OPERATING INSTRUCTIONS AND PARTS LIST FOR

8 INCH BENCH SAW

MODEL NUMBER

103.02041

This is the model number of your Bench Saw. It 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.

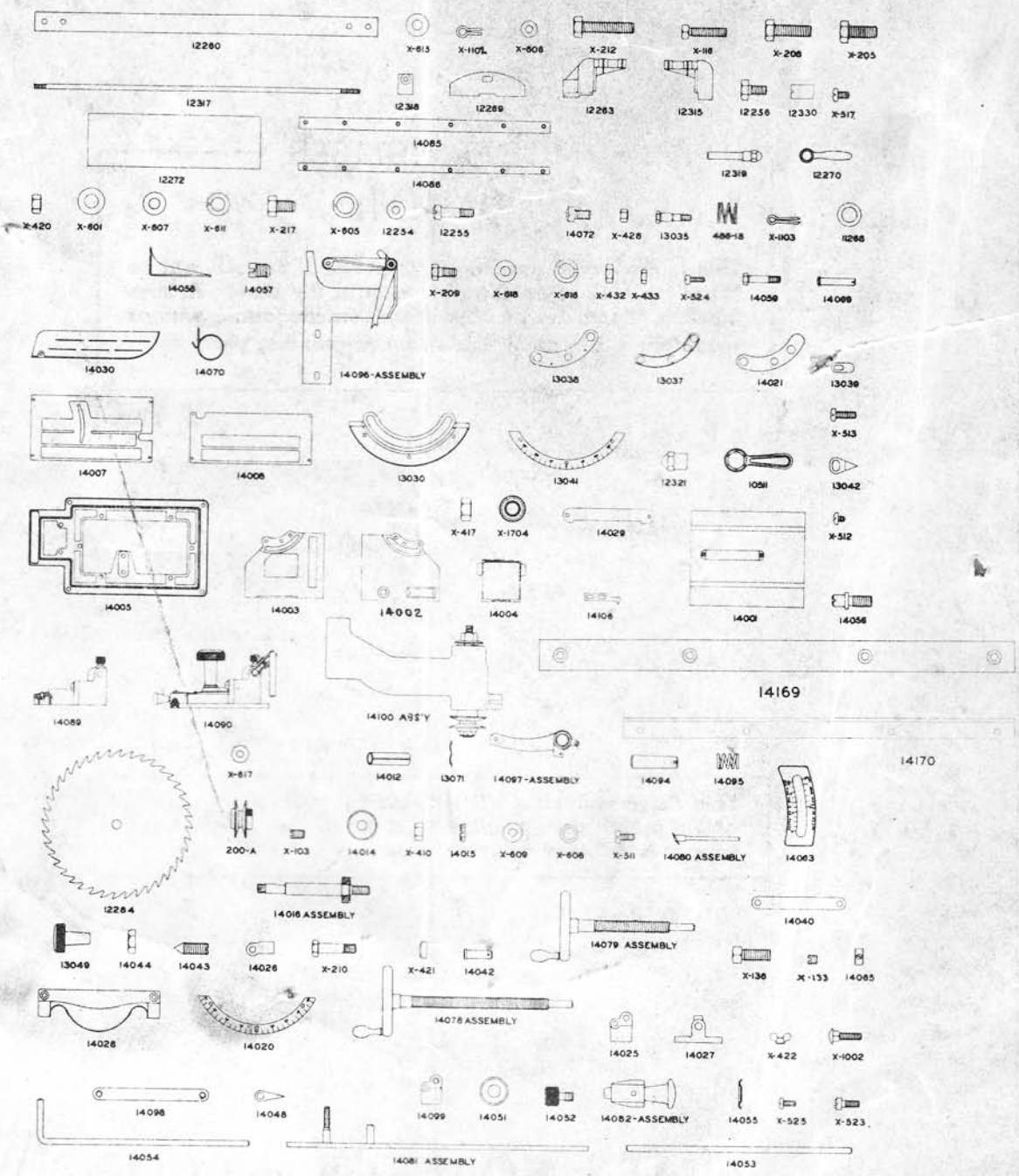
SEARS, ROEBUCK and CO.

