

# INSTALLATION & OPERATION INSTRUCTION MANUAL PORTABLE FILTERS

**ITW** Food Equipment Group

**VULCAN**

*MODELS    MLS*

*85MF            ML-136405 BJ  
                    ML-136405 BL  
                    ML-136405 FC*

*[www.vulcanhart.com](http://www.vulcanhart.com)*

**HOBART**

*MODELS    MLS*

*85HMF            ML-136439 BJ  
                         ML-136439 BL  
                         ML-136439 FC*

*[www.hobartcorp.com](http://www.hobartcorp.com)*

**TECHNICAL SERVICE AND PARTS ASSISTANCE**

**1-800-814-2028**

# INSTALLATION, OPERATION AND CARE OF 85 SERIES PORTABLE FILTERS

## PLEASE KEEP THIS MANUAL FOR FUTURE USE

### GENERAL

The 85 Series Portable Filter can handle up to 85 pounds (38 kilograms) of frying compound.

The portable filter has a  $\frac{1}{3}$  HP pump motor rated 5.6 gallons (21.2 liters) per minute.

The portable filter is constructed and designed to give long satisfactory service providing it is properly used and maintained.

### INSTALLATION

Before installing, verify that the electrical service agree with the specifications on the rating plate located at the bottom front. If the supply and equipment requirements do not agree, do not proceed with the installation. Contact your dealer or manufacturer immediately.

### UNPACKING

This filter was inspected before leaving the factory. The transportation company assumes full responsibility for safe delivery upon acceptance of the shipment. Immediately after unpacking, check for possible shipping damage. If the filter is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

### LOCATION

The equipment area must be kept free and clear of combustible substances.

### INSTALLATION CODES AND STANDARDS

The filter must be installed in accordance with:

#### In the United States of America:

1. State and local codes.
2. National Electrical Code, ANSI/NFPA-70 (latest edition). Copies may be obtained from The National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

**In Canada:**

1. Local codes.
2. CSA C22.1 Canadian Electrical Code (latest edition).

The above are available from the Canadian Standard Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6.

**ELECTRICAL CONNECTIONS**

**WARNING:** ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

**WARNING:** APPLIANCES EQUIPPED WITH A FLEXIBLE ELECTRIC SUPPLY CORD ARE PROVIDED WITH A THREE-PRONG GROUNDING PLUG. IT IS IMPERATIVE THAT THIS PLUG BE CONNECTED INTO A PROPERLY GROUNDING THREE-PRONG RECEPTACLE. IF THE RECEPTACLE IS NOT THE PROPER GROUNDING TYPE, CONTACT AN ELECTRICIAN. DO NOT REMOVE THE GROUNDING PRONG FROM THIS PLUG.

Refer to the electrical diagram attached to the inside front cover of the mobile filter or use the duplicate electrical diagram shipped in a zip lock bag inside the filter tank.

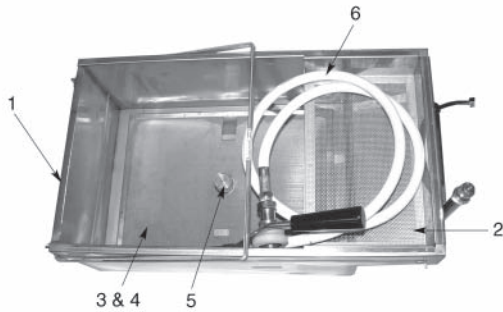
**ELECTRICAL DATA**

<b>Model</b>	<b>Volts/Hz/Ph</b>	<b>Motor Amps</b>	<b>Heater Watts</b>
<b>85MF/85HMF</b>	<b>120 / 50, 60 / 1</b>	<b>5.4</b>	<b>75</b>
<b>85MF/85HMF</b>	<b>208 / 50, 60 / 1</b>	<b>3.0</b>	<b>75</b>
<b>85MF/85HMF</b>	<b>230 / 50, 60 / 1</b>	<b>2.6</b>	<b>75</b>

Motor bearings are permanently lubricated.

