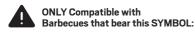


# NATURAL GAS CONVERSION KIT



## **USER MANUAL**

#### MODEL #: 85-2261-4 / G501-0057-03





MK\_01-18-2024



## FOR YOUR SAFETY

**CAUTION:** Read and follow all safety statements, assembly instructions, and use and care directions before attempting to assemble and cook.

▲ WARNING: The information in these instructions must be followed to minimize the risk of fire or explosion or to prevent property damage, personal injury or death.

**INSTALLER/ASSEMBLER:** Leave this manual with consumer.

#### INSTALLATION SAFETY PRECAUTIONS

- Not for use with LP gas.
- This kit converts your barbecue for natural gas use at 7 inch water column supply pressure. Verify supply pressure with your local gas company. If supply pressure is different than 7 inch, contact a certified plumber for assistance.
- Barbecue installation must conform with local codes, or in their absence with National Fuel Gas Code, NFPA 54 / ANSI Z223.1. National Electrical Code, ANSI / NFPA 70.
- Barbecue is not for use in or on recreational vehicles and/or boats.
- Keep any electrical cords and/or fuel supply hoses away from any hot surfaces.



The CONVERTIBLE VALVE SYSTEM™ Kit is used on the following brands:







## VERMONT CASTINGS<sup>mm</sup>

Only models with this logo are compatible.



Check if your barbecue is compatible with this kit, please visit www.cvsbbq.com



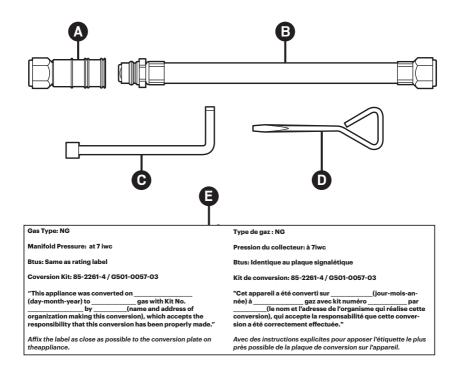
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Assembly Instructions: Master Chef Grill Turismo <sup>™</sup> Grill and Griddle42-61 BBQ
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\* If you have questions or need assistance during conversion, contact your barbecue manufacturer's customer support centre.



#### **PARTS LIST**



ITEM #	QUANTITY	DESCRIPTION	PART NO.
А	1	5/8" quick connect socket	G501-0099-9000
В	1	10 ft. natural gas hose	G501-0099-9000
С	1	Orifice removal tool	G453-000U-9082
D	1	Valve screwdriver	G453-000T-9082
E	1	Warning label	G453-003-000910



#### Additional tools required (not included in kit):

• Adjustable wrench or #17 wrench and #19 wrench

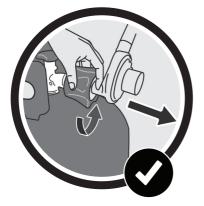


## **BEFORE YOU BEGIN**

**1.** All control knobs must be in the OFF position.



**3.** Disconnect the BBQ regulator from the propane tank.



**2.** Ensure that the propane tank is closed.



**Estimated time to convert to Natural Gas:** 20–30 minutes





ASSEMBLY INSTRUCTIONS: Vida by PADERNO™

- SEE PAGE 18

ASSEMBLY INSTRUCTIONS: COLEMAN PRO SERIES

- SEE PAGE 31

ASSEMBLY INSTRUCTIONS: MASTER CHEF GRILL TURISMO™

**GRILL AND GRIDDLE BBQ** 

- SEE PAGE 42

ASSEMBLY INSTRUCTIONS: VERMENT CASTING<sup>™</sup> GRIDDLE

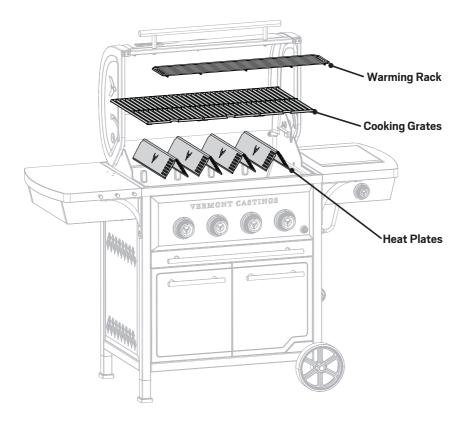
- SEE PAGE 63

\* ALL OTHER BRANDS CONTINUE TO THE NEXT PAGE

1

CONVERTIBLE VALVE SYSTEM<sup>®</sup>

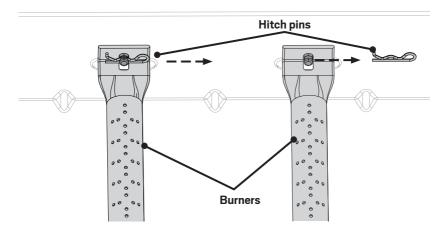
Open lid, remove and set aside the warming rack, all cooking grates, and all heat plates.



# 2A

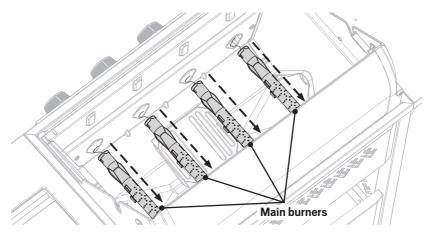
Remove the hitch pins from the burners and carryover tubes (if applicable to your model).

**NOTE:** Depending on your barbecue's configuration your burners and carryovers may be slightly different.



## 2B

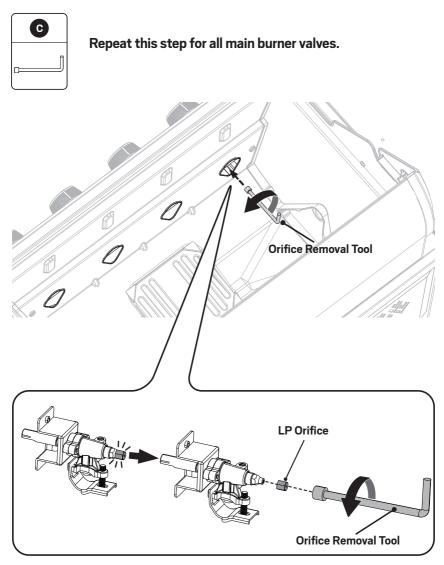
If one or more burners has an electrode attached, remove the burner from valve and lay inside the burner box.



# 3

CONVERTIBLE VALVE SYSTEM<sup>™</sup>

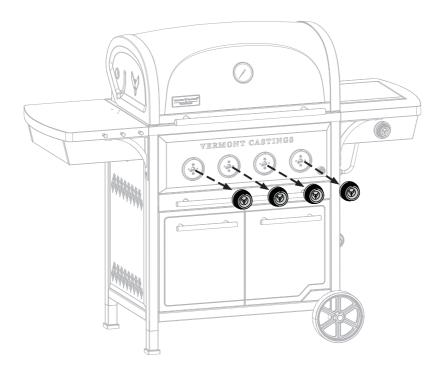
Insert the orifice removal tool into the burner box opening to locate the valve orifice. Once the tool is positioned correctly on the orifice, turn the orifice removal tool counter clockwise to remove the LP orifice.







Remove all control knobs to access the valve switch plate.

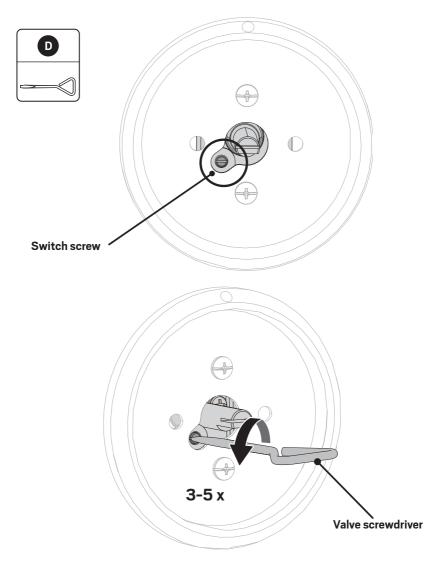




CONVERTIBLE VALVE SYSTEM<sup>™</sup>

Locate the switch screw circled in the diagram. Using the screwdriver supplied with this kit, turn the screw counter clockwise 3–5 turns until it stops, to complete the valve conversion.

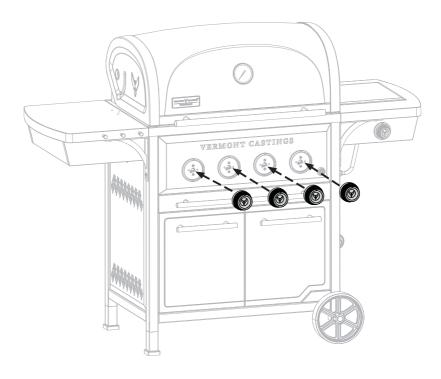
#### ▲ DO NOT USE FORCE.







