

CENTRAL MACHINERY®

HORIZONTAL/VERTICAL METAL CUTTING BANDSAW

Model 93762

ASSEMBLY AND OPERATING INSTRUCTIONS



Due to continuing improvements, actual product may differ slightly from the product described herein.



3491 Mission Oaks Blvd., Camarillo, CA 93011
Visit our Web site at: <http://www.harborfreight.com>

**TO PREVENT SERIOUS INJURY,
READ AND UNDERSTAND ALL WARNINGS
AND INSTRUCTIONS BEFORE USE.**

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For technical questions, please call 1-800-444-3353.

PRODUCT SPECIFICATIONS

Item	Description
Electrical Requirements	120V / 60 Hz / 1 HP Motor / 1700 RPM (No Load) Power Cord: 82" Long, 18 AWG x 3C Power Cord Plug: 3-Prong, Grounded Power Switch: 2-Position Rocker w/Pull Out Safety Key
Cutting Capacity	4-1/2" Round Stock / 4" x 6" Rectangular Stock
Variable Speed Capacity	80 FPM / 120 FPM / 200 FPM
Throat Depth	4-1/2"
Angle Cutting Capacity	0° ~ 55° (Left) Miter Plate on Horizontal Cutting Bed
Blade Specifications	64" Long x 15/32" W x 0.025" Thick / 0.045" Kerf / 14 Teeth Per Inch
Horizontal Bed Dimensions	11-1/2" L x 7-1/2" W x 23-1/2" Height from Floor
Vertical Bed Dimensions	9-5/8" L x 9-1/2" W x 33-1/2" Height from Floor
V-Belt Type	0-506
Net Weight	132 Pounds

SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

GENERAL SAFETY RULES

 **WARNING!**
READ AND UNDERSTAND ALL INSTRUCTIONS
Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.
SAVE THESE INSTRUCTIONS

WORK AREA

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

ELECTRICAL SAFETY

4. **Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.** If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
5. **Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.
6. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators.** There is an increased risk of electric shock if your body is grounded.
7. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
8. **Do not abuse the Power Cord. Never use the Power Cord to carry the tools or pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately.** Damaged Power Cords increase the risk of electric shock.
9. **When operating a power tool outside, use an outdoor extension cord marked “W-A” or “W”.** These extension cords are rated for outdoor use, and reduce the risk of electric shock.

PERSONAL SAFETY

10. **Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
11. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.

12. **Avoid accidental starting. Be sure the Power Switch is off before plugging in.** Carrying power tools with your finger on the Power Switch, or plugging in power tools with the Power Switch on, invites accidents.
13. **Remove adjusting keys or wrenches before turning the power tool on.** A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.
14. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the power tool in unexpected situations.
15. **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

TOOL USE AND CARE

16. **Use clamps (not included) or other practical ways to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
17. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
18. **Do not use the power tool if the Power Switch does not turn it on or off.** Any tool that cannot be controlled with the Power Switch is dangerous and must be replaced.
19. **Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
20. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
21. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with a sharp cutting edge are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools “Do not use” until repaired.
22. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool’s operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.

23. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

SERVICE

24. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
25. **When servicing a tool, use only identical replacement parts. Follow instructions in the “*Inspection, Maintenance, And Cleaning*” section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES

1. **Maintain labels and nameplates on the Bandsaw.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
2.  **Always wear safety impact eye goggles when using the Bandsaw.** Using personal safety devices reduce the risk for injury. Safety impact eye goggles are available from Harbor Freight Tools.
3. **Maintain a safe working environment.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use a power tool in areas near flammable chemicals, dusts, and vapors. Do not use this product in a damp or wet location.
4. **Avoid unintentional starting.** Make sure you are prepared to begin work before turning on the Bandsaw.
5. **Do not force the Bandsaw.** This tool will do the work better and safer at the speed and capacity for which it was designed. Do not force the Saw Blade into the workpiece being cut.
6.  **WARNING!** Keep hands and fingers away from cutting area and Saw Blade.
7. **Never leave the Bandsaw unattended when it is plugged into an electrical outlet.** Turn off the tool, and unplug it from its electrical outlet before leaving.

8. **Make sure the Bandsaw 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 Bandsaw from accidentally moving.
9. **Make sure the Table of the Bandsaw and surrounding area are clear with the exception of the workpiece to be cut.**
10. **Before using the Bandsaw, check to make sure the Saw Blade is properly mounted and is not cracked or bent.**
11. **Industrial applications must follow OSHA guidelines.**
12. **Never stand on the Bandsaw.** Serious injury could result if the Bandsaw is tipped or if the rotating Saw Blade is accidently contacted.
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 Bandsaw when the tool is in its upright position.**
17. **When moving the Bandsaw, always have its Head lowered to its horizontal position and the Locking Pin (115) inserted in the Pivot (120).**
18. **Allow the Saw Blade to rotate to full speed before feeding a workpiece into the Blade.** When turning off the Bandsaw, allow the Saw Blade to spin down and stop on its own. Do not press against the Saw Blade to stop it.
19. **To avoid accidental injury, always wear heavy duty work gloves when changing the Saw Blade.**
20. **The Saw Blade will become hot while cutting.** Allow the Saw Blade to completely cool before handling.
21. **Do not force the workpiece into the Saw Blade when cutting.** Apply moderate pressure, allowing the Saw Blade to cut without being forced.
22. **Turn off the Bandsaw and allow the Saw Blade to completely stop if the Saw Blade is to be backed out of an uncompleted cut.**

23. **Never attempt to remove material stuck in the moving parts of the Bandsaw while it is plugged in and running.**
24. **Make sure the workpiece to be cut off has sufficient room to move sideways.** Failure to do so may result in off-cut binding against the Saw Blade.
25. **Always unplug the Bandsaw from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.**
26. **Keep this product and all other tools and equipment away from children and animals.** Do not allow spectators in the work area.
27. **Keep all safety guards in place and in proper working order.**
28. **This Bandsaw is designed for indoor use only.**
29. **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. See page 27.**
30.  **WARNING!** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are: lead from lead-based paints, crystalline silica from bricks and cement or other masonry products, arsenic and chromium from chemically treated lumber. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, *et seq.*)
31.  **WARNING!** People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.
32.  **WARNING!** The warnings and cautions discussed in this 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.

SAVE THESE INSTRUCTIONS

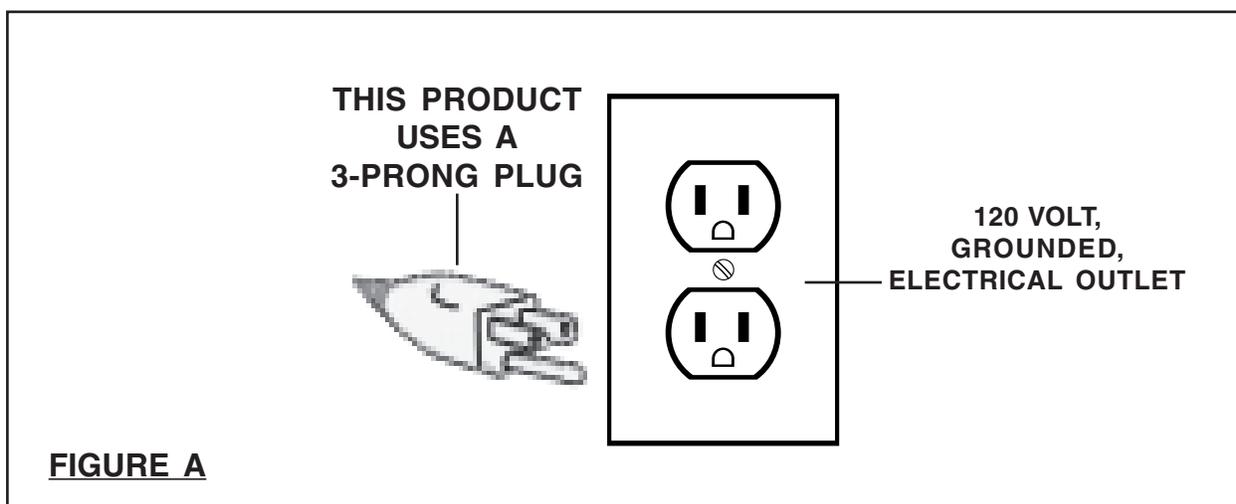
GROUNDING

WARNING!

Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

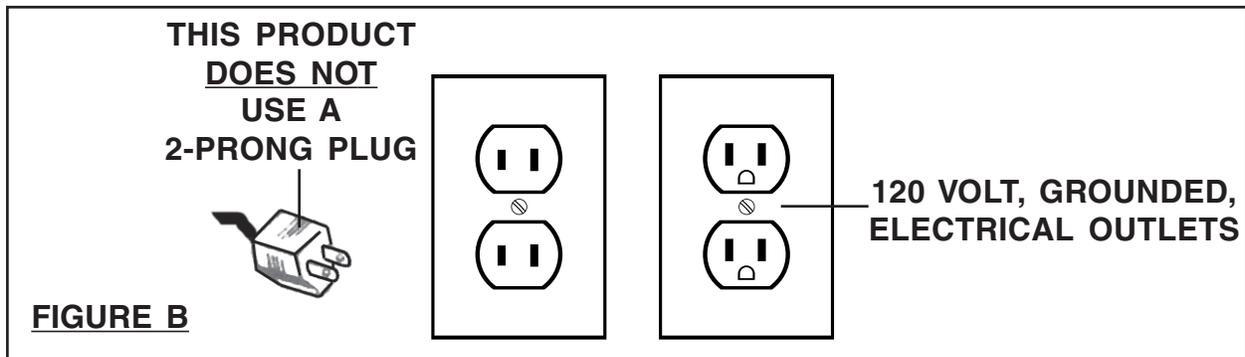
GROUNDING TOOLS: TOOLS WITH THREE PRONG PLUGS

1. Tools marked with “Grounding Required” have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. **(See Figure A.)**
2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool’s grounding system and must never be attached to an electrically “live” terminal. **(See Figure A.)**
3. Your tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration. **(See Figure A.)**



DOUBLE INSULATED TOOLS: TOOLS WITH TWO PRONG PLUGS

4. Tools marked “Double Insulated” do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. **(See Figure B.)**
5. Double insulated tools may be used in either of the 120 volt outlets shown in the following illustration. **(See Figure B.)**



EXTENSION CORDS

1. **Grounded** tools require a three wire extension cord. **Double Insulated** tools can use either a two or three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. **(See Figures C and D, next page.)**
3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. **(See Figures C and D, next page.)**
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Figures C and D, next page.)**
5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. **(See Figures C and D, next page.)**
6. If you are using an extension cord outdoors, make sure it is marked with the suffix “W-A” (“W” in Canada) to indicate it is acceptable for outdoor use.

7. Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
8. Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120 VOLT)					
NAMEPLATE AMPERES (At Full Load)	EXTENSION CORD LENGTH				
	25 Feet	50 Feet	75 Feet	100 Feet	150 Feet
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

FIGURE C * Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

SYMBOLOLOGY

	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
V ~	Volts Alternating Current
A	Amperes
n_oxxxx/min.	No Load Revolutions per Minute (RPM)

FIGURE D

UNPACKING

When unpacking, check to make sure all the parts shown on the **Parts Lists on pages 31 and 32** are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

ASSEMBLY INSTRUCTIONS

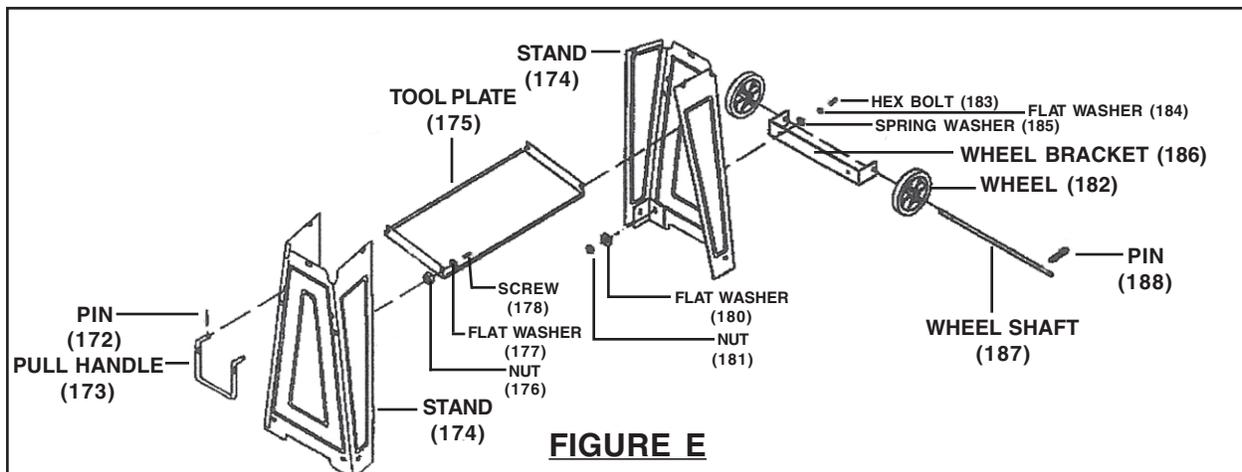
NOTE:

For additional information regarding the parts listed in the following pages, refer to the **Assembly Diagram on page 33**.

