5235 24” Jointer-Planer

Owner’s Manual

Oliver Machinery
Seattle, WA
info@olivermachinery.net

M-5235 1/2018

www.olivermachinery.net

Warranty

Oliver makes every effort possible to assure that its woodworking equipment meets the highest possible standards of quality and durability. All products sold by Oliver are warranted to the original customer to be free from defects for a period of 2 (two) years on all parts, excluding electronics and motors, which are warranted for 1 year. Oliver's obligation under this warranty shall be exclusively limited to repairing or replacing (at Oliver's option) products which are determined by Oliver to be defective upon delivery F.O.B. (return freight paid by customer) to Oliver, and on inspection by Oliver. This warranty does not apply to defects due, directly or indirectly, to misuse, abuse, negligence, accidents, unauthorized repairs, alterations, lack of maintenance, acts of nature, or items that would normally be consumed or require replacement due to normal wear. In no event shall Oliver be liable for death, personal or property injury, or damages arising from the use of its products.

Warning

Read this manual thoroughly before operating the machine. Oliver Machinery disclaims any liability for machines that have been altered or abused. Oliver Machinery reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever.

For More Information

Oliver Machinery is always adding new Industrial Woodworking products to the line. For complete, up-to-date product information, check with your local Oliver Machinery distributor, or visit www.olivermachinery.net

Table of Contents

Warranty 2
Warning 2
Table of Contents 3
General Safety Rules 4-7
Specifications 7
Installation 7-9
    Moving The Machine 8-9
    Cleaning The Machine 9
    Machine Leveling 10
Power Wire Connection..... 11
Control Panel Operation 12
Control Panel Layout 12
Operating The Upper Portion Of The Machine 13
Setting The Size 14
Setting The Front Fence 15
Adjusting The Feed Chain 16
Machine Features 17-18
Adjusting The Feed Rollers 19-20
    Adjusting The Tension 19
    Adjusting The Lower Roller 20
Adjusting The Front And Rear Pressure Plates And Keys 21
Changing The Lower Planing Blades 22
Adjusting Parallelism Of Cutterhead 23-24
Adjusting Feed Speed 25
Digital Thickness Controller 26
Maintenance 27-31
Troubleshooting 32
Explosion View & Parts' Lists..... 33-38

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 considerable lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, server 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 ot the internal mechanisms, or when making repairs.

4. Before leaving the machine, make sure the work area is clean.

5. Check timber for loose knots, nails, or other items, which may cause a hazard or affect the machine's performance.

6. Learn the cutterhead's applications and limitations, as well as the specific potential hazards peculiar to it. Keep the cutterhead sharp for best and safest performance.

7. Keep all guards in place and in working order.

8. Do not force the machine. it will do the job better and be safer working at the rate for which it was designed.

General Safety Rules (Cont.)

9. All children and visitors should be kept a safe distance from the working area.

10. The operator should keep proper footing and balance at all times.

11. Do not operate the machine while under the influence of drugs, alcohol, or any other medication.

12. Avoid awkward operations and hand positions where a sudden slip could cause your hand to move into the cutterhead.

13. Never leave the machine until it comes to a complete stop, and never leave the machine running unattended.

14. The employer is responsible for selecting competent and qualified employees.

15. The employer must make sure that employees study and utilize this safety information.

16. Supervisors must alert personnel of any unsafe practices they observe.

17. All employees should be aware of first aid facilities and be encouraged to use them, regardless of the severity of the injury.

18. Fire prevention must be practiced and fire protection must be available to prevent loss of life, personal injury, and property damage.

19. Safety shoes should be worn to provide protection against rolling objects, falling objects, and sharp edges in the workplace.

General Safety Rules (Cont.)

20. 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 Z87 standards.

21. Wearing hearing protection when operating the machine.

22. Do not wear rings, necklaces or jewelry around moving machinery.

23. Do not wear loose fitting clothes. Clothing should be comfortable, but long sleeves, neckties, etc. should not be worn.

24. Do not wear gloves or other hand covering articles around moving machinery.

25. Cover long hair with a hair net or cap

26. 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.

27. Make sure that operator clearly knows how to stop the machine before starting work.

28. Never clean or remove chips while the machine is running.

29. Maintain the machine in good operating condition. Report unusual conditions or machine malfunctions immediately.

30. Do not alter or remove guards and warning labels.

General Safety Rules (Cont.)

31. 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.

32. Employees should be required to report to their supervisors any hazardous condition of the machine or in the immediate area.

Specifications

MODEL	5230	5235
Max. Working Width	18” (457mm)	24” (610mm)
Max. Working Thickness	4 51/64” (120mm)	8” (200mm)
Max. Working Length	12” (300mm)	12” (300mm)
Composition Of Knives	Solid Carbide	Solid Carbide
Knife Style	30mm x 12mm x 1.5T	30mm x 12mm x 1.5T
Cutterhead Speed	4600 RPM	4600RPM
Feeding Speed	20’ – 60’/min	20’ – 95’/min
Upper Cutterhead Motor	20HP	25HP
Bottom Cutterhead Motor	15HP	25HP
Feed Drive Motor	2, 3HP	7.5HP
Elevation Drive Motor	1HP	1HP
Machine Dimensions	L2520xW1400xH1600mm	L2730xW1700xH1700mm
Packing Dimensions	L2650xW1550xH1800mm	L2950xW1850xH1830mm
N.W. / G.W.	6,614/7,385 lbs	8,818/9,700 lbs
CFM Dust Requirement	3500 CFM	4200 CFM

INSTALLATION

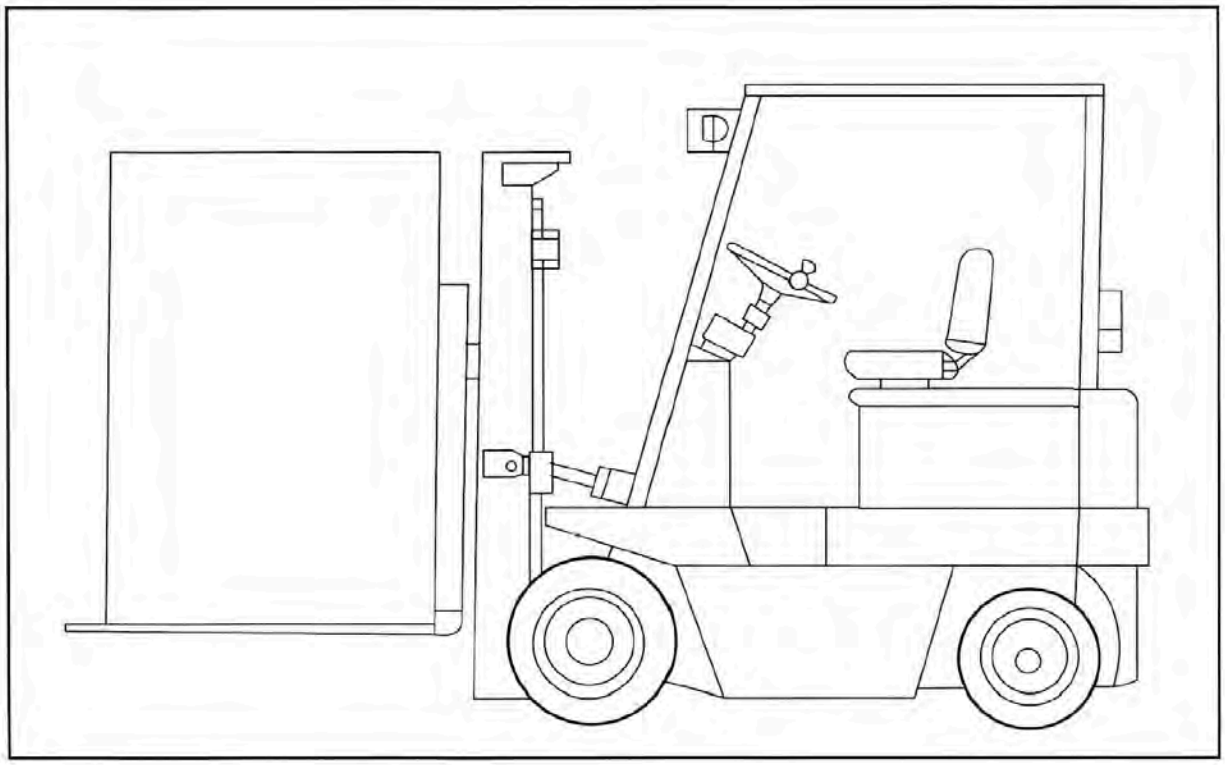
Moving the Machine

The machine is usually packed in a wooden crate.

The packing dimensions are

5230 – L2650 x W1550 x H1800 mm
5235 – L2950 x W1850 x H1830 mm

While in the packing crate, the machine should be lifted and moved by a forklift. Attention should be paid to the balance of the machine while lifting and transporting. Use a forklift with sufficient capacity to move the machine.



Moving the Machine (Cont.)

Once the machine has been unpacked from the crate, move it to the work site using a hoist and straps. The following guidelines should be followed when transporting the machine by this method.

(1) The straps should have a capacity of at least 3 times the weight of the machine. Refer to the specifications for the weight of each model.

(2) Inspect the straps for fray and cuts before using.

(3) Secure all movable parts of the machine and remove movable accessories before moving.

(4) The transportation should be done only by trained and qualified personnel.

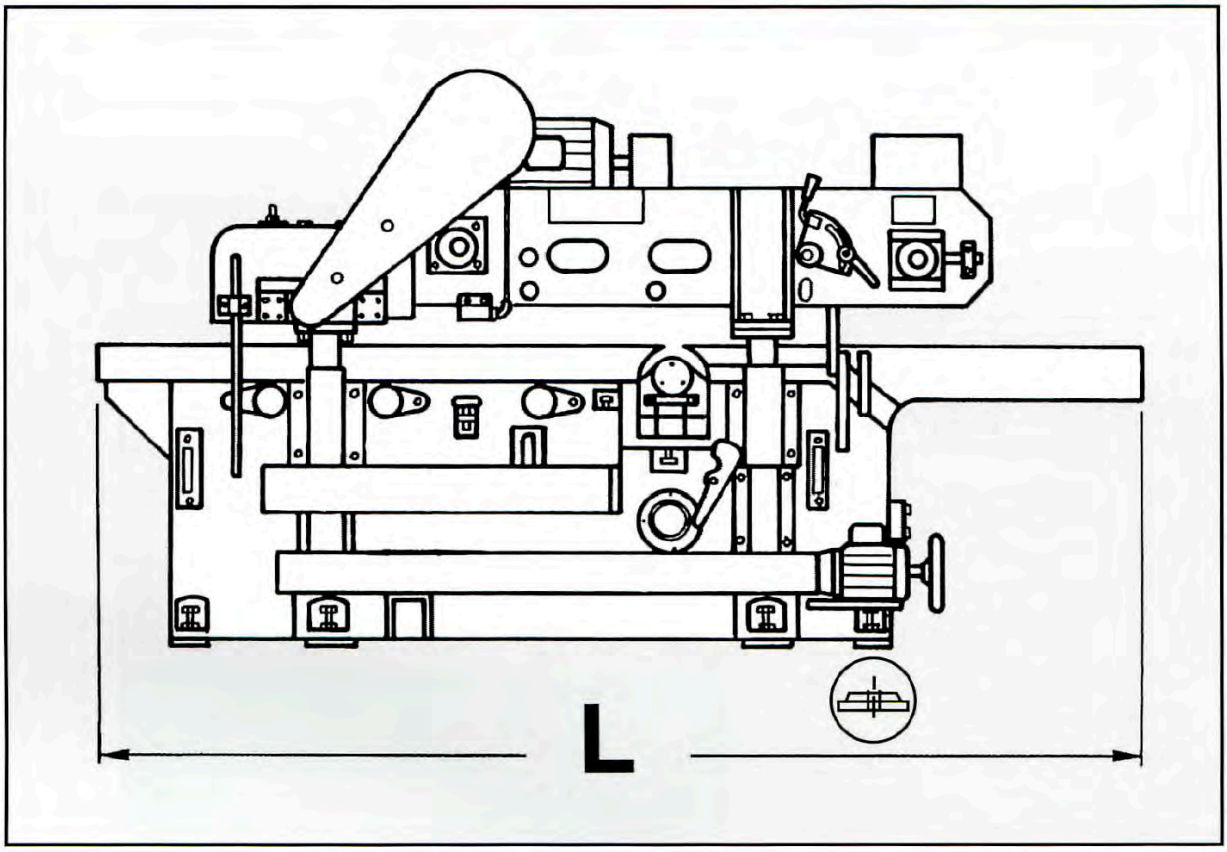
(5) Keep all other people away from the path of the machine.

Cleaning the Machine

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

Machine Leveling

The machine should be installed in an area largo enough to allow personnel to move freely around the machine during operation and maintenance, and to allow the safe feeding and removal of workpieces from the machine. The ground should be flat and rigid enough to support the machine. it is not necessary to bolt the machine to the ground. Place steel plates under the leveling bolts and use two precision level gauges on the infeed table to level the machine. level the machine with 8 leveling bolts (A) and (B) shown in figure below.



