

# Owner's Manual & Safety Instructions

**Save This Manual** Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

21c



## HORIZONTAL/VERTICAL METAL CUTTING BAND SAW



Visit our website at: <http://www.harborfreight.com>  
Email our technical support at: [productsupport@harborfreight.com](mailto:productsupport@harborfreight.com)

**63469**

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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### **⚠ WARNING**

Read this material before using this product. Failure to do so can result in serious injury.  
**SAVE THIS MANUAL.**

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### WARNING SYMBOLS AND DEFINITIONS

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
<b>NOTICE</b> <b>CAUTION</b>	Addresses practices not related to personal injury.

# IMPORTANT SAFETY INFORMATION

## General Tool Safety Warnings

### ⚠ WARNING

Read all safety warnings and instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

1. KEEP GUARDS IN PLACE and in working order.
2. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
3. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
4. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
5. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
6. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
7. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
8. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.
10. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
11. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
12. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
13. DON'T OVERREACH. Keep proper footing and balance at all times.
14. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
15. DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters, and the like.
16. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in off position before plugging in.
17. USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
18. NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
19. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function – check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
20. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
21. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

**Table A: RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS (120 VOLT)**

NAMEPLATE AMPERES (at full load)	EXTENSION CORD LENGTH			
	25'	50'	100'	150'
0 – 6	18	16	16	14
6.1 – 10	18	16	14	12
10.1 – 12	16	16	14	12
12.1 – 16	14	12	Do not use.	

## Grounding Instructions



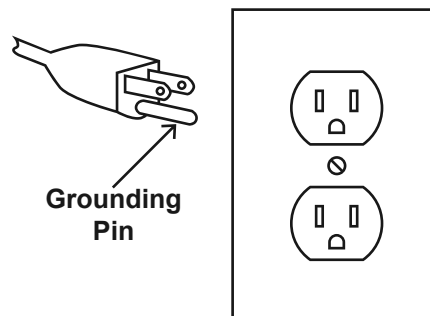
### ⚠️ WARNING

TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION READ AND FOLLOW THESE INSTRUCTIONS:

## 110-120 VAC Grounded Tools: Tools with Three Prong Plugs

1. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This 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.
2. Do not modify the plug provided – if it will not fit the outlet, have the proper outlet installed by a qualified electrician.
3. Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.
4. Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.
5. Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

6. Repair or replace damaged or worn cord immediately.



**125 VAC 3-Prong Plug and Outlet  
(for up to 125 VAC and up to 15 A)**

7. This tool is intended for use on a circuit that has an outlet that looks like the one illustrated above in **125 VAC 3-Prong Plug and Outlet**. The tool has a grounding plug that looks like the plug illustrated above in **125 VAC 3-Prong Plug and Outlet**.
8. The outlet must be properly installed and grounded in accordance with all codes and ordinances.
9. Do not use an adapter to connect this tool to a different outlet.

## Band Saw Safety Warnings

### For Your Own Safety Read Instruction Manual Before Operating Saw

1. Wear eye protection.
2. Do not remove jammed cutoff pieces until blade has stopped.
3. Maintain proper adjustment of blade tension, blade guides, and blade guide bearings.
4. Adjust upper guide to just clear workpiece.
5. Hold workpiece firmly against table.
6. Use special care when unpacking or replacing Band Saw blade. Blade can be under tension and may suddenly uncoil. Wear ANSI-approved safety glasses under a full face shield and heavy-duty work gloves.
7. Keep hands away from cutting area and Saw Blade.
8. **DO NOT OPERATE WITH ANY GUARD DISABLED, DAMAGED, OR REMOVED. Moving guards must move freely and close instantly.**
9. Properly adjust the upper blade guide, blade tension and blade guide bearing before each use to reduce the risk of injury. See Operating Instructions for explanation of needed adjustments.
10. Never leave the Band Saw unattended when it is plugged into an electrical outlet. Turn off the tool, and unplug it from its electrical outlet before leaving.
11. Make sure the Band Saw is located on a flat, level, sturdy surface capable of supporting the weight of the Saw and workpieces. Always “chock” the Wheels to prevent the Band Saw from accidentally moving.

12. Before using the Band Saw, check to make sure the Saw Blade is properly mounted and is not cracked or bent.
13. Never attempt to cut more than one workpiece at a time.
14. Never attempt to cut freehand. Make sure the workpiece to be cut is pressed firmly against the Table and/or secured in the Vise.
15. When cutting a large workpiece, make sure its entire length is properly supported. If necessary, use a roller stand (not included).
16. Do not lean on the Band Saw when the tool is in its upright position.
17. When moving the Band Saw, always have its Head lowered to its horizontal position.
18. Allow the Saw Blade to rotate to full speed before feeding a workpiece into the Blade. When turning off the Band Saw, allow the Saw Blade to spin down and stop on its own. Do not press against the Saw Blade to stop it.
19. Wear heavy-duty work gloves when changing the Saw Blade.
20. Turn off the Band Saw and allow the Saw Blade to completely stop if the Saw Blade is to be backed out of an uncompleted cut.
21. Use indoors only.
22. If the teeth of the Saw Blade are so far apart that they straddle the workpiece, severe damage to the workpiece and/or Saw Blade will result.
23. The use of accessories or attachments not recommended by the manufacturer may result in a risk of injury to persons.
24. When servicing use only identical replacement parts.
25. Only use safety equipment that has been approved by an appropriate standards agency. Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.
26. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
27. Industrial applications must follow OSHA guidelines.
28. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
29. Avoid unintentional starting. Prepare to begin work before turning on the tool.
30. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should:
  - Avoid operating alone.
  - Do not use with power switch locked on.
  - Properly maintain and inspect to avoid electrical shock.
  - Any power cord must be properly grounded. Ground Fault Circuit Interrupter (GFCI) should also be implemented – it prevents sustained electrical shock.
31. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

## Vibration Safety

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any medical or physical symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
3. Use tools with the lowest vibration when there is a choice between different processes.
4. Include vibration-free periods each day of work.
5. Grip workpiece as lightly as possible (while still keeping safe control of it). Let the tool do the work.

6. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.



**SAVE THESE INSTRUCTIONS.**



## Specifications

Electrical Rating	120VAC / 60Hz / 9.5A
Motor No Load Speed	1700 RPM
Blade Speeds	140 / 170 / 240 / 390 FPM
Cutting Capacity	7" Round Stock 7" x 12" Rectangular Stock
Horizontal Bed	6-15/16" L x 20-3/4" W
Vertical Bed	9-5/8" L x 9-1/2" W
Belt Type	A650
Blade Size	93-3/8" L x 3/4" Wide x 5/8 Variable TPI

**SAFETY**

**SETUP**

**OPERATION**

**MAINTENANCE**



## Setup - Before Use:



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

### WARNING

#### TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.

**NOTE:** For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

## Assembly/Mounting

### To Attach the Wheels to the Stand

1. Slide the Axle (79) through the Stand, securing in place with two Pins (81). **See Figure A.**
2. Place both Wheels (80) onto Axle, and secure in place with two Pins (81).
3. Fasten two Nuts M12 (203) to one Support Foot (202). Repeat this process for the other Support Foot.
4. With assistance, lift the Stand using the Handle and align one Support Foot with the mounting hole. Secure in place by threading Support Foot through the hole. Repeat this process for the other Support Foot. **Do not rest Stand on one Support Foot while installing the other Support Foot.**
5. Adjust stand height with the Nuts M12 (203) to desired height. **See Figure A.**

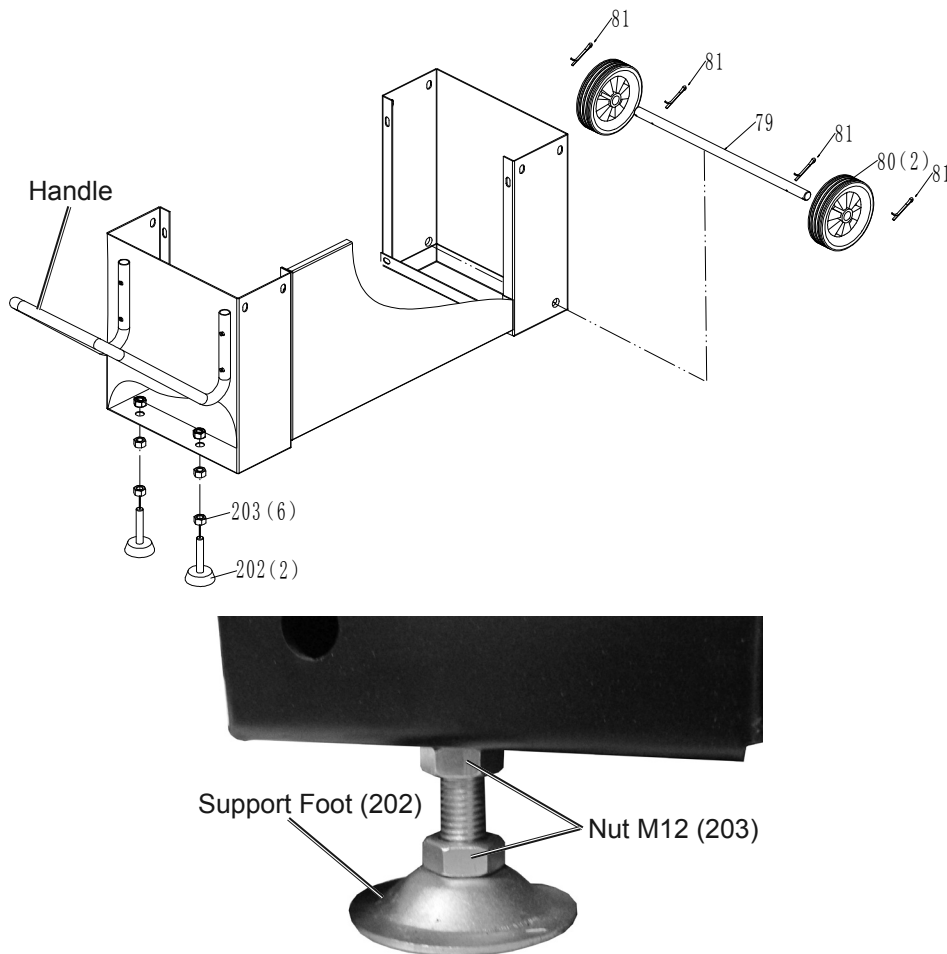


Figure A:



## To Attach the Stock Stop Assembly

1. When mounted to the Band Saw, the adjustable Stock Stop assembly is used to make repetitive cuts of the same length.
2. To attach the Stock Stop (32), slide the Stock Stop Rod (31) into the mounting hole in the Table (1), and secure the Rod by tightening the Set Screw (14) (**see Figure B**).
3. Slide the Stock Stop onto the Shaft, and secure by tightening the Socket Head Screw (30).