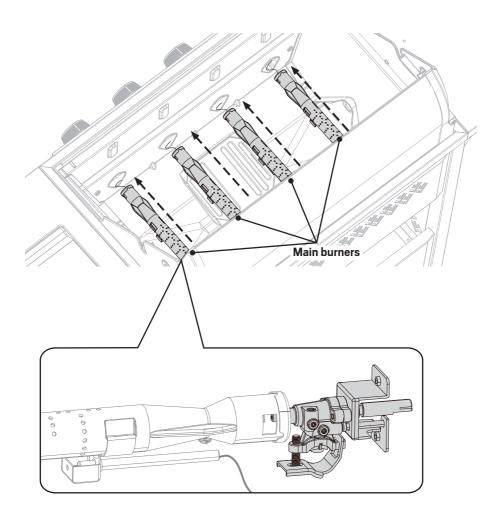
Reassemble the control knobs.





CONVERTIBLE VALVE SYSTEM<sup>™</sup>

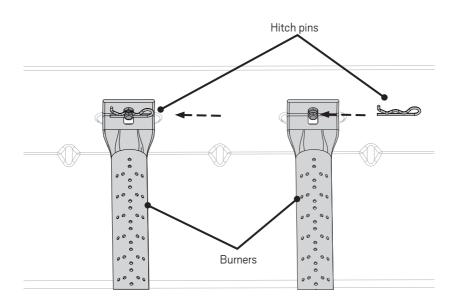
Assemble main burners, one at a time, making sure that the burner engages the valve, before reassembling the hitch pin.



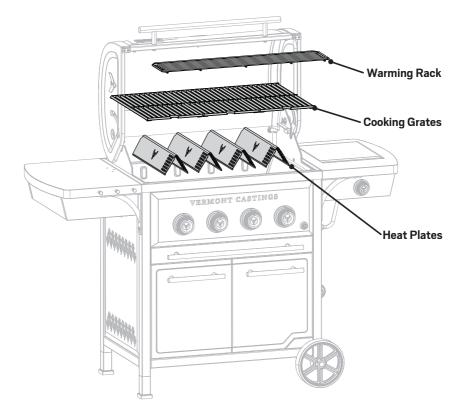
# 5B

Reattach burners and carryovers using the hitch pins (if applicable to your model).

**NOTE:** Depending on your barbecues configuration your burners and carryovers may be slightly different.



Reposition the heat plates, cooking grates and warming rack.



CONVERTIBLE VALVE SYSTEM<sup>®</sup>





SIDE BURNER CONVERSION - SEE PAGE 75 INFRARED SEAR BURNER CONVERSION - SEE PAGE 82 NATURAL GAS CONNECTION - SEE PAGE 93

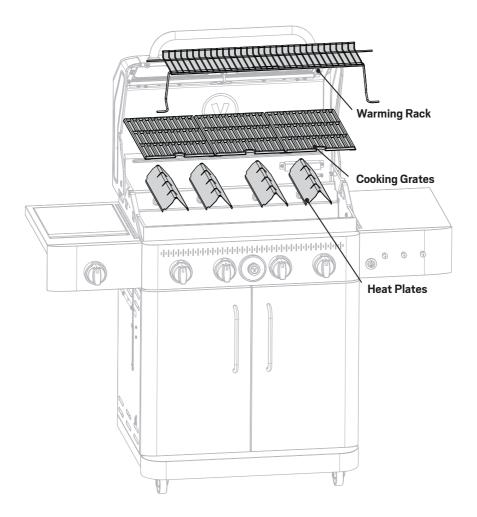
## Vida by PADERNO™



#### For Vida by PADERNO<sup>™</sup> ONLY.



Open lid, remove and set aside the warming rack, all cooking grates, and all heat plates.

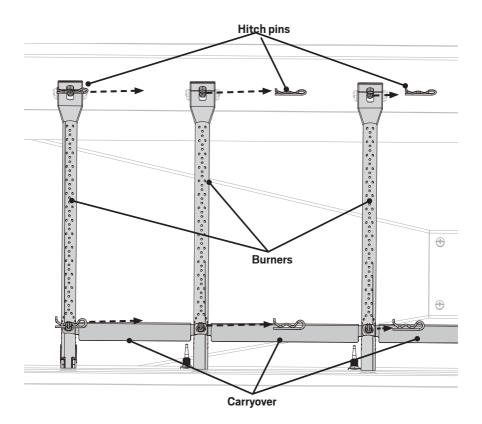


## Vida by PADERNO™





Remove the hitch pins from the burners and carryover assemblies.





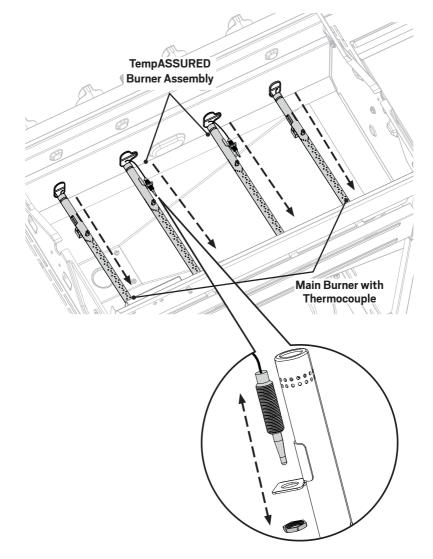




Remove the burners from the valve and lay them inside the burner box.



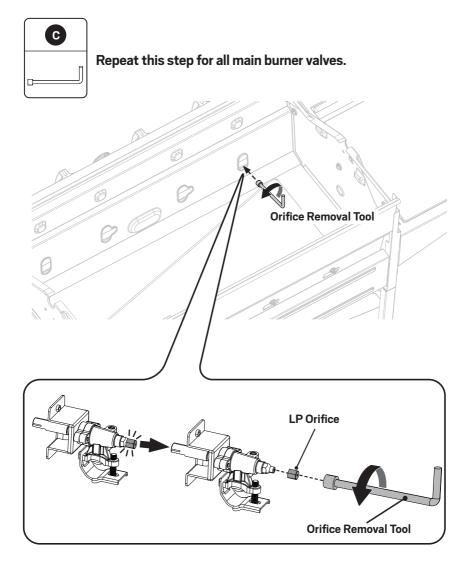
**4-BURNER MODEL ONLY:** If you cannot pull out the thermocouple burner, remove the nut to remove the thermocouple from the burner first.





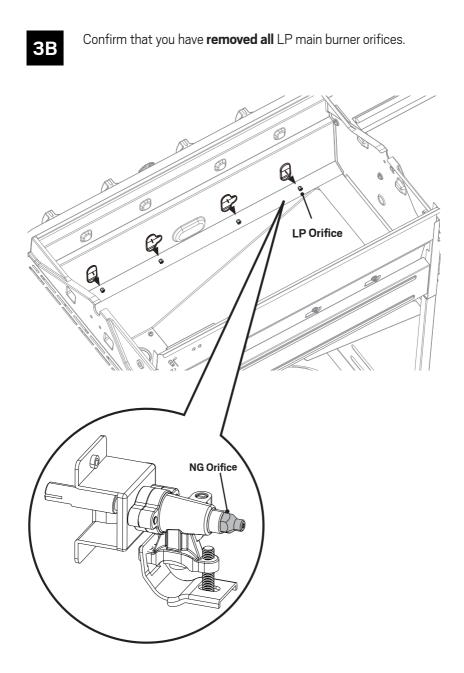


Insert the orifice removal tool into the burner box opening to locate the valve orifice. Once the tool is positioned correctly on the orifice, turn the orifice removal tool counter clockwise to remove the LP orifice.



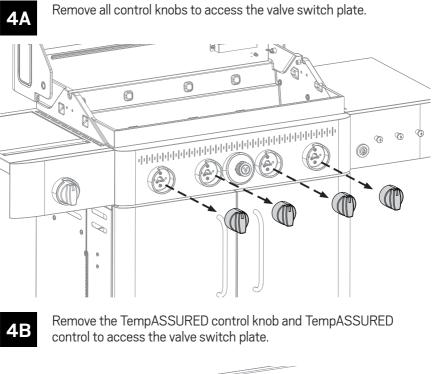


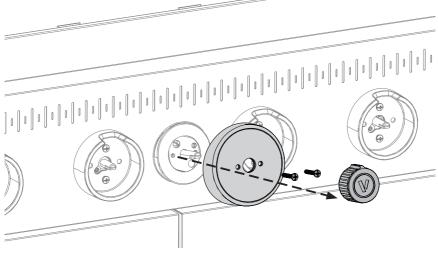




#### Vida by PADERNO™





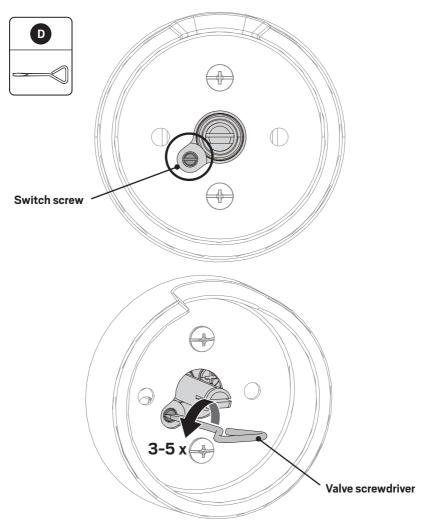




# 4C Main Burners

Locate the switch screw circled in the diagram. Using the screwdriver supplied with this kit, turn the screw counter clockwise 3–5 turns until it stops, to complete the valve conversion.

