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PARTS LIST AND QUICK-CHANGE GEAR

OPERATING INSTRUCTIONS FOR

**Craftsman 12-Inch
Metal Turning Lathe**

**Model Number 101.27430 (24" Between Centers)
Model Number 101.27440 (36" Between Centers)**

This is the Model Number of your Lathe. It will be found on the plate located on the rear of the Bed. Always mention this Model Number when communicating with us regarding your Lathe or when ordering parts.

Instructions for Ordering Parts

All parts listed herein must be ordered through a Sears retail store or mail order house. Parts are shipped prepaid, except those marked with an asterisk. When ordering repair parts, always give the following information:

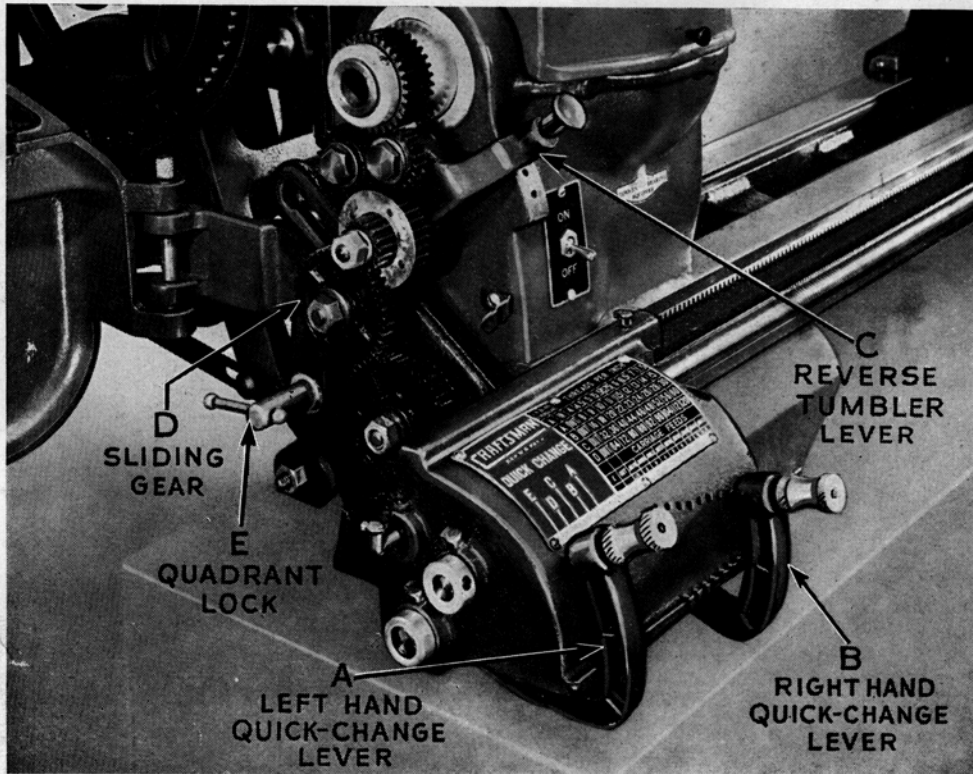
1. The part number in the list.
2. The part name and price in the list.
3. The model number which is 101.27430 or 101.27440.

Filing Instructions

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 COMPANY

OPERATING INSTRUCTIONS



C. Reverse Tumbler Lever—has three index positions — forward, neutral and reverse. Top position feeds carriage to the left and cross-slide toward the operator; bottom position feeds carriage to the right and cross-slide away from operator. Center position is neutral.

D. Sliding Gear—has two positions — IN and OUT as shown on the chart. IN position is toward headstock and meshes with the 32 tooth compound gear, see Figure 2. OUT position, Figure 3, is a way from headstock and meshes with the 16 tooth compound gear. Loosen quadrant lock to mesh the sliding gear with the compound tumbler gear.

The position of the sliding gear (IN or OUT) is shown on the chart in the same row as the thread or feed desired.

