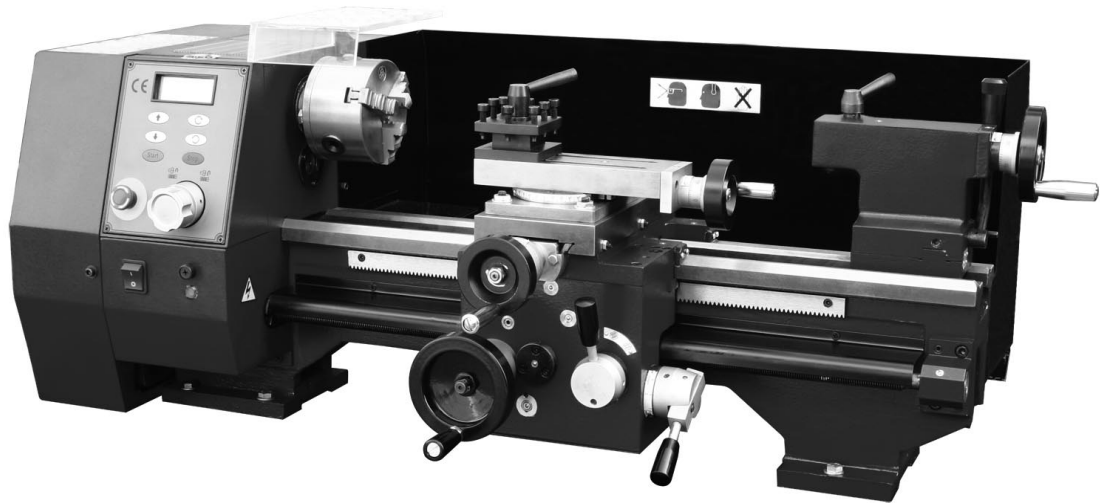


BENCH LATHE

Instruction Manual



Please read this instruction manual thoroughly and follow all directions carefully.



IMPORTANT SAFETY INSTRUCTIONS

READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS TOOL.

Operator

COMMON SENSE AND CAUTION ARE FACTORS WHICH CANNOT BE BUILT INTO ANY PRODUCT. THESE FACTORS MUST BE SUPPLIED BY THE OPERATOR. PLEASE REMEMBER:

1. When using electric tools, machines or equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury.
2. Keep work area clean. Cluttered areas invite injuries.'
3. Consider work area conditions. Do not use machines or power tools in damp, wet or poorly lit locations. Do not expose equipment to rain. Keep work area well lit. Do not use tools in the presence of flammable gases or liquids.
4. Keep children away. All children should be kept away from the work area.
5. Guard against electric shock. Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
6. Stay alert. Never operate equipment if you are tired.
7. Do not operate the product if under the influence of alcohol or drugs. Read warning labels on prescriptions to determine if your judgment or reflexes might be impaired.
8. Do not wear loose clothing or jewelry as they can be caught in moving parts.
9. Wear restrictive hair covering to contain long hair.
10. Use eye and ear protection. Always wear.
 - ANSI approved chemical splash goggles when working with chemicals.
 - ANSI approved impact safety goggles at other times.
 - ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.
 - A full face shield if you are producing metal or wood filings and/or chips.
11. Keep proper footing and balance at all times.
12. Do not reach over or across running machinery.
13. Always check that adjusting keys and wrenches are removed from the tool or machine before starting it.
14. Do not carry any tool with your finger on the start button or trigger.
15. When servicing. Use only identical replacement parts.

Before Operation

1. Be sure the switch is OFF when not in use and before plugging in to wall outlet.
2. Do not use inappropriate attachments in an attempt to exceed the tool's capacity. Approved accessories are available from the dealer or machine maker.
3. Check for damaged parts. Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function.
4. Check for alignment and binding of all moving parts. Broken parts or mounting fixtures and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician.
5. Do not use the tool if any switch does not turn off and on.

Operation

1. Never force the tool or attachment to do the work of a larger industrial tool. It is designed to do the job better and more safely at the rate for which it was intended.
2. Do not carry the tool by its power cord.
3. Always unplug the cord by the plug. Never yank the cord out of the wall outlet.
4. Always turn off the machine before unplugging.

IF YOU QUESTION THE SAFE CONDITION OF THE MACHINE, DO NOT OPERATE IT!

Electrical Grounding Instructions

This machine has a three-prong plug(can choose), the third (round) prong is the ground. Plug this cord only into a three-prong receptacle. Do not attempt to defeat the protection the ground wire provides by cutting off the round prong. Cutting off the ground will result in a safety hazard and void the warranty.

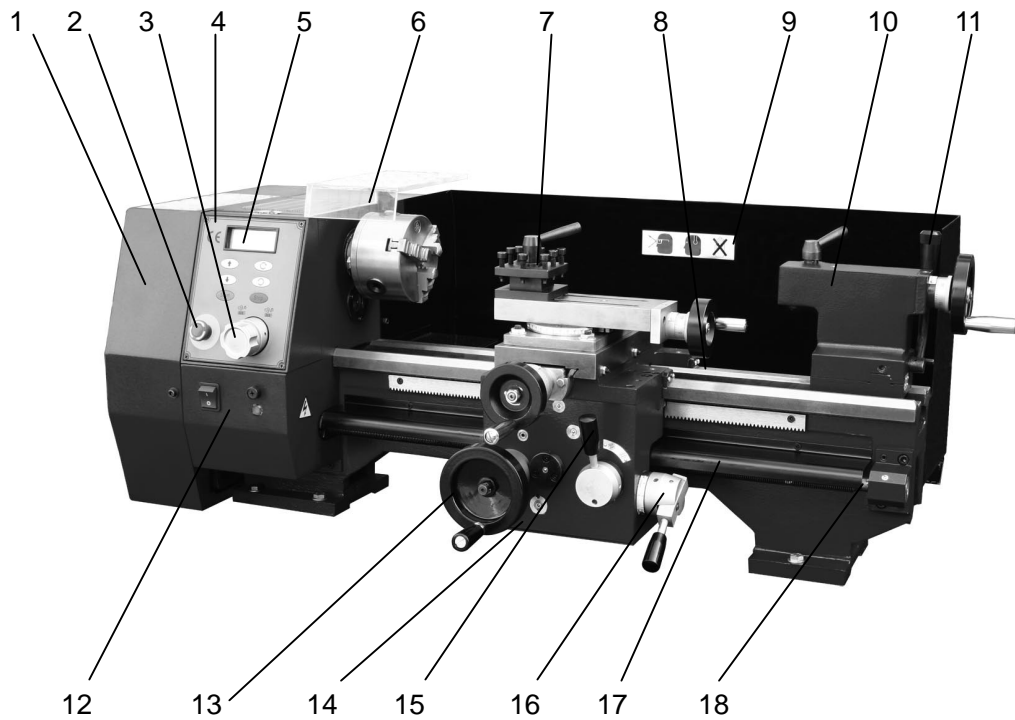
DO NOT MODIFY THE PLUG IN ANY WAY. IF YOU ARE NOT SURE ABOUT THE CONNECTIONS, CALL A QUALIFIED ELECTRICIAN.

