

MODEL CCF-16-W (65-877A) PORTABLE OIL FILTER

OPERATION AND MAINTENANCE MANUAL

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SECTION 1...DESCRIPTION

SECTION 2...ASSEMBLY, OPERATION, AND CLEANING

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Shown with optional  
Splash baffle

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Throughout this manual, WARNINGS, CAUTIONS, and NOTES are used to emphasize information about a procedure that is of particular importance or safety related. The meaning of each is described below:

WARNING

A WARNING is used to emphasize a procedure, step, or practice which, if not correctly followed, could result in personal injury.

CAUTION

A CAUTION is used to emphasize a procedure, step, or practice which, if not strictly followed, could result in equipment damage.

NOTE

A NOTE is used to highlight additional information concerning a procedure or condition.

Falcon Fabricators, Inc.  
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800-883-5555 or 615-832-0027

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SECTION 1 - DESCRIPTION

WARNING

ALWAYS use extreme caution when working with hot oil. Wear safety goggles, gloves, and protective clothing. Read and understand this manual before using the CCF-16-W. Failure to follow the procedures in this manual could result in serious burns and/or electrical shock.

The CCF-16-W Portable Oil Filter has a capacity of 105 pounds. First, hot oil is drained from the fryer into the filter tank through the drain screen which catches large particles. When the power switch is turned on, oil is drawn through the filter

DESCRIPTION (Con't)

assembly and discharged back into the fryer through the swing spout. During this process, fines and particles not caught by the drain screen are removed from the oil by the envelope filter (not included) attached to the filter assembly. After filtration is complete, the fryer drain valve is closed and oil is pumped back into the fryer until it is full.

SECTION 2 - ASSEMBLY. OPERATION. AND CLEANING

ASSEMBLY

Unpack the CCF-16-W and insure that none of the parts were damaged in transit. A complete CCF-16-W includes the following parts:

- |                              |  |
|------------------------------|--|
| (1) Filter Tank              | (1) Filter Tank Cover (2 sections)           |
| (1) Dolly Assembly with Pump | (1) Drain Screen and Frame                   |
| (1) Filter Screen            | (1) Suction Standpipe Assembly               |
| (1) Filter Clamp             | (1) Discharge Swing Spout with Sponge Handle |

Clean all parts except dolly assembly in sink with hot water only. Wipe dolly assembly clean with hot towel.

Place back cover section (piece that is 16-3/4" x 18-3/4") on tank and slide tank onto dolly so front is seated behind dolly lip.

Insert filter screen into 14" X 15" filter envelope (box of 100 is Falcon #22-03-141) and align holes in envelope and filter screen. Fold open end of envelope over and hold it by sliding filter clamp onto filter screen and envelope. Attach this assembly to suction standpipe using filter nut from end of standpipe assembly. Filter nut must be firmly tightened against envelope filter to prevent leaks. Connect suction standpipe to pump suction by tightening union nut.

Attach swing spout to pump discharge by holding quick-disconnect collar down, pushing swing spout in, and then releasing collar. Always pull back on swing spout to make sure it is fully seated and retained by quick-disconnect.

Remove fryer drain pipes and roll unit into place between fryers. Engage locks on two front wheels. Replace fryer drain pipes (if fryers aren't already equipped with side drain pipes, they are available from Falcon Fabricators, Inc. or the fryer manufacturer).

Place landing pan (if you purchased 65-876, 65-877, or 66-096) across fryers so lip on each side fits over top edge of each fryer (if you're only using one fryer, legs to support the other side of landing pan are available from Falcon Fabricators, Inc.).

Place drain screen and frame into front of tank with flange of frame resting on tank sides.

Place front cover section (has handle) on tank.

If you purchased a splash baffle, place it over drain pipes and rest it on drain screen.

Insure that power switch is in the OFF position and plug power cord into 120 VAC GROUNDED outlet. The CCF-16-W is now ready for use.

OPERATION

Turn fryer HEAT OFF.

OPERATION (Con't)

WARNING

Turn fryer HEAT OFF before draining oil. Failure to do so may cause a flash fire if heat comes on after oil has drained.

WARNING

ALWAYS use extreme caution when working with hot oil. Wear safety goggles, gloves, and protective clothing. Failure to follow the procedures in this section could result in serious burns.

