

Anetsberger Brothers, Inc. 180 North Anets Drive • Northbrook, Illinois 60062 • 847-272-0770 • Fax 847-272-1943 For **ANETS** Factory Warranty Service • **800-837-2638** 





Models 14G, 14GS 14GU, 14GSU, MX-14EG, MX-14EGU

> Installation, User Operation, & Maintenance Manual

14GS shown on standard 6" legs

## DANGER

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

### FOR YOUR SAFETY

DO NOT store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

### WARNING

After installation of this equipment, immediately contact your local gas supplier to obtain information about what action to take whenever any person smells gas. *Post this information in a prominent location.* 

Keep this Manual in a Convenient Location for Reference



**The Anets Golden Line** Quality Equipment For The Restaurant, Supermarket, and Bakery Industries



Form I-102 ; Rev. 10/01 Price: \$20.00 US



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Read these specifications, Code Requirements, Installation Requirements, Installation Instructions, and Operating Instructions <u>very carefully</u>. Failure to follow the Instructions could cause the fryer to malfunction. A fryer malfunction can result in property damage, serious bodily injury, or death.

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## SHIPPING CONTAINER INSPECTION

1. Carefully examine the shipping carton for external damage. When damage is noted, notify the delivery carrier immediately. **Save all packing materials for damage claim examination.** 

2. If no external damage is noted, remove the shipping carton from the fryer and examine the

fryer carefully for damage. Place the fryer in a safe location, <u>if damage is noted</u>, so that the freight damage claims adjuster can examine the fryer.

3. Save the shipping container for use during leg/ caster installation. Refer to the Installation Instructions for that procedure.

Models Covered by This Manual				
Model	Features	Model	Features	
14G 14GU	Plain Steel Fryer Kettle Plain Steel Fryer Kettle, CE version	MX-14EG MX-14EGU	High Efficiency Fryer High Efficiency Fryer, CE version	
14GS 14GSU	Stainless Steel Fryer Kettle Stainless Steel Fryer Kettle, CE version			

### Models Covered By This Manual

#### Standard Accessories furnished in the shipping carton for this fryer include:

2 Fryer Baskets	1 Drain Valve Extension	1 Screen
4 Adjustable Legs	1 Cleanout Rod	1 Basket Hanger

Other **optional equipment** includes a sediment tray; single or triple baskets; a built-in Filtronic<sup>™</sup> II or Filter Mate under-fryer filter system; a fryer cover; a drain table; a front drain tray; or four casters.

Note: A Parts List for each Anets fryer is among the items shipped with each fryer. If an additional copy of this list is needed please contact the factory as directed on the back cover.

## FRYER GAS SUPPLY SPECIFICATIONS

#### Please <u>make sure</u> that your desired fryer location has gas supply factors that are suitable for this product:

INPUT REQUIRED: 111,000 BTU*	Natural Gas	Propane
MANIFOLD PRESSURE	3½  W.C. **	10" W.C.
SUPPLY PRESSURE***	6" W.C., minimum	11 ° W.C., minimum

\* - BTU/Hr Rating is based on sea level operation. For sites above 2000 feet, reduce this rating 4% for each 1000 feet above sea level.

- \*\* "W.C. = Inches, Water Column.
- \*\*\* Measure Supply Pressure when <u>all other</u> gas-powered equipment is operating.

Gas Supply Inlet Pipe size must be 34 " NPT (National Pipe Thread) standard gas line. The gas supply inlet line should be as straight as possible (fewest bends or elbows) to obtain the highest available gas pressure at the fryer. Locate this inlet line horizontally at the center of the desired fryer location,  $8\frac{1}{4}$ " above the floor. **NOTE:** Using a flexible inlet line permits variation in the gas supply line location, both horizontally and vertically.

Anets fryers are only for use with the type of gas specified on the spec plate. if a fryer requires modification to use a gas other than that which is identified on the fryer spec plate, contact you Anets representative or call (800) 837-2638.

## FRYER ELECTRICAL SPECIFICATIONS

# The **ANETS** Fryer Models 14GS, 14GSU, MX-14EG, and MX-14EGU require no external electric power source.

Figure 1 is a wiring diagram of an **ANETS** 14GS Fryer. Some fryers may have other options that do not appear in this basic wiring diagram. A model-specific wiring diagram included with each fryer shows all the actual parts and their associated wiring connections. In addition, a fryer equipped with a builtin filter sys- tem (Filtronic II or Filter Mate) has a supplementary manual included for that option.

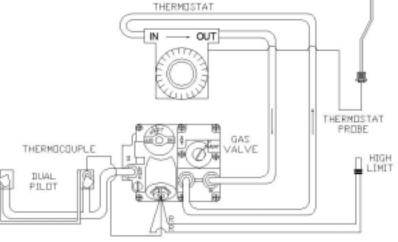


Figure 1. Fryer Model 14GS Wiring Diagram

## CODE REQUIREMENTS

**IMPORTANT:** Read the Code Requirements and ALL installation instructions carefully, <u>before</u> starting the installation. Contact the factory if any problems or questions arise.

