

General Assembly...

Carefully align the Pen Tip (f) with the lower end of the lower body, press firmly together. (See Fig 7).



Fig 7

Align the twist mechanism (e) with the upper end of the lower body, with the brass end first. Firmly press the twist mechanism (e) into the body as far as the groove. See Fig 8. Introduce the Pen refill (g) into the twist mechanism and screw it 'home'.

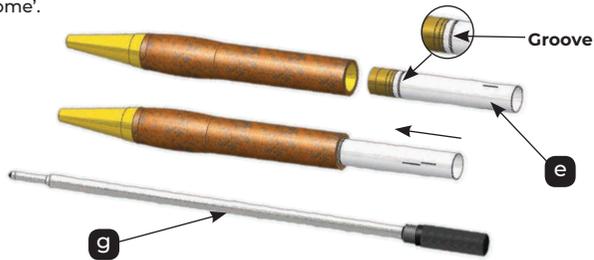
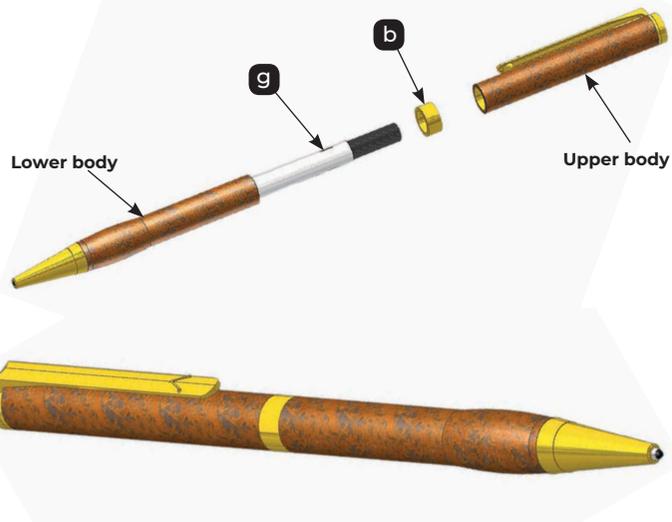


Fig 8

Add the centre band (b) and carefully align and press the upper pen body over the end of the refill (g) and over the twist mechanism. See Fig 9. There is sufficient grip between the upper pen body and the twist mechanism to keep the upper body in place and to enable the mechanism to be twisted to extend and retract the ball point.



More Information...



AXMINSTER
woodturning

10 & 24kt Twist Pen

Code No's: 340075-310490



Pen Kit Instructions



Axminster Tools, Axminster, Devon, EX13 5PH

axminstertools.com

Instructions for the Pen Kits...

Kit No. 340075 10kt Twist Pen Kit
Kit No. 310490 24kt Twist Pen Kit

Below is a list of the items required to make the finished items from the purchased kits (Not including the body blanks). If you do not possess these items we have offered our catalogue stock code numbers alongside the items as a quick guide. We have tried to include everything in the list, although we realise that many woodturners will already have most of them.



Read manual before use Ear protection should be worn Eye protection should be worn Dust mask should be worn Foot protection should be worn

Required items...

Alternatives are listed to cater for different lathe configurations.

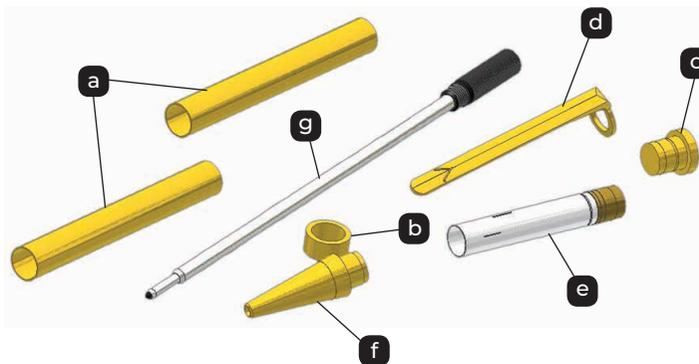
Deluxe Pen Mandrel 1MT	Order No: 211322
Deluxe Pen Mandrel 2MT	211323
60° Live Tail Stock Centre 1MT	340202
60° Live Tail Stock Centre 2MT	340203
7mm Drill Bit (we recommend the Colt Pen Drill)	702554
Axminster Universal Barrel Trimmer	700265
2 Part Rapid Epoxy Resin Adhesive	340282
Alternative Zap-A-Gap Adhesive (Cyanoacrylate)	990095

Recommended Accessories...

Quick Action Pen Blank Vice	600771
Axminster Deluxe Assembly/Disassembly Pen Press	106069

What's Included...

