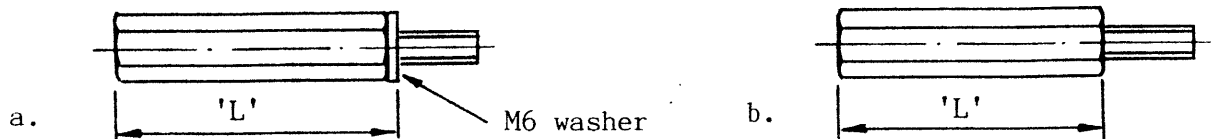
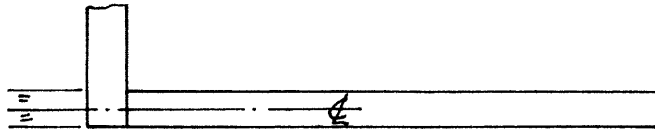


MD65 SLOW SPEED ATTACHMENT, FITTING INSTRUCTIONS.

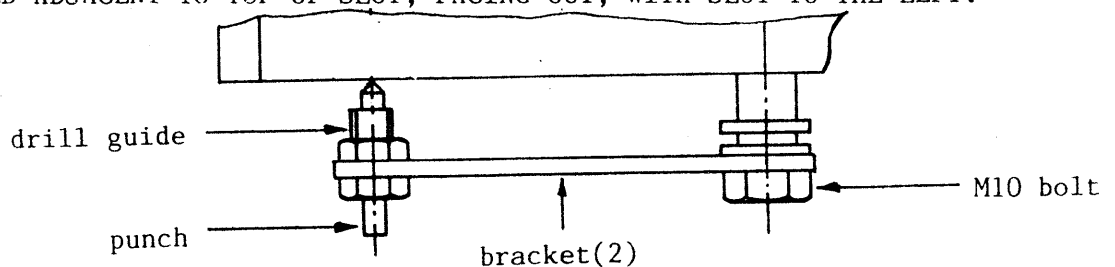
1. Remove belt cover and hinge assembly, from your lathe.
2. Carefully measure dimension 'L', shown on our drawing no.10012.
- 3a.If the length of the hexagon pillar(1), is less than your dimension 'L', reduce the length to equal your dimension 'L', when the pillar is fitted with an M6 washer.



- 3b.If the length of the hexagon pillar(1), is greater than your dimension 'L', reduce the length to equal your dimension 'L'.
4. Remove belts and standard countershaft assembly, then carefully remove standard motor pulley ( a suitable puller or pair of levers will be req'd).
5. Mark a horizontal centre line on the end of the headstock casting, below the motor, and reposition the start capacitor, if protruding more than 30mm beyond the edge of the casting.



6. Remove pulley(5) from the new countershaft assembly, by removing the M4 csk. socket screw(6) and retaining washer(7).
7. Fit the drill guide into the slot in the new countershaft bracket(2) at the end farthest from the pulley spindle. Mount the bracket(2) in position by removing the M10 hex. bolt from the standard countershaft mounting pillar, passing the M10 hex. bolt through the hole in bracket(2), and then refitting the standard countershaft mounting pillar. DO NOT FULLY TIGHTEN M10 BOLT. ENSURE THAT C'SHAFT SPINDLE FACES OUT. N.B. IF C'SHAFT SPINDLE IS REMOVED FROM BRACKET, ENSURE THAT IT IS REFITTED ADJACENT TO TOP OF SLOT, FACING OUT, WITH SLOT TO THE LEFT.



