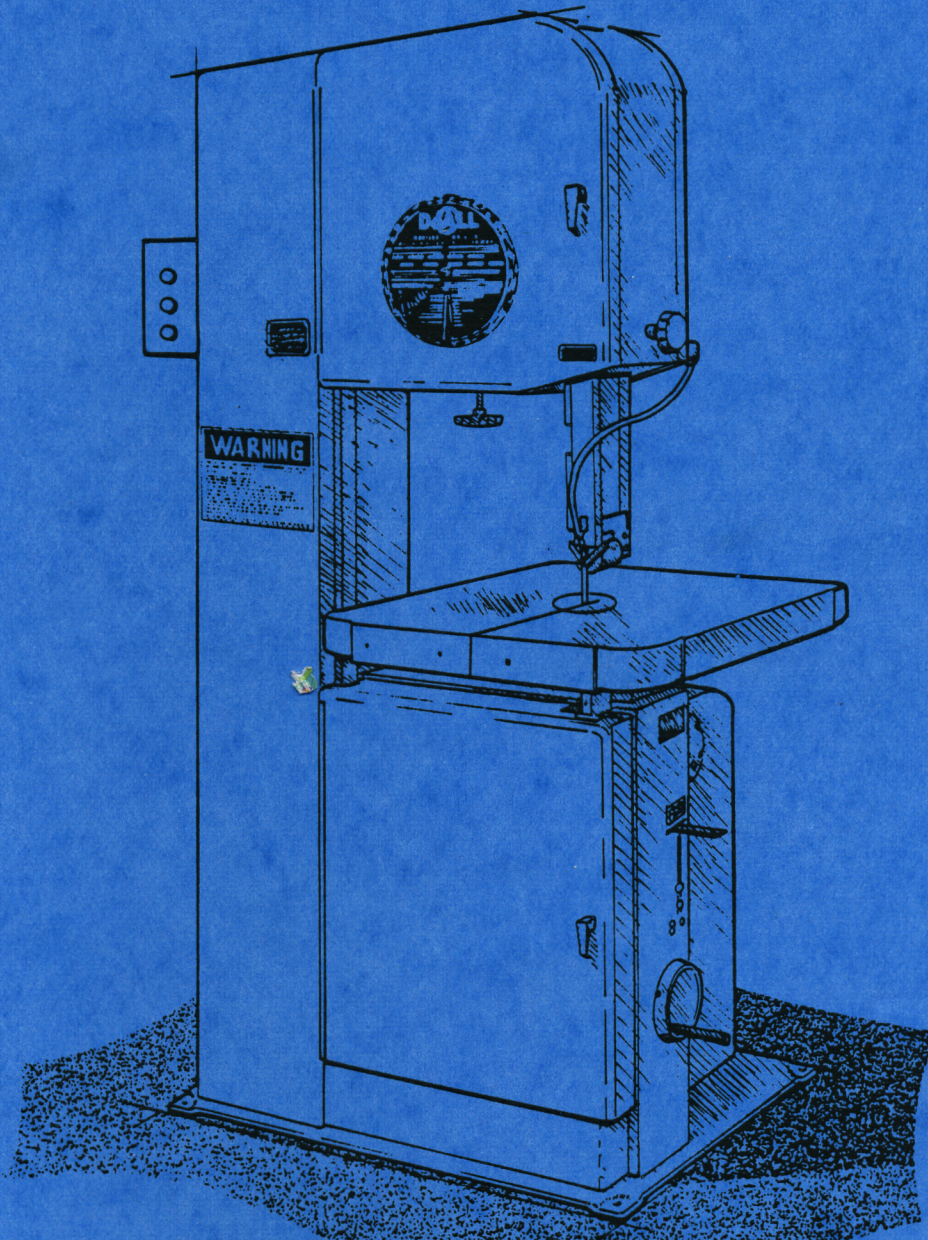


DoALL

INSTRUCTION MANUAL



MODEL 2013-V

CONTOUR BAND MACHINE

DAMAGE CLAIM PROCEDURE

VISIBLE DAMAGE AT TIME OF DELIVERY

1. Note damage on carrier's delivery receipt. Accept the shipment. It can be returned later if repairs aren't possible in the field.
2. Request a "damage inspection" from the delivering carrier:
 - a. The carrier will send his own people or contract an independent agency to make the inspection.
 - b. The inspector will request a signature on the report and leave a copy.
 - c. The carrier "damage inspection" report isn't final. If additional damage is found when repairs are started, contact the carrier for another inspection; or, at least give them the details of the damage.
3. Don't move the equipment from the receiving area and keep all shipping materials until the carrier "damage inspection" report is complete.
4. If possible, take photographs of the damage and keep them with your file. Photos could possibly prove a claim at a later time.
5. Keep a record of all expenses and be sure they are documented.
6. Repair damage in the field whenever possible. Carriers encourage this to keep expenses down.
7. You have 9 months to file a claim.

CONCEALED DAMAGE

1. You have 14 days after delivery to report damage not noted at time of delivery.
 - a. Report damage as soon as possible. This makes it easier to prove that it didn't happen in consignee's plant.
 - b. Inspect machines carefully before moving from the receiving area. Again if machine isn't moved it's easier to prove your case.
2. Request a "damage inspection" from the delivering carrier:
 - a. The carrier will send his own people or contract an independent agency to make the inspection.
 - b. The inspector will request a signature on the report and leave a copy.
 - c. The carrier "damage inspection" report isn't final. If additional damage is found when repairs are started, contact the carrier for another inspection; or, at least give them the details of the damage.
3. Don't move the equipment from the receiving area and keep all shipping materials until the carrier "damage inspection" report is complete.
4. If possible, take photographs of the damage and keep them with your file. Photos could possibly prove a claim at a later time.
5. Keep a record of all expenses and be sure they are documented.
6. Repair damage in the field whenever possible. Carriers encourage this to keep expenses down.
7. You have 9 months to file a claim.

OPERATOR'S INSTRUCTION MANUAL

CONTOUR BAND MACHINE

MODEL
2013-V

FIRST SERIAL NO.
457-86101

LAST SERIAL NO.

MACHINE MODEL

2013-V

MACHINE SER. NO.

457-901912



SAW BAND LENGTH

754 F. O. D.

FILE BAND LENGTH

153"

TOTAL MACHINE ELECTRIC POWER INPUT DATA

VOLTAGE PHASE HERTZ NORM. AMPS. INT. RATE. AMPS RMS SYM. A.C.

268

3

60

3.9

LARGEST CONTROLLED MOTOR F.L.A.

3.9

BELT NUMBERS

MOTOR-VARIABLE

VARIABLE-TRANSMISSION

D-16218

D/30641

AIR PUMP-COMPRESSOR

HYDRAULIC PUMP

SPEED INDICATOR

D 35-342

ELECTRICAL SCHEMATIC

HYDRAULIC SCHEMATIC

AIR SCHEMATIC

512,374

ADJUSTMENT SUMMARY NUMBERS

173614

SEE INSTRUCTION MANUAL FOR MACHINE
OPERATION AND LUBRICATION DATA.

For your information and future reference, pertinent data concerning your machine should be written in the spaces provided above. This information is stamped on a plate attached to your machine. Be sure to provide machine model and serial numbers with any correspondence or parts orders.

Specifications contained herein were in effect at the time this manual was approved for printing. The DoALL Company, whose policy is one of continuous improvement, reserves the right, however, to change specifications or design at any time without notice and without incurring obligations.

PLEASE READ THIS MANUAL CAREFULLY BEFORE OPERATING THE MACHINE.



DoALL COMPANY
254 NORTH LAUREL AVENUE
DES PLAINES, ILLINOIS 60016 U.S.A.

The following registered trademarks of the DoALL Company are used in this manual: DoALL, Imperial Bi-Metal.

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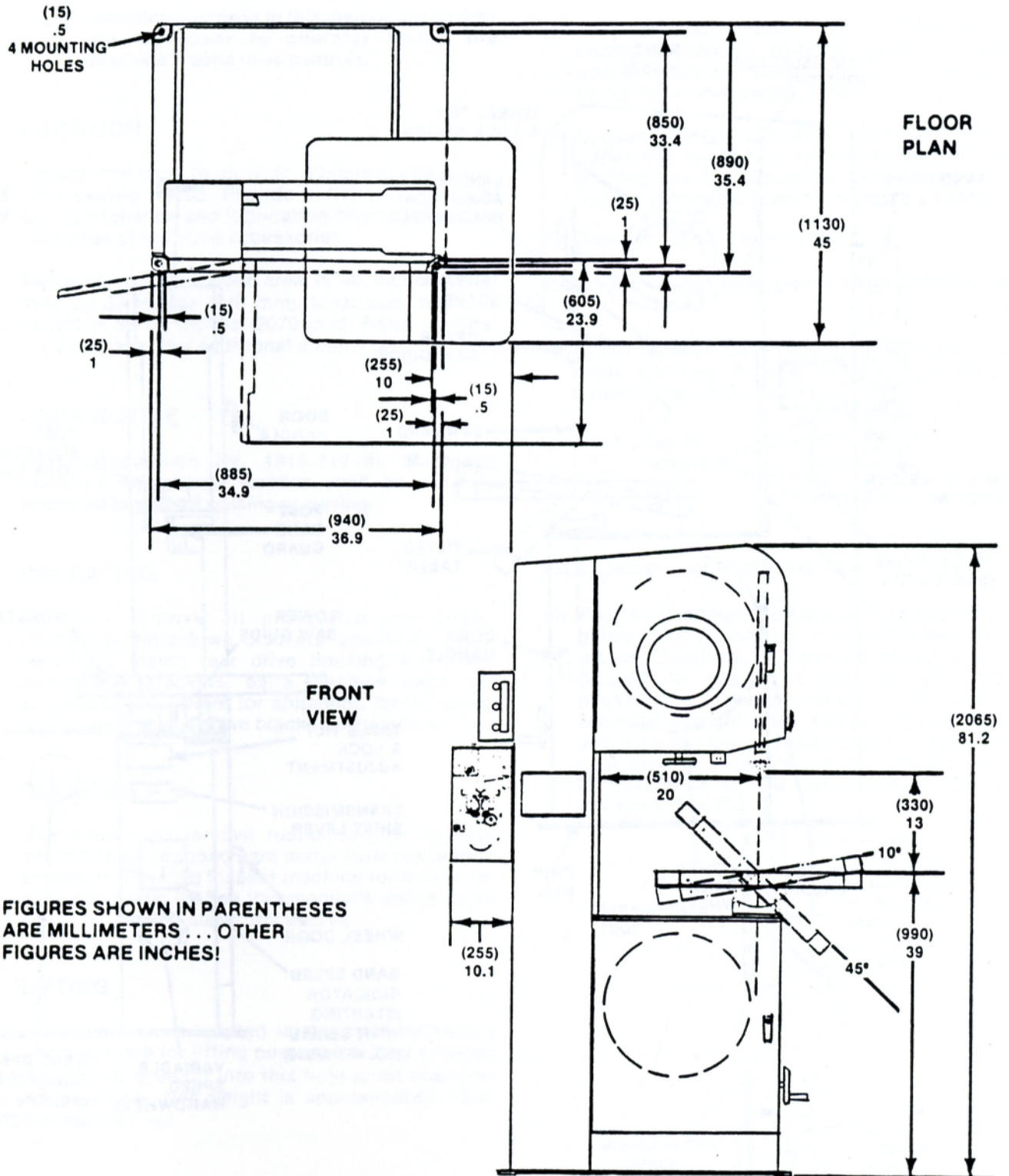
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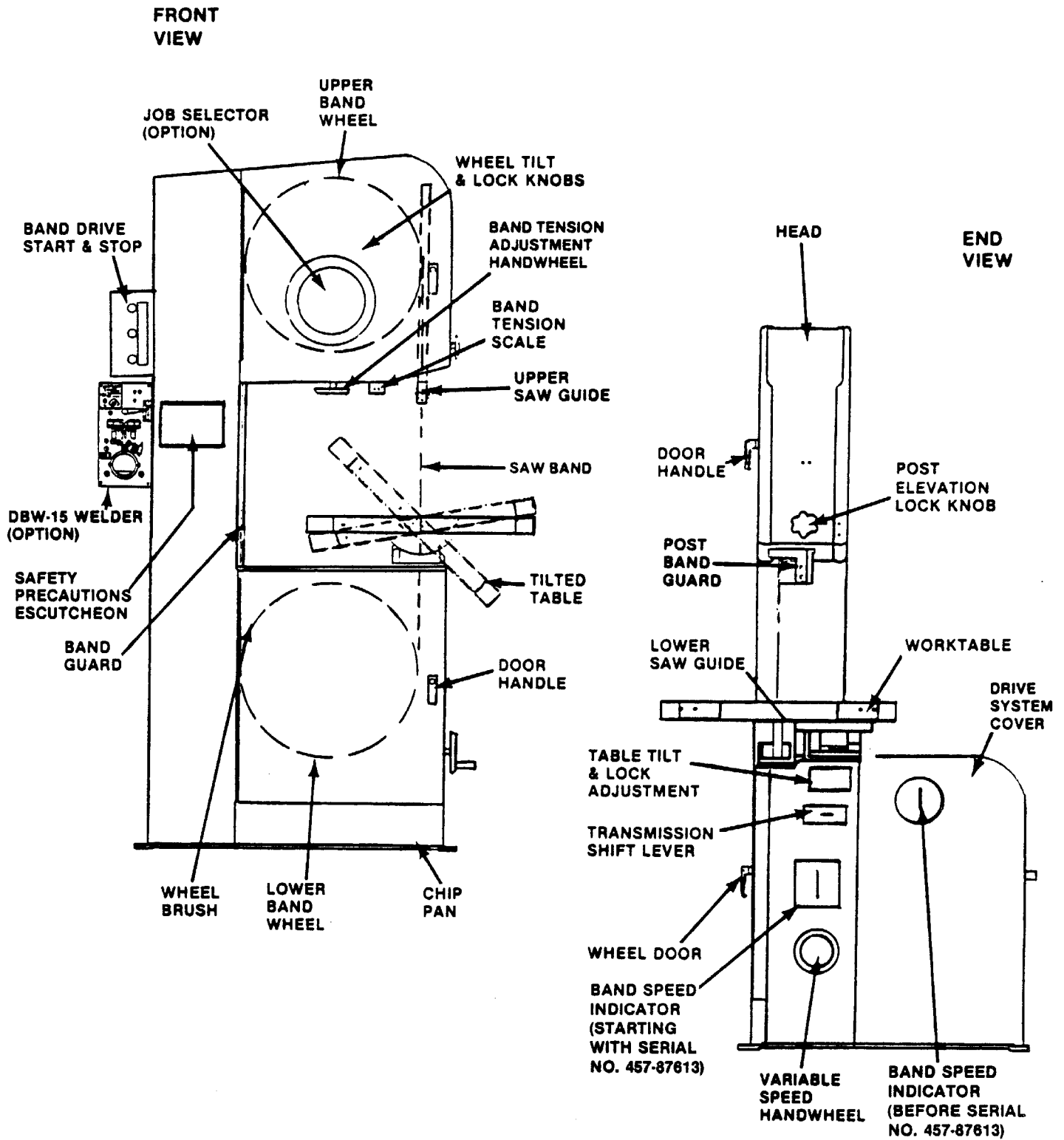
MACHINE DIMENSIONS