Power Wire Connection

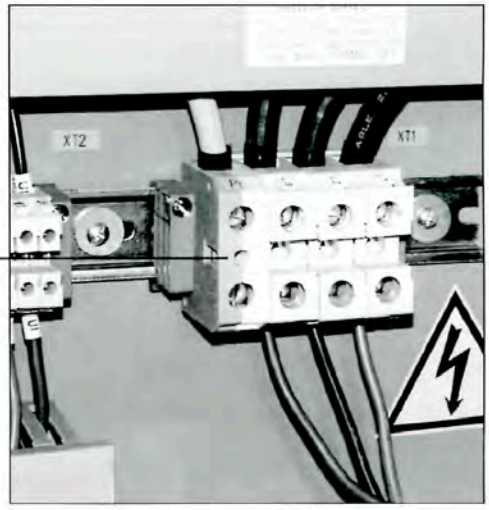
A cable with 4 wires is supplied for connection to the power supply. The power supply can be of 380, 400 or 415V. When connecting the power supply, always connect the grounding to the free/yellow wire first. When disconnecting the power always disconnect the ground last.

On the door of the control cabinet, there is a hand-operated power disconnection device. Before connecting or disconnecting power, or performing any maintenance or inspection work, always switch this device to the “OFF” position and lock it to prevent accidental starting.

After the power has been connected, switch the power device to the “ON” position, and run the main motor. Make sure the rotation direction is correct. If the rotation is incorrect, switch off and disconnect the power supply, and change the phase lines to a correct connection.

The electrical system should be fuse protected as indicated below.
(Dependent the horse power)

Model		Current Rating	Fuse Capacity
5235	77HP	120A	150 KArms



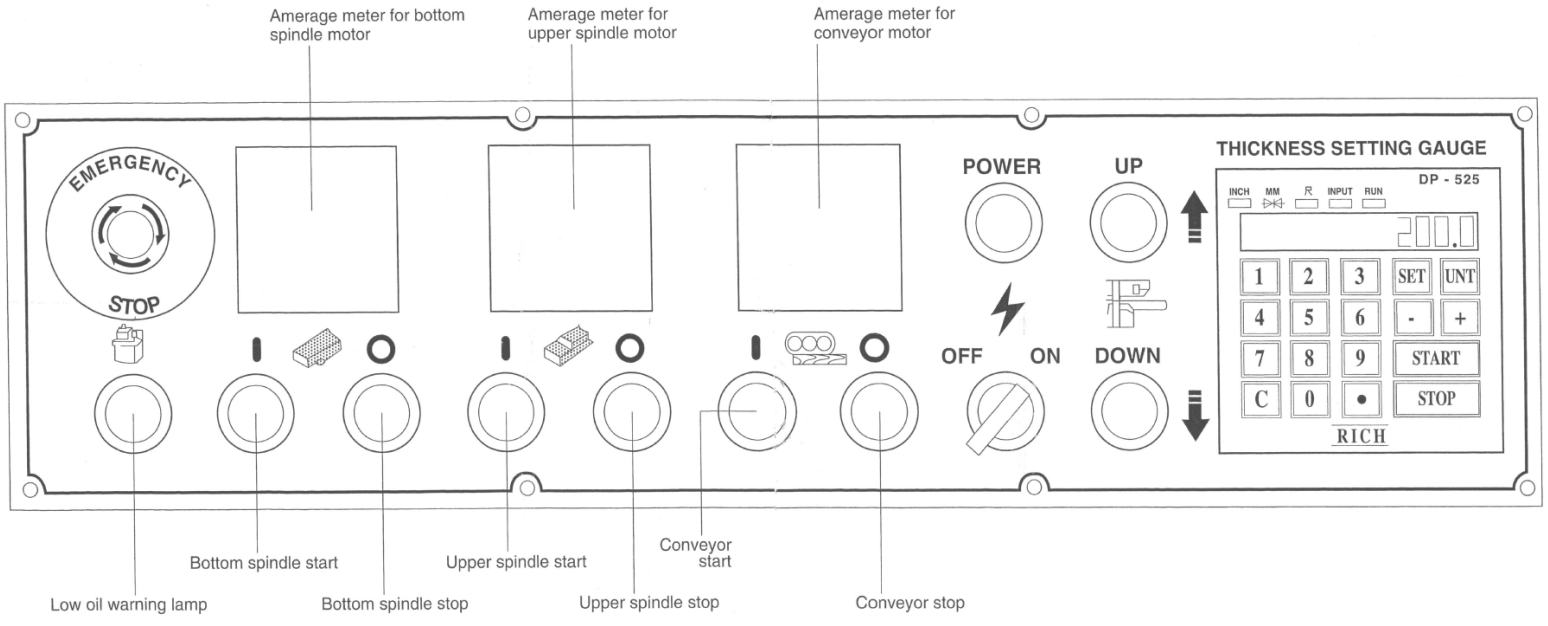
Control Panel Operation

After the planning thickness has been properly set, turn on the power and turn off the brake with the corresponding switches. Press the buttons to start the planning knife spindles and feed conveyor running. The machine is then ready to start planning.

The feed conveyor can only be started when the lower and upper spindles are running. If the upper or lower spindles stop running, the feed conveyor will also stop and cannot be started again until both spindles are running.

Refer to control panel diagram for layout and function of switches.
Optional: Hour Meter. Speed Meter.

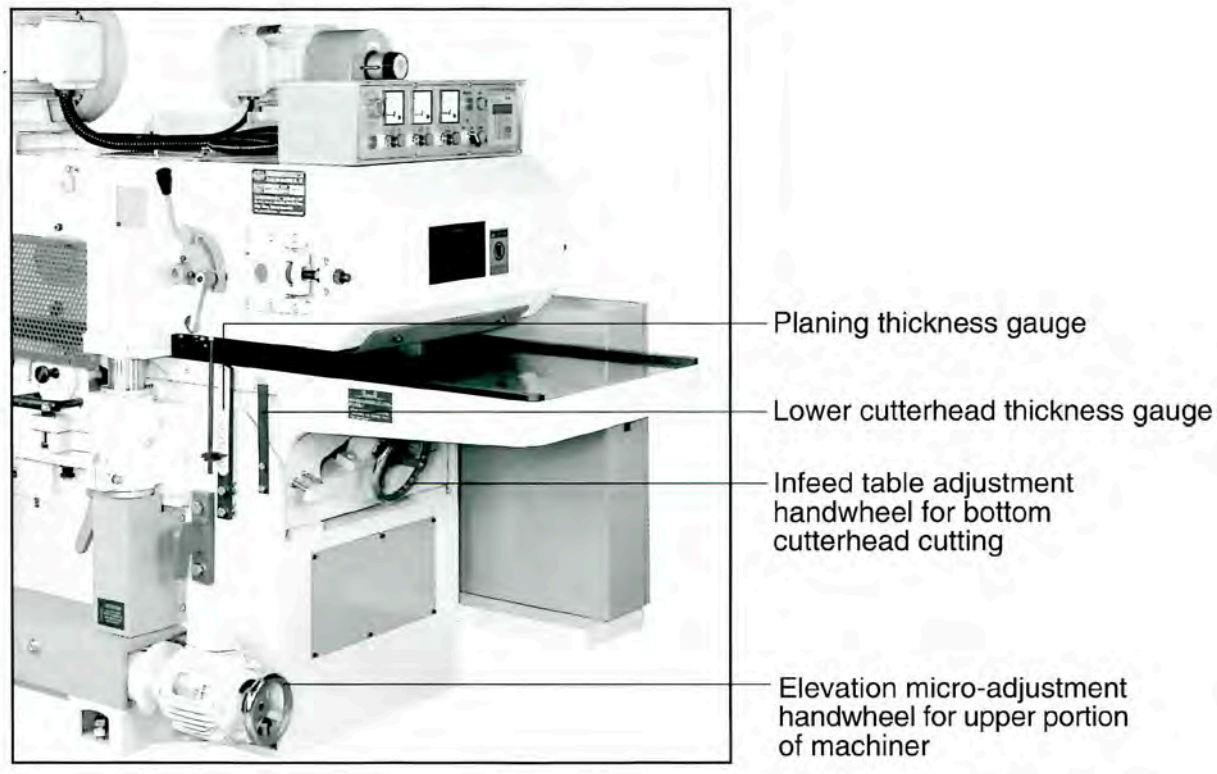
Control Panel Layout



Operating the Upper Portion of the Machine

Elevation buttons for the upper portion of the machine are located at the lower front side of the machine. A hand wheel is located below the elevation buttons for fine adjustment of the working thickness of the workpiece. A hand wheel located under the fence is for making adjustment of the infeed table.

See figure below for part identification.



Setting the Size

The amount to be planed from the bottom of the workpiece is set by adjusting the height of the infeed table in relation to the bottom cutterhead This is done by using the infeed table adjustment hand wheel, located under the infeed table. The gauge for reading the planning amount is located to the right of the pointer gauge, on the infeed table.

Once the lower planning value is set, use the elevation buttons and micrometric adjustment hand wheel to move the upper portion of the machine, so that the upper planning amount is set. The total amount to be planed will be read on the thickness gauge. Make a trial cut and measure the planed workpiece to confirm that the thickness gauge is correctly calibrated.

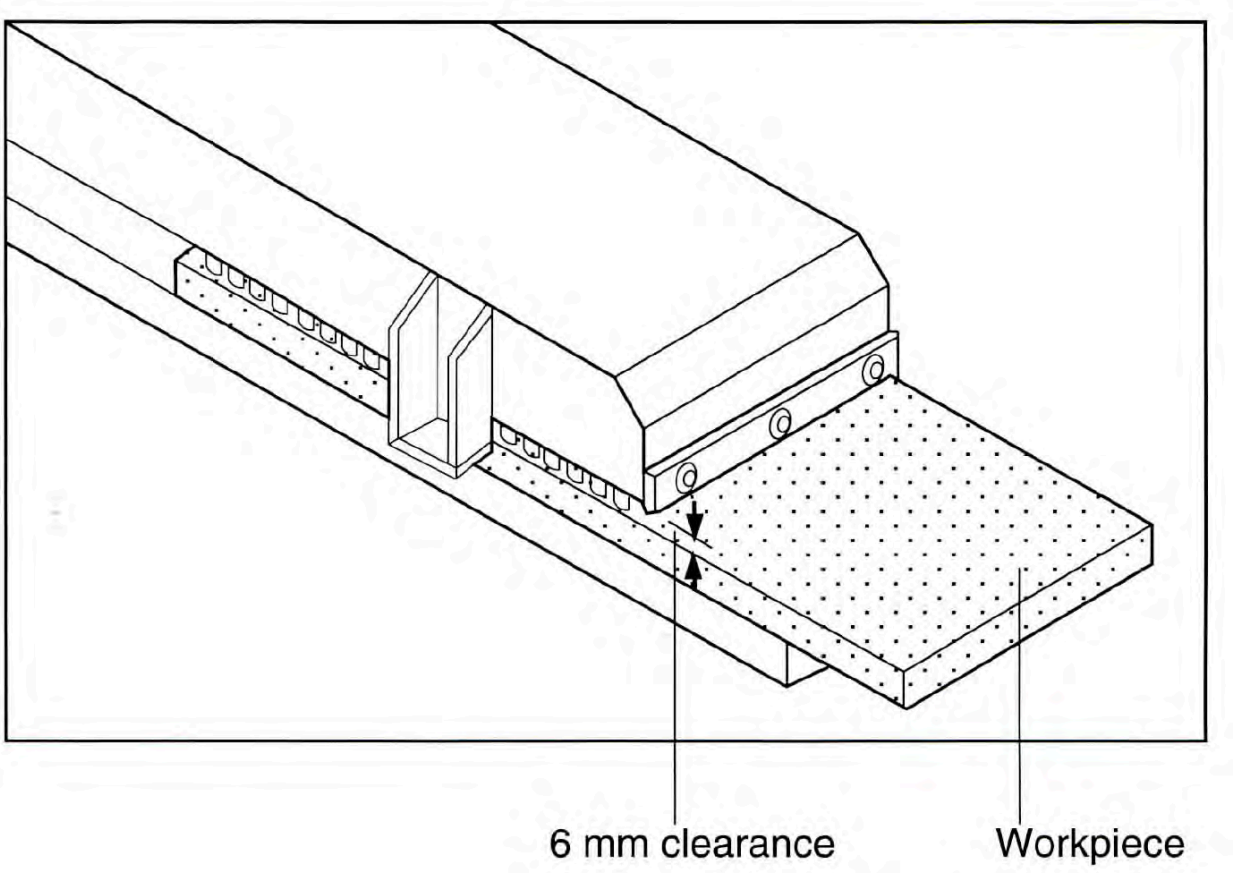
NOTE:

It it recommended that a cutting ration of 1.5:1 be used for upper and lower cutting. i.e., to plane 10mm from the workpiece, set the lower planning value to 4mm and the upper planning value to 6mm.

The maximum lower planning value is 5mm, and the maximum upper planning value is 8mm.

