

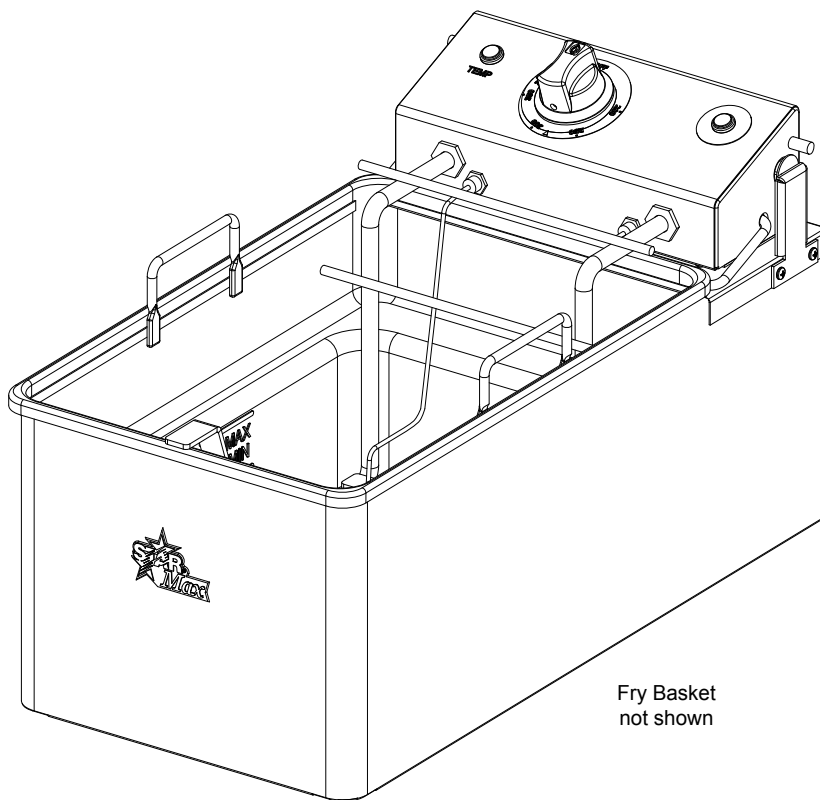
STAR HOLDINGS INTERNATIONAL INC.
10 Sunnen Dr., St. Louis, MO 63143
telephone: 314-678-6303



OWNERS MANUAL

**COUNTERTOP
ELECTRIC FRYER**

MODELS
514LL



Fry Basket
not shown

Includes
INSTALLATION
USE & CARE
EXPLODED VIEW
PARTS LIST
WIRING DIAGRAM

IMPORTANT: DO NOT DISCARD THIS MANUAL

This manual is considered to be part of the appliance and is to be given to the OWNER or MANAGER of the restaurant, or to the person responsible for TRAINING OPERATORS of this appliance. Additional manuals are available from your DEALER.

THIS MANUAL MUST BE READ AND UNDERSTOOD BY ALL PERSONS USING OR INSTALLING THIS APPLIANCE. Contact your dealer if you have any questions concerning installation, operation or maintenance of this equipment.

MAINTENANCE & REPAIR

SAFETY SYMBOL



These symbols are intended to alert the user to the presence of important operating and maintenance instructions in the manual accompanying the appliance.

RETAIN THIS MANUAL FOR FUTURE REFERENCE NOTICE

Using any part other than genuine Star factory supplied parts relieves the manufacturer of all liability.

Star Holdings reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

Due to periodic changes in designs, methods, procedures, policies and regulations, the specifications contained in this sheet are subject to change without notice. While Star International Holdings Inc., exercises good faith efforts to provide information that is accurate, we are not responsible for errors or omissions in information provided or conclusions reached as a result of using the specifications. By using the information provided, the user assumes all risks in connection with such use.

MAINTENANCE AND REPAIRS

Contact your local authorized service agent for service or required maintenance.

Please record the model number, serial number, voltage and purchase date in the area below and have it ready when you call to ensure a faster service.

