



# Operating Instructions and Parts Manual

## 20-inch Planer

Models JWP-208HH-BLK



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# Warranty and Service

JET warrants every product it sells against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-800-274-6846, 8AM to 5PM CST, Monday through Friday.

## Warranty Period

The general warranty lasts for the time period specified in the literature included with your product or on the official JET branded website.

- JET products carry a limited warranty which varies in duration based upon the product. (See chart below)
- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer's defects.

## Who is Covered

This warranty covers only the initial purchaser of the product from the date of delivery.

## What is Covered

This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance. JET woodworking machinery is designed to be used with Wood. Use of these machines in the processing of metal, plastics, or other materials outside recommended guidelines may void the warranty. The exceptions are acrylics and other natural items that are made specifically for wood turning.

## Warranty Limitations

Woodworking products with a Five Year Warranty that are used for commercial or industrial purposes default to a Two Year Warranty. Please contact Technical Service at 1-800-274-6846 for further clarification.

## How to Get Technical Support

Please contact Technical Service by calling 1-800-274-6846. **Please note that you will be asked to provide proof of initial purchase when calling.** If a product requires further inspection, the Technical Service representative will explain and assist with any additional action needed. JET has Authorized Service Centers located throughout the United States. For the name of an Authorized Service Center in your area call 1-800-274-6846 or use the Service Center Locator on the JET website.

## More Information

JET is constantly adding new products. For complete, up-to-date product information, check with your local distributor or visit the JET website.

## How State Law Applies

This warranty gives you specific legal rights, subject to applicable state law.

## Limitations on This Warranty

JET LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

JET 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.

JET sells through distributors only. The specifications listed in JET printed materials and on official JET website are given as general information and are not binding. JET 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. JET® branded products are not sold in Canada by JPW Industries, Inc.

## Product Listing with Warranty Period

90 Days – Parts; Consumable items
1 Year – Motors; Machine Accessories
2 Year – Metalworking Machinery; Electric Hoists, Electric Hoist Accessories; Woodworking Machinery used for industrial or commercial purposes
5 Year – Woodworking Machinery
Limited Lifetime – JET Parallel clamps; VOLT Series Electric Hoists; Manual Hoists; Manual Hoist Accessories; Shop Tools; Warehouse & Dock products; Hand Tools; Air Tools

NOTE: JET is a division of JPW Industries, Inc. References in this document to JET also apply to JPW Industries, Inc., or any of its successors in interest to the JET brand.

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# Warnings

**Read the manual.** Always read the owner's manual carefully before attempting to use the machine. Know the limitations and hazards associated with the use of this planer.

**Installation.** If mounting machine to the floor, use high quality anchor bolts through the mounting holes on the base. If using a mobile base, be sure to lock the wheels.

**Eye protection.** Always wear approved safety goggles, glasses, or a face shield when operating this machine. NOTE: Common eyeglasses are only impact resistant, they are not safety glasses. Also use face or dust mask if the cutting operation is dusty.

**Dress code.** Do not wear loose clothing, neckties, jewelry, or gloves that can get caught in moving parts. Confine long hair. Keep sleeves above the elbow.

**JET Black coating.** This machine has an industrial-grade low-friction corrosion-resistant coating we call JET Black. This coating is on the main table and the infeed and outfeed tables. While the JET Black coating is durable, it can be damaged if metal or other hard and/or sharp objects strike, gouge, or scratch the surface. Significant damage to the coating may affect its performance.

**Placement.** Place machine so that potential kickback area is not in line with aisles, doorways, wash stations or other work areas. Do not use machine in a damp or wet location, or expose to rain. Keep work area well lighted.

**Electrical grounding.** Your machine must be electrically grounded. If a cord and plug are used, make certain the grounding lug connects to a suitable ground. Follow the grounding procedure indicated by the National Electrical Code.

**Guards.** Be sure machine guards are in place and in good working order. Do not operate while gear cover is open. If a guard must be removed for adjustments or maintenance, it should be reinstalled immediately upon completion of the procedure and before operating the machine.

**Housekeeping.** Before turning on machine, remove all extra equipment such as keys, wrenches, scrap, stock, and cleaning rags from the machine. Keep the area around machine clean and free of scrap material and sawdust to minimize the danger of slipping.

**Power off.** Make sure the machine is either unplugged or electrically disconnected and locked out when performing maintenance or service work. Also, make sure switch is in OFF position before plugging in power cord. Never leave the machine running unattended. Do not leave machine until it comes to a complete stop.

**Cutterhead.** Keep knives sharp and free of all rust and pitch. Make sure knife inserts screws are tightened securely.

**Work piece.** Check material for loose knots, nails and other defects that can damage knives and pose a safety hazard for the operator.

**Keep hands away** from feed rollers and cutterhead while operating.

**Use the proper extension cord.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. For runs up to 25 feet, use a 10 AWG or larger gauge cord.

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

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

## Safety Decals

Familiarize yourself with the location and content of these decals on your planer.

**⚠ WARNING**

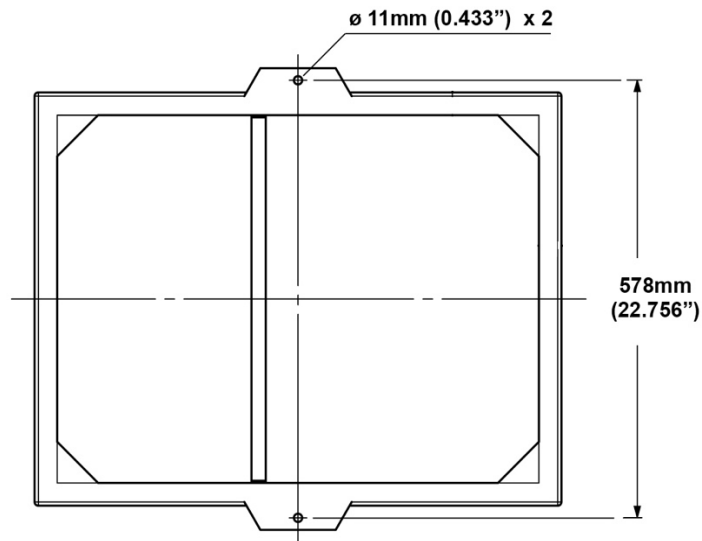
<ol style="list-style-type: none"><li>1. Read instruction manual before operating machine.</li><li>2. Do not operate without all guards properly installed.</li><li>3. Remove or fasten loose articles of clothing such as neckties, etc. Contain long hair.</li><li>4. Remove jewelry such as finger rings, watches, bracelets, etc.</li><li>5. Use approved safety glasses and/or face shield to protect eyes, and use other personal safety equipment as required. Do not wear gloves.</li></ol>	<ol style="list-style-type: none"><li>6. Disconnect machine from power source before making any adjustments or cleaning chips away from machine.</li><li>7. Keep the floor around machine clean and free from scraps, sawdust, oil and grease to minimize the danger of slipping.</li><li>8. Do not operate this machine while under the influence of alcohol or drugs.</li><li>9. Failure to comply with these warnings may result in serious personal injury.</li></ol>
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**DO NOT REMOVE OR OBSCURE THIS LABEL**

**WARNING**

**DO NOT attempt to remove this cover while machine is running. Failure to comply may result in personal injury.**

## Stand Mounting Holes



# Introduction

This manual is provided by JET covering the safe operation and maintenance procedures for a JET Model JWP-208HH-BLK 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 consistent, long-term 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 JET. JET can also be reached at our web site: [www.jettools.com](http://www.jettools.com).

Register your product using the mail-in card provided or register online:

[www.jettools.com/product-registration](http://www.jettools.com/product-registration)

To quickly reach the product registration webpage, scan the QR code below.



# Features

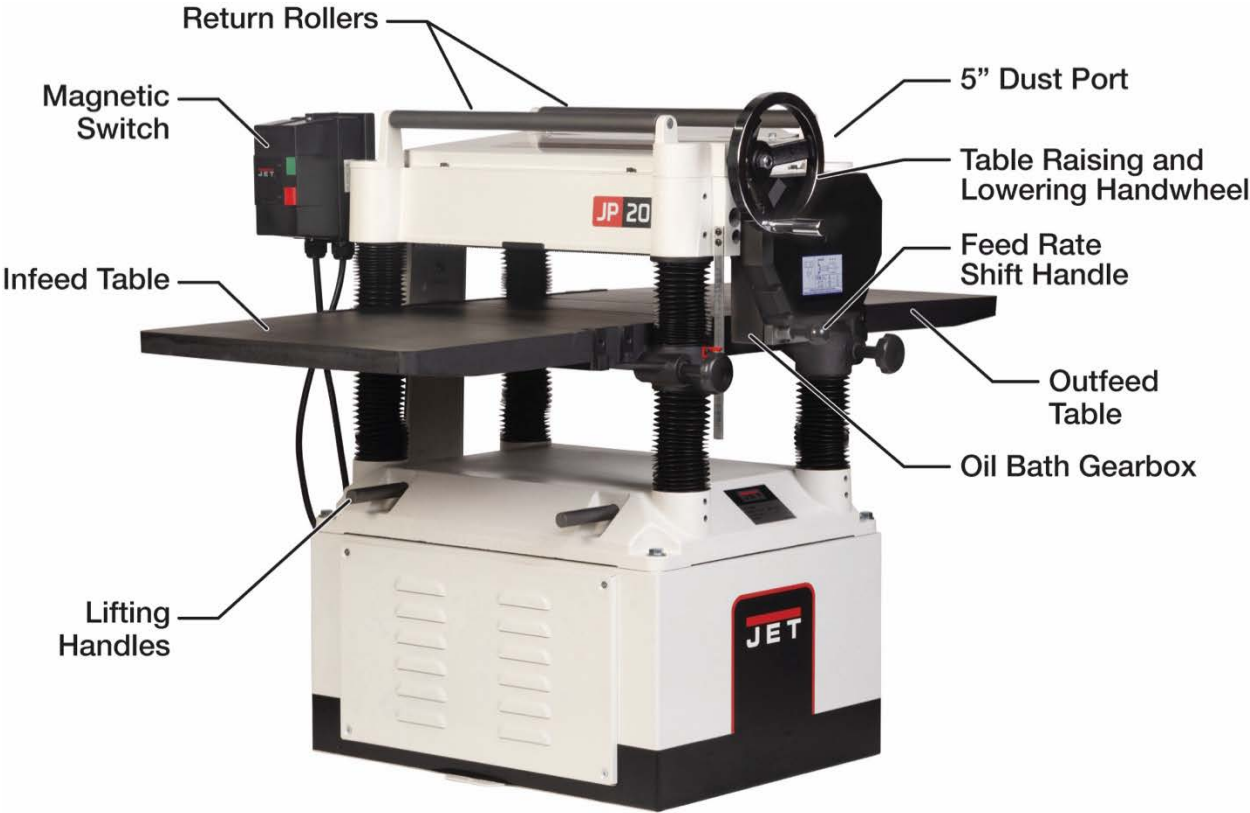


Figure 1

## Specifications

Model No. ....	JWP-208HH-BLK
Stock No (5HP, 1Ph, 230V).....	JT1-1374
Table Area (D x W/in.).....	25-3/4 x 20
Maximum Planing Width (in.).....	20
Maximum Planing Thickness (in.).....	8
Full Width Cutting Depth (in.) .....	3/32
Minimum Planing Length (in.).....	6-3/4
Knives.....	(68) four-sided inserts 15 x 15 x 2.5mm
Cutterhead Speed (RPM).....	5,000
Cuts per Minute .....	n.a.
Cutterhead Diameter (dia/in.) .....	3-7/32
Feed Rate (FPM).....	24 & 31
Motor .....	TEFC, 5HP, 1PH, 230V, 60Hz, 20A
Dust Chute Diameter (dia/in.).....	5
Overall Dimensions (L x W x H/in.).....	26 x 36-5/8 x 41-3/8
Gross Weight (approx. lbs.).....	765

The specifications in this manual are given as general information and are not binding. JET reserves the right to effect, at any time and without prior notice, alterations to parts, fittings, and accessory equipment deemed necessary for any reason whatsoever.

