4235 8” Parallelogram Jointer

Owner’s Manual

Oliver Machinery
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M-4235 8/2019

www.olivermachinery.net

CAUTION:
Before using this 8” Parallelogram Jointer, read this owner’s manual completely and follow all its safety and operating instructions.

QUESTIONS?
If you have any questions or issues with this jointer, please call our Customer Service Center at 1-800-559-5065 or visit our website at www.olivermachinery.net.

SAVE THESE INSTRUCTIONS AND MAKE THEM AVAILABILE FOR OTHER USERS.

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WARRANTY INFORMATION

Oliver Machinery makes every effort to assure that its equipment meets the highest possible standards of quality and durability. All products sold by Oliver Machinery are warranted to the original customer to be free from defects for a period of two (2) years on all parts excluding electronics and motors which are warranted for one (1) year from the date of shipment. Oliver Machinery's obligation under this warranty shall be exclusively limited to repairing or replacing products or parts or components, at its sole option, determined by Oliver Machinery to be defective. Oliver Machinery shall not be required to provide other form of indemnity or compensation including but not limited to compensatory damages.

This warranty does not apply to defects due to direct or indirect misuse, abuse, negligence, accidents, unauthorized repairs, alternation outside our facilities, lack of maintenance, acts of nature, or items that would normally be consumed or require replacement due to normal wear and tear.

OTHER TERMS

To obtain and exercise the warranty right, please call 800-559-5065 or fill out warranty request form online at www.olivermachinery.net.

Warranty parts are shipped via Parcel or Ground. Additional charge will occur and charge to customers if express shipping is required.

DISCLAIMER

Under no circumstances shall Oliver Machinery be liable for death, personal or property injury or damages arising from the use of its products.
Oliver Machinery reserves the right to make changes without prior notice to its products to improve function or performance or design.

FOR MORE INFORMATION

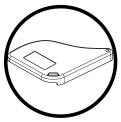
If you need assistance or have questions beyond what is covered in the scope of this warranty information, please call 800-559-5065 or email us at info@olivermachinery.net.

⚠WARNING

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

Always wear safety googles or safety glasses with side shields complying with current national standards.

Wear proper hearing protection.



Never alter the cutter head guard or use the jointer with the cutter head guard missing except when rabbeting. Be sure the guard is in place and working properly before each use. Do not defeat the guard.

Keep hands away from rotating cutterhead.

FAMILIARIZE YOURSELF WITH THE FOLLOWING SAFETY NOTICES USED IN THIS MANUAL.

⚠WARNING: This indicates if precautions are not heeded, it may result in minor or moderate injury, and/or possible machine damage.

⚠CAUTION: This indicates hazardous situation. If precautions are not heeded, it could result in serious injury or possible death

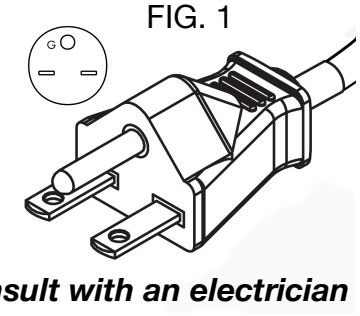
California Resident – California Proposition 65 Warning

⚠WARNING: This product contains chemicals known to the State of California to cause cancer, and birth defect or other reproductive harm. For more information, visit www.p65warnings.ca.gov.

ELECTRICAL REQUIREMENT

- **Grounding Requirements**
  This jointer is equipped with a power cord with a NEMA 6-15p plug, as in **FIG. 1**, that has an equipment grounding wire and a ground pin, and it should be plugged into a properly grounded installed outlet. Never remove or cut off the grounding prong or modify the plug in any way. Do not use any adapter plugs.

FIG. 1



If the plug does not match your local requirement, consult with an electrician to replace it with the proper type.

⚠WARNING: This machine must be properly grounded to help prevent electrical shock and possible fatal injury. Consult with a qualified electrician if you are uncertain about wiring/electrical requirements in your area.

- **Power Supply**
  This jointer is wired for 220V operation and should be connected to a verified ground power supply circuit that is 220V 50/60 Hz with an 8 Amp circuit. Use a separate and proper circuit protection for this tool to avoid electrical hazards or damage to the tool.

- **Use a Proper Extension Cord**
  The use of extension cord is not recommended for this jointer. If you must use an extension cord with this jointer, only use it for a temporary basis. When using an extension cord, make sure it is in a good working condition to prevent short circuits and any electrical hazards. If any sign of cracking, fraying, wear and/or damage appears, replace it immediately. Refer the chart below to determine the right gauge for your extension cord length.

Amperage on Machine Tag	**Cord Length (feet)**			
	25’	26’ – 50’	51 – 100’	101 – 150’
	American Wire Gauge Number			
0 – 6	18	16	16	14
6 – 10	18	16	14	12
10 – 12	16	16	14	12
12 – 16	14	12	Not Recommended	

IMPORTANT SAFETY INSTRUCTIONS

- **IF YOU ARE NOT PROPERLY TRAINED** in the use of a jointer, do not use until proper training and knowledge have been obtained.

- **READ, UNDERSTAND AND FOLLOW** the safety instructions found in this manual. Know the limitations and hazards associated with this machine.

- **EYE SAFETY.** Wear an approved safety shield, goggles or glasses complying with current national standards to protect eyes. Common everyday eyeglasses are only impact-resistant. They are not safety glasses.

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

- **GUARDS.** Always keep cutterhead and drive guards in place and for every operation except when rabbeting. Never alter the guard or use the tool with guards missing. If any guards are removed for maintenance, **DO NOT OPERATE** the machine until the guards are reinstalled.

- **WORK AREA.** Keep the floor around the machine clean and free of scrap material, sawdust, oil and other liquids to minimize the danger of tripping or slipping. Be sure the table is free of all scrap, foreign material and tools before starting to use the machine. Make certain the work area is well lighted and that a proper exhaust system is used to minimize dust. Use anti-skid floor strips on the floor area where the operator normally stands and mark off machine work area. Provide adequate work space around the machine.

- **GOOD PERSONAL SAFETY.** Always stay alert, watch what you are doing and use common sense when operating the tool.

- **CARELESS ACTS.** Give the work you are doing your undivided attention. Looking around, carrying on a conversation, and “horseplay” are careless acts that can result in serious injury.

- **DRUGS, ALCOHOL AND MEDICATION.** Do not operate this machine while under the influence of drugs, alcohol, or any medication.

- **THIS MACHINE IS DESIGNED FOR SURFACING WOOD PRODUCTS ONLY**. Do not use this Oliver jointer for other than its intended use. Do not use this machine to cut any kind of metal or substance other than wood. If used for other purposes, Oliver disclaims any real or implied warranty, and guarantee is null and void.

- **KEEP THE TABLES CLEAR** of other tools, workpieces and debris.

- **CHILDREN, BYSTANDERS AND VISITORS SHOULD BE KEPT OUT** of the work area. They may distract the operator leading to an accident.

- **NEVER START THE JOINTER** while a workpiece is in contact with the cutterhead.

- **KEEP INSERTS SHARP AND CLEAN** for the best and safest performance.

- **MATERIAL CONDITION.** Do not attempt to joint chipboards, panel boards or any stock containing nails, paint or varnish. **BE CAUTIOUS** of knots in wood. Knots can be thrown out of the workpiece or cause kickback.

- **SUPPORT LONG LENGTHS OF MATERIAL PROPERLY** to maintain control. Use work supports or stands as needed.

- **MAINTAIN A BALANCE STANCE** and proper footing at all times when operating this machine. **DO NOT OVERREACH** or use excessive force to perform any machine operation.

- **DO NOT STAND ON THE MACHINE.** Serious injury could occur if the machine tips over or if cutterhead is unintentionally contacted.

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

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

  Your risk from these exposures varies depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with an approved safety mask or respirator specifically designed to filter out microscopic particles in dusty work conditions.

- **DISCONNECT ALL POWER SOURCE BEFORE PERFORMING ANY SERVICE,** maintenance, adjustments or when rotating or replacing blades. A machine under repair should be RED TAGGED to show it should not be used until the maintenance is complete.

- **REPLACEMENT PARTS.** Use only genuine Oliver Machinery factory authorized replacement parts and accessories; otherwise, the warranty and guarantee are null and void.

- **ALWAYS USE PUSH BLOCKS** when jointing materials less than 3” in height or width. NEVER pass your hands directly over cutterhead without a push block. Your hands must never be closer than 3” to the cutterhead at any time.

- **DO NOT** joint material shorter than 10”. **NEVER** joint material narrower or thinner than ¾” when rabbeting.

After reading and understand the owner's manual and all the safety instructions, and you are ready to use this machine, be sure to follow the safety instructions of before, while and when done operating the jointer.

Before Operating the Jointer

- **Make sure** the jointer and its accessories are all assembled and in proper working order.
- **Obtain advice** from a qualified person if you are not thoroughly familiar with the operation of this tool.
- **Before making any adjustments,** installing accessories or making repairs, the jointer should always be turned off and disconnected from its power source.
- **Check that all guards** are in place and return quickly to normal rest positions. If a guard seems slow to return or "hangs up", have it adjusted, repaired or replaced immediately. **Never** use a tool without a properly operating guard.
- **Set up and secure blade inserts** and worktables according to this owner's manual.
- **Make sure cutterhead inserts are securely locked** in the cutterhead and that the unused portion of the blades is covered with the guard before tool use.
- **Maintain proper adjustment** of infeed and outfeed tables.
- **Before turning on** the machine, remove all extra equipment such as keys, wrenches, scraps, and cleaning rags away from the machine.
- **Avoid awkward operations** and hand positions where a sudden slip could cause a hand to move into the blade.
- **Hold** workpiece firmly.
- **Never reach your hands underneath** the workpiece while the cutterhead is rotating.

While Operating the Jointer

- **Keep your hands, fingers and body away from** the cutting area. Contact with a blade insert will cause serious injury.
- **Do not** try to remove too much material in one pass. **Never** remove more than **1/8”** per pass.
- **Do not reach into the dust chute** to unclog chips. Stop the tool and unplug it from the power source. After making sure that cutterhead has stopped, clear the chute with something other than your bare hand.
- **Always be sure that the jointer is switched off and unplugged** before making any adjustments.
- **Never feed** the workpiece in the direction of cutterhead blade rotation. It can cause the cutterhead to grab and pull the workpiece.
- **Use push blocks** to hold down the workpiece to protect your hands and fingers. Your hands and fingers should never pass directly over the cutterhead when feeding a workpiece.

When Done Using the Jointer

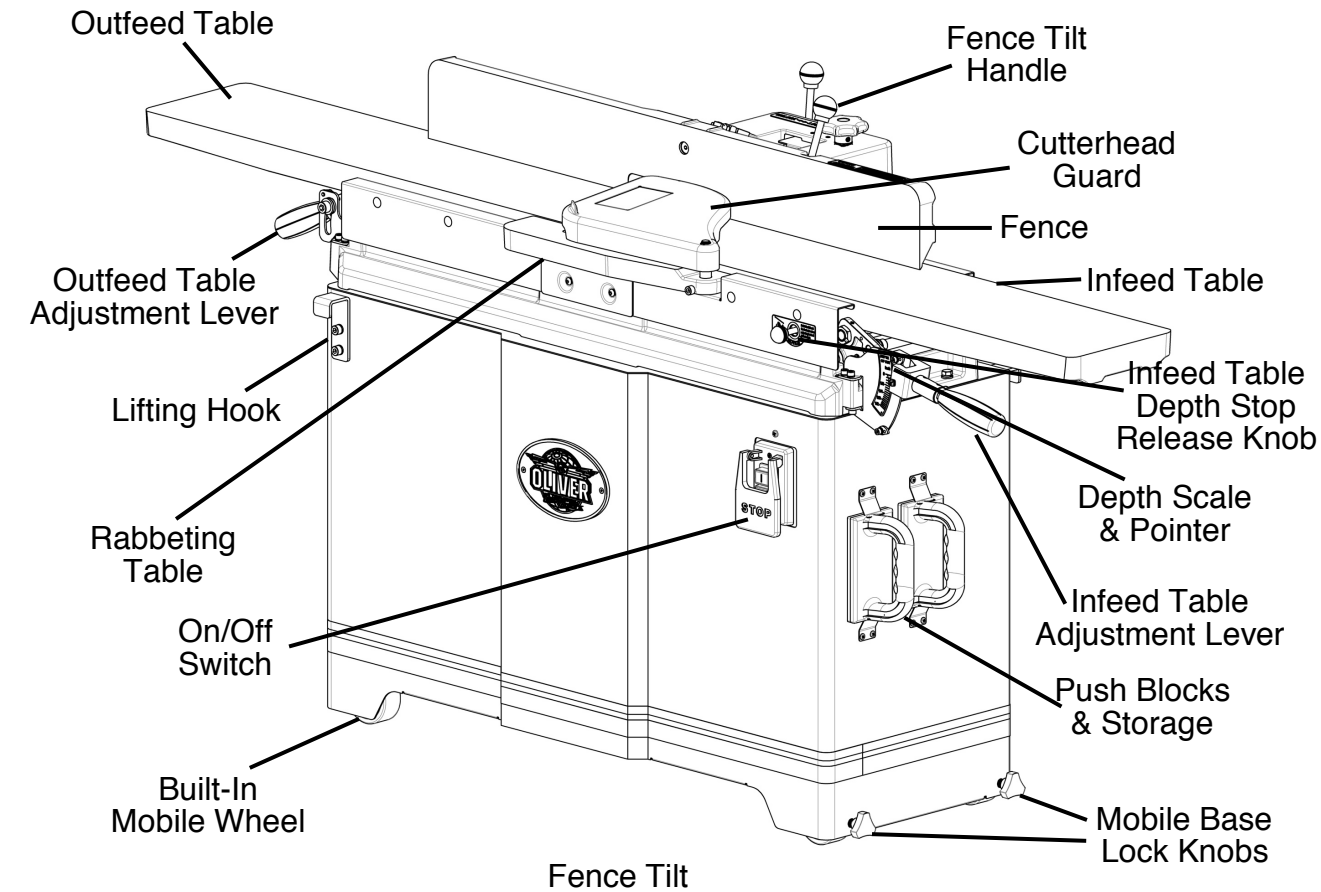
- **Turn off and unplug** the jointer when done.
- **Lock the jointer** to prevent unauthorized use.
- **Clean and store** the jointer in a safe, dry place after use.

