



# OPERATOR'S MANUAL

## HVBS-7MW Bandsaw



### WMH TOOL GROUP

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Part No. M-414459

3/2001

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# Important Information

**1-YEAR  
LIMITED WARRANTY**

**JET offers a one-year limited  
warranty on this product**

## REPLACEMENT PARTS

Replacement parts for this tool are available directly from JET Equipment & Tools. To place an order, call 1-800-274-6848. Please have the following information ready:

1. Visa, MasterCard, or Discover Card number
2. Expiration date
3. Part number listed within this manual
4. Shipping address other than a Post Office box.

## REPLACEMENT PART WARRANTY

JET Equipment & Tools makes every effort to assure that parts meet high quality and durability standards and warrants to the original retail consumer/purchaser of our parts that each such part(s) to be free from defects in materials and workmanship for a period of thirty (30) days from the date of purchase.

## PROOF OF PURCHASE

Please retain your dated sales receipt as proof of purchase to validate the warranty period.

## LIMITED TOOL AND EQUIPMENT WARRANTY

JET makes every effort to assure that its products meet high quality and durability standards and warrants to the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship as follows: 1 YEAR LIMITED WARRANTY ON THIS JET PRODUCT. Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities or to a lack of maintenance. JET LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD SPECIFIED ABOVE FROM THE DATE THE PRODUCT WAS PURCHASED AT RETAIL. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. JET 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 PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. To take advantage of this warranty, the product or part must be returned for examination, postage prepaid, to an authorized service station designated by our Auburn office. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, JET will either repair or replace the product or refund the purchase price, if we cannot readily and quickly provide a repair or replacement, if you are willing to accept such refund. JET will return repaired product or replacement at JET's expense, but if it is determined there is no defect, or that the defect resulted from causes not within the scope of JET's warranty, then the user must bear the cost of storing and returning the product. This warranty gives you specific legal rights, and you have other rights, which vary, from state to state.

**JET Equipment & Tools • P.O. Box 1349, Auburn, WA 98071-1349 • (253) 351-6000**



## **WARNING**

**Read and understand the entire instruction manual before operating machine. This machine is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper safe use of bandsaws, do not use this machine until proper training and knowledge has been obtained.**

“Warning: For your own safety read instruction manual before operation saw”

- (a) Wear eye protection.
  - (b) Do not remove jammed cut off pieces until blade has stopped.
  - (c) Maintain proper adjustment of blade tension, blade guides, and trust bearing.
  - (d) Adjust upper guide to just clear workpiece.
  - (e) Hold workpiece firmly against table.
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.
  9. Use proper extension cord. Make sure your extension cord is in good condition. When using an extension cords, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in voltage resulting in loss of power and overheating. Table shows the correct size to use depending on cord length and nameplate ampere rating. If in double, use the next heavier gage. The smaller the gage number, the heavier the cord.
  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 clamp or a vise to hold work when practical. It is 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 person.
  18. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
    - Lead from lead based paint
    - crystalline silica from bricks and cement and other masonry products, and
    - arsenic and chromium from chemically-treated lumber.
  19. Never stand on tool serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
  20. Check damaged parts. Before further use 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.

21. Direction of feed work into a blade or cutter against the direction of rotation of rotation of the blade or cutter only.
22. Never leave tool running unattended. Turn power off. Don't leave tool until it comes to a complete stop.

**Table**  
**Minimum gage for cord**

Ampere Rating		Volts	Total length of cord in feet			
		120V	25 ft.	50ft.	100ft.	150ft.
		240V	50ft.	100ft.	200ft.	300ft.
	Not	AWG				
More	More					
Than	Than					
0	6	18	16	16	14	
6	10	18	16	14	12	
10	12	16	16	14	12	
12	16	14	12	Not Recommended		
Only the applicable parts o the Table need to be included, For instance, a 120-volt product need not include the 240-volt heading						



## Grounding Instructions

**Caution:** This tool must be grounded while in use to protect the operator from electric shock.

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.

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

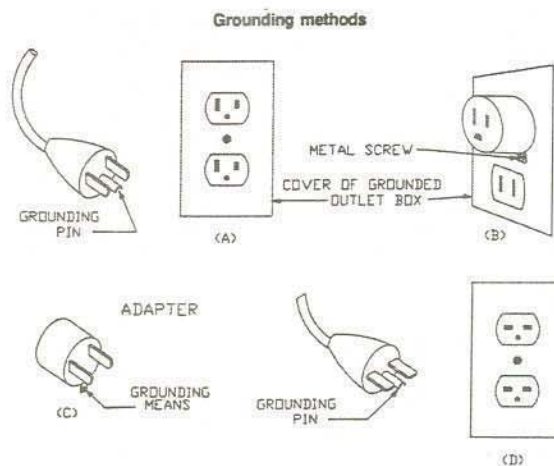
Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor, with insulation having an outer surface that is green with or without yellow stripes, is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

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. Use only three wire extension cords that have three-prong grounding plugs and three-pole receptacles that accept the tool's plug.

Repair or replace a damaged or worn cord immediately.

This tool is intended for use on a circuit that has an outlet that looks like the one illustrated in sketch A. The tool has a grounding that looks like the plug illustrated in sketch A. A temporary adapter, which looks like the adapter illustrated in sketches B and C, may be used to connect this plug to a 2-pole receptacle as shown in sketch B if a properly grounded outlet can be installed by a qualified electrician. (This adapter is not permitted in Canada) The green-colored rigid ear, lug, the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

This tool is intended for use on a circuit that has an outlet that looks like the one illustrated in sketch D. The tool has a grounding that looks like the plug illustrated in sketch D. Make sure the tool is connected to an outlet having the same configuration as the plug. No adapter is available or should be used with this tool. If the tool must be reconnected for use on a different type of electric circuit, the reconnection should be made by qualified service personnel; and after reconnection, the tool should comply with all local codes and ordinances.



The conversion from 115V to 230V operation must be done by a qualified electrician.

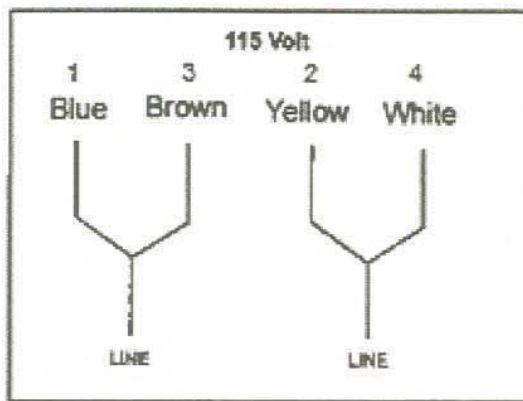


Chart 1

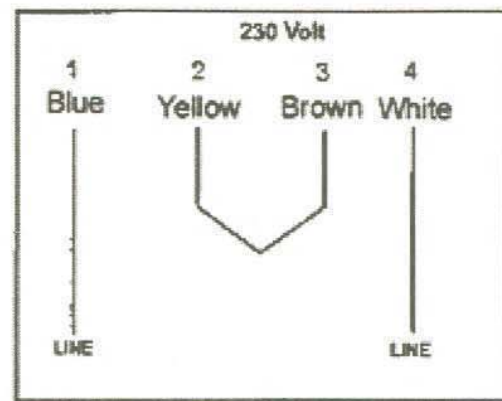


Chart 2

## **WARNING**

- **Read and understand the entire instruction manual before attempting assembly or operation.**
- **This bandsaw is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a bandsaw, do not use until proper training and knowledge have been obtained.**
- Make certain the machine is properly grounded.
- Before operating the machine, remove tie, rings, watches, other jewelry, and roll up sleeves above the elbows. Remove all loose clothing and confine long hair. Do **not** wear gloves.
- Keep the floor around the machine clean and free of scrap material, oil and grease.
- Keep machine guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately.
- Do **not** over reach. Maintain a balanced stance at all times so that you do not fall or lean against blades or other moving parts.
- Make all machine adjustments or maintenance with the machine unplugged from the power source.
- Use the right tool. Don't force a tool or attachment to do a job which it was not designed for.
- Replace warning labels if they become obscured or removed.
- Make certain the motor switch is in the **off** position before connecting the machine to the power supply.
- Give your work undivided attention. Looking around, carrying on a conversation, and "horse-play" are careless acts that can result in serious injury.
- Keep visitors a safe distance from the work area.
- Use recommended accessories; improper accessories may be hazardous.
- Make a habit of checking to see that keys and adjusting wrenches are removed before turning on the machine.
- Always keep hands and fingers away from the blade when the machine is running.
- Never hold the material with the saw in the horizontal position. Always use the vise and clamp it securely.
- Read and understand warnings posted on the machine.
- Keep the belt guard and wheel covers in place and in working order.
- Always provide adequate support for long and heavy material.
- Use a sharp blade and keep machine clean for best and safest performance.
- Failure to comply with all of these warnings may cause serious injury.
- **WARNING:** Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm.  
Some examples of these chemicals are:
  - Lead from lead based paint
  - crystalline silica from bricks and cement and other masonry products, and
  - arsenic and chromium from chemically-treated lumber.
- Your risk from those 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 specifically designed to filter out microscopic particles



## Specifications

## HVBS-7MW

Stock Number .....	414459
Capacity:	
Round .....	7"
Rectangle .....	7" x 8-1/2"
Throat Depth .....	7"
Vertical Worktable .....	9-3/8" x 10"
Vise Tilts .....	45°
Blade Speed .....	86, 132, 178, 260 SFPM
Motor UL Listed .....	3/4 HP, 1 Ph, 115/230V
.....	Prewired 115V
Floor Space Required .....	49-1/2" x 17-1/32"
Net Weight (approx.) .....	318 Lbs.
Shipping Weight (approx.) .....	345 Lbs.

