GS-65
Corner Radius End Mill Re-Sharpener

I. Grinding Preparations

※Unplug the power cord before adjustment.

1. Choose the proper grinding wheel according to the material of end mill.
   • Carbide end mill use SD grinding wheel (Standard).
   • HSS end mill use CBN grinding wheel (Optional).
2. This machine provides grinding corner radius specifications: R0.5, R1.0, R1.5, R2.0.
   Choose the proper grinding wheel according to the user's needs, and install the grinding wheel with needed corner radius side facing outward.
3. Adjust the corner radius grinding shelf to the initial position. (Fig. 1-1)
   ① Loosen the set screw of the shelf.
   ② Turn the adjustment device counter-clockwise to move the shelf to the left until it stops.
4. According to end mill's cutting diameter, adjust the positioning bar with the diameter side facing upward. (Fig. 1-2)
   ①Loosen the set screw of the positioning bar.
   ②Pull out the positioning bar to the end to be able to rotate. Adjust the positioning bar and push it in, so that the set screw slides into the groove of the positioning bar.
5. Adjust the grinding shelf to proper position. (Fig. 1-3)
   ①Turn the adjustment device clockwise to move the shelf to the right.
   ②At the same time, push the positioning bar until the right side of the shelf touches the left slot of positioning bar with the diameter.
6. Tighten the set screw to lock the grinding shelf and positioning bar. (Fig. 1-4)

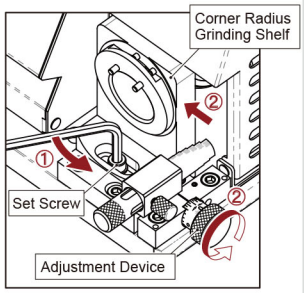

Fig. 1-1

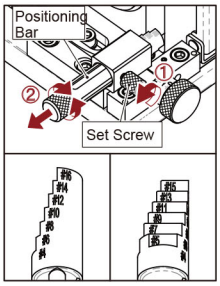

Fig. 1-2

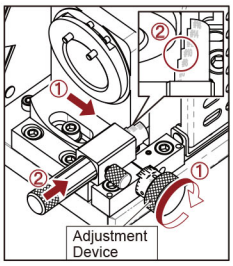

Fig. 1-3

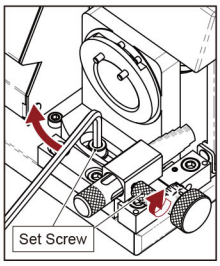

Fig. 1-4

II. Tool Clamping Instructions

1.Choose the proper clamping nut according to the number of flute of end mill.

2. Choose the proper collet according to end mill's diameter.
3. Make sure there are no dust or scraps inside the clamping nut, collet and collet holder.
4. Put the collet into collet holder by 45° angle. (Fig. 2-1)
5. Screw in a little bit by clamping nut, then insert end mill shank into the clamping nut until the end mill tip is about 15 mm out of the clamping nut (Fig. 2-2), slightly screw the chuck set to tighten the end mill a little bit.

※Do not fully tighten the chuck set, make sure end mill can still be adjusted.

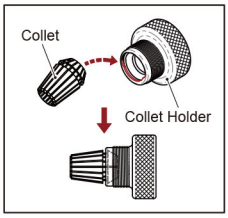

Fig. 2-1

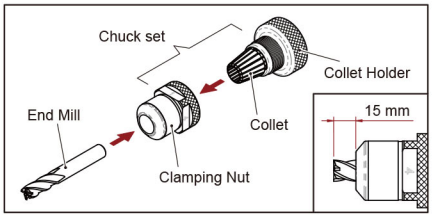

Fig. 2-2

III. The use of the Positioning Shelf

1.Preset the position of the alignment block. (Fig. 3-1)
   ① Loosen the set screw.
   ② Pull out the alignment block to the end.

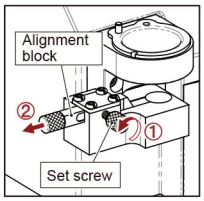

Fig. 3-1

2. End mill positioning (Fig. 3-2) :
   ① Align the slot of the clamping nut to the pin on the positioning shelf, insert the chuck set into the positioning shelf and fit them with no gaps, then turn the chuck set clockwise until it stops by the pin.
   ② Slowly move the alignment block inward.
   ③ Push the end mill to the end, slowly turn it clockwise until the outer corner of the end mill's cutting edge touches the tip of the alignment block.
   ④ Tighten the set screw to lock the alignment block.
   ⑤ Turn the collet holder clockwise and tighten the chuck set to secure the end mill.

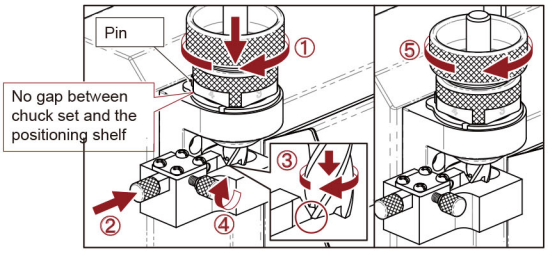

Fig. 3-2

3. Gently turn the chuck set counterclockwise and take it out, make sure the end mill's cutting edge is angled towards the slot of the clamping nut (Fig. 3-3).

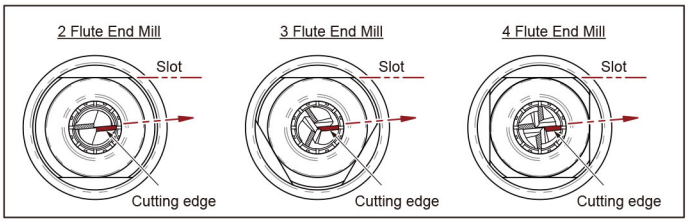

Fig. 3-3

※Make sure the positioning result is correct before starting the grinding procedure.

IV. Grinding Instructions

Turn the power switch on and wait about 10 seconds until the motor rotation is stable.

※Do not hold the drill shank while grinding, it may affect the grinding accuracy.

1.Cutting Lip Grinding (Fig. 4-1)
   ① Insert the chuck set into the corner radius grinding shelf, align the slot of clamping nut to the two pins on the grinding shelf, push the chuck set gently and turn it clock-wise and counterclockwise until the grinding noise stops.
   ② Take the chuck set out, turn it to the other side and grind the end mill in the same way.

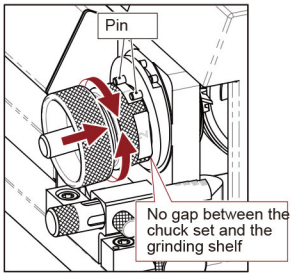

Fig. 4-1