

Operating Instructions and Parts Manual **20-inch Planer**

Models JWP-208 and JWP-208HH



Model JWP-208HH shown

JET 427 New Sanford Road LaVergne, Tennessee 37086 Ph.: 800-274-6848 www.jettools.com

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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Marnings

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.

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 gib 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 an 18 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.

⚠ WARNING: This product can expose you to chemicals including titanium dioxide which is known to the State of California to cause cancer, and lead which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to http://www.p65warnings.ca.gov.

MARNING: Drilling, sawing, sanding or machining wood products generates wood dust and other substances known to the State of California to cause cancer. Avoid inhaling dust generated from wood products or use a dust mask or other safeguards for personal protection.

Wood products emit chemicals known to the State of California to cause birth defects or other reproductive harm. For more information go to http://www.p65warnings.ca.gov/wood.

Safety Decals

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

A WARNING

- Read instruction manual before operating machine.
- Do not operate without all guards properly installed. Remove or fasten loose articles of clothing such as neckties, etc. Contain long hair.
- Remove jewelry such as finger rings, watches, bracelets, etc.
 Use approved safety glasses and/or face shield to protect eyes, and use other personal safety equipment as required. Do not wear

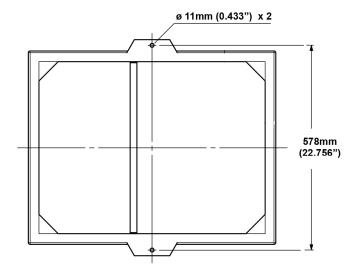
- Disconnect machine from power source before making any adjustments or cleaning chips away from machine.
 Keep the floor around machine clean and free from scraps, sawdust, oil and grease to minimize the danger of slipping.
 Do not operate this machine while under the influence of alcohol
- Failure to comply with these warnings may result in serious personal injury.

DO NOT REMOVE OR OBSCURE THIS LABEL

Figure 1

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

Stand Mounting Holes



JET JWP-208/208HH mounting holes

Figure 1

Features

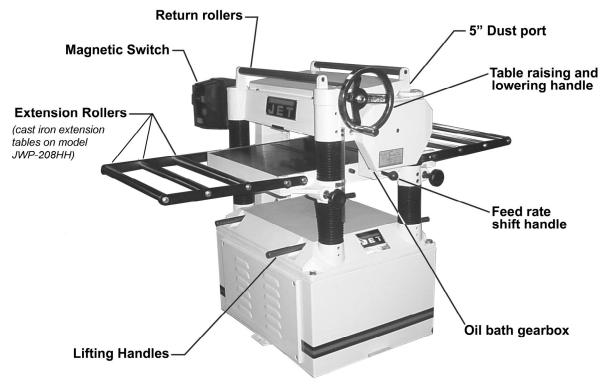


Figure 2

Specifications

Model No	JWP-208.	JWP-208HH
		708544
Table Area (D x W/in.)	25-3/4 x 20 .	25-3/4 x 20
Maximum Planing Width (in.)	20 .	20
		8
		3/32
Minimum Planing Length (in.)	6-3/4 .	6-3/4
		(92) four-sided inserts 15x15x2.5mm
Cutterhead Speed (RPM)	5,000 .	5,000
Cuts per Minute	20,000 .	n.a.
Cutterhead Diameter (dia/in.)	3-3/16 .	3-3/16
Feed Rate (FPM)	24 & 31 .	24 & 31
MotorTEFC,	3HP,1PH,230V,60Hz,18A.	TEFC, 5HP,1PH,230V,60Hz,23A
Dust Chute Diameter (dia/in.)	5 .	5
Overall Dimensions (L x W x H/in.)	26 x 36-5/8 x 41-3/8.	26 x 36-5/8 x 41-3/8
Overall Dimensions (L x W x H/in.)	26 x 36-5/8 x 41-3/8.	26 x 36-5/8 x 41-3/8
Net Weight (approx. lbs.)	640 .	753

^{*}pre-wired 230V

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.

Receiving

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. 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 table, bed rolls, feed rolls, cutterhead and loose items packed with the machine, including lifting handles and motor pulley. 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.

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

Installation & Assembly

- 1. There are four lifting handles (Fig. 3) on the machine. Pull the handles out for use, push in when not in use.
- If a sling or forklift is used to lift the machine, be sure to lift by the handles only. See Fig. 3.
 Make sure machine is kept in level position while lifting.
- 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.

Starter Box

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

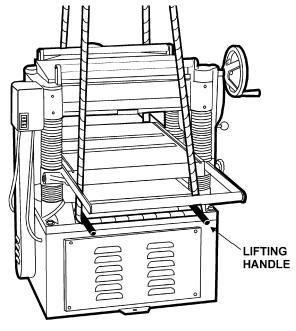


Figure 3

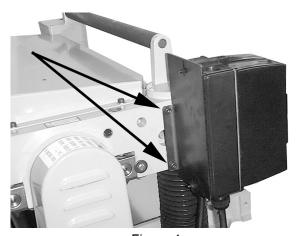


Figure 4

Handwheel

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



Mount the table extension rollers to the table using the provided hex cap screws and washers (A, Fig. 6). The rollers should be adjusted before operating the planer; see *Adjusting Table Extension Rollers* on page 11.

Extension Tables (JWP-208HH only)

- 1. Mount a cast iron table to the edge of the main table with three M8 x 25 hex cap screws (Figure 6a). Do not fully tighten yet.
- 2. The extension table must be leveled with the main table. Place a straight edge (such as a jointed board) 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.

Dust Collection Hood

The dust collection hood (Fig. 6b) comes standard with the model JWP-208 planer, and helps maintain a clean and safe work area. It is assembled to the planer with the screws and washers as shown.

IMPORTANT: Make sure all knives or knife inserts are tight before operating machine. On the helical head model, verify tightness of each insert (re-torque) before using the machine for the first time.