#### **A** DO NOT USE FORCE.

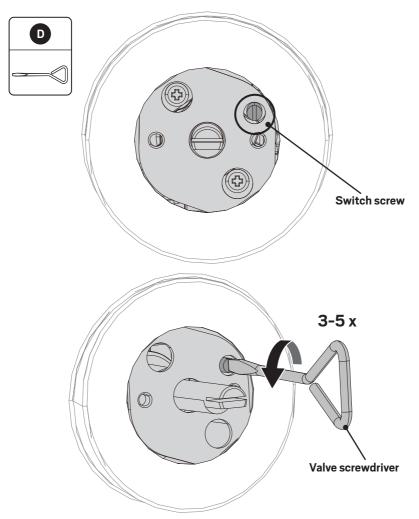




# 4D TempASSURED Control

Locate the switch screw circled in the diagram. Using the screwdriver supplied with this kit, turn the screw counter clockwise 3–5 turns until it stops, to complete the valve conversion.

#### A DO NOT USE FORCE.

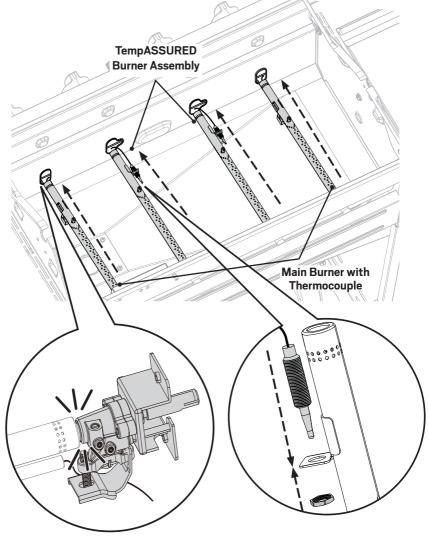




# 5A

Assemble the burners, one at a time, making sure that the burner engages the valve.

**4-BURNER MODEL ONLY:** If you removed the thermocouple in step 2B, reattach the thermocouple to the main burner and secure with the nut removed.

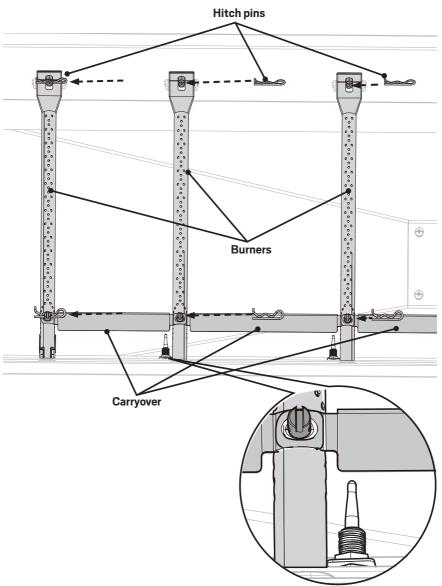




# 5B

Reattach burners and carryovers using the hitch pins removed.

**NOTE:** The thermocouple must not touch the carryover as seen in the diagram.

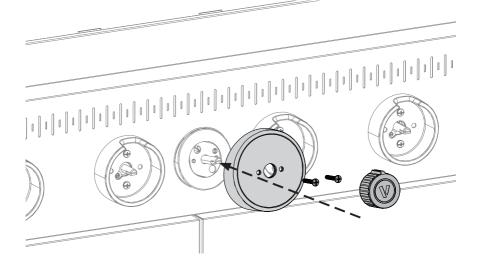






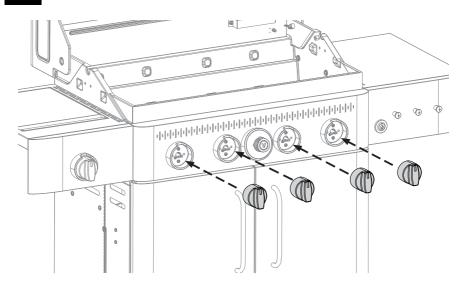


Reassemble the TempASSURED controller and TempASSURED control knob.





Reassemble the control knobs.

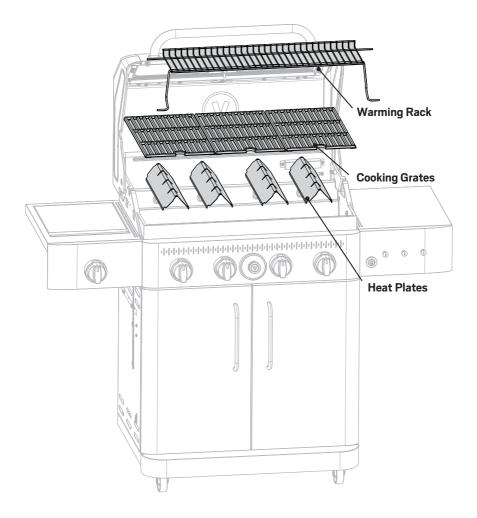


### Vida by PADERNO™

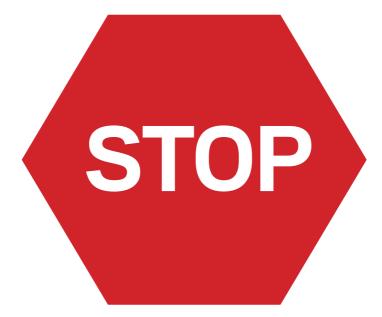




Reposition heat plates, cooking grates and warming rack.







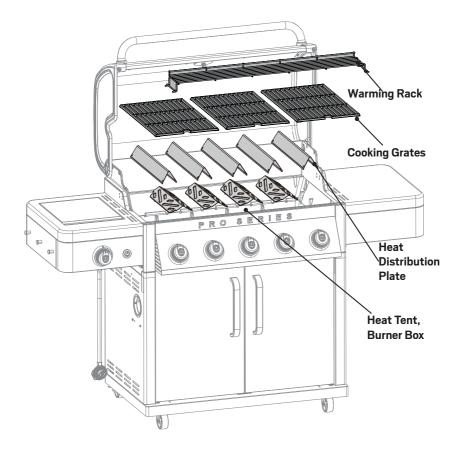
## SIDE BURNER CONVERSION - SEE PAGE 75 INFRARED SEAR BURNER CONVERSION - SEE PAGE 82 NATURAL GAS CONNECTION - SEE PAGE 93

#### **COLEMAN PRO SERIES**



#### For For Coleman Pro Series ONLY.

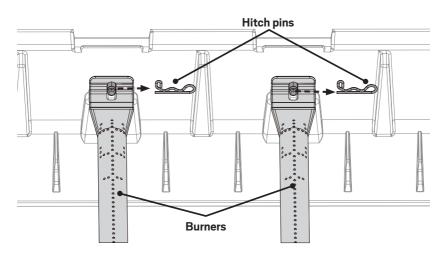
Open lid, remove and set aside the warming rack, all cooking grates, all heat plates and all heat tent.







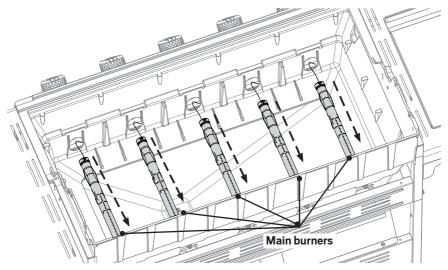
Remove the hitch pins from the burners.



2B

Remove burners and carryovers.

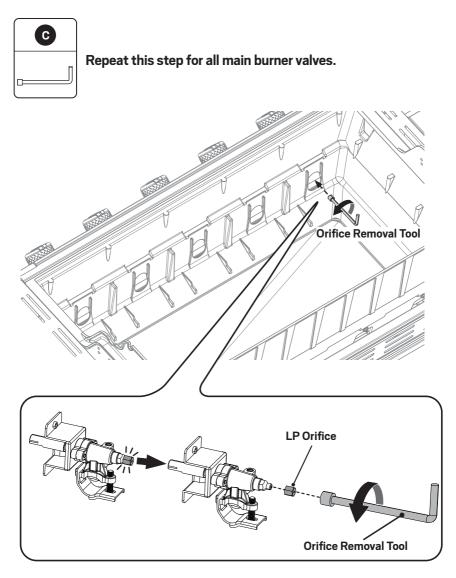
If one or more burners has an electrode attached, remove the burner from valve and lay inside the burner box.







Insert the orifice removal tool into the burner box opening to locate the valve orifice. Once the tool is positioned correctly on the orifice, turn the orifice removal tool counter clockwise to remove the LP orifice.





#### **COLEMAN PRO SERIES**



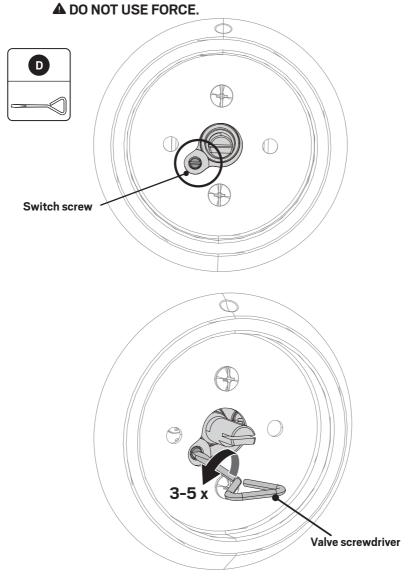
Remove all control knobs to access the valve switch plate.







