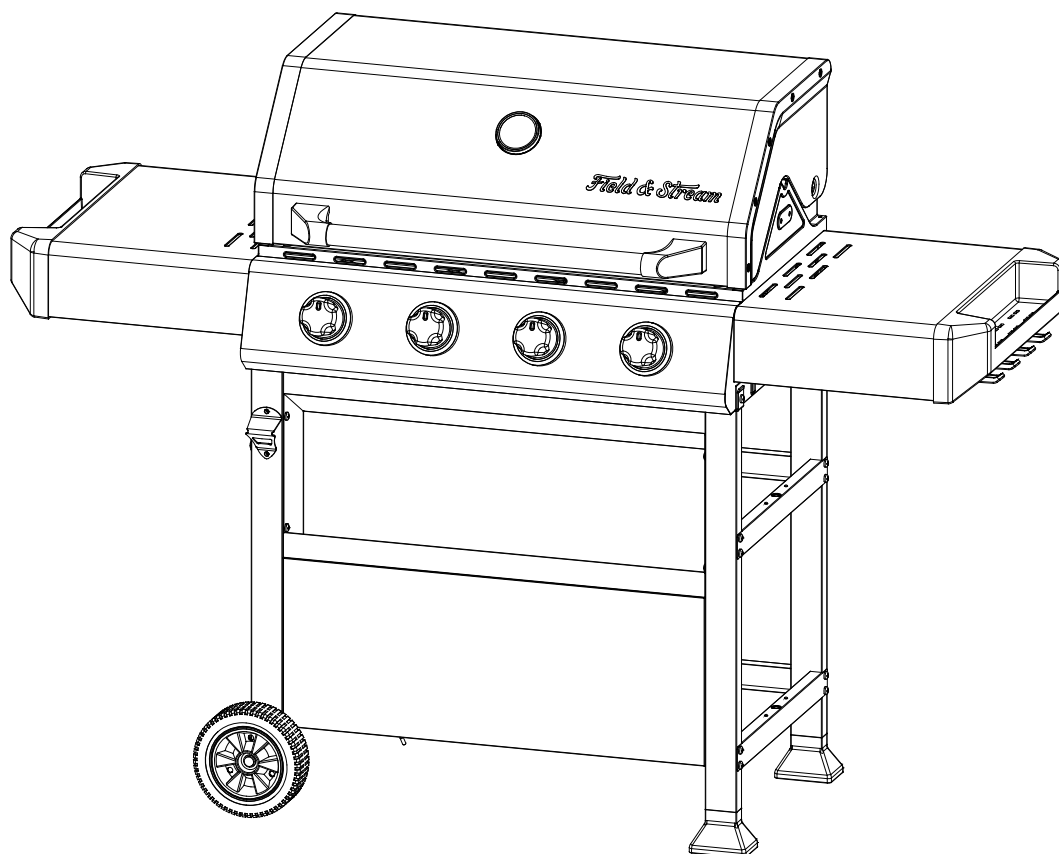


GAS GRILL ASSEMBLY, USE AND CARE MANUAL

Field & Stream ESTB 1871®

4-Burner Gas Grill

MODEL : FS4BPS10P



ATTACH YOUR RECEIPT HERE

Serial Number _____ Purchase Date _____

GAS GRILL ASSEMBLY, USE AND CARE MANUAL

WARNING

For Outdoor Use Only

WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage.

Read this instruction manual thoroughly before installing or servicing this equipment.

WARNING

1. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
2. An LP tank not connected for use should not be stored in the vicinity of this or any other appliance.

DANGER

If you smell gas:

1. Shut off gas to the appliance.
2. Extinguish any open flames.
3. Open the lid.
4. If the odour continues, keep away from the appliance and immediately call your gas supplier or fire department

WARNING

1) "An appliance is considered to be outdoors if installed with shelter no more inclusive than with walls on three sides, but with no overhead cover; all openings shall be permanently open; sliding doors, garage doors, windows, or screened openings are not considered as permanent openings";

2) "An appliance is considered to be outdoors if installed with shelter no more inclusive than within a partial enclosure that includes an overhead cover and no more than two sidewalls. The sidewalls may be parallel, as in a breezeway, or at right angles to each other; all openings shall be permanently open; sliding doors, garage doors, windows, or screened openings are not considered as permanent openings";

3) "An appliance is considered to be outdoors if installed with shelter no more inclusive than within a partial enclosure that includes an overhead cover and three sidewalls, as long as 30% or more of the horizontal periphery of the enclosure is permanently open; all openings shall be permanently open; sliding doors, garage doors, windows, or screened openings are not considered as permanent openings";

GAS GRILL ASSEMBLY, USE AND CARE MANUAL

TABLE OF CONTENTS

Safety Information ----- 4

Package Contents ----- 6

Hardware Contents ----- 7

Preparation ----- 7

Assembly Instructions----- 8

Installation Instructions ----- 18

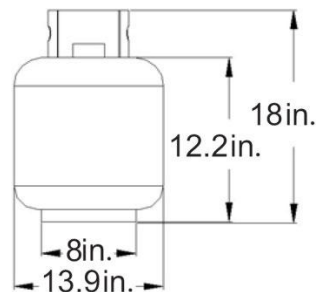
Operating Instructions ----- 22

Care and Maintenance ----- 26

Troubleshooting ----- 31

Customer Support ----- 33

GAS GRILL ASSEMBLY, USE AND CARE MANUAL

- The installation of this appliance must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54.
- This grill is intended for use outdoors and should not be used in a building, garage or any other enclosed or covered area.
- This outdoor grill is not intended for installation in or on recreation vehicles and/or boats.
- A minimum clearance of 36 inches from combustible constructions to the sides of the grill and 36 inches from the back of the grill to combustible constructions must be maintained. This outdoor cooking gas appliance must not be placed under overhead combustible construction.
- The use of an electrical source requires that when installed, the grill must be electrically grounded in accordance with local codes or in the absence of local codes, with ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1. Keep electrical supply cords and the fuel supply hose away from heated surfaces.
- Inspect the hoses before each use for excessive abrasion or wear, or cuts that may affect safe operation of the grill. If there is evidence of excessive abrasion or wear, or the fact that the hose is cut, it must be replaced prior to the grill being put into operation. The replacement hose assembly must be those specified by the manufacturer.
- Keep your grill in an area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- DO NOT obstruct the flow of combustion and ventilation air to this appliance.
- Keep the ventilation openings of the tank enclosure free and clear of debris.
- Check all gas connections for leaks with a soapy water solution and brush. Never use an open flame to check for leaks.
- Never use charcoal in the grill.
- Never use the grill in windy areas.
- Only a 20 lb. LP-gas cylinder is allowed. The cylinder must be constructed and marked in accordance with the Specifications for LP Gas Cylinders of the U.S. Department of Transportation (D.O.T.) or the National Standard of Canada, CAN/CSA-B339, Cylinders, Spheres and Tubes for Transportation of Dangerous Goods; and Commission. Dimensions for a 20 lb. LP-Gas cylinder are:
 - Never use the grill without the drip tray installed and hung under the burner box. Without the drip tray, hot grease and debris could leak downward and produce a fire hazard.
 - Use only the gas pressure regulator supplied with this appliance. This regulator is set for an outlet pressure of 11.0 wc.
 - The cylinder used must include a collar to protect the cylinder valve.
 - Do not store a spare LP-gas cylinder under or near this appliance.
 - Never fill the cylinder beyond 80 percent full.
 - The regulator and hose assembly must be routed through the left panel assembly. Regulator must be locked with regulator hose lock before connect with LP tank. See page 16 for detailed assembly instructions.
- **DANGER:** If the information in above is not followed exactly, a fire causing death or serious injury may occur.

SAFETY INFORMATION

- The outdoor cooking gas appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply system at test pressures equal to or less than 1/2 PSI (3.5 KPa).
- **CALIFORNIA PROPOSITION 65 WARNING:** The burning of gas cooking fuel generates some byproducts which are on the list of substances known by the State of California to cause cancer, reproductive harm, or other birth defects. To reduce exposure to these substances, always operate this unit according to the use and care manual, ensuring you provide good ventilation when cooking with gas.

TANK RUBBER SEAL INSPECTION

1. The cylinder face elastomeric face seal element on these devices could, over time, show marked and visible damage or deterioration that might cause a leak even with the connection tightened.
2. Visual inspection for the seal must be carried out everytime a LP gas cylinder is replaced or refilled.
3. LP-gas cylinder showing signs of damage or deterioration, including visible cracks and pitting, must be returned unused to the seller.

IMPORTANT: We urge you to read this manual carefully and follow the recommendations enclosed. This will ensure you receive the most enjoyable and trouble-free operation of your new gas grill. We also advise you retain this manual for future reference.

WARNING: Your grill has been designed to operate using only the gas specified by the manufacturer on the rating plate. Do not attempt to operate your grill with other gases. Failure to follow this warning could lead to a fire hazard and bodily harm and will void your warranty.

WARNING: Make certain your LP (propane) tank is filled by a reputable propane dealer. An incorrectly filled or overfilled LP tank can be dangerous. An overfilled tank combined with the warming of the LP tank (a hot summer day, tank left in the sun, etc.) can cause LP gas to be released by the pressure relief valve on the tank since the temperature increase causes the propane to expand. LP gas released from the tank is flammable and can be explosive. Refer to your Owner's Manual for more information concerning filling your LP tank.

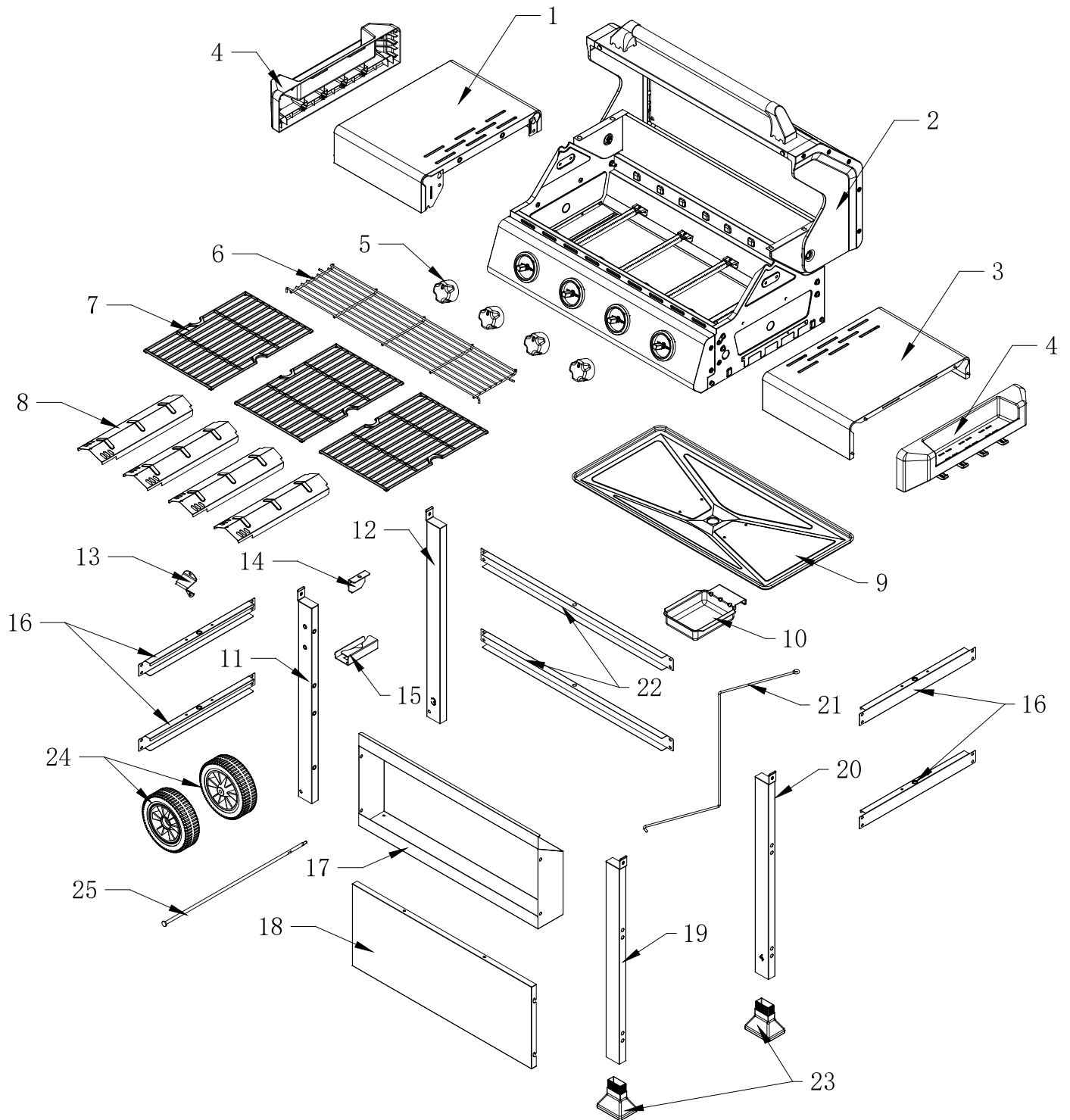
The installer must hand the instructions to the consumer and the consumer should retain them for future reference.



SAFETY INFORMATION

If the outdoor cooking gas appliance is not in use, the gas must be turned off at the supply cylinder(s). Storage of an outdoor cooking gas appliance indoors is permissible only if the cylinder(s) is (are) disconnected and removed from the outdoor cooking gas appliance. Cylinders must be stored outdoors out of the reach of children and must not be stored in a building, garage, or any other enclosed area.

