ELECTRONIC REFRIGERATOR DIAGNOSTIC AID

(To be used only by qualified service technicians)

The purpose of the diagnostic aid is to enable you to operate individual components and test circuits on electronic refrigerators that do not contain "built-in" diagnostics through the touch control board. This includes all electronic models with a 4 pad touch control and electronic models with temperature control knobs. Note: Not all diagnostic tests are available on all models.

The following 3 parts are required to assemble the diagnostic aid:

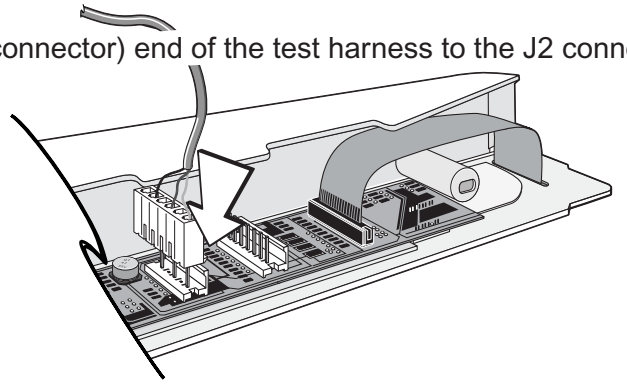
WX05X14999 Wiring harness

WR55X10092 Temperature control board

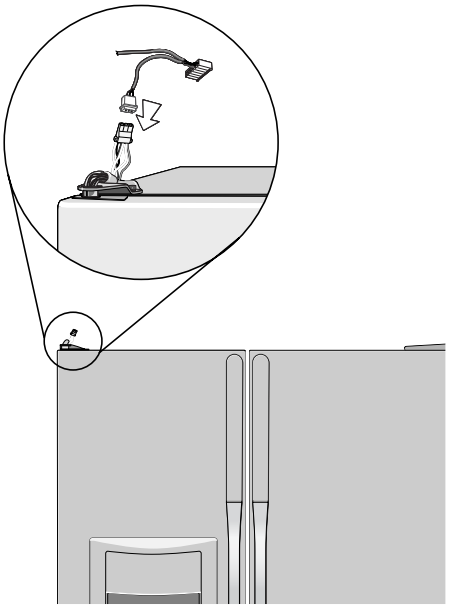
WR55X10068 Touch control membrane and housing

Step 1. Mount the temperature control board in the touch control housing and connect the ribbon cable.

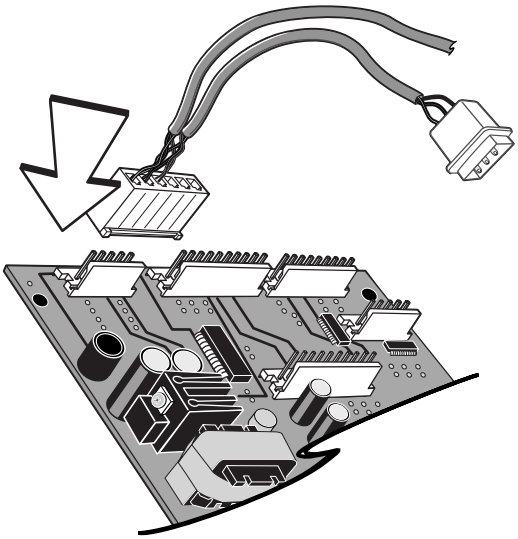
Step 2. Connect the long (single connector) end of the test harness to the J2 connector on the temperature control board.



Step 3. Connect the other end of the test harness to the refrigerator using the appropriate plug for the model being tested (see illustrations).



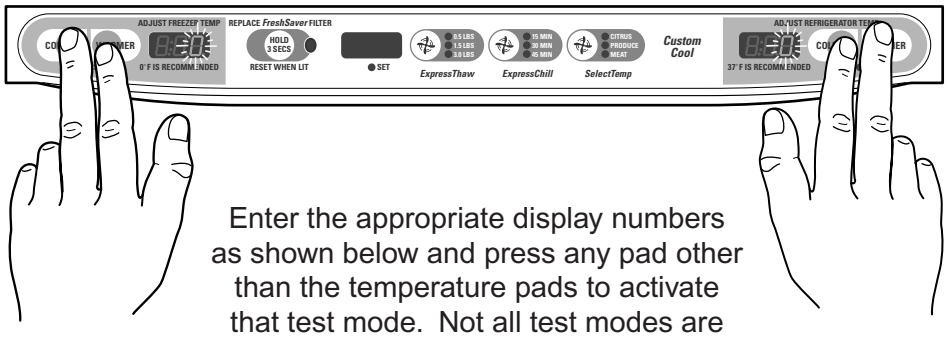
Steel liner side-by-side models have a connector under the upper hinge end cap on the freezer.



Top mount freezer models connect to the J4 connector on the main control board at the rear of the unit.

NOTE: *On plastic liner models with a 4 pad temperature control (no filter reset), you must disconnect the original touch control and plug the cabinet harness directly onto the diagnostic aid control board.*

Once connected to the refrigerator, enter the diagnostic mode by pressing both the freezer temperature (colder and warmer) pads and the refrigerator temperature (colder and warmer) pads simultaneously. All four pads must be held for approximately 3 seconds. Blinking "0's" in both displays indicate the refrigerator has entered the test mode.



Enter the appropriate display numbers as shown below and press any pad other than the temperature pads to activate that test mode. Not all test modes are available on all models.

FREEZER DISPLAY	FRESH FOOD DISPLAY	DIAGNOSTICS	RESULTS	COMMENTS
0	2	Communication check between Temperature Control and Main Control	"P" on freezer display if OK and "F" if problem is found	
0	3	Communication check between Dispenser Control & Temperature Control	"P" on freezer display if OK and "F" if problem is found	Dispenser models only
0	4	Communication check between Dispenser Control and Main Control	"P" on freezer display if OK and "F" if problem is found	Dispenser models only
0	5	Encoder Test	As the knob is rotated the display will show the corresponding setting	Only for models with temperature control knobs
0	7	Control and Sensor System Test	Checks each thermistor and displays "P" for pass and "0" for fail	See Note 1 below
0	8	Duct Door Test	Opens the dispenser duct door for 10 seconds, then closes.	Only for dispensers with 5 or more touch pads
1	0	Dampers Test	Opens each damper, pauses briefly and then closes.	Includes Custom Cool dampers if applicable
1	2	100% Run Time	Sealed system on 100% of the time. Times out after 1 hour.	
1	3	Prechill Test	Starts Prechill mode. Unit returns to normal on its own.	
1	4	Defrost Test	Toggles on the Defrost cycle. **See Note 2**	Must press again to turn heaters off. See Note 2
1	5	Main Control Reset	Causes a system reset	
1	6	Exit Diagnostic Mode	Causes a temperature control board reset	
1	7	Degrees C˚/F˚	Changes from F˚ to C˚ or C˚ to F˚ on temperature display	Press FF temperature pad (warmer/colder) to toggle

Note 1. Display order is #1) Fresh Food 1 #2) Fresh Food 2 #3) Custom Cool #4) Evaporator #5) Freezer Thermistor test results are: P = Pass 0 = Fail S = Short to 5 VDC B = Bad amplifier (replace main control)

Note 2. You **must** enter the defrost test again to toggle the defrost heater off at the end of the test. The heater will not come on if the evaporator thermistor is warm.

Refer to Service Guide 31-9072 for additional information