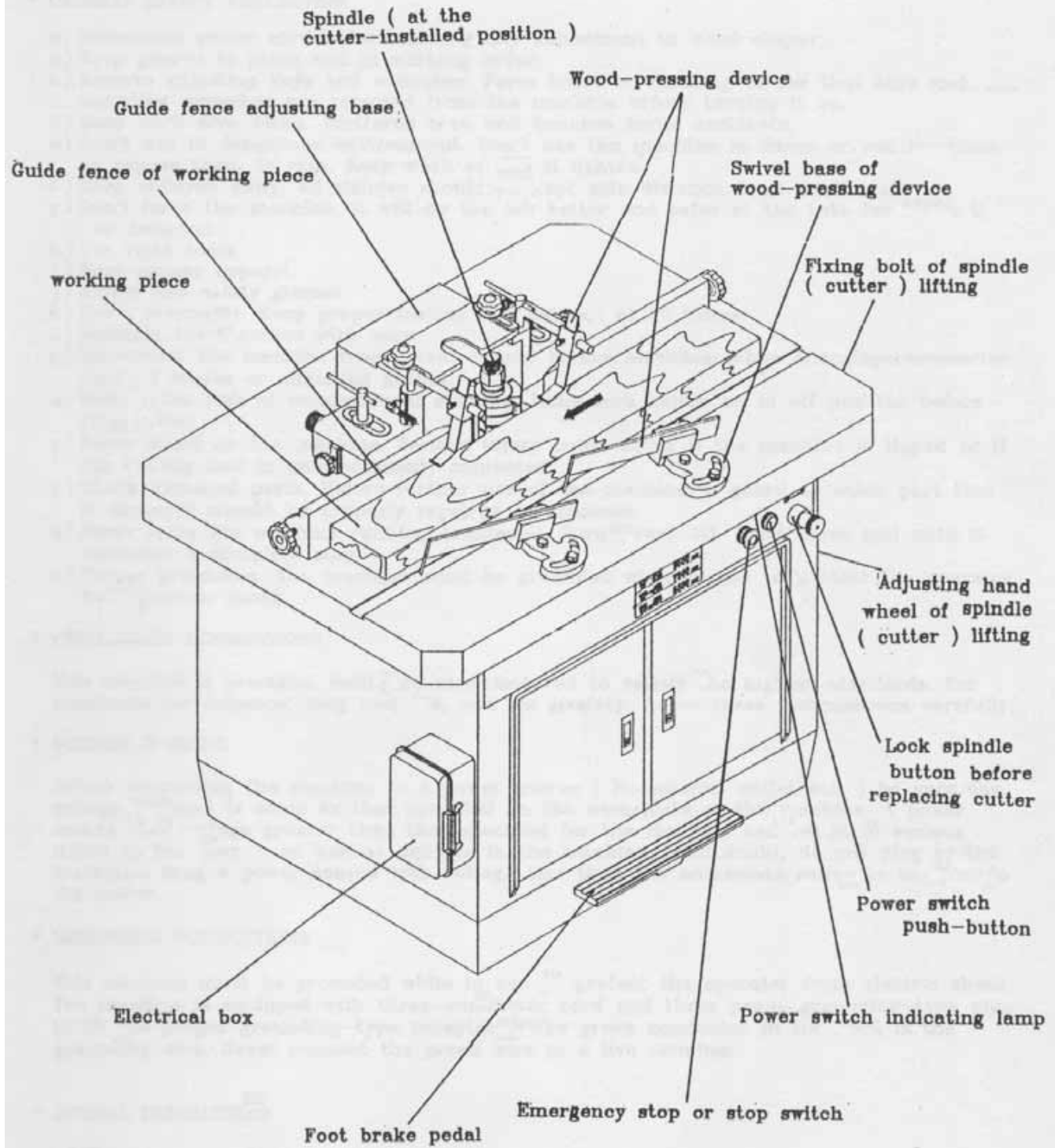


# *ET-150 ET-160*



***EXTREMA MACHINERY COMPANY, INC.***

***P.O. BOX 1450, ALBANY, LOUISIANA 70711  
(877) 398-7362 FAX (225) 567-2966***



## **GENERAL SAFETY RULES**

There is a certain amount of hazard involved with the use of woodworking machinery. Using the machine with the respect and caution demanded as far as safety precautions are concerned will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, severe personal injury to the operator can occur.

1. Read the operation manual before operating this machine.
2. If you are not thoroughly familiar with the machine operation, obtain advice from a supervisor or other qualified person.
3. The machine should be disconnected from the power source before performing maintenance or adjustments to the internal mechanisms, or when making repairs.
4. After maintenance job is finished, check to see if there are any tools or objects left on the machine. Close all safety guards.
5. Before leaving the machine, make sure the work area is clean.
6. Check timber for loose knots, nails, or other items, which may cause a hazard or affect the machine's performance.
7. Learn the machine's applications and limitations, as well as the specific potential hazards peculiar to it. Keep the machine in top condition for best and safest performance.
8. Keep all guards in place and in working order.
9. Do not force the machine. It will do the job better and be safer working at the rate for which it was designed.
10. All children and visitors should be kept a safe distance from the working area.
11. The operator should keep proper footing and balance at all times.
12. Do not operate the machine while under the influence of drugs, alcohol, or any other medication.
13. Avoid awkward operations and hand positions where a sudden slip could cause your hand to move into the machine.
14. Never leave the machine until it comes to a complete stop, and never leave the machine running unattended.
15. The employer is responsible for selecting competent and qualified employees.
16. The employer must make sure that employees study and utilize this safety information.
17. Supervisors must alert personnel of any unsafe practices they observe.
18. All employees should be aware of first aid facilities and be encouraged to use them, regardless of the severity of the injury.
19. Fire prevention must be practiced and fire protection must be available to prevent loss of life, personal injury, and property damage.
20. Safety shoes should be worn to provide protection against rolling objects, falling objects, and sharp edges in the workplace.
21. Eye protection should be worn and such devices should be carefully selected, fitted and used. Compulsory wearing of glasses with impact resistant lenses and side shields is a good safety policy. All eye protection should conform to ANSI 87 standards.
22. Wear hearing protection when operating the machine.
23. Do not wear rings, necklaces or jewelry around moving machinery.
24. Do not wear loose fitting clothes. Clothing should be comfortable, but long sleeves, neckties, etc. should not be worn.
25. Do not wear gloves or other hand covering articles around moving machinery.
26. Cover long hair with a hair net or cap.

27. Protective guards and shields must be in place at all times unless they must be removed for specific service or maintenance. They should be immediately replaced when service or maintenance is completed.
28. Make sure that operator clearly knows how to stop the machine before starting work.
29. Never clean or remove chips while the machine is running.
30. Maintain the machine in good operating condition. Report unusual conditions or machine malfunctions immediately.
31. Do not alter or remove guards and warning labels.
32. Keep the immediate area clean. Do not allow the floor to become slippery, or covered with dust or obstacles. Dust that accumulates in the work area is a hazard that can cause you to fall or slip against the machine or its controls.
33. Employees should be required to report to their supervisors any hazardous condition of the machine or in the immediate area.

### **SHIPPING & RECEIVING INSTRUCTIONS**

This machine has been carefully inspected and tested before packing. It was delivered in good condition and was shipped in one wooden pallet.

When receiving this machine, inspect the wooden pallet and check to see if there is any damage. Then check the machine model and all items as according to the packing list.

If there is any damage on the machine or any missing parts, report it to your local distributor or the machine manufacturer immediately.

### **UNPACKING & CHECKING CONTENTS**

The machine has been well packed at the manufacturer's factory and shipped in good condition. The machine is shipped in one wooden pallet.

Upon receiving the machine, carefully unpack it and check all items as according to the packing list.

If you find any part is missed or damaged, contact your local distributor or the manufacturer of the machine immediately. Do not attempt to operate the machine until the missing parts are obtained and are installed correctly.

### **CLEANING THE MACHINE**

The machine is coated with rust preventative oil before shipment. When the machine has been moved to the proper work site, wipe the oil from the machine using a soft cloth soaked in kerosene. Do not use gasoline, lacquer thinner, or any other volatile solvent, as these may damage the paint surface of the machine.

## **LIFTING THE MACHINE**

The machine should be lifted or moved by a forklift. Make sure the loading capacity of the forklift is sufficient to raise the machine. Pay special attention to the machine balance while lifting the machine to prevent the machine from falling. The forks of the forklift must protrude over the machine bottom for uniform distribution of the entire machine weight.

