

22" PLANER

Model 201

Instruction Manual & Parts List
M-0460224



POWERMATIC[®]

(800) 274-6848
www.powermatic.com

This manual has been prepared for the owner and operators of a Powermatic Model 201 Planer. Its purpose, aside from machine operation, is to promote safety through the use of accepted correct operating and maintenance procedures. Completely read the safety and maintenance instructions before operating or servicing the machine. To obtain maximum life and efficiency from your planer, and to aid in using the machine safely, read this manual thoroughly and follow all instructions carefully.

Warranty & Service

WMH Tool Group warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Repair Stations located throughout the United States can give you quick service.

In most cases, any one of these WMH Tool Group Repair Stations can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET, Performax, Powermatic, or Wilton tools.

For the name of an Authorized Repair Station in your area, call 1-800-274-6848.

More Information

WMH Tool Group is consistently adding new products to the line. For complete, up-to-date product information, check with your local WMH Tool Group distributor or visit wmhtoolgroup.com.

Limited Warranty

WMH Tool Group makes every effort to assure that its products meet high quality and durability standards and warrants to the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship as follows: 1 YEAR LIMITED WARRANTY ON ALL PRODUCTS UNLESS SPECIFIED OTHERWISE. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, repair or alterations outside our facilities, or to a lack of maintenance.

WMH TOOL GROUP LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD SPECIFIED ABOVE, FROM THE DATE THE PRODUCT WAS PURCHASED AT RETAIL. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. WMH TOOL GROUP SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

To take advantage of this warranty, the product or part must be returned for examination, postage prepaid, to an Authorized Repair Station designated by our office. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, WMH Tool Group will either repair or replace the product, or refund the purchase price if we cannot readily and quickly provide a repair or replacement, if you are willing to accept a refund. WMH Tool Group will return repaired product or replacement at our expense, but if it is determined there is no defect, or that the defect resulted from causes not within the scope of our warranty, then the user must bear the cost of storing and returning the product. This warranty gives you specific legal rights; you may also have other rights which vary from state to state.

WMH Tool Group sells through distributors only. WMH Tool Group 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.

TABLE OF CONTENTS

Safety Rules	4-5
Safety: Decals	6
Specifications	7
Receiving	8
Installation	8
Installing Dust Chute.....	8
Inspection	9
Adjustments.....	9
Depth of Cut	9
Feed Rate Adjustment	9
Belt Tension	9
Opening Hood	10
Knife Installation & Adjustment	10
The Feed System of Your Planer.....	11
Anti-Kickback Fingers	11
Infeed Roll.....	11
Chipbreaker.....	12
Pressure Bar.....	12
Outfeed Roll	13
Table Rolls	13
Table Adjustments.....	14
Test Cutting & Trouble-Shooting.....	14-16
Maintenance.....	17
Lubrication.....	17
Trouble-Shooting.....	18-20
Parts Lists & Exploded Views:	
Gearbox Assembly	21-22
Cutterhead Assembly.....	23-25
Top Cover Assembly	26-27
Column Assembly.....	28-29
Table Assembly	30-31
Base Assembly.....	32-34
Electrical Schematics:	
7.5HP 1Ph 230V	35
7.5HP 3Ph 230V	36
7.5HP 3Ph 460V	37

SAFETY RULES

As with all machines, there is a certain amount of hazard involved with the use of this planer. Use the machine with the respect and caution demanded where safety precautions are concerned. When normal safety precautions are overlooked or ignored, personal injury to the operator can result.

Read, understand and follow the safety and operating instructions found in this manual. Know the limitations and hazards associated with this planer.

Electrical grounding. Make certain that the machine frame is electrically grounded and that a ground lead is included in the incoming electrical service. In cases where a cord and plug are used, make certain that the grounding plug connects to a suitable ground. Follow the grounding procedure indicated in the National Electrical Code.

Eye safety. Wear an approved safety shield, goggles, or glasses to protect eyes. (NOTE: Common eyeglasses are only impact-resistant, they are not safety glasses.)

Personal protection. Before operating the machine, remove tie, rings, watch and other jewelry and roll up sleeves above the elbows. Remove all loose outer clothing and confine long hair. Protective type footwear should be used. Where the noise exceeds the level of exposure allowed in Section 1910.95 of the OSHA Regulations, use hearing protective devices. Do not wear gloves.

Guards. Keep the machine guards in place for every operation for which they can be used. If any guards are removed for maintenance, DO NOT OPERATE the machine until the guards are reinstalled.

Work area. Keep the floor around the machine clean and free of scrap material, saw dust, oil and other liquids to minimize the danger of tripping or slipping. Be sure the table is free of all scrap, foreign material and tools before starting to cut. Make certain the work area is well lighted and that a proper exhaust system is used to minimize dust. Powermatic recommends the use of anti-skid floor strips on the floor area where the operator normally stands and that each machine's work area be marked off. Provide adequate work space around the machine.

Avoid accidental starting: Make certain motor switch is in off position before connecting power to the planer.

Operator position. Maintain a balanced stance and keep your body under control at all times. Stand to the left side out of line with the table and make sure no one else is standing in line with the table.

Housekeeping. Before turning on machine, remove all extra equipment such as keys, wrenches, scrap, and cleaning rags away from the machine

Careless acts. Give the work you are doing your undivided attention. Looking around, carrying on a conversation, and "horseplay" are careless acts that can result in serious injury.

Disconnect machine before performing any service or maintenance or when changing blades. A machine under repair should be RED TAGGED to show it should not be used until the maintenance is complete.

Maintain tools in top condition. Keep tools sharp and clean for safe and best performance. Dull tools increase noise levels and can cause kickbacks and glazed surfaces. Broken tools or tools that are not securely locked in the cutterhead can be thrown out of the planer causing severe or fatal injury as well as severe damage to the machine. Check the condition and adjustment of the tools before making any cuts. Follow the sharpening instructions on knife grinding and jointing, installing and adjustments.

Short stock: Do not attempt to plane boards shorter than 12" (305mm) in length without butting a board of equal thickness behind it to help it through the planer. Be sure the last board of a butted sequence is 12" (305mm) long or longer.

Stacked boards: Do not feed stacked boards through a planer; a kickback can occur causing severe or fatal injury.

If stock stops feeding: If the board being planed stops feeding, disengage or turn the feed off and turn the power off. Wait until the cutterhead comes to a complete stop before lowering the table to remove the board. NEVER lower the table with the power on and the stock still in the machine, as a kickback can occur.

Hand safety. Keep hands outside the machine. NEVER reach under the guards to try to clear stock that stops feeding. Do not clear chips and sawdust with hands; use a brush. Do not have any part of the hands under that part of the board that is over the table when starting a cut; the infeed roll will engage the board and force it down against the table causing a pinching action.

Cutterhead rotation: Be sure cutterhead rotates under power in a counterclockwise direction when viewed from the main drive motor side.

Material condition: Do not plane boards with loose knots or with nails or any foreign material on its surface. Knife impact on these objects can cause the knives to be pulled out and cause them to shatter against the chipbreaker or pressure bar. Twisted, warped, or wind in stock should first be jointed on one surface before attempting to plane a parallel surface on the planer. Serious stock flaws cannot be removed by use of a planer alone.

Machine capacity: Do not make any cuts requiring more power than is available on the machine. Do not attempt to feed two boards side by side (multiple board surfacing) on any machine not equipped with sectionalized infeed roll and chipbreaker. **NOTE:** The 22" Planer is rated at 7.5 horsepower with maximum cutterhead speed of 4800 RPM. DO NOT equip your planer with a motor of higher horsepower or run the cutterhead in excess of 4800 RPM. Doing so voids the warranty and Powermatic holds itself harmless from any injury that may result.

Machine adjustments: Make all machine adjustments with power off except feed rate.

Job completion. If the operator leaves the machine area for any reason, the planer should be turned "off" and the cutterhead should come to a complete stop before his departure. In addition, if the operation is complete, he should clean the planer and the work area. NEVER clean the planer with power "on" and never use the hands to clear sawdust and debris; use a brush. Disconnect machine from power source before cleaning.

Replacement parts. Use only Powermatic or factory authorized replacement parts and accessories; otherwise the warranty and guarantee is null and void.

Misuse. Do not use this Powermatic planer for other than its intended use. If used for other purposes, Powermatic disclaims any real or implied warranty and holds itself harmless for any injury or damage which may result from that use.

If you are not thoroughly familiar with the operation of planers, obtain advice from your supervisor, instructor or other qualified person.


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


Health hazards. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- * Lead from lead-based paint.
- * Crystalline silica from bricks and cement and other masonry products.
- * Arsenic and chromium from chemically-treated lumber.

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).

SAFETY

Familiarize yourself with the location and content of this decal on your machine.

WARNING

1. Read instruction manual before operating machine.
2. Do not operate without all guards properly installed.
3. Remove or fasten loose articles of clothing such as neckties, etc. Contain long hair.
4. Remove jewelry such as finger rings, watches, bracelets, etc.
5. Use approved safety glasses and/or face shield to protect eyes, and use other personal safety equipment as required. Do not wear gloves.
6. Disconnect machine from power source before making any adjustments or cleaning chips away from machine.
7. Keep the floor around machine clean and free from scraps, sawdust, oil and grease to minimize the danger of slipping.
8. Do not operate this machine while under the influence of alcohol or drugs.
9. Failure to comply with these warnings may result in serious personal injury.

DO NOT REMOVE OR OBSCURE THIS LABEL

SPECIFICATIONS: Model 201, 22" Planer

Table with standard extensions.....	28" x 38"
Maximum cutting width.....	22"
Maximum thickness.....	1/4"
Full width depth of cut.....	3/16"
Minimum planing length.....	10"
Number of knives.....	4
Cutterhead speed.....	4800 RPM
Cuts per minute.....	19,200
Cutterhead diameter.....	3-1/4"
Blade size.....	22-1/8" L x 7/8" W x 1/8" T
Feed rate.....	20 & 30 FPM
Overall dimensions.....	32-1/4" W x 50" H x 50" L
Motor.....	7.5 HP, 3 Ph, 230V or 7.5 HP, 3 Ph, 460V or 7.5 HP, 1 Ph, 230V
Shipping weight.....	1,197 lbs.

NOTE: The above specifications were current at the time this manual was published, but because of our policy of continuous improvement, Powermatic reserves the right to change specifications without notice and without incurring obligations.

RECEIVING

Open shipping crate and check for shipping damage. Report any damage immediately to your distributor. Read the instruction manual thoroughly for assembly, maintenance and safety instructions.

Contents of crate:

- 1 planer
- 1 dust chute w/ hardware
- 4 special hex head screws w/ hex nuts
- 4 foot pads w/ hardware
- 1 knife-setting gauge
- 1 6mm hex wrench
- 1 8mm hex wrench
- 1 10mm hex wrench
- 1 12mm & 14mm wrench
- 1 22mm & 24mm wrench

INSTALLATION

Remove the screws holding the base of the machine to the skid. Use the lifting eyes on front and back of the planer for hoisting it off the skid. See Figure 1. Make sure the hex nuts are tightened before lifting. The eyes should be removed once the planer is situated.

Place the planer on a solid foundation, preferably a concrete floor. The four foot pads should be placed beneath the corners and the screws and hex nuts used for leveling adjustments. Alternately, you can secure the machine to the floor by using lag screws through the holes in the base.

The machine area should be clean, dry, well ventilated, and well lighted. Since planers can create noise problems, the site selection should be one which minimizes reverberant sound from walls, ceilings and other equipment. Electricals should be installed so that they are protected from damage and exposure. Be sure to properly ground the machine frame.

Exposed metal parts have been given a protective coating at the factory. This should be removed with a soft rag and kerosene or a good commercial solvent. Do not use an abrasive pad.

Powermatic strongly recommends that an exhaust system be used with this machine. It should be of sufficient volume for this size planer. If an exhaust system is not used, the user is cautioned against the health hazard and the limitations in the OSHA regulation for employee or student exposure to dust particles.

INSTALLING DUST CHUTE

Mount the dust chute with the eight M6 x 10mm hex screws, eight spring washers, and eight flat washers. See Figure 2.

