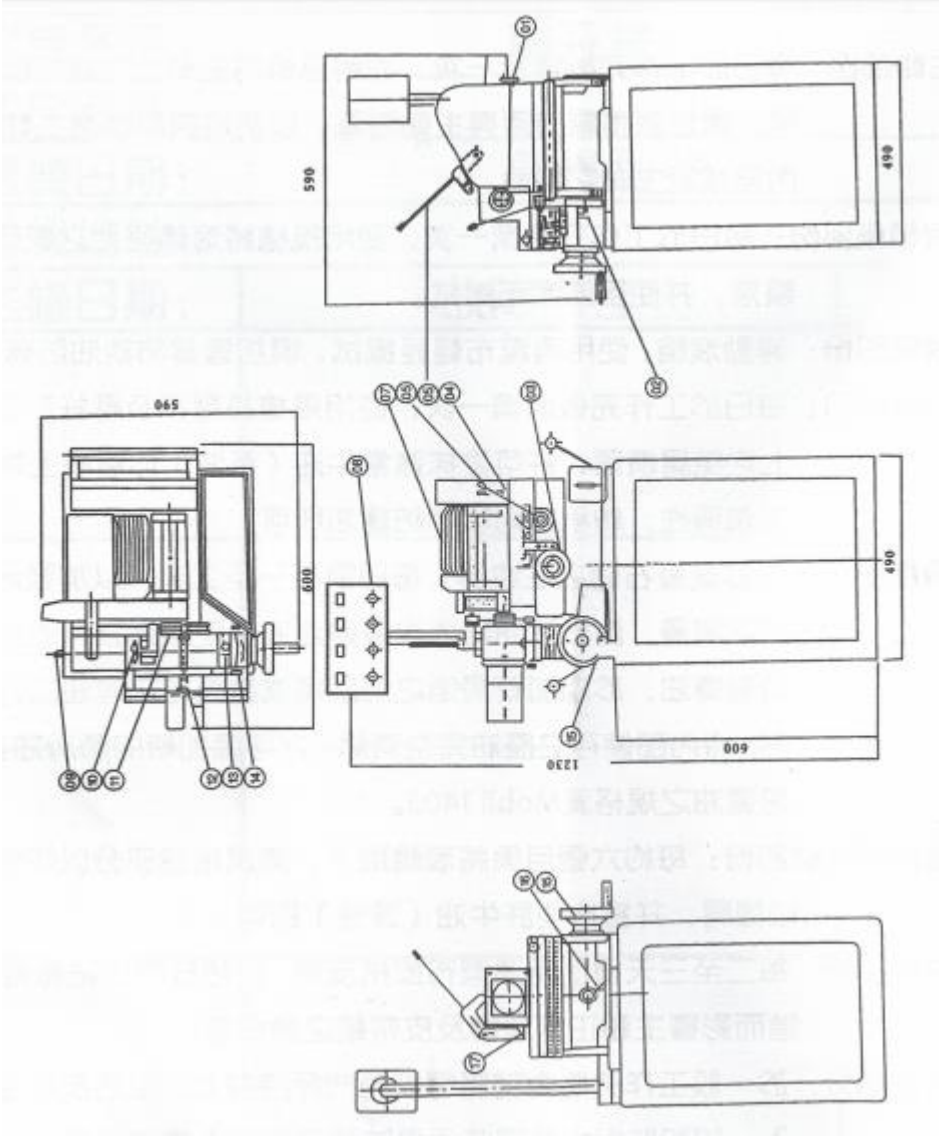
Dy-01 Cylindrical grinder Operation Manual

