DSE SERIES MODELS

OWNER'S MANUAL



Be sure ALL operators read, understand and have access to this manual at all times.

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OWNERS RESPONSIBILITIES

It is the owner's responsibility to:

- Insure the PERFECT FRYER is properly maintained.
- Allow only properly trained personnel to operate, clean and maintain a PERFECT FRYER.
- Contact local authorities having jurisdiction to insure that the installation conforms to all local fire and health regulations.
- Insure that the model ready for installation matches the supply voltage.
- Insure that the main power supply is disconnected before the PERFECT FRYER is serviced.
- Insure that all safety devices are intact.
- Insure that a proper surface is provided for the PERFECT FRYER to sit on.
- Insure that proper clearances are kept.
- Return the fryer for recycling when it reaches end of life

REGULATIONS & RECYCLING

Installation of your PERFECT FRYER must conform to all local fire and health regulations and building codes.

The table below describes the standards that your PERFECT FRYER has been tested to and the corresponding listing marks.

STANDARD	DESCRIPTION	LISTING MARK
NSF 4	Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transport Equipment.	STATION LISTO
EN60335-1	Safety of Household and Similar Electrical Appliances Part 1. General Requirements Amendment 8913 - October 1995 Amendment 9475 - May 1997	
EN60335-2-37	Safety of Household and Similar Electrical Appliances Part 2. Commercial Electric Deep Fat Fryers	して
EN61000-6-1 EN61000-6-3	Electromagnetic Compatibility (EMC) – Emissions & Immunity for Light Industrial Environments	

The table below describes the recycling procedures for your PERFECT FRYER.

WEEE (Waste Electrical & Electronic Equipment) 2002/96/EC RoHS (Restriction of Hazardous Substances) 2002/95/EC	When your PERFECT FRYER has reached end of life, please deliver the fryer to your local distributor. They will prepare and deliver the fryer for recycling to the WEEE collection system in your country. Most of the fryer's materials can be recycled. DO NOT DISPOSE OF THE FRYER IN MUNICIPAL WASTE!	
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SAFETY FIRST

LIFTING & MOVING:

• Your PERFECT FRYER's gross shipping weight is 92 lb. (42 kg). Net weight = 80 lb. (36 kg).

DEEP FRYING:

 Cooking oil is very hot 350°F (177°C). Hot oil can cause severe burns. DO NOT TOUCH THE COOKING OIL UNLESS YOU ARE SURE IT HAS COOLED.

HEATER MODULE:

- DO NOT DROP
- DO NOT IMMERSE IN WATER

CLEANING:

 Before cleaning fryer or removing oil, let fryer cool to 122°F (50°C). DO NOT TOUCH HEATER MODULE, VAT OR OIL UNLESS YOU ARE SURE IT HAS COOLED.

COOKING OIL MAINTENANCE:

• For sanitation and safety, we recommend that the cooking oil is replaced once a week, more often for higher volume usage. Use a commercial grade deep-fryer formulated cooking oil. OLD OIL HAS A REDUCED FLASHPOINT. OLD OIL AND OVER-WET FOOD ARE PRONE TO SURGE BOILING.

SERVICING:

• DISCONNECT THE POWER SOURCE BEFORE SERVICING THE FRYER. There is no need to unplug your PERFECT FRYER for normal cleaning or maintenance.

INSTALLATION

CAUTION Your PERFECT FRYER is NOT to be operated in North America as it not certified for those areas. **CAUTION** A portable restaurant kitchen extinguisher is necessary as a safety precaution and should be located nearby. The procedures for operation and maintenance are contained in this manual. Perfect Fry Company LLC. shall not be liable for injury or damage to property other than this fryer.

Electrical Power Supply

Your PERFECT FRYER must be connected to a dedicated electrical circuit that meets your fryer's requirements (see table below).

CAUTION Improper Installation may damage the fryer and void your warranty

- If your PERFECT FRYER's plug does not fit your wall outlet receptacle, have an ٠ electrician install the appropriate receptacle within 4 feet of the fryer.
- See the manufacturer's label on your PERFECT FRYER for the electrical Model No. DSEXXX, then check off your Model Number.

PERFECT FRY MODEL	VOLTS/P HASES	AMPS	CIRCUIT AMPS	WATTS	POWER SUPPLY
↓ Put a check ma	\clubsuit Put a check mark 🗹 in the box beside the Model Number of your PERFECT FRYER.				
□ DSE300	240 1Ø	12.5	15	3000	For use on an individual branch circuit rated 15A minimum. Country specific plug supplied.
□ DSE570	240 1Ø	24.0	30	5700	For use on an individual branch circuit rated 30A minimum. Plug not supplied.
□ DSE570	230 3 Ø Delta (3 wire)	14.3	15	5700	For use on an individual branch circuit rated 15A minimum. For supply connectors, use minimum no. 14 AWG wire (15A rated). Plug not supplied.
□ DSE570	400/230 3 Ø Wye (4 wire)	8.2	15	5700	For use on an individual branch circuit rated 15A minimum. For supply connectors, use minimum no. 14 AWG wire (15A rated). Plug not supplied.
All models are 50/60 hertz.					

Electrical Specifications

INSTALLATION (Continued)

Prepare Counter-top Area

Unpack

1)	Cut straps on shipping box	
• /		

- ОХ
- 2) Remove box top and body
- 1" on sides 2" on back 0" on top

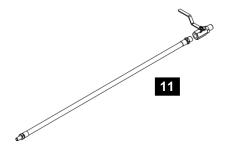
Clearances:

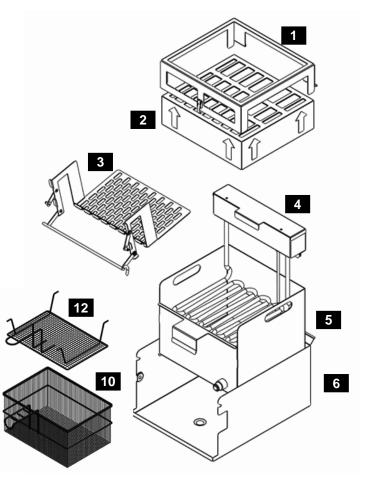
- Remove outer plastic wrapping and keep box along with foam corners and sides
- 4) Lift your PERFECT FRYER onto counter-top

CAUTION Your PERFECT FRYER weighs 80 lb. (36 kg). Lift it carefully with your legs or with the help of another person and place it in its final location.

- 5) Remove all foam stuffing and parts
- 6) Put check mark \square in box once the part is removed
- 7) Go to ASSEMBLY section (next page)

	1	Air Filter Cage		
	2	Air Filter Cartridge		
	3	Basket Lift		
	4	Heater Module		
	5	Oil Vat		
	6	Oil Spill Tray		
	7	Front Panel (NS)		
	8	Door (NS)		
	9	Door Springs (NS)		
	10	Extra Large Basket		
	11	Oil Drainage Kit (Optional)		
	12	XL Basket Cover (Optional)		
NS =	NS = Not Shown			





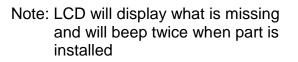
ASSEMBLY

- 1) Clean parts and inside of cabinet (all except air filter cartridge)
 - a) Wash in warm soapy water
 - b) Rinse with hot water
 - c) Rinse with vinegar solution (1 part vinegar to 2 parts water)

CAUTION The heater box must <u>NOT</u> be immersed in water or other liquid.

