

OPERATING INSTRUCTIONS
AND PARTS LIST FOR
CRAFTSMAN BENCH SAW
8 INCH

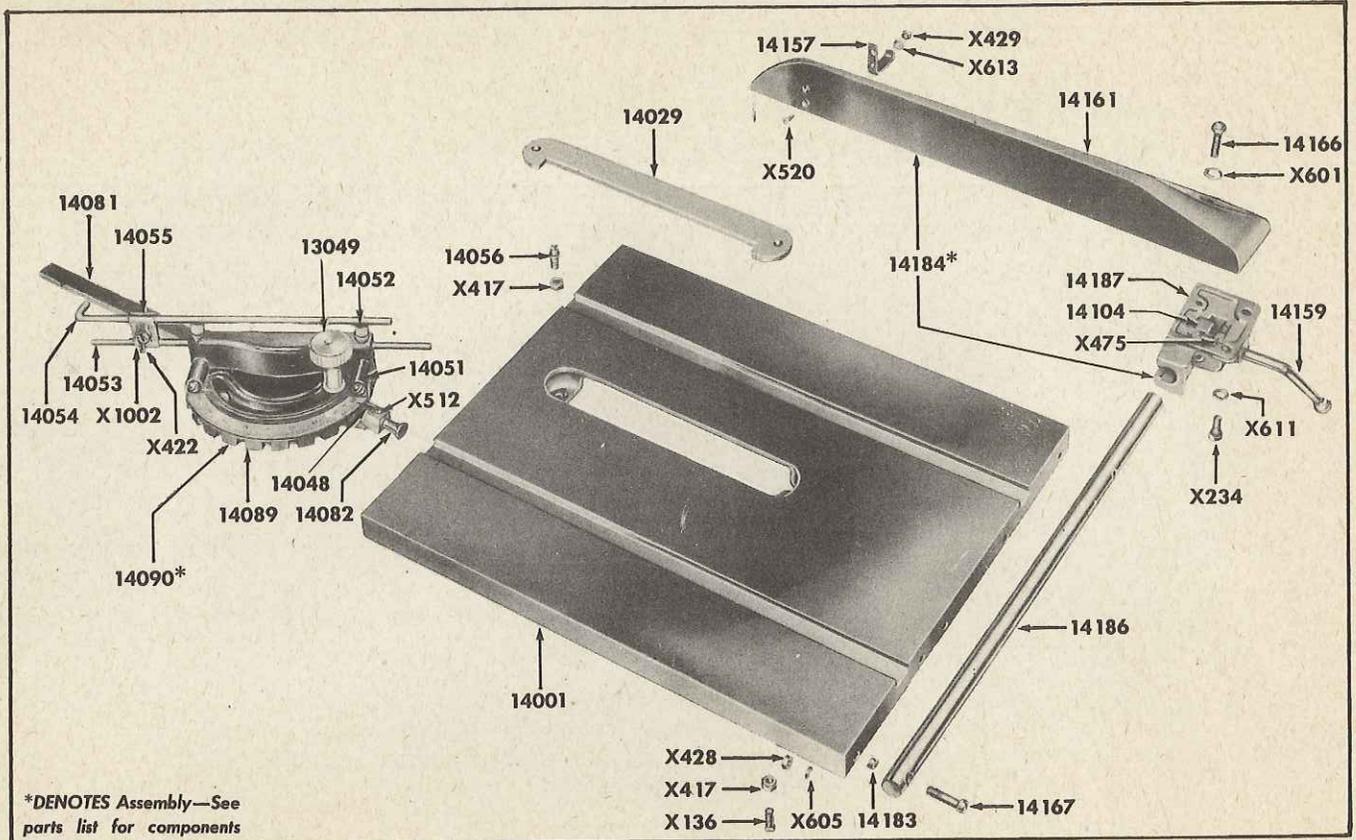
MODEL NUMBER 103.0213

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.