SPECIFICATIONS

| | |
|---------------------------------|----------------|
| Max. swing over bed | 210 mm |
| Max. length of workpiece | 450 mm |
| Spindle taper | Morse No.3 |
| Tailstock taper | Morse No.2 |
| Spindle bore | 20 mm |
| Spindle speed (variable speed) | 100 – 2000 rpm |
| Motor output power | 1000 W |
| Cross slide Min. feeding | 0.2mm/r |
| Longitudinal slide Min. feeding | 0.07 mm/r |
| *Screw threads-Imperial | 5-24 TPI |
| and Metric | 0.25-3.0 mm |

The item marked (*) has different choice, see the label in front of the machine or ask information to your dealer.

FEATURES



Legend

| | |
|-------------------------------|--|
| 1. Change gear Cover | 11. Quick locking handle |
| 2. Emergency stop switch | 12. Spindle box cover |
| 3. Control handle | 13. Apron handle |
| 4. Touch panel | 14. Apron |
| 5. Spindle speed display | 15. Handle |
| 6. Chuck guard with power off | 16. X or Y axis auto feeding change handle |
| 7. Tool rest | 17. Cover for leadscrew |
| 8. Bed way | 18. Leadscrew |
| 9. Splash guard | |
| 10. Tailstock | |

Function:

- (1) Use the brushless motor;
- (2) Use touch panel;
- (3) Quick locking tailstock;
- (4) Cross axis autofeeding;

1. THE HEADSTOCK

The brush less motor provides a direct drive to the Spindle via an internal tooth type belt. Spindle speed is variable, and is regulated by the touch Located on the main control panel.

The Spindle is provided with an internal No.3 Morse taper to accommodate a center for use with a face plate or turning clamp.

The 3-jaw. Self Centering Chuck is mounted on the Spindle Flange. To remove the chuck, simply remove the three securing nuts to the rear of the flange allowing it to be pulled free together with the three mounting studs.

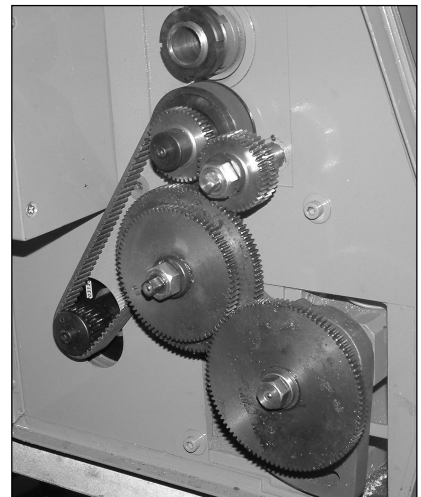
Three external jaws are also supplied which extend the capacity of the chuck. Their uses and method of assembly is described under 'Accessories'



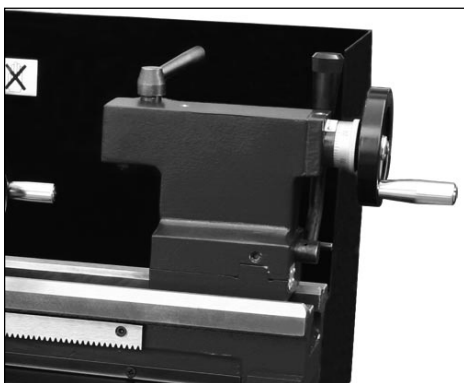
2. THE RUNNING GEAR

The Running Gear is protected by a cover , which is removed by unscrewing the securing hex. Screws in front of the change gear cover.

The gear train, shown in Fig. See right picture, transmits drive to the Lead screw. The lead Screw acts as a worm and by Operating the Auto Feed lever, which engages a nut with the lead screw, drive is transmitted to the carriage/saddle and consequently the cutting tool. Thereby providing a power feed for thread cutting or general turning operations. The rotational speed of the lead screw, and hence the rate of feed of the cutting tool, is determined by the gear configuration. This is explained in greater detail under "Screw cutting".



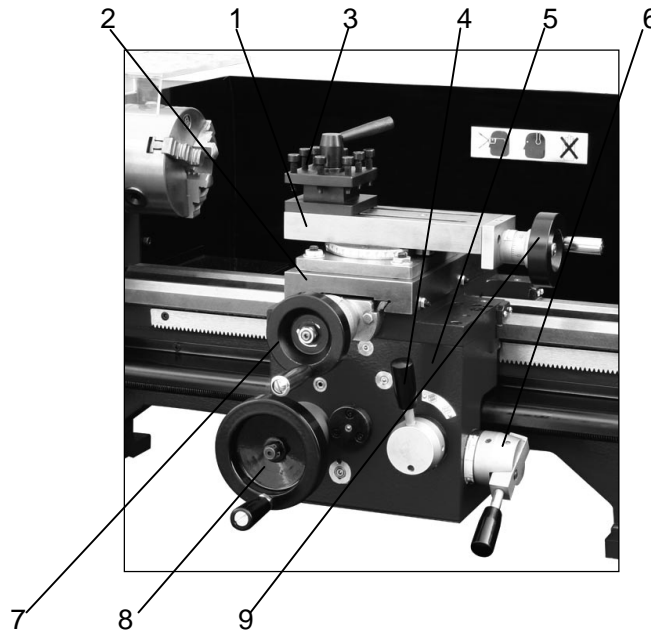
3. THE TAILSTOCK



The tailstock may be moved along the bed to any desired position and is secured in position by a quickly locking handle (behind the tailstock and at the right end). The Tailstock spindle carries an internal No.2 Morse taper for use with the Center provided. A Revolving Live Center and Drill Chuck are also available from your dealer. (See Accessories)

