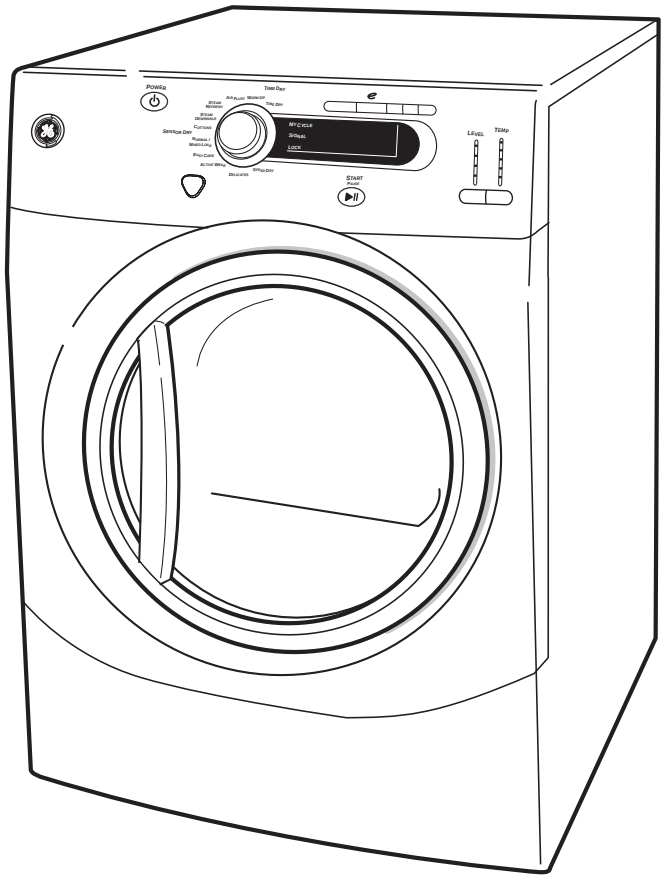
GE Appliances

Technical Service Guide

March 2011

GE HA Dryer With Mist

GFDS350
GFDS355
GFDN240
GFDN245



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GE Appliances
General Electric Company
Louisville, Kentucky 40225

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

If the information in this manual is not followed exactly, fire or explosion may result causing property damage, personal injury or death. If you smell gas:

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in the building.
- Immediately call the gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach the gas supplier, call the fire department.

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.

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Introduction

The two GFDS model dryers incorporate 2 steam features. The steam cycles are: ***Steam Refresh*** and ***Steam Derinkle***.

These units do not utilize a separate steam generator. They use a water valve and a steam nozzle that functions as a "misting" orifice. It works in conjunction with the heat generated by the dryer to de-wrinkle clothing.

- ***Steam Refresh*** - Freshens up to five slightly wrinkled dry garments, reducing wrinkles and odors to extend for another wear.
- ***Steam Dewrinkle*** - Helps remove stubborn wrinkles from larger loads quickly and conveniently, even from clothes left in the dryer from the day before.

A "Y" connector installed on the washer's cold water inlet hose supplies water to the water valve on the rear of the dryer. An internal hose carries the water to the misting orifice.

Other Features Include:

- Rotary electronic controls - Simplify cycle selection with easy-to-use rotary dial controls.
- eDry option - Energy-saving option reduces dry temperatures on select cycles without sacrificing performance.
- 5 heat selections - Offer enhanced drying performance and fabric care.
- My Cycles - Custom cycle that can be set for specific or frequent needs.
- 24-hour Delay Start - Set the dryer to begin cycles whenever it's convenient for you.
- Active Wear cycle - Specific settings to take special care of clothing worn for active sports exercise.
- Speed Dry - Quickly dries items and small loads for families on the go.
- Up to 90 ft. venting capability - Has long equivalent ducting performance for more flexible installation.
- Deluxe dryer rack - Allows tumble-free drying of items like washable sweaters, sneakers, and stuffed animals.
- Large 7.5-cubic foot stainless steel dryer drum.
- Interior Light
- Dual Thermistors - Thermistors are more sensitive to temperature changes and can relay the information faster than thermostats. The dryer utilizes dual thermistors to monitor incoming air temperature as well as air temperature leaving the drum. The sensors work together with the heater and the blower to provide consistent, even heat.
- Sensor Dry Plus™ - A moisture sensor allows the control to monitor the fabric for moisture content and end the cycle at the desired moisture level.
- Built-in service test mode. Specific dryer components can be operated. Error codes are recorded and accessible on the control panel display.
- Reversible Door
- ADA Compliant

Nomenclature

G F D S 3 5 0 E V W W

Brand
P = Profile
G = General Electric

Configuration
T = Top Load
F = Front Load

Product
W = Washer
D = Dryer

Key Feature
S = Steam
N = None

Series

Fuel
E = Electric
G = Gas

Model Year Designator
V = 2011

Color
WW = White
BB = Black
MV = Metallic Red
MG = Metallic Gold
MS = Metallic Block

The nomenclature tag is located on the front panel inside the door.

Note: The technical sheet is located inside the control panel.

Serial Number

The first two characters of the serial number identify the month and year of manufacture.

Example: *AV123456S = January, 2011*

A - JAN	2011 - *V*
D - FEB	2010 - T
F - MAR	2009 - S
G - APR	2008 - R
H - MAY	2007 - M
L - JUN	2006 - L
M - JUL	2005 - H
R - AUG	2004 - G
S - SEP	2003 - F
T - OCT	2002 - D
V - NOV	2001 - A
Z - DEC	2000 - Z

The letter designating the year repeats every 12 years.

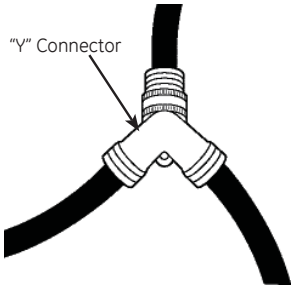
Example:
T - 2010
T - 1998
T - 1986

Water Line Connection

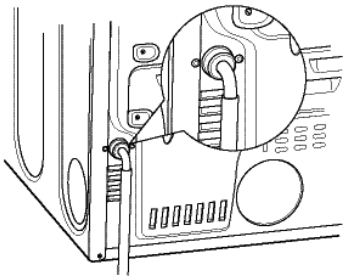
Connecting Inlet Hoses.

To produce steam, the dryer must connect to the cold water supply. Since the washer must also connect to the cold water, a "Y" connector is inserted to allow both inlet hoses to make that connection at the same time.
NOTE: Use the new inlet hoses provided; never use old hoses.

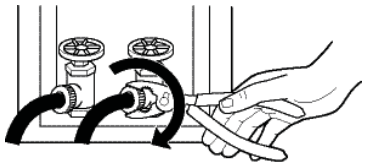
Connect to Cold Water Supply



1. Turn the cold water faucet off. Remove the washer inlet hose from the washer fill valve connector (cold).
2. Ensure the rubber flat washer is in place and screw the female coupling of the short hose onto the washer fill valve connector. Tighten by hand until firmly seated.
3. Attach the female end of the "Y" connector to the male coupling of the short hose. Ensure the rubber flat washer is in place. Tighten by hand until firmly seated.
4. Insert the filter screen in the coupling of the washer's inlet hose. If a rubber flat washer is already in place remove it before installing the filter screen. Attach this coupling to one male end of the "Y" connector. Tighten by hand until firmly seated.



5. Ensure the rubber flat washer is in place and attach the dryer's long inlet hose to the other male end of the "Y" connector. Tighten by hand until firmly seated.
6. Ensure the rubber flat washer is in place and attach the other end of the dryer's long inlet hose to the fill valve connector at the bottom of the dryer back panel. Tighten by hand until firmly seated.

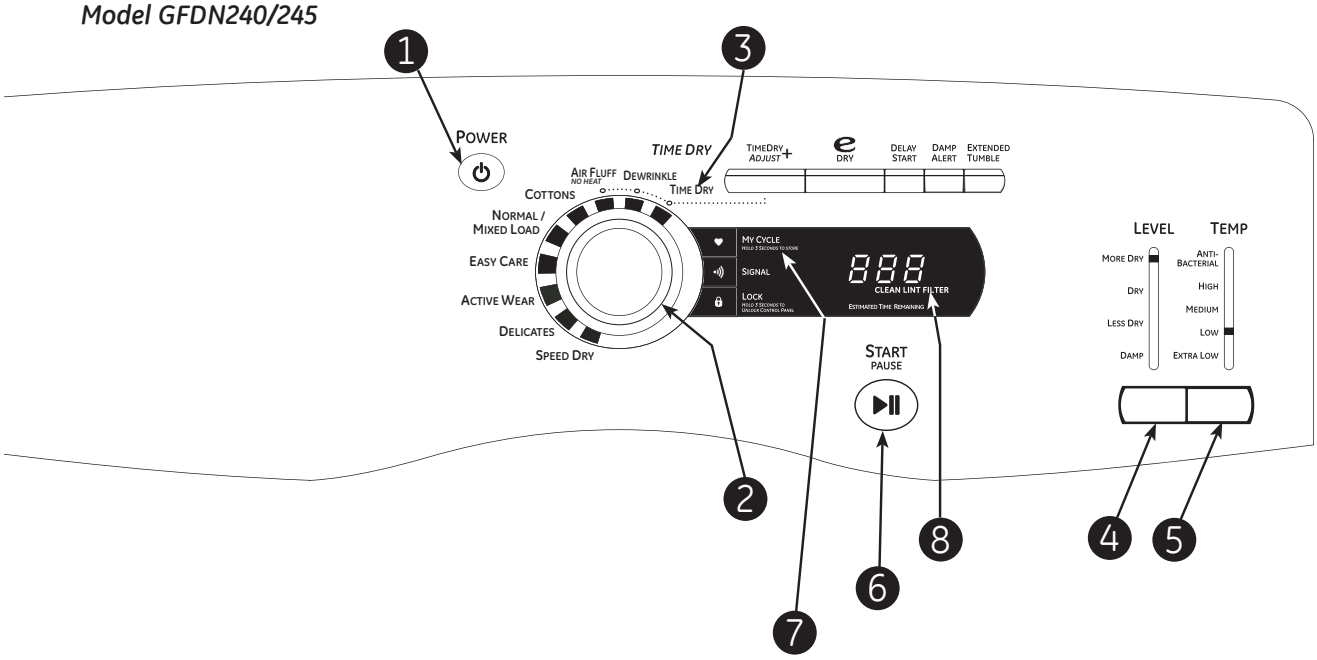


7. Using pliers, tighten all the couplings with an additional two–thirds turn.
   NOTE: Do not overtighten. Damage to the couplings may result.
8. Turn the water faucet on.
9. Check for leaks around the "Y" connector, faucet and hose couplings.

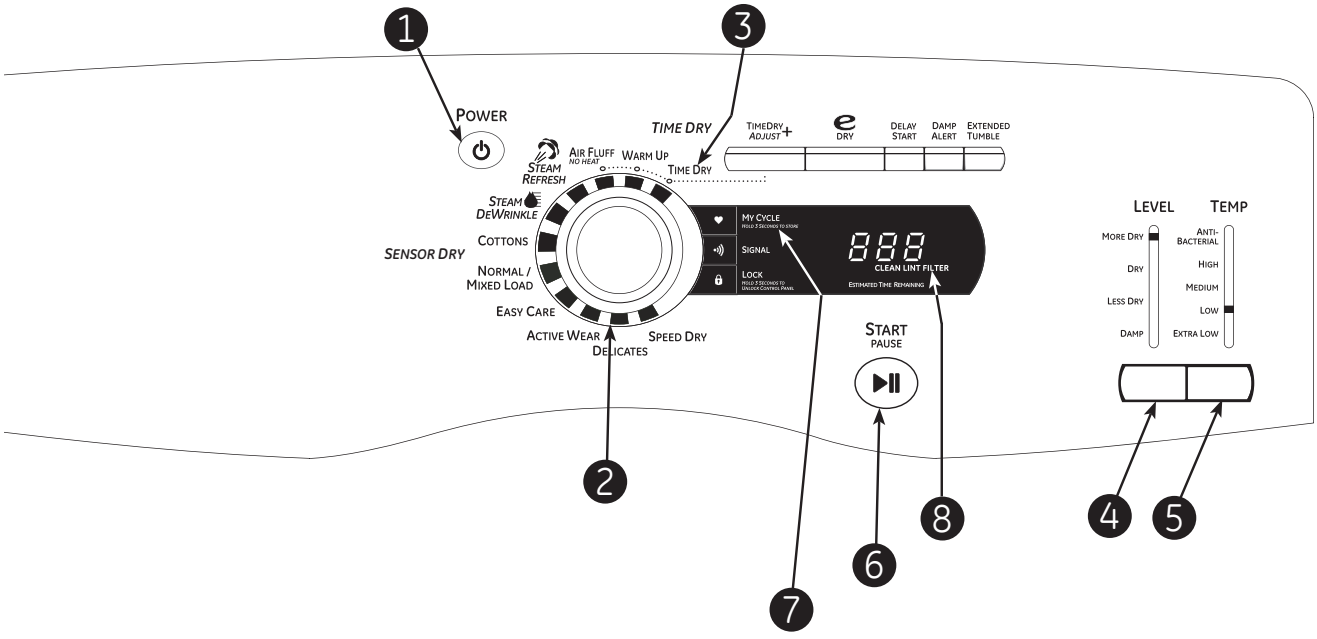
About the dryer control panel.

You can locate your model number at the top inside of the door opening.

Model GFDN240/245



Model GFDS350/355



(*Continued next page*)

1 *Power*

Press to "wake up" the display. If the display is active, press to put the dryer in the standby mode.

***NOTE:** Pressing **POWER** does not disconnect the appliance from the power supply.*

2 *Dry Cycles*

The dry cycle controls the length and tumble speed of the drying process. The chart below will help you match the dry setting with the loads.

Sensor Cycles	*Description*
COTTONS	For cottons and most linens.
NORMAL/MIXED LOADS	For loads consisting of cottons and poly-blends.
EASY CARE	For wrinkle-free and permanent press items.
ACTIVE WEAR	Clothing worn for active sports exercise and some casual wear. Fabrics include new technology finishes and stretch fibers such as Spandex.
DELICATES	For lingerie and special-care fabrics.
SPEED DRY	For small loads that are needed in a hurry, such as sports or school uniforms. Can also be used if the previous cycle left some items damp, such as collars or waistbands.

Timed Dry Cycles	*Description*
WARM UP	Provides 10 minutes of warming time to warm up clothes.
AIR FLUFF	Use this feature to tumble items without heat.
DEWRINKLE *(on some models)*	For removing wrinkles from items that are dry or slightly damp. This cycle is not recommended for delicate fabrics.
STEAM REFRESH *(on some models)*	For slightly wrinkled dry garments. Significantly reduces wrinkles on up to 5 garments. After the ***STEAM REFRESH*** Cycle, the unit will beep and display "0:00." If the unit is not turned off or if the door is not opened, the dryer will continue to tumble for 30 minutes. At the end of 30 minutes, it will display "0:00" and the cycle will be complete. ***Note:*** A single extremely light fabric item may need to have an additional item included in the ***STEAM REFRESH*** cycle to achieve optimum results.
STEAM DEWRINKLE *(on some models)*	For use with larger loads than ***STEAM REFRESH***. Ideal for loads left in dryer for an extended time.

My Cycle	*Description*
MY CYCLE	Press to use, create or modify custom dry cycles. (See page 8 for more details)

3 *Timed Dry*

Use to set your own dry time. ***TIMED DRY*** is also recommended for small loads

To use TIMED DRY:

1. Turn dry cycle dial to ***TIMED DRY***.

2. Increase the drying time by pressing the ***TIMEDRY ADJUST*** + button.

Note: This button only increases the time. When max time is reached, pressing the button again will reset the counter to the lowest setting.

3. Select the ***TEMP.***

4. Close the door.

5. Press ***Start***

(Continued Next Page)

4 Sensor Dry *"Level"*

The sensor continuously monitors the amount of moisture in the load. When the moisture in your clothes reaches your selected dry level, the dryer will stop.

Note: Sensor dry ***"LEVEL"*** only works for ***COTTONS, NORMAL/MIXED LOAD, ACTIVE WEAR, DELICATES, and SPEED DRY***.

5 Dry "*Temp*"

You can change the temperature of your dry cycle.

ANTI-BACTERIAL	This option may only be used with ***COTTONS*** or ***NORMAL/MIXED LOAD*** cycles. This option reduces (on some models) certain types of bacteria by 99.9%, including: Staphylococcus aureus, Pseudomonas aeruginosa and Klebsiella pneumoniae*. The anti-bacterial process occurs when high heat is used during a portion of this drying cycle. ***NOTE:*** Do not use this cycle on delicate fabrics. * The Anti-Bacterial Cycle is Certified by *NSF International (formerly National Sanitation Foundation) to NSF Protocol P154 Sanitization Performance of Residential Clothes Dryers.* NSF Protocol P154 Sanitization Performance of Residential Clothes Dryers
HIGH	For regular to heavy cottons.
MEDIUM	For synthetics, blends and items labeled permanent press.
LOW	For delicates, synthetics and items labeled *Tumble Dry Low*.
EXTRA LOW	For lingerie and special-care fabrics.

6 *START*

Press to start a dry cycle. If the dryer is running, press it once and it will pause the dryer.
Press it again to resume the dry cycle.

7 *My Cycle*

Set up your favorite combination of settings and save them here for one touch recall.
These custom settings can be set while a cycle is in progress.

To store a MY CYCLE combination of settings:

1. Select your drying cycle.
2. Change DRY ***"TEMP"***, and SENSOR DRY ***"LEVEL"*** settings to fit your needs.
3. Select any drying ***OPTIONS*** you want.
4. Press and hold the MY CYCLE pad for three seconds to store your selection. A beep will sound and the pad will light up.

To recall your stored MY CYCLE combination:

Press the ***MY CYCLE*** button before drying a load.

To change your stored MY CYCLE combination:

Follow steps 1–4 in ***"To store a MY CYCLE combination of settings"***.

8 *"CLEAN LINT FILTER" (message)*

(This message represents only a reminder and does ***not*** always appear when filter needs cleaning. The filter should be cleaned after every drying cycle is complete.)

This message will disappear after the ***START*** button is pressed. Even though you may have already cleaned the filter (before or after the ***POWER*** button has been pressed), the ***"CLEAN LINT FILTER"*** message will still be displayed until the ***START*** button is activated.

(Continued Next Page)

About cycle options.

NOTE: Not all features are available on all dryer models. ***GEAppliances.com***

EXTENDED TUMBLE

Extended Tumble

Minimizes wrinkles by adding approximately 60 minutes of no-heat tumbling after clothes are dry. The beeper will sound every two minutes as a reminder to remove the clothes. The ***ESTIMATED TIME REMAINING*** display will show ***00***.

The Extended Tumble time does not get added to the cycle time on the display

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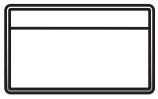
DAMP ALERT

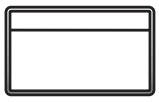


Damp Alert

This option causes the dryer to beep when clothes have dried to a damp level. Remove items that you wish to hang dry. The ***DAMP ALERT*** will only beep when this option is selected.

Removing clothes and hanging them when they are damp can reduce the need to iron some items.

DELAY START



Delay Start

Use to delay the start of your dryer.

1. Choose your dry cycle and any options.
2. Press ***DELAY START***. You can increase the delay time in 1 hour increments using the ***DELAY START*** button.
3. Press the ***START*** pad to start the countdown.

NOTES:

- If the door is opened while the dryer is in ***DELAY START***, the countdown time will not restart unless the door is closed and ***START*** has been pressed again.

e-DRY

Reduces the total energy consumption of specific dryer cycles by adjusting certain heat settings.

Note: *Cycle times will change when* ***e-DRY*** *is selected.*

This feature can be used with ***DELICATES, ACTIVE WEAR, EASY CARE, NORMAL/MIXED LOADS*** and ***COTTONS.***

Signal

Alerts you that the cycle is complete. The beeper will continue to sound every minute for the next 5 minutes, until the clothes have been removed. The clothes should be removed when the beeper goes off so wrinkles don't set in.

Press ***SIGNAL*** to select low, medium or high volume, or to turn the beeper off.

(Continued Next Page)

About cycle options. ***NOTE:*** Not all features are available on all dryer models.

Lock

You can lock the controls to prevent any selections from being made. You can also lock the controls after you have started a cycle.

Children cannot accidentally start the dryer by touching pads with this option selected.

To lock the dryer, press the lock icon. To unlock the dryer, press and hold the lock icon for 3 seconds.

The Lock icon next to the timer will light up when the controls are locked.

Estimated Time Remaining

Displays the approximate time remaining until the end of the cycle.

As the cycle begins, you will see an initial approximate total cycle time in the display. Then lights will "race" in the display. This means the dryer is continuously monitoring the amount of moisture in the load. The lights will continue until the dryer senses a low level of moisture in the load. At that point, the dryer will calculate and display the approximate time remaining.

