



USER MANUAL



GAS CONVECTION OVENS

MODELS: 541CG1L, 541CG1N, 541CG2LK, 541CG2NK



USER MANUAL

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Congratulations on your purchase of Main Street Equipment commercial cooking equipment! At Main Street Equipment, we take pride in the design, innovation, and quality of our products. When used as intended and with proper care and maintenance, you will experience years of reliable operation from your Main Street Equipment equipment. To ensure optimal performance, we have outlined the following instructions and guidelines in this manual for your review. Main Street Equipment declines any responsibility in the event users do not follow the instructions or guidelines stated here.

PRODUCT OVERVIEW

The 541CG1 features a sturdy steel construction with 4 adjustable legs. It is equipped with built-in convection fan(s) for temperature uniformity throughout the cavity. The automatic ignition system activates in the event of a flameout, and a shutdown device stops the system from trying to ignite the burner(s) after 3 unsuccessful attempts to ensure safety. The electronic automatic thermostat ensures accurate temperatures for precise cooking.



Conforms to ANSI 2014-1045
Certified to CSA LI-2045
Conforms to NSF/ANSI std. 4



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SAFETY INFORMATION



WARNING

Any incorrect installation, maintenance, or self-modification can lead to property loss, bodily harm, or death. Please contact Main Street Equipment for any adjustment or maintenance. A certified and insured foodservice equipment technician must handle all maintenance and repair.



WARNING

For the safety of everyone involved, please keep the equipment away from any flammable or explosive objects and substances. Do not store or use any such items in the vicinity of this unit.



WARNING

This equipment should not be operated by persons with insufficient experience or knowledge of the equipment (including children), nor should it be used by those with physiological, perceptual, or mental disabilities without proper supervision.



WARNING

Keep children away from the equipment for their safety.



WARNING

Always keep this manual accessible. When transferring possession of the equipment to a third party, the manual must also be handed over. All users must operate the unit in compliance with this manual.



WARNING

Any nearby walls, surfaces, kitchen supplies, etc. should be non-combustible and heat-resistant. Please pay special attention to fire prevention regulations.


IDENTIFYING YOUR OVEN

For future reference, record the cabinet model and serial number found on the serial plate located on the rear of the cabinet.

MODEL: _____ SERIAL#: _____

ITEM#: _____ QUANTITY: _____

Gas Convection Oven

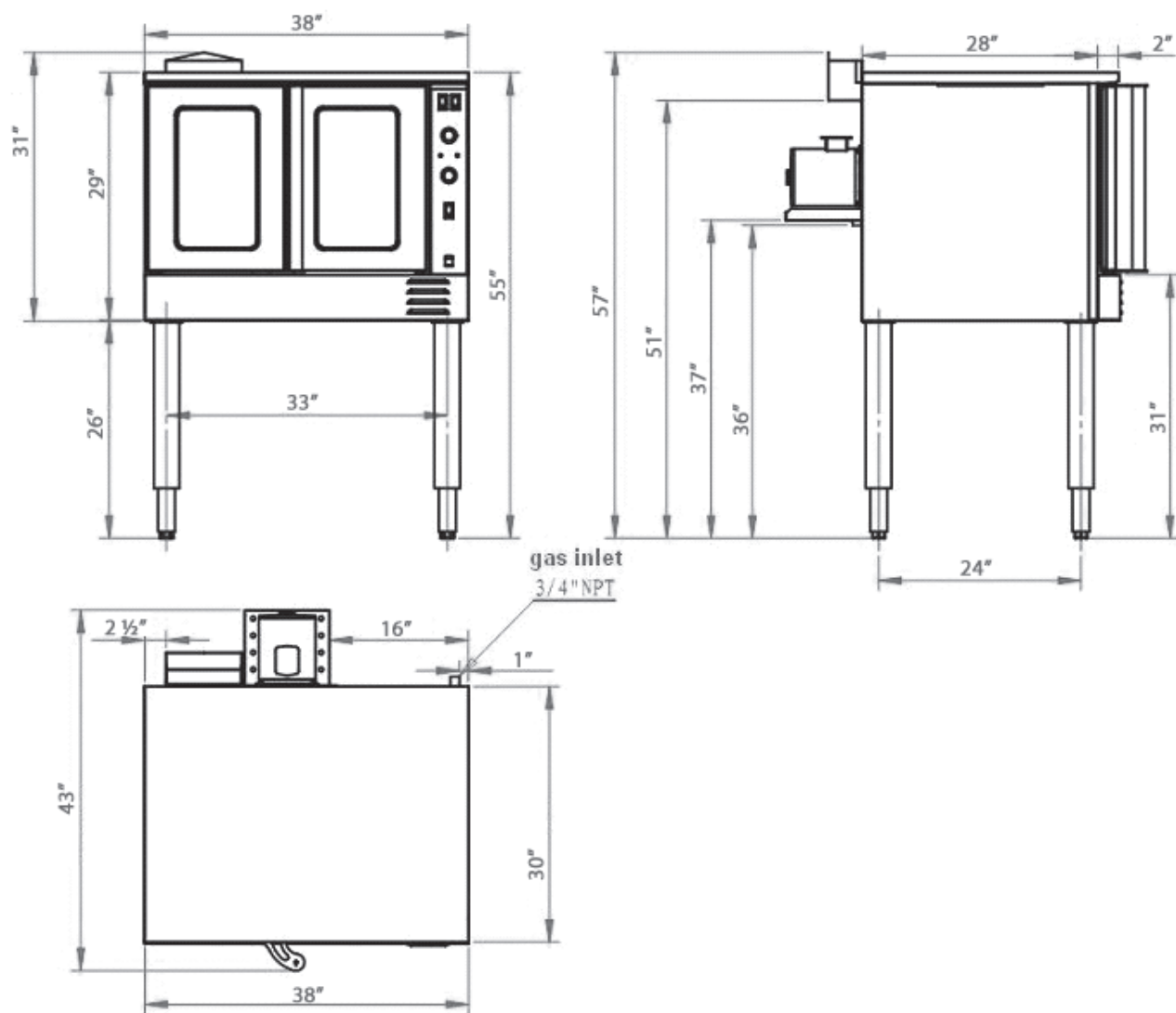


Item: 541CG1L
Gas Type: LP (Propane) Manifold Pressure: 10" WC
Orifice Size: 1.25 mm Input: 54000 BTU
Max Pressure: 13" WC
Serial #:
Electrical Rating: 120VAC, 60 Hz, 1 Phase, 5.9 Amperes
For natural gas when equipment with No. 2.0mm drill size orifice
For your safety refer to installation instructions for conversion procedure
Intended for other than household use.
Manufactured for Clark Core Services, LLC, Lancaster, PA 17602



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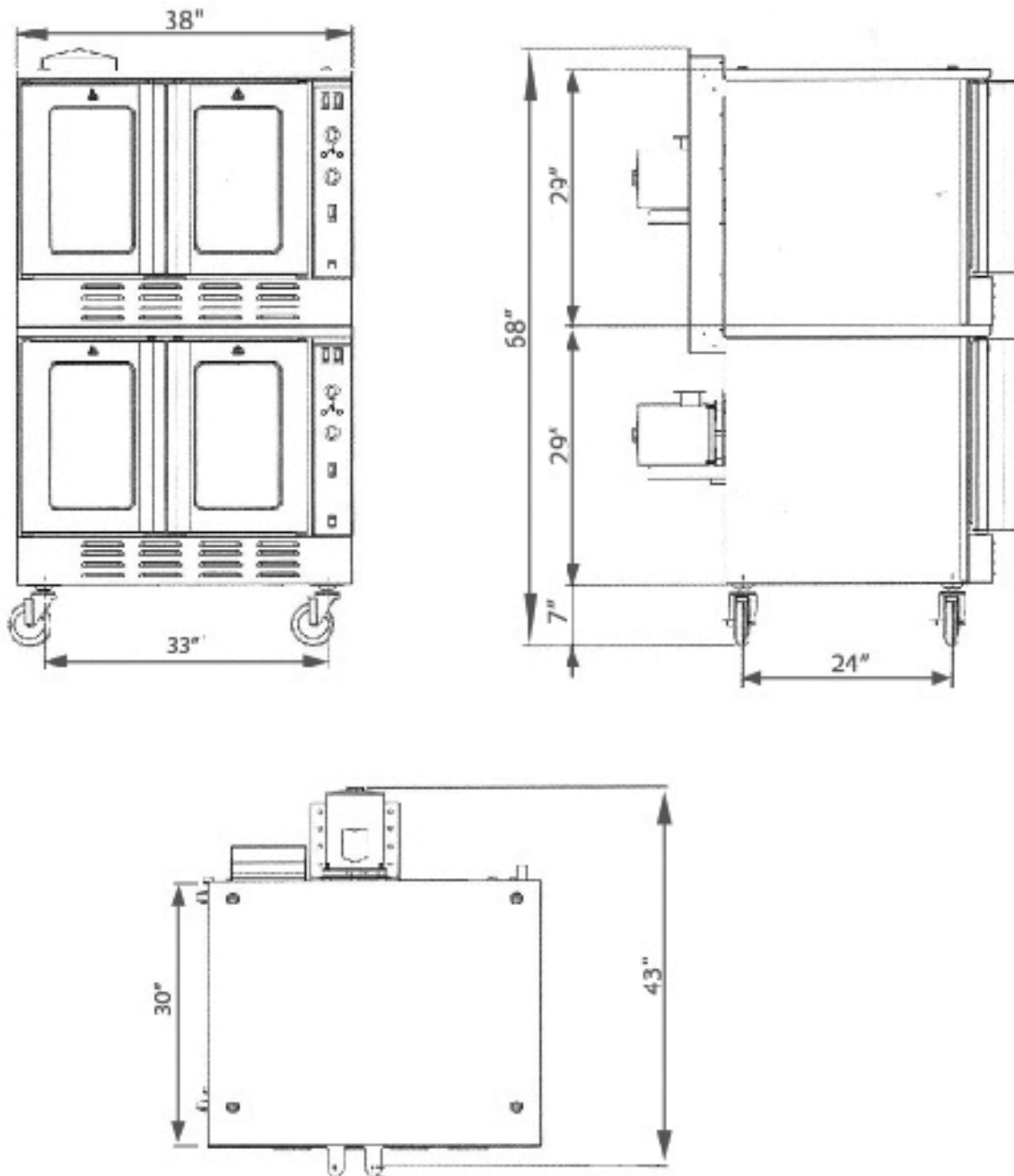
SINGLE DECK OVEN





