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OPERATING INSTRUCTIONS AND PARTS LIST FOR CRAFTSMAN JIG SAW

12 INCH

Model Number 103.21790

This is the model number of your Jig Saw. It will be found on the side of the crankcase. Always mention this model number when communicating with us regarding your Jig Saw or when ordering parts.

Instructions for Ordering Parts

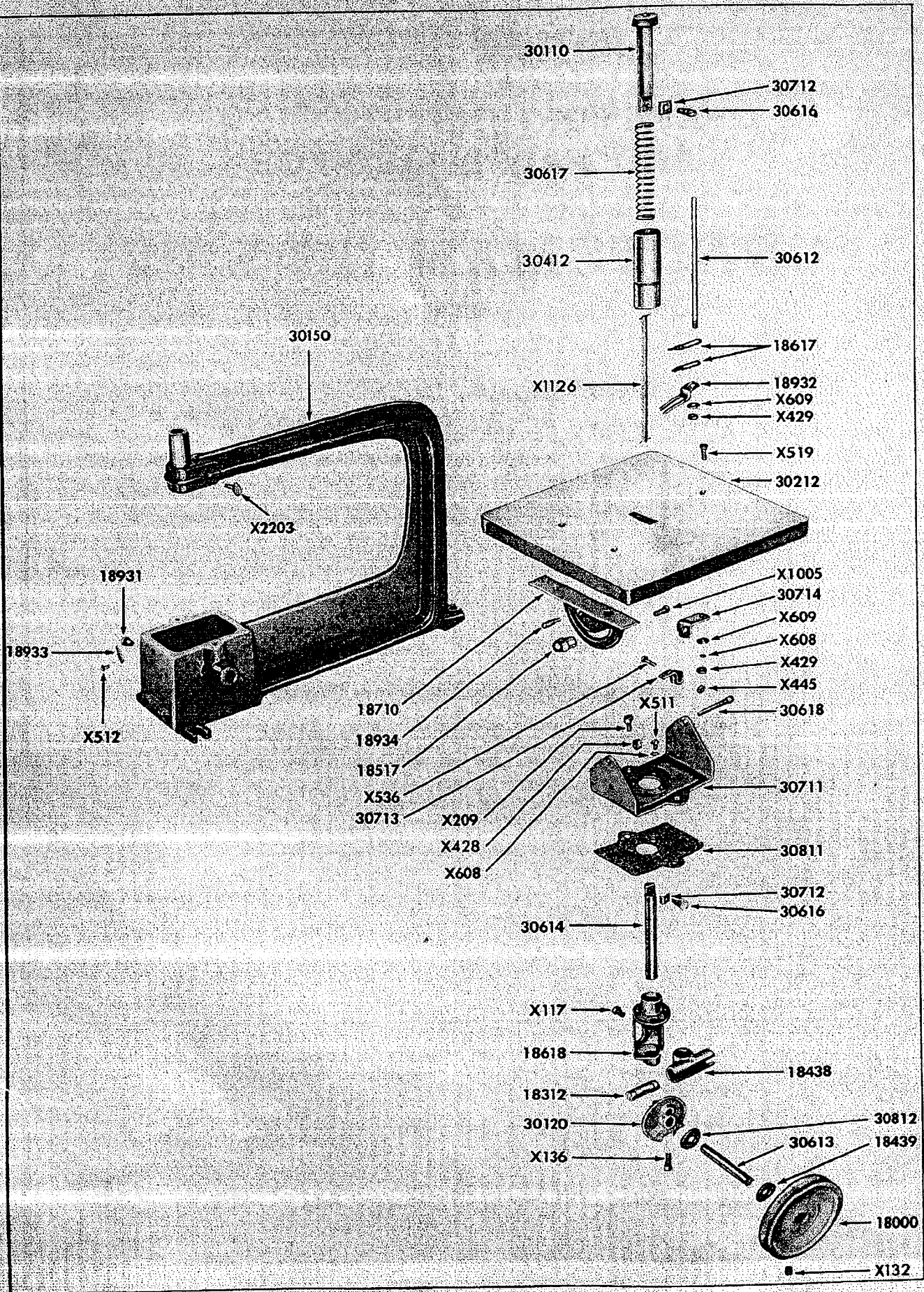
All parts listed here must be ordered through a Sears retail or mail order store. Parts are shipped prepaid. When ordering repair parts, always give the following information:

1. The part number
2. The part name and price
3. The model number which is 103.21790

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

SEARS, ROEBUCK and CO.

