

OPERATING INSTRUCTIONS AND PARTS LIST FOR

BENCH SAW

8 INCH

—MODEL NUMBER 103.0212—

The model number of your Bench Saw will be found on a plate on the right side of the Base. Always mention this model number when communicating with us regarding your Bench Saw or when ordering parts.

This list is valuable. It will assure your being able to obtain proper parts service at all times. We suggest you keep it with other valuable papers.

SEARS, ROEBUCK and CO.

ASSEMBLING and OPERATING INSTRUCTIONS FOR 8 INCH BENCH SAW MODEL 103.0212

RE-ASSEMBLING

This saw has once been assembled and tested at the factory. In order to avoid breakage or misalignment of parts while in transit, the saw blade, table, splitter, guard and fence guide bar have been removed from the base assembly. The base assembly is bolted to boards to protect it from rough handling. To assemble, place the table bottom side up on a flat surface. Remove the boards and place the base assembly on the table with the saw arbor over the slight depressions in the table casting. Line up the four holes in the trunnions with the four tapped holes in the saw table. Packed

in a bag are the cap screws and washers. Screw the four short cap screws into the table through the lugs on the trunnions, using one plain washer against the casting and one lock washer against the screw. Tighten the cap screws moderately (not tight). Bolt the table tilting link mechanism moderately (not tight) in position to the tapped boss on the table with the long cap screw and washers.

Now turn the saw over to running position. Remove the table insert. Remove nut and washer on saw arbor and slip on the blade making sure that the teeth point toward the front of the table. Replace washer and nut and tighten nut securely with a wrench. Raise the blade to full cut. Check alignment of the blade with miter slots by measuring with a rule or scale the distances from the miter slots to the front and rear edges of the saw blade just inside of the teeth. Shift the table enough to equalize the distances. Then tighten securely the five cap screws that hold the trunnions and tilting mechanism to the table. Replace the table insert.

Fasten the front fence guide bar with the two screws provided. The bar projects to the right of the table. Use the two spacers between the guide bar and the table to allow an opening for the fence support.

Back out the fence lock handle several turns to remove any possibility of a clamping action. Slip the fence support

onto the projecting end of the fence guide bar. If the sliding motion is stopped solidly check to make sure the lock handle has been unscrewed far enough. If necessary press the lock shoe in-

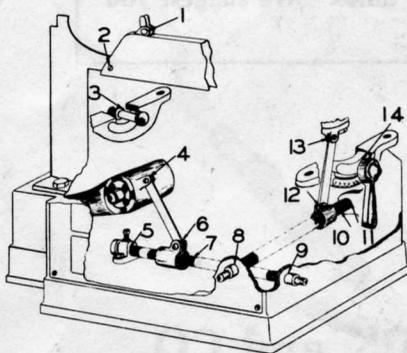


FIGURE 2

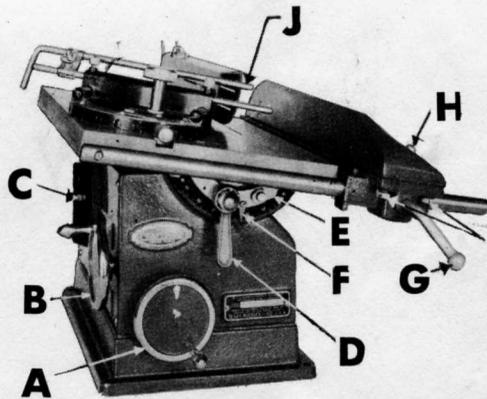


FIGURE 1

side the fence support forward away from the guide bar.

Remove the two bolts holding the splitter support brackets together, insert the splitter and guard assembly, watching carefully that kick backs are in position. Replace and tighten the bolts. The splitter must line up with the saw blade. If out of line, loosen bolts holding the splitter supports to base casting. Reset the splitter by lining up splitter and blade with a straight-edge and retighten the bolts.

LUBRICATION
The sealed ball bearings used on this tool are packed with grease at the factory and require no additional lubrication for the life of the bearing. Oil or grease should be applied occasionally to the points indicated in Figure 2.

LUBRICATION

SPEED
The recommended speed for this saw is 4500 R.P.M. To obtain the proper speed use a 2½" pulley on a 3450 R.P.M. motor.

CONTROL
The recommended speed for this saw is 4500 R.P.M. To obtain the proper speed use a 2½" pulley on a 3450 R.P.M. motor.

SPEED

CONTROL
The saw blade is raised and lowered by means of the hand wheel (A) in Fig. 1. The table is tilted by turning hand wheel (B). The adjustable depth of cut scale (C) indicates the amount of cut for both regular and dado blades. The wrench (D) can be used to lock the table at any angle. The stop link (E) can be adjusted to hold the table at 45°. The amount of tilt is shown by the adjustable pointer (F).

CONTROL

The lock handle (G) clamps the fence head to the fence guide through a lock shoe. The screw (H) is used as a pivot post in adjusting the fence parallel to the miter gage slot in the table. The two bolts (I) when loosened allow the fence to be shifted on the support around the screw (H) and in this way to be re-aligned with the table.

The rod (J) may be adjusted to cut off several pieces to a uniform length.

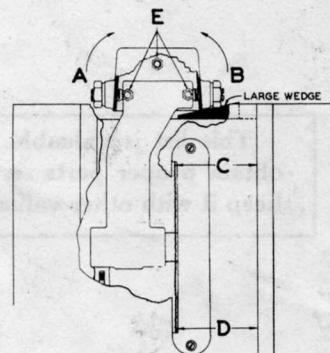


FIGURE 3

ADJUSTMENTS

Saw Blade

If the saw blade should become out of line with the miter gauge slots first try loosening the cap screws holding the table to the trunnions. The table should line up readily due to the slight play provided in the

OPERATING INSTRUCTIONS (Continued)

four holes in the trunnions. If this adjustment is not enough proceed as shown in the drawing, Figure 3.

