



IMPORTANT FOR FUTURE REFERENCE

Please complete this information and retain this manual for the life of the equipment:

Model #: _____

Serial #: _____

Date Purchased: _____

ENGLISH

Installation and Operation Manual Covering MX14 and 14GS Series



THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE

WARNING! FIRE HAZARD

The shortening/oil level should not fall below the minimum indicated level at any time. The use of old shortening/oil can be dangerous as it will have a reduced flashpoint and be more prone to surge boiling.

WARNING

Installation and all connections must be made in accordance with National and Local regulations and codes in force.

NOTICE

This appliance is intended for professional use, and as such, should be operated only by fully trained competent personnel.

NOTICE

Installation of this appliance should only be performed by a competent service technician. The model, serial number and technical requirements of this appliance are on the data plate, located on the inside panel of the door.

WARNING

Shortening/oil, when it is at operating temperatures, is very hot and dangerous! Use extreme caution when handling! Use proper protective gear, such as insulated gloves, aprons, face shield and sleeves when handling hot shortening/oil. DO NOT attempt to move a machine that contains hot shortening/oil. Allow the oil to cool to room temperature or drain the shortening/oil into a suitable container before moving the appliance.

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

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

WARNING

This appliance is NOT Jet Stream approved. Do not clean the appliance with a water jet.

NOTICE

This appliance must be restrained in a manner that prevents strain from being transmitted to the gas supply line.

NOTICE

It is recommended that this appliance be inspected by a qualified technician on a yearly basis.

WARNING

This appliance **MUST** be installed with the legs (or casters) supplied by the manufacturer.

WARNING

This appliance must only be operated in a properly ventilated area. Have the ventilation hood inspected by a professional for proper operation before installing this appliance.

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INSTALLATION

CHECKING YOUR NEW ANETS APPLIANCE

Your new Anets appliance has been carefully packed into one crate. Every effort has been made to ensure that it is delivered to you in perfect condition. As you unpack your new appliance, inspect each of the pieces for damage. If something is damaged, DO NOT sign the bill of lading. Contact the shipper immediately; the shipper is only responsible for 15 days after delivery. Check the packing list enclosed with your appliance to ensure that you have received all the parts to the appliance. If you are missing any parts, contact the dealer from whom the appliance was purchased. As you unpack the appliance and its accessories be careful to keep the weight of the appliance evenly distributed.

Locate your Anets model number, serial number of the appliance and the date of purchase and write them on the cover of this manual for future reference. You will find the model number and serial number on the data plate located inside the door.

CAUTION

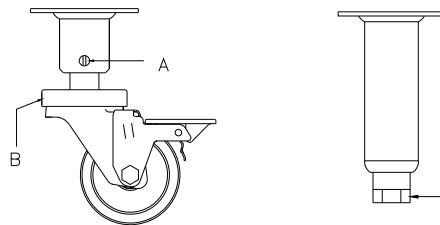
To prevent equipment damage and/or personal injury, do not tilt the appliance onto any two of its casters or legs, or pull the appliance by the splash back.

ASSEMBLY

When you receive your appliance it is completely assembled with the possible exception of the legs (or casters).

Leg/Caster Installation and Leveling

This appliance must be installed with legs or casters; it can not be curb mounted. Curb mounting may seriously inhibit this appliance's ability to operate properly.



WARNING

This appliance must be installed with the legs or casters provided by the manufacturer.

WARNING

Do not install legs or casters, or perform leveling procedure when unit is in operation or fry tank is full. Serious injury could result.

Required tools: 7/16 " wrench and socket and a large pair of pliers (water pump or plumber's pliers work best). If the appliance is equipped with electrical controls or options the legs/casters must be installed before connecting the appliance to the electrical supply. The legs provide the necessary height to meet sanitation requirements and assure adequate air supply for component cooling. Use the following procedure:

- a. Lay the appliance on its back, being careful not to damage the splashback area by pulling on it. Protect the outside of the appliance with cardboard or a drop cloth when laying it down.
- b. Attach each leg/caster with the hex head screws and nuts supplied. Each leg/caster requires four ¼-20 x 5/8" hex head screws and nuts. Insure that all screws are tight.
- c. Mount the screws from the inside of the appliance with the nut on the outside (bottom) of the appliance. The nuts have lock washers attached to them, therefore it is not necessary to use lock washers.
- d. When all four legs/casters are securely mounted, stand the unit up, being careful not to put too much weight on any one leg. Adjust the height and level the appliance by adjusting the leveling devices (B) with pliers. On casters, loosen 2 screws (A) before leveling, then retighten.

