

Pump Assembly

The pump assembly is driven by a synchronous motor. The motor drives a pump which supplies 100 percent filtered water

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

Heater

Refer to the cycle chart on the reverse side to determine when the heater is on during the wash cycle. The heater cycles **ON** and **OFF** for brief periods during the drying cycle.

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

Voltage checks of the heater should be made in the dry portion of the service test mode.

Standard Dry Air Flow

The heated, moist air leaving the dishwasher through the lower vent causes drier air to be drawn into the unit by way of intake vents located at the side of the tub.

The water on the dishes is evaporated into drier air and the venting process continues. The heating element is turned **ON** and **OFF** during the entire drying cycle.

Detergent and Rinse Aid Dispenser

The detergent and rinse aid dispenser is a one piece component consisting of a molded detergent cup and a built-in rinse aid dispenser.

The detergent cup has a spring loaded cover and the rinse aid dispenser has a removable cover.

Liquid rinse aid is added to the dispenser up to the fill line indicator. The amount of rinse aid released can be adjusted by turning the arrow indicator from one, being the least amount, to four, being the greatest amount.

To replace dispenser:

- shut off electricity to dishwasher,
- remove outer door panel assembly,
- disconnect wiring to the actuator,
- remove the six screws,
- remove the dispenser,
- replace and reinstall screws,
- rewire actuator.

Product Specifications

Electrical

Rating 120 Volts, 60Hz
Separate Circuit..15 amp min.- 20 amp max.
Motor (Amps) 1 amp
Heater Wattage 475 - 630W
Total Amps (load rated) 8.7
TempAssure 135°F ±5°F
(60°C±3°C) [with outer door in place]
TempBoost 140°F ±5°F
Heated Wash/Heated Rinse
Hi-Limit Thermostat 200°F (93°C)

Water Supply

Suggested minimum incoming water temperature 120°F (49°C)
Pressure (PSI) min./max. 20/120
Connection (NPT) 3/8"
Consumption (Normal Cycle)
..... 5.8-6.0 U.S. gal
Water valve flow rate (U.S. GPM) 0.9
Water recirculation rate (U.S. GPM)
..... approx. 5.28
Water fill time 43 sec.

Trouble Shooting Tips

WARNING

Personal Injury Hazard

Always disconnect the dishwasher from the electrical power source before adjusting or replacing components.

Symptom	Check the Following	Remedy
Dishwasher will not operate when turned on.	<ol style="list-style-type: none">1. Fuse (blown or tripped).2. 120 VAC supply wiring connection faulty.3. Electronic control board defective.4. No 12 VAC power to control.5. Motor (inoperative).6. Door switch (open contacts).7. Door latch not making contact with door switch.8. Touch pad circuit defective.9. No indicator lamps illuminate when START or OPTIONS are pressed.	<ol style="list-style-type: none">1. Replace fuse or reset breaker.2. Repair or replace wire fasteners at dishwasher junction box.3. Replace control board.4. Replace control board.5. Replace motor/impeller assembly.6. Replace latch assembly.7. Replace latch assembly.8. Replace console assembly.9. Replace console assembly.
Motor hums but will not start or run.	<ol style="list-style-type: none">1. Motor (bad bearings).2. Motor stuck due to prolonged non-use.	<ol style="list-style-type: none">1. Replace motor assembly.2. Rotate motor impeller.
Motor trips out on internal thermal overload protector.	<ol style="list-style-type: none">1. Improper voltage.2. Motor windings shorted.3. Glass or foreign items in pump.	<ol style="list-style-type: none">1. Check voltage.2. Replace motor/impeller assembly.3. Clean and clear blockage.
Dishwasher runs but will not heat.	<ol style="list-style-type: none">1. Heater element (open).2. Electronic control board defective.3. Wiring or terminal defective.4. Hi-Limit thermostat defective.	<ol style="list-style-type: none">1. Replace heater element.2. Replace control board.3. Repair or replace.4. Replace thermostat.
Detergent cover will not latch or open.	<ol style="list-style-type: none">1. Latch mechanism defective.2. Electronic control board defective.3. Wiring or terminal defective.4. Broken spring(s).5. Defective actuator.	<ol style="list-style-type: none">1. Replace dispenser.2. Replace control board.3. Repair or replace.4. Replace dispenser.5. Replace dispenser.
Dishwasher will not pump out.	<ol style="list-style-type: none">1. Drain restricted.2. Electronic control board defective.3. Defective drain pump.4. Blocked impeller.5. Open windings.6. Wiring or terminal defective.	<ol style="list-style-type: none">1. Clear restrictions.2. Replace control board.3. Replace pump.4. Check for blockage, clear.5. Replace pump assembly.6. Repair or replace.
Dishwasher will not fill with water.	<ol style="list-style-type: none">1. Water supply turned off.2. Defective water inlet fill valve.3. Check fill valve screen for obstructions.4. Defective float switch.5. Electronic control board defective.6. Wiring or terminal defective.7. Pressure Switch Stuck.	<ol style="list-style-type: none">1. Turn water supply on.2. Replace water inlet fill valve.3. Disassemble and clean screen.4. Repair or replace.5. Replace control board.6. Repair or replace.7. Repair or replace.
Dishwasher water siphons out.	<ol style="list-style-type: none">1. Drain hose (high) loop too low.2. Drain line connected to a floor drain not vented.	<ol style="list-style-type: none">1. Repair to proper <i>32-inch minimum height</i>.2. Install air gap at counter top.
Detergent left in dispenser.	<ol style="list-style-type: none">1. Detergent allowed to stand too long in dispenser.2. Dispenser wet when detergent was added.3. Detergent cover held closed or blocked by large dishes.4. Improper incoming water temperature to properly dissolve detergent.5. See "Detergent cover will not open."	<ol style="list-style-type: none">1. Instruct customer/user.2. Instruct customer/user.3. Instruct customer/user on proper loading of dishes.4. Incoming water temperature of 120°F is required to properly dissolve dishwashing detergents.