4.THE CARRIAGE/SADDLE

The Saddle carries the Cross-Slide (1) onto which is mounted the Compound Slide (2) with Tool post (3) , allowing intricate and delicate operations to be performed. It may be driven by the Lead screw, via a driver nut, to provide automatic feed when the Auto Feed lever (4), mounted on the Apron (5), is operated. On the right side of the apron, we make a change Cross auto feeding or longitudinal auto feeding control handle (6)



The position of the tool is effected by turning the cross-slide feed handle (7), which moves it across the lathe, and the carriage/saddle or manual feed handle (8), which moves it longitudinally. Additionally the compound slide feed handle (9) may be used to move the tool by small amounts at right angles to the cross-slide. The slide may be set at an angle to the cross-slide so that short tapers or bevels may be cut. This is described in greater detail under ‘Bevel Cutting’.

The cross-slide and compound slide feeds are provided with a scale. These are used to move the tool by precise amounts – one division being equivalent to 0.001”(0.025mm). As the feed handle is turned. So does the scale. The scale on the cross-slide feed may also be held stationary whilst the handle is turned. Allowing the scale to be ‘zeroed’. The manner in which this is put to use is discussed in greater detail under ‘Operation’.

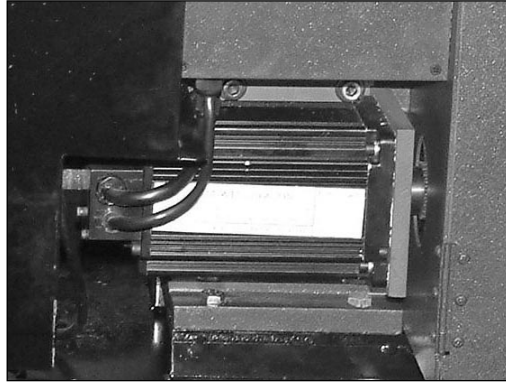
The tool post carries 8 square head screws which are used to secure a cutting tool in any desired position. Four tool bits may be mounted for quick and easy changes. Two are shown mounted.

The tool post is rotated by slackening the lever on its top a sufficient amount so the post can be lifted slightly and then turned to the desired position.

ALWAYS be ensure the post, and hence the tool, is secured by tighten the lever firmly before attempting to cut.

5. THE MOTOR

Disassembly of the motor is not recommended. We use the new type brush less motor, the motor have the big strong power and fix behind the bed way. For all other servicing and repairs. Please contact your dealer.



UNPACKING & PREPARING FOR USE

Upon receipt, carefully unpack the lathe and inspect to ensure that no damage was suffered in transit and to account for all parts. Should any damage be apparent, or parts are missing, please contact your dealer immediately.

The machine is very heavy. With an assistant, lift it onto a sturdy surface or workbench. Remove all traces of preservative with a good quality solvent. then lightly oil all machined surfaces.

You will notice that, for transit purposes, the cross slide feed handle has been mounted in reverse. Remove it, by unscrewing the hex socket head screw securing it, and mount it the correct way round. Then turn all feed handles to ensure they move freely, evenly and smoothly.

Attach the plastic handles to the rims of the manual feed and tailstock feed hand wheels respectively, ensuring the nuts are tight and the handles spin freely about the bolts, without excessive end play.

The carriage/saddle, cross-slide and compound slide adjustments are all factory set to ensure smooth movement in both directions. However, if the adjustments have been upset during transit (indicated by stiff or erratic movement), refer to 'Settings and Adjustments' for the methods of adjustment.

All hex keys and wrench necessary to carry out the various adjustments are supplied together with a chuck key for the 3-Jaw chuck and a spare fuse. The fuse holder is located on the main control panel.

The three external jaws for the 3-Jaw self centering chuck, extend the capacity of the chuck, and are discussed in greater detail under 'Accessories'.

INSTALLATION

CAUTION!

DO NOT USE THE MACHINE UNTIL INSTALLATION IS COMPLETED AND ALL PRELIMINARY CHECKS HAVE BEEN MADE IN ACCORDANCE WITH THIS MANUAL.

MOUNTING THE LATHE

The lathe should be mounted on a sturdy workbench of sufficient height so that you do not need to bend your back to perform normal operations. The machine is very heavy, so get assistance from another person when moving the machine.

Provide adequate overhead lighting so that you will not be working in your own shadow.

We strongly recommend that the machine be firmly bolted to a sturdy workbench using the tapped holes used to secure the feet to the lathe. This is to provide added stability and consequently, safety.

Alternatively, if you do not wish for a permanent installation, you may secure the lathe to a 30 mm thick plywood board with a minimum recommended dimension , the mounting holes being centralized on the board. When the lathe is in use, the board should be clamped to workbench using with C- clamps.

