

Diagnostic Manual

Models:

RX628DX1, RX628DW1, RX611DUX1

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1 MODEL RX628DX1, RX628DW1

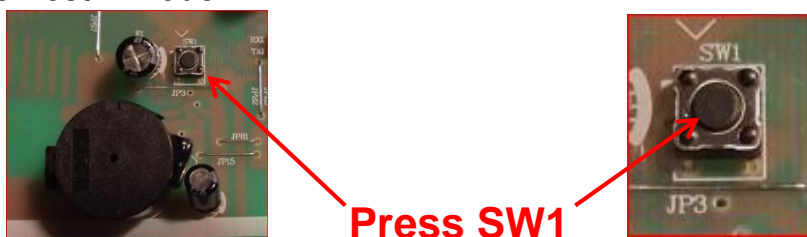
1.1 Diagnostics Self-Test



1.1.1 Self-Test Function

In this function all components of the refrigerator can be tested.

To enter the function, press the test button (SW1), located on the main control PCB board under the main control panel on top of the refrigerator, once. This will enter the Test 1 mode.



1.1.1.1 Test 1 – Pull Down Mode

The refrigerator is now in the Pull Down mode. In this mode:

- The temperature display on the user panel will show T1.
- After a delay of 10 seconds, the compressor will start.
- The freezer fan will start at full speed.
- The condenser fan will start at full speed.
- The defrost heater will be off.
- The refrigerator air damper will open.



1.1.1.2 Test 2 – Forced Defrost Mode

Press the test button again. The refrigerator is now in the Forced Defrost mode. In this mode:

- The temperature display on the user panel will show **T2**.
- After a delay of 10 seconds, the compressor will turn off.
- The freezer and condenser fans will turn off.
- The defrost heater will turn on.
- The refrigerator air damper will close.
- If the defrost sensor temperature is equal to or greater than +7°C, the defrost heater will work for 10 seconds and then switch off and exit the test mode.
- If the defrost sensor temperature is less than +7°C, the defrost heater will keep working until the sensor temperature reaches +7°C and then switch off and exit the test mode.



1.1.1.3 Test 3 – Heater Test Mode

Press the test button again. The refrigerator is now in the Heater Test mode. In this mode, after a delay of 10 seconds:

- The temperature display on the user panel will show **T3**.
- After a delay of 10 seconds, the PC damper heater, ice tube heater and ice flap heater will switch on for 30 seconds, then will switch off and exit the test mode.



NOTE: This does not test the defrost heater. For this, use test 2.

1.1.1.4 Test 4 – Test Defrost Mode

Press the test button again. The refrigerator is now in the Test Defrost mode. In this mode, after a delay of 10 seconds:

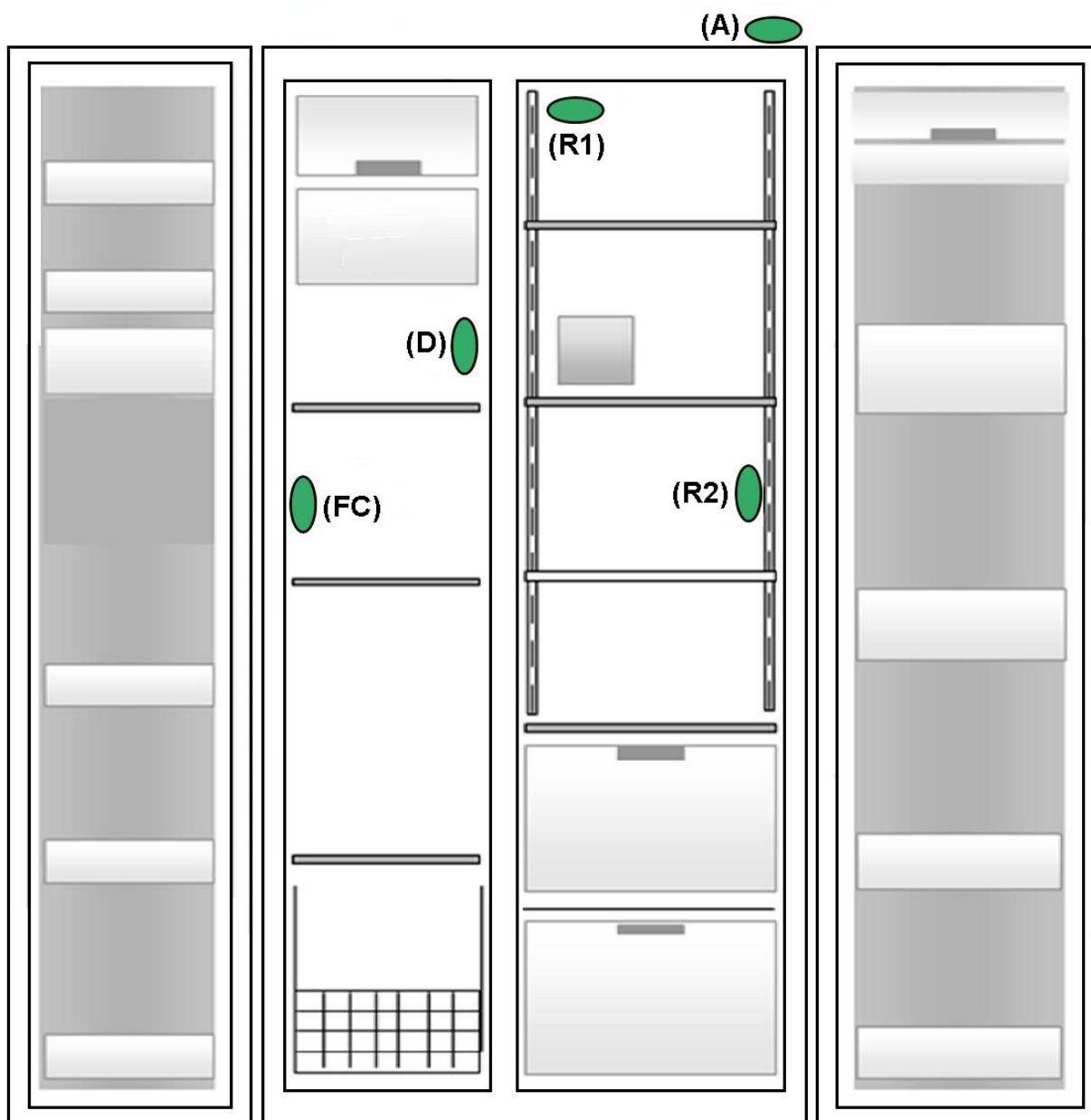
- The temperature display on the user panel will show **T4**.
- The refrigerator will continue to run normally until the temperature is 2°C below the set temperature, or for 30 minutes.
- It will then enter the forced defrost mode as described above in test 2.



To exit the self-test function, press the test button. The display will scroll through the test modes and then exit and the display will return to normal. The compressor will restart after 7 minutes.

2.1.1 Sensors & Fault Codes

1.1.2.1 Sensor Location



REF	SENSOR	LOCATION	FUNCTION
A	Ambient Sensor	Under RH hinge cover	Measure ambient temperature
R1	PC Sensor 1	Beside air vent in PC	Measure PC temperature
R2	PC Sensor 2	RH side of PC cabinet	Measure PC temperature
D	Defrost Sensor	On top of evaporator in FC	Measure evaporator temperature
FC	FC Sensor	LH side of FC cabinet	Measure FC temperature

NOTE: R1 and R2 sensors in the PC are interchangeable. The defrost and FC sensors in the FC are interchangeable, but sensors in the different compartments are not interchangeable.

1.1.2.2 Fault Code List

No.	MALFUCTION	FAULT DISPLAY		FAULT CODE MEANING
		FC	PC	
1	FC Sensor Fault	F4	Normal	FC sensor is short circuit or open circuit
2	Ambient Sensor Fault	Normal	F3	Ambient sensor is short circuit or open circuit
3	PC Sensor Fault	Normal	F1	PC sensor is short circuit or open circuit
4	PC Sensor Fault	Normal	F2	PC sensor is short circuit or open circuit
5	Defrost Sensor Fault	Normal	F6	Defrost sensor is short circuit or open circuit
6	FC Fan Motor Fault	Normal	E1	More than 30 seconds without signal
7	Evaporator Fan Motor Fault	Normal	E2	More than 30 seconds without signal
8	Communication Failure	Normal	E0	No signal transmitted between display PCB and power PCB for over 2 minutes
9	Defrost System Failure	Normal	Ed	Cannot reach -12 ^o within 2 hours

