

SERVICE MANUAL



GAS COUNTER SERIES GRIDDLES

C24GG C36GG C48GG C24TGG C36TGG

C48TGG

C48GG

- NOTICE -

This Manual is prepared for the use of trained Vesta Service Technicians and should not be used by those not properly qualified.

This manual is not intended to be all encompassing. If you have not attended a Vesta Service School for this product, you should read, in its entirety, the repair procedure you wish to perform to determine if you have the necessary tools, instruments and skills required to perform the procedure. Procedures for which you do not have the necessary tools, instruments and skills should be performed by a trained Vesta Service Technician.

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TABLE OF CONTENTS

SERVICES UPDATES	
SERVICE UPDATES	
TIS DOCUMENT LIST - CXXGG/CXXTGG SERIES	
GENERAL	
INTRODUCTION	
INSTALLATION	
OPERATION	
CLEANING	
SPECIFICATIONS	
TOOLS	
COMPONENT LOCATION	
REMOVAL AND REPLACEMENT OF PARTS	6
KNOBS AND PANELS	
LEGS	6
REGULATOR	
GAS VALVE / NOZZLE	- /
PILOT VALVE / PILOT	8
GAS PIPE	
SERVICE PROCEDURES AND ADJUSTMENTS	(
PILOT ADJUSTMENT	(
GAS PRESSURE MEASUREMENT	
GAS PRESSURE REGULATOR ADJUSTMENT	10
BURNER ADJUSTMENT	1
TROUBLESHOOTING	
TROUBLESHOOTING	13

SERVICES UPDATES

SERVICE UPDATES

May, 2024

New compile

SERVICE TAB			
Document Title	Document Type		
CXXGG/CXXTGG Series Countertop Gas Griddles Service Manual	Service Manual		

SERVICE TAB (Multimedia)		
Document Title	Document Type	
CXXGG/CXXTGG Series Countertop Gas Operation & Installation Manual	Operator	

PARTS TAB			
Document Title	Document Type		
CXXGG/CXXTGG Countertop Gas Griddles Parts Catalog	Parts Catalog		

GENERAL

A WARNING

The griddle and its parts are hot. Use care when operating, cleaning or servicing the griddle.

INTRODUCTION

Procedures in this manual will apply to all CXXGG/CXXTGG models unless specified. No procedure in this manual will require the removal or raising of the griddle plate. Pictures and illustrations can be of any model unless the picture or illustration needs to be model specific.

The CXXGG/CXXTGG utilizes manual ignition system.

INSTALLATION

Generally, installations are made by the dealer or contracted by the dealer or owner. Detailed installation instructions are included in the Installation and Operation Manual that is sent with each unit. However, it should be noted that an improperly installed unit, especially an unlevel unit can lead to premature electrical component failures. A unit that is higher in the front will cause the flue gases to vent improperly and gather in the front near the electrical components. All models must be installed with an externally mounted regulator.

OPERATION

Detailed operation instructions are included in the Installation & Operation Manual sent with each unit. The CXXTGG utilizes manual ignition system. If the pilot goes out, the safety valve will shut-off the gas supply to the pilot and main burners. You will have to reach under the front of the unit and through the pilot cutout to ignite the pilots.

CLEANING

Detailed cleaning procedures are included in the Installation & Operation manual sent with each unit.

SPECIFICATIONS

Stainless steel front, sides and front top ledge. Fully welded stainless and aluminized steel body frame.

11" low profile cooking height on 4" legs. 1" thick polished steel griddle plate with 12 gage, 4" stainless steel back and tapered side splashes. Grease chute is fully welded to stop grease migration.

One 30,000 BTU/hr. "U" shaped aluminized steel burner and mechanical snap action thermostat for each 12" of griddle width. Chrome thermostat knob guards. CXXTGG temperature adjusts from 200° to 450° F. Manual shut- off valve. 3½" wide stainless steel grease trough.

A gas pressure regulator supplied with the unit must be installed.

Check and set the gas pressure after the regulator is installed.

Manifold pressure should be:

Natural Gas 4.0" W.C.

Propane Gas 10.0" W.C.

Incoming pressure should be 4-7" W.C. for Natural Gas and 10.0" W.C. for Propane Gas.

Incoming pressure should not exceed 13.0" W.C.

