

Natural Gas Barbeque

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Eleven-gauge mild steel was selected as the construction material for the barbeque.

First: Check the materials list provided and collect the required materials and components.

Second: Layout the lid, bottom, and sides of the barbeque using the plans provided.

After the layout has been completed, X-bend the top of the lid to provide maximum support to this component. This type of bending will also enhance the appearance of the lid.

Once the lid has been bent, cut air slots in the bottom of the barbeque. Use a corner-to-corner tack when assembling the bottom of the barbeque. When tacking the bottom, do not let the bead exceed more than $1/16$ ". If the tacking bead exceeds more than $1/16$ ", you may encounter some difficulty in grinding the bottom.

Lid assembly is the next step. First check the squareness of the bottom of the barbeque. The lid will be assembled and tacked to the bottom to assure a perfect fit. Place the component parts needed for the lid upon the newly constructed base and tack the components together. Use one inch tacks, and stagger the tack weld to prevent distortion of the lid.

Hinges were constructed from $3/4$ " pipe stock, see figure 1, for hinge construction and dimensions. Weld the hinges into place on the lid and bottom of the barbeque. Do not tack the hinges. Grind the tacks, which are holding the lid to the bottom of the barbeque and weld both the lid and the bottom of the barbeque. See figures 2 & 3 for dimensions, leg angles, and construction of lower shelf. One inch square tubing was utilized in the leg construction. Barbeque leg angle is important, as the legs will keep the barbeque upright when the lid is opened abruptly.

The lower shelf is also constructed of one inch square tubing and is butt-welded to the legs. This shelf's sole function is to hold the gas line for the burner, see figure 2.

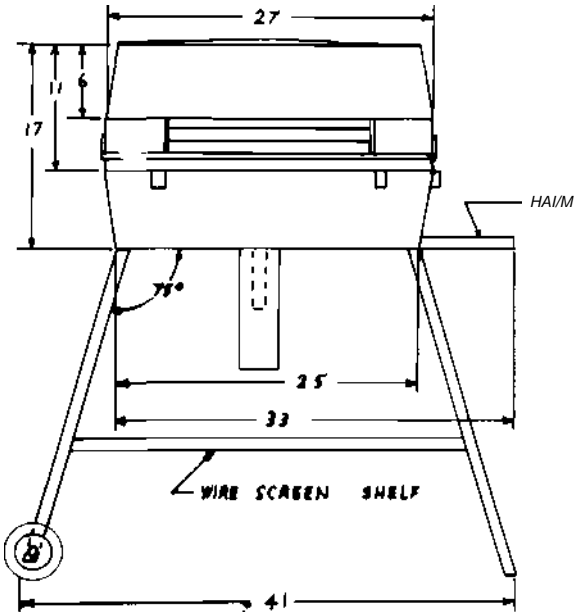
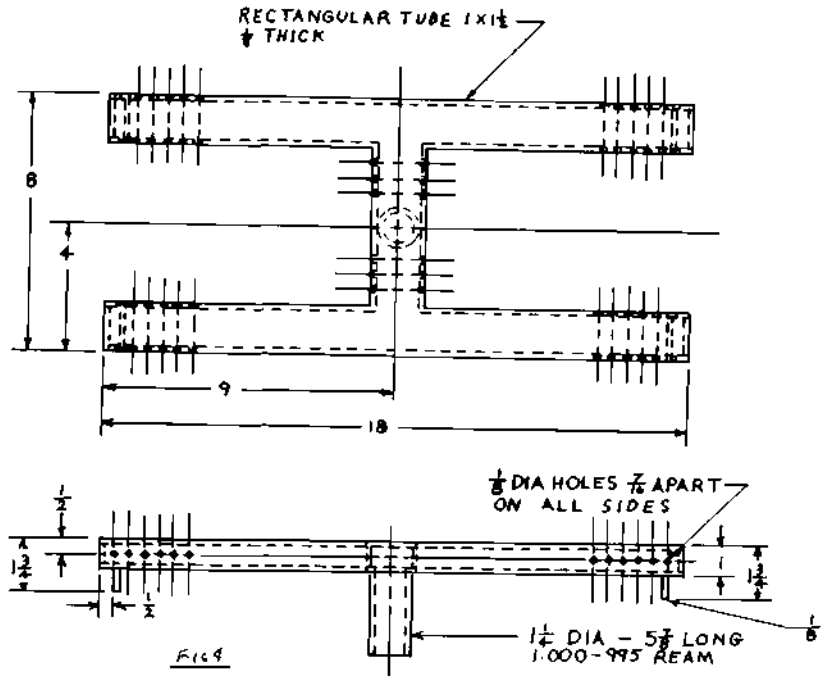
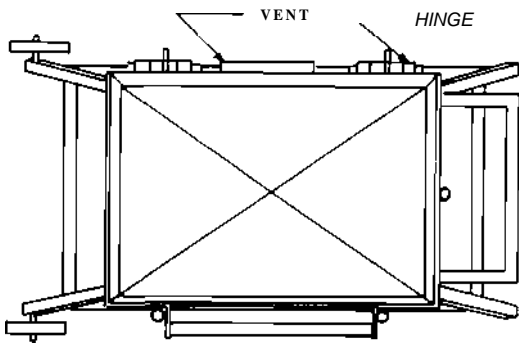
Mount the 6" wheels to the legs, and then weld the 8" handle to the legs. See figure 2 for handle placement. Remember this barbeque is extremely heavy and the greatest mechanical advantage is needed to move the unit. Heat conduction to the handle is at a minimum.

See figure 1 for vent construction. Weld the vent to the lid using the short arc method. Vent dimensions are both functional and add to the appearance of the barbeque. These dimensions should not be altered.



Construction of the heating element is the next step: Keep in mind the pattern if the barbeque is to function properly. See figure 4 for burner layout and dimensions. Burner construction utilized 1 " x $1/2$ " rectangular tubing and a wall thickness of $1/8$ ". Drill pilot holes with a $1/8$ " orifice drill and $1/4$ " spacing. An orifice drill bit should be used; however, satisfactory results can be obtained by





using a standard metal drill. When welding the burner you must avoid any weld which could leak. A weld which leaks is dangerous.

Construction of the charcoal shelves incorporates V** round stock. The cooking grates are two separate pieces and are made from Vu," round stock, see figure 3 for location of grates. Construct the bread rack from the same material. See figure 3 for location and dimensions.

The wooden shelf is placed as indicated in photo. Weld a Vi" flat stock bar around the bottom of the barbeque; this will cover the space between the lid and the bottom of the barbeque. Grind all welds and use a disc sander to remove any weld splattered on the exterior of the barbeque.

Materials Needed

Lid	15" x 24" x 11 ga
Vent	5" x 7" x 4" x 11 ga
Hinges	3/4" pipex 1 Vi" x 4"
Lid Front	9" x 27" x 11 ga
Lid Rear	7" x 27" x 11 ga
Lid Sides (2)	9" \Vi" \ 17" x 11 ga
Bottom Front	8" x 27" x 11 ga
Bottom Rear	9" x 27" x 11 ga
Bottom Sides (2)	8" x 9 1/2" x 17" x 11
Legs (4)	1" sq. tubing x 27"
Burner	1 V2" x 1" rec. tubing x 18"
Screen shelf	17" x 33"
Cooking grate (2)	13 1/2" x 16 1/2" x 3/4" rd
Charcoal grate	15" x 25" x 1/4" rd
Bread grate	5 1/2" x 25" x 1/4" rd
Wheels (2)	6" ballbearing
Wooden Shelf	6" x 3/4" x 27"
Wooden handle lid	16"