On Off

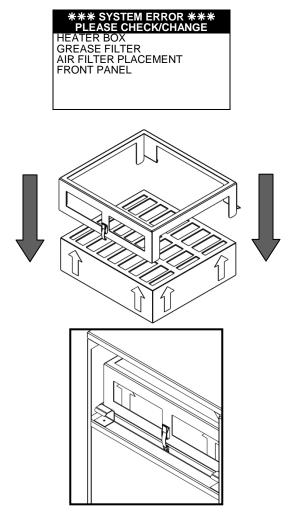
2) Plug in fryer and press



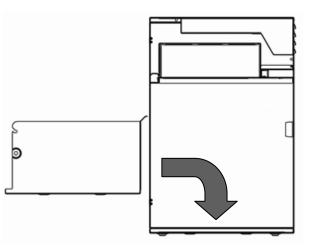
3) Fit air filter cage over air filter cartridge

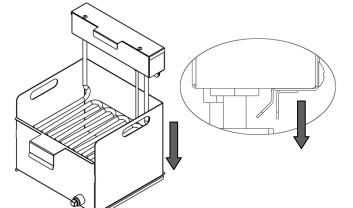
Note: Make sure arrows are pointing up

4) Slide air filter cartridge firmly back into filter compartment and fasten down with latch.



- 5) Install spill tray into bottom cooking compartment
 - Note: Indents on bottom of spill tray should fit into indents on bottom of cabinet

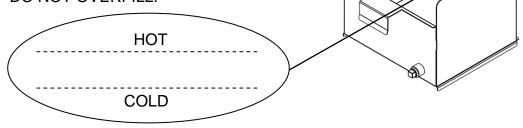




6) Set heater module onto vat

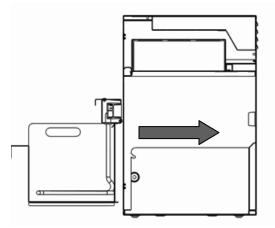
Note: "^" grooves on bottom of heater module should fit onto back of vat

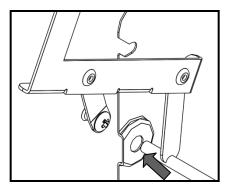
 Pour frying oil into vat. Fill to COLD level mark. Use commercial grade deep fryer cooking oil. DO NOT OVERFILL.

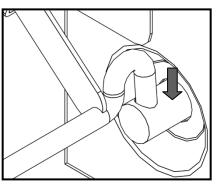


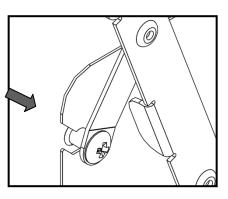
ASSEMBLY (Continued)

 Slide heater module/vat into cooking compartment and push in all the way. Ensure electrical connection is complete with a firm push on the heater module.









- 9) Install basket lift
 - a) Hold basket tray vertical
 - b) Install rod into pivot hole left side

c) Install rod into motor coupler – right side

- d) Pivot basket tray forward from vertical position and insert arms into spill tray.
- 10) Install and close front panel. Turn latch 1/4 turn clockwise and press down
- 11) The fryer will now begin heating. In a few minutes, you will be ready to start cooking!

CLEANING

Daily Maintenance

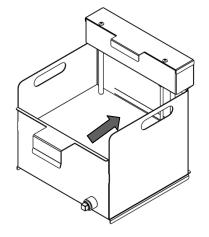
CAUTION Do not unplug the fryer and always make sure the fryer is turned off

 \bigwedge CAUTION Do not touch heater module, oil vat or oil unless you are sure it has cooled

- 1) Wipe basket(s) with paper towel to remove crumbs and food particles
- 2) Wipe crumbs, oil and any other food matter from inside of door into spill tray using a paper towel
- 3) Clean outside of fryer with a good stainless steel cleaner and wipe dry

- CAUTION Do not clean the outside or any other stainless steel part using abrasive cleaners. Use only light degreasers on powder coated surfaces
 - 4) Check oil level on the back of vat to make sure it is up to cold line (at room temperature). If not, add oil as necessary. Replace the cooking oil once a week or more often if necessary. Use a COMMERCIAL GRADE DEEP FRY COOKING OIL.

Weekly Maintenance



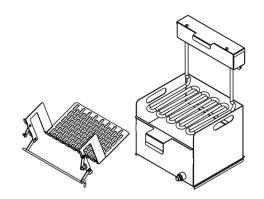
CAUTION Do not unplug the fryer and always make sure the fryer is turned off

Do not touch heater module, oil vat or oil unless you are sure it has cooled

- 1) Open front panel by lifting and turning latches. Lift it off its hinges. The front panel can be cleaned as is or apart if preferred.
- 2) Remove air filter cartridge and set aside (for replacement, see page 11).

CAUTION Do not wash air filter cartridge

3) Pour cooking oil from vat into containers for disposal. Have empty containers handy for proper disposal of used cooking oil. A rendering company can help with proper disposal.



CLEANING (Continued)

4) Remove basket lift, oil vat and heater module (picture right). Use a spray on oven cleaner and enclose with plastic bag for at least one hour or leave overnight if possible. (ECOLAB[→] Grease strip Plus and EASY-OFF[→] are recommended). Wash in soap and hot water and rinse well in hot water. Rinse parts in a solution of: 1 part white vinegar [5% acetic acid] and 2 parts water. The vinegar rinse is very important. It neutralizes

soap residue that causes oil breakdown foaming. Soap residue turns oil dark and reduces its performance significantly. Clear water rinse parts. Clean the male and female terminals on connectors with rubbing alcohol and cotton swab.



CAUTION The heater box must <u>NOT</u> be immersed in water or other liquid.

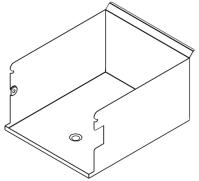
CAUTION Do not spray male connector

OIL VAT BEING SPRAYED WITH OVEN CLEANER

- Remove spill tray and drain any oil that has accumulated. Wash in soap and hot water. Rinse well in hot water and dry.
- 6) With internal components removed, clean cooking and filter compartments with grease cutting soap. Rinse with damp cloth and dry.

CAUTION Do not spray female connector

- 7) Move fryer, and then clean counter-top and external surfaces.
- 8) Re-install all parts (see ASSEMBLY page 6)



CLEANING (Continued)

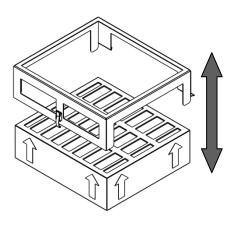
Periodic Maintenance

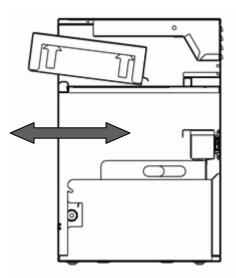
Air Filter Cartridge Replacement

- Replace the air filter cartridge at least once every 3 months, more often for higher volume usage.
 Replacement is safer and easier when the fryer is cool rather than hot.
- Only PERFECT FRY filters may be used in your PERFECT FRYER.

