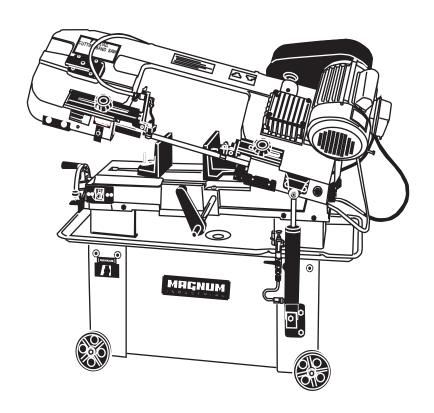
MAGNUM INDUSTRIAL

MODEL NO.: MI-93200



SPECIFICATIONS

Cutting Capacity (HxW) 90° ● 7" (180mm) ■ 7"x10.6" (180x270mm) ■ 2.5"x12" (65x300mm)

45° ● 4.3" (110mm) ■ 7"x3.3" (180x85mm) ■ 5.5"x4.3" (140x110mm)

Blade Speed 50Hz 72/110/148/217 FPM (22/33/45/65 MPM)

60Hz 86/132/178/260 FPM (25/40/55/80 MPM)

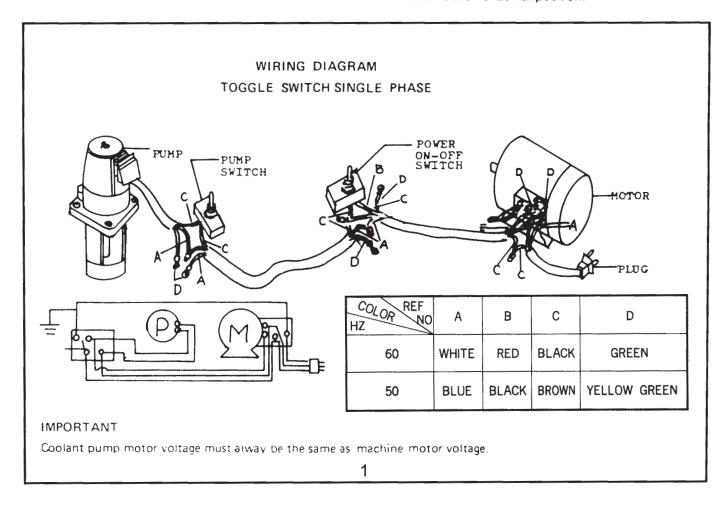
Blade Size 3/4"x0.032"x93" (19x0.9x2360mm)

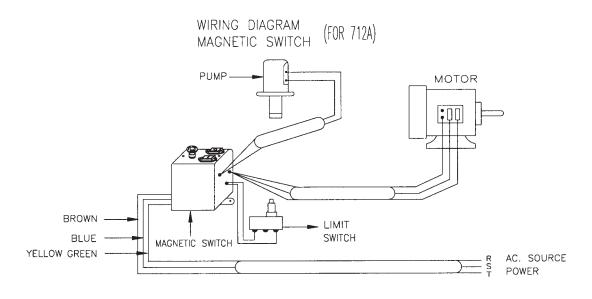
OPERATING MANUAL

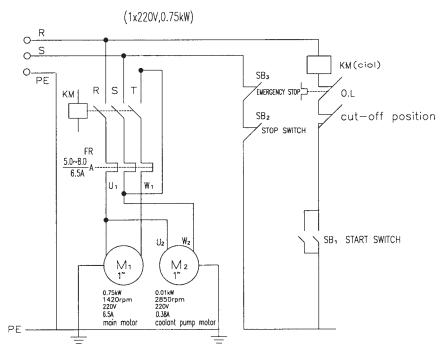
SAFETY INSTRUCTION TO THE OPERATOR

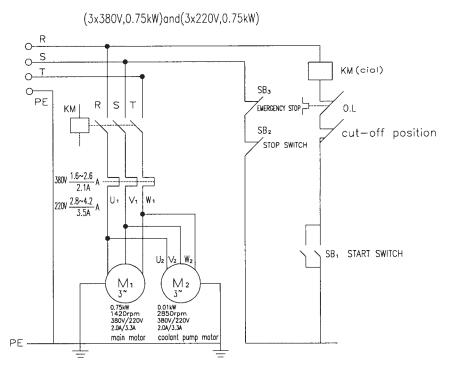
- Know your band saw. Read the operator's manual carefully. Learn the operation, application, and limitions as well as the specific potential hazards peculiar to this band saw.
- 2.This unit is equipped with a three prong (grounding) plug for your protection against shock hazards and should be pluged directly into a properly grounded three prong receptacle. Where a two prong wall receptacle is encountered, it must be replaced with a properly grounded three prong receptacle in accordance with the National Electrical code and Local Codes and Ordinances. THIS WORK SHOULD BE DONE BY A QUALIFIED ELECTRICIAN. DO NOT cut off the round grounding prong!
- Use only 3-wire extension cords which have 3-prong grounding type plugs.
- 4. Replace or repair damage or worn cord immediately.
- 5. Keep guards in place and in working order.
- 6. Be especially careful when using band saw in vertical position to keep fingers and hands out of path of blade.
- 7. Wear ear protection if exposed to long periods of very noisy shop operations.
- 8. Usesafety goggles, hard hat and safety shoes. Also use face or dust mask if cutting operation is dusty.
- 9. Wear proper apparel. No loose clothing or jewelry to get caught in moving parts. Do not wear a tie or gloves.
- Don't overreach. Keep your proper footing and balance at all times.

