

# GE's 2015 27" Top Load Washer



HTW200ASKWW  
MTW200AMKWW  
GTW220ACKWW  
HTW240ASKWW  
GTW330ASKWW  
GTW460ASJWW  
GTW485ASJWW  
GTW485ASJWS  
GTW490ACJWW  
GTW490ACJWS  
GTW680BSJWS



## IMPORTANT SAFETY NOTICE

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

### **WARNING**

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

### RECONNECT ALL GROUNDING DEVICES

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

Although GE Factory Service Employees are required to use the personal protection equipment (PPE) listed below, it is recommended for GE authorized servicers to use them as well for your own protection.



**Dyneema® Cut Resistant Glove**



**Electrically Rated Glove and Dyneema® Cut Resistant Glove Keeper**



**Plano Type Safety Glasses**



**Cut Resistant Sleeve(s)**



**Steel Toe Work Boot**



**Brazing Glasses**



**Prescription Safety Glasses**

**Safety Glasses must be ANSI Z87.1-2003 compliant**

# CAUTION

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

## Step 1

Plan and Prepare

## Step 2

Shut down the appliance

## Step 3

Isolate the appliance

## Step 4

Apply LOTO device & Lock

## Step 5

Control (discharge) stored energy

## Step 6

“Try It” Verify that the appliance is locked out



# Some Features & Benefits

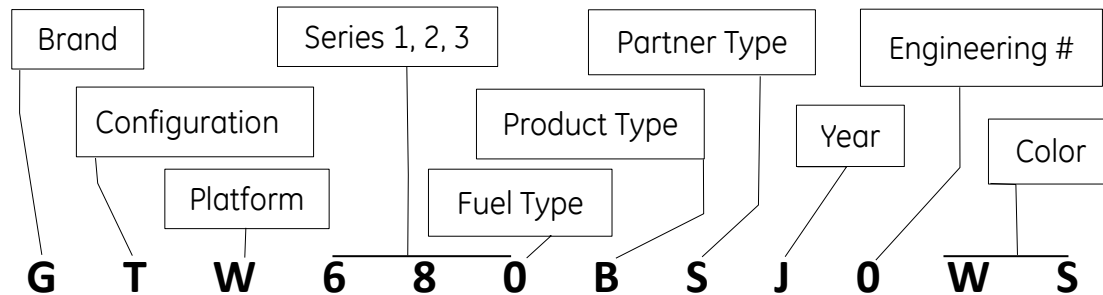
## GTW460 Models

- Deep Fill: Adds more water for larger loads.
- Dual-Action Agitator: Provide gentle, dual-wash action.
- Deep Rinse: Removes any leftover soap residue.
- Auto Soak: Loosens stains by soaking up to 2 hours.
- Speed Wash: Delivers ready-to-go results within minutes.
- Load Size: Automatically measures load size, and adjusts settings and water levels accordingly. Settings are customizable, so you always get the wash you want.

## GTW680 Models

- Sanitize with Oxi: Remove 99.9 % of bacteria with a dedicated cycle that uses an Oxi additive to boost your detergents cleaning power while keeping fabric looking their best.
- Stain Removal Guide: Assist removing tough stains with preprogrammed settings that modify your cycle to treat the four most common stains.
- Warm Rinse: Just what the consumer ordered. The option to select between a warm or cold rinse.
- Deep Fill: Adds more water for larger loads.
- Deep Rinse: Removes any leftover soap residue.
- Auto Soak: Loosens stains by soaking up to 2 hours.

# Nomenclature



## Brand

G-GE  
H-Hot Point  
M-Moffatt

## Configuration

F-Front Load  
T-Top Load - Rear control  
N-Top Load - Front control  
U-Unitized

## Platform

W-Washer  
D-Vented Dryer- Std  
V-Vented Dryer- Long  
C-Condenser Dryer  
H-Heat Pump  
Z-Flat Back Dryer- Long  
X-Flat Back Dryer- Std

## Series 1 1-9

## Series 2 1-9

4 = 24" unitized

7 = 27" unitized

## Series 3 1-9 Washer only

## Fuel Type Dryer

E Electric  
G Gas  
P Propane

## Partner Type

P-Premium Cost (color)  
H-Home Depot  
L-Lowes  
S-Standard  
C-Contract (Hoses)  
M-Mabe

## Product Type

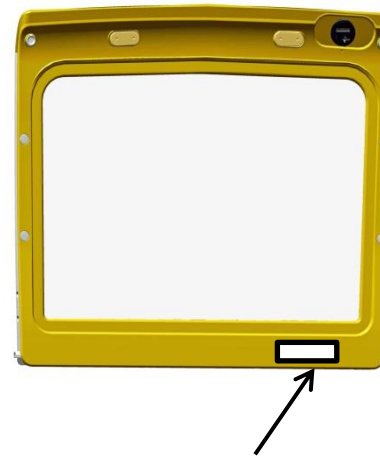
R Riser  
A 2" Cover Top Load  
B 4" Cover Top Load  
S Standard/Stationary  
P Portable

# Nomenclature and Mini (MAXI) Manual Location

## Serial Number

The nomenclature breaks down and explains what the letters and numbers mean in the model number. The first two characters of the serial number identify the month and year of manufacture. Example: LF123456S = June, 2015

|        |         |
|--------|---------|
| A- JAN | 2024- Z |
| D- FEB | 2023- V |
| F- MAR | 2022- T |
| G- APR | 2021- S |
| H- MAY | 2020- R |
| L- JUN | 2019- M |
| M- JUL | 2018- L |
| R- AUG | 2017- H |
| S- SEP | 2016- G |
| T- OCT | 2015- F |
| V- NOV | 2014- D |
| Z- DEC | 2013- A |



Model ID Tag Location.



The mini (maxi) manual location. Tilt washer back to retrieve.

The letter designating the year repeats every 12 years.

The Model Serial ID Tag is located on the bottom edge of the lid.

The Mini Manual is in a storage bag on the inside bottom left side of the outer cabinet.

# Water Levels

## Approximate Minimum Water Levels

Impeller – 7 Gallons or 3 in. depth from the bottom of the basket.

Agitator – 9 Gallons or 3-3/4 in. depth from the bottom of the basket.

## Approximate Maximum Water Levels

Impeller – 26 Gallons or 13-1/2 in. depth from the bottom of the basket. Press and hold for 3 seconds “Deep Fill” to achieve.

Impeller “Bulky” setting water level is 25 gallons or 12-3/4 in. depth from the bottom of the basket.

Agitator – 26 Gallons or 12-1/2 in. depth from the bottom of the basket. Set to super.

Tests are completed with an empty basket.

# Model Graphics



GTW460

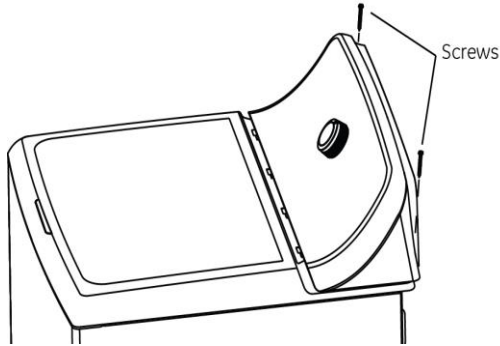


GTW485 GTW490



GTW680

# Lid Assembly Removal

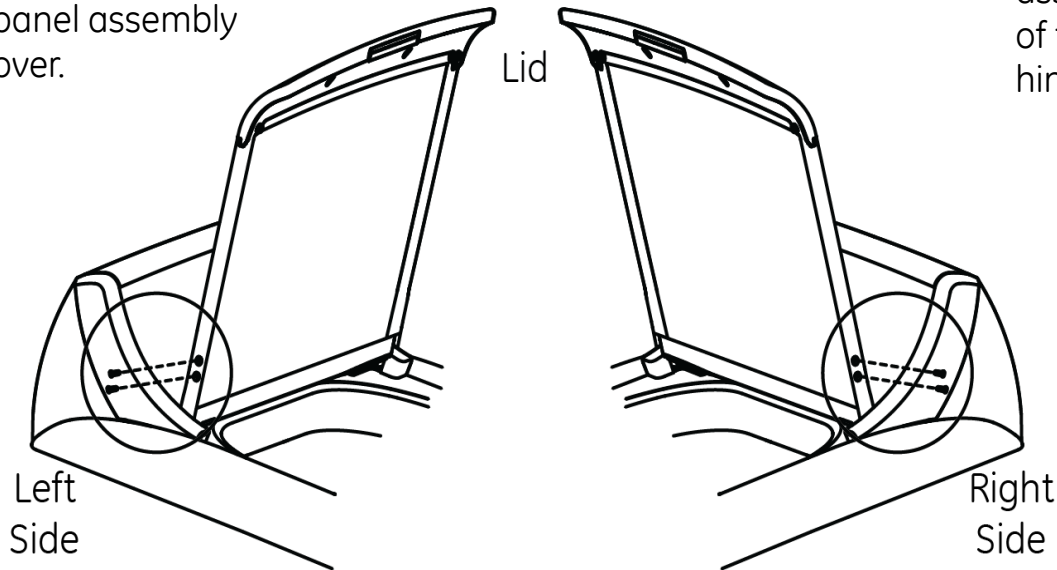


Hinge Pin  
Cover



Remove the two 1/4 in. hex head screws that secure the control panel assembly to the top cover.

Slide the control panel assembly toward the rear of the washer to expose the hinge pin cover.

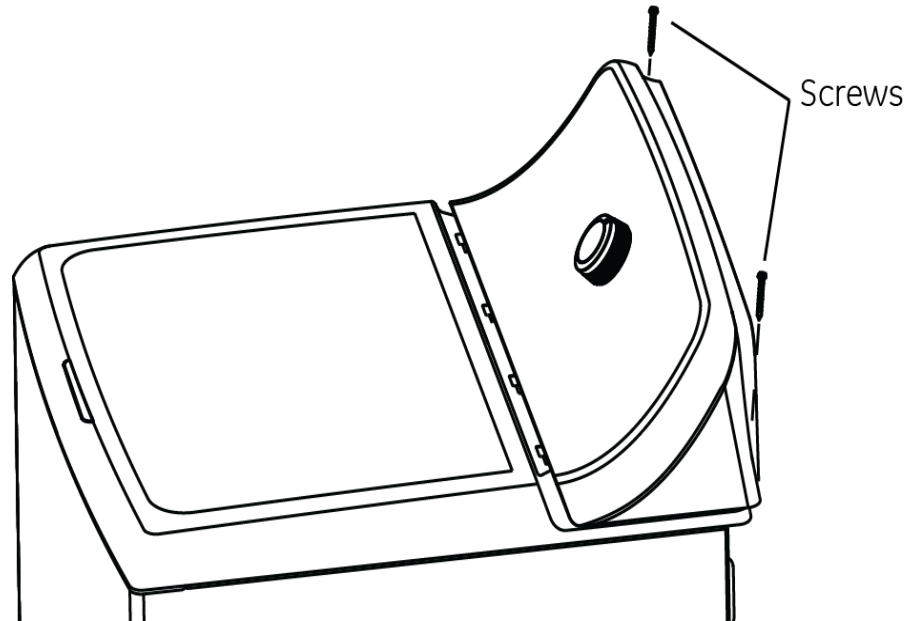


Remove the four Philips head screws (two on each side) and lift lid up to remove.

# Control Panel Assembly Removal

To remove the control panel assembly:

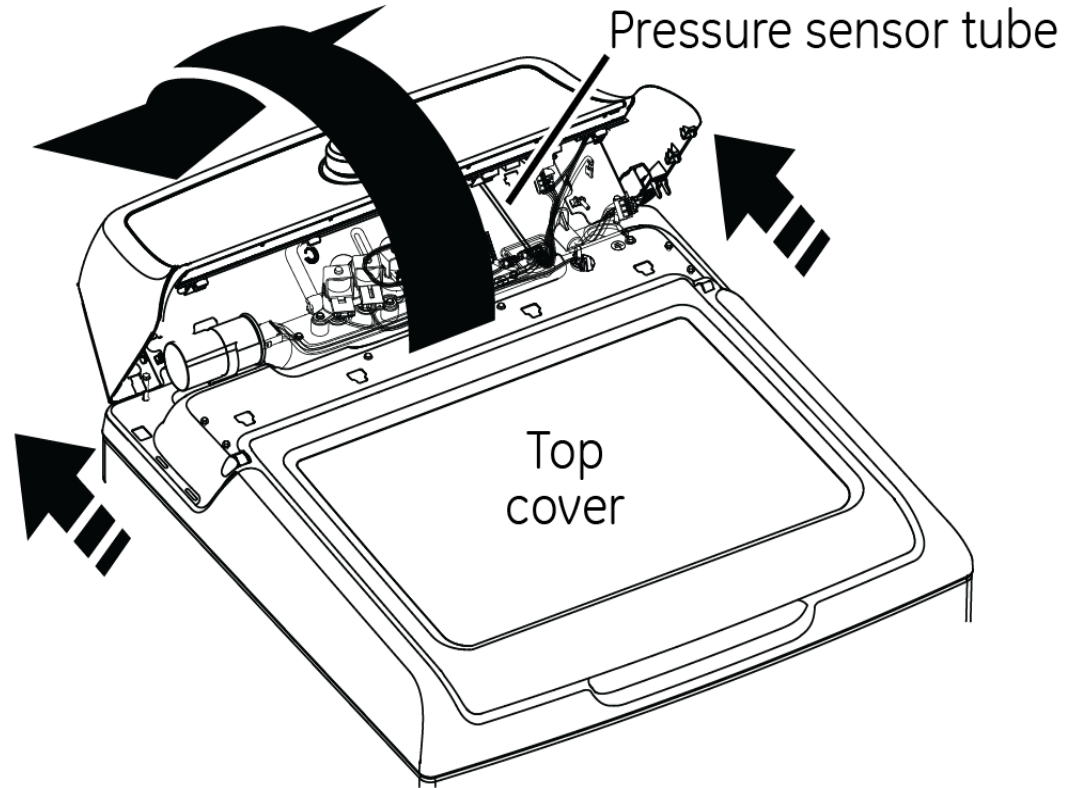
Remove two 1/4 in. hex head screws from the rear corners of the control panel.



# Control Panel Assembly Removal

Grasp the control panel sides and push toward the back of the washer to disengage it from the top cover.

Roll the control panel toward the rear so the pressure tube can be seen and disconnected from the control board.

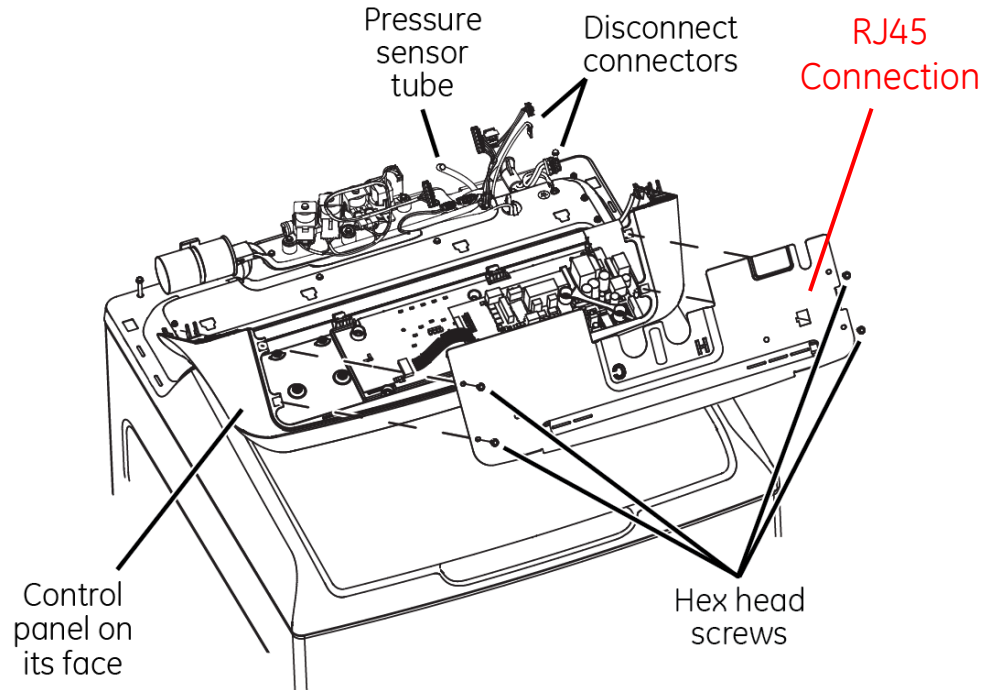


**IMPORTANT:** To disengage the pressure tube from the control board, grasp the tube where it connects to the pressure sensor on the board. Twist the tube while pulling it off the sensor.

# Control Panel Assembly Removal

Roll the control panel forward to lay on its face and remove four 1/4 in. hex screws securing the rear panel to the control panel assembly and remove.

Disconnect harness from the control board.



**IMPORTANT:** When reinstalling the control panel assembly, ensure that all ground wires are reconnected and tested for proper continuity to the ground terminal on the power cord.