# Unpacking

**CAUTION** This machine has an industrial-grade low-friction corrosion-resistant coating on the main table and the infeed and outfeed tables. While the coating is durable, it can be damaged if metal or other hard and/or sharp objects strike, gouge, or scratch the surface. Significant damage to the coating may affect its performance. Use care when unpacking and locating the machine and during all setup and assembly procedures.

Carefully unpack the planer and any loose items from the wood crate and inspect for damage. Any damage should be reported immediately to your distributor and shipping agent. Do not discard any shipping material until the Planer is assembled and running properly. Before proceeding further, read your manual thoroughly to familiarize yourself with proper assembly, maintenance and safety procedures.

Remove the screws that hold the planer to the shipping skid. Remove the protective coating from the cutterhead and loose items packed with the machine. This coating may be removed with a soft cloth moistened with Kerosene. Do not use acetone, gasoline or lacquer thinner for this purpose. Do not use solvents on plastic parts.

**CAUTION** Use care when cleaning the cutterhead; the knives are very sharp.

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.

## Crate Contents (Figure 2):

- 1 Planer (not shown)
- 1 Dust Hood
- 1 Handwheel
- 1 Key
- 1 Handle
- 1 Hardware Bag for Dust Hood:
  - 6 Hex Cap Screws, M6 x 1.0P x 12
  - 6 Flat Washers, M6
- 3 Open-End Wrenches (10-13mm, 12-14mm, 17-19mm)
- 4 Hex Wrenches (3,4,5 and 6mm)
- 2 Star point screwdrivers
- 10 Knife inserts
- 10 Knife insert screws
- 2 JET Black Coated Extension Tables
- 1 Hardware Bag for Extension Tables :
  - 6 Hex Cap Screws, M8 x 1.25P x 25
  - 6 Socket Set Screws, M8 x 1.25P x 12
- 1 Owner's Manual (not shown)
- 1 Warranty Card (not shown)



Figure 2



# Installation & Assembly

**CAUTION** This machine has an industrial-grade low-friction corrosion-resistant coating on the main table and the infeed and outfeed tables. While the coating is durable, it can be damaged if metal or other hard and/or sharp objects strike, gouge, or scratch the surface. Significant damage to the coating may affect its performance. Use care when installing and assembling the machine.

1. There are four lifting handles (Figure 3) on the machine. Pull the handles out for use, push in when not in use.
2. If a sling or forklift is used to lift the machine, be sure to lift by the handles only (see Figure 3). Make sure machine is kept in level position while lifting.
3. For best planing performance, locate planer on a solid, level foundation and anchor to the floor with good quality lag screws. Do not tighten screws completely yet.
4. With machine in position, test table surface lengthwise and crosswise with machinist's level. Place metal shims under low corners.
5. Check that all four corners are supported, then tighten lag screws.
6. Re-test level of table surface in both directions and adjust if necessary.

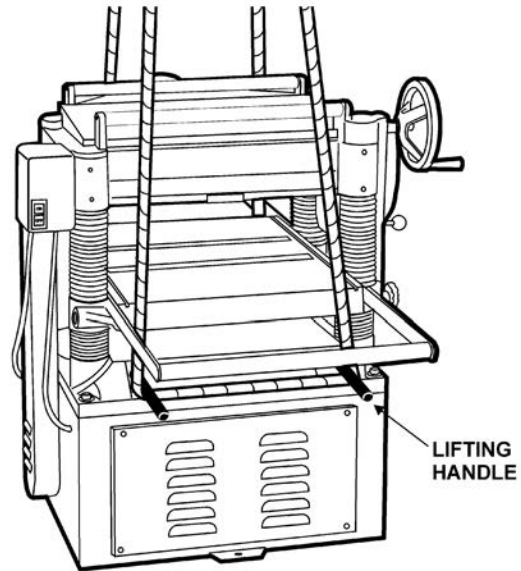


Figure 3

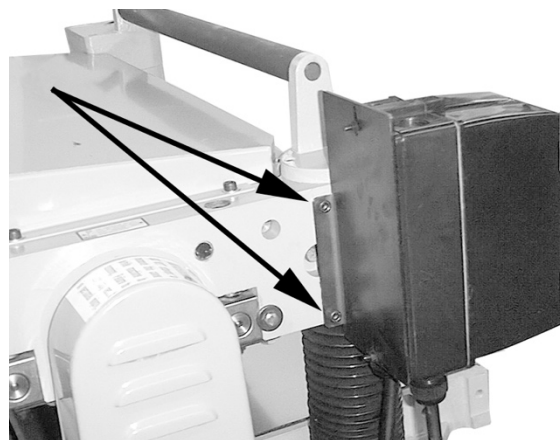


Figure 4

## Starter Box

Mount the starter box at the left side of the machine with two socket head cap screws (Figure 4).

## Handwheel

1. Remove the nut and washer from the gearbox shaft. Insert the key into the slot on the gearbox shaft (see Figure 5).
2. Place the handwheel onto the shaft (see Figure 5), making sure it is oriented so the handwheel slips over the key.
3. Place flat washer and hex nut on shaft and tighten with wrench.
4. Mount the handle in the threaded hole in the handwheel and tighten with a wrench placed over the flat on the handle.

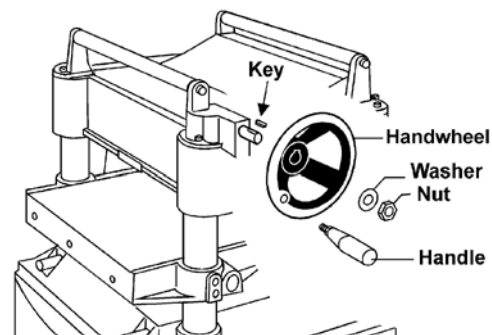


Figure 5

## Extension Tables

1. Mount the first JET Black coated extension table to the edge of the main table with three M8 x 25 hex cap screws (see Figure 6). Do not fully tighten yet.
2. The extension table must be leveled with the main table. Place a straight edge across both tables.
3. Insert three socket set screws with a 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.

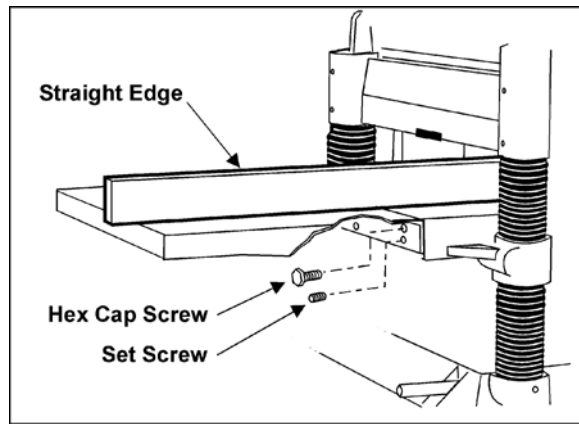


Figure 6

## Dust Collection Hood

The dust collection hood comes standard with this machine and helps maintain a clean and safe work area. Attach dust collection hood to the planer with the M6 x 12 hex cap screws and 1/4" washers as shown in Figure 7.

**IMPORTANT: Make sure all knife inserts are tight before operating machine. Verify tightness of each insert (re-torque) before using the machine for the first time.**

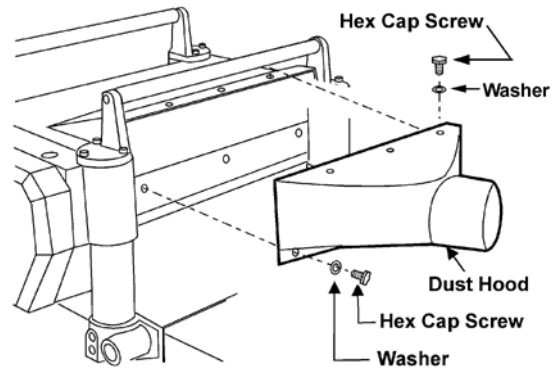


Figure 7

## Electrical Connections

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

A power plug is not provided with the JWP-208HH-BLK planer. You may either connect one or "hard-wire" the machine directly to your electrical panel provided there is a disconnect near the machine. Consult the wiring diagram on page 34 for further clarification of wiring setup.

This machine must be grounded. Grounding provides a path of least resistance to help divert current away from the operator in case of electrical malfunction.

Make sure the voltage of your power supply matches the specifications on the motor plate of the machine.

### Extension Cords

The use of extension cords is discouraged; try to position the machine within reach of the power source. If an extension cord becomes necessary, make sure the cord rating is suitable for the amperage listed on the machine's motor plate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.

The chart in Figure 8 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.

Rated amps	Length of cord		
	25 ft.	50 ft.	100 ft.
0-6	18	16	16
7-10	18	16	14
11-12	16	16	14
13-16	14	12	12
17-20	12	12	10
21-30	10	10	Not recommended

Figure 8

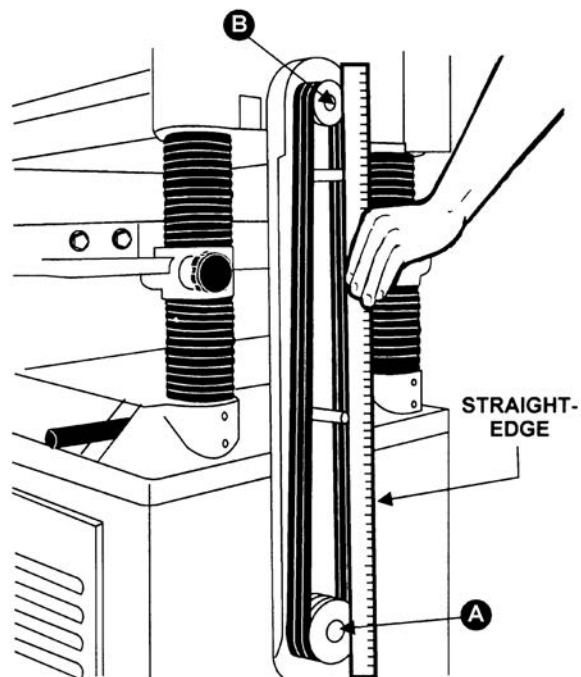


Figure 9

## Adjustments

**⚠CAUTION** This machine has an industrial-grade low-friction corrosion-resistant coating on the main table and the infeed and outfeed tables. While the coating is durable, it can be damaged if metal or other hard and/or sharp objects strike, gouge, or scratch the surface. Significant damage to the coating may affect its performance. Use care when making adjustments to this machine.

### Belt and Pulleys

1. Disconnect machine from power source.
2. Using a straight edge, align the motor pulley (A, Figure 9) and cutterhead pulley (B, Figure 9). The motor plate can be moved for alignment by loosening the set screws (C, Figure 10) in the motor plate.

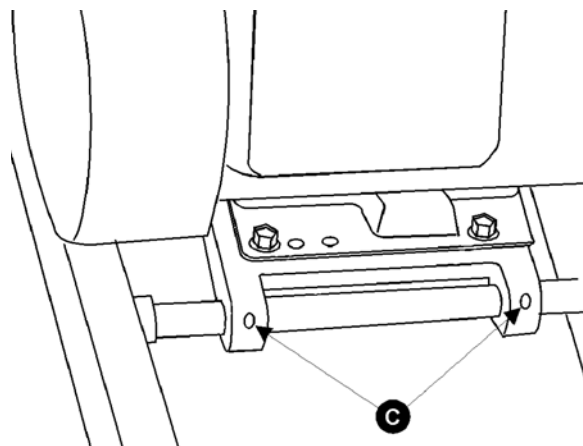


Figure 10

3. Check belt tension. Proper tension is obtained when there is approximately 1/4" deflection of the center span of the pulleys using light finger pressure (Figure 11).

