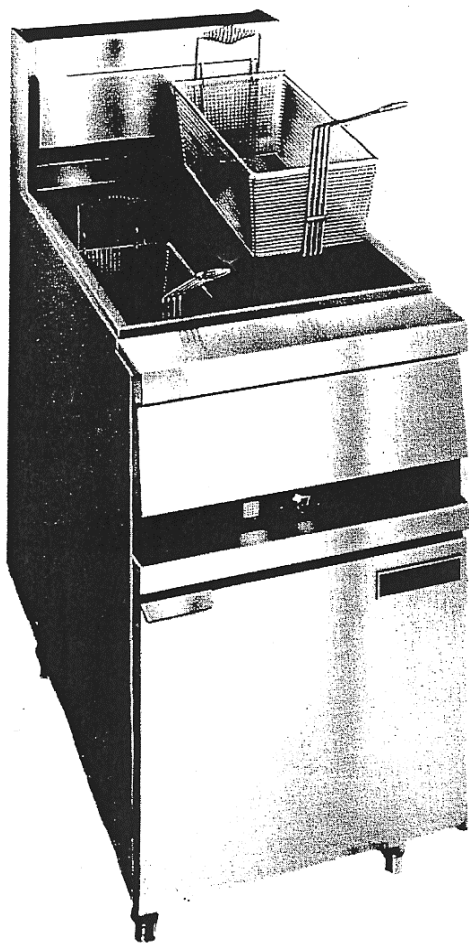


## INSTALLATION OPERATION AND SERVICE INSTRUCTION

### GAS FRYERS



18/20D Two 15 Minute Electric Timers  
18/20E Basic, Electric Controls  
18/20EG Basic

#### FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors, liquids in the vicinity of this or any other appliance.

If you smell gas:

1. Open windows.
2. Do not touch electrical switches.
3. Extinguish any open flame.
4. Call your gas supplier immediately.



**PURCHASER PLEASE NOTE :** Instructions to be followed in the event the user smells gas should be posted in a prominent location. This information can be obtained by consulting the local gas supplier.

## TO THE PURCHASER, OWNER AND STORE MANAGER

**Please review these warnings prior to posting them in a prominent location for reference.**

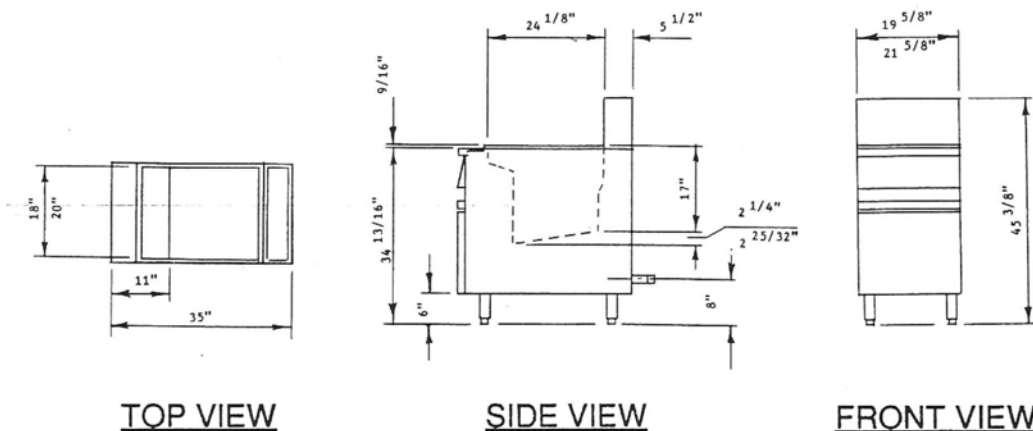
<p><b>TO THE PURCHASER</b></p> <p>Post in a prominent location the instructions to be followed in the event that an operator smells gas. Obtain this information from your local gas supplier.</p> <p><b>FOR YOUR PROTECTION</b></p> <p>DO NOT store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.</p> <p>Do not spray aerosols in the vicinity of this appliance when it is in operation.</p> <p><b>WARNING</b></p> <p>Improper installation, operation, alteration, adjustments, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing, operation, servicing this appliance.</p> <p><b>WARNING</b></p> <p>Installation, maintenance and repairs should be performed by a Anets Authorized Service and Parts (ASAP) company technician or other qualified personnel. Installation, maintenance or repairs by an unauthorized and unqualified personnel will void the warranty.</p> <p><b>WARNING</b></p> <p>Installation and all connections must be made according to local codes in force. In the absence of local codes in North America, the installation must conform with the National Fuel Gas Code, ANSI Z223.1/NFPA 54 or the Natural Gas and Propane Installation Code CSA B149.1 as applicable. In Australia, the appliance must installed in compliance with AS/NZS 5601.</p> <p><b>WARNING</b></p> <p>During the warranty period if a customer elects to use a non-original part or modifies an original part purchased from Anets and/or its Authorized Service and Parts (ASAP) companies, this warranty will be void. In addition, Anets and its affiliates will not be liable for any claims, damages or expenses incurred by the customer which arises directly or indirectly, in whole or in part, due to the installation of any modified part and/or received from an unauthorized service center.</p> <p><b>WARNING</b></p> <p>This appliance, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.2, as applicable</p> <p><b>WARNING</b></p> <p>Adequate means must be provided to LIMIT the movement of this appliance without depending on the gas or electrical cord connection. Single appliances equipped with legs must be stabilized by installing anchor straps. All appliances equipped with casters must be stabilized by installing restraining chains.</p> <p><b>WARNING</b></p> <p>DO NOT alter or remove structural material on the appliance to accommodate placement under a ventilation hood.</p> <p><b>WARNING</b></p> <p>If the appliance is equipped with a power cord and it is damaged, it must be replaced by a Anets Authorized Service and Parts (ASAP) company technician, or a similarly qualified person in order to avoid a hazard.</p> <p><b>WARNING</b></p> <p>The power supply must be disconnected before servicing, maintaining or cleaning this appliance.</p> <p><b>WARNING</b></p> <p>The appliance is NOT jet stream approved. DO NOT clean the appliance with a water jet.</p> <p><b>WARNING</b></p> <p>DO NOT attempt to move this appliance or transfer hot liquids from one container to another when the unit is at operating temperature or filled with hot liquids. Serious personal injury could result if skin comes in contact with the hot surfaces or liquids.</p> <p><b>WARNING</b></p> <p>DO NOT use an open flame to check for gas leaks!</p> <p><b>WARNING</b></p> <p>DO NOT sit or stand on this appliance. The appliance's front panel, tank, splash back, tank cover, work shelf, drain board is not a step. Serious injury could result from slipping, falling or contact with hot liquids.</p>	<p><b>WARNING</b></p> <p>NEVER use the appliance as a step for cleaning or accessing the ventilation hood. Serious injury could result from slips, trips or from contacting hot liquids.</p> <p><b>WARNING</b></p> <p>The oil/shortening level should NOT fall below the minimum indicated level line at any time. The use of old shortening can be dangerous as it will have a reduced flash point and be more prone to surge boiling.</p> <p><b>WARNING</b></p> <p>The contents of the crumb catch and/or filter pan of any filter system must be emptied into a fireproof container at the end of the frying operation each day. Some food particles can spontaneously combust into flames if left soaking in certain oil/shortening materials.</p> <p><b>WARNING</b></p> <p>Completely shut the appliance down when shortening/oil is being drained from the appliance. This will prevent the appliance from heating up during the draining and filling process. Serious injury can occur.</p> <p><b>WARNING</b></p> <p>This appliance is intended for indoor use only.</p> <p><b>WARNING</b></p> <p>DO NOT operate appliance unless all panels and access covers are attached correctly.</p> <p><b>WARNING</b></p> <p>It is recommended that this appliance be inspected by a qualified service technician for proper performance and operation on a yearly basis.</p> <p><b>WARNING</b></p> <p>There is an open flame inside this appliance. The unit may get hot enough to set nearby materials on fire. Keep the area around the appliance free from combustibles.</p> <p><b>WARNING</b></p> <p>DO NOT supply the appliance with a gas that is not indicated on the data plate. If you need to convert the appliance to another type of fuel, contact your dealer.</p> <p><b>WARNING</b></p> <p>If gas flow to appliance is interrupted, or pilots extinguish, wait 5 minutes before attempting to relight the pilot to allow any residual gas in appliance to dissipate.</p> <p><b>WARNING</b></p> <p>Ensure that the appliance can get enough air to keep the flame burning correctly. If the flame is starved for air, it can give off a dangerous carbon monoxide gas. Carbon monoxide is a clear odorless gas that can cause suffocation.</p> <p><b>WARNING</b></p> <p>Never add oil to the appliance when it is at operating temperature. Splashing hot oil can cause severe injuries.</p> <p><b>WARNING</b></p> <p>Never add water to hot oil. Violent boiling can occur causing severe injury.</p> <p><b>WARNING</b></p> <p>This appliance is intended for professional use only and should be operated by fully trained and qualified personnel.</p> <p><b>WARNING</b></p> <p>To avoid splashing of hot liquid when installed, this fryer must be restrained either by the manner of installation, or with adequate ties to prevent tipping.</p> <p><b>WARNING</b></p> <p>An appliance equipped with casters and a flexible gas line must be connected to the gas supply with a quick disconnect device. In North America, gas appliances equipped with casters must be installed with connectors that comply with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69.CSA 6.16 Latest Edition. This connection should include a quick disconnect device that complies with the Standard for Quick Disconnect Devices for Use With Gas Fuel ANSI Z221.41.CSA 6.9 Latest Edition. In Australia, an appliance equipped with casters and a flexible gas line must be connected to the gas supply with a quick disconnect device that complies with AS 4627. The hose must comply with AS/NZS 1869 and be class B or D and have a restraining cable. The restraining cable must not exceed 80% of the length of the flexible gas line.</p>
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### MODEL 18/20" - FRYER SPECIFICATIONS