Model No. _____

Serial No. _____

Voltage _____

Purchase Date _____

Authorized Service Agent Listing

Reference the listing provided with the unit

OR

for an updated listing go to:

Star Website: www.star-mfg.com
Wells Website: www.wellsbloomfield.com
E-mail: customerservice@star-mfg.com

Service Help Desk

Business Hours: 8:00 am to 4:30 p.m. Central Standard Time

Telephone: (314) 678-6303

Fax: (314) 781-2714

E-mail: customerservice@star-mfg.com

Website: www.star-mfg.com

Mailing Address: Star International Holdings Inc.,
10 Sunnen Drive
St. Louis, MO 63143
U.S.A

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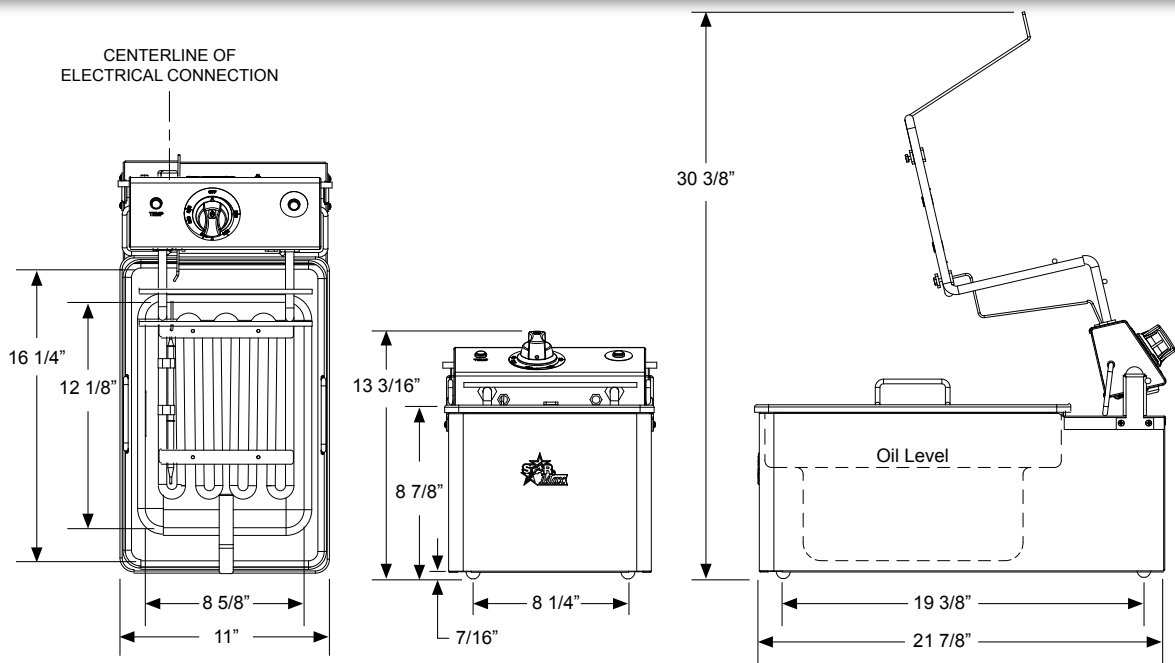
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INTRODUCTION

Proper installation, professional operation and consistent maintenance of this appliance will ensure that it gives you the very best performance and a long, economical service life.

This manual contains the information needed to properly install this appliance, and to use and care for the appliance in a manner which will ensure its optimum performance.