Locate the switch screw circled in the diagram. Using the screwdriver supplied with this kit, turn the screw counter clockwise 3-5 turns until it stops, to complete the valve conversion.

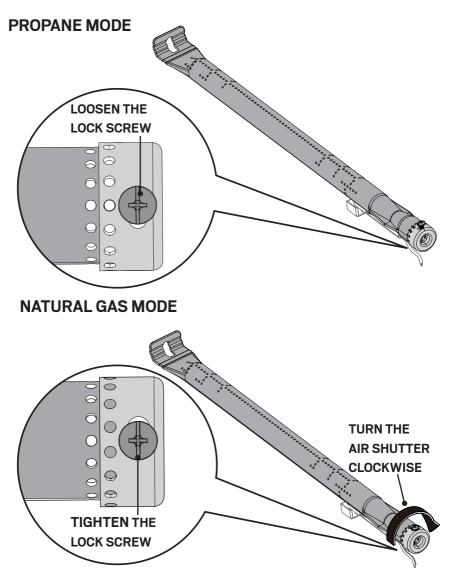




#### **Burner Air Shutter Adjustment**



The adjustable air shutter to adjust the burner orifice from Propane to Natural Gas.



# **COLEMAN PRO SERIES**





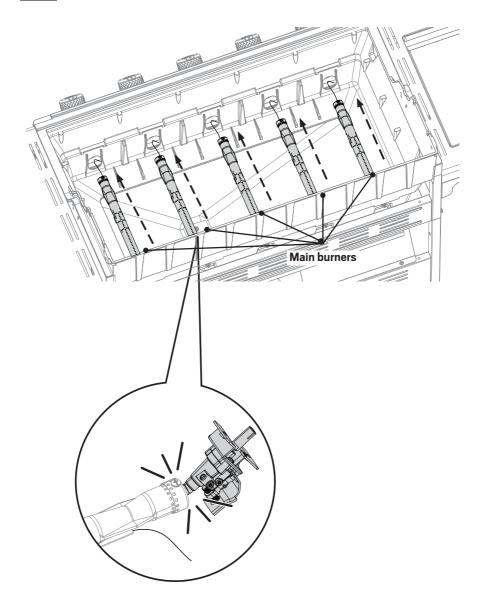
Reassemble the control knobs.







Assemble main burners, one at a time, making sure that the burner engages the valve, before reassembling the hitch pin.

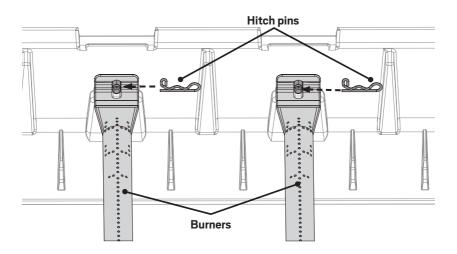


# **COLEMAN PRO SERIES**





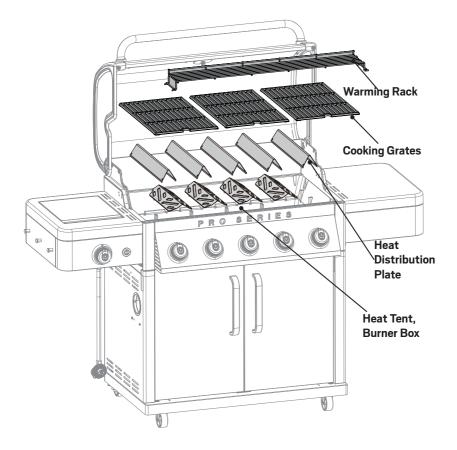
Reattach burners using the hitch pins removed.



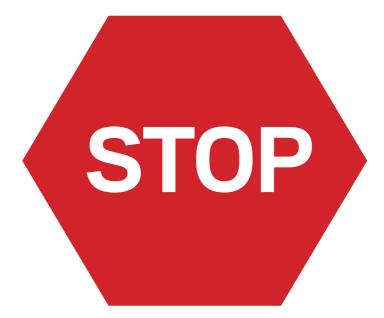




Reposition the heat plates, cooking grates and warming rack.







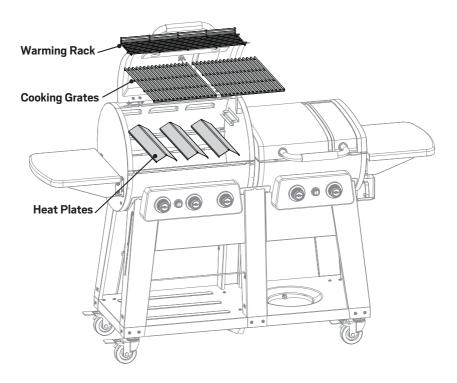
# SIDE BURNER CONVERSION - SEE PAGE 75 INFRARED SEAR BURNER CONVERSION - SEE PAGE 82 NATURAL GAS CONNECTION - SEE PAGE 93



#### **for Master Chef Grill Turismo<sup>TM</sup> Grill and Griddle ONLY**.



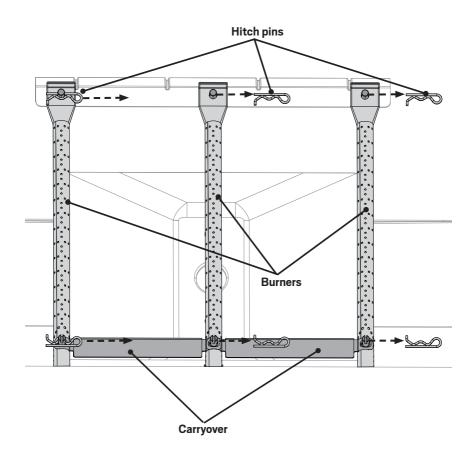
Open lid, remove and set aside the warming rack, all cooking grates, and all heat plates.







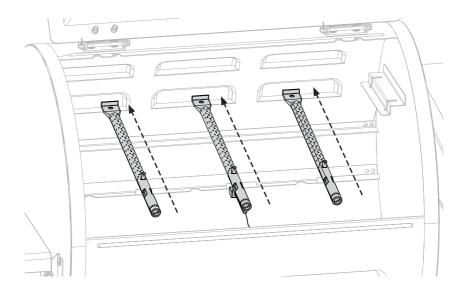
Remove the hitch pins from the burners and carryover assemblies.







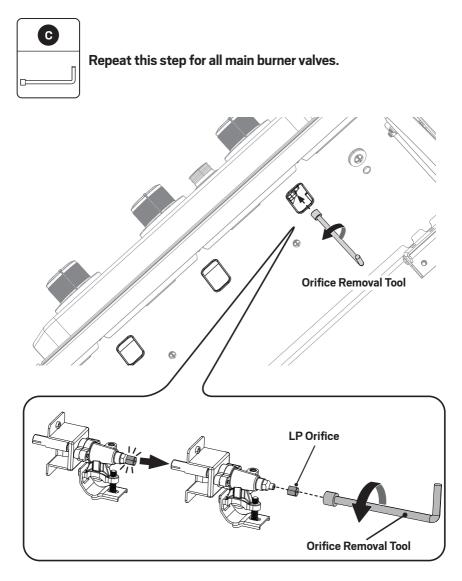
Remove the burners from the valve and lay them inside the burner box.







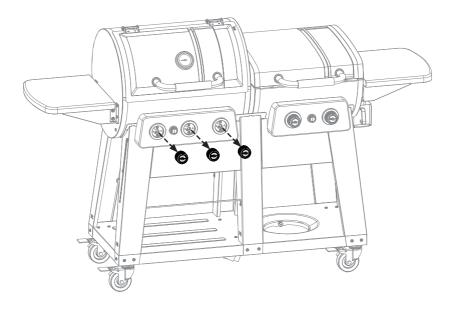
Insert the orifice removal tool into the burner box opening to locate the valve orifice. Once the tool is positioned correctly on the orifice, turn the orifice removal tool counter clockwise to remove the LP orifice.







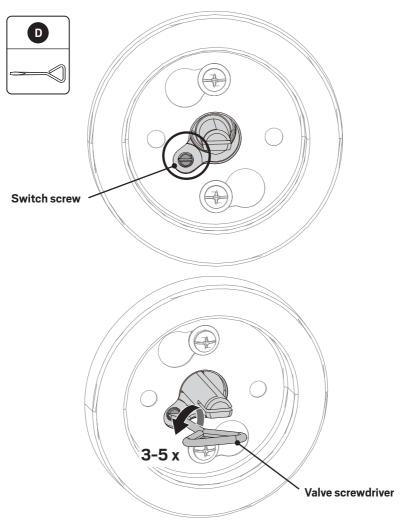
Remove all control knobs to access the valve switch plate.