- Secure work. Always use the vise to hold work. Clamp securely. Never hand-hold the work with saw in horizontal position.
- 12. Keep work area clean. Cluttered areas and benches inveite accidents.
- Avoice dangerous environment. Don't use the band saw in damp or wet location. Keep work area well illuminiated
- 14. Don't force tool. It will do the job better andsafeer at the rate for which it was designed.
- 15. Disconnect power cord before adjusting and servicing, and before changing blade.
- 16. Safety is a combination of operator common sense and alertness at all times when the saw is being used.
- Never stand on tool. Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
- 18. Check damaged parts. Before further use of the tool, a guard or other partrs that is damaged should be carefully checked to assure that it will operate to assure that it will operate properly and perform its Intened 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 otherpart that is damaged should be properly repaired or replaced.
- 19. When moving the saw, ALWAYS have the head lowered to the horizontal position.









ASSEMBLY

A 3/4 or 1 HP, motor, split phase or capacitor start, is recommended for best economical performance. Counterclockwise rotation is required. Note that rotation can be reversed by following directions given on terminal or nameplate.

- 1. Assemble the motor Mounting plate to the head using the long bolt. Note that the flat side of the plate faces up.
- 2. Assemble the guard plate to the Head using the screw and Lock Washer and the Carriage Bolt. Washer and Wing Nutare used to secure the Motor Mounting plate to the Guard plate through the slotted hole in the Guard plate. These components also serve to position and lock the motor in place for proper speed/belt adjustment.
- 3. Place the spacer over the long Bolt and secure it with the nut
- 4. Secure the Motor to the Motor Mounting plate with the four Volts and nuts. Note, that the motor shaft is placed through the large opening in the Guard plate and must be pareallel with the drive shaft.
- Assemble the Motor Pulley, the smaller of the two provided, to the motor shaft. Note, the larger diamenter must be closest to the motor. Do not tighten the set screw.
- Assemble the Driven Pulley, the larger of the two provided, to the protruding drive Shaft. Note the smaller diameter must be closest to the bearing. Do not tighten the set screw.
- Place the belt into one of the pulley groove and the other end into the respective grooves of the second pulley.
- 8. Line up the belt and both pulleys such that the Belt is running parallel in the pulley grooves.
- 9. Tighten the set screws of both pulleys in this position.
- 10. Place the belt into proper pulley combination for proper blade speed. See material cutting Chart.
- 11. Adjust the position of the Motor to obtain approximately 1/2" depression in the belt when applying pressure with your thumb.
- 12. Tighten the head screw Holding the Motor Mounting plate to the Guard plate.
- 13. Connect the Electrical Harness to the motor terminal box. The motor should be protected with a time delay fuse or circuit breaker with a rated amperage slightly greater than the full-loadamperage of the motor

INSTALLATION

The saw may be mounted on your own bench or stand. The rear end of the are must be mounted flush with the rear of the stand or bench to permit vertical operation for this band saw. A Steel your dealer for this band saw. This stand has punched holes to effect easy assembly to the base using eight standard bolts.

OPERATION

WORK SET UP

- 1. Raise the saw head to vertical position.
- 2. Open vise to accept the piece to be cut by rotating the wheel at the end the base.
- 3. Place workpiece on saw bed. If the piece is long, support the end.
- 4. Clamp workpieced securely in vise.

WORK STOP ADJUSTMENT

- 1. Loosen the thumb holding the work stop casting to the shaft.
- 2. Adjust the work stop casting to the desired length position.
- 3. Rotate the work stop to as close to the bottom of the cut as possible.
- 4. Tighten thumb screw.
- DO NOT ALLOW the blade to rest on the work while the motor is shut off.

CONVERTING FOR VERTICAL USE

Nothing, slitting, contour work may be done with the saw in the vertical position in the following maner:

- 1. Rotate the head to the vertical position.
- Assemble a 10"x10" table (an uption that may be purchased from your dealer to the guide bar using the screws provided and the guide bar knob.

BLADE SPEEDS

When using your Band saw always change the blade speed to best suit the material being cut. The material Cutting Shart givers suggested settings for several materials.

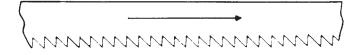
4 SPEED MATERIAL CUTTING CHART

Material		Speed F.P.M.		Belt Groove Used	
	60Hz	50Hz	Motor Pulley	Saw Pulley	
Tool, Stainless Alloy Steels Bearing Bronze	86	72	Small	Largest	
Medium to High Carbon Steels Hard Brass or Bronze	132	110	Medium	Large	
Low to Medium Carbon Steels Soft Brass	178	148	Large	Medium	
Aluminum Plastic	260	217	Largest	Small	

BLADE DIRECTION OF TRAVEL

Be sure the blade is assembled to the pulleys such that the vertical edge engages the work piece first.

BLADE MOVEMENT



STARTING SAW

CAUTION: NEVER OPERATE SAW WITHOUT BLADE GUARDS IN PLACE.

Be sure the blade is not in contact with the work when the motor is started. Start the motor, allow the saw to come to full speed, then begin the cut by lefting the head down slowly onto the work. DO NOT DROP OR FORCE. Let the weight of the saw head provide the cutting force. The saw automatically shuts off att the end of the cut.

BLADE SELECTION

A 8-tooth per inch, general-use blade is furnished with this metal Cutting Band Saw. Additional blades in 4,6,8, and 10 tooth sizes are available. The choisce of blade pitch is governed by the thickness of the work to be cut; the thinner the workpiece, the more teeth advised. A minimum of three (3) teeth should angage the workpiece at all times for proper cutting. If the teeth of the blade are so far apart that they straddle the work, severe damage to the workpiece and to the bladecan result.

