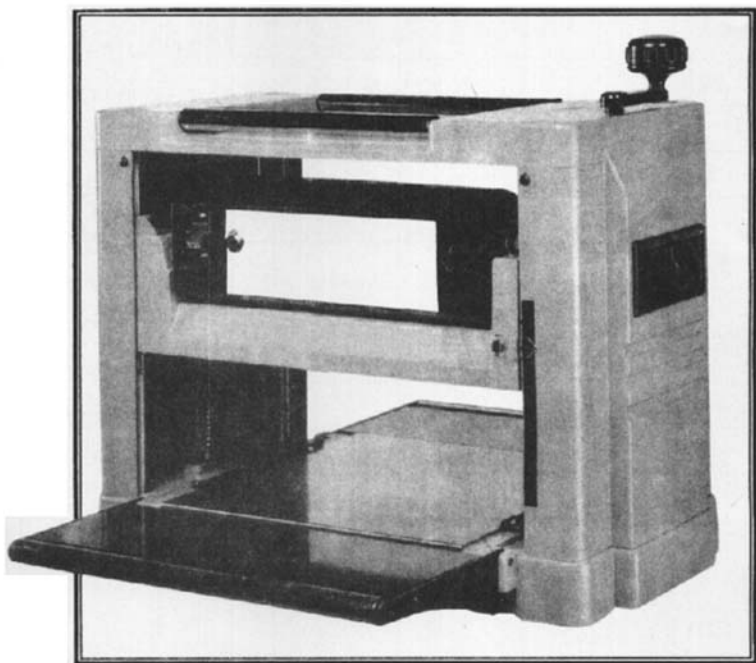


# **12 1/2" PLANER INSTRUCTION MANUAL**



**Moder: MB 1931**

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## **GENERAL SAFETY RULES FOR POWER TOOLS**

**WARNING:** Do not attempt to operate until you have read thoroughly and understand completely all instructions, rules, etc. contained in this manual. **Failure to comply can result in accidents involving fire, electric shock, or serious personal injury.** Keep this owners manual and review frequently for continuous safe operation.

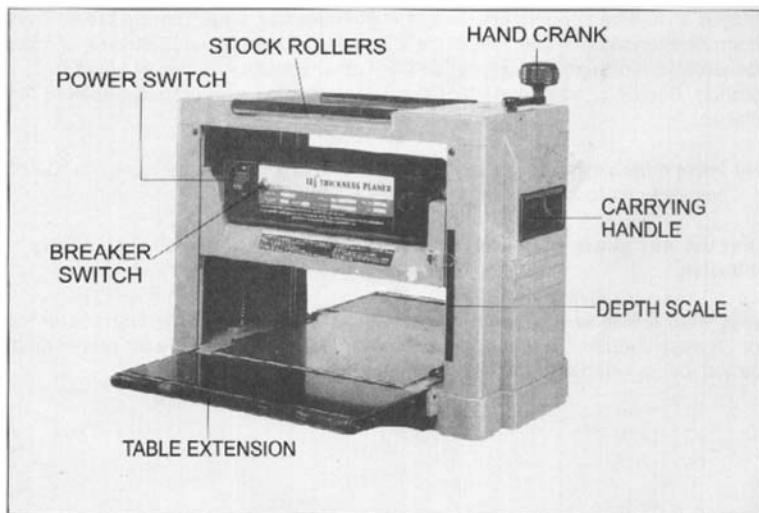
- 1. Know your machine.** For your own safety, read the owner's manual carefully. Learn its application and limitations, as well as specific potential hazards pertinent to this machine.
- 2. Make sure all tools are properly grounded.** If the tools electrical plug has three prongs, it should be used with a three-hole electrical socket. Do not remove or otherwise disable the third prong.
- 3. Keep guards in place and in working order.** If a guard must be removed for maintenance or cleaning, make sure it is properly reattached before using the tool again.
- 4. Remove adjusting keys and wrenches.** Form the habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
- 5. Keep work area clean.** Cluttered areas and workbenches increase the likelihood of an accident.
- 6. Do not use in dangerous environments.** Do not use power tools in damp or wet locations, or expose them to rain. Keep work area well illuminated.
- 7. Keep children away.** All visitors should be kept at a safe distance from work area.
- 8. Make workshop childproof.** With padlocks, master switches, or by removing starter keys.
- 9. Do not force the machine.** It will do the job better and be safer at the rate for which it was designed.
- 10. Use the right tools.** Do not force the machine or attachments to do a job for which they were not designed. Contact the manufacturer or distributor if there is any question about the tool's suitability for a particular job.

## **GENERAL SAFETY RULES FOR POWER TOOLS**

- 11. Wear proper apparel.** Avoid loose clothing , gloves, neckties, rings, bracelets, or jewelry which could be caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
- 12. Always use safety glasses.** Also use face or dust mask if operation is dusty. Everyday eyeglasses only have impact resistant lenses. They are NOT safety glasses.
- 13. Secure work.** Use clamps or a vise to hold work when practical. It is safer than using your hand and frees both hands to operate the tool.
- 14. Do not overreach.** Keep proper footing and balance at all times.
- 15. Maintain machine in top condition.** Keep machine clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 16. Disconnect machine from power source.** Before servicing and when changing accessories, or when mounting and remounting motor.
- 17. Avoid accidental starting.** Make sure switch is in the "off" position before plugging in power cord.
- 18. Use recommended accessories.** Consult the owner's manual for recommended accessories.
- 19. Check damaged parts.** Before further use of the machine, a guard or other part that is damaged should be carefully checked to make sure that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other condition that may affect its operation. Guards or other parts that are damaged should be properly repaired or replaced.
- 20. Never leave machine running unattended.** Turn power off. Do not leave the machine until it comes to a complete stop.
- 21. Do not use any power tools while under the effects of drugs, alcohol, or any medication.**
- 22. Always wear a face or dust mask** if operation creates a lot of saw dust and/or wood chips. Always operate the tool in a well ventilated area and provide for proper dust removal. Use a wood dust collection system whenever possible.

