# SERVICE DATA SHEET

P/N: 808936617

# Electrolux El 24ID50

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.

After Cancel, press pad Heavy and Fast simultaneously for at least 4 seconds to access Service Mode.

LED Auto, Led Heavy and Led Normal blink to indicate that Service mode is accesed.

After accessed Service mode (Led Auto, Led Heavy and Led Normal blinking):

- 1. Press pad Auto to show the first alarm code.
- Led Auto blinks to indicate the machine is in Alarm Reading.
- The first alarm code saved is shown in the display. For descriptions of alarm codes, please see Alarm Codes section
- 2. Press pad Auto again to show the second alarm code.
- Press pad Auto once more to show the third alarm code.
- 4. Press pad Auto the fourth time to move to Actuator Test. Press pad repeatedly will sequentially turn on one actuator at a time.
- Led Auto is turned off. led Heavy blincks to indicate the machine is in Actuator Test.
- The actuator number is shown in the display, see the following table for details.

Number of pad Heavy pressed	Actuator Number in display	Actuator	
4	4	Regeneration Valve	
5	5	Drain Pump	
6	6	Inlet Valve	
7	7	Heater	
8	8	Wash pump	
9	9	Dispenser	
10	10	Dry Fan	

- 5. Press pad Auto when actuator number 10 is activated, the machine will cycle back to Alarm reading and show the first alarm code saved.
- The mode can be exit by pressing the CANCEL button, or waiting 60 seconds after last button pressing.

## LED Test/Delete Alarm Memory

After accessed Service mode ( Led Auto, Led Heavy and Led Normal blinking):

- 1. Press pad Heavy to start this function.
- All LEDS and display blinks 5 seconds on 1 second off.
- Buzzer beeps 5 seconds and then off.
- The alarm codes saved in memory are erased.
- 2. The mode can be exit by pressing the CANCEL button, or waiting 60 seconds after last button pressing.

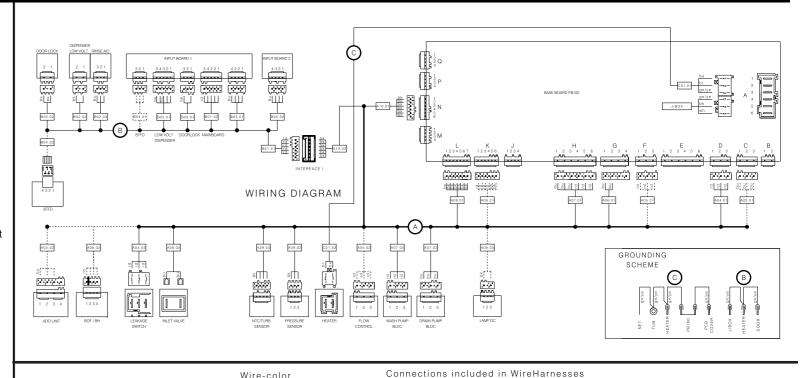
### **Functional Test cycle**

Service Mode

After accessed Service mode (Led Auto, Led Heavy and Led Normal blinking):

- Press pad Normal to start the test cycle. The cycle will not start if door is opened.
- LED Normal blinks all the way through the whole cycle, even if after the cycle is finished

The test cycle runs as a normal wash cycle. It can be cancelled or run to its end.



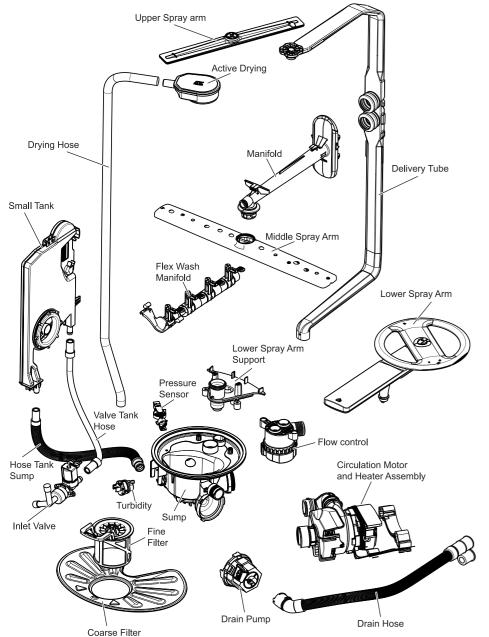
Wiring Diagram

Wire-color		
Code	Color	
bk	black	
br	brown	
bu	blue	
rd	red	
gn/ye	green/yellow	
Line-style		
		$\neg$