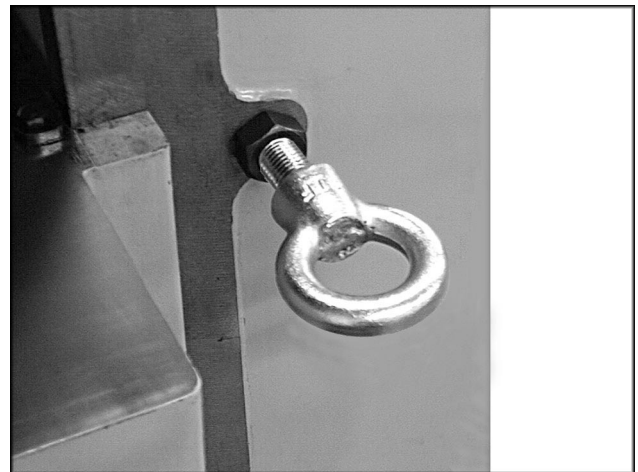


FIGURE 1

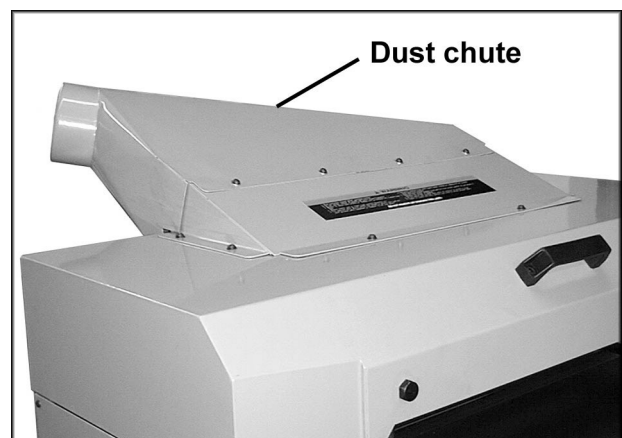


FIGURE 2

INSPECTION

Before putting power to the machine, check that all screws are tight, that all mechanical functions work freely and that the cutterhead turns freely without knife contact with the chipbreaker or pressure bar.

ADJUSTMENTS

Tools required

Philips screwdriver
Hex wrenches (provided)
Open-end wrench (provided)

DEPTH OF CUT

Depth of cut is controlled by raising or lowering the table. This is done by using the handwheel (A), shown in Figure 3.

1. Loosen the lock knob (B).
2. Raise or lower the table to the desired position (clockwise to raise). One revolution of the handwheel equals 1/16". The distance can be read on the scale (C).
3. Retighten lock knob (B).
4. The pointer (D) can be adjusted if the scale should ever need recalibrating.

FEED RATE ADJUSTMENT

The Model 201 is equipped with selectable feed speed rolls that feed stock at 20 and 30 feet per minute. To adjust speed, turn lever shown in Figure 4.

IMPORTANT: Always change speeds while the machine is running.

BELT TENSION

1. Disconnect machine from power source.
2. Remove lower rear panel of machine, and use the hex nuts to adjust tension. See Figure 5. Adjust motor plate up or down until correct belt tension is achieved. To lower motor plate, loosen lower nuts and tighten upper nuts. To raise motor plate, do the opposite.
3. Correct tension is obtained when there is approximately 1/4" deflection in the center span of the belts using light finger pressure.
4. Re-tighten the nuts and replace panel.

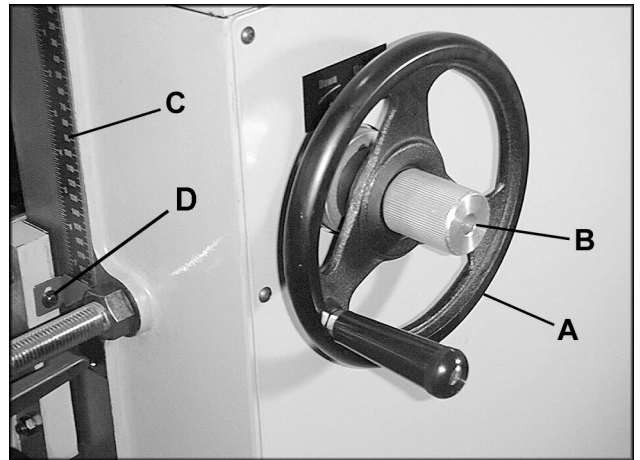


FIGURE 3

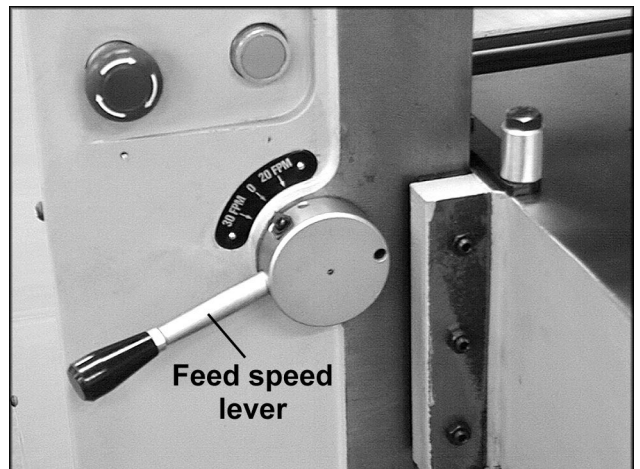


FIGURE 4



FIGURE 5

OPENING HOOD

To open the hood for access to the cutterhead, remove the two hex screws with the 22mm wrench provided. See Figure 6.

KNIFE INSTALLATION & ADJUSTMENT

CAUTION: Use care when placing hands near knives as they are extremely sharp and can cause severe cuts.

Installing knives on a planer is an exacting process. If the knives are not to be jointed and ground, end-to-end and knife-to-knife relationship must be held within .001" (.03mm) for accurate and smooth planing. To help avoid cutterhead distortion in changing out a set of knives, remove and replace the knife in one slot before changing the next knife.

Any knife adjustment or replacement should be done to all four knives at the same time. Failure to do this may result in an out-of-balance cutterhead which can lead to bearing failure.

1. Disconnect machine from power source.
2. To remove knife, loosen the six hex head screws. See Figure 7.
3. The knife is spring loaded and will rise up in the slot. Carefully remove knife from cutterhead by lifting straight out. Remove gib and springs, and clean any dust, pitch or accumulated foreign matter from the slot and the gib.
4. Replace the springs and gib into the slot, then insert new knife and loosely snug the six hex head screws.

5. Carefully place the knife-setting gauge until it contacts the cutterhead, as shown in Figure 8. This will hold the high point of the knives to the proper height above the cutterhead (approximately 1/8" or 3.18mm). Use the gauge at both ends of the knife, then check the center section to be sure it is even. If it is low, try backing off slightly on the center gib screw to allow blade to come up. Gently tap blade down with piece of wood until it conforms to the gauge height. Recheck the full length of the knife.

NOTE: If all knives have been removed, a new set must be installed with the gib screws lightly snugged down but **not** fully tightened. All knives and gibs should be in place before tightening. Locking one knife in without the others in position can cause cutterhead distortion. The tightening process should proceed working from the center out on each knife and after locking all gib screws once, repeat the same sequence until all screws are equally tight.

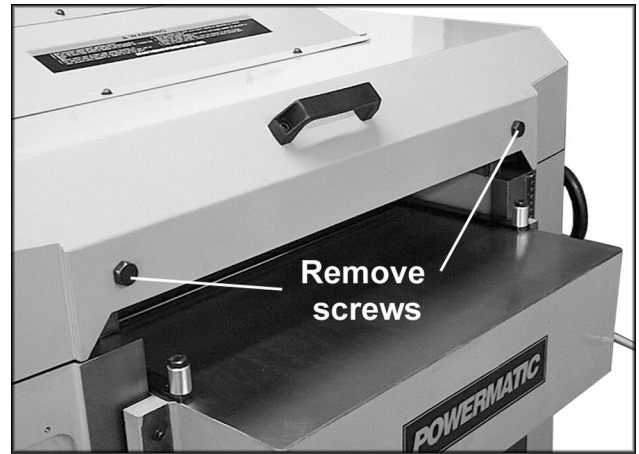


FIGURE 6

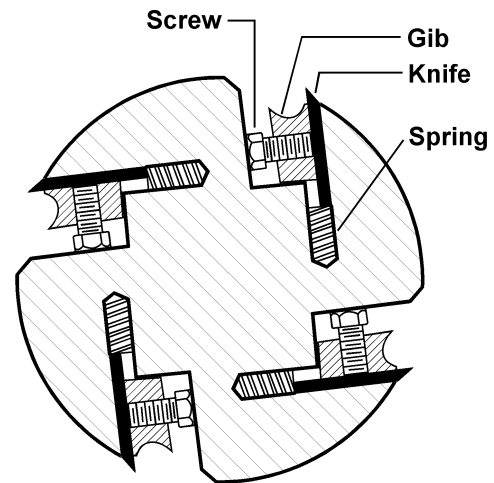


FIGURE 7

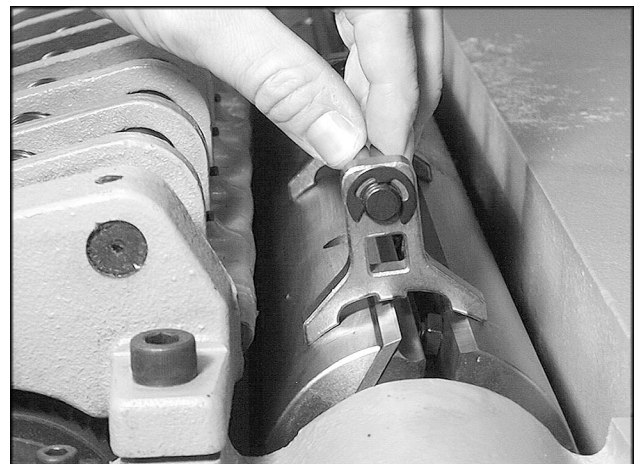


FIGURE 8

⚠ WARNING: After installing knives, re-check all gib screws. Loose gib screws can result in knives being thrown out of the cutterhead, causing severe damage to the machine and possible serious or fatal injury to the operator or bystanders.

THE FEED SYSTEM OF YOUR PLANER

(Figure 9)

1. Anti-kickback fingers
2. Infeed roll
3. Chipbreaker
4. Cutterhead
5. Pressure bar
6. Outfeed roll

ANTI-KICKBACK FINGERS

Anti-kickback fingers help prevent stock from being thrown from the machine. These fingers operate by gravity and should be inspected before each day's use for pitch or gum buildup. The fingers must operate freely and move independently for correct operation.

INFEEED ROLL

The function of the infeed roll is to feed the material into the machine. It is a corrugated, sectional roll with approximately 5/16" independent movement of each section to accommodate multiple board surfacing.

To provide proper drive, it should be set so that the bottom of its arc is 1/16" (1.6mm) below the arc of the cutterhead knives. The infeed roll is 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 boards. The tension should be equal at both ends of each roll.

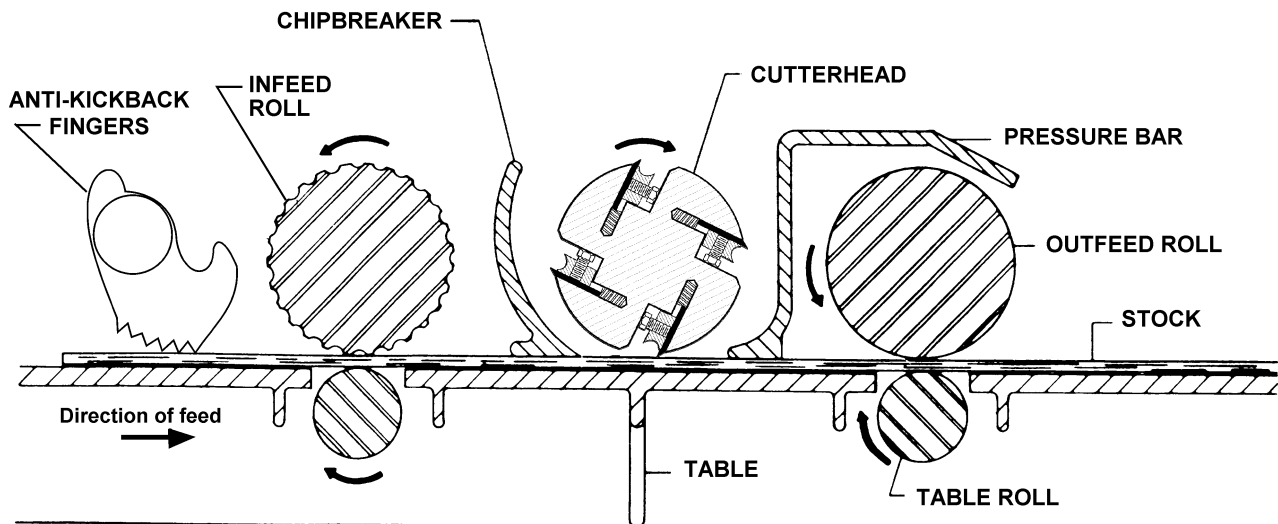


FIGURE 9

To adjust the infeed roll:

1. Place a bed and feed roll gauge (accessory #2230002) under a knife in the cutterhead and raise the table until the gauge contacts the knife at the apex of its curve. See Figure 10.

NOTE: If a bed and feed roll gauge is not available, use a finished block of wood with notches cut out for the table rolls, and a feeler gauge. See Figure 11 for an example of a wood block used for a gauge.

2. Move the gauge to the extreme left side of the infeed roll and check the measurement. It should be $1/16$ " below the knife measurement. If it is not, correct with the adjustment screws (A) on top the side panels, shown in Figure 12.

3. Move the gauge to the extreme opposite end of the infeed roll and check. Make necessary adjustments.

It is important that the setting on both sides of the infeed roll be the same height to help avoid skewing of the material as it is fed through the machine.

