FIELD INSTALLATION INSTRUCTIONS

TITLE:	Checking CAD Cell
NAME:	FII-017
ISSUE DATE:	2 July 2013
REVISION:	2

PURPOSE:

The intention of this FII is to demonstrate how to test the CAD cell and the controller of a unit.

TOOLS REQUIRED:

From left to right: Genisys Contractor Tool, Ratchet, 5/16 Socket, Multimeter, Toggle Switch.

PROCEDURE:

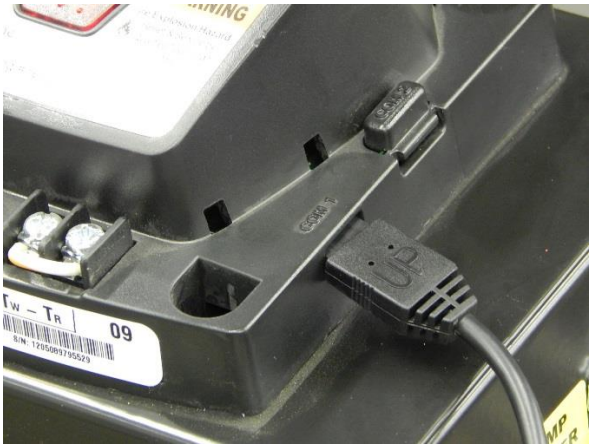

Figure 1: Genisys contractor tool plug-in port

Figure 2: Genisys contactor tool attached to controller

Step 1: If you have a Genisys Controller and have a Genisys Contractor Tool, plug in the tool on the right side of the controller. See Figure 1 for plug-in port location.

Step 2: Genisys Contractor Tool display will show the resistance readings for the CAD cell. Turn the unit on and watch to see if the CAD cell detects the flame. This will be shown by a decrease in the resistance when it sense the light. See Figure 2 for an example of the Genisys Contractor Tool.

Figure 3: Controller cover with fasteners indicated

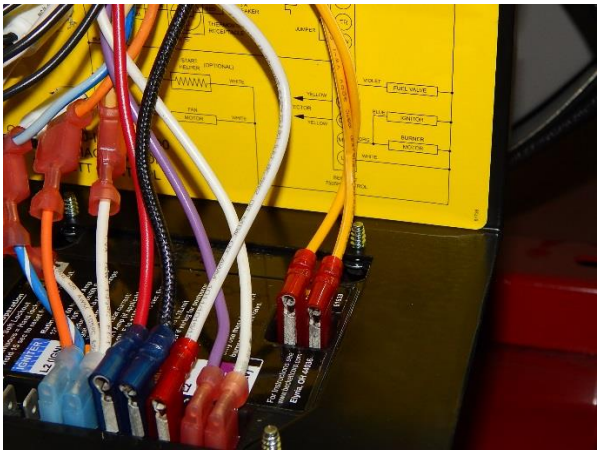

Figure 4: CAD cell wires

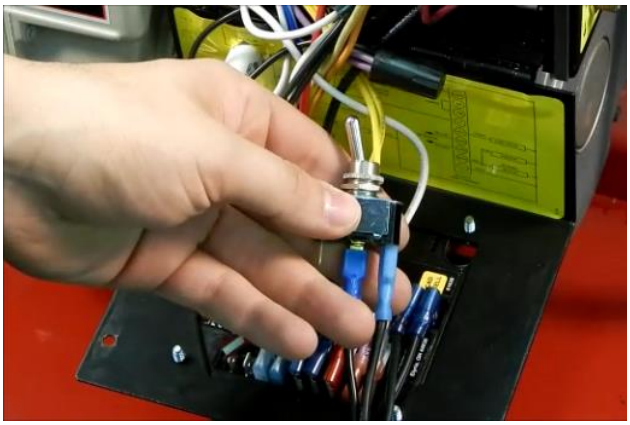

Figure 5: Toggle switch between the CAD cell terminals

Step 3: If you have a Honeywell Controller, do not have the Genisys Contactor Tool, or require further testing, open the controller cover by removing the top two screws. See Figure 3 for the controller cover and screw locations.