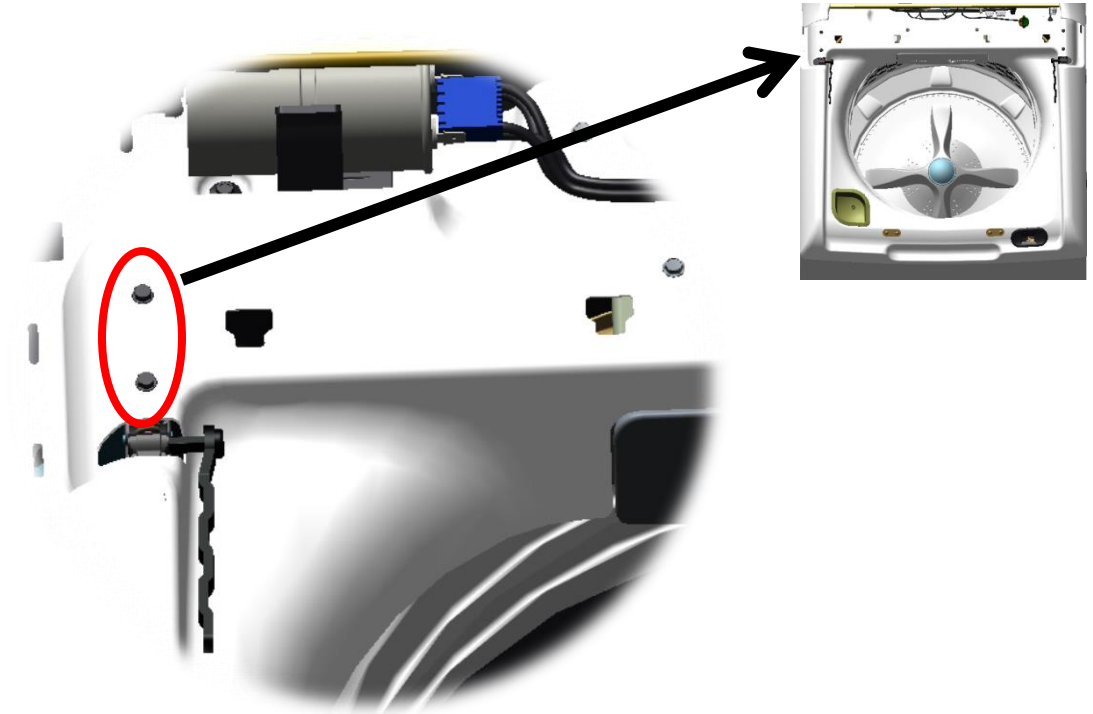
# Lid Hinge

[Video Link](#)

Hinge removal can be achieved without removing the top cover or disconnecting the control panel assembly completely.

Remove the lid assembly.

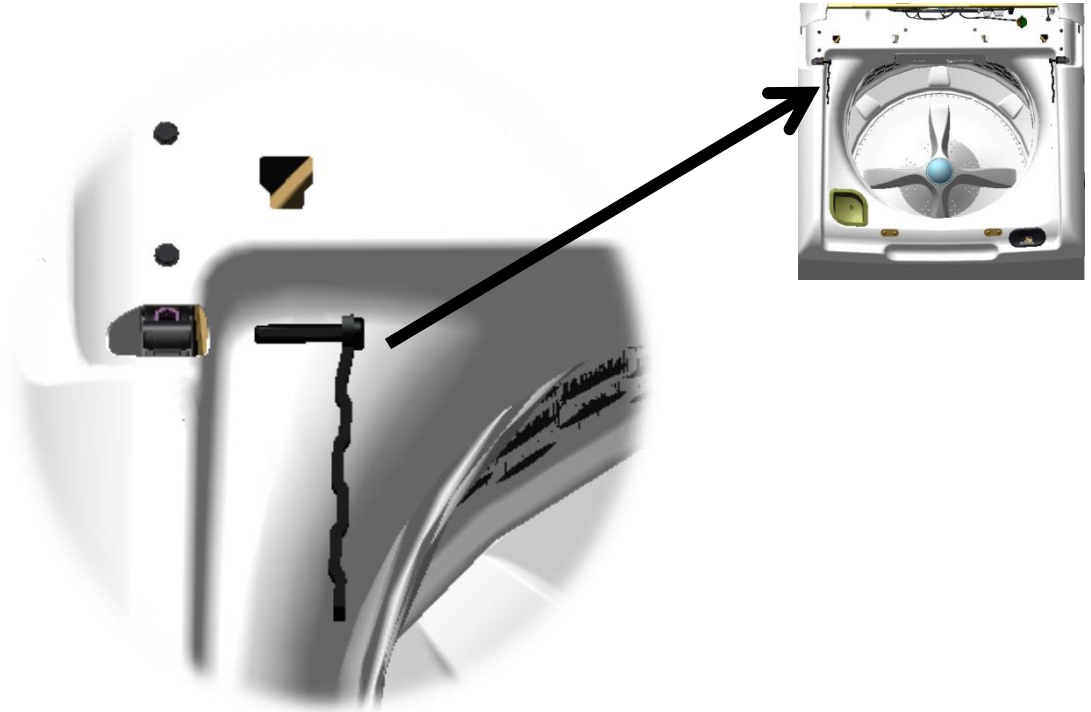
Disengage the control panel from the top cover and slide toward the rear to expose the hinge mounting screws.



# Lid Hinge

Remove the hinge arm by sliding it away from the hinge assembly.

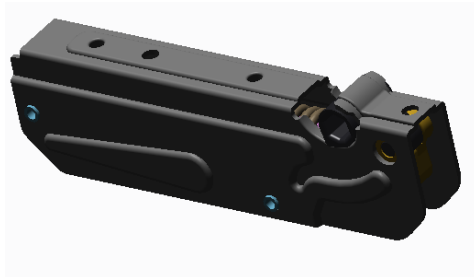
Slide a hand between the tub cover and the top cover and grasp the hinge assembly.



This type hinge arm is only on the GTW680 model. All the other models will have the wire form hinge.

# Lid Hinge

Remove the two 1/4 in. hex head hinge mounting screws and remove hinge assembly from under the top cover.

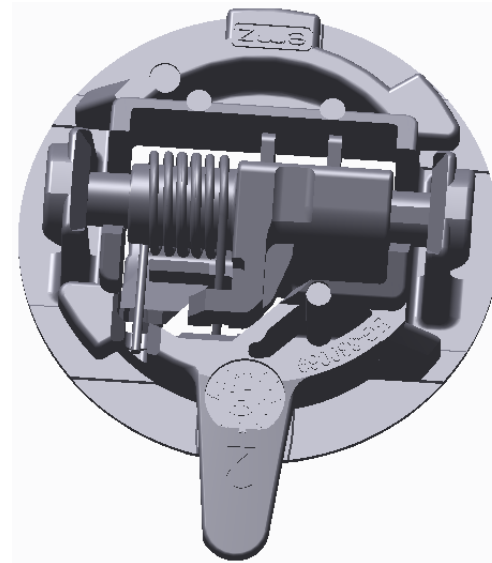
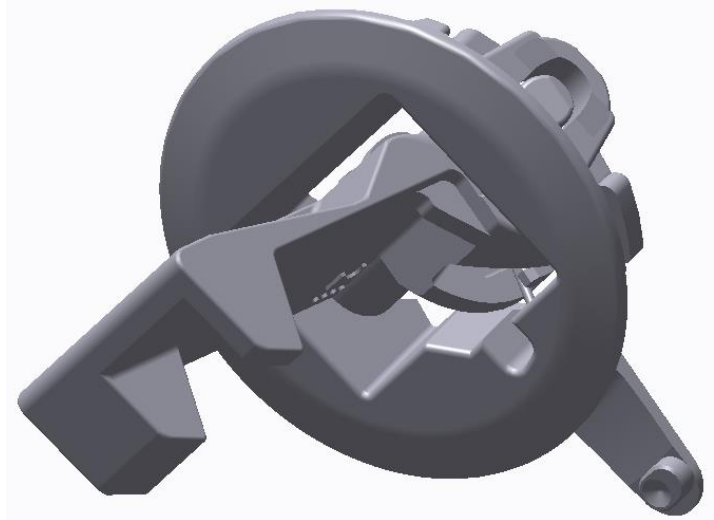


# Lid Lock Striker

[Video Link](#)

The lid lock striker slides into the lid lock/switch assembly. When a cycle is started the lock assembly engages with the striker preventing the lid from opening during the cycle.

The latch has spring tension on it to keep it engaged with the switch/lock assembly.



# Lid Lock Striker

To remove the striker from the lid:

Open the lid.

Using a small screwdriver insert it into the small hole below the striker.

Push inward gently on the locking tab and turn the striker to the left.



# Lid Lock Striker



Pull the striker from the lid.

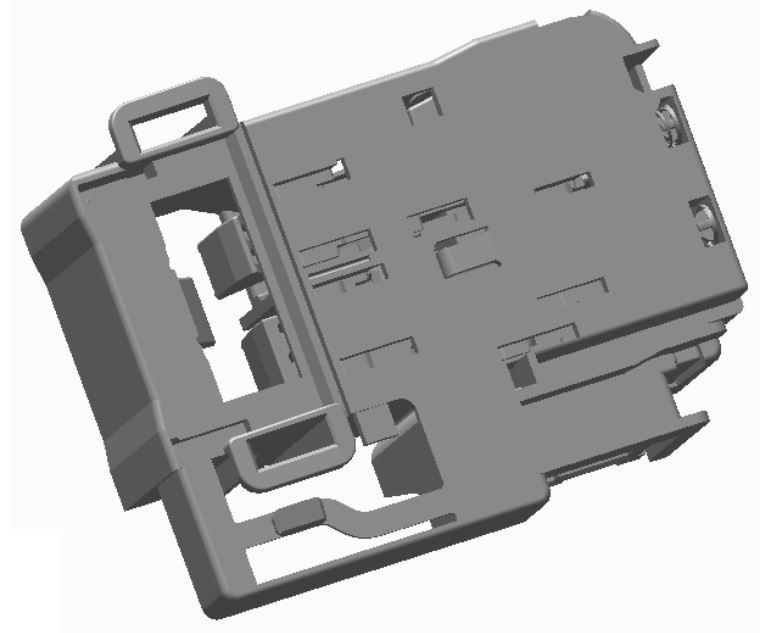
# Lid Switch/Lock Assembly

[Video Link](#)

The lid lock and switch are together in one part. It requires 120 VAC to activate the lock.

**The approximate resistance of the lock coil is 70 ohm from Red – Violet from J512 board connector.**

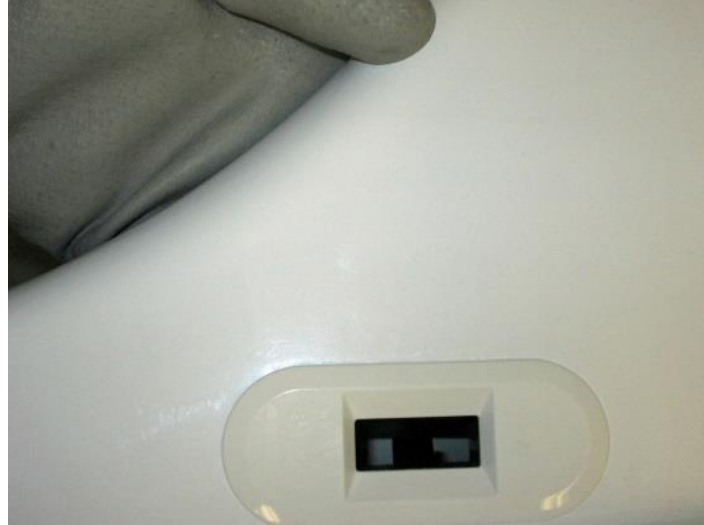
Checking between Red and Yellow wire at the same board connector will show the continuity of the lid switch.



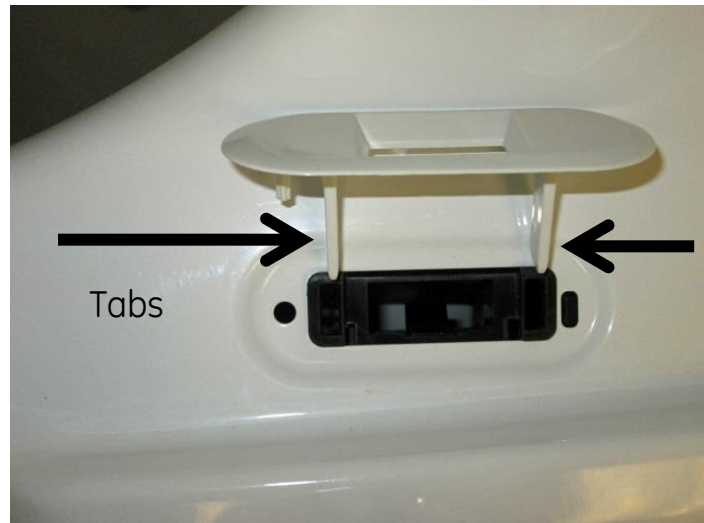
# Lid Switch/Lock Assembly

To remove the lid switch/lock assembly:

Remove the bezel from the top cover by reaching under the top cover toward the lock assembly and feel for the bezel tabs that extend through the lock body.



Push the tabs out from the side of the lock body and then push up to remove the bezel from the top cover



# Lid Switch/Lock Assembly

Using a small screwdriver, push down gently on the tab that prevents the lock assembly from sliding.



Slide the lock assembly to the left first to disengage the right tab, then slide to the right allowing the lock assembly disengage from the top cover.



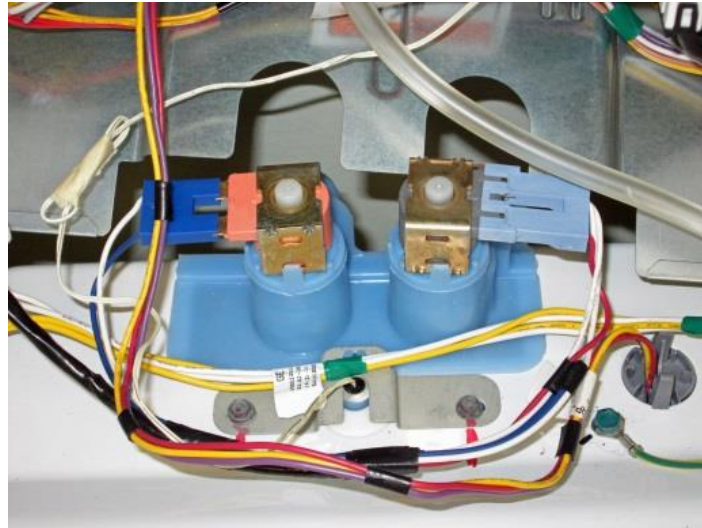
# Lid Switch/Lock Assembly



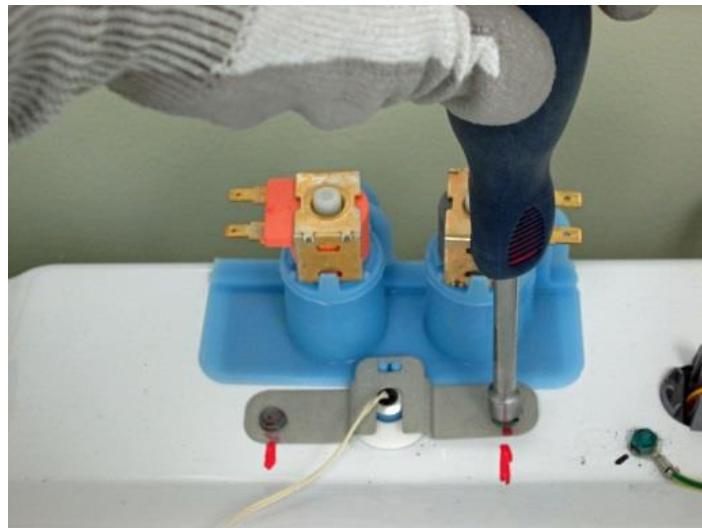
Pull the lock assembly from under the top cover and disconnect the harness connector.

# Two Coil Water Valve

Turn water supply off to valve. Hoses do not need to be disconnected at this time.



Remove two 1/4 in. hex head screws that go through the thermistor mounting bracket into the body of the valve.



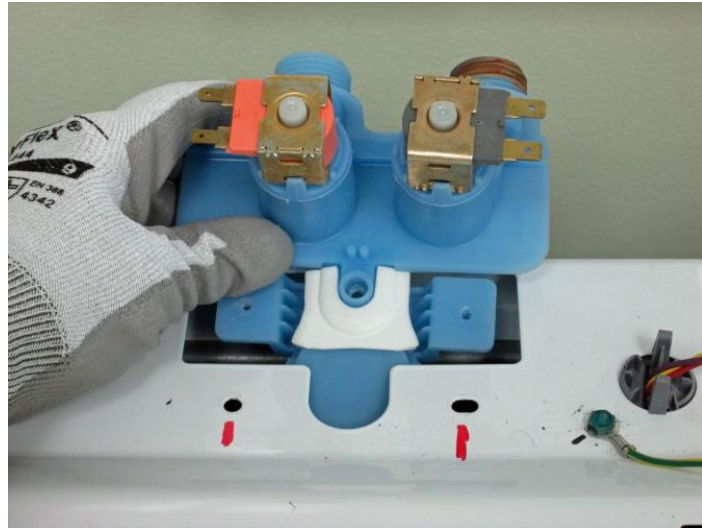
# Two Coil Water Valve



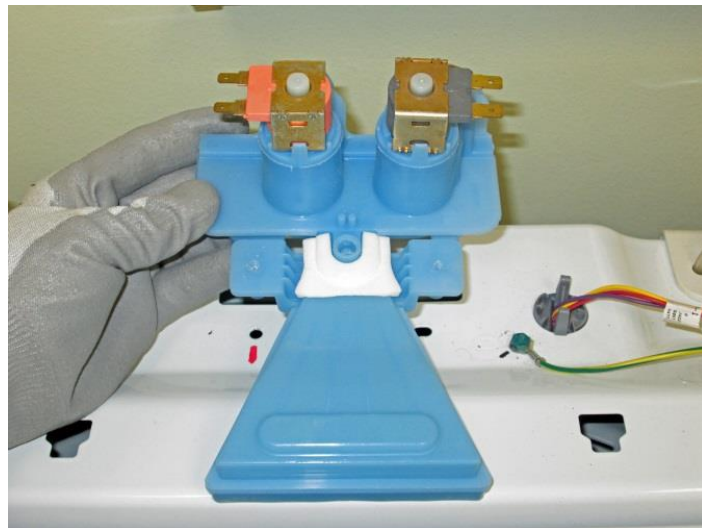
Remove thermistor by pulling up on lip of thermistor. Ensure O-ring is removed with thermistor.