# 4B Main Burners

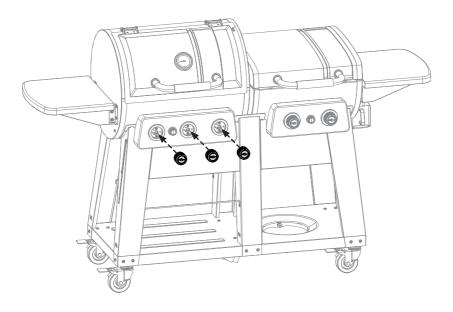
Locate the switch screw circled in the diagram. Using the screwdriver supplied with this kit, turn the screw counter clockwise 3–5 turns until it stops, to complete the valve conversion.

### **A** DO NOT USE FORCE.





#### Reassemble the control knobs.

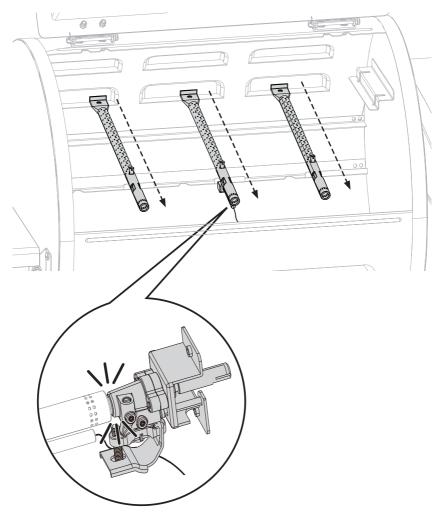


# 5



# 6A

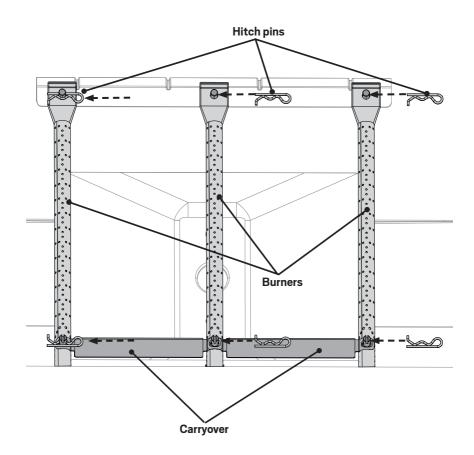
Assemble main burners, one at a time, making sure that the burner engages the valve, before reassembling the hitch pin.





# 6B

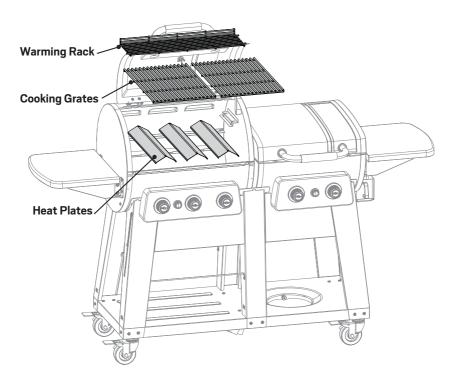
Reattach burners and carryovers using the hitch pins removed.





# 7

Reposition the heat plates, cooking grates and warming rack.





# 8

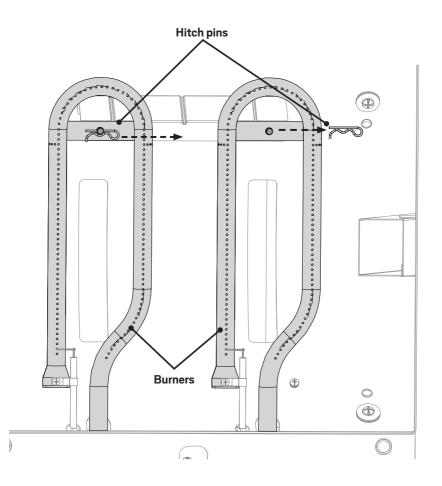
Open lid, remove and set aside the griddle top.







Remove the hitch pins from the burners.

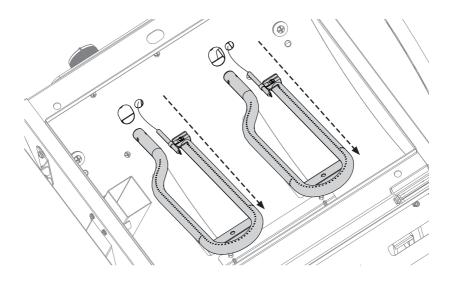


53





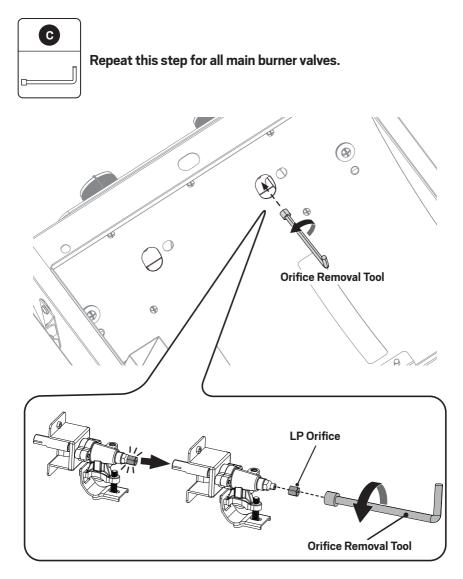
Remove the burners from the valve and lay them inside the burner box.







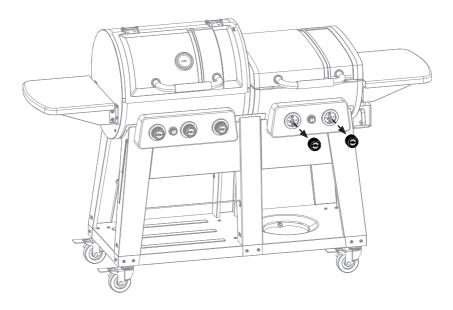
Insert the orifice removal tool into the burner box opening to locate the valve orifice. Once the tool is positioned correctly on the orifice, turn the orifice removal tool counter clockwise to remove the LP orifice.







Remove the control knobs.

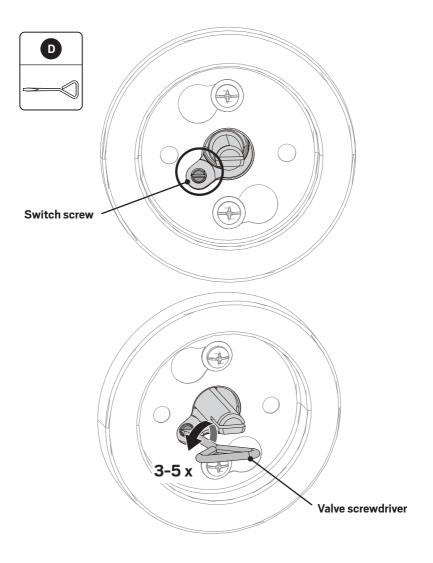






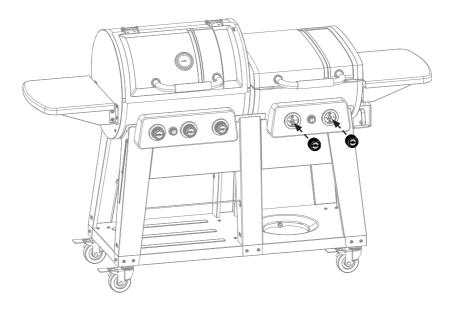
Locate the switch screw circled in the diagram. Using the screwdriver supplied with this kit, turn the screw counter clockwise 3–5 turns until it stops, to complete the valve conversion.

#### ▲ DO NOT USE FORCE.





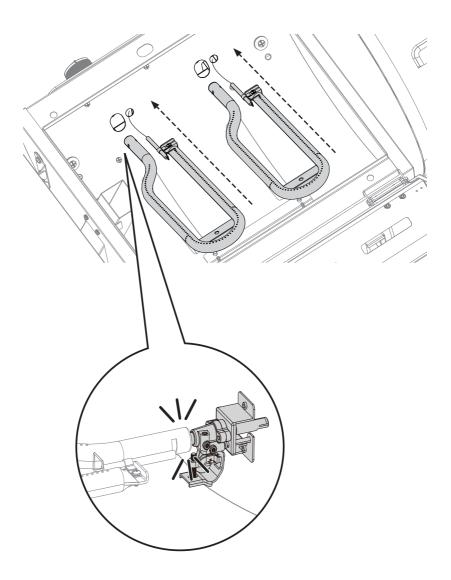
# Reassemble the control knobs.







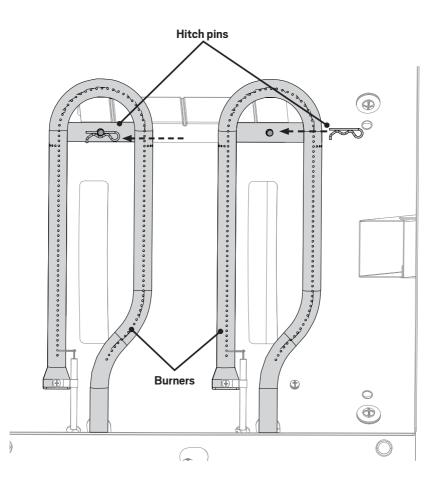
Assemble main burners, one at a time, making sure that the burner engages the valve, before reassembling the hitch pin.







