

# #13 FIREDRAGON Field Notes©

## #210 Cad-cell Control Tester

1. Shut off power to the appliance and remove one of the **T-T** leads from the primary control and then remove one of the **F-F** leads from the primary control.
2. Jumper the **T-T** terminals with a jumper and place the leads of the #210 Tester across the **F-F** terminals, **Figure 1**.
3. Determine the control type, see below in **Table 1**.
  - a. If a Low Resistance primary control use position ‘LO’ (I), **Figure 2**.
  - b. If a High Resistance primary control use position ‘MED’(II), Figure 2.
4. Turn on the power to the oilburner. It should **NOT START**.
5. Push the **RED START** button, Figure 2, the oilburner should start immediately or after self-check delay (2 seconds). If it does not start or if the burner started before the **START** button was pushed the control **MUST** be replaced.
6. Leave the oilburner running and observe operation, the control should function normally for at least three minutes.
7. Switch to the ‘HI’ (0) position, Figure 2. The burner should go to safety lockout or with a recycling control shut off in the allowed safety timing after recycling. If it does not lockout in the OEM’s nominal time, replace the control.
8. After the test is completed a resistance test of the cad-cell should also be performed using an ohmmeter.
9. After completing the test remove the jumper and the #210 tester and replace the wiring on **T-T** and **F-F**.



**Figure 1**



**Figure 2**

**Table 1**

<b>Low Resistance Cad-cell Controls</b>	<b>High Resistance Cad-cell Controls</b>
Carlin 40200, 50200, 60200, all models	Beckett GeniSys 7505, all models
Honeywell R8184, R8185, all models	Honeywell R7184, R7284, all models
ICM 1501, 1502, 1503	ICM 1511, 1512, 1513, 1514
Wayne, all models	<b>MED POSITION (II)</b>
White Rodgers 668, all models	
<b>LO POSITION (I)</b>	