1.  **CAUTION!** Always make sure the Power Switch (164) for the Bandsaw is in its “OFF” position and the tool is unplugged from its electrical outlet prior to assembling the tool, adding any accessories, or making adjustments to the tool.

To Assemble The Stand:

1. Insert the Pull Handle (173) into the two mounting holes located in the upper section of one Stand (174). Then secure the Pull Handle to the Stand, using two Pins (172). (See Figure E.)
2. Attach one end of the Tool Plate (175) to the upper section of one Stand (174), using two Screws (178), two Flat Washers (177), and two Nuts (176). (See Figure E.)
3. Attach the other end of the Tool Plate (175) to the upper section of the remaining Stand (174), using two Screws (178), two Flat Washers (177), and two Nuts (176). (See Figure E.)

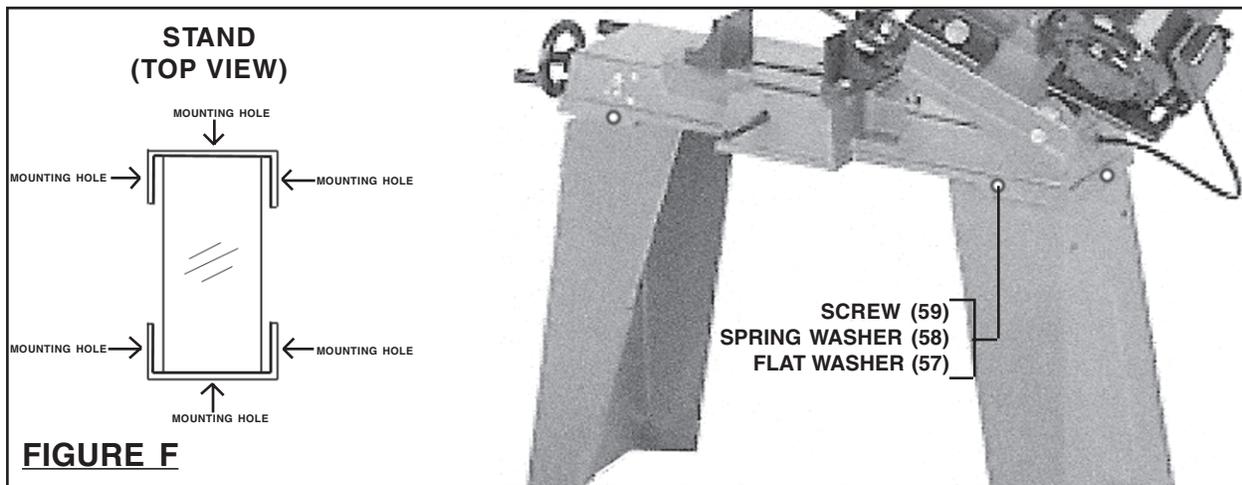


To Attach The Wheels To The Stand:

1. Align the two mounting holes in the Wheel Bracket (186) with the two mounting holes located in the lower section of the Stand (174). Then secure the Wheel Bracket to the Stand, using two Hex Bolts (183), two Spring Washers (185), two Flat Washers (184), two Flat Washers (180), and two Nuts (181).
(See Figure E, previous page.)

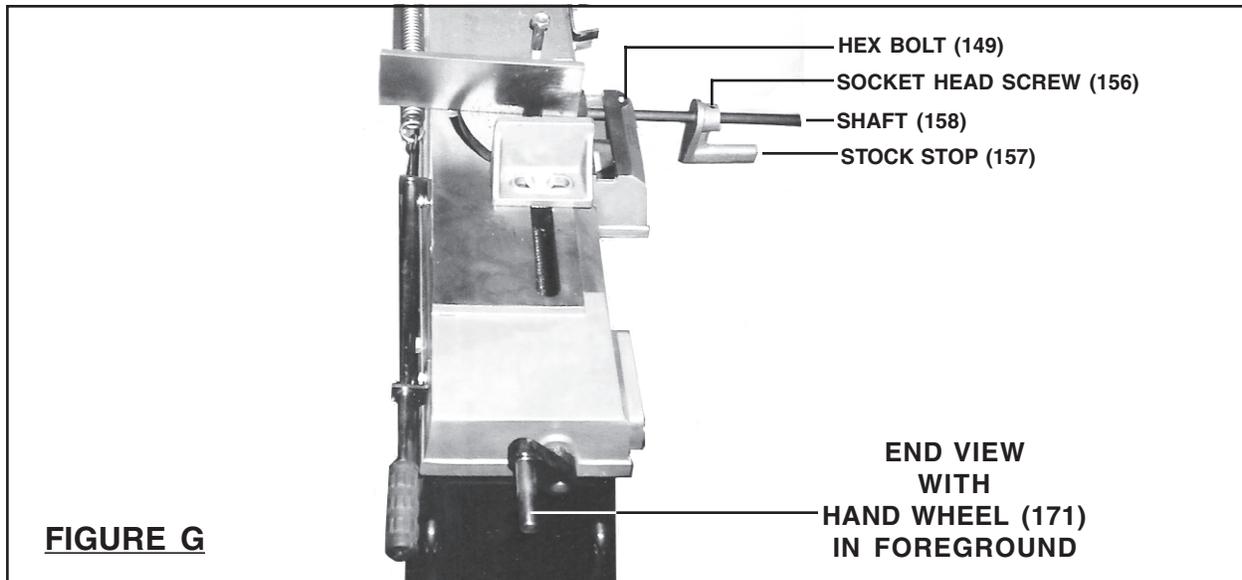
To Attach The Bandsaw To The Stand:

1. With additional manpower, and an adequate lifting device, carefully set the Bandsaw on top of the Stand assembly, making sure the upper section of the Stand fits *outside* the base of the Bandsaw. **(See Figure F.)**
2. Align the *three* threaded mounting holes in each end at the base of the Bandsaw with the three mounting holes located at each end of the Stand assembly. Then secure the Bandsaw to the Stand assembly, using three Screws (59), three Spring Washers (58), and three Flat Washers (57). **(See Figure F.)**



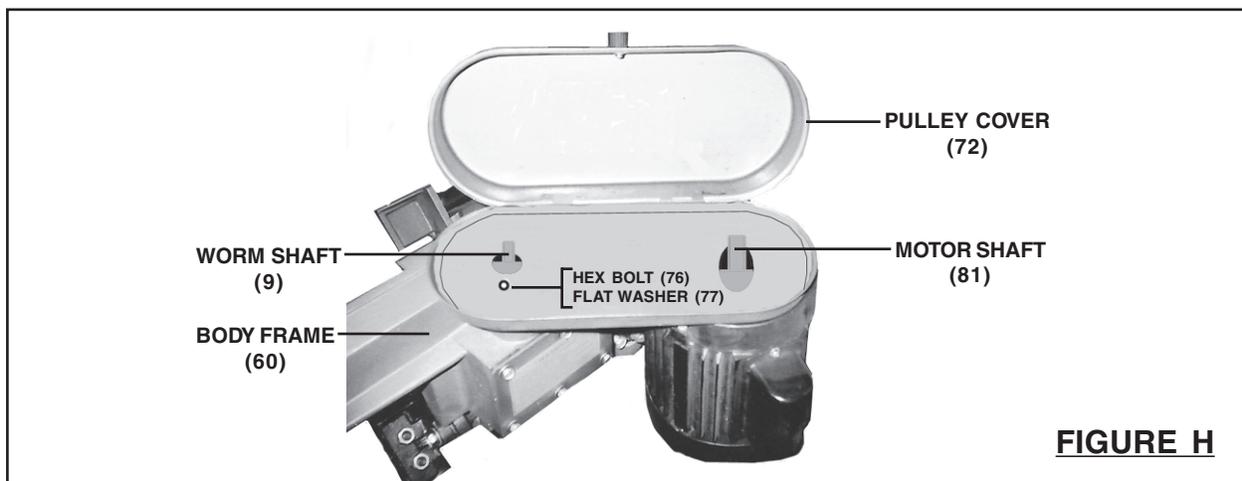
To Attach The Stock Stop Assembly:

1. When mounted to the Bandsaw, the adjustable Stock Stop assembly is used to make repetitive cuts of the same length.
2. To attach the Stock Stop assembly, slide the Shaft (158) into the mounting hole in the Machine Bed (142), and secure the Shaft by tightening the Hex Bolt (149).
(See Figure G, next page.)
3. Slide the Stock Stop (157) onto the Shaft (158), and secure by tightening the Socket Head Screw (156). **(See Figure G.)**



To Attach The Pulley Cover:

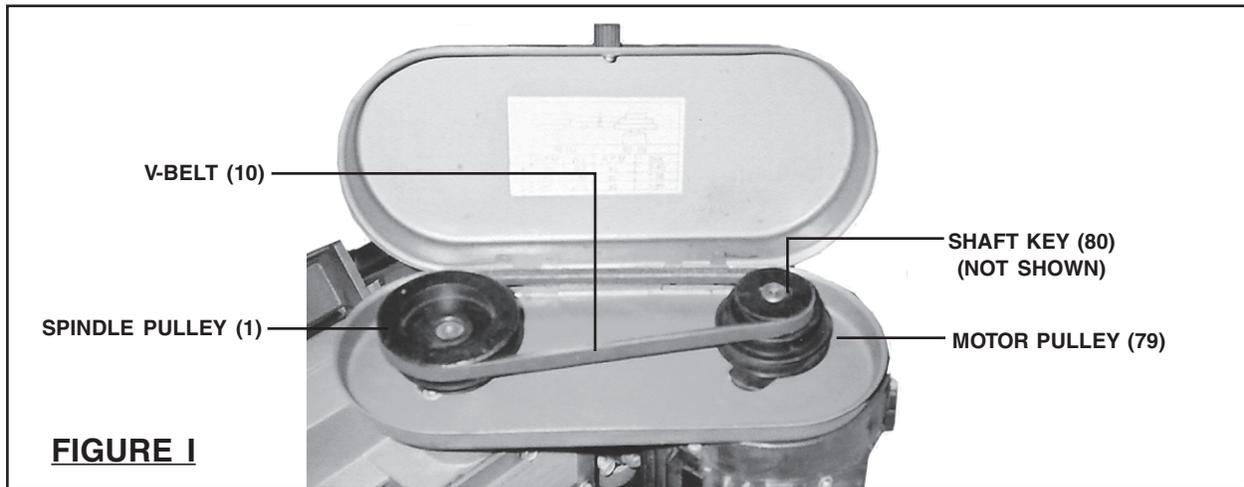
1. Position the Pulley Cover (72) over the Worm Shaft (9) and Motor Shaft (81). Align the mounting hole in the Pulley Cover with the mounting hole in the Body Frame (60). Then secure the Pulley Cover to the Bandsaw, using one Hex Bolt (76) and one Flat Washer (77). **(See Figure H.)**