# Two Coil Water Valve

Tilt back of valve up and slide out of top cover. Once valve is out and held over the basket, disconnect hoses.

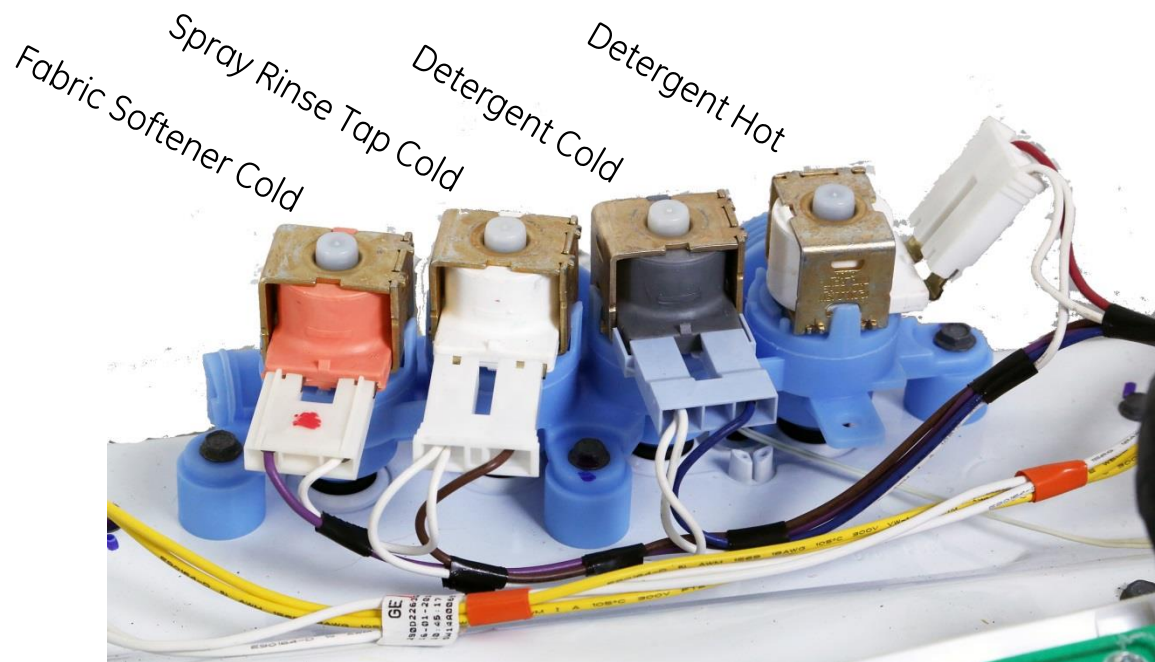


Valve and funnel are one part. Gasket can be ordered separately.



# Four Coil Water Valve On GTW680 Model

[Video Link](#)



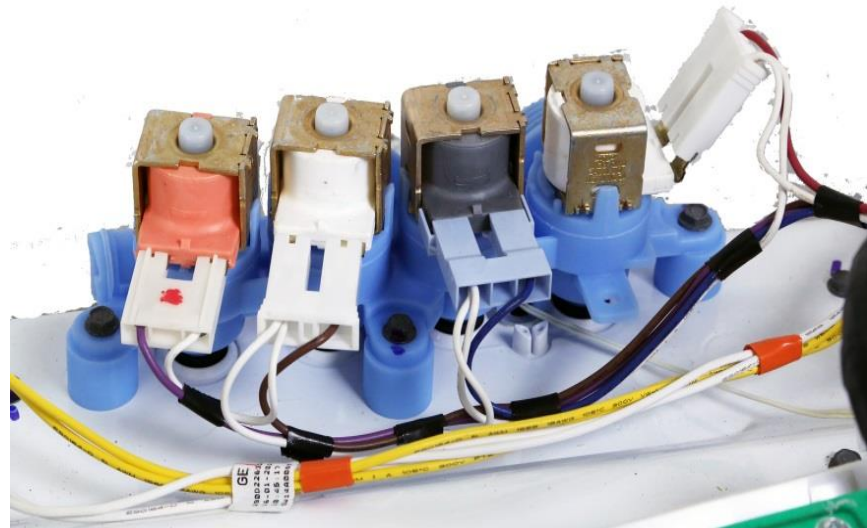
# Four Coil Water Valve Removal

To remove the water valve:

Shut off the water supply to the washer. Hoses do not need to be disconnected at this time.

Lean the control panel assembly back. It does not have to be completely removed.

Disconnect the harness from the water valve.

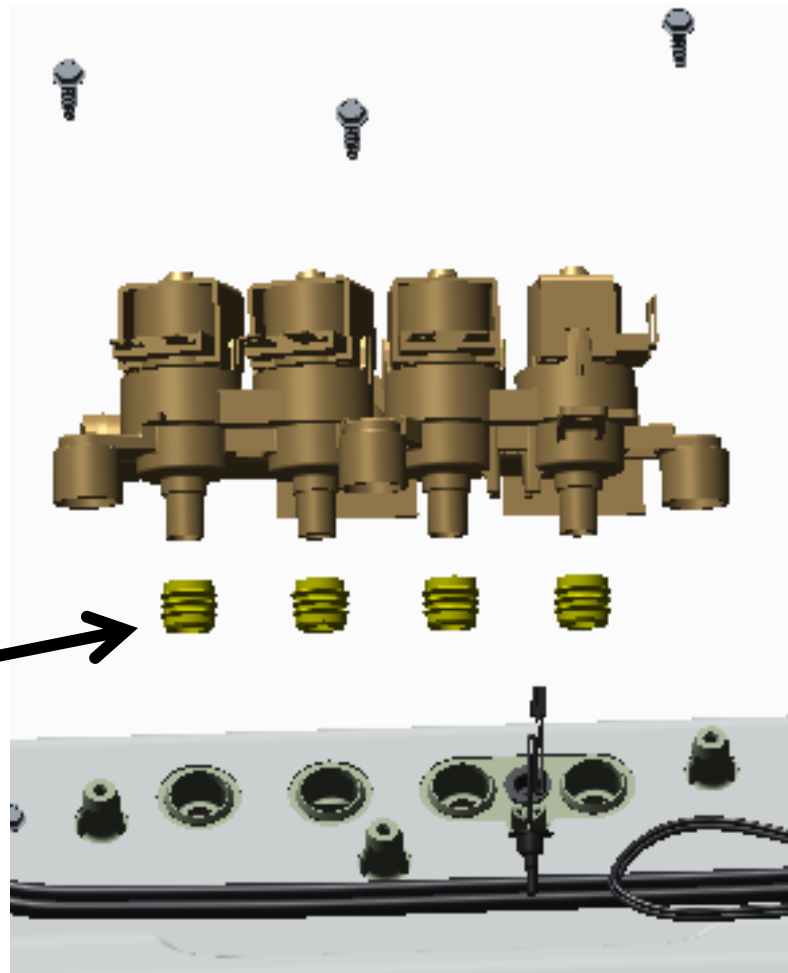


# Four Coil Water Valve Removal

Remove three 1/4 in. hex head screws securing the valve to the top cover and pull the valve up.

Hold valve over the basket and disconnect the supply hoses from the valve.

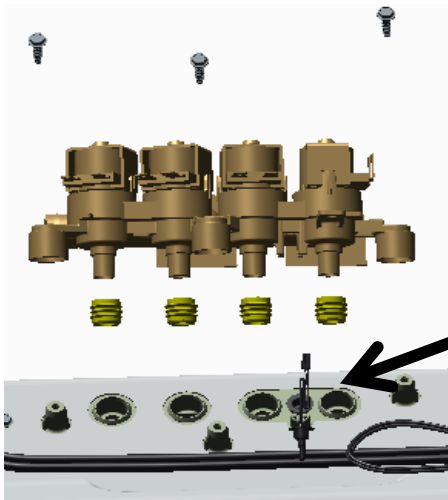
There are four replaceable rubber seals that seal the water valve to the dispenser box.



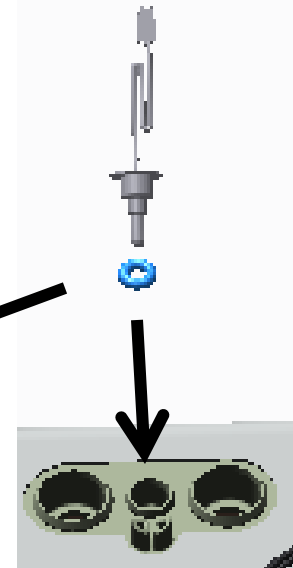
# Thermistor Removal

After the water valve is removed the thermistor can be accessed and removed.

It is pushed into the dispenser box and held in place by the water valve and is sealed with an O-ring.



Thermistor



# Dispenser Removal

The dispenser holds detergent and fabric softener and delivers it at precise times for the cycle selected. Water is added to the dispenser from the water valve to fill and flush the cups. After the valve turns off the remaining water in the cup siphons out.



[Bleach Funnel  
Removal Video](#)

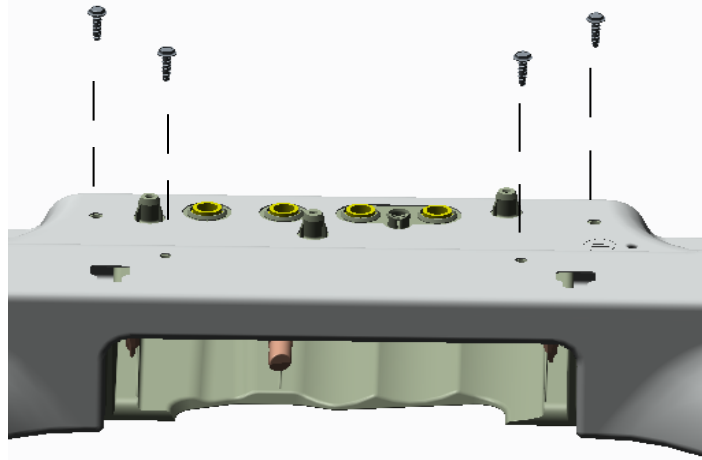
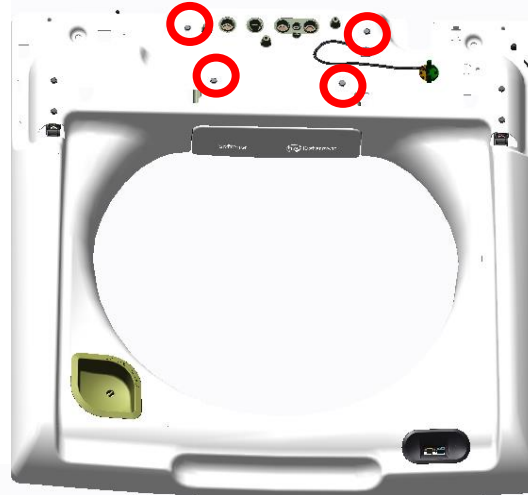
When bleach is added to the bleach cup it is funneled through to the tub cover and into the tub.

# Dispenser Removal

Remove the backsplash assembly, water valve and top cover.

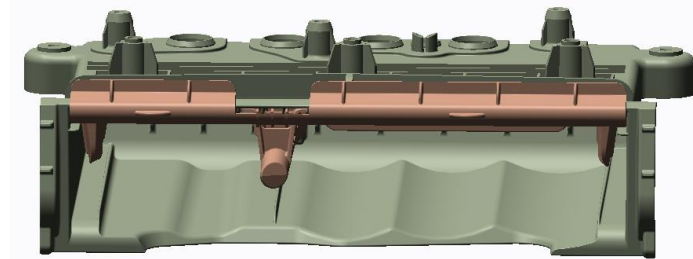
Remove the dispenser tray from the dispenser body.

Remove four 1/4 in. hex head screws from the top cover securing the dispenser body to the top cover.

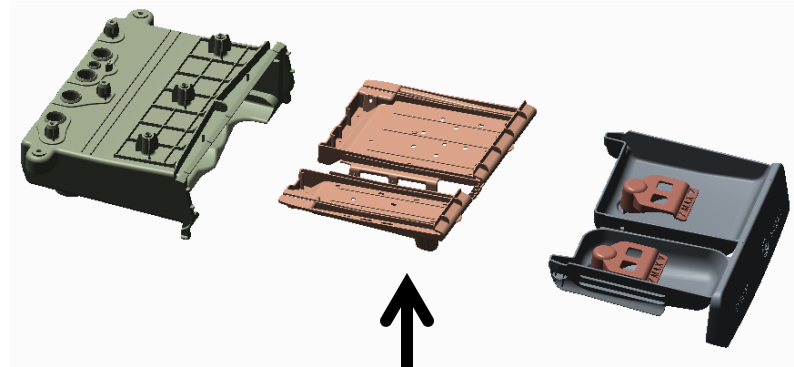


# Dispenser Removal

Remove the dispenser body from the top cover by pushing back slightly on the dispenser body and pull away from top cover.



The dispenser shower insert can be removed at this time for cleaning if necessary.



Dispenser shower insert

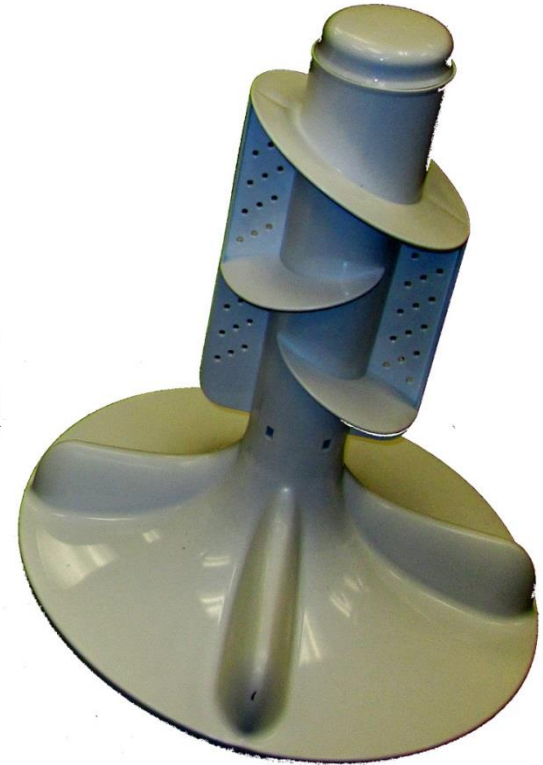
# Impeller and Agitators



Impeller



Dual Action  
Agitator



Single Action  
Agitator

# Impeller



To remove the impeller, pop the center cap off with a small screwdriver to access the 7/16<sup>th</sup> hex bolt. The splined coupler is part of the impeller and agitators.

Note: Impeller bolt should be replaced any time it is removed for service and torqued to 100 in-lbs.



# Dual Stage Agitator

To remove the dual action agitator, the auger section needs to be removed to access the 7/16<sup>th</sup> hex bolt.

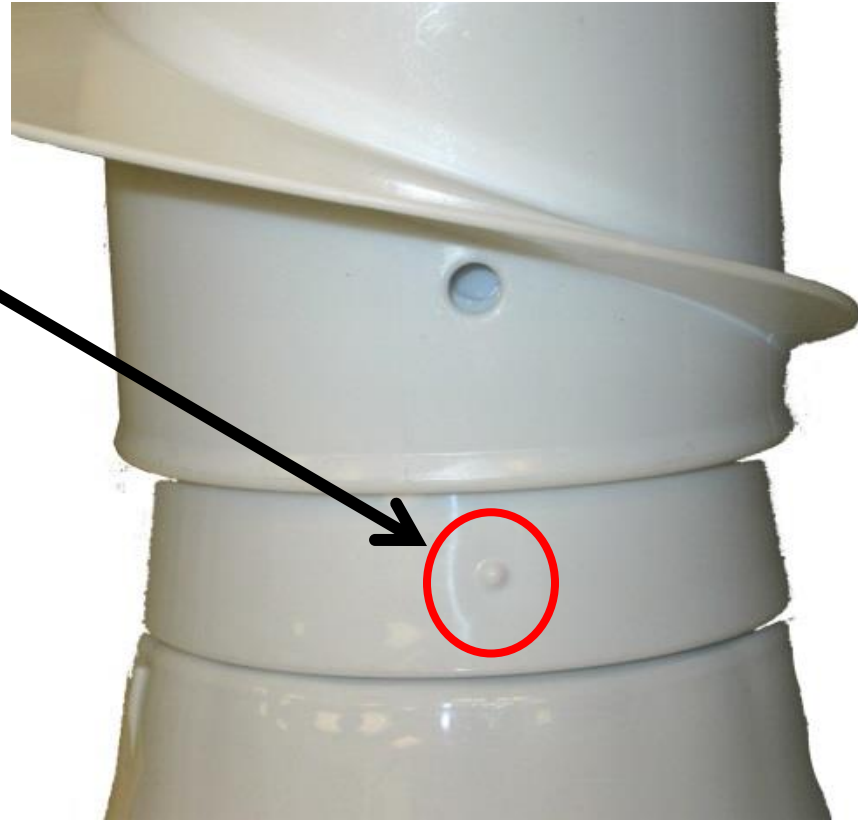
Note: Agitator bolts should be replaced any time it is removed for service and torqued to 100 in-lbs.



# Dual Stage Agitator Auger Removal

Feel for the small protrusion near the bottom of the auger that mounts to the agitator base.

