INSTRUCTIONS

MODEL HFD/HFC SERIES ELECTRIC FRYERS

MODELS

HFD40	*ML-114624*
HFD50	*ML-114625*
HFD225	*ML-114626*
HFD85	*ML-114627*
HFC40	*ML-114628*
HFC50	*ML-114629*
HFC225	*ML-114630*
HFC85	*ML-114631*
HFO15	*ML-114632*
HFO21	*ML-114633*

HOBART
CORPORATION

701 S. RIDGE AVENUE
TROY, OHIO 45374-0001

FORM 33637 Rev. B (5-99)

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Installation, Operation and Care of MODEL HFD/HFC SERIES ELECTRIC FRYERS

SAVE THESE INSTRUCTIONS FOR FUTURE USE

GENERAL

Hobart HFD/HFC Series Electric Fryers are available in 3 sizes with an array of features and options for a range of commercial fryer applications. While the overall tank width on the HF40 and HF50 are the same, the HF50 has a deeper tank area than the HF40.

Model	KW	Width		Fry Compound	
		inches	cm	Lb.	kg
HFD/HFC40	14 & 17	15.5	39.3	35-40	15-18
HFD/HFC50	14, 17 & 21	15.5	39.3	45-50	15-18
HFD/HFC225	14, 17 & 21	15.5	39.3	25	11
HFD/HFC85	24	21.0	53.3	70-85	31-38

Voltage ranges are:
208/240, 3 Phase
220/380, 3 Phase, 4 Wire
240/415, 3 Phase, 4 Wire
480, 3 Phase.

Model HF Series Fryers can be free standing or arranged in batteries of 2 to 5 fryers. The number preceding the model number of your fryer refers to the number of fryers in a battery. One fryer in a battery can be a Frymate Dump Station (HFO15 for HF40 and HF50, HFO21 for HF85) (only one per battery).

HFD Fryers have a solid state thermostat and HFC Fryers have a microprocessor (computer) thermostat and timer control.

Feature options include Basket Lift(s) with Timer(s); Tri, Twin, or Single Baskets; Filter Ready and Battery Interplumbing. Finish options include S/S Sides and Casters. S/S Legs are standard.

Your Hobart fryer is constructed and designed to give long satisfactory service, providing it is properly installed, adjusted and maintained.

The Mobile Filter is covered under a separate Installation and Operation Manual.

HF Series Fryer — Features

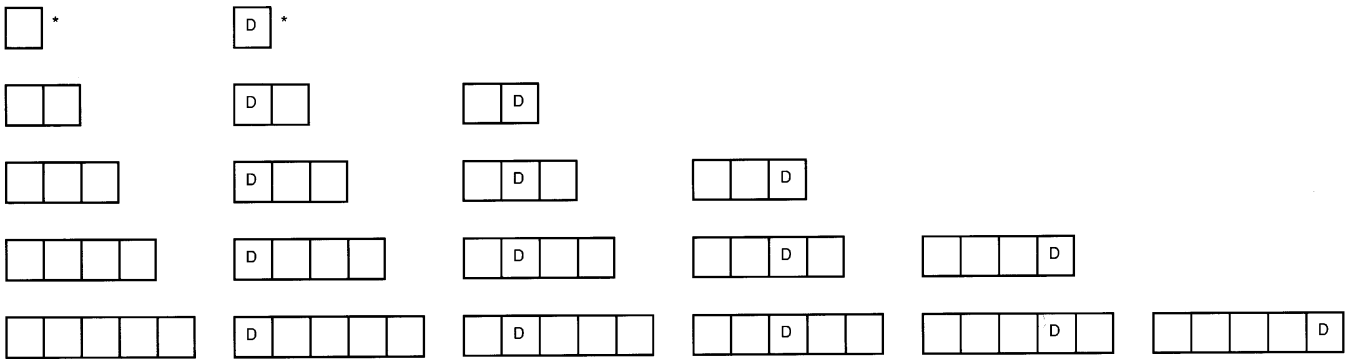
Model	Fat Melt Cycle	Thermostat	Basket Lift(s)	Basket(s)		
				Twin	Single	Tri
HFD 225	Std.	Solid State	Opt.	Std.	N/A	N/A
HFD40, HFD50				Std.	Opt.	N/A
HFD85				Std.	Opt.	Opt.
HFC40, HFC50	Std.	Computer	Opt.	Std.	Opt.	N/A
HFC85				Std.	Opt.	Opt.

HF Series Fryer — Construction Features

Model	Filter Ready	Battery Configuration	Battery Interplumbing
HFD40/HFC40	Opt. (Use HMF50)	Opt.	Opt.
HFD50/HFC50	Opt. (Use HMF50)	Opt.	Opt.
HFD225	Opt. (Use HMF50)	Opt.	Opt.
HFD85/HFC85	Opt. (Use HMF85)	Opt.	Opt.

BATTERY CONFIGURATIONS

Batteries of up to five fryers wide can be configured with any HF Series Fryer or HFO Frymate Dump Station (either 15½" [39.3 cm] or 21" [53.3 cm] wide). Possible configurations showing positions A thru E are depicted below:



NOTES:

D = Dump Station; = Fryer.

*Indicates filter interplumbing not available.
A mobile filter can be located under any position in a battery if it has been built without an HFO Frymate.
A mobile filter can be located under any position in a battery if the line-up has been built with an HFO Frymate located at either end of the battery.
When an HFO Frymate is built between two fryers within a battery, the filter is located under the HFO Frymate.
All options and accessories can be used with batteried equipment.
HFO15 is used on Models HF40 or HF50.
HFO21 is used on Model HF85.