To Attach The Spindle Pulley And Motor Pulley:

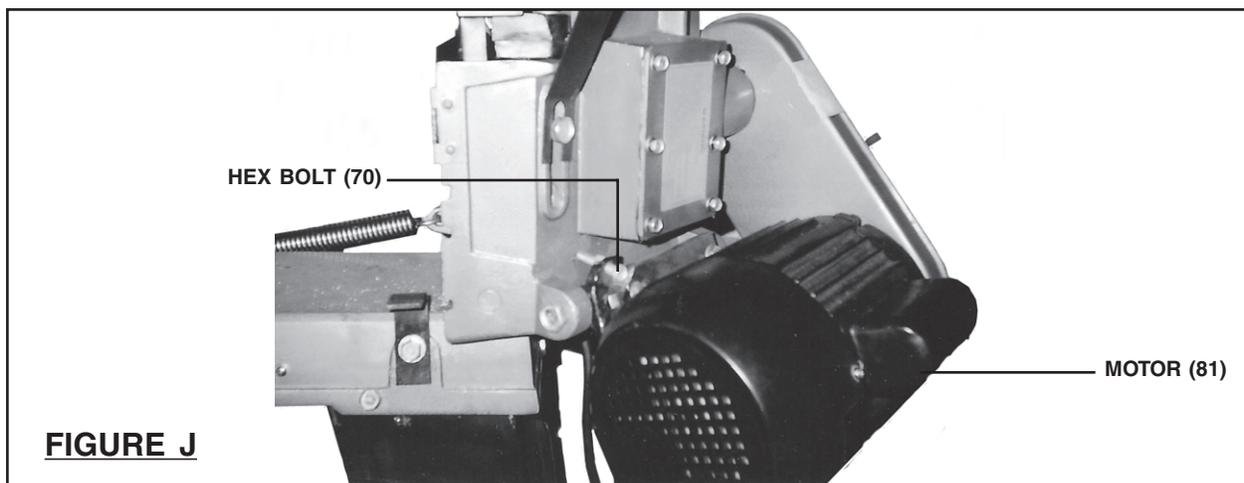
1. Slide the Spindle Pulley (1) fully onto the Worm Shaft (9). Then secure the Spindle Pulley to the Worm Shaft, using one Socket Head Screw (2). **(See Figure I, next page.)**
2. Insert the Shaft Key (80) in the slot on the Motor Shaft (81). Align the slot in the

Motor Pulley (79) with the Shaft Key. Slide the Motor Pulley fully onto the Motor Shaft. Then secure the Motor Pulley to the Motor Shaft, using one Socket Head Screw (2). (See Figure I.)



To Install The V-Belt:

1. The V-Belt (10) can be installed by loosening the Hex Bolt (70) and moving the Motor (81) forward. Place the V-Belt around the top grooves in the Spindle Pulley (1) and Motor Pulley (79). Next, move the Motor backwards to tighten the tension on the V-Belt. Then, re-tighten the Hex Bolt to secure the Motor in place. (See Figures I and J.)



To Adjust The Cutting Speed:

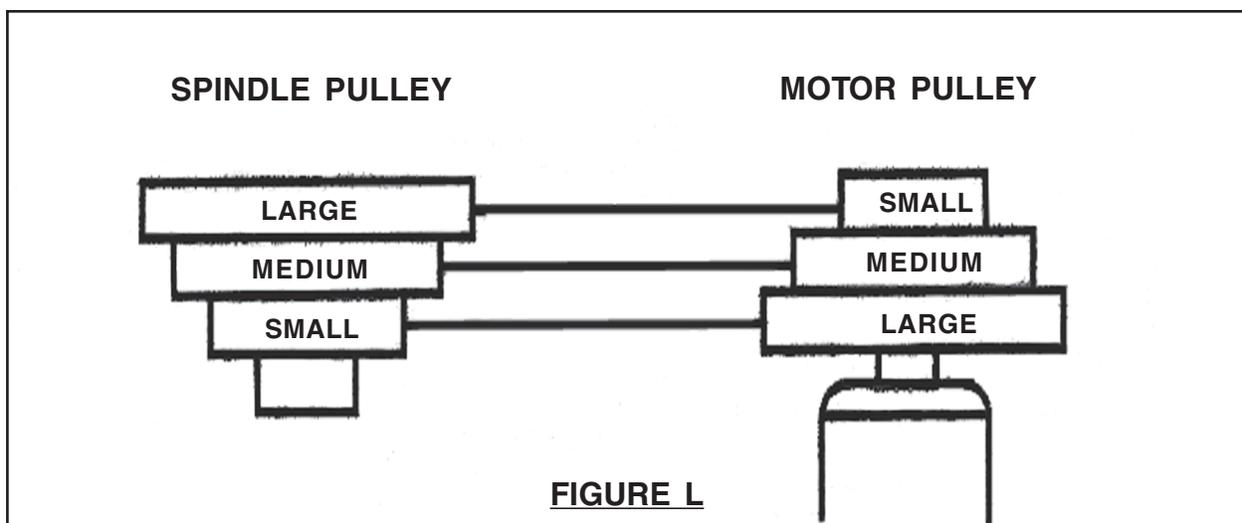
1. The Bandsaw is designed to cut at three different speeds: **80, 120, and 200 FPM** (Feet Per Minute) depending on the type of material being cut.

2. Refer to the Chart below to determine the proper cutting speed for a specific type of material being cut. (See Figure K.)

MATERIAL	SPEED (SFM)	BELT GROOVE USED	
		SPINDLE PULLEY	MOTOR PULLEY
Tool Steel, Stainless Alloy Steels, Bearing Bronze	80 FPM	LARGE	SMALL
Medium to High Carbon Steels, Hard Brass or Bronze Low to Medium Carbon Steels, Soft Brass	120 FPM	MEDIUM	MEDIUM
Aluminum, Plastic	200 FPM	SMALL	LARGE

FIGURE K

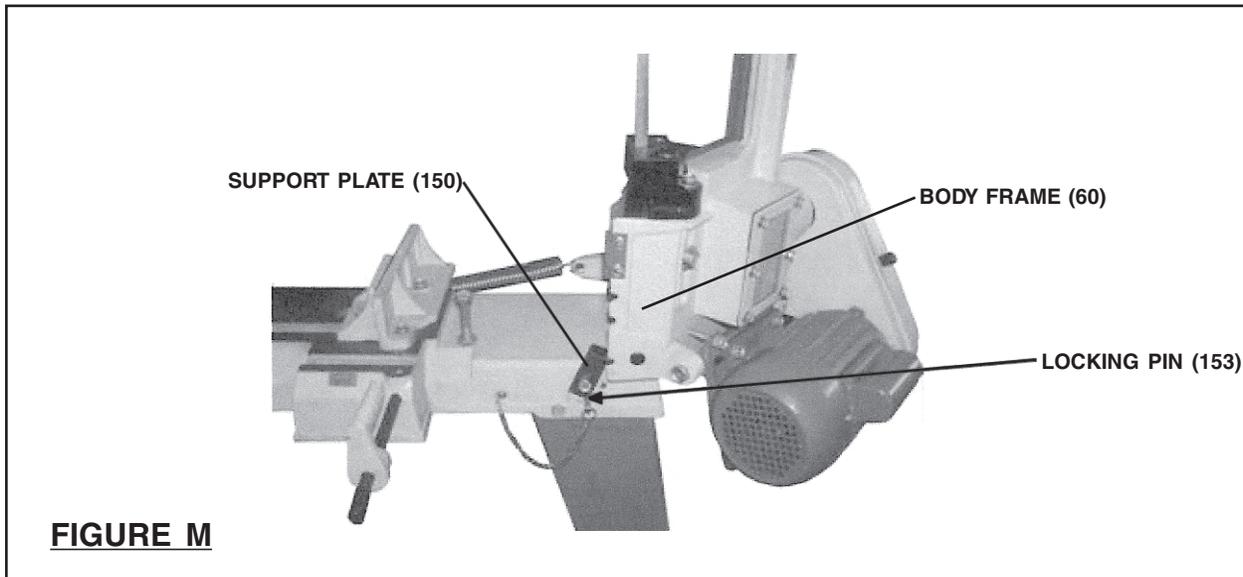
3. The cutting speed can be adjusted by loosening the Hex Bolt (70) and moving the Motor (81) forward. Place the V-Belt around the desired grooves in the Spindle Pulley (1) and Motor Pulley (79). Next, move the Motor backwards to tighten the tension on the V-Belt. Then, re-tighten the Hex Bolt to secure the Motor in place. (See Figures I, J, K, and L.)



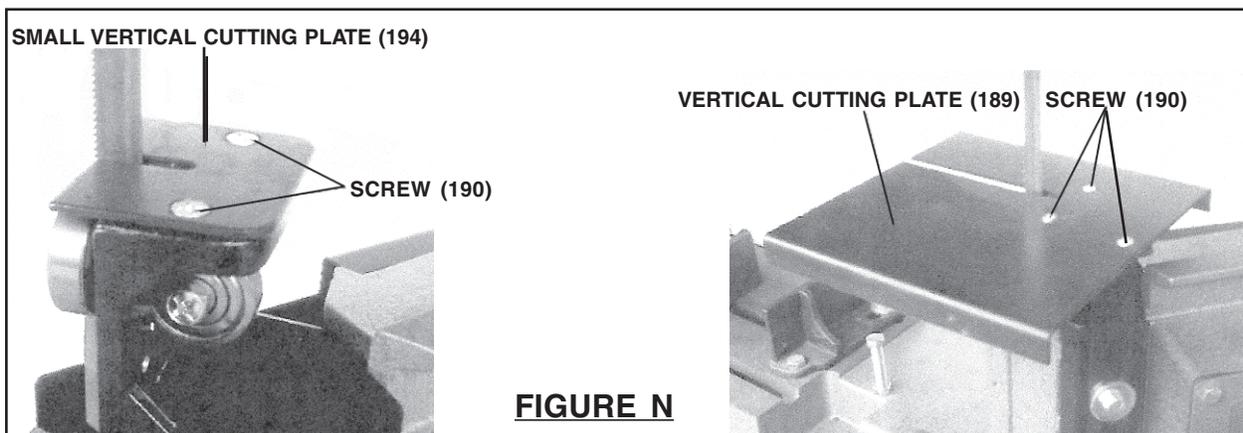
4.  **WARNING!** Always securely close the Lid on the Pulley Cover (72) after installing a V-Belt (10) or adjusting the cutting speed.

