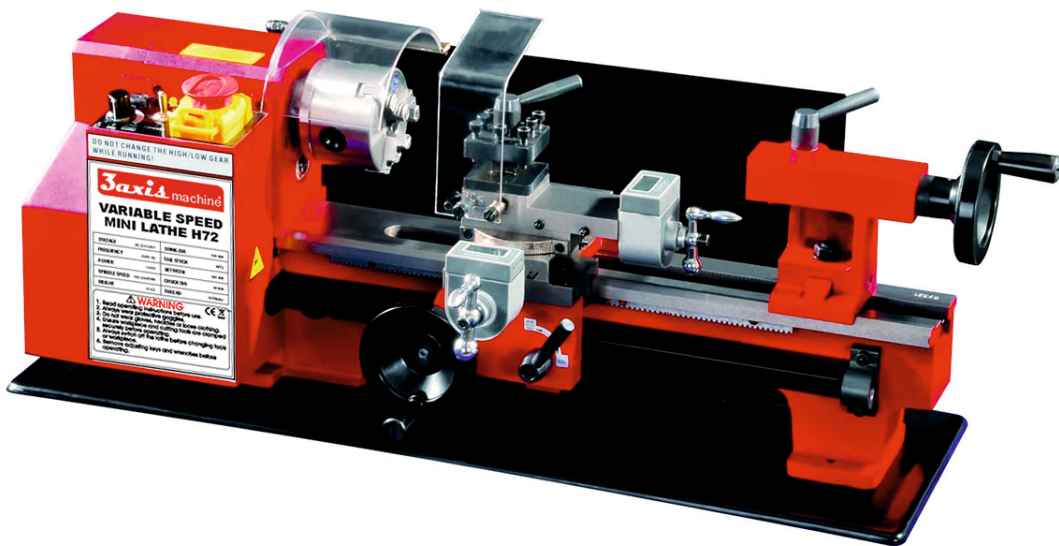


# VARIABLE SPEED MINI LATHE

MODEL : H72

Instruction Manual



[www.3axismachine.com](http://www.3axismachine.com)  
[info@3axismachine.com](mailto:info@3axismachine.com)

**Read all instruction and warning before using this machine**



## **WARNING!**

For Your Own Safety read Instruction manual Before Operating lathe.

- a) Wear eye protection.
- b) Do not wear gloves, necktie, or loose clothing
- c) Tighten all locks before operating.
- d) Rotate workpiece by hand before applying power.
- e) Rough out workpiece before installing on faceplate.
- f) Do not mount split workpiece or one containing knot.
- g) Use lowest speed when starting new workpiece.

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided-if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

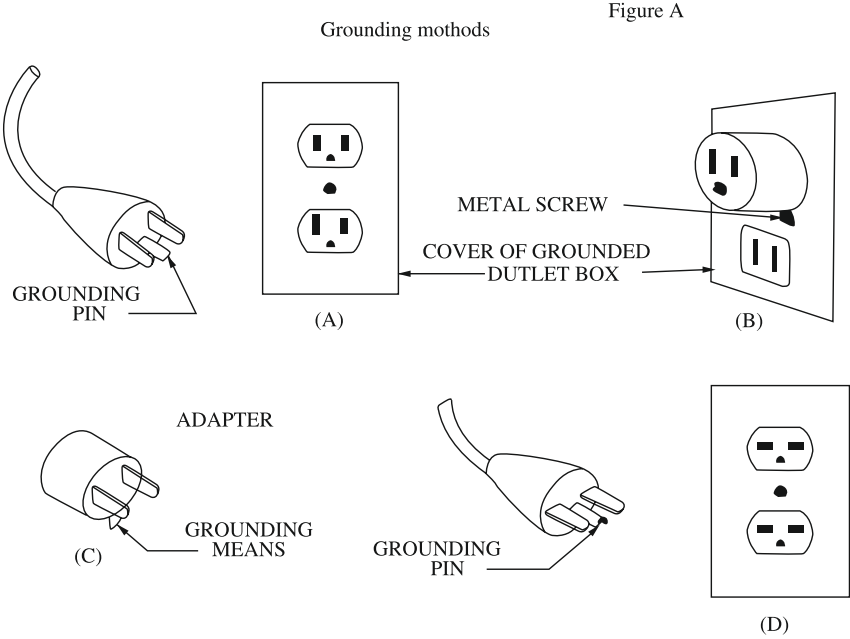
Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

Repair or replace damaged or worn cord immediately.

This tool is intended for use on a circuit that has an outlet looks like the one illustrated in Sketch A in Figure A, The tool has a grounding plug that looks like the plug illustrated IN Sketch A in Figure A, A temporary adapter, which looks like the adapter illustrated in Sketches B and C, may be used to connect this plug to a 2-pole receptacle as shown in Sketch B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, and the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.



1. KEEP GUARDS IN PLACE and in working order.
2. REMOVE ADJUSTING KEY AND WRENCHES. From habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
3. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
4. DON'T USE IN DANGEROUS ENVIRONMENT, Don't use power tools in damp or wet locations, or expose them to rain, keep work area well lighted.
5. KEEP CHILDREN AWAY, ALL visitors should be kept safe distance from work area.
6. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
7. DON'T FORCE TOOL it will do the job better and safer at the rate for which it was designed.
8. USE RIGHT TOOL, Don't force tool or attachment to do a job for which it was not designed.
9. USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table \_\_\_ (see Table A.) shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Table A  
Minimum gage cord

Ampere rating		Volts	Total length of cord feet			
		120V 240V	25ft 50ft	50ft 100ft	100ft 200ft	150ft 300ft
More Than	Not More Than	AWG				
0	6		18	16	16	14
6	10		18	16	14	12
10	18		16	16	14	12
18	18		14	12	Not Recommended	

a only the applicable parts of the Table need to be included, For instance, a 120-volt product need not include the 240-volt heading.

10. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
11. **ALWAYS USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lense, they are NOT safety glasses.
12. **SECUTE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
13. **DON'T OVERREACH.** Keep proper footing and balance at all times.
14. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
15. **DISCONNECT TOOLS** before servicing; when changing accessories, such as blades, bits, cutters, and the like.
16. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in off position before plugging in.
17. **USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
18. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
19. **CHECK DAMAGED PARTS.** Before further use of the tool. a guards or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function-check for allgnment of moving parts, blnding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
20. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
21. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN PWOER OFF.** Don't leave tool until it comes to a complete stop.

## 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.

11. Keep proper footing and balance at all times.
12. Do not reach over or across running machines.
13. Always check that adjusting keys and wrenches are removed from the tool or machine work surface before plugging it in.
14. Do not carry any tool with your finger on either 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.
2. Do not attempt to use inappropriate attachments in an attempt to exceed the tool's capacity. Approved accessories are available from Harbor Freight Tools.
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 properly.

## 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.
4. Always turn off the machine before unplugging.

**IF THERE IS ANY QUESTION ABOUT A CONDITION BEING SAFE OR UNSAFE, DO NOT OPERATE THE TOOL!**

## Grounding Instructions and Voltage Warning

Common household current is 110-120 volts. As long as your tool is rated from 110-120V there will be no complications using this tool with household receptacles. NEVER try to plug a 110-120V tool into a 220-240V circuit (or vice-versa) or serious complications and possible serious injury to the operator can occur. The plugs have different shapes to prevent this.

