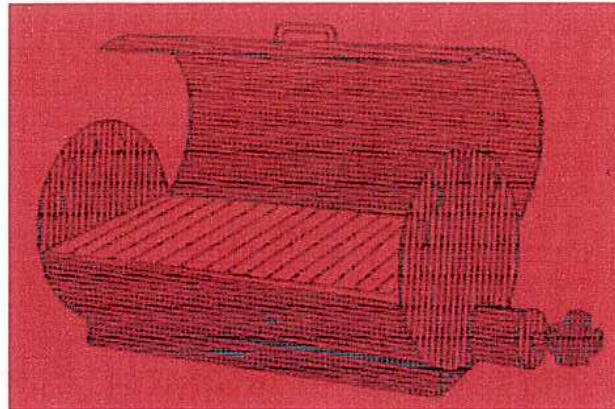


FORCE 10
MARINE BARBEQUES
PROPANE MODELS

= Kuma = Karen
Products

San Leandro, Ca
844-995-8862

Kuma Products.com



Model 3500 - Large Propane

Model 3550 - Small Propane

OWNER'S MANUAL AND WARRANTY

FORCE 10 MARINE LTD.

23080 Hamilton Road, Richmond, B.C. Canada V6V 1C9

Telephone (604) 522-0233 Fax (604) 522-9608

INCLUDED WITH OUR UNITS

For Propane Models #3500 (large) and #3550 (small)

- 1 – FORCE 10 LPG BBQ Assembly complete with Slide-in Grease Catcher and Wind Screen.
- 1 – Top Cooking Grill
- 1 – Aluminum Flavor Plate
- 2 – Mounting Kits – 7/8"-1" tubular rail mount or Inboard/outboard application consisting of:
 - 3 – Pulpit mounts consisting of:
 - 3 pairs of black plastic pieces
 - 6 black plastic shims for use on 7/8" pulpit (not required for 1" pulpit)
 - 6 long stainless steel bolts
 - 2 large stainless steel mounting brackets
 - 1 small stainless steel mounting bracket
 - 5 short stainless steel bolts
 - 5 stainless steel lock washers
 - 1 stainless steel stand-up leg (45° bend at end)
 - 1 stainless steel back bar (90° bend at end)
 - 1 brass wing nut
 - 14 brass hex nuts (1 spare)
 - 2 stainless steel holding right angles
 - 1 – Installation and Operating Manual
 - 1 – Barbecue Hardware
 - 1 – Force 10-Steel Box (small propane barbecue only)

STEP 1 - UNPACKING THE UNIT

1. Unpack BBQ. Remove everything from inside the BBQ, except the burner. Discard black shipping clips from BBQ grill.
2. Peel off the white plastic protective covering on the lid of the BBQ before using.

STEP 2 - INSTALLATION OF BARBEQUE

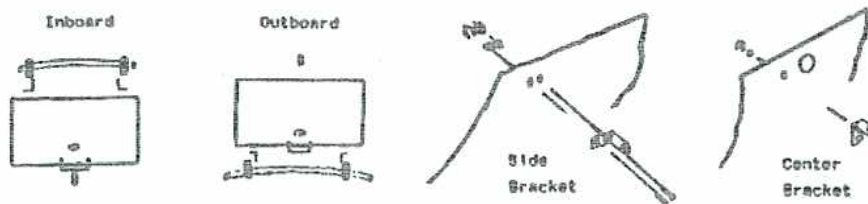
This unit has been provided with two types of mounting kits. Depending on which kit you use, you will end up with extra parts.

- A) INBOARD/OUTBOARD MOUNTING KIT: Provides for a more permanent installation of the barbeque on a 7/8 or 1" rail, but can be dismantled quickly for storage.
- B) RAIL MOUNTING KIT: Allows the barbeque to be quickly mounted on and removed from a 7/8 or 1" rail. This allows your barbeque to be stored while under way. WITH THIS MOUNT, WE STRONGLY RECOMMEND YOU REMOVE YOUR UNIT WHILE SAILING OR MOTORING OR YOU MAY LOSE YOUR BARBEQUE OVERBOARD.