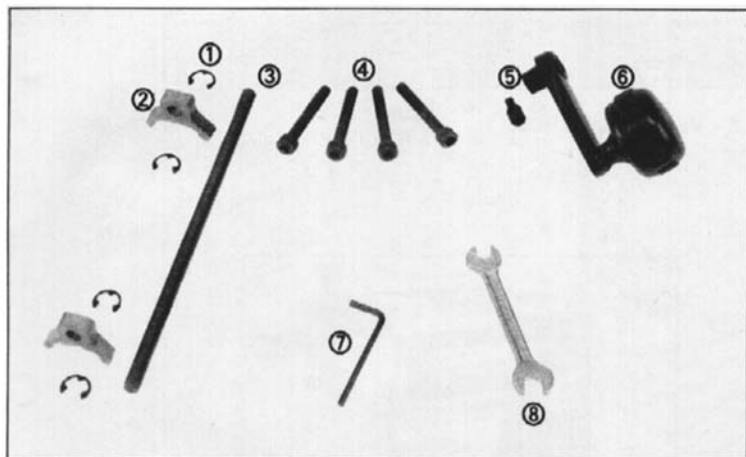
## **SAFETY INSTRUCTIONS FOR MB 1931**

- 1.** Always wear eye protection when operating any machine.
- 2.** Before starting up, check to make sure all holding screws are tight.
- 3.** Always stop motor and disconnect from power source before making any adjustments.
- 4.** Be sure all guards are in place before operating equipment.
- 5.** Read operator's manual thoroughly and familiarize yourself with machine before attempting to operate.
- 6.** Do not force work through the machine. Allow the planer to apply the proper feed rate.
- 7.** Check feed rollers occasionally to be sure chips and sawdust are not lodged between any components. If rollers are not seated firmly, the feed rolls will not hold stock firmly against the bed, allowing kickback.
- 8.** Plane only wood boards.
- 9.** Use sound lumber, with no loose knots, and as few tight knots as possible.
- 10.** Never stand directly in line with either the infeed or outfeed sides. Always stand off to one side of the machine.
- 11.** Be certain the workpiece is free from nails, screws, stones, and other foreign objects which could damage the knives.
- 12.** Be sure the knives are properly attached as described in the instructions.
- 13.** The knives are sharp and can easily cut your hand. Use caution when handling the knives and cutterhead assembly.
- 14.** Allow the cutterhead to reach full speed before using.

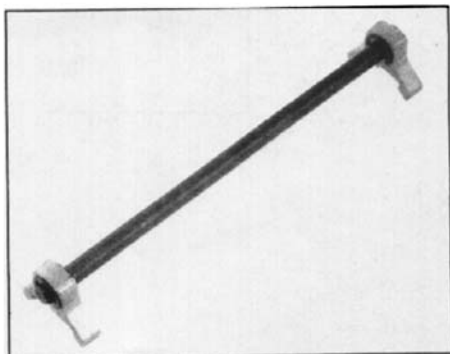


# **LOOSE PARTS BAG**

1. "C" circlip.....4 pieces
2. Knife setting guide.....2 pieces
3. Knife setting gauge shaft.....1 piece
4. Base lock screw Not included if machine supplied with rubber feet.. 8mm x 50 (L)4 pieces
5. Elevation knob lock screw..... 6mm x 15 (L)- 1 piece
6. Cutterhead raising hand crank.....1 piece
7. Allen wrenches..... 5mm
8. Open end wrench.....8 x 10- 1 piece

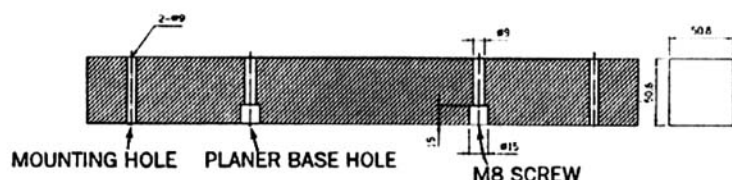


**Properly assembled knife setting gauge**



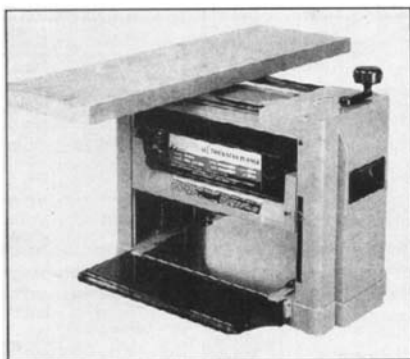
## **MOUNTING THE PLANER ONTO THE WOOD BASE**

1. When the planer is not mounted on a planer stand, it suggested that it be mounted onto two pieces of lumber. This will ensure maximum stability .
2. Choose two pieces of wood according to the sizes shown on the figure below. Mount the planer onto the wood surface.
3. Use the four M8 x50mm long hexagonal socket head screws (**furnished**) to mount the plane base onto the wood.



## **STOCK ROLLERS**

Two rollers are built on top of the planer, providing convenient handling of stock for consecutive cutting operations.



