



# OPERATOR'S MANUAL

Wood Working



## PLANER

MODEL: IP-156 AND IP-156-HH

Baileigh Industrial, Inc.  
P.O. Box 531  
Manitowoc, WI 54221-0531  
Phone: 920.684.4990  
Fax: 920.684.3944  
[sales@baileigh.com](mailto:sales@baileigh.com)

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## THANK YOU & WARRANTY

Thank you for your purchase of a machine from Baileigh Industrial. We hope that you find it productive and useful to you for a long time to come.

**Inspection & Acceptance.** Buyer shall inspect all Goods within ten (10) days after receipt thereof. Buyer's payment shall constitute final acceptance of the Goods and shall act as a waiver of the Buyer's rights to inspect or reject the goods unless otherwise agreed. If Buyer rejects any merchandise, Buyer must first obtain a Returned Goods Authorization ("RGA") number before returning any goods to Seller. Goods returned without a RGA will be refused. Seller will not be responsible for any freight costs, damages to goods, or any other costs or liabilities pertaining to goods returned without a RGA. Seller shall have the right to substitute a conforming tender. Buyer will be responsible for all freight costs to and from Buyer and repackaging costs, if any, if Buyer refuses to accept shipment. If Goods are returned in unsalable condition, Buyer shall be responsible for full value of the Goods. Buyer may not return any special order Goods. Any Goods returned hereunder shall be subject to a restocking fee equal to 30% of the invoice price.

**Specifications.** Seller may, at its option, make changes in the designs, specifications or components of the Goods to improve the safety of such Goods, or if in Seller's judgment, such changes will be beneficial to their operation or use. Buyer may not make any changes in the specifications for the Goods unless Seller approves of such changes in writing, in which event Seller may impose additional charges to implement such changes.

**Limited Warranty.** Seller warrants to the original end-user that the Goods manufactured or provided by Seller under this Agreement shall be free of defects in material or workmanship for a period of twelve (12) months from the date of purchase, provided that the Goods are installed, used, and maintained in accordance with any instruction manual or technical guidelines provided by the Seller or supplied with the Goods, if applicable. The original end-user must give written notice to Seller of any suspected defect in the Goods prior to the expiration of the warranty period. The original end-user must also obtain a RGA from Seller prior to returning any Goods to Seller for warranty service under this paragraph. Seller will not accept any responsibility for Goods returned without a RGA. The original end-user shall be responsible for all costs and expenses associated with returning the Goods to Seller for warranty service. In the event of a defect, Seller, at its sole option, shall repair or replace the defective Goods or refund to the original end-user the purchase price for such defective Goods. Goods are not eligible for replacement or return after a period of 10 days from date of receipt. The foregoing warranty is Seller's sole obligation, and the original end-user's exclusive remedy, with regard to any defective Goods. This limited warranty does not apply to: (a) die sets, tooling, and saw blades; (b) periodic or routine maintenance and setup, (c) repair or replacement of the Goods due to normal wear and tear, (d) defects or damage to the Goods resulting from misuse, abuse, neglect, or accidents, (e) defects or damage to the Goods resulting from improper or unauthorized alterations, modifications, or changes; and (f) any Goods that has not been installed and/or maintained in accordance with the instruction manual or technical guidelines provided by Seller.

**EXCLUSION OF OTHER WARRANTIES.** THE FOREGOING LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. ANY AND ALL OTHER EXPRESS, STATUTORY OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. NO WARRANTY IS MADE WHICH EXTENDS BEYOND THAT WHICH IS EXPRESSLY CONTAINED HEREIN.

**Limitation of Liability.** IN NO EVENT SHALL SELLER BE LIABLE TO BUYER OR ANY OTHER PARTY FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR DOWN TIME) ARISING FROM OR IN MANNER CONNECTED WITH THE GOODS, ANY BREACH BY SELLER OR ITS AGENTS OF THIS AGREEMENT, OR ANY OTHER CAUSE WHATSOEVER, WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY OF LIABILITY. BUYER'S REMEDY WITH RESPECT TO ANY CLAIM ARISING UNDER THIS AGREEMENT IS STRICTLY LIMITED TO NO MORE THAN THE AMOUNT PAID BY THE BUYER FOR THE GOODS.



**Force Majeure.** Seller shall not be responsible for any delay in the delivery of, or failure to deliver, Goods due to causes beyond Seller's reasonable control including, without limitation, acts of God, acts of war or terrorism, enemy actions, hostilities, strikes, labor difficulties, embargoes, non-delivery or late delivery of materials, parts and equipment or transportation delays not caused by the fault of Seller, delays caused by civil authorities, governmental regulations or orders, fire, lightening, natural disasters or any other cause beyond Seller's reasonable control. In the event of any such delay, performance will be postponed by such length of time as may be reasonably necessary to compensate for the delay.

**Installation.** If Buyer purchases any Goods that require installation, Buyer shall, at its expense, make all arrangements and connections necessary to install and operate the Goods. Buyer shall install the Goods in accordance with any Seller instructions and shall indemnify Seller against any and all damages, demands, suits, causes of action, claims and expenses (including actual attorneys' fees and costs) arising directly or indirectly out of Buyer's failure to properly install the Goods.

**Work By Others; Safety Devices.** Unless agreed to in writing by Seller, Seller has no responsibility for labor or work performed by Buyer or others, of any nature, relating to design, manufacture, fabrication, use, installation or provision of Goods. Buyer is solely responsible for furnishing, and requiring its employees and customers to use all safety devices, guards and safe operating procedures required by law and/or as set forth in manuals and instruction sheets furnished by Seller. Buyer is responsible for consulting all operator manuals, ANSI or comparable safety standards, OSHA regulations and other sources of safety standards and regulations applicable to the use and operation of the Goods.

**Remedies.** Each of the rights and remedies of Seller under this Agreement is cumulative and in addition to any other or further remedies provided under this Agreement or at law or equity.

**Attorney's Fees.** In the event legal action is necessary to recover monies due from Buyer or to enforce any provision of this Agreement, Buyer shall be liable to Seller for all costs and expenses associated therewith, including Seller's actual attorney fees and costs.

**Governing Law/Venue.** This Agreement shall be construed and governed under the laws of the State of Wisconsin, without application of conflict of law principles. Each party agrees that all actions or proceedings arising out of or in connection with this Agreement shall be commenced, tried, and litigated only in the state courts sitting in Manitowoc County, Wisconsin or the U.S. Federal Court for the Eastern District of Wisconsin. Each party waives any right it may have to assert the doctrine of "forum non conveniens" or to object to venue to the extent that any proceeding is brought in accordance with this section. Each party consents to and waives any objection to the exercise of personal jurisdiction over it by courts described in this section. Each party waives to the fullest extent permitted by applicable law the right to a trial by jury.

#### **SUMMARY OF RETURN POLICY.**

- 10 Day acceptance period from date of delivery. Damage claims and order discrepancies will not be accepted after this time.
- You must obtain a Baileigh issued RGA number PRIOR to returning any materials.
- Returned materials must be received at Baileigh in new condition and in original packaging.
- Altered items are not eligible for return.
- Buyer is responsible for all shipping charges.
- A 30% re-stocking fee applies to all returns.

Baileigh Industrial makes every effort to ensure that our posted specifications, images, pricing and product availability are as correct and timely as possible. We apologize for any discrepancies that may occur. Baileigh Industrial reserves the right to make any and all changes deemed necessary in the course of business including but not limited to pricing, product specifications, quantities, and product availability.

#### **For Customer Service & Technical Support:**

Please contact one of our knowledgeable Sales and Service team members at:  
(920) 684-4990 or e-mail us at [sales@baileighindustrial.com](mailto:sales@baileighindustrial.com)



## **INTRODUCTION**

*The quality and reliability of the components assembled on a Baileigh Industrial machine guarantee near perfect functioning, free from problems, even under the most demanding working conditions. However, if a situation arises, refer to the manual first. If a solution cannot be found, contact the distributor where you purchased our product. Make sure you have the serial number and production year of the machine (stamped on the nameplate). For replacement parts refer to the assembly numbers on the parts list drawings.*

*Our technical staff will do their best to help you get your machine back in working order.*

### **In this manual you will find: (when applicable)**

- Safety procedures
- Correct installation guidelines
- Description of the functional parts of the machine
- Capacity charts
- Setup and start-up instructions
- Machine operation
- Scheduled maintenance
- Parts lists

## **GENERAL NOTES**

After receiving your equipment remove the protective container. Do a complete visual inspection, and if damage is noted, **photograph it for insurance claims** and contact your carrier at once, requesting inspection. Also contact Baileigh Industrial and inform them of the unexpected occurrence. Temporarily suspend installation.

Take necessary precautions while loading / unloading or moving the machine to avoid any injuries.

Your machine is designed and manufactured to work smoothly and efficiently. Following proper maintenance instructions will help ensure this. Try and use original spare parts, whenever possible, and most importantly; **DO NOT** overload the machine or make any unauthorized modifications.



**Note:** *This symbol refers to useful information throughout the manual.*



## IMPORTANT

### PLEASE READ THIS OPERATORS MANUAL CAREFULLY

It contains important safety information, instructions, and necessary operating procedures. The continual observance of these procedures will help increase your production and extend the life of the equipment.



## SAFETY INSTRUCTIONS

### LEARN TO RECOGNIZE SAFETY INFORMATION

This is the safety alert symbol. When you see this symbol on your machine or in this manual, **BE ALERT TO THE POTENTIAL FOR PERSONAL INJURY!**



Follow recommended precautions and safe operating practices.

### UNDERSTAND SIGNAL WORDS

A signal word – **DANGER**, **WARNING**, or **CAUTION** – is used with the safety alert symbol. **NOTICE**, which is not related to personal injury, is used without a symbol.

**DANGER:** Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

**WARNING:** Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**CAUTION:** Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

**NOTICE:** Indicates a situation which, if not avoided, could result in property damage.

**DANGER**

**WARNING**

**CAUTION**

**NOTICE**

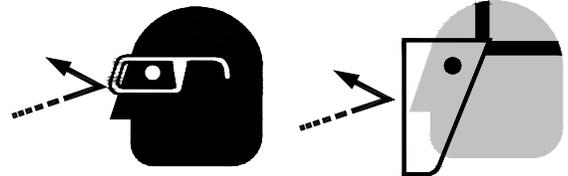


**SAVE THESE INSTRUCTIONS.**  
**Refer to them often and use them to instruct others.**



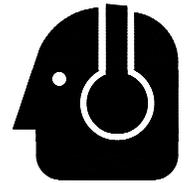
**PROTECT EYES**

Wear safety glasses or suitable eye protection when working on or around machinery.



**PROTECT AGAINST NOISE**

Prolonged exposure to loud noise can cause impairment or loss of hearing. Wear suitable hearing protective devices such as ear muffs or earplugs to protect against objectionable or uncomfortable loud noises.



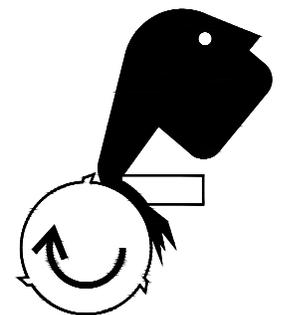
**BLADE HAZARD**

Keep hands and fingers away from the rotating knife blades. These rotating knives can be extremely dangerous if you do not follow proper safety procedures. **NEVER place hands closer than 3" (76mm) to the rotating cutting knives.**



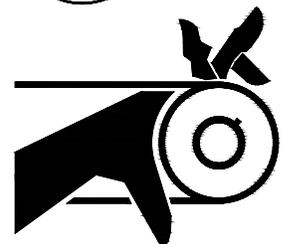
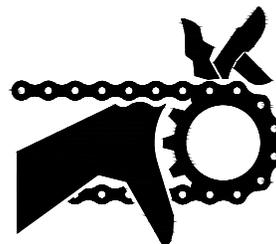
**ENTANGLEMENT HAZARD – ROTATING BLADES**

Contain long hair, **DO NOT** wear jewelry or loose-fitting clothing.