The fryer installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1 (latest edition); the Natural Gas Installation Code, CAN/CGA-B149.1 (latest edition); or the Propane Gas Installation Code, CAN/CGA-B149.2 (latest edition), as applicable, including:

- a. Disconnect the fryer and its individual shutoff valve from the gas supply piping system during any pressure testing of the gas supply system at test pressures in excess of ½ psig (3.45 kPa).
- b. Isolate the fryer from the gas supply piping system during any pressure testing of the gas supply system at test pressures equal to or less than <sup>1</sup>/<sub>2</sub> psig (3.45 kPa).
- c. For fryers utilizing floor casters, the fryer installation shall comprise a connector that complies with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69 (latest edition) or CAN/CGA 6.16 (latest edition), and a quick-disconnect device that complies with the Standard for Quick-Disconnect Devices for Use with Gas Fuel, ANSI Z21.41 or CAN/CGA 1-6.9 (latest edition).

- d. Restrict the movement of a <u>caster-equipped</u> <u>fryer</u> by using a limiting device (for example, a cable attached <u>both</u> to the fryer **and** to a fixture attached to the site structure) to avoid depending on the connector and the quick-disconnect device or its associated piping to limit fryer movement.
- e. Install this fryer on a non-combustible floor with its back and sides at least 6" away from any <u>combustible</u> wall, as shown in Figure 2.

### WARNING

Install this fryer under a ventilation hood that conducts combustion products outside the building. Venting must comply with ANSI/NFPA 96 (latest edition).

- f. Install this fryer in a location where adequate combustion and ventilation air is available.
  Keep the area directly in front of the fryer open for adequate air flow to the burners. *DO NOT* obstruct the flow of combustion and ventilation air.
- g. Keep the fryer area free and clear from combustibles and debris.
- h. Attach a restraining device to each fryer, to prevent the unit from tipping, which could cause splashing of hot liquid.

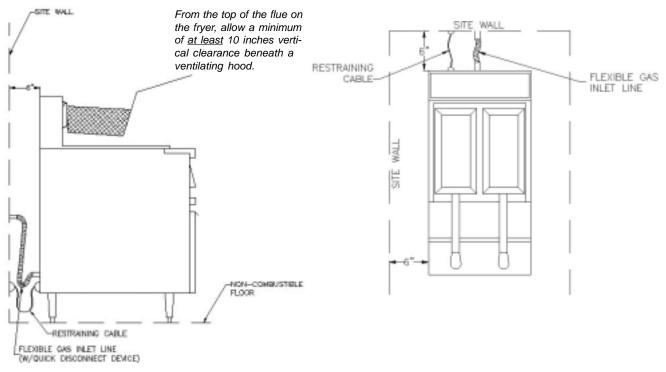


Figure 2. Fryer Site Installation Requirements

## **INSTALLATION REQUIREMENTS**

Install the fryer in accordance with the preceding Code Requirements, as well as the following Installation Requirements.

- 1. DO NOT install this fryer in a mobile home, trailer, or recreational vehicle.
- 2. Install this fryer in a location that allows it to be moved away from other adjacent appliances for cleaning and maintenance.

**NOTE:** If the fryer is installed among a row of appliances ("banked") where its only convenient movement is forward, sufficient room must be available in front to permit its separation from adjacent appliances for cleaning and maintenance.

3. Tightly fasten the legs (or casters) to the bot-

tom of the fryer using the supplied hardware, to prevent the fryer from tipping, wobbling or rocking when it is in its desired location. Refer to the following Installation Instructions for leg or caster attachment and leveling information.

CAUTION: Hood make-up air MUST NOT flow in a manner that restricts or impedes the natural flow of combustion or ventilation air.

4. Confirm that the air from the ventilation hood flowing near the fryer <u>after installation</u> is *NOT* blowing on the rear of the fryer, to prevent affecting the burner flames and possibly causing control damage.

## **INSTALLATION INSTRUCTIONS**

LOCH

### LEG INSTALLATION INSTRUCTIONS

- 1. Flatten the shipping carton (after unpacking the fryer and its parts and accessories) for surface protection during leg installation.
- 2. Position the side of the fryer flat on the carton, exposing the fryer bottom mounting brackets for leg installation, as shown in Figure 3.
- 3. Place the leg mounting plate flush against the mounting bracket on the fryer bottom.
- 4. Insert one mounting bolt through a flat washer and then through the proper hole in the fryer mounting bracket and through the leg mounting plate.
- 5. Screw a locking nut several turns onto the mounting bolt.
- 6. Repeat steps 4 and 5 until all four mounting bolts for a leg are in place with locking nuts.

#### LEG INSTALLATION INSTRUCTIONS (Continued)

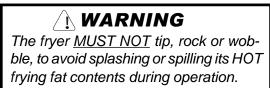
7. Tighten the four locking nuts evenly and <u>securely</u> to hold the leg mounting plate against the fryer mounting bracket.