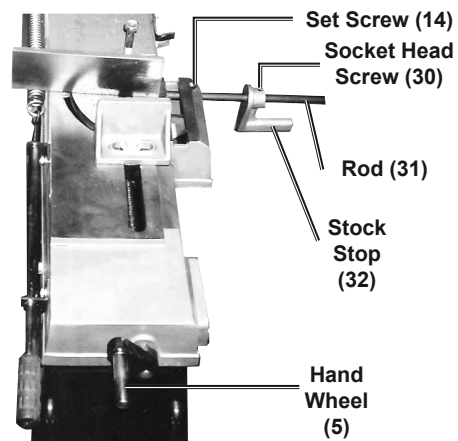


Figure B:

## To Attach the Pulley Cover

1. Position the Pulley Cover (175) over the Worm Pulley (100) and Motor Shaft.
2. Align the mounting hole in the Pulley Cover with the mounting hole in the Motor Mount Bracket (190).
3. Secure the Pulley Cover to the Motor Mount Plate Bracket (190) using M6 Screw (177) and Washer (176). (**see Figure C**).

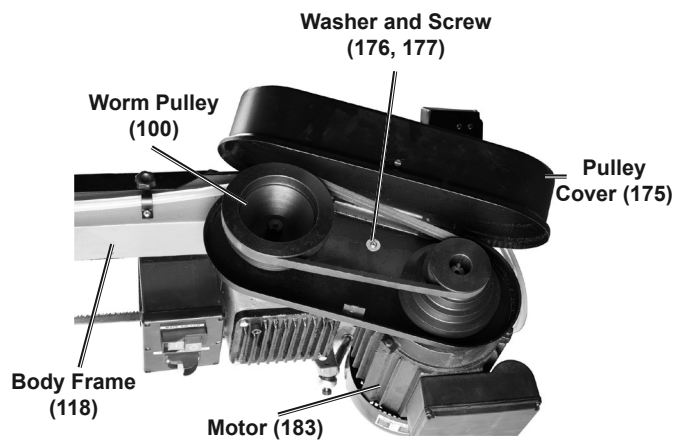


Figure C:

**Note:** The Pulley Cover is held closed by a knob. Install this knob after completing the assembly of the pulleys and belt in the following section.

## To Attach the Spindle Pulley and Worm Pulley

1. Back off Set Screw to keep it from interfering with installation.
2. Insert Shaft Key (178) into slot on Shaft. Slide the Spindle Pulley (180) fully onto the Motor Shaft, making sure Key stays in place. Then secure the Spindle Pulley to the Motor Shaft, using Set Screw (179). (see Figure D).
3. Insert Shaft Key (178) into slot on Shaft. Slide the Worm Pulley fully onto the Worm Shaft (93), making sure Key stays in place. Then secure the Worm Pulley to the Worm Shaft, using Set Screw (101).

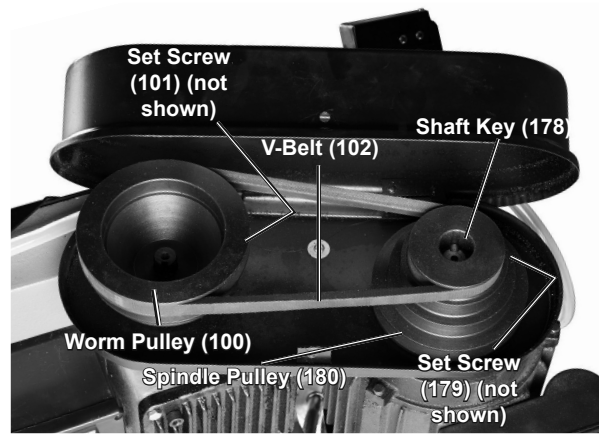


Figure D:

## To Install the V-Belt

1. Back off the Holding Nut (185) to free the Belt Adjustment Bolt (184, under the Motor, not shown) and press the Motor (183) toward the Body (see Figure E).
2. Place the V-Belt (102) around the top grooves in the Spindle Pulley (180) and Worm Pulley (100) (see Figure D).
3. Adjust the position of the Motor to obtain approximately 1/2" depression in the V-Belt when applying pressure with your thumb.
4. Re-tighten the Belt Adjustment Bolt to anchor the Motor in place.
5. Tighten the Holding Nut (185) against the Motor Mounting Bracket.

6. Install the Knob to hold the Pulley Cover closed.

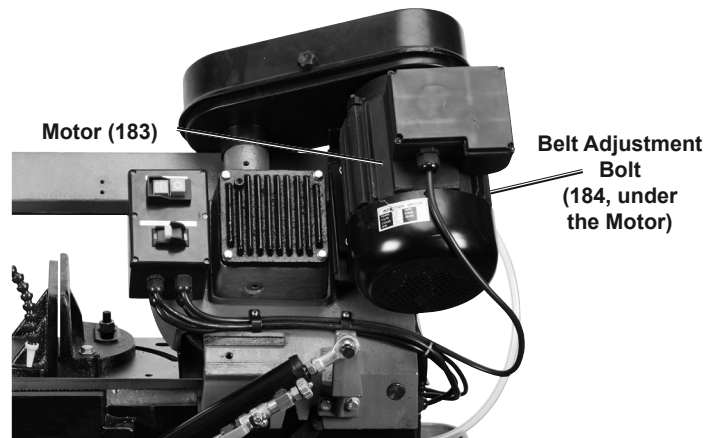


Figure E:

## To Adjust the Cutting Speed

1. The Band Saw is designed to cut at three different speeds: 140, 170, 240, and 390 FPM (Feet Per Minute) depending on the type of material being cut.
2. Refer to the Chart at left to determine the proper cutting speed for a specific type of material being cut.
3. The cutting speed can be adjusted by changing the position of the V-Belt:
  - a. Remove Knob (173) and open the Pulley Cover (175).
  - b. Back off Holding Nut to free the Belt Adjustment Bolt and press the Motor (183) toward the Body.
  - c. Place the V-Belt around the desired grooves in the Spindle Pulley (180) and Worm Pulley (100).
  - d. Ease the Motor back to its original position to tighten the tension on the V-Belt.
  - e. Re-tighten the Belt Adjustment Bolt to secure the Motor in place.
  - f. Tighten the Holding Nut against the Motor Mounting Bracket. (see Figure D, Figure E).

MATERIAL	SPEED (FPM)	PULLEY GROOVE	
		SPINDLE	MOTOR
Tool Steel, Stainless Alloy Steels, Bearing Bronze	140	LARGEST	SMALL
Medium to High Carbon Steels, Hard Brass or Bronze	170	LARGE	MEDIUM
Low to Medium Carbon Steels, Soft Brass	240	MEDIUM	LARGE
Aluminum, Plastic	390	SMALL	LARGEST

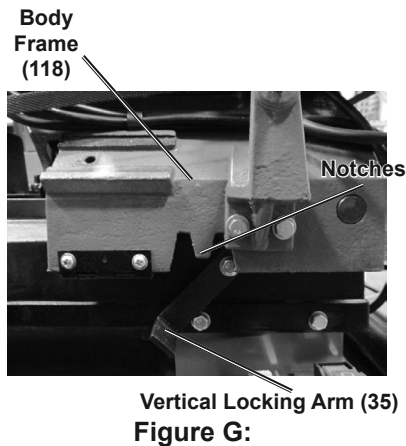
Figure F:

**⚠ WARNING! TO PREVENT SERIOUS INJURY:**  
Always securely close the Lid on the Pulley Cover after installing a V-Belt or adjusting the cutting speed.

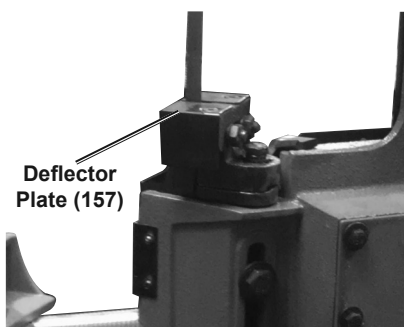
## To Convert the Band Saw for Vertical Use

**NOTE:** Notching, slitting, and contour work is best done with the Band Saw in its vertical position.

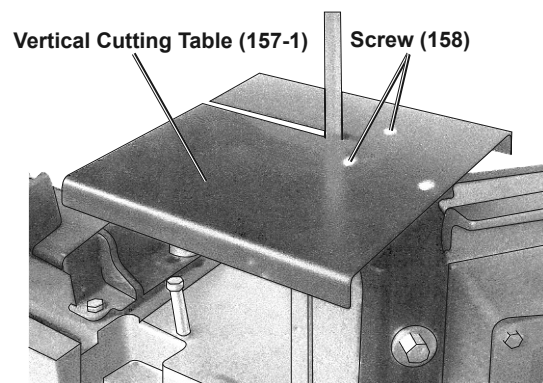
1. Raise the Body Frame (118) to its full vertical position. Turn the Vertical Locking Arm (35) until it firmly locks into the Notches on the Body Frame, locking Body Frame into position (see Figure G).