I. Machine Maintenance

1. Main shaft: clean the main shaft once a day after work. Use air pressure gun to spray the iron scraps on the main shaft. Care must be taken that the cuttings are perpendicular to the main shaft to prevent the cuttings from being injected into the shaft to reduce the service life of the shaft.
2. Roller seat: clean the roller seat once a day after work. Spray the iron scraps off the roller seat with air pressure gun and wipe it with clean cloth.
3. The roller part: rotating rolling, use a clean cloth gently wipe, spray with appropriate rust prevention oil rust prevention.
4. The part of the pressure bar: clean once a day after work, use the air gun to spray off the pressure bar and the iron dust on the pressure bar bearing, and can apply appropriate butter (butter) on the pressure bar to increase lubricity, the bearing block is sprayed with anti-rust oil.
5. Skateboard parts: located in the machine on the right side of the oiler, must pull one to two times daily, to strengthen the lubrication of the skateboard, please within the oiler slideway oil completely used up and then add new slide oil, to add a new slide to the machine before the rear of the drain valve is opened, the internal storage of waste oil is completely removed, can add new lubricating oil.Slide oil specifications are Mobil 1405.
6. The gear part of the roller: remove the roller every 6 months or so, clean the tooth part to prevent iron filings, and apply some butter (butter).
7. Belt parts: clean cloth shall be used to wipe the belt every two to three days to prevent the belt from sticking iron filings, which will affect the normal operation of the main shaft and the service life of the belt wheel.
8. Electric control: please keep the door of electric control box closed during normal working hours to prevent dust from entering. If water holding device is installed, anti-cutting fluid shall be injected into the electric control box.
9. In addition to the above key cleaning and maintenance work, after daily cleaning, anti-rust oil shall be sprayed on all parts of the machine, and anti-rust treatment shall be removed to extend the service life of the machine.

II. Machine Parts



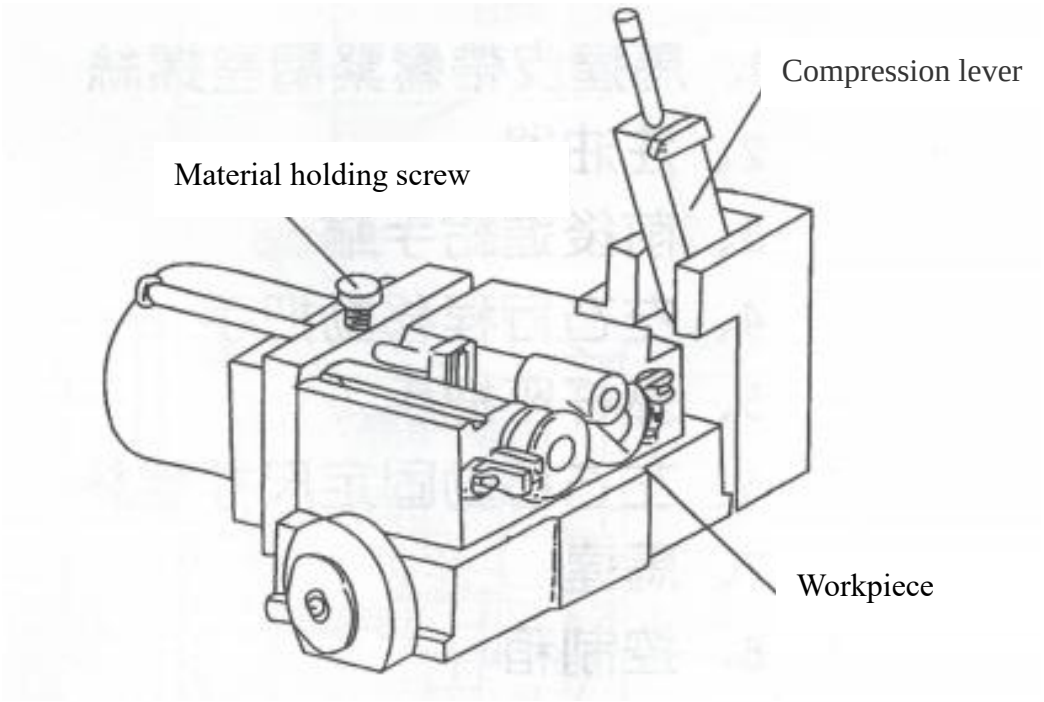
1. Adjustment screw for motor belt release before and after
2. Lubricator
3. Front and rear feed handwheel
4. Left and right stroke movement handle
5. Lever handle
6. Left and right moving size fixed screws
7. Motor
8. Control Cabinet
9. Oil valve
10. Roller seat set screw
11. Idler wheel
12. Working material stall
13. Roller seat set screw
14. Left Angle adjustment screw