MODEL	OPERATION	INPUT BTUH	GAS PRES.		MIN. FAT CAP. 18" FRYER	MAX. FAT CAP. 20" FRYER	VOLTS	HERTZ	AMPS	WEIGHT
			NAT.	LP						
18/20"D	2-15 Min. Timers	160,000	3.5"	10.0"	70/100 lbs.	100/120 lbs.	115	60	2	240/264 lbs.
18/20"E	Elec. Controls	160,000	3.5"	10.0"	70/100 lbs.	100/120 lbs.	115	60	2	240/264 lbs.
18/20"EG	Basic No Elec. Required	160,000	3.5"	10.0"	70/100 lbs.	100/120 lbs.	N/A	N/A	N/A	240/264 lbs.





## ORIGINAL EQUIPMENT LIMITED WARRANTY

### General Warranty

Anets, Inc. warrants to the original user of its commercial cooking appliances and related equipment that said appliances and related equipment will be free from defects in material and workmanship under normal use for a period of one (1) year from the date of installation, with appropriate documentation, to a maximum of fifteen (15) months from the date of manufacture, subject to the following additions, exceptions, exclusions and limitations.

### What is covered

This warranty is limited to the repair or replacement at the Company's option, without charge, of any part found to be defective within the warranty period and reasonable expenses incurred for freight and material for the installation of such part; in addition, the Company's obligation shall be limited to reimbursement for normal labor on such parts.

Anets, Inc. agrees to pay the Authorized Service and Parts Distributor, for any labor and material required to repair or replace, at the Company's option, any part which may fail due to defects in material or workmanship during the above general warranty period.

### Silver Line Fryers

In addition to the above general warranty, for its economy fryers and cookers, the Company warrants to the original user any mild. Stainless steel fry tank or cooking vessel to be free from defects for a period of one (1) year, from the date of manufacture. Labor and freight shall be the responsibility of the end user.

### Gold Line Fryers

In addition to the above general warranty, for its standard fryers and cookers, the Company warrants to the original user any stainless steel fry tank or cooking vessel to be free from defects for a period of (1) year parts and labor and 10 year Frypot or cooking vessel Part only from the date of manufacture. Labor and freight shall be the responsibility of the end user.

### Pasta Cooker

In addition to the above general warranty, for its standard fryers and cookers, the Company warrants to the original user any stainless steel fry tank or cooking vessel to be free from defects for a period of one (1) year parts and labor and 5 years Frypot or cooking vessel part only after year one from the date of manufacture. Labor and freight shall be the responsibility of the end user.

### Limitations to Fry Tank and Cooking Vessel Warranty

After the expiration of the general warranty period, any additional warranty on fry tanks or cooking vessels shall only obligate the Company to repair or replace, at its option, any fry tank or cooking vessel which it determines to be defective. Claims under this item shall be supported by a statement detailing the defect, and the Company may require the return of the fry tank or cooking vessel claimed to be defective. Labor and freight shall be the responsibility of the end user.

### How to Keep Your Warranty in Force

- Make sure any shipping damages are reported immediately. Damages of this nature are the responsibility of the carrier and must be reported by the receiver.
- Install the unit properly. This is the responsibility of the installer and the procedures are outlined in the manual.
- Do not install it in a home or residence.
- Maintain it properly. This is the responsibility of the user of the appliance and the procedures are outlined in the manual.
- Adjustments, such as calibration, leveling, tightening of fasteners or plumbing or electrical connections normally associated with initial installation. These procedures are outlined in the manual and are NOT covered by warranty.
- If it is damaged due to flood, fire or other acts of God, this is not covered under this warranty.
- Use it for what it is intended. If it is used for a purpose other than for which it was intended or designed, resulting damages are not covered under the warranty.
- Make sure that it has the correct voltage, gas supply and/or good quality water. If a failure is due to poor water quality, harsh chemical action, erratic voltage or gas supplies, these damages are not covered under the warranty.
- Do not materially alter or modify from the condition in which it left the factory.
- Do not obliterate, remove or alter the serial number rating plate.
- Use only Genuine OEM parts from Anets, Inc. or its Authorized Parts and Service Distributors. Repairs are not covered by the warranty.
- If any other failure occurs which is not attributable to a defect in materials or workmanship, it is not covered.

This warranty specifically excludes parts which wear or would be replaced under normal usage, including, but not limited to, electric lamps, fuses, interior or exterior finishes, o-rings and gaskets.

### Limits to the Warranty

Outside the United States of America and Canada, this warranty is limited to the replacement of parts and Anets, Inc. will not bear any other expense be it labor, mileage, freight or travel.

If any oral statements have been made regarding the appliance, these statements do not constitute warranties and are not part of the contract of sale. This limited warranty constitutes the complete, final and exclusive statement with regard to warranties.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES WHETHER WRITTEN, ORAL OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR WARRANTY AGAINST LATENT DEFECTS.

### Limitations of Liability

In the event of a warranty or other claim, the sole obligation of Anets, Inc. will be the repair or replacement, at the Company's option, of the appliance or the component part. This repair or replacement will be at the expense of Anets, Inc. except as limited by this warranty statement. Any repair or replacement under this warranty does not constitute an extension in time to the original warranty. Parts covered under this warranty will be repaired or replaced, at the Company's option, with new or functionally operative parts. The liability of Anets, Inc. on any claim of any kind, including claims based on warranty, express or implied contract, negligence, strict liability or any other legal theories will be exclusively the repair or replacement of the appliance. This liability will not include, and the purchaser specifically renounces any right to recover special, incidental, consequential or other damages of any kind, including, but not limited to, injuries to persons, damage to property, loss of profits or anticipated loss of the use of this appliance.

