

Haier

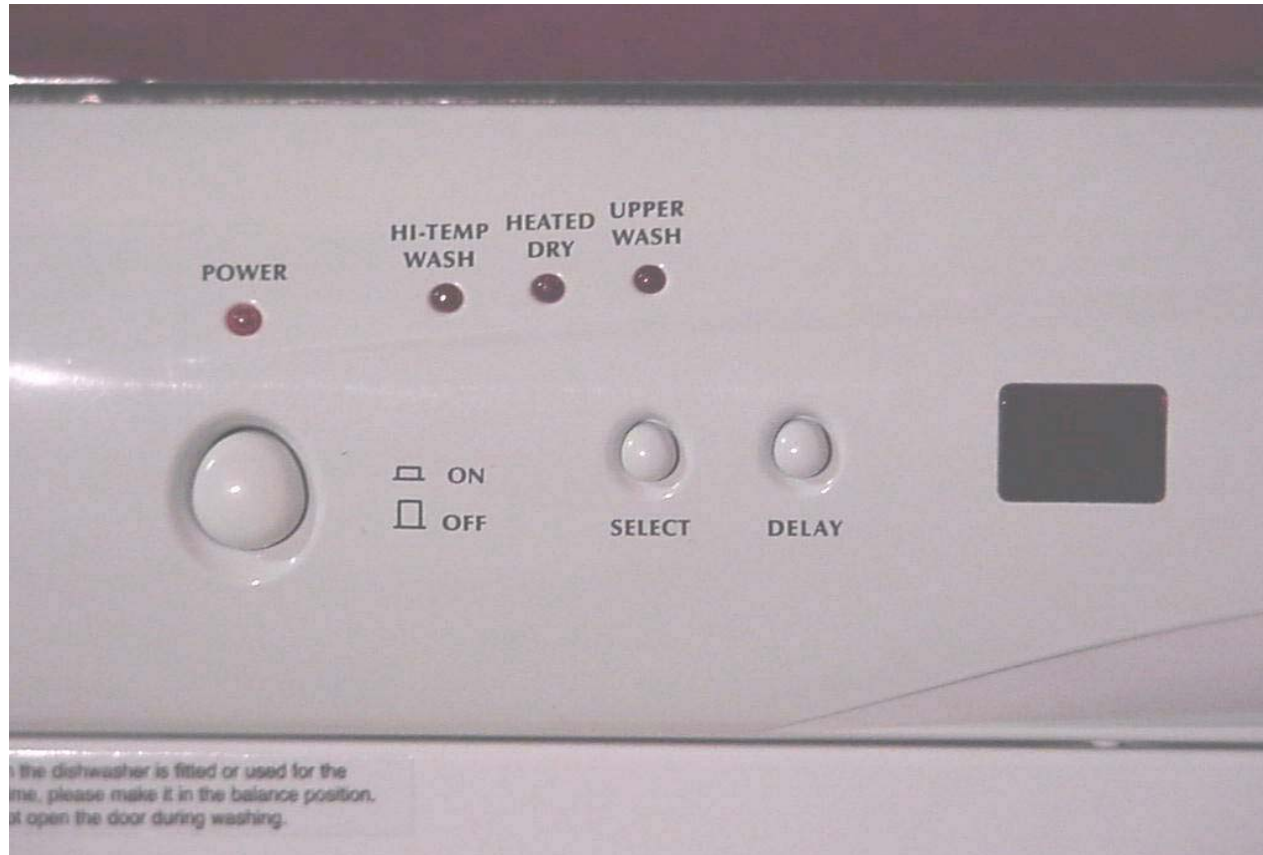
UNDERCOUNTER DISHWASHER

Training Presentation



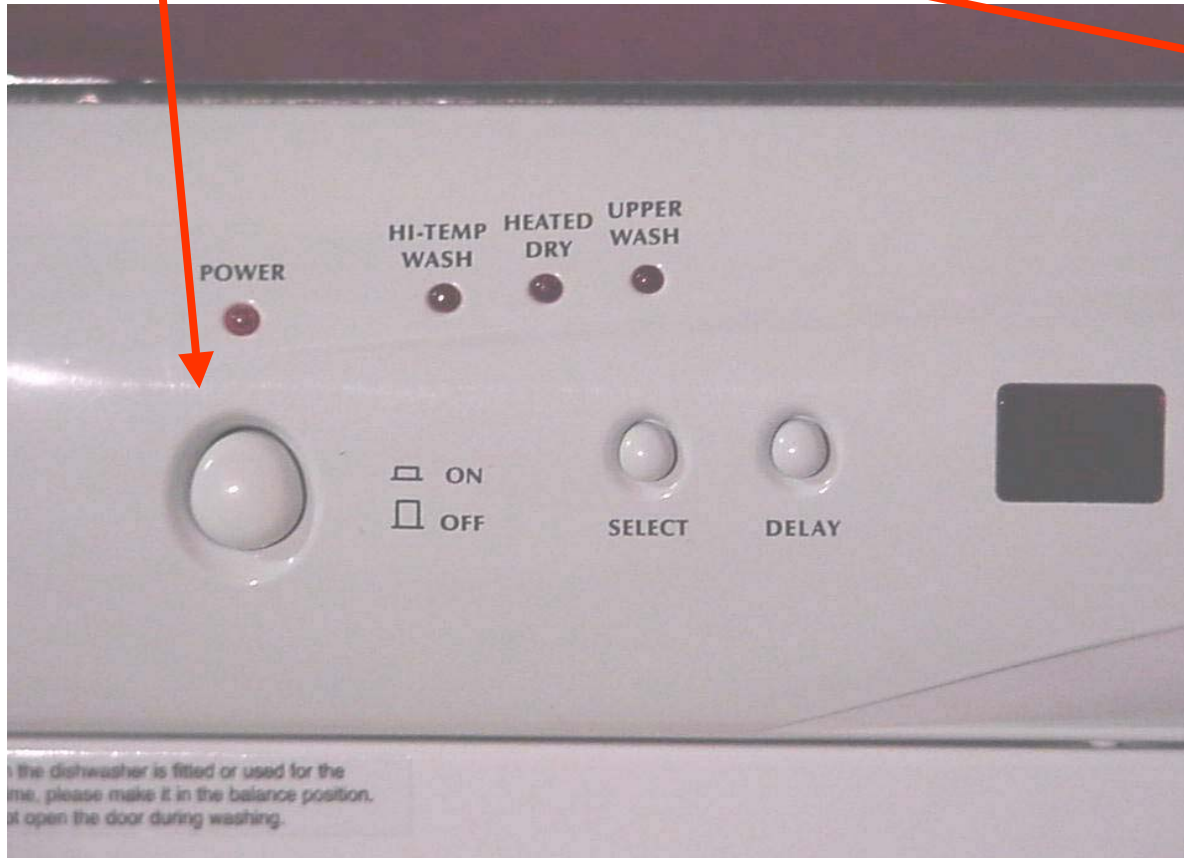
Haier

CONTROL PANEL



POWER BUTTON
In to RUN
OUT to STOP

CONTROL PANEL



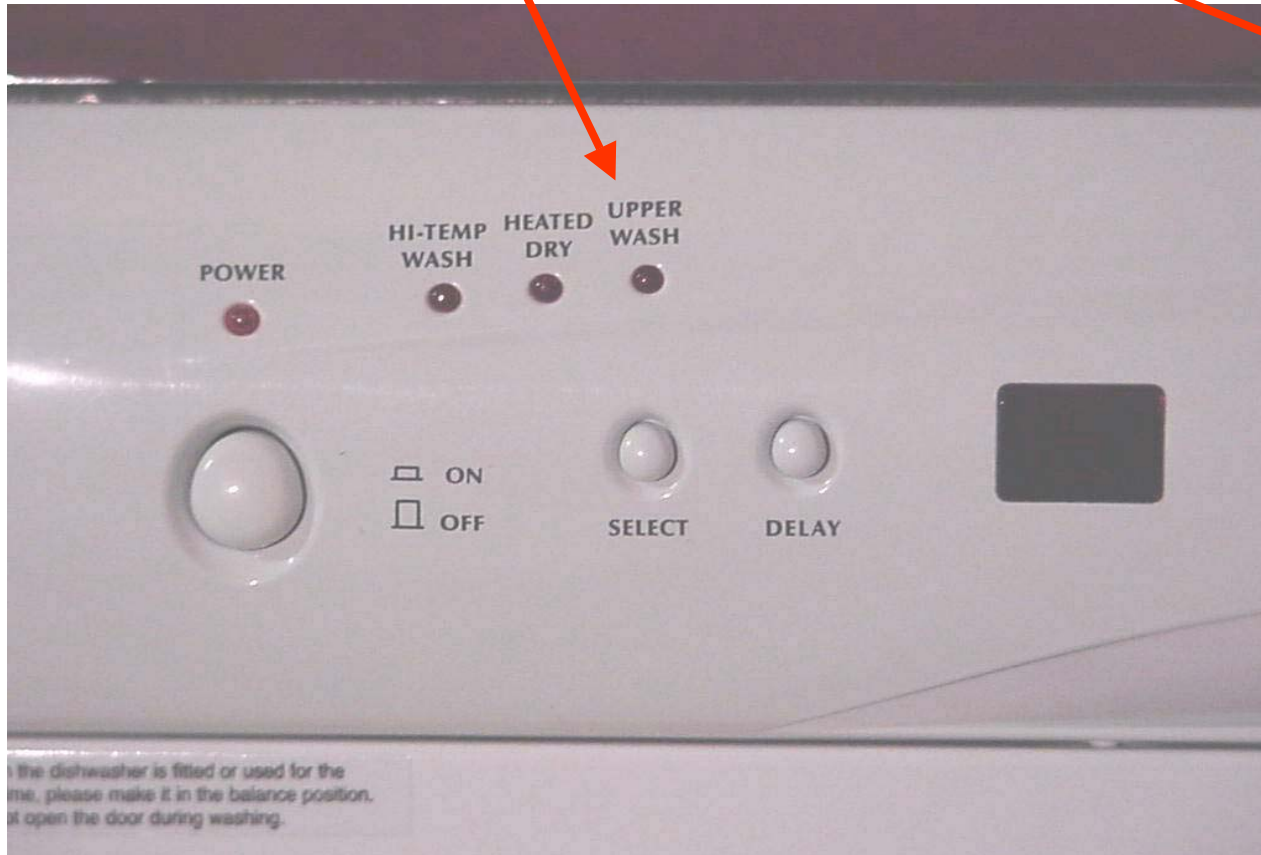
POWER

IN – Power ON
OUT – Power OFF
(Power Indicator Light will be on)

Must be IN to program
and start wash cycle

Pushing the POWER
button during the wash
cycle cancels all programs

CONTROL PANEL



UPPER WASH CYCLE

When this cycle is selected, water is diverted to the upper wash arm only.

Dishes must be on the upper rack only.

CONTROL PANEL



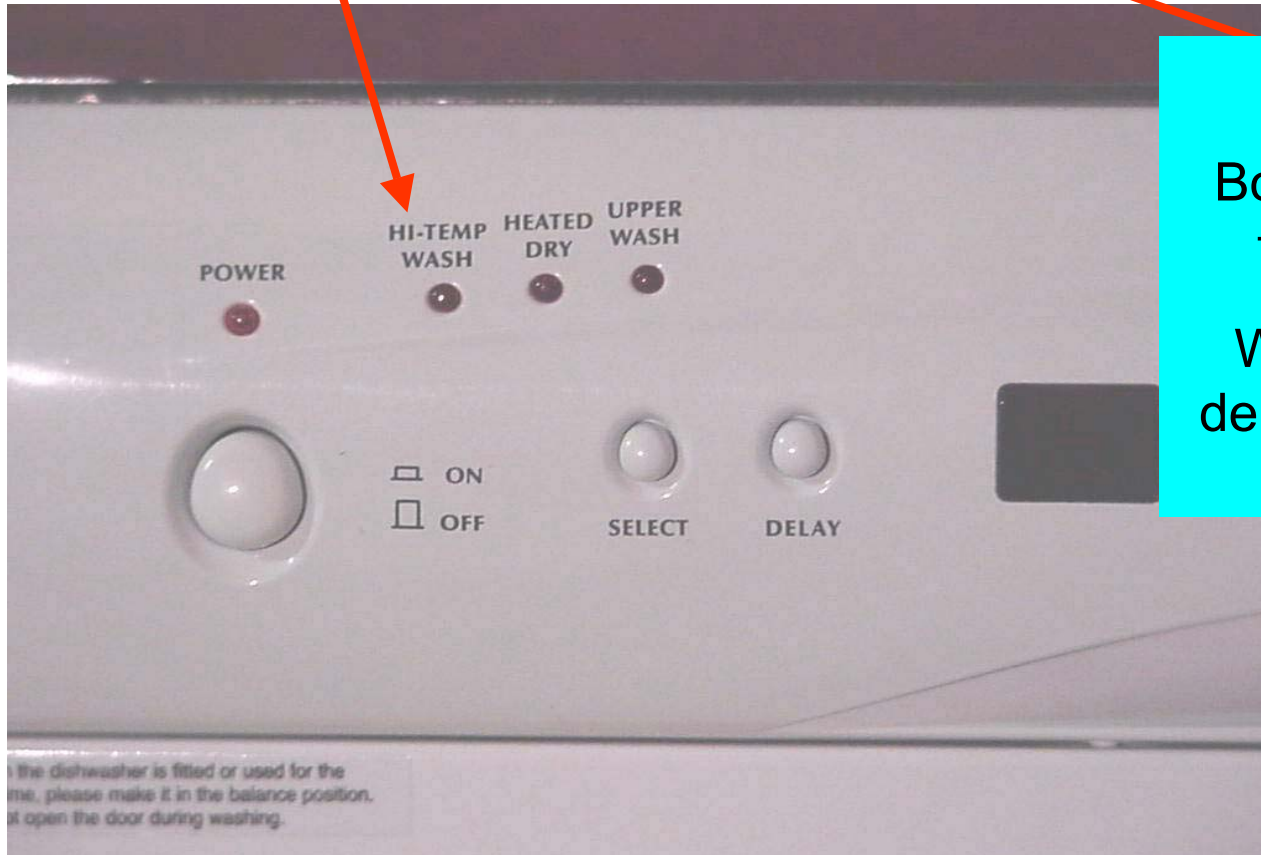
SELECT

Use to select desired cycles
Corresponding lights will light



To select	Push Select Button
Hi-Temp Wash	1 time
Heated dry	2 times
Upper Wash	3 times
Hi-temp wash and Heated Dry	4 times
Hi-temp wash and Upper Wash	5 times
Heated Dry and Upper Wash	6 times
Hi-temp Wash, Heated Dry & Upper Wash	7 times

CONTROL PANEL



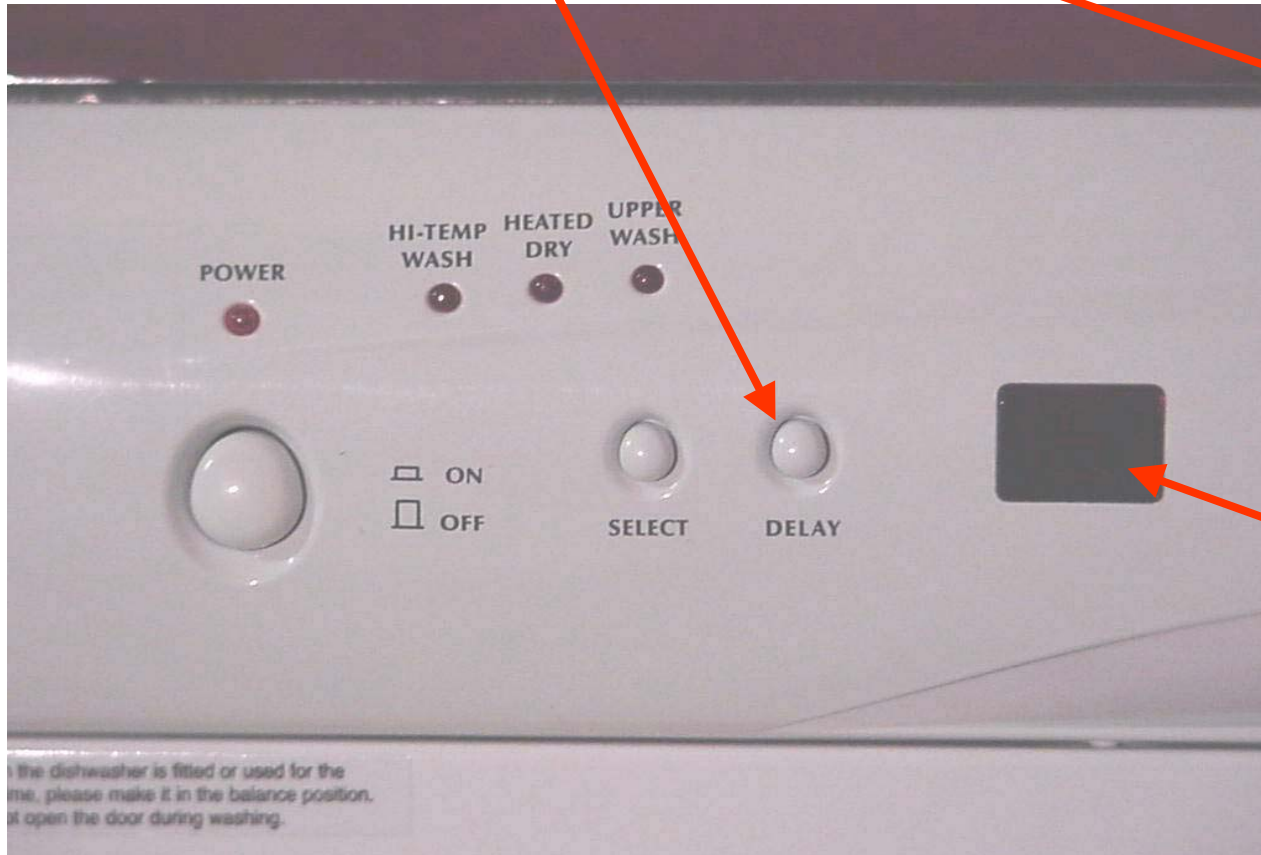
HI-TEMP WASH

Boosts water temperature to 161-167 degrees F

Will increase cycle time depending on temperature of incoming water

If the dishwasher is fitted or used for the first time, please make it in the balance position. Do not open the door during washing.

CONTROL PANEL



DELAY

Pressing the delay button sets the delayed start up to 9 hours.

Delay time will be shown in window

CONTROL PANEL

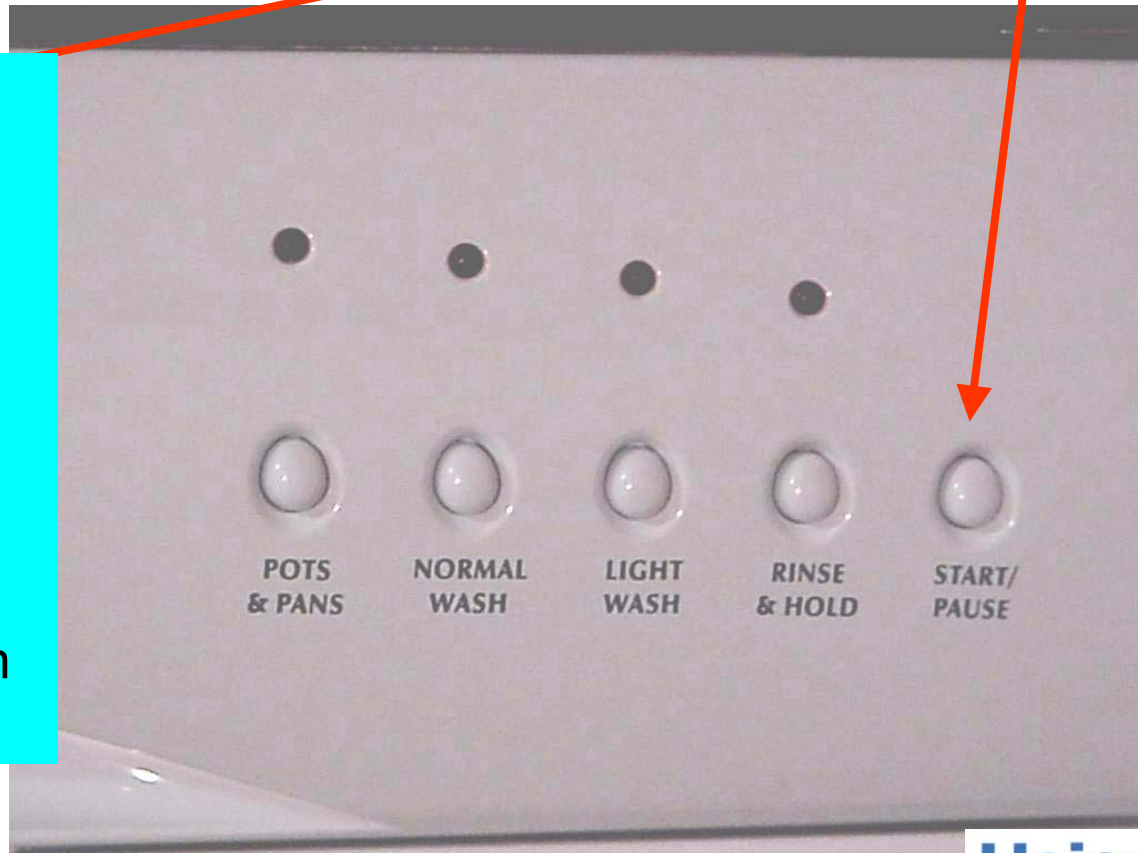


START / PAUSE

Once cycle and options are selected, push **START / PAUSE** to begin cycle.

Push again to **PAUSE** the cycle to open door.

Pressing the **POWER** button cancels all preset options



CONTROL PANEL



In the event of a water overflow or leak

- the cycle will end
- a drain cycle will be activated to drain tank
 - indicator lamps will flash
- unit will shut off and not restart until water is removed from base pan

CONTROL PANEL

Manual Control Dishwashers

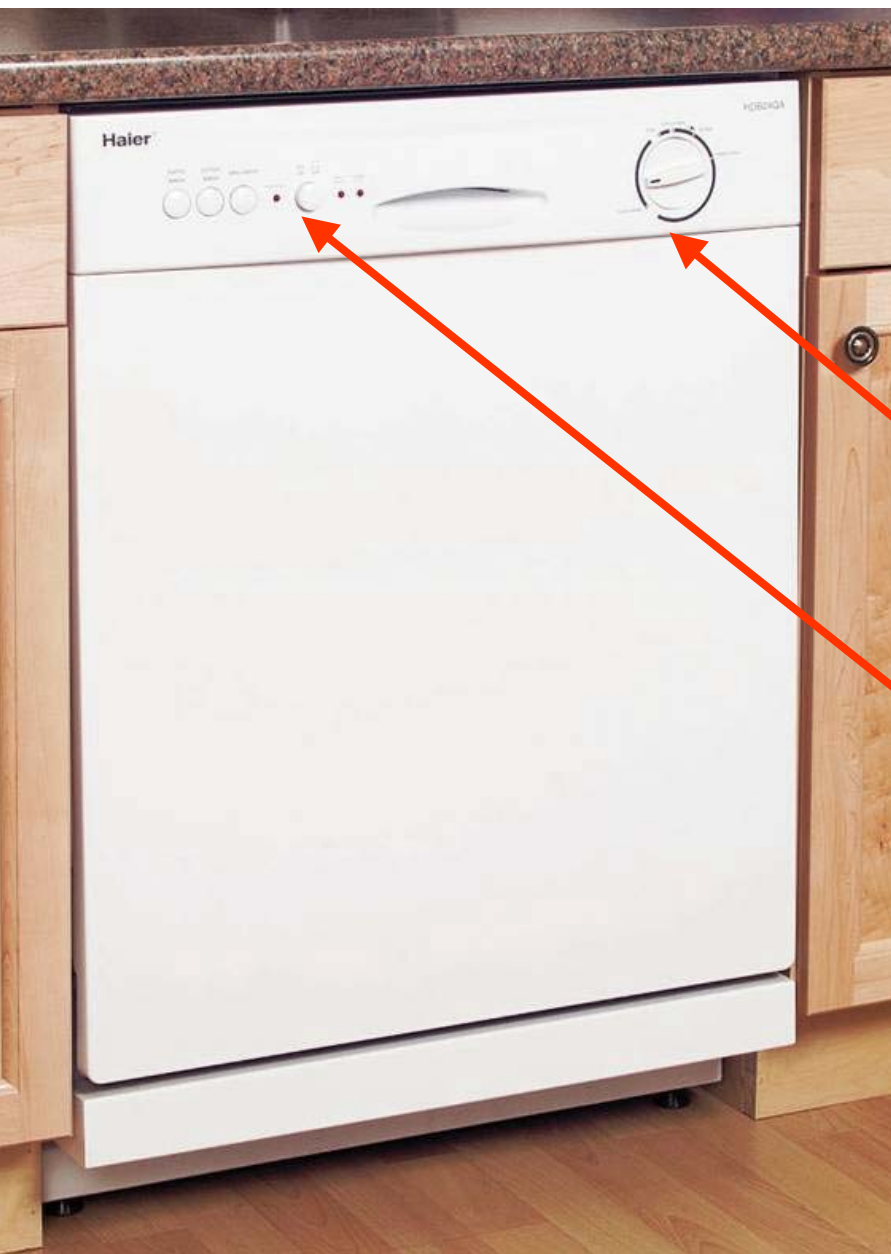
Power Indicator Lamp

The POWER ON indicator lamp will remain on at the end of the cycle until:

1 – The timer is manually moved to the OFF position

Or

2 – The POWER button on the left side of the control panel is pushed to the OFF position.



