

5" x 6" Horizontal Band Saw (Model 20-330)



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INSTRUCTION MANUAL



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IMPORTANT SAFETY INSTRUCTIONS

▲ WARNING Read and understand all warnings and operating instructions before using any tool or equipment. When using tools or equipment, basic safety precautions should always be followed to reduce the risk of personal injury. Improper operation, maintenance or modification of tools or equipment could result in serious injury and property damage. There are certain applications for which tools and equipment are designed. Delta Machinery strongly recommends that this product NOT be modified and/or used for any application other than for which it was designed.

If you have any questions relative to its application DO NOT use the product until you have written Delta Machinery and we have advised you.

Online contact form at www.deltamachinery.com

Postal Mail: Technical Service Manager
Delta Machinery
4825 Highway 45 North
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Information regarding the safe and proper operation of this tool is available from the following sources:

Power Tool Institute
1300 Sumner Avenue, Cleveland, OH 44115-2851
www.powertoolinstitute.org

National Safety Council
1121 Spring Lake Drive, Itasca, IL 60143-3201

American National Standards Institute, 25 West 43rd Street, 4 floor, New York, NY 10036 www.ansi.org
ANSI 01.1 Safety Requirements for Woodworking Machines, and

the U.S. Department of Labor regulations www.osha.gov

SAVE THESE INSTRUCTIONS!

SAFETY GUIDELINES - DEFINITIONS

It is important for you to read and understand this manual. The information it contains relates to protecting YOUR SAFETY and PREVENTING PROBLEMS. The symbols below are used to help you recognize this information.

- ▲ DANGER** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
- ▲ WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
- ▲ CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
- CAUTION** Used without the safety alert symbol indicates potentially hazardous situation which, if not avoided, may result in property damage.

CALIFORNIA PROPOSITION 65

▲ 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 paints,
- crystalline silica from bricks and cement and other masonry products, and
- 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, always wear **NIOSH/OSHA** approved, properly fitting face mask or respirator when using such tools.

GENERAL SAFETY RULES



▲ WARNING READ AND UNDERSTAND ALL WARNINGS AND OPERATING INSTRUCTIONS BEFORE USING THIS EQUIPMENT. Failure to follow all instructions listed below, may result in electric shock, fire, and/or serious personal injury or property damage.

IMPORTANT SAFETY INSTRUCTIONS

- 1. FOR YOUR OWN SAFETY, READ THE INSTRUCTION MANUAL BEFORE OPERATING THE MACHINE.** Learning the machine's application, limitations, and specific hazards will greatly minimize the possibility of accidents and injury.
- 2. WEAR EYE AND HEARING PROTECTION. ALWAYS USE SAFETY GLASSES.** Everyday eyeglasses are NOT safety glasses. USE CERTIFIED SAFETY EQUIPMENT. Eye protection equipment should comply with ANSI Z87.1 standards. Hearing equipment should comply with ANSI S3.19 standards.
- 3. 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.
- 4. DO NOT USE THE MACHINE IN A DANGEROUS ENVIRONMENT.** The use of power tools in damp or wet locations or in rain can cause shock or electrocution. Keep your work area well-lit to prevent tripping or placing arms, hands, and fingers in danger.
- 5. MAINTAIN ALL TOOLS AND MACHINES IN PEAK CONDITION.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories. Poorly maintained tools and machines can further damage the tool or machine and/or cause injury.
- 6. CHECK FOR DAMAGED PARTS.** Before using the machine, check for any damaged parts. Check for alignment of moving parts, binding of moving parts, breakage of parts, and any other conditions that may affect its operation. A guard or any other part that is damaged **should be properly repaired or replaced.** Damaged parts can cause further damage to the machine and/or injury.
- 7. KEEP THE WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- 8. KEEP CHILDREN AND VISITORS AWAY.** Your shop is a potentially dangerous environment. Children and visitors can be injured.
- 9. REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure that the switch is in the "OFF" position before plugging in the power cord. In the event of a power failure, move the switch to the "OFF" position. An accidental start-up can cause injury.
- 10. USE THE GUARDS.** Check to see that all guards are in place, secured, and working correctly to reduce the risk of injury.
- 11. REMOVE ADJUSTING KEYS AND WRENCHES BEFORE STARTING THE MACHINE.** Tools, scrap pieces, and other debris can be thrown at high speed, causing injury.
- 12. USE THE RIGHT MACHINE.** Don't force a machine or an attachment to do a job for which it was not designed. Damage to the machine and/or injury may result.
- 13. USE RECOMMENDED ACCESSORIES.** The use of accessories and attachments not recommended by Delta may cause damage to the machine or injury to the user.
- 14. USE THE PROPER EXTENSION CORD.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating. See the Extension Cord Chart for the correct size depending on the cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
- 15. SECURE THE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. Loss of control of a workpiece can cause injury.
- 16. FEED THE WORKPIECE AGAINST THE DIRECTION OF THE ROTATION OF THE BLADE, CUTTER, OR ABRASIVE SURFACE.** Feeding it from the other direction will cause the workpiece to be thrown out at high speed.
- 17. DON'T FORCE THE WORKPIECE ON THE MACHINE.** Damage to the machine and/or injury may result.
- 18. DON'T OVERREACH.** Loss of balance can make you fall into a working machine, causing injury.
- 19. NEVER STAND ON THE MACHINE.** Injury could occur if the tool tips, or if you accidentally contact the cutting tool.
- 20. NEVER LEAVE THE MACHINE RUNNING UNATTENDED. TURN THE POWER OFF.** Don't leave the machine until it comes to a complete stop. A child or visitor could be injured.
- 21. TURN THE MACHINE "OFF", AND DISCONNECT THE MACHINE FROM THE POWER SOURCE** before installing or removing accessories, before adjusting or changing set-ups, or when making repairs. An accidental start-up can cause injury.
- 22. MAKE YOUR WORKSHOP CHILDPROOF WITH PADLOCKS, MASTER SWITCHES, OR BY REMOVING STARTER KEYS.** The accidental start-up of a machine by a child or visitor could cause injury.
- 23. STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE. DO NOT USE THE MACHINE WHEN YOU ARE TIRED OR UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR MEDICATION.** A moment of inattention while operating power tools may result in injury.
- 24. ▲ WARNING USE OF THIS TOOL CAN GENERATE AND DISBURSE DUST OR OTHER AIRBORNE PARTICLES, INCLUDING WOOD DUST, CRYSTALLINE SILICA DUST AND ASBESTOS DUST.** Direct particles away from face and body. Always operate tool in well ventilated area and provide for proper dust removal. Use dust collection system wherever possible. Exposure to the dust may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing the dust, and avoid prolonged contact with dust. Allowing dust to get into your mouth or eyes, or lay on your skin may promote absorption of harmful material. Always use properly fitting NIOSH/OSHA approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

ADDITIONAL SPECIFIC SAFETY RULES

⚠ WARNING FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS INJURY.

1. **DO NOT OPERATE THIS MACHINE UNTIL** it is **assembled** and **installed** according to the instructions.
2. **OBTAIN ADVICE** from your **supervisor, instructor, or another qualified person** if you are not familiar with the operation of this tool.
3. **FOLLOW ALL WIRING CODES** and recommended electrical connections.
4. **USE THE GUARDS WHENEVER POSSIBLE.** Check to see that they are in place, properly adjusted, secured, and working correctly.
5. **USE PROPER BLADE SIZE** and type.
6. **ADJUST THE UPPER BLADE GUIDE** so that it is about 1/8" above the workpiece.
7. **PROPERLY ADJUST** the blade tension, tracking, blade guides, and blade support bearings.
8. **KEEP ARMS, HANDS, AND FINGERS** away from the blade.
9. **AVOID AWKWARD OPERATIONS** and hand positions where a sudden slip could cause a hand to move into the blade.
10. **NEVER START THE MACHINE** before clearing the table of all objects (tools, scrap pieces, etc.).
11. **NEVER START THE MACHINE** with the workpiece against the blade.
12. **HOLD WORKPIECE FIRMLY** against the table. DO NOT attempt to saw a workpiece that does not have a flat surface against the table.
13. **HOLD WORKPIECE FIRMLY** and feed into blade at a moderate speed.
14. **NEVER REACH UNDER THE TABLE** while the machine is running.
15. **TURN THE MACHINE "OFF"** to back out of an uncompleted or jammed cut.
16. **MAKE "RELIEF" CUTS** prior to cutting long curves.
17. **TURN THE MACHINE "OFF"** and wait for the blade to stop prior to cleaning the blade area, removing debris near the blade, removing or securing workpiece, or changing the angle of the table. A coasting blade can be dangerous.
18. **NEVER PERFORM LAYOUT, ASSEMBLY,** or set-up work on the table/work area when the machine is running.
19. **TURN THE MACHINE "OFF" AND DISCONNECT THE MACHINE** from the power source before installing or removing accessories, before adjusting or changing set-ups, or when making repairs.
20. **TURN THE MACHINE "OFF"**, disconnect the machine from the power source, and clean the table/work area before leaving the machine. **LOCK THE SWITCH IN THE "OFF" POSITION** to prevent unauthorized use.
21. **ADDITIONAL INFORMATION** regarding the safe and proper operation of power tools (i.e. a safety video) is available from the Power Tool Institute, 1300 Sumner Avenue, Cleveland, OH 44115-2851 (www.powertoolinstitute.com). Information is also available from the National Safety Council, 1121 Spring Lake Drive, Itasca, IL 60143-3201. Please refer to the American National Standards Institute ANSI 01.1 Safety Requirements for Woodworking Machines and the U.S. Department of Labor OSHA 1910.213 Regulations.

SAVE THESE INSTRUCTIONS. Refer to them often and use them to instruct others.

POWER CONNECTIONS

A separate electrical circuit should be used for your machines. This circuit should not be less than #12 wire and should be protected with a 20 Amp time lag fuse. If an extension cord is used, use only 3-wire extension cords which have 3-prong grounding type plugs and matching receptacle which will accept the machine's plug. Before connecting the machine to the power line, make sure the switch (s) is in the "OFF" position and be sure that the electric current is of the same characteristics as indicated on the machine. All line connections should make good contact. Running on low voltage will damage the machine.

