

# HANDLE ANYTHING LATHE CHUCK

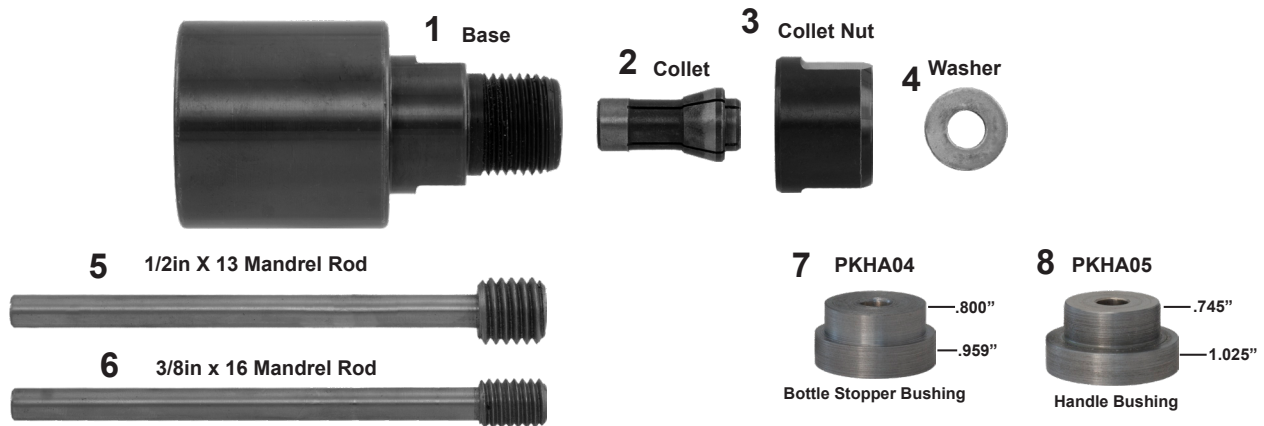
- Turn Closed end projects using bushing with standard through holes.
- Can be used for Kit Projects, Bottle Stoppers, and Various Handle Projects

## Included Accessories

- |               |   |
|---------------|---|
| 1. Base       | 5. Mandrel Rod with 1/2in. x 13tpi thread |
| 2. Collet     | 6. Mandrel Rod with 3/8in. x 16tpi thread |
| 3. Collet Nut | 7. Stepped Bottle Stopper Bushing         |
| 4. Washer     | 8. Stepped Handle Bushing                 |

## Additional Accessories (NOT INCLUDED)

- 7/8" Open Wrenches: #PKMWR
- #PKM-BUSH3 (for spacing and trimming)
- Digital Calipers (recommended)



## Setting Up The Chuck:

The Handle Anything Chuck is meant to thread directly onto a 1in. x 8tpi Lathe Headstock. The Chuck can also be mounted on a different thread with the correct adapter. The Flats on the Collet Nut and the Base accept 7/8" wrenches. To open the Collet, use 7/8" wrenches to unthread the Collet Nut slightly from the Base. Collet can be accessed and replaced if needed by fully removing the Collet Nut. Once a Mandrel Rod is inserted into the open Collet and is ready to be used, tighten the Collet Nut using two 7/8" wrenches to hold the rod firmly in place.

## Preparing Handle Blanks for Mandrel Rods:

For Bottle Stoppers and other projects with 3/8" x 16tpi threads

- Mark the center of the surface on one end of the blank.
- Measure the length of the post that needs to go into the blank
- If tapping with #BSTAPSET2: Drill a 5/16" hole, 1/2" deeper than the length of the post (see previous step) in marked end of the blank. Use the provided tap to create a thread in the above hole.
- If using threaded insert #BSERT: drill a 1/2" hole at least 3/4" deep. Spread glue inside the hole. Push in insert and allow glue to cure.

For Handles and other projects with 1/2" x 13tpi threads

- Mark the center of the surface on one end of the blank.
- Measure length of post needed to mount handle onto project.
- If using hardwood, drill a 31/64" hole to depth needed for project
- If using softwood, drill a 15/32" hole to depth needed for project
- A tap can be used to thread project for the rod. Follow the tap manufacturer's instructions.

## Using the Handle Anything System:

The following instruction is a working demonstration. Using #PKBPN2GM Heavy Duty Bottle Opener Kit, all the steps to measure, mount, trim, and turn using the Handle Anything Chuck system will be shown.

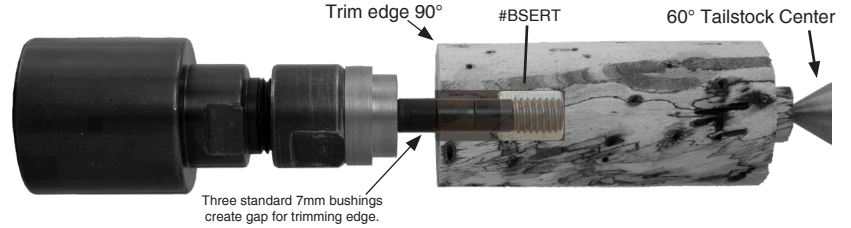
Note that even though the Handle Anything Chuck helps make closed end projects, it works best if there is tailstock support during roughing and shaping. An extra length must be added to the intended length of the final piece. This support section would be separated off the workpiece once support is no longer needed.