INNER DOOR PANEL

Rinse Aid Dispenser

Detergent Dispenser
(closed)

Convection Dry
Fan Cover

Door Latch

DETERGENT CUP

Pre-Wash Cup

Rinse Aid Dispenser
(cap off)

Rinse Aid Dispenser
setting

Main Wash
Detergent Cup

INNER DOOR PANEL

Remove 6 Screws to
remove outer door panel

Remove 6 Screws to
to drop control panel
(remove outer door
panel first)

INNER DOOR

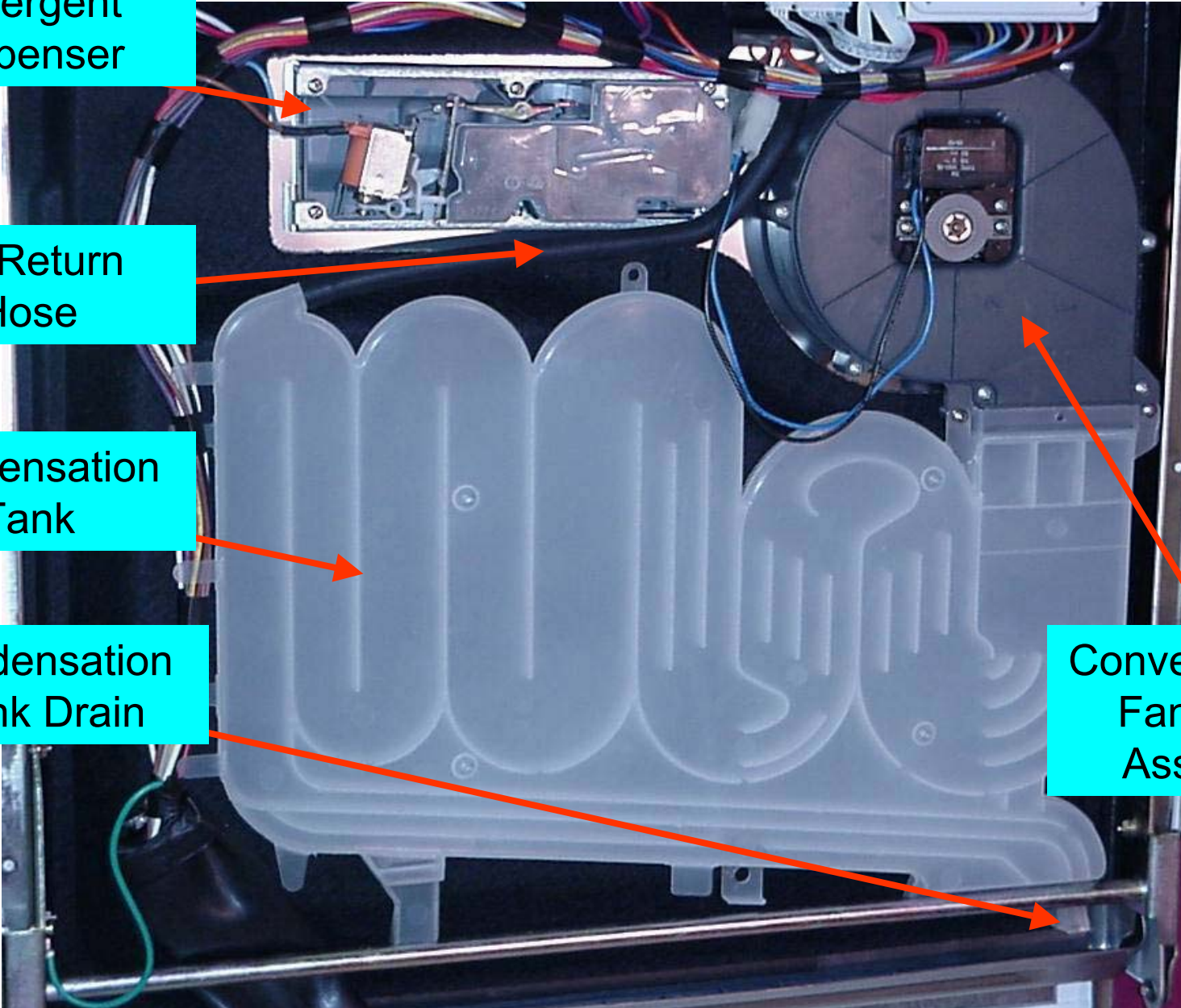
Detergent Dispenser

Air Return Hose

Condensation Tank

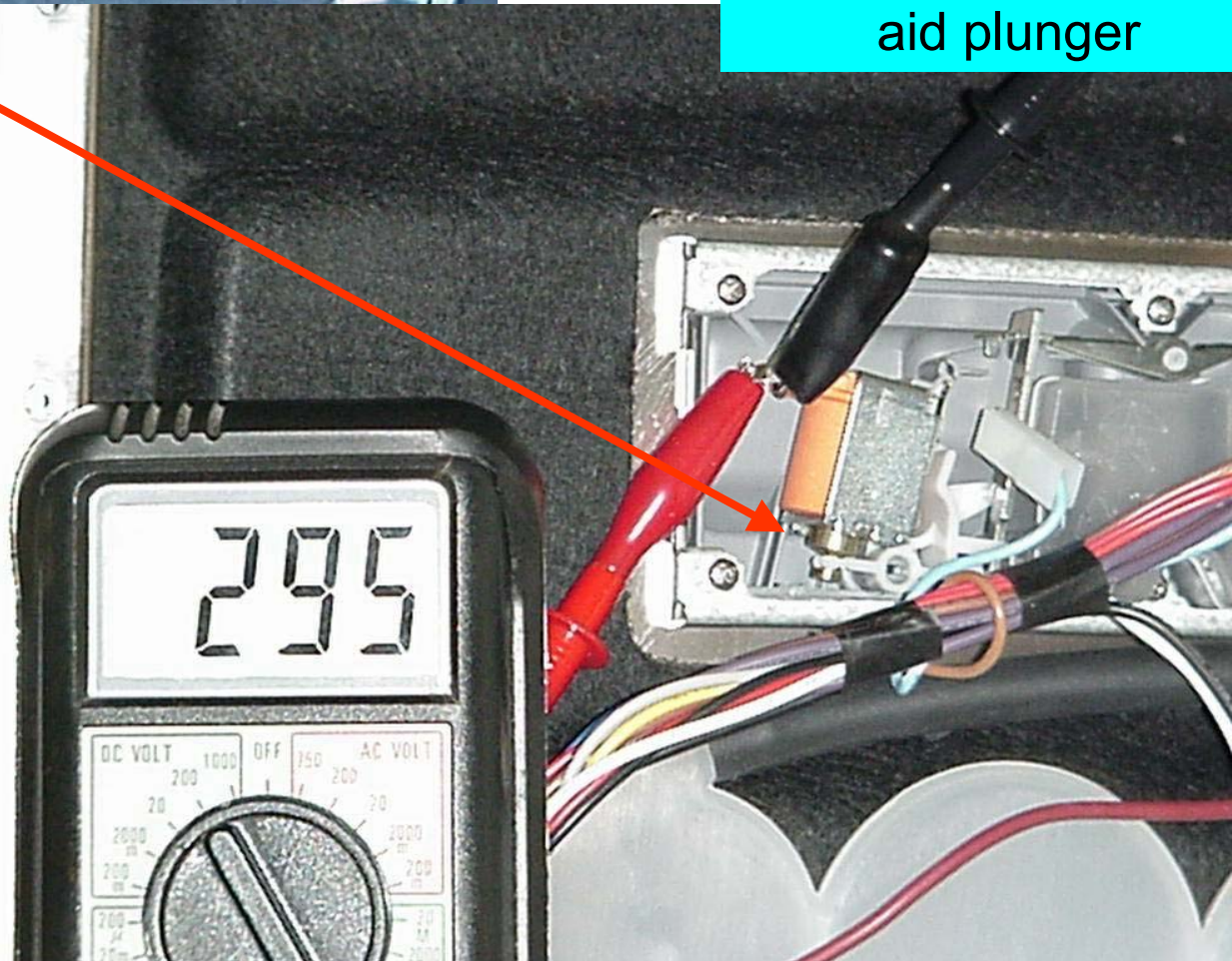
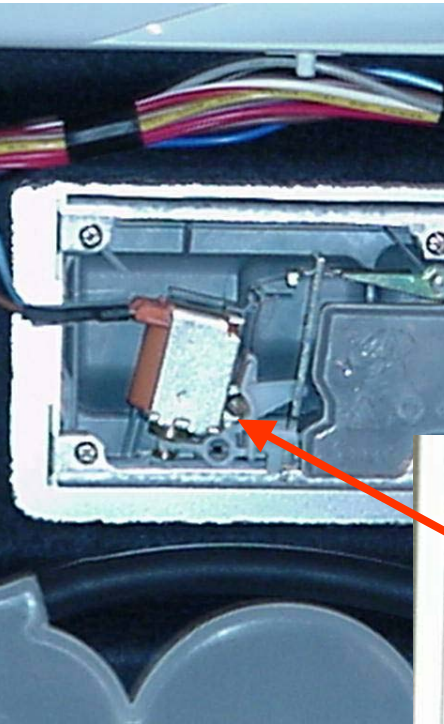
Condensation Tank Drain

Convection Dry Fan Motor Assembly

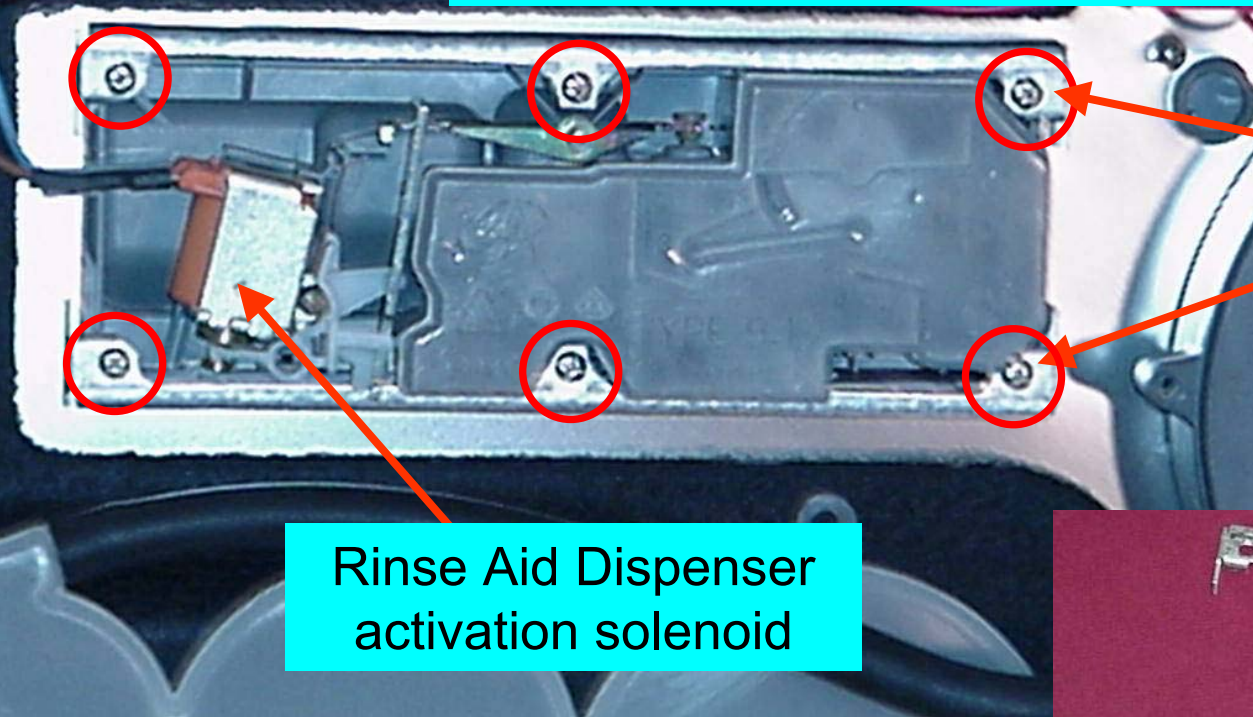


DETERGENT CUP Solenoid Test

Test Solenoid and
check for actuation of
door release and rinse
aid plunger



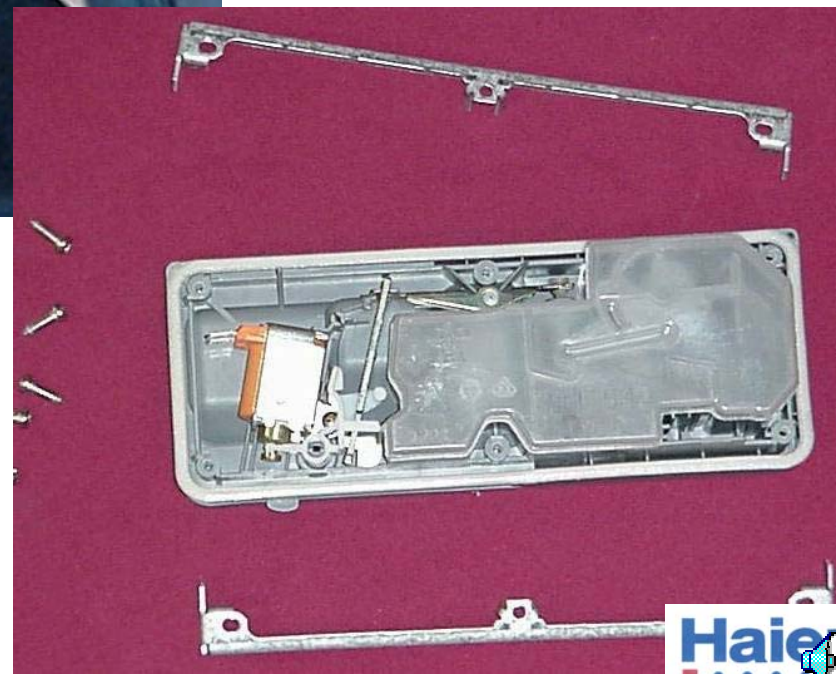
DETERGENT CUP Removal



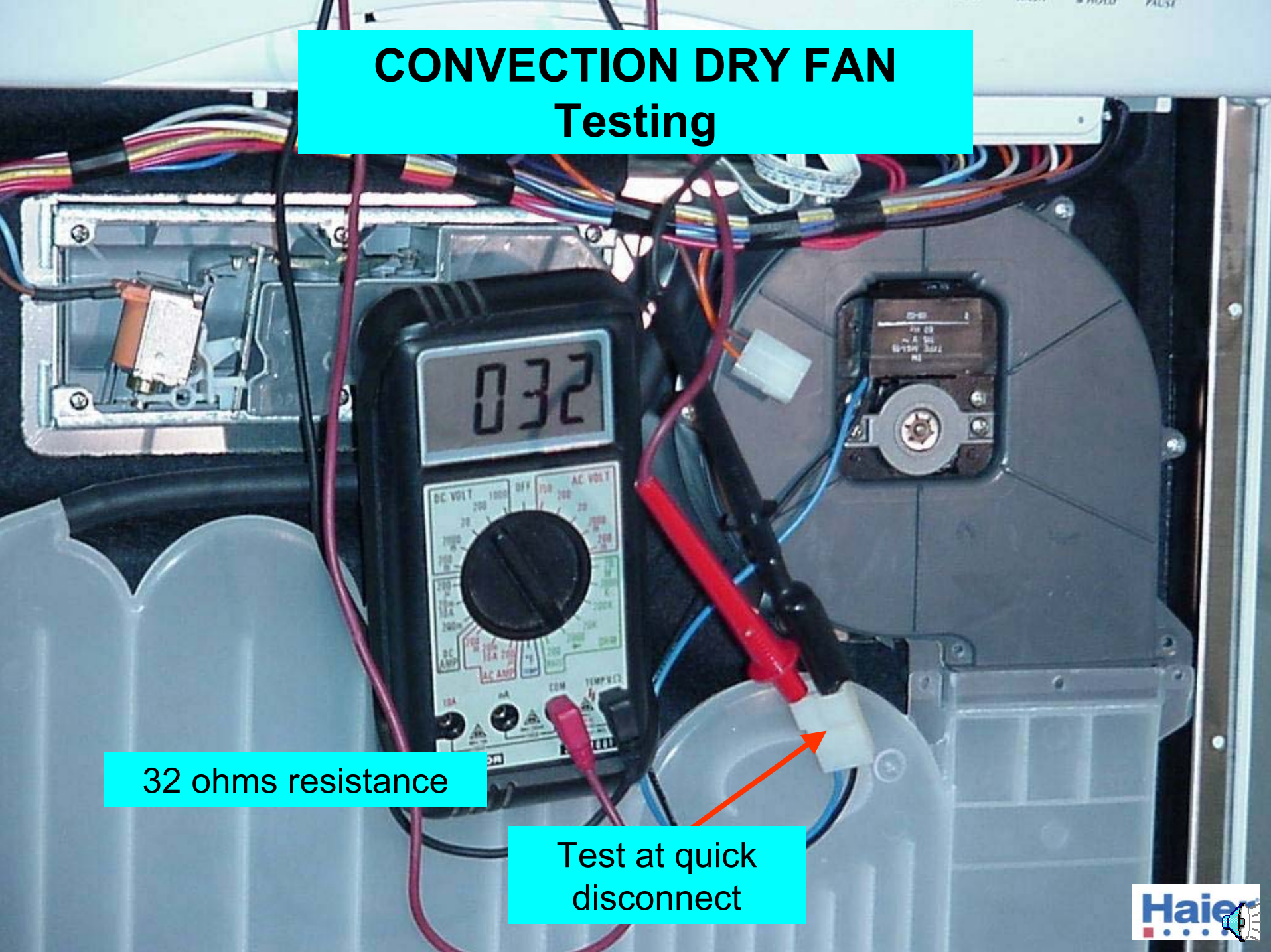
Remove 6 Screws to
remove detergent cup
(Replace as a unit)

Rinse Aid Dispenser
activation solenoid

Replace Dispenser
unit as an assembly



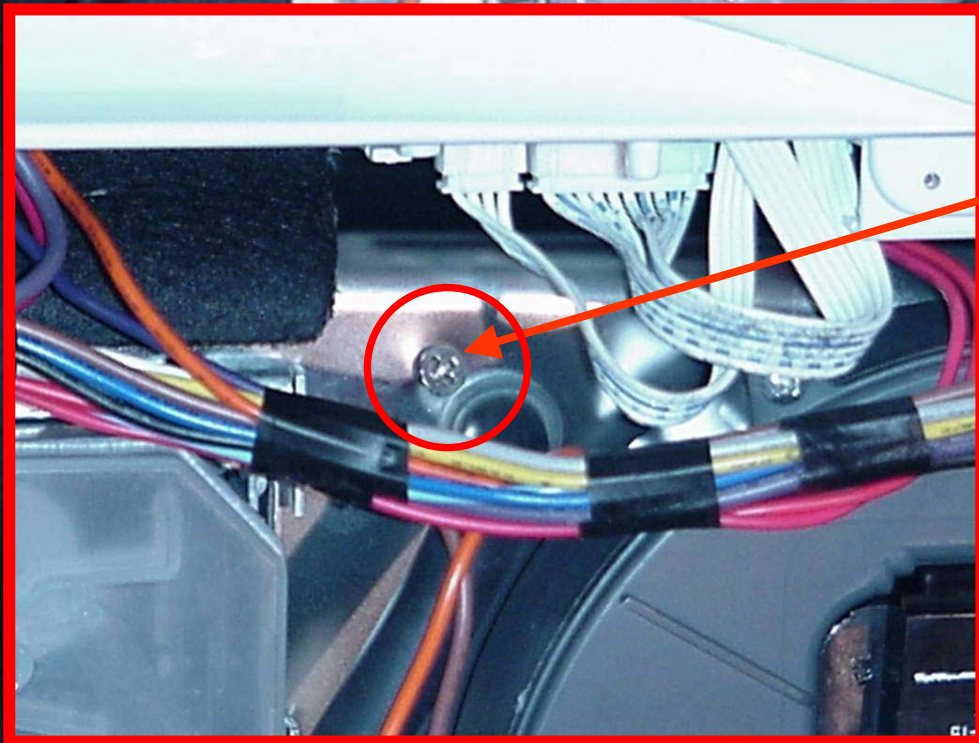
CONVECTION DRY FAN Testing



32 ohms resistance

Test at quick
disconnect

CONVECTION DRY FAN Removal **!! IMPORTANT !!**



Remove cover
retaining screw

CONVECTION DRY FAN Removal

!! CAUTION !!

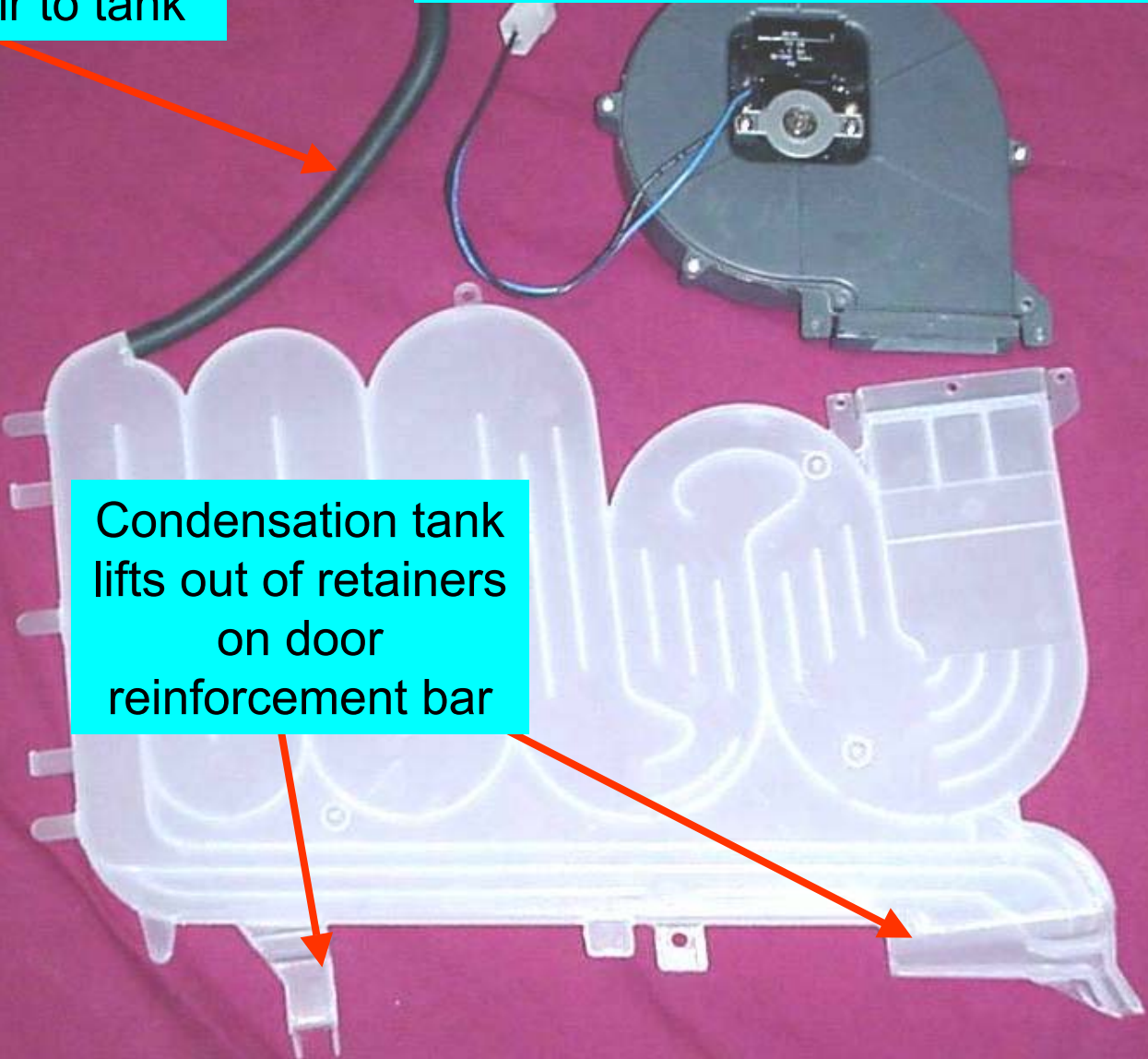
remove cover retaining screw
shown on previous slide before
attempting to remove cover

Rotate Cover
Clockwise

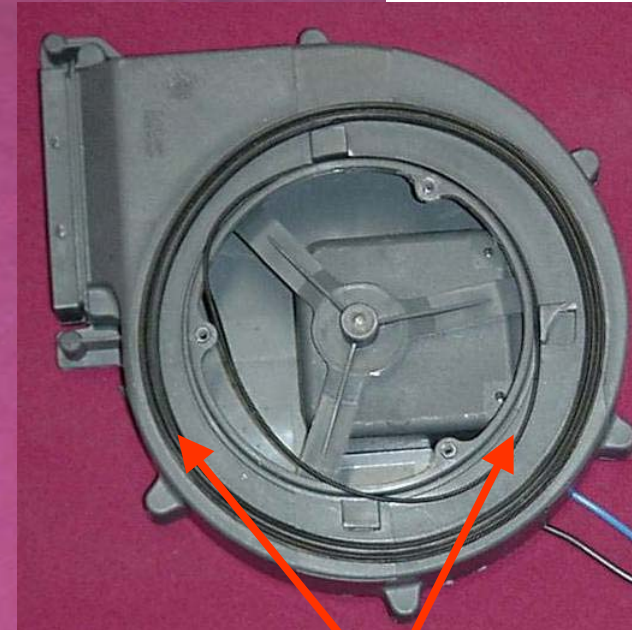
Remove screws
to release fan
motor assembly

CONVECTION DRY FAN Removal

Air to tank



Condensation tank lifts out of retainers on door reinforcement bar



Be certain O-Rings are in place when replacing motor

CONTROL PANEL SERVICE



The control can be dropped down for easy service by pulling the wiring harness out of the retainers on the condensation tank.