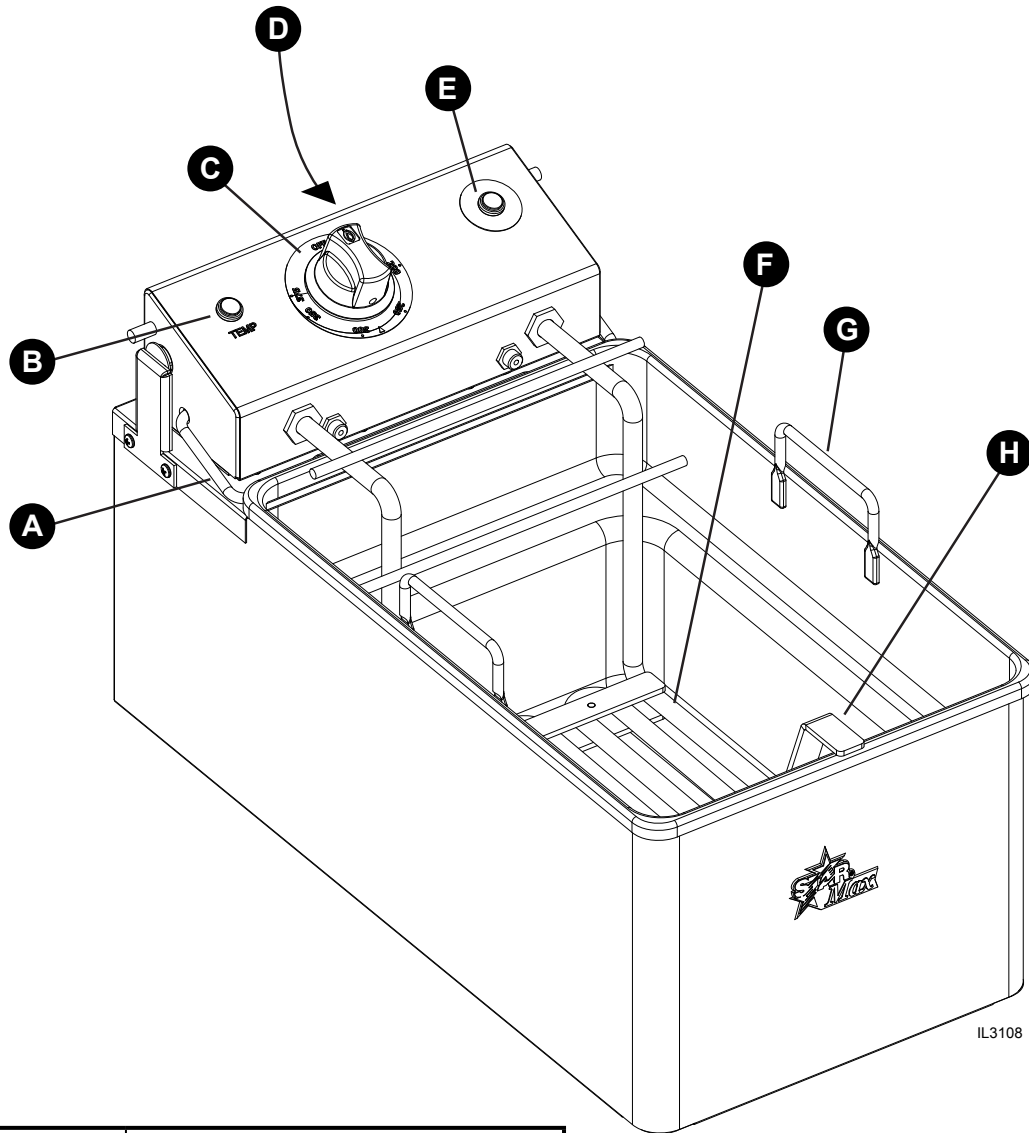
SPECIFICATIONS



IL3107

Model	Voltage	Kw	Amps	Power Supply Cord	Dimensions			Approximate Weight	
					Width	Depth	Height	Installed	Shipped
514LL	120V	1,800	15	NEMA 5-15P	11" (27.9cm)	21.875" (55.5cm)	13.1875" (33.5cm)	31lbs	34lbs

FEATURES & OPERATING CONTROLS



IL3108

A	Spring Loaded Support Rod
B	Heat Indicator
C	Temperature Knob
D	Safety Thermostat
E	Manual Reset Temperature Indicator
F	Element
G	Removable Frypot
H	Swing-up Element Handle
not shown	Half Size, Rear Hanging Fry Baskets

Fig. 1 Countertop Electric Fryer (shown with the fryer head in the down position)

PRECAUTIONS AND GENERAL INFORMATION



DANGER: BURN HAZARD

Contact with cooking grid surface will cause severe burns. Use the handle to lift the grid. Avoid contact with grid surfaces.