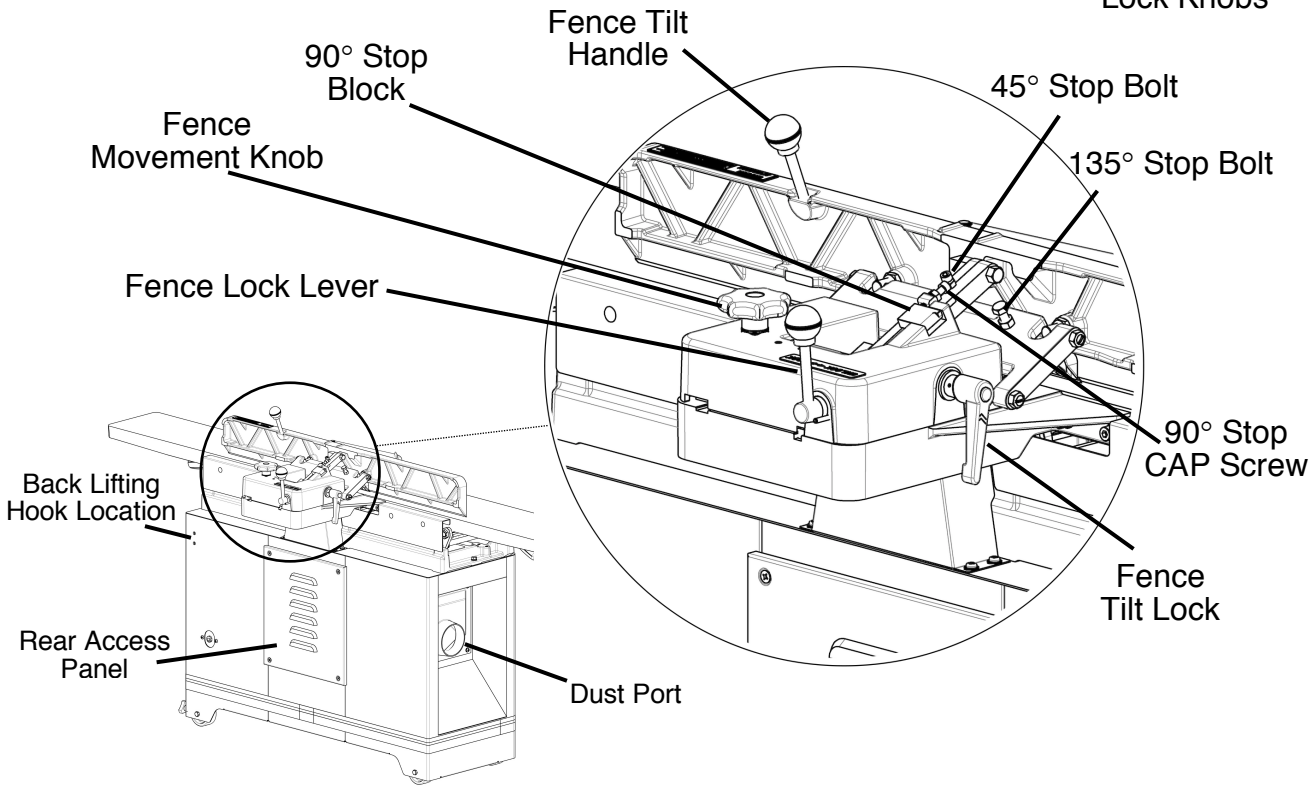
PRODUCT SPECIFICATIONS

MODEL 4235.201 8" X 72" PARALLELOGRAM JOINTER
WITH HELICAL CUTTERHEAD AND BUILT-IN MOBILE BASE

Motor	2HP 1PH 220V 8 Amps
Infeed Table Travel	1/2"
Cutterhead Speed	5,500RPM V-Belt Driven
Number of Knives	36 Inserts
Rabbeting Capacity	1/2"
Max. Cutting Width	8"
Max. Cutting Depth	1/8"
Fence Dimensions	38" L x 4-1/64" H
Fence Tilts	+/- 45° - 90°
Positive Stops	90° and 45°
Table Dimensions	72" L x 8" W
Dust Port Diameter	4" (x1)
Foot Print	39-1/8" x 15-1/8"
Overall Dimensions	72-1/8" L x 24-1/8" W x 38-3/8" H
Net Weight	352 lbs
Gross Weight	487 lbs

PRODUCT OVERVIEW





UNCRATE YOUR JOINTER

- Uncrate the wooden package, remove top crate, as shown in ②, and check for shipping damage. If any signs of shipping damage, call 1-800-559-5065 to report.
- Do not discard any shipping material until the jointer is assembled and running properly.

Contents are shown in **FIG. 2**.

1. Jointer Unit
2. Top Crate & Pallet
3. Cutterhead Guard Assembly
4. Hardware Bag
   - 3mm Hex Wrench
   - 6mm Hex Wrench
   - 8x10 Double Wrench
   - 11x13 Double Wrench
5. Hook Assembly
   - Spring Washer x 4
   - Cap Screw x 4
   - Hook x 2
6. Push Blocks
7. Cutterhead Parts
   - Torx Screwdriver x 2
   - Torx Screw x 10
   - Insert x 5
   - Insert Box x 1
8. Owner's Manual

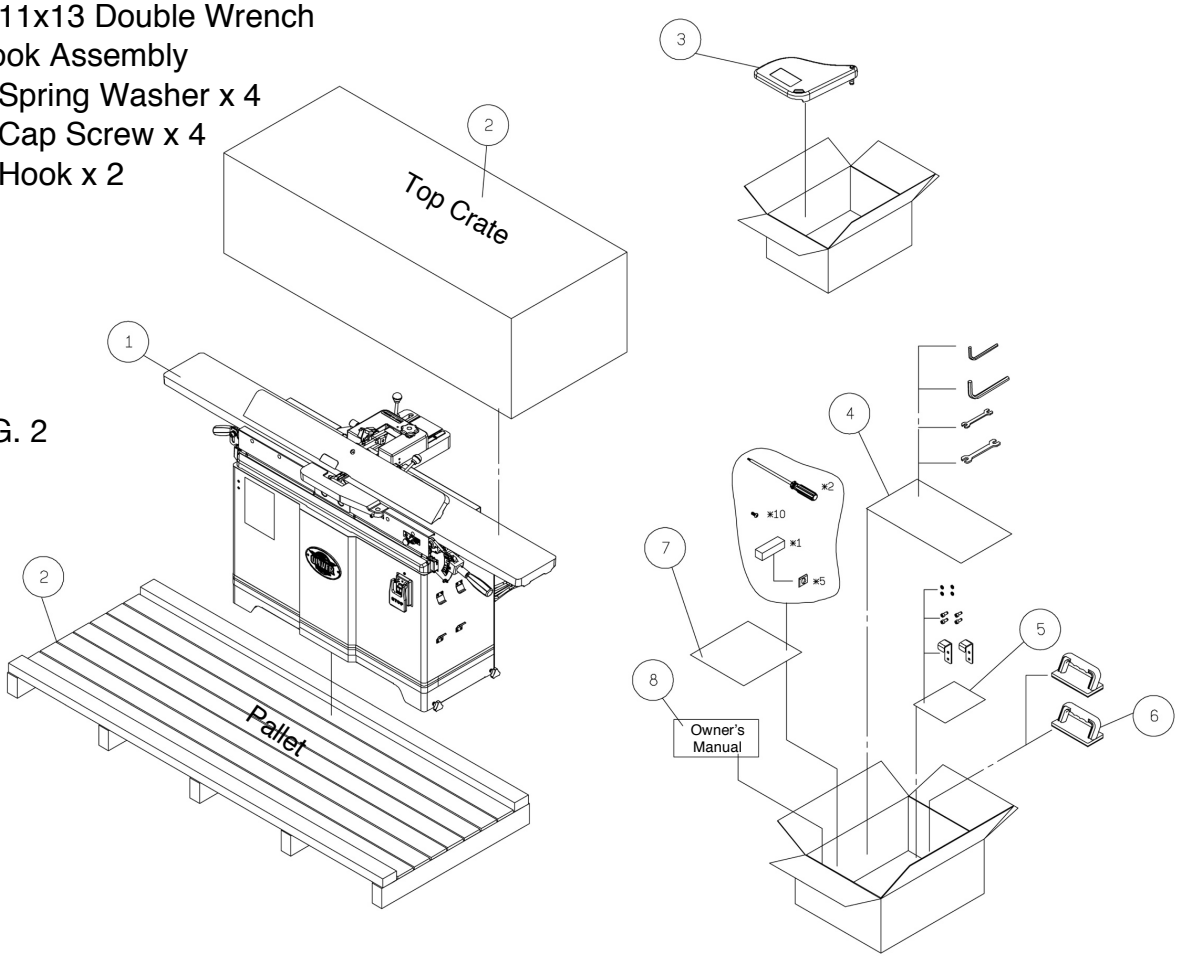


FIG. 2

PREPARATION FOR SET UP

1. Clean and wipe off the rust preventative on the infeed and outfeed tables using WD40 degreaser or any similar kind of degreaser.

2. Cover cleaned surfaces with metal protectant to prevent rust.

3. This jointer should be placed in a dry area on a sturdy floor with adequate lighting and ventilation. Make sure there is sufficient space around the machine for operations of largest size of material that will be processed on this machine, and for routine maintenance check.

4. This jointer is equipped with a mobile base which doesn't require power lifting. Before moving the jointer off the pallet, remove four wood screws at the base.

5. With an assistance of four people, slowly walk the jointer off the pallet and place it on the ground. Roll the jointer to its prepared location.

⚠CAUTION:

Heavy Object!
Multi-Person
Lift Required!

6. If powered lifting is desired, Install the lifting hooks on the machine, one in the front side and one in the back as shown in **FIG. 3** using the included 6mm hex. wrench.

⚠CAUTION:

If using power lifting equipment, attach straps or slings around the lifting hooks to lift the jointer. DO NOT lift the machine directly beneath the infeed and outfeed tables as this may cause misalignment of the tables.

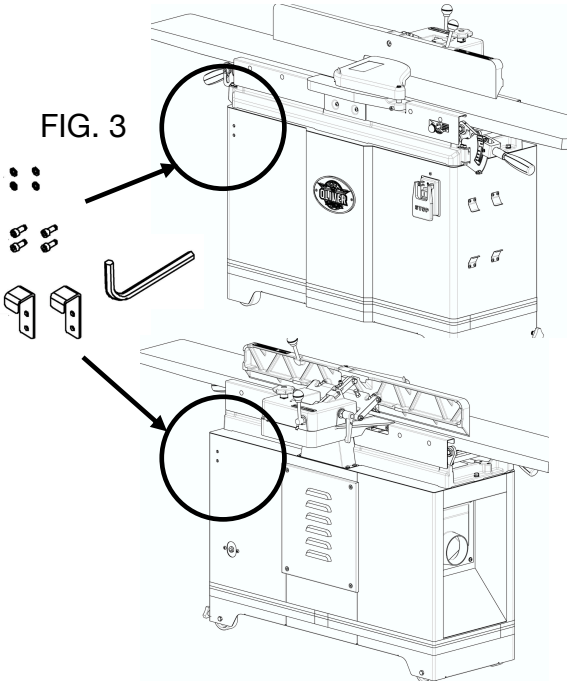


FIG. 3

7. Place the jointer to its prepared location and tighten the mobile base lock knobs as shown in **FIG. 4**.

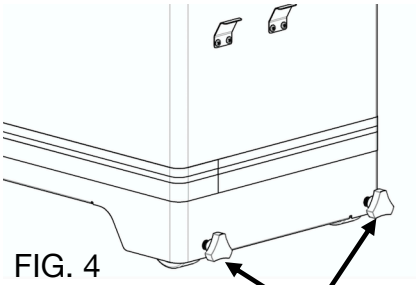


FIG. 4

Mobile Base
Lock Knobs

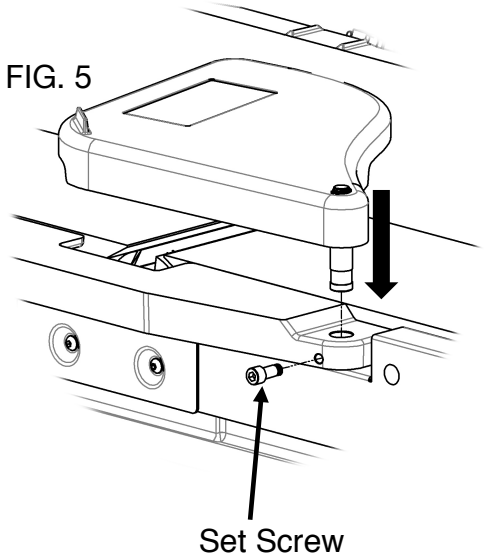
ASSEMBLE AND INSTALLATION

DO NOT CONNECT TO POWER DURING ASSEMBLY & INSTALLATION

A. CUTTERHEAD GUARD

STEP 1: Insert the guard assembly on the hole of the rabbeting support bracket as shown in **FIG. 5**.

FIG. 5



STEP 2: Tighten the set screw completely as shown in **FIG. 5**.

STEP 3: Swing the cutterhead guard away from the fence and release it to make sure it is installed properly.

B. DUST COLLECTION

This jointer is equipped with a 4" dust port. To install a dust collection, follow the steps below.

STEP 1: Attach a 4" dust hose (not included) to the dust port as shown in **FIG. 6.**

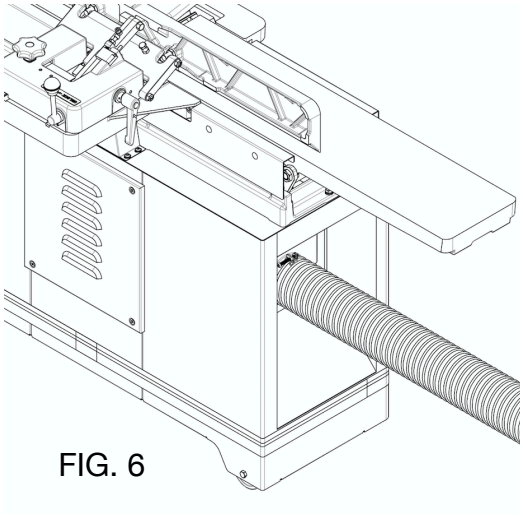


FIG. 6

STEP 2: Secure the hose with a hose clamp (not included). Make sure the hose is attached to the dust port tightly.

ADJUSTMENTS

A. BELT TENSION

After 20 hours of operation, the belt tension needs to be adjusted due to its slightly stretch in order to prevent its slippage and burnt out. To adjust the belt tension, follow the steps below.

STEP 1: DISCONNECT THE MACHINE FROM POWER!
STEP 2: Loosen four screws as shown in **FIG. 7** on the rear access panel and remove the panel as shown in **FIG. 8**.