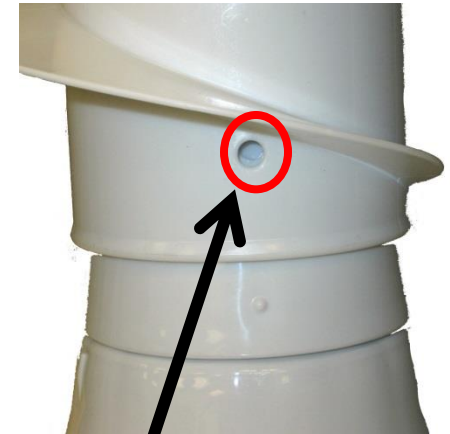
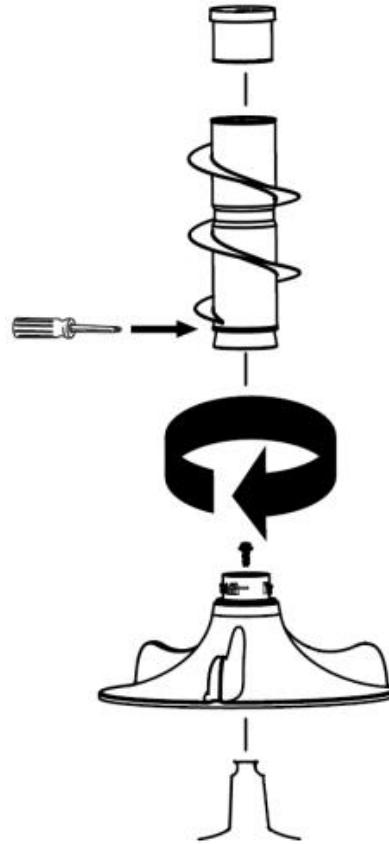
Turn the top half of the auger until you feel the hole located under the auger fin lines up with the protrusion.



# Dual Stage Agitator Auger Removal

Using a thin shanked screwdriver, tap it through the hole in the auger. The inner wall of the agitator where the screwdriver pokes through is thin.

While holding the basket from spinning with one hand, use the screwdriver as a leverage handle and twist the auger assembly clockwise to remove it from the agitator base.



Tap  
Screwdriver  
Through

# Single Stage Agitator



Remove the single action agitator by taking the agitator cap off to access the 7/16<sup>th</sup> hex bolt. The bolt is located inside the agitator at the bottom. A long socket extension (at least 17 in. long) will be needed to remove it.

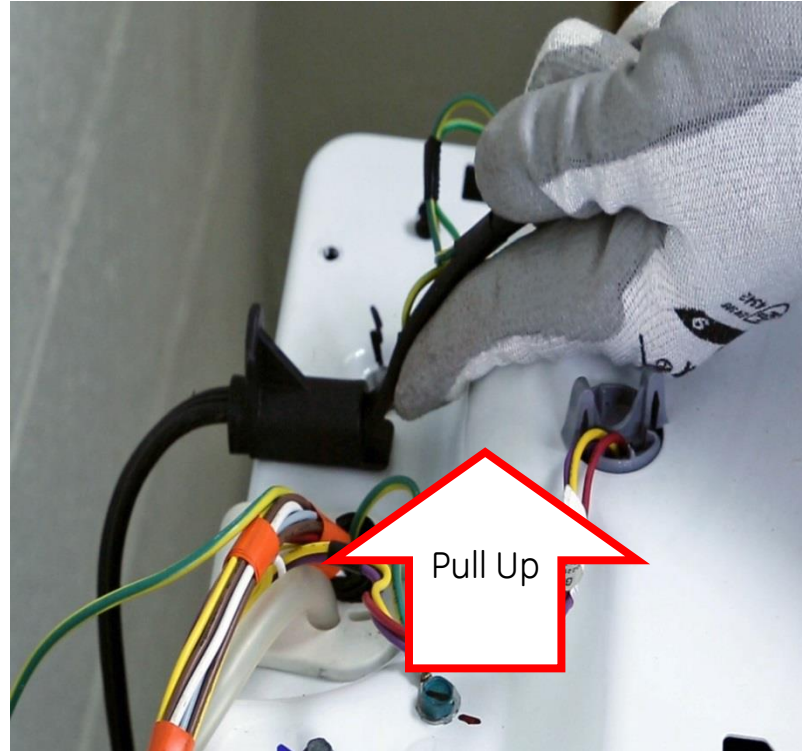
Note: Agitator bolts should be replaced any time it is removed for service and torqued to 100 in-lbs.

# Top Cover Removal

Remove the control panel assembly.

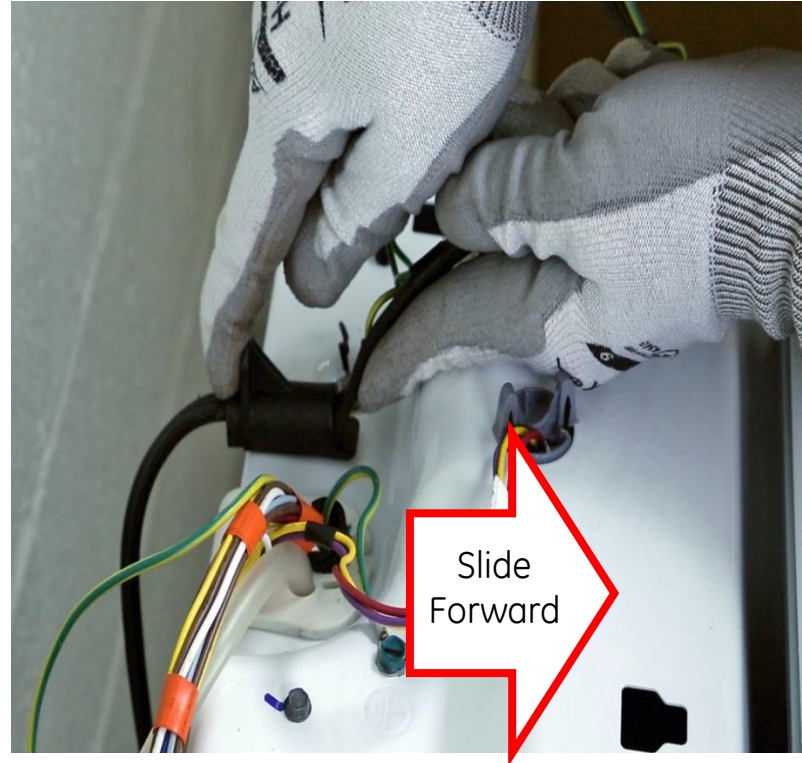
Slide the harness grommet out toward the rear of the washer.

Disengage the power cord from the top cover by pulling up on the front of the power cord grommet.



# Top Cover Removal

Slide the power cord grommet forward.



# Top Cover Removal

Pull up off of the top cover.



# Top Cover Removal

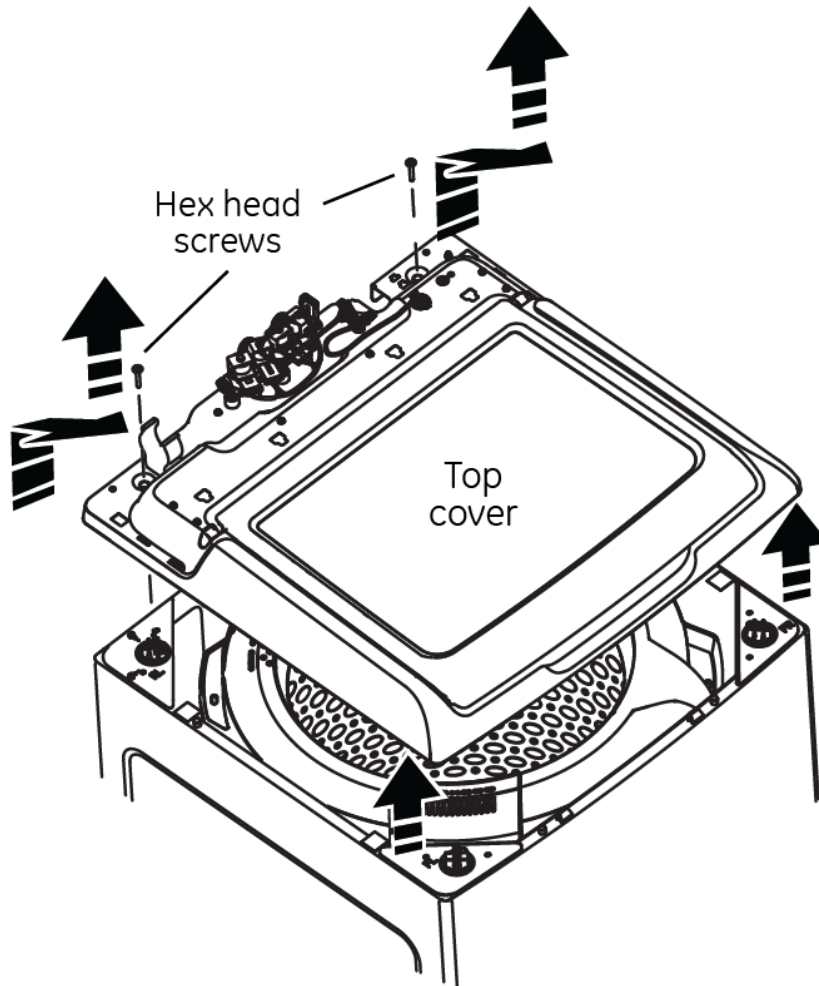
The harness grommet for the lid lock does not need to be removed unless replacing the top cover.

If replacing the top cover, squeeze the two clips on the grommet and push it through the opening. Transfer to the new cover.

Remove ground screws.



# Top Cover Removal



Remove the control panel assembly.

Remove two 1/4 in. hex head screws (one on each side) at the rear corners of the top cover.

Slide the harness grommet out toward the rear of the washer.

Disengage the power cord from the top cover by lifting up on the front of the cord grommet, slide forward and up off of the top cover.

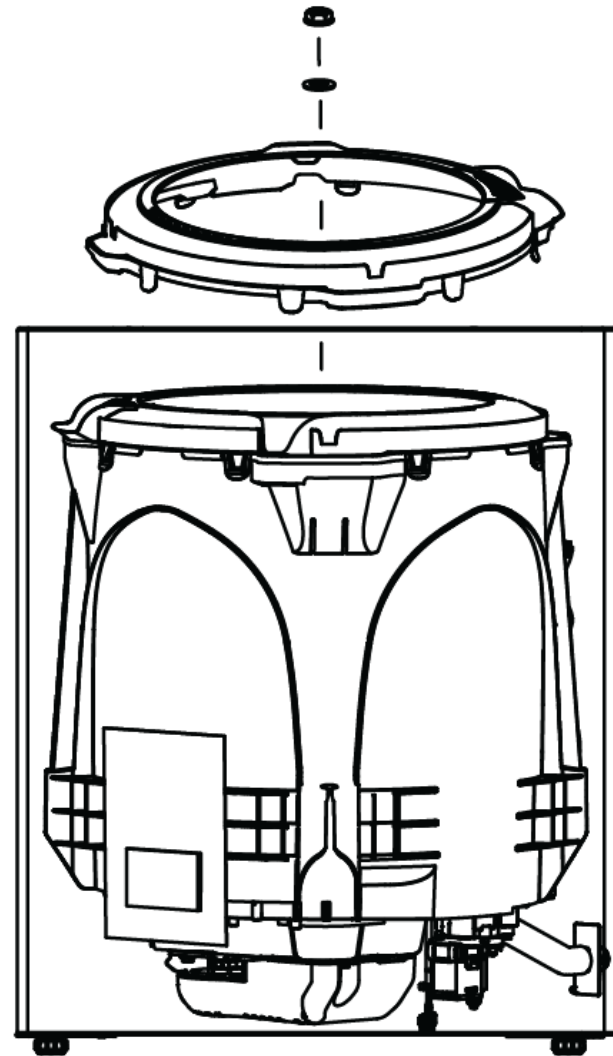
Raise the rear of the top cover up, then pull forward slightly to disengage from the front clips that secures the front of the top cover to the cabinet.

# Basket Removal

Remove the control panel assembly and top cover.

Remove the 1-5/16<sup>th</sup> in. hub nut by turning the nut clock-wise to loosen (reverse threads).

A new hub nut should be used when reinstalling the basket assembly. Torque to 100 ft. lbs.



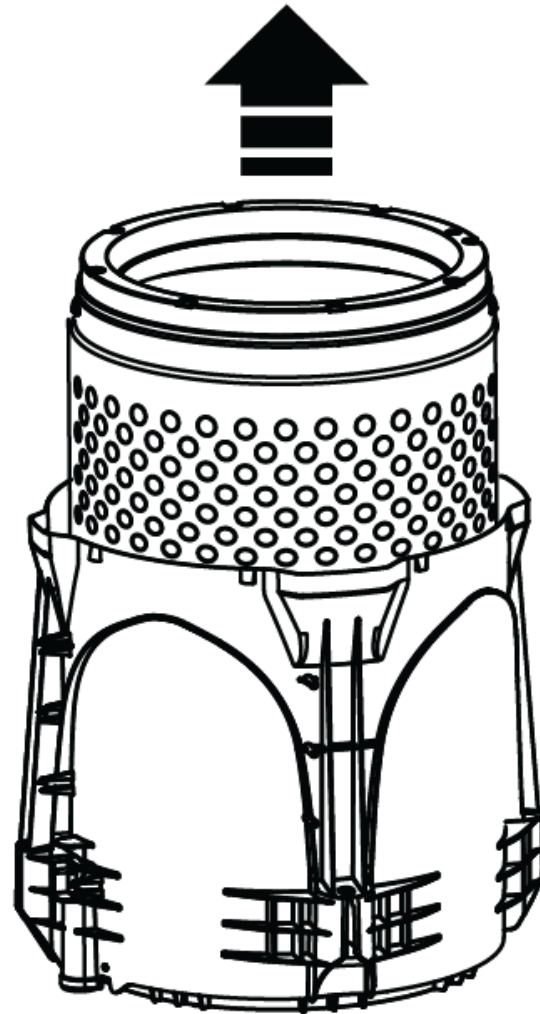
# Basket Removal

Note: A torque limiter (**WX05X10028**) should be used when removing or installing the hub nut with an impact gun.



Remove the tub cover by unclipping eight clips around the edge and lift it off.

Lift the basket out of the tub.



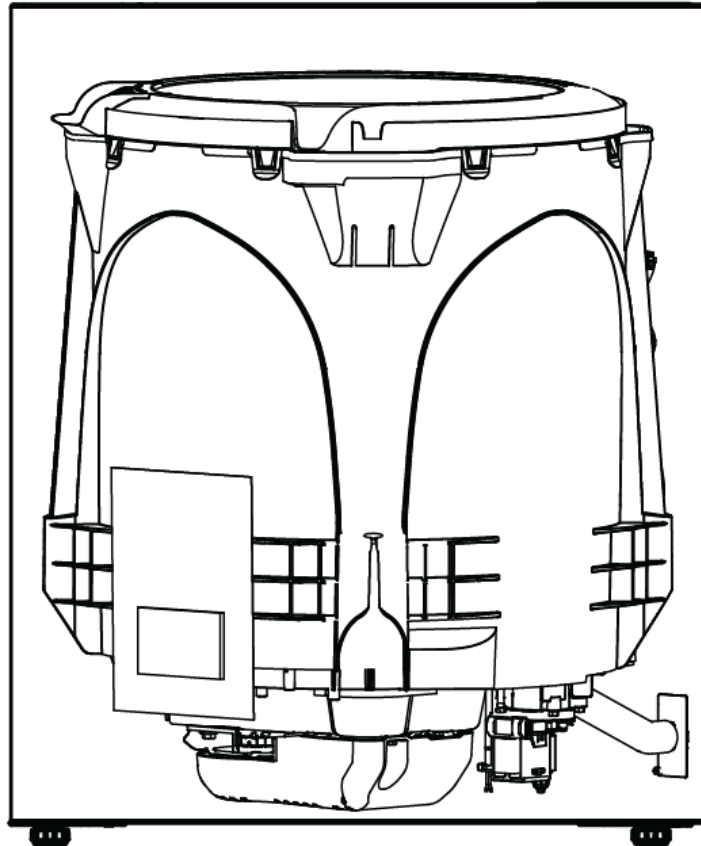
# Tub And Cabinet Removal/Replacement

Remove the control panel assembly and top cover.

Disengage the rod and spring suspension from the tub assembly. Prop blocks (WX05X10027) x2, laying on it's side can be used under the belt protector.



This will raise the tub assembly up to disengage the suspension system.