CONTROL PANEL SERVICE

Electronic Control

Remove 2 Screws

Pry PC Board off
of posts

CONTROL PANEL SERVICE

Electronic Control Connections



Temperature Sensing Circuit

Line In

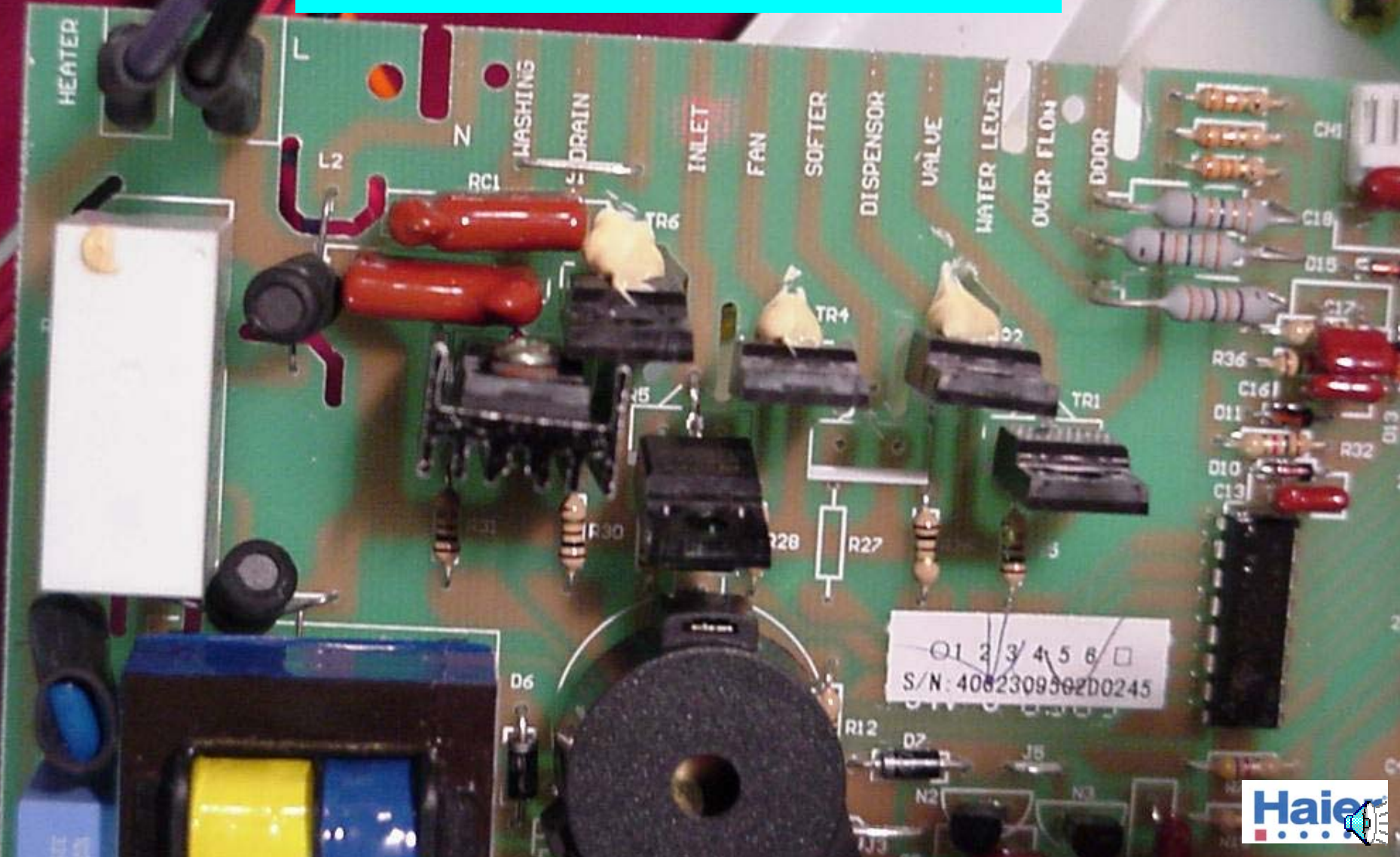
Heater

Control Panel Selector Buttons

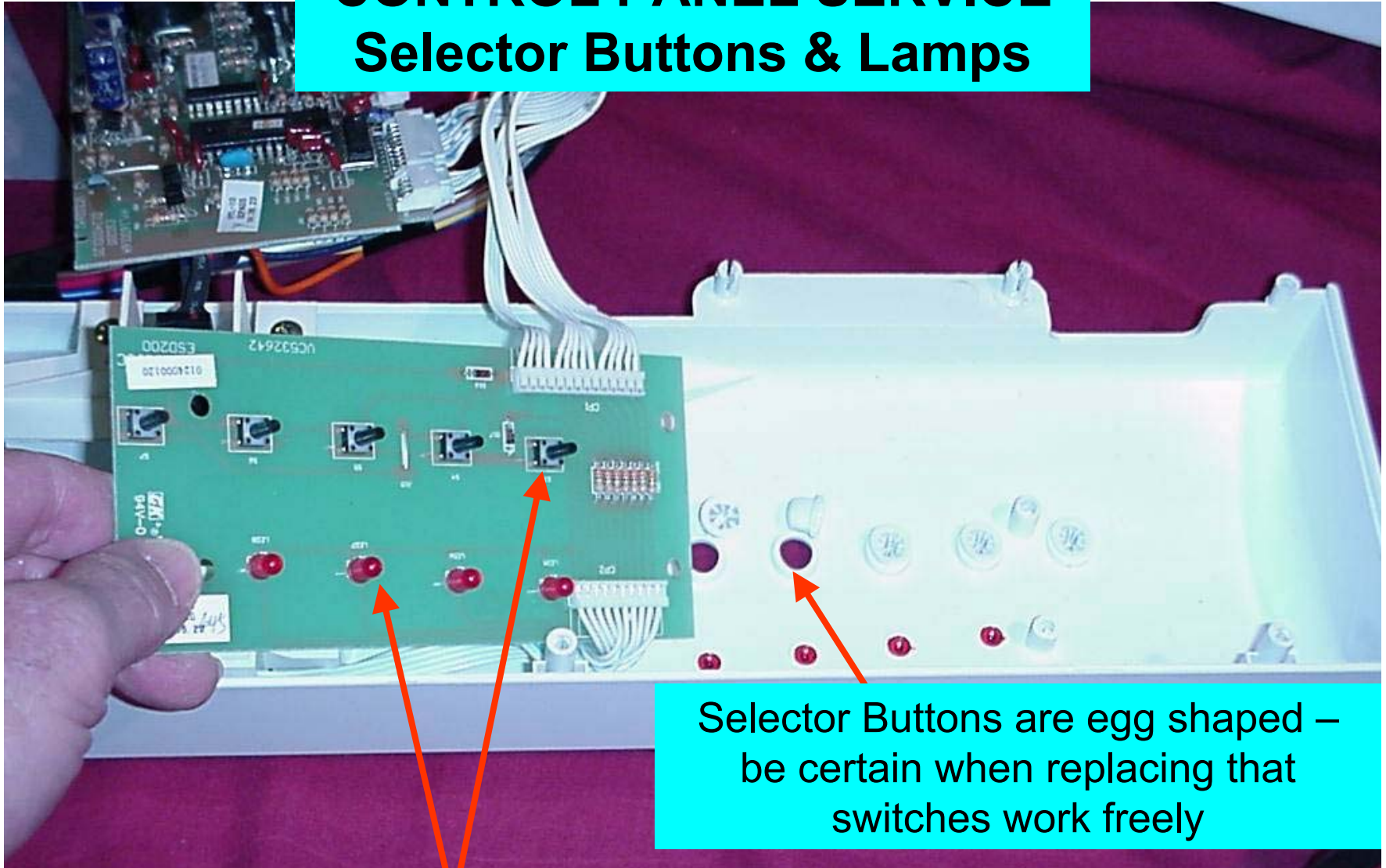
Operational – 120v Connections Valve, Motors, etc except heater

CONTROL PANEL SERVICE

Electronic Control Connections



CONTROL PANEL SERVICE Selector Buttons & Lamps

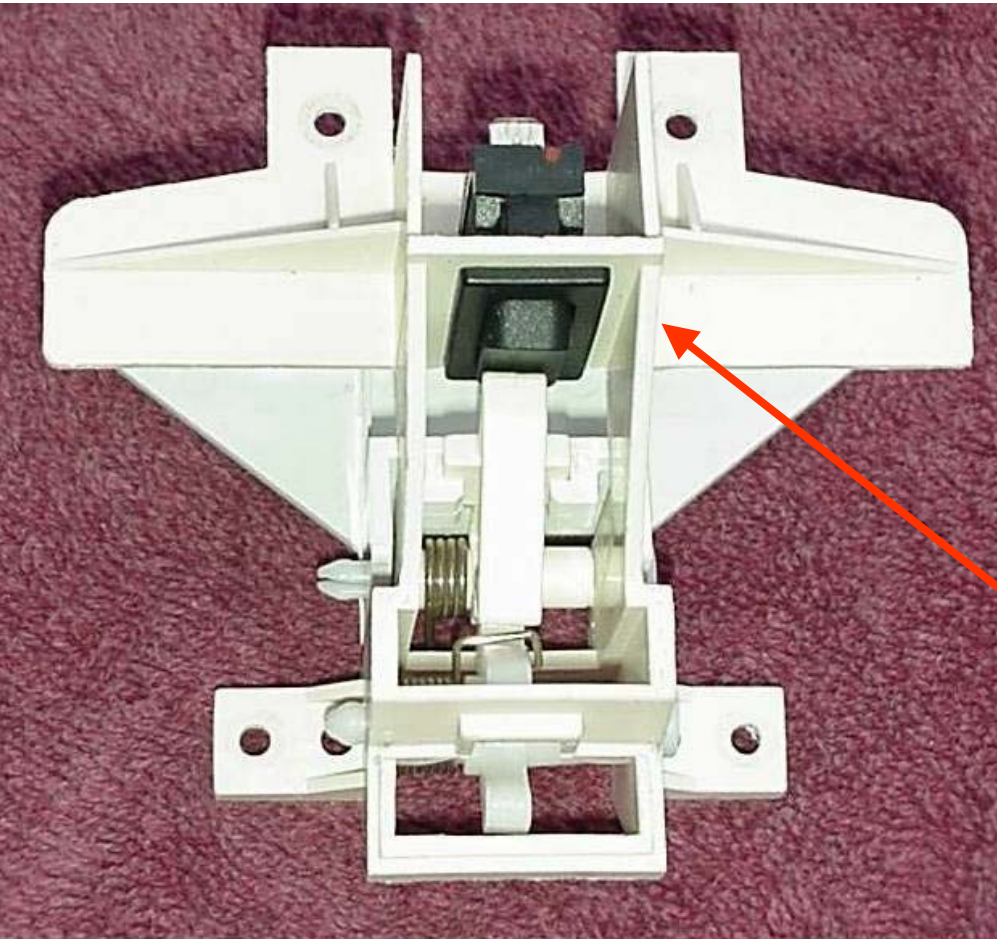


Selector Buttons are egg shaped –
be certain when replacing that
switches work freely

Selector Switches and Lamps

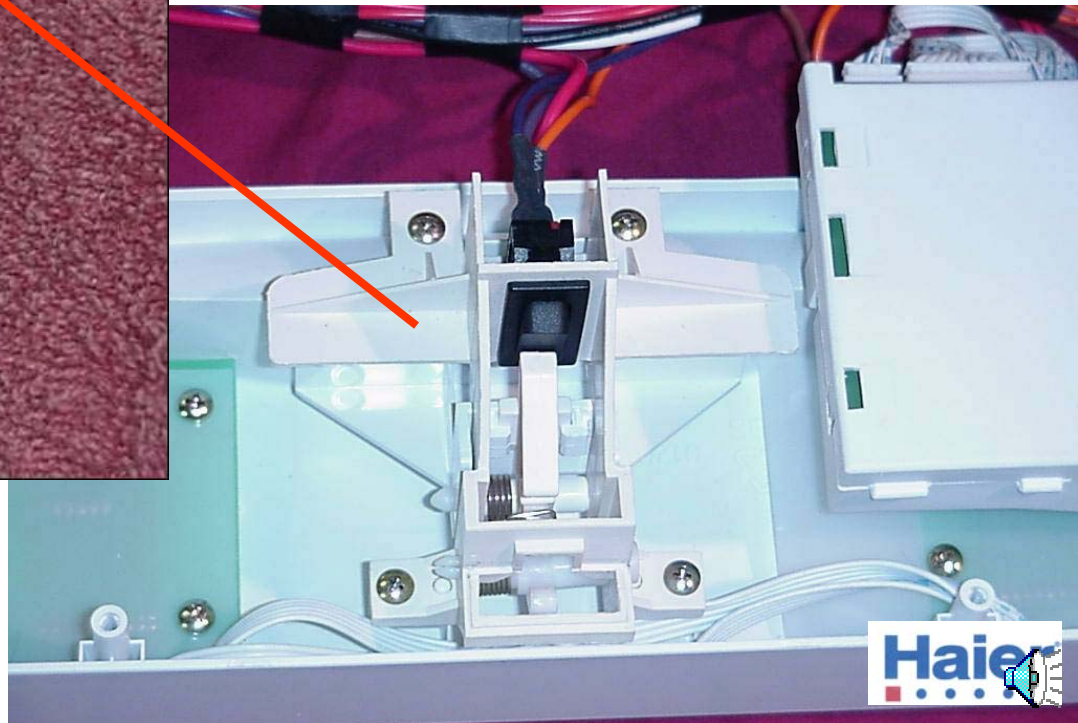
CONTROL PANEL SERVICE

Door Latch Assembly



Door Latch Removed
for service

Door Latch Assembly
in place

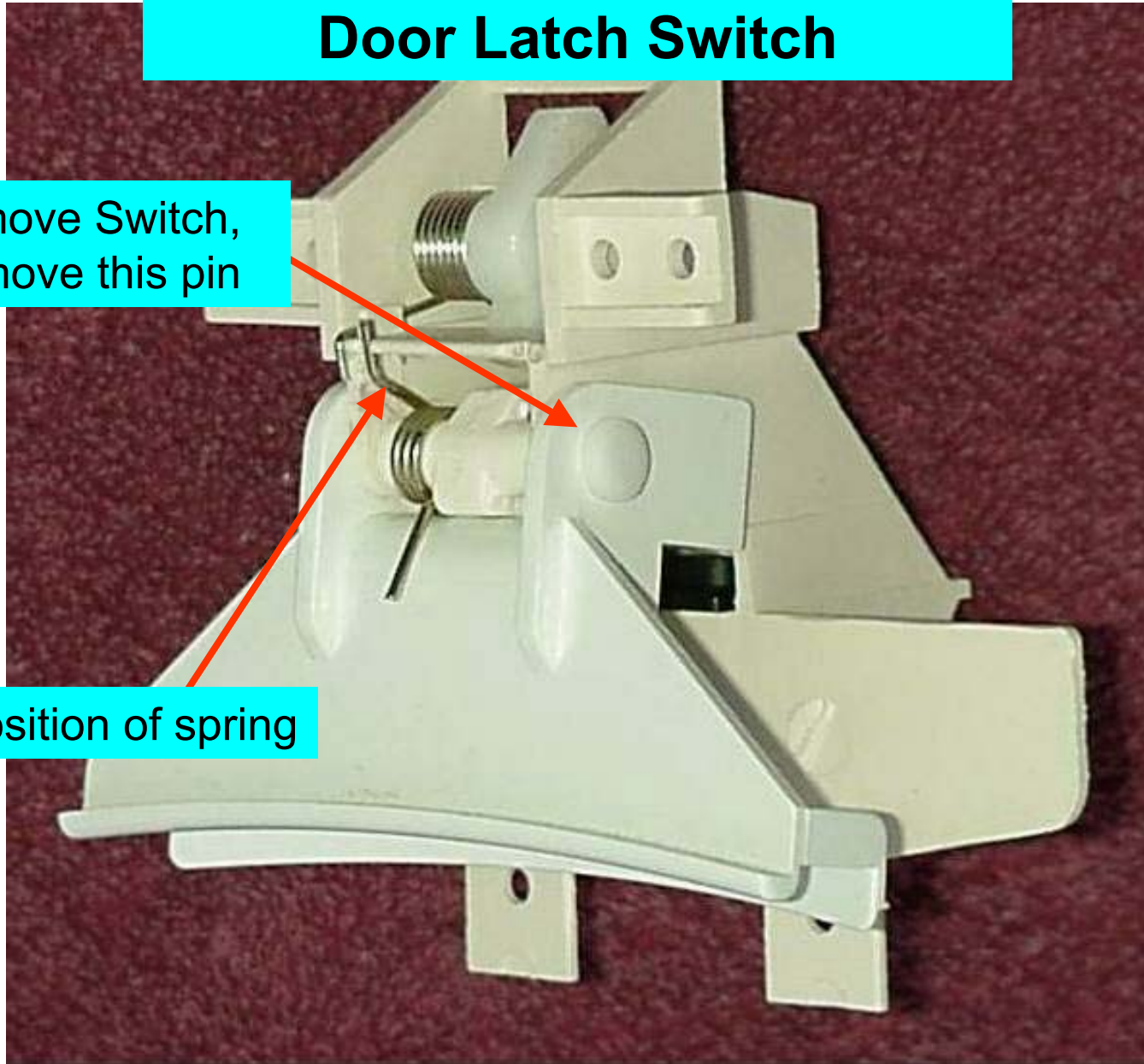


CONTROL PANEL SERVICE

Door Latch Switch

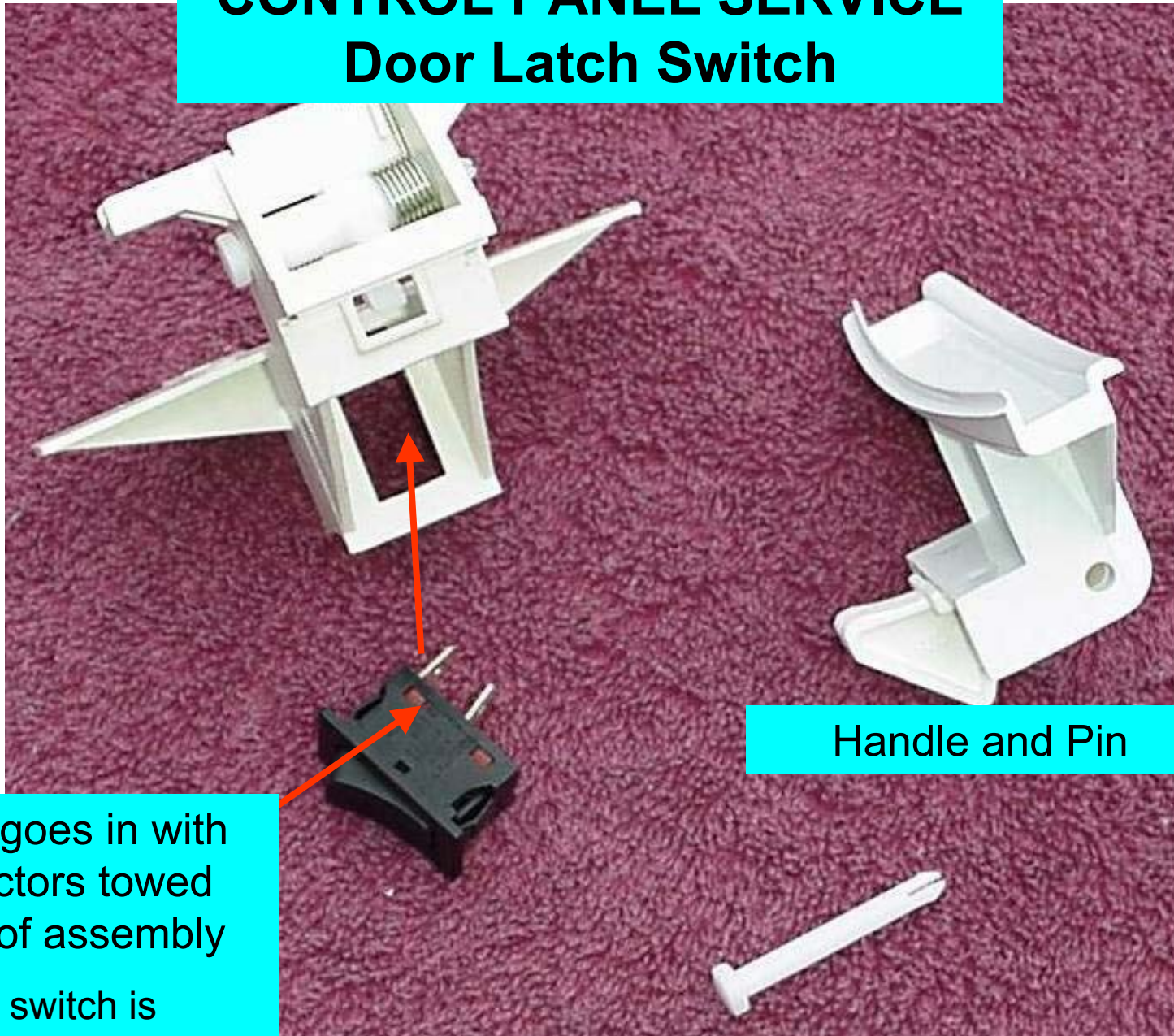
To Remove Switch,
first remove this pin

Note position of spring



CONTROL PANEL SERVICE

Door Latch Switch

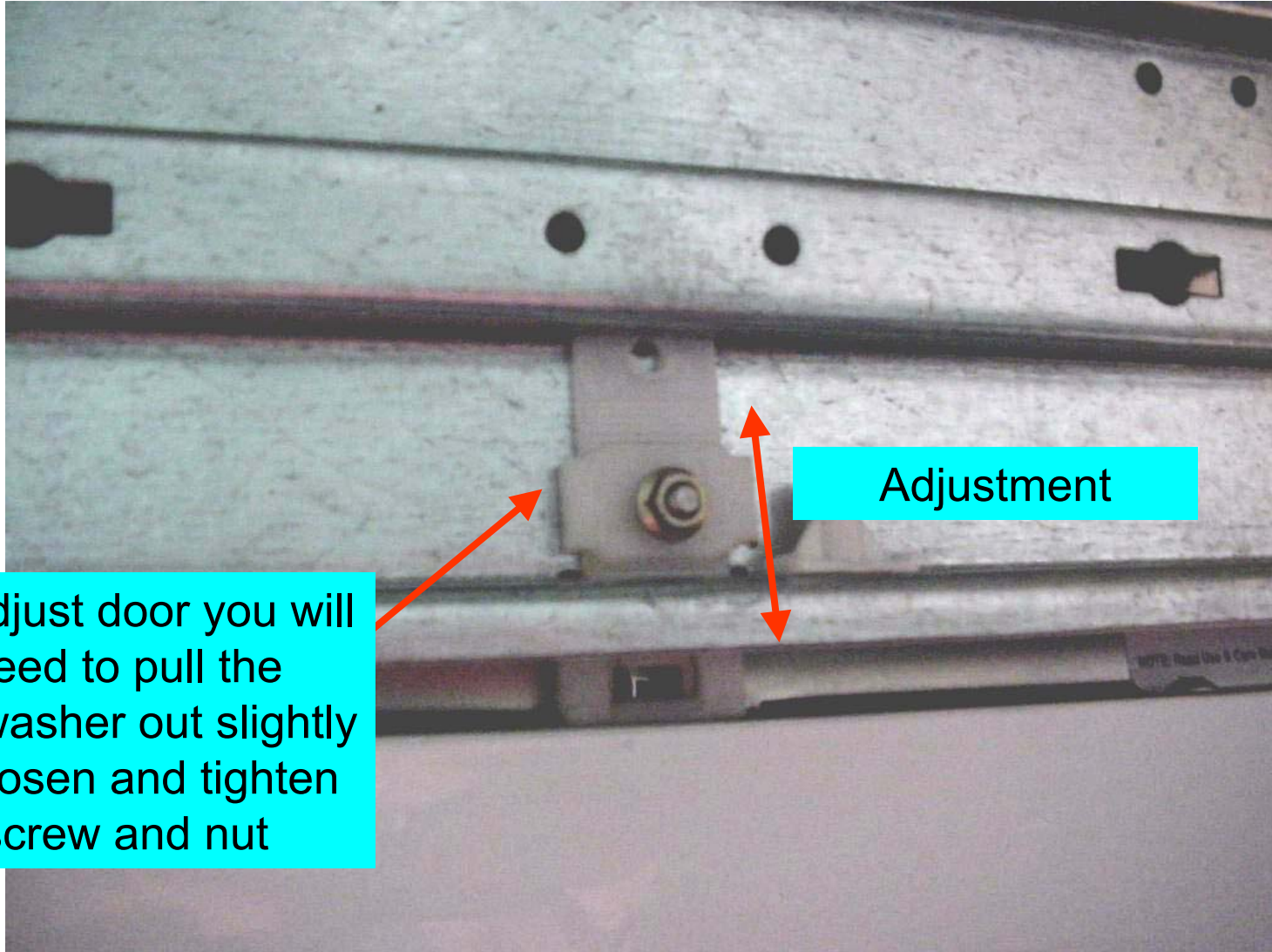


Handle and Pin

Switch goes in with
connectors toward
center of assembly

The switch is
Normally Closed

DOOR LATCH STRIKE



To adjust door you will need to pull the dishwasher out slightly to loosen and tighten screw and nut

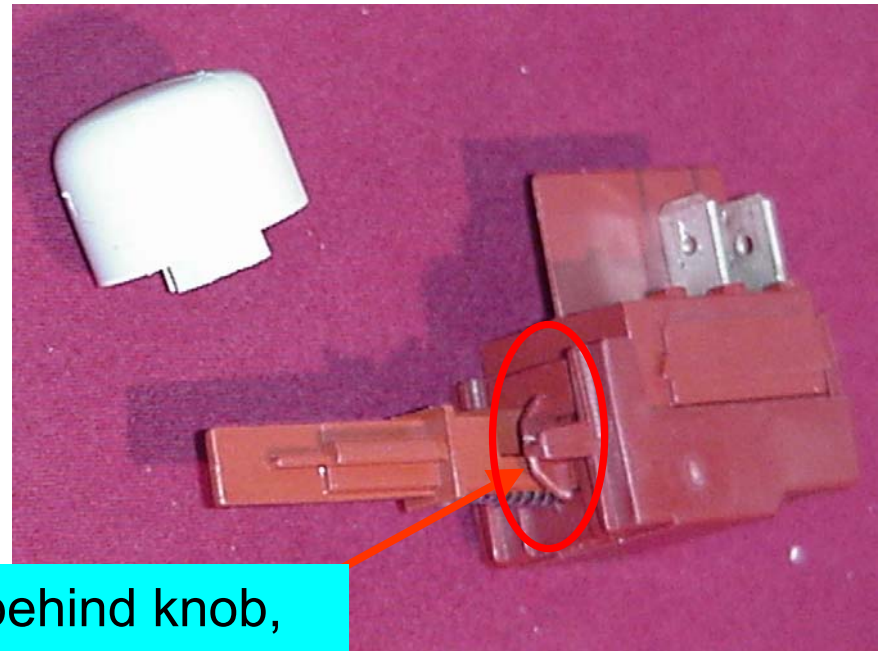
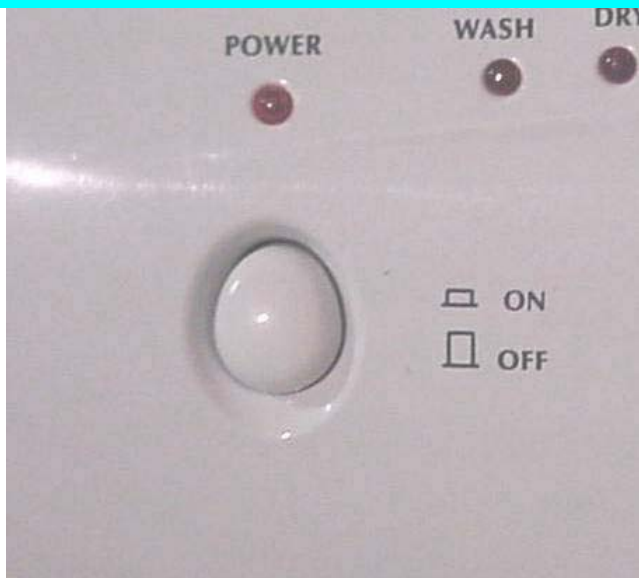
Adjustment

CONTROL PANEL SERVICE

Power Switch



Carefully pry knob off of shaft, protecting the face of the control panel with a soft cloth