Package Contents



Part NO.	Part number	Description	Qty	Part NO.	Part number	Description	Qty
1	N/A	Left Side Table Assembly	1	14	35219	Cylinder Hook	1
2	N/A	Main burner assy	1	15	35220	Cylinder Bracket	1
3	N/A	Right Side Table Assembly	1	16	35221	Short Crossbeam	4
4	N/A	Side Table Decorative Panel	2	17	N/A	Front Storage Basket	1
5	35209	Knob	4	18	N/A	Vehicle Front Panel	1
6	35211	Heat Insulation Net	1	19	35222	Right Front Leg	1
7	35212	Grill Rack	3	20	35223	Right Rear Leg	1
8	35213	Flame Distributor	4	21	N/A	Cylinder Stop Rod	1
9	35214	Oil Collection Tray Assembly	1	22	35224	Long Crossbeam	2
10	35215	Oil Collection Cup	1	23	35225	Leg Support Foot	2
11	35216	Left Front Leg	1	24	35226	Wheel	2
12	35217	Left Rear Leg	1	25	35227	Wheel Axle	1
13	35218	Bottle Opener	1	26	35228	HARDWARE	1

Hardware Contents

A	B	C	D	E	F
 X 8 M4X8 self-tapping screw	 X 1 wrench	 X53(+2) M6X12 screw (+2)spare screw	 X 1 blocking nut	 X 1 Bushing	 X 1 washer

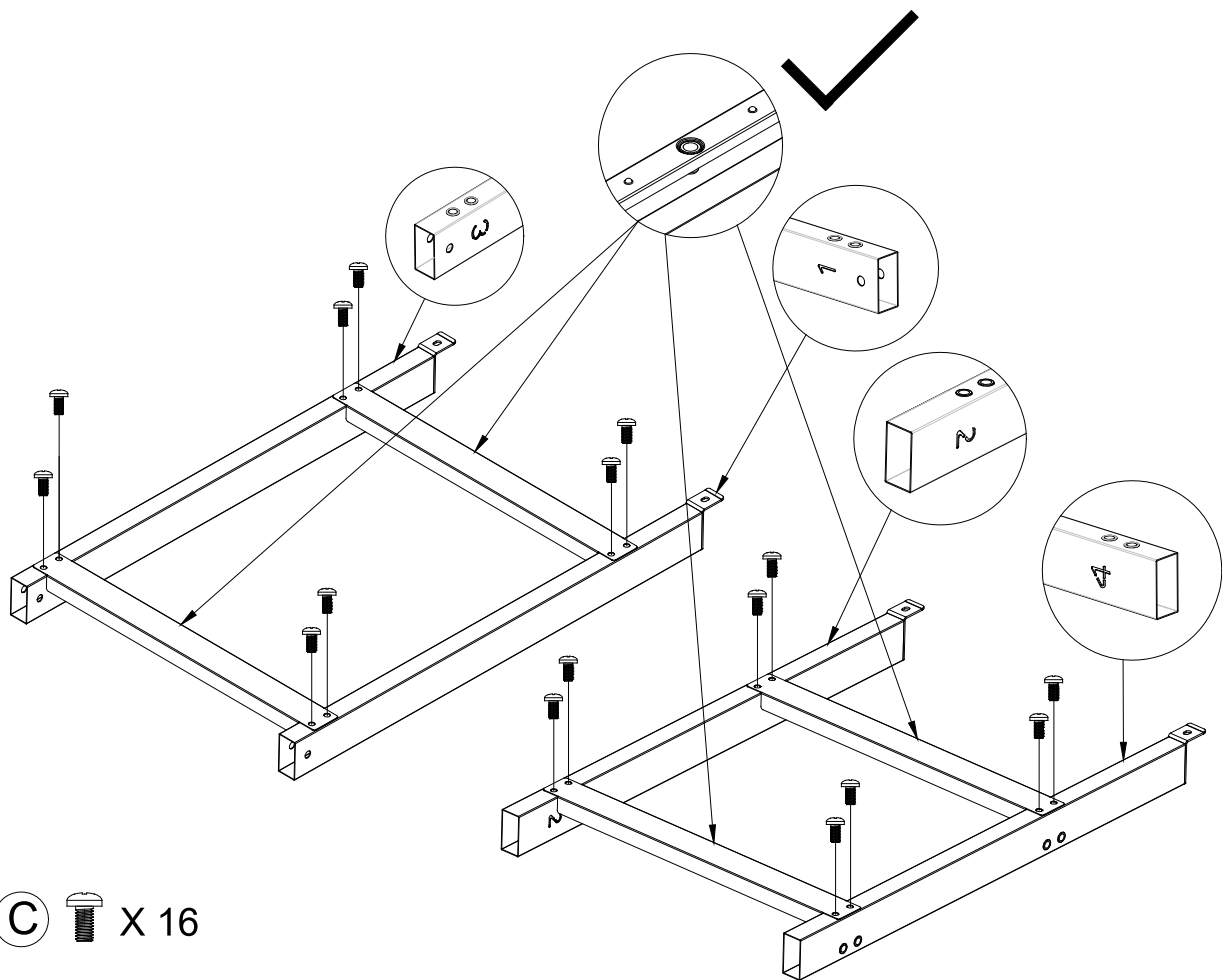
PREPARATION

Before beginning assembly of product, make sure all parts are present. Compare parts with package contents list and hardware contents list. If any part is missing or damaged, do not attempt to assemble the product.

Tools required for assembly (not included): Phillips Screwdriver, Wrench

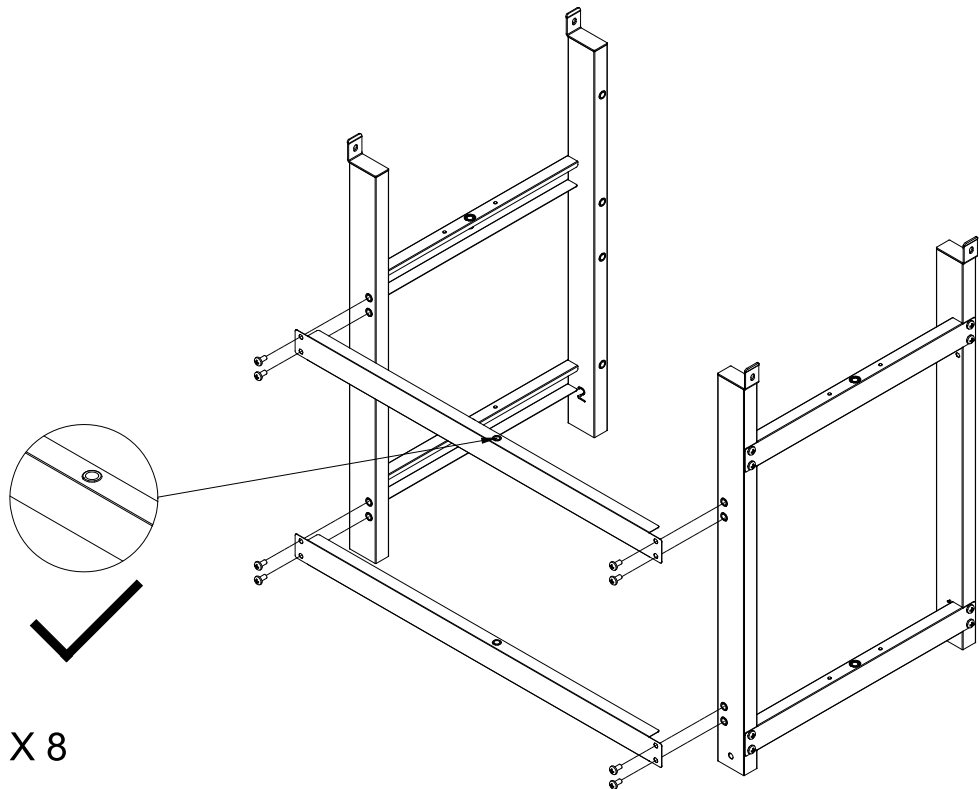
Assembly Instructions

STEP1



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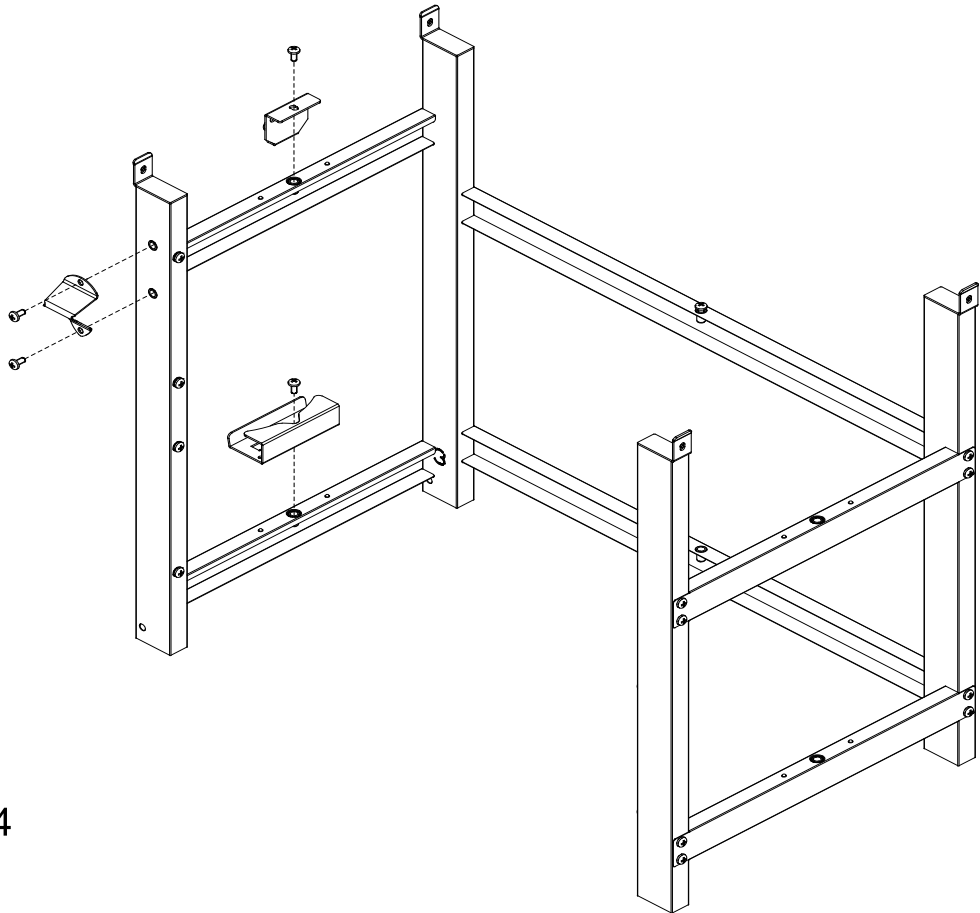
STEP2