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DOUBLE DECK OVEN



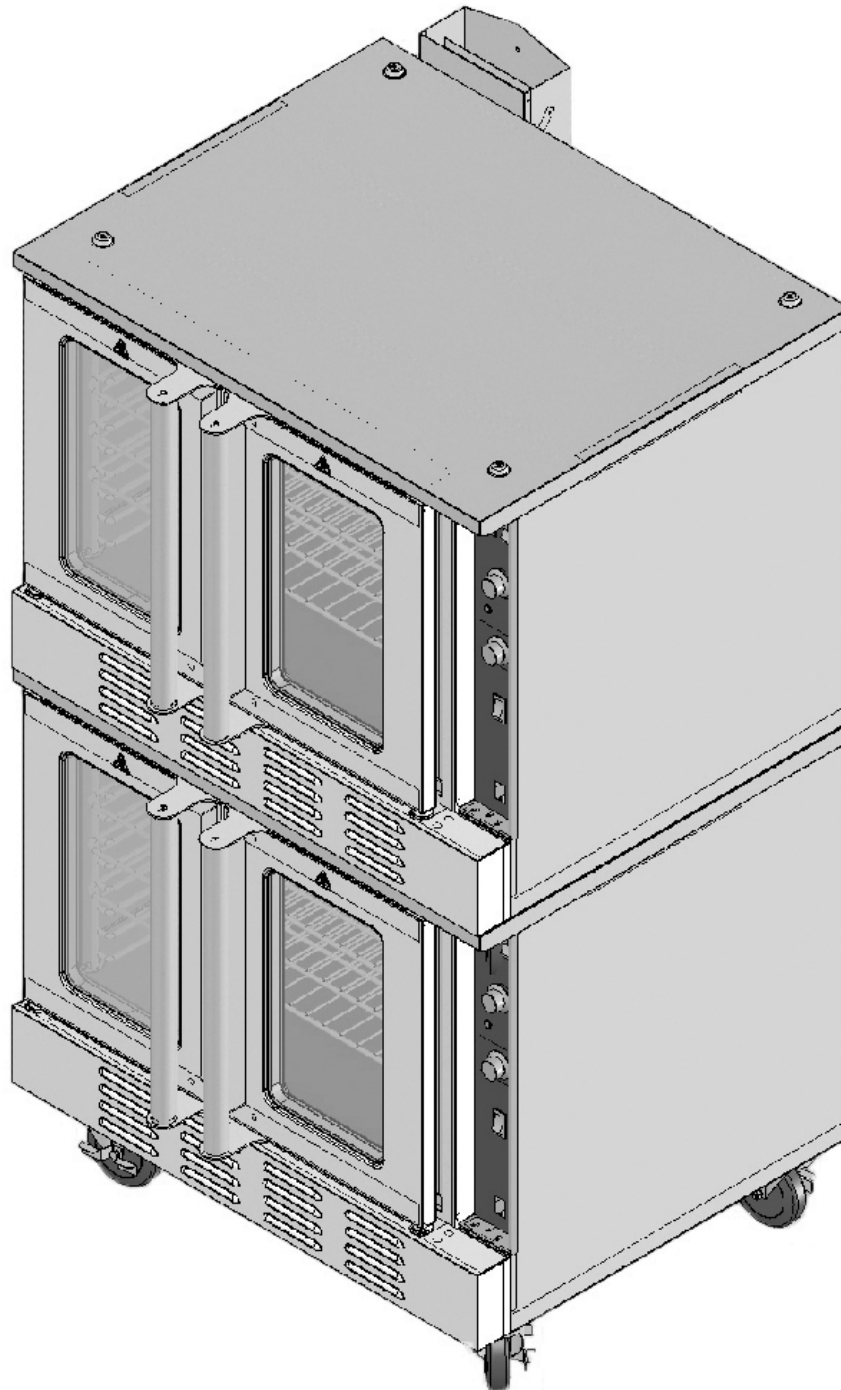


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OVEN STACKING INSTRUCTIONS

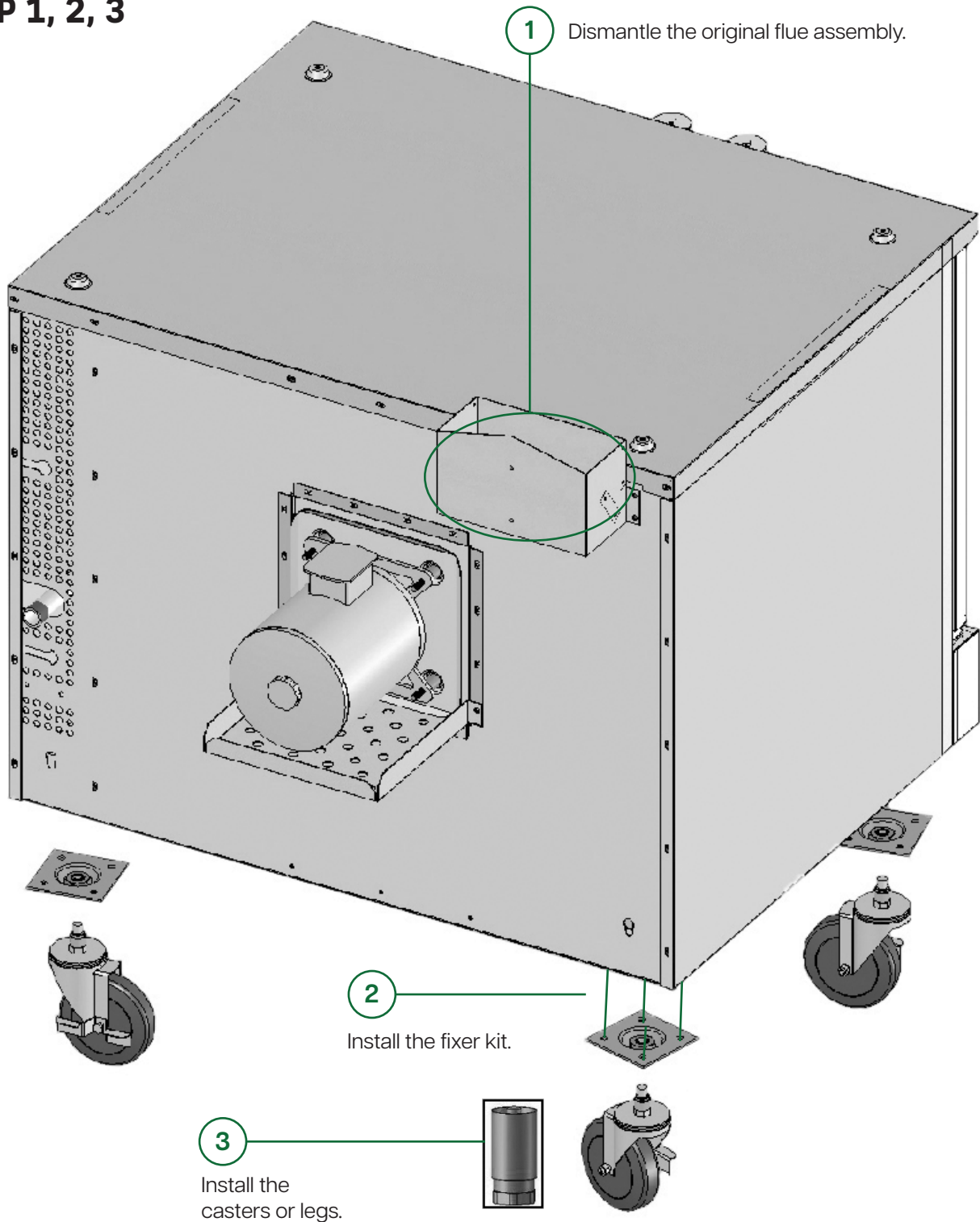
NOTE: Requires two ovens and stacking kit.

NOTE: The stacking should be performed by an authorized service agent or installer. It takes two people to lift the ovens.



