Revision C (2024-06)

INSTRUCTION MANUAL

380mm Industrial Bandsaw

Modol:HW615E

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1 Safety

1.1 General Machine Safety

1. For your own safety, read the user manual before operating the band saw.
2. This machine must be properly grounded to help prevent electrical shock and possible fatal injury.
3. Form a habit of checking to see that the keys and the adjusting wrenches are removed from the machine before turning it on.
4. Keep the work area clean. Cluttered areas and benches invite accidents.
5. Do not use in a dangerous environment. Do not expose the machine to rain or use in wet or damp locations. Keep the work area well lighted.
6. Keep visitors a safe distance from the work area.
7. Children shall be prohibited from entering the working area.
8. Use appropriate feed speed.
9. Use the right tools.
10. Before operating the band saw, remove tie, rings, watches and other jewelry, and roll sleeves up past the elbows. Remove all loose clothing and confine long hair.
11. Always wear protective glasses.
12. Don't get too close to the workspace.
13. Maintain machine and tools with care. Keep the blades sharp and clean for the best and safest performance. Follow instructions for lubricating and cleaning.
14. Disconnect the machine from the power supply before maintenance.
15. Avoid accidental activation. Make certain the switch is in the OFF position before connecting the machine to the power supply.
16. Use recommended accessories; improper accessories may be hazardous.
17. Never stand on the machine.
18. Regularly check those parts that are easily worn.
19. Never leave the machine running unattended. Turn the power off and do not leave the band saw until the blade comes to a complete stop.

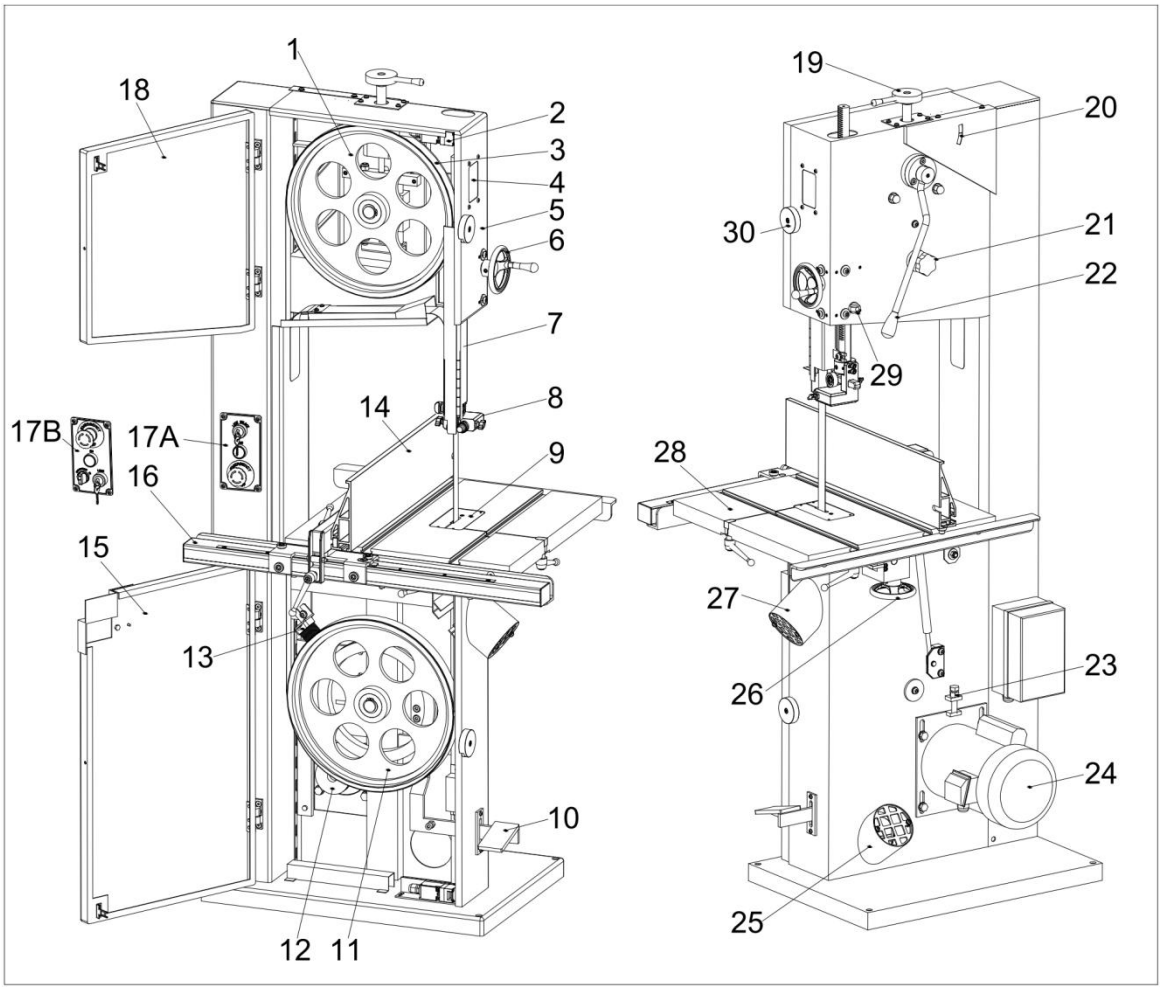
1.2 Band Saw Safety

1. Before removing the insert, always ensure the blade is not moving.
2. Always make sure that hands and fingers are away from the blade.
3. Never cut the round stock without an appropriate supporting tool.
4. Hold stock firmly and feed in a stable speed.
5. If the blade is still in the wood after cutting, you should turn off the power immediately.
6. Adjust the upper blade guide to approximately1/4”above the work piece.
7. Check the size and model of the blade to meet the cutting needs of your project.
8. Make sure the blade tension and the tracking and blade guides are all properly adjusted.
9. Keep the tension a little loose when cutting long curved stock.

⚠WARNING

This means that if precautions are not heeded, it may result in serious injury or possibly even death.

2 Feature Identification



1	Upper Wheel	17A	Switch Panel for **North American and Asian**
2	Door Switch		
3	Tire	17B	Switch Panel for **European**
4	Window	18	Upper Door
5	Frame	19	Blade Tension Adjustment Hand
6	Guide Post Adjustment Hand Wheel	20	Blade Tension Indicator
7	Guide Post	21	Tracking Knob
8	Upper Blade Guide	22	Blade Tension Level
9	Table Insert	23	Belt Tension Blot
10	Brake Pedal	24	Motor
11	Lower Wheel	25	Lower Dust Port
12	Motor Pulley	26	Table Tilt Hand Wheel
13	Brush	27	Upper Dust Port
14	Rip Fence	28	Work Table
15	Lower Door	29	Guide Post Locking Handle
16	Rail	30	Door Locking Knob

3 Specifications

Market	North American	European	Asian
Power	3 HP（2.2 kW）	2.2 kW	2.2 kW
Rated Voltage	230 V	230 V	230 V
Phase	1-Ph	1-Ph	1-Ph
Frequency	60 Hz	50 Hz	50 Hz
Full-Load Current	12.8 A	13.9 A	13.9 A
Wheel Dia.	15″（380 mm）	380 mm	380 mm
Blade Length	132 ″（3350 mm）	3350 mm	3350 mm
Blade Width	1/8 ″- 1″（3-25 mm）	3-25 mm	3-25 mm
Speed of Saw Blade	3740 FPM (1140 MPM)	940 m/min	940 m/min
Max. Cutting Height	14″（350 mm）	350 mm	350 mm
Throat Capacity	14″（360 mm）	360 mm	360 mm
Fence Plate Height	1/2 ″/ 6″（12 / 155 mm）	12/155 mm	12/155 mm
Work Table Size	20″×20″（510×510 mm）	510×510 mm	510×510 mm
Work Table Height	34″-1/4″（870 mm）	870 mm	870 mm
Foot Size	25-1/4″×17-3/4″ （640×450 mm）	640×450 mm	640×450 mm
Total Height	72″（1830 mm）	1830 mm	1830 mm
Net Weight	441 lbs（200 kg）	200 kg	200 kg
Gross Weight	485 lbs（220 kg）	220 kg	220 kg
Packing Size	30″x26″x77″ （760×660×1960 mm）	760×660×1960 mm	760×660×1960 mm

⚠WARNING

Notice to California Residents: This product can expose you to wood dust, which is known to the State of California to cause cancer. For more information, go to **www.P65Warnings.ca.gov**.

This product contains nickel, which is a known allergen. Prolonged or frequent contact may lead to skin irritation or allergic reactions in some individuals. If you have a known allergy to nickel, please take appropriate precautions. Use protective gloves if necessary and wash hands thoroughly after handling. If you experience symptoms of an allergic reaction such as a rash, itching, or swelling, seek medical attention promptly.

4 Unpacking and Setup

The machine is shipped completely in one carton.

4.1 Unpacking

Remove all of the contents from the shipping carton. Do not discard any shipping material until the band saw is fully assembled and running satisfactorily.

4.2 Checking Contents

Inspect the contents for shipping damage. Report any damage immediately to your distributor and shipping agent. Compare the contents of the shipping carton with the contents list in this manual. Report shortages, if any, to your distributor.

