

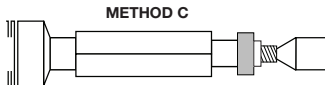
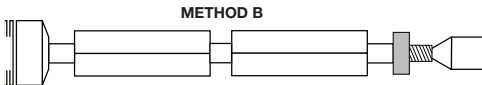
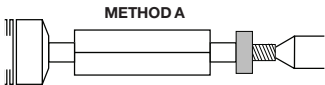
More than just a

UNIVERSAL DELUXE COLLETED PEN MANDREL

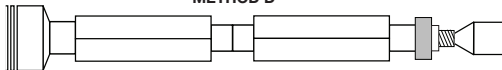
This ROTUR UNIVERSAL DELUXE PEN MANDREL has been designed to provide a means of holding practically any size of pen barrel during the turning operation. It is capable of accommodating either one or two components at a time by simply adjusting the length of shaft protruding from the shank. By tightening the two body parts together the collet contracts securing the shaft in place ensuring that the ground surface of the shaft remains undamaged.

Why not try turning discs, wheels etc on the mandrel? It is so much more versatile than a standard pen mandrel.

Below we have shown the four main methods of securing pen parts during turning.



METHOD D



Methods A and B show single and double part mounting using the parallel spacers. This is suitable for pens with 7mm outside diameter barrels.

Methods C and D show single and double part mounting using the stepped bushings. These are in direct contact to the end of the brass tubes and will not cause any mousing or other damage to the pen parts or tubes, in normal use. A lock nut kit is included for use when turning with the bushings.

In addition to the above options this mandrel will, of course, accept any 1/4" diameter bore adaptor bushes provided by the pen kit distributors.

To use this mandrel simply loosen the two body parts to release the collets grasp on the shaft, pull out ample shaft for the components to be turned. Assemble all the required parts onto the shaft including the brass thumb nut. Slide the shaft complete with pen parts back into the shank as far as possible and lock the shaft by tightening the two body parts together again. Now tighten the thumb nut to clamp the whole assembly firmly together along the shaft. A small silver steel tommy bar is provided and locates in the hole in the brass nut to further tighten this assembly together. Support the end with a rotating tailstock centre (see next section).

Choosing a suitable tailstock centre is very important in order to maximise the life not only of your mandrel but also of the centre itself. A rotating centre should always be used as a solid or 'dead' centre will cause irreparable damage in a very short space of time.

Choose a centre with a 60° included cone angle. This will match the centre in the end of the mandrel. The majority of centres on the market are 60° including all ROTUR products. However, there are a number with greater or smaller cone angles and these will eventually wear both the mandrel and the centre's point. For optimum results use a centre with a hardened cone such as the ROTUR SLIM DELUXE CENTRE. These centres also have the advantage that only a small 1/2" diameter cone is rotating while the main body remains stationary.

The lock nut kit contains a nut, tommy bar and spanner, providing all you need to take this extra precaution.

Please carefully follow the procedures below:

1. Clamp the work up by using the brass ring in the normal way.
2. Run the nut up against the ring – again just finger tight.
3. Place the end of the tommy bar into the hole provided in the brass ring and use this to resist any further rotation as you tighten the nut with the spanner provided.
4. You may now bring your tail centre up in the normal way.

Some miniature lathes may have a comparatively short bore in the headstock which will restrict the amount that the mandrel shaft can be retracted into the shank. If the use of parallel spacers does not overcome this, then it is normally possible to drill the headstock bore deeper with a 7mm or larger drill bit. If in doubt about the feasibility or safety of this operation please consult the lathe manufacturer or their agent.

UNIVERSAL DELUXE COLLETED PEN MANDREL

PM1C - 1MT

PM2C - 2MT

Rotur - Made in the U.K.

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