## **ELECTRICAL SAFETY RULES**

**WARNING:** Always disconnect electrical plug from power source before making any adjustment, performing any maintenance or cleaning.

1. Do not alter or bypass any protective interlock.
2. Before starting the machine, read and observe all warning labels and markings such as nameplates and identification plates.
3. Only personnel who are properly trained and have adequate knowledge and skill should undertake all electrical/electronic troubleshooting and repair.
4. Use extra precautions in damp areas to prevent yourself from accidental grounding.
5. Make sure your body and your tools are clear of electrical grounding.
6. The control panel doors should be opened only when it is necessary to check the electrical equipment or electrical wiring.
7. Before applying power to any equipment, establish without a doubt that all persons are clear.
8. Be alert and be sure you can work with no outside distractions.
9. Avoid wearing metal frame glasses or wearing a metallic necklace or chain, and never work on electrical equipment while wearing rings, watches, or bracelets.
10. When replacing conductors, make sure they conform to the manufacturer's specifications, including proper color-coding.
11. Do not alter the electrical circuits. If machine damage is caused by an unauthorized alteration, the user is responsible, not the manufacturer.
12. Always assume the electrical power is ON and treat circuit as live. This caution develops a habit that may prevent an accident.
13. Give capacitors time to discharge. Otherwise, it should be done manually with care.
14. Use proper test equipment to make certain you have an open circuit. Test equipment must be checked and calibrated at regular intervals.
15. Open the control panel doors only when it is necessary to check the electrical equipment or wiring. After closing the door, make sure the disconnecting means are operating with the disconnecting handle mechanism in its proper position.
16. All covers on junction boxes must be closed before leaving any job.

## **VOLTAGE WARNING**

Before connecting the machine to a power source be sure the voltage supplied is same as that specified on the nameplate of the machine. A power source with voltage greater than that specified for the machine can result in serious injury to the user as well as damage to the machine. If in doubt, do not plug in the machine. Using a power source with voltage less than the nameplate rating is harmful to the motor.

## **GROUNDING INSTRUCTIONS**

This machine must be grounded while in use to protect the operator from electric shock. The machine is equipped with three-conductor cord and three-prong grounding type plug to fit the proper grounding type receptacle. The green conductor in the cord is the grounding wire. Never connect the green wire to a live terminal.

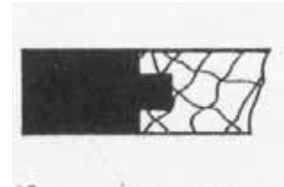
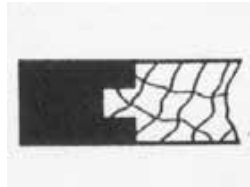
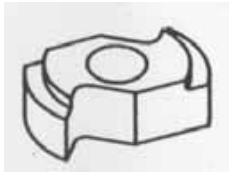
## **SPECIAL PRECAUTIONS**

1. Wear eye protection.
2. Never perform shaping operation with safety guard removed.
3. Maintain the proper relationship of infeed and outfeed table surfaces and cutterhead knife path.
4. Support the work piece adequately at all times during operation. Maintain control of the work at all times. Use rollers or outfeed table with long, heavy stock.
5. Do not back the work toward the infeed table.
6. Do not attempt to perform an abnormal or seldom used operation without study and the use of adequate hold-down/push blocks, jigs, fixtures, stops, etc.
7. Disconnect the machine from the power supply while the motor is being mounted, connected, or reconnected.
8. Keep cutters sharp and free of all rust and pitch.
9. Never run the stock between the fence and the cutter.
10. The fence should be adjusted endwise so the opening is never more than that is required to clear the cutter.
11. Disconnect the machine from power source when making repairs.

## SPECIFICATIONS

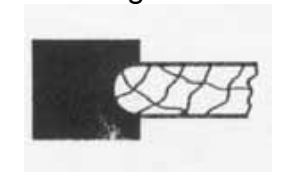
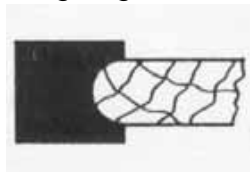
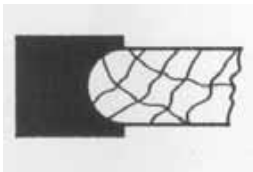
Table Height	33"
Table Area	44 1/2" x 33"
Motor ( <i>XT-150</i> )	5HP, 1PH; 7 1/2HP, 3PH
Motor ( <i>XT-160</i> )	10HP, 3PH
Spindle Speed	5500/7000/8500 RPM
Rise and Fall of Spindle	5"
Packing Size (L x W x H)	49" x 41" x 46 1/2"
Net Weight	1,166 lb
Gross Weight	1,386 lb

## AVAILABLE CUTTERS



3/18" Tonguing Cutter

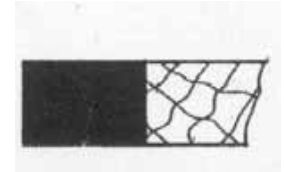
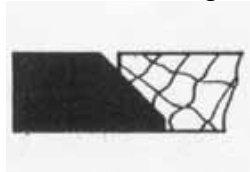
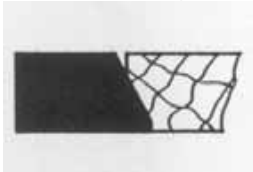
3/18" Grooving Cutter



1" Diameter Nosing Cutter

7/8" Diameter Nosing Cutter

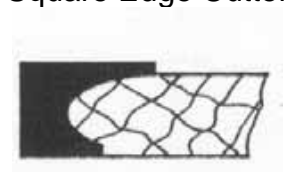
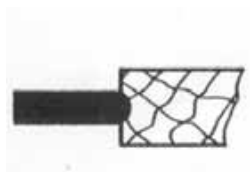
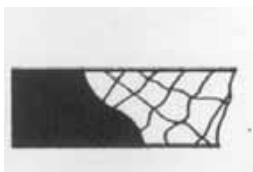
3/4" Diameter Nosing Cutter



30° Angle Cutter

45° Angle Cutter

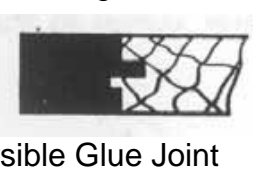
1 1/2" Square Edge Cutter



3/4" Radius Ogee Cutter

1/4" Radius Cutter

Table Edge Cutter



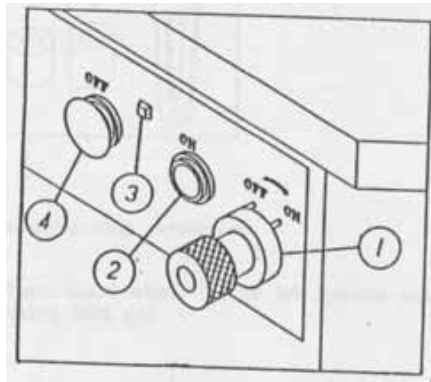
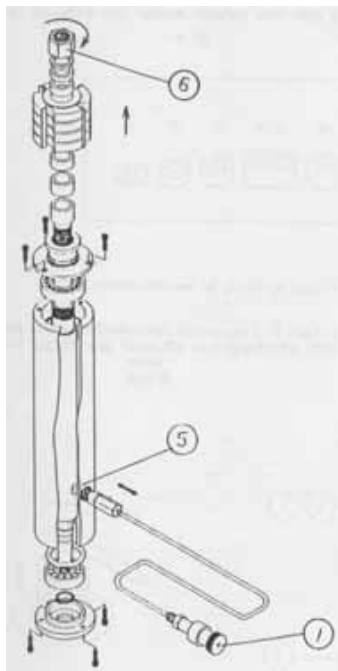
Reversible Glue Joint

5/18" Radius Ovolo Cutter

NOTE: These solid profile cutters cut a true shape indefinitely; re-sharpening does not alter the original profile. No setting is required—they slip straight onto the spindle. May be used singly or stacked. Those illustrated are all 30mm bore.

## OPERATING INSTRUCTIONS

### Replace or Install Spindle Cutter



- (1) Lock spindle button before replacing cutter (Manual brake button)
- (2) Start push button
- (3) Power indicating lamp
- (4) Emergency stop or stop switch

Fig. 1 Manual Brake Fixing Spindle

Disconnect plug from power source.

