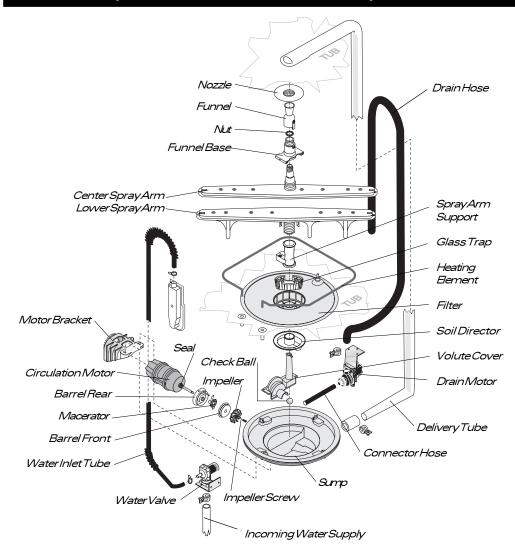
## Exploded View of Wash System



### **PumpAssembly**

The pump assembly is driven by a 1/12 HP, shaded pole motor. Rotation is in the counterclockwisedirectionat3100to3200RPIM. The motor drives a pump which supplies 100 percent filtered water at a rate to approximately 12GPM to one spray arm at a time. The spray arm's operation is alternated by small "pauses" ofthemotorduringthevvashcycle.

Draining is accomplished by using a small separatesynchronousdrainpumpmountedto the side of the sump. The drain pump is connected to the main pump by a small rubber hose. The draincheckvalveislocatedattheentrancetothe drain pump. The drain hose is attached by a wormgearclamptothedischargeofthedrain pump. The drain is then routed up the side of the dishwasherandattachedtothesideofthetub. This drain loop in sures that an air pocket cannot form near the drain pumpand cause the pump to

airlock. The drain loop on the side of the tub must bekept in place after servicing.

The main pump can easily be removed by disconnecting the upper sprayarm supply tube, the drain pump connector hose, and the wiring harness connections made at the circulation motorandthevvaterheatthermostatslocatedon thebottomofthepump.

Oncethepumpassemblyisremovedfromthe dishwasher,themotor/impellerassemblycanbe removedfromthesumpbytakingoutthethree (3)T-20Torx head screws from the aluminum motor bracket and then the three (3) T-20 Torx headscrevvsfromthevolutecover. Using a large flat head screwdriver inserted between the impellerscrevvandthesump'svolute,themotor/ impellerassemblycan begentlypried out of the sump. Usethescrewdriverasalever.

#### 900WattHeater

 $Refer to the {\it cycle chart on the reverse side to} \quad Voltage {\it checks of the heater should be made}$ determinewhentheheaterisonduringthewash cycle. The heater cycles ON and OFF for brief periodsduringthedryingcycle.

withthetimersetinthemainwash.

#### Standard Dry Air Flow

When the control advances to the "dry" portion of The Power Dry configuration is the same as the thecycle, a linear actuator retracts a valve, which opensavent paththrough the console into the kitchen. This venting method eliminates discharging heated moisture into the motor compartment. The heated, moist air leaving the dishwasherthroughtheconsoleventcauses drierairto bedravvn into the unit by way of intake vents located at the bottom of the door. The wateronthedishesisevaporated into drierain and the venting process continues. The heating elementisturned ON and OFF during the entire dryingcycle.

#### 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:

- · shutoffelectricitytodishwasher,
- removeouterdoorpanelassembly,
- · disconnectwiring to the actuator,

Standardexceptithasacrossflowblowerlocated intheairdischargepath. The blovver assists the heating element in producing power to drive the moistairoutofthedishwasher.

## · removethesix screvvs,

Power Dry Air Flow

- removethedispenser,
- replaceand reinstall screws,
- revvireactuator.

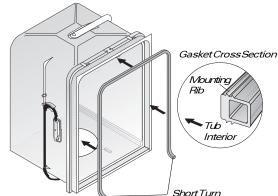
#### To replace actuator:

- shutoffelectricitytodishvvasher,
- disconnectwiring to the actuator,
- place a flat head screwdriver under the actuatorbody and between the dispenser housing and terminal side, twist and lift up on the actuator being careful not to damage theretainersnap-fits,
- replacewith new actuator by pressing into place.
- revvireactuator.

#### Tub and Door Seal

The door seal is pressed into the tube channel for without stretching or bunching. The gasket takes back) at the tub top center and press in place before ending at the channel end wall.

an interference fit. Centerthe gasket (marked on a short turn at the bottom of the tub channel



#### **Product Specifications**

Liectrical
Rating 120 Volts, 60 Hz
SeparateCircuit15ampmin20ampmax.
Motor(HP)
Motor(Amps)
HeaterWattage
TotalAmps(loadrated) 11.0
TempAssure(somemodels) 117°F±5°F
$(47^{\circ}C\pm3^{\circ}C)$ [with outer door in place]
TempBoost(somemodels) 127°F (53°C)
HeatedWash/HeatedRinse
Hi-LimitThermostat 200°F(93°C)

#### **WaterSupply**

Suggestedminimumincomingvvater
temperature
Pressure (PSI) min./max
Connection(NPT) <sup>3</sup> /ε
Consumption(NormalCycle)
6.0U.S.gal.,5.0Imp.gal.,22.7 liters
Watervalveflowrate(U.S.GPM)83
Waterrecirculationrate(U.S.GPM)
approx.12
Waterfilltime 87sec

