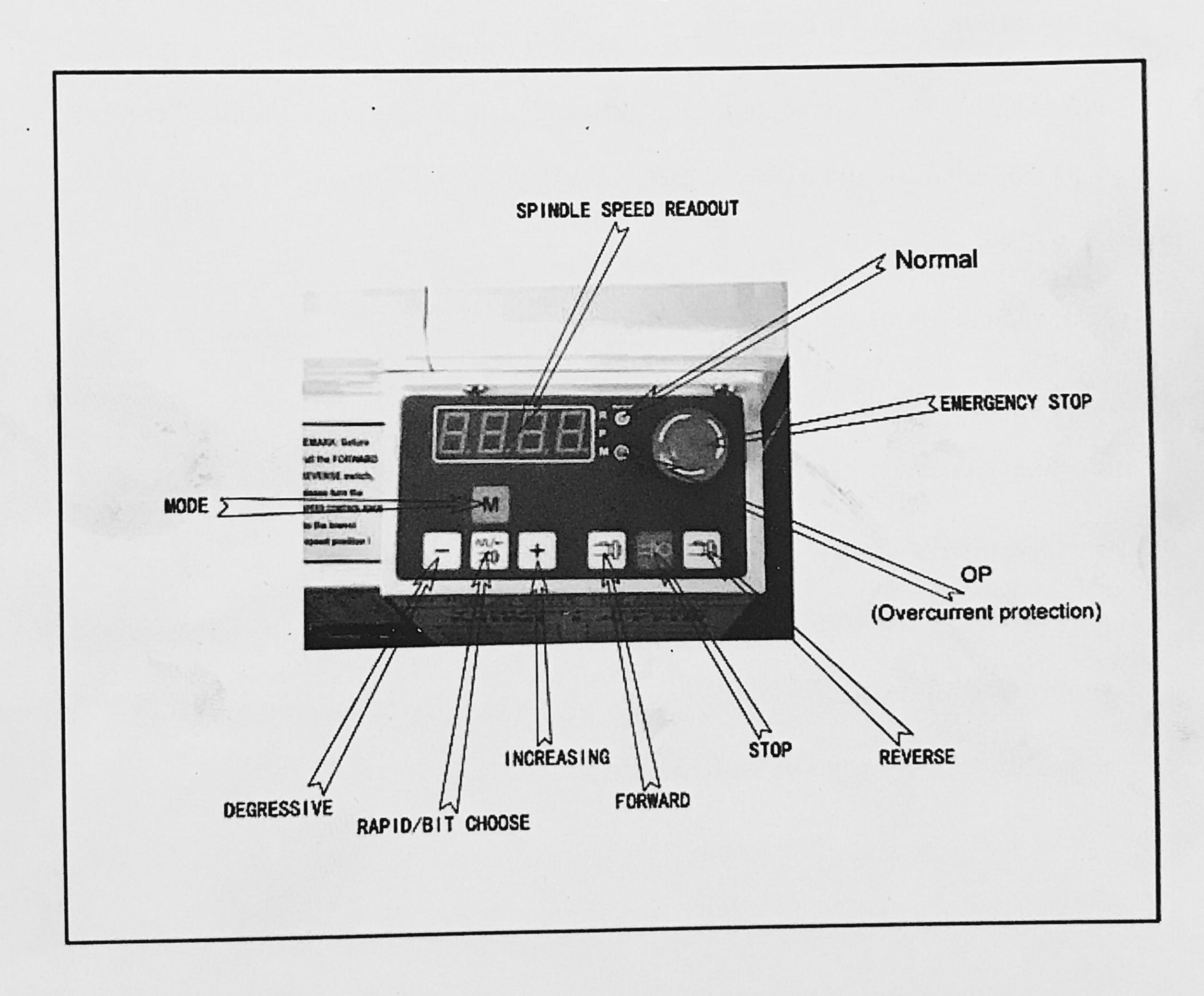
Special instruction for CJ0618B

This precision mini lathe model CJ0618B adopts MCU(microprogram Control Unit) technology on spindle speed control and can also display precise spindle speed & real-time machine state. It uses new-type TOUCH switch and owns intelligent self-protection fucntion. Please find its mechanical operation guide from included INSTRUCTION MANUAL of VARIABLE SPEED MINI LATHE and operating panel as below:



1, TOUCH SWITCH

- 1). " M-mode switch
 - a.Mode 0" " real speed speed display(normal state)
 - b.Mode 1" "theoretic speed set and show theoretic speed; back to normal state if no operation within 10 seconds
 - c.Mode 2 " high speed (100min++) or low speed set (200min++); back to normal state if no operation within 10 seconds
 - d.Mode 3 " "PWM"(pulse width modulation) displaying, this data is effective for machine checking only; back to normal state if no operation within 10 seconds
 - e.NOTE " "no press means Mode 0; press one time means Mode1; press twice means Mode 2; press thrice means Mode 3.
- 2). " -- Degressive reduce theoretical speed; reduce digit sparkling in state Mode 1.
- 3). " + " -- Increasing increase theoretical speed;increase digit sparkling in state Mode 1.
- 4). " Rapid/Bit choose

 a.into speed adjusting RAPIDLY state in Mode 0--it should be pressed synchronously with "--" or "+".

 b.sparkling digit move in state Mode 1.
- 5). "^{⇒0}" spindle move forward
- 6). " spindle stop
- 7). " = spindle move backward
- 8). Light green means normal

- 9). Light red means overcurrent
- 10). " emergency stop

2, OPERATION MANUAL

- 1). spindle move forward
 - press " " at least 0.5 second, spindle move forward start
- 2). spindle move reverse

 press " ²⁰" at least 0.5 second, spindle move backward start
- 3). spindle stop

 press "a" at least 0.5 second, spindle move stop
- 4). forward/reverse interchange
 machine can change moving direction automatically when pressing-MCU
 will check machine state and fulfil intelligent control by speed down—stop-direction change—start-- speed accelerate-- speed stabilize
- 5). spindle speed range
 - a. spindle speed HIGH, forward range 200-2500min⁻¹
 - b. spindle speed HIGN, backward range 200-1600 min⁻¹
 - c. spindle speed LOW, forward range 100-1100min⁻¹
 - d. spindle speed LOW, backward range 100-800min⁻¹
- 6). speed adjusting
 - a. press INCREASING + or DEGRESSIVE directly when plan to adjust spindle speed; speed changes rapidly when RAPID/BIT CHOOSE " " pressing simultaneity on the above operation; it shows theoretical speed in mode interchange.

b. For rapid speed setting, you can move sparkling digit by pressing

RAPID/BIT CHOOSE " → " or change the sparkling digit by pressing

INCREASING +/DEGRESSIV - in Mode state.

3, INTELLIGENT PROTECTION FUNCTION

1). MCU protection

- a. If shows "A001", overload light indicates red, it means machine can't start because of too low speed, please check whether motor is overcurrent or any trouble in mechanical drive system, then restart.
- b. If shows "A002"--overload--please take off more loads, check mechanical driving system, then restart.
- c. If shows "A003"—overspeed--machine will stop and strong current power shut off automatically, please check electronic system carefully and then restart.

2). OP - overcurrent protection

Light comes to be green in normal state; And electronical protection system works if motor current exceeds presetting data in toggle switch—OP light shows red while output power shut off--keeping no restrart for 6-10 seconds --shut off strong current power.

NOTE:

While machine strats,MCU will check high speed or low speed position automatically after 2 seconds' running and will control spindle moving under corresponding speed range; It will result wrong checking conclusion if agility of mechanical driving system acts to be bad, so, you are required to check it before machine starting.