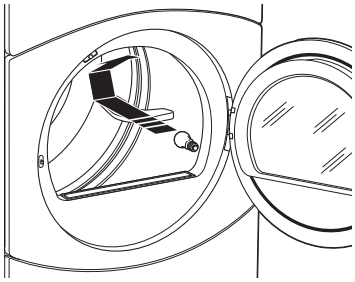
My Cycle

To save a favorite cycle, set the desired settings and hold down the ***MY CYCLE*** button for 3 seconds. A beep will sound to indicate the cycle has been saved.

To use your custom cycle, press the ***MY CYCLE*** button before drying a load.

To change the saved cycle, set the desired settings and hold down the ***MY CYCLE*** button for 3 seconds.

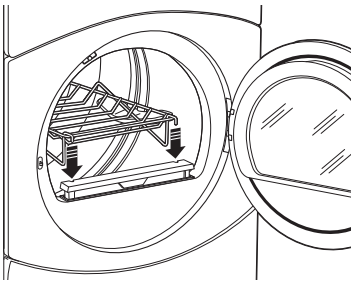
About dryer features.



Drum Lamp

Before replacing the light bulb, be sure to unplug the dryer power cord or disconnect the dryer at the household distribution panel by removing the fuse or switching off the circuit breaker. Reach above dryer opening from inside the drum. Remove the bulb and replace with the same size bulb.

Note: Drum lamp only (and automatically) turns on when the dryer door is open.



Drying Rack *(on some models)*

A handy drying rack may be used for drying delicate items such as washable sweaters. Place items flat on the drying rack and block such items as wool sweaters and delicate fabrics. Dry with low heat.

To install the drying rack, pull up the lint filter slightly. Insert the drying rack into the slots, then push the filter back down.

NOTE:

- The drying rack is designed for use with the ***TIMED DRY*** cycles. Use with sensor cycles may result in damp items or extended cycle times.
- Do not use this drying rack when there are other clothes in the dryer, that are not placed on the rack.

Reversing the Door Swing

IMPORTANT NOTES:

- Read the instructions all the way through before starting.
- Handle parts carefully to avoid scratching paint.
- Set screws down by their related parts to avoid using them in the wrong places.
- Provide a non-scratching work surface for the door.
- Normal completion time to reverse the door swing is 30–60 minutes.

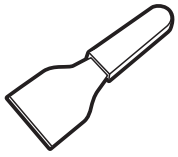
IMPORTANT: Once you begin, do not move the cabinet until door-swing reversal is completed.

These instructions are for changing the hinges from the right side to the left side—if you ever want to switch them back to the right side, follow these same instructions and reverse all references to the left and right.

TOOLS YOU WILL NEED

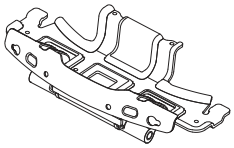
Adjustable Crescent Wrench

Phillips Head Screwdriver

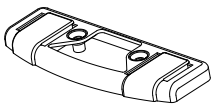


Putty Knife or Thin-Blade Screwdriver

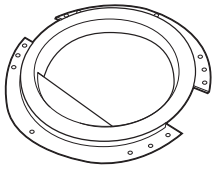
DOOR PARTS



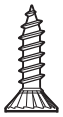
Hinge Assembly



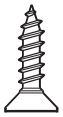
Hinge Cover



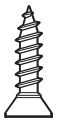
Plastic Cover



3 - # 8 Screws
(door asm and front panel)

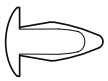


8 - # 8 Screws
(inner door, outer ring & hinge cover)



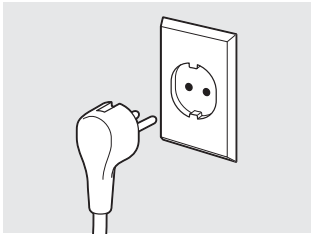
4 - # 8 Screws
(strike plate)

6 - # 8 Machine Screws
(inner door & hinge)



7 - Beauty Buttons

STEP-BY-STEP INSTRUCTIONS



Before You Start

1. Unplug the dryer from its electrical outlet.

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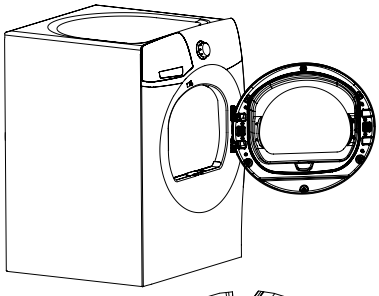
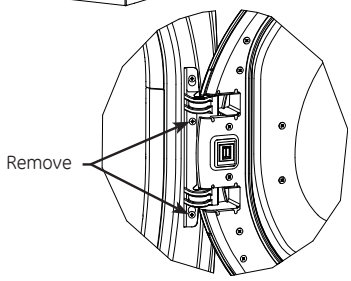
Reversing the door swing.

STEP-BY-STEP INSTRUCTIONS (cont.)

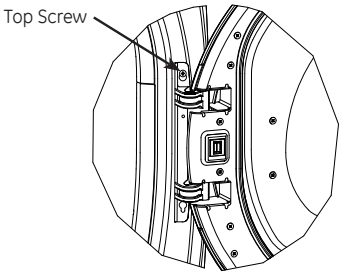


Remove Door Assembly

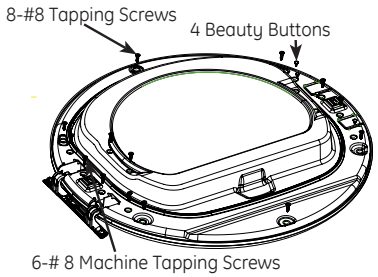
2. Open the door to approximately 130 degrees.



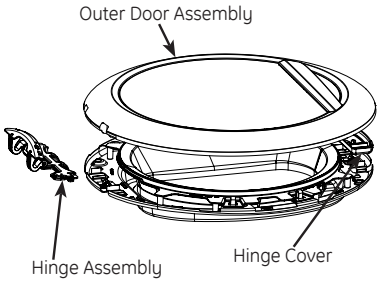
3. Remove the 2 screws starting from the bottom to the top. Make sure the door is supported while removing the screws.



4. Loosen the top screw as shown. Unhook the door by lifting and pulling.



5. Place the door on a soft protected flat surface so the inner door faces upward (door resting on handle side). Remove the 8 tapping screws located around the perimeter of the door outlining the gasket. Remove the 6 machine screws. Using a putty knife or any other flat tool, remove the 2 beauty buttons and install them on the opposite side.



Remove Hinge and Cover

IMPORTANT: Note the location of the hinge (left or right) before removing.

6. With the screws removed, turn the door over and separate the outer door assembly and hinge cover of the door from the door frame and set aside.

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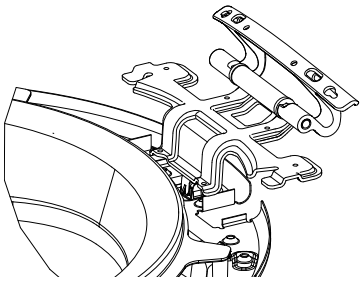
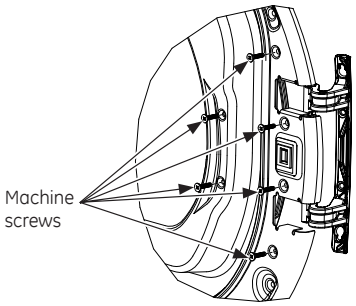
STEP-BY-STEP INSTRUCTIONS (cont.)

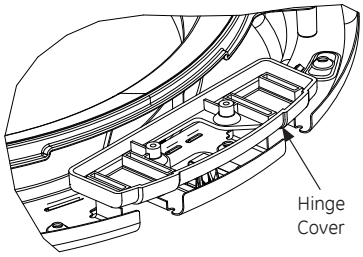


Reinstall Hinge Assembly

7. Install the hinge assembly in the opposite side of the door as shown. Push the hinge assembly in place until the hinge holes align with the door holes.

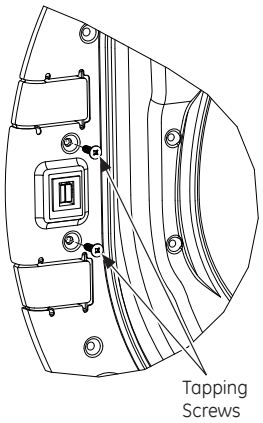


8. Hold the hinge and door on their side with one hand and fasten the 6 machine screws as shown.



Reinstall Hinge Cover

9. Insert the hinge cover. Align the hinge cover holes with the holes in the door.

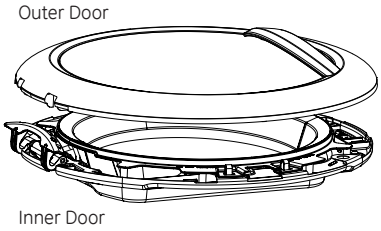


10. Secure the hinge cover with 2 taping screws.

(Continued Next Page)

Reversing the door swing.

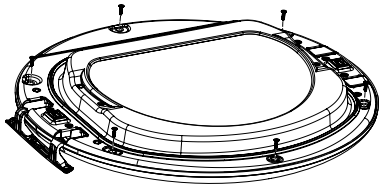
STEP-BY-STEP INSTRUCTIONS (cont.)



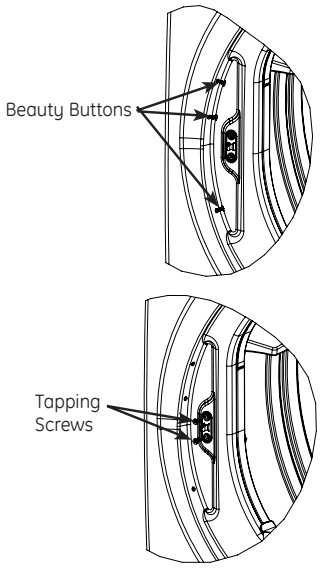
Reassemble Door Assembly

IMPORTANT: Make sure there is no dirt or any other foreign material in between the window panes.

11. Place the plastic outer door onto the inner door. Make sure that the handle part of the outer door is opposite the hinge as shown.



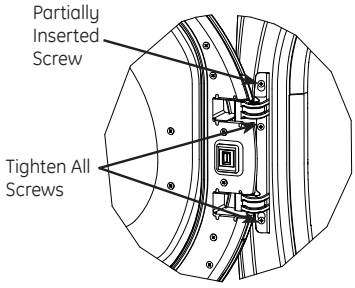
12. Turn the door over and fasten the outer door to the inner door using the 6 tapping screws.



Move Strike Bracket

13. Using a putty knife or any other flat tool, remove the 3 beauty buttons located on the dryer where the door will be installed and install them on the opposite side.

14. Switch the strike bracket and its cover to the opposite side by removing the screws. Reinstall both on the opposite side.



Reinstall Door Assembly

15. The door is now ready to be installed on the dryer. To ease this step, the hinge has keyholes that allow a partially fastened screw to be used as a hook.

Partially fasten a screw to the uppermost screw hole. Hook the door on the partially fastened screw.

Fasten the hinge by installing the other 2 screws and tightening the partially fastened screw above.

Stacking Instructions

BEFORE YOU BEGIN

Read these instructions completely and carefully.

- ***IMPORTANT:*** Save these instructions for local electrical inspector's use.
- ***IMPORTANT:*** Observe all governing codes and ordinances.
- ***Note to Installer –*** Be sure to leave these instructions with the Consumer.
- ***Note to Consumer –*** Keep these instructions for future reference.
- Installation ***must*** be performed by a qualified installer.
- Proper installation is the responsibility of the installer.

FOR YOUR SAFETY

⚠ *WARNING!*

- Electric Shock Hazard. Disconnect power before installing. Failure to do so could result in serious injury or death.
- ***Potential Personal Injury. When stacking the dryer, more than two people are recommended to lift the dryer into position because of its weight and size. Failure to do so could result in personal injury or death.***
- When stacking the dryer, avoid tipping and rupture of utility services. Dryer must be securely attached to the washer. DO NOT place the washer on top of the dryer. Failure to do so could result in personal injury/death or property damage.
- Mobile Home or Manufactured Home Installation – Stacking of a gas dryer is not permitted in a mobile home or manufactured home.

MINIMUM CLEARANCE OTHER THAN ALCOVE OR CLOSET INSTALLATION

Minimum clearance to combustible surfaces and for air opening are: 0″ both sides, 1″ front, and 3″ rear. Consideration must be given to provide adequate clearance for installation and service.

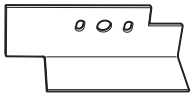
ALCOVE OR CLOSET INSTALLATION

- If your dryer is approved for installation in an alcove or closet, it will be stated on a label on the dryer back.
- The dryer MUST be vented to the outdoors. Refer to dryer Installation Instructions for details.
- Minimum clearance between dryer cabinet and adjacent walls or other surfaces is:
  0″ either side
  3″ front
  4″ rear
- Minimum vertical space from floor to overhead cabinets, ceiling, etc. is 43″ without pedestal, 55″ with pedestal and 84″ stacked.
- Closet doors must be louvered or otherwise ventilated and must contain a minimum of 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.

(Continued Next Page)

Stacking.

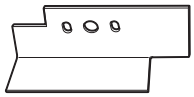
KIT CONTENTS (optional kit GE FL STACK)



Right Hand Bracket

4 Rubber Pads

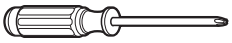
4 #12 x 1" Screws



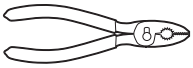
Left Hand Bracket

4 #8 x 1/2" Screws

TOOLS YOU WILL NEED



Phillips Screwdriver



Pliers

Gloves

Open-Ended Wrench

Level

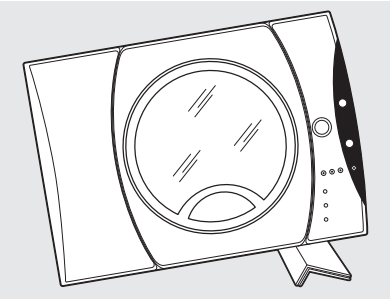
INSTALLATION PREPARATION

Remove the packaging.

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.

(Continued Next Page)

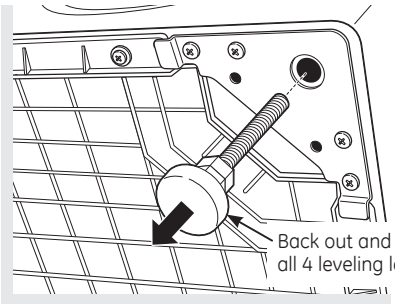
INSTALLING THE STACK BRACKET KIT

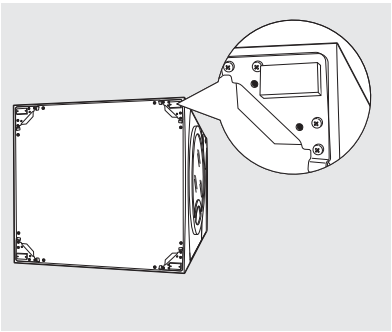


1. Remove the Dryer Leveling Legs

A. Carefully lay the dryer on its side. Use the packing material so you don't scratch the finish on the dryer.

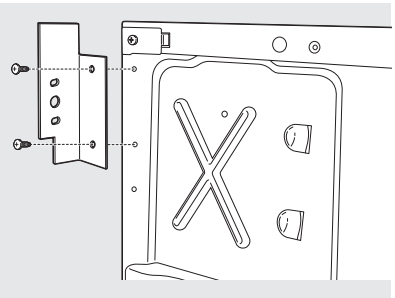
B. Use an open-end wrench or pliers to remove the dryer leveling legs.





2. Install Rubber Pads to Dryer Base

Locate the 4 rubber pads in the parts package. Remove the adhesive backing and firmly place over on the bracket where you removed the leveling legs.



3. Install Bracket to Dryer

A. Align the holes in the left bracket with the holes in the bottom left corner of the dryer. Use a Phillips screwdriver to install the 2 #12 x 1" tapping screws.

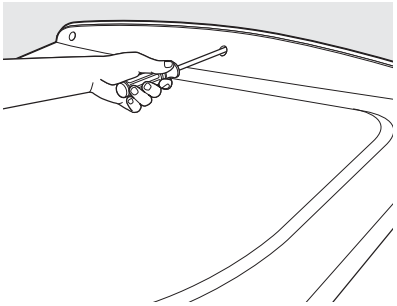
B. Repeat the above step with the right bracket on the bottom right corner of the dryer.

C. Set the dryer upright.

NOTE: Make sure to set the dryer on a piece of packing material so the brackets that are attached to the bottom of the dryer do not damage the floor.

(Continued Next Page)

INSTALLING THE STACK BRACKET KIT (cont.)



4. Prepare the Washer and Dryer

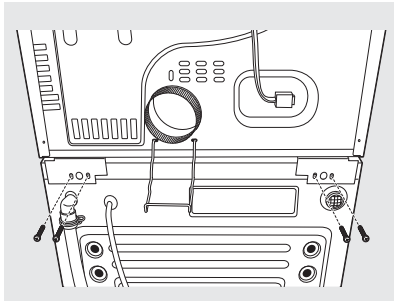
A. Place the washer in the approximate location.

B. Make sure the washer is level. Refer to washer Installation Instructions for details.

C. Remove the back portion of the control panel by removing the 3 screws.

D. Reverse dryer door swing if desired. See dryer Installation Instructions for details.

NOTE: The washer door swing is not reversible.



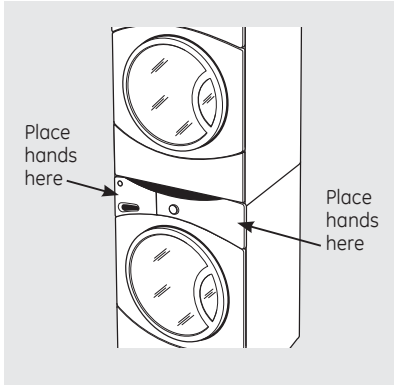
5. Install Dryer and Bracket on Washer

A. Lift the dryer on top of the washer. Be careful not to scratch the top of the washer with the brackets. Protect the washer control panel with cardboard or other protection. Be sure to lift the dryer high enough to clear the washer control panel.

B. Align the holes in the bracket with the holes in the back of the washer. Using a Phillips screwdriver, attach the 2 #8 x 1/2″ tapping screws. Repeat on both sides of the washer.

⚠WARNING!

Potential Personal Injury. More than two people are recommended to lift the dryer into position because of its weight and size. Failure to do so could result in personal injury or death.



6. Finalize the Installation

A. Refer to the washer Installation Instructions to complete the washer installation.

B. Refer to the dryer Installation Instructions to complete the dryer installation.

C. 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.

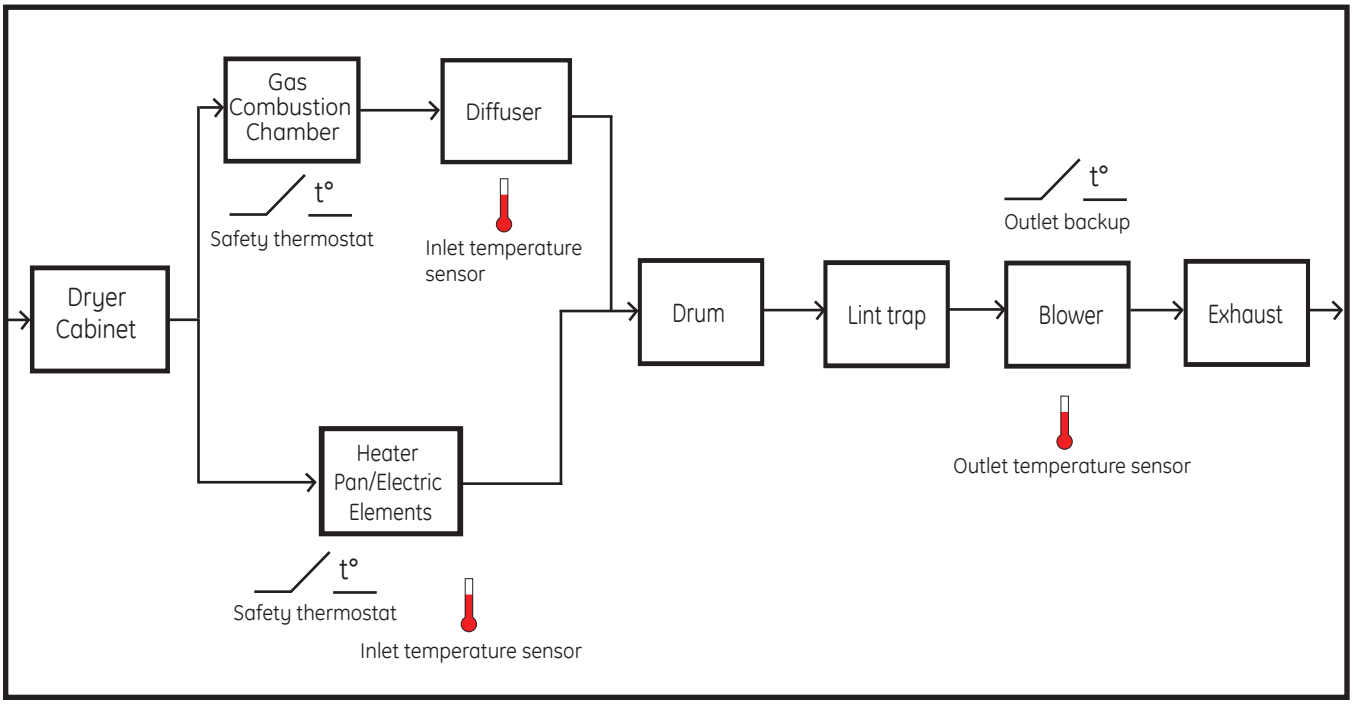
⚠WARNING!

