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## Instruction Sheet

Subject: 8263497 Fresh/Waste Bulk Oil Kit Installation Instructions (Gas) Models affected: FilterQuick Touch FQG30-T Gas **Fryers** 

In This Kit

HARNESS, UNIVERSAL BULK OIL

FILL ASSY, FLT QCK BULK OIL

PLUMBING, FQ GAS BULK OIL

INLET ASSY, GL ATO PUMP

NPPL, 1/2NPT X 2.00 BM

NPPL,1/2NPT X 1 1/2 BM

ELBOW, 1/2 90DEG BM

NUT, KEPS 10-32 HX ZP

NUT, FLNG 1/4-20 SERR

TEE,1/2NPT BM

TY WRAP

TAG, FILL RTI

TAG, DISPOSE RTI

DISPOSE ASSY, FQGLA BULK OIL

PLMB, FQ30 GAS BULK OIL FRESH

ELBOW,1/2NPT W/SIDE OUTLET BM

ADAPTER, MALE 5/8"O.D. X 1/2"

ADAPTER, CHECK VALVE CLOSE NPL

BOLT,1/4-20 X 5/8 SQ CONE LOCK

FLEXLINE, 5/8" X 13.00" LONG

SCRW, #10-1/2 HX WSHR HD N

WRENCH W/A, 1-1/16" CRWS F

CLAMP,.870/.732 SNAP GRIP HOSE

BUSHING, HEYCO 1"I.D. SB1250-16

Description

HANDLE & LOCK ASSY, GAS LOV RTI

Part #

1080686

1085398

1085785

1085907

1087707

1083391

1085789

8022608

8022609

8130331

8130298

8130087

8130062

8101668

8130003

8103738

8090256

8091070

8090417

8101057

8090412

8238991

8140015

8160870

8072469

8076105

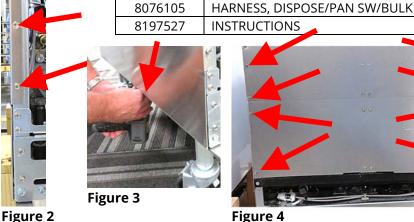
Follow these instructions to install the Bulk Oil Kits (Fresh and Waste).

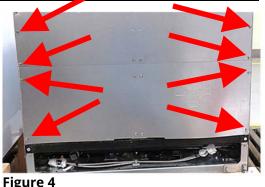
- 1. Disconnect power and gas from the fryer.
- 2. Remove the fryer from the hood to gain access to the rear of the fryer.
- 3. Remove the sides by removing the doors first. Remove the door by pushing up on the lower hinge pin, with а screwdriver or similar object until the door can be removed
- (see Figure 1). 4. Loosen the three (3 screws on the front o the side (see Figure 2).
- 5. Loosen the screw from the center bottom of the side (see Figure 3).
- 6. Loosen the four (4) screws on the lower rear back and the four (4) lower screws on the upper rear back (see Figure 4).





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- Lift upward on the side to remove (see Figure 5). Repeat for other side.
- 8. Remove the filter pan (see Figure 6).
- 9. Remove the filter pan lid by lifting up on the collar, around the drain tube, while pulling on the filter pan lid (see Figure 7).
- 10. Remove the splash shield on the left side of the transformer box, as viewed from the front of the fryer, by removing the two (2) screws connecting the shield to the frame (see Figure 8).
- 11. Remove the splash shield on the right side of the transformer box, by removing the two (2) screws on the rear and the two (2) screws on the front (see Figure 9).
- 12. Disconnect all connectors on both sides of the front of the transformer box (see Figures 10 and 11).
- 13. Remove the two (2) vinyl caps from the

studs of the transformer box (see Figure 12).