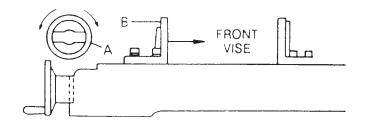
CHANGING BLADE

Raise saw head to vertical position and open the blade guards. Loosen tension screw knob sufficiently to allow the saw blade to slip off the wheels. Install the new blade with teeth slanting toward the motor as follows:

- 1. Place the blade in between each of the guide bearings.
- 2. Slip the blade around the motor pulley (bottom) with the left hand and hold in position.
- 3. Hold the blade taut against the motor pulley by pulling the blade upward with the right hand which is placed at the top of the blade.
- 4. Remove left hand from bottom pulley and place it at the top aide of the blade to continue the application on the upward pull on the blade.
- 5 Remove right hand from blade and adjust the position of the top pulley to permit left hand to slip the blade around the pulley using the thumb, index and little finger as guides.
- Adjust the blade tension knob clockwise until it is just right enough so no blade slippage occurs. Do not tighten excessively.
- 7. Replace the blade quards.
- 8. Place 2-3 drops of oil on the blade.

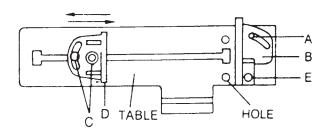
USAGE OF THE QUICK VISE

Your machine is equipped with a "quick thanaction" vise jaw which allows you to instantly position the moveable vise jaw (B). Simply turn handwheel (A) counterclockwise 1/2 turn and move the vise jaw (B) to the desired position. Then tighten the vise jaw (B) against the workpiece by turning hand-wheel-clockwise.



QUICK VISE ADJUSTMENT FOR ANGLE CUT

- 1. Loosen the A. B. C. Screw.
- 2. Adjust rear vise to the threaded hole position. (E)
- 3. Set the scale to the desired angle.
- 4. Adjust the front vise (D) to parallel the rear vise (E).
- 5. Tighten the A. B. C. Screw.



BLADE GUIDE BEARING ADJUSTMENT

ATTENTION: This is the most important adjustment on your saw. It is impossible to get satisfactory work from your saw if the blade guides are not properly adjusted. The blade guide bedarings on your metal. Cutting Band Saw are adjusted and power tested with several test cuts before leaving the factory to insure proper setting. The need for adjustment should rarely occur when the saw is usedproperly. If the guides do get out of adjustment, through, it is extremely important to readjust immediately. If improper adjustment in maintained, the blade will not cut straight, and if the situation is not corrected it will cause serious blade damage.

Because guide adjustment is a critical factor in theperformance of your saw, it is always best to try a new blade to see if this will correct poor cutting before beginning to adjust. If a blade becomes dull on one side sooner than the other, for example, it will begin cutting crooked. A blade change will correct this problem the guide adjustment will not. If a new blade does not correct the problem, check the blade guides for proper spacing.

NOTE: There should be from 000 (just touching) 001 clearance between the blade and guide bearings, to obtain this clearance adjust as follows:

- 1. The inner guide bearing is fixed and cannot be adjusted.
- 2. The outer guide bearing is mounted to an eccentric bushing and can be adjusted.
- 3. Loosen the nut while holding the bolt with an Allen wrench.
- 4. Position the eccentric by turning the bolt to the desired position of clearance.
- 5. Tigthten the nut.
- Adjust the second blade guide bearing in the same manner.

BLADE TRACK ADJUSTMENT

- 1. Open the blade guard.
- 2. Remove the blade guide assemblies (top and bottom)
- 3. Loosen the hex head screw in the tilting machanism to a point where it is loose but snug.
- 4. With the machine running, adjust both the set screw and blade tension knob simultaneously to keep constant tension on the blade. The set screw and blade tension knob are always turned in opposite directions, ie, when one is turned clockwise the other is turned counterclockwise. The blade is tracking properly when the back side just touches the shoulder of pulley or a slight gap appears near the center line of the pulley. Care should be taken not to overtighten the saw blade since this will give a false adjustment and limit life of the blade.

- 5. Tighten the hex head screw in tilting mechanism. IMPORTANT: Sometimes in trying to make this critical adjustment it is possible to cause the basic setting to be misaligned. Should this occur, proceeds as follows:
 - a. Loosen the set screw and back it out as far as it can go and still remain in the threaded hole.
 - b. Turn the hex head screw clockwise until it stop (do not tighten).
 - c. Turn the set screw clockwise until it bottoms, then continue for half a turn and check the tracking by turning on the machine.
 - d. If further adjustment is required, go back to step 4.
- 6. Turn off power to the machine.
- 7. Replace the clade guide assemblies-- it may be necessary to loosen the blade tension alightly.
- 8. Adjust the vertical position of blade guide bearing assemblies so that the back side of the blade just touches the ball bearings.
- Make a final run to check tracking. It required, touch up adjustment (See stop 4)
- 10. Replace the blade guards.

MAINTENANCE

CAUTION: MAKE CERTAIN THAT THE UNIT IS DISCONNECTED FROM THE POWER SOURCE BEFORE ATTEMPTING TO SERVICE OR REMOVE ANY COMPONENT!

LUBRICATION

Lubricate the following components using SAE-30 oil as noted.

- 1. Ball-bearing none.
- 2. Driven pulley bearing 6-8 drops a week.
- 3. Vise lead screw as needed.
- 4. The drive gears run in an oil bath and will not require a lubricant change more often than once a year, unless the lubricant is accidentally contaminated or a leak occurs because of improper replacement of the gear box cover. During the first few days of operation, the worm gear drive will run hot. Unless the temperature exceeds 200 F., there is no cause for alarm.