E. Quadrant Lock—controls the gear quadrant. Loosen to mesh sliding gear with the compound tumbler gear.

CONTROLS

See Figure 1

A. Left Hand Quick-Change Lever — shifts to five positions — A, B, C, D, and E — shown on left end of chart. The position of the lever is indicated at the left end of the row of numbers in which you find the thread or feed desired.

B. Right Hand Quick-Change Lever — shifts to nine positions, numbered on bottom row of chart beneath carriage feeds. The indexing position of the lever is always directly below the thread or feed desired.

LUBRICATION

LUBRICATE REGULARLY — Use S.A.E. No. 20 Oil

1. Place a few drops of oil in each of the oilers on the Quick-Change housing once a week if the machine is in constant use.
2. Quick-Change lever bearings — oil regularly.
3. Sliding Gear Shaft — oil regularly.
4. Quadrant Gears — oil regularly.
5. Quadrant Gear Bearing — oil regularly.

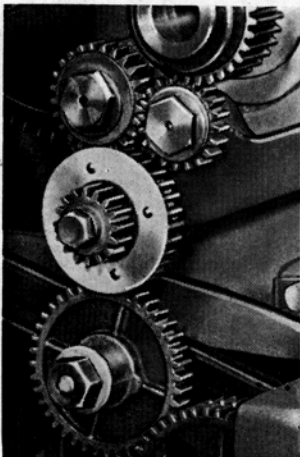


Fig. 2 Sliding Gear in IN position.

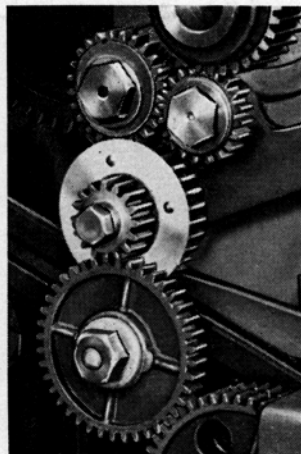


Fig. 3 Sliding Gear in OUT position.

OPERATING INSTRUCTIONS (Cont'd.)

CRAFTSMAN REG. U. S. PAT. OFF. QUICK CHANGE		L. H. LEVER	SLIDE GEAR	THREADS PER INCH								
		A	IN	4	4.5	5	5.5	5.75	6	6.5	7	7.5
E D C B A 		A	OUT	8	9	10	11	11.5	12	13	14	15
		B	OUT	16	18	20	22	23	24	26	28	30
		C	OUT	32	36	40	44	46	48	52	56	60
		D	OUT	64	72	80	88	92	96	104	112	120
		CARRIAGE FEEDS										
E D C B A 		E	OUT	.0078	.0069	.0063	.0057	.0055	.0052	.0048	.0044	.0042
					1	2	3	4	5	6	7	8
DETACH THIS CHART BEFORE REMOVING ATTACHMENT FROM LATHE												

Fig. 4 Quick-Change Chart.

READING THE QUICK-CHANGE CHART

Threads per Inch — forty-five standard threads are shown on Quick-Change chart. Nine additional threads, corresponding to those shown under carriage feeds, are also available. They are: 128, 144, 160, 176, 184, 192, 208, 224, and 240. Feeds for the forty-five threads are shown in Figure 5.

Carriage Feeds — shown on bottom of chart. Nine feeds are listed — .0078" to .0042" per revolution of spindle. Corresponding threads are shown in Figure 5, and in paragraph above.

Sliding Gear — has two positions — IN and OUT. See CONTROLS, part D for location of gear positions. The position of the sliding gear is indicated on the chart in the same row as the thread or feed desired.

Left Hand Lever Position — shown in first column of chart. Lever has five indexing positions — A, B, C, D, and E. These positions are marked on chart directly above left hand group of indexing holes in gear box. The lever position for a thread or feed is shown in same row as thread or feed desired.

Right Hand Lever Position — figures 1 through 9 on bottom of chart are indexing positions of the right hand lever. The indexing position of the lever is always directly below the thread or feed desired.