***Stock placed on the top of the machine can be easily pulled to the operator for planing.***



# SPECIFICATIONS: MB 1931

## Motor:

Volts..... 120V (60Hz) or 240V (50Hz)  
Amps..... 13A/120V or 7A/240V, Single phase

## Cutting capacity:

Length of stock (min)..... 5" (127mm)  
Width of stock (max)..... 12-1/2" (318mm)  
Thickness of stock..... 0.2" ~ 6" (5 ~ 153mm)  
Depth of cut (max.)..... 1/8" (3mm)  
Feed rate..... 26.2 FPM (8m/min)

## Cutterhead:

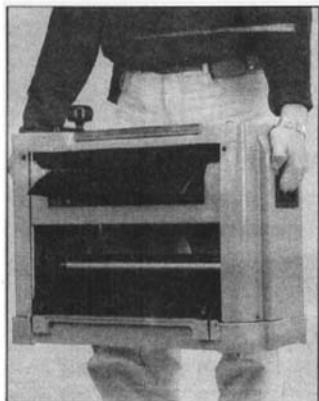
Number of knives..... 2, single edged  
Diameter..... 1.89" (48mm)  
Idle running speed..... 8000 RPM  
Cuts per minute..... 16000

## Overall dimensions:

Length..... 22.8" (580mm)  
Width..... 22" (558mm)  
Height..... 18.2" (463mm)  
Net weight..... 67.6lbs (30.7kg)  
Gross weight..... 70lbs (31.8kg)  
Packing size (L x W x H)..... 24" x 18.3" x 13.8"

## **MOVING THE PLANER**

The planer can be moved by carrying it on the right and left of the frame. Close the table extensions before you move the planer.

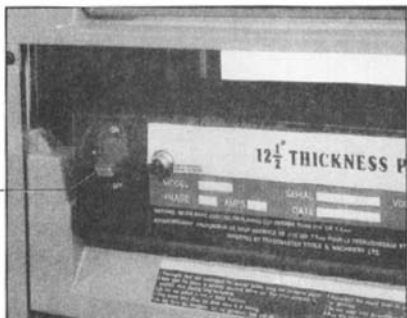


**WARNING:** *Make sure the plane has been turned off and unplugged before you move the planer.*

## **ON/OFF SWITCH**

Your planer has a rocker style switch with a removable locking key to prevent unauthorized use. If you intend to be away from the machine for a long period of time and there is any chance of its use by others, especially children, remove the locking key with the switch in the OFF position. Store it in a safe, inconspicuous place in your workshop. To turn the planer on, insert the red locking key and turn the switch to the ON position. The planer will then be operable. To turn the planer off, turn the switch to the OFF position.

SAFETY ON/OFF  
SWITCH



**WARNING:** Always be sure the switch is in the OFF position before connecting the planer to the power source.

## **CIRCUIT BREAKER SWITCH**

The machine is provided with a breaker switch for overload protection. If an overload occurs, the switch will pop out. If this happens, wait several minutes, and press the switch to reset.

BREAKER SWITCH

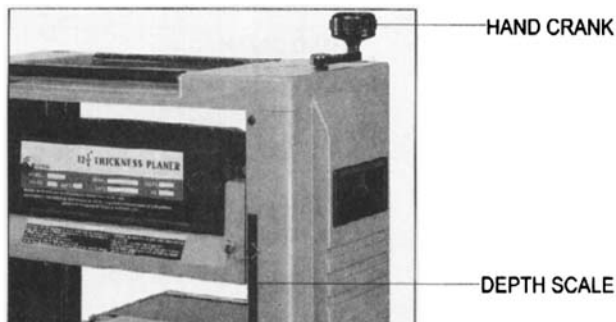


## **ADJUST DEPTH OF CUT**

1. The thickness of stock running through the planer is controlled by the distance you adjust the cutting knife from the table.
2. Always start your work by making a light planing cut. The depth of cut on subsequent passes may be increased, up to 3mm. But, remember that a light cut creates a finer finish than a heavier cut.
3. To adjust the depth of cut, turn the cutterhead-raising hand crank. The depth of cut adjustment can be read from the depth scale. The adjustment graduation is 2mm per revolution of the hand crank.

**WARNING: Never plane more than 3mm in one pass and never attempt to plane a board under 150mm in length. Always wear a protective face shield**

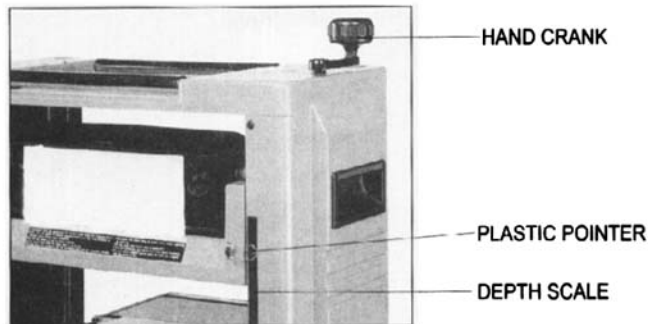
4. Do not plane stock which is less than 5mm thick.
5. Do not plane stock which is thicker than 6" (153mm).



## **ADJUSTING THE DEPTH OF CUT SCALE**

For safe operation of your planer, it is very important that the depth of cut scale is read accurately. To adjust the depth of cut scale, follow the steps outlined below:

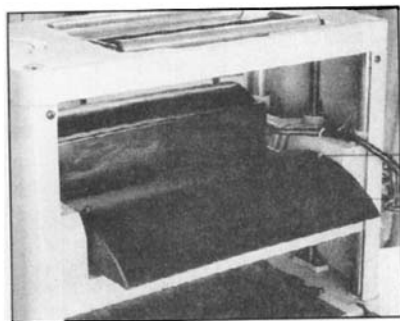
- 1. Try to feed a board for planing.**
- 2. Compare the measured thickness of the board to the reading on the depth of cut scale.**
- 3. If the reading on the depth of cut scale is incorrect, loosen the screw which tightens the plastic pointer and adjust accordingly.**
- 4. When you have properly adjusted the depth of cut scale, test your reading by planing a piece of scrap lumber. After planing, measure the planed thickness and double check it against the scale reading. The two measurements should be the same. If the measurements are not the same, re-adjust your depth of cut scale to read the planed thickness.**



## **REMOVING THE PLANER KNIVES**

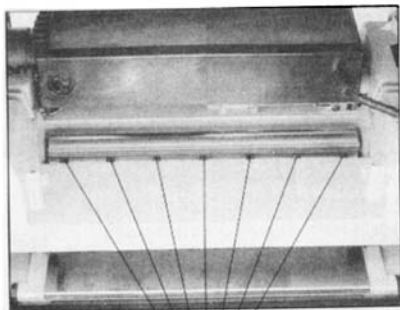
**WARNING:** *Unplug your planer from the power source before removing the planer knives.*

1. Remove the chip guard by removing the screws shown in figure.
2. Loosen the lock bar (B) and knife by turning the lock screws (A) clockwise. The knives are spring loaded, and will push out when the assembly is loosened.
3. Take out the knife (C), and then the knife lock bar (B).