2 Brass Tubes (52.5mm Long)	(a)	1 Twist Pen Mechanism	(e)
1 Centre Band	(b)	1 Pen Tip	(f)
1 Pen Clip Retainer Cap	(c)	1 Pen Refill	(g)
1 Pen Clip	(d)		

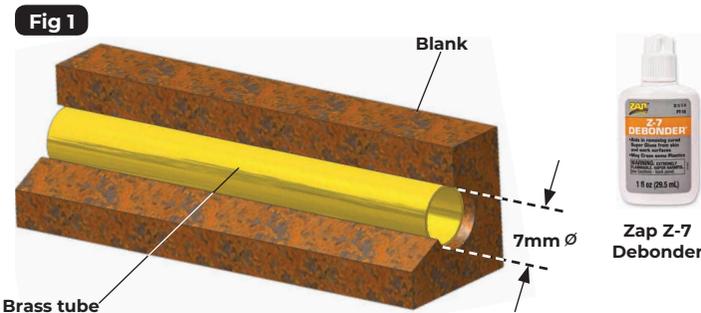


Preparing the Bodies...

Using 16mm (5/8") Square stock; cut the blanks to the length of the brass tubes adding 2-3mm to allow for trimming. The Pen Blank Sizing and Cutting Jig makes this process very much easier.

Drill a 7mm diameter hole through the centre of each blank. Care must be taken not to force the drill bit, (this may cause it to 'wander' from the centre line), and remember to back out the drill frequently to clear the debris from the hole. If you are using a pillar drill the Quick Action Pen Blank Vice is a very useful accessory for this task, it ensures that the blank is held upright and firmly in position. Moreover, if the vice is clamped to the table of the drill, it will provide accurate repeatability for all the blanks that require drilling.

When the holes are drilled, spread the adhesive randomly over the brass tubes and insert the tubes into the blanks using a twisting motion to ensure the glue is spread evenly between the two surfaces. Over insert the tubes into the blanks by approximately 1mm giving an allowance for the blank to be trimmed to size and the excess glue to be removed. (See Fig 1).



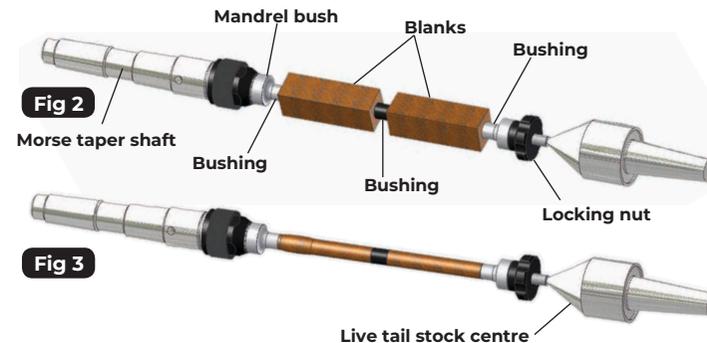
Warning. If you are using cyanoacrylate adhesive, exercise extreme caution and do not allow the adhesive to come into contact with the skin. If this happens keep the affected area from contact with any other surface, until the glue has hardened or you can treat the area with a softening agent similar to Zap Z-7 Debonder (990099), and you can remove the glue.

Allow the adhesive to dry thoroughly.

Using the Barrel Trimmer trim the ends of the blanks squarely and neatly to the ends of the brass tubes; this will also remove any excess glue that may have exuded from the joint. Take care not to undercut the brass tubes.

Turning the Blanks...

Slide an end mandrel spacer bush onto the shaft. Assemble the two tubed blanks onto the mandrel with a spacer bush in between; add the last end spacer bush and the locking nut. Tighten the locking nut to allow the assembly to be turned without 'creeping'. Do not overtighten, this may cause the assembly to distort, the bodies to split, strip the thread on the lock nut, etc. Mount the complete assembly onto your lathe (See Fig 2).



Do not advance the tailstock centre with too much force. The current bulk of the blanks may be adding strength to the assembly but as the body diameters are reduced, too much force on the mandrel may cause it to distort or bow. Turn the blanks to your preferred profiles, sand and finish as required to the diameters of the spacer bushes. (See Fig 3). If you have turned dissimilar profiles on the bodies, it is sensible to identify them somehow e.g. upper and lower body. Remove the finished bodies from the pen mandrel.

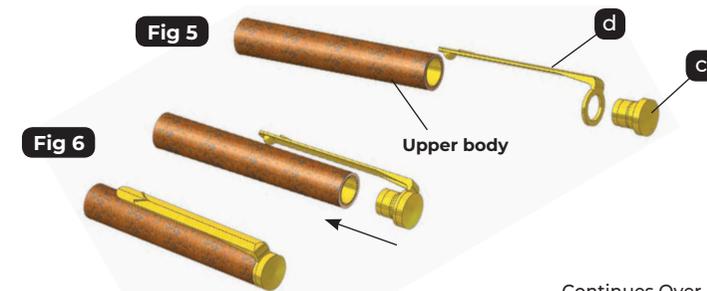
General Assembly...

Note. The Axminster Pen Assembly Press (106069) is a very useful accessory for these operations, as it gives greater control over the applied force and keeps the components in line.

Fig 4



Locate the Clip (d) and the Retainer Cap (c). Ensure they are carefully aligned (See Fig 5). Press the Clip Retainer (c) through the Clip (d) itself into the 'upper' end of the 'upper' body. (See Fig 6).



Continues Over...