SUGGESTIONS FOR OPERATION AND MAINTENANCE

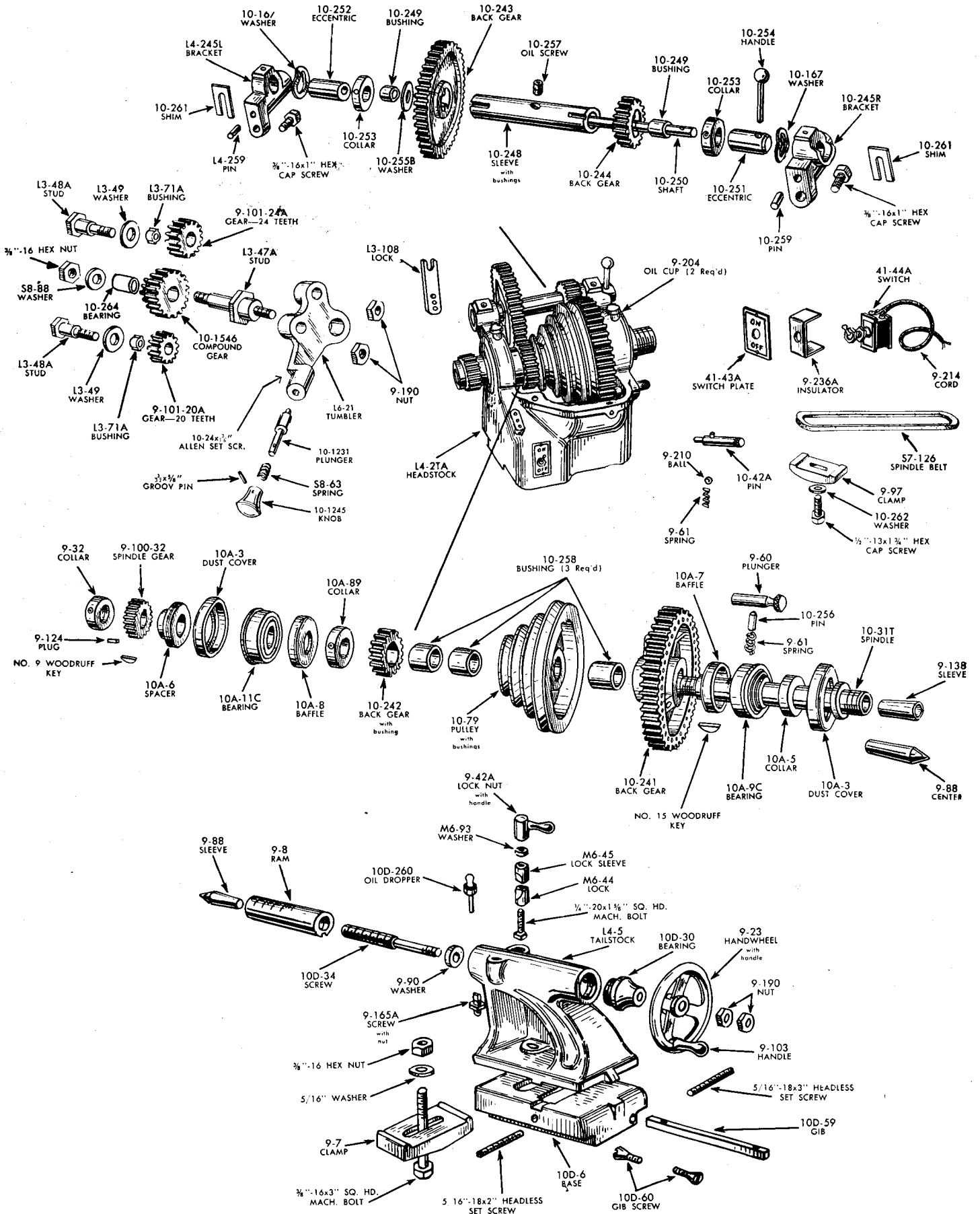
1. CAUTION — do not shift the reverse tumbler lever or either of the Quick-Change gear levers when lathe is turning at high speeds or under heavy loads.