Steps to replace air filter cartridge:

- 1) Open front panel by lifting and turning latches
- 2) Release latch on air filter cage, and remove air filter cage and air filter cartridge from filter compartment
- 3) Remove old used air filter cartridge from air filter cage
- 4) Wipe air filter cage clean
- 5) Fit air filter cage over new air filter cartridge and write date on cartridge
 (û û Arrows up)
- 6) Install air filter cage and new air filter cartridge firmly back into filter compartment and latch in place
- 7) Close front panel and latch shut





TIPS ON DEEP FRYING

Great Food in Less Time

- Use premium quality commercial deep frying oil. Canola and Soybean oils are recommended. Do not use household cooking oils from your local supermarket. Poor quality oils may shorten the life of the air filter cartridge.
- Keep food frozen until ready to fry. Frozen product will absorb less oil during the cooking process.
- **Remove ice from food.** Ice results in excess bubbling and spillage of oil out of the vat.
- **Minimize the moisture.** Excess moisture extends the cooking time. Water, ice, sugar and breading all contribute to shortening the life of the oil.

MINIMIZE THE MOISTURE REDUCE THE COOKING TIME MAXIMIZE THE PROFIT

- Try to reduce the amount of breading that falls off of the food. Breading often has sugar and other ingredients that will reduce the oil's life and darken the appearance of food. Consider filtering the oil to remove the breading particles.
- Do not overfill the basket. Excess food may not be cooked properly.

Common Questions

• How Much Oil to Use?

The PERFECT FRY has a capacity of 2 gallons of oil (8L). Fill the oil vat to the cold line only.

- How Much to Fry? Fill the basket to the fill line only. The basket has an approximate capacity of 2 lbs (1 kg) of product per cycle.
- What is the Ideal Temperature Range for Cooking? The ideal temperature range for cooking product is between 350°F and 360°F (177°C and 182°C). The factory default setting for cooking temperature is 350°F (177°C).
- Should Frozen Food Be Defrosted? DO NOT THAW FROZEN FOOD! Frozen foods only should be put directly into the fryer in order to minimize moisture.
- Can I Refreeze Frozen Foods? NO, do not refreeze frozen foods. Foods that are refrozen can absorb more oil, which will result in a dry, brittle and tasteless product.

OIL FACTS

Frying oil is especially formulated to withstand high temperatures. For this reason, you must ensure you are using the right product. Liquid vegetable shortening is produced by several companies; the oil has an additive and/or has been formulated to increase the performance during high temperature usage.

DO NOT USE OIL THAT IS RECOMMENDED BOTH FOR SALAD AND FRYING!

Fill the oil vat to the cold line only. The oil expands as it heats and if overfilled, the bottom of the basket will remain in the oil when in the up/serve position.

How Much to Fry?

- Fill the basket no higher than the fill line. Do not overload the basket.
- Keep baskets clean and free of breading/batter build up.
- Remove ice crystals or excess water before frying.
- Do not salt or season before frying.
- Remove surplus and/or batter before frying.
- Do not allow frozen food to thaw before frying.
- Drain fried foods before serving.

How Hot is TOO Hot?

Ideal frying temperature range is between 350°F and 360°F (177°C and 182°C). Factory default setting is 350°F (177°C). When frying at too low a temperature, food absorbs more oil which increases oil consumption.

Excessive Oil Usage?

The fried product is absorbing oil. Possible reasons for this include:

- Excess breading or batter, shake off excess before frying.
- Allow basket to drain longer, adjust the drain time.
- Food is being allowed to thaw before frying.

Cleaning Your Fryer?

• Refer to the Cleaning section of this owner's manual. Remember to clean the basket and drip tray.

Filtering Your Oil?

The most important procedure you can do is to maintain the oil, extending its life:

- Filter at least once a day, preferably first thing in the morning when the oil is at room temperature.
- Filtering removes all the contaminants from the previous days cooking.
- Clean the oil vat.

Points to Remember:

- Clean the cooking chamber at least once a week and rinse thoroughly.
- Filter oil daily.
- Do not overheat oil.
- Use the standby mode when possible.
- Do not salt product prior to frying.
- Remove ice crystals and moisture before frying.
- Maintain oil level in vat, check to ensure it is at the hot line often.
- The oil is dead when foaming appears continuously on the oil surface

Your oil, product taste, and customers depend on you.

OIL FACTS (Continued)

If the oil temperature is set too high, the food will cook on the exterior and the interior will be undercooked. When the interior is cooked completely, the exterior will be overdone or burnt. The higher temperature will also cause the oil to break down faster and smoke.

During slow periods, take advantage of the standby mode which allows the oil to cool down to 275°F (135°C), prolonging the oil life and reducing energy costs while allowing quick recovery time when required.

The oil temperature should not be adjusted when cooking different products. Adjust the cooking time instead.

Frozen Foods

Put frozen foods directly into the fryer. **DO NOT THAW FROZEN FOODS!** Blot excess water from food before frying. Remove ice crystals that may be at the bottom of the product bag.

OIL AND WATER DO NOT MIX! Water reacts with oil and makes it break down rapidly resulting in darkening, smoking and foaming (a process called hydrolysis). Excess water in the oil can cause the following problems:

- Unnecessary temperature drop meaning longer cooking times.
- More energy usage to maintain cooking temperature.
- Excessive splattering inside the fryer resulting in a mess to clean up.
- Decreased life of the air filter and the oil.

Refreezing Frozen Foods?

Frozen foods should be fried frozen. Foods that are refrozen can absorb more oil and make your fried foods taste greasy. Refrozen food forms excessive ice and these ice crystals can bond food pieces together causing clumping. Remember:

- Always FRY FOOD FROZEN.
- NEVER REFREEZE thawed food.
- REMOVE ice crystals from product before frying.
- DO NOT accept thawed or refrozen product from supplier.

Excessive Foaming?

The main reason for foaming is improper rinsing of oil vat after cleaning:

- To remove soap residue, rinse 3 times with water after cleaning or neutralize with a water and vinegar solution (1 part white vinegar to 2 parts water).
- Take care of your oil; use standby mode during slow periods. High temperature and oxygen contribute to oil breakdown. Filter oil and clean vat at least once a day when using heavily breaded products.

Excessive Smoking/Oil Darkening?

- Oil is too hot, check temperature.
- Inadequate filtering, breading or batter build-up in vat causes oil breakdown, giving food a bitter taste.
- Moisture content is too high. Use precooked frozen products only. Remember to remove ice crystals.

Grease Soaked Food?

- Frozen food is being allowed to thaw before frying.
- Oil is in the advanced stages of breakdown, replace immediately.
- Oil temperature is too low, check temperature.
- Product has too much breading or batter, remove excess.

OIL FACTS (Continued)

Food Not Browning Properly?

- New oil may not brown the product; check color again after a few basket loads.
- Too much product is in the basket; fill no higher than the fill line.
- Product is not frying long enough, follow manufacturers suggested cooking times.
- Oil temperature is too low, check oil temperature.
- Product is frying in excess foam.
- Oil level is too low, check the oil level.

