



Operating Instructions and Parts Manual

15-inch Thickness Planer

Model JWP-15DX



WMH TOOL GROUP

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WARRANTY AND SERVICE

WMH Tool Group, Inc., warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Service Centers located throughout the United States can give you quick service. In most cases, any of these WMH Tool Group Authorized Service Centers can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET® tools. For the name of an Authorized Service Center in your area call 1-800-274-6848.

MORE INFORMATION

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

WARRANTY

JET products carry a limited warranty which varies in duration based upon the product (MW = Metalworking, WW = Woodworking).

90 DAY WARRANTY	1 YEAR WARRANTY	2 YEAR WARRANTY			5 YEAR WARRANTY	<i>Warranty reverts to 1 Year Warranty if woodworking (WW) products listed below are used for commercial, industrial or educational purposes</i>		LIFE LIFETIME WARRANTY
Lathe Accessories Machine Accessories Mobile Bases Safety Equipment Specialty Items Vise Accessories	Air Tools- Contractor Air Tools-Industrial Air Tools-Light Industrial Lubrication	Body Repair Kits Bottle Jacks Cable Pullers Cold Saws Hoists-Air Hoists-Electric Metalforming Mill/Drills Milling Machines	MW Bandsaws MW Drill Presses MW Finishing Equipment MW Lathes MW Precision Vises Pallet Trucks Rigging Equip. Service Jacks	Stackers Surface Grinders Tapping Trolleys-Air Trolleys-Electric Web Slings Winches-Electric	Beam Clamps Chain Hoist- Manual Lever Hoists Pullers-JCH Models Scissor Lift Tables Screw Jacks Trolleys-Geared	Trolleys-Plain Winches-Manual WW Air Filtration WW Bandsaws WW Buffers WW Drill Presses WW Dust Collectors WW Dust Filters	WW Dust Fittings WW Jointers WW Lathes WW Planers WW Sanders WW Shapers WW Tablesaws	Fastening Tools Mechanics Hand Tools Striking Tools Vises (non-precision) Clamps

WHAT IS COVERED?

This warranty covers any defects in workmanship or materials subject to the exceptions stated below. Cutting tools, abrasives and other consumables are excluded from warranty coverage.

WHO IS COVERED?

This warranty covers only the initial purchaser of the product.

WHAT IS THE PERIOD OF COVERAGE?

The general JET warranty lasts for the time period specified in the product literature of each product.

WHAT IS NOT COVERED?

Five Year Warranties do not cover woodworking (WW) products used for commercial, industrial or educational purposes. Woodworking products with Five Year Warranties that are used for commercial, industrial or education purposes revert to a One Year Warranty. This warranty does not cover defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair or alterations, or lack of maintenance.

HOW TO GET SERVICE

The product or part must be returned for examination, postage prepaid, to a location designated by us. For the name of the location nearest you, please call 1-800-274-6848.

You must provide proof of initial purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, we will repair or replace the product, or refund the purchase price, at our option. We will return the repaired product or replacement at our expense unless it is determined by us that there is no defect, or that the defect resulted from causes not within the scope of our warranty in which case we will, at your direction, dispose of or return the product. In the event you choose to have the product returned, you will be responsible for the shipping and handling costs of the return.

HOW STATE LAW APPLIES

This warranty gives you specific legal rights; you may also have other rights which vary from state to state.

LIMITATIONS ON THIS WARRANTY

WMH TOOL GROUP LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. 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.

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Warnings

1. Read and understand the entire owners manual before attempting assembly or operation.
2. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace the warning labels if they become obscured or removed.
4. This planer is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a planer, do not use until proper training and knowledge have been obtained.
5. Do not use this planer for other than its intended use. If used for other purposes, WMH Tool Group disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
6. Always wear approved safety glasses/face shields while using this planer. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.
7. Before operating this planer, remove tie, rings, watches and other jewelry, and roll sleeves up past the elbows. Remove all loose clothing and confine long hair. Non-slip footwear or anti-skid floor strips are recommended. Do **not** wear gloves.
8. Wear ear protectors (plugs or muffs) during extended periods of operation.
9. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contain 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, cement and other masonry products.
 - Arsenic and chromium from chemically treated lumber.Your risk of exposure 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 face or dust masks that are specifically designed to filter out microscopic particles.
10. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
11. Make certain the switch is in the **OFF** position before connecting the machine to the power supply.
12. Make certain the machine is properly grounded.
13. Make all machine adjustments or maintenance with the machine unplugged from the power source.
14. Remove adjusting keys and wrenches. Form a habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
15. Keep safety guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately.
16. Make sure the planer is firmly secured to the floor or bench before use.
17. Check damaged parts. Before further use of the machine, 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.
18. Provide for adequate space surrounding work area and non-glare, overhead lighting.
19. Keep the floor around the machine clean and free of scrap material, oil and grease.
20. Keep visitors a safe distance from the work area. **Keep children away.**



Warnings

21. Make your workshop child proof with padlocks, master switches or by removing starter keys.
22. Give your work undivided attention. Looking around, carrying on a conversation and “horse-play” are careless acts that can result in serious injury.
23. Maintain a balanced stance at all times so that you do not fall or lean against the knives or other moving parts. Do not overreach or use excessive force to perform any machine operation.
24. Use the right tool at the correct speed and feed rate. Do not force a tool or attachment to do a job for which it was not designed. The right tool will do the job better and safer.
25. Use recommended accessories; improper accessories may be hazardous.
26. Maintain tools with care. Keep knives sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories.
27. Make sure the workpiece is securely attached or clamped to the table. Never use your hand to hold the work piece.
28. Turn off the machine and disconnect from power before cleaning. Use a brush or compressed air to remove chips or debris — do not use your hands.
29. Do not stand on the machine. Serious injury could occur if the machine tips over.
30. Never leave the machine running unattended. Turn the power off and do not leave the machine until it comes to a complete stop.
31. Remove loose items and unnecessary work pieces from the area before starting the machine.

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 injury and/or possible machine damage.

WARNING

This means that if precautions are not heeded, it may result in serious injury or possibly even death.

- - SAVE THESE INSTRUCTIONS - -

Introduction

This manual is provided by WMH Tool Group covering the safe operation and maintenance procedures for a JET Model JWP-15DX Planer. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. This machine has been designed and constructed to provide years of trouble free operation if used in accordance with instructions set forth in this manual. If there are any questions or comments, please contact either your local supplier or WMH Tool Group. WMH Tool Group can also be reached at our web site: www.wmhtoolgroup.com.

Specifications

Model Number	JWP-15DX
Stock Number.....	708538
Maximum Cutting Width (in.)	14-7/8
Maximum Cutting Thickness (in.)	6
Full Width Cutting Depth (in.)	1/8
Maximum Cutting Depth (in.).....	3/16
Minimum Planing Length (in.).....	8
Number of Knives	3
Cutterhead Speed (RPM).....	4,500
Cuts Per Minute.....	13,500
Cutterhead Diameter (in.).....	2-7/8
Feed Rate (FPM).....	16 and 20
Dust Chute Diameter (in.)	4
Motor	TEFC, 3HP, 1Ph, 230V, 60Hz
Overall Dimensions (LxWxH)(in.)	48 x 28 x 43-1/2
Net Weight (lbs.).....	475
Gross Weight (lbs.).....	590

The above specifications were current at the time this manual was published, but because of our policy of continuous improvement, WMH Tool Group reserves the right to change specifications at any time and without prior notice, without incurring obligations.

Unpacking

Open shipping container and check for shipping damage. Report any damage immediately to your distributor and shipping agent. Do not discard any shipping material until the Planer is assembled and running properly.

Compare the contents of your container with the following parts list to make sure all parts are intact. Missing parts, if any, should be reported to your distributor. Read the instruction manual thoroughly for assembly, maintenance and safety instructions.

Contents of the Shipping Container

- 1 Planer
- 1 Dust Hood
- 2 Extension Tables
- 1 Handwheel
- 1 Handle
- 2 Magnet Tools
- 4 Hex Wrenches (3,4,5 and 6mm)
- 1 T-handle Hex Wrench (4mm)
- 3 Open-end Wrenches (8-10, 12-14,14-17)
- 3 Bags of Fasteners – see below
- 1 Owner's Manual
- 1 Warranty Card

Contents of fastener bags (Figure 2):

A – (for installing Handwheel)

- 1 Direction Label
- 1 Hex Nut
- 1 Flat Washer
- 1 Key

B – (for installing Extension Tables)

- 6 Hex Cap Screws, M8x25
- 6 Socket Set Screws, M8x20

C – (for installing Dust Hood)

- 6 Hex Washer Head Screws, M6x12

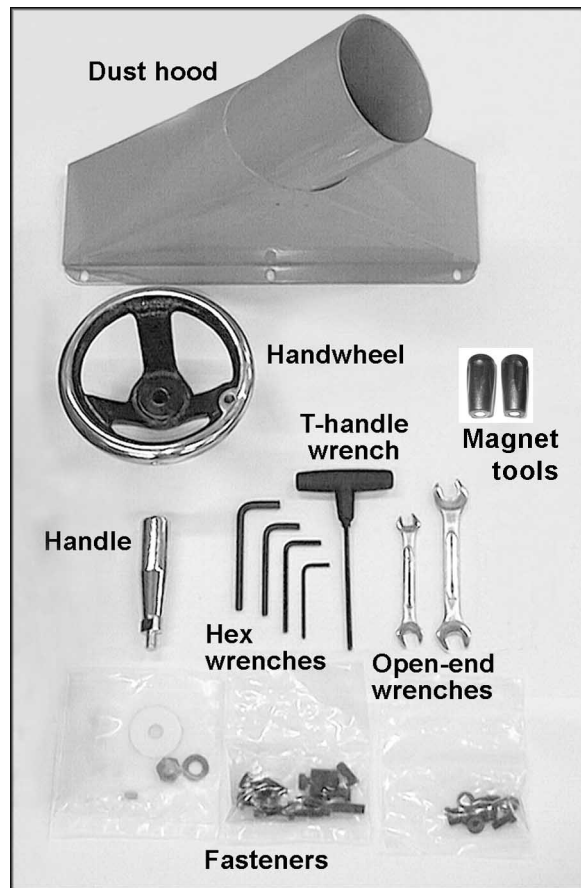


Figure 1

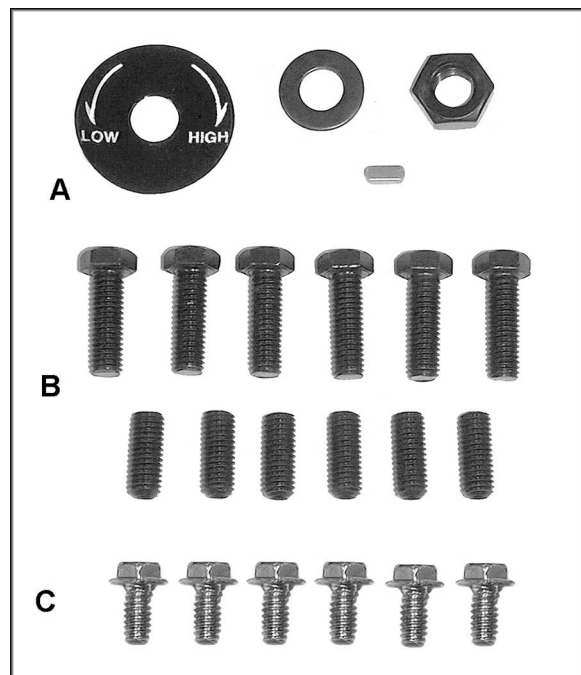


Figure 2

Assembly

Tools required for assembly:

- Forklift or hoist with slings
- Open-end wrenches (provided)
- Hex wrenches (provided)
- 16mm open-end wrench

Remove the screws holding the planer to the pallet and use a forklift or hoist to lift the planer off the pallet. Forks and straps should always be placed under the four lifting handles when lifting this machine (Figure 3). The lifting handles can be pushed back in when not in use.

