

Instruction Sheet

Subject: 8263447 LOV-T Capable Control to Fenwal Ignition Module Conversion Kit Instructions

Models affected: LOV-T (BIGLA30-T) Gas Fryers

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

1. Disconnect power from the fryer.
2. Disconnect 2-pin blower power connection (see Figure 1).
3. Remove the blower grill off of the blower by removing the two nuts attaching the grill (see Figure 2). This allows access to the left two nuts of the blower.
4. Remove the diverter behind the grill by pulling out at an angle (see Figure 3).
5. Remove the left blower nuts and loosen the right blower nuts 2 or 3 turns (see Figure 4).
6. Slide the blower off of the right nuts towards the left (see Figure 5).
7. Remove the ignition module covers by removing the two screws attaching the cover to the module assembly (see Figure 6).
8. Remove the two screws securing the ignition module assembly (see Figure 7).
9. Remove the module by pushing back and then lowering (see Figure 8).

In This Kit		
Part #	Description	Qty
1087467	MODULE ASSY, GLA FENWAL DSI	2
8076162	HARNESS FV	1
8076163	HARNESS DV	2
8073140	3/16" MALE TERMINAL	3
8160554	COVER, MOLDED FAN	1
8090938	SCREW, 10-32 X 5/8 PHL TR HD ZP	2
8197452	INSTRUCTIONS	1

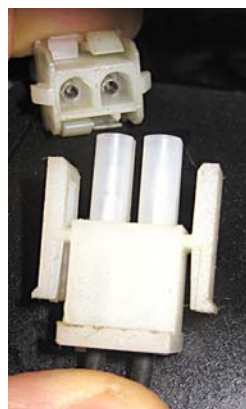


Figure 1



Figure 2

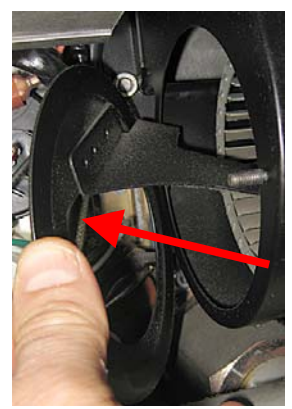


Figure 3



Figure 4

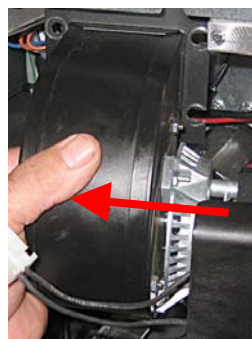


Figure 5



Figure 6



Figure 7



Figure 8

10. Disconnect the high voltage wire, the flame sense wire and the ground wire from the existing module (see Figure 9). Cut and remove the green ground wire as it will not be needed.



Figure 9

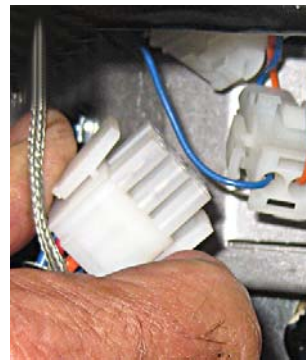


Figure 10



Figure 11

11. Unplug the module harness (see Figure 10).

12. Repeat steps 7 through 11 on opposite module.

13. Disconnect wires from the pressure switch (see Figure 11).

14. Remove the modules and harnesses from the fryer (see Figure 12).



Figure 12

15. Attach the new harnesses to the fryer 6-pin to 6-pin and 9-pin to 9-pin (see Figure 13). Reference wiring diagrams on back pages.