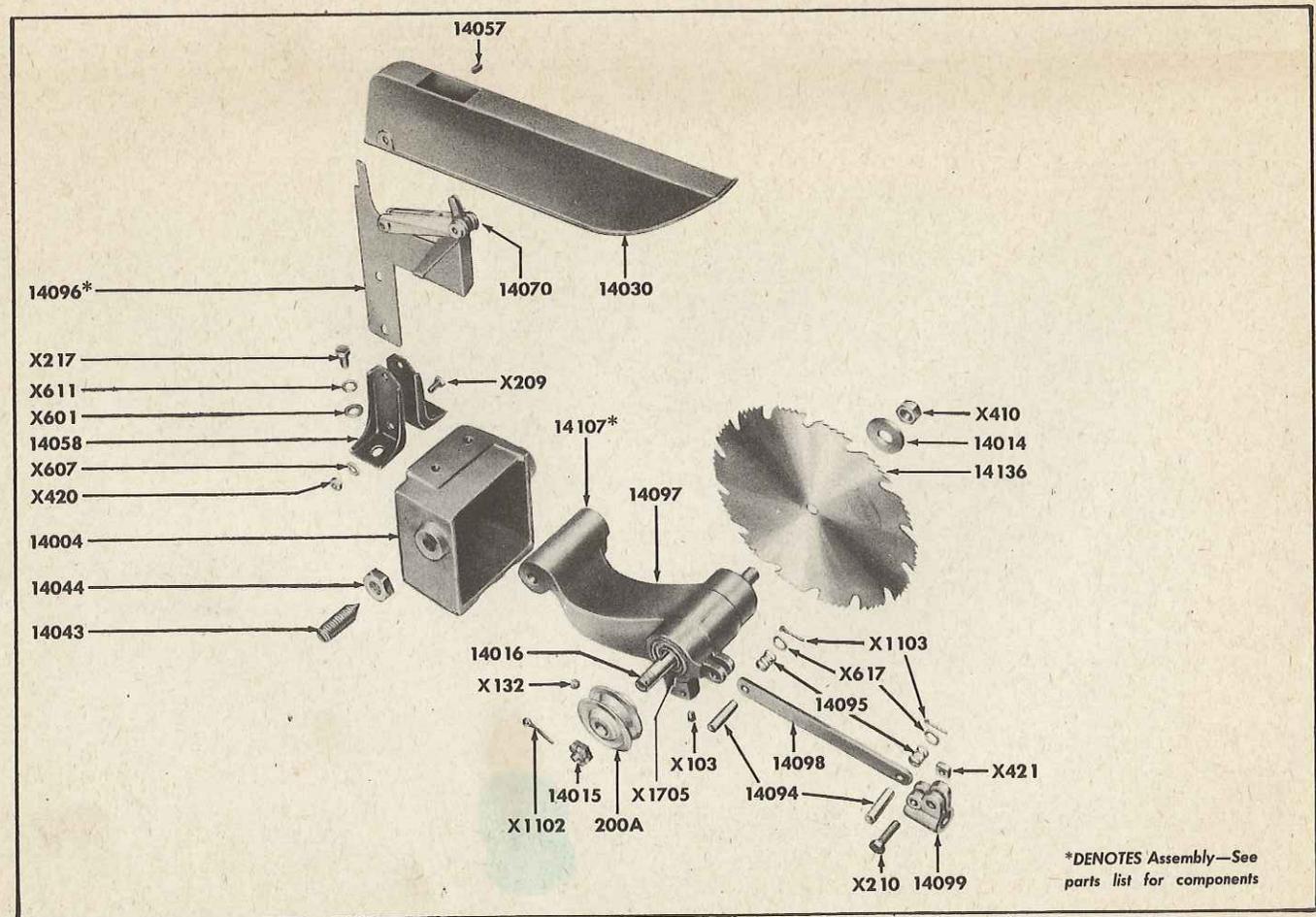
SEARS, ROEBUCK and CO.