TOOLS

- · Standard set of hand tools.
- VOM with A/C current tester (any quality VOM with a sensitivity of at least 20,000 ohms per volt can be used).
- Temperature tester (thermocouple type).
- U-Tube or Digital Manometer.
- Thread sealant suitable for use with natural or propane gas.
- Aluminum Foil Tape McMaster Carr Part No. 7631421 or equivalent.
- Adapter to test thermocouple, Johnstone Supply Part No. H23-226 or equivalent.
- 8mm socket
- 8mm、11mm、17mm、19mm wrench
- · Flat screwdriver
- Teflon tape
- HA40 food grade rust proof oil
- · Handheld leak detector

COMPONENT LOCATION

C48TGG

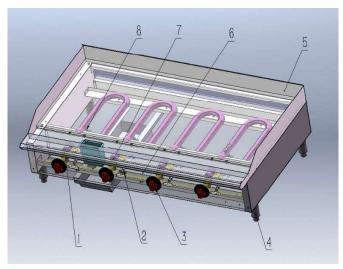


Fig. 1

- 1. Gas control valve
- 2. Gas conversion control valve
- 3. Knob
- 4. Steel feet
- 5. Pressure regulator
- 6. Air intake pipe
- 7. Nozzles
- 8. Pilot

REMOVAL AND REPLACEMENT OF PARTS

KNOBS AND PANELS



A WARNING

Shut off the gas before servicing the unit and follow lockout / tagout procedures.

FRONT PANEL

 Turn all thermostats to off position, pull off knobs.

IN OFF POSITION FOR VIEW



Fig. 2

- 2. Remove screws securing front panel to griddle.
- 3. Pull front panel forward and lay aside.
- 4. Install in reverse order.

NOTE: Before installing front panel, check that lineof-sight through the front panel to see both pilot burners and griddle burners. Move any flexible gas tubing, or capillary tubing that may obstruct the sight holes.

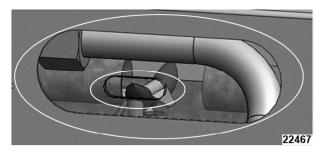


Fig. 3



A WARNING

Shut off the gas before servicing the unit and follow lockout / tagout procedures.

A WARNING

All gas joints disturbed during servicing must be checked for leaks. Check with a soap and water solution (bubbles). Do not use an open flame.

NOTE: It will be necessary to remove the back panel when changing a burner or to remove excessive grease build up from flue area.

1. Disconnect gas supply.

Remove screws securing back panel to griddle. Install in reverse order.

LEGS



A WARNING

Shut off the gas before servicing the unit and follow lockout / tagout procedures.

- 1. Use tools or blocks to raise the furnace body.
- 2. Twist out the steel legs that needs to be replaced counterclockwise by hand.



Fig. 4

Install in reverse order.

REGULATOR



A WARNING

Disconnect the electrical power to the machine and follow lockout / tagout procedures.

- 1. Wrap Teflon tape around the manifold pipe in a clockwise direction, preferably 15-20 turns.
- 2. Install the regulator and tighten it.







Fig.5

- 3. Connect the air source and use a handheld leak detector to check if the regulator valve is leaking.
- 4. Remove in reverse order.

GAS VALVE / NOZZLE



A WARNING

Shut off the gas before servicing the unit and follow lockout / tagout procedures.

All gas joints disturbed during servicing must be checked for leaks. Check with a soap and water solution (bubbles). Do not use an open flame.

- Remove FRONT PANEL and pull off knobs.
- 2. On the back of the product, use an 8mm socket to remove the screws shown in the diagram.



Fig.6

- 3. Use a crane to lift the scraper out and place it properly.
- Use a flat screwdriver to open the pilot fixing plate, push out the pilot, and then remove the gas pipe, fig.12
- 5. Place the product vertically, use an 8mm wrench.

to remove three M8 nuts from the bottom and take out the burner.



Fig.7

6. Use a 13mm wrench to remove the nozzle of the gas valve.



Fig.8

7. Use tools to disassemble A18 valve - C36GG series (Fig.9.1) / Use an 8mm wrench to disassemble Sabaf gas valve - C36TGG series (fig.9.2)





Fig.9.1

Fig.9.2

- 8. Transfer fittings from old valve to new valve. Use thread sealant on assembly.
- 9. Continue to install in reverse order.
- 10. When re-install the nozzle in reverse, need apply HA40 food grade rust proof oil, fig.10.1.
- 11. When install the gas valve in reverse, apply 542 pipe thread sealant evenly to the first three turns of the thread, fig. 10.2
- 12. Connect the air source and use a handheld leak detector to check if each control valve and pipe is leaking.





