# GE Profile 5.2 IEC\* cu. ft. Stainless Steel Capacity Washer

#### **Models:**

PTWN8055MMS (Metallic Silver) PTWN8050MWW (White)

2011 Energy Star® qualified

Service Guide Pub# 31-9211





GWS 05/06/2011

#### 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.



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





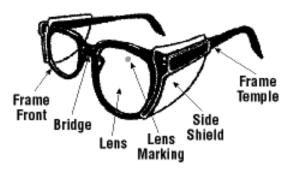
**Steel Toe Shoes** 



**Plano Safety Glasses** 



**VR Gloves – provide shock protection** 



Prescription Safety Glasses
Safety Glasses
must be
compliant with
ANSI Z87.1-2003



# Warranty

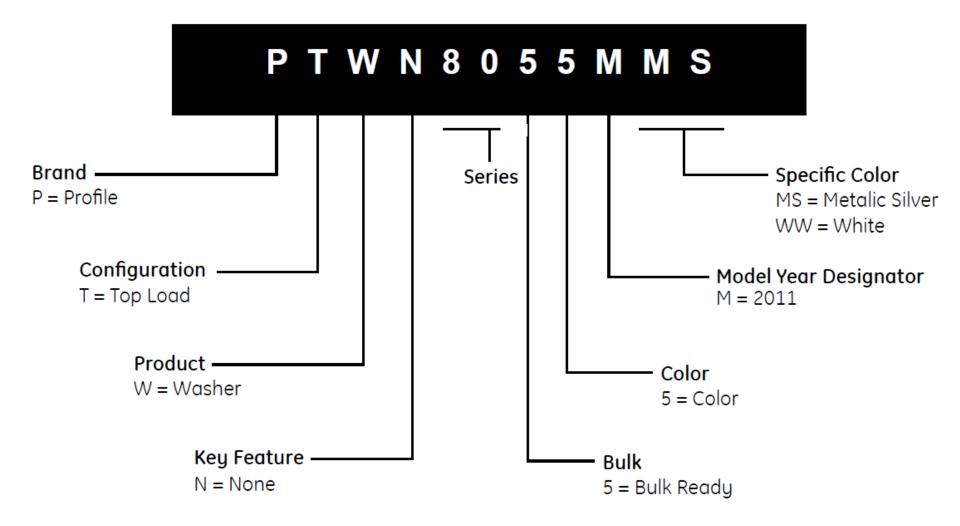
For The Period Of:	We Will Replace:
One Year From the date of the original purchase	Any part of the washer which fails due to a defect in materials or workmanship. During this limited one-year warranty, GE will also provide, free of charge, all labor and related service costs to replace the defective part.
Second through Fifth Year From the date of the original purchase	The suspension rod and spring assembly, and main electronic control board if any of these parts should fail due to a defect in materials or workmanship. GE will also replace the washer lid or cover if they should rust under operating conditions. During this additional three-year limited warranty, you will be responsible for any labor or related service costs.
Second through Tenth Year From the date of the original purchase	The direct drive motor and outer washer tub if any of these parts should fail due to a defect in materials or workmanship. During this additional eight-year limited warranty, you will be responsible for any labor or related service costs.
Lifetime of Product From the date of the original purchase	The washer basket if it should fail due to a defect in materials or workmanship. During this product lifetime limited warranty, you will be responsible for any labor or related service costs.

#### What Is Not Covered (in the United States):

- Service trips to your home to teach you how to use the product.
- Improper installation.
- Failure of the product if it is abused, misused, or used for other than the intended purpose or used commercially.
- Replacement of house fuses or resetting of circuit breakers.
- Damage to the product caused by accident, fire, floods or acts of God.
- Incidental or consequential damage caused by possible defects with this appliance.



#### **Nomenclature**





#### **Model / Serial Plate**



Model / Serial plate is located on the rear of the backsplash just above the water inlet connections.



#### Mini-Manual





Mini-Manual is packaged inside a plastic bag and is located inside the backsplash between the pressure switch and the water valve assembly.

## Wash Cycles

#### "Tidal Wave" or "Alpha Wash"

Basket spins at 230 RPM clockwise then counter-clockwise.

#### "Centrifusion Wash"

Basket spins slowly clockwise then counter-clockwise.

#### "Infusor Wash"

Tub remains stationary. Infusor turn clockwise then counter-clockwise.



#### **Dispenser Drawer**



- For powder detergent, remove the tray & insert.
- To remove drawer for cleaning, pull out to stop, lift front upwards and pull completely out of machine.



## **HE Detergent**



Use & Care recommends the use of HE detergent only.



## **Cycle Cancellation**



#### **NOTE (1):**

If the customer cancels a cycle by pressing the power pad, after four minutes the pump will turn on and pump the water out of the tub. The control does not illuminate or does the tub spin, just the pump is energized till the tub is empty.

Also doesn't matter if the lid is up or down.



## **Cycle Cancellation**



#### **NOTE (2):**

If the customer pauses a cycle for an extended amount of time, after two hours have elapsed, the machine will pump out the water in the tub and shut off.

Also doesn't matter if the lid is up or down.



# My Cycle



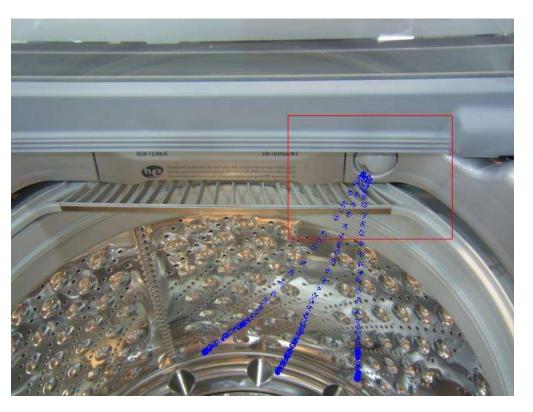
#### **NOTE (2):**

When programming the "My Cycle" feature, the customer can not only program any cycle but can also add any of the cycle additions, on the right of the display, to the cycle functions. These would include Fabric Softener, Delay Start, Extra Rise or Soak.



# **Jet Spray**





"Jet Spray" is used during the rinse cycles in order to use less water during rinse.

It sprays water over the clothes (spray rinse) as the basket rotates. Jet Spray is the default rinse type unless either **FABRIC SOFTENER** or **EXTRA RINSE** cycle additions are selected.



#### **Control Panel**



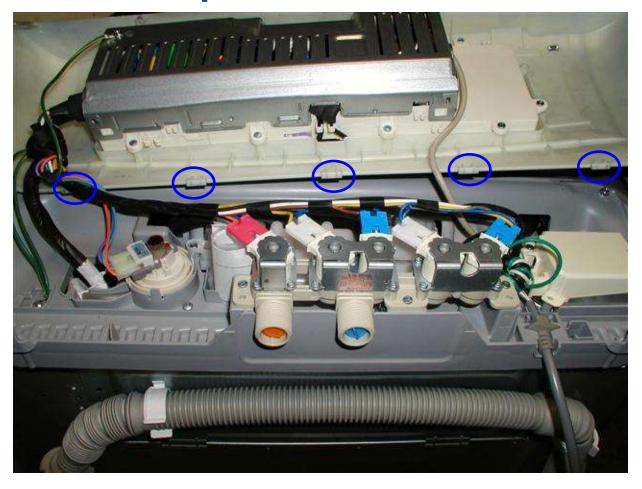
When the fabric softener pad is selected, the machine will provide a deep rinse instead of the spray rinse.





