



# Model 0015 HS 15" Planer Owner's Manual



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## For Your Own Safety Read Instruction Manual Before Operating This Tool

Read this manual completely and observe all warning labels on the machine. This machine has made every attempt to provide a safe, reliable, easy-to-use piece of machinery. Safety, however, is ultimately the responsibility of the individual machine operator. As with any piece of machinery, the operator must exercise caution, patience, and common sense to safely run the machine. Before operating this product, become familiar with the safety rules in the following sections.

1. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
2. **DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
3. **KEEP CHILDREN AWAY.** All visitors should be kept safe distance from work area.
4. **MAKE WORKSHOP KID PROOF** with padlocks, master switches, or by removing starter keys.
5. **USE RIGHT TOOL** Don't force tool or attachment to do a job for which it was not designed.
6. **WEAR PROPER APPAREL** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
7. **ALWAYS USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
8. **SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
9. **DON'T OVERREACH.** Keep proper footing and balance at all times.
10. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
11. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in off position before plugging in.
12. **USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
13. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine 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 conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
14. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
15. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.
16. **Wear eye protection.**

17. KEEP GUARDS IN PLACE and in working order.
18. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
19. DON'T FORCE TOOL It will do the job better and safer at the rate for which it was designed.
20. DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters, and the like.
21. NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment, such as those dust masks that are specifically designed to filter out microscopic particles.

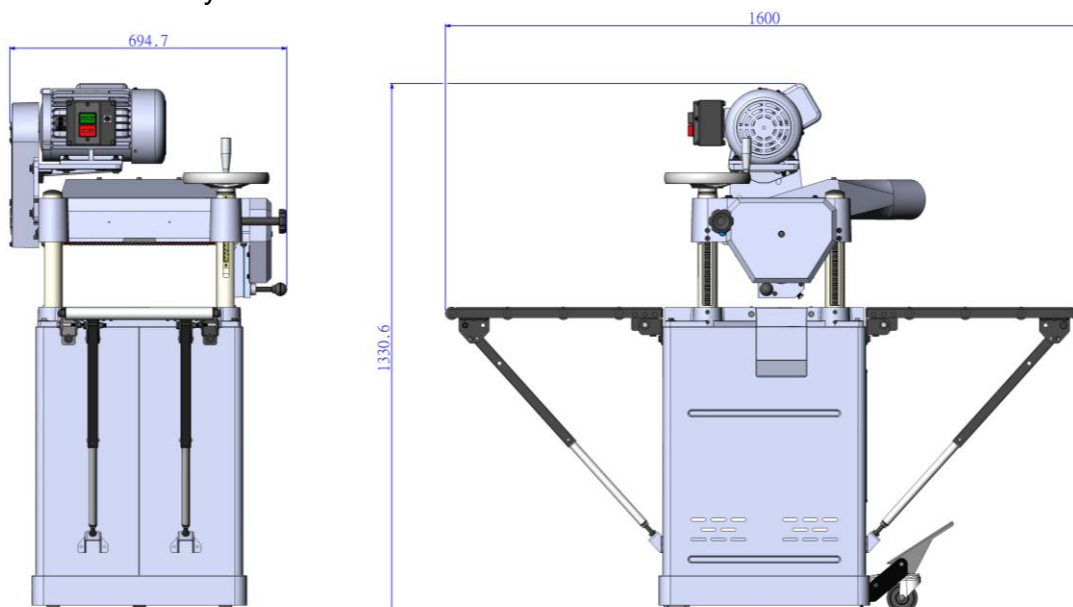
Familiarize yourself with the following safety notices used in this manual:

**CAUTION:** (This means that if precautions are not heeded, it may result in minor or moderate injury and/or possible machine damage)

**WARNING:** (This means that if precautions are not heeded, it could result in serious injury or possibly even death).

### PLACEMENT THE 15" PLANER

This machine should be installed and operated only on a solid, flat and stable floor that is able to support the weight of the planer (430 lbs-195kgs) and the operator. Using the dimensions shown as below (L1600mmx694.7mmx1330.6mm), plan for placement within your shop that will allow the operator to work unencumbered and unobstructed by foot traffic or other tools or machinery.



## 15" PLANER

Thank you for choosing this planer.

This unit is carefully tested and inspected before shipment and if properly used and maintained, will provide you with 1 year of reliable service. To ensure optimum performance and trouble free operation a reasonable amount of care and attention is required.

To get the most from your new planer, please take the time to read this manual before assembling, installing and operating the unit.

## UNPACKING AND CLEANING

To ensure maximum performance from your 15" planer, clean it properly; and install it accurately before use. As soon as you receive the planer, we recommend you follow these procedures:

1. Finish removing the contents of the shipping carton and compare with the contents list.
2. Report damage, if any to your local distributor.
3. Clean all rust protected surfaces with a mild solvent or kerosene. Do not use lacquer thinner; paint thinner, or gasoline. These will damage painted surfaces.
4. To prevent rust, apply a light coating of paste wax to surface.

## USING A SLING

Please using a sling to carry machine, lifting handles must be pulled out (Fig.1). Try keeping sling parallel to machine and hold steady.

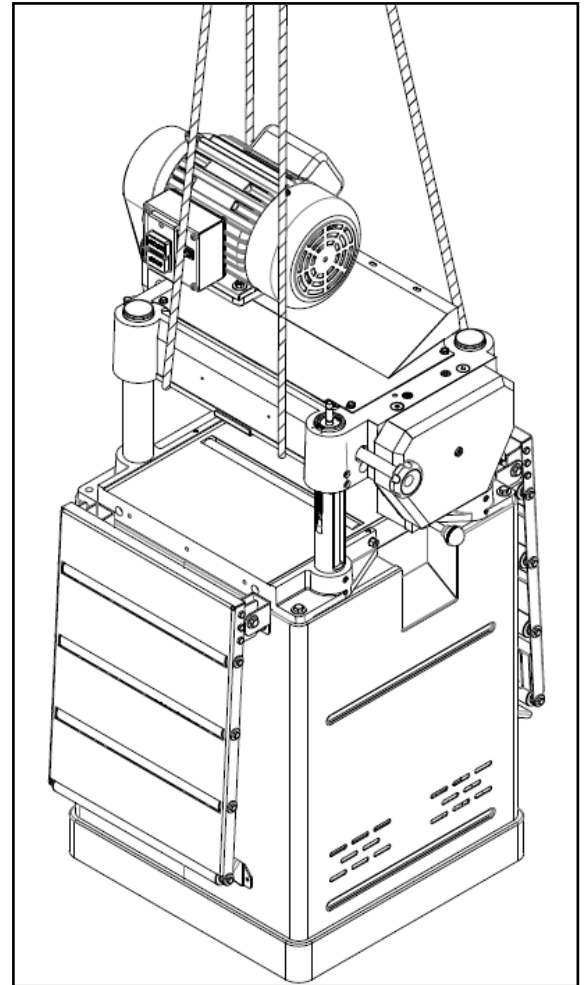


Fig. 1

## MOVING THE PLANER

There are two castors provided at the front bottom and one caster in rear of the enclosed type stand for easy movement of the planer.

When moving the planer is required step on the foot pedal to slightly raise the machine and conveniently move it. Once the planer has been moved to its desired location, shift the foot pedal upward to allow the leveling screws to rest on the floor for planer stability.

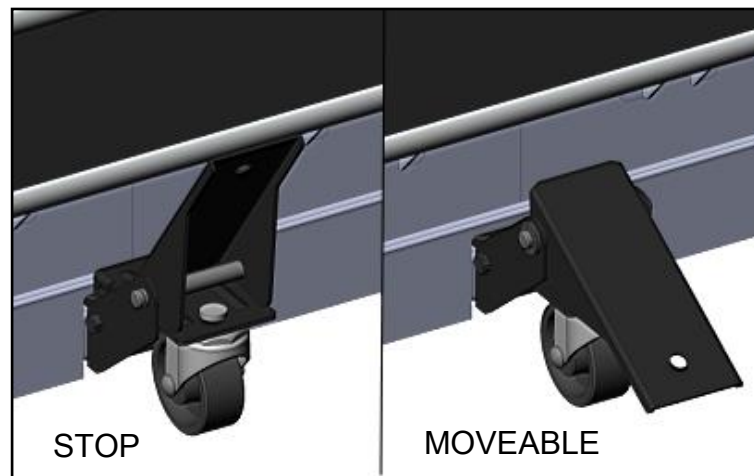


Fig. 2

## ASSEMBLY

### ASSEMBLY DUST CHUTE

Mount the dust chute to the planer hood with 3 Hex. head screws w/washer (A) . CAP screws (B) & spring washers (C), Fig. 3.

Make sure the dust collection system has sufficient capacity and suction for your planer.

Note: Always turn on the dust collection system before starting the planer.

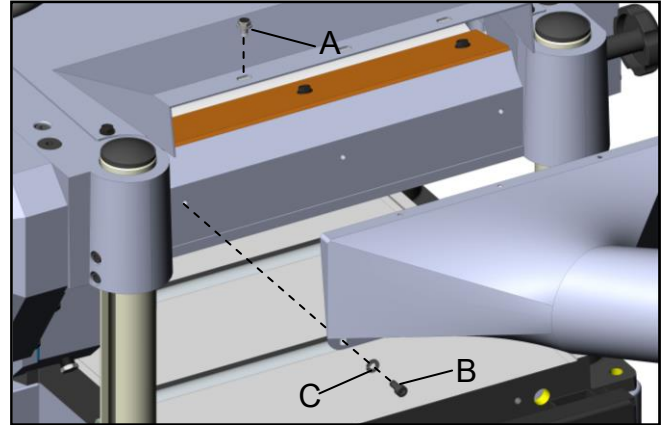


Fig. 3

### ASSEMBLY HANDWHEEL

1. Installed the handwheel (D) onto the top of elevation screw (E) , Fig. 4
2. Put the instruction label , flat washer on the top of handwheel then using the Hex. Nut (F) to lock the handwheel.
3. Installed the handle (I) on the handwheel

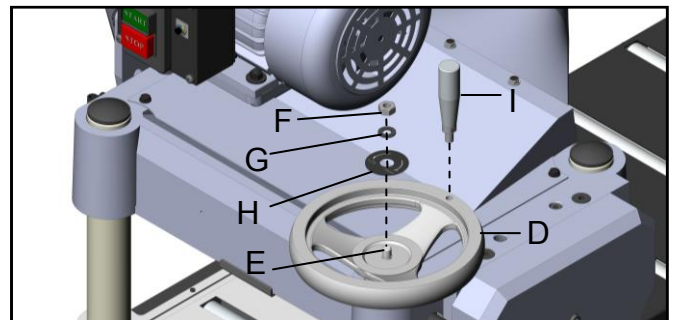


Fig. 4

### ASSEMBLY EXTENSION TABLE

1. The extension tables are mounted at the front and rear ends of the main table.
2. Press the lock pin (I) to release the support leg.
3. Put the support leg into the fix bracket (K) on the stand, Fig. 5.
4. To raise or lower the extension table.
5. Raise the cutterhead by handwheel handle (I, Fig. 4) so that you can get a clear view and work comfortably when making adjustment.
6. Place a straight edge (N) across the main table and the extension tables to be adjusted, Fig. 6.
7. If the extension tables are not leveled , then adjust them applying 17mm open end wrench to loosen nut (L, Fig. 5) and turn the adjustment screw (M) until the extension tables near the main table end just touches the straight edge. Then adjust the leveling of the other end of the extension tables by turning the adjustment screw, located on the extension tables support. Adjust the right and left side of the extension tables in this way, Fig.5.
8. Use the same method for both the front and rear extension table.