- A. First, turn the manual brake button (1) shown on Fig. 1 to the "OFF" position to fix the spindle shown as (5). Then, loosen spindle nut (6) with a wrench. After that, replace or install cutter on the spindle. Tighten the nut after completion of replacement or installation.
- B. If shaping irregular material, make the convex of working table ring shown as Fig. 2 toward upwards that is helpful to do shaping. When cutter is installed well, be sure to turn the manual brake button to the "ON position to let machine run.

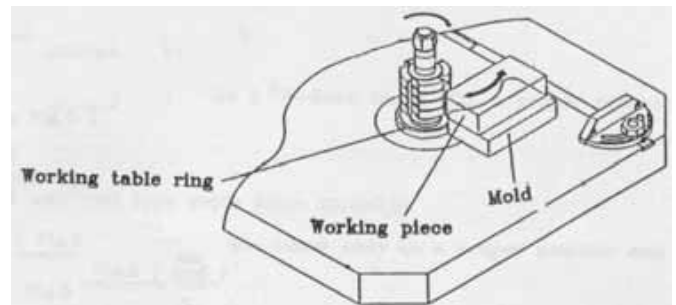


Fig. 2 The Usage of Working Table Ring



C. The thickness of spacing ring that is the main accessory in parts box has 5mm, 10mm, 20mm, 25mm, and 30mm. The different spacing rings can be replaced according to the different thickness of working pieces shown as Fig. 3. Then the thickness of spacing ring is installed well, tighten nut with a wrench.

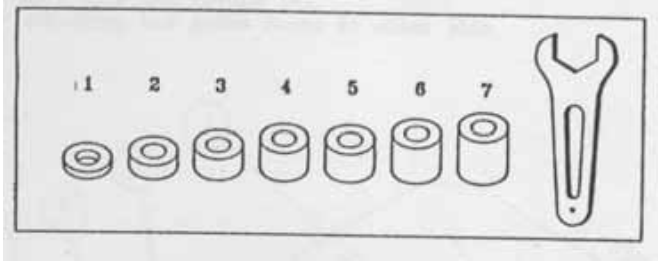


Fig. 3 Accessories in Parts Box—Spacing Ring, Wrenches

D. Spindle lifting adjustment shown as Fig. 4. Turn hand wheel (1) to let spindle reach the desired height and then fix the spindle with fixing bolt (2).

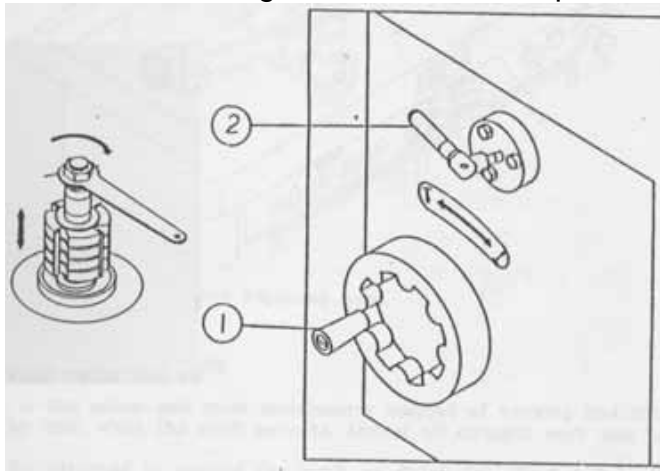


Fig. 4 spindle Lifting Adjustment

### Hold-Down Body Installation

Loosen the pressure adjusting bolt (1) to adjust the hold-down block with a proper pressure and then lock the bolt tightly. (Fig.5)

## The Operation of Guide Fence

Disconnect plug from the power source. This machine has the fixed and universal type guide fence available.

### A. Fixed type guide fence:

Loosen the fixed handle (2) (Fig.5) and move the fence body to a proper position and then lock the handle (2).

### B. Universal type guide fence:

1. Loosen the fixed handle (2) (Fig. 5) and move the fence body to a proper position and then lock the handle (2).
2. Loosen the two screw bolts (3) and move the fence plate (NOTE: do not touch with cutter) to a proper position and then tighten the two bolts (3) with wrench.
3. Loosen the handle (4) according to the cutting size required, adjust micro adjusting knob (5) and then lock the handle (4).
4. Same way for adjusting the guide fence in other side.

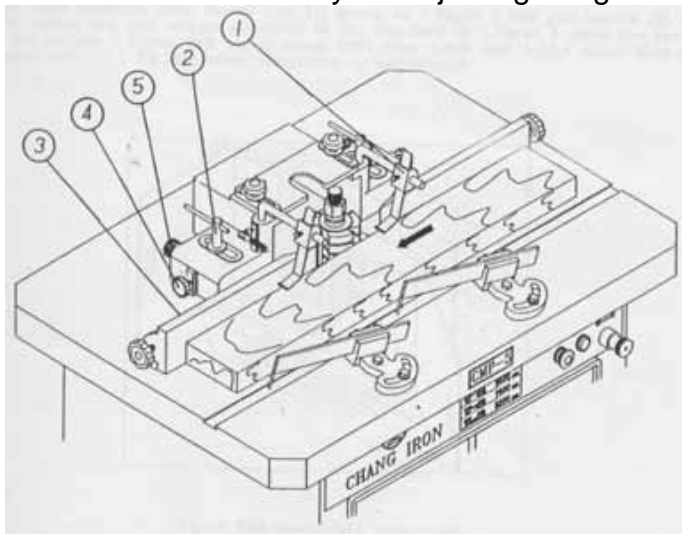


Fig. 5 Guide Fence Adjusting Base

## Shaping When Using the Fence as a Guide

Shaping with the fence is the safest and most satisfactory method of working and this method should always be used when the work permits. Almost all straight work can be used with the fence. The rear fence should be advanced to contact the work, as shown in Fig. 6 and 7.

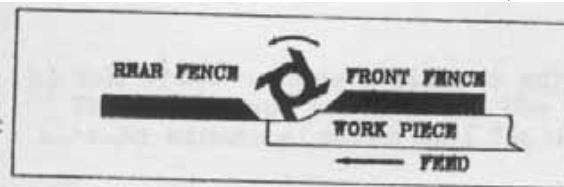


Fig. 6

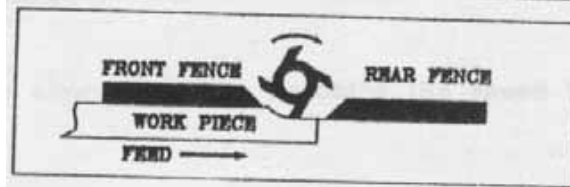


Fig. 7

The rear fence will then be in line with the cutting circle. For average work, where a portion of the original edge of the work is not touched by the cutter, both the front and rear fence are in a straight line, as shown in Fig. 8. When the shaping operation removes the entire edge of the work, e. g. in jointing or making a full bead, the shaped edge will not be supported by the rear fence when both fences are in line, as shown in Fig. 9. In this case, the work should be advanced to the position shown in Fig. 9 and stopped.



Fig. 8



Fig. 9

### Belt Loose/Tight Adjustment

First, open machine door, loosen bolt (1) shown as Fig. 10 and pull handle (2) out. Then, adjust two belt wheels according to the standard of Fig. 11. Move the two belts on the pulleys. (Upper belt pulley speed 5500 rpm; Lower belt pulley speed 9500 rpm). Tighten bolt (1) in Fig. 10 after completion of adjustment.

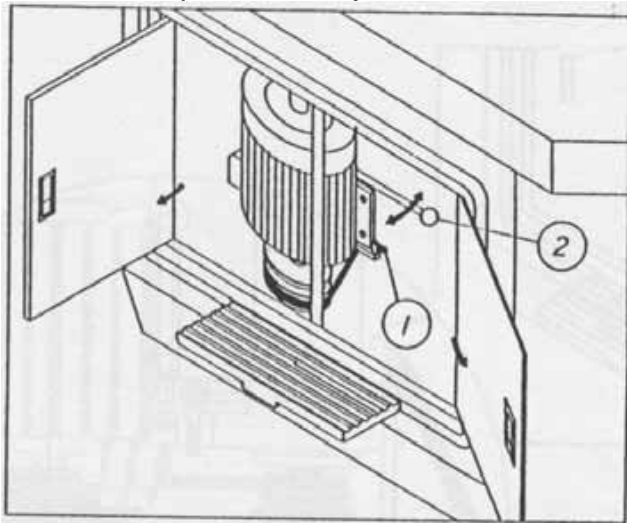


Fig. 10 Belt Loose/Tight Adjustment

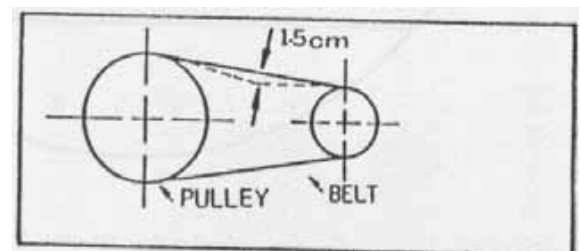


Fig. 11 the Standard of Belt Loose/Tight Adjustment

### Belt Wheel Variable & Stepped Adjustment

The adjustment procedure is the same as above mention. Matching the speed table below to do adjusting shown as Fig. 12.