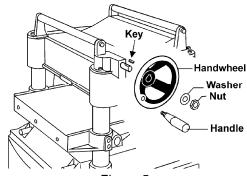


Figure 5

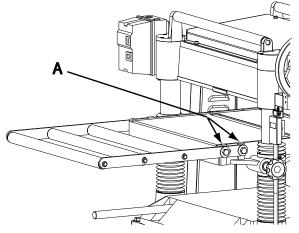


Figure 6 - JWP-208 only

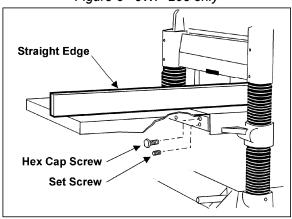


Figure 6a - JWP-208HH only

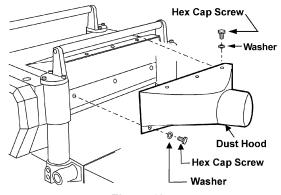


Figure 6b

Electrical Connections

AWARNING 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 208 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 diagrams on pages 32-35 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.

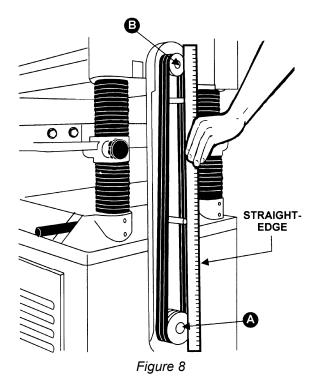
Extension Cords

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 7 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.

	Length of cord		
Rated amps	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 7



Adjustments

Belt and Pulleys

 Using a straight edge, align the motor pulley (A, Fig. 8) and cutterhead pulley (B, Fig. 8). The motor plate can be moved for alignment by loosening the set screws (C, Fig. 9) in the motor plate.

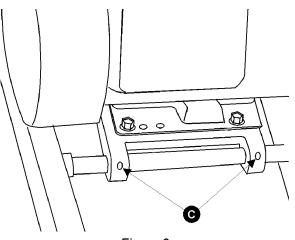


Figure 9

2. 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 (Fig. 10).

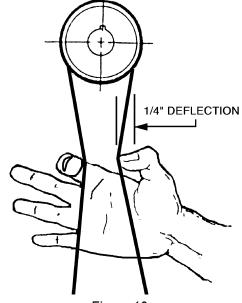


Figure 10

3. If adjustment of belt tension is necessary, loosen one pair of hex nuts (E & F, Fig. 11) and turn the other pair to raise or lower the motor plate. Re-tighten nuts.

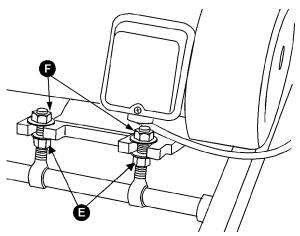


Figure 11

Table Rollers

Overview

Your planer is supplied with two table rollers (A, Fig. 12) which turn as the stock is fed into the planer, 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.

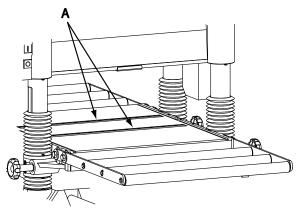


Figure 12

Note: When raising the roller higher above the table, the available range is from .003" to .006" See Fig. 13.

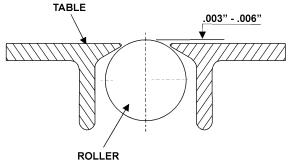


Figure 13

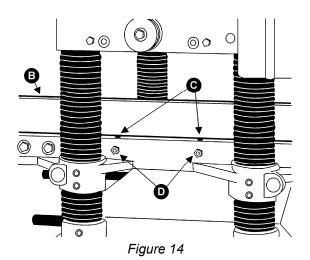
The table rollers are factory set for average planing and are parallel to the table surface. If you desire to adjust the table rollers higher or lower, proceed as follows:

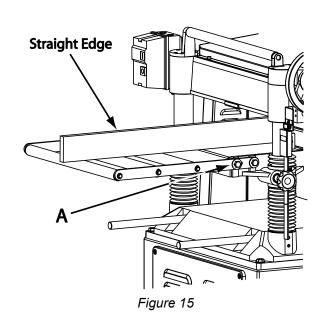
- 1. Disconnect machine from power source.
- Lay a straight edge (B, Fig. 14) across both rollers.
- On one side of the table, loosen the screws (C, Fig. 14) with a hex wrench, and turn the eccentric shafts (D, Fig. 14) to raise or lower the rollers.
- 4. When the proper height is achieved, tighten screws (C, Fig. 14).
- 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. The table rollers must always be set parallel to the table.

Adjusting Table Extension Rollers

- 1. Place a straight edge over the extension roller and the table, as shown in Fig. 15, to make sure the extension roller and table are at the same height. If necessary, adjust the table extension rollers as follows:
- 2. Loosen the screws and washers (A, Fig. 15) to move the extension roller to the proper position, then retighten the screws.
- 3. Adjust both front and rear extension rollers in the same manner.





Adjusting Depth of Cut

The cutting depth scale (A, Fig. 16) 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, Fig. 16). One revolution of the handwheel is .059" (1.5mm). Before moving the table up or down, loosen the lock nuts (C, Fig. 16). After obtaining the proper table position, tighten the lock nuts (C, Fig. 16).

AWARNING Always tighten the lock nuts before operating the planer.

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 17.

Knife Adjustment (Model JWP-208 only)

When checking or adjusting the cutterhead knives, proceed as follows:

- 1. Disconnect machine from power source.
- 2. Remove the six screws (A, Fig. 18) and remove upper cover (B, Fig. 18).
- To check and adjust knives, use the provided knife gauge (Fig. 19 & 20) and check all four knives. Knives should just contact the bottom of the center protrusion (D, Fig. 19) of the knife gauge.
- 4. If an adjustment to one or more of the knives is necessary, slightly loosen the knife gib (E, Fig. 19) by turning the six locking screws (F, Fig. 19) into the gib. Turn the screws just enough to relieve stress in the cutterhead without disturbing the setting of the knives. Do this for all four knives at the same time.
- 5. With the gauge in place over a knife (G, Fig. 19) continue to loosen the locking screws (F, Fig. 19) until the springs (H, Fig. 19) begin raising the knife. When knife comes into contact with the center protrusion (D, Fig. 19) of the gauge, snug up the gib by lightly backing out the six locking screws (F, Fig. 19) against the slot.

