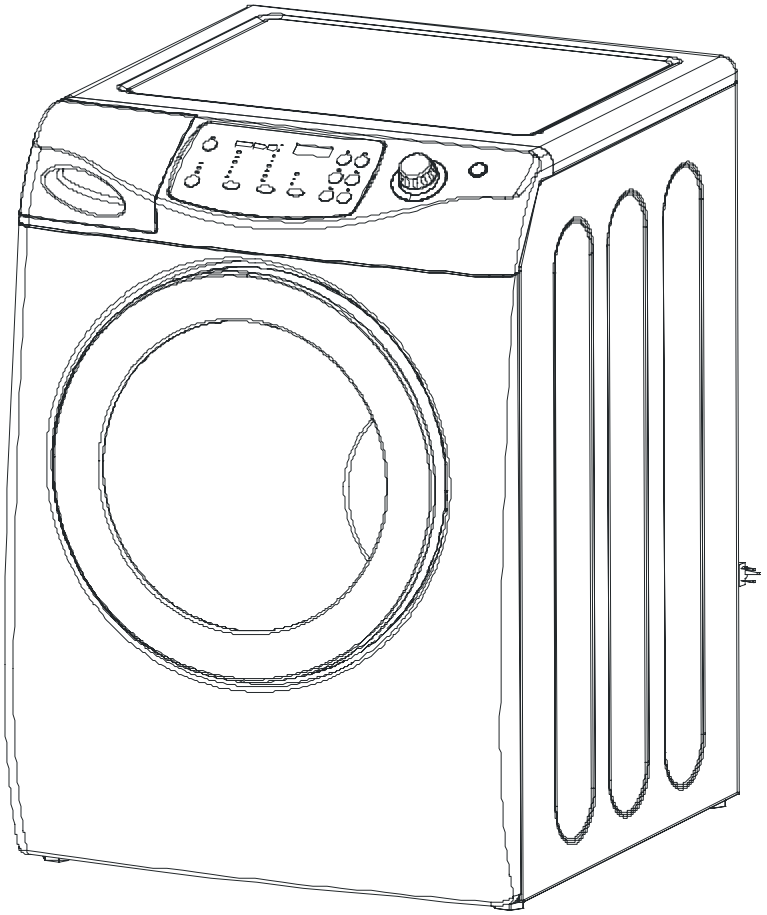
MAYTAG Training Services

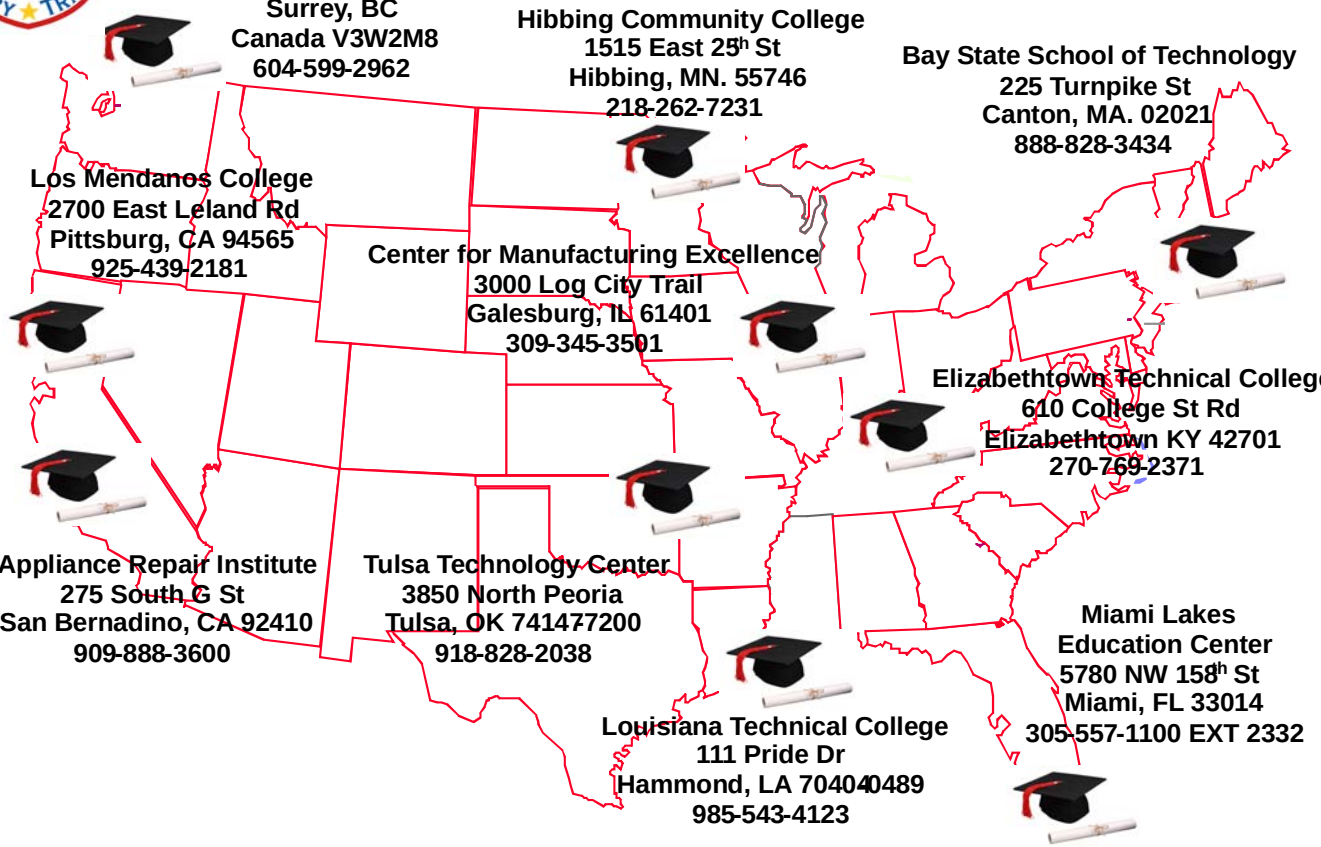
Maytag Neptune
27” Front Load Washer



MAYTAG

L2005-004

Maytag Authorized Training Centers



Kwantlen University College
12666 72nd Ave
Surrey, BC
Canada V3W2M8
604-599-2962

Hibbing Community College
1515 East 25th St
Hibbing, MN. 55746
218-262-7231

Bay State School of Technology
225 Turnpike St
Canton, MA. 02021
888-828-3434

Los Mendanos College
2700 East Leland Rd
Pittsburg, CA 94565
925-439-2181

Center for Manufacturing Excellence
3000 Log City Trail
Galesburg, IL 61401
309-345-3501

Elizabethtown Technical College
610 College St Rd
Elizabethtown KY 42701
270-769-2371

Appliance Repair Institute
275 South G St
San Bernadino, CA 92410
909-888-3600

Tulsa Technology Center
3850 North Peoria
Tulsa, OK 741477200
918-828-2038

Miami Lakes Education Center
5780 NW 158th St
Miami, FL 33014
305-557-1100 EXT 2332

Louisiana Technical College
111 Pride Dr
Hammond, LA 704040489
985-543-4123

Slide 1

Maytag Neptune 27” Front Load Washers

Premium II – MAH9700 - (Direct Drive Motor – Slope Console)

Premium I – MAH8700 – (Belt Drive Motor – Slope Console)

Entry Level– MAH6700 - (Belt Drive Motor - Flat Front Console- Stackable)

Slide 2

Major Differences

Top Spin Speed;

9700–1200RPM

8700–1100 RPM

6700–1000 RPM

Noise Reduction

9700 Direct drive motor, 2 tuned absorbers

8700 2 tuned absorbers

6700 1 tuned absorber

Weights

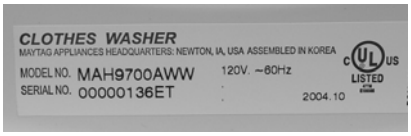
9700 uses two weights attached to the front of outer tub

6700 & 8700 use four weights. Two attached to the front of outer tub, one behind the spinner pulley and one mounted to the right rear side of the outer tub

Slide 3

Maytag Neptune 27” Front Load Washer MAH9700

This training presentation is based on the MAH9700. Differences between the 9700 and 8700 machines will be highlighted



Slide 4

Maytag Neptune Washer MAH9700

Dimensions	
Washer Width	27”
Washer Depth	30.75”
Washer Height	38”
Washer Weight	191 LBS
Pedestal/Riser (MAL1800AX*)	13”
Features	
Capacity (cu.ft)	3.81
Controls	LED
Motor Type	Direct Drive
Spin Speeds	6
Water level Control	IntelliFill
Water Temp Combinations	6
ATC Control	
Soil Level Selections	Heavy, Med., Light
Spinner	Stainless
Self Clean Lint System	
Internal Heater	900 Watts
End of Cycle Chime	High, Med., Off
Delay Wash	Up to 19 Hr.
Dispensers	
Detergent Dispenser	Pre and Main
Bleach Dispenser	100ml
Fabric Softener Dispenser	
Child Lock Out	Control Lock
Tumble Pattern	
Normal	35 Times per Minute
Hand Wash	5 Times per Minute
Energy Consumption	266 Kw/H per year
Water Consumption	9.9 to 15.9 Gallons

Base Cycles	
Sanitary	151 Degrees F
Super Wash	
Normal	
Whites	
Wrinkle Control	
Colors	
Delicates	
Hand Wash	
Quick Wash	
Enviro Plus	
Options	
Prewash	
Stain Treat	
Extra Rinse	
Extended Spin	
Rinse & Spin	
Spin Only	
Spin Speeds	Approximate RPM
Max Extract Plus	1200 RPM
High	1000 RPM
Medium	800 RPM
Gentle	600 RPM
Low	400 RPM
Drain only	0 RPM
15” pedestal and Drawer	MAL1800AXW/M
Colors	White, Platinum

Slide 5

Note: The Power Point Presentation and Participant's Guide for this training session were developed using prototype machines. There might be slight cosmetic differences between the product pictured and the current production units. Always refer to the Technical Data Sheet for detailed information for the product you are servicing.

Slide 6

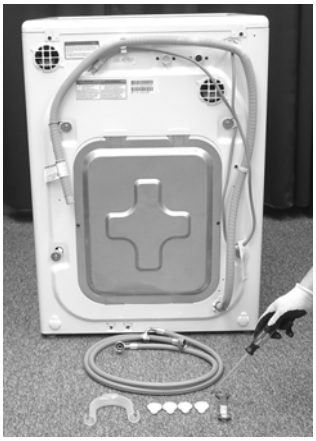
Always follow all safety and caution warnings found on the machine and in the installation and customer use manuals!

Location for the Technical Data Sheet

Slide 7

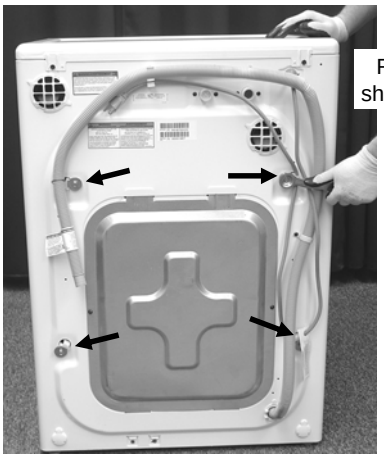
The installation process for the 27" is similar to the 24" product that preceded it.

Slide 8



The installation package contains the fill hoses, a combination wrench for removing the shipping bolts and adjusting the leveling legs, filler plugs and a drain hose bracket.

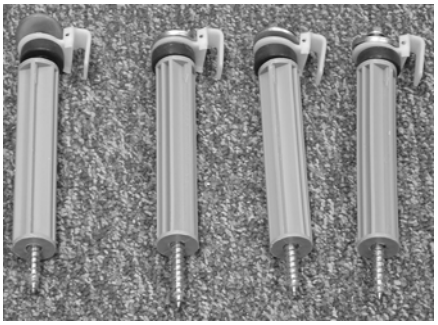
Slide 9



Remove the four 10mm shipping bolts and spacers

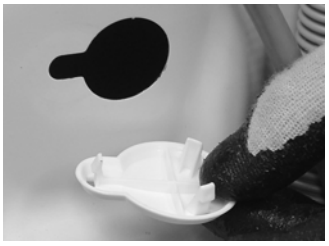
Slide 10

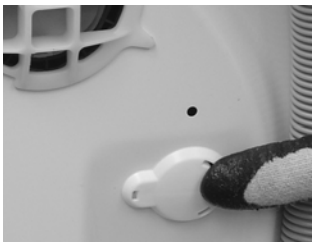
Save the shipping bolts and spacers and installation instruction in case of a future move.



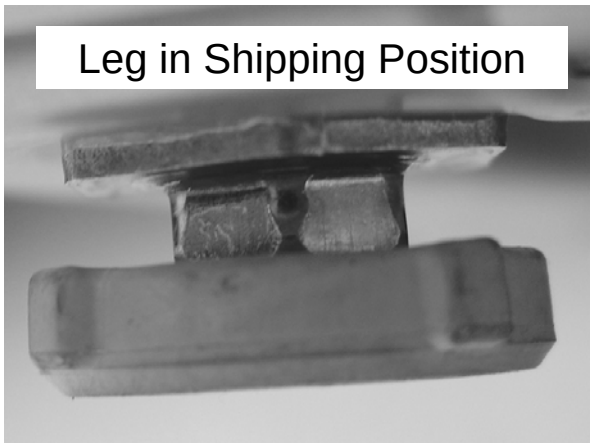
Slide 11

Install the filler plugs supplied in the installation kit.



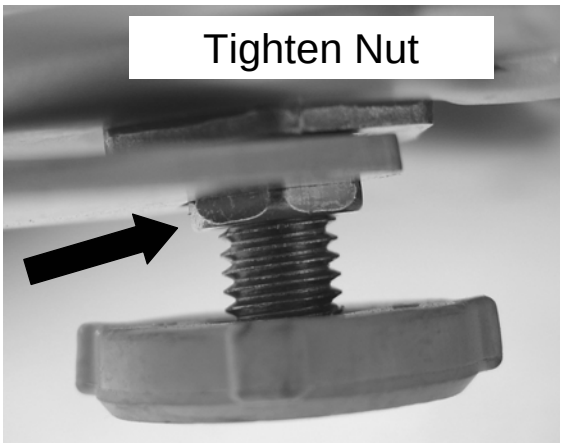


Slide 12



Level the machine side to side and front to back

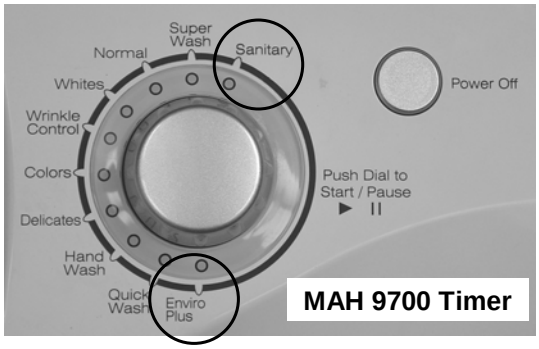
After leveling, make sure to tighten the locking nut against the base. Failure to do so will cause excessive vibration



The washer must be installed on a sturdy floor and leveled.

