



## Stallion 14" 1.5 HP Band Saw

### IMPORTANT

For your safety, read instructions carefully before assembling or using this product. Save this manual for future reference.

CWI-B1413

## Operations Manual

### HEALTH AND SAFETY GUIDELINES

Always follow the instructions provided with the manual. Always wear safety glasses when using woodworking equipment. Always disconnect the power before adjusting any equipment. Failure to observe proper safety procedures and guidelines can result in serious injury.

**WARNING:** Do not allow familiarity (gained from frequent use of your machine and accessories) to become commonplace. Always remember that a careless fraction of a second is sufficient to inflict severe injury.



Always wear safety glasses when using woodworking equipment.



Always read the instructions provided before using woodworking equipment.

# GENERAL INFORMATION

## FOREWORD

The CWI-B1413 boasts a robust set of features and specifications that will appeal to any beginner or advanced woodworker, yet normally only seen in much higher priced machinery.

With this manual we would like to provide the necessary information for maintenance and proper use of the machine. The CWI Woodworking Technologies distribution network is at your service for any technical problems, spare parts or any other customer service inquiries. This manual must be read and understood before operating the machine. This will provide a better working knowledge of the machine, for increased safety and to obtain the best results. To better stress the importance of some basic passages, they have been marked by some preceding symbols:



**WARNING** Indicates imminent risks which may cause serious injury to the operator or other persons. Be careful and scrupulously follow the instructions.



**CAUTION** A statement advising of the need to take care lest serious consequences result in harm to material items such as the asset or the product.

## MACHINE IDENTIFICATION

There is an identification plate fixed to the machine, containing the manufacturer's data, serial number, year of construction, and technical specifications.

## CUSTOMER SERVICE RECOMMENDATIONS

It is recommended that only skilled and authorized technical staff carry out any operation dealing with parts disassembly. Keep to the instructions contained in this manual for the correct use of the machine.



**CAUTION** Only the skilled and authorized staff shall service the machine after reading this manual. Respect the accident prevention regulations and the general safety and industrial rules.

## SAFETY PRECAUTIONS

### SAFETY REGULATIONS



**WARNING** Carefully read the operation and maintenance manual before starting, using, servicing and carrying out any other operations on the machine.

The manufacturer disclaims all responsibilities for damages to persons or things, which might be caused by any failure to comply with the safety regulations.

- It is prohibited to use the machine when under the influence of alcohol, drugs or medication.

**GROUND ALL TOOLS.** If the tool is supplied with a prong plug, it must be plugged into a 3-contact electrical receptacle. The 3rd prong is used to ground the tool and provide protection against accidental electric shock. **DO NOT** remove the 3rd prong. See Grounding Instructions on the following pages.

**AVOID A DANGEROUS WORKING ENVIRONMENT. DO NOT** use electrical tools in a damp environment or expose them to rain.

**DO NOT** use electrical tools in the presence of flammable liquids or gasses.

**ALWAYS** keep the work area clean, well lit, and organized. **DO NOT** work in an environment with floor surfaces that are slippery from debris, grease, and wax.

**KEEP VISITORS AND CHILDREN AWAY. DO NOT** permit people to be in the immediate work area, especially when the electrical tool is operating.

**DO NOT FORCE THE TOOL** to perform an operation for which it was not designed. It will do a safer and higher quality job by only performing operations for which the tool was intended.

**WEAR PROPER CLOTHING. DO NOT** wear loose clothing, gloves, neckties, or jewelry. These items can get caught in the machine during operations and pull the operator into the moving parts. The user must wear a protective cover on their hair, if the hair is long, to prevent it from contacting any moving parts.

**CHILDPROOF THE WORKSHOP AREA** by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.

**ALWAYS UNPLUG THE TOOL FROM THE ELECTRICAL RECEPTACLE** when making adjustments, changing parts or performing any maintenance.

**KEEP PROTECTIVE GUARDS IN PLACE AND IN WORKING ORDER.**

**AVOID ACCIDENTAL STARTING.** Make sure that the power switch is in the “OFF” position before plugging in the power cord to the electrical receptacle.

**REMOVE ALL MAINTENANCE TOOLS** from the immediate area prior to turning “ON” the machine.

**USE ONLY RECOMMENDED ACCESSORIES.** Use of incorrect or improper accessories could cause serious injury to the operator and cause damage to the tool. If in doubt, check the instruction manual that comes with that particular accessory.

**NEVER LEAVE A RUNNING TOOL UNATTENDED.** Turn the power switch to the “OFF” position. **DO NOT** leave the tool until it has come to a complete stop.

**DO NOT STAND ON A TOOL.** Serious injury could result if the tool tips over, or you accidentally contact the tool. **DO NOT** store anything above or near the tool where anyone might try to stand on the tool to reach it.

**MAINTAIN YOUR BALANCE. DO NOT** extend yourself over the tool. Wear oil resistant rubber soled shoes. Keep floor clear of debris, grease, and wax.

**MAINTAIN TOOLS WITH CARE.** Always keep tools clean and in good working order. Keep all blades and tool bits sharp, dress grinding wheels and change other abrasive accessories when worn.

**EACH AND EVERY TIME, CHECK FOR DAMAGED PARTS PRIOR TO USING THE TOOL.** Carefully check all guards to see that they operate properly, are not damaged, and perform their intended functions. Check for alignment, binding or breaking of moving parts. A guard or other part that is damaged should be immediately repaired or replaced.

**DO NOT OPERATE TOOL WHILE TIRED, OR UNDER THE INFLUENCE OF DRUGS, MEDICATION OR ALCOHOL.**

**SECURE ALL WORK.** Use clamps or jigs to secure the work piece. This is safer than attempting to hold the work piece with your hands.

**STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE WHEN OPERATING A POWER TOOL.** A moment of inattention while operating power tools may result in serious personal injury.

**25. ALWAYS WEAR A DUST MASK TO PREVENT INHALING DANGEROUS DUST OR AIRBORNE PARTICLES,** including wood dust, crystalline silica dust and asbestos dust. Direct particles away from face and body. Always operate tool in well ventilated area and provide for proper dust removal. Use a dust collection system wherever possible. Exposure to the dust may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing the dust, and avoid prolonged contact with dust. Allowing dust to get into your mouth or eyes, or lay on your skin may promote absorption of harmful material. Always use properly fitting NIOSH/OSHA approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

**USE A PROPER EXTENSION CORD IN GOOD CONDITION.** When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. The table on the following page shows the correct size to use depending on cord length and nameplate amperage rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the larger diameter of the extension cord. If in doubt of the proper size of an extension cord, use a shorter and thicker cord. An undersized cord will cause a drop in line voltage resulting in a loss of power and overheating.

**USE ONLY A 3-WIRE EXTENSION CORD THAT HAS A 3-PRONG GROUNDING PLUG AND A 3 POLE RECEPTACLE THAT ACCEPTS THE TOOL'S PLUG.**

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

## ELECTRICAL SAFETY



**WARNING THIS TOOL IS PRE-WIRED FOR 115V CIRCUITS, AND MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.**

**IN THE EVENT OF A MALFUNCTION OR BREAKDOWN**, grounding provides the path of least resistance for electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has an equipment grounding conductor and requires a grounding plug (not included). The plug **MUST** be plugged into a matching electrical receptacle that is properly installed and grounded in accordance with ALL local codes and ordinances.

**DO NOT MODIFY ANY PLUG.** If it will not fit the electrical receptacle, have the proper electrical receptacle installed by a qualified electrician.

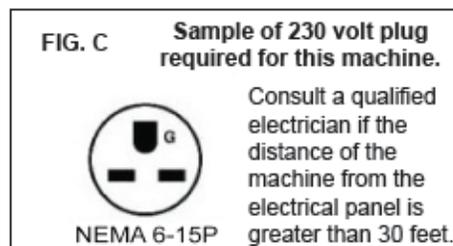
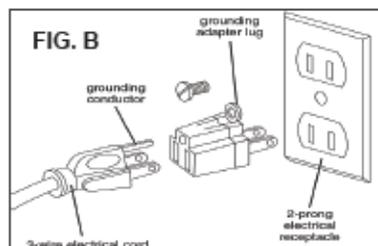
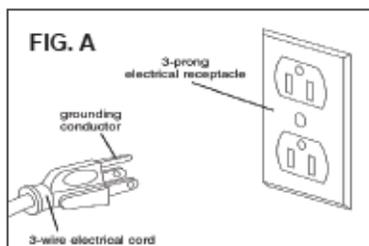
**IMPROPER ELECTRICAL CONNECTION** of the equipment grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. **DO NOT** connect the equipment grounding conductor to a live terminal if repair or replacement of the electric cord or plug is necessary.

**CHECK** with a qualified electrician or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded when installing or replacing a plug.

**USE ONLY A 3-WIRE EXTENSION CORD THAT HAS THE PROPER TYPE OF A 3-PRONG GROUNDING PLUG THAT MATCHES THE MACHINE'S 3-PRONG PLUG AND ALSO THE 3-POLE RECEPTACLE THAT ACCEPTS THE TOOL'S PLUG.** \* See Figures A and B.

**REPLACE A DAMAGED OR WORN CORD IMMEDIATELY.**

This tool is intended for use on a circuit that has a 120 volt electrical receptacle. FIGURE C shows the type of the 220V, 3-wire electrical plug and electrical receptacle that has a grounding conductor that is required if the motor wiring is changed.

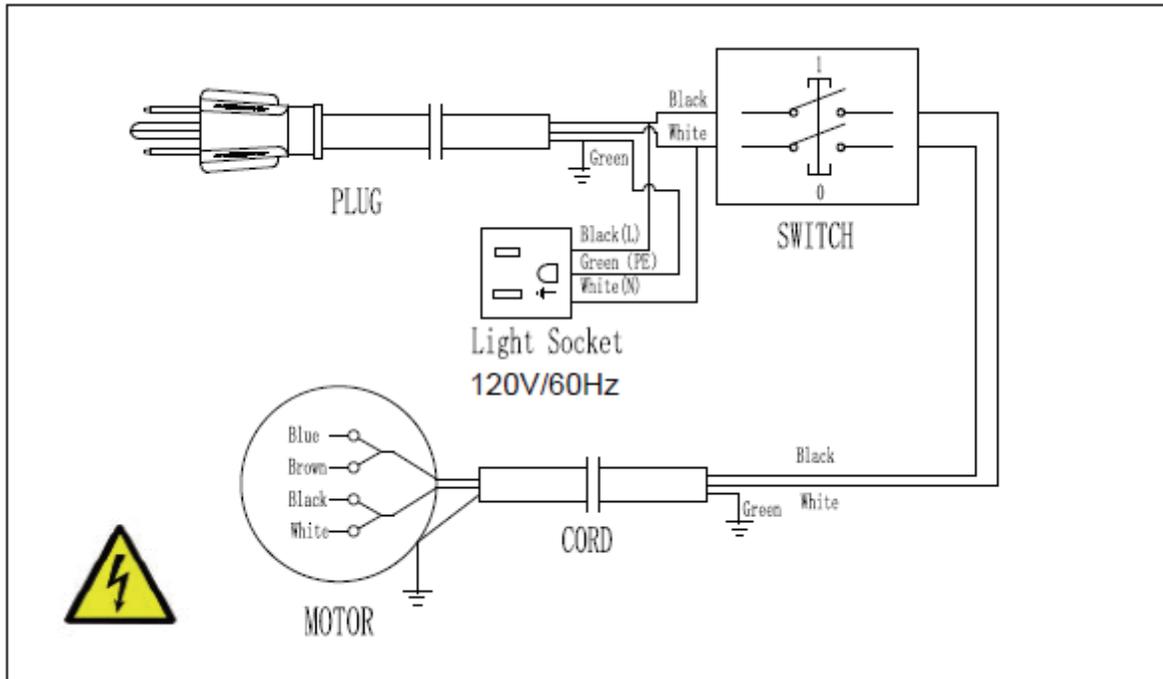


## WIRING DIAGRAM

Electrical installation should be carried out by competent, qualified personnel. The main connection should be made using the terminal box. Replacement of the power supply cable should only be done by a qualified electrician.



**WARNING** To avoid electrocution or fire, any maintenance or repair to electrical system should be done only by qualified electricians using genuine replacement parts.



## EXTENSION CORDS



**WARNING THE USE OF AN EXTENSION CORD WITH THIS MACHINE IS NOT**

**RECOMMENDED.** For best power and safety, plug the machine directly into a dedicated, grounded electrical outlet that is within the supplied cord length of the machine. If an extension cord needs to be used, it should only be for a limited operation of the machine. The extension cord should be as short as possible in length and have a minimum gauge size of **14AWG**.



**WARNING** Check extension cords before each use. If damaged replace immediately. Never use a tool with a damaged cord, since touching the damaged area could cause electrical shock, and serious injury.

MINIMUM RECOMMENDED GAUGE FOR EXTENSION CORDS (AWG)				
120 VOLT OPERATION ONLY				
	25' LONG	50' LONG	100' LONG	150' LONG
0 to 6 Amps	18 AWG	16 AWG	16 AWG	14 AWG
6 to 10 Amps	18 AWG	16 AWG	14 AWG	12 AWG
10 to 12 Amps	16 AWG	16 AWG	14 AWG	12 AWG

Use a proper extension cord. Only use cords listed by Underwriters Laboratories (UL). Other extension cords can cause a drop in line voltage, resulting in a loss of power and overheating of tool. When operating a power tool outdoors, use an outdoor extension cord marked “W-A” or “W”. These cords are rated for outdoor use and reduce the risk of electric shock.



**WARNING** Keep the extension cord clear of the working area. Position the cord so that it will not get caught on lumber, tools or other obstructions while you are working with your power tool. \*Canadian electrical codes require extension cords to be certified SJT type or better.

\*\*The use of an adapter in Canada is not acceptable.

## NOISE LEVEL

	No load	load
Sound Pressure Level	< 80dB(A)	< 90dB(A)
Sound Power Level	< 90dB(A)	< 100dB(A)

The noise levels measured are emission levels and not necessarily the safe working level. Although there is a correlation between the emission levels and the exposure levels, this cannot be used reliably to determine whether further precautions are required. The factors which affect the actual level of operator exposure include the duration of exposure, the ambient characteristics and other sources of emission, for example, the number of machines and other adjacent machining. The permitted exposure values may also vary from country to country. Nevertheless, this information allows the user of the machine to better evaluate the dangers and risks. Other factors which reduce exposure to noise are :

- Correct tool choice
- Tool and machine maintenance
- Use of hearing protection systems (e.g. headsets, earplugs...)



**WARNING** Please use the hearing protection systems if the above-mentioned noise levels exceed 95dB(A).

## SPECIFIC SAFETY INSTRUCTIONS FOR BAND SAWS

This machine is intended for the cutting of natural, solid woods, composite materials, plastics and non-ferrous metals. The permissible workpiece dimensions must be observed (see Technical Specification). Any other use not as specified, including modification of the machine or use of parts not tested and approved by the equipment manufacturer, can cause unforeseen damage and invalidate the warranty.