January, 1947



OPERATING INSTRUCTIONS and PARTS LIST FOR CRAFTSMAN JIG SAW MODEL NUMBER 103.21790

INSTALLATION:

This jig saw should be mounted securely to a work bench or table. Three slots are provided in the base for this purpose. A $\frac{1}{4}$ horse-power 1750 R.P.M. motor may be mounted behind or below the jig saw pulley, so that the direction of pulley rotation will be counter

clockwise as shown by the arrow below the pulley on the frame.

To protect the operating mechanism from unnecessary strain, do not hang the weight of the motor on the belt. Apply sufficient tension to prevent belt slippage.

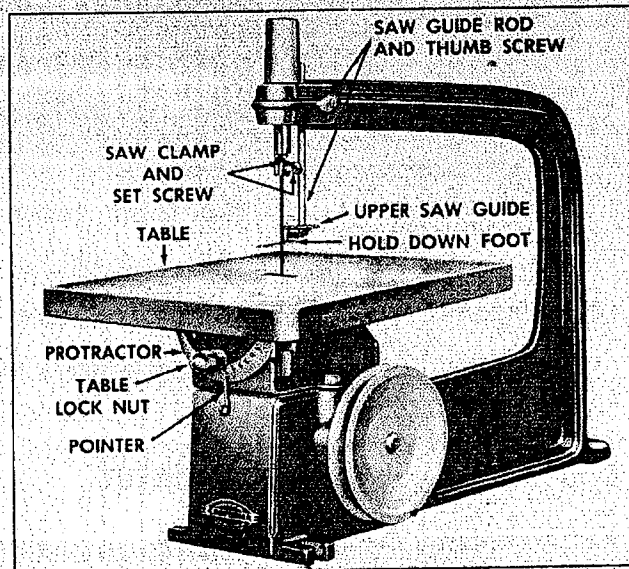


FIGURE 1

LUBRICATION:

DO NOT OPERATE THIS JIG SAW UNTIL THE CRANK-CASE HAS BEEN FILLED WITH OIL.

To protect the close fitting parts in the driving mechanism, this jig saw incorporates an oil bath. Before operation the crank-case should be filled to

the level of the oil hole, on the side of the frame opposite the pulley, with approximately $\frac{1}{2}$ pint of a good quality oil S.A.E. viscosity #30. The air pump tube and upper pull rod should be lubricated occasionally by placing a few drops of oil in the top of the pump tube 30412.