Harness	Connection	WireEnd 01	WireEnd 02	WireEnd 03	WireEnd04	WireEnd 05
	03	BaseBoard	DoorOpener			
	04	BaseBoard	LeakageSwitch			
	05	BaseBoard	FlowControl			
	06	BaseBoard	InletValve			
	07	BaseBoard	DrainPump	WashPump		
	08	BaseBoard	BOF	Lamp (DC)		
	09	BaseBoard	PressureSensor	NTC/Turb Sensor		
	10	BaseBoard	Interface I			
	01	Interface I	UserInterface 1			
	02	UserInterface 1	Dispenser	RinseAid		
	03	UserInterface 1	DoorLock			
	04	UserInterface 1	BTFD			
	05	UserInterface 1	UserInterface 2			
	01	BaseBoard	Heater			

	Cycle Selection Options
Minutes         5         10         15         20         25         30         35         40         45         50         55           Stemware         PreWash1         PreWash2         MainWash           Inlet Valve         Circulation Pump         Incident Pum	ColdRinse HotRinse Dry
Eco         PW1         PW2         PreWash3         PW4         MainWash           Inlet Valve         Circulation Pump         Inspect of the pump of the pu	ColdRinse1 ColdRinse2 HotRinse Dry
Heavy PW1 PW2 PreWash3 MainWash Inlet Valve Circulation Pump Drain Pump Heater Dispenser	ColdRinse1 ColdRinse2 HotRinse Dry
Normal/Auto PW MainWash Inlet Valve Circulation Pump Drain Pump Heater Dispenser	HotRinse Dry Normal Cycle (with light soil)
Upper         PW1         PW2         MainWash         CR         HotRinse         Dry           Inlet Valve	Cycles may differ in behaviour from presentation above due to the dependence of turbidity, temperature and user input. E.g. Less/more phases; shorter/longer duration.
Fast         PW         MainWash 1         MainWash2         HotRinse           Inlet Valve         Circulation Pump         Image: Circula	Rinse   PreWash1   PreWash2     Line Test   PreWash   Inlet Valve   Girc. Pump   Drain Pump   Drain Pump   Heater   Dispenser   Dispense

# **Exploded View of Wash System**



### **Tub Gasket**

The door gasket is pressed into the tub channel for an interference fit. To install the gasket:

- 1. Press the gasket across the header using
- 2. Press the gasket while stretching around the corners .

### NOTE: There should be no wrinkles or puckers in the corners.

3. Place the gasket end at the bottom and then press the gasket in from the bottom up.

# **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 cover.

Liquid rinse aid is added to the dispenser up to the fill line indicator. The amount of rinse aid released can be adjusted from 1, being the least amount, to 4, 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.

# Operation

Starting a Cycle Open door, select the cycle and options: then press the "START" pad. The LED over the selected cycle pad will then flash. Close the door and the cycle will begin.

> **Delay Start** Open door, select the cycle and options; there press the "DELAY" pad. Each press of the

pad will increase the delay time by 1 hour (1 to 24 hours).

Cancelling a

Open door, select the "CANCEL" pad then close the door. The unit will then drain and end the cycle.

Symptom

Selecting a new cycle or option

Open door, select the desired cycle and options; then press the "START" pad and close the door. The cycle will begin.

Locking Controls Open door and hold down the "air dry" pad for 3 seconds. The status window will display "loc" and the pads will be unresponsive. To unlock the control hold the "AIR DRY" pad down for 3 seconds until "loc goes out.

Normal function will resume.

# Alarm Codes/Description

Code family	Description
i10	Water Tap Closed
i20	Draining Problem
i30	Aqua Control
i40	Analogue pressure sensor problem
i50	Washing Motor Problem
i60	Heating Element Problem
i70	Thermistor problem
i80	Auto Door Opener
i90	Configuration Problem
iB0	Sensor Problem
iC0	Communication problem
iD0	Tacho problem
iE0	Flow controller problem
iF0	Water level problem