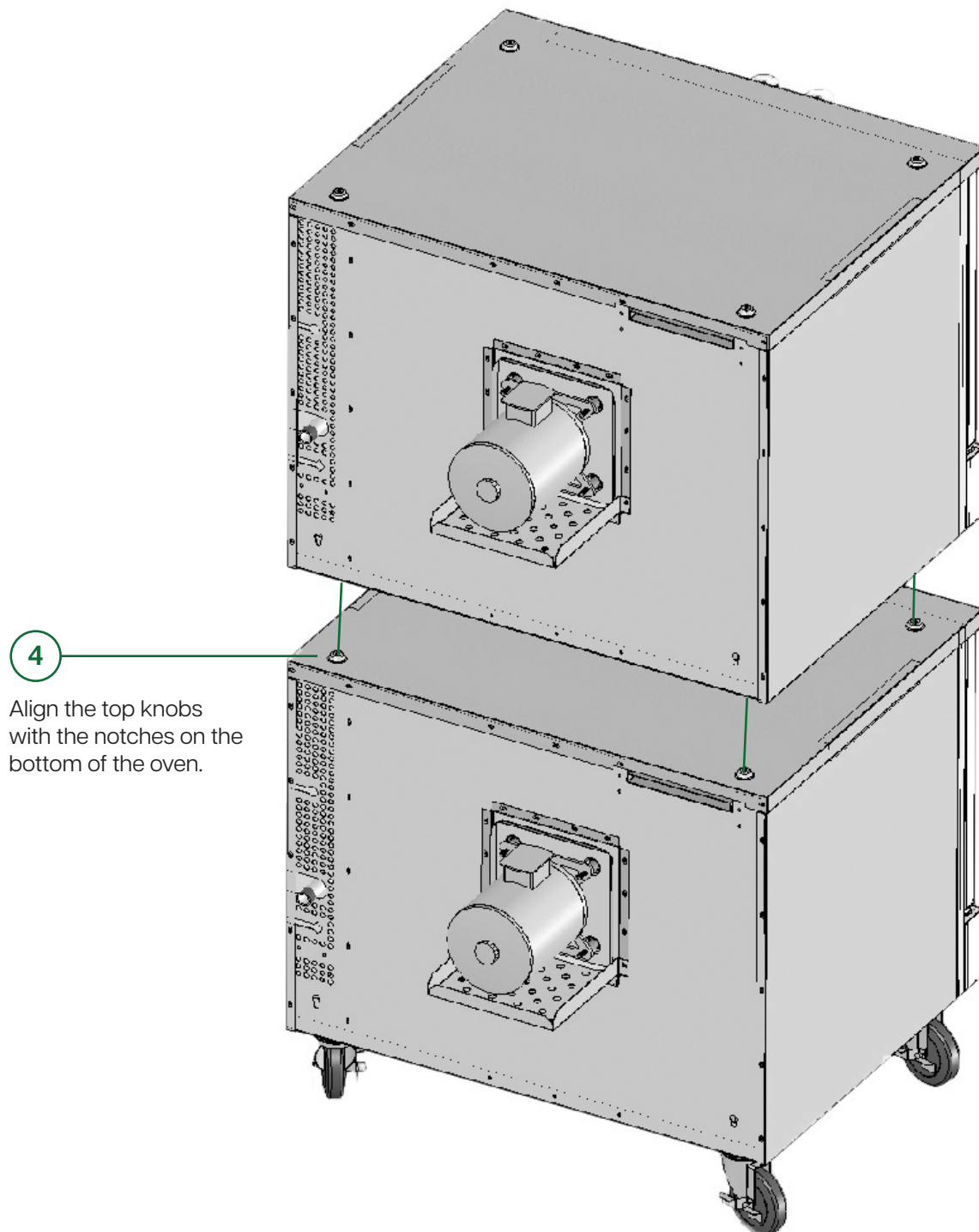
OVEN STACKING INSTRUCTIONS

STEP 1, 2, 3



OVEN STACKING INSTRUCTIONS

STEP 4

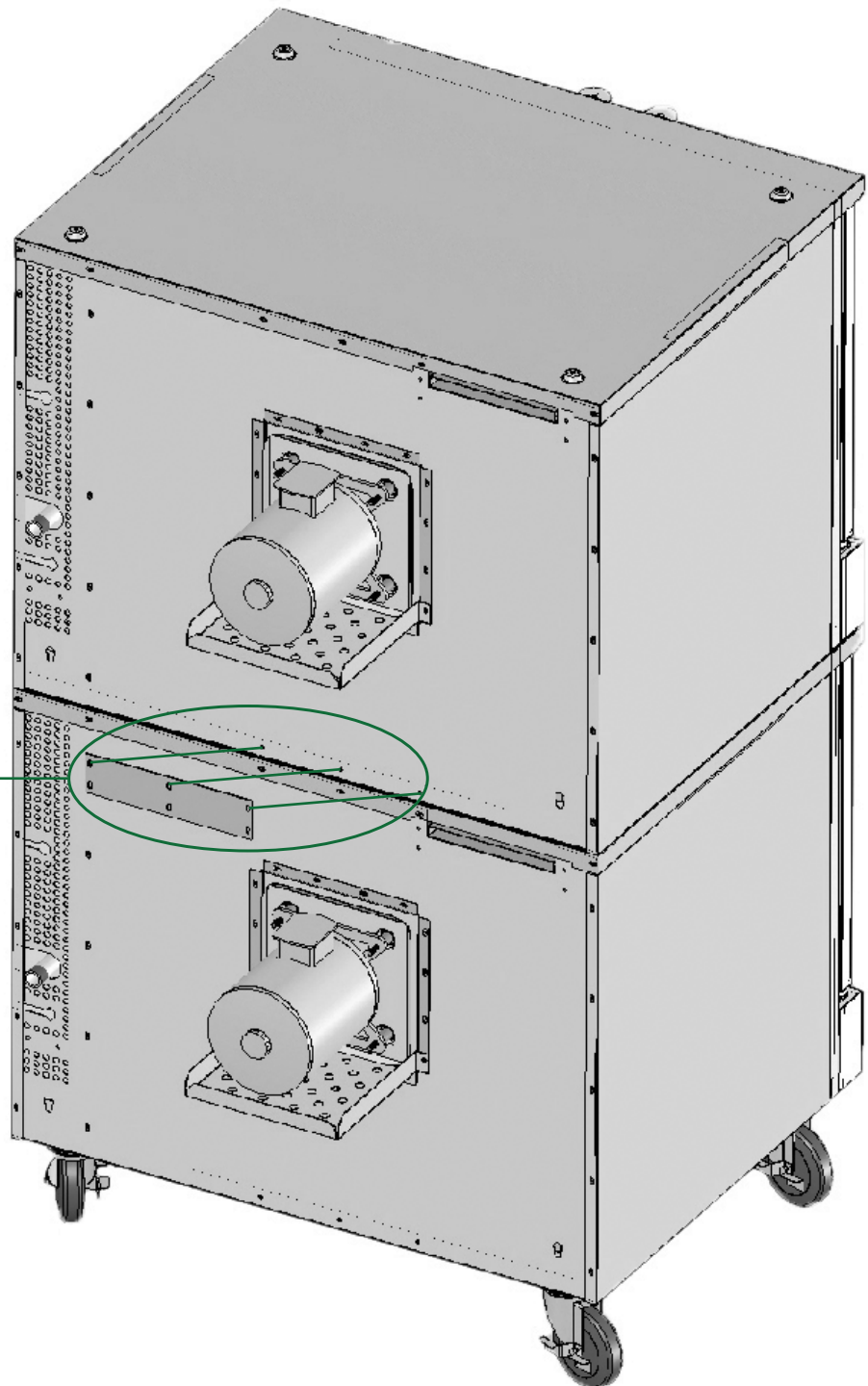


OVEN STACKING INSTRUCTIONS

STEP 5

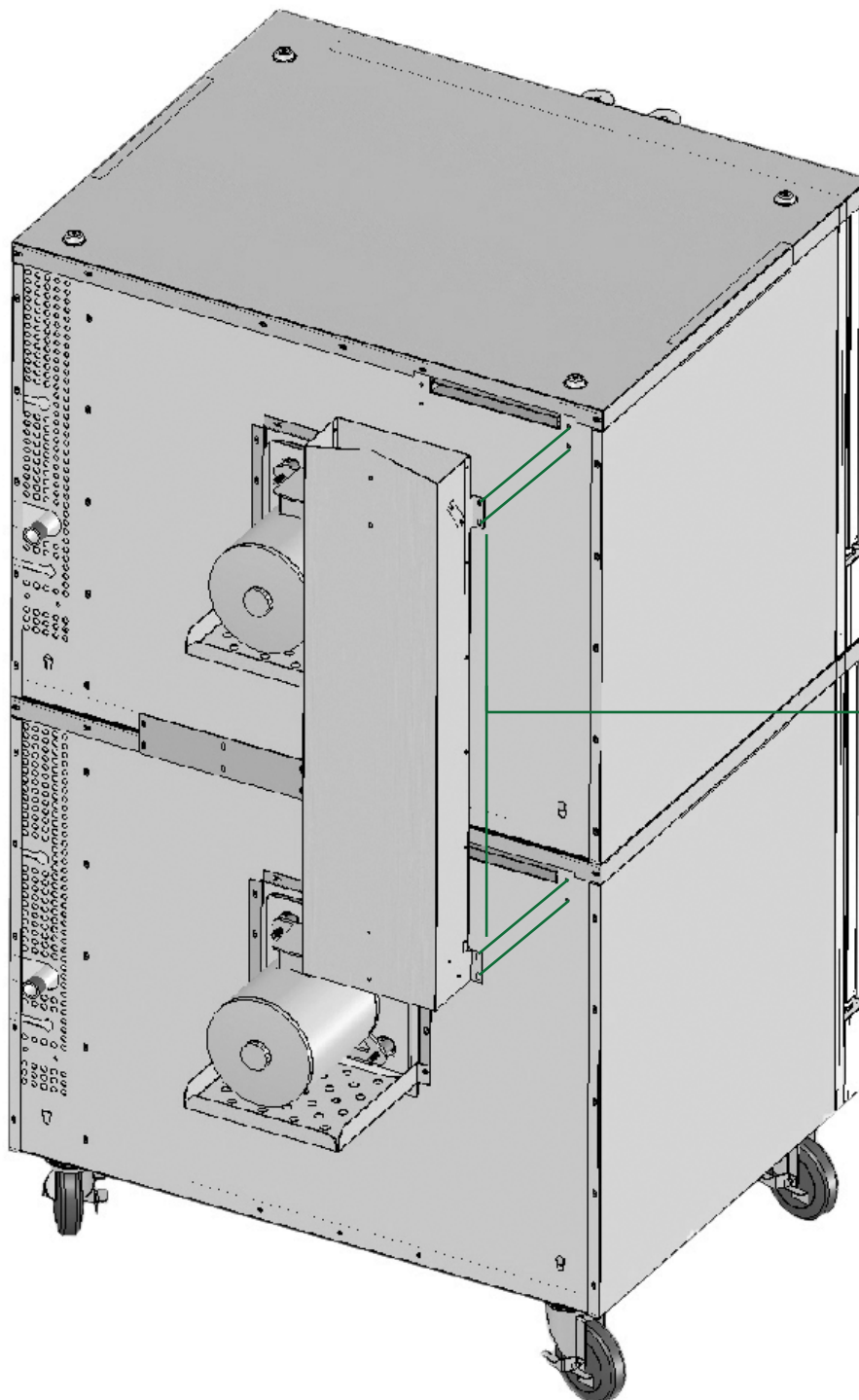
5

Attach the top and bottom unit with connecting plates and screws.



OVEN STACKING INSTRUCTIONS

STEP

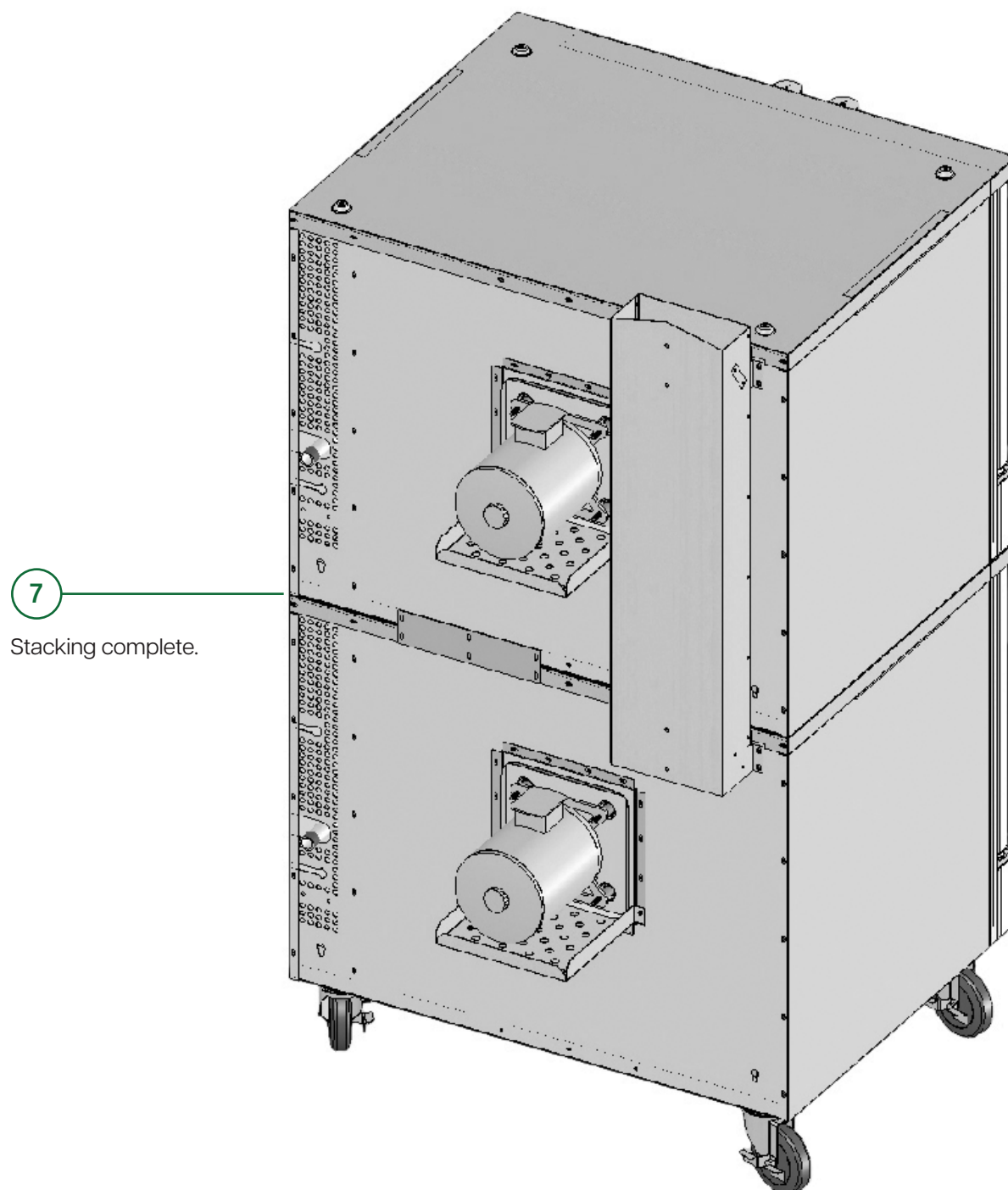


6

Attach the stacked flue
with screws.