LEG MIG. PLATE-

Figure 3. Typical Leg Installation

#### LEG LEVELING INSTRUCTIONS

1. Move the fryer to its desired location.



- 2. Turn the screw-type leg adjustment ends as necessary to level the fryer, until no tipping, rocking, or wobbling is evident.
- 3. Perform the **"Fryer Restraining Device Installation Instructions."**



## **INSTALLATION INSTRUCTIONS** (Continued)

### CASTER INSTALLATION INSTRUCTIONS

- 1. Flatten the shipping carton (after unpacking the fryer and its parts and accessories) for surface protection during leg installation.
- 2. Position the side of the fryer flat on the carton, exposing the fryer bottom mounting brackets for caster installation, as shown in Figure 4.
- 3. Place the caster mounting plate flush against the mounting bracket on the fryer bottom.
- 4. Insert one mounting bolt through a flatwasher (supplied) and the caster mounting plate, then through the proper hole in the fryer bottom mounting bracket.
- 5. Screw a locking nut several turns onto the mounting bolt.
- 6. Repeat steps 4 and 5 until all four mounting bolts for a caster are in place with locking nuts.
- 7. Tighten the four bolts evenly and securely to hold the caster mounting plate against the fryer mounting bracket.

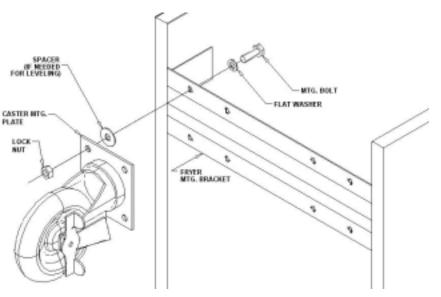


Figure 4. Typical Caster Installation

#### CASTER LEVELING INSTRUC-TIONS

- 1. Move the fryer to its desired location.
- Determine whether the fryer tends to wobble or rock when in its desired location. If it does <u>not</u>, perform step 10, then proceed to the **Fryer Operating Instructions.** If it does, perform steps 3 through 9.

#### WARNING

The fryer <u>MUST NOT</u> tip, rock or wobble, to avoid splashing or spilling its HOT shortening contents during operation.

- 3. Determine which caster requires adjustment and the approximate amount of change required to level the fryer.
- 4. Position the rear side of the fryer on the shipping carton, exposing the bottom of the fryer with the caster mounting plates (Figure 4).

## **INSTALLATION INSTRUCTIONS** (Continued)

#### CASTER LEVELING INSTRUC-TIONS (Continued)

- 5. Completely unscrew the bolts holding the caster mounting plate that requires leveling adjustment. Retain the locking nuts for later reassembly.
- 6. Reinsert each bolt through its flatwasher and the fryer mounting bracket; next, place a spacer of the required thickness on the bolt before inserting the bolt through its mounting hole on the caster mounting plate and screwing a locking nut onto the bolt.
- 7. Repeat step 6 for all remaining bolts.

#### CASTER LEVELING INSTRUC-TIONS (Continued)

- 8. Tighten all four locking nuts evenly and <u>securely</u> against the caster mounting plate and the fryer bottom mounting bracket.
- Return the fryer to its desired location and check again for wobbling or rocking. Repeat steps 3 through 8 until no wobbling or rocking occurs. When the fryer no longer wobbles or rocks, perform step 10.
- 10. Next, perform the "**Fryer Restraining Device Installation Instructions**."

#### FRYER RESTRAINING DEVICE INSTALLATION INSTRUCTIONS

### A WARNING

Fryers **MUST** have a movementlimiting (restraining cable) device installed to <u>prevent</u> tipping that causes splashing or spilling of its HOT contents.

**NOTE:** This movement-limiting device is to be *furnished and installed* by the *fryer's install-ing contractor before* the fryer is connected to the gas line at its desired location.

- 1. Install one restraining device connector <u>into</u> <u>the structure wall</u> directly behind the fryer's desired location, as shown in Figure 2.
- 2. Install one restraining device connector <u>on the</u> <u>rear panel of the fryer</u> very close to the quickdisconnect device on the end of the fryer's gas line.
- 3. Attach one end of the restraining cable to the wall connector. Attach the other end to the fryer connector.
- 4. Confirm that the fryer cannot move far enough away from the wall to cause excessive movement of the flexible gas line or its associated connectors.

## **GAS CONNECTION INSTRUCTIONS**

Installing your **ANETS** Fryer requires the following procedure, <u>after</u> its legs or casters are properly attached and it is in its desired location.

- 1. Ensure that the gas control valve knob in the fryer has its OFF position next to the valve mark.
- 2. Ensure that the gas supply inlet line valve is closed (cross-wise to the pipe line direction).
- 3. Ensure that all fryer controls are set to OFF.
- 4. Connect the  $\frac{3}{4}''$  gas supply line to the gas line adapter on the lower rear of the fryer.