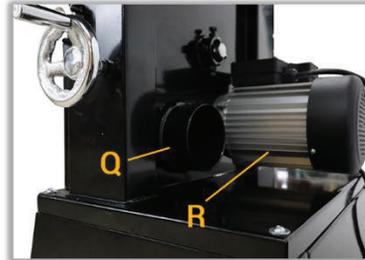
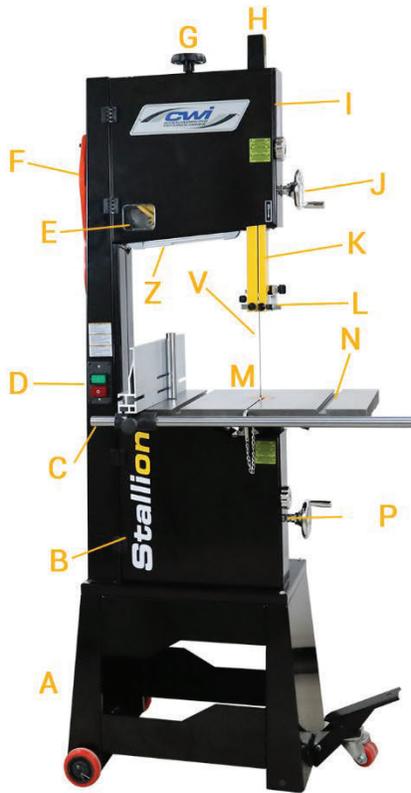
**ATTENTION:** Use of this band saw still presents risks that cannot be eliminated by the manufacturer. Therefore, the user must be aware that wood working machines are dangerous if not used with care and all safety precautions are adhered to.

1. Do not operate this machine until you have read all of the following instructions.
2. If you are not familiar with the operation of the machine, obtain assistance from a qualified person.
3. Always wear approved, safety protective eye wear and hearing protection when operating this machine.
4. Always wear a dust mask and use adequate dust collection and proper ventilation.
5. Adjust the upper guides about 1/8" to 1/4" above the material being cut.
6. Check for proper blade size and type for the thickness and type of material being cut.
7. Make sure that the blade tension and blade tracking are properly adjusted.
8. Always keep hands and fingers away from the blade.
9. Make "relief" cuts before cutting curves to eliminate blade binding.
10. Always hold material firmly, resting flat on the table and feed it into the blade at a moderate speed.
11. Never attempt to saw stock that does not have a flat surface, unless a suitable support is used.
12. When cutting small work pieces, always use a push stick, holding jig or other device to keep your hands safely away from the blade. Use 'Zero Clearance Inserts' to prevent small pieces from becoming jammed in the table insert or lower blade guides.
13. Always allow the bandsaw blade to stop before removing scrap pieces from the table.
14. Do not remove jammed pieces from the saw until the machine and blade has stopped. Unplug the bandsaw from the power source and then remove the jammed work piece.
15. Always turn off the machine if the material is to be backed out of an uncompleted cut.
16. Use extra supports (roller stands, saw horses, tables etc.) for any work pieces large enough to tip when not held down to the tabletop surface.
17. Always turn off and unplug the machine when changing blades or servicing the machine.
18. Release blade tension when the saw will not be used for a long period of time.
19. Remove material or debris from the work area. Keep work area neat and clean.

**SAVE THESE INSTRUCTIONS.**

**Refer to them often.**

## MACHINE OVERVIEW



- A. Mobile Base Assembly
- B. Lower Door
- C. Rip Fence & Front Rail Assembly
- D. ON/OFF Switch
- E. Blade Tension Window
- F. Push Stick & Storage Hanger Bolt
- G. Blade Tension Handle
- H. Guide Post Cap
- I. Upper Door & Blade Tracking Window
- J. Blade Guard Adjustment Hand Wheel
- K. Blade Guard with Scale
- L. Upper Blade Guides
- M. Cast Iron Table with Round Blade Insert
- N. Miter Gauge T-Slots
- O. Lower Blade Guides & Guard

- P. Drive Belt Tension Hand Wheel
- Q. 4" Dust Port
- R. Motor
- S. Table Tilt Hand Wheel
- T. Table Locking Handle
- U. Trunnion with Angle Scale
- V. Band Saw Blade
- W. Guide Post Lock Knob
- X. Blade Tracking Handle & Lock Lever
- Y. Quick Release Blade Tension Lever
- Z. Integrated LED Light

## CONTENTS OF PACKAGE

The **Stallion 14" 1.5 HP Band Saw** is shipped in one complete box on a single pallet.

### UNPACKING, CHECKING CONTENTS & CLEAN-UP

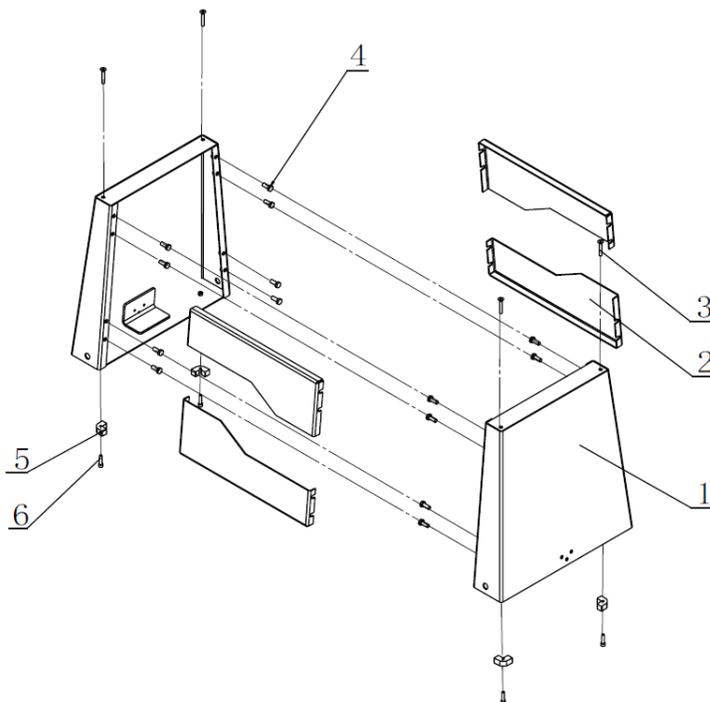
1. Carefully remove all contents from the shipping carton. Compare the contents with the list of contents to make sure that all of the items are accounted for, before discarding any packing material. Place parts on a protected surface for easy identification and assembly. If any parts are missing or broken, please call CWI Woodworking Technologies Customer Service (1-888-389-4752 Ext. 5) as soon as possible for replacements. **DO NOT** turn your machine ON if any of these items are missing. You may cause injury to yourself or damage to the machine.
2. Report any shipping damage to your CWI Woodworking Technologies or your local authorized dealer immediately. Inspect the shipment thoroughly and then sign the Bill of Lading that the shipment is damaged and needs further inspection. Take photographs for any possible insurance claims. CWI Woodworking Technologies will make arrangements for repair or replacement as needed.
3. With the help of another person, carefully lift the Band Saw from the packaging and place it on a level floor.
4. Clean all rust protected surfaces with ordinary household type grease or spot remover. Do not use; gasoline, paint thinner, mineral spirits, etc. These may damage painted surfaces.
5. Apply a coat of paste wax to the table to prevent rust. Wipe all parts thoroughly with a clean dry cloth. Be careful, as the pre-installed bandsaw blade has sharp teeth and may cause injury if touched.
6. Set packing material and shipping carton aside. Do not discard until the machine has been set up and is running properly.



**TABLE OF LOOSE PARTS**

- A. Bandsaw Frame Assembly
- B. Mobile Base Assembly
- C. Blade Tension Hand Wheel
- D. Hand Wheel for Raising Blade Guard
- E. Hand Wheel for Tensioning the Drive Belt
- F. Manual - not shown

**STAND COMPONENTS**

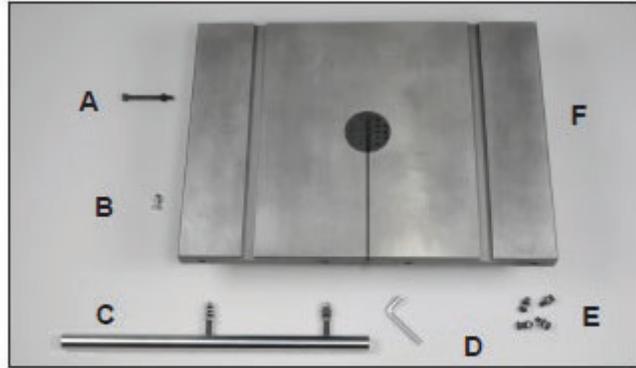


No.	Description	Qty'
1	Side plate welds	2
2	Junction plate	4
3	Screw M6 X40	4
4	Screw M8 X20	16
5	Foot pad	4
6	Screw M6X25	4

## TABLE OF LOOSE PARTS Continued

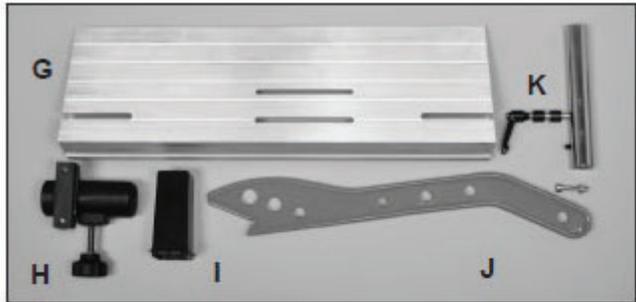
### Table Assembly:

- A. Fence Support Bolt and Nut
- B. 90° Table Leveling Stop Bolt and Nut
- C. Rip Fence Front Rail and Hardware
- D. Table Leveling Pin and Lanyard
- E. Table Mounting Bolts and Washers
- F. Table with Blade Insert



### Rip Fence Assembly & Parts:

- G. Rip Fence
- H. Rip Fence Carrier Assembly
- I. Guide Post Cap
- J. Push Stick and Mounting Bolt and Nut
- K. Resaw Bar Assembly



### Tools and Tool Holder:

- L. Wrenches: 10, 13 mm
- M. Hex Wrenches; 3, 4, 5, 6 mm
- N. Tool Holder and Mounting Screws



### Additional Tools required - not supplied

- #2 Phillips Screwdriver

## INSTALLATION

### MOVING & INSTALLING THE BANDSAW



**CAUTION!** The bandsaw is heavy - over 210 lbs! It is best to assemble the machine near the area where it will eventually reside. When moving or positioning an assembled bandsaw, DO NOT use the table or upper blade guard assemblies as this may damage the machine. Prior to mounting the machine to the mobile base, move the bandsaw by grasping the support column and lower frame which are all welded together for rigidity. The bandsaw can also be moved by laying it down on the back/left side of the column so that the table assembly is not compromised. One mounted to the base stand, the included mobility kit will allow you to move the band saw around your workshop effortlessly.

1. Carefully remove the machine from the shipping carton. See above instructions on handling the saw.
2. Position the machine on a solid, level foundation that is located in an area that has ample space in front, right side and in back of the bandsaw for cutting large or long material. For

best power and safety, the bandsaw should be plugged directly into a dedicated grounded electrical outlet that is within the supplied cord length of the machine. The use of an extension cord is not recommended.

3. Align the machine so that during use, the material being cut will not face aisles, doorways, or other work areas that bystanders may be in. Do not locate or use the machine in damp or wet conditions.

## **MOUNTING THE SAW TO THE MOBILE BASE**

Mount the Bandsaw to the assembled Stand with the four flat head Hex Bolts.

This can be done in two ways:

- A) With assistance, lift the bandsaw and carefully position it in place on top of the stand. Securely fasten it to the stand with the four bolts.
- B) If alone, lay the bandsaw down on its column onto 4"x4" wood blocks. Then also lay the stand on its side on wood blocks to match the bandsaw height and align the holes in the bandsaw base with those in the top of the stand. Laying the saw and stand on blocks will allow you space to install the four bolts. With the stand securely fastened to the bandsaw, tilt the saw upright off the blocks.

With the bandsaw fastened onto the stand, any final shifting or leveling of the stand parts will be done automatically by the weight of the saw. The final tightening of all of the nuts on the stand can now be done.

## ASSEMBLY

**WARNING THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ASSEMBLY IS COMPLETE.**

### TABLE ASSEMBLY

#### TABLE ASSEMBLY

1. Remove the Table Leveling Pin from the front of the table. This metal pin keeps the two sides of the table level at the slot area. **Fig. 1.**

2. Mount the table in place on the trunnion with the assistance of another person. The table is heavy! Do this from the rear of the machine, so that it is easier to fit the pre-installed blade through the slot in the table.

3. Attach the table to the trunnion with the four Hex Socket Cap Screws, Spring Washers and Washers. Install two bolts to the right of the blade, hand tightened only. **Fig. 2.** Then tip the table to 45 degrees and install the two bolts to the left of the blade. **Fig. 3.** **DO NOT** fully tighten the bolts at this time. Return the table to the horizontal position.

**NOTE:** Before finally secured in position, the table can be slightly moved, left and right. Check to make sure that the table's miter gauge slot is parallel to the side of the saw blade. This will provide a true cut when ripping stock. Set a thin metal ruler against the side of the saw blade. Make sure that it is not touching the saw's teeth, which can angle the ruler. Measure the distance from one end of the ruler to the miter gauge slot. **Fig. 4.** Then measure the same distance from the other end of the ruler to the miter gauge slot. Compare these two measurements and angle the table as necessary until the distances are the same.