# **Trouble Shooting Tips**

# AWARNING

### **Personal Injury Hazard**

Remedy

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

Check the Following

- <b>7</b> ····   · · ·	•	<u> </u>
Dishwasher will not operate when turned on.	<ol> <li>Fuse (blown or tripped).</li> <li>120 VAC supply wiring connection faulty.</li> <li>Electronic control board defective.</li> <li>No 12 VAC power to control.</li> <li>Motor (inoperative).</li> <li>Door switch (open contacts).</li> <li>Door latch not making contact with door switch.</li> <li>Touch pad circuit defective.</li> <li>No indicator lamps illuminate when START or OPTIONS are pressed.</li> </ol>	<ol> <li>Replace fuse or reset breaker.</li> <li>Repair or replace wire fasteners at dishwasher junction box.</li> <li>Replace control board.</li> <li>Replace control board.</li> <li>Replace motor/impeller assembly.</li> <li>Replace latch assembly.</li> <li>Replace latch assembly.</li> <li>Replace console assembly.</li> <li>Replace console assembly.</li> </ol>
Motor hums but will not start or run.	Motor (bad bearings).     Motor stuck due to prolonged non-use.	Replace motor assembly.     Rotate motor impeller.
Motor trips out on internal thermal overload protector.	Improper voltage.     Motor windings shorted.     Glass or foreign items in pump.	Check voltage.     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 dispenser.
Dishwasher will not pump out.	Drain restricted.     Electronic control board defective.     Defective drain pump.     Blocked impeller.     Open windings.     Wiring or terminal defective.     Defective Drain Valve.	1. Clear restrictions. 2. Replace control board. 3. Replace pump. 4. Check for blockage, clear. 5. Replace pump assembly. 6. Repair or replace. 7. 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.	<ol> <li>Turn water supply on.</li> <li>Replace water inlet fill valve.</li> <li>Disassemble and clean screen.</li> <li>Repair or replace.</li> <li>Replace control board.</li> <li>Repair or replace.</li> <li>Clean or replace float.</li> </ol>
Dishwasher water siphons out.	Drain hose (high) loop too low.     Drain line connected to a floor drain not vented.     Drain valve or pump stuck open.	1. Repair to proper 32-inch minimum height. 2. Install air gap at counter top. 3. Repair or replace.
Detergent left in dispenser.	<ol> <li>Detergent allowed to stand too long in dispenser.</li> <li>Dispenser wet when detergent was added.</li> <li>Detergent cover held closed or blocked by large dishes.</li> <li>Improper incoming water temperature to properly dissolve detergent.</li> <li>Spray arm blocked.</li> <li>Is water getting into unit.</li> </ol>	<ol> <li>Instruct customer/user.</li> <li>Instruct customer/user on proper loading of dishes.</li> <li>Incoming water temperature of 120°F is required to properly dissolve dishwashing detergents.</li> <li>Instruct customer/user.</li> <li>Check fill valve repair or replace.</li> </ol>

Note: See "Detergent cover will not latch or open."

# **Pump Assembly**

The circulation pump is driven by a brushless-sensorless AC-motor. When looking into the inlet hose, the impeller rotates by the permanent magnet rotor in the counter-clockwise direction when 3-phase power is applied by the main board electronics. When the motor drives the pump approximately at 2900 rpm, supplying 100% filtered water at a rate of approximately 17 GPM to all three spray arms at once.

Draining is accomplished by using a smaller, separate, 3-phase brushless-sensorless drain pump motor mounted to the sump. The drain pump is connected to the sump directly. Speed is 2800rpm, controlled by the main board electronics.

A rubber check valve flap is inserted at the discharge end of the drain outlet pipe, which is integrated on the sump.

A raised drain hose loop section is routed on the side of the unit to help prevent/limit back flow out of the dishwasher. No additional such loops are required.

The main circulation pump is removed by disconnecting both attached clamps and hoses, disconnecting the wiring harness to the pump assembly and un-strapping the pump out of the rubber mount in the basement. Wire harness connections include 2 earth tabs, motor connector and heater connector.

# **Product Specifications**

### Electrical

Separate Circuit15 amp min 20 amp max.
Motor (Amps)0.4
Heater Wattage 850
Total Amps (load rated) 13.0
Water Temps controlled ±5°F
To assure success have outer door in place
TempAssure (cycle dependent)
Main Wash: 140°F
Final Wash: 140°F
Hi-TempAssure: 140°F Wash/149°F Final
Rinse
SanitizeAssure: 140°F Wash/156°F Final
Rinse
Hi-Limit Thermostat 200°F (93°C)

Rating ......120 Volts, 60Hz

## **Water Supply**

Suggested minimum incoming water
temperature 120°F (49°C)
Pressure (PSI) min./max 20/90
Connection (GHT)3/4" 11.5NH
Consumption (Normal Cycle)
Water valve flow rate (U.S. GPM) 0.66
Water recirculation rate (U.S. GPM)
approx. 17 (@2900rpm)
Water fill time104 sec.

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