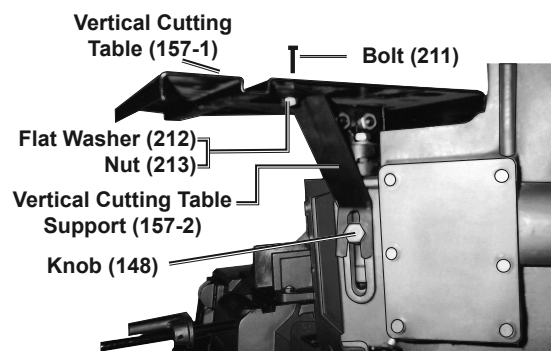
2. Remove the two Screws (158) and set them aside. Then remove the Deflector Plate (157) (see Figure H).



3. Guide the Saw Blade through the slot in the Vertical Cutting Table (157-1), and secure the Vertical Cutting Table in position with the two Screws (158) (see Figure I).



4. To mount the Vertical Cutting Table Support:



- a. Insert one Bolt (211) downward through the mounting hole in the Vertical Cutting Table (157-1).
- b. Attach the top section of the Vertical Cutting Table Support (157-2) to the Vertical Cutting Table using one Flat Washer (212) and one Nut (213).
- c. Loosen the Knob (148).
- d. Position the Vertical Cutting Table Support between the Body Frame and the head of the Bolt.
- e. Firmly re-tighten the Knob (see Figure J).

## To Convert the Band Saw for Horizontal Use

1. Remove the screws (158) holding the Vertical Cutting Table (157-1) in place.
2. Loosen the Knob (148) and guide the Vertical Cutting Table Support assembly away from the Saw Blade.
3. Guide the Deflector Plate (157) around the Saw Blade and secure in place with the Screws (158).
4. Turn the Vertical Locking Arm (35) counterclockwise until it disengages from the Body Frame.
5. Lower the Body Frame to its full horizontal position.
6. When storing or moving the Band Saw, lock it in the horizontal position.

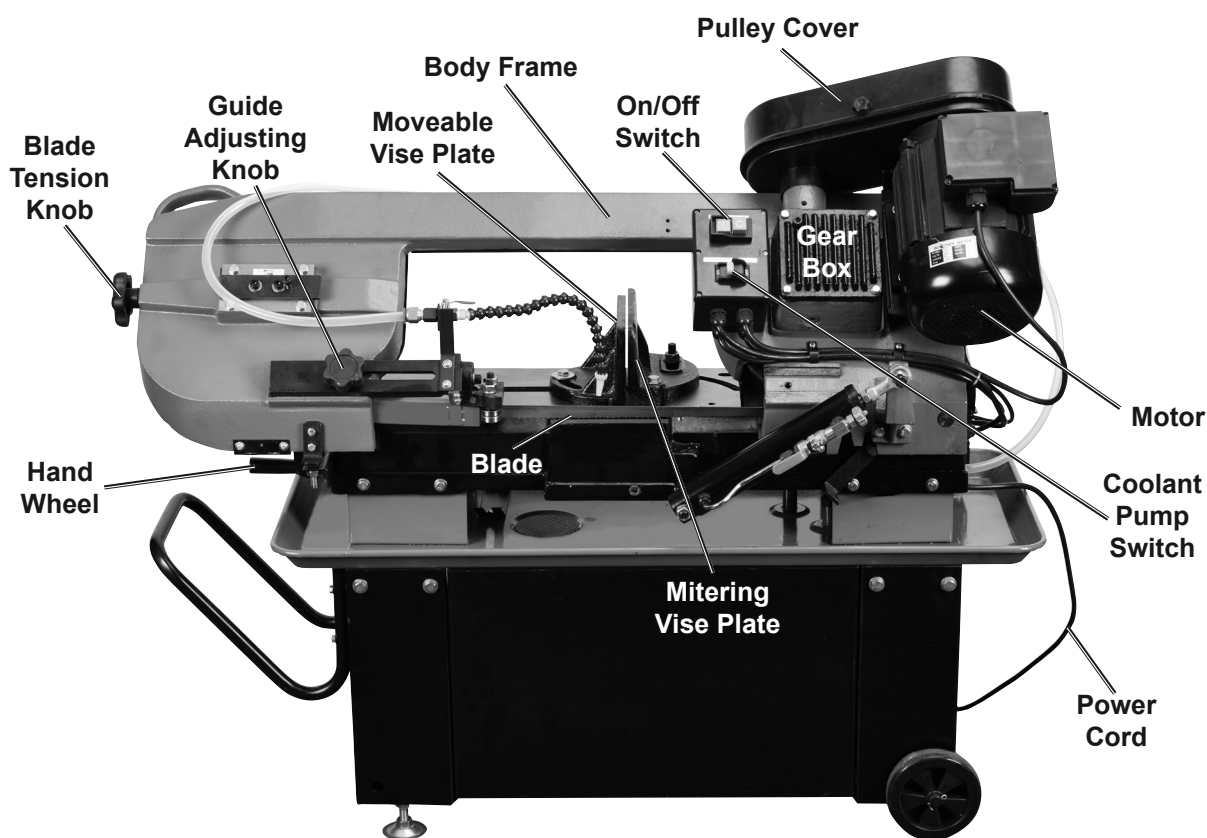
# Functions

SAFETY

SETUP

OPERATION

MAINTENANCE



## Operating Instructions



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

## Tool Set Up

### ⚠ WARNING

**TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:**

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.

**TO PREVENT SERIOUS INJURY:**

**DO NOT OPERATE WITH ANY GUARD DISABLED, DAMAGED, OR REMOVED.**

Moving guards must move freely and close instantly.

### To Use the Vise

1. Raise the Body Frame (118) to its vertical position, and lock the Body Frame in place with the Vertical Locking Arm (35) (see Figure G on page 11).
2. Open the Moveable Vise Plate (8) to accept the workpiece by rotating the Hand Wheel (5) counterclockwise (see Figure K).
3. Place the workpiece on the Table (1). If the workpiece is long, support the end.

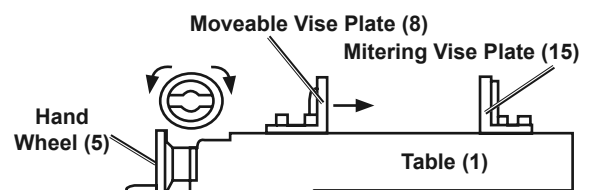


Figure K:

4. Clamp the workpiece firmly against the Mitering Vise Plate (15) with the Moveable Vise Plate by rotating the Hand Wheel clockwise.

### To Use the Quick Vise Adjustment for an Angle Cut

1. Loosen the Bolt (14) and adjust the Mitering Vise Plate to the desired angle as indicated by the Angle Scale (214) (see Figure L). Re-tighten the Bolt.
2. Loosen the Bolt (10) and adjust the Moveable Vise Plate to parallel the Mitering Vise Plate. Re-tighten the Bolt.

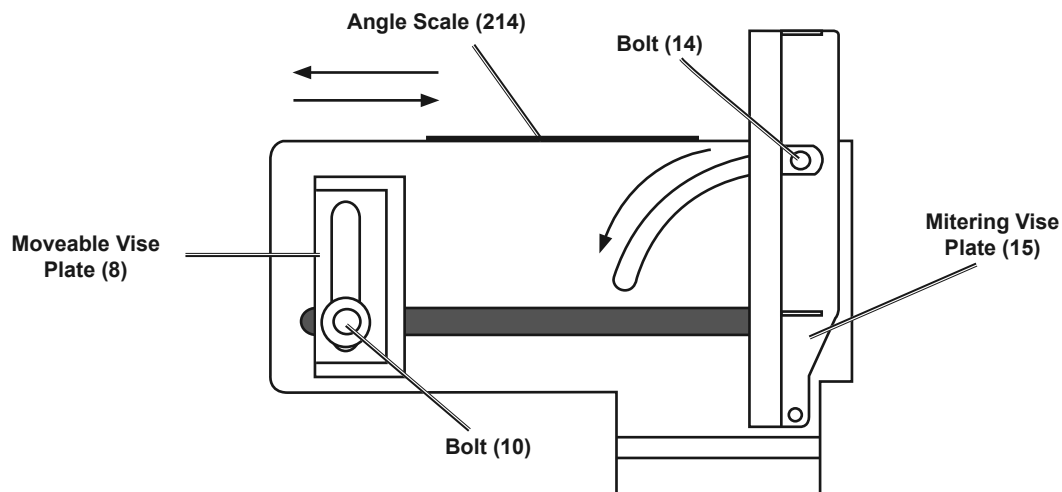


Figure L:

# Adjustments

## To Adjust the Stock Stop

1. Loosen the Socket Head Screw (30) that holds the Stock Stop (32) to the Shaft (31) (**see Figure M**).
2. Adjust the Stock Stop to the desired length position. Re-tighten the Socket Head Screw.

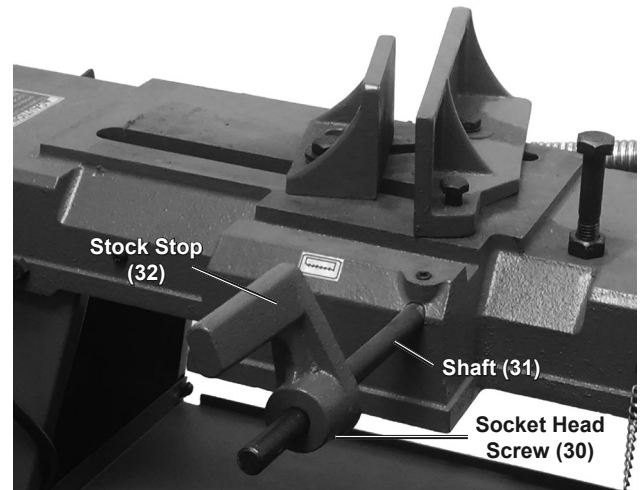


Figure M:

## To Adjust the Blade Guide Bearings

**NOTE:** Blade Guide Bearings (152, 161) adjustment is a critical factor in the performance of the Band Saw.

**NOTE:** Before attempting to adjust the Blade Guide Bearings, try installing a new Saw Blade (140) to correct poor cutting. If a Saw Blade becomes dull on one side sooner than the other, it will begin cutting crooked. A Saw Blade replacement will correct this problem, whereas Blade Guide Bearings adjustment will not.