Contents

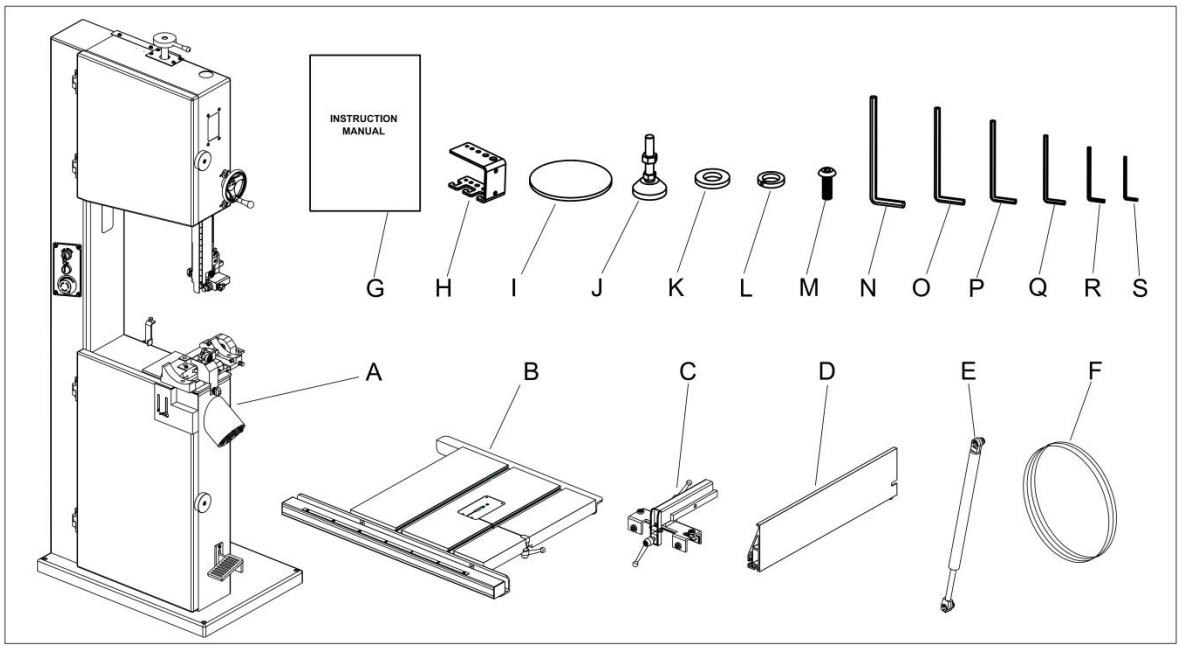


Fig. 2

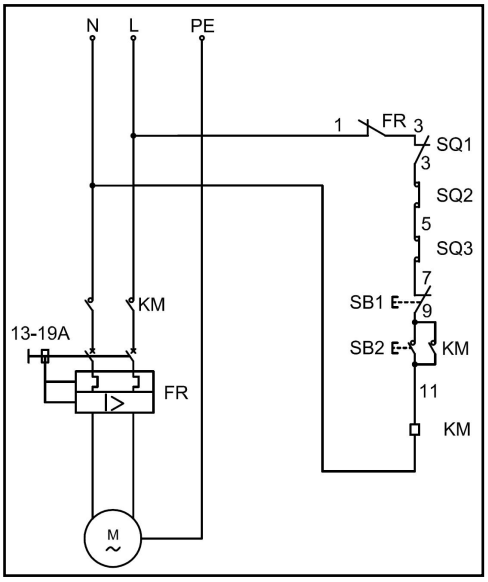
No.	Name	Qty	No.	Name	Qty
A	Band Saw	1	K	Flat Washer 5mm	2
B	Word Table	1	L	Spring Washer 5mm	2
C	Fence Body	1	M	Cap Screw 5x12mm	2
D	Aluminum Guide Plate	1	N	Hex Wrench 6mm	1
E	Gas Spring	1	O	Hex Wrench 5mm	1
F	Blade 3/4″	1	P	Hex Wrench 4mm	1
G	User Manual	1	Q	Hex Wrench 3mm	1
H	Tool Storage Hook	1	R	Hex Wrench 2.5mm	1
I	Dust Hood Cover	1	S	Hex Wrench 2mm	1
J	Stand Pad	4			

4.3 Power Supply

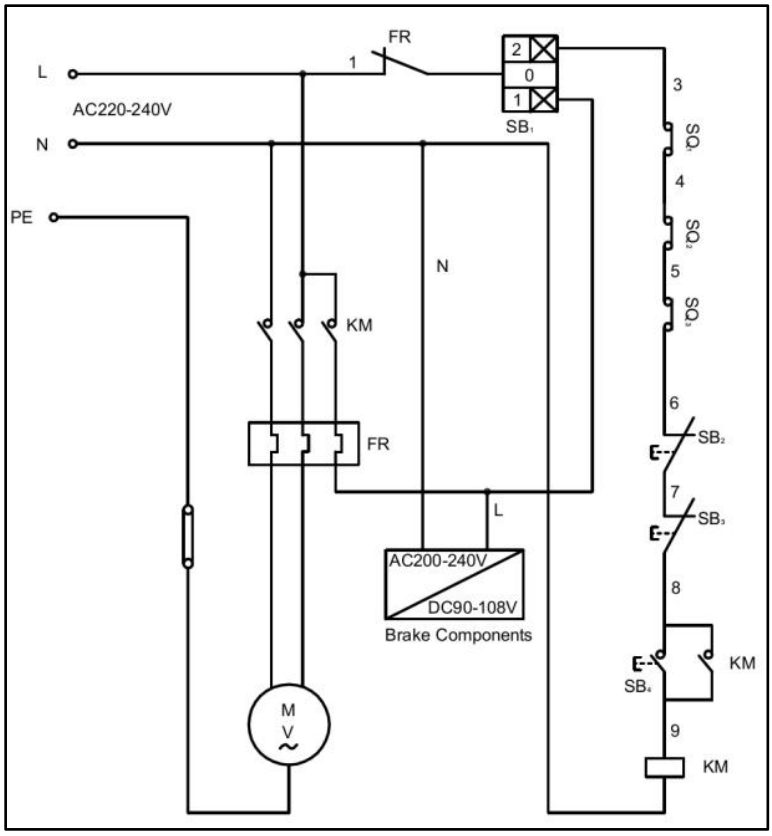
⚠WARNING

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

4.3.1 Electrical Diagram



Induction Motor



Brake Motor

4.3.2 Requirements of Electrical Power

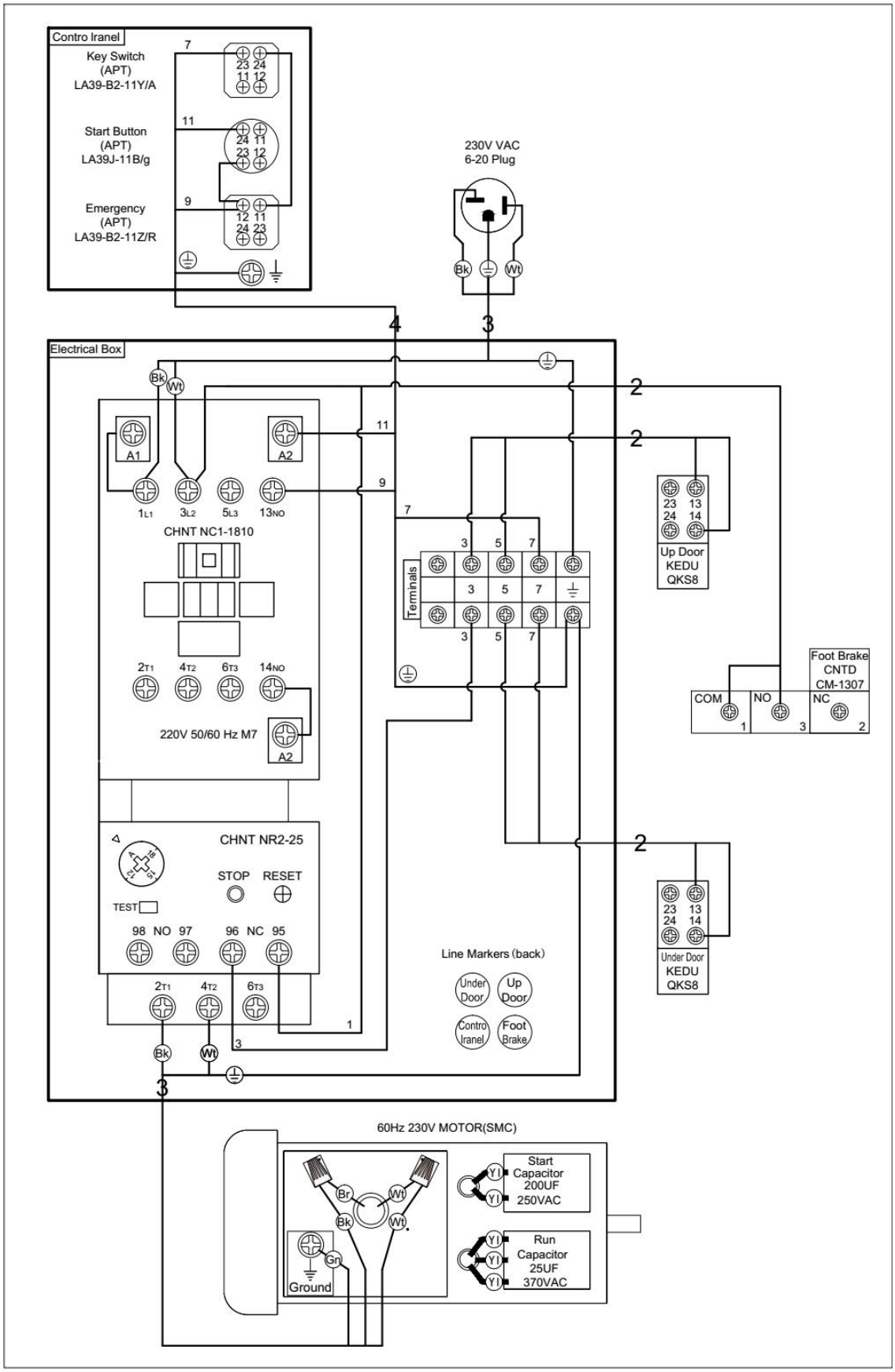
Item	Motor		
	3HP(2.2kW)	2.2kW Brake Motor	2.2kW
Voltage(V)	230 V	230 V	230 V
Phase	1Ph	1Ph	1Ph
Freq.(Hz)	60 Hz	50 Hz	50 Hz
Nominal current A	12.8 A	13.9 A	13.9 A
Overload protector	16 A	17.5 A	16 A
Cords	3	3	3
Circuit Breaker	20A	20A	20A
Local codes take precedence over recommendations.			

The Circuit Breaker with RCD module shall be installed for supplying electric power to this machine, in order to protect people against electrical shock due to indirect shock。