Insure that CCF-16-W is assembled correctly and that brakes on two front wheels are engaged if your unit is equipped with locking casters.

If Filter Aid compound is to be used (recommended), use wire whip to mix Filter Aid slurry according to directions on Filter Aid package. Remove front tank cover and pour slurry on filter envelope around suction standpipe. Replace front tank cover.

CAUTION

ALWAYS use a good filter envelope on suction side of pump. When filter envelope becomes clogged or damaged, REPLACE IT. DO NOT operate pump with a damaged filter envelope or without a filter envelope. Doing so will draw grit into the pump causing shaft seal failure and voiding the pump warranty.

Insure that fryer heat is OFF. Open fryer drain valve and drain all oil into CCF-16-W tank.

WARNING

Drain screen and tank covers must remain in place whenever oil is in tank. Don't remove drain screen or tank covers until all oil has been pumped back into fryer.

If wire screen is used in fryer, use tongs and hand protection and remove wire screen. Discard residue from screen.

WARNING

If fryer drain becomes clogged with residue, quickly close and open fryer drain valve to unclog. If still clogged, insert cleaning rod through drain INSIDE cookpot. Be sure drain valve is completely open! Serious burns could result from inserting cleaning rod in drain valve from outside.

CCF-16-W (65-877A) Portable Oil Filter - Operation and Maintenance Manual

OPERATION (Con't)

Grasp insulated portion of swing spout and move it over center of fryer cookpot. Turn CCF-16-W pump ON and flush residue from cookpot.

Turn CCF-16-W pump OFF. Clean fryer cookpot with cold, damp towel. Turn CCF-16-W pump ON and filter oil for five minutes.

Turn CCF-16-W pump OFF and close fryer drain valve. If wire screen was removed from fryer cookpot, replace it.

Grasp insulated portion of swing spout, move it over center of fryer cookpot, and turn CCF-16-W pump ON. When all oil has been pumped into fryer cookpot, turn CCF-16-W pump OFF. Turn fryer heat ON.

CLEANING

NOTE

Clean CCF-16-W at end of each day's operation. Do not leave oil and residue in tank overnight. Discard used envelope filter.

WARNING

Use gloves or towels for hand protection from hot parts!

Remove splash baffle (if used). Remove front cover. Lift drain screen and frame off tank. Remove thumbscrew and separate drain screen from frame. Clean residue off drain screen.

Remove discharge swing spout by holding quick-disconnect collar down and pulling swing spout up.

Unscrew suction standpipe union nut and stand filter screen on edge in tank. Cut bottom of filter envelope to allow trapped oil to drain out.

Remove filter clamp, filter nut, and suction standpipe. Remove filter screen from envelope and discard envelope.

Clean front cover, drain screen & frame, swing spout, filter screen, suction standpipe, filter clamp, and filter nut with HOT water ONLY. Secure drain screen to frame with thumbscrew.

Pull tank from dolly and remove back cover. Pour remaining oil from tank into saucepan. Using a spatula, scrape residue from tank into saucepan. If cone filters are used, pour oil/residue mixture into cone filter placed over stockpot.

Clean tank and back cover with HOT water ONLY and dry thoroughly. Wipe dolly and pump/motor surfaces with hot towel. DO NOT SPRAY pump/motor with water!

Place back cover on tank and slide tank back on dolly. Place all other parts in tank. Don't assemble with new filter envelope until ready to use next day.

SECTION 3 - TROUBLESHOOTING

If the CCF-16-W should malfunction, this section contains a step-by-step guide to help a trained maintenance person find the problem and repair the unit.

**WARNING**

The procedures in this section are intended for use by trained and authorized personnel ONLY! UNAUTHORIZED PERSONNEL MUST NOT ATTEMPT TO REPAIR THIS EQUIPMENT. Most procedures will require unit to be energized with live electrical components exposed. Under these conditions, there is the possibility of electrical shock. These procedures should only be performed by trained personnel. Call your maintenance department for assistance.

If you replace a part during any of the following procedures and the problem you are fixing is still present, return to Step 1 of that section and go through the procedure again .