2. Do not shift sliding gear when lathe is in motion.
3. If Quick-Change levers do not index, do not force, merely rotate spindle, pulling on belt by hand, until levers slide easily into position.
4. Keep metal chips from piling up underneath gear box — they may cause serious damage to the gear train.
5. Be sure tumbler lever is in correct position for threading — up for right hand feed, down for left hand feed.

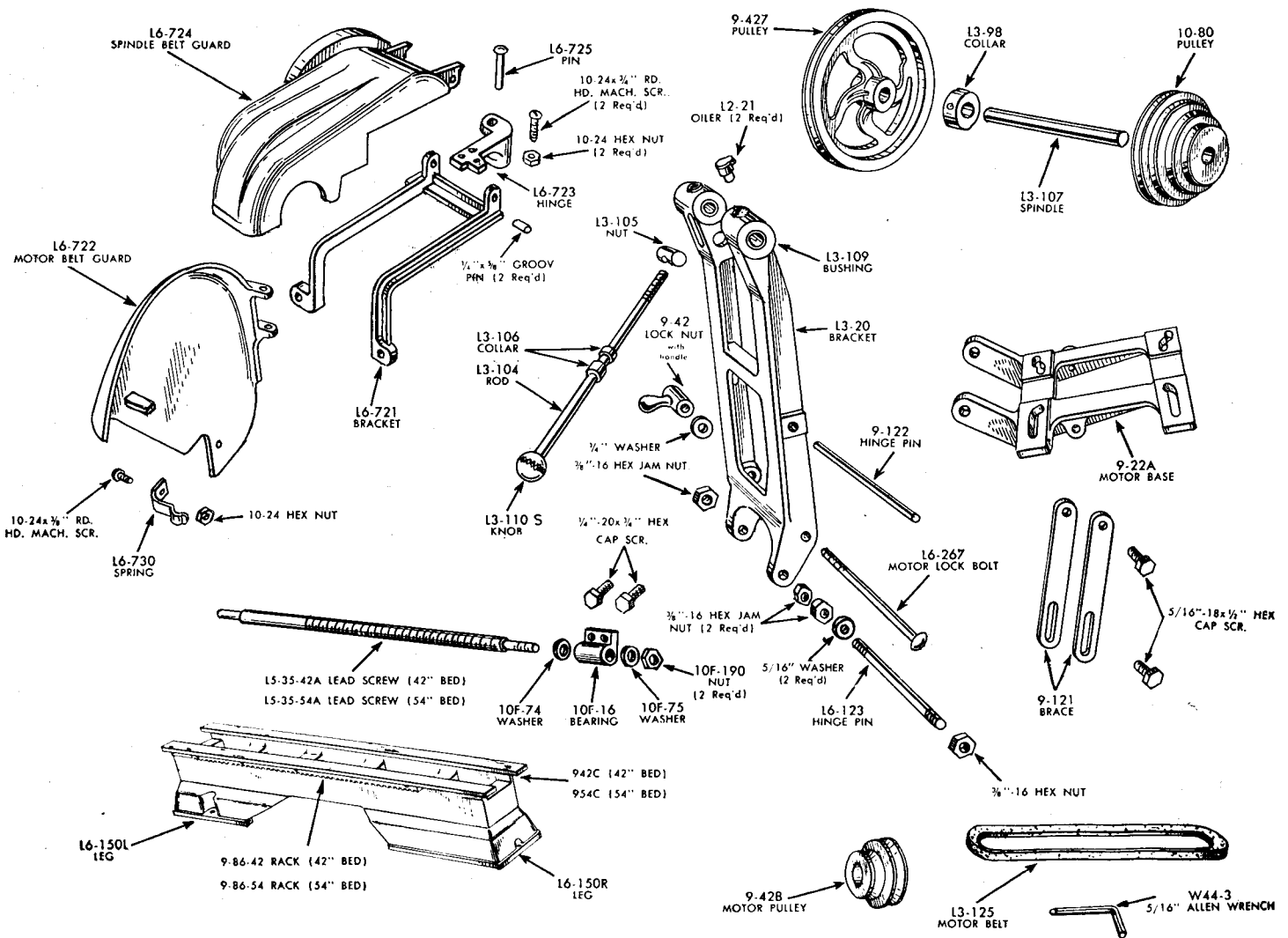
Threads Per Inch	Equivalent Feed In Inches	Threads Per Inch	Equivalent Feed In Inches	Threads Per Inch	Equivalent Feed In Inches
4	.250	18	.0555	80	.0125
4.5	.222	20	.0500	88	.0113
5	.200	22	.0454	92	.0108
5.5	.1818	23	.0434	96	.0104
5.75	.1739	24	.0416	104	.0096
6	.1666	26	.0384	112	.0089
6.5	.1538	28	.0357	120	.0083
7	.1428	30	.0333		
7.5	.1333	32	.0312		
8	.1250	36	.0277		
9	.1111	40	.0250		
10	.1000	44	.0227		
11	.0911	46	.0217		
11.5	.0869	48	.0208		
12	.0833	52	.0192		
13	.0769	56	.0178		
14	.0714	60	.0166		
15	.0666	64	.0156		
16	.0625	72	.0138		
				Carriage Feeds	Equivalent Threads Per Inch
				.0042	240
				.0044	224
				.0048	208
				.0052	192
				.0055	184
				.0057	176
				.0063	160
				.0069	144
				.0078	128