FORM 117

HOW TO ORDER PARTS FOR SEARS 8 INCH BENCH SAW MODEL NUMBER 103.02041

ALL PARTS LISTED HERE MAY BE ORDERED THROUGH ANY SEARS RETAIL STORE OR THE MAIL ORDER STORE WHICH SERVES THE TERRITORY IN WHICH YOU LIVE. PARTS ARE SHIPPED PREPAID. WHEN ORDERING REPAIR PARTS, ALWAYS BE SURE AND GIVE

1. The Part Number, 2. The Part Name, 3. The Model No. which will be found on a plate on the right side of the base.



For Operating Instructions See Page 4

PARTS LIST

All Prices are Subject to Change without Notice
All Parts are Shipped Prepaid

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.

Part Number	Name of Part	Selling Price (Each)
14001	Table	8.65
14002	Table Support - Front	2.60
14003	Table Support - Rear	2.60
14004	Saw Arm & Splitter Support	2.00
14005	Base	2.90
14007	Side Panel - Left	.60
14008	Side Panel - Right	.60
14012	Drive Shaft Bearing Spacer	.15
14014	Saw Clamp Washer	.15
14015	Drive Shaft Lock Nut	.15
14016	Drive Shaft Assembly	.95
14020	Mitre Gage Scale	.20
14021	Table Protractor Clamp - Rear	.15
14025	Table Tilt Link Clevis	.25
14026	Table Tilting Bracket	.20
14027	Saw Arm Screw Bracket	.25
14028	Mitre Gage Support	.65
14029	Table Insert	.25
14030	Saw Guard	1.00
14040	Table Tilting Link	.30
14042	Link Pin	.15
14043	Saw Arm Adjusting Screw	.20
14044	Saw Arm Adjusting Screw Nut	.15
14048	Mitre Gage Pointer	.15
14051	Mitre Gage Clamp Washer	.15
14052	Mitre Gage Extension Rod Clamp Screw	.15
14053	Mitre Gage Extension Rod - Long	.25
14054	Mitre Gage Extension Hook Rod	.25
14055	Mitre Gage Extension Rod Clamp	.15
14056	Table Insert Support	.15
14057	Saw Guard Link Screw	.15
14058	Splitter Support	.25
14059	Table Protractor Lock Screw	.20
14063	Depth of Cut Scale	.30
14065	Saw Arm & Table Screw Collar	.15
14069	Protractor Clamp Pin	.15
14070	Splitter Kick-Back Spring	.15
14072	Fence Guide Screw - Short	.15
14078	Saw Arm Screw Assembly	1.30
14079	Table Tilting Screw Assembly	1.30
14080	Depth of Cut Pointer Assembly	.20
14081	Mitre Gage Bar Assembly	.75
14082	Mitre Gage Plunger Assembly	.45
14085	Fence Guide - Front	2.25
14086	Fence Guide - Rear	1.50
14089	Mitre Gage Sub-Assembly - Inc. 13030(1) 14020(1) 14052(2) X-437(2) X-524(3) X-525(2) X-617(2) X-618(3)	1.25
14090	Mitre Gage Assembly Complete - Inc. 13049(1) 14048(1) 14052(1) 14053(1) 14054(1) 14055(1) 14081(1) 14082(1) 14089(1) X-422(1) X-512(1) X-523(1) X-1002(1)	2.50
14094	Link Pin	.15
14095	Link Pin Spring	.15
14096	Splitter Assembly	1.70
14097	Saw Arm Sub-Assembly	2.50
14098	Saw Arm Link	.25
14099	Saw Arm Link Clevis	.25
14100	Saw Arm Complete - Inc. 13071(1) 14012(1) 14014(1) - 14015(1) 14016(1) 14077(1) 200A(1) X-103(3) X-410(1) X-1102(1) X-1704(2)	9.50
14106	Width of Cut Pointer	.20
14159	Fence Guide - Front	.70
14170	Fence Guide - Rear	.35
13030	Protractor	.70
13035	Table Protractor Guide Screw - Short	.20
13037	Protractor Guide	.30
13038	Table Protractor Clamp	.20
13039	Table Stop Link	.15
13041	Protractor Scale	.20
13042	Protractor Pointer	.15
13049	Mitre Gage Clamp Knob	.30
13071	Bearing Preloading Spring	.15