## Table of Contents

Warning .....	1
Specifications .....	2
Table of Contents .....	2
Shipping Container Contents .....	3
Tools Required for Assembly .....	3
Unpacking and Clean-Up .....	3
Assembly .....	3
Vertical Cutting Plate Assembly .....	4
Coolant Tank Preparation .....	4
Electrical Connections .....	5
Hydraulic Feed Selector Operation .....	6
Prior to Operation .....	6
Changing Blade Speed .....	6
Adjusting Blade Guides .....	7
Vise Adjustment .....	7
Adjusting Blade Tension .....	8
Changing Blades .....	9
Adjusting Blade Square to Table .....	10
Adjusting Blade Square to Vise .....	10
Adjusting Blade Tracking .....	11
Adjusting Blade Guide Bearings .....	12
Adjusting Bow Weight .....	12
Adjusting Automatic Shut-Off .....	13
Lubrication .....	13
Maintenance .....	14
Chip Cleaning Brush .....	14
Parts Breakdowns .....	15-16
Parts List .....	17-19
Electrical Schematic .....	20

The specifications in this manual are given as general information and are not binding. JET Equipment and Tools reserves the right to effect, at any time and without prior notice, changes or alterations to parts, fittings, and accessory equipment deemed necessary for any reason whatsoever.



## Shipping Container Contents

- 1 Saw
- 2 Wheel Axle
- 4 Wheel
- 4 Split Pin
- 1 Material Stop Bar
- 1 Material Stop
- 1 Belt Cover
- 1 Vertical Cutting Plate

## Tools Required for Assembly

#2 Cross Point Screwdriver  
Pliers

## Unpacking and Clean-Up

1. Finish uncrating the saw. Inspect it for shipping damage. If any damage has occurred, contact your distributor.
2. Unbolt the saw from the skid and place it on a level surface.
3. Clean rust protected surfaces with kerosene, diesel oil, or a mild solvent. Do not use cellulose based solvents such as paint thinner or lacquer thinner. These will damage painted surfaces.

## Assembly

1. Place blocking under the ends of the saw base to allow wheel installation. **Caution:** Make sure saw is steady while temporarily supported.
2. Slide wheel axles through the holes in the base.
3. Slide the wheels onto the axles and fasten with pins. Bend the pins to hold in place.
4. Slide the material stop bar (A, Fig. 1) into the base and secure by tightening bolt (B, Fig. 1). Slide the material stop (C, Fig. 1) onto the bar and tighten bolt (D, Fig. 1).
5. Slide the belt cover over the pulley assemblies and fasten with screws and washers (A, Fig. 2).
6. Close belt cover and secure with lock knob (B, Fig. 2).

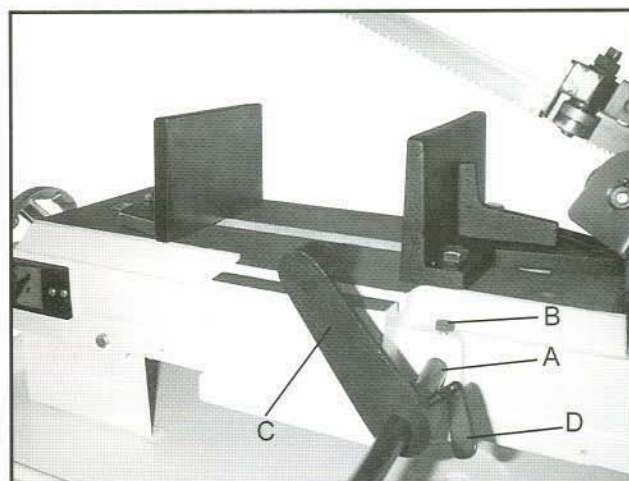


Fig. 1

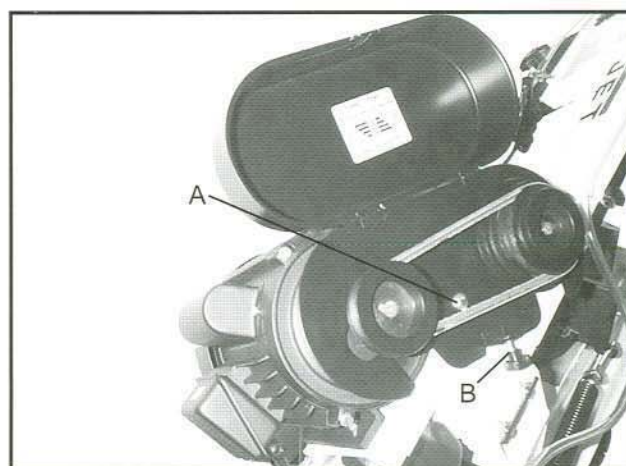


Fig. 2

7. Remove transportation strap and keep for later use should the saw be moved any distance.

### Vertical Cutting Plate Assembly

**Note:** These steps are only necessary if using the bandsaw in the vertical mode.

#### WARNING

**Disconnect bandsaw from the power source before making any repairs or adjustments! Failure to comply may cause serious injury!**

1. Disconnect the bandsaw from the power source.
2. Raise the arm to the vertical position by turning the arm stop (A, Fig. 2A) a quarter turn clockwise, slowly bring the arm to vertical, and lock in place by turning the hydraulic cylinder valve to the off position. **Caution: Do not pinch fingers between the arm stop and the arm bracket.**
3. Remove two screws (A, Fig. 3) and remove the deflector plate (B, Fig. 3).
4. Guide the blade through the slot in the table and fasten with two screws. See Fig. 4.
5. To lower the arm, turn the hydraulic cylinder arm to any of the on positions.

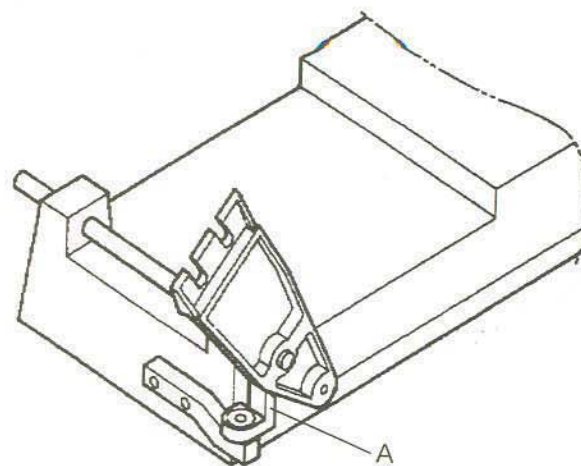


Fig. 2 A

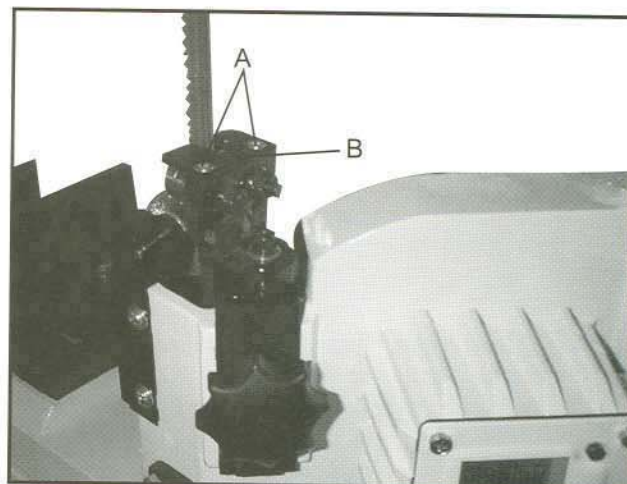


Fig. 3

### Coolant Tank Preparation

Use of a water-soluble coolant will increase cutting efficiency and prolong blade life. Do not use black cutting oil as a substitute. Change cutting oil often and follow manufacturers instructions as to its uses and precautions.