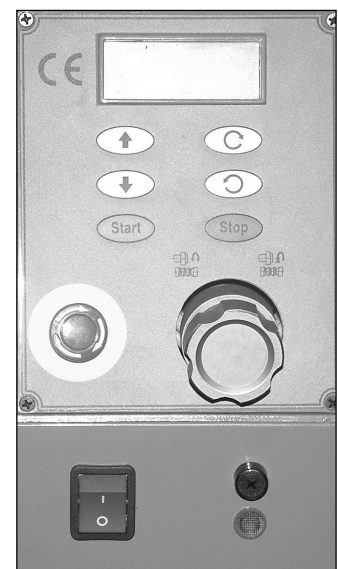
STARTING PROCEDURE

A. DURING INSTALLATION – INITIAL START

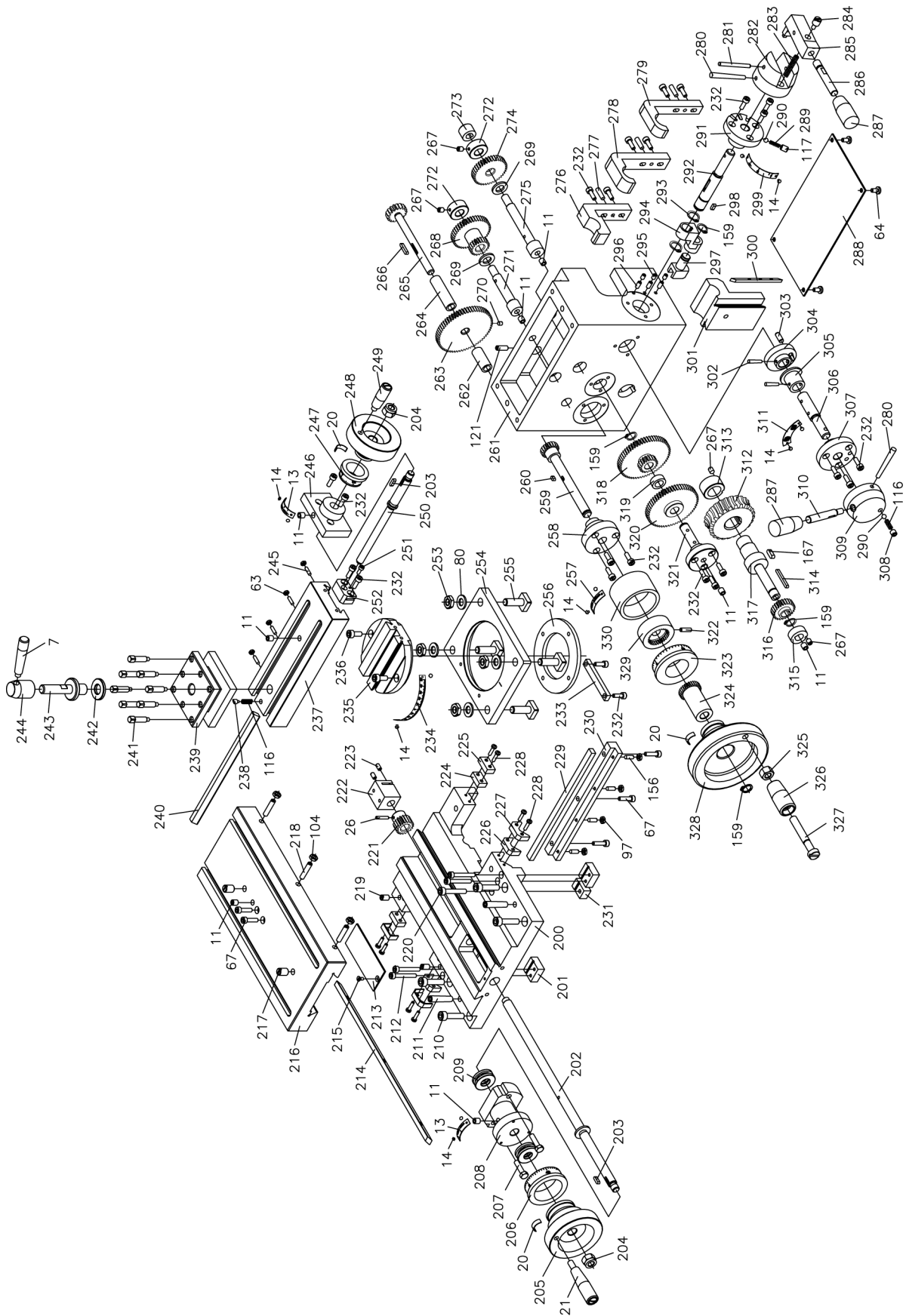
Be sure the cross-slide is well away from the chuck. And the automatic feed lever is in its disengaged position, (i.e. lever is UP). Insert the electric plug into the wall socket.

Press the power switch to “I” position then the power on as the same time the green lamp will bright. Then release the Emergency stop switch. The top display will show “0000” (this show the spindle speed rpm). First press the “start” button and press the “▲” button the spindle speed will to high, if press the “▼” button the spindle speed will to low. If need change the spindle rotate direcate can choose press the Forward or Reverse button. Need stop the machine can press the “stop” button or the Emergency stop switch.