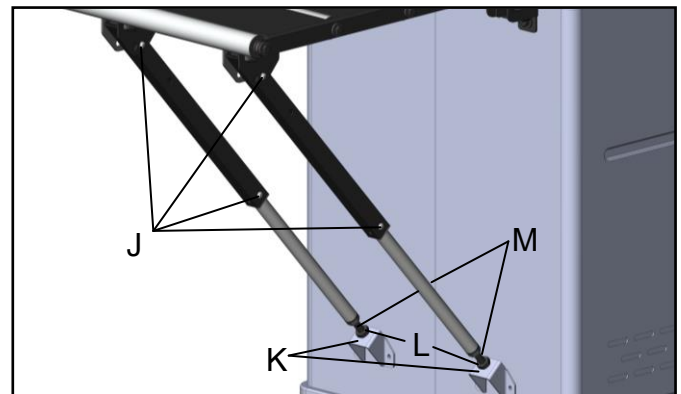


Fig. 5

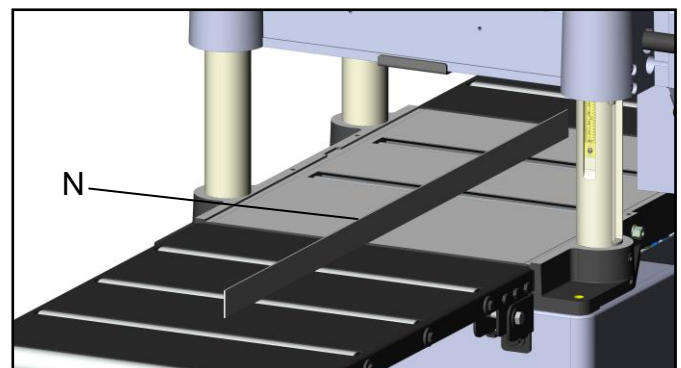


Fig. 6

**WARNING:** Disconnect the machine from the power source.

## HELICAL CUTTERHEAD

**Knife inserts are dangerously sharp. Use extreme caution when inspecting, removing, or replacing knife inserts.**

The knife inserts on the Jointer are four-sided. When dull, simply remove each insert, rotate it 90° for a fresh edge, and re-install it. No further adjustment is necessary. Use the two provided torx wrench to remove the knife insert screw. Use one of the torx wrenches to help hold the cutterhead in Position, and the other to remove the screw. See Fig. 7. It is advisable to rotate all inserts at the same time to maintain consistent cutting. However, if one or more knife inserts develops a nick, rotate only those inserts that are affected. Each knife insert has an etched reference mark so you can keep track of the rotations.

**IMPORTANT:** When removing or rotating inserts, clean saw dust from the screw, the insert, and the cutterhead platform. Dust accumulation between these elements can prevent the insert from seating properly, and may affect the quality of the cut.

Before installing each screw, lightly coat the screw threads with machine oil and wipe off any excess. Securely tighten each screw which holds the knife inserts before operating the jointer!

Make sure all knife insert screws are tightened securely. Loose inserts can be propelled at high speed from a rotating cutterhead, causing injury. from a rotating cutterhead, causing injury.



Fig. 7

## SAFETY SWITCH

The planer is equipped with a push-button switch that will accept a safety padlock (not included). See Fig. 8.

To safeguard your machine from unauthorized operation and accidental starting by young children, the use of a padlock is required.

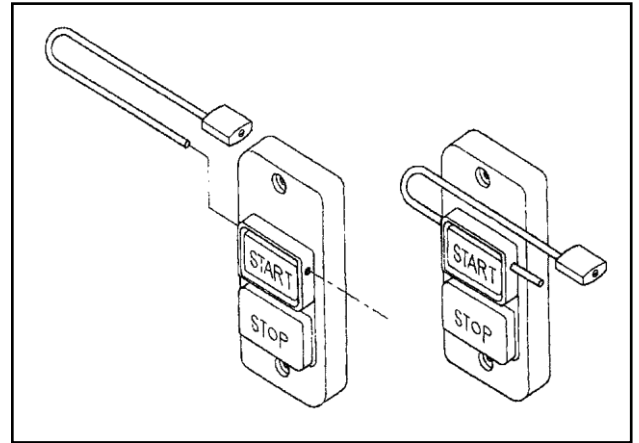


Fig. 8

## CONSTRUCTING GAUGE BLOCK

Before starting any adjustments, disconnect the machine from the power source.

The manufacturer has adjusted all machines before delivery.

Verify that the screws are properly tightened.

The only time you will have to adjust your machine is when it has been functioning for a long time. The adjustment will have to be made to adjust the precision of the machine.

- Straight scale
- Thickness gauge
- Home made gauge block of hard wood, with the dimensions as shown in Fig. 9

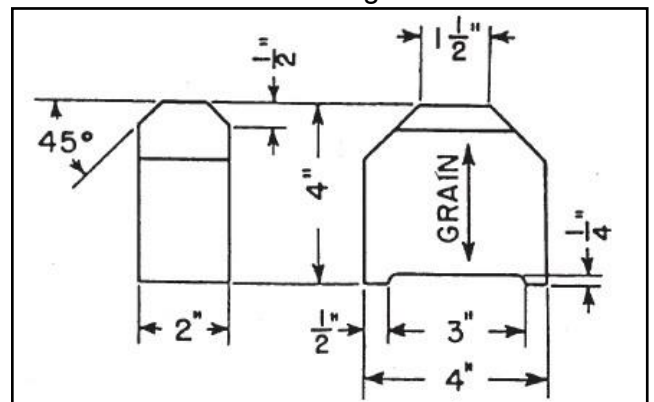


Fig. 9

## OPERATE

### DEPTH OF CUT ADJUSTMENT

Turn the handwheel (B) on a clockwise or counter-clockwise direction to the proper height, Fig. 10. The depth of cut on your planer is controlled by raising or lowering the head assembly shown in Fig. 10, which contains the cutterhead and feed roller. The head assembly raises and lowers on four precision steel ground columns. To adjust for depth of cut, simply loosen the two head assembly lock knobs (A), and turn the handwheel (B). After the desired depth of cut is obtained, tighten the lock knobs (A) combination inch/metric scale (C) is conveniently located on the right front column for easy reading. The maximum depth of cut on full width planning is 1/8" (3.175mm). A limiter (D) is provided on single phase machines to limit the depth of cut. If the workpiece to be cut is less than 6", the allowable maximum depth of cut is no more than 6mm in one pass, Fig. 10

**Warning:** Never over the cutting limited,  
15"~6" width..... 3mm  
Under 6" width..... 6mm

### ANTI-KICKBACK FINGERS

Anti-kickback fingers (E) are provided on your planer to prevent kickback. These fingers operate by gravity and it is necessary to inspect them occasionally to make sure they are free of gum and pitch so that they move independently and operate correctly, Fig.11

### FEED ROLL SPEED CONTROL

Your machine is equipped with a spiral, serrated infeed roller and a solid steel outfeed roller. When the feed rollers are engaged, they turn and feed the stock. The feed rollers slow automatically when the machine is under heavy load for best planning under all conditions. The feed rollers are driven by a chain and sprocket drive, which takes power directly from the cutterhead through the oil bath gearbox. To engage the feed rollers, pull out the lever (F), Fig. 12. To disengage the feed rollers push in the lever. To change the feed speed, push in the lever for 20 FPM or pull the lever out for 16 FPM. Set the lever in the neutral position for zero speed.