**PORTABLE FILTER USING PAPERLESS FILTRATION SYSTEM (FIGS. 1, 2)**

No.	Component Name	Qty.
1.	Filter Tank	1
2.	Splash Screen	1
3.	Filter Envelope	1
4.	Paperless Filter Element	1
5.	Hold Down Device	1
6.	Fill or Discard Hose Assembly	1



**Fig. 1**



**Fig. 2**

**Assembly**

1. Insert the paperless filter element inside the filter envelope (Fig. 3).
2. Close the filter envelope by folding down the envelope latch (Fig. 4).

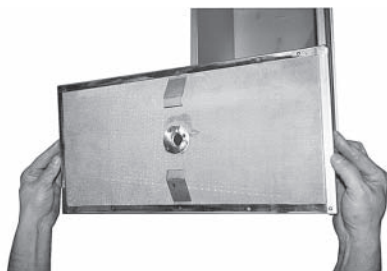


**Fig. 3**



**Fig. 4**

3. Install the envelope assembly into the filter tank with pick up flanges facing up (Fig. 5).
4. Align the hole in the envelope assembly evenly over the filter drain in the tank and screw on the hold down device (Fig. 6).



**Fig. 5**



**Fig. 6**

- Place splash screen onto the filter tank (Fig. 7). Assembly is complete for filtering (Fig. 8).



Fig. 7



Fig. 8

### MOVING PORTABLE FILTER TO FRYER FOR FILTERING

- Use the pull handle to roll the filter to the fryer which is to be filtered. **CAUTION: Do not pull by electrical power cord or oil return hose.**
- Make sure the filter switch is OFF. Turn the fryer OFF. Open the fryer door and position the filter next to the fryer (Fig. 9).

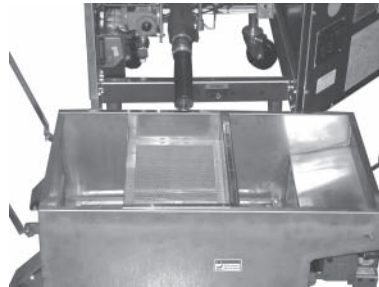


Fig. 9

- Connect the electric supply cord to an extension cord and plug the cord into a ground fault protected (GFI) facility wall receptacle.
- Attach the fill/discard hose to the filter by pulling back on the female quick-disconnect located on the hose and place it over the male quick-disconnect on the fryer (Fig. 10).

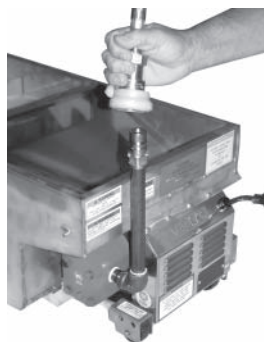


Fig. 10

# OPERATION

## CONTROLS

OFF - PUMP - HEATER switch turns the pump or heater on or off.

RESET button resets the thermal overload on the pump motor if it overheats.

## FILTERING FRYER COMPOUND

**WARNING:** HOT OIL AND PARTS CAN CAUSE BURNS. USE CARE WHEN FILTERING. DO NOT LEAVE UNATTENDED.

**Do not permit water or cleaning solution to enter the mobile filter pump.**

1. Follow fryer instructions to warm fryer compound. Stabilize compound temperature at 260°F (125°C), then turn fryer OFF.

2. Check the filter position and the power supply cords to be sure they are properly connected.

If filtering from a cold start, or if solid compound is used in the fryer tank, turn the filter switch to HEATER. Allow the heater to run for 10 minutes, then turn switch OFF.

3. *Recommended:* Add 4 oz. (65 g) of filter compound (diatomaceous earth) to the hot oil and gently stir.

4. Carefully open the fryer drain valve (Fig. 11); avoid splashing hot oil.

5. As the frying compound fills the filter tank, carefully loosen any crusty sediment around the fry tank sides with a nylon brush.