(C) X 8

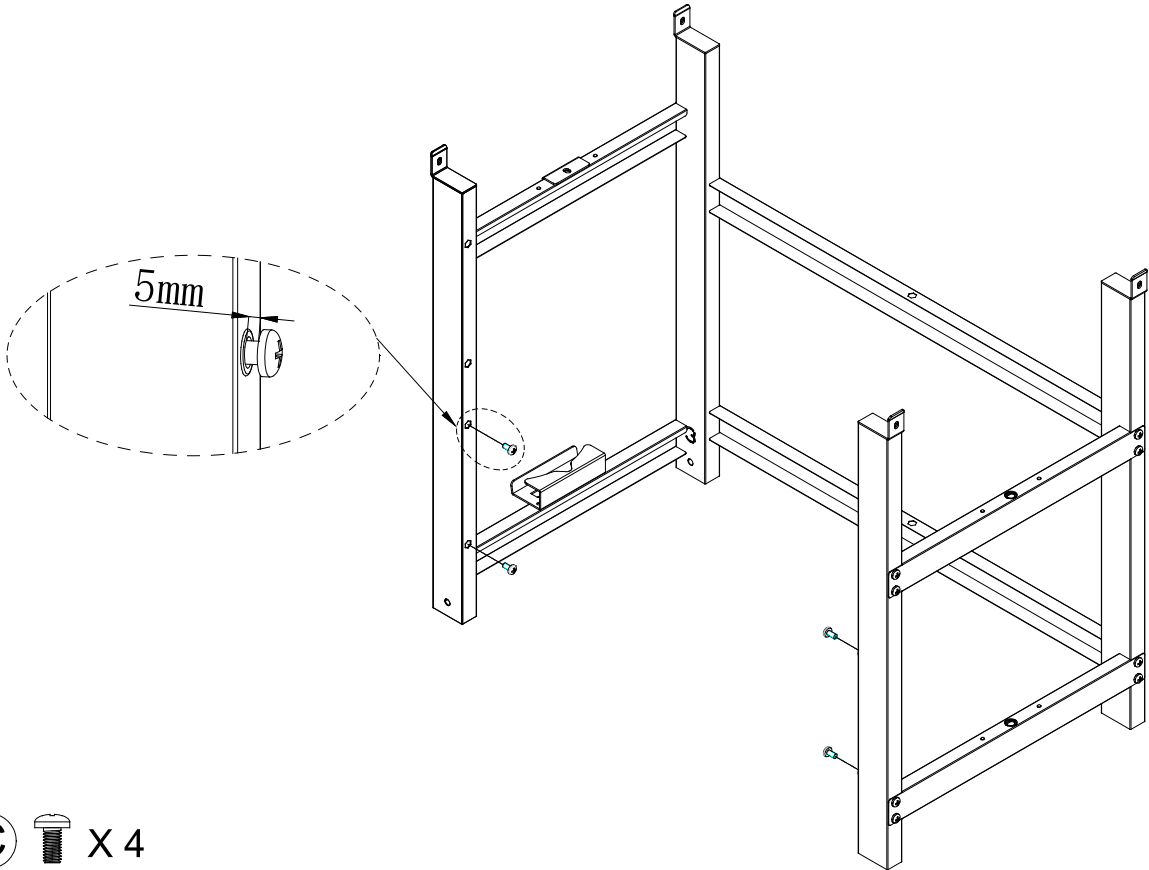
Assembly Instructions

STEP3



(C)  X 4

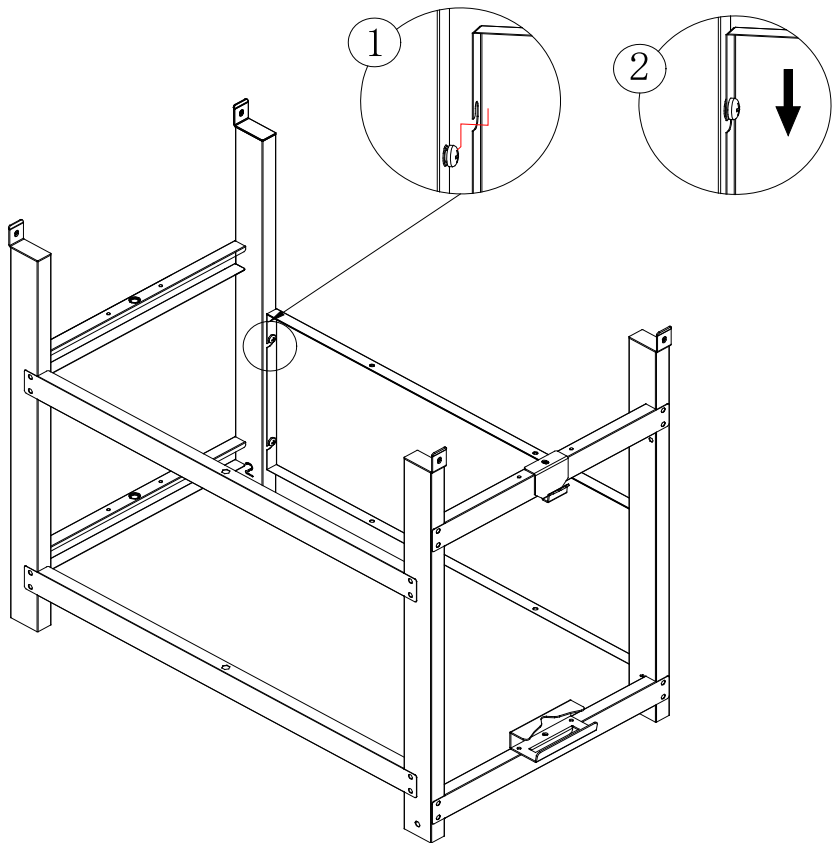
STEP4



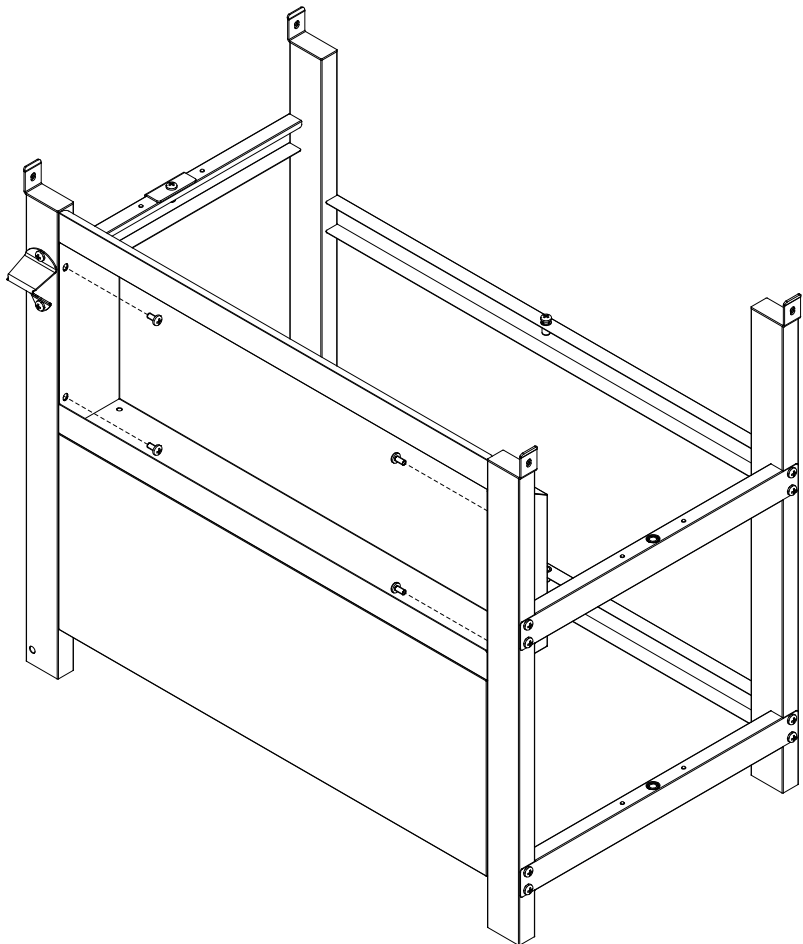
(C)  X 4

Assembly Instructions

STEP5



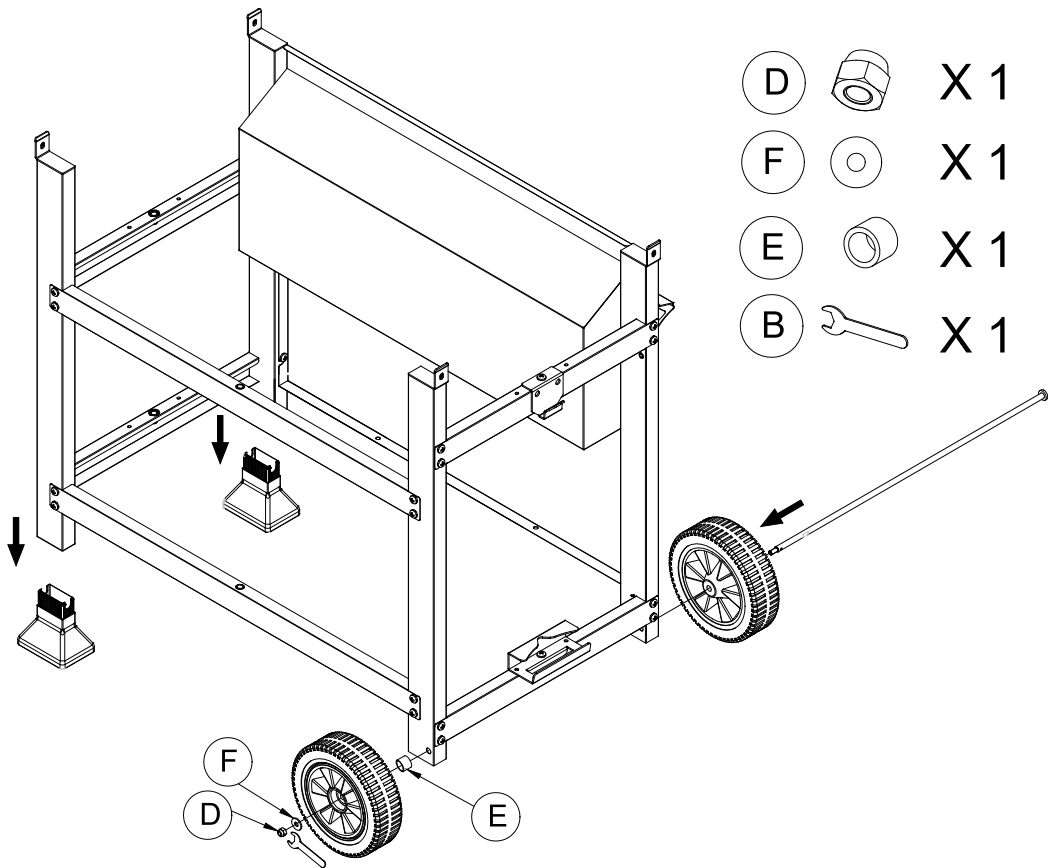
STEP6



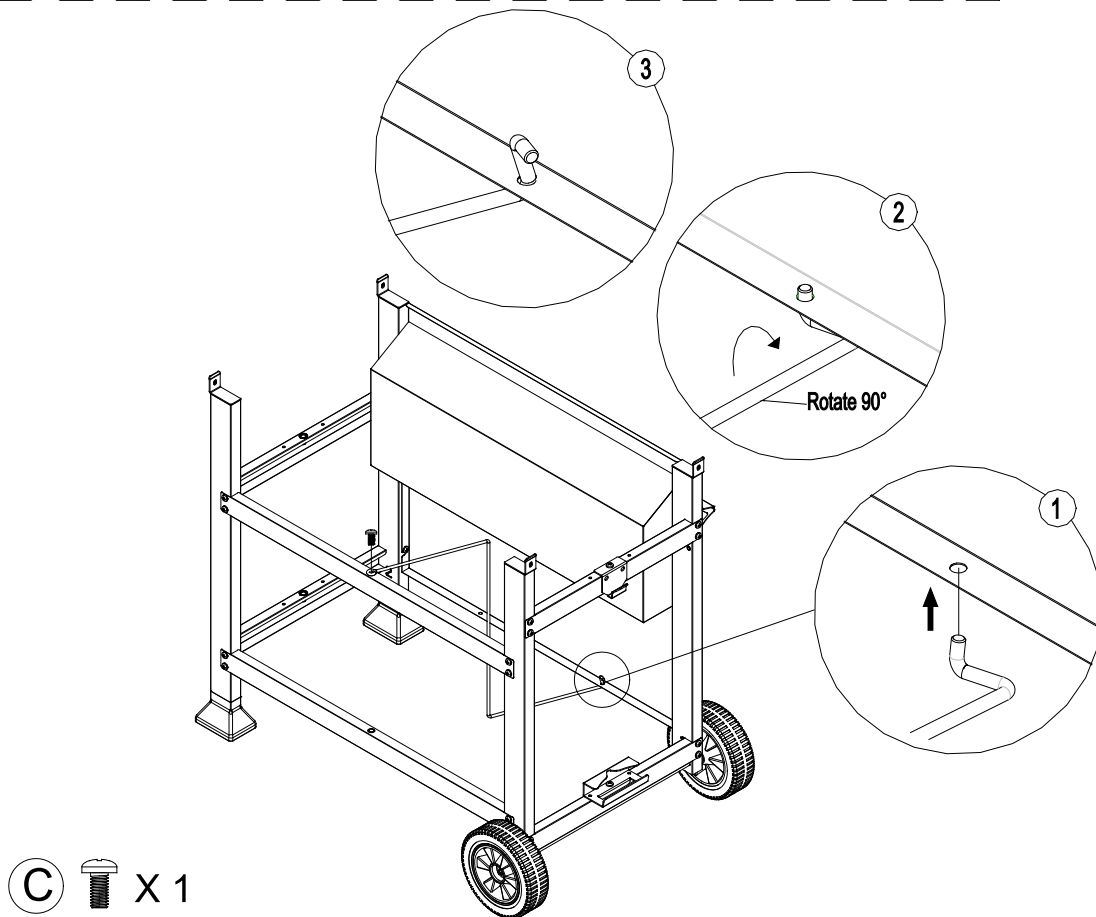
C  X 4