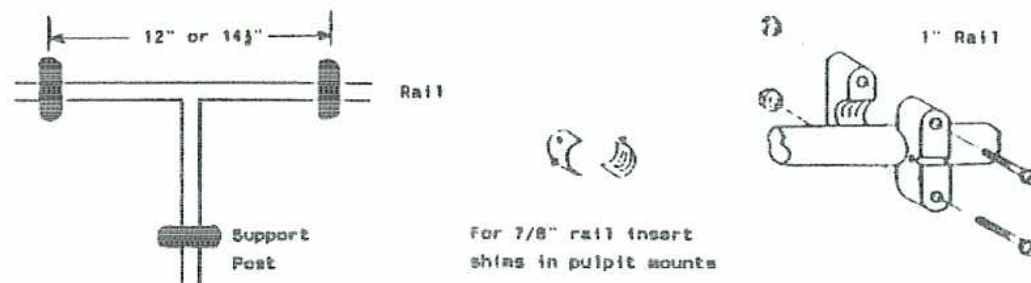
Other kits are available for other applications. Please refer to the brochure included with your barbeque.

MOUNTING KIT "A" - INBOARD OR OUTBOARD INSTALLATION

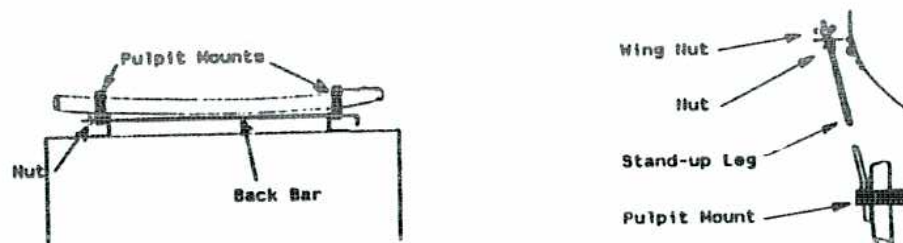
1. Remove all loose parts from the barbeque and set aside.
2. For outboard mounting attach the 2 large mounting brackets to the small holes at the sides on the front of the barbeque using 4 short bolts, 4 lock washers and 4 hex nuts.
3. For inboard mounting attach brackets to holes on rear side.



4. Fasten the small mounting bracket to the center hole on the opposite side of the barbeque using 1 small bolt, 1 lock washer and 1 hex nut.
5. Install two pulpit mounts on the horizontal rail at equal distances from a vertical support post using 4 long bolts and 4 hex nuts. Place them 14" apart for the large barbeque and 12" apart for the small barbeque. Put the piece with the center hole on the outboard side for outboard mounting and on the inboard side for inboard mounting. Fasten securely. (For 7/8" rails, insert a plastic shim in each mounting piece before attaching.)



6. Loosely fasten the third pulpit mount to the vertical support post using 2 long bolts and 2 hex nuts and positioning the center hole on the outboard side for outboard mounting or on the inboard side for inboard mounting.
7. Attach the barbeque to the inboard or outboard side of the rail by aligning the holes in the stainless steel side brackets with the holes in the plastic pulpit mounts. Push the threaded back bar through all the holes and secure it with a



brass hex nut.

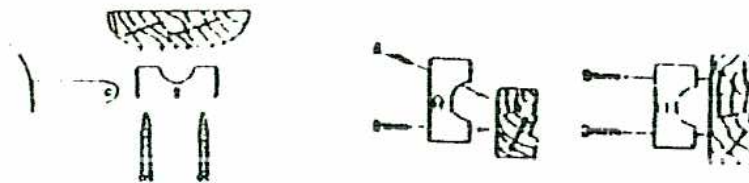
8. Thread a brass hex nut onto the stand-up leg, then connect it to the center bracket securing it with the brass wing nut. Insert the other end of the stand-up leg in the center hole of the plastic pulpit mount on the vertical support post. Slide the mount up or down the post until the barbeque cooking grill surface is level, and then tighten it securely.