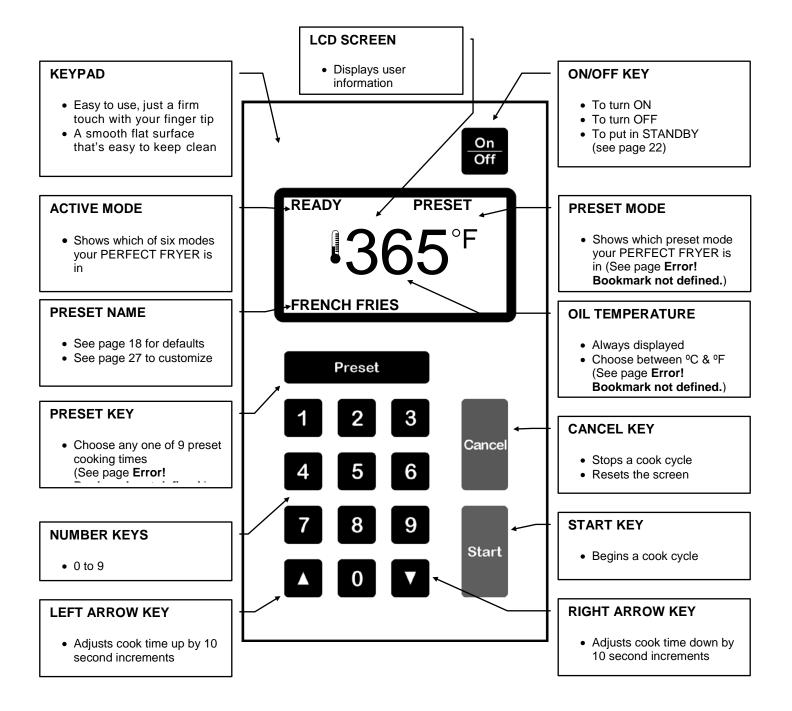
Premature Oil Breakdown?

- Oil is at full temperature during slow periods, use standby mode.
- Oil is contaminated. Never use wire brushes, copper pads or steel wool for cleaning. Use a hard bristle brush and filter oil regularly. Rinse with water vinegar solution.
- Also, see section; HOW HOT IS TOO HOT?

Statements used in OIL FACTS section are taken from:

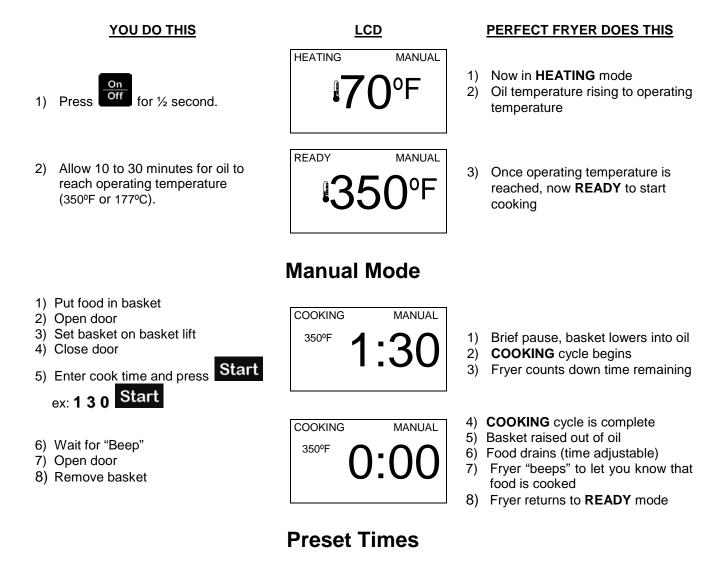
- NAFEM Food Service Industry
- Canola Research Foundation
- Sysco Oil Publication

OPERATING INSTRUCTIONS



OPERATING INSTRUCTIONS (Continued)

Starting Up



	Cooking Times & Names (factory defaults)							
Preset Name Time Preset Name Time Preset Name Time					Time			
1	FRENCH FRIES	3:00	4	POPPERS	3:00	7	FISH FILLETS	4:00
2	CHICKEN TENDERS	4:00	5	CHEESE BITES	2:00	8	CHICKEN WINGS	4:00
3	ONION RINGS	2:30	6	CORN DOGS	3:00	9	POTATO WEDGES	3:30

NOTE: Pressing **Preset** repetitively will toggle between MANUAL mode, PRESET mode and PRESET LOCKED mode.

NOTE: The default presets are programmed and displayed to show you the PERFECT FRYER's capabilities. We recommend that you change the presets to match your own requirements. Please refer to pages 27 and 28.

OPERATING INSTRUCTIONS (Continued)

Preset Mode



- 1) Put food in basket
- 2) Open door
- 3) Set basket on basket lift
- 4) Close door
- Preset 5) Press
- 6) Press **1** (for example) Cook cycle starts automatically

Note: You can choose between 9 different presets

- 7) Wait for "Beep"
- 8) Open door
- 9) Remove basket
- 10) Follow steps 1 through 6 to cook another order this way







PERFECT FRYER DOES THIS

- Now in **PRESET** mode 1)
- 2) LCD displays **PRESET**
- LCD displays FRENCH FRIES 3) (default setting is 3:00)
- Brief pause, basket lowers into oil 4)
- **COOKING** cycle begins 5)
- Fryer counts down time remaining 6)
- 7) COOKING cycle is complete
- 8) Basket raised out of oil
- 9) Food drains
- 10) Fryer "beeps" to let you know that food is cooked
- 11) Fryer returns to **READY** mode
- 12) Fryer returns to MANUAL mode

Preset Locked Mode

READY



- - PRESET

PRESET

- 1) Now in **PRESET LOCK** mode
- 2) **PRESET** is displayed on LCD

- 2) Put food in basket
- 3) Open door
- 4) Set basket on basket lift
- 5) Close door
- 6) Press 2 (for example) Cook cycle starts automatically
- Wait for "Beep"
- 8) Open door
- 9) Remove basket
- 10) Follow steps 2 through 6 to cook another order this way

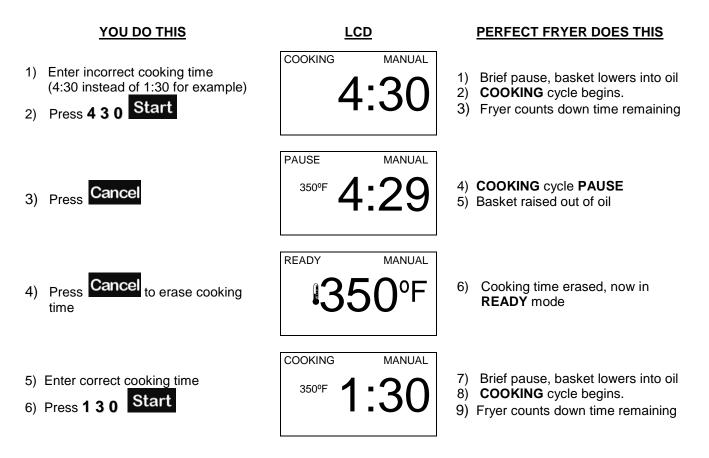




- 3) LCD displays 4:00 (for example)
- 4) Brief pause, basket lowers into oil
- COOKING cycle begins. 5)
- 6) Fryer counts down time remaining
- 7) COOKING cycle is complete
- 8) Basket raised out of oil
- 9) Food drains
- 10) Fryer "beeps" to let you know that food is cooked
 - Note: Still in PRESET LOCK mode

OPERATING INSTRUCTIONS (Continued)

Cooking Time Correction



Open Door – Paused Cooking

(Safety and Health regulations require doors and panels to be closed during cooking)

1) Open door during cook cycle

PAUSE	MANUAL
350°F	:24
*** DOOR OPEN ***	

- 1) COOKING cycle PAUSE
- 2) Basket raised out of oil

4) COOKING cycle begins

- 2) Close door and press Start if you want the cooking cycle to continue
- 3) Close door and press Cancel if you do not want the cooking cycle to continue
- 350°F 1:24



6) Cooking time erased, now in **READY** mode

3) Brief pause, basket lowers into oil

5) Fryer counts down time remaining

OPERATING INSTRUCTIONS (Continued)

Standby Mode

SEE THIS LCD

DO THIS

GET THIS LCD



- 1) Press on and Cancel
- 2) Release both

Note: Temperature will decrease to 275°F (to set default standby temperature, see page 20 for more information)

together



Note: During slow periods, using standby mode reduces energy costs, allows a quick recovery and minimizes oil breakdown.