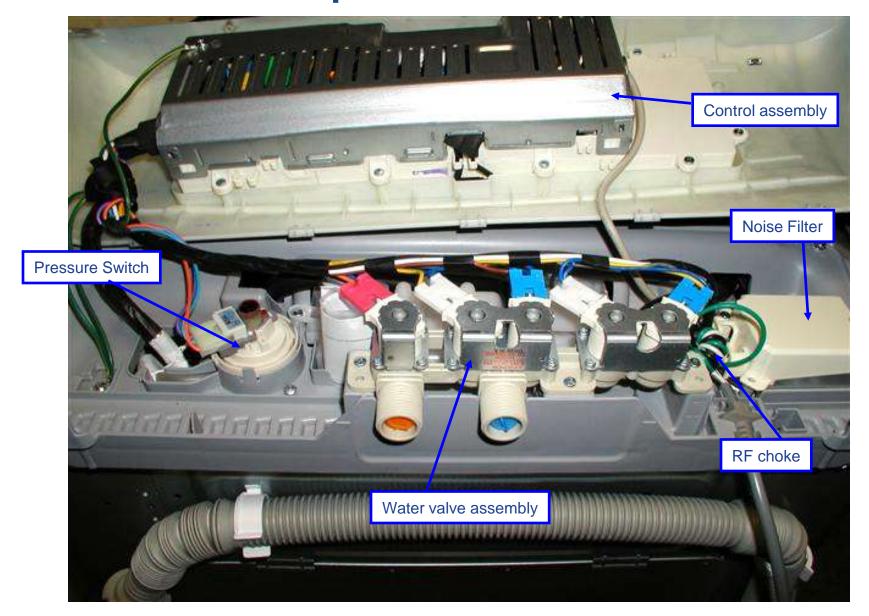
- To access the control components, first begin by removing five Phillips screws securing backsplash rear panel.
- Remove rear panel from backsplash assembly.





- Protect top of washer with a towel or rag.
- Tilt front control panel towards front of machine to disengage tabs.
- Lay control panel on it's face on top of towel.





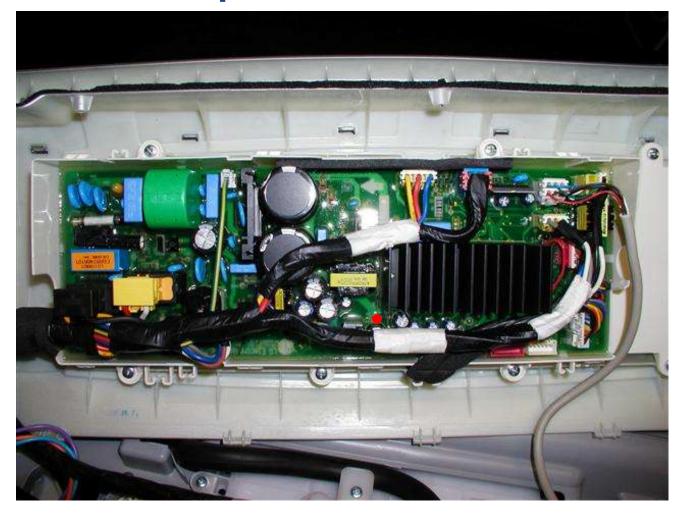




To remove metal shield from control board assembly, pull outward on side tabs.

**Caution:** Metal edges are sharp





Removing the metal cover will expose the plug connections and the individual electronic components on the power board.





- To separate the control assembly from front panel, remove ten (10) Phillips screws.
- Lift board assembly from panel.





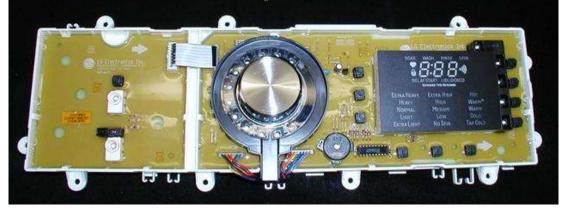
Selector buttons or pads are held to the control panel with tabs and are replaced as a complete assembly.





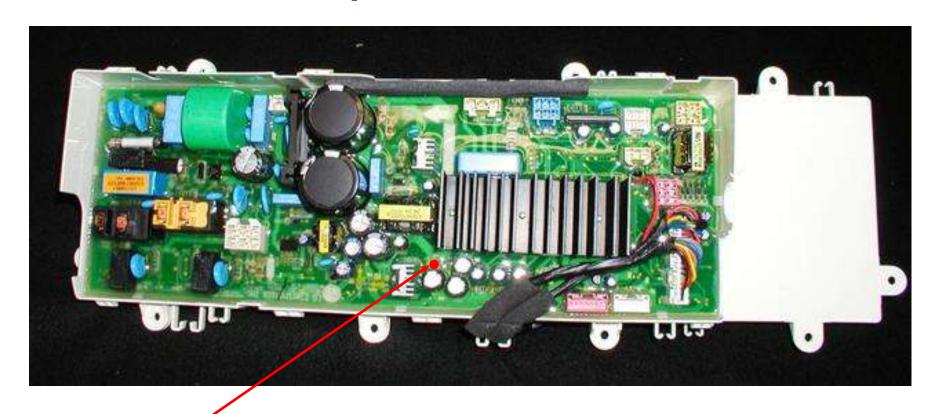
**POWER BOARD** 

#### **DISPLAY / LOGIC BOARD**



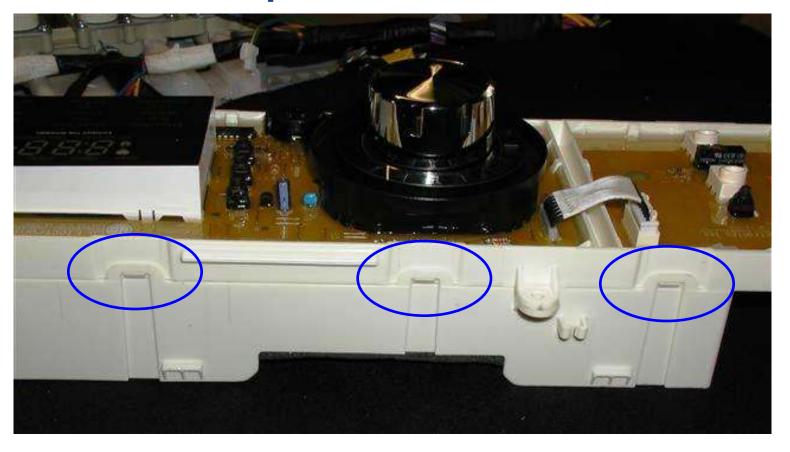
- The control assembly consists of a Power Board and a Display / Logic Board.
- They are held together as an assembly by plastic tabs and connected electrically by two interconnect plugs and cables.





Red LED indicates that the power board is powered and "awake".





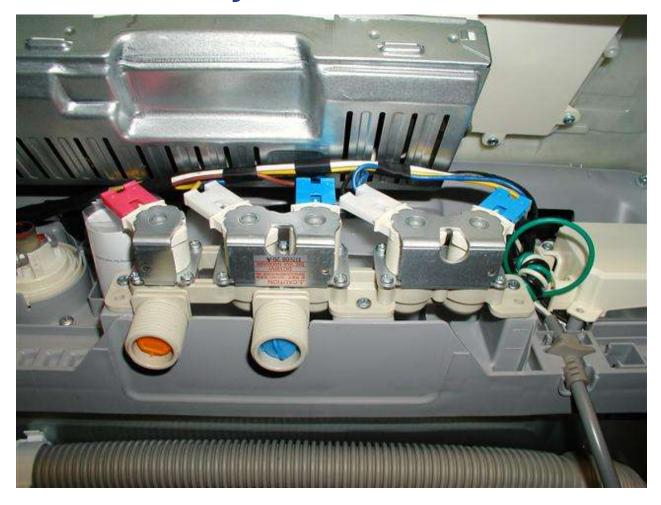
To separate the two control boards, first pry back plastic tabs then pry the two boards apart.





Finally, disconnect the two electrical connectors from the Power Board.





