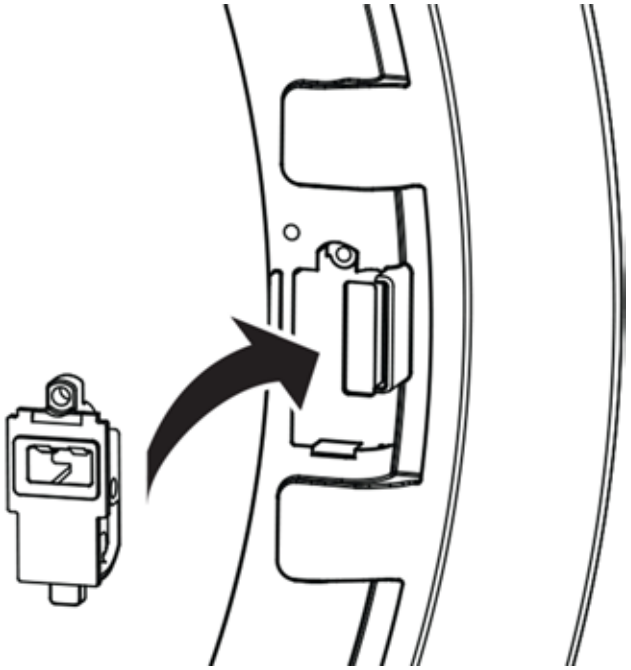


Step 3: Remove, Rotate and Replace the Handle and Hinges into the Opposite Sides

- Lift the handle and the hinge out of the door pockets.

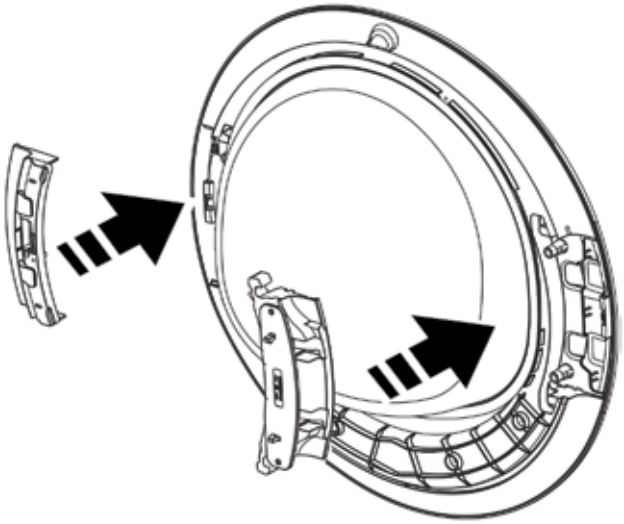


NOTE: Make sure the latch remains seated inside the handle. If it moves or falls out, seat it back into place.



(Continued next page)

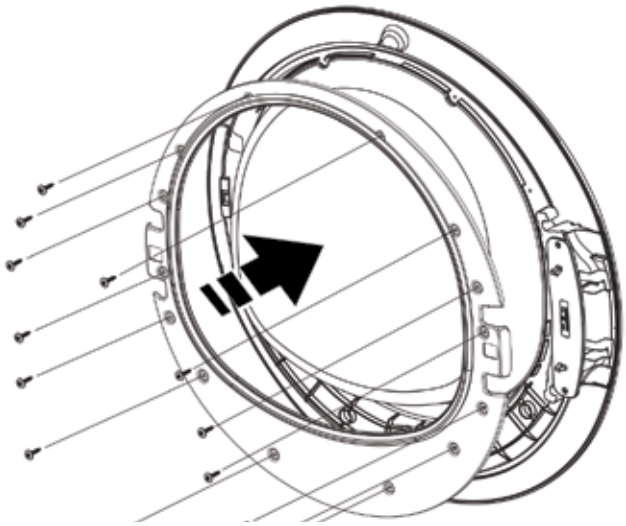
- Rotate the handle and hinge and replace them back into the pockets on the opposite sides.



Step 4: Replace the Inner Door

- Reinstall the inner door frame into the outer door.
- Replace the fourteen screws into the inner door, using a Phillips-head screw-driver, securing it to the outer door.

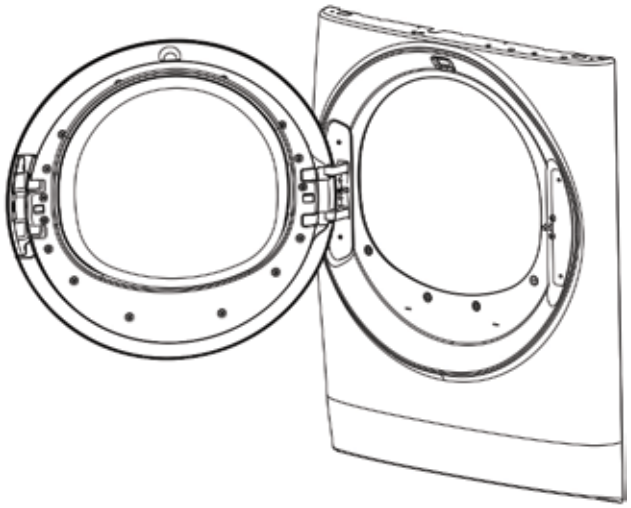
NOTE: Make sure the gasket is properly seated on the inner door frame when replaced.



Step 5: Replace the Strike Plate and Door Assembly

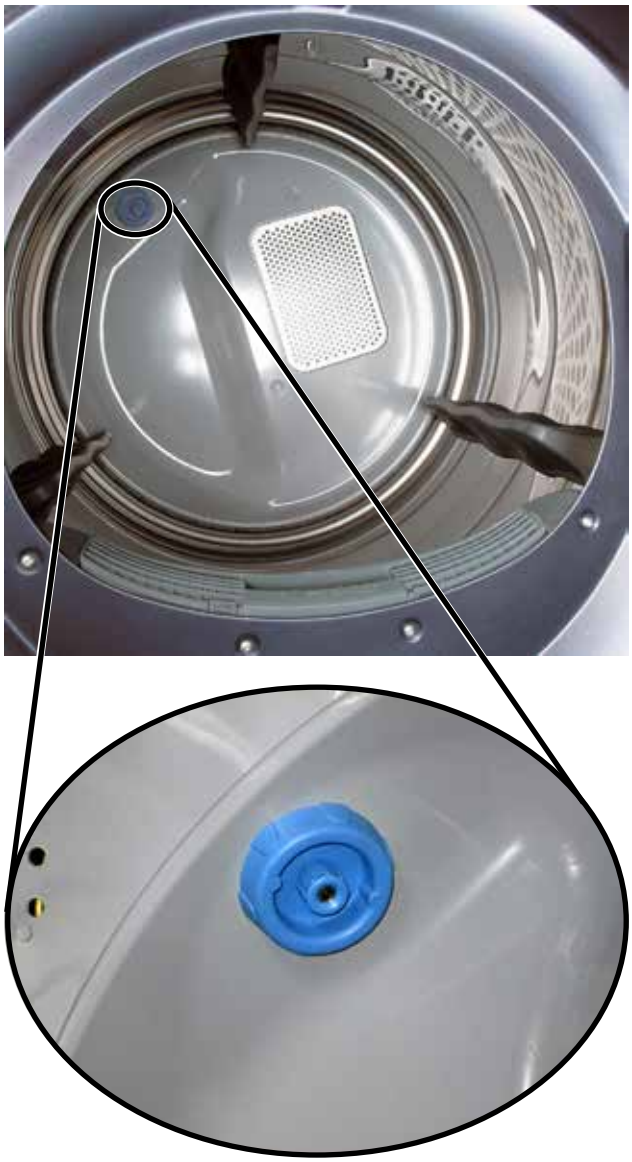
- On the opposite side from where removed, replace the strike plate with its two screws using a T-25 Torx-head screw-driver.
- Lift the door assembly into place and secure it onto the dryer face with its two screws using a 1/4-in. hex-head screw-driver.
- Close the dryer door.

NOTE: Make sure the door opens and closes correctly. If not, repeat all steps making sure the gasket, all parts, and screws are securely seated.



Misting Nozzle and Base

The misting nozzle and base is located and fastened to the inside of the dryer on the rear drum support.



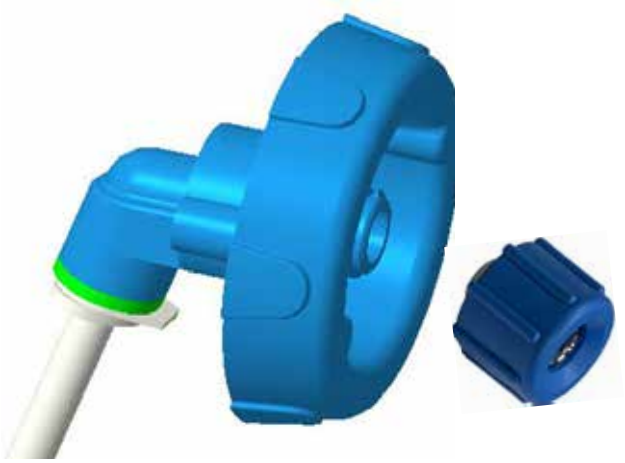
The nozzle has a very fine mesh screen inside. The screen is so fine that it will need replaced instead of cleaned if it gets clogged.



Nozzle Replacement

To replace the nozzle, order Nozzle Replacement Kit WE01X30097 and follow these instructions carefully.

1. Using a 12-point socket or pliers, remove the nozzle from the nozzle base.



2. Remove the screen mesh from inside the nozzle base with a small flat-blade pocket screw-driver.

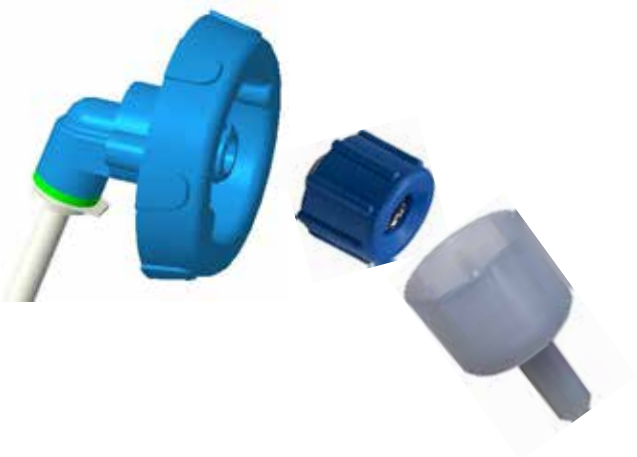


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3. Reinstall the mesh using the male part of the Nozzle/Mesh installation tool that comes in the kit. Place the new mesh onto the tool and insert the mesh inside the nozzle base. The tool will set the mesh to the proper depth in the nozzle base.



4. Finally, use fingers to prevent cross-threading, then attach the nozzle to the nozzle base finger tight. With a pair of pliers and the Nozzle/Mesh Installation Tool socket that comes in the kit, tighten the nozzle to the nozzle base.



Base Replacement

The mist nozzle base is mounted to the rear drum support. If the mist nozzle base needs to be replaced, the rear panel will need to be removed. Then remove the two 1/4-inch hex-head screws that secure the base to the rear drum support.