CHIPBREAKER

The chipbreaker is a sectionalized type made of 1" side spring-loaded sections mounted on a bar which swings concentric with the cutterhead. The functions of the chipbreaker are to break chips into small pieces, help avoid splintering of the wood, help avoid board bounce on thinner boards, to direct the flow of chips out of the machine, and to permit multiple board surfacing.

The chipbreaker in its free position should be $1/32$ " (.8mm) below the cutting arc of the knives.

⚠ CAUTION: A chipbreaker set too low may prevent stock from feeding into the machine.

Using the same method as indicated for the infeed roll, adjust the chipbreaker free position using a bed and feed roll gauge and adjust the screws (B) in the pivot arm at each end if necessary. See Figure 12. It is important that each end be the same height to help avoid skewing of the material as it is fed through the machine.

NOTE: If the infeed roll setting is altered, the chipbreaker must be re-adjusted.

PRESSURE BAR

Most planing problems can be traced to improper setting of the pressure bar. Its function is to hold down the material after it passes under the cutterhead and throughout the remainder of the cut. Its basic setting is to be in line with the arc of the cutterhead knives.

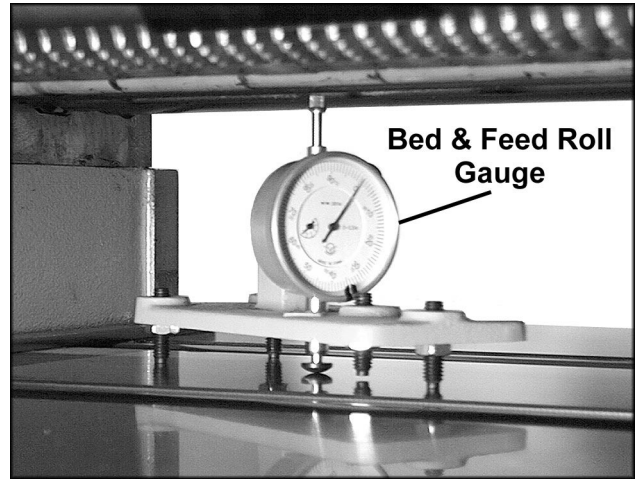


FIGURE 10

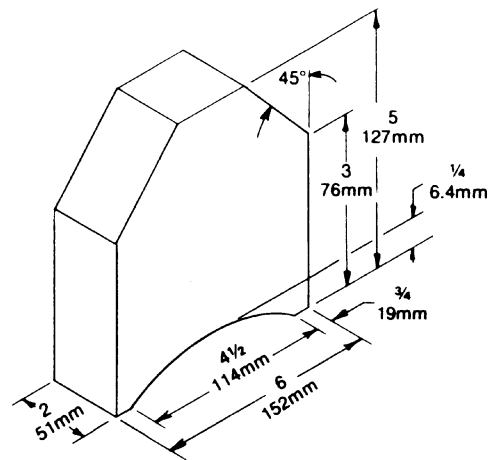


FIGURE 11

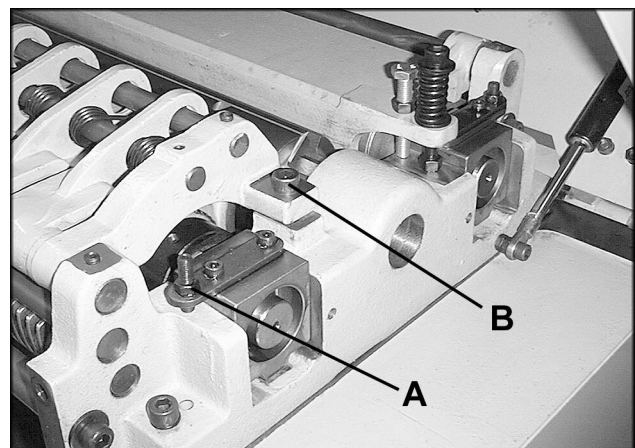


FIGURE 12

If it is too high, a shallow "clip" will occur at each end of the board. If it is too low, stock will not feed through.

Use a bed and feed roll gauge to set the full length of the pressure bar to be .000-.001" (.02mm) above the arc of the cutterhead. Figure 13 shows the height adjustment screw (C) and the spring tension adjustment screw (D) for the pressure bar. This initial setup is a starting point and final adjustment may have to be made during a test cut.

OUTFEED ROLL

The outfeed roll is of smooth, one-piece construction to help avoid marring the finished surface of the material being cut. Its function is to continue to feed the material through the machine after it leaves the infeed roll. The correct free position setting is 1/32" (.8mm) below the arc of the cutterhead knives.

Use a bed and feed roll gauge to check the outfeed roll in the same manner as the infeed roll. Adjust as necessary using the screws shown in Figure 13.

TABLE ROLLS

The Model 201 Planer has two table rolls which help reduce friction of the stock on the table as it feeds through the machine. It is not possible to give exact height setting of the table rolls because each type of wood behaves differently. As a general rule, however, when planing rough stock, the table rolls should be set high and when planing smooth stock the table rolls should be set low. Height should normally range between .005" to .015".

The planer is equipped with a quick set table roll adjustment. With a single lever, you can raise the rolls from their finishing board height to a roughing board height. See Figure 14. The range is 0.00 to .060"

To adjust the height of the table rolls, loosen the handle (A) and turn the lever (B). Re-tighten the handle to lock the setting.

If the table rolls should need further adjustment:

1. Position the lever (B-Fig. 14) to zero setting.
2. Use a bed and feed roll gauge and zero the indicator to the table. Place the gauge over the extreme right side of the table roll and find the high point of the roll arc.
3. The standard setting is .008" (.2mm); if the reading is greater or less than this reading, reach below the table and loosen the hex nut (C) which is above the cam (D) Rotate the hex screw (E) to position the .008" setting. See Figure 15.

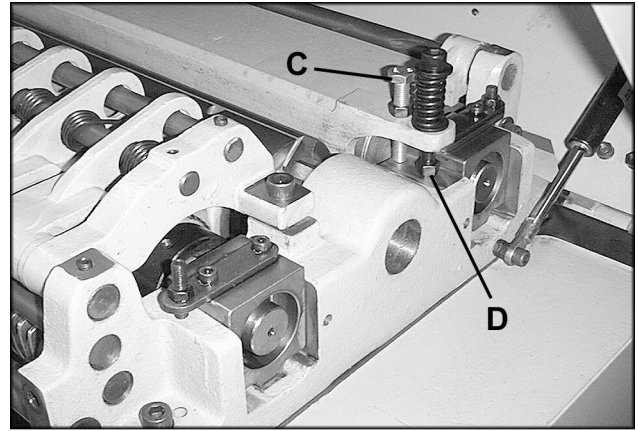


FIGURE 13

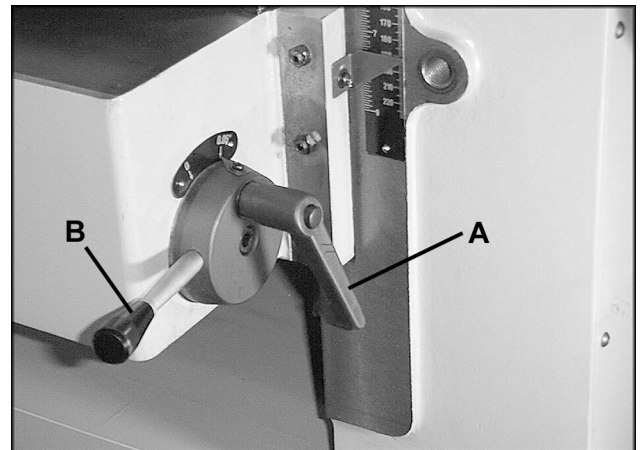


FIGURE 14

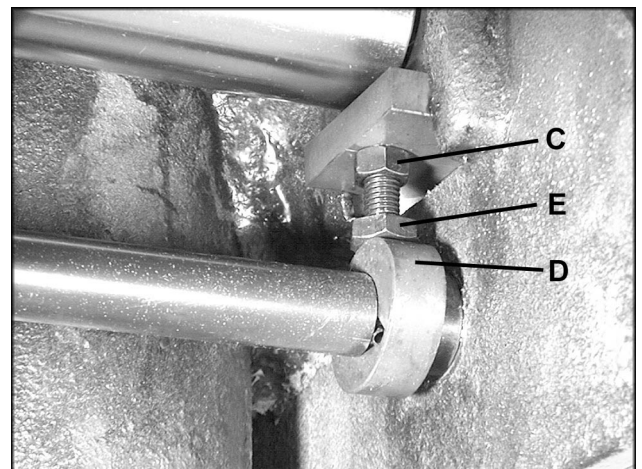


FIGURE 15

4. Repeat the process for the left side, and then re-check the right side. It is important that both ends of the table rolls be the same height to help prevent skewing of the board as it feeds through the machine.

5. Re-tighten the hex nuts (C-Fig. 15) on both ends of the table roll. Repeat for other roll.

TABLE ADJUSTMENTS

The planer table is raised and lowered by twin screws supported on bearings, and is guided by machined surfaces on the side panels. The fit-up to prevent the table from rocking is controlled by two gibs in front. See Figure 16. These gibs should be adjusted individually using the gib screws provided so that the ways are lightly contacting on all four surfaces. The gibs should be tight enough to prevent rocking or movement of the table when the planer is in operation.

To do accurate planing the table must be parallel with the cutterhead. Lack of parallelism results in a taper over the width of the board. To check parallelism do the following:

1. Use a bed and feed roll gauge, or a wood gauge block, to check parallelism at each end of the cutterhead.

2. If the table is not parallel, place the gauge at the end that needs to be raised. Loosen the three socket head screws (A) beneath the table, as shown in Figure 17, place a rod into one of the open holes (B), and turn the shaft (C) to raise the table until the gauge contacts the cutterhead. Or, the same effect can be achieved by lowering the other side of the table.

(NOTE: This adjustment may generate the need to recalibrate the table height pointer.)

3. Re-tighten the screws (A).

TEST CUTTING & TROUBLE-SHOOTING

Using a piece of semi-finished stock, set up for a 1/16" (1.58mm) deep cut with the quick-set adjustment at zero. Start the machine and, standing to the left-hand side, begin feeding the stock into the machine.

⚠ WARNING: Never stand directly behind stock or allow anyone else to do so, and do not bend down to see how stock is feeding. Should a kickback occur, serious or fatal injury could result.

The infeed roll should take the material and force it under the chipbreaker and cutterhead. If the material feeds through effortlessly, examine the finished cut carefully for imperfections.

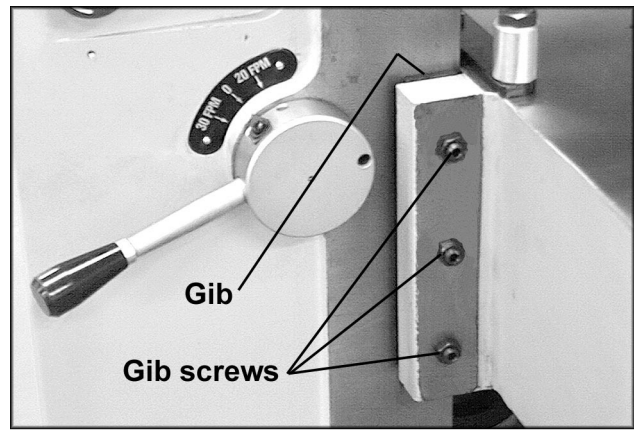


FIGURE 16

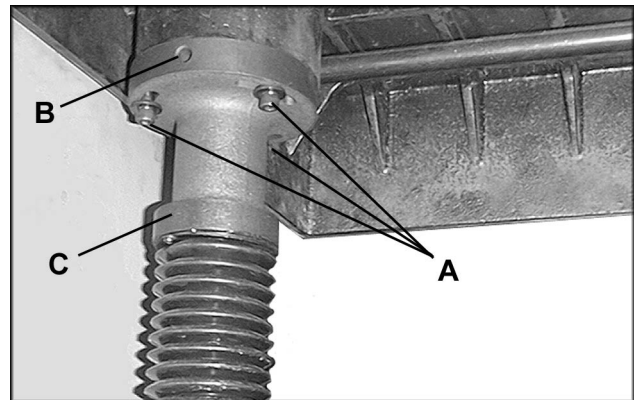


FIGURE 17

Learning to read a board for imperfections will save hours in adjusting a planer to operate properly. Following are some problems that may arise and their probable solutions:

FEED RESTRICTION:

This is caused either by the table rolls being set too low for roughing operations or from a low pressure bar. About 90 percent of the time, the pressure bar is too low. As the sharp edge of the planer knives wear, you must compensate for this wear by raising the pressure bar an equal amount on each side. Your first indication of knife wear is hesitation in feed of the material through the machine after it leaves the corrugated infeed roller on its way out of the machine. Turn machine off and adjust the pressure bar accordingly. The material will free up and feed through smoothly.

⚠ CAUTION: Never attempt pressure bar adjustment while the machine is running.

Feed restriction can also occur due to pitch buildup on the table. Be sure the table surface is clean. Dusting the surface with talc occasionally will aid in smoother feeding and help prevent pitch buildup.