(Rear View)

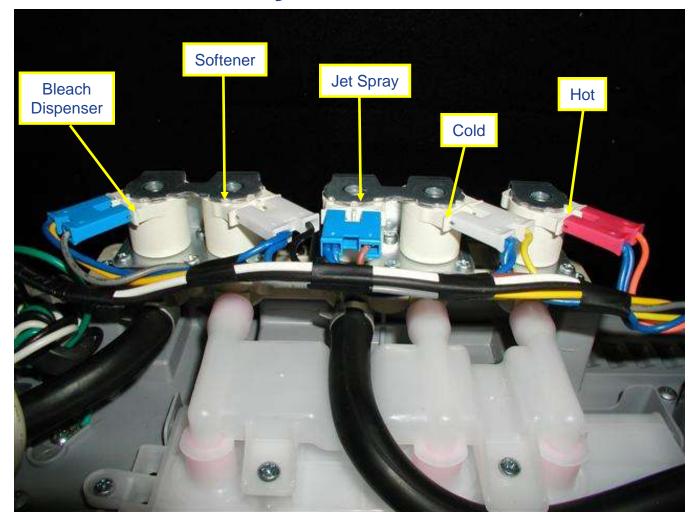
Water valve assembly is accessible after removing the control panel from the top of the machine.





- The water valve consists of a valve body and five solenoid coils.
- It is only available as a complete assembly.
- Each solenoid controls a specific water function.



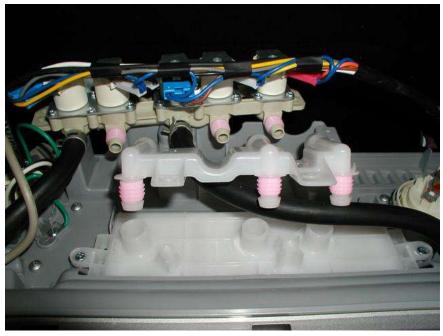


(Front View)

Each coil on the water valve assembly has an approximate resistance value of 30  $\Omega$  and should read 5-6vdc across the coil when energized.







Pink colored, plastic pressure fittings are used in the water distribution system for a tight fit and to reduce the possibility of leaks.



#### **Water Valve Screens**



Hot and cold water inlet screens are used to prevent debris from entering the valve assembly.



#### **Water Valve Screens**

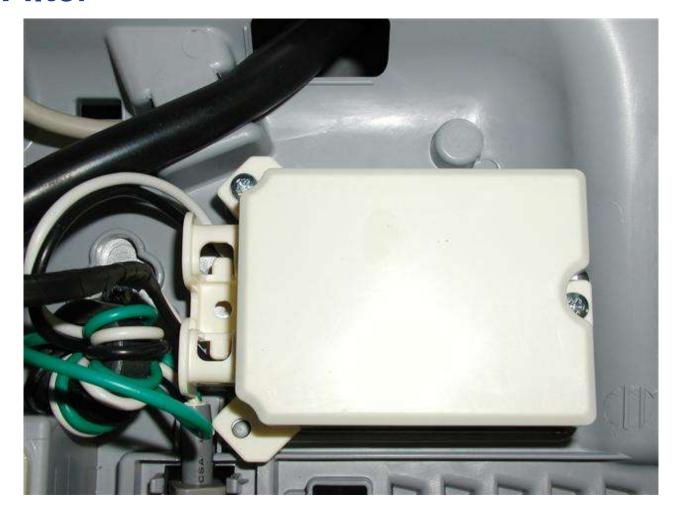




- Inlet screens are easily removed for cleaning.
- Remove them by grasping hold of the "handle" on the rear of the screen with a pair of needle nose pliers and pull straight out.
- After cleaning, re-insert for continued use.



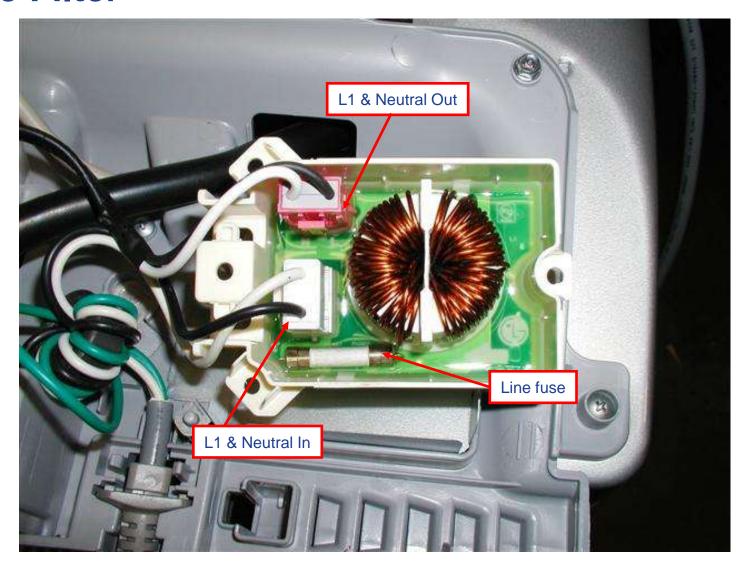
#### **Noise Filter**



Noise filter helps to block out line noise that could adversely affect the washer control system.



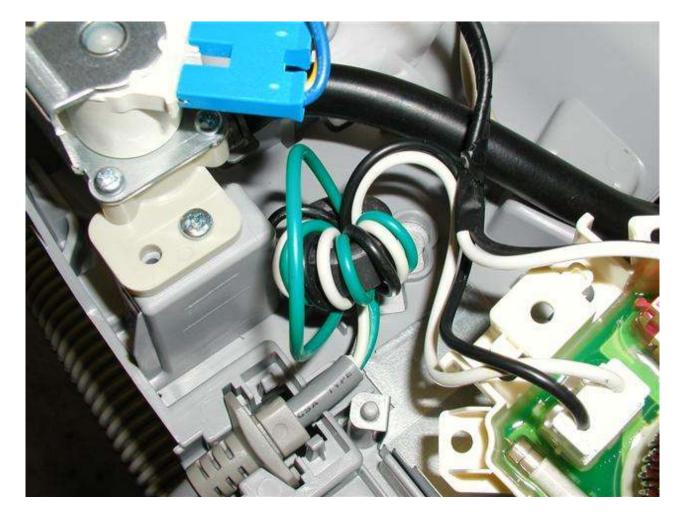
#### **Noise Filter**



15 Amp line fuse is not replaceable. Noise filter is replaced as an assembly.



#### Choke



- L1, Neutral and the ground wire are wrapped around and through a donut shaped ferrite core.
- Choke helps to prevent electrical interference to nearby electronic devices.



#### **Pressure Sensor**



The pressure sensor is connected by a clear hose to an air reservoir near the bottom of the outer tub and operates by a frequency (kHz) signal to the main control board.



### **Pressure Sensor**



- When the water level rises in the washer tub, air is trapped in the reservoir. As the water level rises, the air pressure in the reservoir increases.
- The pressure is translated into an electrical signal (frequency) by the pressure sensor.
- The frequency will vary from approximately 27 kHz (empty tub) to 21 kHz (full tub).
- This frequency can be measured at the pressure sensor between the purple and orange wires.



### **Pressure Sensor**



Sensor is held in place by three flexible, plastic tabs.



# **Top Cover**





- To lift washer top, first insert putty knife between apron and top, seven inches from either side to release spring clips.
- Lift lid, reach inside and pull up on top as you release each clip.



# **Top Cover**

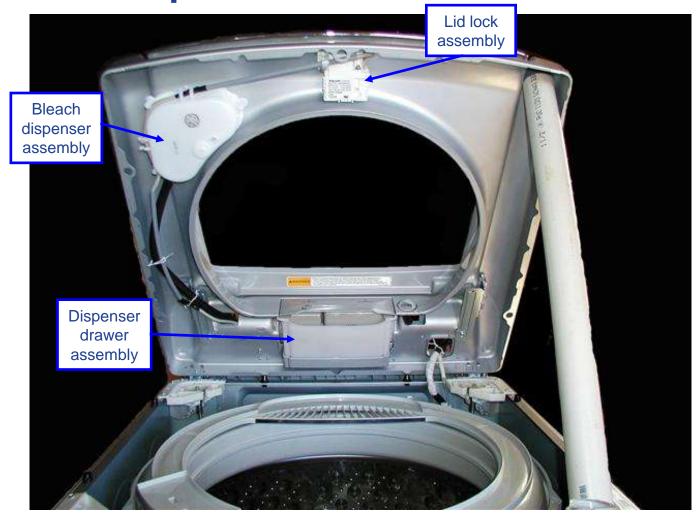




(Bottom half of hinge assembly removed.)