Make sure the locking nuts are tightened against base

Slide 13



The 9700 washer timer features two additional cycles not found on the 8700; ***Sanitary*** and ***Enviro Plus***

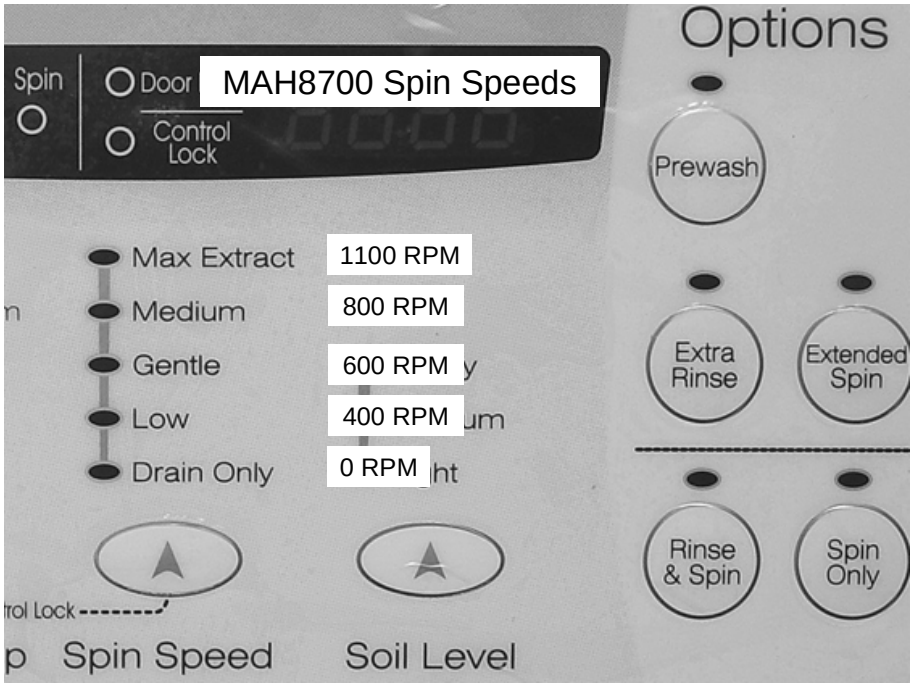
The Sanitary cycle delays during the first wash to heat the wash water. A 900 Watt heating element located in the bottom of the outer tub is used to raise the water temperature to 151 degrees F. As soon as a 151 degree F. temperature is reached the cycle resumes. The machine will delay up to 69 minutes if necessary to achieve SaniTemperature. The purpose of the 151 Degree water temperature is to help eliminate bacteria and improve cleaning performance.

The Enviro Plus cycle uses less energy and less water than the Normal Cycle.

Slide 14

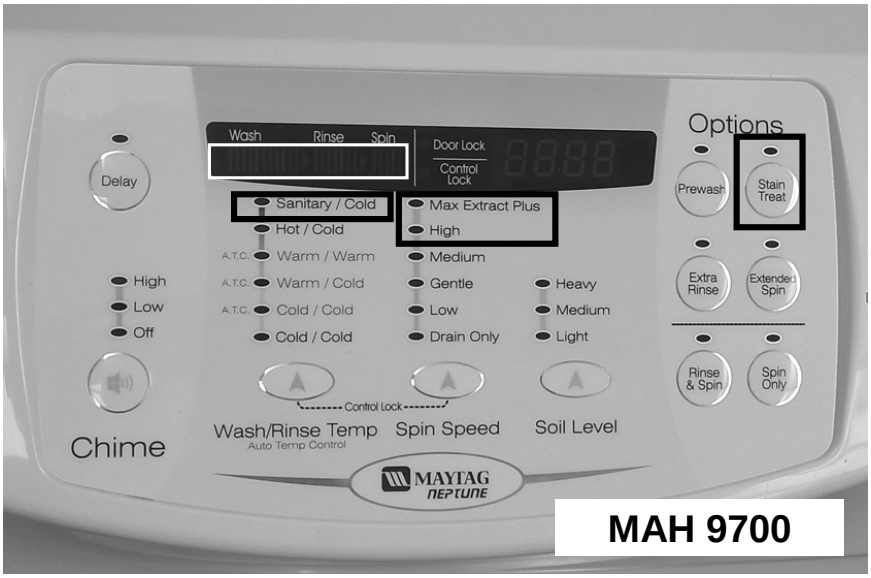
MAH 8700

Slide 15

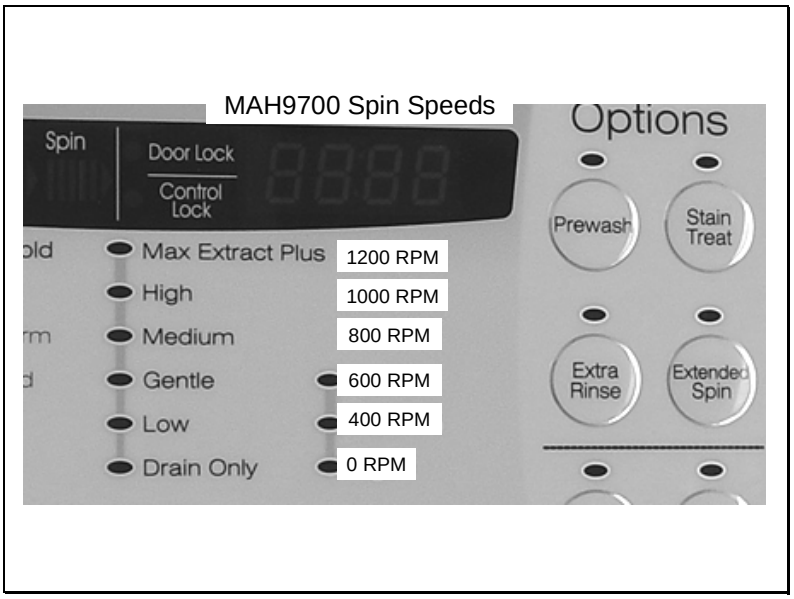


Slide 16

The 9700 has additional options available not found on the 8700. It also uses a cycle progression bar to indicate cycle position, the 8700 uses LED's



Slide 17



Slide 18

ATC Control

When ATC cold wash is selected,

Heater turns on if the water temperature in the tub is below 60 degrees F. Heater turns off if the water temperature is above 70 degrees F or the time runs out for wash time. The cycle time will **not** be extended to reach the desired temperature.

When ATC warm wash is selected, Heater turns on if the water temperature in the tub is below 95 degrees F. Heater will turn off if the water temperature is above 105 degrees F or the time runs out for wash tumble. The cycle time will **not** be extended to reach the desired temperature.

When hot wash is selected, Heater will turn on if the water temperature in the tub is below 120 degrees F. Heater turns off if the water temperature is above 130 degrees F. or the time runs out for wash tumble. The cycle time will **not** be extended to reach the desired temperature.

When the Sanitary Cycle is selected, Heater turns on if the water temperature in the tub is below 141 degrees F. Heater turns off if the water temperature is above 151 degrees F. The wash cycle **will be extended** to achieve the temperature of 151 degrees F.

Note: The heater will not turn on more than once in a wash cycle (no reheating).

Slide 19- Maytag Neptune MAH9700 Time Chart

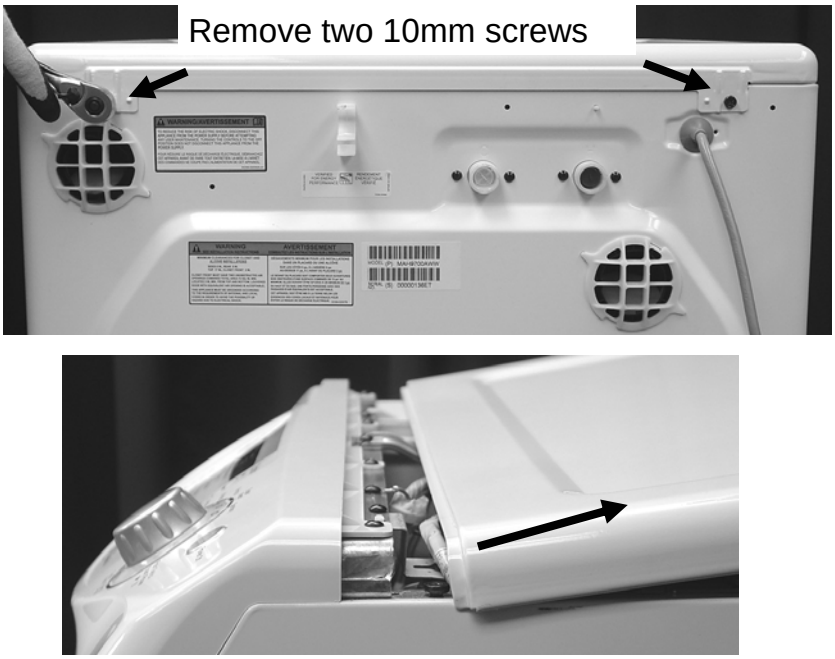
Maytag Neptune MAH9700 Time Chart

Course	Water Temp (Unit : Deg.C) Setting Wash/Rinse	Water Temp (Unit : Deg.C) heater on/off	Time (minute) Water Filling with Tumbling	Heating Soaking	Heating Washing	Cooling / Untangling	Drain	SPIN Intermittent 1	SPIN Intermittent 2	SPIN Final	Water Filling	RINSE	Total
Sanitary	EH/C (N)	141/151	2	3	69	(1)	(1)	(6)	(6)	(7)	2	4	110
Super Wash	C /C (N)	_	2	3	24	1	(1)	(6)	(6)	(7)	2	4	90
	C /C	61/70	2	3	24	1	(1)	(6)	(6)	(7)	2	4	
	W /C	95/106	2	3	24	1	(1)	(6)	(6)	(7)	2	4	
	W /W	95/106	2	3	24	1	(1)	(6)	(6)	(7)	2	4	
	H/C (N)	120/130	2	3	24	(1)	(1)	(6)	(6)	(7)	2	4	
Normal	C /C (N)	_	2	(3)	(13)	1	(1)	(6)	(6)	(7)	2	4	54
	C /C	61/70	2	3	13	1	(1)	(6)	(6)	(7)	2	4	
	W /C	95/106	2	3	13	1	(1)	(6)	(6)	(7)	2	4	
	W /W	95/106	2	3	13	1	(1)	(6)	(6)	(7)	2	4	
	H/C (N)	120/130	2	3	13	(1)	(1)	(6)	(6)	(7)	2	4	
Whites	C /C (N)	_	2	(3)	(6)	1	(1)	(6)	(6)	(7)	2	4	
	C /C	61/70	2	3	6	1	(1)	(6)	(6)	(7)	2	4	
	W /C												
	W /W												
	H/C (N)												
Wrinkle Control	C /C (N)												
	C /C												
	W /C												
	W /W												
	H/C (N)	120/130	2	3	16	(1)	(1)	_	_	(7)	2	4	
Colors	C /C (N)	_	2	(3)	(15)	1	(1)	(6)	(6)	(7)	2	4	56
	C /C	61/70	2	3	15	1	(1)	(6)	(6)	(7)	2	4	
	W /C	95/106	2	3	15	1	(1)	(6)	(6)	(7)	2	4	
	W /W	95/106	2	3	15	1	(1)	(6)	(6)	(7)	2	4	
	H/C (N)	120/130	2	3	15	(1)	(1)	(6)	(6)	(7)	2	4	
Delicate	C /C (N)	_	(2)	_	(6)	_	(1)	(6)	(6)	(7)	(2)	(5)	45
	C /C	61/70	(2)	_	6	_	(1)	(6)	(6)	(7)	(2)	(5)	
	W /C	95/106	(2)	_	6	_	(1)	(6)	(6)	(7)	(2)	(5)	
	W /W	95/106	(2)	_	6	_	(1)	(6)	(6)	(7)	(2)	(5)	
	H/C (N)	120/130	(2)	_	6	_	(1)	(6)	(6)	(7)	(2)	(5)	
Hand Wash	C /C (N)	_	(2)	_	(8)	_	(1)	(6)	(6)	(7)	(2)	(4)	45
	C /C	61/70	(2)	_	8	_	(1)	(6)	(6)	(7)	(2)	(4)	
	W /C	95/106	(2)	_	8	_	(1)	(6)	(6)	(7)	(2)	(4)	
	W /W	95/106	(2)	_	8	_	(1)	(6)	(6)	(7)	(2)	(4)	
	H/C (N)	120/130	(2)	_	8	_	(1)	(6)	(6)	(7)	(2)	(4)	
Quick Wash	C /C (N)	_	2	(3)	(4)	1	(1)	_	_	(7)	2	2	29
	C /C	61/70	2	3	4	1	(1)	_	_	(7)	2	2	
	W /C	95/106	2	3	4	1	(1)	_	_	(7)	2	2	
	W /W	95/105.8	2	3	4	1	(1)	_	_	(7)	2	2	
	H/C (N)	120.2/129.2	2	3	4	(1)	(1)	_	_	(7)	2	2	
Enviro Plus	C /C (N)	_	2	(3)	(10)	1	(1)	(3)	(3)	(7)	2	4	45
	C /C	61/70	2	3	10	1	(1)	(3)	(3)	(7)	2	4	
	W /C	95/106	2	3	10	1	(1)	(3)	(3)	(7)	2	4	
	W /W	95/106	2	3	10	1	(1)	(3)	(3)	(7)	2	4	
	H/C (N)	120/130	2	3	10	(1)	(1)	(3)	(3)	(7)	2	4	
Presoak	C/_		2	3	12	1	(1)	_	_	(6)	_	_	25

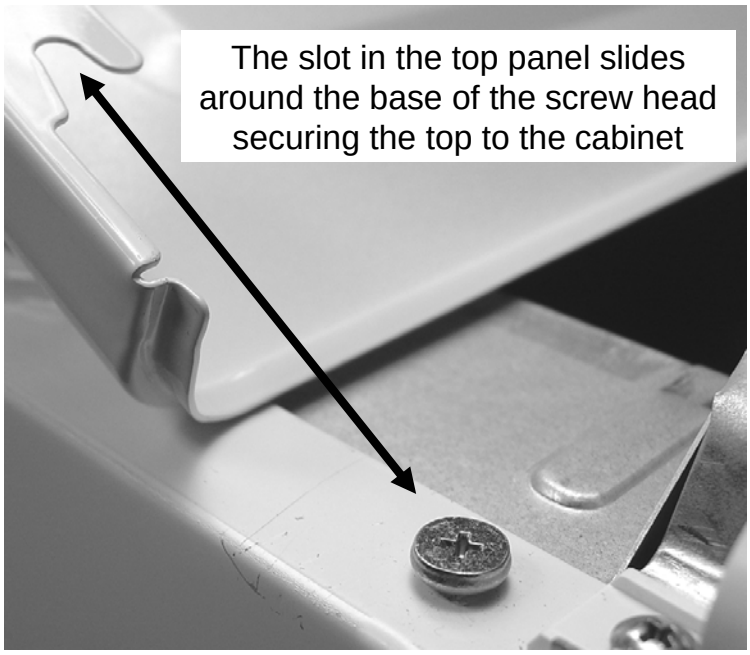
The Micom uses “fuzzy logic” to determine the length of some of the phases etc. Use this chart as a guide only