14-1. Right Angle adjustment screw

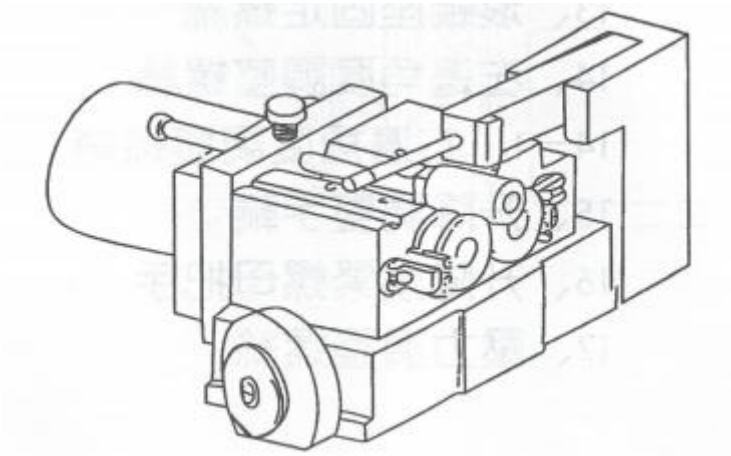
15. Lifting adjustment handwheel
16. Lifting lock nut handle
17. Pressure adjustment screw

III. Step of placing artifacts

1. Firstly lift the pressure bar (seat).
2. Loosen the material holding screw.
3. Shift the material shift to the left and make it back.
4. Place the workpiece in an appropriate position on the roller.



5. Move the material shift to the right, so that the material shift seat against the workpiece.
6. Tighten the material shift fixing screw.
7. Put down the compression lever seat, make it clamp workpiece.

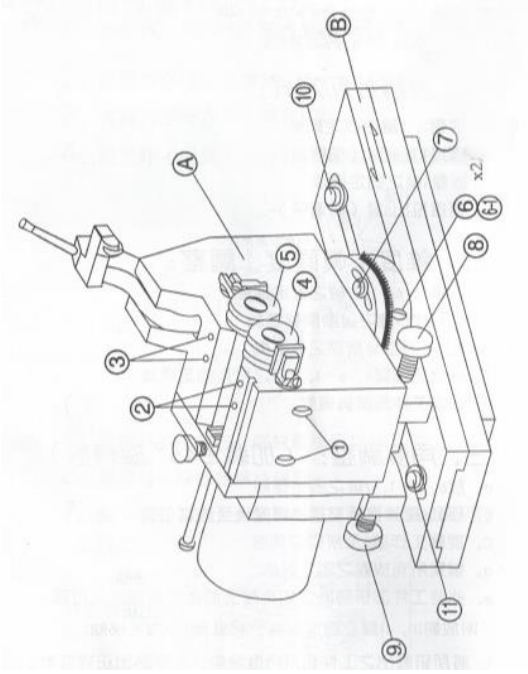


Standard rolling head seat operation mode

1. Rolling disassembly:
   a. loosen the set screw of key 1 and 2.
   b. Directly pull out key 4 (front roller) .
   c. Loosen the set screw d of key 3.
   d. Directly pull out key 5 (back roller).

2. Taper "true straightness" adjustment:
   a. Loosen 6, 6-1, 7 key set screw.
   b. Adjust taper screw of key 8 or 9.
   c. Adjust a seat to the required true straightness.
   d. Lock all set screws of keys 6, 6-1 and 7 in order required.
   e. Grinding workpiece to test true straightness.

3. Angle adjustment: (add ±45° rotating disc)
   a. Put a 6, 6-1, 6-7 key fixed screw
   b. Adjust 8-key taper adjustment screw nut back to proper position
   c. Rotate working head A to the required Angle
   d. Lock all loose fixed screws
   e. When grinding the workpiece, if there is more than the stroke of the front and rear feeding screw, then set the screw of the 10 and 11 keys to play shadow, and the mobile slide B moves backward.
   f. The correct degree can be measured by using the angular projection of the grinding workpiece.