Assembly Instructions

STEP 7

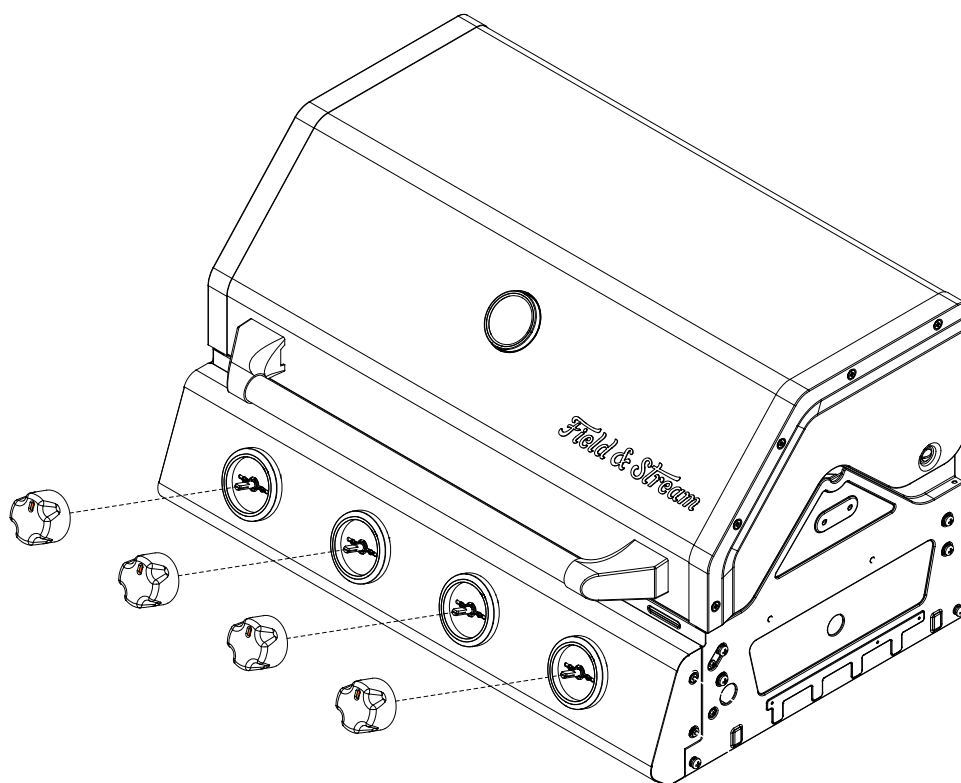


STEP 8

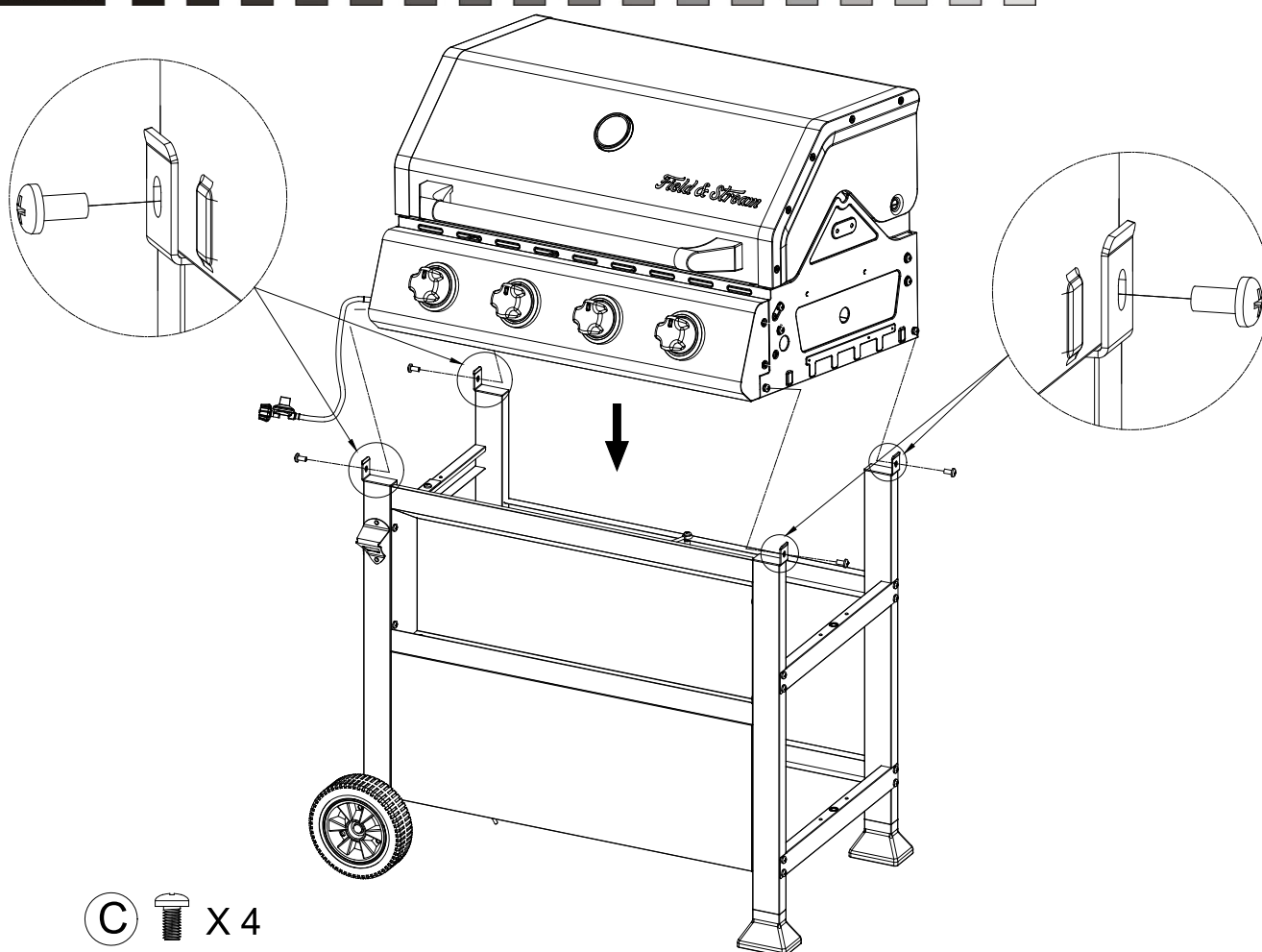


Assembly Instructions

STEP 9



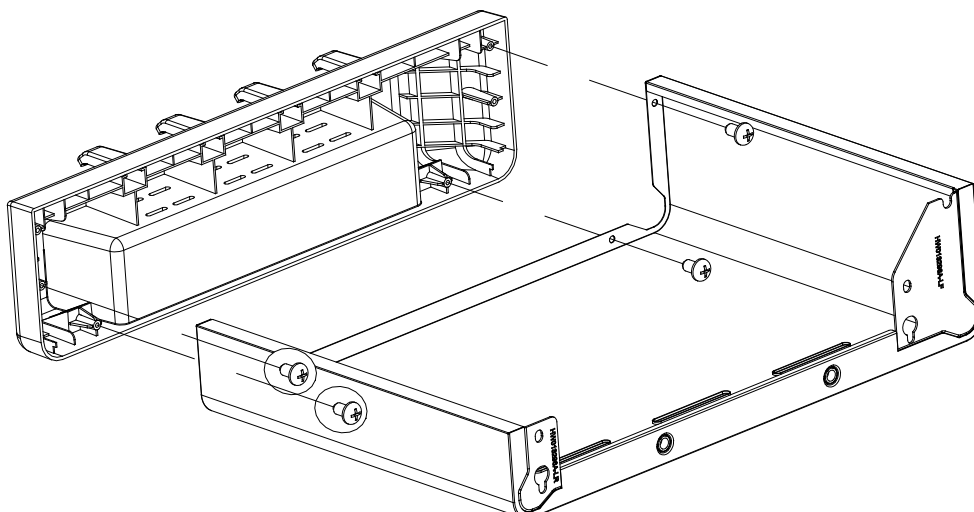
STEP 10



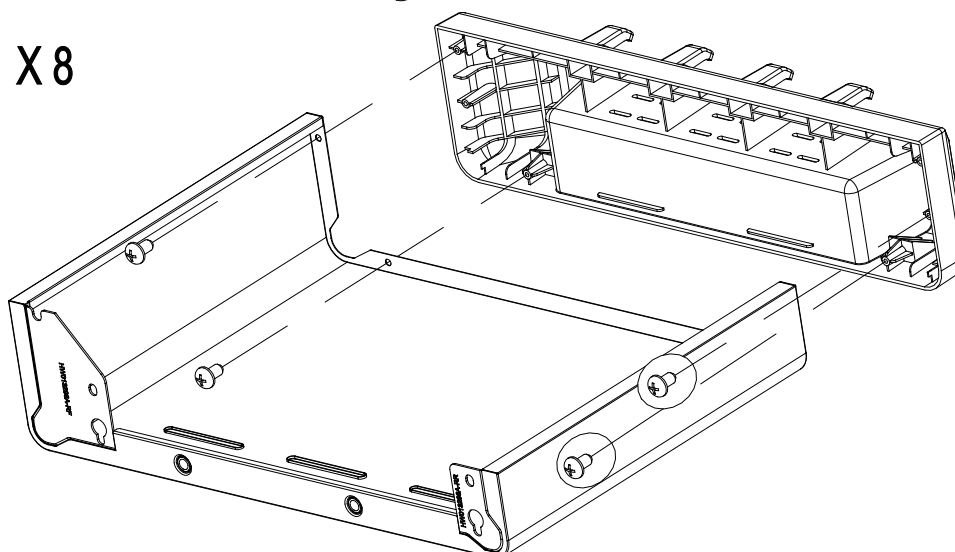
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Assembly Instructions