Check to see if your tool has a two or three-prong plug. If your tool has a two-prong plug, you may proceed past the next paragraph. If your tool has a three-prong plug, please continue reading the following precautions and instructions.

If the tool or machine has a three-prong plug, 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.

If a three-prong receptacle is not available, you may use an adapter, but you must then connect the green ear on the adapter to the outlet. Unscrew the center screw of the outlet cover and put the screw through the green ear. Plug the adapter's two prongs into the outlet, and replace the center screw. Now plug the tool or machine into the adapter.

**DO NOT MODIFY THE PLUG IN ANY WAY. IF YOU HAVE ANY DOUBT, CALL A QUALIFIED ELECTRICIAN.**

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## Extension Cords

If your tool is double insulated and has a two-prong plug, you may use either a two or three-prong extension cord. If your tool has a grounded, three-prong plug, you must use a three-prong extension cord with three-prong receptacles. Only use rounded jacket extension cords listed by the Underwriters Laboratories (UL). If you are using the tool outdoors, use an extension cord rated for outdoor use (signified by "WA" on the jacket).

The extension cord must have a minimum wire size depending on the amperage of the tool and the length of the extension cord. The size is determined by its AWG (American Wire Gauge) rating. The smaller the gauge, the greater the cable's capacity. The amount of cords used does not matter. Total length determines the minimum AWG rating. Every cord must meet the AWG rating. Use the chart below to determine what AWG rating is required for your situation. Cord length is rated in feet. Harbor Freight Tools can supply UL listed and outdoor rated extension cords in multiple AWG ratings if needed.

## Additional Safety Rules for Mini Lathe

1. Before turning on the motor, make sure that proper lubrication is included.
2. Always dismount the chuck and lathe's face plate by hand. Do not use power tools to perform these tasks.
3. After the chuck is installed, remove the wrenches and tools to eliminate the possibility of an accident when the lathe is turned on.
4. Never adjust or fix workpieces or any rotating parts when the lathe is on. Never use instruments to measure the workpiece when the lathe is on. Never check the sharpness of the cutter by using your hand.
5. Avoid accidents resulting from broken workpieces. Never use an excessively large tool cutter to do feeding with a large workpiece.
6. Never change the gear when the lathe is in operation.
7. Always keep a safe distance from the lathe to minimize the risk of being struck by a broken workpiece.

---

**Thank you for choosing a Harbor Freight Tools product! For future reference, please complete the owner's record below:**

**Model:** \_\_\_\_\_ **Serial Number:** \_\_\_\_\_ **Purchase Date:** \_\_\_\_\_

SAVE THE RECEIPT, WARRANTY AND THESE INSTRUCTIONS. It is important that you read the entire manual to become familiar with the unit BEFORE you begin assembly.

---

## Technical Specifications

**Motor:** 3/4 Horsepower

**Power Source:** 110V, Single Phase,

**Lathe Specifications:**

Drive: Gear and Belt

Swing Over Bed: 7"

Distance Between Centers: 12"

Spindle Bore: 3/4"

Quill Travel: 2"

Cross Slide Travel: 2 3/4"

Cross Slide Swing: 4 1/2"

Work Tolerance: .005"

Bed Dimensions: 19 7/8" long, 3 1/4" wide

Saddle Travel: 6 7/8"

Compound Travel: 2 7/8"



## Unpacking

Carefully unpack the Mini Lathe and check all items. Figure 1 below shows all the contents of the carton. Do not discard any packing material until the Mini Lathe is fully assembled and operational. If any parts are missing or broken, please call Harbor Freight Tools at 1-800-444-3353. Be sure you have all parts described in the parts listing at the back of this manual.

### Identification of Main Components

- |          |                     |                  |
|----------|---------------------|------------------|
| A. Lathe | B. Chuck Key        | C. External Jaws |
| D. Chuck | E. Chuck Set Screws | F. Internal Jaws |