FIGURES SHOWN IN PARENTHESES ARE MILLIMETERS... OTHER FIGURES ARE INCHES!

FIGS. 1 & 2 MACHINE DIMENSIONS - FLOOR PLAN & FRONT VIEW.

MACHINE FEATURES



FIGS. 3 & 4. MACHINE FEATURES - FRONT & END VIEWS.

INSTALLATION

NOTE: All "left", "right", "front", and "rear" direction notations in this manual are as they would appear to operator facing the machine's band drive controls.

LOCATION

Locate machine to provide adequate space for your sawing needs. Provide sufficient clearance for maintenance and lubrication procedures, plus operation of machine accessories.

Required machine floor area is 40 inches (1015 mm) by 33 inches (840 mm). Maximum machine height is 81-1/2 inches (2070 mm). Refer to Figs. 1 & 2 on page 1 for additional dimensions.

OSHA NOTICE

OSHA Regulation No. 1910.212 (B). Machines designed for a fixed location shall be securely anchored to prevent walking or moving.

UNCRATING

Carefully remove all protective coverings, strappings, hold-down brackets, and skid. Then: (a) Check inside rear drive housing for other removeable brackets, extra machine parts, or supplies placed there for shipment; (b) Unfasten power weight hold-down bracket (if supplied).

CLEANING

Use solvent to remove rust-preventive coating applied to all exposed bare metal surfaces before shipment. Then: (a) Inspect machine for broken or damaged parts; (b) See this manual's inside front cover for damage claim procedures.

LIFTING

A tapped hole is located in the machine head's upper surface for lifting purposes. Screw a forged 3/4-10 UNC eye-bolt into this hole to lift machine into position. Net weight is approximately 1250 pounds (567 kg).

ALIGNMENT

Follow these procedures to properly align machine:

- (1) Release band tension. Then: (a) Open wheel doors; (b) Remove trunnion guard; (c) Slide post and column band guards, if necessary; (d) Remove table center plate.
- (2) Loosen saw guide inserts. Then: (a) Remove upper and lower saw guides; (b) Loosen bolt holding saw slot cover bar below front table edge; (c) Move bar away from slot.
- (3) Remove band from wheels.

CAUTION: Always wear gloves when handling saw bands.

- (4) Shim between base mounting pads and floor until machine is level with weight resting evenly on all pads. See Fig. 5.

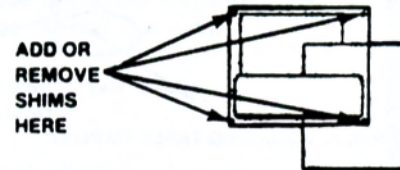


FIG. 5. SHIMMING LOCATIONS - TOP VIEW.

- (5) Post front should be parallel with lower saw guide keeper block's machined mounting recess. Check by: (a) Placing a spacer block -- ground to exactly 0.250-inch (6.4 mm) thickness -- in keeper block; (b) Placing an accurate straight edge against spacer block and post; (c) Using a feeler gage to check post clearance and parallelism to straight edge; (d) Clearance should not exceed 0.004-inch (0.1 mm). See Fig. 6.

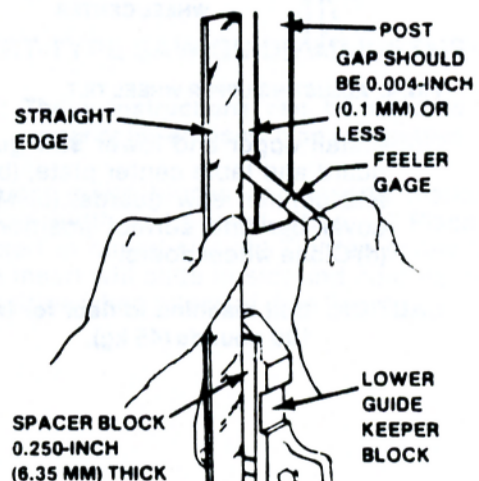


FIG. 6. ALIGN POST TO LOWER SAW GUIDE KEEPER BLOCK.

ALIGNMENT (Continued)

- (6) Correct clearance greater than 0.004-inch (0.1 mm) by shimming under base pad(s). Remove shims to **increase** clearance; add shims to **decrease** clearance. Refer to Fig. 5 on page 3.

CAUTION: Machine must be bolted to floor for table loads over 100 pounds (45 kg).

- (7) Square table to post side by loosening tilt lock mechanism and making necessary adjustment. If necessary, position tilt angle pointer at "0" on scale; then tighten tilt lock. See Fig. 7.

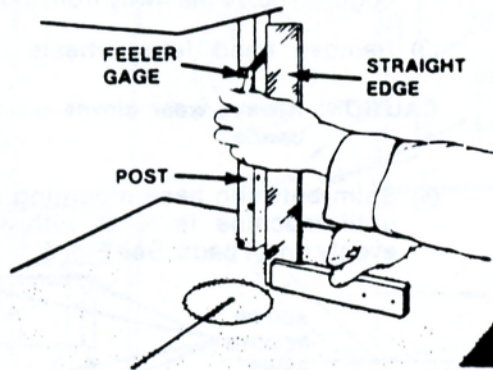


FIG. 7. SQUARING TABLE TO POST.

- (8) Re-install band so its center follows each wheel tire center. Then: (a) Close wheel doors; (b) Use tensioning knob to stress band to maximum reading shown by scale.
- (9) Check to see that band center is following each wheel tire's center. Adjust upper wheel tilt -- maximum 3 inches (75 mm) -- until band is tracking properly. See Fig. 8.

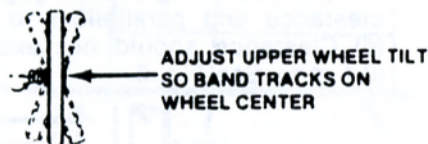


FIG. 8. ADJUSTING UPPER WHEEL TILT.

- (10) Install upper and lower saw guides, trunnion guard and table center plate; (b) Secure post and column saw guards; (c) Move saw slot cover bar into correct position and secure; (d) Close wheel doors.

CAUTION: Bolt machine to floor for table loads over 100 pounds (45 kg).

ELECTRICAL INSTALLATION

ELECTRICAL INSTALLATION MUST BE MADE BY AUTHORIZED ELECTRICAL MAINTENANCE PERSONNEL!

- (1) Bring line circuit leads into machine's electrical box. Refer to electrical wiring schematic, if necessary.
- (2) Open lower wheel door. Then: (a) Alternately jog machine's "start" and "stop-reset" switch; (b) The band wheel must turn **clockwise** when machine is running; (c) Reverse electrical connections if wheel turns **counterclockwise**.
- (3) If your machine has provided overload protection, the overload relay may kick-out if "starting" and "stopping" occurs numerous times in rapid succession. Should this occur, let relay cool a few minutes before "starting" again.

NOTE: Newer machines have a thermal-sensing switch within the drive motor unit which acts as an overload relay.

PREPARATION FOR USE

NOTE: Refer to Lubrication Chart for recommended lubricants.

- (1) Transmission oil level should be even with elbow plug. Capacity is 1 quart (0.95-liter).
- (2) Check air pump (if supplied) for proper lubrication.
- (3) Check oil-mist lubrication unit (if supplied) for proper reservoir level. Refer to manufacturer-supplied literature for capacity & recommended products.
- (4) Make sure all other points listed in Lubrication Chart are properly serviced.

OPERATION

SAFETY PRECAUTIONS

WARNING

TO AVOID POTENTIAL HAZARDS, OBSERVE THESE PRECAUTIONS WHEN OPERATING OR SERVICING THIS MACHINE-OPERATOR MUST:

- WEAR SAFETY GLASSES.
- WEAR GLOVES WHEN HANDLING SAW BAND.
- NOT WEAR GLOVES WHEN OPERATING MACHINE.
- SET SAW GUIDES AS CLOSE TO WORK AS POSSIBLE.
- CLOSE BAND WHEEL COVERS BEFORE TENSIONING BAND OR STARTING MACHINE
- CLOSE DOORS, REPLACE ALL COVERS AND SAFETY GUARDS BEFORE OPERATING MACHINE
- USE A FIXTURE TO FEED WORK PIECE AND KEEP HANDS AWAY FROM MOVING SAW BAND
- AVOID CONTACT WITH COOLANT. ESPECIALLY GUARD YOUR EYES.
- STEP TO ONE SIDE AND AWAY FROM WELDING UNIT BEFORE WELDING A SAW BAND.
- INSTALL FRICTION BAND AND SPARK SHIELD BEFORE FRICTION SAWING.
- USE A DUST COLLECTOR WHEN SAWING GENERATES DUST.
- DISCONNECT ELECTRICAL SUPPLY BEFORE REMOVING PANELS OR DRIVE COVERS.