14. Using a 7/16" inch wrench, remove the nuts securing the transformer box. Lower and set aside (see Figure 13).



Figure 5

Figure 8

Figure 11

Figure 13



Figure 6

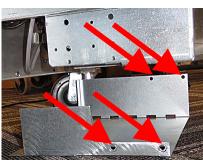


Figure 7



Figure 10



Figure 12

**Figure 9** 



Figure 14

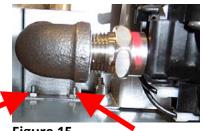


Figure 15

- 15. Remove the lower back by removing the eight (8) screws (see Figure 14).
- 16. Locate the inlet plumbing on the left side of the ATO pump, as viewed from the rear of the fryer. Using a 3/8" nut driver, remove the two (2) nuts attaching the inlet hose bracket (see Figure 15).

- 17. Remove the two (2) nuts on the outside left of the ATO tray, as viewed from the rear (see Figure 16).
- 18. On the inlet side of the ATO pump, push down on the quick disconnect lock clip to unlock the fitting (see Figures 17 and 18).
- 19. Remove the ATO inlet assembly from the ATO pump. Remove the elbow with the quick disconnect fitting and the bracket from the hose. Save the hose with the cap and suction foot for use later (see Figure 19).
- 20. Disconnect the flex line, that runs between the ATO pump and oil manifold, at the check valve (see Figure 20).
- 21. Remove the check valve with fitting (see Figure 21). Set aside, as they will be used later.
- 22. Remove the elbow and check valve nipple. It may require removing the adjacent flexline, to remove elbow (see Figure 22).
- 23. It may be necessary to

disconnect the filter pan switch and move any additional wires out of the way, to allow additional room to work.

- 24. On the outlet side of the ATO pump, push down on the quick disconnect lock clip, to unlock the fitting and remove the flexline assembly (see Figures 23 and 24).
- 25. Apply Loctite to the threads of the JIB hose and attach the JIB hose from step 19 to the 1085789 assembly (see Figure 25).
- 26. Insert the assembly from the previous step through the bottom of the ATO pump tray, ensuring the flexlines and JIB hose are inserted first (see Figure 26).





Figure 19







Figure 18



Figure 20



Figure 21



Figure 25

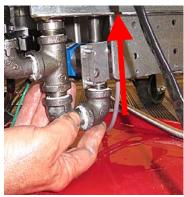
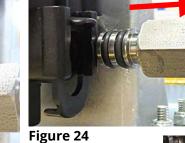


Figure 26





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Figure 23

- 27. Route the JIB hose over the FIB (ATO) box towards the front of the fryer (see Figure 27).
- 28. Once in place, insert the four (4) studs through the four (4) holes in the plate and attach with supplied nuts (see Figures 28 and 29).
- 29. Attach inlet assembly flexline (1083391) to the reducing tee, behind the top off pump (see Figure 30) and tighten.
- 30. Route the flexline behind the top off pump and around the side.

Insert the quick disconnect into the inlet side of the top off pump. Ensure the lock clip is pushed up and fitting is secure (see Figure 31 and 32).

31. Disconnect the flexline from the check valve, connecting the oil manifold to the filter

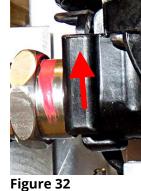
pump (see Figure 33).

Figure 35).

shipping bracket (see Figure 34).

15 foot lbs. Do **<u>NOT</u>** overtighten.





32. Use a 7/16" wrench to remove the nut and bolt from the filter pump

33. Use a 1/2" wrench to remove the two (2) bolts securing the filter pump

35. Remove the flexline adaptor and check valve from the filter pump (see

bracket to the filter pump (see Figure 34). Discard the bracket. 34. Reinsert the two (2) bolts into the filter pump and tighten. Torque to







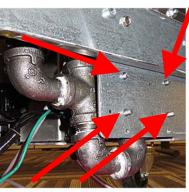


Figure 28



Figure 31



Figure 34



Figure 35





- 36. Remove the check valve fittings and the 90° elbow from the filter pump (see Figures 36 and 37). It may be necessary to loosen all four (4) filter pump bolts, to ease removal of the elbow and check valve fittings. When finished, retighten the bolts, but do NOT overtighten.
- 37. Apply Locktite and insert 1½" nipple (8130087) into the 90° elbow with outlet (8130331) and tighten and orient as shown (see Figure 38).
- 38. Apply Locktite to both ends of the 2" nipple (8130298).
  Insert the nipple into the top of the elbow, attached to the pump, in previous step (see Figure 39).