1. Loosen the screws (E) just enough so that the saw arm can be shifted.

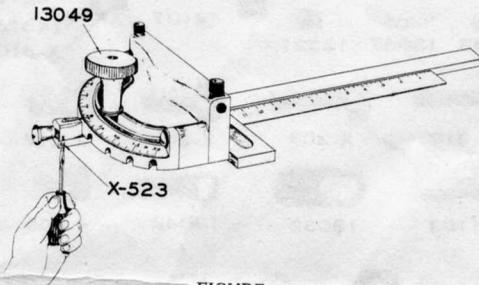
2. If necessary to move the saw arm in the direction of (B) drive a wedge between the saw arm support and the rear of the base as shown until the measurements at C and D are equal.

3. Re-tighten screws (E).

If necessary to turn saw arm in direction of (A), drive wedge at opposite side of saw arm support.

The saw blade can be adjusted to the center of the slot in the saw table by adjusting the slotted pivot screws in the saw arm pivot support at the rear of the saw. To do this, loosen the lock nuts on both screws adjust to the proper position, tighten the screws as tight as possible with a large screw driver and tighten the lock nuts securely.

The stop for setting the 8" saw blade at the level of the table top is a set screw and nut directly under a boss cast on the saw arm.



Miter Gauge

If the miter gauge does not produce square cuts make the following adjustment.

1. Loosen the clamp knob, 13049.
2. Set the plunger stop in the hole provided for 90°.
3. Loosen the two screws, X-523, in the bottom of the plunger housing. See drawing, Fig. 4.
4. Place the stock of a tri-square on the face of the protractor and blade on protractor bar, as shown in the drawing.
5. Reset head square with bar and tighten clamp knob, 13049. Re-check with square after tightening knob.
6. Re-tighten securely the two screws, X-523, under the plunger housing.
7. If necessary, loosen protractor pointer screw and reset pointer on 90° mark.

RIPPING FENCE

If the sides of a piece of stock which has been ripped are not parallel it may be necessary to adjust the fence. The alignment of the saw blade and the miter gauge slot should be checked as outlined above before changing the fence adjustment.

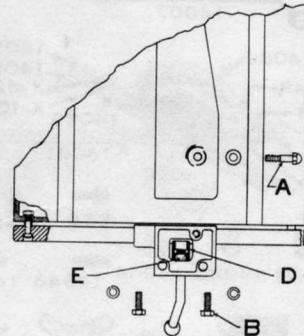
If the table slots are parallel with the blade slide the fence along the table until the edge of the fence is over one edge of the miter slot. Loosen slightly the pivot screw (A in Fig. 5). Do not remove all tension on this screw. Back out the screws (B) several turns and shift the fence by tapping at the rear end of the fence until its edge lines up with the edge of the miter slot. Retighten first the support screws and then the pivot screw.

To adjust the position of the locking handle first remove the three bolts and lift off the fence. Back out the locking handle enough to allow the removal of

the lock shoe (D). To cause the handle to lock more quickly lift out the shoe and rotate the nut (E) to the left or counter clockwise one quarter turn as viewed from the front of the saw. Replace the lock shoe before tightening the lock handle.

OPERATION

After setting up the saw it may be noticed that the saw blade wobbles when turned by hand. This condition will disappear at high speed and the saw will lie flat. If the saw blade rotates at an angle with the table



check the installation of the saw clamp washer. The ground surface of the washer should be against the blade, if it is not the work will be crowded against the rip fence and will bind.

For accurate cross cutting operation the angle of the miter gage should be checked frequently. A quick check may be had by holding a square against both blade and protractor. When cutting angles as sharp as 45° the work

must be held very tightly against the miter gage to prevent an inaccurate cut.

For ripping cuts the width desired can be closely held by using the rip fence. To use the fence slide it to the width desired determined by measuring to the blade. Tighten the clamp lever to hold front of fence against the guide bar. When ripping narrow strips be sure to use a pusher of scrap wood to finish the cut. If most of the work to be handled by the saw is ripping the use of a rip saw blade will obtain better results. While the cut will not be as smooth the saw will handle more feet per minute.

Best results are obtained by allowing saw blade to project enough above the piece being cut to clear the blade of sawdust. The saw blade should be kept sharp. The blade will remain cooler.

Sanding is readily accomplished with this saw by the use of 1/2" bore sanding discs. To convert the saw for sanding remove the table insert and replace the saw blade with the sanding disc. Table can be tilted to sand angle cuts.

For extremely fine cuts a hollow ground combination blade is better than a flat ground combination blade. A common application for this blade is in making miter cuts for interior trim.

An extension for the table on this saw is also available.

While a guard for the "V" belt is not supplied, due to the variety of possible installations, it is strongly recommended that suitable protection be provided by the operator.

PARTS LIST

How to Order Parts for Model Number 103.0212 Saw

All parts listed here may be ordered through any Sears, retail or mail order store. Parts are shipped prepaid. When ordering repair parts, always give the following information:

1. The Part Number in this list.
2. The Part Name and Price in this list.
3. The Model Number which is 103.0212 and will be found on a plate on the front support.

We suggest you write your order for Repair Parts like this Sample SEARS, ROEBUCK & CO.

Enclosed find my check for \$11.25 for which please send me by parcel post the following parts for my 8-inch Bench Saw, Model No. 103.0212.

1 Each No. 14001 Table	\$8.65
1 Each No. 14003 Table Support, Rear	2.60

\$11.25

Yours truly, JOHN MARTIN, Box 128, Richmond, Ind.