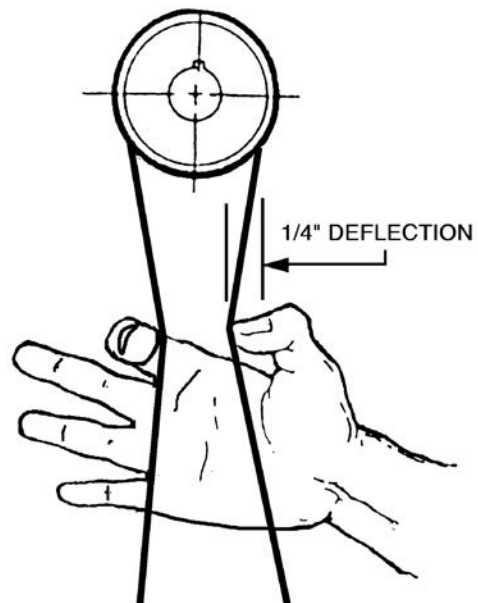


Figure 11

4. If adjustment of belt tension is necessary, loosen one pair of hex nuts (E & F, Figure 12) and turn the other pair to raise or lower the motor plate. Re-tighten nuts.

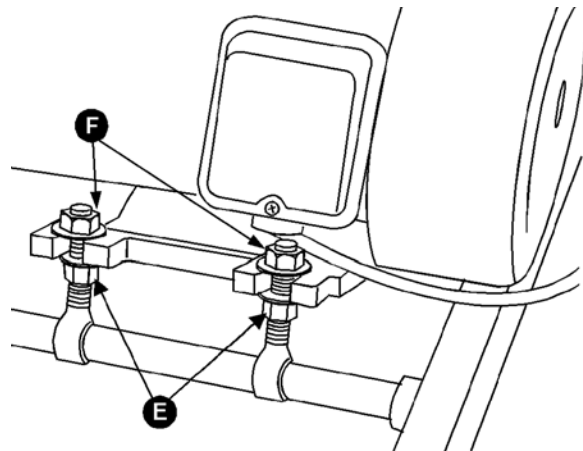


Figure 12

## Adjusting Depth of Cut

Refer to Figure 13

The cutting depth scale (A) is a combination inch/metric scale with a cutting range from 0 to 8" (204mm). The distance of upward or downward movement is controlled by the handwheel (B). One revolution of the handwheel is .059" (1.5mm). Before moving the table up or down, loosen the lock knobs (C). After obtaining the proper table position, tighten the lock knobs (C).

**⚠WARNING** Always tighten the lock nuts before operating the planer.

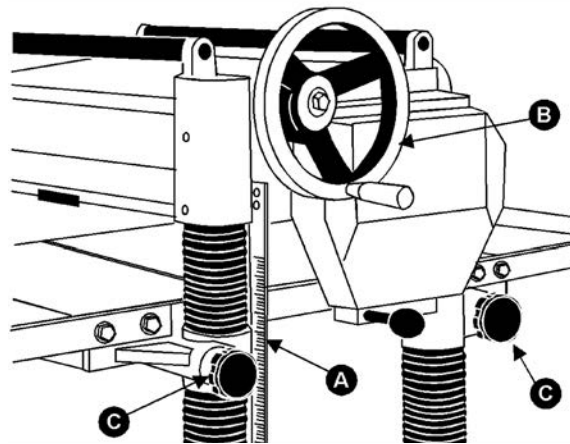


Figure 13

## Replacing or Rotating Knife Inserts

Disconnect machine from power source.

The knife inserts are four-sided. When dull, simply remove each insert, rotate it 90° for a fresh edge, and re-install it.

Use the provided star point screwdriver to remove the knife insert screw (see Figure 14). It is advisable to rotate all inserts at the same time to maintain consistent cutting. However, if one or more knife inserts develops a nick, rotate only those inserts that are affected.

Each knife insert has an etched reference mark so you can keep track of the rotations.

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

Before installing each screw, lightly coat the screw threads with machine oil and wipe off any excess.

Securely tighten each knife insert screw before operating the planer!

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

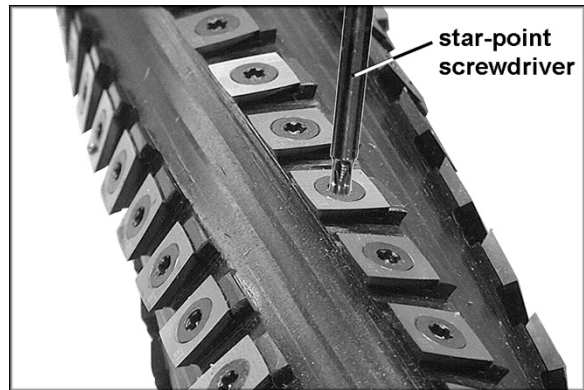


Figure 14

## Cutterhead Adjustment - Overview

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

To check the adjustments, you will need a straight edge, feeler gauge, and a homemade gauge block made of hardwood. This gauge block can be made by following the dimensions shown in Figure 15.

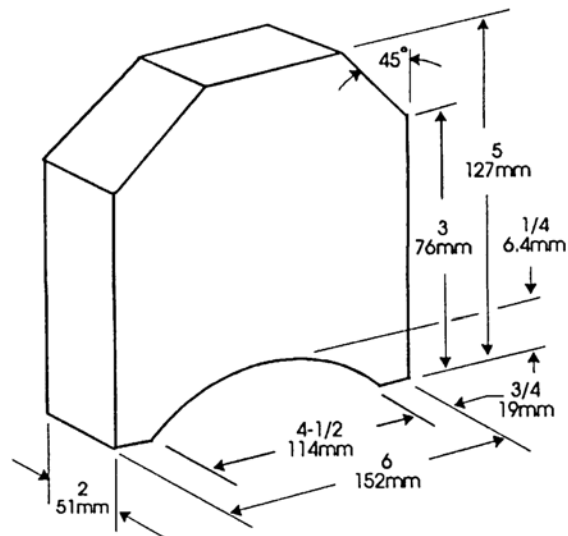


Figure 15

## Checking 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 16) on the work table directly under the edge of a knife insert as shown. Make slight contact with the knife insert edge by gently raising the table.
3. Move the gauge block to the opposite end of the work table. The distance from the work table to the edge of the knife insert should be the same on both ends of the cutterhead.

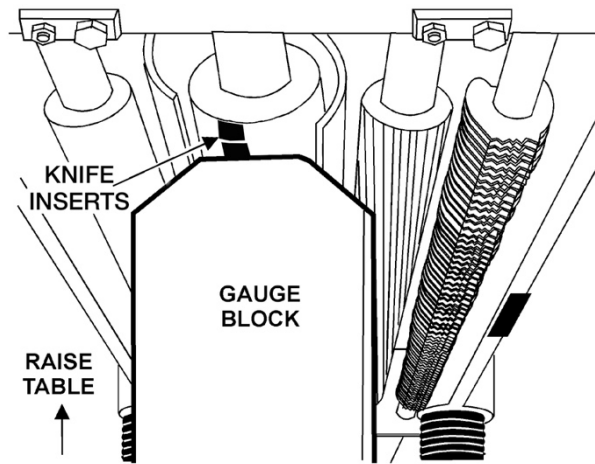


Figure 16

## Adjusting Work Table Parallel to Cutterhead

Refer to Figure 17

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

1. Disconnect the machine from power source.
2. Tilt planer on its side to expose underside of base, as shown in Figure 17.
3. Remove bolt (A) and loosen bolt (B) which will allow you to move the idler sprocket assembly (C) far enough to release tension on the chain.
4. Remove chain from the particular sprocket on corner of base that must be adjusted.

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 headcasting. Turning sprocket 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.

5. When adjustments are correct, replace chain around corner sprocket, slide sprocket (C) back to re-tension chain, tighten bolt (B) and replace and tighten bolt (A).

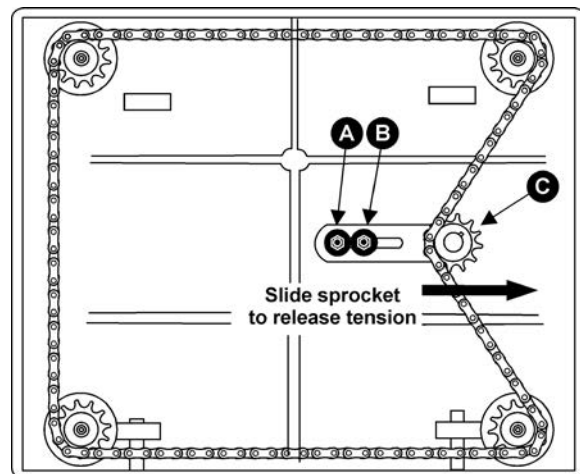


Figure 17

## Know the Transmitting Rollers of Your Planer

- A – Anti-Kickback Fingers
- B – Infeed Roller
- C – Chipbreaker
- D – Cutterhead
- E – Pressure Bar
- F – Outfeed Roller

The infeed roller (B, Figure 18) and outfeed roller (F, Figure 18) 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.

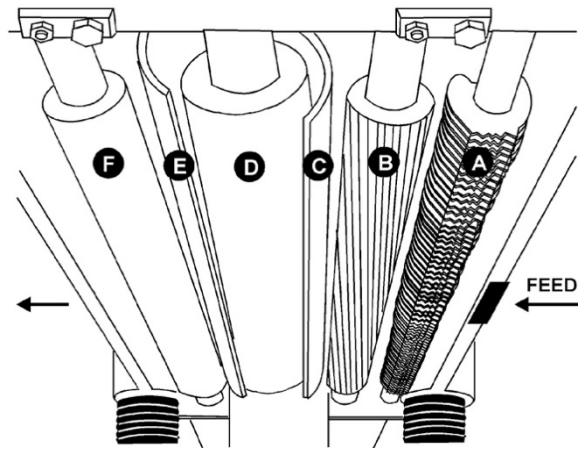


Figure 18

## Anti-Kickback Fingers

The anti-kickback fingers (A, Figure 18) help prevent kickback of stock. They operate by gravity and it is necessary to inspect them occasionally to make sure they are free of gum and pitch, so that they move independently and operate correctly.

## Adjusting Infeed & Outfeed Roller Spring Tension

To adjust the spring tension of the infeed and outfeed rollers, turn screws (G & H, Figure 19) with a hex wrench. Turn screws on opposite end of infeed/outfeed rollers in the same manner.