PUMP/MOTOR WON'T RUN OR INTERMITTENT

Motor's internal thermal overload may have tripped. Turn power switch OFF and allow motor to cool for at least ten minutes. If motor still won't run, remove junction box cover at back of motor and proceed to Step 1 .

| STEP                     | CHECK                      | YES               | NO                      |
|--------------------------|----------------------------|-------------------|-------------------------|
| 1                        | 115V across power cord     | Go to 3           | Go to 2                 |
| 2                        | 115V at wall outlet        | Repair power cord | Reset circuit breaker   |
| 3                        | 115V at load of power sw.  | Go to 4           | Replace power switch    |
| 4                        | Motor shaft turns freely   | Replace motor     | Go to 5                 |
| 5                        | Something jamming pump     | Repair pump       | Replace motor           |
| <u>LOW OIL FLOW RATE</u> |                            |                   |                         |
| 1                        | Standpipe union nut tight  | Go to 2           | Tighten union nut       |
| 2                        | Clean envelope filter      | Go to 3           | Replace envelope filter |
| 3                        | Suction plumbing air leaks | Tighten fittings  | Go to 4                 |
| 4                        | Leaking pump shaft seal    | Replace seal      | Repair/replace pump     |

Note: Leaking pump shaft seal is generally caused by grit getting into pump. Grit can get into pump by running unit without envelope filter, running unit with damaged envelope filter, or standpipe and bottom nut being incorrectly tightened against filter paper allowing oil to be drawn into standpipe without passing through filter.

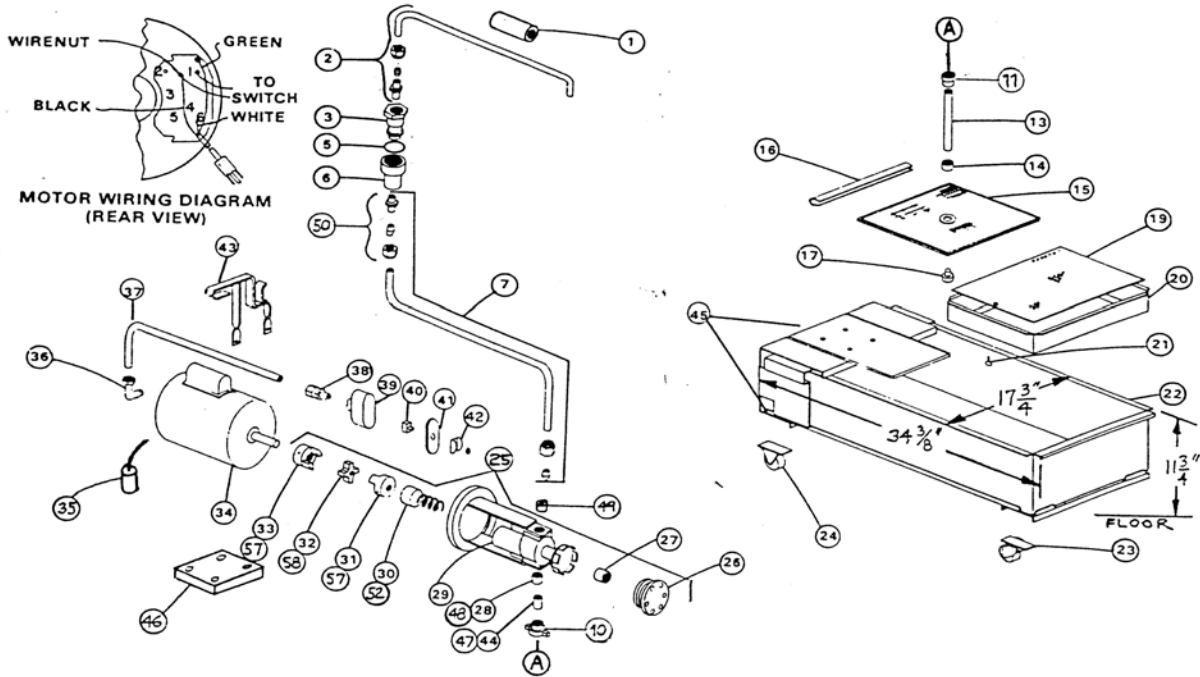
LEAKING QUICK-DISCONNECT FITTING

- |                                    |                  |                              |
|------------------------------------|------------------|------------------------------|
| 1 Viton "O" ring inside of fitting | Replace "O" ring | Install "O" ring female half |
|------------------------------------|------------------|------------------------------|