⚠ DANGER DO NOT EXPOSE THE MACHINE TO RAIN OR OPERATE THE MACHINE IN DAMP LOCATIONS.

MOTOR SPECIFICATIONS

Your machine is wired for 120 Volts, 60 HZ alternating current. Before connecting the machine to the power source, make sure the switch is in the "OFF" position.

GROUNDING INSTRUCTIONS

⚠ DANGER THIS MACHINE MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.

1. All grounded, cord-connected machines:

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 machine 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 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 machine is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding type plugs and matching 3-conductor receptacles that accept the machine's plug, as shown in Fig. A.

Repair or replace damaged or worn cord immediately.

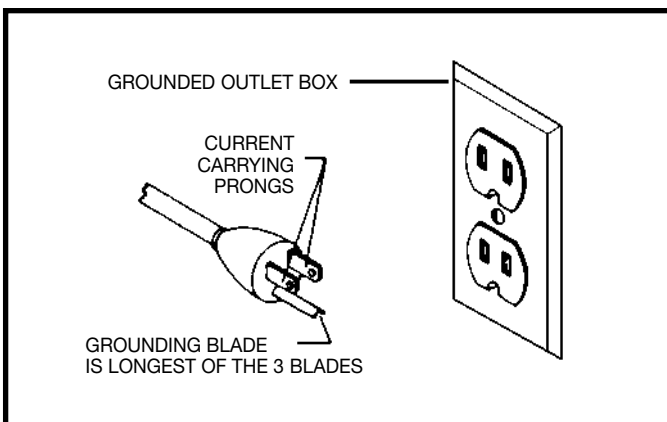


Fig. A

2. Grounded, cord-connected machines intended for use on a supply circuit having a nominal rating less than 150 volts:

If the machine is intended for use on a circuit that has an outlet that looks like the one illustrated in Fig. A, the machine will have a grounding plug that looks like the plug illustrated in Fig. A. A temporary adapter, which looks like the adapter illustrated in Fig. B, may be used to connect this plug to a matching 2-conductor receptacle as shown in Fig. B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, and the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box. Whenever the adapter is used, it must be held in place with a metal screw.

NOTE: In Canada, the use of a temporary adapter is not permitted by the Canadian Electric Code.

⚠ DANGER IN ALL CASES, MAKE CERTAIN THE RECEPTACLE IN QUESTION IS PROPERLY GROUNDED. IF YOU ARE NOT SURE HAVE A QUALIFIED ELECTRICIAN CHECK THE RECEPTACLE.

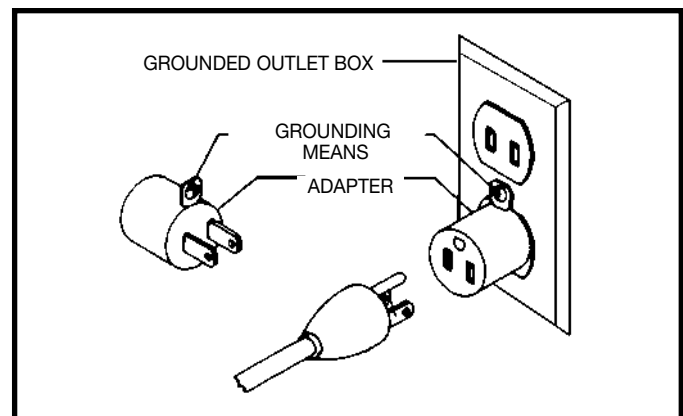


Fig. B

EXTENSION CORDS

⚠ WARNING Use proper extension cords. Make sure your extension cord is in good condition and is a 3-wire extension cord which has a 3-prong grounding type plug and matching receptacle which will accept the machine's plug. When using an extension cord, be sure to use one heavy enough to carry the current of the machine. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating. Fig. D-1 or D-2, shows the correct gauge to use depending on the cord length. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

MINIMUM GAUGE EXTENSION CORD			
RECOMMENDED SIZES FOR USE WITH STATIONARY ELECTRIC MACHINES			
Ampere Rating	Volts	Total Length of Cord in Feet	Gauge of Extension Cord
0-6	120	up to 25	18 AWG
0-6	120	25-50	16 AWG
0-6	120	50-100	16 AWG
0-6	120	100-150	14 AWG
6-10	120	up to 25	18 AWG
6-10	120	25-50	16 AWG
6-10	120	50-100	14 AWG
6-10	120	100-150	12 AWG
10-12	120	up to 25	16 AWG
10-12	120	25-50	16 AWG
10-12	120	50-100	14 AWG
10-12	120	100-150	12 AWG
12-16	120	up to 25	14 AWG
12-16	120	25-50	12 AWG
12-16	120	GREATER THAN 50 FEET NOT RECOMMENDED	

Fig. D-1

FUNCTIONAL DESCRIPTION

FOREWORD

Delta Model 20-330 is a horizontal and vertical, metal-cutting band saw in one. The Delta Model 20-330 has a 1/3 HP 120 volt single phase motor. The cutting capacity is 5" diameter at 90 degrees and 2 7/8" diameter at 45 degrees. For rectangular shapes, the capacity is 5" X 6" at 90 degrees and 4 1/8" X 2 7/8" at 45 degrees. In the vertical setup, the capacity is 7 1/2" X 5". It is an ideal machine for maintenance shops, contractors, metal/plastic fabricators and general work shops. The Delta Model 20-330 converts to a vertical band saw with standard equipment bracket and work table.

NOTICE: THE PHOTO ON THE MANUAL COVER ILLUSTRATES THE CURRENT PRODUCTION MODEL. ALL OTHER ILLUSTRATIONS CONTAINED IN THE MANUAL ARE REPRESENTATIVE ONLY AND MAY NOT DEPICT THE ACTUAL COLOR, LABELING OR ACCESSORIES AND ARE INTENDED TO ILLUSTRATE TECHNIQUE ONLY.

CARTON CONTENTS

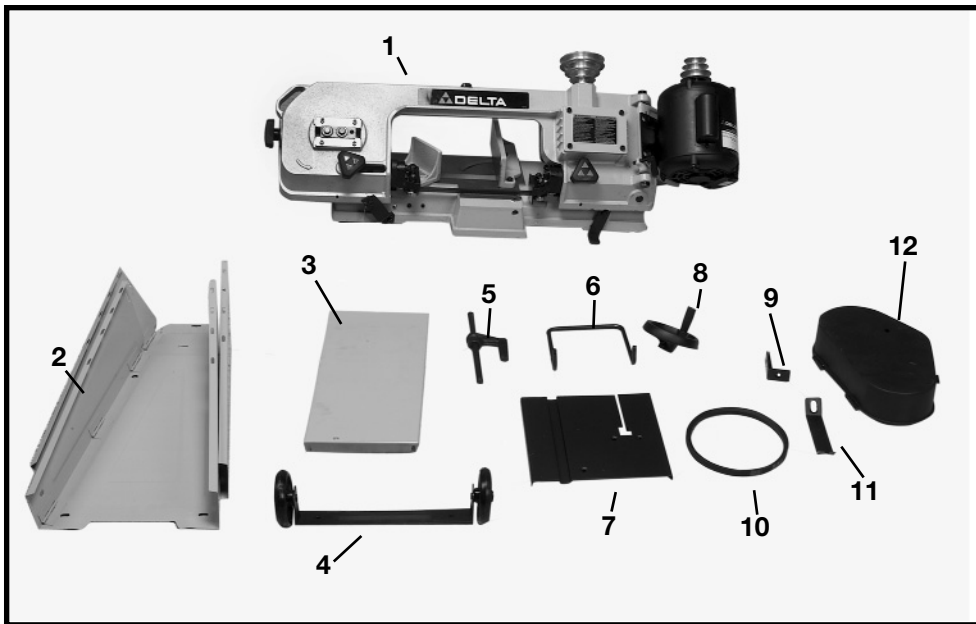


Fig. 1A Hardware

1. Saw unit
2. Legs
3. Shelf
4. Wheel assembly
5. Stock advance stop
6. Stand handle
7. Vertical table
8. Vise clamping handwheel
9. Floor mounting hardware
10. Pulley
11. Table support bracket
12. Pulley guard

Fig. 1A

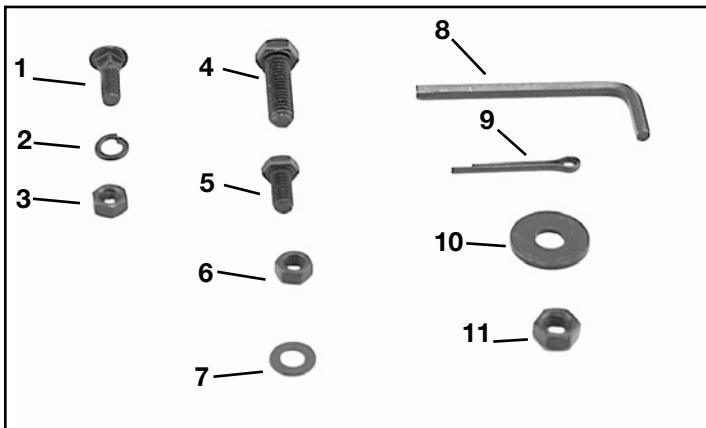


Fig. 1B Hardware

1. M6x10mm hex head screw
2. 6mm lock washer
3. M6 hex nut
4. 5/16"-18x1"
5. 1/4"-20x1/2"
6. 1/4"-20 hex nut
7. 1/4" flat washer
8. 5/32 hex wrench
9. Cotter pin
10. 5/16" washer
11. 5/16"-18 hex nut

Fig. 1B

UNPACKING AND CLEANING

Carefully unpack the machine and all loose items from the shipping container(s). Remove the protective coating from all unpainted surfaces. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose). After cleaning, cover the unpainted surfaces with a good quality household floor paste wax.

ASSEMBLY

⚠ WARNING FOR YOUR OWN SAFETY, DO NOT CONNECT THE MACHINE TO THE POWER SOURCE UNTIL THE MACHINE IS COMPLETELY ASSEMBLED AND YOU READ AND UNDERSTAND THE ENTIRE INSTRUCTION MANUAL.