1. If a new Saw Blade does not correct the problem, check that the Cutting Guards (163, 149) are clear of the Saw Blade.
2. There should be from 0.000" (just touching) to 0.001" clearance between the Saw Blade and Blade Guide Bearings (**see Figure N**). To obtain this clearance adjust as follows:
  - a. The *Outer* Blade Guide Bearings (161) are mounted to Shafts (159, 160) and can be adjusted.
  - b. Loosen the Nuts (150) while holding the Shafts (159, 160) with a Hex Key (not included).
  - c. Turn the Shafts (159, 160) until the Blade Guide Bearings are appropriately clear of the Blade. Then, re-tighten the Nuts (150).
  - d. Adjust the *Inner* Blade Guide Bearings (152) in the same manner.

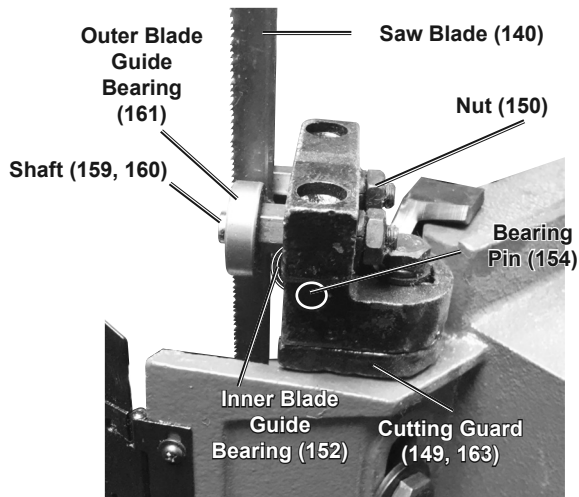


Figure N: Lower Blade Guide Assembly

## To Adjust the Blade Tracking

1. Raise the Body Frame to its full vertical position. Turn the Vertical Locking Arm (35) to the right until it firmly locks into the Body Frame (118) and use the Feed Lock Lever to lock Body Frame into position (**see Figure G on page 11**).
2. Remove the Knobs (168) to open the Blade Back Cover (169). Turn on the Band Saw and examine the Upper Blade Wheel (139).

**⚠ WARNING!** To avoid serious injury, keep hands clear of turning blade.

3. The Saw Blade (140) is tracking properly when the back of the Blade is just touching the edge of the Upper Blade Wheel flange. The back of the Blade should not rub against the flange (**see Figure O**).

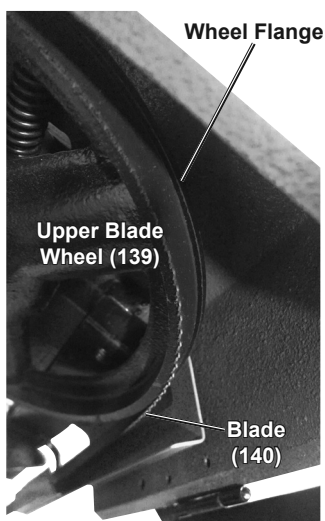


Figure O:

**NOTE:** If adjustment is necessary, the Blade Guide Bearings (152, 161) should be completely clear of the Saw Blade (140) (**see Figure N on page 14**).

4. Turn off the Band Saw and loosen the middle Bolt (129) to a point where it is loose but snug (**see Figure P**).

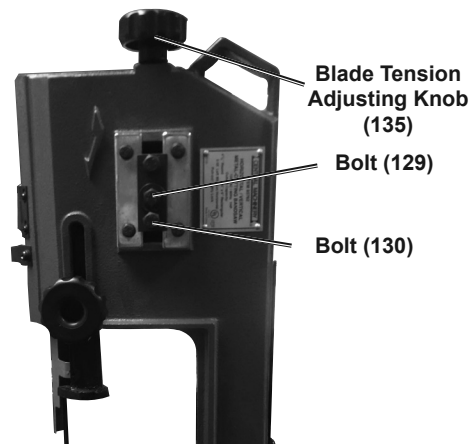


Figure P:

5. With the Band Saw running, turn the lower Bolt (130) until the Saw Blade tracks properly. Make sure Blade tension is maintained by turning the Blade Tension Adjusting Knob (135).
6. When adjustment is complete, turn off the Band Saw and re-tighten the middle Bolt.
7. Close the Blade Back Cover and secure with the Screw and Flat Washer.



## To Adjust the Blade Tension

1. Raise the Body Frame (118) to its full vertical position. Turn the Vertical Locking Arm (35) to the right until it firmly locks into the Body Frame and use the Feed Lock Lever to lock Body Frame into position (**see Figure G on page 11**).
2. Turn the Blade Tension Adjusting Knob (135) *clockwise* to **increase** tension on the Saw Blade (140).
3. Turn the Blade Tension Adjusting Knob *counterclockwise* to **decrease** tension on the Saw Blade.
4. Correct tension has been acquired when the Saw Blade is just tight enough for the Blade Wheels (139, 122) to grip the Blade and turn it.

**NOTE:** Release blade tension when Band Saw will not be used for extended periods.

## To Adjust the Feed Rate

1. Adjust the feed rate of the Body Frame by turning the Feed Knob on the Hydraulic Arm (82) *clockwise* to decrease the feed rate or *counterclockwise* to increase the feed rate (**see Figure Q**).
2. The Blade Guide Brackets should be set as close as possible to the workpiece, without interfering with the workpiece or contacting the Table (1).
3. Once the adjustment is made, re-tighten the Guide Adjusting Knobs.

**NOTICE:** Do not turn the Feed Knob more than one turn at a time. Excessive feed pressure can break the Saw Blade. Insufficient feed pressure dulls the Saw Blade rapidly.

2. The Feed Lock Lever is used to lock or unlock the Hydraulic Arm.

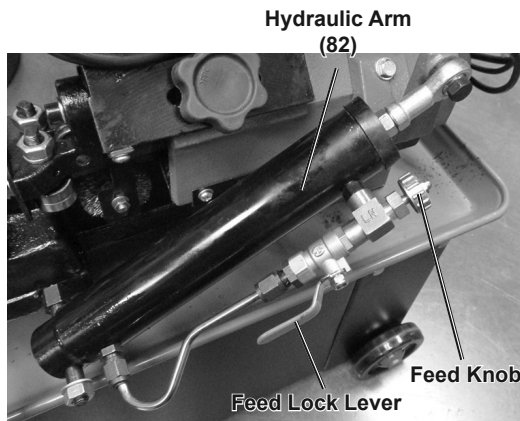


Figure Q:

## To Adjust the Blade Guide Brackets

1. The Blade Guide Bracket (164) is adjustable by loosening the Guide Adjusting Knobs (148) and sliding the Brackets up or down to accommodate the depth of the workpiece (**see Figure R**).

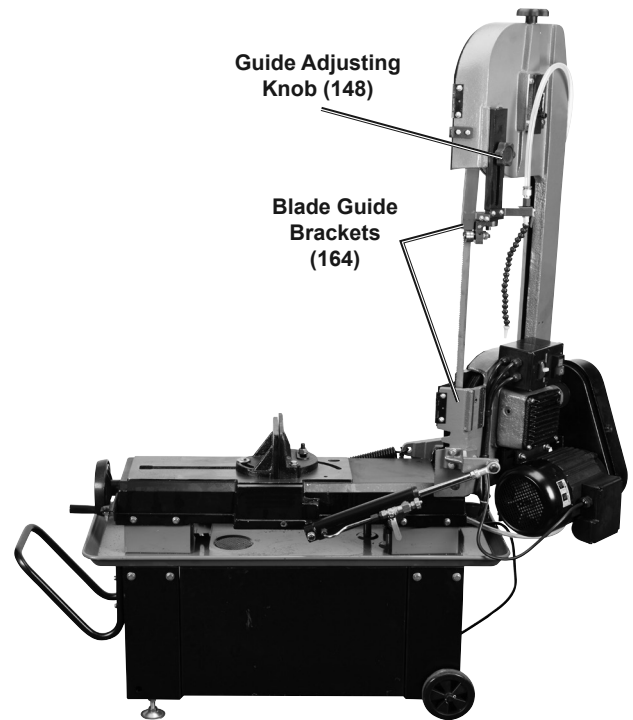


Figure R:



## Workpiece and Work Area Set Up

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1. Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent distraction and injury.
2. Route the power cord along a safe route to reach the work area without creating a tripping hazard or exposing the power cord to possible damage. The power cord must reach the work area with enough extra length to allow free movement while working.
3. Secure loose workpieces using a vise or clamps (not included) to prevent movement while working.
4. There must not be objects, such as utility lines, nearby that will present a hazard while working.