MAKE SAFETY THE RULE AND FOLLOW SAFE SHOP PRACTICES. ALWAYS CONSULT THE OPERATOR'S MANUAL PRIOR TO SERVICING.

404476

ELECTRICAL CONTROLS

- (1) A band drive motor "start" and "stop-reset" switch is located on column front.

NOTE: Be sure band is correctly tensioned and wheel doors are closed before "starting" band drive motor.

- (2) DBW-15 Welder and Grinder controls (if supplied) are described in a separate instruction manual.

SAW BAND SELECTION

Your machine is equipped with an Imperial Bi-Metal Super Silencer saw band 154 inches (3910 mm) long. It will accept bands from 1/16-inch (1.5 mm) to 1 inch (25 mm) wide.

The following is standard equipment:

- (1) One set of high-speed, insert-type saw guide blocks for bands 1/16-inch (1.5 mm) through 1/2-inch (12.5 mm) wide.

- (2) One set of steel guide inserts for bands 1/8-inch (3.2 mm) through 1/2-inch (12.5 mm) wide.

NOTE: Information about all DoALL saw bands is available from a DoALL Industrial Supply Center representative.

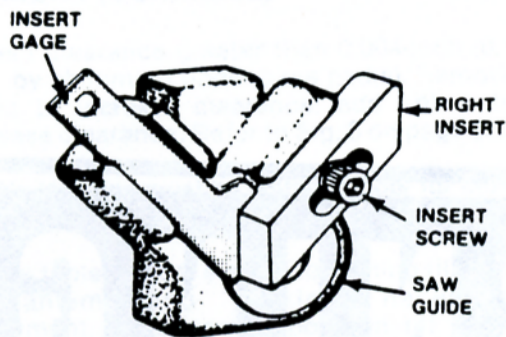
INSERT-TYPE SAW GUIDE ADJUSTMENT

NOTE: These instructions can be used to adjust upper or lower insert-type saw guides.

- (1) Select guide blocks and inserts marked for band width to be used. Then: (a) Place right insert in milled slot; (b) Tighten screw lightly so insert will slide in slot and hold its correct position when released. See Fig. 9.

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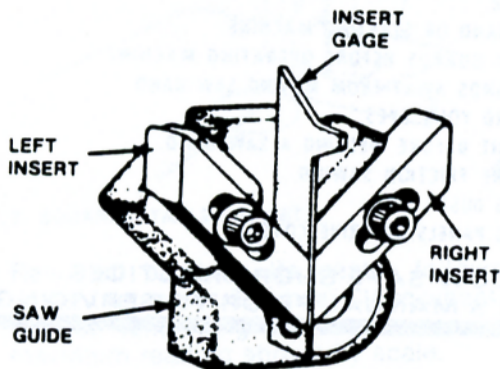
SAW GUIDE ADJUSTMENT (Continued)



1. Use gage to position one insert.

FIG. 9. POSITIONING RIGHT INSERT - UPPER GUIDE BLOCK SHOWN.

- (2) Select insert gage matching band size. Then: (a) Place gage in slot; (b) Adjust inserts to fit exactly into gage notched end; (c) Tighten insert screw. See Fig. 10.



2. Then use gage as a thickness gage to position second insert.

FIG. 10. POSITIONING LEFT INSERT - UPPER GUIDE BLOCK SHOWN.

- (3) Place insert in slot and tighten screw lightly; Then: (a) Place gage edgewise between both inserts; (b) Lower insert until it rests against gage; (c) Tighten screw. Refer to Fig. 10.

NOTE: Insert-type guides are recommended for maximum band speeds of 1300 fpm (390 m/min) for production sawing, or up to 5000 fpm (1500 m/min) for occasional sawing. Use roller guides (if supplied) for continuous sawing over 1300 fpm (390 m/min).

BAND REMOVAL & INSTALLATION

CAUTION: Always wear gloves when handling saw bands.

Band Removal

- (1) Relax band tension. Then: (a) Open band wheel doors; (b) Slide post and column saw guards, if necessary; (c) Loosen saw guide inserts; (d) Loosen screws holding saw slot cover bar and move it aside.
- (2) Carefully slip worn or broken band from between saw guide inserts and remove from around wheels.

Installation

CAUTION: Always wear gloves when handling saw bands.

- (1) Follow "Band Removal" instructions to prepare machine to receive a new band.
- (2) Remove new band's protective Saw Cap. Then: (a) Place new band carefully around wheels and between saw guide inserts; (b) Band's center should follow center of wheels with crowned rubber tires.
- (3) Close wheel doors. Then: (a) Apply band tension to that recommended by tension scale by turning knob below head -- refer to Fig. 11 on page 7; (b) Tighten saw guide inserts; (c) Reposition and secure saw slot cover bar; (d) Secure post and column band guards.

BAND TENSIONING & TRACKING

Tensioning

- (1) Apply band tension by turning knob located below machine head.
- (2) A scale showing recommended tension for various band widths is located right of knob as shown in Fig. 11. Scale numbers represent recommended tensions for common band gages and pitches most likely to be used when sawing.

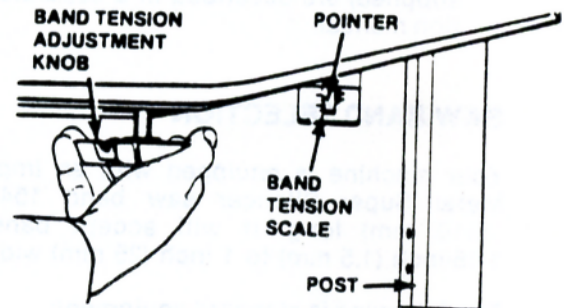


FIG. 11. ADJUSTING BAND TENSION.

BAND TENSIONING & TRACKING (Continued)

- (3) **Reduce** recommended tension when using bands with coarser pitch or lighter gage; **increase** tension when using heavier bands.

Tracking

The upper wheel can be tilted a maximum of 3 inches (75 mm) forward and backward to help achieve correct band tracking.

NOTE: A properly tracking band will have its center following the center of both crowned rubber wheel tires.

Perform the following tracking procedures with band drive "off" and transmission in "neutral".

- (1) Open wheel doors. Manually turn wheels and observe how band tracks. See Fig. 12.

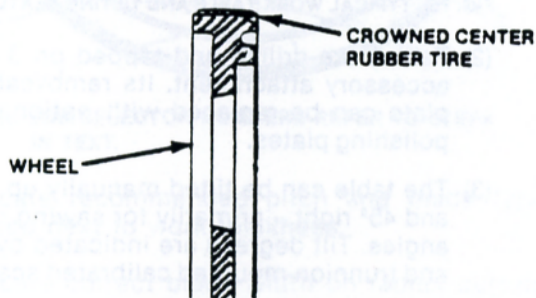


FIG. 12. BAND CENTER SHOULD FOLLOW WHEEL CENTER.

- (2) Adjust wheel tilt if necessary by: (a) Loosening tilt lock knob; (b) Turning adjustment knob until band rides tires properly; (c) Tightening lock knob when correct tilt is obtained.

NOTE: The band's back edge should barely touch saw guide back-up bearings.

- (3) Close wheel doors.

POST ADJUSTMENT

- (1) For best cutting results, place post and upper saw guide as close as possible to stock. To adjust post height: (a) Grasp post; (b) Loosen post elevation lock knob by turning it **counterclockwise**; (c) Manually raise or lower post to desired height; (d) Tighten lock knob by turning **clockwise**. See Fig. 13.

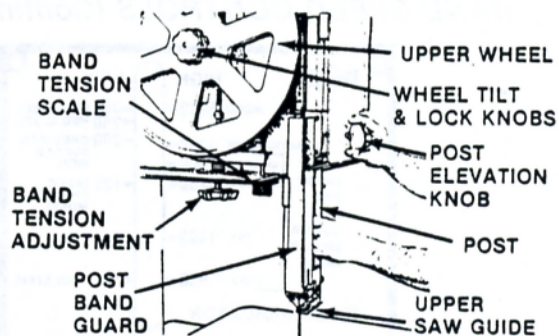


FIG. 13. POST ELEVATION, BAND TENSION & WHEEL TILT CONTROLS.

- (2) Be sure post band guard is secured while band is moving.

BAND SPEED CONTROLS

- (1) Transmission shift lever, band speed indicator and variable speed handwheel are located on machine frame below right worktable edge.
- (2) Operator selects between low and high band speed ranges by moving transmission shift lever. Move lever to the left for high range speeds -- 950 to 5200 fpm (292 to 1584 m/min); move lever to the right for low range speeds -- 55 to 300 fpm (17 to 90 m/min). See Fig. 14A.

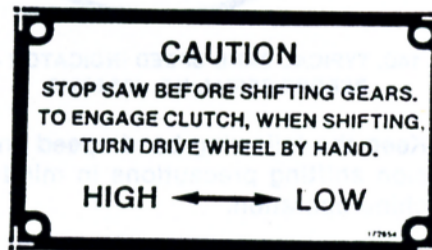


FIG. 14A. TRANSMISSION SHIFT LEVER ESCUTCHEON.

- (3) Variable speed within either range is changed by turning band speed handwheel -- turn wheel **clockwise** to decrease speed, **counterclockwise** to increase. Refer to band speed indicator while turning handwheel to determine when desired speed is reached. See Figs. 14B and 14C.

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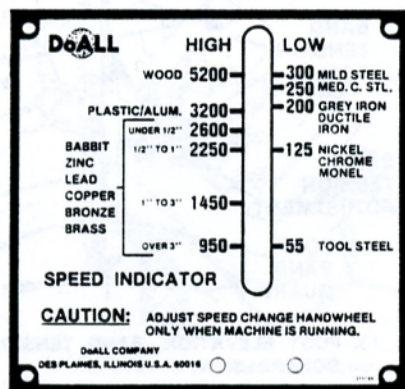


FIG. 14B. TYPICAL BAND SPEED INDICATOR -- MACHINES STARTING WITH SERIAL NO. 457-87613.

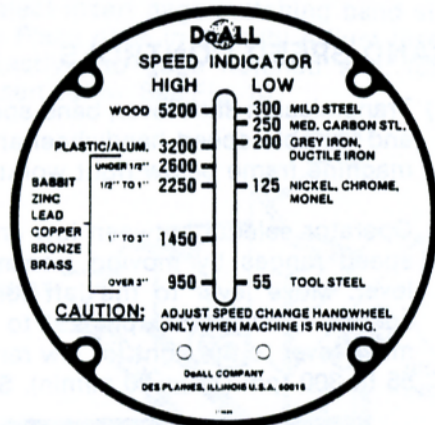


FIG. 14C. TYPICAL BAND SPEED INDICATOR -- MACHINES BEFORE SERIAL NO. 457-87613.

(4) Keep the following band speed and transmission shifting precautions in mind during machine operation:

- * Adjust speed change handwheel **only** while machine is running.
- * Always turn handwheel to a **slow speed** before stopping machine.
- * Always allow machine to **stop completely** before opening lower wheel door and turning drive wheel manually until meshing occurs.

CAUTION: Do not open wheel doors while band is moving.

- * If gears are not in position to mesh, **turn machine off** before opening lower wheel door and turning drive wheel manually until meshing occurs.
- * Turn drive wheel manually to engage clutch while shifting.

CAUTION: Do not attempt to force shift lever into place.

WORK TABLE & TILT ADJUSTMENT

(1) The standard work table measures 26 inches by 26 inches (660 mm by 660 mm). Its load capacity is 500 pounds (225 kg). See Fig. 15.

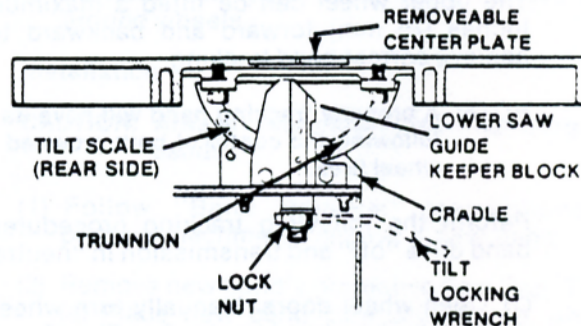


FIG. 15. TYPICAL WORK TABLE AND TILTING FEATURES.