Potential Personal Injury. Do not push on the dryer once installed to top of the washer. Pushing on the dryer may result in pinched fingers.

Operation Overview

Air is pulled into the cabinet from the rear and drawn up across the heat source located behind the drum. This hot air is pulled through the drum rear, across the clothes load, through the lint trap, and down the trap duct into the blower. From the blower, the air is pushed out of the exhaust system. Overall heater temperature is regulated by means of two temperature sensors: an inlet sensor located near the heating elements, and an outlet sensor located at the blower. An additional safety thermostat, located near the heating elements, shuts off the heating elements if they overheat. Also, the outlet backup thermostat, located near the blower, provides additional safety and cycles the heaters if temperature goes above the outlet temperature range.

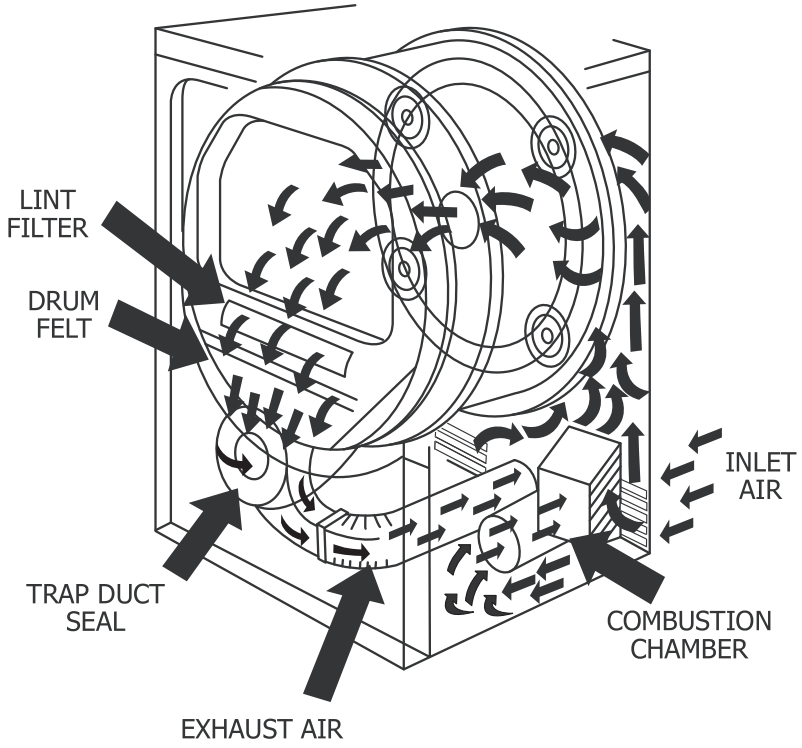
Dryer Air Flow System

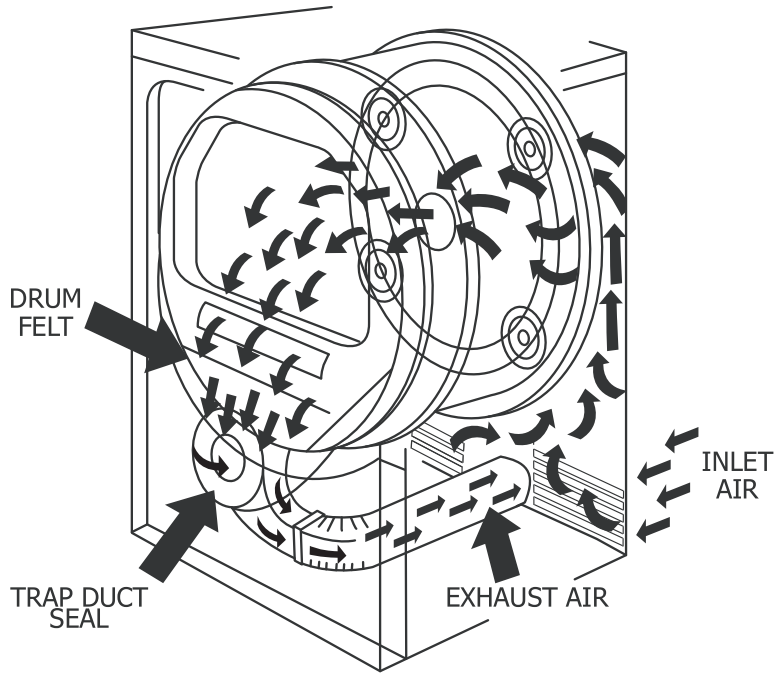


The typical dryer cycle progresses as follows:

1. A cycle is selected and the start key is pressed.
2. The motor is activated.
3. The heater elements (burner for gas models) are activated. The elements (burner) cycle on and off to achieve the desired temperature throughout the heating portion of the cycle.
4. If sensor drying is selected, the heater elements (burner for gas models) are activated. The elements (burner) cycle on and off until the load has achieved the desired dryness level.
5. If timed drying is selected, the heater elements (burner for gas models) are activated and cycle on and off for the selected time at the selected temperature.
6. If *STEAM DEWRINKLE* or *STEAM REFRESH* is selected, the water valve is activated during heater elements cycle on time (burner on time for gas models). See Cycle Matrix Chart on page 15.
7. The heater elements (burner for gas models) discontinue operation after the dryness level or elapsed time has been achieved.
8. The motor continues operating until the clothes temperature drops below specified temperature (Cool Down).
9. The display turns off.

Airflow


LINT
FILTER
DRUM
FELT
INLET
AIR
TRAP DUCT
SEAL
COMBUSTION
CHAMBER
EXHAUST AIR


DRUM
FELT
INLET
AIR
TRAP DUCT
SEAL
EXHAUST AIR

Cycle Matrix Chart

Steam De-wrinkle

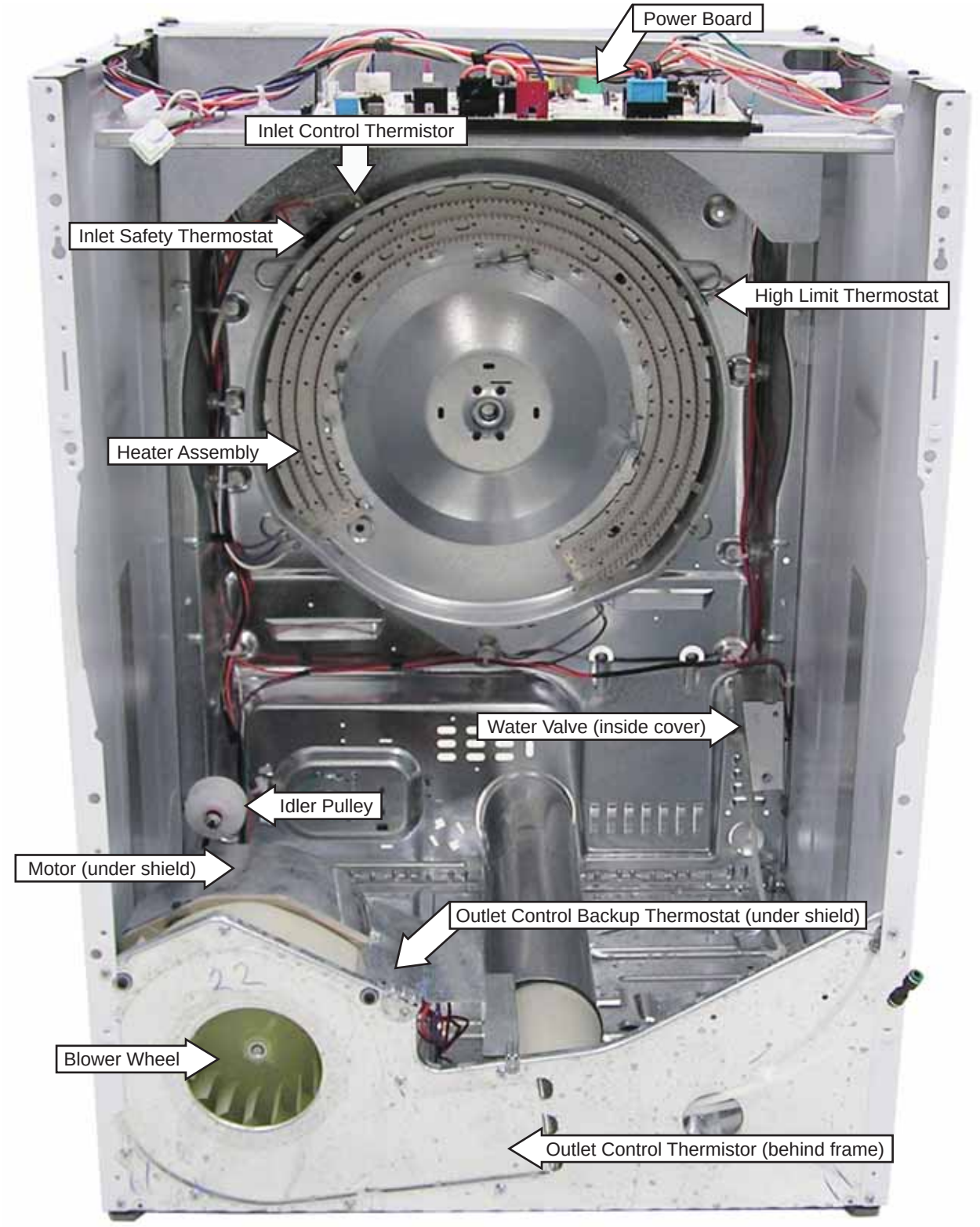
		Tumble with heat	Water Valve on and Heat off	Tumble with heat	Water Valve on Heat off	Tumble with heat	Water Valve on Heat off	Tumble with heat	Water Valve on Heat off	Tumble with heat	Cool Down	Extended Tumble (if option selected)	End of Cycle
Tumble	On / Off												
Heat	ON / Off												
Valve	On / Off												
	Time ->	(Times based on Cycle (Large or Small Steam De-wrinkle)											

Steam Refresh

		Tumble with heat	Water Valve on and Heat off	Tumble with heat	Water Valve on Heat off	Tumble with heat	Water Valve on Heat off	Tumble with heat	Cool Down	Extended Tumble (if option selected)	End of Cycle
Tumble	On / Off										
Heat	On / Off										
Valve	On / Off										
	Time ->	(Times based on Cycle (Large or Small Steam Refresh)									

Component Locator Views

Electric Model



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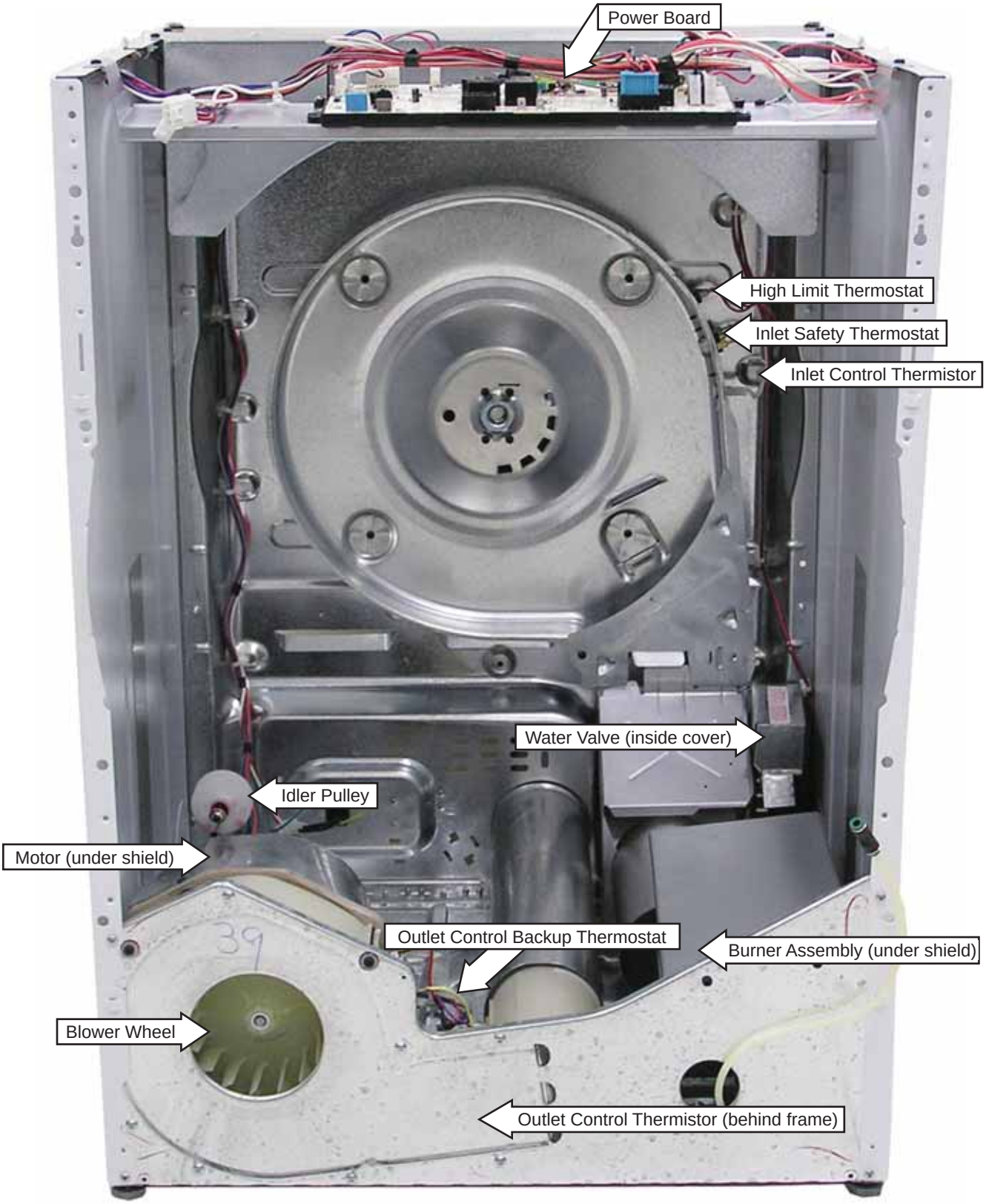
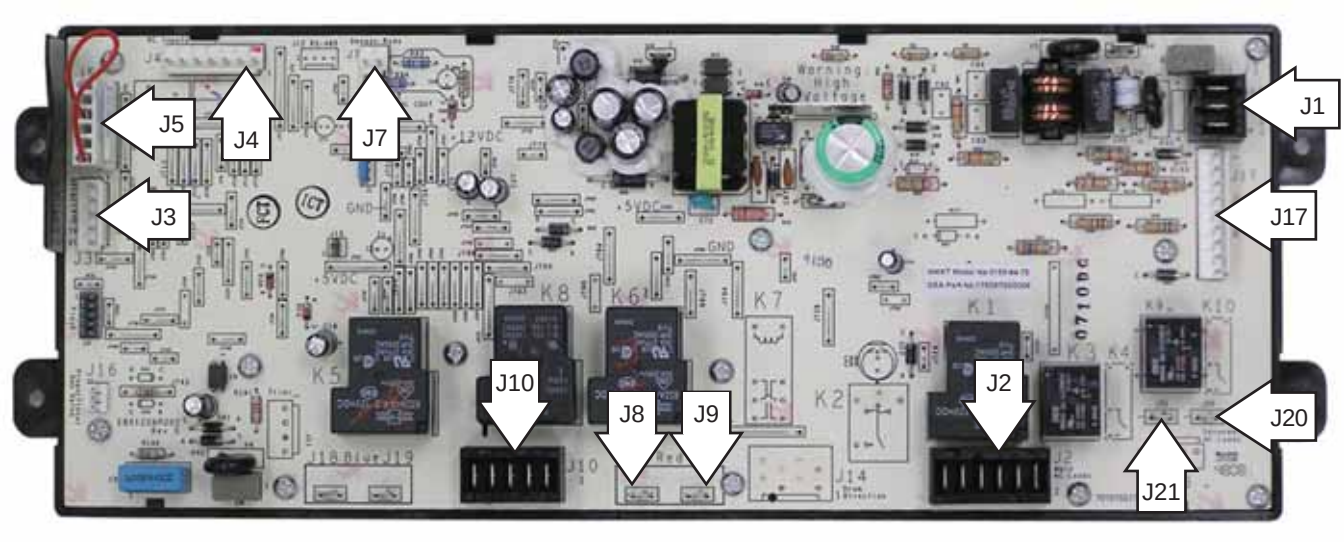
Gas Model


Power Board
High Limit Thermostat
Inlet Safety Thermostat
Inlet Control Thermistor
Water Valve (inside cover)
Idler Pulley
Motor (under shield)
Outlet Control Backup Thermostat
Burner Assembly (under shield)
Blower Wheel
Outlet Control Thermistor (behind frame)

Control Board Connector Locator View

Electronic Control - Rear View (Electric and Gas Models)



J1 - Door Switch

J2 - Drum Motor

J3 - User Interface

J4 - Outlet Control Thermistor and Inlet Control Thermistor

J5 - Model Selector

J7 - Moisture Sensor Rods

J9 - Outer Coil L1 (Electric Heat), Line (Gas Heat)

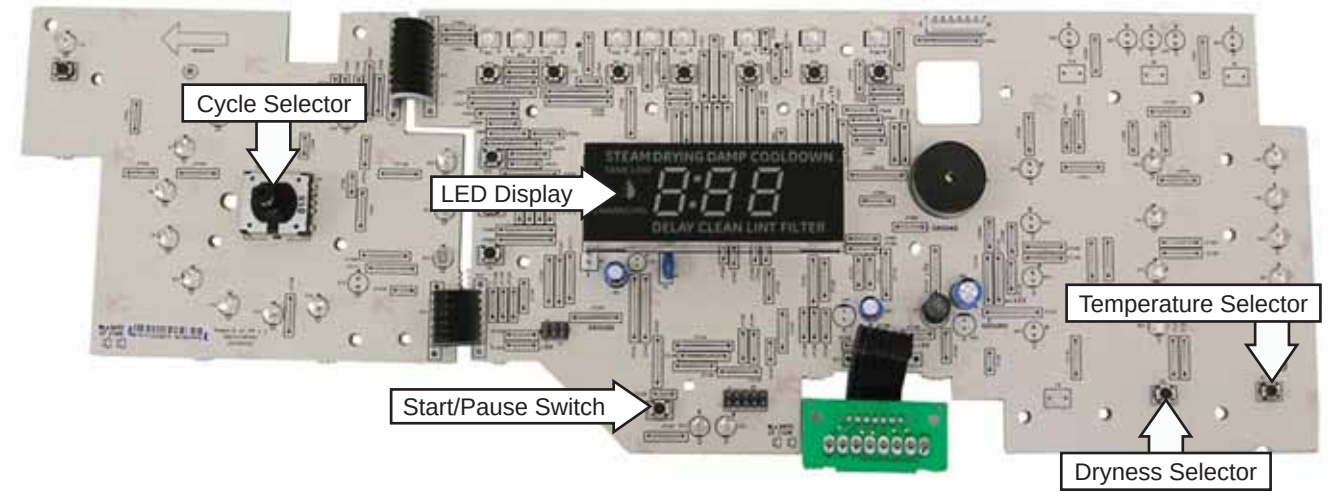
J8 - Outer Coil Relay

J10 - Inner Coil L1 (Electric Heat)

J20 - Water Valve

J21 - Water Valve Relay

Electronic Control - Front View (Electric and Gas Models)



Top Panel

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

Note: Combined Phillips-head/square-drive recess screws are utilized throughout this appliance. Either Phillips or square-drive screwdrivers can be used to extract or install these screws.

Removal of the top panel provides access to the power board. The top panel is held in place with 2 Phillips-head screws (located under the control panel cover) and 2 rear tabs.

To remove the top panel:

1. Remove the Phillips-head screw that attaches the control panel rear trim. Pull the trim backward and remove.

Note: It may be helpful to place a putty knife along the top seam between the cover and the control panel, then tap lightly backward.