### A WARNING

**DO NOT** use a flame to check for leaks.

- 5. Turn the gas supply line valve ON; then, confirm that all gas supply line joints and couplings are free of leaks, using soap suds or a leakcheck solution, after the fryer is in its desired location.
- 6. Refer to **Fryer Operating Instructions** to begin using your **ANETS** Fryer.

## FRYER OPERATING INSRUCTIONS

### ⚠ CAUTION

**DO NOT** attempt to operate this fryer during a interruption of gas service. Turn all fryer controls to OFF, including the gas control valve knob, then close the gas supply line valve. When notified that the gas interruption has ended, perform the Lighting Procedure (later in this manual).

### A DANGER

**NEVER** operate this fryer when its flue is blocked or when the ventilation hood is not on because the combustion products can cause injury to personnel.

### DANGER

Avoid moving the fryer while it contains HOT shortening. Drain the shortening from the fryer <u>before</u> moving it for service, cleaning or maintenance to avoid spilling or splashing. Burns from hot shortening can cause serious injury or death.

A. An **ANETS** Fryer is designed for operation with a kettle filled with approximately 35 to 50 pounds (or 3<sup>1</sup>/<sub>2</sub> to 6 gallons) of <u>liquid</u> shortening.

**CAUTION:** DO NOT melt solid shortening in this fryer because the melting can damage the kettle, which will void the fryer warranty.

Solid shortening <u>must</u> be melted into the liquid state *before* it can be used in an **ANETS** Fryer.

- B. Schedule regular cleaning of the fryer to ensure long-term satisfactory operation.
   Refer to the Daily Cleaning Procedure, later in this manual.
- C. Before servicing and maintenance, allow the fryer to cool. ALWAYS shut off the gas to the fryer while working on it, to prevent burns.
- D. Contact the factory (800-837-2638) for warranty service authorization. [Always notify the factory the next business day about 'after-hours' warranty service.] Contact your local restaurant equipment service agency for other service, repairs, or maintenance activities, as necessary.
- E. When breaded food products are being cooked, **ANETS** recommends using the special (optional) sediment tray to capture any breading fragments that become loosened from the food product. Periodic clearing of the sediment tray reduces premature contamination of the liquid shortening from breading fragments.

#### FRYER PREPARATION FOR USE <u>"BOIL OUT" INSTRUCTIONS</u>

New **ANETS** Fryers are leak-tested and cleaned at the factory before shipping. Before using a newly installed fryer for food preparation, clean the kettle again, as follows:

- Thoroughly wipe the interior of the kettle with clean cloths. Open the front door on the lower portion of the fryer to access the drain ball valve. Open the drain ball valve (by aligning the valve handle with the drain ball valve) and wipe the entire drain line clean.
- Close the drain ball valve (turn the valve handle cross-wise to the drain ball valve). Fill the kettle with water to about 3 ° from the top. Add 1 to 2 cups of soap powder, washing soda (trisodium phosphate), or deep fat fryer kettle cleaner.
- 3. Perform the **Lighting Procedure** for the fryer. (Refer to the **Lighting Procedure** later in this manual.)
- Set the thermostat to 190°F. Heat, but <u>DO</u> <u>NOT</u> boil the water. Stir the water to dissolve the cleaning material.

### WARNING

Hot cleaning solution can cause severe burns. Take care when handling hot cleaning solution to avoid spilling or splashing the solution.

- 5. Clean the fryer kettle for at least 20 minutes. Use a small hand mop (an optional brush can be ordered for this purpose) to clean the upper portion of the kettle (above the 3 " waterline) and the top rim of the kettle.
- Shut down the fryer using the Shutdown Procedure for the fryer. (Refer to the Shutdown Procedure later in this manual.) Allow the water to cool slightly.

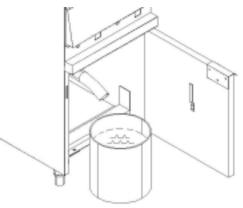
### FRYER PREPARATION FOR USE

(Continued)

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For fryers with built-in filter systems, DO NOT pump the cleaning, or rinsing, solution through the filter system, to avoid damaging the filter system pump.

 Open the front door and mount the drain extension to the drain ball valve. Position a container (bucket) capable of holding VERY HOT cleaning solution beneath the end of the drain extension to hold the cleaning solution being drained, as shown in Figure 5.



#### Figure 5. Draining The Kettle

- 8. Open the drain ball valve SLOWLY, to avoid splashes while draining the cleaning solution from the kettle.
- Close the drain ball valve (valve handle crosswise) and remove the drain extension. Close the front door.
- 10. Safely dispose of the cleaning solution.
- 11. Fill the kettle with water to about 3 " from the top. Add 2 cups of vinegar to neutralize the cleaning solution.
- 12. Repeat steps 3 through 10 of this procedure.
- 13. Thoroughly wipe the interior of the kettle and the drain ball valve with clean, dry, wiping cloths to remove ALL water.
- 14. Dry the kettle <u>thoroughly</u> because any remaining water can cause sputtering of hot shortening when the kettle is later filled and heated.