WARNING: ELECTRIC SHOCK HAZARD

All servicing requiring access to non-insulated components must be performed by qualified service personnel. **DO NOT** open any access panel that requires the use of tools. Failure to heed this warning may result in severe electric shock.

This equipment is designed and sold for commercial use only by personnel trained and experienced in its operation and is not sold for consumer use in and around the home nor for use directly by the general public in food service locations.

Before using your new equipment, read and understand all the instructions & labels associated with the unit prior to putting it into operation. Make sure all people associated with its use understand the units operation & safety before they use the unit.

All shipping containers should be checked for freight damage both visible and concealed. This unit has been tested and carefully packaged to insure delivery of your unit in perfect condition. If equipment is received in damaged condition, either apparent or concealed, a claim must be made with the delivering carrier.

Concealed damage or loss - if damage or loss is not apparent until after equipment is unpacked, a request for inspection of concealed damage must be made with carrier within 15 days. Be certain to retain all contents plus external and internal packaging materials for inspection. The carrier will make an inspection and will supply necessary claim forms.

Cleanliness of this appliance is essential to good sanitation. Read and follow all included cleaning instructions and schedules to ensure the safety of the food product.

Disconnect this appliance from electrical power before performing any maintenance or servicing.

DO NOT submerge this appliance in water. This appliance is not jet stream approved. **DO NOT** direct water jet or steam jet at this appliance, or at any control panel or wiring. **DO NOT** splash or pour water on, in or over any controls, control panel or wiring.

Exposed surfaces of this appliance can be hot to the touch and may cause burns.

The technical content of this manual, including any wiring diagrams, schematics, parts breakdown illustrations and/or adjustment procedures, is intended for use by qualified technical personnel. Any procedure which requires the use of tools must be performed by a qualified technician.

This manual is considered to be a permanent part of the appliance. This manual and all supplied instructions, diagrams, schematics, parts breakdown illustrations, notices and labels must remain with the appliance if it is sold or moved to another location.

This appliance is made in the USA. Unless otherwise noted, this appliance has American sizes on all hardware.



CAUTION: RISK OF DAMAGE

DO NOT connect or energize this appliance until all installation instructions are read and followed. Damage to the appliance will result if these instructions are not followed.



CAUTION: HOT SURFACE

Exposed surfaces can be hot to the touch and may cause burns.

INSTALLATION

NOTE: DO NOT discard the carton or other packing materials until you have inspected the appliance for hidden damage and tested it for proper operation. Refer to *SHIPPING DAMAGE CLAIM PROCEDURE* on the inside front cover of this manual.



CAUTION: RISK OF DAMAGE

DO NOT connect or energize this appliance until all installation instructions are read and followed. Damage to the appliance will result if these instructions are not followed.

WARNING:

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing the equipment.

IMPORTANT:

Damage due to being connected to the wrong voltage or phase is NOT covered by warranty.

UNPACKING & INSPECTION

Carefully remove the appliance from the carton. Remove all protective plastic film, packing materials and accessories from the appliance before connecting performing any installation procedure.

Carefully read all instructions in this manual and the Installation Instruction Sheet packed with the appliance before starting any installation.

Read and understand all labels and diagrams attached to the appliance.

Carefully account for all components and accessories before discarding packing materials. Store all accessories in a convenient place for later use.

ELECTRICAL INSTALLATION

This fryer is equipped for the voltage and wattage indicated on the nameplate mounted on the bottom of the unit, just left of the power switch. It is designed for use on alternating current (AC) only. It is intended for use by properly trained personnel only.

