

PORTABLE FORGE

OPERATING AND REFRACTORY LINING INSTRUCTIONS



Components for assembling your portable forge include (1) Case, (2) face plates, (3) doors: 1- plain, 1- 2½"x 6" opening, 1- 2½"x 2½" opening, (1) burner assembly, ¼-20 x ½" bolts and nuts, ceramic liner and assembly instructions. Regulator, hose and ball valve not included. Call 800-944-6134 to order additional doors.

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⚠ WARNING

THESE INSTRUCTIONS ARE INTENDED AS AN AID TO AN INDIVIDUAL FAMILIAR WITH THE OPERATION OF A GAS FORGE. IF YOU HAVE NEVER USED A GAS FORGE, SEEK HELP IN LEARNING GENERAL OPERATING AND SAFETY PROCEDURES FIRST. READ THESE INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING ASSEMBLY, INSTALLATION AND USE OF YOUR FORGE. FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY.

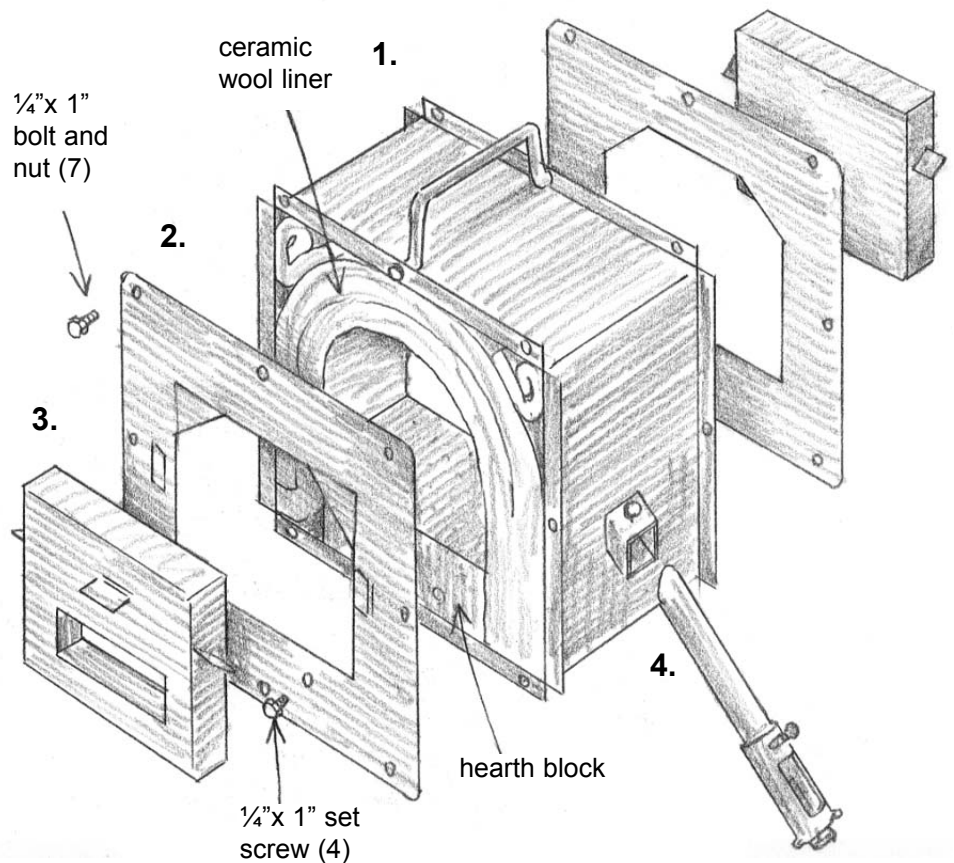
⚠ FOR YOUR SAFETY

- Do not store gasoline or other flammable vapors or liquids, or other combustible materials in the vicinity of your forge.
- Keep LP gas tanks at least four feet away from the forge.
- Keep hoses, valves and gauges away from heat generated by the forge or forge doors.
- Use only in a well ventilated area.
- If you smell gas: shut down the forge immediately and check for leaks. Do not rely on smell alone; use a fuel gas and CO detector to find leaks.

The user of this forge and burner assumes all liability and responsibility for proper installation, maintenance and use of this forge and burner, and the maker is in no way responsible or liable for the failure of the user to observe all safety precautions in the use of this product.

