



CATALOG NO.103UG-GR

STYLES 39500UG 39500UM

THREADING DIAGRAM AND ILLUSTRATED PARTS LIST

FIRST EDITION



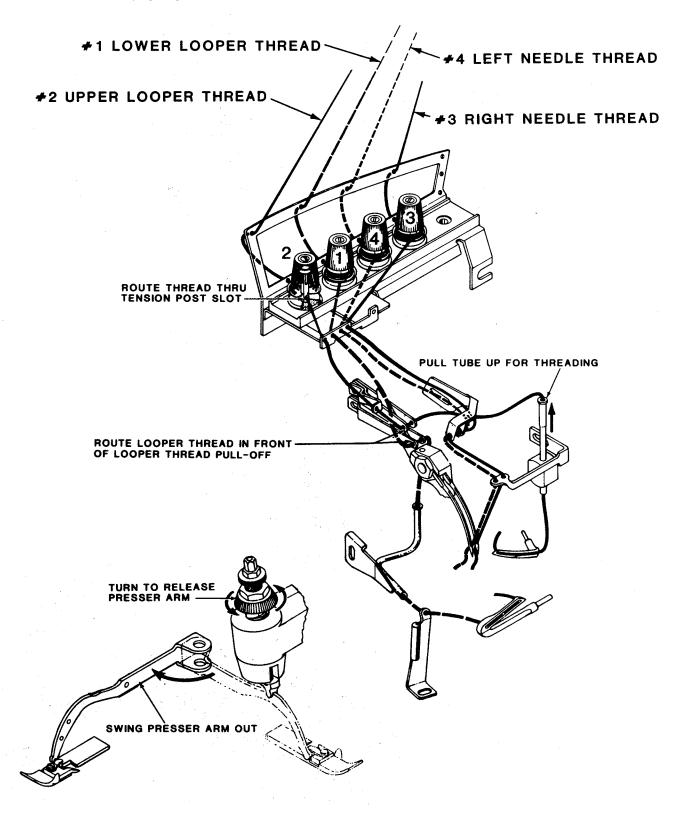
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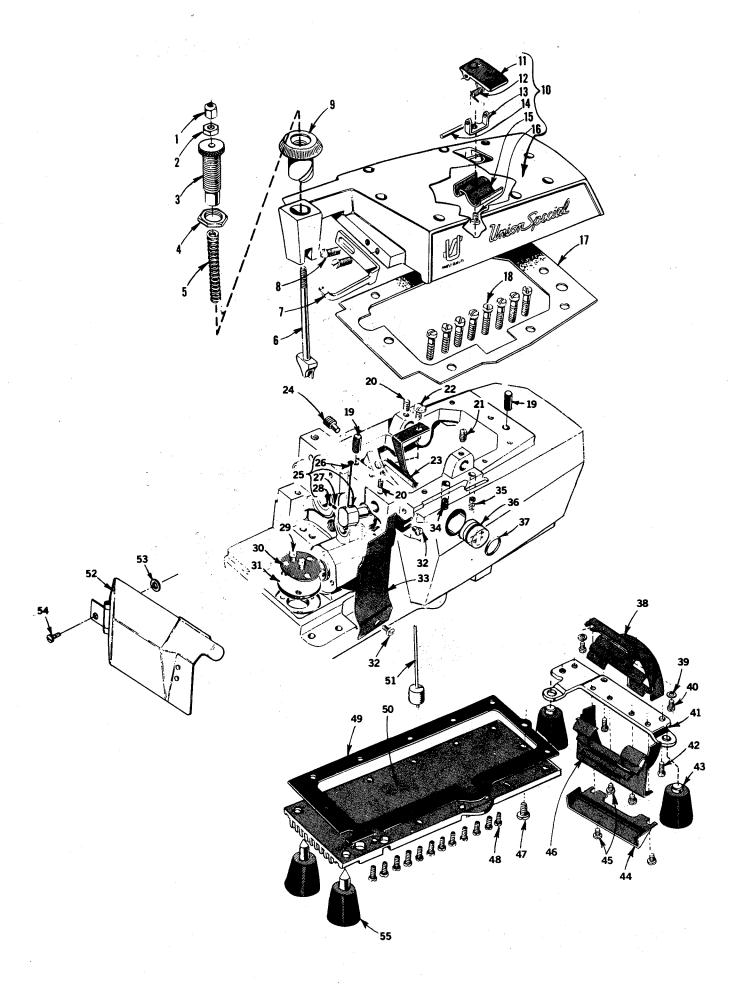
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39500 UG-1/8 THREADING DIAGRAM