**BEWARE OF PINCH POINTS**

Keep hands and fingers clear of all potential pinch points. These include sprockets and chains along with belts and pulleys.





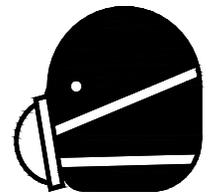
### HIGH VOLTAGE

USE CAUTION IN HIGH VOLTAGE AREAS. DO NOT assume the power to be off.  
(FOLLOW PROPER LOCKOUT PROCEDURES)



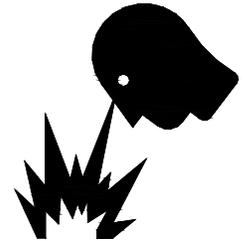
### DUST HAZARD

Wear appropriate dust mask. Dust created while using machinery can cause cancer, birth defects, and long term respiratory damage. Be aware of the dust hazards associated with all types of materials.



### DUST PARTICLES AND IGNITION SOURCES

DO NOT operate the table saw in areas where explosion risks are high. Such areas include locations near pilot lights, open flames, or other ignition sources.



### EMERGENCY STOP BUTTON

In the event of incorrect operation or dangerous conditions, the machine can be stopped immediately by pressing the E-STOP button.



## SAFETY PRECAUTIONS



Wood working can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result.

Safety equipment such as guards, push sticks, hold-downs, feather boards, goggles, dust masks and hearing protection can reduce your potential for injury. But even the best guard will not make up for poor judgment, carelessness or inattention. **Always use common sense** and exercise **caution** in the workshop. If a procedure feels dangerous, don't try it.

**REMEMBER: Your personal safety is your responsibility.**



**WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY**

Dear Valued Customer:

- All Baileigh woodworking machines should be used only for their intended use.
- Baileigh does not recommend or endorse making any modifications or alterations to a Baileigh machine. Modifications or alterations to a machine may pose a substantial risk of injury to the operator or others and may do substantial damage to the machine.
- Any modifications or alterations to a Baileigh machine will invalidate the machine's warranty.

**Please enjoy your Baileigh machine! ....Please enjoy it SAFELY!**

1. **FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE MACHINE.** Learn the machine's application and limitations as well as the specific hazards.
2. **Only trained and qualified personnel can operate this machine.**
3. **Make sure guards are in place and in proper working order before operating machinery.**
4. **Remove any adjusting tools.** Before operating the machine, make sure any adjusting tools have been removed.
5. **Keep work area clean.** Cluttered areas invite injuries.
6. **Overloading machine.** By overloading the machine, you may cause injury from flying parts. **DO NOT** exceed the specified machine capacities.
7. **Do not force tool.** Your machine will do a better and safer job if used as intended. **DO NOT** use inappropriate attachments in an attempt to exceed the machines rated capacity.



8. **Use the right tool for the job. DO NOT** attempt to force a small tool or attachment to do the work of a large industrial tool. **DO NOT** use a tool for a purpose for which it was not intended.
9. **Dress appropriately. DO NOT** wear loose fitting clothing or jewelry as they can be caught in moving machine parts. Protective clothing and steel toe shoes are recommended when using machinery. Wear a restrictive hair covering to contain long hair.
10. **Use eye and ear protection.** Always wear ISO approved impact safety goggles. Wear a full-face shield if you are producing material chips and or filings.
11. **Do not overreach.** Maintain proper footing and balance at all times. **DO NOT** reach over or across a running machine.
12. **Stay alert.** Watch what you are doing and use common sense. **DO NOT** operate any tool or machine when you are tired.
13. **Check for damaged parts.** Before using any tool or machine, carefully check any part that appears damaged. Check for alignment and binding of moving parts that may affect proper machine operation.
14. **Observe work area conditions. DO NOT** use machines or power tools in damp or wet locations. Do not expose to rain. Keep work area well lighted. **DO NOT** use electrically powered tools in the presence of flammable gases or liquids.
15. **Keep children away.** Children must never be allowed in the work area. **DO NOT** let them handle machines, tools, or extension cords.
16. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep them out of reach of children.
17. **DO NOT** touch live electrical components or parts.
18. Turn off power before checking, cleaning, or replacing any parts.
19. Be sure all equipment is properly installed and grounded according to national, state, and local codes.
20. Inspect power and control cables periodically. Replace if damaged or bare wires are exposed. **Bare wiring can kill!**
21. **DO NOT** bypass or defeat any safety interlock systems.
22. Know the location of the **ON - OFF** switch and the "**E**" - **STOP** button.
23. Keep visitors a safe distance from the work area.
24. **Do not remove** any warning signs.
25. **DO NOT** operate machine if under the influence of alcohol or drugs. Read warning labels on prescriptions. If there is any doubt, **DO NOT** operate the machine.
26. **Maintain machine in top condition.** Keep clean for best and safest performance. Follow instructions for lubricating and changing accessories.



27. **Warning:** The dust generated by certain woods and wood products can be injurious to your health. Always operate machinery in well-ventilated areas and provide for proper dust removal. Use a wood dust collection system whenever possible.
28. **Respiratory Protection.** Wear an approved dust mask or respirator while using this machine. Continued exposure to wood dust can cause allergies or long term respiratory problems.
29. **Kickback.** Become familiar with the term “**Kickback**” and how it occurs before operating this planer. Kickback happens when the piece part is thrown towards the operator at a high rate of speed with the potential for serious injury.
30. **Kickback Zone.** The path directly behind the end of the in-feed table is referred to as the “Kickback zone”. **NEVER** stand or allow others to stand in this area while the machine is running. Position yourself to one side of the machine while the planer is running.
31. **Reaching Inside Planer.** To avoid serious personal injury from rotating knives, NEVER remove guards or reach inside the planer while it is connected to power. Always Follow proper lockout /tagout procedures.
32. **Clearing Jams.** To avoid serious personal injury from rotating knives, **ALWAYS STOP** the planer and disconnect power before removing a jammed piece part. Always follow proper lockout/tagout procedures.
33. **Using Quality Stock.** Inspect the stock over carefully that you intend to plane. **NEVER** plane a board that has loose knots, staples, or nails in it. **DO NOT** plane a piece of stock if you have any doubts about its structural integrity.
34. **Dull / Damaged Knives.** Use only sharp, undamaged knives to avoid unnecessary kickback of the piece part. Dull and damaged knives will also affect cut quality.
35. **Looking Inside Planer.** Wood chips fly around inside the planer at a high rate of speed as it is running. To avoid possible injury from flying debris, **DO NOT** look inside the planer while it is running.
36. **Grain Direction.** There is an increased chance of kickback when planing end grain or against the grain. This could also produce chatter and excessive chip out of the material.
37. **In-feed Roller Clearance.** The in-feed roller is designed to pull material into the rotating cutterhead. To avoid serious personal injury, keep hands, jewelry, clothing, and long hair away from the in-feed roller while operating the machine.
38. **Reduce the risk of unintentional starting.** Make sure switch is in “**OFF**” position before plugging in power cord.
39. **Never leave machine running unattended. TURN POWER OFF.** Don’t leave machine until it comes to a complete stop.
40. **Using Correct Materials.** Planing materials other than natural wood fiber can result in serious personal injury and machine damage. **NEVER** use this machine for anything except planing in wood.



## **TECHNICAL SPECIFICATIONS**

Cutting Capacity (W x H)	15" x 6" (381 x 152mm)
Maximum Depth of Cut	1/8" (3.1mm)
Minimum Material Thickness	3/16" (4.7mm)
Minimum Stock Length	6" (152mm)
Cutterhead Speed	5000 RPM
Number of Knives (IP-156)	3
Number of Cutter Inserts (IP-156-HH)	JP31 – 68pcs
Cutter Head Size	3" (76.2mm)
Table Size (L x W)	48" x 15" (1219 x 381mm)
Feed Speed	16/20 FPM (4.8/6MPM)
Dust Collection Port	1 @ 4" (102mm)
Table Elevation	Manual
Power Supply	220V, 60Hz, 1Ph
Motor	3Hp (2.23kw), 220V, 60Hz, 1Ph, 15A
Net Weight (Approx.)	448 lbs. (203kg)
Shipping Weight (Approx.)	520 lbs. (236kg)

## **TECHNICAL SUPPORT**

Our technical support department can be reached at 920.684.4990, and asking for the support desk for purchased machines. Tech Support handles questions on machine setup, schematics, warranty issues, and individual parts needs: (other than die sets and blades).

For specific application needs or future machine purchases contact the Sales Department at: [sales@baileigh.com](mailto:sales@baileigh.com), Phone: 920.684.4990, or Fax: 920.684.3944.



**Note:** *The photos and illustrations used in this manual are representative only and may not depict the actual color, labeling or accessories and may be intended to illustrate technique only.*



**Note:** *The specifications and dimensions presented here are subject to change without prior notice due to improvements of our products.*



## UNPACKING AND CHECKING CONTENTS

Your Baileigh machine is shipped complete. Separate all parts from the packing material and check each item carefully. Make certain all items are accounted for before discarding any packing material.

**⚠ WARNING: SUFFOCATION HAZARD!** Immediately discard any plastic bags and packing materials to eliminate choking and suffocation hazards to children and animals.

If any parts are missing, **DO NOT** place the machine into service until the missing parts are obtained and installed correctly.

### Cleaning

**⚠ WARNING: DO NOT USE** gasoline or other petroleum products to clean the machine. They have low flash points and can explode or cause fire.

**⚠ CAUTION:** When using cleaning solvents work in a well-ventilated area. Many cleaning solvents are toxic if inhaled.

Your machine may be shipped with a rustproof waxy coating and/or grease on the exposed unpainted metal surfaces. Fully and completely remove this protective coating using a degreaser or solvent cleaner. Moving items will need to be moved along their travel path to allow for cleaning the entire surface. For a more thorough cleaning, some parts will occasionally have to be removed. **DO NOT USE** acetone or brake cleaner as they may damage painted surfaces.

Follow manufacturer's label instructions when using any type of cleaning product. After cleaning, wipe unpainted metal surfaces with a light coating of quality oil or grease for protection.



**Important:** This waxy coating is **NOT** a lubricant and will cause the machine to stick and lose performance as the coating continues to dry.



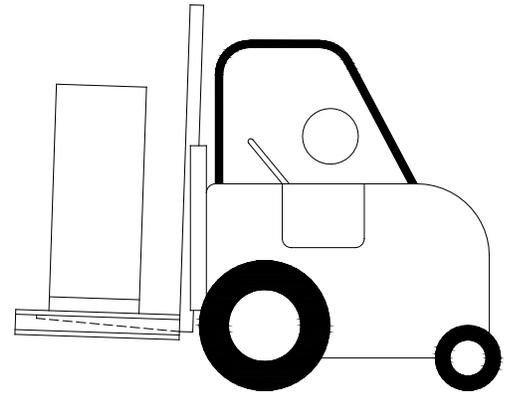


## TRANSPORTING AND LIFTING

**NOTICE:** *Lifting and carrying operations should be carried out by skilled workers, such as a truck operator, crane operator, etc. If a crane is used to lift the machine, attach the lifting chain carefully, making sure the machine is well balanced.*

### **Follow these guidelines when lifting with truck or trolley:**

- The lift truck must be able to lift at least 1.5 – 2 times the machines gross weight.
- Make sure the machine is balanced. While transporting, avoid rough or jerky motion, and maintain a safe clearance zone around the transport area.
- Use a fork lift with sufficient lifting capacity and forks that are long enough to reach the complete width of the machine.
- Remove the securing bolts that attach the machine to the pallet.
- Approaching the machine from the side, lift the machine on the frame taking care that there are no cables or pipes in the area of the forks.
- Move the machine to the required position and lower gently to the floor.
- Level the machine so that all the supporting feet are taking the weight of the machine and no rocking is taking place.



