

MagiKitch'n®



OPERATION MANUAL
ULTIMATE SERIES OUTDOOR CHARBROILERS
SERIES: LPAGA



OUTDOOR GAS CHARBROILERS

Outdoor Gas CharBroiler Models: LPAGA-30S & LPAGA-60S

All gas operated Magikitch'n® charbroilers are intended for use with the type of gas specified on the rating plate and for installation will be in accordance with National Fuel Gas Code ANSI Z223.1 (latest edition).

Please retain this manual for future references.

⚠ WARNING

FOR YOUR SAFETY: Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

⚠ WARNING

California Residents Only
WARNING: This product can expose you to chemicals including chromium which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

⚠ WARNING

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

This equipment is design engineered for commercial use only.



MAGIKITCH'N

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Gas Specifications	
Model Number	Propane Gas BTU/HR @ 10" W.C.
LPAGA-60S	160,000
LPAGA-30S	80,000

Model Definitions	
Model Number	Width
LPAGA-30S	Overall Width = 32"
LPAGA-60S	Overall Width = 62 1/2"

INSTALLATION INSTRUCTIONS

Safety Precautions

DANGER

This symbol warns of imminent hazard which will result in serious injury or death.

WARNING

This symbol refers to a potential hazard or unsafe practice, which could result in serious injury or death.

CAUTION

This symbol refers to a potential hazard or unsafe practice, which may result in or moderate injury or product or property damage.

NOTICE

This symbol refers to information that needs special attention or must be fully understood even though not dangerous.

INSTALLATION INSTRUCTIONS

Safety Precautions (Must Be Posted In A Prominent Location)

⚠ WARNING

For your safety, the following safety precautions should be followed and enforced.

If You Smell Gas:

- Shut off gas supply to appliance
- Extinguish open flames
- Immediately call your gas supplier

NOTICE

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.

1. This unit should be only operated outdoors.
2. LIGHTING: Follow the instructions in the Lighting Instructions section and from the label attached to right side of the broiler.
3. Do not place or use unapproved accessories or items on the broiling area or on any part of this unit.
4. Do not place combustibles or non-combustible materials in the proximity of the broiler as this could cause fires or obstruct airflow to the main burners.
5. This unit may be operated with 0" minimum clearance to non-combustible construction in areas that are non-combustible locations. For combustible construction installations: Minimum 12" each side, 24" back.
6. This installation must conform to local codes, or in absence of local codes to the National Fuel Gas Code ANSI Z223.1, latest edition. In Canada, it must conform to current National Standard CAN/CGA B 149. 1 & 2. - natural gas/propane installation code.
7. Use only the legs and casters provided with the unit. Always lock the caster brakes to prevent movement while the appliance is in use.
8. Broiler must be disconnected from gas supply during any pressure testing of pipelines in excess of ½ psig (3.45 kPa), and isolated (by turning off gas shut-off valve) during any testing less than ½ psig.
9. Inspect the flexible gas hose(s) prior to each use. If excessive abrasion or wear occurs, or if the hose is cracked or damaged it must be replaced.
10. LP cylinders used with the broiler must conform to the specifications of the US Department of Transportation (DOT), or in Canada to the Canadian Transport Commission. The construction must include a collar to protect the service valve from physical damage; they must have a safety relief device that communicates directly with the vapor space of the cylinder and a system to withdraw vapor in the vertical position. The cylinder must have proper marking, shutoff valve and a Type I (QCC1) service outlet connection.
11. Any attempt to fit the regulator(s) with anything other than the mating Type I (QCC1) connector will negate the important safety features designed into the Type I system. Fitting a standard #510 POL connector will not provide the flow control or temperature shutoff safety features build into the complete Type I system.
12. Propane cylinders must be stored outdoors in a well-ventilated area out of the reach of children.
13. The handling, filling, use, storage and transportation of all sizes of LP gas cylinders must be in accordance with NFPA 58, Storage and Handling of LP Gases, or CAN/CGA B149.2, Propane Gas Installation Code.
14. Surfaces of unit will become hot during normal operation and can cause burns and/or serious injury. Do not touch a hot unit without protective clothing. Allow the unit to cool before cleaning or disassembling.
15. High winds may adversely affect burner performance.
16. The minimum ambient temperature for proper operation of this appliance is 50°F (10° C).
17. Retain this manual for future reference.

INSTALLATION INSTRUCTIONS

Unpacking Instructions:

Carefully unpack the broiler and inspect immediately for shipping damages. Your outdoor boiler was shipped in a carton designed to give maximum protection in normal handling. It was thoroughly inspected before leaving the factory and the carrier accepted and signed for it. File any claims for shipping damage or irregularities with the carrier.

Assembly: (Refer To Figure "A")

These unassembled parts should be included in your charbroiler package:

1 Grate (s)	3 Frame assembly	5 Water Pan (s)	7 Leg & Caster Assemblies
2 Radiants	4 Carryover tube cover (s)	6 Base	

1. Remove shipping bands from carton.
2. Remove top of carton.
3. Remove grates from the unit and set them aside.
4. Remove and unwrap any small parts packages that are located underneath the grates. If stainless steel parts are coated with PVC film, remove it prior to installation.