- (2) Tables are drilled and tapped on 3 edges for accessory attachment. Its removeable center plate can be replaced with optional filing or polishing plates.
- (3) The table can be tilted manually up to 10° left and 45° right -- primarily for sawing compound angles. Tilt degrees are indicated by a pointer and trunnion-mounted calibrated scale.
- (4) To tilt the table: (a) Use provided wrench to reach through trunnion frame and loosen tilt locknut; (b) Tilt table until pointer reaches desired angle as shown on scale; (c) Tighten locknut.

CAUTION: Machine must be bolted to floor for table loads over 100 pounds (45 kg).

CHIP BRUSH & CHIP REMOVAL

- (1) A brush located near lower wheel cleans chips from band during machine operation.
- (2) Removed chips fall into a removeable pan in machine base. Empty pan when necessary.
- (3) During operation, chips may accumulate around such machine areas as saw guides, table top, wheels, slides, etc. Remove them as soon as possible.

NOTE: The DoALL Company recommends removing chip collections at least twice per each 8-hour shift, and more often when necessary.

CAUTION: "STOP" band movement before opening machine doors or covers.

USING THE JOB SELECTOR

- (1) Turn dial until material to be cut is directly below cover window as shown in Fig. 15A.

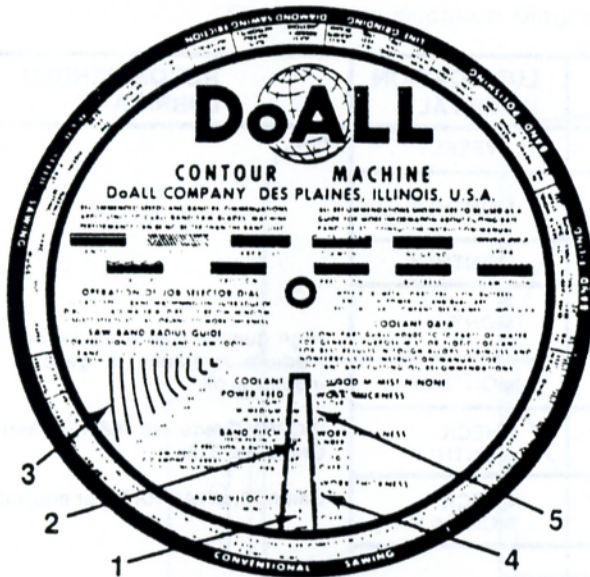


FIG. 15A. JOB SELECTOR NUMBERS REFER TO STEPS IN TEXT.

- (2) Locate recommended pitch and blade type listed next to work thickness.
- (3) Locate correct blade width on radius cutting chart. Determine band width, pitch, and tooth type. Refer to a saw blade specification table to determine gage and set.
- (4) Locate recommended band speed for work thickness and blade type to be used.
- (5) Note recommended feed force to be used with work thickness.

These recommendations can be adjusted to meet special requirements.

WELDING SAW BANDS (If Welder Supplied)

- (1) Complete instructions covering blade welding, operation and maintenance for the DBW-15 butt welder with flash grinder and blade shear (if supplied) are provided in a separate instruction manual.

CONTOUR SAWING PROCEDURES

- (1) Refer to the Accessories section for contour sawing instructions and options pertaining to each operations.

LUBRICATION LUBRICATION CHART

LUBRICATION POINT NUMBER	LOCATION DESCRIPTION & SERVICE RECOMMENDATIONS	LUBRICATION INTERVAL *	RECOMMENDED LUBRICANT
1 **	Variable Pulley. 1 oil cup.	WEEKLY	High quality, rust & oxidation inhibited, medium hydraulic & general purpose industrial oil. ISO-VG Grade No. 68 (Formerly ASTM Grade No. 315). Union 76, UNAX RX 68, or equivalent.
2	Band Tension Screw & Bearing. Clean & apply oil.	MONTHLY	
3	Post. Clean & apply oil.	MONTHLY	
4	Upper Wheel Slide, Hinge & Tilt Screw. Clean & apply oil.	MONTHLY	
5	Table Trunnion. Oil tilt surfaces.	MONTHLY	
6 **	Speed Change Screw & Linkage. Clean & apply oil as required.	CHECK MONTHLY	
7	Miscellaneous, Hinges, Pivots, etc. Clean & apply oil as required.	CHECK MONTHLY	
8	Accessory Equipment As Supplied. Keep clean & apply oil as required to maintain proper function, reduce wear & corrosion, etc.	CHECK MONTHLY	
9	Transmission. 1-quart (0.95-liter) capacity. Proper oil level must be maintained. Drain & refill yearly or when required.	CHECK MONTHLY	High quality, EP (extreme pressure), multi-purpose gear oil. SAE Grade No. 90. Union 76, MP Gear Lube 90, or equivalent.
10	Air Pump (Optional). Remove air intake filter & feed lubricant into opening while pump is in motion. Keep air filter clean.		Dry, powdered, lubricating graphite (natural or manufactured). DoALL graphite lubricant.
11	Electric Motor(s).	Lubricate as required per manufacturer's recommendations.	
12	Oil-Mist Lubricator (Option).	Lubricate as required per manufacturer's recommendations.	
13	DBW-15 Welder (Optional).	Lubricate as required per DBW-15 Instruction Manual.	

* LUBRICATION INTERVALS ARE BASED ON AN 8-HOUR DAY, 40-HOUR WEEK. LUBRICATE MORE OFTEN WHEN REQUIRED.

** Inside Machine

FIG. 16. LUBRICATION CHART.

LUBRICATION DIAGRAM

NOTE: No. 12 from Lubrication Chart Not Shown on Lubrication Diagram.

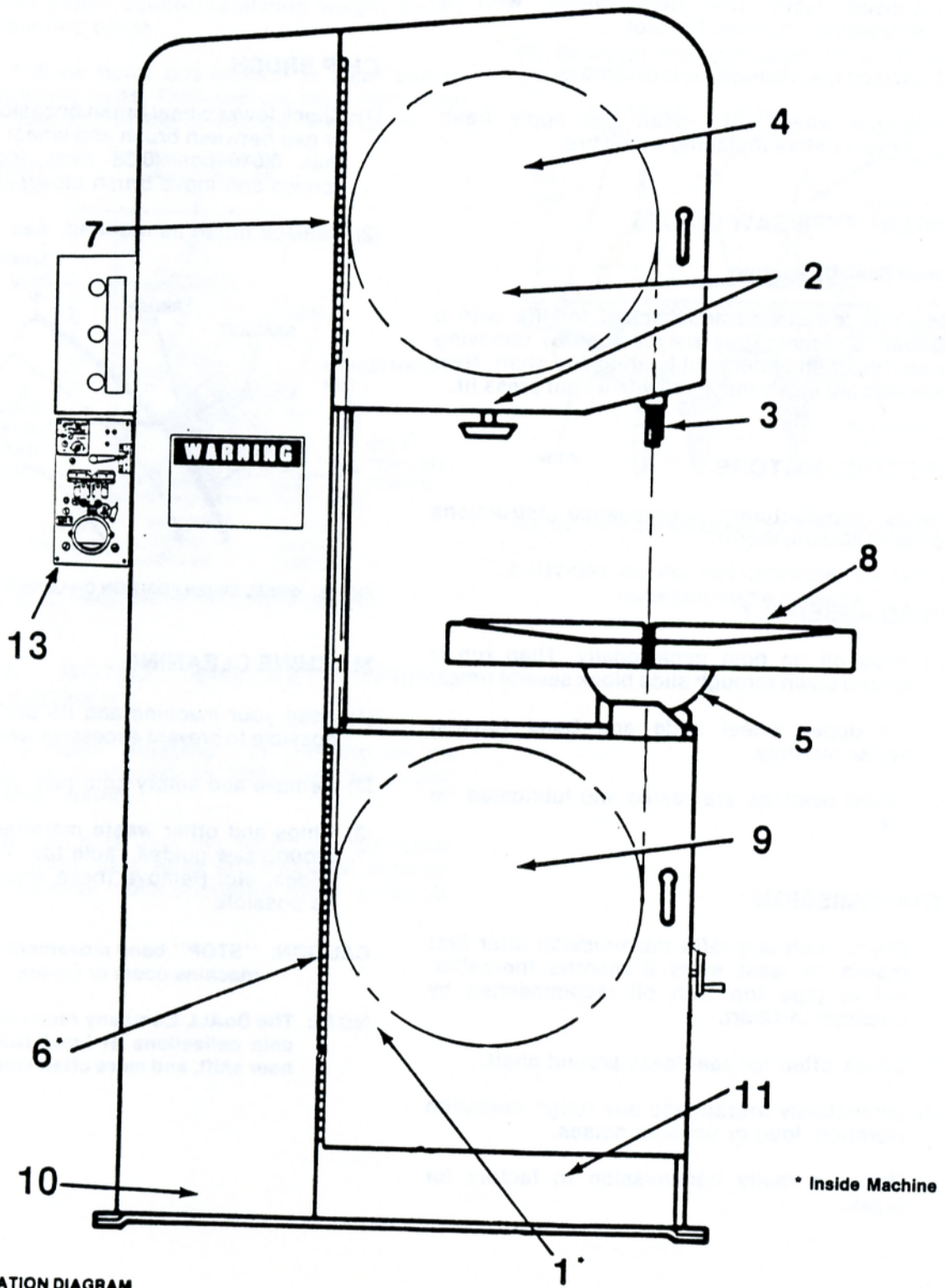


FIG. 17. LUBRICATION DIAGRAM.

MAINTENANCE

REPLACING CROWNED WHEEL TIRES

- (1) Loosen worn tire from wheel with a screwdriver, or other flat tool.
- (2) Stretch tire, if necessary, to remove.
- (3) Scrape wheel until clean and apply fresh cement before installing a new tire.

INSERT-TYPE SAW GUIDES

Roller Back-Up Bearing

Bearings are sealed and packed for life with a special lubricant. They are replaced by removing snap ring; then pulling out bearing and shaft. New bearings are easily installed with a light press fit.

ELECTRIC MOTORS

Follow manufacturer's maintenance instructions for each electric motor.

HEAD ASSEMBLY

- (1) Wipe oil on post occasionally. Then run it up and down through slide block several times.
- (2) Oil upper wheel slide and band tension screw monthly.
- (3) Wheel bearings are sealed and lubricated for life.

TRANSMISSION

- (1) Drain, flush and refill transmission after first month; at least every 6 months thereafter. Fill to pipe top with oil recommended by Lubrication Chart.
- (2) Check often for seal leaks around shaft.
- (3) Immediately investigate any rough operation vibration, loud or unusual noises.
- (4) Return a faulty transmission to factory for repair.

CAUTION: Correct new transmission installation is extremely important because careful alignment is necessary. Installation by a DoALL Industrial Supply Center service representative is recommended.

CHIP BRUSH

- (1) Check lower wheel brush occasionally. If worn, or gap between brush and wheel tire is greater than 0.015-inch (0.38 mm), loosen bracket screws and move brush closer to wheel.
- (2) Replace brush as required. See Fig. 18.

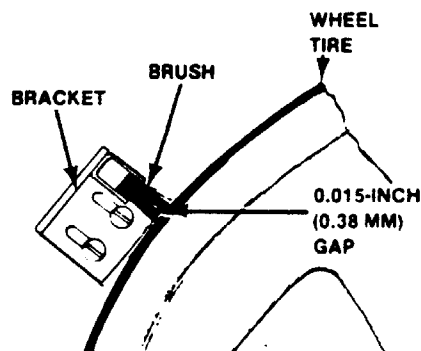


FIG. 18. WHEEL BRUSH POSITION ON LOWER WHEEL.

MACHINE CLEANING

- (1) Keep your machine and its parts as clean as possible to prevent excessive wear and damage.
- (2) Remove and empty chip pan when necessary.
- (3) Chips and other waste materials may collect around saw guides, table top, T-slots, wheels, slides, etc. Remove these materials as soon as possible.