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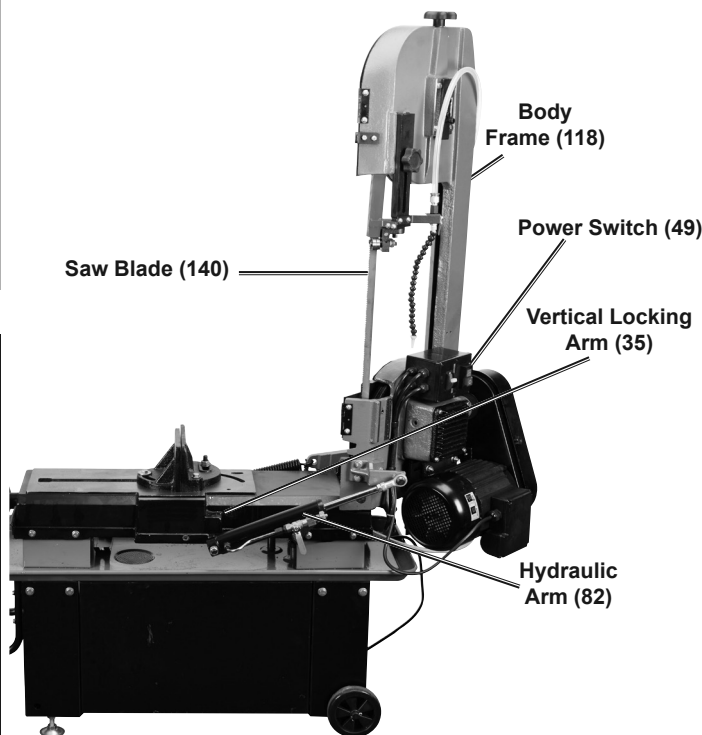
# General Operating Instructions

## Vertical Position

### **⚠WARNING! TO PREVENT SERIOUS INJURY:**

Always wear ANSI-approved safety impact eye goggles when operating the Band Saw.

1. **Do not plug the Power Cord into an electrical outlet until all necessary adjustments (as previously discussed in this manual) have been made.**
2. Raise the Body Frame (118) to its full vertical position, as described in "To Convert the Band Saw for Vertical Use" on page 11.
3. Turn the Vertical Locking Arm (35) clockwise until it firmly locks into the Body Frame and use the Feed Lock Lever to lock Body Frame in position (**see Figure S**).



**Figure S:**

4. Once all necessary adjustments to the Band Saw have been made, plug the Power Cord into the nearest **120 volt, grounded, electrical outlet**.
5. Turn the Power Switch (49) to its **"ON"** position.

**⚠CAUTION!** Cut only *flat* workpieces when the Band Saw is in its vertical position. Never attempt to cut pipes or other round objects with the Band Saw in its vertical position.

6. Before cutting, turn on the Band Saw and check for excessively loose Saw Blade (140) tension or machine vibration. Turn off the Band Saw and correct any problems before using.
7. Set the workpiece on the Vertical Cutting Table (157-1). Keep downward pressure on the workpiece throughout the cutting process.
8. When cutting a large workpiece, make sure its entire length is properly supported. If necessary, use a roller stand (not included) with a larger workpiece.
9. Allow the Saw Blade to reach full speed before feeding the workpiece into the Saw Blade.

**⚠WARNING! TO PREVENT SERIOUS INJURY:** Keep hands and fingers safely away from the cutting area.

10. Feed the workpiece into the Saw Blade gradually. Do not force the Band Saw to remove material faster than it is designed to cut.
11. Use two hands and hold workpiece securely against table at all times.

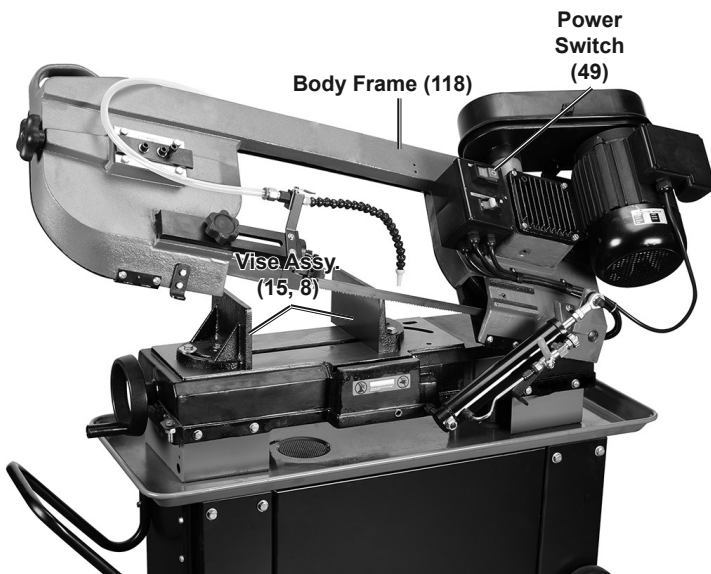
**⚠WARNING! TO PREVENT SERIOUS INJURY:** Never attempt to remove material stuck in the moving parts of the Band Saw while it is plugged in and running. Turn off the Band Saw if the workpiece is to be backed out of an uncompleted cut.

12. Once the cut is made, turn the Power Switch (49) to its **"OFF"** position and unplug the Power Cord from its electrical outlet.
13. Wait until the Saw Blade comes to a complete stop. Then, remove the workpiece and scrap material from the Vertical Cutting Table.
14. Unlock the Feed Lock Lever on the Hydraulic Arm (82) and turn the Vertical Locking Arm (35) to the left. Then, lower the Body Frame to its horizontal position.
15. Clean, lock in the horizontal position using the Feed Lock Lever, then store the tool indoors out of children's reach.

### **⚠ WARNING! TO PREVENT SERIOUS INJURY:**

Always wear ANSI-approved safety impact eye goggles when operating the Band Saw.

1. **Do not plug the Power Cord into an electrical outlet until all necessary adjustments (as previously discussed in this manual) have been made.**
2. If needed, convert the Band Saw for horizontal use as described in "To Convert the Band Saw for Horizontal Use" on page 11.
3. Raise the Body Frame (118) to its full vertical position. Turn the Vertical Locking Arm (35) clockwise until it firmly locks into the Body Frame and use the Feed Lock Lever to lock the Body Frame in position (see Figure V on page 21).
4. Secure the workpiece in the Vise assembly (15, 8). When cutting a large workpiece, make sure its entire length is properly supported. If necessary, use a roller stand (not included) with a larger workpiece (see Figure T).



**Figure T:**

5. If cutting several workpieces at the same length, you may wish to adjust the Stock Stop (32) to the desired position.
6. Once all necessary adjustments to the Band Saw have been made, plug the Power Cord into the nearest **120 volt, grounded, electrical outlet.**

7. Before cutting, turn on the Band Saw and check for excessively loose Saw Blade tension or machine vibration. Turn off the Band Saw and correct any problems before using.
8. To begin cutting, turn the Power Switch (49) to its "ON" position. Unlock the Feed Lock Lever on the Hydraulic Arm (82) and slowly lower the Body Frame until the Saw Blade (140) is just above the workpiece cut line.
9. Allow the Saw Blade to reach full speed before feeding the Saw Blade into the workpiece.

### **⚠ WARNING! TO PREVENT SERIOUS**

**INJURY:** Keep hands and fingers safely away from the cutting area.

10. Slowly lower the Body Frame, while it gradually feeds the Saw Blade into the workpiece. Do not force the Band Saw to remove material faster than it is designed to cut.
11. Never attempt to remove material stuck in the moving parts of the Band Saw while it is plugged in and running. Turn off the Band Saw if the workpiece is to be backed out of an uncompleted cut.

**IMPORTANT:** When in the horizontal cutting mode only, the Stop Tab (118-1) will automatically turn the Power Switch to its "OFF" position and shut off the Band Saw Motor when the cut has been completed.

12. Once the cut is made, check to make sure the Power Switch is in its "OFF" position and unplug the Power Cord from its electrical outlet.
13. Wait until the Saw Blade comes to a complete stop. Raise the Body Frame to its full vertical position. Turn the Vertical Locking Arm (35) clockwise until it firmly locks into the Body Frame and use the Feed Lock Lever to lock Body Frame in position. Remove the workpiece from the Vise assembly and scrap material from the Table (1) of the Band Saw. Then, slowly lower the Body Frame to its horizontal position.
14. Clean, lock in the horizontal position by using the Feed Lock Lever (see Figure S on page 18), then store the tool indoors out of children's reach.

## Maintenance and Servicing



Procedures not specifically explained in this manual must be performed only by a qualified technician.

### **WARNING**

#### **TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:**

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.

#### **TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:**

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

## Cleaning, Maintenance, and Lubrication

- BEFORE EACH USE**, inspect the general condition of the tool. Check for:
  - loose hardware,
  - misalignment or binding of moving parts,
  - cracked or broken parts,
  - damaged electrical wiring, and
  - any other condition that may affect its safe operation.
- BEFORE EACH USE**, inspect the Saw Blade (140). Using a dull Saw Blade will cause excessive wear on the Motor of the Band Saw and will not produce a satisfactory cut. Replace with a new Saw Blade when needed.
- AFTER USE**, wipe external surfaces of the tool with clean cloth. **To clean the exterior parts of the Band Saw**, use only a clean cloth and mild detergent or mild solvent to clean the body of the Saw. **Do not immerse any electrical part of the machine in any liquids.**
- Periodically, wear ANSI-approved safety goggles and NIOSH-approved breathing protection and blow dust out of the motor vents using dry compressed air.
- When the Band Saw is not in use or when transporting the tool:** Always lower the Body Frame (118) to its horizontal position and use the Feed Lock Lever to secure the Body Frame in place.

**CAUTION!** All maintenance, service, or repairs not mentioned in this manual must only be performed by a qualified service technician.

**WARNING!** **TO PREVENT SERIOUS INJURY:** If the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.

### Replacing the Saw Blade

- Wear heavy-duty work gloves to avoid accidental cuts from the Saw Blade when performing this procedure.
- Raise the Body Frame (118) to its full vertical position. Turn the Vertical Locking Arm (35) clockwise until it firmly locks into the Body Frame and use the Feed Lock Lever to lock the Body Frame in position.
- Release Saw Blade tension by turning the Blade Tension Adjusting Knob (135). **(See Figure U)**
- Remove the Knobs (168) to open the Blade Back Cover (169) and access the Saw Blade **(see Figure U:)**.