From behind knob, bend mounting fins in and push knob through control panel

CONTROL PANEL SERVICE

Power Switch

Switch OUT -- OFF

Switch IN -- ON

OFF

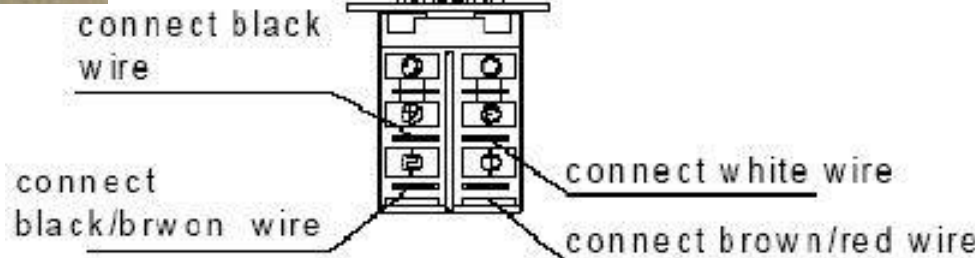
ON

Open

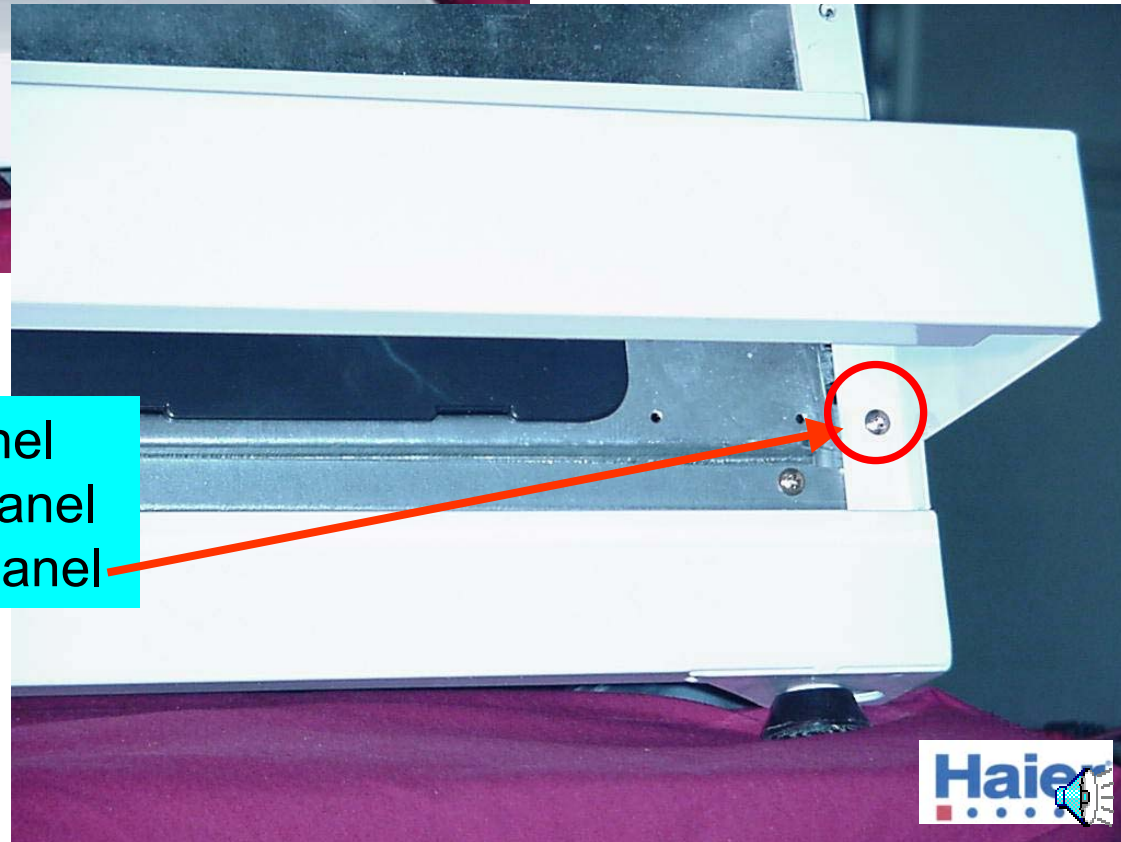
Open

Closed

Closed

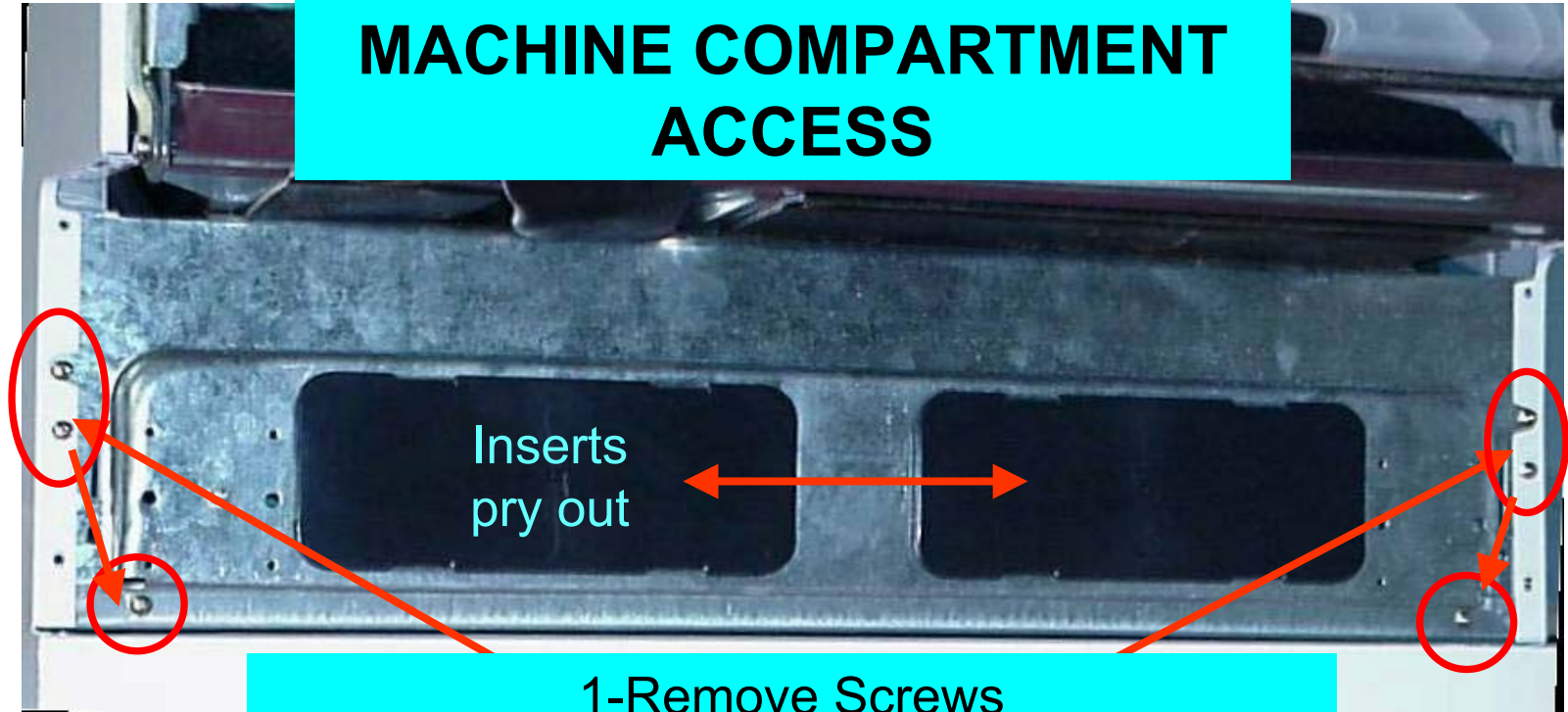


TOE KICK REMOVAL

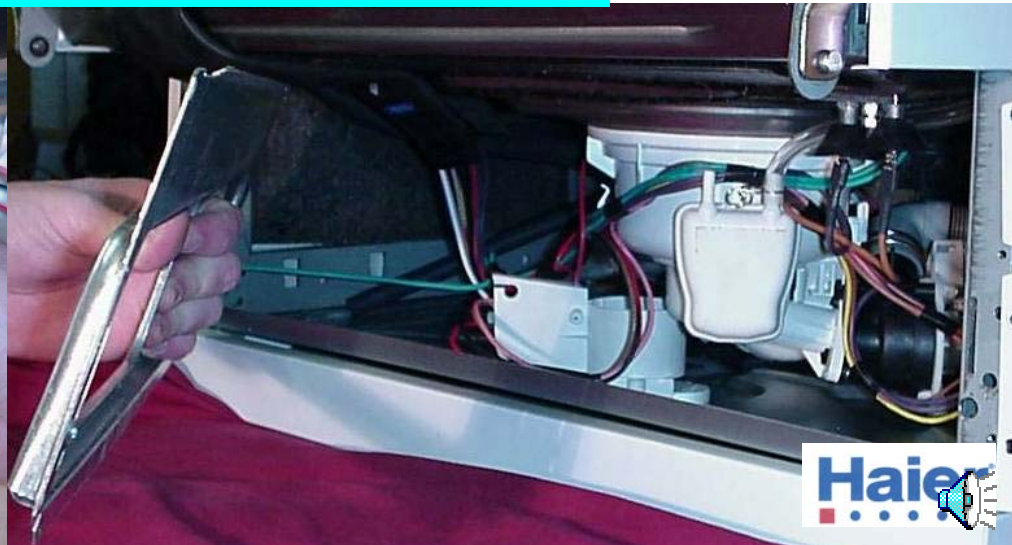
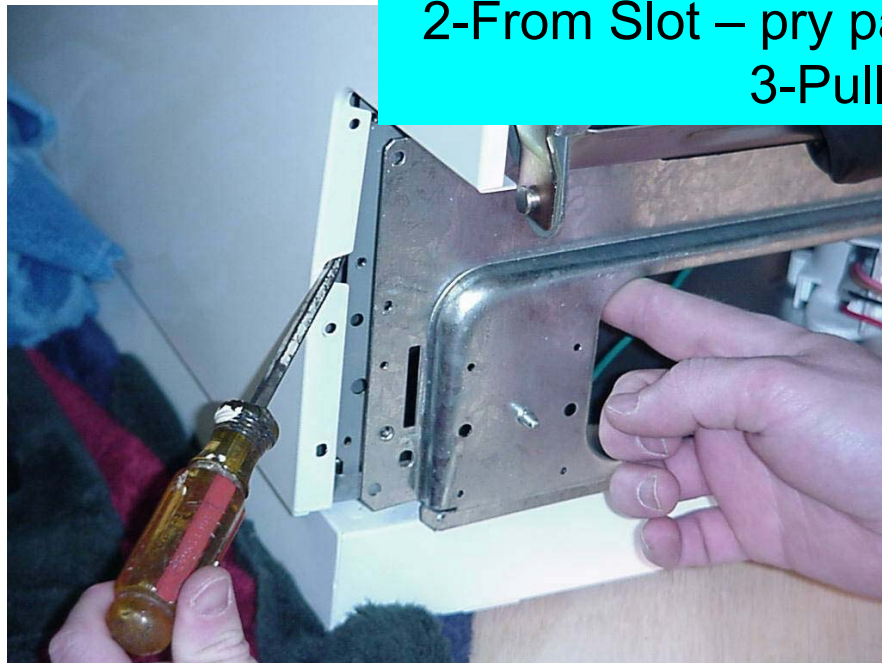


- 1—Remove Outer Door Panel
- 2--Remove 2 screws above panel
- 3—Remove 2 screws below panel

MACHINE COMPARTMENT ACCESS



- 1-Remove Screws
- 2-From Slot – pry panel out from both sides
- 3-Pull panel out



MACHINE COMPARTMENT

Wiring
Harness

Temp sensing
Thermistor

Heater
connections

Fill Valve

Wash motor
and pump

Upper wash
only valve

Heater
thermostat
(at rear)

Tub over flow

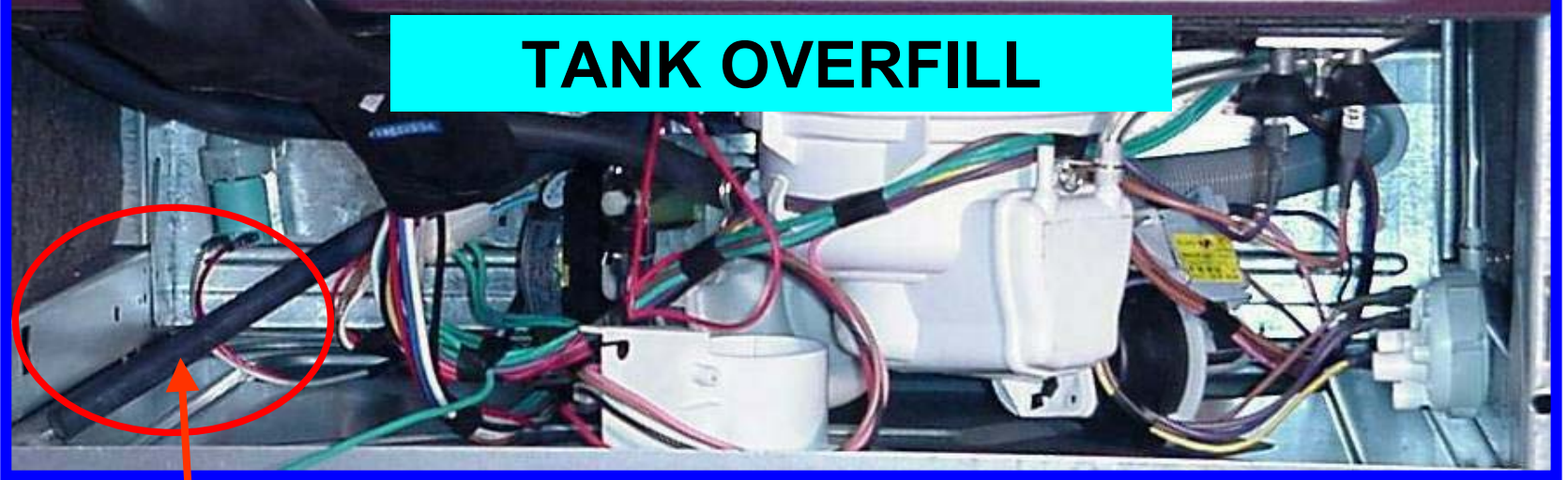
Overflow safety
switch and float

Water level
pressure switch

Bottom catch pan

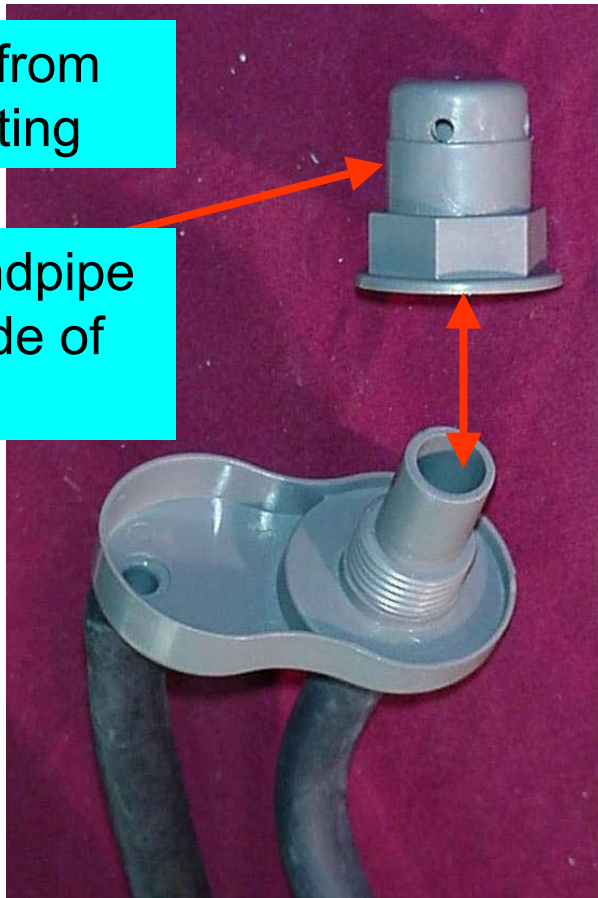
Drain motor
and pump

TANK OVERFILL



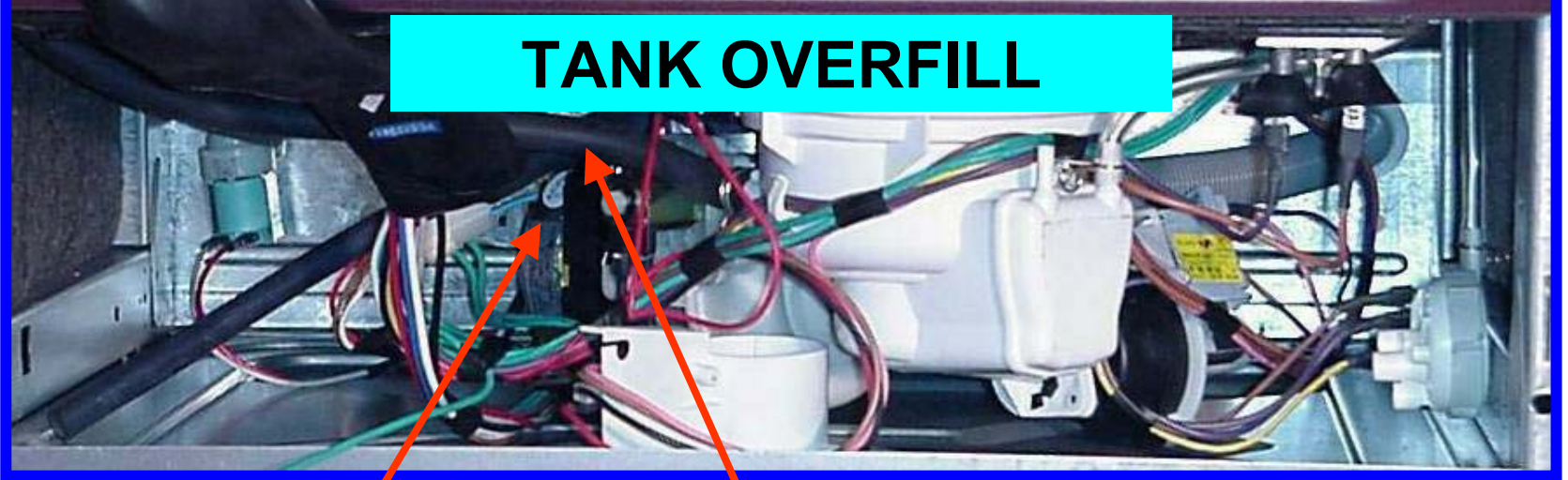
Drain hose from
overflow fitting

Cap and standpipe
located inside of
tank

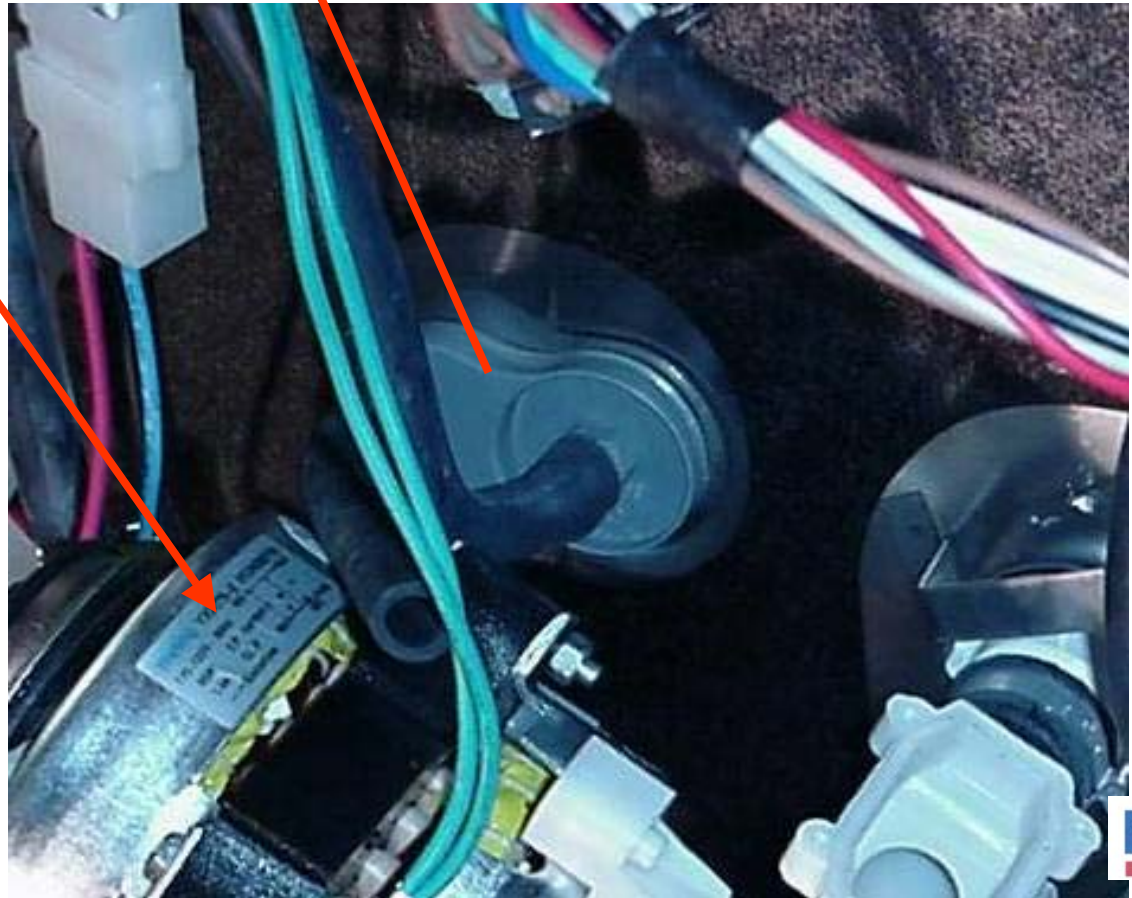


The tank is fitted with an overflow fitting and drain hose. In the event of an overflow or excessive foaming, water will escape through a fitting in the bottom of the tank. This will raise the float and start a pump-out and shut-down procedure. Once water is removed from the base pan, the dishwasher can be restarted.

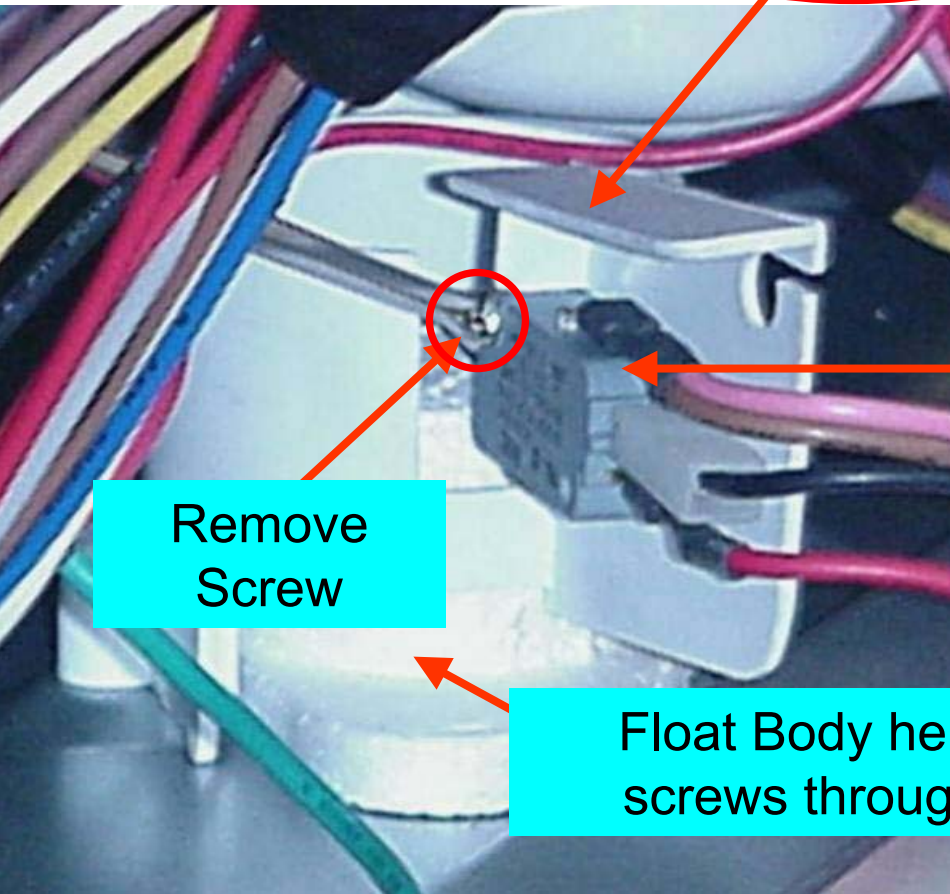
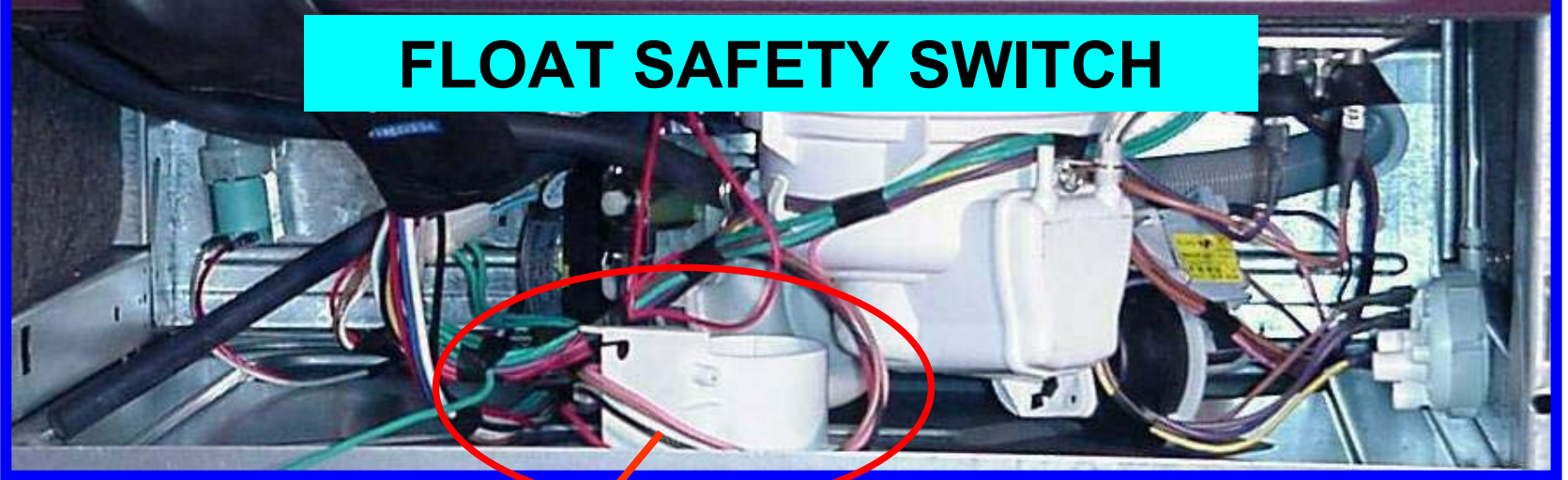
TANK OVERFILL