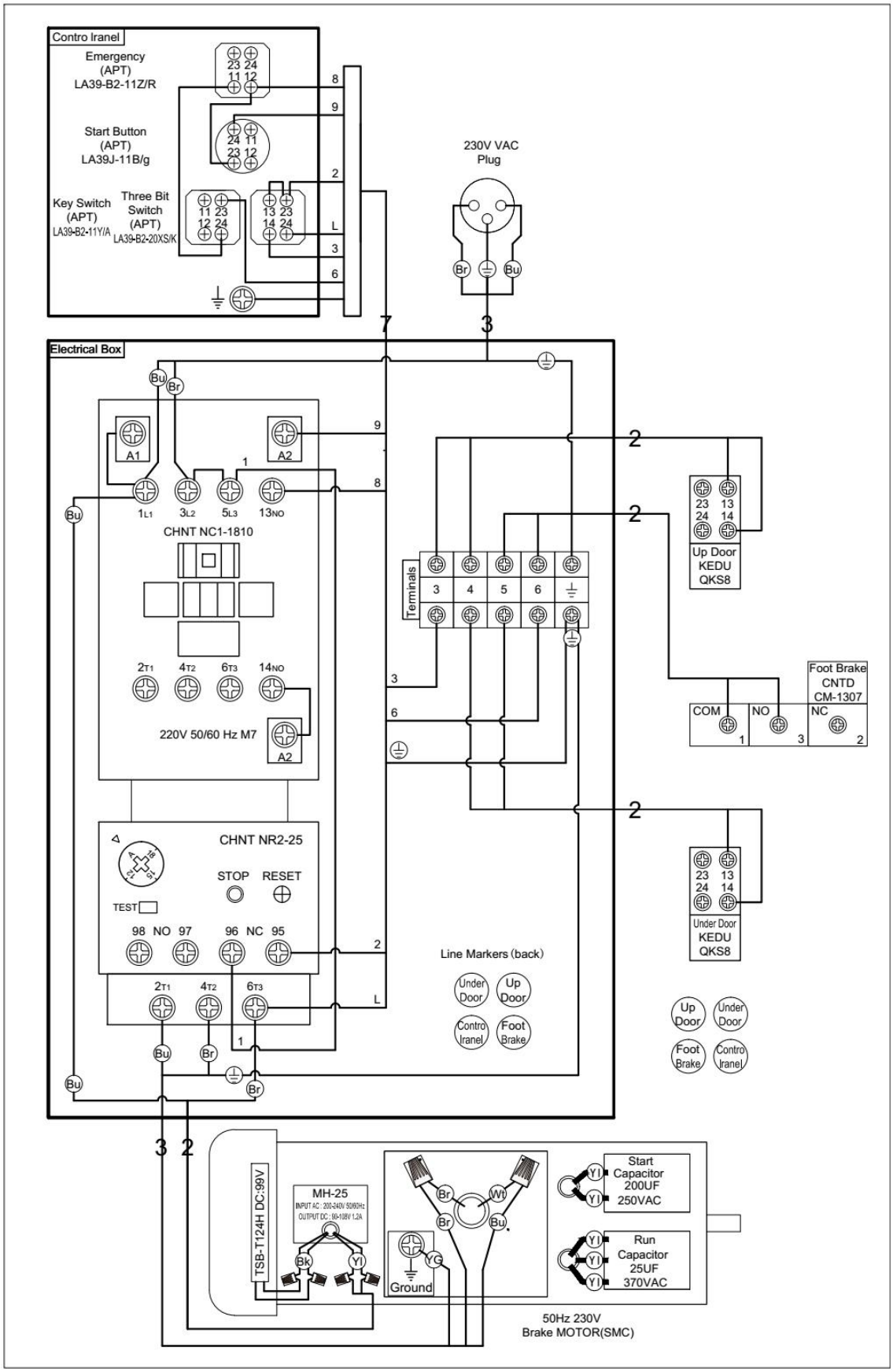
4.3.3 Wiring Diagram

Note : The wiring varies slightly due to different brands of electrical components.

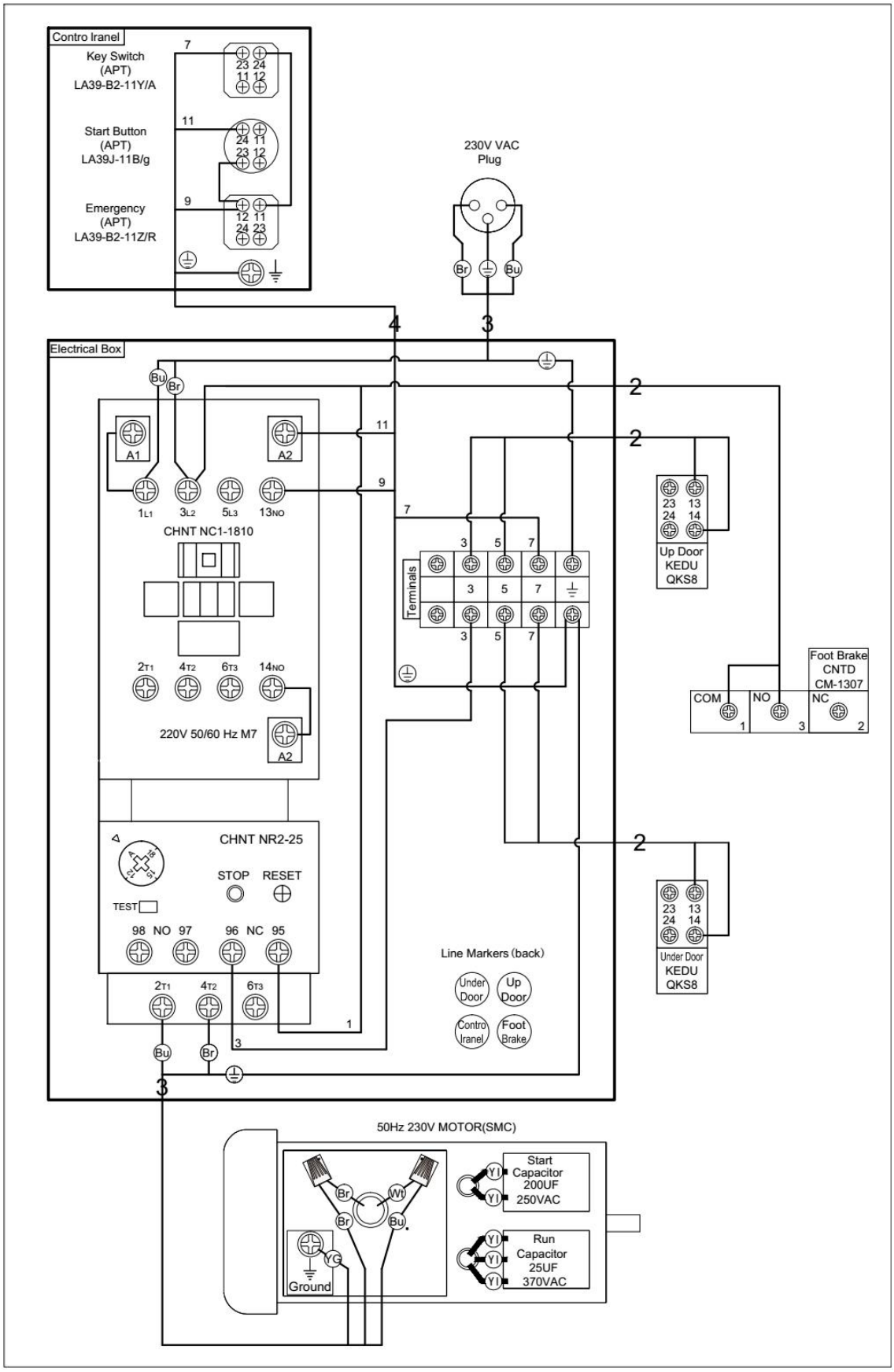
4.3.3.1 Induction Motor （60Hz）



4.3.3.2 Brake Motor



4.3.3.3 Induction Motor （50Hz）



4.4 Grounding

This tool 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. Do not modify the plug provided. If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician.

4.5 Extension Cords

Use Table 1 as a general guide in choosing the correct size cord. The smaller the gauge number, the heavier the cord. If in doubt, use the next heavier gauge. Recommended Gauges (AWG) of Extension Cords

Table 1

Ampere rating		Volts	Total length of cord in feet			
		120	25	50	100	150
		240	50	100	200	300
More than	Not more than		Minimum gauge cord			
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	NR	NR

NR: Not Recommended.

4.6 Dust Collection

The use of a dust collection system is strongly recommended for this band saw. It will help keep the shop clean, as well as reduce potential health hazards caused by inhalation of wood dust. The collector should have a capacity sufficient for this size machine – 400 CFM is recommended.

5 Assembly

The band saw is partially assembled. The following assembly must be completed before operation.

5.1 Stand Pad (Figure 3.)

To be safe, we have mounted the band saw to the pallet for shipment. You must remove the pallet mounting bolts, screw in the stand pads (A from the bottom of the band saw and tighten the nut (B) from the top.

Position the band saw in a level spot in your shop using the four stand pads to achieve a solid setting.

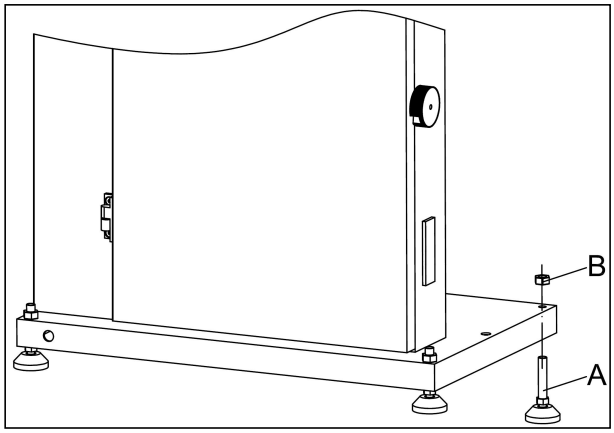


Fig. 3

5.2 Work Table (Figure 4.)

1. Release the locking handles (A).
2. Put the work table assembly into the trunnion grooves (B).
3. Rotate the screws (F) into the matching slot of the worm gear (D) (Don't rotate too much, otherwise the tilting of the work table may be affected), then tighten the screws (F).
4. Make sure the worm gear(D) is engaged with the trunnion gear (C).
5. Pre-tighten the locking handle (A).
6. Rotate the table tilting hand wheel (E) to check if the table tilts.
7. Tighten the locking handles (A).

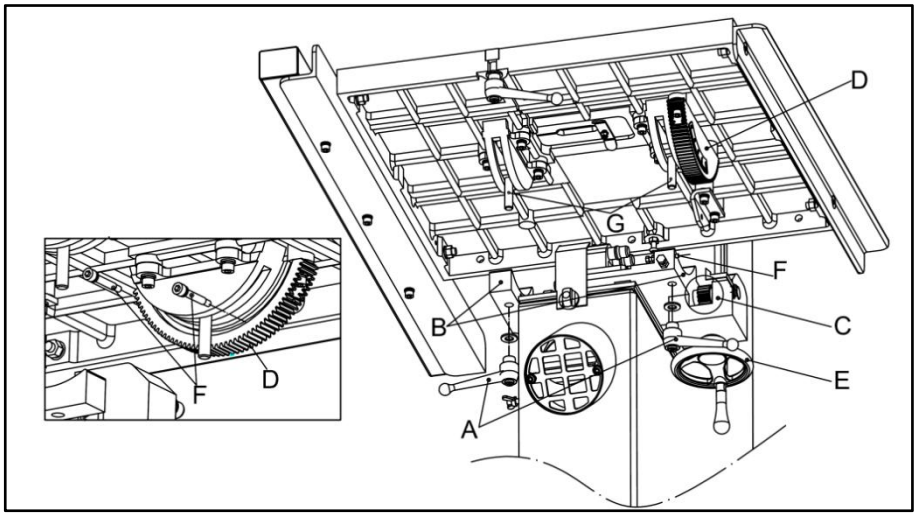


Fig. 4

5.3 Spring Assembly (Figure 5.)

1. Rotate the hand wheel (A) to tilt the table to 45°.
2. Attached the spring (B) to the mounting bracket on the bottom of the work table (C) and the back of the frame (D).
3. Insert the shafts (E) through the holes on the brackets on each end of the spring (B).
4. Insert the split pin (F) through the holes on the shafts and bend the split pins to prevent them from dropping.