- PKBPN2GM is threaded 3/8" x 16tpi. #BSERT insert is used for mounting in this example.
- Cut Blank 3" long plus an extra 1/4" for a tailstock support.
- Using Calipers on the outer diameter of the kit base. It measures .75" with a rounded edge. Match this to small diameter of handle bushing PKHA05 (.745").
- Measure kit post length using Calipers - results are 1.22"
- Drill 1/2" hole to a depth of 1.25" (1-1/4")
- Spread Glue (2-part epoxy recommended) lightly inside hole and on outside of #BSERT.
- Push BSERT into hole completely and allow Glue to cure.

Since Barrel Trimmer cannot be used. This optional section uses the lathe. This can be skipped, but keep in mind that may result in a poor fit.

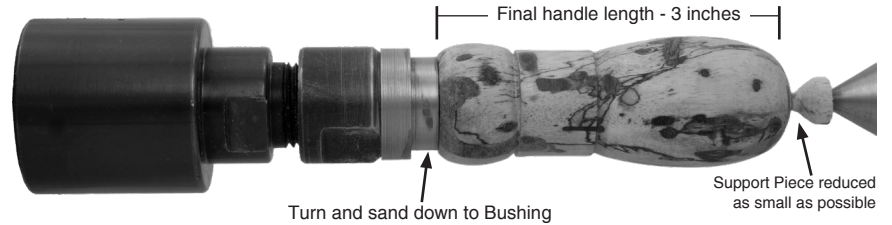
- Slide three standard bushings (PKM-BUSH3) and PKHA05 bushing onto the back of the Mandrel Rod. (See Diagram B1). Note that three bushings are needed because of the depth of the hole. Other handles may need less or more.
- Thread the blank onto Mandrel until tight.
- Slide back of Mandrel Rod fully into Collet Opening
- Bring Tailstock up to the blank and advanced tailstock point into end of blank.
- NOTE: Do not try to bend the blank to force the tailstock to a pre-marked center, it will cause the final piece to be off center. Allow the Tailstock to naturally penetrate at the center of rotation on the mounted blank.
- Tighten the collet using 7/8" wrenches and re-adjust Tailstock.
- Rough turn blank. Reduce the last 1/4 inch as small as possible while still maintaining tailstock support.
- Use a parting tool or skew to trim the Headstock end of the blank so it is 90° to the side of the blank. Only remove enough material to make sure edge is trimmed. Do not remove too much or you might reduce the depth of the hole.
- Loosen Collet and remove Mandrel Rod.
- Slide of the three standard bushings off.

**DIAGRAM B1 / TRIMMING THE BLANK**



**DIAGRAM B2 / SHAPING AND FINISHING THE BLANK**

- Thread blank onto Mandrel Rod until it is fully threaded, **then back the thread out a few turns.**
- Replace the Handle Bushing with small end against Blank and slide Mandrel Rod fully into Chuck.
- Tighten Collet Nut and then fully thread the Blank onto the rod so it is tight against the Bushing. Re-insert Tailstock.
- Turn the barrel straight or to a profile of your choice, cutting open end close to the bushing diameter.
- Reduce Tailstock support piece until it is as small as possible.
- Sand the blank down to be flush with the bushing, and use to finish the rest of the blank almost to the support piece gradually increasing sandpaper grits.
- Use a sharp tool to reduce and remove the tailstock support piece. Slide Tailstock away from blank.
- Sand the end of the blank where support piece was, blending it into the rest of the handle using gradually finer sandpaper grits.
- Finish the barrels using your choice of polish. Allow Sufficient time for the polish to cure—refer to polish manufacturer's instructions.



**Assembly**

- Unthread Blank from Mandrel Rod
- Thread PKBPN2GM into the handle opening until fully seated



**Other Combinations**

The Handle Anything Chuck can be used to make closed ended handles using the same methods with other kits and bushings including, but not limited to:

| Kit             | Mandrel Rod  | Bushing               |
|-----------------|--------------|-----------------------|
| Bottle Stoppers | 3/8" x 16tpi | #PKHA04 Large Side    |
| Niles Stoppers  | 3/8" x 16tpi | #PKHA04 Small Side    |
| #PKCLAWHAM      | 3/8" x 16tpi | #PKSANDPBU Small Side |
| #PKMALLETT      | 1/2" x 13tpi | #PKHA05 Large Side    |
| #PKBHAM         | 1/2" x 13tpi | #PKHA05 Small Side    |
| #PKPCUTS        | 1/2" x 13tpi | #PKTOOL2BU Large Side |
| #PKTAT          | 3/8" x 16tpi | #PKSANDPBU Small Side |
| #PKPCUTC        | 1/2" x 13tpi | #PKHA04 Small Side    |
| #PKSHRED        | 1/2" x 13tpi | #PKTOOL2BU Large Side |

