

Instruction Sheet

Subject: 8263446 Single Spark to Fenwal Ignition Module Conversion Kit Instructions

Models affected: 30lb Gas Fryers - LOV (BIGLA), Manual LOV (BIGL), OCF (FPGL) and FilterQuick (FQG30) Gas Fryers

Follow these instructions to replace a single spark Honeywell or Capable Control module with the Fenwal spark ignition module, 8075949.

1. Disconnect power from the fryer.
2. Remove the module cover by removing the two (2) screws securing the cover (see Figure 1).

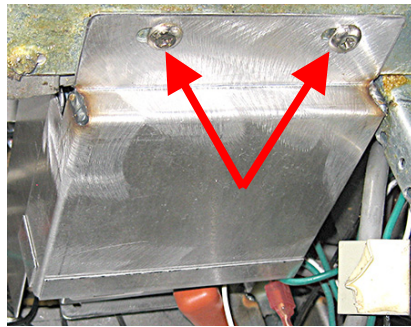


Figure 1

3. Remove controller bezel.
4. Lower the controller by removing the two (2) screws.

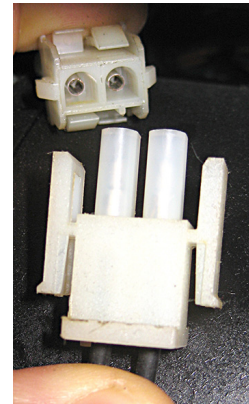


Figure 2

5. Disconnect 2-pin blower power connection (see Figure 2).
6. Remove the blower by removing the four (4) 7/16" nuts (see Figure 3).

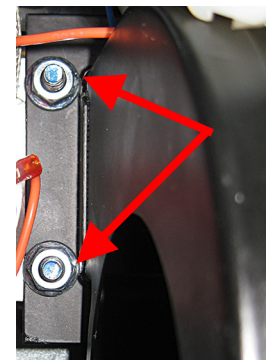


Figure 3

7. Disconnect the module harness from the interface board (see Figure 4).

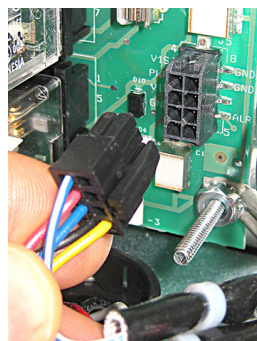


Figure 4

8. Loosen the two (2) 11/32" nuts attaching the module assembly, inside the rear of the controller box, (see Figure 5).

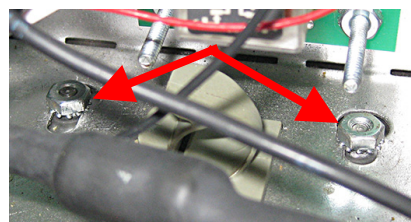


Figure 5



Figure 6

9. Slide the module assembly towards the rear of the control box until the nuts, loosened in the previous step, drop through the key hole slots. Fasteners or zip ties may need to be opened or cut to allow the harness/module to be lowered (see Figure 6).

In This Kit		
Part #	Description	Qty
1087664	MODULE, FENWAL SERVICE KIT ASSY.	1
8075986	HARNESS, FENWALL MODULE FULL VAT	1
8075987	HARNESS, FENWALL MODULE DUAL VAT	1
8073140	3/16" MALE TERMINAL	2
8197447	INSTRUCTIONS	1

10. Pull the module harness down out of the control box.
11. Disconnect the high voltage wire, the white flame sense wire, the green ground wire and the black burner ground wire from the existing module (see Figure 7).
12. If the flame sense wire connector is ¼", cut the ¼" terminal off of the end of the white sense wire and strip the wire (see Figure 8).
13. Terminalize the white sense wire with the supplied 3/16" male terminal (see Figure 9).

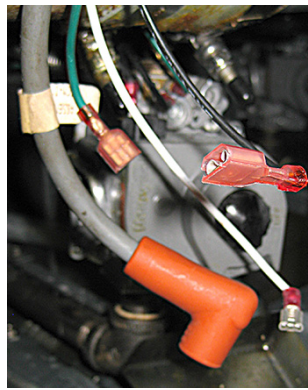


Figure 7



Figure 8



Figure 9

14. Attach the flame sense wire to the SENSE (S1) terminal of the new module (see Figure 10).
15. Attach the high voltage spark cable to the module. It may require twisting and pushing to fully secure the cable onto the module connector (see Figure 11).

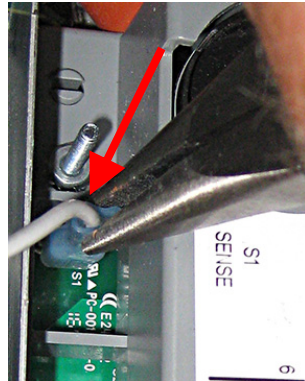


Figure 10



Figure 11

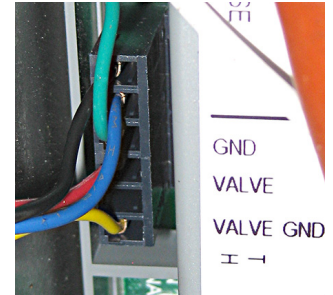


Figure 12

16. If not already connected, attach the 8-pin black connector to the module (see Figure 12). Ensure that it is properly connected to the terminal.