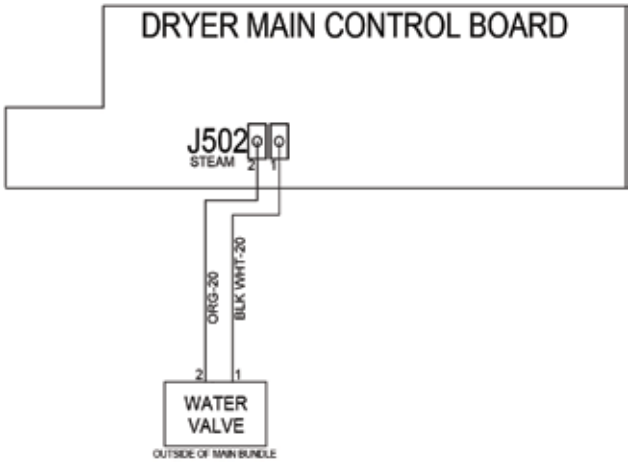
Misting/Steam Valve

The misting/steam valve is used during the Steam Dewrinkle or Steam Refresh cycles. It provides a mist of water that is sprayed into the drum, allowing the clothing to become damp. As the dryer tumbles the clothes, it heats the air, drying the clothes and causing the wrinkles to fade while refreshing the material. The valve is located at the top rear of the cabinet.



Misting/Steam Valve Diagnosing

From the J502 connector on the main board, check for approximately 1k-ohm. If there is no reading, check harness and connections. If harness and connections are good, replace the valve.



Water Valve Removal

1. Remove the top panel (see **Top Panel** in the **Dryer Components** section in this service guide).
2. Disconnect the harness connector and the water line from the misting/steam valve.
3. From the back of the dryer, remove one 1/4-inch hex-head screw securing the valve to the cabinet.

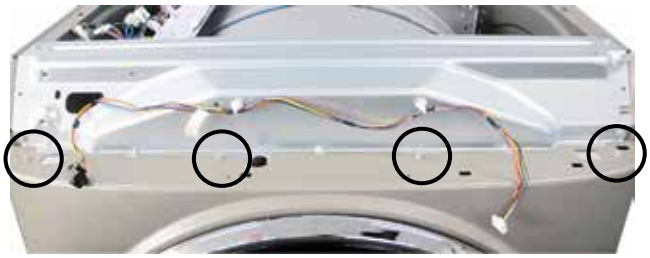
Front Panel

Removal of the front panel provides access to the sensor rods connection, and the drum lamp. The door switch is attached to the front panel.

Front Panel Removal

1. Remove the control panel (see **Control Panel and Front RJ45 Access** in the **Dryer Components** section of this service guide).
2. Remove the top cover (see **Top Panel** in the **Dryer Components** section of this service guide).
3. Remove four 1/4-inch hex-head screws along the top of the front panel.

NOTE: Removal of the door will make removing the front panel easier.



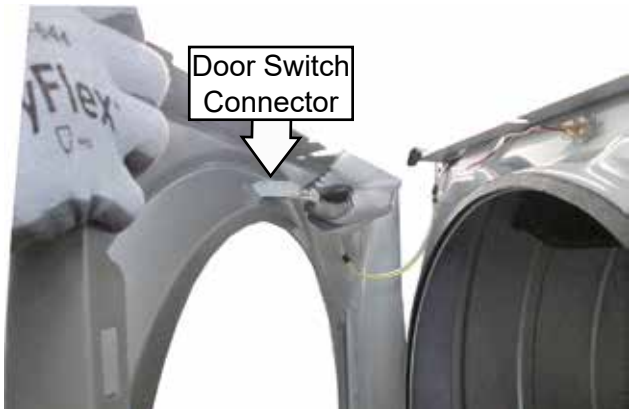
4. Then remove four T15 Torx-head screws. There are no screws at the bottom. Only two clips that will stay with the front panel when removed.

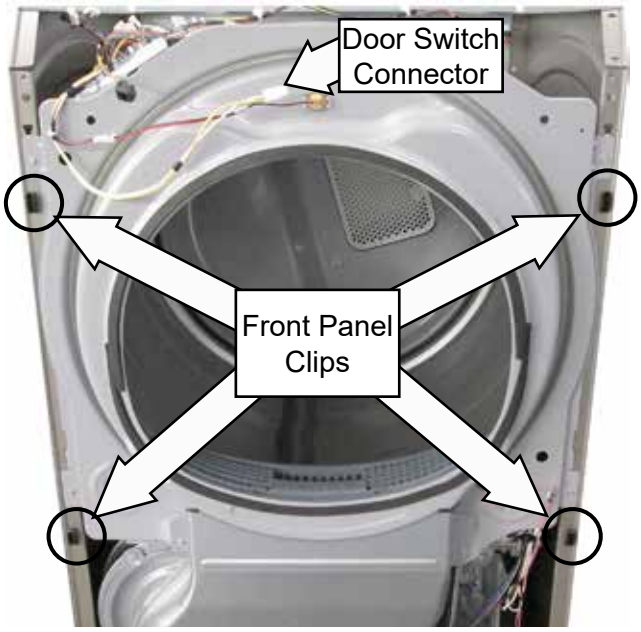


(*Continued next page*)

5. Lift the front panel straight up to disengage the two clips at the bottom of the panel and the four clips from the cabinet. There are two on each side. Disconnect the door switch connector before pulling the front panel away from the cabinet.







Front Drum Support

The drum support holds the front of the drum in place utilizing two roller wheels and shaft. If the shaft is not damaged, it can be reused.

Drum Support Removal

1. Remove the control panel, top cover and front panel (see **Control Panel** and **Front RJ45 Access**, **Top Cover**, and **Front Panel** sections of this service guide).

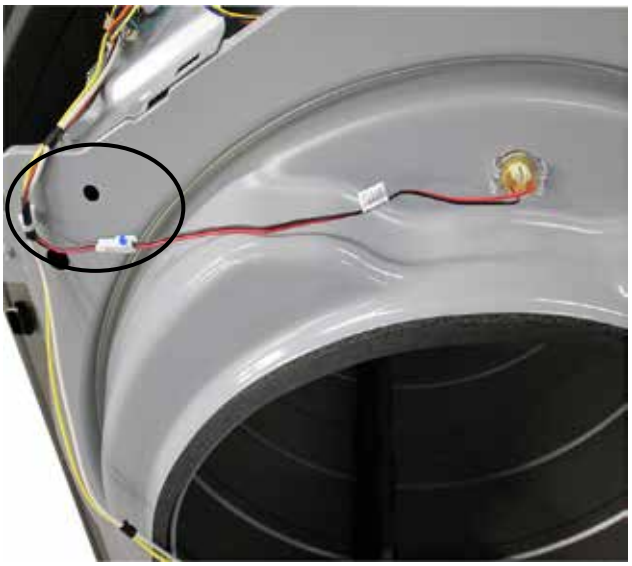
2. Remove the four hex-head screws and one Phillips-head post screw that secures the control panel front bracket to the cabinet. Set the bracket aside.



3. To remove the front drum support, the drum/tub light will need to be disconnected at the drum light harness connector first. The tub light is removed from the inside of the drum. Pinch the tabs on the back of the light and push it to the inside of the drum.



4. Then push the arrow shaped wire tie from the back of the support so the harness is free from the support.



5. Remove six Phillips-head screws securing the front drum support that secures it to the cabinet. One screw is located at the bottom of the trap duct.



6. Then lift up on the support allowing the front support tabs to disengage from the cabinet.

NOTE: It will have downward pressure from the belt still having tension on it.

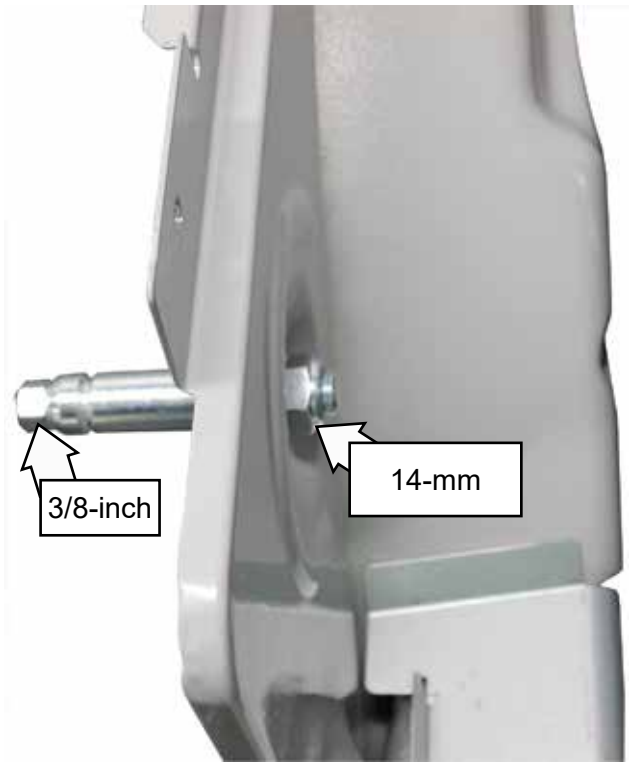
Drum Roller Wheel Removal

1. Remove the control panel, control panel bracket, top cover and front panel (see **Control Panel** and **Front RJ45 Access**, **Top Cover**, **Front Panel** and **Front Drum Support** sections of this service guide).

2. Remove the triangle clip from the shaft that secures the roller wheel on it. Slide the roller wheel off of the shaft.



3. Remove the shaft by using a 3/8-inch and a 14-mm wrench or ratchet and socket.

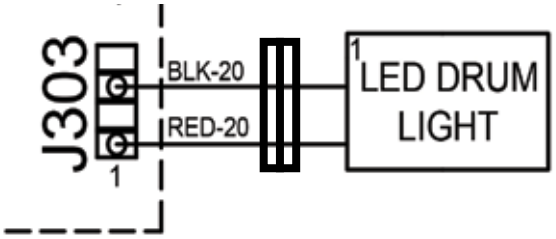


Drum/Tub Lamp

The drum lamp assembly consists of a LED that comes with its own harness attached. It has a built-in light shield.

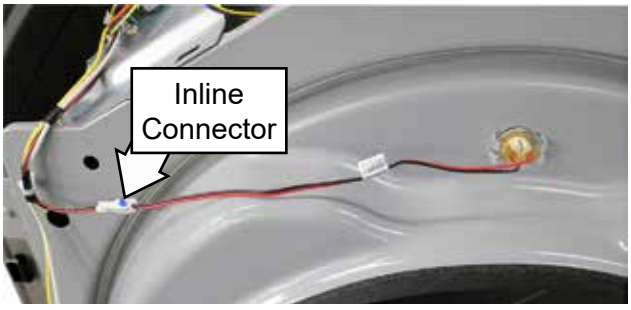
Drum Lamp Diagnosing

With an active display and the door open, check for approximately 5 VDC at the J303 connector on the main board. If voltage is present, check for voltage at the inline connector. If voltage is there, replace the drum lamp assembly.



Drum/Tub Lamp Assembly Removal

1. Remove the control panel, top cover, control panel front bracket and front panel (see those sections of this service guide).
2. Disconnect the inline connector for the tub light from the main harness.



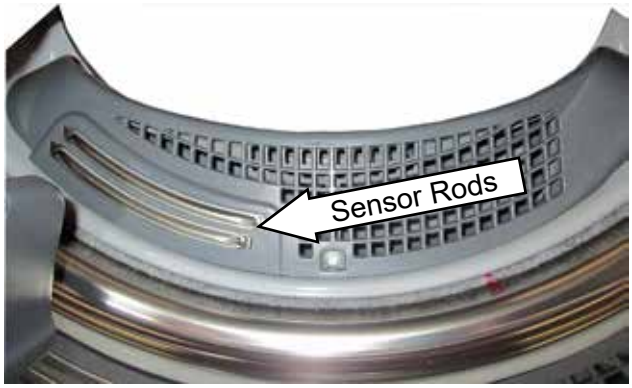
3. Pinch the tabs on the tub light and push to the inside of the drum.





Sensor Rods

The sensor rods consist of two sensors attached to a plastic housing on the inside of the drum support.



The sensors are connected to the main control board. The sensors are spaced approximately 1/2-inch apart, creating an open circuit to the control.