The planer should be operated in a well-lit area with good ventilation. It can be rolled on its casters to the desired location. Press the foot pedal (Figure 4) to lock the casters during operation or adjustments.

Exposed surfaces, such as tables, rollers, cutterhead, etc., have been given a protective coating at the factory. This should be removed with a soft cloth moistened with a good commercial solvent. Do not use acetone, gasoline, lacquer thinner, or other solvents with a low flash point. Do not use an abrasive pad because it may scratch the polished cast iron surfaces.

CAUTION Use care when cleaning around the cutterhead area; knives are extremely sharp.

Handwheel

1. Place the key into the slot on the shaft (Figure 5), and mount the handwheel to the shaft, making sure it is oriented so that it slips over the key.
2. Peel off the backing of the directional label, and attach it to the center of the handwheel. Place flat washer and hex nut on shaft and tighten with 16mm wrench.
3. Mount the handle in the threaded hole in the handwheel, and tighten with a 12mm wrench placed over the flat on the nut.

Control Box

Mount the control box as shown in Figure 6, with the two socket head cap screws which you'll find mounted to the head casting. Use a 5mm hex wrench.

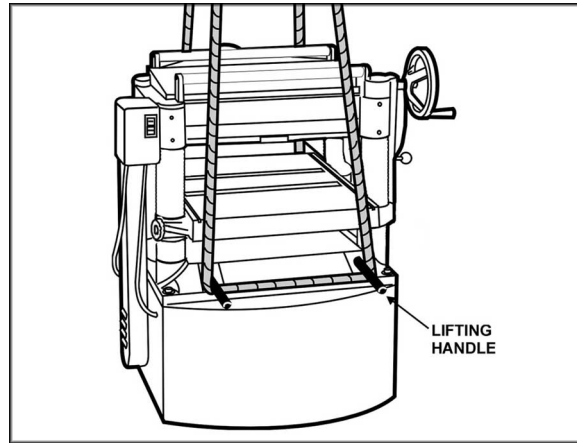


Figure 3

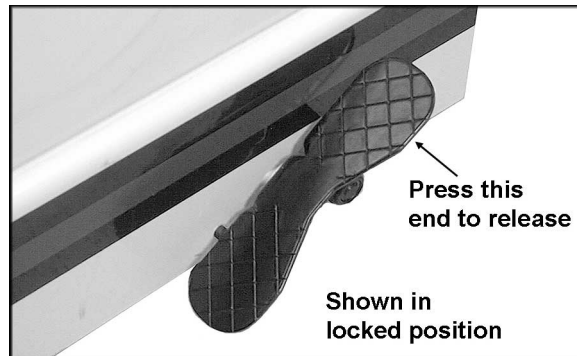


Figure 4

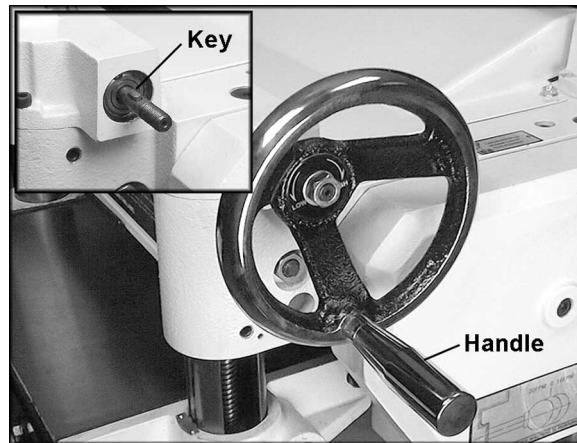


Figure 5

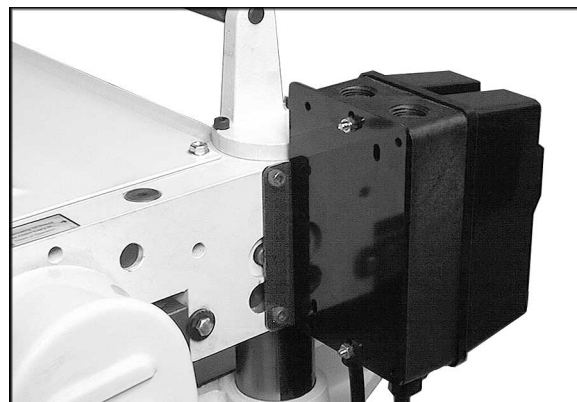


Figure 6

Extension Tables

1. Mount an extension table to the edge of the main table with three M8 x 25 hex cap screws and washers (Figure 7) using a 12mm wrench. Do not fully tighten yet.
2. The extension table must be leveled with the main table. Place a straight edge (such as a carefully jointed board, or a steel bar) across the extension table and the main table. Move the straight edge to various points along the table during the procedure.

NOTE: The straight edge should not lie over the raised table rollers, as this would distort the leveling process. Either place the straight edge just short of the table rollers, or lower the table rollers completely into the table (see page 12) until the extension tables have been installed.

3. Insert three socket set screws below the hex cap screws, using a 4mm hex wrench, and screw them in or out as needed until tables are level.
4. Securely tighten the hex cap screws.
5. Mount the second extension table to the opposite side of the planer table, using the same procedure.



Figure 7

Dust Hood

Mount the hood to the rear of the head casting with six M6 x 12 hex washer head screws (A, Figure 8).

It is strongly recommended that you use a dust collection system with this planer. If you are not using a dust collection system, do not attach the dust hood to the planer, as the accumulation of dust inside the hood may create a safety hazard, or eventually cause jamming of the roller system in the cutterhead.

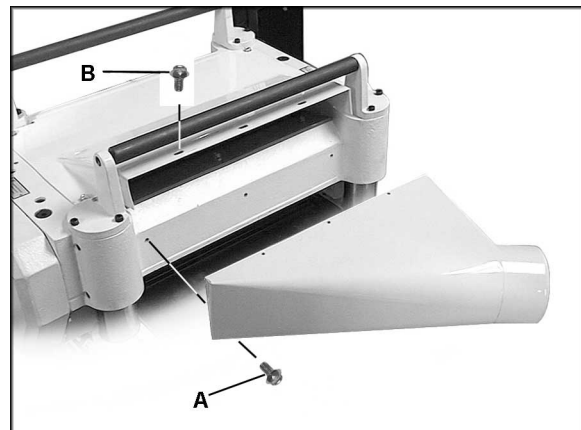


Figure 8

Grounding Instructions

⚠WARNING Electrical connections must be made by a qualified electrician in compliance with all relevant codes. This machine must be properly grounded to help prevent electrical shock and possible fatal injury.

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock.

This machine's power cord must be fitted with an appropriate UL/CSA listed 230 Volt plug (similar to the one shown in Figure 9), or it can be "hard-wired" directly to a control panel. If hard-wired, make sure a disconnect is available for the operator.

If a plug is installed, it must have an equipment-grounding conductor and a grounding prong. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances. Do not modify the plug – if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding connector.

If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

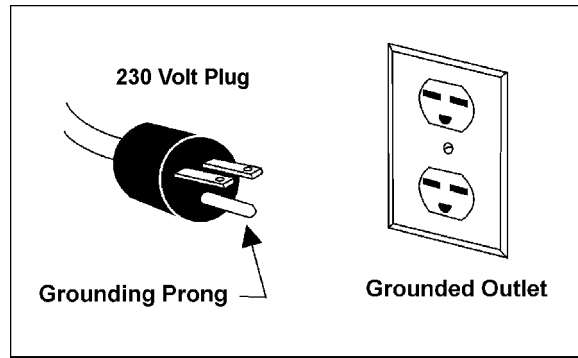


Figure 9

Extension Cords

The use of an extension cord is not recommended for this machine, but if one is necessary make sure the cord rating is suitable for the amperage listed on the machine's motor plate. An undersize cord will cause a drop in line voltage resulting in loss of power and overheating.

The chart in Figure 10 shows the correct size cord to use based on cord length and motor plate amp rating. If in doubt, use the next heavier gauge. The smaller the gauge number the heavier the cord.

Recommended Gauges (AWG) of Extension Cords

Amps	Extension Cord Length *					
	25 feet	50 feet	75 feet	100 feet	150 feet	200 feet
< 5	16	16	16	14	12	12
5 to 8	16	16	14	12	10	NR
8 to 12	14	14	12	10	NR	NR
12 to 15	12	12	10	10	NR	NR
15 to 20	10	10	10	NR	NR	NR
21 to 30	10	NR	NR	NR	NR	NR

*based on limiting the line voltage drop to 5V at 150% of the rated amperes.

NR: Not Recommended.

Figure 10

Adjustments

⚠WARNING Disconnect machine from power source before making adjustments (except feed rate).

Belt Tension

Inspect the tension of the belts frequently during the first few times you use the planer. Belts often stretch during this trial period. If they require tightening, proceed as follows:

1. Remove the belt guard and the rear panel.
2. Loosen the bottom nut on the motor adjustment screw (Figure 11) with a 17mm wrench.
3. Turn the top nut on the adjustment screw to lower the motor plate, which will increase the belt tension.
4. Proper tension is achieved when there is slight deflection in the belt midway between the pulleys, using moderate finger pressure.
5. Tighten the bottom nut on the adjustment screw (Figure 11).

Pulley Alignment

The pulleys should be in line for proper belt operation.

1. Remove the belt guard and place a straight edge against the faces of both pulleys (Figure 12).
2. If the straight edge does not lie flat on both pulley faces, as shown in Figure 13, open the rear panel and loosen the four hex nuts on the motor plate (these are shown in Figure 11) with a 12mm wrench.
3. Nudge the motor left or right until the pulleys are in alignment.
4. Tighten hex nuts and replace covers.

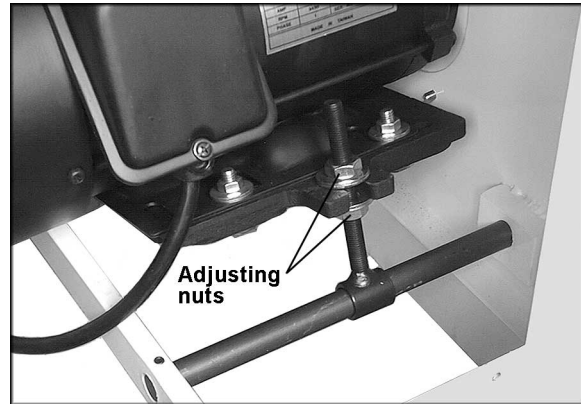


Figure 11

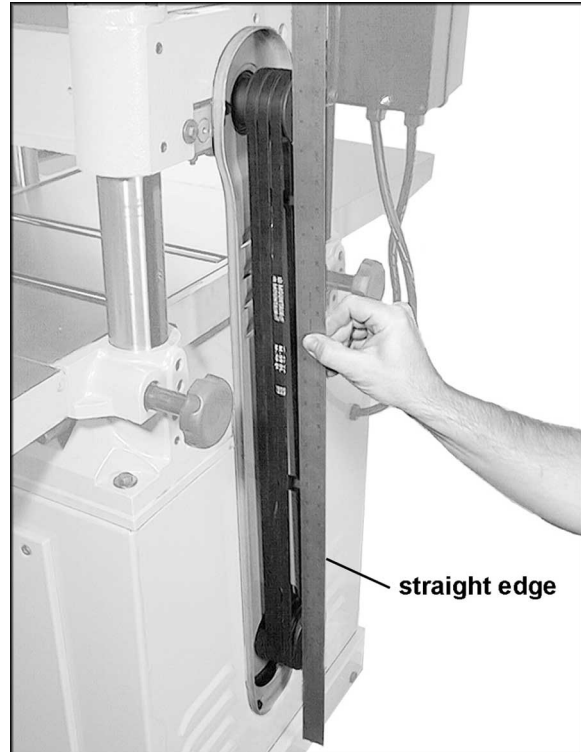


Figure 12

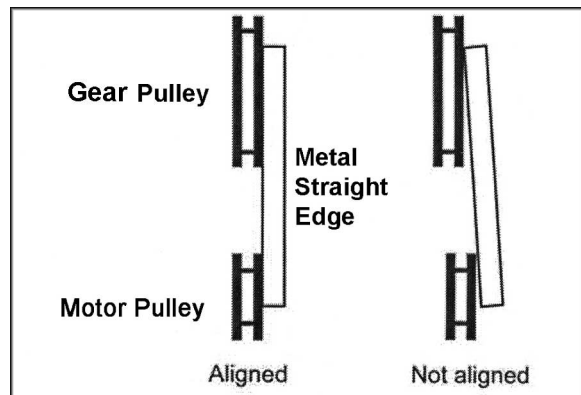


Figure 13

Table Rollers

Your planer is supplied with two table rollers (Figure 14) which turn as the stock is fed into the machine, thus reducing friction. 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 at high position. When planing smooth stock the rollers should be set at low position.