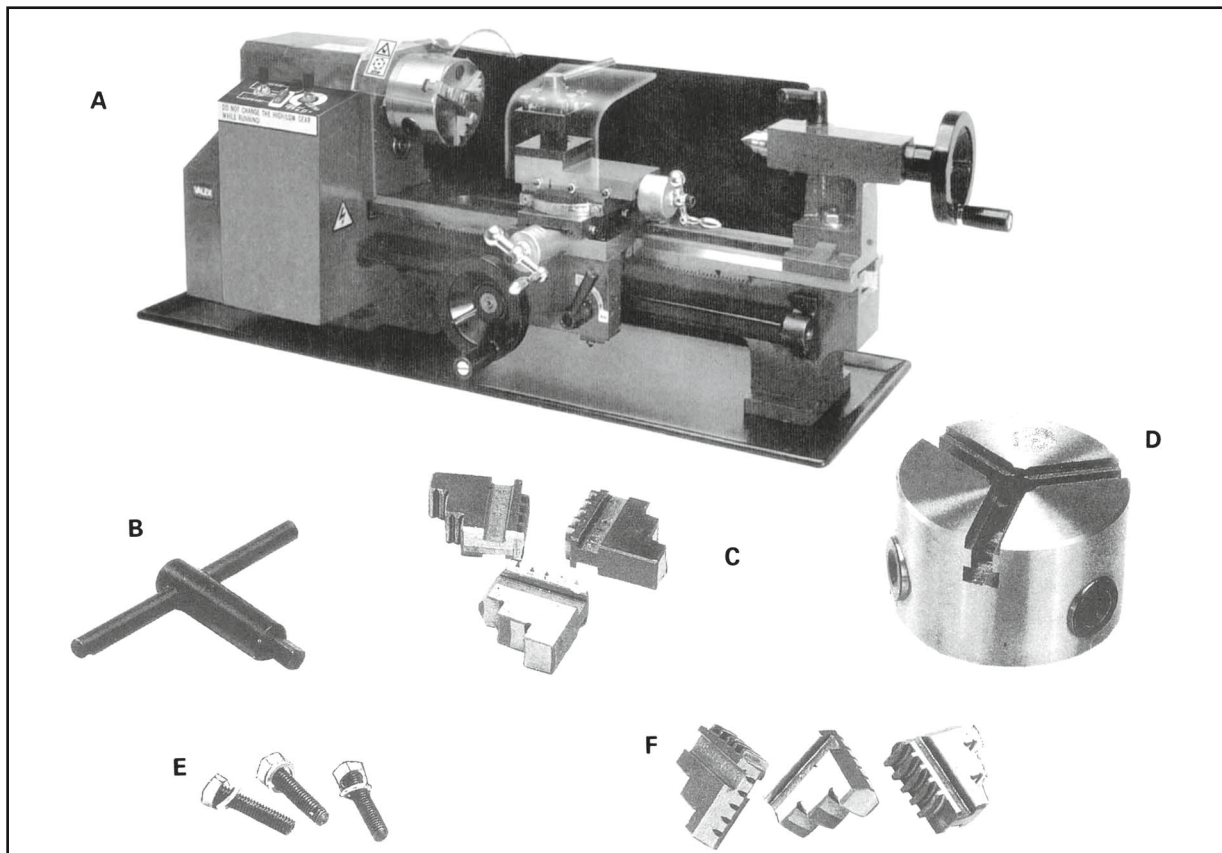
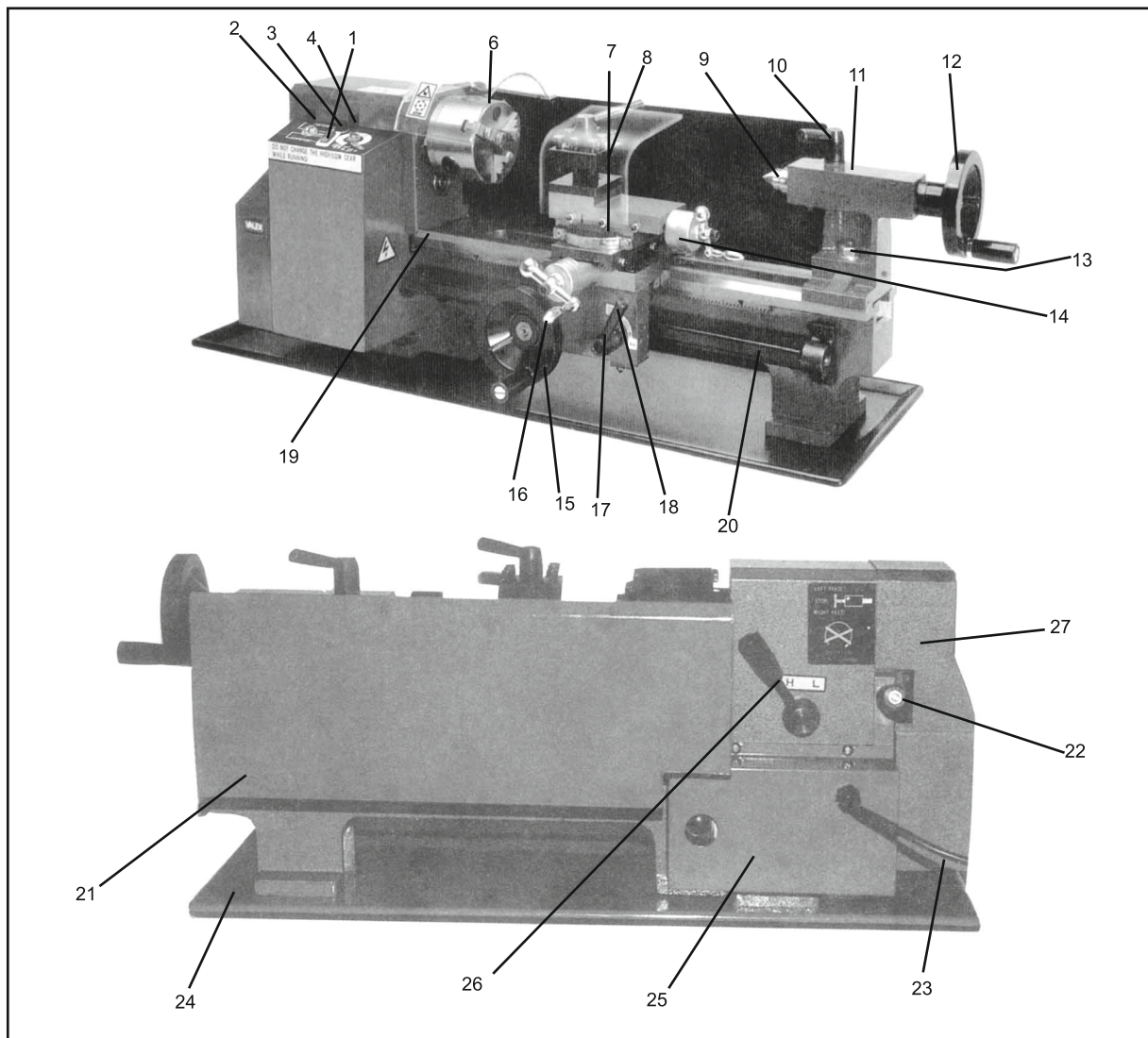


Fig. 1

## Mini Lathe Features

1. Power Switch
2. Forward-Reverse Switch
3. Fuse
4. Speed Control Knob
6. Chuck
7. Compound Rest
8. Tool Post
9. Fixed Center
10. Tailstock Quill Fix Holder
11. Tailstock
12. Tailstock Quill Adjust Handwheel
13. Tailstock Set Screw
14. Compound Rest Crank
15. Feeding Control Wheel
16. Cross Feeding Crank
17. Automatic Feeding Handle
18. Thread Dial Indicator
19. Bed Way
20. Lead Screw
21. Rear Splash Guard
22. Feeding Direction Selector
23. Power Cord
24. Chip Tray
25. Motor Cover
26. H/L Gear Shift Lever
27. End Cover



## Adjusting the Mini Lathe

1. Clean off the protective grease on the Mini Lathe.
2. Check to see that the three set screws on the chuck are tight.
3. Turn the chuck by hand and check that it rotates freely.
4. Move the Feeding Direction Selector (located on the back of lathe) to the middle.
5. Make sure the Switch (#1 in figure 4 below) is at the OFF position.

**WARNING: ADJUST THE SPEED CONTROL KNOB (#4) BY TURNING IT TO ZERO. BEFORE TURNING ON THE MINI LATHE EACH TIME IT IS TO BE USED, THIS SPEED CONTROL KNOB MUST BE AT ZERO.**

6. Plug in the electrical cord and turn the Switch to the ON position and run the lathe for 3 minutes. When the lathe is on, the Power Lamp (#2) will remain on. Check to see that the lathe operates normally.

7. Check the Compound Rest Crank and the Cross Feeding Crank to see that they work properly. If the cranks are too tight or too loose, turn the adjusting screws located at both sides (see figure 5 below).

**WARNING: THE MINI LATHE MUST BE COMPLETELY STOPPED BEFORE CHANGING FORWARD/REVERSE DIRECTION.**

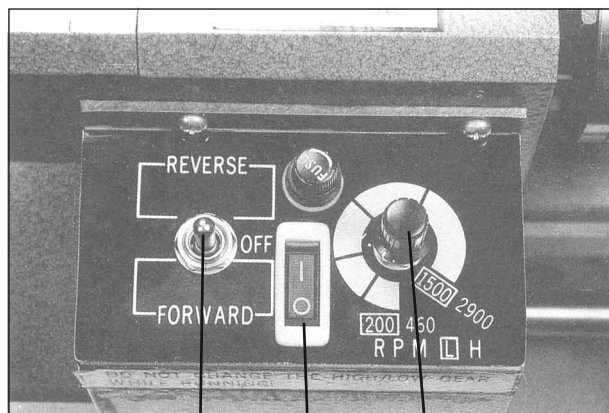


Fig. 4

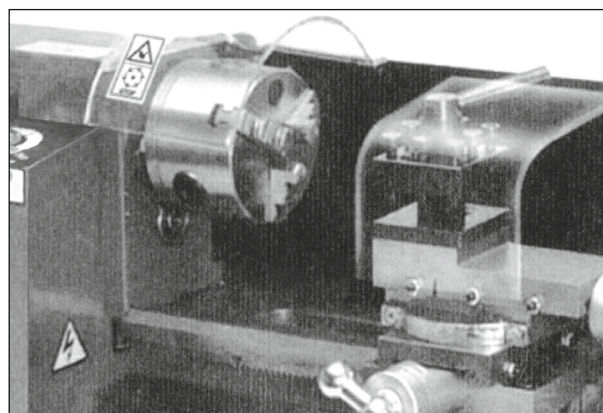


Fig. 5

## Replacement of Chuck

When replacing the chuck, place a cloth or a piece of wood on the bedway at the bottom of the chuck. This step will help avoid damage to the bedway caused by carelessly dropping the chuck. To replace the chuck, loosed the 3 set screws as shown in figure 6 below.