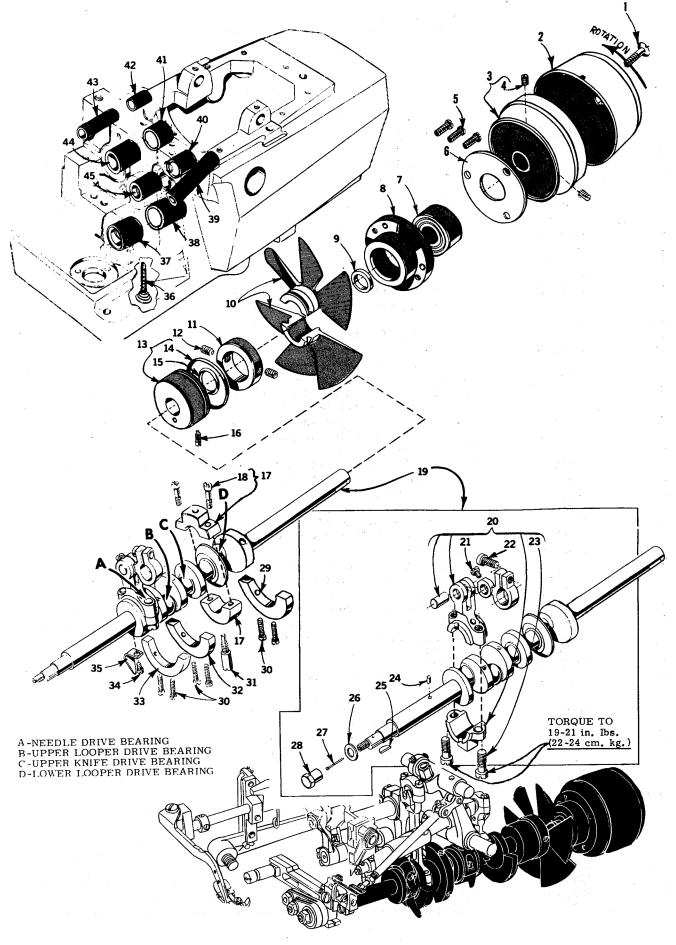


Thread machine in sequence as shown: (1) lower looper thread, (2) upper looper thread, (3) right needle thread and (4) left needle thread.