1. Disconnect the machine from the power source.
2. Remove the coolant return hose from the tank cover.
3. Slide the tank out of the saw base and carefully remove the lid containing the coolant pump.
4. Fill the tank to approximately 80% of capacity.
5. Place the lid back onto the tank and place the tank assembly back into the base.
6. Replace the return hose back into the hole in the tank lid.

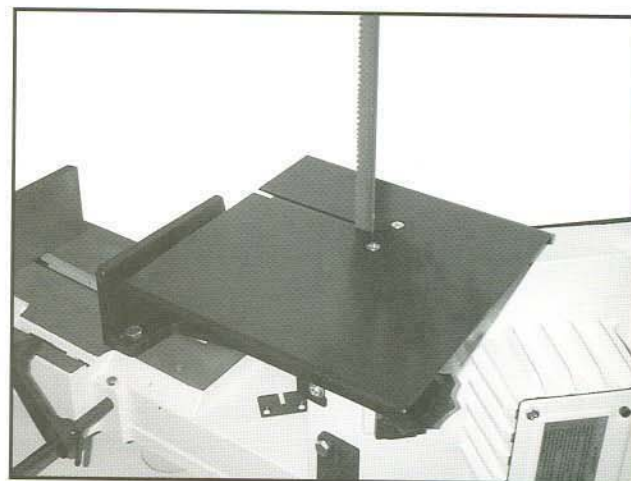


Fig. 4



## Electrical Connections

### WARNING

**All electrical connections must be done by a qualified electrician!**  
**Disconnect the bandsaw from the power source before changing any voltage components!**  
**Failure to comply may cause serious injury!**

The HVBS-7MW bandsaw is rated at 115/230V and comes from the factory prewired at 115V. To switch to 230V operation, follow the wiring diagram found on the inside of the motor junction box. The plug end will have to be replaced with a plug that is rated at 230V. The coolant pump wiring will have to be changed also. Follow the diagram found on the cooling pump head to switch to 230V operation. This bandsaw is designed for use on a circuit with an outlet that looks like (A) in Figure 5. The bandsaw has a grounding prong as illustrated in (B). A temporary adapter (C) may be used to connect the plug to a two pole receptacle (D) if a properly grounded outlet is not available. The temporary adapter should only be used until a properly grounded outlet can be installed by a qualified electrician. The green colored lug must be securely fastened to the cover plate screw.

Before hooking up to the power source, be sure the power and coolant switches are in the off position.

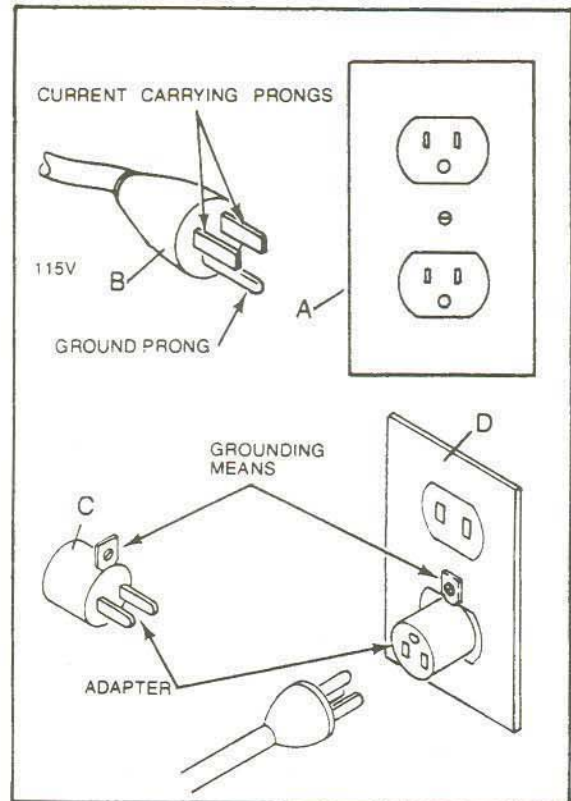


Fig. 5

## Hydraulic Feed Selector Operation

The hydraulic feed selector is used to control the blade feed rate and to lock the arm in the vertical position. To increase the feed rate, turn knob (A, Fig. 6) counter-clockwise. To decrease the feed rate, turn knob (A, Fig. 6) clockwise. To turn off the flow of hydraulic fluid, turn lever as in figure 6. To turn the hydraulic cylinder on, raise lever (B, Fig. 6) to the 12 o'clock position.

For a detailed discussion of proper feed rate and cutting speed, refer to the enclosed booklet "Lenox Guide to Bandsawing" published by American Saw Manufacturing Company. Used by permission.

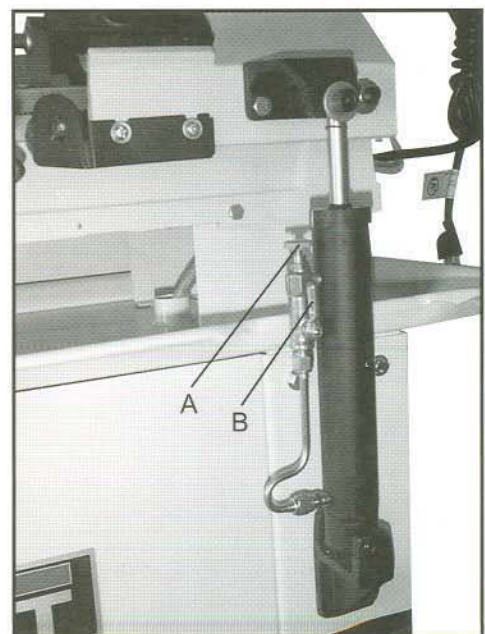


Fig. 6

## Prior to Operation

1. Check to see that the blade tooth direction matches the diagram on saw body.
2. Check to see that the blade is properly seated on the wheels after proper tension has been applied.
3. Set the blade guide roller bearings snug against blade. See "Adjusting Blade Guide Bearings" for more detail.
4. Check for a slight clearance between the back up rollers and the back of the blade.
5. Position both blade guides as close to work as possible.
6. Select proper speed and feed rate for material being cut. See the enclosed "Lenox Guide to Bandsawing" for further information.
7. Material to be cut must be held securely in vise.
8. Check to see that coolant level is adequate.
9. Do not start a cut on a sharp edge.
10. Keep the machine lubricated. See the "Lubrication" section.

## Changing Blade Speed

1. **Disconnect the machine from the power source.**
2. Loosen the motor plate lock bolt (A, Fig. 7).
3. Loosen motor plate slide bolt (B, Fig. 7) until the belt can be moved on the the pulleys.
4. Move the belt to the the desired pulley combination.
5. Tighten the motor plate slide bolt (B, Fig. 7) to re-tension belt.
6. Tighten the motor plate lock bolt (A).
7. Connect the machine to the power source.

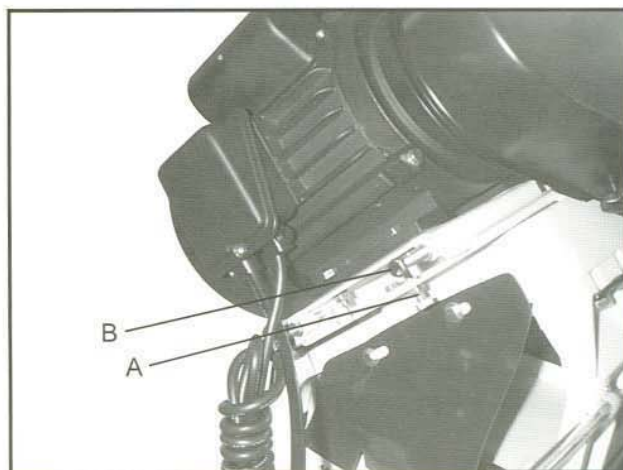


Fig. 7



## Adjusting the Blade Guides

1. Disconnect the machine from the power source.
2. Loosen knob (A, Fig. 8) and bolt (B, Fig. 8). Slide the blade guide assemblies as close as possible to the material without interfering with the cut.
3. Tighten knob (A, Fig. 8) and bolt (B, Fig. 8) and connect machine to the power source.

## Vise Adjustment



### WARNING

Do not make any adjustments or load/unload material from vise while machine is running! Failure to comply may cause serious injury!

To set the vise for 0 to 45 degree cutting:

1. Remove the bolt and nut assemblies (C, Fig. 9).
2. Position the vise and re-install as pictured in Fig. 10. Pay particular attention to the bolt hole location.
3. Set the vise to desired angle, re-install nuts and bolts, and tighten the nut and bolt assemblies.
4. Adjust the movable vise parallel to the fixed vise by loosening bolt (A, Fig. 10), adjusting to parallel, and tightening bolt.