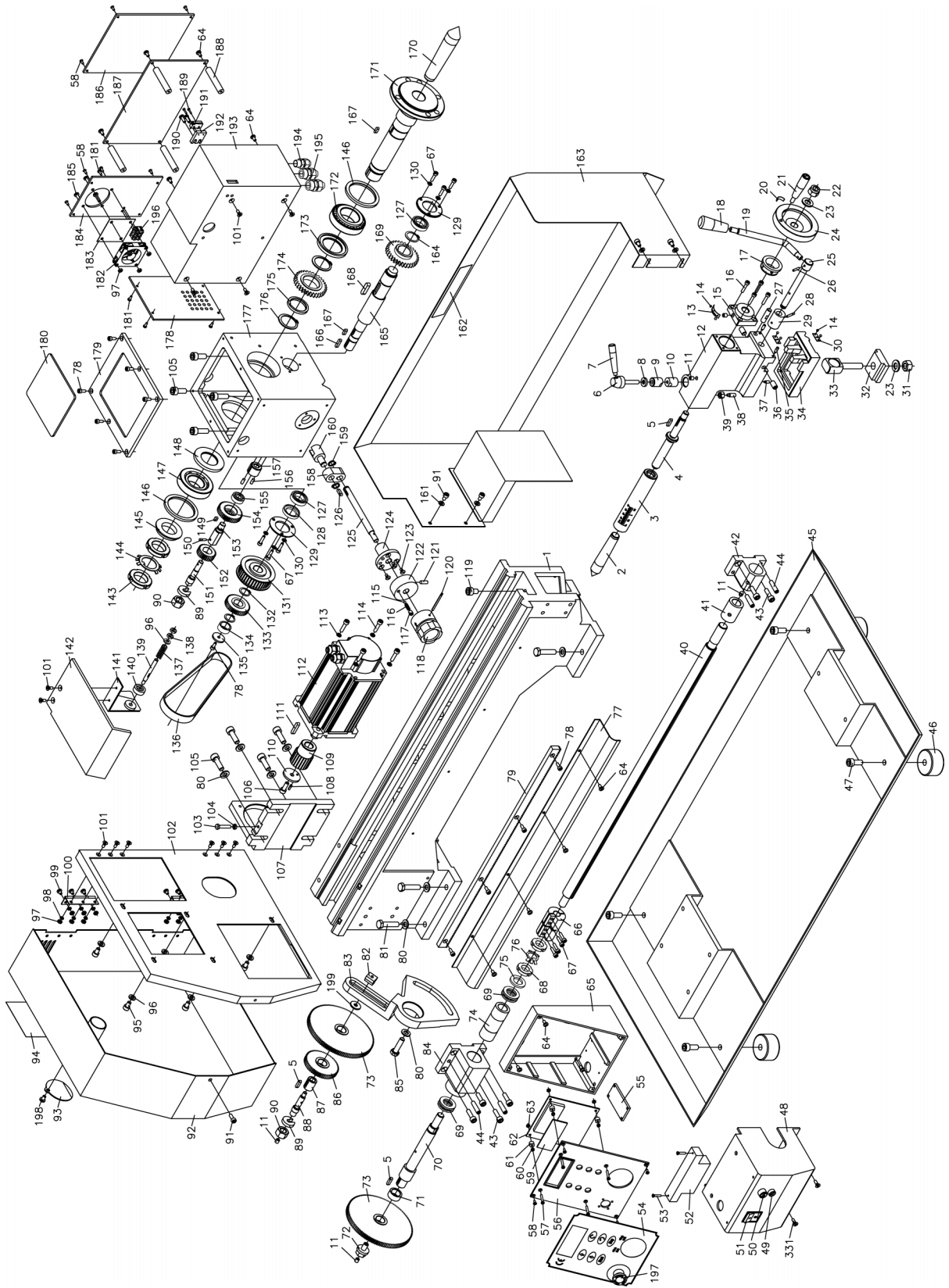
Notice: on the main panel you can find a knob, the knob use for release the spindle rotate, some times when we use the lathe add Milling function we need stop the spindle speed, you can return the knob to right position, when need the spindle running turn it to left position.



Parts drawing I



Parts drawing II



Parts list (I)

| No. | Description | Q'ty | No. | Description | Q'ty |
|-----|-----------------------|------|-----|------------------------------|------|
| 1 | bed way | 1 | 43 | screw M6*20 | 6 |
| 2 | tailstock center | 1 | 44 | pin 6*26 | 4 |
| 3 | tailstock sleeve | 1 | 45 | chip tray (optional parts) | 1 |
| 4 | lead screw | 1 | 46 | rubber foot (optional parts) | 4 |
| 5 | key 4*16 | 3 | 47 | screw M8*20 (optional parts) | 6 |
| 6 | lock shaft | 1 | 48 | protecting cover of bracket | 1 |
| 7 | knob | 2 | 49 | green lamp | 1 |
| 8 | adjust washer | 1 | 50 | fuse | 1 |
| 9 | lock sleeve | 1 | 51 | switch | 1 |
| 10 | lock nut | 1 | 52 | electric filter | 1 |
| 11 | oil cup 6 | 13 | 53 | screw M3*16 | 2 |
| 12 | tailstock casting | 1 | 54 | switch film | 1 |
| 13 | scale lable | 3 | 55 | pc board | 1 |
| 14 | rivet 2*4 | 18 | 56 | switch label | 1 |
| 15 | lead screw support | 1 | 57 | screw M3*20 | 4 |
| 16 | screw M4*20 | 4 | 58 | screw ST2.9*9.5 | 12 |
| 17 | dial | 1 | 59 | digital readout guard | 1 |
| 18 | handle M8*50 | 1 | 60 | compression sping 0.7*4.5*7 | 4 |
| 19 | knob | 1 | 61 | pc board stepping | 4 |
| 20 | speing | 4 | 62 | pc board | 1 |
| 21 | long handle M6*50 | 2 | 63 | nut M3 | 8 |
| 22 | lock nut M10 | 1 | 64 | screw M4*8 | 19 |
| 23 | washer 10 | 2 | 65 | control box | 1 |
| 24 | handle wheel | 1 | 66 | joint sleeve of leadscrew | 1 |
| 25 | rotating shaft | 1 | 67 | screw M4*16 | 15 |
| 26 | pin 3*16 | 2 | 68 | nut M16*1.5 | 2 |
| 27 | limit shank | 1 | 69 | ball bearing 8103 | 2 |
| 28 | pin 3*20 | 1 | 70 | leadscrew connecting shaft | 1 |
| 29 | elcentric sleeve | 1 | 71 | thick washer | 1 |
| 30 | zero position lable | 2 | 72 | bolt | 1 |
| 31 | nut | 1 | 73 | change gear | 2 |
| 32 | tailstock clamp plate | 1 | 74 | copper bush I | 1 |
| 33 | lock bolt | 1 | 75 | washer | 1 |
| 34 | stand | 1 | 76 | lock washer 16*22 | 1 |
| 35 | screw M4*12 | 2 | 77 | protecting cover of lead | 1 |
| 36 | screw M8*14 | 2 | 78 | screw M4*10 | 11 |
| 37 | screw M4*10 | 1 | 79 | rack | 1 |
| 38 | screw M6*16 | 1 | 80 | washer 8 | 15 |
| 39 | nut M6 | 1 | 81 | bolt M8*35 | 6 |
| 40 | lead screw | 1 | 82 | square nut | 1 |
| 41 | copper bush II | 1 | 83 | support plate | 1 |
| 42 | bracket | 1 | 84 | bracket | 1 |