Field Installable Accessories:

- Casters
- Twin Baskets
- Single Baskets
- Tri Baskets (HF85 only)
- Heat Lamp
- S/S Vat Cover
- Batter Tray
- Tank Skimmer
- Tank Scoop

Factory Installed Only

- Fat Melt
- Basket Lift
- S/S Tank
- S/S Sides
- Battery Configuration
- Battery Interplumbing

HFO SERIES FRYMATE (Dump Station)

Model HFO Frymate Dump Station can be configured in batteries with fryers in either 15½" (39.3 cm) or 21" (53.3 cm) width. Frymate provides a final prep area where excess oil drains away and product is seasoned, packaged, and kept ready for sale.

HFO Series Frymate — Finish Options

Model HFO15, HFO21	Front Door	Sides	Legs
Standard	Stainless Steel	Painted Steel	Stainless Steel Legs
Optional	Not Applicable	Stainless Steel	Casters

*Model HFO15 is for use with all HF40, HF50 and HF225 Series Fryers.
Model HFO21 is for use with the HF85 Series Fryers.

HFO Series Frymate — Features

Heat Lamp	Tops				Side Liners*
	Drain	Solid	Pan Solid	Pan Perforated	
Opt.	Std.	Opt.	Opt.	Opt.	Opt.

*Side liners are not available in batteries with HFO interplumbed Frymates.

INSTALLATION

Before installing the fryer, verify that the electrical service agrees with the specifications on the fryer data plate which is located on the inside of the door panel.

UNPACKING

Immediately after unpacking the fryer, check for possible shipping damage. If the fryer is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

Do not use the door or its handle to lift or move the fryer.

LOCATION

The fryer may be installed at 0" clearance from the back or side walls. A 16" (40.6 cm) clearance is required between the fryer and any open top flame burner. Position the fryer for easy accessibility for service.

INSTALLATION CODES AND STANDARDS

Your Hobart fryer must be installed in accordance with:

1. State and local codes.

2. The National Electrical Code, ANSI/NFPA No. 70 (latest edition). Copies may be obtained from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

3. NFPA Standard #96.

ASSEMBLY

The fryer must be restrained with adequate ties to prevent tipping when installed in order to avoid the splashing of hot liquid.

Legs

Position fryer in an open space near the final installation area. Tilt fryer on its side, being careful to avoid scratching the finish. Thread legs into mounting holes provided on bottom of fryer by screwing in a clockwise rotation until tight.

Carefully raise fryer to its normal position and place it in the installing location.

Casters (Optional)

It is recommended that casters be installed on all batteried appliances. A strain relief is supplied to protect the electrical supply line.

If it is necessary to disconnect the restraint, unplug electrical supply before disconnection. Reconnect the restraint before plugging the electrical supply in and returning the fryer to its installation position.

Instructions for installing casters to the fryer are included with the casters.

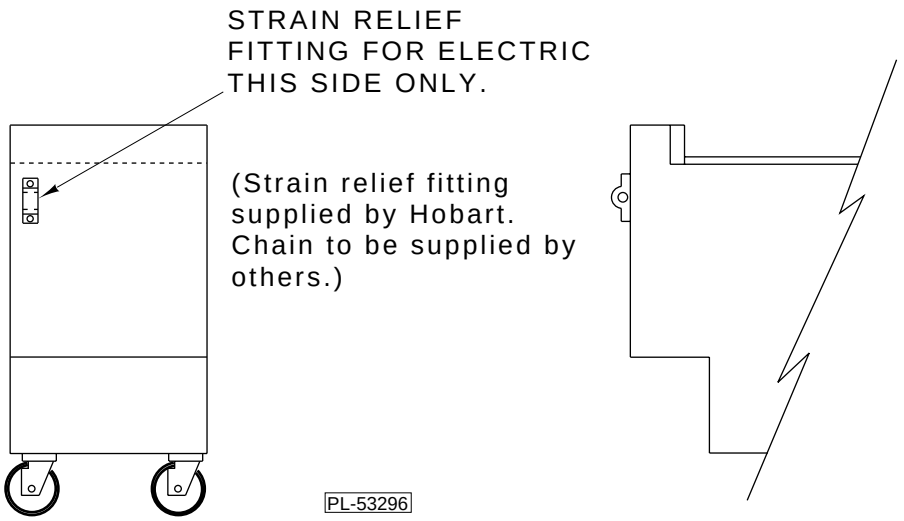


Fig. 1

LEVELING

Place a carpenter's level on top of the fryer and level the fryer front-to-back and side-to-side by turning the adjustable legs.

ELECTRICAL CONNECTIONS

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

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH TO INDICATE THAT YOU ARE WORKING ON THE CIRCUIT.

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 GROUNDED THREE-PRONG RECEPTACLE. IF THE RECEPTACLE IS NOT THE PROPER GROUNDING TYPE, CONTACT AN ELECTRICIAN. DO NOT REMOVE THE GROUNDING PRONG FROM THIS PLUG.

Place fryer as near to its final position as possible. Connect 3 phase line to X, Y and Z of terminal block. To reach terminal block, remove electric cover plate from fryer.

For each 15½" (39.3 cm) and 21" (53.3 cm) section, a 3 phase supply line capable of handling the required KW at the fryer's rated voltage (208, 240, 480) is needed. Refer to the fryer data plate for this electrical information.