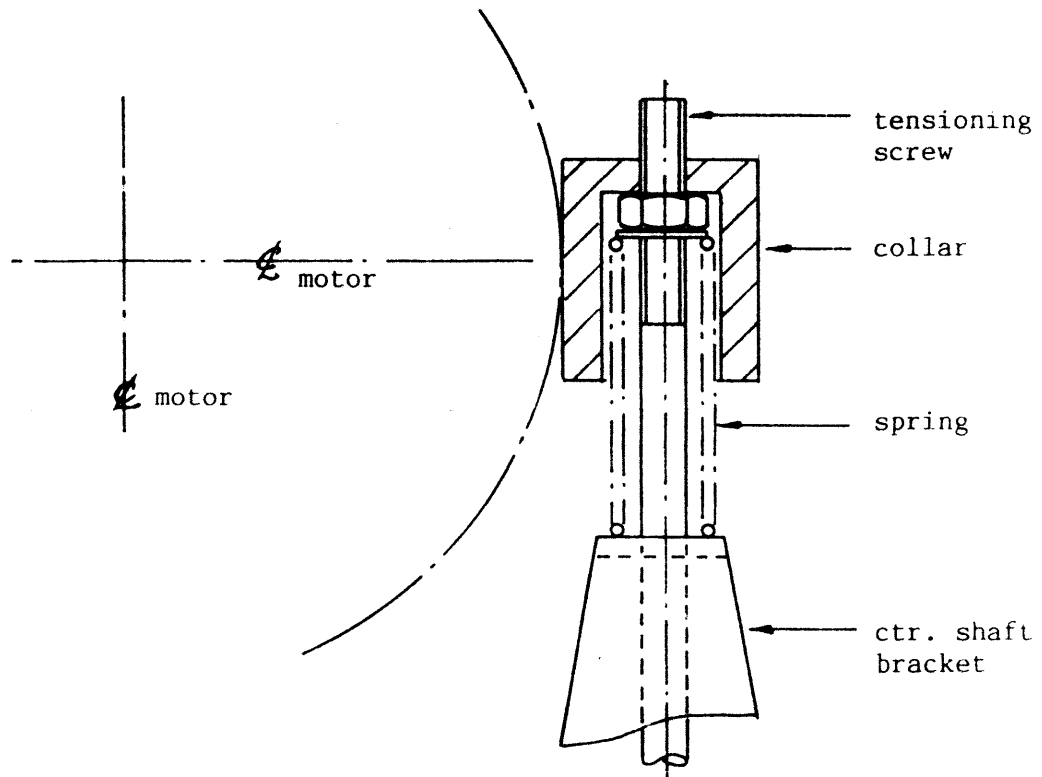
8. Insert punch provided, through drill guide, and align point of punch with the scribed centre line on the headstock casting. TIGHTEN THE M10 BOLT TO PREVENT FURTHER MOVEMENT. Centre punch the headstock casting and then remove the punch. WITHOUT moving anything else, drill a  $\varnothing 4\text{mm}$  (5/32") hole 18mm deep, remove drill guide, and enlarge hole with a 5mm (13/64") drill. Tap hole M6 x 1.00mm to a minimum depth of 14mm full thread.
9. Slacken M10 bolt and swing bracket(2) clear of the new tapped hole, screw pillar(1) into the tapped hole, remembering to fit the M6 washer if required.
- 10.Swing the bracket(2) back into approximate position, and fit M6 screw(3) and M6 washer(4).
- 11.Refit new countershaft pulley(5), and secure with screw(6) and washer(7).

MD65 SLOW - SPEED ATTACHMENT, FITTING INSTRUCTIONS.

12. Refit standard countershaft assembly.
13. Fit new motor pulley(8), ensuring the grub screw is located in the keyway of the motor shaft, align this pulley with the new countershaft pulley, and tighten grub screw(M5). Loctite 222 should be applied to the grub screw.
14. Fit new drive belt to the new pulleys (5 & 8), and lightly tension.
15. Tighten M6 hex. screw(3), and M10 hex. bolt.
16. Refit standard belts, and tension as required.
17. Refit belt cover and hinge assembly.

ADDITIONAL NOTES FOR GUIDENCE.

1. THIS ATTACHMENT IS DESIGNED TO REDUCE SPEED, DO NOT BE TEMPTED TO USE IT AS A MEANS OF TAKING LARGER THAN USUAL CUTS.
2. Owing to our own and Hobbymats' manufacturing tolerances, some minor adjustments may be required to obtain the necessary clearances etc..
3. Should you require increased tension in the belt between the two countershafts, when the attachment is in use,( we have not found this to be necessary during our trials.) a stepped collar can be made to fit over the standard tensioning screw and spring. This can then be fitted to hold the tensioner away from the motor. The sketch below shows the principle, but dimensions will have to be determined to suit individual requirements.