5. Lift frame assembly from carton and set aside.
6. Lift base from carton and place it upside down on ground.
7. Install legs & caster assemblies and flip the stand over into the upright position.
8. Place the broiler on the stand.
9. Place the carryover tubes cover(s) on their brackets to cover the tubes.
10. Place the radiants on their front and rear support pins over each burner.
11. Place grates into frame assembly.

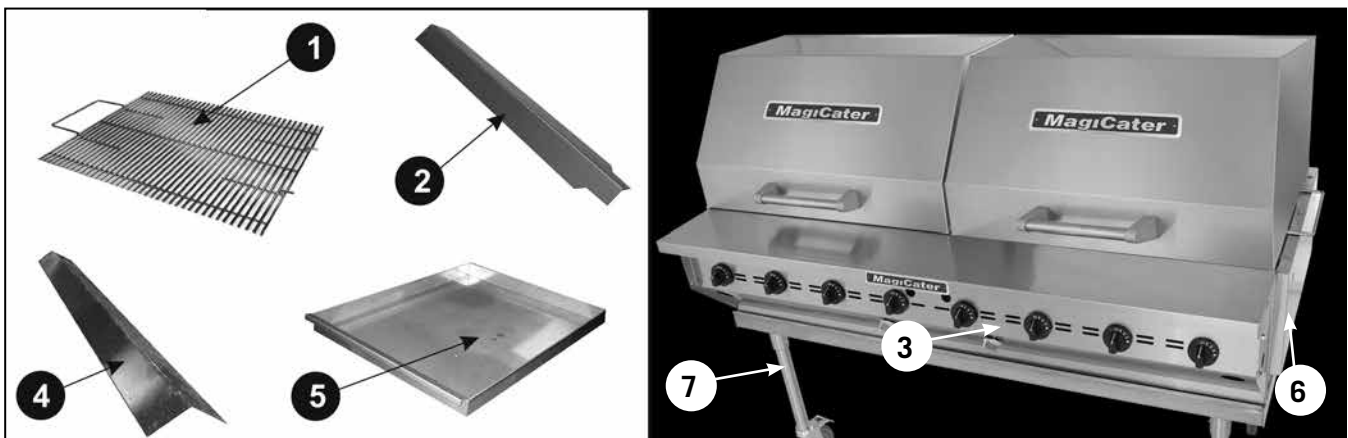


Figure A



INSTALLATION INSTRUCTIONS

Connecting The Gas Lines To The Propane Tanks

- New propane tanks are shipped empty with no pressure and must be purged of air and filled with propane per NPGA (National Propane Gas Association)
- Install the green plastic connector onto the external thread on the tank valve. Turn it clockwise and hand tighten. The plastic nut is designed for easy grip and allows user friendly, wrench-less connection. It is thermally sensitive and will shut off the flow of gas if subjected to temperatures between 240°F and 300°F. Type I (Q.C.C. 1) connection system will not allow gas to flow until a positive seal has been made (See Figure "A-3").
- Make sure the vent on the regulator is facing down (toward the ground) so that water and other liquids do not get into the regulator.

NOTICE

The 40-lb LP cylinders have a Type I ACME service valve with a one-way valve that only allows propane to flow out of the valve. The 40-lb cylinder cannot be filled through this Type I ACME service valve. The 40-lb cylinders have a 1-3/4" ACME male fill connection with a built in OPD to protect the cylinder from being overfilled. Be sure that your local propane supplier has the correct adapter to fill through a 1-3/4" ACME male filling connector.

40-lb cylinders must be used in the horizontal (laying down) position.

INSTALLATION INSTRUCTIONS

Installing Tank Caddy:

- Our unit is equipped with a tank caddy. It has to be placed underneath the broiler and secured in place by (2) hooks provided (see fig. "A-3"). The front of the caddy will be raised off the ground to prevent possible movement and putting strain on connection hoses.
- LP gas cylinder(s) have to be securely mounted to the caddy with thumb screws. They will only work in the horizontal position.

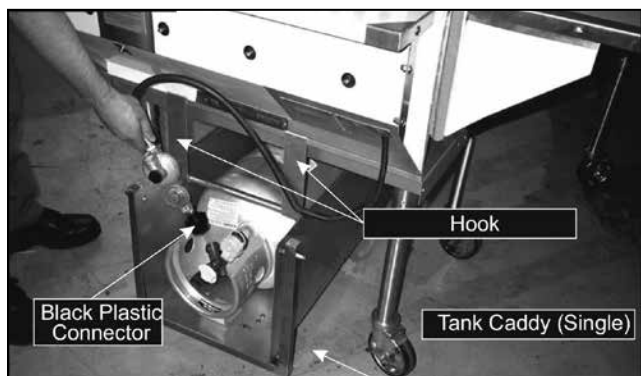


Figure A3

Leak Testing:

The plumbing must now be tested for gas leaks before use. Turn all propane tank, burner control and carryover control valves to the OFF position. Wet all gas line fittings and connectors with a solution of soapy water (or commercial leak disclosing liquid). Slowly open the propane tank valve(s) and look for bubbles of foam at any of the joints of the system. If a leak is found, close the tank valves immediately and call your local dealer or the manufacturer. If the gas connections are leak-free, the unit is ready to use. Follow the lighting instructions.