# FALCON CCF-16-W (65-877A) PORTABLE OIL FILTER

## SECTION -4- PARTS LIST

Order spare parts and supplies from: Falcon Fabricators Nashville, 422 Allied Dr. Nashville, TN 37211  
800-883-5555 or 615-832-0027



| ITEM # | PART #    | DESCRIPTION   |
|--------|-----------|---|
| 1      | 56-01-010 | Sponge Handle   |
| 2      | 65-407    | Swing Spout Assembly  |
| 3      | 14-06-094 | Coupling Disconnect Plug  |
| 4      | 65-406    | Swing Spout Assembly Comp. - Items 2&3  |
| 5      | 22-05-026 | Viton "O" Ring #211   |
| 6      | 14-06-093 | Coupling Disconnect Socket  |
| 7      | 65-413    | Supply Line Assembly  |
| 8      | 65-427    | Supply Line Assy. Comp. — Items 5, 6, & 7   |
| 9      | 13-03-009 | 3/8" Lug Union Comp. - Items 10 & 11  |
| 10     |           | Use Item 9  |
| 11     |           | Use Item 9  |
| 12     | 65-423    | Stand Pipe Assy. - Items 10, 11, 13, 14, & 17                                     |
| 13     | 13-11-004 | 3/8" X 6" Nipple  |
| 14     | 30-01-022 | Upper Nut, Aluminum   |
| 15     | 65-064    | Filter Insert Assembly (12-1/2" X 12-1/2") - Uses 14' X 15' Paper Filter Envelope |
| *      | 22-03-132 | 14' X 15' Envelope Filter - Box of 100  |
| 16     | 45-01-035 | Filter clamp  |
| 17     | 30-01-021 | Bottom Nut, Aluminum  |
| 18     | 65-522    | Filter, Stand Pipe, & Clamp - 12, 15, & 16  |
| 19     | 65-767    | Crackling Screen  |
| 20     | 45-01-199 | Crackling Catch Pan   |
| 21     | 15-04-025 | Thumb Screw   |
| 22     | 65-889    | Flier Tank  |
| 23     | A11-758-4 | 2" Swivel Caster  |
| 24     | A11-758-4 | 2" Swivel Caster  |
| 25     | 31-01-150 | Complete Pump, See #53  |
| 26     | 31-01-160 | Head Gasket, Viking Pump  |
| 27     | 31-01-158 | Idler Bushing, Viking Pump  |
| 28     | 13-06-029 | 1/2" X 3/8" Bushing, Viking Pump, See #48   |
| 29     | 31-01-155 | Casing Bushing, Viking Pump   |
| 30     | 31-01-147 | Seal Kit Viking Pump, see #52   |
| 31     | 31-01-131 | Jaw Coupling, 1/2" Love- Joy, Viking Pump   |
| 32     | 31-01-100 | Love - Joy Spider, Viking Coupling  |
| 33     | 31-01-132 | Jaw Coupling, 5/8" Love - Joy, Viking Pump  |
| 34     | 10-06-036 | Motor, 1/3 HP   |
| 35     | 75-147    | Supply Cord Assy.   |
| 36     | 11-53-045 | 1/2 EMT Connector, 90° Liquid Tight   |
| 37     |           | Use #51   |
| 38     |           | Use #51   |
| 39     |           | Use #51   |
| 40     | 10-01-029 | Switch, SP, ST, 16 Amp. 125 V   |
| 41     | 52-01-055 | Cover   |