Normal operation of an **ANETS** Fryer requires that the kettle is filled with liquid shortening *above* the lower indent level, marked on the rear of the kettle, <u>before</u> lighting the fryer's pilot and turning on the main burner.

A CAUTION: Shortening MUST be in liquid form to avoid scorching or discoloration and possible damage to the kettle. Damage caused by melting solid shortening will <u>NOT</u> be covered by the warranty.

### LIGHTING PROCEDURE

**NOTE:** The gas line of a new fryer installation may contain a considerable amount of air that will hinder immediate lighting. You may have to press in the gas safety valve control knob as long as several minutes before the pilot flame burns steadily.

- 1. Ensure that the fryer's thermostat knob is set to OFF.
- 2. Open the gas supply line inlet valve to the fryer by aligning the gas valve handle with the gas line piping.
- 3. Open the front door and move the right pilot viewing/lighting port cover aside.
- 4. Turn the gas control valve knob to align the PILOT setting with the valve mark. Figure 6 shows the possible gas control valve knob positions.
- 5. Press, and *hold down*, the valve control knob to allow pilot gas to flow.
  Model 14G, 14GU, 14GS, or 14GSU: Use a match or lighter to ignite the pilot burner.
  Model MX-14EG or MX-14EGU: Push the spark igniter pushbutton several times, until the pilot flame lights. (A match may also be used to light the pilot flame.)
  Continue holding down the control knob for *at least* 30 seconds until the pilot flame burns steadily without going out.
- 6. Release the control valve knob and observe that the pilot flame remains lighted. Close the right pilot viewing/lighting port.
- 7. Light the left pilot flame by opening the left pilot viewing/lighting port and applying a match to ignite the pilot flame. Close the left pilot viewing/lighting port.

- CAUTION: Ensure that both pilot viewing/lighting ports are closed, to prevent excessive heat from damaging the gas controls.
- 8. Turn the gas control valve knob to align the ON setting with the valve mark.
- 9. Turn the thermostat knob to the desired temperature. Observe that the fryer's main burners light to heat the kettle.

MAIN BURNER REGULATOR ADJUSTMENT COVER

#### PILOT VALVE ADJUSTMENT COVER NI z LNH/ NO OFF VALVE CONTROL KNOB VALVE MARK European Valve Valve Mark Markings 101 OFF `⊕ K PILOT <⊂∏ ON OFF PILOT ON

Figure 6. Gas Control Valve & Knob Positions

### SHUTDOWN PROCEDURE

**NOTE:** Shutdown is *recommended* at the end of a workday or whenever no frying is required for a period of several hours. The fryer should be shutdown during any power outage or interruption of gas service. The fryer **MUST** also be shutdown before draining the kettle, or whenever there is no shortening in the kettle to prevent damage.

- 1. Turn the thermostat knob to OFF.
- 2. Turn the gas control valve knob to align the PILOT setting with the valve mark.

- 3. Open the pilot viewing/lighting port to confirm that only the pilot flame remains lighted.
- 4. Press *down* and turn the gas control valve knob to align the OFF setting with the valve mark. Observe that the pilot flame goes out.

**NOTE:** For extended periods of non-use *or* when servicing the fryer, close the gas supply line inlet valve to the fryer by turning the gas valve handle cross-wise with the gas line piping.

Load the fryer basket with the food product while the basket is **not** in the hot liquid shortening. <u>DO NOT overload the fryer</u> <u>basket.</u> Load only a premeasured quantity of food product (1½ lb, typically; less, if smaller portions are desired). Place the loaded fryer basket into the hot liquid shorteningcarefully to avoid splashing.

When the basket of food product has reached the desired point of 'doneness', lift the basket from the hot shortening and hang the basket on the basket hanger to let it drain for approximately 15 -30 seconds before serving.

NEVER increase the thermostat setting above the recommended setting to reduce the cooking time; this will produce a lower quality product and will cause more rapid shortening breakdown.

#### RECOMMENDED FRYING TIME FOR POPULAR FRIED FOODS

Food Produc (Typical 1½ lb loa		ANE Frye (° F)	r	Frying Time (minutes)
Breaded Foods Calamari Cheese Sticks Fresh Shrimp (B Frozen Shrimp ( Mushrooms Onion Rings Tamale Sticks	,	340	)	2½ - 3 3 4 2½ - 3 2½ - 3 3
<u>Chicken</u> Croquettes (Nug Pre-cooked, Bre Raw to Done, Pi Tenders	eaded Pieces			3 - 4 3 - 4 12 - 15 5
Corn Dogs				31⁄2
<u>French Fries</u> Raw to Done Blanched, only Browned, only				5 2½ 2½
Raw to Done Blanched, only Browned, only				6 3 3
Raw to Done Blanched, only Browned, only	1/2″ cut 1/2″ cut 1/2″ cut			7 4 3
Fritters				3
Frozen Fish				4 - 7
Tortilla Chips**		340		2 - 2½

\* - Usual per order = Wing, Leg, Breast, Thigh (1/2 chicken)

\*\* - Use a second basket on top of the chips in the bottom basket, to keep them within the hot shortening; otherwise, they float before cooking completely.