2. Remove the 2 Phillips-head screws that attach the top panel to the cabinet.

3. Raise the front of the top panel approximately 3 inches, then pull forward to clear the rear tabs.

Control Panel

Removal of the control panel provides access to the control board assembly.

To remove the control panel:

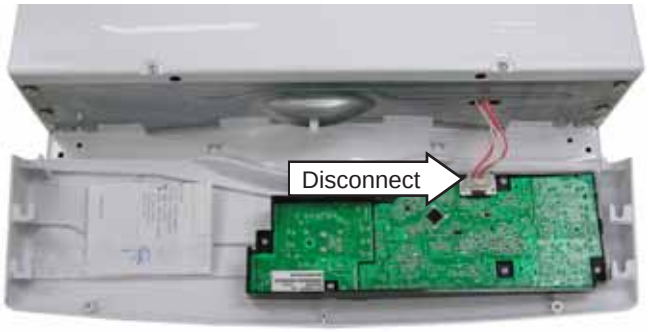
1. Remove the cycle selector knob by pulling outward.

2. Remove the Phillips-head screw underneath the cycle selector knob.

(Continued Next Page)

3. Lift the control panel off vertically.

4. Disconnect the wire harness.



Front Panel

Removal of the front panel provides access to the drum and drive belt. The front panel is held in place by 4 screws.

To remove the front panel:

1. Remove the top panel and control panel. (See *Top Panel* and *Control Panel*.)

2. Disconnect the drum lamp / door switch wire harness and the sensor rod wire harness connected to the power board.

3. Remove the 2 Phillips-head screws from the front panel bracket.

4. Remove 4 Phillips-head screws from the front panel bracket.

5. Lift the bracket out of the hinges and set aside.

Note: In the following step it may be necessary to raise the front of the dryer to gain access to the screws.

6. Loosen, but do not remove, the 2 Phillips-head screws from the bottom of the front panel.

7. Remove 2 Phillips-head screws from the top of the front panel.

8. Tilt the top edge of the front panel out and press on the John Guest connector collar to release the water line.

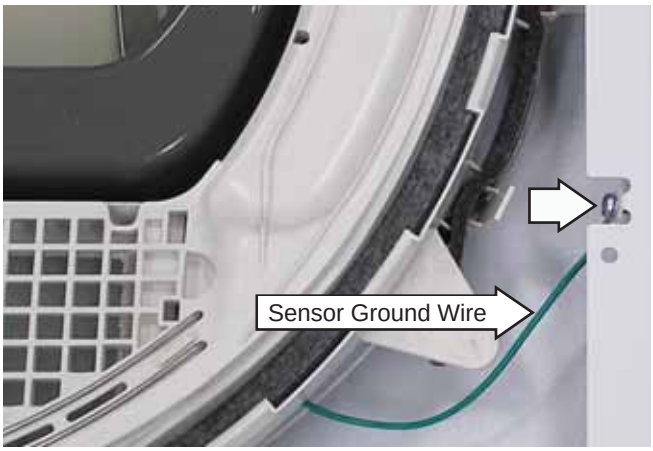
9. Lift front panel from the bottom two screws and set aside.

Air Duct Assembly

The air duct assembly houses the lint filter, steam nozzle, trap duct felt seal, and the 2 sensor rods. It is located on the back side of the front panel.

To remove the air duct assembly:

1. Remove the front panel. (See ***Front Panel***.)
2. Remove the single Phillips-head screw that attaches the sensor ground wire to the cabinet.



3. Remove the 2 Phillips-head screws that attach the air duct assembly to the front panel.

4. Grasp each side of the air duct assembly and unsnap the air duct from the front panel.

Caution: Upon reassembly, ensure that the door switch, drum light, and sensor wiring are retained and routed properly to avoid contact with the drum.

Note: The trap duct felt seal can be replaced by extracting the seal from the channel located on the air duct assembly.

Drum Slide Assembly

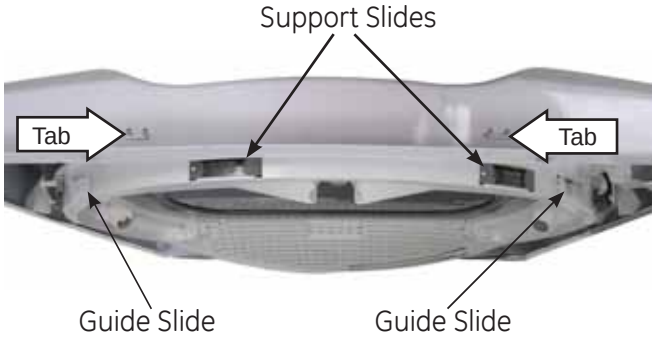
The drum slide assembly is located on the back side of the front panel and utilizes 4 drum slides. Two white outer slides are used as guides, and 2 dark color center (top) slides are used to support the weight of the drum. When replacing the slides, the dark-colored support slides must be used to replace the top support slides. Guide slides may also be replaced with support slides.

Caution: Do not replace the center (top) support slides with the white guide slides. Damage to the dryer will result.

Note: To replace the individual drum slides, follow steps 1-7 of the front panel assembly. (See ***Front Panel***.) Tilt the front panel out and remove the drum slide.

To remove the drum slide assembly:

1. Remove the air duct assembly. (See ***Air Duct Assembly***.)
2. Grasp each side of the drum slide assembly and unsnap from the front panel. Pull the top of the drum slide assembly down and inward to release the assembly from the 2 tabs located at the top of the front panel.



3. Remove the single Phillips-head screw that attaches the drum light receptacle and remove the receptacle from the drum glide assembly.

Caution: Upon reassembly, ensure that the door switch, drum light and sensor wiring are retained and routed properly to avoid contact with the drum.

Steam Nozzle

The steam nozzle is located inside the front of the dryer on the right side of the air duct assembly. The steam nozzle consists of a brass orifice and a fine filter screen. If the orifice should become plugged or restricted, it should not be cleaned. Replace a plugged or restricted steam nozzle.

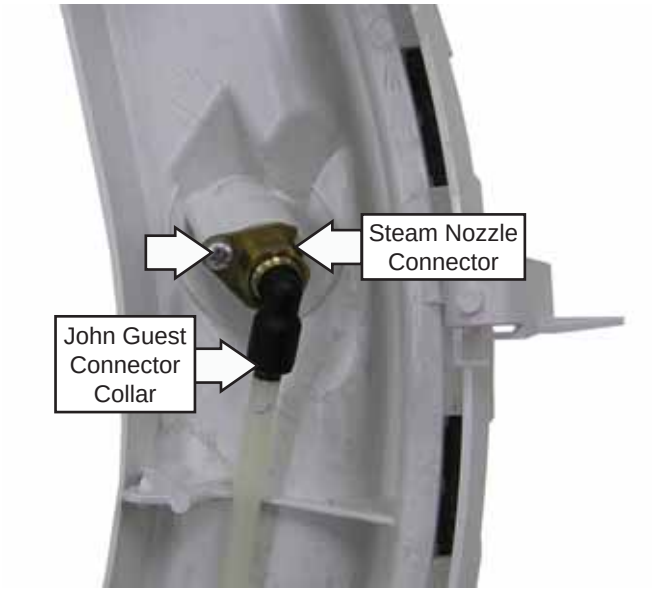
The steam nozzle can be replaced without disassembly of the dryer. Replacement can be performed by opening the dryer door to access the steam nozzle. A 7/16" or 11-mm nut driver can be used to unscrew the nozzle from the air duct assembly.

Note: The replacement steam nozzle will have thread lock pre-applied to the screw threads.

Nozzle with Thread Lock Applied

To replace the steam nozzle connector:

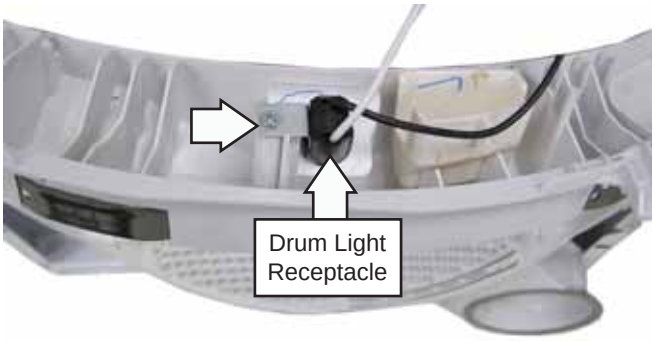
1. Remove the air duct assembly. (See ***Air Duct Assembly***.)
2. Press on the John Guest connector collar and release the water line from the steam nozzle connector.
3. Remove the Phillips-head screw that attaches the nozzle to the nozzle housing.



4. Pull the nozzle connector out of the housing.

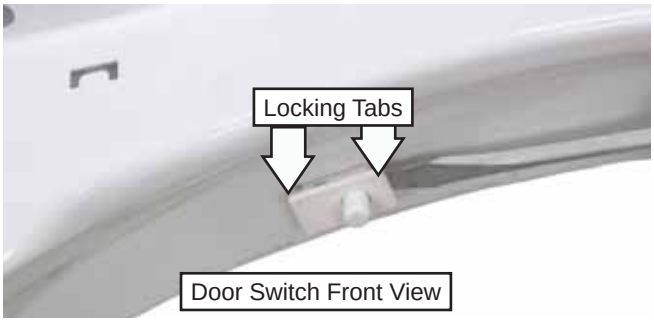
Drum Light Receptacle

The drum light receptacle is attached to the inside of the front panel with a single Phillips-head screw. It is necessary to remove the drum slide assembly to replace the drum light receptacle. (See ***Drum Slide Assembly***.)

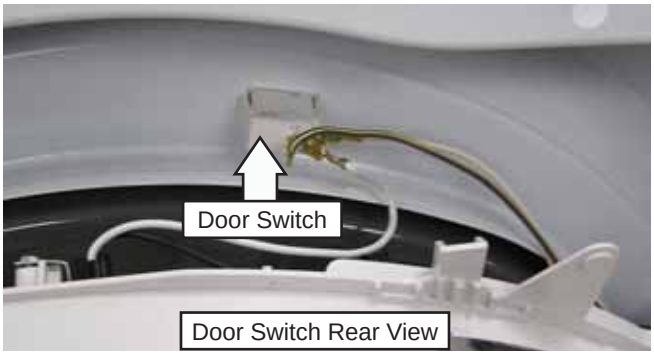


Door Switch

The door switch is fastened to the front panel by 2 locking tabs (1 on each side). When the dryer door is closed, the switch will complete the drum motor circuit, allowing dryer operation. When the door is open, the switch will open the drum motor circuit, interrupting dryer operation. Opening the dryer door will also cause the door switch to close the drum light circuit, allowing the drum light to be energized.



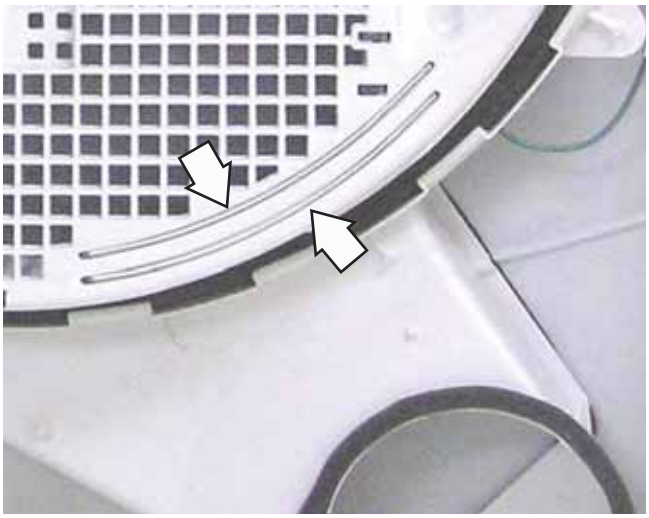
Door Switch Front View



Door Switch Rear View

Moisture Sensor

The moisture-sensing circuit consists of 2 sensor rods. They are mounted beneath the lint filter on the drum side of the air duct.



Note: The 2 sensor rods in the air duct assembly are replaceable individually. To replace the sensor rods, order part WE1M575.

- The sensor rods are connected to the main control board. The rods are spaced approximately 1/2-in. apart, which creates an open circuit to the control.
- The control board utilizes a low-voltage capacitor that charges to approximately 5 VDC when the circuit is open and discharges to less than 1 VDC when the circuit is shorted.
- When wet clothes tumble across the two rods, the clothes create a very low resistance between the rods, which discharges the capacitor.
- As the clothes become dry, their resistance value increases and the charge across the capacitor builds to approximately 5 VDC.
- 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 sensor rods. This could produce a false dryness reading.

The dryer will signal when the clothes are at 17% moisture level if equipped with a damp signal that has been selected.

Approximate values for dryness level:

Damp = 17%

Less dry = 12%

Dry = 2-6%

More dry = <2%

Operation of the moisture sensor can be checked by using service test mode T07. (See ***Service Test Mode***.)

Drive Belt

WARNING: Sharp edges may be exposed when servicing the dryer. Use caution to avoid injury and wear Kevlar gloves and sleeves or equivalent protection.

The drive belt (Part #WE12M29) is a 4-rib belt and extends from under the motor pulley, over the top of the idler pulley, and around the perimeter of the dryer drum. (See belt diagram.) Belt tension is maintained by the idler pulley and driven by a pulley attached to the motor shaft.

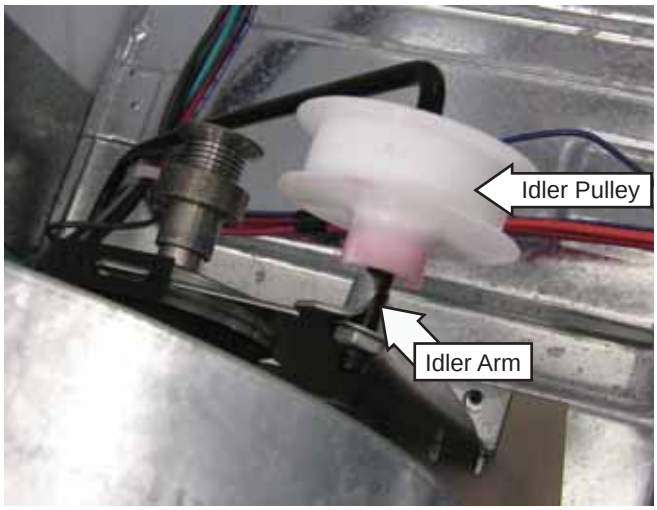
To remove the drive belt:

1. Remove the front panel. (See ***Front Panel***.)

WARNING: The idler arm is under high tension. To prevent injury, do not let the idler arm snap back.

2. Reach under the left-hand side of the drum, push the idler pulley down and to the right, and lock the idler arm on the top corner of the motor bracket to release belt tension. (See photo. Drum removed for clarity.)

Locked Position



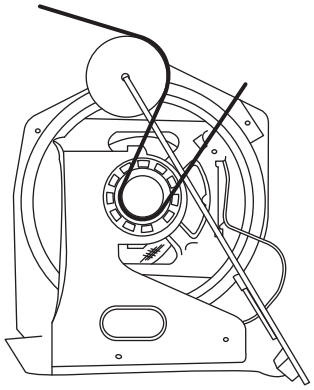
3. Remove the belt from the motor pulley and remove through the front of the dryer.

To install the drive belt:

1. Remove the front panel. (See ***Front Panel***.)
2. Reach under the left-hand side of the drum, push the idler pulley down and to the right, and lock the pulley shaft on the top corner of the motor bracket. (See photo.)
3. Place the belt in position around the center of the drum through the front of the dryer.
4. Place the belt in position around the motor pulley (see diagram), release the idler pulley from the motor bracket, and guide onto the belt.

Note: Check to make sure the belt is in place and not twisted before installing the top and front panels.

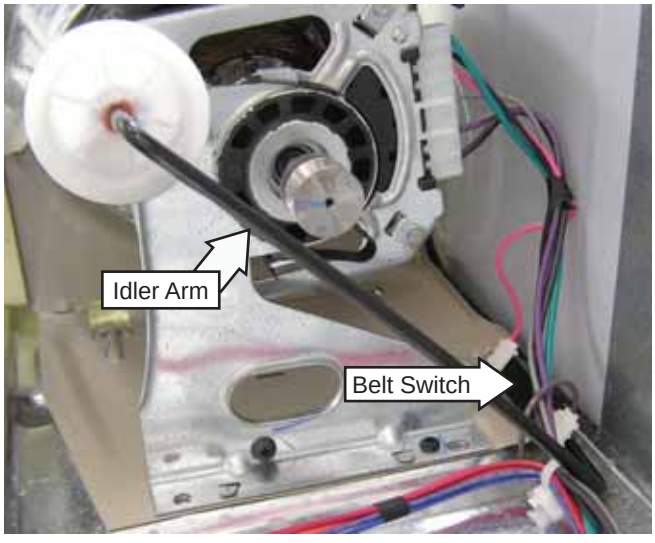
Belt Installed on Pulleys



Belt Switch

A belt switch, activated by the idler arm, is fastened to the motor bracket by 2 screws. Should the drive belt break, the belt switch will open the drive motor circuit, interrupting dryer operation.

Note: The drum lamp will operate with an open belt switch.



Drum

The drum is made of 304 stainless steel and has three replaceable baffles. The drum rotates counterclockwise, as viewed from the front, at a speed of 47 to 51 RPM.

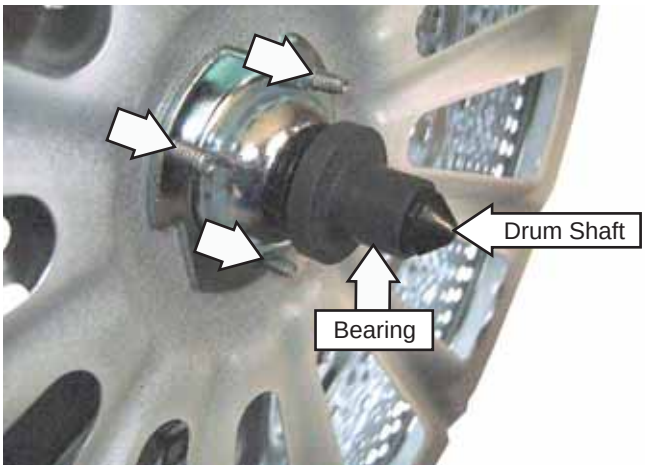
To remove the drum:

1. Remove the drive belt from the motor. (See ***Drive Belt***.)
2. Using the belt as a handle, pull the drum forward and guide out of the cabinet.

Drum Shaft and Bearing

The drum shaft is attached to the rear of the drum with three T-20 Torx screws. The bearing can be removed by pulling it off the shaft. The drum shaft and bearing fit into the bearing retainer in the center of the heater assembly (electric models) or diffuser assembly (gas models).

To access the drum shaft and bearing, it is necessary to remove the drum. (See ***Drum***.)



Idler Assembly

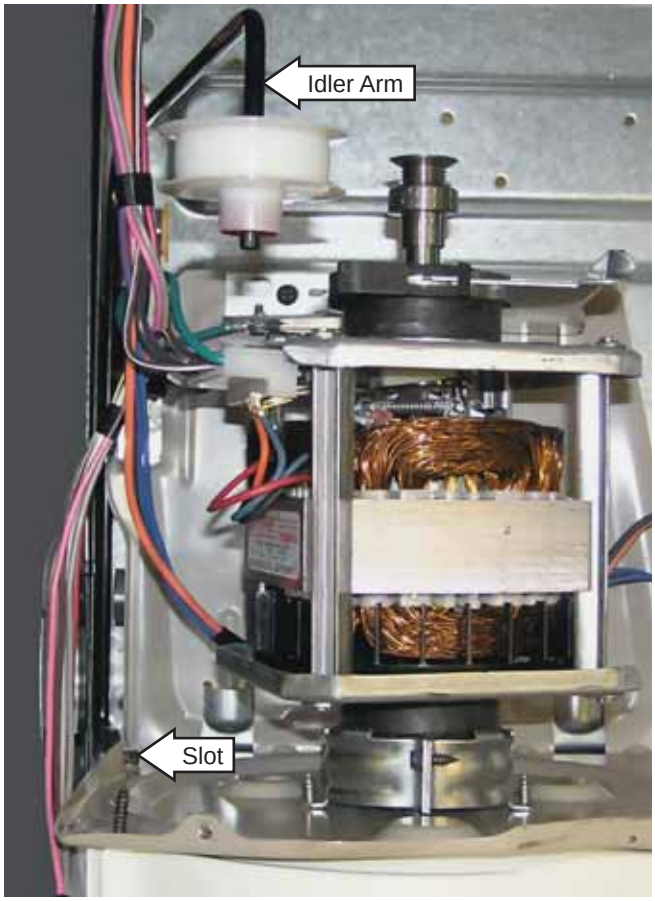
The idler assembly maintains proper tension on the belt to minimize belt slippage. The idler assembly consists of an idler pulley that rotates on an idler arm. The pulley is retained on the arm using a cap nut. The idler arm is positioned on the chassis and inserted in a slot in the motor base plate. The assembly is located to the left of the motor.