WASHBOARD FINISH:

A very pronounced washboard finish down the full length of the board results from one knife being too high and forced to do all the cutting. See Figure 18. Reset the high knife accordingly.

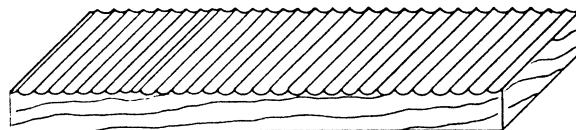


FIGURE 18

CLIP MARKS:

If "clip" marks occur 6" (152 mm) in from each end of the board, the pressure bar is too high. See Figure 19. Turn both right and left hand adjusting screws the same amount, 1/4" turn clockwise or less, and take another 1/16" (1.58 mm) deep cut. Re-examine the board.

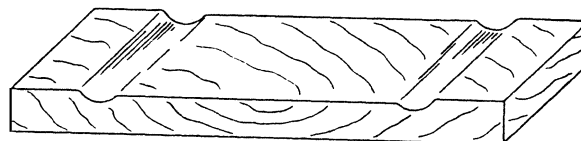


FIGURE 19

Continue the operate-adjust procedure until the clip marks disappear. Should the board fail to feed through, back off slightly on both adjusting screws until feeding is smooth and the imperfections do not reappear. Lock the pressure bar adjusting screws with the jam nuts provided.

SNIPES:

If snipes appear on each end of the material, as shown in Figure 20, a table roll is too high causing a slight lift of the material as it passes through the machine. Normally these snipes are more noticeable on the trailing end of the board than on the lead end, and most often occur during planing of rough lumber. Table rolls must be elevated for running rough or resaw lumber through the machine. When material is turned over to surface the other side, and you neglect to lower the table rolls for a finished cut, then definite snipes will appear on the ends of the material.

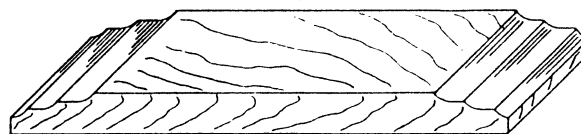


FIGURE 20

CHATTER:

Chatter marks usually appear on thin material. See Figure 21. Even at their lowest point, the table rolls are too high to handle thin material. Solve the problem by either using a slave board or making an auxiliary table out of Formica countertop material, cleating at each end of the table to keep it stationary.

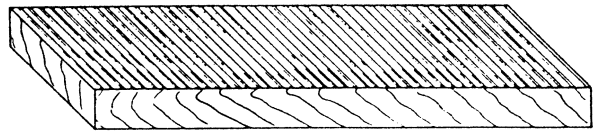


FIGURE 21

TAPERS:

If the machine planes a taper across the full width of the board, as shown in Figure 22, the table is not parallel with the cutterhead. First check that all knives are properly installed with equal protrusion from the cutterhead. If they are, then the table itself must be adjusted. See "Table Adjustment" above.

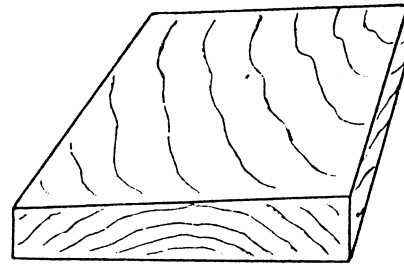


FIGURE 22

TWISTING:

If material twists while feeding through the planer, either the table rolls, pressure bar, or outfeed roll may be out of level. Place the bed and feed roll gauge (or a gauge block) on the table directly under the right end of the infeed roll, move table up until light contact is made between roll and gauge. Move the gauge to the left end and check. Repeat this process under the chipbreaker, pressure bar, and outfeed roll until the problem is discovered. Generally the pressure bar will be out of level due to its constant adjustment to compensate for knife wear. At this point, level the pressure bar (or other part of the planer) and proceed with operation.

HALTED FEEDING:

If the infeed roll takes stock away from you while feeding, then feeding stops immediately, the chipbreaker is too low, causing material to hit high on the heel. Reset the chipbreaker.

In a similar situation, the infeed roll takes the stock, the chipbreakers lift, and just as you hear the knives contact the material, then it stops feeding. In this case the pressure bar is too low. Reset the pressure bar according to instruction in this manual.

MAINTENANCE

Periodic or regular inspections are required to ensure that the machine is in proper adjustment, that all screws are tight, that belts are in good condition, that dust has not accumulated in the electrical enclosures, and that there are no loose or worn electrical connections.

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

Close-fitting parts, such as the table locking rods, the cutterhead slot and gibs, should be cleaned with a cloth or brush and non-flammable solvent and freed from clinging foreign matter.

Remove resin and other accumulations from feed rolls and table with a non-flammable solvent.

Periodically check all the chains for proper tension and adjust accordingly if required.

TIP: If a foreign object nicks the knives, instead of throwing them away or trying to grind out the deep nick, simply stagger the knives in the head, moving one knife no more than 1/4" to the right and another knife no more than 1/4" to the left. The nick will not be noticeable.

LUBRICATION

The gear box oil should be changed once a year. The drain plug (A) is shown in Figure 23. Refill the gear box with 60-90 weight gear oil through the fill hole (B). The sight glass (C) should be checked periodically and oil added as necessary.

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, use an oil cloth but never pour the oil directly on the chain. Over-oiling defeats the purpose of the lubrication, since it tends to invite the collecting of dust, shavings, etc. and works into members of the chain. This hastens wear and leads to premature replacement.

The bearings on the cutterhead are factory lubricated and sealed. They require no further attention.

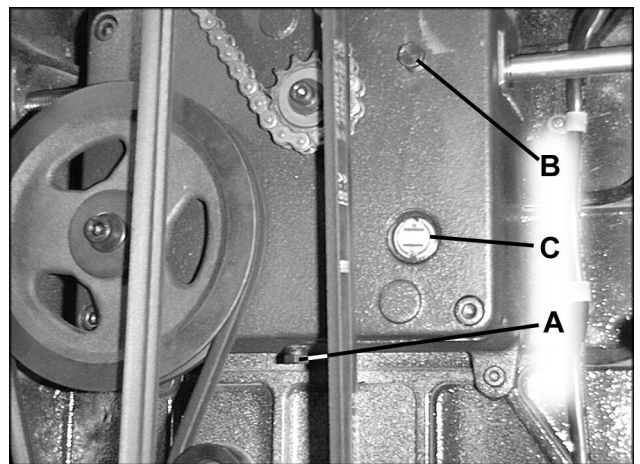


FIGURE 23

TROUBLE-SHOOTING: OPERATING PROBLEMS (201 Planer)

PROBLEM	POSSIBLE CAUSE	SOLUTION
Snipe (NOTE: Snipe can be minimized but not eliminated.)	<ol style="list-style-type: none"> 1. Table rollers not set properly. 2. Inadequate support of long boards. 3. Uneven feed roll pressure front to back. 4. Dull knives 5. Lumber not butted properly. 	<ol style="list-style-type: none"> 1. Adjust rollers to proper height. 2. Support long boards with extension rollers. 3. Adjust feed roll tension. 4. Sharpen knives. 5. Butt end to end each piece of stock as they pass through.
Fuzzy Grain	<ol style="list-style-type: none"> 1. Planing wood with a high moisture content. 2. Dull knives. 	<ol style="list-style-type: none"> 1. Remove high moisture content from wood by drying. 2. Sharpen knives.
Torn Grain	<ol style="list-style-type: none"> 1. Too heavy a cut. 2. Knives cutting against grain. 3. Dull knives. 	<ol style="list-style-type: none"> 1. Adjust proper depth of cut. 2. Review planing for finish. 3. Sharpen knives.
Rough/Raised Grain	<ol style="list-style-type: none"> 1. Dull knives. 2. Too heavy a cut. 3. Moisture content too high. 	<ol style="list-style-type: none"> 1. Sharpen knives. 2. Adjust proper depth of cut. 3. Remove high moisture content from wood by drying.
Rounded glossy surface	<ol style="list-style-type: none"> 1. Dull knives. 	<ol style="list-style-type: none"> 1. Sharpen or replace knives.
Poor feeding of lumber.	<ol style="list-style-type: none"> 1. Inadequate feed roll pressure. 2. Planer bed rough or dirty. 3. Transmission v-belt slipping. 4. Surface of feed rolls too smooth. 	<ol style="list-style-type: none"> 1. Adjust feed roll tension. If proper tension cannot be achieved, replace feed rolls. 2. Clean pitch and residue, and wax planer bed. 3. Tighten transmission v-belt. 4. Lightly roughen the feed roll surface with sandpaper.

TROUBLE-SHOOTING: MECHANICAL & ELECTRICAL PROBLEMS (201 Planer)

PROBLEM	POSSIBLE CAUSE	SOLUTION
Uneven depth of cut side to side	<ol style="list-style-type: none"> 1. Knife projection 2. Cutterhead not level with bed. 	<ol style="list-style-type: none"> 1. Adjust knife projection. 2. Level bed.
Board thickness does not match depth of cut scale	<ol style="list-style-type: none"> 1. Depth of cut scale incorrect. 	<ol style="list-style-type: none"> 1. Adjust depth of cut scale.
Chain jumping	<ol style="list-style-type: none"> 1. Inadequate tension. 2. Sprockets misaligned. 3. Sprockets worn. 	<ol style="list-style-type: none"> 1. Adjust chain tension. 2. Align sprockets. 3. Replace sprockets.
Machine will not start/restart or repeatedly trips circuit breaker or blows fuses	<ol style="list-style-type: none"> 1. Unit not plugged in. 2. Overload automatic reset has not reset. 3. Planer frequently trips. 4. Building circuit breaker trips or fuse blows. 5. Loose electrical connections. 6. Motor starter failure. 	<ol style="list-style-type: none"> 1. Verify unit is connected to power. 2. When planer overloads on the circuit breaker built into the motor starter, it takes time for the machine to cool down before restart. Allow unit to adequately cool before attempting restart. If problem persists, check amp setting on the motor starter inside the electrical box. 3. One cause of overload trips which are not electrical in nature is too heavy of a cut. The solution is to take a lighter cut. If too deep of a cut is not the problem, then check the amp setting on the overload relay. Match the full load amps on the motor as noted on the motor plate. If amp setting is correct then there is probably a loose electrical lead or a failed component. See items 9 & 10 below. 4. Verify that planer is on a circuit of correct size. If circuit size is correct, there is probably a loose electrical lead. Check amp setting on motor starter. 5. Go through all of the electrical connections on the planer including motor connections, verifying the tightness of each. Look for any signs of electrical arcing which is a sure indicator of loose connections or circuit overload. 6. Examine motor starter for burned or failed components. If damage is found, replace motor starter. If motor starter looks OK but is still suspect, you have two options: have a qualified electrician test the motor starter for function, or purchase a new starter and establish if that was the problem on changeout. If you have access to a voltmeter, you can separate a starter failure from a motor failure by first, verifying incoming voltage at 220+/-20 and second, checking the voltage between starter motor at 220+/-20. If incoming voltage is incorrect, you have a power supply problem.

Machine will not start/
restart or repeatedly
trips circuit breaker
or blows fuses

7. Motor starter failure.

7. (continued)

If voltage between starter and motor is incorrect,
you have a starter problem.

If voltage between starter and motor is correct,
you have a motor problem.

8. Motor failure.

8. If electric motor is suspect, you have two options:
Have a qualified electrician test the motor for
function or remove the motor and take it to a quality
electric motor repair shop and have it tested.

9. Miswiring of the unit.

9. Double check to make certain all electrical
connections are correct and properly tight .
The electrical connections other than the motor
are preassembled and tested at the factory.

Therefore,

the motor connections should be double checked as
the highest probability for error. If problems persist,
double check the factory wiring.