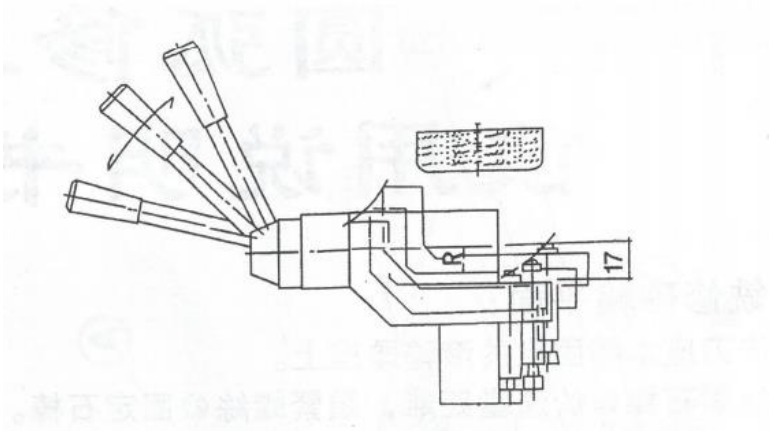
Operation manual of plane and circular arc repair knife base

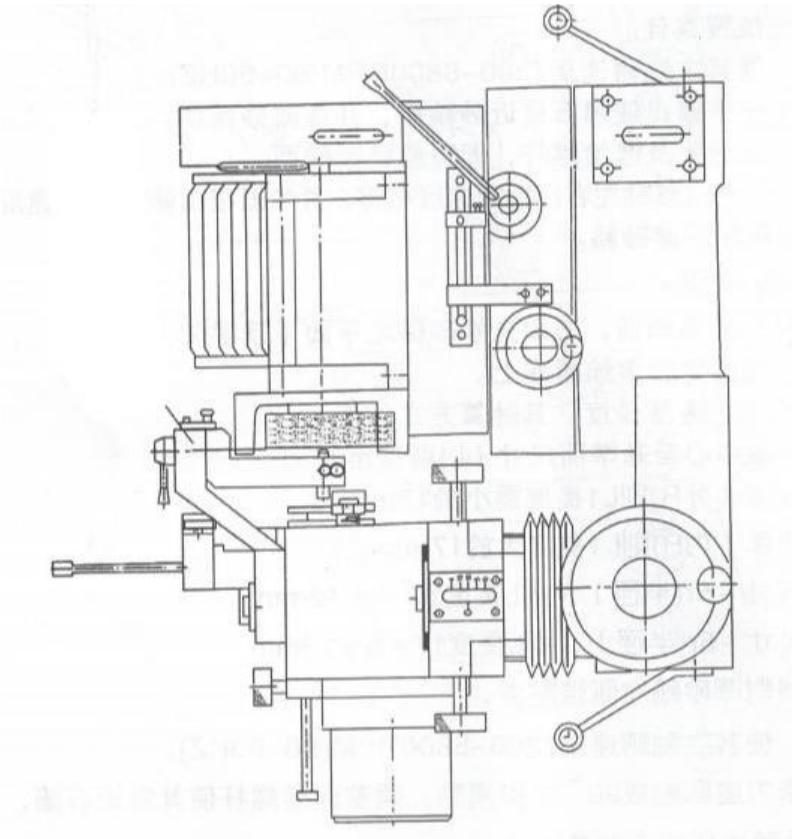
(A) Grinding wheel surface: (1) Fix the grinding knife seat on the roller head seat. (2) Adjust the diamond rod at an appropriate distance, and lock the screw fix the stone rod. (3) Move the lifting hand wheel and adjust the diamond bar so that it is slightly lower to the center of the grinding wheel (about 2 mm). (4) Start the power supply and make the spindle speed to 7200-8800 rpm (50-60 Hz). (5) Adjust the feed screw handwheel so that the diamond is close to the sand transport surface and touches the grinding wheel surface lightly. (6) Move about the stroke handle and feed screw, you can repair sand transport surface. (7) The best grinding wheel can be dressed only when the traveling speed of left and right side is equal and the speed is reduced in final finishing.