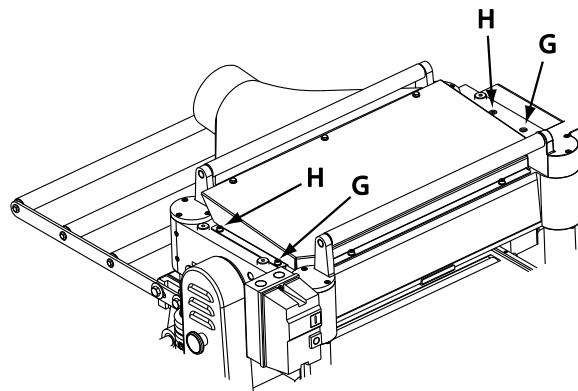


Figure 19

## CUTTING - ROLLER ASSEMBLY (SIDE VIEW)

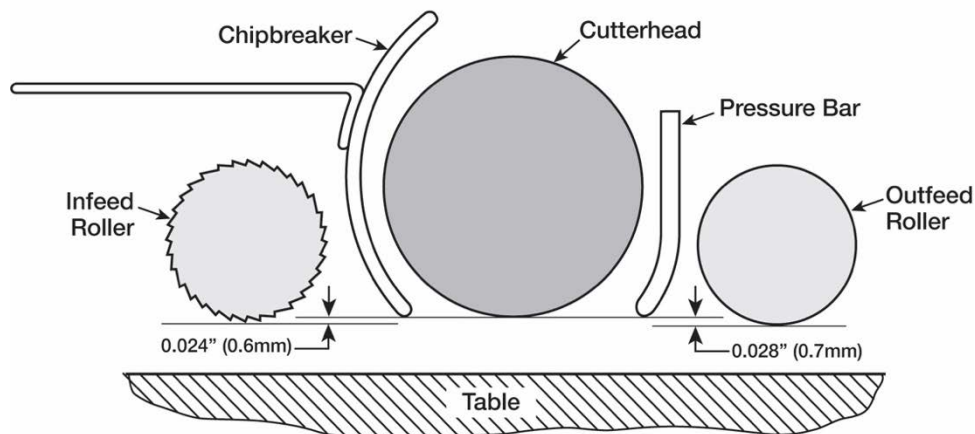


Figure 20

## Height of Infeed Roller, Chipbreaker, Pressure Bar & Outfeed Roller

The infeed roller, chipbreaker, pressure bar and outfeed roller are adjusted at the factory. The chipbreaker and pressure bar should be even with the cutting arc; the infeed roller should be set at

0.024" (0.6mm) below the cutting arc; and the outfeed roller should be set at 0.028" (0.7mm) below the cutting arc. See Figure 19.

If an adjustment to the infeed roller, chipbreaker, pressure bar or outfeed roller is necessary, use the following steps as an example of procedure.

NOTE: The process below is for checking and adjusting the outfeed roller. Follow the same steps below to check and adjust the infeed roller, but use the measurements shown in Figure 20.

To check and adjust the outfeed roller below the cutting arc, proceed as follows:

1. Disconnect machine from power source.
2. Make sure the knife inserts are adjusted properly as previously explained under "Replacing or Rotating Knife Inserts."
3. Place the gauge block (J, Figure 21) on the table directly underneath the cutterhead (D, Figure 21). Using a 0.028" (0.7mm) feeler gauge (K, Figure 21) placed on top of the gauge block, raise the working table until the knife inserts just touch the feeler gauge when the knife inserts are at their lowest point. Do not move the working table any further until the outfeed roller is adjusted.

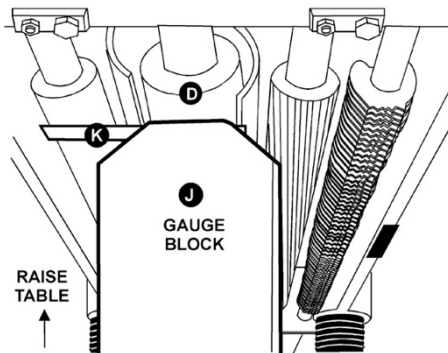


Figure 21

4. Remove the feeler gauge and move the gauge block (J, Figure 22) under one end of the outfeed roller (F, Figure 22). 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 (L, Figure 22) and turn screw (M, Figure 22) until the outfeed roller just touches the gauge block. Then tighten lock nut (L, Figure 22).
5. Check and adjust opposite end of the outfeed roller in the same manner.

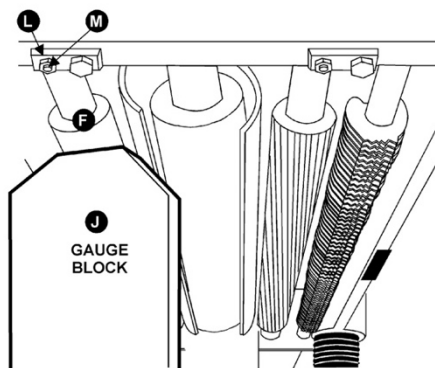


Figure 22

## Feed Speed Control

Your machine is equipped with a spiral, serrated infeed roller and a solid 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 (A, Figure 23) and sprockets (B, Figure 23) which are powered directly from the cutterhead through the oil bath gear box (C, Figure 23).

The gear box has two feed speeds. These are set by pulling out or pushing in the shift lever (D, Figure 23) while the machine is running. The feed speed range is shown in Figure 29.

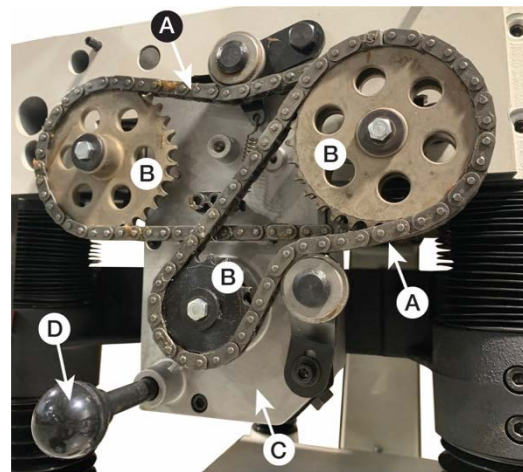


Figure 23

## Using Low Speed Gear Kit (optional accessory) for Lowest Feed Speed

The Low Speed Gear Kit (708583) is an optional accessory you can order from JET Tools service department.

This kit provides the lowest feed speeds for your planer (16.2 fpm & 20.7 fpm) by allowing you to replace the lower gear shaft sprocket and chain. To change the sprocket and chain on your machine, proceed as follows:

1. Disconnect machine from power source.
2. Remove the handwheel by removing hex nut and washer and sliding handwheel off of worm gear shaft (see Figure 24). Make sure the key in the worm gear shaft is not lost.





Figure 24

3. There are two safety plates attached to the rear of the gear box cover. These plates are on each side of the gear box cover and can't be seen when the cover is installed. The safety plates are held in place by mounting screws which are accessed from the front of the gear box cover (see Figure 25) Remove the top mounting screws on each safety plate (see Figure 26). Reach behind the gear box cover and swing both safety plates down (see Figure 26). You may need to slightly loosen the lower mounting screws to allow the safety plates to pivot. Also, when pivoting the right-side safety plate, it may contact the table locking knob. This problem will be taken care of in step 4.

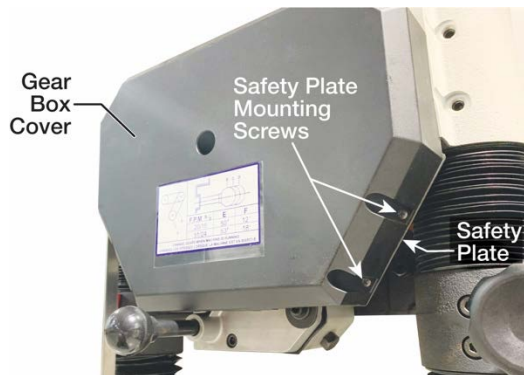


Figure 25



Figure 26

4. Using a 6mm hex wrench, remove gear box cover mounting screw located in the center of cover (see Figure 27). With this screw removed, adjust the cover to allow the right-side safety plate to swing down freely. Remove the cover.

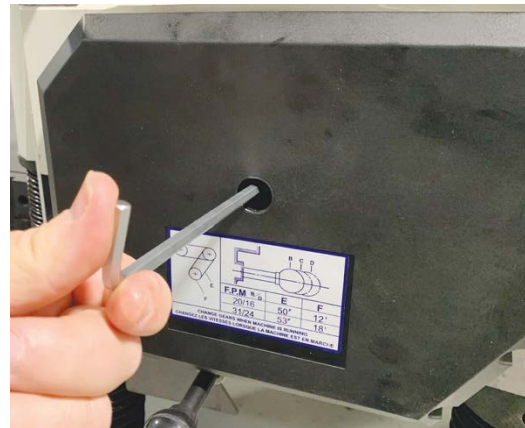


Figure 27

5. Loosen the lower idler mounting bolt (A, Figure 28) and rotate lower idler (B, Figure 28) away from the outer chain (C, Figure 28).
6. Remove the outer chain from the upper right sprocket (D, Figure 28) and lower gear shaft sprocket (E, Figure 28).
7. Remove the hex cap screw and washer (F, Figure 28) from the lower gear shaft sprocket (E, Figure 28).

8. Remove the lower gear shaft sprocket and replace with smaller sprocket from kit. Reattach the washer and hex cap screw to secure the new lower gear shaft sprocket.
9. Install the shorter chain from the kit to the lower gear shaft sprocket and upper right sprocket.
10. Rotate lower idler (B, Figure 28) to contact the chain as shown in Figure 28. Tighten the lower idler mounting bolt (A, Figure 28).
11. Replace gear box cover and handwheel by reversing steps 1 – 4.

## Return Rollers

The two return rollers on the top of 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.

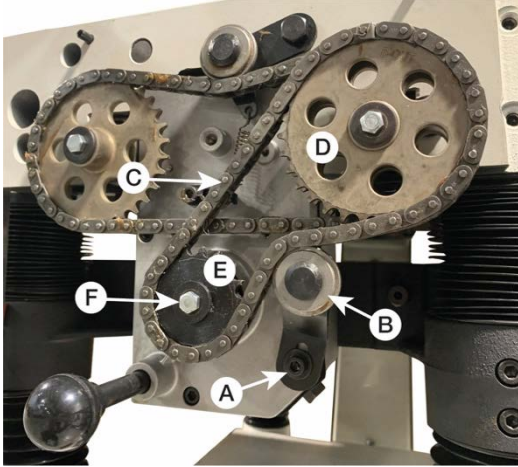


Figure 28

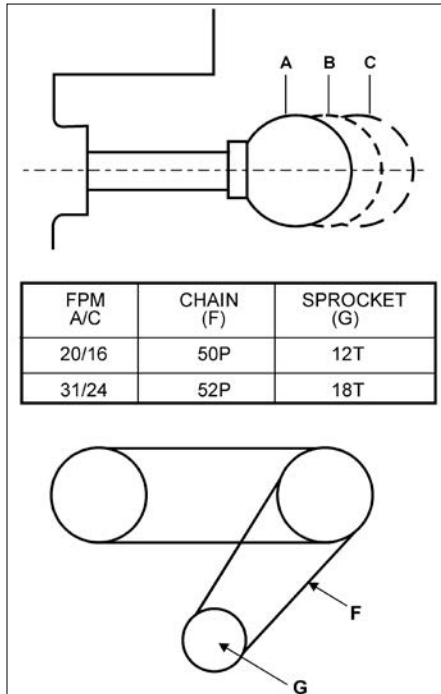


Figure 29

## Maintenance

**⚠WARNING** Disconnect machine from power source before doing any maintenance. Failure to comply may cause serious injury.

**⚠CAUTION** This machine has an industrial-grade low-friction corrosion-resistant coating on the main table and the infeed and outfeed tables. While the coating is durable, it can be damaged if metal or other hard and/or sharp objects strike, gouge, or scratch the surface. Significant damage to the coating may affect its performance. Use care when performing maintenance on this machine.

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 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 planing.

Close-fitting parts should be cleaned with a cloth or brush and non-flammable solvent.

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 required.

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

## Lubrication

The bearings on the cutterhead are factory lubricated and sealed for life – no lubrication required.

The gear box oil level must be checked and added to (if needed) every 30 hours of operation. Replace gear box oil every 2,500 hours of operation. Use a high quality 70-90 weight gear oil.