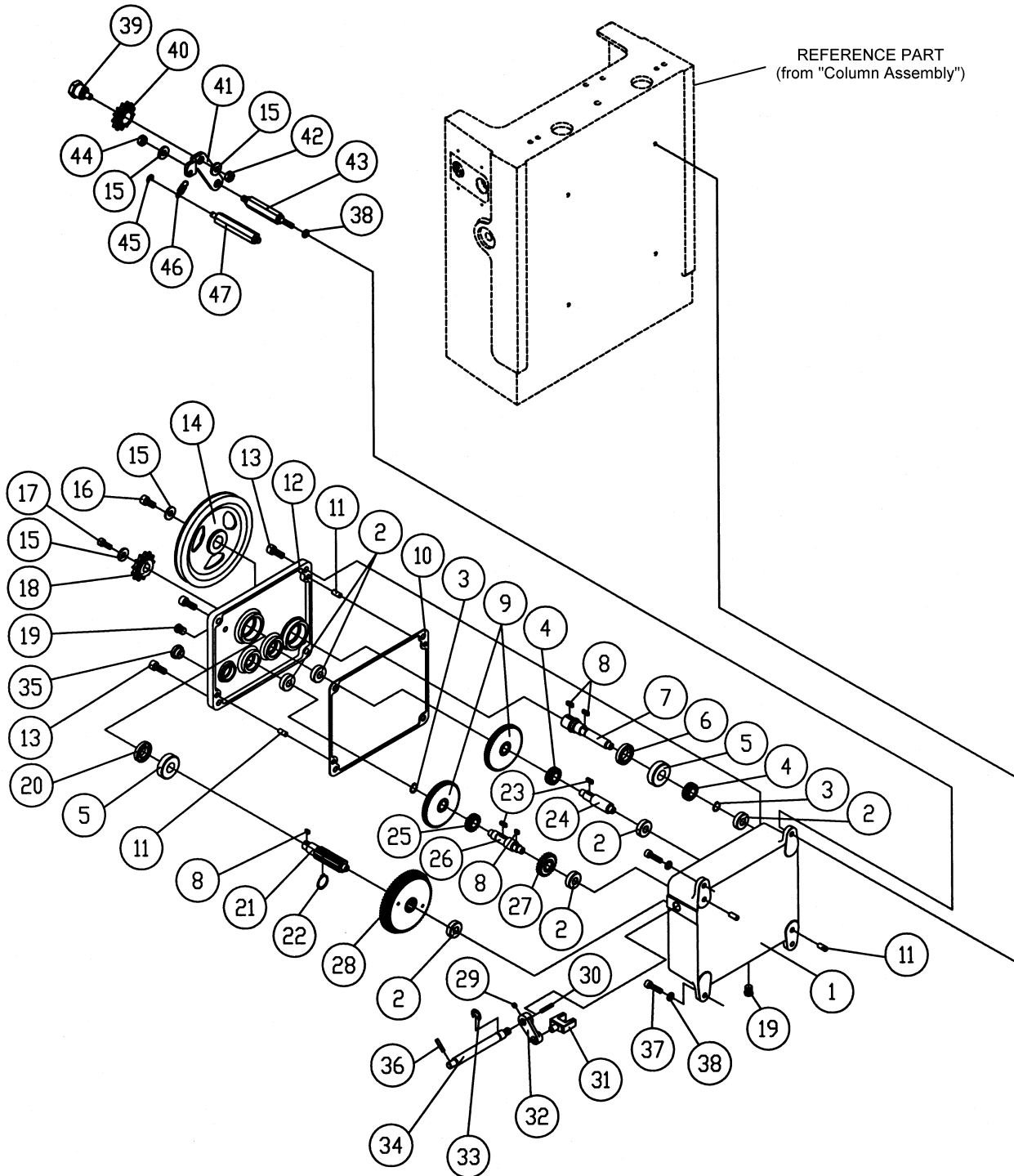
10. On/off switch failure.

10. If the on/off switch is suspect, you have two options:
Have a qualified electrician test the switch for
function, or purchase a new on/off switch and
establish if that was the problem on changeout.

PARTS LIST: Gearbox Assembly (Model 201 Planer)

No.	Part No.	Description	Quantity
1	6012034	Gearbox Body.....	1
2	6012035	Ball Bearing, 6201-2NSE	6
3	6012036	S-Ring, STW-16	2
4	6012037	Gear	2
5	6012038	Ball Bearing, 6204-2NSE	2
6	6012039	Oil Seal, TC24 x 40 x 8.....	1
7	6012040	Shaft.....	1
8	6293370	Key, 5 x 5 x 10.....	4
9	6012041	Gear	2
10	6012042	Gasket.....	1
11	6012043	Pin.....	4
12	6012044	Gearbox Cover	1
13	6012142	Hex Socket Cap Screw, M10 x 1.5P x 25Lg.....	4
14	6012046	Pulley	1
15	6012047	Flat Washer, 10mm x 25 x 3T.....	2
16	6012048	Socket Head Cap Screw, M10 x 1.5P x 20Lg.....	1
17	6012049	Socket Head Cap Screw, M8 x 1.25P x 20Lg.....	1
18	6012050	Sprocket	1
19	6292789	Oil Plug, PT1/4"-19UNF	2
20	33-1051-00-1	Oil Seal, TC20 x 40 x 7.....	1
21	6012051	Shaft.....	1
22	6012052	S-Ring, STW-25	1
23	6292745	Key, 5 x 5 x 16.....	2
24	6012053	Shaft.....	1
25	6012054	Gear	1
26	6012055	Shaft.....	1
27	6012056	Gear	1
28	6012057	Gear Assembly	1
29	6012058	Set Screw, M5 x 0.8P x 5Lg.....	1
30	6012059	Spring Pin, 4mm x 25Lg	1
31	6012060	Shift Fork.....	1
32	6012061	Lever	1
33	6012062	E-Ring, ETW-12	1
34	6012063	Shift Shaft.....	1
35	6012064	Eye Glass Oil Level	1
36	6012065	Spring Pin, 5mm x 26Lg	1
37	6012066	Socket Head Cap Screw, M8 x 1.25P x 25Lg.....	3
38	6012067	Spring Washer, 8.2mm x 15.4	4
39	6012082	Shaft.....	1
40	6012286	Idle Sprocket.....	1
41	6012287	Bracket	1
42	6012079	Hex Nut, M10 x 1.5P.....	1
43	6012288	Stand Off	1
44	6012289	Check Nut, M10 x 1.5P	1
45	6012290	E-Ring, ETW-7	1
46	6012291	Spring.....	1
47	6012292	Stand Off	1

Gearbox Assembly (Model 201 Planer)

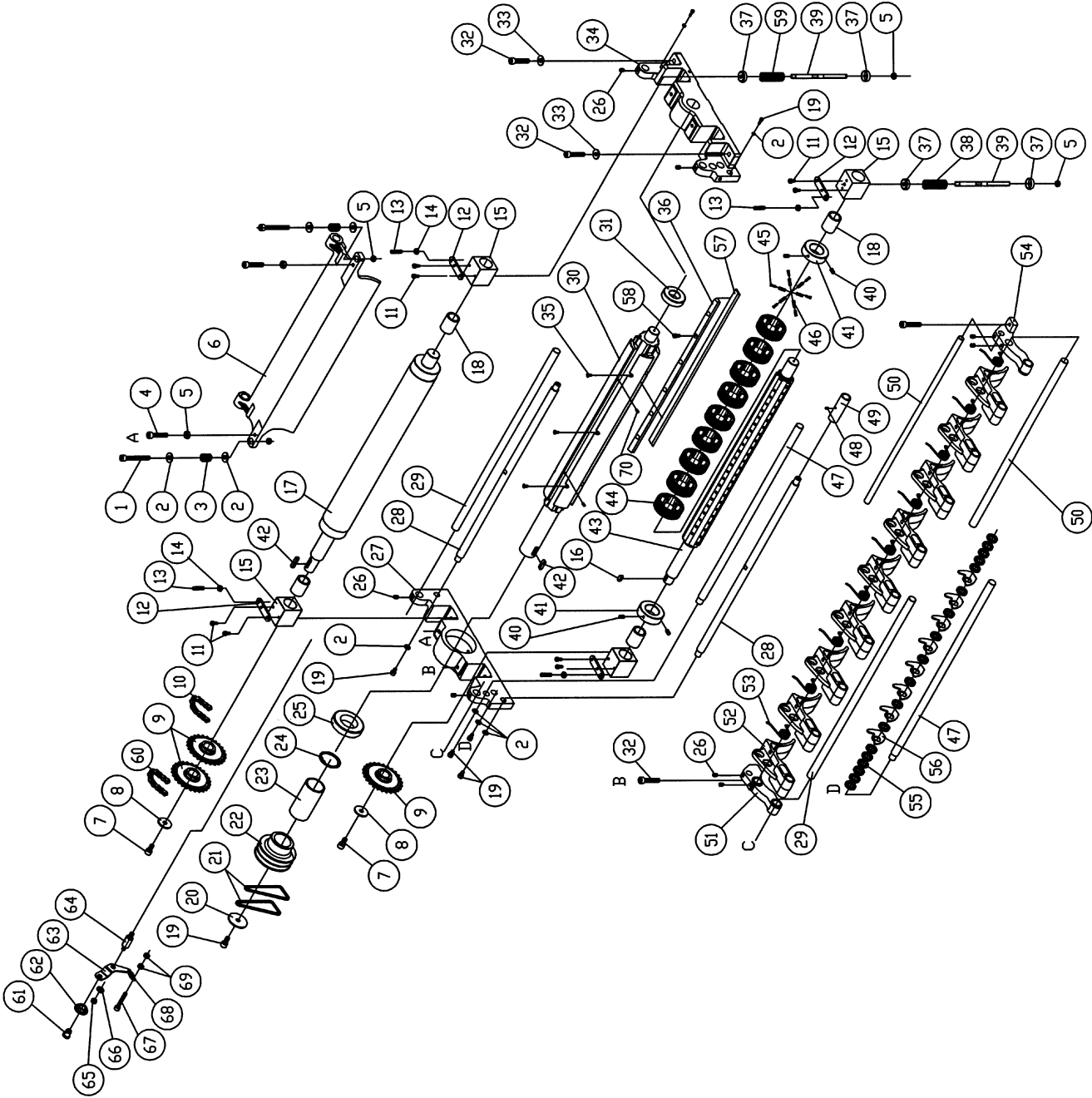


PARTS LIST: Cutterhead Assembly (Model 201 Planer)

No.	Part No.	Description	Quantity
1	6012131	Socket Head Cap Screw, M10 x 1.5P x 75Lg	2
2	6012080	Flat Washer, 10mm x 25 x 3T	10
3	6012132	Spring	2
4	6012133	Socket Head Cap Screw, M10 x 1.5P x 50Lg	2
5	6012079	Hex Nut, M10 x 1.5P	8
6	6012134	Pressure Bar Casting.....	1
7	6012048	Socket Head Cap Screw, M10 x 1.5P x 20Lg	2
8	6012135	Washer	2
9	6012136	Sprocket.....	3
10	6012137	Chain, #40 x 60pcs (infeed roll to outfeed roll).....	1
11	6012138	Socket Head Cap Screw, M6 x 1.0P x 16Lg	8
12	6012139	Plate	4
13	6012140	Set Screw, M8 x 1.25P x 25Lg	4
14	6012097	Hex Nut, M8 x 1.25P	4
15	6012141	Bearing Housing.....	4
16	6012104	Key, 8 x 7 x 18	1
17	6012143	Outfeed Roller.....	1
18	6012144	Needle Bearing, NA-6906.....	4
19	6012048	Hex Socket Cap Screw, M10 x 1.5P x 20Lg	7
20	6012116	Washer	1
21	6012145	Belt, A81	2
22	6012146	Cutterhead Pulley.....	1
23	6012147	Bushing.....	1
24	6012148	R-Ring, RTW-85	1
25	6012149	Ball Bearing, 6209-2NSE.....	1
26	6012150	Set Screw, M8 x 1.25P x 10Lg	8
27	6012151	Cutterhead Casting Left.....	1
28	6012152	Shaft	2
29	6012153	Shaft	2
30	6012154	Cutterhead	1
31	6012155	Ball Bearing, 6007-2NSE.....	1
32	6012156	Socket Head Cap Screw, M10 x 1.5P x 35Lg	6
33	6012157	Spring Washer, 10.2mm x 18.4.....	4
34	6012158	Cutterhead Casting Right	1
35	6012159	Screw, M5 x 0.8P x 12Lg.....	12
36	6012160	Knife Gib.....	4
37	6012161	Washer	8
38	6012162	Spring	4
39	6012163	Shaft	4
41	6012164	Spacer	2
42	6012165	Key, 8 x 7 x 30	1
43	6012166	Infeed Shaft	1
44	6012167	Infeed Roller.....	22
45	6012168	Shaft	132
46	6012169	Spring	132
47	6012170	Shaft	2
48	6012098	Set Screw, M5 x 0.8P x 5Lg	1
49	6012171	Stock Limiter	1
50	6012172	Shaft	2
51	6012173	Bracket, Left Hand	1
52	6012174	Sectional Chipbreaker	10
53	6012175	Spring	10
54	6012176	Bracket, Right Hand	1
55	6012177	Spacer	72
56	6012178	Anti-Kickback Finger	62

No.	Part No.	Description	Quantity
57	6012179	Knife (set of 4)	1
58	6012180	Gib Screw	32
59	6012273	Spring	2
60	6012274	Chain #40 x 72 pcs (gearbox to outfeed roll)	1
61	6012275	Shaft	1
62	6012276	Idle Sprocket	1
63	6012277	Bracket	1
64	6012278	Shaft	1
65	6012279	Check Nut M8 x 1.25P	1
66	6012083	Flat Washer, 8.5mm x 19 x 2T	1
67	6012280	Socket Head Cap Screw, M8 x 1.25P x 50Lg	1
68	6012281	Spring	1
69	6012097	Hex Nut, M8 x 1.25P	2
70	6012296	Spring	8
71	6012295	Knife Setting Gauge (not shown)	1