Fig.10.1

Fig.10.2

PILOT VALVE / PILOT



A WARNING

Shut off the gas before servicing the unit and follow lockout / tagout procedures.

All gas joints disturbed during servicing must be checked for leaks. Check with a soap and water solution (bubbles). Do not use an open flame.

- 1. Remove FRONT PANEL and pull off knobs.
- 2. On the back of the product, use an 8mm socket to remove the screws.
- 3. Use a crane to lift out the scraper and place it properly.
- 4. Use an 11mm wrench to remove the nut of the adjustment valve, fig.11.

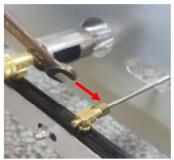


Fig.11

5. Use a flat screwdriver to open the pilot fixing plate, push out the pilot, and then remove the gas pipe, fig.12.





Fig.12

6. Use an 11mm wrench to remove the pilot valve, fig.13.



Fig.13

- 7. Continue to install in reverse order.
- 8. When installing the pilot valve in reverse, apply 542 pipe thread sealant evenly to the first three turns of the thread, and then tighten, fig.10.2
- Connect the air source and use a handheld leak detector to check if each control valve and air pipe is leaking.

GAS PIPE



A WARNING

Shut off the gas before servicing the unit and follow lockout / tagout procedures.

All gas joints disturbed during servicing must be checked for leaks. Check with a soap and water solution (bubbles). Do not use an open flame.

- 1. Remove FRONT PANEL and pull off knobs.
- 2. On the back of the product, use an 8mm socket to remove the screws.
- 3. Use a crane to lift out the scraper and place it properly.
- Use a flat screwdriver to open the pilot fixing plate, push out the pilot, and then remove the gas pipe, fig.12
- 5. Place the product vertically, use an 8mm wrench to remove three M8 nuts from the bottom plate, and take out the burner, fig.7.
- 6. Use an 11mm wrench to remove the nut of the adjustment valve, fig.11.
- 7. Use a 10mm wrench to remove the three nuts shown in the diagram, and then take out the gas pipe, fig.14.
- 8. Continue to install in reverse order.
- Connect the air source and use a handheld leak detector to check if each control valve and air pipe is leaking.





Fig.14

SERVICE PROCEDURES AND ADJUSTMENTS

PILOT ADJUSTMENT

Using a flathead screwdriver, turn the slotted pilot adjustment screw clockwise to decrease the flame, and counterclockwise to increase the flame.



Fig. 15

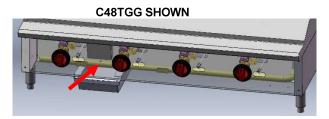


Fig. 16

GAS PRESSURE MEASUREMENT

A WARNING

All gas joints disturbed during servicing must be checked for leaks. Check with a soap and water solution (bubbles). Do not use an open flame.

- 1. Turn the gas supply off at a manual shutoff valve.
- 2. Remove the control panel.
- 3. Remove the pressure tap plug and attach manometer.
- 4. Turn gas back on.
- 5. Light pilot(s).
- 6. Turn all thermostats on to the maximum setting so that all burners are on.
- 7. Turn all the equipment on the same supply line on.
- 8. Check gas pressure.
- Gas pressure should read 4" W.C. for natural and 10" W.C. for propane gas. If not correct, refer to GAS PRESSURE REGULATOR ADJUSTMENT.
- 10. Turn gas supply off, disconnect manometer and reinstall pressure tap plug.

GAS PRESSURE REGULATOR ADJUSTMENT

A gas pressure regulator is supplied with the griddle and must be installed as close to the griddle on the gas supply line as possible. Make sure that the arrow on the underside of the regulator is oriented in the direction of gas flow to the griddle and the regulator is positioned with the vent plug and adjustment screw upright. Check that vent plug is not clogged by grease and debris.

Check and set the gas pressure after the regulator is installed. The pressure should be set for 4" water column (W.C.) for natural gas and 10" W.C. for propane gas while all burners are on.