Setting the Front Fence

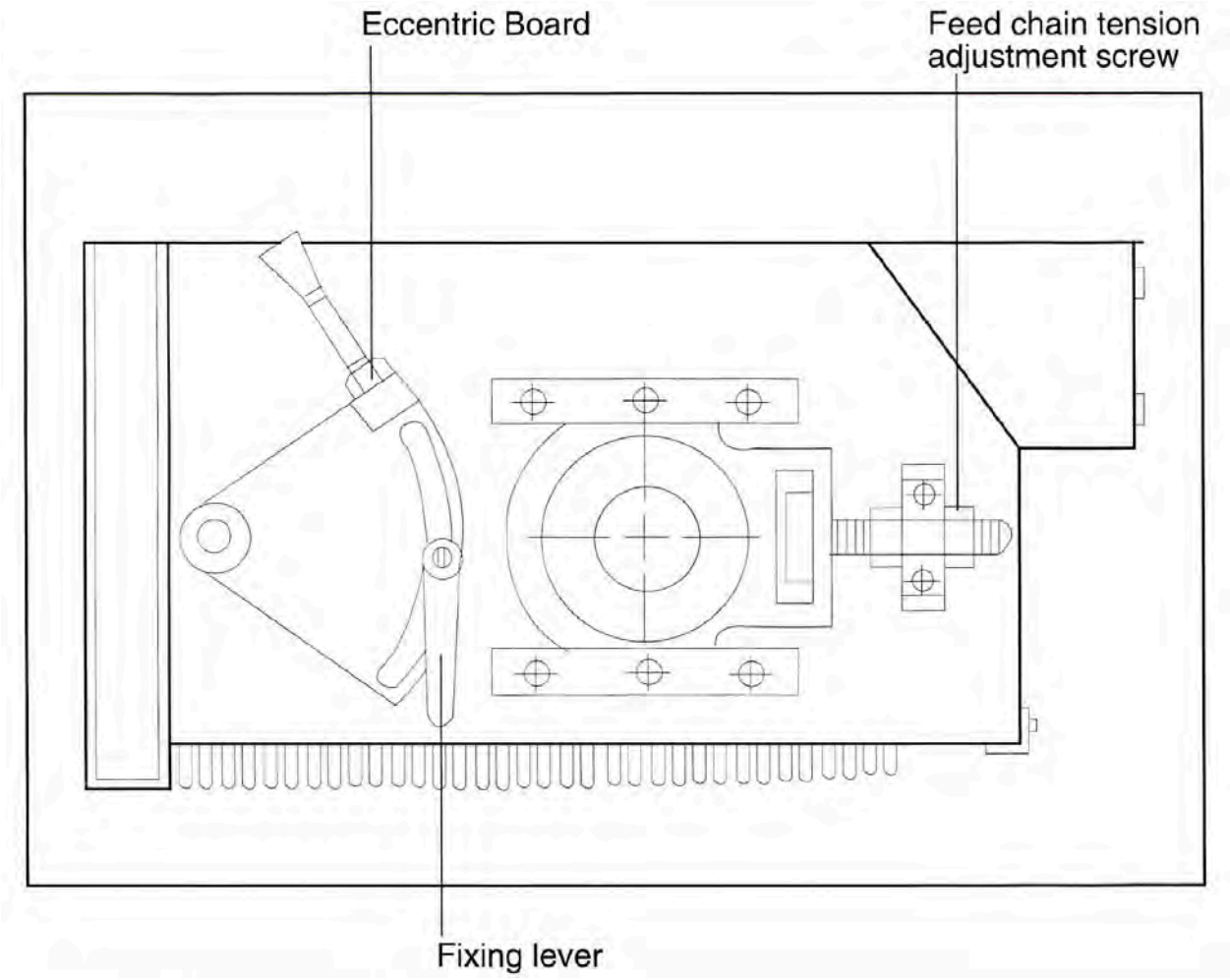
If the planning thickness is too great, then the machine may become clogged and damaged. There is a fence at the infeed side to prevent workpieces from being fed in such a way that too much material would be removed at one time. The upper portion of the machine should be set so that there is at least 6mm clearance between the fence and the workpiece.



Adjusting the Feed Chain

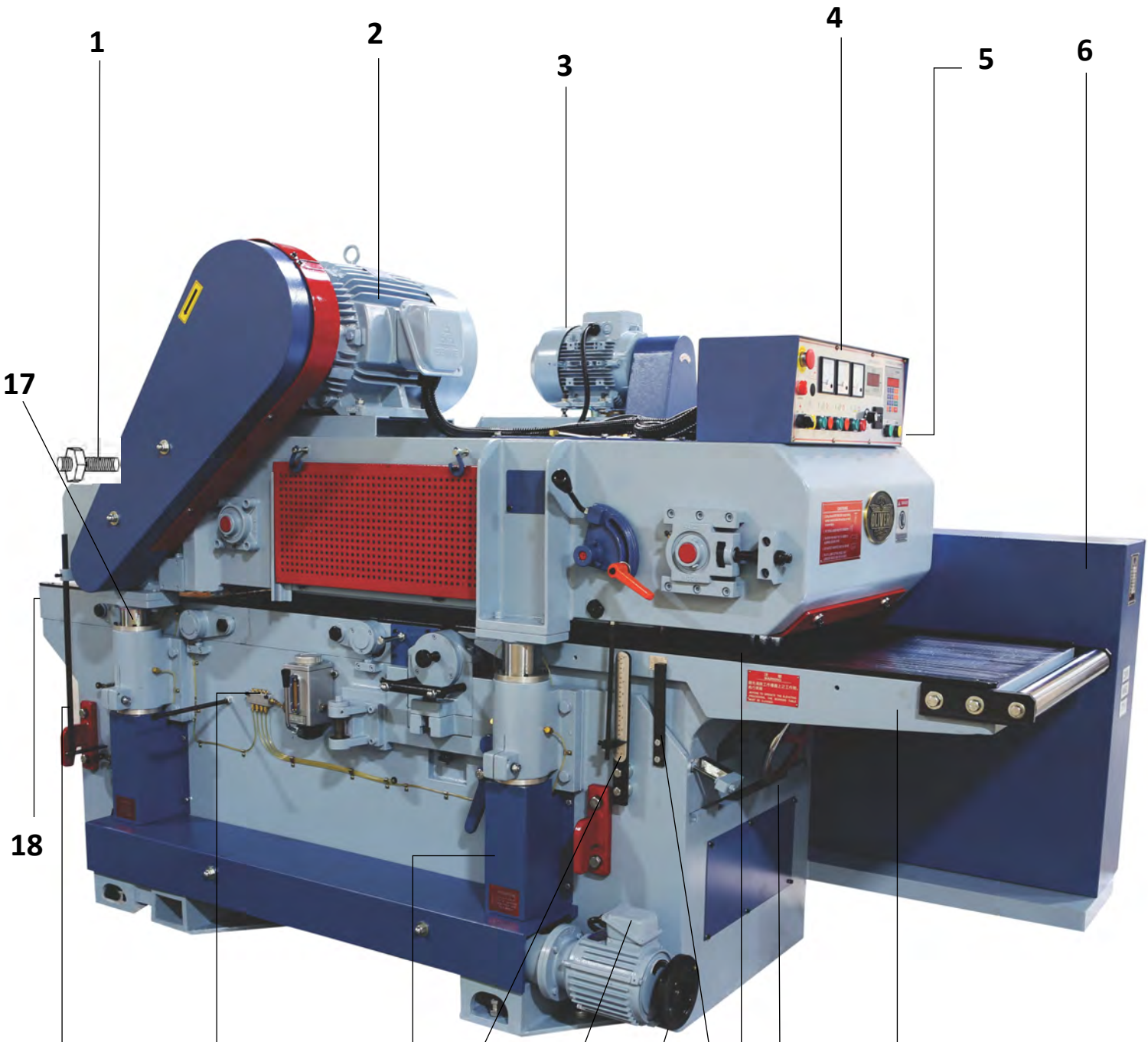
The feed chain tension is adjusted by the two chain tension screws located at either side of the infeed end of the table. If the feed chain is too loose, it will cause binding and excess noise during workpiece feed. Tighten the screws to increase tightness.

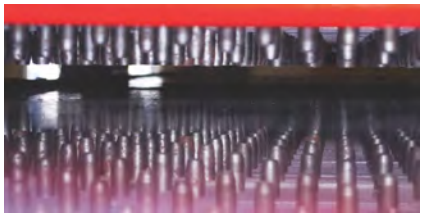
To adjust the pressure, loosen the fixing lever on the eccentric board, and move the eccentric board up or down to obtain the correct pressure. Retighten the fixing lever after adjustment, in general, greater feed chain pressured is required for harder woods. Check the relative hardness of the wood stock before planning.



Machine Features

1. Belt tension adjustment
2. Upper cutterhead motor
3. Feed motor
4. Control panel
5. Elevation buttons for upper portion of machinery
6. Electrical cabinet
7. Infeed table
8. Infeed table elevation hand wheel
9. Spike conveyor (feed chain)
10. Lower cutterhead thickness gauge
11. Thickness gauge
12. Micrometric elevation adjustment hand wheel
13. Elevation motor for upper portion of machinery
14. Elevation tube screw and nut
15. Lower knife replacing tray
16. Elevation limit power off rod
17. Column
18. Outfeed table

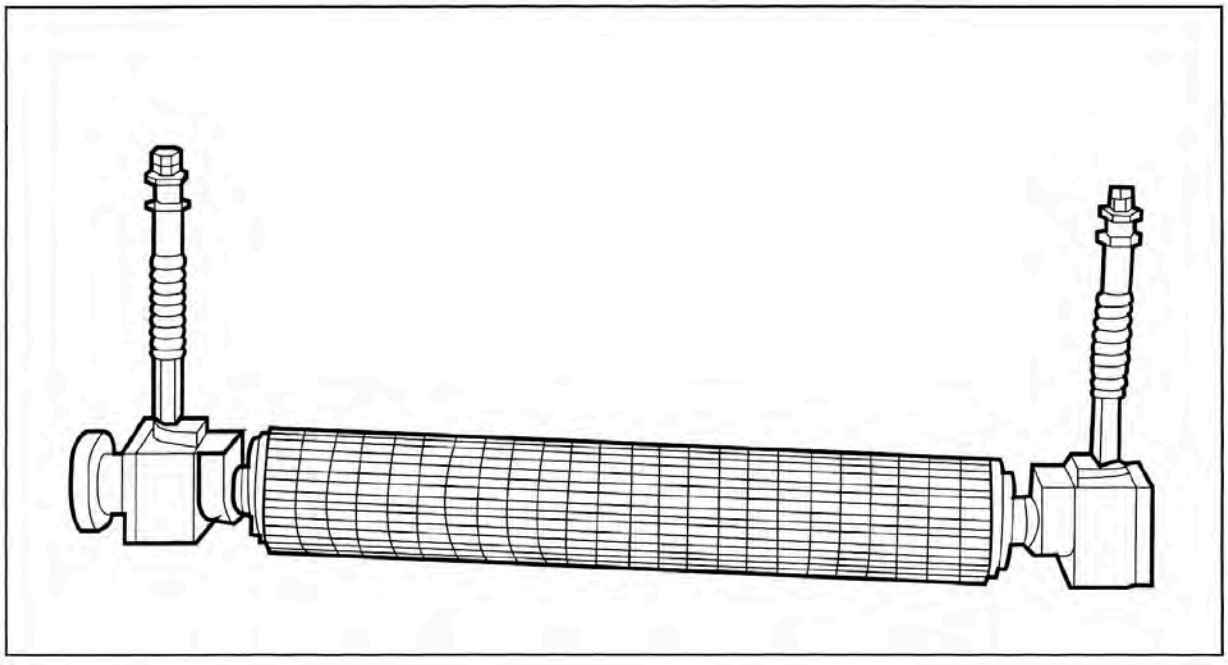

1
2
3
4
5
6
17
18
16
14
11
10
8
7
12
13
15
9



Adjusting the Feed Rollers

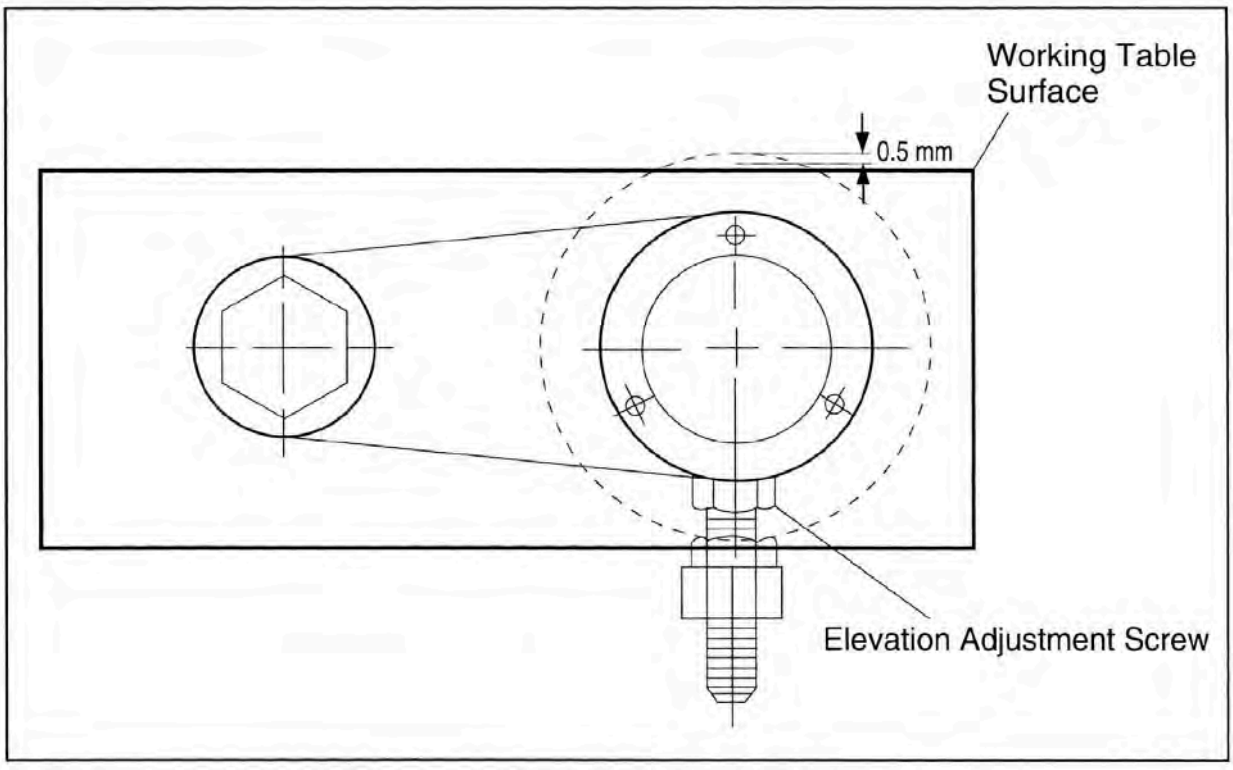
There is one section and one steel fine roller on the upper portion of the feed bed, and three steel rollers on the bottom the top rollers are pressure rollers and keep the workpiece from jumping during feed.