Parts list (II)

| No. | Description | Q'ty | No. | Description | Q'ty |
|-----|-----------------------------|------|-----|----------------------|------|
| 85 | bolt M8*30 | 1 | 127 | bearing 61903 | 2 |
| 86 | change gear | 1 | 128 | spacer | 1 |
| 87 | bearing | 1 | 129 | cover | 2 |
| 88 | bolt | 1 | 130 | washer 4 | 6 |
| 89 | open washer | 2 | 131 | spindle pully | 1 |
| 90 | nut M12 | 2 | 132 | check ring 16 | 2 |
| 91 | screw M5*8 | 5 | 133 | gear | 1 |
| 92 | gear box cover | 1 | 134 | washer | 1 |
| 93 | small cover | 1 | 135 | check ring | 1 |
| 94 | thread and feeding lable | 1 | 136 | timing blet | 1 |
| 95 | screw M6*10 | 5 | 137 | compression sping | 1 |
| 96 | washer 6 | 6 | 138 | nut M6 | 2 |
| 97 | nut M4 | 22 | 139 | small shaft | 1 |
| 98 | spring washer M4 | 12 | 140 | damp sleeve | 1 |
| 99 | screw M4*6 | 6 | 141 | splash guard support | 1 |
| 100 | hinge 62*33 | 2 | 142 | guard | 1 |
| 101 | screw M4*10 | 12 | 143 | nut M27*1.5 | 2 |
| 102 | rear plate of gear ox cover | 1 | 144 | lock washer 27*37 | 1 |
| 103 | bolt M5*25 | 1 | 145 | spacer | 1 |
| 104 | nut M5 | 4 | 146 | oil ring | 2 |
| 105 | screw M8*25 | 6 | 147 | bearing 30206 | 1 |
| 106 | screw M6*16 | 1 | 148 | oil ring | 1 |
| 107 | motor support | 1 | 149 | key 4*8 | 1 |
| 108 | pin 3*10 | 1 | 150 | pin B3*14 | 1 |
| 109 | pully | 1 | 151 | spindle bolt | 1 |
| 110 | washer | 1 | 152 | gear | 1 |
| 111 | key 5*25 | 1 | 153 | intermediate shaft | 1 |
| 112 | brushless motor | 1 | 154 | gear | 1 |
| 113 | spring washer 5 | 4 | 155 | bearing 60018 | 1 |
| 114 | screw M5*20 | 4 | 156 | screw M4*12 | 6 |
| 115 | steel ball 4 | 1 | 157 | inlay block | 1 |
| 116 | compression sping 0.8*4*12 | 3 | 158 | shifting arm | 1 |
| 117 | screw M6*8 | 2 | 159 | check ring 10 | 6 |
| 118 | knob | 1 | 160 | shifting block | 1 |
| 119 | screw M8*12 | 1 | 161 | washer 5 | 4 |
| 120 | pin 3*40 | 1 | 162 | safty lable | 1 |
| 121 | screw M5*16 | 2 | 163 | rear splash guard | 1 |
| 122 | finding dial | 1 | 164 | ring 21 | 1 |
| 123 | screw M4*8 | 3 | 165 | H/L gear shaft | 1 |
| 124 | fingding sleeve | 1 | 166 | key 4*18 | 1 |
| 125 | small shaft | 1 | 167 | key 4*12 | 3 |
| 126 | key 4*14 | 1 | 168 | key 6*25 | 1 |

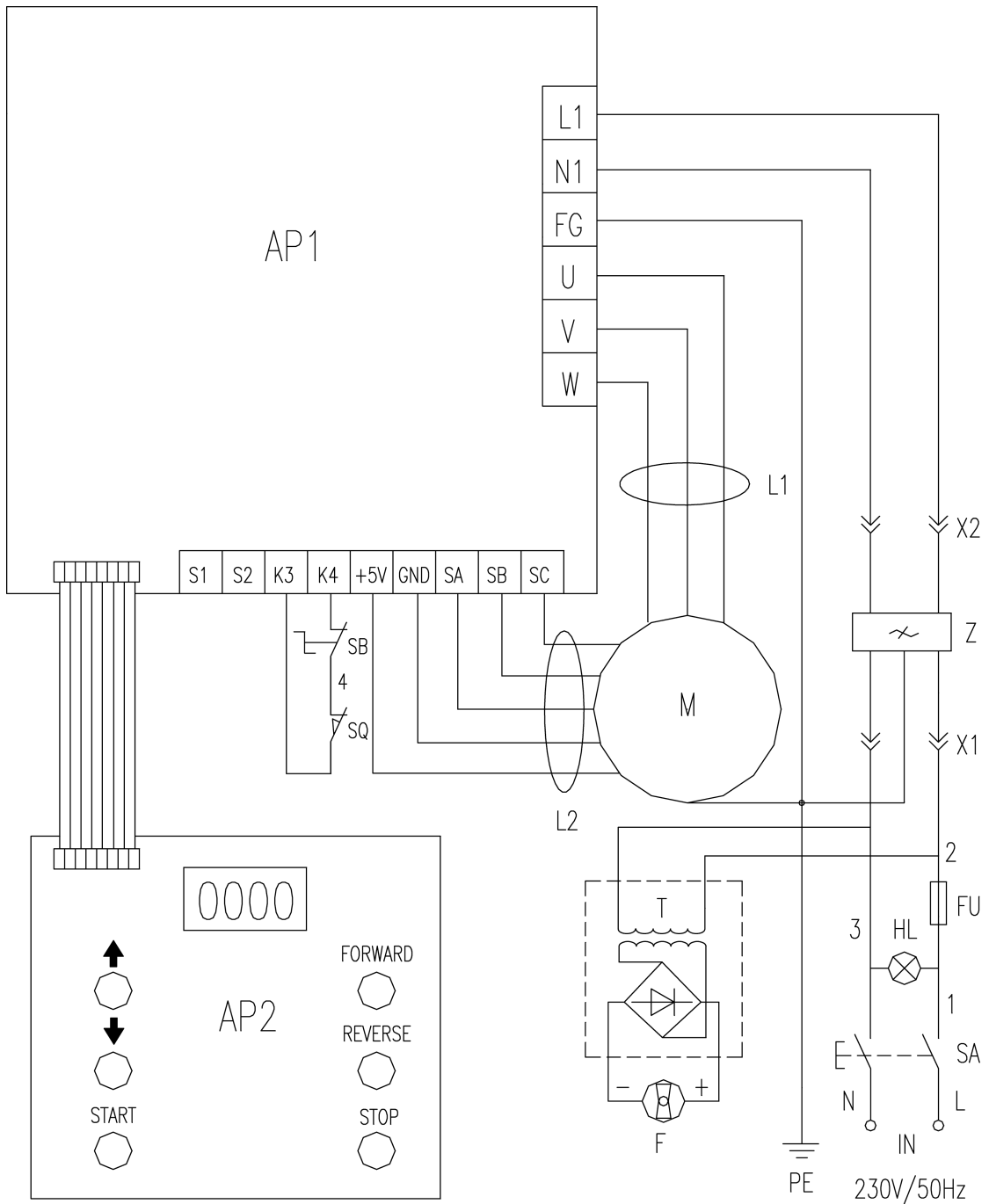
Parts list (III)