To replace the gear box oil, proceed as follows:

1. Disconnect machine from power source.
2. Remove the handwheel by removing hex nut and washer and sliding handwheel off of worm gear shaft (see Figure 30). Make sure the key in the worm gear shaft is not lost.



Figure 30

3. There are two safety plates attached to the rear of the gear box cover. These plates are on each side of the gear box cover and can't be seen when the cover is installed. The safety plates are held in place by mounting screws which are accessed from the front of the gear box cover (see Figure 31). Remove the top mounting screws on each safety plate (see Figure 32). Reach behind the gear box cover and swing both safety plates down (see Figure 32). You may need to slightly loosen the lower mounting screws to allow the safety plates to pivot. Also, when pivoting the right-side safety plate, it may contact the table locking knob. This problem will be taken care of in step 4.

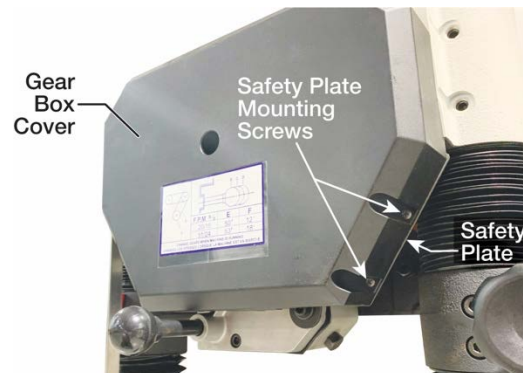


Figure 31



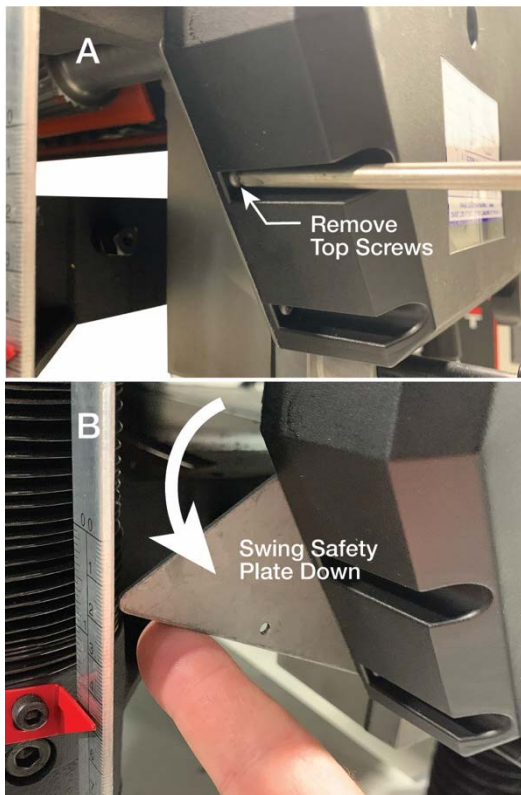


Figure 32

4. Using a 6mm hex wrench, remove gear box cover mounting screw located in the center of cover (see Figure 33). With this screw removed, adjust the cover to allow the right-side safety plate to swing down freely. Remove the cover.



Figure 33

5. Remove the oil fill level plug (Figure 34).
6. Remove the oil drain plug (Figure 34) and allow all gear box oil to drain. Properly dispose of used gear box oil.

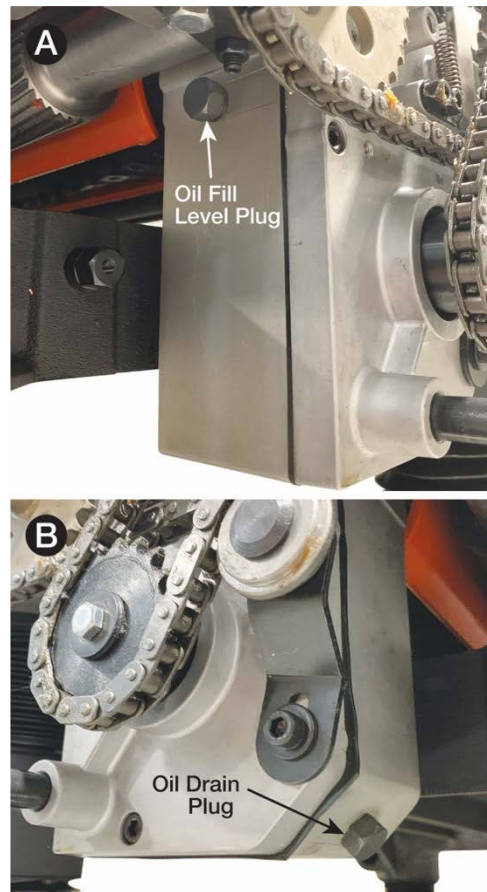


Figure 34

7. Replace and tighten oil drain plug in gear box. Remove oil fill socket head cap screw from head casting (Figure 35).
8. Add high quality 70-90 weight gear oil. Fill and carefully watch the open oil fill level hole (Figure 34). The gear box is full when gear oil starts to seep from open oil fill level hole. Replace and tighten oil fill level plug.
9. Replace gear box cover and handwheel by reversing steps 1 – 4.



Figure 35

[The item numbers on this chart are referenced with the accompanying illustrations.]

No.	Position	Interval	Suitable Types of Lubricant	Fig. No.
1	Drive Chain	Frequently	Grease	23
2	Gear Box	When operated more than 2,500 hours	70 to 90 weight gear oil	34,35
3	Return Rollers	Frequently	SAE-30	37
4	Worm Gear	Frequently	Grease	38
5	Lead Screw	Frequently	Grease	38
6	Column	Frequently	Clean and SAE-30	38
7	Table Chain	Frequently	Grease	39
8	Feed Rollers	Frequently	SAE-30	40

Figure 36

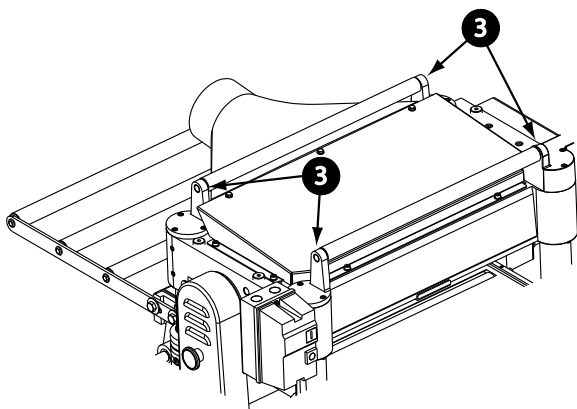


Figure 37

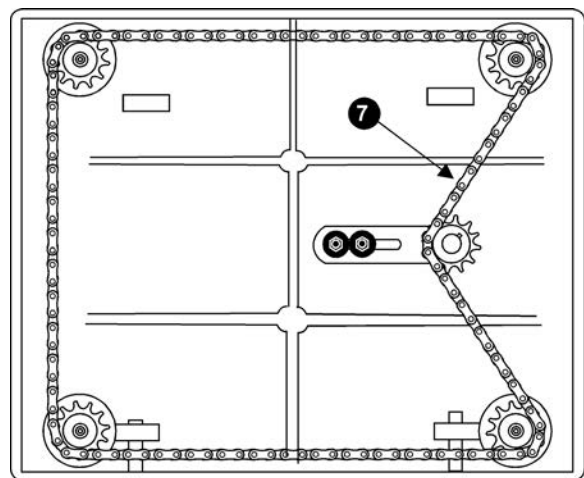


Figure 39

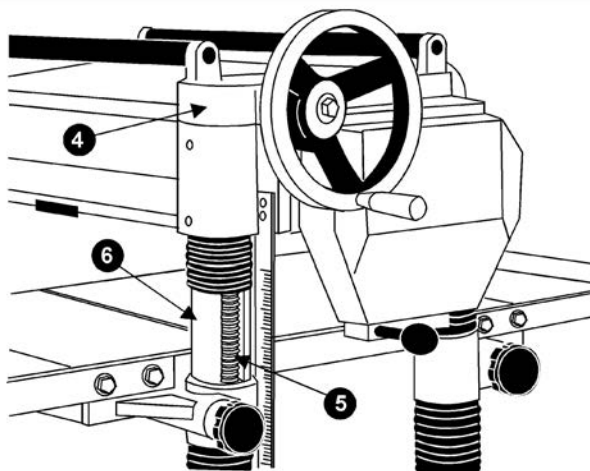


Figure 38

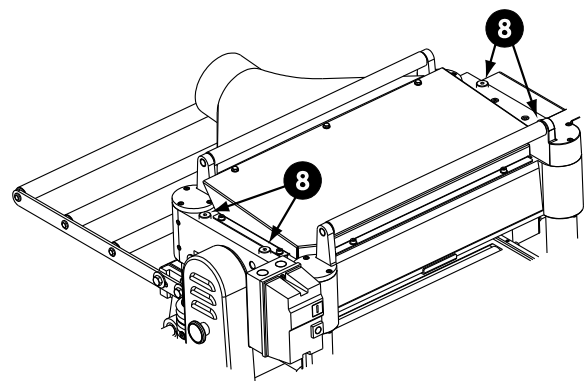


Figure 40

# Troubleshooting

## Operating Problems

Problem	Possible Cause	Solution
Snipe.  (Snipe cannot be eliminated but can be minimized so as to become negligible.)	Inadequate support of long boards.  Uneven feed roller pressure front to back.  Dull Knives.  Lumber not butted properly.	Support long boards with extension rollers.  Adjust feed roller tension.  Rotate or replace knife inserts.  Butt end to end each piece of stock as they pass through.
Fuzzy Grain	Planing wood with a high moisture content.  Dull knives.	Remove high moisture content from wood by drying.  Rotate or replace knife inserts.
Torn Grain	Too heavy a cut.  Knives cutting against grain.  Dull knives.	Adjust proper depth of cut.  Cut along the grain.  Rotate or replace knife inserts.
Rough/Raised Grain	Dull knives.  Too heavy a cut.  Moisture content too high.	Rotate or replace knife inserts.  Adjust proper depth.  Remove high moisture content from wood by drying.
Rounded, glossy surface	Dull knives.  Feed speed too slow.  Cutting depth too shallow.	Rotate or replace knife inserts.  Increase speed.  Increase depth.
Poor feeding of lumber	Inadequate feed roller pressure.  Planer bed rough or dry.	Adjust feed roller tension. If proper tension cannot be achieved, replace feed rollers.  Clean pitch and residue.

## Mechanical and Electrical Problems

Problem	Possible Cause	Solution
Uneven depth of cut side to side.	Cutterhead not level with bed.	Level bed.
Board thickness does not match depth of cut scale.	Depth of cut scale incorrect.	Adjust depth of cut scale.
Chain jumping.	Inadequate tension.  Sprockets worn.	Adjust chain tension.  Replace sprockets.

Problem	Possible Cause	Solution
<p>Machine will not start/restart or Repeatedly trips circuit breaker or blows fuses.</p>	<p>No incoming power.</p> <p>Overload automatic reset has not reset.</p> <p>Planer frequently trips.</p> <p>Building circuit breaker trips of fuse blows.</p> <p>Loose electrical connections.</p> <p>Motor starter failure.</p> <p>ON/OFF switch failure or motor failure.</p>	<p>Verify unit is connected to power.</p> <p>When planer overloads on the circuit breaker built into the ON/OFF switch, it takes time for the machine to cool down before restart. Press the OFF button and allow unit to adequately cool before attempting restart. If problem persists, contact JET technical support.</p> <p>One cause of overloading trips is too deep a cut. If too deep a cut is not the problem, check the sharpness of the blade inserts. If blades are sharp, check the amp setting on the overload relays. Match the full load amps on the motor as noted on the motor plate. If amp setting is correct, check for low voltage supplying the machine. If voltage is correct, there is probably a loose electrical lead. Check amp setting on motor starter.</p> <p>Verify that planer is on a circuit of correct size. If circuit size is correct, check the wire size of your extension cord (if used). Use a minimum 10 AWG or larger gauge extension cord. there is probably a loose electrical lead. Check amp setting on motor starter.</p> <p>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.</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 change-out.</p> <p>If you have access to a voltmeter, you can separate a ON/OFF switch failure from a motor failure by first, verifying incoming voltage at 230V +/- 10% and second, checking the voltage between starter and motor at 230 +/- 10%.</p> <p>If incoming voltage is incorrect, you have a power supply problem.</p> <p>If voltage between starter and motor is correct, you have a motor problem.</p> <p>If electrical 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>

Problem	Possible Cause	Solution
	Miswiring of the unit.	Double check to confirm all electrical connections are correct and tight. Refer to wiring diagram on page 34 to make any needed corrections.