| ITEM #   | PART #    | DESCRIPTION                                     |
|----------|-----------|---|
| 42       | 45-01-740 | Switch Guard                                    |
| 43       | 65-426    | Handle  |
| 44       | 13-11-001 | 3/8" X Close Nipple, See #47                    |
| 45       | 65-882    | Dolly   |
| 46       | 52-01-137 | Motor Spacer (on some units)                    |
| 47       | 13-11-009 | 3/8" X 1-1/2" Nipple. Only on units with #46    |
| 48       | 13-06-011 | 3/4" X 3/8" Bushing, MTE Pump, See #28          |
| 49       | 13-06-012 | 3/4" X 1/2" Bushing, MTE Pump Only              |
| 50       | 14-06-028 | Fitting, 5/8" Tubing to 1/2" Male Pipe Thread   |
| 51       | 65-689    | Welded Conduit Assy. - Items 37, 38, & 39       |
| 52       | 31-01-323 | Seal Kit, MTE Pump, See #30                     |
| 53       | 65-518    | Pump & Bushings - Items 25, 48, & 49            |
| 54       | 65-425    | Pump & Motor Assy. - Items 34, 43, 47, & 53     |
| 55       | 65-420    | Crackling Catch Pan Assy. - Items 19, 20, & 21  |
| 56       | 65-877A   | CCF-16-W Less Landing Pan                       |
| 57       | 31-01-346 | Jaw Coupling, MTE Pump                          |
| 58       | 31-01-347 | Spider, MTE Coupling                            |
| *        | 65-886    | Landing Pan, Keating                            |
| *        | 65-457    | Landing Pan, Frymaster and Pitco                |
| *        | 65-449    | Side Legs                                       |
| *        | 66-779    | Push / Pull Handle Kit                          |
| *        | 66-004    | Drain Line Assy. from J-3-F to CCF-16-W         |
| *        | 65-440    | Drain Line Assy. from J-3-C to CCF-16-W         |
| *        | 66-177    | Small Splash Baffle                             |
| *        | 66-219    | Large Splash Baffle                             |
| *        | 66-795    | Filter Tank Cover Complete (both sections)      |
| *        | 65-637    | Splash Guard (bolts to front of some tanks)     |
| *        | 65-155    | Under-frame Assy., 11" Legs                     |
| *        | 65-908    | CCF-16-W Less Pump & Motor, Keating             |
| *        | 65-909    | CCF-16-W Less Pump & Motor, Frymaster and pitco |
| Optional | 17-10-041 | Swivel Caster 3"                                |
| Optional | 17-10-042 | Fixed Caster 3"                                 |

\* = NOT SHOWN

### CCF-16-W MISCELLANEOUS DATA

Filter Unit Dimensions 17 3/4" W x 26" H (Top of item #39) X 34 3/8" D  
Landing Pan Dimensions 24" W X 6" H X 27" Deep  
Filter Unit Shipping Weight 110lbs.  
Landing Pan Shipping Weight 21lbs.  
Filter Tank Volume 2.46 cubic feet.  
Filter Tank Shortening Capacity 105lbs.

SECTION 5 - WARRANTY

LIMITED WARRANTY

Unless otherwise specified, Falcon Fabricators, Inc. (Falcon) warrants to the ORIGINAL USING PURCHASER of a new CCF-16-W Portable Oil Filter that it will be free of defects in materials or workmanship under normal commercial restaurant use as follows:

For a period of 90 DAYS from date of Falcon's invoice, Falcon will pay the reasonable and customary labor charges for a service technician AUTHORIZED BY FALCON to repair the defective filter.

For a period of ONE YEAR from date of Falcon's invoice, Falcon, after confirming a defect in materials or workmanship, will issue a refund or credit (including prepaid regular UPS freight charges) for any new or refurbished part purchased from Falcon to replace a malfunctioning part on the invoiced filter. In order for Falcon to confirm a defect in materials or workmanship, the malfunctioning part must be returned to Falcon for inspection.

To receive warranty service, write down your filter's model number, part number, and serial number and call the Falcon Customer Service Department at 800-883-5555 or 615-832-0027. A Customer Service Representative will verify warranty coverage and issue the required authorization for repair.

All parts and repairs provided under this warranty maintain only the unexpired portion of the original 90 DAY LABOR and ONE YEAR PARTS warranty.

Filters or parts that have been subjected to abuse, misuse, accident, improper installation, improper maintenance or repair, and/or unauthorized alteration will not be warranted.

As provided under this warranty, Falcon's liability in all events shall be limited to repair or replacement of the defective filter or part therein and shall not exceed the purchase price. Falcon shall not be liable for any incidental or consequential damages. The duration of any and all implied warranties, including the implied warranties of merchantability and fitness for a particular purpose, is limited to the duration of this warranty.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

This warranty is valid only in the United States of America.

Falcon Fabricators, Inc. offers no warranty, expressed or implied, on used equipment or parts not purchased from Falcon Fabricators Nashville.