Shutting Down

YOU DO THIS

TURN YOUR PERFECT FRY OFF:

- At end of day
- To replace deep fry oil
- To clean
- For other service or maintenance



COOLDOWN

READY

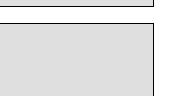
LCD

PERFECT FRYER DOES THIS

- 1) Now in **READY** mode
- 2) Now in COOLDOWN mode
- 3) No power to heater element
- 4) Fans continue to cool fryer
- 5) Fryer counts down temperature
- 6) LCD backlighting goes off
- 7) Temperature decreases to 122 °F (50°C)
- 8) Fans stop
- 9) LCD goes blank
- 10) Your PERFECT FRYER is off

1) Press	Off

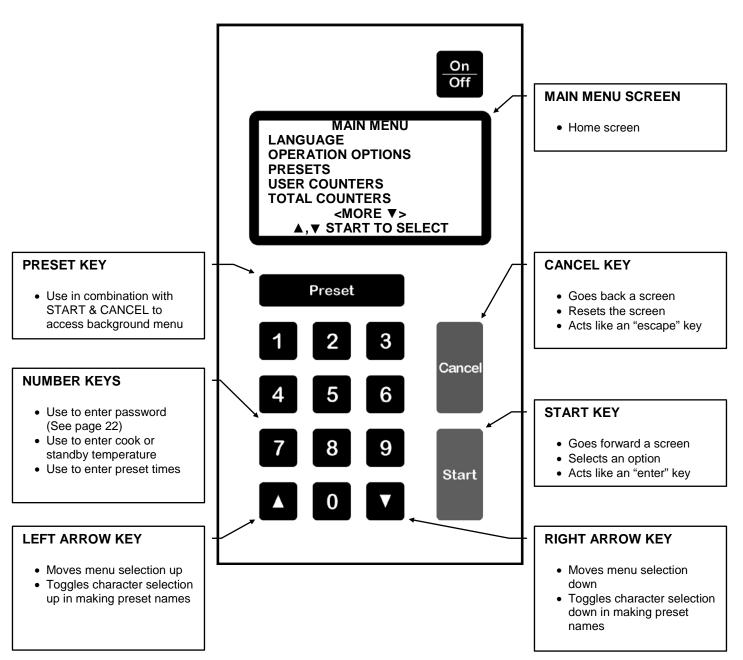
DO NOT UNPLUG FRYER Fans must remain ON during COOLDOWN mode



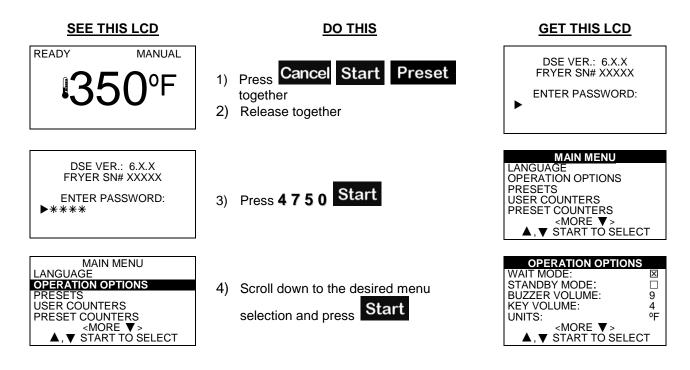
USER DEFINED OPTIONS

CUSTOMIZE YOUR PERFECT FRYER WITH YOUR OWN SETTINGS

- CTS[™] Cook Time Sensitivity
- Temperature read-out: °C or °F
- Preset Cooking Times
- Cooking Oil Standby Temperature
- Count of Cook Cycles
- Cooking Oil Temperature
- Basket Drain Time
- Sound Volume
- And Much More



USER DEFINED OPTIONS (Continued)



CTS[™] (Cook Time Sensitivity)

- CTS[™] adjusts cooking time to compensate for the drop in cooking oil temperature when a basket of product is placed into the fryer. CTS[™] increases cooking time to accommodate for differences in product moisture content, basket-load size, and initial temperature.
- A proper CTS[™] setting will ensure a high quality product. For example; 2 lbs of French fries will cook to the same quality as only 6 ounces of French Fries.
- In addition to having a "global" CTS[™] setting under the Operation Options menu for manually entered cook cycles, each preset can be programmed with its own individual setting. This provides for a lot of flexibility among different food products.
- Some experimenting with the range of 1 to 9 may be required to achieve optimum quality. A value of 5 is a good place to start and is the default.
- A setting of 0 means no CTS[™] whatsoever.

Background Menu - Map

LANGUAGE

- ENGLISH (factory default)
- ESPANOL
- FRANCAIS



USER DEFINED OPTIONS (Continued)

OPERATION OPTION	IS	
WAIT MODE:	Х	
STANDBY MODE:		
UNITS:	٥F	
LCD CONTRAST	5	
SENSITIVITY:	5	
<more ▼=""></more>	-	
▲, ▼ START TO SELECT		
	СТ	

FRENCH FRIES	
	3:00
SENSITIVITY: NAMF:	3
FRENCH FRIES	
▲,▼ START TO SEL	ECT

OPERATION OPTIONS

> WAIT MODE

- When ⊠, will not allow cooking until oil has reached operating temperature
- Default is

> STANDBY MODE

- When ⊠, gives user ability to put fryer into standby
- mode
- This is an energy saving feature which holds oil temperature at desired standby temperature
- Default is ⊠

> BUZZER VOLUME

- Intensity of "beep" for finish of cook cycle and system errors
- Choose between 0 and 9
- Default is 9

> KEY VOLUME

- Intensity of "beep" when a key is pressed
- Choose between 0 and 9
- Default is 4

> UNITS

- Temperature of oil in the vat
- Choose between °C (Celsius) and °F (Fahrenheit)

> DRAIN TIME

- Time a basket of cooked food sits out of the oil before you hear the "beep"
- Choose between 0 and 30 seconds
- Default is 15 seconds

> COOK TEMPERATURE

- Operating temperature of the oil
- Choose between 275°F (135°C) and 375°F (190°C)

Note: Between 350°F and 360°F (177°C and 182°C) is ideal. If the temperature is set too low, the food will absorb too much oil and taste greasy. If the temperature is set too high, the food will cook too quickly on the outside and will be too dark once the inside is cooked. It may also cause the oil to breakdown quicker and cause smoking.

Default is 350°F (177°C)

> STANDBY TEMPERATURE

- Oil temperature when fryer is in standby mode
- Choose between low (ambient room temperature) and high (cook temperature)
- Default is 275°F (135°C)

LCD CONTRAST

- Visibility of screen
- Choose between 0 and 9

> CTS[™] COOK TIME SENSITIVITY

 Adjusts cooking time to compensate for drop in cooking oil temperature when basket of product is placed into fryer. Refer to page 22 for more information.