If a fan interlock is needed, it should be connected to 1 and 2 on the 4 pole barrier strip. 1 and 2 go to a set of dry contacts on the power switch.

OPERATION

WARNING: HOT OIL AND PARTS CAN CAUSE BURNS. USE CARE WHEN OPERATING, CLEANING AND SERVICING THE FRYER.

WARNING: SPILLING HOT FRYING COMPOUND CAN CAUSE SEVERE BURNS. DO NOT MOVE FRYER WITHOUT DRAINING ALL FRYING COMPOUND FROM THE TANK.

BEFORE FIRST USE

Clean the Fryer and Heating Elements

Do not dry fire elements.

Using a non-corrosive, grease-dissolving commercial cleaner, clean the protective metal oils from all surface parts and the tank interior. Follow the cleaner manufacturer's directions. Rinse thoroughly and drain by opening the drain valve (accessible when the door is opened). After cooling, wipe tank and heating elements completely dry with a soft clean cloth. (See also CLEANING — WEEKLY OR AS REQUIRED in this manual.)

Clean all fryer accessories. Rinse all parts thoroughly after cleaning then wipe dry.

FILLING THE FRY TANK WITH SHORTENING

Liquid shortening may be used in all HFD/HFC Series Fryers.

Melting solid shortening without using the melt cycle will damage the fry tank and scorch the shortening. Only fryers equipped with the MELT cycle may use solid shortening. Solid shortening must be gently warmed to the liquid state before heating to frying temperatures. On HFC fryers, the computer must be programmed for MELT ENABLE, page 22.

Fill fryer tank to the "fill level" line on back wall (Fig. 2). Keep shortening at the "fill level" line in the fry tank. Add fresh shortening as needed. Do not overfill tank.

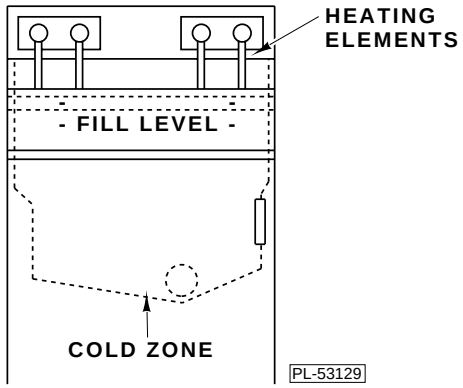


Fig. 2

ADDING SOLID SHORTENING

If replacing shortening, place the block of shortening in the room with the fryer for 1 to 2 hours before using. This will soften the shortening and make it easier to divide.

CAUTION: Failure to remove crumb screens prior to addition of fresh shortening may cause fryer side walls to overheat, allowing shortening to reach flashpoint.

After draining shortening, allow the tank to cool down before adding all new shortening to avoid scorching new shortening.

Shortening Capacity

FULL VAT	40 lb., 50 lb., 85 lb. (18 kg, 22 kg, 38 kg)
SPLIT VAT	25 lb. each vat section (11 kg)

Split Vat

1. Remove crumb screens.
2. Divide a 50-pound (22.6 kg) block of shortening into two equal halves (approximately 25 pounds [11.3 kg] each).
3. Place each half of the shortening directly on the heating elements in each well of the fry tank and slide back.
4. Place crumb screens on top of shortening in tank.

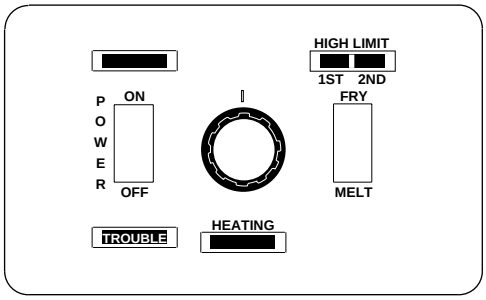
Single Vat

1. Remove crumb screen.
2. Place the block of shortening directly on the heating elements in the tank and slide back.
3. Place crumb screen on top of shortening.

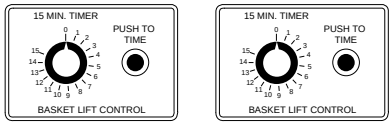
DAILY SHORTENING ADDITION (All Models)

Keep level of shortening at "fill level" line in fry tank. Add fresh shortening as needed.

CONTROLS — HFD SERIES (Fig. 3)



HFD FRYER



HFD FRYER
TIMED BASKETLIFT
OPTION

PL-52239

Fig. 3

THERMOSTAT — Controls temperature of oil in tank.

POWER ON - OFF SWITCH — Turns electric power to the fryer on or off.

FRY - MELT* SWITCH — Position on MELT when solid shortening is being melted; FRY is used after shortening is liquified to reach frying temperatures.

INDICATOR LIGHTS*

- ON — Electric power to the machine is on.
- TROUBLE — Indicates fryer has been shut down by second high limit.
- HEATING — Indicates temperature controller is calling for heat to elements.
- 1ST HIGH LIMIT — Oil temperature is higher than 425°F (218.3°C) and system has shut down.
- 2ND HIGH LIMIT — Oil temperature is higher than 450°F (232.2°C) and system has shut down.

*Present on some models.

MELTING SOLID SHORTENING (Model HFD)

To begin the melt cycle, push the power switch to ON and push the Melt/Fry switch to MELT. When oil has melted, push the Melt/Fry switch to FRY. Set thermostat to desired temperature.

TURNING THE HFD FRYER ON

CAUTION: Before turning the heating elements on, the fry tank must be filled with liquid or melted shortening. If this is not done, the tank walls can be damaged. Warpage can cause leaks.