Fig. 5 Thread and Feed Chart.

HEADSTOCK AND TAILSTOCK PARTS



COUNTERSHAFT, BED AND LEAD SCREW PARTS



PARTS PRICE LIST

When ordering, always give Part Number, Name of Part and Model Number.

All parts are shipped prepaid except those marked with an asterisk (*).

Standard parts, such as bolts, nuts, washers, etc., shown on the picture parts list without part numbers should be purchased locally.

PART NO.	NAME	PREPAID SELLING PRICE EACH
*942C	42" Bed. for No. 2743	\$69.90
*954C	54" Bed. for No. 2744	85.40
9-7	Tailstock Clamp	.95
9-8	Tailstock Ram	6.10
9-13	Split Nut Guide	1.40
9-14	Carriage Clamp	.70
9-22A	Motor Base	4.20
9-23	Handwheel, with handle (2 Req'd)	8.60
9-32	Spindle Collar	1.25
9-37A	Carriage Slide Guard	1.10
9-39	Tool Post	2.90
9-40	Tool Post Washer	.90
9-41	Tool Post Rocker	.75
9-42	Motor Base Lock Nut	.95
9-42A	Ram Lock Nut	.95
9-53	Shim	.20
9-60	Plunger	.20
9-61	Plunger Spring (4 Req'd)	.20
9-62	Threading Dial	.75
9-63	Threading Dial Body	.90
9-64	Threading Dial Gear	.75
9-65	Threading Dial Shaft	.25
9-66	Split Nut Stud (2 Req'd)	.30
9-67	Handwheel Shaft	1.70
9-68	Carriage Pinion Shaft	1.10
9-69A	Quadrant Gear Bolt (2 Req'd)	.30
9-70A	Quadrant Gear Bushing (2 Req'd)	.65