4. Once the table is aligned parallel to blade, tighten all four of the installed bolts to secure the table in place.

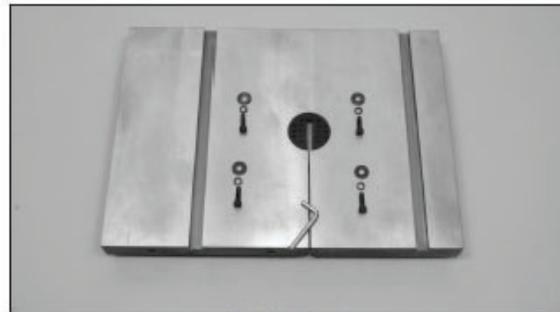


FIGURE 1

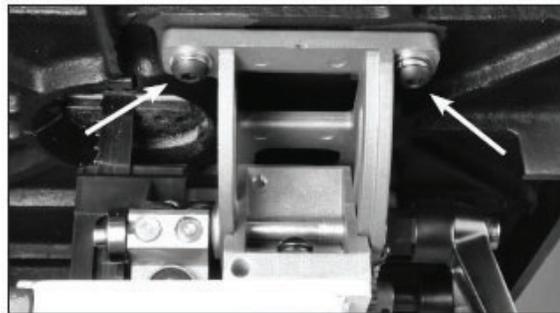


FIGURE 2

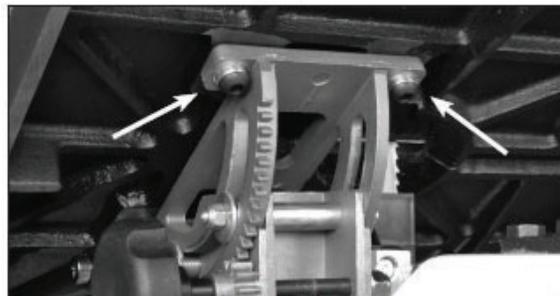


FIGURE 3

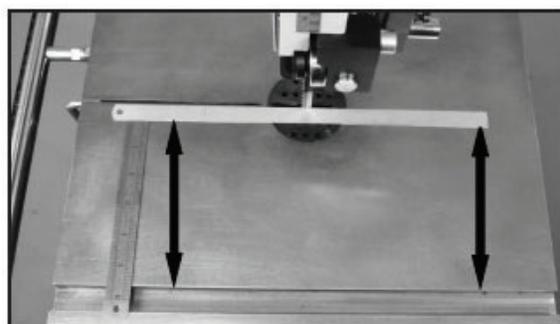


FIGURE 4

## INSTALL THE 90° TABLE STOP

Thread the Hex Bolt (#8B) and Nut (#7B) to the bottom of the table in the pre-bored and tapped hole. See Fig. 12 Setting the table to 90° to the blade will be done later.

## INSTALL THE FENCE SUPPORT BOLT



On the rear, left corner lip of the table install the Fence Support Bolt and Nut in the pre-bored and tapped hole. When the fence is moved to the far left on the front rail, the fence will be off of the table, but it will be supported in position on this bolt.

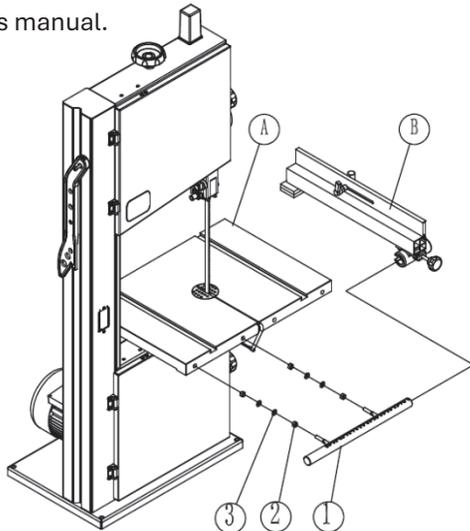
## RIP FENCE ASSEMBLY

1. Mount the fence Guide Rail (1) onto the front cast iron table (A) edge with the two fence bar Nuts and Washers (2&3). Position the bar so that it is parallel with the table surface, and equal distance out from the front edge of the table when measured at both left and right front edges of the table.

2. Slide the Fence Carrier and Fence Assembly onto the fence's guide rail. (B)

3. Lock the fence carrier in place on the rail by tightening the fence Lock Knob, which is located on the front of the carrier.

4. Final adjustments to the fence are covered later in this manual.



## INSTALL THE HAND WHEELS

1. Attach the Handwheel to the upper right side of the saw frame with the 5mm hex wrench. This wheel raises and lowers the blade guard.

3. Attach the Handwheel to the lower right side of the frame with the 5mm hex wrench. This wheel adjusts the motor drive belt tension.

4. Install the Blade Tension Handwheel to the top of the saw frame. No tools are needed, as the metal shaft of the handwheel has two simple pins that engage the Blade Tension Rod.

## INSTALL THE TOOL HOLDER

1. Assemble the Tool Holder to the column rear with two Phillips Screws Fig. 8. Handy storage for the Hex Wrenches (3, 4, 5, 6mm).

## INSTALL THE PUSH STICK HOLDER

1. Assemble the Push Stick Hanger Bolt and Nut to the column's left side with a 5mm hex wrench. Handy storage for the push stick when not in use. Fig. 9.

## INSTALL THE GUIDE POST CAP

1. Place Guide Post Cap into the square hole on top of the upper frame. This cap protects the guide post assembly from shop dust or debris. Fig. 10.



## ADJUSTMENTS



**WARNING THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.**

### TILTING THE TABLE

1. At the rear of the saw, loosen the Locking Handle on the table trunnion by turning it counterclockwise. **Fig. 11, A.**

2. Turn the Table Tilting Knob to adjust the table to the desired angle. **Fig. 11, B.** Use the angle indicator scale that is cast into the trunnion bracket Support to find the desired angle.

3. Retighten the locking handle to secure the table.

### SETTING THE TABLE SQUARE TO THE SAW BLADE'S SIDE

The table may be set at 90° to the saw blade sides by adjusting the table stop Bolt under the table. The table stop bolt rests on the top of the pivoting Stop Block **Fig. 12.**

1. First loosen the bolt's Locking Nut **Fig. 12, A.**

2. Set a square on the table and against the saw blade's flat side. Tilt the table until the table is set exactly 90° to the blade, then lock the table in position.

3. Adjust the bolt (**Fig. 12, B**), up or down, until it is in contact with the pivoting Table Angle Stop Block **Fig. 12, C.** Retighten the locking nut making sure that the table angle setting is maintained.

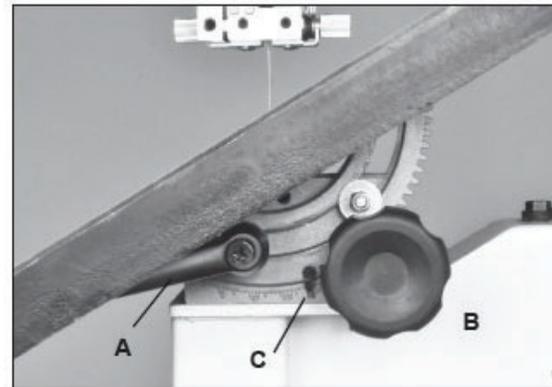


FIGURE 11

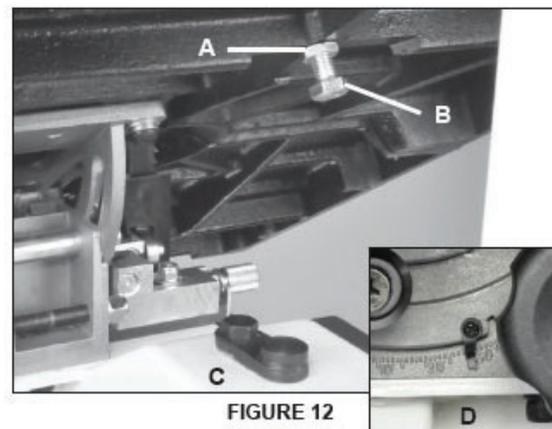


FIGURE 12

4. The angle indicator on the trunnion, can be adjusted by loosening the Phillips head screw and moving the pointer into position. **Fig. 12 D.**

## ADJUSTMENTS



**WARNING THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.**

### SETTING THE TABLE SQUARE TO THE SAW BLADE'S BACK

While pre-set before shipping, if needed, the table may also be re-set at 90° to the back of the saw blade by adjusting the trunnion micro adjustment screws.

1. On the lower Trunnion Support, slightly loosen the two Hex Bolts that hold the support to the bandsaw frame. **Fig. 13, A.**
2. Set a square on the table and against the saw blade's back, flat edge.
3. Using the 3mm hex wrench, turn the lower trunnion's micro adjusting hex screws to adjust the table position. **Fig. 13, B.**
  - *Clockwise* will raise the trunnion & table.
  - *Counterclockwise* will lower the trunnion & table.
4. Check the table and blade angle for 90° and when achieved, re-tighten the bolts to secure the table in position.

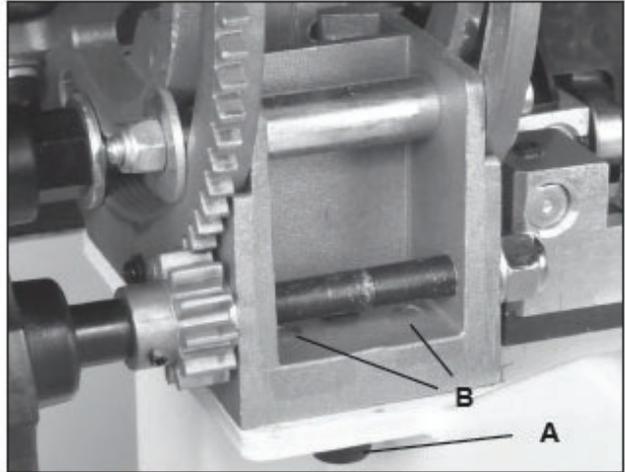


FIGURE 13

### TRACKING THE SAW BLADE



**WARNING** Unplug the bandsaw. A blade is installed at the factory. It is recommended to check the blade tracking prior to use. Make sure the upper and lower blade guides are adjusted away from the blade and the tension scale is set to correspond to the width of the blade you are using.

## TRACKING THE SAW BLADE

1. Open both doors. At the rear of the machine, loosen the Lock Lever (FIG. 14, A) by turning it counterclockwise.
2. Turn the Blade Tracking Handle (Fig. 14,B) clockwise or counterclockwise, while at the same time carefully turning the Upper Wheel by hand. Fig. 15, D. Check the tracking of the blade on the wheel through the side window (Fig. 14, C). Make at least three rotations of the wheel or until the blade tracks centered on the wheel.
3. Once the blade runs centered, tighten the lock lever and close the doors. For tracking of the blade on the Lower Wheel, see instructions further in this manual.

**NOTE:** the lower wheel has been pre-set at the factory and any changes made to this wheel should be after thorough reading and understanding of the instructions. Failure to do so could damage the machine.

## ADJUSTING THE BLADE TENSION

1. Always tension the blade with the Quick Release Lever in the “ON” position. Failure to do so could result in lack of blade tension or tension failure. Figure 16 E.

**NOTE:** Release / turn ‘OFF’ the Tension Lever only to change the blade, or to prolong the life of the blade when the saw is not in use for extended periods.



Figure 14



Figure 15



Figure 16

- To adjust the blade tension, turn the Blade Tension Handwheel (Fig. 17 A) on the top of the saw. To tighten the tension of the blade, turn the hand wheel clockwise. Tension the blade until the Tension Indicator Arrow (Fig. 19 C) corresponds to the width of blade you are using. View the indicator Arrow through the top door's front window. Fig.18.

**NOTE:** The blade tension scale may read differently due to different blade specifications from manufacturers - steel thickness, material, or variations in the welded blade length. It may be necessary to adjust the tension arrow up/down one size on blade tension scale to match your blade. Note the blade setting for the next time the same blade is used.

**General Rule** for blade tension: With the saw unplugged and the blade guard up, the saw blade should deflect about 1/4" when pressed with a finger to the side of the blade. Read further for information on 'Adjusting the Blade Tension Stop' for tensioning blades that are welded a bit longer than the specified 111" length.

**NOTE:** Excessive counterclockwise turning of the Blade Tension Handwheel to release blade tension may unscrew the threaded Blade Tension Rod from its tapped Block (Fig. 19, C). If this occurs, blade tensioning is impossible as the handwheel will just freely turn. The Rod must be rethreaded into the Block to resume blade tensioning.

Figure 17

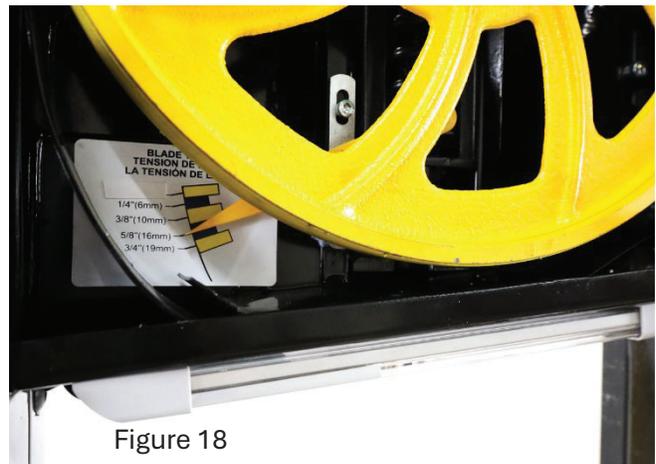
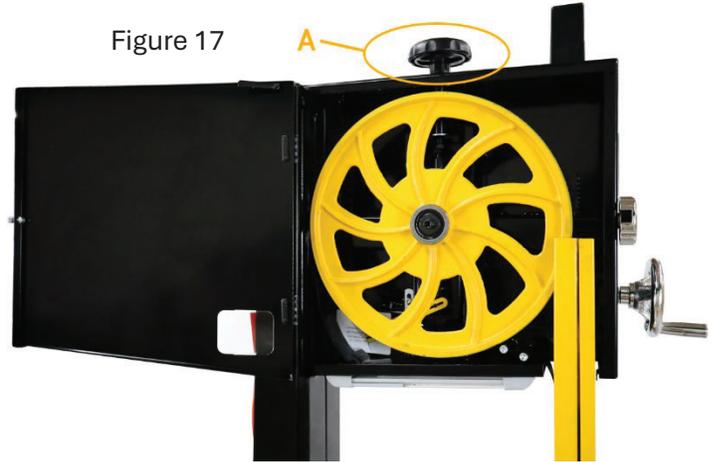


Figure 18

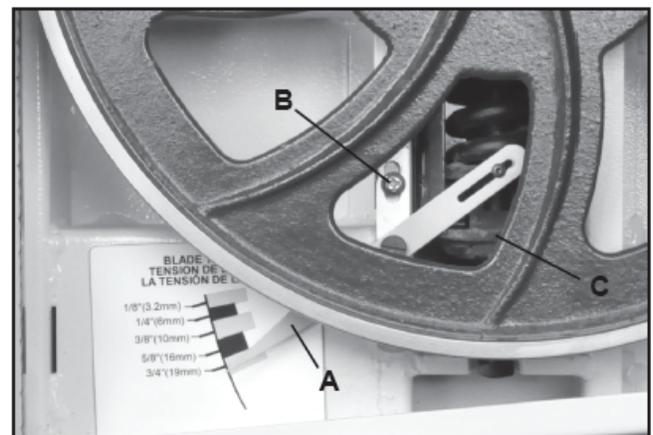


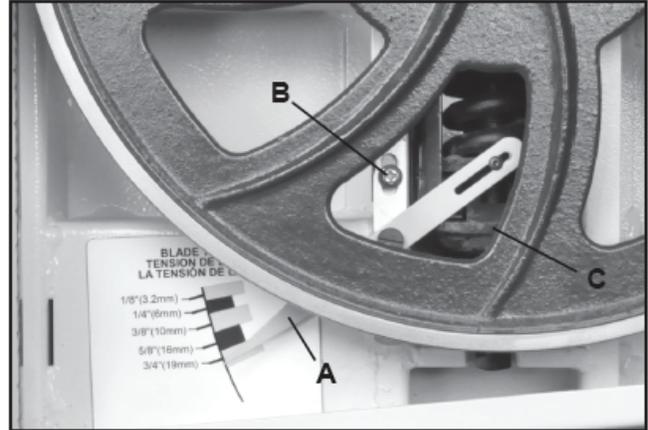
Figure 19

## ADJUSTING THE BLADE TENSION INDICATOR

The Blade Tension Indicator Arrow (Fig. 19, A) should be checked and adjusted the first time the saw is set up and run, and whenever a new blade is installed.