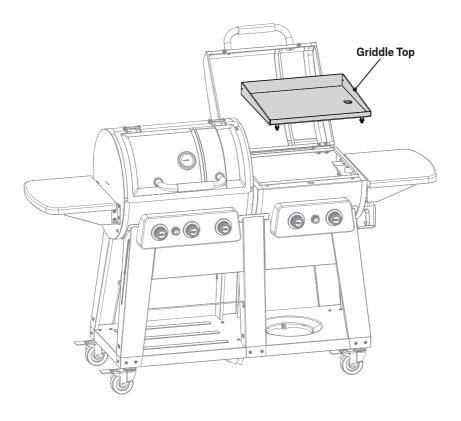
Reattach burners using the hitch pins removed.







Reposition the griddle top.







SIDE BURNER CONVERSION - SEE PAGE 75 INFRARED SEAR BURNER CONVERSION - SEE PAGE 82 NATURAL GAS CONNECTION - SEE PAGE 93



### ▲ For Vermont Castings<sup>™</sup> Griddle ONLY.



1

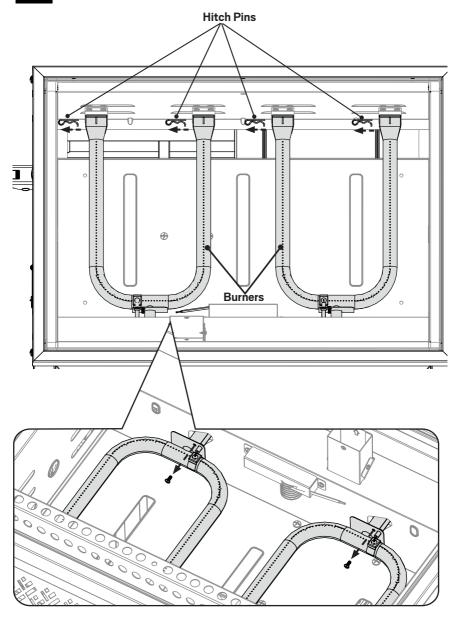
Remove the griddle.





2

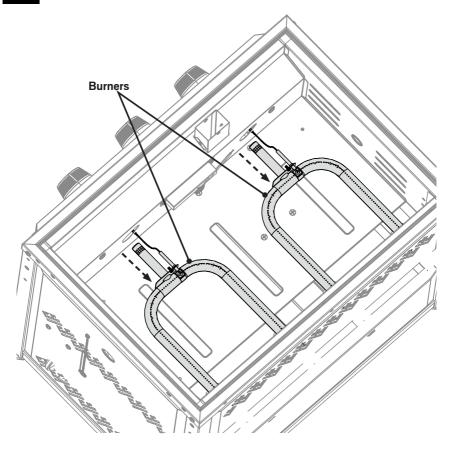
Remove the hitch pins and screws from the burners.





3

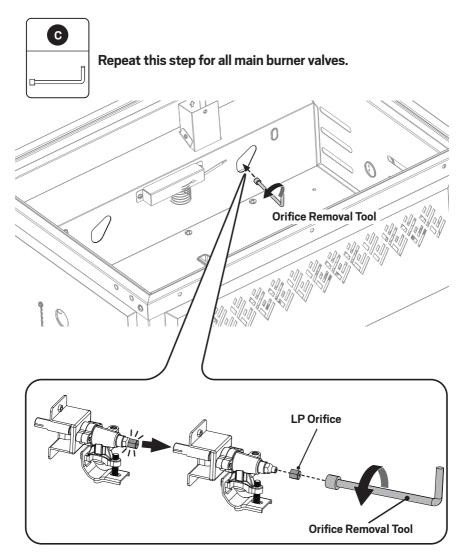
Remove the burners from the valve and lay them inside the burner box.





4

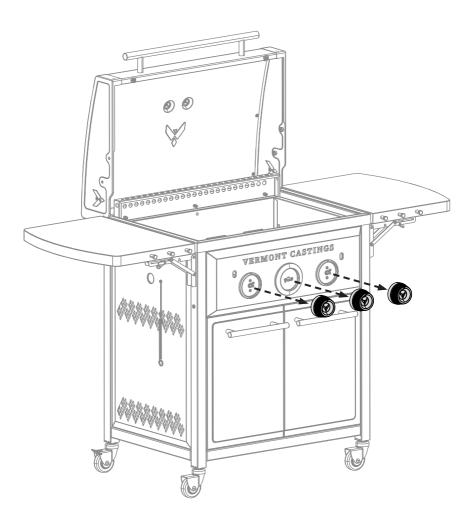
Insert the orifice removal tool into the burner box opening to locate the valve orifice. Once the tool is positioned correctly on the orifice, turn the orifice removal tool counter clockwise to remove the LP orifice.





### 5

Remove all control knobs to access the valve switch plate.

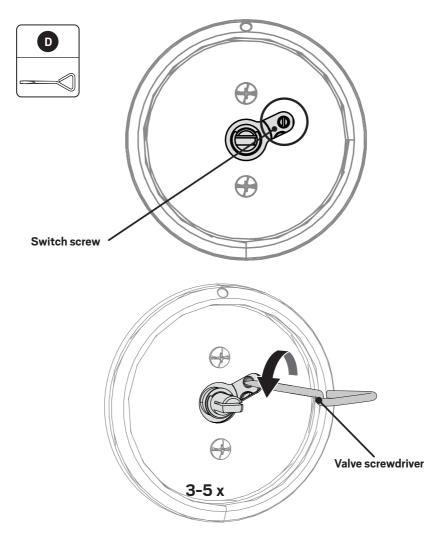


# 6 Main Burners

CONVERTIBLE VALVE SYSTEM®

Locate the switch screw circled in the diagram. Using the screwdriver supplied with this kit, turn the screw counter clockwise 3–5 turns until it stops, to complete the valve conversion.

#### A DO NOT USE FORCE.



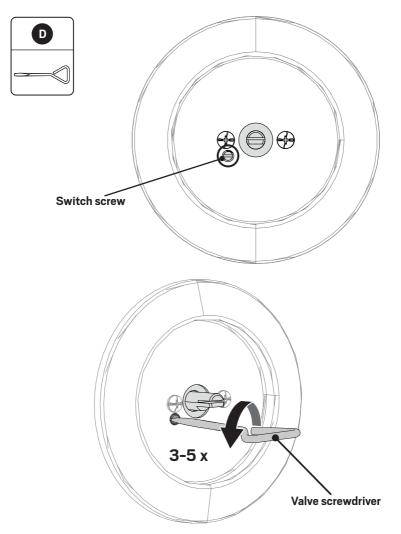


# 7

# TempASSURED Control

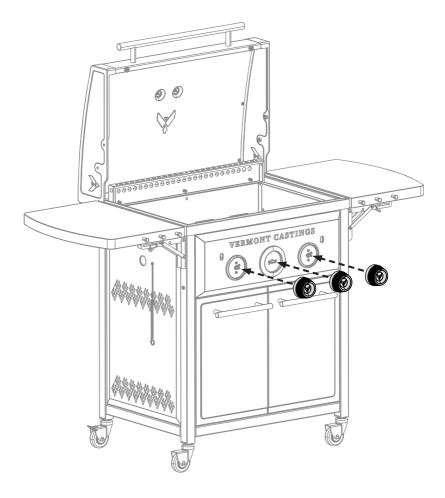
Locate the switch screw circled in the diagram. Using the screwdriver supplied with this kit, turn the screw counter clockwise 3–5 turns until it stops, to complete the valve conversion.

#### **A** DO NOT USE FORCE.





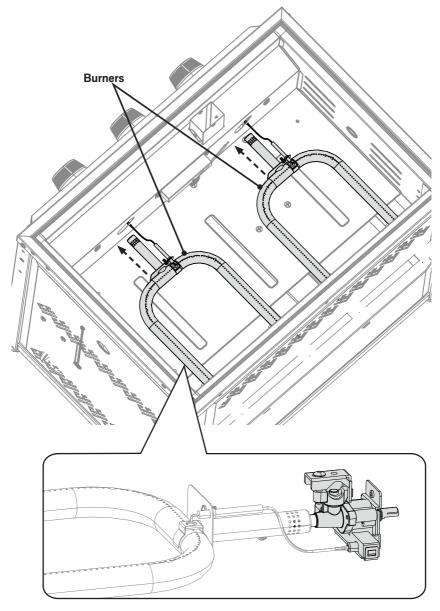
Reassemble the control knobs.





9

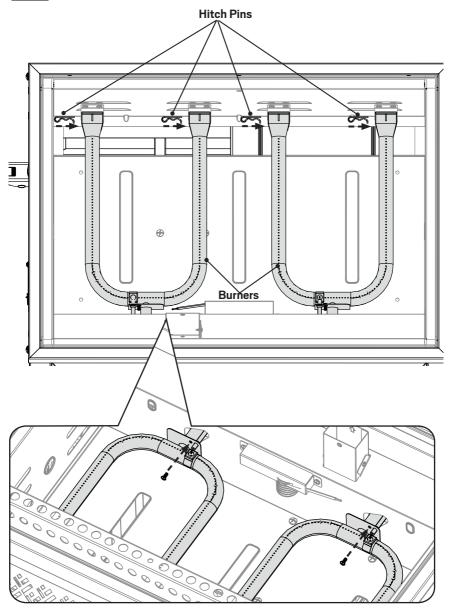
Assemble the burners, one at a time, making sure that the burner engages the valve.