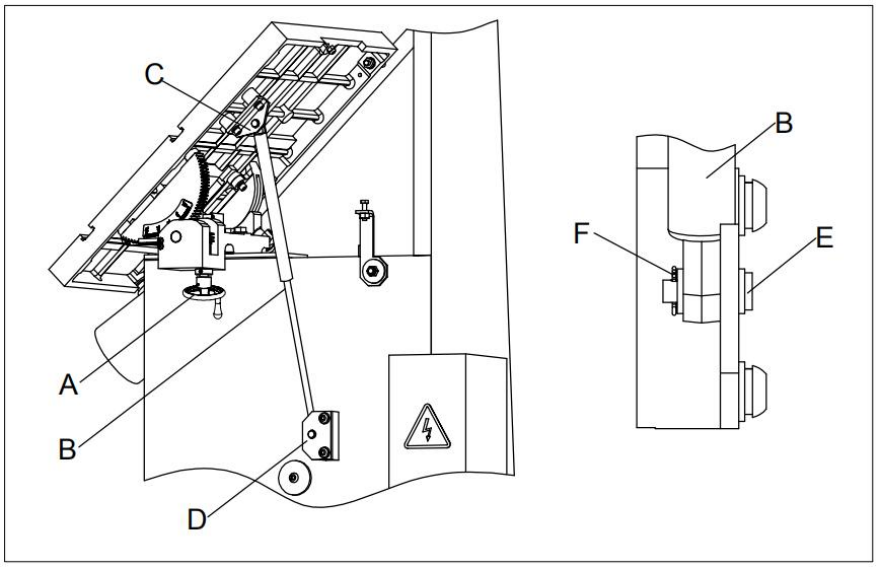


Fig. 5

5.4 Rip Fence (Figure 6.)

1. Rail (A) are pre-installed and adjusted on the work table.
2. Mount the rip fence (B) on the rail.
3. Make sure the fence can move freely along the rail.
4. Tighten the locking handle.

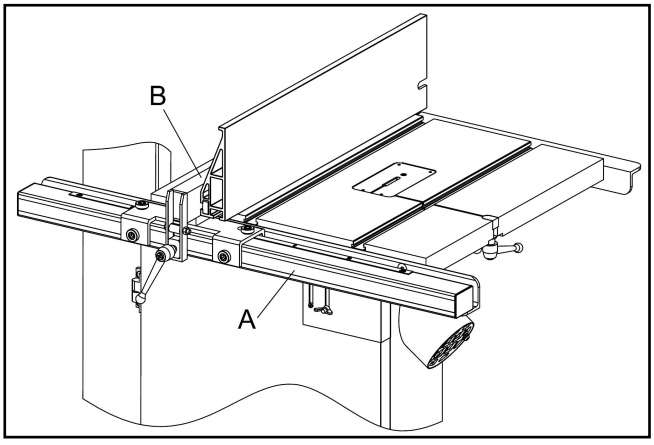


Fig. 6

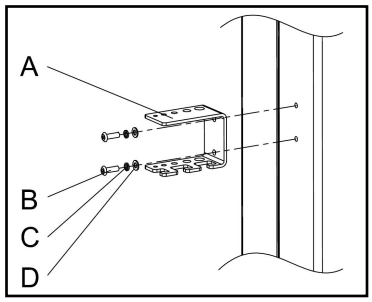


Fig. 7

5.5 Tool Storage Hook (Figure 7.)

1. Install the tool storage hook (A) to the frame by screws (B), spring washers(C) and the flat washer (D).
2. Insert the hex wrenches in the hook.

5.6 Blade

5.6.1 **induction motor**

Refer to Figure 8.

1. Remove the table insert (A), loosen the locking handle (B) and remove it from the work table.
2. Release the blade tension lever (C) and then open the upper and lower doors.
3. Slide the blade (D) through the split on the table (E) and the frame (F).
4. Mount the blade to the upper and lower wheel (G) and place the blade in the upper and lower blade guides.
5. Tighten the blade by the tension lever.
6. Re-install the table insert (A) and the locking handle (B).

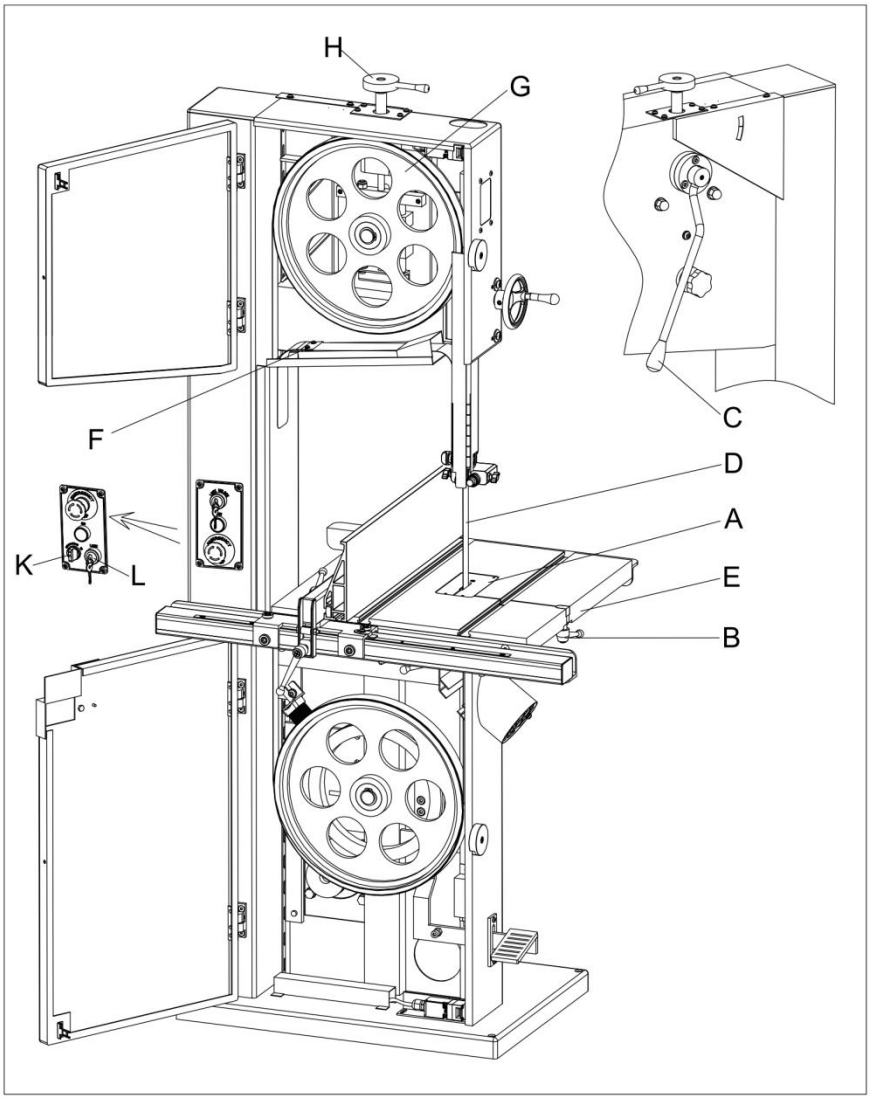


Fig. 8

⚠WARNING brake motor

With the machine is plugged to the power supply, turn the power safety lock (L) and three positions switches (K) to the left position. Then follow the steps in 5.6.1.

6 Adjustment

6.1 Blade

6.1.1 Blade Tension

Refer to Figure 8.

1. Disconnect the machine from the power source.
2. Back off the upper and lower blade guides to eliminate any contact with the blade.
3. Tighten the blade by the blade tension lever (C).
4. Rotate the blade tension hand wheel (H) until the blade is properly tensioned.
5. Re-adjust the upper and lower blade guides.

⚠WARNING

Too little or too much blade tension can cause blade breakage and/or poor cutting performance. When the band saw is not being used, release the blade tension. This will prolong the life of the blade and the tires and reduce the load on the wheels, bearings and other components.

6.1.2 Changing the Blade

⚠WARNING

Always wear gloves when handling with blades. New blades are usually packaged in a coiled position. To prevent injury, uncoil them slowly and carefully while wearing work gloves and safety glasses.

Refer to Figure 8.

1. Remove the table insert (A), loosen locking handle (B) and remove it from work table.
2. Release the blade tension lever (C) and then open the upper and lower doors.
3. Flip to open the upper blade guard cover and uninstall the lower blade guard by loosening the locking knob.
4. Back off the upper and lower blade guides to eliminate any contact with the blade.
5. Slide the blade (D) through the split on t table (E) and the frame (F) to take off the blade.
6. Mount the new blade through the table and the frame, then put the blade to the upper and lower flywheel (G) and place the blade in the upper and lower blade guides.
7. Tighten the blade by the tension lever (C) on the back of the saw.
8. Re-install the table insert (A), locking handle (B) and the blade guards and close the doors.

6.1.3 Blade Tracking

After proper tensioning, the blade must be tracked. Tracking refers to the position of the blade on the wheels while the machine is in operation. Tracking should be checked periodically, and is mandatory after every blade change. Blade tracking is done by hand with the machine disconnected from the power source.

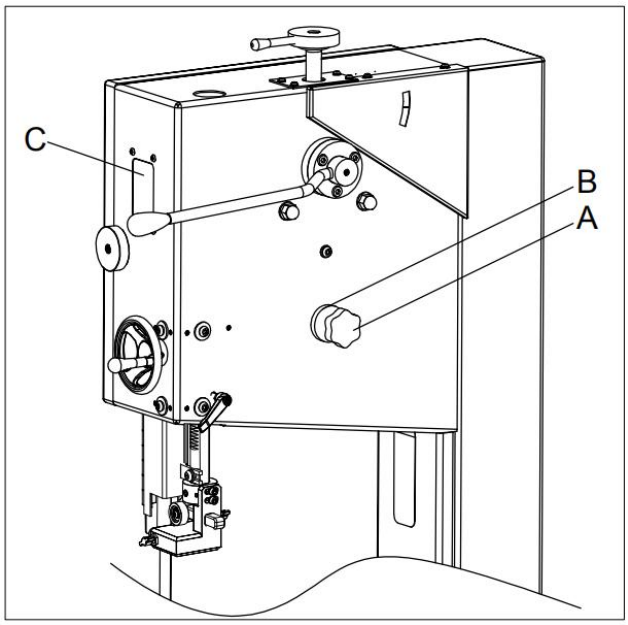


Fig. 9

Refer to Figure 9.

1. Disconnect the machine from the power source.
2. The blade must be correctly tensioned.
3. Make sure the blade guides and other parts of the machine will not interfere with the blade movement. Lower the guide post until you can see the blade through the tracking window.
4. Open the upper door to expose the wheel. Rotate the wheel by hand, observing the position of the blade through the tracking window (C).
5. If the blade tends to move toward the edge of the wheel, loosen the locking knob (A) and slightly rotate the tracking knob (B) while continuing to rotate the wheel.
6. Observe the blade through the tracking window. Rotating the knob clockwise will cause the blade to move toward the rear edge of the wheel. Rotating the knob counterclockwise will cause the blade to move toward the front edge of the wheel. This adjustment is sensitive; perform it in small increments and give the blade time to react to the changes.
7. When the blade is tracking in the center of the wheel, re-tighten the locking knob and close the upper door.
8. Tension the blade and connect the band saw to the power source. Turn it on for a brief time to observe the blade action through the tracking window.
9. If further adjustments are needed, disconnect from the power source and repeat the above procedure.