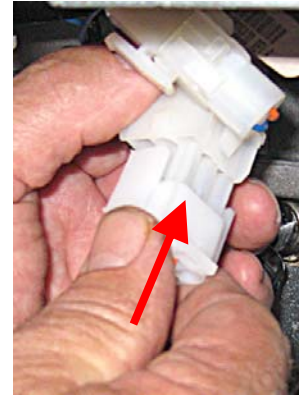


Figure 13

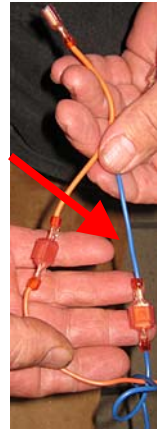


Figure 14

16. Disconnect blue extension wire from module harness removed in step 14 (see Figure 14).

17. Connect blue extension to the common connection on the pressure switch (see Figure 15).



Figure 15

18. Attach the blue wire from the new harness to the blue extension attached in the previous step (see Figure 16).

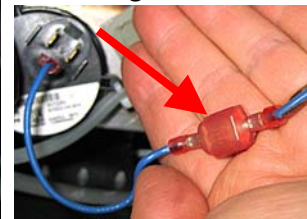


Figure 16

19. Attach the orange wire from the new harness to the NO position of the pressure switch (see Figure 17).



Figure 17

20. Cut the 1/4" terminal off of the end of the white sense wire and strip the wire (see Figure 18).

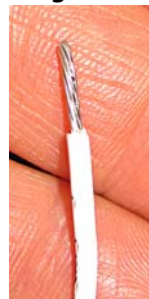


Figure 18

21. Terminalize the white sense wire with the supplied 3/16" male terminal (see Figure 19).



Figure 19

22. Attach the flame sense wire to the SENSE (S1) terminal of the new module (see Figure 20).

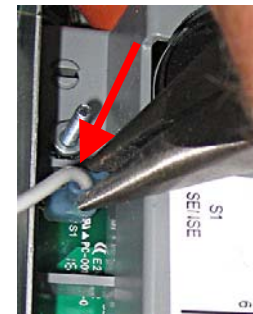


Figure 20

23. 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 21).



Figure 21

24. Attach the 8-pin black connector to the module (see Figure 22). Ensure that it is properly connected to the terminal.



Figure 22

25. Attach new module by inserting the module assembly and then sliding bracket onto the bottom of the control box from the rear. Secure with supplied 1/4" screws (see Figure 23). **NOTE:** The harness with the solid blue wire



Figure 23

attaches to the left module;
the harness with the
blue/white wire attaches to
the right module.

26. Unscrew and remove the old
motor guard from the blower
(see Figure 24).

27. Attach the new motor guard
with beveled edges (see
Figure 25).

28. Ensure the harnesses are
secured up and out of the
way.

29. Reattach the blower. Ensure
the right slotted sides slide
on first underneath the loose
nuts. Slide the left holes
back onto the studs (see
Figure 26).