Part Number	Name of Part	Selling Price (Each)
12254	Fence Guide Spacer	.15
12255	Fence Guide Screw - Long	.15
12256	Fence Guide Screw - Short	.15
12260	Fence Sub-Assembly - Long	.40
12263	Fence End - Front	.35
12269	Rip Fence Equalizer	.25
12270	Rip Fence Clamp Lever	.20
12272	Table Extension - Side	1.00
12284	8" Saw Rip & Cross Cut	1.80
12315	Fence End - Rear	.25
12317	Rip Fence Lock Rod - Long	.25
12318	Rip Fence Clamp - Rear	.15
12319	Rip Fence Clamp Bolt	.20
12330	Lock Rod Nipple	.15
12321	Protractor Clamp Nut	.25
11268	Rip Fence Washer	.15
10511	Clamp Nut Wrench	.25
486-18	Clamp Pin Spring	.15
200-A	Pulley	.30
X-1704	Drive Shaft Bearing	1.00
X-410	Drive Shaft Nut	.10

THE FOLLOWING PARTS ARE STANDARD AND CAN BE PURCHASED LOCALLY

X-103	Pulley Set Screw-Depth of Cut Pointer Sc.	1/4-20x3/8	.10
X-116	Saw Arm Set Screw	1/4-20x1	.10
X-133	Collar Set Screw	1/4-20x3/8	.10
X-136	Table Stop Set Screw	5/16-18x3/4	.10
X-205	Table Support & Saw Arm Support Screw	5/16-18x3/4	.10
X-208	Table Support Mounting Screw	5/16-18x1	.10
X-209	Splitter Bracket & Table Tilt Stop Screw	1/4-20x1/2	.10
X-210	Link Clevis Screw	1/4-20x1	.10
X-212	Table Tilt Bracket & Saw Arm Bracket Sc.	5/16-18x1-1/4	.10
X-217	Splitter Bracket Mounting Screw	5/16-18x1/2	.10
X-417	Table Stop Nut, Table Insert Support Nut, Saw Arm Bracket Nut, Table Support Mounting Nut	5/16-18	.10
X-420	Saw Arm Stop Nut - Splitter Bracket Nut, Fence Guide Screw Nut	1/4-20	.10
X-421	Link Clevis Screw Nut	1/4-20	.10
X-422	Mitre Gage Extension Clamp Screw Wing Nut	3/16-24	.10
X-428	Fence Guide Screw Nut - Fence Lock Rod Nut	1/4-28	.10
X-432	Protractor Guide Screw Nut	3/8-24	.10
X-433	Protractor Scale Screw Nut-Mitre Gage Scale Screw Nut	#4-40	.10
X-511	Depth of Cut Gage Screw	10-24x3/8	.10
X-512	Mitre Gage Pointer Screw - Protractor Pointer Screw	6-32x1/8	.10
X-513	Base Cover Screw	10-24x5/8	.10
X-517	Fence Screw	1/4-20x3/8	.10
X-522	Mitre Gage Plunger Housing Screw	#5-40x5/16	.10
X-524	Protractor Scale Screw - Mitre Gage Scale Screw	4-40x5/8	.10
X-525	Mitre Gage Mounting Screw	5/16-18x5/8	.10
X-601	Washer - Table Support Screw - Table Tilt Screw - Saw Arm Screw Bracket - Saw Arm Support Mounting Screw, Splitter Bracket Mounting Screw	5/16 Std.	.10
X-605	Lock Washer - Table Stop Screw - Fence Guide Screw - Fence Equalizer Screw	1/4 Std.	.10
X-606	Clamp Pin Washer	3/8 Std.	.10
X-607	Table Stop Screw - Splitter Bracket Screw Washer	1/4 Std.	.10
X-608	Depth of Cut Scale Lock Washer	3/16 Std.	.10
X-609	Depth of Cut Gage Washer	13/64	.10
X-611	Lock Washer - Table Support Screw, Table Tilt Screw, Table Support Mounting Screw - Saw Arm Screw Bracket - Saw Arm Suppt. Mounting Screw - Splitter Bracket Screw	5/16 Std.	.10
X-615	Fence Equalizer Screw Washer	1/4 Std.	.10
X-616	Protractor Guide Screw Lock Washer	5/16 Std.	.10
X-617	Mitre Gage Mounting & Link Pin Washer	5/16 Std.	.10
X-618	Protractor & Mitre Gage Scale Screw Washer	1/8 Std.	.10
X-1002	Mitre Gage Extension Screw	3/16-24x3/4	.10
X-1102	Drive Shaft Cotter Pin	3/32	.10
X-1105	Clamp & Link Pin Cotter Pin	1/16	.10

TO INCREASE THE TABLE SPACE 5-9/16 INCHES IN FRONT OF THE SAW BLADE ON THE 2190 SAW, THE FOLLOWING UNIT CAN BE PURCHASED AS AN ACCESSORY -- NOT ILLUSTRATED.