November, 1945



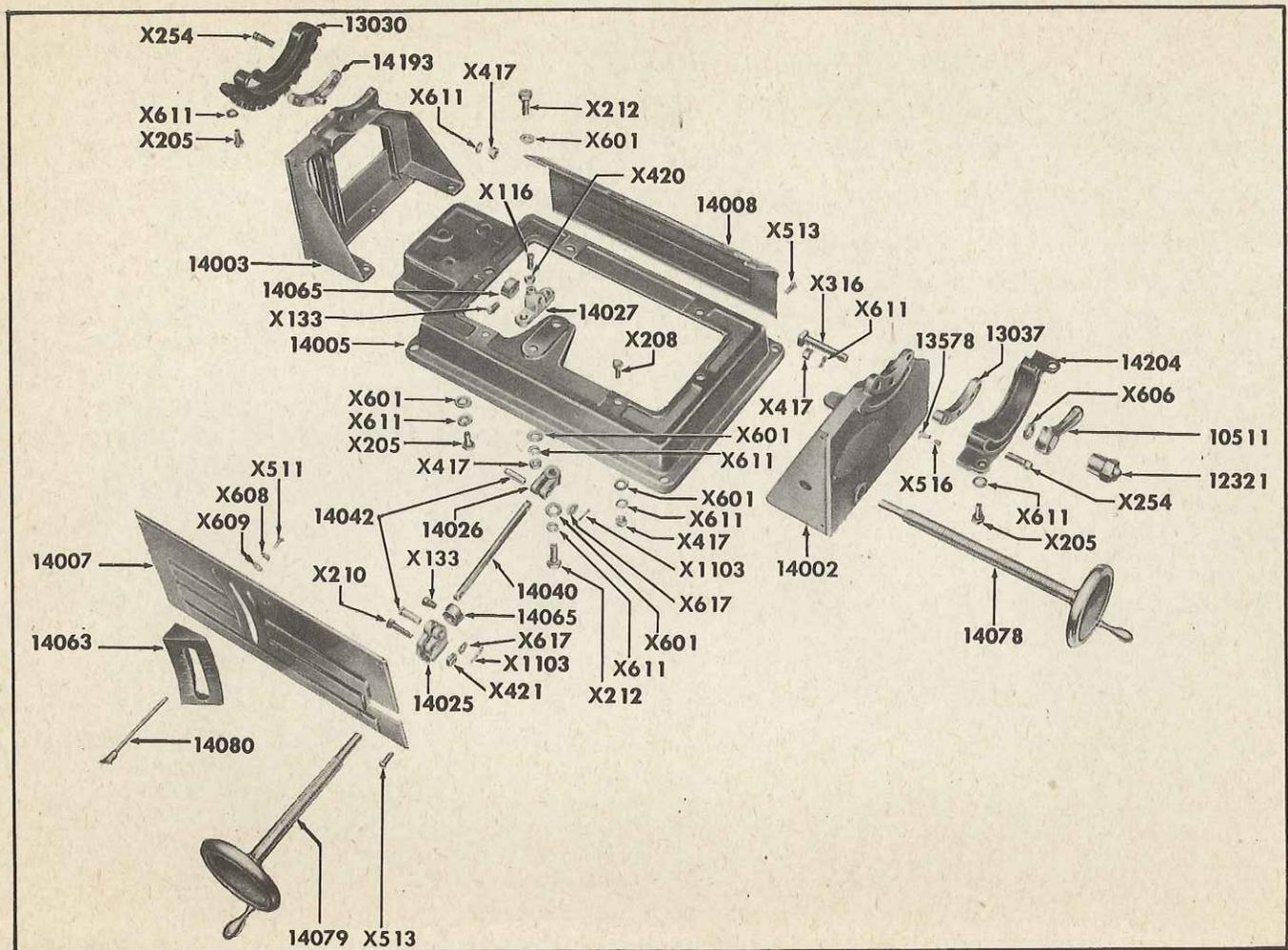
*DENOTES Assembly—See parts list for components