30. Tighten up the four (4) nuts
to secure the blower.

31. Reattach the blower power cable (see Figure 27).

32. Angle and slide the diverter
back into place inside the
blower and rotate to slide
onto the studs (see Figure 28).

33. Reattach the shutter and
tighten the nuts.

34. Reattach the module cover
removed in step 7 (see Figure
30) with two (2)
 $\frac{1}{4}$ " screws.

35. Reconnect power.

36. Test and ensure the fryer
is functioning properly.

37. 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 24

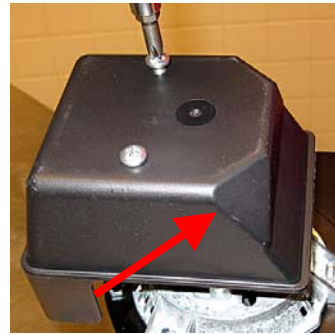


Figure 25



Figure 26

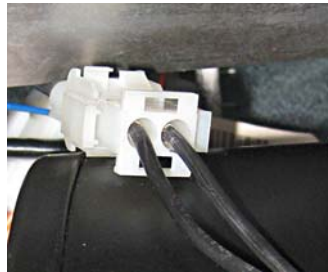


Figure 27



Figure 28

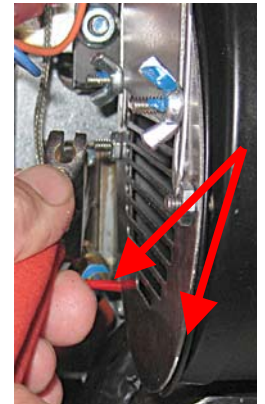
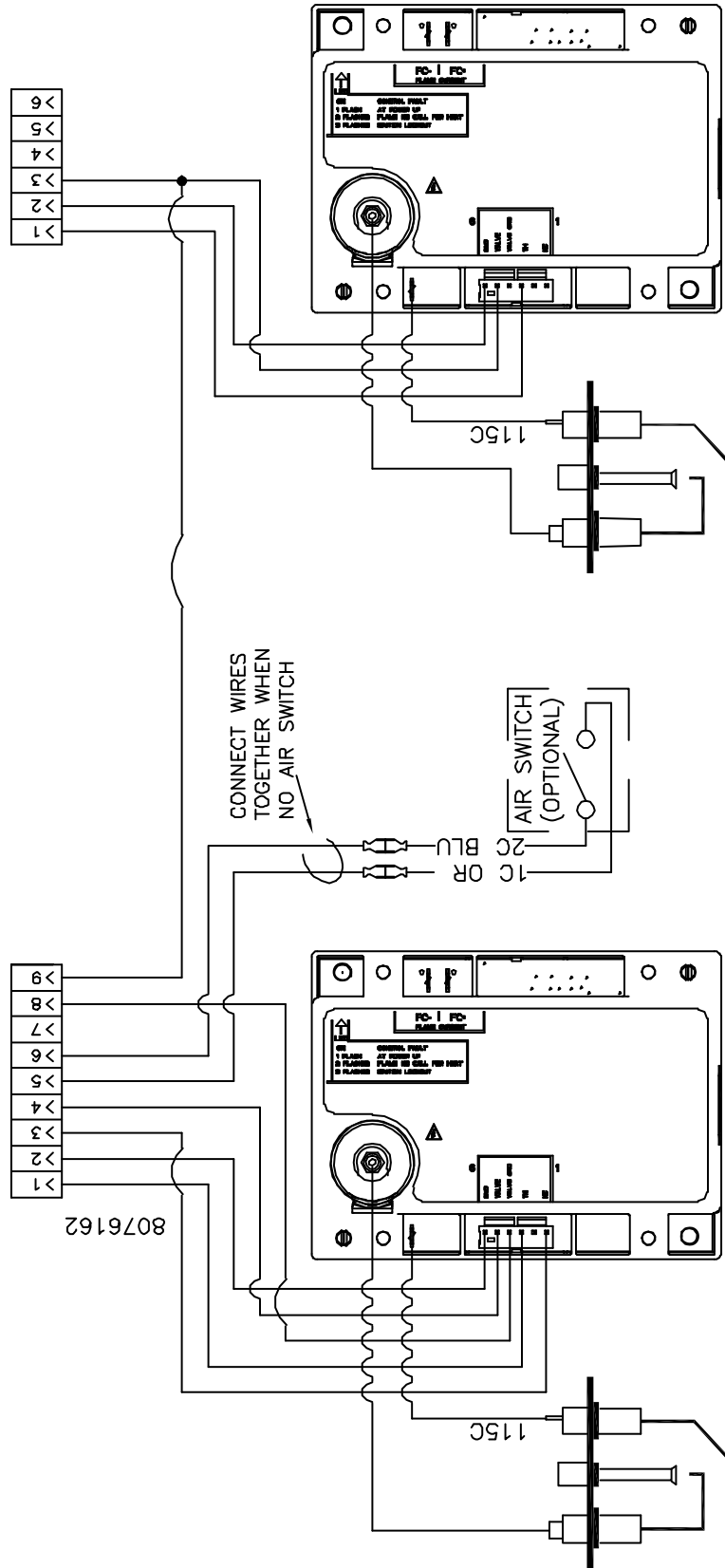


Figure 29



Figure 30

Full Vat Wiring



8076162

Dual Vat Wiring