To set vise for maximum width of stock cutting:

1. Remove the nut and bolt assemblies.
2. Position the vise and re-install the bolt assemblies as pictured in Fig. 9.



Fig. 8

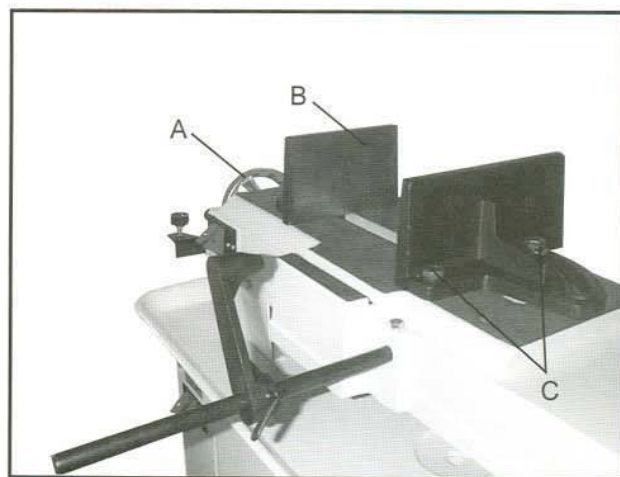


Fig. 9

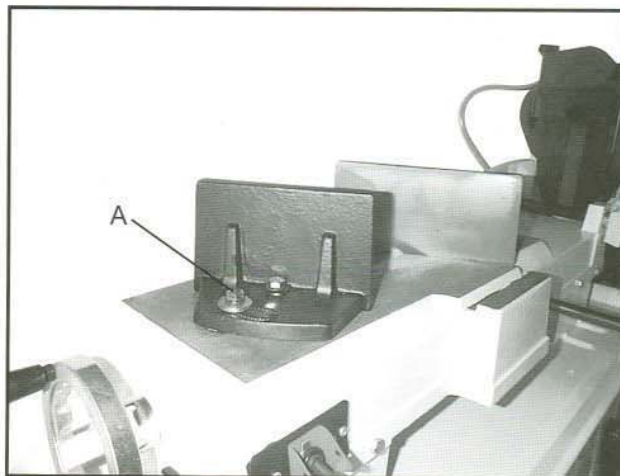


Fig. 10

## Adjusting Blade Tension

### WARNING

**Disconnect machine from the power source!  
Blades are sharp! Use extra care when  
removing, installing or adjusting!  
Failure to comply may cause serious injury!**

Blade tension is important to the proper operation of the saw. Proper blade tension is 22,000 to 25,000 lbs. per square inch as measured on a blade tension gauge.

To set the blade tension without the use of a blade tension gauge:

1. Install the blade between the wheel and insert blade between the bearings on the blade guides.
2. Tension the blade slightly to remove any sag in blade between the blade wheels.
3. Turn the blade tension knob (A, Fig. 11) one and three quarter to two revolutions clockwise. This equals approximately 23,000 lbs. of blade tension.

### CAUTION!

**Do not over tighten blade. This may cause blade to stretch and warp.**

4. After the blade has been completely installed, close the covers, connect to the power source, and run saw for two to three minutes so the blade can seat properly.
5. Disconnect the machine from the power source. Open the cover and loosen the blade just until it begins to sag.
6. Tighten the blade until it becomes straight between the blade wheel and all sag has been eliminated.
7. Tighten the blade by turning the blade tension wheel two full revolutions. Blade is now properly tensioned and ready for use.
8. Close the covers and connect the machine to the power source.

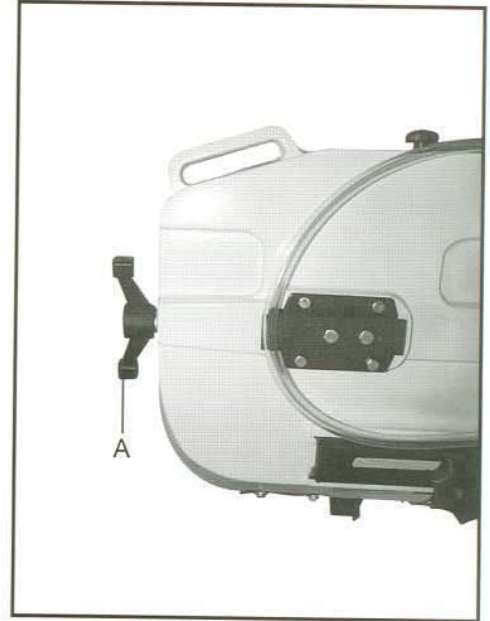


Fig. 11



## Changing Blades

### WARNING

Never operate this saw unless all blade guards are installed and in proper working order!  
Never adjust the blade brush while machine is running!  
Failure to comply may cause serious injury!

### CAUTION!

This machine is designed and intended for use with blades that are 3/4" wide by .032" thick by 93" long. Use of blades with different specifications may cause inferior performance.

1. Disconnect the machine from the power source.
2. Raise the saw arm to the vertical position and lock in place by turning the hydraulic cylinder off.
3. Remove the red blade guard assembly (A, Fig. 12) by removing two screws (B, Fig. 12).

### WARNING

It is essential this guard be installed after the new blade has been fitted!  
Failure to comply may cause serious injury!

4. Remove the brush assembly (C, Fig. 12) by removing two screws (D, Fig. 12).
5. Loosen blade tension by turning the blade tension knob counter-clockwise.
6. Carefully remove the old blade. **Caution: blade teeth are sharp. Handle with care.**
7. Install the new blade by placing the blade between blade guides first. Make sure the blade teeth face the same direction as indicated on the label found on the saw arm.
8. Place the blade around both wheels. Make sure the blade edge rests near the wheel flange on both wheels.



Fig. 12



Replacement Blade.	Stock Number
3/4"x.035"x93"x10/14VT	414300
3/4"x.035"x93"x5/8VT	414303
3/4"x.035"x93"x6/10VT	414304

9. Turn the blade tension knob clockwise to tension the blade. Do not over tension. See section titled "Adjusting Blade Tension".
10. Close the blade cover door and secure with lock knobs.
11. Attach the red blade guard and brush assembly.
12. Connect the machine to the power source.
13. Run the saw and make sure blade is tracking properly.

For a discussion on blade selection, see the enclosed booklet entitled "Lenox Guide to Bandsawing".

#### **Adjusting Blade Square to Table**

1. **Disconnect machine from the power source.**
2. Place a machinist's square on the table next to the blade as pictured in Fig. 13.
3. Check to see that the blade makes contact with square along the entire width of the blade.
4. If adjustment is necessary, loosen bolts (A, Fig. 13) and rotate the blade guide assemblies slightly in the same direction until the blade makes contact with the square along it's entire width.
5. Tighten bolts (A, Fig. 13).
6. Connect the machine to the power source.

**Note:** If adjustment to square blade to table is necessary, be sure to check blade adjustments again.

#### **Adjusting Blade Square to Vise**

1. **Disconnect the machine from the power source.**
2. Place a machinist's square as pictured in Figure 14. Square should lie along the entire length of vise and blade without a gap.

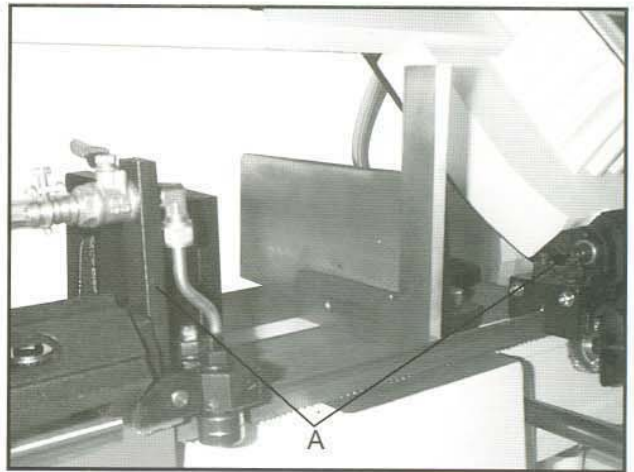


Fig. 13

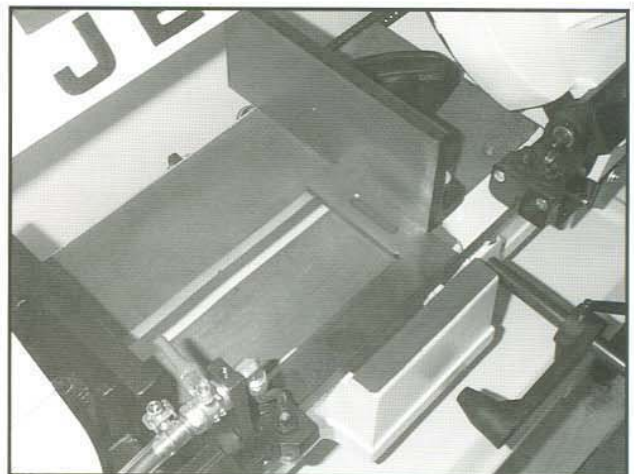


Fig. 14



3. If adjustment is necessary, loosen the bolts holding the vice and adjust the vise so that the square lines up properly. Tighten bolts.
4. Connect machine to the power source.