TABLE ASSEMBLY



*DENOTES Assembly—See parts list for components

ARBOR ASSEMBLY



BASE ASSEMBLY
Parts List

Part No.	PART NAME	Price	Part No.	PART NAME	Price	Part No.	PART NAME	Price
TABLE ASSEMBLY			14026	Table Tilting Bracket	\$0.20	THE FOLLOWING PARTS ARE STANDARD AND CAN BE PURCHASED LOCALLY.		
13049	Miter Gage Clamp Knob	\$0.30	14027	Saw Arm Screw Bracket	.25	X-103	1/4—20 x 3/8 Sl. Hd. Set Scr.	\$.10
14001	Table	8.65	14040	Table Tilting Link	.20	X-116	1/4—20 x 1 Sq. Hd. Set Scr.	.10
14029	Table Insert	.65	14042	Link Pin	.15	X-132	5/16—18 x 1/4 Sl. Hd. Set Scr.	.10
14048	Miter Gage Pointer	.15	14063	Depth of Cut Scale	.30	X-133	5/16—18 x 3/8 Sq. Hd. Set Scr.	.10
14051	Miter Gage Clamp Washer	.15	14065	Saw Arm and Table Screw Collar	.15	X-136	5/16—18 x 3/4 Sq. Hd. Set Scr.	.10
14052	Miter Gage Ext. Rod Clamp Screw	.15	14078	Saw Arm Screw Assembly	1.30	X-205	5/16—18 x 3/4 Hex Hd. Scr.	.10
14053	Miter Gage Ext. Rod Long	.20	14079	Table Tilting Screw Assembly	1.30	X-208	5/16—18 x 1 Hex Hd. Scr.	.10
14054	Miter Gage Ext. Hook Rod	.25	14080	Depth of Cut Pointer Assembly	.20	X-209	1/4—20 x 1/2 Hex Hd. Scr.	.10
14056	Table Insert Support Screw	.15	14193	Rear Protractor Guide Assembly	.95	X-210	1/4—20 x 1 Hex Hd. Scr.	.10
14055	Miter Gage Ext. Rod Clamp	.15	14204	Protractor Scale Assembly	1.10	X-212	5/16—18 x 1-1/4 Hex Hd. Scr.	.10
14081	Miter Gage Bar Assembly	.75	X-316	Table Protractor Lock Screw 3/8—24 x 2	.10	X-217	5/16—18 x 1/2 Hex Hd. Scr.	.10
14082	Miter Gage Plunger Assy.	.45	ARBOR ASSEMBLY			X-234	5/16—18 x 7/8 Hex Hd. Scr.	.10
14089	Miter Gage Sub. Assembly	1.25	14004	Arm and Splitter Support	2.00	X-254	5/16—18 x 1 Fil. Hd. Scr.	.10
14090	Miter Gage Assembly Complete	2.50	14014	Saw Clamp Washer	.15	X-417	5/16—18 Hex Nut	.10
14104	Fence Lock Shoe	.35	14015	Spindle Lock Nut	.15	X-420	1/4—20 Hex Nut	.10
14157	Fence Support—Rear	.15	14016	Spindle Assembly	.95	X-421	1/4—20 Sq. Nut	.10
14159	Fence Lock Handle	.50	14030	Saw Guard	1.00	X-422	3/16—24 Wing Nut	.10
14161	Fence	3.00	14043	Saw Arm Pivot Screw	.20	X-429	No. 10—32 Hex Nut	.10
14166	Fence Pivot Screw	.15	14044	Saw Arm Pivot Screw Nut	.15	X-475	7/16—14 Sq. Nut	.10
14167	Fence Guide Screw	.15	14057	A Saw Guard Pivot Screw	.15	X-511	No. 10—24 x 3/8 Rd. Hd. Scr.	.10
14183	Fence Guide Spacer	.20	14058	Splitter Support	.25	X-512	No. 8—32 x 1/8 Rd. Hd. Scr.	.10
14184	Fence Assembly Complete	4.50	14070	Splitter Kick Back Spring	.15	X-513	No. 10—32 x 5/8 Rd. Hd. Scr.	.10
14186	Fence Guide Bar	1.20	14094	Link Pin	.15	X-516	No. 8—32 x 1/4 Rd. Hd. Scr.	.10
14187	Fence Support—Front	1.25	14095	Link Spring Pin	.15	X-520	No. 10—32 x 1/2 Fl. Hd. Scr.	.10
X428	Fence Guide Nut 1/4—28	.10	14096	Splitter Assembly	1.30	X-523	5—40 x 5/16 Fil. Hd. Mach. Scr.	.10
BASE ASSEMBLY			14098	Saw Arm Link	.25	X-601	5/16 Flat Washer	.10
10511	Clamp Nut Wrench	.45	14099	Saw Arm Link Clevis	.25	X-605	1/4 Lock Washer	.10
12321	Table Protractor Clamp Nut	.25	14107	Saw Arm Complete	5.50	X-606	3/8 Flat Washer	.10
13030	Protractor	.70	14136	8 inch. Combination Saw Blade, Flat	2.60	X-607	1/4 Flat Washer	.10
13037	Protractor Guide	.30		Ground, Fancy Tooth, Purchase From Division 9 in Nearest Retail Store.		X-608	3/16 Lock Washer	.10
13578	Table Protractor Pointer	.15				X-609	3/16 Flat Washer	.10
14002	Table Support Front	2.90				X-611	5/16 Lock Washer	.10
14003	Table Support Rear	2.60				X-613	3/16 Flat Washer	.10
14005	Base	2.90				X-617	5/16 Flat Washer	.10
14007	Side Panel Left	.60	200-A	Pulley, Single Groove 2" Dia. 1/2" Bore	.30	X-1002	3/16—24 x 3/4 Rd. Hd. Carriage Bolt	.10
14008	Side Panel Right	.60	X-410	Arbor Nut	.10	X-1102	3/32 x 1 Cotter Pin	.10
14025	Table Link Clevis	.25	X-1705	Spindle Bearing	1.00	X-1103	1/16 x 5/8 Cotter Pin	.10