To adjust the tension of the rollers, adjust the pressure screws and nuts located at either side of each roller. If there is insufficient pressure, the lumber will slip. Too much may cause damage to the workpiece.



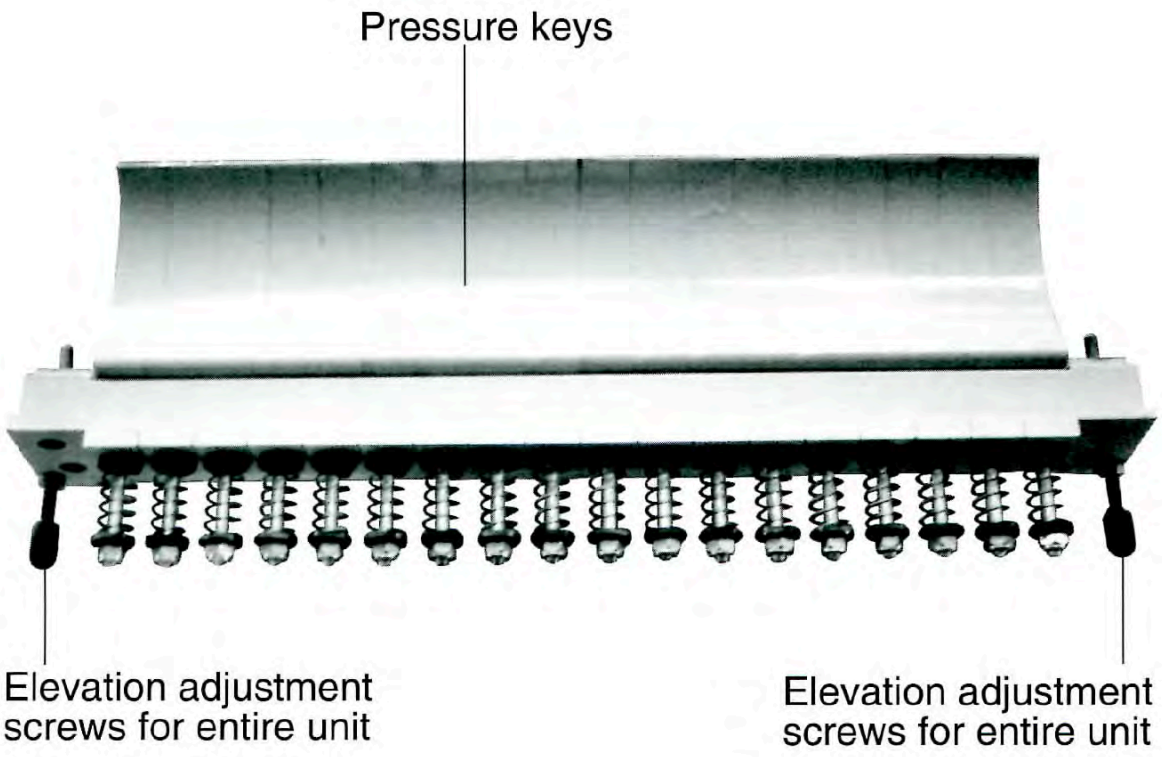
Adjusting the Feed Rollers

For better feeding and planning results, the lower roller should be adjusted so that the top of the roller extends 0.55mm over the table. The roller should always be parallel with the table. To Adjust the roller, turn the screws on the sides of the roller until it is parallel and at the correct height.



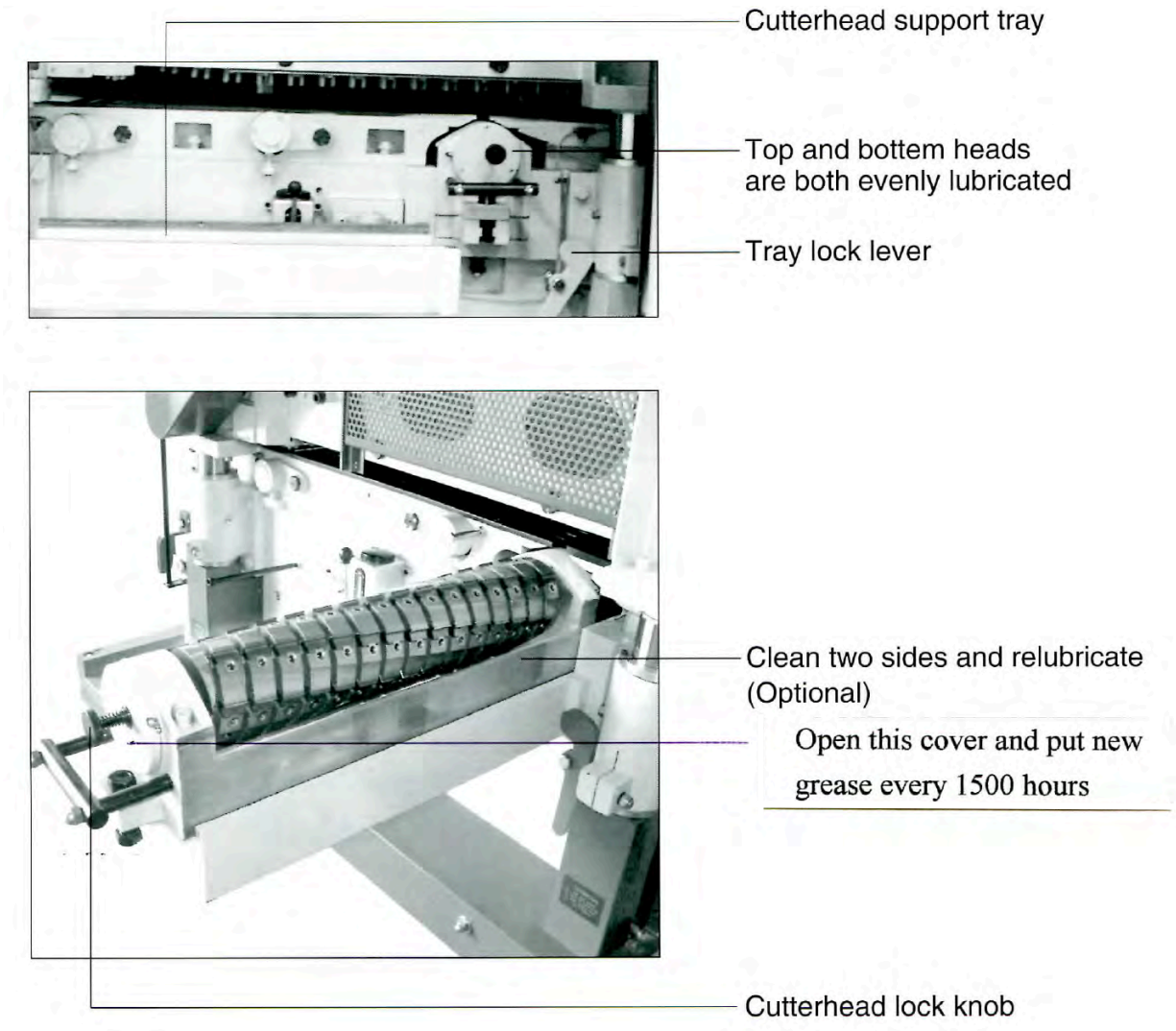
Adjusting the Front and Rear Pressure Plates and Keys

Place a workpiece onto the feed bed under the front and rear pressure plates. To adjust the rear pressure plate, turn the screws located at the side of each pressure plate (See figure below). The pressing keys can be adjusted individually by turning the screw on each key.



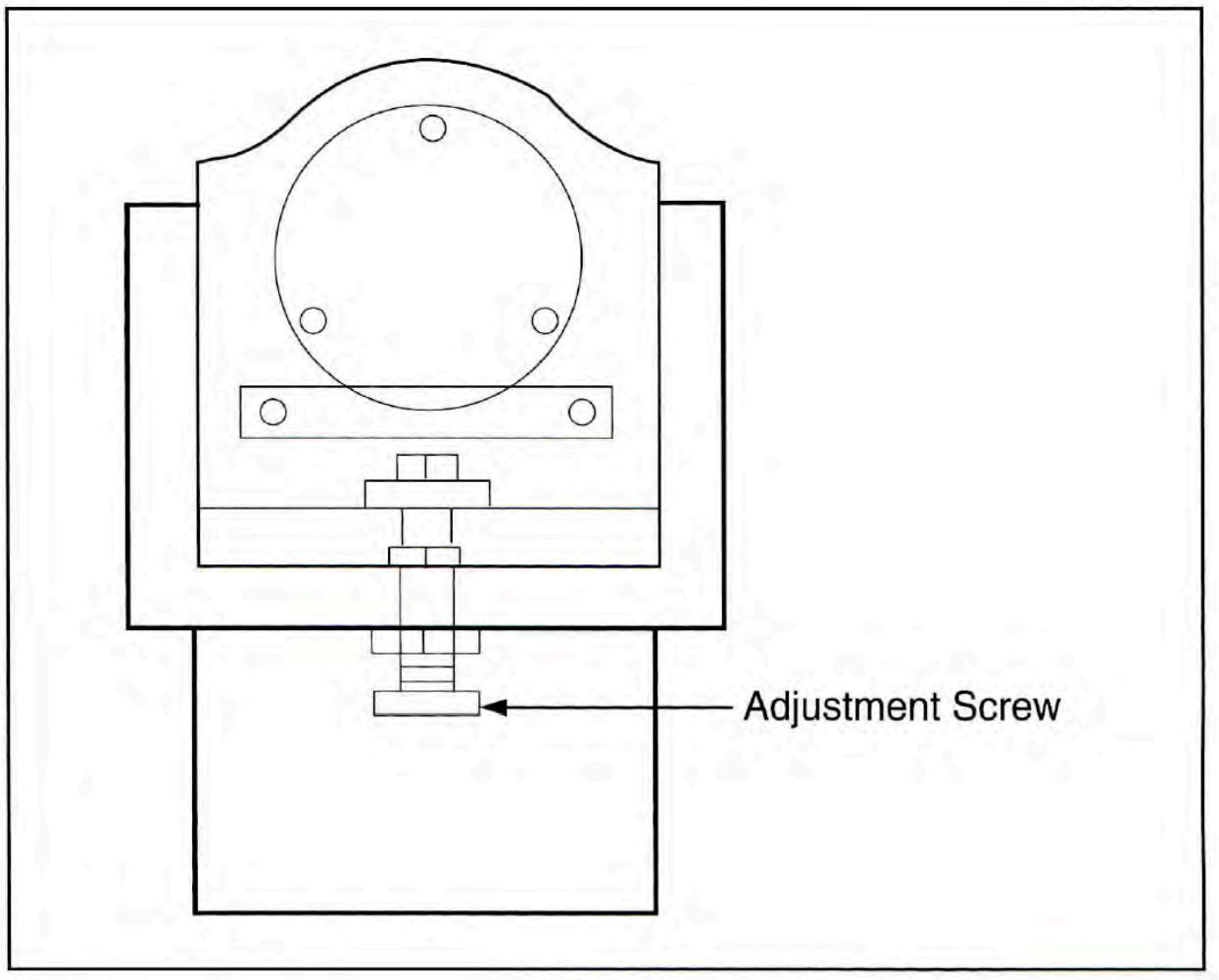
Changing the Lower Planing Blades

At the rear of the machine, loosen the cutterhead drive belt with the handwheel, and then remove the belt cover and belt. On the front of the machine, swing the cutterhead support tray to perpendicular position and fix it in place with the lock lever. Pull the cutterhead out of the machine and fix the cutterhead with the fix knob on the outer end of the assembly. Replace and adjust knives as necessary. Reverse the above procedures after knives are changed.