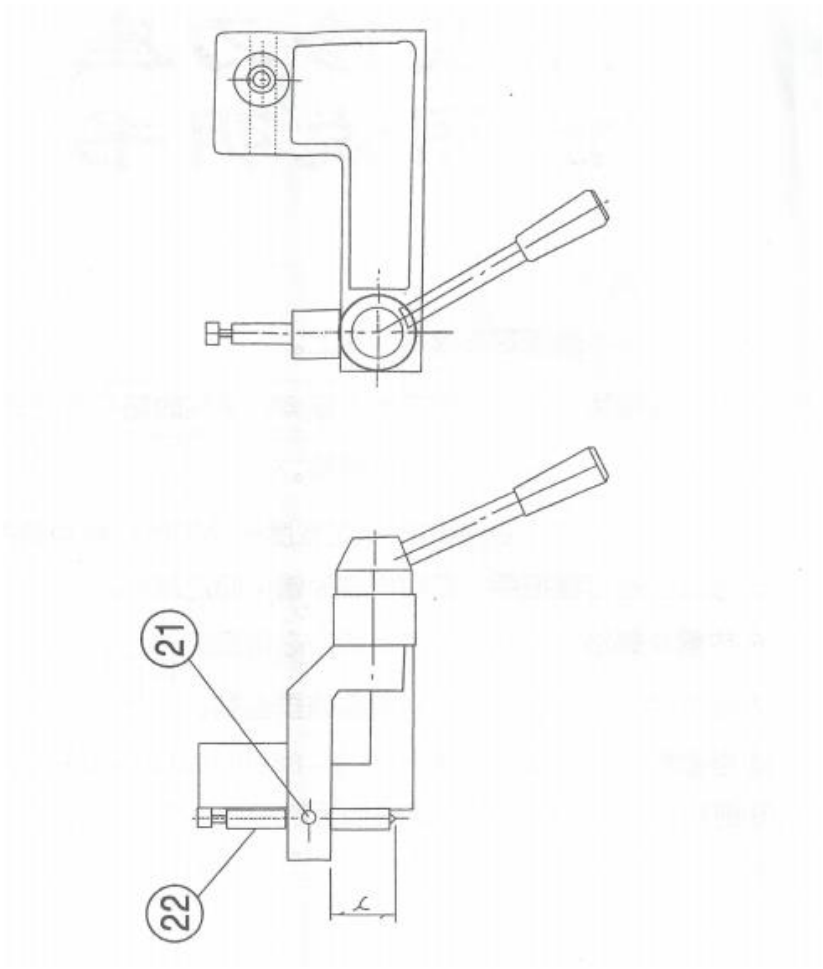
(B) Arc of grinding wheel for milling and repairing:

1. Before grinding the grinding wheel into a circular arc, the surface of the grinding wheel must be repaired (see above A).
2. Fix the repairing knife seat itself on the roller head seat.
3. Adjust the diamond pen to the appropriate length. The calculation method is as follows: if the dimension from the center of the rotary shaft of the cutter base to the base plane (L) is 17mm(43/64 inch), the length of L1 should be less than 17mm(43/64 inch) if the outer arc (outer R) is to be repaired, the length of L1 is greater than 17mm(43/64 inch): if the dimension of the outer circle is -5(radius), then the length of L is 17-5 = 12mm(15/32 inch) if the dimension of the inner circle is -5r(radius), then the length of L is 17+5=22mm(55/64 inch).
4. The diamond pen slightly at the left end of the sand.
5. Start the power supply and make the spindle speed to 7200-8800 rpm (50-60 Hz).

6. Rotate the rotary shaft of the grinding wheel base to 90° reciprocating linkage, adjust the feed screw so that it is close to the chalk pencil, then the grinding wheel can be repaired to the required circular arc size.