6.2 Blade Guide

The blade guides should be set so that contact between the blade and the guides will occur only when the blade is under pressure from a workpiece. To adjust the upper bearing guides for proper blade control, proceed as follows:

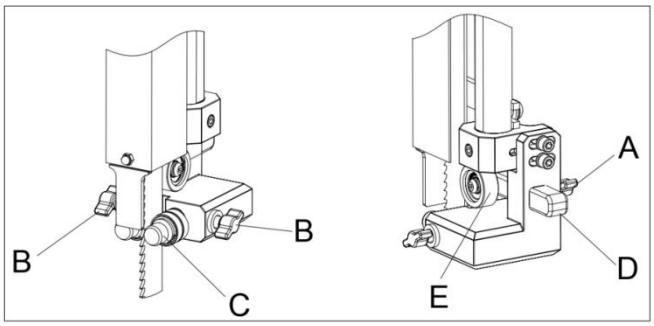


Fig. 10

6.2.1 Upper Blade Guide

Refer to Figure 10.

1. Disconnect the machine from the power source.
2. The blade must already be tensioned and tracking correctly.
3. Lower the guide post until the upper guide bearings are a few inches above the table.
4. Loosen the guide bearing bracket locking knob (A).
5. Slide the entire guide bracket until the front of the guide bearings (E) are about 1/64” (0.4mm) behind the blade’s gullet.
6. Tighten the locking knob (A) to secure this position.
7. Loosen both of the guide bearing locking knobs (B).
8. The guide bearing rotates on an eccentric shaft. Adjust the guide bearing by rotating the knurled knob (C), until the guide bearing is approximately 0.004” (0.1mm) from the blade.
9. Tighten the locking knobs (B).
10. Make sure all of the locking knobs on the upper bearing guide assembly are tightened when the adjustments are finished.

⚠ WARNING

Do not force the guide bearing against the side of the blade. It should make contact with the blade when there is pressure from the cutting operation.

6.2.2 Lower Blade Guide

Refer to Figure 11.

1. Disconnect the machine from the power source.
2. Open the lower door and uninstall the lower blade guard by loosening the guard locking knob.
3. Adjust the lower guide and thrust bearings below the table, using the similar procedure as for the upper guides.
   Loosen the locking screws (A) using a hex wrench to move the guide bearing bracket.
   Loosen the locking knob (B) to adjust the guide bearings.
   Loosen the locking knob (C) to adjust the thrust bearings.
4. Make sure all screws, knobs and levers are tightened when the adjustments are complete.

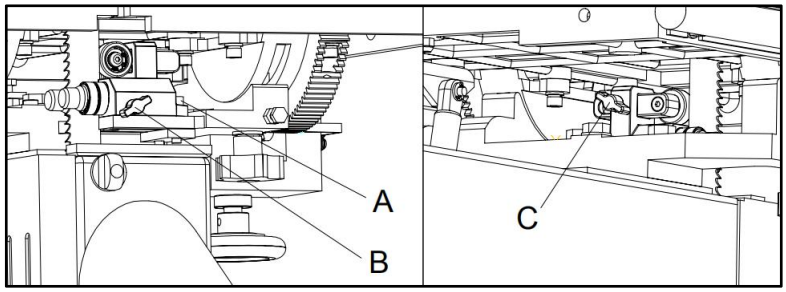


Fig. 11

6.2.3 Guide Post

Refer to Figure 12.

1. Disconnect the machine from the power source.
2. Loosen the locking handle (A) and raise or lower the guide post by rotating the hand wheel (B).
3. Position the blade guide assembly until the bottom of the guide bearings are about 3/16” above the material to be cut. Or, lower the guide post until the scale pointer indicates the height of your workpiece. This provides minimal clearance between the workpiece and the bottom of the guide bearings, which will minimize blade deflection as well as enhance operator safety.
4. Tighten the locking handle (A).

6.2.4 Guide Post Parallelism

The guide post should be parallel to the blade throughout the travel of the guide post.The guide bearings will maintain the gap to the blade at any height and won't have to be re-set each time the guide post is moved. This setting has been accurately made by the manufacturer and should not require immediate attention, but it may be checked in the future as follows:

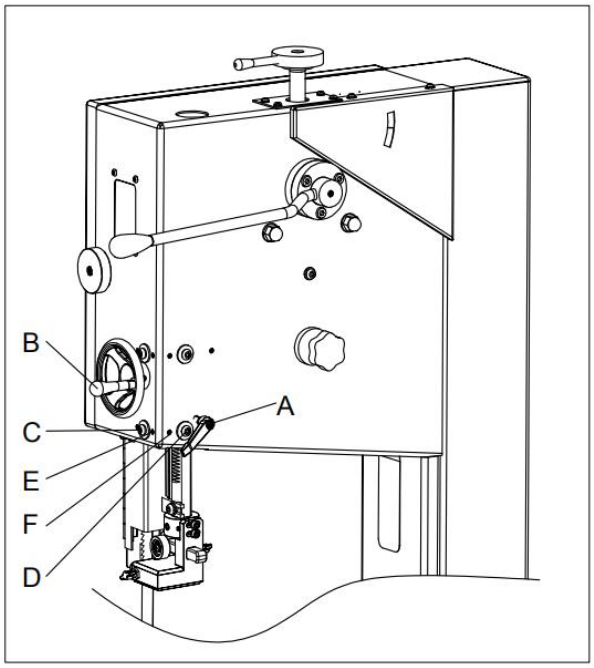


Fig. 12

Refer to Figure 12.

1. Disconnect the machine from the power source.
2. Fully tension the blade.
3. Lower the upper blade guide assembly and make sure it is properly adjusted.
4. Loosen the guide post locking handle (A) and raise the guide post to the highest position.
5. Confirm that the guide post travels straight up and down, and the guide bearings maintain the gap to the blade.
6. If the guide post does not move straight up and down (the blade begins deflecting when the guide post is raised), slightly loosen the four locking screws (C and D).
7. The left and right adjustment is accomplished using a combination of four set screws (E); forward/back adjustment is accomplished using the four set screws (F).
8. When the adjustments are finished, securely tighten the locking screws (C and D).
9. Re-check the setting by raising and lowering the guide post.

6.3 Work Table

6.3.1 **Table Tilt** (Refer to Figure 13.)

1. Disconnect the machine from the power source.
2. Loosen the table tilt locking handle (A).
3. To tilt the table right, rotate the table tilt hand wheel (B) to tilt the table up to 45°.
4. To tilt the table left, swing the table support (C) down, then rotate the hand wheel (B) to tilt the table up to -15°.
5. Tighten the locking handle (A) to secure the setting.

6.3.2 **Table Stop Set Up** (Refer to Figure 13.)

Please follow the steps to setup the 90° stop:

1. Disconnect the machine from the power source.
2. Loosen the table tilt locking handle (A).
3. Swing the table support (C) out, then loosen the locking nut (D) and rotate the stop screw (E) downward.
4. Rotate the hand wheel (B) to tilt the table until the blade is square with the table and use a square to check it.
5. Tighten the locking handle (A).
6. Adjust the indicator to 0°. Swing the table support (C) back, reset the stop screw (E) until it touches the bottom of the table and tighten the locking nut (C).

Please follow the steps to setup the 45° stop:

1. Loosen the table tilt locking handle (A).
2. Rotate the hand wheel (B) until the indicator points to 45°.
3. Adjust the stop screw (G) until it touches the table and lock the locking nut (F).

Please follow the steps to setup the -15° stop:

1. Loosen the table tilt locking handle (A) and swing the table support (C) down.
2. Rotate the hand wheel (B) until the indicator points to -15°.
3. Adjust the stop screw (I) until it touches the table, then lock the locking nut (H).

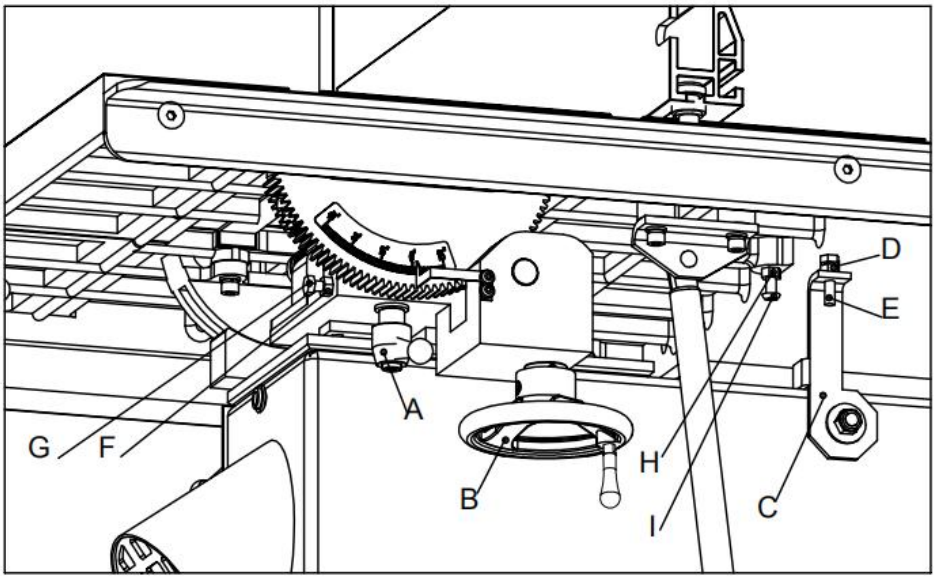


Fig. 13

6.3.3 Setting the Table Parallel to the Blade

Refer to Figure 14.

1. Disconnect the band saw from the power source.
2. The blade should be fully tensioned and properly tracked.
3. Place a long straightedge ruler flush against the blade, making sure it contacts both the front and back of the blade.
4. `Use another ruler to carefully measure the distance from the miter slot to the straight edge. Take measurements at both the front and the back of the table – these should be the same.
5. If the miter slot is not parallel to the blade, loosen the three locking bolts (A), and shift the table support assembly as needed until the miter slot is parallel to the blade.
6. Tighten the locking bolts (A).

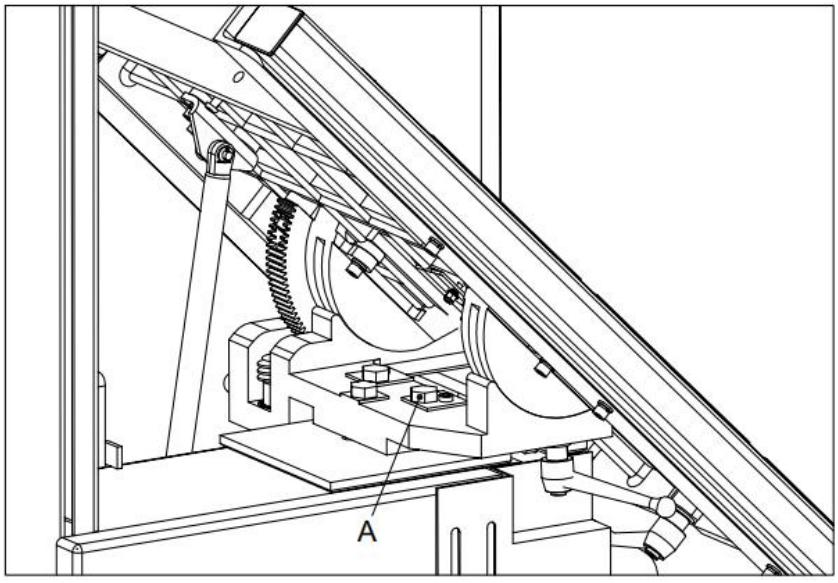


Fig. 14

6.4 Fence

6.4.1 Fence Plate Positions (Refer to Figure 15.)

1. Loosen the fence plate locking handle (J) on the left side of the fence guide (B), until the lock bar (C) protrudes enough to slide the aluminum fence plate out of the fence guide (B).
2. Uninstall the fence plate rare support by loosening the locking nut (D).
3. With the fence plate facing down, install the support and tighten it.
4. Position the fence plate where needed and slide it back to the fence guide.
5. Re-tighten the locking handle.