Note: Although each 30" x 30" cooking area of the LPAGA will deliver 80k BTU's, it is not intended that the unit be routinely operated "full tilt". This extra high capacity was intended to allow the cook to load the unit with a full complement of product and still have enough heat to maintain cooking time. If the cook is running the LPAGA at the full 80k BTU's with a light food load, it is using propane at a rate that is not needed. The LPAGA should be "throttled down" to match the food load on the grill.

Propane dealer will not fill a 40 lb cylinder because it does not have the correct valve with an OPD installed:

OPD stands for "Overfill Protection Device". This is a safety device that is now required on all 4 through 40 lb propane cylinders to prevent them from being overfilled. Propane filling stations know that the new 20 lb cylinders with OPD's have a triangular valve handle instead of the old round valve handle. If you bring a propane cylinder to a filling station with a round handle on the Type I valve, they will not fill it because they know it does not have the required OPD.

Confusion is caused by the Type I connectors found on the 40 lb cylinders. On the 40 lb cylinders this is a special service valve only (outgoing gas only). It has an internal one-way valve that will only allow gas out of the cylinder and not into it. The 40 lb cylinder cannot be filled through this valve because the one-way valve will not allow the propane into the cylinder. Since this valve cannot be used to fill the cylinder, it does not need an OPD. This valve cannot have the triangular handle because it does not have the OPD. The filling connection on a 40 lb cylinder is a plain male thread without a manual valve on it. The filling valve opens automatically when the filling connector is properly attached to the cylinder. The OPD is built into this automatic valve because this is where the propane enters the cylinder. All of our 40 lb cylinders are clearly marked on the cylinder label to identify that they have the required OPD. Larger propane facilities are very familiar with the fill valve on the 40 lb cylinder and will fill them without a problem.

LIGHTING INSTRUCTIONS

Lighting Instructions:

Fill water pans to within 1/2" of top edges (this will control grease flare-ups, provide for ease of cleaning and keep cooked food moist). Re-fill pans with water when they evaporate to within 1/2" of the bottom of the pans. Failure to keep water in the water pans could lead to grease fires and will void the warranty.

1. Open the roll-up hood if so equipped. Turn all the burner knobs and carryover tube knobs to the OFF position and slowly open the gas tank valves.
2. Turn the carryover tube knob on one side fully counter-clockwise to the ON position. Insert a lit, extra-long match or a gas lighter flame through the hole on the same side in the front panel. For 60" broilers repeat the same procedure for the other side.
3. Check that the entire crossover tube is lit by looking through the lighter hole(s) located on the front panel. If the carryover tube(s) will not light or stay lit, shut off the gas supply and do not use

the unit. Wait 5 minutes before attempting to re-light the unit. (See Figure "B")

4. After lighting the crossover tube(s), open the desired burner valves and observe that the burners light completely from the crossover tube(s).

NOTICE

If the tank valves are not opened very slowly, an excess flow valve in the tank connector fitting (a safety feature) may restrict the flow of gas to the unit resulting in little or no flame at the burners. Should this happen, follow the shutdown instructions and be sure to shut off tanks and remove and re-attach the tank connectors as instructed. This is necessary to re-set a closed excess flow valve. Repeat all steps of the lighting instructions. The appliance should now function normally.

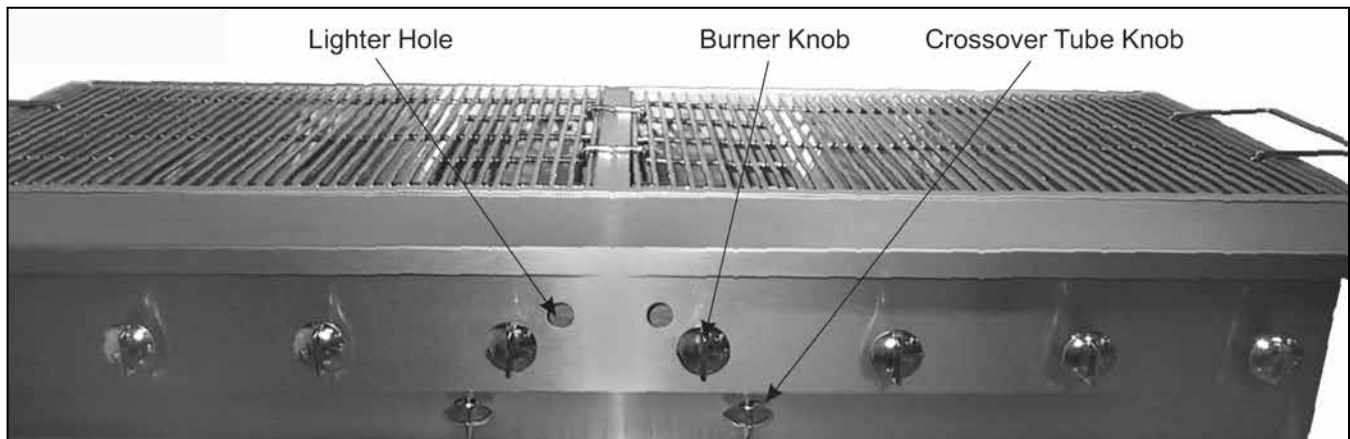


Figure B

Shutdown Instructions

To shut down the unit, turn all burners and carryover tube knobs clockwise to the OFF position. Close gas tank valve(s), disconnect propane tank(s) and leave them outdoors.