ASSEMBLY TOOLS REQUIRED

- * 5/32 hex wrench(supplied)
- * 10 mm, 12mm and 1/2 inch open end or socket wrenches (not supplied)

ASSEMBLY TIME ESTIMATE - 1 to 2 hours

ASSEMBLING STAND

1. Assemble the two legs (A) and (B) Fig. 2, to the band saw base using the six 5/16-18x1" hex head cap screws, three of which are shown at (C) Fig. 2, twelve 5/16" flat washers and six 5/16-18" hex nuts. Align the holes in the band saw with the holes in the legs. Place a 5/16" flat washer onto a 5/16-18x1" hex head cap screw, insert screw through the hole in the band saw and the hole in the leg, place a 5/16" flat washer onto the screw, thread a 5/16" hex nut onto the screw, and tighten securely. Repeat this process for the five remaining holes.

2. Assemble the shelf (D) Fig. 2, to the two legs (A) and (B). Align the four holes in the shelf (D) with the four holes in the two legs (A) and (B). Insert a M6x10mm hex head screw, two of which are shown at (E) through the hole in the shelf and leg. Place a 6mm lockwasher onto the screw, thread a M6 hex nut onto the screw, and tighten securely. Repeat this process for the three remaining holes.

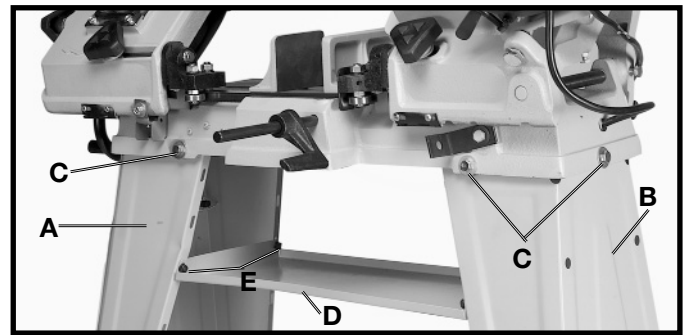


Fig. 2

ASSEMBLING WHEELS

Assemble the wheel assembly (A) Fig. 3, to the bottom of the left leg. Align the holes in the wheel assembly with the holes in the left leg. Place a 1/4" flat washer onto a 1/4-20x1/2" hex head screw, insert the screw through the holes (B) in the wheel assembly and the hole in the left leg, place a 1/4" flat washer onto the screw, thread a 1/4-20 hex nut onto the screw, and tighten securely. Repeat this process for the remaining hole.

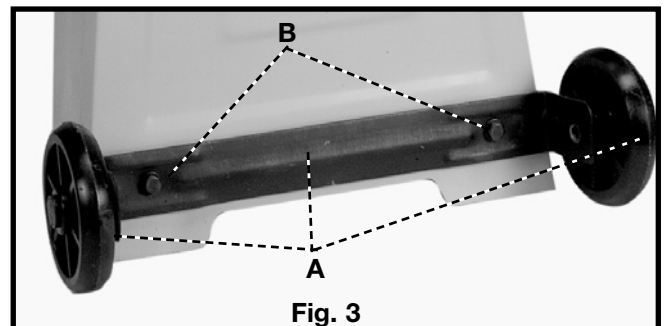


Fig. 3

ASSEMBLING VISE HANDWHEEL

Assemble the vise clamping handwheel (A) Fig. 4, to the shaft (B), and tighten set screw (C) against the flat on the shaft (B).

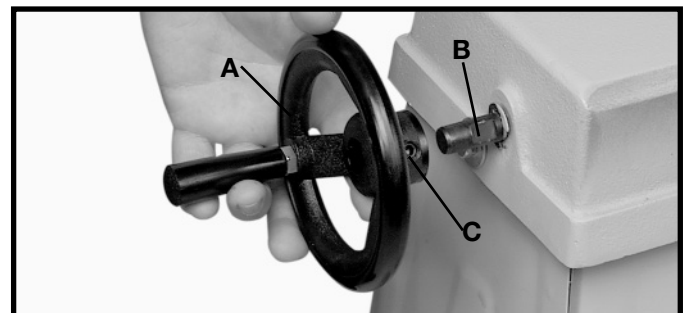


Fig. 4

ASSEMBLING STAND HANDLE

Insert ends of handle (A) Fig. 5, into the two holes (B) on the right leg and fasten in place using the two cotter pins supplied.

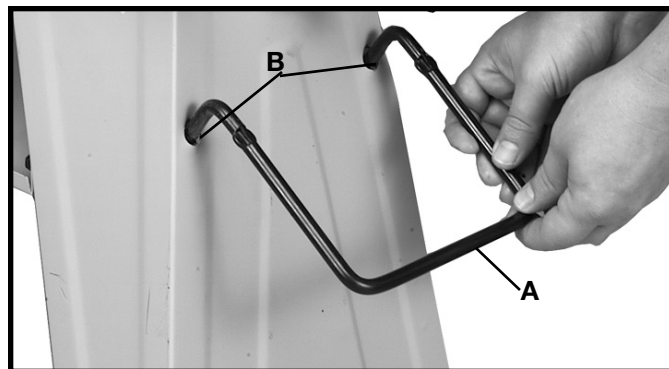


Fig. 5

ASSEMBLING STOCK ADVANCE STOP

Assemble the stock advance stop assembly (A) to the hole on the front of the table and tighten the two set screws (B), as shown in Fig. 6.

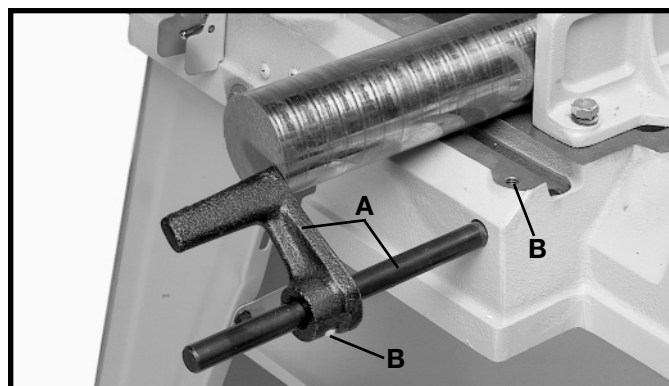


Fig. 6

ASSEMBLING GUARD AND BELT

Open the belt and pulley guard (A) Fig. 7, and position the bottom half of the guard assembly behind the pulleys (B) as shown. Line up the two holes in the bottom of the guard with the two threaded holes in the casting. **NOTE: DO NOT COMPLETELY TIGHTEN THE PULLEY GUARD TO THE CASTING AT THIS TIME.** Place a 1/4" flat washer onto a 1/4-20x1/2" hex head screw and insert screw through hole in pulley guard and thread screw into the tapped hole in the casting. Repeat this process for the remaining hole. Raise the motor and assemble the belt (D) Fig. 7, to the desired steps of the two pulleys then release the motor. A speed selection chart (E) is located on the inside of the guard cover. When the belt is tensioned, tighten screws (C).

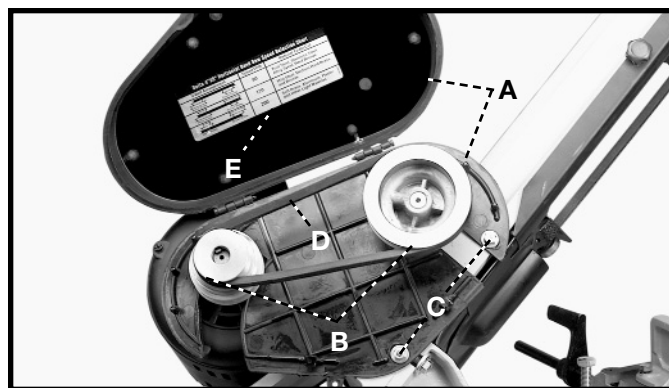


Fig. 7

FASTENING BAND SAW TO SUPPORTING SURFACE

⚠ WARNING IF DURING OPERATION THERE IS ANY TENDENCY FOR THE BAND SAW TO TIP OVER, SLIDE OR WALK ON THE SUPPORTING SURFACE, THE RIGHT LEG OF THE BAND SAW MUST BE SECURED TO A SUPPORTING SURFACE.

Align the hole in the "L" shaped floor mounting bracket (A) Fig. 8, with the hole in the bottom of the right leg (B). Insert a 5/16" flat washer (C) onto a 5/16-18x1/2" hex head screw (D). Insert screw through the floor mounting bracket (A) and the right leg. Place a 5/16" flat washer (E) onto the screw (D) and tighten securely. Repeat this process for the remaining hole on the other side of the right leg. Then secure the two brackets to the supporting surface.

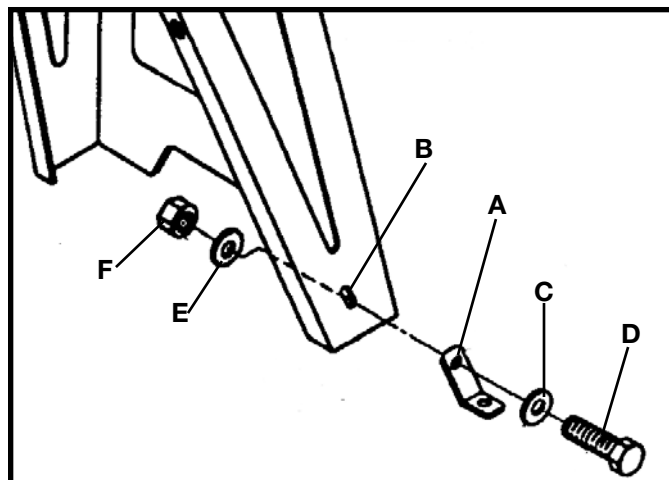


Fig. 8

OPERATION

OPERATIONAL CONTROLS AND ADJUSTMENTS

STARTING AND STOPPING MACHINE

1. The on/off switch (A) Fig. 13 is located on the front of the band saw. To turn the machine "ON," move the switch up to the "ON" position.
2. To turn the machine "OFF", move the switch (A) down to the "OFF" position.