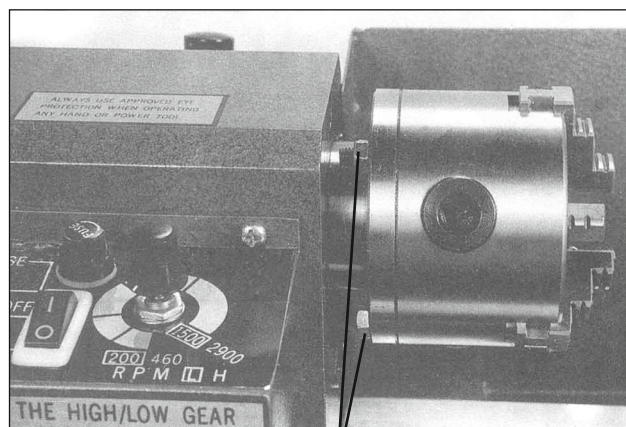


Fig. 6

## Replacement of Jaws

There are two types of jaws: the internal jaws and external jaws. Please note that the number of jaws fit with the number inside the chuck's groove. Do not mix them together.

When you are going to mount the jaws, mount them in ascending order. When they are taken out, make sure to take them out in descending order (3-2-1) one by one. After you finish this procedure, rotate the jaws to the smallest diameter and check that the three jaws fit properly (see figure 7).

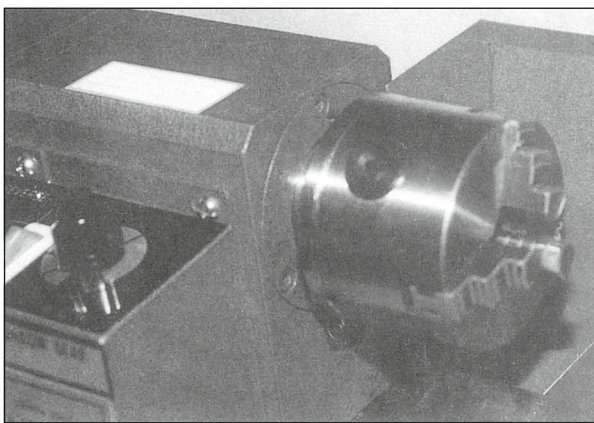


Fig. 7

If the jaws do not fit well together, you will need to re-assemble them again.

When mounting a workpiece, it is recommended that all three jaws are loosened at the same time. This will protect the threads inside.

## Compound Rest Adjustment

To adjust the compound rest, loosen the two screws as shown in figure 8 (A). After adjusting to the required angle, tighten the screws.

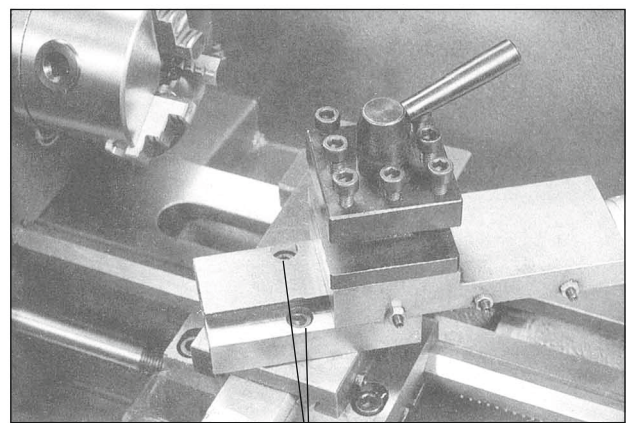


Fig. 8

## Tailstock Rest Adjustment

To change position or replace the tailstock, loosen the nut as shown in (A) of figure 9.

## Replacement of Carbon Brushes

To replace, remove brush covers on the motor cover (A) in figure 10-A, and the right bottom side of speed controller as shown in (B) of figure 10-B.

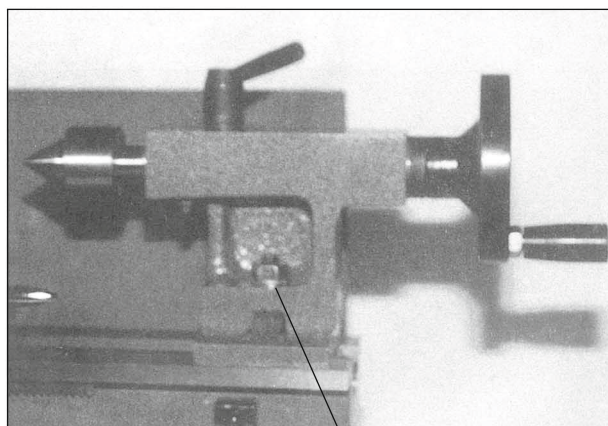


Fig. 9

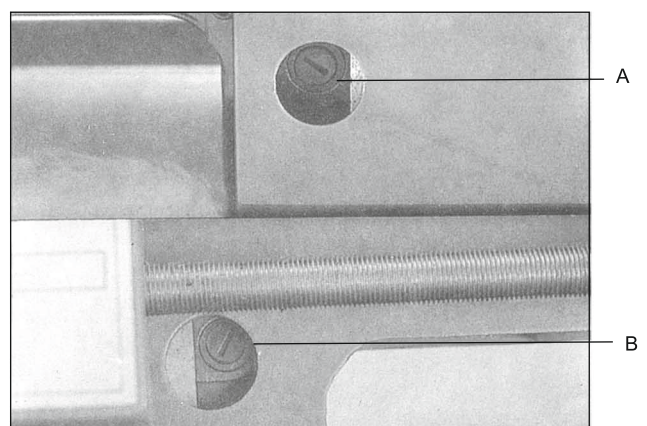


Fig. 10-A  
Fig. 10-B

## Tool Post Adjustment

Loosen the lever shown in (B) of figure 11, to adjust the tool post position. Once the adjustment is made, re-tighten the lever. To replace the work cutter, loosen the screws shown in (A) of figure 11.

## Automatic Feeding

Adjust the feeding direction selector to the direction you desire. Press down the handle (A) in figure 12, and continue with the automatic feeding procedure. When feeding, never try to change the feeding direction.