To remove the idler assembly:

1. Remove the drum. (See ***Drum***.)

WARNING: The idler arm is under high tension. To prevent injury, do not let the idler arm snap back.

2. Release tension on the idler assembly by unlocking the idler arm from the top right corner of the motor support.
3. Remove the idler arm from the slot in the motor base plate. (See photo. Moisture shield removed for clarity.)



4. Remove the idler assembly from the dryer.

Water Inlet Valve

The water inlet valve is located inside the cabinet at the bottom right hand corner. The water valve is enclosed under a metal cover. The cover is attached to the dryer with a Phillips-head screw and a tab located at the bottom.

The valve has an approximate resistance value of 406 Ω.

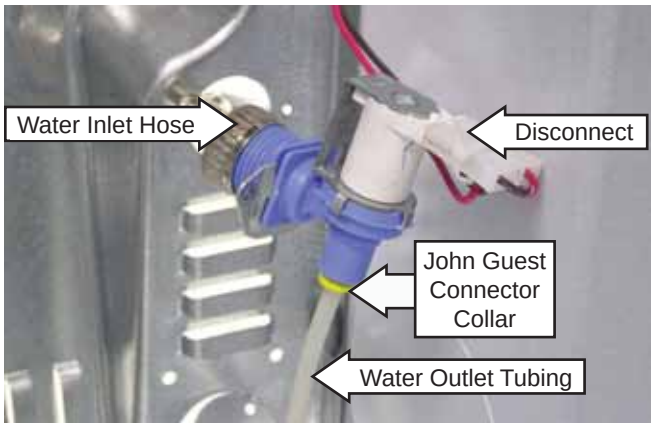
Operation of the water inlet valve can be checked by using service test mode T07. (See ***Service Test Mode***.)

To replace the inlet water valve:

1. Remove the drum. (See ***Drum***.)
2. Remove the 2 Phillips-head screws that hold the cover to the cabinet and remove the cover by lifting up and out.

Note: In the following steps, capture any residual water that may escape from the valve, fill hose, and tubing.

3. Disconnect the water inlet hose.
4. Disconnect the coil wiring.
5. Press the John Guest connector collar and remove the water outlet tubing.



Motor and Blower Wheel

The motor is a single-speed, dual-shaft, 1/4-hp, 1725-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 (6), engages the motor run winding (8), and closes the circuit contacts (1 to 3) for the heat source.

The blower wheel is held to the motor shaft with a 15/16-in. (24-mm) molded nut.

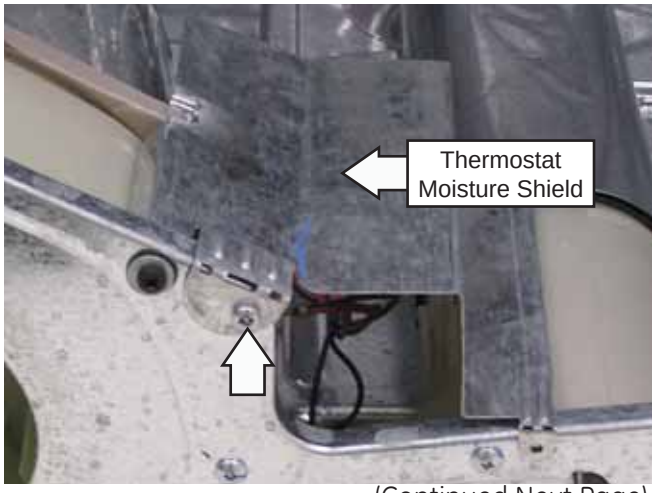
Motor resistance values:

Start winding = 2.3 ohms

Run winding = 2.3 ohms

To remove the motor:

1. Disconnect power to the unit.
2. Remove the drum. (See ***Drum***.)
3. Remove the Phillips-head screw and the thermostat moisture shield from the front frame.



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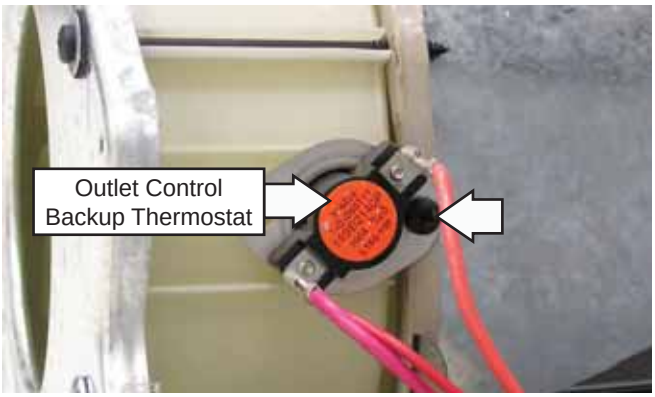
4. Remove the Phillips-head screw and the outlet control backup thermostat from the blower housing.

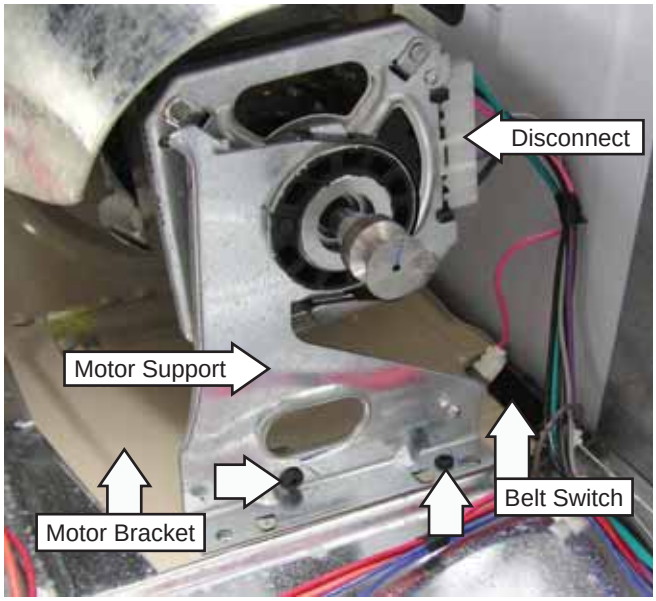


5. Remove the idler pulley assembly from the motor bracket. (See ***Idler Assembly***)

6. Disconnect the motor wire harness.

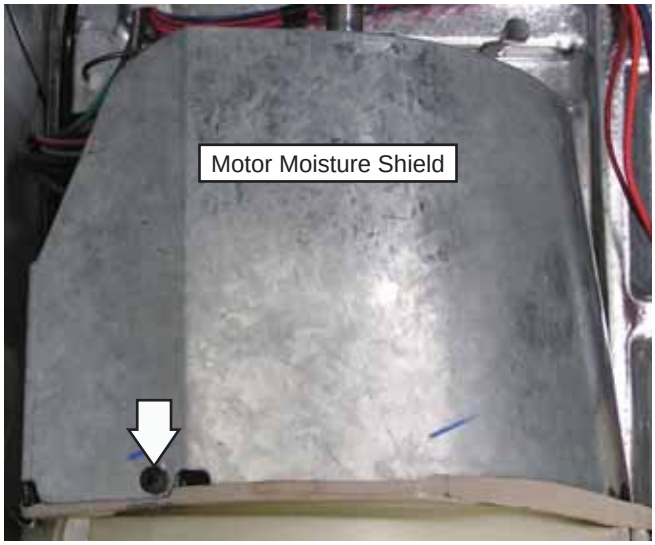
7. Disconnect the wires attached to the belt switch.

8. Remove the single vertical and single horizontal Phillips-head screws that attach the motor bracket and motor support to the chassis.



9. Remove the 2 Phillips-head screws and 2 washers that hold the top of the motor base plate to the blower housing.

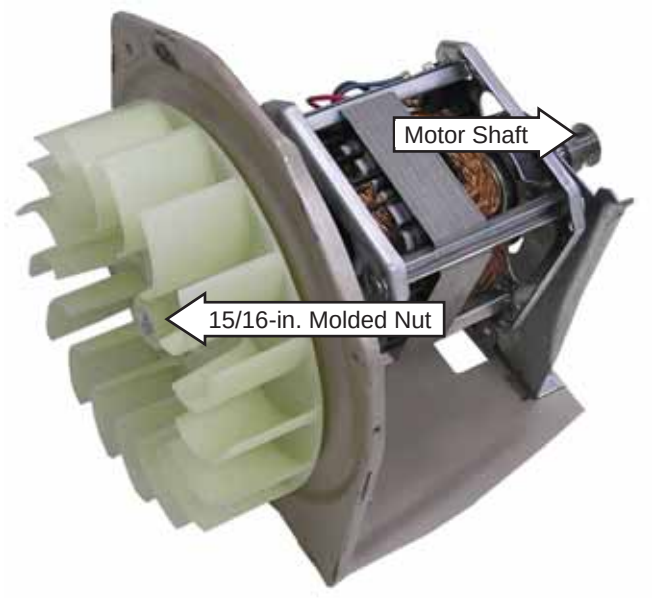
10. Remove the Phillips-head screw, then disengage the motor moisture shield from the motor bracket.



11. Raise the rear of the motor bracket to clear the tab protruding from the bottom of the chassis. Slide the motor bracket back until the bracket tabs clear the slots in the chassis. Remove the motor and blower wheel assembly from the chassis.

Note: When installing the motor and blower wheel assembly, ensure that the 2 rear tabs on the motor bracket are inserted into the slots in the motor support, and the 2 front tabs on the motor bracket are inserted into slots provided in the chassis.

12. Hold the motor shaft from turning and use a 15/16-in. (24-mm) socket to remove the blower wheel from the motor shaft.



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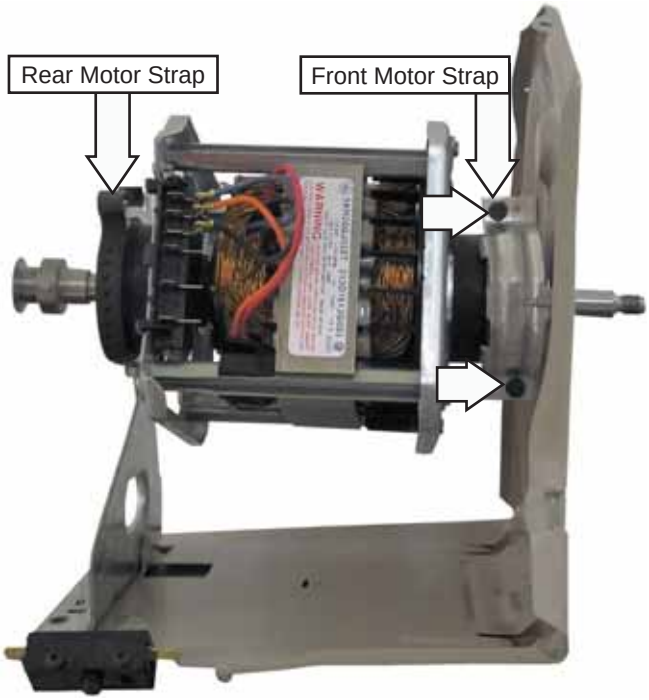
13. Compress and remove the rear motor strap from the motor support.
14. Loosen the two 1/4-in. hex-head screws on the front motor strap.
15. Lift and remove the motor from the motor bracket.



Note:

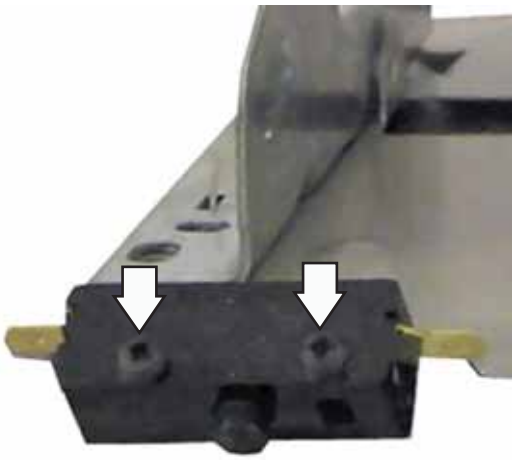
- When installing the motor to the motor bracket, install the motor with the motor harness terminals at the 9:30 o'clock position.
- After installing the motor, ensure both moisture shields are properly installed.

Belt Switch

The belt switch is fastened to the motor base plate with 2 Phillips-head screws. The belt switch is activated by the movement of the idler arm. If the drive belt breaks or comes off the idler pulley, the belt switch opens power to the motor interrupting dryer operation. The drum lamp will operate with an open belt switch.

To remove the belt switch:

1. Remove the motor and blower wheel. (See ***Motor*** and ***Blower Wheel***.)
2. Remove the 2 Phillips-head screws that attach the belt switch to the motor base plate.



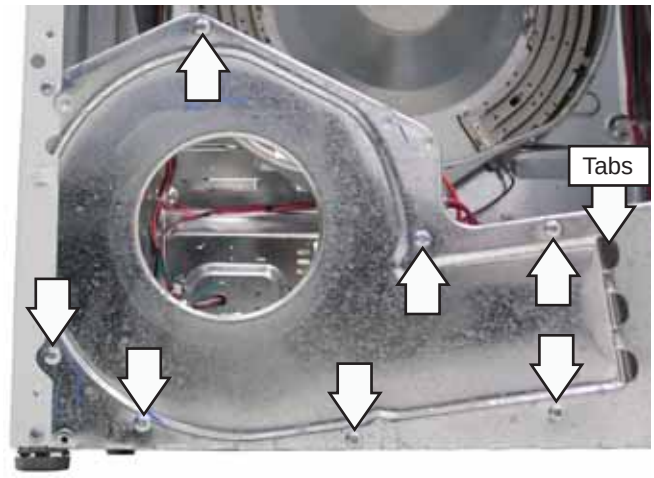
Blower Housing

The blower housing is attached to the dryer with 7 screws and 3 tabs.

To remove the blower housing:

1. Remove the motor and blower wheel. (See ***Motor and Blower Wheel***.)
2. Remove the single Phillips-head screw located inside the outlet of the exhaust pipe. Remove the exhaust pipe from the blower housing.

3. Remove the 7 Phillips-head screws that attach the blower housing to the base plate.



4. Slide the blower housing to the right.

Note: When reinstalling the blower housing, ensure the 3 tabs are inserted into the front base plate.

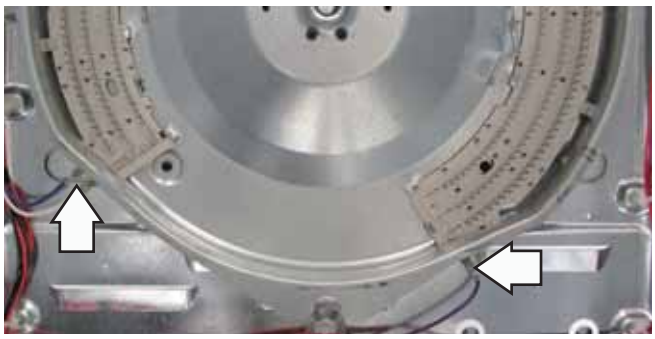
Heater Assembly

The heater assembly is located behind the drum. It consists of inner and outer open-wire elements, each formed in a zigzag pattern fastened to a single housing. The inner element consists of 2 elements wired in parallel with each. The inner element and the outer element are controlled by separate relays on the control board.

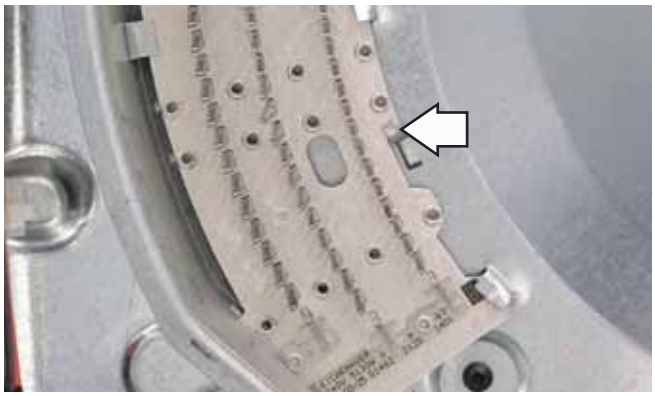
When energized, the outer element draws approximately 12.5 amps at 240 VAC. The outer element has a resistance value of 19.2 Ω. When energized, the 2 inner elements draw approximately 12.5 amps at 240 VAC. The 2 inner elements have a combined resistance value of 19.2 Ω.

To remove the heater assembly:

1. Remove the drum. (See ***Drum***.)
2. Disconnect the leads from the heater.



3. Bend back the single metal tab on the housing holding the heater in place.



4. Rotate the heater counterclockwise to align the notches and tabs. Remove the heater by pulling out and up to clear the bottom tabs.

Burner Assembly and LP Conversion

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

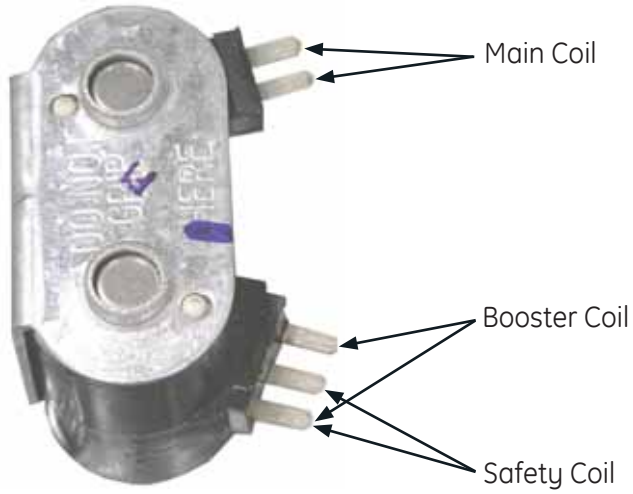
To convert the dryer from natural gas to LP gas, install a WE25X217 conversion kit. To convert the burner assembly back to natural gas, install a WE25X218 conversion kit.

Gas Valve Coils

The burner assembly has a gas valve that utilizes 3 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.

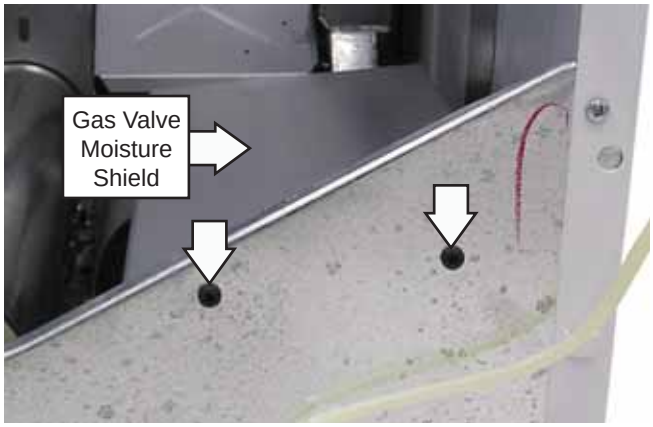
Gas valve coil assembly resistance values:

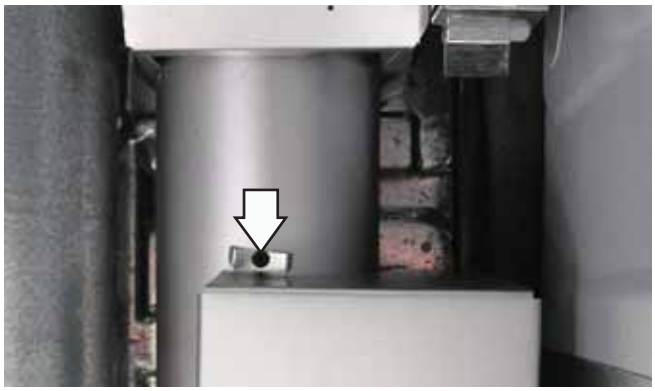
- Safety coil terminals - 1400 Ω
- Booster coil terminals - 580 Ω
- Main coil terminals - 1300 Ω



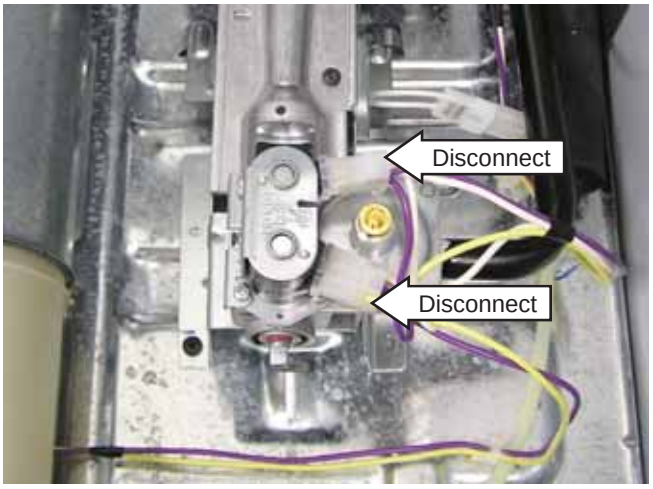
To remove the double and main coils:

1. Remove the drum. (See ***Drum***.)
2. Remove 2 Phillips-head screws from the front frame and the Phillips-head screw from the rear of the gas valve cover.