INSTALLATION

If you have completed the above steps that are applicable to the appliance you purchased, the appliance is now ready to be installed. Although it may be possible for you to install and set up your new appliance, it is **STRONGLY** recommended that you have this done by qualified professionals. A qualified professional will ensure that the installation is safe and meets local building and fire codes.

Gastechanical Information and Specifications (UK only)

Model	Fuel Type	Gas	Appliance Category	Gross Input (kW)	Net Input (kW)	Supply Pressure (mbar)	Burner Pressure (mbar)	Burner Orifice	Pilot Orifice Code	Governor	Nominal Gas Rate (m ³ /hr)
MX14	NAT	G20	I _{2H}	29.0	26.1	20	9.0	1.15 mm	N22	Yes	2.8
	LP	G31	I _{3P}	29.0	27.0	50/37	25.4	0.70 mm	LP16	Yes	1.1
14GS	NAT	G20	I _{2H}	29.0	26.1	20	10.0	1.15 mm	N22	Yes	2.8
	LP	G31	I _{3P}	29.0	27.0	50/37	25.4	0.70 mm	LP16	Yes	1.1

Installation Clearances

The clearances shown below are for combustible and non-combustible installations and will allow for safe and proper operation of your appliance.

	Combustible Construction	Non-Combustible Construction
Back	15 cm	0
Sides	15 cm	0
Floor *	(12 cm)	(12 cm)

* For use only on non-combustible floors.

In addition to the above clearances there must also be at least 71 cm of aisle space in front of the appliance and a minimum of 45.7 cm of open space between the flue opening and the intake of the exhaust hood.

Electrical Connection (if applicable)

Your Anets appliance is manufactured to operate on a particular electrical supply. **DO NOT** attempt to connect the appliance to an electrical supply other than that indicated on the data plate. The electrical connection used by this appliance must comply with local or national codes. The appliance must be grounded in accordance with local or national codes.

Ventilation and Fire Safety Systems

Your new appliance must have proper ventilation to function safely and properly. It is very important to install a fire safety system. Your ventilation system should be designed to allow for easy cleaning. Frequent cleaning and proper maintenance of the ventilation system and the appliance will reduce the chances of fire.

It is essential that the appliance be operated only when adequate ventilation is provided. Your ventilation hood should be properly maintained. A qualified installation professional should ensure that the hood is operating properly in conjunction with the appliance. Inadequate ventilation may not properly evacuate all appliance emissions.

Initial Cleaning

When your appliance is shipped, many of its parts are covered with a thin coat of oil for protection. Before the appliance is ready for cooking it must be cleaned. This will remove the oil coating and any foreign matter that may have accumulated during storage and shipment. Refer to the following procedure to clean the appliance.

INSTALLATION

- a. Fill the tank with water. Turn the appliance on and set the thermostat to 200°F (93°C) Refer to the APPLIANCE START UP section of this manual for instructions.
- b. Allow the appliance to heat for 15 minutes. Add Anets cleaner to the water, stirring with the cleaning brush to ensure that the cleaner dissolves thoroughly.

CAUTION

DO NOT leave the appliance unattended during cleaning. Never let the water level go below the “Oil Level” mark stamped on the tank.

- c. Using the cleaning brush, scrub the inside of the tank to remove the protective coating.
- d. When cleaning is complete turn the appliance off and drain the water into a container suitable for hot water and dispose of it.

WARNING

Wear protective gloves and clothing when cleaning and draining the appliance and when disposing of water. The water is extremely hot and can cause severe injuries.

- e. When the tank has cooled, rinse thoroughly with cool water. Continue to rinse the tank until the cleaner has been completely and thoroughly rinsed from the tank.
- f. Using a clean dry cloth, wipe out all of the water. Be very thorough when removing the water, as any residual water will cause hot shortening/oil to splatter out of the appliance.

FILLING THE TANK WITH SHORTENING OR OIL

Both liquid and solid shortening/oil can be used in this appliance, but liquid is preferred. If solid shortening/oil is used it is recommended that you melt the shortening/oil before adding it to the appliance. You can melt solid shortening/oil in the appliance, but you must be very careful not to scorch the shortening/oil.