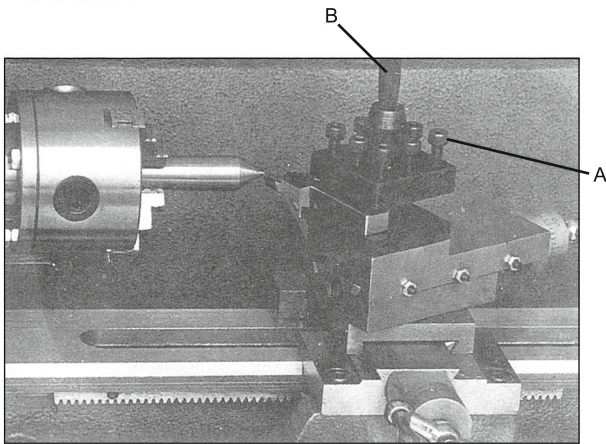


Fig. 11

## Threading

Select the feeding direction selector to the thread direction desired. Then press down handle (A) in figure 12 by matching the right calibrations on the thread dial indicator (B) and continue with the automatic threading procedure. When threading, never try to change the direction. Additional threading instructions are provided on pages 10-12.

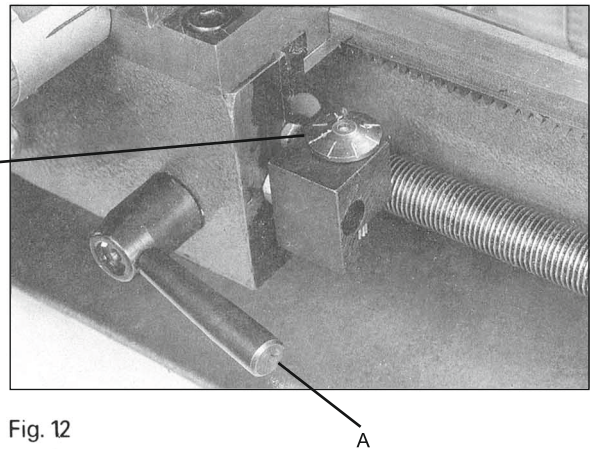


Fig. 12

# Operation

1. Use the chuck to hold the workpiece firmly (figure 13 below). Then, use the rolling center to fix the other end. If you change the rolling center to drilling chuck you can start your drilling immediately.

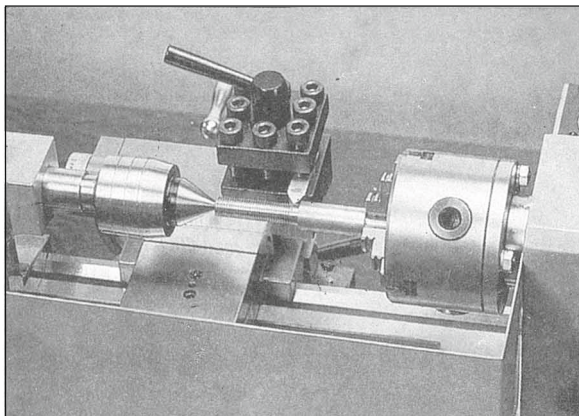


Fig. 13.

2. Use the chuck to hold the workpiece firmly, and use the cutter to start lathe's face cutting (figure 14). The edge of the cutter must be at the same height as the center.

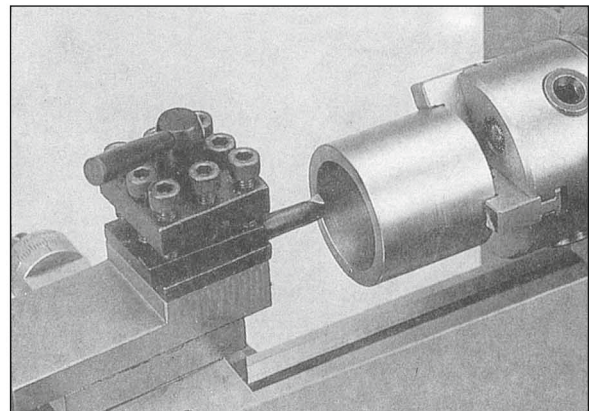


Fig. 14

3. By changing the tool post angle and adjusting the compound rest, you can do internal cutting (figure 15).
4. After adjusting the angle of the compound rest, you can do bevel cutting (figure 16).

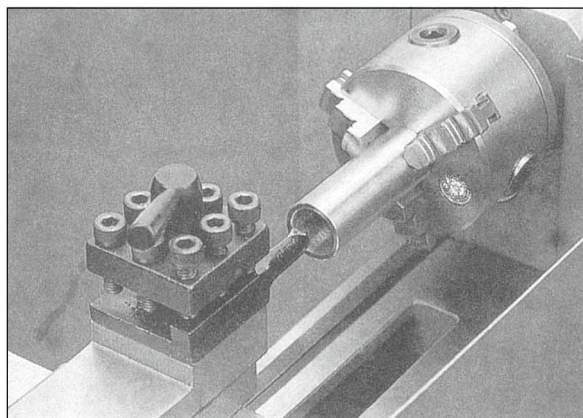


Fig. 15

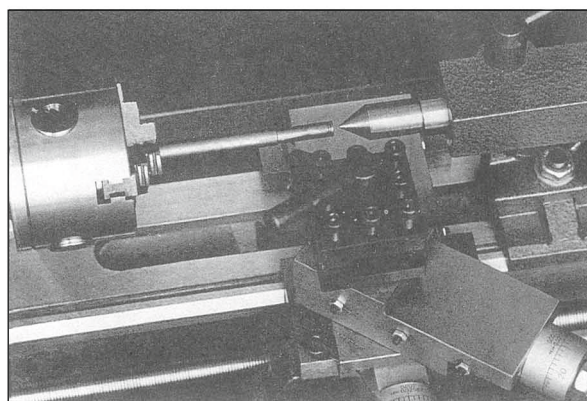
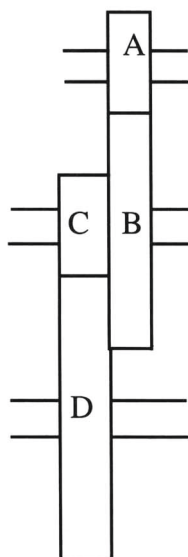
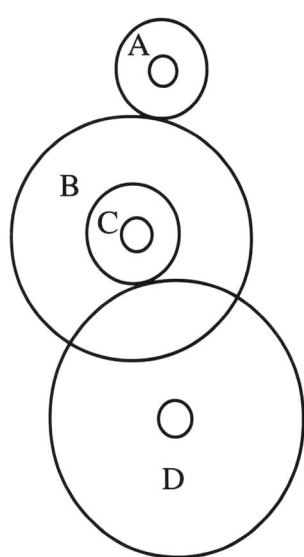


Fig. 16

### Set-Up Instructions for Threading Gears

By changing the gear set-up it is possible to cut most thread sizes. The factory set-up for Mini Lathe gears is as follows (see illustration below):



Position A= 20T  
 Position B= 80T  
 Position C= 20T  
 Position D= 80T

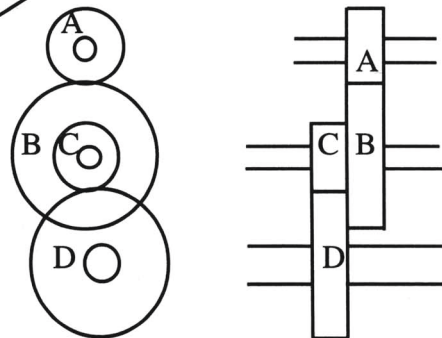
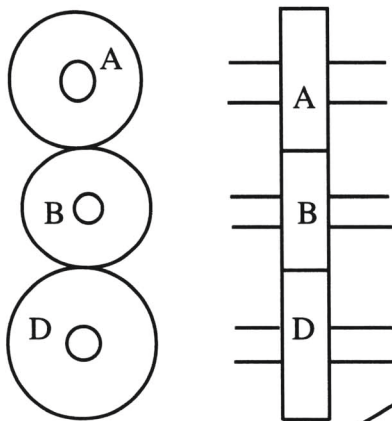
To change the thread size, use the gear box settings shown on the table on the next page.

