

INSTRUCTIONS AND PARTS LIST FOR

No. 5010 BELT AND DISC SANDER

All of the equipment furnished with the Belt and Disc Sander is wrapped in the papers that support the sander in the carton. Be sure you have removed everything before the carton and papers are destroyed.

MOUNTING SANDER

Bolt the sander to a heavy, rugged stand. Make sure the base rests solidly before bolting it to the table. Motor may be mounted either below or behind the sander — whichever is more convenient.

MOTOR REQUIREMENTS

The Sander requires a 1/3 or 1/2 HP, 1725 RPM motor, preferably a capacitor or repulsion-induction type.

The 2-inch motor pulley furnished has a 5/8-inch bore — dealer can supply bushing for 1/2" dia. motor shaft.

STATIC ELECTRICITY

Sometimes a slight shock is experienced when touching the sander. This may be caused by a static electrical charge set up by the friction of the moving parts and is not necessarily an indication of faulty motor windings or grounds. To correct, ground the sander to a water or heater pipe.

CONTROLS

1. Handle beneath the disc sander table controls the table tilt lock. The table can be tilted and locked securely at any angle between 0 and 45 degrees below the horizontal position — angle is shown on graduated scale.
2. The knob on the end of the belt sander housing controls the sanding belt tension.
3. The set of knobs on left side of the belt sander controls the tilt of the idler drum. Outside knob tilts drum to adjust the tracking of the sanding belt — the inside knob locks tilt setting.
4. The two knobs on right side of belt sander hold the guard in position. The guard is easily removable for sanding curved or irregular stock on the drum.
5. The stop fence on belt sander is held in position with two screws. May be quickly removed for sanding long pieces.



Fig. 2. Contour sanding with the Belt Sander in vertical position and belt guard removed.

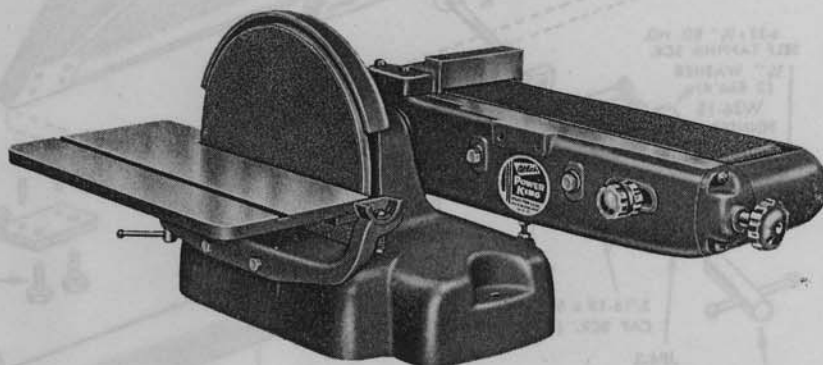


Fig. 1

6. Handle on spindle housing locks belt sanding unit in desired position.

ADJUSTMENTS

1. To adjust the tilt gauge pointer on the disc table segment, merely loosen the pointer screw.
2. To adjust sanding belt tension, turn the knob on the end of belt sander frame.
3. To adjust the sanding belt to track properly, turn the outer knob on the left side of belt sander frame.

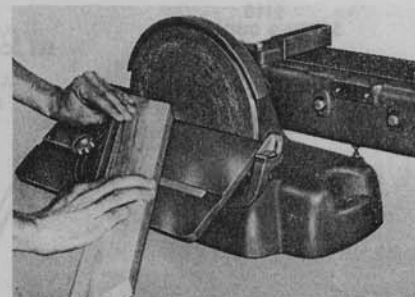


Fig. 3. Disc sanding with the mitre gauge. Be sure to tighten inner knob after adjustment is made.