## Optional Accessories

Stock No	Description
708119 .....	Mobile Base
708520 .....	Digital Read-out Retrofit Kit
708583 .....	Low Speed Gear Kit
1791212 .....	Knife Inserts (set of 10)

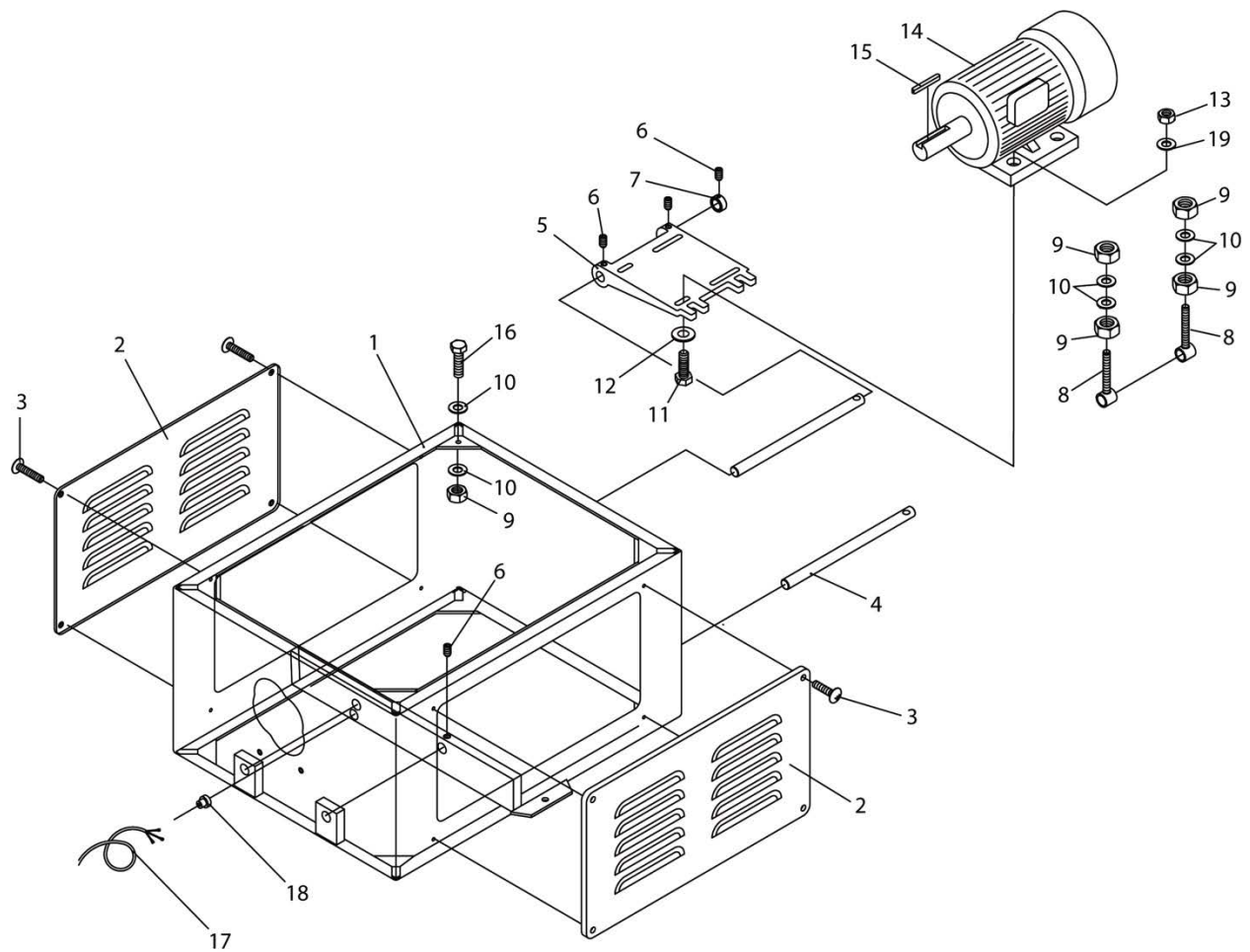
## Ordering Replacement Parts

To order parts or reach our service department, call 1-800-274-6848, Monday through Friday (see our website for business hours, [www.jettools.com](http://www.jettools.com)). Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

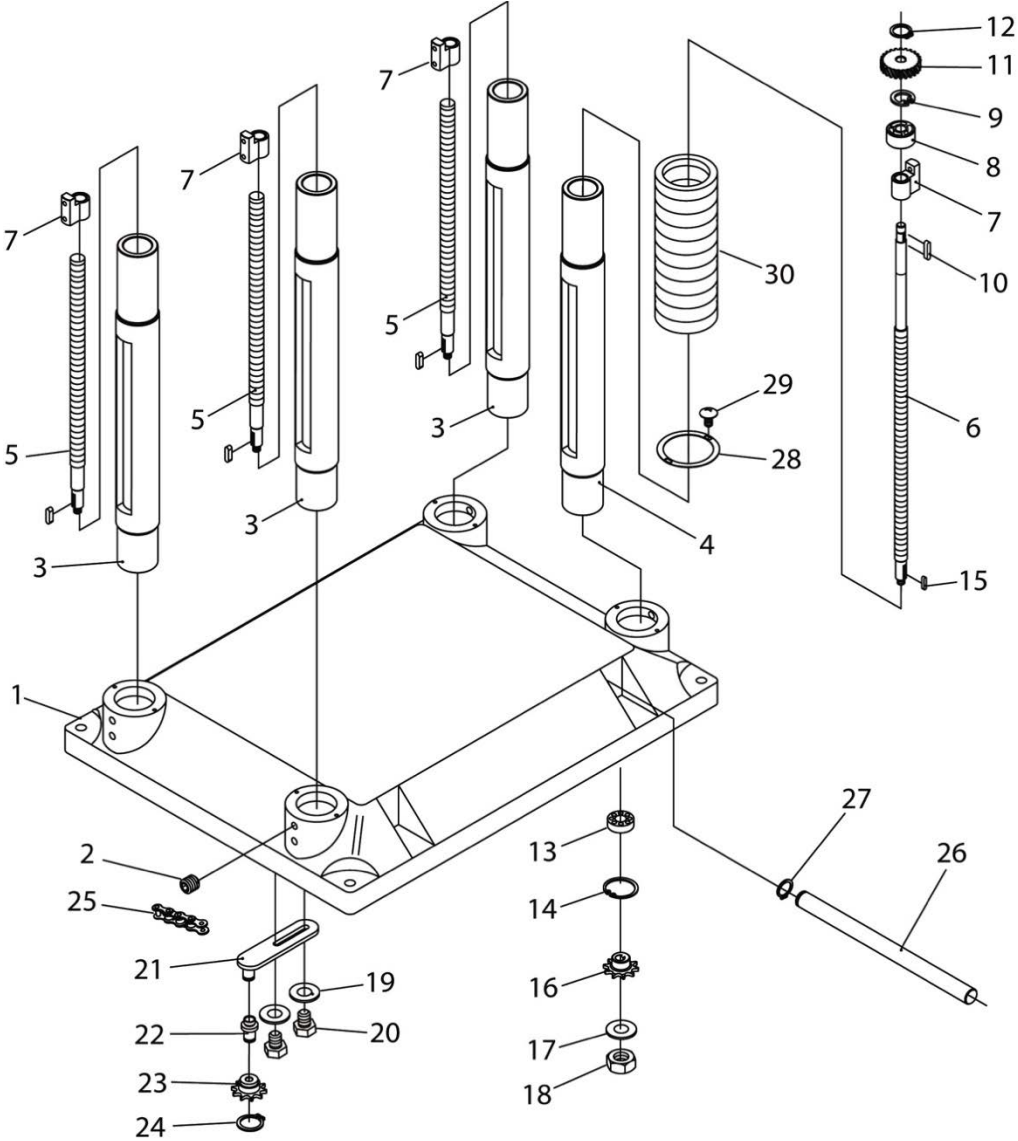


# Stand and Motor – Parts and Exploded View

Index	Part No.	Description	Size	Qty
1	JWP208-401	Stand		1
2	JWP208-402	Cover		2
3	TS-2286201	Flat Head Machine Screw	M6 x 20	8
4	6292796	Bar		2
5	JWP208-405	Motor Mount		1
6	TS-1524011	Set Screw	M8 x 8	4
7	JWP208-407	Collar		1
8	JWP208-408	Adjust Bolt		2
9	TS-1540081	Nut	M12	8
10	TS-0680061	Washer	1/2	4
11	TS-1490041	Hex Cap Screw	M8 x 35	4
12	TS-0680031	Washer	5/16	4
13	TS-1540061	Nut	M8	4
14	JWP208HHJC-414	Motor	5HP, 1Ph, 230V	1
15	JWP208-415	Key		1
16	TS-1492051	Hex Cap Screw	M12 x 50	4
17	JWP208HH-417	Power Cord		1
18	JWP208HH-418A	Strain Relief		1
19	TS-0680031	Washer	5/16	4
	JET-88T	JET Logo (not shown)	8" x 8"	1
	JWP208-420	JET Stripe (not shown)	90mm x 2495mm ... per ft.	