⚠ WARNING MAKE SURE THAT THE SWITCH IS IN THE "OFF" POSITION BEFORE PLUGGING IN THE POWER CORD. IN THE EVENT OF A POWER FAILURE, MOVE THE SWITCH TO THE "OFF" POSITION. AN ACCIDENTAL START-UP CAN CAUSE INJURY.

LOCKING SWITCH IN "OFF" POSITION

IMPORTANT: When the machine is not in use, the switch should be locked in the "OFF" position to prevent unauthorized use, using a padlock with a 3/16" diameter shackle through the holes at (B) Fig. 13.

AUTOMATIC SHUT-OFF

When the band saw is in the horizontal position, the saw should shut itself off automatically. After a completed cut has been made, and the saw is in the down or horizontal position, the shut-off bracket (B) Fig. 14 will contact the toggle switch (A) and push it to the down position, turning off the power. **IMPORTANT: THE SHUT-OFF BRACKET (B) SHOULD NOT REST ON OR BE SUPPORTED BY THE TOGGLE SWITCH (A).**

The downward travel of the saw should be adjusted to just trip the toggle switch at its lowest position. To adjust the downward travel of the saw arm, loosen lock nut (C) Fig. 15, and turn the stop screw (D) in or out until the correct adjustment is made; then tighten lock nut (C).

ADJUSTING BLADE TENSION

⚠ WARNING DISCONNECT MACHINE FROM POWER SOURCE.

1. Turn blade tension handwheel (A) Fig. 16, clockwise to increase or counterclockwise to decrease blade tension. Correct tension is obtained when the blade is just tight enough that no slippage occurs between the blade and the wheels.
2. When the machine is not in use, release the blade tension.

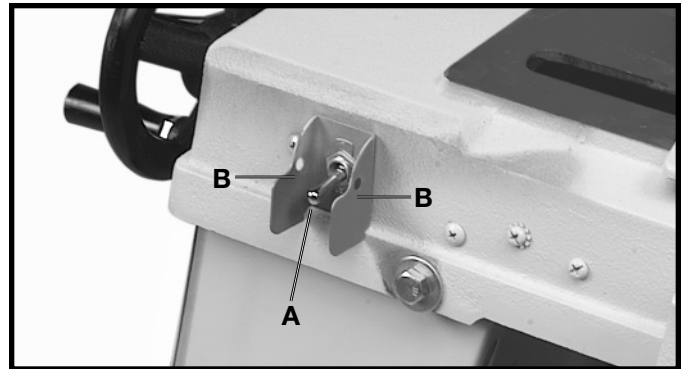


Fig. 13

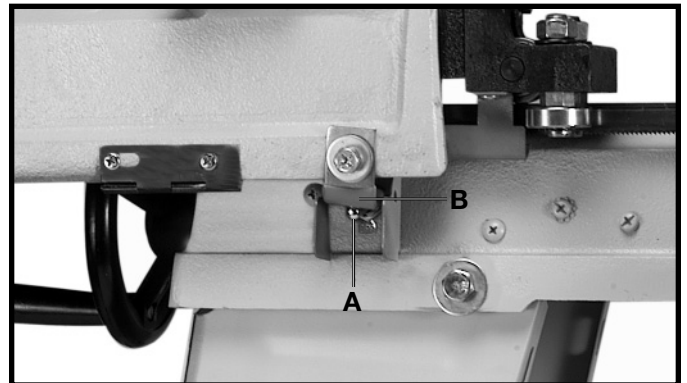


Fig. 14

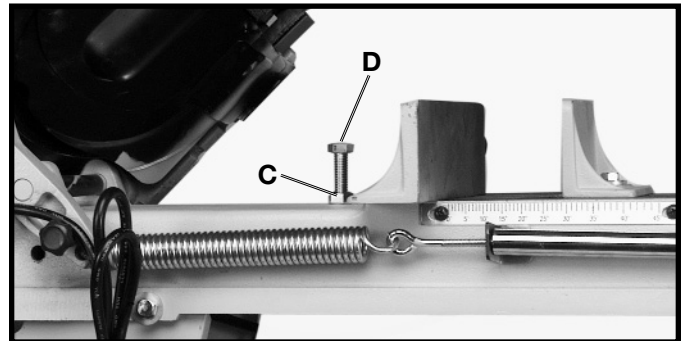


Fig. 15

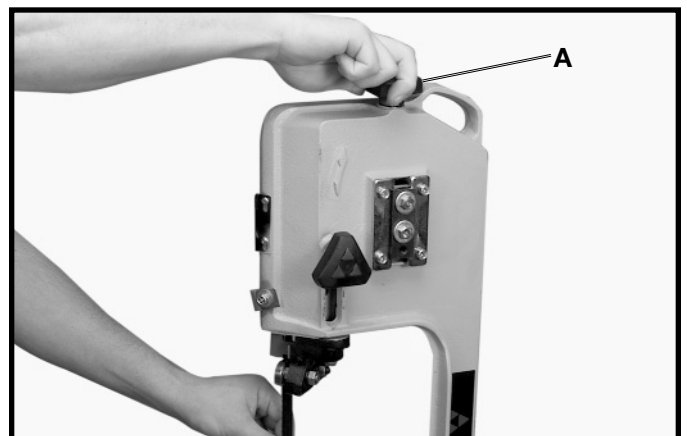


Fig. 16

ADJUSTING BLADE TRACKING

1. Place the saw arm in the vertical position and open the wheel cover (A) Fig. 17.
2. Turn on the band saw. The blade is tracking properly when the back of the blade (B) Fig. 17, is just touching the edge of the wheel flange (C). The back of the blade should not be rubbing against the flange.
3. If an adjustment is necessary the blade guide bearings and blade support bearings (E) Fig. 19 (two of which are shown) should be clear of the blade.
4. Loosen screw (D) Fig. 18.
5. With the band saw running, turn adjusting screw (E) until the blade is tracking properly making certain blade tension is maintained by turning blade tension knob. (F). The blade is tracking properly when the back side of the saw blade just touches the flange on the wheel.
6. Tighten screw (D) Fig. 18, when adjustment is complete.

7. **IMPORTANT: IT IS POSSIBLE WHEN MAKING THIS ADJUSTMENT TO OVER TIGHTEN THE ADJUSTING SCREW (E), FIG. 18, AND CAUSE THE BLADE TO BE MIS-ALIGNED.** If this happens, loosen the adjusting screw (E) several turns but do not remove it from its threaded hole and loosen screw (D). Turn screw (D) clock-wise until it stops but do not tighten. Then turn the adjusting screw (E) clockwise until it bottoms. Turn on the machine and turn adjusting screw (E) clockwise a small amount at a time until the blade is tracking correctly and tighten screw (D) Fig. 18.

8. After the blade is tracking properly make sure to adjust the blade guide bearings and blade support bearings.

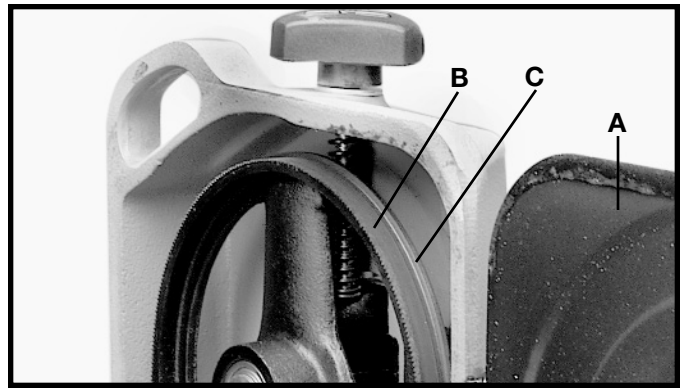


Fig. 17



Fig. 18

ADJUSTING BLADE SUPPORT BEARINGS

⚠ WARNING DISCONNECT MACHINE FROM POWER SOURCE.

1. The blade support bearing (A) Fig. 19, should be adjusted so it just touches the back of the saw blade after the blade is tracking properly. To adjust, loosen screw (C) and move the bracket (D) up or down until the support bearing (A) just touches the back of the blade (B). Then tighten screw (C).
2. Adjust the other blade support bearing in the same manner.

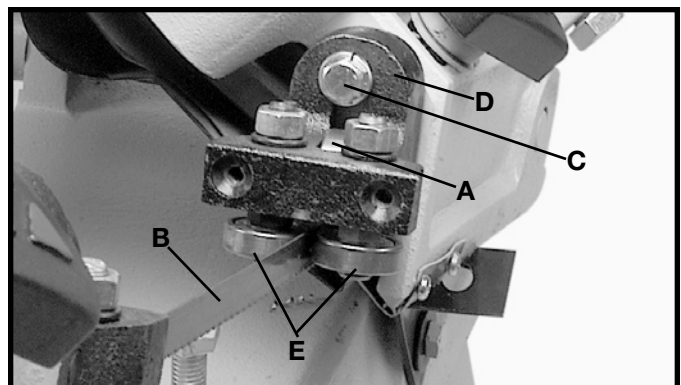


Fig. 19

ADJUSTING BLADE GUIDE BEARINGS

⚠ WARNING DISCONNECT MACHINE FROM POWER SOURCE.

1. The blade guide bearings (A) and (B) Fig. 20 should be adjusted so they just touch the sides of the blade (C) after the blade is tracking properly and the blade support bearing has been adjusted. To adjust, proceed as follows:

2. Remove the cover plate that is attached to the face of the right guide bracket (D) Fig. 20.

3. The inside guide bearing (A) Fig. 20, is mounted to a fixed shaft and cannot be adjusted. The outside guide bearing (B) is mounted on an eccentric shaft and should be adjusted so that the sides of the blade (C) just contact the guide bearings (A) and (B). To adjust, loosen nut (E) and turn adjusting nut (F) until proper adjustment is made. Then tighten nut (E).