# Tub And Cabinet Removal/Replacement

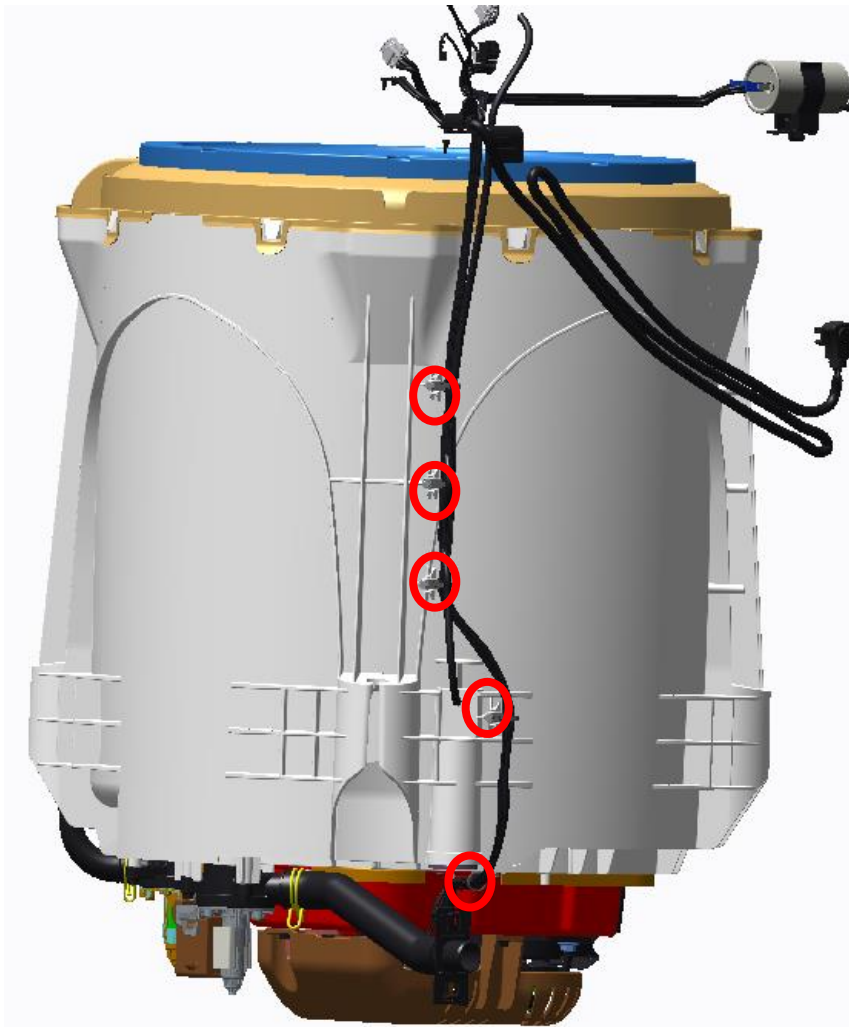
Once the suspension is disengaged, remove the prop blocks letting the tub assembly rest on the belt protector.

Raise the cabinet up and over the tub assembly and set aside.

Note: Be careful of the tub assembly balance while removing cabinet.



# Harness Removal/Replacement

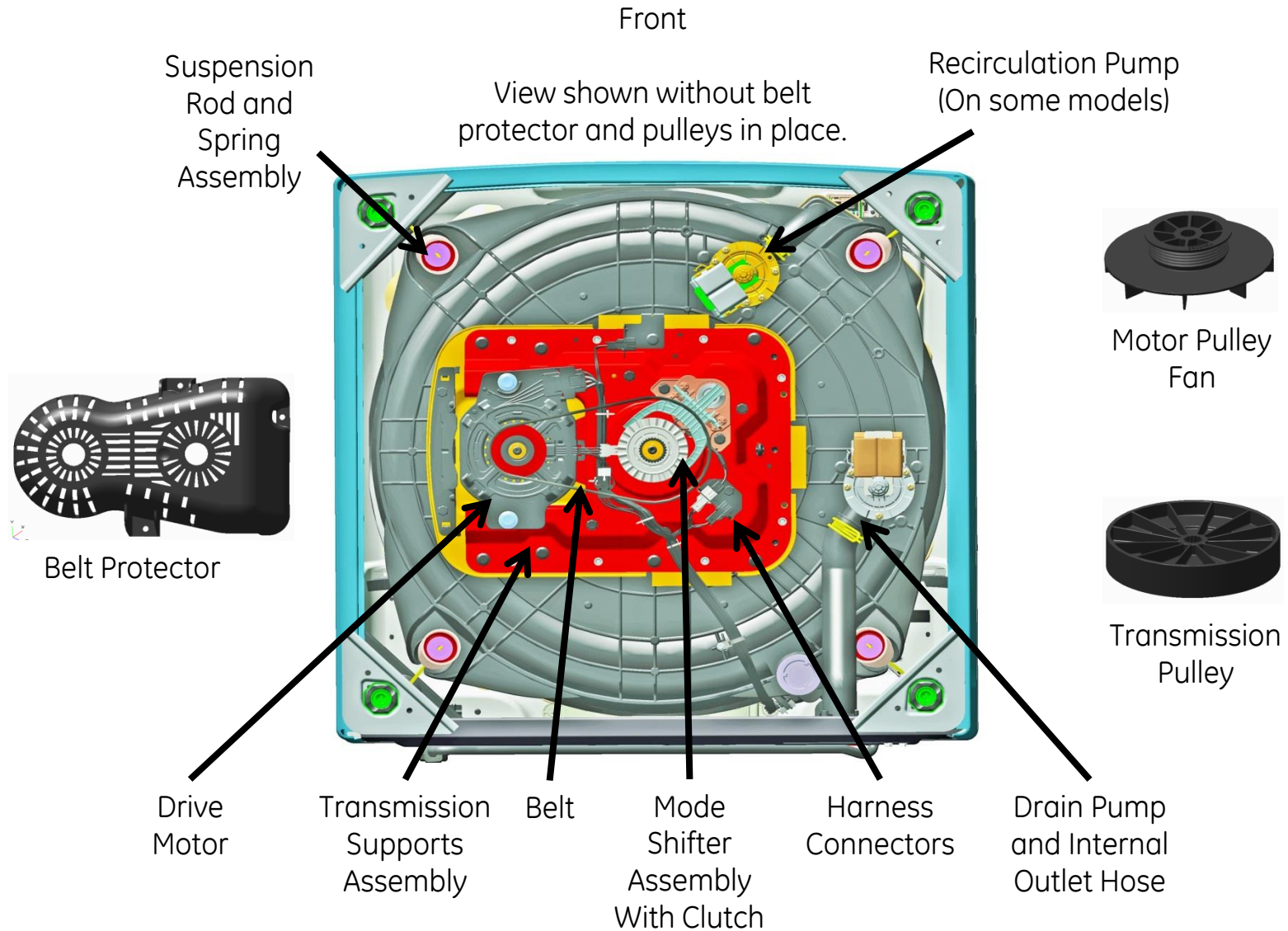


The cabinet needs to be removed to replace the harness assembly.

Once the cabinet is removed there are four 1/4 in. hex head screws that secure the harness to the side of the tub that need to be removed.

There is one 1/4 in. hex head screw on the bottom and up to six wire ties.

# Bottom Component View



# Drain And Recirculation Pump

The drain pump is located on the right side of the bottom of the tub. It is mounted directly to the tub secured by three (3) 3/8<sup>th</sup> hex head bolts.

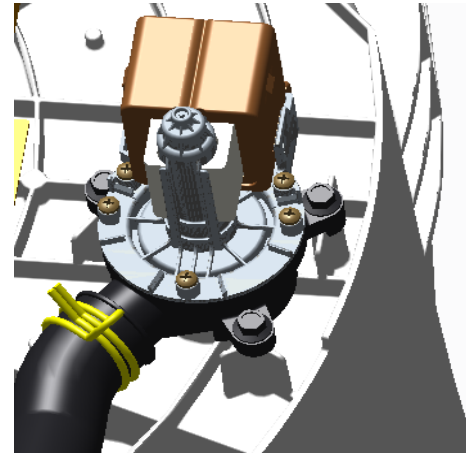
The GTW680 model has a recirculation pump located at the front of the bottom of the tub. It mounts to the tub the same as the drain pump.

Both pumps are 120 VAC.

**The approximate resistances of the pumps checked from J512 board connector are:**

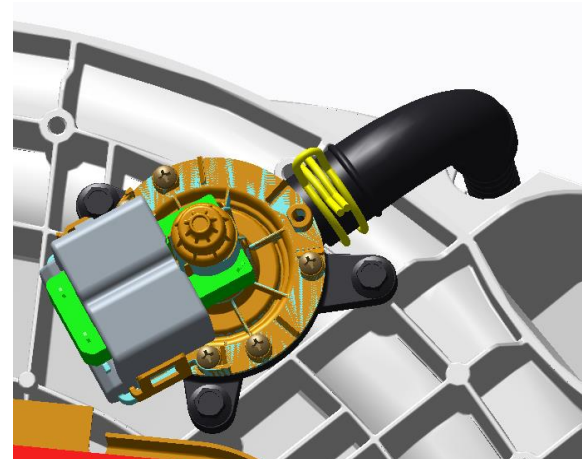
**Drain pump – 13.2 ohms**

**Recirculation pump – 31.7 ohms**



Drain Pump

[Video Link](#)



Recirculation Pump

[Video Link](#)

# Drain And Recirculation Pump

Before removing the drain or recirculation pump any water in the basket must be removed. This is done by using a transfer pump.

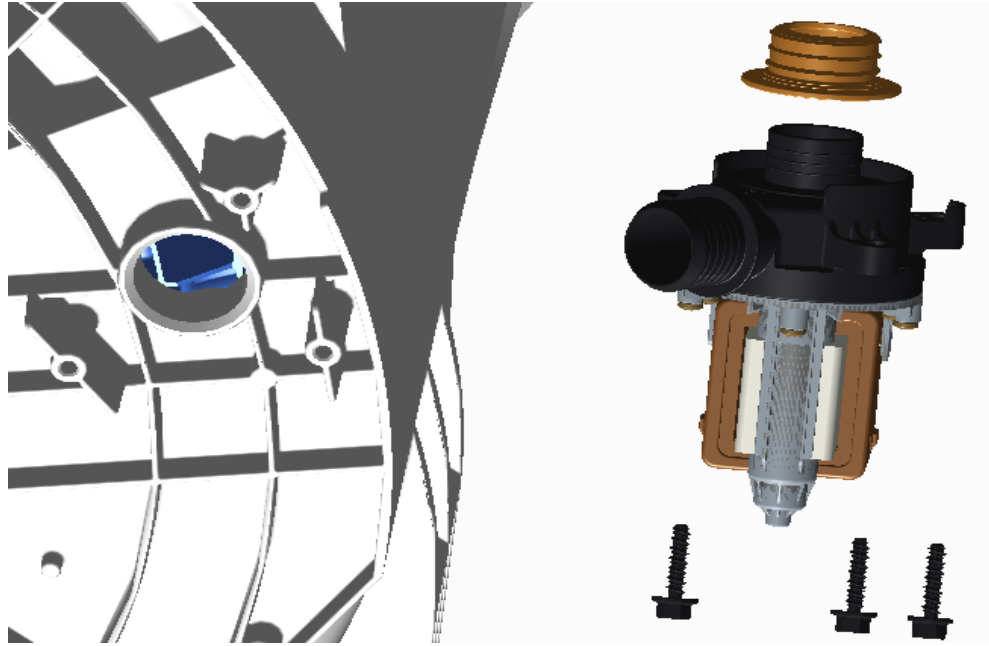
The transfer pump only comes with one (1) hose. A standard washer hose can be used for the outlet side of the pump. Part number **WH41X10207**.

- Pump out as much of the standing water in the basket as possible.
- Lean the washer back and pump out the water seen in the basket.
- When the drain pump is removed approximately 1–2 cups of water will drain out of the pump opening in the tub.

Transfer Pump WX05X23817



# Drain And Recirculation Pump



Once the bolts are removed the pump can be pulled from the tub. Have something to catch excess water. The seal is a separate part that can be replaced if leaking.

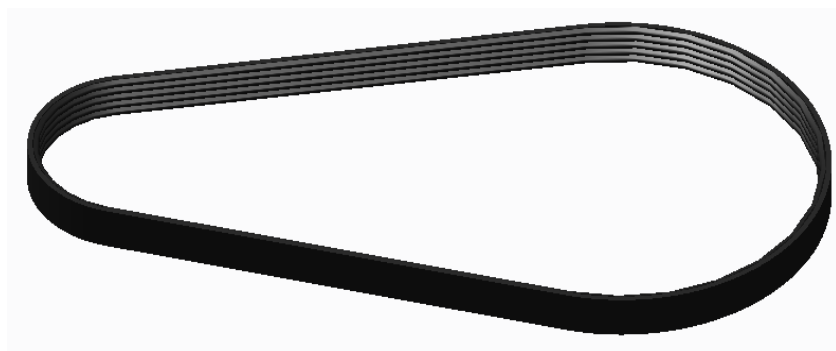
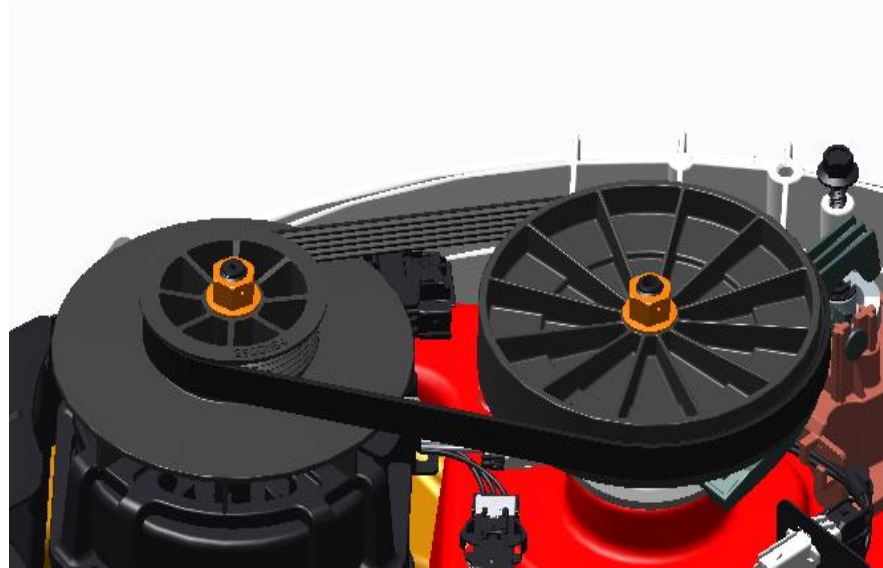
# Drive Belt

The drive belt has six ribs and can be removed easily turning the pulley to walk the belt off.

To reinstall the belt, put it on the motor pulley first.

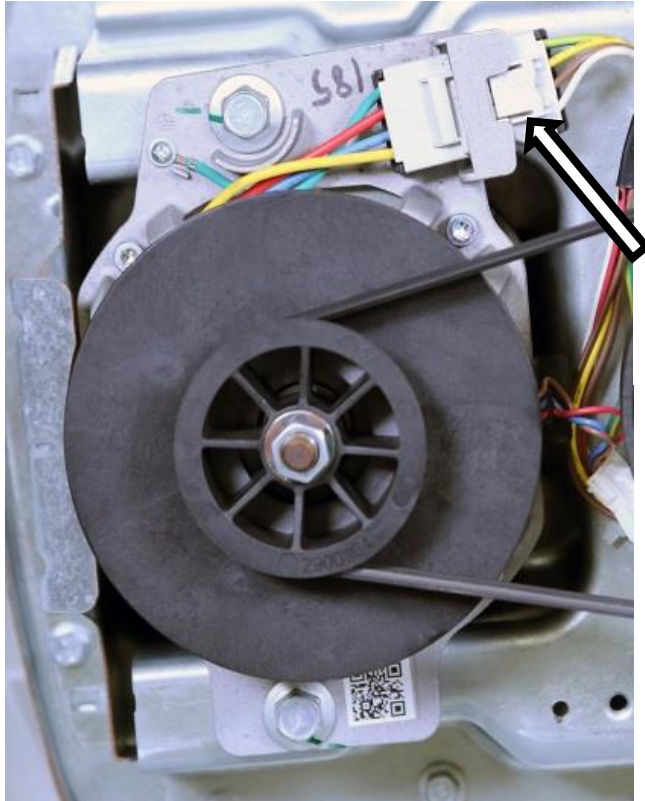
Stretch the belt around the transmission pulley as far as it can go.

Then rotate the pulley until the belt is in place. Be sure all the ribs of the belt.



# Drive Motor

## [Video Link](#)



Push here  
Pull out

There are two different horsepower motors. One third and one half horsepower motors. The GTW485, GTW490 and GTW680 models have the half horsepower motor. They are both 120 VAC reversible motors .

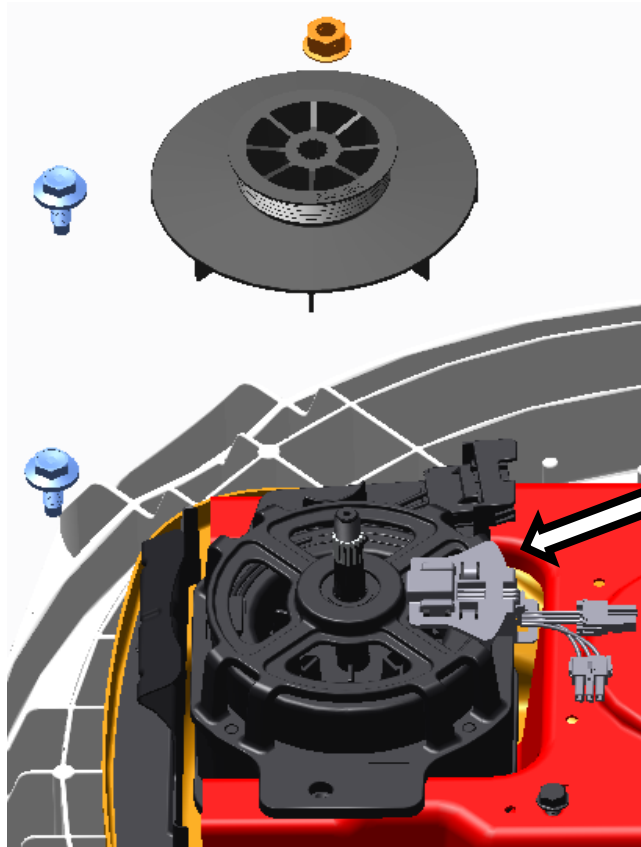
**Resistances are 1/2 hp.- Blue - Red and Blue - Yellow approx. 3.1 ohm. 1/3<sup>rd</sup> hp. Approx. 3.8 ohm from J511 board connector.**

To remove the motor:  
Remove the belt and fan pulley. The pulley is held on by a 9/16 in. lock nut.

Use a new nut when reinstalling the pulley and torque to 110 in-lbs.

Disconnect the motor harness connector.