The following lubricants may be used for the gear box: Atlantic Refinery Co. Mogul Cyl. Oil

Cities Service Optimus No. 6
Gulf Refinery Co Medium Gear Oil

Pure Oil co. Park Clipper

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.
- 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

- 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 holes in base.
- Slide wheels onto axles and fasten with pins. Bend pins to hold in place.
- 4. Slide material stop bar (A, Fig. 1) into base and secure by tightening bolt (B). Slide material stop (C) onto bar and tighten bolt (D).
- 5. Slide belt cover over pulley assemblies and fasten with screws and washers (A, Fig. 2).
- 6. Close belt cover and secure with lock knob (B).

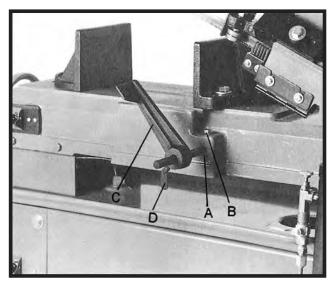


Fig. 1

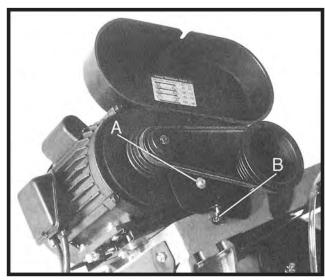


Fig. 2

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

Vertical Cutting Plate Assembly (Option)

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!

- Disconnect the bandsaw from the power source.
- Raise the arm to the vertical position and lock in place by turning the hydraulic cylinder valve to the off position.
- 3. Remove two screws (A, Fig. 3) and remove the deflector plate (B).
- 4. Guide blade through slot in table and fasten with two screws. See Fig. 4.



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

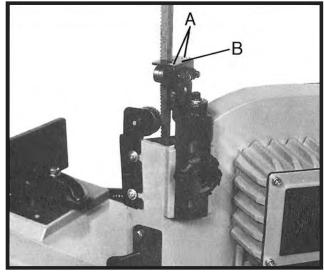


Fig. 3

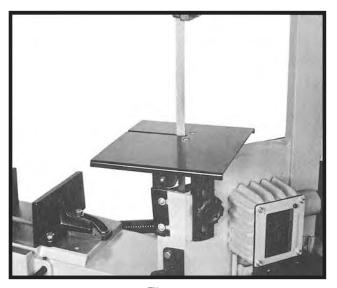


Fig. 4

Electric Box (For UE-712A)

- A. Part No.A Emergency stop switch (EMS). It stop all electric motors including coolant pump.
- B. Part No.B Start switch.
- C. Part No.C-Stop switch.

There is a relay inside the electric box. When machine is overloaded and the current is too high. This relay will switch off automatically as protection. It cuts off all electrics and machine stops.

Open the electric box and find this switch in white button. Please reset this white button to function the electrics again.

If this machine gets overloaded too often, Try to adjust the realy-make the setting of current higher.

Adjusting Blade Square to Table

- 1. Disconnect machine from the power source.
- 2. Place machinist's square on table next to blade as pictured in Fig. 6.
- 3. Check to see blade makes contact with square along the entire width of the blade.
- 4. If adjustment is necessary, loosen bolts (A Fig. 6.) and rotate blade guide assemblies slightly in the same direction until blade makes contact with the square along it's entire width.
- 5. Tighten bolts (A).
- 6. Connect 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 machine from the power source.
- Place a machinist's square as pictured in figure
 Square should lie along entire length of vise and blade without a gap.
- If adjustment is necessary, loosen bolts holding vice and adjust vise so that square lines up properly. Tighten bolts.
- 4. Connect machine to the power source.

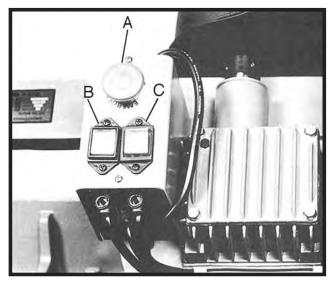


Fig. 5

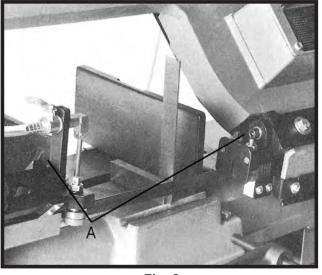


Fig. 6

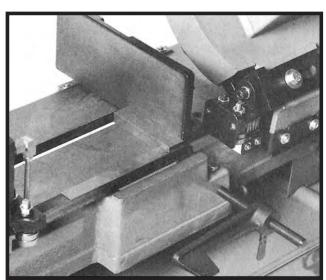


Fig. 7

Adjusting Blade Guides

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

Vise Adjustment

⚠ WARNING

Do not make <u>any</u> 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 bolt assemblies (C, Fig. 9).
- Position vise and re-install as pictured in Fig.
 Pay particular attention to bolt hole location.
- 3. Set vise to desired angle, re-install bolts, and tighten nut and bolt assemblies.
- 4. Adjust movable vise parallel to 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 nut and bolt assemblies.
- 2. Position vise and re-install bolt assemblies as pictured in Fig 9.