3. Disconnect the wire harness from both coils.



4. Note the position of the locator pins inserted in the coil bracket.
5. Remove the 2 Phillips-head screws that attach the coil bracket to the valve body.

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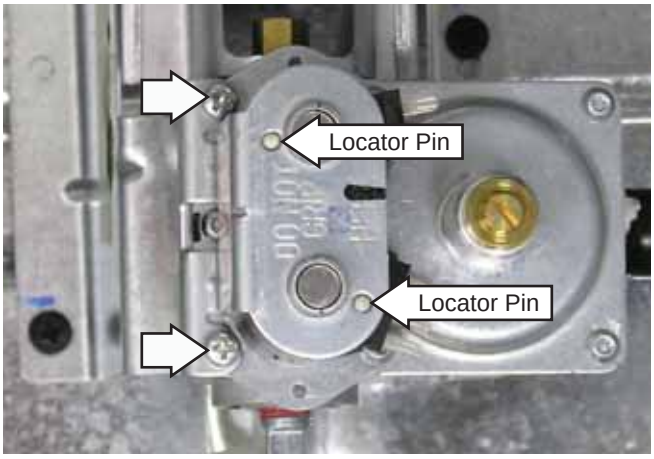


6. Lift the bracket vertically. Lift coils to remove.

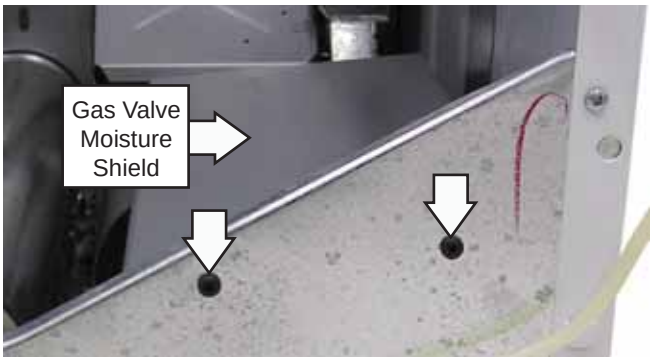
Note: Upon reassembly, ensure the locator pins are inserted into the holes provided in the coil bracket.

Gas Valve

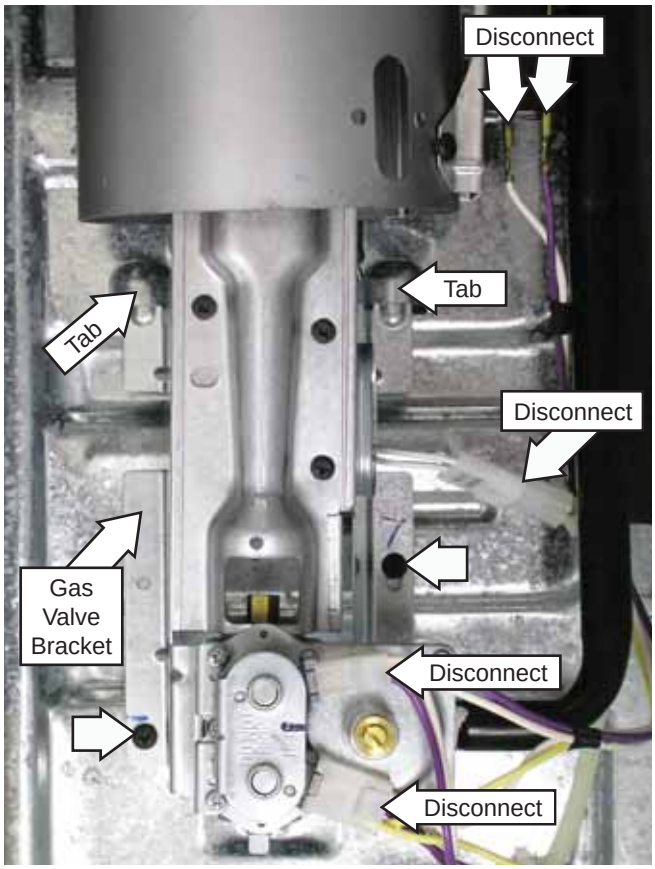
The gas valve is attached to a bracket located in the bottom, right, front corner of the dryer cabinet.

To remove the gas valve:

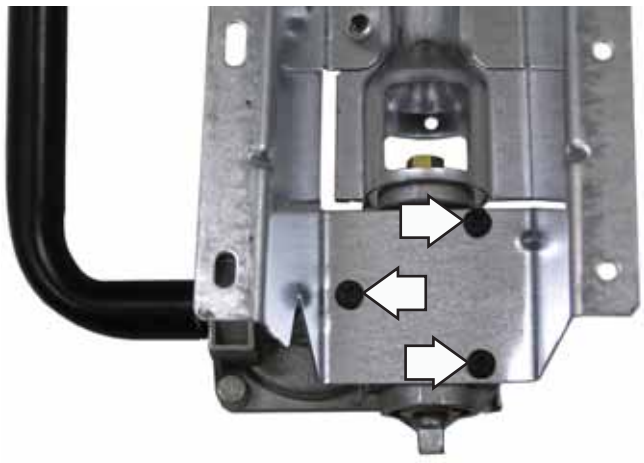
1. Shut off the gas supply to the unit.
2. Disconnect gas supply from the burner inlet pipe.
3. Remove the drum. (See ***Drum***.)
4. Remove 2 Phillips-head screws from the front frame and the Phillips-head screw from the rear of the gas valve cover.



5. Disconnect the ignitor wire harness and the 2 wires from the flame detector.
6. Disconnect the coil wire harness from each coil.
7. Remove the 2 Phillips-head screws that attach the gas valve bracket to the dryer floor.
8. Pull the bracket toward the front of the dryer to disengage tabs from dryer floor.



9. Remove the coils from the gas valve. (See ***Gas Valve Coils***.)
10. Turn the bracket over. Remove the 3 Phillips-head screws that attach the gas valve to the gas valve bracket.



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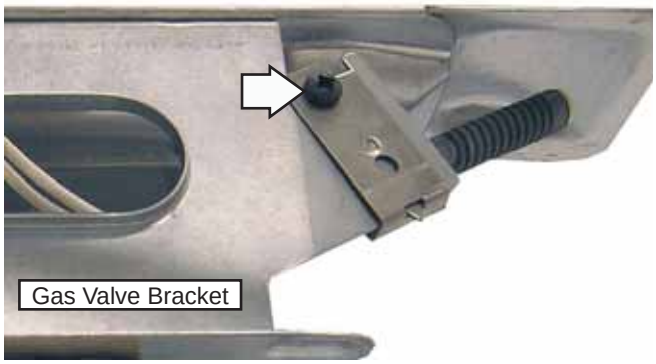
Caution: The ignitor is very fragile. To prevent breaking the ignitor, care must be taken when installing the gas valve.

Note: Upon reassembly, ensure the gas valve bracket is inserted under the 2 tabs located in the dryer floor.

Ignitor

The ignitor is located at the end of the burner assembly in the combustion chamber opening and has a maximum rating of .4 amps. The ignitor has an approximate resistance value of 300 to 500 Ω.

The ignitor is attached to the gas valve bracket with a Phillips-head screw. To access the ignitor, it is necessary to remove the burner assembly. (See *Gas Valve* , steps 1 through 8.)



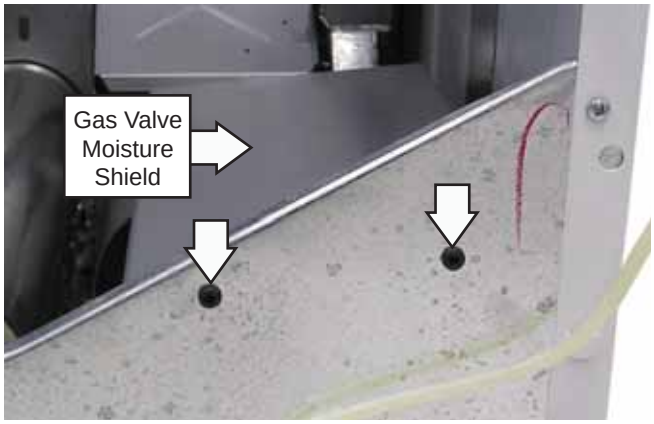
Caution: The ignitor is very fragile. To prevent breaking the ignitor, care must be taken when installing the burner assembly.

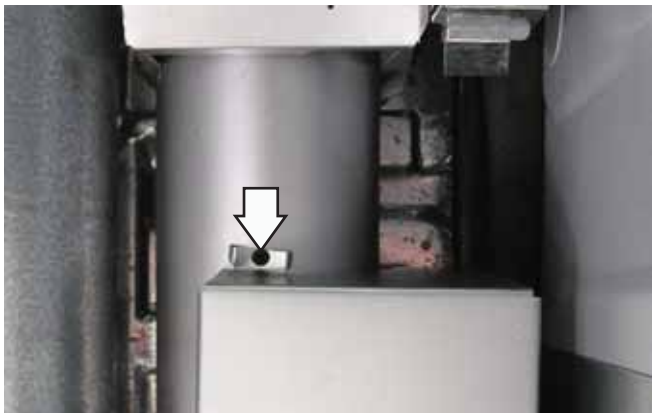
Flame Detector

The flame detector is attached to the right side of the combustion chamber. It is necessary to remove the flame detector moisture shield to remove the flame detector.

To remove the flame detector:

1. Remove the drum. (See *Drum*.)
2. Remove 2 Phillips-head screws from the front frame and the Phillips-head screw from the rear of the gas valve cover.





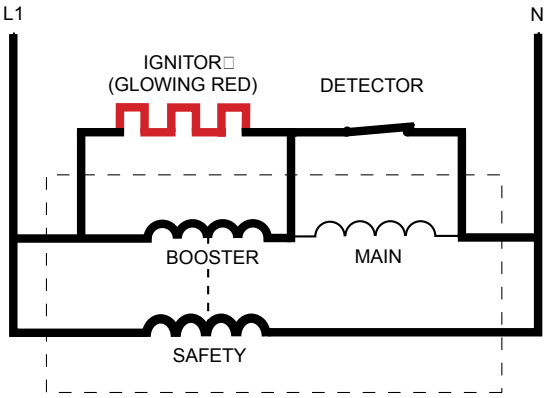
3. Disconnect the 2 wires from the flame detector.
4. Remove the Phillips-head screw that holds the flame detector to the combustion chamber.

5. Remove the flame detector from the tab at the bottom.

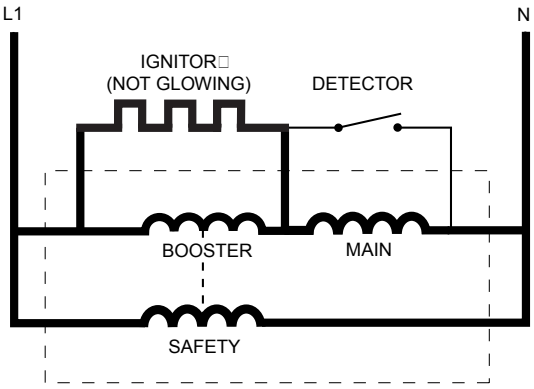
Note: Upon reassembly, ensure the tab at the bottom of the flame detector is inserted into the slot located on the combustion chamber.

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 1350 ohms) and a booster coil (resistance approximately 550 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 1300 ohms).



Ignitor On



Gas Valve Open

The flame detector (< 1 ohm) is mounted on the combustion chamber. It is normally in the 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. Control relay K3 closes L1 to J2 pin 1 sending L1 power through the Outlet and Safety thermostats to the gas valve.
2. 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 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 flame. 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.

Inlet Safety Thermostat

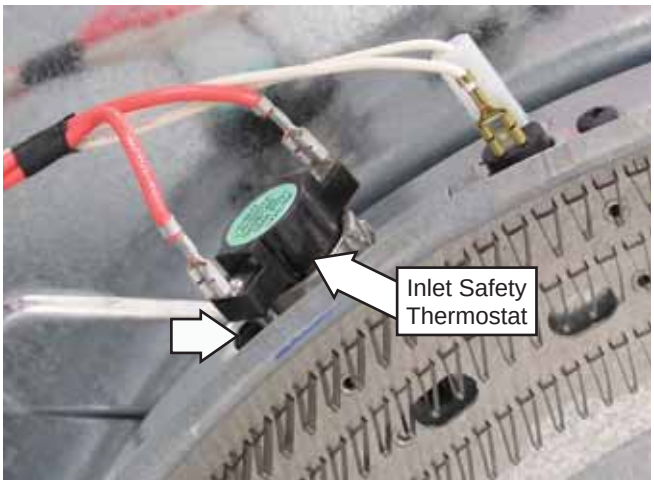
On electric models, the inlet safety thermostat is located on the top left area of the heater housing, to the left of the inlet control thermistor. On gas models, the inlet safety thermostat is located on the right side of the diffuser, above the inlet control thermistor. The thermostat monitors incoming air temperature.

If the thermostat reaches a temperature beyond its maximum temperature rating, it will trip and disable power to the heating elements (electric models) or burner assembly (gas models).

On electric dryers, the inlet safety thermostat opens at 210°F (99°C) and will automatically reset at 180°F (82°C). On gas dryers, the inlet safety thermostat opens at 300°F (149°C) and will automatically reset at 260°F (127°C).

To remove the inlet safety thermostat:

1. Remove the drum. (See ***Drum***.)
2. Disconnect the 2 wires from the inlet safety thermostat.
3. Remove the Phillips-head screw that attaches the inlet safety thermostat to the heater assembly or diffuser.
4. Lift and slide the thermostat from the heater assembly or diffuser.



Electric Model Shown

Inlet Control Thermistor

On electric models, the inlet control thermistor is located on the top left area of the heater housing, to the right of the inlet safety thermostat. On gas models, the inlet control thermistor is located on the right side of the diffuser, below the inlet safety thermostat. The thermistor monitors incoming air temperature and will respond to temperature changes of 3°F. The thermistor relays this information to the control board.

The thermistor has a negative coefficient. As the temperature increases, the thermistor's resistance decreases.

Thermistor Resistance Values		
Temperature °C	Temperature °F	Resistance K-Ohms
10	50	202
16	60	151
21	70	120
25	77	100
32	90	74
38	100	57
49	120	37
57	135	27
66	150	19
93	200	8
121	250	3

Note: If the control reads a thermistor value too high or too low, it will log an error code and switch to a setting where the heaters are on a duty cycle. The dryer then relies on the backup thermostats to control the heater and will go into fall back mode when it has determined that it can no longer rely on the thermistor temperature to control the applied heat. This occurs when a thermistor cannot sense heat (failed open) or reads hot (failed closed). The fall back mode consists of reducing the maximum heating power (typically 50%) so that thermostats are fast enough to shut down the heater in case of overheating. On GE dryers, both heaters are cycled on and off every minute.

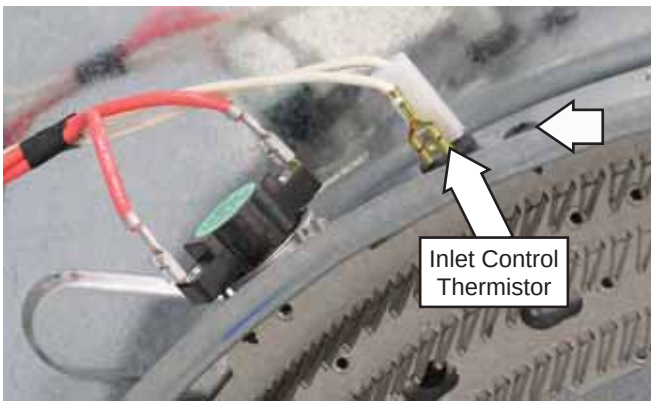
Operation of the inlet control thermistor can be checked by using service test mode T06. (See ***Service Test Mode***.)

Specific failures associated with the inlet control thermistor can initiate error codes E3 and E4. (See ***Service Test Mode***.)

(Continued Next Page)

To remove the inlet control thermistor:

1. Remove the drum. (See ***Drum***.)
2. Disconnect the 2 wires from the inlet control thermistor.
3. Remove the Phillips-head screw that attaches the inlet control thermistor to the heater assembly or diffuser.
4. Lift and slide the thermistor from the heater assembly or diffuser.



Electric Model Shown

Outlet Control Thermistor

The outlet control thermistor is located on the lower rear area of the blower housing. It is below the moisture shield and the outlet control backup thermostat. The outlet control thermistor measures outgoing air temperature and will respond to temperature changes of 3°F. The thermistor relays this information to the control board.

The outlet control thermistor has the same resistance values as the inlet control thermistor. (See ***Inlet Control Thermistor***.)

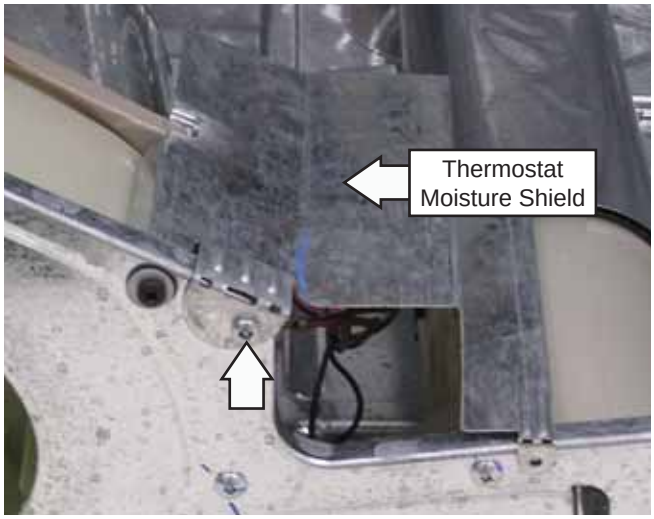
Note: If the control reads a thermistor value too high or too low, it will log an error code and switch to a setting where the heaters are on a duty cycle. The dryer then relies on the backup thermostats to control the heater and will go into fall back mode when it has determined that it can no longer rely on the thermistor temperature to control the applied heat. This occurs when a thermistor cannot sense heat (failed open) or reads hot (failed closed). The fall back mode consists of reducing the maximum heating power (typically 50%) so that thermostats are fast enough to shut down the heater in case of overheating. On GE dryers, both heaters are cycled on and off every minute.

Operation of the outlet control thermistor can be checked by using service test mode T05. (See ***Service Test Mode***.)

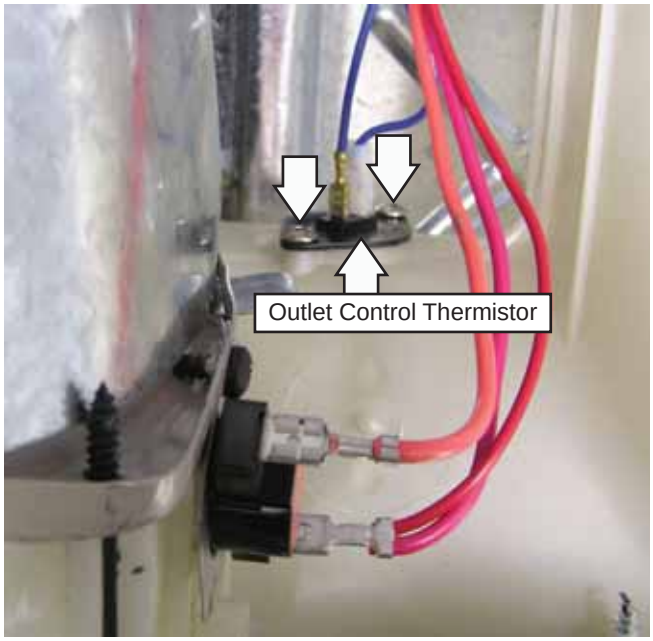
Specific failures associated with the outlet control thermistor can initiate error codes E5 and E6. (See ***Service Test Mode***.)

To remove the outlet control thermistor:

1. Remove the drum. (See ***Drum***.)
2. Remove the Phillips-head screw and the thermostat moisture shield from the front frame.



3. Disconnect the 2 wires from the outlet control thermistor.
4. Remove the 2 Phillips-head screws that attach the outlet control thermistor to the blower housing.