If any provision of this warranty is unenforceable under the law of any jurisdiction, that provision only will be inapplicable there, and the remainder of the warranty will remain unaffected. The maximum exclusion or limitation allowed by law will be substituted for the unenforceable provision.

### How to Obtain Warranty Service

First direct your claim to the Anets, Inc. Authorized Service and Parts Distributor closest to you giving complete model, serial and code numbers, voltage, gas type, and description of the problem. Proof of the date of installation and/or the sales slip may also be required. If this procedure fails to be satisfactory, write the National Service Manager, Anets, Inc., P. O. Box 501, Concord, NH. 03302-0501. USA

This warranty gives you certain specific legal rights; you may have other rights which vary from state to state.

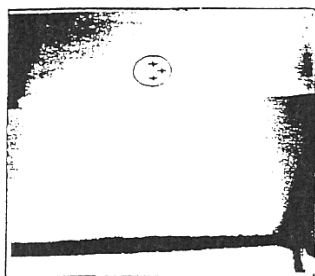
**Anets, Inc., P.O. Box 501, Jct. I-89 & I-93 Concord, NH 03302-0501**

**509 Route 3A, Bow, NH 03304 USA**

**Tel: (603)225-6684 Fax: (603)228-5231 [www.ANETS.com](http://www.ANETS.com)**

*L14-022 R1 Printed in U.S.A.*

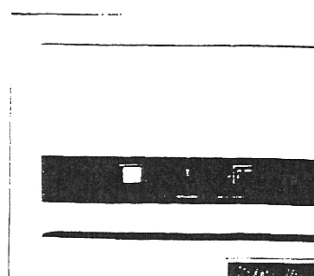
## DESIGN FEATURES AND AVAILABLE OPTIONS AND ACCESSORIES



Dual shortening levels are clearly marked for minimum and maximum shortening capacities.



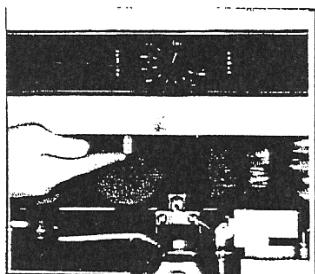
Lift-off basket hanger and insulated flue back splash is easily cleaned.



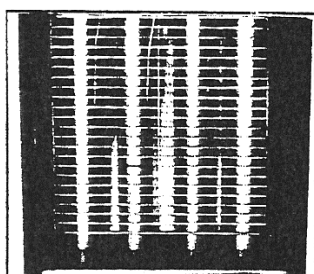
Recessed Lexan®-faced control panel protects controls from boil-over damage from accidental striking by carts, etc.



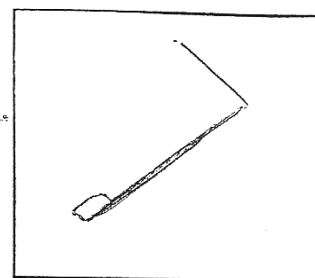
Thermostat can be easily calibrated by loosening set screw and turning knob to agree with oil thermometer.



Pilots are easily lit by depressing electronic spark ignitor.



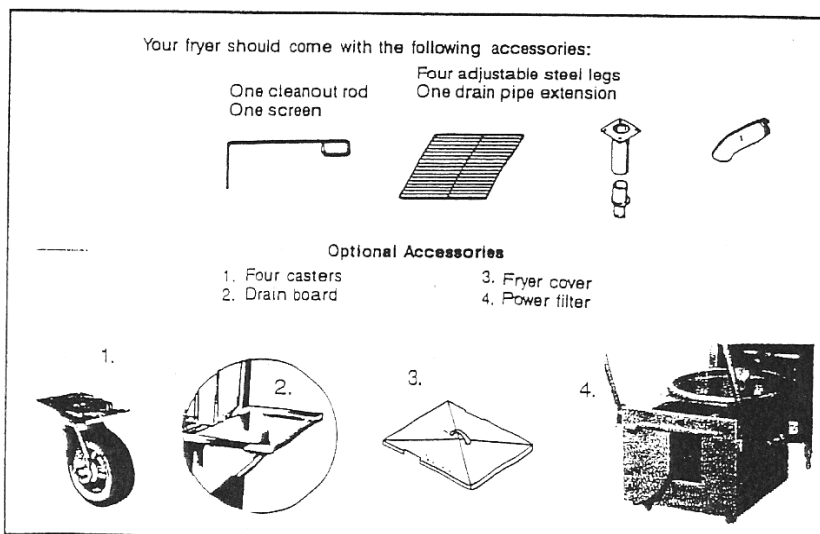
Nickle-plated basket support screen provided as standard accessory.



Handy drain rodder provided as standard accessory.

- Optional Shortening Melter. Not available on 18/20EG Model.
- Models 18/20D and 18/20E accept the optional Fri-tronic computers. Not available on 18/20EG Models.

- Optional Fil-tronic filtering system available on 18/20D and 18/20E.
- Units can be banked at no additional charge.
- Overall dimensions DO NOT change when adding automatic lifts, computers or filtering system.

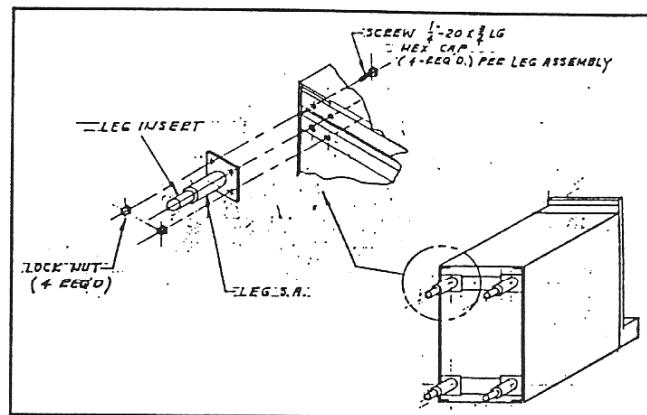


# INSTALLATION INSTRUCTIONS

THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE

## REMOVING THE CARTON

1. Check carton for exterior damage. If damage is noted, notify delivery carrier *immediately* and save all packing materials.
2. Carefully remove carton from unit. Also remove all loose pieces of packaging material and accessories.
3. Carefully lay fryer on its back and install legs or casters as shown on the diagram to the right:



NOTE: LEGS OR CASTERS SHOULD BE SECURELY TIGHTENED TO THE BOTTOM OF THE CABINET.

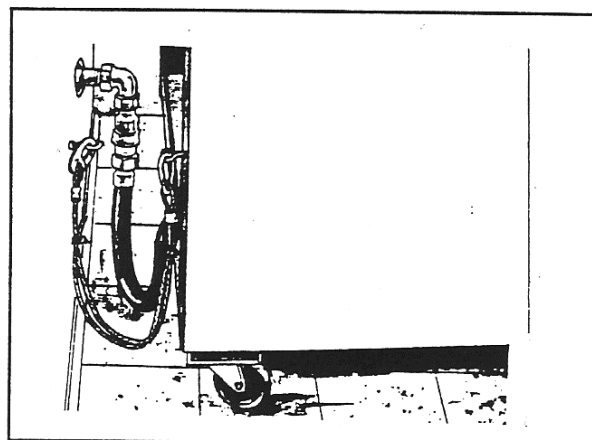
## THE FRYER CAN ONLY BE USED ON A NON-COMBUSTIBLE FLOOR

After placing the unit in the area in which it is to be installed, adjust the individual leg inserts so that the top of the kettle is level and the fryer rests on all four legs (unit does not rock.) NOTE: Be sure height adjustments are only made by turning the individual leg inserts. The legs should remain tight against the bottom of the unit.