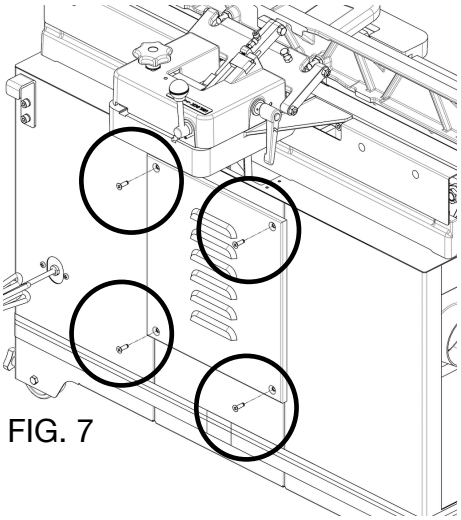
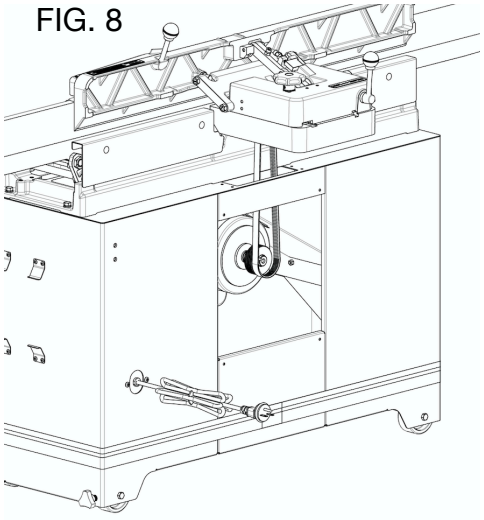


FIG. 7

FIG. 8



STEP 3: with medium index finger pressure, the belt should push in approximately ¼" between the pulleys as shown in **FIG. 9**. If the belt is correctly tensioned, go to STEP 6. If there is too much deflection, follow STEP 4 to STEP 5.
STEP 4 Loosen 4 sets of motor mounting carriage bolts and nuts as shown in **FIG. 10**. **NOTE:** DO NOT COMPLETLELY LOOSEN AND REMOVE THE CARRIAGE SCREWS AND NUTS.

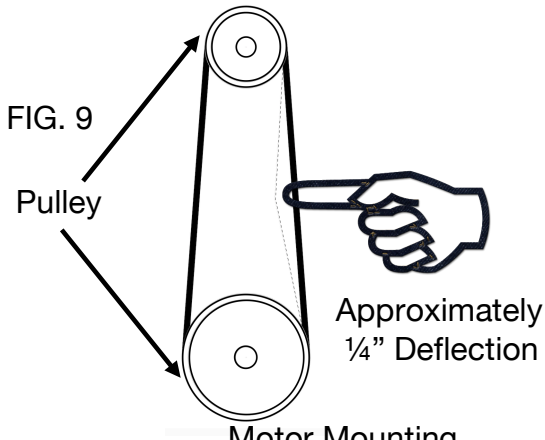
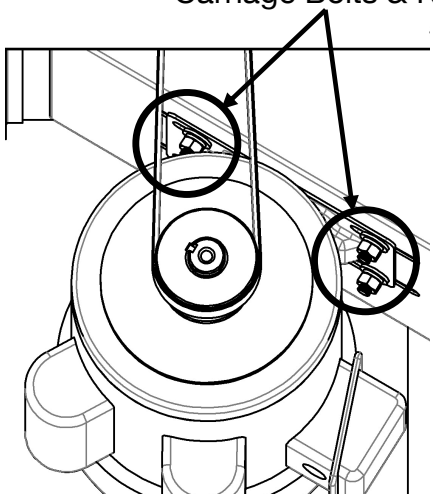


FIG. 9

FIG. 10



A. BELT TENSION (CONTINUED)

STEP 5: Press down the motor and check the belt tension as in STEP 3, if the tension is correct, tighten motor mounting carriage screws. If it still is too much deflection, repeat STEP 5.
STEP 6: Reinstall the rear access panel.

B. BELT REPLACEMENT

STEP 1: DISCONNECT THE MACHINE FROM POWER!
STEP 2: Remove rear access panel door as shown in **FIG. 7** and **FIG. 8** on A. BELT TENSION on page 17.
STEP 3: Loosen 4 sets of motor mounting carriage screws and nuts as shown in **FIG. 10** on page 17.
STEP 4: Lift the motor to loosen the belt and tighten the motor mounting carriage screws and nuts.
STEP 5: Remove the old belt from pulleys.
STEP 6: Place a new belt and make sure the belt is seated in top and bottom pulley grooves.
STEP 7: Loosen 4 sets of the motor mounting carriage bolts nuts and re-tension the belt (See A. BELT TENSION STEP 3 to STEP 5 on page 17).
STEP 8: Reinstall rear access panel.

C. FENCE MOVEMENT

The fence can slide forward or backward across the width of the tables as well as being tilted forward or backward to any angle down to 45°. To do so, follow the steps below.
Slide Fence
STEP 1: DISCONNECT THE MACHINE FROM POWER!
STEP 2: Loosen the fence lock lever as shown in **FIG. 11**.
STEP 3: Rotate fence movement knob as shown in **FIG. 11** to move the fence position forward and backward across the table width.
STEP 4: When the fence is pushed to a desired position, tighten the fence lock lever.
Tilt Fence
STEP 1: Loose the fence tilt handle to adjust the fence to any angle down to 45°.
STEP 2: Tighten the fence tilt handle to secure the fence to any position.
NOTE: There is a plastic piece mounted to the front fence as a buffer to prevent scratches on the tables when adjusting the fence positions as shown in **FIG. 12**.

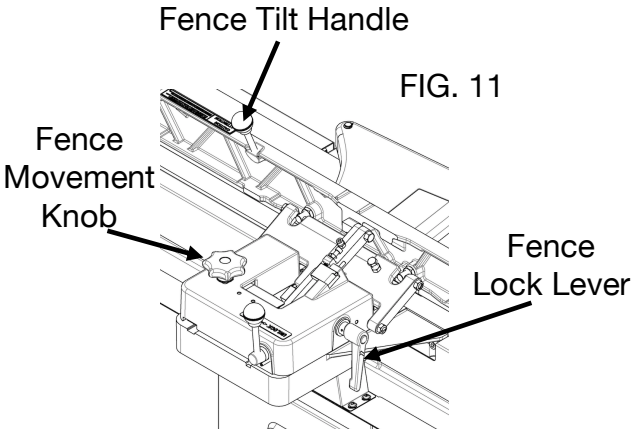


FIG. 11

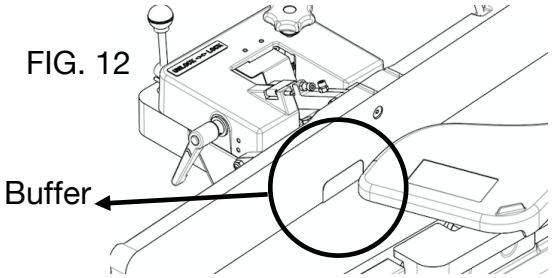
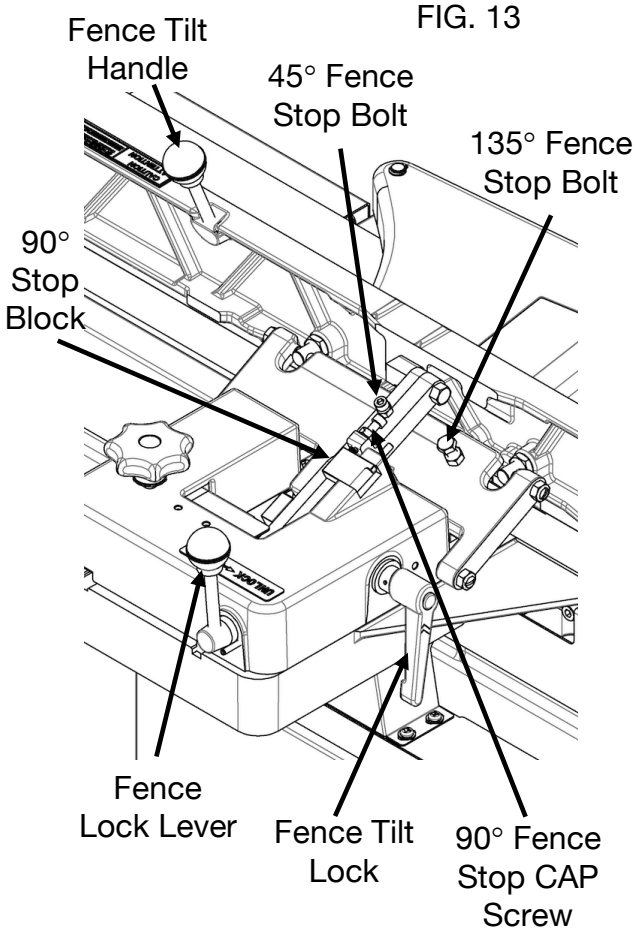


FIG. 12

The fence has preset positive stops of 135°, 90° and 45°. To adjust the fence to these stops, follow the steps below.

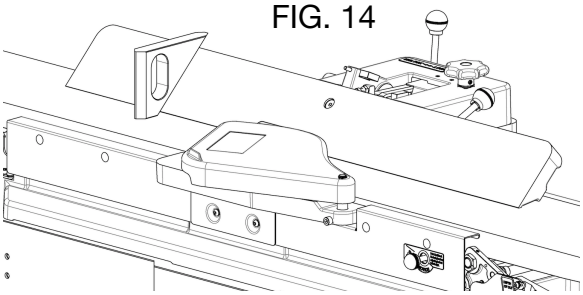
FIG. 13



Fence at 135°

STEP 1: DISCONNECT THE MACHINE FROM POWER!
STEP 2: Loosen fence tilt lock as shown in **FIG. 13**.
STEP 3: Rotate 90° stop block up as in **FIG. 13** (It is in down position) to disengage the fence to stop at 90°
STEP 4: Use fence tilt handle to tilt the fence backward and slide it back until it stops at the 135° fence stop bolt.
STEP 5: Lock fence tilt lock and begin to jointing at 135° bevel.
NOTE: If the 135° fence stop doesn't seem to be accurate, follow STEP 6 to STEP 10.
STEP 6: To calibrate the angle to true 135°, loose fence tilt lock.
STEP 7: Place a 135° measuring device on the table against the fence as shown in **FIG. 14**.
STEP 8: Loosen the 135° fence stop bolt & nut and adjust it to lie flush against the fence.
STEP 9: Re-tighten the nut on the bolt.
STEP 10: Lock fence tilt lock.

FIG. 14



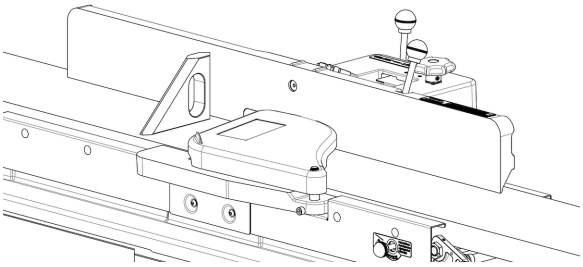
Fence at 90°

STEP 1: DISCONNECT THE MACHINE FROM POWER!
STEP 2: Loosen fence tilt lock as shown in **FIG. 13**.
STEP 3: 90° stop block is engaged as shown in **FIG. 13** (down position).
STEP 4: Use fence tilt handle to position the fence to stop at the 90° fence stop cap screw as in **FIG. 13**.
STEP 5: Lock fence tilt lock and begin to joint 90° fence set.
NOTE: If the 90° fence stop doesn't seem to be accurate, follow STEP 6 to STEP 11.

D. FENCE STOPS (CONTINUED)

STEP 6: To calibrate the angle to true 90°, loose fence tilt lock.
STEP 7: The 90° stop block is in down position as in **FIG. 13** on page 19.
STEP 8: Slide the fence to approximate 90°, and place a 90° measuring device on the table against the fence as shown in **FIG. 15**.

FIG. 15



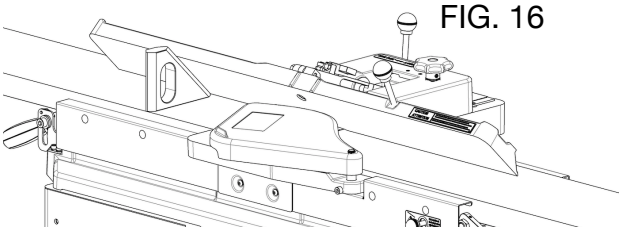
STEP 9: Loosen the 90° fence stop cap screw and nut as in FIG. 13, and slide the fence to lie flush against the 90° measuring device.
STEP 10: Re-tighten the cap screw and nut on the bolt.
STEP 11: Lock fence tilt lock

<u>Fence at 45°</u>
STEP 1: DISCONNECT THE MACHINE FROM POWER!
STEP 2: Loosen fence tilt lock as shown in **FIG. 13**.
STEP 3: Rotate 90° stop block up as in **FIG. 13** (It is in down position) to disengage the fence to stop at 90°.
STEP 4: Use fence tilt handle as **in FIG. 13** to tilt the fence forward and slide it until it stops at the 45° fence stop bolt.
STEP 5: Lock fence tilt lock and begin to jointing at 45° bevel.

NOTE: If the 45° fence stop doesn't seem to be accurate, follow STEP 6 to STEP 10.

STEP 6: To calibrate the angle to true 45°, loose fence tilt lock as in FIG. 13.
STEP 7: Place a 45° measuring device on the table against to the fence as shown in **FIG. 16**

FIG. 16

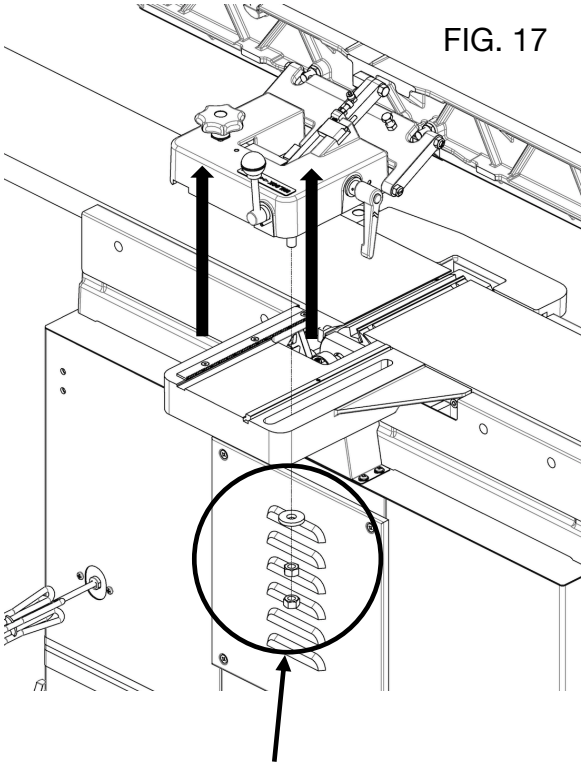


STEP 8: Loosen the 45° fence stop bolt & nut and adjust it to lie flush against the fence.
STEP 9: Re-tighten fence stop bolt & nut.
STEP 10: Lock fence tilt lock.