## Gear Settings for Various Thread Sizes

Thread Per Inch	Stud Gear Box			
	A	B	C	D
12	40			30
13	40	65	60	30
14	40			35
16	40			40
18	40			45
19	40	50	60	57
20	40			50
22	40			55
24	40			60
26	40			65
28	20			35
32	20			40
36	20			45

Thread Per Inch	Stud Gear Box			
	A	B	C	D
38	20	50	60	57
40	20			50
44	20			55
48	20			60
52	20			65
56	20	35	30	60
64	20	40	20	40
72	20	45	20	40
76	20	50	30	57
80	20	50	20	40
88	20	55	20	40
96	20	60	20	40
104	20	65	20	40

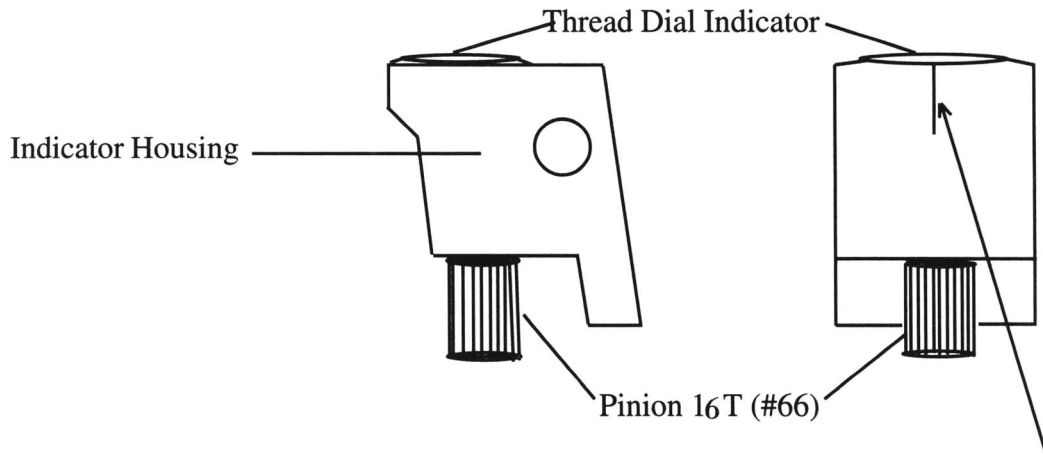
Example: To cut 12 thread per inch (see illustration below), use 40T in position A, 30T in position D, and put any other gear in position B to connect A and D.



Example: To cut 38 thread per inch (see illustration above), use 20T in position A, 57T in position D, 50T in position B, and 60T in position C.

## Additional Set-Up Instructions for Threading Gears

When the lathe is ON and the Spindle (#3) is revolving, the threaded bar (#66 Pinion 16 T) and the Thread Dial Indicator (#65) will also be revolving (see below).



Suggestion: Add an alignment mark on desired setting, and insure that the mark is lined up with the Thread Dial Indicator before operation.

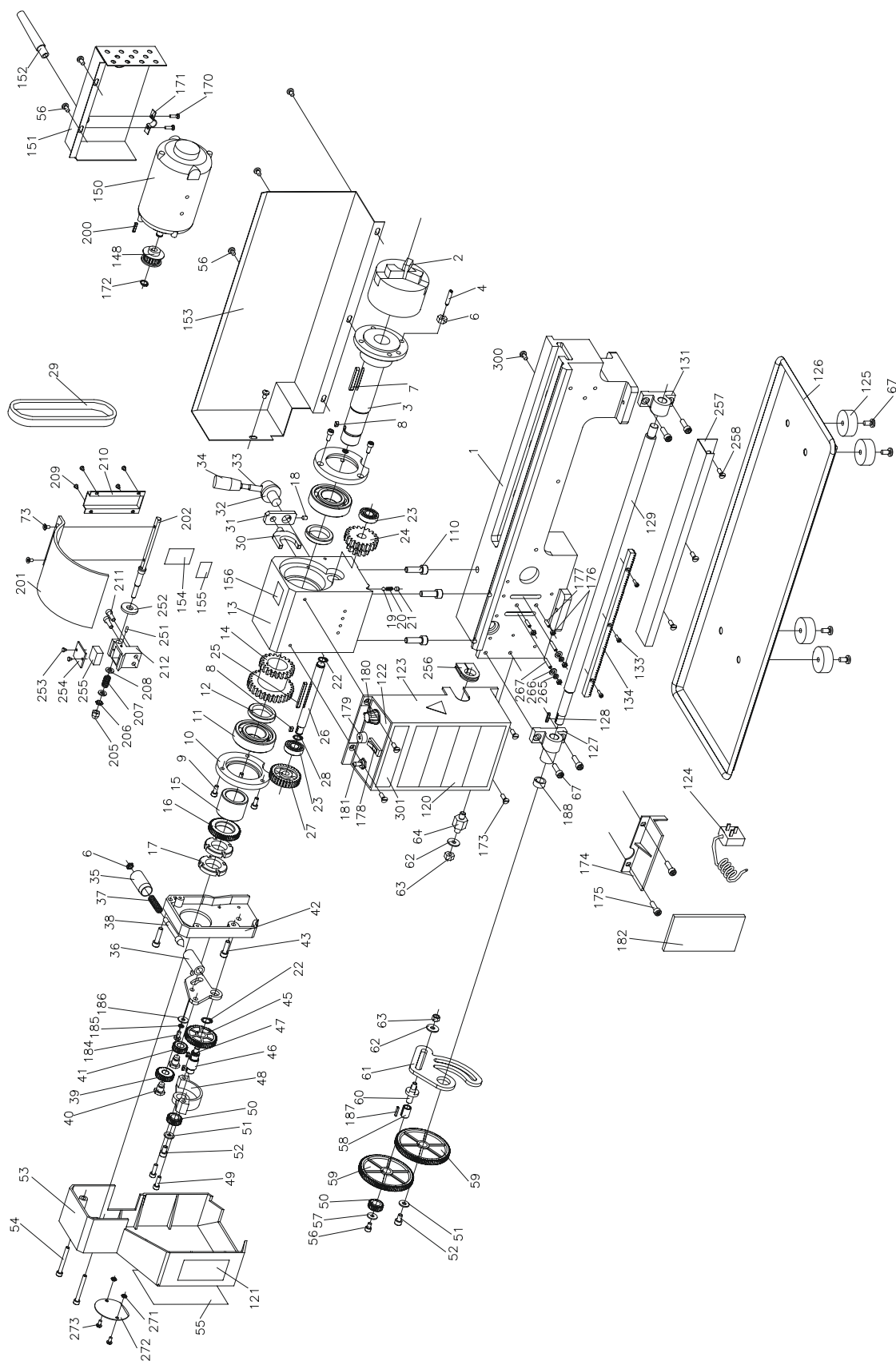
Move the cutting blade to the proper position, and adjust the Thread Dial Indicator to the desired mark. Pull down the Handle (#79) and the Mini Lathe starts threading automatically.