9. Re-install loose parts and barbeque is ready to use. Be sure that all parts are tightened securely. To remove the barbeque, disconnect the back bar and stand-up leg.

MOUNTING ON OVERSIZE RAILS

Most pulpits are 7/8" or 1" O.D. If yours is larger, you may order the optional 1-1/4" Rail Mounting Kit, cat. no. 8386 (round) or cat. no. 8387 (square).

MOUNTING ON WOOD RAILS



To attach to wood rails use only the plastic mounting pieces with the center holes and fasten them to the rails with 1-1/2" wood screws (not supplied).

MOUNTING BIT "B" - RAIL MOUNT INSTALLATION:

1. Rail or deck mounting brackets must be 3-7/8" apart. Make sure the stainless steel (SS) right angle bases are angled outside and the slots are level with each other. (see diagram 1).
2. Be sure the rail mounts are fastened tightly - otherwise you might lose a meal overboard.
3. These barbeques also mount easily on wooden taffrails or any flat surface without damaging it. Just exchange the bolts for wood screws or long bolts. (Diagram 2)
CAUTION - The heat from the bottom of the BBQ has been tested on many different surfaces. However, on the first few operations of the BBQ, check whether anything gets too hot. If so, install a heat reflector, i.e. stainless steel sheet material.
4. Most stern rails are made from 7/8" or 1" O.D. tubing. If you have a larger rail you may order the optional 1-1/4" Rail Mounting Kit, cat. no. 8386 (round) or cat. no. 8387 (square).
5. Set your BBQ on the SS holding angles and slide brackets through slots on each side. Turn knobs clockwise by hand to tighten securely.

6. To remove your BBQ, turn knobs counterclockwise to loosen, hold BBQ and push holding levers away from slots in holding angles. Lift off BBQ.

Diagram 1

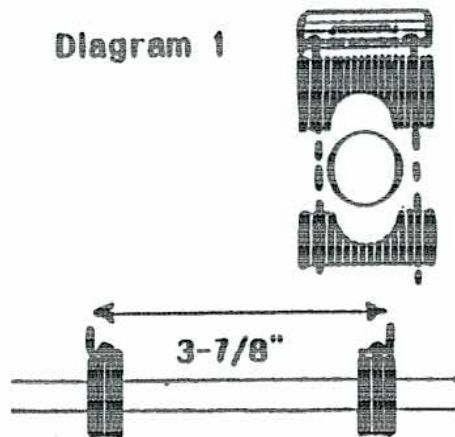


Diagram 2

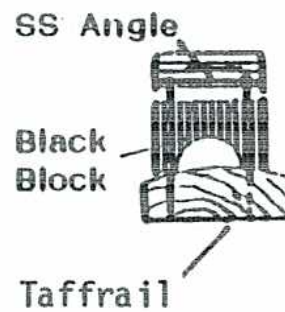
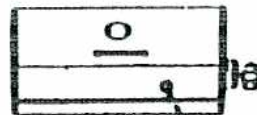