## Adjusting Blade Tracking



### WARNING

**Blade tracking adjustment requires running the saw with the back cover open. This adjustment must be completed by qualified persons only! Failure to comply may cause serious injury!**

**Note:** Before making any tracking adjustments, try a new blade. Warped blades will not track.

Blade tracking has been set at the factory and should not require adjustment. If a tracking problem occurs, adjust the machine as follows:

1. Move the saw arm to the vertical position and lock in place by shutting off the hydraulic cylinder valve.
2. Confirm that blade tension is set properly. To adjust, see section titled "Adjusting Blade Tension".
3. Open the back cover by loosening the lock screws.
4. Run the saw and observe the blade. Blade should run next to but not tightly against wheel flange.
5. Loosen bolts (A, Fig. 15).
6. Turn set screw (B, Fig. 15) while observing the blade tracking on the wheel. Turn the set screw clockwise to track the blade closer to the wheel flange. Turn the set screw counter-clockwise to track blade away from the wheel flange.
7. Once tracking is set, tighten bolts (A, Fig. 15).



Fig. 15

## Adjusting Blade Guide Bearings

### CAUTION!

This machine is designed and intended for use with blades that are 3/4" wide by .032" thick by 93" long. Use of blades with different specifications may cause inferior performance.

1. Disconnect the machine from the power source.
2. Raise the arm to the vertical position and lock in place by turning off the hydraulic cylinder valve.
3. Loosen the hex cap screw (A, Fig. 16) and adjust assembly so that the back roller bearing is approximately .003" - .005" from the back of the blade.
4. Turn nut (B, Fig. 16) to adjust the eccentric bearing snug to the blade. Blade should still move up and down freely when grasped as in Fig. 17. **Warning! Make sure power is disconnected and hands are protected before handling blade.** Be sure that the blade teeth do not interfere with the roller bearings.
5. Repeat for the other blade guide assembly.
6. Connect machine to the power source.

## Adjusting Bow Weight

Bow weight is one of the most important adjustments of the saw. If the bow weight is not set properly, one can expect poor performance, crooked cuts, tooth stripping, stalling, and the blade popping off the blade wheels. The hydraulic feed rate unit will not compensate for improper bow weight. Bow weight has been set at the factory and should not need adjustment. If adjustment is necessary:

1. Disconnect the machine from the power source.
2. Turn the hydraulic cylinder valve on and place the the saw arm in horizontal position.
3. Turn feed rate valve on hydraulic cylinder counter-clockwise until it stops.

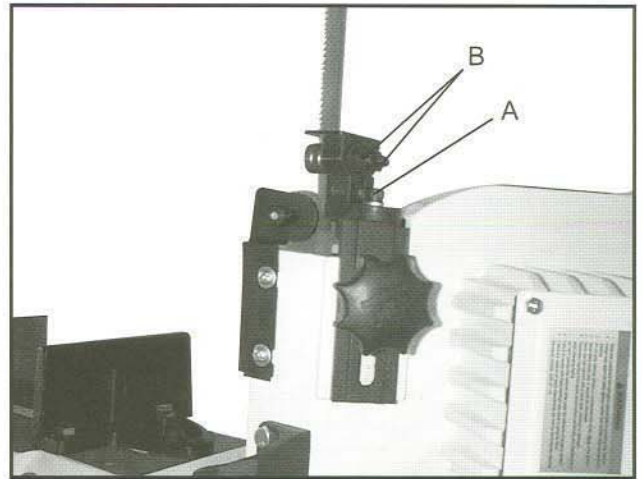


Fig. 16

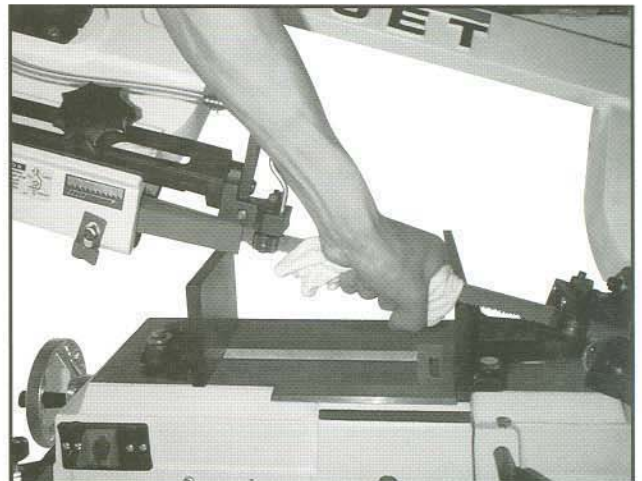


Fig. 17



4. Place a fish-type scale under the blade tension handle and lift the saw arm. Scale should indicate approximately 13 - 15 lbs.
5. Adjust tension to approximately 13 -15 lbs. by turning bolt (A, Fig. 18).
6. Connect the machine to the power source.

### Adjusting Automatic Shutoff

The saw should stop after the cut has been completed:

1. If the saw completes the cut and continues to run, adjust the stop tip (A, Fig. 19) down.
2. If the saw shuts off before the cut is complete, adjust the stop tip (A, Fig. 19) up.
3. If the saw stops cutting but continues to run, adjust the stop bolt (B, Fig. 19).

The saw is properly adjusted when the saw shuts off just after the blade has finished the cut.

### Lubrication

Ball bearings on the blade guide assemblies and the blade wheels are permanently sealed and require no lubrication.

Lightly lubricate the vise screw with #2 tube grease.

Change gear box oil after the first 90 days of operation. There after, change every six months

To change gear box oil:

1. **Disconnect the machine from the power source.**
2. Place the saw arm in the horizontal position.
3. Remove screws (A, Fig. 20) from the gear box and remove the cover plate and gasket.
4. Hold a container under the lower right corner of the gear box with one hand while slowly raising the saw arm with the other.

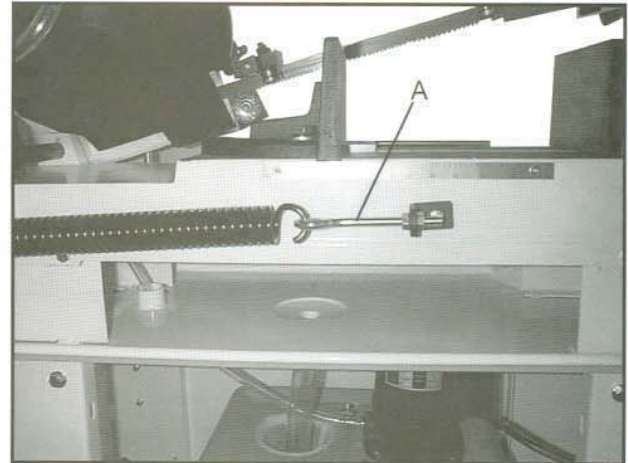


Fig. 18

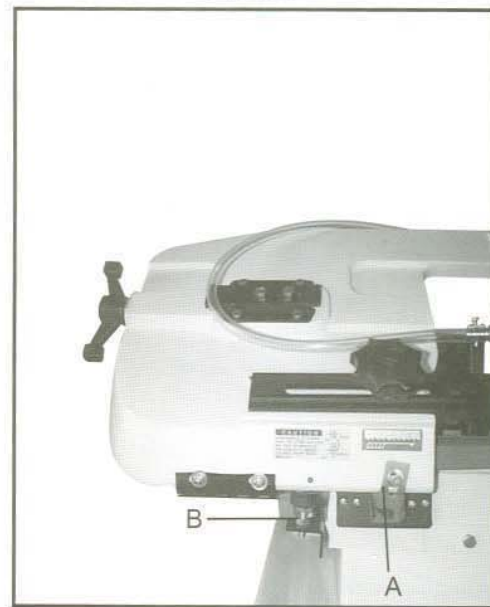


Fig. 19



Fig. 20

5. Place the saw arm in the horizontal position again. Wipe out remaining oil with a rag.
6. Fill the gear box with approximately 3/4 pint of 90 weight gear oil.
7. Replace the gasket and cover. Fasten the cover with screws.
8. Connect machine to the power source.