- When wet clothes tumble across the two sensors, the clothes create a very low resistance between the sensors.
- As the clothes become dry, their resistance value increases.
- Operation of the touch sensors can be checked by using the service mode test (see **Service Mode Tests** in the **Diagnostics and Service Information** section of this service guide).
- Proper leveling of the dryer is vital for accurate sensor drying. If the front of the dryer is raised too high, clothes will tumble toward the rear of the drum, preventing contact with the sensors. This could produce a false dryness reading.

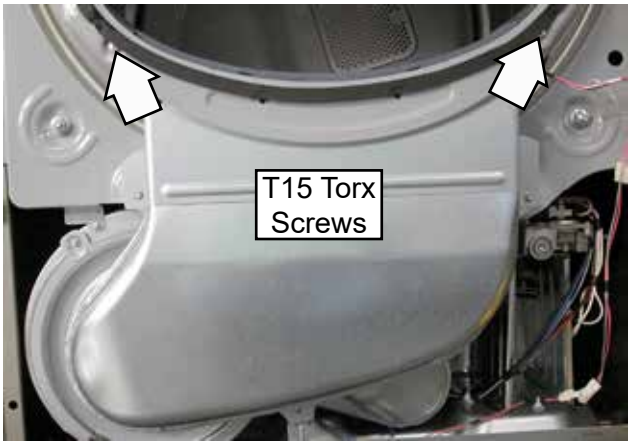
Sensor Rod Removal

1. Remove the front panel to access the sensor rods and harness (see **Front Panel Removal** under **Front Panel** in this section of this service guide).

2. Remove one 1/4-in. hex-head screw securing the grill housing to the front drum support. This is located on the inside of the door opening.



3. Remove two T15 Torx-head screws securing the grill housing to the front drum support.



4. Disconnect the harness connectors from sensor rods. A flat-blade screw-driver works well.

5. Remove the grill housing with sensor rods from the dryer.

Drum

The drum has two grooves where the drum sits on top of drum rollers. There are two at the front and two at the rear of the drum. It is held in place on the drum rollers using a downward pressure caused by the idler arm and spring.

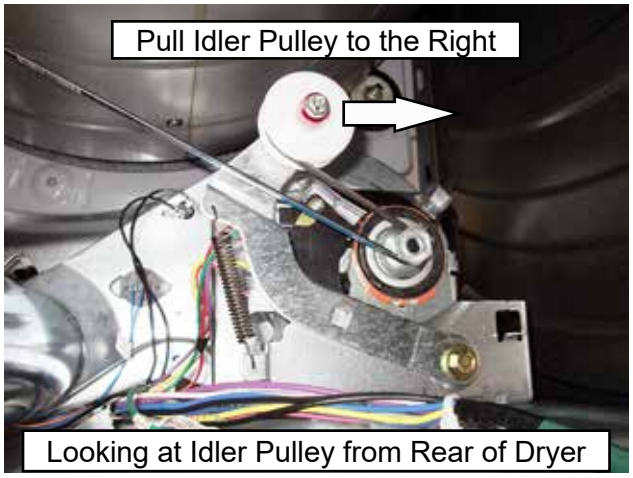
Drum Removal

1. The control panel, top panel, front panel and front drum support will need to be removed (see **Control Panel and Front RJ45 Access**, **Top Cover**, **Front Panel** and **Front Drum Support** sections of this service guide).

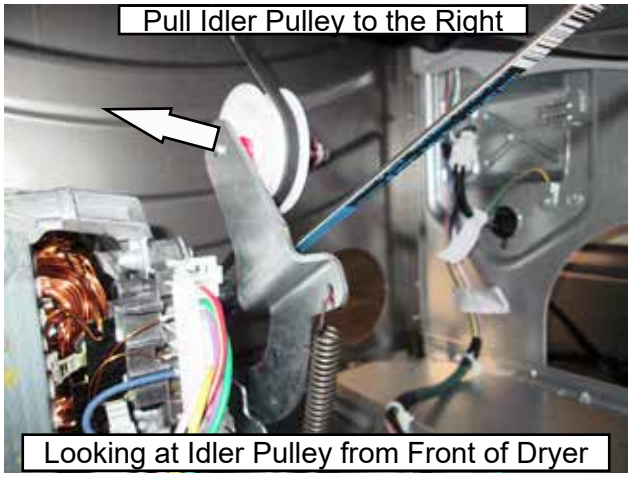
2. Disconnect the drum/drive belt from the motor. This can be done from the rear of the dryer, or from the front. If done from the rear, remove the access panel from around the vent tube.



3. Pull the idler pulley to the right, taking the pressure off of the belt. Then slip the belt off of the motor.



(*Continued next page*)



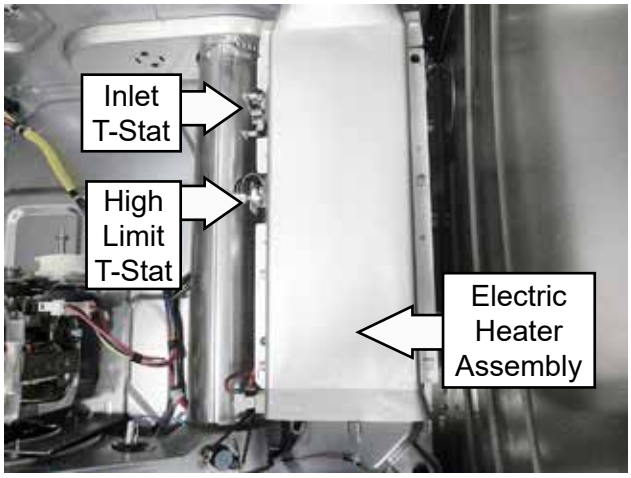
4. Using the belt as a handle, lift the drum from the cabinet.



NOTE: The felt on the front and back of the drum are not separate parts. They come with the drum.

Electric Heater Assembly

The electric heater assembly has an upper and lower heater in the housing, which comes assembled together. It also has the inlet and high limit thermostats mounted to the left side of the heater housing.

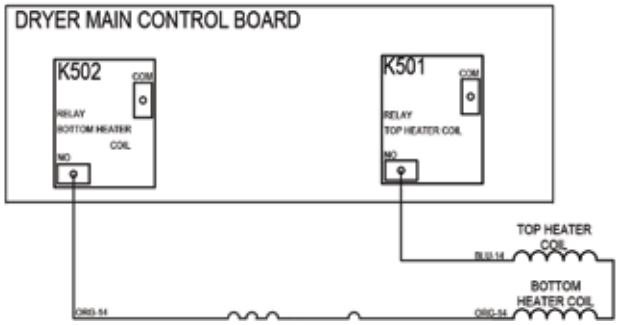


Heater Diagnosing

1. Disconnect power from the dryer.
2. Access the main board located under the top panel.



3. Disconnect either the **blue** wire from the normally open (N.0.) terminal of the K502 relay or the **orange** wire from the normally open (N.0.) terminal of the K501 relay.

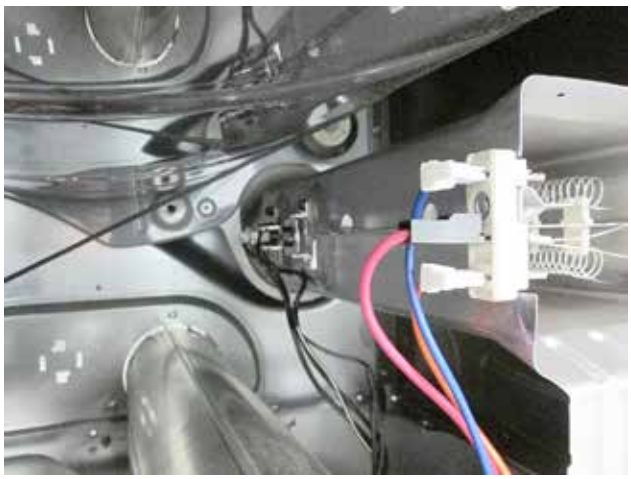


4. Using a multi-meter, test resistance between the two heater coils. This should read approximately between 36.2 Ω (ohms) to 40.3 Ω (ohms). If open, check the heater harness for damage. If not damaged, replace the heater assembly.

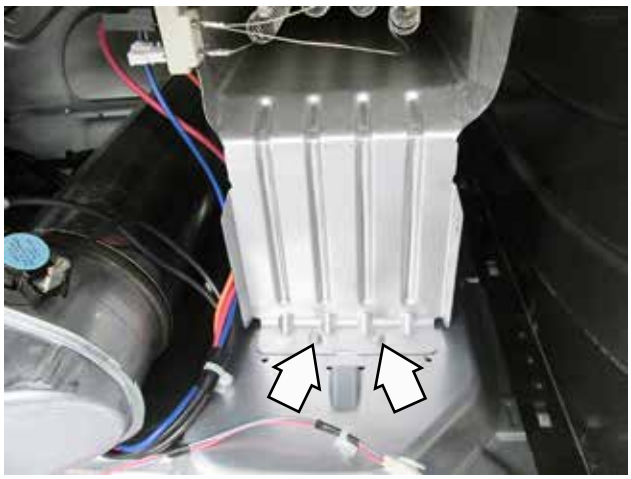
Heater Assembly Removal

1. The control panel, top panel, front panel, front drum support and drum will need to be removed (see **Control Panel and Front RJ45 Access**, **Top Cover**, **Front Panel**, **Front Drum Support** and **Drum** sections of this service guide).

2. Disconnect the harness connectors from the heater assembly and the thermostats.

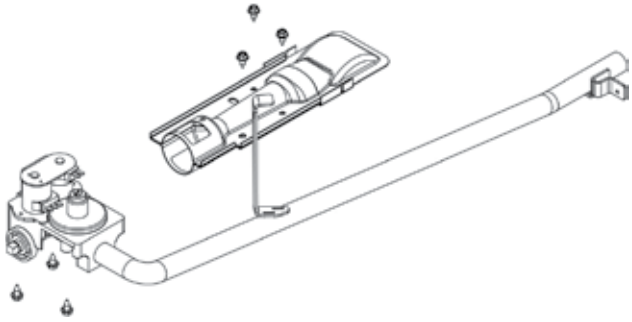


3. Remove two 1/4-inch hex-head screws securing the heater assembly to the dryer base.



Burner Assembly

The burner assembly consists of the gas valve, burner, and inlet pipe.



To convert the dryer from natural gas to LP gas, the burner assembly must be replaced. The burner cannot be converted to LP gas. Refer to LP Conversion Kit WE25M87.

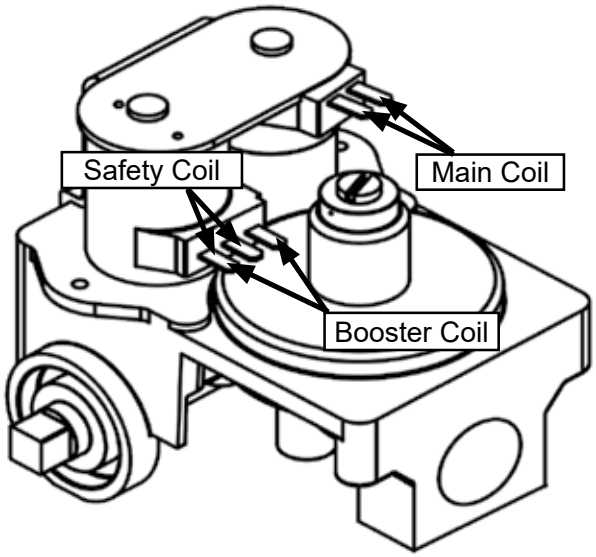
Gas Valve

The burner assembly has a gas valve that utilizes three coils. A double coil (safety and booster coils combined) and a single main coil are located on top of the gas valve in front of the combustion chamber opening. All coils can be replaced separately.