## INSTALLATION

**⚠ WARNING:** FOR YOUR OWN SAFETY, DO NOT CONNECT THE MACHINE TO THE POWER SOURCE UNTIL THE MACHINE IS COMPLETELY ASSEMBLED AND YOU READ AND UNDERSTAND THE ENTIRE INSTRUCTION MANUAL.

### **IMPORTANT:**

Consider the following when looking for a suitable location to place the machine:

- Overall weight of the machine.
- Weight of material being processed.
- Sizes of material to be processed through the machine.
- Space needed for auxiliary stands, work tables, or other machinery.
- Clearance from walls and other obstacles.



- Maintain an adequate working area around the machine for safety.
- Have the work area well illuminated with proper lighting.
- Keep the floor free of oil and make sure it is not slippery.
- Remove scrap and waste materials regularly, and make sure the work area is free from obstructing objects.
- It is important to maintain free area around the machine, which is required for the working place. If any long material is machined, it is necessary to have a sufficient room in front of the machine as well behind it in the places of material input and output.
- **FLOOR:** This machine distributes a large amount of weight over a small area. Make certain that the floor is capable of supporting the weight of the machine, work stock, and the operator. The floor should also be a level surface. If the unit wobbles or rocks once in place, be sure to eliminate by using shims.
- **WORKING CLEARANCES:** Take into consideration the size of the material to be processed. Make sure that you allow enough space for you to operate the machine freely.
- **POWER SUPPLY PLACEMENT:** The power supply should be located close enough to the machine so that the power cord is not in an area where it would cause a tripping hazard. Be sure to observe all electrical codes if installing new circuits and/or outlets.

**⚠ WARNING:** Before operating; make sure it is positioned firmly on a solid level floor. If it tips over on you, it could cause severe injury or death.

- **LEVELING:** The machine should be sited on a level, concrete floor. The accuracy of any machine depends on the precise placement of it to the mounting surface. Locate the planer in an area that is level and provides a solid foundation. Make sure that any potential kickback is not in line with aisles, doorways, wash stations or other work areas.
  - Place shims under the four feet mounted in the base as required for leveling.

There are four lifting handles (A) hidden in the bed of the planer table. Pull the handles out for use and push them in when not in use.

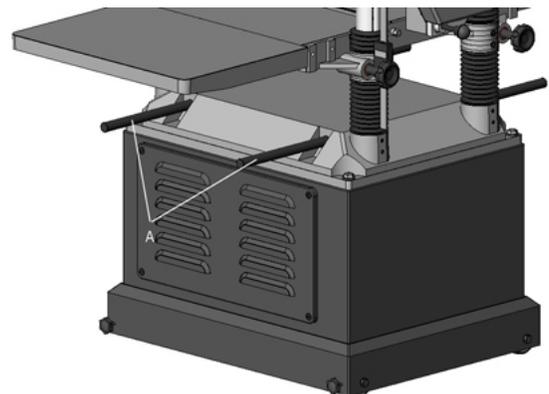


Fig. 1



## ASSEMBLY EXTENSION TABLE

**⚠ WARNING:** For your own safety, **DO NOT** connect the machine to the power source until the machine is completely assembled and you read and understand the entire instruction manual.

1. Use an assistant to help lift and align the holes on the extension table to the main table.
2. Insert the bolts and loosely secure with washers and nuts. (Fig. 2).
3. With the fasteners in position and snug, place straight edge through machine so that it lies across the main table and extension table. (Fig. 3).
4. Align the extension table to the main table. When the tables are aligned, hold in position and securely tighten the fasteners.

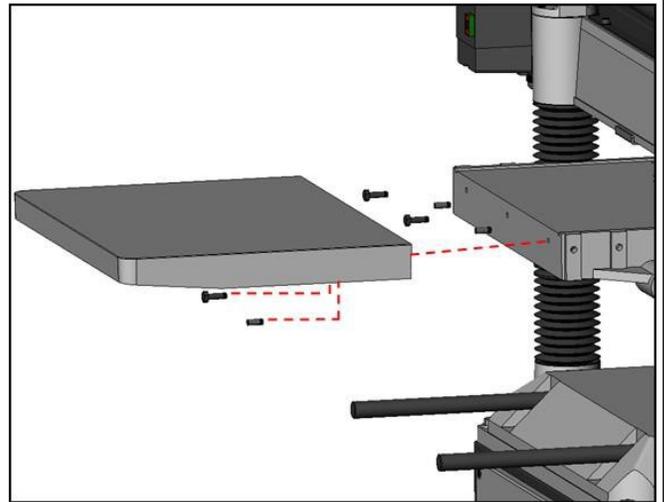


Fig. 2

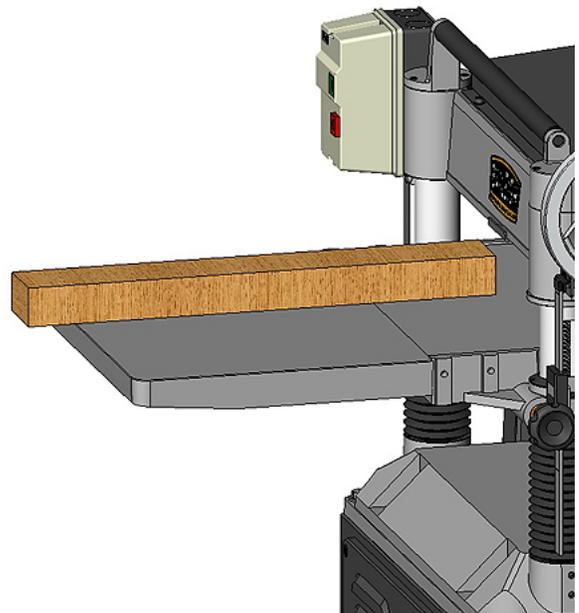


Fig. 3



## DUST CHUTE ASSEMBLY

1. Mount the dust chute to the planer hood with hex head screws & flat washer.
2. Make sure the dust collection system has sufficient capacity and suction for your planer.
3. Always turn on the dust collection system before starting the planer. (Fig. 4).

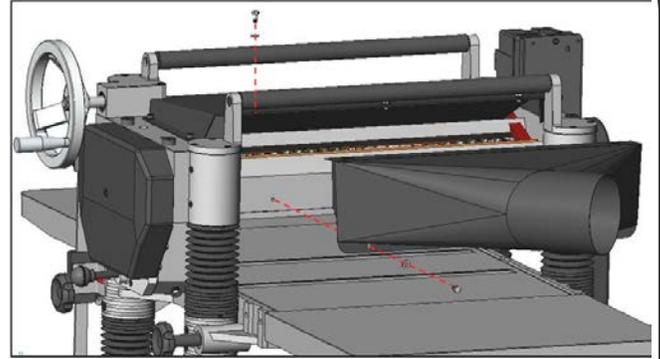


Fig. 4



## ELECTRICAL

 **CAUTION:** HAVE ELECTRICAL UTILITIES CONNECTED TO MACHINE BY A CERTIFIED ELECTRICIAN!  
Check if the available power supply is the same as listed on the machine nameplate.

 **WARNING:** Make sure the grounding wire (green) is properly connected to avoid electric shock. DO NOT switch the position of the green grounding wire if any electrical plug wires are switched during hookup.

### Power Specifications

Your machine is wired for 220 volts, 60hz alternating current. Before connecting the machine to the power source, make sure the power source is OFF.

Before switching on the power, you must check the voltage and frequency of the power to see if they meet with the requirement, the allowed range for the voltage is  $\pm 5\%$ , and for the frequency is  $\pm 1\%$ .

### Considerations

- Observe local electrical codes when connecting the machine.
- The circuit should be protected with a time delay fuse or circuit breaker with a amperage rating slightly higher than the full load current of machine.
- A separate electrical circuit should be used for your machine. Before connecting the motor to the power line, make sure the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as indicated on the machine.
- All line connections should make good contact. Running on low voltage will damage the motor.
- In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This machine is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

 **WARNING:** In all cases, make certain the receptacle in question is properly grounded. If you are not sure, have a qualified electrician check the receptacle.



- Improper connection of the equipment-grounding conductor can result in risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.
- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the machine is properly grounded.
- Repair or replace damaged or worn cord immediately.

### **Extension Cord Safety**

Extension cord should be in good condition and meet the minimum wire gauge requirements listed below:

AMP RATING	LENGTH		
	25ft	50ft	100ft
1-12	16	16	14
13-16	14	12	12
17-20	12	12	10
21-30	10	10	No
WIRE GAUGE			

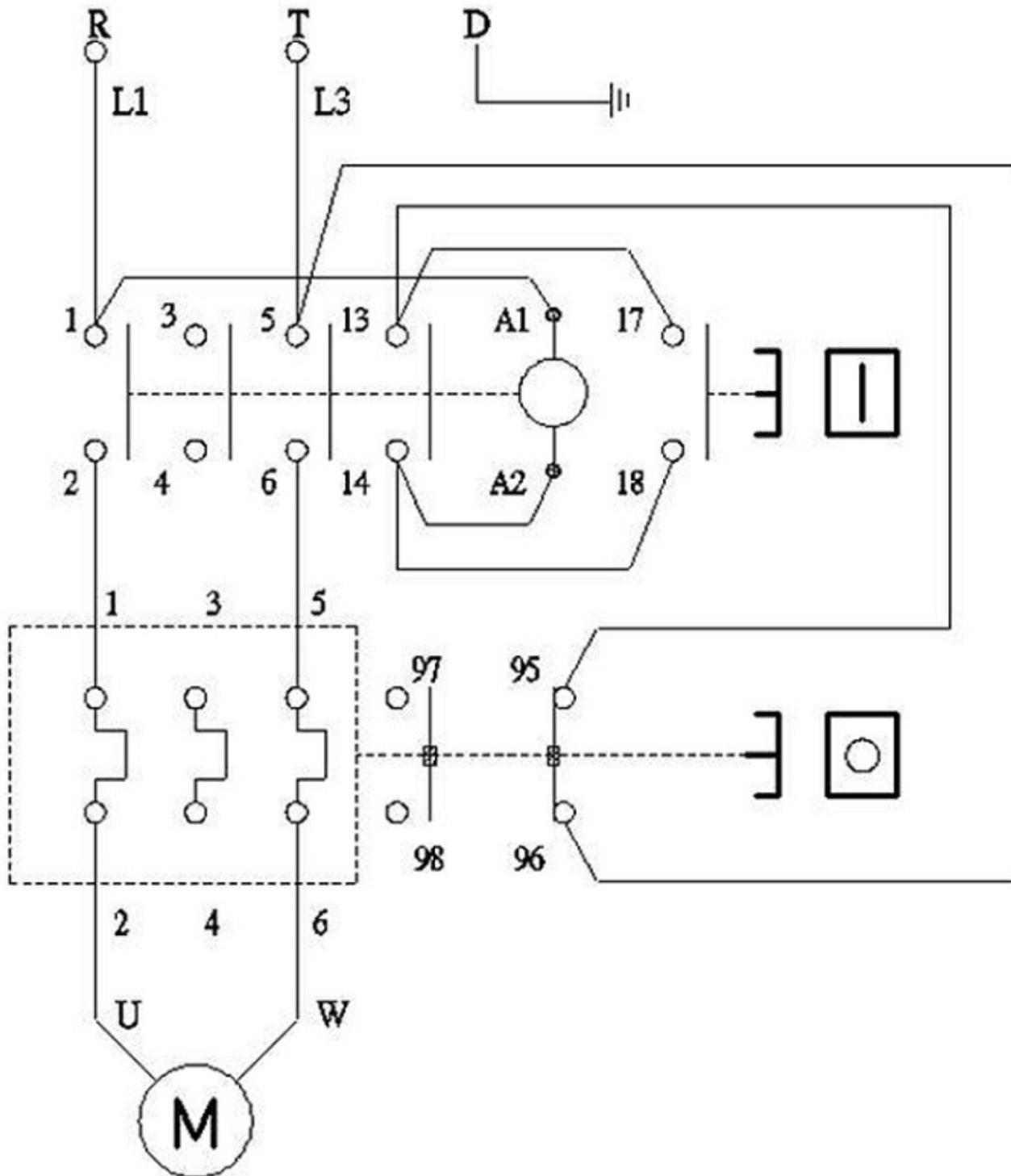
An undersized cord decreases line voltage, causing loss of power and overheating. All cords should use a ground wire and plug pin. Replace any damaged cords immediately.