DO NOT CONNECT TO DIRECT CURRENT (DC)

The installation of the appliance should conform to the: NATIONAL ELECTRIC CODE AND ALL LOCAL ELECTRIC CODES AND ORDINANCES AND THE LOCAL ELECTRIC COMPANY RULES AND REGULATIONS

For your protection we recommend that a qualified electrician install this appliance. He should be familiar with electrical installations and all electrical codes. Proper connections and power supply are essential for efficient performance. The external wiring should be in conduit or an approved type of flexible cable suitable for operation at 194°F (90°C) and of a proper size to carry the load. The supply circuit should be properly fused and equipped with a means of disconnection, as required by local electrical code. **THE BODY OF THE APPLIANCE SHOULD BE GROUNDED - DO NOT GROUND TO A GAS SUPPLY LINE.** Four legs are provided and should be installed for ease of cleaning. **DO NOT INSTALL WITHOUT FEET PROVIDED.** Level unit by adjusting the (4) feet which have an adjustment of 1-3/8" (34.92 mm) for accurate leveling and perfect line-up with other units.

POWER SUPPLY

These models are wired at the factory for operation on a single phase power supply. For specific wiring, check the wiring diagram.

OPERATING INSTRUCTIONS

PLACE THE LAMINATED WARNING SIGN SUPPLIED WITH THE FRYER IN AN AREA VISIBLE TO THE FRYER OPERATOR.

CLEAN KETTLE BEFORE USING

Take out baskets, push and hold element catch, lift up on element lift handle until elements lock in a vertical position, and remove kettle. The kettle can be cleaned in a sink.

DO NOT use soap when cleaning the kettle, it will discolor the kettle.

ADDING FAT

Replace kettle and swing the element down, making fryer ready for use. Add fat. The kettle has a 15 lb. fat capacity. A fat level line on the rear of the kettle will guide you in determining the minimum cold fat level. A higher fat level can be used when frying bulky foods, such as chicken or fish cakes. The fat level should be chosen carefully so that the foaming action of the fat does not spill out of the kettle. If solid shortening is used, pack carefully around the elements.

CONTROLS

1. **ON/OFF TWO-POLE SWITCH** - Located on the front panel is a two-pole switch which turns power on or off. An indicator light (Power On) is located on the control housing.
2. **THERMOSTAT CONTROL** - Located on the Control Housing, this control allows you to select the desired frying temperature. A signal light "Heating" indicates when the element is on. When the light goes off, the desired temperature has been reached.
3. **HI-LIMIT THERMOSTAT** - Should fat temperatures reach 450° F (230° C), this control will shut off the power to the heating elements. The unit will still have power. The fat temperature must cool to 400° F (202.4° C) and the manual reset button located on the back panel of the control housing must be pressed to restore operation. Should the hi-limit control activate twice in succession, the primary thermostat should be checked for malfunction by a qualified service technician.



**CAUTION:
RISK OF
DAMAGE**

DO NOT connect or energize this appliance until all installation instructions are read and followed. Damage to the appliance will result if these instructions are not followed.



**CAUTION:
HOT SURFACE**

Exposed surfaces can be hot to the touch and may cause burns.



**CAUTION:
HOT SURFACE**

Exposed surfaces can be hot to the touch and may cause burns.

OPERATION continued



CAUTION: HOT SURFACE

DO NOT ATTEMPT TO REMOVE THE KETTLE FILLED WITH HOT OIL. CONTACTING HOT OIL CAN RESULT IN SEVERE INJURIES OR DEATH

FRYING

After fat has been added, turn the switch on and set the thermostat at 200°F (92.4° C). After the fat has melted, turn the thermostat to the desired setting. Included in this instruction booklet is a frying chart and some helpful hints on fat use. After the selected fat temperature has been reached, slowly lower half filled baskets into the fat. Do not overload baskets as this causes foods to be improperly fried.

NOTE: Baskets should be allowed to drain after frying cycle. The kettle handles serve as basket hangers.

IDLING

During idle periods turn thermostat control to approximately 200° F (92.4° C). The fast recovery fryers can be brought up to frying temperature in a matter of minutes. Lowering the temperature during idle periods saves energy costs and prolongs fat life.

DRAINING KETTLE

Turn switch to "OFF". Raise element to the first stop and allow to drain. Raise the element to the vertical position and siphon the oil out of the kettle. Once drained, the kettle can be washed out with warm water and wiped dry before returning it to the unit..