Slide 20 - Removing the Top

Slide 21

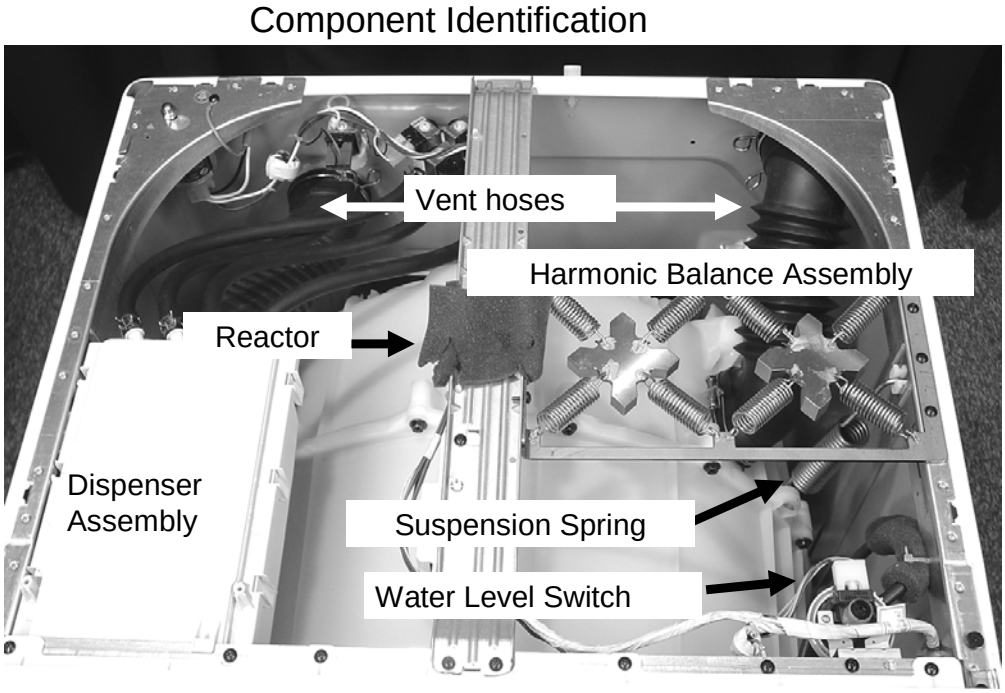


Slide 22



Slide 23 - Component Identification

Slide 24

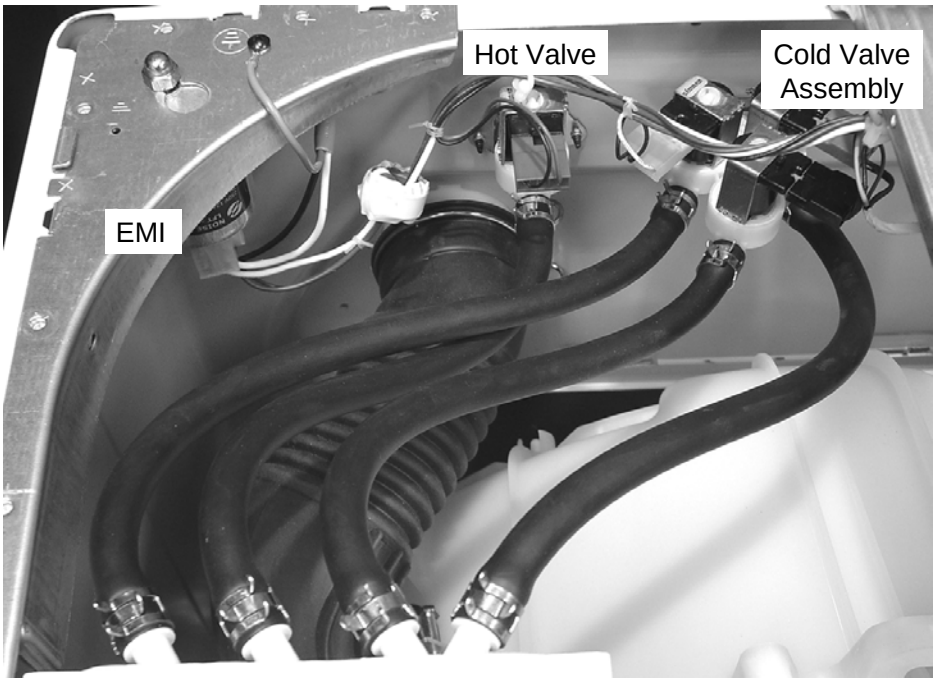


Slide 25

Two hoses attached to the tub vent out the back. The vents are at different heights to promote air circulation through the tub and spinner. Dampers in the vent outlets close in event of oversudsing

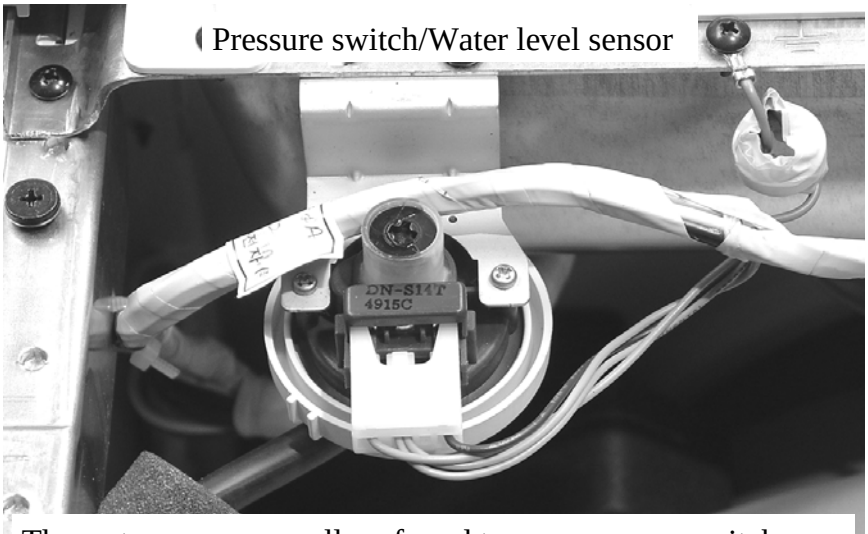
To remove vent flange release the two locking tabs and twist off the vent

Slide 26



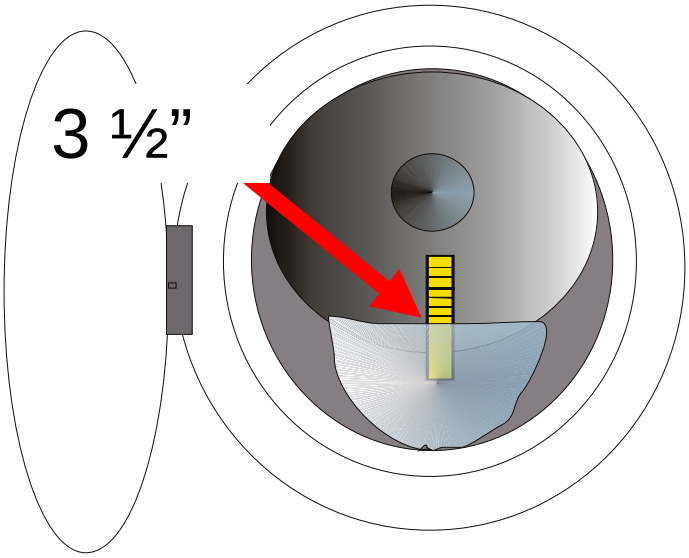
Slide 27 - Water Level Sensor- Pressure Switch

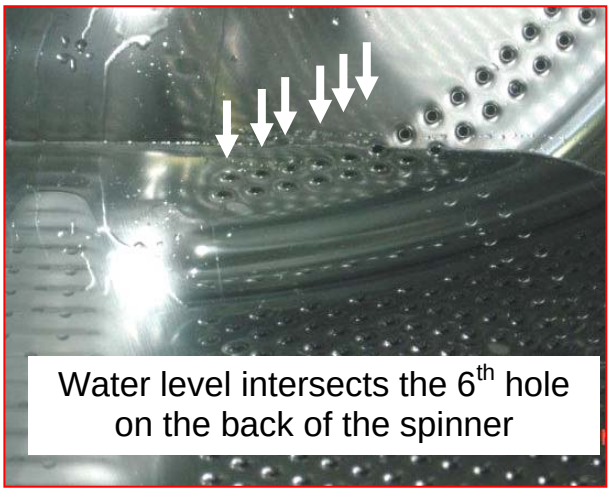
Slide 28



The water sensor, usually referred to as a pressure switch communicates with the control circuit board via a frequency signal. To check the sensor use the service mode diagnostics outlined in the Technical Data sheet shipped with the product.

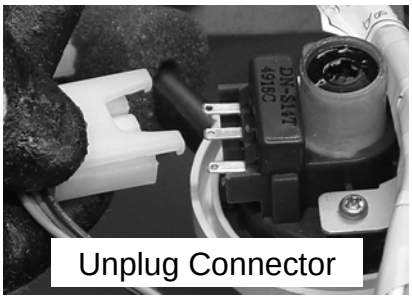
With an empty spinner, select ***Normal Wash*** and let the unit fill. Measure the depth of the water at the very back of the spinner at the six o'clock position. The water level should be approximately 3 ½ "

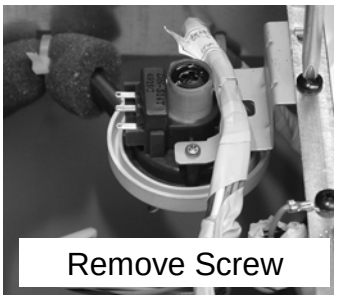


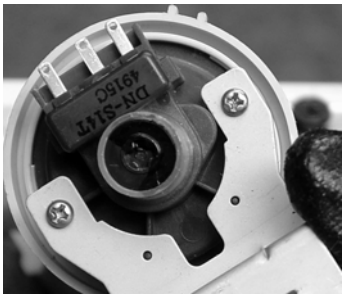


Slide 29

To remove water level sensor



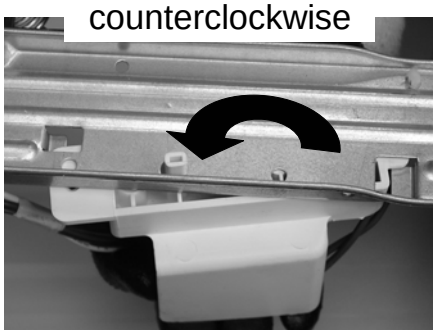


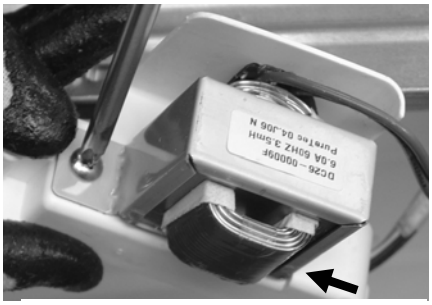


S***lide 30 – Reactor***

Slide 31

Twist bracket counterclockwise





Remove screw and slide reactor out of bracket

Slide 32

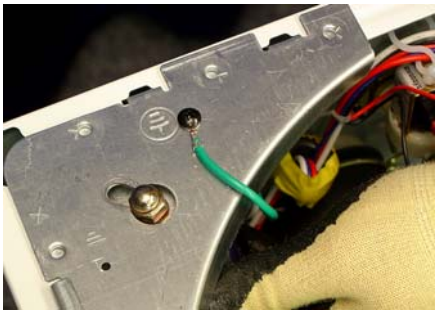
The reactor coil is wired in series with line internally in the control board. An open coil would result in a "dead" board complaint. A resistance check across the coil leads should indicate less than 1 OHM

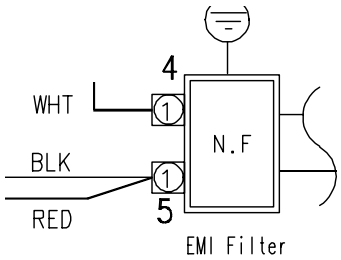
Select normal wash and let the washer fill. Measure the water level at the 6 o'clock position the rear of the spinner. The water level should be approximately 3 ½"

Slide 33 - EMI

Slide 34

Loosen 13mm nut and slide the EMI out of the bracket

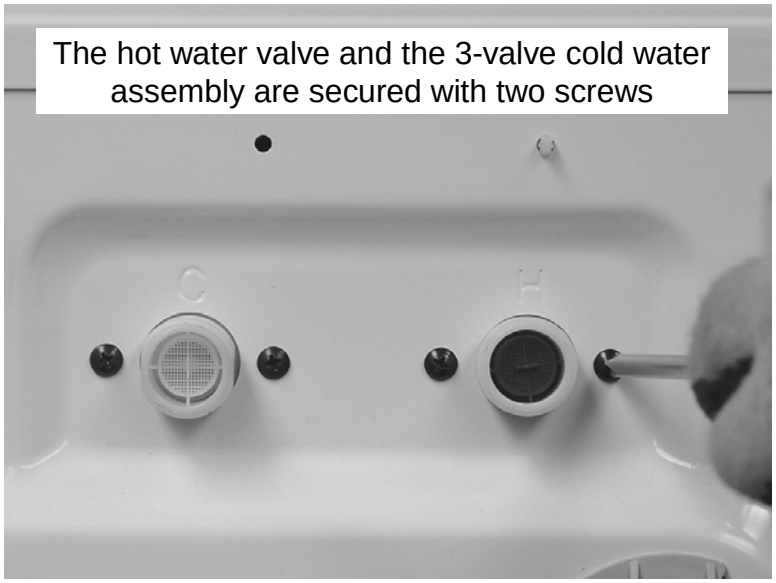




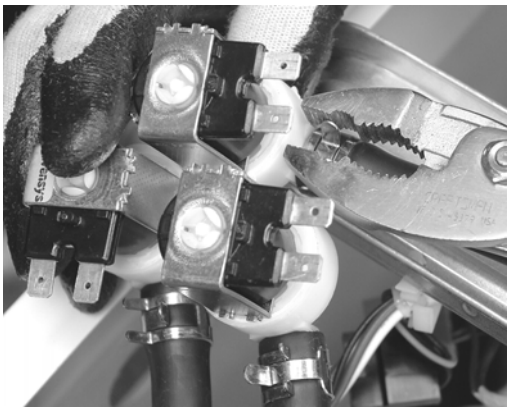
Mark wire locations for reinstallation

Slide 35 - Water Valves

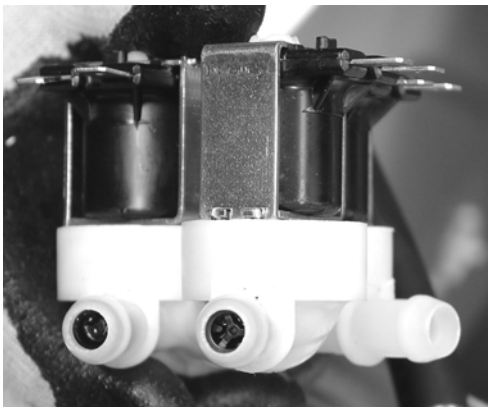
Slide 36



Slide 37



The three valve cold water assembly supplies water for main fill, bleach and fabric softener dispense. The fabric softener and bleach dispense outlets have flow washers, the main fill does not