To Convert The Bandsaw For Vertical Use:

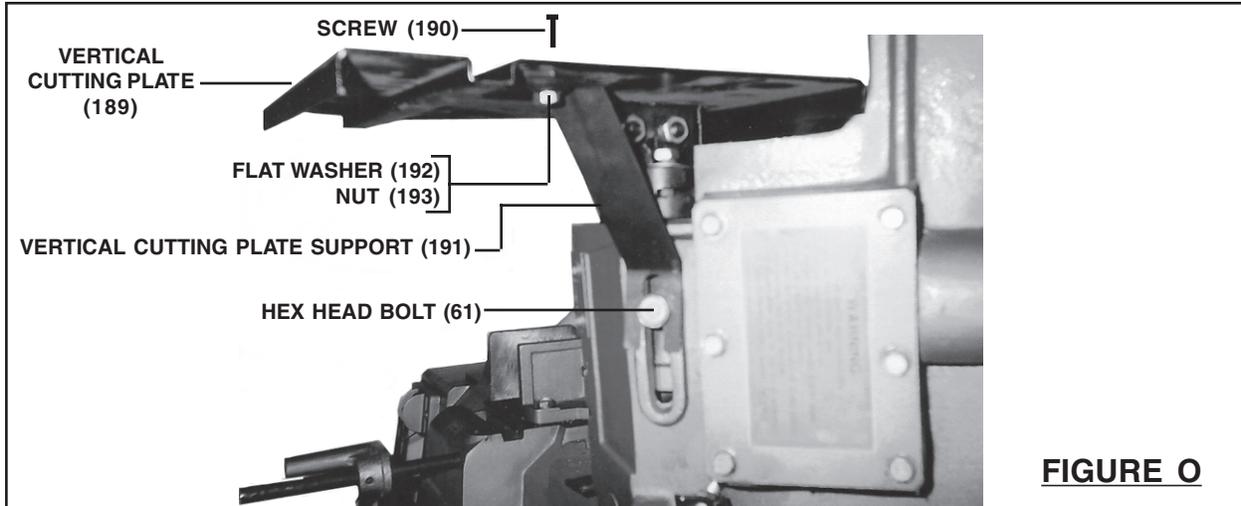
1. **NOTE:** Notching, slitting, and contour work is best done with the Bandsaw in its vertical position.
2. Raise the Saw Head to its full vertical position, making sure it locks in position by turning the Support Plate (150) to the right until it firmly locks into the Body Frame (60) and inserting the Locking Pin (153). **(See Figure M.)**



3. Remove the two Screws (190), and remove the Small Vertical Cutting Plate (194). **(See Figure N.)**
4. Guide the Saw Blade (82) through the slot in the Vertical Cutting Plate (189), and secure it in position with the two Screws (190). **(See Figure N.)**
5. Insert one Screw (190) downward through the mounting hole in the Vertical Cutting Plate (189). Attach the top section of the Vertical Cutting Plate



Support (191) to the Vertical Cutting Plate (189), using one Flat Washer (192) and one Nut (193). Remove the Hex Head Bolt (61). Position the Vertical Cutting Plate Support against the Body Frame (60). Then firmly re-tighten the Hex Head Bolt. (See Figures N and O.)

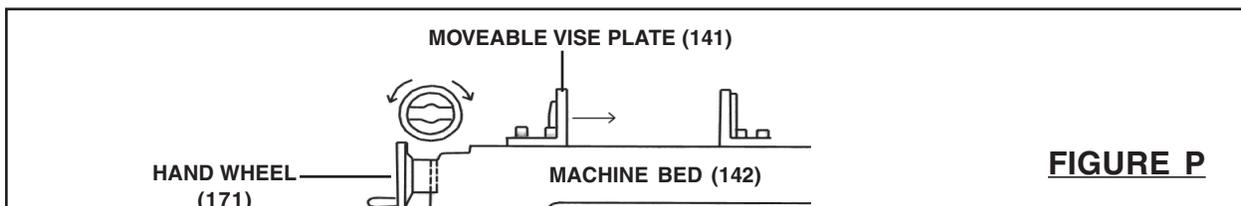


OPERATING INSTRUCTIONS

1. **⚠ CAUTION!** Always make sure the Power Switch (164) for the Bandsaw is in its “OFF” position and the tool is unplugged from its electrical outlet prior to making adjustments to the tool.

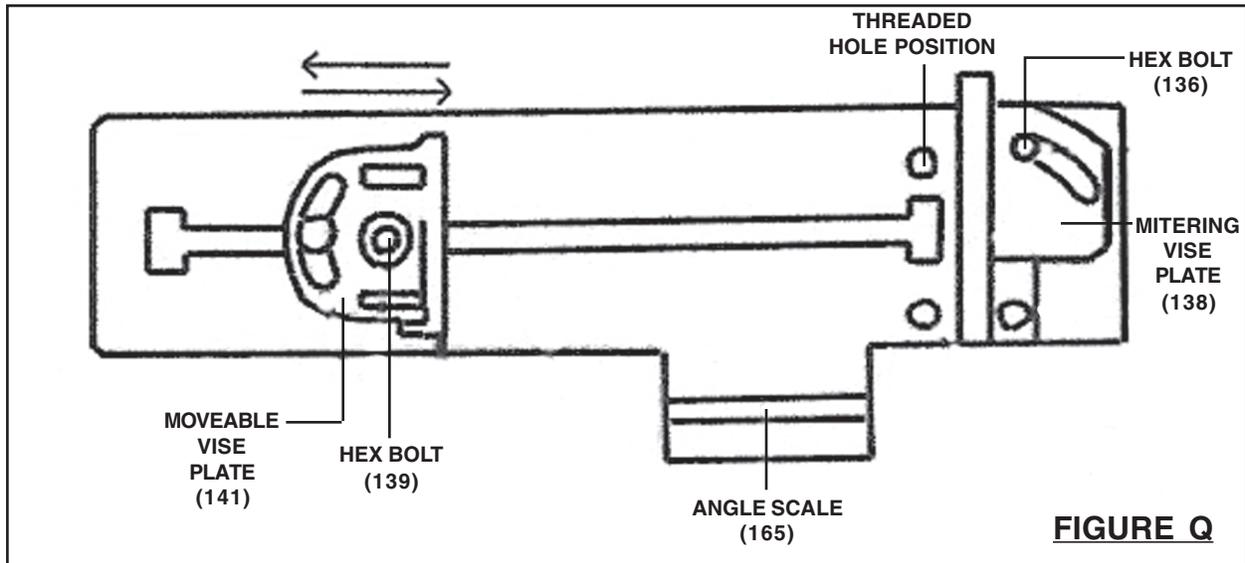
To Use The Vise:

1. Raise the Body Frame (60) to its vertical position, and lock the Body Frame in place with the Support Plate (150) and Locking Pin (153). (See Figure M.)
2. Open the Moveable Vise Plate (141) to accept the piece of material to be cut by rotating the Hand Wheel (171) counterclockwise. (See Figure P.)
3. Place the workpiece on the Machine Bed (142). If the workpiece is long, support the end. (See Figure P.)
4. Clamp the workpiece firmly with the Moveable Vise Plate (141) by rotating the Hand Wheel (171) clockwise. (See Figure P.)



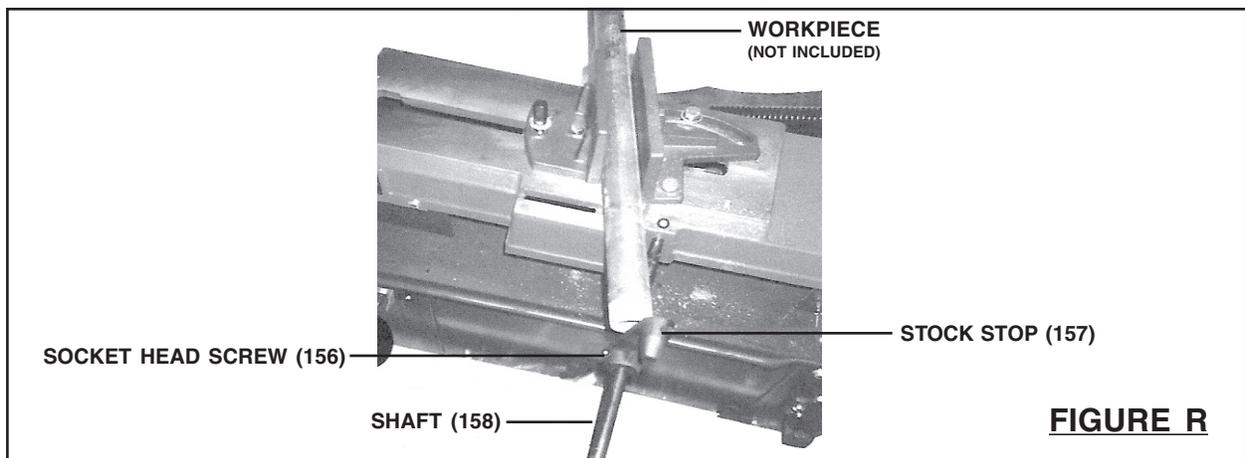
To Use The Quick Vise Adjustment For An Angle Cut:

1. Loosen the Hex Bolt (136), and move the Mitring Vise Plate (138) to the threaded hole position. Adjust the Mitring Vise Plate to the desired angle as indicated by the Angle Scale (165). Loosen the Hex Bolt (139), and adjust the Moveable Vise Plate (141) to parallel the Mitring Vise Plate. Then, re-tighten the Hex Bolt. **(See Figure Q.)**



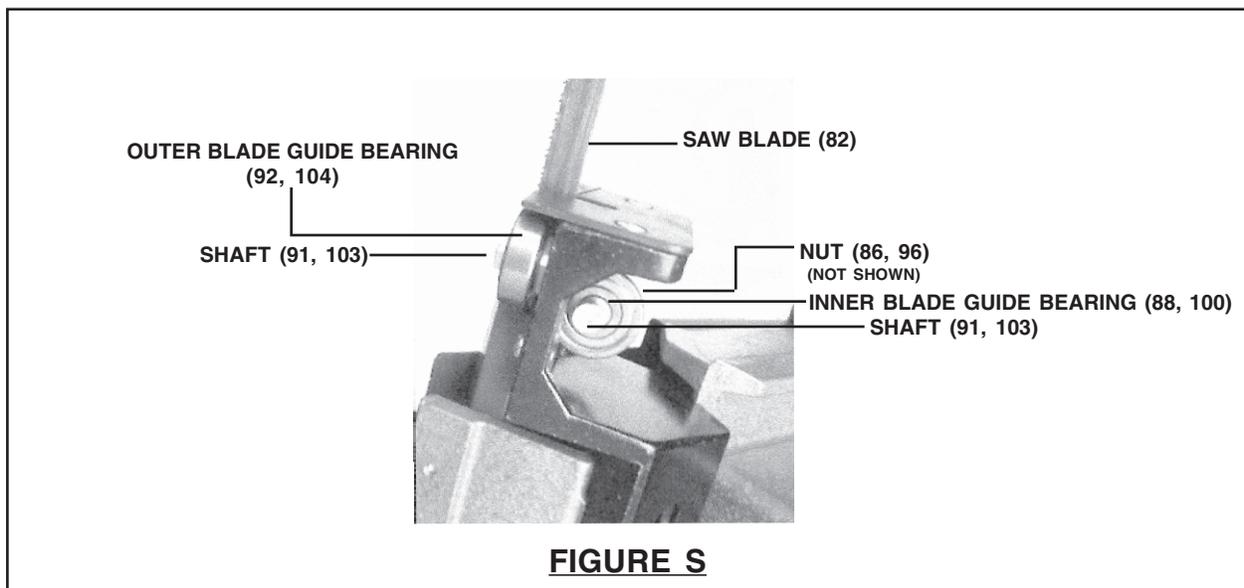
To Adjust The Stock Stop:

1. Loosen the Socket Head Screw (156) that holds the Stock Stop (157) to the Shaft (158). **(See Figure R.)**
2. Adjust the Stock Stop (157) to the desired length position. Then, re-tighten the Socket Head Screw (156). **(See Figure R.)**



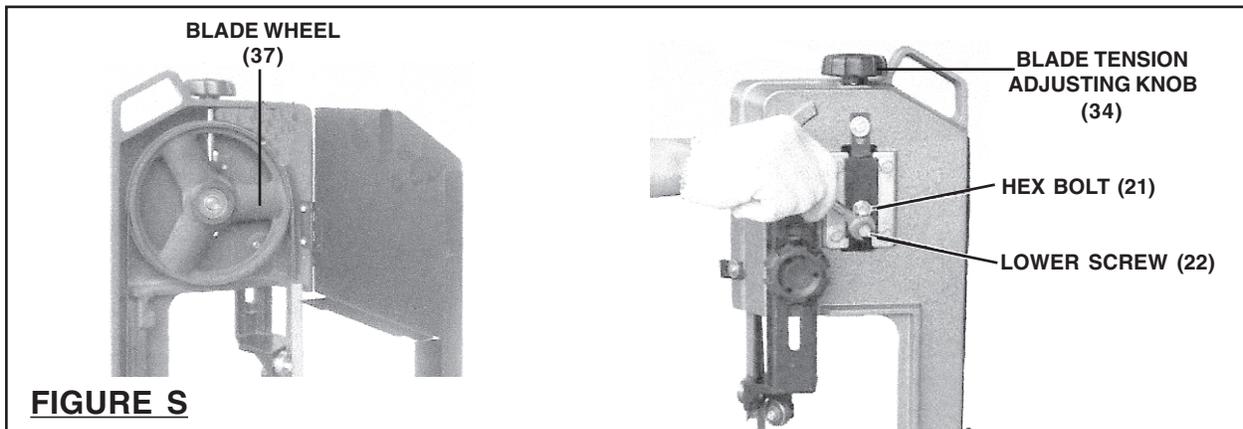
Adjusting The Blade Guide Bearings:

1. **NOTE:** Blade Guide Bearings (88, 92, 100, 104) adjustment is a critical factor in the performance of the Bandsaw.
2. It is always best to try a new Saw Blade (82) to see if it will correct poor cutting before attempting to adjust the Blade Guide Bearings. For example, 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.
3. If a new Saw Blade does not correct the problem, check the Blade Adjustable Seats (83, 110) to obtain the proper clearance. **(See Figure S.)**
4. **NOTE:** There should be from .000" (just touching) to .001" clearance between the Saw Blade and Blade Guide Bearings (88, 92, 100, 104). To obtain this clearance adjust as follows:
 - A. The *Outer* Blade Guide Bearings (92, 104) are mounted to Shafts (91, 103) and can be adjusted. **(See Figure S.)**
 - B. Loosen the Nuts (86, 96) while holding the Shafts (91, 103) with an Allen wrench (not included). **(See Figure S.)**
 - C. Position the Shafts (91, 103) by turning it to the desired position of clearance. Then, re-tighten the Nuts (86, 96). **(See Figure S.)**
 - D. Adjust the *Inner* Blade Guide Bearings (88, 100) in the same manner.