SERVICE DATA SHEET

P/N: FPHD2491

FRIGIDAIRE Electronic Series

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. Electrolux Home Products North America 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

BK.....	Black
BU.....	Blue
PK.....	Pink
RD.....	Red
WH/RD.....	White/Red
RD-YE.....	Red/Yellow
VT.....	Violet
OR.....	Orange
GR.....	Green
W.....	White

Operation

To start Press START/CANCEL pad. Close and latch door.

To delay start . . . Press DELAY START pad to select desired delay time. Close and latch door.

To select a new cycle or option . . . Press desired cycle and/or option pad. The indicator lights will change. Press START/CANCEL within 15 seconds to begin cycle.

To cancel cycle . . Press START/CANCEL. Dishwasher will drain for 60 seconds, then shut off.

For controls lock Press and hold the AIR DRY pad for 3 seconds.
 To unlock, press and hold the AIR DRY pad for 3 seconds.

Display Codes (Readout)

LO.....Low liquid in the rinse aid dispenser

PF.....A power failure has occurred

Cd.....Close the door

'01-24'.....Hour(s) delay before start

Display Codes (LED)

CLEAN Shows completion of cycle. Indicator light will go off 30 seconds after door is opened.

OPTION LED's Flashing -- HI-TEMP WASH and AIR DRY/ LED's flashing indicates power failure has occurred. Press START/CANCEL pad and reselect desired options and cycle.

LOW RINSE The liquid rinse agent is low. Light will switch off after 5 complete wash cycles or dispenser is filled. (Some models)