Slide 38

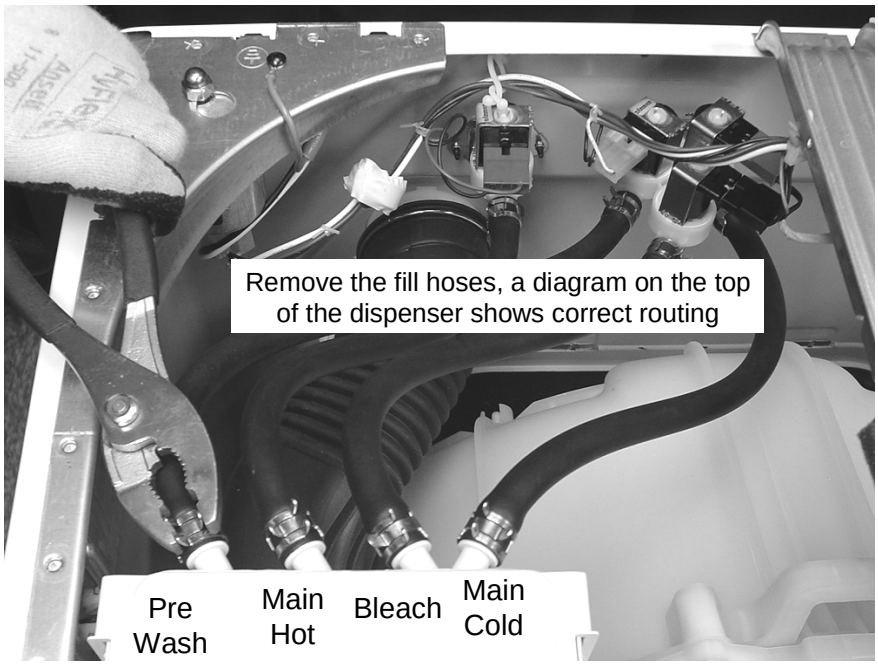
The resistance of all four fill valves is the same, approximately 1130 OHMS

Slide 39 - Dispenser

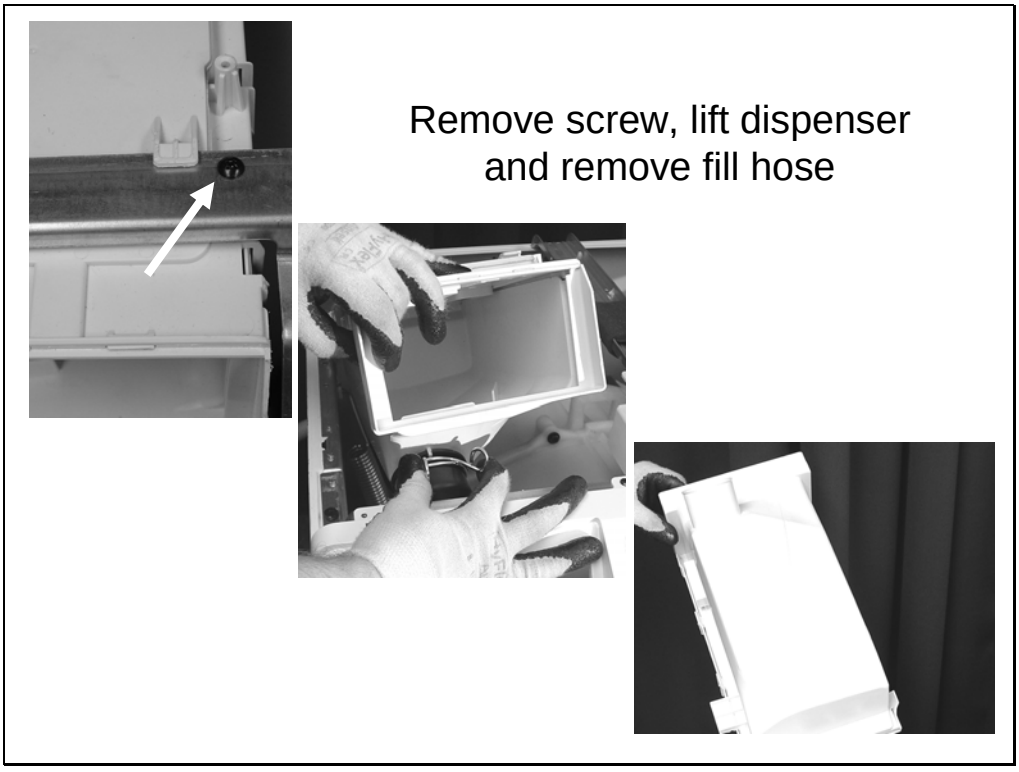
Slide 40

Depress release and pull dispenser assembly out

Slide 41



Slide 42

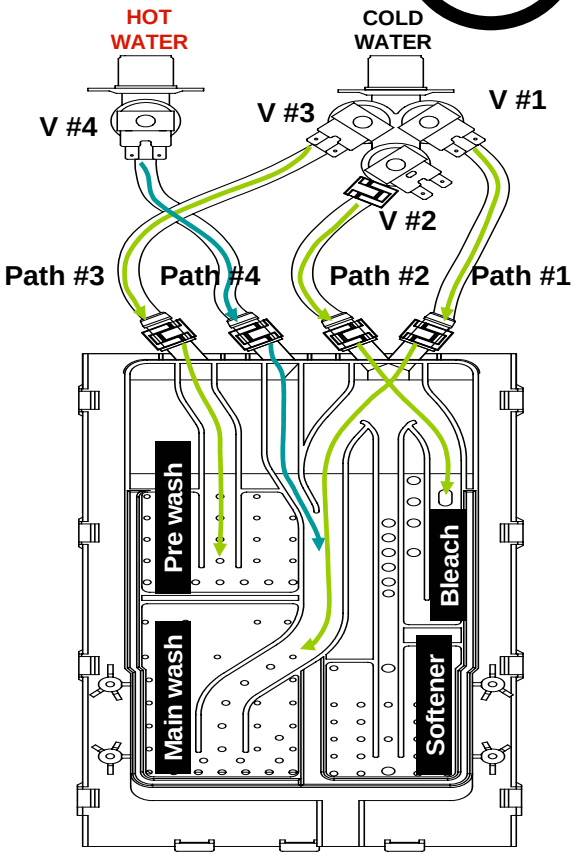


Notes

Slide 43

Water flow through dispenser during Wash fill

WASH					
DRAIN	FILL / Rotation of Spinner	(HEATING)	WASHING	COOLING / DISENTANGLE	SUB TOTAL



First minute of fill with no water in tub (*Reset Level – 25.6 kHz*)
Valve #3 opens and cold water flows through path #3 to detergent compartment (Pre wash)

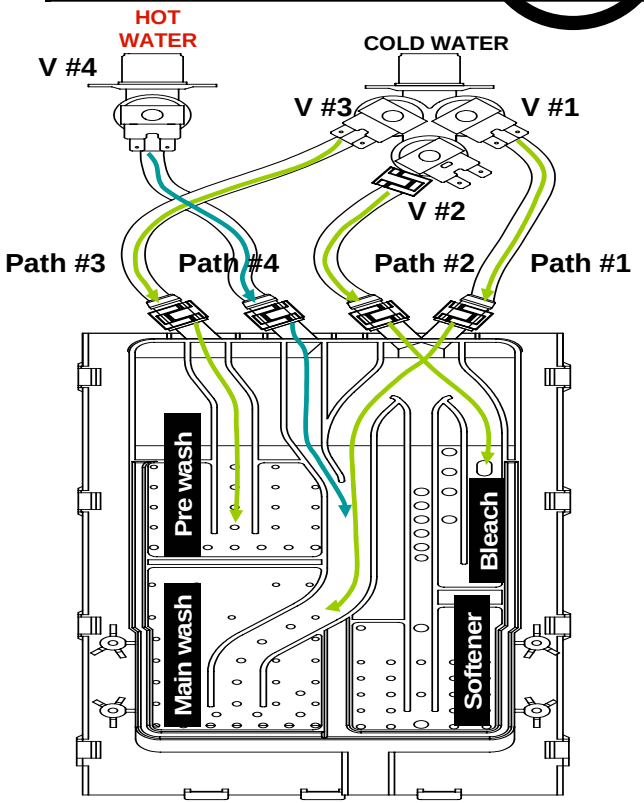
To specified Water Level (Final Water Level) for each cycle
1. If ATC (warm or cold) is selected,
Valves #1 and #4 open as needed to achieve specified water temperature. Cold water flows through path #1 and hot water through path #4 to the detergent compartment
2. If NON-ATC is applied,
If "HOT wash" is selected, valve #4 opens and water flows through path #4.
If "COLD wash" selected , Valve #1 opens and cold water flows through path #1

Cold wash and rinse, Non ATC: water temperature shall be tap cold
Cold wash, ATC: water temperature of 65°F±10°F
Warm wash, ATC: water temperature of 105°F±10°F
Warm Rinse, ATC: water temperature of 80°F±10°F
for final rinse only, all other rinses will be "tap cold"
Hot Wash, Non ATC: water temperature shall be tap hot

Slide 44

Water flow through dispenser during Rinse 1 fill

RINSE 1					
DRAIN	MIDTERM SPIN	FILL / Rotation of Spinner	RINSE	DISENTANGLE / FILLING TO REMOVE SUDS	SUB TOTAL



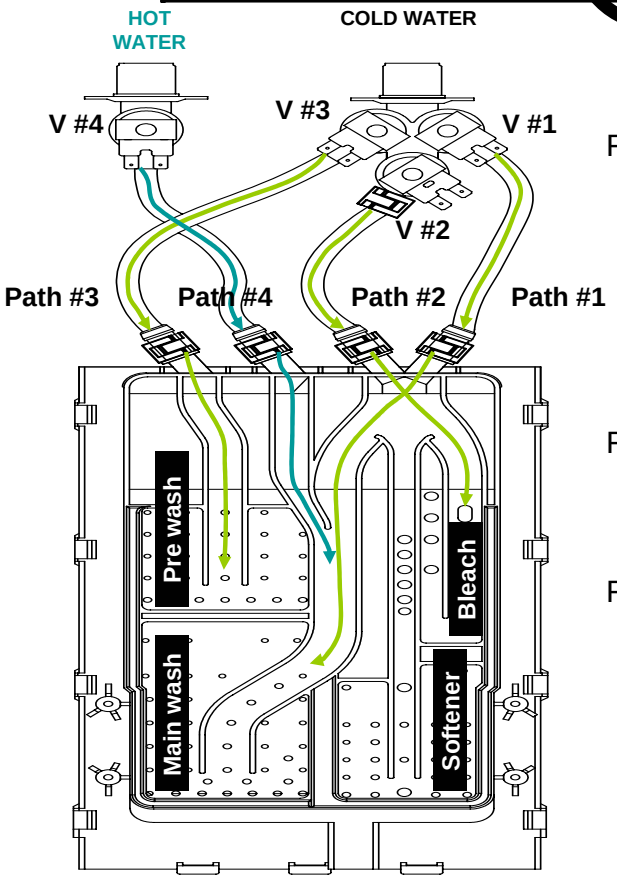
From NO water level (Reset Level) to the specified (final) water level
Valves #2 and #3 open and cold water flows through paths 2 and 3 to the detergent compartment

In order to fill “Bleach”,
Valve #2 opens and cold water flows through path #2 to the Bleach compartment I.

Slide 45

Water flow through dispenser during Rinse 2 fill

RINSE 2					
DRAIN	MIDTERM SPIN	FILL / Rotation of Spinner	RINSE	DISENTANGLE / FILLING TO REMOVE SUDS	SUB TOTAL



From no water level (Reset Level) to *1st sensing level (25.1kHz)*,
Valves #1 & #2 open at the same time. Cold Water from valves #1 & #2 collides and fills Main wash/Softener/Bleach compartments.
Valve #1 & #2 are opened for 1st 9 seconds and closed for 15 seconds, After that, they are opened again to 1st sensing water level.

From 1st sensing level to specified water level for each cycle
In order to meet the ATC temperature specification, the Hot water valve & Cold water valve #1 are opened as needed.

Finally, in order to remove the remaining water in Bleach tray,
Cold water valve #2 is opened for 8 seconds.