## Maintenance

### **WARNING**

**Disconnect machine from the power source before making any repair or adjustment! Failure to comply may cause serious injury!**

1. Keep all surfaces clean and free of rust, slag, chips, and coolant build-up.
2. Do not use compressed air to clean the bandsaw. Compressed air may force chips into the guide bearings and other critical areas of the saw.
3. Use a small paint brush or parts cleaning brush to remove metal particles.
4. Wipe the saw down with a clean, dry cloth and oil all unpainted surfaces with light machine oil.
5. Keep the blade guides clean and free of metal chips.
6. Check the guide bearings frequently to make sure they are properly adjusted and turning freely.

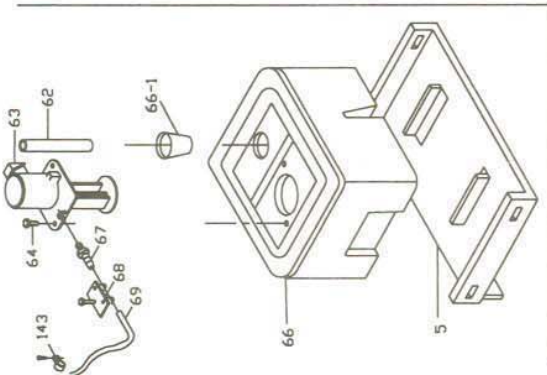
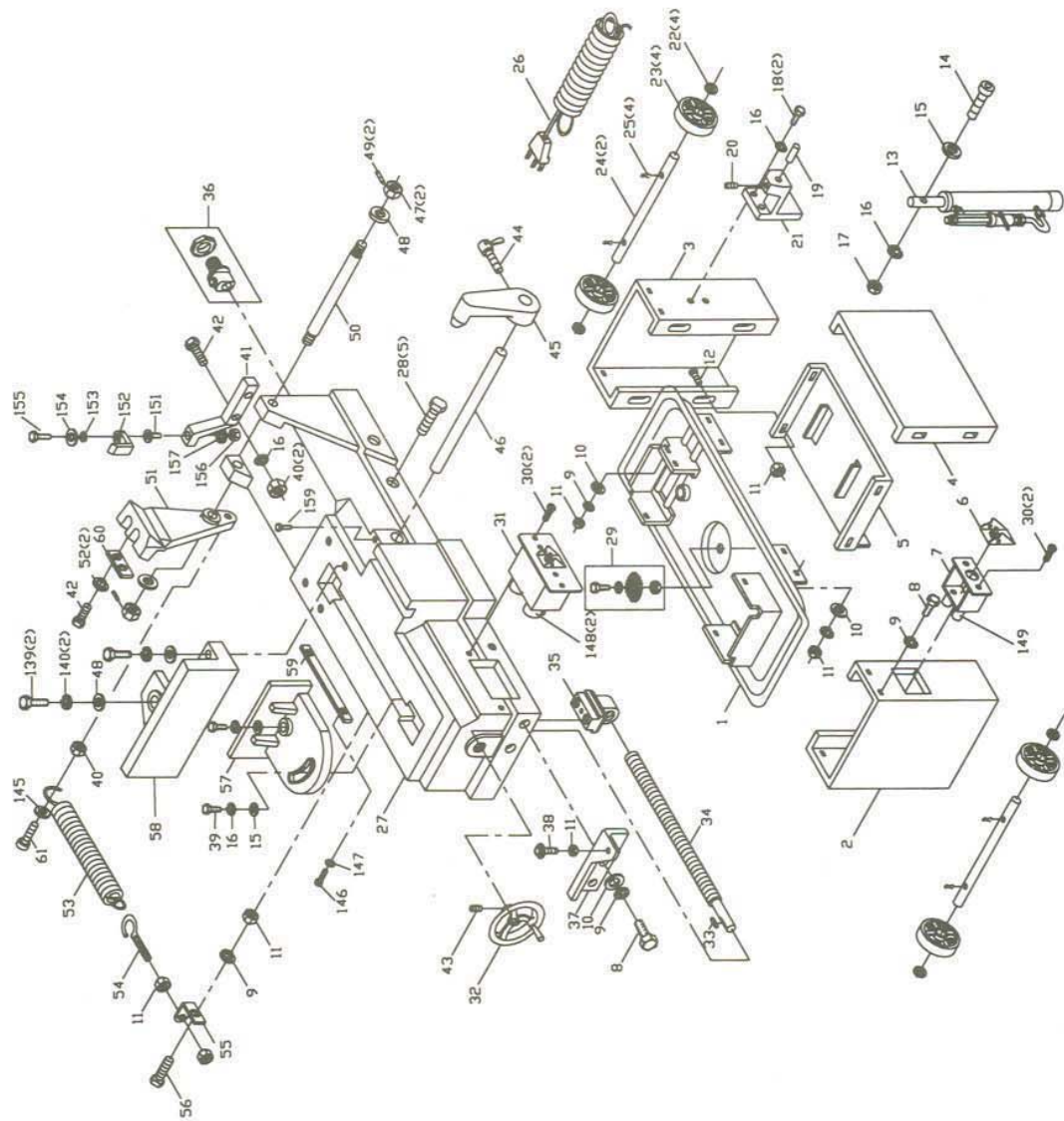
## Chip Cleaning Brush

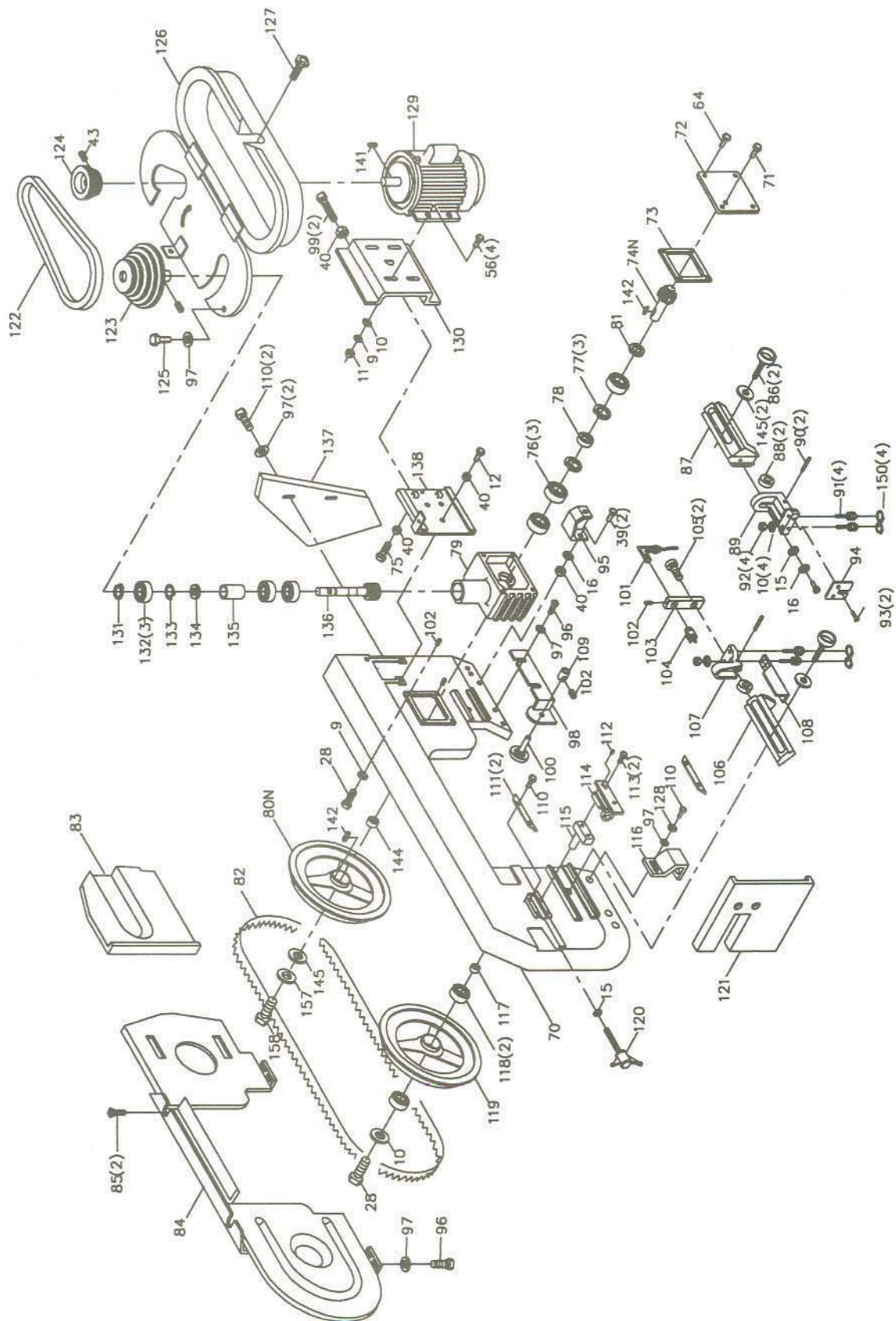
### **WARNING!**

**Do not attempt to adjust blade brush with the machine running! Adjust only when the machine's power cord has been removed from the power source! Failure to comply may cause serious injury!**

It is very important that the blade cleaning brush be properly adjusted and kept in good working order. Replace the brush if it becomes damaged or worn out. Blade life will be shortened severely if the brush is allowed to go out of adjustment, becomes damaged, or is worn out.