4. Adjust the other blade guide bearings in the same manner.

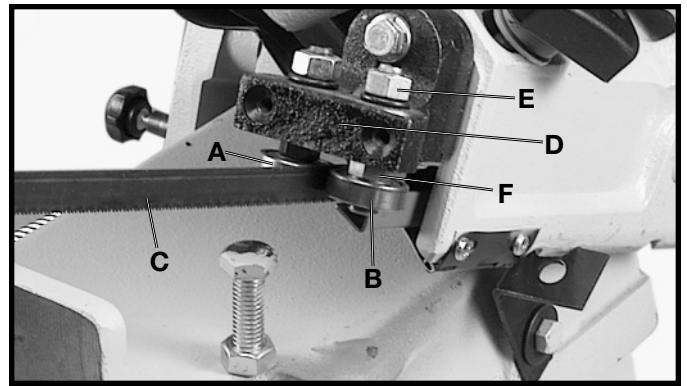


Fig. 20

ADJUSTING BLADE 90 DEGREES TO THE TABLE SURFACE

In order for accurate work to be accomplished on your saw the blade must be at 90 degrees to the table surface. To check and adjust, proceed as follows:

⚠ WARNING DISCONNECT MACHINE FROM POWER SOURCE.

1. Lower the saw arm to the horizontal position. Place a square (A) Fig. 21, on the table with one end of the square against the blade, as shown.

2. If the blade is not at 90 degrees to the table, loosen the two screws (B) Fig. 21, that attach the blade guide brackets to the guide arms and rotate both guide brackets (C) until the blade is at 90 degrees to the table. Then tighten the two screws (B). **NOTE: CARE SHOULD BE TAKEN NOT TO DISTURB THE BLADE GUIDE SUPPORT BEARINGS WHEN MAKING THIS ADJUSTMENT.**

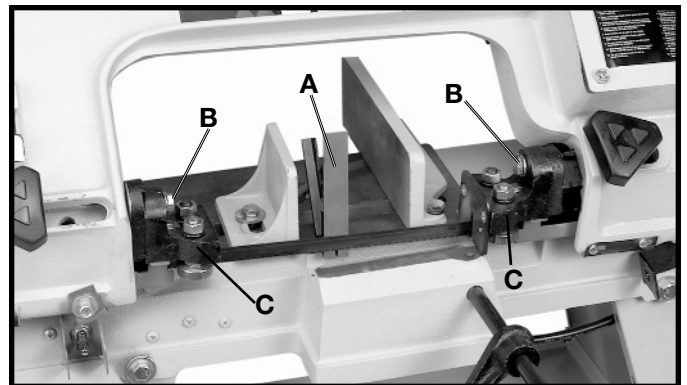


Fig. 21

ADJUSTING BLADE GUIDE BRACKETS

⚠ WARNING DISCONNECT MACHINE FROM POWER SOURCE.

The left and right blade guide brackets (A) and (B) Fig. 22, are adjustable by loosening the two lock knobs (C) and sliding the brackets to accommodate the width of the work piece. The guide brackets (A) and (B) should be set as close as possible to the workpiece, without interfering or touching the workpiece, or contacting the table. Once the adjustment is made, tighten the lock knobs (C).

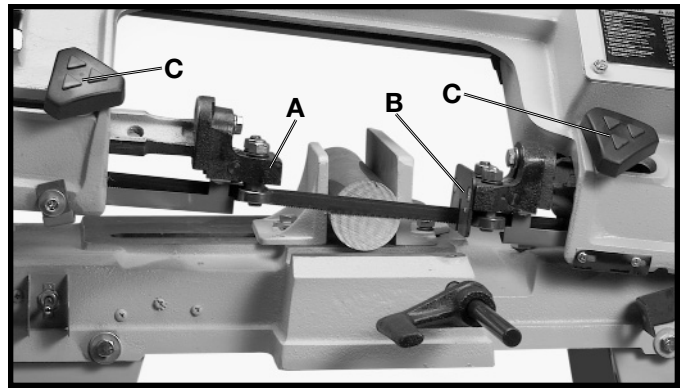


Fig. 22

ADJUSTING FEED RATE

⚠ WARNING DISCONNECT MACHINE FROM POWER SOURCE.

The feed rate of the saw arm can be adjusted by turning the control arm (A) Fig. 23, counterclockwise to increase or clockwise to decrease the feed rate. Do not turn the control arm more than one turn at a time. Excessive feed pressure can break or stall the blade. Insufficient feed pressure dulls the blade rapidly.



Fig. 23

OPERATING AND ADJUSTING THE VISE

The workpiece (A) is placed between the vise jaws with the required amount to be cut-off extending out past the blade, as shown in Fig. 24. To tighten the workpiece in the vise, turn handwheel (B).

The vise can be adjusted to cut any angle from 0 degrees to 45 degrees by loosening the two screws (C) Fig. 25, and positioning the vise jaw (D) to the desired angle. A scale (E) is positioned on the rear of the table to give the proper cutting angle. It may also be necessary when angle cutting to move the left vise jaw (F) to the rear to clear the blade guide bracket.

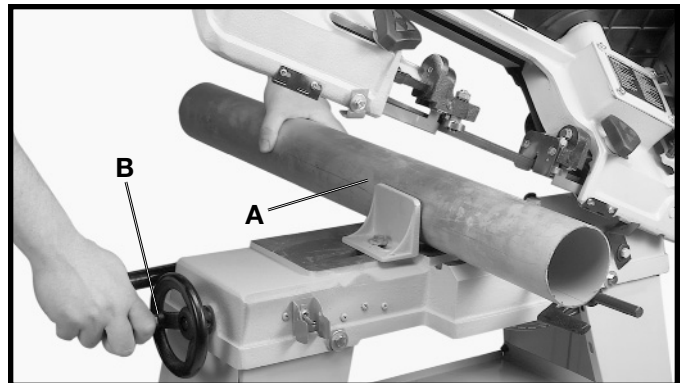


Fig. 24

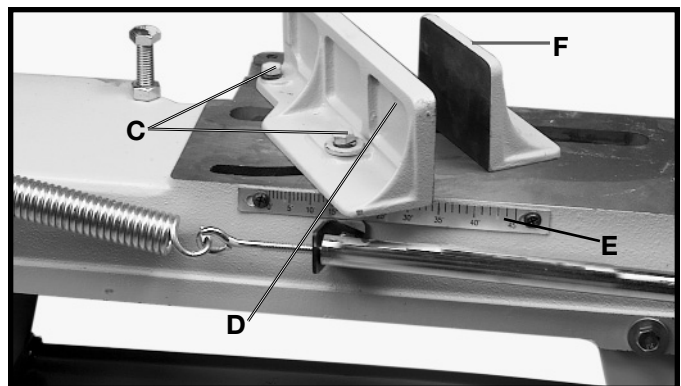


Fig. 25

ADJUSTING STOCK STOP

The stock stop is used when more than one piece is to be cut to the same length. Position the stop block (A) Fig. 26, the desired distance away from the blade. It is good practice to have the work contact the stop at the bottom of the work, as shown. The stop may be repositioned in or out by loosening set screw (B) and moving the stop accordingly. When not using the stock stop, rotate the stop below the table surface.

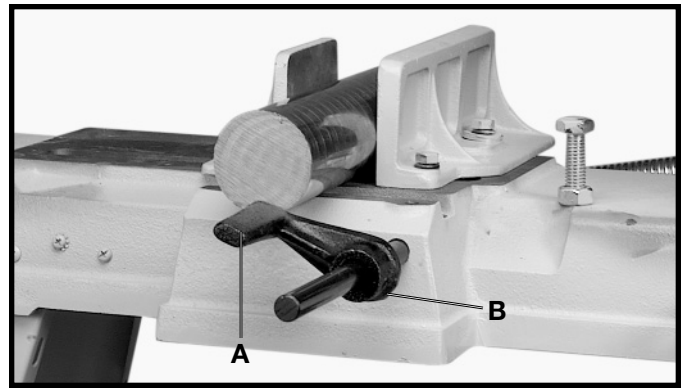


Fig. 26

For cuts when the work will not extend beyond the table, the stop (C) Fig. 27, can be turned around, as shown, to contact the workpiece.

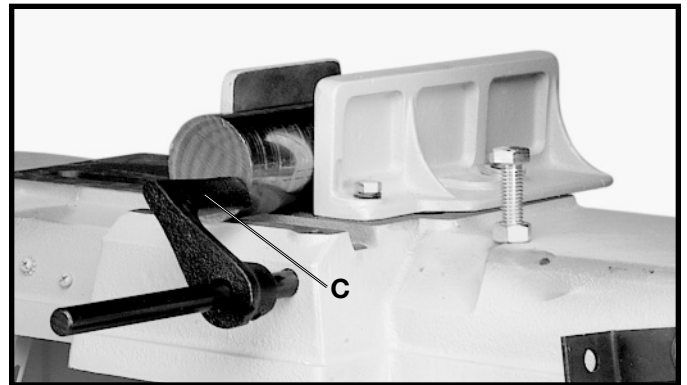


Fig. 27

ARM POSITIONING LEVER

An arm positioning lever (A) Fig. 28, is supplied on the front of the base and can be engaged with one of the two notches (B) depending on the size of the workpiece, for positioning the arm during set-up. The lever (A) should be engaged with notch (C) when operating the saw in the vertical position.

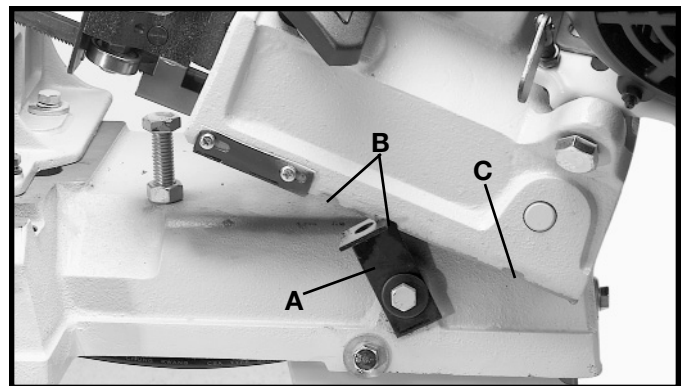


Fig. 28

CHANGING SPEEDS AND ADJUSTING BELT TENSION

⚠ WARNING DISCONNECT MACHINE FROM POWER SOURCE BEFORE CHANGING SPEEDS AND ADJUSTING BELT TENSION.