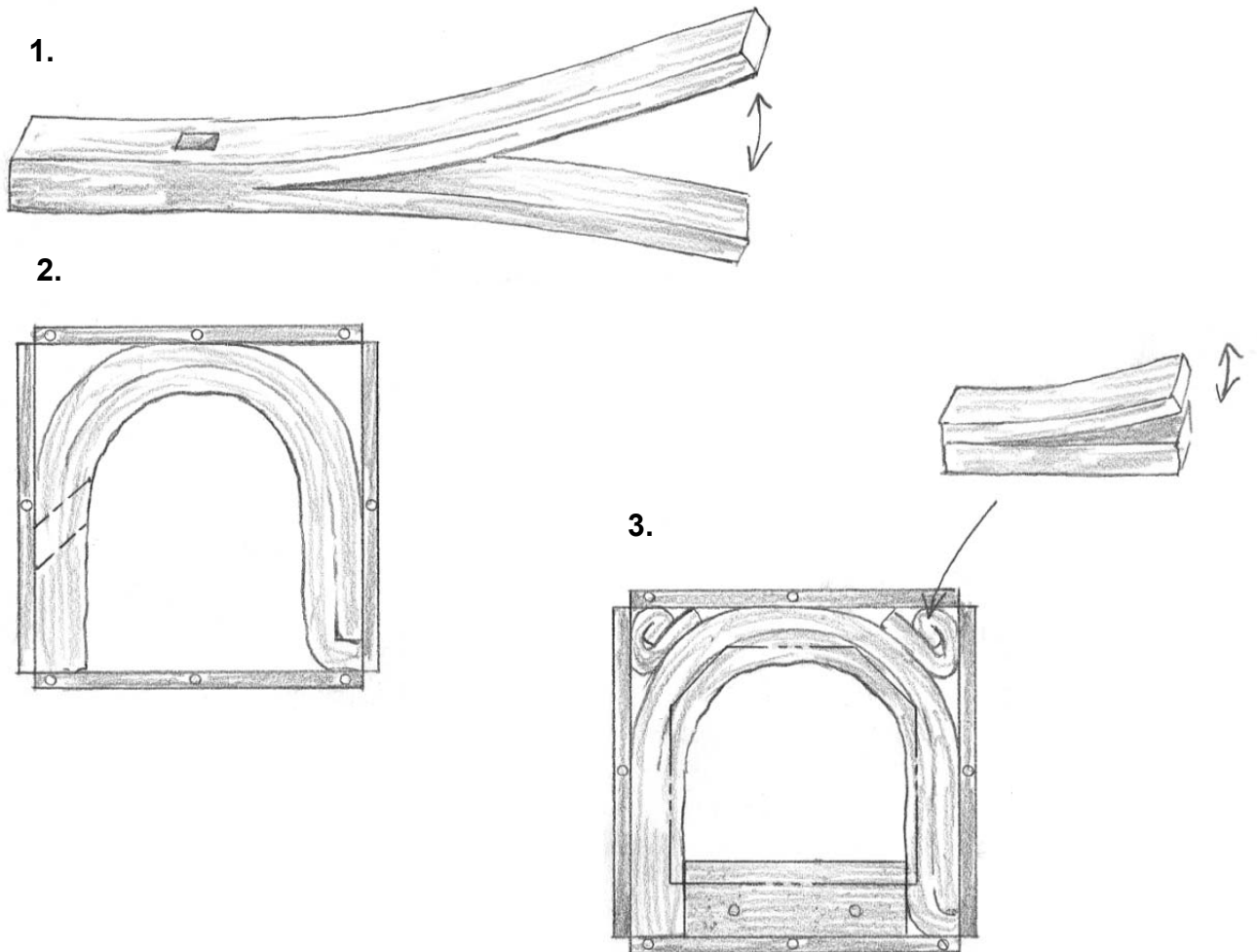
ASSEMBLY

There are four parts to this forge: 1. Case, 2. Face Plate, 3. Door, and 4. Burner Assembly. To assemble, install the ceramic liner as shown on p. 3. Bolt the two face plates to the case using the supplied $\frac{1}{4}$ -20 bolts and nuts. Slide the burner assembly into the square tube located on the side of the forge. Align the end of the burner flush with the interior of the forge and secure with the set screw.