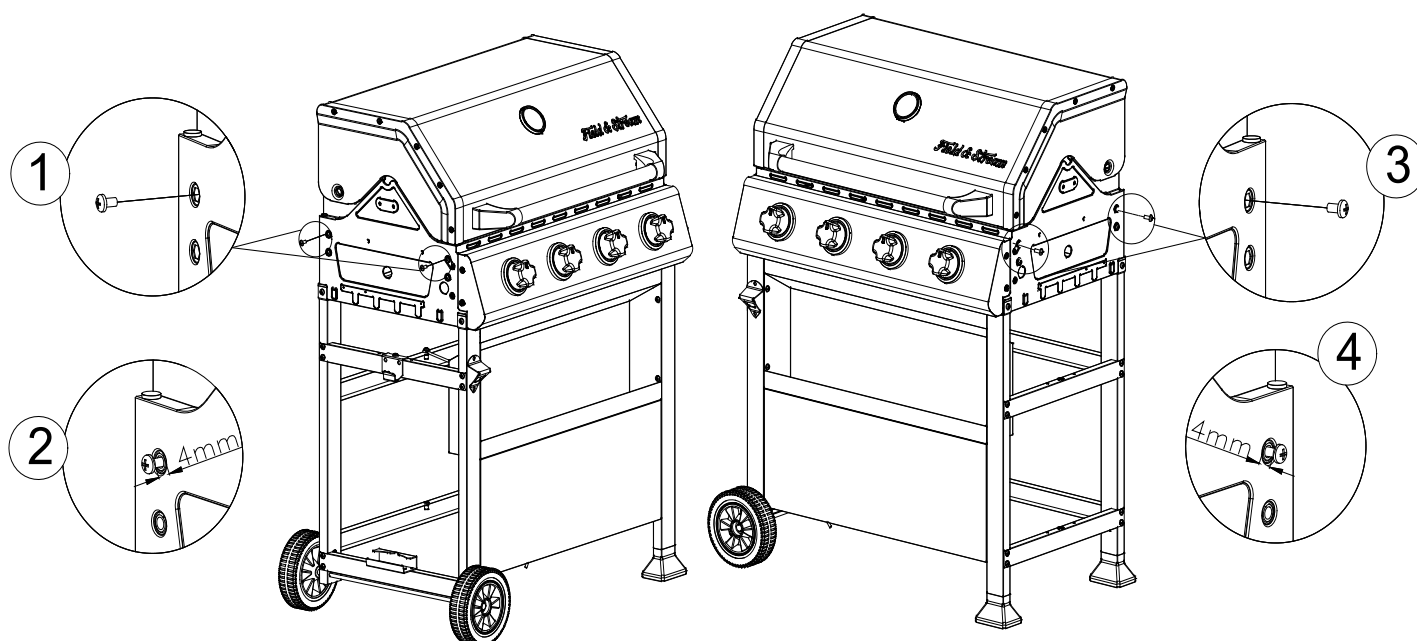
STEP 11



A  X 8



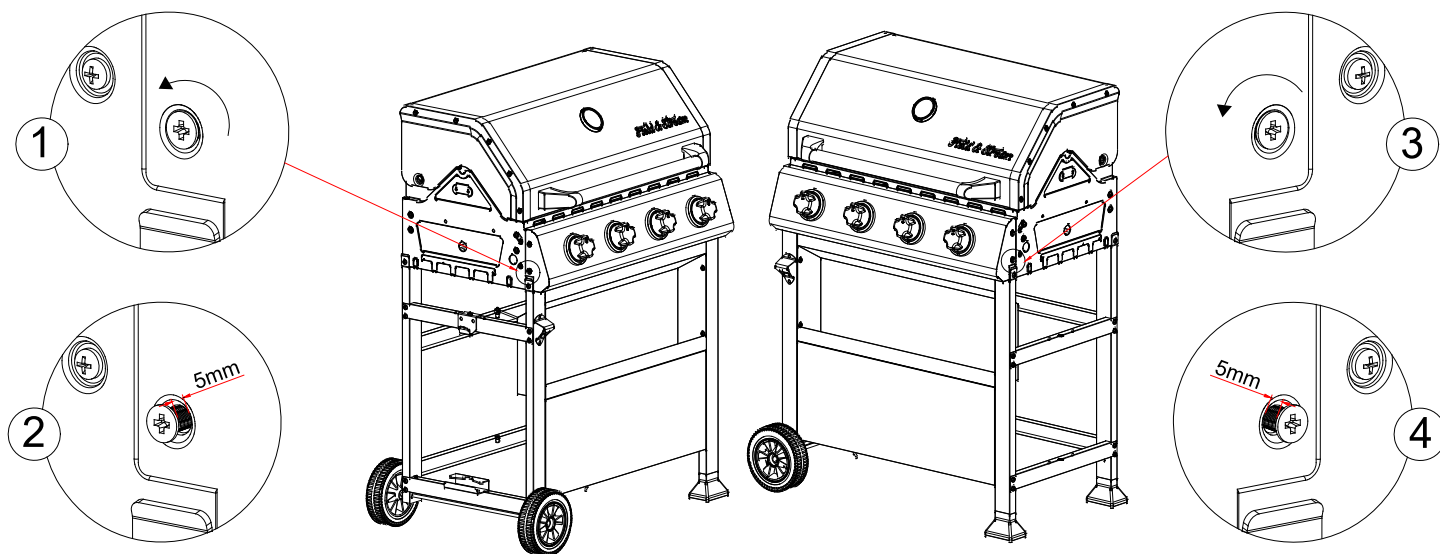
STEP 12



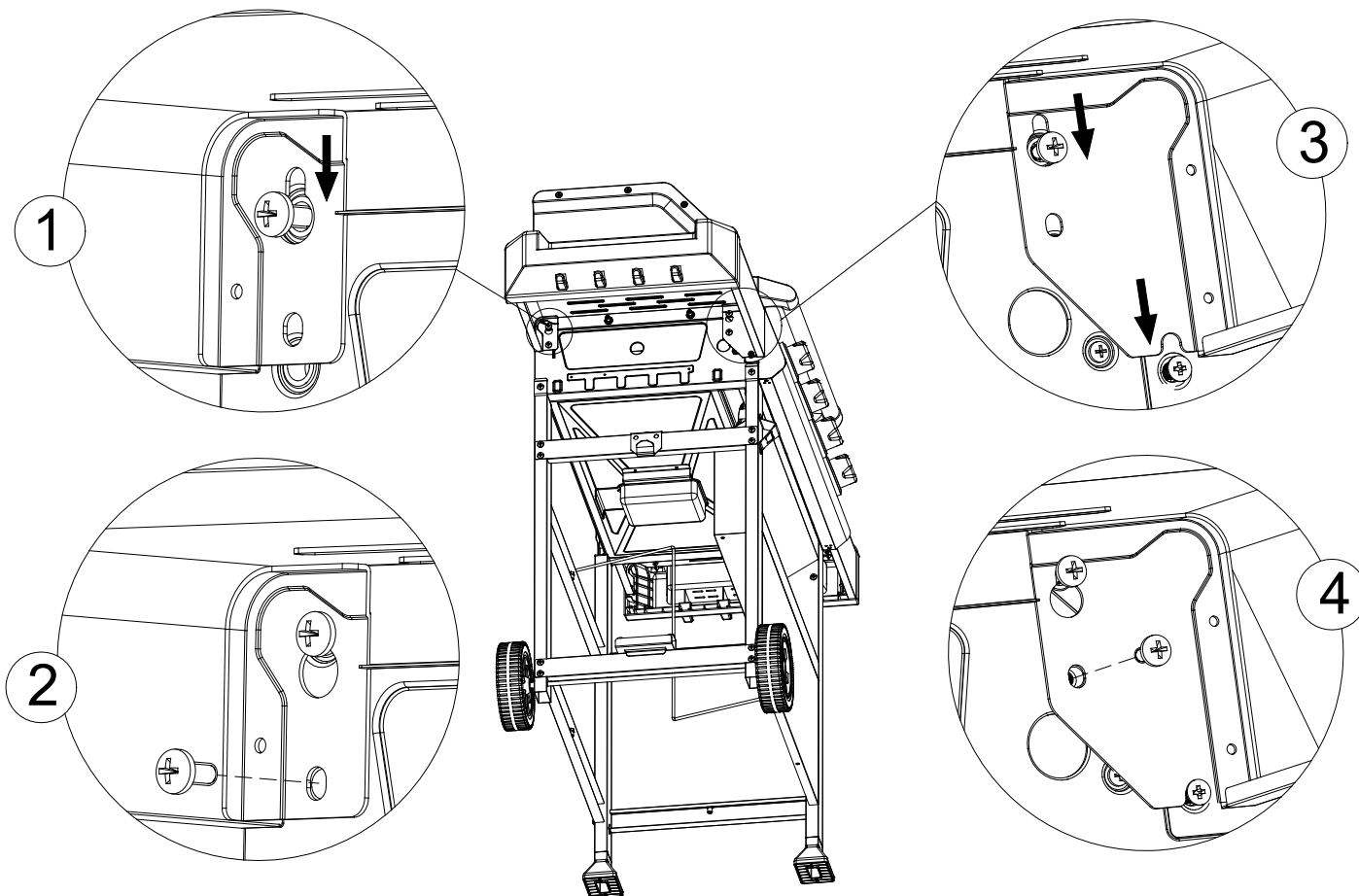
C  X 4

Assembly Instructions

STEP 13



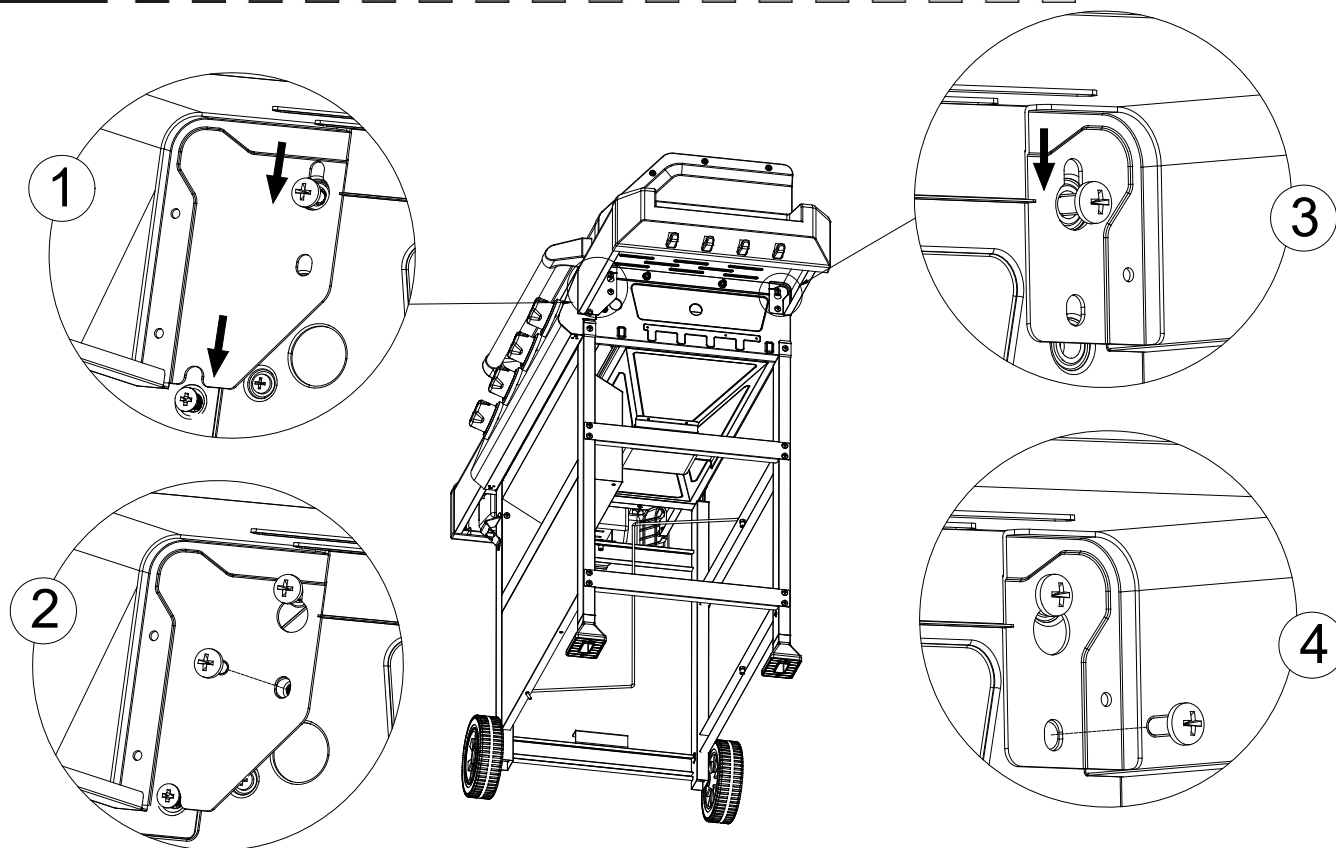
STEP 14



(C)  X 2

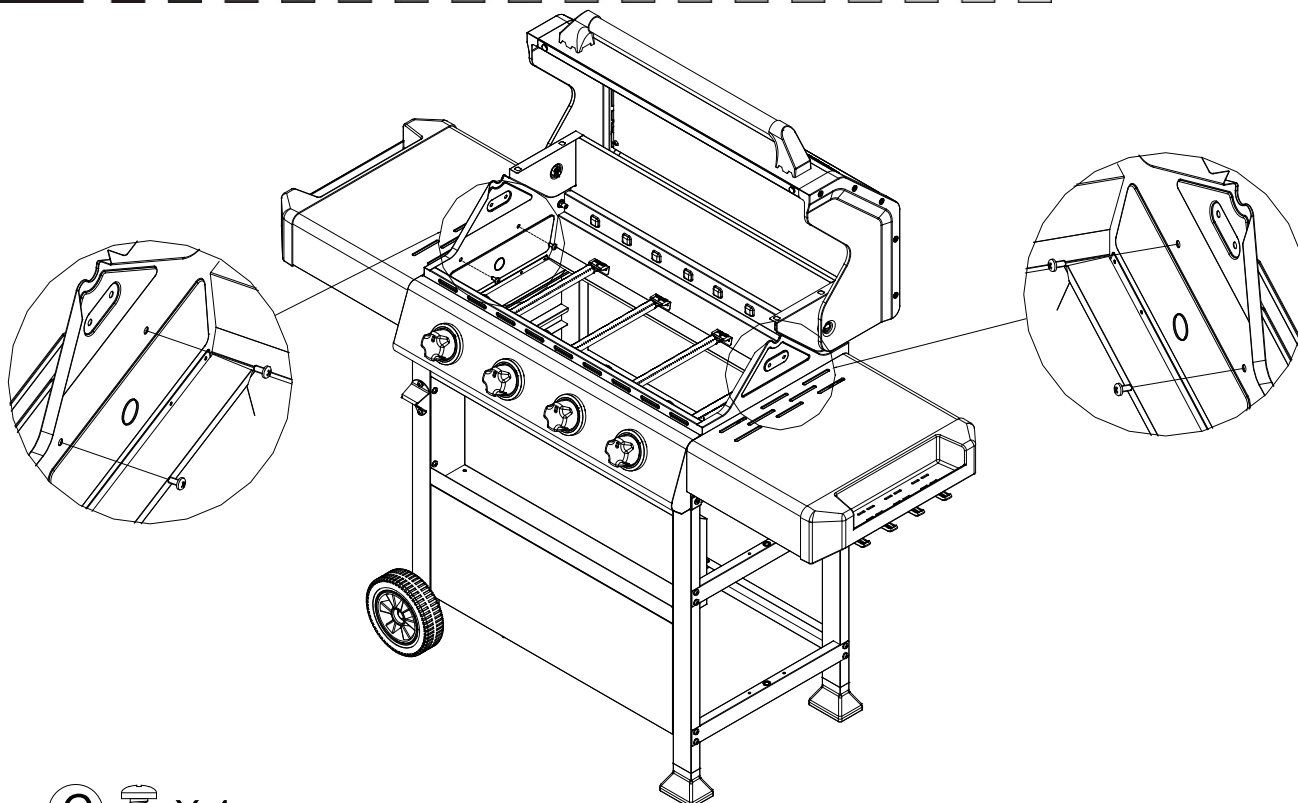
Assembly Instructions

STEP 15



(C)  X 2

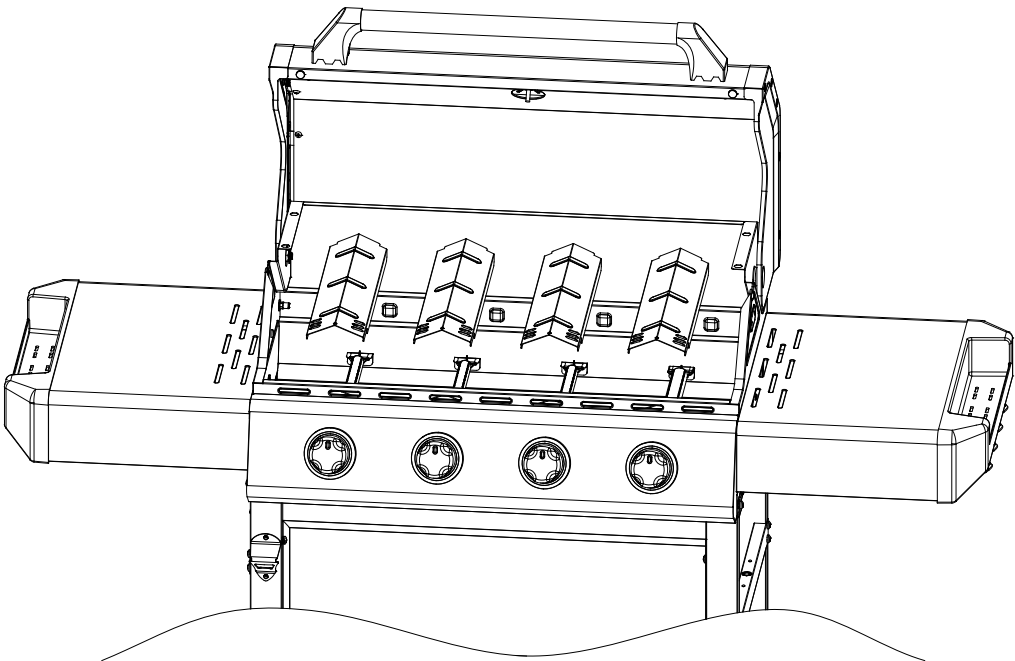
STEP 16



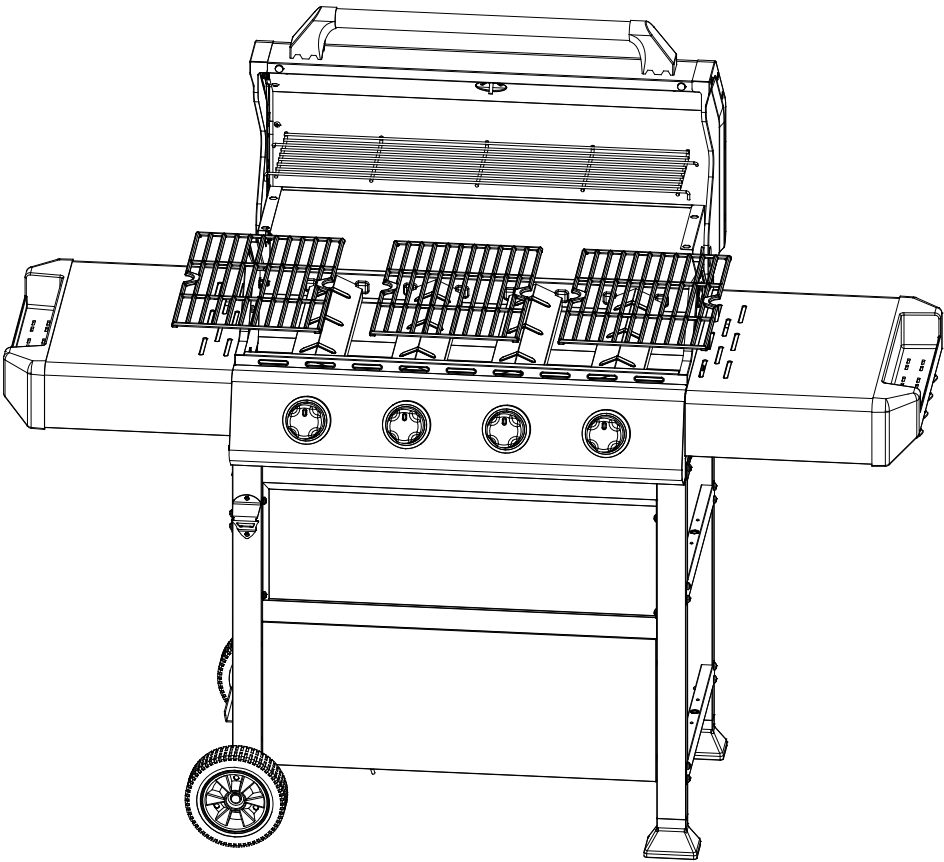
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Assembly Instructions

STEP17

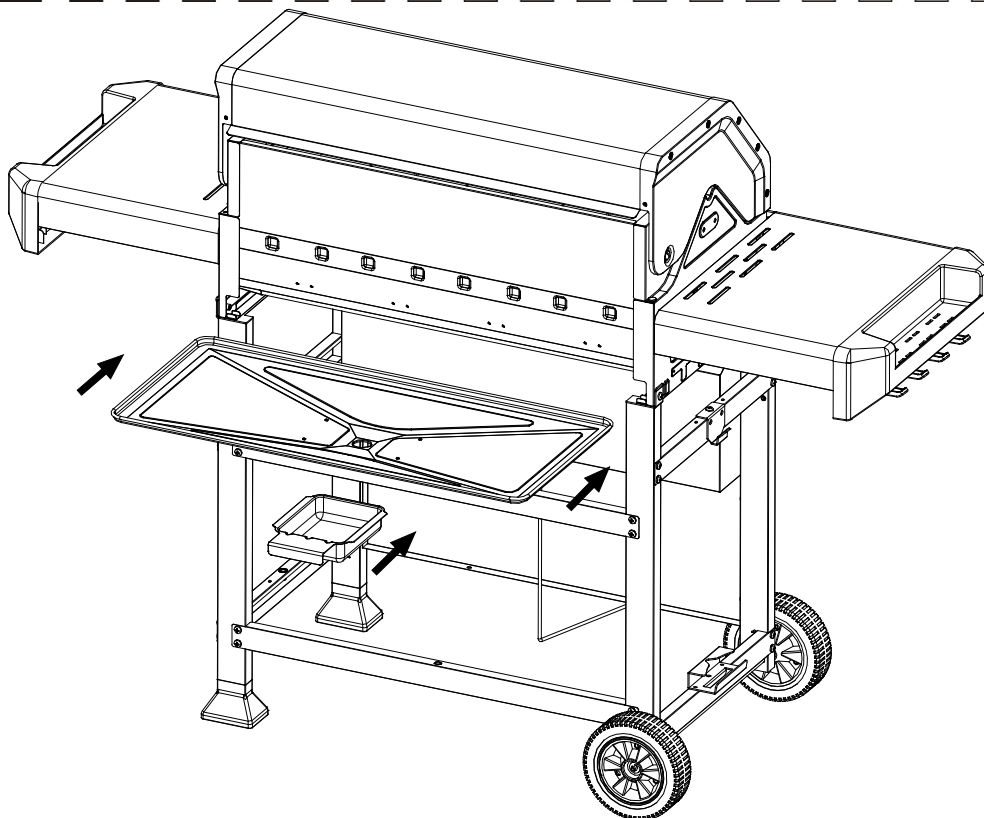


STEP18

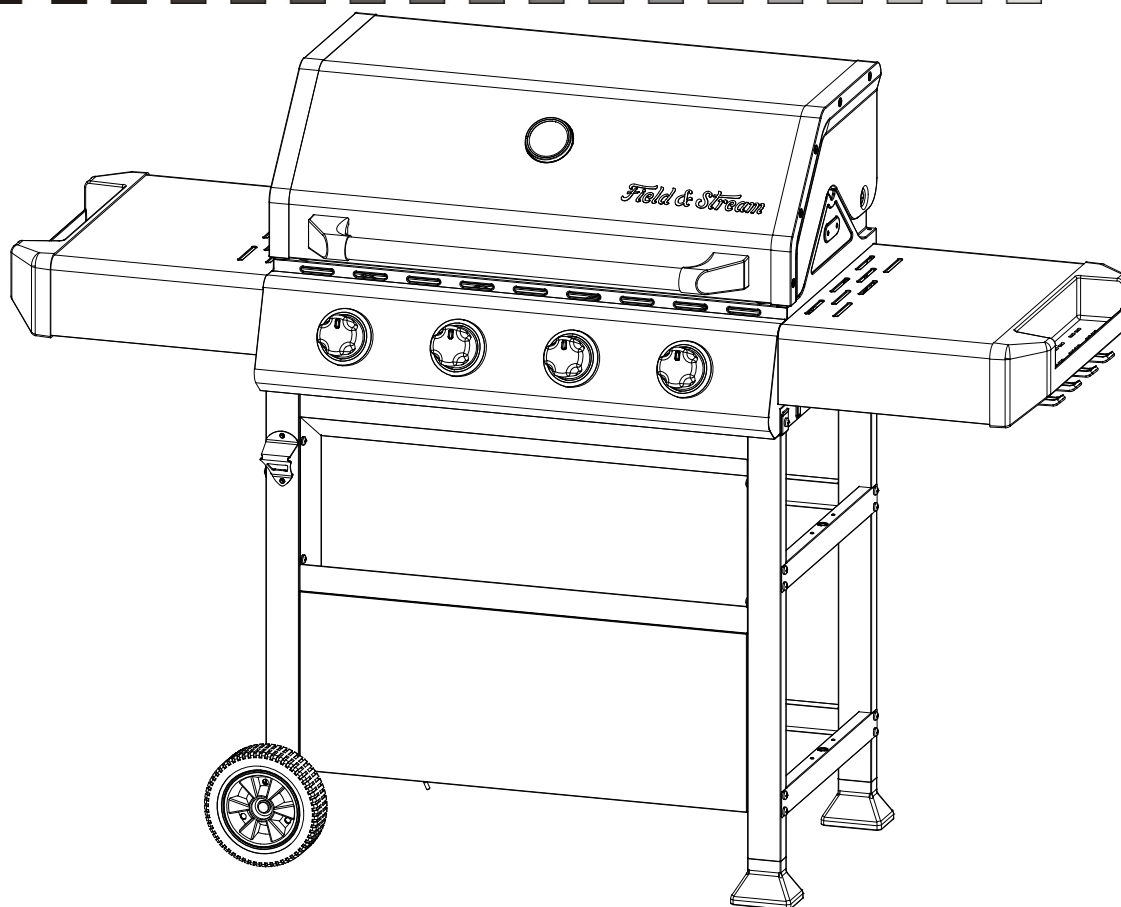


Assembly Instructions

STEP 19



STEP 20



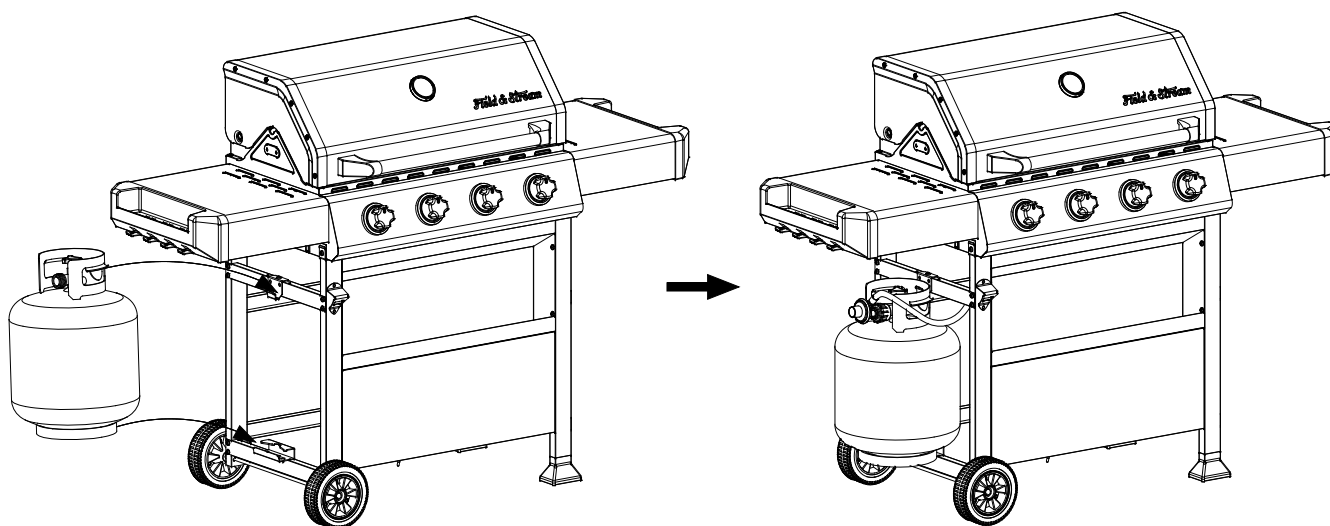
Installation Instructions

Check the ignition system

Press the knob, rotate it to the left, and observe whether an electric arc is generated at the ignition pin. If no electric arc is generated, check the ignition wires of the ignition system for abnormalities such as breaks or loosening. It is essential to ensure that an electric arc is generated at every ignition pin to confirm that each ignition system is functioning normally.

For Portable LP-Gas Connection

There is an arcuate notch at the lower cross beam of cart. Place the flange edge of the gas cylinder's bottom into the notch and hang the gas cylinder onto the gas cylinder hook (as shown in the diagram below). After securing the gas cylinder, connect the pressure-regulating valve and check the gas circuit for any leaks.