E. FENCE REMOVAL

To remove the fence assembly from the machine, follow the steps below.
STEP 1: Remove two (2) hex. nuts and one (1) washer as shown in **FIG. 17**.
STEP 2: Lift the fence assembly straight up from the jointer.

FIG. 17

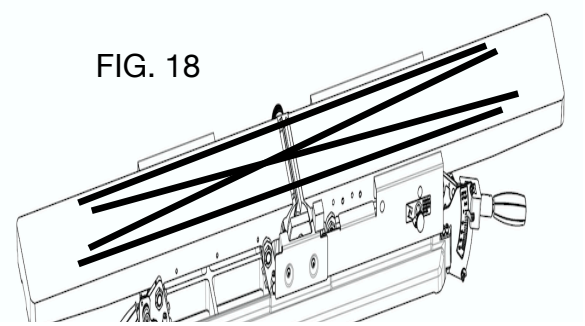


F. TABLE ALIGNMENT

The alignment of the tables has been precisely set at the factory level. The alignment should not need to be adjust, however, in case of misalignment occurred due to transportation, it should be checked. Follow the steps below to check and adjust

Coplanarity
STEP 1: DISCONNECT THE MACHINE FROM POWER!
STEP 2: Remove the cutterhead guard (See J. CUTTERHEAD GUARD on page 26).
STEP 3: Slide the fence assembly way back or remove it from the machine (See E. FENCE REMOVAL on the left).
STEP 4: Place a steel straight edge across the tables in positions as shown in **FIG. 18**. In each position, the straight edge should sit flat and fit flush with both infeed and outfeed tables. If it does not, follow the steps in Outfeed Table and Infeed Table adjustments below.

FIG. 18



Outfeed Table
STEP 1: While the machine is still disconnected from power source, cutterhead guard is removed, and fence is away or removed, remove rear access panel to obtain access of the cutterhead body.

F. TABLE ALIGNMENT (CONTINUED)

STEP 2: Rotate motor pulley to access cutterhead, and place a straight edge on the outfeed table hanging half way on the top of the cutterhead as shown in **FIG. 19**.

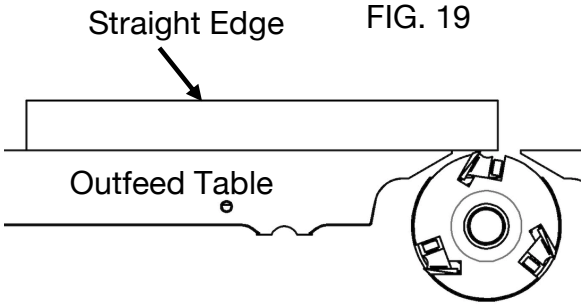


FIG. 19

STEP 3: Use an 8mm hex. Wrench (not included) to loosen nut to release outfeed table adjustment lever as shown in **FIG. 20**.

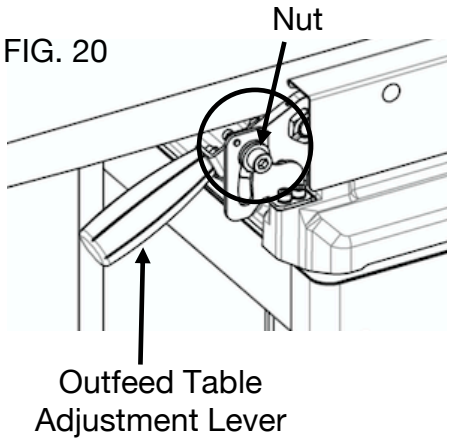


FIG. 20

STEP 4: Untighten cap screw on the back of the outfeed table adjustment lever as shown in **FIG. 21** to lower the outfeed table to adjust the straight edge to level with the top dead center of the insert as in **FIG. 19**.

NOTE: When the half-moon shape packing on the CAP screw touches the plate, it results in the lowest point of the outfeed table and is a reference level to the top dead center of the inserts.

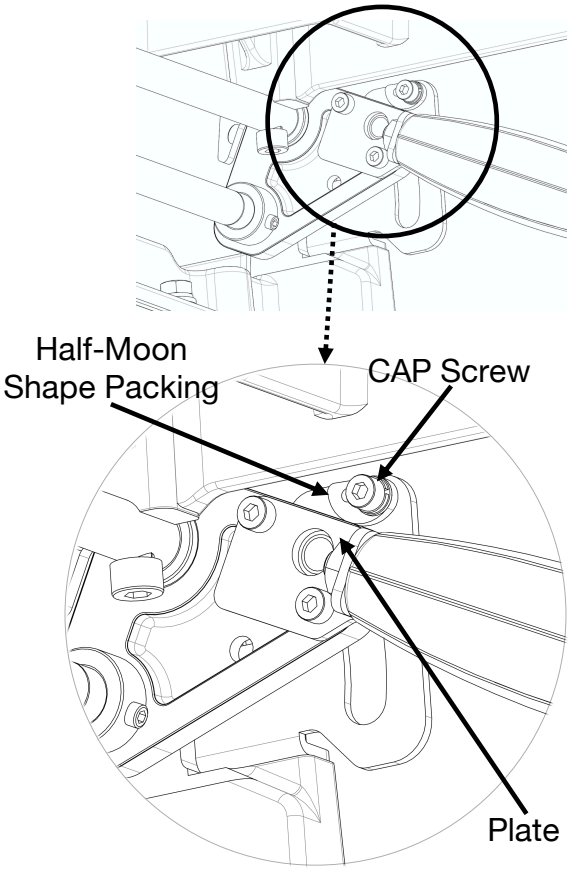


FIG. 21: Back View of Outfeed Table Adjustment Lever

STEP 5: Place a straight edge in positions shown in FIG. 22 to make sure outfeed table is parallel with the cutterhead.

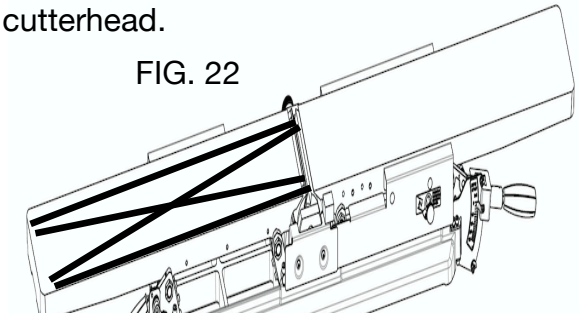


FIG. 22

F. TABLE ALIGNMENT (CONTINUED)

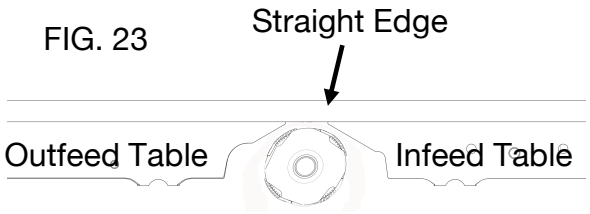
STEP 6: If straight edge does not sit flat on outfeed table, repeat STEP 4. If it sits flat on outfeed, go to Infeed Table to check the parallelism on infeed table.

Infeed Table

STEP 1: Before checking parallelism on infeed table, outfeed table's must have been checked that outfeed table is paralleled with insert tips.

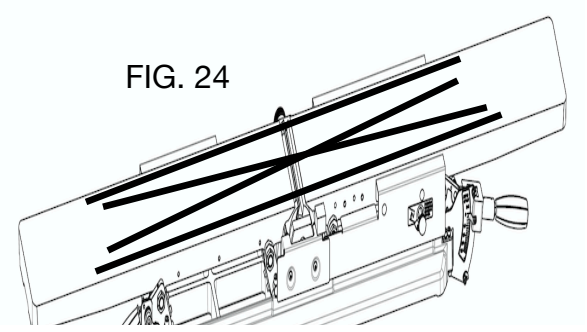
STEP 2: Place straight edge across infeed and outfeed tables as in **FIG. 23**. If inserts interfere with straight edge, rotate the cutterhead.

FIG. 23



STEP 3: Place straight edge in positions shown in **FIG. 24**.

FIG. 24



STEP 4: If straight edge lies evenly flat against both infeed and outfeed tables in all positions, re-install fence, blade guard and rear access panel. If it does not fit evenly flat against both infeed able outfeed tables in any position, go to Table Parallelism Adjustment.

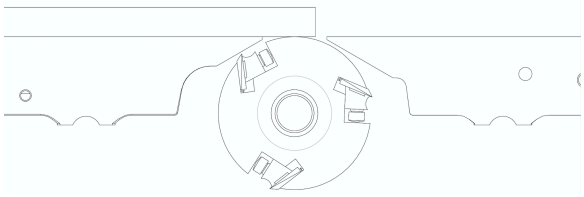
Table Parallelism Adjustment

When the infeed table is not parallel with the outfeed table, they can be adjusted. **NOTE:** This adjustment needs to be done very precisely and should not need to be done again once set.

Before following the steps below, double check the alignments as shown in Infeed Table to be certain that this adjustment is required.

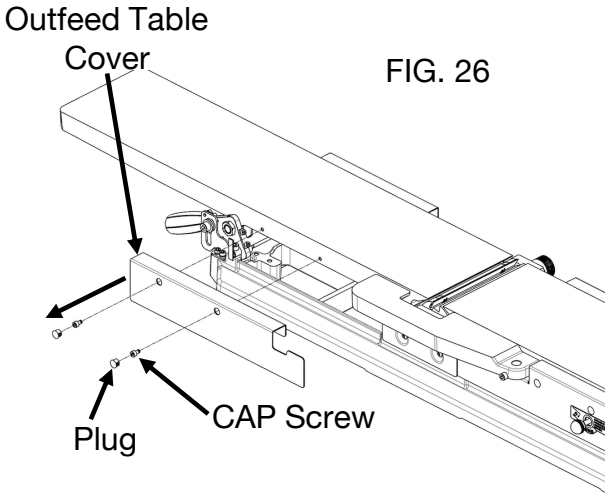
STEP 1: Place a straight edge on outfeed table hangs over the cutterhead and slightly touch the cutterehad body as shown in **FIG. 25**.

FIG. 25



STEP 2: Remove the plugs and loosen CAP screws to release and remove outfeed table cover as in **FIG. 26**.

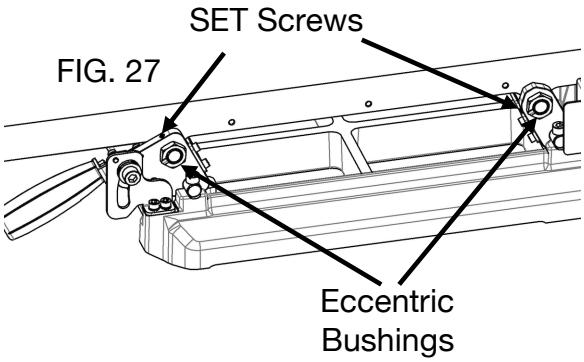
FIG. 26



F. TABLE ALIGNMENT (CONTINUED)

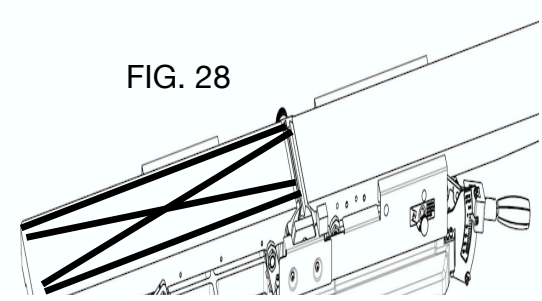
STEP 3: Loosen set screws as shown in **FIG. 27**.

FIG. 27



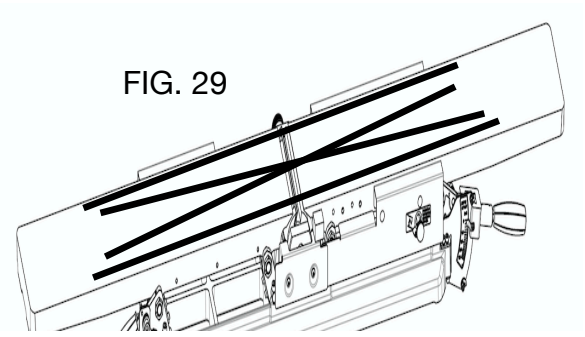
STEP 4: Place straight edge to all the positions shown in **FIG. 28**, and adjust the eccentric bushings as in **FIG. 27** until straight edge slightly touches the cutterhead body on each position.

FIG. 28



STEP 5: After verifying the parallelism on the outfeed table, tighten set screws in **FIG. 27**.
STEP 6: Remove infeed table depth stop release knob and infeed table cover, loosen set screws and place straight edge across infeed and outfeed tables as in **FIG. 29**, and adjust eccentric bushings under infeed table as STEP 4 for outfeed table.
STEP 7: Verify parallelism in each position as in **FIG. 29**, tighten set screws in eccentric bushings on infeed table.

FIG. 29



STEP 8: Tighten set screws in eccentric bushings under infeed table.
STEP 9: Re-install table covers and infeed table depth stop release knob back.

G. OUTFEED TABLE HEIGHT VS KNIFE INSERTS

Outfeed table only needs to be set with knife inserts when cutterhead is removed and re-installed or is replaced. Set the outfeed table height level in relation to the arc of the knife inserts for correct jointer and best cutting results. Follow the steps below to set outfeed table height.
STEP 1: DISCONNECT THE JOINTER FROM POWER SOURCE!
STEP 2: Remove cutterhead guard, fence and rear access panel.

⚠CAUTION:

Knife inserts are extremely sharp. Use caution when setting them.

STEP 3: Place straight edge on outfeed table hanging over cutterhead as shown in **FIG. 19** on page 22.
STEP 4: Follow STEP 3 and STEP 4 on F. TABLE ALIGNMENT on page 22.
STEP 5: Lock outfeed table at that height.

H. DEPTH OF CUT

This jointer is equipped with a 1/8" depth stop, and it is the maximum depth of cut. If deeper cuts are desired, make several passes. To set the infeed table depth of cut on each pass, follow the steps below.