## SPECIAL NOTE:

When your fryer is equipped with casters, the installation:

- 1) Shall be made with a connector that complies with the standard for connectors for movable gas appliances, ANSI Z21. 69-1979, and ADDENDA Z21. 69a-1983, and a quick-disconnect device that complies with the standard for quick disconnect devices for use with gas fuel, ANSI Z21. 41-1978, and ADDENDA Z21. 41a-1981 and Z21. 41b-1983 or latest edition.
- 2) Adequate means must be provided to limit the movement of the fryer without depending on the connector and the quick-disconnect device or its associated piping to limit the fryer movement.



## PIPING (ALL MODEL FRYERS)

ALL GAS PIPING SHOULD BE INSTALLED BY A QUALIFIED SERVICE PERSON.

The installation must conform with all local codes and with the natural fuel gas code, ANSI Z223.1-1984 or latest edition. Pipe size can be determined by referring to the "Supply Pipe Capacity Chart". The connection on the Anets fryer is 3/4" pipe. Each fryer should be connected separately and each should have its own shut-off valve. The gas supply available to each fryer at this point should be at least 6 inches of w.c. pressure for a natural gas fryer and at least 11 inches of w.c. pressure for an L.P. gas fryer. This pressure should be available when all other gas appliances and all gas-fired heating equipment is in operation.

### CAUTION

- The fryer and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.45 kPa).
- The fryer must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or greater than 1/2 psig (3.45 kPa).

### SUPPLY PIPE CAPACITY CHART

PIPE SIZE	TYPE OF GAS	CAPACITY - MBH			
		LENGTH OF PIPE			
		15	30	45	90
3/4	NATURAL	150	125	100	50
	PROPANE	300	250	200	150
1	NATURAL	300	250	200	150
	PROPANE	725	425	300	250
1 1/4	NATURAL	725	525	425	300
	PROPANE	2000+	1025	725	525

On initial start up, test for gas leaks up to the individual manual shut-off valve, never test for gas leaks with an open flame. Use soap suds to check all connections; this will avoid any possibility of fire or explosion.

If fryer is designed to use natural gas only, the fryer should not be modified to operate on liquefied petroleum or other gases. Unsafe operation could result. Consult your manufacturer if fryer requires modification.

### WARNING

ELECTRICAL GROUNDING INSTRUCTIONS (SEE INSIDE OF DOOR FOR WIRING DIAGRAM).

THIS APPLIANCE IS EQUIPPED WITH A THREE-PRONG (GROUNDING) PLUG FOR YOUR PROTECTION AGAINST SHOCK HAZARD, AND SHOULD BE PLUGGED DIRECTLY INTO A PROPERLY GROUNDED THREE-PRONGED RECEPTACLE. DO NOT CUT OR REMOVE THE GROUNDING PRONG FROM THIS PLUG.

### ELECTRICAL REQUIREMENTS

Model 18/20"EG requires no electrical connections.

Models 18/20"D and 18/20"E are equipped with a 3-prong (grounding) plug which is to be plugged into a compatible grounded 115 volt 60 hertz outlet. These fryers when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with The National Electrical Code, ANSI/NFPA No. 70-1984 or latest edition. If in doubt, contact a qualified electrical service person.

Refer to wiring diagram located inside of fryer door and/or to the wiring diagrams in the "Sequence of Operation" section.

### VENTILATION

The fryer must be adequately vented so as to conduct products of combustion to the outdoors. Compliance should be according to the ANSI/NFPA 96-1984 code or latest edition. It is just as important that there is an adequate amount of air for proper burner operation, but *also* for replacing all the air exhausted through the ventilation system.

### KETTLE PREPARATION AND INITIAL START UP

The fryer should never be fired (neither pilot flame nor main flame) unless it is filled at least to the normal cooking level with either water or shortening. Firing an empty kettle will cause permanent, irreparable damage and will void all warranties.

Before a new fryer can be put into service, it must be cleaned thoroughly to remove the factory installed finish protector. The following instructions combine the cleaning and initial start up procedure because to clean the kettle properly, it must be filled with water and heated.

1. Mount the drain valve extension (stored on the inside of the door) to the drain valve.
2. Place a bucket that can handle hot water under the drain valve extension.
3. Open the drain valve.
4. Carefully wipe the entire inside of the kettle with clean cloths to remove as much of the finish protector as possible.
5. Close the drain valve.
6. Fill the kettle with water no more than three inches from the top, and add to this one to two cups of soap powder, washing soda, or deep fat fryer kettle cleaner (trisodium phosphate). This mixture is to be heated.
7. With water in the kettle, proceed with initial start.

## **PROCEDURE FOR LIGHTING OR RELIGHTING**

The Gas Cock Dial has a dual function:

- A) Complete control of gas to pilot the main burner.
- B) When in pilot position, it is the reset mechanism for the automatic pilot.

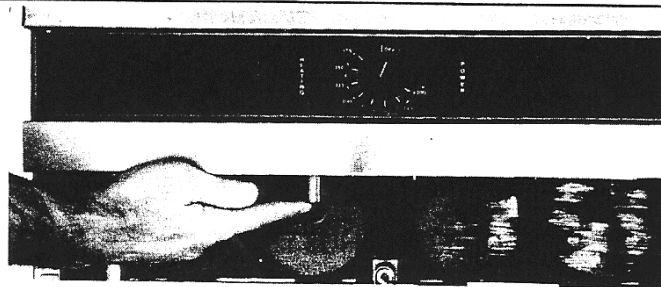
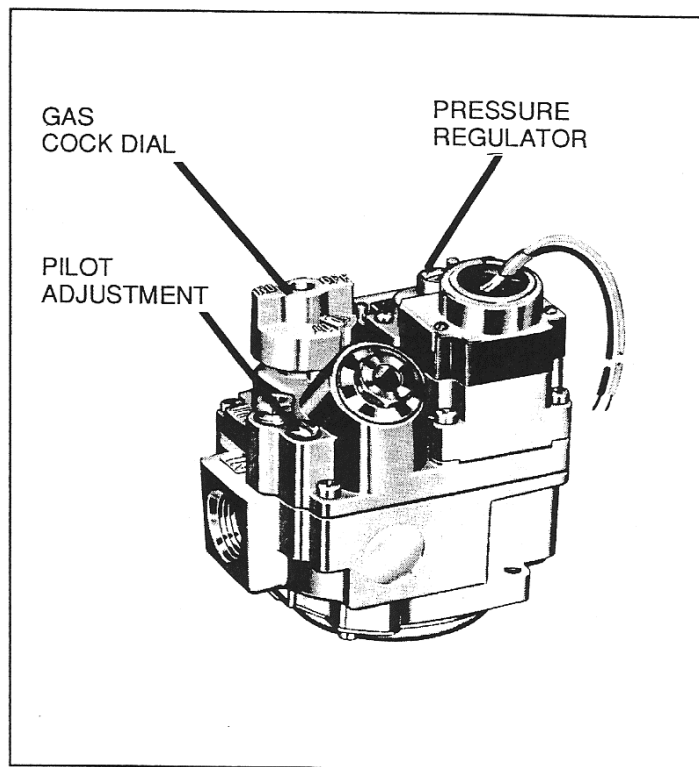
The Gas Cock Dial cannot be turned to "OFF" position without FIRST partially depressing dial in "PILOT" position while rotating to "OFF".

1. Turn fryer thermostat to "OFF" or lowest setting.
2. Partially depress and turn the valve Gas Cock Dial to "OFF" position.

(On initial start-up or lighting) open the manual shut-off valve.

3. Wait sufficient length of time to allow gas which may have accumulated in burner compartment to escape (at least 5 minutes).
4. Turn the valve Gas Cock Dial to the "PILOT" position.