NOTE: When raising the roller higher above the table, the range is from zero to 0.06" (Figure 15).

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

1. Disconnect machine from power source.
2. Lay a straight edge across both rollers.
3. On one side of the table, loosen the set screws (A, Figure 14) with a 3mm hex wrench, and turn the eccentric shafts (B, Figure 14) to raise or lower the rollers.
4. When proper height is achieved, tighten set screws.
5. Adjust the rollers from the opposite side of the table in the same manner.

IMPORTANT: Be sure that the height of front and rear rollers are the same. And the table rollers must always be set parallel to the table.

Cutterhead

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 be corrected by following the directions in this manual.

To check the adjustments you will need feeler gauges, and a home-made gauge block made of hardwood. This gauge block can be made by following the dimensions shown in Figure 16.

Installing and Replacing Knives

CAUTION Use caution and proceed slowly when working with and around the knives – they are extremely sharp.

The planer knives are double-sided. If one side becomes dull, the knife can simply be rotated to use the new edge. When both edges have become worn, the knife must be replaced.

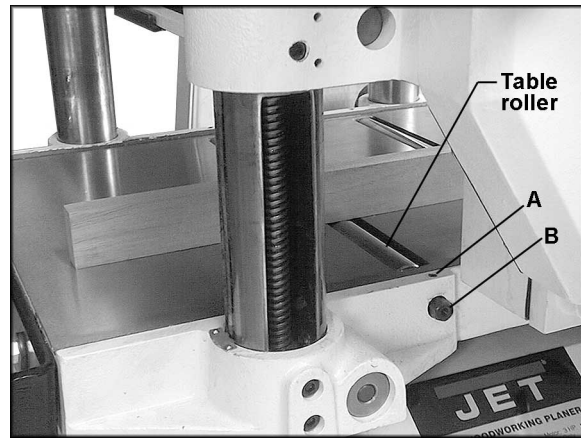


Figure 14

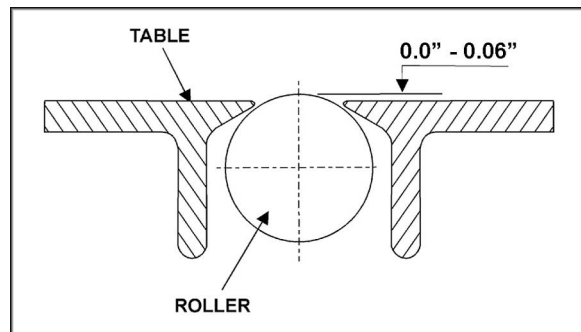


Figure 15

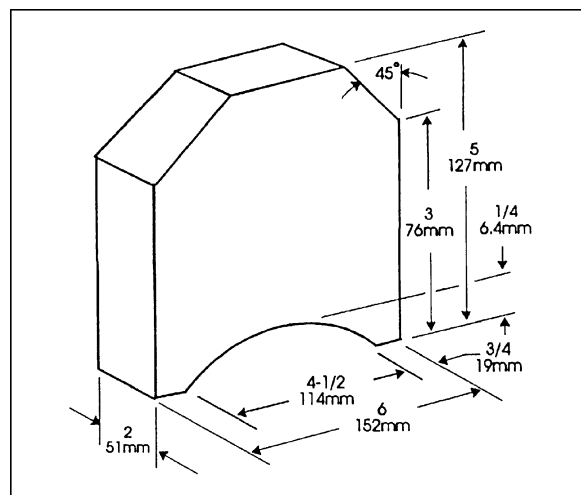


Figure 16

Care must be exercised in setting knives into the cutterhead. Replace all three knives at the same time. Proceed as follows:

1. Disconnect machine from power source.
2. Remove the gib screws and the gib (Figure 17) using a T-handle hex wrench.
3. Remove old knife, and clean cutterhead slot and gibs.
4. Install new knife, making sure the knife fits properly over the two pins in the cutterhead slot. Make sure the blade is oriented in the proper direction. Use the provided magnet tools to help safely position the knives.
5. Place the gibs evenly over the knife, and insert and tighten the gib screws, beginning at one end of the knife and working toward the other end.

⚠WARNING After installing knives, check again carefully. Make certain all gib screws are tightened securely. Loose knives can be thrown from the cutterhead, causing injury.

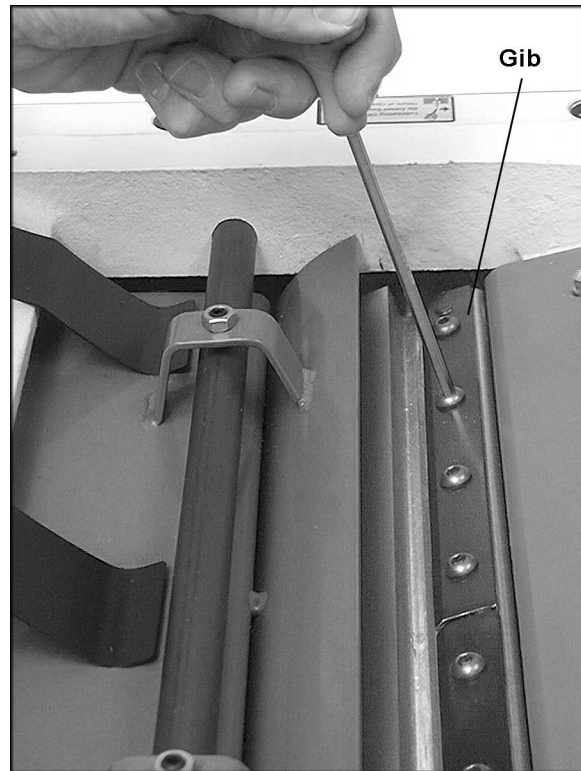


Figure 17

Inspect Work Table Parallel to Cutterhead

The work table is set parallel to the cutterhead at the factory and no further adjustment should be necessary. 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 work table is set parallel to the cutterhead. Proceed as follows:

1. Disconnect machine from power source.
2. Place the gauge block (Figure 18) on the work table directly under the edge of a knife as shown. Make slight contact by gently raising table.
3. Move the gauge block to the opposite end of the work table. NOTE: Distance from the work table to edge of knife should be the same at both ends.

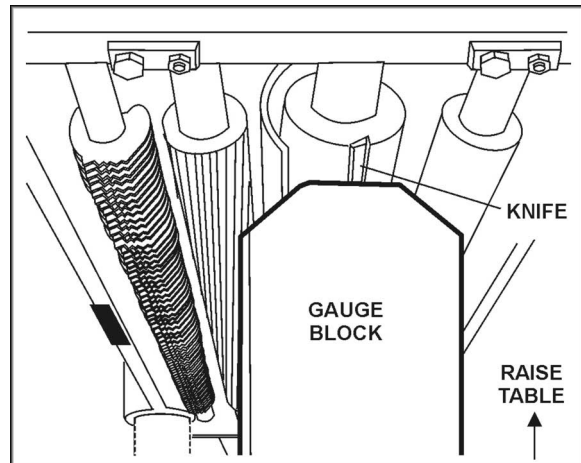


Figure 18

Adjusting Work Table Parallel to Cutterhead (Fine Adjustment)

If the gap difference determined in the previous section is greater than 0.004" and less than 0.016", perform the adjustment procedure as follows:

1. Determine which side of the table must be raised to correct the gap.
2. Locate the two socket head cap screws in the table casting for each of the columns (Figure 19). Loosen both sets of screws for each column on the side you wish to adjust.

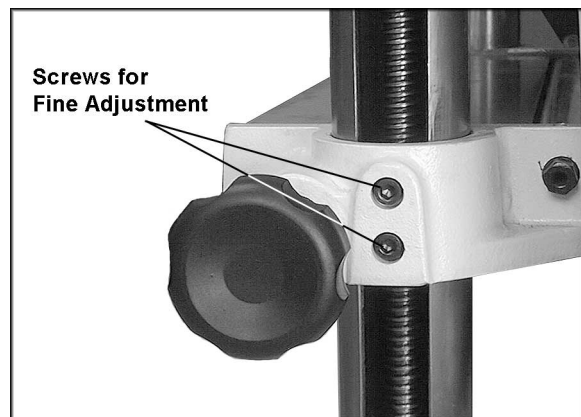


Figure 19

3. Push down or pull up the cutterhead assembly in the desired direction. Hold the assembly in position and retighten the cap screws.
4. Re-check the table-to-cutterhead parallelism again as described in the previous section, then repeat steps 1 through 3 until the deviation is less than 0.004".

Adjusting Work Table Parallel to Cutterhead (Major Adjustment)

If the work table is not parallel to the cutterhead, perform the adjustment procedure as follows:

1. Disconnect machine from power source.
2. Remove bolts holding the planer to the stand. Carefully tilt planer on its side to expose underside of base (Figure 20).
3. Remove bolt (A, Figure 20) and loosen bolt (B, Figure 20) which will allow you to move the idler sprocket assembly (C, Figure 20) far enough to release tension on the chain.
4. Remove the chain from the particular sprocket on the corner of the base that you need to adjust.
5. Turn the sprocket by hand to bring that corner into adjustment with the other three corners. NOTE: Turning sprocket clockwise will increase the distance between the working table and the head casting; counterclockwise will decrease the distance. This adjustment is very sensitive and it should not be necessary to turn the sprocket more than one or two teeth.
6. When adjustments are correct, replace chain around corner sprocket, slide idler sprocket (C-Figure 20) back to re-tension chain, tighten bolt (B, Figure 20) and insert and tighten bolt (A, Figure 20).

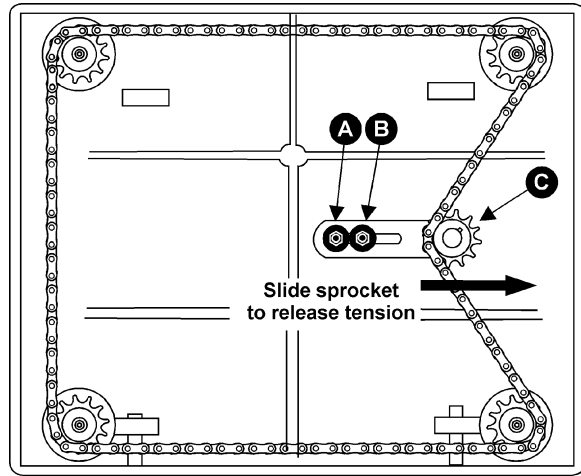


Figure 20

Know the Transmitting Rollers of Your Planer

(Figure 21)

- A. Anti-Kickback Fingers
- B. Infeed Roller
- C. Chipbreaker
- D. Cutterhead
- E. Outfeed Roller

Anti-Kickback Fingers

The anti-kickback fingers (A, Figure 21) are an important safety feature, as they help prevent kickback of stock. They operate by gravity and should be inspected frequently to make sure they are free of gum and pitch, so that they move independently and operate correctly.