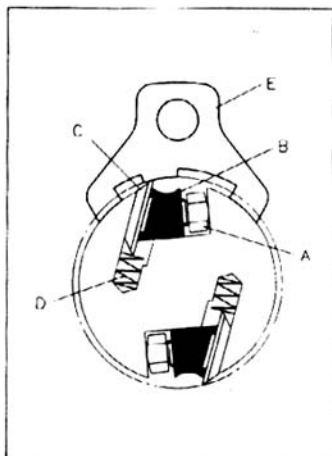


SCREWS

CHIP GUARD



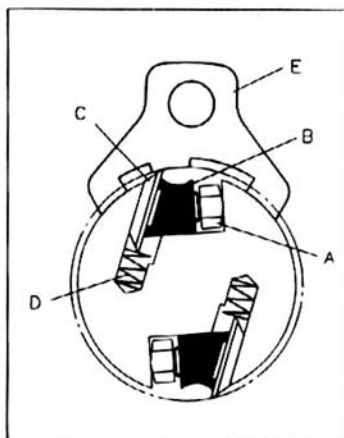
SCREW



## **INSTALLING THE PLANER KNIVES**

**WARNING:** *Unplug your planer from its power source before removing or installing the planer knives.*

1. Remove the knives according to the instructions for **"Removing the Planer Knives"**.
2. Fit the knife lock bar (B) into the slot on the cutterhead.
3. Fit the knife into the slot on the cutterhead, and tighten the lockbar-knife assembly by turning the screws counterclockwise. Make sure the knife is facing the correct direction (See fig. below)
4. Set the knife heights according to the instructions on the following page. The knife height must be reset every time the knives are taken out for any reason.
5. Be sure to replace the chip guard after knives are installed.



**WARNING:** *The knife edge is very susceptible to chipping. Use caution when handling the gauge near the knives to avoid damaging them.*

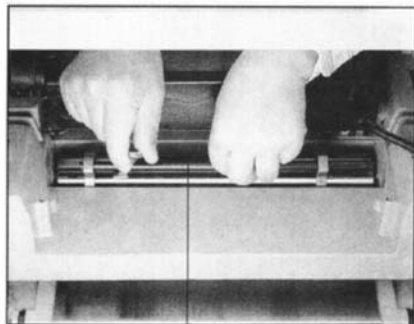
**WARNING:** *The assembly must be tightened securely to prevent accidents during planing.*

## **SETTING THE KNIFE HEIGHT**

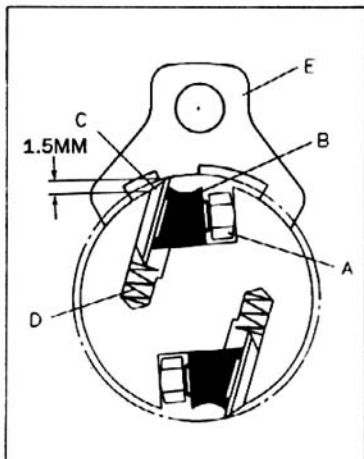
1. To obtain a knife projection of 1.5mm, place the knife setting gauge (E) on the cutterhead with both guides resting firmly against the knife.
2. Loosen the assembly by turning the 7 screws (A) clockwise with an open end wrench.
3. When the knife is pressed to the proper height by the guides on the gauge, retighten the assembly by turning the screws counterclockwise. Make sure all seven lock screws are tightened properly.

**WARNING:** *The knife edge is very susceptible to chipping. Use caution when handling the gauge near the knives to avoid damaging them.*

**WARNING:** *The assembly must be tightened securely to prevent accidents during planing.*



(E) KNIFE SETTING GAUGE





## **ADJUST THE TABLE EXTENSION ROLLER**

1. The table extensions are mounted at the front and rear ends of the main table.
2. Raise the cutterhead assembly so that you can get a clear view and work comfortably adjusting the extensions.
3. Place a straight edge across the main table and table extension to be adjusted.
4. If the main table and table extension roller are not aligned, then adjust the table extension by loosening nut (B) and turning screw (A) until the table extension just touches the straight edge. Adjust the right and left side of the table extension in this way.
5. The roller has been factory set to align with the table extension, and requires no further adjustment.

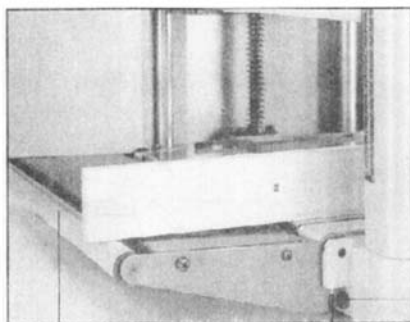


TABLE EXTENSION ROLLER

SCREW(A)