# Drive Motor



Unclip the hall/speed sensor from the motor.

Remove two 1/2 in. bolt mounting the motor to the tub letting the motor come loose from the platform.

**When reinstalling the motor mounting bolts torque to 170 in-lbs.**

Note: If the hall/speed sensor is wire tied to the motor when replacing the motor. Order both the motor and hall/speed sensor.

# Mode Shifter Assembly

The mode shifter either engages or disengages the clutch with the transmission pulley depending on whether the cycle is in spin or agitate.

The clutch home position is engaged with the pulley or ready for spin.

It has a 120 VAC motor.

**Resistance of the mode shift motor from Brown – Blue is 5700 ohm from J512 board connector.**

To remove the Mode shifter:  
Remove the transmission pulley and nut. The pulley is held on by a 9/16 in. lock nut. **Use a new nut when reinstalling the pulley and torque to 110 in-lbs.**



Guide Pins

# Mode Shifter Assembly

Disconnect the mode shifter motor harness connector.

Remove two 3/8<sup>th</sup> hex head mounting bolts. This will allow the complete mode shifter assembly to be removed with the clutch.

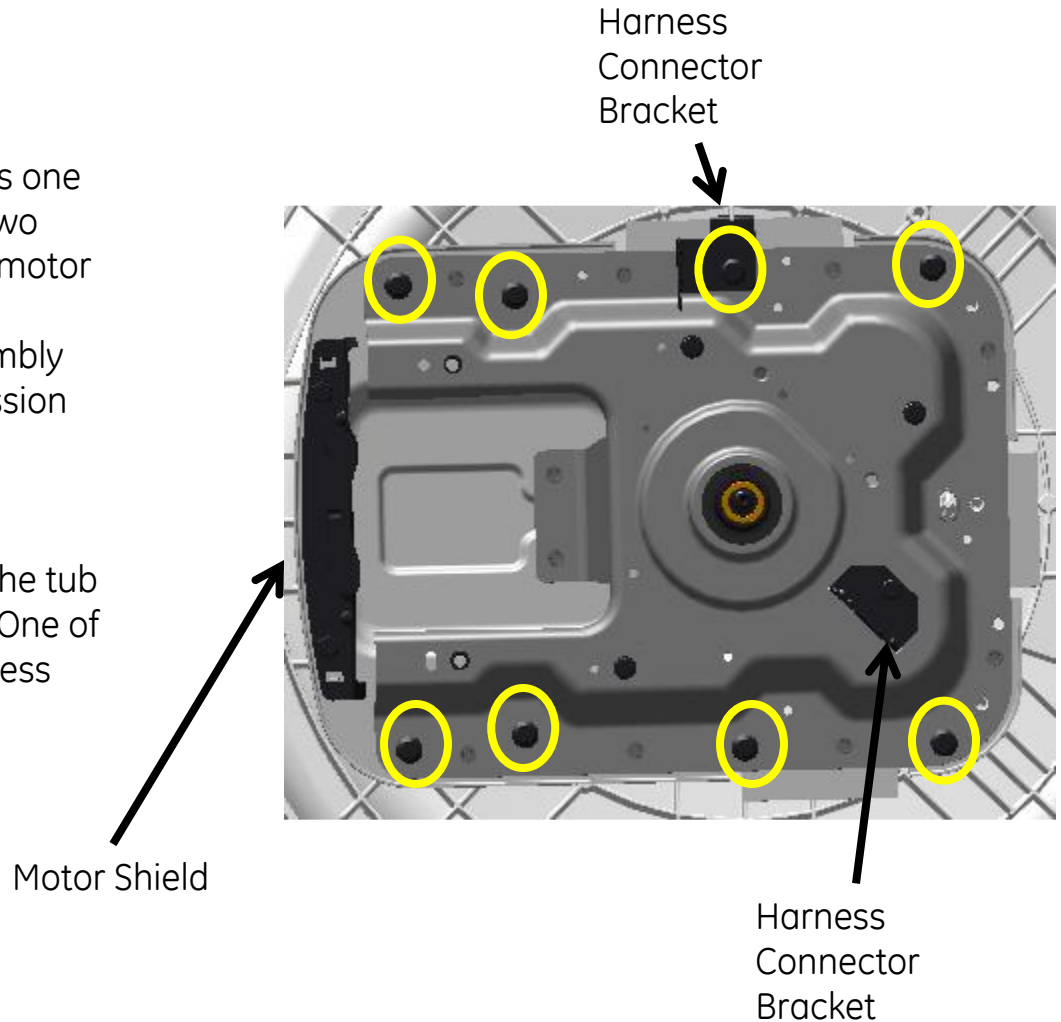
The clutch spring and spring washer will come off as well. When reinstalling be sure to install the spring washer before the clutch spring.



# Platform Transmission Assembly

The platform transmission assembly is one complete part with the exception of two harness connector brackets and one motor splash guard. These will need to be transferred to the new platform assembly when replacing the platform transmission assembly.

The platform assembly is secured to the tub by eight 3/8<sup>th</sup> hex head bolts circled . One of these bolts also holds one of the harness brackets to the platform.

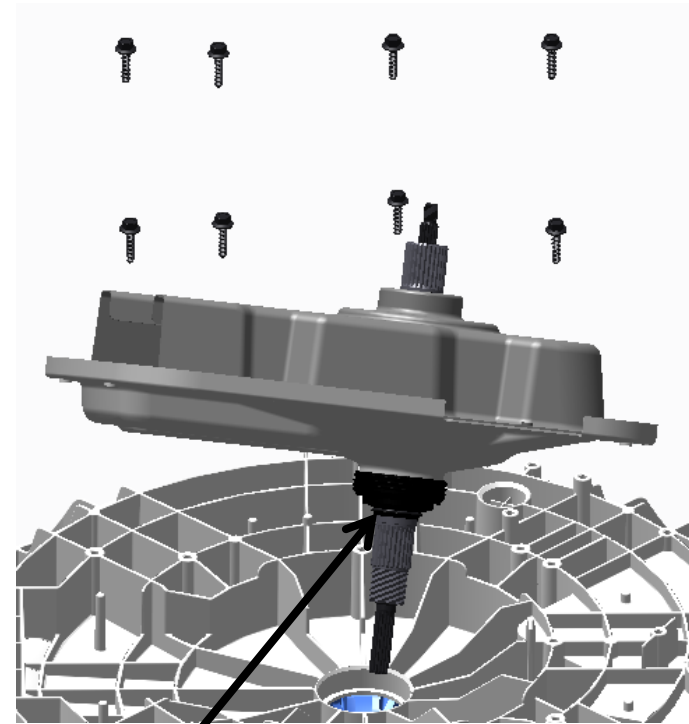


# Platform Transmission Assembly

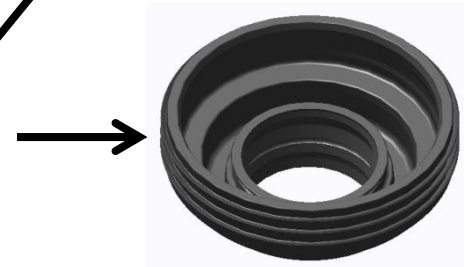
To remove the platform assembly after all other components have been removed remove the eight 3/8<sup>th</sup> hex head bolts and pull the platform away from the tub.

Note: The bottom of the tub can be used to pry the platform transmission assembly off of the tub.

The tub seal is pressed on to the platform transmission assembly. If there is a leak from the seal, the complete transmission will need to be replaced.



Triple Lip  
Tub Seal



# Platform Transmission Assembly

To reinstall the platform assembly to the tub, slide the shaft of the transmission into the opening of the tub.

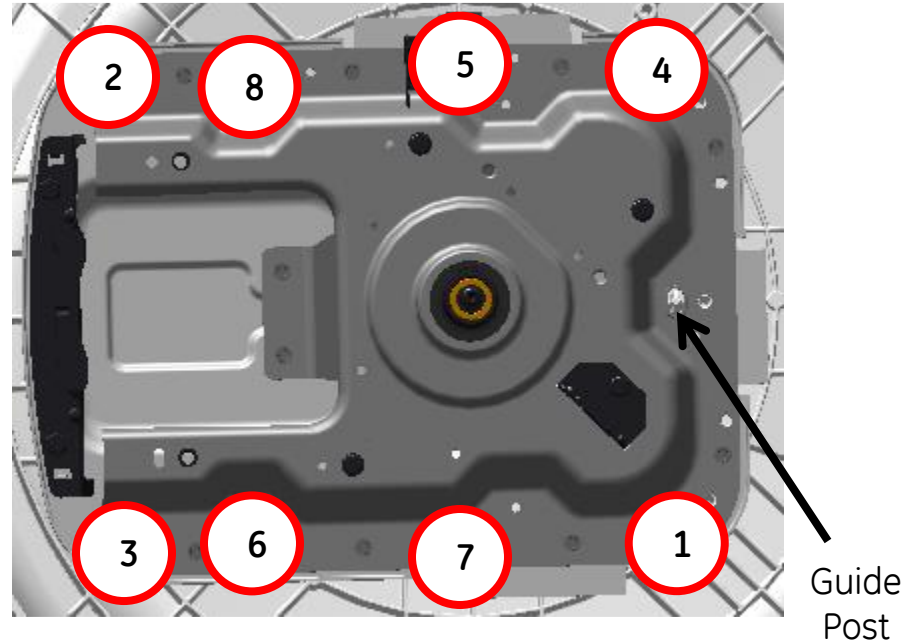
Press the tub seal into the tub opening.

Note: Line the guide post with the opening in the platform.

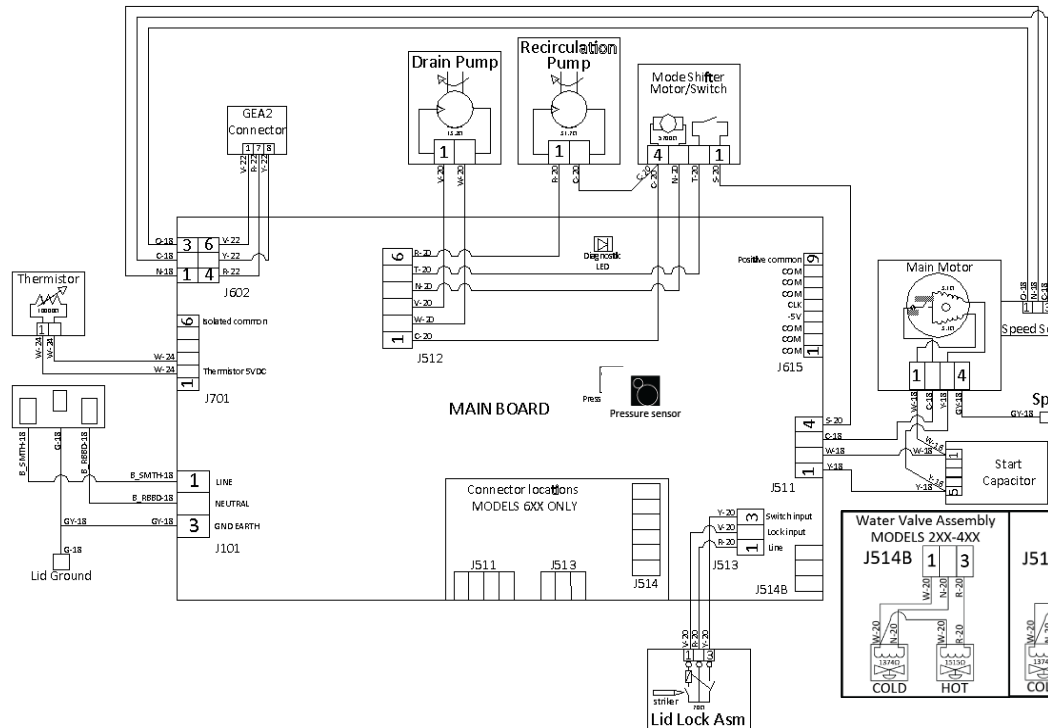
Tighten the eight hex head bolts in a crisscross pattern so that the seal is pulled into the tub evenly and securely.

This is done by tightening each bolt about 1/4 of the way in at a time.

Torque to 65 in-lbs.



# Schematic



## Wire Color Key

XX-YY  
XX:Wire color  
YY:Wire gauge

- |                       |           |
|-----------------------|-----------|
| W: White              | C: Brown  |
| B: Black              | R: Red    |
| S: Grey               | P: Pink   |
| N: Blue               | V: Purple |
| Y: Yellow             | O: Orange |
| G: Green              | T: Tan    |
| GY: Green with Yellow |           |

| Thermistor Resistance Table |         |               |
|-----------------------------|---------|---------------|
| Temp(C)                     | Temp(F) | Resistance(Ω) |
| 10                          | 50      | 19901         |
| 15                          | 59      | 15713         |
| 20                          | 68      | 12493         |
| 28                          | 82.4    | 8833          |
| 32                          | 90      | 7446          |
| 38                          | 100     | 5807          |
| 44                          | 111     | 4558          |
| 50                          | 122     | 3601          |
| 54                          | 130     | 3108          |
| 66                          | 150     | 2016          |
| 76                          | 169     | 1435          |

## Pressure Sensor

1. Not usable
  2. Power supply(+)
  3. Ground
  4. Output
  5. Not usable
  6. Not usable
  7. Not usable
  8. Not usable
- \*To measure output voltage, connect the probes between pin 4 and pin 3. Shorting pin 3 to pin 2 will cause the main board to shut down

## Tub Water Level Pressure Sensor

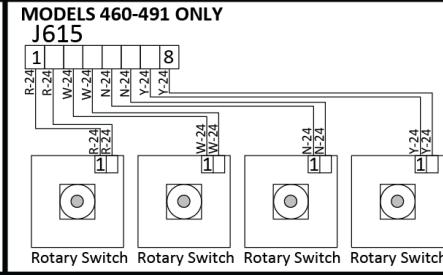
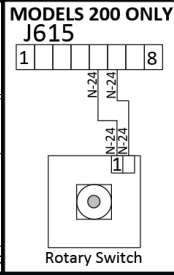
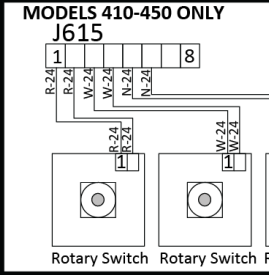
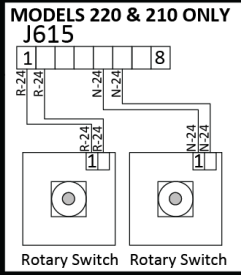
| MODELS 200-491 ONLY |         | MODELS 680 ONLY |         |
|---------------------|---------|-----------------|---------|
| Inches of Water     | Voltage | Inches of Water | Voltage |
| Empty               | 0.4     | Empty           | 0.4     |
| 1"                  | 0.7     | 1"              | 0.8     |
| 2"                  | 1.0     | 2"              | 1.0     |
| 3"                  | 1.4     | 3"              | 1.2     |
| 4"                  | 1.6     | 4"              | 1.4     |
| 5"                  | 1.8     | 5"              | 1.6     |
| 6"                  | 2.0     | 6"              | 1.8     |
| 7"                  | 2.2     | 7"              | 2.0     |
| 8"                  | 2.4     | 8"              | 2.2     |
| 9"                  | 2.6     | 9"              | 2.4     |
| 10"                 | 2.8     | 10"             | 2.6     |
| 11"                 | 3.0     | 11"             | 2.8     |
| 12"                 | 3.2     | 12"             | 3.0     |

## Resistance Table

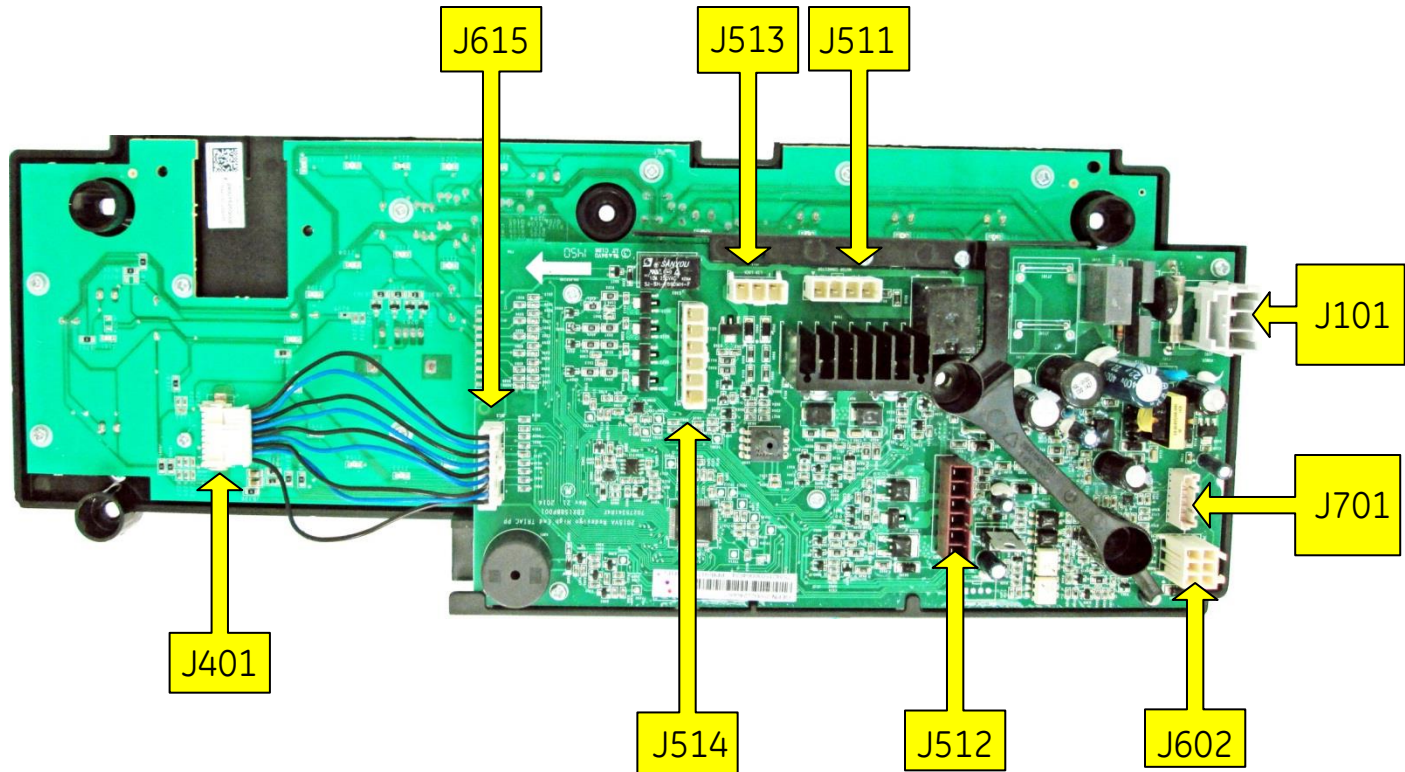
| Component                   | Resistance(Ω) |
|-----------------------------|---------------|
| Drain pump                  | 13.2          |
| Lid Lock                    | 70            |
| Mode Shifter                | 5700          |
| Motor(1/2HP)                | 3.1           |
| Motor(1/3HP)                | 3.8           |
| Recirculation pump          | 31.7          |
| Water Valves(Cold,Fab_Soft) | 1374          |
| Water Valves(Hot, Rinse)    | 1515          |