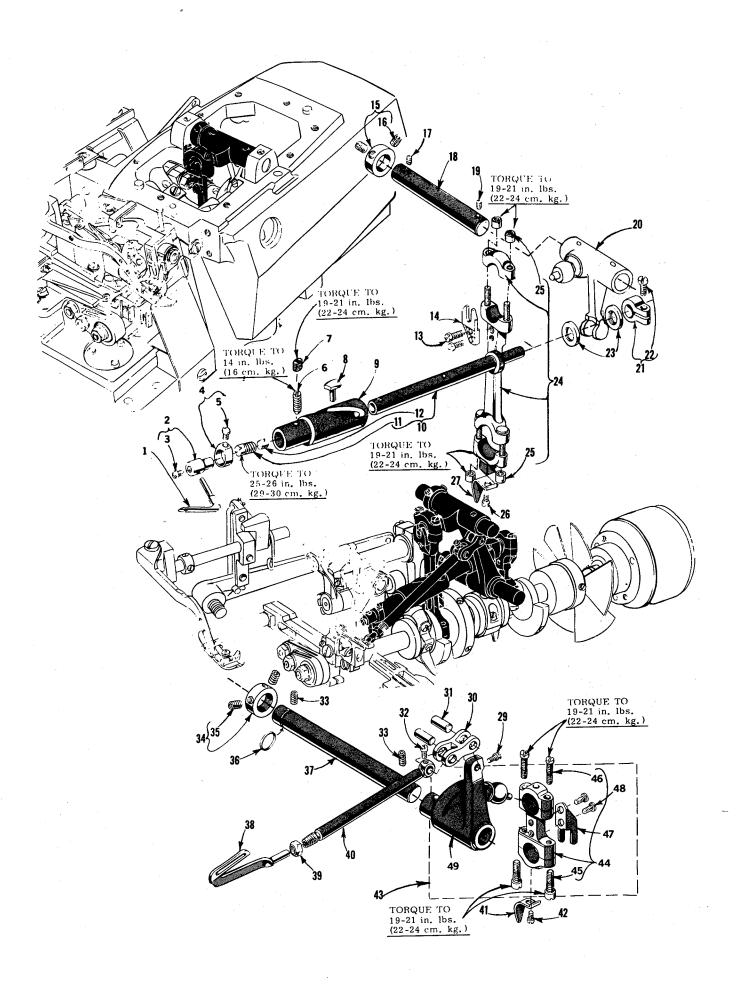
MAIN FRAME, PRESSER FOOT RELEASE PARTS, MISCELLANEOUS COVERS AND PLATES

Re No			Part No.			<u>Description</u>	Amt. Req.
1			39557	В .		Presser Spring Plunger Cap Nut	. 1
2			39557			Presser Spring Plunger Locking Nut	
3		, i	39557	C			
4		٠.	39557	F		Presser Spring Plunger Adjusting ScrewLock Nut, for adjusting screw	- ī
5			39557	100		Presser Spring	- 1
6			39557			Presser Spring Plunger	- 1
7			39563			Top Cover Needle Thread Eyelet	
8			22569	_		Screw, for top cover needle thread eyelet	- 2
9 10			39556 39582			Presser Foot Release Bushing	- 1
11			39582			Top CoverOil Filler Cover	- 1
12			39582			Spring	
13			39582			Hinge Bracket	
14				103 B	lk.	Hinge Pin	- 1
15			39582		• • • •	0il Guard	- 1 - 1
16			22562			Screw, for hinge bracket	
17			39582	BZ		Top Cover Gasket	<u> </u>
18			22541			Screw, for top cover	- 8
19			667	D-8		Dowel Pin	- 2
20			22565			Set Screw, for upper looper thread tube assembly and for upper looper drive lever shaft	2
21			22565	S		Spot Screw, for upper looper drive lever shaft	
22			22569			Screw, for oil collector plate	_ 1
23			39594	R		Oil collector Plate	- 1
24			22571	E		Magnetic Oil Drain Plug Screw	
25			29477			Upper Looper Thread Tube Assembly	- ī
26			39568			Thread Tube	- 1
27			39568	J.		Thread Tube Tension Spring	
28			22743			Set Screw, for thread tube tension spring	
29			22760			Screw, for oil filter screen and strainer	- 2
30 31			39594			Oil Filter Screen	
32			39594 22569			Oil strainer, felt	
33			39578 I			Screw, for chip guard	- 2
34			22569			Chip Guard	· 1
35			22894	••		Screw, for lower looper bar driving lever shaft	
36			39593			Oil Sight Gauge	. 2
37			660-			Oil Gauge Seal Ring	. 1
38			39582	BV		Air Duct, upper	- 1
39			8372	A	•	Washer, for upper air duct	
40			22569 (Screw, for upper air duct	- 2
41			39582 I		•	Base Plate	- 1
42			22541 I	В		Screw, for base plate	
43			39595			Isolator	. 2
44			39582 1			Air Duct, outer	
45			22569 [Screw, for lower and outer air duct	- 4
46 47	****		39582 I			Air Duct lower	
48			22586 1 22541 I			Screw, for bottom cover	
49			39582 E			Screw, for bottom cover	
50			39582 [Bottom Cover GasketBottom Cover	
51			39593 N	* ***		Oil Gauge Indicator Assembly	
52			39582 [Feed Bar Cover Assembly	1
53			39198			Washer	1
54			22758 (Screw	. 1
55			51295 E			Isolator	. 2
							4