## Parts List For The HVBS-7MW Bandsaw

Index No.	Part No.	Description	Size	Qty.
1.....	HVBS7MW-1.....	Coolant Pan.....		1
2.....	HVBS7MW-2.....	Base Leg (left).....		1
3.....	HVBS7MW-3.....	Base Leg (right).....		1
4.....	HVBS7MW-4.....	Skirt.....		1
5.....	HVBS7MW-5.....	Shelf.....		1
6.....	HVBS7MW-6.....	Toggle Switch.....		1
7.....	HVBS7MW-7.....	Electrical Box.....		1
8.....	TS-0051031.....	Hex Cap Bolt.....	5/16x3/4.....	10
9.....	TS-0720081.....	Lock Washer.....	5/16.....	32
10.....	TS-0680031.....	Flat Washer.....	5/16.....	18
11.....	TS-0561021.....	Hex Nut.....	5/16.....	27
12.....	TS-0051011.....	Hex Cap Bolt.....	5/16x1/2.....	8
13.....	HVBS7MW-13.....	Cylinder Assembly (S/N: 010218160 and lower).....		1
	HVBS7MW-13-RK.....	Cylinder Repair Kit (not shown).....		1
14.....	TS-150506.....	Hex Socket Cap Screw.....	M10x40.....	1
15.....	TS-0680041.....	Flat Washer.....	3/8.....	6
16.....	TS-0720091.....	Lock Washer.....	3/8.....	11
17.....	TS-154007.....	Hex Nut.....	M10.....	1
18.....	TS-0060051.....	Hex Cap Bolt.....	3/8x1.....	2
19.....	HVBS7MW-19.....	Support Rod.....		1
20.....	TS-0050011.....	Hex Cap Bolt.....	1/4x1/2.....	1
21.....	HVBS7MW-21.....	Bottom Support.....		1
22.....	TS-0680081.....	Flat Washer.....	5/8.....	4
23.....	HVBS7MW-23.....	Wheel.....	5".....	4
24.....	HVBS7MW-24.....	Wheel Shaft.....		2
25.....	HVBS7MW-25.....	Split Pin.....		4
26.....	HVBS7MW-26.....	Power Cord.....		1
	HVBS7MW-26-1.....	Power Cord (motor - main switch -not shown).....		1
	HVBS7MW-26-2.....	Power Cord (main switch - pump - not shown).....		1
27.....	HVBS7MW-27.....	Table.....		1
28.....	TS-0081051.....	Hex Cap Bolt.....	5/16x1.....	10
29.....	HVBS7MW-29.....	Filter Assembly.....		1
30.....	HVBS7MW-30.....	Hex Head Screw.....	3/16x3/8.....	2
31.....	HVBS7MW-31.....	Switch Box Assembly (S/N: 5011368 & lower).....		1
	HVBS7MW-31N.....	Switch Box Assembly (S/N: 5011369 & higher).....		1
	HVBS7MW-31A.....	Switch (S/N: 5011368 & lower).....		1
	HVBS7MW-31AN.....	Switch (S/N: 5011369 & higher).....		1
32.....	HVBS7MW-32.....	Wheel Handle.....		1
33.....	HVBS7MW-33.....	Key.....	5x20.....	1
34.....	HVBS7MW-34.....	Lead Screw.....		1
35.....	HVBS7MW-35.....	Nut Seat.....		1
36.....	HVBS7MW-36.....	Strain Relief Assembly.....		1
37.....	HVBS7MW-37.....	Support Plate.....		1
38.....	HVBS7MW-38.....	Stop Screw.....		1
39.....	TS-0060061.....	Hex Cap Bolt.....	3/8x1-1/4.....	4
40.....	TS-0561031.....	Nut.....	3/8.....	8
41.....	HVBS7MW-41.....	90° Support.....		1
42.....	TS-0060071.....	Hex Cap Bolt.....	3/8x1-1/2.....	4
43.....	TS-0270031.....	Set Screw.....	5/16x3/8.....	4
44.....	HVBS7MW-44.....	Thumb Screw.....		1
45.....	HVBS7MW-45.....	Stop Block.....		1



46.....	HVBS7MW-46.....	Stop Rod.....	1
47.....	TS-0561031.....	Hex Nut..... 1/2.....	2
48.....	TS-0680061.....	Flat Washer..... 1/2.....	4
49.....	TS-026702.....	Set Screw..... 1/4x1/4.....	2
50.....	HVBS7MW-50.....	Support Shaft.....	1
51.....	HVBS7MW-51.....	Pivot Arm (S/N: 80910746 and lower).....	1
.....	HVBS7MW-51N.....	Pivot Arm (S/N: 80910747 and higher).....	1
52.....	TS-0720091.....	Lock Washer..... 3/8.....	2
53.....	HVBS7MW-53.....	Spring.....	1
54.....	HVBS7MW-54.....	Spring Adjusting Rod.....	1
55.....	HVBS7MW-55.....	Spring Bracket.....	1
56.....	TS-0051061.....	Hex Cap Bolt..... 5/16x1-1/2.....	5
57.....	HVBS7MW-57.....	Vise Jaw (left).....	1
58.....	HVBS7MW-58.....	Vise Jaw (right).....	1
59.....	HVBS7MW-59.....	Scale (S/N: 010217984 and lower).....	1
.....	HVBS7MW-59N.....	Scale (S/N: 010217985 and higher).....	1
60.....	HVBS7MW-60.....	Arm Support Plate.....	1
61.....	TS-020908.....	Hex Socket Cap Screw..... 3/8x1-3/4.....	1
62.....	HVBS7MW-62.....	Hose.....	1
63.....	HVBS7MW-63.....	Pump.....	1
64.....	TS-0050021.....	Hex Cap Bolt *..... 1/4x5/8.....	6
65.....	HVBS7MW-65.....	Tank Cover (S/N: 8091100 and lower).....	1
66.....	HVBS7MW-66.....	Coolant Tank (S/N: 8091100 and lower).....	1
.....	HVBS7MW-66N.....	New Coolant Tank (S/N: 80911001 and higher).....	1
66-1 .....	HVBS7MW-66-1N.....	Plastic Funnel (S/N: 80911001 and higher).....	1
67.....	HVBS7MW-67.....	Hose Fitting.....	1
68.....	HVBS7MW-68.....	Hose Clamp.....	1
69.....	HVBS7MW-69.....	Hose.....	1
70.....	HVBS7MW-70.....	Saw Bow (S/N: 8091100 and lower).....	1
.....	HVBS7MW-70N.....	Saw Bow (S/N: 8091101 and higher).....	1
.....	HVBS7MW-70N1.....	Saw Bow (JET Mark)( S/N: 010218161 and higher).....	1
71.....	HVBS7MW-71.....	Vent Plug *.....	1
72.....	HVBS7MW-72.....	Gear Box Cover *.....	1
73.....	HVBS7MW-73.....	Gear Box Gasket *.....	1
74.....	HVBS7MW-74.....	Worm Gear * ( S/N: 00114808 and lower).....	1
.....	HVBS7MW-74N.....	Worm Gear * ( S/N: 00114809 and higher).....	1
75.....	TS-051061.....	Hex Cap Bolt *..... 5/16x1-1/4.....	1
76.....	BB-6005Z.....	Ball Bearing *.....	3
77.....	HVBS7MW-77.....	C-Ring *..... S-25.....	2
78.....	HVBS7MW-78.....	Oil Seal *.....	1
79.....	HVBS7MW-79.....	Gear Box *.....	1
80.....	HVBS7MW-80.....	Blade Wheel (right)(S/N: 00114808 and lower).....	1
.....	HVBS7MW-80N.....	Blade Wheel (right)(S/N: 00114809 and higher).....	1
81.....	HVBS7MW-81.....	Worm Bushing *.....	1
82.....	414300.....	Replacement Blade..... 3/4"x.035"x93"x10/14VT.....	1
.....	414303.....	Replacement Blade..... 3/4"x.035"x93"x5/8VT.....	1
.....	414304.....	Replacement Blade..... 3/4"x.035"x93"x6/10VT.....	1
83.....	HVBS7MW-83.....	Wheel Cover.....	1
84.....	HVBS7MW-84.....	Rear Wheel Cover.....	1
85.....	HVBS7MW-85.....	Plum Screw.....	2
86.....	HVBS7MW-86.....	Lock Knob.....	2
87.....	HVBS7MW-87.....	Adjustable Bracket (right).....	1
88.....	BB-608ZZ.....	Ball Bearing.....	2
89.....	HVBS7MW-89.....	Adjustable Blade Seat (right).....	1
90.....	HVBS7MW-90.....	Bearing Pin.....	2
91.....	HVBS7MW-91.....	Eccentric Shaft Assembly (outside).....	2
.....	HVBS7MW-91A.....	Center Shaft Assembly(inside)(S/N: 80910747 and higher).....	2
.....	BB-608ZZ.....	Ball Bearing (not shown).....	8
.....	HVBS7MW-91-2.....	Eccentric Shaft (outside)(not shown).....	2