OVEN STACKING INSTRUCTIONS

STEP 7





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SPECIFICATIONS

Specifications	Single Oven	Double Stack Oven
Overall Dimensions	38" x 42" x 57"	38" x 42" x 68"
BTU (per oven)	54,000	54,000
Voltage (V) (per oven)	AC120V/60HZ	AC120V/60HZ
Oven Chamber Dimensions (in)	29" x 25" x 20"	29" x 25" x 20" per oven
Temperature Range (F)	150–500°	150–500°
Amps	5.9	5.9 per oven

START-UP

1. Remove packaging before beginning installation.
NOTE: Some parts are protected with an adhesive film. Remove any glue residue with approved substances, such as petrol; never use abrasive substances.
2. Mount the feet, adjusting them to make the unit level.
NOTE: If stacking ovens, see above for stacking instructions. If installing casters on a single deck model, see instructions below.
3. The connections to the gas and/or electric network must be close to the equipment and easy to reach.
4. Place the unit under an exhaust hood to comply with your local regulations.
5. Install the unit at least 2" from the wall and at least 6" from other heat-producing equipment. Any wall, surface, cabinet, table, etc. in close proximity to the equipment should be made of non-combustible materials with proper thermal insulation.
6. Law provisions, technical regulations, and directives: The manufacturer requires the installation to be performed according to national and local codes.
7. Open the control panel and remove the right side panel. Turn the electric and manual gas valve to the "ON" position, and reattach the side panel.
8. Checking the functions: Start the equipment; check the gas pipes for leaks; check the burner flame. See Gas Connection section below for more details.

CASTER INSTALLATION INSTRUCTIONS

Follow the instructions below to install casters on single deck ovens.

1. Remove the foot from the leg.
2. If the caster is connected to a mounting plate, use a hex wrench to remove the caster from the mounting plate. If already disconnected, skip this step.
3. Screw the caster into the leg.
4. Repeat steps 1 - 3 for the remaining legs.

NOTES FOR THE INSTALLER

- Explain and demonstrate to the user how the equipment works according to the instructions, and ensure that the user manual is accessible.
- Remind the user that any structural alterations or modifications made to the room that houses the equipment will warrant a recheck of the equipment functions.



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- Do not install the equipment close to other units that can reach high temperature, as the electrical components could be damaged. A 6" minimum clearance is required from such equipment.

GAS CONNECTION

1. The serial plate is located on the side panel. It indicates the type of gas the unit is equipped to use. All equipment is adjusted at the factory.
2. The equipment is design-certified for operation on either natural or propane gas; it should only be connected to the type of gas for which it is equipped.
3. A 3/4" NPT inlet is located at the rear for the gas connection. The external regulator provided with the unit must be installed. An adequate gas supply is imperative. Undersized or low pressure lines will restrict the volume of gas required for satisfactory performance.
4. An adequate gas supply line to the unit should be no smaller than 3/4" diameter.
5. Purge the supply line to clean out dust, dirt, or other foreign matter before connecting the line to the unit.
6. All pipe joints and connections must be tested thoroughly for gas leaks. Use only soapy water for testing on all gases. Never use an open flame to check for gas leaks.
7. All units are shipped from the factory for use at elevations under 2,000 ft. If you are installing at a different elevation please see the chart below for the orifice size that will be needed for your application.

	Gas type	Manifold Pressure	Under 2,000 ft.	Under 5,000 ft.	Under 8,000 ft.	Under 10,000 ft
541CG1N	Natural Gas	4" WC	2.0 mm	1.85 mm (#49)	1.77 mm (#50)	1.61 mm (#52)
541CG1L	Liquid Propane	10" WC	1.25 mm	1.18 mm (#56)	1.09 mm (#57)	1.016 mm (#60)

ELECTRIC CONNECTION

Before connecting the equipment to the network, check the following:

- Network voltage corresponds to the data written on the plate
- Grounding is efficient
- The connection cable is suitable to the power absorbed by the equipment

ELECTRICAL GROUNDING INSTRUCTIONS:

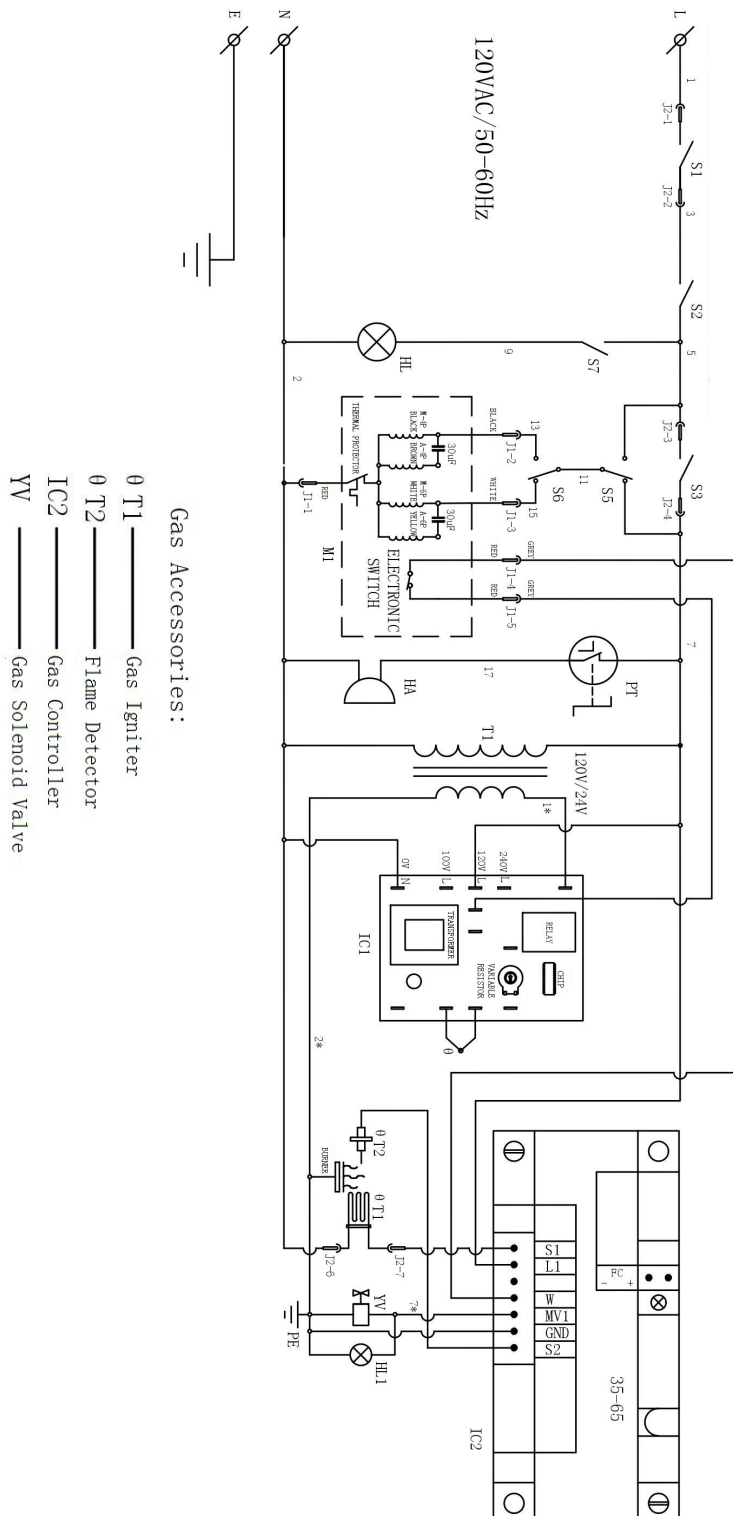
This equipment is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.



EXHAUST SYSTEM

1. This equipment must be positioned in suitable areas for the discharge of the combustion products in respect to how much is prescribed by the installation's norms. This equipment is classified as type "A" gas units.
2. This equipment must discharge the combustible products into appropriate hoods.
3. This equipment is not designed to be connected to an evacuation duct for the discharge of combustible products.

FGC100 - ELECTRICAL DIAGRAM





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FGC100 - ELECTRICAL DIAGRAM

#	Symbol	Part Code	Our Item #	Description
1	S1	301080026	541080026	Protection Switch (Ec)
2	S2	301080141	541080141	Power Switch
3	S3	301080079	541080079	Door Switch
4	O	302170069	541170069	Temperature Sensor
5	S5	301080141	541080141	Cook/Cool Switch
6	S6	301080141	541080141	Hi/Low Switch
7	S7	301080141	541080141	Lamp Switch
8	HL	301130151	541130151	Chamber Lamp
9	M1	301010262	-	Fan
10	PT	301120028	541120028	Timer (N.C.)
11	HA	301100086	541100086	Buzzer
12	T1	301100149	541100149	Transformer
13	IC1	301030208	541030208	Thermostat
14	HL1	301130140	541130140	Working Indicator
15	J1	301070047	5411070047	Connector
16	J2	301070080	-	Connector



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SAFETY PRECAUTIONS



CAUTION

Potential hazard or unsafe practice could result in minor or moderate injury or product or property damage.

NOTICE: Local codes regarding installation vary greatly from one area to another. The National Fire Protection Association, Inc., states in its NFPA96 latest edition that local codes are “Authority Having Jurisdiction” when it comes to requirement for installation of equipment. Therefore, installation should comply with all local codes. This product is intended for commercial use only. Not for residential use. Use in residential applications will void warranty.