### **Power cord connection:**

1. Turn the main disconnect switch on the control panel to the OFF position.
2. Unwrap the power cord and route the cord away from the machine toward the power supply.
  - a. Route the power cord so that it will NOT become entangled in the machine in any way.
  - b. Route the cord to the power supply is a way that does NOT create a trip hazard.
3. Connect the power cord to the power supply and check that the power cord has not been damaged during installation.
4. When the machine is clear of any obstruction. The main power switch may be turn ON to test the operation. Turn the switch OFF when the machine is not in operation.



**ELECTRICAL DIAGRAM**





## CONTROL THE DEPTH OF CUTTING

**⚠ CAUTION:** Always wear proper eye protection with side shields, face shield, safety footwear, and leather gloves to protect from, chips, dust, burrs, and slivers.

The cutting depth scale is a combination of inch / metric scale, the cutting range is from 0 to 8" (204 mm). The distance between upward or downward of driving handle is 0.059" (1.5mm) one complete turn.

Before adjusting the table upward, or downward; loosen nut (A), after positioning to required position, tighten nut (A) again to hold in position. (Fig. 5)

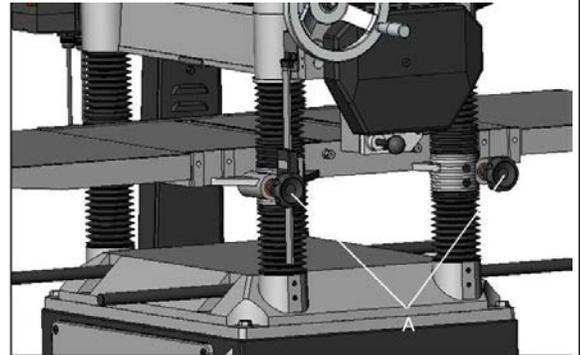


Fig. 5

## CHECKING PULLEY

To verify that motor pulley (B) is in line with the shaft pulley of (A), using the edge of a straight scale check to see if they are on-line with each other (Fig. 6).

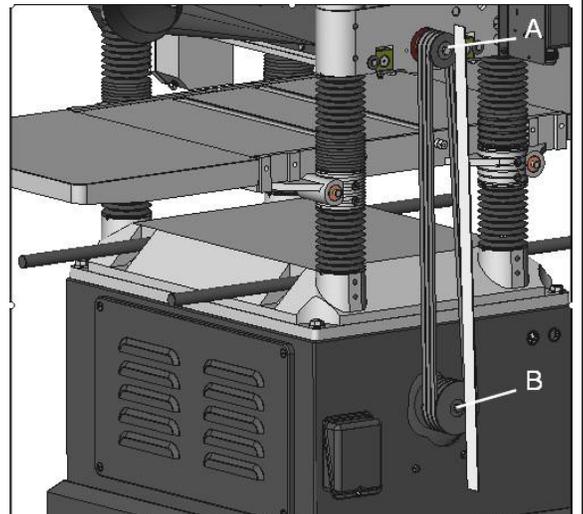


Fig. 6

## Adjusting Motor Mount

If motor pulley B and shaft pulley A, are not on-line loosen screw as shown in (Fig. 7), move shaft to left and right until adjusted to proper position and tighten the screw again.

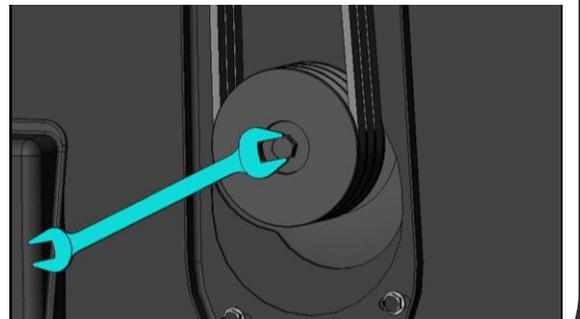


Fig. 7



## ADJUSTING BELT TENSION

Use the two bolts to adjust the belt tension (Fig. 8). When achieved proper position of adjustment tighten bolts to hold in place.

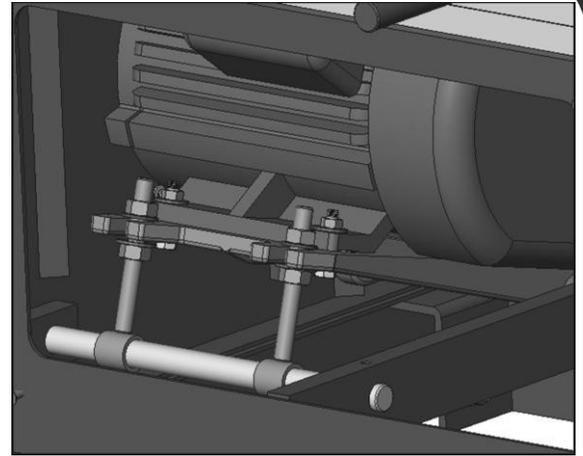


Fig. 8

## FEED ROLL SPEED RATE

The rate of speed is transmitted by shift gears located in gear box. The shift gear handle (Fig. 9) performs with three different methods of speed by using the shift handle to pull or push.

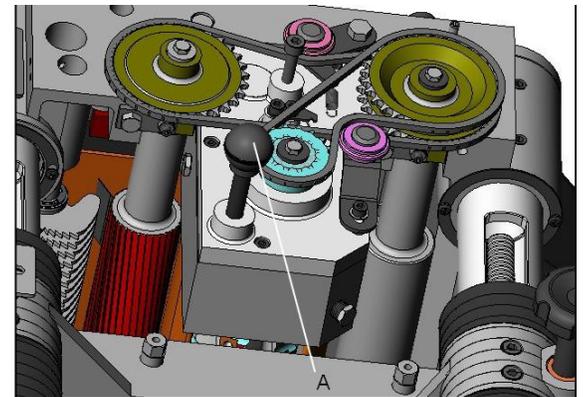


Fig. 9

Position A: feed roll is functioning on 20-FPM speed rate.  
Position B: feed roll is functioning on 0-speed rate.  
Position C: feed roll is functioning on 16-FPM speed rate.



is running.

**Note:** Only change gears when the motor

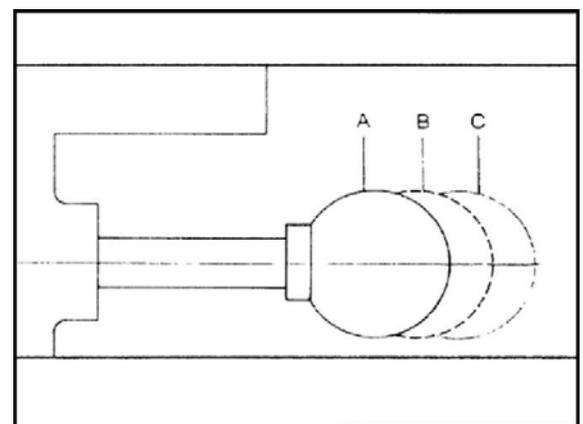


Fig. 10



## **ROLL TRANSMITTING**

The purpose of the roll located on top of machine, is transmitting stock after cutting and shaving workpieces. This roll will save you lots of time and will speed up you're working rate. (Fig. 11)

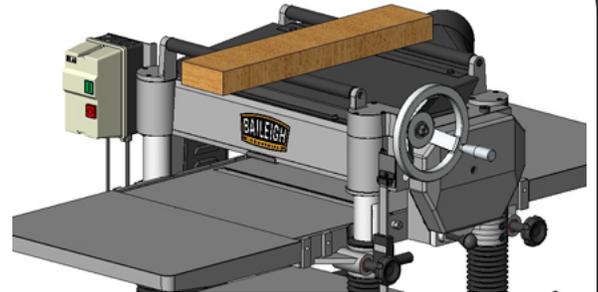


Fig. 11

## **CONNECTING DUST COLLECTOR**

Connect dust collector system to hood of machine, located at the back of machine. The dust collector will collect all dust and particles while molding in process, this system will give a clean and safe working environment. (Fig. 12)

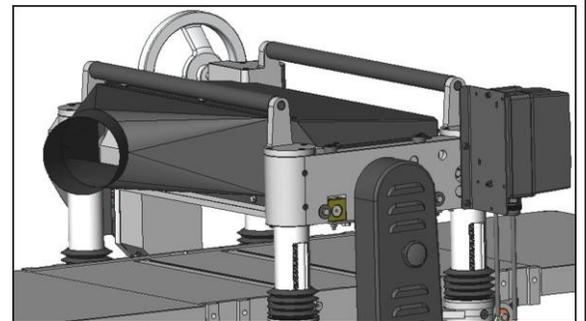


Fig. 12

## **FEEDROLL PRESSURE AJDUSTMENT**

The pressure of the feed roll will depend on the pressure set by the springs, and screws. To adjust the pressure, you must loosen or tighten the lever. There are two sets of springs on both ends of the feed roll, to ensure great results make sure both sides are at the same level pressure. (Fig. 13)

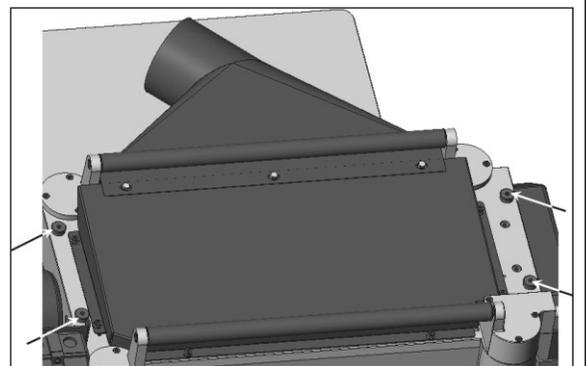


Fig. 13



## ADJUSTMENT TRANSMITTING ROLLER

Verify that roller and table are both at the same height.  
(Fig. 14)

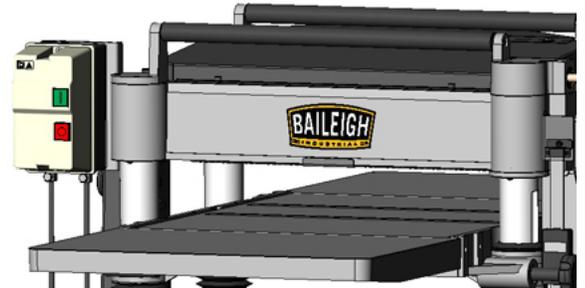


Fig. 14

## ADJUSTING TABLE ROLLER

To reduce friction between stock and table, two table rollers have been assembled on machine. Adjustments will be needed when planing with the different types of wood.

- Roller must be adjusted high, when planing rough wood.
- Roll must be adjusted low, when planing smooth wood.

## ADJUST ROLLER

- UNPLUG OR DISCONNECT PLANER FROM POWER SOURCE AND LOCK OUT POWER.
- Place a straight level on table roll, loosen screw (A) adjust your shaft (B) to the proper height and tighten back the screw to hold in position. (Fig. 15)

Always check to make sure that the front and back height are the same. There must be no slant between roller and table.