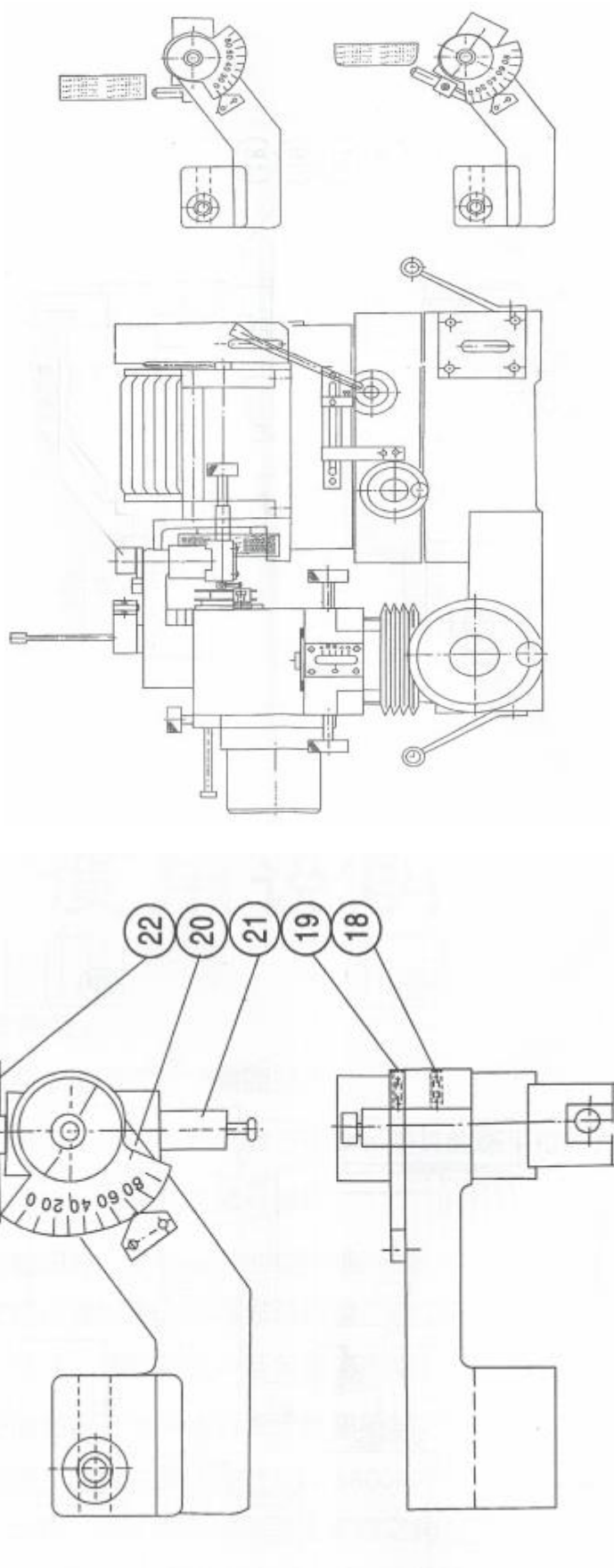






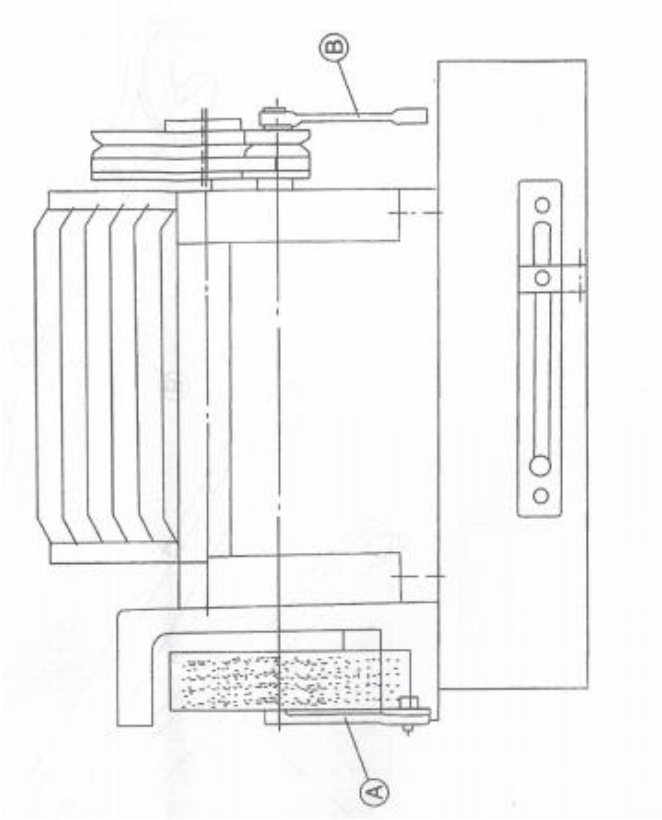
Operation instruction of Angle trimming knife holder