WARNING: The Type I connective coupling (see Fig.24) supplied with your grill must not be replaced with a different type of grill/tank connection system. Removal will result in loss of warranty, gas leakage, fire and severe bodily harm.

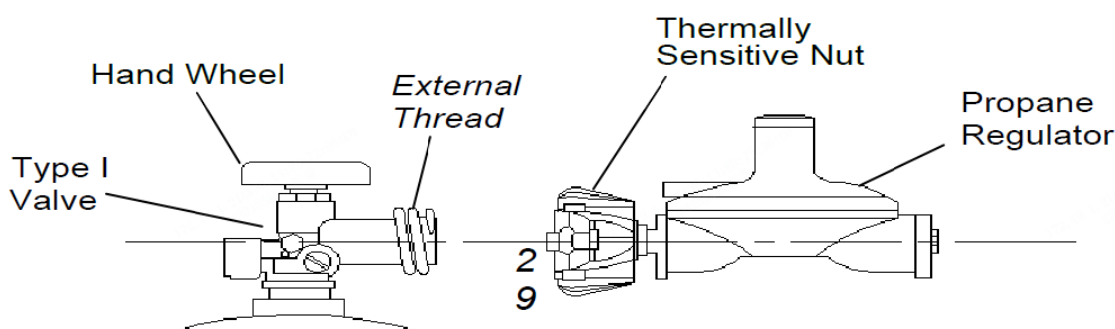


Fig.24

The propane tank valve connection supplied with this grill incorporates four important safe guards: Hand Assembly, Hand Disassembly, Excess Flow Control and Temperature-Activated Shut-Off.

Installation Instructions

a. Hand Assembly:

1. Make certain the tank valve and all the appliance valves are in the "OFF" position.
2. When connecting the regulator valve assembly to the tank, turn the large plastic nut clockwise until it stops.
3. Gas will not flow unless the plastic nut is completely connected.
4. HAND TIGHTEN ONLY.

b. Hand Disassembly:

1. Make certain the tank valve and all the appliance valves are in the "OFF" position.
2. Turn the large plastic nut counter-clockwise until it is disassembled.
3. HAND LOOSEN ONLY.

c. Excess Flow Control

The propane regulator assembly incorporates an excess flow device designed to supply the grill with sufficient gas flow under normal conditions yet control excess gas flow.