PARTS LIST

Part No.	Part Name	Prepaid Selling Price Each	Part No.	Part Name	Prepaid Selling Price Each
18000	Pulley with set screws—4 in. single groove V-pulley $\frac{1}{2}$ in. bore, purchase from nearest Sears retail or mail order store.	\$.	30712	Saw Clamp	.15
18312	Yoke Pin	.35	30713	Lower Saw Guide	.15
18438	Yoke	.70	30714	Table Bracket	.15
18439	Fibre Washer	.15	30811	Gasket	.15
18517	Table Lock Nut	.25	30812	Fibre Washer	.15
18617	Upper Saw Guide (2 required)	.20	THE FOLLOWING PARTS ARE STANDARD AND MAY BE PURCHASED LOCALLY		
18618	Lower Pull Rod Support	1.00	X-117	Set Screw 5/16—24 x $\frac{3}{8}$ Sq. Hd. Cup Point	.10
18710	Protractor with 18934 Pivot Pin	.90	X-132	Set Screw 5/16—18 x $\frac{1}{4}$ Slotted Hd. Cup Point	.10
18931	Oil Hole Plug	.15	X-136	Set Screw 5/16—18 x $\frac{3}{4}$ Sq. Hd. Round Point	.10
18932	Hold-Down Foot	.20	X-209	Cap Screw $\frac{1}{4}$ —20 x $\frac{1}{2}$ Hex Hd.	.10
18933	Pointer	.15	X-428	Hex Nut $\frac{1}{4}$ —28	.10
18934	Protractor Pivot Pin	.20	X-429	Hex Nut #10—32	.10
30110	Upper Pull Rod	.65	X-445	Hex Nut #6—32	.10
30120	Eccentric with Set Screw	.60	X-511	Mach. Screw #10—24 x $\frac{3}{8}$ Rd. Hd.	.10
30150	Jig Saw Frame with 30412 & 18931 installed	13.00	X-512	Mach. Screw #8—32 x $\frac{1}{8}$ Rd. Hd.	.10
30212	Table	5.75	X-519	Mach. Screw #10—32 x $\frac{3}{4}$ Flat Hd.	.10
30412	Pump Tube	.50	X-536	Mach. Screw #6—32 x $\frac{3}{4}$ Rd. Hd.	.10
30612	Saw Guide Rod	.25	X-608	Lock Washer 13/64 I. D.	.10
30613	Drive Shaft	.50	X-609	Plain Washer 13/64 I. D.	.10
30614	Lower Pull Rod	.65	X-1005	Carriage Bolt $\frac{1}{4}$ —20 x $\frac{3}{4}$.10
30616	Thumb Screw #8—32 Thread	.15	X-1126	Jig Saw Blade 5", pin type, purchase from nearest Sears retail or mail order store.	.15
30617	Spring	.15	X-2203	Thumb Screw $\frac{1}{4}$ —20 x $\frac{3}{4}$.15
30618	Table Pivot Screw	.20			
30711	Table Support	.80			

This sheet is intended for instruction and repair parts list only and is not a packing slip. The parts shown and listed may include accessories not necessarily part of this tool. All parts are shipped prepaid. All prices are subject to change without notice.

SPEED:

The proper operating speed and power may be attained by using a 2 inch diameter pulley on a 1750 R.P.M. $\frac{1}{4}$ horsepower motor. This pulley is available from your Sear's retail or mail order store. Ask for stock number 9-2801. Be sure to specify the shaft diameter of your motor.

CONTROLS AND ADJUSTMENTS:

The table of your jig saw may be tilted to any angle shown on the table protractor after the $\frac{1}{2}$ inch lock nut has been loosened, and may be locked in the position selected by tightening the lock nut.

If a square cut is not produced with a 90° protractor setting, the table should be set perpendicular to the saw blade, checked with a square, and the pointer reset at the 90° mark.

The hold-down foot should ride lightly on the work piece to prevent the blade from lifting the work piece on the up stroke. The hold-down foot may be raised or lowered to accommodate various thicknesses of material by loosening the thumb screw X-2203.

The upper saw guides 18617 may be shifted to accommodate blades of various widths and thicknesses by loosening the hexagon nut X-429 on the bottom of the saw guide rod. The 5 inch blades may be replaced by loosening the two blade clamp thumb screws. Secure the blade in the lower blade clamp with the teeth pointing down. Rotate the pulley until the blade reaches the top of its stroke,

and pull the upper rod down $\frac{1}{4}$ inch to apply tension. Insert the blade in the upper clamp and secure it by tightening the thumb screw.

The lower saw guide, below the table surface, may be shifted to accommodate blades of various widths by loosening the round head machine screw X-536 which clamps the guide to the table pivot pin. Under normal operating conditions, the upper and lower guides should be set close to the blade but must not produce a binding action.

OPERATION:

To minimize blade breakage, always use as wide a blade as is practical for the type of cut intended. For unusually fine cuts, a puzzle blade is recommended. A fret saw blade with wide spaced teeth and no set is recommended for use with material which tends to gum the blade. These blades produce a very smooth cut.

When sawing material harder than wood, blades with small teeth should be used. The fine tooth blade should also be used when cutting thin material, for if the tooth spacing is wider than the thickness of the work the blade will catch and tear the work rather than produce a clean cut.

Although the jig saw is intended for the cutting of irregular figures, it is advisable to avoid sharp turns whenever possible by cutting into the waste material of the work piece. In this manner, sharp clean corners are maintained, and blade distortion and breakage are minimized.