STEP 1: Turn infeed table adjustment lever clockwise to release it as in **FIG. 30**.

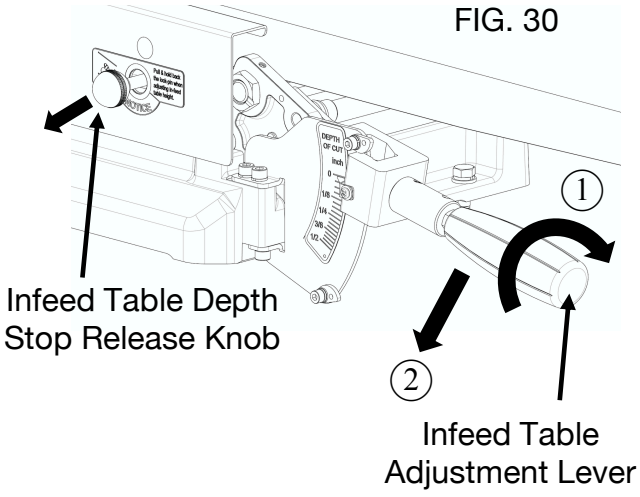
STEP 2: Push down infeed table adjustment lever to set cutting depth up to 1/8" as in **FIG. 30**.

STEP 3: Turn infeed adjustment lever counter-clockwise to tighten and depth of cut is set.

To <u>further lower</u> infeed table for rabbeting operation, follow **STEP 1** and pull infeed table depth stop release knob as in **FIG. 30** and hold. Then, follow **STEP 2** to lower infeed table all the way down to 1/2".

STEP 3: Turn infeed adjustment lever counter-clockwise to tighten and set the cutting depth.

FIG. 30



<u>Calibration Depth of Cut Scale</u>

When actual cutting depth does not match depth of cut scale, follow the steps below to calibrate.

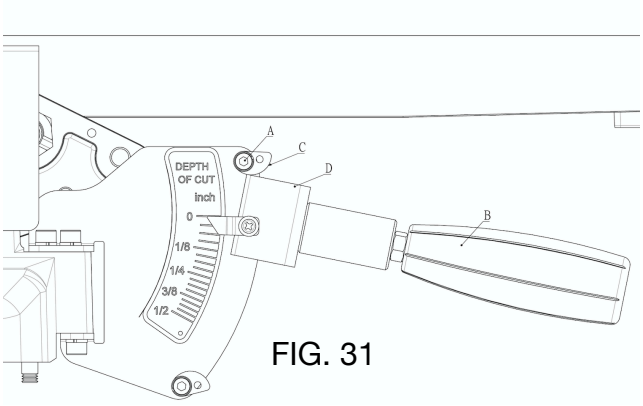


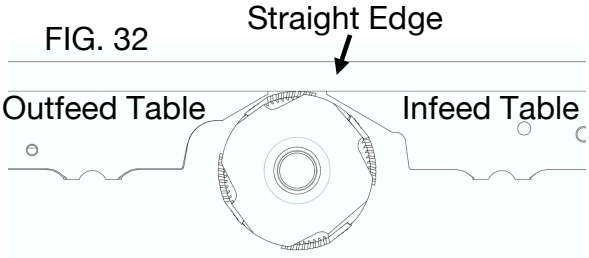
FIG. 31

STEP 1: Loosen **A** screw in **FIG. 31**.

STEP 2: Release infeed table adjustment lever as **B** in **FIG. 31**.

STEP 3: Place straight edge across infeed and outfeed tables as in **FIG. 32**.

FIG. 32



STEP 4: Adjust infeed table to level with knife insert tip (top dead center).

STEP 5: Move infeed table adjustment lever as **B**. in **FIG. 31** to have indicator point at zero.

STEP 6: Move position plate as **C** in **FIG. 31** to contact position bracket as **D** in **FIG. 31**.

STEP 7: Tighten **A** screw in **FIG. 31**.

I. ROTATING OR REPLACING KNIFE INSERTS

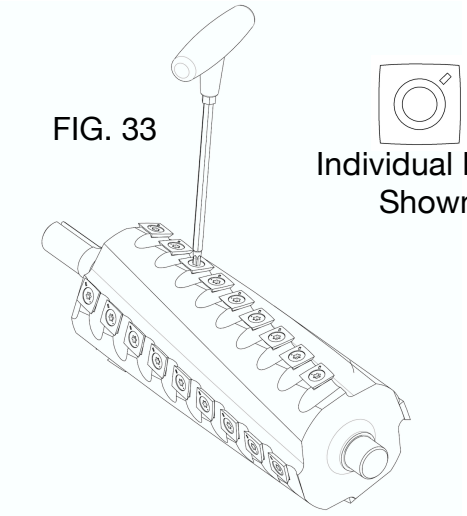
This jointer comes with a helical cutterhead with 4 sided carbide inserts which can be rotated or removed individually when dull. To rotate or replace inserts, follow the steps below.

⚠CAUTION:

BLADE INSERTS ARE SHARP. USE CAUTION WHEN WORKING WITH OR AROUND THEM.

STEP 1: DISCONNECT THE MACHINE FROM POWER SOURCE!
STEP 2: Remove cutterhead guard, lower infeed table to its lowest point and remove rear access panel.
STEP 3: Clean sawdust and debris from the screw, the inserts and cutterhead to prevent from having dust sticking in between the elements and causing improper seating and affect the quality of cuts.
STEP 4: Remove torx screws with the included torx screwdriver as in **FIG. 33**.

FIG. 33

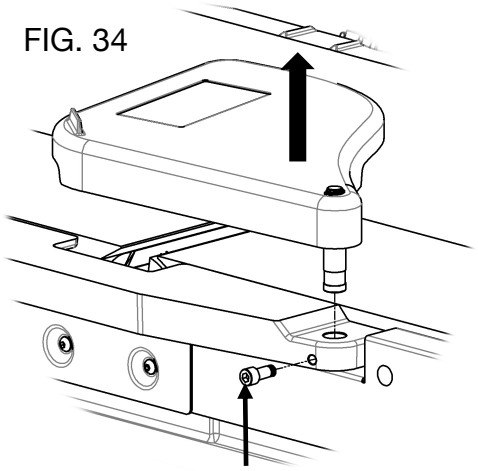


Individual Insert Shown

J. CUTTERHEAD GUARD REMOVAL

To remove cutterhead guard,
STEP 1: Untighten set screw as in **FIG. 34**.
STEP 2: Lift up cutterhead guard.

FIG. 34



Set Screw

NOTE: This jointer is equipped with spring preload mechanism. The spring won't lose its tension and cutterhead guard will always bounce back.

K. CUTTERHEAD REMOVAL

The cutterhead assembly can be removed from the jointer for servicing or replacing bearings. To remove the cutterhead, follow the steps below.

⚠CAUTION:

BLADE INSERTS ARE SHARP. USE CAUTION WHEN WORKING WITH OR AROUND THEM.

STEP 1: DISCONNECT THE MACHINE FROM POWER SOURCE!
STEP 2: Remove cutterhead guard, fence assembly, and rear access door.
STEP 3: Lower both infeed and outfeed tables to their lowest point.
STEP 4: Loosen cap screw as in **FIG. 35** from the rabbeting table.

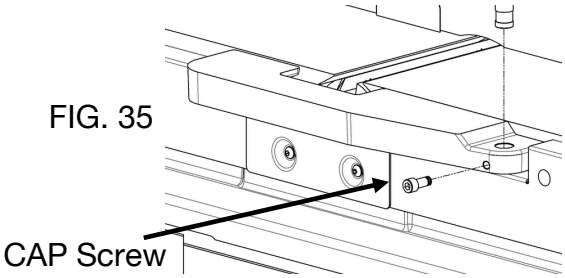


FIG. 35

STEP 5: Remove screws and washers from infeed table as in **FIG. 36** to remove rabbeting table.

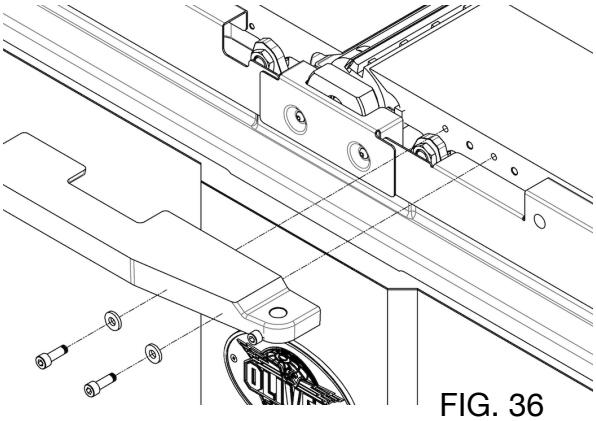


FIG. 36

STEP 6: Remove screws from cutterhead front cover as in **FIG. 37**.

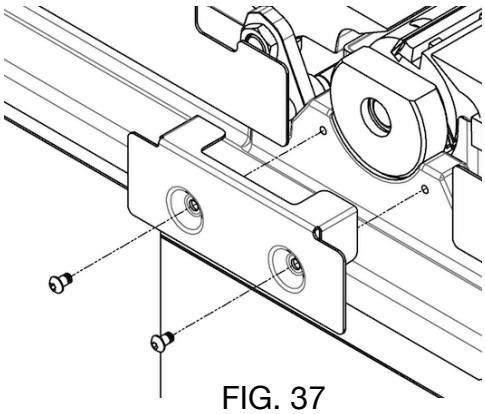


FIG. 37

STEP 7: Remove fence assembly (See E. Fence Removal on page 21).
STEP 8: Remove belt guard by removing four (4) screws as in **FIG. 38** and remove driving belt as in **FIG. 39** from cutterhead pulley.

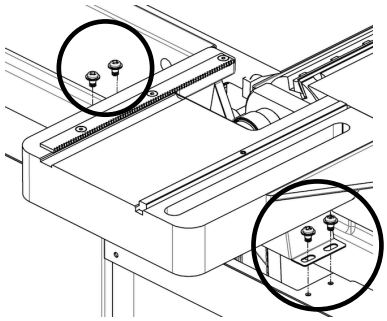


FIG. 38

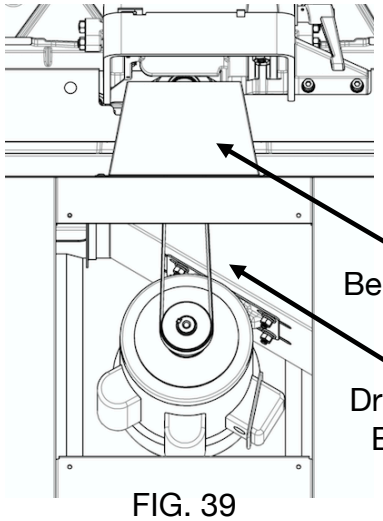
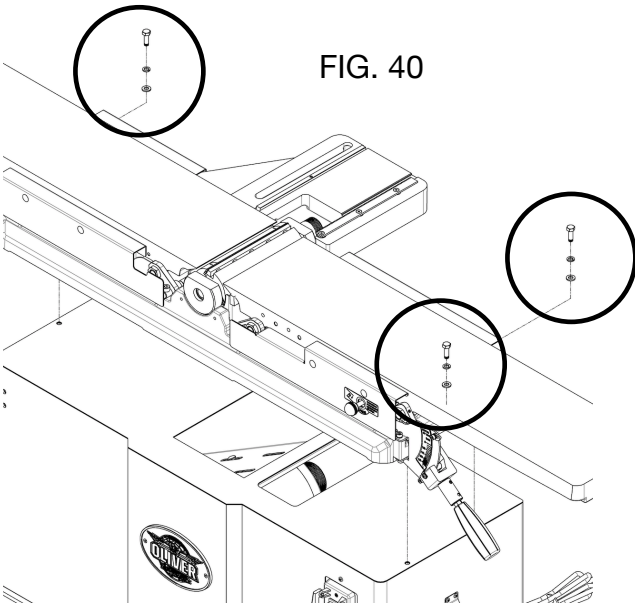


FIG. 39

K. CUTTERHEAD REMOVAL (CONTINUED)

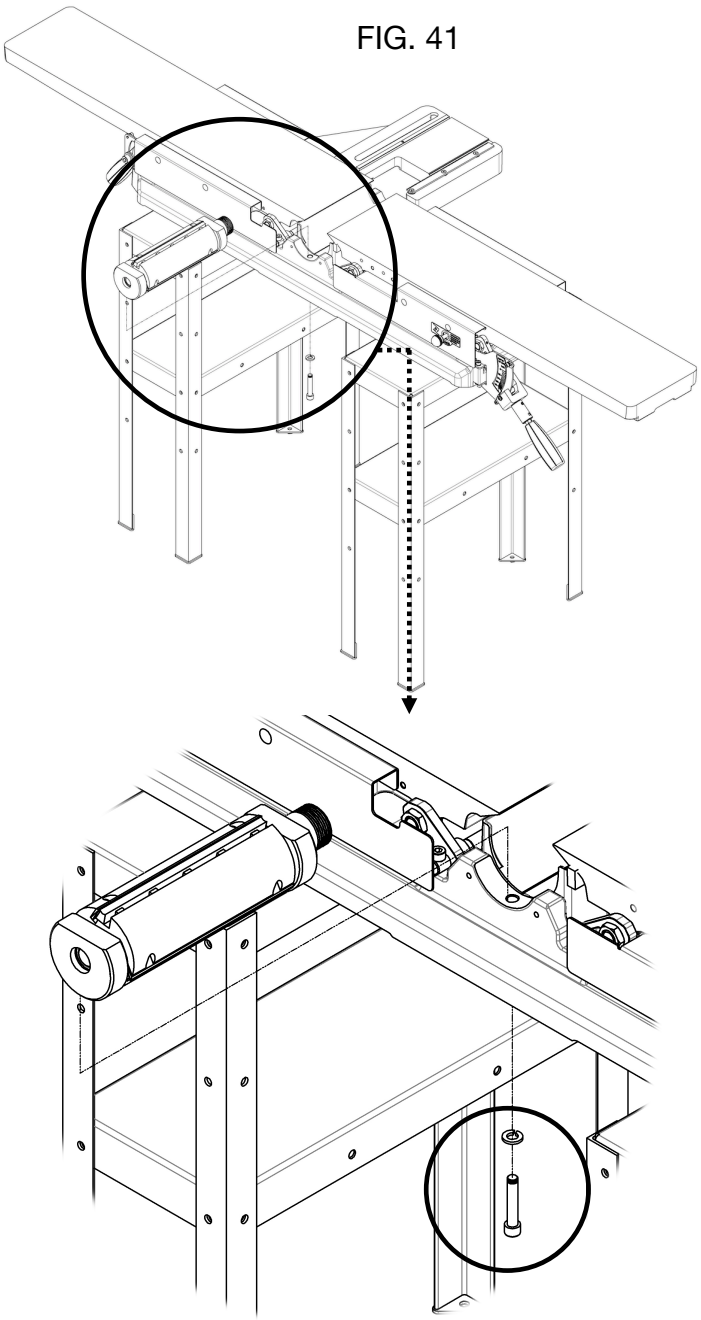
STEP 9: Remove the screw from the base to detach the table and table base from the stand as in **FIG. 40**.