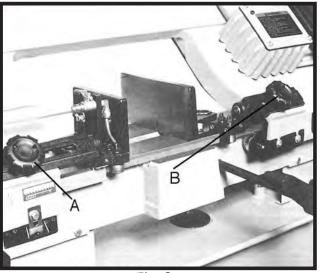


Fig. 8

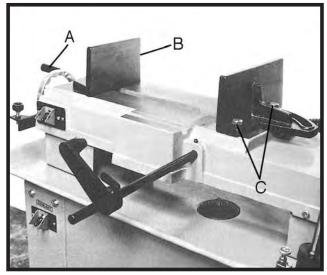


Fig. 9

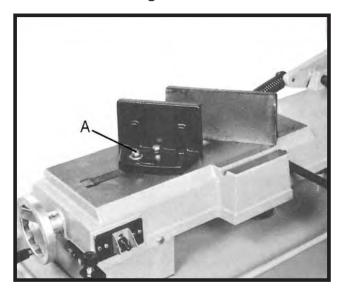
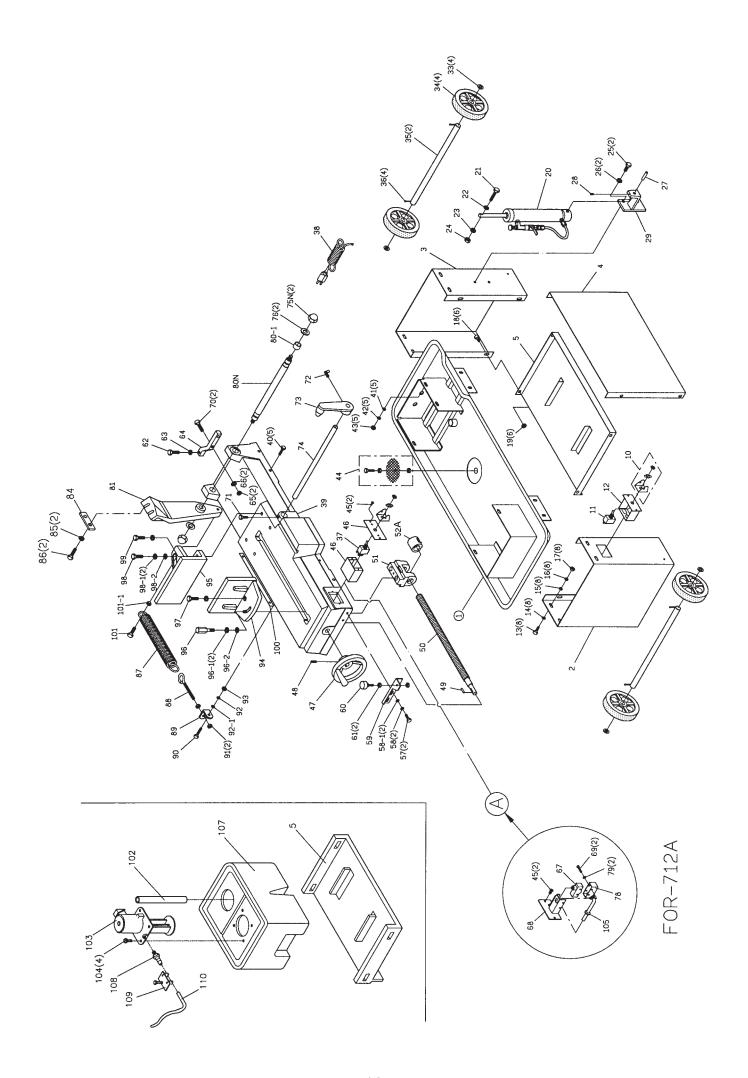
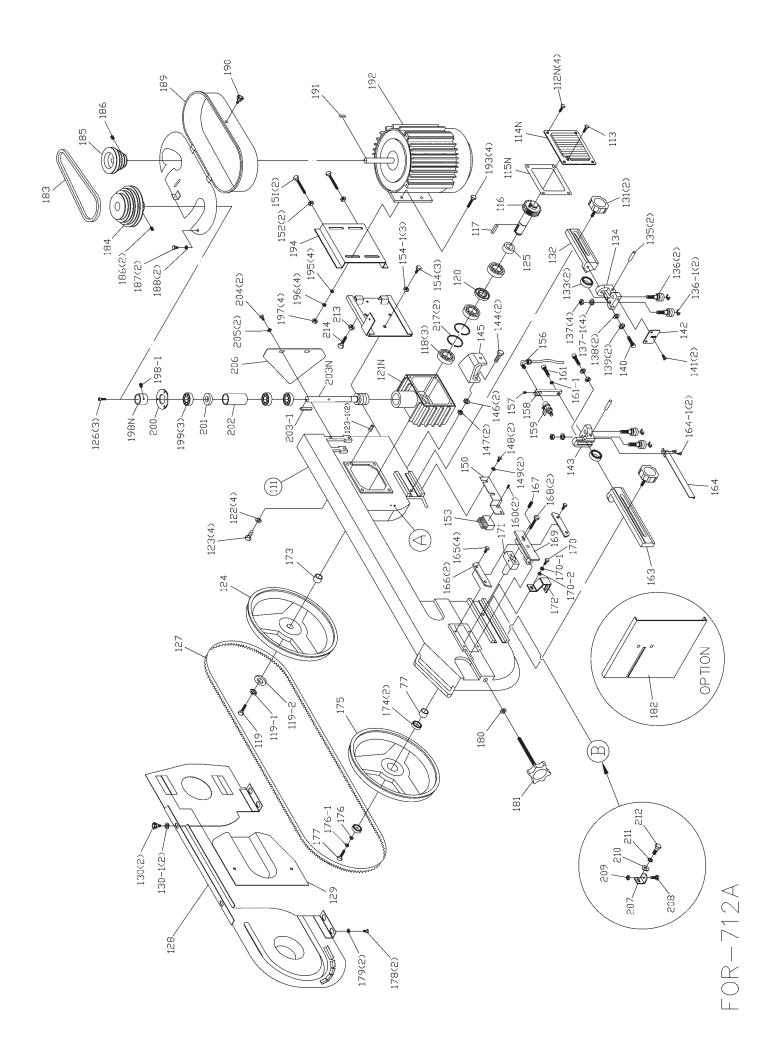