10

Reattach the burners using the hitch pins and the screws removed.



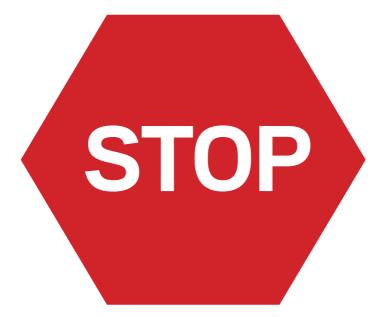




Reposition the griddle.



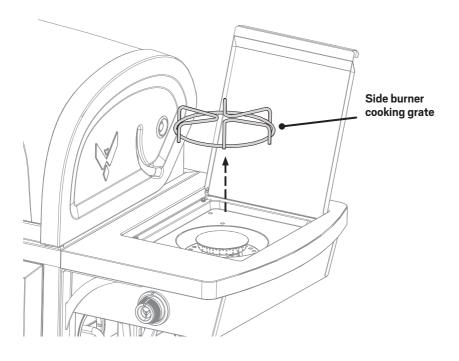




SIDE BURNER CONVERSION - SEE PAGE 75 INFRARED SEAR BURNER CONVERSION - SEE PAGE 82 NATURAL GAS CONNECTION - SEE PAGE 93

#### **ATTENTION:**

- If your barbecue does not have a side burner proceed to page 82.
- Lift the side burner lid. Remove the side burner cooking grate.

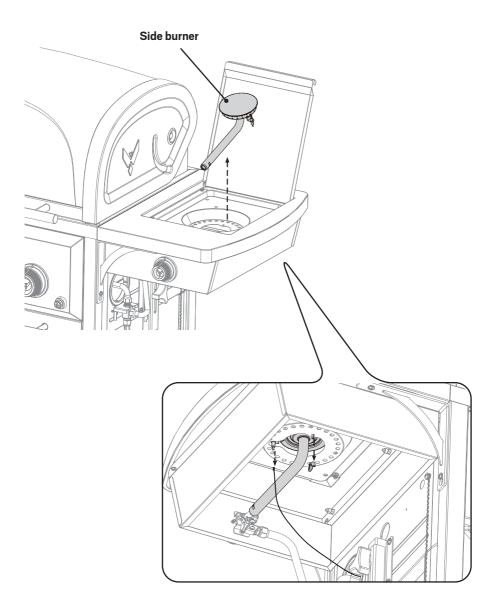


▲ ATTENTION: FOR COLEMAN<sup>®</sup> REVOLUTION<sup>™</sup> Dual Fuel (G53701 / 85-3140) Models

The charcoal ignition burner and valve works with both LP and NG gas. Conversion is not required for this feature to convert GAS SIDE of the barbecue.

CONVERTIBLE VALVE SYSTEM<sup>™</sup>

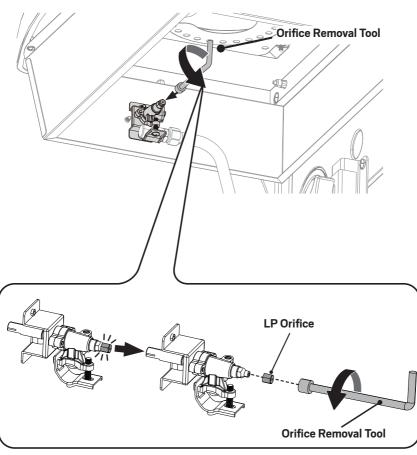
Remove the side burner support clip (if applicable), disconnect the side burner electrode and remove the side burner.





Using the orifice removal tool, remove the side burner valve orifice, as shown.



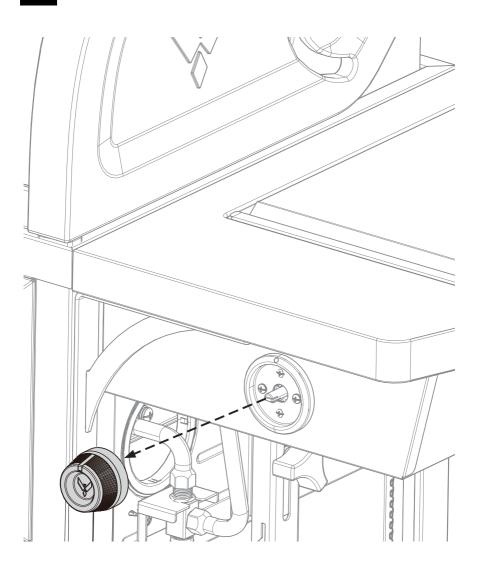


## SIDE BURNER CONVERSION

Remove the side burner knob to access the valve switch plate.

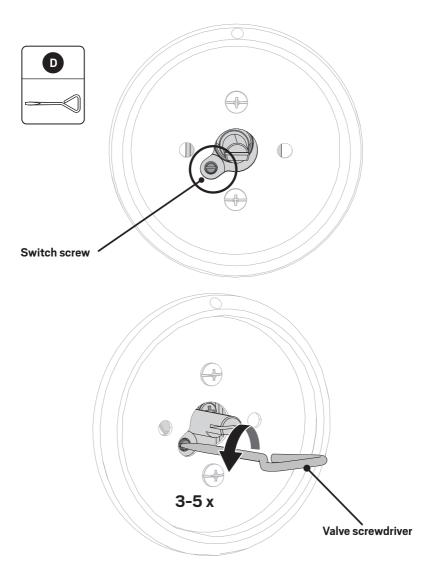
CONVERTIBLE VALVE SYSTEM<sup>®</sup>

4



Locate the switch screw circled in the diagram. Using the screwdriver supplied with this kit, turn the screw counter clockwise 3–5 turns until it stops, to complete the valve conversion.

CONVERTIBLE VALVE SYSTEM®



#### ▲ DO NOT USE FORCE.

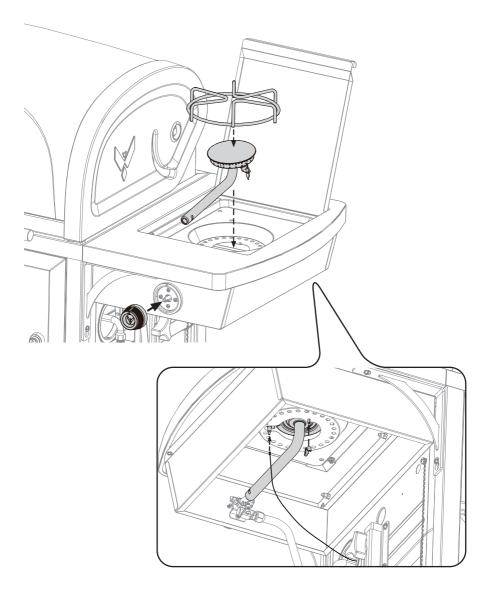
5

## SIDE BURNER CONVERSION

6

CONVERTIBLE VALVE SYSTEM<sup>™</sup>

Reassemble the side burner, side burner electrode, side burner support clip (if applicable), side burner grate, and the side burner knob.





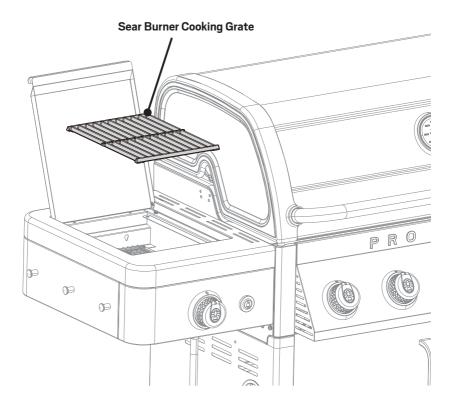


INFRARED SEAR BURNER CONVERSION - SEE PAGE 82 NATURAL GAS CONNECTION - SEE PAGE 93



#### **ATTENTION:**

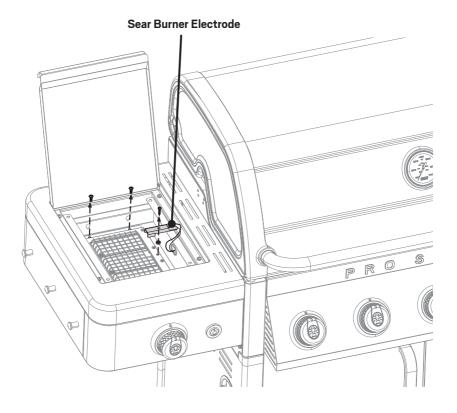
- If your barbecue does not have a sear burner proceed to page 93.
- Lift the sear burner lid. Remove the sear burner cooking grate.