39. Attach the 90° elbow (8130062) to the top

of the nipple in the previous step. Tighten and orient as shown (see Figure 39).

- 40. Attach flexline adaptor (8101668) to elbow in previous step and orient as shown (see Figure 40).
- 41. Attach the check valve fittings, check valve, and flexline adaptor, removed in steps 35 and 36, to the bottom opening of the elbow as shown (see Figure 41).
- 42. Reattach the flexline disconnected in step 31 (see Figure 42).
- 43. Locate the 1085907 Bulk Oil plumbing assembly. Facing the switch connectors, attach the 8076105 harness to the Bulk Oil Plumbing assembly. Beginning with the switch on the left, attach the red wire the the farthest left connector; next attach the green wire, to the connector directly to the right of the the red. On the right switch, attach the black wire to the farthest right connector; attach the white wire to the connector left of the black wire (see Figure 43).



Figure 36









Figure 41

Figure 42

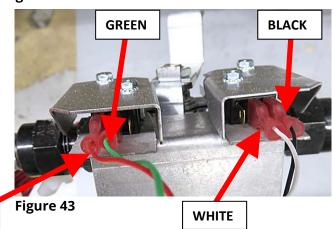




Figure 37



- 44. With the dispose valve handle oriented away from the filter pump, insert the bulk oil plumbing assembly into the cabinet. Ensure the flexline running from the pick up tube to the filter pump, is beneath the bracket of the the plumbing assembly.
- 45. Using a 7/16" wrench, attach the switch assembly to the four studs on the filter pump mounting plate using 4 – ¼"-20 nuts (see Figure 44).
- 46. Using Figure 45 below as a guide, route the flexline #1 over the pump and attach to the outlet of the filter pump (see Figure 46).



Figure 44

#1

#2

## Figure 45

47. Attach the 8130003 "T", 8101668 adaptor and check valve nipple removed in step 22 to the adaptor that was left attached to the oil manifold in step 22 (see Figures 47 and 48).

#3

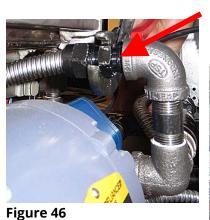
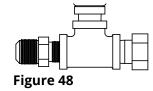




Figure 47

48. Attach flexline 8101057 to flexline adaptor in Figure 48 and the other end to the assembly below it (see Figure 49).



- 49. Using the check valve and top fitting removed in step 21 to assemble as shown (see Figure 50).
- 50. Reinsert fitting attached to flexline, removed in step 24, into the ATO pump (see Figure 51).

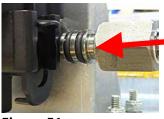


Figure 51



Figure 49



Figure 50

- 51. Once the quick disconnect fitting is fully engaged, push the lock up (see Figure 52).
- 52. Attach other end of flexline to the top of the fitting (see Figure 53).



Figure 52

- 53. Remove far right nut and bolt, as viewed from the rear of the fryer, attaching the return oil manifold to the frame (see Figure 54).
- 54. Using a prybar, lift the oil manifold up slightly to allow the oil dispose assembly 1087707 to slide in between the gas and oil manifolds (see Figure 55).
- 55. Attach the flexline #2 from the dispose switch assembly in Figure 45, to the dispose outlet assembly (see Figure 56).
- 56. Detach the electrical connector from the dispose assembly. Position over the pre-drilled holes (see Figure 57).
- 57. Replace the bolt and nut removed in step 53.
- 58. Position the fresh oil fill assembly 1085785 to the far left of the fryer, as viewed from the rear. Position the assembly between the oil manifold and the gas manifold. Route the flexline around the ATO pump and attach the fresh flexline from the assembly to the right of the ATO

pump to the fresh oil fill assembly (see Figures 58 and 59).