OPERATION OPTIONS			
DRAIN TIME:	15S		
COOK TEMP:	350°F		
STANDBY TEMP:	302°F		
LCD CONTRAST:	5		
CTS:	5		
<more▼></more▼>			
▲, ▼ START TO SELECT			

OPERATION OPTIONS	
WAIT MODE:	
STANDBY MODE:	X
BUZZER VOLUME:	9
KEY VOLUME:	4
UNITS:	٥Ē
<more▼></more▼>	-
▲, ▼ START TO SELECT	

USER DEFINED OPTIONS (Continued)

PRESETS

- > 1: FRENCH FRIES
- > 2: CHICKEN TENDERS
- > 3: ONION RINGS
- ➢ 4: POPPERS
- ➢ 5: CHEESE BITES
- ➢ 6: CORN DOGS
- ➢ 7: FISH FILLETS
- ➢ 8: CHICKEN WINGS
- ➢ 9: POTATO WEDGES

Preset properties that can be changed (refer to page 27)

- ≻ TIME
 - Cook Cycle Time
- ➤ TEMP
 - Cook Cycle Temperature
- > NAME
 - Preset Name
- > CTS
 - Cook Time Sensitivity (refer to page 22)
- ≻ FTS
 - N/A (for PFA models only)
- > DUAL LOAD TIME
 - N/A (for PFA models only)

	00 00
2: CHICKEN TENDERS 4:	
3: ONION RINGS 2:	30
4: POPPERS 3:	00
5: CHEESE BITES 2:	00
<more ▼=""></more>	
▲, ▼ START TO SELECT	
DDEOETO	

PRESEIS		
6: CORN DOGS 7: FISH FILLETS	3:00	
7: FISH FILLETS	4:00	
8: CHICKEN WINGS	4:00	
8: CHICKEN WINGS 9: POTATO WEDGES	3:30	
<more ▲=""> ▲,▼ START TO SELECT</more>		

FRENCH FRIES		
TIME: TEMP: NAME: FRENCH FRIES	3:00 350⁰F	
<more ▲,▼ START TO</more 		

FRENCH FRIES		
CTS: FTS: DUAL LOAD TIME:	5 3 0:00	
<more ▲=""> ▲,▼ START TO SELE</more>	CT	

USER DEFINED OPTIONS (Continued)

USER COUNTERS

- > COOK TIME
 - Accumulated cook cycle time in hours
- > NUMBER OF CYCLES
 - Accumulated number of cook cycles
- > ON TIME
 - Accumulated on time in hours
- ➢ RESET ALL
 - To reset all values to 0

PRESET COUNTERS

- NUMBER OF CYCLES
 - Accumulated number of cook cycles

➢ RESET ALL

To reset all values to 0

USER COUNTERS			
COOK TIME:	0HR		
NO. CYCLES:	0		
ON TIME:	0HR		
RESET ALL			

▲, ▼ START TO SELECT



PRESET COUNTERS		
6: CORN DOGS	32	
7: FISH FILLETS	56	
8: CHICKEN WINGS	223	
9: POTATO WEDGES	61	
RESET ALL		
<more ▲=""></more>		
▲, ▼ START TO SELECT		

TOTAL COUNTERS

- > COOK TIME
 - Accumulated cook cycle times in hours, cannot be reset
- > NUMBER OF CYCLES
 - Accumulated number of cook cycles, cannot be reset
- > ON TIME
 - Accumulated on time in hours, cannot be reset

TOTAL COUNTERS COOK TIME: NO. CYCLES: ON TIME:	0HR 0 0HR
▲, ▼ START TO SELEC	т

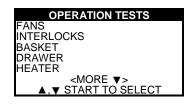
USER DEFINED OPTIONS (Continued)

OPERATION TESTS (for service personnel)

- ➢ FANS
 - Use the arrow keys to turn fans on and off (note: oil temperature must be below 122°F (50°C))
 - Monitor rpm and current values of each fan
- > INTERLOCKS
 - To view interlocks and if they're open or closed
 - \Box = Open, \boxtimes = Closed
- BASKET
 - Use the arrow keys to move arm up and down
- > DRAWER
 - N/A (for PFA models only)
- ➢ HEATER
 - For factory heater calibration. **Do not adjust**.
- > DISPLAY
 - Use START and CANCEL to turn all the pixels of the LCD on and off
- CIRCUIT BOARD
 - Monitor the circuit board temperature

SET DEFAULTS

- Press start to reset options and presets to factory defaults
- PRESETS and UNITS will not change



OPERATION TESTS		
DISPLAY CIRCUIT BOARD		
CIRCOTI BOARD		
<more ▲=""> ▲,▼ START TO SELECT</more>		

SET DEFAULTS

PRESS START TO RESET OPTIONS AND PRESETS TO FACTORY DEFAULTS

Option Changes (Example °F to °C)

DO THIS

kev

SEE THIS LCD OPERATION OPTIONS

<MORE V>

▲.▼ START TO SELECT

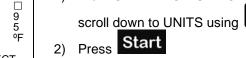
WAIT MODE:

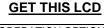
KEY VOLUME:

UNITS:

STANDBY MODE: BUZZER VOLUME:









Note: All OPERATION OPTIONS menu items can be customized by following this basic procedure (some use the arrow keys).

USER DEFINED OPTIONS (Continued) Customizing Presets

SEE THIS LCD

<MORE ▼ > ▲,▼ START TO SELECT

PRESETS

<MORE ♥ >
.,♥ START TO SELECT

FRENCH FRIES

<MORE ♥ > ▲,♥ START TO SELECT

FRENCH FRIES

<MORE ♥> ,♥ START TO SELECT

FRENCH FRIES

<MORE V>

▲, ▼ START TO SELECT

FRENCH FRIES

<MORE V>

▲, ▼ START TO SELECT

QUICK FRIES

<MORE ♥> ▲,♥ START TO SELECT

3:<u>00</u>

4:00

2:30

3:00

2:00

3:00

350°F

0:55

350°

0:55

350°F

0:55

350°F

0:55

350°F

LANGUAGE

OPERATION OPTIONS PRESETS USER COUNTERS

PRESET COUNTERS

1:FRENCH FRIES 2:CHICKEN TENDERS

3:ONION RINGS

5:CHEESE BITES

FRENCH FRIES

FRENCH FRIES

NAME: FRENCH FRIES

FRENCH FRIES

QUICK FRIES

4:POPPERS

TIME:

TEMP:

NAME

TIME:

TEMP

NAME:

TIME:

TEMP:

TIME:

TEMP

NAME:

TIME:

TEMP:

NAME:

<u>DO THIS</u>

- From main menu, scroll down to PRESETS using key
 Press Start
- 3) Change PRESET 1's settings by scrolling down using the key
 4) Press Start
- 5) Change PRESET 1's cook time by scrolling down using the key
 6) Press Start
- 7) Set new COOK TIME (e.g.: 55 seconds)
- 8) Press 5 5 Start
- 9) Change PRESET 1's name by scrolling

down with the key

- 10) Press Start (A small cursor appears under first letter of the name PRESET 1.)
- 11) To change character above small cursor,