WARNINGS

1. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other equipment.
2. Improper installation, adjustment, alteration, service, or maintenance could lead to property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing Mainstreet Equipment equipment. This manual must be retained for future reference.
3. Instructions must be posted in a prominent location. All safety precautions must be taken in the event the user smells gas. Safety information can be obtained from your local gas supplier.
4. A factory authorized agent should handle all maintenance and repair. Prior to conducting any maintenance or repair work, contact an authorized service agency.

GAS PRESSURE

The equipment and its individual shutoff valve (to be supplied by user) must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 PSI (3.45 kPa).

OPERATING INSTRUCTIONS

LIGHTING, RELIGHTING, AND SHUTDOWN

1. To light the oven, flip the power switch at the top left corner of the control panel to the “ON” position. The oven is equipped with a direct hot surface ignition system. There is no pilot to light.
2. If the burners fail to ignite within four seconds, the oven will automatically shut off the gas. Wait five minutes to allow the gas that was released to dissipate, and try to light the burners again. If the burners still fail to ignite after three such attempts, the oven will stop trying even though the power switch is in the “ON” position. To continue to attempt to light the burners, turn the power switch “OFF” and then “ON” again.
3. To shut down the oven, flip the power switch to the “OFF” position. For a complete shutdown, also open the control panel and remove the right side panel. Turn the manual electric and gas valve to the “OFF” position. Re-attach the right side panel.



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CONTROL PANEL

Power Switch

Switch ON to use the oven; switch OFF when done using the oven.

Cook Timer

Turn knob to set a cook time. An alarm will sound when the timer runs out. Turn the knob to OFF to cancel the alarm. The timer is a reminder to the user; the timer does not control the oven.

HI/LOW Fan Speed

Use to select fan speed (HI/LOW). The appropriate speed is determined by the type of food being cooked.

Fan Mode

In COOK mode, the fan runs continuously except when the doors are open. The fan does not cycle with the operation of the burners. In COOL mode, the fan runs continuously even if the doors are open. To rapidly cool the oven after cooking is completed, open the doors and switch the fan mode to COOL.

HEAT-ON Indicator

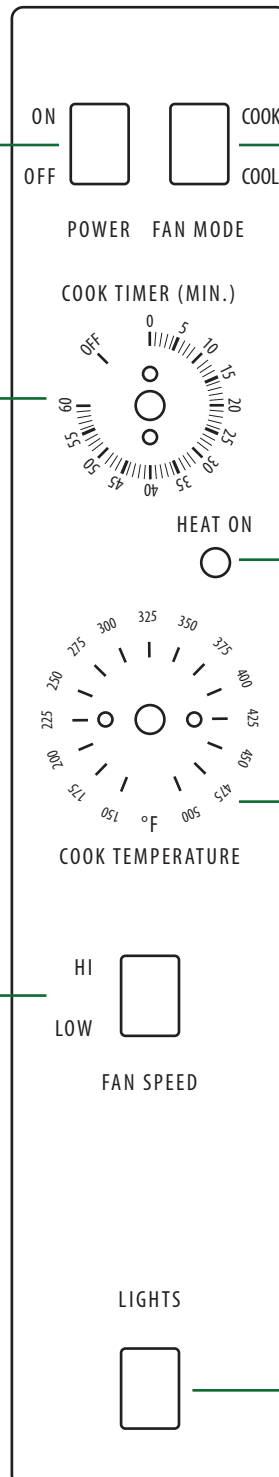
The HEAT-ON indicator will light when the burners are on and will remain on while the oven preheats.

Cook Temperature Control

Turn the knob to desired temperature. When the set point is reached, the HEAT ON indicator will be off. When the burners maintain the set temperature, the indicator will cycle between ON and OFF.

Oven Interior Light Switch

Press to turn on the light. The light is controlled independently.





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COOKING INSTRUCTIONS

1. Turn the oven ON using the power switch at the top of the control panel.
2. Select the desired fan speed using the fan speed switch. The appropriate fan speed (HI or LOW) depends on the type of food being cooked.
3. Switch the fan mode to COOK. The fan will run continuously when the oven doors are closed (the fan does not cycle on and off with the burners). If this switch is set to COOL, the fan will continue to run when the oven doors are open.
4. Set the cooking temperature by turning the cook temperature control until the indicator mark on the knob is pointed to desired cooking temperature. The HEAT ON indicator will light when the burners are on and will remain on while the oven preheats.
5. Wait until the HEAT ON indicator has gone out. At that time the oven will have reached the set cooking temperature.
6. Open the oven doors, load the product into the oven, and close the doors.
7. You can use the cook timer as a reminder of when to remove the product from the oven. Turn the cook timer knob until the indicator mark points to the desired cooking time (up to 55 minutes). The timer knob will rotate counterclockwise as the timer runs down, indicating how much time remains. You can turn the knob while cooking to increase or decrease the remaining time. When the timer runs out, a buzzer will sound for a short time, then turn itself off. (To immediately silence the buzzer, turn the cook timer knob to the OFF position.) The timer is a reminder to you; it does not control the oven.
 - If you open the oven doors, the burners and fan will shut off until the doors are closed. However, the timer will continue running even if the doors are open.
 - To turn on the oven light, press and hold the switch located at the bottom of the control panel.
8. To rapidly cool the oven cavity when finished cooking, turn thermostat down to lowest level. Open the oven door and switch the fan to COOL mode. This will cause the fan to run even with the doors open. For the most rapid cooling, also switch the fan speed to HI.
9. When you are done cooking, turn the cook temperature control to the lowest setting (fully counterclockwise) and flip the power switch to OFF.

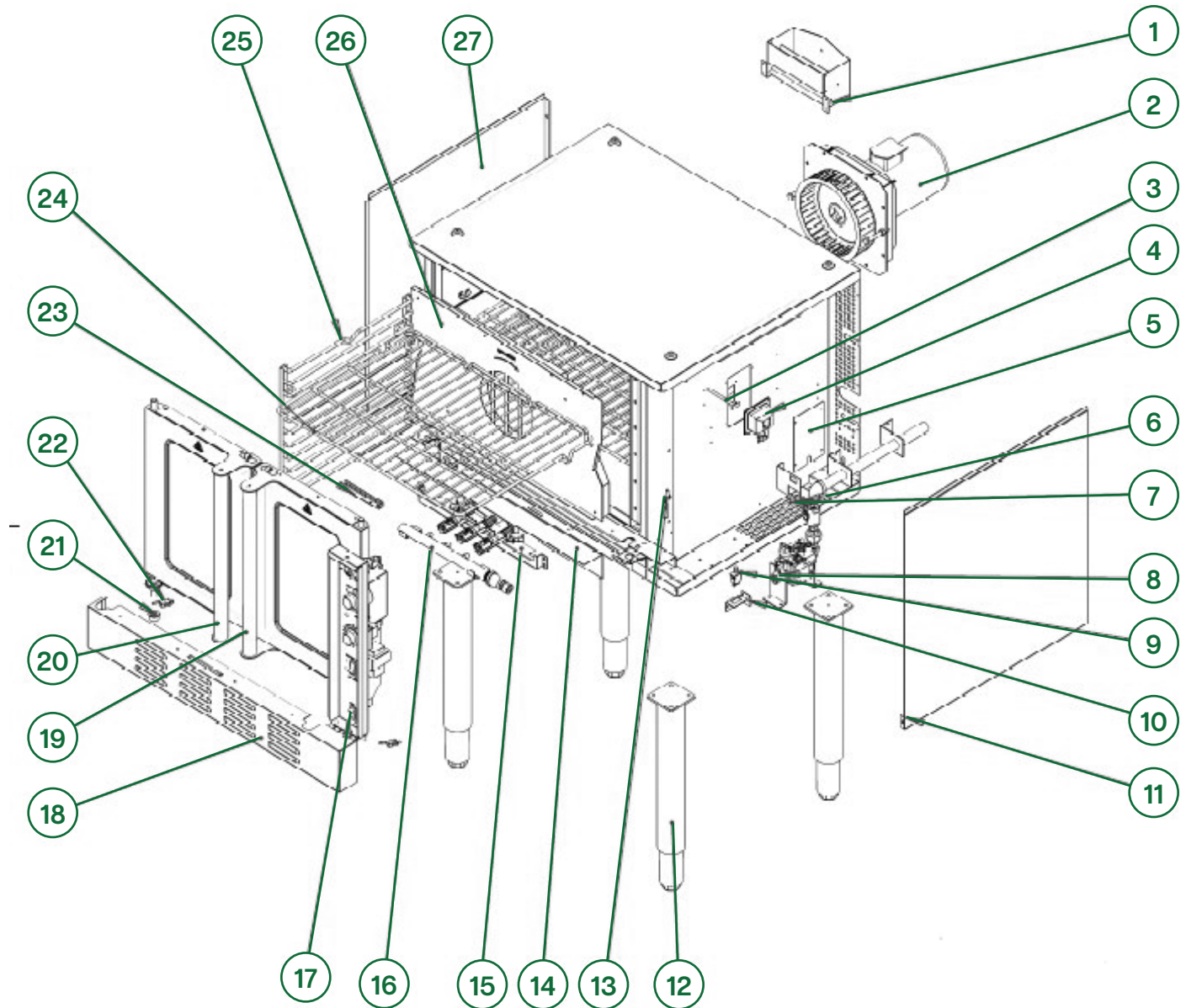


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CLEANING & MAINTENANCE

1. Before cleaning, turn off the unit and let it cool down.
2. Carefully clean the equipment daily to promote proper operation and long life.
3. Steel surfaces must be cleaned with dish detergent diluted in very hot water using a soft cloth; do not use abrasive powder detergents or corrosive substances. The use of acids can affect the unit's operation and user safety. Do not use brushes, steel cottons, or abrasive disks made with other metals or alloys that may cause rust stains due to contamination. For the same reason, avoid contact with iron objects. Do not use stainless steel brushes, as they can cause long-term damages.
4. Metal powder, metal shavings, and iron material in general can cause stainless steel to rust. Superficial rust stains may be present on new equipment and can be removed with a detergent diluted in water and a scouring pad. If dirt is difficult to remove, a sponge may be used.
5. Do not use substances for cleaning silver and be careful with hydrochloric or sulphuric vapors rising from floor washing products. Do not aim water jets directly on the equipment. After cleaning, rinse properly with clean water and dry carefully with a cloth.
6. This equipment requires minimal maintenance. Despite this, we recommend that the user subscribes to a maintenance agreement to have the equipment checked at least once per year by an authorized technician.
7. Before carrying out any maintenance or repair, disconnect the equipment from the gas network or cut off the mains. Use only original spare parts supplied by Main Street Equipment.
8. If the equipment is not going to be used for a long period of time, it is advised to clean the equipment and surrounding areas properly. Pour a small quantity of cooking oil on the stainless steel surfaces, carry out all maintenance operations, and cover the equipment with a suitable material, leaving some openings to allow air to circulate.