Step 4: Remove the CAD cell connectors.

Step 5: Turn the unit on and using a Multimeter check to see the resistance reading across the two yellow CAD cell wires. See Figure 4 for the CAD cell wires.

NOTE: You should start with a very high resistance and then when the burner starts you should see the resistance drop below 1200 Ω. If this does not happen, you may need to replace the CAD cell.

Step 6: Disconnect the CAD cell wires and jumper them together using a toggle switch. See Figure 5 for installed toggle switch.

Step 7: Turn unit on, wait for the 45 second pre-purge and then during the trial for ignition turn the toggle switch on to simulate a detected flame. If the unit still does not start, you may have to replace your controller.

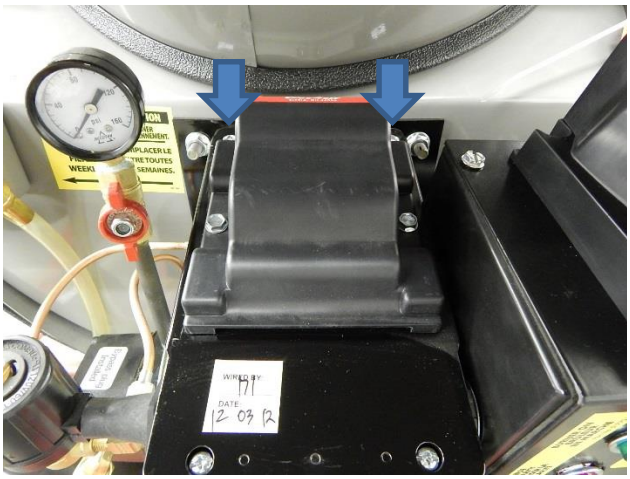

Figure 6: Igniter cover with fasteners indicated

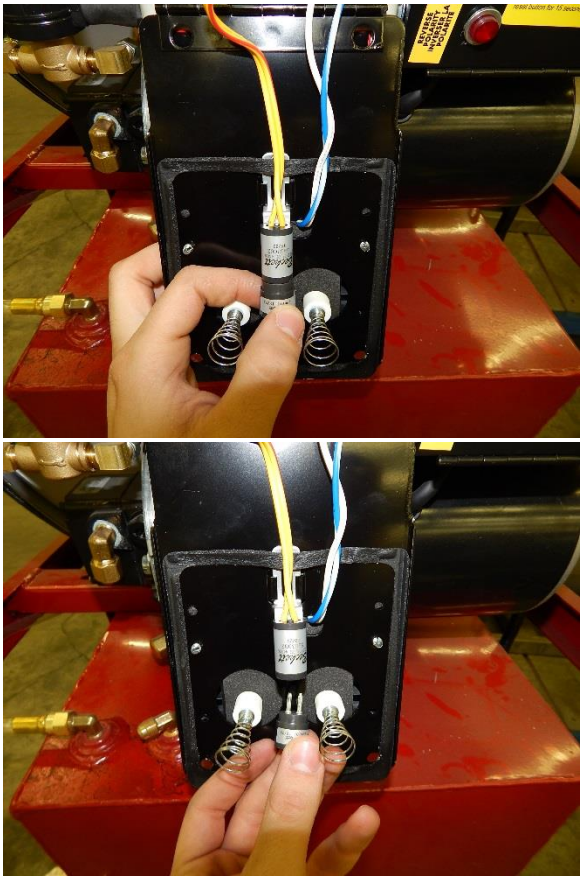

Figure 7: Removing CAD cell

Step 8: Open the igniter cover by removing the two screws at the top corners. See Figure 5 for the igniter cover and screw locations.

Step 9: Unplug CAD cell from unit by pulling it straight out. See Figure 6 for example of CAD cell removal.

NOTE: The prongs of the CAD cell have no designated orientation, meaning they can be plugged into the port in either way. So you need not keep track of its orientation upon removal.

Step 10: Plug in new CAD cell and close igniter cover.

NOTE: Be careful not to pinch the CAD cell wires when closing the igniter cover.