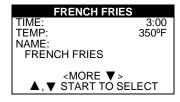
use the and keys

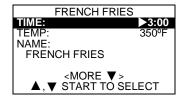
- 12) Press Start to move forward
- 13) Press Cancel to move back
- 14) To enter your selection, press Start after underscore mark (_) appears
- "QUICK FRIES" will now appear on bottom left of LCD during PRESET modes

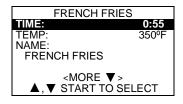
Note: maximum 20 characters

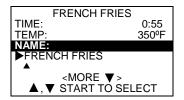
GET THIS LCD

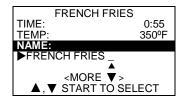
PRESETS	
1:FRENCH FRIES	3:00
1:FRENCH FRIES 2:CHICKEN TENDERS	4:00
3:ONION RINGS	2:30
4:POPPERS	3:00
5:CHEESE BITES	2:00
<more ▼=""></more>	
▲, ▼ START TO SELECT	









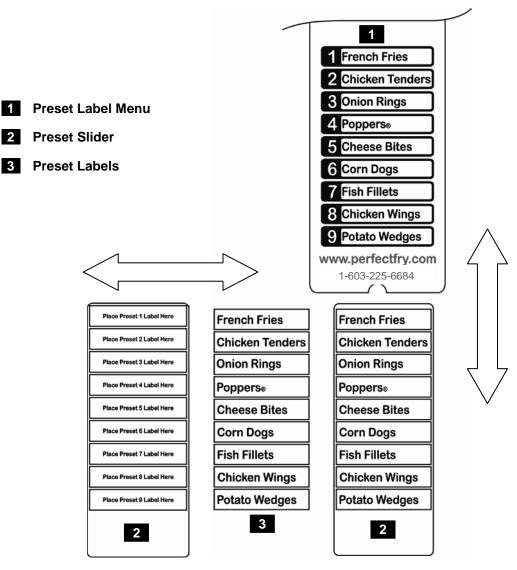




USER DEFINED OPTIONS (Continued) Customizing Presets on the Front Label

Used in conjunction with your custom programmed presets (please refer to page 27), easily identify your own custom presets by using the supplied label page. Simply follow the steps below:

- 1) Remove preset slider (default presets are located on front and custom preset label template is located on back).
- 2) Choose preprinted labels or create your own label from supplied label sheet.
- 3) Apply labels to preset slider in proper preset box (up to 9 labels corresponding to 9 programmed presets may be used on preset slider).
- 4) Install preset slider under preset menu label by starting from bottom (moving fryer to edge of counter may make this easier).





- Your PERFECT FRYER "beeps" twice to signal an error condition. When the error condition is corrected, two beeps signal OK.
- It is possible to have more than one SYSTEM ERROR displayed at the same time. When that happens, all error conditions will be displayed on the LCD. All must be corrected.
- When a SYSTEM ERROR condition exists, the PERFECT FRY de-energizes the heating element, but the fans continue to run.
- When there appears to be a problem, but no SYSTEM ERROR message is displayed, refer to the trouble-shooting table on page 34. If the solution suggested doesn't solve the problem, call your service rep. or PERFECT FRY at 1-603-225-6684.

System Error Conditions

SEE THIS LCD	CAUSED BY DO THIS	GET TH	IIS LCD
*** SYSTEM ERROR *** PLEASE CHECK FRONT PANEL	 Hinged front panel is not installed or shut properly Check to see that front panel is closed securely with two black latches 		MANUAL 4°F
*** SYSTEM ERROR *** PLEASE CHECK FILTER PLACEMENT	 Air filter cartridge is not installed properly Check to make sure cartridge is properly installed (û û up) in air filter cage, and cage is securely latched in place 		MANUAL 4°F
*** SYSTEM ERROR *** PLEASE CHECK GREASE FILTER	 Grease filter is not installed properly Check to see that it sits in grease tray (magnet on right hand end of grease filter), and that filter and tray are properly installed in filter chamber 		MANUAL 4°F
*** SYSTEM ERROR *** PLEASE CHECK HEATER BOX	 Heating Element is not installed properly Check to see that heater module has been properly placed on oil vat Check to see the electrical connection between heater module and connector is made at inside back of fryer compartment Clean the male and female terminals on connector with rubbing alcohol and cotton swab. 	HEATING 8	MANUAL 4°F
*** SYSTEM ERROR *** PLEASE CHECK AIRFLOW/AIR FILTER	 There is improper air flow Make sure air intake (front) and exhaust (rear) vents are not obstructed Clean grease filter thoroughly Replace the air filter cartridge 		MANUAL 4°F
*** SYSTEM ERROR *** PLEASE CHECK FIRE EXTINGUISHER	 Loss of pressure in the Fire Extinguisher, system needs to be recharged Call PERFECT FRY at 1-603-225-6684 for recommended fire Service Company near you. 	HEATING 8	MANUAL 4°F
*** SYSTEM ERROR *** PLEASE CHECK PRIMARY OVERTEMP.	 Heating Element is not installed properly Check to see that heater module has been properly placed on oil vat Check to see the electrical connection between heater module and connector is made at inside back of fryer compartment Clean the male and female terminals on connector with rubbing alcohol and cotton swab. 	HEATING B	MANUAL 4°F

HELP (Continued)

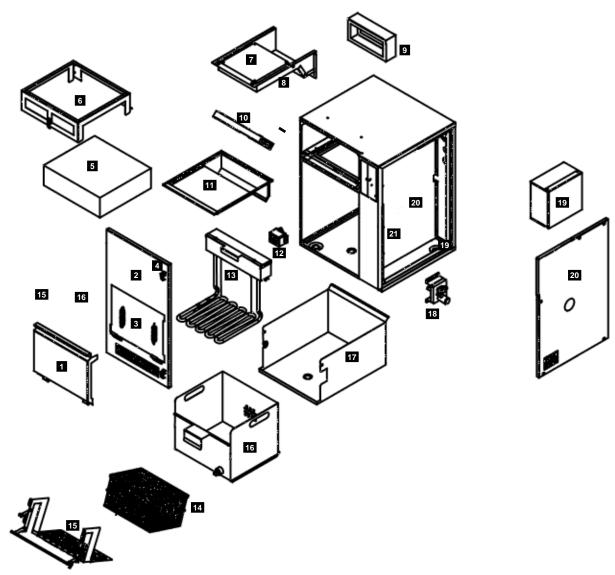
SEE THIS LCD	CAUSED BY DO THIS	GET THIS LCD
*** SYSTEM ERROR *** PLEASE CHECK SECONDARY OVERTEMP.	 Cooking oil level is too low. Make sure oil level is between the hot and cold lines at rear of vat. Cooking oil has overheated. Press and keys together and release to reset Is it possible the heater module was submerged in water? If so, call 1-603-225-6684 	HEATING MANUAL
*** SYSTEM ERROR *** PLEASE CHECK MAIN FAN	 Main ventilation fan is not functioning properly Check main ventilation fan to see if it is moving air and the fan blades are moving Remove obstruction and/or check electrical connection 	HEATING MANUAL
*** SYSTEM ERROR *** PLEASE CHECK CONTROL FAN	 Control fan is not functioning properly Check control fan to see if it is moving air and the fan blades are moving Remove obstruction and/or check electrical connection 	HEATING MANUAL
*** SYSTEM ERROR *** PLEASE CHECK EBOX FAN.	 Electronics box fan is not functioning properly Check main ventilation fan to see if it is moving air and the fan blades are moving Remove obstruction and/or check electrical connection 	HEATING MANUAL
*** SYSTEM ERROR *** PLEASE CHECK DRAWER MOTOR	Drawer motor has been obstructed	HEATING MANUAL
*** SYSTEM ERROR *** PLEASE CHECK BASKET MOTOR	Basket motor has been obstructed	HEATING MANUAL