Do not dry fire elements.

To turn the fryer ON, push the power switch to ON and set the thermostat knob to the desired temperature. When the set temperature is reached, the fryer will cycle on and off to maintain temperature.

TURNING THE HFD FRYER OFF

1. Turn thermostat knob OFF.

2. Turn power switch OFF.

Extended Shutdown

1. Turn thermostat knob OFF.

2. Turn power switch OFF.

3. Disconnect or turn main power supply OFF, i.e., breaker or disconnect supply line to fryer.

HIGH LIMIT CONTROL

If the shortening becomes overheated, one of the temperature shutoff devices will shut the fryer off. DO NOT turn fryer on until the shortening temperature is below 300°F (148.8°C).

If the high limit device has shut the fryer system off, push the red reset button on the back of the element head(s) before turning the fryer back on.

If this situation persists, shut fryer down and contact your local Hobart service office.

FRYING (All Models)

Heat shortening to set temperature. (For Model HFC Fryers, refer to computer controller instructions starting on page 16 of this manual.)

Pieces of product to be fried should be about the same size to ensure the same doneness.

Drain or wipe dry raw or wet foods to minimize splatter when lowering into the hot oil.

Do not overfill baskets.

Recommended maximum capacities are:

Models	(1 Basket) Product Weight		(2 Baskets) Total Product Weight		(3 Baskets) Total Product Weight	
	lb.	kg	lb.	kg	lb.	kg
HFD225	1.5	.68	3.0	1.3	N/A	
HFD/HFC40	1.5	.68	3.0	1.3	N/A	
HFD/HFC50	2.5	1.1	5.0	2.2	N/A	
HFD/HFC85	3.5	1.5	7.0	3.2	10.5	4.7

Carefully lower basket into oil.

When frying doughnuts and fritters, turn product only once during frying.

When cooking French fries or onion rings, shake basket several times in a way that does not splatter the shortening.

Batter-covered foods should be dropped carefully, one by one, into shortening or basket. If you use the basket, first dip basket into shortening to reduce batter build-up on basket surfaces.

When frying is completed, remove basket or product. Hang basket on rear basket hanger. Remove food and season it. Do not salt food over the shortening because salt could cause a chemical change in the oil.

DAILY FILTERING

Fryers Without Filter Ready Options

Turn power switch off when draining or filling.

Always filter the shortening while liquified. A cold fryer will not drain properly because the shortening under the cold zone area will remain hard, even if the heat is on for a few minutes. If necessary, the clean-out rod may be used to carefully stir up hard fat to an area above the cold zone (see Fig. 2) where it will melt. After the cold zone is liquified, turn the fryer thermostat and gas valve off.

Shortening life will be extended by filtering at least once a day or more often if conditions warrant. A commercial power filter (available from other manufacturers) may be used. Follow the manufacturer's operating instructions for draining, straining, and replacing shortening in the fry tank.

Another way to filter is to drain the shortening from the drain pipe through a filter bag, or cover the receiving container with cheesecloth or other filtering material.

Filtering Procedure (Non- Filter Ready Units)

1. Turn the fryer off.
2. Slowly remove the baskets and raise the elements out of the tank, especially if shortening is hot, to prevent splashing.
3. Open the fryer door and attach the drain pipe to the drain valve.
4. Select a container of sufficient capacity and place it below the drain pipe.
5. If you are using a filter bag, tie it securely to the drain pipe. If other filter medium is used, place it in the container.
6. Open the drain valve carefully so the oil stream is directed through the filter.
7. With a small amount of warm shortening, flush out scraps and sediment in the fry tank. Drain the tank thoroughly and wipe clean. (If it is necessary to clean the tank more thoroughly, follow the procedure shown in CLEANING - Weekly or as Required, in this manual [page 24]).
8. Close the drain valve.
9. Pour strained shortening back into the tank.
10. Add shortening to the "fill level" line. If using new solid shortening, refer to fat melt procedures.

Filter-Ready Fryers Only

Follow instructions in the MOBILE FILTER OPERATING MANUAL shipped with the mobile filter. If the manual is not found, contact your local Hobart service office to obtain the manual before operating the mobile filter.

Battery Interplumbing (Optional)

A battery of fryers equipped with optional interplumbing connects the fry tanks to a common drain. Each tank has an individual drain valve; these should only be opened one at a time.

Always be sure you have adequate container capacity before opening the drain; monitor the draining process.

To pump the oil back into the individual tank after the oil has filtered into the mobile filter:

1. Close the drain valve.

2. Open the valve on the return line (see Fig. 4).

Only one return valve should be open at a time

After oil is pumped back, close the return valve. Fill tank to the "fill level" line on the back wall of the fry tank.

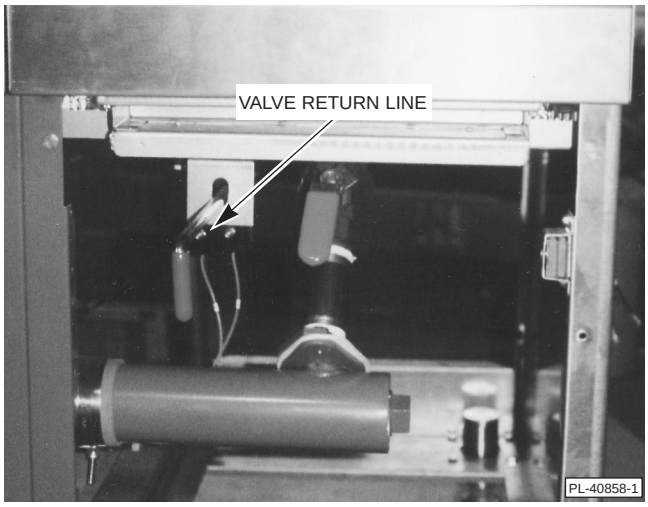


Fig. 4

SHORTENING LIFE (All Models)

Shortening life may be extended by following these guidelines:

- Do not salt foods over the fryer.
- Use good quality shortening.
- Filter shortening daily at a minimum.
- Replace shortening if it becomes poorly flavored.
- Keep equipment and surroundings clean.
- Set thermostats correctly.
- Remove excess moisture and particles from food products before placing in fryer.