Pump Motor

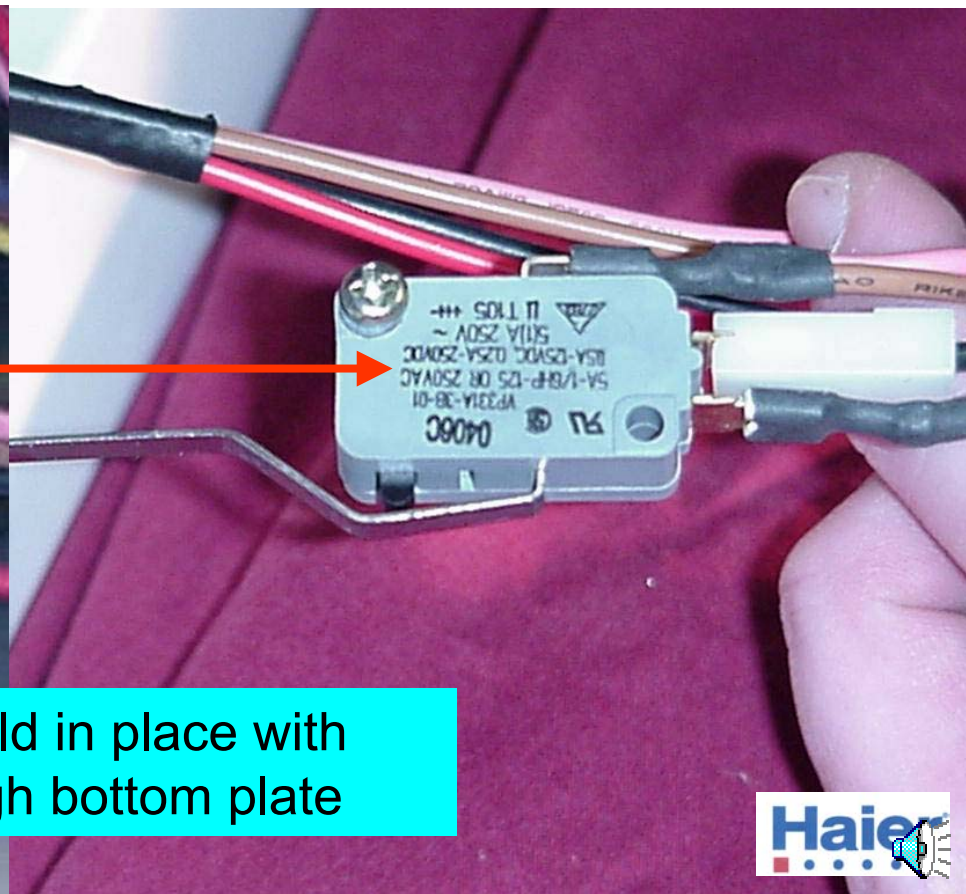


FLOAT SAFETY SWITCH

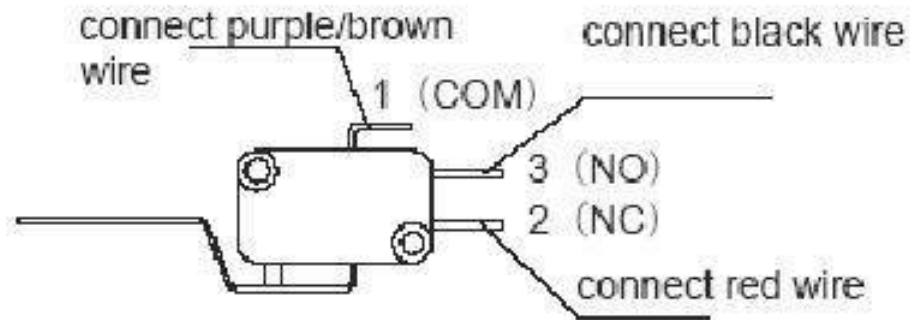
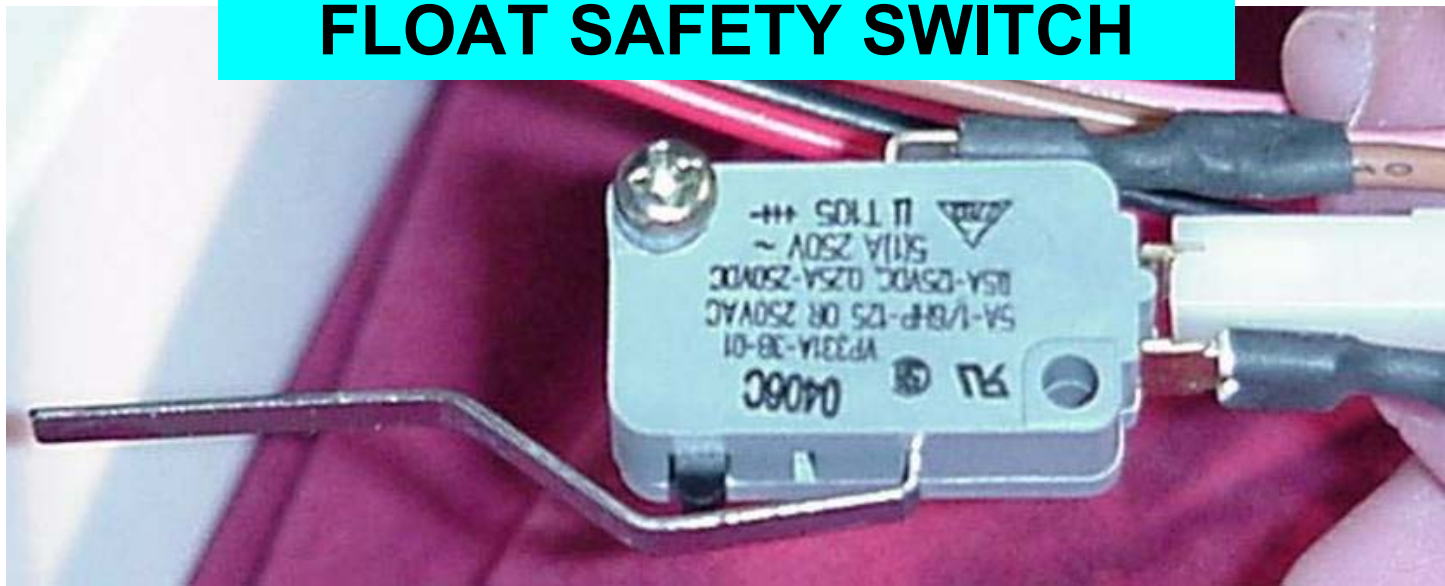


Remove
Screw

Float Body held in place with
screws through bottom plate



FLOAT SAFETY SWITCH

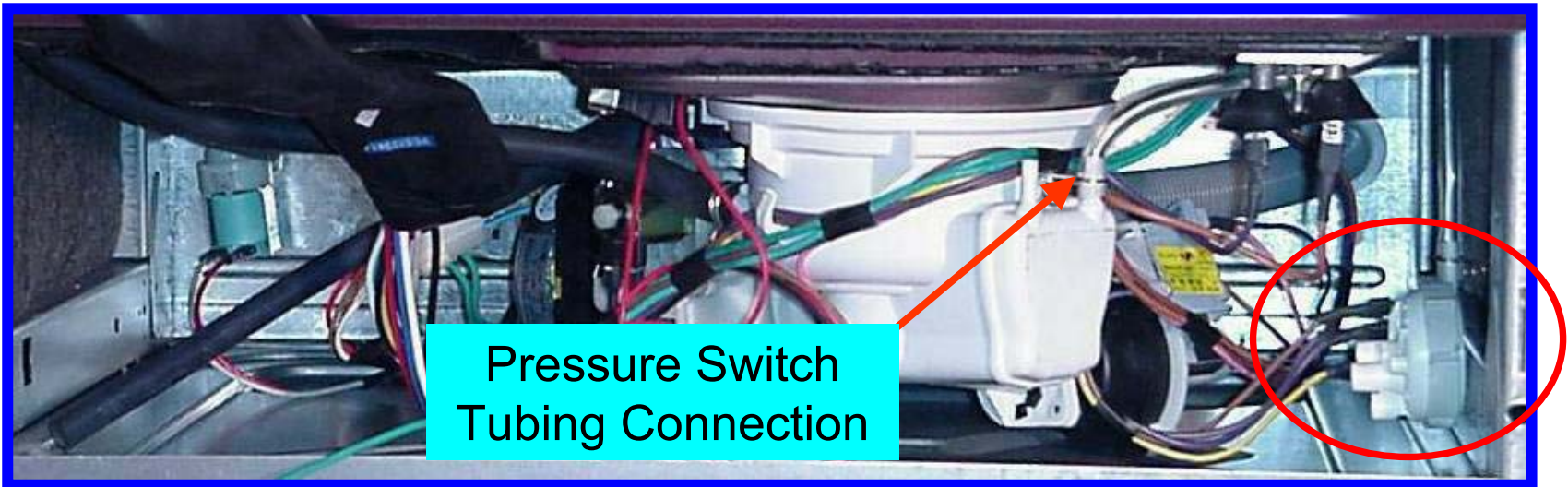


In the NC mode, the switch allows for normal fill and wash cycles.

If the float senses water in the base pan, power bypasses the fill valve and activates through the pc board a drain and alarm cycle.

The dishwasher will not restart until the float drops.

WATER LEVEL PRESSURE SWITCH



Principal of Operation

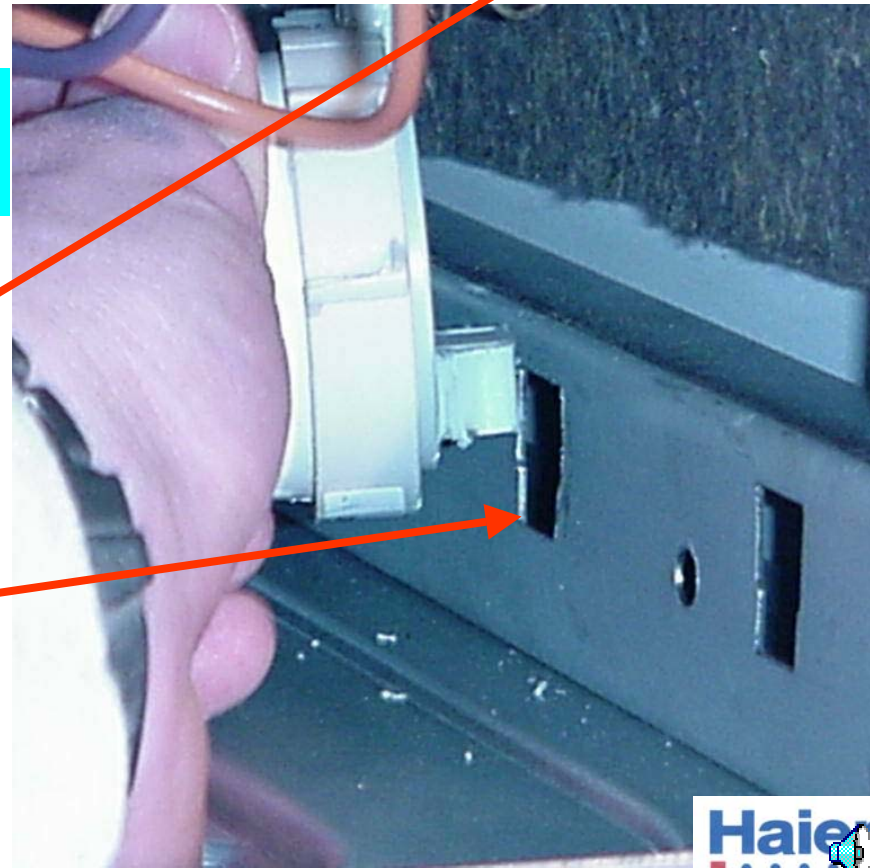
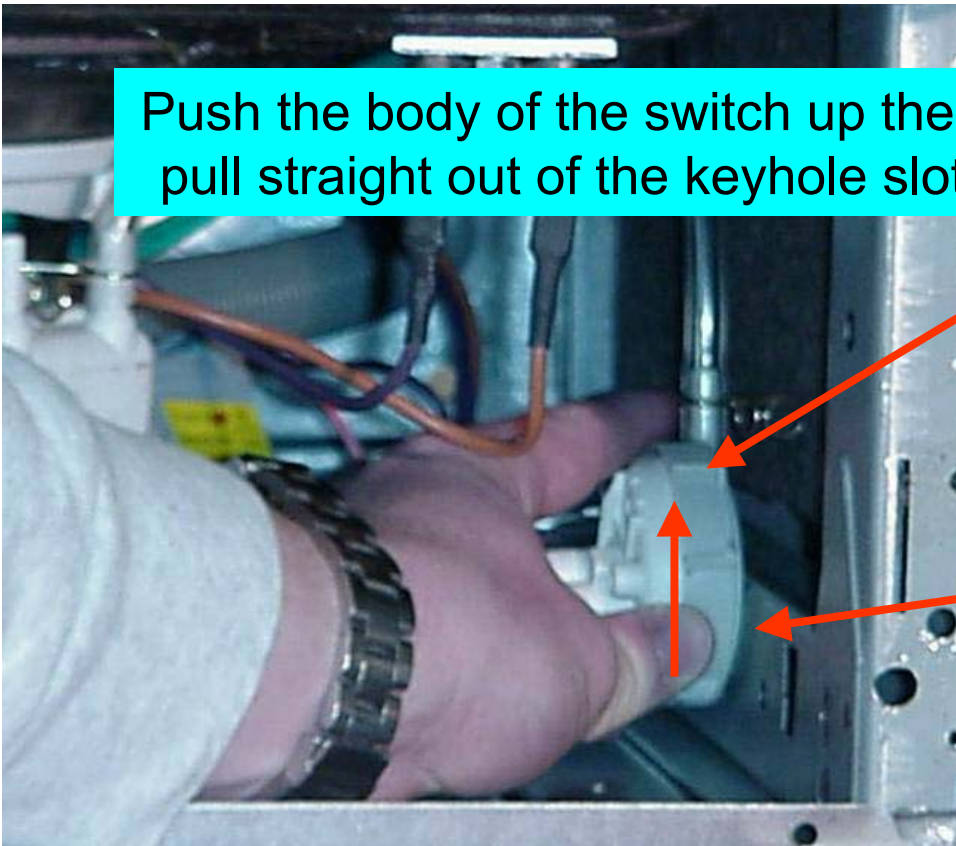
The water level is controlled by a pressure switch located on the right side of the base and connected through a plastic tube to the water sump. This switch controls both the fill and drain cycles.

The tubing is routed over a vent located behind the right side panel and accessed by removing the panel.

WATER LEVEL PRESSURE SWITCH



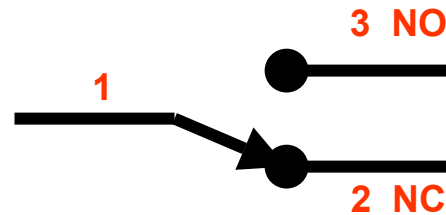
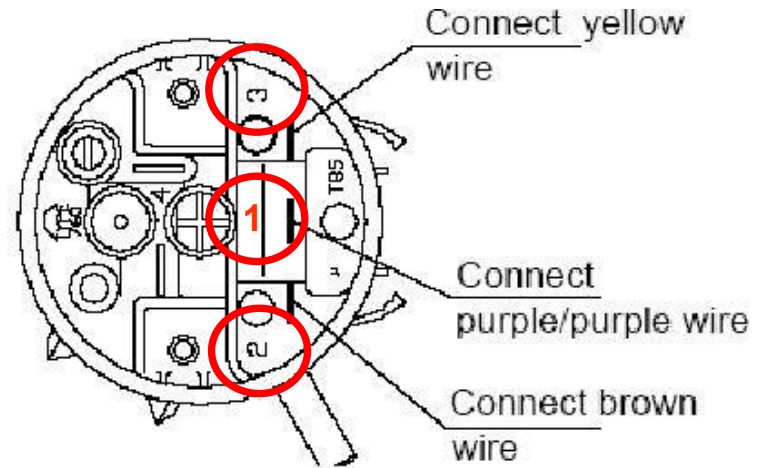
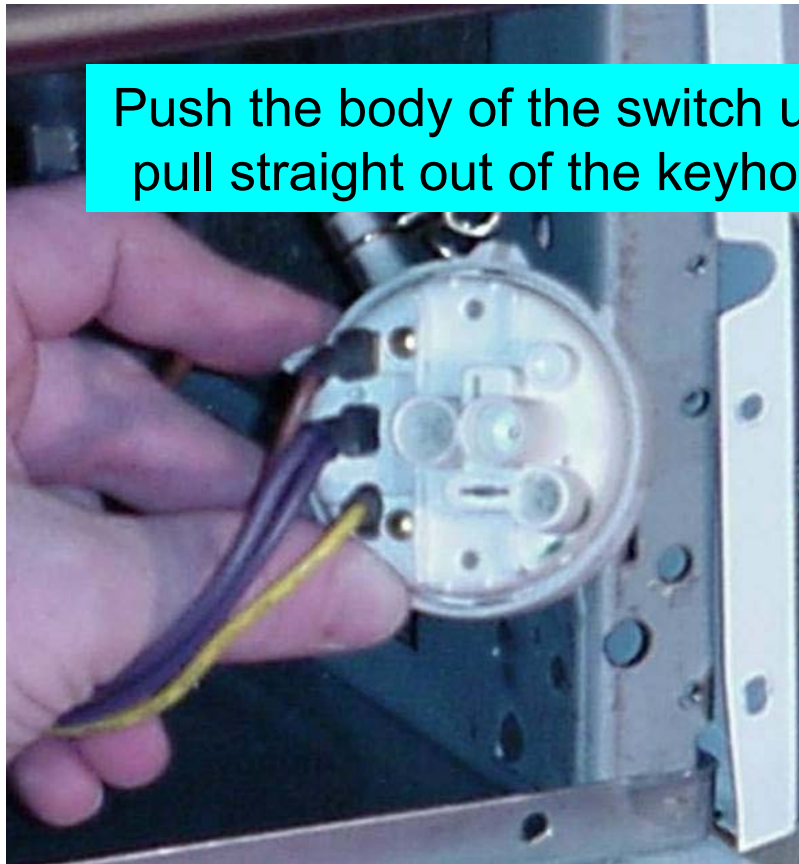
Push the body of the switch up then pull straight out of the keyhole slot



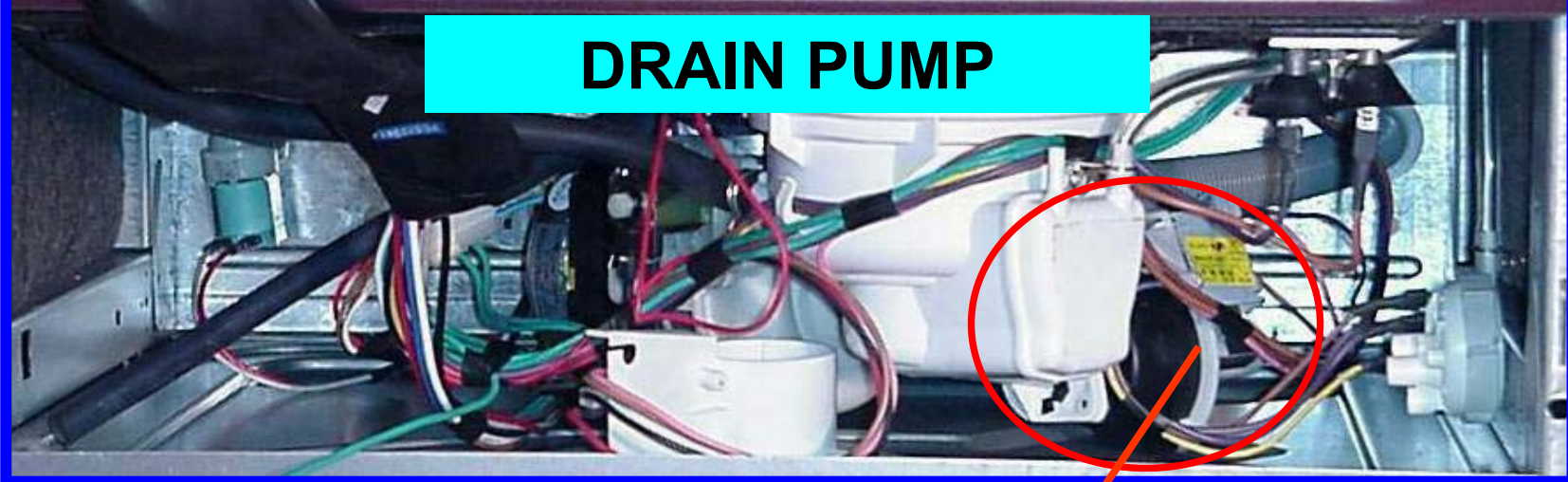
WATER LEVEL PRESSURE SWITCH



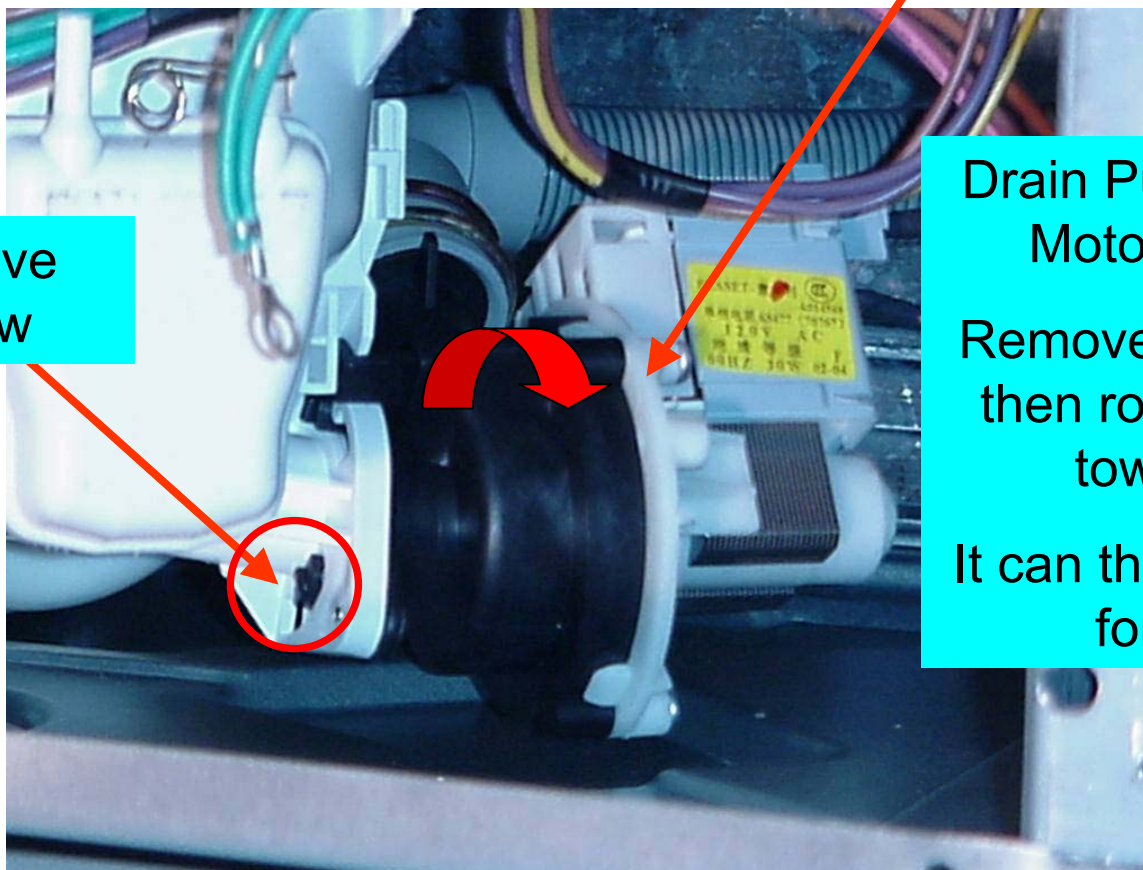
Push the body of the switch up then pull straight out of the keyhole slot



DRAIN PUMP



Remove
Screw

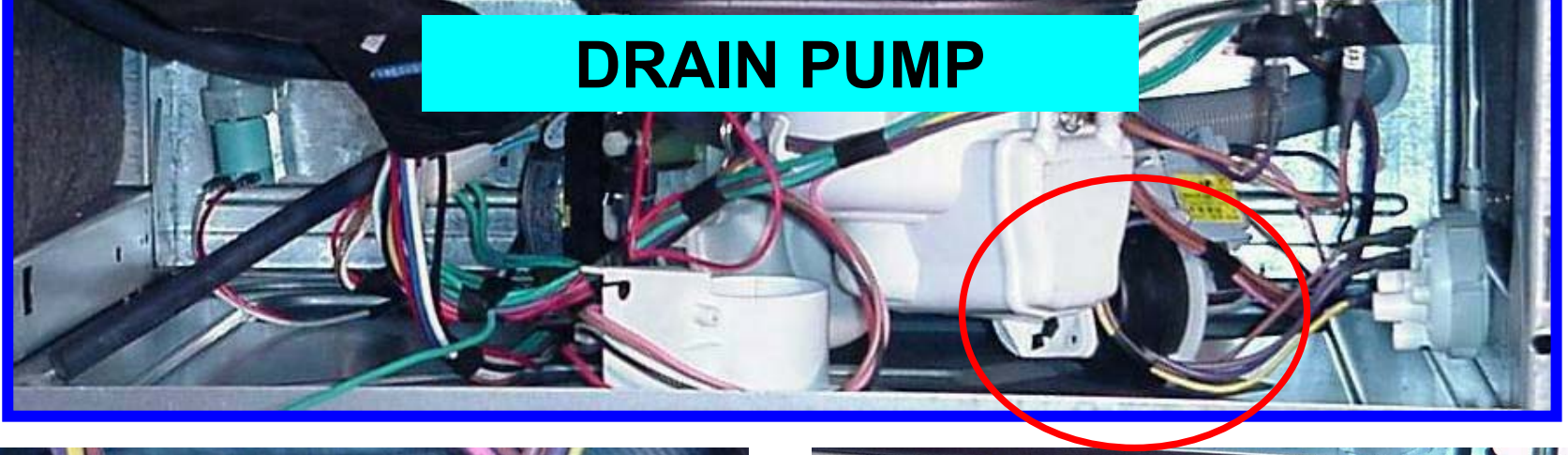


Drain Pump Assembly
Motor and Pump

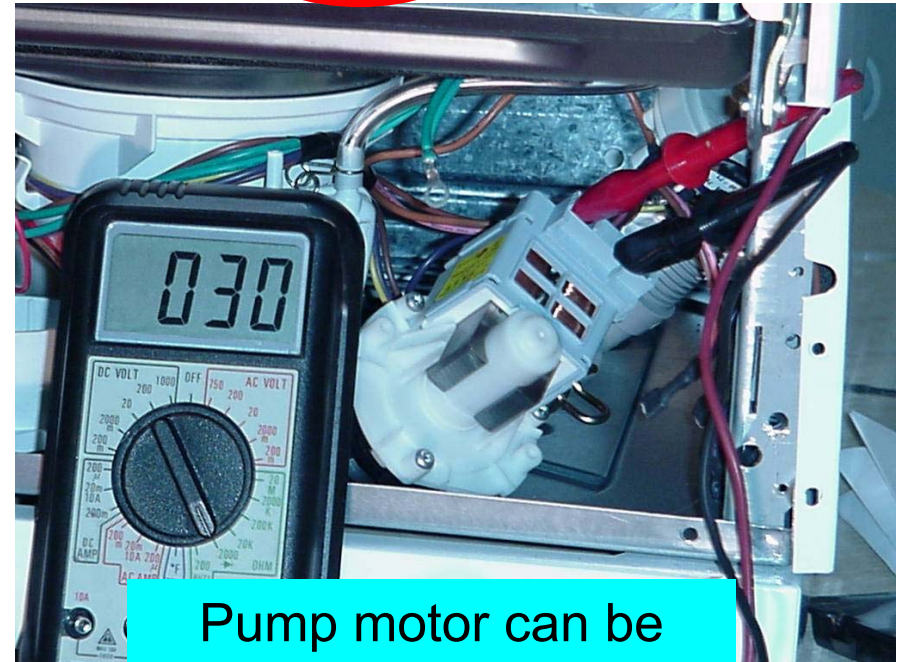
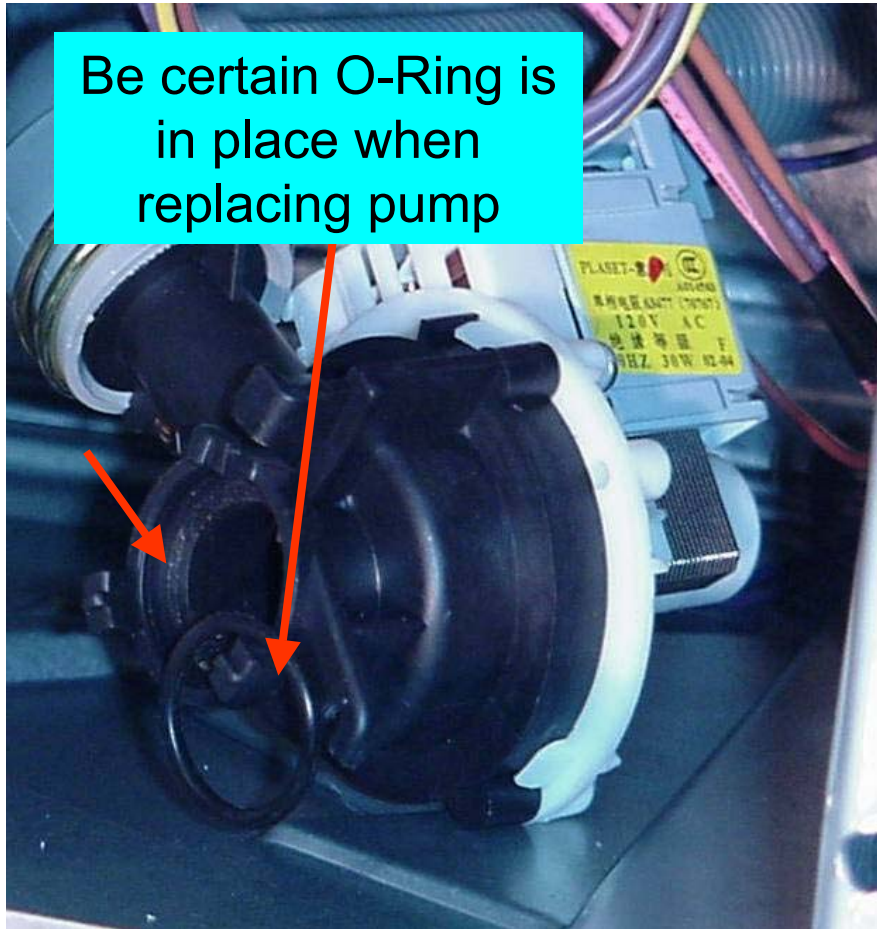
Remove locking screw
then rotate the pump
towards you.

