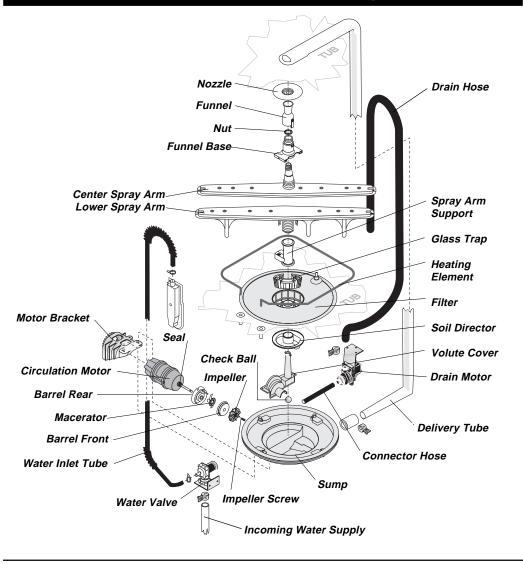
Exploded View of Wash System



Standard Dry Air Flow

When the control advances to the "dry" portion of The Power Dry configuration is the same as the the cycle, a linear actuator retracts a valve, which Standard except it has a cross flow blower located opens a vent path through the console into the in the air discharge path. The blower assists the kitchen. This venting method eliminates heating element in producing power to drive the discharging heated moisture into the motor moist air out of the dishwasher. compartment. The heated, moist air leaving the dishwasher through the console vent causes drier air to be drawn into the unit by way of intake vents located at the bottom of the door. 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

piece component consisting of a molded

The detergent cup has a spring loaded cover and

Liquid rinse aid is added to the dispenser up to

indicator from one, being the least amount, to

four, being the greatest amount.

· shut off electricity to dishwasher,

disconnect wiring to the actuator,

remove outer door panel assembly,

To replace dispenser:

Tub and Door Seal

Power Dry Air Flow

replacing components.

Symptom

The detergent and rinse aid dispenser is a one • remove the six screws,

- remove the dispenser,
- detergent cup and a built-in rinse aid dispenser. replace and reinstall screws,

rewire actuator.

the rinse aid dispenser has a removable cover. To replace actuator:

- shut off electricity to dishwasher,
- the fill line indicator. The amount of rinse aid disconnect wiring to the actuator, released can be adjusted by turning the arrow
 - place a flat head screwdriver under the actuator body and between the dispenser housing and terminal side, twist and lift up on the actuator being careful not to damage the retainer snap-fits.
 - · replace with new actuator by pressing into place,
 - · rewire actuator.

an interference fit. Center the gasket (marked on a short turn at the bottom of the tub channel back) at the tub top center and press in place before ending at the channel end wall.

The door seal is pressed into the tub channel for without stretching or bunching. The gasket takes open

Dishwasher will not pur

Pump Assembly

The pump assembly is driven by a 1/12 HP, shaded pole motor. Rotation is in the counterclockwise direction at 3100 to 3200 RPM. The motor drives a pump which supplies 100 percent filtered water at a rate of approximately 12 GPM to one spray arm at a time. The spray arm's operation is alternated by small "pauses" of the motor during the wash cycle.

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 entrance to the drain pump. The drain hose is attached by a worm gear clamp to the discharge of the drain pump. The drain is then routed up the side of the dishwasher and attached to the side of the tub. This drain loop insures that an air pocket cannot form near the drain pump and cause the pump to

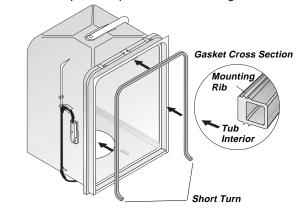
900 Watt Heater

Refer to the cycle chart on the reverse side to Voltage checks of the heater should be made in determine when the heater is on during the wash the dry portion of the service test mode. cycle. The heater cycles ON and OFF for brief periods during the drying cycle.

air lock. The drain loop on the side of the tub must be kept in place after servicing.

The main pump can easily be removed by disconnecting the upper spray arm supply tube, the drain pump connector hose, and the wiring harness connections made at the circulation motor and the water heat thermistor located on the bottom of the pump.

Once the pump assembly is removed from the dishwasher, the motor/impeller assembly can be removed from the sump by taking out the three (3) T-20 Torx head screws from the aluminum motor bracket and then the three (3) T-20 Torx head screws from the volute cover. Using a large flat head screwdriver inserted between the impeller screw and the sump's volute, the motor/ impeller assembly can be gently pried out of the sump. Use the screwdriver as a lever.