SANDING OPERATIONS

DISC SANDING —

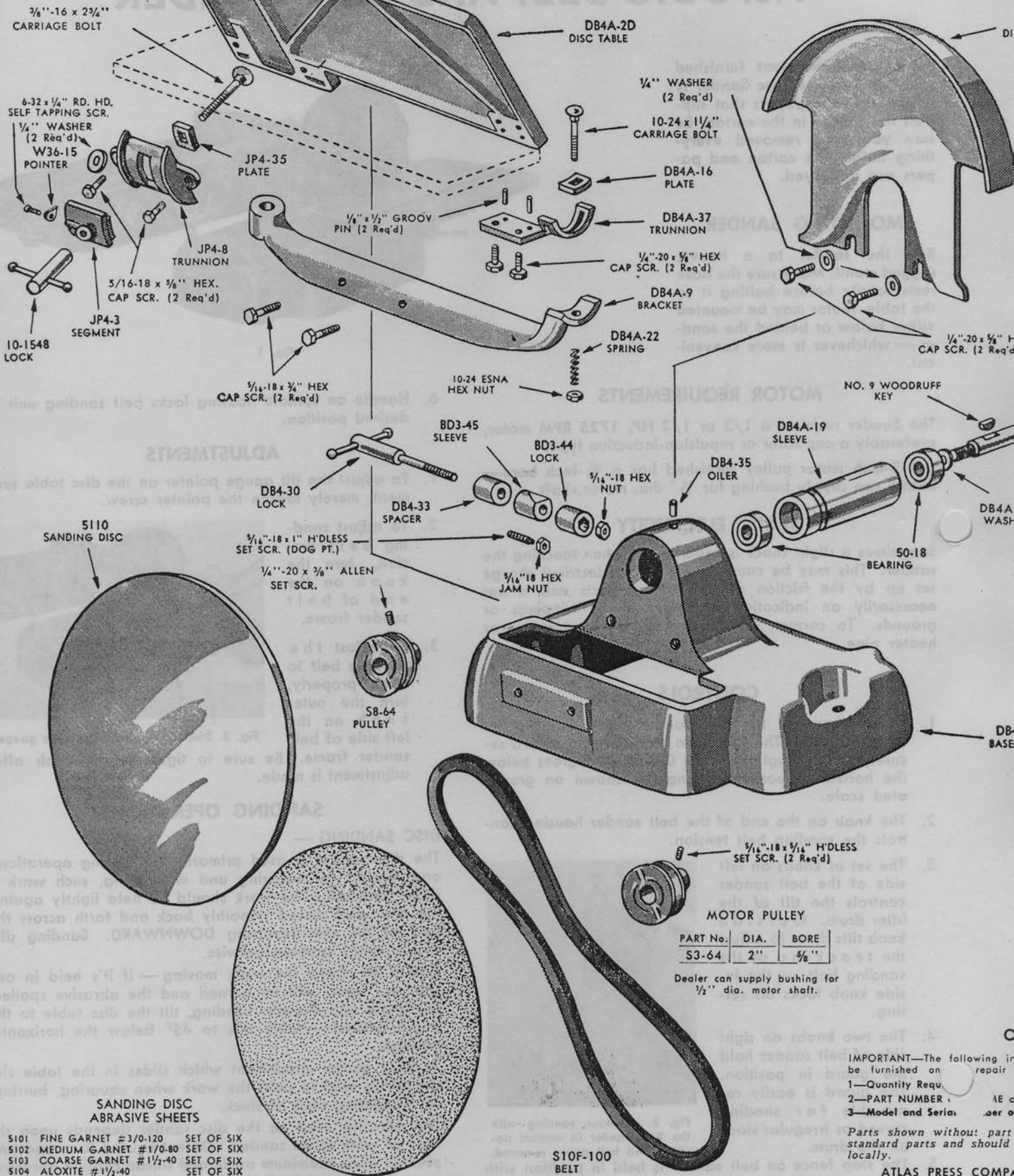
The disc sander is used primarily for edging operations, and, except for squaring and chamfering, such work is done freehand. The work should be held lightly against the disc, and moved smoothly back and forth across the half of the disc revolving DOWNWARD. Sanding disc should rotate counterclockwise.

CAUTION: Keep the work moving — if it's held in one spot the wood will be burned and the abrasive spoiled. For angle and chamfer sanding, tilt the disc table to the angle desired — table tilts to 45° below the horizontal position.