Fig. 10

TROUBLE SHOOTING CHART

SYMPTOM	POSSIBLE CAUSE (s)	CORRECTIVE ACTION
	Incorrect blade tension	Adjust to where blade just does not slip on w wheel
	2. Incorrect speed or feed	2. Check Machinist Handbook
	3. Material loose in vise	3. Clamp work securely
	4. Blade rubs on wheel flange	4. Adjust wheel alignment
Excessive Blade	5. Teeth too coarse for material	Check Machinist Handbook for recommanded
		blade type
Breakage	6. Teeth in contact with work before sawis	6. Place blade in contact work after motor is
	started	started
	7. Misaligned guides	7. Adjust
	8. Blade too thick for wheel diameter	8. Use thinner blade
	9. Cracking at weld	Make longer annealing cycle
	Teeth too corase	Use finer tooth blade
	2. Too much speed	2. Try next lower speed
	3. Inadequate feed pressure	Decrease spring tension on side of saw
Permature Blade	4. Hard spots or scale in/on material	4. Reduce speed increase feed pressure (Scale)
remature blade		Increase feed pressure (Hard Spots)
Dulling	5. Work hardening of material (especially	5. Increase feed pressure by reducing spring
· ·	stainless steel)	tension 6. Remove blade twist inside out and reinstall
	6. Blade installed backwards	blade.
	7. Insufficient blade tension	7. Increase tension to proper level
		Adjust vise to be square with blade Always
	1. Work not square	clamp work tightly in vise.
	2. Feed pressure too great	Reduce pressure by increasing spring tension on side of saw.
	3. Guide bearing not adjusted properly	Adjust guide bearing to 001 greater than max. thickness, including weld of the saw.
	4. Inadequate blade tension	4. Increas ade tension a little at a time.
Bad Cuts (Crooked)	5. Blade guides spaced out too much	5. Move guide as close to work as possible.
	6. Dull blade	6. Replace blade
	7. Speed incorrect	7. Check manual for recommended speeds
	8. Blade guide assembly loose	8. Tighten
	Blade guide bearing assembly loose	9. Tighten
	10. Blade tracks too'far away from wheel	10. Retrack blade according to operating
	flanges	instructions.
Bade cuts (Rough)	1. Too much speed or feed	1. Reduce speed and feed
	2. Blade is too coarse	2. Replace with finer blade
Blade is twisting	1. Cut is binding blade	Decrease feed pressure
3	2. Too much blade tension	2. Decrease blade tension
Unusual Wear on	Blade guides worn	1. Replace
	Blade guide bearings not adjusted properly	2. Adjust as per operators manual
Side/Back of Blade	Blade guide bearing bracket is loose	3. Tighten
	1. Tooth Too coarse for work	1. Use finer tooth blade
Feeth Ripping from	2. Too heavy feed / too slow feed	2. Increase feed pressure and/or speed
	3. Vibrating work place	3. Clamp work Securely 4. Use coarse tooth blade or brush to remove
blade	4. Gullets loading	chips
	1. Plade tension too high	Reduce tension on blade
	1. Blade tension too high	1
	2. Drive belt tension too high	2. Reduce tension on drive belt
Motor Running too	3. Blade is too coarse for work (Pipes especially)	3. Use finer blade
·	4. Blade is too fine for work (Heavier, soft	4. Use coarser blade
	materially)	
Hat	1	I C A II
Hot	5. Gear not aligned properly	5. Adjust gears so that worm is in center or gear
Hot	Gear not aligned properly Gears need lubrication	6. Check oil bath 7. Oil bearing/shaft on idler wheel





ITEM NO.	DESCRIPTION	SIZE	Q'ty
MI-93200-001	BOTTOM PAN		1
MI-93200-002	LEG LEFT)		1
MI-93200-003	LEG RIGHTI		1
MI-93200-004	SKRI		1
MI-93200-005	SHELF		1
MI-93200-010	SWITCH BRACKET		1
MI-93200-011	TOGGLE SWITCH		1
MI-93200-012	ELECTRICAL BOX		1
MI-93200-013	HEX HD SCREW	5/16X3/4	8
MI-93200-014	WASHER	5/16	8
MI-93200-015	WASHER	5/16	8
MI-93200-016	SPRING A SHER	5/16	8
MI-93200-017	NUT	5/16	8
MI-93200-018	MEX HD SCREW	5/16X1/2	6
MI-93200-019	NUT	5/16	6
MI-93200-020	CYUNDER		1
MI-93200-021	HEX SOC SOREN	M10X40	1
MI-93200-022	WASHER	3/8	1
MI-93200-023	SPRING WASHER	M10	1
MI-93200-024	NUT	M10	1
MI-93200-025	HECHO SCREW	3/8X1	2
MI-93200-026	SPRING WASHER	3/8	2
MI-93200-027	SUPPORT ROD		1
MI-93200-028	SET SCREW	1/4X3/8	1
MI-93200-029	BOTTOM SUPPORT		1
MI-93200-033	WASHER	5/8	4
MI-93200-034	WHEEL	5"	4
MI-93200-035	WHEEL SHAFT		2
MI-93200-036	CUTTER PIN		4
MI-93200-037	TOGGLE SWITCH		1
MI-93200-038	ELECTRIC CORD ASSEMBLY		1
MI-93200-039	TABLE		1
MI-93200-040	HEX HD. SCREW	5/16X1	5
MI-93200-041	WASHER	5/16	5
MI-93200-042	SPRING WASHER	5/16	5
MI-93200-043	NUT	5/16	5
MI-93200-044	ALTER		1
MI-93200-045	ROUNO HO SCREW	3/16X3/8	2
MI-93200-046	ELECTRIC BOX ASSEMBLY		1
MI-93200-047	HANDLE WEE.		1
MI-93200-048	SET SCREW	5/16X3/8	1
MI-93200-049	KEY	5X20	1
MI-93200-050	LEAD SCREN		1
MI-93200-051	NUT SEAT		1
MI-93200-052A	ACME NUT ASSEMBLY		1
MI-93200-057	HECHO. SOREN	5/16X5/8	2