MAINTENANCE INSTRUCTIONS

Cleaning Instructions

- Clean the unit regularly after use.
- Top Grates: after removing from the unit, use warm soapy water and a stiff bristled brush or plastic pad. Cooking grates must be removed to steam clean or pressure wash. Do not use steel wool or abrasive pads as they may degrade the metal finish. Always clean stainless steel panels along the grain.
- Radiants/Covers: These will need little or no cleaning due to high in-use temperatures. If necessary, clean as top grates.
- Broiler body: Use warm, soapy water and a stiff bristle brush or plastic pad. Do not use chlorine, bleach or other caustic chemicals. Be careful not to get water into the burners or carryover tubes. Do not pressure wash.
- Water Pans/Stand: Clean like top grates.

Burner / Orifice Inspection

1. Remove the front shelf by removing the two screws at the ends.
2. Slide front shelf forward and then lift it off the unit.
3. The front of the burners, the valve bodies, and orifices are now exposed for inspection. Looking down into the unit, compare each assembly with figure "C" for alignment.
4. If the components are not aligned as shown in the diagram, discontinue use and contact the appliance manufacturer.
5. If the components are aligned, carefully replace the service shelf and re-insert and tighten the screws. Your unit is ready for use.

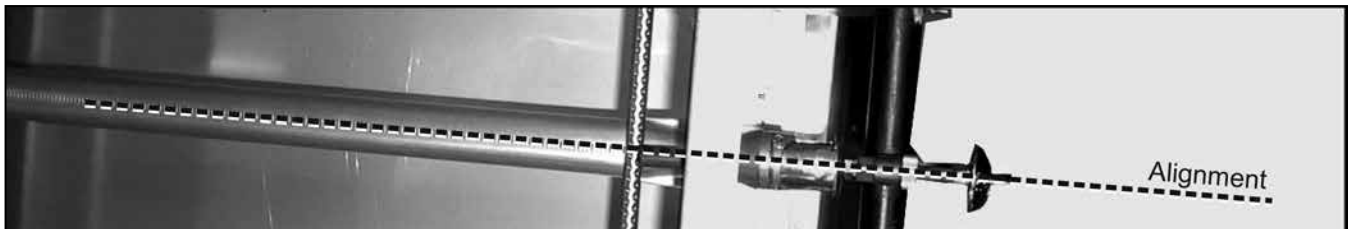


Figure C



MAINTENANCE INSTRUCTIONS

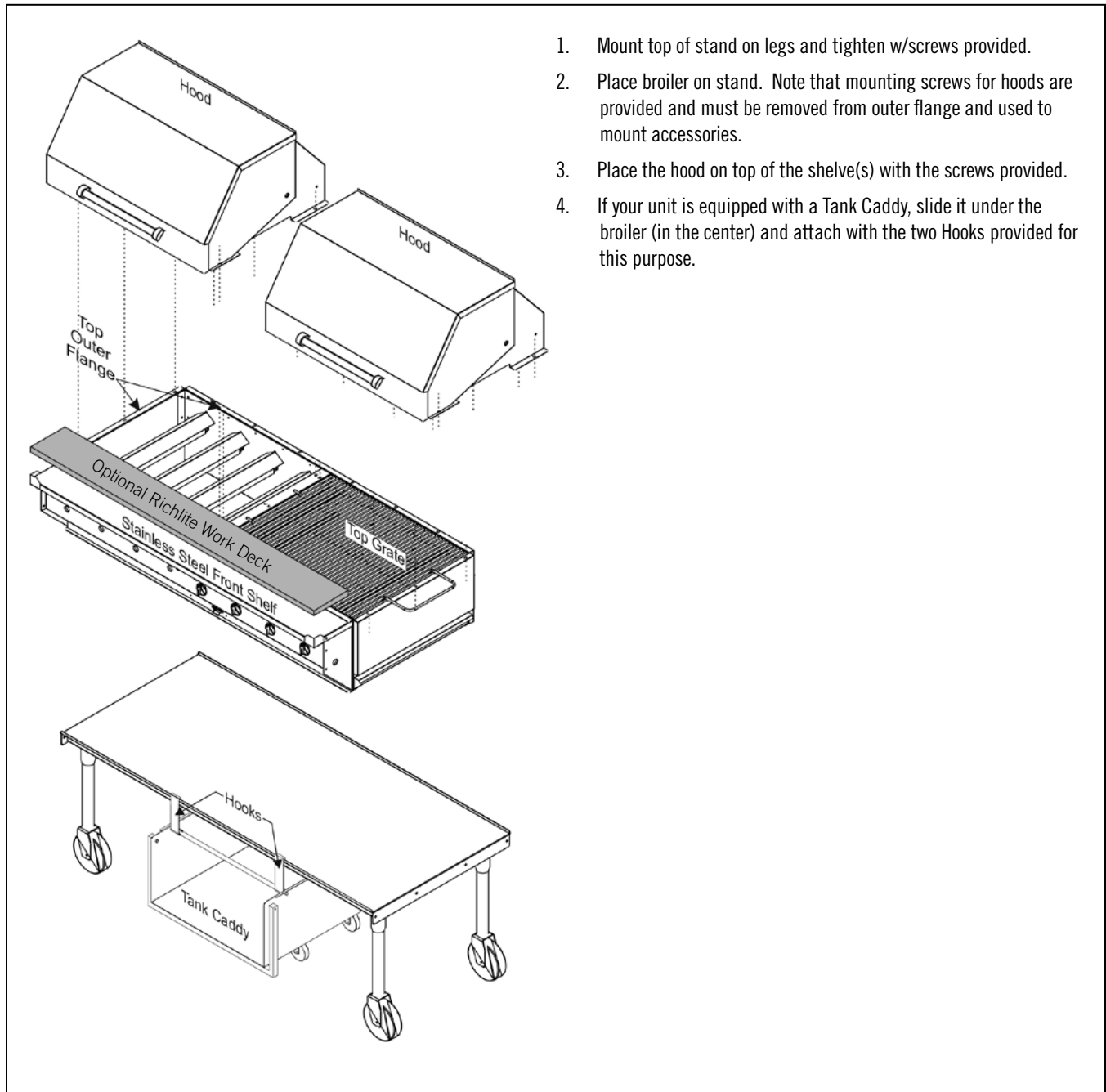
Troubleshooting Guide

Problem	Probable Cause	Solution
Burners & carryover will not turn on	L.P. tank empty	Replace with fresh tank.
	L.P. tank valve closed.	Open valve.
Burners produce excessive carbon deposits	Incorrect gas type.	Supply correct type gas.
	Incorrect gas pressure	Call local gas supplier.
	Incorrect orifices.	Call Magikitch'n® authorized service center.
	Primary air not adjusted properly.	Adjust air shutter.
Carryover will not remain lit.	Carryover flame adjusted incorrectly.	Adjust carryover flame.
	Draft condition.	Remove draft.
	Carryover clogged w/grease or debris.	Clean carryover.
Excessive flare-up	Overload of fatty meat	Maintain adequate water level in water pan.
Broiler does not seem hot enough	Orifices may be dirty/clogged.	When unit cools, check & clean orifices.
	Low gas pressure.	Increase gas pressure to 10" W.C. (L.P.)
Grates &/or radiants &/or burners &/or gas valves warp	Usually improper cleaning methods ie; users cover grate top w/sheet pans & crank up heat to burn-off debris	Never cover top grates w/sheet pans. This causes the firebox area to overheat excessively.