Rapid changes in pressure can trigger the excess flow device providing a low flame and low temperature. If the tank valve is turned open to allow gas flow while a burner valve is open, the surge of pressure will cause the device to activate. The device will remain closed until the pressure is equalized. This should occur within 5 seconds.

To ensure this does not cause difficulty in lighting the grill, follow these instructions:

1. Make sure all burner valves are "OFF".
2. Open the tank valve and wait 5 seconds.

d. Temperature-Activated Shut-Off

The large plastic nut on the regulator assembly is designed in coordination with a check valve in the tank valve to shut off the flow of gas when exposed to temperatures between 240-300° F. In the event of a fire or hose break, one of the safeguards will function to control or stop the flow of gas from the propane tank. Never attempt to use damaged equipment.

Installation Instructions

IMPORTANT: Before the use of a fresh tank of gas, please check leakage around the connections according to section “Checking Gas Leaks” on page 25 and make sure there is no leakage or vapor accumulation in the cabinet. Make sure all openings around side walls are not blocked.

IMPORTANT: Place dust cap on cylinder valve outlet whenever the cylinder is not in use. Only install the type of dust cap on the cylinder valve outlet that is provided with the cylinder valve. Other types of caps or plugs may result in leakage of propane.

Gas Requirements

The grill is set and tested at the factory for use with LP-Gas only.

LP Gas

The regulator supplied is set for 11 in. water column (WC) and is for use with LP gas only. The factory-supplied regulator and hose must be used with a 20 lb. LP gas tank.

LP GAS System

Contact your gas supplier for a special regulator for bulk gas that fuels other appliances.

Gas Consumption

Total gas consumption of this grill with the burner(s) on “MAX” Table 1 below.

Table 1

Burner Type	BTU/HR
Main Burners	10,000

Locating the Grill

This gas appliance is designed and certified for outdoor use only. Do not operate the grill inside a building, garage, recreation vehicle, screened porch or any enclosed area. Keep the grill away from windy areas, but keep the grill in a well-ventilated area. Do not obstruct the flow of combustion and ventilation air around the grill.

Warning: Do not place the grill under overhead, unprotected combustible surfaces.

Clearance to Combustible Construction

A minimum clearance of 36 in. from the sides of the grill and a minimum clearance of 36 in. from the back of the grill to adjacent vertical combustible constructions must be maintained. However, the manufacturer strongly suggests a 6 ft. clearance of the grill to combustible constructions.

Installation Instructions

Clearance to Noncombustible Construction

A minimum clearance of 36 in. from the back of the grill above the cooking surface to noncombustible constructions is required to allow the grill hood to open completely. A minimum of 36 in. clearance to the sides of the grill above the cooking surface to noncombustible constructions is recommended. The grill can be installed directly next to noncombustible construction below the cooking surface.

Checking orifice alignment with burners

Orifices may shift during assembly and movement; therefore, check the orifice alignment with the burners according to the following illustrations before lighting.

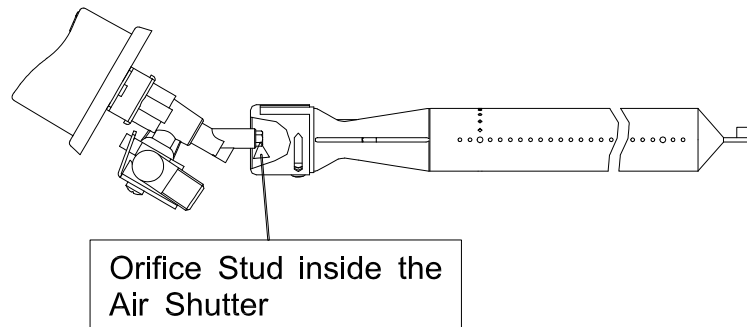


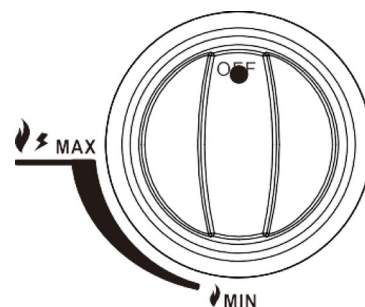
Fig. 25 Main Burner and Orifice Relationship

OPERATING INSTRUCTIONS

Grill Lighting Instructions

To Light the Main Burners

- 1 .Make sure the control knobs are in the “OFF” position.
- 2 .Open the grill hood.
- 3 .Check the ignition pin position and distance between the pin and the burner.
- 4 .Make sure the drip tray is installed.
- 5 .Open the LPG tank.
- 6 .Light each burner separately. Turning on two burner valves together could trip the flow connection (LP grills only).
- 7 .Push the control knob in and turn the knob to the left to “MAX” position. Keep pressing the knob until the burner is lit.
- 8 .If the burner does not ignite within 5 seconds, immediately turn the control knob back to the “OFF” position. Wait 5 minutes and repeat Step 7 up to 2 or 3 times.
- 9 .If the burner still does not ignite, TURN OFF THE GAS. WAIT 5 MINUTES for excess gas to dissipate. Repeat Steps 6 and 7(if necessary).
- 10 . If the burner still can't be lit, refer to the Troubleshooting section.



Replacing the Battery

1. Unscrew the electrical ignition button and remove the old battery.
2. Replace with a new AA battery

Note: The negative (-) side of the battery goes in first. Please refer to the mark on the side of the cap.

WARNING:

1. Make sure the hood is completely open each time you attempt to light the grill. Failure to open the hood could lead to delayed ignition resulting in bodily harm.
2. This grill is equipped with a flame observation hole in the side panel. Wear protective mitts before using the flame observation hole.

CAUTION: It is important to inspect the full length of the gas line hose. If it is evident there is excessive abrasion or wear, or the hose is cut, the hose must be replaced prior to the appliance being used.

If required, check your parts list for the proper replacement hose assembly. It will be necessary to open the bottom door to fully inspect the hose.

CAUTION: Regulator and hose must run outside the cart and then route through the hole on the left side panel of the cart before connecting with tank. See page16 for detailed assembly instructions.

OPERATING INSTRUCTIONS

Checking the Flame

Refer to Fig.26 below (side view of grill) for where to check the flame after the grill is lit. Make sure you have a stable, mostly blue flame.

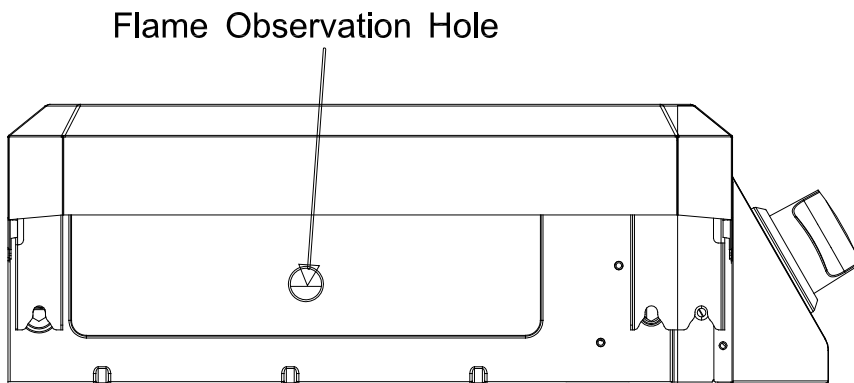


Fig.26

Using matchstick

Refer to troubleshooting for igniting your barbecue using matchstick holder. Substitute with use of an extended reach lighter. See Fig.27

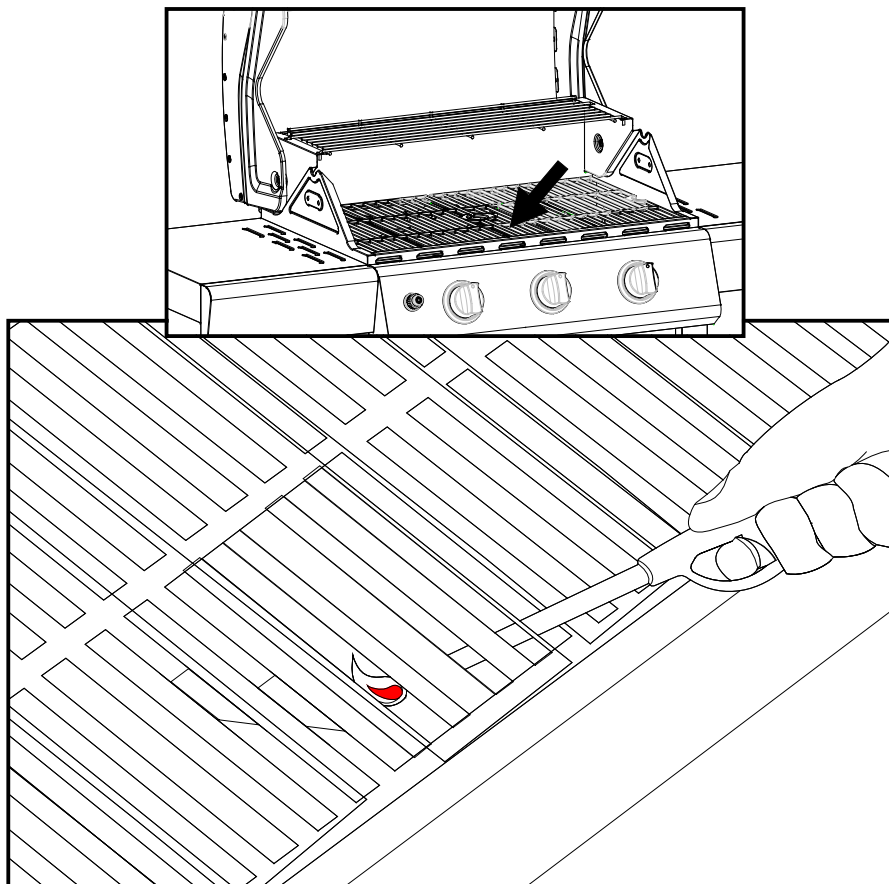


Fig. 27 Using matchstic

OPERATING INSTRUCTIONS

Match stick holder no longer included. Ignite your barbecue by using an extended reach lighter or a long stick match. See Fig.28

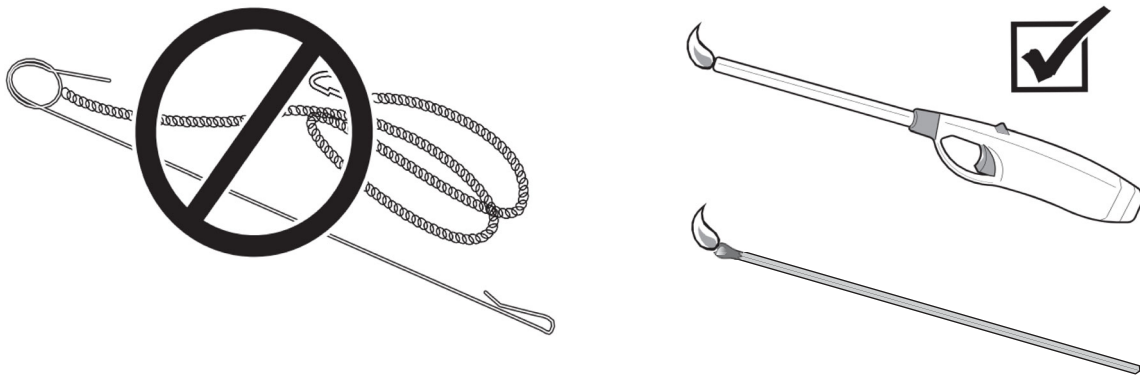


Fig. 28

Breaking in Your Grill

When firing your grill for the first time, it is advisable to run the main burner(s) on “MAX” for 20 minutes with the hood down, and then turn the main burners off. This tempers the grill.

Preheating Grill

It is extremely important that your grill be up to temperature before you begin using it. After lighting, close the hood and preheat the grill on “MAX” for 15 minutes. This preheating will ensure that the cooking grate is hot enough for proper grilling.

CAUTION: Do not cover the cooking grate during the preheating period.

WARNING: Never leave a grill unattended to guard against possible grease fires getting out of control. Grease fires can be severe and cause grill damage, property damage and bodily harm.

Open or Closed Hood for Grilling

Cooking with the lid open or closed is a matter of personal preference. Cooking with the lid closed is recommended if you enjoy cooking at maximum “searing” temperatures. This method will also produce more “flare up”, speed the cooking procedure and will give you a more robust, smoky, outdoor flavor. If you prefer cooking slower with less flare up, we suggest the lid-open method.

We recommend always cooking with the lid CLOSED if you are in a windy area or colder climate. Your grill has been designed and constructed to give you maximum flexibility and cooking performance. Be creative. Try different cooking methods on your grill and determine which suits your needs best. There is no right or wrong way to cook, just different cooking styles. Get creative and enjoy!

OPERATING INSTRUCTIONS

Checking Gas Leaks

Before operating your grill, after refueling, check carefully to be certain that all connections are tight and there are no gas leaks.

- 1: Make 2-3 ounces of leak solution by mixing liquid dishwashing soap with water.
- 2: Make certain all control knobs are in the “OFF” position.
- 3: Brush small amounts of the leak solution on all the fittings and turn the gas on.
- 4: If bubbles appear, there is a leak. Proceed to step 5.
- 5: Turn the gas off and tighten all connections.
- 6: Go back to step 1 to retest the fittings.
- 7: If bubbles continue to appear, turn the gas off. Contact customer service.