It can then be slid back
for service.

DRAIN PUMP

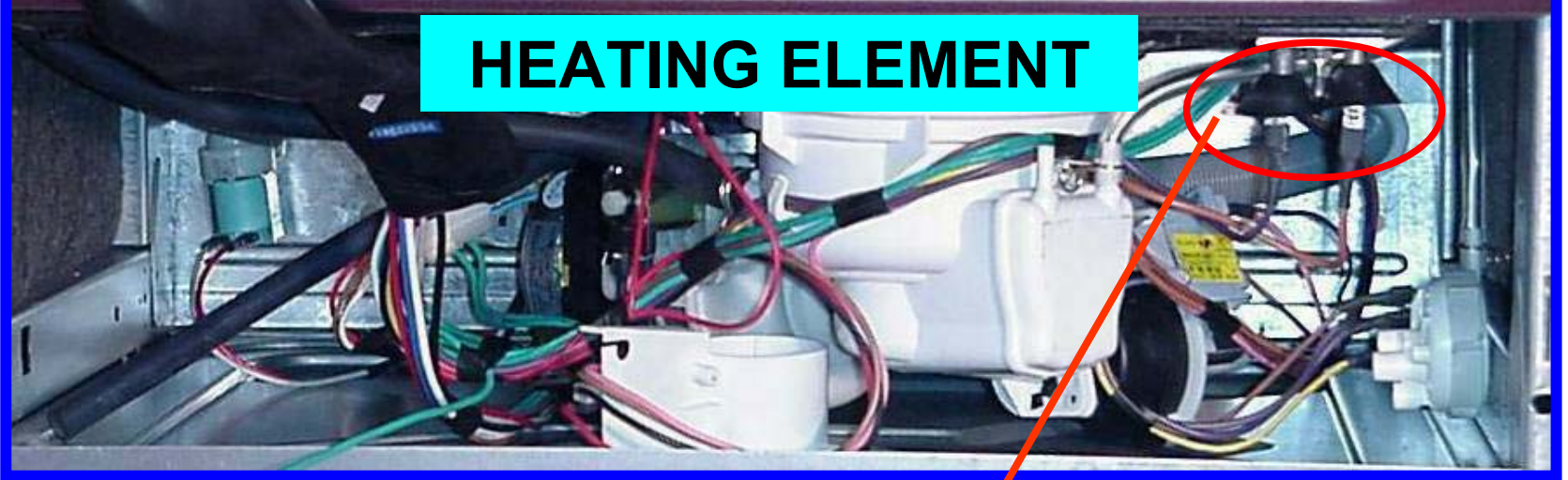


Be certain O-Ring is in place when replacing pump

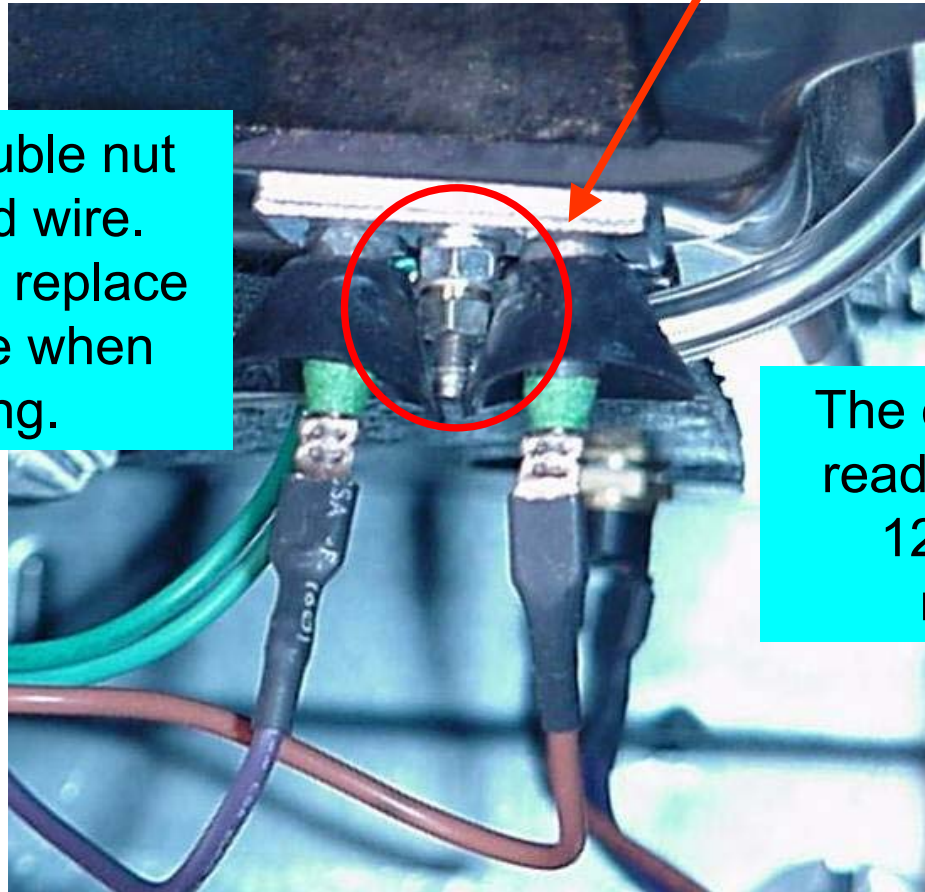


Pump motor can be tested without removing from sump housing

HEATING ELEMENT

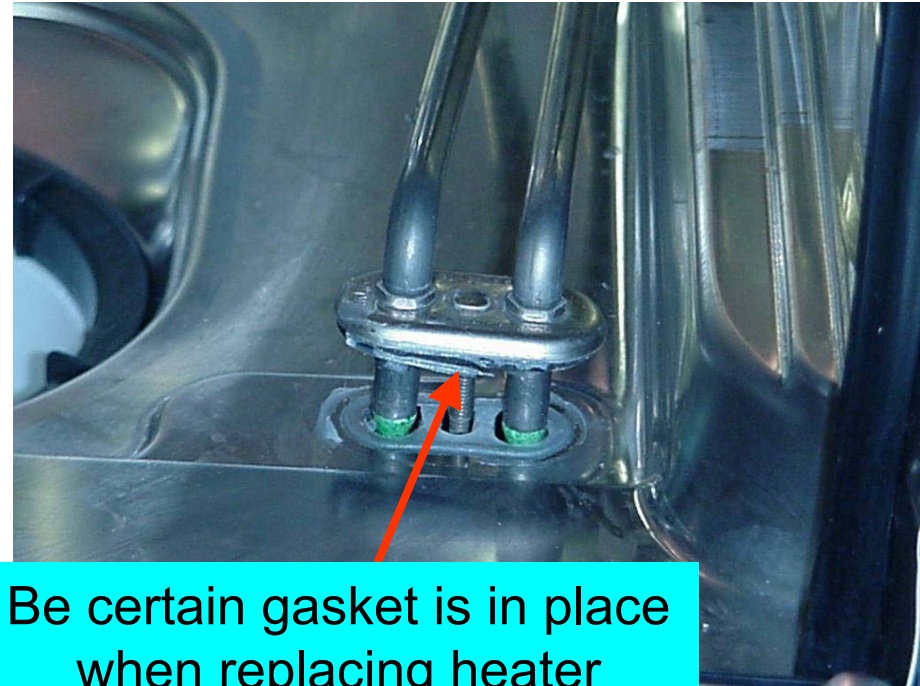
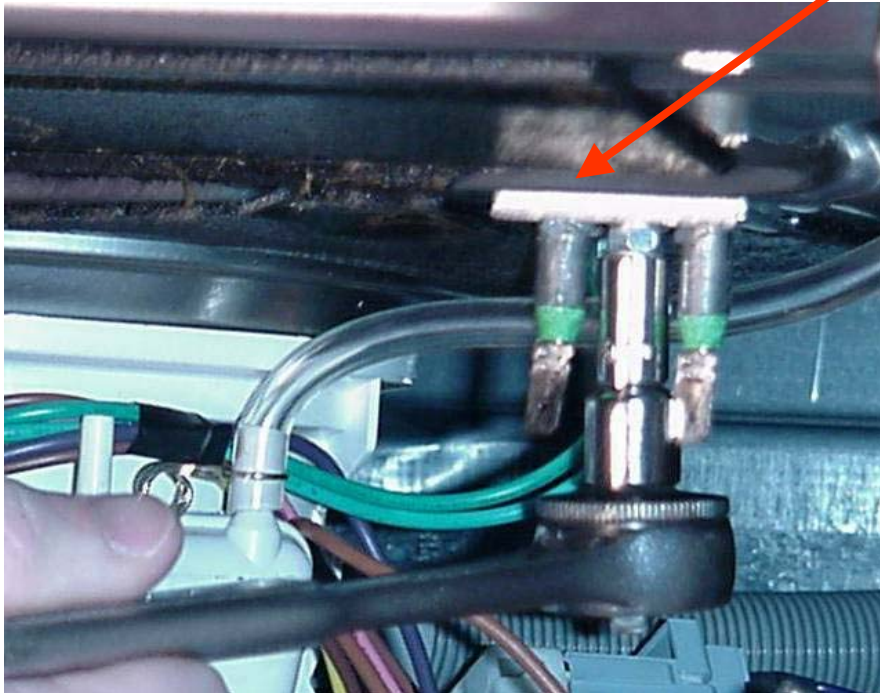
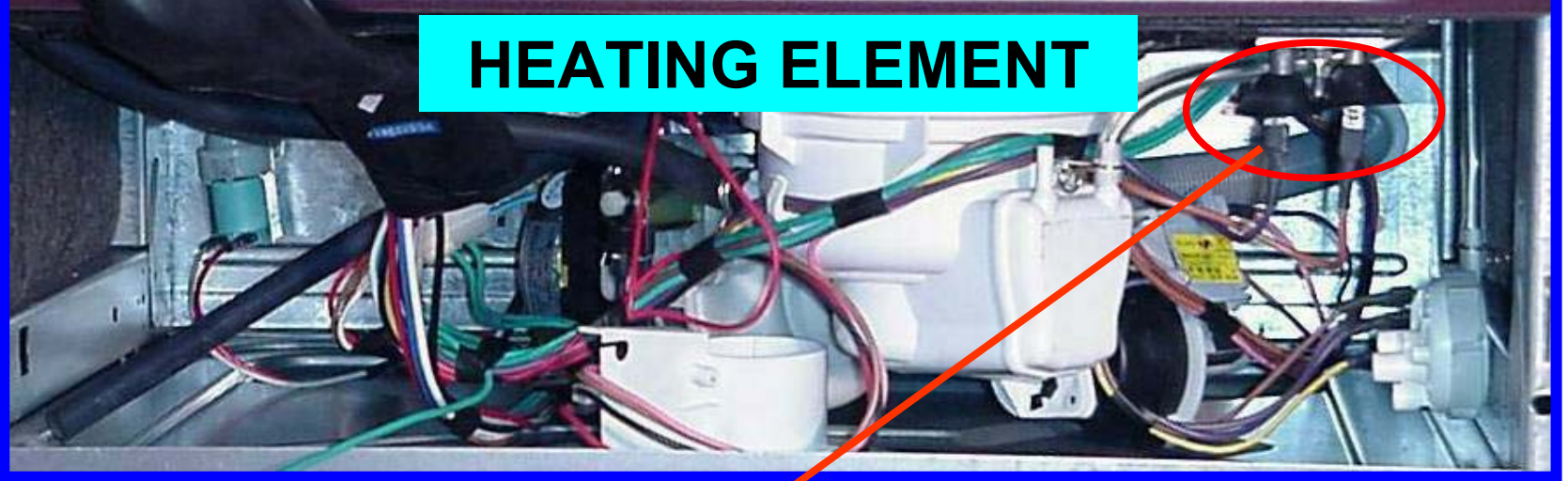


Remove double nut with ground wire. Be certain to replace ground wire when replacing.



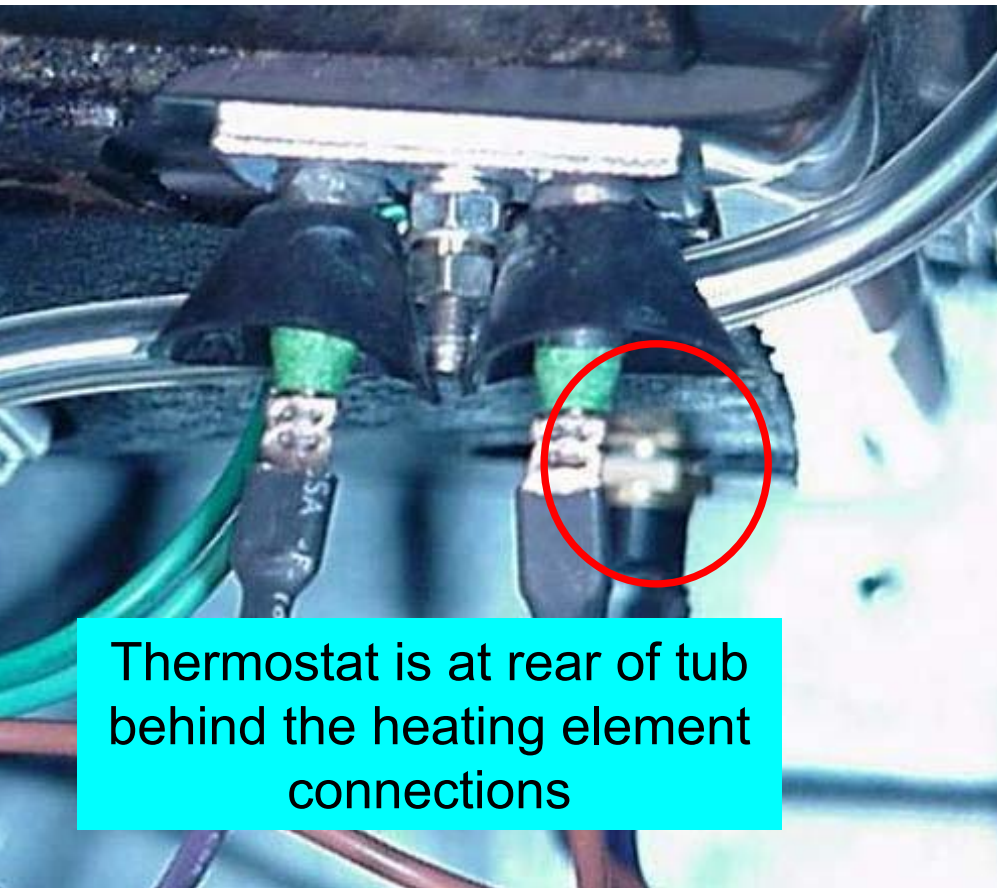
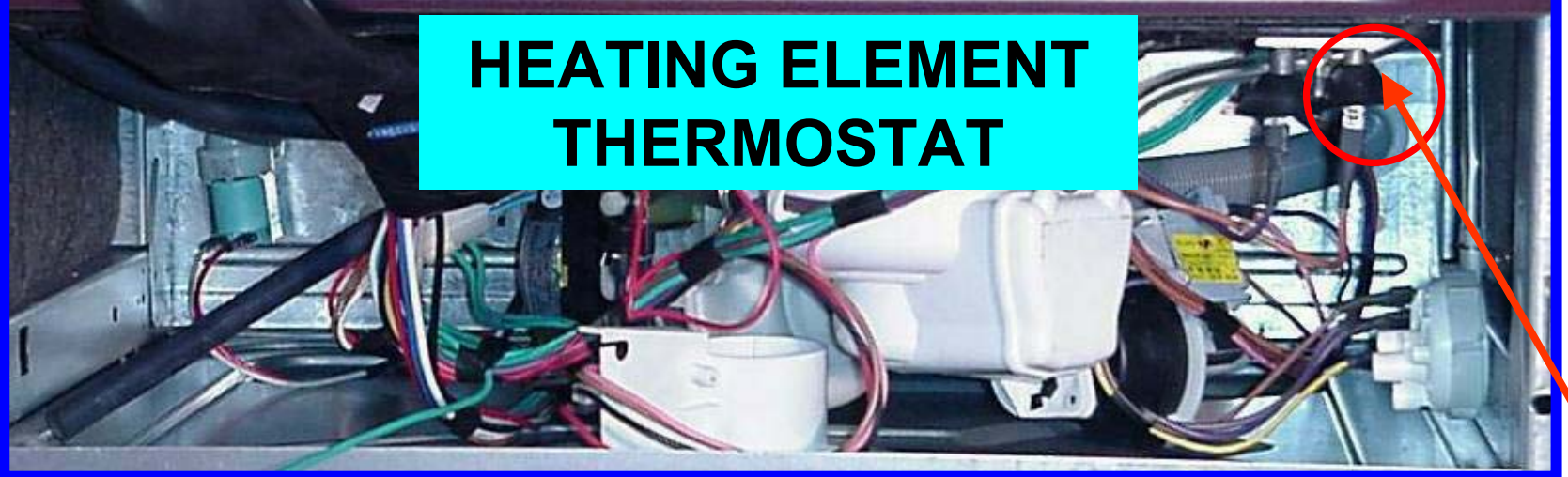
The element should read approximately 12 to 15 ohms resistance.

HEATING ELEMENT

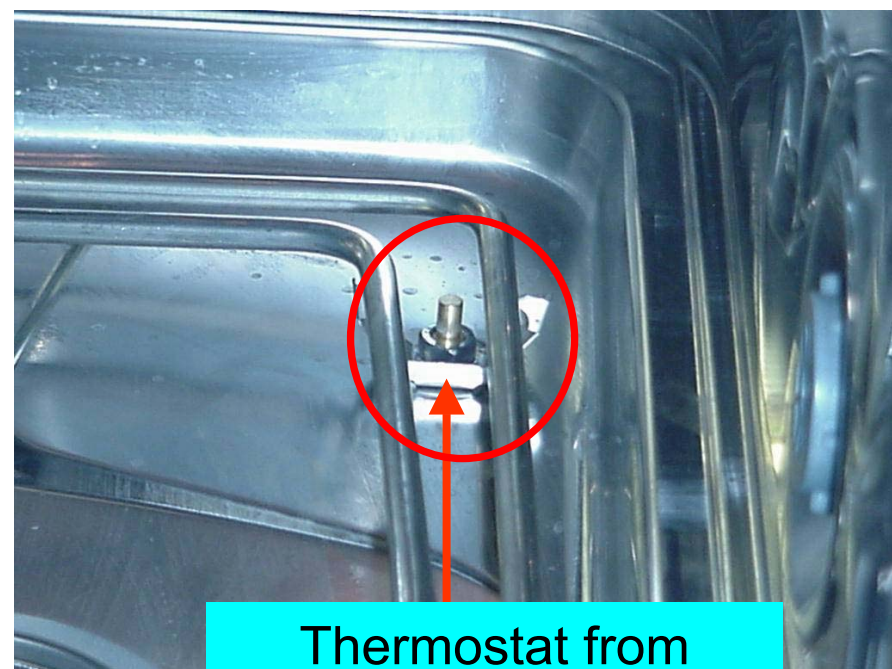


Be certain gasket is in place
when replacing heater

HEATING ELEMENT THERMOSTAT

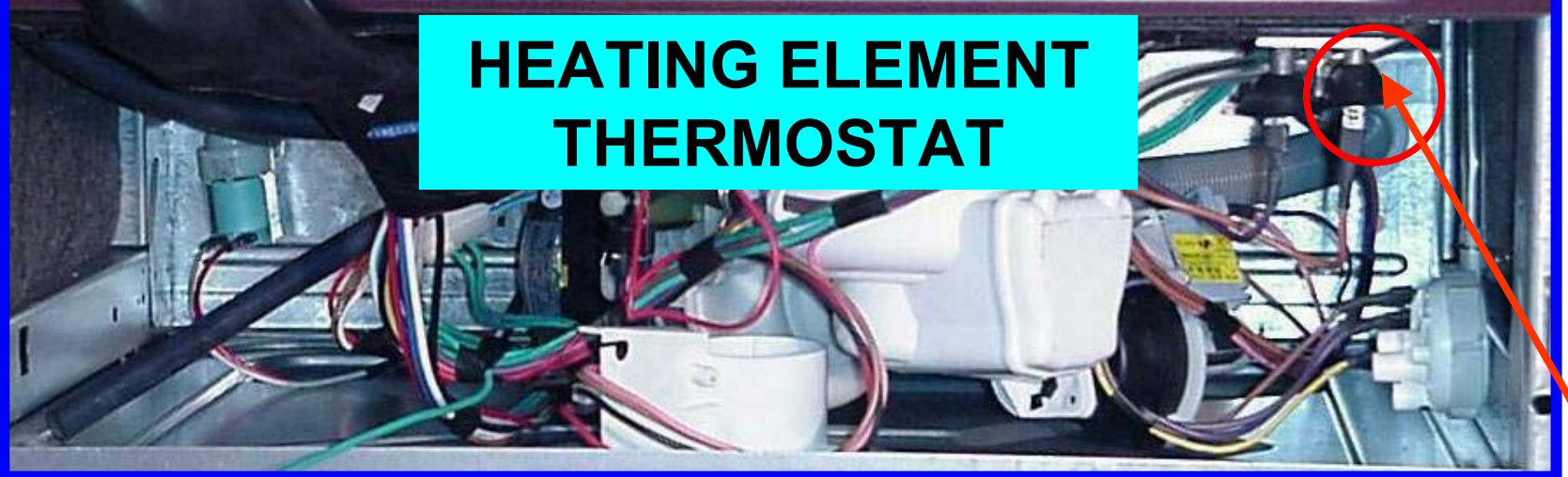


Thermostat is at rear of tub
behind the heating element
connections

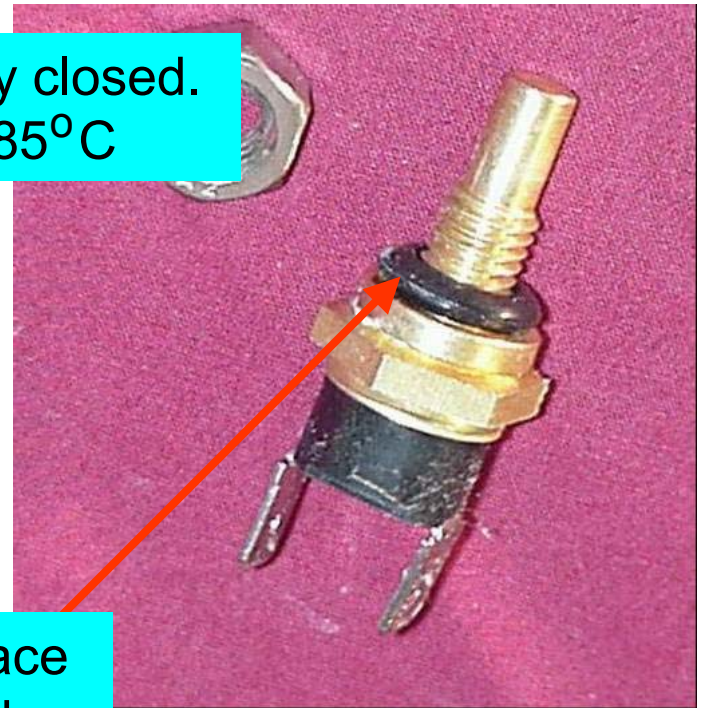
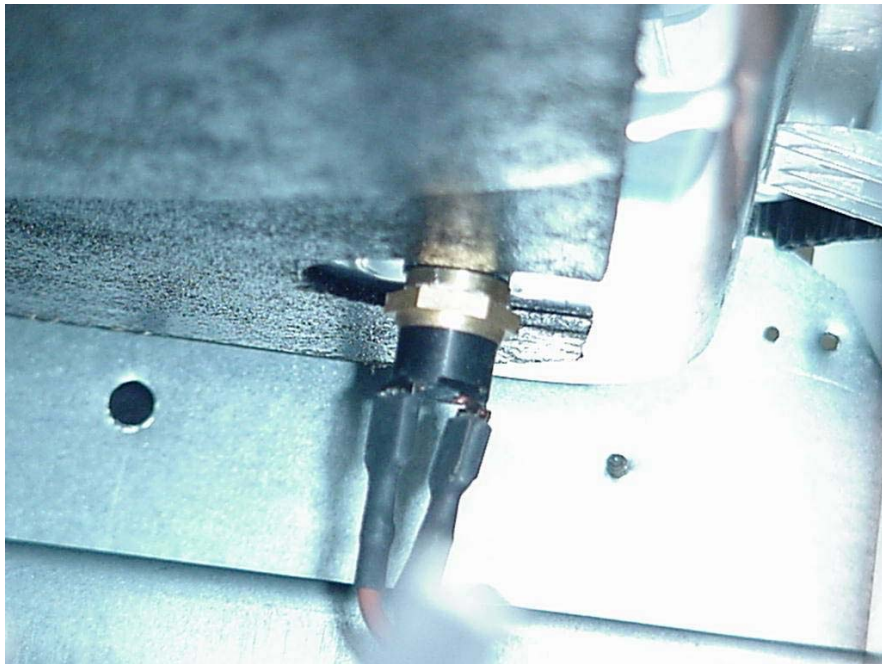