**Warning:** The feed speed should only be changed when the machine is running.(Fig.12)

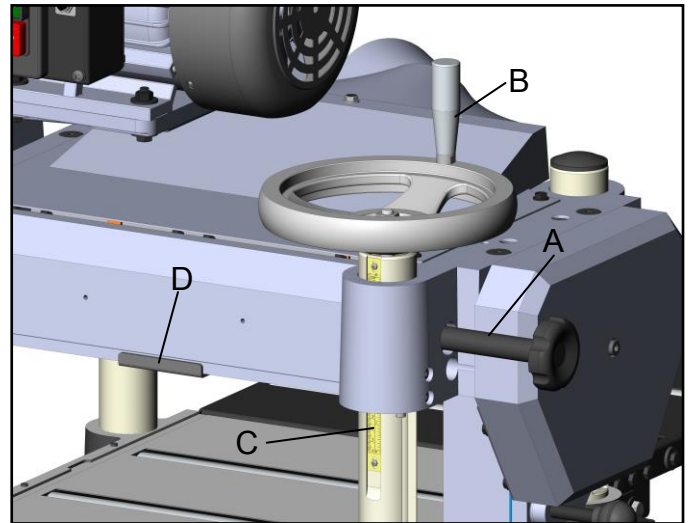


Fig.10

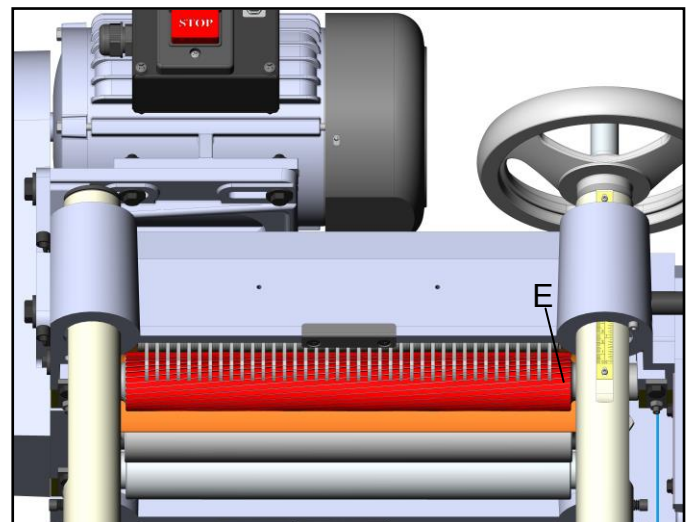


Fig.11

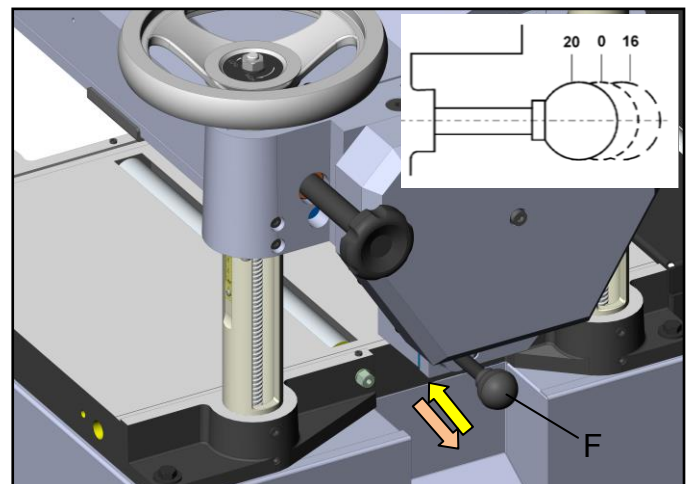


Fig.12



## ADJUSTMENT

Although your planer was carefully adjusted at the factory, it should be checked before being put into operation. Any inaccuracies due to rough handling in transit can easily be corrected by following these directions:

In order to check the adjustments you will need a straight edge, feeler gauge and a homemade gauge block made of hardwood. This gauge block can be made by the dimensions showing in Fig. 13

**Warning:** WHEN CHECKING ADJUSTMENTS , ALWAYS MAKE SURE THE PLANER IS DISCONNECTED FROM THE POWER SOURCE

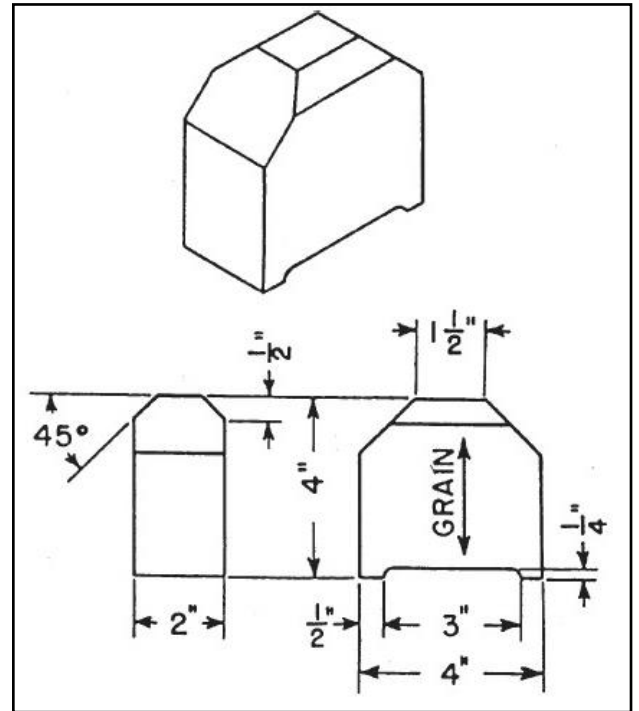


Fig. 13

## ADJUSTING BELT TENSION

To adjust the belt tension on your machine , proceed as follows:

1. Disconnect the machine from the power source.
2. Remove pulley cover from the machine.
3. Place a board (A) underneath the motor base (B, Fig. 14)
4. Loosen the two bolts (C, Fig. 15) and micrometric adjustment screw (D) by shifting it to the highest position of the slot (E), and pry up on the motor base to an approximate belt tension. Then make micrometric adjustment of belt tension. At this time, loosen the micrometric adjustment screw to the highest position of the slot (E). Adjust belt tension until correct belt tension is obtained.
5. Correct tension is obtained when there is approximately 1/4" deflection in the center span of the belts using light finger pressure.
6. Then tighten two bolts and remount pulley cover. (Fig.15)

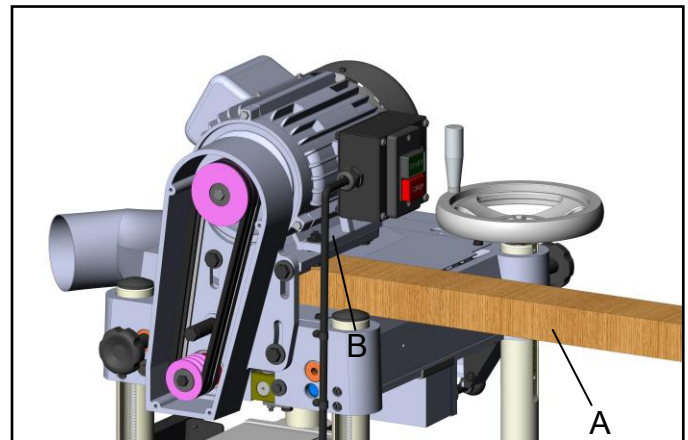


Fig. 14

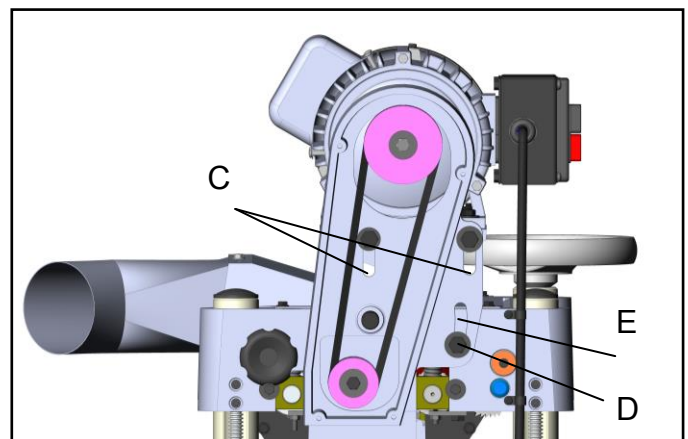


Fig. 15

## ADJUSTING FEED ROLL SPRING TENSION

The infeed roller (A) and outfeed roller (B) are those parts of your planer that feed the stock while it is being planed. The feed rolls (A) and (B) are under spring tension and this tension must be sufficient to feed the stock uniformly through the planer without slipping, but should not be so tight that it causes damage to the board. The tension should be equal at both ends of each roller. (Fig. 16)

To adjust the spring tension of the infeed roller, turn screw (C) and also the screw shown on the opposite end of planer.

To adjust the spring tension of the outfeed roller, turn screw (D) and also the screw on the opposite end of the planer.(Fig. 17)

## ADJUSTING TABLE ROLLS

This planer is supplied with two table rollers (E, Fig. 18) which aid in feeding stock by reducing friction, and turn as the stock is fed through the planer.

It is not possible to give exact dimensions on the proper height setting of the table rollers.

Because each type of wood behaves differently.

As a general rule, however, when planing rough stock the table rollers should be set HIGH and when planing smooth stock the table rollers should be set at LOW. In general, the suggested table roll height is at least 0.5mm over the table surface.

The table rollers on your planer are set for average planing and are parallel to the table surface. If you desire to adjust the rolls higher or lower, proceed as follows:

1. Disconnect the machine from the power source.
2. Lay a straight edge (G, Fig. 19) across both rollers. Loosen the screw (F, Fig. 18), then turn the two eccentric shafts (H, Fig. 18) to raise or lower table rollers. Table rolls must also be adjusted on the opposite end of the table in the same manner. The table rollers must always be set parallel to the table.

**Warning:** Disconnect the machine before performing any adjustments. Failure to comply can cause serious injuries to the machine and the work operator.