CAUTION: "STOP" band movement before opening machine doors or covers.

NOTE: The DoALL Company recommends removing chip collections at least twice per each 8-hour shift, and more often when necessary.

DRIVE BELTS

Variable Pulley Drive Models

- (1) Belts driving the variable pulley and input sheave will stretch slightly after initial use. This stretch is automatically taken up by drive motor counter-balancing weight on its mounting hinge.
- (2) Lift drive motor and block it in place before replacing belts. Then slip old belts from their pulleys and install new ones. See Fig. 19.

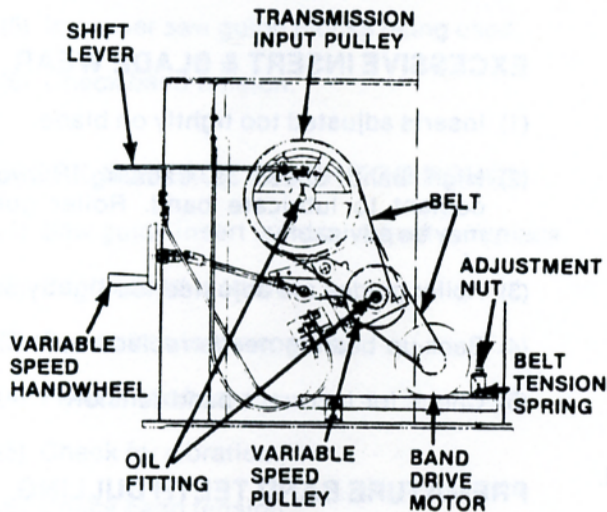


FIG. 19. ADJUSTING DRIVE MOTOR BRACKET SPRING.

DRIVE MOTOR BRACKET SPRING ADJUSTMENT

- (1) Drive motor "hopping", or climbing on its belt, is controlled by adjusting the motor bracket spring.
- (2) Turn jam nuts until the spring will just clear the motor plate when at its highest position during drive motor operation. Refer to Fig. 19.

VARIABLE PULLEY

- (1) Remove, wash and clean the variable speed pulley unit with solvent every 6 months. Then: (a) Check to see that pulley's center sheave is free to shift sideways; (c) Check pulley for scoring which could damage the bolts.
- (2) Bearings are lubricated from an oil cup in shaft end. See Fig. 20.

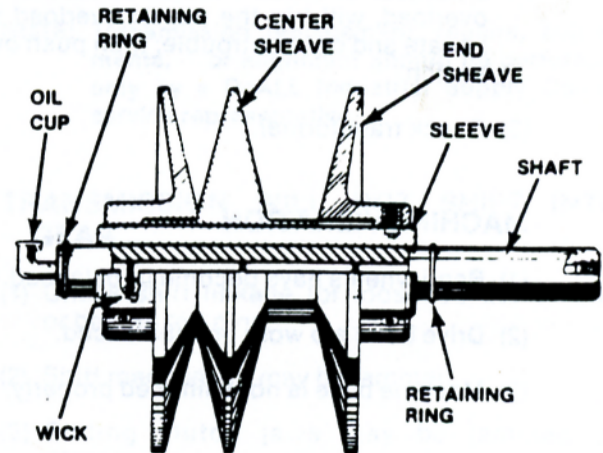


FIG. 20. VARIABLE SPEED PULLEY - CROSS-SECTION.

CAUTION: Do not over-lubricate. Oil will coat the belts and cause slippage.

TROUBLE SHOOTING

MACHINE WILL NOT START

- (1) Check main fuses and control circuit fuse.
- (2) Check overload reset on band drive motor starter. Starting and stopping the machine a number of times in quick succession, or an overload, will trip the starter overload switch. Locate and correct trouble; then push overload switch.
- (3) Check transformer.

MACHINE VIBRATION

- (1) Band wheels have become unbalanced.
- (2) Drive belts are worn or unbalanced.
- (3) Machine base is not shimmed properly.

BAND VIBRATION

- (1) Incorrect band speed or feed force being used.
- (2) Incorrect band pitch choice.
- (3) Stock is not being held firmly.
- (4) Saw guide inserts are worn or improperly adjusted.
- (5) Saw guide back-up bearing is worn.
- (6) Check for loose post. Adjust cover plate, if necessary.
- (7) Stock is not clamped firmly to table.
- (8) Band has a poor weld.
- (9) Check band tension setting.

BAND CUTTING INACCURATELY

- (1) Blade teeth are worn. Inserts too wide for blade will damage set teeth.
- (2) Stock scale has not been removed.
- (3) Blade too wide for radius being cut.
- (4) Incorrect band or insert alignment.

- (5) Incorrect feed force or band speed being used.
- (6) Coolant not being applied evenly to both band sides.
- (7) Upper saw guide is not located close enough to stock.
- (8) Incorrect band tension.
- (9) Saw guide inserts are worn, or adjusted too loosely.

EXCESSIVE INSERT & BLADE WEAR

- (1) Inserts adjusted too tightly on blade.
- (2) High band speed is causing friction. Use coolant to lubricate band. Roller guide use may be advisable.
- (3) Roller guides are adjusted too tightly on band.
- (4) Back-up bearing needs replacement.
- (5) Check for incorrect band tension.

PREMATURE BAND TEETH DULLING

- (1) Band is not being "broken in" on first few cuts. Reduce feed pressure on first cuts.
- (2) Band speed is too high. This causes abrasion.
- (3) Band pitch is too coarse.
- (4) Feed pressure is too light; increase feed.
- (5) Coolant is not covering band properly.
- (6) Cutting rate is too high.
- (7) Faulty material such as heavy scale, inclusions, hard spots, etc.
- (8) Check for band vibration.
- (9) Chipped tooth is lodged in cut.
- (10) Check for chip welding.
- (11) Check band tension.
- (12) Inserts are too wide for blade width, allowing inserts to hit set teeth (listen for clicking sound during band operation).

TROUBLE SHOOTING (Continued)

BAND SLIPS OFF WHEELS

- (1) Upper wheel is not aligned correctly.
- (2) Too much coolant, or slippery coolant, being used.
- (3) Initial machine alignment is wrong.
- (4) Wheel brush worn or not adjusted properly. This allows chips to remain on wheel tire.
- (5) Improper saw guide blocks being used.
- (6) Check band tension.

WORK SURFACE FINISH TOO ROUGH

- (1) Saw guide insert is worn. Adjust or replace.
- (2) Band speed is too low.
- (3) Band pitch is too coarse.
- (4) Feed is too heavy.
- (5) Check for vibration.
- (6) Check band tension.
- (7) Band has a poor weld.

FILE BAND BREAKS

- (1) Band tension is too high. Set for same tension as used on 1/8-inch (3.2 mm) wide carbon band.
- (2) Feed force is too high.
- (3) Wrong file band type being used.

POOR BAND FILING FINISH

- (1) Feed force is too high.
- (2) File band is not correctly assembled.
- (3) Band tension is too high.

NO COOLANT FLOW (If Supplied)

- (1) Applicator nozzle is clogged.
- (2) Coolant hoses clogged or kinked.
- (3) Coolant control valve clogged or damaged.

TRANSMISSION WILL NOT STAY IN GEAR

- (1) Gears are worn.

NOTE: Transmission replacement, repairs, adjustments, or alignment should be performed only by a DoALL Industrial Supply Center service representative.

TRANSMISSION WILL NOT SHIFT INTO GEAR

- (1) Check shift linkage for loosened set screws or broken roll pins.
- (2) Shift mechanism may be jammed.
- (3) Sliding clutch jaws may be jammed or damaged.

ACCESSORIES

NOTE: The following are accessories sometimes used in contour sawing operations. However, those having (if supplied) references may no longer be supplied. A DoALL Industrial Supply Center representative will be happy to advise you about the availability of any of these accessories.

DISK CUTTING

Attachment used to cut internal or external true circles from 2-1/2 inches (65 mm) to 30 inches (760 mm) in diameter. To set up:

- (1) Place flat washers under screws. Then:
(a) Bolt bracket to post; (b) Lower post until upper saw guide is approximately 3/8-inch (10 mm) above table; (c) Loosen fine adjustment and arm clamp bolts; (d) Move center pin to approximate distance or radius to be cut; (e) Tighten fine adjustment clamp bolt. See Fig. 21.

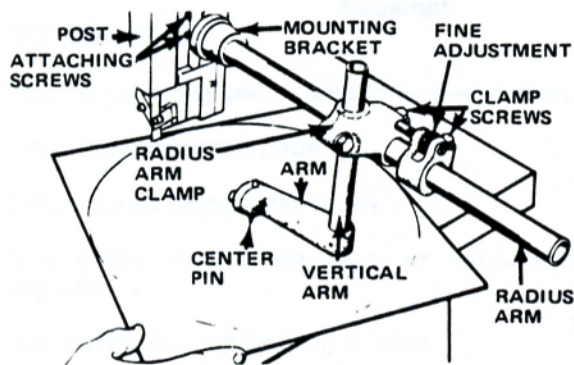


FIG. 21. CUTTING A RADIUS WITH DISK CUTTER.

- (2) Centering pin's center must be perpendicular to band cutting edge. To position: (a) Place a square against saw tooth tip; (b) Loosen vertical adjustment clamp bolt; (c) Line up center pin with square's blade edge; (d) Clamp tight.
- (3) Make final radius adjustments with fine adjustment wheel: (a) Tighten arm and radius arm clamp bolts while making sure center pin is square to table; (b) Adjust unit for stock thickness by raising or lowering post.

NO. 2 CUT-OFF & MITERING (Side Mount)

- (1) Mitering bar must contact table surface evenly during use. Place a combination square in table slot to check alignment and set bar for sawing at various angles.
- (2) When not being used, the unit can be swung up, to the right, and down on slide rod so it hangs below table surface. See Fig. 22.

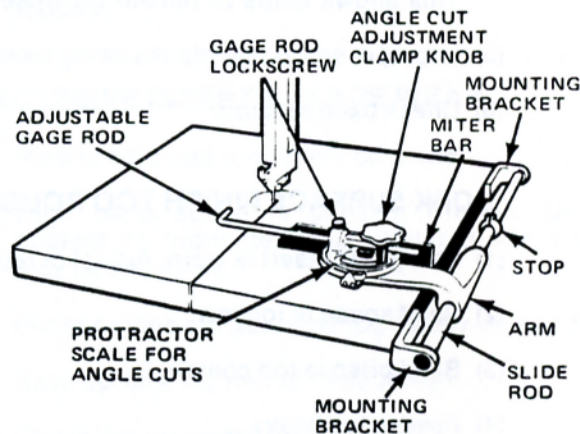


FIG. 22. NO. 2 CUT-OFF & RIPPING OPTION.

RIP FENCE

- (1) Square fixture during installation so it is in line with table slot.
- (2) Before attempting a long cut, check to see that band is not worn on one side. This will cause stock to wander relative to rip fence guide bar. See Fig. 23.

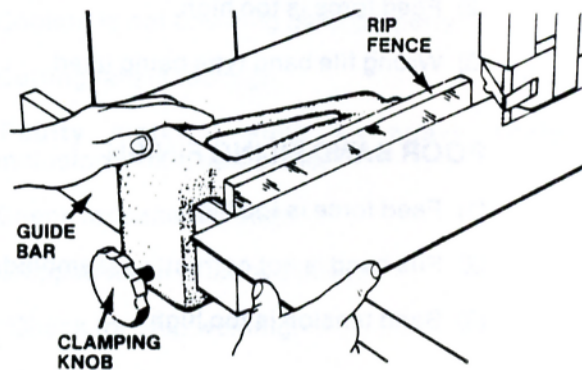


FIG. 23. RIP FENCE SET-UP.

HEAVY WORK SLIDES

- (1) Slide bar with ball bearings are placed between table and heavy stock to reduce friction.
- (2) Insert a block in table's center hole to support stock at sawing point. Saw into block to establish a kerf or blade travel path. See Fig. 24.