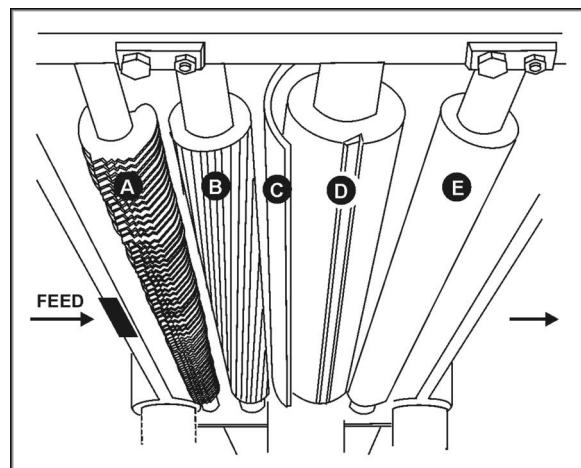


Figure 21

Infeed and Outfeed Roller Spring Tension

The infeed roller (B, Figure 21) and outfeed roller (E, Figure 21) are those parts of your planer that feed the stock while it is being planed.

The infeed and outfeed rollers 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.

To adjust the spring tension of the infeed and outfeed rollers, turn screws (Figure 22) with a hex wrench. A clockwise turn increases tension on the pressure spring. See Figure 23. A counterclockwise turn decreases tension. Adjust the screws at the other end of the rollers with the same number of turns.

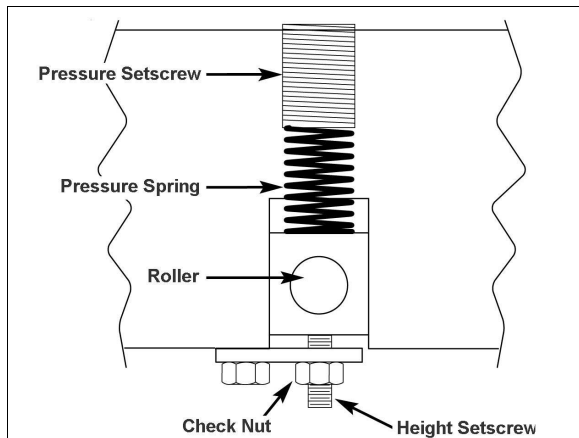


Figure 23

Height of Infeed Roller, Chipbreaker and Outfeed Roller

The infeed roller, chipbreaker and outfeed roller are adjusted at the factory. The height relationship between these items and the cutterhead is crucial for accurate and safe planing. The infeed roller, chipbreaker, and outfeed roller should each be set at 0.02" (0.5mm) below the cutting circle. See Figure 24.

If any adjustments are necessary for the infeed roller, chipbreaker, or outfeed roller, they should be done carefully. Use the following steps as an example of procedure.

NOTE: This procedure uses a home-made gauge block and feeler gauges, which should be sufficient for most planer operations. If very precise measurements are desired, however, use a dial indicator device.

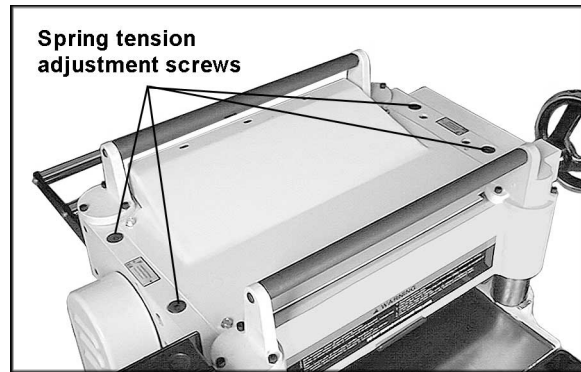


Figure 22

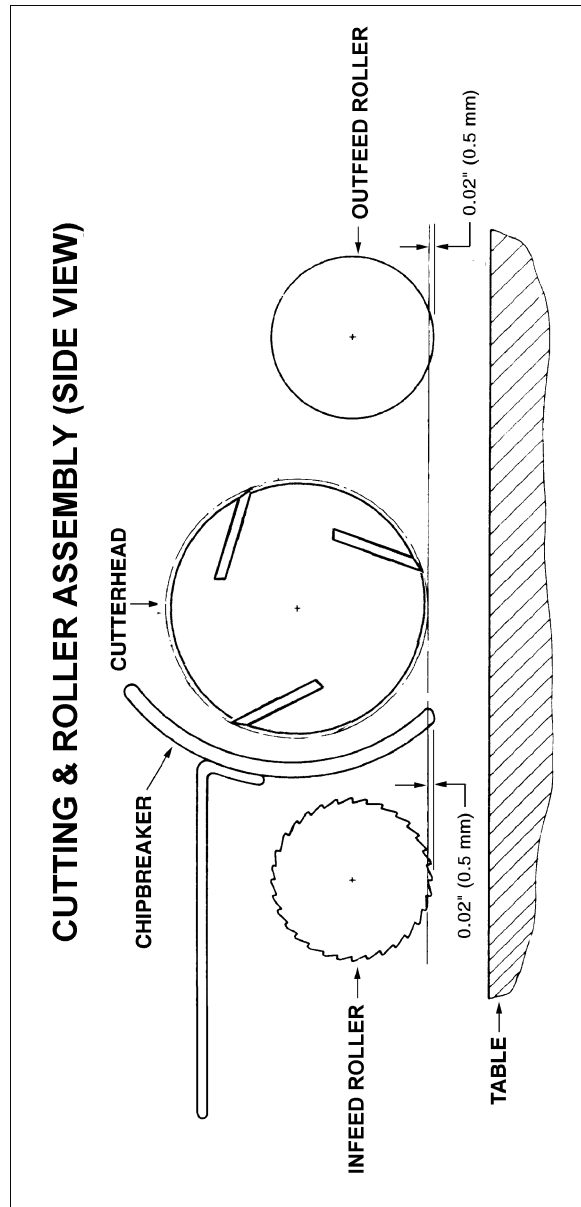


Figure 24

Outfeed Roller Height

1. Disconnect machine from power source.
2. Make sure the knives are set properly as previously explained under "Knife Adjustment."
3. Place the gauge block (F, Figure 25) on the table directly beneath the cutterhead (D, Figure 25).
4. Using a 0.02" (0.5mm) feeler gauge (G, Figure 25) placed on top of the gauge block, raise the work table until the knife just touches the feeler gauge when the knife is at its lowest point. Do not move the work table any farther until the outfeed roller is adjusted.
5. Remove the feeler gauge and move the gauge block (F, Figure 25) under one end of the outfeed roller. The bottom of the outfeed roller should just touch the top of the gauge block. If an adjustment to the outfeed roller is necessary, loosen the lock nut (J, Figure 26) and turn screw (H, Figure 26) until the outfeed roller just touches the gauge block. Then tighten lock nut (J, Figure 26).
6. Check and adjust the opposite end of the outfeed roller in the same manner.

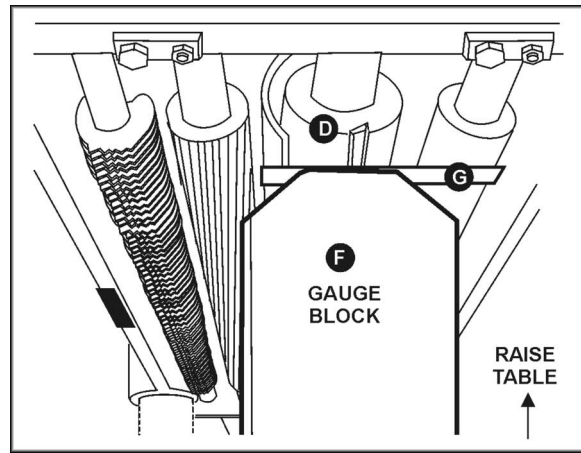


Figure 25

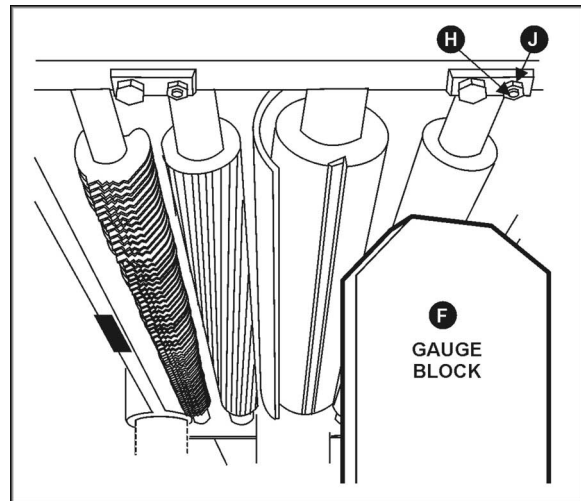


Figure 26

Infeed Roller Height

Use the exact same procedure for checking the infeed roller as you did for the outfeed roller. Use the .02" (0.5mm) feeler gauge atop the gauge block. If adjustment is necessary, use the lock nut and screw on each end of the infeed roller.

Chipbreaker Height

The chipbreaker breaks off the larger chips before the stock reaches the cutterhead. Use the gauge block and a .02" (0.5mm) feeler gauge to check the height of the chipbreaker, following the same procedure as explained in the previous sections. If adjustment is needed:

1. Remove top cover of planer.
2. Loosen the lock nuts (A, Figure 27) at both ends of the chipbreaker, and turn the set screws (B, Figure 27) to raise or lower the chipbreaker as needed. The set screws should be turned the same amount.
3. When the chipbreaker contacts the gauge block, tighten both lock nuts (A, Figure 27).

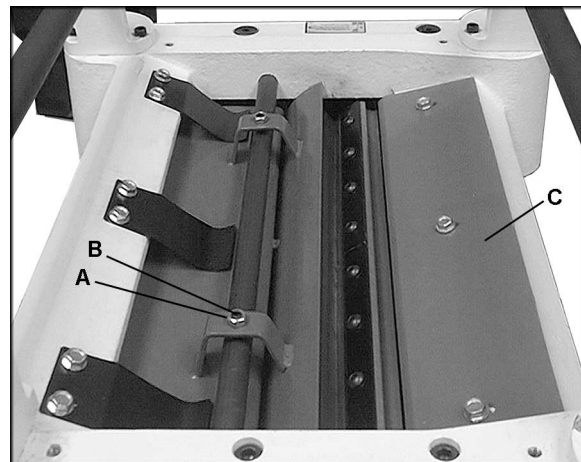


Figure 27

Chip Deflector

The chip deflector (C, Figure 27) keeps wood chips from falling into the outfeed roller. The deflector should be set approximately 1/16" to 1/8" from the tip of the knives. Make sure the deflector is oriented so the bevel on its front edge matches the shape of the cutterhead.

Feed 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 to feed the stock. The feed rollers slow automatically when the machine is under heavy load for best planing in all conditions. The feed rollers are driven by chains and sprockets (see Figure 28) which take power directly from the cutterhead through the oil bath gear box. The drive chain does not need tensioning, as a tension device (Figure 28) maintains proper tension at all times.

To gain access to the chain and sprockets (for example, when performing maintenance) proceed as follows:

1. You may find it easier to remove the sprocket guard by first removing the handwheel from the machine, though this is not mandatory.
2. Remove the socket head cap screw from the center of the cover using a 6mm hex wrench. Remove the left triangular back plate (2 screws) using a 10mm wrench. See Figure 29.
3. Pull the sprocket guard off the machine.

NOTE: Always re-install cover before operating planer.

The gear box has two feed speeds. These are set by pulling out or pushing in the shift lever (Figure 30). Always change feed speed while the machine is running. A label showing the lever positions is affixed just above the lever. It is also shown in Figure 30.

CAUTION Do not attempt to change feed speed while stock is passing through the machine. Damage to the gearbox may result.

Stock Return Rollers

The two rollers on top the machine serve as a convenient rest for stock. They save time and motion for the operator as the stock is returned to the infeed side.