FIG. 40



STEP 10: Place the table base assembly on top of two tables to have an access to the bottom of the cutterhead. Remove the lock washer and cap screw from the bearing block housing as in **FIG. 41**.

FIG. 41



L. PULLEY ALIGNMENT

Pulleys must be parallel and coplanar. Each of them can be adjusted. Follow steps below.

STEP 1: DISCONNECT THE MACHINE FROM POWER SOURCE!

STEP 2: Remove fence, belt cover and rear access panel panel.

STEP 3: Check their parallelism by looking down length of belt and pulley faces as in **FIG. 42**, and/or placing straight edge against pulley faces as in **FIG. 43**.

STEP 4: If pulleys are aligned, go to STEP 10. If not, continue to STEP 5.

STEP 5: Remove belt (See B. BELT REPLACEMENT on page 18).

STEP 6: Loosen set screws on motor and cutterhead as in **FIG. 43**.

STEP 7: Align both pulleys.

STEP 8: Tighten both set screws.

STEP 9: Repeat STEP 3 to make sure the pulleys are aligned.

STEP 10: Re-install fence, belt cover and rear access panel.

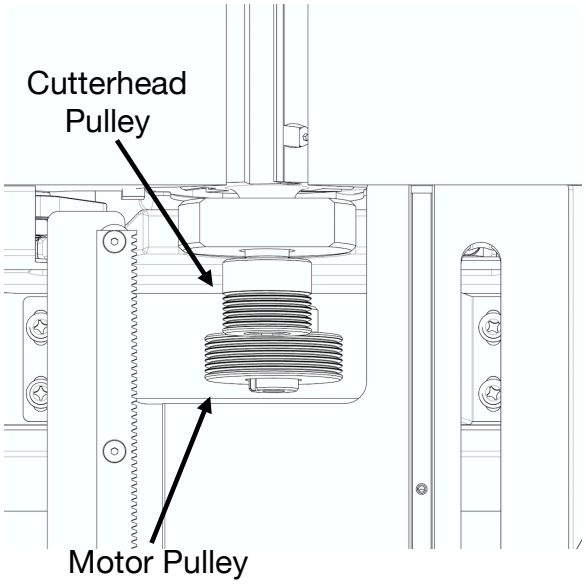


FIG. 42
View from Top

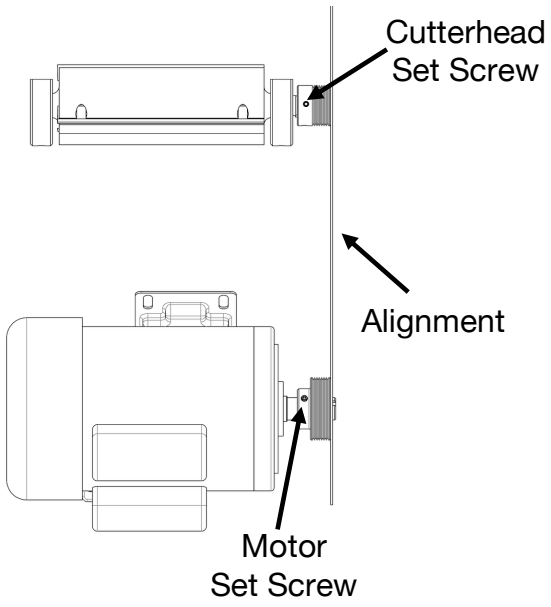


FIG. 43

OPERATIONS

A. SWITCH ASSEMBLY

Switch assembly is illustrated as in **FIG. 44**. To prevent unauthorized operation or children from using this machine. The switch can be locked with a padlock (not included).

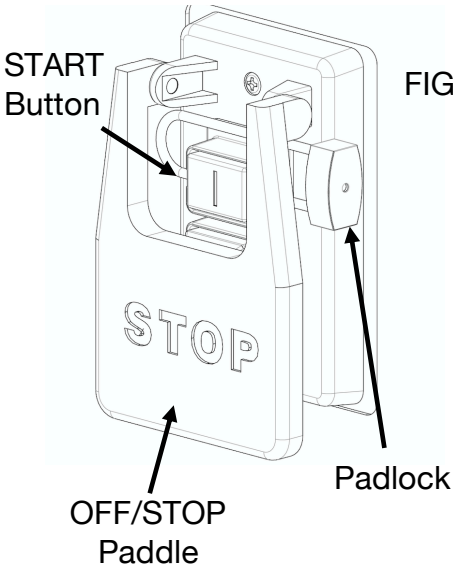


FIG. 44

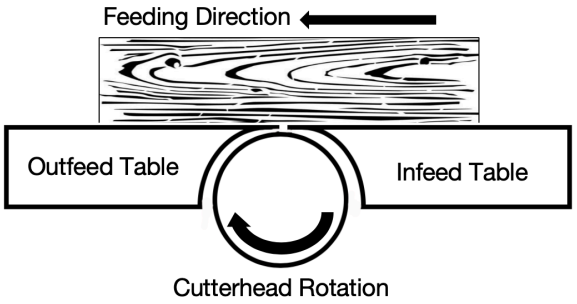
B. KNOW YOUR WORKPIECE

Direction of Grain

Read the grain for the correct feeding direction to ensure smooth feeding and to avoid tear-out. Always feed with grain. See **FIG. 45** and **FIG. 46** to determine correct and incorrect feeding directions.

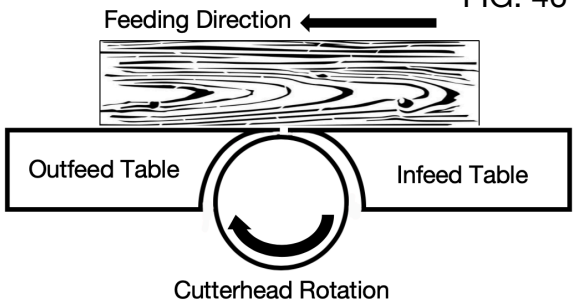
CORRECT Feeding Direction

FIG. 45



INCORRECT Feeding Direction

FIG. 46



Workpiece Inspection & Condition

- Always examine your workpiece. If the workpiece surface is warped, cupped or bowed, place the concave side down and going multiple minimum depth of cuts until the surface is flat.
- Check for knots – Do not joint workpiece that has large or loose knots to prevent injuries caused by loose forced out knots.
- Remove foreign objects such as nails, staples or any other foreign objects that could damage the cutterhead.
- Do not joint workpiece that is smaller than ½" thick and 2" wide.

C. FENCE STOPS

See D. FENCE STOPS on pages 19 and 20.

D. SET DEPTH OF CUT

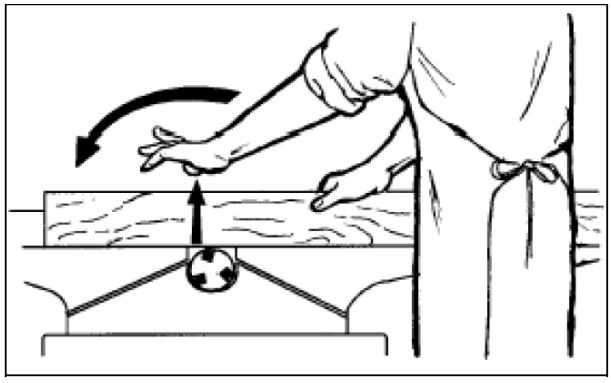
See H. DEPTH OF CUT on page 25.

E. HAND SAFETY & PLACEMENT

Never pass hands directly over the cutterhead. As one hand approaches the cutterhead, remove it from the workpiece in a position beyond the cutterhead. See **FIG.47**.

When feeding the workpiece, pressure is applied not only toward the cutterhead but against the fence and down to the table at the same time. At the start of the cut, the left hand holds the workpiece down and toward the fence while right-hand pushes toward the cutterhead. As the workpiece crosses the cutterhead, the left hand comes up and over as in **FIG. 47** to continue the pressure but now on the outfeed table. As the right hand approaches the cutterhead, it is time to move it up and over the cutterhead in the same fashion as the left hand in **FIG. 47**.

FIG. 47



F. SURFACING

Surfacing is jointer the face of the workpiece as shown in **FIG. 48**.

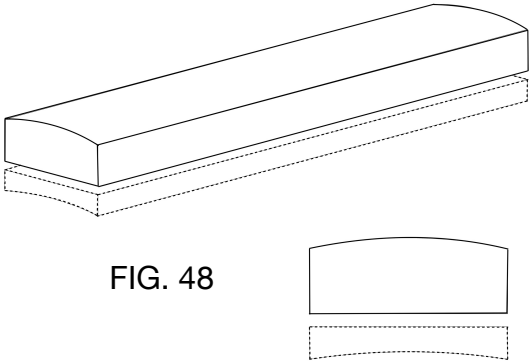


FIG. 48

⚠CAUTION:

CONCAVE SIDE OF WORKPIECE FACING DOWN TO ENSURE STABALE CUT.

STEP 1: Adjust the depth of cut on the infeed table. Do not cut more than 1/16” per pass when surfacing to allow control over the workpiece and to minimize risk of kickback.

STEP 2: Set fence to 90°.

STEP 3: Have push blocks ready and in position.

STEP 4: Start jointer.

STEP 5: Place the workpiece against fence and infeed table firmly.

More steps on next page

F. SURFACING (CONTINUED)

STEP 6: Feed workpiece completely across cutterhead while pressing it firmly against the fence and tables during the entire cut. Keep in mind the outfeed table is the reference point. Once the workpiece is past the cutterhead, downward pressure should be applied to the outfeed table only. Putting downward pressure on the infeed table at this time will bend any cup or warp prior to hitting the cutterhead. After the pressure is released, the cup will spring back. At the same time, try to keep a constant feed rate in order to give a good smooth cut with no burnt marks.
STEP 7: Repeat STEP 6 until entire surface is flat.

G. EDGE JOINTING

Edge jointer is to give a good straight edge for gluing or joining.
STEP 1: Set fence square with the table.
STEP 2: Set depth of the cut to the minimum amount to obtain a straight edge. Do not set cuts deeper than 1/8" in a single pass.
STEP 3: Hold the best face of the workpiece firmly against the fence throughout the feeding.

H. BEVELING

Bevel cut is to feed the workpiece firmly along the angled fence face as shown in **FIG. 49**.
STEP 1: Set depth of cut on infeed table.

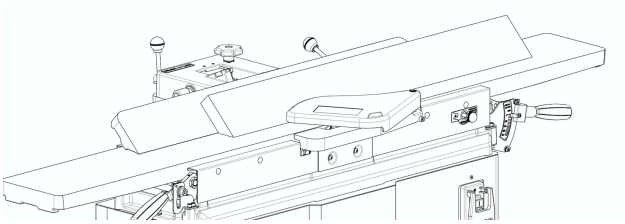
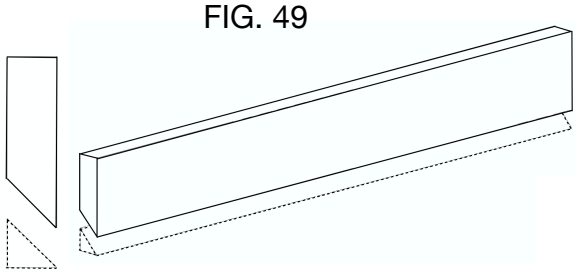


FIG. 49



STEP 2: Set fence tilt to desired angle of cut using a protractor and lock into place.
STEP 3: Place workpiece against the fence and infeed table.
STEP 4: Feed the workpiece through pressing firmly against the fence and tables.
STE**P 5:** Several passes may be necessary for the desired result.

I. RABBETING

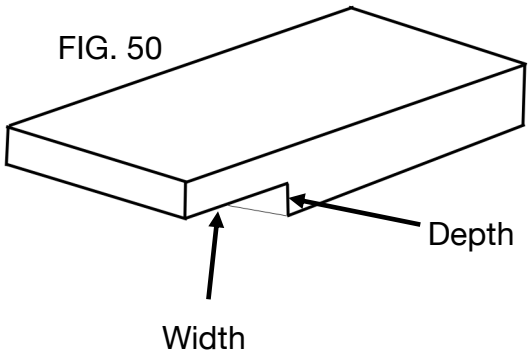
A rabbet cut is a groove cut along the edge of a workpiece.

STEP 1: Lower the infeed table to the depth of the rabbet required. The maximum depth of cut for rabbet is ½"

STEP 2: Set fence to 90°.

STEP 3: Slide the fence forward to set the distance between the edge of the cutterhead and the fence that is equal to the width of the desired rabbet as shown in **FIG. 50**. The amount of exposed cutterhead equals to the desired rabbet.

FIG. 50



STEP 4: Have the push blocks ready.

STEP 5: Place workpiece firmly against the fence and infeed table.

STEP 6: Feed the workpiece through completely across cutterhead while keeping it firmly against fence and tables during the entire cut.

⚠WARNING:

RABBETING REQUIRES REMOVAL OF THE CUTTERHEAD GUARD. USE EXTREME CAUTION AND REINSATLL THE GUARD IMMEDIATELY AFTER COMPLETION.

MAINTENANCE

⚠WARNING:

TO REDUCE THE RISK OF INJURY, DISCONNECT THE MACHINE FROM ITS POWER BEFORE PERFORMING SERVICE, MAINTENANCE OR REPAIR.

CLEANING

After each use, vacuum excess wood chips, dust and/or debris on the table and fence, and wipe clean the tables with a dry cloth. Periodically clean inside of the stand for dust control. Use an air hose to blow out dust off from motor fan and motor cover.

PROTECTION

After each cleaning, the table and fence must be kept free of dust. A thin layer of protectant can be applied to prevent rust.

