

Get Ready

SANDING • SAWING • CARVING • SCRATCHING

Get Set

White plastic plumbing pipe, 3/4 inch (1.9 cm) in diameter, 3/4 inch (1.9 cm) long

Photocopied design template 1

Bench tool kit, page 9

Cone burr, 0.6 x 1.9 cm

Inverted cone burr, 3 mm

Ball burr, 3 mm

Soft toothbrush

T pin

FINISHED SIZE
Front, 1.9 cm; back, 0.6 cm

DESIGNER'S NOTE

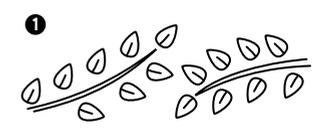
To make a different size ring, start with a different size pipe or sand out the pipe's interior.

Go

1. Lightly sand any manufacturer's printing off of the plumbing pipe. Measure and mark one line that is 1/4 inch (0.6 cm) inside the edge of the pipe. Measure and mark a second line that is 3/4 inch (1.9 cm) from the edge of the pipe.
2. Mark a dot on the 1/4-inch (0.6 cm) line and position the pipe so the dot is on the left. Using a slanted line, connect the marked dot to the 3/4-inch (1.9 cm) line at the far right side of the pipe. Saw the pipe along this line.
3. Using the large cone burr attachment in a flexible shaft, bevel all the inside edges of the pipe. Hand sand the ground areas with sandpaper until the transitions are smooth.



4. Use the photocopied template to trace the design pattern onto the ring. The center of the tips of the center leaves should line up with the front centerline of the ring.
5. Using the inverted cone burr attachment in the flexible shaft, carve a groove on both sides of each branch. (A groove cut in one firm line looks best.) Make a lighter second cut with the same burr along each branch, on the far side of the line, leaving the stem with a triangular profile.
6. Switch to the small round burr attachment on the flexible shaft. Place the burr along the stem at the marked leaf locations, and slowly remove the plastic material. The rounded leaf shape will be formed by the rotation of the bit; no hand movement is necessary.
7. Sand off any raised curls of plastic, making sure to round the stems. Use the T pin to scribe a line down the center of each leaf.
8. Brush the ring with a soft toothbrush to clean out any fine grit or curls of plastic.





PS. If you want to add a new process to your repertoire, or if you need a quick refresher on a specific metalworking method, look no further than *The Ultimate Jeweler's Guide* by Joanna Gollberg. This hardworking book covers all the essentials. It is a comprehensive, step-by-step resource for learning metalwork that fits easily on your worktable and is sure to become your go-to source. (And check out the 30-minute prong-set ring designed by Gollberg on page 108).

Bench Tool Kit

- Bench pin
- Steel bench block
- Jeweler's saw frame
- Saw blades
- Beeswax
- Needle files
- Bastard file
- Sandpaper, 220 and 400 grit
- Emery paper
- Chasing hammer
- Rawhide or wooden mallet
- Forging hammer
- Mandrels
- Dapping block and punches
- Flexible shaft
- Wood block
- Drill bits
- Burrs
- Scribe
- Stainless steel ruler
- Dividers
- Calipers
- Pliers
- Wire cutters
- Center punch
- Burnisher
- Safety glasses
- Safety gloves
- Hearing protection
- Dust mask

Soldering Kit

- Soldering torch
- Striker
- Heat resistant soldering surfaces (charcoal blocks, firebricks, or ceramic plates)
- Flux
- Flux brush or other applicator
- Solder (hard, medium, and easy)
- Snips
- Small embroidery scissors
- Solder pick
- Tweezers
- Cross-locking tweezers with wooden handle
- Third hand
- Copper tongs
- Water for quenching
- Pickle
- Pickle warming pot
- Safety glasses
- Fire extinguisher