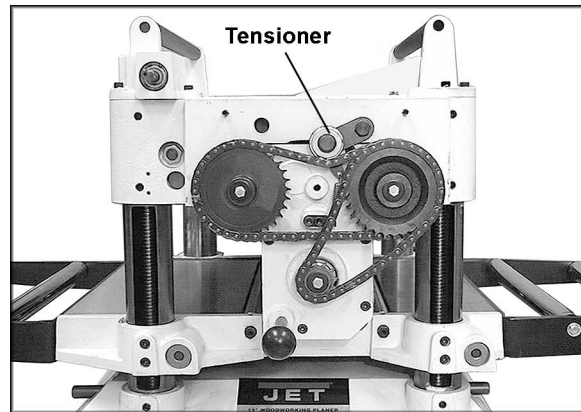


Figure 28

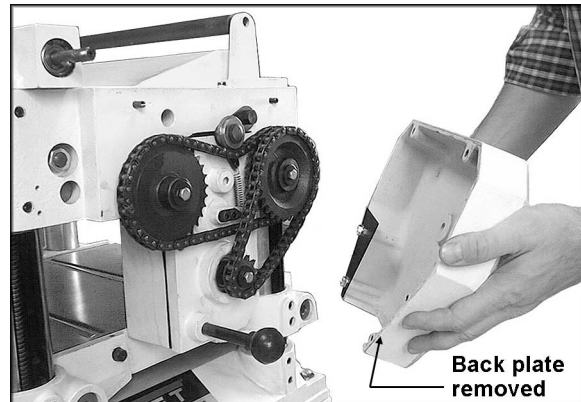


Figure 29

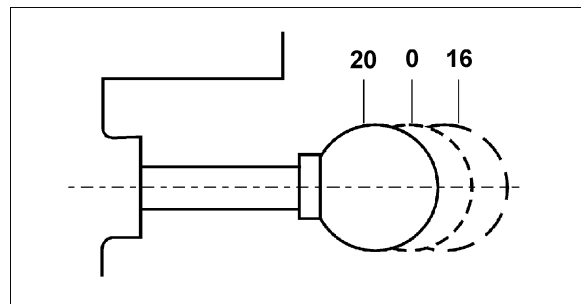


Figure 30

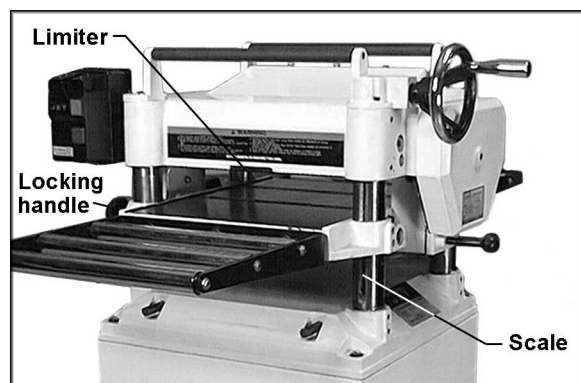


Figure 31

Depth of Cut

The cutting depth scale (Figure 31) is a combination inch/metric scale, with a cutting range from 0 to 6" (152.4mm).

The distance of upward or downward movement is controlled by the handwheel. Before moving the table up or down, loosen the locking handles (Figure 31). After obtaining proper table position, tighten the locking handles.

Maximum depth of cut is 3/16". A limiter on the front of the head casting limits the depth of cut on full width planing under 1/8".

Maintenance

⚠WARNING Before doing maintenance on the machine, disconnect it from the electrical supply by pulling out the plug or switching off the main switch! Failure to comply may cause serious injury.

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

Close-fitting parts, such as the cutterhead slots 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 rollers and table with a soft rag and non-flammable solvent.

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

The table should be kept clean and free of rust. Some users prefer a paste wax on exposed steel and cast iron surfaces. The wax provides a layer of protection as well as reducing friction between lumber and the table, making cuts

faster and smoother. Avoid any wax that contains silicone or other synthetic ingredients. These materials can find their way into lumber and can make staining and finishing difficult.

Another option is talcum powder applied with a blackboard eraser rubbed in vigorously once a week; this will fill casting pores and form a moisture barrier. This method provides a table top that is slick and allows rust rings to be easily wiped from the surface. Important also is the fact that talcum powder will not stain wood or mar finishes as wax pickup does.

Lubrication

All ball bearings are factory lubricated and sealed for life. They require no further lubrication.

The lubricant in the gear box must be drained and replaced every 2,500 hours. Multi-purpose gear box lubricant will be suitable.

To replace the lubricant:

1. Remove the drain plug (A, Figure 32) with a 14mm wrench. Drain dirty oil thoroughly.
2. Insert and tighten the drain plug. (A, Figure 32).
3. Remove filler cap (B, Figure 32) and fill with clean lubricant through the hole. Fill until the oil reaches the top of the filler plug port for correct oil level.
4. Install and tighten filler cap (B, Figure 32).

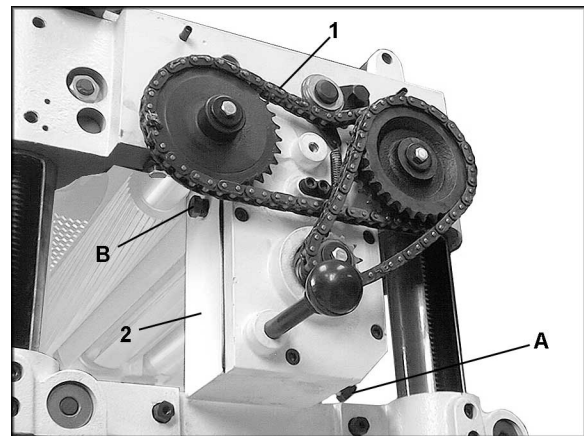


Figure 32

The item numbers on this chart are referenced to the surrounding Figures on pages 18 and 19.

No.	Position	Interval	Suitable Types of Lubricant	Fig. No.
1	Drive Chain	Inspect and lubricate monthly	Grease	32
2	Gear Box	When operated more than 2,500 hours	70 to 90 weight oil	32
3	Return Rollers	Inspect frequently	SAE-30	33
4	Worm Gear	Inspect and lubricate monthly	Grease	34
5	Lead Screw	Inspect and lubricate monthly	Grease	34
6	Column	Inspect and lubricate weekly	Clean columns and apply SAE-30	34
7	Table Chain	Inspect monthly, lubricate when needed	Grease, or good quality bicycle chain lubricant	35
8	Feed Rollers	Inspect and lubricate daily before startup	SAE-30	36

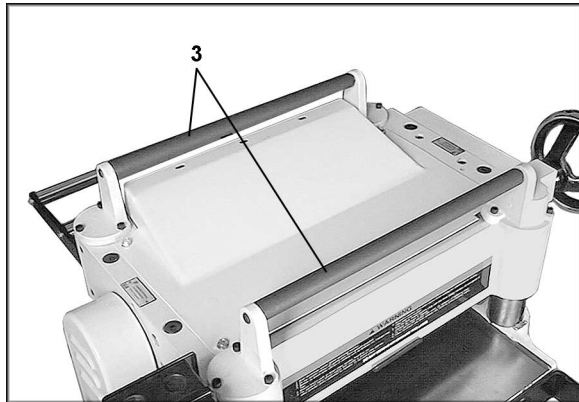


Figure 33

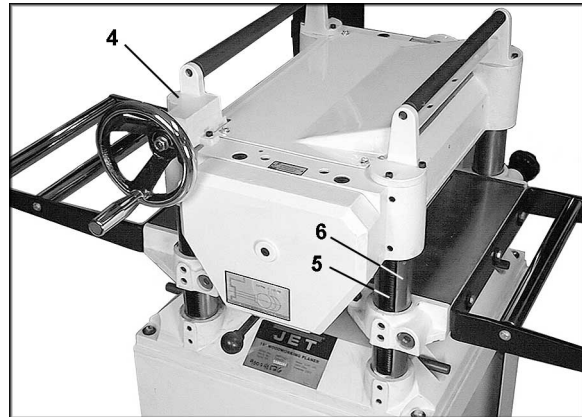


Figure 34

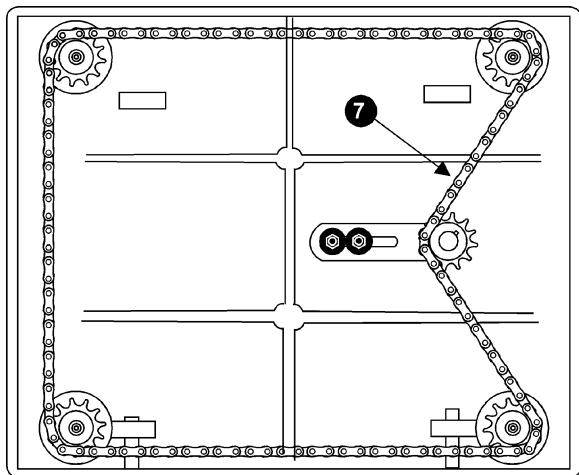


Figure 35

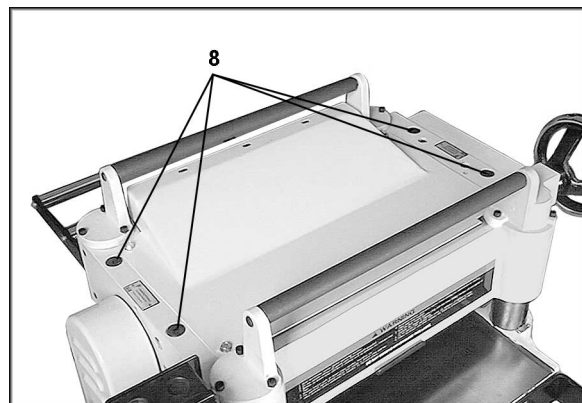


Figure 36

Troubleshooting: Performance Problems

Trouble	Probable Cause	Remedy
Snipe. (NOTE: Snipe can be minimized until negligible, but not eliminated.)	Table rollers not set properly.	Adjust rollers to proper height.
	Inadequate support of long boards.	Support long boards with extension rollers.
	Uneven feed roller pressure front to back.	Adjust feed roller tension.
	Dull knives.	Replace knives.
	Lumber not butted properly.	Butt end to end each piece of stock as they pass through machine.
Fuzzy grain.	High moisture content in wood.	Remove moisture by drying, or use different stock.
	Dull knives.	Replace knives.
Torn grain.	Too heavy a cut.	Adjust proper depth of cut.
	Knives cutting against grain.	Cut along the grain.
	Dull knives.	Replace knives.
Rough/Raised grain.	Dull knives.	Replace knives.
	Too heavy a cut.	Adjust proper depth.
	Moisture content too high.	Remove moisture by drying, or use different stock.
Rounded, glossy surface.	Dull knives.	Replace knives.
	Feed speed too slow.	Increase speed.
	Cutting depth too shallow.	Increase depth.
Poor feeding of lumber.	Inadequate feed roller pressure.	Adjust feed roller tension. If proper tension cannot be achieved, replace feed rollers.
	Planer table rough or dirty.	Clean pitch and residue, and apply paste wax to planer table.
	V-belt is slipping.	Tighten v-belt.
	Surface of feed roller is clogged.	Clear pitch and residue out of teeth.