This Sheet is intended for Instruction and Repair Parts only and is not a Packing Slip. The Parts shown and listed may include accessories not necessarily part of this tool. All prices are subject to change without notice. All parts are shipped Prepaid.

ASSEMBLING and OPERATING INSTRUCTIONS FOR CRAFTSMAN 8 INCH BENCH SAW

Model 103.0213

REASSEMBLING

This saw has been assembled and tested at the factory. In order to avoid breakage and to minimize misalignment of parts while in transit, the splitter, guard, fence, fence guide bar, and miter gage have been removed and packed separately.

To assemble, place the saw on a table in working position—see Fig. 1. Tilt the table by turning hand-

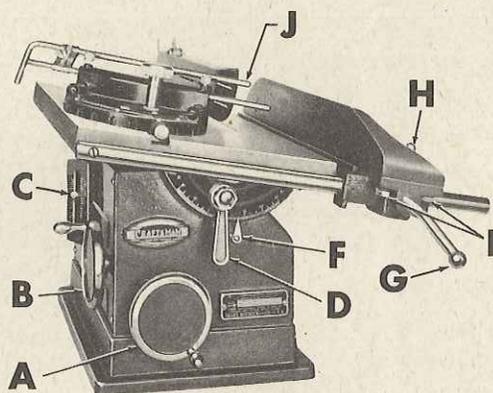


FIGURE 1

wheel B, and remove two small wood packing blocks from under left side of table. Fasten the fence guide bar 14186 to the table using two screws 14167. Place the spacers 14183 between the bar and the table on the screws. Back out the fence lock handle G, Fig. 1, several turns to remove any possibility of clamping action and slip the fence support over the projecting end of the fence guide bar, making sure the lock shoe 14104 is in position.

Remove the two bolts holding the splitter support 14058 together and insert the splitter and guard assembly watching carefully that the kickbacks 14070 are in position. Replace and tighten the bolts. If the splitter does not line up with the saw blade, loosen the bolts holding the splitter supports to arm and splitter support casting 14004. After aligning splitter and blade with a straight edge, retighten the bolts.

LUBRICATION

The sealed ball bearings used in this tool are packed with grease at the factory and require no additional lubrication for the life of the bearings. Other moving parts may require occasional lubrication with a light grade oil.

SPEED

This saw should be operated at approximately 4500 R.P.M. Proper speed may be maintained by using a 2 $\frac{1}{2}$ inch pulley on a 3450 motor.

CONTROLS

The saw blade is raised and lowered by means of the handwheel A, Fig. 1. The table is tilted by turning handwheel B. The adjustable depth of cut scale C indicates the amount of cut for both regular and dado blades. The wrench D is used to lock the table at any angle, while the amount of tilt is shown by the adjustable pointer F. The lock handle

G clamps the fence head to the fence guide by means of the lock shoe 14104. The screw H is used as a pivot post in adjusting the fence. The two bolts I when loose allow the fence to pivot around the fence support screw H. The rod J may be adjusted so that several pieces can be cut at a uniform length.

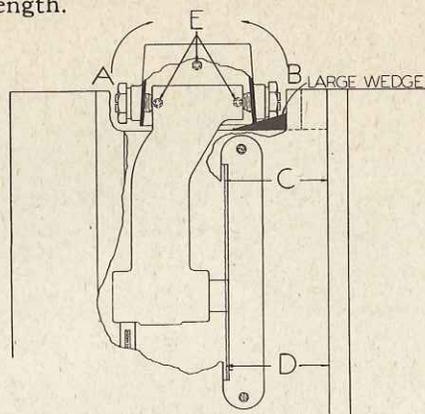


FIGURE 2

ADJUSTMENTS

Saw Blade, Fig. 2

If the saw blade should become out of line with the miter gage slots, first loosen the cap screws which hold the table to the trunnions. The table should line up readily due to slight play provided in the four trunnion holes. If further adjustment is necessary, loosen the 3 screws E in the bottom of the arm and splitter support casting 14004 just

enough to allow the saw arm to shift to the desired location. If, due to hardened paint, extra force is necessary, drive a wedge between the saw arm support and the rear of the base as shown. This causes movement in direction B. To turn the saw arm in direction A, drive the wedge in the opposite side of the saw arm support. Retighten the 3 screws E after making above adjustment.