Washer top pivots on two rear mounted, two piece hinge assemblies. **Caution:** Support top if raised over 90 degrees.

# **Top Cover Components**



Washer top show in an upright position with support (not included).



### **Lid Removal**





#### To Remove Lid:

- Begin by lifting washer top cover.
- Then, with a pair of needle nose pliers, grasp spring loaded hinge pin on the left side lid hinge assembly.
- Pull pin to the left as far as possible to disengage from pin opening in lid.



### **Lid Removal**



With hinge pin pulled completely to the left, lift left side of the lid upwards to clear pin....



### **Lid Removal**



- Grasp lid and move to the left to disengage the right side hinge pin.
- Lift and remove lid from machine.
- Hydraulic closing mechanism contained in lid assembly.
- Lid assembly comes as a single part.



# Lid Replacement





- Insert right side lid pin into hinge opening.
- Use putty knife to depress left side hinge pin into hinge assembly.
- Lower left side of lid into position.
- Slowly remove putty knife allowing pin to enter into opening in lid assembly.





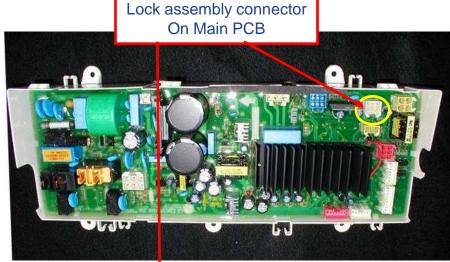
# **Lid Hinge**





**Lid Lock Assembly** 



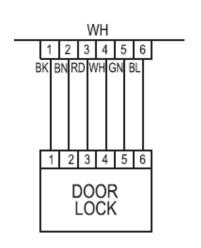




Lock assembly is secured to the underside of the washer top with two Phillips screws. The assembly includes the interconnect cable and plug. It connects to a six pin connector on the Main PCB at the plug shown above.



# **Lid Lock Assembly**





Doorlock(Main PCBA WH6)

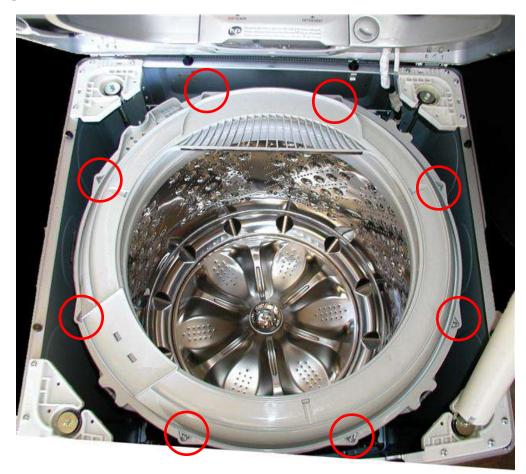
Lock State: Pin3 to Pin 4 - Short, Pin 6 to Pin 4: Open Unlock State: Pin3 to Pin 4 - Open, Pin 6 to Pin 4: Short

Pin 3 to 4 --- 5vdc Unlocked Ovdc Locked

Pin 6 to 4 --- 0vdc Unlocked 5vdc Locked

Pin 1 to 2 --- 12vdc Momentarily locking or unlocking





#### To remove the wash basket:

- Lift the top cover.
- Remove the 8 Phillips-head screws that hold the outer tub cover in place.





Place a flat blade screwdriver in the slot under the infusor cap and gently pry off.





• Using a socket or Phillips-head screwdriver, remove the 10-mm hex-head screw that holds the infusor in place (turn screw counterclockwise to remove).

Note: The 10-mm screw has a serrated lock washer and a rubber O-ring.

- Pull the infusor up and out.
- Remove the flat washer.





- Using a socket, hub nut wrench or Crescent wrench, remove the 37.5-mm (1-1/2" SAE equivalent) hub-nut (turn hub nut counter-clockwise to remove).
- Lift the wash basket up and out.



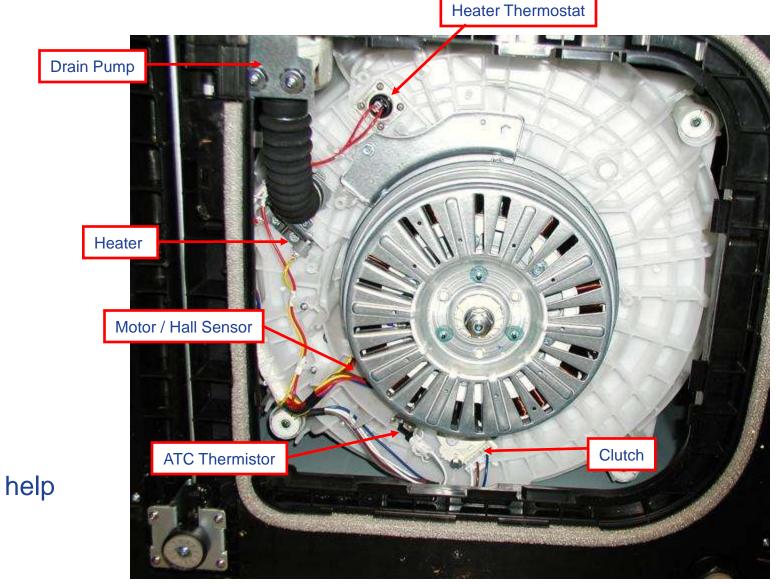
# **Suspension Rods**





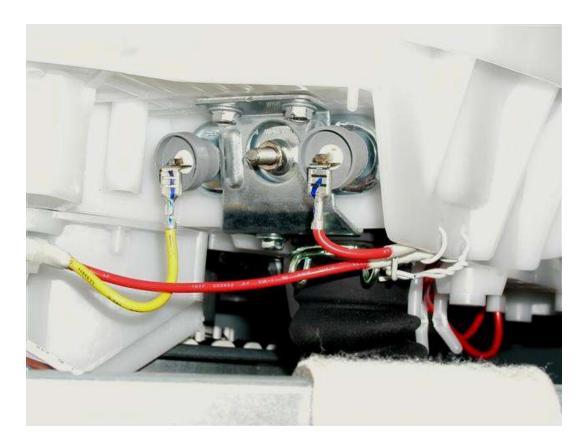
- The wash basket, outer tub, and motor are suspended by four rod and spring assemblies.
- The rod and spring assemblies are attached to each corner of the washer cabinet.
- They extend down and connect to the bottom of the outer tub.





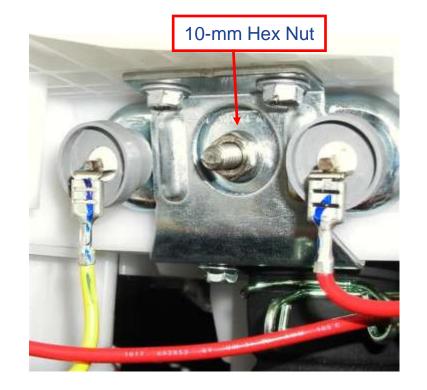
Right side of Washer





- The heating element is located above the drain at the bottom of the outer tub.
- The Heating element is held in place by a compressed rubber gasket.
- When the 10-mm hex nut is tightened, it squeezes the rubber gasket between the 2 mounting plates to seal the opening of the tub.
- The hex nut is set from the factory at 43.4 in. lbs of torque.





**Note:** The heating element must be removed before attempting to remove the hi-limit thermostat.

- 1. Remove 2 wires from the terminal ends of the heating element.
- 2. Remove the three 8-mm hex-head screws holding the heating element bracket in place. Remove the bracket.
- 3. Loosen the 10-mm hex-nut until the rubber gasket is no longer compressed.
- 4. Grasp the heating element and pull it from the tub.