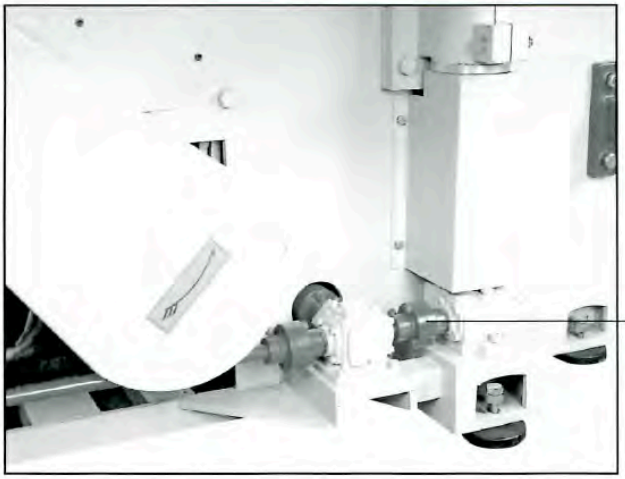
Adjusting Parallelism of Cutterhead

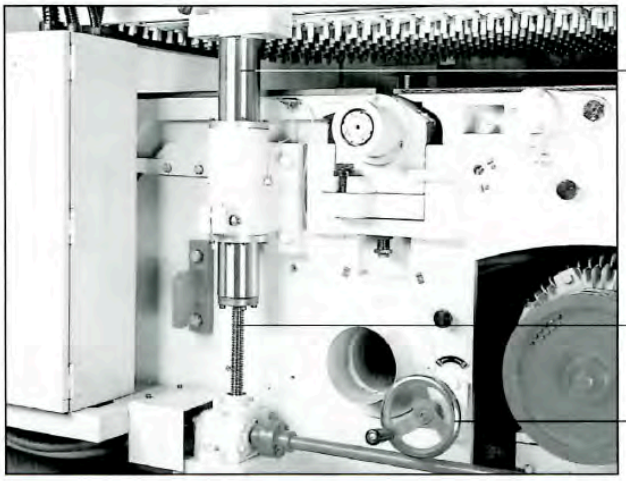
If the difference between the heights of the sides of the workpiece is greater than 0.03mm, then the cutterhead is not parallel to the table and needs to be adjusted. Open the front door and access the lower cutterhead. Prevent the cutterhead from rotating by fixing the lock pin. Loosen the fix screw as shown in diagram and turn the adjustment screw until the cutterhead is parallel to within 0.03mm. Retighten the fix screw after adjustment.

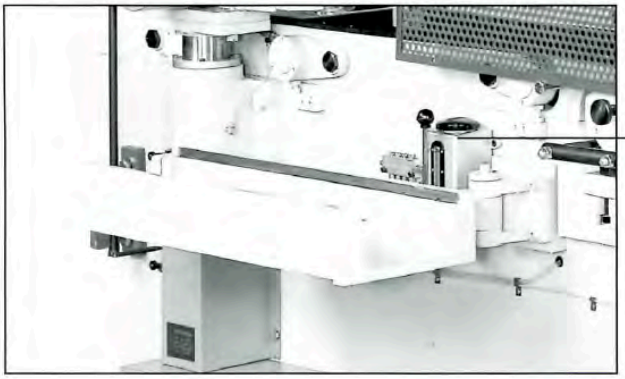


Adjusting Parallelism of cuttherhead (Cont.)

To adjust the upper cutterhead, open the rear door and access the elevation rod for the upper portion of the machine (See figure). Loosen the three scres that are located at the connection point of the rod and vertical shaft. Adjust the upper cutterhead and retighten the screws.





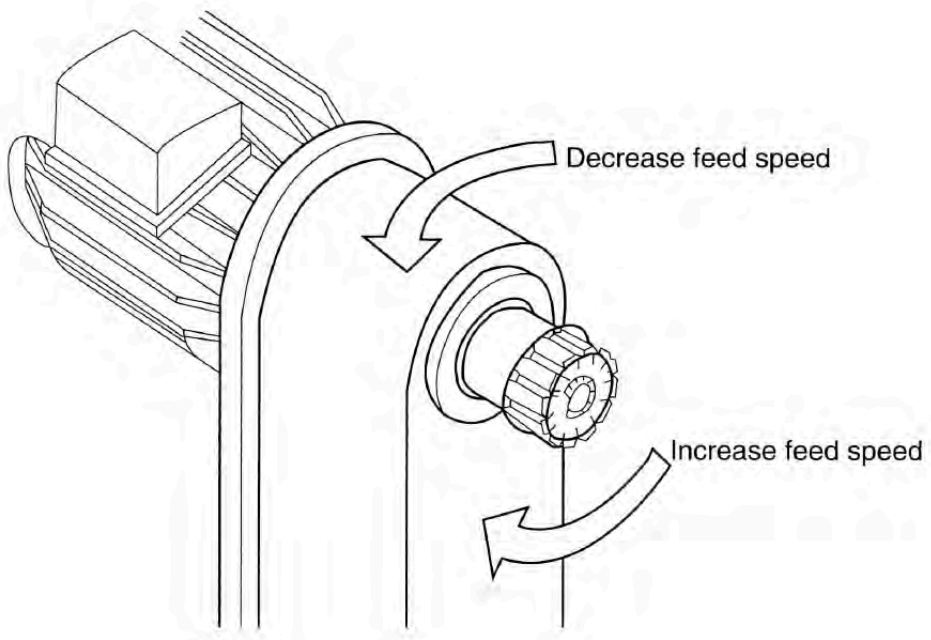


Adjusting Feed Speed

There is a speed selector knob located on the motor cover. There are ten feed speed settings, shown in the table below. Turning the selector knob clockwise increases feed speed, turning it counterclockwise decreases feed speed.

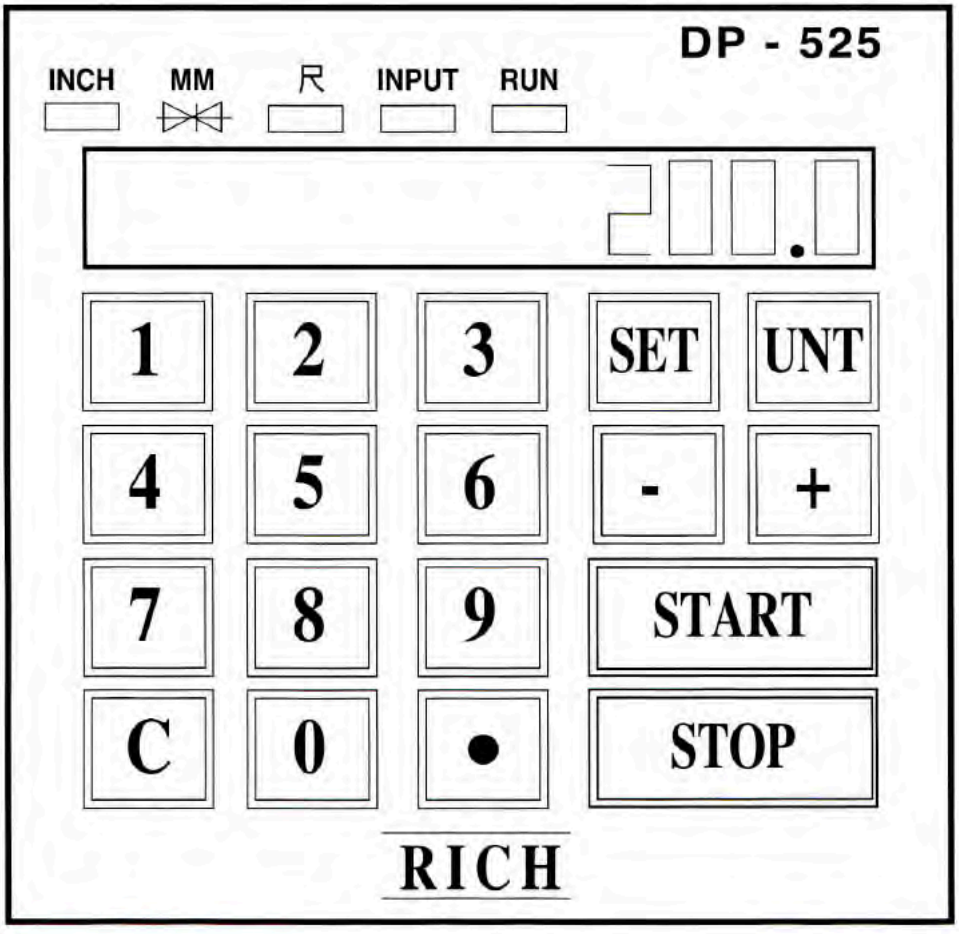
WARNING! Do not change the feed speed when the machine is not running.

Setting	Feed Speed (M/min)
0	8.00
1	9.5
2	12.9
3	16.3
4	19.6
5	23.06
6	26.46
7	29.79
8	33.2
9	36.54
10	-



Digital Thickness Controller

To set the desired planning thickness on the digital controller, enter the amount on the keypad and press the SET key for 2 – 3 seconds. Press the START key to have the machine automatically move to the desired thickness. The UNIT key will switch the setting to inches, mm or Chinese inches as required. The “+” and “-“ keys will raise or lower the setting automatically as long as the key is pressed.

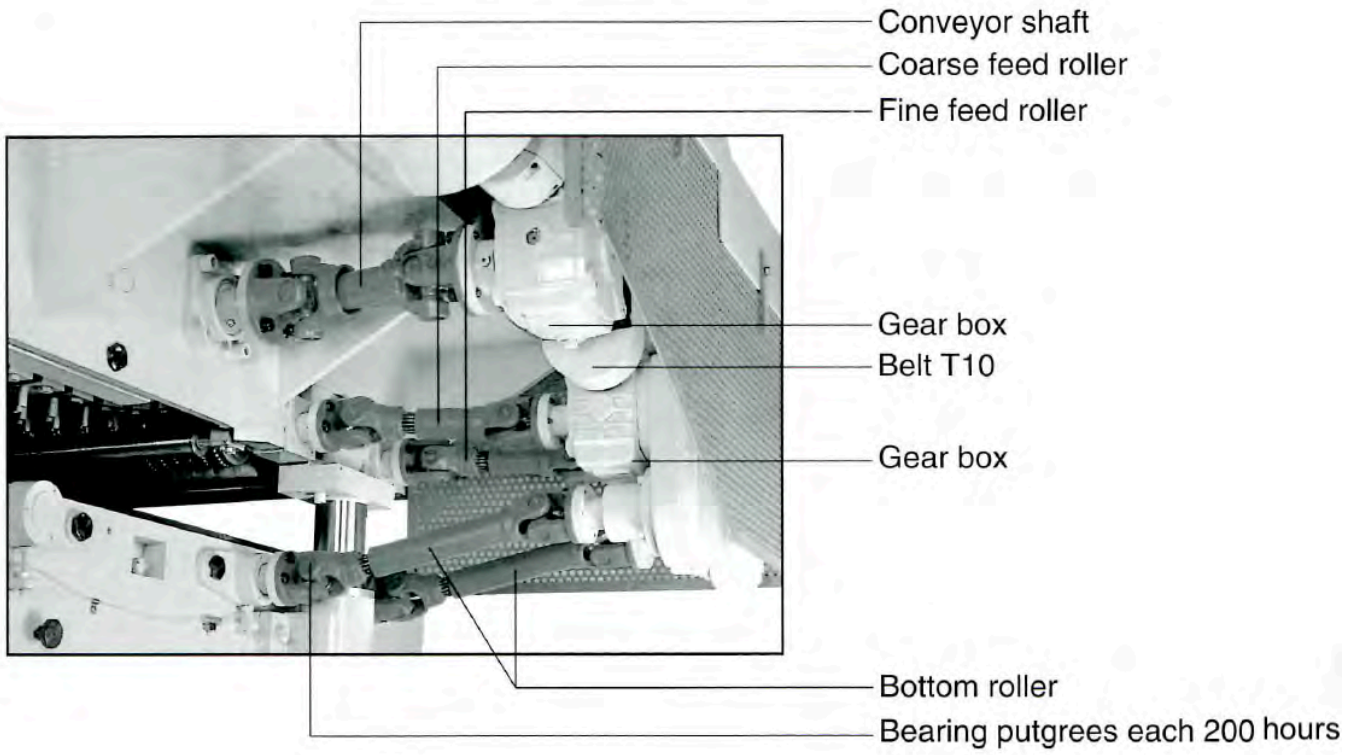


Maintenance

1. Lubrication Instructions

No.	Part	Amount	Period
01	Automatic lubrication for the transmission chain	Lubrication is automatic. Keep tank filled with lubricant. Oil No: RW.68	2 liters with digital control setting. Automatic lubrication of 3 seconds every 3 minutes or 3 seconds every 2 minutes depending on feed speed
02	Gear box	Oil must be replaced. 400 hours 1,500 hours Oil No. VG.460	First time: 2months after installation. After that, once every 6 months.
03	Transmission rods. (See figure below)	Sufficient grease	After adjustments

Transmission rods:
Grease with SNAZZY MP2 (Japan), EP2 (Europe, USA)



Maintenance (Cont.)