Gas Valve Diagnosing

Access the gas valve by removing the dryer drum (See **Drum Removal** section of this guide). Check coil resistance at the gas valve at the specified terminal. The gas valve coil assembly approximate resistance values are:

- **Safety Coil Terminals**: 1,400 Ω
- **Booster Coil Terminals**: 580 Ω
- **Main Coil Terminals**: 1,300 Ω



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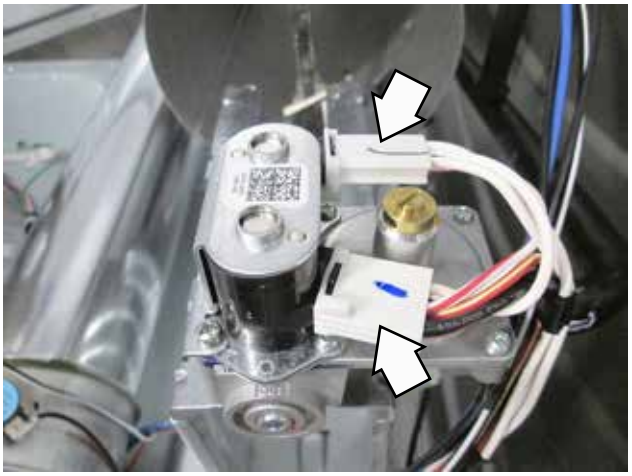
Gas Valve Removal

1. Ensure electric to the dryer has been disconnected.

2. Ensure the gas is turned off at the supply.

3. Disconnect the house supply line from the dryer.

4. Disconnect the harness connectors from the gas valve.



5. Remove three 1/4-inch hex-head screws from the bottom side of the gas valve bracket.



6. Lift the gas valve along with the black pipe going to the valve up and away from the bracket.

Radiant Sensor (Flame Detector)

The radiant sensor (flame detector) is attached to the right side of the combustion chamber. The radiant sensor is used in gas dryers to ensure the igniter is hot enough to ignite gas once it is released from the valve. When the radiant sensor is cool it is closed. This allows electricity to energize the dryer's igniter. After the radiant sensor heats up, because of its close proximity to the igniter, it opens. The power is then diverted to the valve solenoids where the valve should open and release gas. The radiant sensor rarely goes bad.

Radiant Sensor Diagnosing

1. Support the switch's terminals with a pair of needle-nose pliers while disconnecting the two connecting wires.

2. Check for continuity across the switch's terminals. There should be no resistance measured when the dryer is cool.

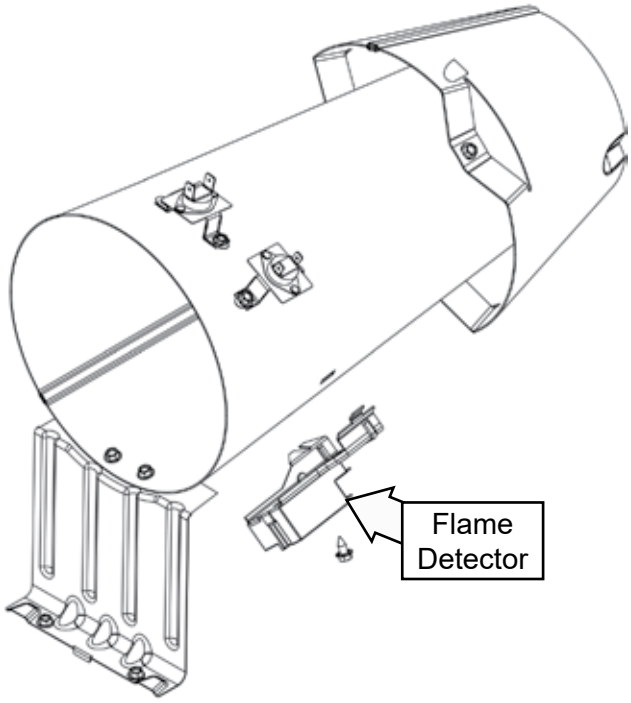
If the igniter heats up but never clicks off, replace this switch.

Radiant Sensor Removal

1. Remove the drum (see **Drum** section).

2. Disconnect the two wires from the flame detector.

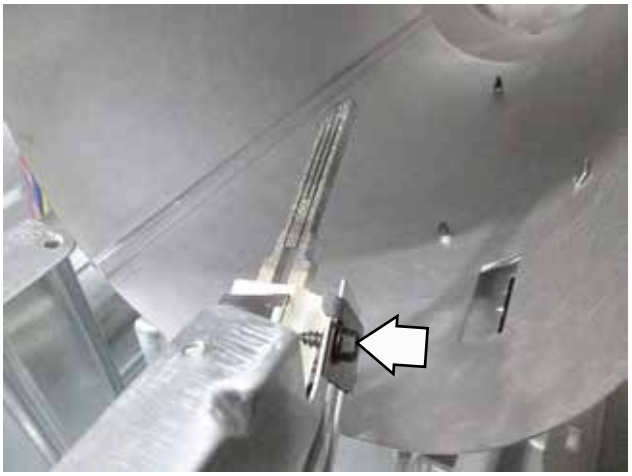
3. Remove the Phillips-head screw that holds the flame detector to the combustion chamber.



Igniter

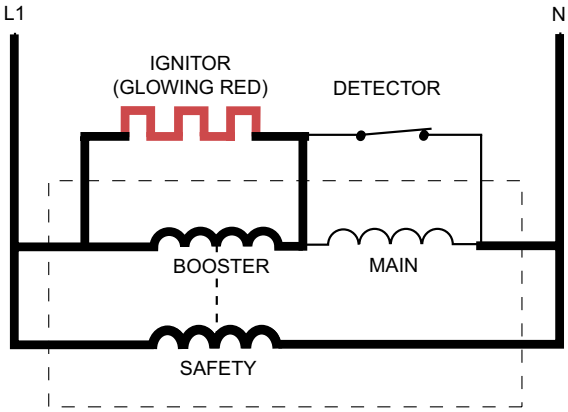
The ignitor is located at the end of the burner assembly in the combustion chamber opening and has a maximum rating of 3.5 amps. The ignitor has an approximate resistance value of 40 to 400 Ω.

The ignitor is attached to the gas valve bracket with one 1/4-inch hex-head screw. To access the ignitor, it is necessary to remove the burner assembly (see **Burner Assembly** in this section of the service guide.).

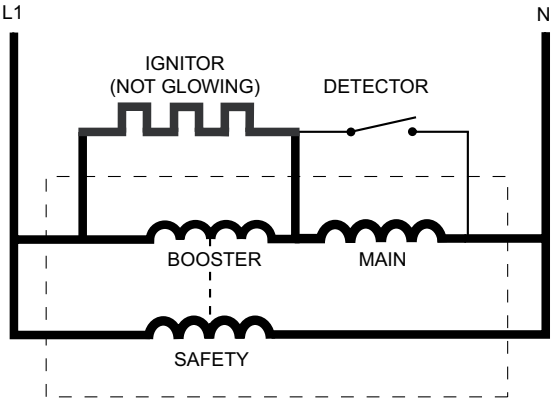


Ignitor Circuit Operation

The glo-bar ignitor circuit is made up of the following components: a gas valve with safety and main valves, ignitor, and a flame detector. The safety valve is actuated by a double coil that comprises a safety coil (resistance approximately 1,400-ohms) and a booster coil (resistance approximately 580-ohms). Both coils are needed to open the safety valve. Once energized, the safety coil alone will hold the valve open. The main valve has a single coil (resistance approximately 1,300-ohms).



Ignitor On



Gas Valve Open

The flame detector (less than 1-ohm) is mounted on the combustion chamber. It is in the normally closed position (N.C.). The flame detector is opened by the radiant heat produced by the glo-bar and once open, the flame detector will be held open by the radiant heat produced by the gas flame.

When the control system calls for heat, the following circuits are energized:

1. L1 power is sent from the timer, through the outlet control and safety thermostats, to the gas valve.
2. The neutral circuit is from the dryer harness through the door switch and motor switch M2 to M1 to the gas valve.

When the glo-bar is heating, the booster and safety coils are both energized and will open the safety valve. The main valve is closed as its coil is bypassed by the normally closed (N.C.) flame detector. When the glo-bar reaches ignition temperature, in approximately 60 seconds or less, the flame detector is heated and opens, placing the main coil in series with the glo-bar. The main valve opens, allowing gas to flow into the combustion chamber and ignite. The main coil, now in series with the glo-bar, causes the glo-bar to cool down. However, the flame detector is held open by the radiant heat from the gas flames. The booster coil is now also in series with the main coil and is essentially inoperative. Should a momentary power failure occur, the gas valve will shut off and an attempt to restart will not occur until the flame detector cools and resets, in approximately 30 seconds.

Blower Wheel

The function of the blower wheel is to circulate incoming dry air through the heating system of the dryer and into the drum. The warm moist air is then blown outside through the vent duct.

The blower wheel is attached to the shaft of the drive motor with a 1/2-inch hex-nut.

Blower Wheel Removal

1. Remove the two 1/4-inch hex-head screws securing the inlet ring to the blower housing.



2. Once the inlet ring is removed, use an adjustable wrench to stabilize the shaft of the motor. Then remove the 1/2-inch Belleville nut securing the blower wheel to the shaft of the motor.



NOTE: Remember to rotate the nut to the right clockwise (CW) to loosen the nut.



Rotate the nut to the left counter-clockwise (CCW) to tighten the nut. As shown here, the directional words "FASTEN" and "LOOSEN" are molded into the blower wheel.



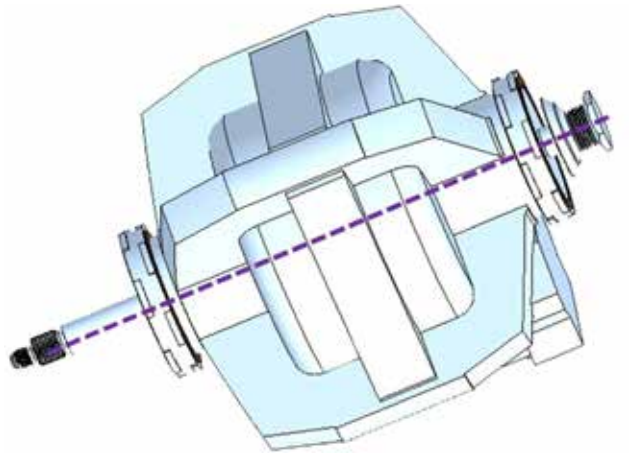
Drive Motor

The motor is a single-speed, 1/4-HP, 1750-RPM motor with an automatic reset overload protector. The overload protector is an internal component of the motor and cannot be replaced separately. The motor contains a centrifugal switch that serves three purposes: It disengages the motor start winding; engages the motor run winding: and closes the circuit contacts for the heat source.

There are two different motors. One for standard venting and one for long venting.

Standard Vent Motor

The standard vent motor has a single drive shaft that attaches to the blower on one end and a belt pulley on the other end.



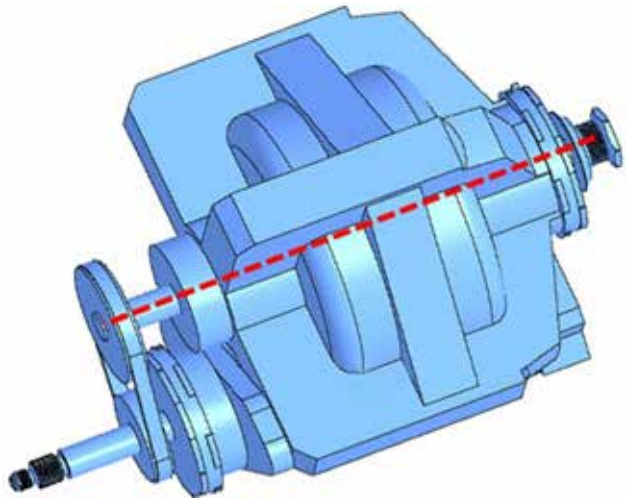
Main Motor Resistance Values

- **Start Winding**: 2.84-ohms to 3.27-ohms
- **Run Winding**: 2.82-ohms to 3.12-ohms

Long Vent Motor

The long vent motor is similar to the standard vent motor in that is has the single shaft going through the motor that has the belt pulley on the one end. On the other end of the shaft, instead of connecting directly to the blower wheel, it has a speed increaser pulley mounted to it.