NOTE: For a full vat use the two harnesses with the blue/white wire on both modules. If dual vat, use the two harnesses with the solid blue wire on both modules (see Figure 14).

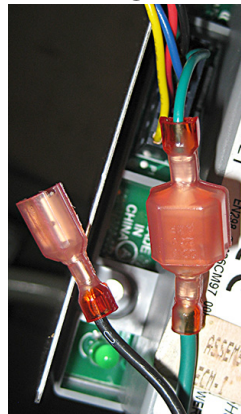


Figure 13

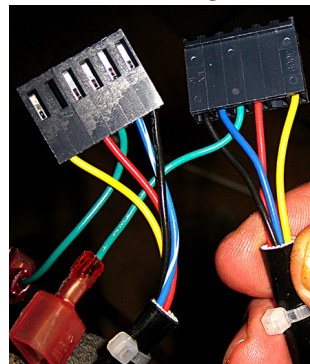


Figure 14

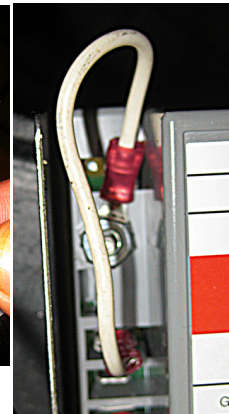


Figure 15

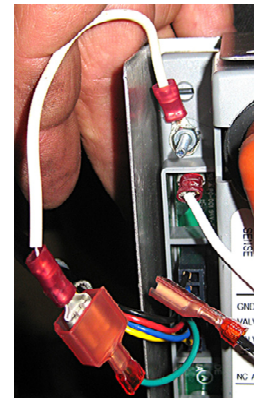


Figure 16

17. On full vat right module and both split vat modules, attach the green wire removed from the old module in step 11 to the green wire on the 8-pin connector attached to the module in previous step. Leave the black wire disconnected, as it is not used (see Figure 13). Reference wiring diagram on page 3.
18. On full vat left modules, remove the white ground wire from the old module (see Figure 15).
19. Attach the white ground wire removed from the previous step to the ground lug of the new module. Attach the other end to the green wire from the 8-pin connector (see Figure 16). Leave the black wire disconnected, as it is not used.

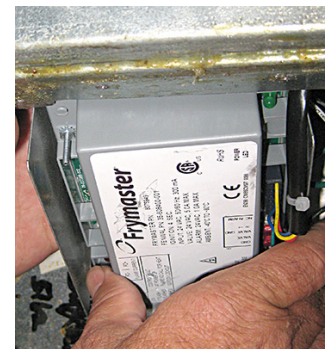


Figure 17

20. Ensure the nuts on the top of the module assembly housing are loose. Carefully position the module housing studs with nuts, through the key hole slots in the bottom of the control box (see Figures 17 and 18).

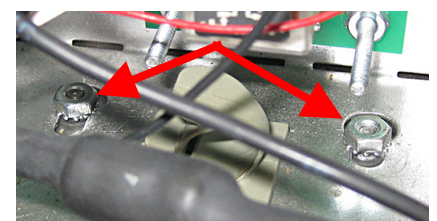


Figure 18

21. Once the nuts are through the key hole slots, pull the module towards the front of the fryer and tighten the nuts.
22. Ensure the high voltage line is secured and no wires are pinched.
23. Route new harness into control box and connect to the interface board (see Figure 19).
24. Attach new module cover (see Figure 20).
25. Reattach blower removed in step 6. Ensure that wires are not pinched.
26. Reconnect blower power cable removed in step 5.
27. Reattach controller and bezel removed in steps 3 and 4.
28. Reconnect power.
29. Test and ensure the fryer is functioning properly.
30. The DC microamp output for flame proofing is $1.7\mu\text{A}$ to $3.0\mu\text{A}$; $2\mu\text{A}$ to $2.5\mu\text{A}$ is a good range. Lockout is $0.5\mu\text{A}$.

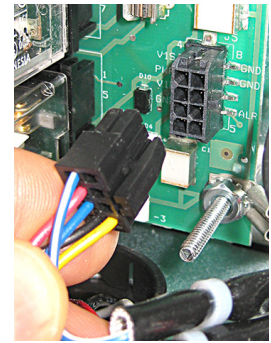


Figure 19

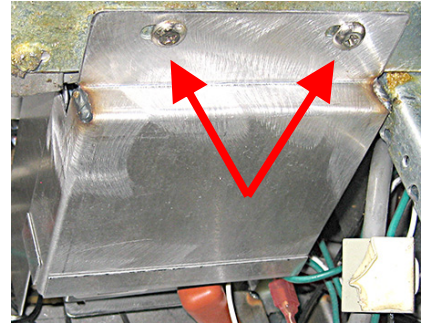


Figure 20