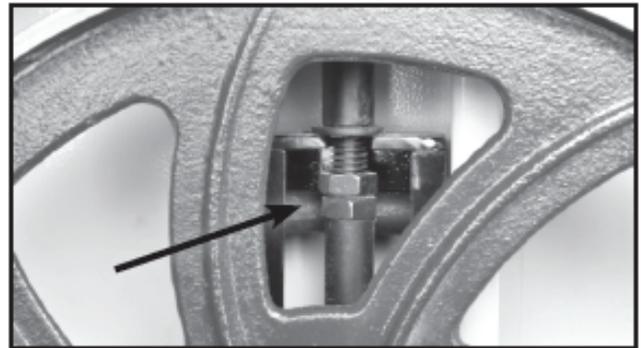
The blade tension indicator should be adjusted for blades made from thicker steel, if over cut or undercut in length, or made by different manufacturers.

1. With moderate tension on the blade, loosen the Indicator Plate's adjusting Screw with a Phillips head screwdriver (Fig. 19, B).
2. Adjust the blade indicator up/down as needed and then tighten the plate's adjusting screw.



## ADJUSTING THE BLADE TENSION STOP

If you can not set full tension on a new blade, the blade is most likely welded a bit longer than the standard 111" length, and so just beyond the pre-set tensioning range of the saw. To fix this, behind the top bandsaw wheel is the threaded Blade Tension Rod. Loosen the Nuts and screw them upward about 1/4", then retighten. This will increase the blade tensioning range of the saw for your new blade.



## CHANGING THE BANDSAW BLADE

**WARNING** Unplug the machine from the electrical supply. This ensures that the Bandsaw will not accidentally turn on if the ON/OFF switch is bumped.

1. Open the top and bottom wheel doors.
2. Release the blade tension by moving the Quick Release Lever from right to left. Fig. E.



3. Open the Hinged Door on the blade guard by loosening the Locking Handle. Fig. 21, A.

4. Remove the saw blade from the top wheel then feed it through the upper blade guides (B), slot in the table (C), lower blade guides & lower blade guard (D), out of the slot in the column of the machine (F), off of the bottom wheel, and then around the front rail (G).



**CAUTION** Be careful not to cut yourself on the sharp saw teeth.

Wear gloves for protection.

5. When installing the new blade, reverse the steps 1-4 above. Ensure that the blade teeth are pointing downwards and towards you at the position where the blade passes through the table.

6. Center the blade on both wheels.

7. Re-tension the new blade by moving the quick release lever back to the ON position, Fig. E (Previous Page), and check the blade tracking. The blade should run in the center of the wheels. Refer to “Tracking the Saw Blade” on page 14 for more details.

8. Reset the blade guides as described in the section “Adjusting the Blade Guides”

9. Reset the blade tension as described in the section “Adjusting the Blade Tension”

10. Close the hinged door on the blade guard and tighten the locking handle to keep the door closed.

11. Close and lock both the wheel doors before reconnecting the power supply.



## ADJUSTING THE BLADE GUIDES

The Stallion CWI-B1413 Band Saw features industrial, ball bearing blade guides for controlling the side-to-side and rear movement of the blade. With the bandsaw blade properly centered on the drive wheels, the guide bearings can then be set. To adjust the blade guides:

### Upper Guides:

1. Position the right and left guides relatively close to the blade. First, loosen the front Locking Knobs. (A, Fig. 22) To move the guides towards or away from the blade, turn the knurled, micro-adjusting Knobs. (B, Fig. 22)
2. The front of the guides should be approximately 1/16" behind the gullets of the saw blade (Fig. 23, inset). If they need to be moved forward or backwards, loosen the Locking Knob (C, Fig. 23) and move the upper guide's Support Block (D) until the guides are properly positioned behind the blade gullets. Re-tighten the Locking Knob when done.
3. Set both side bearing guides to within 1/32" of the saw blade - about the same thickness of a business card (Fig. 22). Do not set the bearing guides too close, or touching the sides of the blade, as this will adversely affect the life of the blade and bearings.
4. Adjust the rear bearing guide (E, Fig. 24) to be just clear of the back of the saw blade. Loosen the rear guide's Locking Knob (F, Fig. 24) and move the rear guide towards the blade by turning the rear, knurled micro-adjusting Knob (G, Fig. 24) that pushes the end of the guide's Long Shaft. When the correct adjustment is made, lock the guide in place by tightening the Locking Knob.

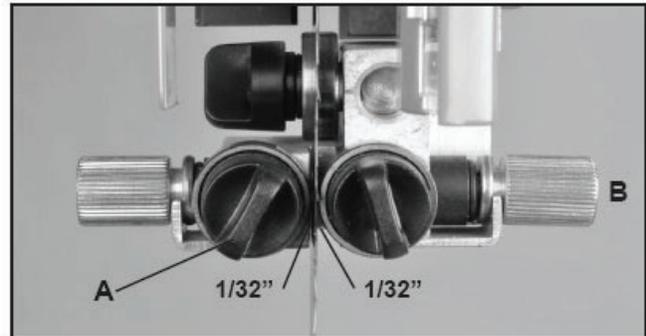


FIGURE 22

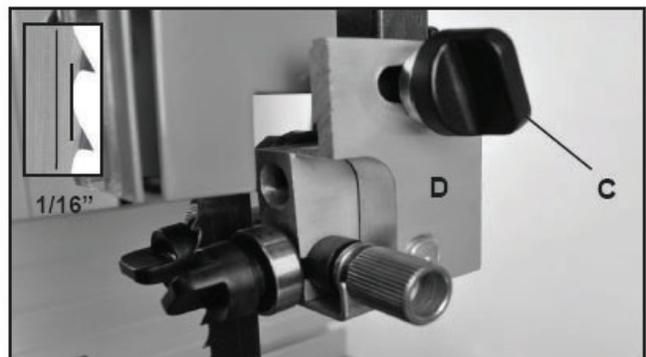


FIGURE 23

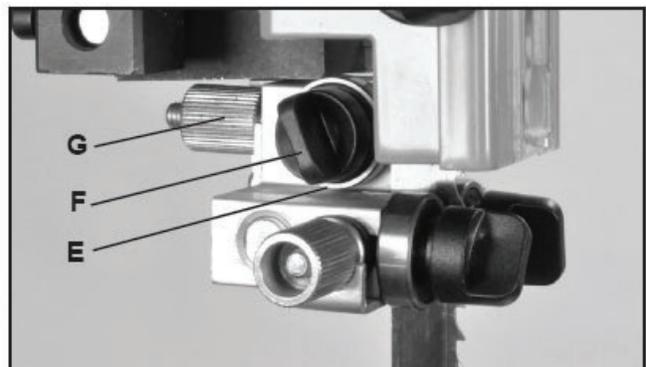


FIGURE 24

## Lower Guides:

Adjusting the ball bearing guides that are below the table is similar to the steps taken for the upper guides.

1. Loosen the lower support Locking Handle (A, Fig 25). Next, move the blade Guide Block (B, Fig 25) with the micro-adjusting Knob (C, Fig 25) until both side bearing guides are approximately 1/16" behind the gullets of the bandsaw blade. See Fig. 23, inset. When set, tighten the Locking Handle (A).

2. Set both side bearing guides to within 1/16" of the saw blade - about the same thickness of a business card. Do not set the bearing guides too close, or touch the sides of the blade, as this will adversely affect the life of the saw blade and bearings.

3. First, loosen the front Locking Knobs (A, Fig 26). To move the guides towards or away from the blade, use the Locking Knobs as handles to slide the bearings in place. Once set, secure the Locking Knobs.

4. Adjust the rear bearing guide to be just clear of the back of the saw blade. Loosen the rear guide's Locking Knob (A, Fig 27) and move the rear guide towards the blade by turning the lower, front micro-adjustment Knob (B, Fig 27). When the correct adjustment is made, lock the guide in place by tightening the Locking Knob (A).

**NOTE:** If the rear guide will not adjust close to the rear of the blade (possible issue with thin blades), the position of the blade on the wheel can be adjusted, or the lower Plate can be moved. There is a second position hole in the plate for the Hex Bolt. Unscrew the bolt and reposition it thru the plate's other hole. This will re-adjust the guide's travel distance.



FIGURE 25

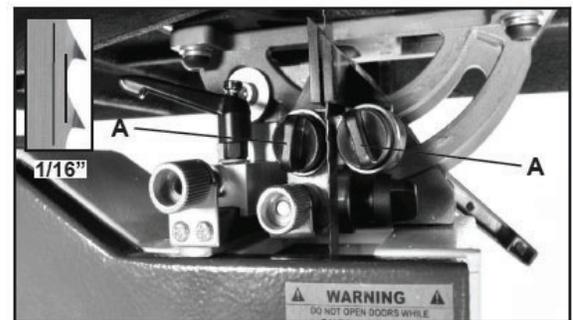


FIGURE 26



FIGURE 27

## ADJUSTING THE BLADE GUIDE & GUARD

**NOTE:** Before cutting, set the upper guide bearings approximately 1/4" above the top surface of the work piece. This will give the best blade control. **Fig. 28.**

1. Loosen the Guidepost Lock Knob (A, Fig. 30) and turn the Guidepost Handle (B, Fig. 29) to raise or lower the guide post/upper blade guide assembly to the desired height.

A measurement scale has been supplied on the right side of the guide post for quick reference on the height of the guide bearings above the table surface.

2. When the guide bearings are in proper position, re-tighten the guidepost lock knob.

**NOTE:** The guide post is pre-set at the factory to aligned vertical with the bandsaw blade. If the guide post setting ever needs slight adjustment:

3. Open the top door and lower the blade guard all the way down to the table to access the Guide Bracket block. **Fig. 31.**

4. Loosen the four Hex Bolts (C, Fig. 30) located at the rear of the top frame. This will allow the guide post to be shifted/angled a bit left or right to correct any positioning issues.

5. There are also four Set Screws (Fig. 31) set in the rear of the guide bracket near the corners. If the guard post needs to be angled slightly towards the front or back of the table, or even twisted on an angle, make the adjustment with these screws.

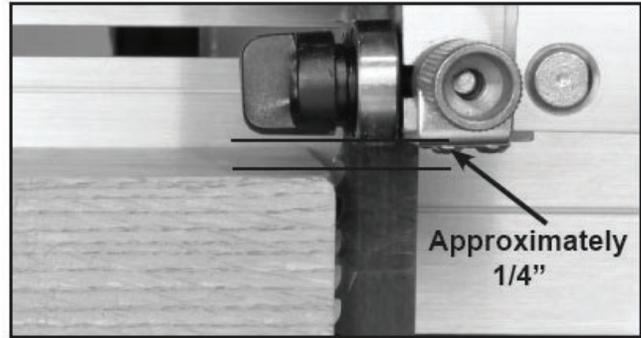


FIGURE 28



Figure 30

Figure 29

- Advancing the top two set screws will angle the post towards the rear of the table.

- Advancing the bottom two set screws will angle the post towards the front of the table.

- Setting the two left or right screws will angle the post to the right or left.

6. When the post is adjusted vertical, tighten the four hex bolts that were loosened in step 4.

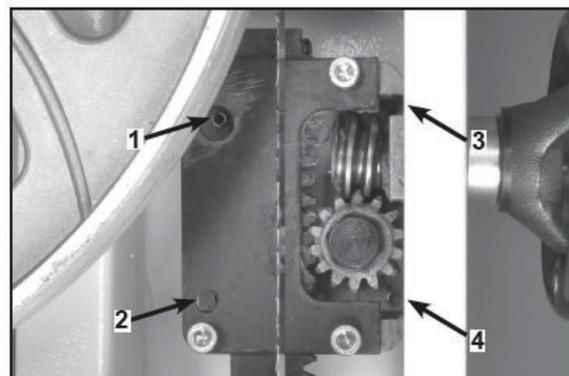


FIGURE 31

## ADJUSTING THE RIP FENCE FOR DRIFT

The CWI-B1413 Band Saw can be adjusted to eliminate 'drift' - bringing the fence back to being parallel to the blade - by two methods. To adjust the fence for drift:

Method 1. Loosen the two Hex Screws which hold the Rip Fence to the Fence Carrier. Adjust the fence so that it is parallel to the blade/miter gauge slots, then re-tighten the hex screws.

Method 2. Loosen the Fence Rail Nuts (Fig. 32 C) so that the fence rail can be adjusted in or out from the table edge. This will position the fence left or right, as needed, to align it parallel to the blade and miter saw slots in the table. Once the fence is set, tighten the fasteners. Fig. 32, A.

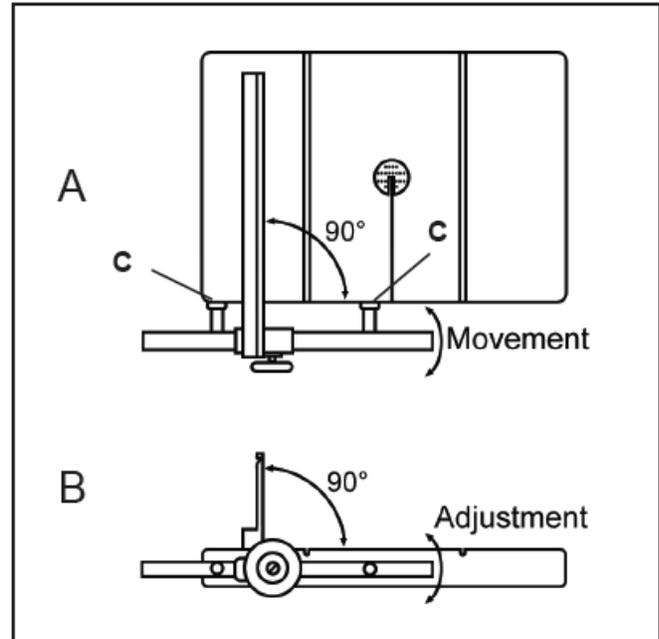


FIGURE 32

## ADJUSTING THE FENCE 90° TO THE TABLE

Check that the fence is 90 degrees to the table using a square. If adjustments are required, loosen the Fence Rail Nuts (Fig. 32, C) and raise or lower either side of the fence's Guide Rail until the fence is 90 degrees to the table. Once set at 90 degrees, fully tighten the fence bar nuts. Fig. 32, B & 33.