ITEM NO.	DESCRIPTION	SIZE	Q'ty
MI-93200-058	SPRING WAS ER	5/16	2
MI-93200-058-1	WASHER	5/16	2
MI-93200-059	SUPPORT PLATE		1
MI-93200-060	STOP SCREW		1
MI-93200-061	NUT	5/16	2
MI-93200-062	FEX HD SCREW	3/8X1	1
MI-93200-063	NUT	3/8	1
MI-93200-064	90° POSITION SUPPORT		1
MI-93200-065	NUT	3/8	2
MI-93200-066	SPRING WASHER	3/8	2
MI-93200-067	LIMIT SWITCH		1
MI-93200-068	LIMIT SWITCH SEAT		1
MI-93200-069	ROUND HD. SCREW	5/32X1	2
MI-93200-070	HEX HD. SCREW	3/8X1-1/2	2
MI-93200-071	HEX HO SCREW	5/16X3/4	1
MI-93200-072	THUMB SCREW		1
MI-93200-073	STOP BLOCK		1
MI-93200-074	WORK STOP ROD		1
MI-93200-075N	FIBER HEX. NUT	1/2	2
MI-93200-076	WASHER	1/2	2
MI-93200-077	BEARING BUSHING (FRONT)		1
MI-93200-078	RUBBER COVER		1
MI-93200-079	WASHER	5/32	2
MI-93200-080N	SUPPORT SHAFT	22MM	1
MI-93200-080-1	BUSHING		1
MI-93200-081	PIVOT ARM		1
MI-93200-084	PLATE	0.0	1
MI-93200-085	SPRING WASHER	3/8	2
MI-93200-086	HEX.HD. SCREW	3/8X1-1/2	2
MI-93200-087	SPRING		1
MI-93200-088	ADJUSTABLE SPRING ROD		1
MI-93200-089	SPRING BRACKET	EMCVA	1
MI-93200-090	HEX.HD, SCREW	5/16X1	1
MI-93200-091	NUT SPRING WASHER	3/8 5/16	1
MI-93200-092 MI-93200-092-1	SPRING WASHER	5/16	1
-	WASHER	5/16	1
MI-93200-093 MI-93200-094	NUT FRONT VISE	3/10	1
MI-93200-094	REAR VISE		1
MI-93200-095	VISE THRUST SHAFT		1
MI-93200-096-1	SPRING WASHER	3/8	2
MI-93200-096-2	WASHER	3/8	1
MI-93200-097	HEX.HD SCREW	3/8X1-1/2	1
MI-93200-097	HEX.HD. SCREW	1/2X1-1/2	1
MI-93200-098-1	SPRING WASHER	1/2	2
MI-93200-098-2	WASHER	1/2	1
	WAGIEN	1/2	

ITEM NO.	DESCRIPTION	SIZE	Q'ty
MI-93200-099	HEX.HD. SCREW	1/2X1-1/4	1
MI-93200-100	SCALE		1
MI-93200-101	HEX, SOC SCREW	3/8X1-3/4	1
MI-93200-101-1	NUT	3/8	1
MI-93200-102	HOSE	1"	1
MI-93200-103	PUMP		1
MI-93200-104	ROUND HD. SCREW	1/4X1/2	4
MI-93200-105	STRAIN RELIEF		1
MI-93200-107	COOLANT TANK		1
MI-93200-108	HOSE FITTING		1
MI-93200-109	HOSE CLAMP	13MM	1
MI-93200-110	HOSE	5/16	1
MI-93200-111	SAW BOW		1
MI-93200-112N	TAPPING SCREN	6X20	4
MI-93200-113	VENT PLUG		1
MI-93200-114N	GEAR BOX COVER		1
MI-93200-115N	GEAR BOX GASKET		1
MI-93200-116	WORM GEAR	oven	1
MI-93200-117	KEY	6X20	1
MI-93200-118	BALL BEARING	6005	3 1
MI-93200-119 MI-93200-119-1	HEX HD. SCREW SPRING WASHER	3/8X7/8 3/8	1
MI-93200-119-1	WASHER WASHER	3/8X35X4	1
MI-93200-120	OIL SEAL	25.47.7	1
MI-93200-121N	GEAR BOX	20.11.1	1
MI-93200-122	SPRING WASHER	5/16	4
MI-93200-123	HEX HD SCREW	5/16X1-1/4	4
MI-93200-123-1	ADU. SCREW	1/4X3/8	2
MI-93200-124	BLADE WHEEL (REAR)		1
MI-93200-125	BEARING BUSHING		1
MI-93200-126	HEX SOC SCREW	3/16X5/8	3
MI-93200-127	BLADE		1
MI-93200-128	BLADE BACK COVER		1
MI-93200-129	WHEEL COVER		1
MI-93200-130	PLUM SCREW		2
MI-93200-130-1	WASHER	1/4	2
MI-93200-131	ADJUSTABLE GUIDE KNOB		2
MI-93200-132	ADJUSTABLE BRACKET (REAR)		1
MI-93200-133	BALL BEARING	608ZZ	2
MI-93200-134	ADJUSTABLE BLADE SEAT (REAR)		1
MI-93200-135	BEARING PN		2
MI-93200-136	ECCENTRIC SHAFT ASSEMBLY		2
MI-93200-136-1	CENTER SHAFT ASSEMBLY		2
WII-30200-100-1			
MI-93200-137	NUT	3/8X24UNF	4
	NUT SPRING WASHER	3/8X24UNF 3/8 5/16	4 4 2