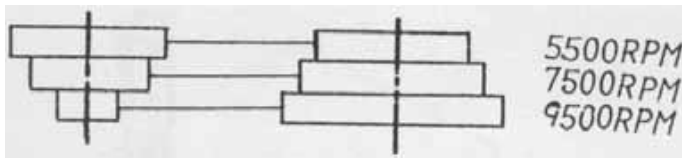


Fig. 12 Belt Wheel Variable & Stepped Adjustment

### Foot Brake System

When the machine is in the operation, if an emergency occurs, and you want to stop running, hit the yellow pedal with foot so that the power will be immediately cut down and spindle stops running. Its structure is shown as Fig. 13.

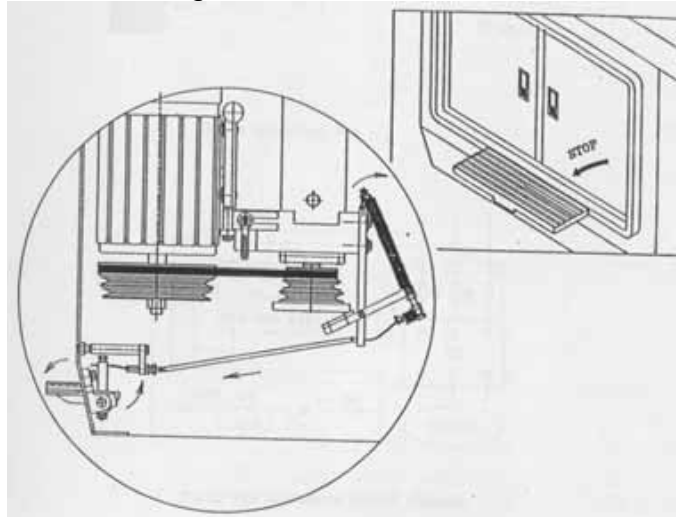


Fig. 13 Foot Brake System

### Electrical Trouble Shooting

If cutting load is too large, the overload relay will automatically cut down power and ON-OFF will lose its function. You must open the electrical box and press "A" button to start it again (see Fig. 14). Overload setting and adjusting circuit shown as Fig. 15.

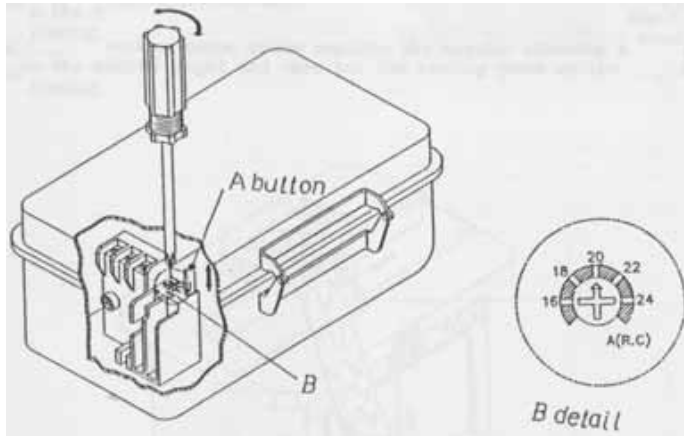


Fig. 14 Electrical Box

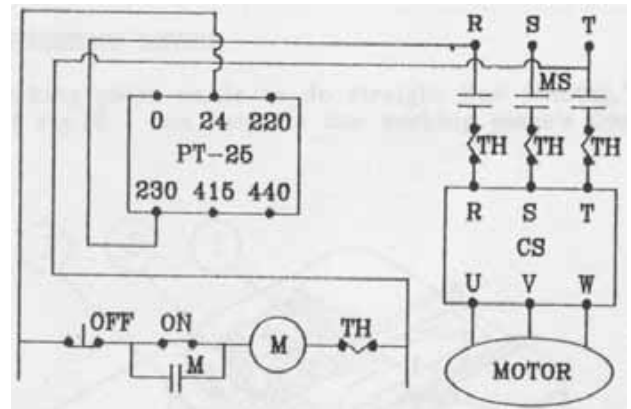


Fig. 15 The Machine's Circuit Diagram

### Clear the Chips

If there are a lot of chips accumulated in the working table ring (1) that makes the working table ring not seat properly. Remove the working table ring to clear chips away (see Fig. 16).

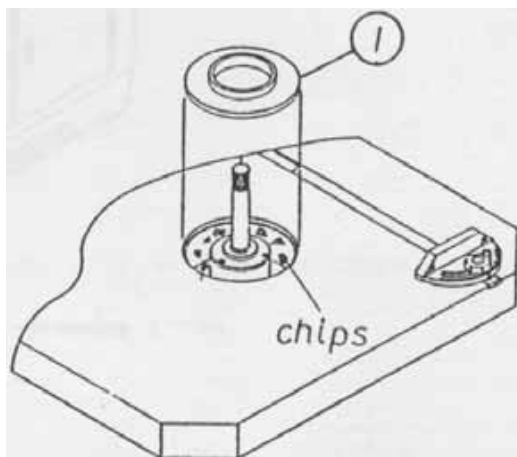


Fig. 16 Remove the Working Table Ring to Clear Chips Away

### The Usage of Angular Adjusting Disc

If shaping angular working piece, regulate the angular adjusting disc (1) shown as Fig. 1 to the desired height and then put the working piece on the angular adjusting disc to do shaping.

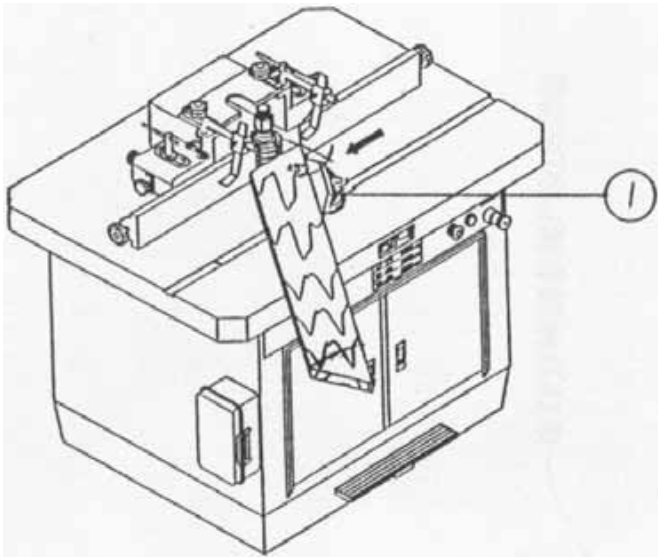


Fig. 17 The Usage of Angular Adjusting Disc

### The Usage of Wood-Pressing Device

If thicker or wider working piece wants to do straight line shaping, the wood-pressing devices (1) (2) (3) (4) shown as Fig. 18 can help fix the working piece's upper and side to avoid it declining to one side.