Thermostat from
inside of tank

HEATING ELEMENT THERMOSTAT

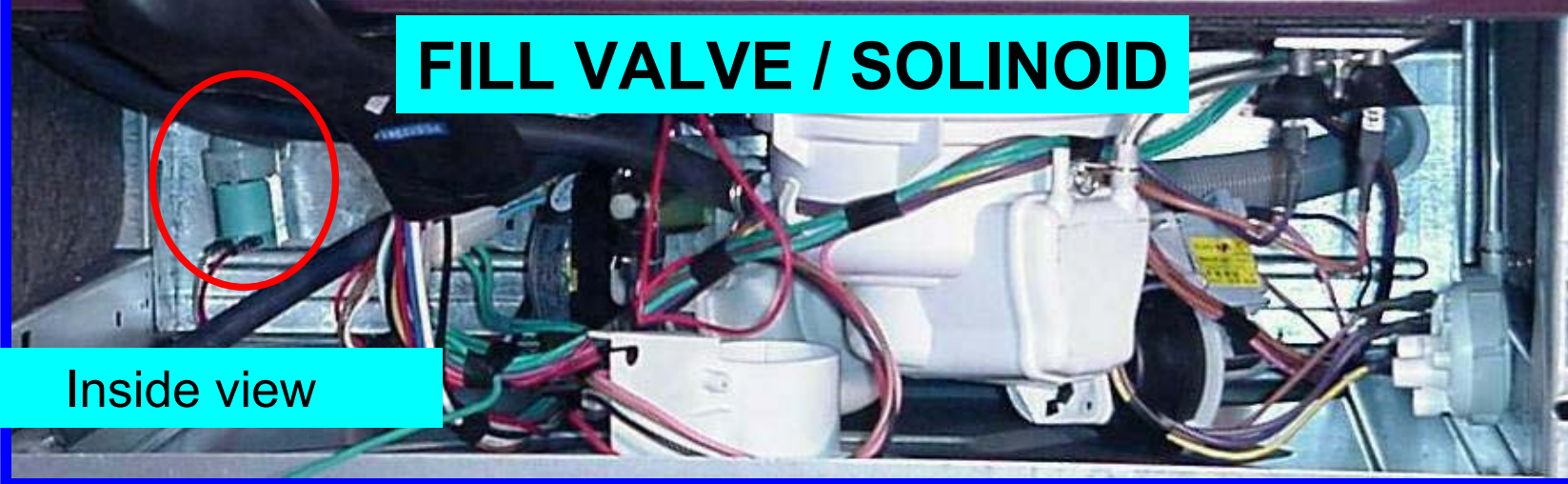


is normally closed.
185°F – 85°C



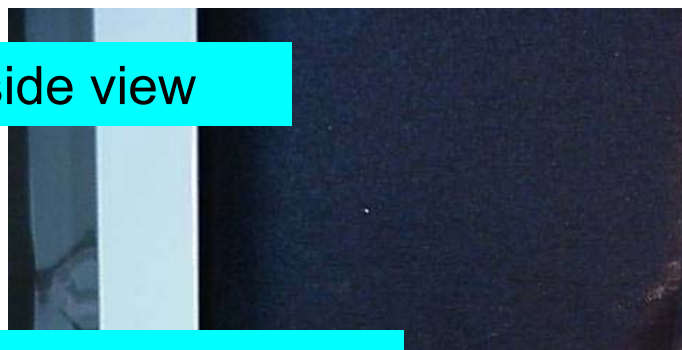
Be certain to replace
O-Ring below tub

FILL VALVE / SOLINOID



Inside view

Backside view

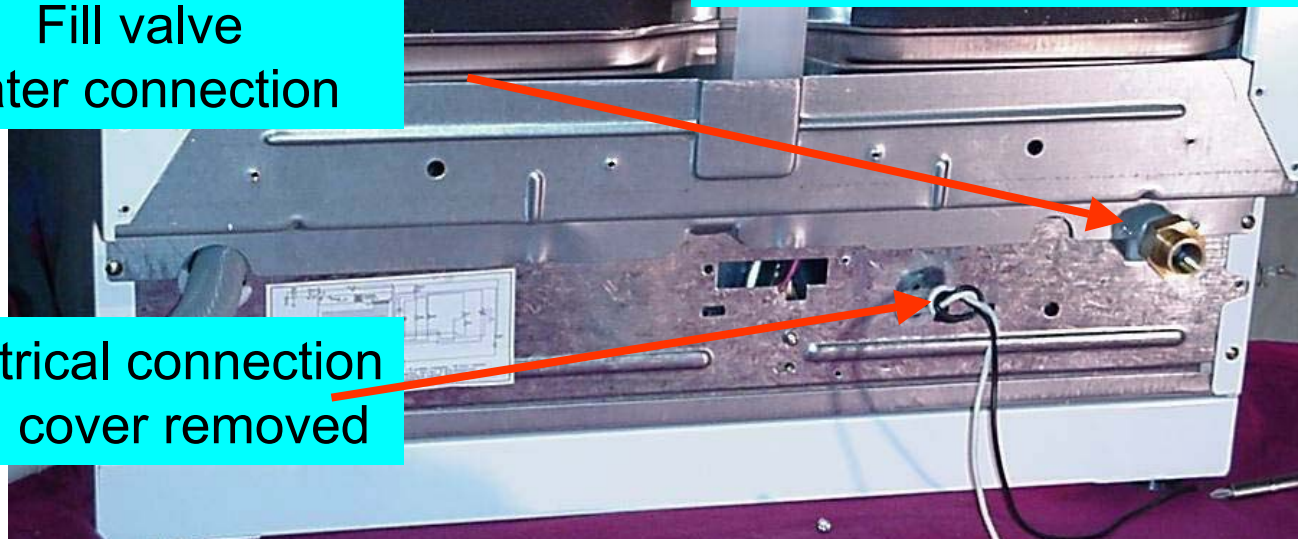


Fill valve
water connection

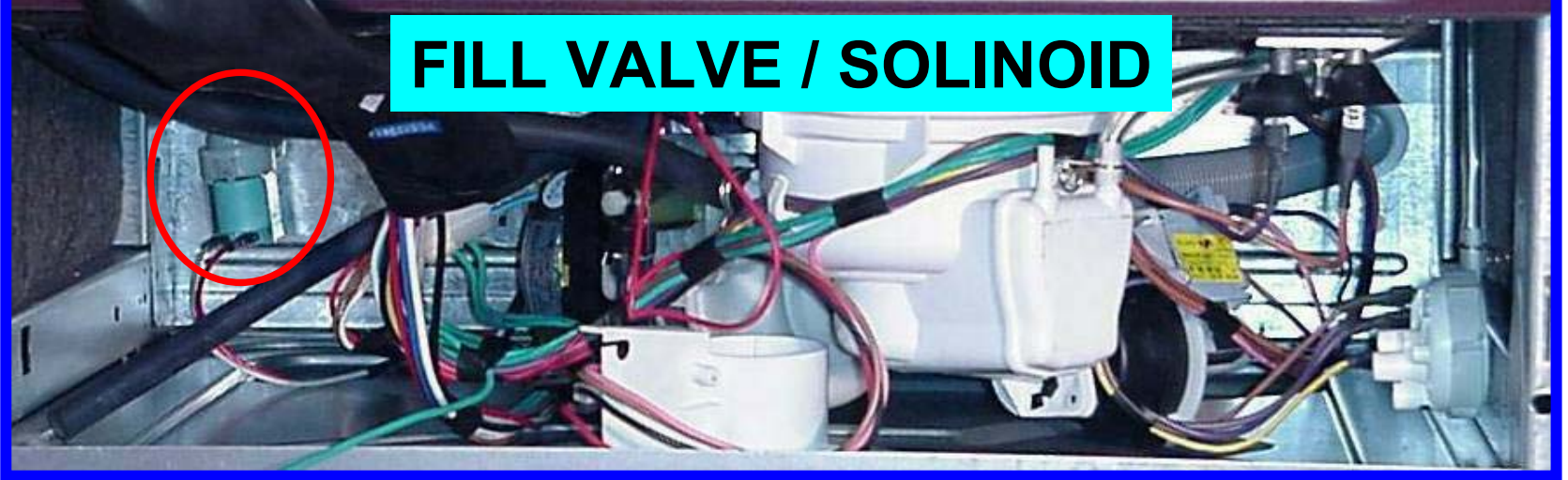
The fill valve is accessed through the back panel.

The dishwasher must be removed from the cabinet for this service.

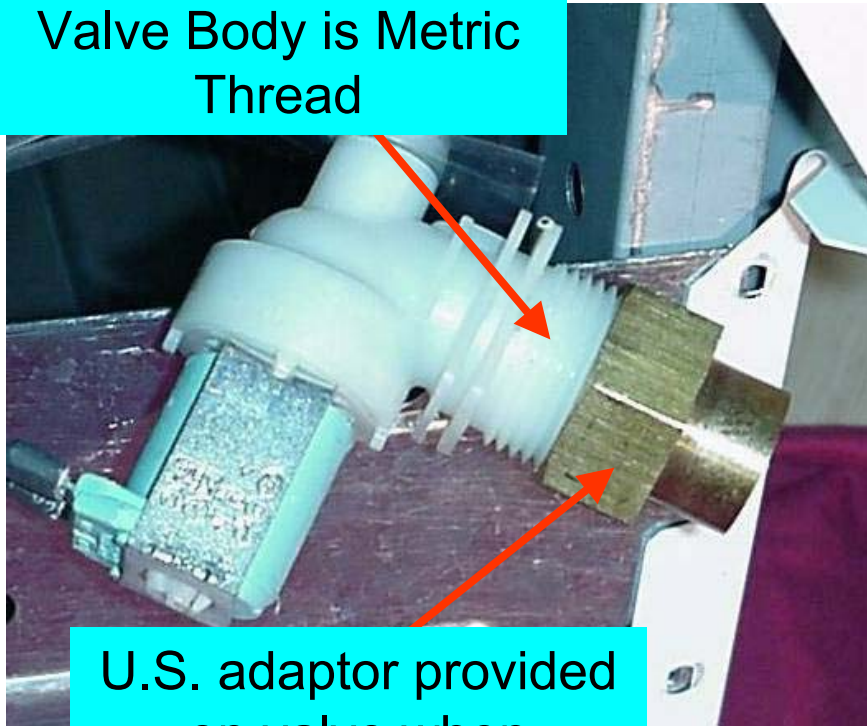
Electrical connection
with cover removed



FILL VALVE / SOLINOID



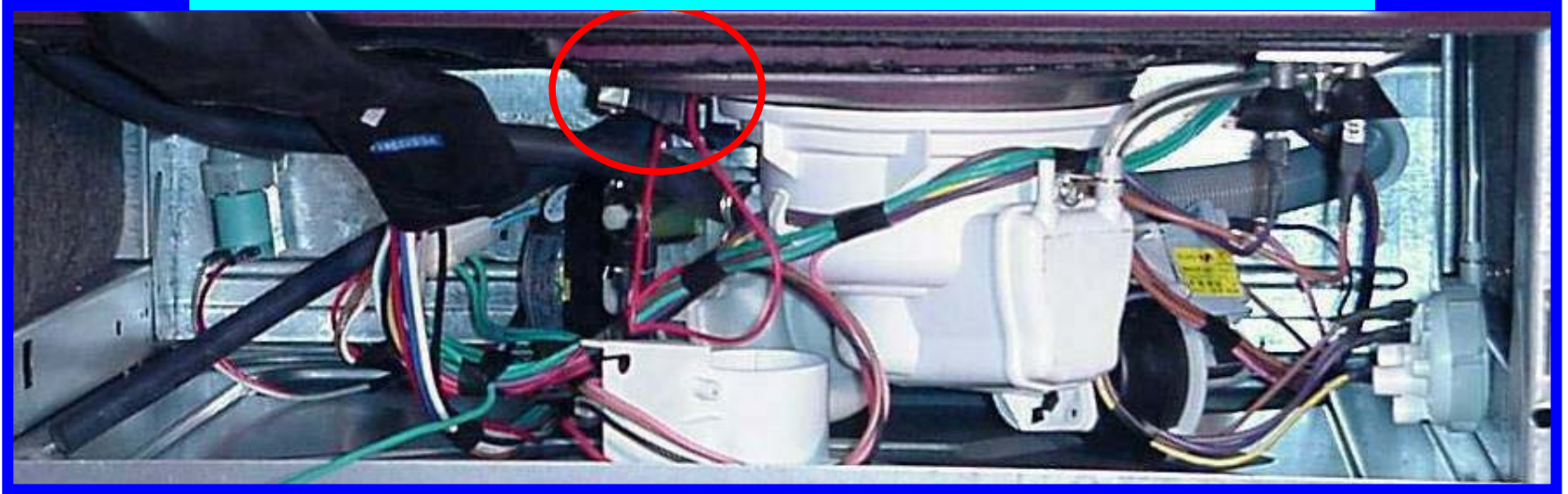
Valve Body is Metric Thread



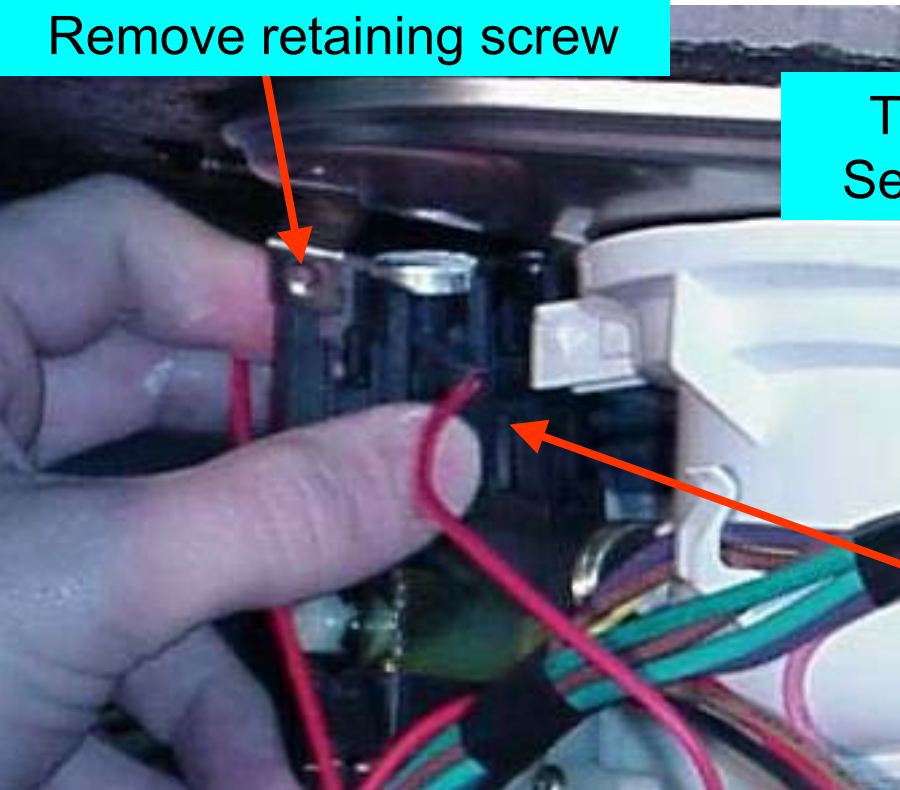
U.S. adaptor provided on valve when unpacked



TEMPERATURE SENSING CIRCUIT

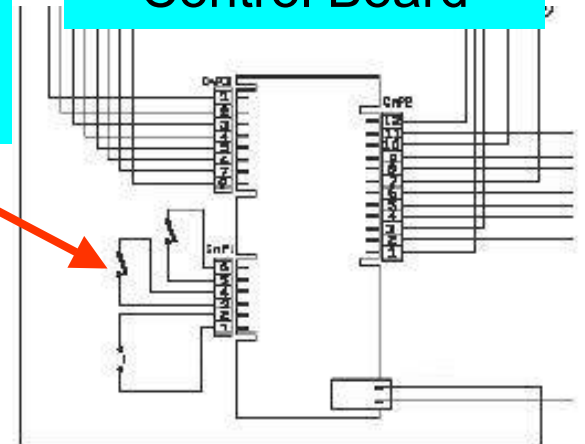


Remove retaining screw



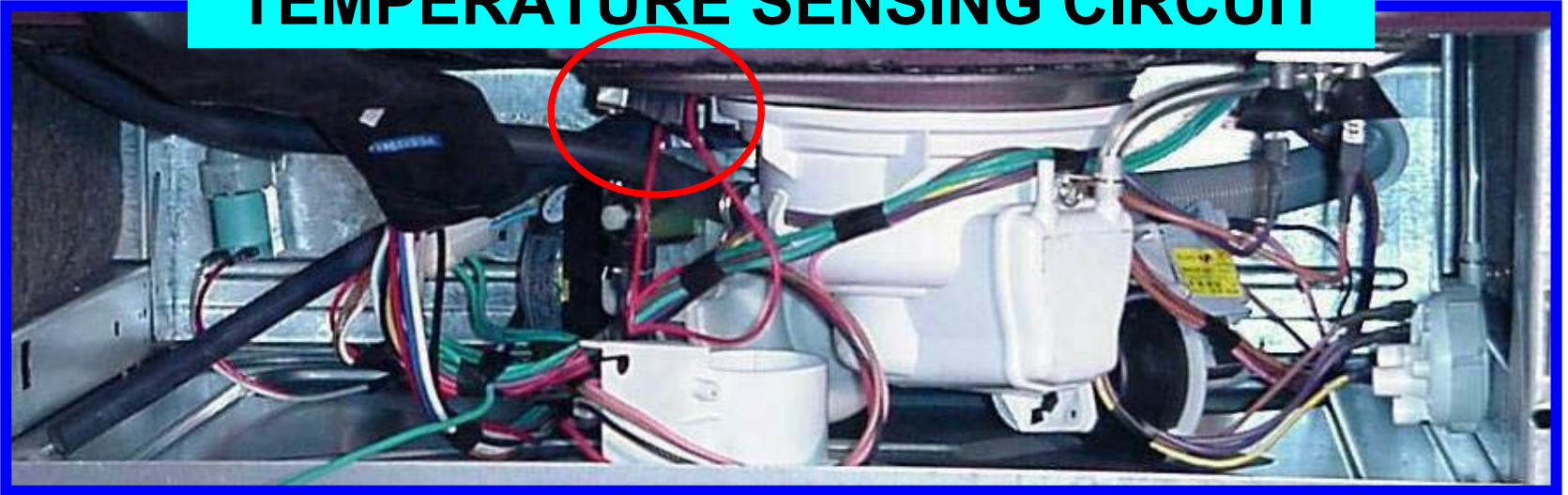
Temperature Sensing Circuit

Control Board



Release snap clip and pull mounting bracket back and down

TEMPERATURE SENSING CIRCUIT



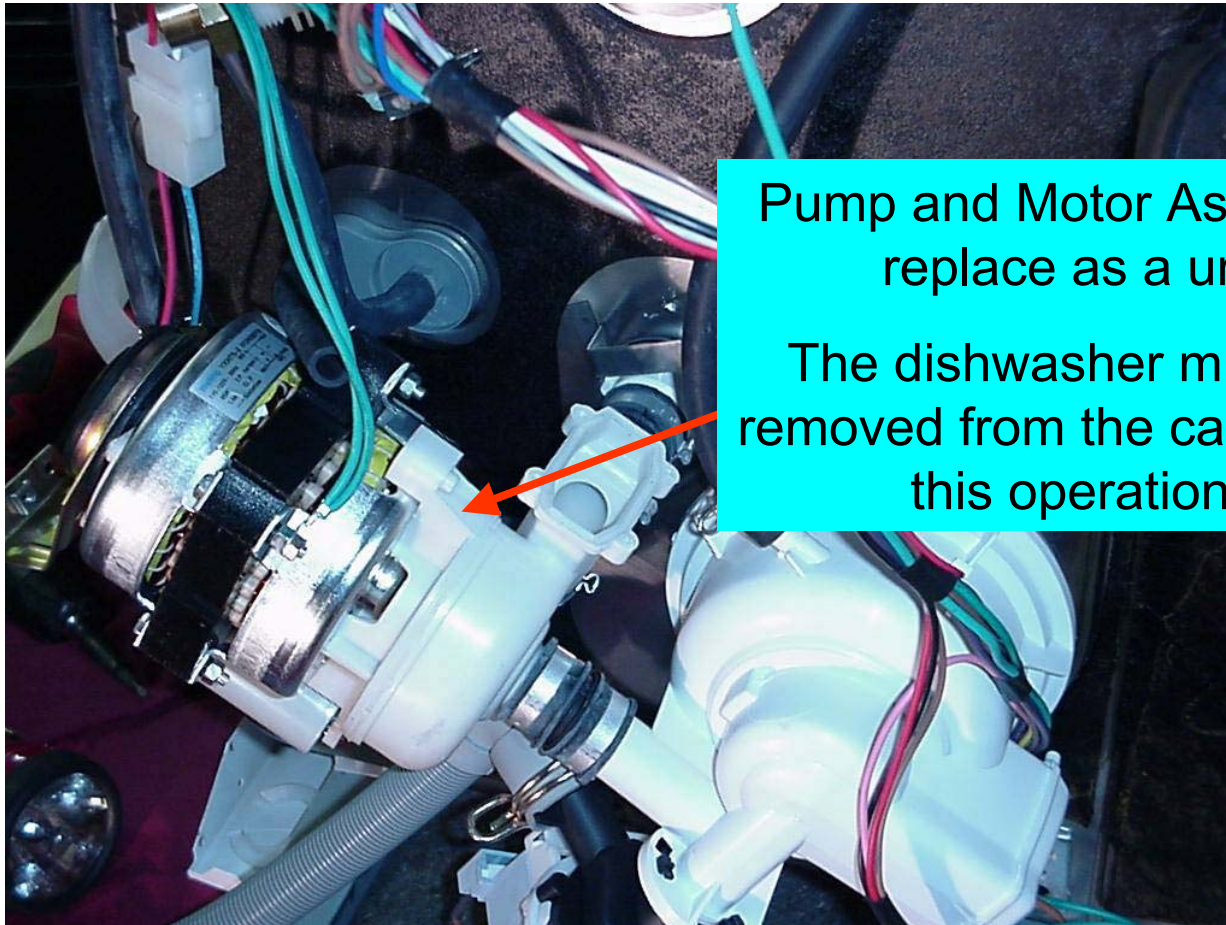
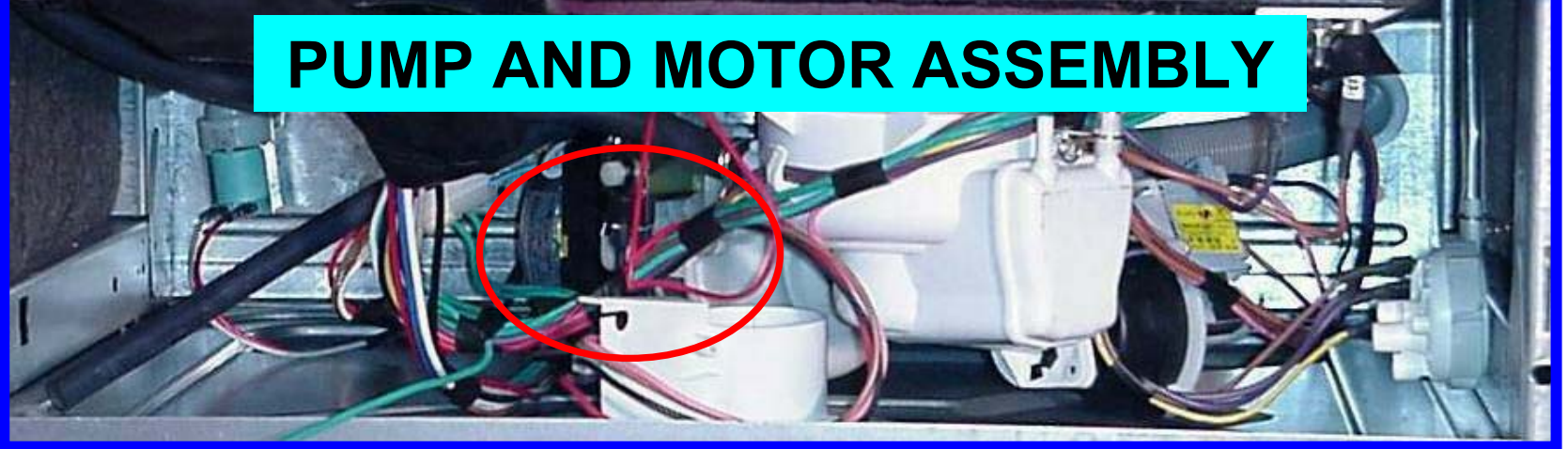
NTC Thermistor should read approximately 1100 ohms at 70°F

NTC Thermistor resistance will drop as temperature rises

NTC Thermistor



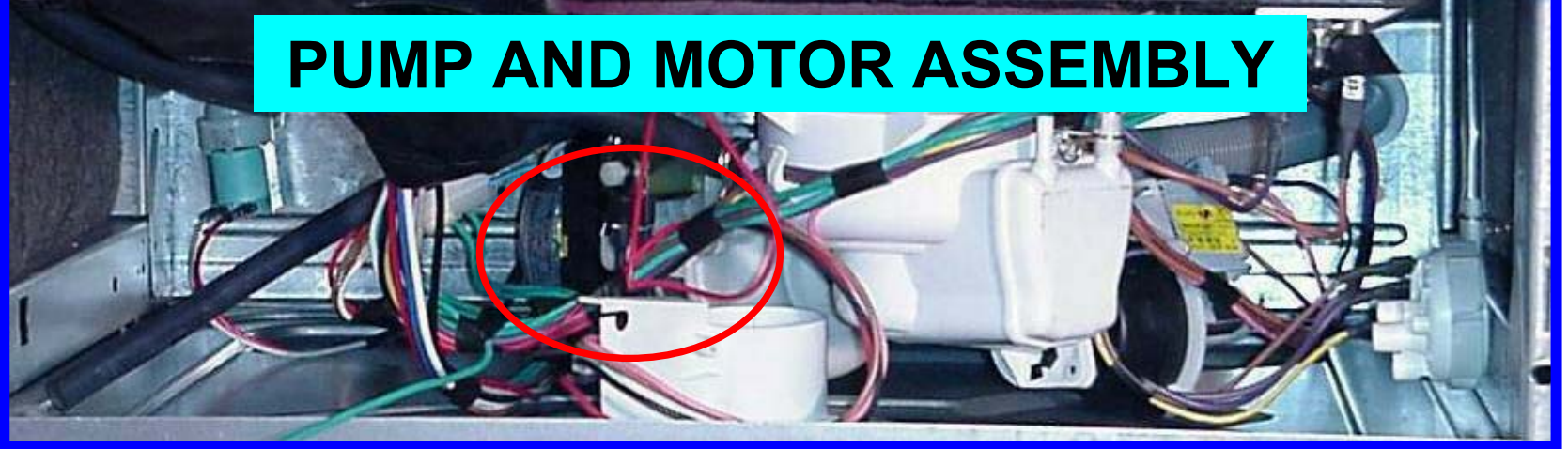
PUMP AND MOTOR ASSEMBLY



Pump and Motor Assembly
replace as a unit

The dishwasher must be
removed from the cabinet for
this operation.

PUMP AND MOTOR ASSEMBLY

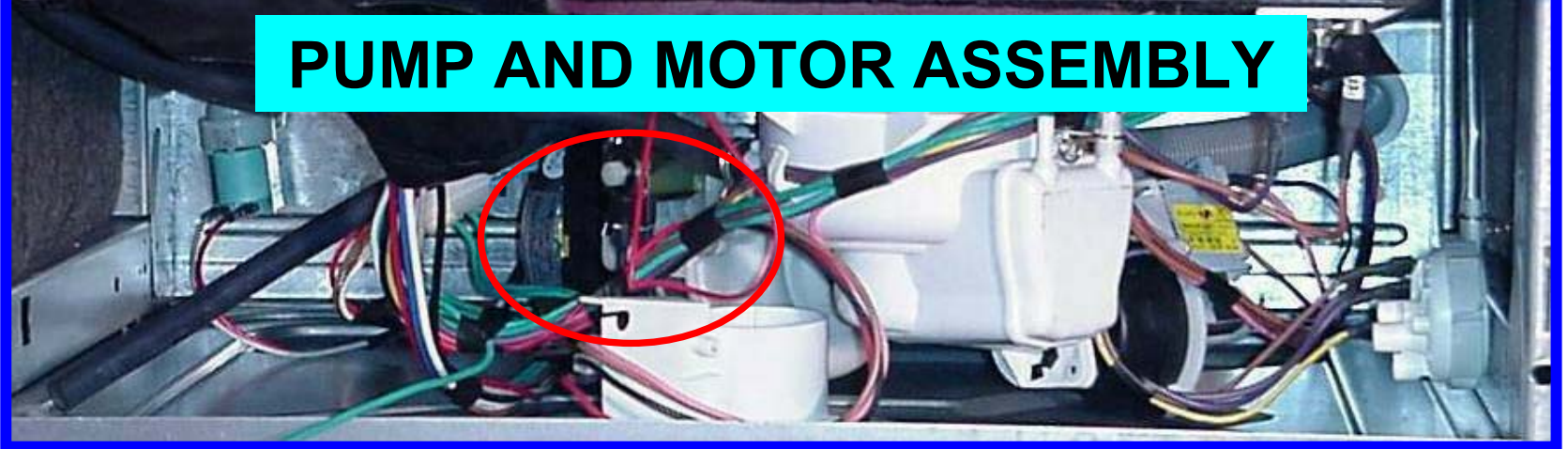


Motor is a single direction capacitor start motor.

Using Motor leads
(not connector leads)
Start Winding A = 25 ohms
Run Winding M = 17 ohms
(approximate readings)

Welling YXW75-2 0124000118
115-120V~ 60Hz
85W 2 P 10uF/250V
1.4A CL.F
— Rotation
RED BLUE
RED BLACK
A M
130°C

PUMP AND MOTOR ASSEMBLY



Motor capacitor

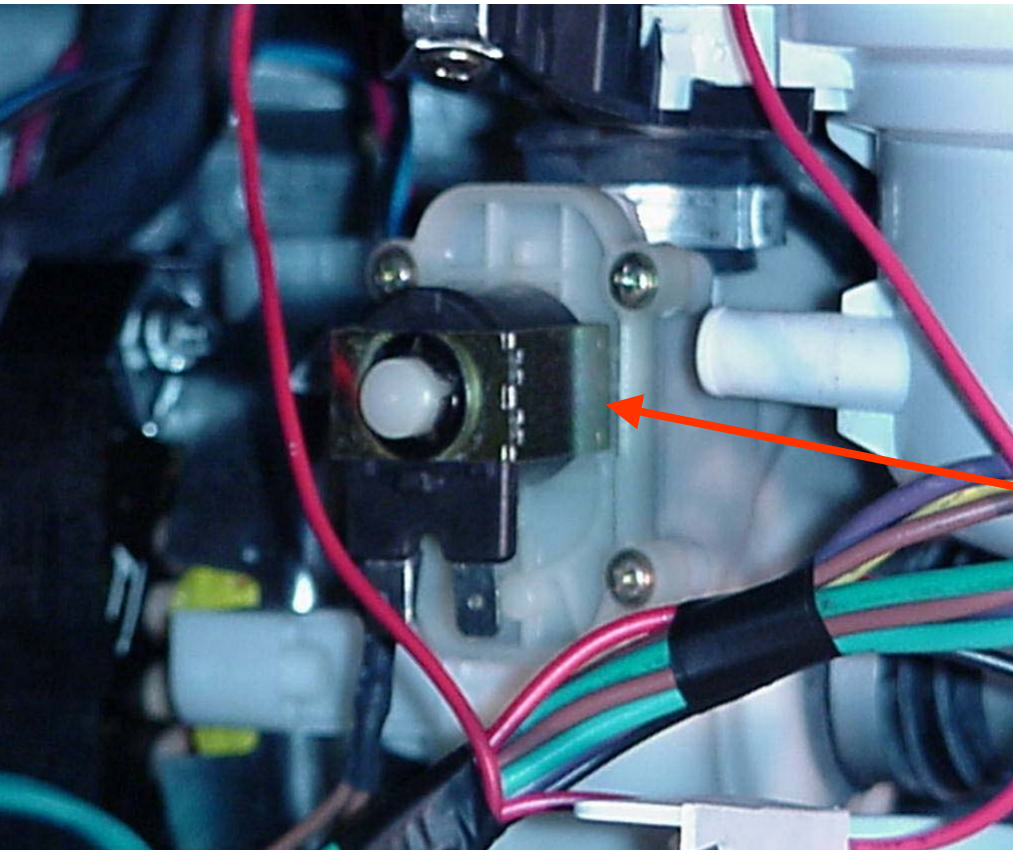
Motor wiring connector

UPPER WASH ONLY VALVE

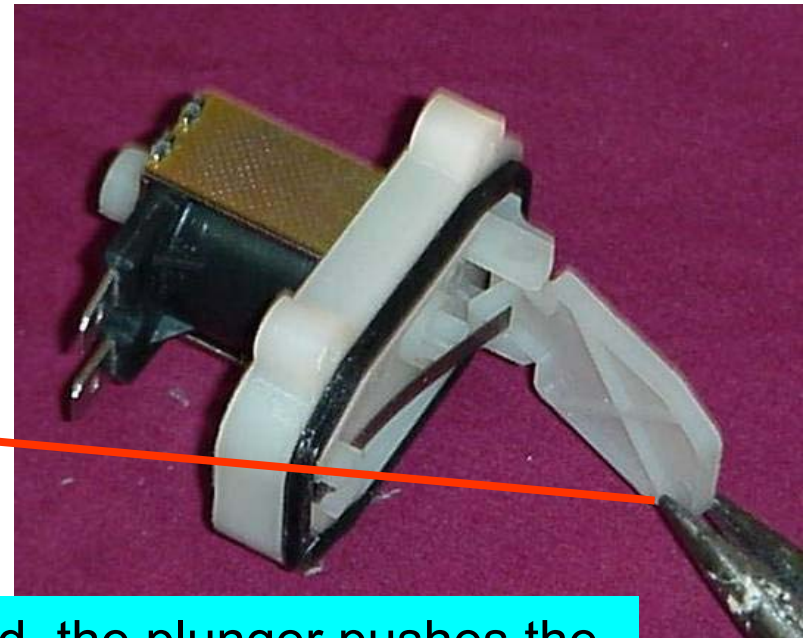
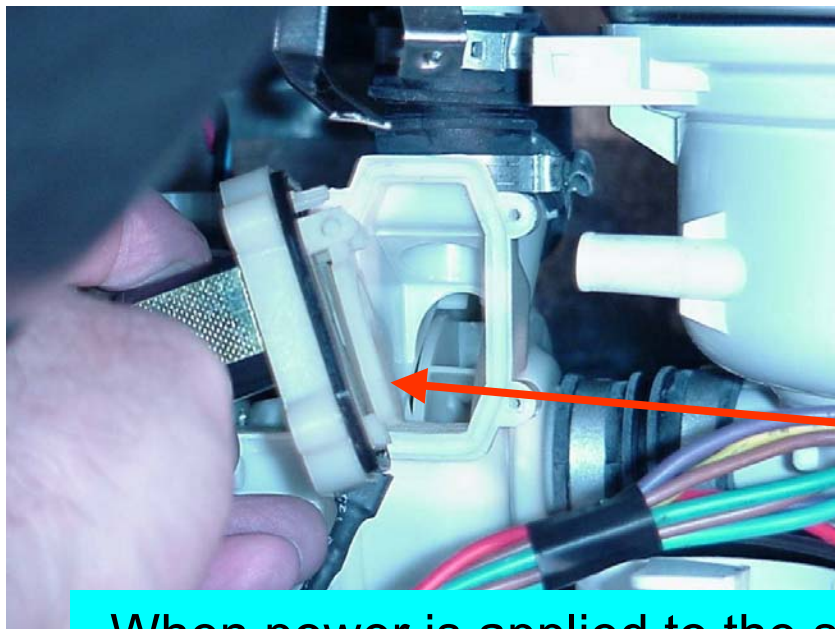
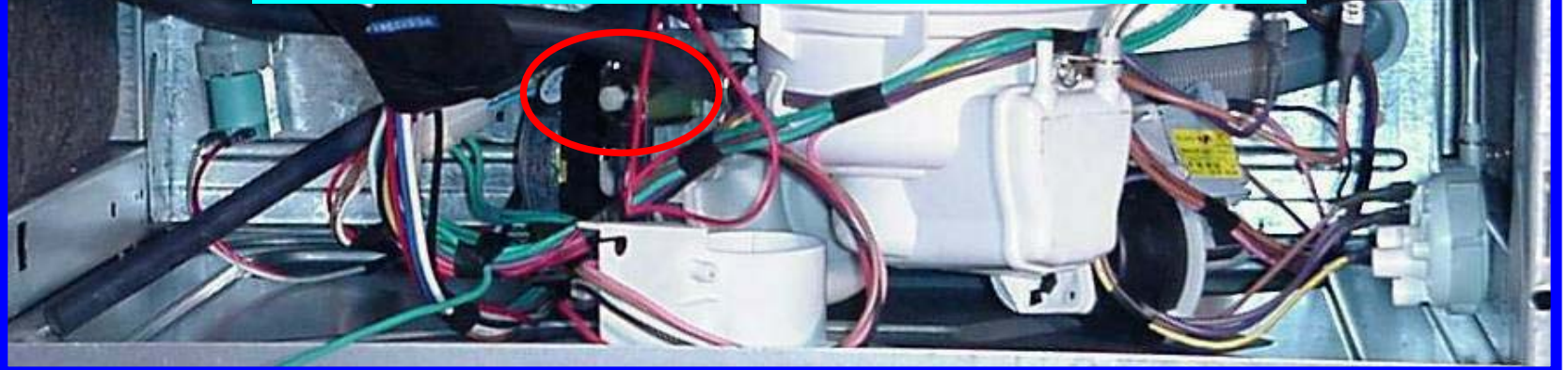


Some models are equipped with an upper wash only option. In this mode, a diverter valve diverts all water to the upper wash arm located on the bottom of the upper rack.

Valve is solenoid operated and located on side of pump body

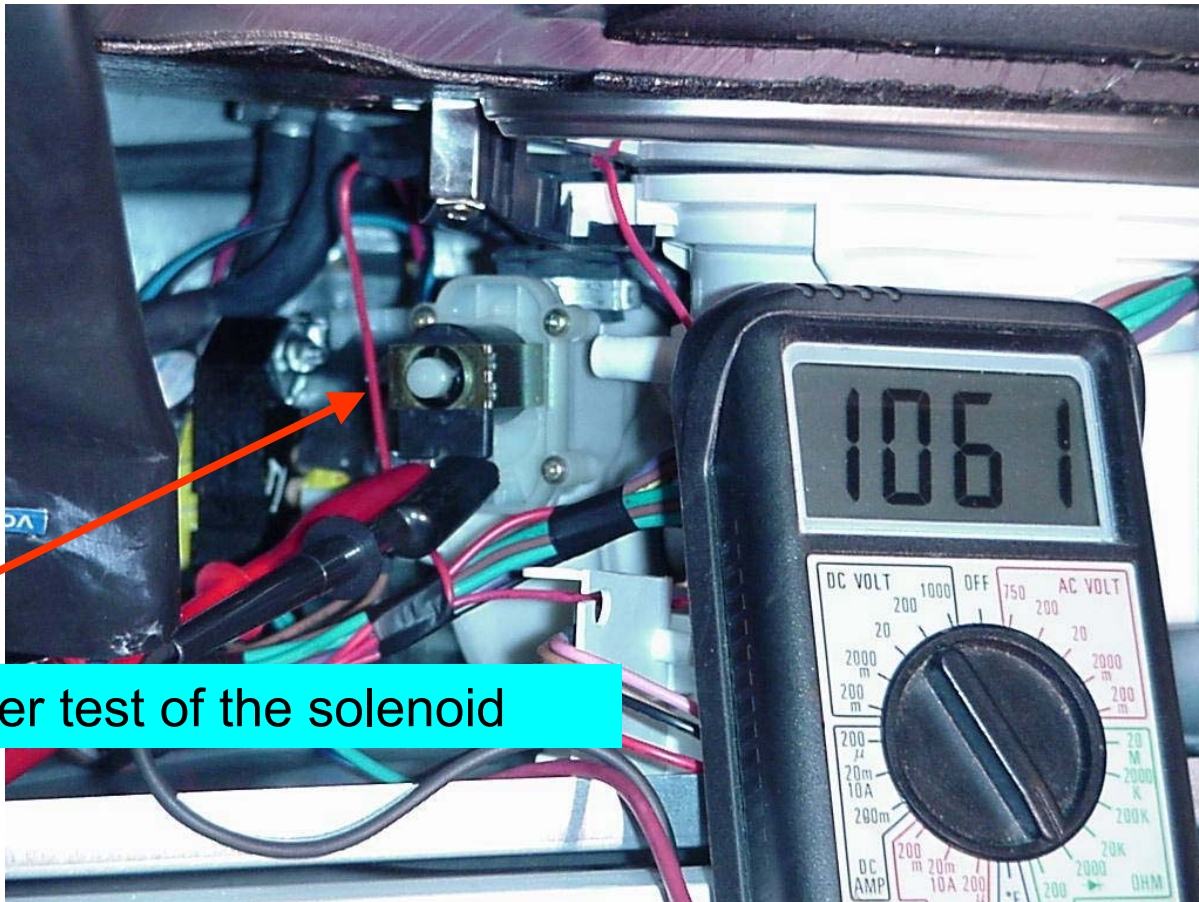


UPPER WASH ONLY VALVE



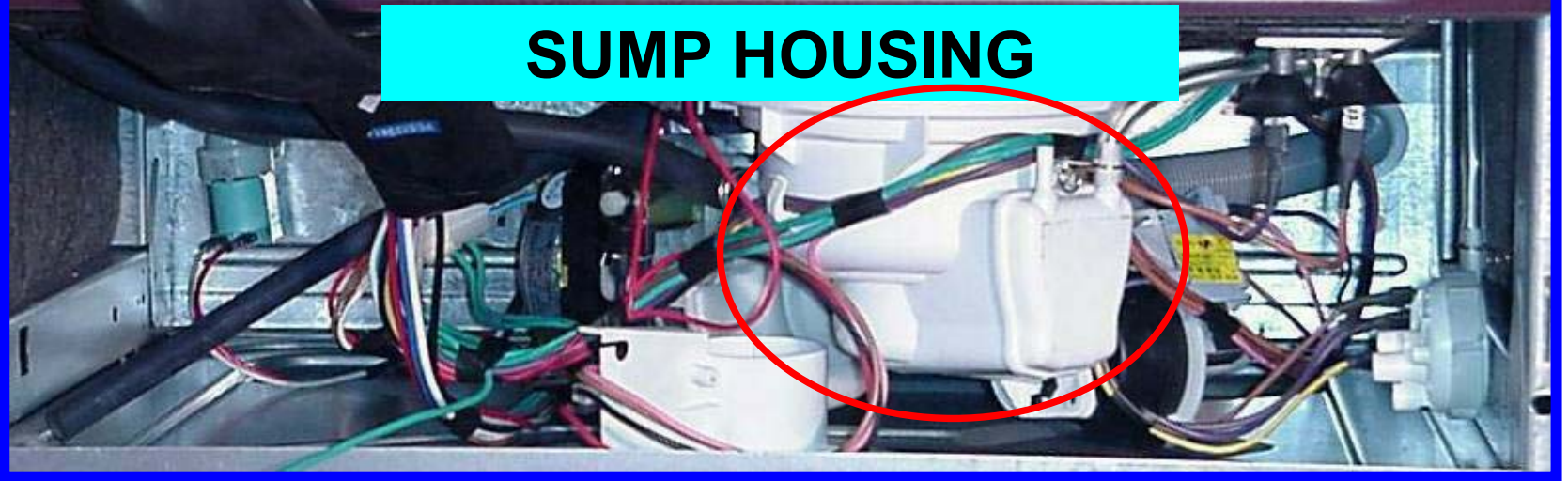
When power is applied to the solenoid, the plunger pushes the lock spring outward allowing the diverter flap to open. The flap will be held open with water pressure from the pump and close automatically at the end of the cycle.

UPPER WASH ONLY VALVE



Ohmmeter test of the solenoid

SUMP HOUSING



The filter and sump housing is removed by turning the retainer ring located in the bottom of the tank. Twist the clamp ring counter-clockwise to release. Remove the sump from the machine area.

LOWER WASH ARM



inside of tank

tank bottom



machine compartment

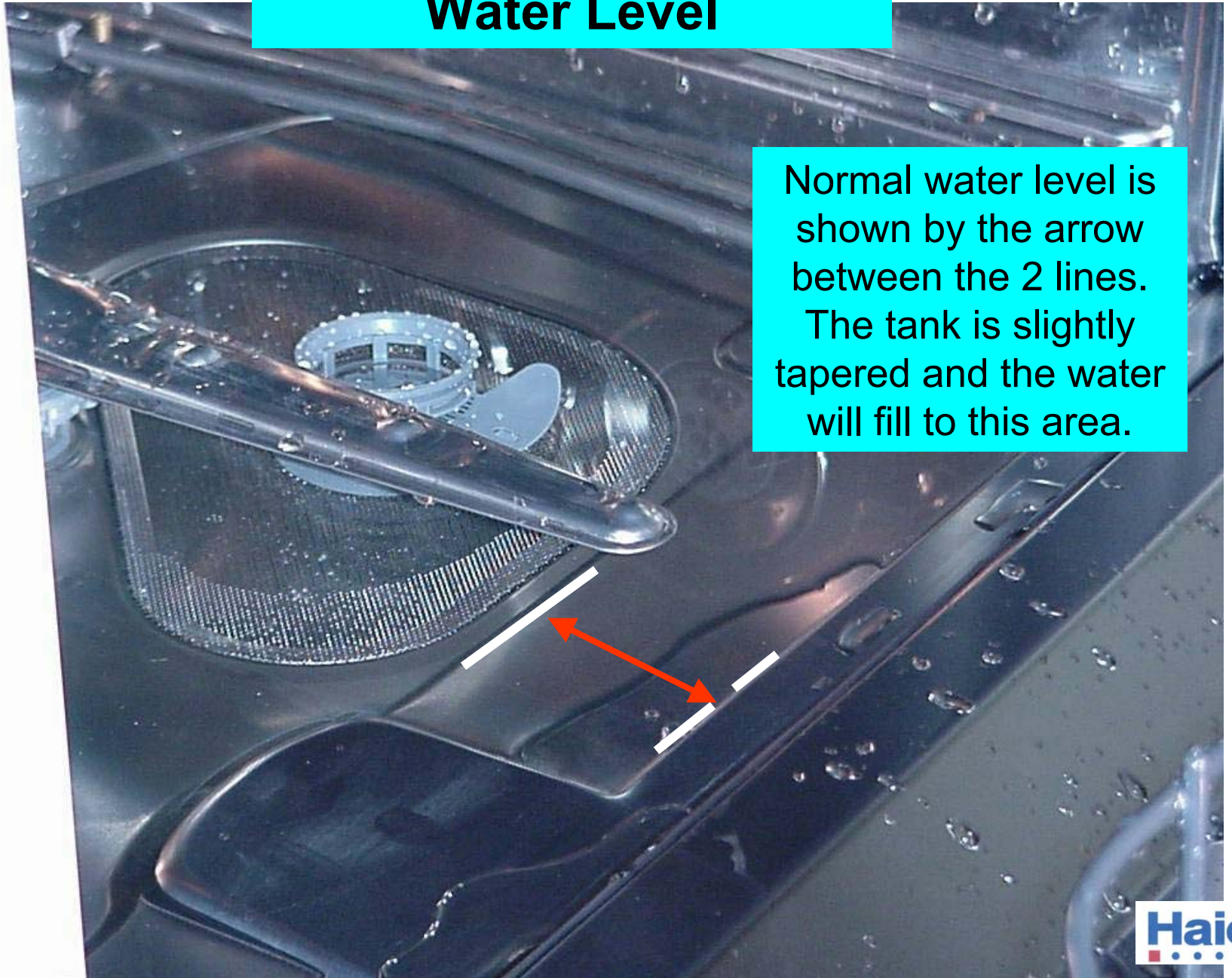


The lower wash arm is located directly above the pump. The fittings through the bottom of the tank are serviceable by removing the spray arm and riser and base

TROUBLE SHOOTING

Water Level

Normal water level is shown by the arrow between the 2 lines. The tank is slightly tapered and the water will fill to this area.



TROUBLE SHOOTING

Control Panel Signals

An automatic troubleshooting program is built into the control board to diagnose certain functions.

Pots and Pans is flashing
And alarm is sounding



Door Latch Switch or
Wiring Malfunction

Pots and Pans, Normal and Light
Wash are flashing
And alarm is sounding



Low or No Water Fill

Pots and Pans, Light Wash and
Rinse and Hold are flashing
And alarm is sounding



Water Not Draining

Pots and Pans, Light Wash,
Normal and Rinse and Hold
are flashing
And alarm is sounding



Water Overflow Into Base Pan

TROUBLE SHOOTING

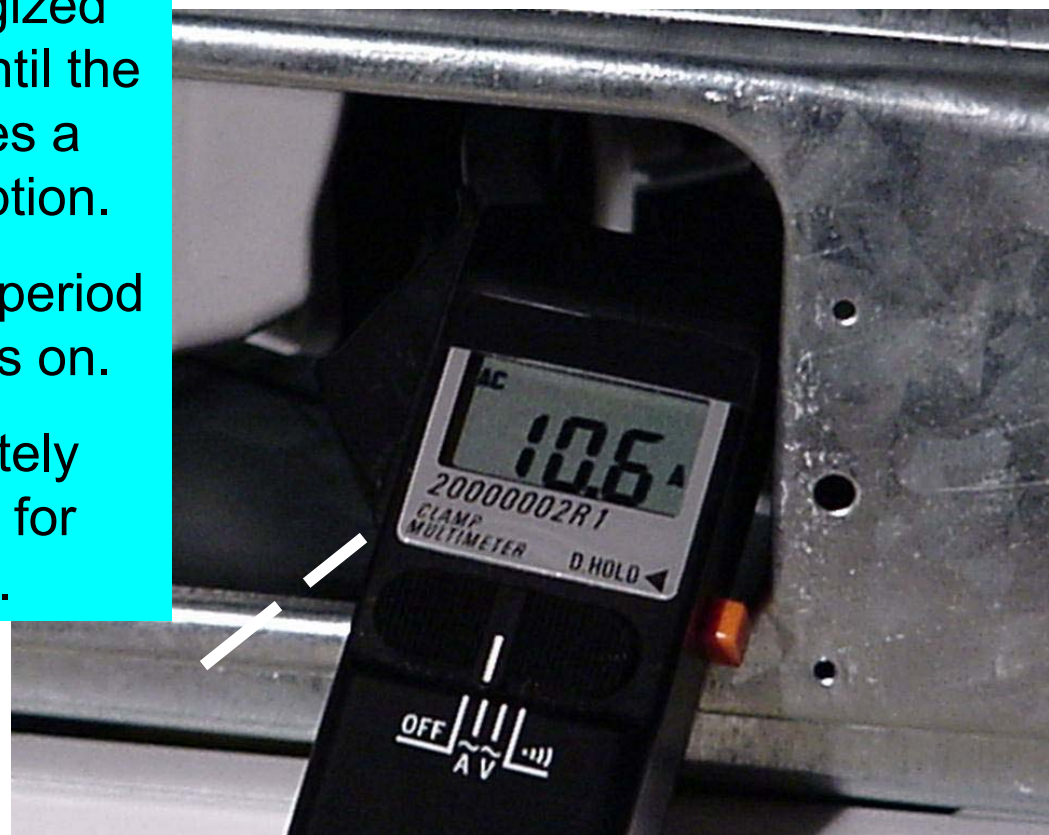
Long Wash Times

Incoming water should be at least 120°F

If the incoming water is below that level, the heating element will be energized during the wash and rinse cycle until the temperature of the water reaches a preset level, depending on the option.

The cycle will be extended for the period of time that the heating element is on.

The heater will draw approximately 10.5 amps and can be checked for operation with an amp probe.



THANK YOU



www.haieramericasupport.com