⚠WARNING

The aluminum fence plate can be installed in two positions; vertically or horizontally. The horizontal position is useful for smaller workpieces. (The zero setting of the cursor cannot be used with the horizontal fence position.)

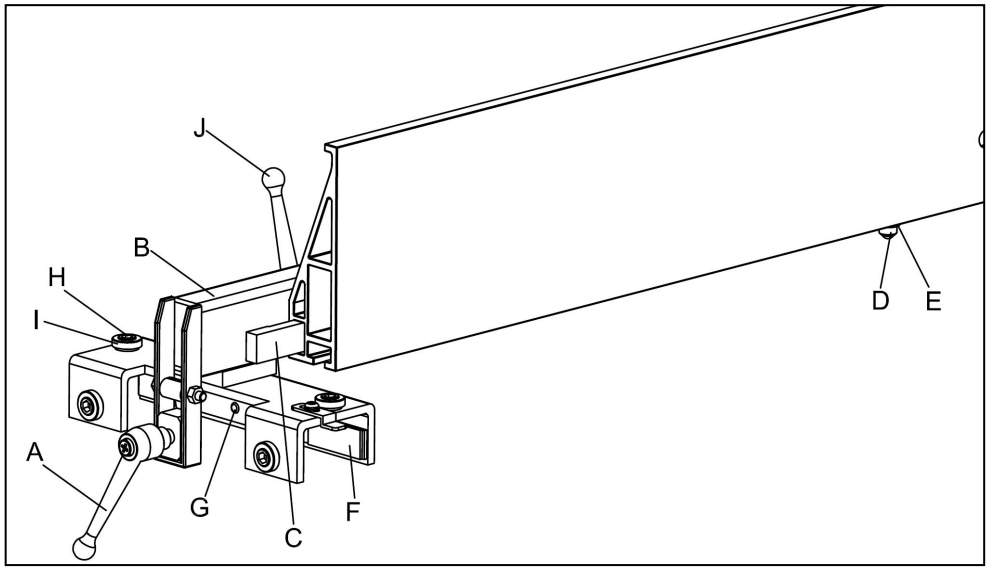


Fig. 15-1

6.4.2 Setting the Fence to the Table Clearance

Refer to figure 15-1.

1. Check the clearance between the table and the bottom of the fence. The fence should not rub against the table surface but be slightly above it. This clearance should be the same at the front or rear of the table.
2. If the clearance is not the same, use a combination of the following two adjustments:
   - With the provided hex wrench, loosen the locking nuts (I) and then rotate the two fence square adjustment screws (H) the same amount to raise or lower the fence body from the guide rail. Clockwise raises the fence plate and counterclockwise lowers the fence plate.
   - And/or....adjust the rare end of the fence by loosening the locking nut (D), and rotating the adjustment screw (E) in or out with the hex wrench. When the fence-to-table clearance is equal, re-tighten the locking nut against the fence plate.

6.4.3 Setting the Cursor Zero Position

The fence must be set so that the cursor reads zero at the line of the blade. The fence plate must be installed on the fence body in the vertical position, and the blade must be installed and fully tensioned.

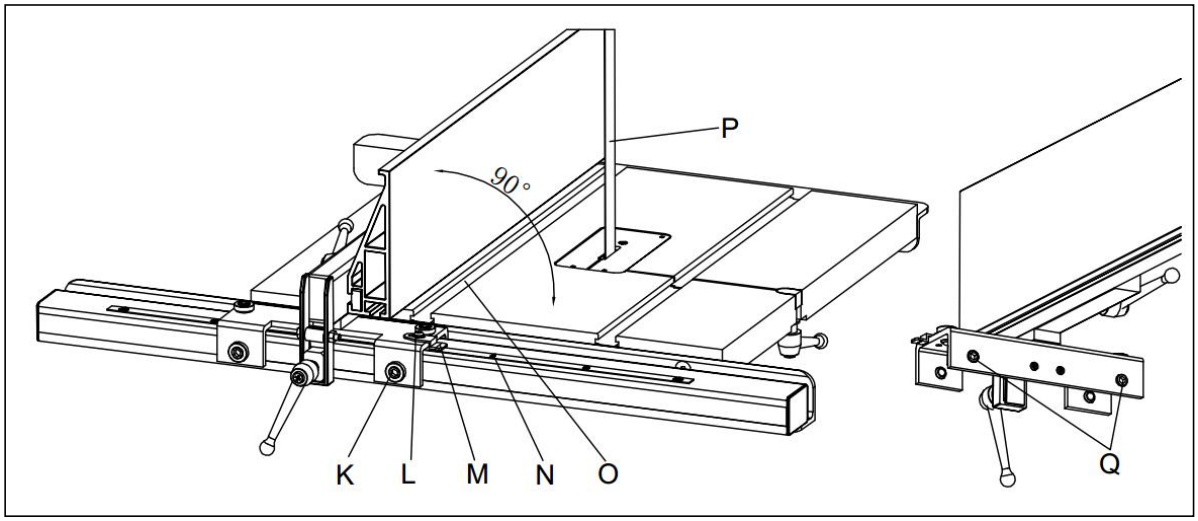


Fig. 15-2

1. Slide the fence flush against the flat of the blade. Do not force the fence into the blade so that the blade bends.
2. If the cursor（M） is not at zero, loosen the screws（L）and slide the cursor as needed. Then re-tighten it.

6.4.4 Setting the Fence Parallel to the Blade

The fence should be parallel to the flat of the blade for accurate cutting. Since the miter slot has been set parallel to the blade, you can use the table miter slot to set the fence to parallel.

Refer to Figure 15-1-2.

1. Slide the fence to the edge of the miter slot. The fence plate should align with the miter slot along the entire length of the fence plate.
2. If an adjustment is needed, turn one of the fence parallelism adjustment screws (F) on the opposite side of the adjustment pad (Q) to turn the fence in line with the miter slot.

6.4.5 Setting the Fence Square to the Table

The fence must be square to the table.

Refer to Figure 15-1-2.

1. Slide the fence against the blade. Do not force the fence into the blade so that the blade bends.
2. Loosen the locking nut (I) and turn either of the fence square adjustment screws (H) until the fence is square to the table.
3. Tighten the locking nut (I).

6.5 Belt Tension and Replacement

The belt tension should be occasionally checked when the band saw is new, as a new belt may stretch slightly during the breaking-in process. If the belt becomes worn, cracked, frayed or glazed, it should be replaced.

Please follow the steps to adjust the belt tension or belt replacement:

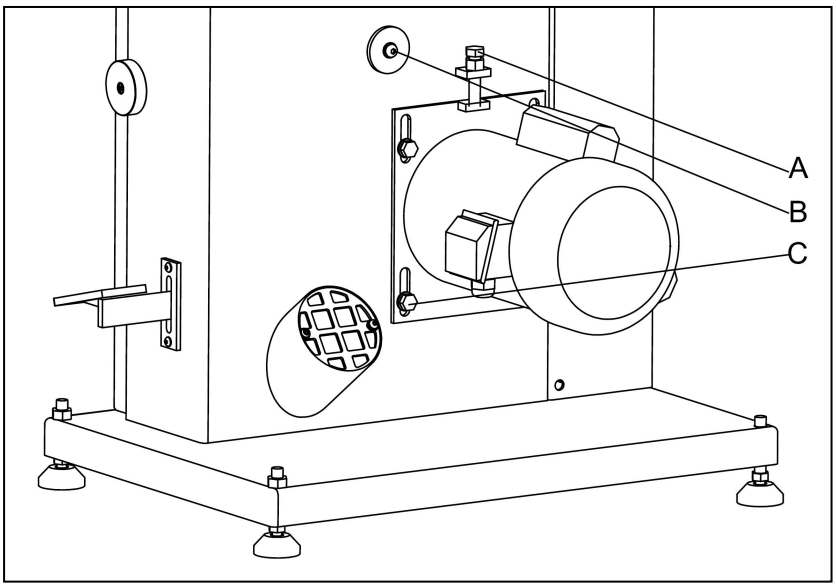


Fig. 16

Refer to Figure 16.

1. Disconnect the machine from the power source.
2. Remove the blade.
3. Loosen the four motor bracket mounting bolts (B) and loosen the belt tension adjustment bolt (C).
4. Lift the motor and re-tighten the bolts (B) to hold the motor in the raised position.
5. Remove the lower wheel locking screw (A) on the back of the frame and remove the lower wheel.
6. Remove the old belt and install the new one on the wheel belt pulley, making sure it seats properly in the pulley grooves.
7. Slide the wheel back to the frame and tighten the wheel locking bolt (A). Then mount the belt on the motor pulley.
8. Loosen the motor bracket mounting bolts (B) and allow the motor to lower.
9. The weight of the motor itself should generally produce the proper tension for the belt. Check the tension by pushing with moderate pressure against the center of the belt . An adequately tensioned belt will deflect about 1/2”. If the tension isn’t strong enough, push down on the motor by tightening the belt tension bolt (C).
10. Re-tighten the motor bracket mounting bolts (B) and the belt tension bolt (C).
11. Re-check the blade tension and tracking before operating the saw.

7 Operation

7.1 Switch

7.1.1 induction motor

Do not start the band saw until all assembly and adjustments have been completed.
Refer to figure 17.

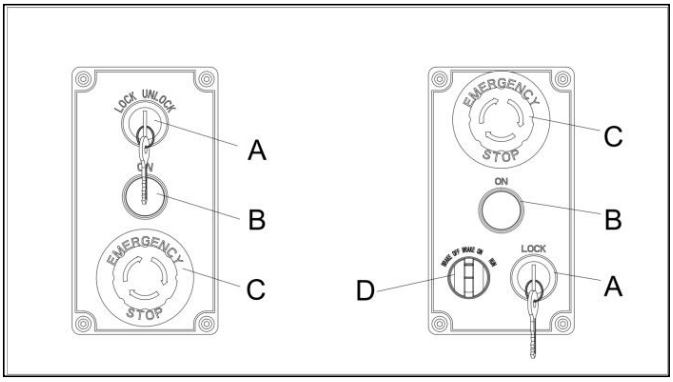


Fig. 17

Open the safety lock (A).Press the green button (B) to start the band saw.Press the red stop button (C) to stop the band saw.

7.1.2 brake motor Refer to figure 17.