Diagram 3



Lighting and burner
observation hole

Diagram 4

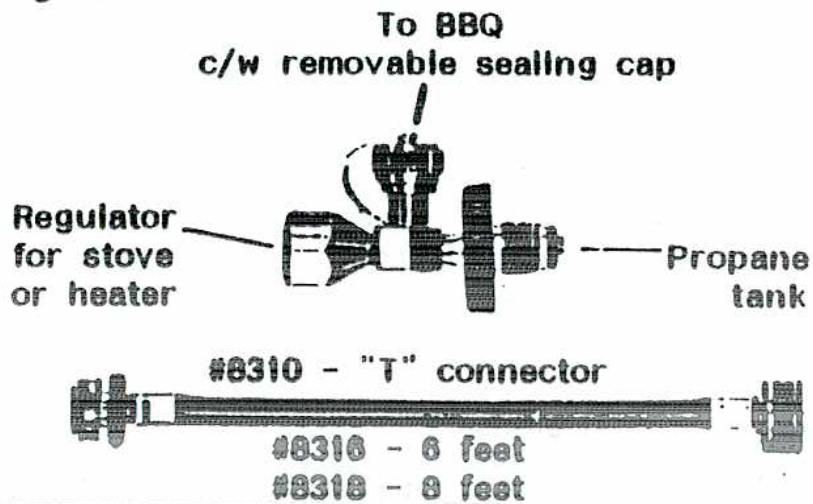
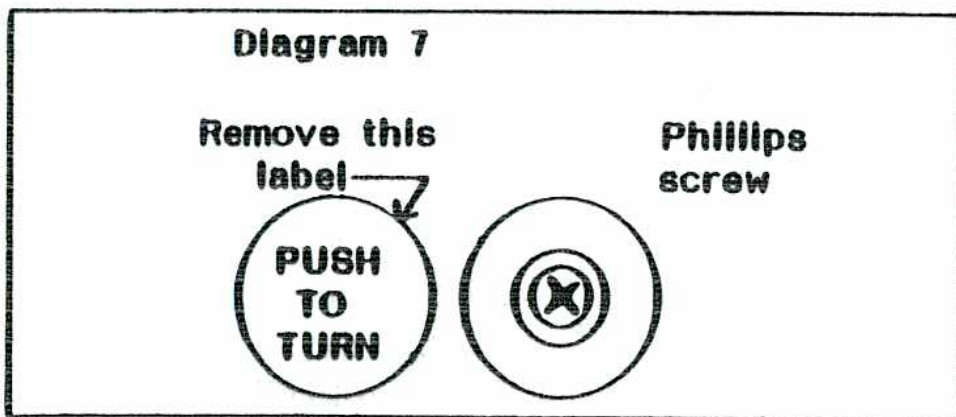
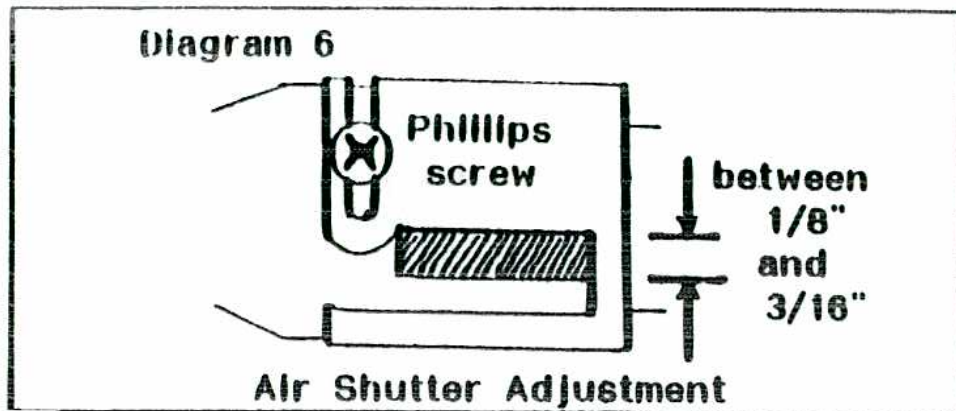


Diagram 5



The items in Diagrams 4 and 5 do not require any tools. Just tighten them by hand, except the first time when you install your stove or heater regulator onto the "T".

STEP 3 - ASSEMBLY FOR COOKING



1. Install the aluminum flavor plate by placing directly over the burner, smooth side down.
2. Slide in the grease catcher from the end opposite the regulator.

CAUTION - The grease catcher must be installed when cooking. Do not let grease build up in the grease catcher. Clean on a regular basis.