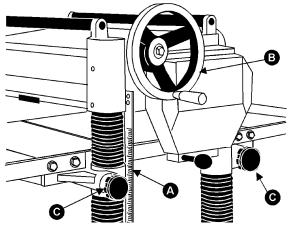


Figure 16

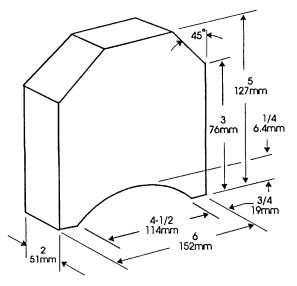


Figure 17

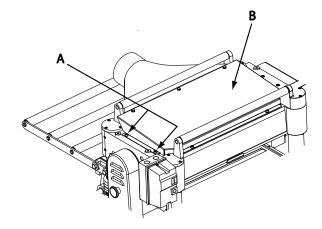


Figure 18

- NOTE: At this time, only tighten the knife in the slot just enough to hold knife in position.
- 6. If additional knives must be reset, repeat step 5.
- 7. After all four knives are set with screws just snug, back out and tighten the six locking screws (F, Fig. 19 & 20), against the slot starting with the end screws first, then the center screws, until the knife is securely held in the cutterhead. Tighten remaining three knives in the same manner.

Important: Double check all screws for tightness.

Replacing & Resetting Knives (Model JWP-208 only)

If the knives are removed for sharpening, care must be exercise in replacing and resetting them. Proceed as follows:

- 1. Disconnect machine from power source.
- 2. Remove six screws and upper cover (see Fig. 18).
- To remove knife, loosen the gib (E, Fig. 19) by turning the six locking screws (F, Fig. 19) into the gib. Remove gib (E, Fig. 19), knife (G, Fig. 16) and springs (H, Fig. 19). NOTE: The inner two springs may pop out when the knife and gib are removed.
- 4. Remove the remaining three knives in the same manner.
- Thoroughly clean the knife slots, gibs, springs and locking screws. Check the locking screws; if the threads appear worn or stripped or if the heads are becoming rounded, replace them.
- Inspect the cutting edge of the knives for nicks or wire edge. Hone the knives slightly using a stone, or if the knives are to be sharpened, maintain a cutting angle of 35 degrees.
- 7. Insert springs, knives and gib into slot of cutterhead. Back out locking screws just enough to hold the knife in the cutterhead.
- 8. Place knife gauge (C, Fig. 19) over knife.
- 9. While holding down on the knife gauge, loosen all six locking screws (F) by turning them into the gib (E) until cutting edge of knife comes into contact with the protrusion (D) of the gauge. Snug up the gib by slightly backing out the six locking screws against the slot.

Note: At this time, only tighten the knife into the slot just enough to hold the knife in position.

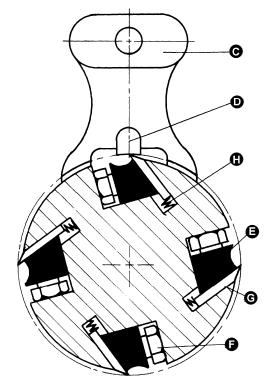


Figure 19 - JWP-208 only

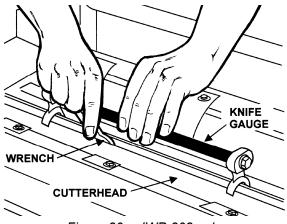


Figure 20 - JWP-208 only

- 10. Replace and reset the other three knives in the same manner.
- 11. After all four knives are set with the screws just snug, back out and tighten the six screws (F) against the slot starting with the end screws first and then the center screws until the knife is securely held in the cutterhead. Tighten the remaining three knives in the same manner.

AWARNING After replacing and checking knives, CHECK AGAIN carefully. Make certain the direction of knives is correct and all twenty-four locking screws are tightened securely.

Replacing or Rotating Knife Inserts (Model JWP-208HH only)

The knife inserts on the model JWP-208HH 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 20a. It is advisable to rotate all inserts at the same time to maintain consistent cutting. However, if one or more knife inserts develops a nick, rotate only those inserts that are affected.

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

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

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

Securely tighten each screw which holds the knife inserts before operating the planer!

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

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:

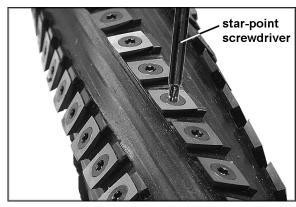


Figure 20a – JWP-208HH only

- 1. Disconnect machine from power source.
- 2. Place the gauge block (Figure 21) on the work table directly under the edge of a knife or knife insert as shown. Make slight contact with the knife edge by gently raising the table.
- Move the gauge block to the opposite end of the work table. The distance from the work table to the edge of the knife should be the same on both ends of the knife.

Adjusting Work Table Parallel to Cutterhead

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 Fig. 22.
- 3. Remove bolt (A, Fig. 22) and loosen bolt (B, Fig. 22) which will allow you to move the idler sprocket assembly (C, Fig. 22) 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; counter-clockwise 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.

 When adjustments are correct, replace chain around corner sprocket, slide sprocket (C, Fig. 22) back to re-tension chain, tighten bolt (B, Fig. 22) and replace and tighten bolt (A, Fig. 22).

Know the Transmitting Rollers of Your Planer

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

The infeed roller (B, Fig. 23) and outfeed roller (F, Fig. 23) 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.

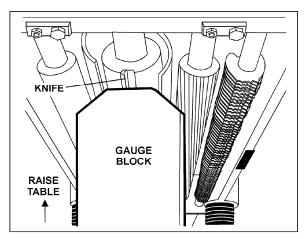


Figure 21

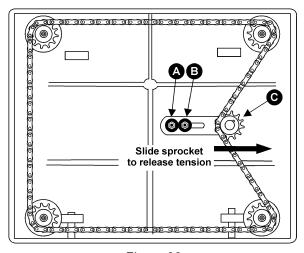
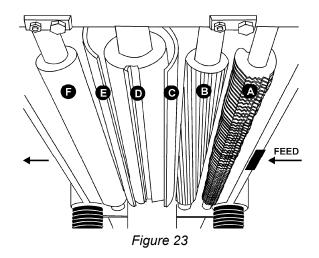


Figure 22



15

Anti-Kickback Fingers

The anti-kickback fingers (A, Fig 23) 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, Fig. 24) with a hex wrench. Turn screws on opposite end of infeed/outfeed rollers in the same manner.