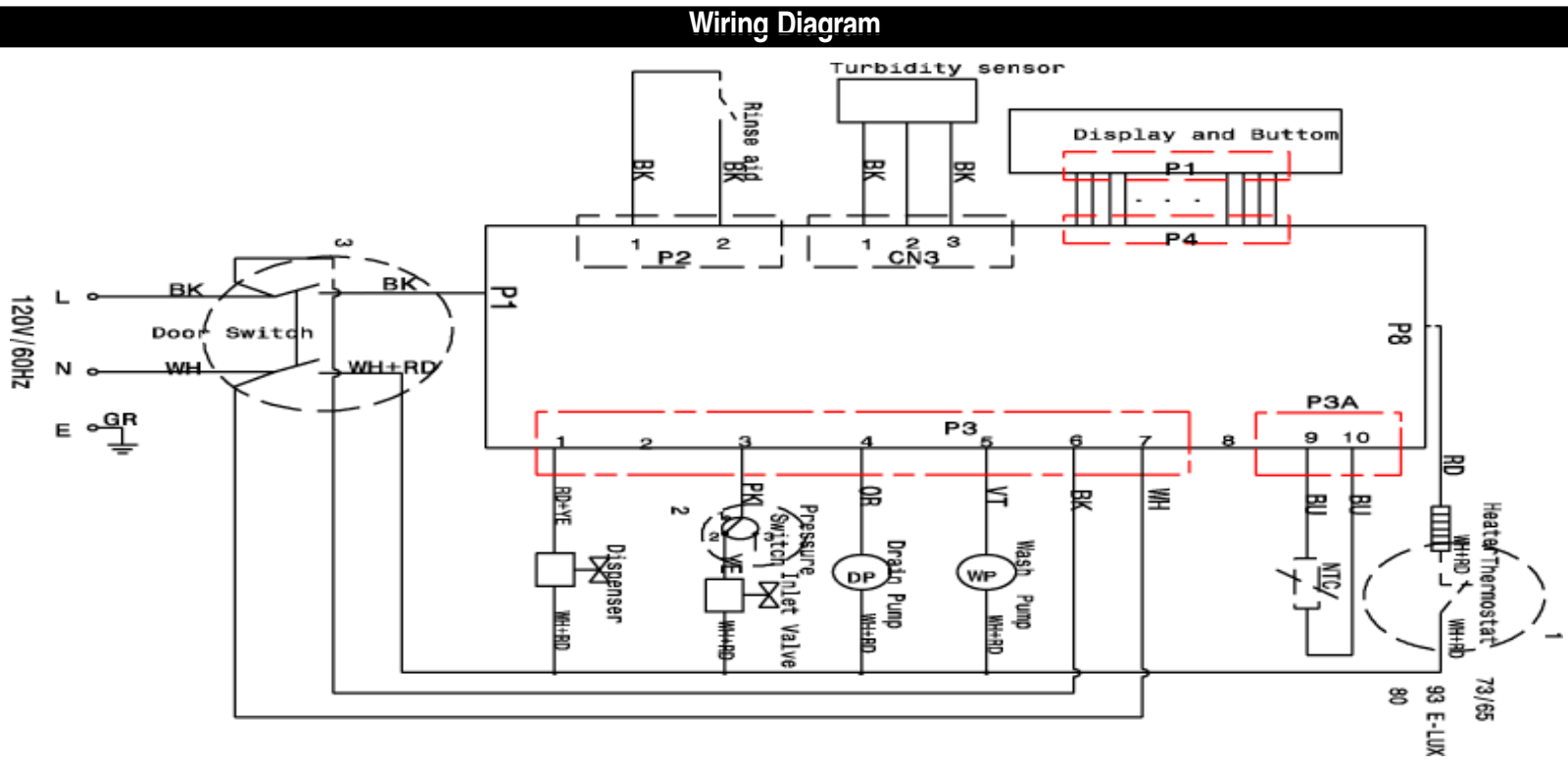
SANITIZE..... The SANITIZED criteria has been met. Indicator light will go off 30 seconds after door is opened.

Water/Service Test

The water/service test is a Special function initiated from the power failure mode or idle mode.

While in power failure or idle mode - simultaneously press the AIR DRY and START/CANCEL pads for 1 1/2 seconds. The dishwasher will then step through the test cycle per the chart. Pushing the START/CANCEL pad will advance the dishwasher to the next step.

DESCRIPTION	TOTAL TIME, (SEC)	WATER VALVE	CIRCULATION MOTOR	DRAIN MOTOR	HEATER	DISPENSER	FAN UNIT	SANITIZE LED	CLEAN LED	device being monitored	display flashes when detection of failure
FILL / DISPENSER	43	1	0	0	0	1	0	0	0		
DISPENSER	27	0	0	0	0	1	0	0	0	turbidity	tu
WASH/HEAT	45	0	1	0	1	0	0	0	0		
PAUSE	0.4	0	0	0	1	0	0	0	0		
WASH/HEAT	75	0	1	0	1	0	0	0	0		
WASH/HEAT/DISP	60	0	1	0	1	1	0	0	0	thermistor	th
DRAIN	90	0	0	1	0	0	1	0	0		
DRY	90	0	0	1	X	0	1	0	0	rinse aid	rA
TOTAL	430							1	1		
X - denotes selectable option											
SANITIZE and CLEAN LED stay on for 30 seconds after door is opened or cycle started.											



Cycle Selection Options

Minutes	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155																																															
Heavy Wash	<table border="0" style="width: 100%; text-align: left;"> <tr> <td>Pre-Wash 1</td><td>Pre-Wash 2</td><td>Pre-Wash 3</td><td>Main Wash</td><td>Rinse 1</td><td>Rinse 2</td><td>Final Rinse</td><td>Dry</td> </tr> <tr> <td>Water Valve</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td> </tr> <tr> <td>Wash Motor</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td> </tr> <tr> <td>Drain Motor</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td> </tr> <tr> <td>Heater</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td> </tr> <tr> <td>Dispenser</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td> </tr> </table>																														Pre-Wash 1	Pre-Wash 2	Pre-Wash 3	Main Wash	Rinse 1	Rinse 2	Final Rinse	Dry	Water Valve	■	■	■	■	■	■	■	Wash Motor	■	■	■	■	■	■	■	Drain Motor	■	■	■	■	■	■	■	Heater	■	■	■	■	■	■	■	Dispenser	■	■	■	■	■	■	■
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