CONTROLS — HFC Series (Fig. 5)

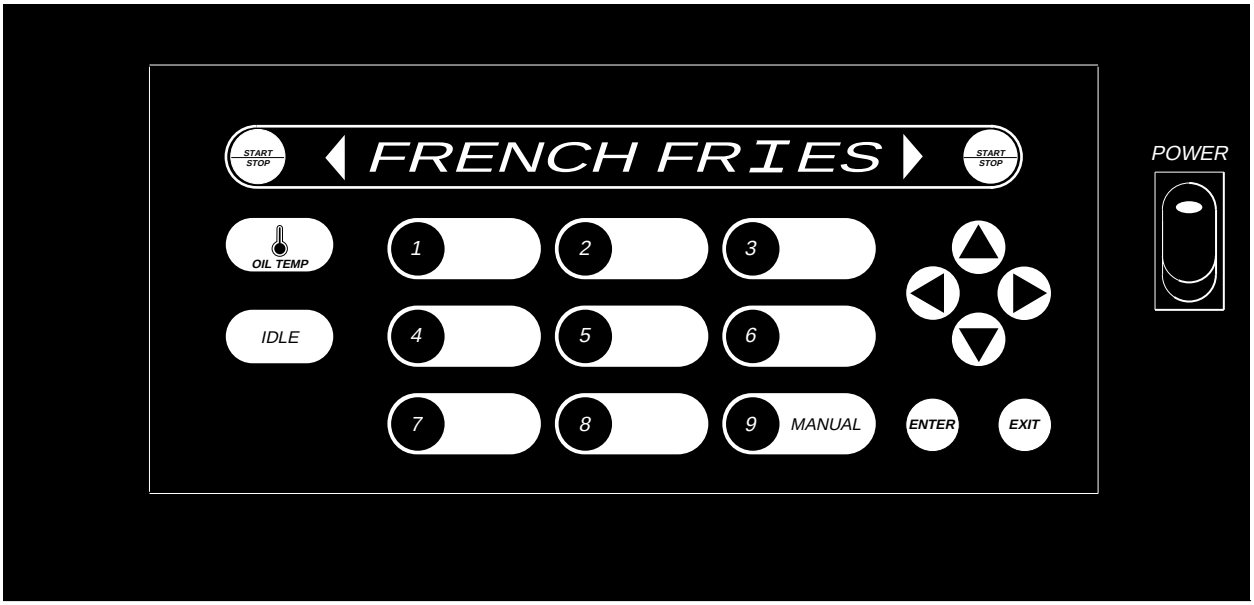


Fig. 5

DISPLAY	—	A twelve character display provides information during operation.
HEAT	—	HEAT indicator (in LED display) is lit when burners are on, not lit when off.
PRODUCT PADS (1-8)*	—	Programmable product pads select pre-programmed cooking parameters.
MANUAL PRODUCT (9)	—	Manual product pad can be programmed or allows manual operation.
OIL TEMP	—	Temperature of oil in vat will be displayed after this is pressed.
IDLE	—	Toggles Idle Mode on or off. Idle can be programmed to maintain 275°F or 350°F (135°C or 176°C).
◄ ►	—	Green light, indicates left or right basket.
START/STOP	—	Starts or stops the cooking timer for a basket.
◄ ► ▲▼, ENTER, EXIT	—	Moves around the menu system or edits product or system information.

* Two sheets of peel-off labels with most common product names are supplied. Applicable product names can be affixed to the appropriate Product Pad.

POWER-UP

After being turned on, the control executes a self-check routine. See ERROR MESSAGES, page 23.

After going through the self-check routine, the control enters either Fat Melt or Heating mode.

Fat Melt Mode

After power-up, if the oil temperature is below 135°F (57°C) and the FAT MELT mode is enabled, the fryer enters MELT mode. MELT is displayed. Whenever the oil temperature is below 135°F (57°C), if fat melt mode is enabled and the controller is not timing a product, the fryer will be in the MELT mode. If you press OIL TEMP, the oil temperature will display.

If you will never be using solid shortening and use liquid shortening only, the controller can be programmed so it will enter heating mode without going into the MELT cycle. See SELECT MELT, MELT DISABLED, page 22.

Heating Mode

During Heating mode, the burners will heat to the set point of 350°F (176°C) or until a product cook cycle is begun. WAIT displays and the HEAT indicator is lit. After reaching 335°F (168°C), READY displays.

PRODUCT PADS (1-8) can be used to select a product cooking cycle.

START/STOP initiates the timed cycle for either left or right basket and indicates time remaining. The oil temperature is controlled by the programmed temperature for the selected product. After a product cycle has begun, the product name will display with an arrow indicating left or right basket.

MANUAL PRODUCT (9) allows you to set the time and temperature for the batch.