2. Recommended Oils

Oil Used / Applied portion	Grease	Heavy Duty Oil
Supindle; grease plug; Universal joint	Snazzy, OKS416 Grease EP2#	
Transmitting gear box (Worm gear)		Snazzy VG-220 HLP 90 Shell OMala VG-460

3. Standard Accessories List and Applications

No.	Part	Quantity
01	Tool kit	1 set
02	Shims plate	8 pieces
03	Tool gauge	1 piece

4. Optional Accessories List and Their Applications

No.	Part	Quantity
01	Helical cutterhead	1 set
02	Air screw driver	1 piece

Maintenance (Cont.)

5. Cutting Knife Specifications

a. The recommended type and dimensions of the knife used for this machine is helical knife: 30 x 12 x 1.5 x 6 rows or 8 rows

b. Always keep the knife sharp to have the best performance while cutting. Do not change the angle of the cutting knife (42°while grinding the knife.

c. The bottom cutting knife spindle must be wiped clean and lubricated before the spindle may be drawn out.

6. Recommendation for Dust Collection and Disposal

The dust should be collected by the use of suitable connecting tubes attached to the dust hoods mounted on the machine. specifications for suitable dust collectors are shown as following.

Model	Air Speed for Upper Cutter
5230	5” x 2 (Hole)
5235	5” x 3 (Hole)

Maintenance (Cont.)

7. List of Parts Subject to Wear.

For maximum safety, please follow the timetable below.

No.	Part	Quantity
01	V belt	Once Per Year
02	Roller	Once every two years
03	Press pin	Once every two years

8. Safety Precautions for Maintenance

A. Do not bypass any safety device or interlocking system during maintenance work.

B. Disconnect the power from the hand operated power disconnection device before starting maintenance work.

C. Be sure to check that all personnel are clear of the movable guards before reconnecting power after maintenance.

D. Do not let untrained personnel perform maintenance requiring technical training.

9. Replacement Procedures for Worn Parts

9.1 Replacement of V Belt

A. Release motor brake

B. Turn the pulley around to release the worn belt

C. Mount the new belt

D. Restore the pulley and close the door

Maintenance (Cont.)

9.2 Replacement of Roller

A. Remove all protective covers

B. Raise the upper portion

C. Insert a wood block under the roller unit

D. Loosen the screws affixing the roller unit

E. Raise the upper portion further to separate the roller unit and the upper portion

F. Take roller unit off the machine and replace with a new roller

G. Place the roller unit on the wood block in its mounted position

H. Lower the upper portion onto the roller unit and adjust to proper position, then affix with screw

I. Secure the roller unit, verify everything is in its proper position and replace the protective covers.

9.3 Replacement of Pressure Pins

A. Remove the cover at the top of the upper portion

B. Remove the screws and the plate that affixes the pressure pins

C. Replace the worn pins

D. Restore the plate and fix it in place with the screws

E. Restore the cover on the upper portion

Troubleshooting

Problem	Possible Cause	Correction
CIRCUIT OVERLOAD	1. Poor contact of power wire terminals 2. Lack of phase running 3. Cutting overload 4. Pooer magnetic switch	1. Tighten terminal screws securely 2. Reduce cutting load 3. Reduce feed speed 4. Replace magnetic switch
BOARD JAMS DURING FEEDING	1. Incorrect tension for feed conveyor 2. Table roller too low 3. Too much cut for each pass 4. Feed speed too fast 5. Uneven thickness of wood at front and rear end 6. Incorrect position of outfeed rollers	1. Adjust feed conveyor tension 2. Adjust table roller position 3. Reduce cutting load 4. Reduce feed speed 5. Do not feed such workpieces 6. Adjust the outfeed rollers accordingly
POOR SURFACE OF CUT	1. Knives too dull 2. Board is not being held firmly during feed 3. Bottom cutterhead not parallel with table 4. Poor holding by front and rear pressure plates 5. Table rollers too high 6. Wood too warped	1. Sharpen knives 2. Adjust tension on feed conveyor 3. Adjust bottom cutterhead 4. Adjust the position of the pressure plates 5. Adjust table rollers 6. Do not use wood that is excessively warped

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57

5235 Parts's List

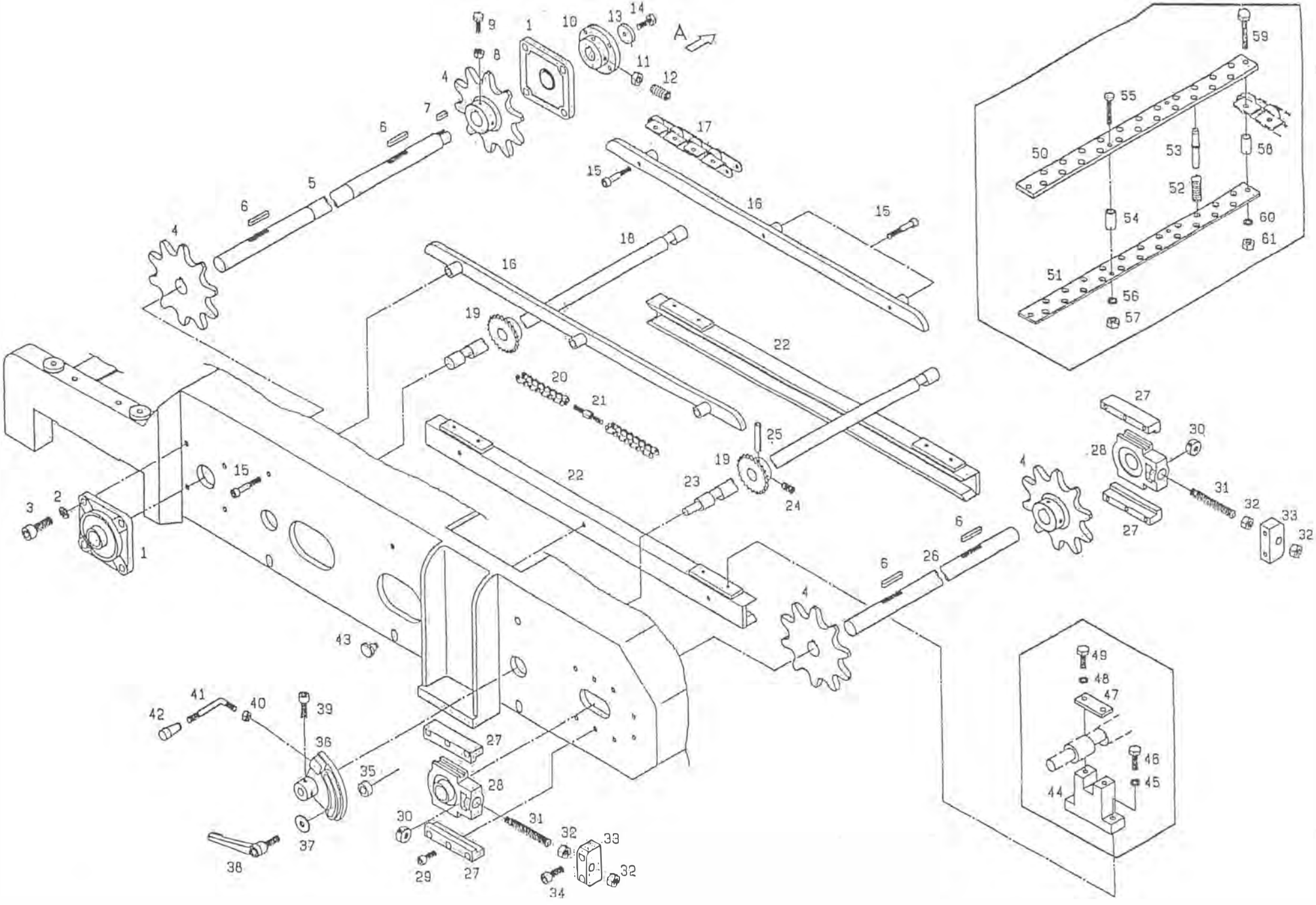
Exterior of UPPER MECHANISM

Index	Description	Quantity
1	Upper Meechanism Body	1
2	Electrical Control Box	1
3	Electrical Control Panel	1
4	Electrical Control panel Lock Screw	8
5	Control box Cover	1
6	Lock Screw	4
7	See Thru Window	1
8	S Washer	8
9	Screw	8
10	S Washer	4
11	Lock Screw	4
12	Side cover	3
13	Side Cover Lock Screw	6
14	Quick Setter Fix Plate	1
15	Washer	2
16	Fix Plate Lock Screw	2
17	Upper Belt Guard Lock Screw	1
18	Washer	4
19	Upper Belt Guard lOck Screw	1
20	Upper Belt Guard	1
21	Upper Belt Guard Lock Screw	2
22	Disk Washer	2
23	Spring	1
24	Nut	2
25	Upper Cutterhead Fix Screw	1
26	Actuating Rod Holder for Breaker	1
27	Nut	1
28	Screw	1
29	Actuating Rod for Breaker	1
30	Nut	1
31	Thicness Scale Fix Rod	1
32	Thickness Indicator Bracket	1
33	Thickness Indicator Bracket	1
34	Screw	1
35	Thickness Scale	1
36	Thickness Scale Clamping Plate	1
37	Clamping Plate Lock Screw	2
38	Infeed Fence	1

5235 Parts's List

Exterior of UPPER MECHANISM

Index	Description	Quantity
39	S Washer	2
40	Infeed Fence Lock Screw	2
41	Washer	4
42	Screw	4
43	Upper Cutterhead Drive Motor	1
44	Hard Washer	4
45	S Washer	4
46	Nut	4
47	Upper Motor Pulley	1
48	Fix Collar	1
49	Hard Washer	1
50	S Washer	1
51	Screw	1
52	Belt	4
53	Nut	1
54	Belt Adjustment Screw	1
55	Safety Guard	1
56	S Washer	2
57	Screw	2


A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61

5235 Parts's List

Interior of UPPER MECHANISM

Index	Description	Quantity
1	Sprocket Wheel Bracket	8
2	S Washer	4
3	Bearing Fix Screw	1
4	Sproket Wheel	4
5	Drive Sprocket Wheel Shaft	1
6	Key	8
7	Key	8
8	Nut	1
9	Sprocket Wheel Set Screw	2
10	Connector	2
11	Nut	1
12	Connector Set Screw	1
13	Hard Washer	1
14	Screw	1
15	Screw	6
16	Guide Rail	2
17	Feed Chain	2
18	Rear Eccentric Shaft	1
19	Sproket Wheel	2
20	Chain	1
21	Chain Tension Adjustment Screw	1
22	Lower Guide Rail	2
23	Front Eccentric Shaft	1
24	Sprocket Wheel Set Screw	2
25	Spring Pin	2
26	Driven Sproket Wheel Shaft	1
27	Bearing Fix Plate	4
28	Adjustable Bearing	2
29	Fix Plate Lock Screw	12
30	Nut	2
31	Screw Shaft	2
32	Nut	4
33	Bracket	2
34	Bracket Lock Screw	4
35	Bushing	1
36	Eccentric Plate	1
37	Washer	1
38	Handle	1

5235 Parts's List

Interior of UPPER MECHANISM

Index	Description	Quantity
39	Eccentric Plate Lock Screw	2
40	Handle Lock Screw	1
41	Handle	1
42	Plastic Knob	1
43	Guide Rail Fix Screw	6
44	Eccentric Shaft Support	4
45	Washer	8
46	Eccentric Shaft Lock Screw	8
47	Eccentric Shaft Fix Plate	4
48	S Washer	8
49	Screw	8
50	Spike Plate (Thick)	50
51	Spike Plate (Thin)	50
52	Spike Spring	1100
53	Spike	1100
54	Bushing (#38)	100
55	Connecting Screw	100
56	S Washer	100
57	Nut	100
58	Bushing (#34)	100
59	Screw	100
60	S Washer	100
61	Nylon Nut	100

A
B
C
1
2
3
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
35
37
41
42
43
44
45
46
47
48
49
50