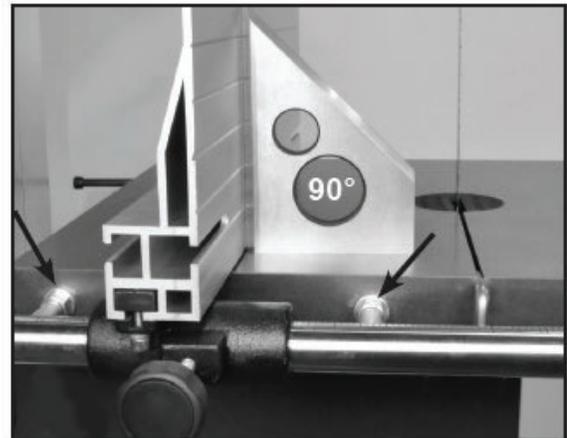


FIGURE 33

## ADJUSTING THE FENCE TO THE TABLE

Check that the fence is lying flat, or parallel to the table surface. The gap between the table and the bottom of the fence should be equal along the whole length of the fence. If a slight adjustment is necessary, loosen the Fence Rail Nuts so that the fence rail can be adjusted up or down from the table surface. This will position the fence up or down as needed to align it parallel to the table surface. Once the fence is set, tighten the fence rail nuts. Fig. 34, A.

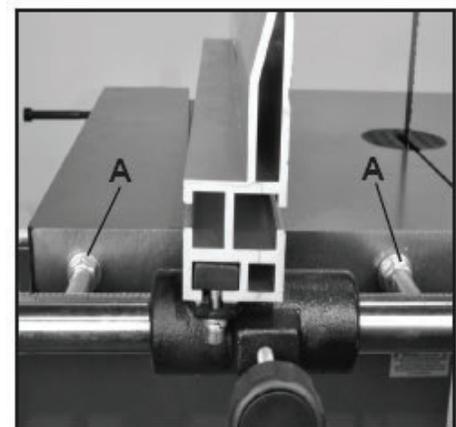


FIGURE 34

## ADJUSTING THE FENCE ON THE CARRIER

The fence can be changed from a vertical position to a horizontal position, or from its mounting on the left side of the blade to the right with simple adjustments of the carrier's hardware and front rail.

### To change the fence from vertical to horizontal:

1. Loosen the two Hex Screws (A, Fig. 35) which hold the Rip Fence (B, Fig. 35) to the Fence Carrier (C, Fig. 35). Slide the fence forward to remove it from the carrier's Sliding Block (D, Fig. 35).
2. Turn the fence down to its horizontal position and slide it back onto the carrier. The bottom of the fence is slotted to mount on the sliding block. Fig. 36.
3. Once in place, retighten the two hex screws to secure the fence in position on the carrier. Check the fence for drift, and make corrections if needed.

### To change the fence from the left side of the blade to the right side of the blade:

1. Remove the fence carrier with fence from the front rail.
2. Mount the Fence Carrier back onto the front rail on the right side of blade.
3. Loosen the two Hex Screws (Fig. 35, A) which hold the Rip Fence to the Fence Carrier. Slide the fence forward to remove it from the carrier's Sliding Block.
4. Turn the fence around 180° end-to-end and slide it back onto the sliding block. Fig. 37. Once in place, retighten the two hex screws to secure the fence in position on the carrier. Fig. 38.
5. Check the fence for drift, and make corrections if needed.

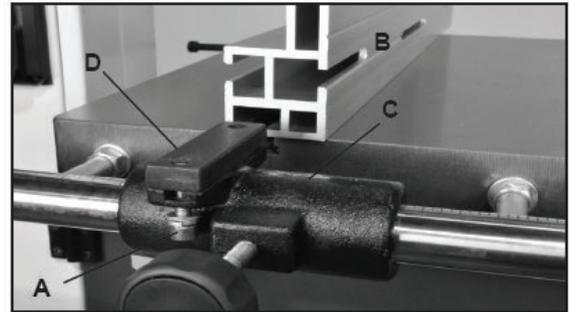


FIGURE 35

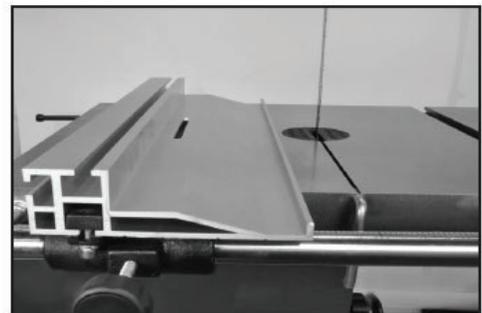


FIGURE 36

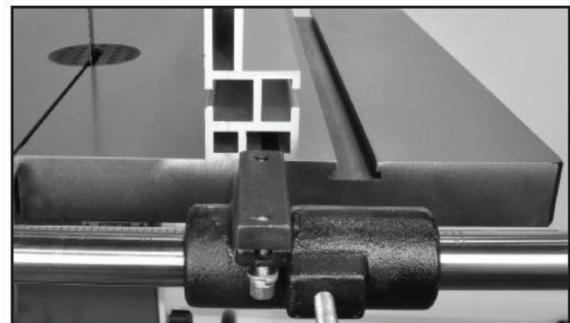
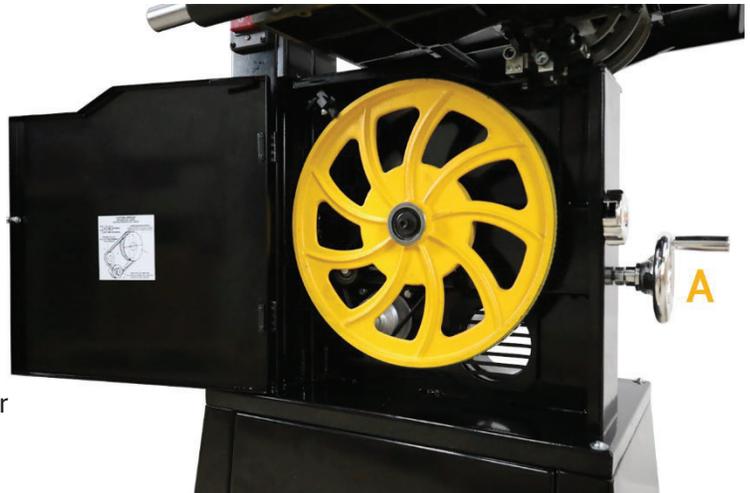


FIGURE 37

## CHANGING THE BLADE SPEED

This Bandsaw has two blade speeds, high speed (2950 ft/min) and low speed (1445 ft/min). **NOTE:** The bandsaw is shipped in the high speed mode.

The lower wheel has two integral “multi-vee” form pulleys, and the motor shaft has a twin multi-vee form pulley. The “multi-vee” belt passes around the wheel pulley and the motor pulley. The belt tension is released and applied by using the Handwheel **Fig. 39, A**.



For the **HIGH SPEED** (2950 ft/min), the belt should be installed on the rear pulley of both the motor and the wheel, as shown in **Fig. 40**. The high speed setting is the standard for all around sawing needs of woods and composites.

For the **LOW SPEED** (1445 ft/min), the belt should be installed on the front pulley of both the motor and wheel, as shown in **Fig. 40**.

The low speed setting is best for cutting extra hard material - wood, plastics, and non-ferrous metals. The correct blade type is necessary for clean, effective cutting action in these materials.

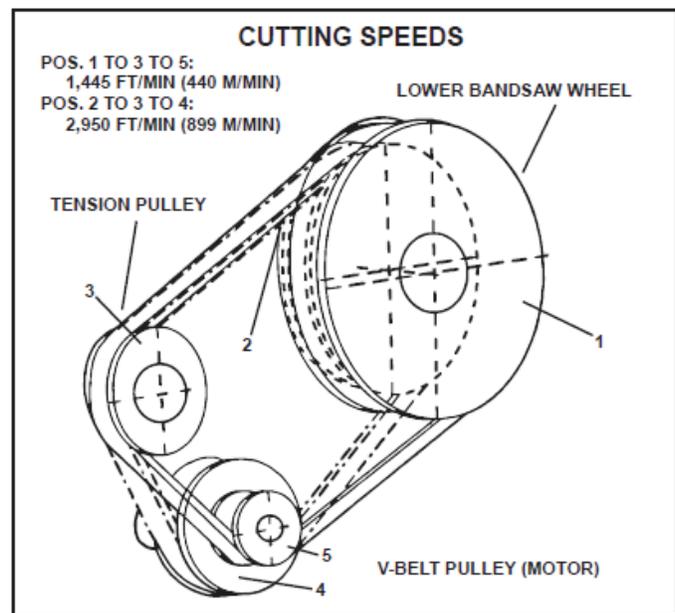


FIGURE 40

## ADJUSTING THE DRIVE BELT TENSION

To adjust the belt tension turn the lower Handwheel (**Fig. 39, A**) until there is about 3/8” to 1/2” deflection in the “multi-vee” drive belt. **DO NOT** over tension the belt as this can put excessive, damaging pressure on the belt, pulleys and motor. **Fig. 41**.

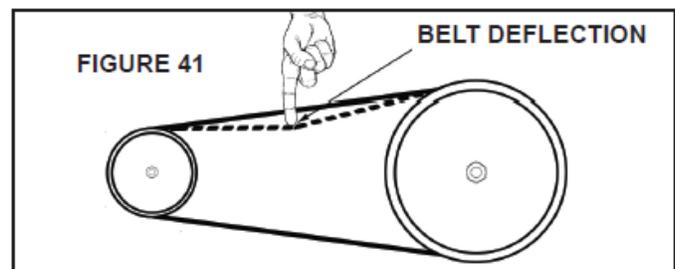


FIGURE 41

**See further instructions later in the manual for changing the drive belt.**

## ON / OFF SWITCH

To operate the saw, Press the top, round “ON” button in to its full depth to turn the saw on. There should be a ‘click’ to indicate the ‘on’ contact is made.

Once work is finished, hit the bottom red safety switch to turn the saw OFF. Fig. 42.

If the saw is not to be used for an extended length of time, unplug the saw from the power supply and release the tension on the blade.



## OPERATION

### BASIC OPERATION

The blade cuts on a continuous down-stroke. Never start the saw with the workpiece in contact with the blade.

With both hands, firmly hold the workpiece down on the table, and feed it slowly towards the blade, putting only light pressure on it, and keeping your hands away from the blade.

Keep your hands and fingers away from the blade. Use a push stick whenever working close to the blade.

For best results, the blade must be sharp. A dull blade will not cut correctly, especially when straight cutting, and causes excess pressure to be applied on the rear guide bearings.

Select the right blade for the job, depending on the thickness of the wood and the cut to be made. The thinner and harder the wood, the finer the teeth of the blade should be. Use a fine tooth blade for cutting sharp curves.

The machine is especially suited for cutting curves, but will also make straight cuts. When cutting, follow the design marked out by pushing and turning the workpiece evenly into the blade.

Do not attempt to turn the workpiece without pushing it, as this may cause the workpiece to get stuck, or bend the blade. For straight cuts, use the fence provided to feed the workpiece along the blade slowly and in a straight line. Use the re-saw bar for thick or difficult woods. Use a miter gauge for cross-cut or angle cutting.

## RE-SAWING

A re-saw guide bar is supplied to help correct any blade wandering during certain re-sawing operations.

For re-sawing, attach the re-saw bar to the slot on the fence. Position the re-saw bar so that it is aligned with the front of the blade. Draw a reference line down the workpiece. Use the bar as a pivot point, angling the wood left or right while against the bar, to follow the line through the cut. Fig. 43.

Note: The re-saw bar is not needed for all re-saw operations. Proper blade tension and selection, as well as proper guide set up, will allow re-sawing flat stock against the fence without the use of the re-saw bar.

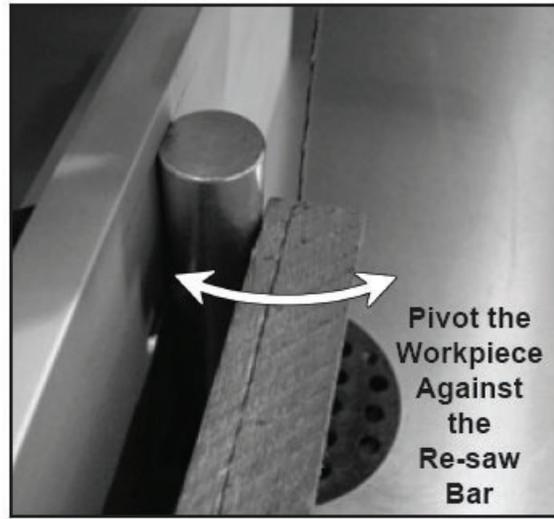


FIGURE 43

## MAINTENANCE



**CAUTION! BEFORE CLEANING OR CARRYING OUT MAINTENANCE WORK, DISCONNECT THE MACHINE FROM THE POWER SOURCE (WALL SOCKET). NEVER USE WATER OR OTHER LIQUIDS TO CLEAN THE MACHINE. USE A BENCH BRUSH. DO NOT USE COMPRESSED AIR NEAR BEARINGS. REGULAR MAINTENANCE OF THE MACHINE WILL PREVENT UNNECESSARY PROBLEMS.**

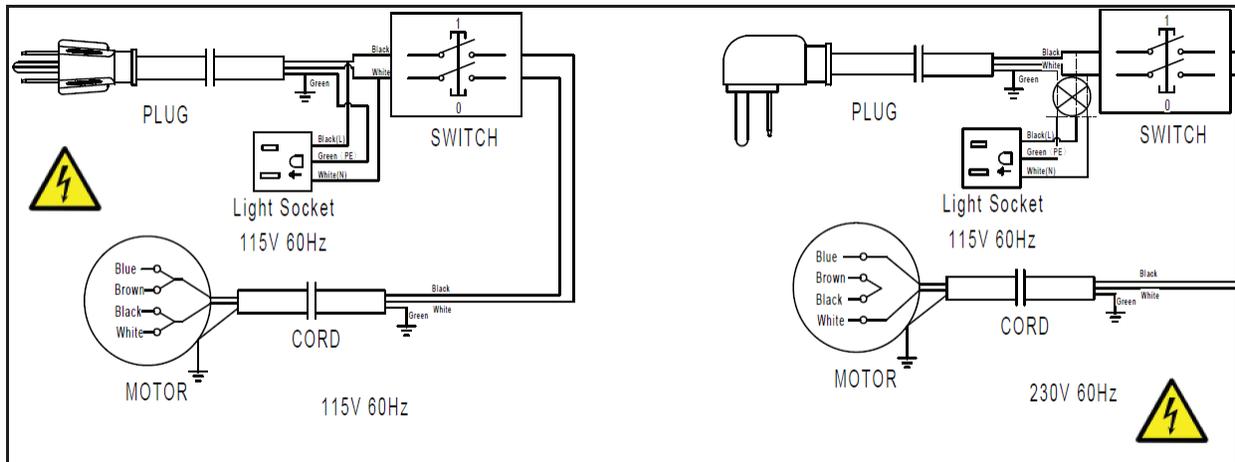
1. Keep the table clean to ensure accurate cutting.
2. Keep the outside of the machine clean to ensure accurate operation of all moving parts and prevent excessive wear.
3. Keep the ventilation slots of the motor clean to prevent it from overheating.
4. Keep the inside of the machine (near the saw blade, etc.) clean to prevent accumulation of dust. Use dust collection, if possible.
5. To prolong the life of the blade, when the bandsaw is not in use for extended periods, release the blade tension. Before reusing the bandsaw, ensure that the blade is re-tensioned and tracking is checked.
6. Keep the guide bearings free of dust and clean the guide bearing assemblies frequently.