- 59. Align the fresh oil fill assembly to the pre-drilled holes and attach using ¼"-20 bolts (see Figure 60).
- 60. Unplug the 12-pin connector from the rear of the FIB (ATO) box (see Figure 61).





Figure 53



Figure 55



Figure 57



Figure 58



Figure 60

Figure 54



Figure 56



Figure 59



Figure 61

- 61. Locate the 8076105 wire harness. If the revision on the harness is revision A or B proceed to the next step. If the revision is C or later, skip to step 68 (see Figure 62).
- 62. Unplug the 2-pin connector on the other end of the 12-pin connector in previous step (see Figure 63).
- 63. Using a pin pusher push pins 1 and 2 out of the 12-pin connector and set aside for later use (see Figure 64).
- 64. Using a pin pusher, push pins 1 (black) and 2 (red) out of the new 12-pin connector on the 8076105 harness and discard (see Figures 65 and 66). Pin 1 is located by looking for the protruding ridge which is adjacent to Pin 1.
- 65. Using the 2-pin connector removed in step 63, insert the pins into positions 1 and 2 of the 12-pin connector in step 64 (see Figure 67).
- 66. If using Revision A 8076105 harness, remove pins 3 (red) & 4 (black) out of 12-pin connector (see Figure 68).
- 67. On the opposite end of the wires that were removed in the previous step, push the correlating pins 5 and 6, out of the 9-pin connector(see Figure 69) and discard the wires.

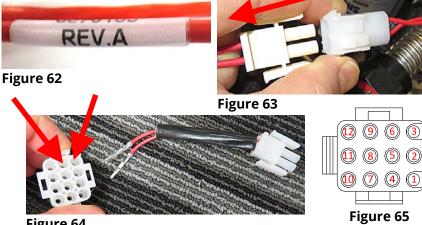


Figure 64

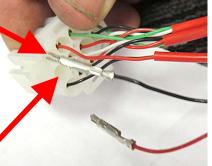
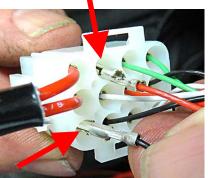


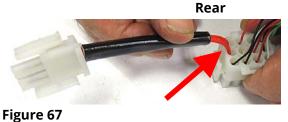
Figure 66



**Figure 68** 



Figure 70



Viewed from the

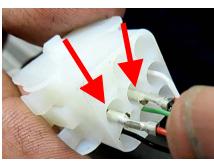


Figure 69



Figure 71

- 68. Insert the 9-pin female connector into the dispose assembly (see Figure 70).
- 69. Align the dispose outlet assembly to the pre-drilled holes and attach using ¼"-20 self tapping bolts (see Figure 71).

- 70. Attach the 1085398 9-pin male connector to the female connector (see Figure 72).
- 71. Locate the two-wire harness from the fresh oil assembly solenoid, behind the ATO pump. Route under the gas manifold. Push the pins out of the 2pin connector (see Figure 73).
- 72. Insert the two black wires removed from the 2-pin connector in the previous step into positions 3 and 4 of the 12-pin connector in step 68 (see Figures 65 and 74).
- 73. Connect the 12-pin connector to the rear of the FIB (ATO) box (see Figure 75).
- 74. Zip tie excess wiring to gas manifold (see Figure 76). Do <u>NOT</u> tie wires to the oil return manifold.
- 75. Attach green ground wire from solenoid to the underside of the assembly (see Figure 77).
- 76. Using zip ties, attach (FILL) tag to the fresh oil port on the left side of the fryer, as viewed from the rear (see Figure 78).
- 77. Using zip ties, attach (DISPOSE) tag to the waste oil port on the right side of the fryer, as viewed from the rear (see Figure 79).
- 78. Remove the plug from the rear of the drain
  - tube (see Figure 80).
- 79. Insert flexline adaptor 8101068 into the port in the rear of the drain tube and tighten (see Figure 81).