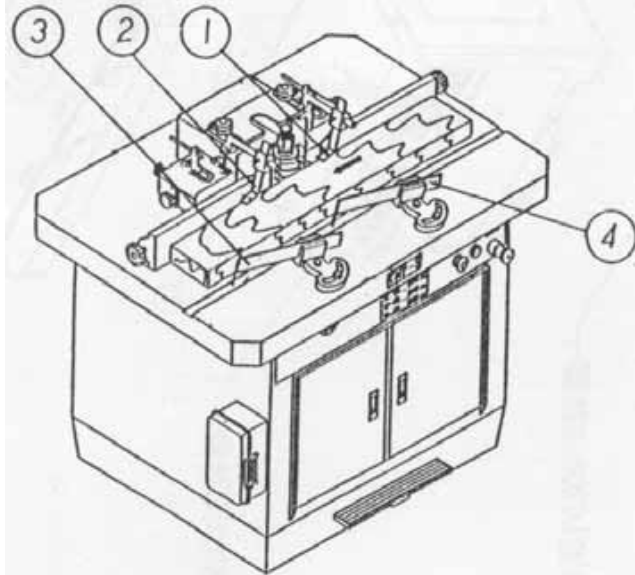
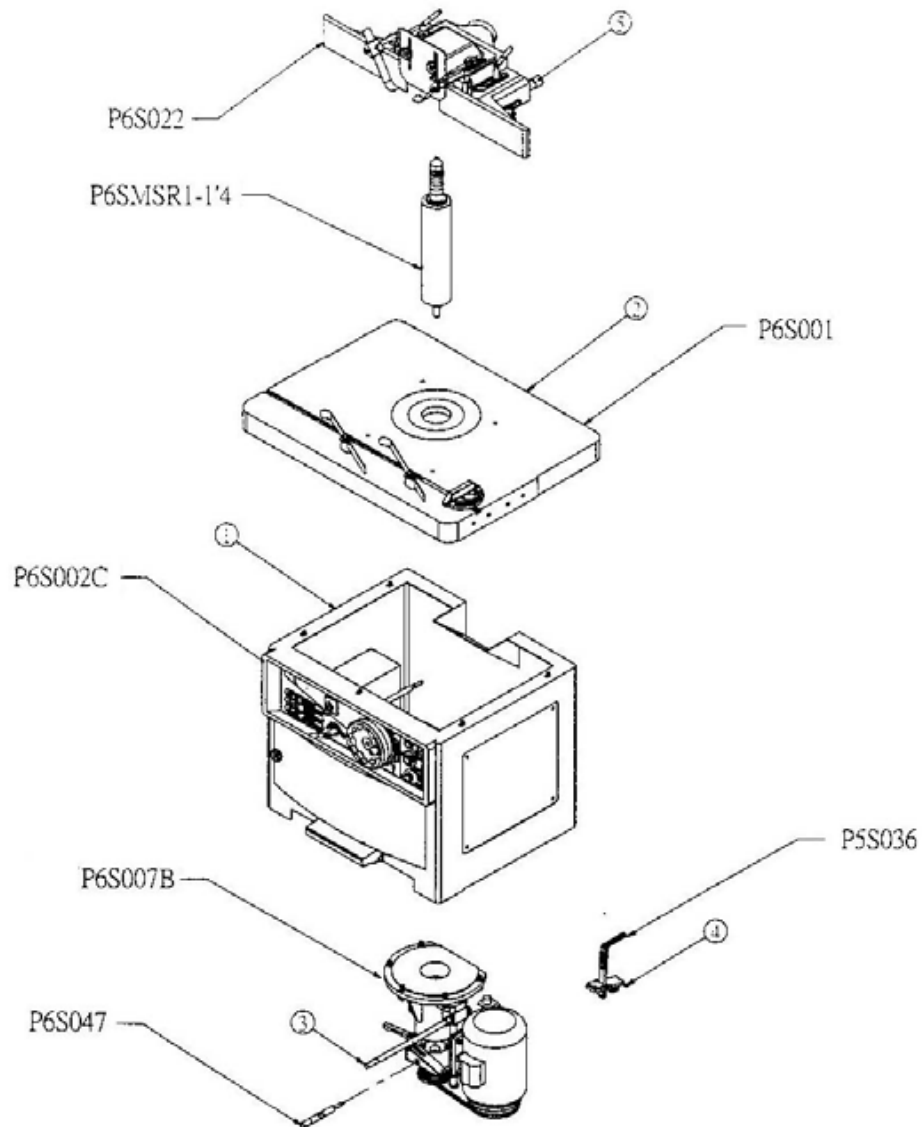


Fig. 18 The Usage of Wood-Pressing Device

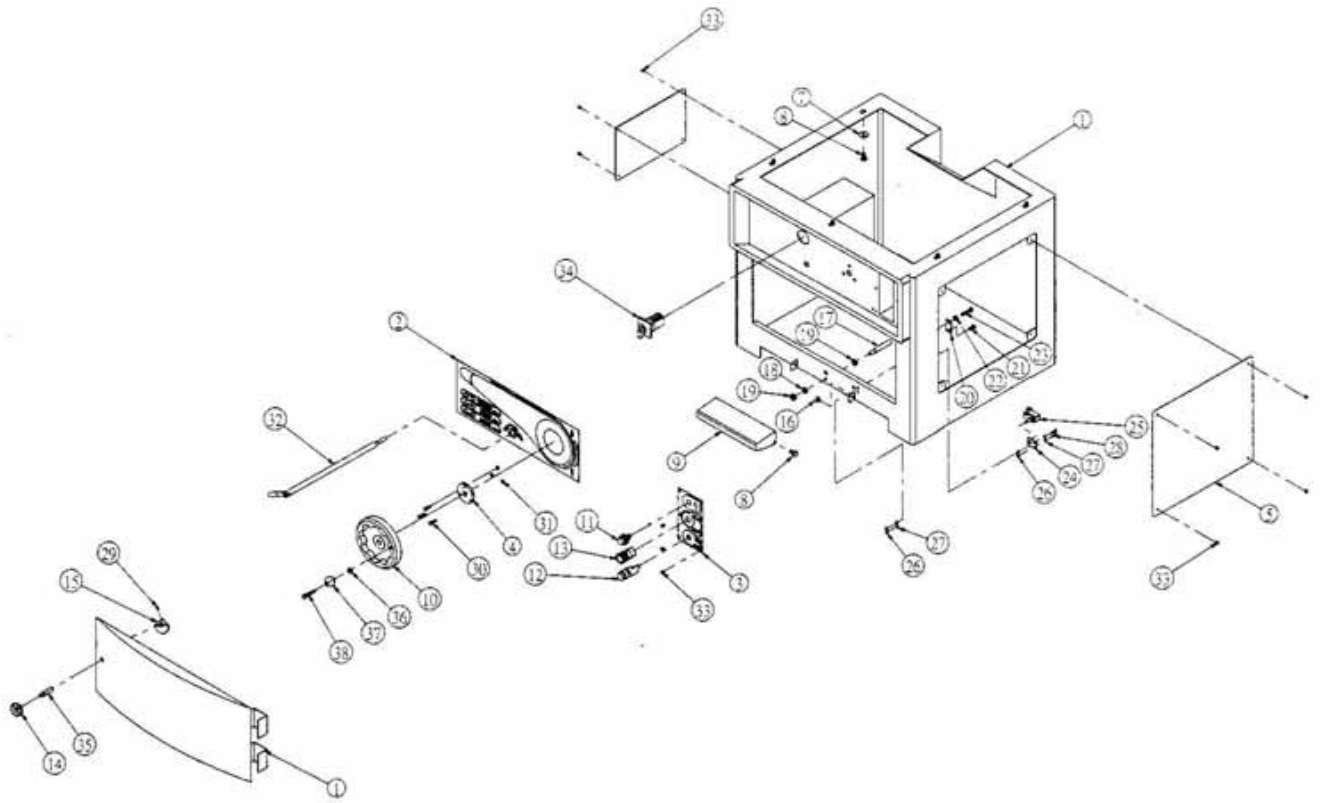
## PARTS LIST

No	Part Description	Qty	Part No
1	Base Assembly	1	P6S002C
2	Table Assembly	1	P6S001
3	Spindle Seat Assembly	1	P6S007B
4	Brake Flat Assembly	1	P5S036
5	Fence Frame Assembly	1	P6S022
6	Brake Rod Assembly	1	P6S047
7	Main Spindle Assembly (1-1/4")	1	P6SMSR1-1'4