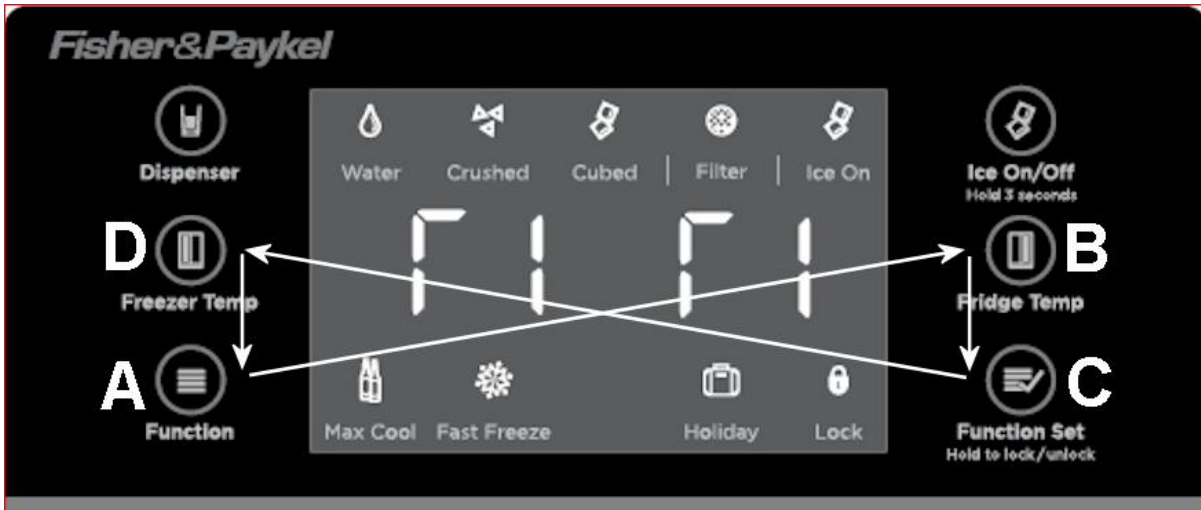
The product does not automatically show the fault code on the display. To view the fault code, lock the display by pressing and holding the **Lock** button for 3 seconds, then press the **Fast Freeze** button and the **Holiday** button together for 3 seconds. The fault code will be displayed.



The fault code will not be deleted until the fault has been repaired and the product does its next automatic self-check (approximately 2 hours).

If the product has been turned off by the customer, then turned back on, some of the fault codes will not display until the product has run for approximately 2 hours, when the product does its next automatic self-check.

2 MODEL RX611DUX1



(LCD panel displaying “T1 T1” when in the Forced Start mode)

2.1 Self-Test Function

In this function all components of the refrigerator can be tested.

To enter the function, ensure that the display is locked by pressing and holding the **Function Set** button (C).

Press the **Function** (A), then **Fridge Temp** (B), then **Function Set** (C), then **Freezer Temp** (D), then **Function** (A) buttons one by one within 5 seconds. The freezer and refrigerator temperature displays will each show T1.

1.1.1 Forced Start Mode

The refrigerator is now in the Forced Start mode. In this mode:

- The refrigerator and freezer displays will show **T1** as shown above.
- The compressor will start.
- The freezer fan will start at full speed.
- The condenser fan will start at full speed.
- The defrost heater will be off.
- The refrigerator air damper will open.

2.1.1 Forced Defrost Mode

Press the **Function** (A) button again. The refrigerator is now in the Forced Defrost mode. In this mode:

- The refrigerator and freezer displays will show **T2**.
- The compressor will turn off.
- The freezer and condenser fans will turn off.
- The defrost heater will turn on.
- The refrigerator air damper will close.
- If the defrost sensor temperature is equal to or greater than $+7^{\circ}\text{C}$, the defrost heater will work for 10 seconds and then switch off.
- If the defrost sensor temperature is less than $+7^{\circ}\text{C}$, the defrost heater will keep working until the sensor temperature reaches $+7^{\circ}\text{C}$ and then switch off.

To exit the self-test function, press the **Function** (A) button. The display will change to **T3**. Press **Function** (A) again and the display will change to **T4**. Press **Function** (A) again and the display will return to normal. Refer to Sections 1.1.1.3 and 1.1.1.4 for details of the T3 and T4 modes.