

**OPERATION MANUAL**  
**DRILING UNIT FD55-80**

1. Confirm and check motor (77) voltage and rotation direction.
2. Speed regulation valve fitting is in size of 8 mm.
3. Application pressure should be 55-80 PSI. Use proper special pneumatic lubrication oil in air regulator set.
4. Tightness of belt (54), pulley (53A-1) and (53A-2) can be adjusted as follows:  
    <Figure 1> loosen up screw turn (55) clockwise, which will move upward, until proper tightness. Fasten screw (51). At last, tighten screw (61) on motor plate (05).  
    <Figure 2>

5. Adjust stroke:

Total stroke (A)= Rapid travel distance (B) + Machining depth (C).

**Procedures:**

- a. Rapid travel distance (B): loosen up screw (44), move indication ring to required distance. Then tighten screw (44). <Figure 3>
- b. Machining depth (C): loosen up screw (63) on dog (11). Turn adjusting ring (12) and move dog (11) to required depth. Then tighten screw (63). <figure 4>  
    <Figure 5>

The hydro-check should be with longer stroke than operational total length (A).

6. According to different material, hole dimension, tools we may select revolution within 5000 RPM range. With which we will choose motors in different poles, pulleys to acquire designed speed.
7. Spindle RPM= Motor RPM x Pulley Diameter (motor side)/Pulley Diameter (spindle side)
8. To avoid unnecessary problems caused by power failure, we should not choose two position directional valve.
9. Motor Installation:  
    Shown on figure 1, motor can be mounted in angle of every 45 degrees by loosen up screw (40) x 4 pcs. Then rotate fixing plate to required angle.
10. Limit switch connection is shown on <Figure 6>.
11. For precise machining, when spindle travels to forward end, set timer for dwelling 0.5 seconds until adjusting wheel (12) to touch left surface, then retract.