## WIRING DIAGRAM



**WARNING** This machine must be grounded. Replacement of the power supply cable should only be done by a qualified electrician. See page 5 for additional electrical information.

As received from the factory, your bandsaw is ready to run at 115V operation. It can be switch to 230V according to the schematic and instructions below. Note the warning for disabling the electrical outlet.



**For 115V wiring;** connect the black & white motor terminal wires to the white switch wire lead, and connect the blue & brown motor terminal wires to the black switch wire lead. Disregard the wires that lead to the capacitor.

**For 230V wiring;** connect the blue motor terminal to the black switch wire lead. Connect the white motor terminal to the white switch wire lead. Tie the brown and black motor leads together with spare wire nut (supplied). Disregard the wires that lead to the capacitor.



**WARNING** For 230V wiring, **DISCONNECT** the wires leading to the Power Outlet to make it inoperable. This plug is for 115V wiring only.

## TROUBLESHOOTING



**WARNING FOR YOUR OWN SAFETY, ALWAYS TURN OFF AND UNPLUG THE MACHINE BEFORE CARRYING OUT ANY TROUBLESHOOTING.**

TROUBLE	PROBABLE CAUSE	REMEDY
The machine does not work when switched on.	<ol style="list-style-type: none"> <li>1. No power supply.</li> <li>2. Defective switch.</li> </ol>	<p>Check the cable for breakage. Contact your local dealer for repair parts.</p>
The blade does not move with the motor running.	<ol style="list-style-type: none"> <li>1. The quick release lever or blade tension handwheel has not been tightened.</li> <li>2. The blade has come off one of the wheels.</li> <li>3. The saw blade has broken.</li> <li>4. The drive belt has snapped.</li> </ol>	<p>Switch off the motor, tighten the quick release lever or blade tension handwheel. Open the hinged door and check. Replace the blade. Replace the belt.</p>
The blade does not cut in a straight line.	<ol style="list-style-type: none"> <li>1. Fence for cutting not used.</li> <li>2. Too fast feed rate.</li> <li>3. The blade teeth are dull or damaged.</li> <li>4. Blade guides not suitably adjusted.</li> </ol>	<p>Use a fence. Put light pressure on the workpiece &amp; make sure the blade does not bend. Use a new blade. Adjust the blade guides</p>
The blade does not cut, or cuts very slowly.	<ol style="list-style-type: none"> <li>1. The teeth are dull, caused by cutting hard material or long use.</li> <li>2. The blade was mounted in the wrong direction.</li> </ol>	<p>Replace the blade, use a 6 T.P.I. blade for wood and soft materials. Use a 14 T.P.I. blade for harder materials. A 14 T.P.I. blade always cuts slower due to the finer teeth. Install the blade correctly.</p>
Sawdust builds up inside the machine.	<ol style="list-style-type: none"> <li>1. This is normal</li> </ol>	<p>Clean the machine regularly. Open the hinged door and remove the sawdust with a vacuum cleaner. Attach a dust collection system.</p>
Sawdust inside the motor housing.	<ol style="list-style-type: none"> <li>1. Excessive dust build-up on the machine exterior components.</li> </ol>	<p>Clean the ventilating slots of the motor with a vacuum cleaner. From time to time remove the sawdust to prevent it from being drawn into the housing</p>
The machine does not cut at 45° or 90° angles.	<ol style="list-style-type: none"> <li>1. The table is not at right angles to the blade.</li> <li>2. The blade is dull or too much pressure was put on the workpiece.</li> </ol>	<p>Adjust the table. Replace the blade or put less pressure on the workpiece.</p>
The blade cannot be properly positioned on the band wheels.	<ol style="list-style-type: none"> <li>1. The wheels are not aligned.</li> <li>2. The blade tracking knob hasn't been properly adjusted.</li> <li>3. Inferior blade.</li> </ol>	<p><b>Contact CWI Support @ 1-888-389-4752 Ext. 5</b> Adjust the knob Replace the blade.</p>



**WARNING** THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.

## CHANGING THE MOTOR DRIVE BELT

Before changing the belt, make sure that the bandsaw is unplugged from the power source. To change the drive belt:

1. Release the tension on the bandsaw blade and move the blade off of the lower wheel, or take the blade totally off from the saw.
2. Remove the tension from the drive belt by turning the belt tensioning Handwheel. Take the old belt off of the wheel and pulleys.
3. Take the Lower Wheel off of the saw. Remove the Allen Screw, Spring Washer and Flat Washer in the middle of the lower wheel. Carefully pull the wheel off the shaft.
4. Install the new belt and reverse the process outlined above. Tension the drive belt until there is 3/8" to 1/2" of deflection.

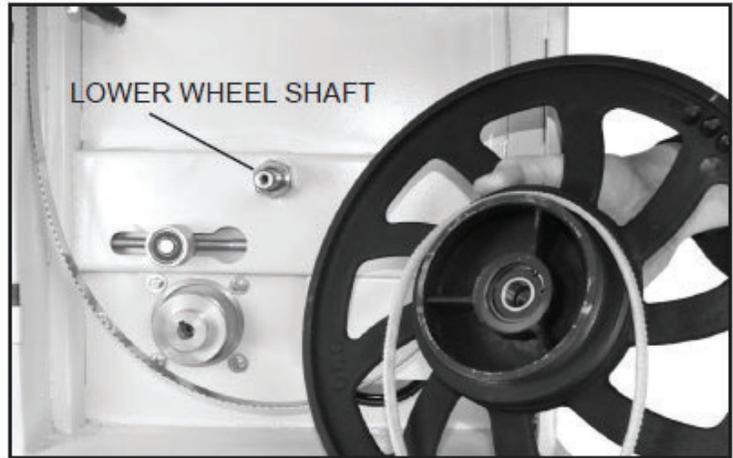


FIGURE 44



FIGURE 45

## LEVELING THE TABLE INSERT

The table insert has an innovative built in micro-adjustment feature. This adjustment can be used if the table insert sits too high or too low in the table seat. If the insert is resting above the table, turn the micro-screws with a hex "L" wrench counter clockwise to lower the insert. If the insert is sitting below the table, turn the microscrews clockwise to raise the insert level with the table.



**CAUTION!** Having the insert below the top of the table could cause the workpiece to get stuck on the lip of the table seat, particularly on the back area of the table seat in back of the blade.

## CHANGING BANDSAW TIRES

Use a putty knife to get underneath the tire and pull it up and away from the wheel. Work the putty knife all the way around the wheel to loosen the tire. Then, use the putty knife as leverage to flip the tire over and off of the wheel. Clean the inside of the groove, removing any dirt, debris or cement with lacquer thinner.

Soak the replacement tire in warm water to make it more flexible. Dry the tire, and while it is still warm, lay it on top of the wheel. Start by setting the tire into the wheel groove at the top of the wheel. Using a putty knife, work the new tire around the wheel, making sure not to slice the tire. If rubber cement is to be used as a binder, make sure to distribute it evenly. Having high spots between the wheel and the tire will cause a vibration and effect blade tracking.

## LOWER WHEEL ADJUSTMENTS

The following instructions will correct common blade issues related to the lower wheel's alignment in relation to the upper wheel. These adjustments will correct the blade position on the lower wheel and blade oscillation (wobble). These are critical adjustments which affect the performance and accuracy of the bandsaw.



**CAUTION! PLEASE READ AND UNDERSTAND THESE STEPS THOROUGHLY BEFORE MAKING ANY ADJUSTMENTS. FAILURE TO DO SO COULD DAMAGE THE MACHINE.**

**Please contact a CWI Woodworking Technologies technical support representative if you have questions before attempting these adjustments. 1-888-389-4752 Ext. 5**

Release the blade tension completely before making any lower wheel adjustments. Pressure must be released on the lower wheel to allow proper adjustments and to avoid damaging the machine.

If the blade is not running true, or it is not running on center of the lower wheel but is correct on the upper wheel, then an adjustment to the wheel hub on the rear of the bandsaw is required.

The numbers shown on the rear hub photo represent the positions on a clock face.

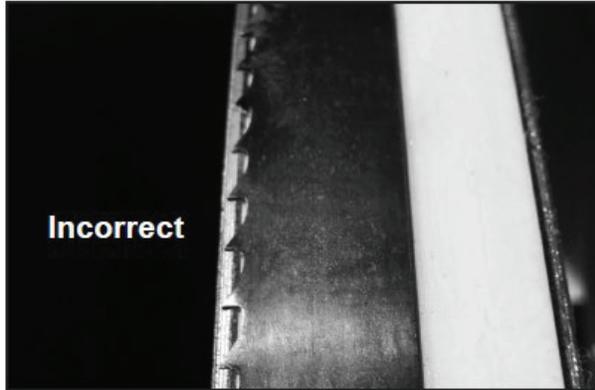
**NOTE:** To help identify the extent of rotation on a bolt, mark a black dot on the edge of the bolt as a visual indicator.



*If a blade is tracking forward on the lower wheel toward the door, follow these correction steps:*

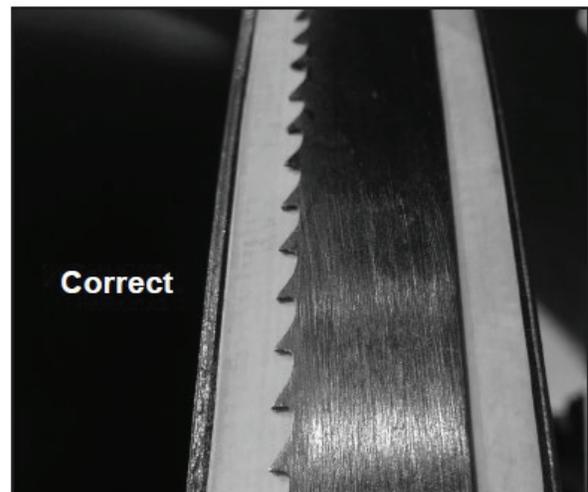
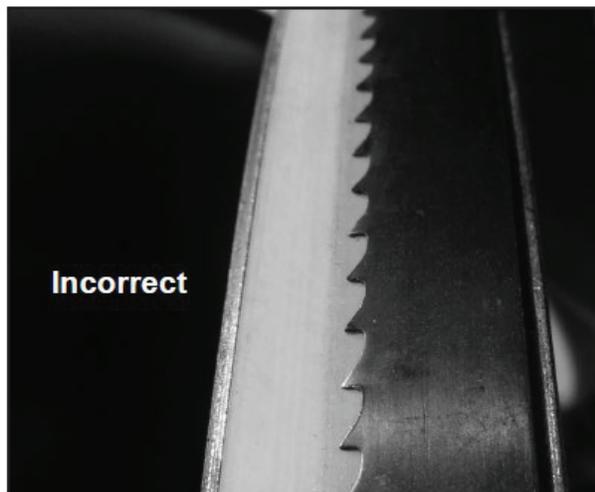
- 1.) *De-tension the saw blade.*
- 2.) *Loosen 9 o'clock shaft bolt to take pressure off the shaft.*
- 3.) *Loosen 12 o'clock shaft bolt one half rotation.*
- 4.) *Tighten the 6 o'clock shaft bolt until the shaft touches the 12 o'clock adjusting bolt.*

- 5.) Lock all three shaft bolts.
- 6.) Re-tension the saw blade and set the upper wheel to plumb by adjusting the tracking knob. Spin the upper wheel by hand and track the blade.
- 7.) Repeat if further adjustment is necessary.



If a blade is tracking on the rear of the lower wheel, away from the door, follow these steps:

- 1.) De-tension the saw blade.
- 2.) Loosen 9 o'clock shaft bolt to take pressure off the shaft.
- 3.) Loosen 6 o'clock shaft bolt one half rotation.
- 4.) Tighten the 12 o'clock shaft bolt until the shaft touches the 6 o'clock adjusting bolt.
- 5.) Lock all three shaft bolts.
- 6.) Re-tension the saw blade and set the upper wheel to plumb by adjusting the tracking knob. Spin the upper wheel by hand and track the blade.
- 7.) Repeat if further adjustment is necessary.

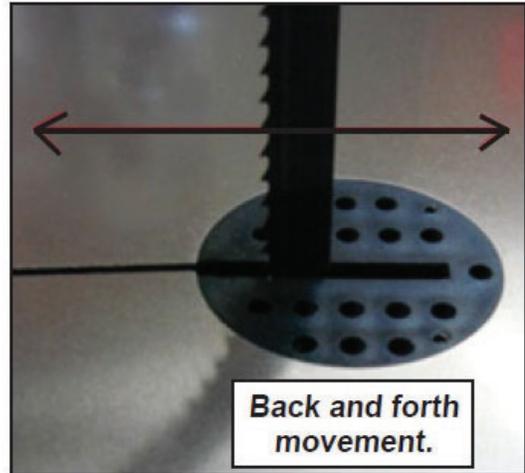


*If a blade is moving back and forth (wobbling) follow these steps:*

First, check the bandsaw blade to insure that it has been welded correctly, so that the blade's back is in proper alignment - flat (if it is laid down on a table surface).

If the blade is welded true, then adjustment to the wheel hub on the rear of the bandsaw is required.

- 1.) De-tension the saw blade.
- 2.) Loosen 6 o'clock shaft bolt to take pressure off of the shaft.
- 3.) Loosen 9 o'clock shaft bolt one half rotation.
- 4.) Tighten the 3 o'clock shaft bolt until the shaft touches the 9 o'clock adjusting bolt.
- 5.) Lock all three shaft bolts.
- 6.) Re-tension the saw blade and set the upper wheel to plumb by adjusting the tracking knob. Spin the upper wheel by hand and track the blade.
- 7.) Start the bandsaw and check blade movement.
- 8.) If movement has diminished then continue with the adjustment.
- 9.) If movement is worse, reverse the adjustments in steps 3 and 4.