| No. | Description | Q'ty | No. | Description | Q'ty |
|-----|------------------------------|------|-----|----------------------------|------|
| 169 | H/L gear | 1 | 211 | pin 6*30 | 2 |
| 170 | spindle center | 1 | 212 | screw M4*30 | 4 |
| 171 | spidle | 1 | 213 | cover | 1 |
| 172 | bearing 32007 | 1 | 214 | gib strip | 1 |
| 173 | oil ring | 1 | 215 | screw M3*6 | 1 |
| 174 | spindle gear | 1 | 216 | cross slide | 1 |
| 175 | spacer | 1 | 217 | screw M8*12 | 2 |
| 176 | check ring 30 | 2 | 218 | screw M5*25 | 3 |
| 177 | head stock body | 1 | 219 | screw M6*10 | 2 |
| 178 | cover of electric box | 1 | 220 | screw M5*30 | 1 |
| 179 | cover | 1 | 221 | gear | 1 |
| 180 | rubber | 1 | 222 | nut | 1 |
| 181 | screw ST2.9*9.5 | 6 | 223 | screw M4*8 | 2 |
| 182 | small fan | 1 | 224 | oil-stopping felt | 2 |
| 183 | protect mesh | 1 | 225 | protecting panel | 2 |
| 184 | small cover of electric box | 1 | 226 | oil-stopping felt | 2 |
| 185 | screw M4*16 | 4 | 227 | protecting panel | 2 |
| 186 | big cover of electric box | 1 | 228 | screw M3*12 | 8 |
| 187 | pc board | 1 | 229 | gib strip | 1 |
| 188 | stepping | 4 | 230 | rear clamp | 1 |
| 189 | screw M2*10 | 2 | 231 | rear clamp | 1 |
| 190 | screw M4*12 | 2 | 232 | screw M4*12 | 24 |
| 191 | mrico switch | 1 | 233 | finding block | 1 |
| 192 | bottom plate of mrico switch | 1 | 234 | angle ruler | 1 |
| 193 | electric box | 1 | 235 | cutter rest revolving dial | 1 |
| 194 | lock connect M12 | 1 | 236 | screw M5*12 | 2 |
| 195 | lock connect M16 | 2 | 237 | compound rest | 1 |
| 196 | connection pole | 1 | 238 | positing pin | 1 |
| 197 | emergency stop switch | 1 | 239 | tool rest | 1 |
| 198 | screw M5*8 | 1 | 240 | gib strip | 1 |
| 199 | washer | 1 | 241 | screw M6*20 | 8 |
| 200 | saddle | 1 | 242 | adjusting washer | 1 |
| 201 | front clamp | 2 | 243 | fuselage | 1 |
| 202 | lead screw | 1 | 244 | clamping lever | 1 |
| 203 | key 3*10 | 2 | 245 | screw M3*12 | 4 |
| 204 | lock nut M8 | 2 | 246 | leadscrew support | 1 |
| 205 | handle wheel | 1 | 247 | dial | 1 |
| 206 | dial | 1 | 248 | handle wheel | 1 |
| 207 | bolt M5*20 | 2 | 249 | knob M6*32 | 1 |
| 208 | bearing seat | 1 | 250 | lead screw | 1 |
| 209 | bearing 8100 | 2 | 251 | screw M3*8 | 1 |
| 210 | screw M6*25 | 4 | 252 | nut | 1 |