IDLE changes to IDLE mode (sets temperature back to 275°F (135°C) if programmed — see SEL SETBACK, page 21).

OIL TEMP — press to display the oil temperature.

TO BEGIN MELT CYCLE

	DISPLAY
1. Fill vat with shortening.	
2. Turn Power Switch ON.	
3. If Fat Melt is enabled and oil temperature is below 135°F (57°C)...	MELT
4. Allow the cooking oil to heat ...	WAIT
5. After oil temperature reaches 335°F (168°C), a buzzer sounds...	READY

COOKING

DISPLAY

1. Press a Product Pad [1 - 8]... | FRENCH FRIES |
2. Load basket. Press left or right START/STOP Pad and lower basket. Timer counts down...* | XX:XX |
3. When finished, buzzer sounds...* | DONE |
4. Press left or right START/STOP Pad to stop buzzer.

* Display indicates left or right basket. When both baskets are in use, count down time and "DONE" for the left basket are displayed on left, right basket info is displayed on right.

MANUAL COOKING OPERATION

This allows the operator to select the cooking time and temperature to cook a batch of product.

1. With at least one basket not in use, press the MANUAL pad (9).
2. If the previous time and temperature were OK, press START/STOP to begin cooking.
3. If you want to set the time and temperature, use the editor...

DISPLAY	INSTRUCTION
TIME = 00:10	Use ▲▼►◄ to edit the time. Press ENTER.
TEMP = XXX°F	Use ▲▼►◄ ; edit temperature. Press ENTER.
	Press START/STOP to begin cooking.

COOKING TIME REMAINING

XX:XX YY:YY Left basket displays on left; right basket on right; time is in Minutes:Seconds. If only one basket is cooking, the other will indicate READY or WAIT.

XX:XX READY

COMPLETION

After the timer counts down to 00:00, a buzzer sounds and the display prompts DONE on the left or right side of the display, indicating which basket is done. Press START/STOP to remove the DONE message and stop the tone.

SUCCESSIVE PRODUCT COOKING

After selecting a Product by pressing its Product Pad (1 - 8), the timer can be started by pressing the START/STOP pad. If the START/STOP pad is pressed during a cooking cycle, the product cycle is terminated. Fryer returns to READY.

DURING SLACK PERIODS

If the fryer is not going to be used for an extended period, oil life is enhanced by pressing IDLE if SETBACK is enabled. With the setback feature enabled, after 30 minutes of non-use, the fryer automatically assumes Idle mode where it maintains 275°F (135°C) temperature. If Setback is disabled, the fryer does not automatically go into idle mode and will continue to maintain 350°F (176°C).

IDLE MODE

If setback is enabled, during idle mode, the Setback temperature of 275°F (135°C) will be maintained until IDLE is pressed. IDLE MODE WITH SETBACK - PRESS IDLE TO RESUME

If the setback is not enabled, 350°F (176°C) is maintained during Idle mode.

IDLE MODE - PRESS IDLE TO RESUME

The purpose of the setback temperature is to extend oil life during slack periods.

OPERATOR ADVICE

OIL indicates the programmed number of hours has expired and reminds the operator that the oil should be changed or filtered. To remove the advice, reset the timer to a non-zero value. A zero setting turns the oil timer off.

TOO HI or TOO LOW indicate invalid edit entry.

USING THE EDITOR

Names or Messages use the 12 character alpha-display. When entering data …

- ▲ begins at A and increments thru the alphabet.
- ▼ begins with Z. Select the correct letter.
- ▶ moves Right one character or space.
- ◀ moves Left one character or space.

Use a series of ▲▼▶◀ to display the name or message you want.

Time or Temperature …

▲▼ increment up or down (0 - 9). Select the correct number.▶ moves Right one space; ◀ moves Left.

°F or °C …

▲▼ toggle between Fahrenheit and Celsius; temperature is automatically converted. All temperatures display in the most recently edited temperature scale.

PROGRAMMING THE CONTROLLER

Enter the menu system by pressing Product Pads 2 and 3 at the same time until -FUNCTIONS- is displayed. The controller must not be in a timed product cycle to enter the menu system.

Step through the program using ▼ . If you go too far, ▲ will return one step.

EDIT PRODUCT	RECOVERY
SEL SETBACK	SELECT MELT
CALIBRATE	MANUAL SETUP
BOIL OUT	OIL TIMER

Description of each program element follows.

DEFINITIONS — EDIT PRODUCT

PRODUCT KEY = The Product Pad, (1 - 8)

PRODUCT NAME = any 12 alpha characters.

COOK TIME = Minutes: Seconds of cooking duration. Controls basket lifts and buzzer. Elastic time compensates for under- or over-temperature.

COOK TEMP = fryer burner thermostat control.

DUTY TIME = time between start and the duty message.

DUTY MSG = displays after duty time lapses during cooking cycle, e.g. 'shake basket'.

HOLD TIME = amount of time after the last batch is processed before product begins to stale. Buzzer notifies when HOLD TIME is over.

CLR PRODUCT? = ENTER erases product from memory.

