## **Bangle Bracelet Kit**

## **Tools & Equipment:**

Lathe, turning tools of choice, Band saw or scroll saw, Drill Press or 4 jaw lathe chuck with standard #2 jaws, mini jumbo jaws, 2 3/8" forstner bit, 3 ½" hole saw (optional), Tailstock mounted Jacob's Chuck, masking or Duct tape, denatured alcohol, spring clamps.



## **Material:**

Metal Bangle Bracelet of choice, Extra Brass bangle bracelet of appropriate size (bushing bracelet) for sizing, Bangle Bracelet Blank (Wood or Acrylic), Liquid Nails – home projects. Wood finishing supplies (finishes and sandpaper). A word about wood selection: Most untreated wood will tend to crack on the end grain in the process of making the bangle blanks, therefore it is recommended a "treated" or stabilized hardwood be used to avoid the cracking. If you use untreated wood, you may "treat it" by soaking the end grain with thin ca glue.

1) Start with a piece of stabilized wood 4" x 4" x 7/8" and cut it into a circle 3 ½" in diameter or use a prepared bangle blank of your choosing. You can also use a four jaw chuck with a set of mini jumbo jaws and use a hole saw to make the blank. Draw two concentric circles, 3-5/8" and 2-3/8" as guides. Cut the outside circle.

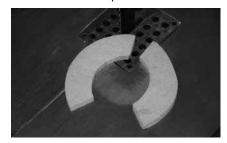




2) Drill the inside diameter with a 2 3/8" forstner bit. If drilling the inside hole on a drill press, it is recommended to drill the inside hole first (with a forstner bit) then cut the outside hole to 3-5/8" on a band saw.



3) Make a set of spacers from a piece of 1/4" plywood or some other scrape wood as shown.



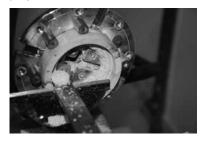
**4)** Mount a 4 Jaw Chuck (with #2 Jaws) on your lathe. Place the spacers behind the blank then open the jaws to tighten the blank onto the chuck and remove the spacers. DO NOT OVER TIGHTEN the blank – you will crack it or break it! If you have a set of mini jumbo jaws then you can place the blank inside the jaws.







5) Using the turning tool of your choosing, (a flat scraper is shown) or a ¼" parting tool and CAREFUL-LY start to remove material from the inside of the blank. Take your time and do not be too aggressive – DO NOT remove a lot of material at a time.



6) Stop the lathe frequently and use a Bracelet half (of the proper size) as a guide to see if it just fits inside. IMPORTANT – you want it to fit just a little loose so the glue will have something to adhere to when you glue the blank to the core. If it is too tight, when you glue it together, you will not have enough glue to make the pieces stick together.



7) Once the first side fits properly, reverse the bangle blank on the chuck and complete the other side making sure you have just a little wiggle room for glue.



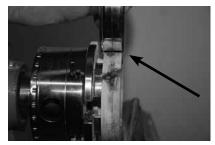
**8)** Once both sides fit properly, face off one side to get it squared up and start to reduce the width.



9) Mount the bangle on the four jawed chuck using the spacers you used in previous steps and continue to reduce the width of the bangle blank removing small amounts of material at a time.



**10)** Stop the lathe and check it frequently until the bangle blank just fits inside the two halves as shown without having any gaps in the metal core.



11) Now use the brass bushing core and place a small piece of masking or duct tape on the inner side of the brass bushing core. Place another small piece of tape on the opposite side of the same brass metal core.

**11 A)** Apply tape to both halves of the brass metal core as shown.





**12)** Place a piece of tape over the center of the brass metal core in a few places as shown to hold the core halves to the blank.



13) Mount the brass bushing core with your blank on a four jawed chuck to turn the outside diameter down to the brass bushing. You are using the metal brass bangle as a bushing to turn the blank down to the desired shape. You do not want to use your finished metal pieces because you will scratch them at this point.



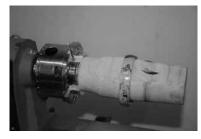
**14)** Once you have the desired shape to your blank, sand it on the brass bushing core and then use sandpaper (Abralon pads recommended) to finish sanding the blank.



15) Apply a finish of your choice – A penetrating finishing oil (ie. similar to Mahoney's, Odies, etc.) was used here for this blank. Buffing off the lathe will provide you with excellent results.



16) If you want to put a ca glue finish on the blank, remove the brass bushing core from the bangle blank and it is recommended that you make a jam chuck and apply the ca glue away from your four jaw chuck!



17) Take the finished metal core of your choosing and lightly sand the inside lips so the adhesive will adhere better. Use denatured alcohol and wipe the inside of the metal core pieces to clean off the sanding debris and grease.



**18)** Wipe the inside of the bangle blank with denatured alcohol



19) Apply a light amount of liquid nails (home version), this is flexible adhesive and will allow for movement without cracking) to the inside lip of both halves of the finished metal core. Other adhesives may work as well but should be flexible so they will not crack the wood after time as they dry out.



**20)** Apply a light amount of adhesive to the inside of the bangle blank.



21) Use spring clamps to ensure a good bond between the finished metal core and blank. Allow it to dry for eight hours



**22)** If excess glue squeezes out onto the metal bracelet, allow it to dry and then simply rub it off with your finger!