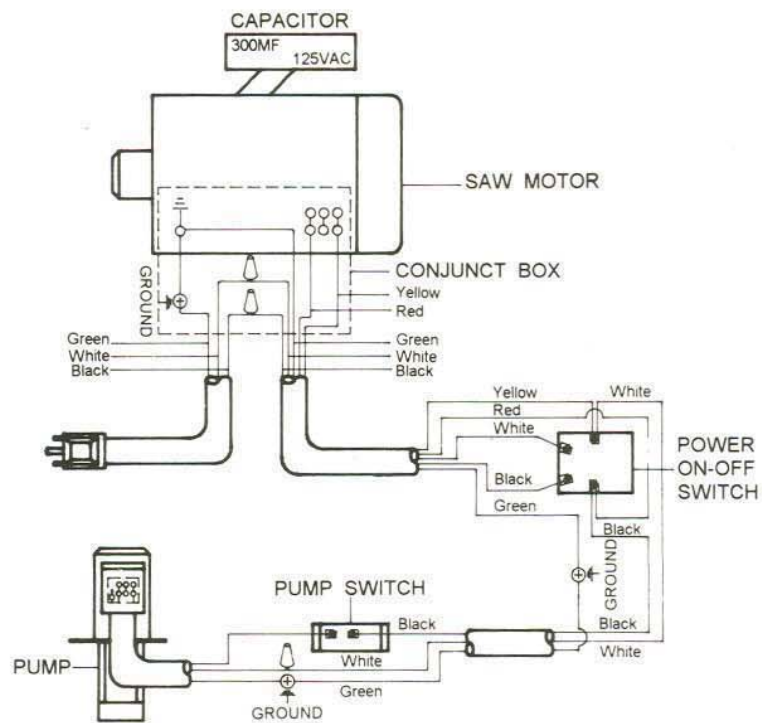
.....	HVBS7MW-91A-2	Center Shaft (inside)( S/N: 80910747 and higher)	.....2
.....	HVBS7MW-91-3	C-Ring (not shown)	.....4
92.....	TS-0561031	Hex Nut	.....3/8 .....4
93.....	HVBS-7MW-91-4	Flat Head Screw	.....1/4x3/8 .....2
94.....	HVBS7MW-94	Vertical Cutting Plate	.....1
95.....	HVBS7MW-95	Top Support	.....1
96.....	TS-0813032	Round Head Screw	.....1/4x1/2 .....6
97.....	TS-0680021	Flat Washer	.....1/4 .....11
98.....	HVBS7MW-98	Brush Holder	.....1
99.....	TS-0060111	Hex Cap Bolt	.....3/8x2-1/2 .....2
100.....	HVBS7MW-100	Brush	.....1
101.....	HVBS7MW-101	Nozzle Cock	.....1
102.....	TS-0267021	Set Screw	.....1/4x1/4 .....3
103.....	HVBS7MW-103	Nozzle Cock Support	.....1
104.....	HVBS7MW-104	Valve	.....1
105.....	TS-0208071	Hex Socket Cap Screw	.....5/16x1-1/4 .....2
106.....	HVBS7MW-106	Adjustable Bracket (left)	.....1
107.....	HVBS7MW-107	Adjustable Blade Seat (left)	.....1
108.....	HVBS7MW-108	Blade Guard	.....1
109.....	HVBS7MW-109	Brush Support	.....1
110.....	TS-0050011	Hex Cap Bolt	.....1/4x1/2 .....7
111.....	HVBS7MW-111	Guide Plate	.....2
112.....	HVBS7MW-112	Set Screw	.....5/16x3/4 .....1
113.....	TS-0051071	Hex Cap Bolt	.....5/16x1-1/2 .....2
114.....	HVBS7MW-114	Blade Tension Block	.....1
115.....	HVBS7MW-115	Sliding Draw Block	.....1
116.....	HVBS7MW-116	Switch Cut-Off Trip	.....1
117.....	HVBS7MW-117	Bearing Bushing	.....1
118.....	BB-6203Z	Ball Bearing	.....2
119.....	HVBS7MW-119	Wheel	.....1
120.....	HVBS7MW-120	Blade Tension Handwheel	.....1
121.....	HVBS7MW-121	Vertical Cutting Plate	.....1
122.....	VB-3V270	V-Belt	.....1
123.....	HVBS7MW-123	Worm Pulley	.....1
124.....	HVBS7MW-124	Motor Pulley	.....1
125.....	HVBS7MW-125	Hex Head Screw	.....1/4x3/8 .....2
126.....	HVBS7MW-126	Pulley Cover	.....1
127.....	HVBS7MW-127	Lock Screw	.....1
128.....	TS-0720071	Lock Washer	.....1/4 .....1
129.....	HVBS7MW-129	Motor	.....1
.....	HVBS7MW-129A	Motor Fan (not shown)	.....1
.....	HVBS7MW-129B	Motor Fan Cover (not shown)	.....1
130.....	HVBS7MW-130	Motor Mount Plate	.....1
131.....	HVBS7MW-131	C-Ring *	.....S-17 .....1
132.....	BB-6003Z	Ball Bearing *	.....3
133.....	HVBS7MW-133	C-Ring *	.....R-35 .....1
134.....	HVBS7MW-134	Oil Seal *	.....1
135.....	HVBS7MW-135	Bearing Bushing *	.....1
136.....	HVBS7MW-136	Worm Shaft *	.....1
137.....	HVBS7MW-137	Support Plate	.....1
138.....	HVBS7MW-138	Motor Support Plate	.....1
139.....	TS-0070031	Hex Cap Bolt	.....1/2x1-1/2 .....2
140.....	TS-0720111	Lock Washer	.....1/2 .....2
141.....	HVBS7MW-141	Key	.....5x20 .....1
142.....	HVBS7MW-142	Key *	.....6x20 .....2
143.....	HVBS7MW-143	Hose Clamp	.....2
144.....	HVBS7MW-144	Bearing Bushing	.....1

145.....	HVBS7MW-145.....	Flat Washer.....	3/8.....	4
146.....	HVBS7MW-146.....	Cross Screw.....	1/8 x 1/4.....	2
147.....	HVBS7MW-147.....	Flat Washer.....	1/8.....	2
148.....	HVBS7MW-148.....	Strain Relief Bushing.....		2
149.....	HVBS7MW-149.....	Strain Relief.....		2
150.....	HVBS7MW-150.....	E-Ring.....	E-7.....	2
151.....	HVBS7MW-151.....	Support Screw.....		1
152.....	HVBS7MW-152.....	Bracket.....		1
	HVBS7MW-152A.....	Arm Stop Assembly CP.....		1
153.....	HVBS7MW-153.....	Spring.....		1
154.....	HVBS7MW-154.....	Spring Cap.....		1
155.....	HVBS7MW-155.....	Hex Socket Cap Screw.....	3/16 x 1/2.....	1
156.....	TS-0561031.....	Nut.....	3/8.....	1
157.....	TS-0710091.....	Lock Washer.....	3/8.....	2
158.....	TS-0060051.....	Hex Cap Bolt.....	3/8 x 1.....	1
	HVBS7MW-GB.....	Gear Box Assembly (not shown).....		1
159.....	HVBS7MW-159.....	Hex Head Screw.....	5/16"x3/4".....	1
160.....	HVBS7MW-13-1.....	Control Valve For Hyd. Cylinder.....		1

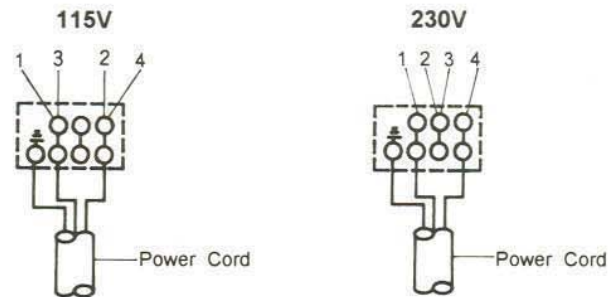
\* included in HVBS7MW-GB Gear Box Assembly



## Electrical Schematic



### Main Motor Dual Voltage Wiring



### Coolant Pump Dual Voltage Wiring