WHOLE ASSEMBLY - PARTS DIAGRAM



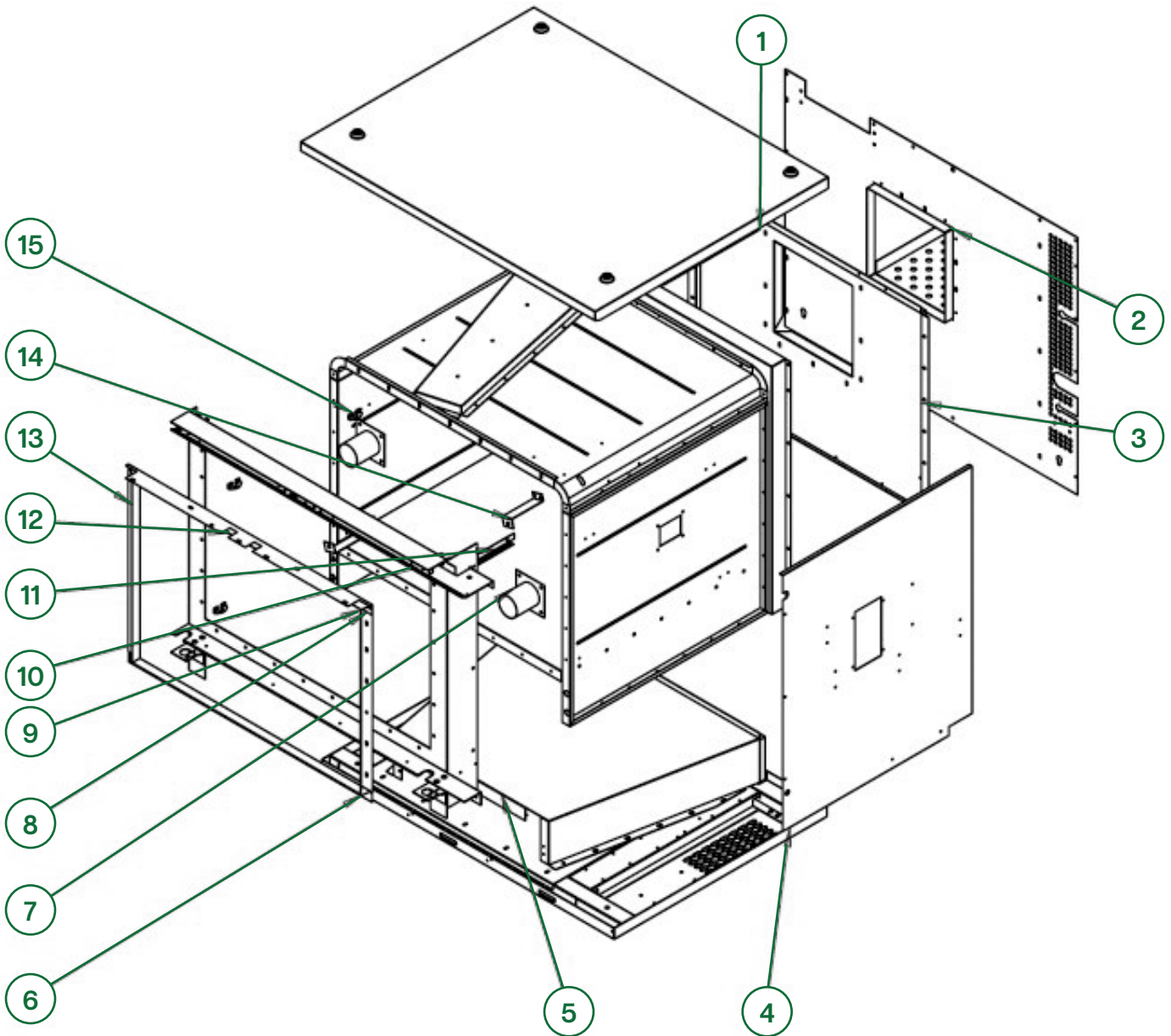


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WHOLE ASSEMBLY - PARTS LIST

#	Part Code	Our Item #	Description	Qty
1	20165002032	54165002032	Chimney	1
D (2)	20165002018	54165002018	Motor Installation Assembly	1
3	302170022	541170022	Temperature Probe	1
4	301130151	541130151	Lamp	1
5	20265002032	54165002032	Coverplate	1
6	20265002081	54165002081	Fixed Plate	1
F(7)	20165002001	-	Housing Assembly	1
C(8)	-	-	Gas Pipeline Assembly	1
9	301080026	541080026	Panel Safety Switch	1
10	20265002083	54165002083	Fixed Plate (Travel Switch)	1
11	20265002078	54165002078	Side Panel (Right)	1
12	20365002002	54165002002	Leg Assembly - Tall (Single Unit)	4
13	302210918	541210918	Screw	1
14	20265002080	54165002080	Front Coverplate	1
B(15)	20165002019	54165002019	Burner Assembly	1
A(16)	-	-	Inlet Gas Pipe Assembly	1
G(17)	20165002008	54165002008	Control Panel Assembly	1
18	20265002079	54165002079	Lower Front Coverplate	1
E(19)	20165002011	54165002011	Door Assembly (Right)	1
E(20)	20165002014	54165002014	Door Assembly (Left)	1
21	302201928	541201928	Door Shaft Bushing	4
22	301080079	541080079	Door Switch	2
23	20228051023	54128051023	Guard Temperature Probe	1
24	302110578	541110578	Oven Rack	3
25	302110577	541110577	Oven Rack Guide	2
26	20165002009	54165002009	Fan Cover	1
27	20265002077	54162002077	Left Side Panel	1

COVER ASSEMBLY - PARTS DIAGRAM



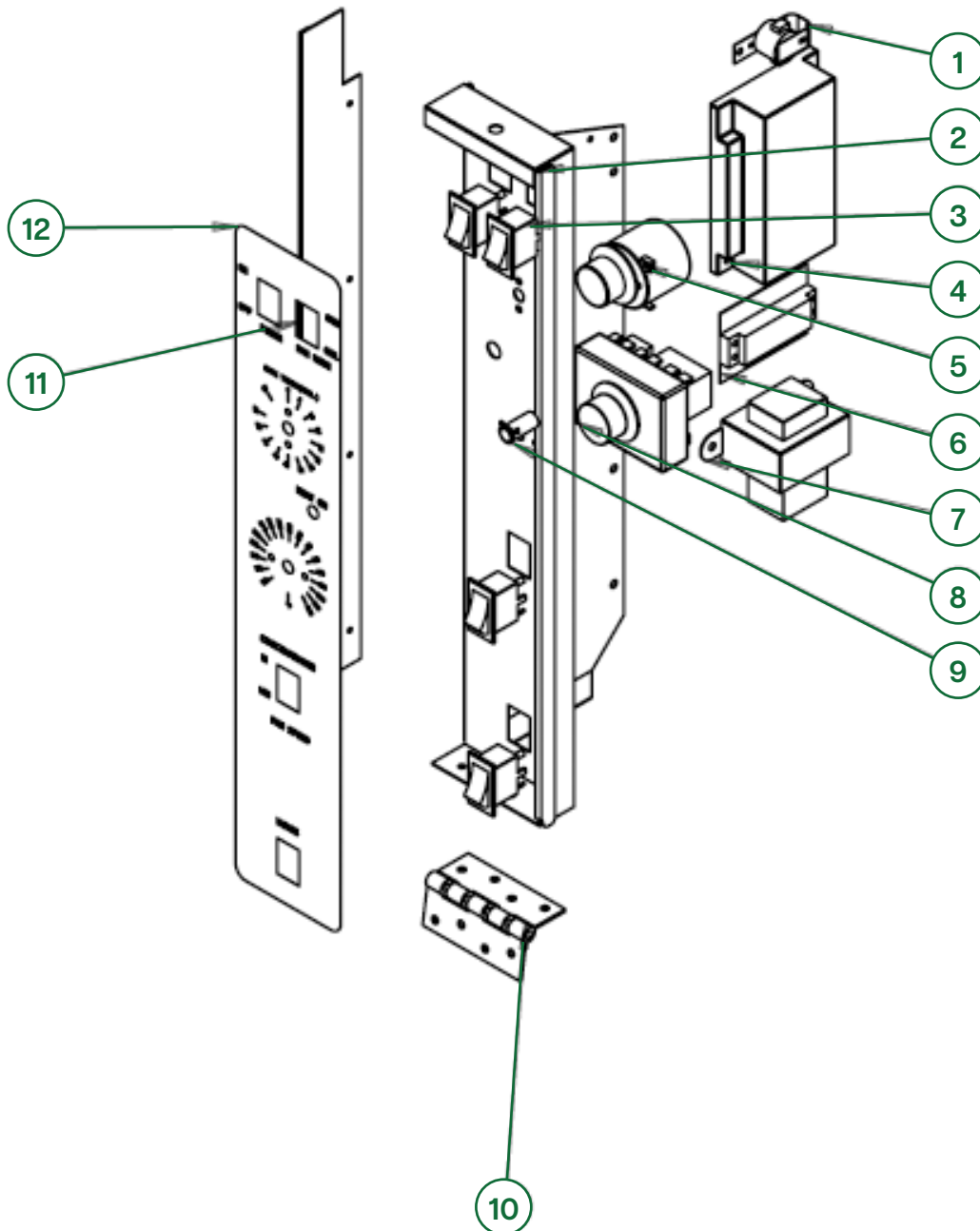


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COVER ASSEMBLY - PARTS LIST

#	Part Code	Our Item #	Description	Qty
1	20165002006	54165002006	Top Cover Assembly	1
2	20165002007	54165002007	Rear Shrouding Assembly	1
3	20265002033	54165002033	Coverplate	1
4	20265002031	54165002031	Cotton Sealing Plate	1
5	20165002002	54165002002	Base Assembly	1
6	20265002036	54165002036	Perimeter Door Gasket Bottom	1
7	20165002005	54165002005	Air Outlet Assembly	2
8	20265002034	54165002034	Perimeter Door Gasket Top	1
9	20265002037	54165002037	Perimeter Door Gasket Right	1
10	20165002004	54165002004	Front Frame Assembly	1
11	20228051023	54128051023	Guard Temp Probe	1
12	20265002035	54165002035	Perimeter Door Gasket Top 2	1
13	20265002038	54165002038	Perimeter Gasket Left	1
14	20165002003	54165002003	Chamber Assembly	1
15	20265002039	54165002039	Oven Rack Guide Clip	8