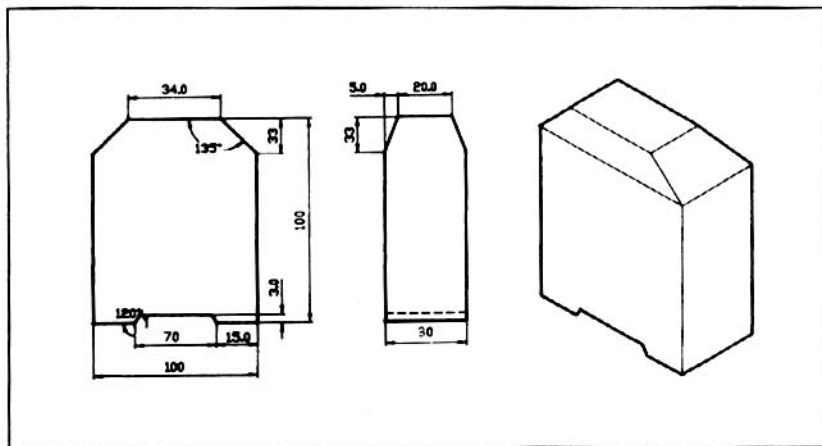
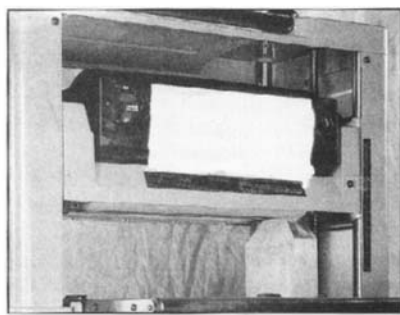
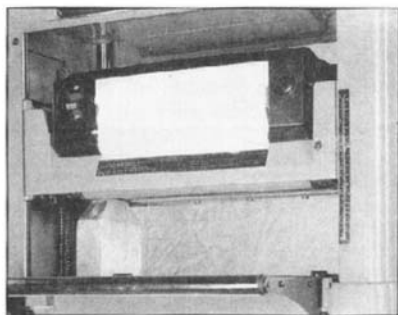
NUT(B)

## **MAKING THE CUTTERHEAD AND WORKTABLE PARALLEL**

Plane a workpiece and measure the workpiece thickness after the cut. If the thickness is not the same on both sides of the workpiece, perform the following.

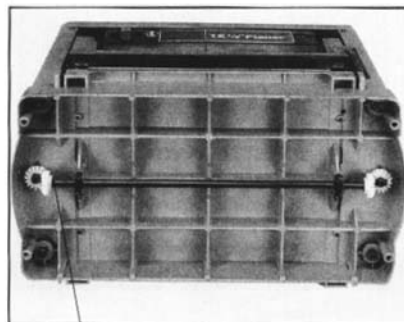
Adjust the cutter shaft and the worktable so they are parallel.

The tools used for checking are shown below. Please use hardwood to make a tool gauge block according to the figure shown size. Make the adjustment as per the following procedures.

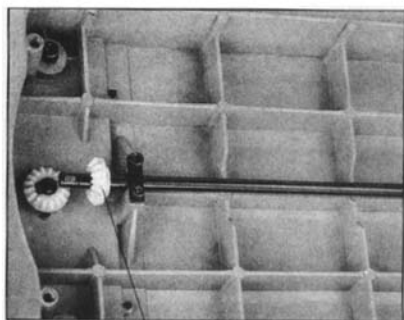


## **MAKING THE CUTTERHEAD AND WORKTABLE PARALLEL**

- 1. Undemeath the main table, loosen the "C" circlip as shown in Figure 1 below.**
- 2. Disengage the bevel gear next to the circlip. See figure 2 below.**
- 3. Turn the bevel gear to adjust the height of that side of the cutterhead. One tooth of turn counterclockwise gives 0.12mm raising thickness.**
- 4. After adjustment, re-engage the bevel gear and replace the "C" circlip.**



"C"circlip



Bevel gear

## **PLANING FOR FINISH**

Planing for a smooth finish as well as thickness is best accomplished by taking light cuts on the board. However, several other things are important besides light cuts to achieve a smooth finish.

Always feed the board in a direction that allows the planer blades to cut with the grain. This aids the knife in severing the wood fibers rather than lifting and tearing the fibers. Torn fibers give a fuzzy appearance to the surface. Feeding against the grain can also cause your knife to lift large chips from the board's surface, causing a very unsightly appearance.

## **THICKNESS PLANING**

Thickness planing is the sizing of material to a desired thickness, while creating a smooth surface parallel to the opposite side of the board.

The art of thickness planing consists mainly of using good judgment about the depth of cut in various situations. You must take into account not only the width of the stock, but the hardness of the board, its dampness, straightness, grain direction and grain structure.

The effects of these factors upon the quality of the finished work can only be learned through experience. It is always advisable, whenever working with a new type of wood, or one with unusual problems, to make test cuts on scrap material if possible prior to working on your finished product.

## **FOR ADDITIONAL PLANING**

If more material needs to be removed, hand crank the cutterhead no more than 3mm and complete another pass. Repeat this process until the desired thickness has been reached.

## **LUBRICATION**

1. The recommended lubrication for roller chains used in medium to slow speed operation is to simply wipe the chain clean. When there is an appreciable build-up of dust, dirt or wood-shavings, coat chain with a light film of oil but never pour the oil directly on the chain. Over-oiling defeats the purpose of the lubrication, since it simply tends to hasten the collection of dust, shavings, etc., and works them into members of the chain. This hastens wear and leads to premature replacement. This applies to the speed reduction and height adjustment chains, as well as the elevation screws.
2. The bearings on the cutterhead are factory lubricated and sealed. They require no further attention.

## **PERIODIC MAINTENANCE**

Buildup of sawdust and other debris can cause your machine to plane inaccurately. Periodic cleaning is not only recommended, but mandatory for accurate precision planing.

1. Close-fitting parts, such as the lockbars and the planer cutterhead slots should be cleaned with a brush and freed from clinging foreign matter and then replaced in their respective positions, slightly dampened with oil.
2. Remove resin and other accumulations from feed rolls and table with a non-flammable solvent.