Electric Model Shown

Outlet Control Backup Thermostat

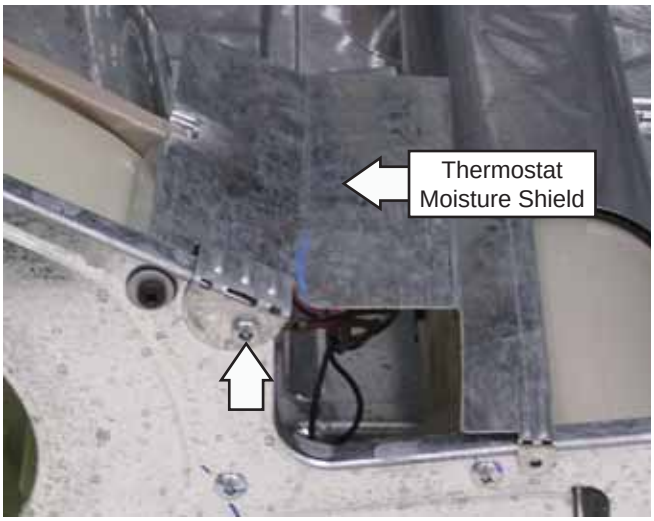
The outlet control backup thermostat is located on the upper, rear area of the blower housing. It is below the moisture shield and above the outlet control thermistor. The outlet control backup thermostat monitors the outgoing air temperature.

If the thermostat reaches a temperature beyond its maximum temperature rating, it will trip and disable power to the heating elements or burner assembly.

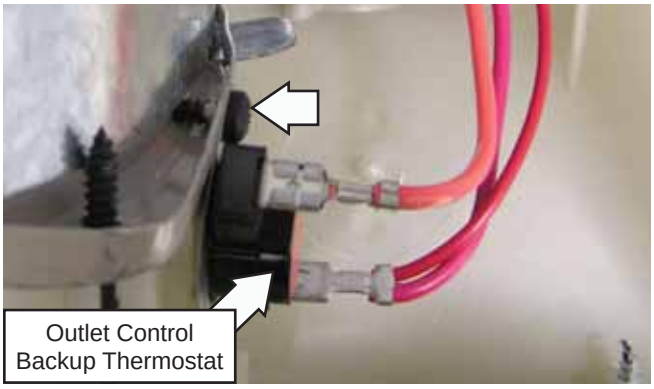
The outlet control backup thermostat opens at 165°F (74°C) and will automatically reset at 155°F (68°C).

To remove the outlet control backup thermostat:

1. Remove the drum. (See ***Drum***.)
2. Remove the Phillips-head screw and the thermostat moisture shield from the front frame.



3. Disconnect the 2 wires from the outlet control backup thermostat.
4. Remove the Phillips-head screw that attaches the outlet control backup thermostat to the blower housing.



Electric Model Shown

High Limit Thermostat

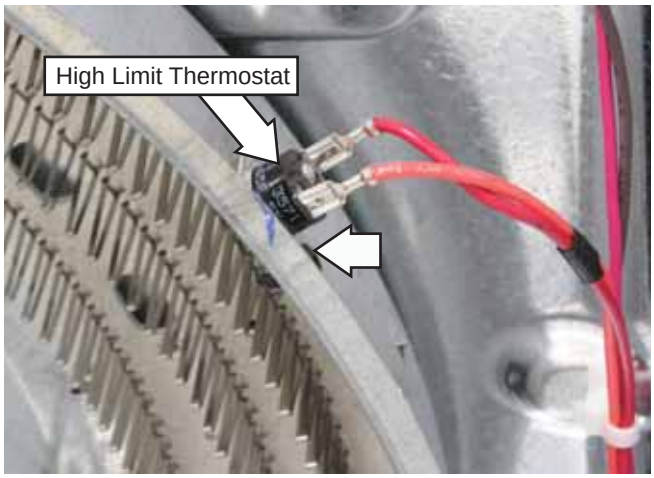
On electric models, the high limit thermostat is located on the top right area of the heater housing. On gas models, the high limit thermostat is located on the upper right side of the diffuser. The high limit thermostat monitors incoming air temperature.

If the thermostat reaches a temperature beyond its maximum temperature rating, it will trip and take out the L1 circuit to the motor disabling the heat source.

For both gas and electric models, the high limit thermostat opens at 315°F (157°C) and will automatically reset at 250°F (121°C).

To remove the high limit thermostat:

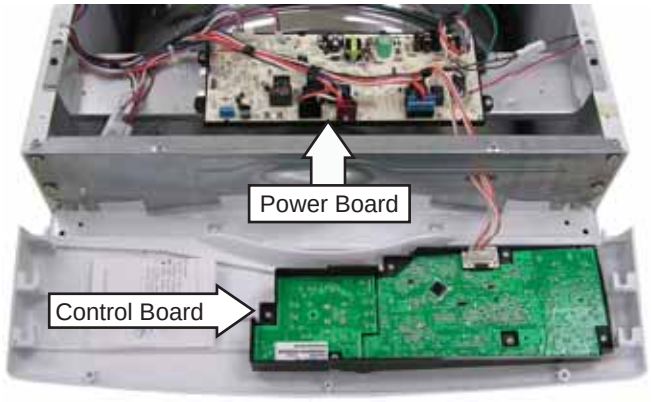
1. Remove the drum. (See ***Drum***.)
2. Disconnect the 2 wires from the high limit thermostat.
3. Remove the Phillips-head screw that attaches the high limit thermostat to the heater assembly or diffuser.
4. Slide the thermostat from the heater assembly or diffuser.



Electric Model Shown

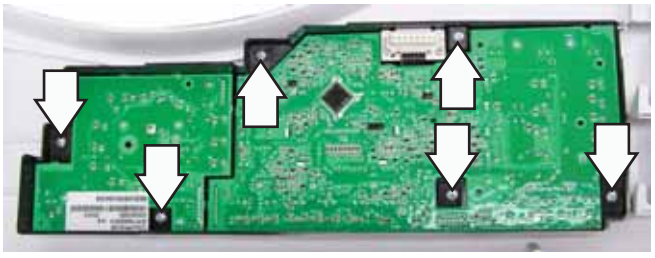
Electronic Control

The electronic control consists of a control board and a power board.



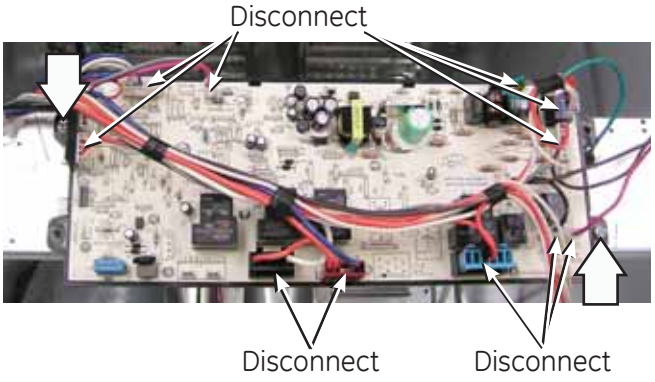
To remove the electronic control board:

1. Set the control panel in the service position. (See *Control Panel*.)
2. Remove the 6 Phillips-head screws that attach the selector board to the control panel.

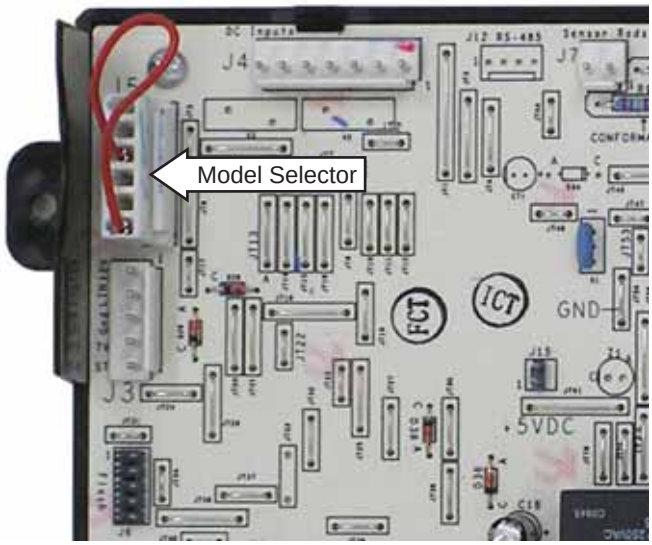


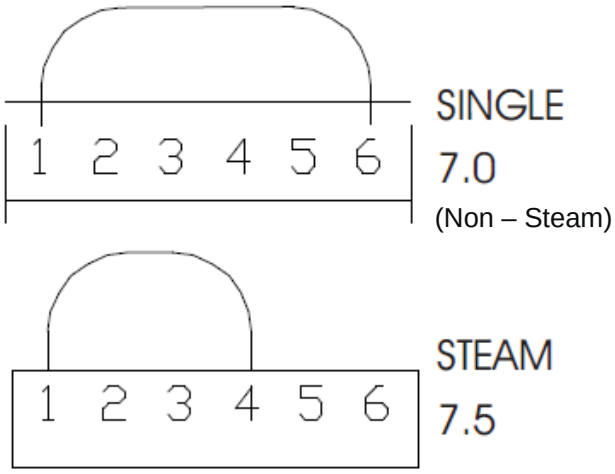
To remove the electronic power board:

1. Remove the top panel. (See *Top Panel*.)
2. Disconnect 11 wires and wiring harnesses from the power board.
3. Remove the 2 Phillips-head screws to release the power board from the power board bracket.

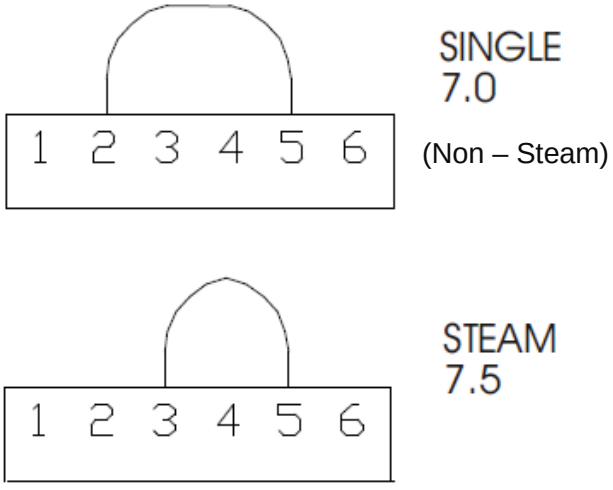


Note: If replacing the electronic control, transfer the model selector harness to the replacement control board in the same location as on the original. If harness is not transferred, it will generate an E8 fault code. (See *Service Test Mode*.)





Electric Models



Gas Models

Troubleshooting

Demo Mode

To enter demo mode:

1. Turn the unit off so the screen is blank.
2. Unplug the unit from power and wait 10 seconds.
3. Plug the unit back in.
4. Open the door.
5. Within 30 seconds after plugging the unit back in, press the *START/PAUSE* button 4 times.
6. Close the door.
7. Press the *POWER* button.

To exit demo mode:

8. Repeat the above sequence.

Note: In the demo mode, the control will proceed through the selected cycle but will not activate any components.

Service Test Mode

How to enter to service mode and navigate:
From idle state, press and alternate between the "My cycle" and "Delay Start" buttons to enter service mode. Upon entering the service mode, the Control shall be in test selection mode and display the first test number (t01). Rotating the knob counter clockwise (CCW) shall decrement the test number in the display. Rotating the knob clockwise (CW) shall increment the test numbers in the display.
Once the test number is selected, pressing [Start/Pause] shall begin the selected test.
During a test, pressing power button shall terminate that test and bring the control to the test selection mode (test number is displayed on the display).
Pressing Power key during the test selection mode shall exit the Service mode.

SERVICE MODE TEST		SEQUENCE	
T01	Error codes	Start/Pause	Display error codes
		Knob	The knob can be turned CCW and CW to see all logged error codes.
		Start/Pause	Clear highlighted error code from machine
		Power	Returns to service mode screen
T02	Version info	Start/Pause	Display the current version of software
		Knob	Turn the knob CW while the display shows the UI SW version - The display will alternate between "SPb" and the 3 digit MC SW version, displaying each for 1 second at a time
		Knob	Turn the knob CW while the display shows the MC SW version - The display will alternate between "EUI" and the 3 digit UI Eeprom version, displaying each for 1 second at a time
		Knob	Turn the knob CW while the display shows the UI Eeprom version The display will alternate between "EPb" and the 3 digit MC Eeprom version, displaying each for 1 second at a time
		Knob	Turn the knob CCW during each of the software versions - verify that the previous display is stored
		Power	Returns to service mode screen

(Continued Next Page)

SERVICE MODE TEST		SEQUENCE	
T03	Eeprom check	Start/Pause	On Entry - The UI and MC board will test their respective Eeproms. When the UI and MC have finished, "UIP" will be displayed on the SSD if the UI passed, or "UIF" if the UI Eeprom test failed.
		Knob	Turn the knob - "PBP" will be displayed on the 7-segment LEDs if the MC passed, or "PBF" if the MC Eeprom test failed.
		Power	Returns to service mode screen
T04	UI test	Start/Pause	The control shall turn on all LED's around the dial, the "Power", and "Start/Pause" button LED's, but not the SSD for a duration of 5 seconds. The control shall then turn off all LED's and then turn on the SSD.
		Any button but power	The control shall sound a Beep as long as a key is pressed.
		Power	Returns to service mode screen
T05	Outlet Thermistor	Start/Pause	The control shall display the Outlet Thermistor temperature in degrees Fahrenheit on the SSD during the test. The control shall start the drum motor and turn on the inner and outer coils for Electric models, and the gas valve for Gas models.
		Power	Returns to service mode screen
T06	Inlet Thermistor	Start/Pause	The control shall display the Inlet Thermistor temperature in degrees Fahrenheit on the SSD throughout the duration of the test. The control shall start the drum motor and turn on the inner coil for Electric models, and the gas valve for Gas models.
		Power	Returns to service mode screen
T07	Moisture Sensor		The control shall display the voltage read from the moisture sensor in volts on the SSD
		Power	Returns to service mode screen
T08	Steam test	Start/Pause	Upon entry, control shall display "STE" on the SSD during the steam test. The steam test shall rotate the drum with the standard profile. Five seconds after enabling the drum motor, the control shall enable power to the steam generator throughout the remainder of the test.
		Power	Returns to service mode screen

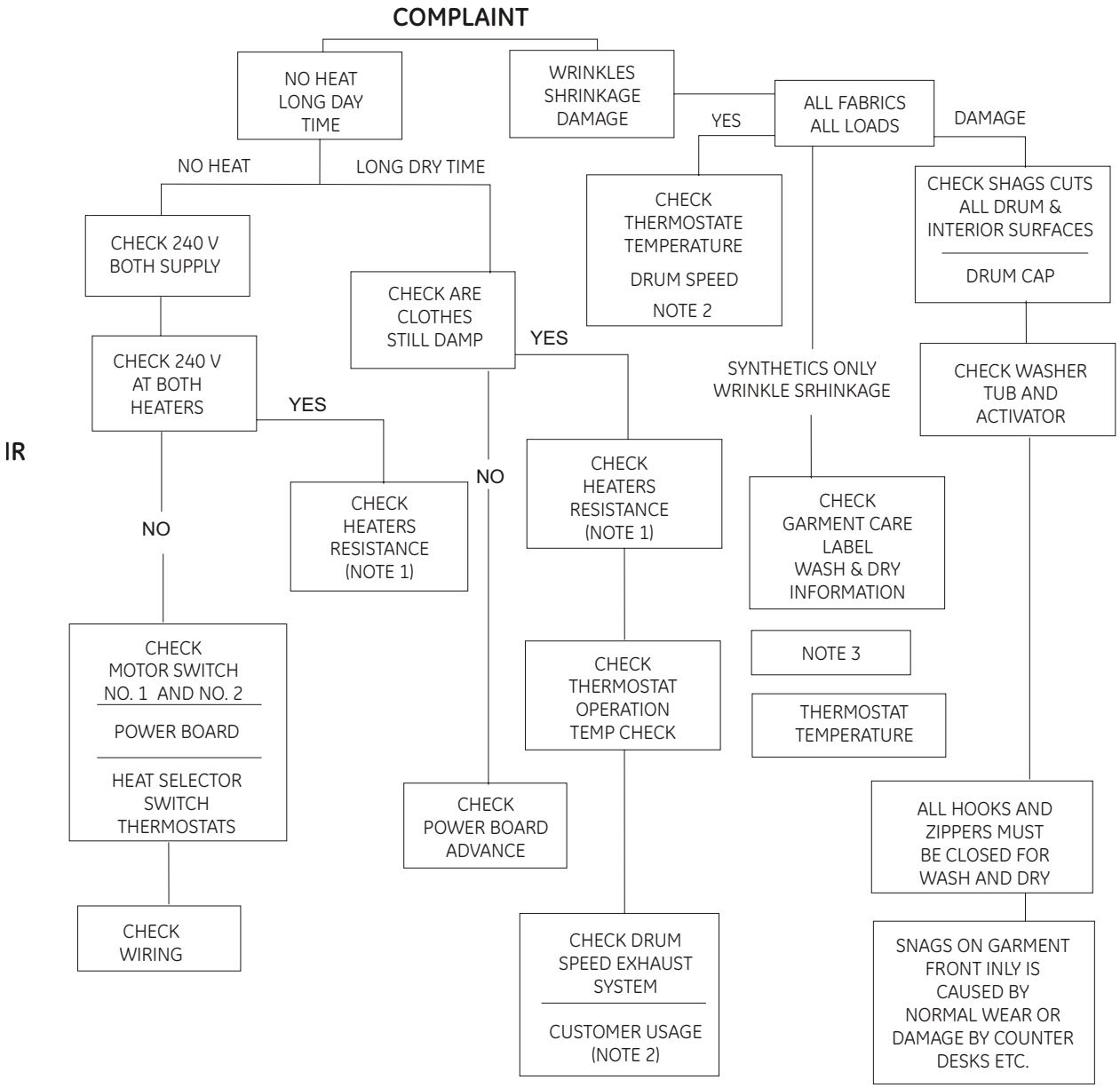
Error codes

Error Code	Description
E1-Interface EEPROM	Reading or writing improperly. Replace UI board.
E2-Power EEPROM	Reading or writing improperly. Replace power board.
E3-Inlet Short	Check and replace inlet thermistor if necessary.
E4-Inlet Open	Check and replace inlet thermistor if necessary.
E5-Outlet Short	Check and replace outlet thermistor if necessary.
E6-Outlet Open	Check and replace outlet thermistor if necessary.
E7- Check Electrical Connection	Please check power connections.
E8- Power Model	Check model selector on power board.
E11- Drum Motor	Motor is not rotating properly or centrifugal switch is bad. Please check.
E14- Stuck Button	Stuck keys. Please check

Note:

- The display error codes test allows the service technician to examine and clear the fault log.
- The control will display the most recent error in the fault log upon entry into the display error codes test. If there are no errors in the fault log, the **E00** code will be displayed on the display.
- The control will clear the displayed error from the fault log if the *START/PAUSE* key is pressed during the display error codes test. After clearing the displayed error from the fault log, the dryer will display the next most recent error from the fault log.
- After clearing all errors from the fault log, the control will display the **E00** code on the display.
- The control will log the last 8 error codes in the memory stored in the control.
- The control will avoid logging multiple instances of the same error code.