PART NO.	NAME	PREPAID SELLING PRICE EACH
9-73A	Change Gear Sleeve (2 Req'd)	.90
9-86-42	Carriage Rack, 42" Bed	5.20
9-86-54	Carriage Rack, 54" Bed	6.60
9-88	Center, #2 Morse Taper (2 Req'd)	2.65
9-90	Ram Screw Thrust Washer	.85
9-92A	Change Gear Guard Hinge Pin	.85
9-93	Change Gear Washer (8 Req'd)	.30
9-97	Headstock Clamp	1.40
9-100-32	Spindle Gear	1.10
9-101-20A	Reverse Tumbler Gear — 20 Teeth	.75
9-101-24A	Reverse Tumbler Gear — 24 Teeth	.95
9-101-40A	Sliding Gear — 40 Teeth	1.10
9-101-48A	Quadrant Gear — 48 Teeth (2 Req'd)	1.30
9-102-12S	Carriage Traverse Gear (2 Req'd)	1.10
9-102-24	Carriage Traverse Gear (2 Req'd)	1.10
9-103	Handwheel Handle (3 Req'd)	.45
9-104	Cross Feed Wheel Handle (4 Req'd)	.45
9-115	Combination Wrench	.95
9-121	Motor Base Brace (2 Req'd)	.70
9-122	Motor Base Hinge Pin	.40
9-124	Set Screw Plug	.20
9-136A	Tool Post Anchor	.90
9-137A	Tool Post Anchor Stud	.75
9-138	Center Sleeve	2.60
9-139L	Tool Holder	2.50
9-148	Tool Post Set Screw	.70