Troubleshooting: Mechanical and Electrical Problems

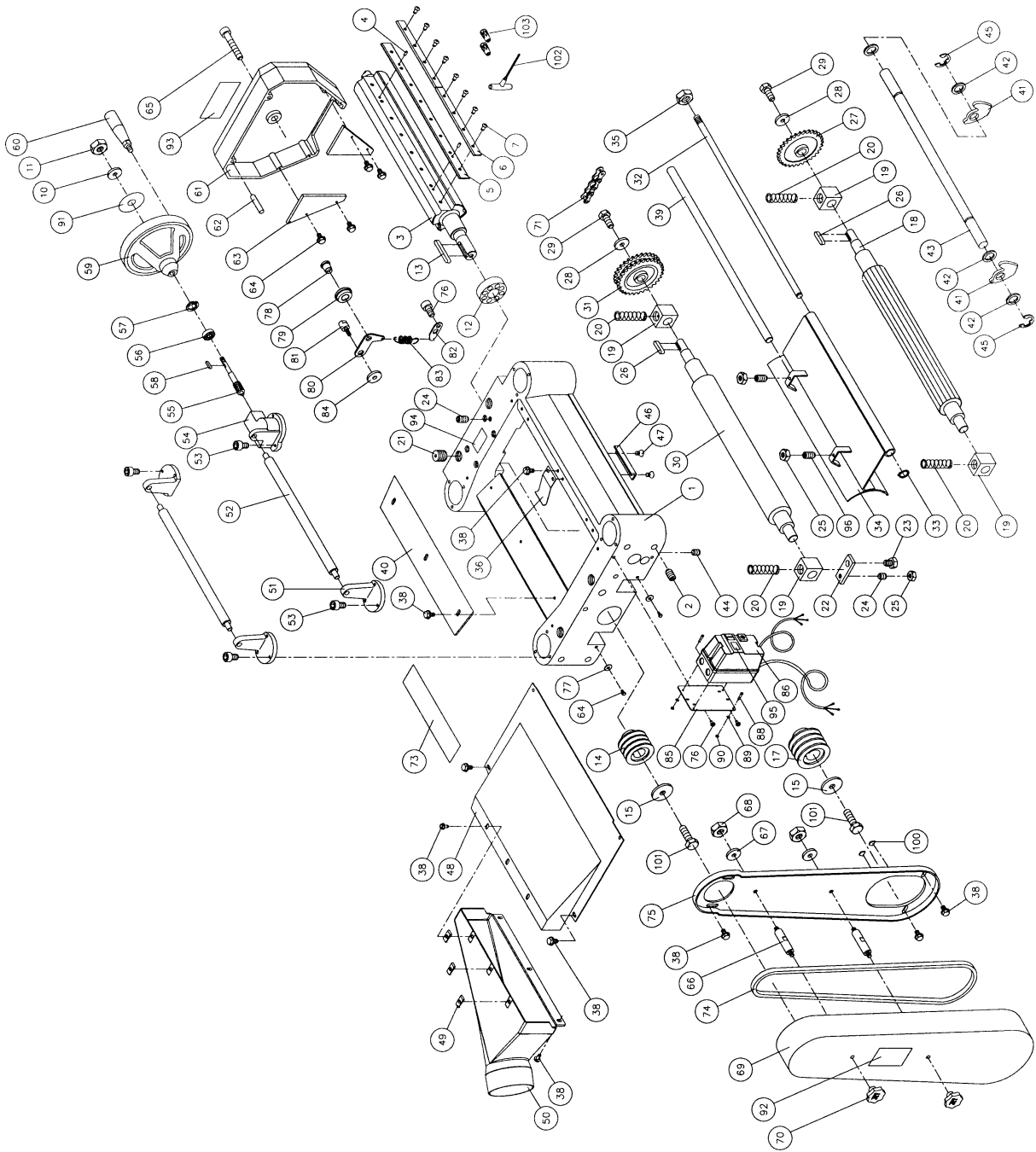
Trouble	Probable Cause	Remedy
Uneven depth of cut side to side.	Knives are worn.	Replace knives.
	Cutterhead not level with bed.	Level the bed.
Board thickness does not match depth of cut scale.	Depth of cut scale incorrect.	Adjust depth of cut scale.
Chain is jumping.	Inadequate tension.	Adjust chain tension.
	Sprockets misaligned.	Align sprockets.
	Sprockets worn.	Replace sprockets.
Machine will not start/restart or repeatedly trips circuit breaker or blows fuses.	No incoming power.	Verify unit is connected to power.
	Overload automatic re-set has not re-set.	When the 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.
	Planer frequently trips.	One cause of overloading trips which are not electrical in nature is too heavy a cut. The solution is to take a lighter cut. If too deep 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. Check amp setting on motor starter.
	Building circuit breaker trips or fuse blows.	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.
	Loosen electrical connections.	Go through all 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.

Trouble	Probable Cause	Remedy
<p>Machine will not start/restart or repeatedly trips circuit breaker or blows fuses.</p> <p>(continued)</p>	<p>Motor starter failure.</p>	<p>Examine motor starter for burned or failed components. If damage is found, replace motor starter. If motor starter looks okay 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.</p> <p>If you have access to a voltmeter, you can separate a starter failure from a motor failure by first, verifying incoming voltage and second, checking the voltage between starter and motor. If incoming voltage is incorrect, you have a power supply problem.</p> <p>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.</p>
	<p>Motor failure.</p>	<p>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 qualified electric motor repair shop and have it tested.</p>
	<p>Miswiring of the machine.</p>	<p>Double check to confirm all electrical connections are correct and tight. Refer to wiring diagram on page 34 to make any needed corrections.</p>
	<p>On/off switch failure.</p>	<p>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.</p>

Replacement Parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 between 7:30 a.m. and 6:00 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.

Head Assembly

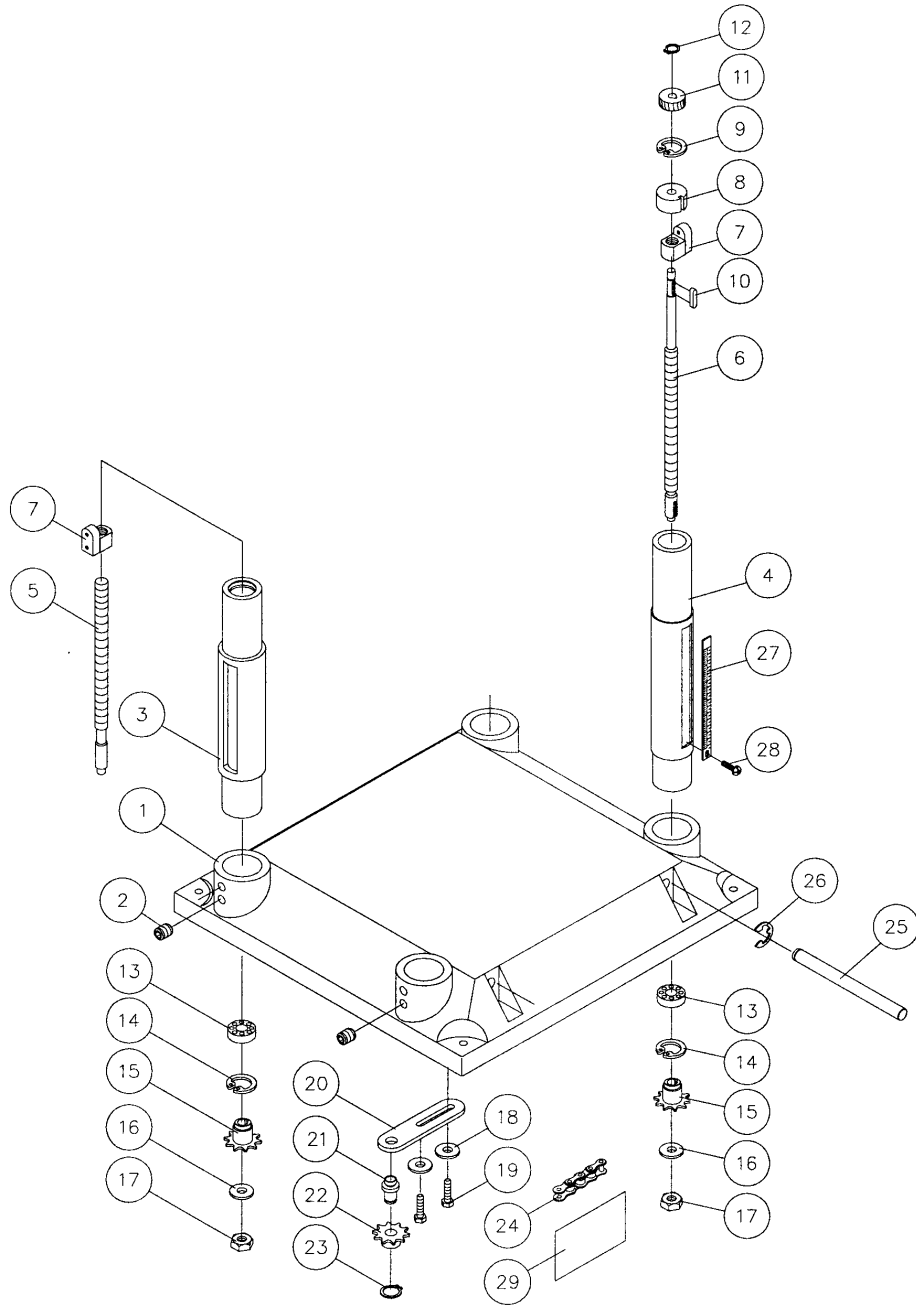


Parts List: Head Assembly

Index No.	Part No.	Description	Size	Qty
1	JWP15H-001	Head Casting		1
2	TS-1525021	Set Screw	M10x12	8
	JWP15DX-CA	Cutter Head Assembly (Index #3 thru #7)		1
3	JWP15DX-003	Cutter Head		1
4	JWP15DX-004	Pin		6
5	708817	Knives (Set of 3)		1
6	JWP15DX-006	Knife Bar		6
7	TS-2246122	Button Head Socket Screw	M6x12	24
10	TS-1550071	Washer	M10	1
11	TS-1540072	Hex Nut	M10x1.25P	1
12	BB-6205ZZ	Ball Bearing	6205ZZ	1
13	JWP15DX-013	Key	8x8x36	1
14	JWP15H-014	Machine Pulley		1
15	JWP15H-015	Washer		2
17	JWP15H-017	Motor Pulley		1
18	JWP15H-018	Infeed Roller		1
19	JWP15H-019	Bushing		4
20	JWP15H-020	Spring		4
21	JWP15H-021	Set Screw	M22x1.5Px20	4
22	JWP15H-022	Plate		4
23	TS-1490031	Hex Cap Screw	M8x20	4
24	TS-1523051	Set Screw	M6x16	5
25	TS-1540041	Nut	M6	6
26	JWP15H-026	Key	5x5x22	2
27	JWP15H-027	Sprocket		1
28	TS-0680021	Washer	1/4	2
29	TS-1482031	Hex Cap Screw	M6x16	2
30	JWP15H-030	Outfeed Roller		1
31	JWP15H-031	Sprocket		1
32	JWP15H-032	Locking Bolt		1
33	JWP15H-033	Retaining Ring	STW-12	1
34	JWP15H-034	Chipbreaker		1
35	TS-1540081	Hex Nut	M12	1
36	JWP15H-036	Plate Spring		3
38	JWP208-038A	Hex Washer Head Screw	M6x12	23
39	JWP15H-039	Shaft		1
40	JWP15H-040	Deflector Plate		1
41	JWP15H-041	Anti-Kickback Finger		39
42	JWP15H-042	Collar		40
43	JWP15H-043	Shaft		1
44	TS-1524031	Set Screw	M8x12	1
45	JWP15H-045	Retaining Ring	ETW-15	2
46	JWP15H-046	Limit Plate		1
47	JWP208-053A	Flat Head Screw	M5x8	2
48	JWP15H-048	Upper Cover		1
	JWP15DX-CHA	Collector Hood Assembly (Index #49, #50)		1
49	JWP15DX-049	Plate		3
50	JWP15DX-050	Collector Hood		1
51	JWP15H-051	Roller Stand		3
52	JWP15H-052	Roller		2
53	TS-1503051	Socket Head Cap Screw	M6x20	12
54	JWP15H-054	Worm Gear Box		1
55	JWP15H-055	Worm		1
56	BB-6200Z	Ball Bearing	6200Z	1
57	JWP15H-057	Retaining Ring	RTW-30	1
58	JWP15H-058	Key	4x4x10	1
59	JWP15H-059	Hand Wheel		1