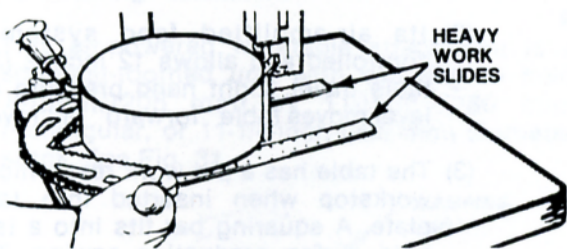


FIG. 24. HEAVY WORK SLIDES.

ADJUSTABLE WORKHOLDING JAW

- (1) Option used for off-hand and contour sawing. By looping a power feed chain around the workholding jaw, the operator can use the cable pulley system to guide stock along contour layout lines. See Fig. 25.

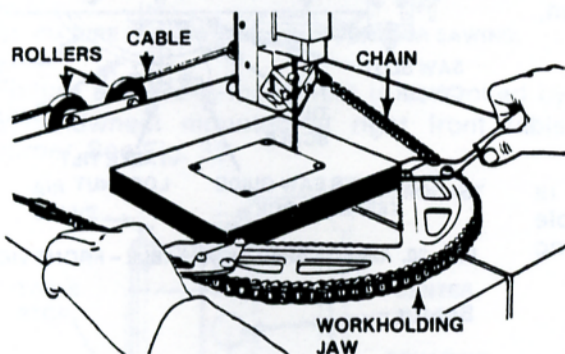


FIG. 25. ADJUSTABLE WORKHOLDING JAW.

NOTE: Be sure to use correct band width when cutting a radius.

AIR-OPERATED POWER FEED

NOTE: This option requires shop air at 20 psi (1.38 bars) minimum to 100 psi (7 bars) maximum. It is tested for 70 psi (4.8 bars) pressure during factory inspection.

Air-power provides steady feeding pressure and allows operator to use both hands to guide work.

A pressure regulating knob and gage is located slightly below left table surface, and a pulley and cable system is attached by adjustable bracket to rear table edge. To use:

- (1) Adjust pulley and carrier system for work width. This is done by loosening 2 knobs located below rear bracket, then removing any slack in workholding chain. See Fig. 26.

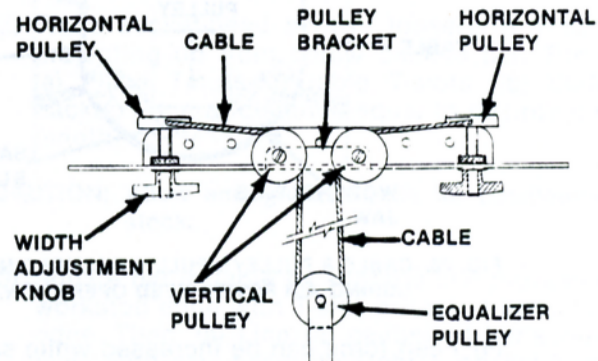


FIG. 26. CABLE & PULLEY ASSEMBLY -- REAR CROSS-SECTION VIEW.

- (2) Set desired feed force with regulating knob at table's left. Turn **clockwise** for increased feed force, **counterclockwise** to decrease. Refer to gage for pressure reading. See Fig. 27.

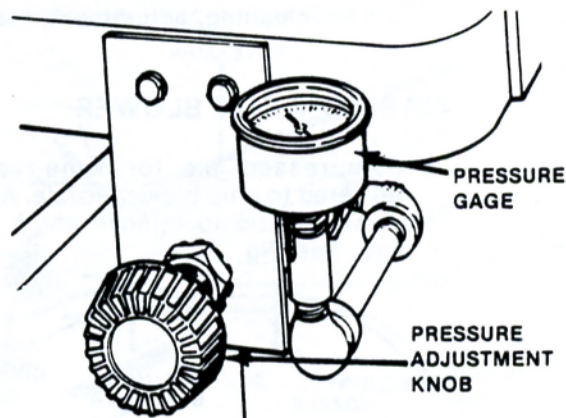


FIG. 27. FEED FORCE ADJUSTMENT KNOB & GAGE.

- (3) Place work between workholding jaws and remove cable slack. Start machine and begin cutting by exerting slight downward foot pedal pressure. See Fig. 28.

Continued Next Page

AIR-OPERATED POWER FEED (Continued)

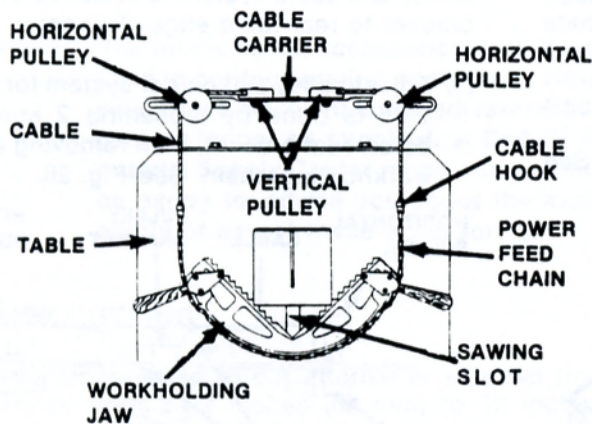


FIG. 28. CABLE & PULLEYS PULL WORKHOLDING JAW DURING AIR POWER FEED OPERATION.

- (4) Feed force can be increased while sawing by applying additional pressure against foot pedal. When procedure is finished, remove foot from pedal to relax feed force.

CAUTION: A special oil-mist lubricator is included with this option. Refer to manufacturer-supplied booklet for information about its installation, operation, lubrication, cleaning, adjustment, etc.

AIR PUMP & CHIP BLOWER

- (1) Compressed air for vane-type pump is delivered to chip blower nozzle. Adjust flexible blower nozzle to remove chips from sawing area. See Fig. 29.

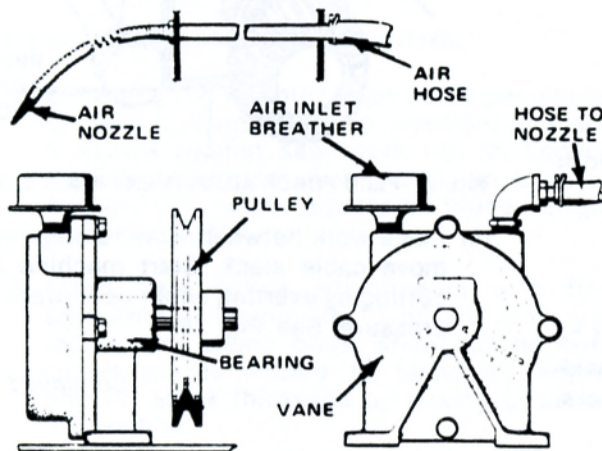


FIG. 29. AIR PUMP & CHIP BLOWER.

AIR-POWERED WORKTABLE

- (1) This optional air-powered worktable provides a 24-inch (610 mm) by 30-1/2-inch (775 mm) work area with coolant return troughs. The table can be tilted 6° left and 45° right. It has 2 T-slots for work fixture clamping.

NOTE: This attachment reduces standard machine stock height capacity by 1 inch (25 mm).

- (2) Its air-amplified feed system is lever-controlled and allows 12 inches (305 mm) of table travel. Light hand pressure against the lever moves table "forward" or "reverse".
- (3) The table has a pin work rest which acts as a workstop when inserted into table center plate. A squaring bar fits into a table slot to hold during production sawing. Table locks permit loading and positioning of heavy stock. Special table center plates for filing or polishing operations are provided. See Fig. 30.

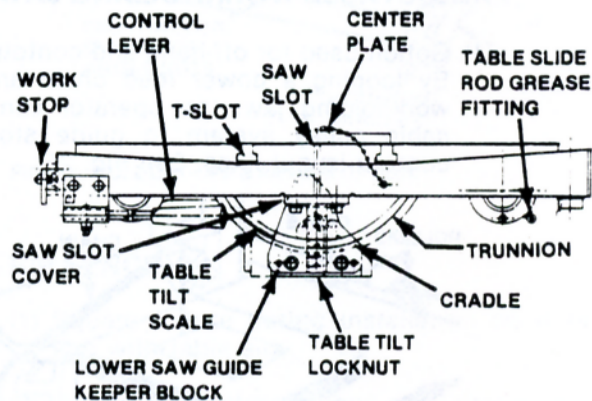


FIG. 30. AIR-POWERED WORKTABLE - FRONT VIEW.

Set-Up

- (1) Position stops on left table side to limit travel. The front stop controls cut depth; the rear stop minimizes unnecessary travel. Stops are positioned by loosening locknuts, sliding to desired position, and re-locking nuts.
- (2) Place table at desired tilt angle by: (a) Loosening locknut; (b) Moving table to desired angle; (c) Tightening locknut.

Production Sawing

- (1) Place rest pin in table center hole to serve as a workstop. Place squaring bar in a table T-slot to act as the stock holder.

CAUTION: Remove rest pin and squaring bar for contour sawing.

AIR-POWERED WORKTABLE (Continued)

- (2) Place stock on table. Move table "forward" manually until the cut is started.
- (3) Push control lever at left table front to obtain desired feed force. Feed force will return to "0" when lever is released.

Contour Sawing Attachment

- (1) This air-powered worktable attachment is a sprocket-toothed unit with capacity to hold 8-inch (205 mm) by 11-inch (280 mm) rectangular, or 11-1/4-inch (285 mm) diameter stock. See Fig. 31.

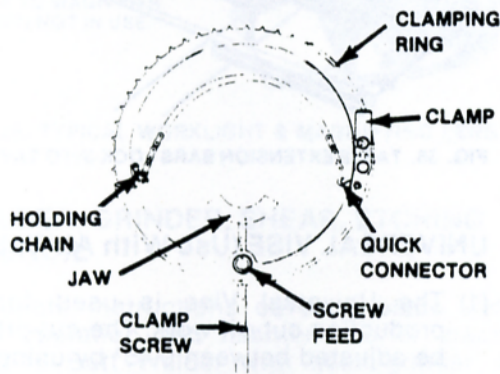


FIG. 31. FIXTURE CLAMPS STOCK FOR CONTOUR SAWING.

- (2) Fixture and stock movement is controlled by a handwheel mounted at right front table corner. See Fig. 32.

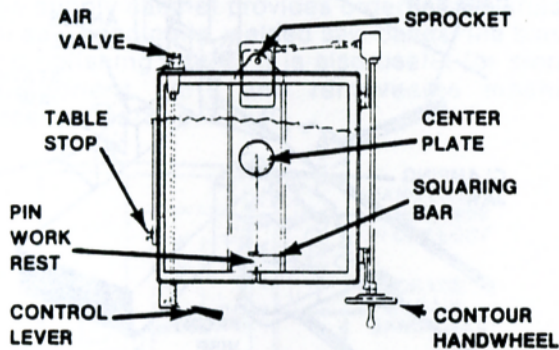


FIG. 32. AIR-POWERED WORKTABLE WITH CONTOUR SAWING ATTACHMENT - TOP VIEW.

UNIVERSAL CALIBRATED WORK FIXTURE (Use With Air Table Only)

Set-Up For Straight Cut-Off

- (1) Place fixture on table at required distance from band. Loosely install T-nuts and screws. If necessary, align scale's zero mark with saw band; then zero the pointer.

- (2) Place socket-head screws loosely in T-nuts projecting up from below backup bar. Then:
(a) Place T-nuts in table T-slots; (b) Slide backup edge at distance equal to desired cut length.

CAUTION: Allow enough clearance for positioning stock.

- (3) Square bar to table by aligning one moveable workstop edge with T-slot or table filler plate edge. Then:
(a) Line up calibrated bar's zero mark with saw band; (b) Tighten socket-head screws so backup bar is firmly anchored to table; (c) Shift moveable workstop to one saw band side; (d) Run table forward until stop front passes band; (e) Move workstop toward band until edge barely touches set teeth.

- (4) Close locking lever to hold workstop in position. Then adjust workstop pointer to line up with scale's zero mark. See Fig. 33.