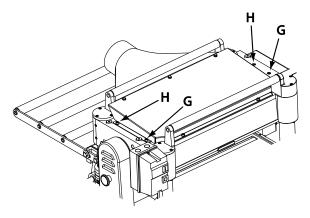


Figure 24

CUTTING - ROLLER ASSEMBLY (SIDE VIEW)

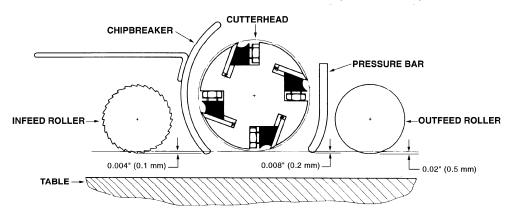


Figure 25

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

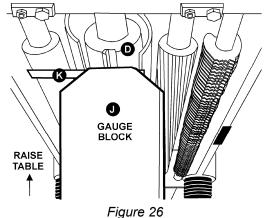
The infeed roller, chipbreaker, pressure bar and outfeed roller are adjusted at the factory. The infeed roller and the chipbreaker should be set at 0.004" (0.1mm) below the cutting circle; and the outfeed roller should be set at 0.02" (0.5mm) below the cutting circle. See Fig. 25.

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

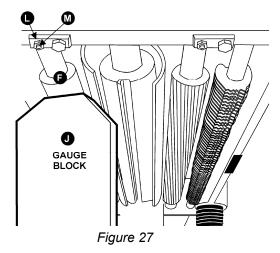
To check and adjust the outfeed roller below the cutting circle, proceed as follows:

- 1. Disconnect machine from power source.
- 2. Make sure the knives are adjusted properly as previously explained under "Checking & Adjusting of Knives."
- 3. Place the gauge block (J, Fig. 26) on the table directly underneath the cutterhead (D.

Fig. 26). Using a 0.02" (0.5mm) feeler gauge (K, Fig. 26) placed on top of the gauge block, raise the working table until the knife just touches the feeler gauge when the knife is at its lowest point. Do not move the working table any further until the outfeed roller is adjusted.



- 4. Move the gauge block (J, Fig. 27) under one end of the outfeed roller (F, Fig. 27). 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, Fig 27) and turn screw (M, Fig. 27) until the outfeed roller just touches the gauge block. Then tighten lock nut (L, Fig. 27).
- Check and adjust opposite end of the outfeed roller in the same manner.



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, Fig. 28) and sprockets (B, Fig. 28) which take power directly from the cutterhead through the oil bath gear box (C, Fig. 28).

The gear box has two feed speeds. These are set by pulling out or pushing in the shift lever (D, Fig. 28) while the machine is running. The feed speed range is shown in Fig. 29.

Changing Accessories for Lowest Feed Speed

The lowest feed speed for your planer (16.2 fpm & 20.7 fpm) can be obtained by replacing the lower (gear shaft) sprocket and the chain. See Fig. 29. To change the sprocket and the chain on your machine, proceed as follows:

- 1. Disconnect machine from power source.
- 2. Remove the three hex cap screws and washers (E, Fig. 28).
- 3. Remove the three sprockets (B, Fig. 28) from the infeed roller, outfeed roller and the gear shaft at the same time.

- When the sprockets (B, Fig. 28) are removed, replace the lower sprocket which will be assembled on the gear shaft.
- 5. Assemble the three sprockets and chains to the shafts, and tighten the hex cap screws (E, Fig. 28).

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.

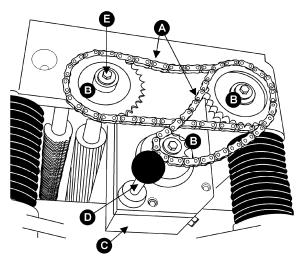


Figure 28

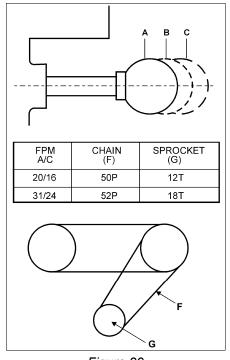


Figure 29

Maintenance

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

Remove resin and other accumulations from feed rollers and table with a soft rag and non-flammable solvent.

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

Tip: If a foreign object nicks the knives, instead of throwing them away or trying to grind out the deep nick, simply stagger the knives in the head, moving one knife no more than 1/4" to the right and another knife no more than 1/4" to the left. The nick should no longer be noticeable.

The table should be kept clean and free of rust. Some users prefer a paste wax coating. 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

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

The lubricant in the gearbox must be replaced every 2,500 hours. Multi-purpose gearbox lubricant will be suitable.

To replace the gearbox lubricant:

Remove the drain plug (A, Fig. 30), and filler plug (B, Fig. 30). Drain dirty oil thoroughly.

Tighten the drain plug (A, Fig. 30).

Fill with clean lubricant through hole (B, Fig. 30).

Reinstall and tighten filler plug (B, Fig. 30).

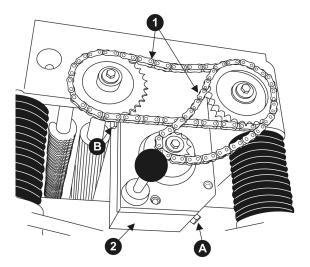


Figure 30

[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	30
2	Gear Box	When operated more than 2,500 hours	70 to 90 weight gear oil	30
3	Return Rollers	Frequently	SAE-30	32
4	Worm Gear	Frequently	Grease	33
5	Lead Screw	Frequently	Grease	33
6	Column	Frequently	Clean and SAE-30	33
7	Table Chain	Frequently	Grease	34
8	Feed Rollers	Frequently	SAE-30	35