Open the power safety lock (A) before you start to use the band saw.
Turn the three positions switches (D) to the right position and then press the green start button (B) to start the band saw. Turn the three positions switch (D) to the middle position to stop the band saw. Press the red emergency stop button (C) to stop the band saw in the urgent situations.

7.2 Brake Pedal

When the stop button is used to stop the band saw, the blade will coast slowly to a stop. Press and hold the foot brake and the blade will stop moving approximately four seconds after the brake pedal is pressed. Re-start the saw by pressing the start button on the frame.

⚠WARNING

Unnecessary and excessive use of the brake pedal may shorten the life of the brake pad. After the machine is shut off, allow the wheels and the blade to come to a complete stop before opening the doors, making adjustments, or leaving the area.

7.3 Door Switch

When the door is open, the door switch will shut off the band saw power.
Close the door before starting the band saw.

⚠WARNING

When the machine is running, opening the door directly is not allowed. The door can only be opened after a complete stop. Keep the keyhole of the limit switch clean otherwise it will cause serious injury.

8 Application

The following section contains basic information, and is not intended to cover all possible applications or techniques using the band saw.

1. Make sure the blade is adjusted correctly for tension and tracking, and the upper and lower blade guide are set in proper relation to the blade.
2. Adjust the guide post so that the blade guides are just above the workpiece allowing minimum exposure to the blade.
3. If using the fence, move it into position and lock it to the guide rail. If you are using the miter gauge for a crosscut, the fence should be moved safely out of the way.
4. Start the band saw and wait for the machine to reach full speed.
5. Use a push-stick, hold-down, power feeder, jig, or similar device while feeding stock, to prevent your hands getting too close to the blade.
6. Place the straightest edge of the workpiece against the fence for a rip cut; or against the miter gauge for a crosscut.
7. Push the workpiece slowly into the blade, while also keeping it pressed against the fence or held against the miter gauge. Do not force the workpiece into the blade.

8.1 Ripping

Ripping is cutting lengthwise down the workpiece, and with the grain of wood stock. Always use a push stick or similar device when ripping narrow pieces.

8.2 Crosscutting

Crosscutting is cutting across the grain of the workpiece, while using the miter gauge to feed the workpiece into the blade.

⚠WARNING

Do not use the fence in conjunction with the miter gauge. Using the fence in conjunction with the miter gauge can cause binding and possible damage to the blade and it can cause serious injury to the users.

8.3 Resawing

Resawing is the process of slicing stock to reduce its thickness, or to produce boards that are thinner than the original workpiece.
The ideal blade for resawing is the widest one the machine can handle, as the wider the blade the better it can hold a straight line.
When using the resaw fence, use a push block, push stick, or similar device to keep your hands away from the blade.

8.4 Curve Cutting

When cutting curves, simultaneously feed and turn the stock carefully so that the blade follows the layout line without twisting. Always make short cuts first, then proceed to the longer cuts.
Relief cuts will also reduce the chance that the blade will be pinched or twisted. Relief cuts are cuts made through the waste portion of the workpiece and are stopped at the layout line. As you cut along the layout line, waste wood is released from the work piece, alleviating any pressure on the back of the blade. Relief cuts also make backing the work piece out easier.

8.5 Blade Lead

Blade lead, or drift, is when the blade begins to wander off the cutting line even when the band saw fence is being used. It is more common with small, narrow blades, and is almost always attributable to poor blade quality, or insufficient blade tension.

9 Maintenance

⚠ WARNING

Before doing maintenance on the machine, disconnect it from the electrical supply by pulling out the plug or switching off the main switch! Failure to comply may cause serious injury.

If the machine is equipped with a brake motor, in order to prevent the brake pads from locking up with the motor, if the machine has not been used for more than six months, the brake lever must be released and manually turn the flywheel several times before starting it again!

9.1 Lubrication

- Periodically apply a light, non-hardening grease to the rack and pinion system of the guide post.
- Grease the sliding surfaces of the table tilt trunnions.
- Grease the contact area of the trunnion gear and the handwheel worm gear.
- Grease the blade tension screw.
- Oil any pins, shafts, and joints. Do not get oil on the pulleys or belts.

⚠ NOTICE

The bearings on the band saw are sealed for life and do not require lubrication.

9.2 Cleaning

- Clean the band saw regularly to remove any resinous deposits and sawdust.
- Keep the miter slot and the guide bearings clean and free of resin.
- Keep the blade clean and sharp. Check it periodically for cracks or other signs of wear.
- Remove any deposits from the band wheels to avoid vibration and potential blade breakage.
- Vacuum or blow out dust from inside the cabinet. (Use proper dust mask equipment).
- The table surface must be kept clean and free of rust for best results.
- Apply a light coat of paste wax to the table. The coating should protect the metal and provide a smooth surface.

9.3 Replacement

- If the power cord is worn, cut, or damaged in any way, have it replaced immediately.
- The drive belt should be checked periodically. If it looks worn, frayed, glazed or otherwise damaged, replace it.

9.4 Wheel Brush

The band saw is equipped with a lower wheel brush and this brush should be checked and cleaned on a daily basis. When it becomes dirty, there is an adjustment bracket that allows the brush to be adjusted for bristle wear.

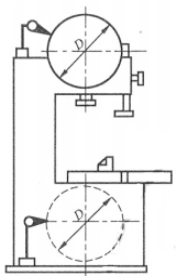
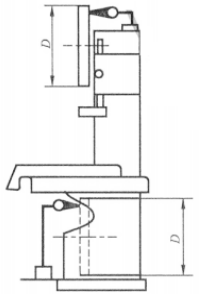
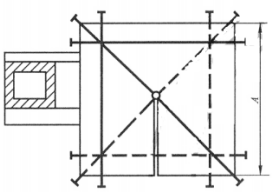
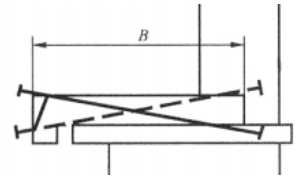
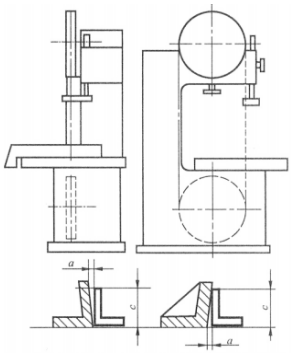
10 Trouble Shooting

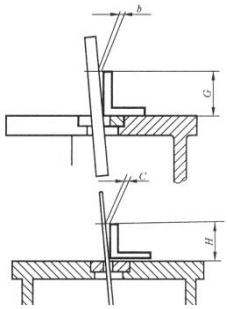
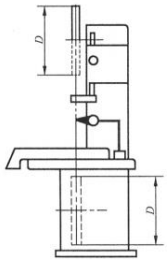
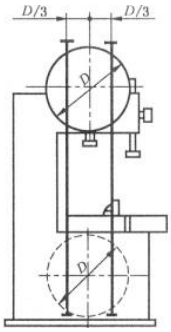
Trouble	Probable Cause	Remedy
Table tilt does not hold position under load.	Locking handle not tight.	Tighten locking handle.
	Trunnion locking mechanism is broken or worn.	Replace trunnion locking mechanism.
Table will not tilt.	Trunnion not lubricated.	Lubricate trunnion.
	Trunnion jammed.	Disassemble and replace jammed parts.
Table vibration while sawing.	Drive belt too slack.	Increase tension on drive belt. Replace belt if worn.
	Saw dust or debris on wheel. Or tire is worn/damaged.	Keep band wheels clean. Replace tires if necessary.
Surface finish on workpiece is rough.	Blade pitch too coarse.	Change to finer pitch blade.
	Workpiece being fed too strongly.	Reduce feed force.
Blade cutting inaccurately. Cuts not straight.	Gum or pitch on blade.	Clean blade.
	Worn blade teeth or damaged blade.	Replace blade.
	Fence not parallel to blade.	Align fence properly.
	Incorrect adjustment of blade guides.	Adjust blade guides properly.
	Workpiece being fed too strongly.	Reduce feed force.
	Upper blade guides not located close enough to workpiece.	Position guides about 1/8” above workpiece.
	Incorrect choice of saw blade for that particular operation.	Install correct blade.
	Blade tension too light.	Increase tension.
Blade cannot be tensioned properly.	Tension spring is fatigued.	Replace tension spring.
Blade binds in workpiece.	Incorrect blade tension or damaged blade	Correct accordingly.
	Blade too wide for desired radius.	Select narrower blade.
Blade forms cracks at base of teeth.	Teeth not suitable for operation,or incorrectly set.	Replace with proper blade.
	Blade thickness not suitable for band wheel diameter.	Replace with proper thickness blade.
	Blade sharpened incorrectly, becomes overheated.	Sharpen blade properly or replace.
	Band wheels have become misaligned.	Contact service representative.
Cracks on back edge of blade.	Workpiece being fed too quickly.	Reduce feed speed to lessen strain on blade.
	Welding on blade not perfectly aligned.	Eliminate welded part, and re-weld properly; or acquire a new blade. Round the back edge of a new blade.
	Thrust bearing is worn; caused by constant contact with back of blade.	Replace thrust bearing. Adjust new bearing according to instructions.

Blade breaks prematurely.	Feed force too great.	Reduce feed force.
	Blade pitch too coarse.	Refer to blade selection chart; use finer pitch blade.
	Guide bearings not properly supporting blade.	Check guide bearings for correct position and signs of wear. Adjust or replace as needed.
	Blade tensioned too tightly.	Reduce tension.
Blade breaks close to weld.	Blade overheated during welding.	Have blade annealed, or eliminate brittle part and weld correctly.
	Blade cooled too rapidly after welding.	Have blade annealed, or eliminate brittle part and weld correctly.
Premature dulling of saw teeth.	Blade pitch too fine.	Use blade with coarser pitch.
	Feed pressure too light.	Increase feed pressure.
	Cutting rate too low.	Increase feed pressure and cutting rate.
	Incorrect choice of blade.	Select proper blade.
	Chipped tooth or foreign object lodged in cut.	Stop saw and remove lodged particle. Replace blade if damaged.
Machine will not start/restart or repeatedly trips circuit breaker or blows fuses.	No incoming power.	Verify machine is connected to power source, and safety key is installed on switch.
	Cord damaged.	Replace cord.
	Overload automatic reset has not been reset.	Allow a few minutes for machine to cool. If problem persists, check amp setting on motor starter.
	Building circuit breaker trips or fuse blows.	Verify that band saw is on a circuit of correct size. If circuit size is correct, there is probably a loose electrical lead. Check amp setting on motor starter.
	Motor overheated.	Clean motor of dust or debris to allow proper air circulation. Allow motor to cool down before restarting.
	Motor failure.	Replace motor.
	Miswiring of unit.	Refer to wiring diagram to make any needed corrections.
	Switch failure.	Replace switch.
Band Saw does not attain full speed.	Extension cord too light or too long.	Replace with adequate size and length of cord.
	Low current.	Contact a qualified electrician.