OVERVIEW OF PROGRAMMING

-FUNCTIONS-	EDIT PRODUCT	# CHARS - TYPE	UNITS - LIMITS
	PRODUCT NAME	12 - ALPHA CHARACTERS	[A - Z]
	COOK TIME	XX:XX - TIME	MINUTES:SECONDS - [00:00 - 99:59]
	COOK TEMPERATURE	XXX - TEMPERATURE	[°F OR °C] - [320 - 375°F] or [161 - 190°C]
	DUTY TIME	XX:XX - TIME	MINUTES:SECONDS - [00:00 - 99:59]
	DUTY MESSAGE	12 - ALPHA CHARACTERS	[A - Z]
	HOLD TIME	XX:XX - TIME	MINUTES:SECONDS - [00:00 - 99:59]
	SEL SETBACK	↑↓ - TOGGLE	SETBACK - [ON - OFF] ON = IDLE @ 275°F - WITH AUTO 135°C - WITH AUTO OFF = IDLE @ 350°F - WITH OUT AUTO 176°C - WITH OUT AUTO
	CALIBRATE	XXX- TEMPERATURE	°F or °C - [XXX ± 30°F] or [YYY ± 17°C]
	BOIL OUT	XXX- TEMPERATURE	°F or °C - [190 - 205°F] or [88 - 96°C]
	RECOVERY	XX:XX - TIME	MINUTES:SECONDS - [00:00 - 99:59]
	SELECT MELT	↑↓ - TOGGLE	MELT - [ON - OFF]
	MANUAL SETUP	↑↓ - TOGGLE	MANUAL - [ON - OFF]
	OIL TIMER	XXX - NUMERIC	HOURS - [0 = OFF, 1 - 255]

EDIT PRODUCT

To Add or Change a Product Cook Cycle…

DISPLAY	INSTRUCTION
READY	Press 2 & 3 simultaneously.
-FUNCTIONS-	Press ▼.
EDIT PRODUCT	Press ENTER.
PRODUCT KEY	Press Pad Number (1-8).
PRODUCT NAME	Press ENTER.
	Enter the product name. Use ▲▼►◄ . When the display is OK, press EXIT.
PRODUCT NAME	Press ▼.
COOK TIME	Press ENTER.
TIME = XX:XX	Enter the time. Use ▲▼►◄. When OK, press EXIT.
COOK TIME	Press ▼.
COOK TEMP	Press ENTER.
TEMP = XXX°F/°C	Enter the temperature. Use ▲▼►◄. When OK, press EXIT.
COOK TEMP	Press ▼.
DUTY TIME	Press ENTER.
DT TM = XX:XX	Enter duty time.Use ▲▼►◄. When OK, press EXIT.
DUTY TIME	Press ▼.
DUTY MSG	Press ENTER.
	Enter the message. Use ▲▼►◄. When OK, press EXIT.
DUTY MSG	Press ▼.
HOLD TIME	Press ENTER.
HD TM = XX:XX	Enter hold time.Use ▲▼►◄ . When OK, press EXIT.
HOLD TIME	Press ▼.
CLR PRODUCT?	Press EXIT.

DO NOT press ENTER unless you want to erase the product from memory.

-FUNCTIONS-	Press Exit.
READY	

SEL SETBACK

ON sets the IDLE temperature at 275°F (135°C); fryer will automatically go into Idle after 30 minutes. OFF sets the IDLE temperature at 350°F (176°C) and will not automatically enter Idle after 30 minutes. Use ▲ or ▼ to toggle SETBACK ON or SETBACK OFF.

DISPLAY	INSTRUCTION
READY	Press 2 & 3 simultaneously.
-FUNCTIONS-	Press ▼.
EDIT PRODUCT	Press ▼.
SEL SETBACK	Press ENTER.
SETBACK OFF	Press ▲ or ▼.
SETBACK ON	Press EXIT.
SEL SETBACK	Press EXIT.
-FUNCTIONS-	Press EXIT.
READY	

CALIBRATE

This feature allows the operator to calibrate the temperature sensors in the fryer. Before calibrating, temperature must be stable at 350°F (176°C).

DISPLAY	INSTRUCTION
READY	Press 2 & 3 simultaneously.
-FUNCTIONS-	Press ▼.
EDIT PRODUCT	Press ▼.
SEL SETBACK	Press ▼.
CALIBRATE	Press ENTER.
TEMP = 347°F/175°C	Measure the vat temperature with a thermometer device. Use ▲▼►◄ to edit the displayed temperature so it agrees with the measurement. When OK, press EXIT.
CALIBRATE	Press EXIT.
-FUNCTIONS-	Press EXIT.
READY	

BOIL OUT

BOIL OUT heats water in the vat for cleaning purposes for 15 minutes. If operating at a higher altitude, the boiling temperature may be lowered.

DISPLAY	INSTRUCTION
READY	Press 2 & 3 simultaneously.
-FUNCTIONS-	Press ▼.
EDIT PRODUCT	Press ▼.
SEL SETBACK	Press ▼.
CALIBRATE	Press ▼.
BOIL OUT	Press ENTER.
START BOIL	- To change boil temperature, press ▼.
CH BOIL TEMP	Press ENTER.
TEMP = 195°F/90°C	Alter boil temp. Use ▲▼►◄. When OK, Press EXIT.
CH BOIL TEMP	Press ▼.
START BOIL	- To begin boil, press ENTER.*
BOIL OUT	
TIME = 15:00	Time Counts down or EXIT.
DRAIN VAT	Suspends operation. Turn fryer OFF.

* To return to -FUNCTIONS- press EXIT.

RECOVERY

Displays the previous recovery time, the time it takes to recover from 275 to 325°F (135 to 162°C).