# 2

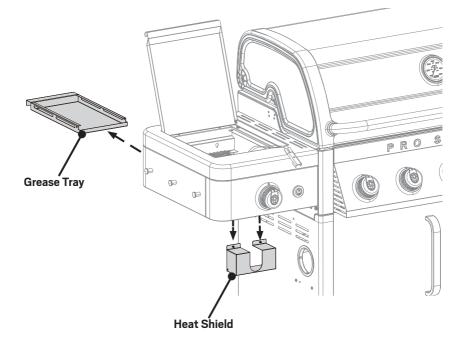
Disconnect the sear burner electrode.





#### 3

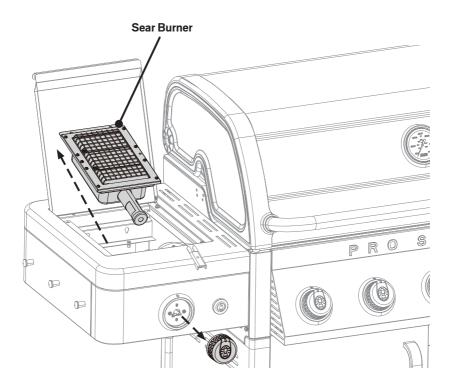
Remove the sear burner grease tray and heat shield.





### 4

Remove the sear burner and control knob.

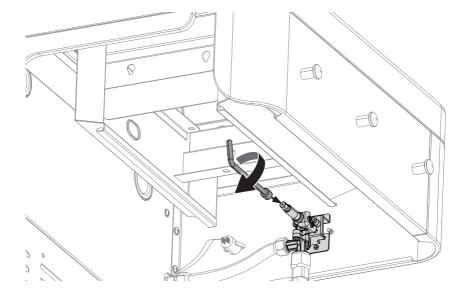




# 5

Using the orifice removal tool, remove the sear burner valve orifice, as shown.



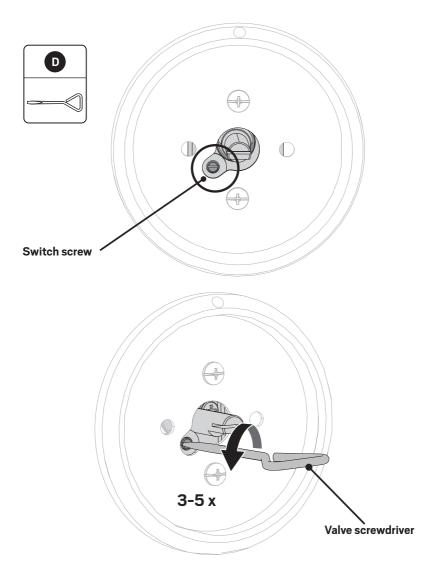


6

Locate the switch screw circled in the diagram. Using the screwdriver supplied with this kit, turn the screw counter clockwise 3–5 turns until it stops, to complete the valve conversion.

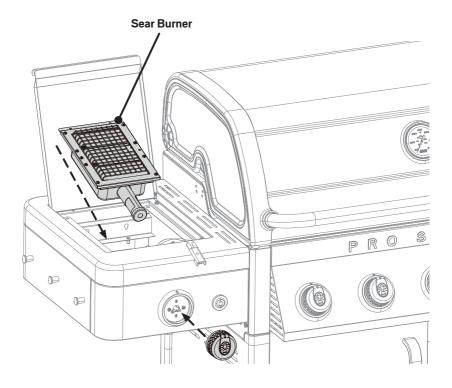
CONVERTIBLE VALVE SYSTEM®

#### **A** DO NOT USE FORCE.





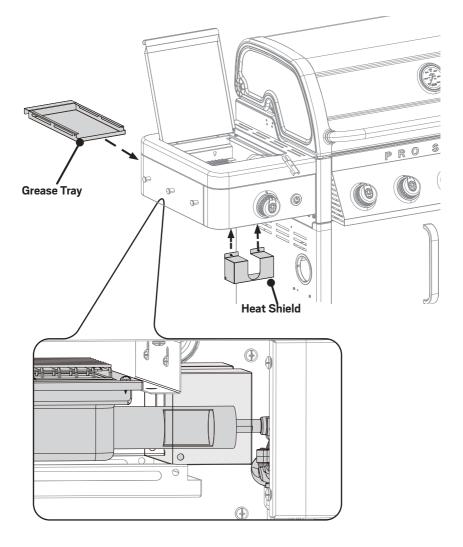
Reassemble the sear burner and control knob.





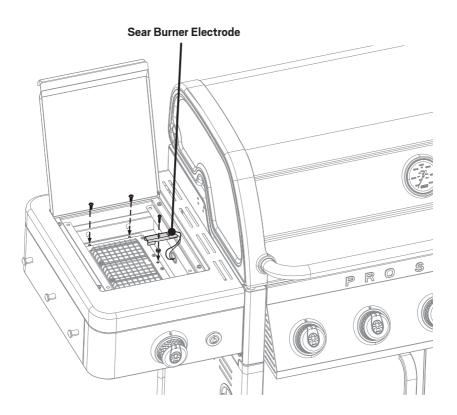
#### 8

Reassemble the sear burner heat shield and grease tray.





#### Reattach the sear burner electrode.

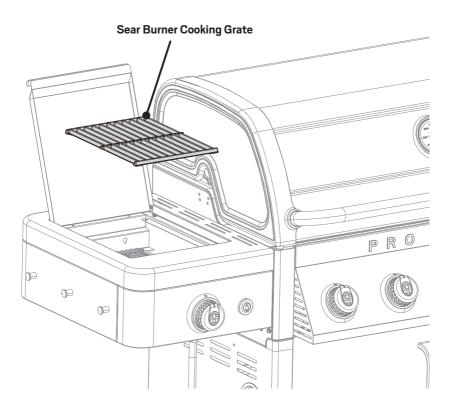


## 9

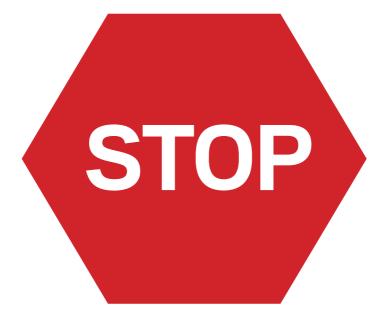


# 10

Reassemble the sear burner cooking grate



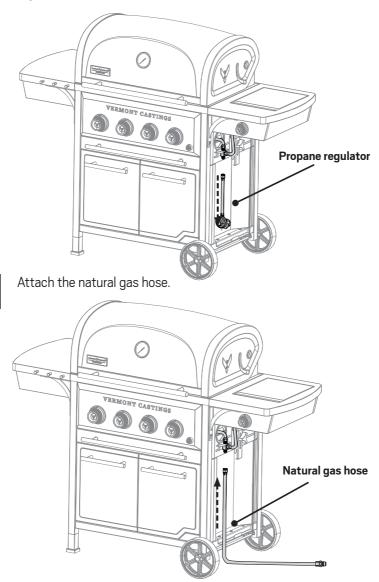




### NATURAL GAS CONNECTION - SEE PAGE 93

## **CONNECTING THE NATURAL GAS HOSE**

Use a **#17** and **#19** wrench to remove the regulator, or use an adjustable wrench.



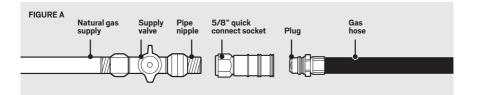


## **3** CONNECTING YOUR BARBECUE TO THE NATURAL GAS SOURCE

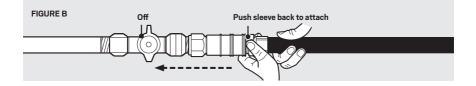
CONVERTIBLE VALVE SYSTEM

Coat pipe nipple with gas resistant teflon tape or pipe dope. Tighten quick-disconnect coupling onto pipe nipple that leads to natural gas supply (**FIGURE A**).

With the natural gas supply valve "OFF", connect the natural gas hose to the quick connect socket. Push the sleeve back on the quick connect socket (**FIGURE B**) and insert the plug until the sleeve snaps forward, locking the



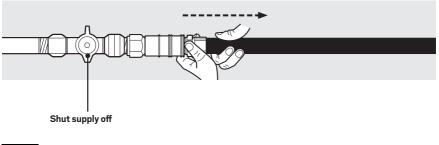
plug into the quick connect socket. Be sure to leak test these connections prior to use.



## 4 DISCONNECTING YOUR BARBECUE FROM THE NATURAL GAS SOURCE

- 1. Turn natural gas supply valve "OFF".
- 2. To disconnect, push sleeve back and pull plug out of sleeve.

**A** CAUTION: The natural gas source should always be in the "OFF" or in closed position when the barbecue is not in use.



# 5 LEAK TEST AND SAFETY CHECK

#### ▲ IMPORTANT!

#### Before using your barbecue, review the SAFE USE & CARE MANUAL

that came with your barbecue for important safety instructions, including; performing a Leak Test and the Burner Flame Check.

#### ATTENTION!

**PERFORM A LEAK TEST** on all connections as outlined in your barbecue's Safe Use and Care Manual. Leak checks should be performed on all new barbecues even if assembled by an assembler or gas technician. Leak checks should be performed frequently thereafter.



# NOTES

# NATURAL GAS CONVERSION KIT



Visit us online at **www.cvsbbq.com** to view our conversion video and access to other information.

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