5. Depress and hold Gas Cock Dial while lighting pilot burner. Allow pilot to burn approximately one-half minute before releasing Gas Cock Dial. If pilot does not remain lighted, repeat operation allowing longer period before releasing Gas Cock Dial. (See Note)
6. Turn Gas Cock Dial to "ON" position.
7. Set fryer thermostat to desired temperature position. Turn on power switch. The main burners will come on.



### **NOTE:**

The pilots are easily lit by depressing the electronic spark ignitor a few times. The spark lights a small flame which travels across the pilot runner tube establishing small pilot flames in front of each burner.

With the main burners in operation, the kettle cleaning can continue.

8. Set the thermostat under 212° so that the water will become hot enough to dissolve the powder, but not reach the boiling point.
9. With a cloth wrapped on a stick, swab those parts of the kettle not in contact with the soapy water.
10. Turn the fryer "OFF" by turning the thermostat to the "OFF" position.
11. Place the bucket that can handle hot water under the drain valve extension.
12. Open the drain valve slowly. THE WATER IS HOT!!! Drain the fryer and close the valve.
13. Rinse by immediately filling the fryer with fresh water to within 3" from the top and add 2 cups of vinegar to neutralize soap traces.
14. Turn the fryer "ON" and set the thermostat under 212° so that the water will get hot but not reach the boiling point.
15. With a clean cloth, swab the kettle again.
16. Turn both the thermostat and the Gas Cock Dial to the "OFF" positions. Place the bucket that can handle hot water under the drain valve extension and open the drain valve slowly. THE WATER IS HOT. Drain the fryer.
17. Dry out the kettle completely. Water left in the bottom of the kettle can present a hazard when later the fryer is filled with oil and is heated.
18. Close the drain.

## INSTRUCTIONS FOR SHUTTING DOWN FRYER

When closing for the evening, we recommend shutting the fryer down completely. Turn the thermostat dial and the master control switch to "OFF". Turn the gas cock dial to "PILOT". If the unit is to be shut down for an extended period, or if it is desired to turn off the pilot, depress the gas cock dial, turn to "OFF" and turn off the main gas cock. **PILOT MUST BE TURNED OFF IF FRY VAT IS EMPTY!**

## WARNING

Unless your fryer is equipped with an optional shortening melter, liquid shortening must be used. Failure to do so will cause scorching, discoloration and permanent damage to kettle.

### NOTE:

100 lbs. of solid shortening is equal to approximately 13 gal. of liquid shortening.  
120 lbs. of solid shortening is equal to approximately 15 1/2 gal. of liquid shortening.

Fill with shortening:

1. Make sure that the drain valve is closed.
2. Fill the kettle to the correct level with LIQUID SHORTENING.
3. When using SOLID SHORTENING with a fryer equipped with the optional shortening melter, first remove the basket support rack that is sitting on top of the heat exchanger tubes and thoroughly pack the solid shortening into the pot.
4. Light the pilot (refer to the Initial Start Up and Adjustment Procedure for Lighting or Relighting.)

### NOTE:

When equipped with the ANETS automatic shortening melter, turn the master control switch to "MELT". Melting the shortening will take approximately 45 minutes when using a new cube of shortening. **DO NOT** turn the switch to the "ON" position until the 50 lb. cube is completely melted. Carefully replace the basket support rack, **THE OIL IS HOT.**

5. Set the fryer thermostat to the desired cooking temperature (on models 18/20"D, 18/20"E and those equipped with the Anets automatic melt timer, also turn on the Power Switch) and allow the fryer to cycle On and Off 5 or 6 times to insure that the shortening has reached a uniform temperature.

## OPERATING INSTRUCTIONS

Your fryer is now ready for operation. Follow Standard Deep Fat Frying Procedures. Never try to force-fry your product by upping the temperature on the thermostat. This will only result in an inferior product and rapid shortening breakdown.

PURCHASER; PLEASE REMEMBER TO POST, IN A PROMINENT LOCATION instructions to be followed in the event the user smells gas. This information can be obtained by consulting the local gas supplier.

### FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

### PROCEDURE FOR LIGHTING OR RELIGHTING

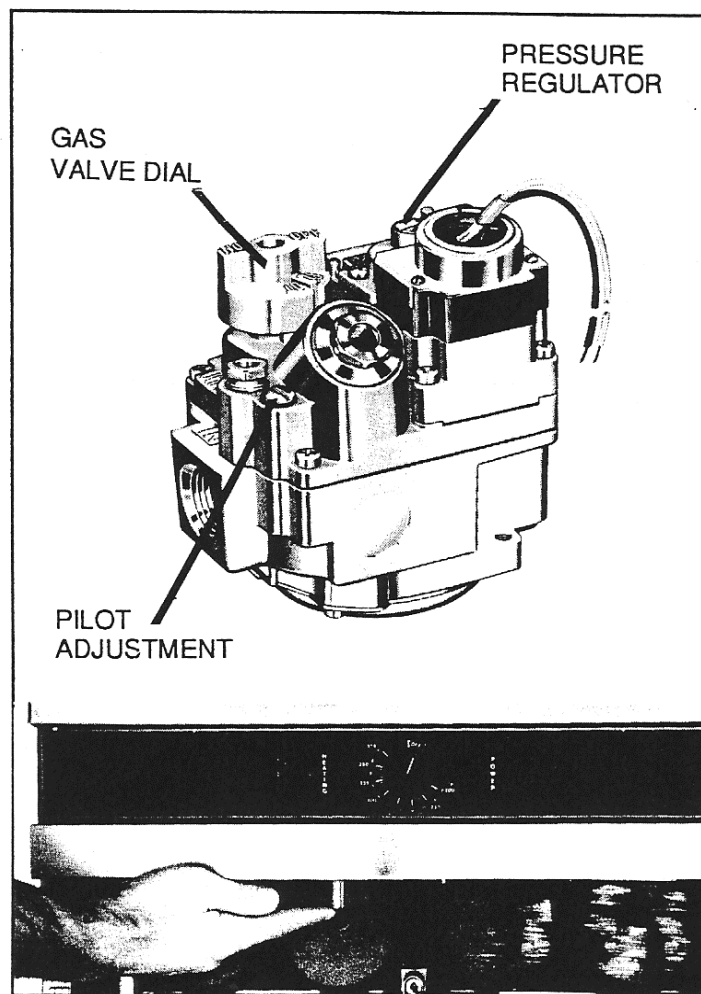
The Gas Cock Dial has a dual function:

- A) Complete control of gas to pilot and main burner.
- B) When in pilot position, it is the reset mechanism for the automatic pilot.

The Gas Cock Dial cannot be turned to "OFF" position without FIRST partially depressing dial in "PILOT" position while rotating to "OFF".

1. Turn fryer thermostat to "OFF" or lowest setting.
2. Partially depress and turn Gas cock dial to "OFF" position.
3. Wait sufficient length of time to allow gas which may have accumulated in burner compartment to escape (at least 5 minutes).
4. Turn Gas Cock Dial to the "PILOT" position.

5. Depress and hold Gas Cock Dial while lighting pilot burner. Allow pilot to burn approximately one-half minute before releasing Gas Cock Dial. If pilot does not remain lighted, repeat operation, allowing longer period before releasing Gas Cock Dial. (See Note)
6. Turn Gas Cock Dial to "ON" position.
7. Set fryer thermostat to desired temperature position. The main burners will come on.



### NOTE:

The pilots are easily lit by depressing the electronic spark ignitor a few times. The spark lights a small flame that travels across the pilot runner tube establishing small pilot flames in front of each burner.