3. Make sure your regulator is in the OFF position. Screw in the propane hose or throw-away bottle by applying upward pressure. Make sure the connector is straight while installing or you may damage the thread inside the regulator. The regulator may be turned slightly so the propane hose or bottle clears the rail or deck. **NOTE:** For the Large Propane Barbeque, throw-away propane cylinders lose pressure rapidly and may cause your BBQ to heat inadequately once they are about half-empty. We therefore recommend that you hook your BBQ up to a

larger tank as per Suggestions 1 and 1 below.

4. Follow lighting instructions on RED LABEL beside regulator. See Diagram 3 for location of lighting hole.

SUGGESTIONS -

1. If you would like to use your BBQ with your existing propane system on board, we or your local marine dealer have fittings and hoses available. There is now a simple 'quick-disconnect' adapter which will fit any propane tank (see Diagram 4). It allows you to "T" right at the tank and still have the security of the solenoid switch and manual shut-off valve for your stove down below. The Adapter, cat. no. 8310, comes complete with a sealing cap nut. No tools are required for installation. Remember to also order the special 6' or 8' hose, cat. no. 8316 or 8318.

CAUTION Force 10 BBQ's must be hooked up to your propane system ahead of your stove or heater regulator as the barbeque has its own regulator (high/med/low) valve assembly. DO NOT DOUBLE REGULATE!

2. If you do not have a propane system on board, we suggest you buy a 10-20 lb. propane tank for use with the large propane barbeque. As you will be keeping it on deck, there is no danger. Order a 6' or 8' hose, cat. no. 8306 or 8308, to connect the tank to the BBQ (see Diagram 5). The small propane barbeque can also be hooked up in this manner, or will work just as well with a portable throw-away propane bottle.
3. When using fittings, hoses and remote tanks, make sure you have no leaks. Always check your connections with some soapy water. No bubbles no leaks. RESPECT PROPANE - SAFETY FIRST - WHO IS IN A HURRY ANYWAY??
4. To clean your BBQ use a liquid oven cleaner. Heat up BBQ for 2 minutes with lid closed. Turn BBQ off. Spray on oven cleaner (both inside and out if necessary) and let stand for a while and wipe off. Repeat if necessary. If your BBQ is stained by salt water, use a fine Scotch-Brite pad made by the 3-M Company and rub in the direction of the grain of the stainless steel.

DO NOT USE A STEEL SOS PAD - IT WILL CONTAMINATE THE STAINLESS STEEL MATERIAL and cause your BBQ to stain. A bronze pad may be used.

5. As you can see we now use the superior flavor plate. This has replaced the use of lava rocks. With this plate the fat drippings will drop on the hot plate, jump around, smoke and most will burn away. Some will leak through the holes and eventually collect in the grease catcher. You can add extra flavor to your meals by putting some hickory or cherry wood chips on your flavor plate. WOW-WOW - that's good! The flavor plate can also be cleaned with oven cleaner.

6. **CAUTION DO NOT OPERATE THE BBQ WITH THE LID CLOSED COMPLETELY.** Excessive temperature will ruin your food, and damage the BBQ and flavor plate. It is not necessary either for preheating or to effect proper cooking and may melt the aluminum flavor plate. Also do not put food to be cooked directly on flavor plate. Under no circumstances should lava rocks be used in conjunction with the flavor plate. Damage to the plate due to the foregoing conditions are not covered under the warranty. We will gladly sell you another flavor plate!
7. If you notice the burner puts out less heat after a while, you may find that dust, fat or food particles have collected around your burner holes. Take a good bronze brush and clean it!
8. For normal barbequing you will have plenty of heat. However, if for example you want to do a salmon wrapped in aluminum foil, you can increase the heat by covering some of the large holes in the side of the propane BBQ with aluminum foil, but never close them all off or you will kill the flame. You must have some ventilation.
9. **CAUTION - DO NOT LEAVE THE BARBEQUE IN THE RAIL MOUNTING BRACKETS WHEN VESSEL IS UNDER WAY!** Vibration could loosen the mounting, causing you to lose your BBQ overboard.
10. **COOKING IN THE WIND -** Barbequing in high gusty winds is impossible, so don't even try to light your BBQ. For cooking in lighter wind, however, Force 10 Propane BBQ's are now equipped with a rotating wind screen which can be turned down to cover the opening on the bottom of the regulator housing.