Filling the tank with liquid shortening/oil

To fill the tank with liquid shortening/oil refer to the following procedure:

- a. Ensure that the drain valve is completely closed and that there is no residual moisture in the tank.
- b. Fill the tank with shortening/oil. You may fill the tank to the “OIL LEVEL” mark or slightly below the nominal level mark: the shortening/oil will expand slightly when it heats up, raising the level slightly.

Filling the tank with solid shortening/oil

To fill the tank with solid shortening/oil, refer to the following procedure:

WARNING

NEVER melt blocks of solid shortening/oil on top of the basket screen. This will cause a fire and could result in personal injury.

- a. Ensure that drain valve is completely closed and that there is no residual moisture in tank. Remove the basket screen.
- b. Cut the solid shortening/oil into cubes no larger than one inch. ALWAYS pack the shortening/oil firmly and solidly into the fry tank. **DO NOT** leave any large air gaps. Use care when packing the solid shortening/oil into the tank. **DO NOT** bend or break the temperature or high limit sensor probes. If these are damaged the appliance will not function properly.

- c. Once the appliance tank is firmly packed with shortening/oil, the shortening/oil must be melted. Melt the shortening/oil by cycling the burners on for 4 seconds and off for 30 seconds repeatedly, using the thermostat knob.

OPERATING INSTRUCTIONS

To ensure the quality of the food you cook in this appliance, follow the preparation instructions from the food manufacturer. Using the best shortening/oil makes the best fried foods. The best shortening/oil will last longer than lower grade shortening/oil and save you money. When not in use, the shortening/oil should be cooled and covered to prevent contamination. A maximum load of 1.5 lbs. (0.7 kg) per basket is recommended. Exceeding this recommendation may affect food quality and could cause surge boiling.

WARNING

This appliance must be installed using restraining devices to prevent accidental tipping or movement. DO NOT attempt to move the appliance when it is in use or has hot liquid in it. Splashing hot liquids can cause severe burns.

WARNING

Water and shortening/oil DO NOT mix. Keep liquids away from hot shortening/oil. Dropping liquid or frozen foods into the hot shortening/oil will cause violent boiling.

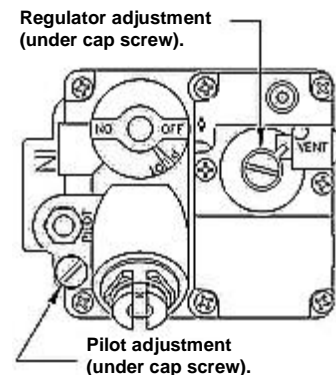
Appliance Start-Up

WARNING

DO NOT start the appliance without filling the tank with shortening/oil first!

For models with Gas thermostat refer to the following instructions:

- a. Ensure that tank is full and ventilation hood is on. The thermostat should be in the 'OFF' position.
- b. Turn the knob on the gas valve to the 'PILOT' position. Press and hold knob.
- c. While keeping the knob on the gas valve depressed, press and hold the ignitor button. This will spark repeatedly at the pilot. The pilot will ignite once adequate gas flow has been established.
- d. Keep the knob on the gas valve pressed for approximately 30 seconds or until the pilot remains lit without the knob being pressed.
- e. Once the pilot flame has been established, turn the knob on the gas valve to the 'ON' position.
- f. You may now use the thermostat to operate the appliance.



Appliance Shut-down

For models with Gas thermostat refer to the following instructions:

- a. Turn the temperature control knob (thermostat) to the OFF position.
- b. Turn the knob on the gas valve to the 'OFF' position.

WARNING

Never leave the appliance unattended when it is in operation. Shut the appliance down completely overnight or during long periods when it will not be used.

CLEANING AND MAINTENANCE

DAILY CLEANING

Your appliance should be cleaned every day to maintain peak performance, proper sanitation and appearance. Perform the following procedures daily.

- a. Wipe up any shortening/oil that spills onto the exterior of the appliance. This should be done with a clean soft cloth while the shortening/oil is still warm. **DO NOT** spray or pressure wash the appliance!
- b. Use warm water with a mild detergent to clean surfaces. Be careful not to get water into the shortening/oil and be sure to completely remove any detergent from the fry tank.
- c. Use a non-abrasive scouring powder or pad to clean stains if necessary.

WARNING

Hot shortening/oil and water, if mixed react violently. Ensure that your filter pan and components are thoroughly and completely dry before attempting to filter.