## **INSTRUCTIONS FOR SHUTTING DOWN FRYER**

When closing for the evening, we recommend shutting the fryer completely down. Turn the thermostat dial and the master control switch to "OFF". Turn the safety valve dial to "PILOT". If the unit is to be shut down for an extended period, or if it is desired to turn off the pilot, depress the safety valve dial, turn to "OFF" and turn off the main gas cock. **PILOT MUST BE TURNED OFF IF FRY VAT IS EMPTY!**

### **WARNING**

#### **ELECTRICAL GROUNDING INSTRUCTIONS**

This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard, and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

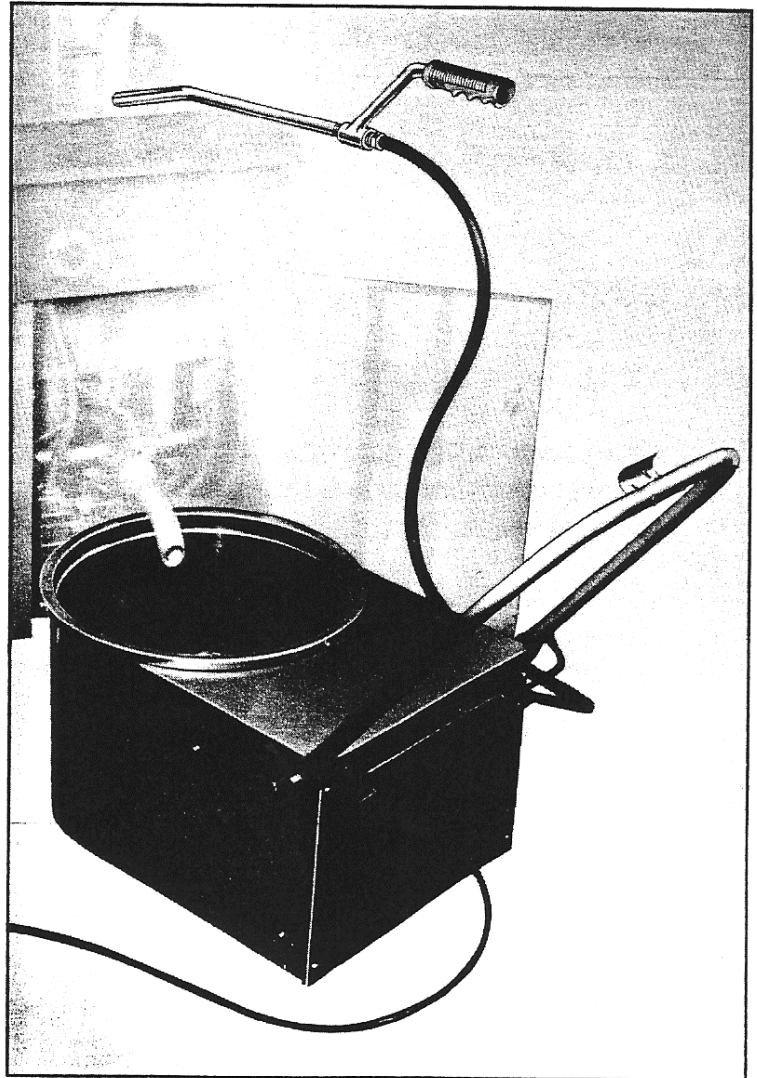
Keep the appliance area free of debris. The area the unit is installed into should have provisions for an adequate air supply for proper burner operation, and the flow of combustion and ventilation air must not be obstructed. The area directly in front of the unit must be kept open so that the unit can be serviced, and so the burners will be able to draw enough air for proper operation.

- *Contact the factory (parts department), the factory representative or a local service company to perform maintenance and repairs.*

## **DAILY CLEANING INSTRUCTIONS**

Clean this appliance regularly. This is especially important when breaded items are being fried.

1. With shortening at liquid stage, totally shut down fryer by following instructions specified above.
2. After placing drain extension to drain valve, place either the Anets Power Filter or a steel drain container with filter cone directly underneath the drain valve.
3. Slowly open ball valve and drain.
4. Insert cleanout rod into cold zone and rod through to loosen any clogged particles into drain valve area.
5. Flush warm shortening through pot until all sediment is removed. Drain all fat from kettle, and wipe inside of kettle with a cloth to remove excess grease and foreign particles. Be careful, pot still may be hot!
6. Close valve and remove drain extension.
7. Refill fryer with filtered shortening which has reached the breakdown point. Be sure to strain and filter the shortening to prolong its life.
8. Your fryer is now ready for next day's use. Follow lighting instructions when starting fryer.



## PILOT AND BURNER ADJUSTMENT

Neither the pilot nor main flame should require adjustment as the fryers are fire tested and adjusted at the factory. If necessary, however, field adjustment may be accomplished as follows:

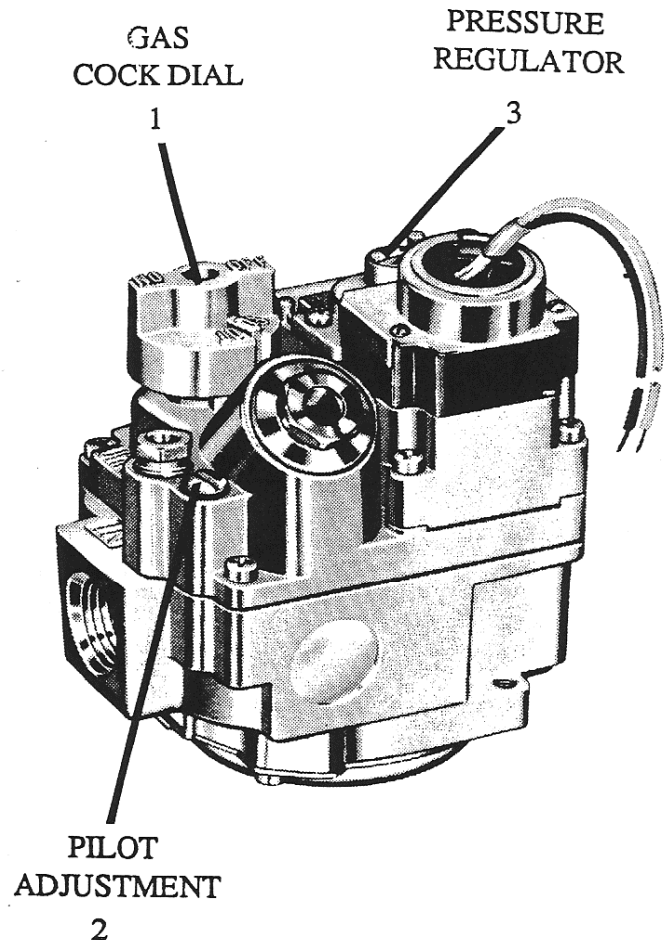
### PILOT BURNER ADJUSTMENT

1. Turn the gas cock dial (1) to the "PILOT" position.
2. Remove the pilot adjustment cap. (2)
3. Adjust the pilot screw until the flame on the runner tube is stable and does not lift. This screw is not a regulator but simply a needle valve. Turning the screw in or clockwise reduces the pilot gas, and screwing out or counter-clockwise will increase the pilot gas.
4. Replace the pilot adjustment cap (3) and make sure it seats properly.
5. The pilot runner tube orifices are #55 for natural gas and #72 for LP gas.

### MAIN BURNER ADJUSTMENT

The model 18 and 20 fryer is fired by four burners, each having its own orifice (number 34). The input is determined by the orifice size and the gas pressure (3 1/2 inches w.c.) in the manifold. A test plug (hole tapped 1/8 NPT and plugged) is provided on the front left side of the burner manifold. Pressure readings taken here are called manifold pressure (M.P.).