Figure. 31

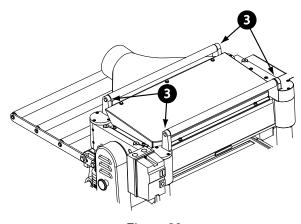


Figure 32

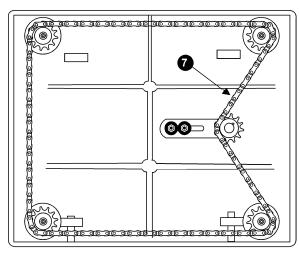


Figure 34

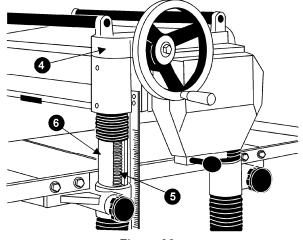


Figure 33

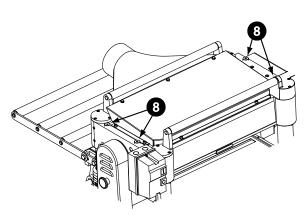


Figure 35

Troubleshooting

Operating Problems

Problem	Possible Cause	Solution
Snipe.	Table rollers not set properly.	Adjust rollers to proper height.
(Snipe cannot be	Inadequate support of long boards.	Support long boards with extension rollers.
eliminated, but can be minimized so	Uneven feed roller pressure front to back.	Adjust feed roller tension.
as to become negligible.)	Dull Knives.	Sharpen knives.
3 3 ,	Lumber not butter properly.	Butt end to end each piece of stock as they pass through.
Fuzzy Grain	Planing wood with a high moisture content.	Remove high moisture content from wood by drying.
	Dull knives.	Sharpen or replace.
Torn Grain	Too heavy a cut.	Adjust proper depth of cut.
	Knives cutting against grain.	Cut along the grain.
	Dull knives.	Sharpen knives.
Rough/Raised	Dull knives.	Sharpen knives.
Grain	Too heavy a cut.	Adjust proper depth.
	Moisture content too high.	Remove high moisture content from wood by drying.
Rounded, glossy	Dull knives.	Sharpen or replace knives.
surface	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 bed rough or dry.	Clean pitch and residue, and wax planer table.
	Transmission v-belt slipping.	Tighten transmission v-belt.
	Surface of feed rollers too smooth.	Lightly roughen the feed roller surface with sandpaper.

Mechanical and Electrical Problems

Problem	Possible Cause	Solution
Uneven depth of cut side to side.	Knife projection. Cutterhead not level with bed.	Adjust knife projection. Level bed.
Board thickness does not match depth of cut scale.	Depth of cut scale incorrect.	Adjust depth of cut scale.

Problem	Possible Cause	Solution
Chain jumping.	Inadequate tension.	Adjust chain tension.
	Sprockets misaligned.	Align sprockets.
	Sprockets worn.	Replace sprockets.
Machine will not	No incoming power.	Verify unit is connected to power.
start/restart or repeatedly trips circuit breaker or blows fuses.	Overload automatic reset has not reset.	When planer overloads on the circuit breaker built into the motor starter, it takes time for the machine to cool down before restart. Allow unit to adequately cool before attempting restart. If problem persists, check amp setting on the motor starter inside the electrical box.
	Planer frequently trips.	One cause of overloading trips which are not electrical in nature is too heavy a cut. If too deep a cut is not the problem, then 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 then there is probably a loose electrical lead. Check amp setting on motor starter.
	Building circuit breaker trips of 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.
	Loose 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.
	Motor starter failure.	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.
	Motor starter failure.	If you have access to a voltmeter, you can separate a starter failure from a motor failure by first, verifying incoming voltage at 220 +/- 20 and second, checking the voltage between starter and motor at 220 +/- 20.
		If incoming voltage is incorrect, you have a power supply problem.
		If voltage between starter and motor is correct, you have a motor problem.
	Motor failure.	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.

Problem	Possible Cause	Solution
	Miswiring of the unit.	Double check to confirm all electrical connections are correct and tight. Refer to wiring diagrams on pages 32-35 to make any needed corrections.
	On/off switch failure.	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.

Optional Accessories

Stock No	Description
708119	Mobile Base
708520	Digital Read-out Retrofit Kit
708583	Low Speed Gear Kit
708808	Knives, Single Sided (set of 4) – model JWP-208 only
1791212	Knife Inserts (set of 10) – model JWP-208HH only

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). Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

Parts

Head Assembly - Parts List

Index Part No.	Description	Size	Qty
1JWP208-001	Head Casting		1
2TS-1525021	Set Screw	M10 x 12	8
3JWP208-003	Cutterhead*		1
46292620	Spring*		8
5708808	Knife*		4
	Knife Gib*		
76292623	Hex Cap Bolt*	M8 x 10	24
8JWP208-008	Knife Gauge Bar		1
	Knife Gauge		
	Washer		
	Nut		
	Ball Bearing		
	Key		
	Pulley		
	Washer		
	Set Screw		
	Motor Pulley		
	Infeed Roller		
	Bushing		
	Spring		
	Screw		
	Plate		
	Hex Cap Screw		
	Jack Screw*		8

^{*} Index # 3, 4, 5, 6, 7 and 24 are used only on the straight cutterhead, model JWP-208

Head Assembly – Parts List

Index	Part No.	Description	Size	Qty
		Hex Nut		
		Key		
		Sprocket		
		Washer		
		Hex Washer Head Screw		
		Outfeed Roller		
		Sprocket		
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
		Washer		
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
		Lock Washer		
43	JWP208-043	Shaft		1
44	TS-1523051	Set Screw	M6 x 16	9
		Set Screw		
		Plate Spring		
		Chip Deflector Plate		
		Anti-Kickback Finger		
		Collar		
		Shaft		
		Retaining Ring		
		Cut Limit Plate		
		Flat Head Machine Screw		
		Upper Cover		
		Gasket		
		Collector Tube		
		Roller Stand		
		Roller		
		Socket Head Cap Screw		
		Worm Gear Box		
		Socket Head Cap Screw		
		Worm		
	BB-6201Z			
		Retaining Ring		
		KeyKeaining King		
		Hand Wheel		
		Washer		
		Handle		
		Scale		
		Machine Screw		
		Pointer		
		Special Washer		
73		Cover		
		Spring Pin		
		Safety Plate		
		Machine Screw		
		Safety Latch		
		Socket Head Cap Screw		
		Pulley Guard		
80	6292696	Bolt		2