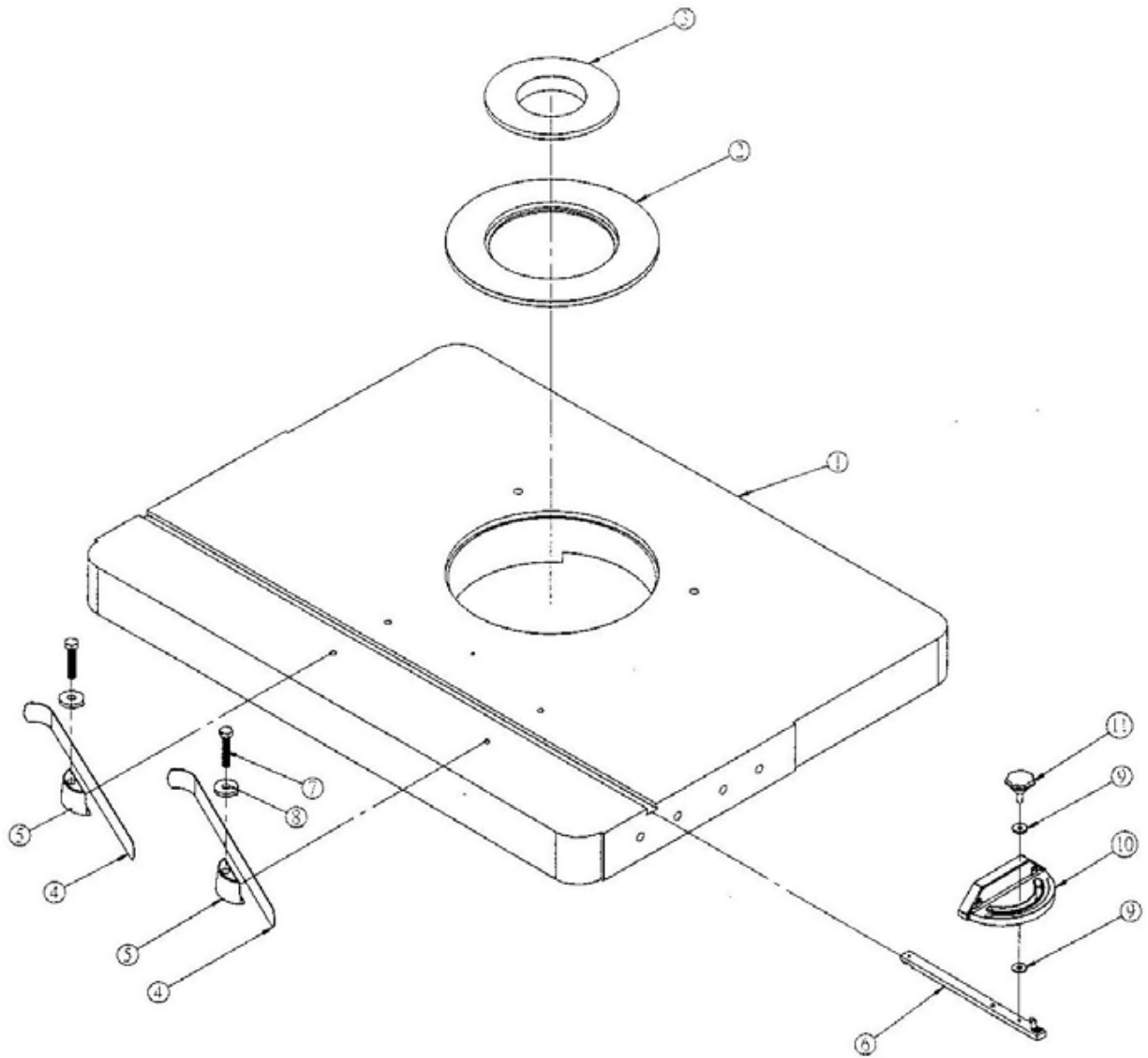


No	Part Description	Qty	Part No
1	Base	1	P6002C
2	Switch Plate	1	EPP6A
3	Switch Plate	1	EPP6B
4	Flange	1	3A006
5	Cover	1	P6006
6	Cover	1	P6013B
7	Washer (34x1/2x3mm)	5	SE1-2
8	Hex Bolt (M12x20mm)	7	A1220
9	Foot Pedal	1	P6017
10	Hand Wheel	1	P6012
11	Push-Button Switch (White)	1	PK004
12	Push-Button Switch (Green)	1	PK002
13	Switch (Red)	1	PK010
14	Lock Knob (1/2")	1	FKJ1-2
15	Lock	1	P6019
16	Nut Check (M12)	2	AA12
17	Bolt	1	P5034
18	Spring Washer (1/2")	1	SS1-2
19	Hex Nut (1/2")	2	ARB1-2
20	Flat Iron Plate	1	P5035
21	Hex Nut (3/8"x3/4")	1	AB3-806
22	Hex Nut (3/8")	1	AR3-8
23	Hex Head Bolt (3/8"x1-3/4")	1	A3-816
24	Micro Switch Plate	1	20V003
25	Figure Watch	1	PK019
26	Hex Nut (M6)	4	ARE6
27	Spring Washer (1/4")	4	SS1-4
28	Hex cap Bolt (M6x20mm)	2	AC620
29	Hex Socket Head Fixing Bolt (M8x10mm)	1	AS810
30	Hex Head Bolt (M8x25mm)	3	A825
31	Hex Nut (M8)	3	ARE8
32	Locking Knob	1	P6W035
33	Crosshead Bolt (M6x10mm)	14	AXB610
34	Forward-Reverse Switch	1	PK050
35	Knob	1	P6052
36	Hex Nut (3/8")	1	ARB3-8
37	Knob (50x3/8")	1	FD3-8S
38	Hex Head Bolt (3/8"x2")	1	A3-82