The speed increaser pulley utilizes a belt to drive the second speed increaser pulley that has a second shaft attached to it. The second shaft has the splines on it that will allow the blower wheel to connect to it. This shaft spins the blower wheel at a faster rate of speed (2,250 RPM) than the main motor shaft.



Main Motor Long Vent Models Resistance Values

- **Start Winding**: 2.72-ohms to 3.12-ohms
- **Run Winding**: 2.25-ohms to 2.48-ohms

Removing the Motor

1. Disconnect power to the unit.

(*Continued next page*)

2. Remove the top panel, front panel, front drum support, blower wheel and drum (see **Top Panel**, **Front Panel**, **Front Drum Support**, **Blower Wheel** and **Drum** sections in this guide).

3. Disconnect the harness connector from the motor.



4. Unclip the two clamps that secure the motor to the motor bracket.



5. Raise the back of the motor up and slide toward the rear of the dryer.

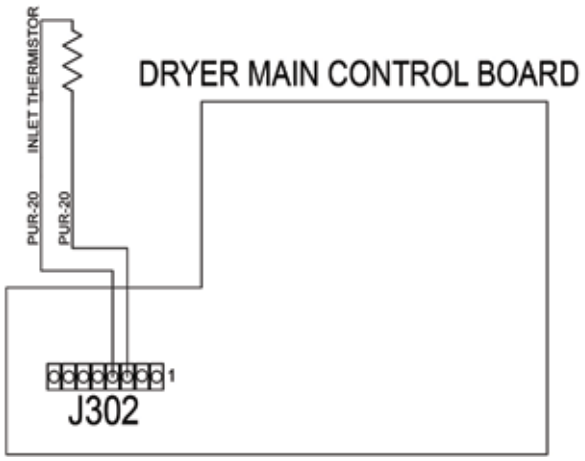


Inlet Thermistor

The inlet thermistor is located at the back of the dryer. It is mounted to the supply duct.

The thermistor has a negative temperature coefficient (as temperature increases, resistance decreases).

Resistance can be measured at the thermistor wire harness or from the main board, two **purple** wires at the J302 connector pins 3 and 4.



Thermistors Resistance Values (Ω)		
K OHMS	**TEMP.** °F	**TEMP.** °C
76-84	86	30
95-105	77	25
118-132	68	20

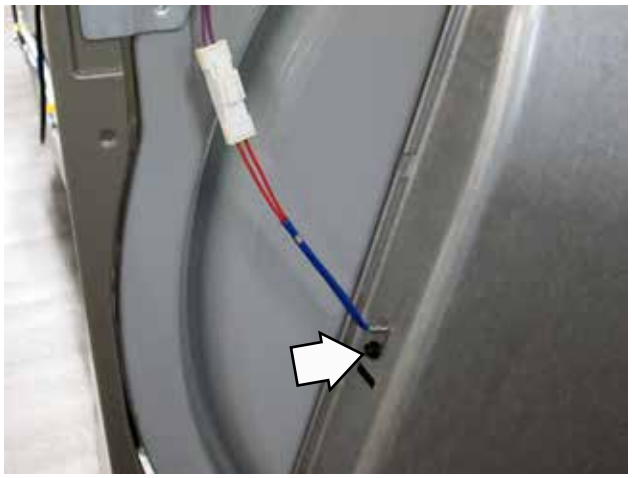
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Inlet Thermistor Removal

1. Remove the rear panel to access the thermistor.



2. Disconnect the thermistor harness connector.
3. Remove one 1/4-inch hex-head screw securing the thermistor to the supply duct and pull out from the supply duct.



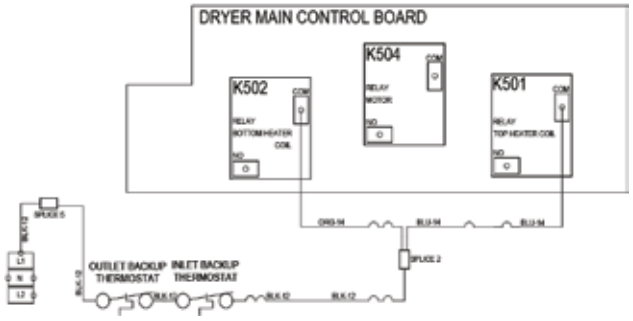


Inlet Backup Thermostat

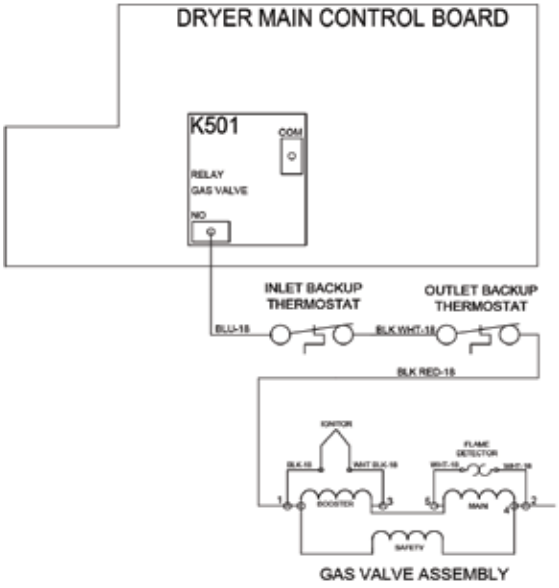
The inlet thermostat is located on the side of the electric heater on electric model dryers. The thermostat opens at 255°F and closes at 232°F. On gas dryers, it is located on top of the combustion chamber. The thermostat opens at 221°F and closes at 200°F.

Backup Thermostat Diagnosing

Continuity can be checked at the thermostat or from the main board. From the main board on the electric dryer, check from the common terminals of K502 or K501 relays to the line one side of the power cord or terminal block. **NOTE**: Disconnect the J101 connector from the main board to prevent a false reading. If there's no continuity found, either the inlet or outlet backup thermostat could be open as they are in the same circuit.

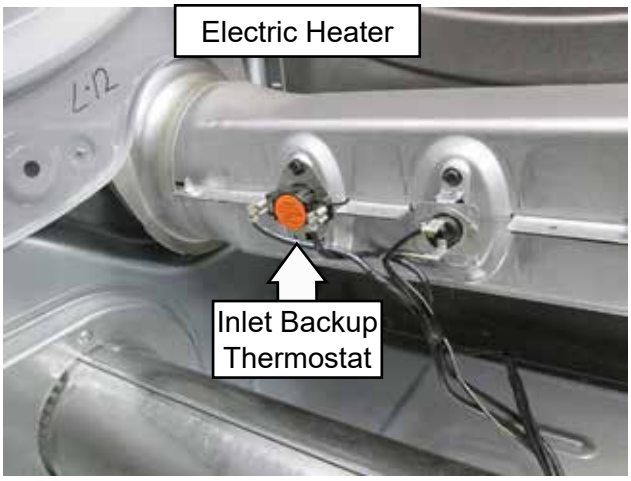


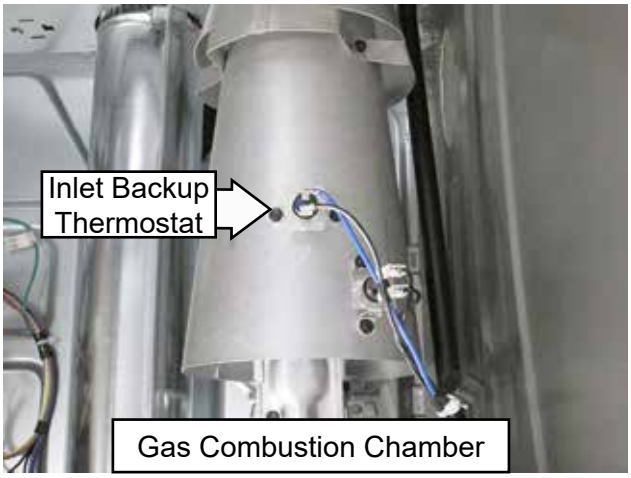
On gas dryers, continuity can be checked at the thermostat or from the normally open (N.O.) terminal on the K501 relay to gas valve. If there's no continuity found, either the inlet or outlet backup thermostat could be open as they are in the same circuit.



Inlet Backup Thermostat Removal

1. Remove the top panel, front panel, front roller support, blower wheel and drum (see **Top Panel**, **Front Panel**, **Front Drum Support**, **Blower Wheel** and **Drum** sections in this guide).
2. Disconnect the two wires connected to the thermostat.
3. Remove one 1/4-inch hex-head screw securing the thermostat to the heater and remove thermostat.



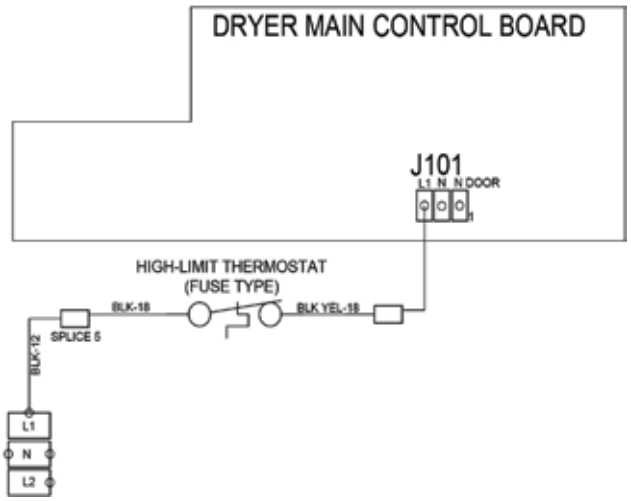


High Limit Thermostat

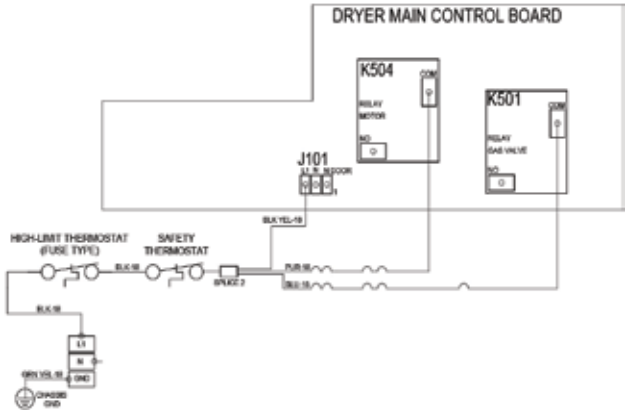
The high limit thermostat is located on the side of the electric heater on electric model dryers. On gas dryers, it is located on top of the combustion chamber. On electric dryers, it opens at 290°F. On gas dryers, it opens at 302°F.

High Limit Thermostat Diagnosing

Continuity can be checked at the thermostat or from the main board. From the main board on the electric dryer, check from the J101 connector to the line one side of the power cord or terminal block. If there's no continuity found, the high limit thermostat may be open.