The saw blade may be adjusted to the center of the slot in the saw table by adjusting the slotted pivot screws 14043 in the saw arm pivot support 14004 at the rear of the saw. Loosen the lock nuts 14044 on both screws and with a screw driver adjust the saw arm to the proper position. Securely retighten the screws and then the locknuts.

The stop for setting the 8 inch saw blade at the level of the table top is a square head set screw X-116 and nut X-420 in the saw arm screw bracket 14027 on the base.

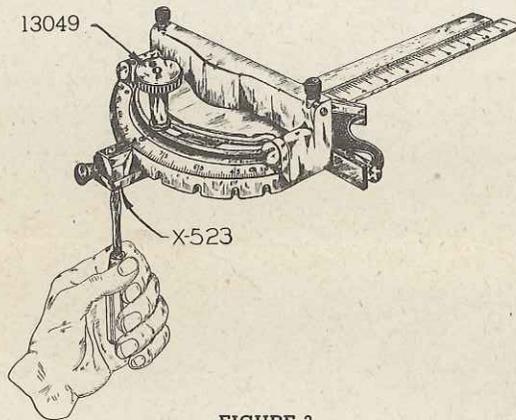


FIGURE 3

Miter Gage, Fig. 3

If the miter gage does not produce square cuts, loosen the clamp knob 13049 and set the plunger stop in the hole provided for 90° setting. Loosen the two screws X-523 in the bottom of the plunger housing. Place the stock of a tri square on the face of the protractor, and the blade along the protractor bar as shown in the drawing. Square the protractor head with the bar and tighten the clamp knob. Recheck with the square before tightening the two screws under the plunger housing. If necessary, loosen the protractor pointer screw and reset the pointer on the 90° mark.

Ripping Fence

To adjust the position of the locking handle G, Fig. 1, first remove the pivot screw 14166 and the two cap screws I, Fig. 1, and lift off the fence. Back out the locking handle enough to allow the removal of the square nut X-475. After turning the nut

$\frac{1}{4}$ turn, make sure the lock shoe is in place before tightening lock handle.

If the sides of a piece of stock which has been ripped are not parallel, it may be necessary to adjust the fence. If the miter gage slots are parallel with the blade, slide the fence along the table until its straight edge is over one edge of the miter slot. Loosen slightly the pivot screw 14166 but do not relieve all tension on this screw. Back out the two screws I, Fig. 1, several turns, and shift the fence by tapping at the rear until the fence edge lines up with the miter slot edge. Retighten the two support screws and then the pivot screw in order.

OPERATION

After setting up the saw it may be noticed that the saw blade wobbles when turned by hand. This condition should disappear at high speed. Another possible cause of wobble may be traced to a loose saw clamp washer 14014. The blade should be snug against the shoulder on the arbor 14016 and the ground surface of the saw clamp washer should be snug against the blade.

For accurate cross cutting operation the angle of the miter gage should be checked frequently. When cutting angles as sharp as 45° the work should be held tightly against the miter gage to insure an accurate cut.

For ripping cuts, the desired width can be held by using the adjustable rip fence. Tighten clamp lever to secure fence in desired position on bar. When ripping narrow strips be sure to use a pusher of scrap wood when the end of the cut approaches the blade. If most of the work to be handled by the saw is ripping, the use of a rip saw blade will allow the handling of more feet per minute although the cut will not be so smooth.

This saw may be converted to a sanding unit by removing the table insert 14029 and replacing the blade with a $\frac{1}{2}$ " bore sanding disc. The table may still be tilted for angle cuts.

For extremely fine work such as miter cuts for interior trim, a hollow ground combination blade is better than a flat ground combination blade.

A table extension is also available for this saw which greatly facilitates the handling of larger pieces of stock.

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

How to Order Parts for Model Number 103.0213 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 103.0213 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. 103.0213.

1 Each No. 14001 Table	\$8.65
1 Each No. 14003 Table Support, Rear	2.60
	<u>\$11.25</u>

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