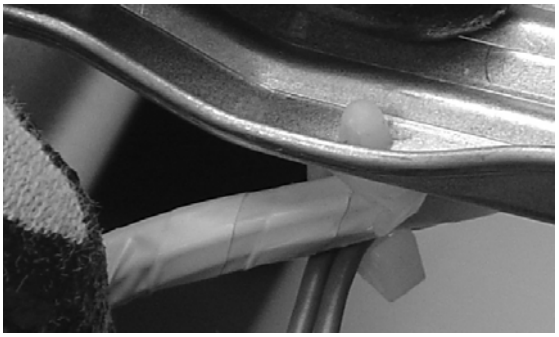
1st Water Sensing Level

- Wrinkle Control & Quick Wash – 24.9 kHz
- Others – 25.1 kHz

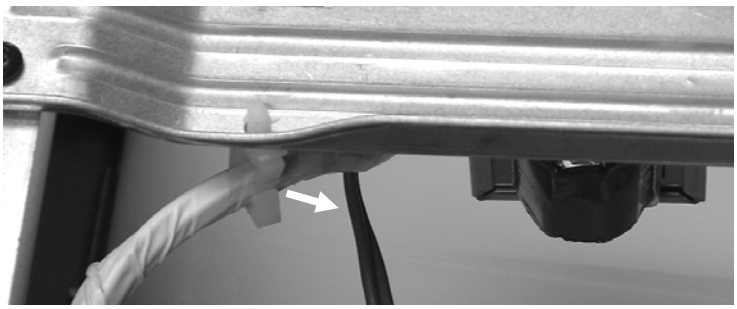
Slide 46 - Removing Console

Slide 47

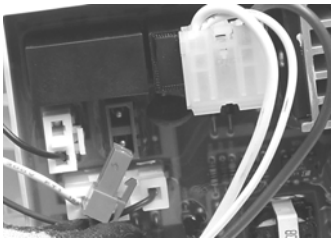
Slide 48

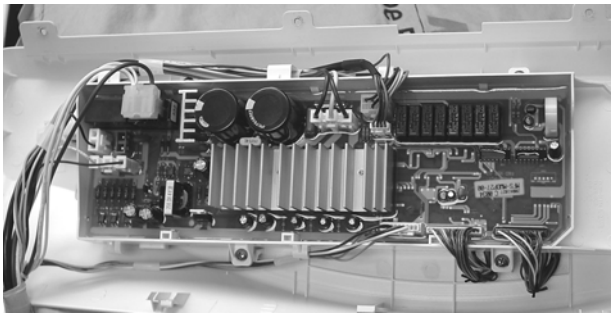


Remove reactor wire harness from restraint

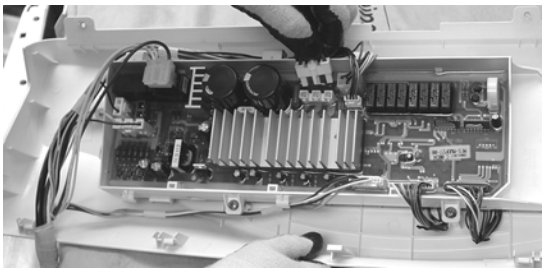


Slide 49

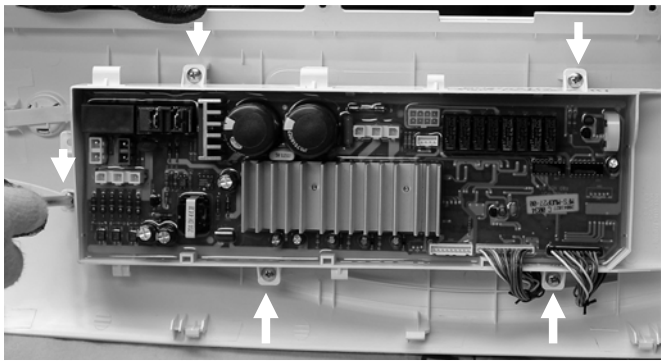




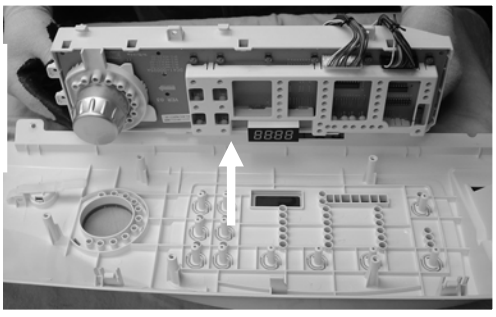
Remove the red two wire reactor harness from the board. This will allow you to position the console to ease disassembly. Remove the remaining connectors



Slide 50



Remove the 5 screws securing the circuit board to the console and lift off the board assembly.



Slide 51

The “power on” actuating lever and push button are replaceable items. To remove the lever, slide the shaft in either direction and lift out the opposite side. Release the locking tabs on the push button and remove

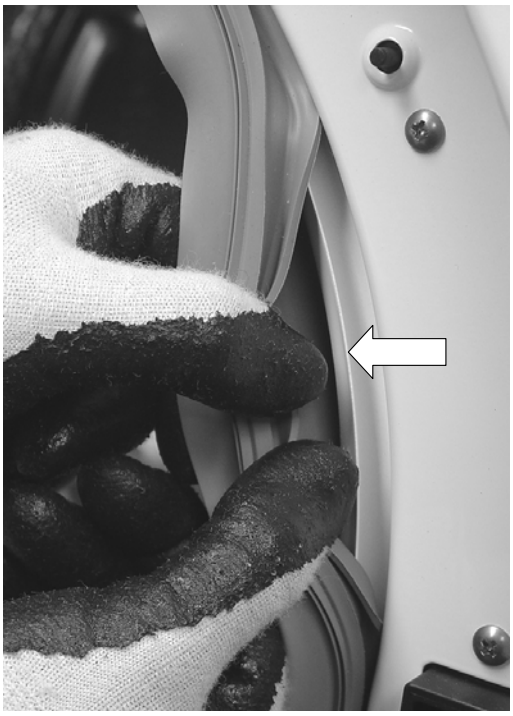
Slide 52 - Removing Front Panel

Slide 53

Locate the boot retainer spring (six o’clock position).

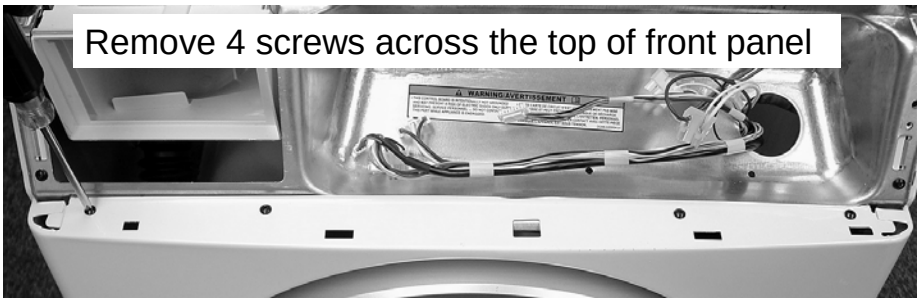
Expand the spring as you work the wire off the gasket

Slide 54



Start at the two o'clock position and pull the gasket off the front panel lip. Push the gasket into the tub

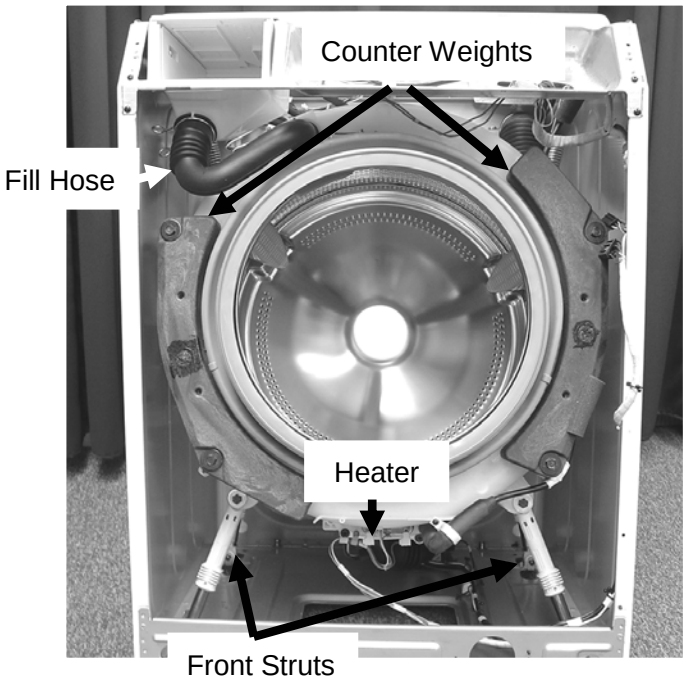
Slide 55



Disconnect the wire connectors on the door switch

Lift off the front panel

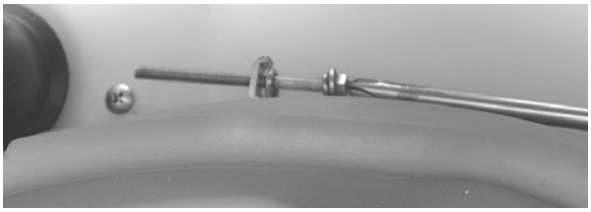
Slide56

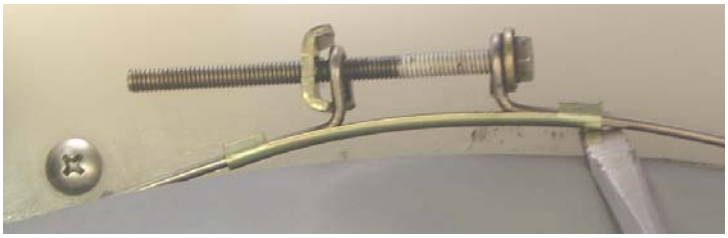


Slide 57 - Removing the Boot Gasket

Slide58

Begin by removing the front panel.
Locate the retainer clamp at the 12:00 o'clock position
Loosen the retainer screw
Remove the gasket retainer