\*These values are read from the leads while disconnected from the control PCB  
\*\*The values are approximate  
\*\*\*Measure lid lock resistance between pins 2 and 3 and pins 1 and 3 while lid is closed

| Rotary Switch Resistance Table                                                     |                |         |
|------------------------------------------------------------------------------------|----------------|---------|
| *Resistance values are read from the leads while disconnected from the control PCB |                |         |
| Position                                                                           | Resistance(kΩ) | Voltage |
| 1                                                                                  | 0.8            | 0.7     |
| 2                                                                                  | 1.9            | 1.5     |
| 3                                                                                  | 3.7            | 2.2     |
| 4                                                                                  | 6.7            | 2.9     |
| 5                                                                                  | 13.5           | 3.7     |
| 6                                                                                  | 40.5           | 4.5     |



# Control Board User Interface



# Consumer Error Mode Entry

## Entry into Consumer Error Mode

- From an idle state only (all LEDs off), press and hold **Start** button for 10 seconds.
- After holding **Start** for 10 seconds, all LEDs will turn on, signifying the user may release the **Start** button.

## Behaviors While In Consumer Error Mode

- The **Pause** and **Lid Locked** LEDs should be constantly blinking while in CEM.
- The first fault, if present, will show on the display.
- Pressing **Start** will display the next fault code.
  - Models without 7-segment display: Fault code will blink in binary - the consumer will report which LEDs are blinking and which are not. See **Binary Display Fault Chart**.
  - Models with 7-segment display: Fault code will blink on the 7-segment display.
- At the end of the fault list or if no faults present:
  - Models without 7-segment display: All status LEDs will blink.
  - Models with 7-segment display: 7-segment display will blink “—”.

## Exiting Consumer Error Mode

- Pressing any button (other than **Start**) or turning any knob will exit Consumer Error Mode.
- Consumer Error Mode will time out after 10 minutes

# Consumer Help Indicator

Your washer is equipped with Consumer Help Indicator (CHI). CHI is our way to communicate a simple remedy for some situations that you can perform without the need to call for service. The chart below describes the helpful messages you may notice scrolling on your display when you return to start another load. These messages will provide simple remedies you can quickly perform.

To ensure that you see the message, the washer will scroll the message continually until you interact in some way with the controls.

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| "Ob" (Out of balance)                       | After the wash cycle, the clothing wasn't evenly distributed enough to spin out the water. Redistribute the clothes more evenly in the washer and then run a <b><i>Drain &amp; Spin</i></b> cycle.                                                                                                                                                                                                                                                             |
| "Po" (Water took too long to Pump Out)      | Resume cycle or enter <b><i>Drain &amp; Spin</i></b> . If water pumps out, then the clog has likely cleared. If water remains in the washer, check for clogged or pinched drain hose. This situation could be more likely to appear, over time, if the external drain hose has been extended or restricted.                                                                                                                                                    |
| "H2O SUPPLY"<br>(Water not entering washer) | Check your house water supply. Did you forget to turn on one or both supply valves after installation or coming back from vacation? As soon as the message starts to scroll, the washer will initiate a 3 minute lock-out period. The washer controls won't respond/change during this time. After the 3 minutes, you can begin your cycle again. If you try to bypass the lock-out period by unplugging the washer, the 3 minute timer will start over again. |
| "CAnCELEd"                                  | If your machine has stopped itself before the cycle completed, CAnCELEd will scroll in the display. On models without a display, the two furthest right LED lights will flash. This indicates that an error has occurred. Try to run a <b><i>Drain &amp; Spin</i></b> cycle to see if it will clear. If it does not clear, call 800.GE.CARES (800.432.2737) for service.                                                                                       |

# Service Mode Entry

## Field Service Mode Entry

From an idle state only (all LEDs off), press and hold **Start** button while rotating the cycle selection knob 180 degrees (7 clicks) and then release the **Start** button.

- Once service mode is entered all LEDs will be flashing.
  - On 7-segment display models: (0) will be displayed for Test (0).
  - On models without a 7-segment display: All of the status LEDs above the cycle knob will be lit.
- The cycle selection Knob is now used to control the test selection menu.
  - Rotating the knob clockwise will increment the test numbers in the display.
  - Rotating the knob counter clockwise will decrement the test number in the display.
  - Models without 7-segment display: Will display tests using the status lights above the cycle knob in a binary format. (See Binary Chart)
  - Turning the knob to go to a different test will terminate any current active state.
- Once the test number is selected, pressing **Start** will begin the selected test.

## Exit Field Service Mode

- Field service mode will time out after 30 minutes if there is no user activity.
- Models without 7-segment display: Press and hold the **Start** button for 3 seconds
- Models with a 7-segment display: Press **Power** button

**Once the washer is in Service Mode, the following service features are available via the cycle knob (on some models):**

# Binary Display Test and Fault Chart

| Binary Display Fault Chart                  |                                    |                                                                   |
|---------------------------------------------|------------------------------------|-------------------------------------------------------------------|
| Fault/Test # displayed on 7-segment display | When entered into service mode     | Fault/Test # displayed in binary format using cycle status lights |
|                                             | Service Mode Tests                 | Filled circles indicate light on                                  |
| 0                                           | All LEDs on                        | ● ● ● ● ● ● ●                                                     |
| 1                                           | Fault Codes                        | ○ ○ ○ ○ ○ ●                                                       |
| 2                                           | Personality ID                     | ○ ○ ○ ○ ● ○                                                       |
| 3                                           | UI Software Version (Critical)     | ○ ○ ○ ○ ● ●                                                       |
| 4                                           | UI Software Version (Non-critical) | ○ ○ ○ ● ○ ○                                                       |
| 5                                           | XML Version (Non-critical)         | ○ ○ ○ ● ○ ●                                                       |
| 6                                           | Hot Water Valve                    | ○ ○ ○ ● ● ○                                                       |
| 7                                           | Cold Water Valve                   | ○ ○ ○ ● ● ●                                                       |
| 8                                           | Fabric Softener Dispenser          | ○ ○ ● ○ ○ ○                                                       |
| 9                                           | Spray Rinse Valve                  | ○ ○ ● ○ ○ ●                                                       |
| 10                                          | Pressure Sensor                    | ○ ○ ● ○ ● ○                                                       |
| 11                                          | Recirculate Pump                   | ○ ○ ● ○ ● ●                                                       |
| 12                                          | Drain Pump                         | ○ ○ ● ● ○ ○                                                       |
| 13                                          | Lid Switch                         | ○ ○ ● ● ○ ●                                                       |
| 14                                          | Spin                               | ○ ○ ● ● ● ○                                                       |
| 15                                          | Agitate                            | ○ ○ ● ● ● ●                                                       |
| 16                                          | Clear all F Codes                  | ○ ● ○ ○ ○ ○                                                       |
| 17                                          | Change Personality                 | ○ ● ○ ○ ○ ●                                                       |
| 18                                          | Analog Knob                        | ○ ● ○ ○ ● ○                                                       |
| 19                                          |                                    | ○ ● ○ ○ ● ●                                                       |
| 20                                          |                                    | ○ ● ○ ● ○ ○                                                       |
| 21                                          |                                    | ○ ● ○ ● ○ ●                                                       |
| 22                                          |                                    | ○ ● ○ ● ● ○                                                       |
| 23                                          |                                    | ○ ● ○ ● ● ●                                                       |
| 24                                          |                                    | ○ ● ● ○ ○ ○                                                       |
| 25                                          |                                    | ○ ● ● ○ ○ ●                                                       |

# Service Mode Tests

| Knob Index / Test number (Displayed on SSD, 7-segment display, if present) (Without SSD will be displayed in binary format. (See Binary Chart) | Test Name      | <p><u>Description of test</u></p> <p>If tests call for numbers to be shown it will: (Display on SSD, 7-segment display, if present.) (Without SSD will be displayed in binary format. (See Binary Chart) Turning the cycle knob will index to the next or prior test.</p>                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0                                                                                                                                              | All LED's on   | All LEDs on the display will be blink including "88" on the (7-segment display) SSD at a rate of 1Hz.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 1                                                                                                                                              | Fault Codes    | <p>Models without 7-segment display:</p> <p>Faults will be shown;</p> <ul style="list-style-type: none"> <li>- On <b>Start</b> button press, blink first fault code in binary. (See Binary Chart)</li> <li>- On next <b>Start</b> button press, blink next fault code.</li> <li>- At end of list OR if no fault codes are present, blink all LEDs.</li> <li>- Pressing <b>Start</b> at the end of the fault list will wrap back around.</li> <li>- Use the fault sequence.</li> </ul> <p>7-segment display models:</p> <p>On <b>Start</b> button press, blink first fault code</p> <p>Display fault code in SSD.</p> <p>At end of list OR if no fault codes are present, washer will flash "- -".</p> |
| 2                                                                                                                                              | Personality ID | <p>Pressing <b>Start</b> will start the test.</p> <p>Flash the set personality after pressing <b>Start</b>.</p> <p>Models without SSD use binary to show personality.</p> <p>Model with SSD will display personality.</p> <p>(See Personality ID Chart for the correct ID for the model being checked.)</p>                                                                                                                                                                                                                                                                                                                                                                                           |

# Service Mode Tests

| Knob Index / Test number (Displayed on SSD, 7-segment display, if present) (Without SSD will be displayed in binary format. (See Binary Chart) | Test Name                                                                                                         | <u>Description of test</u><br>If tests call for numbers to be shown it will: (Display on SSD, 7-segment display, if present.) (Without SSD will be displayed in binary format. (See Binary Chart) Turning the cycle knob will index to the next or prior test.                                                                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3                                                                                                                                              | UI Software Version (Critical)                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| (Critical)                                                                                                                                     | After entering this test, press the <b>Start</b> button to toggle through the software version number as follows: | After entering this test, press the <b>Start</b> button to toggle through the software version number as follows:<br>Example: v01.23<br>High end UI<br>1st press - "01" on 7SD<br>2nd press - "23" on 7SD<br>Low end UI (See Version Diagram below)<br>Major version ( <b>Pause</b> LED ON)<br>1st press - Display 0 in binary (all LEDs off)<br>2nd press - Display 1 in binary<br>Minor version ( <b>Lid Locked</b> LED ON)<br>3rd press - Display 2 in binary<br>4th press - Display 3 in binary |

# Service Mode Tests

| Knob Index / Test number (Displayed on SSD, 7-segment display, if present) (Without SSD will be displayed in binary format. (See Binary Chart) | Test Name                          | <u>Description of test</u><br>If tests call for numbers to be shown it will: (Display on SSD, 7-segment display, if present.) (Without SSD will be displayed in binary format. (See Binary Chart) Turning the cycle knob will index to the next or prior test.                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4                                                                                                                                              | UI Software Version (Non-critical) | After entering this test, press the <b>Start</b> button to toggle through the software version number as follows:<br>Example: v01.23<br>High end UI<br>1st press - "01" on SSD<br>2nd press - "23" on SSD<br><br>Low end UI (See Version Diagram below)<br>Major version (Pause LED ON)<br>1st press - Display 0 in binary (all LEDs off)<br>2nd press - Display 1 in binary<br>Minor version ( <b>Lid Locked</b> LED ON)<br>3rd press - Display 2 in binary<br>4th press - Display 3 in binary |

# Service Mode Tests

| Knob Index / Test number (Displayed on SSD, 7-segment display, if present) (Without SSD will be displayed in binary format. (See Binary Chart)) | Test Name                  | <u>Description of test</u><br>If tests call for numbers to be shown it will: (Display on SSD, 7-segment display, if present.) (Without SSD will be displayed in binary format. (See Binary Chart) Turning the cycle knob will index to the next or prior test.                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5                                                                                                                                               | XML Version (Non-critical) | Example: v01.23<br>High end UI<br>1st press - "01" on SSD<br>2nd press - "23" on SSD<br><br>Low end UI (See Version Diagram below)<br>Major version ( <b>Pause</b> LED ON)<br>1st press - Display 0 in binary (all LEDs off)<br>2nd press - Display 1 in binary<br>Minor version ( <b>Lid Locked</b> LED ON)<br>3rd press - Display 2 in binary<br>4th press - Display 3 in binary<br>NOTE: We only show the non-critical version number because the critical XML version number must match the application non-critical version number for the control to boot. If you get to service mode, then the XML critical version is correct. If not, update software. |

# Service Mode Tests

| Knob Index / Test number (Displayed on SSD, 7-segment display, if present) (Without SSD will be displayed in binary format. (See Binary Chart) | Test Name                 | <u>Description of test</u><br>If tests call for numbers to be shown it will: (Display on SSD, 7-segment display, if present.) (Without SSD will be displayed in binary format. (See Binary Chart) Turning the cycle knob will index to the next or prior test. |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6                                                                                                                                              | Hot Water Valve           | Pressing <b>Start</b> will toggle the hot water valve on and off. Test will have a timeout for how long valve will be on (1 minute). The valve will turn off when the test is exited.                                                                          |
| 7                                                                                                                                              | Cold Water Valve          | Pressing <b>Start</b> will toggle the cold water valve on and off. Test will have a timeout for how long valve will be on (1 minute). The valve will turn off when the test is exited.                                                                         |
| 8                                                                                                                                              | Fabric Softener Dispenser | Pressing <b>Start</b> will toggle the fabric softener valve on and off. Test will have a timeout for how long valve will be on (1 minute). The valve will turn off when the test is exited.                                                                    |
| 9                                                                                                                                              | Spray Rinse Valve Check   | Pressing <b>Start</b> will toggle the spray rinse valve on and off. Test will have a timeout for how long valve will be on (1 minute). The valve will turn off when the test is exited.                                                                        |

# Service Mode Tests

| Knob Index / Test number (Displayed on SSD, 7-segment display, if present) (Without SSD will be displayed in binary format. (See Binary Chart) | Test Name        | <u>Description of test</u><br>If tests call for numbers to be shown it will: (Display on SSD, 7-segment display, if present.) (Without SSD will be displayed in binary format. (See Binary Chart) Turning the cycle knob will index to the next or prior test.                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10                                                                                                                                             | Pressure Sensor  | Pressing <b>Start</b> will start the test.<br>Pressure sensor test will have a timeout.<br>All valves will turn on.<br>All LEDs will blink at start of test.<br>Stop blinking LEDs as approximate water levels are crossed.<br>The levels are:<br>2"<br>3"<br>4"<br>5"<br>6"<br>7" Water valves shuts off at this level. |
| 11                                                                                                                                             | Recirculate Pump | Pressing <b>Start</b> will toggle the recirculation pump on and off.<br>Test will have a (1 minute) timeout for how long recirculation pump will be on.<br>The recirculation pump will turn off when the test is exited.                                                                                                 |
| 12                                                                                                                                             | Drain Pump       | Pressing <b>Start</b> will toggle the drain pump on and off. Test will have a (4 minute) timeout for how long drain pump will be on. The drain pump will turn off when the test is exited.                                                                                                                               |

# Service Mode Tests

| Knob Index / Test number (Displayed on SSD, 7-segment display, if present) (Without SSD will be displayed in binary format. (See Binary Chart) | Test Name | <u>Description of test</u><br>If tests call for numbers to be shown it will: (Display on SSD, 7-segment display, if present.) (Without SSD will be displayed in binary format. (See Binary Chart) Turning the cycle knob will index to the next or prior test.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14                                                                                                                                             | Spin      | <p>Pressing <b>Start</b> will start the test.</p> <p>Spin test will perform child safety algorithm before it starts to spin. (Two (2) sprays of water before locking the lid.) The lid must be closed to start the test. If lid is open the <b>Locked</b> LED will blink.</p> <p>When started, the mode shift to spin will occur if required and the lid will be locked. When mode shift is complete, the washer will begin spinning to max spin speed for the model being tested.</p> <p>Spin test will have a (4 minute) timeout.</p> <p>Be sure to only run this test with an empty basket as there is no OOB detection during this test.</p> <p>The spin will stop when the test is exited.</p> <p>The lid will unlock once the speed reaches 0 after the test is exited.</p> |