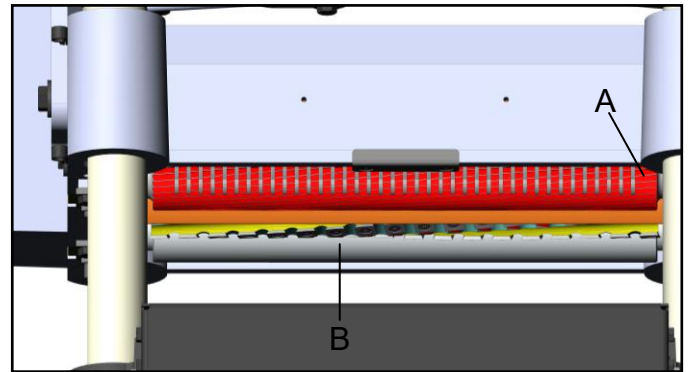


Fig. 16

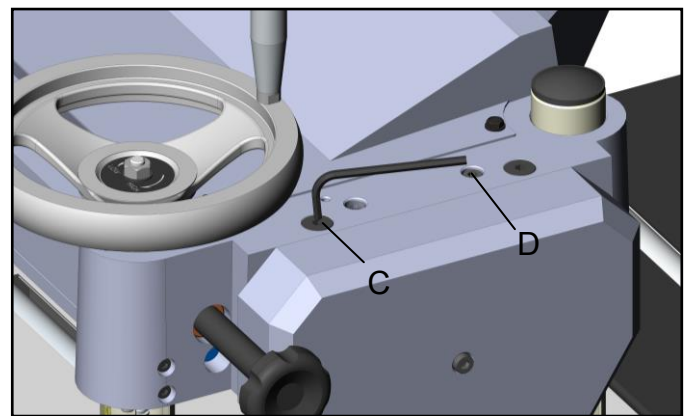


Fig. 17

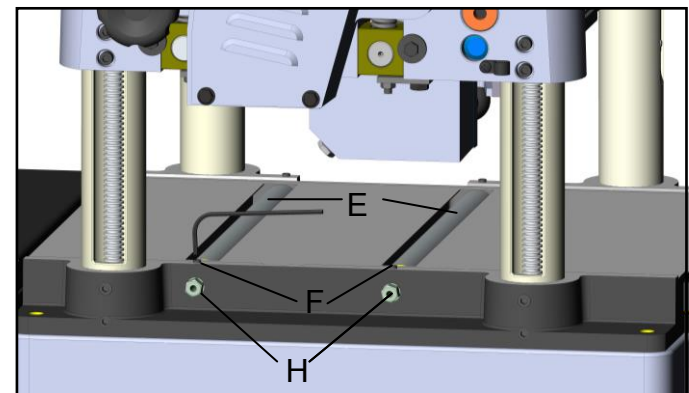


Fig. 18

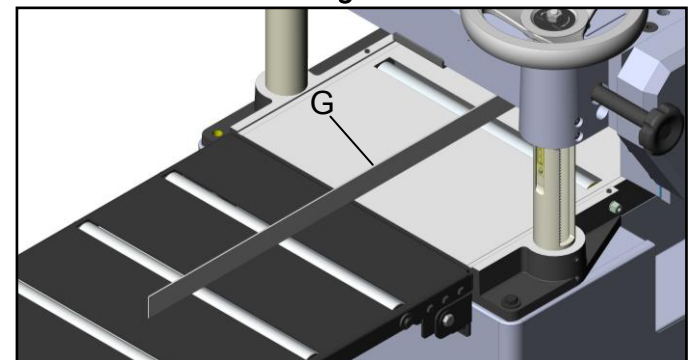


Fig. 19

## ADJUSTING HEIGHT OF INFEED ROLLER & OUT FEED ROLLER

The outfeed roller is adjusted at the factory to be set 0.5mm below the cutting circle. To check and adjust the outfeed roller, proceed as follows:

1. Disconnect machine from the power source.
2. Make sure the knives are adjusted properly as explained under CHECKING , ADJUSTING AND REPLACING KNIVES.
3. Place the gauge block on the table directly underneath the cutterhead as Fig. 20. Using a 0.5mm feeler gauge (B) , placed on top of the gauge Block (C), raise or lower the head until the knife tip just touches the feeler gauge when the knife is at its lowest point. Do not move the head any further until the outfeed roller is adjusted.

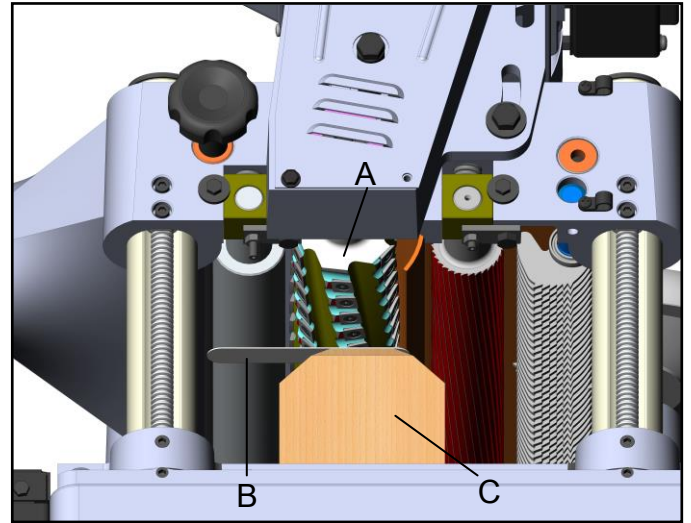


Fig. 20

1. Move the gauge block (C) under on end of the infeed roller (D, Fig. 21). Using a 0.5mm feeler gauge (A). The bottom of the infeed roller should just touch the feeler gauge (B). If an adjustment to the infeed roller is necessary; loosen locknut (E) and turn screw (F) until the infeed roller just touches the gauge block. Then tighten the locknut (E).
5. Move the gauge block (C) under on end of the outfeed roller (G, Fig. 22). Using a 0.5mm feeler gauge (A). The bottom of the outfeed roller should just touch the feeler gauge (B). If an adjustment to the outfeed roller is necessary; loosen locknut (H) and turn screw (I) until the outfeed roller just touches the gauge block. Then tighten the locknut (H).

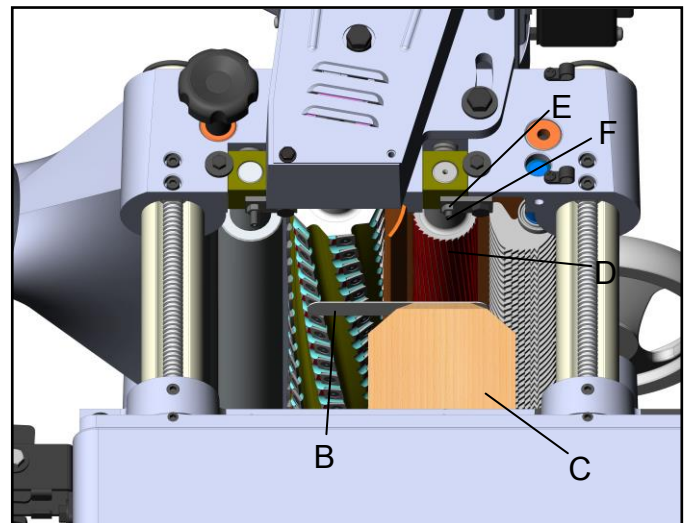


Fig. 21

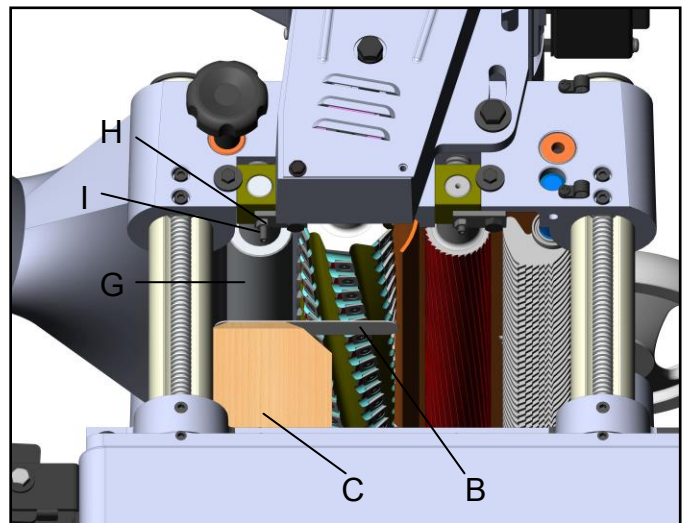


Fig. 22

## ADJUSTING CHIP BREAKER

The chip breaker is located on top of the planer and extends down around the front of the cutterhead. The chip breaker raises as stock is fed through and "breaks or curls" the chips the same as a plane iron cap on a hand plane.

The bottom of the chip breaker must be parallel to cutting circle. To check and adjust the chip breaker, proceed as follows:

1. Disconnect the machine from the power source.
2. Make certain the knives are adjusted properly as previously explained under CHECKING, ADJUSTING AND REPLACING KNIVES.
3. Place the gauge block (A) on the table directly underneath the cutterhead as shown. Using a 0.5mm feeler gauge (B), placed on top of the gauge block, raise or lower the head until the knife tip (C) just touch the feeler gauge when the knife is at its lowest point. Do not move the head any further until the chip breaker is checked and adjusted as necessary, Fig. 23.
4. Move the gauge block (C) underneath the chip breaker (D, Fig. 24). The bottom of the chip breaker should just touch the top of the gauge block. Check the opposite end of the chip breaker in the same manner.
5. If an adjustment to the chip breaker is necessary, loosen nuts (E, Fig. 25), and turn screws (F) until the bottom of the chip breaker just touches the gauge block. Then tighten the nuts (E).

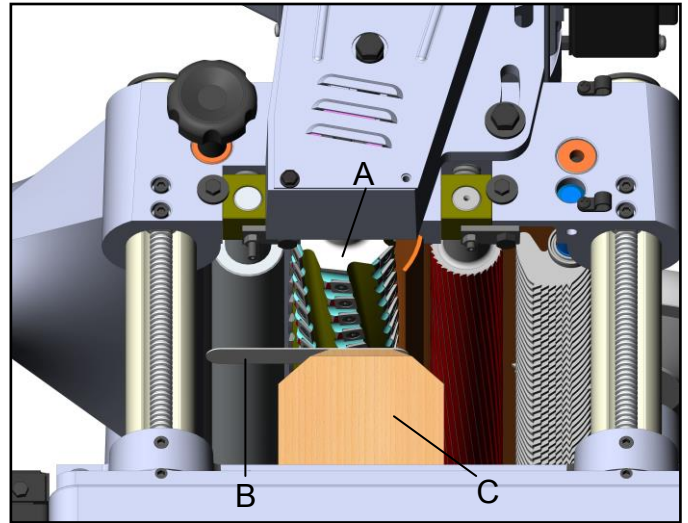


Fig. 23

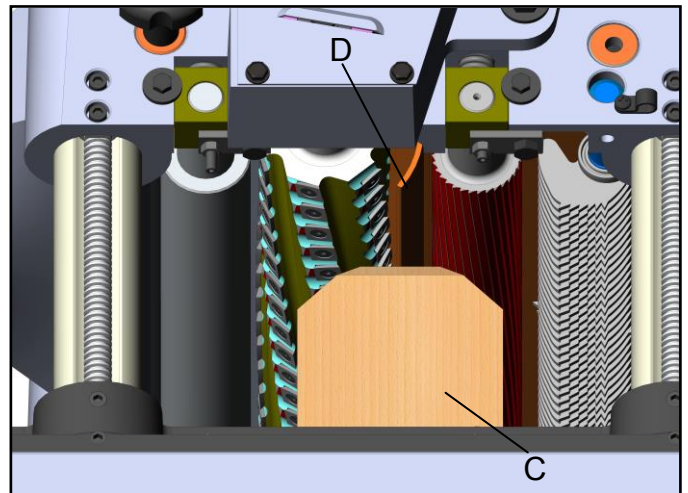


Fig. 24

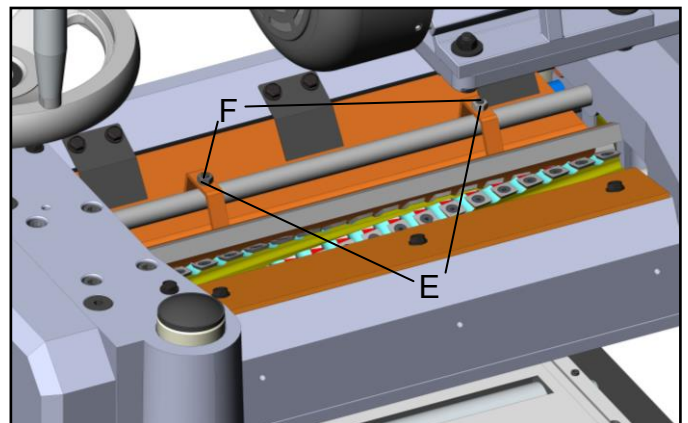


Fig. 25

## ADJUSTING CUTTERHEAD PARALLEL TO TABLE

The cutterhead is set parallel to the table at the factory and no further adjustment should be required. If your machine is planing a taper, first check to see if the knives are set properly in the cutterhead. Then check to see if the table is set parallel to the cutterhead as follows:

1. Disconnect the machine from the power source.
  2. Place gauge block (C) on table directly under cutterhead, Fig. 26. Lower cutterhead until knife tip just touches gauge block.
  3. Move gauge block (C) to opposite end of table Fig. 27.
  4. Repeat steps 2 and 3 on outfeed end of table.
2. If cutterhead is not parallel to table, tilt planer on its side, Fig. 28. Remove bolt (H) and loosen bolt (I), which will allow you to move the idler sprocket far enough to release tension on the chain, Fig. 29. Remove chain from sprocket on end of cutterhead that must be adjusted. In this case chain has been removed from sprocket.
3. Turn sprocket (G, Fig. 28) by hand to bring that corner into adjustment with other three corners.

**IMPORTANT:** THIS ADJUSTMENT IS VERY SENSITIVE AND IT SHOULD NOT BE NECESSARY TO TURN THE SPROCKET MORE THAN ONE OR TWO TO TURN THE SPROCKET MORE THAN ONE OR TWO TEETH.

Turning sprocket clockwise will decrease the distance between the table and cutterhead. Counter-clockwise will increase the distance.

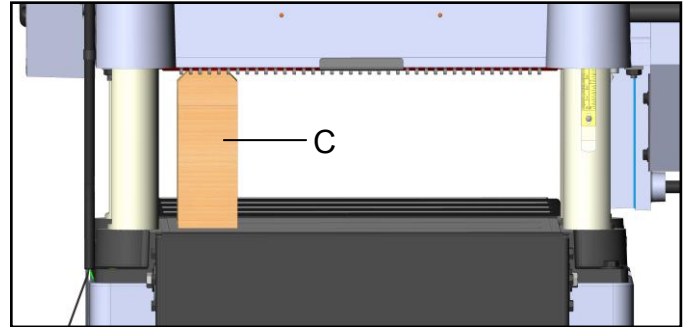


Fig. 26

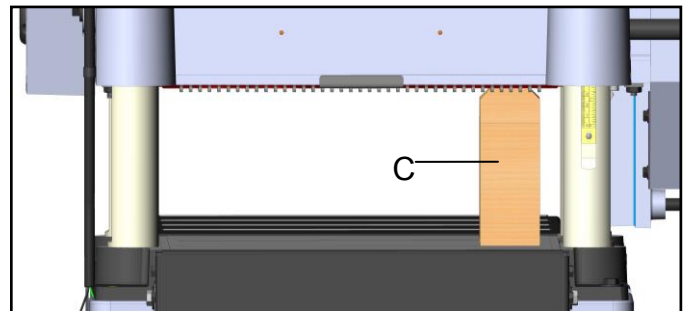


Fig. 27

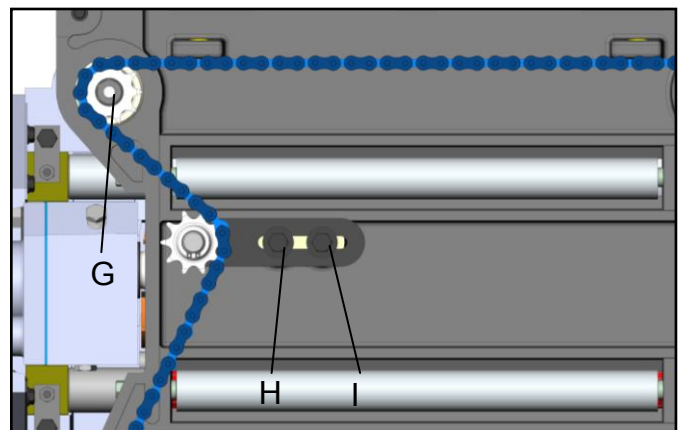


Fig. 28

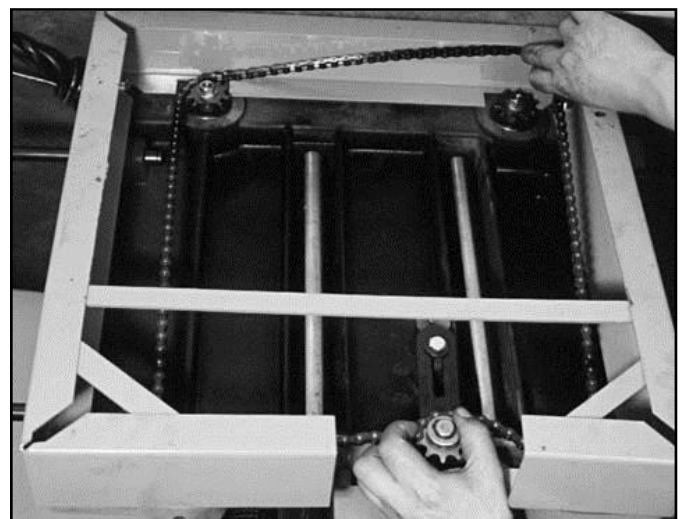
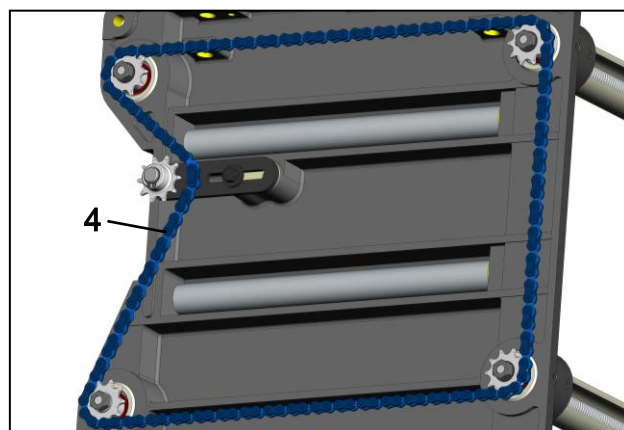
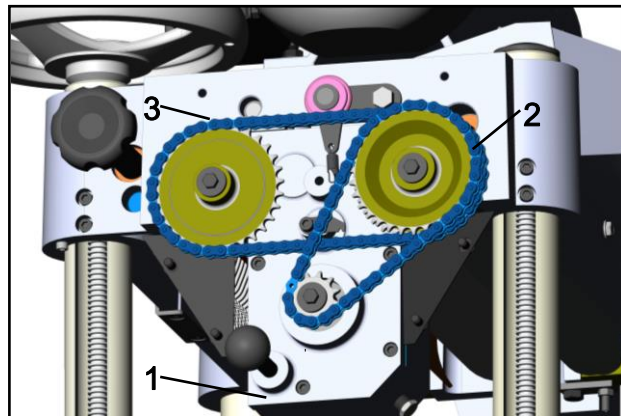


Fig. 29

## PARTS LUBRICATION REQUIRED

NO.	POSITION	GREASE	OIL
1	GEAR BOX	NO	YES
2	CHAIN	YES	NO
3	CHAIN	YES	NO
4	CHAIN	YES	NO
5	BRACKET	NO	YES
6	LEAD SCREW	YES	NO
7	COLUMN CLEAN & OIL	NO	YES

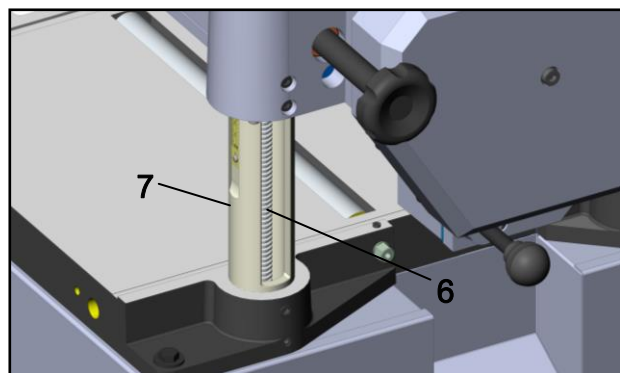
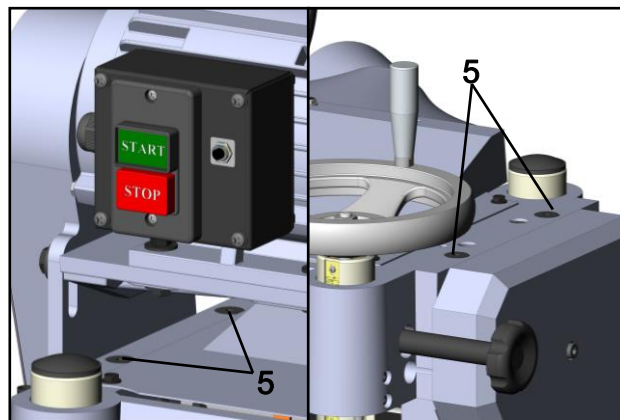
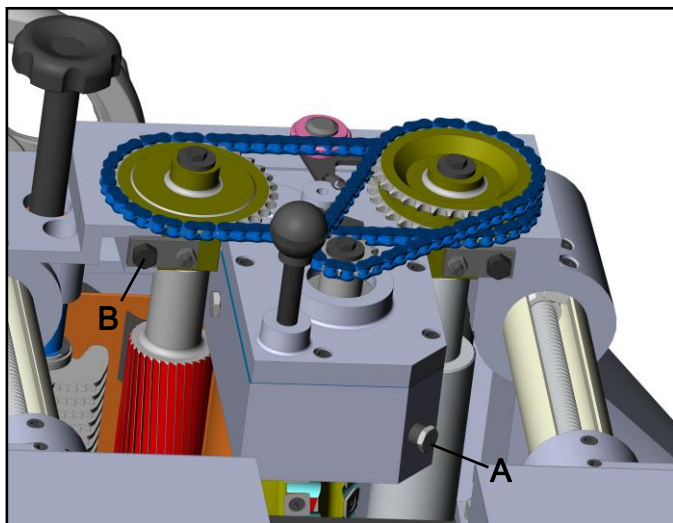
- Worm Gear is used to adjust the table up or down.
- The oil in Gear Box must be changed after 2500 hours of work.
- All chains must be lubricated regularly.
- After 30 hours or more of work the lubrication of bracket must be changed.
- The machine comes equipped with four head screws, it is important to always keep them lubricated.
- To ensure maximum performance always keep the sliding rolls of table lubricated