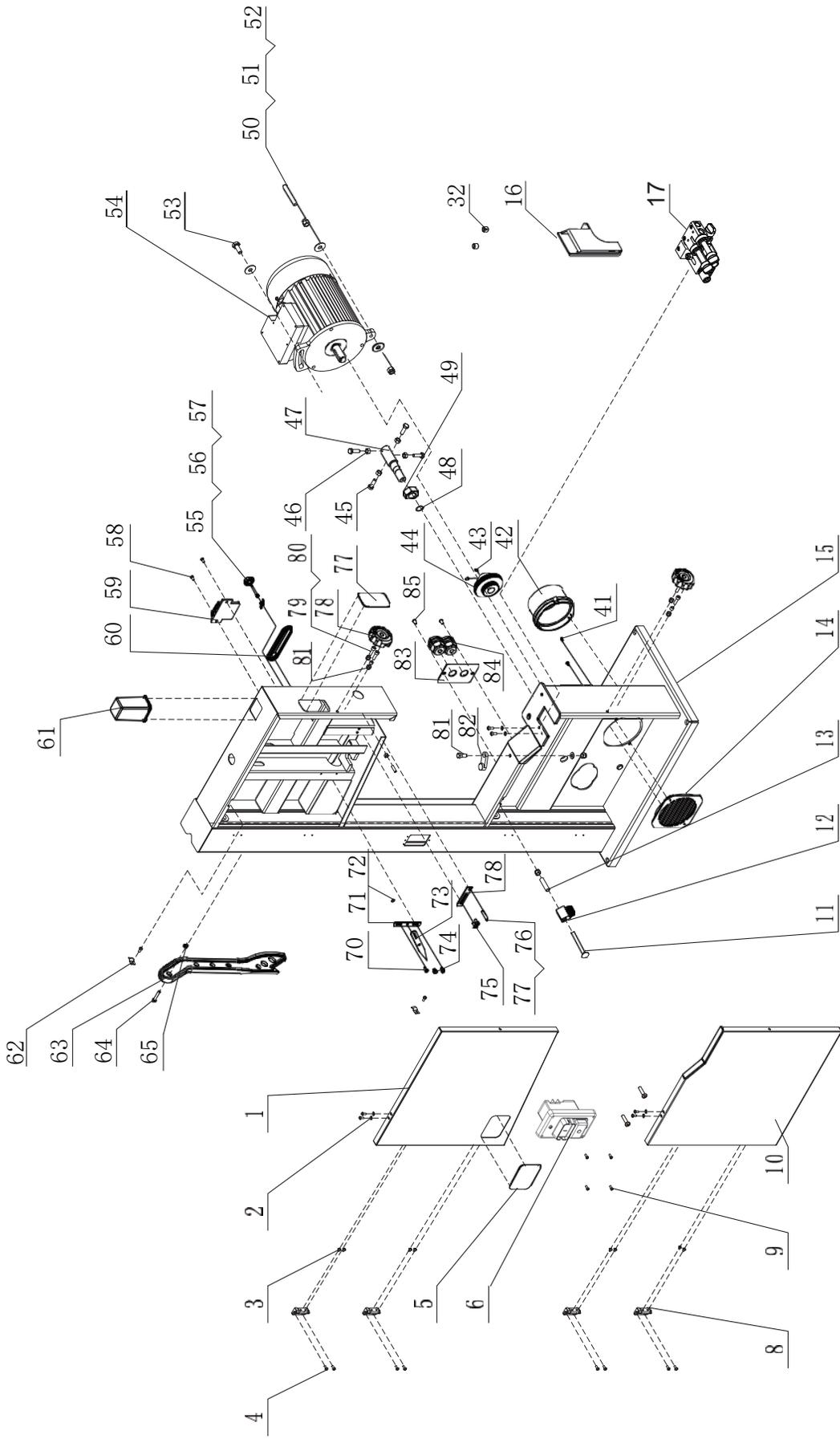


**FOR ADDITIONAL SUPPORT & PARTS INQUIRIES CONTACT  
CWI WOODWORKING TECHNOLOGIES**

**1-888-389-4752 Ext. 5  
SALES@CWIMACHINERY.COM**

# 7. DIAGRAMS AND COMPONENTS

## 7.1 Frame assembly

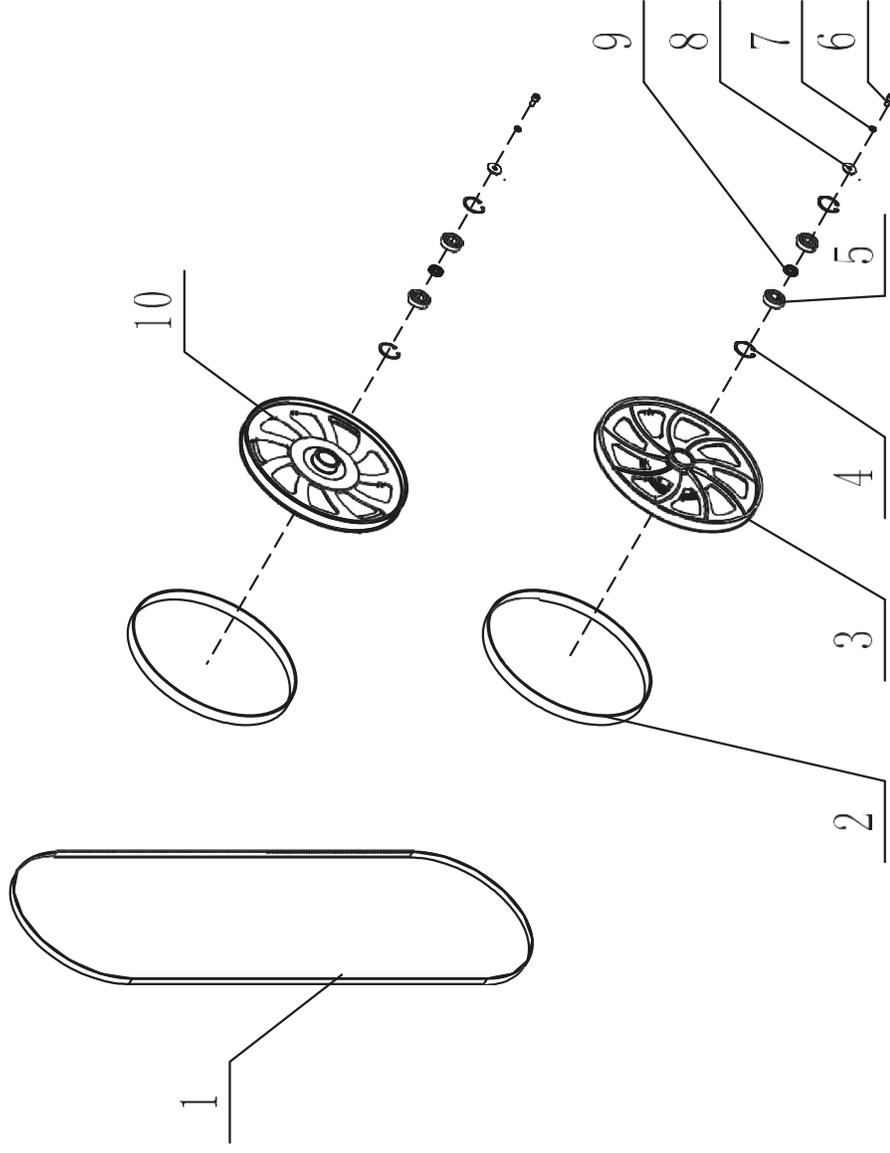


## 7.1 Frame assembly

No.	Description	Qty'
1	Upper door	1
2	Flat washer M4	4
3	Screw M4X6	8
4	Screw M4X10	12
5	Winbaw	1
6	Switch	1
8	Hinge assy	4
9	Screw M4X12	2
10	Lower door	1
11	Bolt	1
12	Brush	1
13	Sleeve	1
14	Suction rack	1
15	Frame	1
16	Lower guide guard	1
17	Lower guide assembly	1
32	Screw M6X6	2
41	Tap screw	2
42	Suction port	1
43	Screw	2
44	Motor pulley	1
45	Bolt M8X25	4
46	Hex nut M8	4

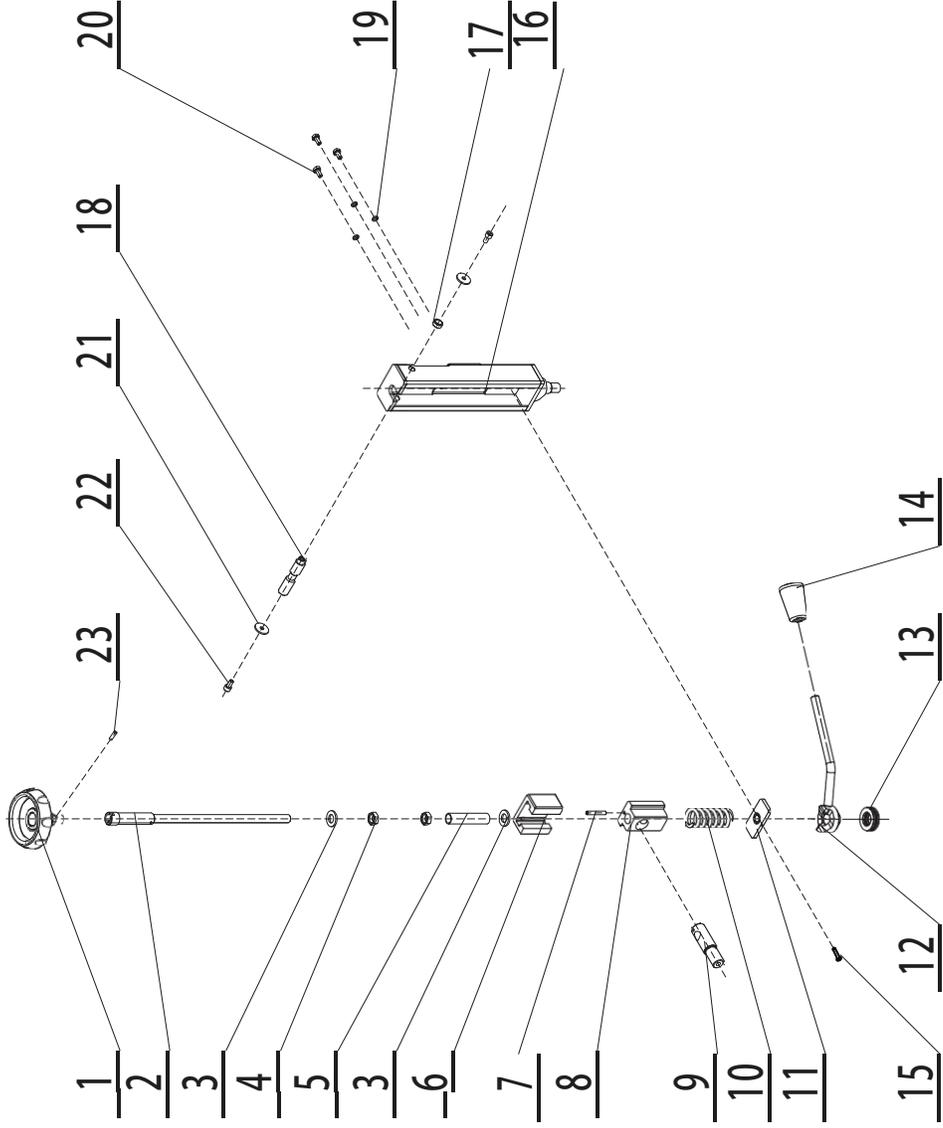
47	Lower wheel axle	1
48	Spring washer	1
49	Hex nut	1
50	Screw M10X70	1
51	Nut M10	2
52	Washer M10	3
53	Bolt M10X25	1
54	Motor	1
55	Clamp handle	1
56	Stud shaft	1
57	Nut	1
58	Tool rack	1
59	Screw M5X10	1
60	Dust guard	1
61	Upper guide guard	1
62	Pressing plate	1
63	Plastic push handle	1
64	Screw M6X30	1
65	Nut M6	2
70	Screw M5X8	1
71	Pointer fix board	1
72	Washer M5	1
73	Pointer	1
74	Pointer screw	1
75	Screw M5X12	2
76	Plastic pipe	1
77	Screw M6X30	1
78	Connecting board	1
79	Screw	2
80	Washer M4	2
81	Stud shaft	1
82	Cushion block	1
83	Threading board	1
84	Fixed seat	2
85	Screw M6X10	2

## 7.2 Driving system



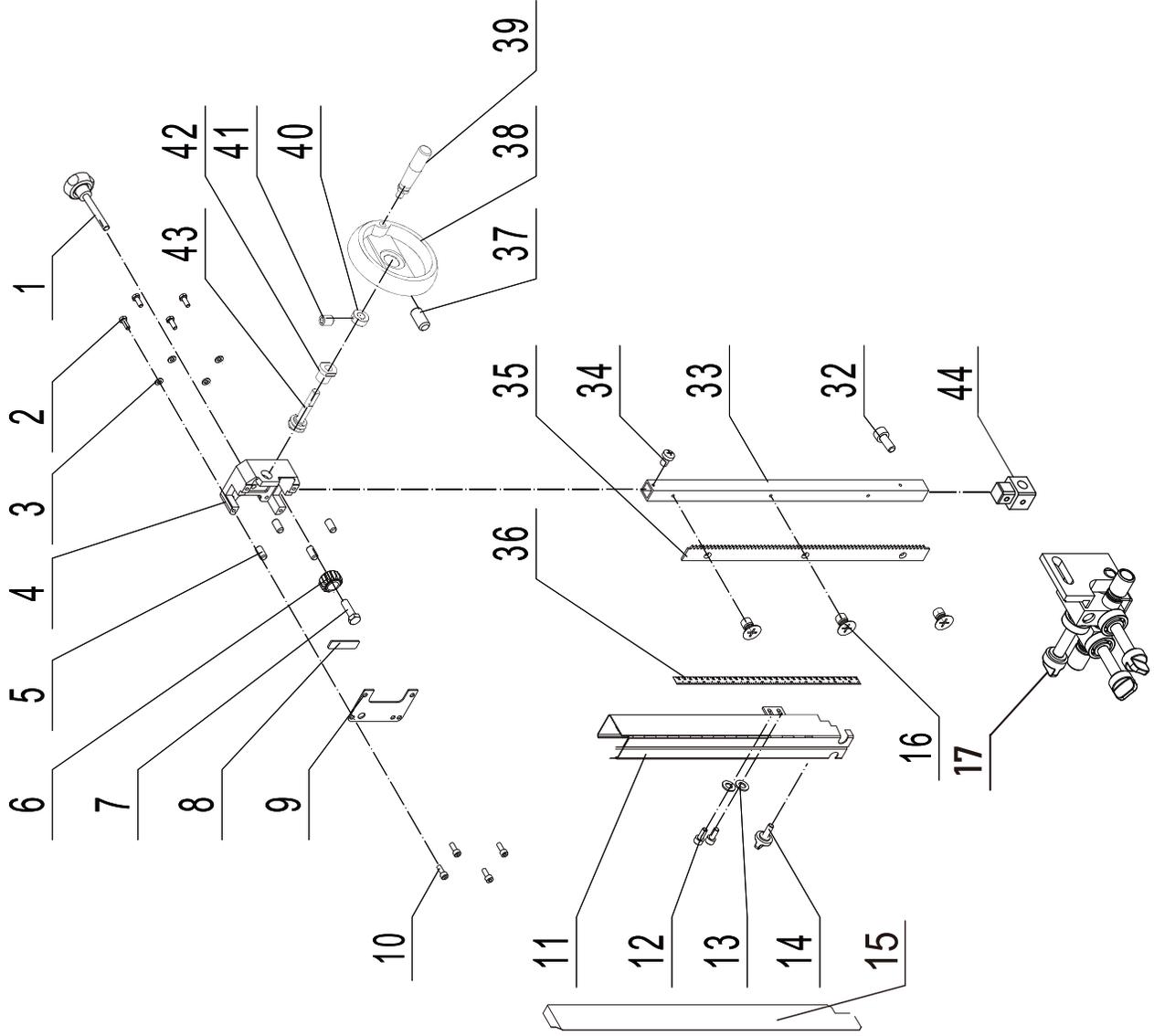
No	Description	Qty'
1	Blade	1
2	Rubber wheel	2
3	Lower wheel	1
4	Spring washer	4
5	Bearing	4
6	Screw M8X16	2
7	Spring washer M8	2
8	Big washer M8	1
9	Distance sleeve of bearing	2
10	Upper wheel	1