## **TROUBLESHOOTING**

<b>PROBLEM</b>	<b>POSSIBLE CAUSE</b>	<b>REMEDY</b>
<b>FUZZY GRAIN</b>	<ol style="list-style-type: none"><li>1. Planing wood with high moisture content.</li><li>2. Dull knives.</li></ol>	<ol style="list-style-type: none"><li>1. Dry the wood.</li><li>2. Sharpen knives.</li></ol>
<b>TORN GRAIN</b>	<ol style="list-style-type: none"><li>1. Too heavy a cut</li><li>2. Knives cutting against the grain.</li><li>3. Dull knives.</li></ol>	<ol style="list-style-type: none"><li>1. Review proper depth of cut.</li><li>2. Feed wood with the grain, or turn workpiece around.</li><li>3. Sharpen knives.</li></ol>
<b>ROUGH/RAISED GRAIN</b>	<ol style="list-style-type: none"><li>1. Dull knives</li><li>2. Too heavy a cut.</li><li>3. Moisture content too high.</li><li>4. Cutterhead bearings damaged.</li></ol>	<ol style="list-style-type: none"><li>1. Sharpen knives.</li><li>2. Review proper depth of cut.</li><li>3. Dry the wood.</li><li>4. Replace bearings</li></ol>

## **TROUBLESHOOTING**

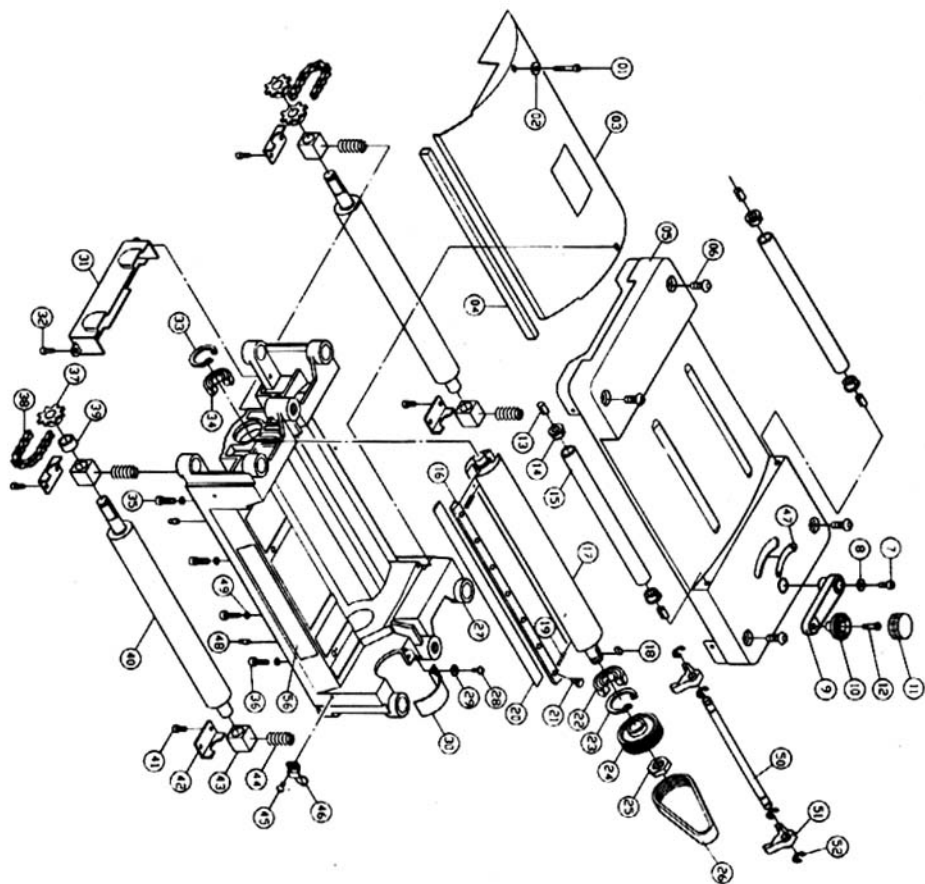
<b>PROBLEM</b>	<b>POSSIBLE CAUSE</b>	<b>REMEDY</b>
<b>POOR FEEDING OF LUMBER</b>	<ul style="list-style-type: none"><li><b>1.</b> Planer table dirty.</li><li><b>2.</b> Feed roller damaged</li><li><b>3.</b> Sprocket damaged.</li><li><b>4.</b> Gear box malfunction.</li></ul>	<ul style="list-style-type: none"><li><b>1.</b> Clean off pitch and residue, and lubricate planer table.</li><li><b>2.</b> Replace.</li><li><b>3.</b> Replace.</li><li><b>4.</b> Check gear box.</li></ul>
<b>WORKPIECE JAMMED</b>	<ul style="list-style-type: none"><li><b>1.</b> Inadequate knife setting height.</li></ul>	<ul style="list-style-type: none"><li><b>1.</b> Set the knives to the correct height.</li></ul>

## **TROUBLESHOOTING**

<b>PROBLEM</b>	<b>POSSIBLE CAUSE</b>	<b>REMEDY</b>
UNEVEN DEPTH OF CUT SIDE TO SIDE	<ol style="list-style-type: none"> <li>1. Knife projection not uniform.</li> <li>2. Cutterhead not levelled to planer bed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust knife projection.</li> <li>2. Level cutterhead to table:</li> </ol>
BOARD THICKNESS DOESN'T MATCH DEPTH OF CUT SCALE	Depth of cut scale incorrect.	Adjust depth of cut scale.
CHAIN JUMPING	<ol style="list-style-type: none"> <li>1. Sprockets misaligned.</li> <li>2. Sprockets worn.</li> </ol>	<ol style="list-style-type: none"> <li>1. Align sprockets.</li> <li>2. Replace sprockets.</li> </ol>
MECHANICAL/ ELECTRICAL MACHINE WON'T START/RESTART	<ol style="list-style-type: none"> <li>1. Not plugged in.</li> <li>2. Circuit breaker/fuse.</li> <li>3. Motor failure.</li> <li>4. Loose wire.</li> <li>5. Overload reset has not reset.</li> <li>6. Motor starter failure.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check power source.</li> <li>2. Check power source.</li> <li>3. Have motor checked.</li> <li>4. Have motor checked by qualified electrician.</li> <li>5. Allow machine to cool down and restart.</li> <li>6. Have motor starter checked by qualified electrician.</li> </ol>
REPEATED CIRCUIT TRIPPING RESULTING IN MOTOR STOPPAGE	<ol style="list-style-type: none"> <li>1. Extension cord too long or too thin.</li> <li>2. Knives too dull.</li> <li>3. Low voltage running.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use a shorter or thicker extension cord.</li> <li>2. Sharpen or replace knives.</li> <li>3. Check voltage.</li> </ol>