WARNING: Never use a match or open flame for leak detection. Use of an open flame could result in a fire, explosion and bodily harm.

IMPORTANT: When connecting or replacing any gas pipe or fittings, all joints must be sealed with approved leak-proof sealing compound or plumber’s tape.

WARNING: Please remember this is an outdoor gas grill. Many areas of the grill generate extreme heat. We have taken every precaution to protect you from the contact areas. However, it is impossible to isolate all high-temperature areas. Therefore, use good judgment and a certain degree of caution when grilling on this product. We suggest a covered, protected hand during operation of grill. Do not move your grill when it is in operation or hot to the touch. Wait until your unit is turned off and properly cooled down before moving it. Failure to follow this warning could result in personal injury.

Post Heating

To keep the grates free of charred food remains, run the grill on “MAX” for 15 minutes after cooking is complete and food has been removed.

CAUTION: Do not cover the grill during the post heating period.

After post heating your grill, turn the control knobs to the “OFF” position.

Propane Tank Shut-Off

After the firebox cool down, the propane tank valve should also be closed. If you do not want to wait for the firebox to cool, use a covered hand to turn off the propane tank valve.

CARE AND MAINTENANCE

WARNING: Do not attempt to turn off the LP tank valve without first covering your hand with a protective mitt or allowing the grill to cool down. Failure to follow this warning could result in a severe burn.

LP Gas Safety Requirement

For LP gas grills, the LP gas supply tank to be used must be: Constructed and marked in accordance with the Specifications for LP Gas Tanks of the US. Department of Transportation (DOT) or the National Standard of Canada, CAN/CSA-B339 Cylinders, Spheres and Tubes for Transportation of Dangerous Goods; and Commission, as applicable; and Provided with a listed Overfill Prevention Device (OPD). The tank should be 12 inches in diameter and 18-1/2 inches tall and be equipped with a Type-I fitting.

The tank supply system must be arranged for vapor withdrawal.

The tank used must include a collar to protect the cylinder valve.

The tank should be provided with a cylinder connection device compatible with the connection for outdoor cooking appliances.

Do not operate the gas grill indoors or in any enclosed area. If the gas grill is not in use, the gas must be turned off at the supply tank. If the grill is to be stored indoors, disconnect the gas supply tank and store the tank in an upright position in a cool, well-ventilated outdoor location away from your grill or any other heat source.

When checking for gas leaks, do not use an open flame. Use a soapy water solution and apply it to the pipe joints and fittings with a brush and check for bubbles. Check flexible hoses for cuts and wear that may affect the safe operation of the grill. Only the factory supplied hose and regulator must be used. Use only replacement regulator and hose assembly specified by manufacturer.

LP tank should be securely locked by the gas cylinder safety stop at all times. An unlocked tank may fall or tilt which can cause injury or property damage. It is recommended to lock the tank all the time.

CARE AND MAINTENANCE

Handling the Liquid Propane Tank Safely

Remember to handle your portable liquid propane tank carefully when you take it to your dealer for a refill. Avoid dropping it or bumping it against sharp objects. Liquid propane tanks are sturdily constructed, but a series of hard jolts could damage the container.

When transporting the tank to your local propane gas dealer, make sure the valve is closed tightly and the protective cover is in place. Position the tank securely in an upright position so it will not roll around your vehicle.

If you plan to make stops for shopping or errands, have your liquid propane tank filled at the last stop before going home. Again, make certain the refilled tank is secure and in an upright position. When you return home, remove the refilled tank from your vehicle. Never leave a portable liquid propane tank inside a vehicle that may become overheated by the sun.

Your local liquid propane gas dealer will gladly offer you additional safety tips.

Storing the Liquid Propane Tank Safely

Whether you are between cross-country treks in your recreational vehicle or looking for a place to keep the liquid propane tank to provide fuel for your outdoor grill, keep in mind some basic safety rules about storing portable liquid propane tanks:

Do not store the tanks (whether full or empty) inside your home, the living area of an R.V., a garage, basement or workshop. It is unlikely that liquid propane will leak from the tanks. If it should leak, the fuel could be exposed to sparks from automobiles, power tools or other appliances. When storing or transporting your LP tank, it must remain in an upright position.

Never lay your LP tank down on its side whether it is full or empty. Never store a spare tank under or near your grill.

CAUTION: Never transport or move your grill or grill tank without first closing the manual valve on your liquid propane gas tank.

The best place to store a liquid propane tank is in a shady or protected spot outdoors, behind your home or garage, or on a screened porch but where it is out of reach of children. Liquid propane will not evaporate. It is in a strong, closed container. It will not lose any of its clean-burning heat content, even if left outside year-round.

CARE AND MAINTENANCE

WARNING: When not connected to your grill, the LP gas tank must be stored in an upright position in a cool, shady, well-ventilated, outdoor location away from your grill or any other heat source. Failure to follow this warning could lead to tank valve damage, fire hazard and personal injury.

Refilling a Propane Tank

It is extremely important that your LP tank be filled properly when you take it to be refilled. Be sure to use a reputable LP dealer and observe how the tank is filled and at what capacity. An overfilled LP tank can be dangerous.

The proper way to fill a tank is by weight. The empty tank should be placed on a scale. The scale weights should be readjusted to a weight that would allow up to 80% of the total weight. The filling operation must end once the tank is filled to 80% of its total capacity. If the tank is not completely empty, the scale readjustment must be changed to consider the propane (LP) already in the tank.

WARNING: An LP (propane) tank is overfilled if it contains more than 80% of its total capacity of propane (LP).

An incorrectly filled or an overfilled LP (propane) tank can be dangerous. If a tank is overfilled and the weather causes the warming of the LP tank, (a hot day, tank left in sun or stored indoors) internal pressure is created due to expansion of the propane which in turn may cause the LP gas to be released through the pressure relief valve on the tank. The pressure relief valve is a safety device required on 20 lb. propane tanks by the Department of Transportation or the National Standard of Canada, CAN/CSA-B339 Cylinders, Spheres and Tubes for Transportation of Dangerous Goods; and Commission, as applicable, to prevent a catastrophic tank failure due to excessive pressure. LP gas released from the tank is flammable and can be explosive.

IMPORTANT: When connecting or replacing gas pipe or fittings, all joints must be sealed with approved leak-proof sealing compound or plumber's tape. After making connections, check all joints for leaks using a soapy water solution and a brush.

Clean with stainless steel cleaner on all non-cooking surfaces once a month. Never clean the stainless steel when it is hot.

After initial grilling, certain areas of the grill (i.e the vents, hood and firebox) may discolor. This is a normal discoloration caused by the intense heat from the burners. Specks of grease can gather on the surface of the stainless steel and get baked-on. These can usually be removed with warm soapy water or a stainless steel cleaner. As a last resort a mild abrasive pad could be used with a stainless cleaner. Use light pressure on the pad and always scrub in the direction of the grain. There are many outstanding products that will help clean and protect on all non-cooking surfaces.

Do not use steel wool to clean the grill.

CARE AND MAINTENANCE

Do not use abrasive cleaners on the polished surface. Use caution when cleaning. Metal polish or mild chrome cleaner can be used to bring back luster and highlights. Naval jelly can be used to remove rust stains that occur from outside sources. Follow the naval jelly instructions carefully.

To touch up minor scratches in the stainless steel, sand the affected surface lightly with 160 dry grit emery sand paper in the direction of the grain.

Burners

Burners are made of stainless steel and can be soaked in water and cleaned with a brass wire brush or a still bristle brush. Check every port hole for clogs. Use a wire pin (smaller than the port) to clean clogged ports. Do not enlarge any ports. Make sure the burners are dry before installing them back to the grill. See Fig.29

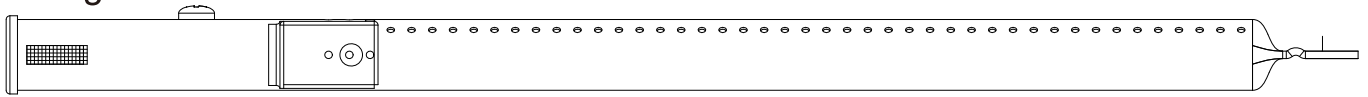


Fig.29

Spiders and insects can nest inside the burners of this or any other grill and cause the gas to flow from the front of the burner. This could cause a fire to occur behind the valve panel, thereby damaging the grill and making it unsafe to operate. Inspect the burners at least once a year or immediately after any of the following conditions occur:

1. The smell of gas in conjunction with the burner flames appearing yellow.
2. The grill does not reach temperature.
3. The grill heats unevenly.
4. The burners make popping noises.

Drip Tray

The drip tray collects excessive grease runoff and fallen food particles.

Allow the tray and its contents to cool before cleaning. Slide the tray out and wipe it clean.

Make sure the tray is installed before using the grill.

It is highly recommended that you check the tray regularly to avoid any possibility of a grease fire; however, most of the drippings will vaporize back into the cooked item giving you an outdoor grilled flavor.

Helpful Care and Maintenance Hints

Before grilling, pre-heat grill for 15 minutes on “MAX” with hood down. To avoid uncontrolled flare-ups or grease fires, grill meats with hood open. Close hood if meats are thick or weather is cold, or if you are using a rotisserie or indirect cooking.

Always protect your hand with a pot mitten or cooking glove when coming into contact with a hot surface.

CARE AND MAINTENANCE

Hood up when grilling meats, especially chicken. Hood down when indirect or rotisserie cooking.

NEVER leave your grill unattended while cooking.

After use, close hood, turn burners to “MAX” for 15 min. for self-cleaning, grease burn off.

Care and Maintenance Time Table Chart

Grill Item	Frequency Based on Normal Use	Cleaning Method
Painted surface	Twice yearly	Car wax
Stainless surface	Twice yearly	Stainless cleaner
All grates	After each use	Burn off and wipe
Porcelain	15 days	Scrub pad soapy water/ Dishwasher safe
Burner heat tents	30 days	Wire brush
Burners	90 days	Wire brush
Burner box interior	120 days	Interior grill cleaning products

Gauging amount of LPG fuel

To gauge the amount of propane fuel in your gas tank, the grill must be in operation. Place your hand at the top of the tank and slowly move down the side until the tank feels cool to the touch. This will indicate the approximate amount of propane gas in your tank; if 3/4 empty, refill.

Do not use charcoal briquettes or any flammable material with your grill. Use of such material will void your warranty and may lead to a fire, explosion and bodily harm.

TROUBLESHOOTING

Problem	Possible Cause	Corrective Action
Grill or side cooker will not light.	1. The ignition wire came off the electrical igniter/valve. 2. The distance between the ignition pin and the burner is greater than 5/32 in. - 3/16 in. (side burner). 3. The ignition wire is broken. 4. The battery has died. 5. The battery is in the wrong polarity. 6. The electrode tip does not produce sparks at the burner port. 7. No gas supplied. 8. Air shutter opening is too big.	1. Reconnect the ignition wire to the electrical igniter/valve. 2. Loosen the ignition pin and adjust the distance, then fasten it again. 3. Call customer service for a replacement ignition wire. 4. Install a new AA battery. 5. Change the battery polarity. 6. Reinstall the electrode. 7. Turn on the regulator valve. 8. Loosen the air shutter and adjust the opening to a smaller size.
Burner flame is yellow and gas odor can be smelled.	1. The air shutter opening is not properly set. 2. Spiders or insects block the air shutter.	1. Loosen the air shutter and adjust the opening to have blue flames. 1/4 in. opening for LPG. 1/8 in. or less opening for NG. 2. Clean blockages. 3. Check for the source of gas leaks.
Excessive flare-up.	1. Grilling fatty meats. 2. Knobs on "MAX." 3. Spray water on gas flames. 4. Hood closed when grilling.	1. Hood up when grilling. 2. Grill fatty meats when the grates are cold while the knobs are on the "MIN" setting. Move the meats to the warming rack if flare up continues until flame settles down. Never spray water on gas flames.

TROUBLESHOOTING

Problem	Possible Cause	Corrective Action				
Weak or no flame	1. LP tank is empty. 2. Burner is not aligned with the control valve. 3. Gas supply is not sufficient.	1. Refill the LP Tank. 2. Install the burner correctly. 3. Check the gas supply hose and make sure there are no leaks and no knots.				
Low heat with the knob in “MAX” position.	1. Ports are blocked. 2. LP tank has run out.	<table border="1"><tr><td>Burner</td><td>Burner</td></tr><tr><td>Main Burner</td><td>ø 0.93mm</td></tr></table> 1. Clear ports of any obstructions. 2. Refill the LP tank.	Burner	Burner	Main Burner	ø 0.93mm
Burner	Burner					
Main Burner	ø 0.93mm					
Low heat, LP gas.	The propane regulator assembly incorporates an excess flow device designed to supply the grill with sufficient gas flow. Rapid changes in pressure can trigger the excess flow device, providing a low flame and low temperature.	Please follow these instructions: 1. Make sure all burners are “OFF”. 2. Open the tank valve and wait 5 minutes. 3. Light the burner one at a time following the lighting instructions listed on the door liner and Page 24.				

Customer Support

If you experience any malfunction or issue with this product, and you are unable to diagnose or resolve it on your own, please contact us immediately.

Enerco Group Inc.

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Phone: 1-800-251-0001

Our customer service team is ready to assist you with troubleshooting, warranty service, or replacement parts.