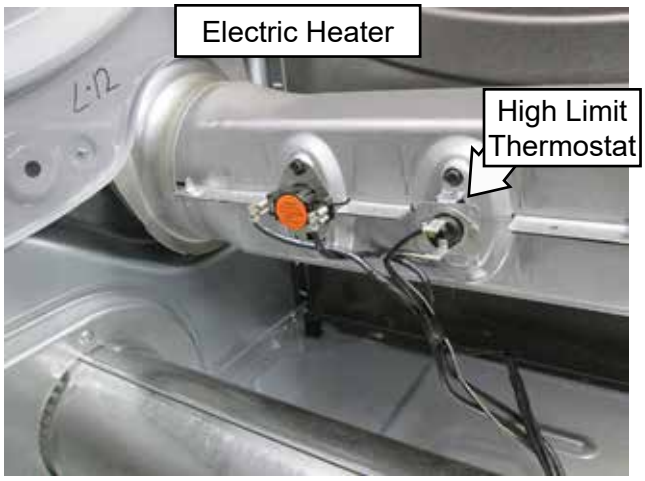
On gas dryers, check from the common terminal of either the K504 or the K501 relays, or the J101 connector on the main board to the line one side of the terminal block. If no continuity found, either the high limit or the safety thermostat may be open.

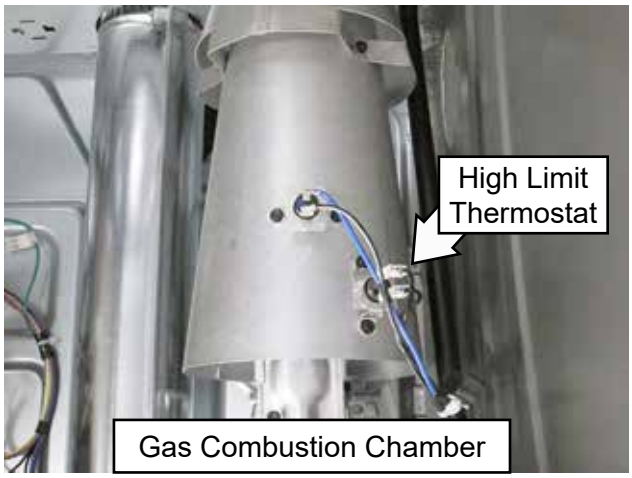


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High Limit Thermostat Removal

1. Remove the top panel, front panel, front roller support, blower wheel and drum (see **Top Panel**, **Front Panel**, **Front Drum Support**, **Blower Wheel** and **Drum** sections in this guide).
2. Disconnect the two wires connected to the thermostat.
3. Remove one 1/4-inch hex-head screw securing the thermostat to the heater and remove thermostat.





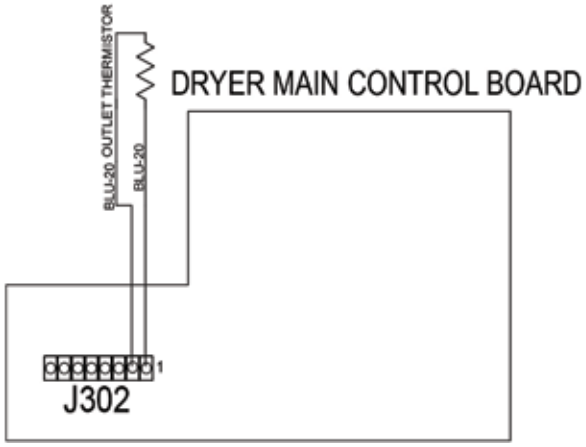
Outlet Thermistor

The outlet thermistor is located on the back of the blower housing.

The thermistor has a negative temperature coefficient (as temperature increases, resistance decreases).

Thermistors Resistance Values (Ω)		
K OHMS	**TEMP.** °F	**TEMP.** °C
76 to 84	86	30
95 to 105	77	25
118 to 132	68	20

Resistance can be measured at the thermistor wire harness or from the main board, two **blue** wires at the J302 connector, pins 1 and 2.



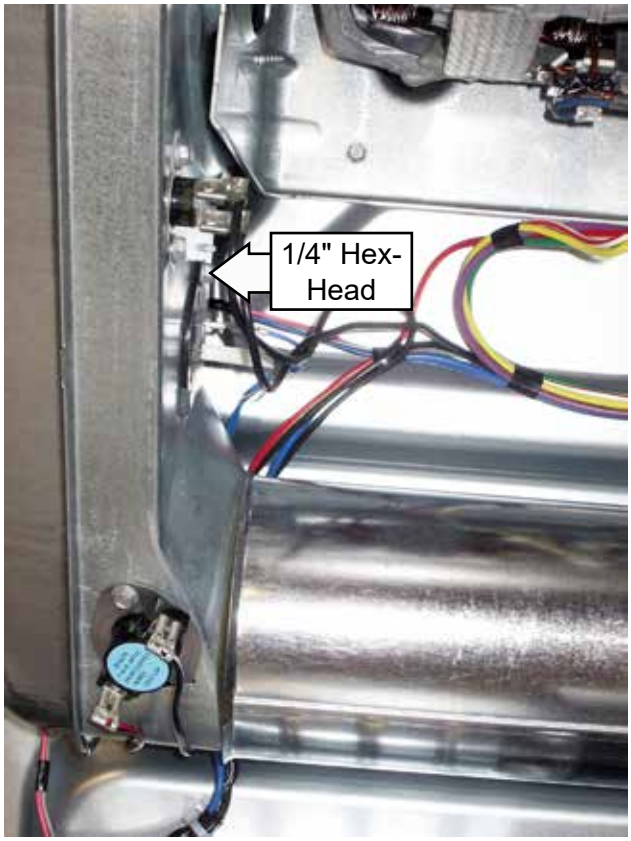
Outlet Thermistor Removal

1. The control panel, top panel, front panel, front drum support and drum will need to be removed (see **Control Panel and Front RJ45 Access**, **Top Panel**, **Front Panel**, **Front Drum Support**, and **Drum** sections in this guide) to access the outlet thermistor.



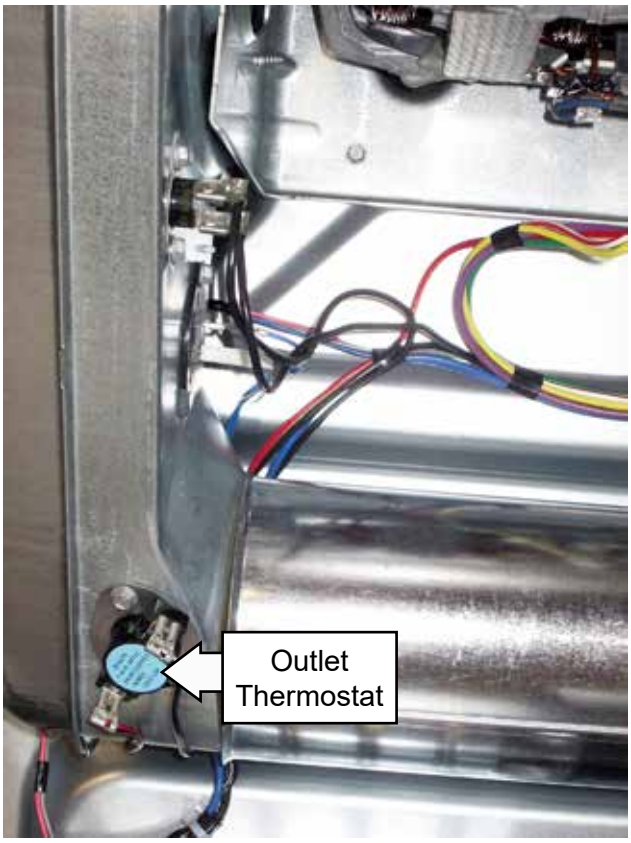
2. Disconnect the thermistor harness connector.

3. Remove one 1/4-inch hex-head screw securing the thermistor to the supply duct and pull out from the blower housing.



Outlet Thermostat

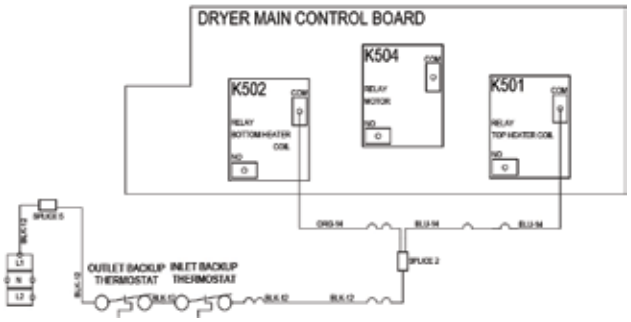
The outlet thermostat is located on the side of the blower housing on both gas and electric models.



On gas and electric dryers, it opens at 165°F and closes at 155°F.

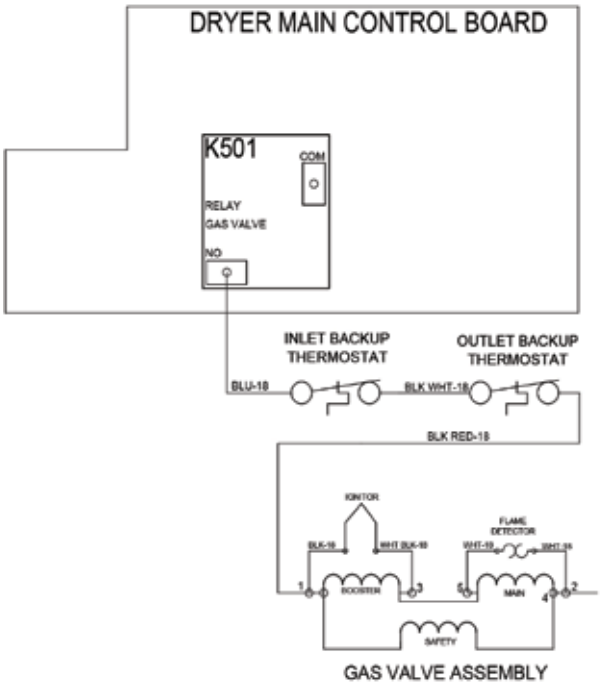
Outlet Thermostat Diagnosing

Continuity can be checked at the thermostat or from the main board. From the main board on the electric dryer, check from the common terminals of K502 or K501 relays to the line one side of the power cord or terminal block. **NOTE**: Disconnect the J101 connector from the main board to prevent a false reading. If there's no continuity found, either the outlet or inlet backup thermostat could be open as they are in the same circuit.



(Continued next page)

On gas dryers, continuity can be checked at the thermostat or from the normally open (N.O.) terminal on the K501 relay to the gas valve. If there's no continuity found, either the outlet or inlet backup thermostat could be open as they are in the same circuit.



Safety Thermostat

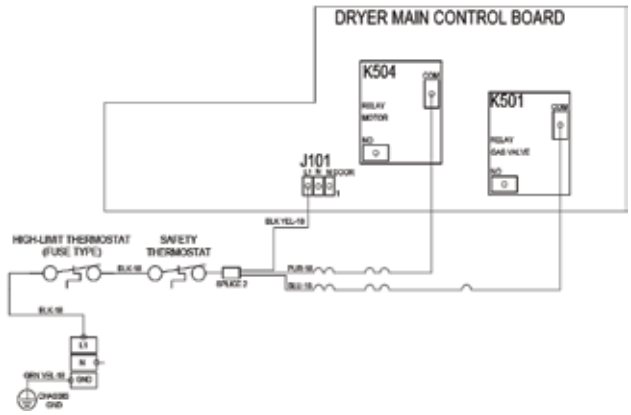
The safety thermostat is only found on the gas dryer. It is located on the back of the blower housing.



It opens at 190°F and closes at 151°F.

Outlet Thermostat Diagnosing

The safety thermostat can be checked from the common terminal of either the K504 or the K501 relays, or the J101 connector on the main board to the line one side of the terminal block. If no continuity is found, either the safety or the high limit thermostat may be open.



User Interface (UI) Board

The user interface (UI) board is mounted to the control panel assembly under the plastic cover. It consists of the display board; cycle select board and the power/pause button board. They are all connected together and come as one part.

NOTE: The cycle select knob does not need to be removed as it will stay with the control panel.