Adjusting The Blade Tracking:

1. Raise the Saw Head to its full vertical position, making sure it locks in position by turning the Support Plate (150) to the right until it firmly locks into the Body Frame (60) and inserting the Locking Pin (153). **(See Figure M.)**
2. Turn on the Bandsaw. The Saw Blade (82) is tracking properly when the back of the Blade is just touching the edge of the Blade Wheel (37) flange. The back of the Blade should not be rubbing against the flange. **(See Figure T.)**
3. If adjustment is necessary, the Blade Guide Bearings (88, 92, 100, 104) should be clear of the Saw Blade (82). **(See Figure S.)**
4. Loosen the middle Hex Bolt (21) to a point where it is loose but snug. **(See Figure S.)**
5. With the Bandsaw running, turn the lower Screw (22) until the Saw Blade (82) is tracking properly, making sure Blade tension is maintained by turning the Blade Tension Adjusting Knob (34). **(See Figure S.)**
6. Make sure to re-tighten the middle Hex Bolt (21) when adjustment is complete. **(See Figure S.)**



Adjusting The Blade Tension:

1. Turn the Blade Tension Adjusting Knob (34) **clockwise** to increase tension on the Saw Blade (82). Turn the Blade Tension Adjusting Knob **counterclockwise** to decrease tension on the Saw Blade. Correct tension is acquired when the Saw Blade is just tight enough so that no slippage occurs between the Saw Blade and the Blade Wheels (37, 54). **(See Figure T, next page.)**
2. **NOTE:** When the Bandsaw is not in use over long periods of time, release the tension on the Saw Blade (82). **(See Figure T.)**

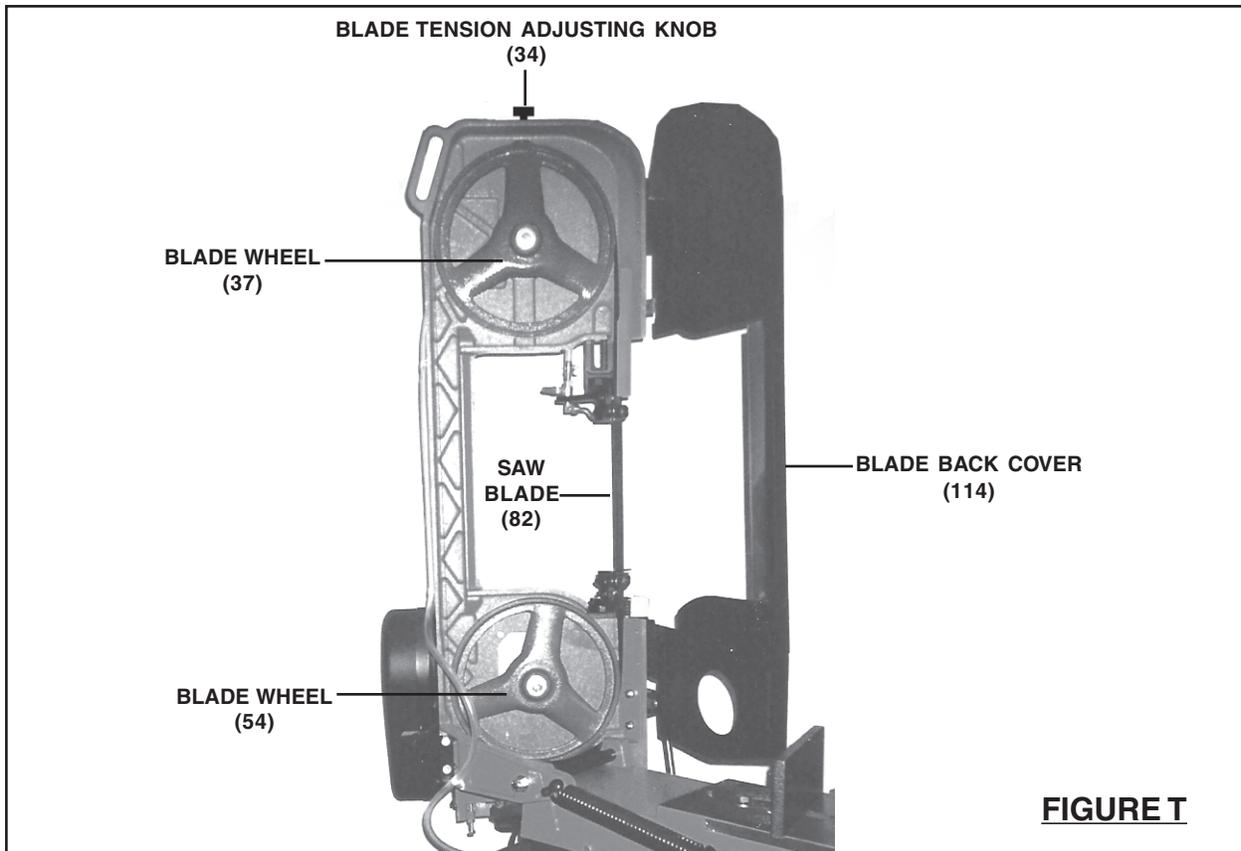


FIGURE T

Adjusting The Feed Rate:

1. The feed rate of the Body Frame (60) can be adjusted by turning the Handle (127) *clockwise* to decrease the feed rate or *counterclockwise* to increase the feed rate. Do not turn the Handle more than one turn at a time. Excessive feed pressure can break the Saw Blade (82). Insufficient feed pressure dulls the Saw Blade rapidly. **(See Figure U.)**

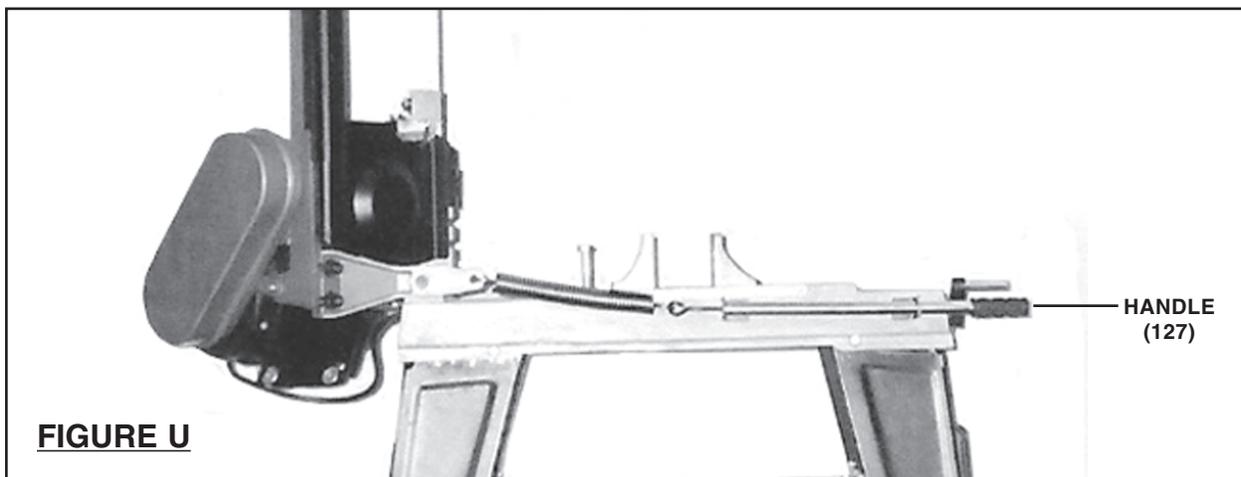


FIGURE U

Adjusting The Blade Guide Brackets:

1. The Right Blade Guide Bracket (90) and Left Blade Guide Bracket (102) are adjustable by loosening the Guide Adjusting Knob (45) and sliding the Brackets up or down to accommodate the depth of the workpiece. **(See Figure V.)**
2. The Blade Guide Brackets (90, 102) should be set as close as possible to the workpiece, without interfering with the workpiece or contacting the Machine Bed (142). **(See Figure V.)**
3. Once the adjustment is made, make sure to re-tighten the Guide Adjusting Knob (45). **(See Figure V.)**

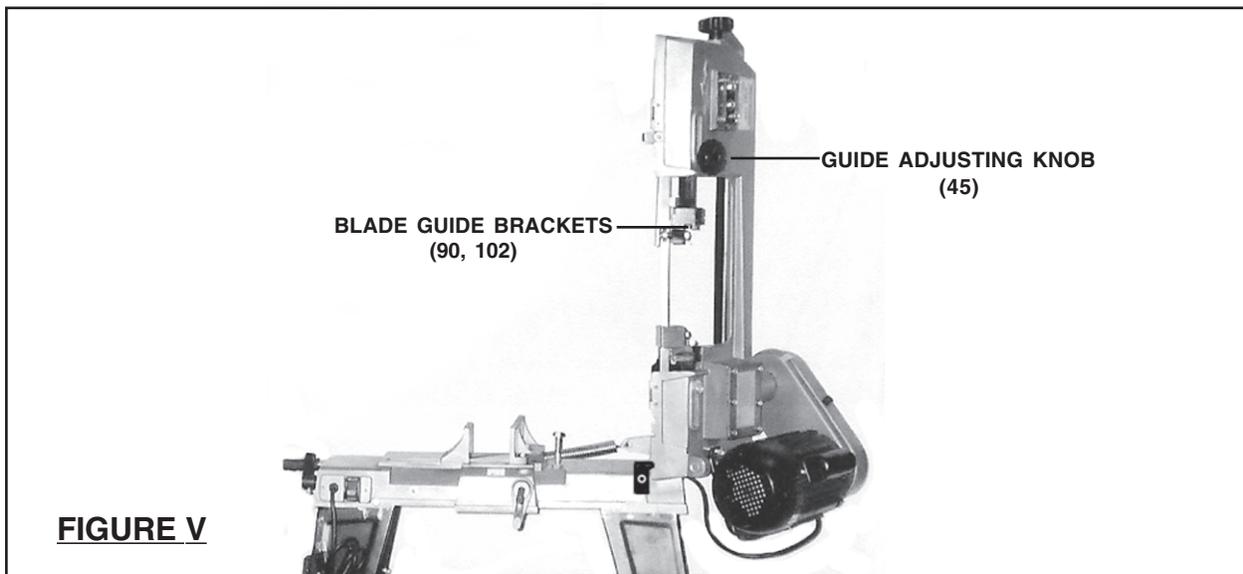
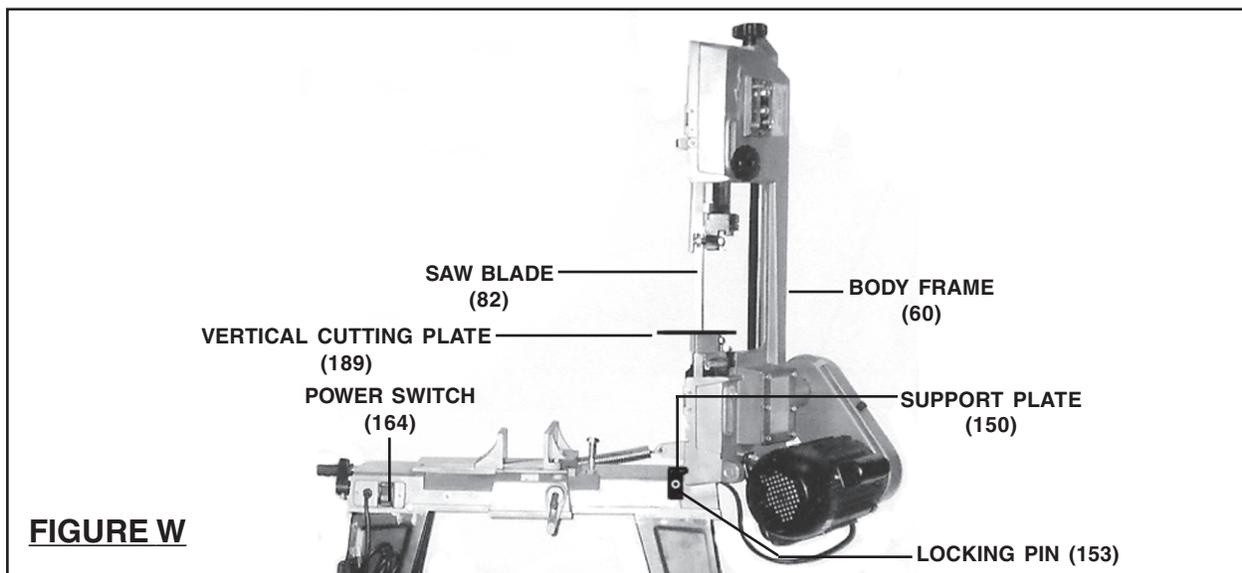