#### DAILY CLEANING PROCEDURE

**NOTE:** Cleaning is *recommended* at the end of a workday, to prepare the fryer for proper operation the next time it is to be used.

### **DANGER**

DO NOT move the fryer while it contains HOT shortening. Allow it to cool and drain the shortening from the fryer <u>before</u> moving it for service, cleaning, or maintenance to avoid spilling or splashing. [Refer to steps 1 through 7.] Burns from HOT shortening can cause serious injury or death.

When cleaning, *if* relocation of your fryer is necessary, disconnect the gas supply line to the fryer. Also, if your fryer is caster-equipped, unlock the locking casters and disconnect the movementlimiting cable. Move the fryer as necessary to allow the following cleaning procedure to occur:

- 1. Open the front door of the fryer. Attach the drain extension to the drain ball valve.
- 2. Perform the **Shutdown Procedure**. Ensure that the gas supply line inlet valve is closed (handle *cross-wise* to pipe line) and the pilot flame is extinguished.
- Position a steel drum [NEVER use plastic!] with a filter cone, directly beneath the drain extension end, <u>OR</u> if your fryer is equipped with an **ANETS** Filtronic <sup>™</sup>II or Filter Mate unit, refer to that equipment's manual for operation details.
- 4. Remove the fryer baskets and the sediment tray, if present, from the kettle. (If the screen is present, use the cleanout rod to lift it from the hot shortening, to avoid burns.) Thoroughly clean, and rinse, these items in the sink. MAKE SURE that these items are completely dry before their next use.

## DAILY CLEANING PROCEDURE

(Continued)

- 5. Allow the shortening to cool before draining. Slowly open the drain ball valve to drain the shortening. Take care to avoid spilling or splashing the shortening.
- 6. Carefully use the Cleanout Rod to clear any sediment blocking the kettle drain. Flush out all sediment in the bottom of the kettle by pouring filtered, liquid shortening into the kettle until the shortening being drained runs clear.
- Close the drain ball valve, after the kettle is completely empty of shortening and sediment. Detach the drain extension. Clean, rinse, and dry it before storing.

### WARNING

Wait until the kettle has cooled before performing step 8, to avoid injury from burns.

- 8. Thoroughly wipe the kettle interior using clean cloths.
- Periodically perform the "BOIL OUT" Instructions to ensure thorough cleaning of the kettle. (Refer to the earlier FRYER PREPARATION FOR USE section.)
- 10. Return the fryer to its normal operating location and reconnect both the gas supply line and the movement-limiting cable. (For caster-equipped fryers, lock the locking casters to prevent movement.)
- 11. Refill the kettle with filtered (or fresh) liquid shortening to the desired indent mark on the rear wall of the kettle, *only* if fryer operation is to continue during a subsequent shift. <u>Otherwise</u>, melt shortening into its liquid state and refill the kettle *before* fryer operation is scheduled during the next working shift.

#### DAILY CLEANING PROCEDURE

(Continued)

- 12. Return the screen (or, if used, the sediment tray) to its proper position in the kettle.Place the fryer baskets on the basket hanger, ready for use.
- 13. Perform the **Lighting Procedure** to return the fryer to operation, when desired.

#### MONTHLY MAINTENANCE INSTRUCTIONS

**NOTE:** Regular maintenance is *recommended* to keep the fryer operating properly.

Once each month, before beginning fryer operation, check the flue (behind the backsplash panel) to ensure that it is clear, enabling exhaust combustion gases to flow freely toward the ventilation hood area. DO NOT allow the flue to become excessively dirty. NEVER allow the flue to be blocked. Monthly, observe the condition of the ventilation hood. If it shows evidence of a great deal of greasy residue, remove (clean) the residue to allow free flow of ventilation air.

## FRYER TROUBLESHOOTING GUIDE

All service (repairs or part replacement) <u>must</u> be performed by a qualified Service Agency.