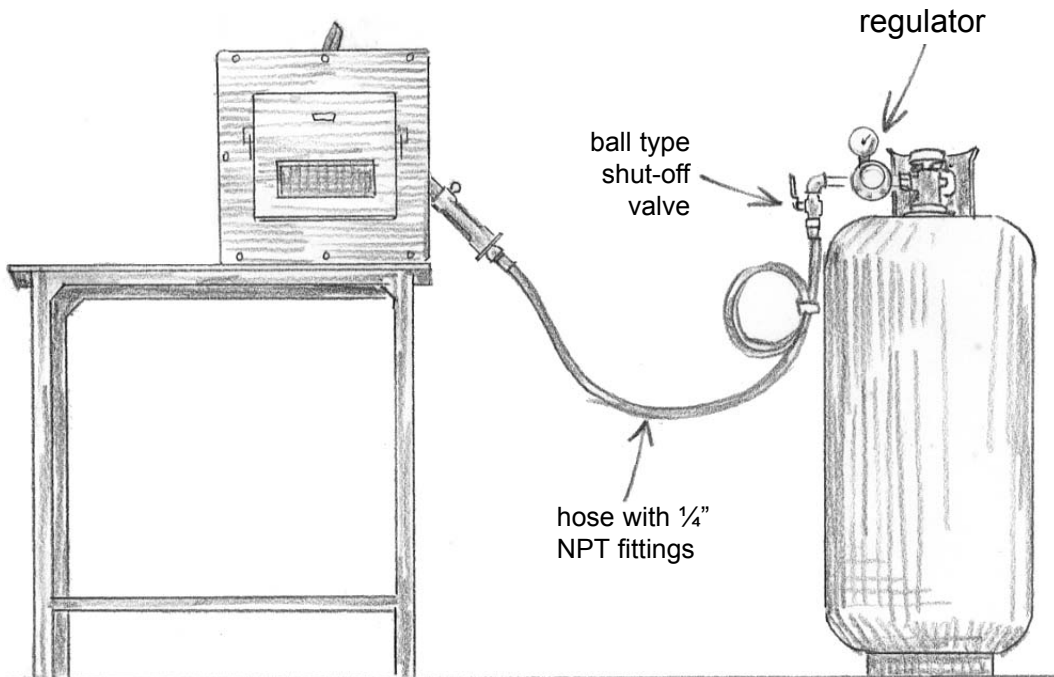
CERAMIC LINER

Your forge is supplied with a ceramic wool liner, hard ceramic hearth floor block and cast-in-place ceramic doors. The wool liner is already cut to size. To install: 1. Separate the wool into two strips from the end to the burner tube opening. 2. Slip the wool over the burner tube and wrap it around the interior of the forge housing, tucking one layer under the other at the end. 3. Separate additional $\frac{1}{2}$ " thick strips, roll them up and insert into the upper corners of the case. Place the hearth floor block in the bottom of the case, between the ends of the wool liner. After bolting the case together line up the holes in the face plate and hearth block and insert the set screws to hold the block in place. It is strongly recommended that you paint your forge with a high temperature paint such as "Rust-Oleum High Heat" paint (good to 1200°F).



SETUP

Your forge can be mounted on a steel bench or table, pedestal, stand or swinging arm. Allow plenty of space behind and around the forge for handling stock. Hardware needed includes a regulator, (for example a Fisher type 67, available at most propane distributors), ball valve and hose. Locate the LP tank (40-100 lb portable tank recommend) away from the forge with the regulator mounted to it. Attach the ball valve to the regulator and connect to the forge using a hose with $\frac{1}{4}$ " NPT fittings.



OPERATION

⚠ WARNING: Never rapidly heat a forge with newly cast refractory. Before you can use your forge you must first drive moisture out of the cast refractory by heating slowly.

⚠ WARNING: Never leave the forge unattended while it is running.

To start your forge: 1. close the ball valve and open the LP tank valve all the way. 2. Set the pressure at the regulator to 25lbs. and make sure the burner draft control is at least half open. 3. Stand away from the hearth opening, and place a small wad of burning newspaper in the forge and slowly begin opening the ball valve. 4. Once the forge starts, open the ball valve all the way. After about 10 minutes the forge will reach forging temperature and the draft control can be adjusted to achieve a neutral flame (close down, then open to a point where a neutral flame is achieved). The forge operates at a gas pressure between 15 and 35 lbs. Forging range is between 20-25 lbs and welding range is between 25-30 lbs. Operating pressures below 15 lbs will cause the burner to sputter, indicating that it is no longer drawing air. Choose a door with the smallest opening needed to do the work at hand. *Do not* close off the entire heating chamber with two solid doors. To shut down, close the ball valve, then the LP tank valve. Note: This forge is designed to work up to 2000 ft. above sea level. The burner jet is interchangeable and can be replaced to work at higher elevations.