(A) Repairing Angle:
1. Fix the repairing tool base body on the roller head seat.
2. Loosen the screw and turn the diamond pen so that it is approximately parallel to the grinding wheel surface.
3. Loosen the screw and adjust the scale to zero.
4. Pull the bar back and forth so that the width of the grinding wheel 20t is within the travel range of the repairing tool holder.
5. By moving the left and right travel handle, the grinding wheel plane can be reset to zero.
6. Loosen the screw and move the Angle piece to the desired Angle.
7.Move the grinding wheel so that the tip of the diamond rod is aligned to the point perpendicular to the grinding wheel
8. Start the power supply and make the spindle speed to 7200 ~8800 RPM(50~60Hz).
9. Pull back and forth to shape the grinding wheel to the desired angle.

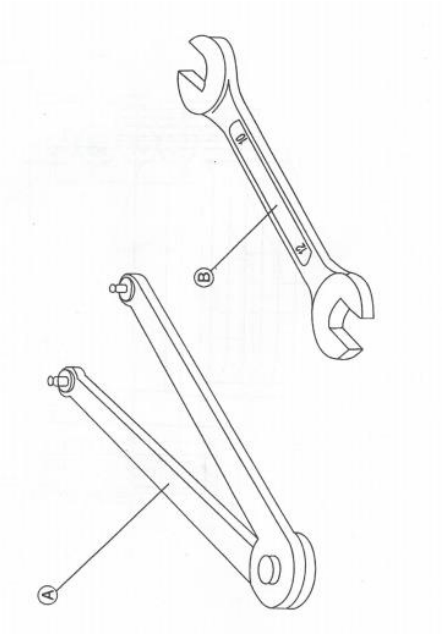


When A is downward and B is upward, the grinding wheel is relaxed.

If A is up and B is down, the grinding wheel is locked tightly.