6. Close the fryer drain valve (Fig. 11). If the fryer is in a battery, only one drain valve may be opened at any one time. Make sure the fill/discard hose is connected. Turn the filter toggle switch to PUMP (Fig. 12).

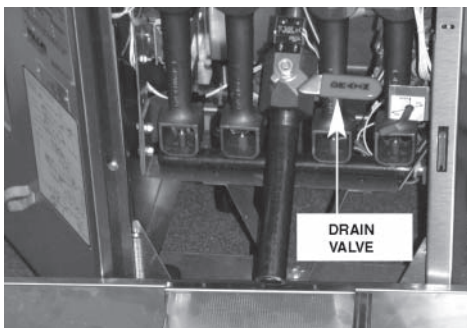


Fig. 11

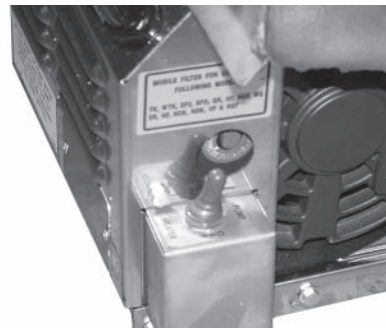


Fig. 12

7. Allow all the oil to flow back into the fryer tank through the fill/discard hose. When the air bubbles appear in the oil, indicating completion of the pumping operation, turn the filter pump OFF.

The filter vessel is not intended as a storage device. All frying compound must be pumped back into the fryer tank after filtering.

If frying compound is left to solidify inside the filter, it cannot be pumped back into the fryer and must be removed by hand.

## **CLEANING**

**WARNING:** DISCONNECT ELECTRICAL POWER SUPPLY TO THE MACHINE AND FOLLOW LOCKOUT/TAGOUT PROCEDURES.

### **Paperless Filter Screen**

Clean the filter screen in a dishwasher or place the filter screen in the fryer during Boil-Out.

Use filter powder to protect the filter from the varnishing effect. Any filter powder may be used. Filter screens that use filter powder will last longer. However, if the filter screen is boiled out or put in the dishwasher at least once a week, it will last just as long.

Dry screen thoroughly before next use.

## **MAINTENANCE**

**WARNING:** THE FILTER AND ITS PARTS ARE HOT. USE CARE WHEN OPERATING, CLEANING OR SERVICING THE FILTER.

**WARNING:** DISCONNECT ELECTRICAL POWER SUPPLY TO THE MACHINE AND FOLLOW LOCKOUT/TAGOUT PROCEDURES.

### **SERVICE AND PARTS INFORMATION**

To obtain service and parts information concerning this model, contact the Authorized Service Agency in your area (refer to the manufacturer's website for a complete listing of Authorized Service and Parts depots).

When calling for service, the following information must be available: model number, serial number, manufacture date (MD) and voltage.

# TROUBLESHOOTING

If a pump shuts down during a filter operation, turn the filter switch OFF and allow it to cool for 5 minutes. Then push in the motor reset button located on the right-hand side of the portable filter (Fig. 13).

If reset fails after several tries, check power supply cords of both filter and fryer to be sure they are connected. Check circuit breakers.

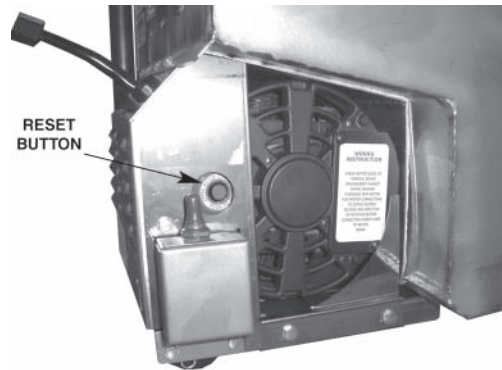


Fig. 13

Contact the Authorized Service Agency in your area for any other servicing (refer to the manufacturer's website for a complete listing of Authorized Service and Parts depots).