Not enough gas to the burners (L.P. ONLY)	Tank is empty.	Fill tank.
	Cylinder is frozen.	If the LPAGA is operated at the full 80k BTU output with a 40lb propane cylinder, the cylinder may not be able to generate enough vapor pressure to support that flow when the cylinder is less than half full. If there is frost on the bottom of the cylinder and gas flow is restricted, this can be improved by placing the cylinder in a container of water. The water will help heat the cylinder and prevent the ice build-up that prevents the needed vapor from forming inside the cylinder.
	Outside temperature is below 50°F.	As the temperature gets below 70 deg. F, the ability to produce the vapor needed to burn decreases. The lower the temperature, the lower the performance of the grill because of less vapor available. At temperatures below the 50's there is just not enough vapor available to support adequate combustion in these high capacity burners.
Regulator Freezes (L.P. ONLY)	Water in the liquid propane.	Small amounts of water in liquid propane can form ice crystals in the regulator and prevent it from working properly. Magikitch'n LP models use a two-stage regulator that reduces, but does not eliminate this problem.
	Drawing liquid propane rather than gas from a 40# tank.	On a 40# horizontal tank it is possible to have liquid propane in the discharge rather than propane gas (vapor). This can happen if the tank is overfilled or if it is bounced around during transportation. A short "J" shaped tube is located inside the tank. This is called a "dip tube" and it is the point where the propane vapor is taken into the discharge and then into the regulator. If liquid propane fills this tube it will be drawn into the regulator where it expands into gas. This will cause frost and ice to build up on the outside of the regulator and supply hose and will interfere with normal operation. This can cause the excess flow valve to close and severely restrict the amount of propane gas allowed to pass through the regulator and hose. If you suspect an overfilled tank, or that there is liquid in the dip tube, it can be corrected by running the unit with the tank(s) in the upright or vertical position in front of the LPAGA. Make sure that the tanks are properly secured in the vertical position so they cannot be knocked over! After the liquid propane in the dip tube has been burned off, the tank(s) can be returned to their normal position. Be careful when returning the tank(s) to the horizontal position so that you don't cause more liquid propane to be "sloshed" into the dip tube again or it will be necessary to repeat the process again.