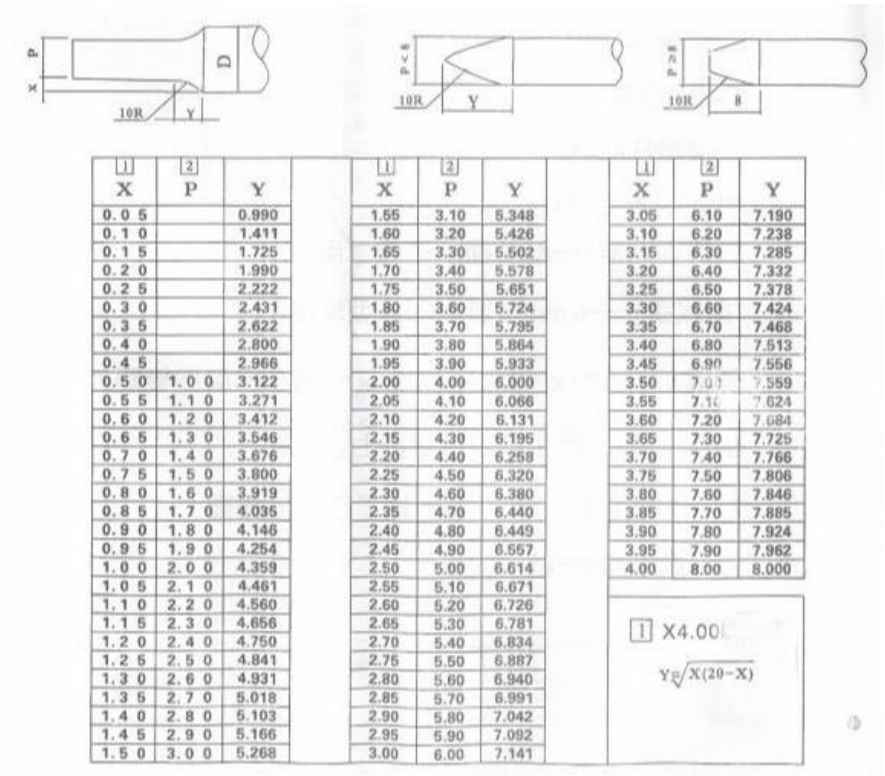
Grinding wheel handling tool



Punch R length conversion table

A impact R length: Y B impact edge R length :Y

- $\frac{(D-P)}{2}$ =X
- P < 8
- P ≥ 8 Y 8mm



1 X	2 P	Y
0.05		0.990
0.10		1.411
0.15		1.725
0.20		1.990
0.25		2.222
0.30		2.431
0.35		2.622
0.40		2.800
0.45		2.966
0.50	1.00	3.122
0.55	1.10	3.271
0.60	1.20	3.412
0.65	1.30	3.546
0.70	1.40	3.676
0.75	1.50	3.800
0.80	1.60	3.919
0.85	1.70	4.035
0.90	1.80	4.146
0.95	1.90	4.254
1.00	2.00	4.359
1.05	2.10	4.461
1.10	2.20	4.560
1.15	2.30	4.656
1.20	2.40	4.750
1.25	2.50	4.841
1.30	2.60	4.931
1.35	2.70	5.018
1.40	2.80	5.103
1.45	2.90	5.166
1.50	3.00	5.268

1 X	2 P	Y
1.55	3.10	5.348
1.60	3.20	5.426
1.65	3.30	5.502
1.70	3.40	5.578
1.75	3.50	5.651
1.80	3.60	5.724
1.85	3.70	5.795
1.90	3.80	5.864
1.95	3.90	5.933
2.00	4.00	6.000
2.05	4.10	6.066
2.10	4.20	6.131
2.15	4.30	6.195
2.20	4.40	6.258
2.25	4.50	6.320
2.30	4.60	6.380
2.35	4.70	6.440
2.40	4.80	6.449
2.45	4.90	6.557
2.50	5.00	6.614
2.55	5.10	6.671
2.60	5.20	6.726
2.65	5.30	6.781
2.70	5.40	6.834
2.75	5.50	6.887
2.80	5.60	6.940
2.85	5.70	6.991
2.90	5.80	7.042
2.95	5.90	7.092
3.00	6.00	7.141

1 X	2 P	Y
3.05	6.10	7.190
3.10	6.20	7.238
3.15	6.30	7.285
3.20	6.40	7.332
3.25	6.50	7.378
3.30	6.60	7.424
3.35	6.70	7.468
3.40	6.80	7.513
3.45	6.90	7.556
3.50	7.00	7.599
3.55	7.10	7.624
3.60	7.20	7.684
3.65	7.30	7.725
3.70	7.40	7.766
3.75	7.50	7.806
3.80	7.60	7.846
3.85	7.70	7.885
3.90	7.80	7.924
3.95	7.90	7.962
4.00	8.00	8.000

1 X4.00

$Y \approx \sqrt{X(20-X)}$

List of tool box for o cylindrical grinder

01. Hexagon wrench
02. Open end wrench (8x10mm, 12 x14mm, 17x19mm)
03. Power line
04. Four feet of iron
05. Shockproof washers
06. Wrench05. Shockproof washers
07. Grinding wheel holder (for flushing device)
08. T grinding wheel holder (for adding large equipment)
09. Grinding wheel
10. Wheel flange
11. Flange gasket (thick, thin) installed on the machine
12. Grinding wheel extractor