11 Inspection Standards

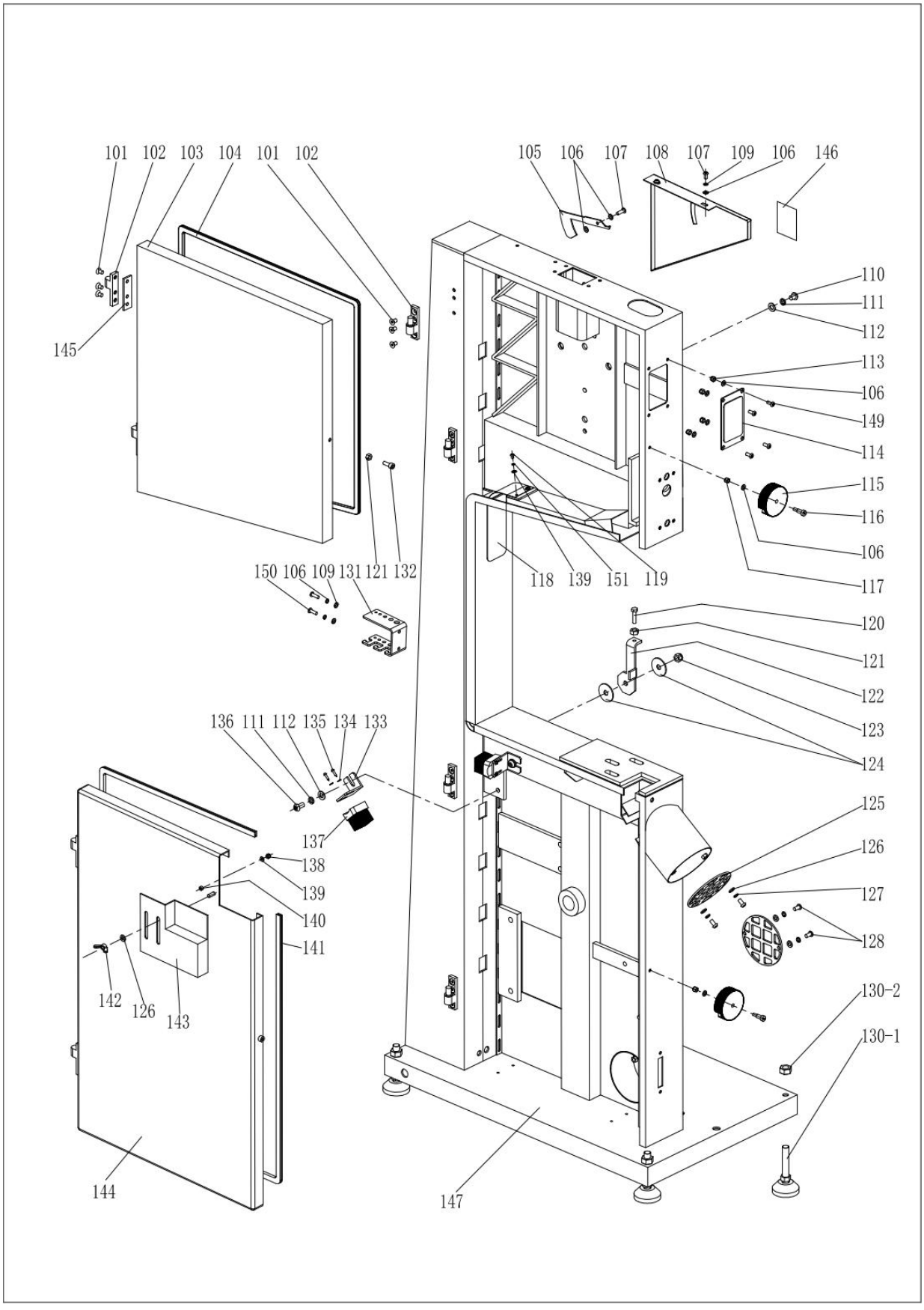
This machine is inspected in the factory and meets the following precision standards.

Index	Diagram	Inspection Item	Standard（mm）
1		Wheel radial runout	0.2
2		Wheel end-face runout	0.3
3		Flatness of worktable： a、Longitudinal straightness b、Transverse straightness c、Diagonal straightness	 a：≤0.30 b：≤0.30 c：≤0.40
4		Straightness of fence	0.3/630
5		Squareness of fence against work table	0.2/100

Index	Diagram	Inspection Item	Standard（mm）
6		Squareness of the side of blade against work table Squareness of the back of blade against work table	0.1/200 0.2/200
7		The back of blade jerks while rotating with testing blade	0.4
8		Parallelism of end face of upper and lower wheels	0.3

Explosionszeichnung und Stückliste

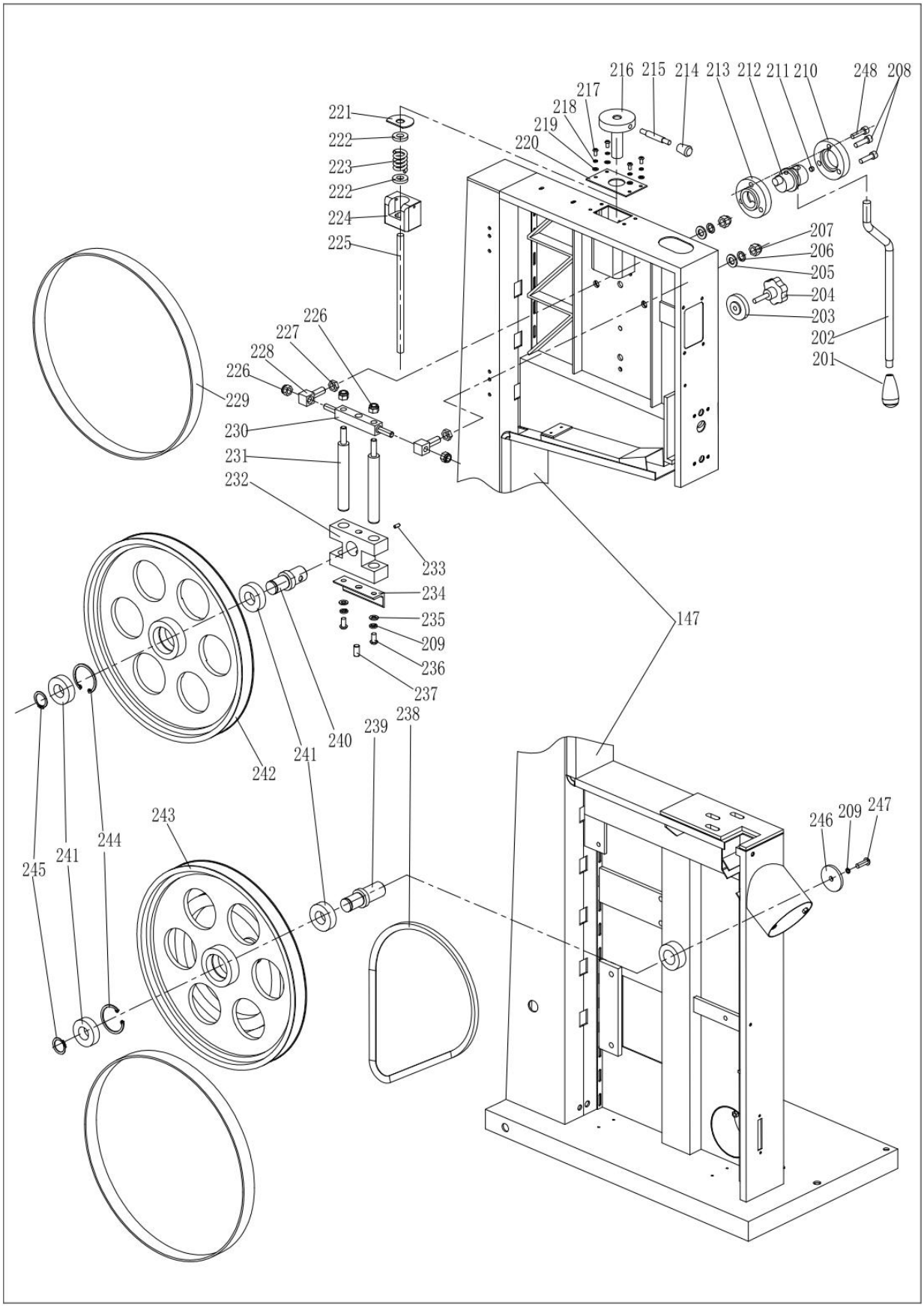
Frame Assembly Exploded View



Frame Assembly Parts List

NO.	Description
101	Cap Screw M6×12
102	Hinge
103	Door
104	Shockproof Soft Article
105	Position Indicator
106	Flat Washer 5
107	Cap Screw M5×12
108	Tension Indicator Piece
109	Spring Washer 5
110	Cap Screw M8×10
111	Spring Washer 8
112	Flat Washer 8
113	Nut M5
114	Sight Glass
115	Lock Button
116	Cap Screw 6×12
117	Lock Nut M5
118	Guide Plate
119	Cap Screw M4×8
120	Cap Screw M6×25
121	Lock Nut M6
122	Support Plate
123	Lock Nut M8
124	Large Washer 8
125	Dust Guard
126	Flat Washer 6
127	Spring Washer 6
128	Cap Screw M6×16
129	/
130	Anchor Bolt M12×60
131	Tool Bracket
132	Cap Screw M6×12
133	Brush Plate
134	Flat Washer 3
135	Screw 2.9×9.5
136	Cap Screw M8×16
137	Brush
138	Lock Nut M4
139	Flat Washer 4
140	Flat Washer M4×10
141	Shockproof Soft Article
142	Nut M6
143	Cover
144	Door
145	Stator
146	Tension Label
147	Saw Frame
148	/
149	Cap Screw M5×10
150	Cap Screw M5×16
151	Spring Washer 4

Wheels and Blade Tension Level Assembly Exploded View



Wheels and Blade Tension Level Assembly Parts List

NO.	Description
201	Knob
202	Handle
203	Adjusting Nut
204	Knob M8×35
205	Flat Washer 12
206	Spring Washer 12
207	Nut M12
208	Cap Screw M8×30
209	Spring Washer 8
210	Gasket
211	Set Screw M8×10
212	Cam Shaft
213	Support Gasket
214	Handle Cover M8
215	Adjusting Extension Handle
216	Adjusting Handle
217	Cap Screw M5×12
218	Spring Washer 5
219	Flat Washer 5
220	Top Plate
221	Tensioning Big Washer
222	Tensioning Thick Washer
223	Tighten Spring
224	Spring Bracket

NO.	Description
225	Shaft
226	Lock Nut M10
227	Nut M12
228	Square Screw
229	Rubber Belt
230	Square Shaft
231	Guide Bar
232	Shaft Bracket
233	Set Screw M6×12
234	Bracket
235	Flat Washer 8
236	Cap Screw M8×16
237	Set Screw M10×20
238	Triangle Belt 9.5×990 La
239	Driving Shaft
240	Driven Shaft
241	Bearing 6205P6/2RS
242	Upper Fly-wheel
243	Lower Fly-wheel
244	Circlip For Hole 52
245	Circlip For Shaft 25
246	Plain Thick Washer
247	Cap Screw M8×25
248	Cap Screw M8×27