CONTROL PANEL ASSEMBLY - PARTS DIAGRAM



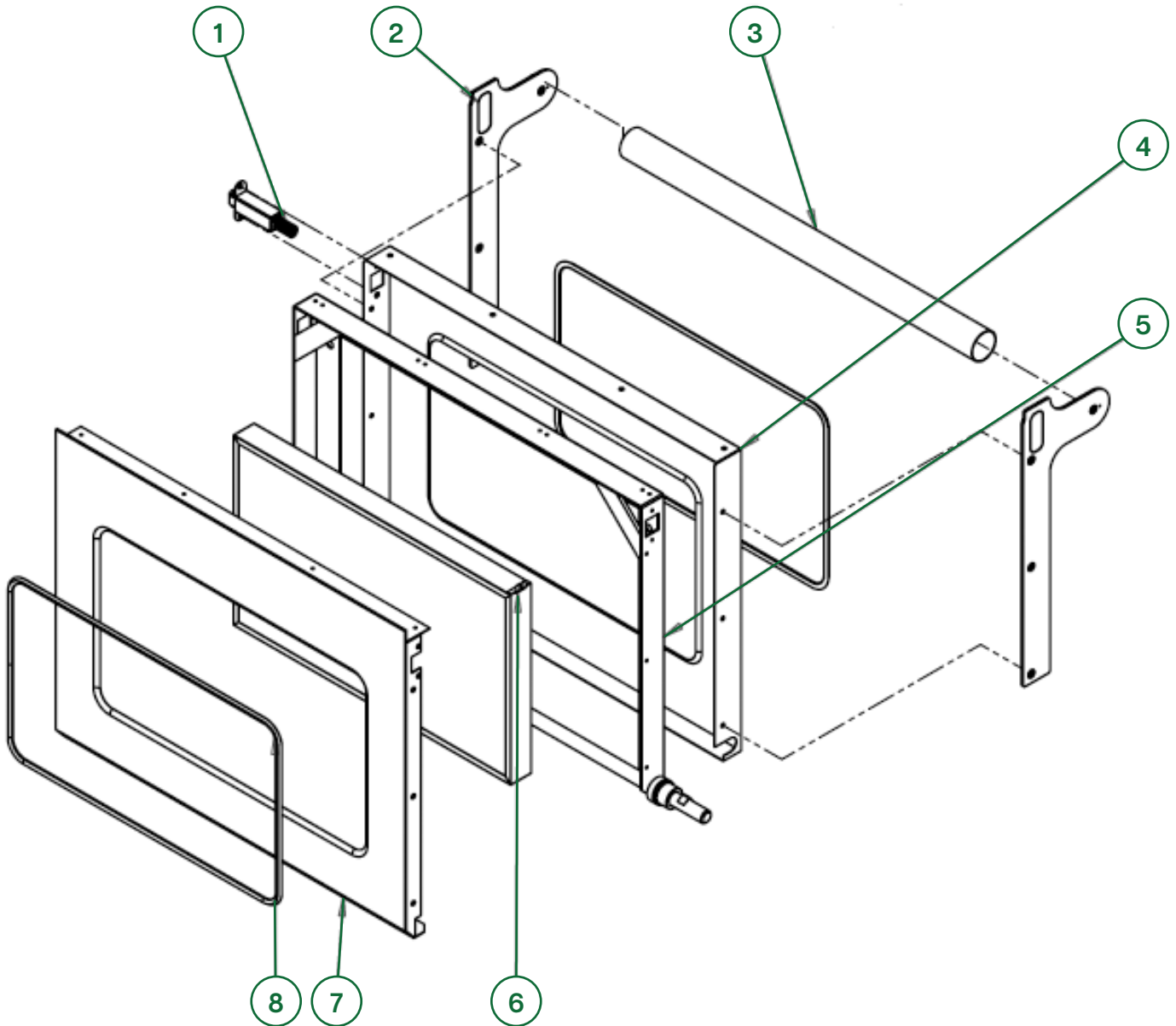


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CONTROL PANEL ASSEMBLY - PARTS LIST

#	Part Code	Our Item #	Description	Qty
1	301100086	541100086	Buzzer	1
2	20217046018	54117046018	Control Panel	1
3	301080141	541080141	Switch	4
4	301150304	541150304	Ignition Module	1
5	301120028	541120028	Timer	1
6	301070047	5411070047	Terminal Block	1
7	301100149	541100149	Transformer	1
8	301030169	541030169	Solid State Thermostat	1
9	301130140	541130140	Indicator Light	1
10	302190015	541190015	Hinge	1
11	20265002041	54165002041	Side Panel (Control Panel)	1
12	303124124	541124124	Adhesive Sticker	1

DOOR ASSEMBLY - PARTS DIAGRAM



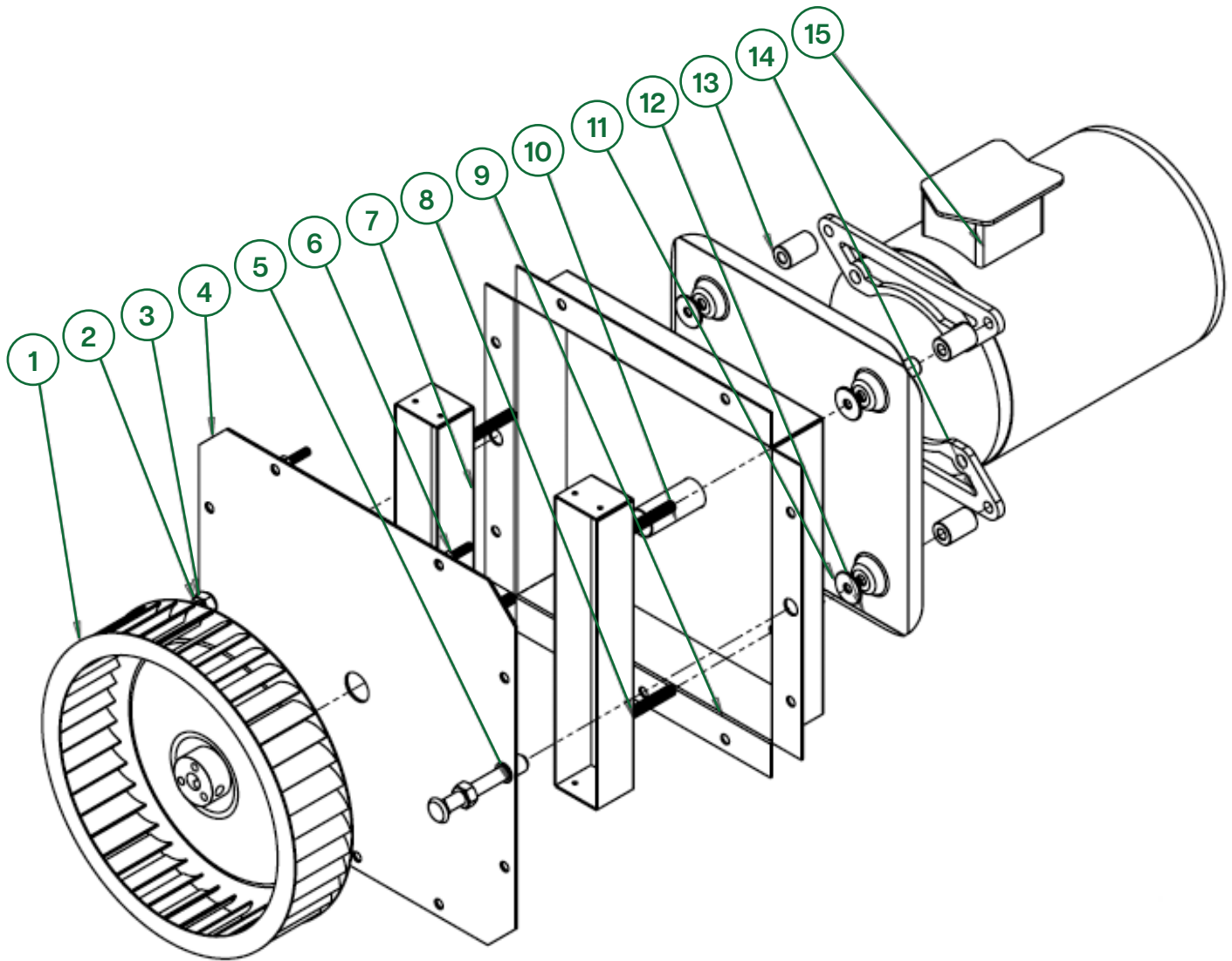


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DOOR ASSEMBLY - PARTS LIST

#	Part Code	Our Item #	Description	Qty
1	20165002016	54165002016	Door Latch	1
2-A	20265002092	54165002092	Fixed Plate (Door Handle, Left)	1
2-B	20265002093	54165002093	Fixed Plate (Door Handle, Right)	1
3	20265002055	54165002055	Round Rod (Door Handle)	1
4-A	20265002046	54165002046	Outer Panel (Right Door)	1
4-B	20265002059	54165002059	Outer Panel (Left Door)	1
5-A	20165002012	54165002012	Frame Assembly (Right Door)	1
5-B	20165002015	54165002015	Frame Assembly (Left Door)	1
6	20165002013	54165002013	Frame Assembly (Door Glass)	1
7-A	20265002053	54165002053	Inner Panel (Right Door)	1
7-B	20265002061	54165002061	Inner Panel (Left Door)	1
8	20465002001	54165002001	Sealing Strip	2