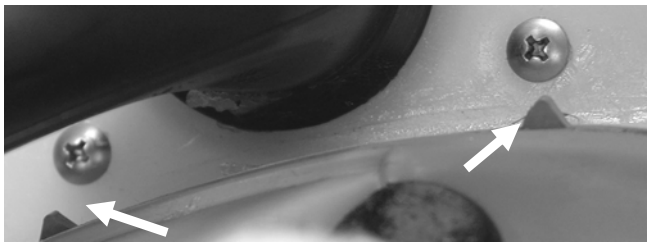




Slide 59

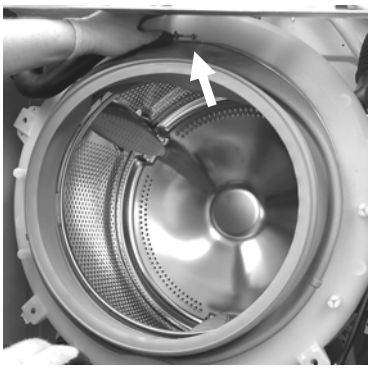
Slide 60

Remove the tub weights to ease installation of the gasket



Align the two index tabs on the gasket with the screws below the fill tube

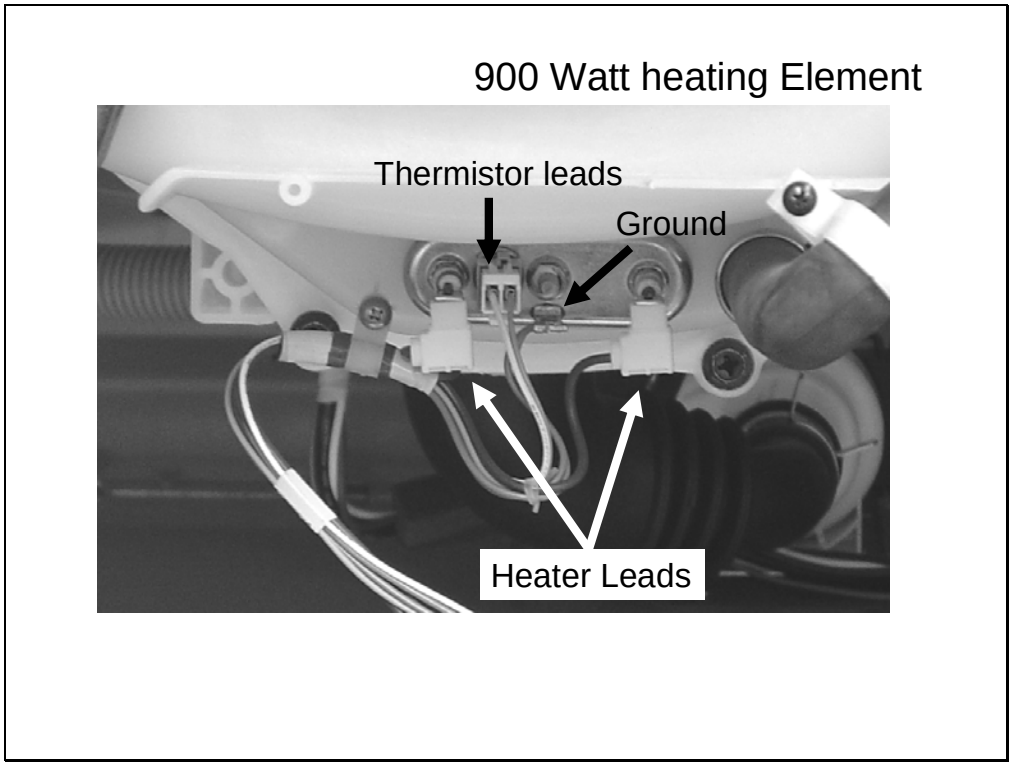
Work gasket onto tub lip



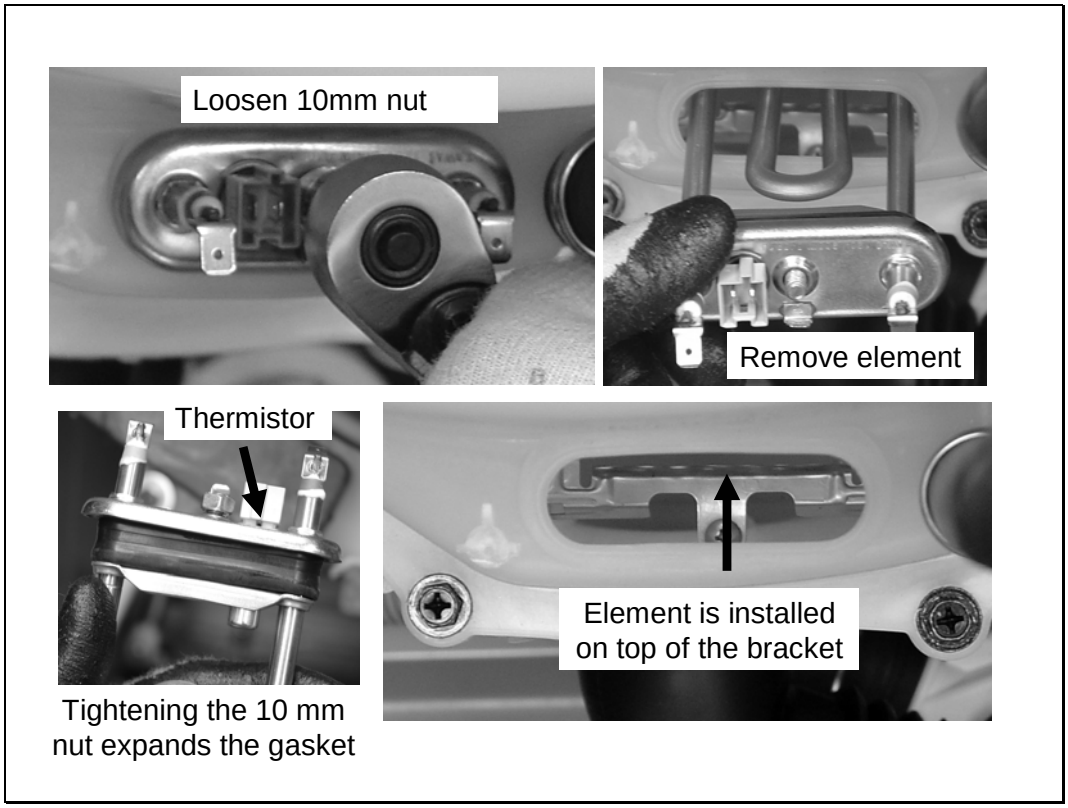
Install retainer and tighten clamp

Slide 61 - Heating Element

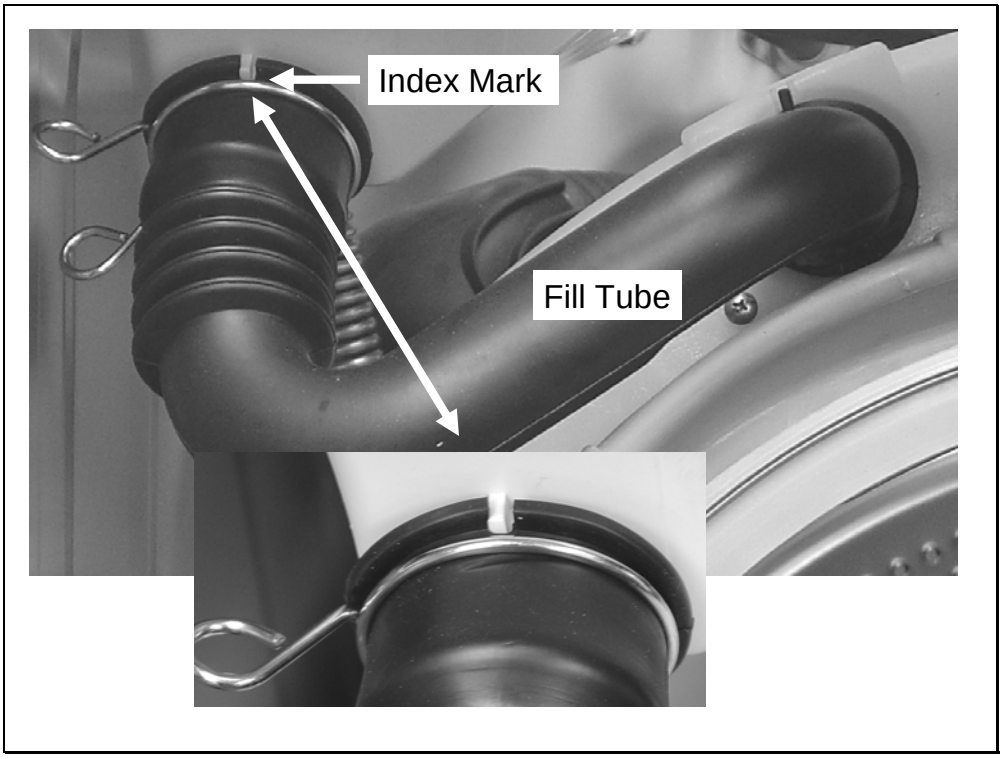
Slide 62



Slide 63

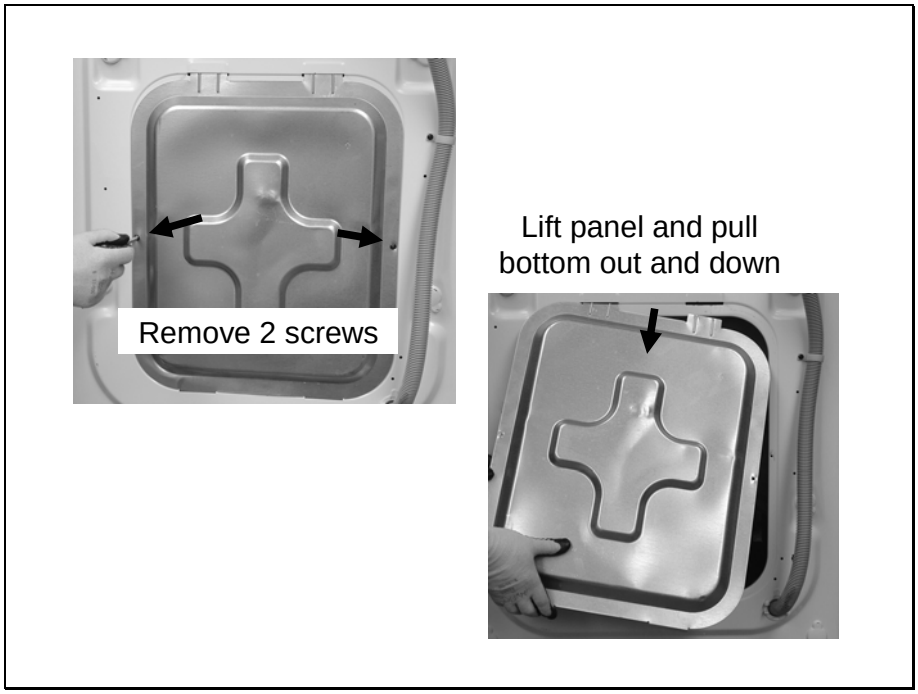


Slide 64

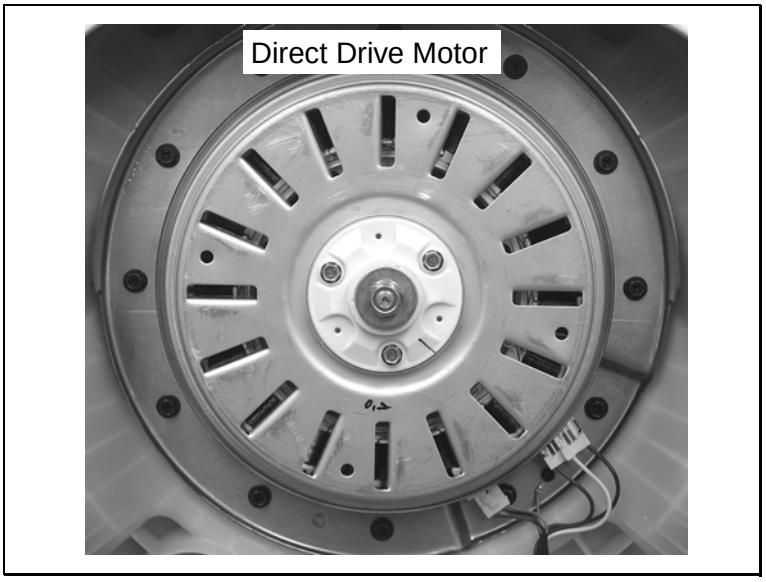


Slide 65 - Motor Removal

Slide 66

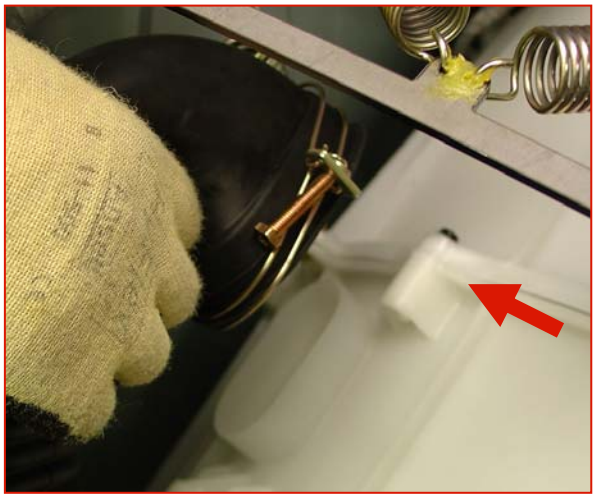


Slide 67



Slide 68

Loosen screw on vent hose clamp and



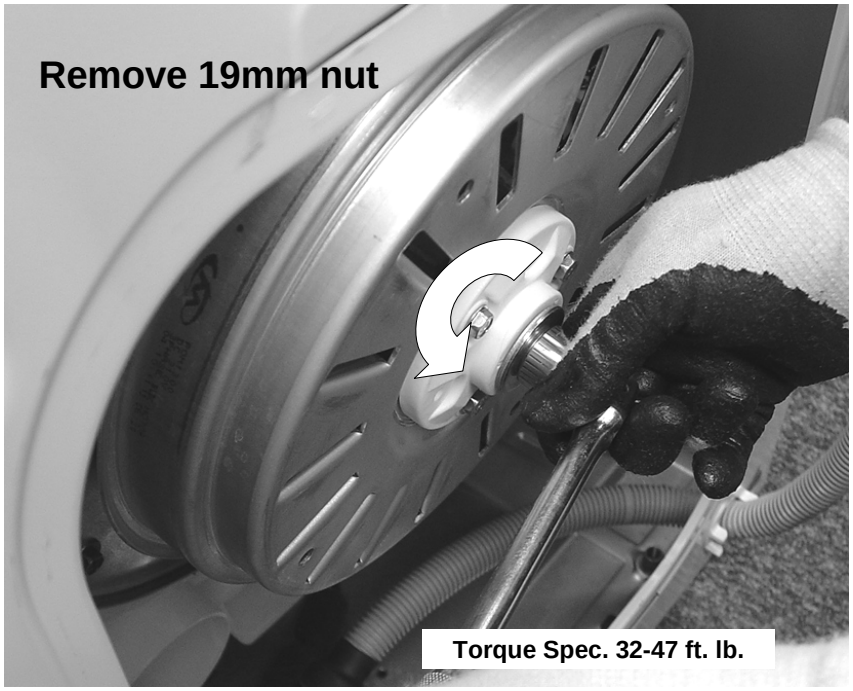
Remove the vent tube and rotate the spinner. Locate one of the three slots in the spinner. Insert a suitable tool to use as a stop. Rotate the spinner in the direction you will be turning the rotor nut until it locks in place

Insert stop

Use a tool with a rubber coated handle to prevent damage

Rotate spinner until spinner is locked in position

Slide 69

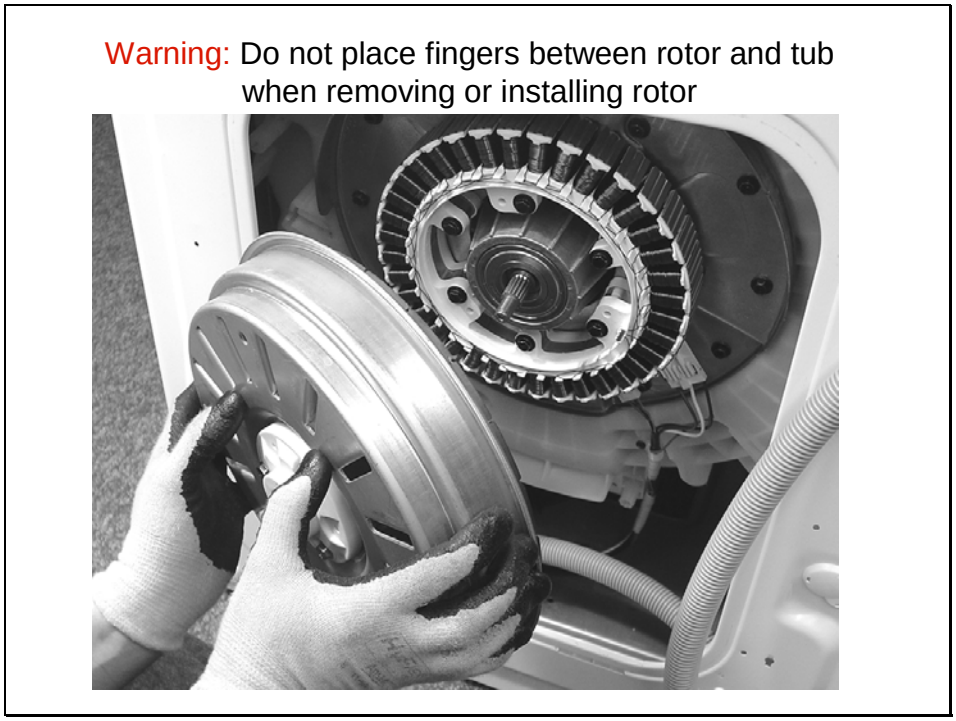


Slide 70

Grasp the rotor at the 9 and 3 o'clock position and pull

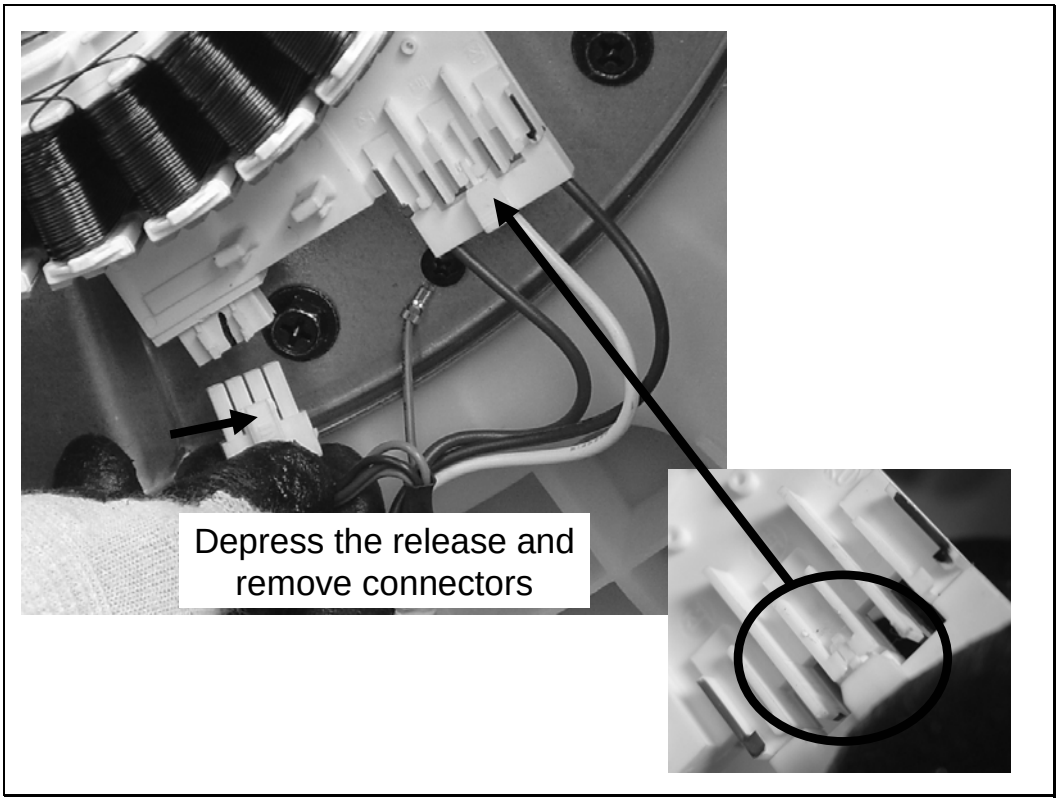
The magnets make the removal of the rotor difficult