Product Specifications

Electrica	
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Rating 120 Volts, 60Hz
Separate Circuit15 amp min 20 amp max.
Motor (HP) ¹ / ₁₂
Motor (Amps) 3.4
Heater Wattage 900
Total Amps (load rated) 11.0
TempAssure 136°F ±5°F
(58°C±3°C) [with outer door in place]
TempBoost 144°F ±5°F (62°C ±3°C)
Heated Wash/Heated Rinse
Hi-Limit Thermostat 200°F (93°C)

Water Supply

	Trates eacher)	
<u>,</u>	Suggested minimum incoming water	
	temperature 120°F (49°C)	
2	Pressure (PSI) min./max	
ŀ	Connection (NPT) ³ / ₈ "	Detergent left in dispens
)	Consumption (Normal Cycle)	
)	6.0 U.S. gal., 5.0 Imp. gal., 22.7 liters	
	Water valve flow rate (U.S. GPM)	
	Water recirculation rate (U.S. GPM)	
	approx. 12	
è	Water fill time	
۱ I		

Detergent cover will not

AWARNING

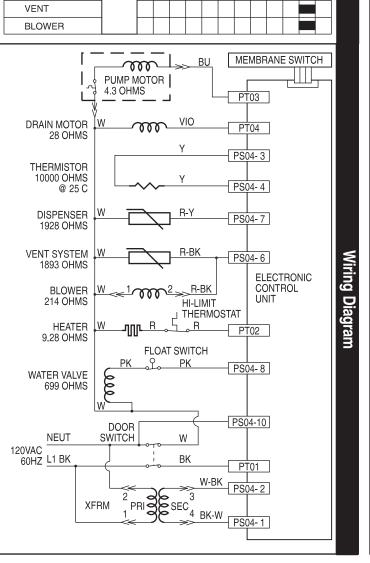
Personal Injury Hazard

Always disconnect the dishwasher from the electrical power source before adjusting or

Symptom	Check the Following	Remedy					
Dishwasher will not operate when turned on.	 Fuse (blown or tripped). 120 VAC supply wiring connection faulty. Electronic control board defective. No 12 VAC power to control. Motor (inoperative, check resistances). Door switch (open contacts). Door latch not making contact with door switch. Touch pad circuit defective. No indicator lamps illuminate when START or OPTIONS are pressed. 	 Replace fuse or reset breaker. Repair or replace wire fasteners dishwasher junction box. Replace control board. Replace transformer. Replace motor/impeller assembly. Replace door switch. Replace latch assembly. Replace console assembly. Replace console assembly. 					
Motor hums but will not start or run.	 Motor (bad bearings or locked rotor). Motor stuck due to prolonged non-use. 	 Replace motor. Rotate motor fan or impeller. 					
Motor trips out on internal thermal overload protector.	 Improper voltage. Seal faces binding. Motor shaft binding. Motor windings shorted. Glass or foreign items in pump. 	 Check voltage. Rotate motor fan or impeller, or replace. Clear blockage or replace. Replace motor/impeller assembly. Clean and clear blockage. 					
Dishwasher runs but will not heat.	 Heater element (open). Electronic control board defective. Wiring or terminal defective. Hi-Limit thermostat defective. 	 Replace heater element. Replace control board. Repair or replace. Replace thermostat. 					
Detergent cover will not latch or open.	 Latch mechanism defective. Electronic control board defective. Wiring or terminal defective. Broken spring(s). Defective actuator. 	 Replace dispenser. Replace control board. Repair or replace. Replace dispenser. Replace actuator. 					
Dishwasher will not pump out.	 Drain restricted. Electronic control board defective. Defective drain pump. Air lock in drain hose. Blocked impeller. Open windings. Wiring or terminal defective. 	 Clear restrictions. Replace control board. Replace pump. Make sure hose is attached in proper position on side of tub. Check for blockage, clear. Replace windings. Repair or replace. 					
Dishwasher will not fill with water.	 Water supply turned off. Defective water inlet fill valve. Check fill valve screen for obstructions. Defective float switch. Electronic control board defective. Wiring or terminal defective. Float stuck in "UP" position. 	 Turn water supply on. Replace water inlet fill valve. Disassemble and clean screen. Repair or replace. Replace control board. Repair or replace. Clean float. 					
Dishwasher water siphons out.	 Drain hose (high) loop too low. Drain line connected to a floor drain not vented. Drain hose not connected to side of tub. 	 Repair to proper height. Install air gap at counter top. Reattach drain hose. 					
Detergent left in dispenser.	 Detergent allowed to stand too long in dispenser. Dispenser wet when detergent was added. Detergent cover held closed or blocked by large dishes. Improper incoming water temperature to properly dissolve detergent. See "Detergent cover will not open." 	 Instruct customer/user. Instruct customer/user. Instruct customer/user on proper loading of dishes. Incoming water temperature of 120°F is required to properly dissolve dishwashing detergents. 					