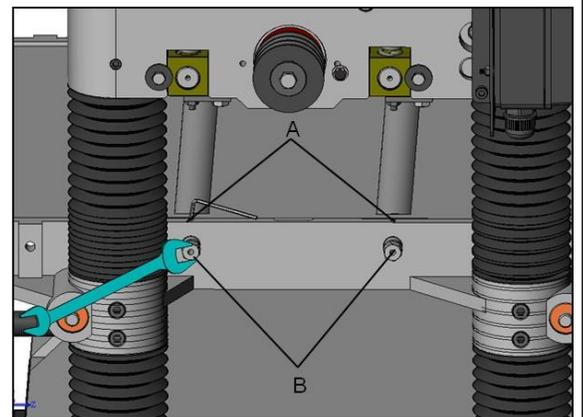


Fig. 15



## CONSTRUCTING GAUGE BLOCK

- UNPLUG OR DISCONNECT PLANER FROM POWER SOURCE AND LOCK OUT POWER.

The manufacturer has adjusted all machines before delivery.

Verify that the screws are properly tightened.

The only time you will have to adjust your machine is when it has been functioning for a long time.

The adjustment will have to be made to adjust the precision of the machine.

Always check the adjustments before starting on a new project.

To check you will need the following supplies.

- Straight scale
- Thickness gauge
- Gauge block of hard wood made with the dimensions as shown in Fig. 16.

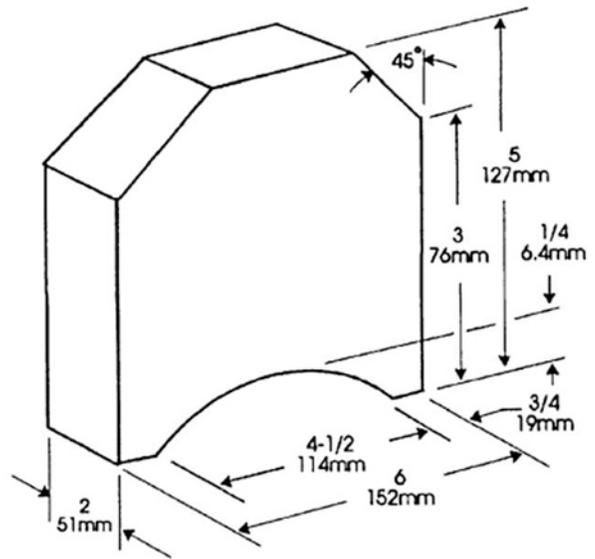


Fig. 16

## ASSEMBLING CHAIN

If head casting is not parallel to table, tilt planer on its side. Remove bolt C and loosen bolt (D) (Fig. 17). This will enable you to move the idler sprocket assembly (E) this procedure will release the tension of the chain.

Remove chain from sprocket on the end that must be adjusted. When chain has to be released, do not turn the sprocket more than one or two teeth. Turn sprocket clockwise to decrease the distance, and counter clockwise to increase the distance between the head casting and table.

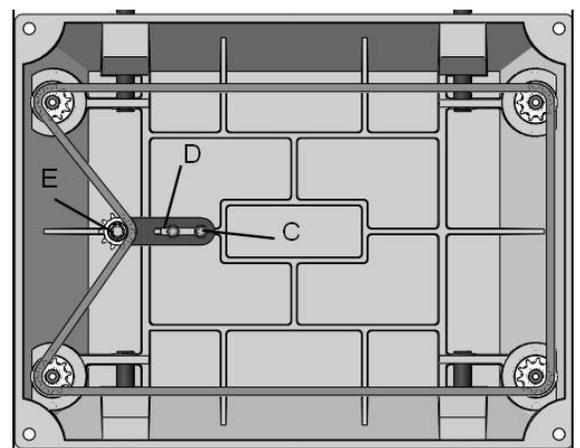


Fig. 17



## ADJUSTING CUTTING HEAD PARALLEL TO TABLE

### Cutting Head and Roller Components

- 1 Infeed Roller
- 2 Chipbreaker
- 3 Cutter Head
- 4 Casting
- 5 Outfeed Roller

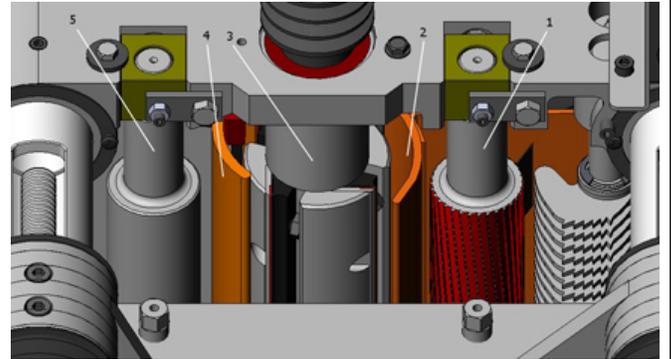


Fig. 18

All parallel adjustments have been made to table before shipment, no further adjustments are required. The only verification you should make is to check indirectly the parallel of the cutter head and table. Proceed with the following:

1. UNPLUG OR DISCONNECT PLANER FROM POWER SOURCE AND LOCK OUT POWER.
2. Place gauge block between upper head casting and table, make them contact slightly. (Fig. 19).
3. Move gauge block to the opposite side, making them to the same height.
4. Follow the same procedures to check the backside.

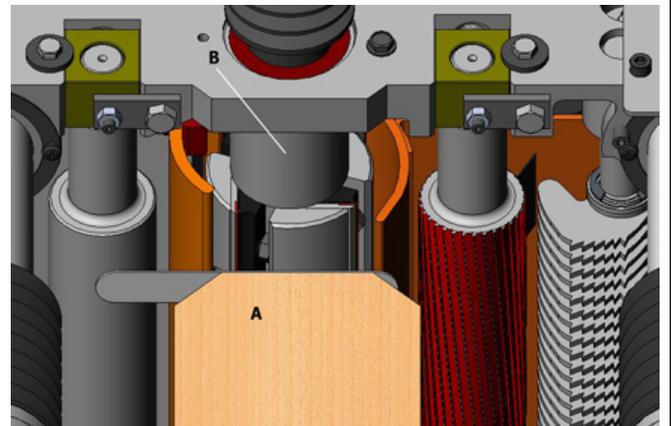


Fig. 19



## ADJUSTING SPRING TENSION OF FEED ROLLER

The infeed roller (A) and the outfeed roller (B) are two of the major parts of automatic transmitting of planer. (Fig. 20).

To control pressure, spring tensions are used.

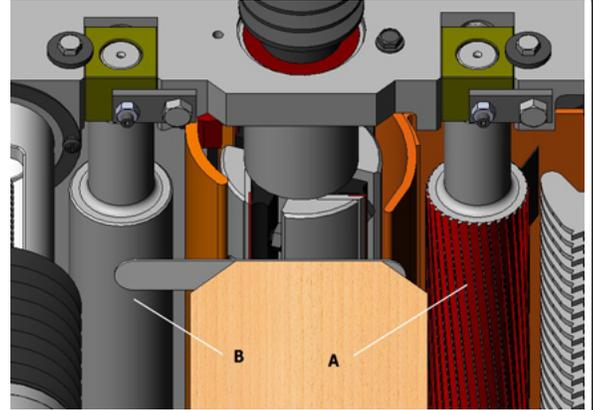


Fig. 20

### Adjusting Infeed and Outfeed Roller

Before starting with the adjustment, you must check the position of the cutting head. You will need;

- Thickness gauge 0.5m/m
- Gauge block

Figure 21 shows the relative dimensions of the Cutter Head and Roller assembly. (Fig. 21).

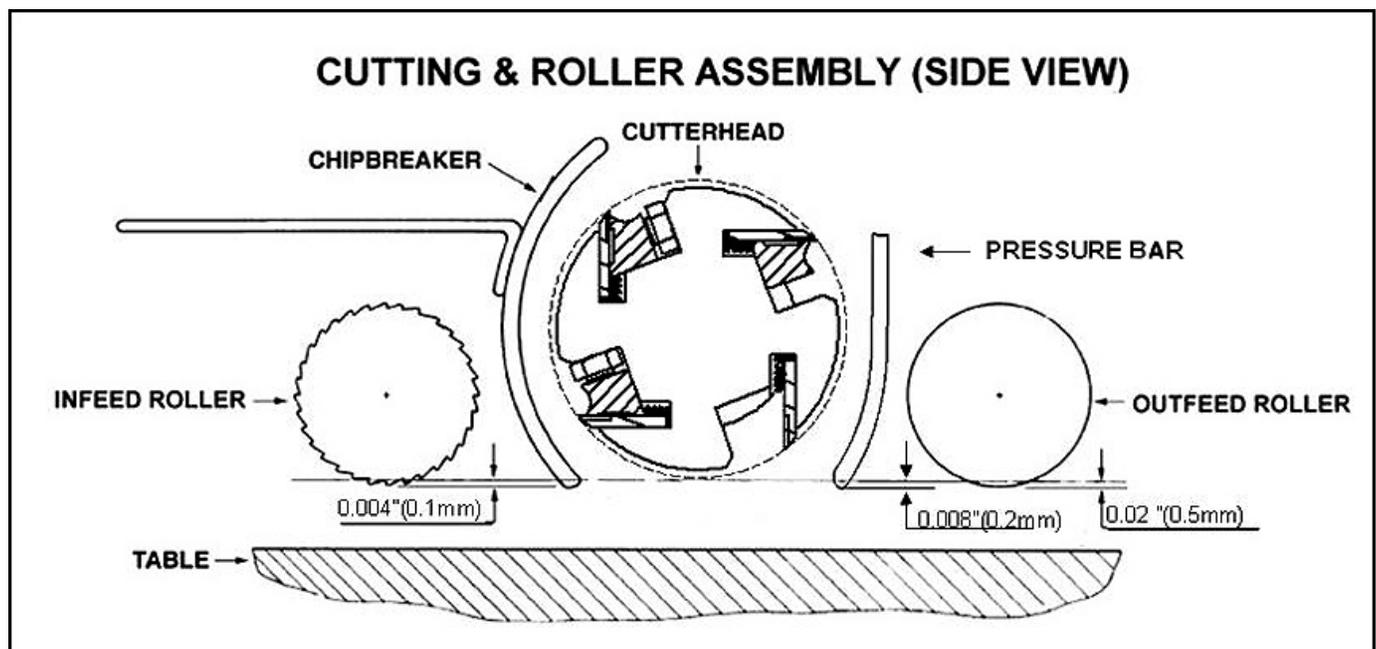


Fig. 21



**⚠ WARNING:** Knife inserts are dangerously sharp. Use extreme caution when working with or around the knife inserts.

1. UNPLUG OR DISCONNECT PLANER FROM POWER SOURCE AND LOCK OUT POWER.
2. Place gauge block under the cutterhead.
3. Raise the table and rotate the cutter head until the blade just contacts the gauge block.

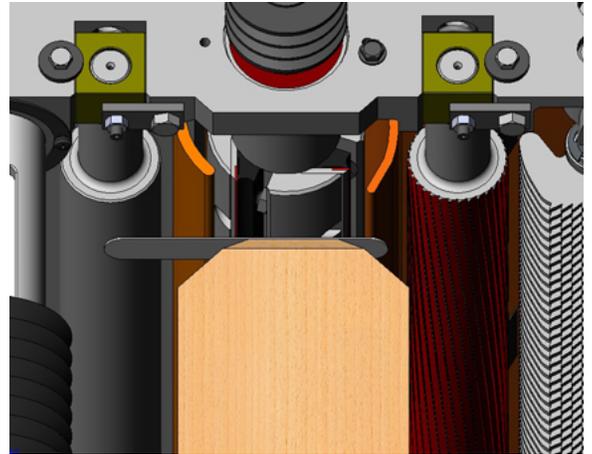


Fig. 22

### Infeed Roller

1. Place gauge block under the infeed roller. (Fig. 23).
2. Loosen nut (2) and turn screw (1). This will make the infeed roller move upwards, or downwards.
3. Make infeed roller touch the top of gauge block.
4. Once adjusted, turn the nut tightly (2), and replace screw (1).
5. The same procedures apply for the other end.