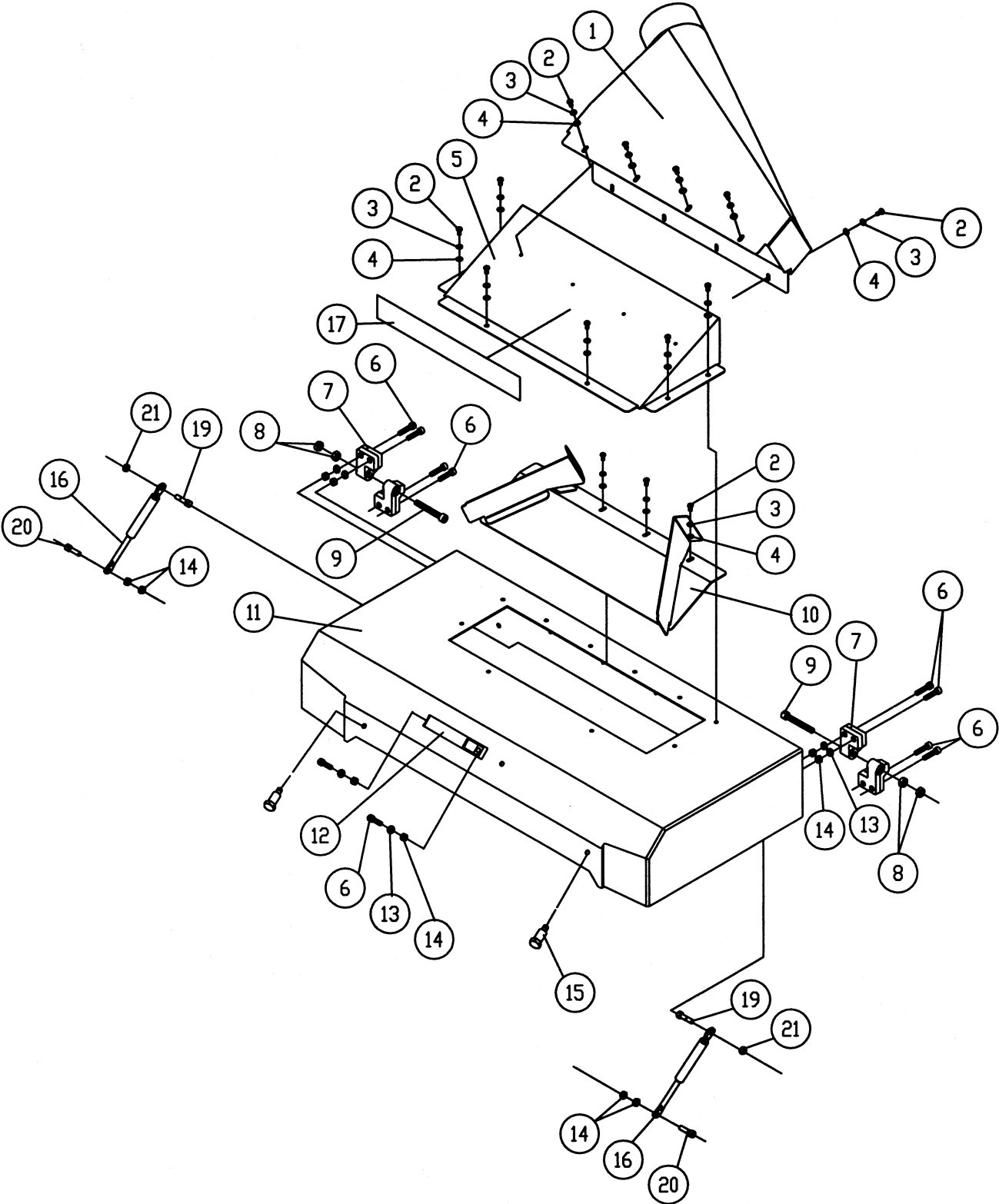
Cutterhead Assembly (Model 201 Planer)



PARTS LIST: Top Cover Assembly (Model 201 Planer)

No.	Part No.	Description	Quantity
1	6012181	Dust Hood.....	1
2	6012091	Screw, M6 x 1.0P x 10Lg.....	18
3	6012182	Spring Washer, 6.1mm x 12.3.....	18
4	6012183	Flat Washer, 6.6mm x 13 x 1T.....	18
5	6012184	Upper Cover.....	1
6	6012066	Socket Head Cap Screw, M8 x 1.25P x 25Lg.....	10
7	6012185	Cast Hinge Half.....	4
8	6012079	Nut, M10 x 1.5P.....	4
9	6012186	Socket Head Cap Screw, M10 x 1.5P x 60Lg.....	2
10	6012187	Deflection Plate.....	1
11	6012188	Top Cover.....	1
12	6012189	Handle.....	1
13	6012067	Lock Washer, 8.2mm x 15.4.....	6
14	6012097	Hex Nut, M8 x 1.25P.....	10
15	6012190	Special Screw.....	2
16	6012191	Cylinder.....	2
17	6012192	Warning Label.....	1
18	6012282	Screw w/ Washer, M6 x 1.0P x 10Lg.....	4
19	6012283	Shoulder Screw.....	2
20	6012284	Shoulder Screw.....	2
21	6012285	Check Nut, M8 x 1.25P.....	2

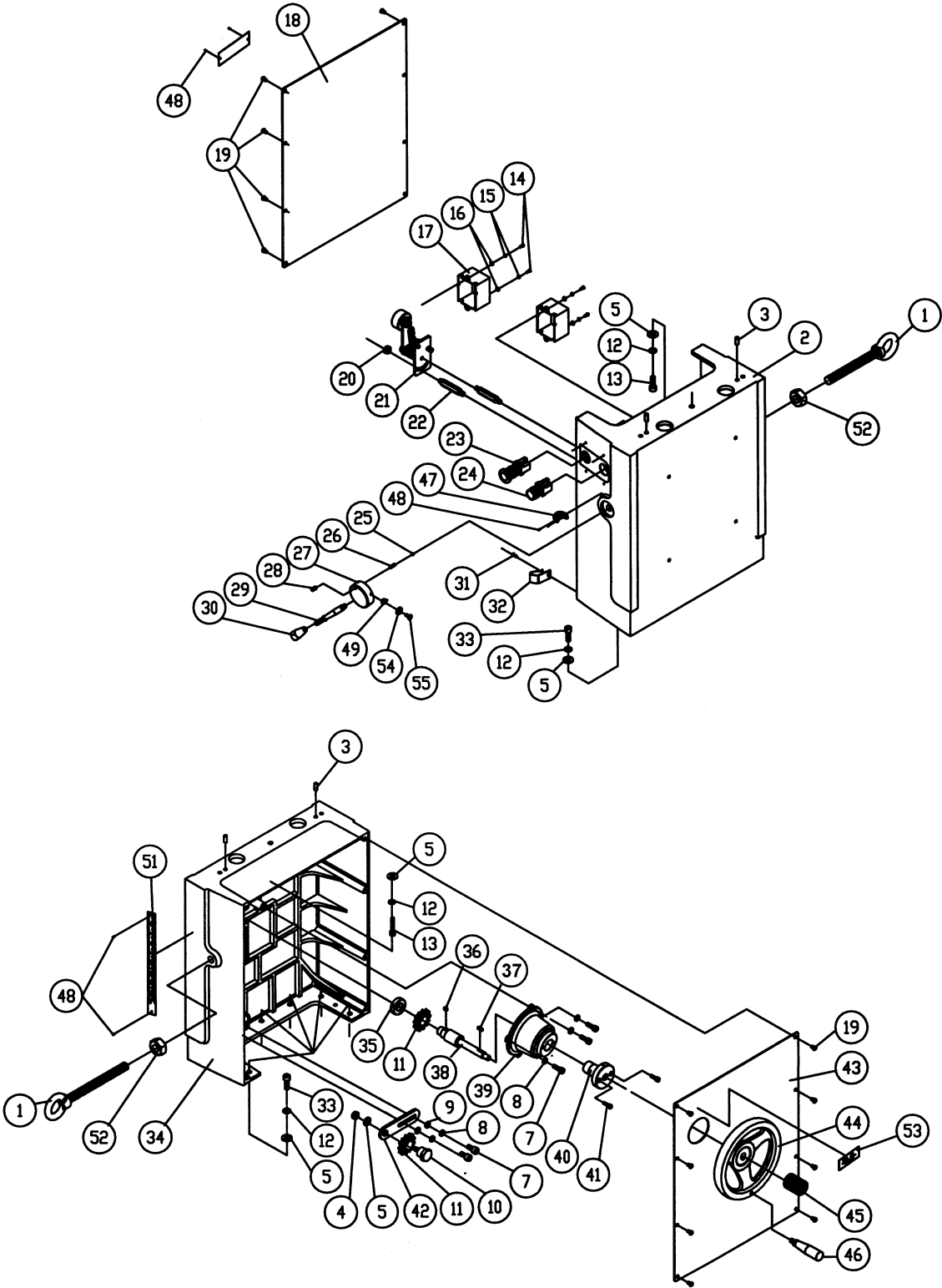
Top Cover Assembly (Model 201 Planer)



PARTS LIST: Column Assembly (Model 201 Planer)

No.	Part No.	Description	Quantity
1	6012193	Lifting Eye, M20 x 2.5P x 30Lg	2
2	6012194	Left Column	1
3	6012195	Pin	4
4	6012079	Hex Nut, M10 x 1.5P	1
5	6012080	Flat Washer, 10mm x 25 x 3T	17
7	6012066	Socket Head Cap Screw, M8 x 1.25P x 25Lg	6
8	6012067	Spring Washer, 8.2mm x 15.4	7
9	6012083	Flat Washer, 8.5mm x 19 x 2T	2
10	6012082	Shaft	1
11	6012197	Sprocket	3
12	6012157	Spring Washer, 10.2mm x 18.4	16
13	6012198	Socket Head Cap Screw, M10 x 1.5P x 40Lg	2
14	6012199	Pan Head Machine Screw, M4 x 0.7P x 10Lg	4
15	6012200	Spring Washer, 4.1mm x 7.7	4
16	6012201	Flat Washer, 4.3mm x 10 x 1T	5
17	6012202	Switch Box	2
18	6012203	Left Sidecover	1
19	6012091	Screw, M6 x 1.0P x 10Lg	16
20	6012204	Hex Nut, 5/16"-18NC	1
21	6012205	Idler Assembly	1
22	6012206	Stand Off	2
23	6012207	Stop Switch	1
24	6012208	Start Switch	1
25	6012209	Ball Detent, 6mm	1
26	6012210	Spring	1
27	6012211	Shifter Hub	1
28	6012212	Set Screw, M6 x 1.0P x 12Lg	1
29	6012213	Shaft	1
30	6012214	Handle	1
31	6012087	Screw, M5 x 0.8P x 10Lg	4
32	6012088	Cord Clip, ACC-3	4
33	6012156	Socket Head Cap Screw, M10 x 1.5P x 35Lg	14
34	6012215	Right Column	1
35	6012216	Ball Bearing, 6004ZZ	1
36	6293370	Key, 5 x 5 x 10	1
37	6292745	Key, 5 x 5 x 16	1
38	6012217	Shaft	1
39	6012218	Housing	1
40	6012219	Sleeve	1
41	6012220	Socket Head Cap Screw, M6 x 1.0P x 16Lg	2
42	6012221	Rocker Arm	1
43	6012222	Right Cover	1
44	6012223	Handwheel	1
45	6012224	Lock Knob	1
46	6012225	Handwheel Swivel Assembly	1
47	6012226	Label Shifter	1
48	6012227	Rivet	6
49	6012228	Pointer	1
51	6012230	Scale	1
52	6012293	Hex Nut, M20 x 2.5	1
53	6012231	Height Adjust Label	1
54	6012201	Flat Washer, 4.3 x 10 x 1T	1
55	6012232	Screw, M4 x 0.7P x 8Lg	1