14142	Complete Unit (See Power Tool Catalogue)	
14073	Table Extension Fence Sub-Assembly	1.25
14084	Table Extension - Front	3.50
14088	Fence Assembly	3.00
12255	Fence Guide Screw Long	.15
12256	Fence Guide Screw - Short	.15
12263	Fence End - Front	.35
12269	Rip Fence Equalizer	.25
12270	Rip Fence Clamp Lever	.35
12319	Rip Fence Clamp Bolt	.20
12315	Fence End - Rear	.25
12318	Rip Fence Clamp - Rear	.15
12330	Rip Fence Lock Rod Nipple	.15
X-119	Table Extension Adj. Screw	3/16-24x1/2 .10
X-209	Rip Fence Equalizer Clamp Screw	1/4-20x1/2 .10
X-428	Fence Guide Screw Nut	1/4-28 .10
X-617	Fence Screw	1/4-20x3/8 .10
X-605	Equalizer Screw Lock Washer	.10
X-615	Equalizer Screw Plain Washer	.10

WE SUGGEST YOU WRITE YOUR ORDERS FOR REPAIR PARTS LIKE THIS SAMPLE

Sears, Roebuck and 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. 103.02041

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.

FOR OPERATING INSTRUCTIONS SEE PAGE 4.

OPERATING INSTRUCTIONS FOR SEARS 8 INCH BENCH SAW

LUBRICATION

The saw spindle is mounted on two sealed dust proof S.K.F. precision ball bearings. These bearings are mounted in a rugged housing which is packed with a sufficient supply of the right grade of grease at the factory, to insure proper lubrication over a long period.

The table tilting and saw arm link mechanism joints and screws will need periodic greasing or oiling to insure ease of operation. The table trunions will need greasing occasionally, also the saw guard links.

Recommended operation speed approximately 3500 R.P.M.

TABLE

Heavy and well ribbed with smoothly ground finish. The table is supported on both ends by trunions or quadrants which rotate on a tongue fastened securely on the front and rear trunion supports. The front trunion is provided with conventional graduated protractor with a pointer. The graduated protractor is adjustable, if necessary to correct any error on protractor with the table top.

The 90° stop set screw adjustment is under the table top and is easily adjustable to square the table with the saw blade. A 45° stop is provided on the front trunion bolt. The stop can be properly adjusted by loosening the cap screw and adjusting the flat link to the proper positi

Tilting of the table and raising or lowering of the saw blade is controlled by a simple link and screw mechanism. To tilt the table, unlock the front trunion with a lever wrench by pulling forward on to hexagon nut. Loosen. Adjust to the angle desired by turning the hand wheel on the side and relock the front trunion protractor. Raising or lowering of the saw blade is controlled by the front hand wheel.

On each end of the operating screws of the tilting screw and saw raising screw is a set collar. Be sure and keep the same set up close in order to eliminate end play on these screws.

IMPROVED RIPPING FENCE

The fence is clamped or locked to the table at both ends. The front end of the fence has floating clamping lever and equalizer for paralleling the fence with the saw blade. To lock the fence in position on the saw table, pull the lever wrench forward from neutral position on the hexagon nut to loosen or lock the fence in the position desired.

After locking the fence, push the lever into neutral position on the nut. If necessary to line up or adjust the fence parallel with the saw blade, loosen the screw slightly under the fence which holds the equalizer plate; place the fence on the saw table with the equalizer plate in position on the front bar; then line up the fence with the edge of the protractor slot; lock the fence in position on the table and then tighten the equalizer screw under the front end of the fence.