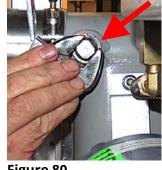


Figure 80



Figure 72

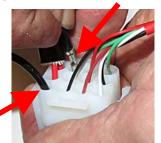


Figure 74



Figure 76



Figure 78



Figure 81



Figure 73

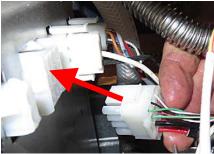


Figure 75

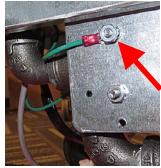


Figure 77



Figure 79



Figure 82

80. Attach the #3 flexline (see Figure 45) from the check valve to connector attached to the drain tube in the previous step (see Figure 82).

- 81. Attach the dispose handle assembly 1080686 to the dispose switch valve assembly with the clevis clip (see Figure 83).
- 82. Attach the dispose valve bracket to the frame (see Figure 84).
- 83. On the rear of the fryer remove the plugs and connect the fresh oil hose to the FILL port and the waste oil hose to the DISPOSE port.
- 84. Use the wiring diagram on the back page for reference when attaching any wiring from an external bulk system. Connect the wiring to the harness next to the DISPOSE connector, on the rear of the fryer (see Figure 72).
- 85. Reverse steps 1-15 to return the fryer to operation.
- 86. Once fryer has powered up, wait one (1) additional minute with the controller OFF and press the

HOME button.

- 87. Press the SETTINGS button.
- 88. Press the SERVICE button.
- 89. Enter **3000**.
- 90. Press the  $\sqrt{(check)}$  button.
- 91. Press the down arrow button one time.  $\bigtriangledown$
- 92. Press OIL SYSTEM TYPE if adding bulk fresh oil.
- 93. Press BULK.
- 94. Press the  $\sqrt{(check)}$  button.
- 95. Press WASTE OIL if connecting to bulk waste oil system.
- 96. Press BULK.
- 97. Press the  $\sqrt{(check)}$  button.
- 98. Press the HOME button to exit.
- 99. Press and **HOLD** the momentary reset switch. Ensure the switch is pressed and held for **one (1) minute**. On some gas units, the button may be located under the far-left control box. On newer gas and units, the switch is located close to the USB port.
- 100. Once the fryer is rebooted press and **HOLD** the **ORANGE** JIB reset button to fill the container with fresh oil until the container is full. Once full release the button (see Figures 85 and 86). NOTE: It takes approximately twelve seconds from the time the top off reset button is pressed, until the bulk fresh oil pump

starts. It may take up to 20 seconds before the level of the oil in the top off reservoir begins to rise. Typically, it takes approximately three minutes to fill the reservoir. It takes approximately one minute to fill a split vat and two minutes to fill a full vat.

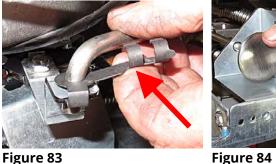




Figure 84



Figure 85



- 101. Test the dispose function by pressing the FILTER button  $\textcircled{\begin{tabular}{ll} \end{tabular}}$ .
- 102. Select DISPOSE from the menu.
- 103. The controller displays DISPOSE NOW? YES NO.
- 104. Press the YES button.
- 105. The controller displays WEAR PROTECTIVE GLOVES; YES.
- 106. Press the YES button.
- 107. Press the BLUE button.
- 108. Controller displays VAT EMPTY?
- 109. Press the YES button.
- 110. Controller displays CLEAN VAT COMPLETE?
- 111. Press the YES button.
- 112. Controller displays ALERT DRAIN CLOSING REMOVE TOOLS changing to OPEN DISPOSE VALVE.
- 113. Open the dispose valve by pulling the handle towards the front of the fryer (see Figure 87).
- 114. Ensure that the filter pump starts and begins pumping oil out of the filter pan. If so, immediately push dispose handle in to stop the pump. Reboot the fryer system. Once the system is rebooted and all prompts are correctly answered, press the FILTER button and select the FILL VAT FROM PAN option to return the oil to the vat. Ensure that the oil is returned. It may be necessary to top off the vat when finished for the vat to heat properly.



Figure 87