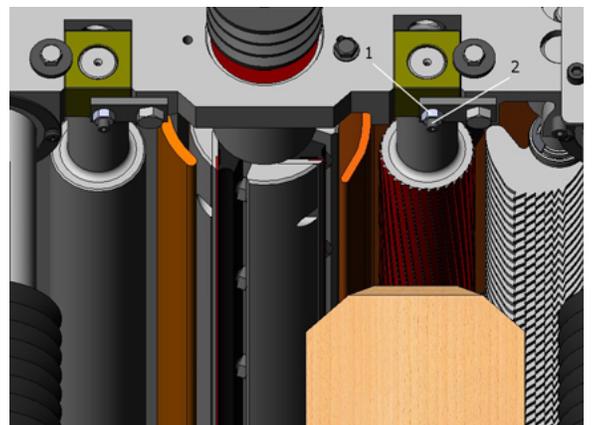


Fig. 23

### Outfeed Roller

1. Place gauge block under outfeed roller. (Fig. 24)
2. Loosen nut (3) and screw (4). This will allow for the outfeed roller to move upwards, or downwards.
3. Make the roller touch the top of gauge block.
4. When adjustments have been finished, tighten nut (3), and replace screw (4).
5. The same procedures apply for the other end.

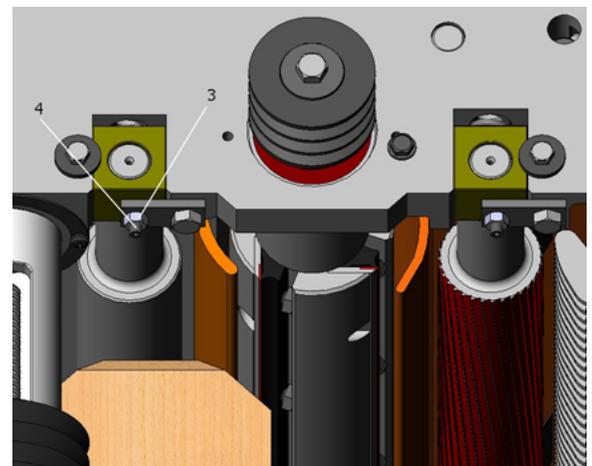


Fig. 24



## CHECK HEIGHT OF PRESSURE BAR

When adjusting pressure bar, the correct position of wooden gauge and 0.2mm thickness gauge must be as shown in (Fig. 21).

1. UNPLUG OR DISCONNECT PLANER FROM POWER SOURCE AND LOCK OUT POWER.
2. Loosen screw (1) and nut (2). Turn the screw to the right so that the pressure bar moves upward. (Fig. 25).
3. Place gauge block and 0.2mm thickness gauge under the cutterhead as shown in (Fig. 26).
4. Place gauge block under pressure bar.
5. Make pressure bar touch the top of the gauge block.
6. Turn the screw (1) tightly and replace the nut (2).

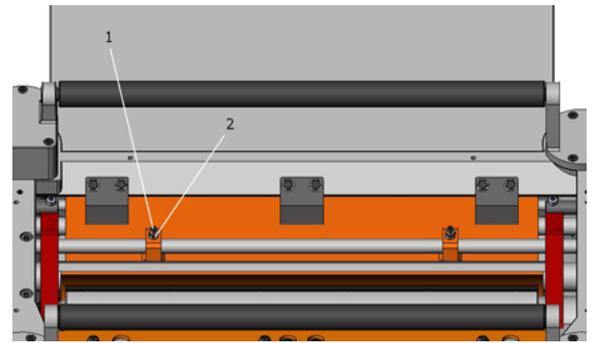


Fig. 25



Fig. 26

## CHECK HEIGHT OF CHIPBREAKER

When adjusting the chipbreaker, the correct position of wooden gauge and 0.1mm thickness gauge must be, as shown in (Fig. 26). Adjust process of screw and nut as shown in (Fig. 27).

1. Place wooden gauge and thickness gauge as shown in (Fig. 26)
2. Loosen screw (1) and nut (2). Turn screw to the right to make chipbreaker move upward.
3. Place gauge block under the chipbreaker.
4. Make chipbreaker move downwards slowly until it touches the top of the gauge block.
5. Once adjusted, turn screw (1) tightly, and replace the nut (2).

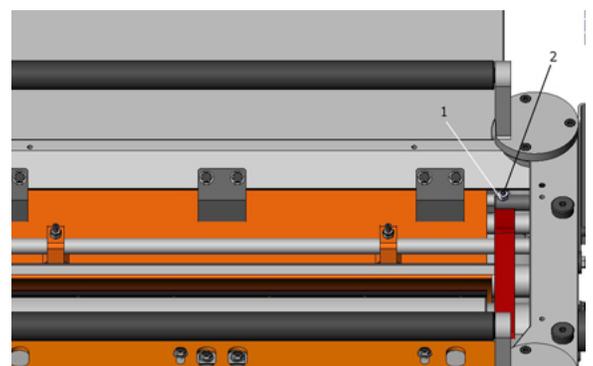


Fig. 27



## MAINTENANCE



**WARNING:** Make sure the electrical disconnect is OFF before working on the machine.

Maintenance should be performed on a regular basis by qualified personnel.

Always follow proper safety precautions when working on or around any machinery.

Maintenance on your planer should be done at periodic intervals to ensure that the machine is in good working order. Inspection and maintenance should be performed at least twice a year but more often if the lathe receives constant use.

- Check daily for any unsafe conditions and fix immediately.
- Check that all nuts and bolts are properly tightened.
- Do a general cleaning by removing dust and chips from the machine.
- On a weekly basis clean the machine and the area around it.
- Lubricate threaded components and sliding devices.
- Apply rust inhibitive lubricant to all non-painted surfaces.



**Note:** Proper maintenance can increase the life expectancy of your machine.

- Check all fasteners to make sure they are tight and check all adjustments that they are in order.
- Clean and oil the tables so that the material will slide easily. Clean any rust spots that may develop on the bed with a commercial rust remover.
- Use compressed air to blow out the interior of the machine in order to keep chips and sawdust from accumulating on the belts and pulleys.
- Check the drive belt for tightness. It should be snug but not overly tight.
- Use a mill file to remove any nicks or dings from the infeed or outfeed tables.



**Note:** When cleaning chips and debris from the machine, use a brush and a shop vacuum. **DO NOT** blow off the machine with compressed air. The force of the compressed air may force chips into critical mechanisms or may inflict injury to yourself or others.



## Parts Lubrication Required

No.	Position	Grease	Oil
1	Worm Gear	Yes	No
2	Gear Box	No	Yes
3	Chain	Yes	No
4	Chain	Yes	No
5	Chain	Yes	No
6	Bracket	No	Yes
7	Lead Screw	Yes	No
8	Column Clean & Oil	No	Yes

- Worm Gear is used to adjust the table up or down. (Fig. 29)
- The oil in Gear Box must be changed after 2500 hours of work. (Fig. 30)
- All chains must be lubricated regularly. (Fig. 31)

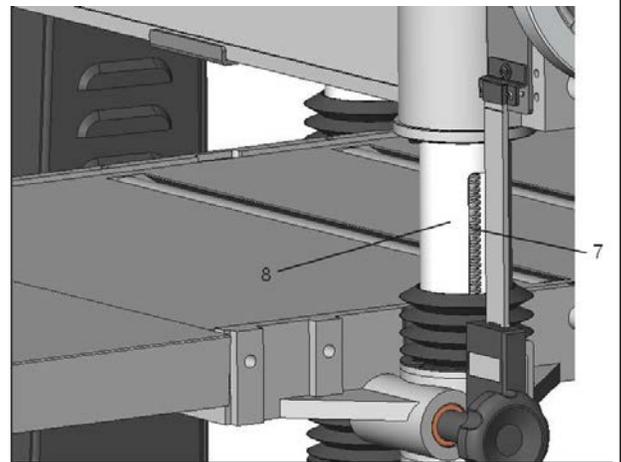


Fig. 29

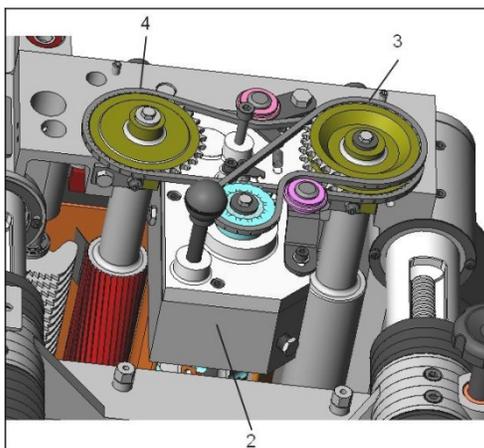


Fig. 30

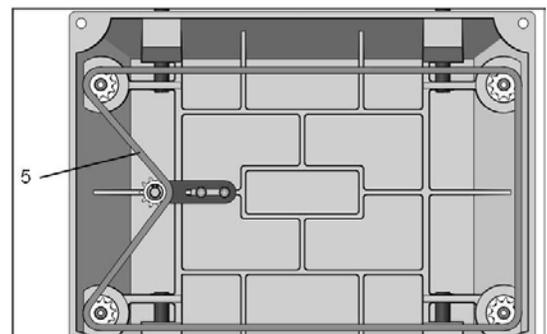


Fig. 31



### **Change Lubricant**

When lubrication needs to be changed:

1. UNPLUG OR DISCONNECT PLANER FROM POWER SOURCE AND LOCK OUT POWER.
2. Remove the gear box and chain drive cover.
3. Place a suitable container under the drain plug (A).
4. Remove the drain plug (A) and allow the old lubrication to fully drain.
5. Install and tighten the drain plug (A).
5. Remove the fill plug (B) on the left side of the gearbox and fill the gearbox until the oil just reaches the bottom of the fill port. Fill is approximately 1qt. (.94L) of a 70W to 75W gear oil. 75W-85 is acceptable.
6. Install and tighten the fill plug (B).