Slide 71

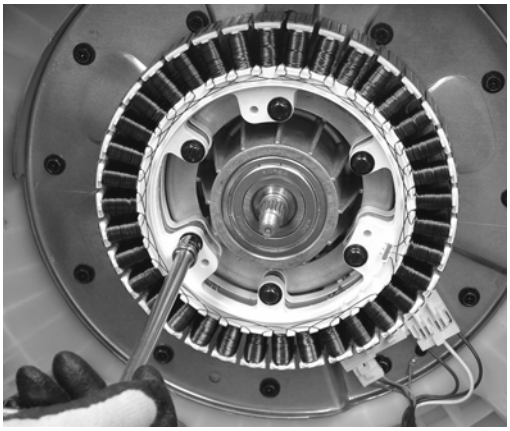


Warning: Do not place fingers between rotor and tub when removing or installing rotor

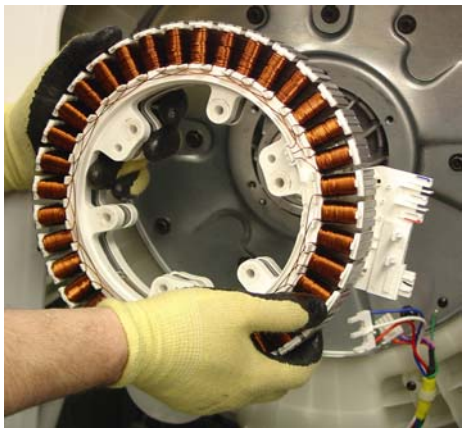
Slide 72



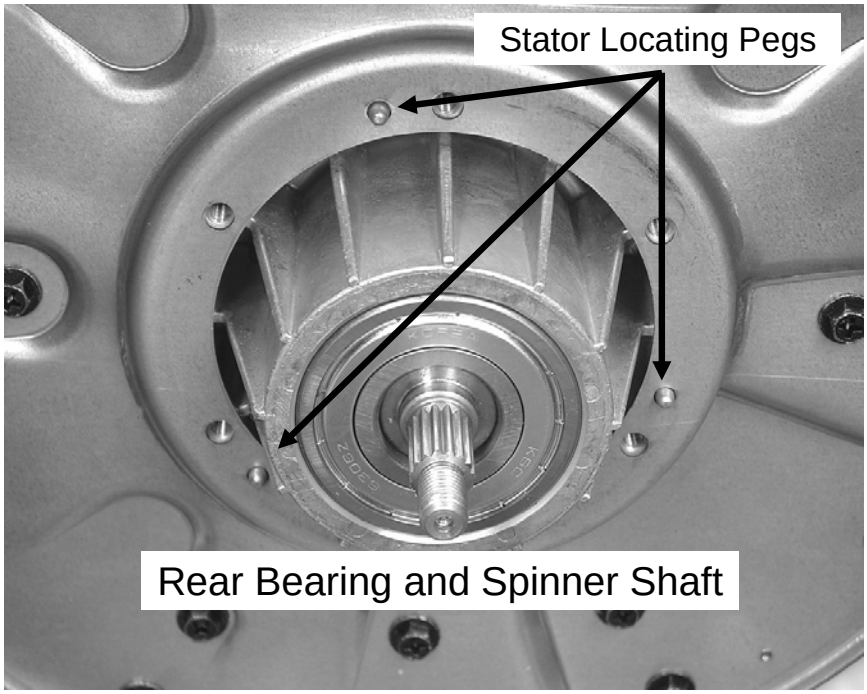
Slide 73



Remove the six 10mm bolts securing stator coil to the tub



Slide 74



Slide 75 - Drain pump

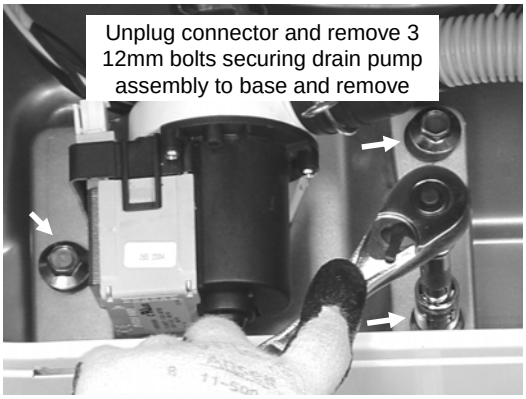
Slide 75 – Drain Pump Removal

Slide 76

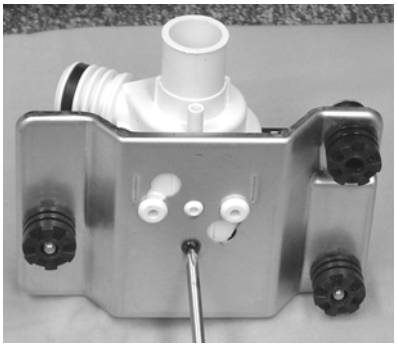
Remove hose clamp and drain hose from drain pump

Remove tub hose from drain pump

Slide 77



Slide 78

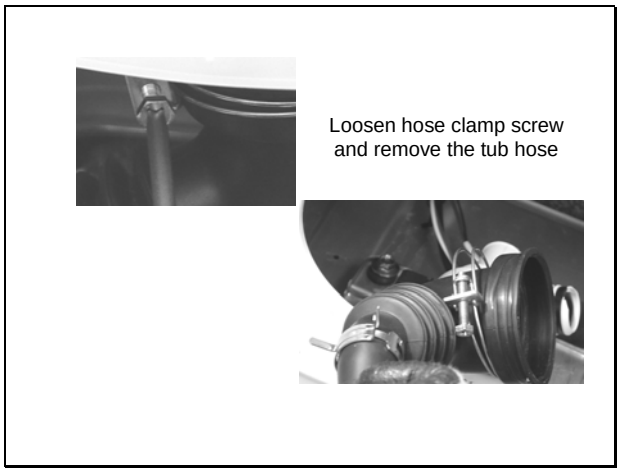


Remove screw from bottom side of bracket. Twist the pump counter clockwise to remove from bracket

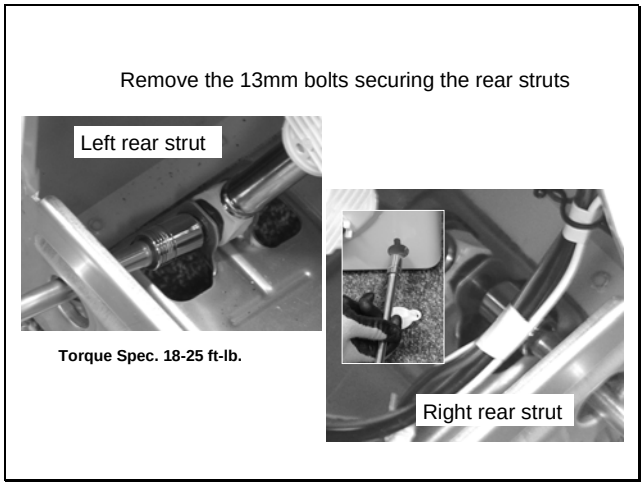
120 VAC 80 Watt motor

Slide 79 - Removing the tub

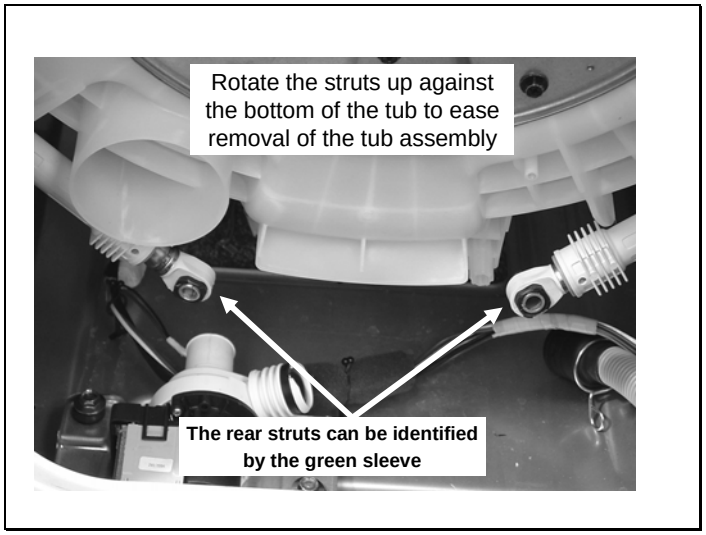
Slide 80



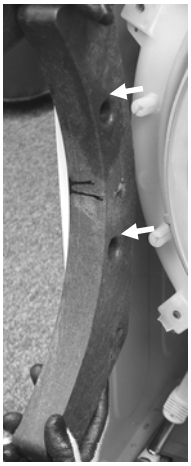
Slide 81



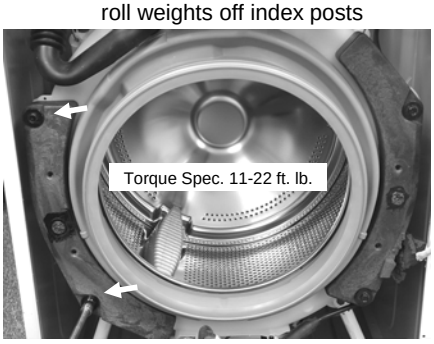
Slide 82



Slide 83

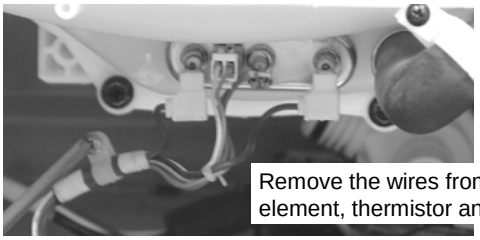


Remove two 13mm bolts and
roll weights off index posts

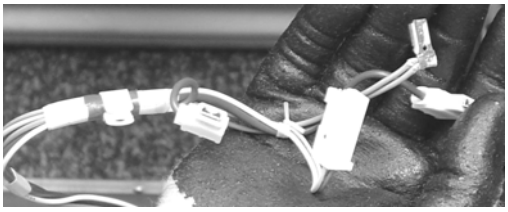


Warning: Weights are heavy use
caution when removing or installing

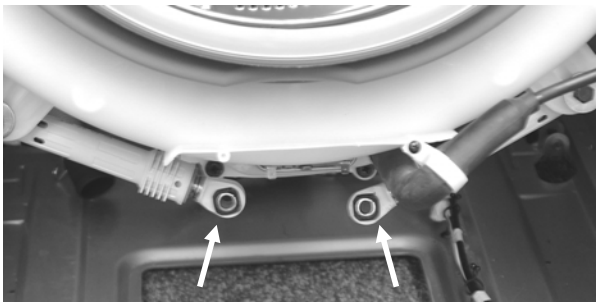
Slide 84



Remove the wires from the heater
element, thermistor and ground

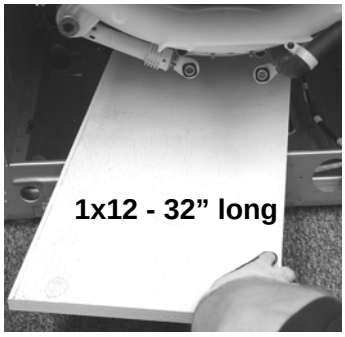


Slide 85



Remove the front struts and fold the
struts up against the bottom of the tub

Slide 86



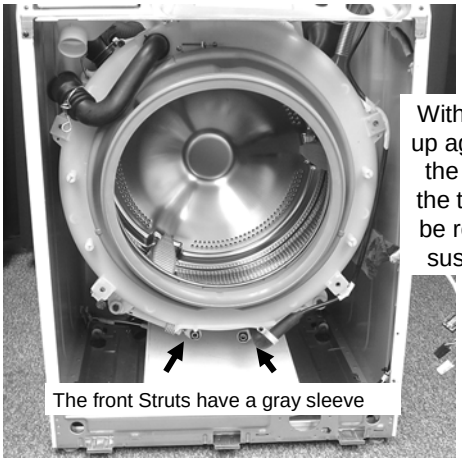
Insert a board or boards across the bottom of the washer frame to use as a support when removing the tub assembly

Note: any dimension lumber can be used if it’s long and wide enough to support the tub

Slide 87

Remove fill hose

Slide 88

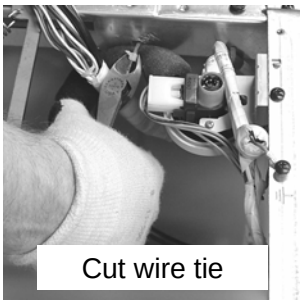


With the struts folded up against the tub and the support in place the tub assembly can be removed from the suspension springs

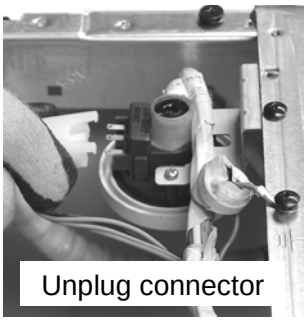
The front Struts have a gray sleeve

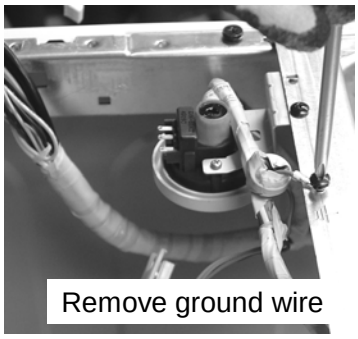
Slide 89

Prepare console back guard for removal


Cut wire tie

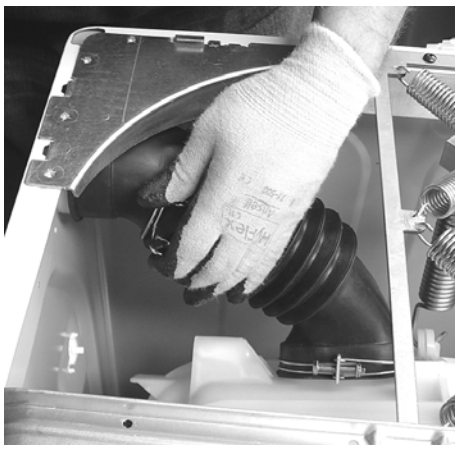

Remove pressure hose


Unplug connector


Remove ground wire

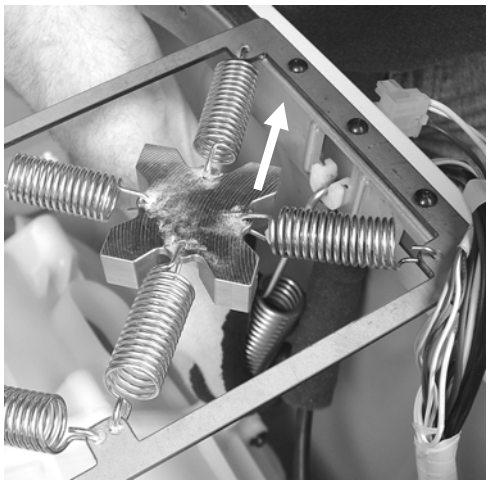
Slide 90

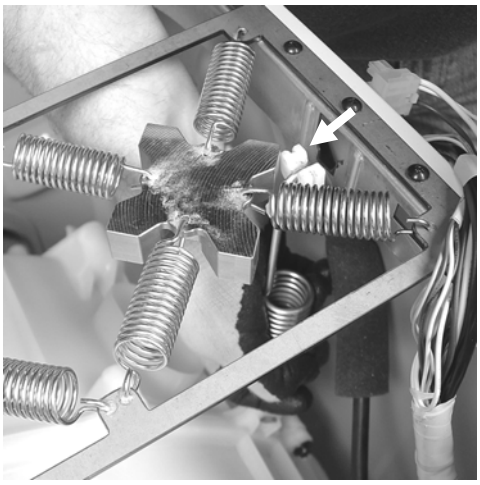
Remove the left and right side vent hoses