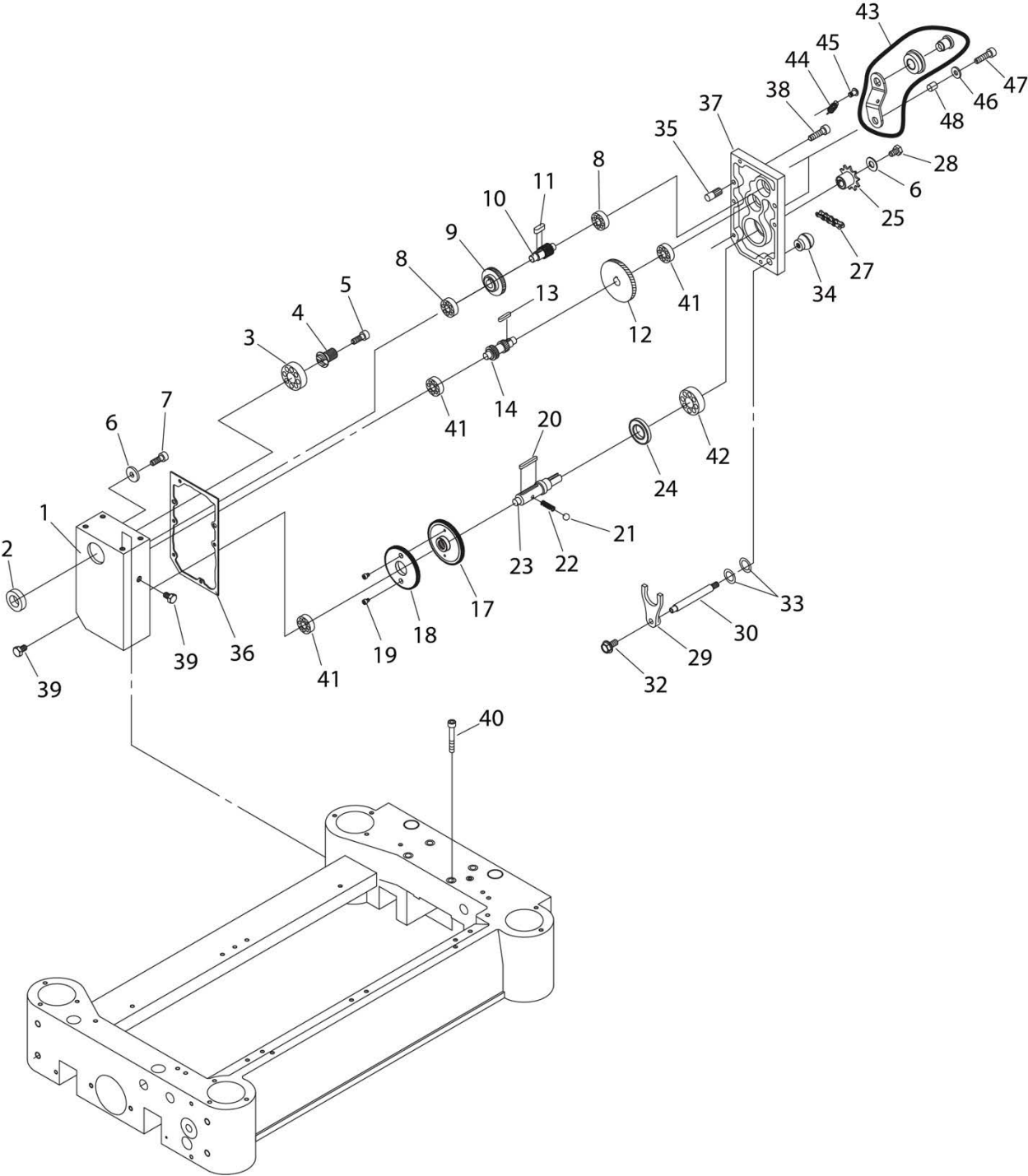
# Base and Column – Exploded View



## Base and Column – Parts List

Index	Part No.	Description	Size	Qty
1	JWP208-301	Base		1
2	TS-1525021	Set Screw	M10 x 12	8
3	JWP208-303	Column		3
4	JWP208-304	Column		1
5	JWP208-305	Lead Screw		3
6	JWP208-306	Lead Screw		1
7	JWP208-307	Nut		4
8	JWP208-308	Bushing		1
9	JWP208-309	Retaining Ring		1
10	JWP208-310	Key	4 x 4 x 10	1
11	JWP208-311	Gear	24T	1
12	JWP208-312	Retaining Ring		1
13	BB-6202ZZ	Ball Bearing	6202ZZ	4
14	JWP208-314	Retaining Ring		4
15	JWP208-315	Key	5 x 5 x 16	4
16	JWP208-316	Sprocket	10T	4
17	JWP208-317	Washer	3/8	4
18	JWP208-318	Nut	M10	4
19	JWP208-319	Washer		2
20	TS-1490041	Hex Cap Screw	M8 x 25	2
21	6292749	Idler Bracket		1
22	JWP208-322	Shaft		1
23	6292751	Sprocket	10T	1
24	JWP208-324	Retaining Ring	STW-15	1
25	JWP208-325	Chain		1
26	JWP208-326	Carry Handle		4
27	JWP208-327	Retaining Ring	ETW-19	4
28	JWP208-328	Pipe Band		16
29	TS-1533032	Pan Head Screw	M5 x 10	32
30	JWP208-330	Expansion Band		8
	JWP208HHJC-ID	ID Label (not shown)		1

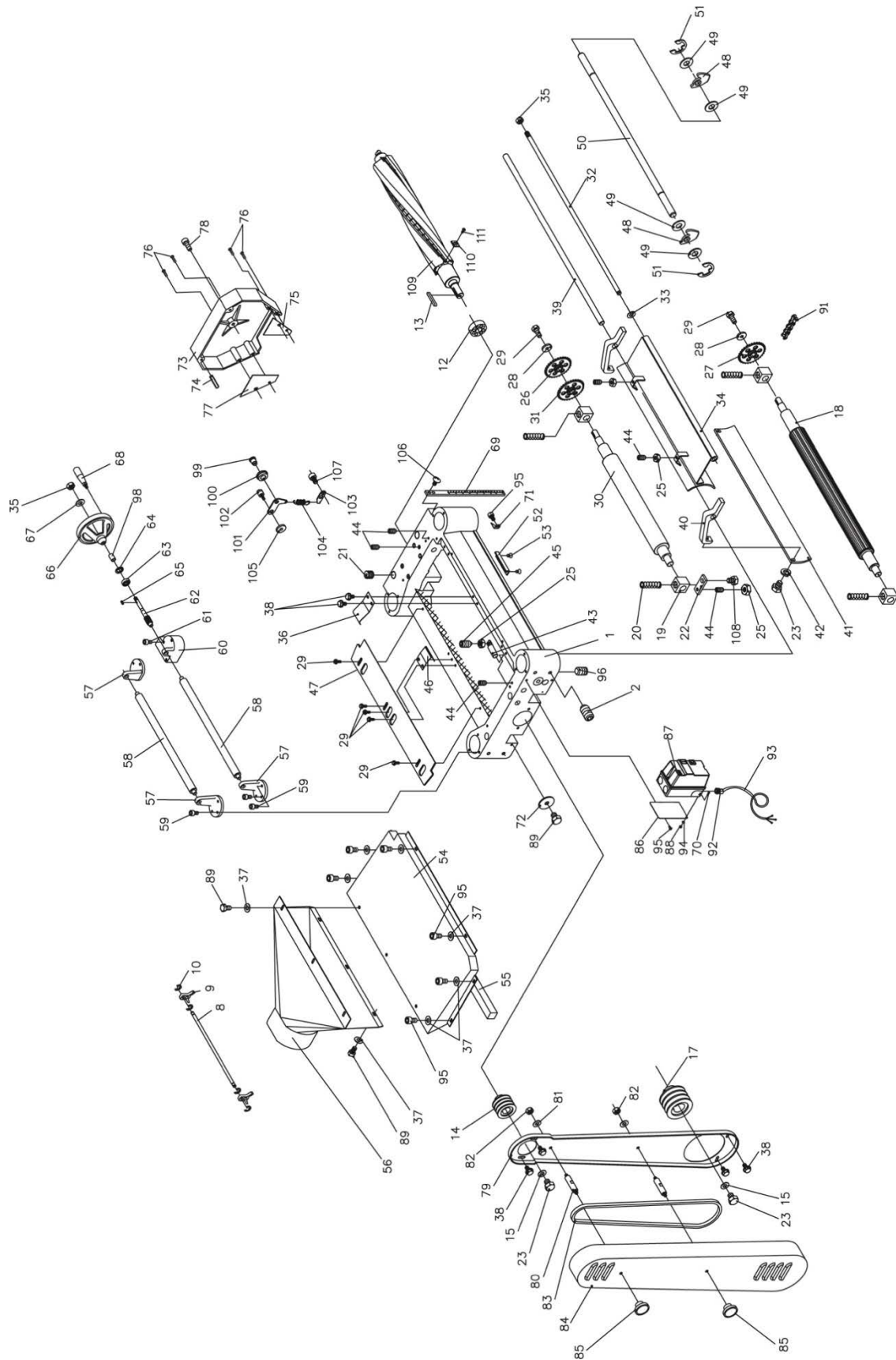
# Gearbox – Exploded View



## Gearbox – Parts List

Index	Part No.	Description	Size	Qty
1	JWP15B-416	Gear Box		1
2	OS-28408	Oil Seal		1
3	BB-6204ZZ	Ball Bearing	6204ZZ	1
4	6292762	Gear	16T	1
5	TS-1503061	Socket Head Cap Screw	M6 x 25	1
6	TS-1550041	Washer	M6	2
7	TS-1503041	Socket Head Cap Screw	M6 x 16	1
8	BB-6201	Ball Bearing	6201	2
9	6292766	Gear	47T	1
10	6292767	Shaft	18T	1
11	JWP208-511	Key	5 x 5 x 12	1
12	6292769	Gear	71T	1
13	JWP208-513	Key	5 x 5 x 10	1
14	JWP15H-314	Shaft	18T/22T	1
17	JWP208-517	Gear	96T	1
18	JWP208-518	Gear	92T	1
19	TS-1503021	Socket Head Cap Screw	M6 x 10	3
20	JWP208-520	Key	6 x 6 x 40	1
21	JWP208-521	Ball		1
22	6292776	Spring		1
23	6292777	Shaft		1
24	OS-25476	Oil Seal		1
25	6292791	Sprocket	18T	1
	6292779	Sprocket	12T	1
27	6292792	Chain	.06BX52 (for 6292791)	1
	6292780	Chain	.06BX50 (for 6292779)	1
28	TS-1482031	Hex Cap Screw	M6 x 16	1
29	6292781	Clutch		1
30	6292782	Handle		1
32	JWP208-038A	Hex Washer Head Screw	M6 x 12	1
33	JWP208-533	Oil Ring		1
34	6292784	Knob		1
35	6292785	Pin		2
36	6292786	Packing		1
37	JWP208-537A	Cover		1
38	TS-1503061	Socket Head Cap Screw	M6 x 25	4
39	JWP208-539	Oil Plug		1
40	TS-1504101	Socket Head Cap Screw	M8 x 50	4
41	BB-6201Z	Ball Bearing	6201Z	1
42	BB-6204Z	Ball Bearing	6204Z	1
43	JWP208HHBLK-543	Chain Tensioner Assembly		1
44	PA-C61	Spring		1
45	TS-2246102	Socket Head Button Screw	M6 x 10	1
46	TS1550041	Flat Washer	M6	1
47	TS-1503071	Socket Head Cap Screw	M6 x 30	1
48	JWP208HHBLK-548	Bushing		1
	JWP208-GBA	Gear Box Complete (not shown)		1
	JWP208-551	Open End Wrench (not shown)		1
	JWP208-552	Hex Wrench Set (not shown)		1