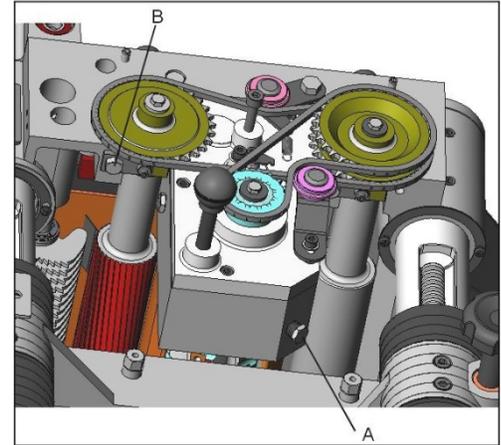


Fig. 32

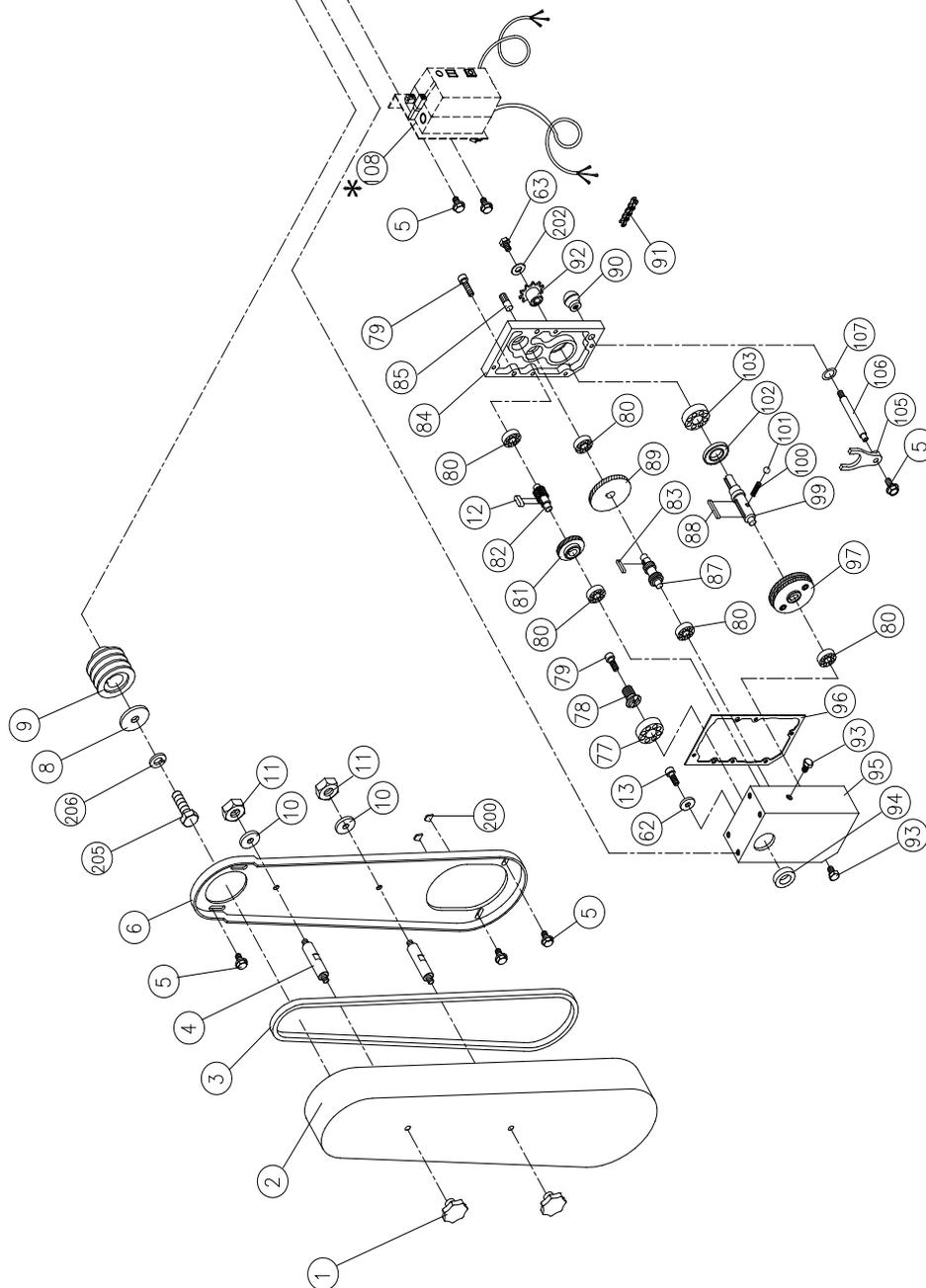
### **Oil Disposal**

Used oil products must be disposed of in a proper manner following your local regulations.