FIGURE V

Basic Bandsaw Operation -- Vertical Position:

1. **⚠ WARNING!** Always wear ANSI-approved safety impact eye goggles when operating the Bandsaw.
2. **Do not plug the Power Cord Plug into an electrical outlet until all necessary adjustments (as previously discussed in this manual) have been made.**
3. Raise the Body Frame (60) to its full vertical position, making sure it locks in place by turning the Support Plate (150) to the right until it firmly locks into the Body Frame and inserting the Locking Pin (153). **(See Figure W, next page.)**
4. Once all necessary adjustments to the Bandsaw have been made, plug the Power Cord Plug into the nearest **120 volt, grounded, electrical outlet.**

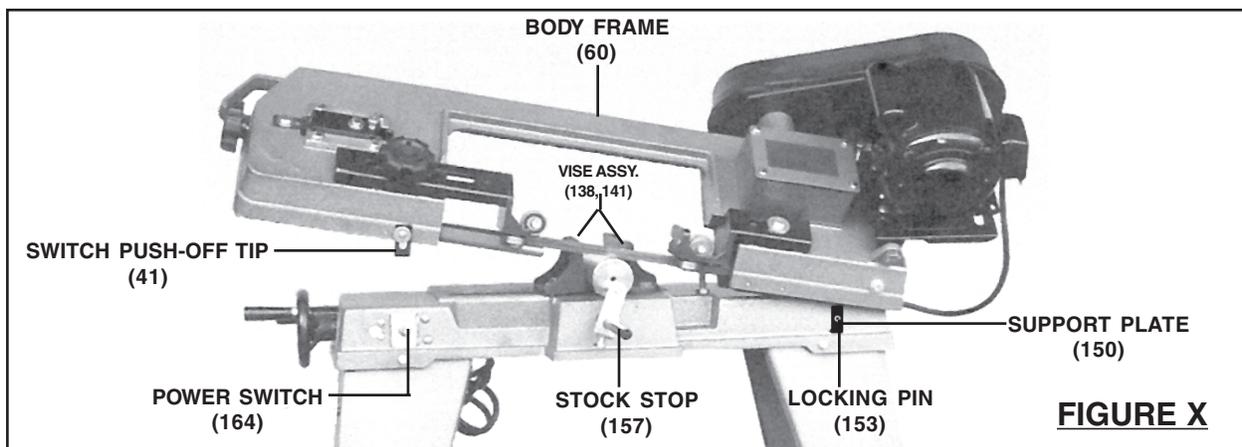
5. Turn the Power Switch (164) to its “ON” position. **(See Figure W.)**
6. **⚠ CAUTION!** Cut only *flat* workpieces when the Bandsaw is in its vertical position. Never attempt to cut pipes or other round objects with the Bandsaw in its vertical position.
7. Before cutting, turn on the Bandsaw and check for excessively loose Saw Blade (82) tension or machine vibration. If this is found, turn off the Bandsaw and correct the problem before using. **(See Figure W.)**
8. Set the workpiece on the Vertical Cutting Plate (189), making sure to keep downward pressure on the workpiece throughout the cutting process. **(See Figure W.)**
9. 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.
10. Allow the Saw Blade (82) to turn up to full speed before feeding the workpiece into the Saw Blade. **(See Figure W.)**
11. **⚠ WARNING!** Always keep hands and fingers safety away from the cutting area.
12. Feed the workpiece into the Saw Blade (82) gradually. Do not force the Bandsaw to remove material faster than it is designed to cut. **(See Figure W.)**
13. Never attempt to remove material stuck in the moving parts of the Bandsaw while it is plugged in and running. Turn off the Bandsaw if the workpiece is to be backed out of an uncompleted cut.



14. Once the cut is made, turn the Power Switch (164) to its “**OFF**” position. Then, unplug the Power Cord Plug from its electrical outlet. **(See Figure W.)**
15. Wait until the Saw Blade (82) comes to a complete stop. Then, remove the workpiece and scrap material from the Vertical Cutting Plate (189). **(See Figure W.)**
16. Remove the Locking Pin (153) and turn the Support Plate (150) to the left. Then, lower the Body Frame (60) to its horizontal position. **(See Figure W.)**

Basic Bandsaw Operation -- Horizontal Position:

1.  **WARNING!** Always wear ANSI-approved safety impact eye goggles when operating the Bandsaw.
2. **Do not plug the Power Cord Plug into an electrical outlet until all necessary adjustments (as previously discussed in this manual) have been made.**
3. Raise the Body Frame (60) to its full vertical position, making sure it locks in place by turning the Support Plate (150) to the right until it firmly locks into the Body Frame and inserting the Locking Pin (153). **(See Figure W.)**
4. Secure the workpiece in the Vise assembly (138, 141). 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 X.)**
5. If cutting several workpieces at the same length, you may wish to adjust the Stock Stop (157) to the desired position. **(See Figure X.)**
6. Once all necessary adjustments to the Bandsaw have been made, plug the Power Cord Plug into the nearest **120 volt, grounded, electrical outlet.** **(See Figure X.)**



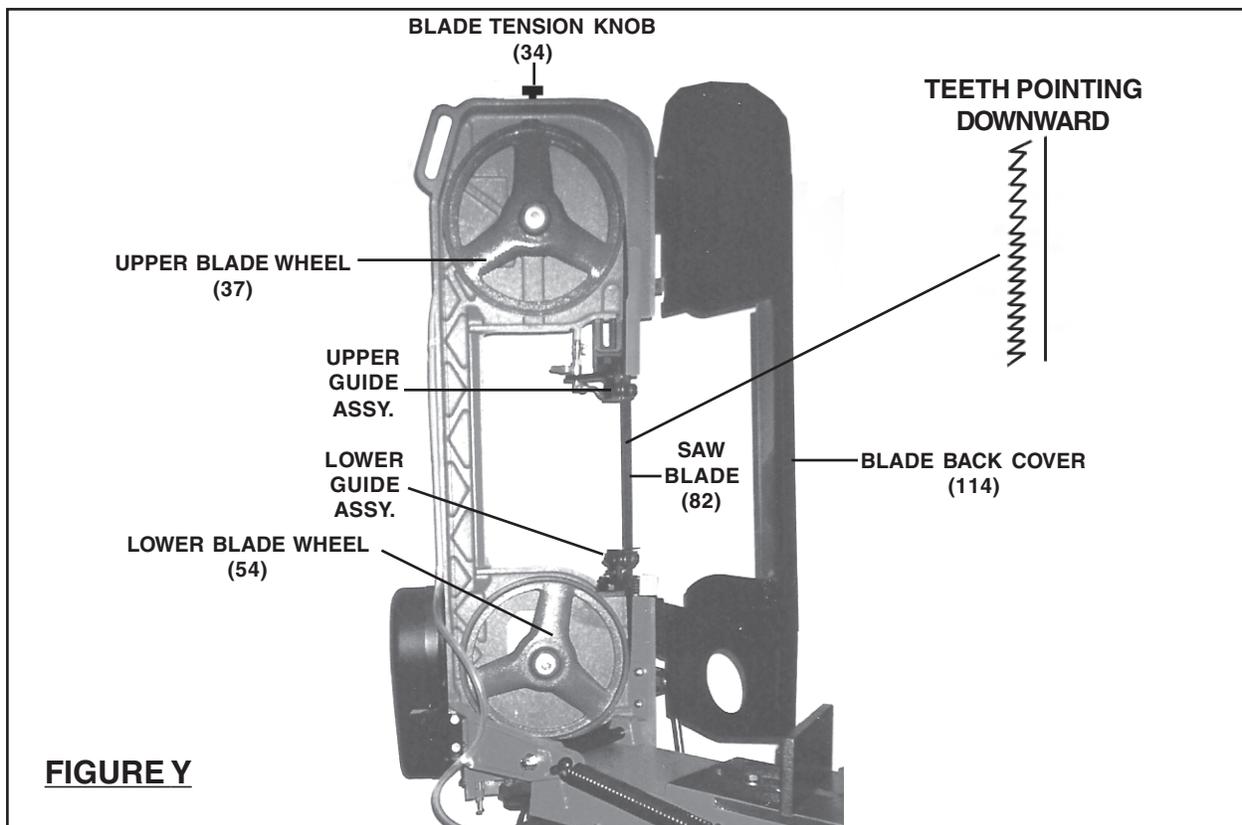
7. Turn the Power Switch (164) to its “**ON**” position, and slowly lower the Body Frame (60) until the Saw Blade (82) is just above the workpiece cut line. **(See Figure X.)**
8. Before cutting, turn on the Bandsaw and check for excessively loose Saw Blade (82) tension or machine vibration. If this is found, turn off the Bandsaw and correct the problem before using. **(See Figure X.)**
9. Allow the Saw Blade (82) to turn up to full speed before feeding the Saw Blade into the workpiece. **(See Figure X.)**
10.  **WARNING! Always keep hands and fingers safety away from the cutting area.**
11. Slowly lower the Body Frame (60), while it gradually feeds the Saw Blade (82) into the workpiece. Do not force the Bandsaw to remove material faster than it is designed to cut. **(See Figure X.)**
12. Never attempt to remove material stuck in the moving parts of the Bandsaw while it is plugged in and running. Turn off the Bandsaw if the workpiece is to be backed out of an uncompleted cut.
13. **IMPORTANT:** When in the horizontal cutting mode only, the Switch Push-Off Tip (41) will automatically turn the Power Switch (164) to its “**OFF**” position and shut off the Bandsaw’s Motor when the cut has been completed. **(See Figure X.)**
14. Once the cut is made, check to make sure the Power Switch (164) is in its “**OFF**” position. Then, unplug the Power Cord Plug from its electrical outlet. **(See Figure X.)**
15. Wait until the Saw Blade (82) comes to a complete stop. Next, raise the Body Frame (60) to its full vertical position, making sure it locks in place by turning the Support Plate (150) to the right until it firmly locks into the Body Frame. Remove the workpiece from the Vise assembly (138, 141) and scrap material from the Machine Bed (142) of the Bandsaw. Then, slowly lower the Body Frame (60) to its horizontal position and lock it in place with the Locking Pin (115). **(See Figure X.)**