PARTS PRICE LIST CONT'D

PREPAID SELLING		PREPAID SELLING			
PART NO.	NAME	PRICE EACH	PART NO.	NAME	PRICE EACH
9-155	Threading Dial Screw Washer (2 Req'd)	.20	10F-17	Mitre Gear Stud	1.15
9-165A	Tailstock Ram Set Screw, w/nut	.20	10F-19	Carriage Slide Nut	1.70
9-179	Threading Dial Screw (2 Req'd)	.40	10F-33	Cross Feed Screw Gear	1.70
9-190	Special 3/8" - 16 Hex Jam Nut (5 Req'd)	.20	10F-36	Cross Feed Slide Screw	2.85
9-204	Oil Cup (2 Req'd)	.45	10F-45	Feed Screw Bushing (2 Req'd)	.40
9-210	3/16" Steel Ball (3 Req'd)	.20	10F-46	Cross Feed Screw Bearing	4.25
9-214	Cord	.90	10F-54	Carriage Bearing Plate (front)	1.40
9-236A	Switch Insulator	.20	10F-55	Carriage Bearing Plate (rear)	1.40
9-304	Tool Post Slide Gib	.75	10F-57	Carriage Gib	.95
9-306	Feed Screw Nut	1.70	10F-62	Graduated Dial (2 Req'd)	1.15
9-307	Thrust Plate	.85	10F-71	Collar (2 Req'd)	.95
9-427	Countershaft Pulley	7.70	10F-74	Feed Screw Thrust Washer (left)	.40
9-428	Motor Pulley, 1/2" bore	2.70	10F-75	Feed Screw Thrust Washer (right)	.40
9-729	Knob	.30	10F-81	Cross Feed Mitre Gear Bearing, with bushing	1.95
			10F-82A	Cross Feed Mitre Gear	1.75
10-29	Split Nut Lever	1.25	10F-83	Cross Feed Mitre Gear	1.10
10-31T	Spindle	20.50	10F-84	Cross Feed Gear Shift Knob	.65
10-42A	Pulley Index Pin	.50	10F-85	Gear Bearing Shim	.20
10-56	Cross Feed Gib	.85	10F-129	Shift Gear Shaft	.75
10-79	Spindle Pulley	6.20	10F-130	Felt Oiler (4 Req'd)	.20
10-80	Countershaft Pulley	5.50	10F-131	Wiper (4 Req'd)	.20
10-167	Back Gear Tension Washer (2 Req'd)	.20	10F-132R	Wiper Retainer (2 Req'd)	.25
10-225	Gib Screw Nut (3 Req'd)	.20	10F-132L	Wiper Retainer (2 Req'd)	.25
10-226	Gib Screw Nut (3 Req'd)	.20	10F-159	Carriage Shim (rear)	.30
10-241	Spindle Back Gear	7.70	10F-160	Carriage Shim (front)	.25
10-242	Spindle Back Gear	3.30	10F-190	Lead Screw Jam Nut (2 Req'd)	.20
10-243	Back Gear	6.20	10F-305	Compound Rest Feed Screw	1.80
10-244	Back Gear	2.90			
10-245F	Back Gear Bracket	3.30	41-43A	Switch Plate	.45
10-248	Back Gear Sleeve	3.50	41-44A	Switch	2.20
10-250	Back Gear Shaft	1.15			
10-251	Back Gear Eccentric (right)	.95	BD1-24	Collar (2 Req'd)	.45
10-252	Back Rear Eccentric (left)	.95			
10-253	Set Collar (2 Req'd)	.95	L2-21	Gits Oiler (2 Req'd)	.40
10-254	Eccentric Handle	.95	L2-61	Ball Crank, with handle	1.80
10-256	Back Gear Lock Pin	.75			
10-257	Back Gear Oil Screw	.20	L3-20	Countershaft Bracket	4.55
10-258	Bushing (3 Req'd)	.75	L3-47A	Spindle Gear Stud	.75
10-259	Dowel Pin	.20	L3-48A	Reverse Idler Stud (2 Req'd)	.45
10-261	Back Gear Shim (2 Req'd)	.20	L3-49	Reverse Idler Stud Washer (2 Req'd)	.45
10-262	Headstock Clamp Washer	.20	L3-71A	Gear Bushing (2 Req'd)	.70
10-264	Compound Tumbler Gear Bearing	1.50	L3-98	Countershaft Collar	.50
10-301	Compound Rest Swivel (lower)	11.00	L3-104	Countershaft Tension Rod	1.50
10-302	Compound Rest Swivel (upper)	11.00	L3-105	Countershaft Tension Rod Nut	1.25
10-309	Swivel Lock Plunger Pin (2 Req'd)	.40	L3-106	Countershaft Tension Rod Collar (2 Req'd)	.75
10-1225	Stack Gear Spindle Collar (3 Req'd)	.85	L3-107	Countershaft Spindle	2.20
10-1231	Lever Plunger (3 Req'd)	.85	L3-108	Countershaft Tension Rod Lock	.50
10-1244	Lever Sleeve (3 Req'd)	1.10	L3-109	Countershaft Bracket Bushing (2 Req'd)	.50
10-1245	Lever Knob (3 Req'd)	1.25	L3-110	Knob, use L3-110S	.90
10-1508	Compound Gear Spindle	2.60	L3-110S	Knob	2.10
10-1512	Stack Tumbler Drive Gear - 20 Teeth	1.75	L3-125	Motor Belt	7.10
10-1513X	Stack Tumbler Gear - 45 Teeth, w/bushing	3.30	L3-303	Tool Post Slide	