**CAUTION:** Proper torque must be applied to the 10mm hex nut in order to assure a proper seal.

Under torque could cause water leakage, over torque could cause the tub to crack.



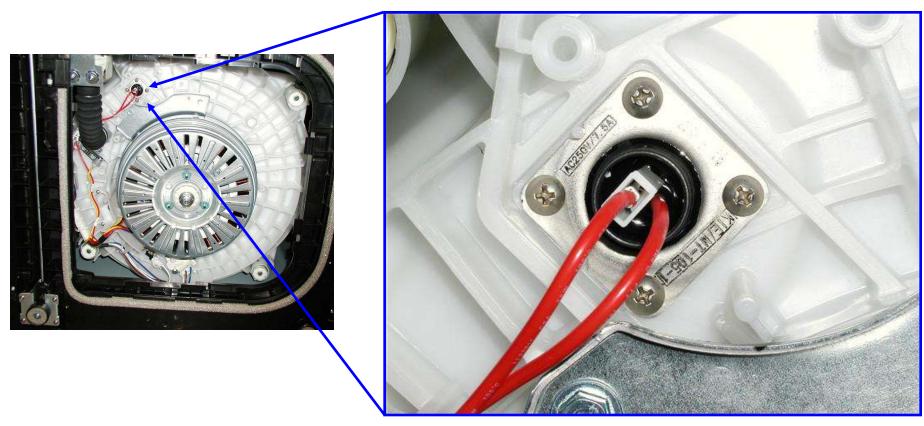
#### **Heating Element Specifications:**

- 120 VAC
- 1200 Watts
- 9.0 Amps
- 12.5 Ω
- The heating element is used only on the SANITIZE cycle.
- The inverter board regulates the heating element through information received from the thermistor / ATC control.

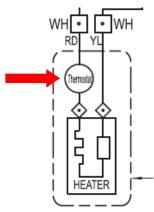


Heater and thermostat together outside of tub for visual only.





- The outer tub is protected from over heating from the heating element by a hi-limit thermostat.
- The hi-limit thermostat is located on the bottom of the outer tub.







#### **Important:**

- 1. Heater must be removed prior to thermostat removal.
- 2. Make note of the two small posts on the bottom of the tub and the the two cut outs in the thermostat body for proper orientation.
- 3. Four Phillips screws hold the thermostat in place.





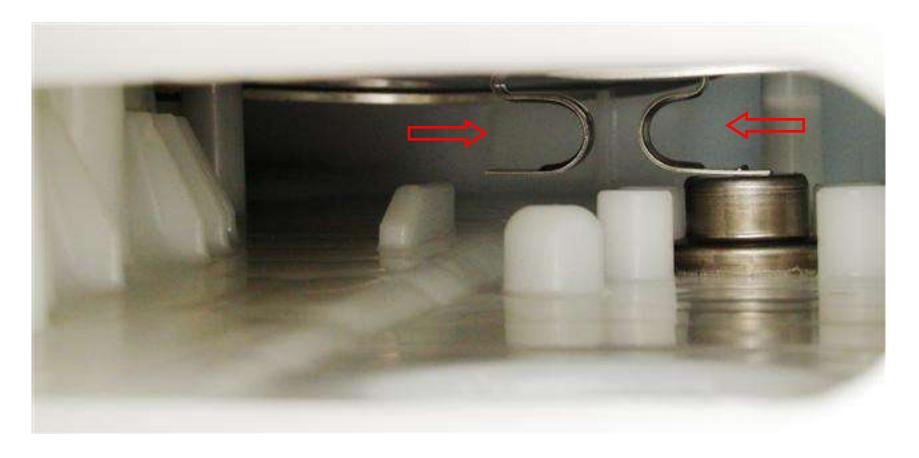
- The hi-limit thermostat is a safety device that monitors the temperature of the heating element.
- The hi-limit thermostat is wired in series with the heating element.
- If the hi-limit thermostat reaches a temperature beyond its maximum temperature rating, it will trip and disable the heating function only.
- Heating functions will be restored when the Hi-Limit thermostat cools and resets.
- The hi-limit thermostat has a trip temperature of 185°F (85°C) +/- 5% and a reset temperature of 86°F (30°C) +/- 5%.

imagination at work





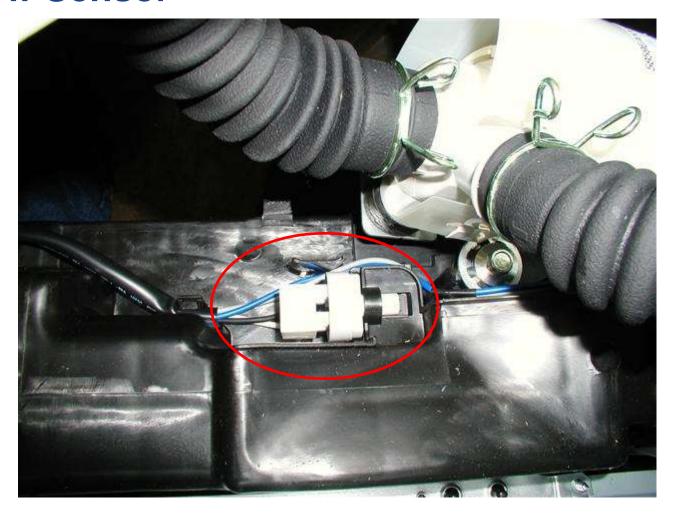
The reason for proper orientation of the thermostat is because the heater support is part of the thermostat body and must be positioned correctly for the heater to be installed.



View inside tub through heater opening with heater removed. Note heater support mounted to top of thermostat.



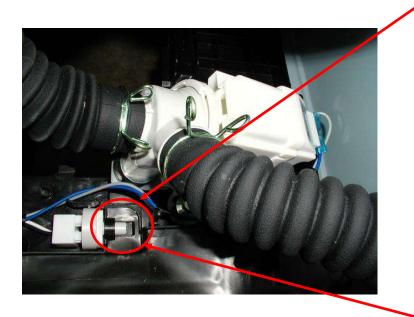
### **Overflow Sensor**



Overflow sensor is located in the bottom rear of the machine, just to the left of the drain pump.



### **Overflow Sensor**





If an overloaded washer load causes a splash over, it will be detected by the sensor.

The sensor will terminated the "Alpha Wash" or "Tidal Wave" part of the wash cycle.

Normal agitate and the rest of the cycles will continue unaffected.



### **Overflow Sensor**

#### TIDAL WAVE Wash System (Alpha Wash)

Your washer has an innovative washing system which uses rapid spinning motion and an angled spray to pull water through fabric. The *TIDAL WAVE* Wash system provides a gentler and more thorough cleaning.

TIDAL WAVE Wash is available only during COLORS/NORMAL and WHITES/HEAVY DUTY cycles. (from U&C 49-90404)



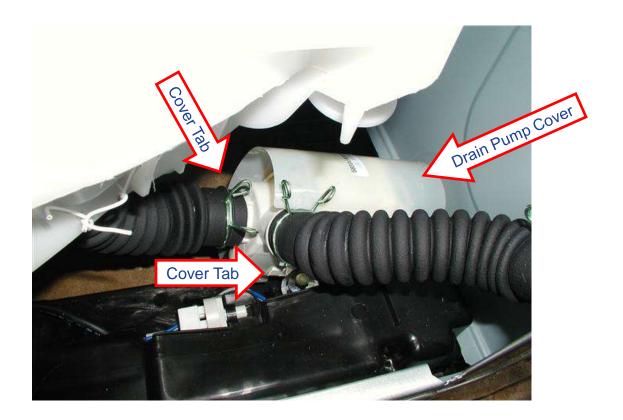


Worst case scenario in testing was with an overloaded tub with a pillow or pillows at the top of the load.

Splash over in this case was 192g or just over 6 ounces of water.