PROBLEM	CAUSE	REMEDY
Pilot (piezo-electric) pushbutton igniter, if present, does not light	1. Electrode of igniter out of position or dirty/sooty electrode.	1. Move electrode within 3/16" of pilot burner tip. Clean the electrode.
the pilot flame	2. Loose spark wire; loose igniter nut.	2. Check spark wire connection at the igniter nut and make sure the connection is tight.
	3. Piezo-electric igniter does not generate a spark.	3. Replace igniter mechanism (portion with pushbutton).
Pilot flame does not stay lighted.	1. Dirty/sooty pilot burner.	1. Clean the pilot burner. Perform the Lighting Procedure.
	<ol> <li>Low gas supply pressure [less than 6" W.C. for natural gas; (11" W.C. for pro- pane) when <u>all</u> other gas-powered equip- ment is operating].</li> </ol>	<ul><li>2. Measure the gas supply pressure.</li><li>Contact your local gas supplier to obtain adequate gas supply pressure.</li></ul>
	3. Pilot flame too small to heat the thermo- couple.	3. Adjust the pilot valve (part of the gas control valve) to in- crease the flame size: Un- screw and retain the slotted threaded cover; turn the pilot valve adjustment screw <i>two</i> <i>turns</i> counterclockwise; reinstall the threaded cover.
	4. Pilot flame 'wavering' (being blown about by a draft).	4. Block or redirect the draft, to keep the flame burning steadily.
	5. Improper thermocouple output voltage (must be at least 10 millivolts, measured at the thermocouple junction block).	5. Replace the thermocouple.
	6. High-limit thermostat problem has shut off the gas.	6. Check for, and repair, any dam- aged high-limit thermostat wir- ing. [For model 14GSU fryer ONLY: Press the reset push- button on the high-limit thermo- stat control. Perform the Light- ing Procedure, to check wheth- er the pilot flame lights. If the pilot flame stays lit, the high- limit thermostat has failed and must be replaced. ]

PROBLEM	CAUSE	REMEDY
Pilot flame does not stay lighted. (Continued)	6. High-limit thermostat problem has shut off the gas. (Continued)	<ul> <li>6. (Continued) For model 14GS, MX-14EG, and MX14-EGU fryers ONLY: Test the high-limit thermostat by disconnecting the thermo- couple at the gas control valve. Then, disconnect the red wires to the high-limit thermostat from the gas control valve. Reconnect the thermocouple; next, perform the Lighting Pro- cedure, to check whether the pilot flame lights. If the pilot flame stays lit, the high-limit thermostat has failed and must be replaced.</li> </ul>
		<b>CAUTION:</b> DO NOT return the fryer to normal operation with its high-limit thermostat bypassed/disconnected.
	7. Gas control valve has failed.	7. Replace the gas control valve.
Pilot flame goes out repeatedly.	<ol> <li>Low gas supply pressure [less than 6" W.C. for natural gas; (11" W.C. for pro- pane) when <u>all</u> other gas-powered kitchen equipment is operating].</li> </ol>	<ol> <li>Measure the gas supply pressure.</li> <li>Contact your local gas supplier to obtain adequate gas supply pressure.</li> </ol>
	2. Loose thermocouple or high-limit thermo- stat connection(s) on gas control valve.	2. Check and tighten the connections.
	3. Pilot flame does not continuously touch the thermocouple because of excessive air flow around the pilot burner assembly.	3. Block the excessive air flow to make the pilot flame contact the thermocouple.
	4. High-limit thermostat problem has shut off the gas.	4. Check for, and repair, any dam- aged high-limit thermostat wir- ing. [For model 14GSU fryer ONLY: Press the reset push- button on the high-limit thermo- stat control. Perform the Light- ing Procedure, to check wheth- er the pilot flame lights. If the pilot flame stays lit, the high- limit thermostat has failed and must be replaced. ]

PROBLEM	CAUSE	REMEDY
Pilot flame goes out repeatedly. (Continued)	4. High-limit thermostat problem has shut off the gas. (Continued)	<ul> <li>4. (Continued) For model 14GS, MX-14EG, and MX14-EGU fryers ONLY: Test the high-limit thermo- stat by disconnecting the ther- mocouple at the gas control valve. Then, disconnect the red wires to the high-limit thermo- stat from the gas control valve. Reconnect the thermocouple; next, perform the Lighting Pro- cedure, to check whether the pilot flame lights. If the pilot flame stays lit, the high-limit thermostat has failed and must be replaced.</li> <li>CAUTION: DO NOT return the fryer to normal operation with its high-limit thermostat bypassed/disconnected.</li> </ul>
Main burners do not ignite.	1. Gas control valve knob set to OFF or PILOT.	<ol> <li>Perform the normal Lighting Procedure. Turn the gas control valveknob to ON to light the main burners. If the burners do not light, the gas control valve has failed and must be replaced.</li> </ol>
	<ul><li>2. Low gas supply pressure [less than 6" W.C. for natural gas; (11" W.C. for propane) when <u>all</u> other gas-powered kitchen equipment is operating].</li></ul>	<ol> <li>Measure the gas supply pressure.</li> <li>Contact your local gas supplier to obtain adequate gas supply pressure.</li> </ol>
	3. Pilot burner problem.	3. Refer to the preceding Pilot Burner problems and use the correct remedy.
	4. Thermostat control set below the temperature of the liquid shortening in the kettle.	4. Increase the thermostat setting until the burners light. If this setting is greater than the de- sired temperature, reset the thermostat to the desired set- ting and allow the shortening to cool to the desired tempera- ture.
I	5. Gas control valve has failed.	5. Replace the gas control valve.

