

SETTING AND GRINDING INSTRUCTIONS FOR DRILL SHARPENING MACHINE

A. NORMAL DRILL POINT GRINDING (2FLUTE DRILLS)

1. Set swivel base 'B' - $\frac{3}{8}$ " from corner of base 'A'
2. Ensure motor platform 'C' is screwed down to bottom position.
3. Ensure collet head 'D' scribed line is in top central position.
4. Swivel the head at 45° by pulling out plunger.
5. Select correct collet for drill size required.
6. Place collet into head 'E'.
7. Place drill in collet and move out so that the cutting edge 'F' is in contact with the setting piece 'G'. (This is variable with size of drill used.)
8. Tighten the collet to grip the drill and re-check drill position with setting piece 'G'.
9. Wind handle 'H' back to ensure drill does not touch the wheel.
10. Swing the head back into central position until it locks ensuring the top slide is far enough back.
11. Set wheel handle in top position.
- 11a Moving handle 'H', feed the topslide into the wheel.
12. Check to see if drill is moving onto the centre bottom of the wheel.
Further check now by swivelling the wheel over the drill to check for even contact each side of the drill. Correct, by moving handle 'J' backwards or forwards to centralize.
13. Set wheel to T.D.C. over drill.
14. Start motor.
15. Feed handle 'H' a few thou' into the wheel moving the wheel continually through an arc of 180°. Check for even grinding of the drill point and correct as at (12).

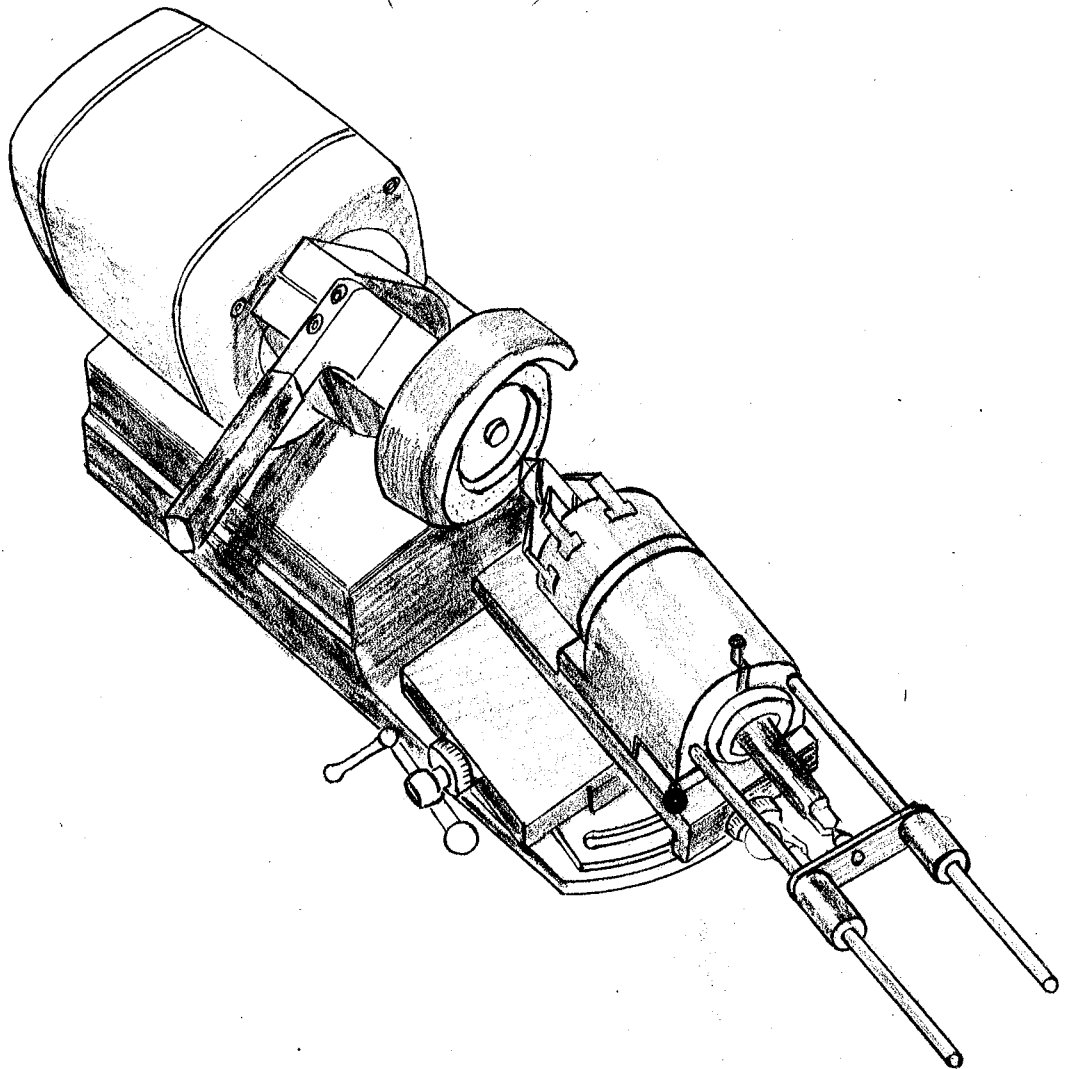
N.B.

16. When .002"/.003" has been fed on after contact with the wheel, set the wheel in the backrest position to stop the motor.
17. Release collet body lock 'K'. Move through 180° checking the drill flutes. The collet will lock automatically in position.
18. Re-start motor.

c/s 11127

OPERATORS INSTRUCTION MANUAL FOR VICEROY TDS 29 DRILL SHARPENING MACHINE.

CAPACITY 1mm (NO.1 DRILL) To 25mm DIA (1" DRILL)



DENFORD MACHINE TOOLS LTD.
BIRDS ROYD,
BRIGHOUSE,
HD6 1NB
YORKSHIRE, U.K.

19. Carefully bring the wheel over to the drill (it may bite fiercely so care must be taken). Gently feed the wheel across the drill point.
(Too much care cannot be exercised at this time).
20. Repeat the whole sequence until sufficient has been cleared off both sides of the drill point to sharpen it.
21. Stop motor - set wheel to rear rest position.
22. Swinghead 'D' away from the wheel and remove the whole head 'E' by lifting it off its location pin. Check the point for evenness of grinding. If correctly ground, remove from collet. If not repeat the process until evenly ground.

NOTE: Unevenly ground drills will result in oversize holes.

N.B. for 4 flute drills, the collet clicks at each 90° position. Grind in the same manner as for 2 flute drills.

POINT THINNING (if required)

2 flutes only

1. Leave the drill in position in the collet after sharpening.
2. Swivel wheel to front stop position.
3. Ensure drill cutting edge 'F' is uppermost, feed handle 'J' in so that the grinding wheel almost touches the drill cutting edge.
4. Start motor.
5. Feed handle 'J' in until the wheel just touches and cleans the point and cleans the trailing edge.
6. The amount of 'feed in' will vary with the drill size. Care must be taken not to remove too much.

FOR WHEEL DRESSING AND TRIMMING - SEE LEAFLET