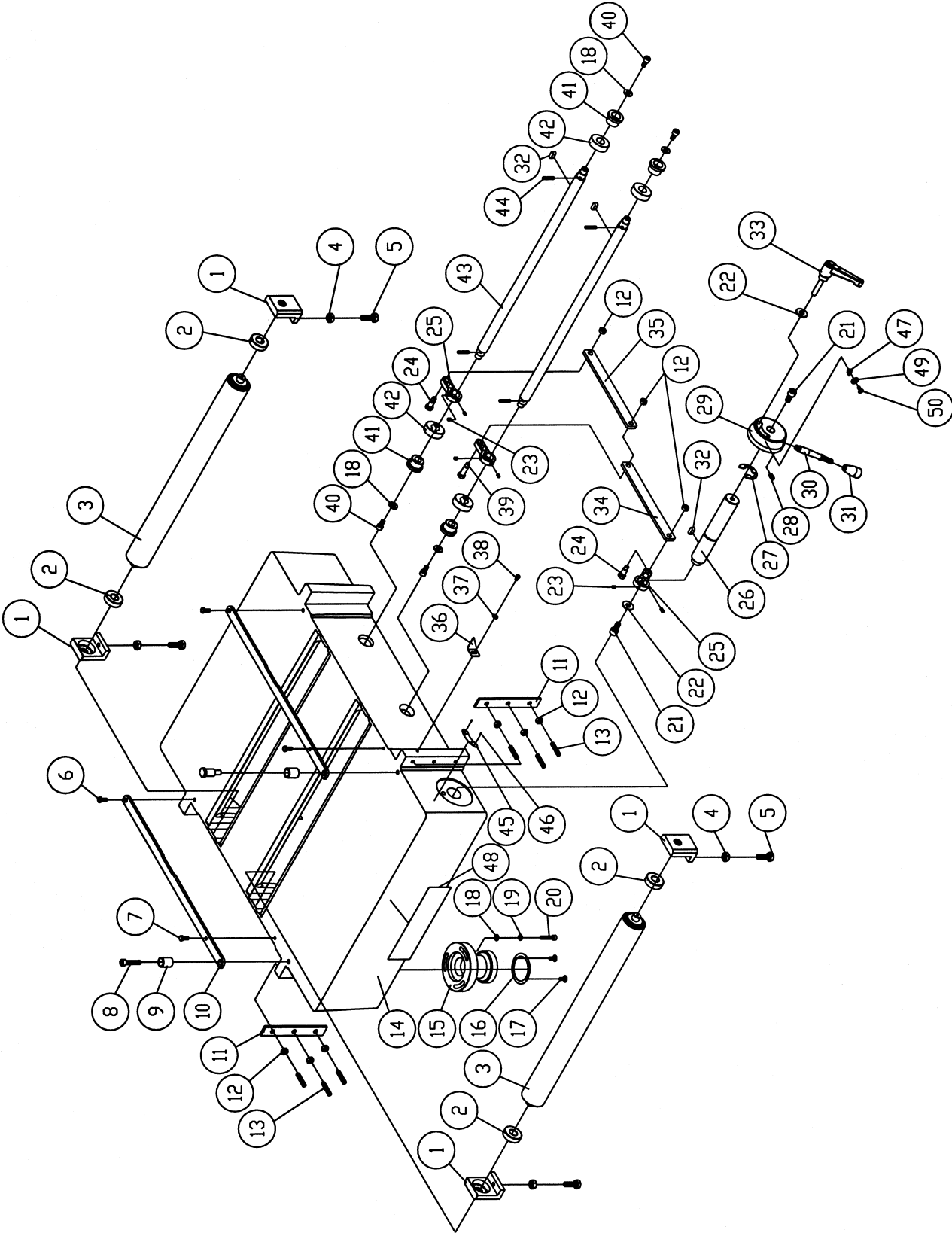
Column Assembly (Model 201 Planer)



PARTS LIST: Table Assembly (Model 201 Planer)

No.	Part No.	Description	Quantity
1	6012233	Bracket.....	4
2	BB-6203ZZ	Ball Bearing, 6203-ZZ.....	4
3	6012234	Roller Assembly	2
4	6012079	Hex Nut, M10 x 1.5P	4
5	6012235	Hex Screw, M10 x 1.5P x 30Lg.....	4
6	6012236	Hex Screw, M8 x 1.25P x 16Lg.....	2
7	6012237	Hex Screw, M6 x 1.0P x 16Lg	2
8	6012238	Hex Screw, M10 x 1.5P x 50Lg.....	2
9	6012239	Pointer.....	2
10	6012240	Plate.....	2
11	6012241	Plate.....	2
12	6012097	Hex Nut, M8 x 1.25P	9
13	6012242	Set Screw, M8 x 1.25P x 35Lg.....	6
14	6012243	Table.....	1
15	6012244	Table Adjusting Hub	2
16	6012245	Bushing	2
17	6012070	Screw w/Washer, M4 x 0.7P x 8Lg/4mm x 10 x 0.8T.....	4
18	6012083	Flat Washer, 8.5mm x 19 x 2T	10
19	6012067	Spring Washer, 8.2mm x 15.4	6
20	6012246	Socket Head Cap Screw, M8 x 1.25P x 40Lg.....	6
21	6012048	Socket Head Cap Screw, M10 x 1.5P x 20Lg.....	2
22	6012080	Flat Washer, 10mm x 25 x 3T	2
23	6012098	Set Screw, M5 x 0.8P x 5Lg	6
24	6012247	Special Screw.....	2
25	6012248	Linking Plate.....	3
26	6012249	Shaft	1
27	6012250	E-Ring, ETW-24	1
28	6012251	Set Screw, M6 x 1.0P x 12Lg	1
29	6012252	Hub	1
30	6012213	Shaft	1
31	6012214	Handle.....	1
32	6293370	Key, 5 x 5 x 10	3
33	6012253	Handle.....	1
34	6012254	Fixing Plate	1
35	6012255	Fixing Plate	1
36	6012256	Pointer.....	1
37	6012257	Flat Washer, 5.3mm x 12 x 1T	1
38	6012087	Screw, M5 x 0.8P x 10Lg.....	1
39	6012258	Special Screw.....	1
40	6012259	Socket Head Cap Screw, M8 x 1.25P x 16Lg.....	4
41	6012260	Shaft	4
42	6012261	Cam	4
43	6012262	Transfer Rod	2
44	6012263	Spring Pin, 5mm x 26L.....	4
45	6012264	Label	1
46	6012227	Rivet	2
47	6012228	Pointer.....	1
48	6012265	Name Label.....	1
49	6012201	Flat Washer, 4.3mm x 10 x 1.0T	1
50	6012232	Screw, M4 x 0.7P x 8 Lg.....	1

Table Assembly (Model 201 Planer)

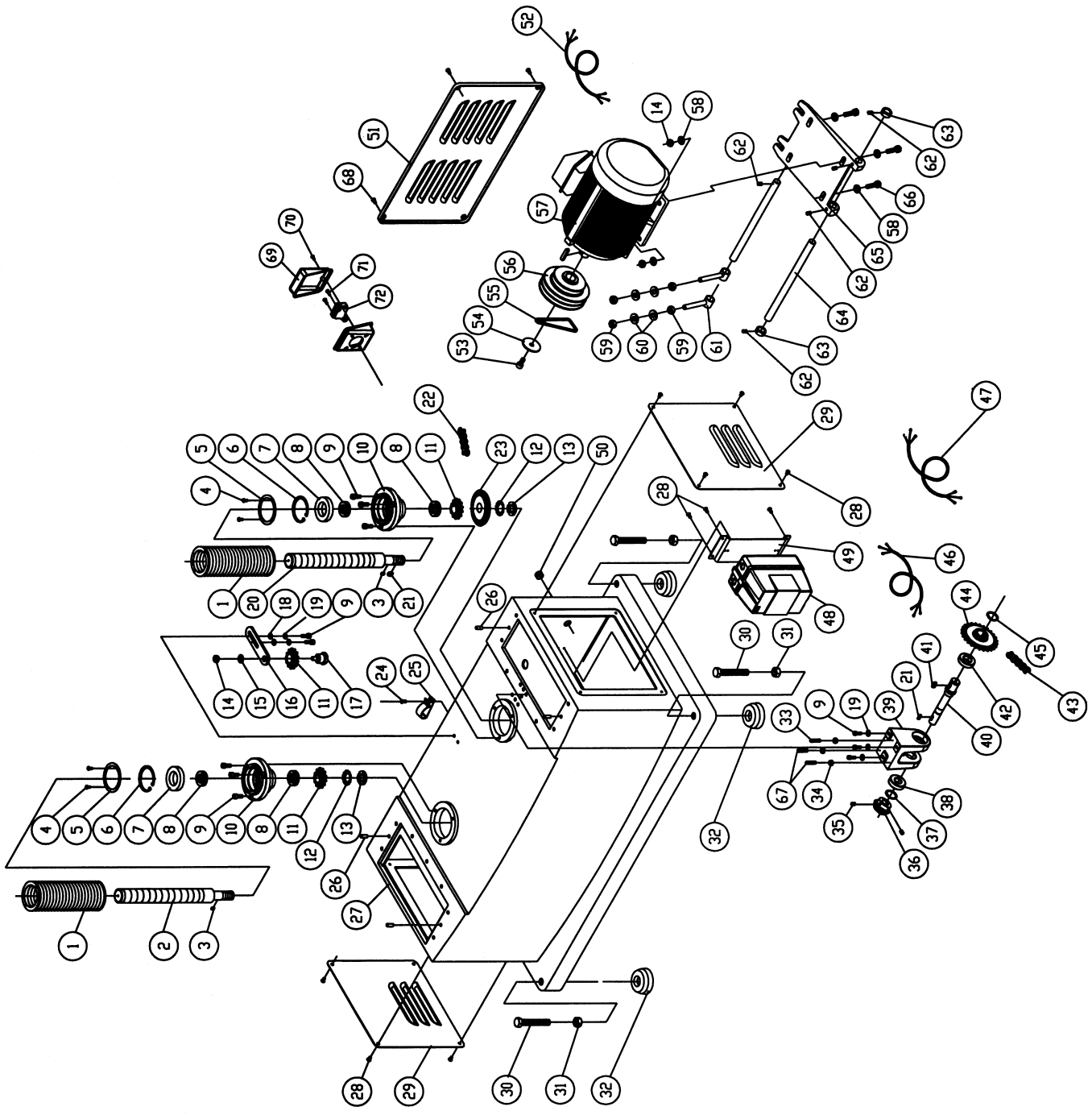


PARTS LIST: **Base Assembly** (Model 201 Planer)

No.	Part No.	Description	Quantity
1	6012068	Rubber Boot	2
2	6012069	Lead Screw.....	1
3	6293370	Key, 5 x 5 x 10.....	2
4	6012070	Screw w/ Washer, M4x0.7Px8Lg / 4mmx10x0.8T	4
5	6012071	Bushing	2
6	6012072	R-Ring, RTW-68.....	2
7	6012073	Ball Bearing, 6008-2NSE	2
8	6012074	Bearing, 51105	4
9	6012066	Socket Head Cap Screw, M8 x 1.25P x 25Lg.....	11
10	6012075	Bracket	2
11	6012076	Sprocket	3
12	6012077	Washer, 25mm	2
13	6012078	Nut, M25 x 1.5	2
14	6012079	Hex Nut, M10 x 1.5P.....	5
15	6012080	Flat Washer, 10mm x 25 x 3T.....	1
16	6012081	Rocker Arm	1
17	6012082	Shaft.....	1
18	6012083	Flat Washer, 8.5mm x 19 x 2T.....	2
19	6012067	Spring Washer, 8.2mm x 15.4	5
20	6012084	Lead Screw.....	1
21	6292745	Key, 5 x 5 x 16.....	2
22	6012085	Chain, #40 x 79pcs	1
23	6012086	Bevel Gear	1
24	6012087	Screw, M5 x 0.8P x 10Lg.....	4
25	6012088	Strain Relief Clip, ACC-3	4
26	6012089	Pin.....	4
27	6012090	Base	1
28	6012091	Screw, M6 x 1.0P x 10Lg.....	12
29	6012092	Cover.....	2
30	6012093	Special Hex Screw.....	4
31	6012094	Hex Nut, M16 x 2.0.....	4
32	6012095	Foot.....	4
33	6012096	Set Screw, M8 x 1.25P x 30Lg.....	1
34	6012097	Hex Nut, M8 x 1.25.....	3
35	6012098	Set Screw, M5 x 0.8P x 5Lg.....	2
36	6012099	Bevel Gear	1
37	6012100	S-Ring, STW-20	1
38	6012101	Ball Bearing, 6204-ZZ.....	1
39	6012102	Support Block	1
40	6012103	Shaft.....	1
41	6012104	Key, 8 x 7 x 18.....	1
42	6012105	Ball Bearing, 6005-ZZ.....	1
43	6012106	Chain, #40 x 107pcs	1
44	6012107	Sprocket	1
45	6012052	S-Ring, STW-25	1
46	6012109	Switch Cord	1
47	6012110	Power Cord, 1Ph.....	1
	6012267	Power Cord, 3Ph.....	1
48	6012111	Switch, 460V/3Ph	1
	6012045	Switch, 230V/1Ph	1
	6012294	Switch, 230V/3Ph	1
49	6012112	Switch Plate.....	1
50	6012113	Strain Relief Bushing, M20	1
51	6012114	Cover.....	1
52	6012115	Motor Cord, 1Ph	1
	6012266	Motor Cord, 3Ph	1