## CHANGE LUBRICANT

When lubrication needs to be changed:

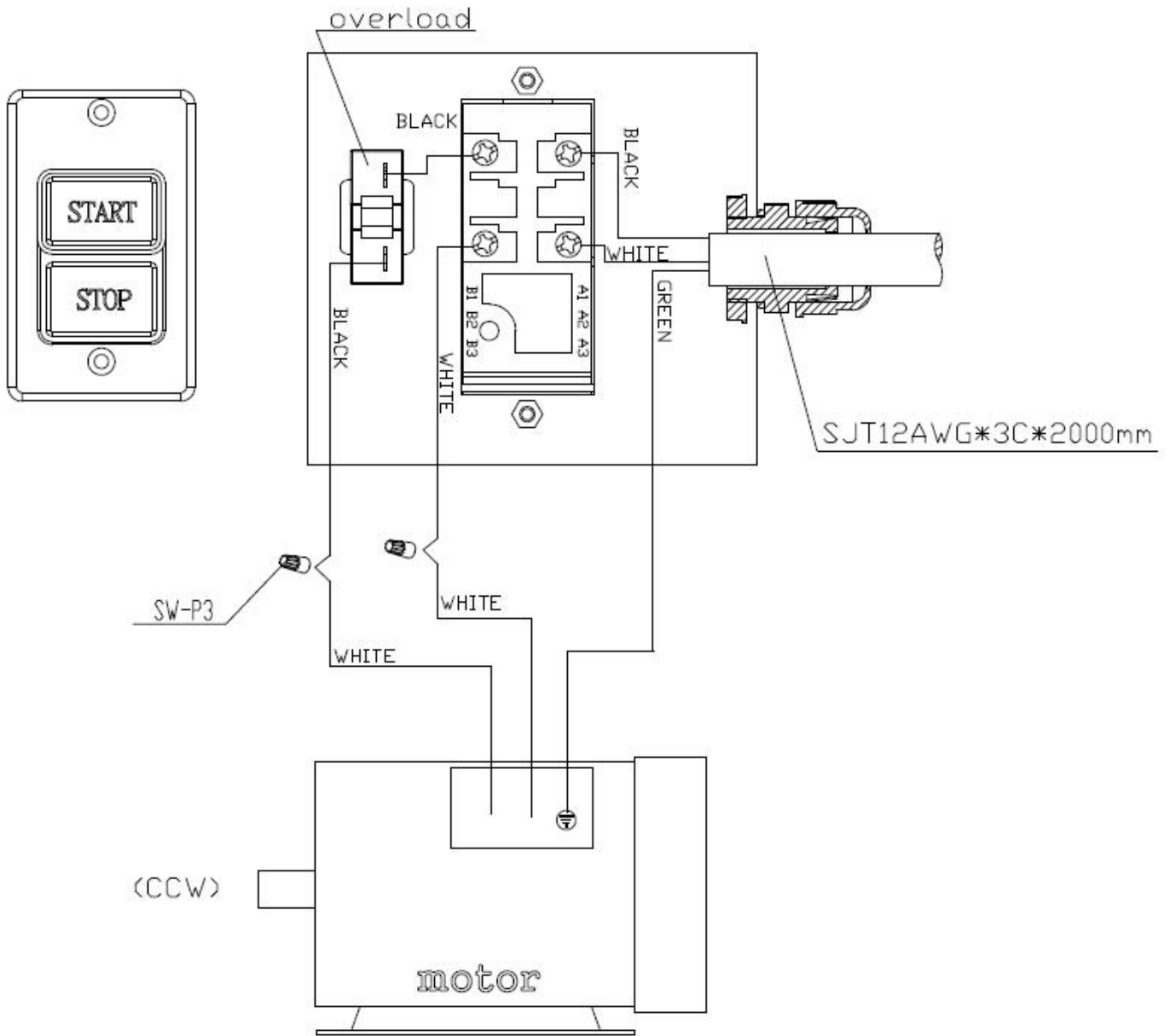
1. Loosen the nut A on the outfeed hole.
2. Clean out old lubrication and let it dry.
3. Tighten nut A
4. Replace clean lubricant by hole B



## TROUBLESHOOTING

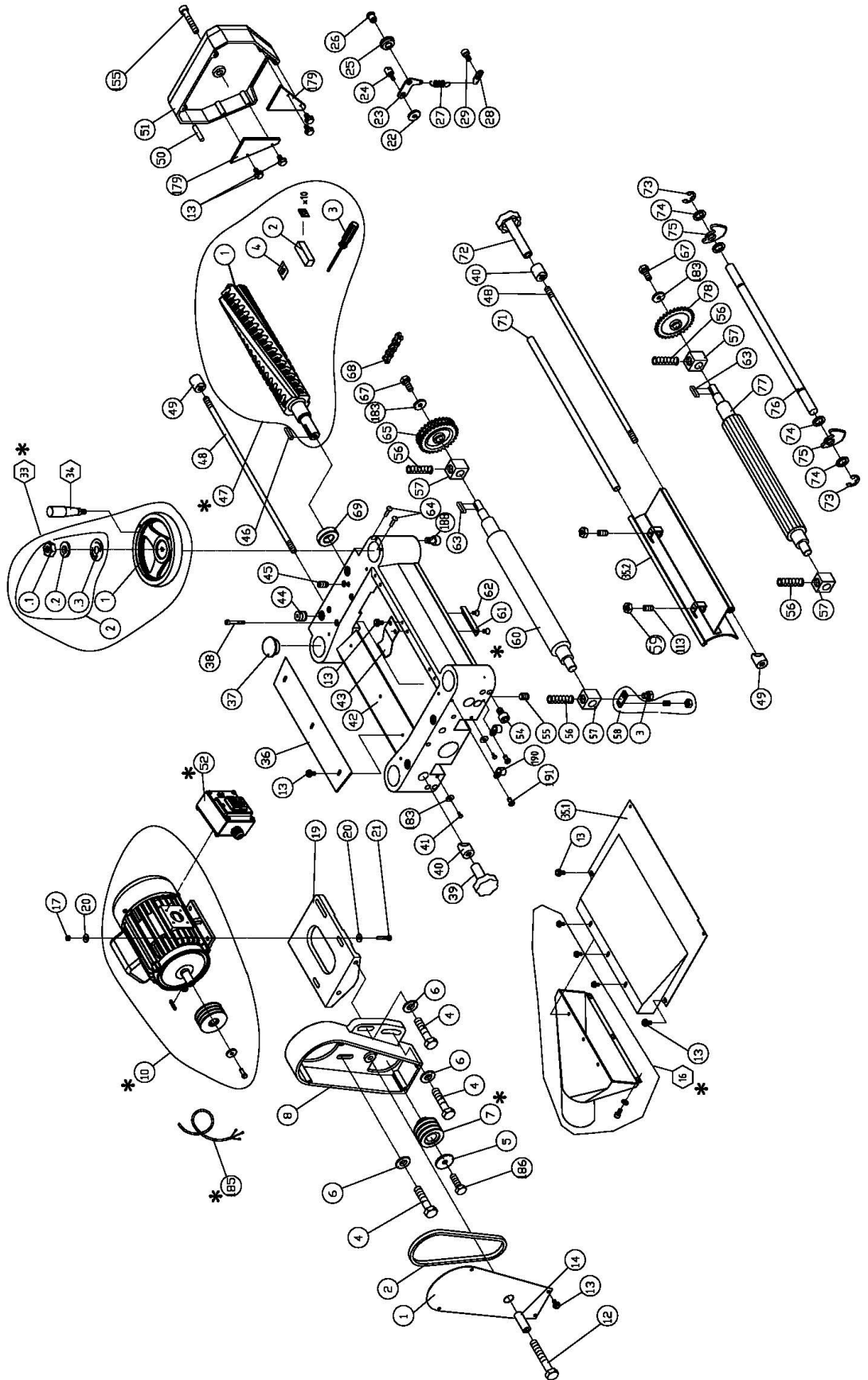
PROBLEM	POSSIBLE CAUSE	REMEDY
FUZZY GRAIN	<ol style="list-style-type: none"> <li>1. Planning wood with high moisture content</li> <li>2. Dull knives</li> </ol>	<ol style="list-style-type: none"> <li>1. Dry the wood</li> <li>2. Sharpen knives</li> </ol>
TORN GRAIN	<ol style="list-style-type: none"> <li>1. 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</li> <li>2. Feed wood with the grain, or turn workpiece around</li> <li>3. Sharpen knives</li> </ol>
ROUGH/RAISED GRAIN	<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</li> <li>3. Dry the wood</li> <li>4. Replace bearings</li> </ol>
POOR FEEDING OF LUMBER	<ol style="list-style-type: none"> <li>1. Planer table dirty</li> <li>2. Feed roller damaged.</li> <li>3. Sprocket damaged</li> <li>4. Gearbox malfunction</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean off pitch and residue, and lubricate planer table.</li> <li>2. Replace</li> <li>3. Replace</li> <li>4. Check gearbox</li> </ol>
WORKPIECE JAMMED	<ol style="list-style-type: none"> <li>1. Inadequate knife setting height</li> </ol>	<ol style="list-style-type: none"> <li>1. Set knives to the correct height</li> </ol>
UNEVEN DEPTH OF CUT SIDE TO SIDE	<ol style="list-style-type: none"> <li>1. Knife projection not uniform</li> <li>2. Cutterhead not leveled 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	<ol style="list-style-type: none"> <li>1. Depth of cut scale incorrect</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust depth of cut scale</li> </ol>
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. Have motor checked by qualified technician</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>