60	JWP15H-060	Handle		1
61	JWP15H-061	Cover		1
62	JWP15H-062	Spring Pin		2
63	PF-C22	Plate		2
64	TS-1482021	Hex Cap Screw	M6x12	8
65	TS-1504091	Socket Head Cap Screw	M8x45	1
66	JWP15H-067	Bolt		2
67	TS-0680031	Washer	5/16	2
68	TS-0561021	Hex Nut	5/16-18	2
69	JWP208-084	Pulley Cover		1
70	JWP15H-072	Knob		2
71	JWP15H-073	Chain		1
73	PG-C05	Label		1
74	VB-M59	V-Belt	M-59	3
75	JWP208-079	Pulley Guard		1
76	TS-1503021	Socket Head Cap Screw	M6x10	4
77	PF-C26	Washer		4
78	PA-C56	Stud		1
79	PA-C57	Idle Pulley		1
80	PA-C58	Bracket		1
81	PA-C59	Stud		1
82	PA-C60	Hanger		1
83	PA-C61	Spring		1
84	PA-C62	Washer		1
85	JWP15H-076	Switch Bracket		1
86	JWP15H-077	Switch		1
88	TS-081C102	Screw	#10-24X1-3/4	2
89	JWP15H-079	Tooth Washer		2
90	TS-0560071	Hex Nut	#10-24	2
91	PF-C27	Direction Indicator Label		1
92	PA-C67	Label		1
93	PA-G18-1	Label		1
94	PA-C66	Label		1
95	PJE-C04	Label		1
96	TS-1523041	Set Screw	M6x12	2
100	JWP15DX-100	Pad		2
101	TS-1490041	Hex Cap Screw	M8x25	2
102	JWP15DX-102	T-Handle Wrench		1
103	JWP13DX-079	Magnet Tool Assembly		2

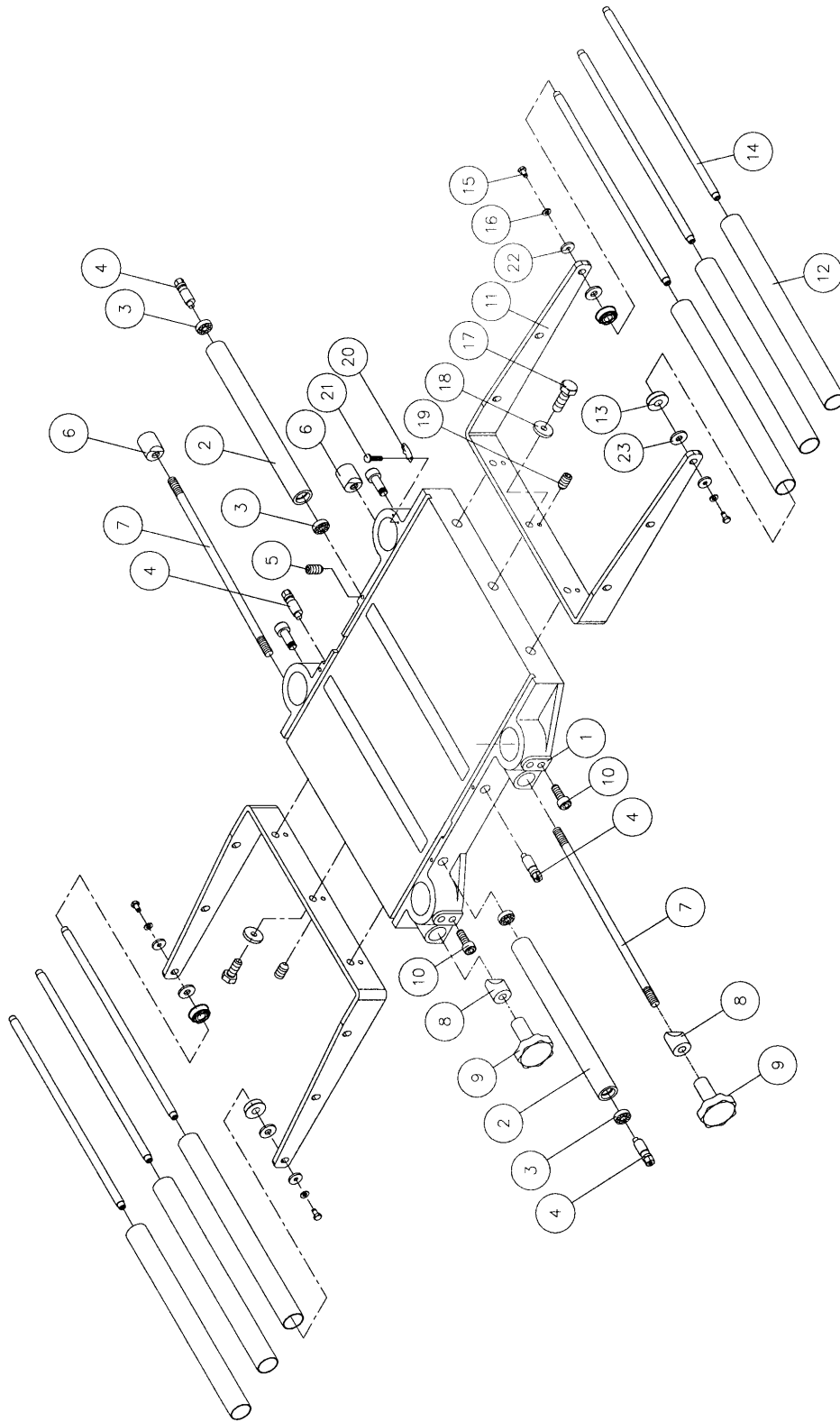
Base Assembly



Parts List: Base Assembly

Index No.	Part No.	Description	Size	Qty
1	JWP15H-201	Base		1
2	TS-1525021	Set Screw	M10x12	8
3	JWP15H-203	Column		3
4	JWP15H-204	Column		1
5	JWP15H-205	Lead Screw		3
6	JWP15H-206	Lead Screw		1
7	JWP15H-207	Nut		4
8	JWP15H-208	Bushing		1
9	JWP15H-209	Retaining Ring	RTW-38	1
10	JWP15H-210	Key	4x4x10	1
11	JWP15H-211	Gear		1
12	JWP15H-212	Retaining Ring	STW-10	1
13	BB-6202Z	Ball Bearing	6202Z	4
14	JWP15H-214	Retaining Ring	RTW-35	4
15	JWP15H-216	Sprocket		4
16	TS-1550071	Washer	M10	4
17	TS-1540072	Nut	M10x1.25P	4
18	TS-1550061	Washer	M8	2
19	TS-1490041	Hex Cap Screw	M8x25	2
20	JWP15H-221	Bracket		1
21	JWP15H-222	Shaft		1
22	JWP15H-223	Sprocket		1
23	JWP15H-224	Retaining Ring	STW-15	1
24	JWP15H-225	Chain		1
25	JWP15H-226	Lifting Handle		4
26	JWP15H-227	E-Clip	ETW-12	4
27	JWP15H-228	Scale		1
28	TS-1531012	Screw	M3x6	1
29	PJE-B01	I.D. Label		1

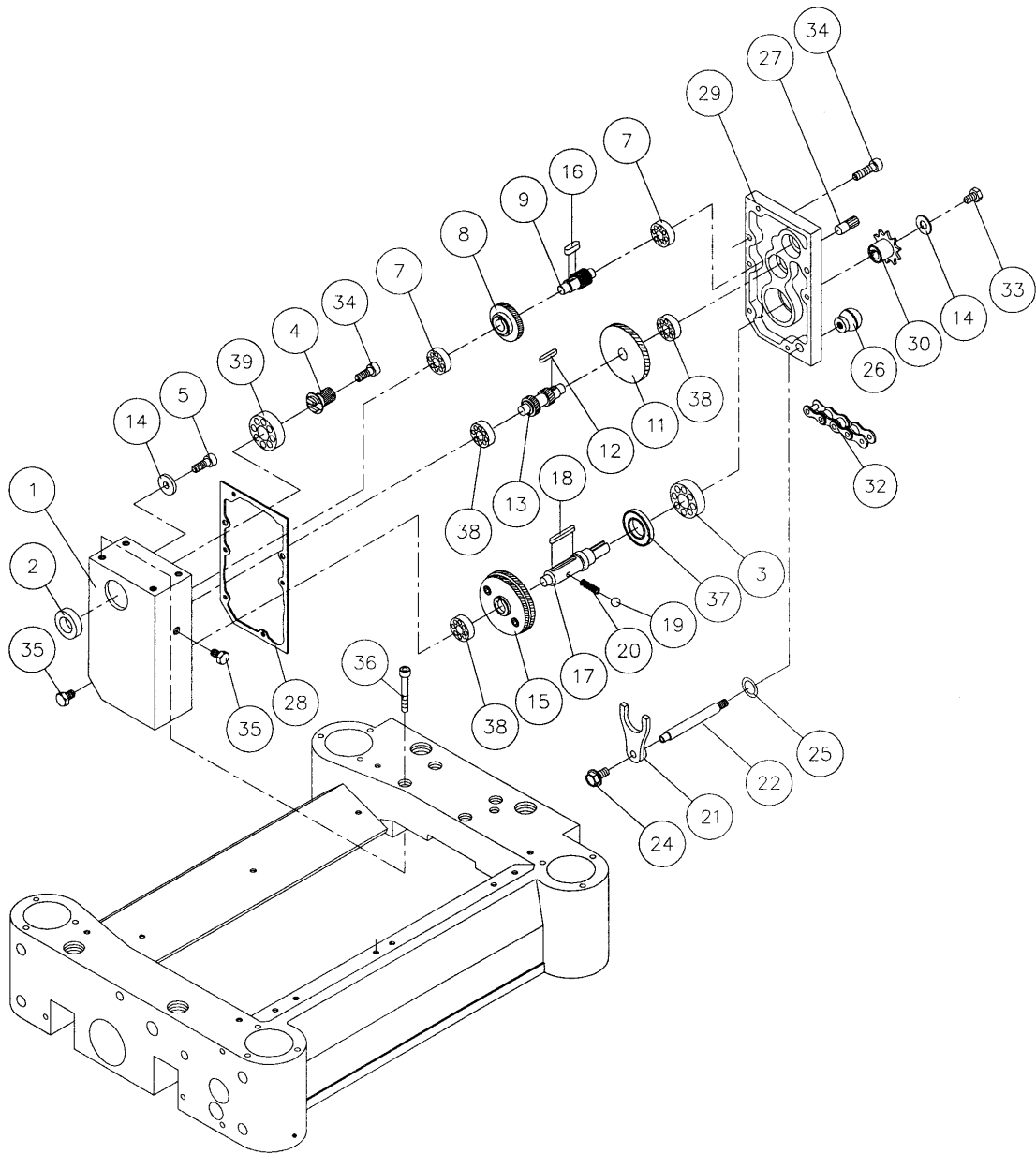
Table Assembly



Parts List: Table Assembly

Index No.	Part No.	Description	Size	Qty
1	JWP15H-101	Middle Table		1
2	JWP15H-102	Roller		2
3	BB-608Z	Ball Bearing	608Z	4
4	JWP15H-104	Eccentric Shaft		4
5	TS-1523041	Set Screw	M6x12	4
6	JWP15H-106	Threaded Lock Bushing		2
7	JWP15H-107	Lock Bolt		2
8	JWP15H-108	Lock Bushing		2
9	JWP15H-109	Knob		2
10	TS-1503051	Socket Head Cap Screw	M6x20	8
11	PJ020801	Roller Frame		2
12	JWP15H-112	Roller		6
13	JWP15H-113	Roller Bushing		12
14	JWP15DX-114	Shaft		6
15	TS-1482021	Hex Cap Screw	M6x12	12
16	TS-2361061	Lock Washer	M6	12
17	TS-1490031	Hex Cap Screw	M8x20	6
18	TS-1550061	Washer	M8	6
19	TS-1524031	Set Screw	M8x12	6
20	JWP15H-230	Cut Limit Pointer		1
21	JWP15H-231	Rivet	2x5	2
22	TS-1550041	Flat Washer	M6	12
23	TS-1550071	Flat Washer	M10	12