DISPLAY	INSTRUCTION
READY	Press 2 & 3 simultaneously.
-FUNCTIONS-	Press ▼.
EDIT PRODUCT	Press ▼.
SEL SETBACK	Press ▼.
CALIBRATE	Press ▼.
BOIL OUT	Press ▼.
RECOVERY	Press ENTER.
REC TM = XX:XX	Press EXIT.
-FUNCTIONS-	Press EXIT.
READY	

SELECT MELT

▲▼ toggles MELT DISABLE or MELT ENABLE. ENABLE is required when using solid shortening to automatically MELT if below 135°F (57°C).

DISPLAY	INSTRUCTION
READY	Press 2 & 3 simultaneously.
-FUNCTIONS-	Press ▼.
EDIT PRODUCT	Press ▼.
SEL SETBACK	Press ▼.
CALIBRATE	Press ▼.
BOIL OUT	Press ▼.
RECOVERY	Press ▼.
SELECT MELT	Press ENTER.
MELT ENABLE	Press ▲ or ▼ to toggle.
MELT DISABLE	When OK, press EXIT.
SELECT MELT	Press EXIT.
-FUNCTIONS-	Press EXIT.
READY	

MANUAL SETUP

▲▼ toggles MANUAL ON or MANUAL OFF. ON allows time/temp entry for the batch. OFF disables manual operation and allows the manual pad (9) to be reprogrammed as a regular product pad.

DISPLAY	INSTRUCTION
READY	Press 2 & 3 simultaneously.
-FUNCTIONS-	Press ▼.
EDIT PRODUCT	Press ▼.
SEL SETBACK	Press ▼.
CALIBRATE	Press ▼.
BOIL OUT	Press ▼.
RECOVERY	Press ▼.
SELECT MELT	Press ▼.
MANUAL SETUP	Press ENTER.
MANUAL OFF	Press ▼ or ▲ to toggle.
MANUAL ON	When OK, press EXIT.
MANUAL SETUP	Press EXIT.
-FUNCTIONS-	Press EXIT.
READY	

OIL TIMER

The controller will alert the operator when the oil needs to be changed. OIL TM = XXX sets the number of hours before the alert will be given.

DISPLAY	INSTRUCTION
READY	Press 2 & 3 simultaneously.
-FUNCTIONS-	Press ▼.
EDIT PRODUCT	Press ▼.
SEL SETBACK	Press ▼.
CALIBRATE	Press ▼.
BOIL OUT	Press ▼.
RECOVERY	Press ▼.
SELECT MELT	Press ▼.
MANUAL SETUP	Press ▼.
OIL TIMER	Press ENTER.
OIL TM = XXX HR	Use ▲ or ▼ to reset the timer. When set time is OK, press EXIT.
OIL TIMER	Press EXIT.
-FUNCTIONS-	Press EXIT.
READY	

ERROR MESSAGES

TEMP TOO HI indicates the fryer has operated at a higher than normal temperature and has shut down and become inoperable.

CALL SERVICE indicates that the fryer has a problem that demands the attention of your local Hobart service office. The fryer will shut down and become inoperable.

Arrows flashing indicates RAM failure. If any failures are present, the fryer remains in back-up mode.

CLEANING (All Models)

WARNING: UNPLUG FRYER BEFORE CLEANING.

Daily

Clean the exterior of your fryer regularly with a damp cloth and polish with a soft dry cloth. If regular cleaning is neglected, grease will be burned on and discolorations may form. These may be removed by washing with any detergent or soap and water. A self-soaping scouring pad may be used for particularly stubborn discolorations. Always rub with the “GRAIN” in a horizontal direction.

Keeping the fryer exterior clean and free of accumulated grease will prevent stubborn stains from forming. Wash all exterior surfaces at least once daily. Use a cloth with warm water and a mild soap or detergent. Follow with a clear rinse, then dry.

Fingerprints are sometimes a problem on highly polished surfaces of stainless steel. They can be minimized by applying a cleaner that will leave a thin, oily or waxy film.

DO NOT use a scouring pad or harsh cleaners on the computer keypad, especially the display area.

Weekly or as Required

1. Once the shortening has been drained, flush out scraps and sediment with a small amount of warm shortening. Allow the tank to drain thoroughly.

2. Close the drain valve and fill the tank with a non-corrosive, grease-dissolving commercial cleaner, following the manufacturer's instructions.

3. Set the thermostat at a temperature recommended by the manufacturer of the commercial cleaner and boil the solution for 15 to 20 minutes. If cleaner is a water based chemical, temperature may be 190 - 212°F (87-100°C). Set the temperature as low as possible; monitor boiling to prevent overflow.

4. Drain the cleaning solution from the tank.

5. Close the drain valve and refill the tank with water. Add 1 cup (226 g) of vinegar to neutralize alkaline left by the cleaner. Bring the solution to a boil and allow it to stand for a few minutes.

6. Drain the tank and rinse thoroughly with clear, hot water. All traces of cleaner must be removed. Dry the tank thoroughly.

7. Close the drain valve and add shortening to the "fill level" line. If using solid shortening, refer to fat melt and adding solid shortening procedures.

The fryer is now ready for use.

MAINTENANCE

WARNING: HOT OIL AND PARTS CAN CAUSE BURNS. USE CARE WHEN OPERATING, CLEANING AND SERVICING THE FRYER.

WARNING: SPILLING HOT FRYING COMPOUND CAN CAUSE SEVERE BURNS. DO NOT MOVE FRYER WITHOUT DRAINING ALL FRYING COMPOUND FROM THE TANK.

LUBRICATION

Motors used on basketlifts are permanently lubricated.

SERVICE AND PARTS INFORMATION

To obtain service and parts information concerning this fryer, contact your local Hobart service office.