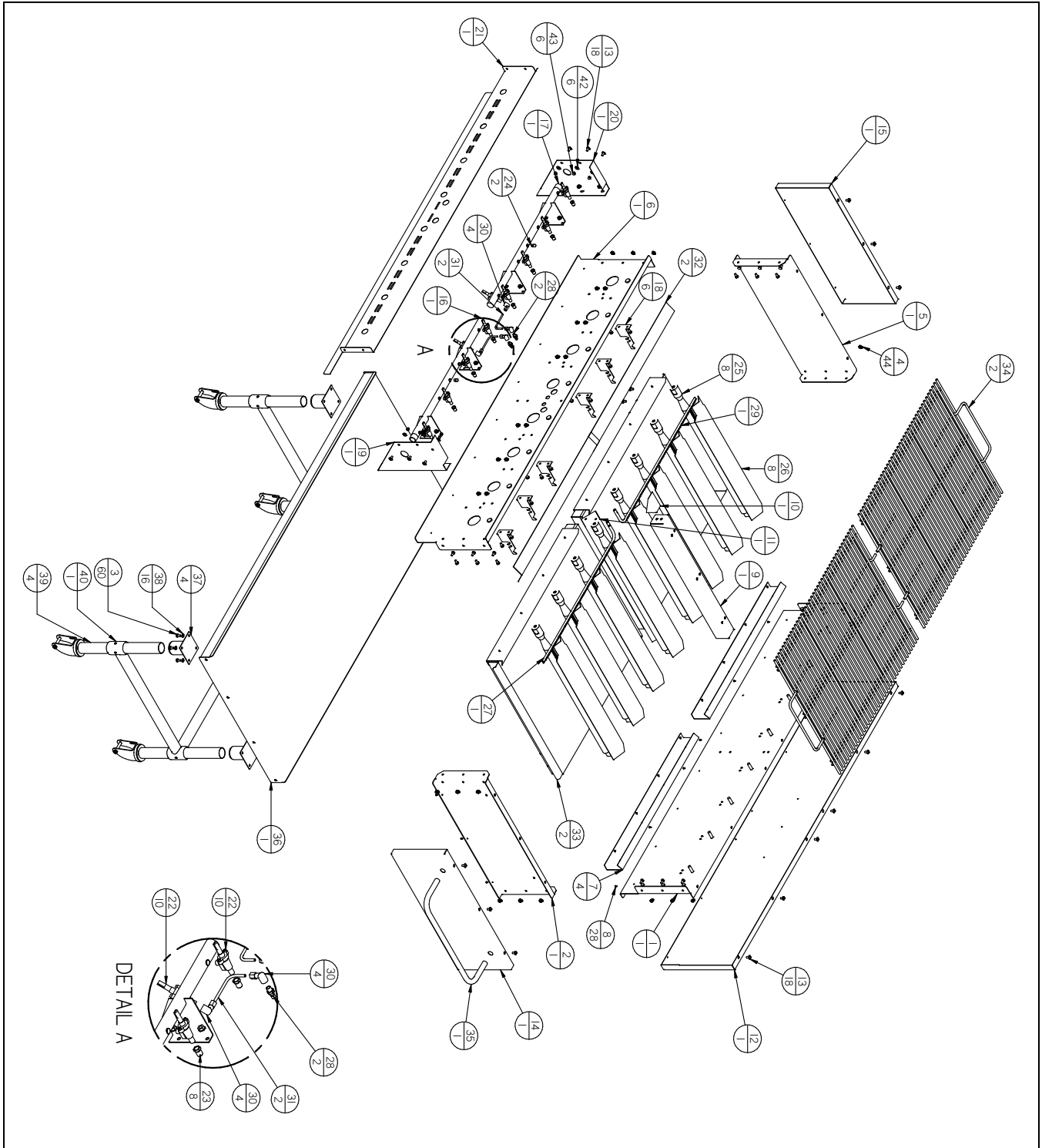
ACCESSORIES

Instructions For Installing Outdoor Charbroiler Accessories

Your new Charbroiler has been shipped in several cartons, partly assembled. Please follow the instructions below which detail the assembly of hoods, tank caddy and stand.