Remember: After thread cutting operation is complete, change back to the factory set-up gear setting:

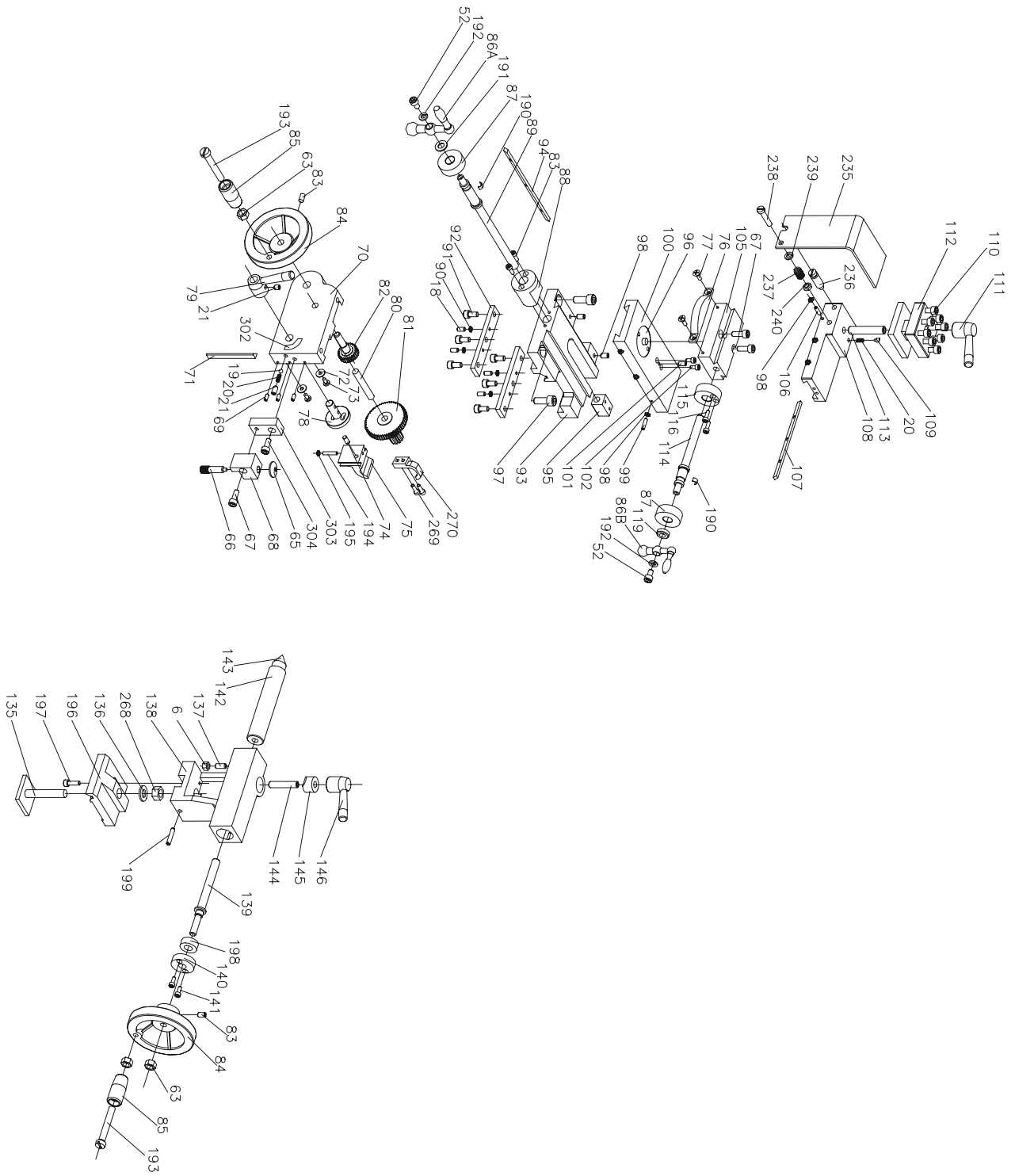
- Position A= 20T
- Position B= 80T
- Position C= 20T
- Position D= 80T



# Assembly Diagram and Parts List



# Assembly Diagram and Parts List



Part No.	Description	Q'ty	Part No.	Description	Q'ty
1	Bed way	1	42	Fixed cover	1
2	3 jaw chuck	1	43	Screw M6x20	2
3	Spindle	1	45	Gear 45T	1
4	Screw M6x25	3	46	Shaft	1
6	Nut M6	5	47	Parallel key 3x8	1
7	Key 5x40	1	48	Mount	1
8	Key 4x8	2	49	Screw M5x18	2
9	Screw M5x12	6	50	Gearwheel 20T	2
10	Cover	2	51	Washer M6	6
11	Ball bearing 80206	2	52	Screw M6x8	2
12	Spacer	2	53	Cover	1
13	Headstock casting	1	54	Screw M5x45	2
14	H/L gear 21T/29T	1	55	thread cutting chart	1
15	Spacer	1	56	Screw M5x8	12
16	Spur gear 45T	1	57	Washer M4	2
17	Nut M27x1.5	2	58	bush w/key	1
18	Set screw M5x8	1	59	Gearwheel 80T	2
19	Steel ball 5	2	60	Shaft	1
20	Comperssion spring	3	61	Support plate	1
21	Set screw M6x8	3	62	Washer 8	3
22	Retaining ring 12	2	63	Nut M8	3
23	Ball bearing 6201Z	2	64	Shaft	1
24	H/L gear 12T/20T	1	65	Dial label	1
25	Parallel key 4x45	1	66	Set screw	1
26	H/L gear shaft	1	67	Screw M6x16	10
27	Pulley	1	68	Dial indicator body	1
28	Retaining ring 10	2	69	Set screw M4x10	3
29	Timing belt L136	1	70	Apron	1
30	Shifting fork	1	71	Gib strip	1
31	Shifting arm	1	72	Washer	2
32	Shifting knob	1	73	Screw M4x8	2
33	Shifting lever	1	74	Shaft	1
34	Shifting grip	1	75	Half nut base	1
35	Handle	1	76	Augle block	1
36	Handle mount	1	77	Screw M4x10	2
37	Spring	1	78	Groove cam	1
38	Indicator	1	79	Handle	1
39	Pinion 25T	1	80	Shaft	1
40	Support screw	2	81	Feeding gear 11T/54T	1
41	Pinion 20T	1	82	Feeding gear 24T	1