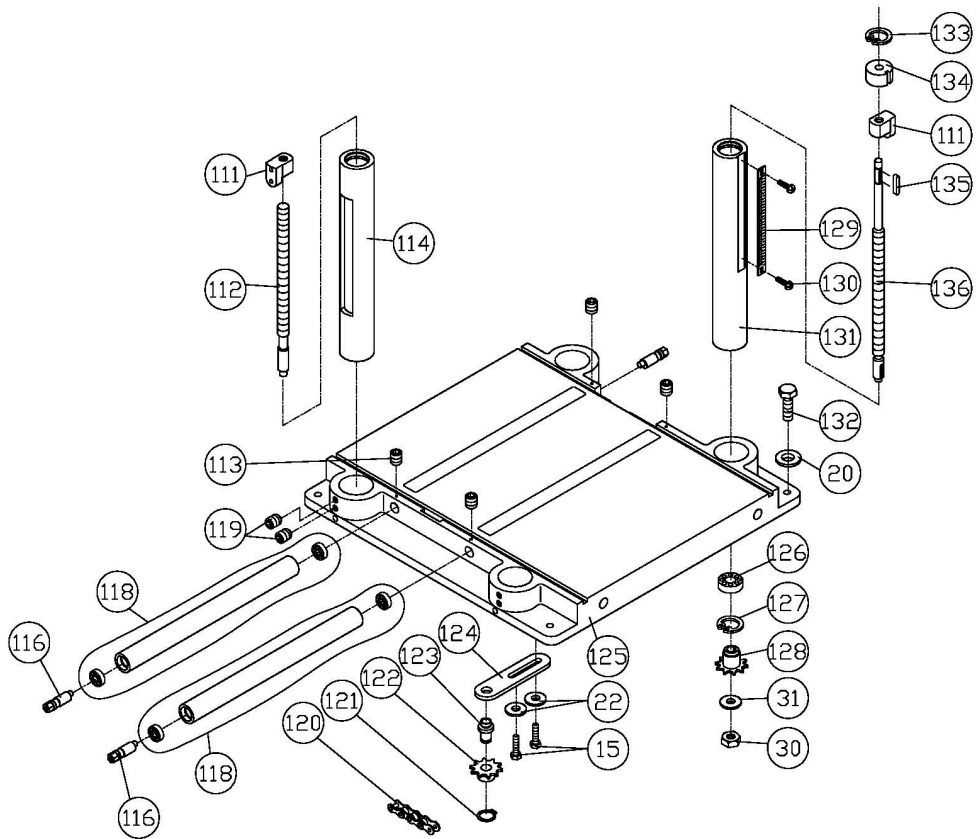
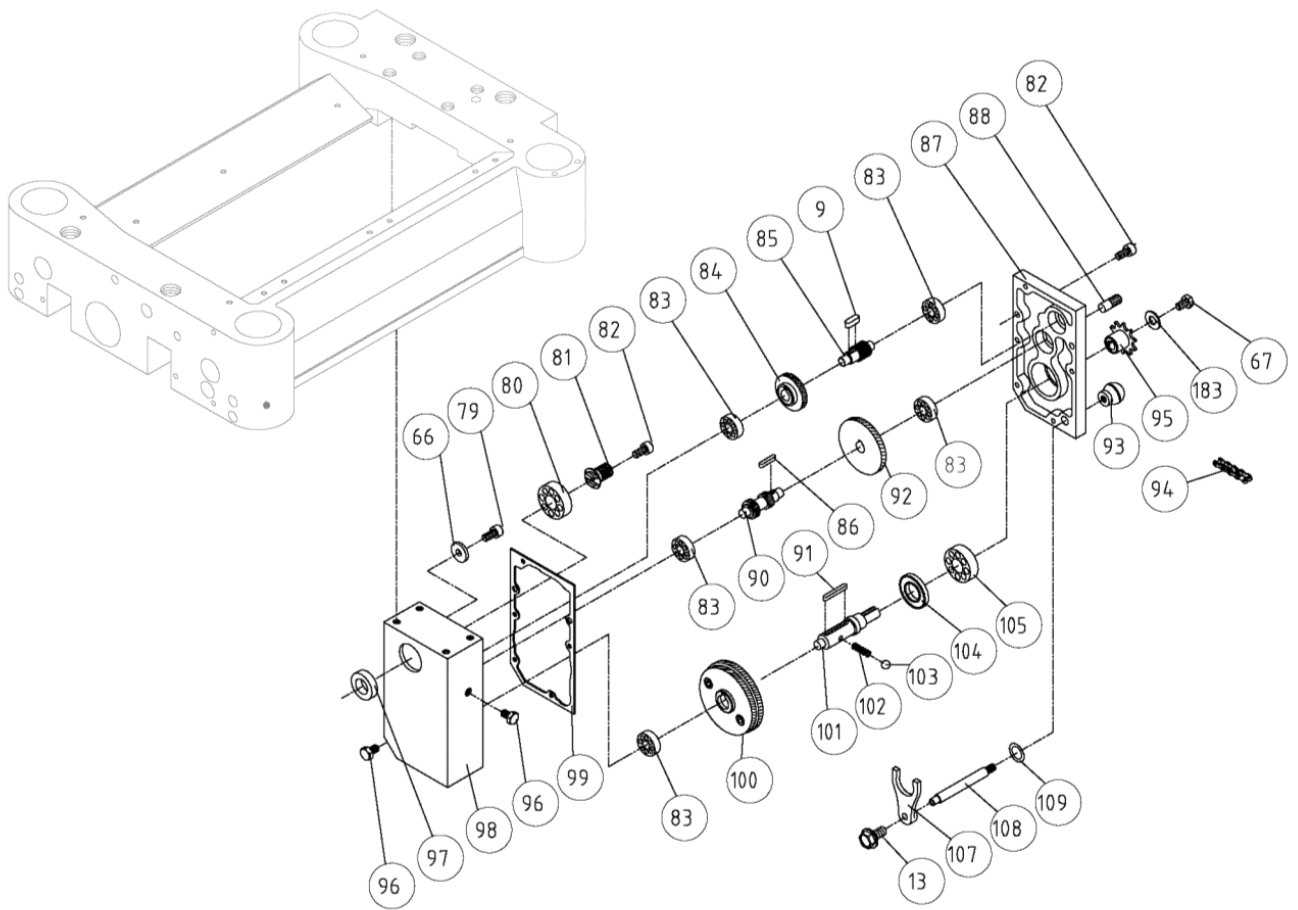
# WIRING DIAGRAMS