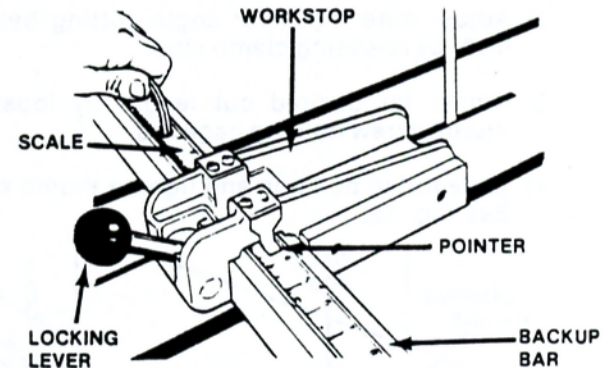


FIG. 33. UNIVERSAL CALIBRATED WORK FIXTURE SET UP FOR STRAIGHT CUT-OFF.

Set-Up For Angle Cut-Off

- (1) Loosen left socket-head screw. Then:
(a) Remove right T-nut and screw from backup bar; (b) Use protractor or square to position backup bar at desired angle as measured to T-slot; (c) Tighten head screw.

- (2) Mount collar on right T-nut and fasten to table against backup bar with socket-head screw. Then:
(a) Run table forward until backup bar barely touches saw band; (b) Set workstop at required length dimension.

UNIVERSAL CALIBRATED WORK FIXTURE (Continued)

NOTE: Disregard backup bar scale for angular cuts.

- (3) Notch backup bar with band to assure cutting through stock completely and set table stop to limit table travel to cut length. See Fig. 34.

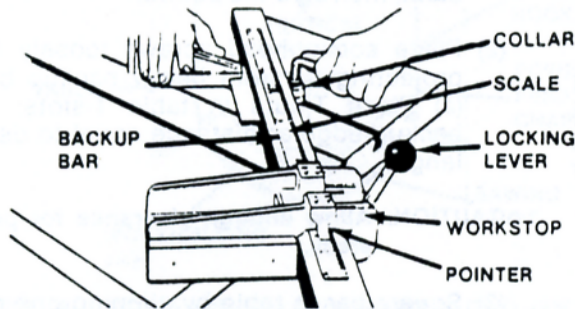


FIG. 34. UNIVERSAL CALIBRATED WORK FIXTURE SET UP FOR ANGLE CUT-OFF.

PROTRACTOR WORKSTOP & ALIGNING GAGE

To set up:

- (1) Lock slide bar in table T-slot in a position so miter head will clear saw band.
- (2) Adjust miter head for angle cutting between 0-45° by releasing clamp stud.
- (3) Adjust for desired cut length by loosening thumb screw holding gage rod.
- (4) Slide rod to position and tighten thumb screw. See Fig. 35.

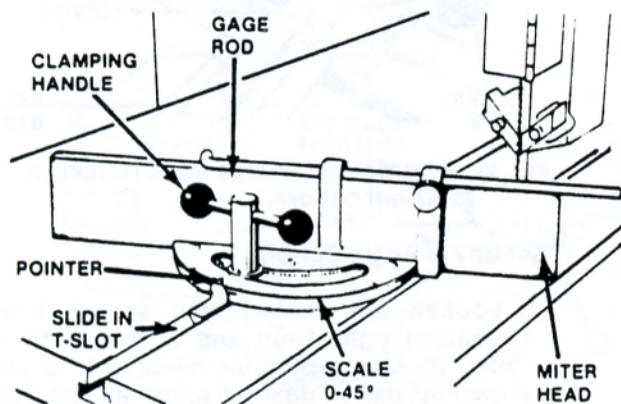


FIG. 35. PROTRACTOR WORKSTOP & ALIGNING GAGE SET-UP.

TABLE EXTENSION BARS (Use With Air Table Only)

- (1) Lock these two bars into table T-slots to provide adjustable outboard support for stock larger than the table itself.
- (2) Bar and studs backstop straight or irregular stock pieces at any angle. See Fig. 36.

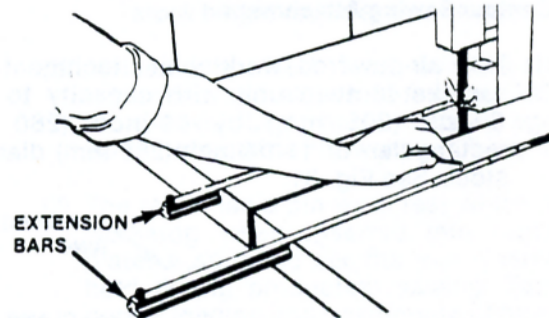


FIG. 36. TABLE EXTENSION BARS LOCK INTO TABLE T-SLOT.

UNIVERSAL VISE (Use With Air Table Only)

- (1) The Universal Vise is used for accurate production cut-off work. The cut-off angle can be adjusted between 0-45° by using a protractor and pointer.
- (2) Set up by clamping vise jaws in right table T-slot and the cut-off gage into left T-slot. See Fig. 37.

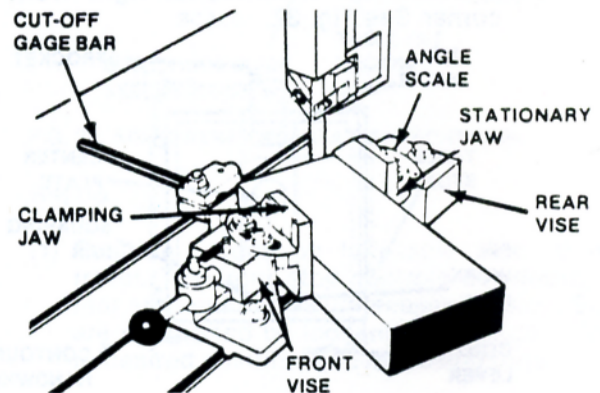


FIG. 37. UNIVERSAL VISE JAWS CLAMPED IN TABLE T-SLOT.

WORKLIGHT & MAGNIFIER

- (1) Magnifying the cutting area may prove helpful during delicate sawing procedures. This is done by placing a magnifying lens over the work light's front portion.
- (2) A protective lens cover which prevents scratching should be placed around the magnifier when it's not being used. See Fig. 39.

A SNAP-ON PROTECTIVE LENS COVER PREVENTS SCRATCHING OR DAMAGE TO MAGNIFIER WHEN NOT IN USE.

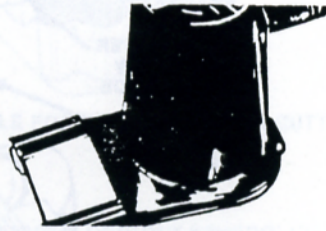


FIG. 39. TYPICAL WORKLIGHT & MAGNIFYING LENS.

WELDER, GRINDER, SHEAR, ETCHING PENCIL

Complete instructions covering blade welding, plus operation and maintenance of machine's DBW-15 Butt Welder with flash grinder, blade shear, and etching pencil are provided in a separate instruction manual.

SUPPLY CABINET

The supply cabinet provides orderly, safe storage for saw band coils, welded saw bands, file bands, and polishing bands. It is also useful for storing component parts and removeable machine accessories. See Fig. 40.

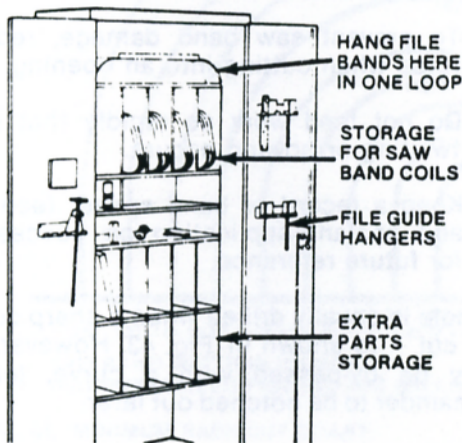


FIG. 40. SUPPLY CABINET.

WORK TABLE OPTION

Your machine may be equipped with a factory-installed 30-inch (760 mm) square work table in place of the standard 26-inch (660 mm) square table.

ACCESSORY SAW GUIDE BLOCK SELECTION

It is possible to equip your machine with precision, heavy-duty, high-speed, or roller saw guide blocks. Precision guide blocks are for band speeds up to 2000 fpm (608 m/min). High-speed, heavy-duty, Type I and Type II roller guide blocks are for speeds up to 6000 fpm (1824 m/min).

Insert-Type Saw Guides

Choose between steel or carbide-faced inserts. See Figs. 10 & 11 on page 6 for steel insert guide instructions. Instructions for adjusting carbide-faced back-up bearings are shown in Fig. 41.

Continued Next Page

ACCESSORY SAW GUIDE BLOCK SELECTION (Continued)

Roller Saw Guides

NOTE: Type II, high-speed roller saw guide blocks reduce workheight capacity by 1-inch (25 mm) & restrict right table tilt to 27°.

Use roller guides for continuous high-speed sawing. Adjust them as follows:

- (1) Select rollers which match band width to be used.
- (2) Place one back-up roller and one side roller in each guide block. See Fig. 41.

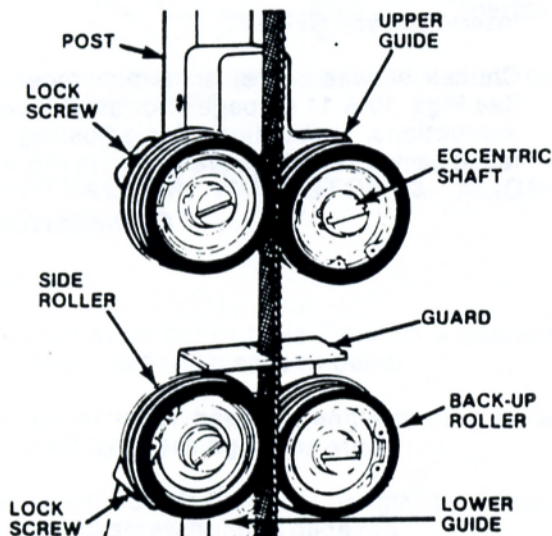


FIG. 41. ROLLER SAW GUIDES.

- (3) Attach guides to post and keeper block.
- (4) Place saw band over upper and lower machine wheels. Adjust tension.
- (5) Loosen lock screw. Bring rollers toward band by turning eccentric bearing shaft with a screwdriver. Rollers should be just free enough to turn without moving the band.

CAUTION: Bearings will overheat if roller fits too tightly against band. Loose rollers may cause band wobble and affect cutting accuracy.

- (6) Tighten roller lock screws to prevent eccentric shaft from turning and changing the adjustment.

NOTE: Roller saw guides are recommended for continuous sawing at speeds over 1300 fpm (390 m/min).

90° BAND GUIDE BRACKETS (If Supplied)

- (1) These brackets permit cutting materials longer than the machine's regular throat capacity. Mount upper and lower brackets as shown in Fig. 42.

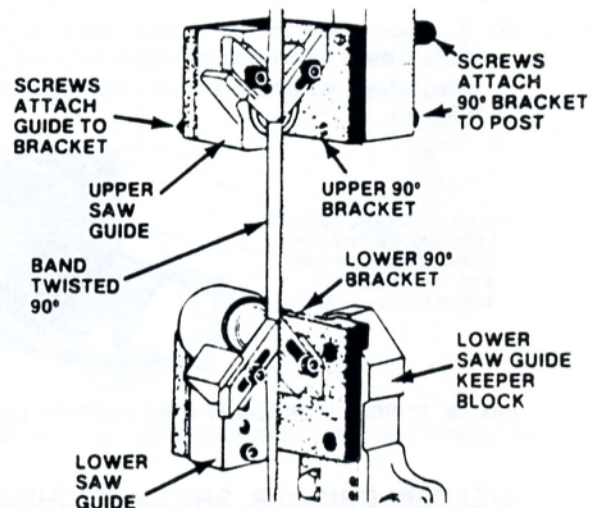


FIG. 42. 90° BAND GUIDE BRACKETS.

- (2) Be sure to: (a) Install correct-size saw guides; (b) Install band so it is twisted 90° when passing through saw guide inserts; (c) Operate machine at speeds under 1500 fpm (450 m/min).