EXPLODED VIEWS & PARTS LISTS



Exploded View – LPAGA-30S & LPAGA-60S Exterior / Interior

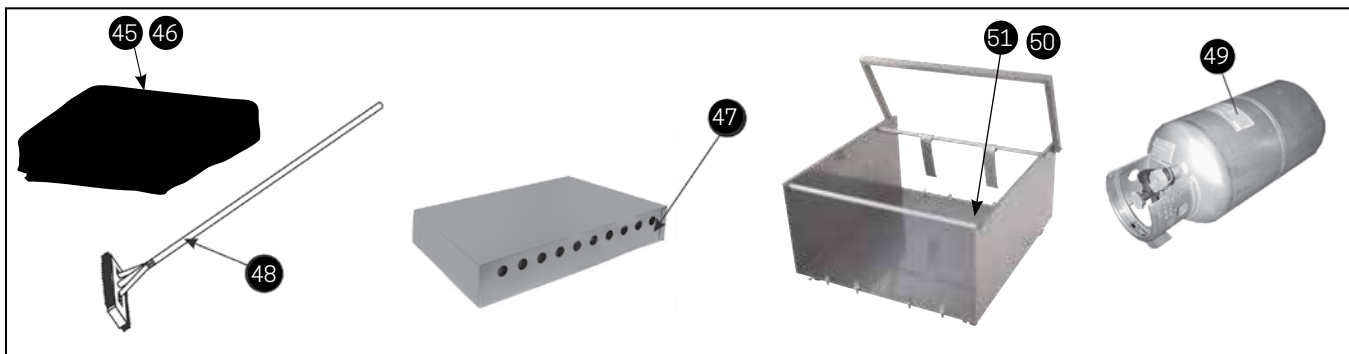
EXPLODED VIEWS & PARTS LISTS

Exterior/Interior

Item	P/N	Description
1	21840812	PANEL, CHAMBER BACK 60"
2	21840515	PANEL, CHAMBER SIDE RIGHT
3	8204000	C/S HX HD #5 1/4-20 X 1/2 ZN
4	8431500	NUT, HEX, KEPS, 1/4-20
5	21840813	PANEL, CHAMBER SIDE LEFT
6	21840814	PANEL, CHAMBER FRONT
7	21840517	TRACK, WATER PAN
8	56521	POP RIVET
9	21840818	SUPPORT, CENTER UPPER
10	21840815	SUPPORT, WORK DECK CENTER
11	21840816	SUPPORT, CENTER LOWER
12	21840819	PANEL, OUTER BACK
13	8205500	SCREW, 1/4-20 X 1/2 TR HD
14	21840526	PANEL, OUTER SIDE RIGHT
15	21840527	PANEL, OUTER SIDE LEFT
16	21840545	WELDM'T, MANIFOLD RIGHT
17	21840845	WELDM'T, MANIFOLD LEFT
18	21840522	BRACKET, BURNER TUBE
19	21840514	SUPPORT, WORK DECK RIGHT
20	21840519	SUPPORT, WORK DECK LEFT
21	21840811	PANEL, FRONT 60"
22	2068000	VALVE, GAS, ON-OFF
23	2066655	HOOD, ORIFICE #55
24	2092517	PLUG, 1/8 NPTM

Item	P/N	Description
25	21840520	BURNER
26	21840530	RADIANT
27	21840523	TUBE, CARRY-OVER RIGHT
28	2068874	ORIFICE #74, LP GAS (CARRY OVER SPUD)
29	21840817	TUBE, CARRY-OVER LEFT
30	21880304	ADAPTER, 1/8(NPT) X 3/16 OD X 90 FEM ELBOW
31	21840524	TUBE, PILOT
32	21840525	COVER, RUNNER TUBE
33	21840512	PAN, WATER
34	21840532	WIRE RACK
35	S1002A	HANDLE, DOOR 3/4" X 17 1/2" BC
36	21840840	WELDM'T, SHELF LPAGA-60S
37	21840538	SOCKET, LEG
38	8507800	WASHER, SPLITLOCK 1/4" ZN
39	21840539	LEG & CASTER (SET OF 4)
40	21840824	STABILIZER, STAND 60"
41	05252	NAME PLATE, HOOD & FRONT (NOT SHOWN)
42	8507600	WASHER, FLAT 1/4"
43	8427400	ACORN NUT, 1/4-20 SS
44	8706410	KNOB, METAL (NOT SHOWN)

Accessories

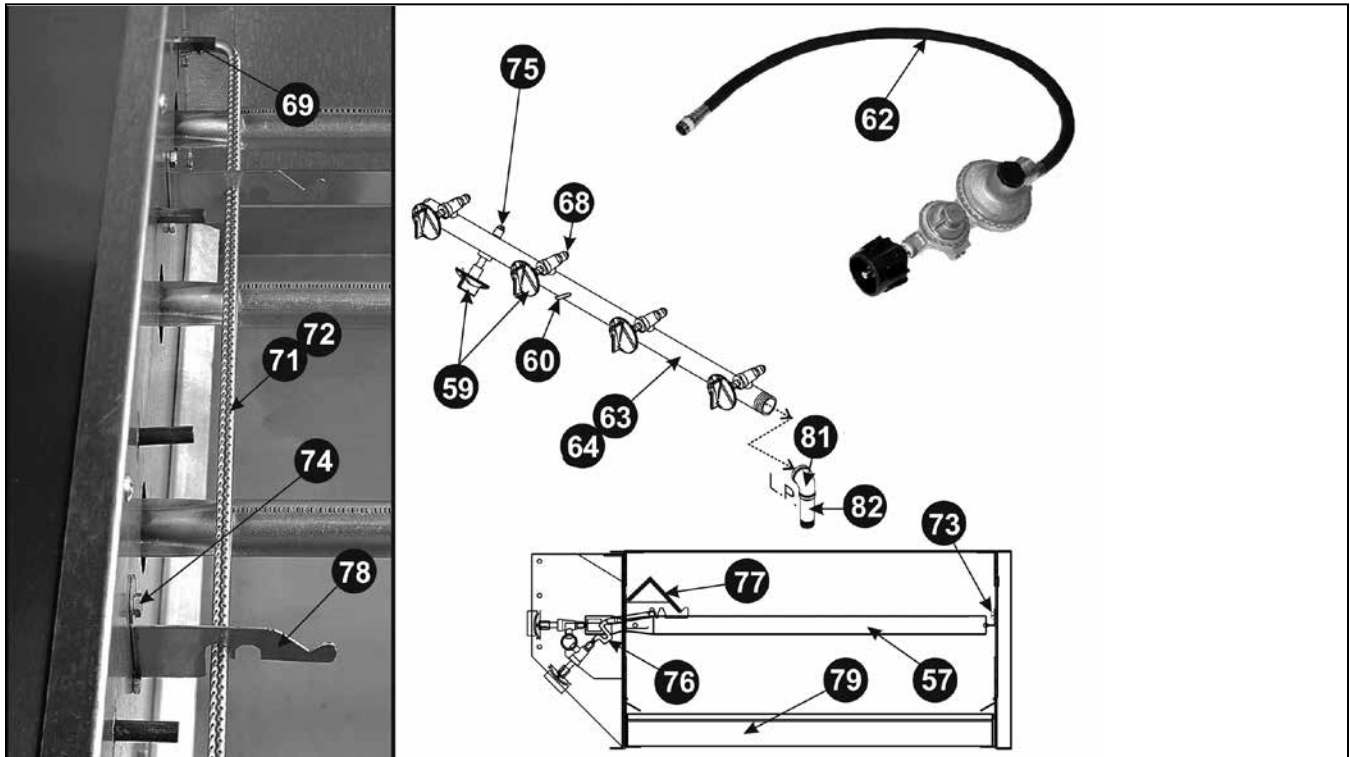


Item	P/N	Description
44	21841050	30" In-Line Griddle (not shown)
45	21844540	Vinyl Cover, 30"
46	21841040	Vinyl Cover, 60"
47	21841025	Steamer Support (Full Size)
48	T5104V	Brush