Head Assembly - Parts List

	ssembly – Parts L			
Index	Part No.	Description	Size	Qty
81	TS-0680041	.Washer	5/16	2
		.Nut		
		.V-Belt		
		Pulley Cover		
		.Knob		
		Switch Mounting Plate		
87	IM/P208-087F	.Magnetic Switch (JWP-208 only)	3HP 1Ph 230\/	
		Contactor (JWP-208 only, not shown)		
		Overload (JWP-208 only, not shown)		
		Magnetic Switch (JWP-208HH only)		
		Contactor (JWP-208HH only, not shown)		
		Overload (JWP-208HH only, not shown)		
		Magnetic Switch		
		. Contactor (not shown)		
		Overload (not shown)		
		.Magnetic Switch		
		Contactor (not shown)		
		.Overload (not shown)		
		.Nut		
		.Hex Cap Screw		
		.Chain		
		.Relief Bushing		
		.Relief Bushing (for 5HP, 1PH, 230V only)		
		.Power Cord		
		.Power Cord (for 5HP, 1PH, 230V only)		
		.Tooth Washer		
		.Socket Head Cap Screw		
96	TS-1524011	.Set Screw	. M8 x 8	1
		.Collar		
		.Shaft		
100	PA-C59	.Idler Pulley		1
		.Bracket		
	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
	MS-SA20-24V	Magnetic Contactor for 3HP Motor (not shown).		1
	MS-SA20-24VA	. Magnetic Contactor for 5HP, 3PH Motor (not sho	own)	1
		.Magnetic Contactor for 5HP, 1PH Motor (not sho		
		.Thermal Relay for 3HP Motor (not shown)		
		.Thermal Relay for 5HP, 3PH Motor (not shown)		
		.Thermal Relay for 5HP, 1PH Motor (not shown)		
		.JET Plaque		
		.Warning Label (not shown)		
		.Lubrication Label (not shown)		
	6292820	.Guard Label (not shown)		1
	1791224	.Helical Cutterhead Assembly (index #109 thru #	111)**	1
109	JWP208HH-109	.Helical Cutterhead**		1
110	1791212	.Knife Insert (sold in set of 10)**	(92 total
111	JWP208HH-111	.Knife Insert Screw**	#10-32 x 1/2"	92
112		Star Point Screwdriver (not shown)**	.,, 10 02 X 1/2	02
113	JWP208-113	.Model Name (not shown)	.JP20	1
** Index #	109 thru 112 are used or	nly on the helical cutterhead, model JWP-208HH		

^{**} Index # 109 thru 112 are used only on the helical cutterhead, model JWP-208HH

Head Assembly – Exploded View

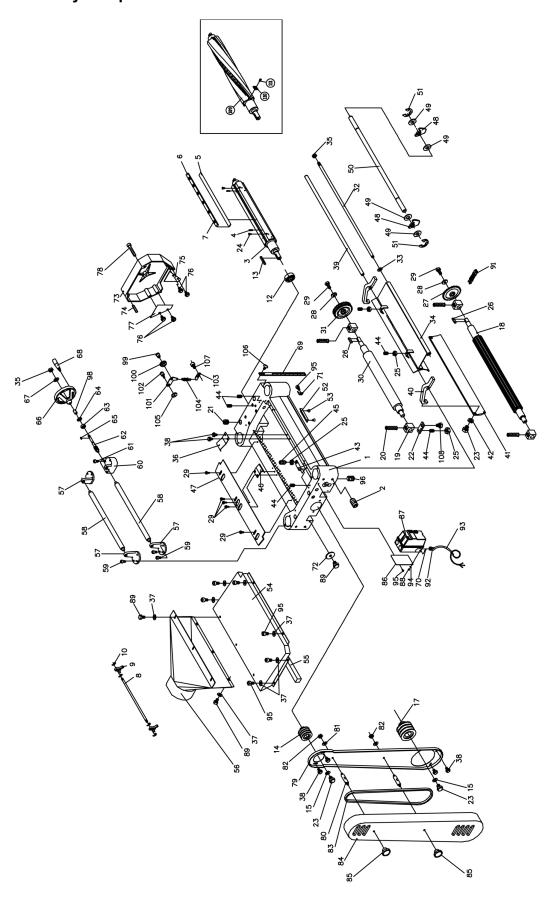
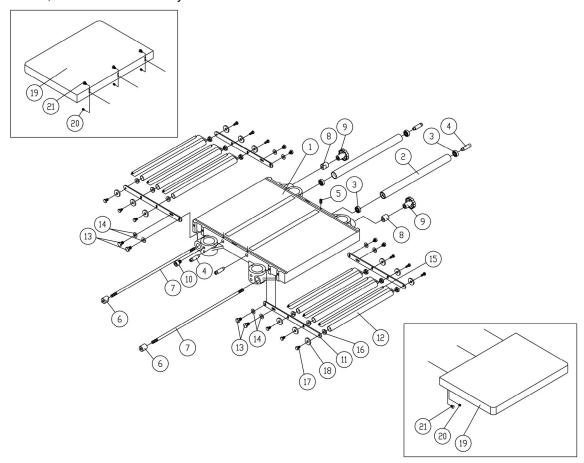


Table and Roller – Parts and Assembly

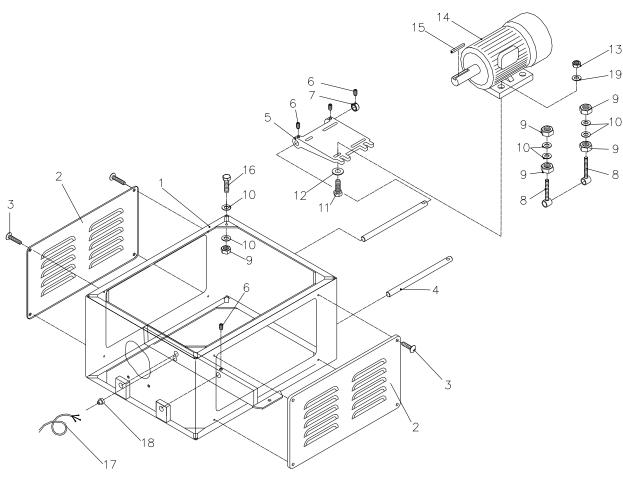
Index	Part No.	Description	Size	Qty
1	JWP208HH-201	Middle Table		1
2	6292722	Roller		2
3	BB-6201ZZ	Ball Bearing	6201ZZ	4
		Eccentric Shaft		
5	TS-1523041	Set Screw	M6x12	4
		Lock Bar		
		Lock Bolt		
88	6292727	Lock Bushing (no thread)		2
9	6292728	Knob		2
10	TS-1504041	Socket Head Cap Screw	M8x20	8
11	6292730	Roller Frame*		4
		Roller*		
13	TS-1491031	Hex Cap Screw*	M10x25	8
14	TS-0680041	Washer*	3/8"	8
		Shaft*		
		Bushing*		
		Hex Head Screw*		
		Flat Washer*		
		Extension Table**		
		Socket Set Screw**		
21	TS-1490041	Hex Cap Screw**	M8x25	6

^{*} Index #11 thru 18 are used only on the model JWP-208.
** Index #19, 20 and 21 are used only on the model JWP-208HH.