Proper belt tension is obtained when there is approximately 1/4" deflection of the belt using light finger pressure at the center span of the pulleys. To adjust belt tension, loosen lock nut (C) Fig. 29, and turn adjusting screw (D) clockwise to increase tension and counterclockwise to decrease tension. Tighten locknut (C) Fig. 29, after belt tension is obtained.

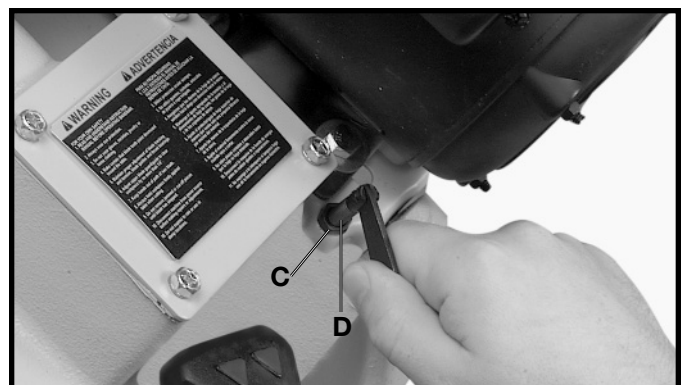


Fig. 29

When changing speeds, release belt tension and open belt and pulley guard cover (D) Fig. 30. Speed rates of 80, 120, and 200 feet per minute are available with your band saw. When the belt is on the largest step of the motor pulley (A) Fig. 30, and the smallest step of the gear box pulley (B) the blade speed will be 200 feet per minute. When the belt is on the smallest step of the motor pulley (A) and the largest step of the gear box pulley (B) the blade speed will be 80 feet per minute. When changing speeds, first release belt tension. After the desired speed is obtained, adjust belt tension and close belt and pulley guard cover (D).

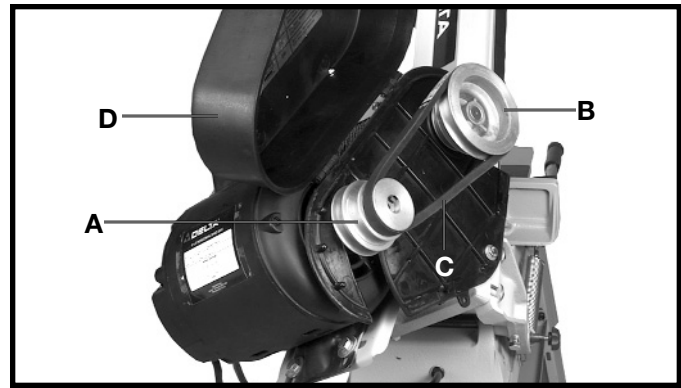


Fig. 30

SPEED AND MATERIAL CHART

Fig. 31 illustrates the correct speeds and the position of the belt on the motor and gear box pulleys for most common materials cut on the band saw.

Material To Be Cut	Speed	Belt Position	
		Motor	Gear
Tool Steel Stainless Steel Alloy Steel Hard Bronze	80 FPM	Small	Large
Mild Steel Medium Hard Brass Medium Hard Bronze	120 FPM	Middle	Middle
Soft Brass Aluminum Plastic Other Light Materials	200 FPM	Large	Small

Fig. 31

BLADE SELECTION

1. Your band saw uses blades 1/2" wide, 64½" long and .020-.025 thick. Accessory blades with a pitch (number of teeth per. inch of the blade) of 10 and 14 are available from Delta.
2. Never use a blade so coarse that less than three consecutive teeth are engaged in the workpiece at one time. (Too few teeth will cause the teeth to strip out).
3. Never use a blade finer than required to obtain a satisfactory surface finish or satisfactory flatness (Too many teeth engaged in the workpiece will prevent attainment of a satisfactory sawing rate; frequently produce "dished" cuts or cuts which are neither square or parallel).
4. When thin rectangular solid bar is to be sawed, the work should, whenever possible, be loaded with the thinnest cross section exposed to the blade teeth. The pitch (number of teeth per. inch of the blade) selected must provide engagement of at least three consecutive teeth in the workpiece. Should application of this rule not be possible because the thinnest cross section is too thin, the piece must be loaded with the wider dimension exposed to the saw teeth and a coarser blade selected.
5. When thin wall pipe or tubing or channel iron are cut, a 14 pitch (number of teeth per inch) blade is used. Fewer than 14 teeth per inch will almost never be satisfactory. For standard wall pipe or tubing 10 teeth per inch is satisfactory.

CHANGING BAND SAW FROM HORIZONTAL TO VERTICAL POSITION

Your saw can be changed to the vertical position for notching, slitting or contour work as follows:

⚠ WARNING DISCONNECT MACHINE FROM POWER SOURCE.

1. Move the cutting arm to the vertical position and lock in place with the arm positioning lever (C) Fig. 32. Stop screw (A) Fig. 32 should bear against base casting when arm is in the vertical position. If adjustment is needed loosen lock nut (B) and adjust screw (A).
2. Remove two screws (C) and bearing cover plate (D) Fig. 33.
3. Assemble the vertical table (E) to the guide bracket using the two screws (C) that were removed in STEP 2, as shown in Fig. 34.
4. Assemble one end of the table support bracket (G) Fig. 35 to the table using a 1/4-20x1/2" flat head screw and 1/4-20 nut (H) and the other end underneath the guide bracket lock knob (J), as shown in Fig. 35.

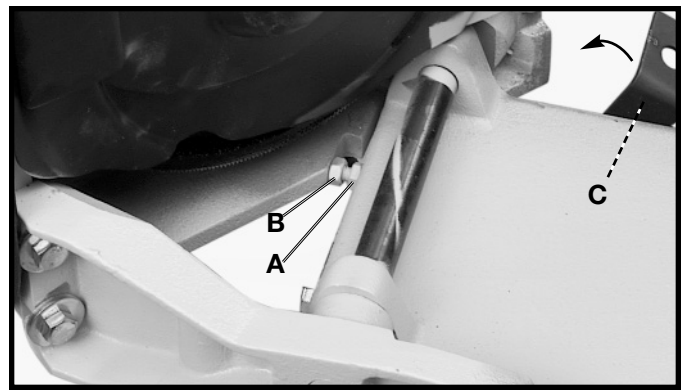


Fig. 32

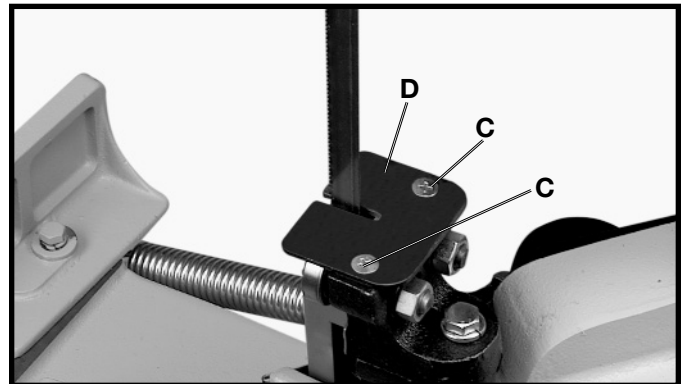


Fig. 33

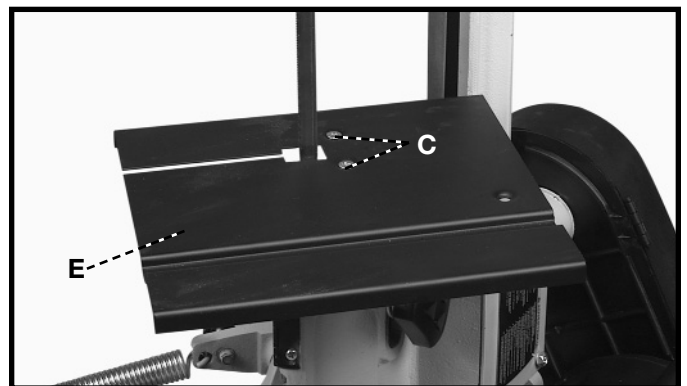


Fig. 34

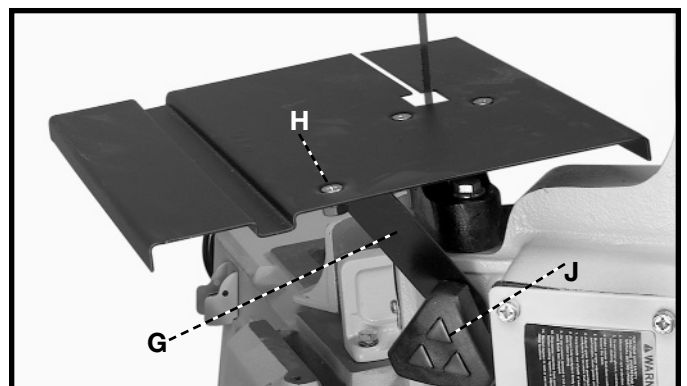


Fig. 35

CHANGING BLADES

⚠ WARNING DISCONNECT MACHINE FROM POWER SOURCE.

1. Raise the saw arm to the vertical position and open the blade wheel cover (A) as shown in Fig. 36.
2. Release blade tension by turning blade tension hand knob (B).
3. Remove the two finger guards (C).
4. Carefully slip blade (D) off both wheels (E), and guide assemblies (F).
5. Place the new blade between each of the blade guide bearings (F) and around both wheels (E). **NOTE: THE TEETH MUST BE POINTING DOWN ON THE RIGHT HAND SIDE AS SHOWN BY THE DIRECTIONAL ARROW IN FIG. 31.**
6. Replace finger guards (C), and adjust blade tension by turning hand knob (B).
7. Close the blade wheel cover (A).