# **Drain Pump**



- The drain pump consists of a 120 VAC, 60-Hz, motor, impeller, and impeller housing.
- The pump is capable of pumping to a stand-pipe height of 8 ft.
- To gain access to the pump, remove the thin plastic cover over the drain pump by pulling down on the ends to clear the 2 tabs.



# **Drain Pump Impeller**

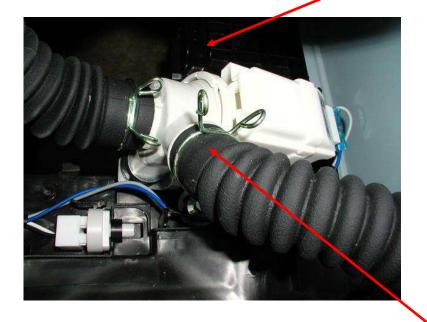


**Warning:** The drain pump bracket is not grounded. Unplug the unit before servicing to avoid electric shock.

**Note:** The impeller can be accessed for cleaning without removing the drain hoses. Water will remain in hoses even when the tub appears empty. Use care to avoid water spills.



# **Drain Pump Impeller**





- Lift up the tab on the impeller housing with a flat blade screwdriver.
- When viewed from the impeller housing end, rotate the housing in a counterclockwise direction to remove.
- Remove any foreign objects from the impeller and impeller housing.
- Inspect the impeller for any damage, and replace the pump assembly if necessary.



# **Drain Pump Removal**



#### To remove the drain pump:

- Disconnect power to the machine.
- Remove the thin plastic cover over the drain pump by pulling down on the ends to clear the tabs.
- Remove the drain hoses from the pump:



# **Drain Pump Removal**

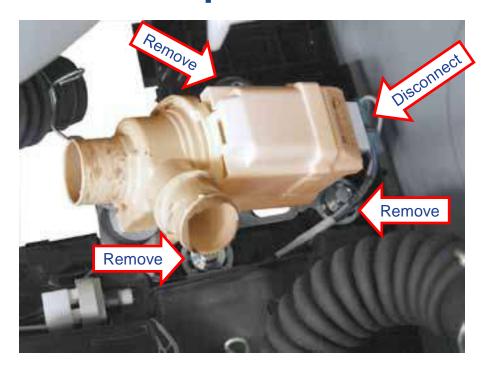


**Note:** The drain hoses are difficult to remove due to a sealing compound used at the factory.

- Squeeze each clamp and slide it back.
- Carefully break each hose loose by inserting a small flat-blade screwdriver under the hose to break the seal.
- Remove the hoses.



# **Drain Pump Removal**

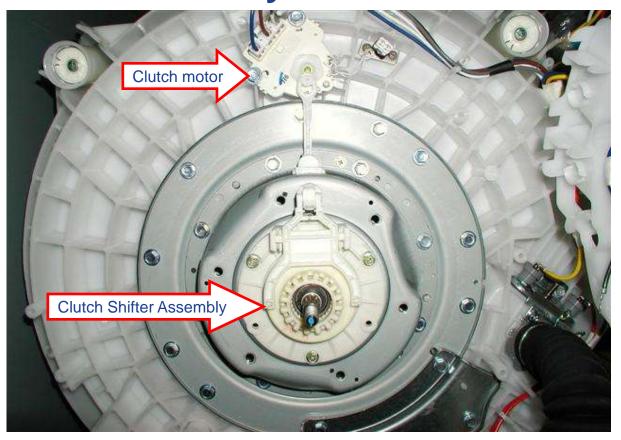




- Disconnect the drain pump wires.
- Remove (3) 10mm bolts that hold the drain pump to the washer frame.
- Remove the drain pump.
- When installing, apply a thin coat of sealing compound (WH60X15) to the inner surface of the drain hoses to prevent leaks.
- Remove the 2 Phillips-head screws that hold the drain pump to the mounting plate. Remove the drain pump.



# **Clutch Shifter Assembly**



The clutch assembly locks or unlocks the basket and infusor together, depending on the wash cycle pattern.

- The infusor is connected directly to the motor shaft. Whenever the motor is rotating, the infusor is rotating.
- The clutch only locks or unlocks the wash basket.



# **Clutch Shifter Assembly**

The infusor and basket are in the **locked** position during the following cycles:

- Water Fill
- Wet Load Sensing
- "Tidal Wave" Wash
- Centrifusion Wash
- Spin
- Spray Rinse

The infusor and the basket are in the **unlocked** position during the following cycles:

- Dry Load Sensing
- Infusor Wash



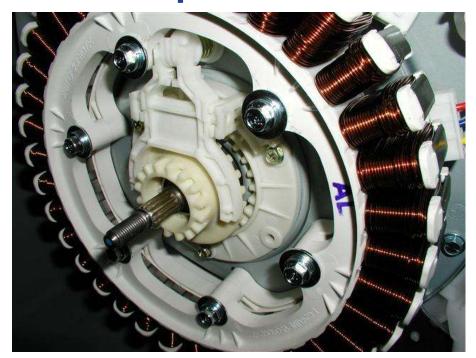
# **Clutch Operation**



- The clutch locks and unlocks the basket by engaging teeth on the inside of the rotor with teeth on the clutch coupler.
- When the basket and infusor are in the locked position, the clutch moves downward and engages the rotor and clutch coupler teeth allowing the basket to rotate with the infusor.



# **Clutch Operation**





#### **LOCKED POSITION**

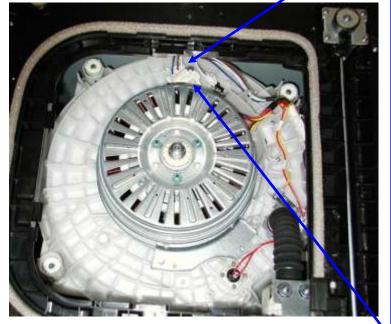
When the basket and infusor are in the locked position, the clutch moves downward and engages the rotor and clutch coupler teeth allowing the basket to rotate with the infusor.

#### **UNLOCKED POSITION**

When the basket and infusor are in the unlocked position, the clutch moves upward, disengaging the clutch coupler and rotor teeth, allowing the infusor to rotate independently of the basket.



## **Clutch Motor**



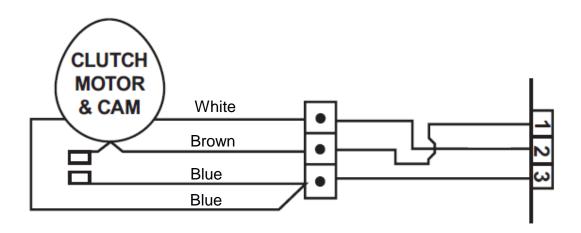


- The clutch motor is secured to the bottom of the tub with two 10mm screws.
- The power board supplies 120 VAC to the clutch motor through the blue and white wires when the clutch motor changes position.



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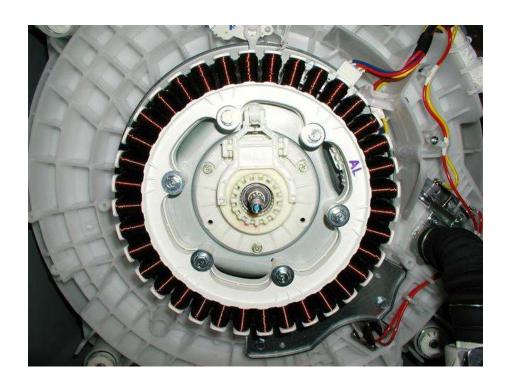
## **Clutch Motor**



- The rotation of the clutch motor causes an internal switch to open or close. This can be measured between the brown and blue wires on the power board at the WH6 plug.
- When the clutch is in the unlocked position, the switch should be closed  $(0 \Omega)$ .
- When the clutch is in the locked position, the switch should be open (infinity).



# **Clutch Shifter Removal**





#### To remove the clutch shifter assembly:

- Remove the rotor.
- Remove the three Phillips-head screws from the clutch coupler plate.
- Remove the clutch coupler assembly.