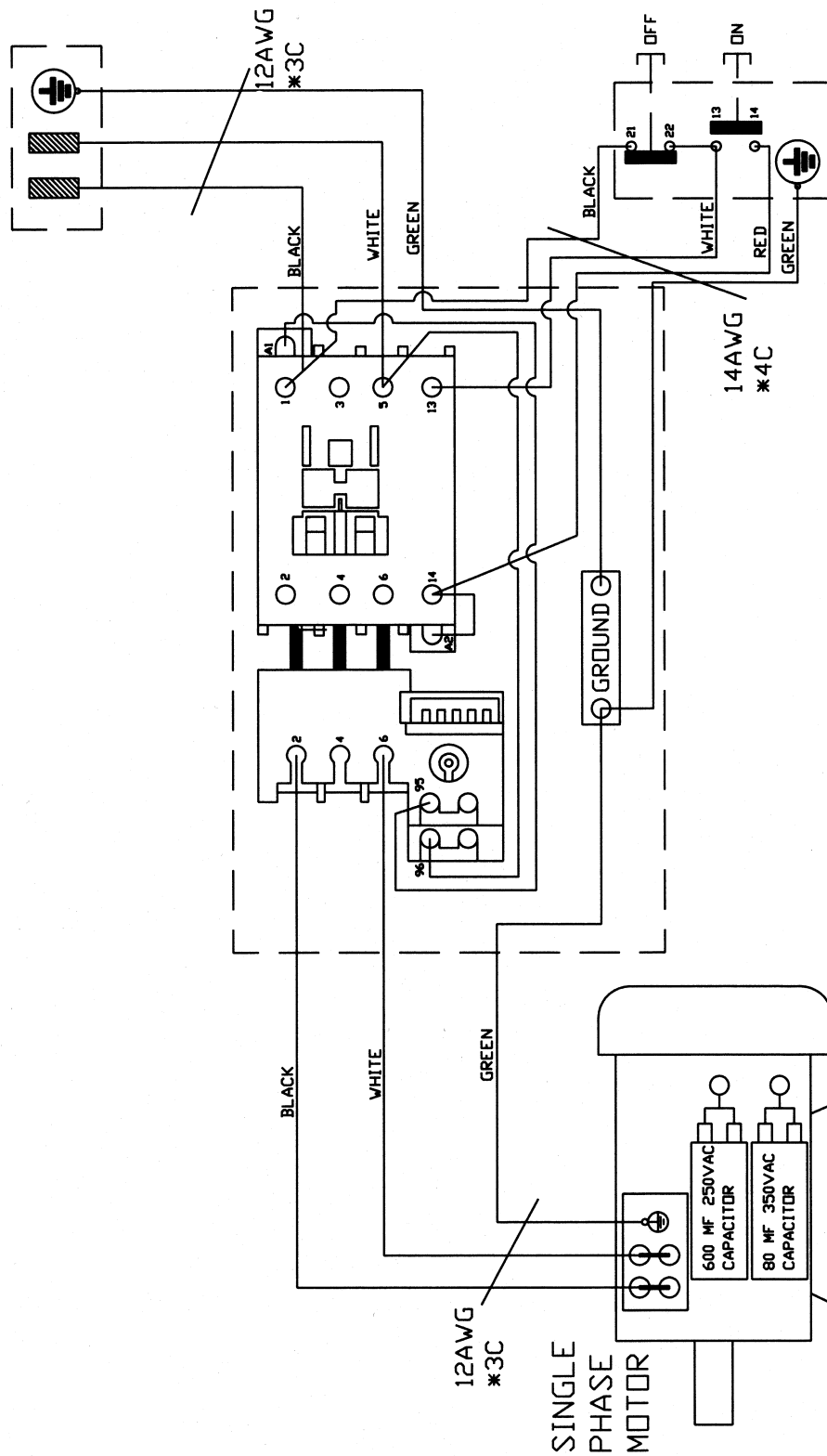
No.	Part No.	Description	Quantity
53	6012048	Socket Head Cap Screw, M10 x 1.5P x 20Lg	1
54	6012116	Washer	1
55	6012117	Belt, A56	1
56	6012118	Motor Pulley	1
57	6012108	Motor, 7.5HP 1Ph 230V.....	1
	6012119	Motor, 7.5HP 3Ph 230/460V	1
58	6012120	Flat Washer, 10.3mm x 23 x 2T	8
59	6012121	Hex Nut, M12 x 1.75	4
60	6012122	Flat Washer, 13mm x 28 x 3T	4
61	6012123	Adjusting Bolt	2
62	6012124	Set Screw, M8 x 1.25P x 12Lg	5
63	6012125	Spacer	2
64	6012126	Shaft	2
65	6012127	Motor Plate.....	1
66	6012128	Hex Screw, M10 x 1.5P x 40Lg	4
67	6012129	Set Screw, M8 x 1.25P x 20Lg	2
68	6012130	Flat Head Screw, M6 x 1.0P x 20Lg	4
69	6012269	Terminal Cover	1
70	6012270	Screw, 3/16-24NC x 1/4	1
71	6012271	Screw, M5 x 0.8P x 20Lg.....	2
72	6012272	Terminal Plate.....	1

Base Assembly (Model 201 Planer)



ELECTRICAL SCHEMATIC (Model 201 Planer)

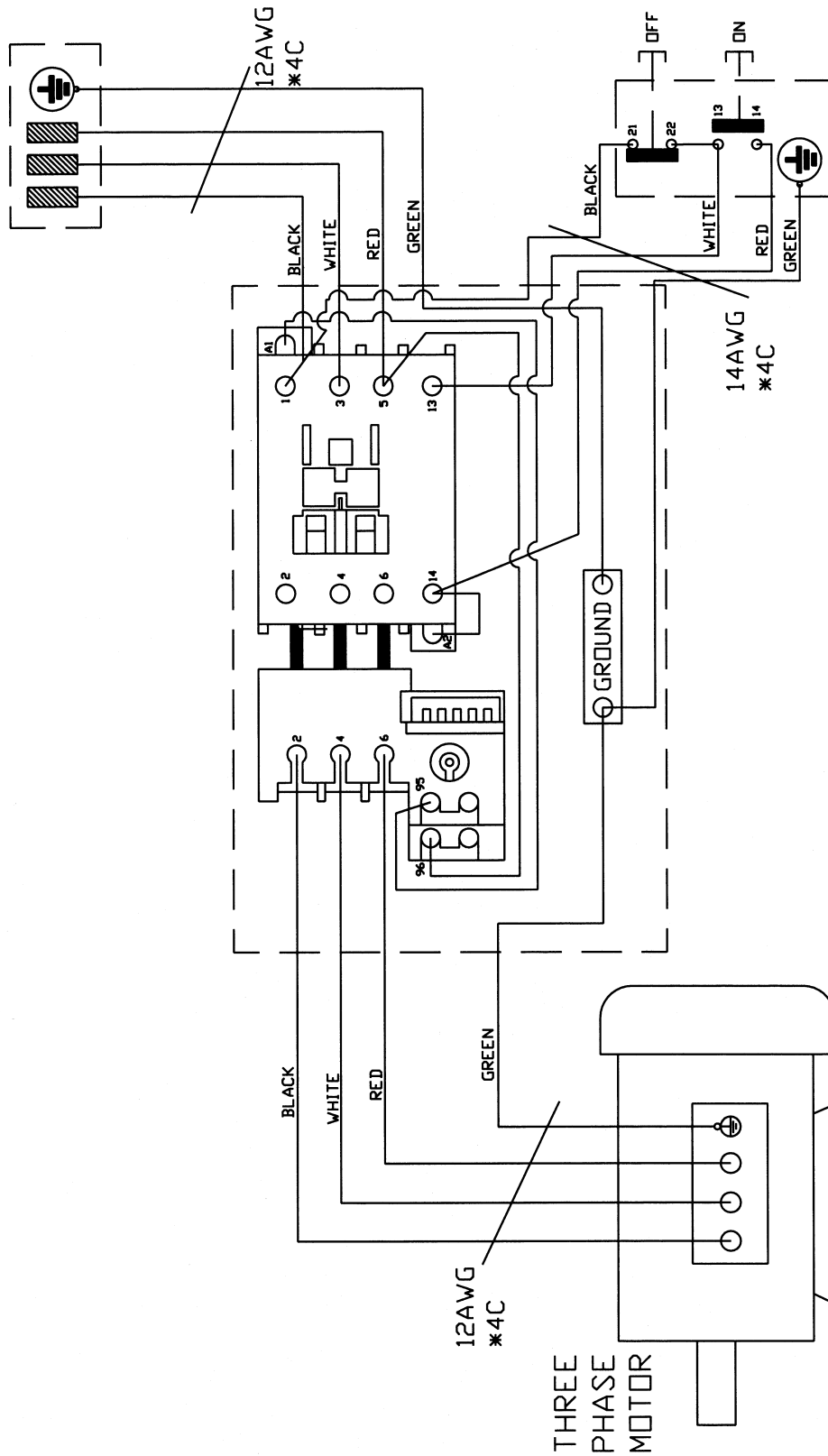
7.5HP 1Ph 230V



7.5HP*220V~240V*60HZ*1PH*2P

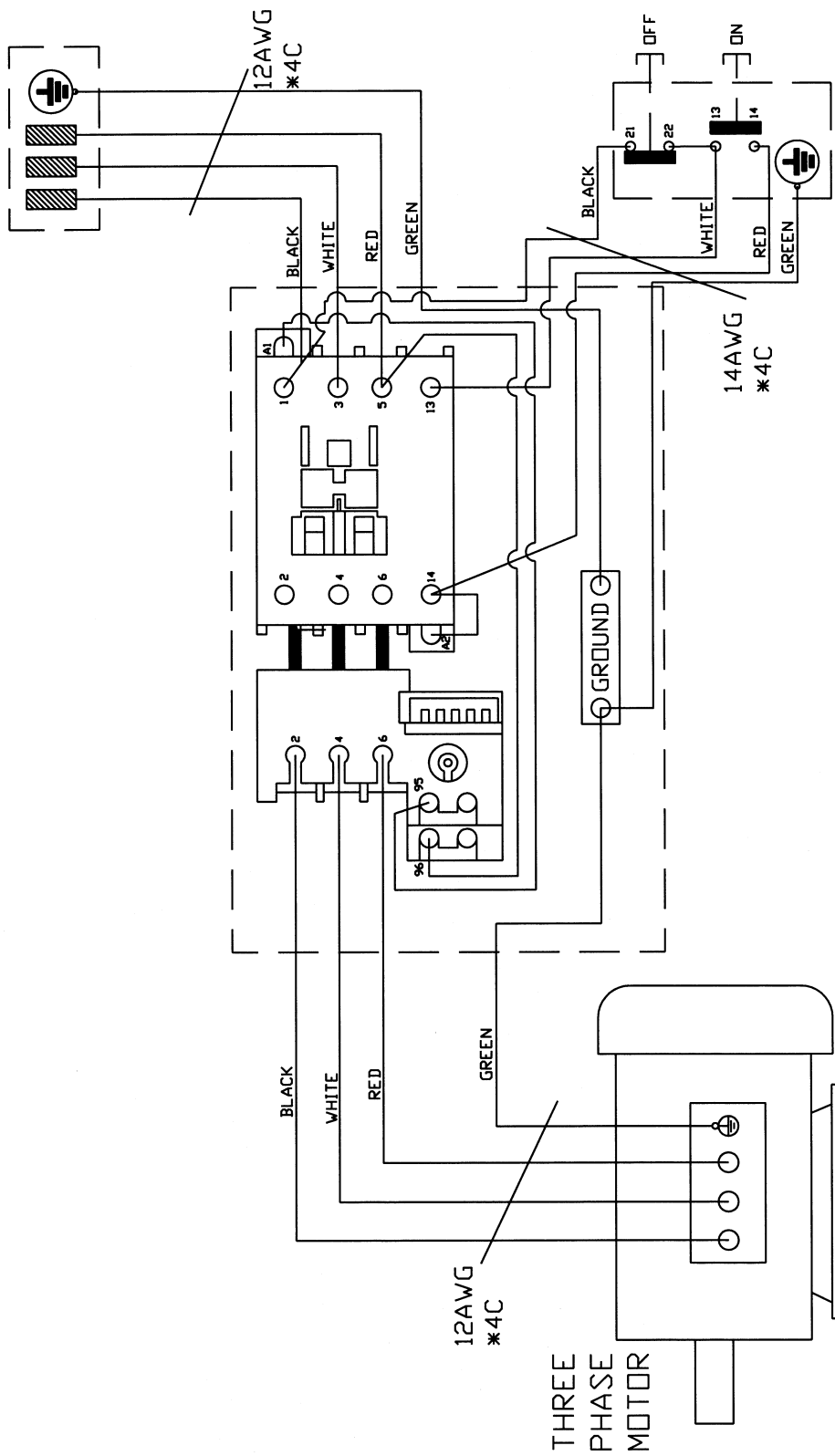
ELECTRICAL SCHEMATIC (Model 201 Planer)

7.5HP 3Ph 230V



ELECTRICAL SCHEMATIC (Model 201 Planer)

7.5HP 3Ph 460V



7.5HP*440V~460V*60HZ*3PH*2P

To order parts or reach our service department, please call our toll-free number between 8:00 a.m. and 4:30 p.m. (CST), Monday through Friday. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately. Locating the stock number of the part(s) required from your parts manual will also expedite your order.

Phone No.: (800) 274-6848

Fax No. (800) 274-6840

If you are calling from Canada, please call 800-238-4746

E-mail: powermatic@wmhtoolgroup.com

Website: www.powermatic.com

POWERMATIC[®]

WMH Tool Group
P.O. Box 1349
Auburn, WA 98071-1349
Phone (800) 274-6848
Fax: (800) 274-6840
E-mail: powermatic@wmhtoolgroup.com
Website: www.powermatic.com