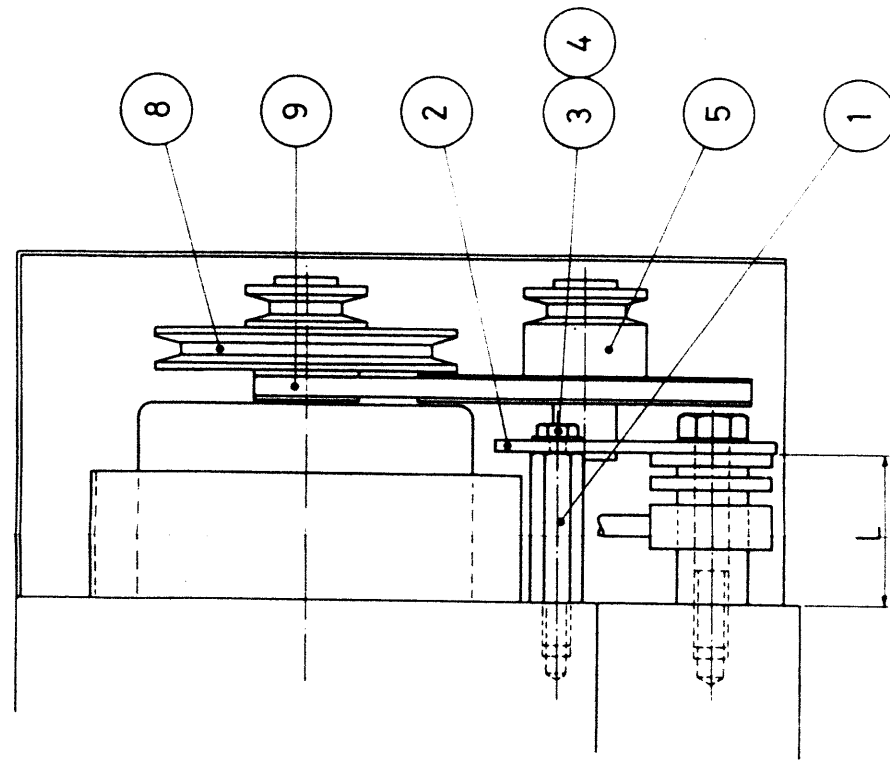


To use collar arrangement shown, select speed required ( 156 or 78 rpm.), adjust tension of spindle belt, then fit collar. The collar can be chamfered to ease fitting, or machined as an eccentric, and then turned round after fitting in place.

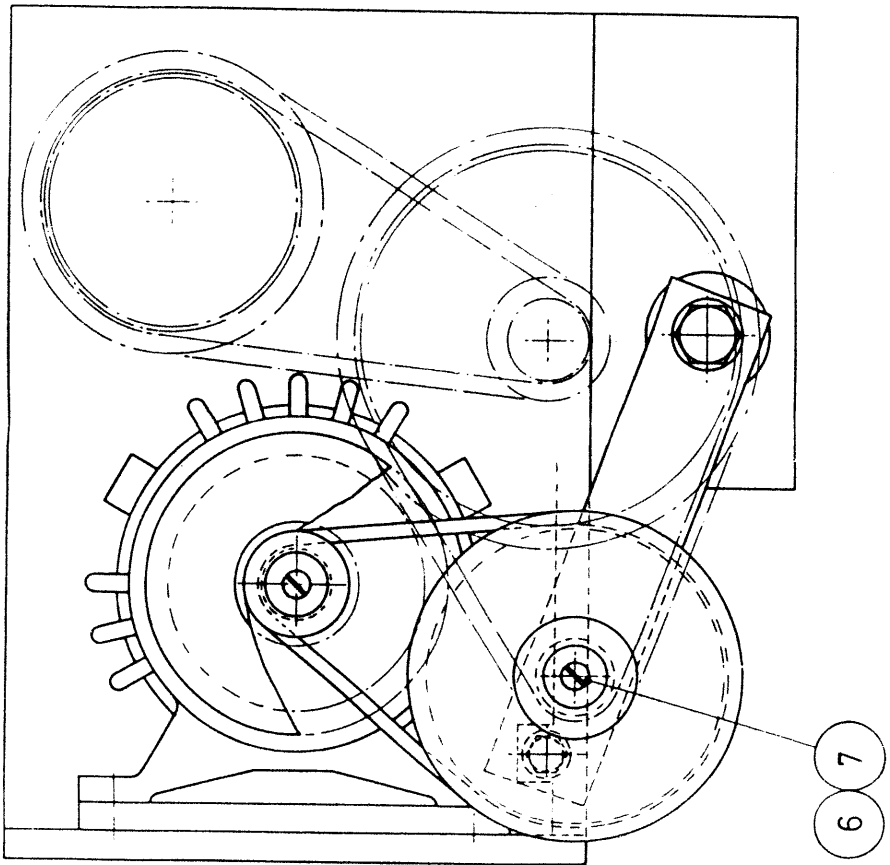
DRG. No. 10012

SHEET OF

DO NOT SCALE



CASTING FACE TO END OF SLIPPER  
SEE MD65 HANDBOOK P.46 ITEM 9.



ISSUE	DESCRIPTION	APPD.	DATE	DRAWN	TRACED	CHECKED	APPROVED	DATE
A	NEW ASSEMBLY		2.87	SPL				FEB '87
				TITLE SLOW SPEED ASSY. MD-65.				
				ESSEL ENGINEERING				
				01686 4/2040				
				DRAWING No. 10012 ISSUE A				