DO NOT use soap when cleaning the kettle, it will discolor the kettle.

If kettle needs further cleaning, contact your dealer for product specific to cleaning fryer kettles. Follow the directions provided with that specific cleaner.

DO NOT ATTEMPT TO REMOVE THE KETTLE FILLED WITH HOT OIL. CONTACTING HOT OIL CAN RESULT IN SEVERE INJURIES OR DEATH.

If you do not have a siphon, order one from your dealer or dip the oil out and strain into a container. After oil has been removed, remove the kettle and clean.



CAUTION

INAPPROPRIATE USE DUE TO A LACK OF COMMON SENSE MAY RESULT IN PRODUCT DAMAGE OR PERSONAL INJURY.

CLEANING THE EXTERIOR

The exterior surfaces can be cleaned by regularly wiping with a soft cloth. Any discoloration can be removed with a non-abrasive cleaner.

CAUTIONS FOR ALL DEEP FAT FRYERS

NEVER LEAVE AN OPERATING FRYER UNATTENDED

REMEMBER HOT OIL IS DANGEROUS – **RESPECT IT!**



WARNING – INSTALLATION

- Locate your fryer in a protected place so that it cannot be tipped over or knocked off its support. A mechanical restraint should be installed to prohibit the fryer from tipping or moving. Consult your local codes for allowable methods of restraint.
- Install an automatic fire extinguisher over the fryer and in the exhaust duct.
- Be sure your power supply is installed properly and in accordance with the local and national codes.
- Install a shut-off switch or gas valve close to the fryer. It must turn off the fryer immediately.
- Failure to add a mechanical restraint can result in oil splashing out and contacting the skin, leading to serious injury or death!



WARNING – HOT OIL

- Hot oil is dangerous – Severe burns can result when hot oil contacts the skin.
- Hot oil is flammable – Keep open flames away from hot oil and its vapors.
- Never allow water or ice to get in hot oil.
IT CAN EXPLODE!



WARNING - ENVIRONMENT

- Keep your floors clean and free of grease and all other substances so no one slips accidentally and contacts the hot fryer.
- Keep areas and filters clean above your fryers – Oil soiled lint or dust can ignite easily and flames will spread rapidly.



WARNING – MAINTENANCE

- Have your equipment checked regularly to insure its safe and properly functioning.
- If your fryer starts to smoke or boil abnormally, cut off the power supply immediately and determine the reason for the smoking or boiling before attempting to use it again.



WARNING – TRAINING

- Train all personnel to understand the hazards of hot oil. Instruct them on the proper action to take if something does not seem to be acting properly.
- Instruct your personnel on what to do if there is an oil fire. Do not use water on an oil fire! Use only fire extinguishers of the approved type and never direct such extinguishers so as to blow the oil out of the oil container.
- Inappropriate use due to a lack of common sense may result in product damage or personal injury.

CARE OF FAT

In three to six months you may spend as much for fat as you paid for your kettle. So fat is an item you want to know all about; how to select it; how to manage it. The more production you can get from each pound of fat, the more profitable your frying operation will be.

To get a high rate of production per pound of fat you have to avoid two things. One is early breakdown and spoilage of the compound so that you have to throw it away before it does enough work to "earn its keep." The other is excessive sponging up of fat by the food being fried.

The main cause of fat breakdown is excessive heat. On the other hand abnormal absorption is caused by frying too long at too low temperatures. One answer to both problems is exact control of heat — so that fat neither smokes up nor soaks up.

Of course, no fat "keeps" forever. Not only heat, but air and moisture, salt particles and crumbs of food work to break it down. But you can slow up fat deterioration by maintaining proper temperatures and by draining your kettle, filtering or straining the fat once or twice a day and by keeping the kettle itself absolutely clean.

A number of commercial devices and materials are available to aid in eliminating fat impurities. There are several excellent models of pressure filters as well as strainer-type filters, which, if used regularly, will prolong life of fat.