# A



**MODEL : MB 1931**

# PARTS LIST

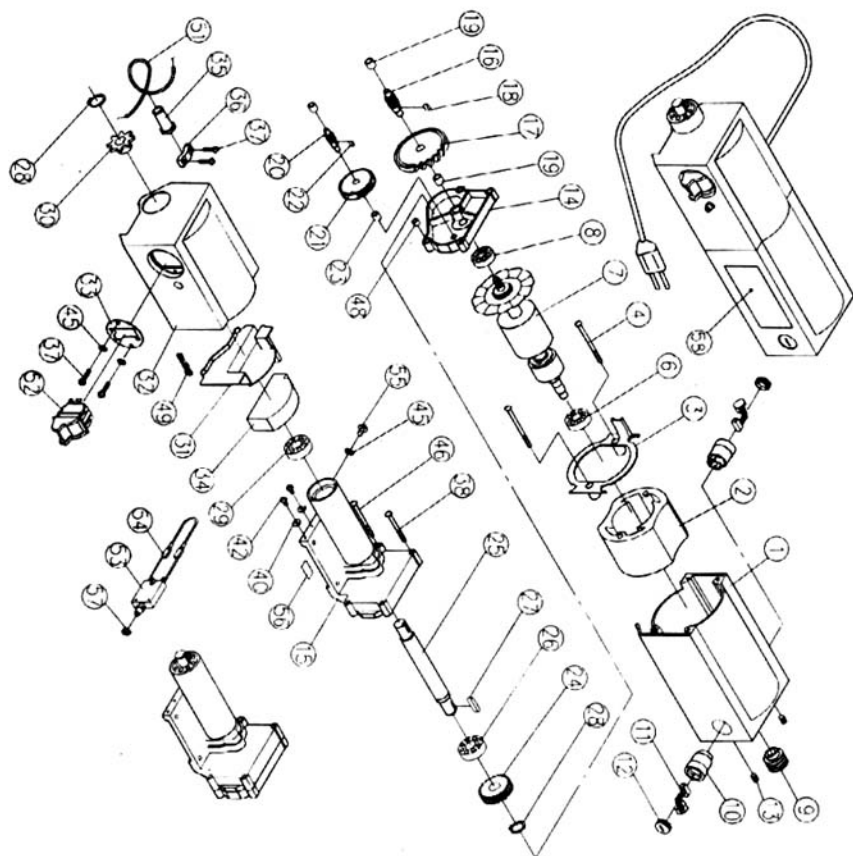
# A

No.	Description	Specification	Quantity
	Upper Mechanism		
1	Hexagonal socket head screw	M5*0.8P*30	2
2	Spring washer	5.1*9.2*1.3	2
3	Chip guard assembly Chip guard warning label		1 1 1
4	Sponge piece		1
5	Upper guard		1
6	Hexagonal socket head screw	M8*1.25P*16	4
7	Hexagonal socket head screw	M6*1.0P*16	1
8	Spring washer	6.1*10.2*1.4	1
9	Handle set Handle crank		1 1
10	Hand knob		1
11	Handle guard		1
12	Handle shaft		1
13	Spring pin	6*20	4
14	Bush		2
15	Roller		1
16	Gib		2
17	Cutterhead		1
18	Double round end key	5*5*10	1
19	Spring		1
20	Knife		2
21	Gib lock screw	1/4-28UNF	14
22	Bearing	6203-2NK	1
23	"C" circlip	RTW-40	1
24	Cutterhead pulley		1
25	Nut		1
26	Belt	135-J6	1
27	Upper frame		1

# A

28	Cross round head screw	M4*0.7P*8	2
29	Plain washer	4*10*0.8	2
30	Pulley guard		1
31	Chain guard		1
32	Cross round head screw	M5*0.8P*8	2
33	"C" circlip	RTW-35	1
34	Bearing	6202-2NK	1
35	Hexagonal socket head screw	M6*1.0P*20	2
36	Self tapping screw	M6*1.59P*20	2
37	Chain sprocket		3
38	Chain	#41*26P	2
39	Spacing collar		1
40	Rubber roller		2
41	Cross round head screw	M5*0.8P*10	8
42	Bracket plate		4
43	Roller bracket		4
44	Bracket spring		4
45	Cross round head screw	M4*0.7P*8	1
46	Indicator		1
47	Indication label		1
48	Pin		2
49	Spring washer	6.1*10.2*1.4	4
50	Gauge rod		1
51	Knife setting guide		2
52	"E" circlip	ETW-9	4
56	Warning label		1