INSPECTION, MAINTENANCE, AND CLEANING

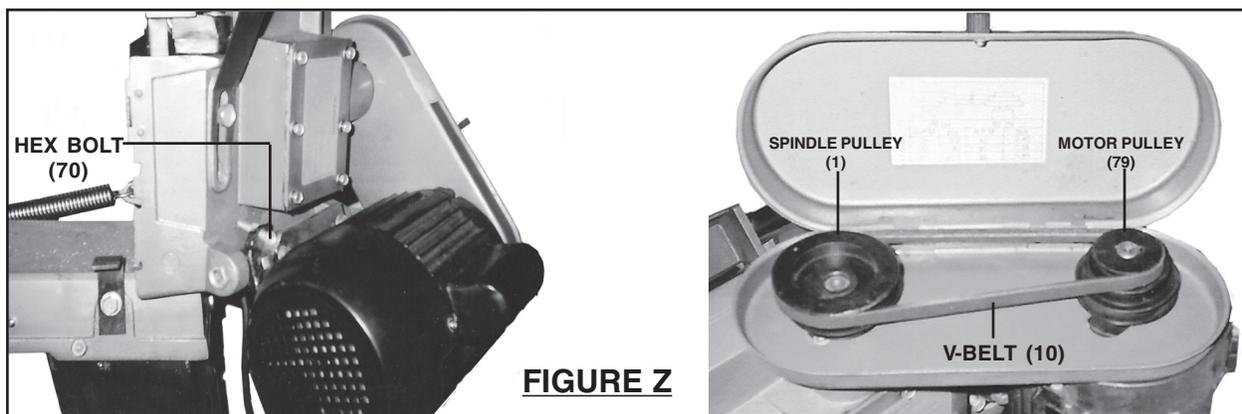
1.  **WARNING!** Make sure the Power Switch (164) is in its “**OFF**” position and the tool is unplugged from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.
2. **Before each use,** inspect the general condition of the Bandsaw. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts,

damaged electrical wiring, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**

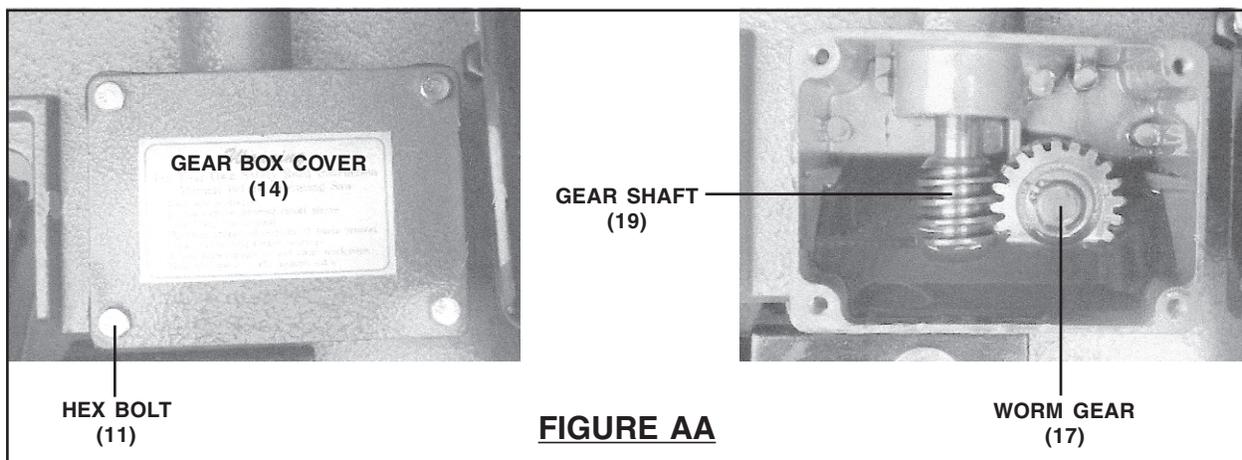
3. **Before each use**, inspect the Saw Blade (82). Using a dull Saw Blade will cause excessive wear on the Motor of the Bandsaw and will not produce a satisfactory cut. Replace with a new Saw Blade when needed. To replace a Saw Blade:
 - A. **NOTE:** Make sure to wear heavy duty work gloves to avoid accidental cuts from the Saw Blade (82) when performing this procedure.
 - B. Raise the body Frame (60) to its full vertical position, making sure it locks in place by turning the Support Plate (150) to the right until it firmly locks into the Body Frame, and insert the Locking Pin (153). **(See Figure W.)**
 - C. Release Saw Blade (82) tension by turning the Blade Tension Knob (34). **(See Figure Y.)**
 - D. Slip the old Saw Blade (82) off the Upper Blade Wheel (37), Lower Blade Wheel (54), and Guide assemblies. **(See Figure Y.)**



- E. Place the new Saw Blade (82) between each of the Guide assemblies and around the Upper Blade Wheel (37) and Lower Blade Wheel (54).
IMPORTANT: The teeth must be pointing downward toward the Motor.
(See Figure Y.)
- F. **NOTE:** The Bandsaw is equipped with a 64" diameter, .025" thick, 15/32" wide, 14 teeth per inch Saw Blade (82). 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 more teeth is recommended. A minimum of 3 teeth should engage the workpiece at all times for proper cutting. **(See Figure Y.)**
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.
- G. Tighten the tension on the new Saw Blade (82) by turning the Blade Tension Knob (34). **(See Figure Y.)**
- H. Close the Blade Back Cover (114). **(See Figure Y.)**
4. **To replace the V-Belt:** The Bandsaw uses a size 0-506 V-Belt (10). To replace the V-Belt:
- A. Open the Pulley Cover (72). **(See Figure Z.)**
- B. Loosen the Hex Bolt (70) to release tension on the old V-Belt. **(See Figure J.)**
- C. Remove the old V-Belt (10) from the two Pulleys (1, 79). **(See Figure Z.)**
- D. Place the new V-Belt (10) into the proper Pulley (1, 79) combination for the desired Blade speed. **(See Figures L and Z.)**

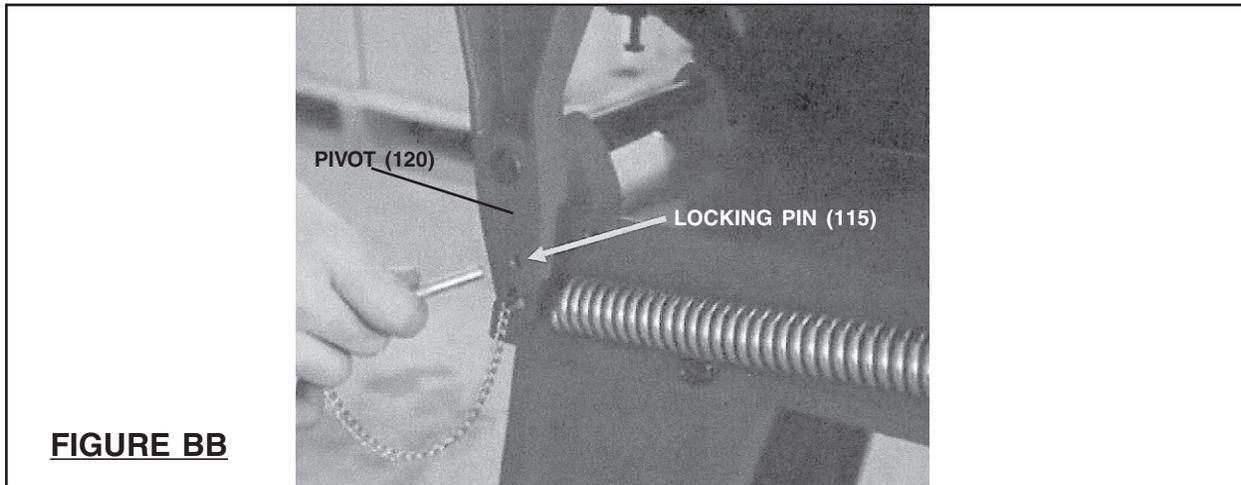


- E. Adjust the position of the Motor (81) to obtain approximately 1/2" depression in the V-Belt (10) when applying pressure with your thumb. **(See Figure Z.)**
 - F. Tighten the Hex Bolt (70) to secure the Motor (81) in place. **(See Figure X.)**
5. **To lubricate the Worm Gear and Worm Shaft:** The Worm Gear (17) and Gear Shaft (19) 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 (14). To change oil in the Gear Box:
- A. Position the Body Frame (60) in the horizontal position. **(See Figure W.)**
 - B. Remove the four Hex Bolts (11), Gear Box Cover (14), and Gear Box Gasket (15). **(See Figure AA.)**
 - C. 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 AA.)**
 - D. Replace the Gear Box Gasket (15), Gear Box Cover (14), and four Hex Bolts (11). **(See Figure AA.)**



- 6. **To clean the exterior parts of the Bandsaw,** 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.**
- 7. **When the Bandsaw is not in use or when transporting the tool:** Always lower the Body Frame (60) to its horizontal position and insert the Locking Pin (115)

into the Pivot (120) to secure the Body Frame in place. **(See Figure BB.)**



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

PLEASE READ THE FOLLOWING CAREFULLY

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 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 RISKS 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.

TROUBLESHOOTING

Problem	Possible Cause(s)	Possible Solution
Excessive Blade breakage.	<ol style="list-style-type: none"> 1. Incorrect Blade tension. 2. Incorrect speed or feed. 3. Material loose in vise. 4. Blade rubs on Wheel Flange. 5. Teeth too course for material. 6. Teeth in contact with material before Saw started. 7. Misaligned Guides. 8. Blade too thick for Wheel diameter. 	<ol style="list-style-type: none"> 1. Tighten Blade tension. (See Page 20.) 2. Check manual for correct Blade speed. (See Page 15.) 3. Clamp work securely. 4. Adjust Wheel alignment. (See Page 20.) 5. Check manual for recommended Blade type. (See Page 27.) 6. Allow Blade to spin up to full speed before feeding material into it. 7. Adjust Guides. (See Page 19.) 8. Use thinner Blade. (See Page 27.)
Premature Blade dulling.	<ol style="list-style-type: none"> 1. Teeth too course. 2. Too much speed. 3. Inadequate feed pressure. 4. Hard spots or scale in/on material. 5. Work hardening of material. 6. Blade installed backwards. 7. Insufficient Blade tension. 	<ol style="list-style-type: none"> 1. Use finer tooth Blade. (See Page 27.) 2. Try next lower speed. (See Page 15.) 3. Decrease spring tension on side of Saw. (See Page 21.) 4. Reduce speed, increase feed pressure. (See Pages 15 and 21.) 5. Increase feed pressure by reducing spring tension. (See Page 21.) 6. Remove Blade. (See Page 26.) 7. Increase tension to proper level. (See Page 20.)
Blade Cuts Crooked.	<ol style="list-style-type: none"> 1. Workpiece not square. 2. Feed pressure too great. 3. Guide Bearing not adjusted properly. 4. Inadequate Blade tension. 5. Blade Guides spaced out too much. 6. Dull Blade. 7. Speed incorrect. 8. Blade Guide assembly loose. 9. Blade Guide Bearing assembly loose. 10. Blade tracks too far away from Wheel Flanges. 	<ol style="list-style-type: none"> 1. Adjust Vise so it is square with Blade. Always clamp work tightly in Vise. (See Page 17.) 2. Reduce pressure by increasing spring tension on side of Saw. (P. 21.) 3. Adjust Guide Bearing to .001 greater than maximum thickness, including the weld of the Saw. (See Page 19.) 4. Increase Blade tension a little at a time. (See Page 20.) 5. Move Guide as close to work as possible. (See Page 22.) 6. Replace Blade. (See Page 26.) 7. Check manual for recommended speeds. (See Page 15.) 8. Tighten Blade Guide assembly. (See Page 22.) 9. Tighten Blade Guide Bearing assembly. (See Page 19.) 10. Re-track Blade according to operating instructions. (See Page 20.)
Blade cuts rough.	<ol style="list-style-type: none"> 1. Too much speed or feed. 2. Blade is too coarse. 	<ol style="list-style-type: none"> 1. Reduce speed and feed. (See Pages 15 and 21.) 2. Replace with finer Blade. (See Page 27.)
Blade is twisting.	<ol style="list-style-type: none"> 1. Cut is binding Blade. 2. Too much Blade tension. 	<ol style="list-style-type: none"> 1. Decrease feed pressure. (See Page 15.) 2. Decrease Blade tension. (See Page 20.)
Unusual wear on side/back of Blade.	<ol style="list-style-type: none"> 1. Blade Guides worn. 2. Blade Guide Bearings not adjusted properly. 3. Blade Guide Bearing Bracket is loose. 	<ol style="list-style-type: none"> 1. Replace Blade Guides. (See Page 19.) 2. Adjust according to operator's manual. (See Page 19.) 3. Tighten Blade Guide Bearing Bracket. (See Page 19.)
Teeth ripping from Blade.	<ol style="list-style-type: none"> 1. Teeth too coarse for work. 2. Too heavy feed or too slow feed. 3. Vibrating workpiece. 4. Teeth filled with debris. 	<ol style="list-style-type: none"> 1. Use finer tooth Blade. (See Page 27.) 2. Increase feed pressure and/or speed. (See Pages 15 and 21.) 3. Clamp work securely. (See Page 17.) 4. Use coarse tooth Blade or brush to remove debris. (See Page 27.)
Motor running too hot.	<ol style="list-style-type: none"> 1. Blade tension too high. 2. Drive Belt tension too high. 3. Blade is too coarse for work. 4. Blade is too fine for work. 5. Gear not aligned properly. 6. Gears need lubrication. 7. Idler Wheel needs lubrication. 	<ol style="list-style-type: none"> 1. Reduce tension on Blade. (See Page 20.) 2. Reduce tension on Drive Belt. (See Page 14.) 3. Use finer Blade. (See Page 27.) 4. Use coarser Blade. (See Page 27.) 5. Adjust Gears so that Worm is in center of Gear. (See Page 28.) 6. Check Oil Bath. (See Page 28.) 7. Lubricate Bearing/Shaft on Idler Wheel. (See Assy. Diagram.)