COMBINATION GUARD, SPLITTER AND KICK BACK DOGS

Automatic leveling type, mounted on the splitter. Moves vertically to the maximum depth of the cut. The guard may be tipped back out of the way, without removal from the saw by swinging same over the splitter letting the top end of the slot in the guard rest on the notched rear end of the splitter. The Kick Back Dogs are always in position whether the guard is in position or thrown back out of the way.

MITRE GAUGE

Improved indexing type. The plunger stop provides for important angular positions. The intermediate angles located by the Pointer on the graduated scale mitre gauge has adjustable T head that can be adjusted on the protractor so that the T head can be adjusted accurately to 90° with the bar on the protractor. The mitre gauge is equipped with an adjustable cut-off stop.

TABLE INSERT

The table insert is provided with vertical adjustment studs with lock nuts in each end. To level, loosen the lock nuts and with a screw driver, adjust the stud to bring the insert to the proper position and then tighten the lock nuts. When dadoeing, insert can be removed by lifting off the studs.

To adjust Mitre Gauge, set plunger stop in the hole provided for 90°. Loosen two screws in bottom of plunger housing. Place an accurate square on protractor bar and set Mitre Gauge square with bar. Tighten two plunger housing screws while in this position. If necessary, loosen protractor pointer screw and set pointer on 90°.

Sometimes the Mitre Gauge will seem to be out of square when the trouble is actually in the alignment of the table. Be sure that the table alignment is perfect before you correct the Mitre Gauge alignment. This may be done by loosening the cap screws and adjusting the position of the table on the quadrants.

ADJUSTABLE SAW ARM

The saw arm is held in position on two adjustable pivot screw centers in the saw arm pivot 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.

Lowering of the 8" saw blade to the level of the table top is controlled by a set screw and lock nut.

The depth of cut pointer on the side panel of the saw can be adjusted accurately with a graduated scale by loosening the graduated scale casting on the side panel and loosening the screws on the inside of the panel and moving the scale either up or down as desired to register with the pointer.

The pointer can be rotated or adjusted in or out by loosening the screw in the saw arm and adjusting to the desired position.

ALIGNMENT OF THE SAW BLADE

The saw blade is lined parallel with the mitre gauge grooves at the factory, after which the table is removed for safety in shipping.

When assembling the table to the base, same should line up readily with the slight play provided in holes in the trunions that the four cap screws fasten the table to the trunions with. This play should be ample for any slight adjustment of the blade with the mitre gauge grooves.

If through rough handling while in transit, the saw arm pivot support has become out of place, same can be moved into proper alignment by loosening the screws under the sub base and shifting the saw arm pivot support to the proper position. Be sure and tighten the screws securely when adjustment is made.

EXTENSION TABLES

Front and side extensions increase the table size to 26 1/2" x 24 3/16". The table extensions can be attached by removing the steel bars at the front and rear of the table and bolting the cast iron front extensions to the saw table, using the mitre gauge slots to determine the right location. Adjusting screws for leveling the extensions are provided in each extension.

Fasten the long narrow bar to the rear of the saw table so that an equal amount extends each side of the table.

Insert the pressed steel side extensions between the rear bar and front extensions and partially fasten. Then place long wide bar across the front of the front extensions, put fence guide spacers in place and fasten.

Place a straight edge across the whole assembly to level extensions with main table.

Be sure and tighten all bolts securely after leveling.

ASSEMBLY INSTRUCTIONS

For 2222 8-inch Bench Saw

This saw has once been completely assembled at the factory and, to avoid breakage or misalignment during while in transit, the saw table, splitter, and guard have been removed from the base assembly. The base assembly is bolted to a board to protect this assembly from rough handling. To assemble, place the table top bottom side up. Place the base assembly on the table top, being careful to line up the four holes in trunions 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 in the table top, using one plain steel washer and lock washer on each bolt through the lugs on trunions. Tighten the cap screw snugly (not tight), bolt the table tilting link mechanism snugly (not tight) in position with the long cap screw and washers.

Now turn the saw over to normal position. Raise the blade to full cut and with a rule or scale, line up mitre gauge slots parallel to blade by shifting the table in the correct position. Now tighten securely the five cap screws that hold trunions and tilting mechanism to table. Remove the two bolts from splitter support bracket, insert splitter and guard assembly, carefully watching that kick backs are in position and tighten bolts.

Fence and protractor are used in usual manner.

Correct operating speed—3500 R.P.M.