HELPFUL HINTS & TROUBLE SHOOTING

If your propane BBQ is difficult to light or blows out in a light wind or does not burn hot enough, please check the following:

1. Do not connect your BBQ to your propane tank regulator. The Force 10 BBQ has its own regulator/heat control combination, so connect your hose directly to the tank valve. **DO NOT DOUBLE REGULATE!**
2. The burner holes or orifice may be plugged. Take out the burner by removing the machine screw connecting the burner to the left side of the BBQ. **CAUTION -** Do not lose the spacer or lock washer! Inspect the burner holes and clean out if necessary. A good stiff bronze wire brush will make this task easy. Make sure all burner holes (large and small) are clean. The hole in the brass nipple should also be checked and cleaned at this time. It can be removed by holding the brass hex nipple with a wrench (18mm or 5/8") and spinning off the regulator. **CAUTION -** Never alter or increase the size of burner or orifice holes.

3. The primary air shutter may need to be adjusted. The opening should be between 1/8" and 3/16". It is located on the far end of the burner in the regulator housing. The air shutter can be adjusted with the burner removed from the BBQ as per Item 2 above. It may also be adjusted without disassembling the burner from the BBQ by simply removing the rack and the aluminum plate and rotating the burner slightly until the screw can be reached through the opening at the bottom of the regulator housing (below the red label). The air shutter is adjusted by loosening the Phillips head screw, measuring the opening and re-tightening the screw (see diagram 6). After making the adjustment and reassembling the BBQ if necessary, reinstall the aluminum plate. Fire up the burner and let burn for awhile and observe the flame through the lighting hole.
 1. If the flame is mainly blue with a bit of yellow at the top of the flame, you did a perfect job.
 2. If you flame is all blue, you will have a wild flame which will jump off the burner with a bit of wind. In this case close your primary air a bit more.
 3. If you flame is mainly yellow, you closed off too much primary air and will not get enough heat to cook. In this case, you must open it up a bit more.

4. The regulator pressure may be set too low and you may have to reset it. Remove the silver label in the center of the regulator (where it says "Push to Turn"- see Diagram 7). By turning the Phillips head screw found below this label, you can increase or decrease the gas flow. Clockwise turns the gas flow up, and counterclockwise turns the gas flow down. The flame should be mainly blue with a bit of yellow at the top and extend 1"to 1-1/4"from each side of the burner tube. CAUTION - You can turn the gas flow up too much and the gas will not turn off. Check this carefully.

ACCESSORIES, MOUNTING KITS, HOSES & PARTS FOR PROPANE MARINE BARBEQUES

DESCRIPTION	MODEL #3500 (Large)	MODEL #3550 (Small)
Barbeque Cover - Blue or White	8321	8319
Tote-n-Store Bag - Blue or White	8382	8385
Food Tray	8322	8352
Rail Mounting Kit (7/8-1" Round)	511000	511000
Rail Mounting Kit (1-1/8 - 1-1/4" Round)	8386	8386
Rail Mounting Kit (1-1/4" Square)	8387	8387
Rod Holder Mount	8300	8300

Inboard/outboard Mounting Kit	8302	8302
Flat Rail Mounting Kit	8302	8302
Dock Stand Unit	8323	8353
Propane Hose - 6' Standard	8306	8306
Propane Hose - 8' Standard	8308	8308
Propane Hose - 6' T-Type	8316	8316
Propane Hose - 8' T-Type	8318	8318
Propane "T" Connector	8310	8310
Barbeque Regulator c/w Orifice	N300	N400
Aluminum Flavor Plate	N106	N406
Propane Burner	N103	N403
Cooking Rack	592000	532000
Drip Tray	516022	516025

83907 -

83909 -

| 18^{3/8"} | O 9^{1/2"}



16"