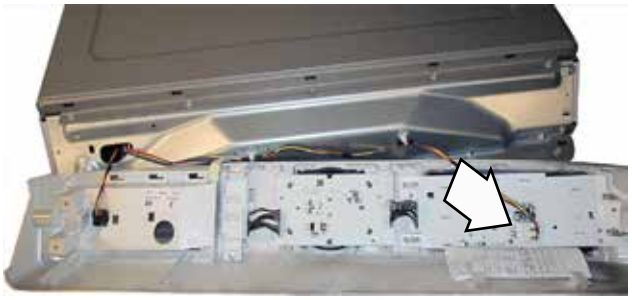
User Interface (UI) Board Diagnosing

The user interface (UI) board is powered by the main board from the J601 connector. If the user interface (UI) board is not working, check for approximately 13.5 VDC from pin 2 to pin 8 on the 10-pin connector from the main board to the user interface (UI) board. If voltage is present at the J101 connector pin 4 to pin 5 of the UI board, replace the UI board. If no voltage, check the harness and connectors. If good, replace the main board.

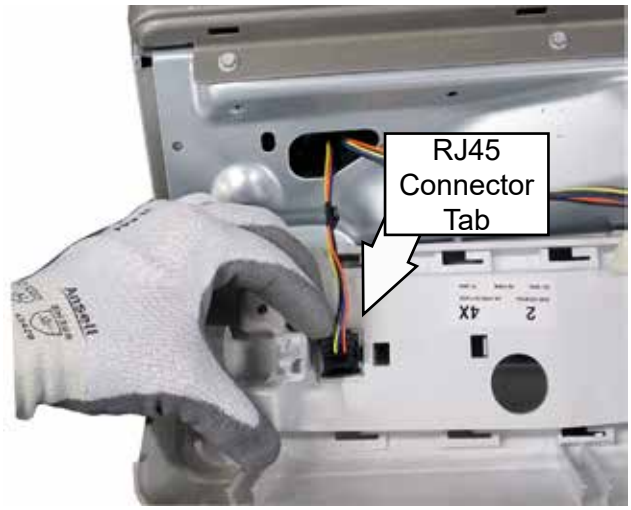
User Interface (UI) Board Removal

1. Remove the control panel (see **Control Panel and Front RJ45 Access** in the **Dryer Components** section of this service guide). Then place the control panel face down on a protective surface.

2. Remove the single harness that supplies DC voltage to the UI board.



3. Disconnect the RJ45 connector by pushing in the tab on the connector. Then rotate the connector from the control panel.



4. Remove the one Phillips-head screw for the power/start button bracket that secures the power/pause button board to the control panel.



5. Release the user interface (UI) board from the control panel by pushing in on the tabs that secures the UI board to the panel. While pushing in on the six tabs that hold the UI board to the control panel assembly, pull upwards slightly on the UI board. If the board is not held with an upward pressure on it, the tabs will refasten, not letting the board to disengage from the control panel assembly.

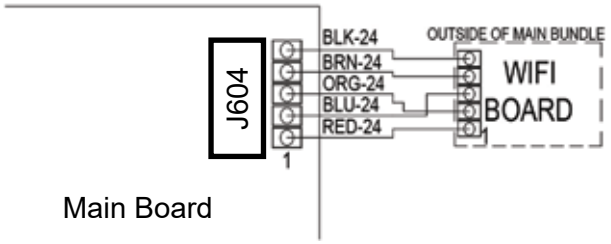


Wi-Fi Board

The Wi-Fi board is powered by the main board from the J602 connector. It is located/mounted on the housing of the main board.

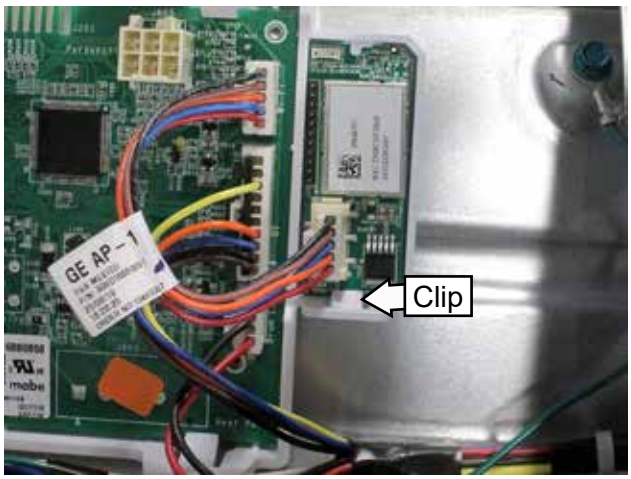
Touch Board Diagnosing

If the Wi-Fi board is not working, check for approximately 5 VDC from pin 1 to pin 5 at the J604 connector on the main board. If no voltage, check the harness and connectors. If good, replace the main board. If voltage is present, replace the Wi-Fi board.



Removing the Wi-Fi Board

1. Remove the harness connector from the Wi-Fi board.



2. Push downward on the bottom clip securing the Wi-Fi board to the main board housing. Then lift the board away from the main board housing.



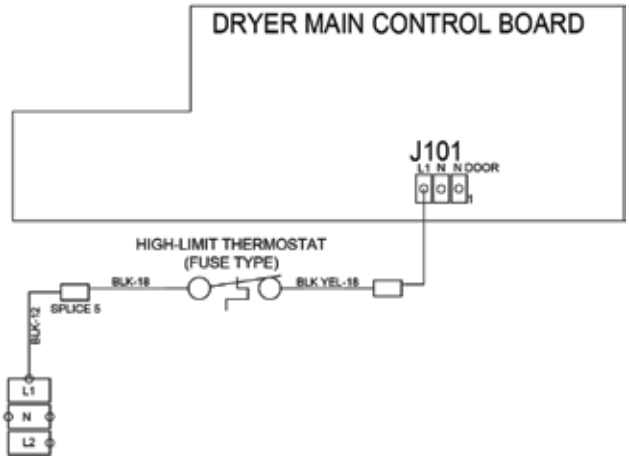
Main Board

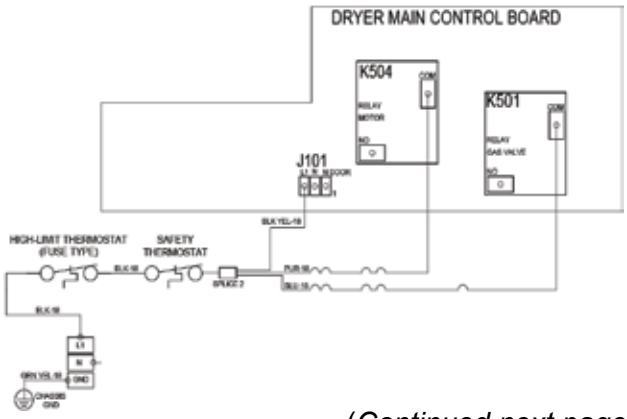
The main board is located under the top panel, mounted on a bracket on the left side.



Main Board Diagnosing

Check for 120 VAC at the outlet. If voltage is there, check for 120 VAC between the **black** and **white** wires at the J101 connector pins 2 and 3 on the main board. If no voltage is found, check the wire harness and connector integrity. If voltage is found at the main board, but no heartbeat LED flashing on the main board, check the high limit thermostat on both gas and electric models and/or the safety thermostat on gas dryers. If thermostats, harness and connectors are good, replace the main board.





(*Continued next page*)

Main Board Removal

1. Remove the Top Panel (see **Top Panel** in the **Dryer Components** section of this service guide).
2. Disconnect harness connector from the main board.
3. Lift up the tab and slide main board toward the rear of the dryer and lift from main board bracket.



Diagnostics and Service Information

Consumer Fault Code Mode

Consumer fault code mode provides a way for consumers to read the fault table from their dryers to provide them to the call takers. This will allow the service technicians to bring the correct parts to the service call.

- From an idle state only (all LED's off), press and hold Start pad for 10 seconds.
- After holding the Start pad for 10 seconds, all LED's will turn on, signifying that the user may release Start pad.

Behaviors While in Consumer Fault Code Mode

- The Pause and Door Lock LED's should be constantly blinking while in CFCM.
- The first fault, if present, will show on the display.
- Pressing the Start pad will display the next fault code.
  - Fault code will blink on the Seven Segment Display (SSD).
- At the end of the fault list, or if no faults present:
  - Seven Segment Display (SSD) will blink “—”.

Exiting Consumer Fault Code Mode

- Pressing any pad (other than Start) or turning any knob will exit Consumer Fault Code Mode.
- Consumer Fault Code Mode will time out after 10 minutes.

Service Mode

From an idle state (all LED's off) or from a standby state (LED's on but no cycle running), press and hold the Start pad while rotating cycle selection knob 180 degrees, then release Start pad.

- Once Service Mode is entered, all LED's will be flashing.
- The Cycle Selection knob is now used to control the test selection menu.
  - Rotating the knob clockwise (CW) will increment the test numbers in the display.
  - Rotating the knob counter-clockwise (CCW) will decrement the test number in the display.
- Once test number is selected, pressing Start will begin the selected test.

Exit Field Service Mode

- Field Service Mode will time out after 30 minutes if there is no user activity.
- Press and hold (3 seconds) Start pad.
- Press Power pad.

Service Mode Tests

Test No.	Test Name	Description
0	All LED's On	All LED's on the display will blink including "88" on the Seven Segment Display (SSD) at a rate of 1Hz
1	Fault Codes	• Pressing Start pad will blink the first fault code. • Press the Start button to advance to the next fault. • At end of list, OR if no fault codes are present, unit will flash "- -". • Pressing Start again at the end of the list will wrap back around to display the first fault again. • Rotate the cycle knob to end the current test and advance to the next test.
2	Personality ID	• Pressing Start/Pause will start the test. • Flash the set personality after pressing Start. • Use Seven Segment Display (SSD) to show personality. • Rotate the cycle knob to end the current test and advance to the next test.
3	MC Software Version (Critical)	• Press Start to toggle through software version number as follows (Example v01.23). • First Press: "01" on Seven Segment Display (SSD). Major Version (Pause LED will be ON). • Second Press: "23" on Seven Segment Display (SSD). Minor Version (Sensing LED will be ON). • Rotate the cycle knob to end the current test and advance to the next test.
4	MC Application Version (Non-Critical)	• Press Start to toggle through software version number as follows (Example v01.23). • First Press: "01" on Seven Segment Display (SSD). Major Version (Pause LED will be ON). • Second Press: "23" on Seven Segment Display (SSD). Minor Version (Sensing LED will be ON). • Rotate the cycle knob to end the current test and advance to the next test.
5	MC Parametric Version (Non-Critical)	• Press Start to toggle through software version number as follows (Example v01.23). • First Press: "01" on Seven Segment Display (SSD). Major Version (Pause LED will be ON). • Second Press: "23" on Seven Segment Display (SSD). Minor Version (Sensing LED will be ON). • Rotate the cycle knob to end the current test and advance to the next test.
6	User Interface Software Version (Critical)	• Press Start to toggle through software version number as follows (Example v01.23). • First Press: "01" on Seven Segment Display (SSD). Major Version (Pause LED will be ON). • Second Press: "23" on Seven Segment Display (SSD). Minor Version (Sensing LED will be ON). • Rotate the cycle knob to end the current test and advance to the next test.
7	User Interface Software Version (Non-Critical)	• Press Start to toggle through software version number as follows (Example v01.23). • First Press: "01" on Seven Segment Display (SSD). Major Version (Pause LED will be ON). • Second Press: "23" on Seven Segment Display (SSD). Minor Version (Sensing LED will be ON). • Rotate the cycle knob to end the current test and advance to the next test.