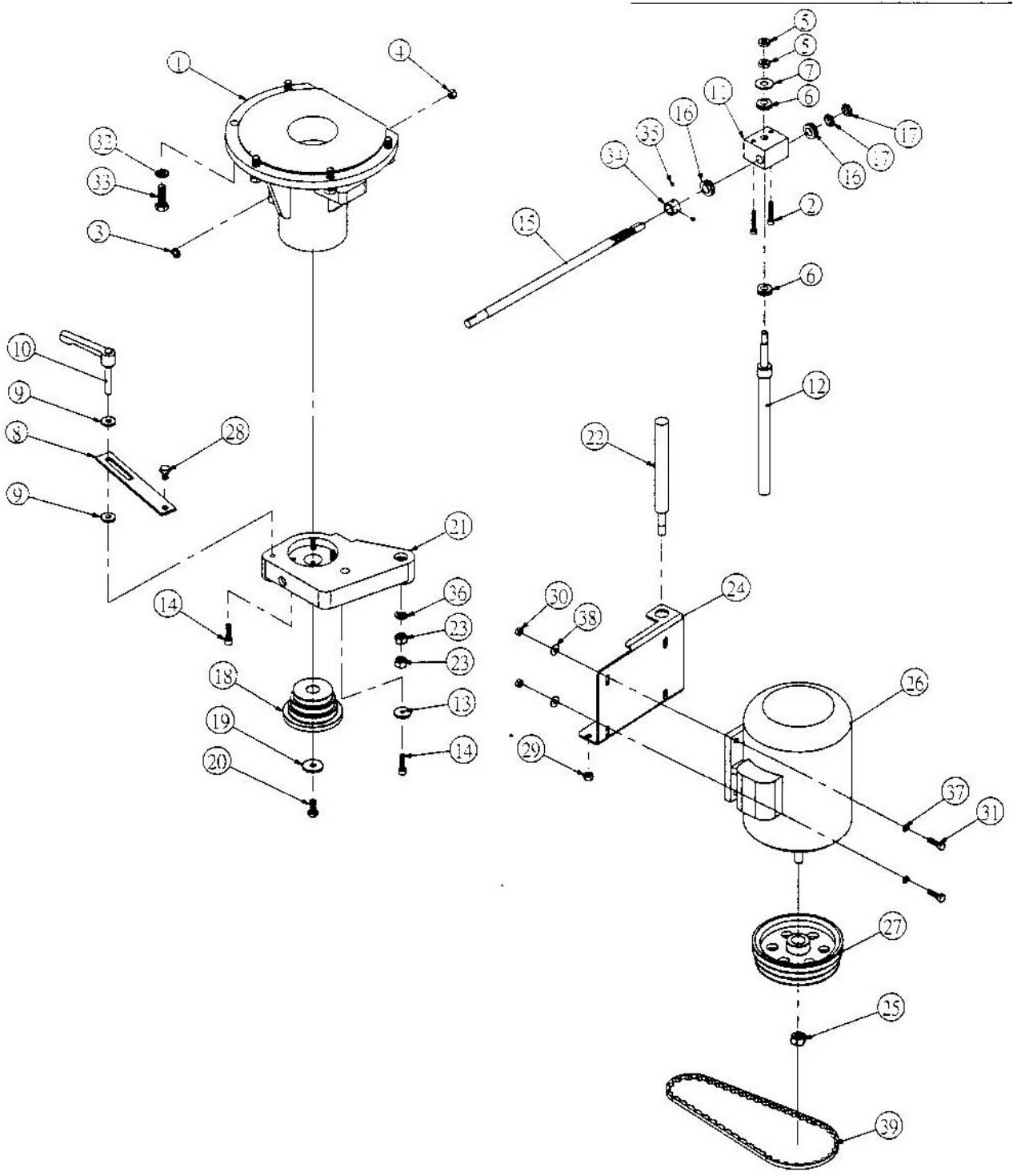




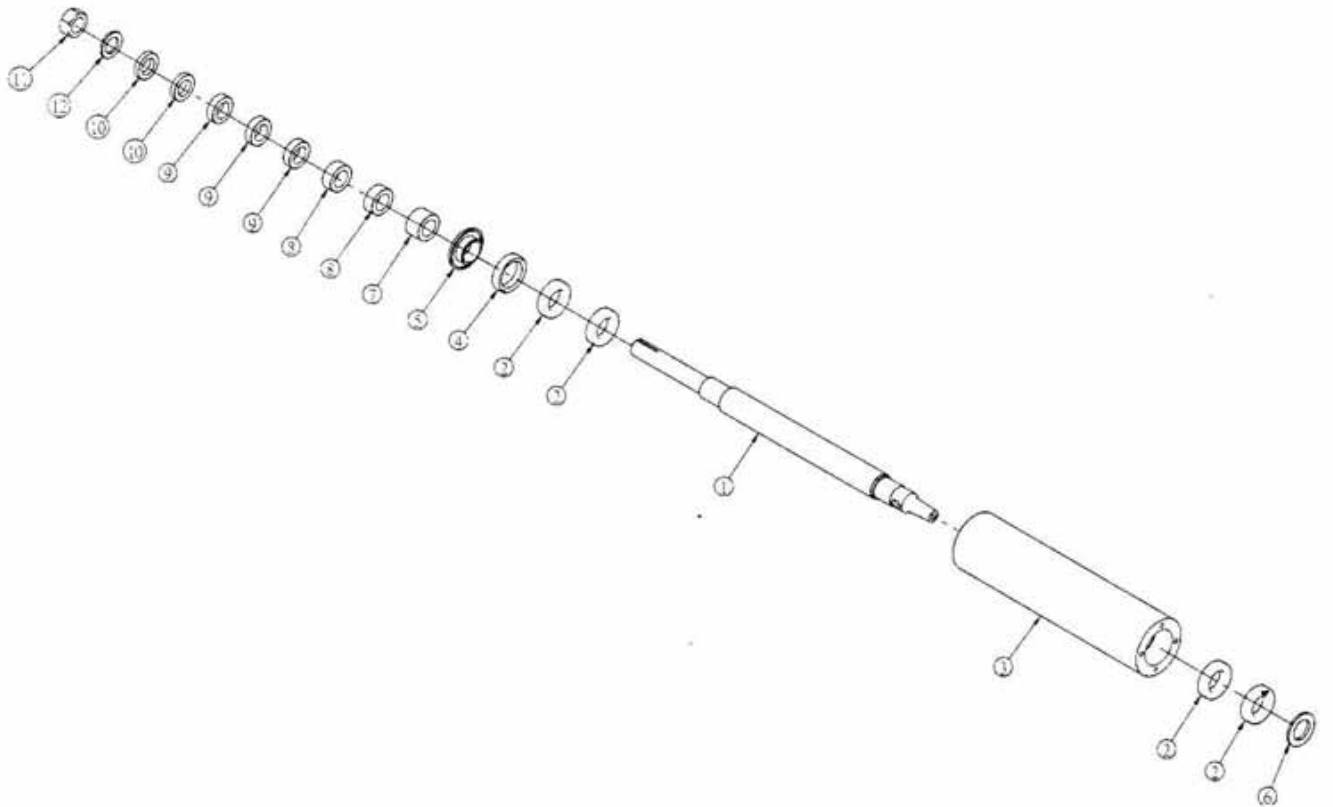
No	Part Description	Qty	Part No
1	Table	1	P6001
2	Table Ring	1	P5009A
3	Table Ring	1	P5009
4	Spring Plate	2	P6003
5	Bracket Support	2	P6020
6	Guide Bar	1	3SW037
7	Hex Head Screw (M12x60mm)	2	A1260
8	Washer	2	P6024
9	Washer (23x5/16"x3mm)	2	SE5-16
10	Miter Gauge	1	3A039
11	Lock Knob (5/16"x7/8")	1	FS5-1607



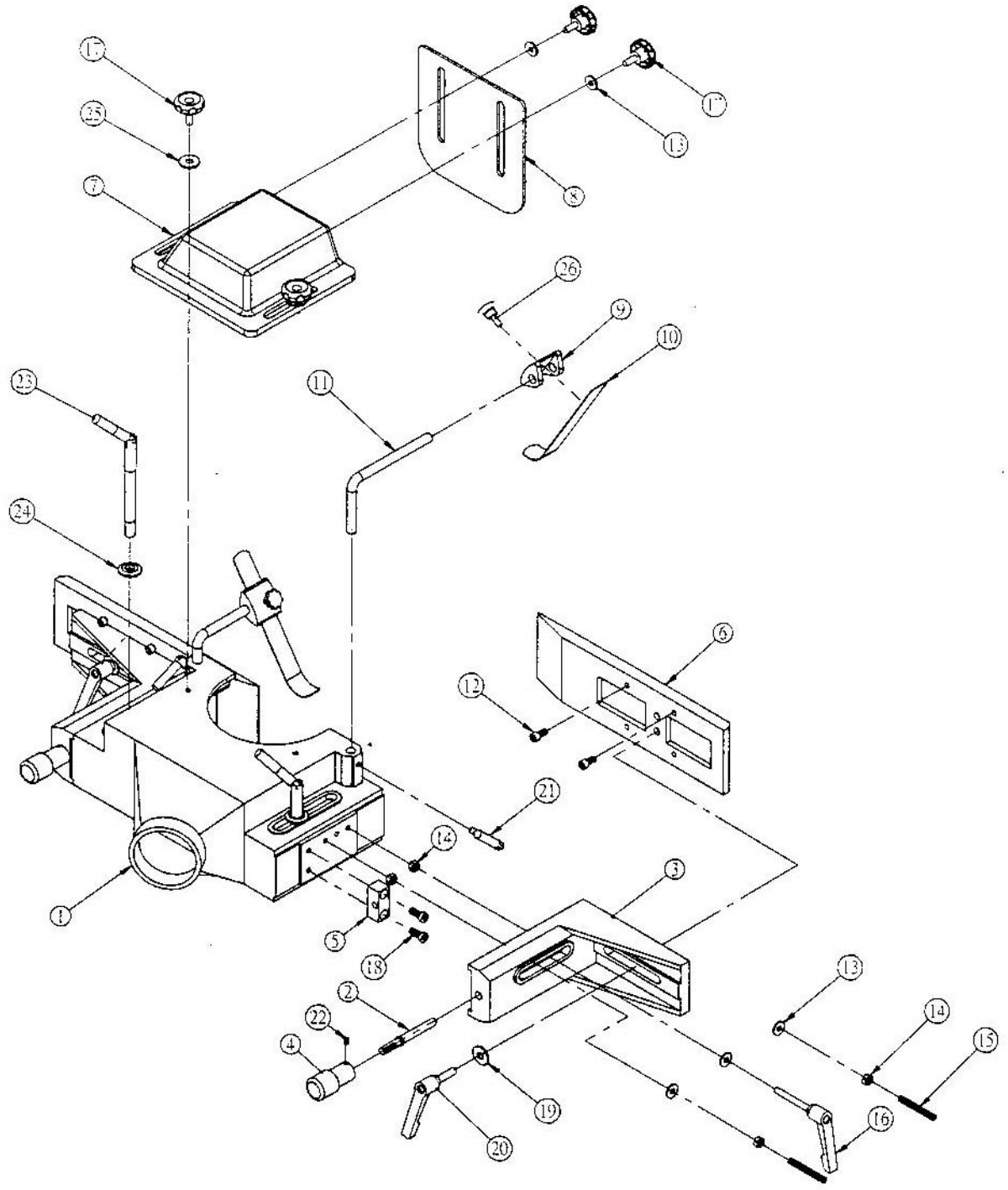
No	Part Description	Qty	Part No
1	Housing	1	P6007
2	Hex Cap Bolt (M8x50mm)	2	AC850
3	Spring Washer (1/2")	1	SS1-2
4	Hex Nut (M12)	1	ARE12
5	Hex Nut (1/2")	2	AR1-2
6	Bearing (2902)	2	BE-2902
7	Washer (38x5/8"x3mm)	1	SE5-8
8	Motor Fastening	1	P6014
9	Washer (32mmx12mmx5mm)	2	SK32125
10	Knob (1/2"x75mm)	1	TRS1-275
11	Elevation Warm Box	1	767127
12	Elevation	1	P6030
13	Wash (38x3/8"x5mm)	1	SK3835
14	Hex Cap Bolt (M10x40mm)	5	AC1040
15	Bar	1	P6031
16	Bearing (51104)	2	BE-51104
17	Hex Nut	2	P6032
18	Spindle Belt Wheel	1	P5020
19	Washer (D:45 D:13 T:5)	1	SK45135
20	Hex Head Bolt (M12x30mm)	1	A1230
21	Motor Base	1	P6008B
22	Motor	1	P6010
23	Hex Nut (5/8")	2	ARB5-8
24	Motor Base	1	P6009A
25	Hex Nut (3/4")	1	AR3-4
26	Motor	1	M4524362FVX
27	Pulley	1	P5021
28	Hex bolt (M12x20mm)	1	A1220
29	Nut Check (M12)	1	AA12
30	Nut Check (M10)	4	AA10
31	Hex Head Bolt (M10x35mm)	4	A1035
32	Washer (M16)	5	SS16
33	Hex Head Bolt (M16x50mm)	5	A1650
34	Sleeve	1	3A030A
35	Screw Bolt	1	A030A
35	Screw Bolt (M6x6mm)	2	AS66
36	Spring Washer (1/4")	1	SS5-8
37	Spring Washer (3/8")	4	SS3-8
38	Washer (25x3/8"x3mm)	4	SE3-8
39	V-Belt (20mmx10mmx1085mm)	1	RE6430