However, no purification device will renew broken down or rancid fat or put new life into it. Once you have allowed fat to break down it becomes unsuitable for frying — in fact browning is impossible.

In addition to filtration, you can prolong the usefulness of fat by sweetening it with fresh compound every day - replacing about 15% of the bulk you started with. If you do enough frying so that normal absorption of fat in food amounts to 15% to 20% of the capacity of your kettle every day - then you can call that your turn-over food. It means you can add the recommended 15% of fresh fat without discarding any of the old.

10 POINT PROGRAM TO PRESERVE FAT AND PRODUCE THE FINEST FRIED FOODS

1. Choose a fat that does not break down quickly. Hydrogenated shortening, corn, and peanut oils are less likely to break down under high temperatures.
2. Do not fry foods at temperatures above those recommended. The higher the fat temperature, the more rapid the rate of fat deterioration. Above 400°F fats quickly deteriorate.
3. During short intervals between frying, turn the heat down. Do not keep heat on for long periods between batches.
4. Keep fat clean. Strain or filter daily or at end of each shift. Add at least 15% fresh fat to your kettle daily.
5. At least once a day, cool a small amount of fat and taste it to see if it has picked up foreign flavors.
6. Discard fat that tends to bubble excessively before food is added.
7. Do not overload baskets-pieces should not touch when frying. Shake baskets to prevent food from sticking together. Fry similar sizes together.
8. Never salt foods directly over fat, salt in fat reduces its life.
9. Raw, wet foods, such as potatoes and oysters, should be drained or wiped dry before frying to extend the life of the frying fat. Have foods to be fried at room temperature.
10. Keep fat temperatures below smoking point to minimize frying odors.

HANDY FRYING CHART

FOOD	COATING	PROCEDURE	TEMP	MINUTES
POTATOES				
Standard French Fries		Cut in uniform pieces 1/2"	350°	5-7
Blanch Only		square the long way	350°	3-1/2
Brown Only			350°	3-1/2
Long Branch		Cut in uniform pieces 3/4" square the long way	350°	7-10
Julienne (shoe string)		Cut in uniform pieces 1/8" to 1/4" square the long way	350°	3-6
Chips		Soak in cold running water until water does not run milky	350°	2-3
CHICKEN				
Large Pieces	Batter or	Some prefer rolling in	325°	9-11
Small Pieces	Breading	seasoned flour, dipping in egg	340°	7-10
Pre-cooked		wash, and frying	350°	3-4
FISH				
Fillets (Large)	Breading	Select fillets of uniform	350°	4
Fillets (Small)	or Batter	size, skin out and dry.	350°	3
Oysters	Breading	Use Oyster liquor in batter	350°	5
	or Batter	or breading	350°	5
Clams	Batter		350°	1
Scallops	Breading		350°	4
Shrimp	Batter	Some prefer soaking 1/2 hour in cold seasoned milk	350°	3
Smelts	Breading	Cut spinal cord several	350°	4
MEATS				
Chicken Fried Steak	Breading	Sever all connecting membranes at one inch intervals to prevent curling	360°	3-4
Cutlets	Breading		350°	3-4
Chops	Breading		340°	3-4
Meat Balls	Breading or rolled in flour		340°	4-6
Brains	Breading		340°	3-5
VEGETABLES				
Asparagus	Batter or crumbs	Pre-cook in salted water	350°	3
Cauliflower	Batter or crumbs	Pre-cook and separate flowers	350°	3
Egg Plant	Crumb Breading	Peel, cut cross-wise into 1/4" slices	350°	3
Onions	Light batter	Slice thin, soak in milk for two hours	350°	3
FRITTERS				
Fruit (bananas, pineapples, apricots, berries)		Serve with fruit juice	350°	3-5
Corn	Batter	Serve with syrup or jelly	350°	3-5
Vegetable (peas, green beans)		Serve with tomato cheese sauce	350°	5-8
MISCELLANEOUS				
Croquettes	Breading		360°	3
Chinese Noodles			375°	1-2
French Toast			375°	1
DOUGHNUTS				
Cake			375°	1-1/2 - 2
Yeast, raised			375°	1