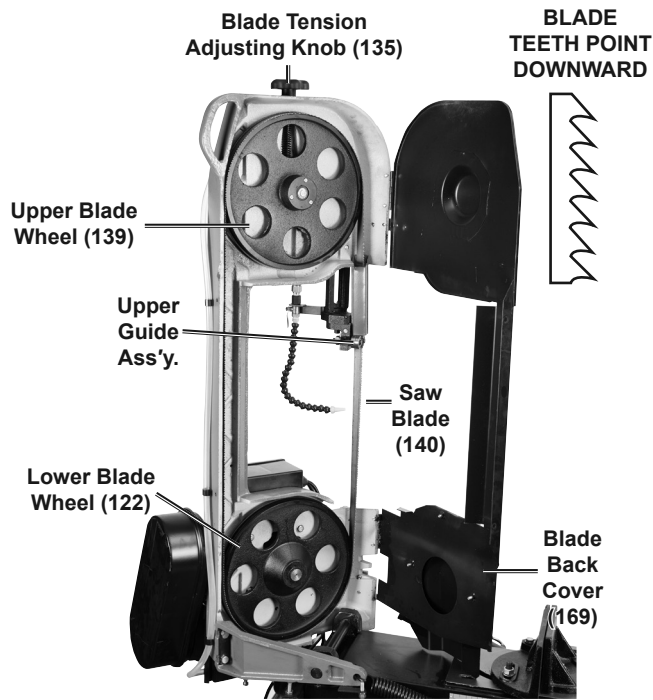


Figure U:

- Slip the old Saw Blade off the Upper Blade Wheel (139), Lower Blade Wheel (122), and Guide assemblies.

### Replacing the V-Belt

The Band Saw uses a size A650 V-Belt (102). To replace the V-Belt:

- Open the Pulley Cover (175) (see Figure V).

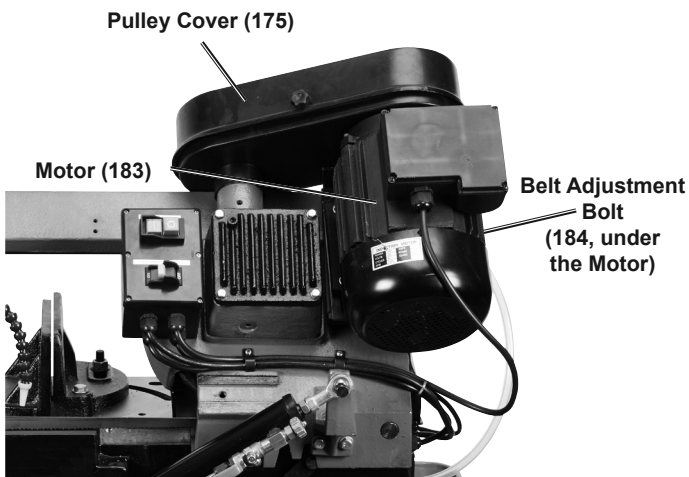


Figure V:

- Back off the Holding Nut (185) to free the Belt Adjustment Bolt (184, under the Motor, not shown) and press the Motor (183) toward the Body
- Remove the old V-Belt from the two Pulleys (100, 180) (see Figure W).

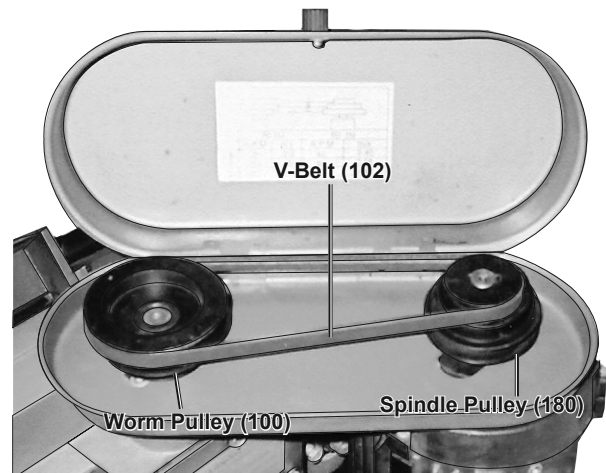


Figure W:

- Place the new Saw Blade between each of the Guide assemblies and around the Upper Blade Wheel and Lower Blade Wheel.

**IMPORTANT:** The teeth must be pointing downward toward the Motor.

**NOTE:** The Band Saw is equipped with a 93-3/8" long, 3/4" wide, 5 to 8 teeth per inch Saw Blade. The number of teeth per inch varies between 5 and 8 throughout the length of the blade. (93-3/8" L x 3/4" Wide x 5/8 Variable TPI) The machine will also accept Blades in 4, 6, 8, and 10 tooth sizes. The choice of Blade pitch is determined by the thickness of the material to be cut. The thinner the workpiece, the greater the number of teeth required for proper cutting. A minimum of 3 teeth should engage the workpiece at all times.

**CAUTION!** If the teeth of the Saw Blade are so far apart that they straddle the workpiece, severe damage to the workpiece and/or Saw Blade will result.

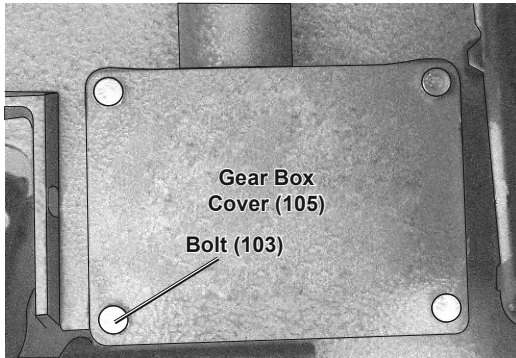
- Tighten the tension on the new Saw Blade by turning the Blade Tension Adjusting Knob.
- Close the Blade Back Cover, and secure with the Knobs.

- Place the new V-Belt (102) around the desired grooves in the Spindle Pulley (180) and Worm Pulley (100) (see Figure F on page 10).
- Adjust the position of the Motor (183) to obtain approximately 1/2" depression in the V-Belt when applying pressure with your thumb.
- Re-tighten the Belt Adjustment Bolt to anchor the Motor in place.
- Tighten the Holding Nut (185) against the Motor Mounting Bracket.
- Install the Knob to hold the Pulley Cover closed.

## Lubricating the Worm Gear and Worm Shaft

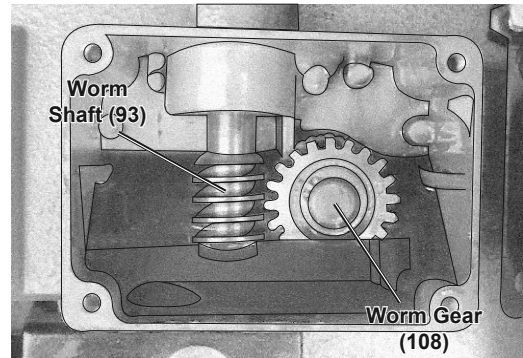
The Worm Shaft (93) and Worm Gear (108) run in an oil bath Gear Box and should not require an oil change more than once a year, unless the oil becomes contaminated or a leak occurs due to improper replacement of the Gear Box Cover (105). To change oil in the Gear Box:

1. Position the Body Frame (118) in the horizontal position (**see Figure S on page 18**).
2. Remove the four Bolts (103), Gear Box Cover (105), and Gear Box Gasket (106) (**see Figure X**).



**Figure X:**


3. Remove the old oil from inside the Gear Box and replace the oil using 140 weight gear oil. The new oil should just come to the edge of the Gear Box. Do not overfill (**see Figure Y**).



**Figure Y:**

4. Replace the Gear Box Gasket, Gear Box Cover, and four Bolts.

# Troubleshooting


Problem	Possible Causes	Likely Solutions
Tool will not start.	<ol style="list-style-type: none"> <li>1. Cord not connected.</li> <li>2. No power at outlet.</li> <li>3. Tool's thermal reset breaker tripped (if equipped).</li> <li>4. Internal damage or wear. (Carbon brushes or switch, for example.)</li> </ol>	<ol style="list-style-type: none"> <li>1. Check that cord is plugged in.</li> <li>2. Check power at outlet. If outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure circuit is right capacity for tool and circuit has no other loads.</li> <li>3. Turn off tool and allow to cool. Press reset button on tool.</li> <li>4. Have technician service tool.</li> </ol>
Tool operates slowly.	Extension cord too long or wire size too small.	Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See <b>Table A on page 3</b> .
Performance decreases over time.	<ol style="list-style-type: none"> <li>1. Saw Blade dull or damaged.</li> <li>2. Carbon brushes worn or damaged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace Saw Blade.</li> <li>2. Have qualified technician replace brushes.</li> </ol>
Excessive noise or rattling.	Internal damage or wear. (Carbon brushes or bearings, for example.)	Have technician service tool.
Overheating.	<ol style="list-style-type: none"> <li>1. Forcing machine to work too fast.</li> <li>2. Saw Blade dull or damaged.</li> <li>3. Blocked motor housing vents.</li> <li>4. Motor being strained by long or small diameter extension cord.</li> <li>5. Saw Blade tension is too high.</li> <li>6. V-Belt tension too high.</li> <li>7. Blade is too coarse or too fine for workpiece.</li> <li>8. Gear not aligned properly.</li> <li>9. Gears need lubrication.</li> </ol>	<ol style="list-style-type: none"> <li>1. Allow machine to work at its own rate.</li> <li>2. Replace Saw Blade.</li> <li>3. Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator while blowing dust out of motor using compressed air.</li> <li>4. Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See <b>Table A on page 3</b>.</li> <li>5. Gradually adjust Saw Blade tension until optimal tension has been achieved. See page 16.</li> <li>6. Gradually adjust V-Belt tension until optimal tension has been achieved. See page 10.</li> <li>7. See page 20 for recommended Blade type. Replace with more appropriate Saw Blade.</li> <li>8. Adjust Gears so that Worm is in center of Gear.</li> <li>9. Check Oil Bath. See page 22.</li> </ol>
Excessive Blade breakage.	<ol style="list-style-type: none"> <li>1. Saw Blade is loose.</li> <li>2. Saw Blade turns too quickly or too slowly.</li> <li>3. Vise is not gripping the workpiece.</li> <li>4. Wheel Flange is eroding Saw Blade.</li> <li>5. Saw Blade teeth are spaced too widely for the workpiece material.</li> <li>6. Saw Blade is not permitted to reach full speed before workpiece is fed into it.</li> <li>7. Guides are poorly aligned.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten Blade tension.</li> <li>2. Check manual for correct Blade speed. See page 10.</li> <li>3. Clamp workpiece securely.</li> <li>4. Adjust Wheel alignment. See page 15.</li> <li>5. See page 20 for recommended Blade type. Replace with more appropriate Saw Blade.</li> <li>6. Allow Blade to reach full speed before feeding material into it.</li> <li>7. Adjust guides.</li> </ol>
 <b>Follow all safety precautions whenever diagnosing or servicing the tool.</b> <b>Disconnect power supply before service.</b>		