Γ	INTERN	INTERN	DURATION (IN SECONDS)	6		LED	_	A	P			JTPU 盂		7	Ŵ		CYC မှ		_	<u>9</u>	
	INTERNAL NUMBER	INTERNAL FUNCTION	ION CONDS)	CLEAN	DRYING	RINSING	WASHING	ADD-A-DISH	BLOWER	VENT	DISPENSER	HEATER	FILL VALVE	DRAIN MOTOR	WASH MOTOR		SHORT (UPPER	SHORT (BOTH)	NORMAL WASH	POTS & PANS	
	1	⊇ DRAIN	90																		
	2	1 - FILL 1 - WASH A	89 # 3								ப	4									
	4	1 - WASH B 1 - WASH C	0 # 3									4									
	6 7	1 - WASH D 1 - WASH E	0 # 3									4									
	8 9	1 - WASH F 1 - DRAIN	30 180																		
	10 11	2 - FILL 2 - WASH A	87 # 3								4										
	12 13	2 - WASH B 2 - PAUSE	# 3 0.6																		
	14 15	2 - WASH C 2 - WASH D	30 3																		
	16 17	2 - PAUSE 2 - WASH E	0.6 # 3									ഗ									
	18 19	2 - WASH F 2 - DRAIN	30 # 3																		
	20 21	3 - FILL 3 - WASH A	87 90								თ										
	22 23	3 - PAUSE 3 - WASH B	0.6 # 3																		
	24 25	3 - PAUSE 3 - WASH C	3 # 3																		
	26 27	3 - PAUSE 3 - WASH D	0.6 # 3																		
	28 29	3 - PAUSE 3 - WASH E	3 # 3																		
	30 31	3 - PAUSE 3 - WASH F	0.6 # 3																		
	32 33	3 - PAUSE 3 - WASH G	3 # 3																		
	34 35	3 - PAUSE 3 - WASH H	0.6 # 3																		
	36 37	3 - PAUSE 3 - WASH I	3 # 3																		
	39	3 - PAUSE TEMP ASSURE	0.6 # 1																		
	40 41	HEAT DELAY 3 - WASH J	# 2 # 3																		
	42 43	3 - WASH K 3 - DRAIN	30 # 3																		
	44 45	4 - FILL 4 - PAUSE	87 3																		
	46 47	4 - WASH A 4 - PAUSE	75 0.6																		
		4 - WASH B 4 - PAUSE	75 3																		ýc
		4 - WASH C 4 - PAUSE	75 0.6																		Cycle Selection Options
	53	4 - WASH D 4 - WASH E	75 30																		elec
	55	4 - DRAIN 5 - FILL	180 87																		
	56 57	5 - WASH A 5 - PAUSE	60 3								8										
	58 59	5 - WASH B 5 - PAUSE	60 0.6																		ptio
	60 61	5 - WASH C 5 - PAUSE	60 3																		suc
	62 63	5 - WASH D 5 - PAUSE	60 0.6																		
		5 - WASH E 5 - PAUSE	60 3																		
		5 - WASH F 5 - PAUSE	# 3 0.6								4										
		5 - WASH G 5 - PAUSE	60 3																		
	70 71	5 - WASH H 5 - PAUSE	60 0.6																		
		TEMP ASSURE HEAT DELAY	# 1 # 2																		
	74 75	5 - WASH I 5 - WASH J	90 30																		
	77	5 - DRAIN 6 - FILL	# 3 87																		
	79	6 - WASH A 6 - PAUSE	90 3																		
		6 - WASH B 6 - PAUSE	75 0.6																		
		6 - WASH C 6 - PAUSE	75 3																		
	85	6 - WASH D 6 - PAUSE	75 0.6																		
	87	6 - WASH E 6 - WASH F	75 30																		
	89	6 - DRAIN 7 - FILL 7 - WASH A	# 3 87 90																		
	91	7 - WASH A 7 - PAUSE 7 - WASH B	90 3 75								7										
	93	7 - PAUSE 7 - WASH C	0.6 75																		
	95	7 - PAUSE 7 - WASH D	3 75																		
	97	7 - PAUSE 7 - WASH E	0.6 75																		
	99	7 - WASH E 7 - WASH F 7 - DRAIN	30 90																		
	101	DRY DRY	180 180									9				Ħ				H	
	103	DRY DRY	90 180									6				Ħ			ļ		
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	107	DRY DRY	180 180 90									9							ļ		
	109	DRY DRY	180 60									9							ļ	H	