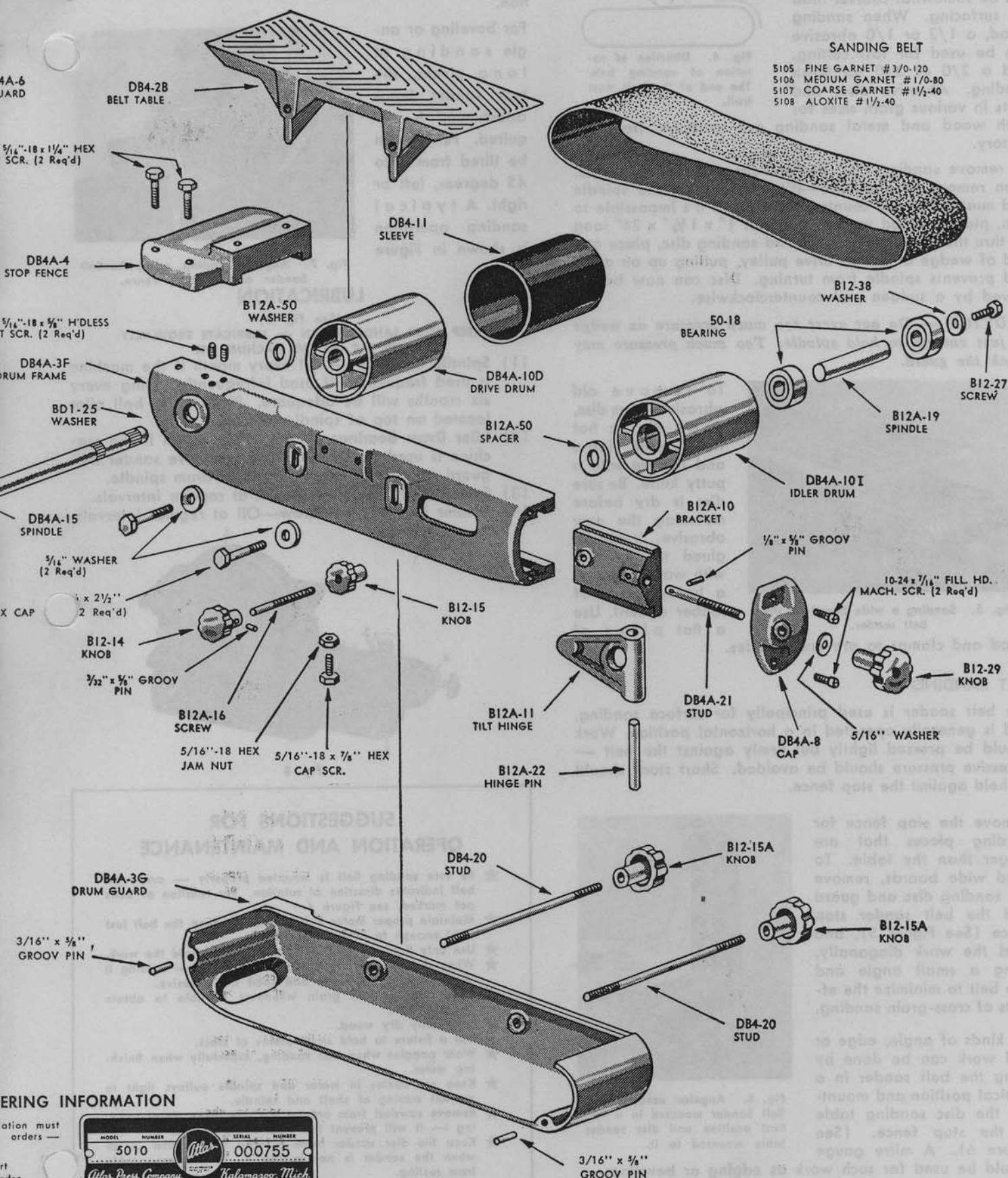
A mitre gauge attachment which slides in the table slot should be used to hold the work when squaring, burring, or chamfering ends of stock.

The abrasive used on the disc sander depends upon the type of work to be sanded. Garnet is used for wood and plastics while aluminum oxide and silicon carbide abrasives are used for metal. Since the disc sander is usually used

REPAIR PARTS FOR No. 50



BELT AND DISC SANDER



OPERATING INFORMATION

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orders —

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embers are
purchased



Be sure to give Model and Serial Number on this plate. Plate located on sander base.

KALAMAZOO 13D, MICHIGAN, U. S. A.

OPERATING INSTRUCTIONS

for edge work, the abrasive can be somewhat coarser than for surfacing. When sanding wood, a 1/2 or 1/0 abrasive can be used for fast cutting, and a 2/0 or 3/0 for finish sanding. Abrasive discs and belts in various grain sizes for both wood and metal sanding are available from the factory.

To remove sanding disc, first remove sanding disc table. Then remove sanding disc—it's threaded on the spindle and must be turned counterclockwise. If it's impossible to turn, place a wood wedge — about 1" x 1 1/2" x 24" long — thru the guard opening behind sanding disc, place one end of wedge of top of drive pulley, pulling up on other end prevents spindle from turning. Disc can now be removed by a sudden pull counterclockwise.

CAUTION — Do not exert too much pressure on wedge — just enough to hold spindle. Too much pressure may crack the guard.



Fig. 5. Sanding a wide board on the belt sander.

wood and clamps to prevent wrinkles.

BELT SANDING —

The belt sander is used principally for surface sanding, and is generally operated in a horizontal position. Work should be pressed lightly but firmly against the belt — excessive pressure should be avoided. Short stock should be held against the stop fence.