PARTS LIST

Part #	Description	Part #	Description
1	Spindle Pulley	61	Hex Head Bolt (M12x30)
2	Socket Head Screw (M8x10)	62	Flat Washer (10)
3	Screw (M4x10)	63	Hex Head Bolt (M6x8)
4	Seal Cover	64	Flat Washer (6)
5	Oil Seal (B15x35x7)	65	Bolt (M12x30)
6	Bearing (6202Z)	66	Motor Plate
7	Spacer	67	Hex Bolt (M8x30)
8	Bearing (6202Z)	68	Nut (M8)
9	Worm	69	Flat Washer (8)
10	V-Belt	70	Hex Bolt (M8x16)
11	Hex Bolt (M6x12)	71	Hex Bolt (M12x35)
12	Spring Washer (6)	72	Pulley Cover
13	Flat Washer (6)	73	Knob
14	Gear Box Cover	74	Flat Washer (4)
15	Gear Box Gasket	75	Screw (M4x6)
16	Key (C5x28)	76	Hex Bolt (M5x8)
17	Gear	77	Flat Washer (5)
18	Pin (5x16)	78	Screw (M6x8)
19	Gear Shaft	79	Motor Pulley
20	Hex Bolt (M8x25)	80	Key (C5x28)
21	Hex Bolt (M8x16)	81	Motor
22	Hex Bolt (M8x16)	82	Blade
23	Flat Washer (8)	83	Blade Guide Bracket Seat (Right)
24	Hex Bolt (M6x10)	84	Flat Washer (8)
25	Spring Washer (6)	85	Hex Bolt (M8x25)
26	Blade Tension Sliding Plate	86	Nut (M10)
27	Flat Washer (6)	87	Spring Washer (10)
28	Blade Tension Sliding Guide	88	Bearing (180029)
29	Sliding Plate Draw Block	89	Pin
30	Blade Wheel Shaft	90	Blade Guide Bracket (Right)
31	Nut	91	Shaft
32	Spring	92	Bearing (180029)
33	Flat Washer (10)	93	Ring (9)
34	Blade Tension Adjusting Knob	94	Blade Guide Bracket Cover (Right)
35	Spacer	95	Screw (M6x12)
36	Bearing	96	Nut (M8)
37	Blade Wheel	97	Spring Washer (8)
38	Washer	98	Hex Bolt (M8x25)
39	Spring Washer (5)	99	Flat Washer (8)
40	Screw (M5x15)	100	Bearing (180029)
41	Switch Push-Off Tip	101	Pin
42	Flat Washer (6)	102	Blade Guide Bracket (Left)
43	Spring Washer (6)	103	Shaft
44	Hex Bolt (6x16)	104	Bearing (180029)
45	Adjusting Knob	105	Ring (9)
46	Flat Washer (10)	106	Blade Guard
47	Bearing (6202Z)	107	Flat Washer (4)
48	Spacer	108	Spring Washer (10)
49	Bearing (6202Z)	109	Screw (M4x8)
50	Oil Seal (B15X35X7)	110	Blade Guide Bracket Seat (Left)
51	Seal Cover	111	Screw (M5x8)
52	Screw (M4x10)	112	Spring Washer (5)
53	Spacer	113	Flat Washer (5)
54	Blade Wheel	114	Blade Back Cover
55	Socket Head Screw (M8x8)	115	Locking Pin
56	Ring (15)	116	Socket Head Screw (M10x25)
57	Flat Washer (5)	117	Spring Washer (10)
58	Spring Washer (5)	118	Flat Washer (10)
59	Screw (M5x8)	119	Socket Head Bolt (M8x8)
60	Body Frame	120	Pivot

NOTE:

Some parts are listed and shown for illustration purposes only,
and are not available individually as replacement parts.

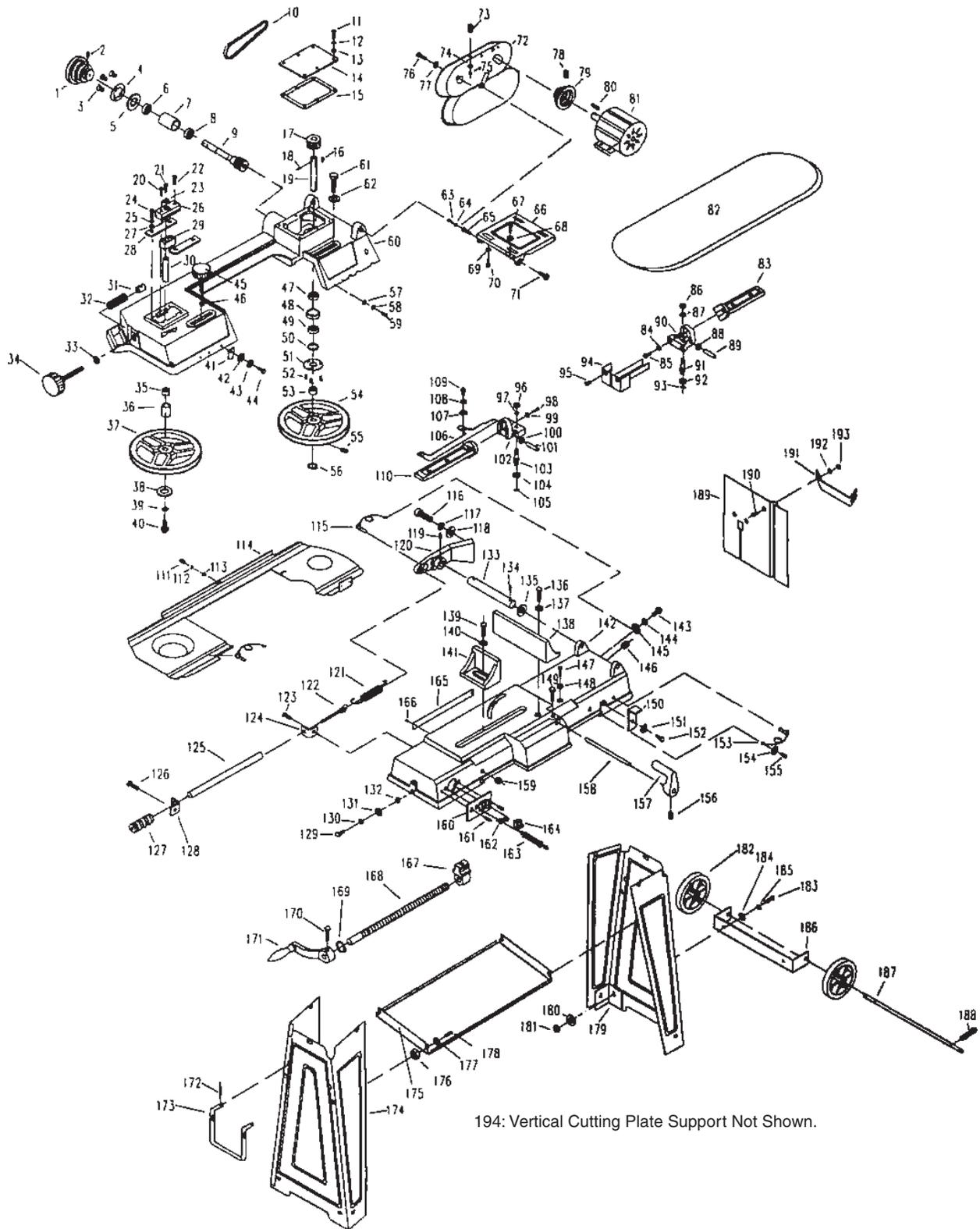
PARTS LIST (CONT.)

Part #	Description	Part #	Description
121	Spring	158	Shaft
122	Spring Adjusting Screw	159	Cable Protector
123	Hex Bolt (M8x16)	160	Switch Panel
124	Support	161	Screw (M5x8)
125	Adjusting Rod	162	Pull Relief
126	Hex Bolt (M8x16)	163	Power Cord
127	Handle	164	Power Switch
128	Support	165	Angle Scale
129	Hex Bolt (M8x16)	166	Rivet
130	Spring Washer (8)	167	Nut
131	Flat Washer (8)	168	Lead Screw
132	Nut (M8)	169	Ring (14)
133	Pivot Rod	170	Socket Head Screw (M6x8)
134	Pin (4x25)	171	Hand Wheel
135	Flat Washer (6)	172	Pin (2.5)
136	Hex Bolt (M8x20)	173	Pull Handle
137	Flat Washer (8)	174	Stand
138	Mitering Vise Plate	175	Tool Plate
139	Hex Bolt (M10x30)	176	Nut (M6)
140	Flat Washer (10)	177	Flat Washer (6)
141	Moveable Vise Plate	178	Screw (M6x10)
142	Machine Bed	179	Stand Support
143	Hex Bolt (M5x8)	180	Flat Washer (6)
144	Spring Washer (5)	181	Nut (M6)
145	Flat Washer (5)	182	Wheel
146	Pull Relief	183	Hex Bolt (M6x16)
147	Hex Bolt (M12x70)	184	Flat Washer (6)
148	Nut (M12)	185	Spring Washer (6)
149	Hex Bolt (M8x10)	186	Wheel Bracket
150	Support Plate	187	Wheel Shaft
151	Flat Washer (8)	188	Pin (2.5)
152	Hex Bolt (M8x16)	189	Vertical Cutting Plate
153	Locking Pin	190	Screw (M6x12)
154	Flat Washer (6)	191	Vertical Cutting Plate Support
155	Screw (M6x8)	192	Flat Washer (6)
156	Socket Head Screw (M8x8)	193	Nut (M6)
157	Stock Stop	194	Vertical Cutting Plate Support

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ASSEMBLY DIAGRAM



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