The supply pressure (upstream of the regulator) should be 4-7" W.C. for natural gas and 10-13" W.C. for propane gas. At no time should the griddle be connected to supply pressure greater than ½ psig (3.45 kPa) or 13" W.C.

Graphic shows pressure plug location.

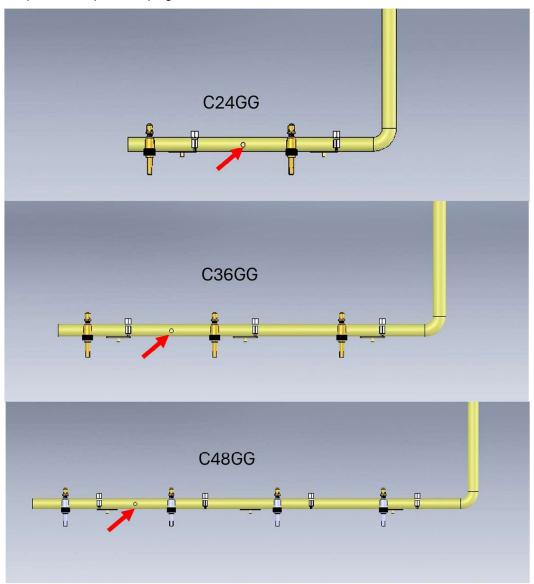


Fig. 17

NOTE: CXXTGG models are in same locations.

BURNER ADJUSTMENT

For efficient burner operation, it is important that a proper balance of gas volume and primary air supply is maintained to give complete combustion. Insufficient air supply results in a yellow streaming flame. Primary air supply is controlled by the air shutter on the front of the burner venturi. Loosen the screw on the venturi and adjust the air shutter to just eliminate yellow tips on the burner flames. Lock the air shutter in place in place by tightening the screw. Repeat this procedure as necessary with all burners.

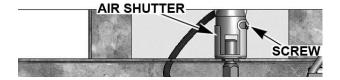


Fig. 18

TROUBLESHOOTING

TROUBLESHOOTING

SYMPTOMS	POS	SSIBLE CAUSES
Gas pilot no ignites.	1. 2.	Gas supply off or insufficient gas pressure. Adjust pilot valve to allow more gas flow.
	3. 4.	Obstructed pilot orifice. valve malfunction.
Gas pilot ignites but will not maintain flame.	1. 2.	Air blowing pilot out. Prevent air flow from affecting unit. Gas supply not purged of air.
	3.	Adjust pilot valve to allow more gas flow.
	4. 5.	Obstructed pilot orifice. Insufficient gas pressure.
	6.	valve malfunction.
Gas burners ignite but will not maintain flame.	1.	Gas pressure incorrect or fluctuating.
	2. 3.	Obstructed flue. Gas orifice obstructed, improperly aligned / spaced, or incorrect.
	4.	Burner malfunction.
	1.	Check gas pressure.
One or more burners have lower flame level than the others.	2.	External air flow or vent hood problems may agitate affected burners.
	3.	Gas orifice obstructed, improperly aligned / spaced, or incorrect.
	4.	Adjust burner air shutter.

Page 12 of 13 F25383 (0219)

Gas Countertop Griddles - TROUBLESHOOTING

SYMPTOMS	POSSIBLE CAUSES	
One burner has a delayed ignition; a several second lapse when the burner actually lights.	1.	Check gas pressure.
	2.	Check that burner is properly seated.
	3.	Check that burner ignition ports, pilot flash tube and pilot burner are all aligned.
	4.	Gas orifice obstructed, improperly aligned / spaced, or incorrect.
	5.	Check burner shutter adjustment.
	6.	Check pilot flame adjustment.
	1.	Gas shut off valve not completely open.
Excessive or low heat.	2.	Thermostat malfunction.(CXXTGG)
	3.	Gas pressure incorrect.
	4.	Unit's gas regulator not installed or malfunctioning.
	5.	Incorrect gas type.
	6.	Gas orifice obstructed or incorrect.
Heat does not come on when the thermostat is turned on. (CXXTGG)	1.	Pilot burner not lit.
	2.	Griddle shut-off valve not in ON position.
	3.	Low gas pressure.
	4.	Thermostat malfunction.