CONTOUR SAWING PROCEDURES

- (1) Use hand feed or screw feed (if supplied) for sawing intricate contours. To contour saw large, heavy stock will require using a variable weight power feed (if supplied) and a heavy gage blade. Observe these precautions:
 - * To prevent saw band damage, reduce feed force when cutting into an opening.
 - * Do not feed work so rapidly that saw band twisting or bowing occurs.
 - * Keep a record of band speed, feed pressure and coolant application on successful jobs for future reference.

A hole is usually drilled when a sharp corner is to be cut -- as shown in Fig. 43. However, a corner may be by-passed with a curve, leaving the remainder to be notched out later.

CONTOUR SAWING PROCEDURES (Continued)

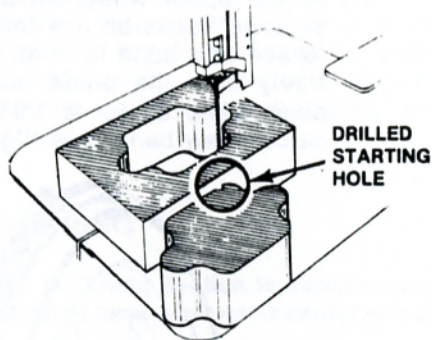


FIG. 43. STARTING HOLE FOR SHARP CONTOUR CUTTING.

Internal Contours

- (1) To prepare for internal contour sawing: (a) Drill a starting hole in stock; (b) Run band through the hole; (c) Weld the band.
- (2) The drilled starting hole's diameter is determined by band size. Use the widest possible band for curve to be cut.
- (3) Attempting to cut too small a radius with too wide a band will cause binding, and the lower wheel tire may become grooved. The following chart indicates minimum radii cuts possible with various band widths. See Fig. 44.

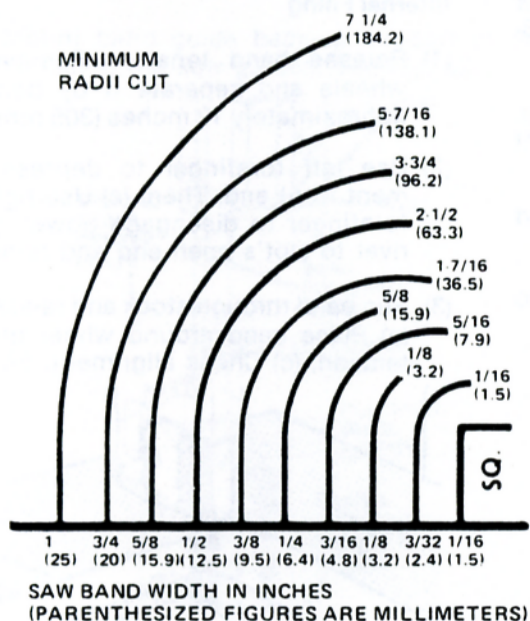


FIG. 44. MINIMUM RADII CUT CHART.

NOTE: You will insure a better band weld by insulating band from contact with stock or table. See Fig. 45.

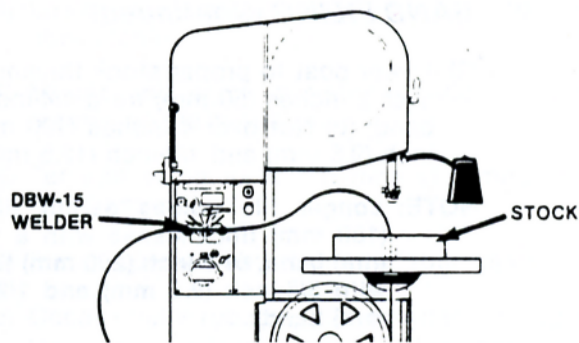


FIG. 45. INSULATE SAW BAND BEFORE WELDING.

- (3) Radii chart recommendations are based on sawing relatively thin stock. Consider these variations: (a) Use a heavy gage blade for heavy stock sawing; (b) Use a narrower than recommended band when sawing stock more than 1-inch (25 mm) thick.

FILE GUIDES

Standard and long file guide sets are available. Each set consists of a file guide back-up assembly, plus 1/4-inch (6.4 mm), 3/8-inch (9.5 mm), and 1/2-inch (12.5 mm) guides.

BAND FILING

NOTE: This band filing section applies only to machines having crowned center rubber wheels.

Set-Up

- (1) Remove saw band, saw guides, table center plate and post band guard. Then: (a) Mount file guide back-up support to lower keeper block; (b) Install upper guide to post. See Fig. 46.

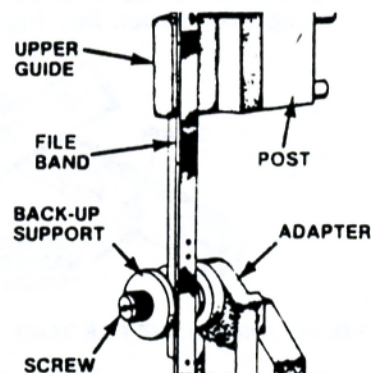


FIG. 46. FILE GUIDE INSTALLATION.

Continued Next Page

BAND FILING (Continued)

- (2) Lower post to proper stock thickness: (a) Not over 2 inches (50 mm) for a 1/4-inch (6.4 mm) band; (b) Not over 4 inches (100 mm) for 3/8-inch (9.5 mm) and 1/2-inch (12.5 mm) bands.

NOTE: Longer file guides permit filing 7-inch (180 mm) thicknesses with a 1/4-inch (6.4 mm) band, or 8-inch (200 mm) thicknesses with 3/8-inch (9.5 mm) and 1/2-inch (12.5 mm) bands.

- (3) Install upper file guide and lock it firmly to post with knurled thumb screws. Insert special filing center plate. See Fig. 47.

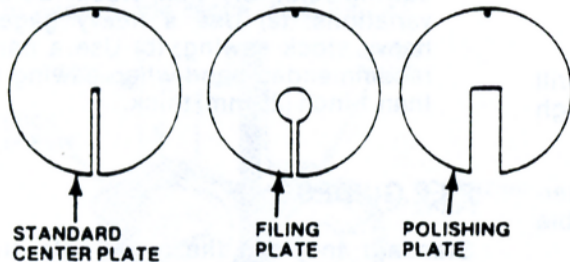


FIG. 47. STANDARD TABLE CENTER, FILING & POLISHING PLATES.

File Band Joining

- (1) Place file band around wheels and insert one end through table center plate. Cutting edges should point down. File band length is 153-inches (3885 mm).
- (2) Hold yellow lock rivet segment in left hand. Depress spring steel band tip held in right hand.
- (3) Allow rivot head to slip into slotted hole and slide into slot's small end.
- (4) Straighten band to allow spring steel end to snap over dowel. See Fig. 48.

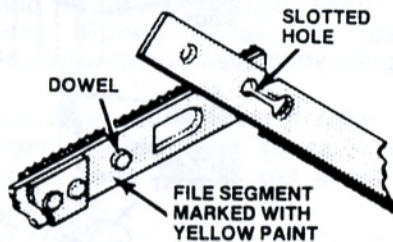


FIG. 48. JOINING THE FILE BAND.

File Band Tracking and Tensioning

- (1) Adjust upper wheel tilt angle (if necessary) so band tracks on tire center. Then: (a) Check to see that band is in alignment and passing freely over file guide supports; (b) Tension band same as for a 1/8-inch (3.2 mm) wide carbon saw band. See Fig. 49.

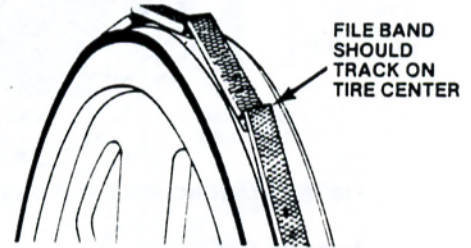


FIG. 49. TRACKING THE FILE BAND.

NOTE: Excessive band tightening should be avoided.

Filing Operation

- (1) Keep files clean. Do not file when teeth are loaded. Filing can be performed without coolant if its application makes seeing layout lines difficult.
- (2) Place transmission shift lever in "low" range before "starting" drive motor.

Internal Filing

- (1) Release band tension. Remove band from wheels and separate it by bending joint to approximately 12 inches (305 mm) radius.
- (2) Use left forefinger to depress yellow segment front end. Then: (a) Use right thumb and forefinger to disengage dowel; (b) Slide lock rivet to slot's open end and remove.
- (3) Run band through stock and re-assemble. Then: (a) Place band around wheel tires; (b) Apply tension; (c) Check alignment. See Fig. 50.

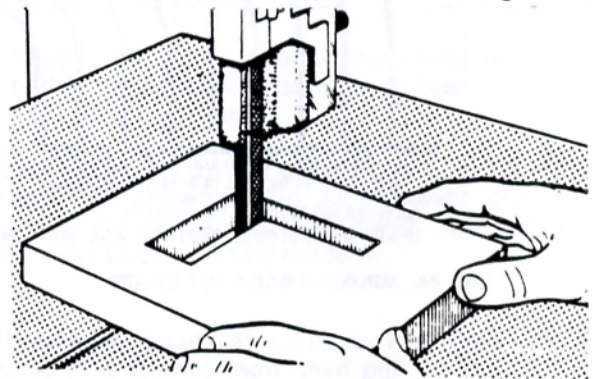


FIG. 50. INTERNAL BAND FILING.

BAND FILING (Continued)

- (4) Clean band with file card and coil into no more than 3 loops before storing. A DoALL supply cabinet is recommended for storage -- there bands can be looped in a 16-inch (405 mm) radius with ends hanging in the compartment.

BAND POLISHING

NOTE: Band polishing section is applicable only to machines having crowned center wheels.

Three polishing band grain cloth belts are available in aluminum oxide. See Fig. 51.

APPLICATION	CUTTING SPEEDS	GRIT
Grinding	50-300 fpm (15-90 m/min)	50
Polishing -- Coarse	850-1000 fpm (260-305 m/min)	80
Polishing -- Fine	850-1500 fpm (260-450 m/min)	150

FIG. 51. POLISHING APPLICATION, SPEED & GRAIN RECOMMENDATIONS.

Set-Up

- (1) Remove table center disk.
- (2) Mount band guide back-up support to post, replacing the saw guides. See Fig. 52.

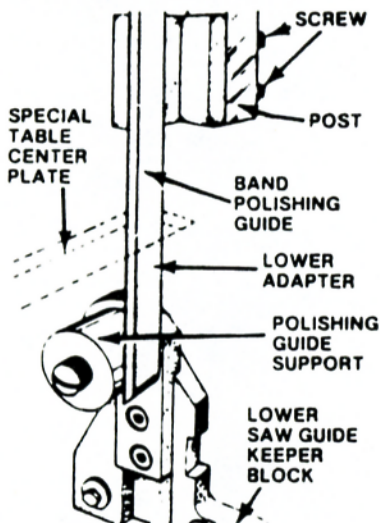


FIG. 52. POLISHING GUIDE INSTALLATION.

- (3) Install lower adapter to lower saw guide keeper block.

- (4) Lower post to approximately 4 inches (100 mm) above table.
- (5) Mount and track polishing band in same manner as file bands.
- (6) Tension same as a 1/16-inch (1.5 mm) wide carbon saw band.
- (7) Install special table center adapter plate.
- (8) Occasionally rub graphite powder into guide fabric to lubricate and increase band life. Use air nozzle to blow dust away. See Fig. 53.

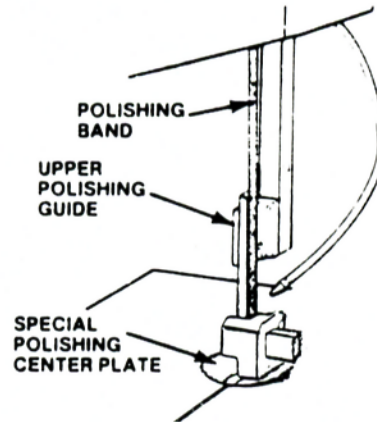


FIG. 53. BAND POLISHING OPERATION.

NOTE: Do not use coolant with polishing bands.