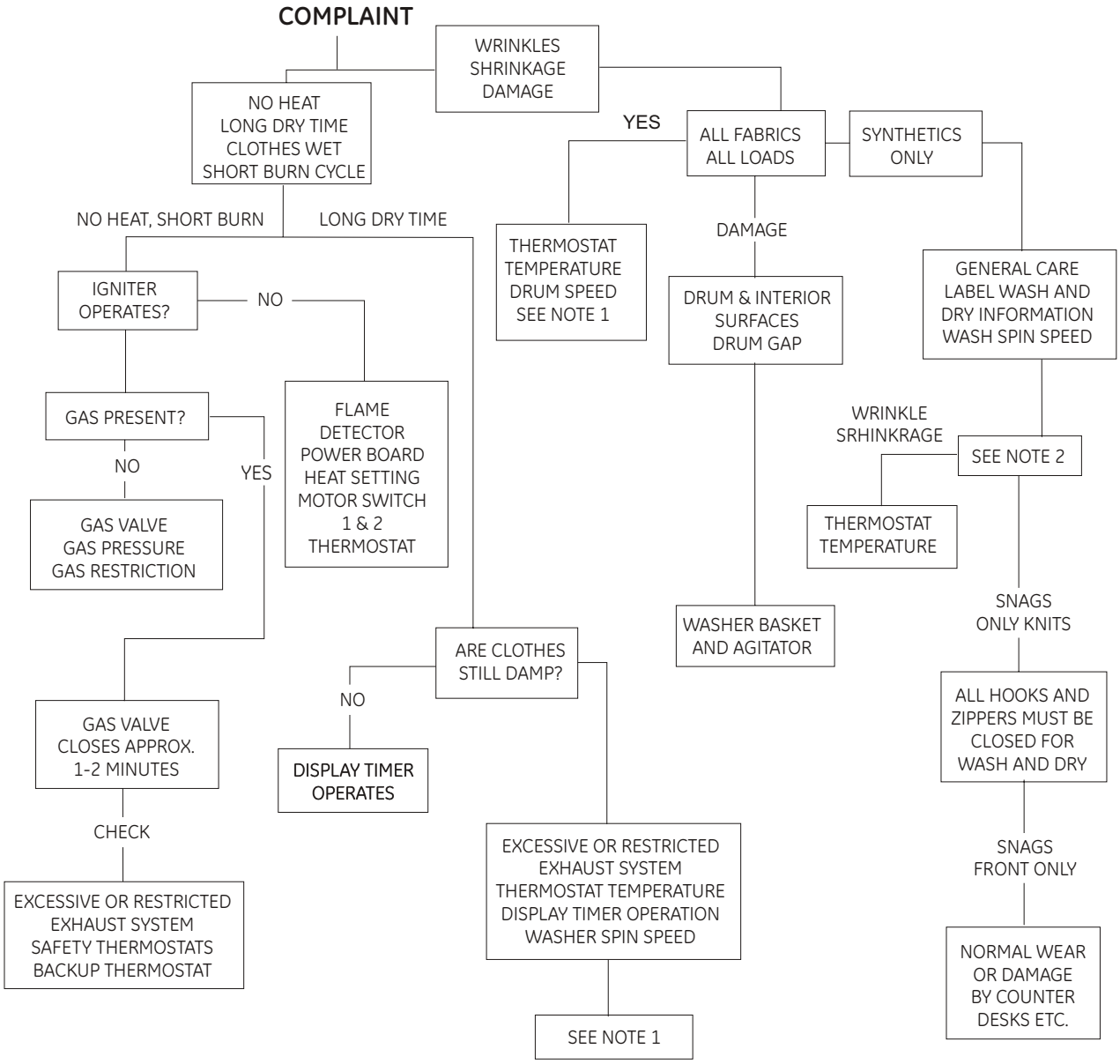
(Continued Next Page)



Note:

- Heater element is shown on wiring schematic (on reverse side of this sheet). Check for infinite resistance between any heater terminal and dry cabinet. Heater failure could result from low air flow caused by improper sealing, kinked or excessive ducting or excessive line voltage.
- Other factors contributing to long dry times, or clothes condition: load size, large bulky items, ambient temperature, room size (if not exhausted outdoor). washer spin speed, washer rinse temperature, gas supply (restrictions), gas pressure.
- Small loads: Less than 3 lbs. if not treated with destaticizer could develop a static charge if over dried and cling to drum surface (no tumble) causing wrinkles, shrinkage, or melting. Use a fabric softener (washer or dryer) or add 2 large bath towels to act as a buffer when drying.

(Continued Next Page)

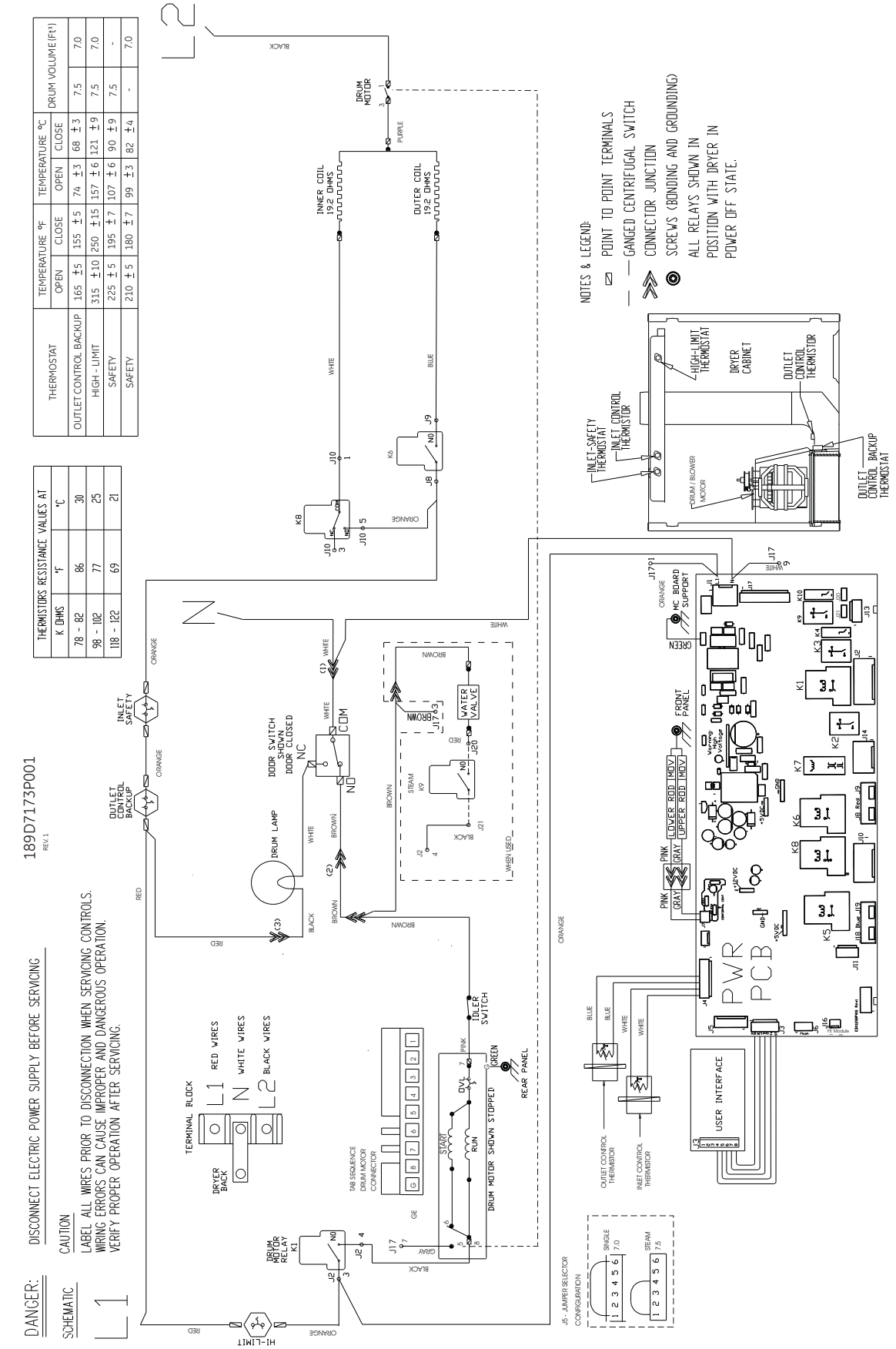


SEE SHEMATIC FOR PROPER SWITCH CONNECTIONS

Note:

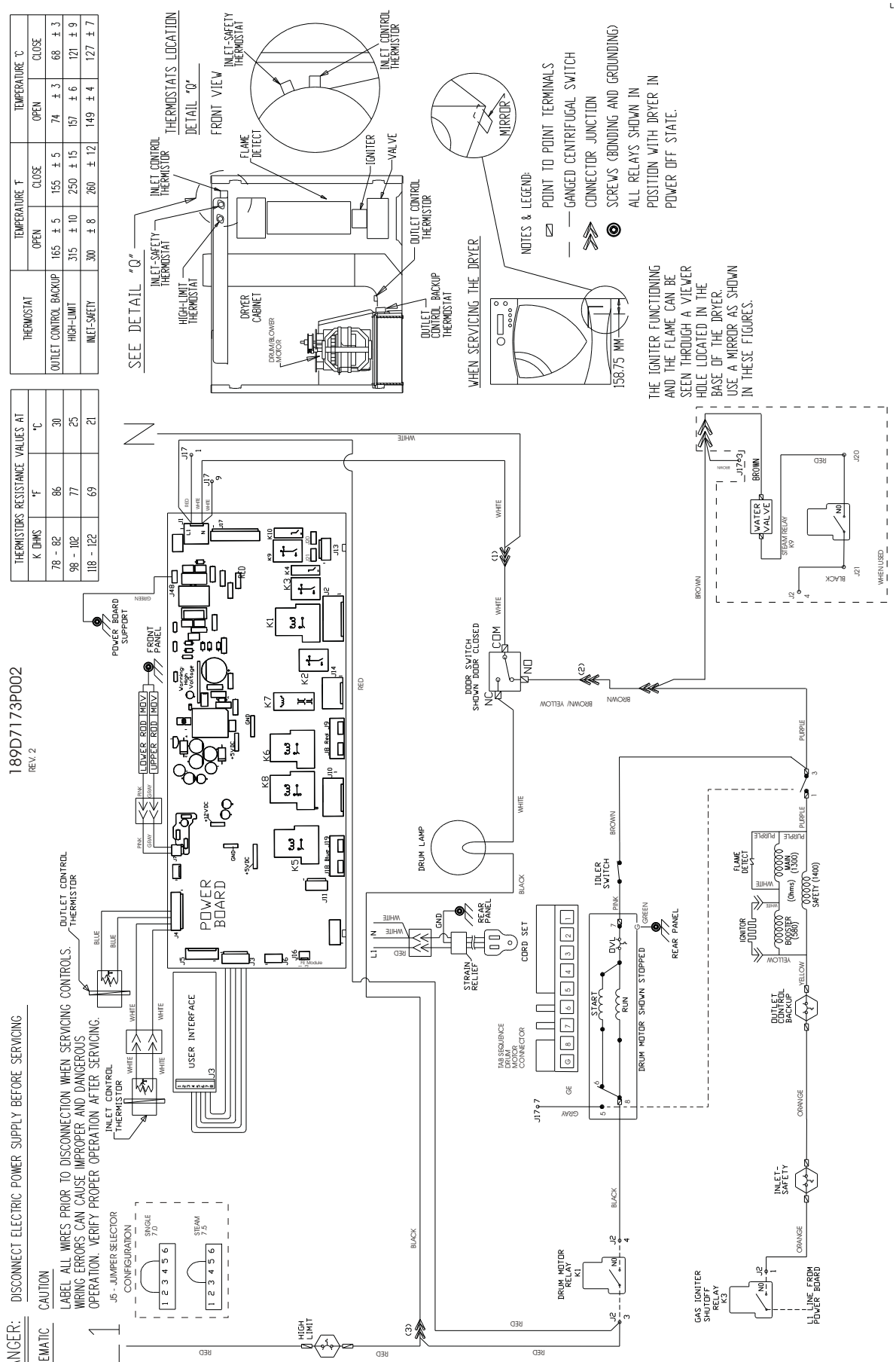
- Other factors contributing to long dry times, or clothes condition: load size, large bulky items, ambient temperature, room size (if not exhausted outdoor). washer spin speed, washer rinse temperature, gas supply (restrictions), gas pressure.
- Small loads: Less than 3 lbs. if not treated with destaticizer could develop a static charge if over dried and cling to drum surface (no tumble) causing wrinkles, shrinkage, or melting. Use a fabric softener (washer or dryer) or add 2 large bath towels to act as a buffer when drying.

Electric Model



THERMISTORS RESISTANCE VALUES AT		
K OHMS	°F	°C
78 - 82	86	30
98 - 102	77	25
118 - 122	69	21

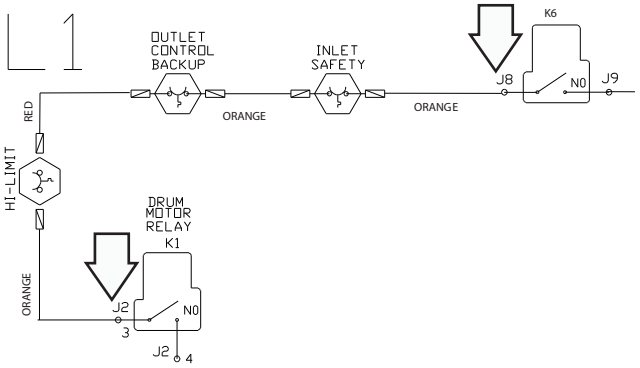
THERMOSTAT	TEMPERATURE °F		TEMPERATURE °C		DRUM VOLUME (FT³)
	OPEN	CLOSE	OPEN	CLOSE	
OUTLET CONTROL BACKUP	165 ±5	155 ±5	74 ±3	68 ±3	7.5 7.0
HIGH-LIMIT	315 ±10	250 ±15	157 ±6	121 ±9	7.5 7.0
SAFETY	225 ±5	195 ±7	107 ±6	90 ±9	7.5 -
SAFETY	210 ±5	180 ±7	99 ±3	82 ±4	- 7.0


DANGER: DISCONNECT ELECTRIC POWER SUPPLY BEFORE SERVICING
SCHEMATIC
CAUTION
LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. VERIFY PROPER OPERATION AFTER SERVICING.
189D7173P002
REV. 2
THERMISTORS RESISTANCE VALUES AT
K OHMS °F °C
78 - 82 86 30
98 - 102 77 25
118 - 122 69 21
THERMOSTAT TEMPERATURE °F TEMPERATURE °C
OPEN CLOSE OPEN CLOSE
OUTLET CONTROL BACKUP 165 ± 5 155 ± 5 74 ± 3 68 ± 3
HIGH-LIMIT 315 ± 10 250 ± 15 157 ± 6 121 ± 9
INLET-SAFETY 300 ± 8 280 ± 12 149 ± 4 127 ± 7
SEE DETAIL "Q"
THERMOSTATS LOCATION
DETAIL "Q"
FRONT VIEW
INLET-SAFETY THERMOSTAT
INLET CONTROL THERMISTOR
HIGH-LIMIT THERMOSTAT
DRYER CABINET
DRUM BLOWER MOTOR
FLAME DETECT
IGNITER
VALVE
OUTLET CONTROL THERMISTOR
OUTLET CONTROL BACKUP THERMOSTAT
WHEN SERVICING THE DRYER
MIRROR
158.75 MM
THE IGNITER FUNCTIONING AND THE FLAME CAN BE SEEN THROUGH A VIEWER HOLE LOCATED IN THE BASE OF THE DRYER. USE A MIRROR AS SHOWN IN THESE FIGURES.
NOTES & LEGEND:
POINT TO POINT TERMINALS
GANGED CENTRIFUGAL SWITCH
CONNECTOR JUNCTION
SCREWS (BONDING AND GROUNDING)
ALL RELAYS SHOWN IN POSITION WITH DRYER IN POWER OFF STATE.
POWER BOARD
USER INTERFACE
J5 - JUMPER SELECTOR CONFIGURATION
SINGLE 7.0
STEAM 7.5
INLET CONTROL THERMISTOR
OUTLET CONTROL THERMISTOR
POWER BOARD SUPPORT
FRONT PANEL
LOWER ROD (MOV)
UPPER ROD (MOV)
DOOR SWITCH SHOWN DOOR CLOSED
DRUM LAMP
REAR PANEL
STRAIN RELIEF
CORD SET
TAB SEQUENCE DRUM MOTOR CONNECTOR
IDLER SWITCH
DRUM MOTOR SHOWN STOPPED
START
RUN
DRUM MOTOR RELAY K1
HIGH LIMIT
GAS IGNITER SHUTOFF RELAY K3
LINE FROM POWER BOARD
INLET-SAFETY
OUTLET CONTROL BACKUP
IGNITOR
FLAME DETECT
BURNER (1300)
MAIN (0hms)
SAFETY (1400)
VALVE
STEAM RELAY K9
WHEN USED
WATER VALVE
BROWN
BLACK
WHITE
RED
PURPLE
YELLOW
ORANGE
GREEN
GRAY
PINK

To check thermostats:

1. Disconnect power.
2. Measure resistance between J2 pin 3 and J8.

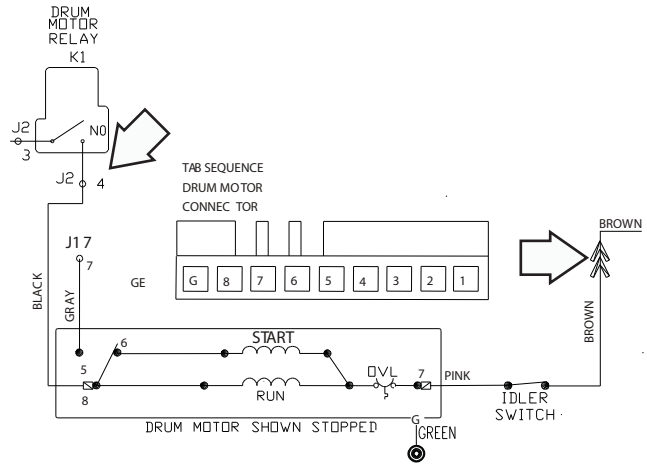
Note: If all thermostats are intact, reading should be 0 Ω.



To check belt switch:

1. Disconnect power.
2. Measure resistance between J2 pin 4 and plug.

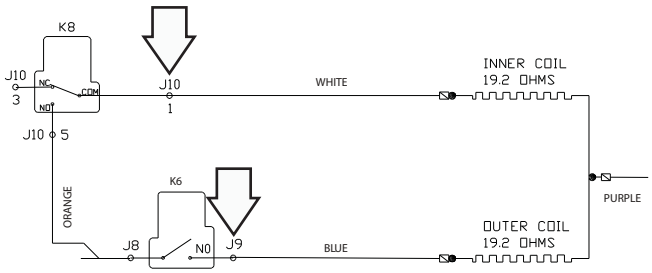
Note: If belt switch and motor are intact, reading should be 3 Ω.



To check heaters:

1. Disconnect power.
2. Measure resistance between J9 and J10.

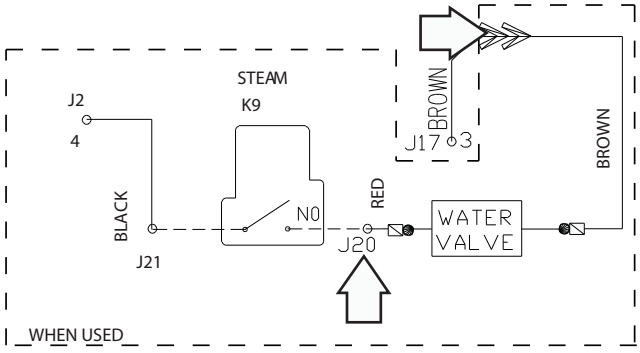
Note: If both heaters are intact, reading should be 40 Ω.



To check water valve:

1. Disconnect power.
2. Measure resistance between J20 and plug.

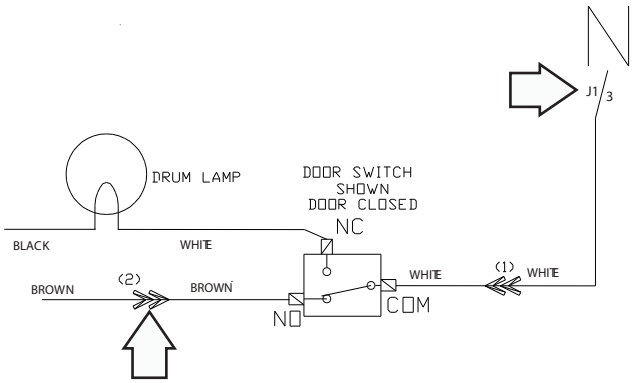
Note: The resistance of the valve coil should read 400 Ω.



To check door switch:

1. Disconnect power.
2. Measure resistance between J1 pin 3 (neutral) and plug.

Note: The resistance should read 0 Ω with the door closed and ∞ Ω with the door open.



Warranty

All warranty service provided by our Factory Service Centers, or an authorized Customer Care® technician. To schedule service, on-line, visit us at GEAppliances.com, or call 800. GE.CARES (800.432.2737).

Please have serial number and model number available when calling for service.

Staple your receipt here. Proof of the original purchase date is needed to obtain service under the warranty.

For The Period Of:	*We Will Replace:*
One Year *From the date of the original purchase*	***Any part*** of the dryer which fails due to a defect in materials or workmanship. During this ***limited one-year warranty***, GE will also provide, ***free of charge***, all labor and related service costs to replace the defective part.

What Is Not Covered:

- ***Service trips to your home to teach you how to use the product.***
- ***Improper installation, delivery or maintenance.***
- ***Failure of the product if it is abused, misused or used for other than the intended purpose or used commercially.***
- ***Replacement of house fuses or resetting of circuit breakers.***
- ***Damage to the product caused by accident, fire, floods or acts of God.***
- ***Incidental or consequential damage caused by possible defects with this appliance.***
- ***Damage caused after delivery.***
- ***Product not accessible to provide required service.***

EXCLUSION OF IMPLIED WARRANTIES—Your sole and exclusive remedy is product repair as provided in this Limited Warranty. Any implied warranties, including the implied warranties of merchantability or fitness for a particular purpose, are limited to one year or the shortest period allowed by law.

This warranty is extended to the original purchaser and any succeeding owner for products purchased for home use within the USA. If the product is located in an area where service by a GE Authorized Servicer is not available, you may be responsible for a trip charge or you may be required to bring the product to an Authorized GE Service location for service. In Alaska, the warranty excludes the cost of shipping or service calls to your home.

Some states do not allow the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. To know what your legal rights are, consult your local or state consumer affairs office or your state's Attorney General.

Warrantor: General Electric Company. Louisville, KY 40225