Stand and Motor – Parts and Assembly

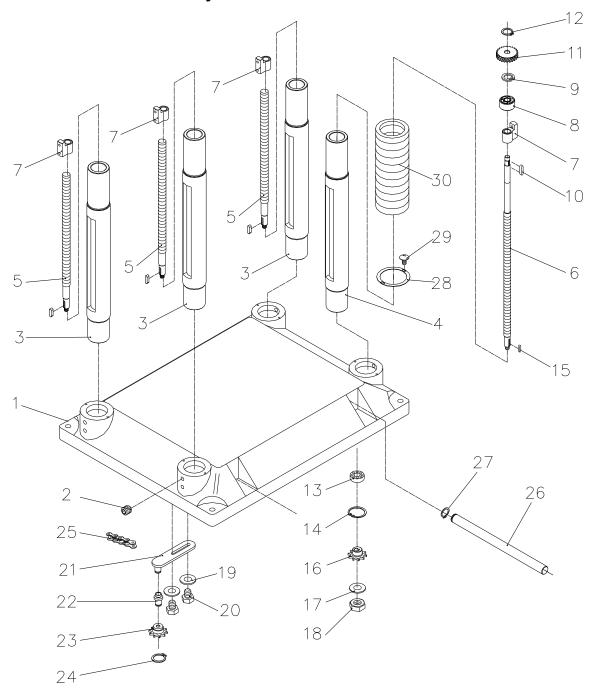
Index	Part No.	Description	Size	Qty
1	JWP208-401	Stand		1
2	JWP208-402	Cover		2
3	TS-2286201	Flat Head Machine Screw	M6 x 20	8
4	6292796	Bar		2
5	JWP208-405	Motor Mount		1
6	TS-1524011	Set Screw	M8 x 8	4
7	JWP208-407	Collar		1
8	JWP208-408	Adjust Bolt		2
9	TS-1540081	Nut	M12	8
10	TS-0680061	Washer	1/2	4
11	TS-1490041	Hex Cap Screw	M8 x 35	4
12	TS-0680031	Washer	5/16	4
		Nut		
14	JWP208-414	Motor (3HP, 1Ph, 230V)		1
	209-5023	Motor (5HP, 1Ph, 230V)		1
	JWP208-414A	Motor (5HP, 3Ph, 230/460V)		1
15	JWP208-415	Key		1
16	TS-1492051	Hex Cap Screw	M12 x 50	4
17	JWP208-417	Power Cord		1
	JWP208HH-417	Power Cord (for 5HP, 1PH, 230V only)		1
		Strain Relief		
	JWP208HH-418	Strain Relief (for 5HP, 1PH, 230V only)		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 2495m	m.perft.



Base and Column - Parts List

Index	Part No.	Description	Size	Qty
1	JWP208-301	Base		1
2	TS-1525021			
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
88	JWP208-308	Bushing		1
9		Retaining Ring		
10		Key		
11		Gear		
12		Retaining Ring		
13		Ball Bearing		
		Retaining Ring		
15		Key		
16		Sprocket		
		Washer		
18		Nut		
19		Washer		
		Hex Cap Screw		
21	02021 10	Idler Bracket		
22		Shaft		
		Sprocket		
24		Retaining Ring		
25		Chain		
		Carry Handle		
27		Retaining Ring		
		Pipe Band		
-		Pan Head Screw		_
30	JWP208-330	Expansion Band		8

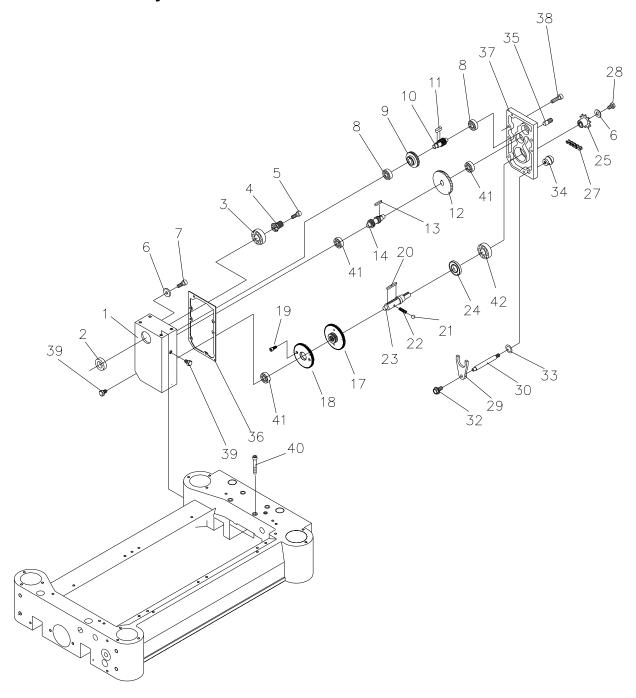
Base and Column – Assembly



Gearbox – Parts List

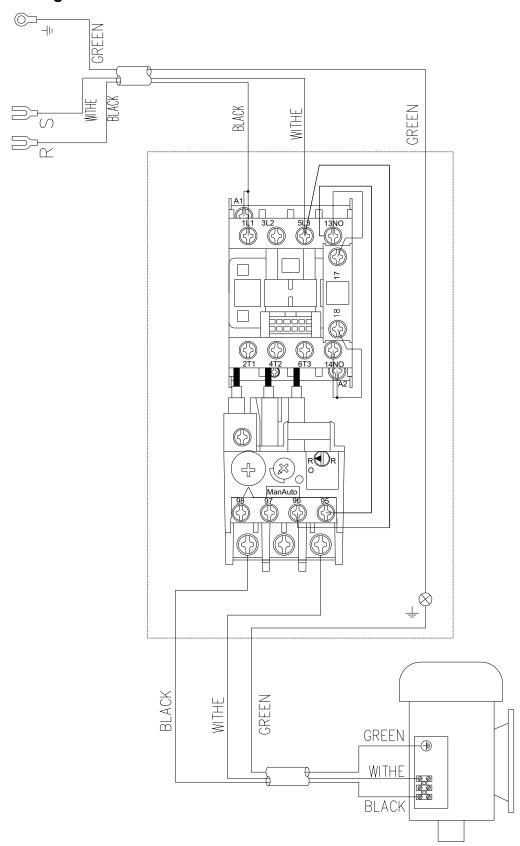
Index	Part No.	Description	Size	Qty
1	JWP208-501	Gear Box		1
2	OS-28408	Oil Seal		1
3	BB-6204ZZ	Ball Bearing	6204ZZ	1
4	6292762	Gear	16T	1
5	TS-1503061	Socket Head Cap Screw	M6 x 25	1
6	TS-1550041	Washer	M6	2
7	TS-1503041	Socket Head Cap Screw	M6 x 16	1
8	BB-6201	Ball Bearing	6201	2
9	6292766	Gear	47T	1
10	6292767	Shaft	18T	1
11	JWP208-511	Key	5 x 5 x 12	1
		Gear		
13	JWP208-513	Key	5 x 5 x 10	1
		Shaft		
		Gear		
18	JWP208-518	Gear	92T	1
		Socket Head Cap Screw		
		Key		
		Baĺl		
		Spring		
23	6292777	Shaft		1
24	OS-25476	Oil Seal		1
		Sprocket		
		Sprocket		
		Chain		
	6292780	Chain	06BX50 (for 6292779)	1
28	TS-1482031	Hex Cap Screw	M6 x 16	1
		Clutch		
		Handle		
		Hex Washer Head Screw		
		Oil Ring		
		Knob		
		Pin		
		Packing		
		Cover		
		Socket Head Cap Screw		
		Oil Plug		
		Socket Head Cap Screw		
		Ball Bearing		
		Ball Bearing		
		Gear Box Complete (not shown)		
	JWP208-551	Open End Wrench (not shown)		1
		Hex Wrench Set (not shown)		
	3 - 1 - 2 3 3 3 			