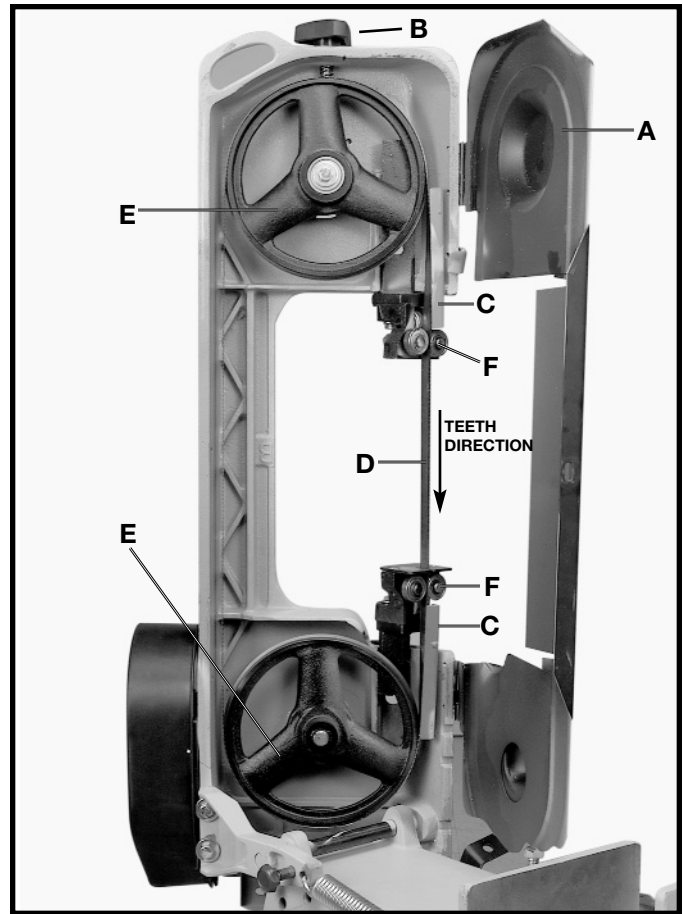


Fig. 36

MACHINE USE

TYPICAL OPERATIONS FOR HORIZONTAL BAND SAW

The horizontal band saw cuts all types of metals, including ferrous and non-ferrous metal, steel pipe, angle iron, conduit, brass, aluminum and copper. As shown in Fig. 24 and 25, workpieces can be cut at 90 or tilted to any angle in the vise.

TYPICAL OPERATIONS FOR VERTICAL BAND SAW

NOTE: THIS BAND SAW IS RECOMMENDED FOR USE IN CUTTING METAL ONLY.

Before starting the machine, see that all adjustments are properly made and the guards are in place. Turn the upper wheel by hand to make sure that everything is correct **BEFORE** turning on the power. Keep the top guide within 1/8" of the work piece at all times. Do not force the material against the blade. Light pressure on the work piece will produce a smoother cut, and prevent excess friction, heating, and hardening of the blade. **KEEP THE SAW BLADE SHARP.** Very little forward pressure is required for normal cutting. Keep the workpiece moving at a slow and consistent rate against the blade to ensure a smooth and accurate cut. Avoid twisting the blade by trying to turn sharp corners. Remember, you must saw around corners.

CUTTING CURVES

When cutting curves, turn the workpiece carefully so that the blade follows without twisting. If a curve is so abrupt that it is necessary to repeatedly back up and cut a new kerf, a narrower blade, a blade with more set, or additional relief cuts Fig. 37, may be necessary to allow the blade to cut more efficiently. The more set a blade has, the easier it will allow the stock to be turned, but the cut is usually rougher than where a medium amount of set is used.

When withdrawing the piece being cut, changing the cut, or for any other reason, be careful not to accidentally draw the blade off the wheels. In most

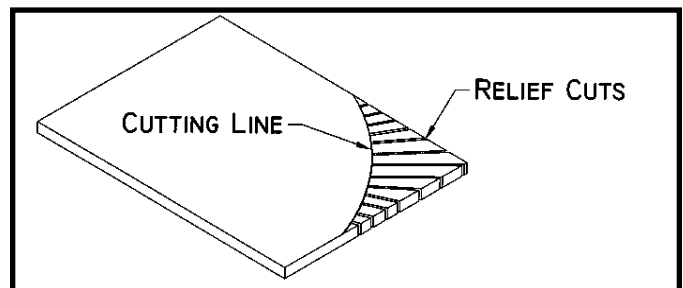


Fig. 37

cases, it is easier and safer to turn the stock and saw out through the waste material, rather than try to withdraw the stock from the blade.

TROUBLESHOOTING

For assistance with your machine, visit our website at www.deltamachinery.com for a list of service centers or call the DELTA Machinery help line at 1-800-223-7278 (In Canada call 1-800-463-3582).

In spite of how well a band saw is maintained, problems can occur. The following troubleshooting guide will help you solve the more common problems:

Trouble: *SAW WILL NOT START.*

Probable Cause

1. Saw not plugged in.
2. Fuse blown or circuit breaker tripped.
3. Cord damaged.

Remedy

1. Plug in saw.
2. Replace fuse or reset circuit breaker.
3. Have cord replaced.

Trouble: *BREAKER KICKS OUT FREQUENTLY.*

Probable Cause

1. Extension cord too light or too long.
2. Feeding stock too fast.
3. Blade in poor condition (dull, warped, gummed).
4. Low voltage supply.

Remedy

1. Replace with adequate size cord.
2. Feed stock more slowly.
3. Clean or replace blade.
4. Contact an electrician.

Trouble: *BAND SAW VIBRATES EXCESSIVELY.*

Probable Cause

1. Machine not mounted securely to stand.
2. Stand on uneven surface.
3. Worn belt.
4. Pulley not aligned.
5. Motor not fastened securely.

Remedy

1. Tighten all mounting hardware.
2. Reposition on flat level surface.
3. Replace belt.
4. Adjust pulleys.
5. Tighten all mounting hardware.

Trouble: *BAND SAW DOES NOT COME UP TO SPEED.*

Probable Cause

1. Low voltage due to improper extension cord size.
2. Low voltage.

Remedy

1. Replace with adequate size cord.
2. Contact an electrician.

Trouble: *BLADES BREAK.*

Probable Cause

1. Blade not tensioned properly.
2. Blade guides improperly adjusted.
3. Blade support bearing improperly adjusted.
4. Blade wheel tracking adjustment improperly set.
5. Bad weld on blade.
6. Worn tires.
7. Forcing wide blade around short radius.
8. Dull blade or insufficient set.
9. Upper blade guide set too high.
10. Continuous running of machine when not actually cutting.

Remedy

1. Adjust blade tension.
2. Check and adjust blade guides.
3. Adjust blade support bearing.
4. Check and adjust blade tracking.
5. Replace the blade.
6. Replace tires.
7. Change to a narrower blade.
8. Replace blade.
9. Set upper blade guide within 1/8" of workpiece.
10. Turn off machine when not performing cutting operation.

(continued on next page)

Trouble: *BLADE WILL NOT TRACK.*

Probable Cause

1. Blade too loose
2. Upper wheel not properly adjusted.
3. Improperly adjusted blade support bearing.

Remedy

1. Adjust tension
2. Adjust upper wheel.
3. Adjust blade support bearing.

Trouble: *BLADE WILL NOT STAY ON WHEEL.*

Probable Cause

1. Blade not tensioned properly.
2. Blade guides improperly adjusted.
3. Blade support bearing improperly adjusted.
4. Blade wheel not tracking properly.
5. Bad weld on blade.
6. Worn tires.

Remedy

1. Adjust blade tension.
2. Check and adjust blade guides.
3. Adjust blade support bearing.
4. Check and adjust blade tracking.
5. Replace the blade.
6. Replace tires.

Trouble: *BAND SAW MAKES UNSATISFACTORY CUTS.*

Probable Cause

1. Blade not tensioned properly.
2. Blade guides improperly adjusted.
3. Blade support bearing improperly set.
4. Blade wheel not tracking properly.
5. Bad weld on blade.
6. Worn tires.
7. Incorrect blade for work being done.
8. Dull blade or insufficient set.
9. Upper blade guide set too high.

Remedy

1. Adjust blade tension.
2. Check and adjust blade guides.
3. Adjust blade support bearing.
4. Check and adjust blade tracking.
5. Replace the blade.
6. Replace tires.
7. Change the blade.
8. Replace blade.
9. Set upper blade guide within 1/8" of work piece.

BAND SAW BLADES

A band saw blade is a delicate piece of steel that is subjected to tremendous strain. You can obtain long use from a band saw blade if you use it properly. Use blades of proper thickness, width and temper for the various types of material and cuts.

Any one of a number of conditions may cause a band saw blade to break. Blade breakage is, in some cases, unavoidable, being the natural result of the peculiar stresses to which blades are subjected. Blades will break often due to avoidable causes, such as the lack of care to the blade or the blade not being properly adjusted to the band saw. The most common causes of blade breakage are:

- (1) faulty alignments and adjustments of the guides.
- (2) forcing or twisting a wide blade around a curve of short radius.
- (3) feeding the work piece too fast into the blade.
- (4) dullness of the teeth, or absence of sufficient set.
- (5) improperly tensioned blade.
- (6) top guide set too high above the work piece being cut.
- (7) using a blade with a lumpy or improperly finished braze or weld.
- (8) continuous running of the saw blade when not cutting.

Use blades that are 64½" in length on this machine.

Always use a sharp blade. Keep it free from gum and pitch. Clean frequently with a stiff fiber brush.

A new blade, in most cases, will perform better and last longer than a re-sharpened blade.

Insure that the blade guides are adjusted properly.

Do not force or twist the blade around a curve or a very short radius.

Feed the workpiece through the blade at a consistent rate, allow the blade to do the cutting – do not feed the work piece too fast.

Do not apply excessive tension to the blade. The tension is only necessary to drive the blade without slipping on the wheels. Narrow blades require less tension than wider blades.

MAINTENANCE

LUBRICATING THE VISE SCREW

The vise lead screw should be lubricated using light machine oil as needed.

The drive gears run in an oil bath gear box and it should not be necessary to change this oil more than once a year unless the oil becomes contaminated or a leak occurs due to improper replacement of the gear box cover. To change oil in the gear box, proceed as follows:

⚠ WARNING DISCONNECT MACHINE FROM POWER SOURCE.

1. Position cutting arm in the horizontal position.
2. Remove the four screws (A) Fig. 38, and the gear box cover (B) and gasket.
3. Remove the old oil from inside the gear box and replace the oil using 140 weight gear oil, available from Delta. The new oil should just come to the edge (C) Fig. 39, of the gear box. Do not overflow. Replace the gasket, cover and four screws that were removed in **STEP 3**.