#### **Motor Removal**

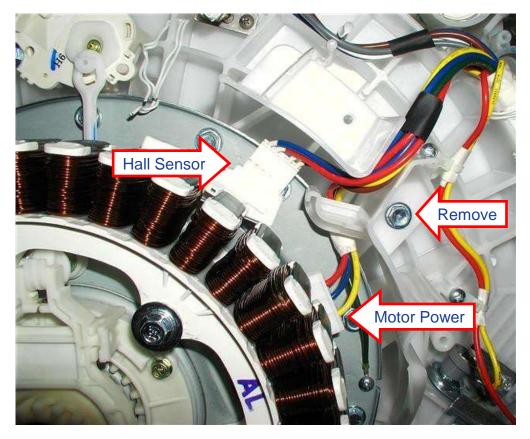


**Warning**: The rotor is not grounded & is moving when the motor is energized. Unplug the washer before servicing.

- To access the motor, the washer must be placed on its side. Place a towel or blanket on the floor to prevent scratches to the surface of the washer.
- Remove the 24-mm (15/16 in. SAE equivalent) rotor nut with a socket or adjustable Crescent wrench (rotate rotor nut counterclockwise to remove).
- Remove the flat washer.
- Pull the rotor away from the drive shaft.



#### **Motor Removal**



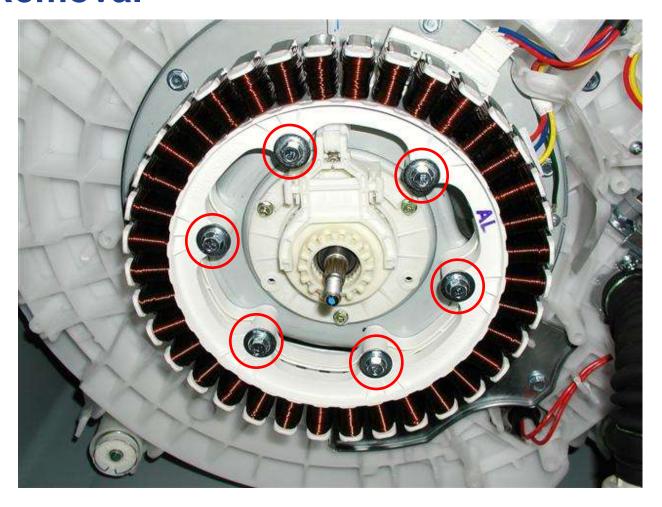
**Note:** Removal of the wiring guard (held in place by one 10-mm hex-head screw) will give better access to the motor connectors.

**Caution:** The stator connector and Hall sensor connector are very fragile, handle with care.

• Disconnect the wiring harnesses from the stator and the Hall sensor.



## **Motor Removal**

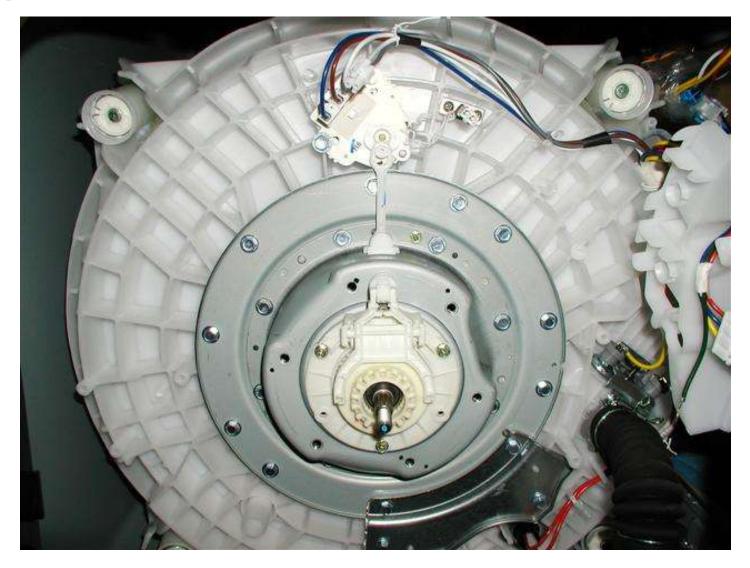


• Remove the six 10-mm hex-head screws that hold the stator in place. **Note**: When assembling, be sure to put the motor and Hall sensor wires back in the wiring guard away from the motor.



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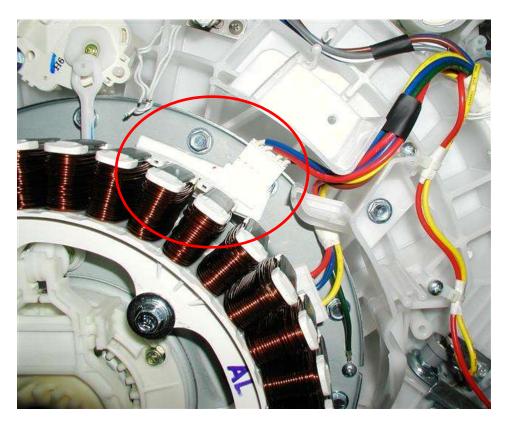
# **Motor**



Bottom of tub shown will motor (rotor & stator) completely removed.



## **Hall Sensor**



The Hall effect sensor measures the motor rpm.

- Four wires connect the Hall sensor to the main board at the 6-pin dark blue connector.
- The Hall sensor measures approximately  $9K\Omega$  between the brown and blue wires and the brown and red wires.
- If the sensor has failed, the motor will not operate.



# **Hall Sensor**

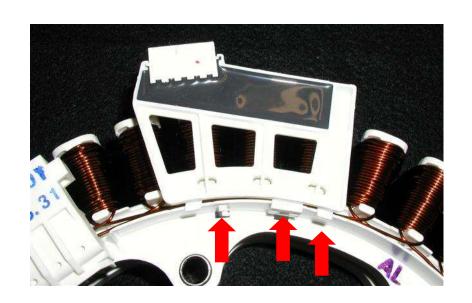
Hall Sensor (Main PCBA\_BL6)

Test Points	Result	Voltage(DC)
Red to Blue	19ΚΩ	0V
Blue to Brown	9ΚΩ	12V
Brown to Red	+ 9ΚΩ	12V

Hall Sensor resistance and supply voltage from power board.



# **Hall Sensor**



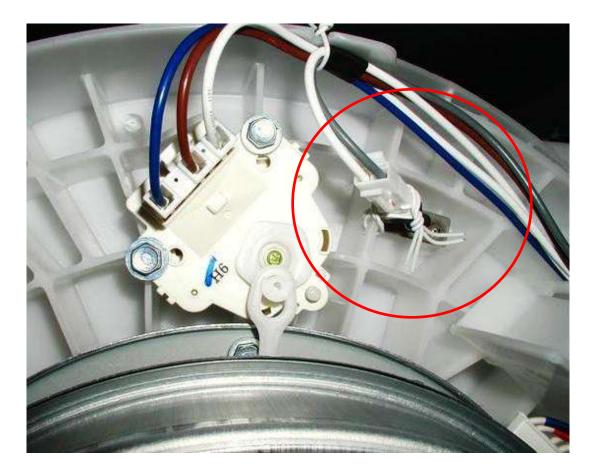


The Hall Sensor is a separate component from the stator and can be replaced separately.

Hall sensor assembly clips to the frame of the stator.



## **ATC**

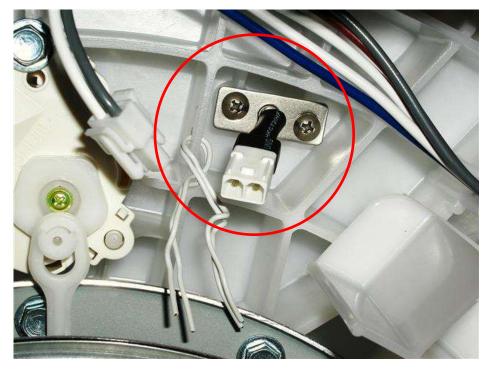


The ATC control uses a water temperature sensor (thermistor) to regulate the wash water temperature.