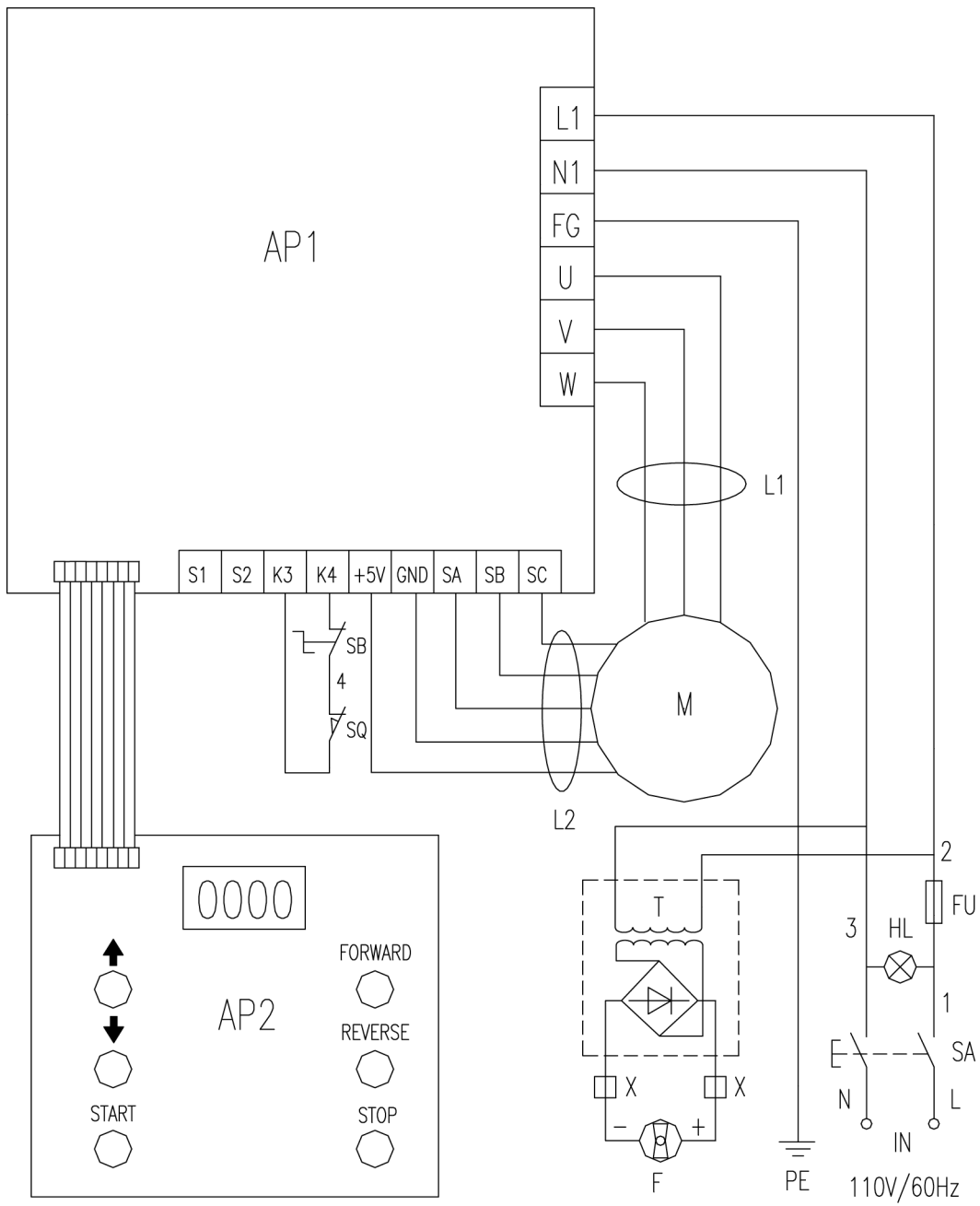
Parts list

| No. | Description | Q'ty | No. | Description | Q'ty |
|-----|-------------------------------|------|-----|-----------------------|------|
| 253 | nut M8 | 4 | 295 | screw M4*6 | 3 |
| 254 | stand | 1 | 296 | screw M4*8 | 3 |
| 255 | T bolt | 4 | 297 | shifting block | 1 |
| 256 | rotating clamp | 1 | 298 | key 3*8 | 1 |
| 257 | lable | 1 | 299 | cross feeding lable | 1 |
| 258 | shaft I sleeve | 1 | 300 | gib strip | 1 |
| 259 | shaft I gear shaft | 1 | 301 | half nut | 1 |
| 260 | key 3*6 | 1 | 302 | pin 3*18 | 2 |
| 261 | apron | 1 | 303 | pin 5*12 | 1 |
| 262 | shaftII sleeve I | 1 | 304 | shifting dial | 1 |
| 263 | shaft II gear | 1 | 305 | lock wheel | 1 |
| 264 | shaft II sleeve II | 1 | 306 | shaft VII | 1 |
| 265 | shaft II gear shaft | 1 | 307 | finding flange sleeve | 1 |
| 266 | key 3*16 | 1 | 308 | screw M6*6 | 1 |
| 267 | screw M5*8 | 4 | 309 | handle seat I | 1 |
| 268 | H/L gear of shaft V | 1 | 310 | bolt | 1 |
| 269 | washer | 2 | 311 | lable | 1 |
| 270 | screw M4*6 | 1 | 312 | worm wheel | 1 |
| 271 | shaft V | 1 | 313 | shaft VI sleeve I | 1 |
| 272 | ring 10 | 2 | 314 | key 3*28 | 1 |
| 273 | shaft sleeve | 1 | 315 | shaft VI sleeve II | 1 |
| 274 | shaft IV gear | 1 | 316 | H/L gear | 1 |
| 275 | shaft IV | 1 | 317 | shaft VI | 1 |
| 276 | leadscrew support | 1 | 318 | shaft III H/L gear | 1 |
| 277 | pin B4*16 | 3 | 319 | spacer | 1 |
| 278 | leadscrew supporting clasp II | 1 | 320 | shaft III gear | 1 |
| 279 | leadscrew supporting clasp I | 1 | 321 | shaft III | 1 |
| 280 | pin 4*45 | 2 | 322 | screw M4*14 | 1 |
| 281 | pin 4*40 | 1 | 323 | dial | 1 |
| 282 | handle seat II | 1 | 324 | meshing gear of wheel | 1 |
| 283 | conpression spring 0.8*5*30 | 1 | 325 | nut M8 | 1 |
| 284 | finding screw | 1 | 326 | handle | 1 |
| 285 | active handle block | 1 | 327 | screw M8*55 | 1 |
| 286 | handle shank | 1 | 328 | handle wheel | 1 |
| 287 | long handle sleeve M8*40 | 2 | 329 | inner gear sets | 1 |
| 288 | apron botton cover | 1 | 330 | protecting sleeve | 1 |
| 289 | Compression spring 0.6*3.5*12 | 1 | 331 | screw M4*12 | 2 |
| 290 | steel ball 5 | 2 | | | |
| 291 | limit flange sleeve | 1 | | | |
| 292 | shifting knob | 1 | | | |
| 293 | check ring 12 | 2 | | | |
| 294 | shifting arm | 1 | | | |

Electrical Circuit Diagram for 230V



Electrical Circuit Diagram for 110V



Packing list

| No. | Descriptions | Q'ty |
|-----|---------------------------------------|--------|
| 1 | Bench lathe | 1 |
| 2 | Instruction Manual | 1 |
| 3 | L Hex. End Wrench S 2.5; 3; 4; 5; 6. | Each 1 |
| 4 | Double end Wrench 8*10; 14*17; 17*19. | Each 1 |
| 5 | Screw driver 125*9 | 1 |
| 6 | Screw driver 2# | 1 |
| 7 | Key for 3-jaw chuck | 1 |
| 8 | Spindle dead center | 1 |
| 9 | Tailstock dead center | 1 |
| 10 | Change gear set | 1 set |