# Service Mode Tests

| Knob Index / Test number (Displayed on SSD, 7-segment display, if present) (Without SSD will be displayed in binary format. (See Binary Chart) | Test Name             | <u>Description of test</u><br>If tests call for numbers to be shown it will: (Display on SSD, 7-segment display, if present.) (Without SSD will be displayed in binary format. (See Binary Chart) Turning the cycle knob will index to the next or prior test.                                                                                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15                                                                                                                                             | Agitate               | Pressing <b>Start</b> will start the test. Agitate test will perform child safety algorithm before it starts to agitate. The lid must be closed to start the test. If lid is open, the <b>Locked</b> LED will blink.<br>When started, the mode shift to agitate will occur if required.<br>When mode shift is complete, the washer will begin agitating.<br>The test will pause if the lid is opened after starting. The test will resume on lid close if it was running when opened.<br>The test will stop when the test is exited. |
| 16                                                                                                                                             | Clear all Fault Codes | Pressing <b>Start</b> will clear all fault codes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 17                                                                                                                                             | Change Personality    | Pressing <b>Start</b> will start the test.<br>Press <b>Start</b> button again and the next valid personality should be displayed.<br>Press and hold the <b>Start</b> button to select the correct personality.                                                                                                                                                                                                                                                                                                                       |

# Service Mode Tests

| Knob Index / Test number (Displayed on SSD, 7-segment display, if present) (Without SSD will be displayed in binary format. (See Binary Chart) | Test Name   | <u>Description of test</u><br>If tests call for numbers to be shown it will: (Display on SSD, 7-segment display, if present.) (Without SSD will be displayed in binary format. (See Binary Chart) Turning the cycle knob will index to the next or prior test.                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 18                                                                                                                                             | Analog Knob | Pressing <b>Start</b> will start the test.<br>Each options knob is represented by a specific corresponding status LED. (Far left options knob to the far left status LED)<br>When knob position changes, the LED for the specific knob blinks.<br>With each click to the right, the LED for the specific knob blinks faster.<br>With each click to the left, the LED for the specific knob blinks slower. |

# Fault Codes

| Fault Code (Hex) | Name                                                                                      | Description                                                                                                                                                                                                                                                                                                                                                    | Repair Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                | Lock Monitor                                                                              | Lid lock didn't occur or lid lock signal not seen by control due to lack of connection.                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>• Check the resistance of the lid lock assembly.</li> <li>• Check the harness for open wires and or connectors from the board to the lock assembly.</li> <li>• If lock assembly and harness prove good at the time of service, replace the lid lock assembly.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 2                | Lid Monitor                                                                               | Control did not get lid closed signal from switch while motor was moving. Could mean the switch didn't close or control didn't get the signal because of lack of connection.                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>• Replace control if this fault happens repeatedly.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 3                | Locked Rotor Monitor                                                                      | For 5 straight seconds control not seeing signal changes indicating the motor is turning while trying to spin. Could mean the motor isn't rotating or Control didn't get the signal because of lack of connection.                                                                                                                                             | <ul style="list-style-type: none"> <li>• Physically check the washer for anything preventing motor movement.</li> <li>• Check harness and harness connectors from the control to the motor.</li> <li>• Verify hall sensor is connected to the main harness. Put washer in Service Mode and run TEST 13. Spin Test. If hall sensor is bad or disconnected, the basket will start to spin normally and then stop spinning after approximately 5 seconds. Ensure hall sensor is properly connected and positioned on the motor. If basket spins for approximately 15 seconds, the hall sensor is most likely NOT the cause.</li> <li>• TCO should reset in approximately 45 minute. If TCO is tripped, make sure motor moves freely and that nothing is jamming it. Replace motor if it does not.</li> </ul> |
| 4                | Reset Monitor                                                                             | Control is resetting the software by itself due to criteria it believes could resolve itself upon reset.                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>• Check for loose connections at the control. Reconnect if any.</li> <li>• Check for recommended house line voltage to the washer.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 5                | Mode Shifter                                                                              | Control didn't see the transition from Agitate to Spin or vice-versa in the time required. Could mean the shift didn't occur or Control didn't get the signal because of lack of connection.                                                                                                                                                                   | <ul style="list-style-type: none"> <li>• Check mode shifter coupler for damage and the ability to slide in and out freely.</li> <li>• Using an ohm meter, check to ensure mode shifter switch is in the open position.</li> <li>• Check resistance of mode shifter motor (approximately 5.7K ohms).</li> <li>• Check for 120VAC to the mode shifter motor at the control J512 connector.</li> <li>• If voltage is present, replace the mode shifter.</li> <li>• If voltage is not present at the control, replace control.</li> </ul>                                                                                                                                                                                                                                                                     |
| 6                | Critical Flood Level by Pressure. Pressure level exceeds 17.5 inches above pressure port. | Control received an extended period of pressure readings that is nearing over-flow levels. Pressure 17.5". Voltage Output must be present. Could mean water did get that high due to briefly stuck water valve. Voltage output of sensor too high for actual water level because of sensor or water in pressure tube increasing pressure.                      | <ul style="list-style-type: none"> <li>• Check pressure tube for pinches where it goes through top cover grommet.</li> <li>• Check pressure tube for trapped water.</li> <li>• Check for any leaking water valves.</li> <li>• Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control.</li> </ul>                                                                                                                                                                                                                                                                                                     |
| 7                | Flood Warning Level by Pressure. Pressure level exceeds 16.5 inches above pressure port.  | Main micro received an extended period of pressure readings that is greater than maximum allowable fill volume. Pressure 16.5". Voltage output must be present. Could mean water did get that high due to briefly stuck water valve. Voltage output of Sensor too high for actual water level because of sensor or water in pressure tube increasing pressure. | <ul style="list-style-type: none"> <li>• This can happen if a large wet load is placed in the washer.</li> <li>• Check pressure tube for pinches where it goes through top cover grommet.</li> <li>• Check pressure tube for trapped water.</li> <li>• Check for any leaking water valves.</li> <li>• Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control.</li> </ul>                                                                                                                                                                                                                             |
| 8                | Pressure Sensor Loss                                                                      | This determines if there has been a too great of a difference in the pressure sensor reading and the expected pressure sensor reading for the amount of water the control calculated it has put in. It assumes there is a pressure leak, a clog in the pressure hose/system delaying the increase in pressure, or a significant amount water leaking out.      | <ul style="list-style-type: none"> <li>• Check house water supply vales are turned on.</li> <li>• Check pressure tube for pinches where it goes through top cover grommet.</li> <li>• Check pressure tube for trapped water.</li> <li>• Check water valve operation</li> <li>• Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control.</li> </ul>                                                                                                                                                                                                                                                    |
| 9                | Lid Switch Redundancy                                                                     | Start attempted for a 4th cycle when the previous 3 cycles have completed with backup micro seeing lid open. Could mean the switches didn't occur or backup processor didn't get the signal because of lack of connection. See Fault #2 as well.                                                                                                               | <ul style="list-style-type: none"> <li>• Open and close the lid to clear the error.</li> <li>• Check harness and connectors that go to the lid switch.</li> <li>• If the error will not clear, replace the lid switch.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

# Fault Codes

| Fault Code (Hex) | Name                        | Description                                                                                                                                                                                                                                                                                                                                          | Repair Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10               | Mode Shift Feedback Monitor | Signal feedback state from the mode shifter (agitate or spin) and the state requested by the control are not the same and the basket or agitator is rotating faster than 3-4 RPM. Agitate mode feedback signal is no voltage.                                                                                                                        | <ul style="list-style-type: none"> <li>• Check mode shifter coupler for damage and the ability to slide in and out freely.</li> <li>• Use ohm meter to ensure harness shows continuity to the mode shifter from the control.</li> <li>• Check resistance of mode shifter motor (approximately 5.7K ohms).</li> <li>• Check for 120VAC to the mode shifter motor at the control J512 connector.</li> <li>• If voltage is present and no operation, replace the mode shifter.</li> <li>• If voltage is not present at the control, replace control.</li> </ul>            |
| 11               | Clock Monitor               | 1. AC power line frequency is not 60Hz.<br>2. Software failure.                                                                                                                                                                                                                                                                                      | <ol style="list-style-type: none"> <li>1. Check the frequency of the AC power outlet. If it is more than a few Hz off of 60Hz, notify utility company.</li> <li>2. If house frequency is good, update software.</li> </ol>                                                                                                                                                                                                                                                                                                                                              |
| 12               | Redundant Flood Condition   | Backup Processor received an extended period of pressure readings that is nearing over-flow levels. Pressure 18.0"<br>Voltage Output must be present. Could mean water did get that high due to briefly stuck water valve. Voltage output of Sensor too high for actual water level because of Sensor or water in Pressure tube increasing pressure. | <ul style="list-style-type: none"> <li>• Check pressure tube for trapped water.</li> <li>• Check Each Valves Operation... (Replace Water Valve and send back to GE)</li> <li>• Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control. Send Control back to GE.</li> <li>• If the pressure tube is intact, replace control and Send Control back to GE.</li> </ul> |
| 13               | Redundant Lid Unlocked      | In spin mode, the lid switch feedback has voltage (lid closed), for more than 5 seconds the motor speed feedback assumes the basket is spinning > 4-5RPM when the lid lock feedback has no voltage (Lid Unlocked). Lid Switch Feedback has no Voltage when the BRPM is > 4-5RPM.                                                                     | <ul style="list-style-type: none"> <li>• Check lid switch continuity at J513 on the control.</li> <li>• Check continuity of lid lock position. Opened or Closed.</li> <li>• Check for proper operation of lid lock. 120VAC while activating</li> <li>• Check lid lock wiring harness from the control to lock assembly.</li> <li>• If lid lock assembly and harness are OK, replace control board</li> </ul>                                                                                                                                                            |
| 14               | Lid Lock Failure            | Signal received by control is indicating the lock will not lock or unlock when requested or the lid switch is indicating open when the signal received indicated locked.                                                                                                                                                                             | <ul style="list-style-type: none"> <li>• Verify that the lid lock is not blocked by any external debris.</li> <li>• Check lid switch continuity at J513 on the control.</li> <li>• Check continuity of lid lock position. Opened or Closed.</li> <li>• Check for proper operation of lid lock. 120VAC while activating</li> <li>• Check lid lock wiring harness from the control to lock assembly.</li> <li>• If lid lock assembly and harness are OK, update the software.</li> </ul>                                                                                  |
| 15               | Water Temp Sensor Invalid   | 1. Thermistor disconnected/not present.<br>2. Failed thermistor                                                                                                                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>• Check thermistor resistance from connector J701 on the control board. Validate the resistance matches the table in mini-manual.</li> <li>• Check wiring harness and connections.</li> <li>• Replace thermistor.</li> </ul>                                                                                                                                                                                                                                                                                                     |

# Fault Codes

| Fault Code (Hex) | Name                                  | Description                                                                                                                                                                                                                                                                                                                                  | Repair Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16               | Adaptive Drain/Slow Drain             | The total number of times during machine life the actual amount of time the pressure sensor indicated the wash water had drained to empty exceeded the calculated time by the software.                                                                                                                                                      | <ul style="list-style-type: none"> <li>This fault is set when adaptive drain cycle occurs to try to remove the rest of water in tub.</li> <li>If the adaptive drain cycle times out, the control will run a Drain Pump Clearing algorithm to free the pump impeller of debris. Then it will finish draining. If drain clearing algorithm fails look for fault 18.</li> <li>If fault 16 is 100 and fault 18 never occurs there is no problem...If fault 16 and fault 18 equal each other in faults, then look for drain blockages including house standpipe.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 17               | Dry Load Sense Timeout                | Dry load sense times out and moves to the next part of the cycle selected. This occurs when the washer is not reaching the target speed within a defined time limit for the load type selected.                                                                                                                                              | <ol style="list-style-type: none"> <li>1. Check for water in the bottom of the tub. If so drain and try cycle again</li> <li>2. Check the basket for excessive friction. Basket should spin freely. If not, find source of friction and remove it.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 18               | Drain Pump Clearing algorithm failed. | While draining the pressure sensor value for water level did not indicate the washer was empty before the Max Continuous Drain ON time was reached.                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>This fault is set and will be seen with fault 16 when Drain Pump Clearing Algorithm failed to remove the blockage and the rest of water in tub.</li> <li>Check the drain pump for blockage.</li> <li>Check installation instructions for proper standpipe height.</li> <li>Check pressure tube for pinches where it goes through top cover grommet.</li> <li>Check pressure tube for trapped water.</li> <li>Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control.</li> <li>Check resistance of the pump (13.5 ohms) from J512 connector on the control.</li> <li>If open circuit, check wiring harness to the pump and pump motor.</li> <li>Check for 120VAC to the drain pump.</li> <li>If voltage is present and pump does not operate, replace pump.</li> <li>If voltage is not present, replace IMC (Interface Machine Control).</li> </ul> |
| 19               | UI State Timeout                      | Washer was paused for over 12 hours                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>This is normal operation. This will happen if the consumer and/or control switched cycle to a paused state.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 20               | Critical Flood Level by Gallons       | Water volume into the tub exceeded 41 gallons as calculated by the control.<br><ol style="list-style-type: none"> <li>1. Pressure tube is momentarily pinched, has water in it, partial blockage if Flood fault 12 occurs.</li> <li>2. Low water pressure/flow or permanent pressure system blockage if NO Flood fault 12 occurs.</li> </ol> | <ul style="list-style-type: none"> <li>Check pressure tube for pinches where it goes through top cover grommet.</li> <li>Check pressure tube for trapped water.</li> <li>Check for any leaking water valves.</li> <li>Check home water pressure.</li> <li>Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

# Fault Codes

| Fault Code (Hex) | Name                                        | Description                                                                                                                                                                                                                                                                                                              | Repair Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 21               | Flood Warning Level by Gallons.             | Water volume into the tub exceeded 36.3 gallons as calculated by the control. Stops filling<br>1. Pressure tube is momentarily pinched or has water in it, partial blockage if Flood fault 6, 7, or 12 occurs.<br>2. Low water pressure/flow or permanent pressure system blockage if NO Flood fault 6, 7, or 12 occurs. | <ul style="list-style-type: none"> <li>• Check pressure tube for pinches where it goes through top cover grommet.</li> <li>• Check pressure tube for trapped water.</li> <li>• Check for any leaking water valves.</li> <li>• Check home water pressure.</li> <li>• Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control.</li> </ul> |
| 22               | Out of Balance (OOB) during dry load sense. | Large wet/OOB load being washed. This is set if OOB condition is detected during dry load sense algorithm. Dry load sense will be abandoned and wet load sense will be started.                                                                                                                                          | <ol style="list-style-type: none"> <li>1. Check for excessively OOB load. Customer Education on how to distribute load.</li> <li>2. Check the basket for excessive friction or for being excessively out of round. Basket should spin freely and without wobble. If friction is found, remove it. If basket is bad replace it.</li> </ol>                                                                                                                                                                                                   |
| 23               | Critical Lid Lock                           | <ol style="list-style-type: none"> <li>1. Lock blockage</li> <li>2. Lid Lock failure. Will not lock or unlock or is locked while lid is opened.</li> </ol>                                                                                                                                                               | <ul style="list-style-type: none"> <li>• Verify that the lid lock is not blocked by any external debris.</li> <li>• Check lid switch continuity at J513 on the control.</li> <li>• Check continuity of lid lock position. Opened or Closed.</li> <li>• Check for proper operation of lid lock. 120VAC while activating</li> <li>• Check lid lock wiring harness from the control to lock assembly.</li> <li>• If lid lock assembly and harness are OK, replace control board</li> </ul>                                                     |
| 24               | Lid Logic Failure                           | Lid switch failure.<br>This fault is set if the system perceives the lid to be both OPEN and LOCKED for 5 consecutive seconds                                                                                                                                                                                            | <ol style="list-style-type: none"> <li>1. Check harness and connections from the control to the lid lock assembly for damage and continuity.</li> <li>2. Run a spin cycle. Pull up on the lid during spin for more than 5 seconds and see if this fault occurs. Replace lid lock assemble.</li> <li>3. If above does not correct the fault, replace the control.</li> </ol>                                                                                                                                                                 |
| 25               | Pressure Sensor Dropout                     | <ol style="list-style-type: none"> <li>1. Disconnected pressure hose.</li> <li>2. Pressure tube is pinched or has water in it.</li> <li>3. Pressure sensor failure.</li> </ol>                                                                                                                                           | <ul style="list-style-type: none"> <li>• Check pressure tube for pinches where it goes through top cover grommet.</li> <li>• Check pressure tube for trapped water.</li> <li>• Check for any leaking water valves.</li> <li>• Check home water pressure.</li> <li>• Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control.</li> </ul> |

# Warranty

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## *For The Period Of:    We Will Replace:*

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### ***One Year***

From the date of the original purchase

***Any factory specified part*** of the washer which fails due to a defect in materials or workmanship. During this ***limited one-year warranty***, we will also provide, ***free of charge***, all labor and related service to replace the defective part.

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### ***Ten Years***

From the date of the original purchase

***The motor***, if it should fail due to a defect in materials or workmanship. During this ***additional nine-year limited warranty***, you will be responsible for any labor and related service costs.

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## ***What Is Not Covered:***

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- |                                                                                                                      |                                                                                      |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| ■ Service trips to your home to teach you how to use the product.                                                    | ■ Damage to the product caused by accident, fire, floods or acts of God.             |
| ■ Improper installation, delivery or maintenance.                                                                    | ■ Incidental or consequential damage caused by possible defects with this appliance. |
| ■ Failure of the product if it is abused, misused, or used for other than the intended purpose or used commercially. | ■ Defects or damage due to operation in freezing temperatures.                       |
| ■ Replacement of house fuses or resetting of circuit breakers.                                                       | ■ Damage caused after delivery.                                                      |
| ■ Products which are not defective or broken, or which are working as described in the Owner's Manual.               | ■ Product not accessible to provide required service.                                |