- The thermistor has a negative temperature coefficient (as temperature increases, resistance decreases).
- The thermistor is located in the bottom of the outer tub, under the wash basket.



## **ATC**



#### ATC Resistance/Temp Chart

Result (tolerance $\pm$ 5%)	Remark	
39.5 k <i>Ω</i>	At 86°F (30°C)	
26 <sub>.</sub> 1 kΩ	At 104°F (40℃)	
12.1 kΩ	At 140°F (60℃)	
8.5 k <i>Ω</i>	At 158°F (70℃)	
3.8 k <i>Ω</i>	At 203°F (95℃)	
2.8 kΩ	At 221°F (105℃)	

# Water Temperature Ranges

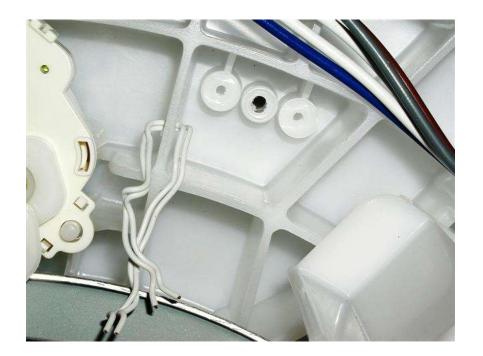
Category Target Temperature

Cold 65°F
Warm 95°F
Hot 120°F
Sanitize 140°F

- The washer control should maintain the water temperature in the tub within +/- 5°F (+/- 3°C) by opening or closing the hot and cold water valves.
- The resistance of the thermistor can be checked between the gray and white wires on the power board at the 2-wire yellow plug.

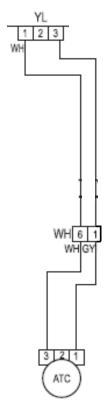


## **ATC**





- The resistance of the thermistor can be checked between the gray and white wires on the power board at the 2-wire yellow plug.
- Make sure to unplug the connector to isolate the thermistor before taking resistance readings.





# **Bearing Housing Assembly**



#### To remove the bearing housing assembly:

- Remove the infusor, the hub nut, wash basket, motor assembly and clutch shifter assembly.
- Remove the screw that holds the ground wire to the bearing housing.
- Remove the twenty-one 10-mm hex-head screws that attach the bearing housing assembly and safety shield.



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# **Bearing Housing Assembly**



Remove the bearing housing assembly.

**Note:** When installing the bearing housing, be sure the safety shield is in place.

Make sure the motor and Hall sensor wires are positioned in the wiring guard and away from the motor.



## **Service Mode - Enter**



#### **To Enter Service Mode:**

- While in the Idle Mode (unit powered but off, display blank)
- Press and hold the "SPIN" & "TEMP" buttons
- Press the "POWER" button.
- First test "t1" will appear on the display.



# **Service Mode - Navigate**



- Once in the service mode, turn the selector knob to navigate between the different tests.
- To enter the test displayed, press the "START" button.
- To end a test and move to another test, turn the selector knob.



## **Service Mode - Exit**



#### **To Exit Service Mode:**

Pressing the "POWER" button from either the menu screen or while a test is running will exit the service mode.

Disconnecting from power or if no key is pressed for 15 minutes, will also terminate the service mode.



#### Test "t1" --- Software Version.

- Press start button once to display power board software version.
- Press start a second time to view display / logic board software.
- All control panel LEDs should be illuminated as part of test.

#### Test "t2" --- Error Codes

- Press start button to display most recent error code.
- EEprom will store five error codes and display them in chronological order by turning selector knob.
- To clear error codes, press start pad with error displayed.

#### Test "t3" --- Button / Pad Check

Buttons or pads should light and beep when pressed.

Each time a button or pad is pressed, the display will change from "111" to "222" then "333" and on and on......



#### Test "t4" --- Inlet Valve & Pressure Sensor Check

- Press start to initiate test.
- Each time start is pressed a different valve is energized and a different corresponding letter is displayed.

A : Cold valve is energized.

b: Hot valve is energized.

C: Jet spray valve is energized.

d : Bleach valve is energized.

E : Softener valve is energized.

- Pump will activate when water frequency is 21.0 KHz.
- Water level frequency will be displayed.

#### Test "t5" --- Heater / Thermister Test

- Press start to initiate test.
- Tub will begin to fill with water.
- When water reached the 25.8 KHZ level, heater will be energized for 5 minutes.
- Water temperature will be displayed.
- After 5 minutes, pump is energized.



#### Test "t6" --- Pump Check

- Press start to initiate test.
- Pump will be energized for 1 minute.
- After 1 minute, pump will turn off.
- Water frequency will be displayed.

#### **Test "t7" --- Alpha Check (Tidal Wave Wash)**

Press start to initiate test.

Tub will spin CCW at @ 230 RPM for 3 minutes.

RPM value will be displayed.

## Test "t8" --- Agitate-1 Check (Centrifusion Wash)

- Press start to initiate test.
- Tub will slowly spin CW then stop then spin for 3 minutes.
- With an empty tub, "720 ~ 902 should be displayed. This
  is the reading from the load sensor for an empty tub. It is
  not the RPM reading of the tub speed.



#### Test "t9" --- Agitate-2 Check (Infusor Wash)

- Press start to initiate test.
- Product will alternately rotate infusor CW then CCW for 1 minute.

#### Test "t10" --- Spin Check

- Press start to initiate test.
- Pump will run until water frequency is under 26.0 KHz.
- Tub will then slowly ramp up to maximum RPM (1000 RPM)
- RPM will be displayed.
- Tub will spin at maximum RPM for 3 minutes.
- After 3 minutes, tub will slowly decelerate to 0 RPM.

Note: 999 will be the maximum RPM displayed.

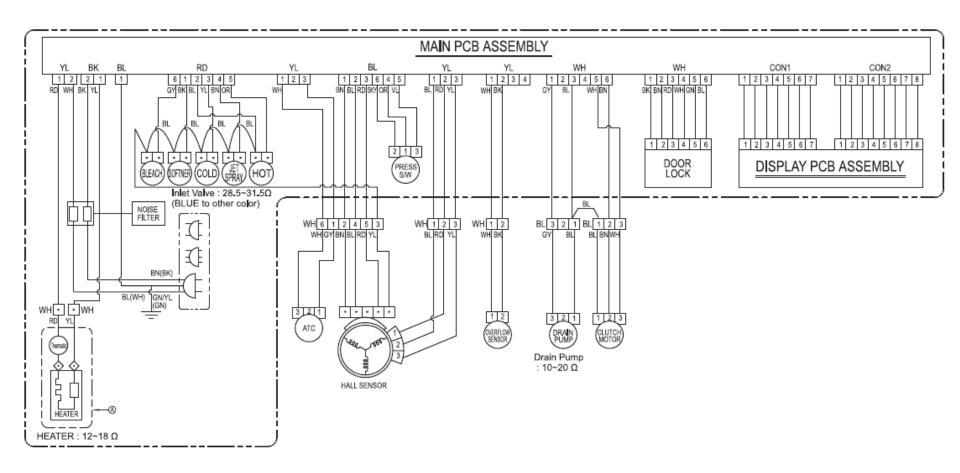


#### **Error Codes**

- E00 --- No error codes.
- E1 --- Over flow error.
- E2 --- Lid switch error. (Lid opened during run state, RPM>= 40RPM).
- E3 --- Thermistor error. (ATC thermistor)
- E4 --- Inlet valve failure.
- E5 --- Pump failure.
- E6 --- Clutch error.
- E7 --- Pressure sensor failure.
- E8 --- Lid switch failure. (lid opened during run state, RPM < 40RPM)
- E9 --- EEprom error.
- E10 --- Motor not rotating properly.
- E11 --- No E11 error code.
- E12 --- Clutch coupling error.
- E13 --- IPM (Integrated Power Module) Thermistor. Monitors current flow to the motor stator.
- E14 --- Door lock / unlock error.



## **Schematic**





# END OF PRESENTATION THANK YOU FOR YOUR ATTENTION ......