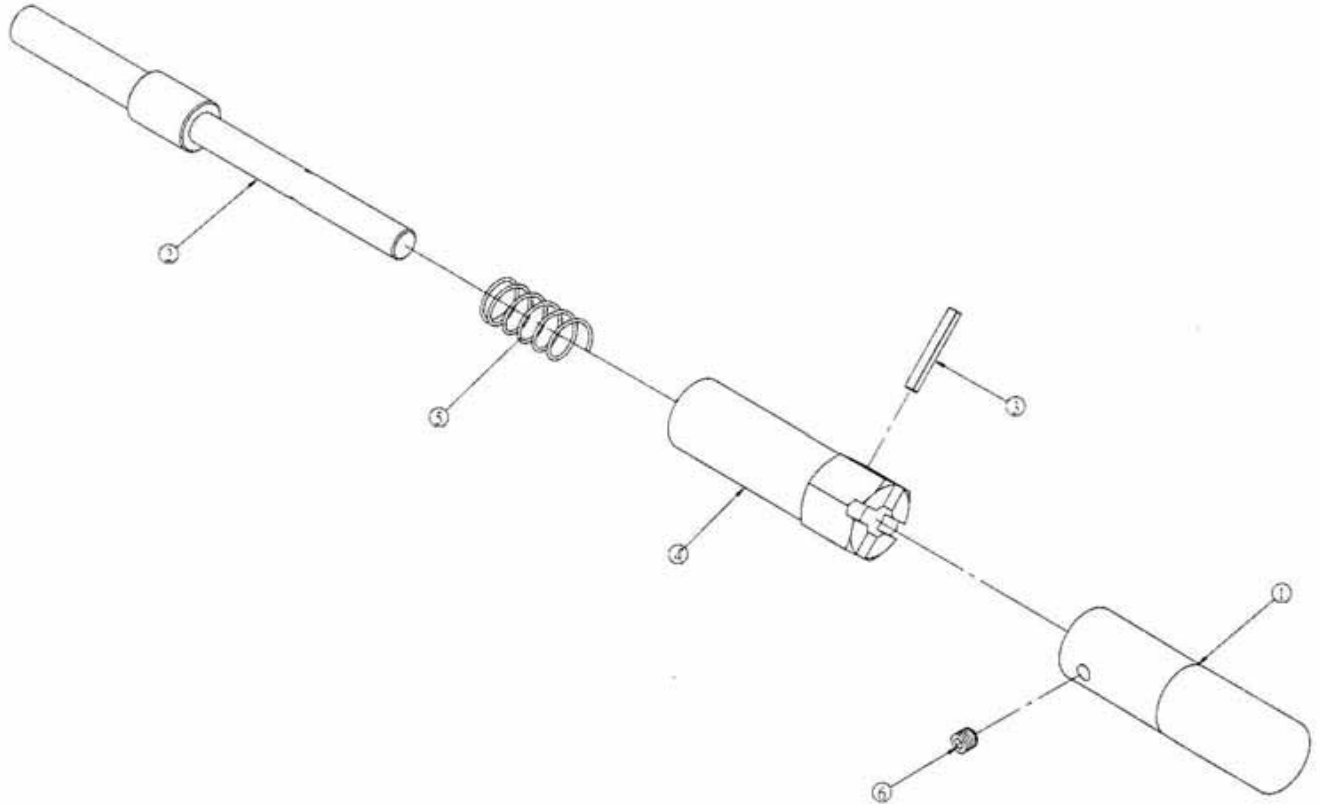
No	Part Description	Qty	Part No
1	Main Spindle (1-1/4")	1	MSR12
2	Bearing (7008)	4	BE-7008
3	Transverse Shaft Housing	1	MQL456
4	Spindle Cover (L)	1	CUL50
5	Spindle Up Cover (R)	1	CUR4035
6	Spindle down (L)	1	CDL40
7	Spacer Washer (1-1/4"x30mm)	1	P5041B5
8	Spacer Washer (1-1/4"x20mm)	2	P5041B4
9	Spacer Washer (1-1/4"x15mm)	3	P5041B3
10	Spacer Washer (1-1/4"x10mm)	2	P5041B2
11	Main Spindle Hex Nut	1	P6005B
12	Spacer Washer (1-1/4"x5mm)	1	P5041B1



<b>No</b>	<b>Part Description</b>	<b>Qty</b>	<b>Part No</b>
1	Fence Frame	1	P6022
2	Special Shaft	2	P6023
3	Fence Frame L Shaft	2	P6033
4	Screw Seat	2	P6025
5	Plate	2	P6026
6	Guide Plate	2	P6027
7	Fence Frame Reducer	1	P6028
8	Fence	1	P6029
9	Slide Block	2	P6021
10	Guide Plate	2	P6045
11	Rod	2	3A043
12	Hex Cap Bolt (3/8"x3/4")	4	AC3-806
13	Washer (25x3/8"x3mm)	8	SE3-8
14	Nut Check (M10)	8	AA10
15	Set Bolt (M10x80mm)	4	AS1080
16	Knob (M10x80mm)	2	TRS1080
17	Lock Knob (M10x20mm)	4	FK1025
18	Hex Bolt (M10x25mm)	4	AC1025
19	Washer (34x13x3mm)	2	SK34133
20	Knob (1/2"x40mm)	2	TRS1240
21	Movable Bolt (3/8"0	2	AT3-8
22	Hex Socket Head Fixing Bolt (M8x10mm)	2	AS810
23	Movable Bolt	2	P6W037
24	Washer (38x5/8"x6mm)	2	SB3856
25	Washer (34x1/2"x3mm)	2	SE1-2
26	Knob (M8x20mm)	2	FK820S



No	Part Description	Qty	Part No
1	Rod Sleeve	1	P6047
2	Stop Lever	1	P6048
3	Spring Pin (4mmx26mm)	1	PS426
4	Brake Casing	1	P5027
5	Spring	1	P6049
6	Screw Bolt (M6x6mm)	1	AS66





<b>No</b>	<b>Part Description</b>	<b>Qty</b>	<b>Part No</b>
1	Brake Flat Iron Plate	1	P5036
2	Supporting Shaft of Brake Plate	1	P5039
3	Hex Nut (M6x25mm)	1	A625
4	Hex Nut (M6)	1	ARE6
5	Hex Screw (1/4"x2-1/4")	1	A1-424
6	Hex Nut (1/4")	3	AR1-4
7	Hex Screw (1/4"x1-1/2")	1	A1-414
8	Hex Screw (3/8"x1-1/2")	1	A3-814
9	Hex Nut (3/8")	1	AR3-8
10	Plate Head Bolt (3/16"x5/8")	2	AV3-1605
11	Spring	1	P5037B
12	Spring	1	P5037A
13	Brake Lining	1	P5038
14	Washer (25x3/8"x3mm)	2	SE3-8
15	Hex Head Bolt (M10x30mm)	2	A1030