Gearbox – Assembly

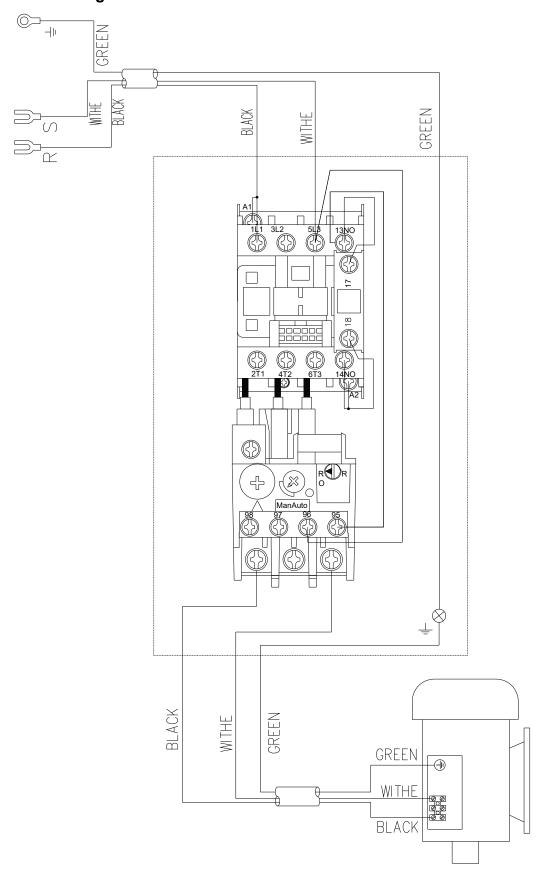


Wiring Diagrams

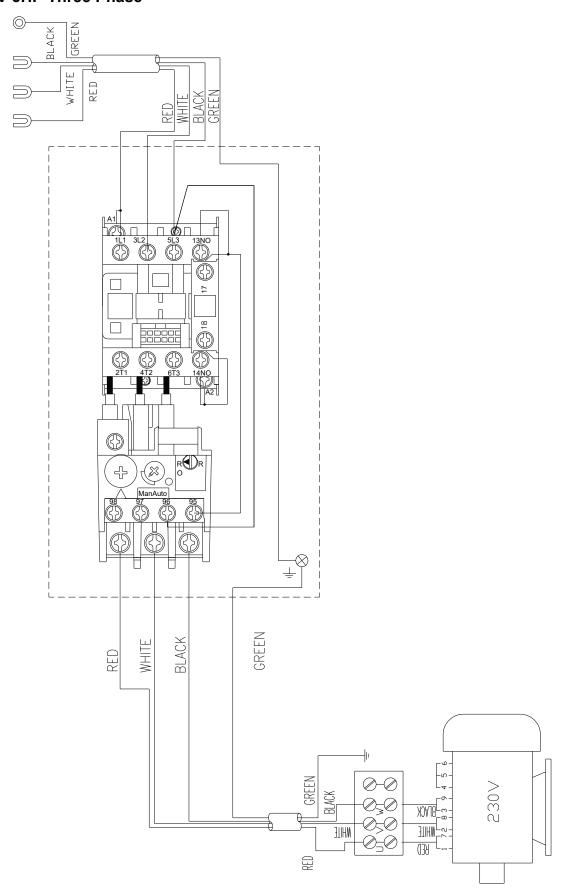
230V 3HP Single Phase



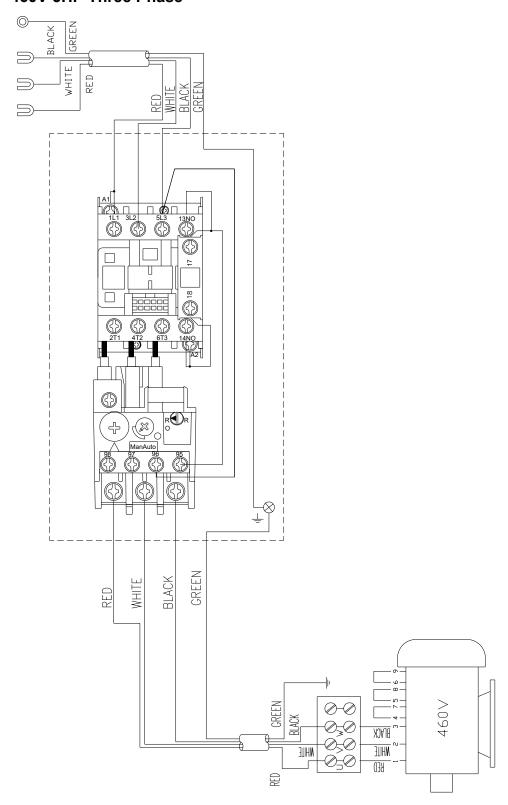
230V 5HP Single Phase



230V 5HP Three Phase



460V 5HP Three Phase





427 New Sanford Road LaVergne, Tennessee 37086 Phone: 800-274-6848 www.jettools.com