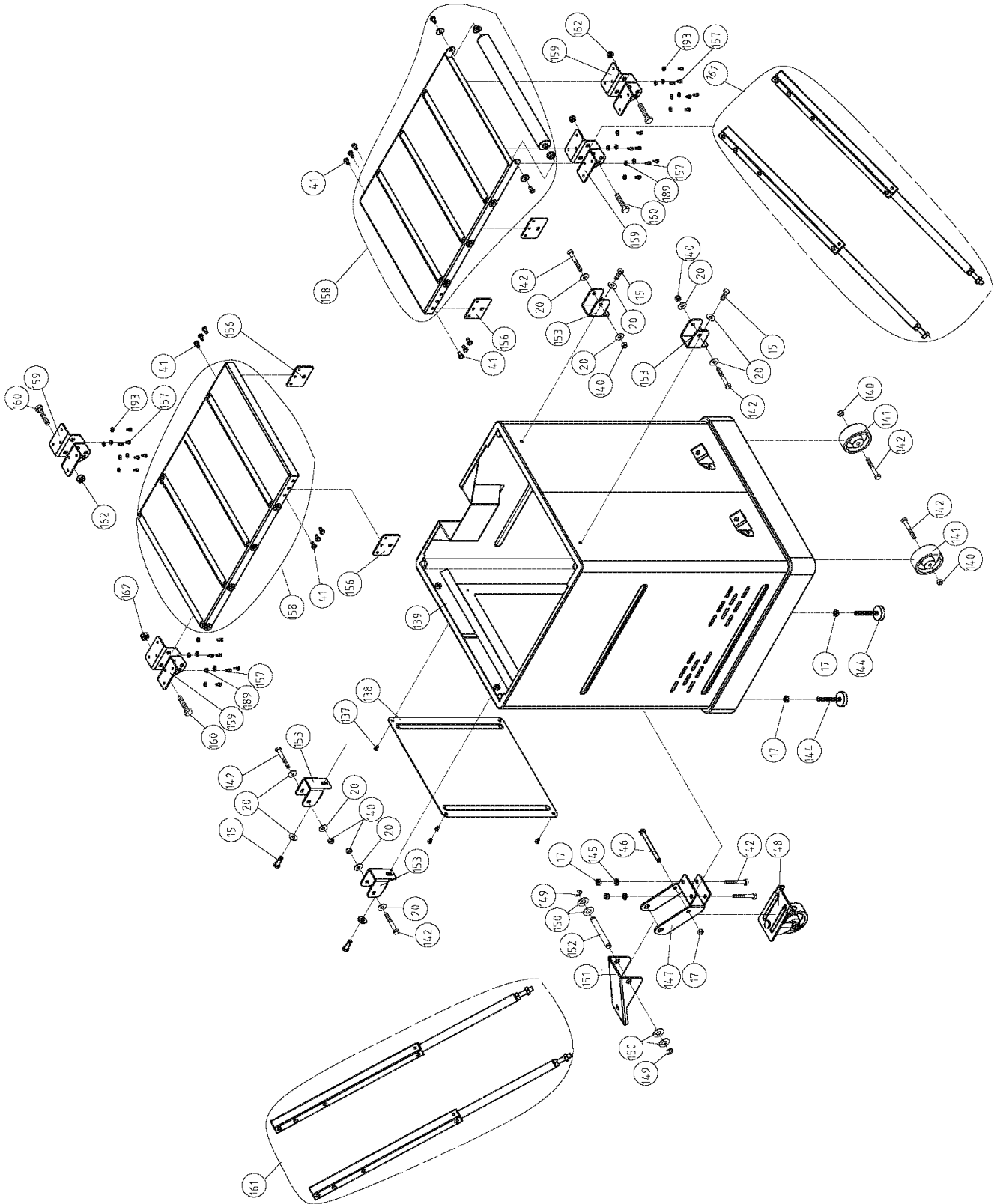




# PARTS DIAGRAMS







## PARTS LIST

Key	Part No.	Descriptions	Q'ty
1	170404-000	BELT COVER	1
2	014001-000	V-BELT	M27 3
3	000003-104	HEX. SCREW	M8*1.25P*20 4
4	000004-103	HEX. SCREW	M10*1.5P*30 3
5	006001-043	FLAT WASHER	8.2*30*4.0t 1
6	006001-082	FLAT WASHER	10.5*28*3.0t 3
7	050273-000	CUTTERHEAD PULLEY	1
8	050272-000	BELT GUARD FRONT	1
9	012003-003	KEY	5*5*12 1
10	901010-000	MOTOR ASSY	3HP*1PH 1
12	000004-108	HEX. SCREW	M10*1.5P*80 1
13	000902-102	HEX SCREW W/WASHER	M6*1.0P*12 24
14	190073-901	BUSHING	1
15	000003-105	HEX. SCREW	M8*1.25P*25 6
16	922360-000	DUST HOOD ASSEMBLY	1
17	08006-100	HEX. NUT	8
19	050274-000	MOTOR PLATE	1
20	006001-056	FLAT WASHER	8.5*23*2.0t 16
21	000003-108	HEX. SCREW	M8*1.25P*40 4
22	006001-041	FLAT WASHER	8.2*22*3.0t 3
23	170405-901	BRACKET	1
24	290039-901	SHAFT	1
25	130071-000	CHAIN TENSIONER	1
26	360349-901	CHAIN TENSIONER SHAFT	1
27	280050-000	SPRING	1
28	170406-901	HOOK	1
29	000103-102	CAP SCREW	M6*1.0P*10 2
30	008008-100	HEX NUT	M10*1.25P 4
31	006001-067	FLAT WASHER	8.5*16*1.5t 4
33	920349-000	HANDWHEEL ASSY	1
33.1	240014-000	HAND WHEEL	1
33.2.1	008008-200	HEX NUT	M10*1.25P 1
33.2.2	006002-067	FLAT WASHER	10*20*1.5t 1
33.2.3	570887-000	INDICATOR LABEL	1
34	230114-906	HANDLE	1
35.1	170419-000	TOP COVER	1
35.2	170410-019	CHIP BREAKER	1
36	250158-617	CHIP DEFLECTOR	1
37	250159-615	PLUG	3
38	000104-114	CAP SCREW	M8*1.25P*50 4
39	230115-000	KNOB	1
40	130037-000	LOCK KNOB	2
41	000002-101	HEX. SCREW	M6*1.0P*12 4
42	050275-000	HEAD CASTING	1
43	270015-901	SPRING PLATE	3

Key	Part No.	Descriptions	Q'ty	
44	380200-901	SCREW	4	
45	000203-106	SET SCREW	M6*1.0P*16	1
46	012204-001	KEY	8*8*36	1
47	922733-000	HELICAL CUTTERHEAD ASSY	BYRD	1
47.1.1	220125-000	SHEARTEC 2 CUTTERHEAD		1
47.1.2	210160-000	KNIFE		75
47.1.3	049402-101	TORX SCREW		75
47.2	922735-000	KNIFE INSERT * 10 PCS		1
47.3	040704-000	SCREW DRIVER		1
47.4	040705-000	SLEEVE		1
48	360350-902	SHAFT		2
49	130038-000	LOCK KNOB		2
50	011004-102	SPRING PIN	6*20	2
51	050276-000	SIDE COVER		1
52	937837-000	PUSH BUTTONSWITCH		1
54	000103-106	CAP SCREW	M6*1.0P*16	8
55	000204-103	SET SCREW	M8*1.25P*12	1
56	280051-000	SPRING		4
57	130039-000	BUSHING		4
58	923901-000	RETAINER PLATE		4
59	008005-100	HEX NUT	M6*1.0P	2
60	360383-000	OUTFEED ROLLER		1
61	170409-901	LIMIT PLATE		1
62	000402-104	FLAT HEAD SCREW	M5*0.8P*12	2
63	012003-008	KEY	5*5*22	2
64	002301-201	RIVET	2*5	2
65	070012-000	CHAIN SPROCKET		1
66	006001-020	FLAT WASHER	6.2*20*3.0t	1
67	000002-103	HEX. SCREW	M6*1.0P*16	3
68	016306-000	CHAIN	#06B*63P	1
69	030209-002	BALL BEARING	6205	1
71	360351-000	SHAFT		1
72	230117-000	KNOB		1
73	010209-000	RETAINING RING	ETW-15	2
74	250160-615	SPACER		40
75	172281-905	ANTI-KICK BACK		39
76	360352-000	SHAFT		1
77	360353-000	INFEED ROLLER		1
78	070013-000	CHAIN SPROCKET		1
79	000103-103	CAP SCREW	M6*1.0P*12	1
80	030208-002	BALL BEARING	6204	1
81	320196-000	GEAR		1
82	000103-108	CAP SCREW	M6*1.0P*25	6
83	030106-002	BALL BEARING	6201	5
84	320197-000	GEAR		1
85	320160-000	SHAFT		1
86	012003-002	KEY	5*5*10	1

Key	Part No.	Descriptions	Q'ty
87	050280-000	GEARBOX COVER	1
88	360355-901	PIN	2
90	320205-000	SHAFT	1
91	012004-003	KEY	6*6*40
92	320198-000	GEAR	1
93	250372-615	KNOB	1
94	016303-000	CHAIN	#06B*47P
95	150008-000	CHAIN SPROCKET	1
96	043401-000	PLUG	PT1/4"-19
97	043608-000	OIL SEAL	TCX4 28*40*8
98	050281-000	GEARBOX	1
99	340012-615	GEARBOX GASKET	1
100	922351-000	GEAR ASSEMBLY	1
101	360357-901	SHAFT	1
102	280052-000	SPRING	1
103	017002-000	STEEL BALL	Φ6
104	043505-000	OIL SEAL	SC25*47*6
105	030109-002	BALL BEARING	6204
107	070014-000	SHIFTING CLAW	1
108	360358-901	SHAFT	1
109	043303-000	O RING	P12
110	041503-017	PLASTIC PAPER	570*440*0.05t
111	130040-000	NUT	4
112	360359-000	COLUMN SHAFT	3
113	000203-104	SET SCREW	M6*1.0P*12
114	050277-000	COLUMN	3
116	360360-901	ECCENTRIC SHAFT	4
118	921209-000	ROLLER W/BEARING	2
119	000205-101	SET SCREW	M10*1.5P*12
120	016220-000	CHAIN	#410*134P
121	010006-000	RETAINING RING	STW-15
122	150009-000	CHAIN SPROCKET	1
123	360362-901	SPROCKET SHAFT	1
124	170413-901	CHAIN TENSIONER BRACKET	1
125	050278-000	BASE CASTING	1
126	030003-001	BALL BEARING	6202
127	010103-000	RETAINING RING	RTW-35
128	150010-000	CHAIN SPROCKET	4
129	570888-000	SCALE	1
130	000301-101	ROUND HD SCREW	M3*0.5P*6
131	050279-000	MAIN COLUMN	1
132	000003-106	HEX. SCREW	M8*1.25P*30
133	010104-000	RETAINING RING	RTW-38
134	130041-000	BUSHING	1
135	012002-007	KEY	4*4*20
136	360364-000	ELEVATING SCREW	1
137	000303-102	ROUND HD SCREW	M5*0.8P*8

Key	Part No.	Descriptions	Q'ty
138	170459-000	COVER	1
139	174173-000	STAND	1
140	008306-100	HEX LOCK NUT	M8*1.25P
141	250399-615	WHEEL	2
142	000003-313	HEX. SCREW	M8*1.25P*60
144	230049-000	FOOT	2
145	006305-100	SPRING WASHER	8.2*15.4
146	000003-312	HEX. SCREW	M8*1.25P*100
147	170269-147	BRACKET	1
148	660005-000	WHEEL	1
149	010207-000	RETAINING RING	ETW-10
150	006001-093	FLAT WASHER	13.5*28*2.0t
151	170486-008	PADEL	1
152	360009-901	ROD	1
153	170457-904	ADJUSTABLE PLATE	4
155	000104-113	CAP SCREW	M8*1.25P*45
156	174174-904	BRACKET	4
157	000101-101	CAP SCREW	M4*0.7P*8
158	924249-000	EXTENSION TABLE	2
159	170460-904	FIX PLATE	8
160	000004-306	HEX. SCREW	M10*1.5P*50
161	922369-000	SUPPORT LEG ASSEMBLY	4
162	008308-100	HEX LOCK NUT	M10*1.5P
166	040006-000	HEX. WRENCH	6mm
167	040005-000	HEX. WRENCH	5mm
168	040004-000	HEX. WRENCH	4mm
169	040003-000	HEX. WRENCH	3mm
170	040201-000	WRENCH BOX	8*10
171	040204-000	WRENCH BOX	12*14
172	040206-000	WRENCH BOX	17*19
179	170424-905	SIDE COVER GUARD	2
183	006001-021	FLAT WASHER	6.2*22*3t
185	473004-048	SWITCH CORD	SJT12AWG*3C*2100mm
186	048201-104	HEX HEAD SCREW	M8*1.25P*30
187	002201-201	WOOD SCREW	M6*2.6P*24
188	000102-101	CAP SCREW	M5*0.8P*6
189	006001-001	FLAT WASHER	4.3*10*1.0t
190	021103-100	CABLE FASTENER	ACC-3-B
191	000303-102	ROUND HD SCREW	M5*0.8P*10