MOTOR ASSEMBLY - PARTS DIAGRAM



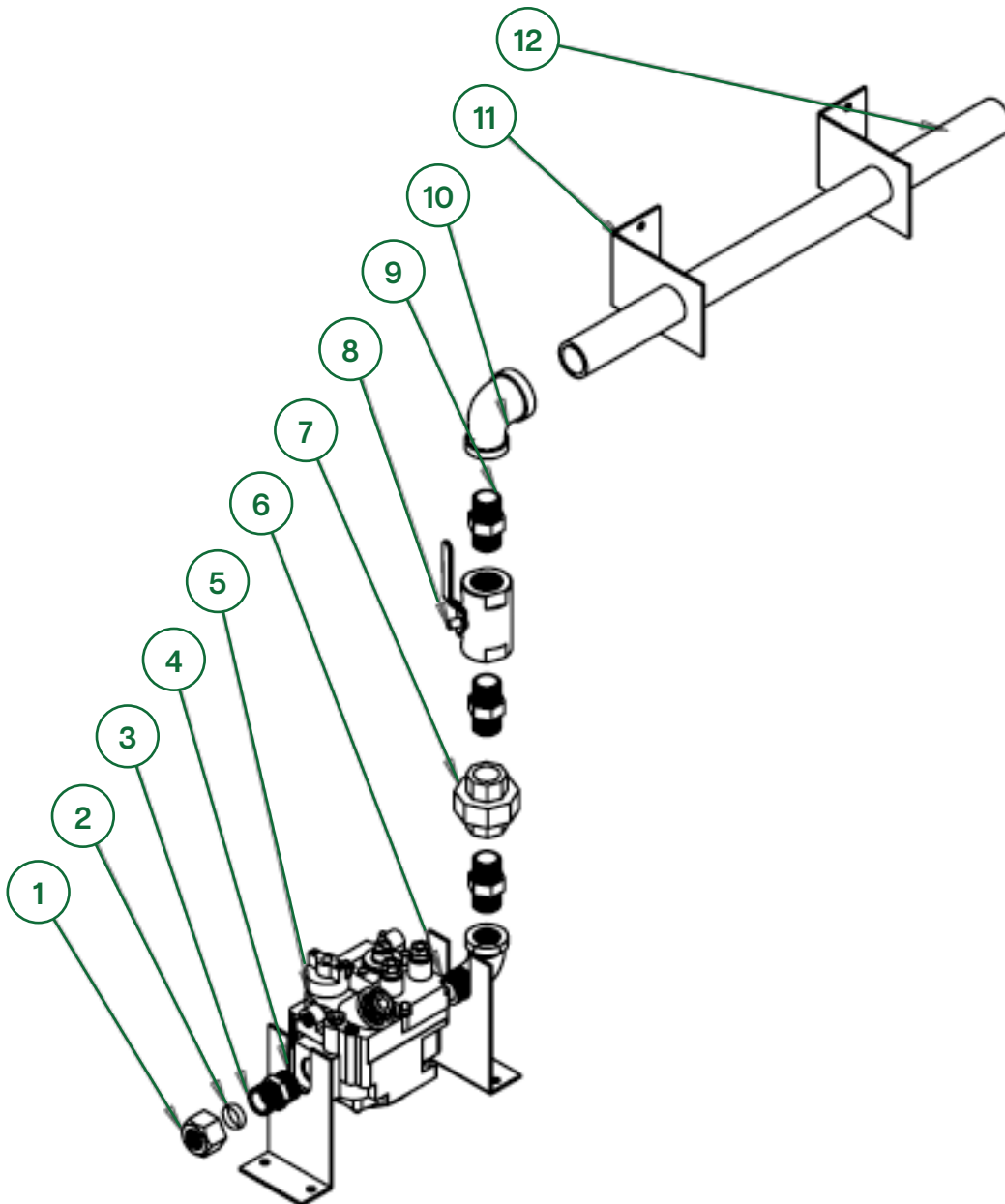


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MOTOR ASSEMBLY - PARTS LIST

#	Part Code	Our Item #	Description	Qty
1	301010263	541010263	Blower Wheel	1
2	302214237	541214237	Bolt	2
3	-	-	Nut	2
4	20265002066	54165002066	Heat Shield	1
5	-	-	Rivet Nut	2
6	-	-	Bolt	2
7	20265002105	54165002105	Reinforcement Plate	2
8	-	-	Bolt	4
9	20265002065	54165002065	Heat Shield	1
10	20265002106	54165002106	Bushing	1
11	302201881	541201881	Insulation Pad	4
12	20265002102	54165002102	Baffle	1
13	302202143	5412021413	Motor Mounting Bracket	4
14	20265002086	54165002086	Fixed Flange	2
15	301010264	541010239	Two Speed Motor	1

MAIN GAS PIPE ASSEMBLY - PARTS DIAGRAM



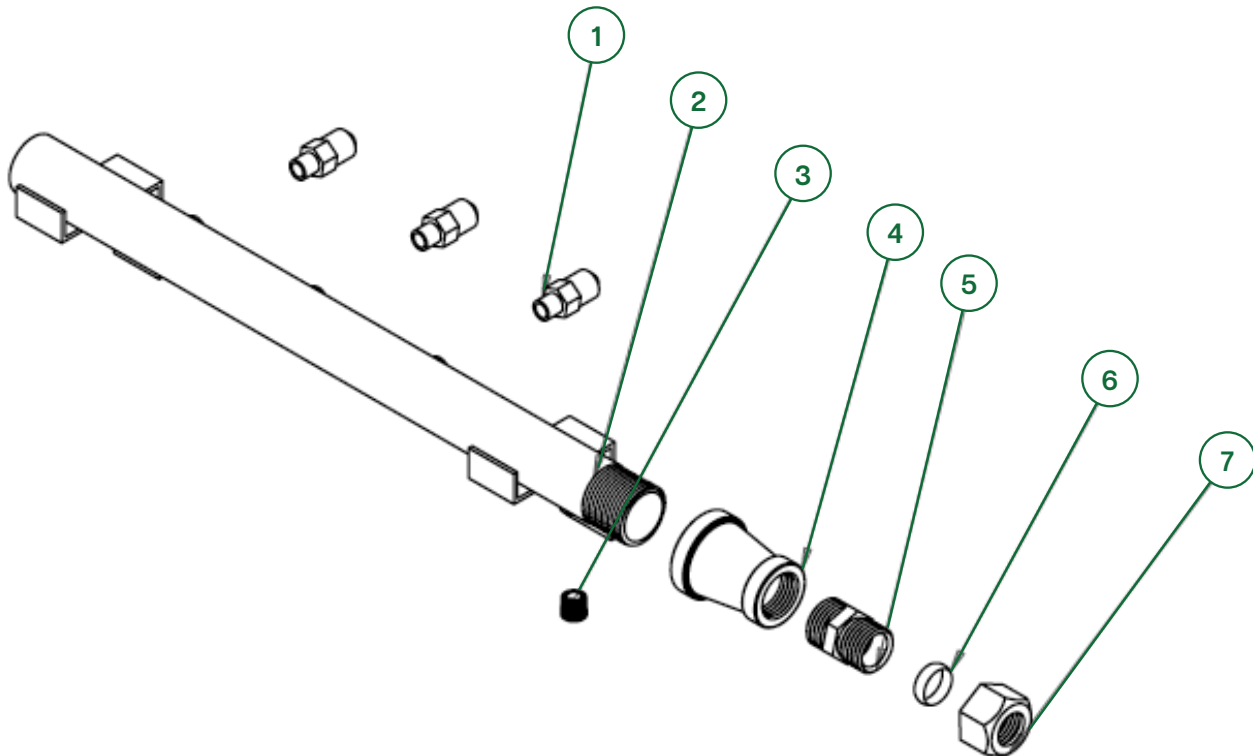


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MAIN GAS PIPE ASSEMBLY - PARTS LIST

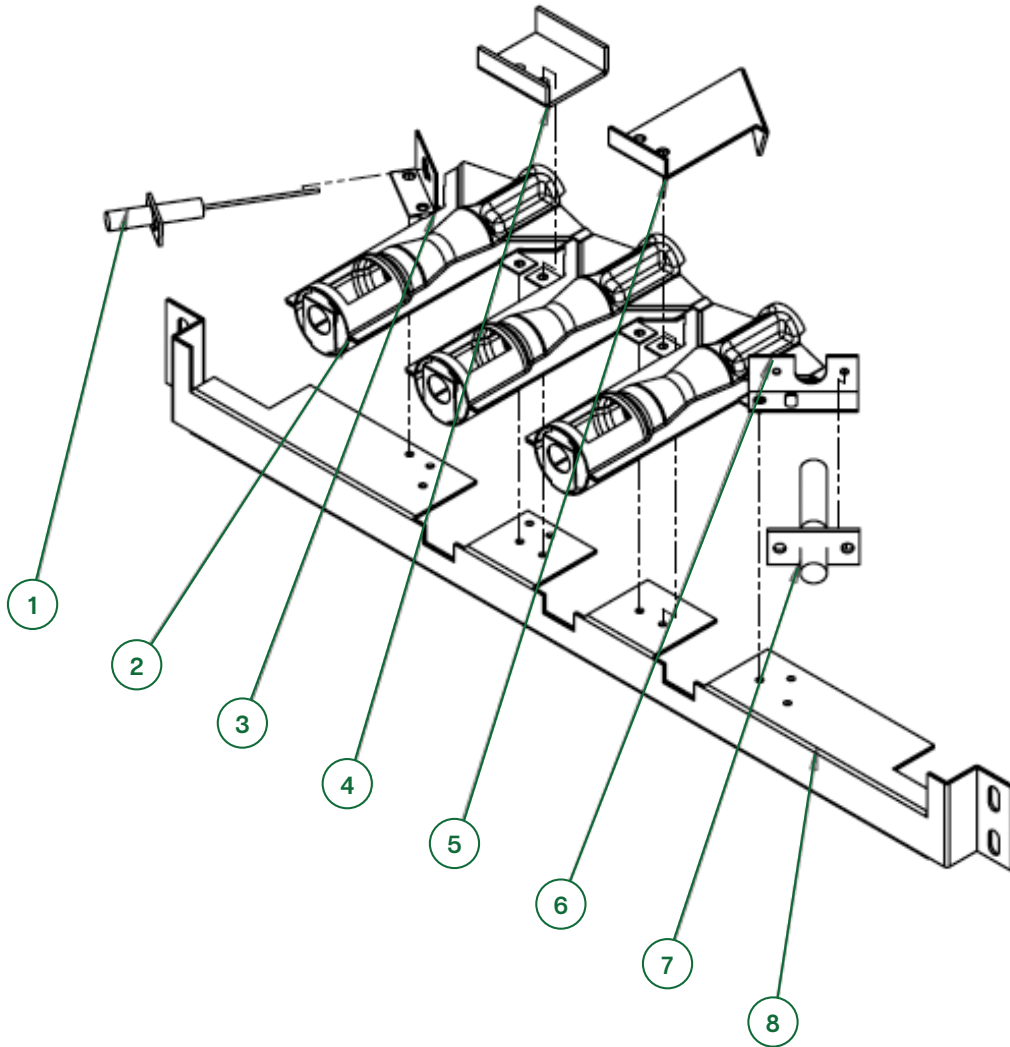
#	Part Code	Our Item #	Description	Qty
1	302140080	541140080	Nut	1
2	302140079	541140079	Hoop	1
3	302140077	541140077	Connector	1
4	20265002085	54165002085	Fixed Plate (Valve)	2
5-1	302220079	54122079	Gas Safety Valve	1
5-2	302220098	54122098	Gas Safety Valve	1
6	302060152	541060152	Elbow	1
7	302050076	541050076	Ball Valve	1
8	302060046	541060046	Union	1
9	302060040	541060040	Straight Pipe	3
10	302060151	541060151	Elbow	1
11	20265002084	54165002084	Fixed Plate (Gas Inlet Pipe)	2

INLET GAS PIPE - PARTS DIAGRAM & LIST



#	Part Code	Our Item #	Description	Qty
1	302150177	541150177	Orifice - No Hole	3
2	302180512	541180512	Manifold	1
3	302200620	541200620	Test Plug	1
4	302190014	541190014	Straight Pipe	1
5	302140077	541140077	Straight Connector	1
6	302140079	541140079	Compression Ring	1
7	302140080	541140080	Compression Nut	1

BURNER ASSEMBLY - PARTS DIAGRAM & LIST



#	Part Code	Our Item #	Description	Qty
1	302220004	541220004	Flame Sensor	1
2	20265002071	54165002071	Burner	3
3	20265002073	54165002073	Fixed Plate (Probe)	1
4	20265002072	54165002072	Pressing Plate (Burner)	1
5	20265002068	54165002068	Flame Spreading Plate	1
6	20265002069	54165002069	Fixer (Igniter)	1
7	302170039	5411170039	Surface Igniter	1
8	20265002067	54165002067	Bracket (Burner)	1