5235 Parts's List

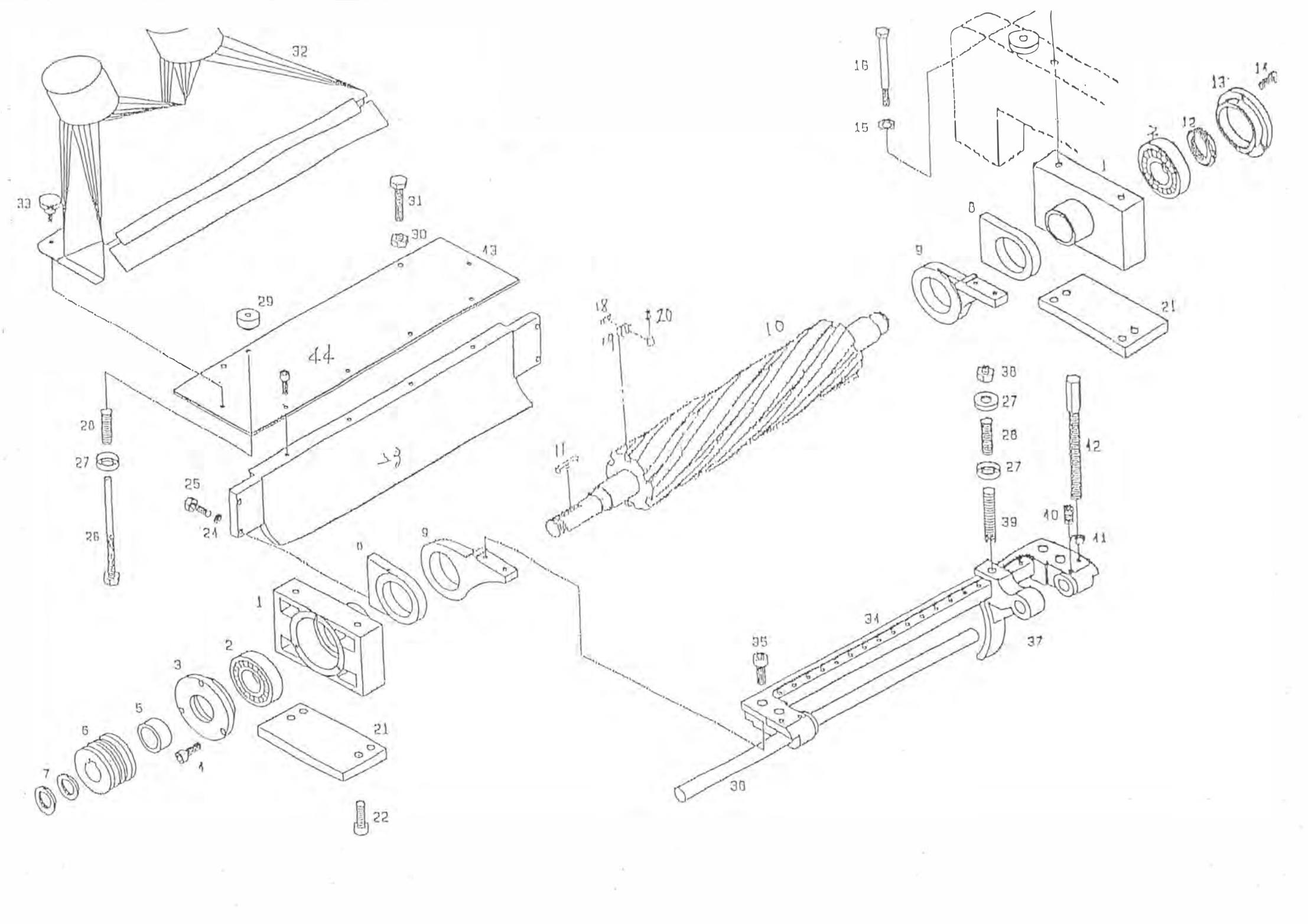
TRANSMISSION MECHANISM

Index	Description	Quantity
1	Feed Drive Motor	1
2	S Washer	4
3	Motor Lock Screw	4
4	Spped Variable Pulley	1
5	Belt Guard	1
6	S Washer	4
7	Belt Guard Lock Screw	4
8	Timing Belt	1
9	Gear Reducer (#70)	1
10	S Washer	8
11	Lock Screw	8
12	Shaft Coupling	1
13	Shaft Coupling Set Screw	4
14	Gear Reducer (#80)	1
15	Sprocket Wheel Coupling	1
16	Coupling Cover	1
17	Coupling Cover lock Screw	4
18	Bearig Plate	2
19	Flanged Bearing	2
20	S Washer	4
21	Bearing Lock Screw	4
22	Key	1
23	Connecting Shaft	1
24	Bushing	1
25	Inner Pulley Half	1
26	Bushing Lock Screw	1
27	Outer Pulley Half	1
28	Pulley Connecting Screw	3
29	Coupling AE80	8
30	Washer	8
31	Coupling Lock Screw	8
32	Universal Joint	4
33	S Washer	32
34	Universal Joint Lock Screw	32
35	Coupling AE120	2
36	Washer	2
37	Coupling Lock Screw	2
38	K125 Universal Joint	1

5235 Parts's List

TRANSMISSION MECHANISM

Index	Description	Quantity
39	Washer	8
40	Universal Joint Lock Screw	8
41	Gear Reducer Protection Screen	1
42	S Washer	5
43	Protection Screen Lock Screw	5
44	Pulley Connecting Screw	1
45	Pulley With Protect Guard	1
46	Timing Belt	1
47	Screw	4
48	Nut	12
49	Gear Reducer Base	1
50	Hard Washer	8


32
33
31
30
13
29
44
28
27
26
25
24
53
18
19
20
10
11
16
15
14
13
12
1
8
9
21
38
27
28
27
39
12
10
11
34
35
37
36
0
9
1
2
3
5
6
7
4
21
22

5235 Parts's List

UPPER CUTTERHEAD
FRONT & REAR PRESSURE PLATE
DUST HOOD

Index	Description	Quantity
1	Upper Cutterhead Bearing Housing	2
2	Upper Cutter Bearing	2
3	Bearing Cup	1
4	Bearing Cup Lock Screw	3
5	Bushing	1
6	Pulley	1
7	Pulley Lock Nut	2
8	Rear Press Plate Holding Collar	2
9	Front Pressure Plate Holding Collar	2
10	Upper Cutterhead Bearing Housing	1
11	Couble Round End Key 10*10*40	1
12	Nut	1
13	Bearing Cap	1
14	Bearing Cap Lock Screw	3
15	S Washer	4
16	Bearing Housing Lock Screw	4
17	Knife Spring	8
18	Knife Spring	4
19	Gib	4
20	Knife Lock Screw	40
21	Bearing Housing Base	2
22	Lock Screw	8
23	Rear Pressure Plate	1
24	S Washer	4
25	Rear Pressure Plate Lock Screw	4
26	Screw Shaft	2
27	Disk Washer	40
28	Spring	20
29	Knurled Nut	2
30	Nut	2
31	Screw Shaft	2
32	Upper Dust Hood	1
33	Dust Hood Lock Screw	2
34	Front Pressure Plate Bracket	1
35	Bracket Lock Screw	4
36	Bracket Shfat	1

5235 Parts's List

UPPER CUTTERHEAD
FRONT & REAR PRESSURE PLATE
DUST HOOD

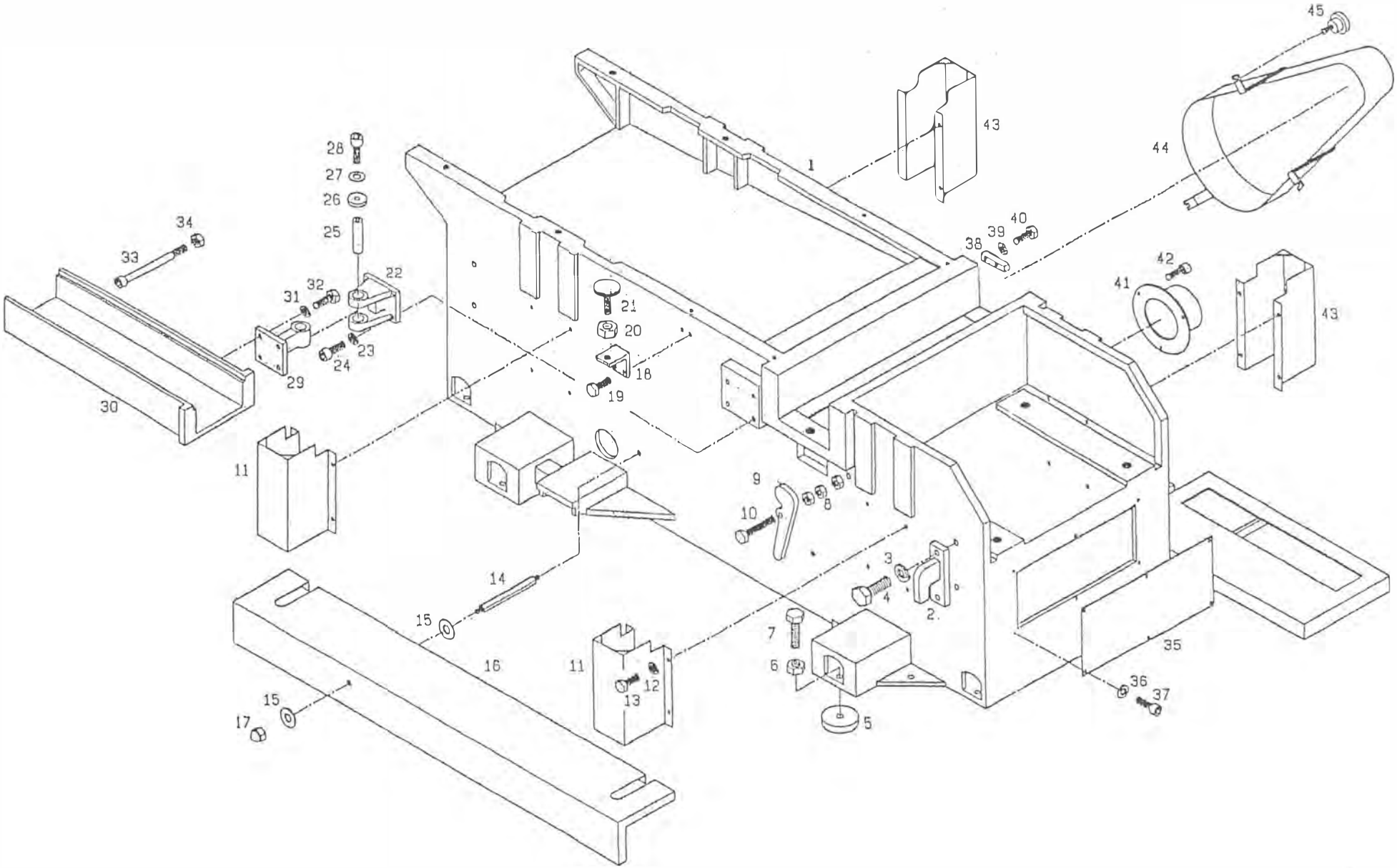
Index	Description	Quantity
37	Front Pressure Plate	18
38	Spring Tension Adjustment Nut	18
39	Spring Lock Screw	18
40	Lock Screw	2
41	Nut	2
42	Front Pressure Plate Position Adjustment Screw	2
43	Rear Pressure Plate Connector	1
44	Connector Lock Screw	4

B
1
2
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

5235 Parts's List

UPPER FEED ROLLERS

Index	Description	Quantity
1	Nut	8
2	Spring Tension Adjustment Screw	4
3	Nut	4
4	Screw Shaft	4
5	Spring Tension Adjustment Screw	4
6	Spring Shaft	4
7	Roller Bracket	2
8	Bearing	4
9	Bearing Cup	2
10	Roller Bracket Cover	2
11	Cover Lock Screw	10
12	Upper Roller (Smotth)	1
13	Key	2
14	Bushing	2
15	Upper Roller (Coarse)	1
16	Spring	72
17	Roller Spring Plug	72
18	Roller Clamp	24
19	Clamp Nut	2
20	Roller Bracket	2
21	Clamp Nut	1
22	Shaft Connector	2
23	Washer	2
24	Connector Lock Screw (Left Thread)	2
25	Auxiliary Roller Bearing	2
26	Auxiliary Roller	1
27	Auxiliary Roller Shaft	1
28	Spring	2
29	Auxiliary Roller Shaft Plate	2
30	Nut	4
31	Screw Shaft	4
32	Fix Plate Lock Screw	4
33	Shaft Bracket	2


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45

5235 Parts's List

MACHINE FRAME ASSEMBLY

Index	Description	Quantity
1	Machine Frame	1
2	Lifting Hook	4
3	S Washer	8
4	Lifting Hook Lock Screw	8
5	Leveling Pad	8
6	Nut	8
7	Leveling Adjustment Screw	8
8	Nut	3
9	Lower Cutterhead Slide Fix Piece	1
10	Lock Screw	1
11	Front Elevation Screw Guard	2
12	S Washer	16
13	Guard Lock Screw	16
14	Screw	2
15	Washer	4
16	Elevationg Connection Shaft Cover	1
17	Screw	2
18	Quick Setter Fix Plate	1
19	Lock Screw	2
20	Fix Plate Lock Nut	1
21	Quick Setter Fix Plate	1
22	Lower Cutterhead Fix Bracket	1
23	S Washer	4
24	Fix Bracket Lock Screw	4
25	Connecting Pin	1
26	Washer	1
27	S Washer	1
28	Screw	1
29	Auxiliary Bracket	1
30	Lower Cutterhead Slide Fix Piece	1
31	S Washer	4
32	Fix Bracket Lock Screw	4
33	Positioning Screw	1
34	Nut	1
35	Front Cover	1
36	S Washer	6
37	Screw	6
38	Lower Cutterhead Positioning Piece	1

5235 Parts's List

MACHINE FRAME ASSEMBLY

Index	Description	Quantity
39	WSWasher	2
40	Screw	2
41	Lower Dust Hood Connector	1
42	Screw	3
43	Rear Elevation Screw Guard	2
44	Lower Cuttehread Belt Guard	1
45	Belt Guard Lock Screw	3

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
24-1
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48