ITEM NO.	DESCRIPTION	SIZE	Q'ty
MI-93200-139	SPRING WASHER	5/16	2
MI-93200-140	HEX, SOC SCREW	5/16X1-1/8	1
MI-93200-141	HD SCREW	1/4X1/2	2
MI-93200-142	VERTICAL CUTTING PLATE (SMALL)		1
MI-93200-143	ADJUSTABLE BLADE SEAT FRONTY		1
MI-93200-144	HEX HD SCREW	3/8X1-1/4	2
MI-93200-145	TOP SUPPORT		1
MI-93200-146	SPRING WASHER	3/8	2
MI-93200-147	NUT	3/8	2
MI-93200-148	ROUND HD. SCREN	1/4X1/2	2
MI-93200-149	WASHER	1/4	2
MI-93200-150	BRUSH HOLDER		1
MI-93200-151	HEX.HD SCREW	5/16X2-1/2	2
MI-93200-152	NUT	5/16	2
MI-93200-153	BRUSH		1
MI-93200-154	HEX. HD SCREW	5/16X5/8	3
MI-93200-154-1	SPRING WASHER	5/16	3
MI-93200-156	NOZZLE	44000	1
MI-93200-157	SET SCREW	1/4X3/8	1
MI-93200-158	NOZZLE SUPPORT		1
MI-93200-159	VALVE POLIND NO CODEW	2/46/2/0	2
MI-93200-160 MI-93200-161	ROUND HO SCREW HEX. SOC. SCREW	3/16X3/8 5/16X1-1/8	1
MI-93200-161-1	SPRING WASHER	5/16	1
MI-93200-163	ADJUSTABLE BRACKET (FRONT)	3/10	1
MI-93200-164	BLADE GUARD		1
MI-93200-164-1	ROUND HO SCREW	3/16X1/4	2
MI-93200-165	HEX HO SCREW	1/4X1/2	4
MI-93200-166	SLIDING GUIDE PLATE		2
MI-93200-167	SET SCREW	5/16X3/4	1
MI-93200-168	HEX HO. SCREW	5/16X1-1/2	2
MI-93200-169	BLADE TENSION SLIDING BLOCK		1
MI-93200-170	HEX HD, SCREW	1/4X1/2	1
MI-93200-170-1	SPRING WASHER	1/4	1
MI-93200-170-2	WASHER	1/4	1
MI-93200-171	SLIDING DRAW BLOCK		1
MI-93200-172	BRACKET		1
MI-93200-173	BEARING BUSHING REAR)		1
MI-93200-174	BALL BEARNG	6203ZZ	2
MI-93200-175	BLADE WHEEL (FRONT)		1
MI-93200-176	WASHER	5/16	1
MI-93200-176-1	SPRING WASHER	5/16	1
MI-93200-177	HEX.HD SCREN	5/16X3/4	1
MI-93200-177			
MI-93200-177	ROUND HD SCREW	1/4X1/2	2
-			2 2

ITEM NO.	DESCRIPTION	SIZE	Q'ty
MI-93200-181	BLADE ADJUSTABLE HANDLE		1
MI-93200-182	VERTICAL CUTTING PLATE	OPTION	1
MI-93200-183	BELT	3V270	1
MI-93200-184	WORM PULLEY		1
MI-93200-185	MOTOR PULLEY		1
MI-93200-186	SET SCREW	5/16X3/8	3
MI-93200-187	HEX HD SCREW	1/4X1/2	2
MI-93200-188	WASHER	1/4	2
MI-93200-189	PULLEY COVER		1
MI-93200-190	PLUM SCREW		1
MI-93200-191	KEY	5MM	1
MI-93200-192	MOTOR		1
MI-93200-193	HEX HO SCREW	5/16X1	4
MI-93200-194	MOTOR MOUNT PLATE		1
MI-93200-195	WASHER	5/16	4
MI-93200-196	SPRING WASHER	5/16	4
MI-93200-197	NUT	5/16	4
MI-93200-198-N	WORM SHAFT STOPPER		1
MI-93200-198-1	SET SCREW	5/16X1/4	1
MI-93200-199	BALL BEARING	6003	3
MI-93200-200	BLOCK PLATE		1
MI-93200-201	OIL SEAL	17.35.7	1
MI-93200-202	BEARING BUSHING		1
MI-93200-203N	WORM SHAFT		1
MI-93200-203-1	KEY	5X5X50	1
MI-93200-204	HEX HO SCREW	1/4X1/2	2
MI-93200-205	WASHER	1/4	2
MI-93200-206	SUPPORT PLATE		1
MI-93200-207	LIMIT SWITCH RACK		1
MI-93200-208	HEX HD. SCREW	1/4X1/2	1
MI-93200-209	NUT	1/4	1
MI-93200-210	WASHER	1/4	1
MI-93200-211	SPRING WASHER	1/4	1
MI-93200-212	HEX HD SCREW	1/4X1/2	1
MI-93200-213	NUT	5/16	1
MI-93200-214	HEX HD. SCREW	5/16X1-1/4	1
MI-93200-217	C-RING	R47	2