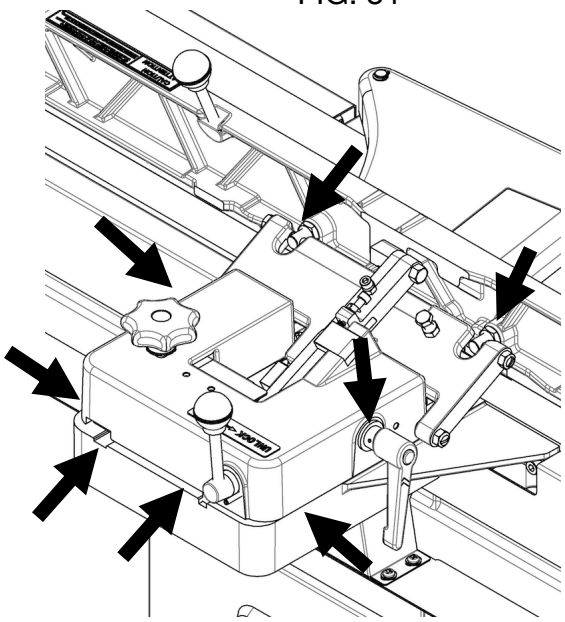
LUBRICATION

Periodically, apply a light grease to the fence assembly after cleaning**. FIG. 51** points to the lubrication locations.

KNIVES

To rotate or replace carbide inserts, please follow the steps on I. ROTATE OR REPLACING INSERTS on page 26. Before rotate and replace inserts, the inserts, screws and the cutterhead platform must be free of dust to make sure the inserts are placed properly.

FIG. 51

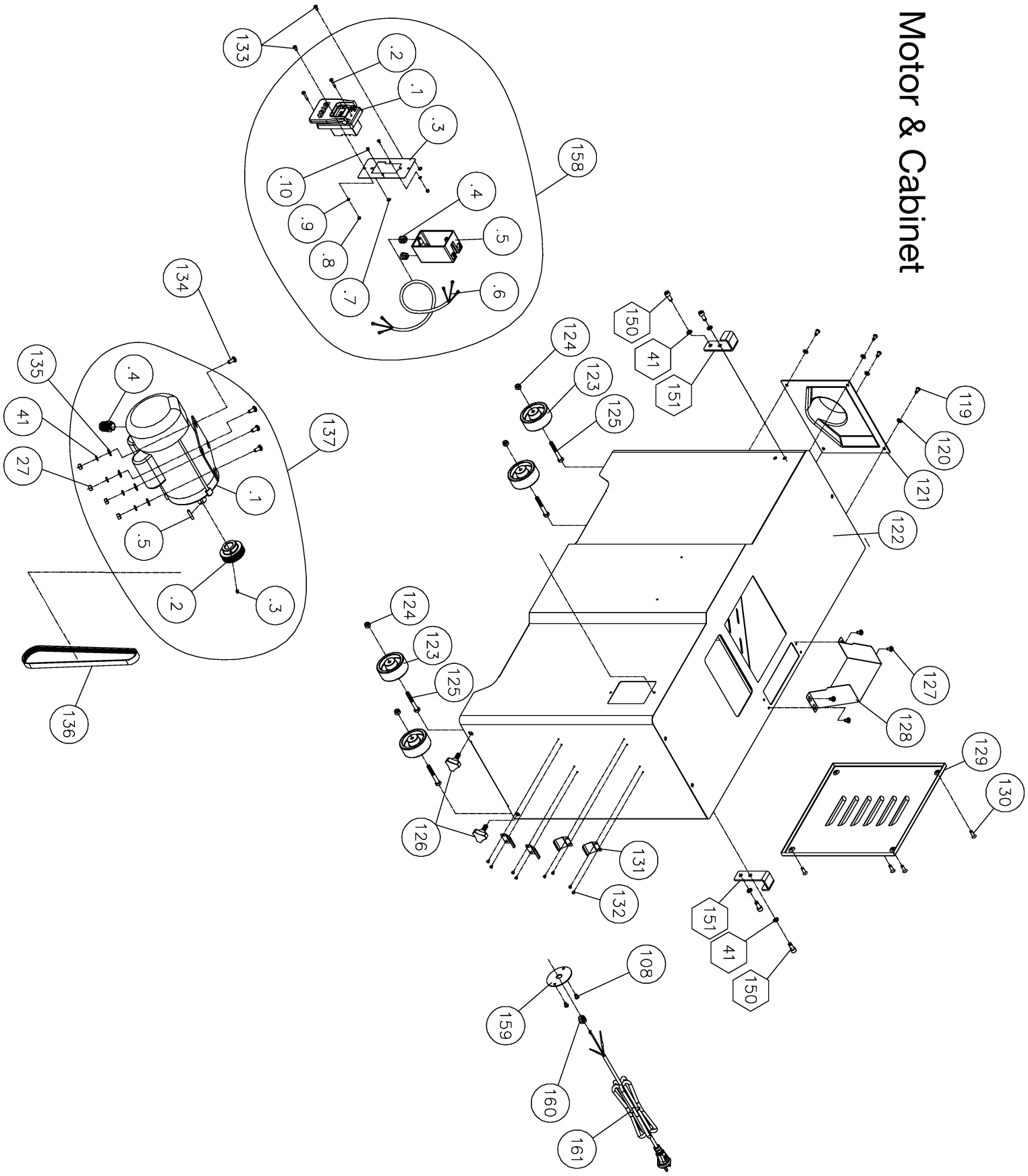


TROUBLESHOOTING

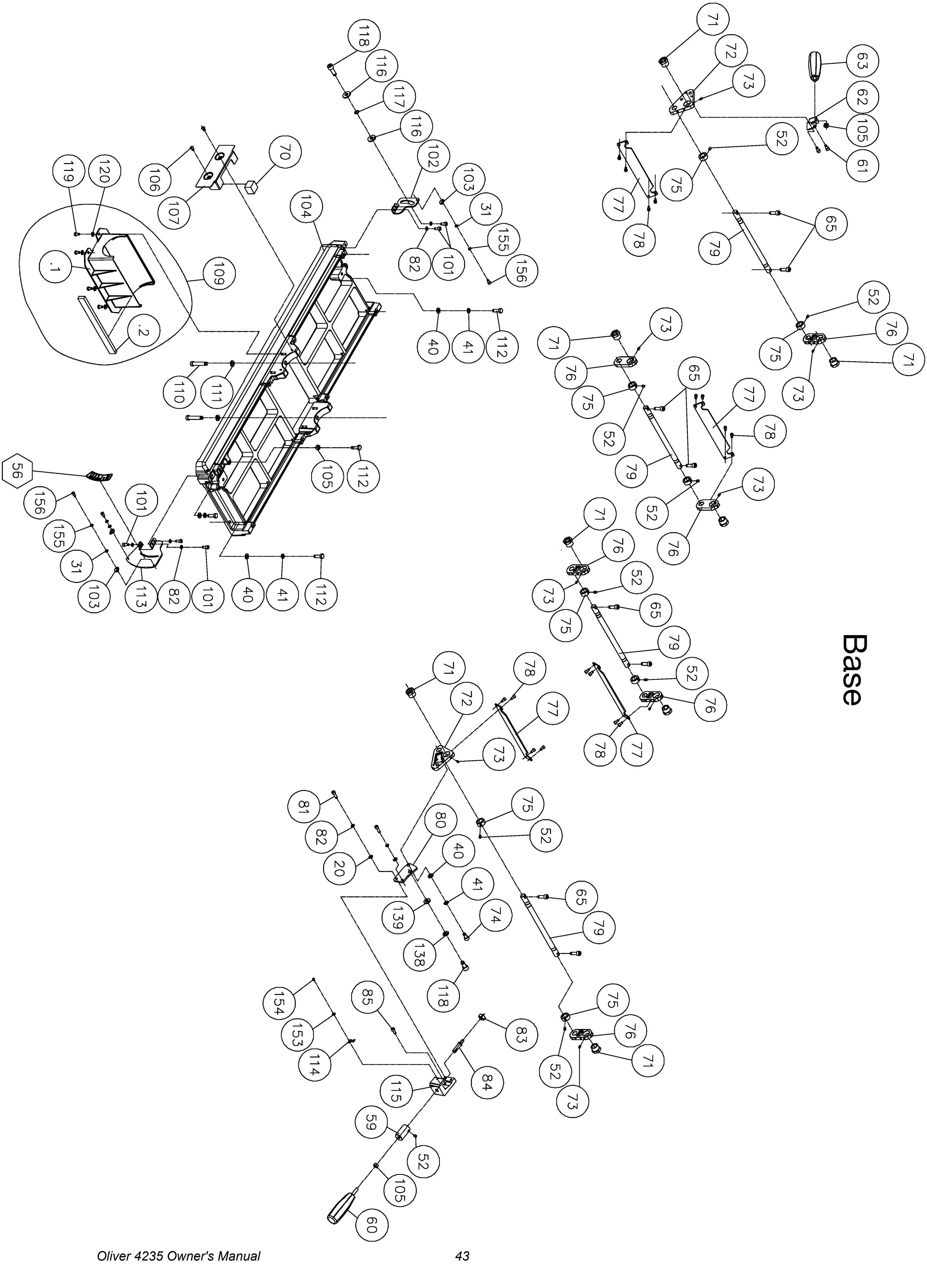
Description of	Possible Cause	Corrective Action
Machine will not start	1. Fuse blown or circuit breaker tripped 2. Cord Damaged 3. Faulty switch 4. Not connected to power source or no power to machine 5. Start capacitor at fault 6. Motor at fault	1. Replace fuse or reset circuit breaker 2. Replace cord 3. Test and replace switch 4. Check connection and ensure correct power supply voltage 5. Test and replace capacitor 6. Test and repair or replace motor
Cutterhead doesn't come up to speed	1. Cable too light or too long 2. Low current	1. Replace with adequate size cable 2. Contact local electric company
Unsatisfactory finish	1. Dull knives 2. Dirt or debris under inserts 3. Feed rate too slow or too fast	1. Rotate/replace inserts 2. Remove inserts, clean mounting pockets and re-install inserts 3. Adjust feeding rate
Excessive Vibration	1. Machine not level 2. Damaged knife inserts 3. Belt worn or loose 4. Loose, bent or misaligned pulley 5. Improper motor mounting 6. Motor fan interferes with fan cover 7. Motor bearings at fault 8. Loose hardware	1. Reposition on flat, level surface 2. Replace knife inserts 3. Inspect tension or replace belt 4. Check and repair/replace pulley 5. Check and adjust motor mounting 6. Fix or replace the fan/cover 7. Test and replace motor bearings 8. Tighten hardware
Adjustments do not move freely	Sawdust and debris in mechanisms	Clean sawdust/debris and re-grease mechanism
Finished stock is concave on the end	1. Knife is higher than the outfeed table 2. Workpiece not held with even pressure when feeding through	1. Adjust the outfeed table to the highest point of the cutting circle 2. Apply even pressure throughout entire feeding
Back end of the stock is thicker than the front end	1. Knife is higher than the outfeed table 2. Workpiece not held with even pressure when feeding through	1. Knife is higher than the outfeed table 2. Workpiece not held with even pressure when feeding through
Finished stock is concave or convex in the middle	Tables are not level with each other	Level one of the tables to the other

Maintenance Records:

Motor & Cabinet



Base



Fence

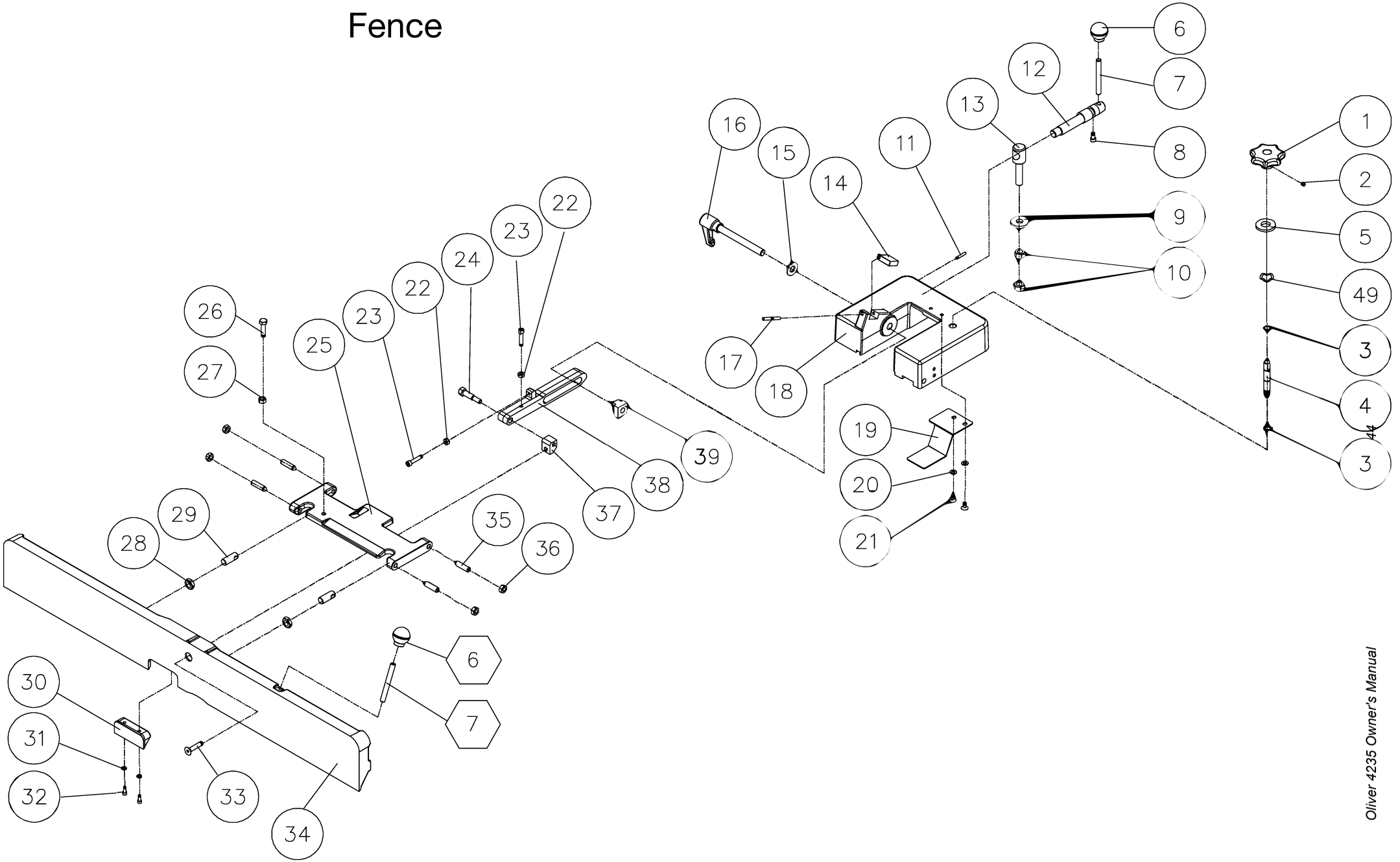

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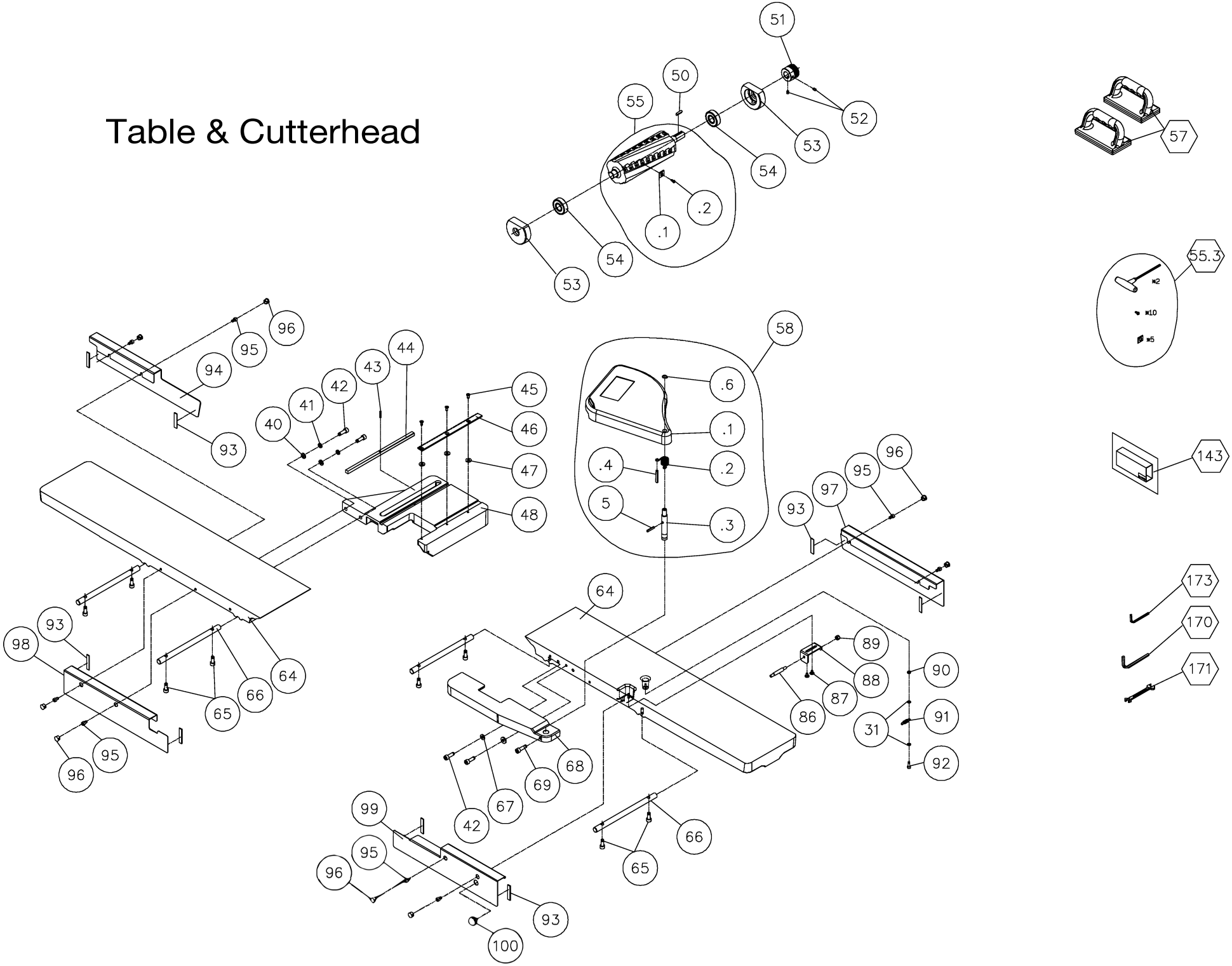
Table & Cutterhead



Parts List for 4235				
Item	**Part No.**	**Description**	**Specification**	**Qty**
1	240080-904	Knob		1
2	001902-109	Set Lock Screw	M6*1.0P*6	1
3	010003-000	S Ring	STW-12	2
4	381336-901	Gear Shaft		1
5	006001-087	Flat Washer		1
6	250372-615	Knob		2
7	360038-901	Shaft for Knob		2
8	003103-102	Cap Screw	1/4"-20NC*1/2"	1
9	172285-905	Flat Washer	13*35*5.0t	1
10	009011-100	Hex. Nut	1/2"-12NC	2
11	011002-106	Spring Pin	4*25	1
12	360074-901	Eccentric Shaft		1
13	360075-901	Cam Lock Stud		1
14	130019-903	Stop Block		1
15	006001-091	Flat Washer	13*28*3.0t	1
16	230035-000	Lock Handle		1
17	360078-000	Pin		1
18	051332-000	Fence Bracket		1
19	170127-901	Safety Plate		1
20	006001-032	Flat Washer	6.6*13*1.0t	4
21	003403-102	Flat Head Screw	1/4"-20NC*1/2"	2
22	009004-200	Hex. Nut	1/4”-20NC	2
23	003103-104	Cap Screw	1/4"-20NC*1-1/4"	2
24	290007-901	Screw		1
25	051313-000	Fence Link		1
26	003003-106	Hex. Screw	5/16"-18NC*1-1/4"	1
27	009005-200	Hex. Nut	5/16”-18NC	5
28	009010-100	Hex. Nut	1/2"-20NF	2
29	360676-901	Pivot Stud		2
30	250462-615	Fence Insert		1
31	006001-009	Flat Washer	5.2*10*1.0t	7
32	003102-102	Cap Screw	3/16"-24NC*1/2"	2
33	003602-101	Flat Head Hex. Screw	5/16"-18NC*1-1/2"	1
34	051331-000	Fence		1
35	230015-901	Set Screw		4
36	009022-100	Hex. Nut	3/8"-16NC	4
37	130008-903	Fence Block		1
38	051334-000	Fence Link		1
39	130383-903	T-Nut (RH Thread)	1/2"-12NC	1
40	006001-049	Flat Washer	8.5*16*2.0t	6
41	006305-100	Spring Washer	8.2*13.7	14
42	000104-108	Cap Screw	M8*1.25P*25	4

Parts List for 4235				
Item	**Part No.**	**Description**	**Specification**	**Qty**
43	011002-105	Spring Pin	4*20	1
44	380082-902	Key		1
45	000701-103	Flat Head Hex. Screw	M5*0.8P*12	3
46	171841-902	Fence Guide		1
47	006001-034	Flat Washer	6.7*16*2.0t	3
48	051355-000	Fence Slide Bracket		1
49	006722-100	Wavy Washer	WW-19 (19.05*26)	1
50	012003-008	Key	5*5*22	1
51	381409-902	Cutterhead Pulley		1
52	001902-102	Set Lock Screw	M6*1.0P*8	11
53	050095-901	Bearing Housing		2
54	030208-002	Ball Bearing	6204-2NSE	2
55	JG34-12	Cutterhead Assembly		1
55.1	P-15mm 4S	Inserts Sold in Packs of 10	15*15*2.5t	36
55.2	038201-101	Torx Screws	#10-32NF*1/2"	36
55.3	040710-000	Torx Screwdriver	T-25	2
57	250035-629	Push Blocks		2
58	924821-000	Cutterhead Guard Assembly		1
58.1	090020-000	Cutterhead Guard		1
58.2	280281-901	Torsion Spring		1
58.3	361375-901	Pivot Shaft		1
58.4	011004-106	Pin	6*28	1
58.5	011003-105	Pin	5*26	1
58.6	010002-000	S Ring	STW-11	1
59	381428-902	Bushing		1
60	230191-000	Knob		1
61	000102-104	Cap Screw	M5*0.8P*12	2
62	174786-904	Knob Bracket		1
63	230141-615	Knob		1
64	051429-000	Table (infeed or outfeed)		2
65	002601-107	Cap Lock Screw	M8*1.25P*25	16
66	361239-902	Table Shaft		4
67	006001-163	Flat Washer	8.5*19*3t	2
68	051358-000	Rabbeting Table		1
69	003104-104	Cap Screw	5/16"-18NC*1"	1
70	200105-615	Sponge	30*30*22(L*W*H)	1
71	130350-903	Adjusting Bushing		8
72	130351-903	Bushing Plate (3 Holes)		2
73	001901-102	Set Lock Screw	M5*0.8P*8	8
74	000104-104	Cap Screw	M8*1.25P*16	1
75	361241-902	Bushing		8
76	130352-903	Bushing Plate (2 Holes)		6

Parts List for 4235				
Item	**Part No.**	**Description**	**Specification**	**Qty**
77	174604-000	Plate		4
78	002603-101	Cap Lock Screw	M5*0.8P*10	16
79	361326-902	Shaft for Knob		4
80	174784-904	Positioning Plate		1
81	000103-108	Cap Screw	M6*1.0P*25	2
82	006303-100	Spring Washer	6.5*10.5	7
83	130393-903	Wedged Block		1
84	361370-902	Shaft		1
85	002602-101	Cap Lock Screw	M6*1.0P*12	1
86	361327-902	Shaft		1
87	290028-901	Shoulder Screw		2
88	174603-902	Positioning Plate		1
89	009103-100	Lock Nut	1/4”-20NC	1
90	008004-100	Hex. Nut	M5*0.8P	1
91	280082-000	Tension Spring		1
92	000102-116	Cap Screw	M5*0.8P*15	1
93	200024-615	Foam Pad		8
94	174600-000	Left Rear Cover		1
95	000103-102	Cap Screw	M6*1.0P*10	8
96	042505-000	Plug	HP-13	8
97	174601-000	Right Rear Cover		1
98	174599-000	Left Front Cover		1
99	174781-000	Right Front Cover		1
100	230156-615	Ball Knob	22mm dia*1/4"-20NC	1
101	000103-105	Cap Screw	M6*1.0P*15	5
102	174787-904	Outfeed Table Lock Plate		1
103	174785-904	Positioning Plate		3
104	051441-000	Table Base		1
105	008006-100	Hex. Nut	M8*1.25P	3
106	000801-101	Flat Head Cap Screw	M6*1.0P*10	2
107	174597-000	Cutterhead Front Cover		1
108	000304-101	Philips Screw	M6*1.0P*8	2
109	924665-000	Dust Cover Assembly		1
109.1	251321-615	Dust Cover		1
109.2	200104-615	Dust Cover Sponge	212*10*20mm(L*W*H)	1
110	003111-301	Cap Screw	3/8-24NF*2"	2
111	006306-100	Spring Washer	9.8*17.8	2
112	000003-105	Hex. Bolt	M8*1.25P*25	4
113	174783-904	Infeed Table Lock Plate		1
114	174782-156	Scale Pointer		1
115	310548-911	Bracket		1
116	006003-080	Flat Washer	10.5*23*3.0t	2

Parts List for 4235				
Item	**Part No.**	**Description**	**Specification**	**Qty**
117	006703-100	Wavy Washer	WW-10	1
118	000105-101	Cap Screw	M10*1.5P*20	2
119	000304-203	Pan Head Philips Screw	M6*1.0P*12	8
120	006002-032	Flat Washer	6.6*13*1.0t	8
121	250052-615	Dust Port		1
122	174596-000	Cabinet		1
123	250399-615	Wheel		4
124	008306-100	Lock Nut	M8*1.25P	4
125	000003-313	Hex. Screw	M8*1.25P*60	4
126	230388-000	Knob Bolt	3-Lobe	2
127	001603-102	Phillip Head Screw w/Flat Washer	M6*1.0P*10/6*13.2*1.0t	4
128	174595-000	Belt Guard		1
129	170445-000	Rear Access Pan Headel		1
130	000403-104	Pan Head Phillips Screw	M6*1.0P*20	4
131	270003-901	Push Block Bracket		4
132	001102-102	Self-Tapping Screw	M4*1.59P*8	8
133	000303-103	Pan Head Philips Screw	M5*0.8P*10	2
134	003801-202	Carriage Bolt	5/16"-18NC*3/4"	4
135	006001-053	Flat Washer	8.5*19*2.0t	4
136	014361-000	V-Belt	300J-7	1
137	JG34-01	4235 Motor Assembly		1
137.1	603168-000	Motor	2HP*220-240V*60HZ*1PH*2P*8A	1
	496272-000	Starting Capacitor	400MFD/125VAC(LAI)(40*90)	1
	496291-000	Running Capacitor	60UF/250VAC(LAI)(40*85)	1
137.2	381410-902	Motor Pulley		1
137.3	001902-102	Set Screw	M6*1.0P*8	1
137.4	021316-000	Strain Relief	MG16A-10B-ST	1
137.5	012202-002	Key	5*5*30	1
138	006307-100	Spring Washer	10.2*18.5	1
139	006001-069	Flat Washer	10*20*3.0t	1
150	000104-106	Cap Screw	M8*1.25P*20	4
151	174695-902	Lifting Hook		2
153	006001-001	Flat Washer	4.3*10*1.0t	1
154	000302-101	Pan Head Philips Screw	M4*0.7P*6	1
155	006302-100	Spring Washer	5.1*9.3	3
156	000102-103	Cap Screw	M5*0.8P*10	3
158.1	821028-002	Switch Assembly	KJD17B-230V-S	1
158.2	000302-209	Pan Head Philips Screw	M4*0.7P*25	2
158.3	174365-902	Switch Backing Plate		1
158.4	020003-000	Strain Relief R type	SB7R-3	2
158.5	250480-615	Switch Box		1
158.6	473003-005	CSA Cable	SJT 14AWG*3C*850mm	1

Parts List for 4235				
Item	**Part No.**	**Description**	**Specification**	**Qty**
158.7	570695-000	Ground Sticker		2
158.8	008002-200	Hex. Nut	M4*0.7P(7B*3.2H)	2
158.9	006501-100	Toothed Washer	4.3*8.5(BW-4)	2
158.10	000302-101	Pan Head Philips Screw	M4*0.7P*6	2
159	174239-904	Backing Plate		1
160	020003-000	Pan Head Philips Screw	M4*0.7P*6	2
161	453012-013	CSA/UL Molded Plug	SJT 14AWG*3C*2600mm	1
170	040006-000	Hex. Wrench 6mm	6mm	1
171	040201-000	Open-End Wrench	8mm * 10mm	1
173	040003-000	Hex. Wrench 3mm	3mm	1

WIRING DIAGRAM