ELEVATION MECHANISM

Index	Description	Quantity
1	Micrometric Adjustment Handwheel	1
2	Handwheel Set Screw	1
3	Elevation Motor	1
4	S Washer	4
5	Motor Lock Screw	4
6	Shaft Coupling Rubber	1
7	Shaft Coupling Rubber	2
8	Elevation Screw Set	1
9	S Washer	3
10	Screw	3
11	Connector (6 holes)	8
12	Connector (6 holes)	2
13	Screw	24
14	Screw	16
15	Connector Shaft	2
16	Key	6
17	Connector (3 holes)	6
18	90º Direction Changer	2
19	S Washer	8
20	Screw	8
21	Elevation Gear Box	2
22	S Washer	12
23	Screw	12
24	Connector Shaft	1
25	Elevation Screw Set	1
26	Quill (Rear)	2
27	S Washer	8
28	Screw	8
29	Quill (Front)	2
30	Aluminium Cover Lock Screw	32
31	Aluminium Dust Guard	8
32	Dust Guard Cotton	8
33	Elevation Bushing	4
34	Elevation Bushing Tightening Adjustment Screv	4
35	Fixing Screw	4
36	Nut	4
37	S Washer	4
38	S Washer	16

ELEVATION MECHANISM

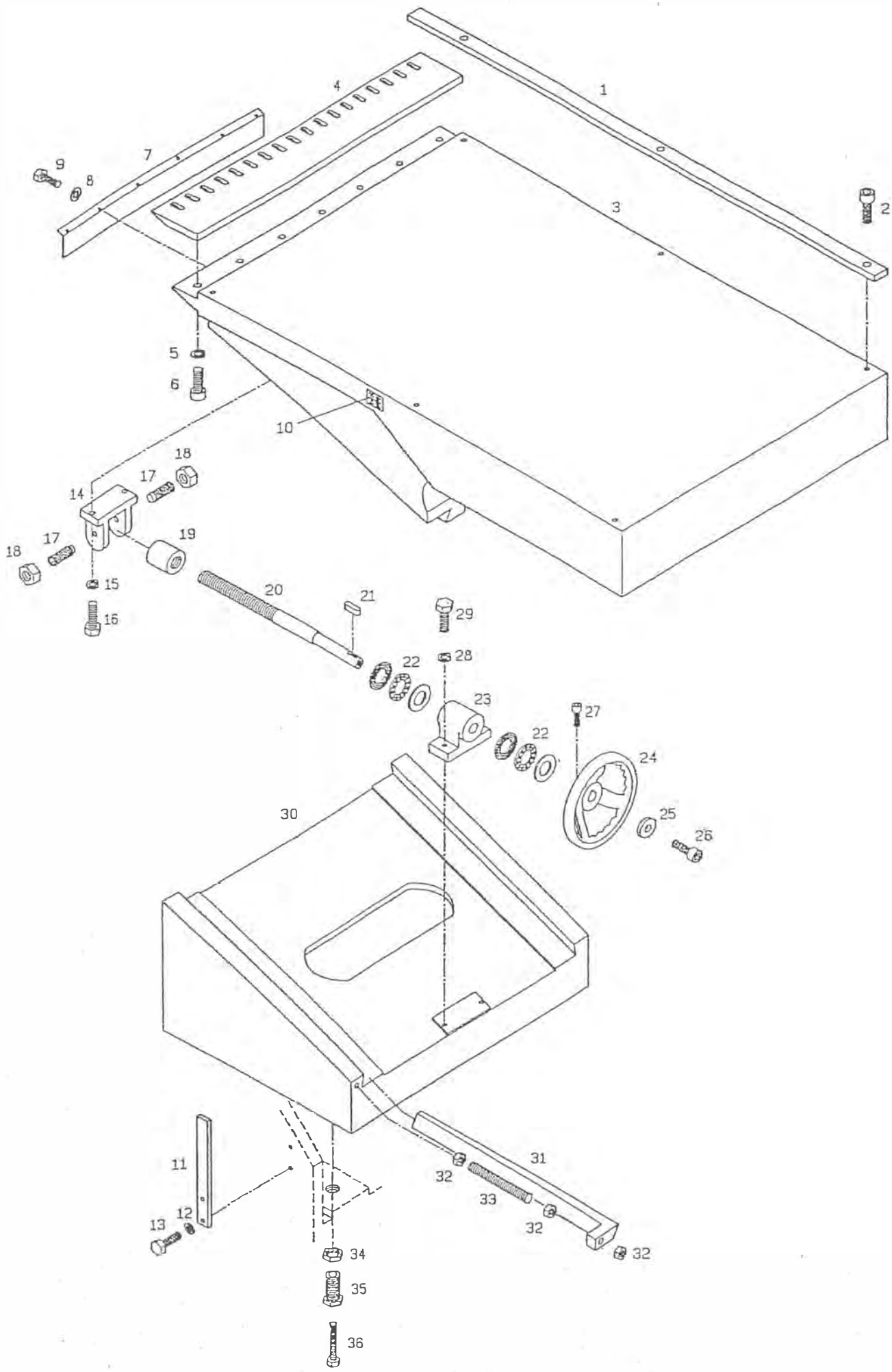
Index	Description	Quantity
39	Screw	16
40	Nut	4
41	S Washer	16
42	Screw	16
43	Digital Rearout Sensor	1
44	Sensor Fix Plate	1
45	S Washer	2
46	Screw	2

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
C

5235 Parts's List

REAR TABLE ASSEMBLY

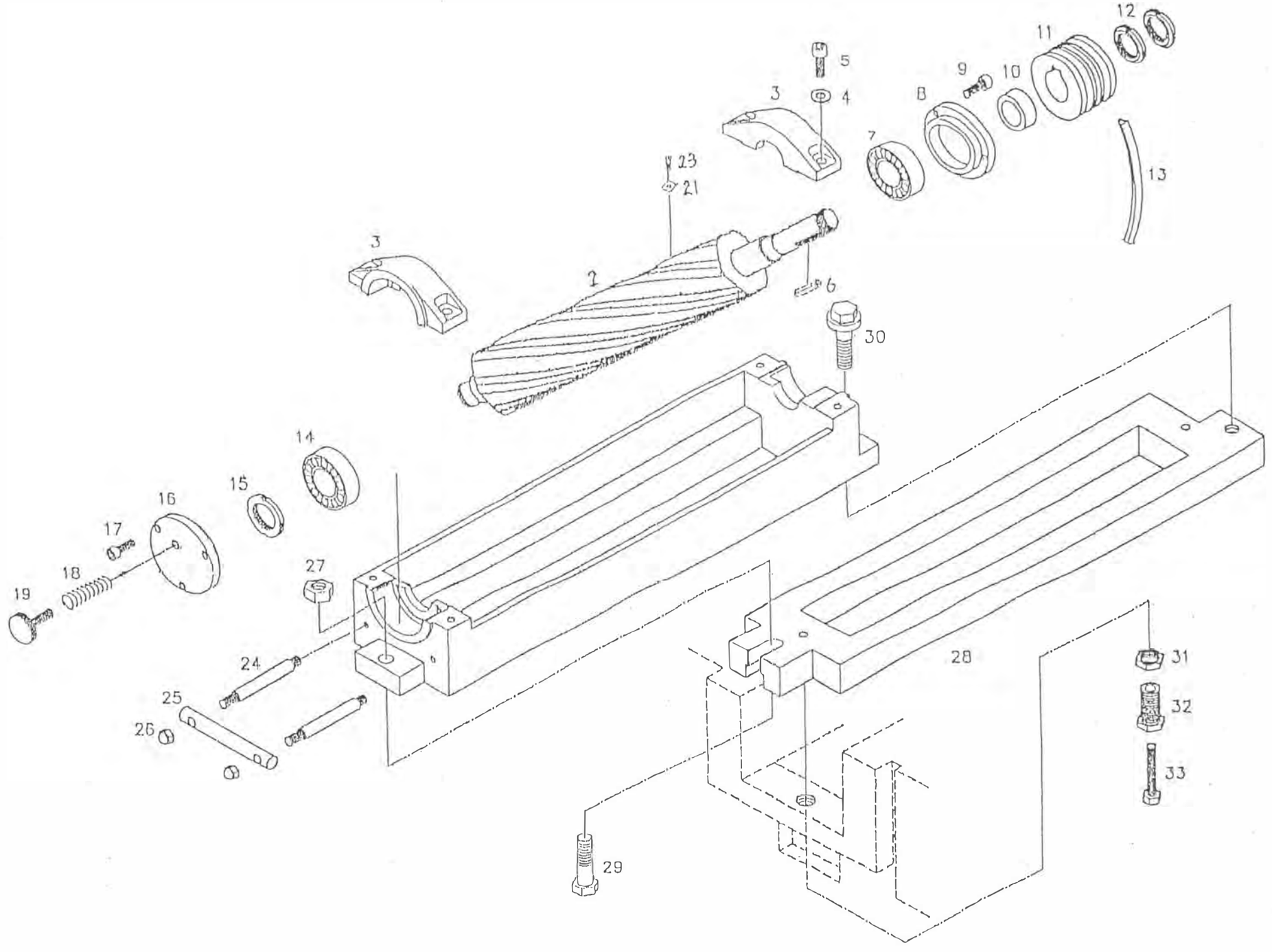
Index	Description	Quantity
1	Rear Table Fence	1
2	Rear Table Fence	1
3	Rear Table Fence	1
4	Rear Table Fence	1
5	Rear Table	1
6	Fence Lock Screw	10
7	Nut	0
8	Rear Table Lock Screw	8
9	Rear Table Lock Screw	8
10	Nut	0
11	Rear Table Lock Screw	0
12	Rear Table Lock Screw	0
13	S Washer	7
14	Steel Plate Lock Screw	7
15	Bearing Housing Lock Screw	6
16	Bearing Housing	6
17	Bearing	6
18	Bearing Clamp	4
19	Bearing Cap	4
20	Bearing Cap Lock Screw	12
21	Roller Shaft	2
22	Key	2
23	Key	2
24	Roller Shaft	2
25	Roller Set Screw	4
26	Bushing	2
27	Bearing Cap	2
28	Bearing Cap Lock Screw	6
29	Connector	2
30	Hard Washer	2
31	Screw	2


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36

5235 Parts's List

FRONT TABLE ASSEMBLY

Index	Description	Quantity
1	Front Table Fence	2
2	Fence Lock Screw	6
3	Front Table Fence	1
4	Cutterhead Steel Plate	1
5	S Washer	7
6	Lock Screw	7
7	Sclip Guard	1
8	S Washer	6
9	Clip Guard Lock Screw	6
10	Thickness Scale (Lower Cutterhead)	1
11	Thickness Indicator	1
12	S Washer	2
13	Thickness Indicator Screw	2
14	Screw Support	1
15	S Washer	2
16	Screw Support Lock Nut	2
17	Screw	2
18	Nut	2
19	Nut	1
20	Screw	1
21	Key	1
22	Thrust Bearing	2
23	Screw Support	1
24	Handwheel	1
25	Hard Washer	1
26	Screw	1
27	Screw	1
28	S Washer	2
29	Screw	2
30	Front Table Slide	1
31	Gib	1
32	Nut	3
33	Screw	1
34	Nut	4
35	Table Lock Screw	4
36	Table Lock Screw	4


1
2
3
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
21
23
24
25
26
27
28
29
30
31
32
33

LOWER CUTTERHEAD ASSEMBLY

Index	Description	Quantity
1	Cutterhead Support	1
2	Cutterhead Support	1
3	Upper Bearing Cover	2
4	S Washer	4
5	Upper Bearing Cover Lock Screw	4
6	Key	1
7	Bearing 6309V	1
8	Bearing Cap	1
9	Bearing Cap Lock Screw	3
10	Bushing	1
11	Pulley	1
12	Nut	2
13	Belt	3
14	Bearing 6309V	1
15	Nut	1
16	Bearing Cap	1
17	Bearing Cap Lock Screw	3
18	Spring	1
19	Knob	1
20	Knife Spring	8
21	knife Spring	4
22	Gib	4
23	Knife Lock Screw	40
24	Cutterhead Support Handle	2
25	Cutterhead Support Handle	1
26	Nut	2
27	Nut	1
28	Cutterhead Support Base	1
29	Lock Screw	1
30	Lock Screw	1
31	Nut	2
32	Lock Screw	2
33	Lock Screw	2

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

LOWER CUTTERHEAD MOTOR ASSEMBLY

Index	Description	Quantity
1	Motor	1
2	Washer	4
3	Motor Lock Screw	4
4	Pulley	1
5	Hard Washer	1
6	S Washer	1
7	Pulley Set Screw	1
8	Upper Slide	1
9	Set Screw	2
10	Gib	1
11	Nut	4
12	Screw	4
13	Nut	1
14	Screw	1
15	Key	1
16	Thrust Bearing	4
17	Lower Slide Set Screw	4
18	Lower Slide	1
19	Slide Pad	2
20	Hard Washer	2
21	Screw	2
22	Gear	1
23	Gear	1
24	Screw	2
25	Bushing	1
26	Key	2
27	Gear Shaft	1
28	Bushing Lock Screw	3
29	Handwheel Set Screw	1
30	Hard Washer	1
31	Screw	1
32	Handle	1
33	Handwheel Set Screw	1