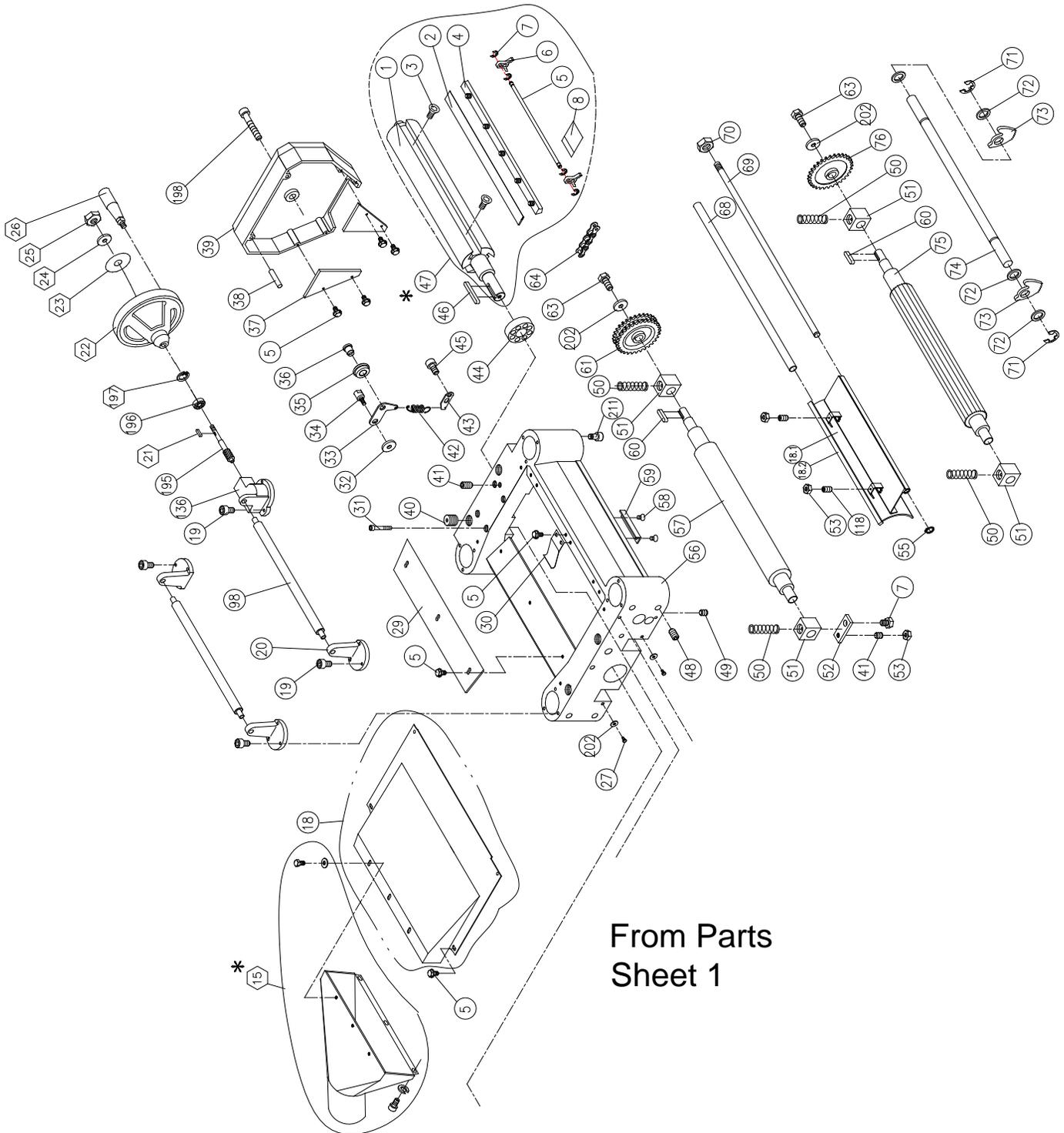
**PARTS DIAGRAM – SHEET 1**

To Parts  
Sheet 2



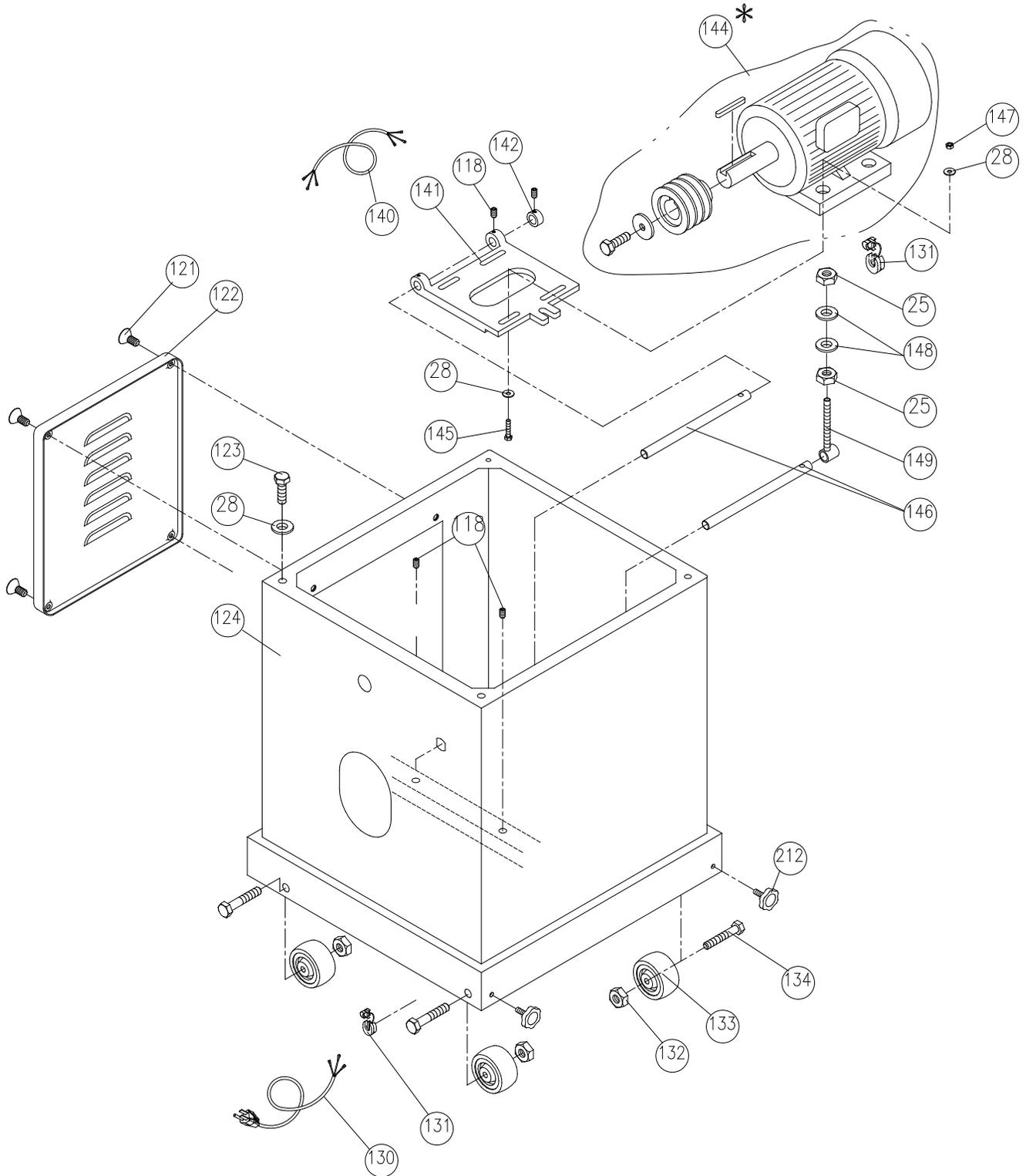


# PARTS DIAGRAM – SHEET 2



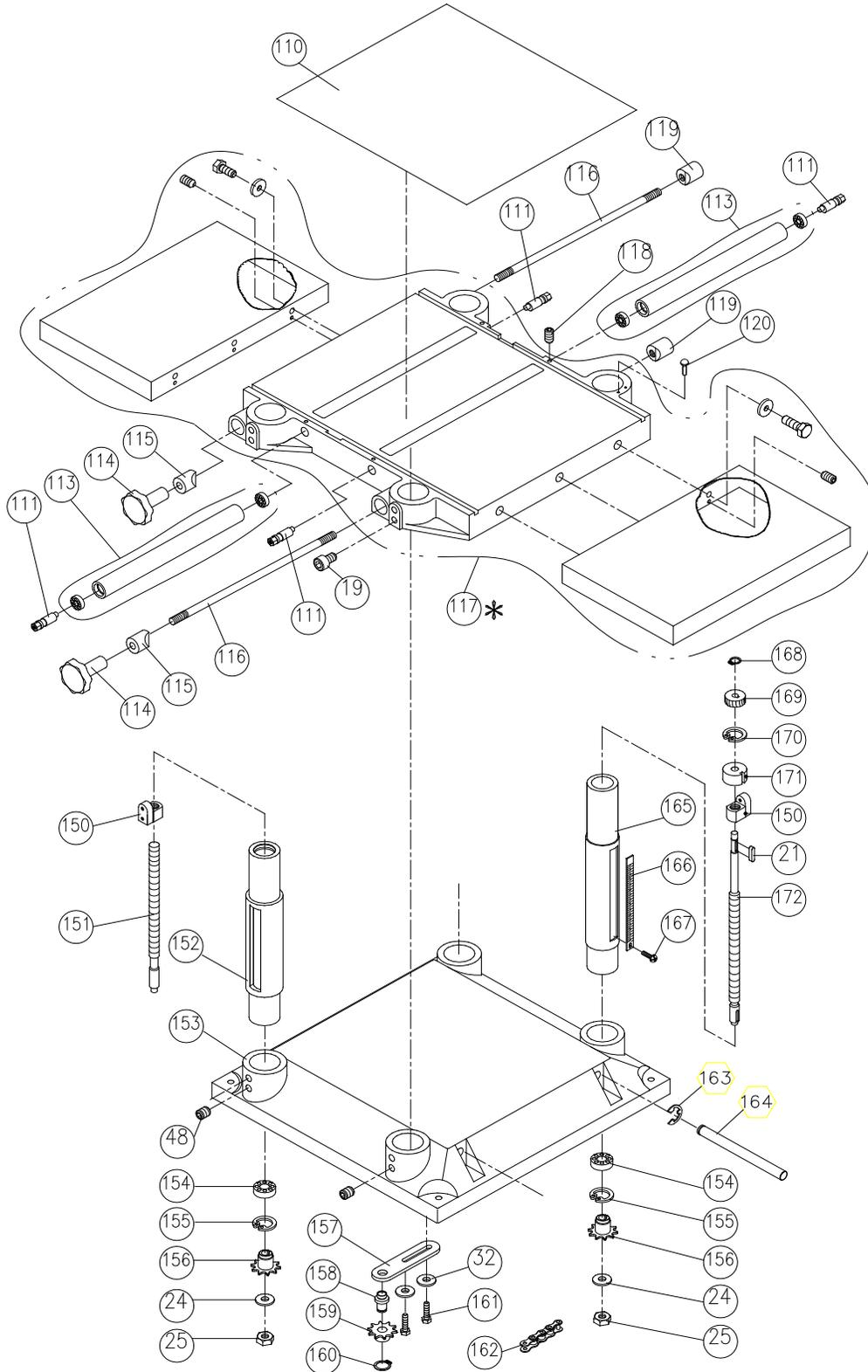


### PARTS DIAGRAM – SHEET 3





# PARTS DIAGRAM – SHEET 4





## Parts List

Item	Descriptions	Specification	Qty.
1	Nut		2
2	Belt Guard		1
3	V-Belt	M59	3
4	Stud Pivot		2
5	Hex Screw With Washer	M6 x 1.0P x 12	24
6	Guard		1
7	Hex Screw	M8 x 1.25P x 20	4
8	Flat Washer	8.2 x 30 x 4.0T	1
9	Cutterhead Pulley		1
10	Flat Washer	8.5 x 16 x 1.5T	2
11	Hex Nut	5/16"-18NC (12.7B x 6.75H)	2
12	Key	5 x 5 x 12mm	1
13	Cap Screw	M6 x 1.0P x 12	1
15	Dust Chute Assembly		1
18	Dust Hood Assembly		1
19	Cap Screw	M6 x 1.0P x 20	20
20	Roller Bracket		3
21	Key	4 x 4 x 10mm	2
22	Handwheel		1
23	Label		1
24	Flat Washer	10 x 20 x 1.5T	5
25	Hex Nut	M10 x 1.25P (17B x 8H)	7
26	Handle		1
27	Hex Screw	M6 x 1.0P x 12	4
28	Flat Washer	8.5 x 23 x 2.0T	12
29	Cover		1
30	Spring		3
31	Cap Screw	M8 x 1.25P x 50	4
32	Flat Washer	8.2 x 22 x 3.0T	3
33	Bracket		1
34	Shaft		1
35	Chain Tensioner		1
36	Chain Tensioner Shaft		1



Item	Descriptions	Specification	Qty.
37	Side Cover Guard		2
38	Spring Pin	6 x 20mm	2
39	Side Cover		1
40	Screw		4
41	Set Screw	M6 x 1.0P x 16	5
42	Spring		1
43	Hook		1
44	Ball Bearing	6205	1
45	Cap Screw	M6 x 1.0P x 10	2
46	Key	8 x 8 x 36mm	1
47	3 Standard Blades Cutterhead Assembly		1
47.1	Cutter Head		1
47.2	Knife		3
47.3	Flat HD Soc. Screw	M5 x 0.8P x 12	6
47.4	Knife Lock Bar Assembly		3
47.5	Tilt Plate		1
47.6	Knife Gauge		2
47.7	Retaining Ring	ETW-9	4
47A	Helical Cutter Head (IP-156-HH)	JP31	1
47A.1	Cutter Inserts	15x15x2.5T Pkg of 10	68
48	Set Screw	M10 x 1.5P x 12	16
49	Set Screw	M8 x 1.25P x 12	1
50	Spring		4
51	Bushing Block		4
52	Bracket		4
53	Hex Nut	M6 x 1.0P (10B x 5H)	6
55	S-Ring	STW-12	1
56	Head Casting		1
57	Outfeed Roller		1
58	Pan Head Screw	M5 x 0.8P x 12	2
59	Limiter Depth		1
60	Key	5 x 5 x 22	2
61	Sprocket		1
62	Flat Washer	6.2 x 20 x 3.0T	1
63	Hex Screw	M6 x 1.0P x 16	3



Item	Descriptions	Specification	Qty.
64	Chain	#06B x 63P	1
68	Adjust Shaft		1
69	Stud Pivot		1
70	Hex Nut	M12 x 1.75P (19B x 10H)	1
71	Retaining Ring	ETW-15	2
72	Spacer		40
73	Anti-Kick Finger		39
74	Shaft		1
75	Infeed Roller		1
76	Chain		1
77	Ball Bearing	6204	1
78	Helical Gear		1
79	Cap Screw	M6 x 1.0P x 25	6
80	Ball Bearing	6201	5
81	Gear		1
82	Shaft		1
83	Key	5 x 5 x 10mm	1
84	Gear Cover		1
85	Pin		2
87	Gear Shaft		1
88	Key	6 x 6 x 40mm	1
89	Gear		1
90	Handle		1
91	Chain	#06B x 47P	1
92	Chain Sprocket		1
93	Plug	PT1/4"-19	2
94	Oil Seal	TC28 x 40 x 8	1
95	Gearbox		1
96	Gearbox Gasket		1
97	Gear Assembly		1
98	Roller		2
99	Gear Shaft		1
100	Spring		1
101	Steel Ball	6	1
102	Oil Seal	SC25 x 47 x 6	1



Item	Descriptions	Specification	Qty.
103	Ball Bearing	6204	1
105	Shifting Claw		1
106	Shaft		1
107	O-Ring	P12	1
108	Magnetic Switch Assembly	3HP, 220V-240V, 1PH	1
108	Magnetic Switch	3HP, 220V-240V, 1PH	1
108	Switch Mounting Plate		1
108	Pan HD Screw	3/16"-24NC x 1-3/4"	2
108	Hex Nut	3/16"-24NC (8B x 4H)	2
109	Tooth Washer	5.3 x 10 (BW-5)	2
109	Power Cord	12AWG, 3C x 1450mm	1
109	Power Cord	12AWG, 3C x 2000mm	1
109	Wire Protector	5/8"	2
110	Plastic Sheet	570 x 440 x 0.05T	1
111	Eccentric Shaft		4
113	Roller Assembly		2
114	Lock Knob		2
115	Lock Smith		2
116	Screw Elevation		2
117.1	Cast Iron Extension Table		2
117.2	Extension Table Hardware		1
117.21	Hex Screw		6
117.22	Flat Washer		6
118	Set Screw	M6 x 1.0P x 12	11
119	Lock Smith		2
120	Rivet	2 x 5mm	2
121	Pan Head Screw	M6 x 1.0P x 20	4
122	Cover		1
123	Hex Screw	M8 x 1.25P x 45	4
124	Stand		1
131	Strain Relief	7W-2	2
132	Hex Nut	3/8"-16NC (14.2B x 11.5H)	4
133	Wheel		4
134	Hex Screw	3/8"-16NC x 2-1/2"	4
136	Worm Gear Box		1



Item	Descriptions	Specification	Qty.
141	Motor Plate		1
142	Spacer		1
144	Motor Assembly	3HP, 220V, 60HZ, 1PH, 2P	1
145	Hex Screw	M8 x 1.25P x 30	4
146	Shaft		2
147	Hex Nut	M8 x 1.25P (13B x 6.5H)	4
148	Flat Washer	13 x 28 x 3.0T	2
149	Tension Bolt		1
150	Nut		4
151	Lead Screw		3
152	Column		3
153	Base		1
154	Ball Bearing	6202	4
155	Retaining Ring	RTW-35	4
156	Sprocket		4
157	Bracket		1
158	Shaft		1
159	Sprocket		1
160	S-Ring	STW-15	1
161	Hex Screw	M8 x 1.25P x 25	2
162	Chain	#410 x 134P	1
163	Retaining Ring	ETW-12	4
164	Key		4
165	Column		1
166	Scale		1
167	Pan Hd Screw	M3 x 0.5P x 6	1
168	S-Ring	STW-10	1
169	Gear		1
170	Retaining Ring	RTW-38	1
171	Bushing		1
172	Crank Lead Screw		1
181	Hex Wrench	6mm	1
182	Hex Wrench	5mm	1
183	Hex Wrench	4mm	1
184	Hex Wrench	3mm	1



Item	Descriptions	Specification	Qty.
185	Wrench Box	8 x 10mm	1
186	Wrench Box	12 x 14mm	1
187	Wrench Box	14 x 17mm	1
195	Screw Elevation		1
196	Ball Bearing	6200	1
197	Retaining Ring	RTW-30	1
198	Cap Screw	M8 x 1.25P x 45	1
200	Pad		2
202	Flat Washer	6.2 x 22 x 3T	7
205	Hex Screw	M8 x 1.25P x 30	1
206	Spring Washer	8.2 x 15.4	1
207	Plastic Sheet	1350 x 1330 x 0.1T	1
208	Wood Screw	M6 x 2.6P x 24	16
211	Cap Screw	M5 x 0.8P x 6	1
212	Lock Knob	5/16"-18NC x 3/4"	2



NOTES



**BAILEIGH INDUSTRIAL, INC. 1625 DUFEK DRIVE MANITOWOC, WI 54220**

**PHONE: 920. 684. 4990 FAX: 920. 684. 3944**

**WWW.BAILEIGH.COM**

**BAILEIGH INDUSTRIAL LTD. UNIT 1 FULLWOOD CLOSE**

**SWIFT VALLEY INDUSTRIAL ESTATE, RUGBY**

**WEST MIDLANDS, CV21 1QH UNITED KINGDOM**

**PHONE: +44 (0)24 7661 9267 FAX: +44 (0)24 7661 9276**

**WWW.BAILEIGH.CO.UK**