## **TroubleShootingTips**

## **A WARNING**

Personal Injury Hazard

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

Symptom	ChecktheFollowing	Remedy
Dishwasherwill notoperatewhen turned on (wait at least 90 seconds).	<ol> <li>Fuse(blownortripped).</li> <li>120VAC supply wiring connection faulty.</li> <li>Timer (contacts open or defective)</li> <li>Motor (inoperative, check resistances).</li> </ol>	<ol> <li>Replacefuseorreset breaker.</li> <li>Repair or replace wire fasteners a dishwasher junction box.</li> <li>Replace timer.</li> <li>Replace motor/impeller assembly.</li> </ol>
	Door switch (open contacts).     Door latch not making contact with door switch.     Selectors witch (open contacts).	5. Replacedorswitch. 6. Replacedatchassembly. 7. Replacedators witch. 7. Repl
	7. Selector switch (open contacts).	7. Replace selector switch.
Motor hums but will not start or run.	<ol> <li>Motor (bad bearings or locked rotor).</li> <li>Motor stuckdue to prolonged non-use.</li> </ol>	Replacemotor.     Rotatemotorfanorimpeller.
Motor tripsout on internal thermal overload protector.	Impropervoltage.     Seal faces binding.	Checkvoltage.     Rotate motor fan or impeller, o replace.
	<ol> <li>Motorshaftbinding.</li> <li>Motorwindingsshorted.</li> <li>Glassorforeignitemsinpump.</li> </ol>	<ol> <li>Clear blockage or replace.</li> <li>Replace motor/impeller assembly.</li> <li>Clean and clear blockage.</li> </ol>
Dishwasherruns but will not heat.	Heaterelement(open).	Replaceheaterelement.
	<ul><li>2 Timerdefective.</li><li>3. Wiringorterminal defective.</li></ul>	<ul><li>2 Replacetimer.</li><li>3 Repairorreplace.</li></ul>
	4. Hi-limitthermostatdefective.	4. Replacethermostat.
Detergent cover will not latch or	Latchmechanism defective.	Replacedispenser.
open.	<ul><li>2 Timercontactdefective.</li><li>3. Wiringorterminaldefective.</li></ul>	<ul><li>2 Replacetimer.</li><li>3. Repairorreplace.</li></ul>
	<ul><li>4. Brokenspring(s).</li><li>5. Defective actuator.</li></ul>	<ul><li>4. Replacedispenser.</li><li>5. Replaceactuator.</li></ul>
Dishwasherwill not pumpout.	Drainrestricted.	Clear restrictions.
	<ul><li>2 Timercontactdefective.</li><li>3 Defectivedrainpump.</li></ul>	<ul><li>2 Replacetimer.</li><li>3 Replacepump.</li></ul>
	4. Airlockindrainhose.	Makesurehoseisattachedin proper position on side of tub.
	<ul><li>5. Blocked impeller.</li><li>6. Openwindings.</li></ul>	<ul><li>5. Checkfor blockage, clear.</li><li>6. Replacevvindings.</li></ul>
Dishwasherwill not fill with water.	Water supply turned off.	Turnwatersupplyon.
	<ol> <li>Defective water in let fill valve.</li> <li>Check fill valve screen for obstructions.</li> </ol>	<ul><li>2 Replacewater inlet fill valve.</li><li>3 Disassemble and clean screen.</li></ul>
	4. Defective float switch.	4. Repairorreplace.
	5. Timercontactdefective.	<ul><li>5. Replacetimer.</li><li>6. Repairorreplace.</li></ul>
	<ul><li>6. Wiringdefective.</li><li>7. Float stuckin "UP" position.</li></ul>	7. Cleanfloat.
Timer does not advance.	Timermotor(stalledoropen.)	1. Replacetimer.
	<ol><li>Checktimerforpowertotimer motor.</li></ol>	<ul><li>2 Repairorreplacetimer.</li><li>3 Repairoradjust.</li></ul>
	3 Timershaftbindingtoorknob	· · ·
	interferencevvithescutcheon. 4. TempBoostthermostatdefective.	<ol><li>Replace or adjust position o thermostat.</li></ol>
Dishwasherwatersiphonsout.	Drain hose(high)loop too low.     Drain line connected to a floor	Repairto proper height.     Install air gapat counter top.
	drain not vented.  3. Drain hose not connected to side oftub.	3. Reattachdrainhose.
Detergent left in dispenser.	Detergentallowed to stand too long in dispenser.	1. Instructcustomer/user.
	<ol> <li>Dispenserwetwhendetergentwas added.</li> </ol>	2 Instructcustomer/user.
	<ol><li>Detergent cover held closed or</li></ol>	3. Instruct customer/user on prope
	<ul><li>blocked by largedishes.</li><li>4. Improperincomingwater temperature to properly dissolve detergent.</li></ul>	<ul><li>loading of dishes.</li><li>4. Incoming water temperature of 1201 is required to properly dissolved dishwashing detergents.</li></ul>
	<ol><li>See"Detergentcoverwill not open."</li></ol>	

## SERVICE DATA SHEET

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. Frigidaire Company cannot be responsible, nor assume any liability, for injury or damage of any kind arising from the use of this Service Data

P/N: 154297101

# FRIGIDAIRE

Model: FDB435

## Color Code

BK-WBlack/White BK-YBlack/Yellow BRBrown BR-W.Brown/White BU.Blue	OOrange O-BKOrange/Black O-WOrange/White PKPink PK-BKPink/Black PK-WPink/White	R-W         Red/White           R-Y         Red/Yellow           VIO         Violet           W         White           Y         Yellow
	RRed	
bu-U blue/Orange	KKeu	T-DK Tellow/black

## Timer Block