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Problem	Possible Causes	Likely Solutions
Premature Blade dulling	<ol style="list-style-type: none"> <li>1. Saw Blade teeth are spaced too widely for the workpiece material.</li> <li>2. Saw Blade turns too quickly.</li> <li>3. Body Frame descends too lightly.</li> <li>4. Saw Blade installed backwards.</li> <li>5. Insufficient Saw Blade tension.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace with appropriate Saw Blade. See page 21.</li> <li>2. Try next lower speed. See page 10.</li> <li>3. Increase pressure by reducing spring tension on side of Saw. See page 16.</li> <li>4. Re-install Saw Blade properly.</li> <li>5. Gradually increase Saw Blade tension until optimal tension has been achieved. See page 16.</li> </ol>
Blade cuts crooked.	<ol style="list-style-type: none"> <li>1. Vise is not square with Saw Blade.</li> <li>2. Feed pressure is too great.</li> <li>3. Guide Bearing is not adjusted properly.</li> <li>4. Insufficient Saw Blade tension.</li> <li>5. Blade Guides are too far from workpiece.</li> <li>6. Saw Blade is dull.</li> <li>7. Saw Blade turns too quickly or too slowly for workpiece.</li> <li>8. Saw Blade tracks too far away from Wheel Flanges.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust Vise so it is square with Blade. Always clamp work tightly in Vise.</li> <li>2. Reduce pressure by increasing spring tension on side of Saw. See page 16.</li> <li>3. Adjust Guide Bearing to 0.001" greater than maximum thickness, including the weld of the Saw Blade. See page 14.</li> <li>4. Gradually increase Saw Blade tension until optimal tension has been achieved. See page 16.</li> <li>5. Move Blade Guide as close to workpiece as possible.</li> <li>6. Replace Saw Blade. See page 20.</li> <li>7. Check page 10 for recommended speeds.</li> <li>8. Adjust Saw Blade tracking. See page 15.</li> </ol>
Blade cuts rough.	<ol style="list-style-type: none"> <li>1. Saw Blade turns too quickly.</li> <li>2. Feed pressure is too heavy.</li> <li>3. Saw Blade teeth are spaced too widely for the workpiece material.</li> </ol>	<ol style="list-style-type: none"> <li>1. See page 10 for recommended speeds.</li> <li>2. Reduce pressure by increasing spring tension on side of Saw. See page 16.</li> <li>3. Replace with appropriate Saw Blade. See page 21.</li> </ol>
Blade twists.	<ol style="list-style-type: none"> <li>1. Saw Blade is caught in the workpiece cut.</li> <li>2. Saw Blade tension is too high.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce pressure by increasing spring tension on side of Saw. See page 16.</li> <li>2. Gradually adjust Saw Blade tension until optimal tension has been achieved. See page 16.</li> </ol>
Unusual wear on side/back of Blade.	<ol style="list-style-type: none"> <li>1. Blade Guide Bearing Bracket is loose.</li> <li>2. Blade Guide Bearings are out of place.</li> <li>3. Blade Guides are worn down.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten Blade Guide Bearing Bracket.</li> <li>2. Adjust Blade Guide Bearings. See page 14.</li> <li>3. Replace Blade Guides. See page 14.</li> </ol>
 <b>Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.</b>		



## PLEASE READ THE FOLLOWING CAREFULLY

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THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

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## Parts List

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Part	Description	Qty
1	Table	1
2	Acme Screw	1
3	Washer Φ16	1
4	Screw M8x12	1
5	Hand Wheel	1
6	Screw M10x40	1
7	Washer Φ10	2
8	Moveable Vise Plate	1
9	Bracket	1
10	Screw M10x40	1
11	nut M12	1
12	Washer Φ12	1
13	Carriage Bolt	1
14	Set Screw M10x40	1
15	Mitering Vise Plate	1
16	Bushing	1
17	Support Rod	1
18	hex Bolt M8x20	1
19	Pivot Bracket	1
20	Washer	1
21	Screw M10x40	2
22	Support Plate	1
23	Spring	1
24	Spring Adjusting Rod	1
25	Spring Handle Bracket	1
26	Screw M8x16	1
27	Washer Φ8	1
28	nut M10	1
29	Washer Φ10	1
30	Socket Head Screw	1
31	Shaft	1
32	Stock Stop	1
33	Screw M8x30	1
34	Washer Φ8	1
35	Vertical Locking Arm	1
36	Support Plate	1
37	M10x30	1
38	Nut M10	1
39	Screw M8x16	2
40	Washer Φ8	2
41	Screw M8x30	1
42	Nut M8	1
43	Screw M8x16	2
44	Washer Φ8	2
45	Electrical Box	1
46	Switch	1
47	Cover	1
49	Power Switch	1
50	Wire Retainer	1
51	Coolant Pan	1
52	Filter	1
53	Screw M8x30	8
54	Washer Φ8	17
55	Nut M8	8
56	Leg (Right)	1
57	Leg (Left)	1
58	Screw M10x20	8

Part	Description	Qty
59	Washer Φ10	16
60	Nut	8
62	Limit Switch	1
62-1	Switch Box	1
62-2	Screw M6x8	2
62-3	Spring Washer	2
62-4	Washer 6	5
62-5	Screw M6x16	3
63	Panel	1
64	Hose	1
65	Screw M8x16	6
66	Washer Φ8	12
67	Nut M8	6
68	Coolant Tank	1
69	Pump Support	1
70	Cooling Pump	1
71	Screw M4x16	2
72	Washer Φ4	2
73	Nut M4	2
75	Hose Clamp	2
76	Hose	1
77	Tube Fitting 1/4"Pt	1
78	Nozzle Cock 1/4Ptx8'	1
79	Axle	2
80	Wheel	2
81	Pin	4
82	Hydraulic Arm	1
83	Washer Φ8	3
84	Screw M8x25	3
85	Screw	1
87	Hydraulic Arm Bracket	1
88	Support Rod	1
90	Flat Washer Φ10	1
91	Nut M10	1
92	Gear Box	1
93	Worm Shaft	1
94	Key 5X5x55	1
95	Bearing 6003Z	1
96	Bearing Bushing	1
97	Bearing 6003Z	2
98	C-Ring A17	1
99	Screw M8x12	1
100	Worm Pulley	1
101	Set Screw Mx12	2
102	V-Belt A650	1
103	Bolt M6x20	4
104	Washer Φ6	4
105	Gear Box Cover	1
106	Gear Box Gasket	1
107	Key 6X6x20	1
108	Worm Gear	1
109	Transmission Shaft	1
110	C-Ring 8	1
111	Key 6X6x20	1
112	Bushing	1
113	Bearing 180205	1
114	Bearing Bushing	1

## Parts List (cont'd)

Part	Description	Qty
115	Bearing 180205	1
116	Bearing Cover	1
117	Screw M4x8	3
118	Body Frame	1
118-1	Stop Tab	1
118-2	Screw	2
119	Spring Washer Φ10	4
120	M10x40	4
121	C-Ring	1
122	Lower Blade Wheel	1
122-1	Active Saw Wheel	1
123	Bolt M8x20	1
124	Pin 4X25	1
125	Slider	1
126	Blade Wheel Shaft (Front)	1
127	Sliding Guides Plate	2
128	Blade Tension Sliding Block	1
129	Screw M8x40	1
130	Screw M8x40	2
131	Spring Washer Φ8	2
133	Screw M8x16	4
134	Spring	1
135	Blade Tension Adjusting Knob	1
136	Bearing Bushing	1
137	C-Ring B35	1
138	Bearing 6202Z	2
139	Upper Blade Wheel	1
139-1	Bearing Cap	1
139-2	Screw M4x8	3
140	Saw Blade 2360X20x0.9	1
141	Washer Φ8	1
142	Screw M8x16	1
143	Switch Hip	1
144	Washer Φ6	1
145	Round Hd. Screw M6x16	1
145-1	Spring Washer 6	5
146	Nozzle Cock Support	1
146-1	Joint	1
146-2	Water Pipe Head	1
147	Screw M6x12	2
148	Knob M10x35	2
149	Horizontal Cutting Guard	1
150	nut M10x1	4
151	Spring Washer Φ10	4
152	Inner Blade Guide Bearing 80029	2
153	Adjustable Blade	1
154	Bearing Pin	2
155	Washer Φ8	1
156	Washer Φ10	2
157	Deflector Plate	1
157-1	Vertical Cutting Table	1
157-2	Vertical Cutting Table Support	1
158	Screw M4x8	3
159	Shaft	2
160	Shaft	2
161	Bearing 80029	8
162	C-ring A10	4
163	Upper Cutting Guard	1
164	Blade Guide Bracket	2
165	Blade Cover (Front)	1