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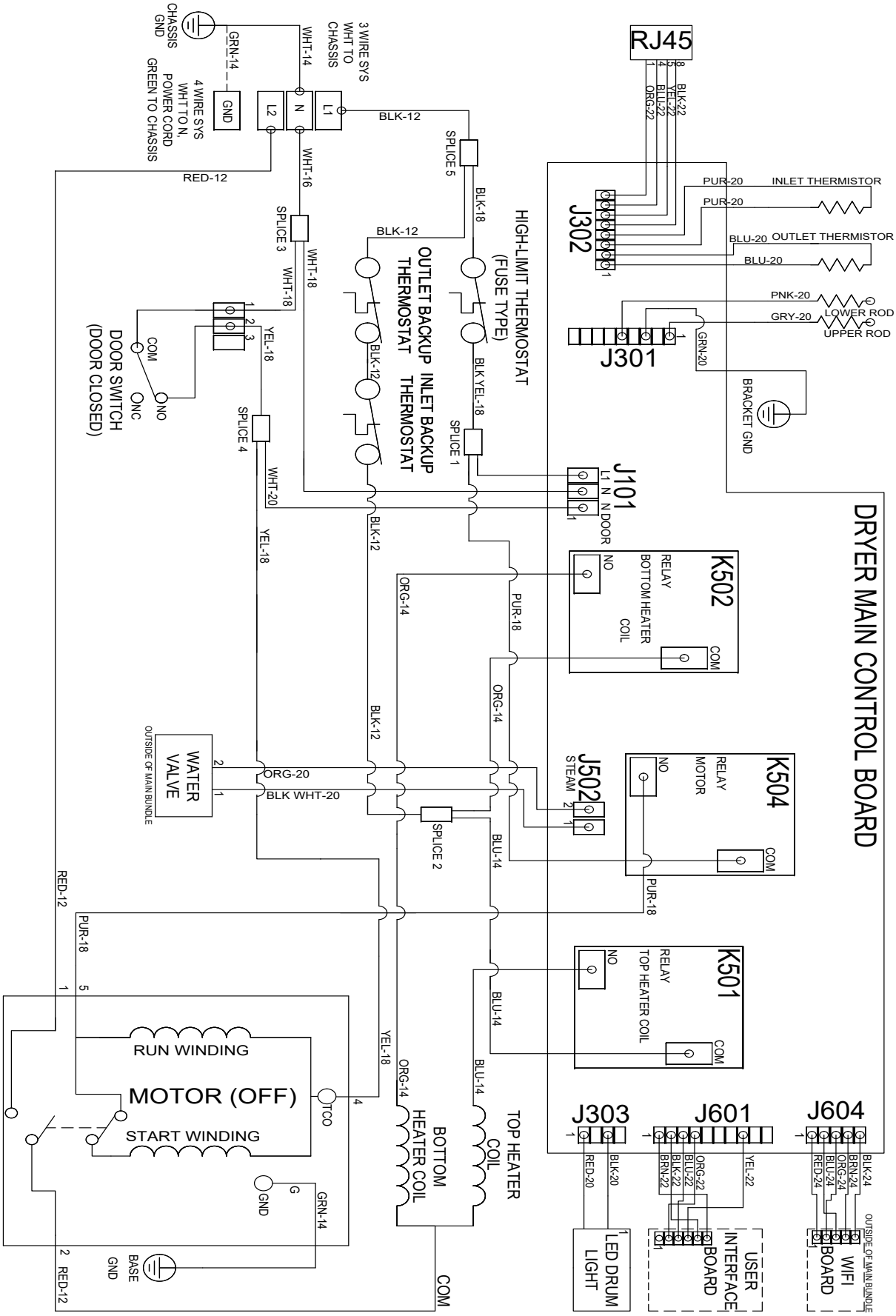
Test No.	Test Name	Description
8	Outlet Thermistor Test	• Press Start to begin test. • Control will display outlet temperature in °F using Seven Segment Display (SSD). • Control will start drum motor during test. • Electric dryers will turn on the outer coils only during test. • Gas dryers will turn on heat during this test. (Gas only has one output for heat). • Opening the door will stop the motor, turn off heat and exit test. • Temperatures will be limited to COTTONS high max temperatures. When max temperature is reached, motor will turn off, but temperature will still be displayed. • After 5 minutes, drum motor and heat will turn off. • Rotate the cycle knob to end current test and advance to next test.
9	Inlet Thermistor Test	• Press Start to begin test. • Control will display inlet temperature in °F using Seven Segment Display (SSD). • Control will start drum motor during test. • Electric dryers will turn on the inner coils only during test. • Gas dryers will turn on heat during this test. (Gas only has one output for heat). • Opening the door will stop the motor, turn off heat and exit test. • Temperatures will be limited to COTTONS high max temperatures. When max temperature is reached, motor will turn off, but temperature will still be displayed. • After 5 minutes, drum motor and heat will turn off. • Rotate the cycle knob to end current test and advance to next test.
10	Moisture Sensor Test	• Press Start to begin test. • The control will display the voltage reading from the moisture sensor in tenths of a volt, with one decimal place accuracy, using two digits of the Seven Segment Display (SSD). For example: 4.3 volts will be displayed as 43. The valid range for this is from 0 to 5 volts. • When nothing is contacting either signal rod, display should indicate approximately 5 volts. When a damp rag is placed across signal rods, voltage should drop toward 0 volts. • Rotate the cycle knob to end current test and advance to next test.

Test No.	Test Name	Description
11	Door Open/ Close Test	• Press the Start button to begin test. • The control will display "dc" if the door is closed or "do" if the door is open. • Rotate the cycle knob to end current test and advance to next test.
12	Door Latch	• Latch Disabled Test. Open the door. • Press the Start button. • The control should display "LC" for latch clear. • Latch Set Test. Close the door. Press the Start button. • The control should display "LS" for latch set. • Rotate the cycle knob to end current test and advance to next test.
13	Clear Fault Codes	• Pressing the Start button will clear all Fault Codes. • When cleared the display will show " - - ". • Rotate the cycle knob to end current test and advance to next test.
14	Steam Valve	• Be sure the door is closed. • Press the Start button to toggle the water valve On and Off. • Seven Segment Display (SSD) will show either “on” or “OFF”. • Valve will have a time limit of 1-minute. • Valve will turn off upon exit of test. • Rotate the cycle knob to end current test and advance to next test.
15	Change Personality	• Pressing Start/Pause will start the test. • Pressing the Start pad will display the next valid personality. • Pressing and holding the Start pad to select the personality and exit Service Mode.

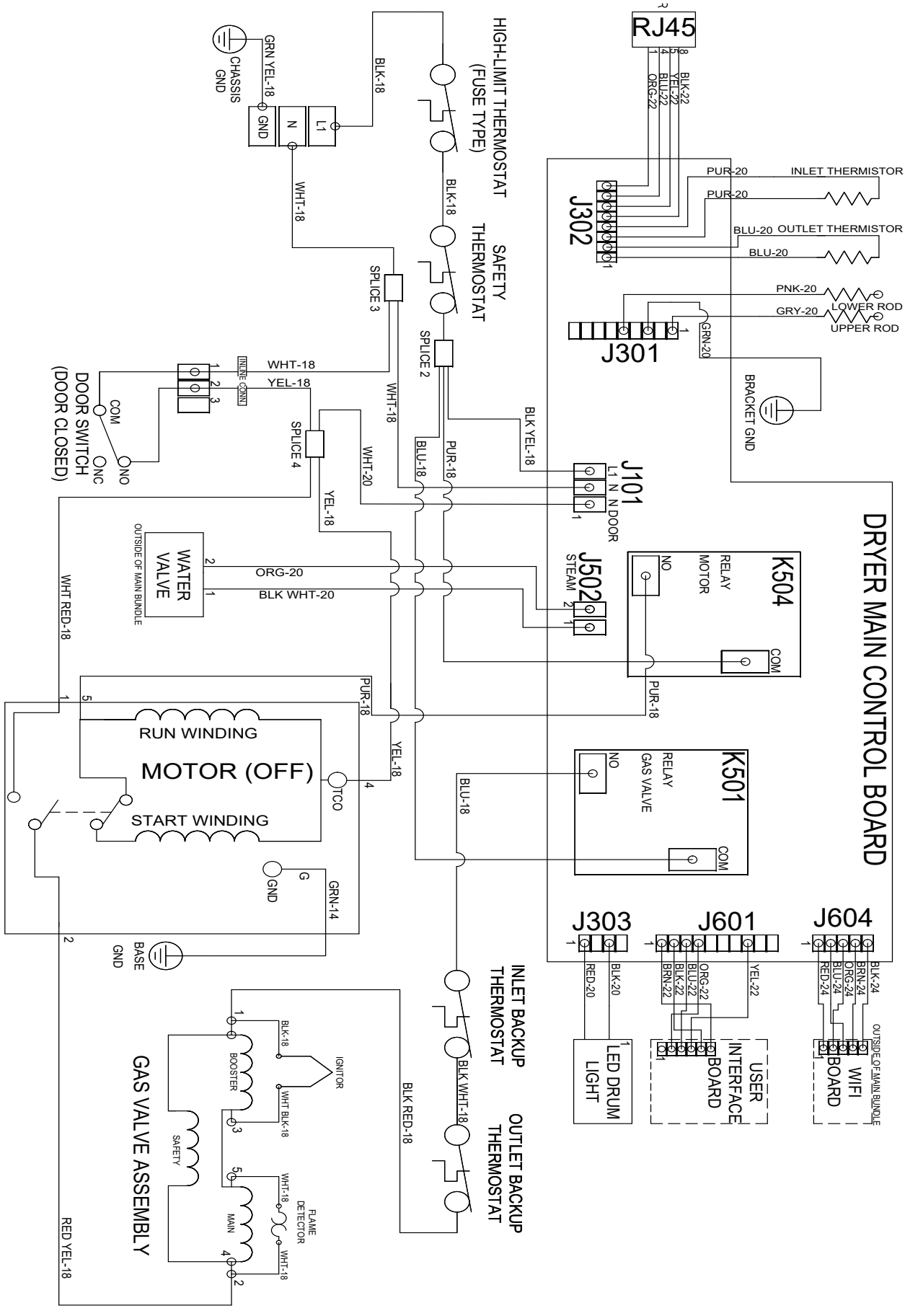
Fault Codes

Fault Code	Description	Trigger Condition	Action
1	Inlet Thermistor Failure	Thermistor readings are out of range.	• Check harness and connections. If good, replace thermistor.
2	Outlet Thermistor Failure	Thermistor readings are out of range.	• Check harness and connections. If good, replace thermistor.
6	Stuck Button	If a button is depressed for 1 minute, it will be logged as a stuck button.	• Check and replace the user interface (UI) board if necessary.
7	Miss Wire	L2/N are mis-wired.	• L2 and N need to be rewired. The display will show "E7".
8	Door Latch Stuck	If five cycles are run and the DOOR_LATCH_ SIGNAL has not gone open, then this error is set.	• Check and replace door switch and/or harness, if necessary.
9	Dry Load Detection Trip	The dry load detection algorithm has been tripped.	• Check and replace outlet/inlet thermistor, if necessary.
10	Empty Drum Detection Tripped.	Empty drum detection algorithm has been tripped.	• Check and replace sensor rods and/or harness, if necessary.
11	Blocked Vent	The blocked vent algorithm has detected a blockage.	• Check the vent and clear, if blocked.
13	Door Switch Signal Stuck Closed	If five cycles are run and the DOOR_STATE signal in the hardware door switch detection circuit has not gone open, then this error is set.	• Check and replace door switch, harness and/or main board, if necessary.
14	Door Latch Pulsing Error	Malfunction of door switch detection circuit.	• Check and replace door switch, harness and/or main board, if necessary.
15	Critical Flood Level by Gallons	Malfunction of door switch detection circuit.	• Check and replace door switch, harness and/or main board, if necessary.
19	Door Latch Lost In Run	This can happen during normal operation when power brownout occurs.	• If the issue is persistently happening, replace the main board.

Electric Schematic



Gas Schematic



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