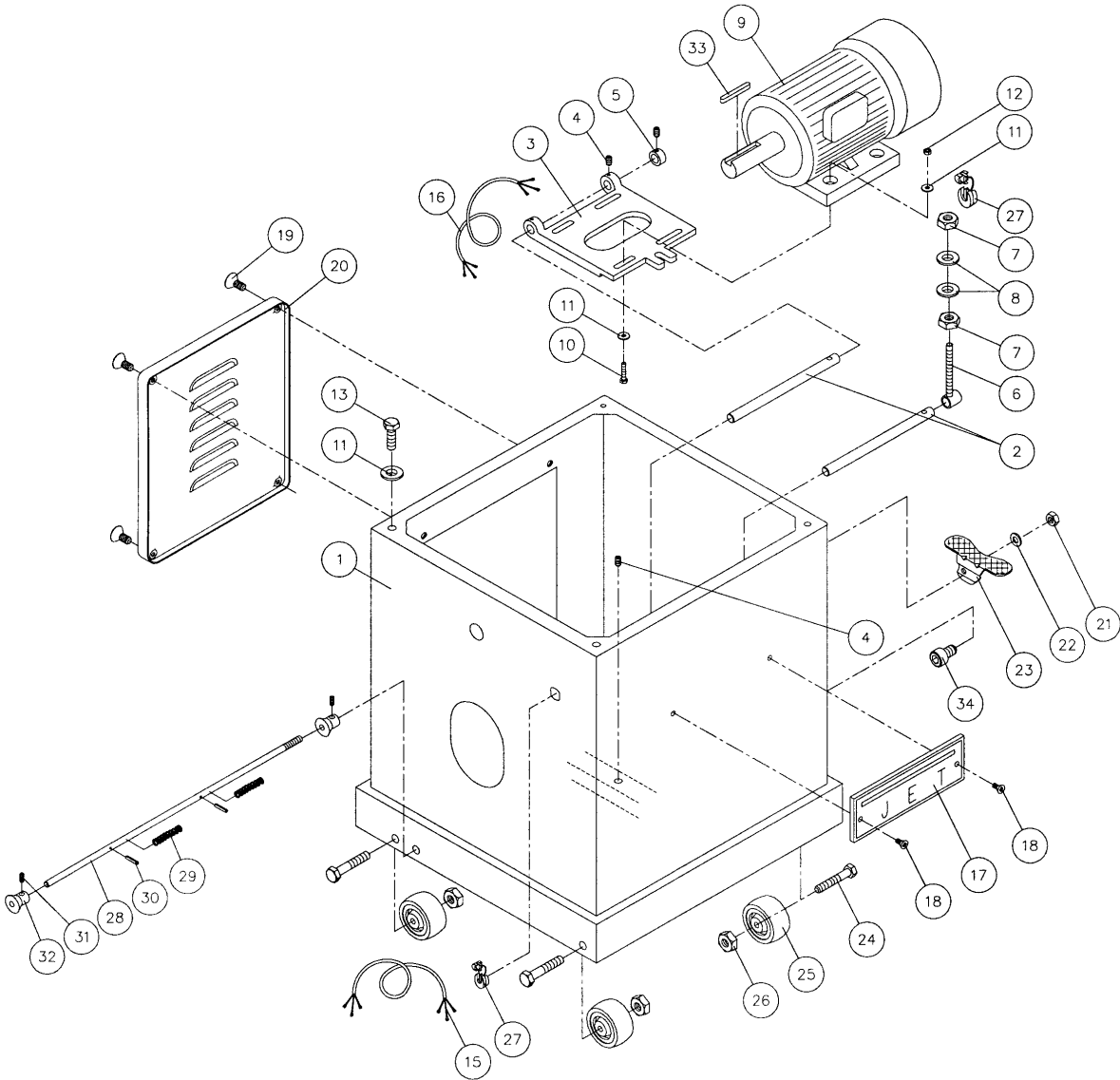
Gear Box Assembly



Parts List: Gear Box Assembly

Index No.	Part No.	Description	Size	Qty
1	JWP15H-301	Gear Box		1
2	OS-28408	Oil Seal		1
3	BB-6204Z	Ball Bearing	6204Z	1
4	JWP15H-304	Gear	16T	1
5	TS-1503031	Socket Head Cap Screw	M6x12	1
7	BB-6201	Ball Bearing	6201	2
8	JWP15H-309	Gear	47T	1
9	JWP15H-310	Shaft	18T	1
11	JWP15H-312	Gear	71T	1
12	JWP15H-313	Key	5x5x10	1
13	JWP15H-314	Shaft	18T, 22T	1
14	TS-1550041	Washer	M6	2
15	JWP15H-317	Gear Assembly	96T/92T	1
16	6292768	Key	5x5x12	1
17	JWP15H-323	Shaft		1
18	JWP15H-320	Key	6x6x40	1
19	JWP15H-321	Ball		1
20	JWP15H-322	Spring		1
21	JWP15H-329	Clutch		1
22	JWP15H-330	Handle		1
24	JWP208-038A	Hex Washer Head Screw	M6x12	1
25	JWP15H-333	Oil Seal		1
26	JWP15H-334	Knob		1
27	JWP15H-335	Pin		2
28	JWP15H-336	Gasket		1
29	JWP15H-337	Cover		1
30	JWP15H-325	Sprocket	12T	1
32	JWP15H-327	Chain		1
33	TS-1482031	Hex Cap Screw	M6x16	1
34	TS-1503061	Socket Head Cap Screw	M6x25	5
35	JWP15H-339	Oil Plug		2
36	TS-1504101	Socket Head Cap Screw	M8x50	4
37	OS-25476	Oil Seal		1
38	BB-6201Z	Ball Bearing	6201Z	3
39	BB-6204ZZ	Ball Bearing	6204ZZ	1

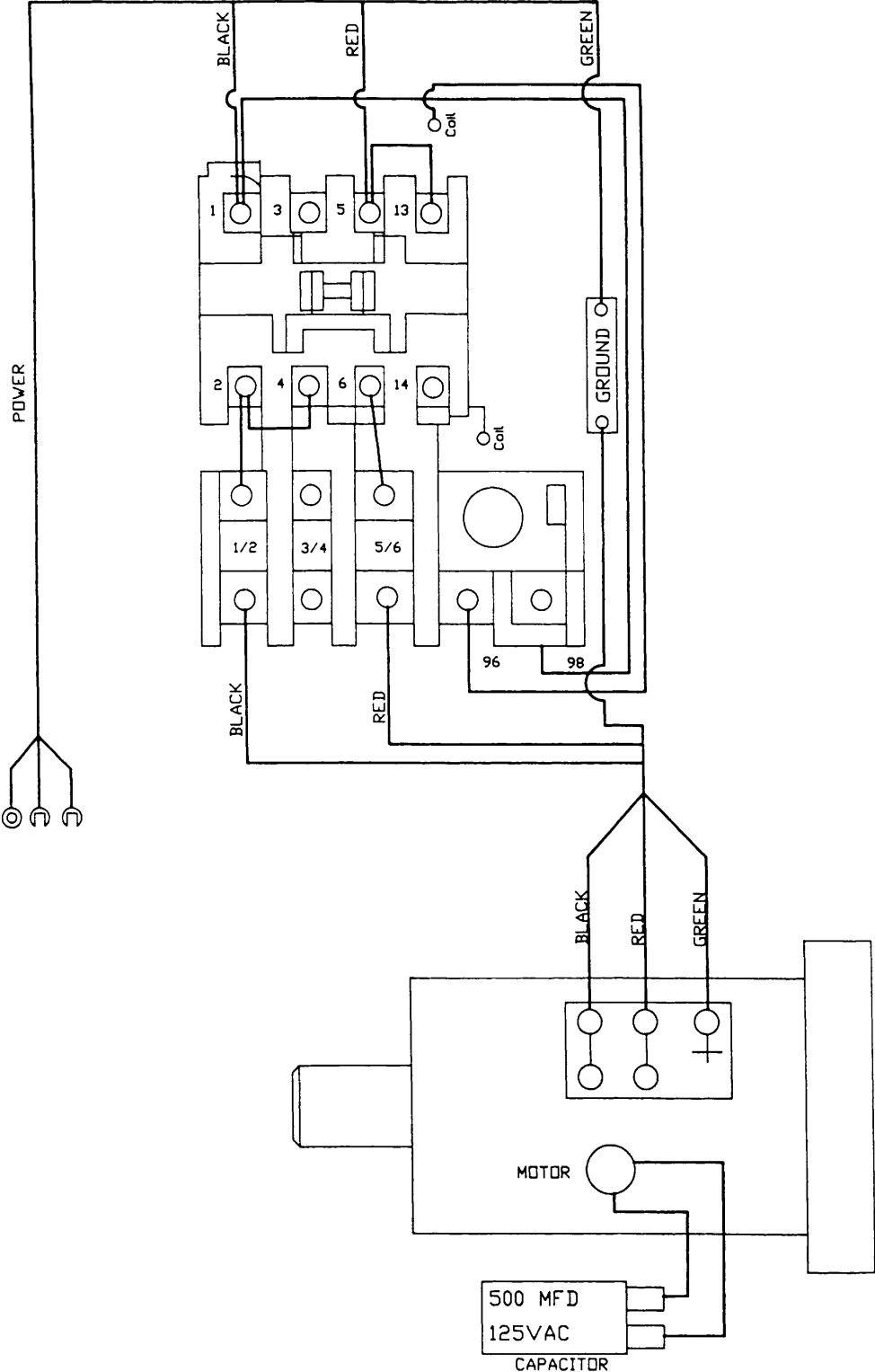
Stand and Motor Assembly



Parts List: Stand and Motor Assembly

Index No.	Part No.	Description	Size	Qty
1	PJN-S01	Base		1
2	JWP15H-404	Support Bar		2
3	JWP15H-406	Motor Mount		1
4	TS-1523011	Set Screw	M6x6	4
5	JWP15H-408	Collar		1
6	JWP15H-409	Adjusting Bolt		1
7	TS-1540072	Nut	M10x1.25P	2
8	TS-0680061	Washer	1/2	2
9	JWP15H-412	Motor	3HP	1
10	TS-1490051	Hex Cap Screw	M8x30	4
11	TS-1550061	Washer	M8	12
12	TS-1540061	Hex Nut	M8	4
13	TS-1490081	Hex Cap Screw	M8x45	4
15	JWP15H-418	Power Cable		1
16	PAG-M02	Motor Cable		1
17	PG-M02	Jet Plaque		1
18	TS-2245081	Flat Head Screw	M5x8	2
19	TS-2286201	Flat Head Screw	M6x20	4
20	PJH-S02	Door		1
21	TS-1540071	Hex Nut	M10	1
22	TS-1550071	Flat Washer	M10	1
23	PJN-S02	Foot Brake		1
24	TS-0060111	Hex Cap Screw	3/8-16x2-1/2	4
25	PG-M05	Wheel		4
26	TS-0561031	Hex Nut	3/8-16	4
27	5MA-L05	Strain Relief Bushing		2
28	PJN-S03	Shaft		1
29	PG010033	Spring		2
30	HG010911	Spring Pin	4x20	2
31	TS-1523011	Set Screw	M6x6	2
32	PJN-S04	Eccentric Cam		2
33	5FK-C13A	Key	5x5x30	1
34	TS-1503031	Socket Head Cap Screw	M6x12	1

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