## 7.3 Tension system



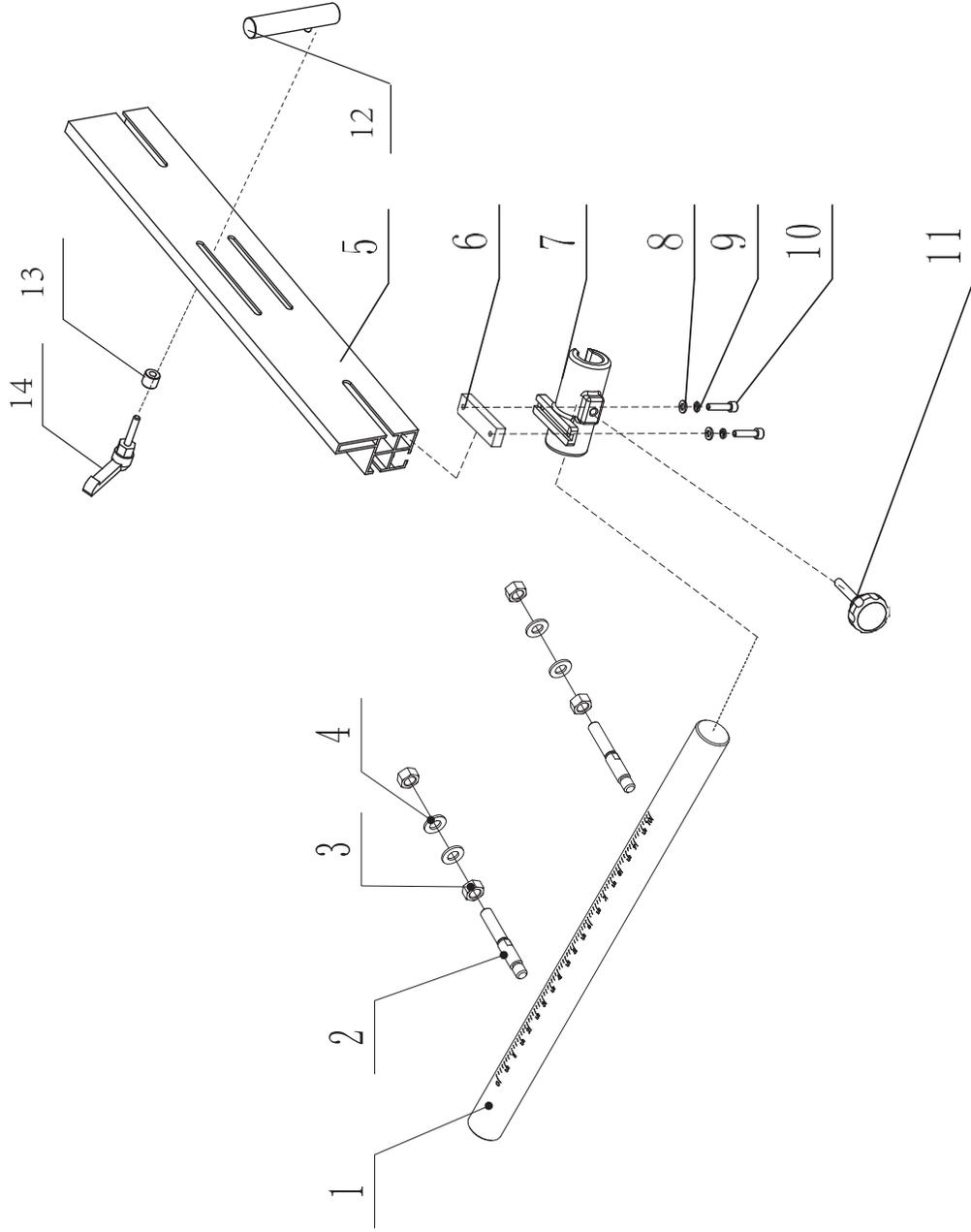
No.	Description	Qty
1	Tension handle	1
2	Connect board	1
3	Flat washer M12	2
4	Nut	2
5	Sleeving tube	1
6	Rail	1
7	Pin	1
8	Sliding block	1
9	Upper shaft	1
10	Spring	1
11	Support board	1
12	Lower block	1
13	Bearing	1
14	Ball	1
15	Screw M3X16	1
16	Tension support	1
17	Washer	1
18	Support shaft	1
19	Spring washer M6	3
20	Bolt M6X12	3
21	Big washer M6	2
22	Screw M6X12	2
23	Round pin	1

## 7.4 Upper guide frame



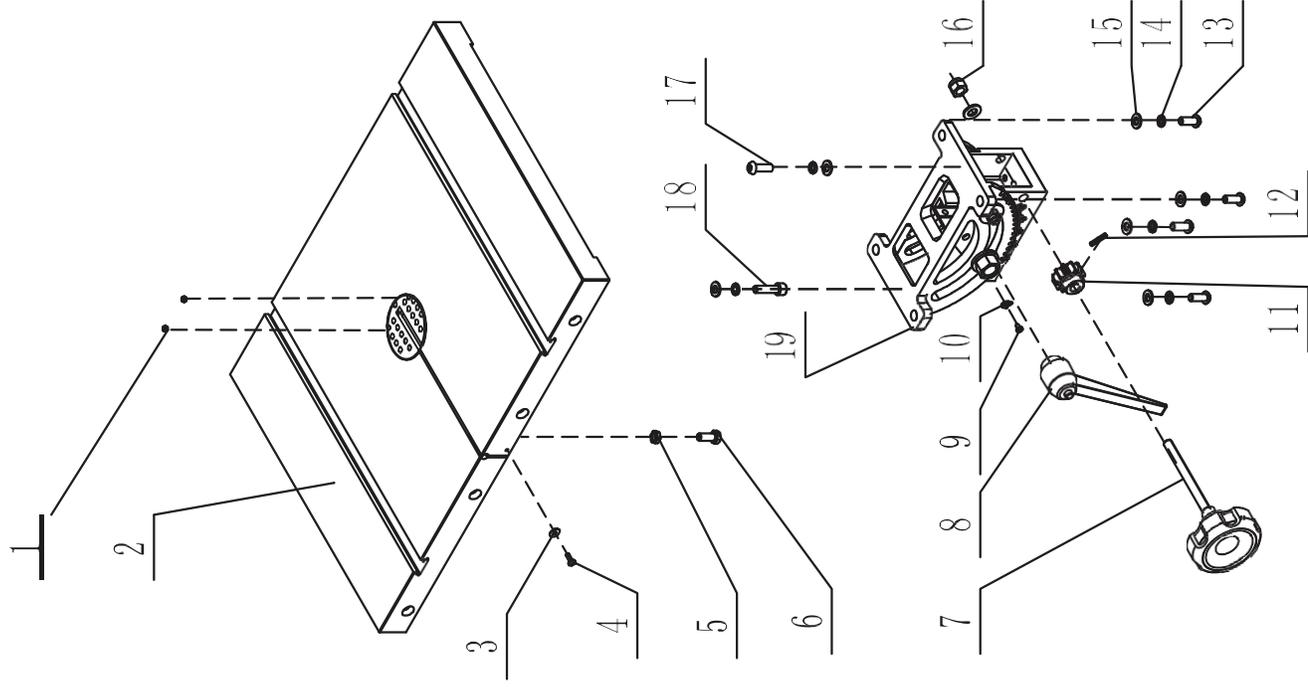
No.	Description	Qty
1	Locking handle	1
2	Hex. Bolt M6x16	4
3	Washer	4
4	Guide bracket	1
5	Set Screw	4
6	Gear	1
7	Fixed bolt	1
8	Fixed plate	1
9	Guide Bracket Cover	1
10	Hex socket screw M6x16	4
11	Hinged door	1
12	Carriage bolt M5x12	2
13	Washer	2
14	Locking handle	1
15	Spring piece	1
16	Hex socket screw M5x8	3
17	Upper conductor assembly	1
32	Screw M5X25	1
33	Guide post	1
34	Pan head screw M5X8	1
35	Gear rack	1
36	Scale	1
37	Hex socket end lock screw M6X12	1
38	Crank handwheel	1
39	Handwheel handle	1
40	Set collar	1
41	Set Screw	1
42	Bushing	1
43	Worm cylinder	1
44	Bracket seat	1

# 7.5 Rip fence assembly



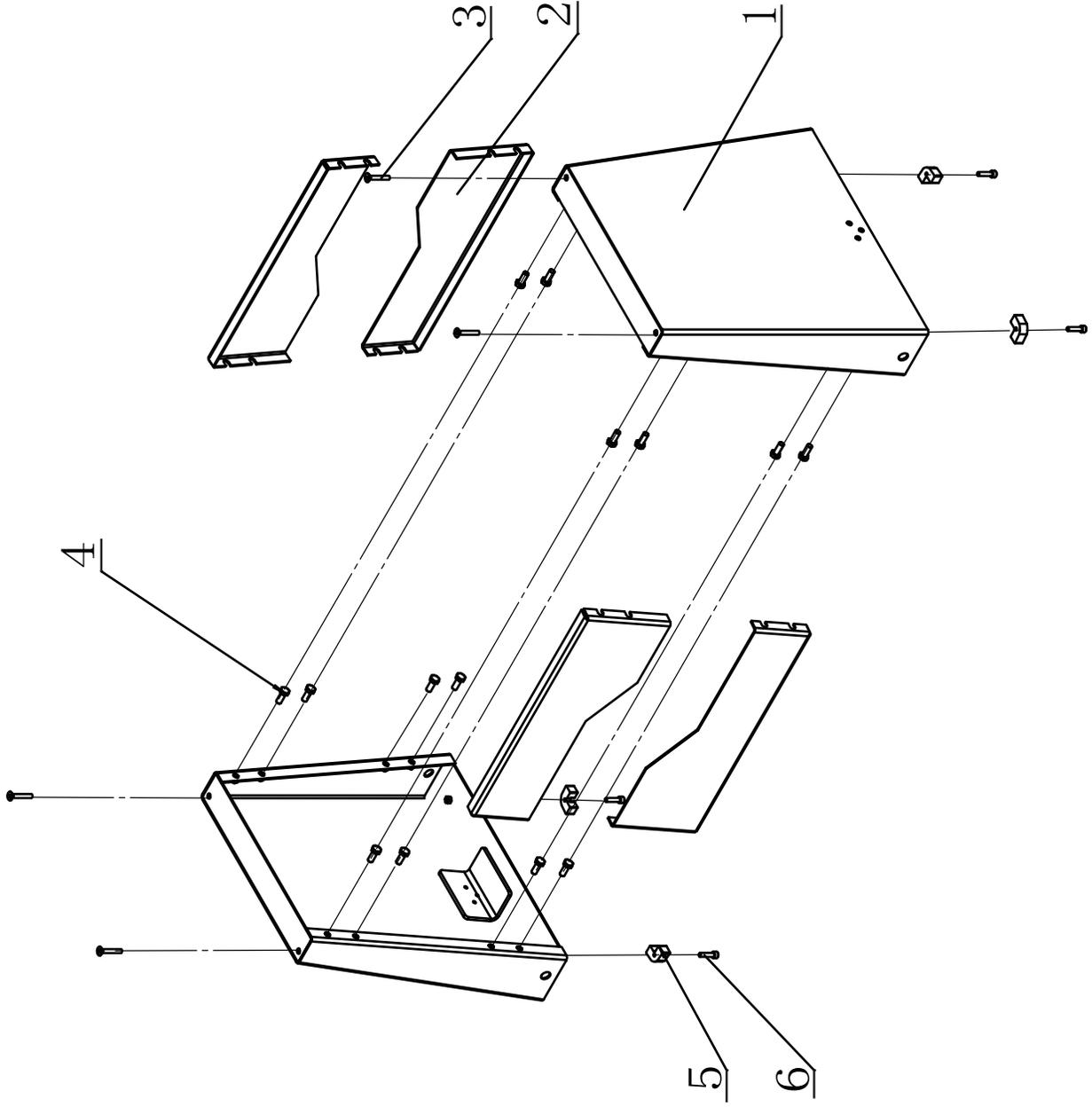
No.	Description	Qty.
1	Front rail	1
2	Joint lever	2
3	Nut M8	4
4	Flat washer M8	4
5	Fence	1
6	Clamp board	1
7	Handle base	1
8	Flat washer M6	2
9	Spring washer M6	2
10	Screw M6X25	2
11	Brass bolt handle	1
12	Retaining rod assembly	1
13	Sheath	1
14	Handle	1

## 7.6 Table



No.	Description	Qty'
1	Screw M6X4	2
2	Table	1
3	Big washer M4	1
4	Screw M4 X10	1
5	Hexnut M8	1
6	Hexbolt M8X20	1
7	Handle	1
8	Clamp handle	1
9	Tap Screw	1
10	Pointer	1
11	Steering gear	1
12	Pin	1
13	Screw M8X20	4
14	Spring washer M8	6
15	Flat washer M8	7
16	Nut M8	1
17	Screw M8X25	1
18	Screw M8X25	1
19	Bogie assembly	1

# 7.7 Chassis



No.	Description	Qty'
1	Side plate welds	2
2	Junction plate	4
3	Screw M6 X40	4
4	Screw M8 X20	16
5	Foot pad	4
6	Screw M6X25	4



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