# B



MODEL : MB 1931

# PARTS LIST

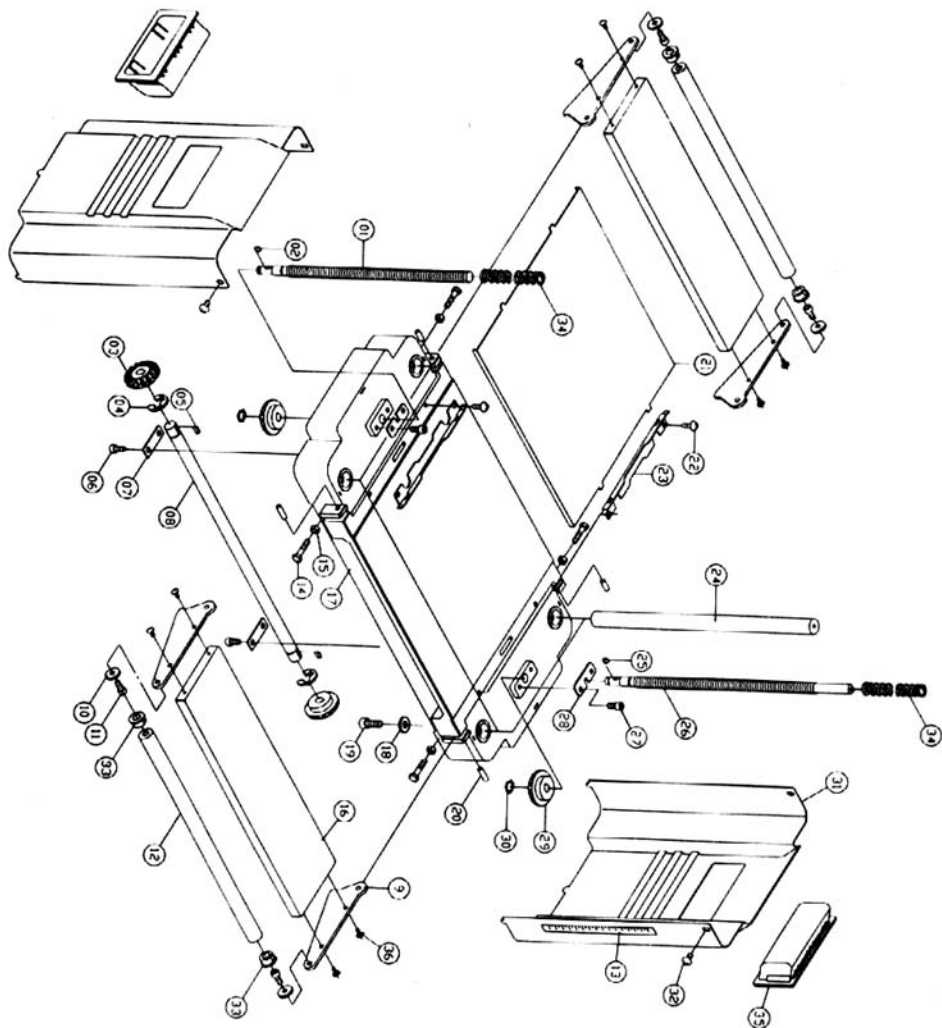
# B

No.	Description	Specification	Quantity
	Motor Assembly		
1	Motor casing		1
2	Stator assembly		1
3	Plate		1
4	Self tapping screw	M4.85*1.59P*70	2
6	Bearing	#6201-2NK	1
7	Rotor assembly		1
8	Bearing		1
9	Motor pulley		1
10	Carbon brush Carbon brush bracket		2 1
10	Carbon brush cover		1
11	Carbon brush		2
13	Set screw	M5-0.8P*10	2
14	Gear box cover		1
15	Gear box		1
16	Gear shaft	8	1
17	Gear	70	1
18	Double round end key	4*4*8	1
19	Bronze bush	8*11.13*10	2
20	Gear shaft	8	1
21	Gear	46	1
22	Double round end key	3*3*7	1
23	Bush	6*10*9	2
24	Gear	33	1
25	Shaft		1
26	Bearing	#6202Z(A)	1
27	Double round end key	4*4*10	1
28	"C" circlip	STW-15	2
29	Bearing	#6002Z(A)	1

# B

30	Chain sprocket Switch casing assembly	8	1 1
31	Spacing plate		1
34	Dust guard plug		1
32	Switch guard (black)		1
36	Electrical wire clamp		1
37	Self tapping screw	M4*16	4
49	R type plug	SSP-10	1
35	Power wires Safety wire ball		1 1
51	Power wires		1
33	Switch plate		1
38	Self tapping screw	M4.85*1.59P*50	3
40	Plain washer	4*10*0.8	2
42	Cross round head screw	M4*0.7P*8	2
45	Teeth washer	BW-5	3
46	Self tapping screw	M4.85*1.59P*60	1
48	Positioning pin	5.6*7.1*5	2
52	Safety switch		1
53	Temperature control switch		1 1
57	Nut		1
54	Temperature control wire	2.0/1C*13cm*2	1
55	Cross round head screw	M5*.08P*8	1
56	Motor label		1
58	Motor name plate		1

**C**



**MODEL : MB 1931**

# PARTS LIST



No.	Description	Specification	Quantity
	Base Assembly		
1	Left screw		1
2	Double round end key	4*4*8	1
3	Bevel gear		2
4	"E" circlip	ETW-8	2
5	Double round end key	4*4*8	2
6	Hexagonal socket head screw	M6*1.0P*10	4
7	Fixing piece		2
8	Transmission shaft		1
9	Table extension bracket		4
10	Plain washer	6*19*3	4
11	Table extension bracket	M6*1.0P*8	4
12	Table extension roller (seamless steel pipe)	20*350	2
13	Depth scale		1
14	Hexagonal head screw	M6*1.0P*25	4
15	Nut	M6*1.0P	4
16	Table extension		2
17	Base		1
18	Plain washer	5/16*23*2	4
19	Hexagonal socket head screw	M8*1.25P*20	4
20	Spring pin	6*20	4
21	Pad		1
22	Cross round head screw	M6*1.0P*10	4
23	Guide plate		2
24	Column		4
25	Double round end key	4*4*8	1
26	Right screw		1
27	Hexagonal socket head screw	M6*1.0P*10	4
28	Fixing piece		2



# C

29	Bevel gear		2
30	"S" circlip	STW-10	2
31	Side guard		2
32	Cross round head screw	M5*0.8P*6	4
33	Bush (A)		4
34	Screw spring		2
35	Carrying handle		2
36	Cross round head screw		8