PROBLEM	CAUSE	REMEDY
Main burners do not stop burning.	1. Thermostat has failed.	1. Turn the thermostat control knob to OFF. If the burners do not quit burning, the ther- mostat has failed and must be replaced.
	2. Gas control valve has failed.	2. Turn the gas control valve knob to OFF. If the burners do not quit burning, the gas control valve has failed and must be replaced.
Liquid shortening does not reach the desired temperature for frying.	<ol> <li>Low gas supply pressure [less than 6" W.C. for natural gas; (11" W.C. for pro- pane) when <u>all</u> other gas-powered equip- ment is operating], causing reduced heat from main burners.</li> </ol>	<ol> <li>Measure the gas supply pressure.</li> <li>Contact your local gas supplier to obtain adequate gas supply pressure.</li> </ol>
	<ul> <li>2. Low gas manifold pressure [less than 3½" W.C. for natural gas; (10" W.C. for propane).</li> </ul>	<ol> <li>Measure the gas pressure at the fryer's manifold pressure tap. Adjust the manifold pres- sure (see Figure 6), as neces- sary: [a] Unscrew (and re- tain) the threaded Main Burner Regulator Adjustment Cover. [b] Use a flat-blade screwdriver to turn the regulator adjustment screw (clockwise to increase; counterclockwise to decrease) to reset the pressure adjust- ment. [c] Reinstall, and tighten, the Regulator Adjustment Cover, when finished.</li> </ol>
	3. Loose knob on thermostat; <u>or</u> thermostat requires calibration (temperature setting differs by about 10°F from measured shortening temperature).	3. Stir the shortening to mix the hot shortening with some from the lower 'cool zone' and allow it to sit for 5 minutes. Turn the thermostat knob until it 'clicks' <i>on</i> (causing the main burners to flame); note the setting where this occurs. Turn the thermostat knob until it 'clicks' <i>off</i> (causing the main burners to go out); note the setting where this occurs. Repeat this temperature 'click points' step at least three times to ensure that

PROBLEM	CAUSE	REMEDY
Liquid shortening does not reach the desired temperature for frying. (Continued)	3. Loose knob on thermostat; <u>or</u> thermostat requires calibration (temperature setting differs by about 10°F from measured shortening temperature). (Continued)	<ul> <li>3. (Continued) the shortening temperature has stabilized. Measure the temperature of the shortening by inserting an <i>accurate</i> thermometer about 4 inches into the shortening to measure its temperature. If the temperature difference between the measured temperature and the thermostat setting is 10°F or less, the thermostat can be <i>recalibrated</i>. <u>Recalibrate</u> the thermostat by: (a) removing the cap on the thermostat control knob; (b) loosening the center brass hex nut portion of the knob; (c) turn the pointer portion of the knob to the measured temperature value of the thermostat setting. Tighten the brass hex nut to lock the adjustment. Replace the cap on the knob.</li> </ul>
	4. Thermostat setting is more than 20°F different than measured shortening temperature.	<ul> <li>4. Check the thermostat setting against an accurate measure of the shortening temperature. If the temperature difference is greater than 20°F, the thermostat can <u>possibly</u> be <i>recalibrated</i>.</li> <li><u>Recalibrate</u> the thermostat by: <ul> <li>(a) removing the cap on the thermostat control knob;</li> <li>(b) loosening the center brass hex nut portion of the knob;</li> <li>(c) turn the pointer portion of the knob to the measured temperature. Tighten the brass hex nut to lock the adjustment. Replace the cap on the knob.</li> <li>If this calibration is unsuccessful, the thermostat has failed and must be replaced.</li> </ul> </li> </ul>

# LIMITED WARRANTY

ANETSBERGER BROTHERS, INC., Northbrook, Illinois, USA, certifies that all equipment of its manufacture is, to the best of its knowledge, free from defective material and workmanship.

ANETSBERGER BROTHERS, INC., agrees to replace any integral part of its equipment that proves defective within 15 months of date of original shipment from the factory, or 12 months from the date of installation, whichever is sooner. Buyer must return the defective part to the factory, freight prepaid, for inspection. Anetsberger Brothers, Inc., further agrees to assume the cost of installing said replacement part within the same period.

All frypots are covered by the warranty above for the first year of operation. Various models have an extended warranty that covers the replacement of the frypot only. See the indivdual specification sheets for details.

Overtime charges, calibration, adjustments and abnormal installation charges shall not be at the expense of Anetsberger Brothers, Inc.

The conditions and warranty expressed above are valid only if equipment has been properly installed and operated. No other warranty, expressed or implied, shall govern equipment manufactured by Anetsberger Brothers, Inc. Under no circumstances shall Anetsberger Brothers, Inc., be liable for loss of profits or any direct or indirect cost, expenses, loss or damages arising out of defects in or failure of the equipment or any part thereof.



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Keep this Manual in a Convenient Location for Reference