1. Connect a manometer to the test plug location.
2. Remove the regulator adjustment screw cap (3).
3. Turn the gas cock dial (1) to the "ON" position.
4. Set the thermostat to 340° and turn the switch to ON if so equipped. The main burners will come on. While they are firing, adjust the regulator so that it reads 3 1/2 inches w.c. for natural gas and 10 inches w.c. for L.P. gas. To adjust the regulator, rotate the adjustment screw clockwise to increase and counterclockwise to decrease the gas pressure.
5. Replace the regulator adjustment screw cap (3).



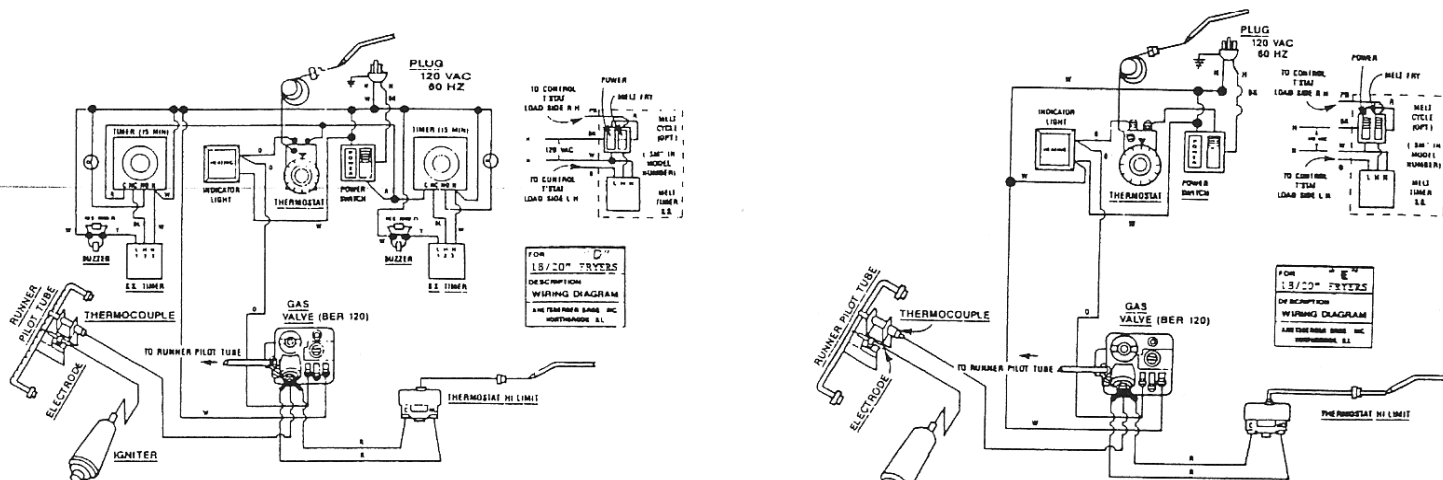
## SEQUENCE OF OPERATION

### For Models 18/20" DE Fryers

1. Turn the power switch to the "OFF" position and set the thermostat to the "OFF" position.
2. Turn the gas cock dial to the "PILOT" position.
3. Hold the dial down and push the ignitor button a few times until the runner tube and pilots light.  
NOTE: On initial fryer hookup the air must be purged from the pilot lines until gas is present. Bleeding air out of the line can take as long as 5 minutes.
4. After half a minute or so, release the gas cock dial and turn it to the "ON" position. The pilot should remain burning; if it goes out, repeat steps 2, 3 and 4 until the pilot continues to burn after the dial is turned to the "ON" position.
5. The safety magnet portion of the valve is being held in by the electrical circuit generated by the pilot flame heating the thermocouple. If the pilot flame goes out or gets too small, or if the "HIGH LIMIT" switch opens because the oil temperature is too high, the safety magnet portion of the valve will shut off both the pilot gas and main gas supply.
6. With the gas cock dial in the "ON" position, turn the thermostat dial to the proper cooking temperature and push the power switch to "ON". The drawings below illustrate the 18E circuitry; power travels from the "H" or hot side of the power cord through the switch (the switch is in the "ON" position), and through the thermostat (the thermostat is in the "ON" position), supplying both the "HEATING" light and the main gas valve. THE MAIN BURNERS WILL COME ON.
7. The burners will continue to fire until the circuit is broken. Routinely, this happens when the thermostat is satisfied (the thermostat set point is reached). The burners will also turn off if the power switch is turned to "OFF", the power cord is unplugged, there is a power failure, the "HIGH LIMIT" control is activated, or the gas cock dial is turned to either "PILOT" or "OFF" positions.

#### CAUTION NOTE:

If there is a power failure, the main burner flames will go out. When power is restored, however, the main burners will come back on. To prevent this, in the event of power failure, turn the power switch "OFF".



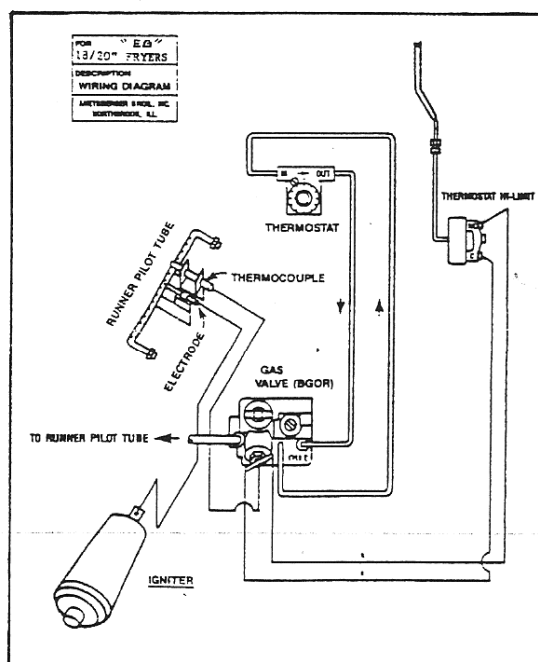
# GAS OPERATED CONTROL SYSTEM

## For Models 18/20" EG Fryers

### Sequence of Operation

(Refer To Drawing 7A)

1. With the thermostat set in the "OFF" position, turn the gas cock dial to the "PILOT" position.
2. Hold the dial down and push the ignitor button a few times until the runner tube and pilots light.
3. After half a minute or so, release the gas cock dial and turn it to the "ON" position.  
NOTE: On initial fryer hookup the air must be purged from the pilot lines until gas is present. Bleeding air out of the line can take as long as 5 minutes.
4. The safety magnet portion of the valve is being held in by the electrical circuit generated by the pilot flame heating the thermocouple. If the pilot flame goes out or gets too small, or if the "HIGH LIMIT" switch opens because the oil temperature is too high, the safety magnet portion of the valve will shut off not only the pilot gas, but also the main gas supply.
5. When the gas cock dial is turned to the "ON" position, the gas pressure in the system pressurizes the top of the valve diaphragm holding the valve in the closed position.
6. When the thermostat set point is raised, this gas pressure over the diaphragm is vented through the thermostat and tubing, the diaphragm raises and opens the main gas valve.
7. When the set point of the thermostat is reached, the thermostat closes, stopping the vent action. The gas pressure above the diaphragm builds instantly and closes the valve.