WEEKLY CLEANING

The appliance should be thoroughly cleaned AT LEAST once a week. This should include a thorough wipe down of the entire appliance with a rag and mild detergent. **DO NOT** spray or pressure wash the appliance!

Boil Out Procedure

The appliance should be boiled out AT LEAST once a week to remove food debris and shortening/oil build up. You will need a container large enough to hold 1 ½ times the shortening/oil in the tank. Refer to the following procedure for weekly boil out.

WARNING

Completely shut the appliance down when the shortening/oil is being drained and replaced with water. This will prevent the burners from energizing while the tank is empty.

WARNING

At operating temperatures, the shortening/oil in the appliance is VERY HOT and can cause severe burns. Do not let the hot shortening/oil touch your skin or clothing. ALWAYS wear insulated, shortening/oil proof gloves, protective clothing and eyewear when working on a hot appliance.

For models with Gas thermostat refer to the following instructions:

- a. Drain the shortening/oil from the appliance and discard or save for reuse. Remove the basket screen. Close the drain valve and fill the tank with warm water and non-caustic detergent. For best results, use Anets Cleaner. A sample packet is included with your new appliance.
- b. Restart the appliance as described in this manual and set the thermostat to 200°F (93°C). Bring the water to a slow boil. **DO NOT** allow the water to boil excessively as this will cause excessive foaming and boil over.
- c. Allow the appliance to soak for 20 minutes to soften shortening/oil deposits. Use the cleaning brush to scrub and remove any residue from the tank walls and foam zone.
- d. When finished drain the water and wipe the tank dry with a soft clean cloth.
- e. Ensure that the drain valve is closed and replace the basket screen.
- f. You may now refill the tank with shortening /oil per the filling instructions in this manual.

Thermostat Calibration Check

NOTICE

Thermostat calibration requires that the temperature of the appliance be raised above boiling. If you have water in the tank you will need to drain it, dry it and fill it with shortening/oil. Follow the filling instructions in this manual.

To check the calibration of your appliance, refer to the following procedure.

- a. Remove the basket screen from the tank.
- b. Place the tip of a digital thermometer probe into the shortening/oil approximately one inch above the temperature sensor.
- c. Perform the appliance startup as described in this manual, set the thermostat to 325°F (163 °C) and allow the shortening/oil to come up to temperature. Watch the thermometer closely as the temperature rises.
- d. If the shortening/oil temperature reaches 350°F (177 °C) and the burners do not turn off, turn the thermostat down. Keep lowering the thermostat setting until the burners turn off.

CAUTION

If the burners do not shut off at the LOWEST thermostat setting, the thermostat may be defective. Contact your local service company.

- e. Let the appliance cycle 4 to 6 times before checking the temperature. Compare the thermometer temperature against the thermostat setting. If the values are more than 5°F (3 °C) apart, calibrate the thermostat using procedure in this manual.

Thermostat Calibration

For Gas Thermostats refer to the following procedure:

- a. Remove the basket screen from the tank and place the tip of a digital thermometer into the shortening approximately one inch above the temperature sensor.
- b. Perform the appliance startup as described in this manual, set the thermostat to 325°F (163 °C) and allow the shortening/oil to come up to temperature; let the appliance cycle 4-6 times to insure that the oil temperature has stabilized. Compare the thermostat setting of 325°F (163 °C) to the digital thermometer reading.
- c. Remove the thermostat dial by pulling the knob straight out. DO NOT rotate the dial.
- d. Holding the outside of the shaft so that it does not move, scrape away the sealing compound in the center of the shaft with a small flat blade screwdriver.
- e. Turn the adjustment screw clockwise to lower the thermostat's temperature setting or counter-clockwise to raise it.

NOTE

One-quarter turn of the adjustment screw changes the temperature setting approximately 24°F (13 °C).

- f. Turn the adjustment screw until the burners energize at 325°F (163 °C).
- g. Replace the knob and allow the appliance to cycle 4 to 6 times. Check the temperature of the digital thermometer against the thermostat dial setting; if there is greater than a 5 °F (3 °C) difference, repeat the calibration procedure.

TROUBLESHOOTING AND CONVERSION

TROUBLESHOOTING

Should there be a problem with your appliance, use the following tables to help diagnose possible faults before calling your Authorized Service Agent.