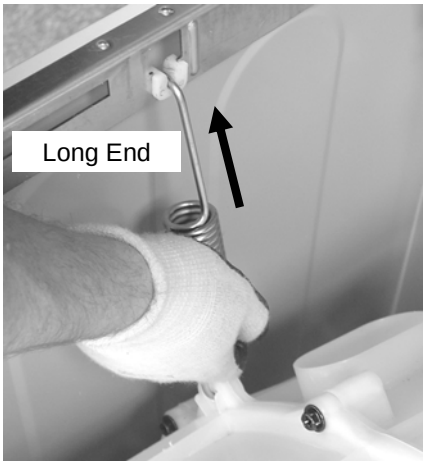
Slide 91

Begin with the suspension spring under the Dynamic Balance. Grasp the tub with one hand and the spring with the other. Lift and remove the spring from the slot in the frame



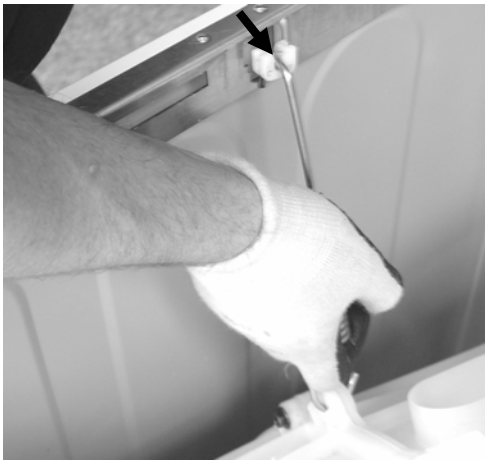


Slide 92

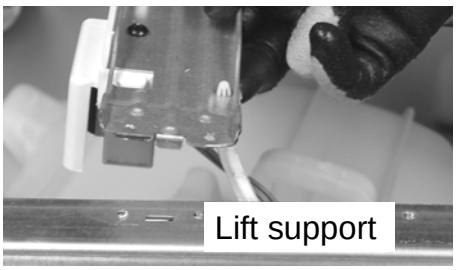


Long end of spring hooks on rail short end hooks to tub

Remove the spring on the opposite side and let tub rest on board support



Slide 93



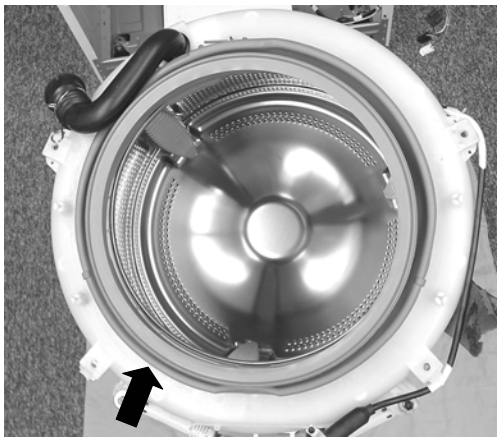
Remove back guard

Slide 94

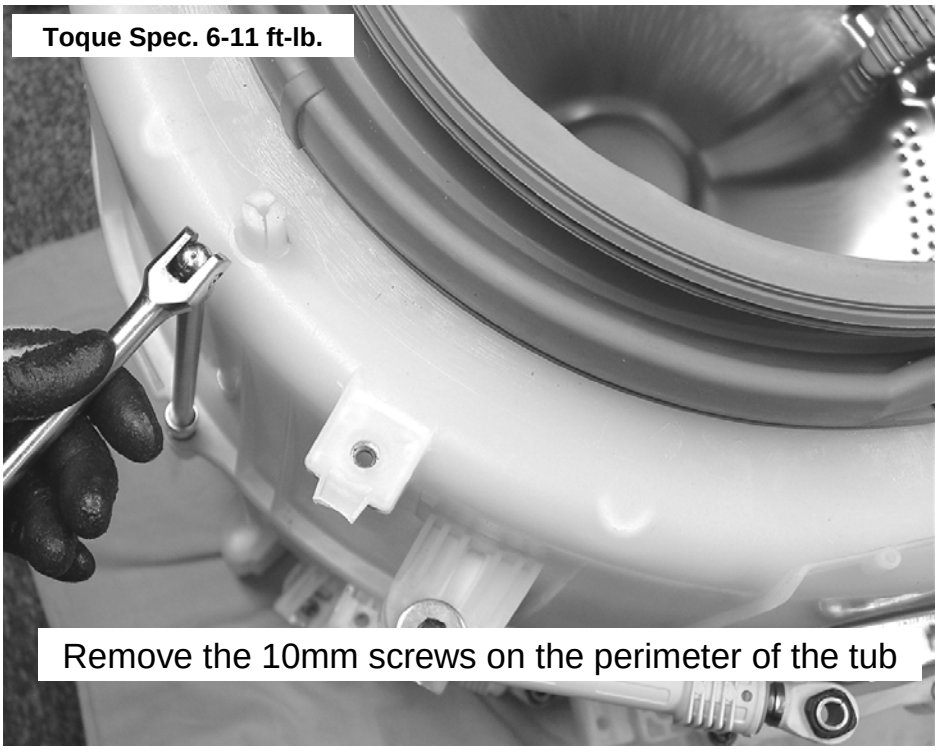
Grasp the front and rear of the tub and slide out. Use a blanket or rug to protect the floor

Slide 95

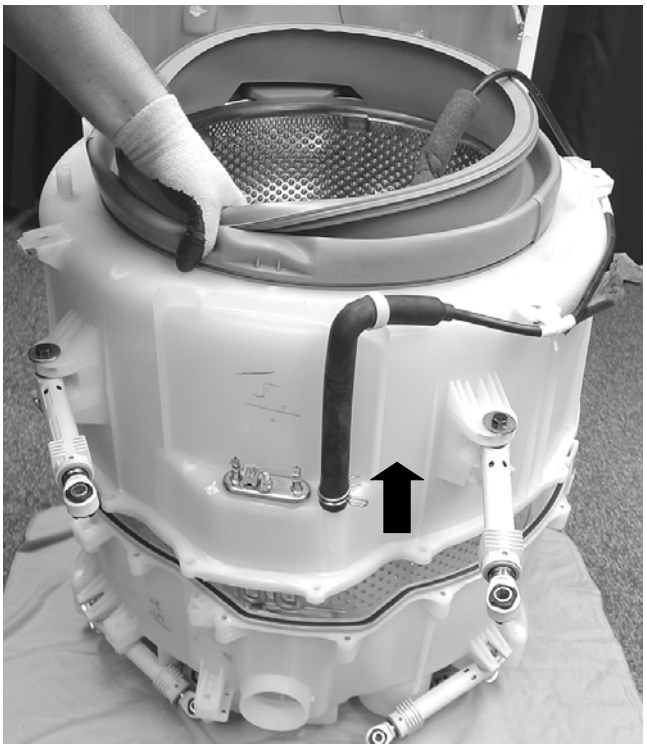
Set the tub on the floor. Position 4” wood blocks or equivalent around the spinner shaft. Roll the tub to the upright position and rest it on the blocks



Slide 96



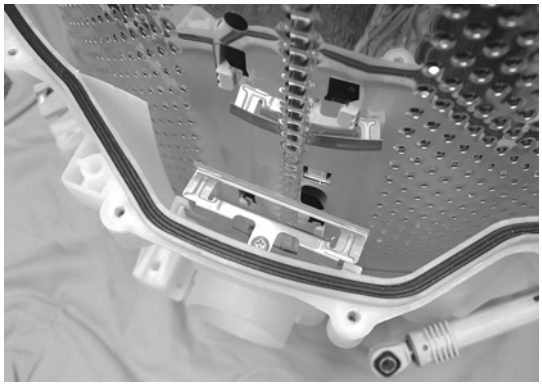
Slide97



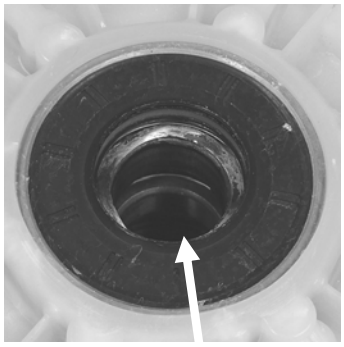
Separate the front and rear halves of the outer tub

Slide98

There is a gasket between the tub halves



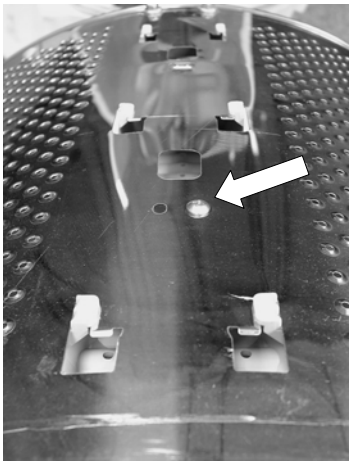
Slide 99



A wave washer is installed between the spinner and seal

Slide 100

Remove 1 screw and slide the baffle to release the mounting tabs from the spinner



Slide 101

Maytag Neptune 8700 Front Load Washer

Slide 102

Differences between the 8700 and 9700

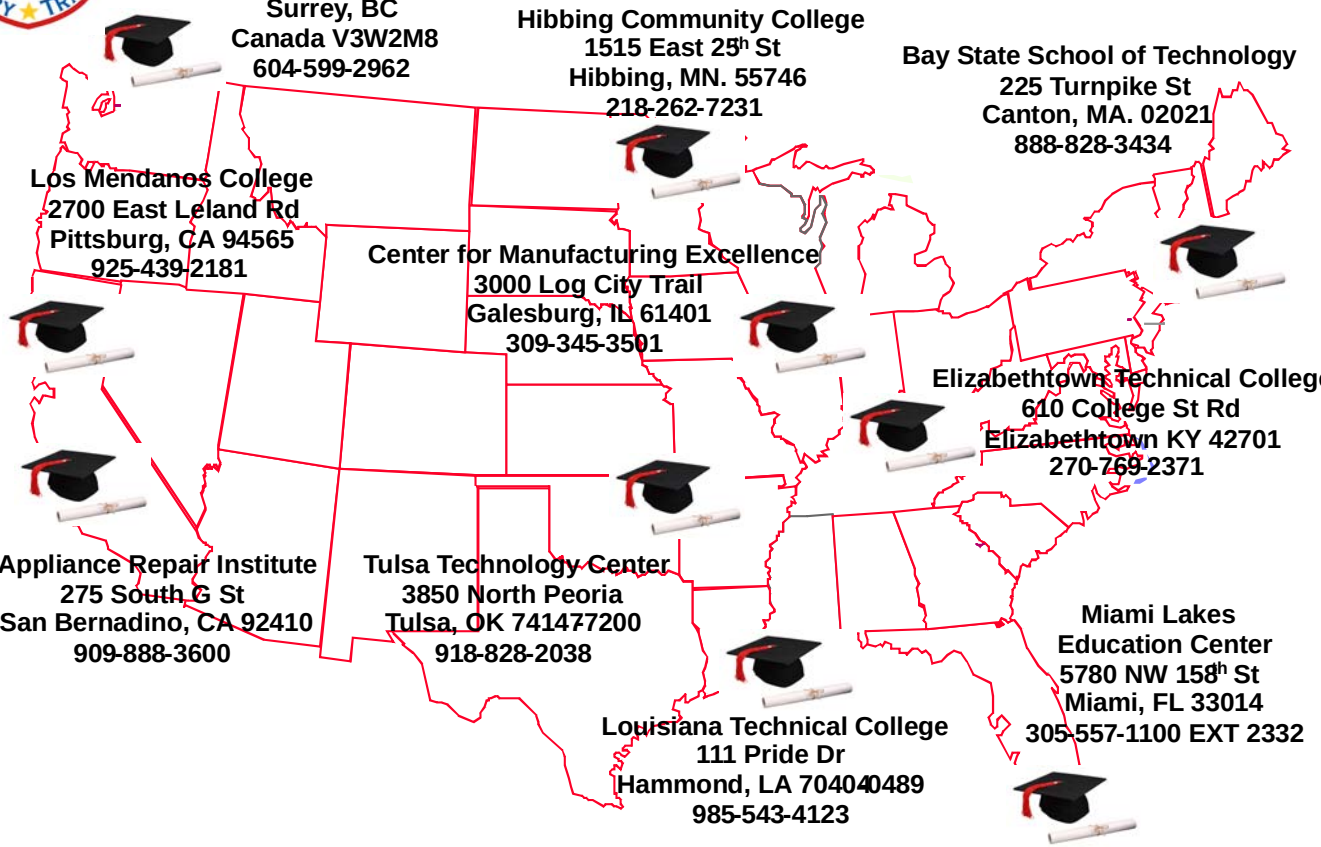
Belt drive motor

Weight added to right rear of outer tub

Weight added to back of the outer tub behind pulley

2 less cycles, 1 less option, water temperature setting and spin speed

Maytag Authorized Training Centers



Kwantlen University College
12666 72nd Ave
Surrey, BC
Canada V3W2M8
604-599-2962

Hibbing Community College
1515 East 25th St
Hibbing, MN. 55746
218-262-7231

Bay State School of Technology
225 Turnpike St
Canton, MA. 02021
888-828-3434

Los Mendanos College
2700 East Leland Rd
Pittsburg, CA 94565
925-439-2181

Center for Manufacturing Excellence
3000 Log City Trail
Galesburg, IL 61401
309-345-3501

Elizabethtown Technical College
610 College St Rd
Elizabethtown KY 42701
270-769-2371

Appliance Repair Institute
275 South G St
San Bernadino, CA 92410
909-888-3600

Tulsa Technology Center
3850 North Peoria
Tulsa, OK 741477200
918-828-2038

Miami Lakes Education Center
5780 NW 158th St
Miami, FL 33014
305-557-1100 EXT 2332

Louisiana Technical College
111 Pride Dr
Hammond, LA 704040489
985-543-4123

Be Aware, Be Alert
Always work safely.
On the Job, On the Road, In the Home
Every Time, All the Time

MAYTAG Training Services