Part No.	Description	Q'ty	Part No.	Description	Q'ty
83	Screw M6x10	4	126	Chip tray	1
84	Wheel	2	127	Bracket	1
85	Knob	2	128	Key M3x16	1
86A	Handle big	1	129	Lead screw	1
86B	Handle small	1	131	Bracket	1
87	Dial	2	133	Screw M3x10	3
88	Bracket	1	134	Rack	1
89	Feeding screw	1	135	Clamp plate	1
90	Nut M5	4	136	Washer M10	1
91	Screw M6x12	6	137	Screw M5x16	1
92	Slide plate	2	138	Tailstock casting	1
93	Saddle	1	139	Tailstock screw	1
94	Gib strip	1	140	Bracket	1
95	Feeding nut imperial	1	141	Screw M4x10	2
96	Swivel disk	1	142	Tailstock quill	1
97	Screw M8x20	6	143	Center	1
98	Nut M4	6	144	Stud M8x40	1
99	Screw M4x16	3	145	Clamp	1
100	Cross slide	1	146	Handle	1
101	Screw M5x10	2	148	Pulley	1
102	Screw M4 x 8		150	Motor	1
105	Compound rest(B)	1	151	Cover	1
106	Screw M4x14	3	152	Cable gland	1
107	Gib strip	1	153	Rear splash guard	1
108	Compound rest(A)	1	154	F/N/R ladel	1
109	Position pin	1	155	High-low label	1
110	Screw M6x25	8	156	top warning label	1
111	Clamping lever	1	157*	Gearwheel 30T	1
112	Tool rest	1	158*	Gearwheel 35T	1
113	Stud M10x65	1	159*	Gearwheel 40T	2
114	Cross feed screw	1	160*	Gearwheel 45T	1
115	Bracket	1	161*	Gearwheel 50T	1
116	Screw M4x12	2	162*	Gearwheel 55T	1
119	Nut M18	2	163*	Gearwheel 57T	1
120	Model lable	1	164*	Gearwheel 60T	1
121	Dial indicator label		165*	Gearwheel 65T	1
122	Switch label	1	166*	External jaws(set)	1
123	Control box	1	167*	3-jaw chuck key	1
124	Plug w/cord	1	170	Screw M4x8	1
125	Rubber foot	4	171	Clamp block	1

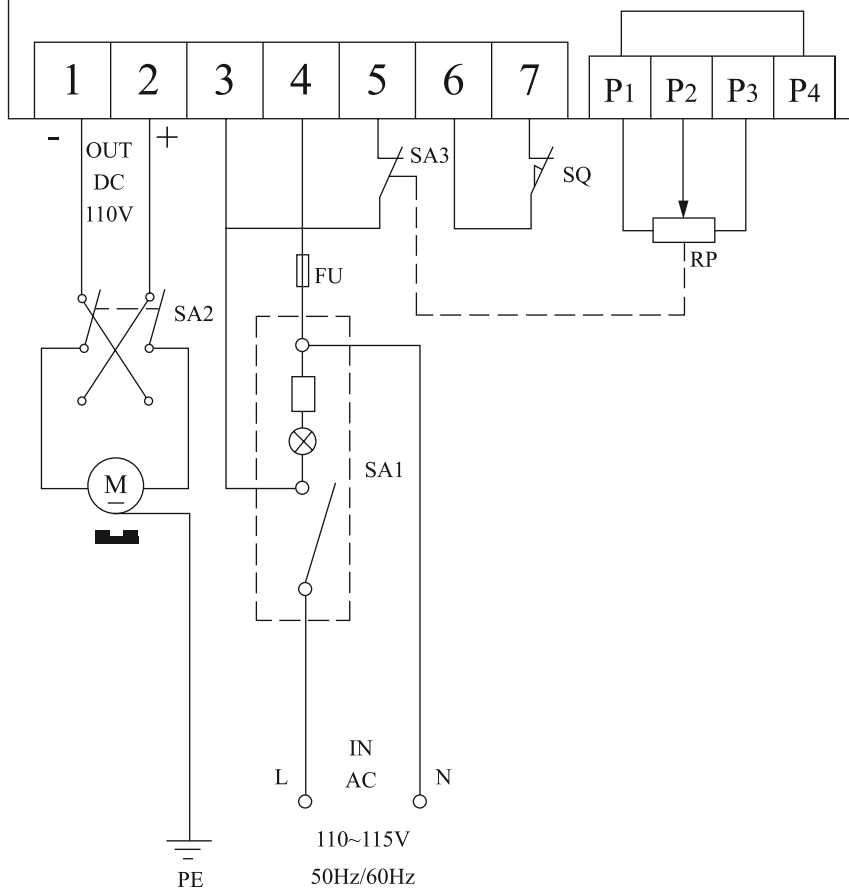
\*Not shown in the explored drawing

Part No.	Description	Q'ty	Part No.	Description	Q'ty
172	Check ring 8	1	235	Protective cover	1
173	Screw M5x10	4	236	Sloting screw	1
174	Protector	1	237	Compression spring	1
175	Screw M5x10	2	238	Sloting Screw M6x30	1
176	Nut M6	2	239	Small washer 6	1
177	Screw M6x25	2	240	Hexagon nut M6	1
178	Power switch	1	251	Round pin	1
179	Fuse box	1	252	Rotate plate	1
180	Variable speed control knob	1	253	Screw 2.9x4,5	2
181	Forward/off/reverse switch	1	254	Cover	1
182	P.C.board	1	255	Micro switch	1
184	Screw M5x10	1	256	Dustproof sleeve	1
185	Spring washer 5	1	257	Protective cover for leadscrew	1
186	Washer 5	1	258	Screw M5x8	3
187	Key 3*16	1	265	Spring washer 6	2
188	Spacer	1	266	Big washer 6	2
190	Spring	2	267	Screw M6x25	2
191	Washer 8	1	268	Nut M10	1
192	Spring washer	2	269	Screw M5x14	1
193	Screw M8x55	2	270	Leadscrew support	1
194	Screw M4x38	1	271	Nut M4	2
195	Nut M4	1	272	Protective cover	1
196	Tailstock plate	1	273	Screw M4x6	2
197	Screw M5x16	1	300	Screw	1
198	Flange	1	301	Label	1
199	Screw M5x25	1	302	Label	1
200	Key 3x12	1	303	Plate	1
201	Chuck protect cover	1	304	Screw M6x12	1
202	Hinge	1	310*	Oil can	1
205	Spring washer 6	1	311*	L hex wrench set S: 3,4,5,6	1
206	Big washer 6	1	312*	Double end wrench 8-10	1
207	Spring	1	313*	Double end wrench 14-17	1
208	Washer 6	1	314*	Fuse	1
209	Screw M3x4	4	315*	Package box	1
210	Switch cover	1	316*	Foamed plastics box	1
211	Screw M5x16	2	317*	Instruction Manual	1
212	Fixed cover	1	318*	Carbon brush set	1

\*Not shown in the explored drawing

# AP

## FC250BJ/110V



## PACKING LIST

No	Description	Quantity	Part NO.
1	7"×12" Mini Lathe	1 piece	
2	Chuck external jaws	3 pieces	
3	Chuck Key	1 piece	
4	Fuse 5 A	1 piece	
5	Gear Z:30, 35, 40, 40, 45, 50, 55, 57, 60, 65	10 pieces	
6	Double head wrench 8-10, 14-17	2 pieces	
7	Inside six horn wrench S: 3, 4, 5, 6	4 pieces	
8	Oilcan	1 piece	
9	Center MT: 2	1 piece	143
10	Rubber	4 pieces	125
11	Knob	2 pieces	85
12	Instruction Manual	1 copy	
13	Wiring Diagram of Control Circuit	1 copy	
14	Warranty Document	1 copy	

VARIABLE SPEED MINI LATHE

MODEL : H72

Instruction Manual



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