Item	P/N	Description
49	21841021	40" Propane Tank
50	21841040	Stainless Steel Tank Caddy 60"
51	21840560	Stainless Steel Tank Carrier 30"

Note: When ordering, ALWAYS specify Part #, Model #, Serial #, Voltage/Phase & type of Gas.

EXPLODED VIEWS & PARTS LISTS



Exploded View – Manifold, Burner, Valve, Orifice, Pilot Tube

Item	P/N	Description
57	21840520	Burner
58	2068000	Gas Valve (no knob)
59	8706410	Knob, Gas Valve, ON-OFF
60	2092517	Plug, 1/8"
62	21840511	Hose Assy
63	21840545	Manifold Assy, Right (LPAGA-30/60 LP)
64	21840845	Manifold Assy, Left (60 LP)
68	2068753	Orifice #53 L.P. (Burner)
69	2068874	Orifice, #74 L.P. (Pilot)

Item	P/N	Description
71	21840817	Carry-over Tube, Left
72	21840523	Carry-over Tube, Right
73	Q1459A	Screw, 10-32 x 3/8
74	8205500	Screw, 1/4-20 x 1/2
75	21880304	Adapter, 1/8NPT
76	21840826	Pilot Tube
77	21840525	Runner Tube Cover
78	21840522	Runner Tube Bracket
79	21840512	Water Pan
81	2093300	Reducing Elbow, 3/4 x 3/8 (LP only)
82	2093600	Nipple, 3/8 x 3 1/2 (LP only)

Note: When ordering, ALWAYS specify Part #, Model #, Serial #, Voltage/Phase & type of Gas.



MAGIKITCH'N LIMITED WARRANTY

WHAT IS COVERED	<p>This warranty covers defects in material and workmanship under normal use, and applies only to the original purchaser providing that:</p> <ul style="list-style-type: none">• The equipment has not been accidentally or intentionally damaged, altered or misused;• The equipment is properly installed, adjusted, operated and maintained in accordance with National and local codes and in accordance with the installation instruction provided with the product;• The serial number rating plate affixed to the equipment has not been defaced or removed.
WHO IS COVERED	<p>This warranty is extended to the original purchaser and applies only to equipment purchased for use in the U.S.A.</p>
COVERAGE PERIOD	<p>All Other Products: One (1) Year limited parts and labor. Warranty period begins the date of dealer invoice to customer or ninety (90) days after shipment date from factory - whichever comes first.</p>
WARRANTY	<p>This warranty covers on-site labor, parts and reasonable travel time and travel expenses of the authorized service</p>
COVERAGE	<p>Representative up to (100) miles, round trip, and (2) hours travel time. The purchaser, however, shall be responsible for all expenses related to travel, including time, mileage and shipping expenses on smaller counter models that may be carried into a Factory Authorized Service Center.</p>
EXCEPTIONS	<p>All removable parts in Magikitch'n® Charbroilers, including but not limited to: Burners, Grates, Radiants, Stones and Valves, are covered for a period of SIX MONTHS.</p>
EXCLUSIONS	<ul style="list-style-type: none">• Negligence or acts of God,• Failures caused by erratic voltages or gas supplies,• Thermostat calibrations after (30) days from equipment installation date,• Unauthorized repair by anyone other than a Magikitch'n Factory Authorized Service Center,• Air and Gas adjustments,• Damage in shipment,• Light bulbs,• Alteration, misuse or improper installation,• Glass doors and door adjustments,• Thermostats and safety valves with broken capillary tubes,• Fuses,• Char-broiler work decks and cutting boards,• Tightening of conveyor chains,• Adjustments to burner flames and cleaning of pilot burners,• Tightening of screws or fasteners.• Accessories — spatulas, forks, steak turners, grate lifters, oven brushes, scrapers, peels. etc.,• Freight — other than normal UPS charges,• Ordinary wear and tear.
INSTALLATION	<p>Leveling and installation of decks as well as proper installation and check out of all new equipment —per appropriate installation and use materials — is the responsibility of the dealer or installer, not the manufacturer.</p>
REPLACEMENT PARTS	<p>Magikitch'n genuine Factory OEM parts receive a (90) day materials warranty effective from the date of installation by a Magikitch'n Factory Authorized Service Center.</p>

This Warranty is in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on the manufacturer's part. Magikitch'n shall in no event be liable for any special, indirect or consequential damages, or in any event for damages in excess of the purchase price of the unit. The repair or replacement of proven defective parts shall constitute a fulfillment of all obligations under the terms of this warranty.



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Be sure to keep up with new product
announcements and events on social media!