Part	Description	Qty
166	Screw M6x12	6
167	Screw M8x25	2
168	Knob	4
169	Blade Back Cover	1
170	Wheel Cover	1
171	Washer Φ6	10
172	Screw M6x12	4
173	Knob	1
175	Pulley Cover	1
176	Washer Φ6	2
177	Screw M6x16	2
178	Shaft Key 6X6x40	1
179	Set Screw M8x12	1
180	Spindle Pulley	1
181	Screw M8x25	4
182	Washer Φ8	8
183	Motor	1
184	Belt Adjustment Bolt M8xc35	1
185	Nut M8	1
186	Motor Mount Plate	1
187	Nut M8	4
188	Screw M8x16	4
189	Washer Φ8	4
190	Motor Mount Bracket	1
191	Nut M8	1
192	Screw M8x16	1
193	Screw M6x12	2
194	Washer Φ6	2
195	Support Plate	1
196	Flat Gasket Φ10	1
198	Bolt M8x12	1
199	Handle	1
200	Screw M6x30	4
201	Flat Gasket Φ6	4
202	Support Foot	2
203	Nut M12	6
204	Self Locking M6	4
205	Screw M6x25	1
206	Brush	1
207	Self Locking M6	1
208	Brush Plate	1
209	Flat Mat Φ6	1
210	Nut M6	1
211	Bolt (not shown)	1
212	Flat Washer (not shown)	1
213	Nut (not shown)	1
214	Angle Scale (not shown)	1

SAFETY

SETUP

OPERATION

MAINTENANCE

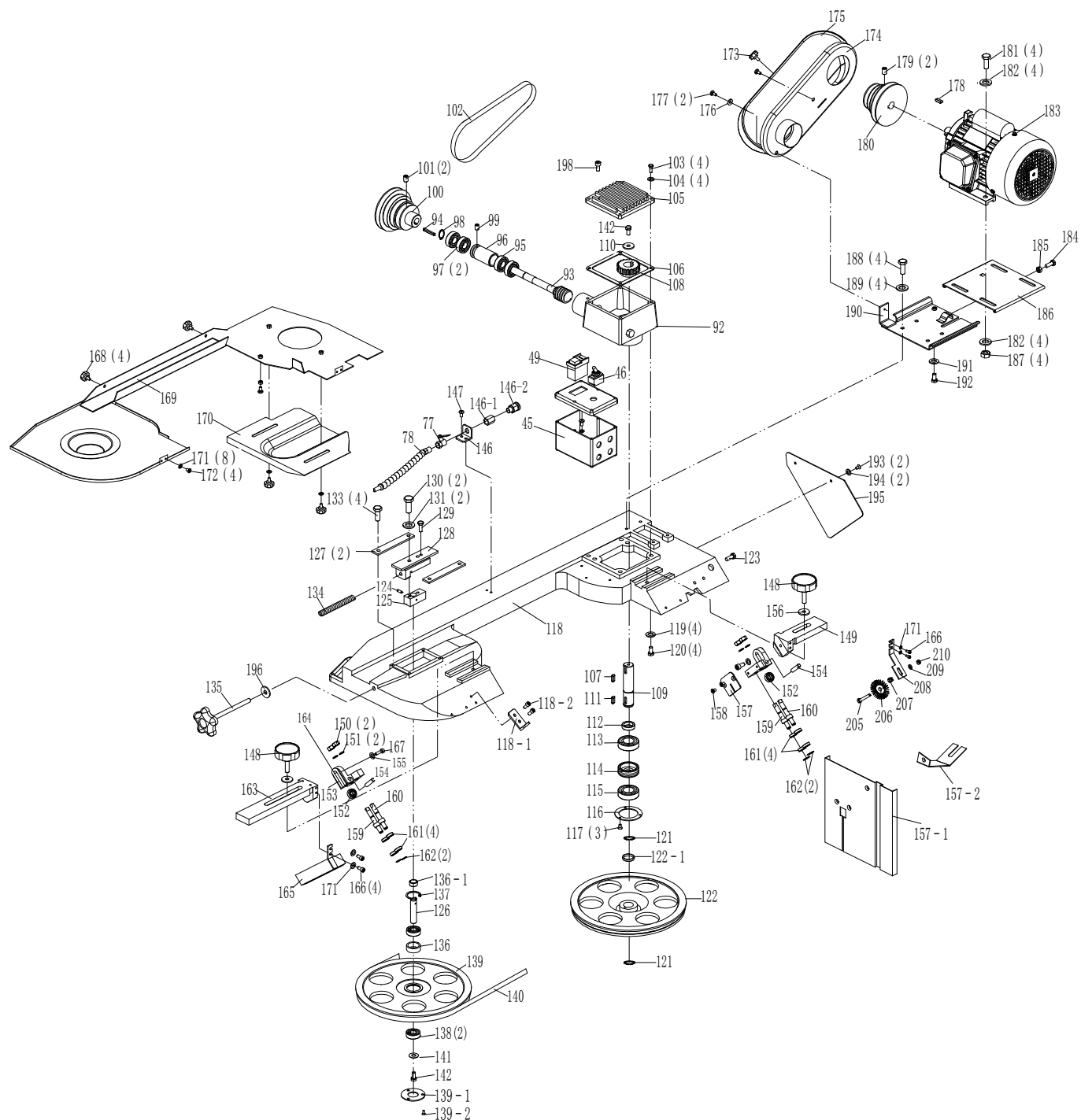
# Saw Body Assembly Diagram

SAFETY

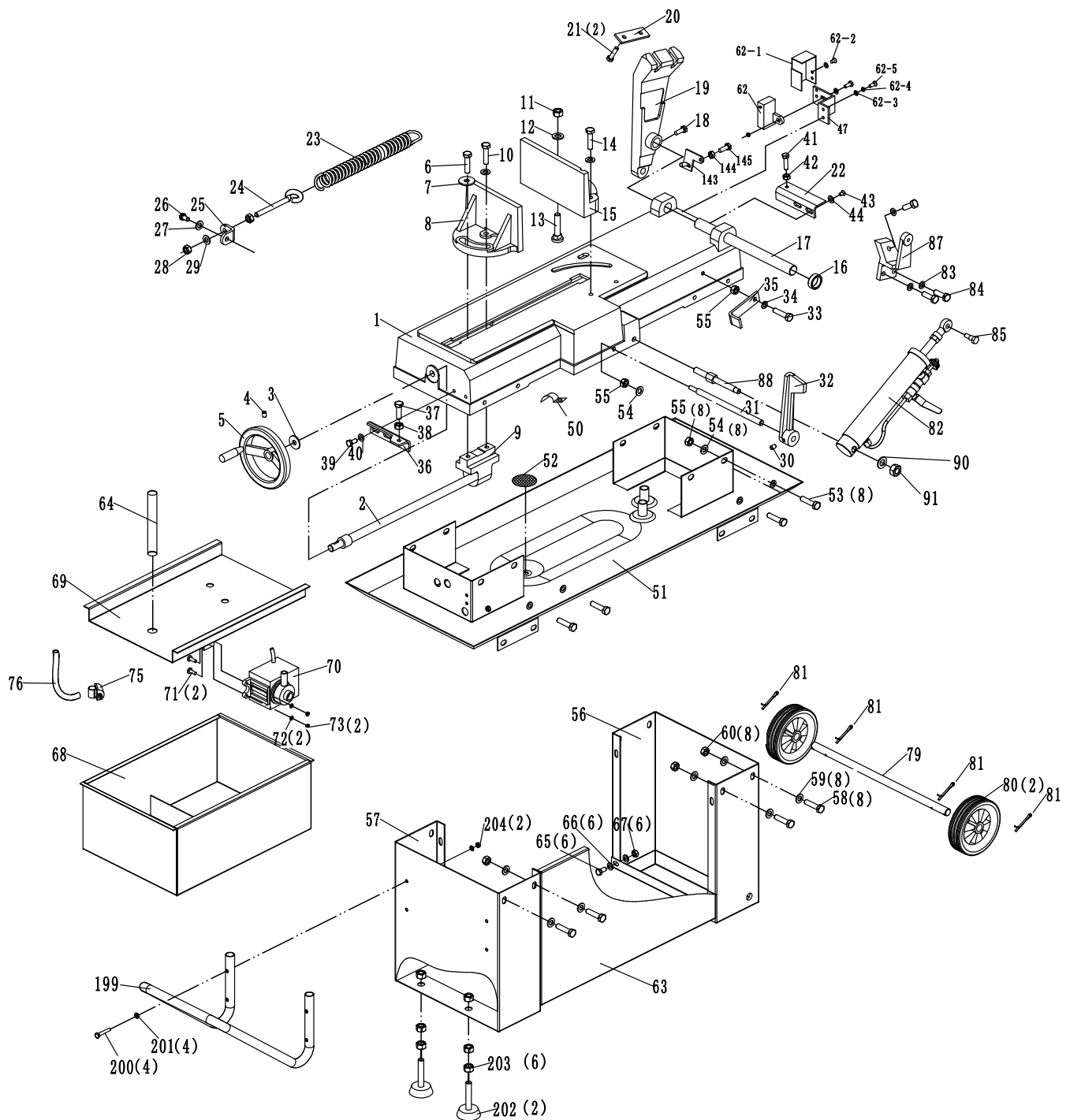
SETUP

OPERATION

MAINTENANCE



# Saw Stand Assembly Diagram



SAFETY

SETUP

OPERATION

MAINTENANCE

**Record Product's Serial Number Here:** \_\_\_\_\_

**Note:** If product has no serial number, record month and year of purchase instead.

**Note:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts. Specify UPC 193175335326 when ordering parts.





## Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.



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