DRAWING 7A



**ANETS FRYER MODELS**  
**MX14E, MX14-2E, MX7E, MX14AA, MX14-2AA, MX7A**  
**18E, 18AA, 20E, GPC14, GPC14A, GPC18, GPC18AA**

**INSTALLATION, USER OPERATION  
& MAINTENANCE MANUAL ADDENDUM**

**REVISION:** 1. Change from a Thermocouple operating system to a Thermopile system  
2. Elimination of Dual Pilot

**EFFECTIVE DATE:** August 2003 (Serial Number 50313)

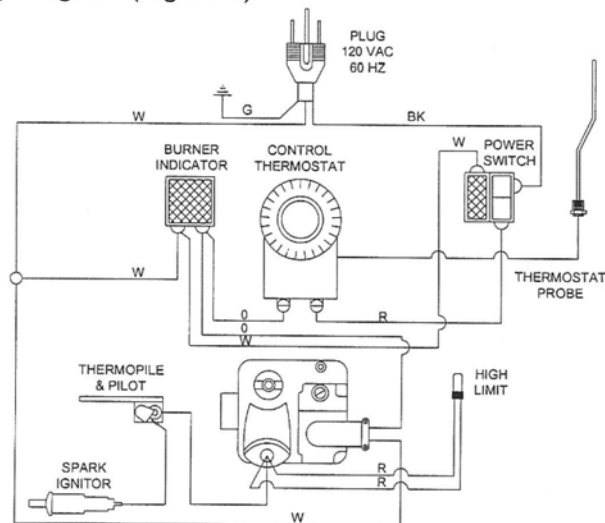
**PARTS LIST CHANGES:**

Gas Valve to P8905-37 from P8903-40

Thermopile from P8905-38 from thermocouple P8903-48

**MANUAL CHANGES:**

Page 5: New Wiring Diagram (Figure 1)



**TROUBLESHOOTING GUIDE**

**PROBLEM** – Pilot flame does not stay lighted.

**CAUSE** – Improper **thermopile** output voltage (must be at least **180** millivolts, measured at the **thermopile** junction).

**REMEDY** – Replace the **thermopile**.

Oct. 1, 2003



*The Anets GoldenLine<sup>SM</sup>*

*Quality Equipment For the Restaurant, Supermarket, and Bakery Industries*



# TROUBLE SHOOTING GUIDE

ALL WORK TO BE DONE BY A QUALIFIED SERVICE MAN

PROBLEM	CAUSE	MODELS	REMEDY
Main burners will not ignite.	1. No electrical power.	18/20D 18/20E	1. Check fuses or circuit breakers; check power cord.
Pilots must be burning for the main burner to fire.	2. Switch is in "OFF" position.	18/20D 18/20E	2. Turn switch to "ON".
	3. Defective switch.	All	3. Replace switch.
	4. Gas cock dial is on "OFF" or "PILOT" position.	All	4. Turn dial to "ON" position.
	5. Thermostat is set to low or in the "OFF" position.	All	5. Adjust thermostat to a higher setting.
	6A. Defective thermostat CAUTION: LINE VOLTAGE To check: Jump across the thermostat terminals. If burners light, the thermostat is no good.	18/20D 18/20E	6A. Replace thermostat.
	6B. Defective GS thermostat To check: Loosen the thermostat control tube connected to the "OUT" control port of the main valve. Bleed off some gas. If the valve opens, the thermostat is no good.	18/20EG	6B. Replace thermostat.
	7. Defective main valve To check: Loosen the control tube connected to the "OUT" control port of the main valve. Bleed off some gas. If the main valve does not open, it is no good.	18/20EG	7. Replace the main valve.
	8. Defective main valve. If the pilot is on and voltage across the terminals reads 120 volts, the main valve should be open.	18/20D 18/20E	8. Replace the main valve.

PROBLEM	CAUSE	MODELS	REMEDY
<p>Main burners will not shut off.</p> <p>To manually shut the burners off, turn the gas cock dial to the "PILOT" or "OFF" position.</p>	1. Shortening level could be too low. If the level is below the thermostat and/or hi-limit sensing bulbs, they cannot respond to the shortening temperature.	All	1. Add enough shortening so it is at the correct level.
	2. Defective main gas valve. If there is no voltage across the terminals, the valve should be closed.	18/20D 18/20E	2. Replace the main valve.
	3. Defective main gas valves. Turn the gas cock dial to the "PILOT" position. Remove the "OUT" control tube and seal the "OUT CONTROL PORT" with your finger. Turn the gas cock dial to the "ON" position. If the valve opens, it is defective.	18/20EG	3. Replace the valve.
	4. Loose connection of either fitting on the "OUT" control tubing.	18/20EG	4. Tighten the fittings.
	5. "OUT" control tubing broken. Check by turning the gas cock dial to the "PILOT" position. Remove the "OUT" control tubing and fitting from the main valve. Cover the "OUT" opening in the valve with your finger. Turn the gas cock dial to the "ON" position. If the valve stays closed, the tubing is defective and/or leaking or the thermostat is faulty.	18/20EG	5. Replace tubing.

PROBLEM	CAUSE	MODELS	REMEDY
	<p>6A. Defective thermostat. Check by turning the dial to the "OFF" position. The main valve should close. If it does not, the thermostat is defective.</p> <p>6B. Defective thermostat. Turn the power to the fryer off. Check by removing a wire from one of the terminals. Restore the power. The main valve should remain closed. If not, the thermostat is defective. <u>Use caution. The wires are line voltage.</u></p>	<p>18/20EG</p> <p>18/20D 18/20E</p>	<p>6A. Replace the thermostat.</p> <p>6B. Replace the thermostat.</p>
Main burners will not shut off and kettle overheats with shortening temperature exceeding 440°F.	1. Any of the above and combined with a defective high limit control.	All	1. Replace the malfunctioning parts and the hi-limit control.
Pilot will not remain lit.	<p>1. Low gas pressure.</p> <p>2. The millivolt signal to the main valve is too low. Thermocouples must generate a minimum of 7-10 millivolts and thermopiles must generate a minimum of 100 millivolts in order to hold the magnetic operator in.</p> <p>3. Defective main valve.</p> <p>4. Defective magnetic operator portion of the main valve. To test: If the millivolt signal generated is adequate, it should hold the operator in and the pilot should remain lit.</p> <p>5. High Limit is faulty.</p> <p>6. Oil temperature has exceeded the high limit control setting &amp; the high limit circuit has opened.</p>	<p>All</p> <p>All</p> <p>All</p> <p>All</p> <p>All</p> <p>All</p>	<p>1. Call service agency or the Gas Company.</p> <p>2. Replace the thermocouple or thermopile.</p> <p>3. Replace valve.</p> <p>5. Replace the control.</p> <p>6. Correct the overheating problem. Allow the oil to cool.</p>

PROBLEM	CAUSE	MODELS	REMEDY
Piezoelectric ignitor will not light the pilot.	<ol style="list-style-type: none"> <li>1. Points on ignitor are out of position.</li> <li>2. Air in pilot lines.</li> <li>3. Wire is loose on ignitor or electrode assembly.</li> <li>4. Ignitor does not generate spark.</li> </ol>	All	<ol style="list-style-type: none"> <li>1. Electrode should be positioned within 3/16" of the runner tube surface.</li> <li>2. Purge.</li> <li>3. Reconnect wire.</li> <li>4. Replace the ignitor.</li> </ol>

**EQUIPPED WITH OPTIONAL ANETS AUTOMATIC MELT TIMER**

Fryer does not go into melt cycle.	<ol style="list-style-type: none"> <li>1. Defective controller.</li> <li>2. Defective sensing probe.</li> </ol>	CALL SERVICE AGENCY
Fryer does not come out of melt cycle.	<ol style="list-style-type: none"> <li>1. Defective controller.</li> <li>2. Defective sensing probe.</li> <li>3. Defective sensing probe.</li> </ol>	

In the event of problems with or questions about your order, please contact the Anets factory at:  
(603)-225-6684 World Wide  
Website Address: [www.anets.com](http://www.anets.com)

In the event of problems with or questions about your equipment, please contact the Anets Authorized Service and Parts representative (ASAP) covering your area, or contact Anets at the number listed to the left.

MAILING ADDRESS – P.O. BOX 501, CONCORD, NH 03302-0501  
SHIPPING ADDRESS – 10 FERRY STREET, CONCORD, NH 03301