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ERVICE DATA SHEET S This information is intended for use P/N: 154278801 by persons having electrical and mechanical training and a level of knowledge these of subjects RF FRIGIDAI 1111 generally considered acceptable in the appliance repair trade. Frigidaire Company cannot be responsible, nor Models: FDB737, assume any liability, for injury or FDB836, FDB837 damage of any kind arising from the use of this Service Data Sheet. the Temp Assure event is preset to occur on the upper spray arm action. **NOTE 2:** HEAT DELAY operation is in progress. This is an optional cycle event. Cycle timing is interrupted while the water is heated to the preset temperature. At either the preset temperature or a default escape time (10 mins.), normal cycle timing resumes. The pump motor is generating lower and upper spray action during this interval. The sequence is 3 seconds pause, 60 seconds wash, 0.6 second pause, 60 seconds wash. The NOTE 3: NOTE 4: NOTE 5: NOTE 5: NOTE 7: NOTE 7: NOTE 8: NOTE 9: R-R-B BK W termination of the Heat Delay event is preset to occur on the upper spray arm action. **NOTE 3:** This interval time is controlled by the 'CYCLE VARIABLE TABLE'. **NOTE 4:** This output is ON only for the SHORT WASH cycle. **NOTE 5:** This output is ON only for the RINSE & HOLD cycle. **NOTE 1:** Temp Assure operation is in progress. This is a fixed cycle event. Cycle timing is interrupted while the water is heated to a preset temperature. At either the preset temperature or a default escape time (10 mins.), normal cycle timing resumes. The pump motor is generating lower and upper spray action during this interval. The sequence is 3 seconds pause, 60 seconds wash, 0.6 second pause, 60 seconds wash. The termination of 0 BR Color Code This output is ON only for POTS & PANS and NORMAL WASH cycle. This output is ON only for POTS & PANS cycle. This output is ON only for the NORMAL WASH cycle. This output is OFF when the 'NO HEAT DRY' option is active. White White/BlackRed/BlackRed/Yellow Violet Black/White Yellow Black Blue Red While in power failure mode (flashing HI-TEMP WASH & NO HEAT DRY): Water/Service Test - press and hold for 3 seconds NO HEAT DRY and START/CANCEL pads. If not in power failure mode: Cancel any cycle and, with the door latched, press for 3 seconds HI-TEMP WASH and START/CANCEL pads. INTERVAL SHORT POTS & PANS (BOTH) (UPPER) 90 60 45 3 5 1ST W/ **CYCLE** 66655 Notes 7 11 \SH 2 60 60 45 45 Cycle Test Procedure option is active. - 888 1121 2ND V 270 VARIABLE TABLE' 17 19 VASH 10 5 5 5 180 180 90 135 23 25 27 45 90 90 1<u>35</u>90 3RD 45 90 45 1<u>31</u> <u>13</u>888 |33 |35 |37 |41 |43 \SH 45 90 90 90 90 90 90 90 90 90 90 90 <u>8888</u> 9888 66 76 5TH ଞ୍ଚଛ୍ଚ 90 90 28 8 To select a new cycle or option -리 To cancel cycle To delay start . Seconds start END Time ଷ ଓ ଓ ଓ 0.6 မ ഗള 10 38 Diagnostic ADD-A-DISH WASHING . . Press START/CANCEL. Dishwasher will drain for 90 seconds, then shut LEDS Close and latch door. Press START/CANCEL pad. RINSING Press desired cycle and/or option pad. The indicator lights will change. Press START/CANCEL within 15 seconds to begin cycle. Close and latch door. Press DELAY START pad to select desired delay time. Diagnost DRYING CLEAN 12 9 10 11 INTERVAL 1 2 3 4 5 6 7 8 ີດ WASH MOTOR Test OPERATION DRAIN MOTOR FILL VALVE OUTPUTS HEATER 9 DISPENSER



ADD-A-DISH Dishes may be added now. The indicator light will switch off after the detergent dispenser activates and will remain off for the remainder of cycle. Wash portion of cycle. Rinsing portion of cycle. Drying portion of cycle. **DISPLAY CODES (LED)**

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