10-1515	Stack Gear - 18 Teeth	1.75			
10-1516	Stack Gear - 20 Teeth	1.75	L4-2TA	Headstock	29.00
10-1517	Stack Gear - 22 Teeth	1.85	L4-5	Tailstock	19.40
10-1518	Stack Gear - 23 Teeth	1.95	L4-245L	Back Gear Bracket	3.30
10-1519	Stack Gear - 24 Teeth	1.95	L4-259	Dowel Pin	.20
10-1520	Stack Gear - 26 Teeth	2.10			
10-1521	Stack Gear - 28 Teeth	2.30	L5-35-42A	Feed Screw, for 42" Bed	10.50
10-1522	Stack Gear - 30 Teeth	2.60	L5-35-54A	Feed Screw, for 54" Bed	13.50
10-1523	Compound Tumbler Drive Gear - 20 Teeth	1.85	L5-95	Gear Guard Bracket	3.30
10-1524X	Compound Tumbler Gear - 32 Teeth, w/bushing	2.95	L5-96A	Gear Guard Bracket Plate	1.10
10-1525	Compound Gear - 16 Teeth	1.75			
10-1533	Stack Gear Spindle Collar (3 Req'd)	.55	L6-9A	Carriage Apron	11.70
10-1534	Compound Gear Collar	.90	L6-21	Reverse Gear Tumbler	1.70
10-1539	Compound Gear Plate	.25	L6-38	Split Nut Scroll	.85
10-1543	Compound Gear Bushing	.25	L6-123	Countershaft Bracket Hinge Pin	.70
10-1545	Change Gear Tumbler Bushing (4 Req'd)	.40	L6-150L	Bench Leg (left)	8.10
10-1546	Reverse Tumbler Gear Assembly	2.00	L6-150R	Bench Leg (right)	8.10
10-1548 X	Lock Assembly	.90	L6-263	Plunger Return Spring	.30
10-1560X	Compound Gear Ass'y, includes 10-1528, 10-1529 and (2) 10-1263	7.90	L6-264	Spring Spacer	.25
10-1561X	Compound Gear Ass'y, includes 10-1526, 10-1527, and 10-1263	5.95	L6-265	Plunger	.50
10-1562X	Compound Gear Ass'y, includes 10-1526, 10-1527, and 10-1542	6.15	L6-267	Motor Tension Lock Bolt	.25
10-1563	Bushing (3 Req'd)	.25	L6-721	Belt Guard Bracket	4.40
10-1586	Lever, w/guide (2 Req'd)	6.35	L6-722	Motor Belt Guard	11.70
10-1588	Tumbler Lever Shaft (2 Req'd)	.40	L6-723	Outer Belt Guard Hinge	.95
10-1592	Compound Gear Bushing (2 Req'd)	.45	L6-724	Belt Guard	14.70
			L6-725	1/4" x 2 1/4" Rd. Hd. Rivet	.20
10A-3	Dust Cover (2 Req'd)	.70	L6-730	Guard Latch Spring	.25
10A-5	Spindle Collar	1.40	L6-1001	Gear Housing, w/bushings and oilers	18.35
10A-6	Spindle Spacer	1.40	L6-1002	Housing Support Bracket	4.40
10A-7	Inside Baffle Plate	.65	L6-1004L	Gear Guard - Lower	7.60
10A-8	Inside Baffle Plate (left)	.65	L6-1004U	Gear Guard - Upper	5.50
10A-9C	Spindle Bearing (front)	15.55	L6-1007	Change Gear Quadrant	5.50
10A-11C	Spindle Bearing (rear)	13.90	L6-1009	Stack Gear Spindle	2.20
10A-89	Spindle Thrust Collar	.95	L6-1011	Gear Tumbler Spindle	2.20
			L6-1014	Stack Gear - 16 Teeth	1.75
10D-6	Tailstock Base	6.60	L6-1030	Feed Screw Gear - 30 Teeth	2.65
10D-30	Tailstock Screw Bearing	1.60	L6-1031	Threading Chart	2.60
10D-34	Tailstock Ram Screw	1.80	L6-1032	Compound Gear Spacer	.20
10D-59	Tailstock Gib	1.10	L6-1036	Stack Gear Spindle Key	.45
10D-60	Tailstock Gib Adj. Screw (2 Req'd)	.30	L6-1040	Feed Screw Gear Shaft	2.95
10D-260	Oil Dropper	.40	L6-1054	Tumbler Spindle Retaining Ring, 3/8" hole	.20
10D-262	Special Ball Crank Nut (2 Req'd)	.20	L6-1056	Feed Screw Retaining Ring, 1" hole	.20
10D-408	Compound Rest Ball Crank, w/handle	1.75	L6-1057	Spacer	.20
10F-9	Carriage	20.20	M6-44	Tailstock Ram Lock Sleeve	.25
10F-11	Traverse Gear Case	1.25	M6-45	Tailstock Ram Lock Sleeve	.25
10F-11X	Traverse Gear Case Assembly	4.00	M6-93	Tailstock Ram Washer	.20
10F-12	Split Nut, 1 pr.	1.60			
10F-12XS	Half-nut Assembly	5.30	S7-126	Spindle Belt	2.35
10F-16	Feed Screw Bearing	1.15	S7-217	Oiler	.80
			S8-63	Lever Plunger Spring (3 Req'd)	.20
			S8-88	Compound Tumbler Washer	.20
			W30-16	Oiler (3 Req'd)	.25
			W44-3	5/16" Allen Wrench	.20

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE