

# SERVICE DATA SHEET

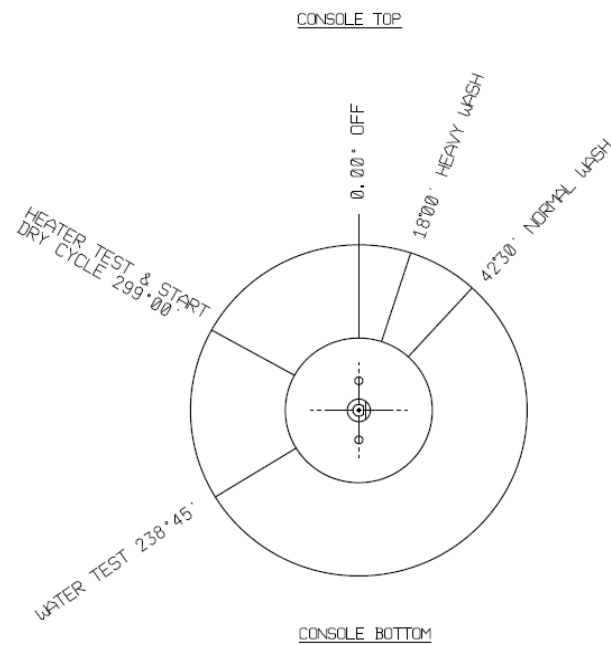
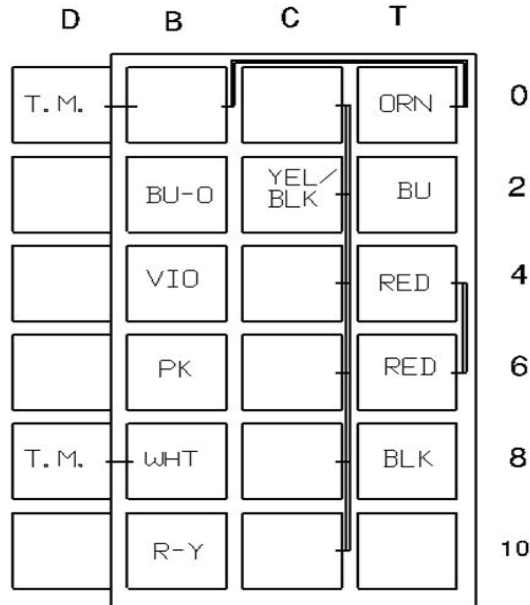
P/N: 808376901RevC  
 Artwork: 808376901 Rev.003

Model:  
 587.1401\*  
 \* = Color Number

This information is intended for use by persons having electrical and mechanical training and a level of knowledge of these subjects generally considered acceptable in the appliance repair trade. The manufacturer or seller cannot be responsible, nor assume any liability, for injury or damage of any kind arising from the use of this Service Data Sheet.

## COLOR CODE

BU-O.....Blue/Orange	R.....Red
R-Y.....Red/Yellow	BU.....Blue
BLK.....Black	PK.....Pink
VIO.....Violet	ORN.....Orange
WHT.....White	YEL/BLK...Yellow/Black



## COMPONENT CHECKING

Notes:  
 1) Always turn the timer knob clockwise. Make adjustments when the door is ajar.  
 2) Possible overshooting of the detent and gear/cam position from previous operation can affect the duration of the first interval - small overshoots are not a problem.

Drain Pump: To energize, turn the timer to the detent labeled Heavy Wash. Two back-to-back drain intervals provide about 2 minutes of pump out at the start of this cycle.

Fill Valve: Turn the timer to the unlabeled detent at about the 8 o'clock (239°) position. This detent coincides with the start of the final rinse and was put there for testing of the fill valve during production. The wash segment begins with a 63 second fill.

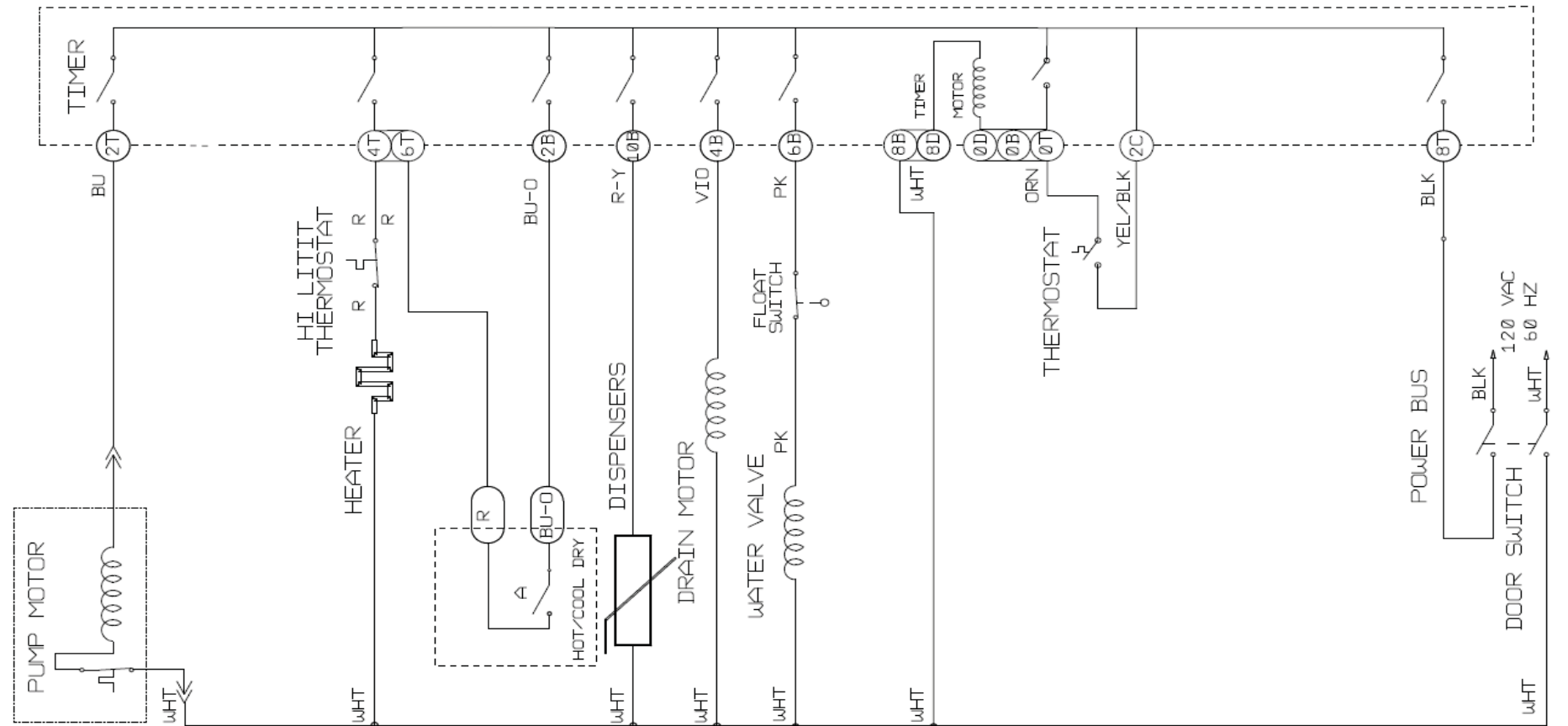
Float: While the fill valve is energized (see above), raising the float should result in power being removed from the fill valve causing it to close.

Detergent Dispenser: Follow instructions for energizing the Fill Valve. Following the initial 63 second fill there is a short (9 second) pause followed by 130 seconds with both the detergent dispenser and the circulation pump energized. The detergent door can be expected to open with 40 to 90 seconds of dispenser power up time.

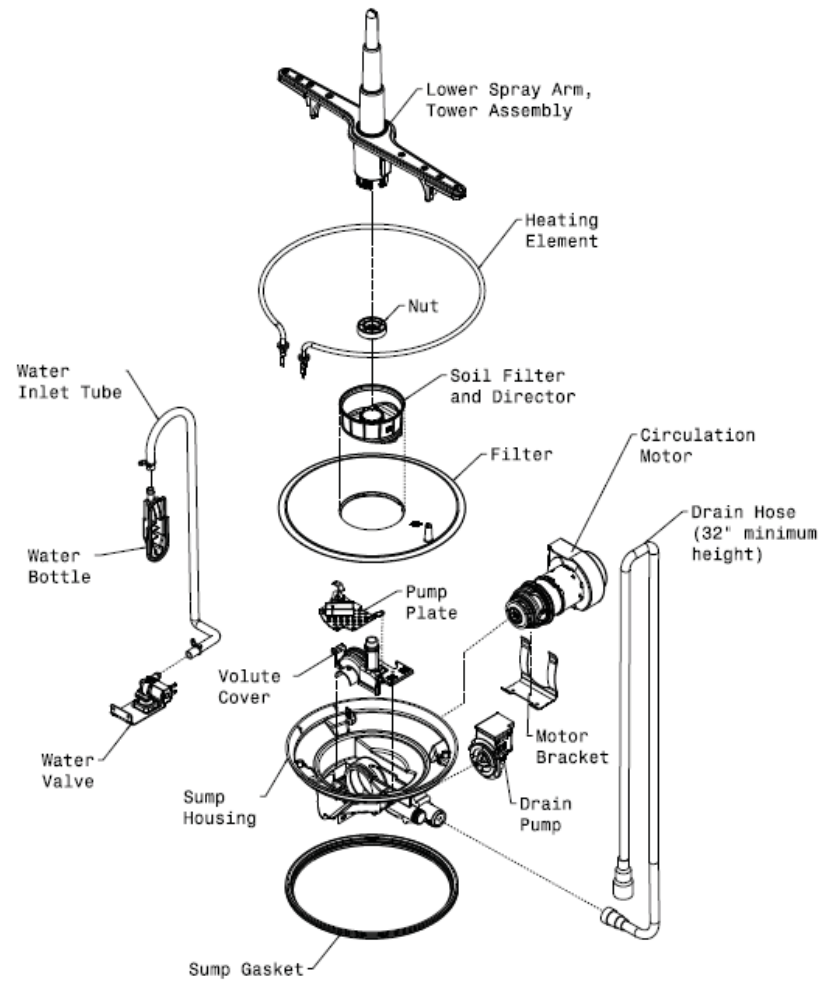
Circ Pump: Turn the timer to the Normal Wash detent. Left to run the cycle will drain (62 seconds), pause (3 seconds), fill (65 seconds) and then run the circ pump for about 190 seconds. To energize the circ pump without adding water move originally to the normal wash detent and then advance the dial by 10° to reach the start of the circ pump operation. The approximate 190 seconds of pump operation will correspond to about 16° of dial rotation.

Heater: **WARNING!** When checking that the element is giving off heat be careful not to touch the heating element inside the tub - it will burn. To check for a failed heater remove power and check the resistance between the two connections. Probes can be inserted in to the back side of the connectors. The heating element changes resistance with temperature but should always be between 12 and 21 ohms. To check that it is being energized by the timer, apply power to the unit and turn the timer to the detent labeled Drying/Plate Warmer. The detent is located at the beginning of a 130 seconds heating interval at the start of the drying portion of the cycle. It is followed by several alternating periods of pause (about 75 seconds each) and heating (ranging from 65 to 130 seconds in duration). In all, 5 heating intervals follow the detent.

## WIRING DIAGRAM



## EXPLODED VIEW OF WASH SYSTEM



## Pump Assembly

The pump assembly is driven by a synchronous motor. Rotation is in the counterclockwise direction at up to 3100 RPM. The motor drives a pump which supplies 100 percent filtered water at a rate of approximately 9.2 GPM.

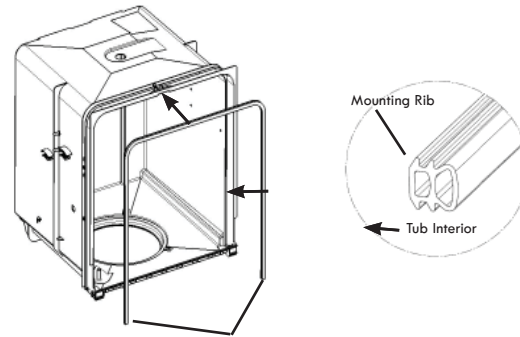
Draining is accomplished by using a small separate synchronous drain pump mounted to the side of the sump. The drain check valve is located at the discharge end of the drain pump. The drain hose is attached by a worm gear clamp to the discharge end of the drain pump.

The drain hose must have a loop at a minimum height of 32 inches in order to insure proper drainage.

To remove the main circulation (circ) pump first disconnect the wiring harness connections located at the circ pump's motor. Next, remove the two screws that hold the motor bracket and slide the motor bracket away from the sump. The motor and pump can then slide out of the sump.

## Tub and Door Seal

The door seal is pressed into the tub channel for an interference fit. Center the gasket (marked on back) at the tub top center and press in place without stretching or bunching. The gasket takes a short turn at the bottom of the tub channel before ending at the channel end wall.



## Product Specifications

### Electrical

Rating.....120 Volts,  
60Hz  
Separate Circuit..15 amp min.  
- 20 amp max.  
Motor (Amps).....1.1  
Heater Wattage.....900  
Total Amps (load rated).....10.0

### Water Supply

Suggested minimum incoming  
water temperature..120°F (49°C)  
Pressure (PSI) min/max. 20/120  
Connection (NPT).....3/8"  
Consumption (Normal Cycle)...4.4  
U.S Gal., 19.8 liters



### WARNING

**Personal Injury Hazard**  
Always disconnect the  
dishwasher from the electrical  
power source before adjusting  
or replacing components.

## TROUBLE SHOOTING TIPS

Check the list below each symptom. Repair or replace defective components as encountered.

**Symptom..Dishwasher will not operate when turned on (wait at least 90 seconds).**

1. Fuse (blown or tripped)
2. 120 VAC supply wiring connection faulty.
3. Timer (contacts open or defective)
4. Motor (inoperative)
5. Door Switch (open contacts)
6. Door latch not making contact with door switch.

**Symptom..Motor Hums but will not start or run.**

1. Motor (bad bearings and locked rotor)
2. Motor stuck due to prolonged non-use.
3. Debris in pump impeller preventing rotation

**Symptom..Motor trips out on internal thermal overload protector.**

1. Improper voltage.
2. Motor shaft binding.
3. Motor windings shorted.
4. Glass or foreign items in pump.

**Symptom..Dishwasher runs but will not heat.**

1. Heater element (open).
2. Timer defective.
3. Wiring or terminal defective.

**Symptom..Dishwasher will not pump out.**

1. Drain restricted.
2. Timer contact defective.
3. Defective drain pump.
4. Air lock in drain hose.
5. Blocked impeller.
6. Open windings.

**Symptom..Dishwasher will not fill with water.**

1. Water supply turned off.
2. Defective water inlet fill valve.
3. Check fill valve screen for obstructions.
4. Defective float switch.
5. Timer contact defective.
6. Wiring defective.
7. Float stuck in "UP" position.

**Symptom..Timer does not advance.**

1. Timer motor (stalled or open)
2. Check timer for power to timer motor.
3. Timer shaft or knob interference with console.
4. If dial is pointing to "water heating" then thermostat may be defective.

**Symptom..Dishwasher water siphons out.**

1. Drain hose (high) loop too low - must be a minimum height of 32 inches.
2. Drain line connected to a floor drain not vented. (install air gap at counter top).

## CYCLE SELECTION OPTIONS