HELP (Continued)

Trouble-shooting Table

"PROBLEM"	PROBABLE CAUSE	PROBABLE SOLUTION
Won't turn ON when you press the Off key	 Not plugged in Circuit breaker or fuse Wiring 	 Plug in fryer Check circuit breaker or replace fuse Make sure PERFECT FRYER is plugged in according to its electrical specifications (see page 4)
ON but will not heat	 Connector on heater module Electronics box module 	 Replace heater module Replace electronics box module
Baskets will not lower into or rise out of cooking oil.	 Basket lift not working Motor not working 	 Make sure that the basket lift is installed properly (see page 8) Check wiring Replace Motor
Outer surface is unusually hot	 Dirty grease filter Air filter cartridge plugged Fans not operating 	 Remove and clean grease filter Replace air filter cartridge Check rear of fryer for air flow
Cooking oil spills into spill tray, excessively	 Too much oil in vat Too much ice or water in food Too much food in basket Oil has reached end of its life 	 Remove some oil (when oil is cold it should not be above cold oil line inside vat) Cook only frozen foods recommended for use in deep fryers; remove excess ice from food before placing food in basket Do not fill food above top of basket Change oil
Food floats out of basket	1) Too much cooking oil in vat.	1) Remove some oil; do not fill above cold oil line.
Excessive smoking	 Oil has "broken down" Moisture 	 Replace the cooking oil Too much moisture or ice crystals
Excessive foaming	 Soap residue Oil has "broken down" 	 Rinse parts with vinegar solution Replace the cooking oil

BLOW-APART DIAGRAM & PARTS LIST



Item	Description	Part #
1	Front Door	4ST888
2	Front Panel	4ST889
3	Kit Door Spring (2/kit)	2DT957
4	Kit Front Panel Latch (2/kit)	2DT962
5	Replacement Filter	2FV803
6	Filter Cage	6ST730
7	Airflow Module	2HT723
8	Kit Main Fan	2DT951
9	Fire Damper	6HT588
10	Grease Filter Assembly	3HT727
11	Grease Filter Tray	6ST728
12	Female Connector Assembly	3CT765
13	Heater Module 5700W	8ET900
NS	Heater Module 1500W	2ET747
NS	Heater Module 3000W	2ET762
14	8L Oil Vat	6ST737

Item	Description	Part #
NS	Small Baskets	6HU036
NS	Large Basket	6HV053
14	Extra Large Basket	6HT905
15	Basket Lift Assembly	3HT740
16	8L Oil Vat	6ST737
17	Oil Spill Tray	6ST734
18	Motor Module	2HT689
19	Electronics Box Module	2WT679
20	Control Access Panel Assembly	3HT731
NS	Kit Control Fan	2DT952
NS	Kit Front Panel Hinges (2/kit)	2DT961
NS	Kit Air Filter Switch	2DT955
NS	Kit Gasket - Front Perimeter	2DT959
NS	Kit Feet Rubber (sheet)	2DT969
NS	Kit Oil Drainage	2DT931

NS = Not Shown

For warranty information, see page 34

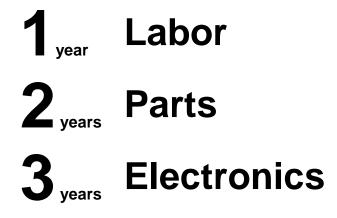
DECLARATION OF CONFORMITY (FOR CE PERFECT FRYERS ONLY)

Application of Council Directive(s):	Low Voltage Directive (93/68/EEC & 72/23/EEC) EMC Directive (2004/108/EC & 89/336/EEC) WEEE Directive (2002/96/EC) RoHS Directive (2002/95/EC)
Standard(s) to which Conformity is Decla	ared: <u>EN 60335-1, EN 60335-2-37</u> <u>EN 61000-6-1, EN 61000-6-3</u>
Manufacturer's Name:	Perfect Fry Company
Manufacturer's Address:	<u>P.O. Box 501</u> <u>Concord, NH USA</u> <u>03302-0501</u>
Importer's Name:	
Importer's Address:	
Type of Equipment:	Commercial Electric Deep Fat Fryer
Model Number:	
Serial Number:	
Year of Manufacture:	
	e that the equipment specified above conforms Directive(s) and Standard(s)
Place: Perfect Fry Company LLC.	

Concord, NH, USA	
Date://	(Signature)
	(Full Name)

(Position)

THE PERFECT FRY <u>1 2 3</u> WARRANTY



During the first year after purchase, all labor required in repairing or replacing a defective part will be provided free of charge.

During the first 2 years after purchase, all parts of the fryer which prove to be defective in materials or workmanship will be replaced free of charge (parts only).

During the first 3 years after purchase, if the electronics module proves to be defective in materials or workmanship, it will be replaced free of charge (parts only).

TERMS OF WARRANTY

- Perfect Fry Company LLC. warrants this fryer to be free from defects in materials and workmanship and will repair or replace it at Perfect Fry Company LLC.'s option for a period of two years after purchase providing the purchaser follows the manufacturer's recommended procedures for operation and maintenance contained in this manual. Perfect Fry Company LLC. shall not be liable for injury or damage to property other than this fryer.
- 2) The warranty applies to materials at the factory for two years (3 years electronics) and labor for one year from date of purchase. The warranty does not include materials and labor employed in cleaning the fryer. Any and all transportation and shipping charges and expenses are the responsibility of the Purchaser. The warranty card must be completed and registered with Perfect Fry Company LLC. within 30 days of purchase to validate the warranty. The warranty will cease to exist if maintenance has not been performed according to the manufacturer's instructions. This warranty does not cover damage arising from or caused by improper maintenance, directly or indirectly, transportation, accident, misuse, improper installation, fire, flood, or acts of God. Parts repaired or replaced under this warranty are warranted throughout the remainder of the original warranty period only. The warranty does not apply to parts and service supplied or obtained from other than Perfect Fry or its authorized distributors.
- 3) Other than the warranty expressed in clause 1) hereof, Perfect Fry Company LLC. expressly disclaims all conditions and warranties, express or implied, including, without limitation, the implied warranties of merchantability and fitness for a particular purpose. Perfect Fry shall not be responsible for, nor does this warranty extend to, any consequential or incidental damages or expenses of any kind or nature, regardless of the cause thereof or any knowledge which Perfect Fry may have regarding the probability of the occurrence of such damages or expenses including, without limitation, injury to persons or property, loss of life, loss of use of the products, lost goodwill, loss of income, lost resale profits, work stoppage, impairment of other goods, breach of contract, negligence or such other actions as may be deemed or alleged to be the cause of a loss or damage.



Perfect Fry Company LLC. Mailing Address: P.O. Box 501, Concord, NH 03302-0501 Shipping Address: 10 Ferry St., Concord, NH 03301

> Tel: 603-225-6684 Fax: 603-225-8472 General Information: profits@perfectfry.com Customer Support: service@perfectfry.com Internet: www.perfectfry.com

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