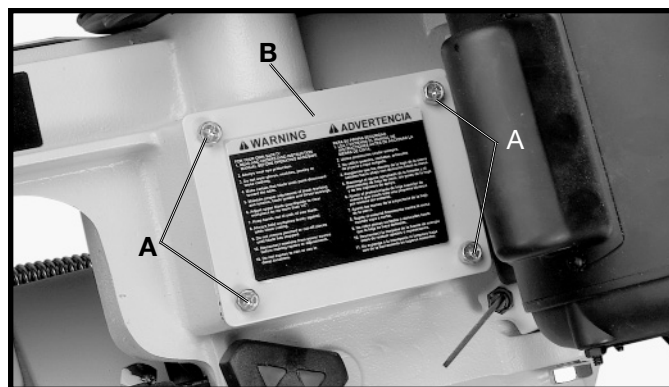


Fig. 38

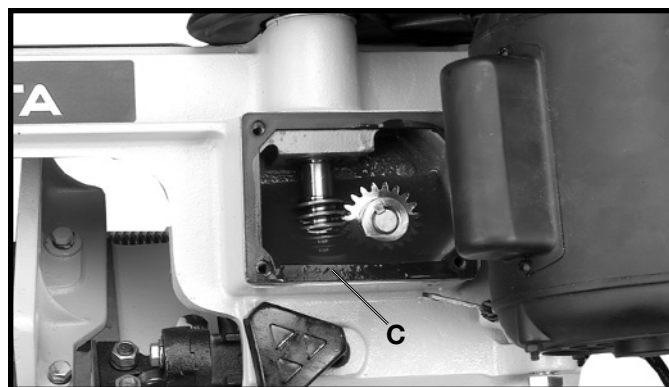


Fig. 39

KEEP MACHINE CLEAN

Periodically blow out all air passages with dry compressed air. All plastic parts should be cleaned with a soft damp cloth. NEVER use solvents to clean plastic parts. They could possibly dissolve or otherwise damage the material.

⚠ WARNING WEAR ANSI Z87.1 SAFETY GLASSES WHILE USING COMPRESSED AIR.

FAILURE TO START

Should your machine fail to start, check to make sure the prongs on the cord plug are making good contact in the outlet. Also, check for blown fuses or open circuit breakers in the line.

LUBRICATION

Apply household floor paste wax to the machine table and extension table or other work surface weekly.

PROTECTING CAST IRON FROM RUST

To clean and protect cast iron tables from rust, you will need the following materials: 1 pushblock from a jointer, 1 sheet of medium Scotch-Brite™ Blending Hand Pad, 1 can of WD-40®, 1 can of degreaser, 1 can of TopCote® Aerosol. Apply the WD-40 and polish the table surface with the Scotch-Brite pad using the pushblock as a holddown. Degrease the table, then apply the TopCote® accordingly.

SERVICE



PARTS, SERVICE OR WARRANTY ASSISTANCE

All Delta Machines and accessories are manufactured to high quality standards and are serviced by a network of Porter-Cable • Delta Factory Service Centers and Delta Authorized Service Stations. To obtain additional information regarding your Delta quality product or to obtain parts, service, warranty assistance, or the location of the nearest service outlet, please call 1-800-223-7278 (In Canada call 1-800-463-3582).

ACCESSORIES

A complete line of accessories is available from your Delta Supplier, Porter-Cable • Delta Factory Service Centers, and Delta Authorized Service Stations. Please visit our Web Site www.deltamachinery.com for a catalog or for the name of your nearest supplier.

⚠ WARNING Since accessories other than those offered by Delta have not been tested with this product, use of such accessories could be hazardous. For safest operation, only Delta recommended accessories should be used with this product.

WARRANTY



Two Year Limited New Product Warranty

Delta will repair or replace, at its expense and at its option, any new Delta machine, machine part, or machine accessory which in normal use has proven to be defective in workmanship or material, provided that the customer returns the product prepaid to a Delta factory service center or authorized service station with proof of purchase of the product within two years and provides Delta with reasonable opportunity to verify the alleged defect by inspection. For all refurbished Delta product, the warranty period is 180 days. Delta may require that electric motors be returned prepaid to a motor manufacturer's authorized station for inspection and repair or replacement. Delta will not be responsible for any asserted defect which has resulted from normal wear, misuse, abuse or repair or alteration made or specifically authorized by anyone other than an authorized Delta service facility or representative. Under no circumstances will Delta be liable for incidental or consequential damages resulting from defective products. This warranty is Delta's sole warranty and sets forth the customer's exclusive remedy, with respect to defective products; all other warranties, express or implied, whether of merchantability, fitness for purpose, or otherwise, are expressly disclaimed by Delta.

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(Obtenga Refaccion de Partes o Servicio para su Herramienta en los Siguientes Centros de Porter-Cable • Delta)

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Phone: (602) 279-6414
Fax: (602) 279-5470

CALIFORNIA

Ontario 91761 (Los Angeles)
3949A East Guasti Road
Phone: (909) 390-5555
Fax: (909) 390-5554

San Diego 92111
7290 Clairemont Mesa Blvd.
Phone: (858) 279-2011
Fax: (858) 279-0362

San Leandro 94577 (Oakland)
3039 Teagarden Street
Phone: (510) 357-9762
Fax: (510) 357-7939

COLORADO

Denver 80223
700 West Mississippi Ave.
Phone: (303) 922-8325
Fax: (303) 922-0245

FLORIDA

Davie 33314 (Miami)
4343 South State Rd. 7 (441)
Unit #107
Phone: (954) 321-6635
Fax: (954) 321-6638

Tampa 33634
4909 West Waters Ave.
Phone: (813) 884-0434
Fax: (813) 888-5997

GEORGIA

Forest Park 30297 (Atlanta)
5442 Frontage Road,
Suite 112
Phone: (404) 608-0006
Fax: (404) 608-1123

ILLINOIS

Addison 60101 (Chicago)
400 South Rohlwing Rd.
Phone: (630) 424-8805
Fax: (630) 424-8895

KANSAS

Overland Park 66214
9201 Quivira Road
Phone: (913) 495-4330
Fax: (913) 495-4378

MARYLAND

Elkridge 21075 (Baltimore)
7397-102 Washington Blvd.
Phone: (410) 799-9394
Fax: (410) 799-9398

MASSACHUSETTS

Franklin 02038 (Boston)
Franklin Industrial Park
101E Constitution Blvd.
Phone: (508) 520-8802
Fax: (508) 528-8089

MICHIGAN

Madison Heights 48071 (Detroit)
30475 Stephenson Highway
Phone: (248) 597-5000
Fax: (248) 597-5004

MINNESOTA

Eden Prairie 55344
9709 Valley View Road
Phone: (952) 884-9191
Fax: (952) 884-3750

MISSOURI

St. Louis 63146
11477 Page Service Drive
Phone: (314) 997-9100
Fax: (314) 997-9183

NEW YORK

Flushing 11365-1595 (N.Y.C.)
175-25 Horace Harding Expwy.
Phone: (718) 225-2040
Fax: (718) 423-9619

NORTH CAROLINA

Charlotte 28270
9129 Monroe Road, Suite 115
Phone: (704) 841-1176
Fax: (704) 708-4625

OHIO

Columbus 43229
1948 Schrock Road
Phone: (614) 895-3112
Fax: (614) 895-3187

Parma Heights OH 44130
6485 Pearl Road
Phone: (440) 842-9100
Fax: (440) 884-3430

OREGON

Portland 97230
14811 North East Airport Way
Phone: (503) 255-6556
Fax: (503) 255-6543

PENNSYLVANIA

Willow Grove 19090
(Philadelphia)
520 North York Road
Phone: (215) 658-1430
Fax: (215) 658-1433

TEXAS

Carrollton 75006 (Dallas)
1300 Interstate 35 N, Suite 112
Phone: (972) 446-2996
Fax: (972) 446-8157

Houston 77022-2122
536 East Tidwell Rd.
Phone: (713) 692-7111
Fax: (713) 692-1107

WASHINGTON

Auburn 98001(Seattle)
3320 West Valley HWY, North
Building D, Suite 111
Phone: (253) 333-8353
Fax: (253) 333-9613

Authorized Service Stations are located in many large cities. Telephone **800-438-2486** or **731-541-6042** for assistance locating one. Parts and accessories for Porter-Cable-Delta products should be obtained by contacting any Porter-Cable-Delta Distributor, Authorized Service Center, or Porter-Cable-Delta Factory Service Center. If you do not have access to any of these, call **800-223-7278** and you will be directed to the nearest Porter-Cable-Delta Factory Service Center. Las Estaciones de Servicio Autorizadas están ubicadas en muchas grandes ciudades. Llame al **800-438-2486** ó al **731-541-6042** para obtener asistencia a fin de localizar una. Las piezas y los accesorios para los productos Porter-Cable-Delta deben obtenerse poniéndose en contacto con cualquier distribuidor Porter-Cable-Delta, Centro de Servicio Autorizado o Centro de Servicio de Fábrica Porter-Cable-Delta. Si no tiene acceso a ninguna de estas opciones, llame al **800-223-7278** y le dirigirán al Centro de Servicio de Fábrica Porter-Cable-Delta más cercano.

CANADIAN PORTER-CABLE • DELTA SERVICE CENTERS

ALBERTA

Bay 6, 2520-23rd St. N.E.
Calgary, Alberta
T2E 8L2
Phone: (403) 735-6166
Fax: (403) 735-6144

BRITISH COLUMBIA

8520 Baxter Place
Burnaby, B.C.
V5A 4T8
Phone: (604) 420-0102
Fax: (604) 420-3522

MANITOBA

1699 Dublin Avenue
Winnipeg, Manitoba
R3H 0H2
Phone: (204) 633-9259
Fax: (204) 632-1976

ONTARIO

505 Southgate Drive
Guelph, Ontario
N1H 6M7
Phone: (519) 767-4132
Fax: (519) 767-4131

QUÉBEC

1515 ave.
St-Jean Baptiste, Suite 160
Québec, Québec
G2E 5E2
Phone: (418) 877-7112
Fax: (418) 877-7123

1447, Begin
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