# Head Assembly – Exploded View



## Head Assembly – Parts List

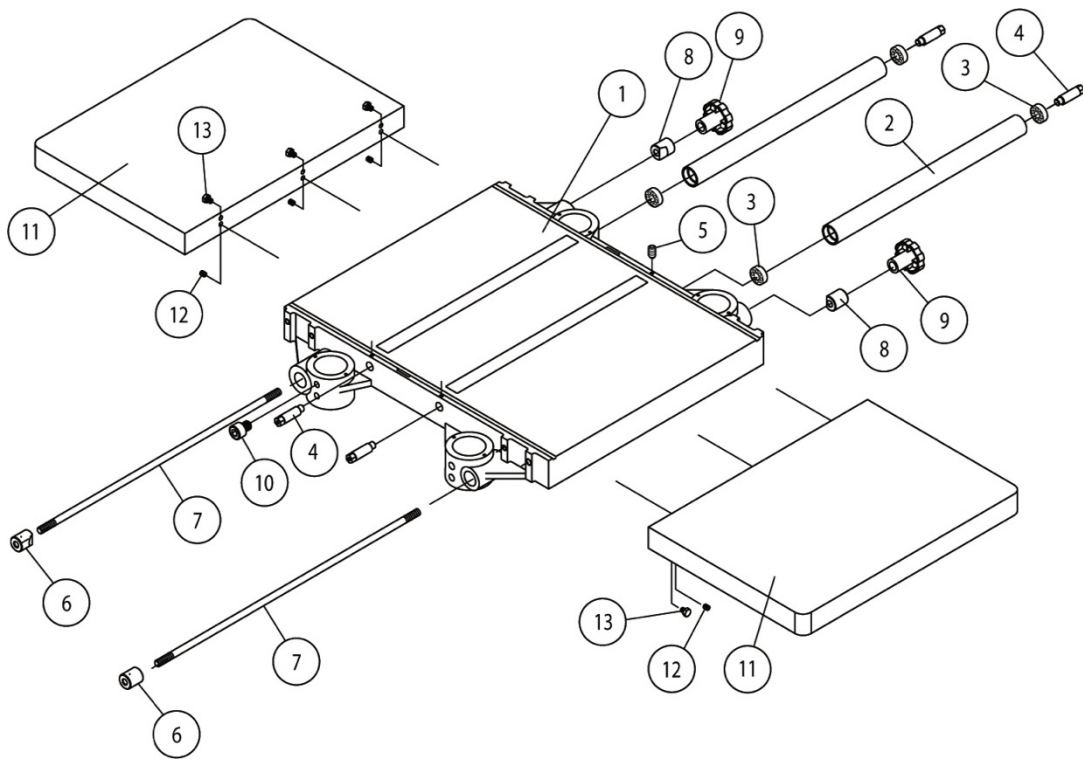
Index	Part No.	Description	Size	Qty
1	JWP208-001	Head Casting		1
2	TS-1525021	Set Screw	M10 x 12	8
8	JWP208-008	Knife Gauge Bar		1
9	JWP208-009	Knife Gauge		2
10	JWP208-010	Washer	3/8	2
11	JWP208-011	Nut	M10	2
12	BB-6206ZZ	Ball Bearing	6206ZZ	1
13	JWP208-013	Key	8 x 8 x 36	1
14	6292630	Pulley		1
15	6292631	Washer		2
16	TS-1523071	Set Screw	M6 x 25	2
17	JWP208-017	Motor Pulley		1
18	JWP208-018	Infeed Roller		1
19	JWP208-019	Bushing		4
20	JWP208-020	Spring		4
21	JWP208-021	Screw	M22 x 20	4
22	JWP208-022	Plate		4
23	TS-1490031	Hex Cap Screw	M8 x 20	8
25	TS-1540041	Hex Nut	M6	8
26	JWP208HHJC-114	Sprocket		1
27	6292643A	Sprocket		1
28	TS-1550041	Washer	M6	2
29	JWP208-029A	Hex Washer Head Screw	M6 x 16	5
30	JWP208-030	Outfeed Roller		1
31	6292647A	Sprocket		1
32	JWP208-032	Locking Bolt		1
33	JWP208-033	Retaining Ring		1
34	JWP208-034	Chip Breaker		1
35	TS-1540081	Nut	M12	2
36	JWP208-036	Plate Springs		3
37	JWP208-037	Washer	1/4	12
38	JWP208-038A	Hex Washer Head Screw	M6 x 12	14
39	JWP208-039	Shaft		1
40	JWP208-040	Bracket		2
41	JWP208-041	Pressure Plate		1
42	TS-2361081	Lock Washer	M8	2
43	JWP208-043	Shaft		1
44	TS-1523051	Set Screw	M6 x 16	9
45	TS-1523061	Set Screw	M6 x 20	2
46	JWP208-046	Plate Spring		3
47	JWP208-047	Chip Deflector Plate		1
48	6292664	Anti-Kickback Finger		87
49	6292665	Collar		88
50	JWP208-050	Shaft		1
51	JWP208-051	Retaining Ring		2
52	6292668	Cut Limit Plate		1
53	JWP208-053A	Flat Head Machine Screw	M5 x 8	2
54	JWP208-054	Upper Cover		1
55	JWP208-055	Gasket		1
56	JWP208-056	Collector Tube		1
57	JWP208-057	Roller Stand		3
58	JWP208-058	Roller		3
59	TS-1503041	Socket Head Cap Screw	M6 x 16	9
60	JWP208-060	Worm Gear Box		1
61	TS-1503111	Socket Head Cap Screw	M6 x 50	3
62	JWP208-062	Worm Gear Shaft		1
63	BB-6201Z	Ball Bearing		1
64	JWP208-064	Retaining Ring	6201Z	1
65	JWP208-065	Key	4 x 4 x 10	1

66	JWP208-066	Hand Wheel		1
67	JWP208-067	Washer	1/2	1
68	6292684	Handle		1
69	JWP208-069	Scale		1
70	JWP208-070	Machine Screw	M5 x 10	2
71	JWP208-071	Pointer		1
72	6292814	Special Washer	M6	3
73	JWP208-073A	Cover		1
74	JWP208-074	Spring Pin	6 x 20	2
75	JWP208-075A	Safety Plate		1
76	TS-2284082	Machine Screw	M4 x 8	4
77	JWP208-077A	Safety Latch		1
78	TS-1504021	Socket Head Cap Screw	M8 x 12	1
79	JWP208-079	Pulley Guard		1
80	6292696	Bolt		2
81	TS-0680041	Washer	5/16	2
82	TS-0561021	Nut	5/16-18	2
83	JWP208HHBLK-083	V-Belt		3
84	JWP208-084	Pulley Cover		1
85	6292710	Knob	5/16	2
86	JWP208-086A	Switch Mounting Plate		1
87	JWP208HH-087G	Magnetic Switch	5HP, 1Ph, 230V	1
	209-5016BC	Contactora	5HP, 1Ph, 230V	1
	209-5016COA	Overload	5HP, 1Ph, 230V	1
88	TS-1540031	Nut	M5	2
89	TS-1482021	Hex Cap Screw	M6 x 12	10
91	JWP208-091	Chain		1
92	JWP208HH-092A	Relief Bushing		2
93	JWP208-093	Power Cord		1
94	JWP208-094	Tooth Washer		4
95	TS-1503021	Socket Head Cap Screw	M6 x 10	12
96	TS-1524011	Set Screw	M8 x 8	1
98	JWP208-098	Collar		1
99	6292714	Shaft		1
100	PA-C59	Idler Pulley		1
101	PA-C58	Bracket		1
	JWP208-106	Chain Tensioning Assy		1
102	PA-C59	Shaft		1
103	PA-C60	Hanger		1
104	PA-C61	Spring		1
105	PA-C62	Collar		1
106	TS-1534042	Pan Head Screw	M6X12	1
107	TS-1503021	Socket Head Cap Screw	M6x10	2
108	JWP208-108	Hex Head Screw	M8x18	4
	PG-M02	JET Plaque		1
	6012192	Warning Label (not shown)		1
	6292819	Lubrication Label (not shown)		1
	6292820	Guard Label (not shown)		1
	1791224A	Helical Cutterhead Assembly (index #109 thru #111)**		1
109	JWP208HH-109A	Helical Cutterhead		1
110	1791212	Knife Insert (sold in set of 10)		68 total
111	JWP208HH-111	Knife Insert Screw	#10-32 x 1/2"	68
112	JJ6HH-113A	Star Point Screwdriver (not shown)		2
113	JWP208-113	Model Name (not shown)	JP20	1



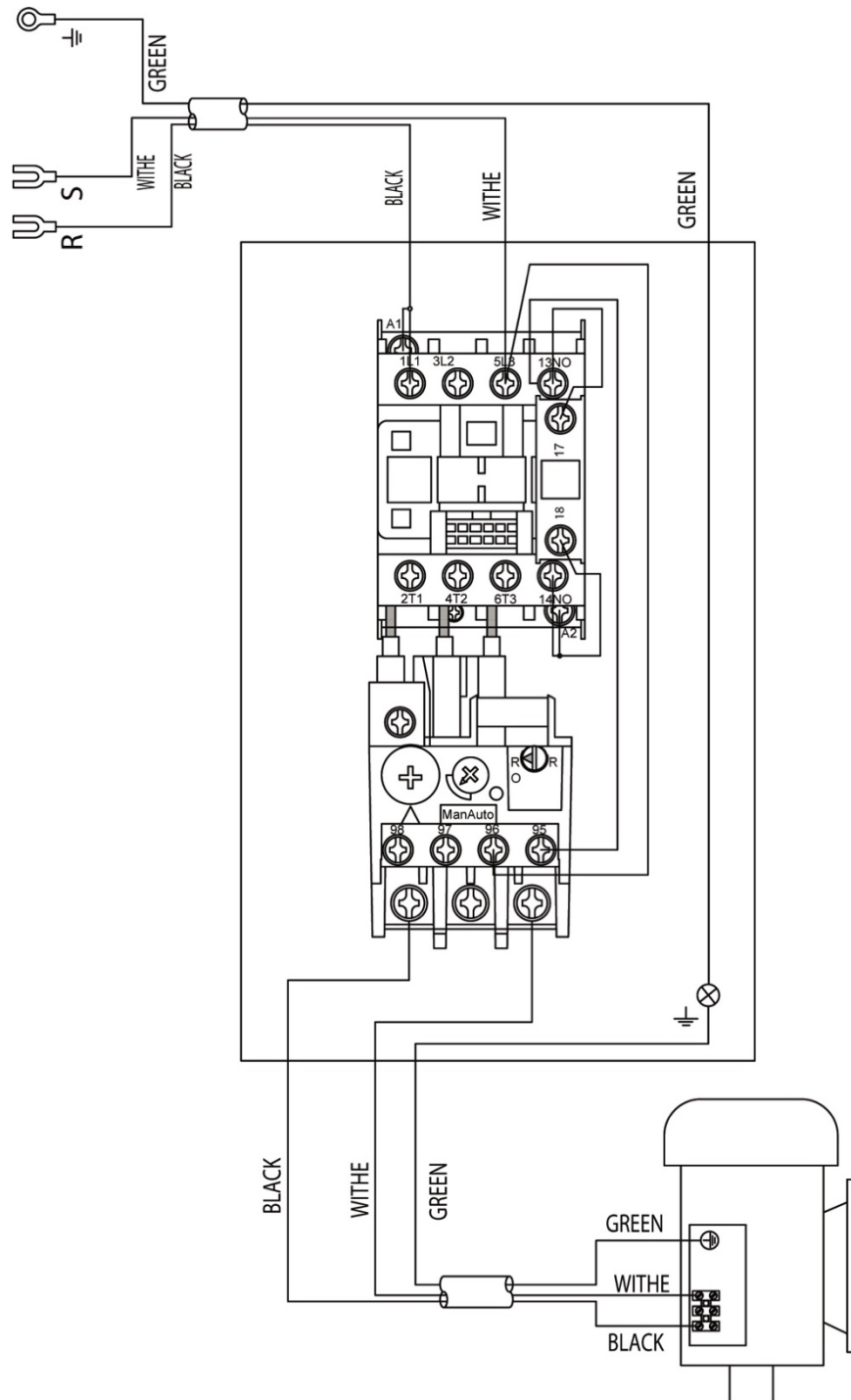
## Table and Rollers – Parts and Exploded View

Index	Part No.	Description	Size	Qty
1	JWP208HH-201T	Middle Table		1
2	6292722	Roller		2
3	BB-6201ZZ	Ball Bearing	6201ZZ	4
4	6292724	Eccentric Shaft		1
5	TS-1523041	Set Screw	M6x12	4
6	6292725	Lock Bar		2
7	6292726	Lock Bolt		2
8	6292727	Lock Bushing (no thread)		2
9	6292728	Knob		2
10	TS-1504041	Socket Head Cap Screw	M8x20	8
11	JWP208HH-219T	Extension Table		2
12	TS-1524051	Socket Set Screw	M8x20	6
13	TS-1490041	Hex Cap Screw	M8x25	6



# Wiring Diagram

## 230V 5HP Single Phase



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