Remove the stop fence for sanding pieces that are longer than the table. To sand wide boards, remove the sanding disc and guard and the belt sander stop fence (See Figure 5), and feed the work diagonally, using a small angle and fine belt to minimize the effects of cross-grain sanding.

All kinds of angle, edge or end work can be done by using the belt sander in a vertical position and mounting the disc sanding table to the stop fence. (See Figure 6). A mitre gauge should be used for such work as edging or beveling.

Inside curves are sanded on the end drum (See Figure 2).

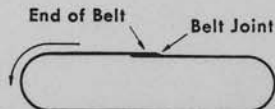


Fig. 4. Direction of rotation of sanding belt. The end of the belt must trail.

To remove old abrasives from disc, soak disc in hot water until loose and remove with a putty knife. Be sure disc is dry before mounting the new abrasive. It can be glued to the disc with water glass or a heavy grade of rubber cement. Use a flat piece of

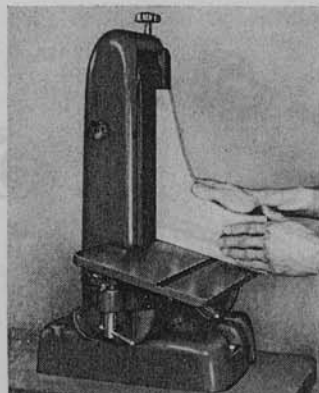


Fig. 6. Angular sanding with Belt Sander mounted in a vertical position and disc sanding table mounted to it.

The sanding belt guard must be removed for this operation.

For beveling or angle sanding of long pieces, the belt sander fence attachment is required. Fence can be tilted from 0 to 45 degrees, left or right. A typical sanding operation is shown in Figure 7.

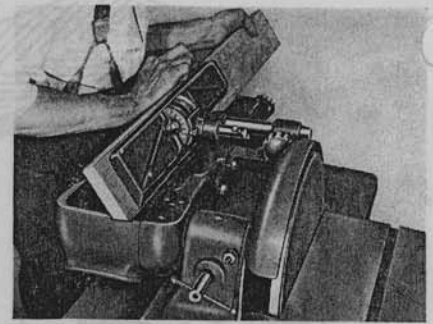


Fig. 7. Angular Sanding, using the Belt Sander and Sanding Fence.

LUBRICATION

(See Fig. 8)

KEEP YOUR SANDER CLEAN — LUBRICATE REGULARLY
USE SAE NO. 20 MACHINE OIL

- (1) **Spindle Bearings** — Oil every month if the machine is used frequently; if used infrequently, oiling every six months will be adequate. Place oil in ball oiler located on top of spindle housing.
- (2) **Idler Drum Bearings** — Oil every month if the machine is used frequently. To oil, remove sander belt guard and the oil screw in end of drum spindle.
- (3) **Sander Belt Tilt Screw** — Oil at regular intervals.
- (4) **Sander Belt Tension Screw** — Oil at regular intervals.

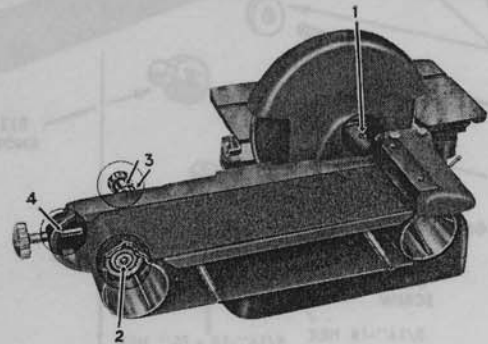


Fig. 8

SUGGESTIONS FOR OPERATION AND MAINTENANCE

- ★ Be sure sanding belt is mounted properly — arrow on belt indicates direction of rotation. For rotation of belts not marked, see Figure 4.
- ★ Maintain proper motor belt tension — keep the belt just tight enough to prevent its slipping.
- ★ Use only light pressure — just enough to hold the work.
- ★ When disc sanding, keep the work moving — holding it still will burn the wood and spoil the abrasive.
- ★ Sand parallel with grain whenever possible to obtain smooth finish.
- ★ Sand only dry wood.
- ★ Use a fixture to hold small pieces of stock.
- ★ Wear goggles when disc sanding, especially when finishing metal.
- ★ Keep set screws in motor and spindle pulleys tight to prevent scoring of shaft and spindle.
- ★ Remove sawdust from around machine when metal sanding — it will prevent fire from flying sparks.
- ★ Keep the disc sander table covered with a film of oil when the sander is not in use — it will keep table from rusting.