Check these items before calling your Authorized Service Company.	
ITEM TO CHECK	HOW TO CHECK
Gas Supply	Ensure that gas is supplied to the appliance.
Gas Supply Pressure	Ensure that gas supply pressure is adequate.
Hi-Limit reset	Press hi-limit reset button.

SYSTEM TROUBLESHOOTING	
SYMPTOM	POSSIBLE CAUSES
Pilot will not light.	Tripped hi-limit, faulty/improperly installed thermocouple, clogged/incorrect pilot orifice, low supply pressure, faulty gas valve, pilot flame setting is too low, faulty piezo ignitor, piezo ignitor rod not adjusted properly.
Appliance will not run, pilot stays lit.	Gas valve control knob in wrong position, faulty thermostat, oil/shortening temperature is higher than thermostat set point.
Appliance will not run, pilot will not stay lit.	Tripped or faulty hi-limit, faulty thermocouple, clogged pilot orifice, low supply pressure, faulty gas valve, pilot flame setting is too low, excessive air flow around pilot burner.
Appliance will not maintain temperature properly.	Faulty or improperly calibrated thermostat, faulty hi-limit switch.
Main burners do not shut off.	Faulty gas valve, faulty thermostat.
Oil/Shortening does not reach desired temperature.	Faulty/improperly calibrated thermostat.

Gas Conversion Instructions

To convert the appliance to a different gas type refer to the following table and procedure:

- a. Turn the appliance off by following the Shut Down Procedure in this manual for the appliance and allow the appliance to cool to room temperature before performing the conversion procedure. Ensure that the gas supply to the appliance is shut off.
- b. Disconnect the pilot/thermocouple assembly from the burner array. If necessary disconnect the pilot/thermocouple assembly from the gas valve and remove it from the appliance.
- c. If necessary, disassemble pilot burner from tubing and remove pilot orifice. Replace pilot orifice with the appropriate pilot orifice for the gas type to which you are converting the appliance.
- d. Disconnect and remove the burner array from the appliance. Remove burner orifices from the array and replace them with the appropriate burner orifices for the gas type to which you are converting the appliance. Use a suitable pipe joint compound on all threads.
- e. If necessary, remove the regulator on the gas control valve and replace it with the appropriate regulator for the gas type to which you are converting the appliance.

TROUBLESHOOTING AND CONVERSION

- f. Reinstall the modified burner array assembly into the appliance.
- g. Reinstall the modified pilot assembly into the appliance.
- h. Apply the gas type conversion label, provided with the conversion kit, just below the data plate (located on the inside of the appliance door).
- i. Ensure that all steps of this procedure have been executed properly and that ALL gas connections are connected and retightened.
- j. Connect a manometer to the pressure test point on the burner manifold.
- k. Turn the gas supply to the appliance on and start the appliance using the Appliance Start Up procedure in this manual.
- l. Using leak detector fluid, check ALL gas connections and orifice tips for leakage. If gas leakage is detected shut the appliance down using the Appliance Shut Down procedure in this manual, turn off the gas supply to the appliance and repair the leak. When the leak has been repaired repeat step 'k' in this procedure and continue through the procedure.
- m. With the main burners on, ensure that the burner pressure is correct for the gas type to which you have converted the appliance. Adjust the burner pressure, if necessary, by removing the cap screw on the gas valve regulator and turning the adjustment screw clockwise to increase burner pressure, counter-clockwise to decrease burner pressure. Replace regulator cap screw when finished.

Gas Conversion Information and Specifications

Model	Fuel Type	Gas	Appliance Category	Burner Pressure (mbar)	Burner Orifice	Pilot Orifice Code	Governor
MX14	NAT	G20	I _{2H}	9.0	1.15 mm	N22	Yes
	NAT	G25	I _{2L}	10.0	#56	N22	Yes
	LP	G31	I _{3P}	25.4	0.70 mm	LP16	Yes
14GS	NAT	G20	I _{2H}	10.0	1.15 mm	N22	Yes
	NAT	G25	I _{2L}	10.0	#56	N22	Yes
	LP	G31	I _{3P}	25.4	0.70 mm	LP16	Yes

In the event of problems with or questions about your order, please contact the Anetsberger factory at:

(800) 837-2638 (U.S., Canada)
(603)-225-6684 (Outside U.S.)

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.

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SHIPPING ADDRESS – 10 FERRY ST., CONCORD, NH 03301 USA