CRANKSHAFT MECHANISM AND BUSHINGS

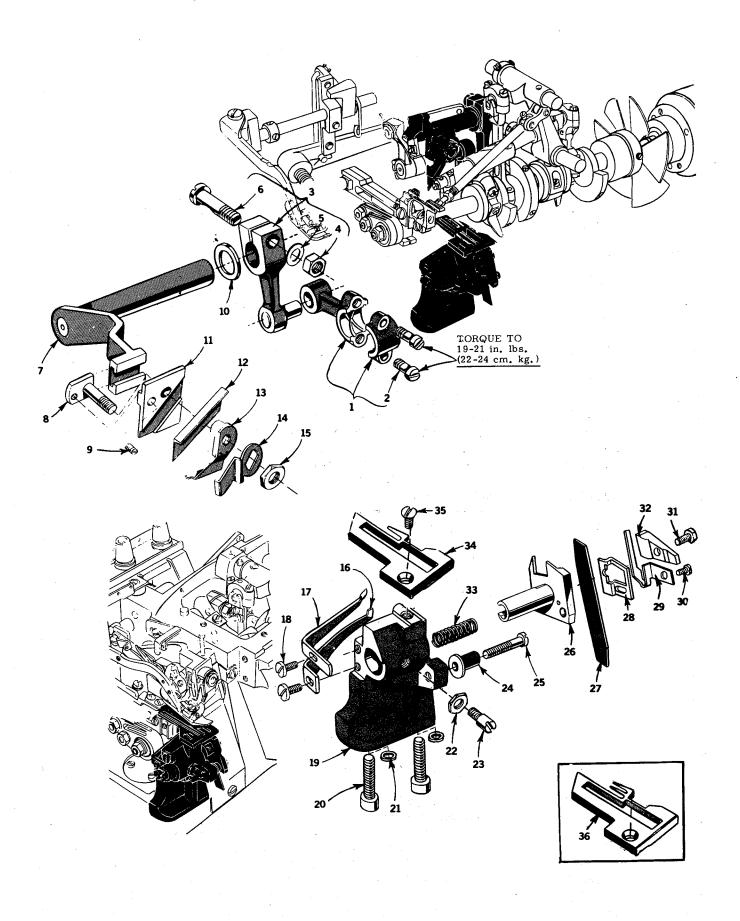
Ref.	Part		Amt.
No.	No.	Description	Req.
1	22769 B	Screw, for pulley capPulley Cap	. 1
2	39521 D	Pulley Cap	1
3	39521 G	Pulley	.]
4	95	Screw, for pulley	
5	22569 Y	Screw, for crankshaft ball bearing retaining plate -	. 3
6	39590 H	Crankshaft Ball Bearing Retaining plate	. 1
7	660-835	Crankshaft Rall Roaring	7
8	39590 G	Crankshaft Ball Bearing Housing	1
9	39590 J	Thrust WasherCrank Chamber Cooling Fan	. 1
10	39591 L	Crank Chamber Cooling Fan	.]
11	39591 H	Crank Chamber Cooling Fan Collar	.]
12	22894 D	Spot Screw, for crank chamber cooling fan collar	
13	39590 Y	Crankshaft Bearing, inner right	. 1
14	660-443	"O" Ring, for crankshaft bearing, inner right -	
15	660-764	Oil Seal	•
16	22565 F	Screw, for crankshaft bearing, inner right	
17	39590 D	Crankshaft Split Bearing	1
18	97 A	Screw, for crankshaft split bearing	2
19	29477 JM	Crankshaft and Needle Driving Arm Crank Assembly	1
20	29477 MC	Needle Driving Arm Crank and Connecting Rod	•
21	22760 C	Assembly	. 1
21	22768 C	Screw, for needle driving arm connecting	,
22	22596 Н	rod pin	
23	22587 M	Screw, for needle driving arm crank	.]
23	22307 M	Screw, for needle driving arm connecting rod	2
24	51-228 Blk.	Vent Plug	
25	39541 A	Feed Driving Eccentric Key	
26	40-46	Washer	. 1
27	39593 U-126	Washer	. 1
28	39536 FN	Nut, for crankshaft	. i
29	39591 B	Crankshaft Counterweight, right	. i
30	22747 B	Screw, for crankshaft counterweights	6
31	39590 N	Stud, for crankshaft split bearing	
32	39591 A	Crankshaft Counterweight, middle	. i
33	39591 K	Crankshaft Counterweight, left	. i
34	87 U	Screw, for oil Splasher	. i
35	39594 N	Oil Splasher	, j
36	666-94	Oil Wick and Spring	, j
37	39590	Crankshaft Bushing, left	. 1
38	39590 T	Crankshaft Bushing, inner left	. 1
39	39544 X	Lower Looper Bar Bushing	. 1
40	39552 Z	Needle Driving Arm Crank Bushing, right	. 1.
41	39573 AA	Upper Knife Driving Arm Bushing, right	. 1
42	39555 N	Foot Lifter Shaft Bushing, right	. 1
43	39555 P	Foot Lifter Shaft Bushing, left	. 1
44	39573 K	Upper Knife Driving Arm Crank Bushing, left	
45	39552 AL	Needle Driving Arm Crank Bushing, left	, 1



UPPER AND LOWER LOOPER DRIVING PARTS

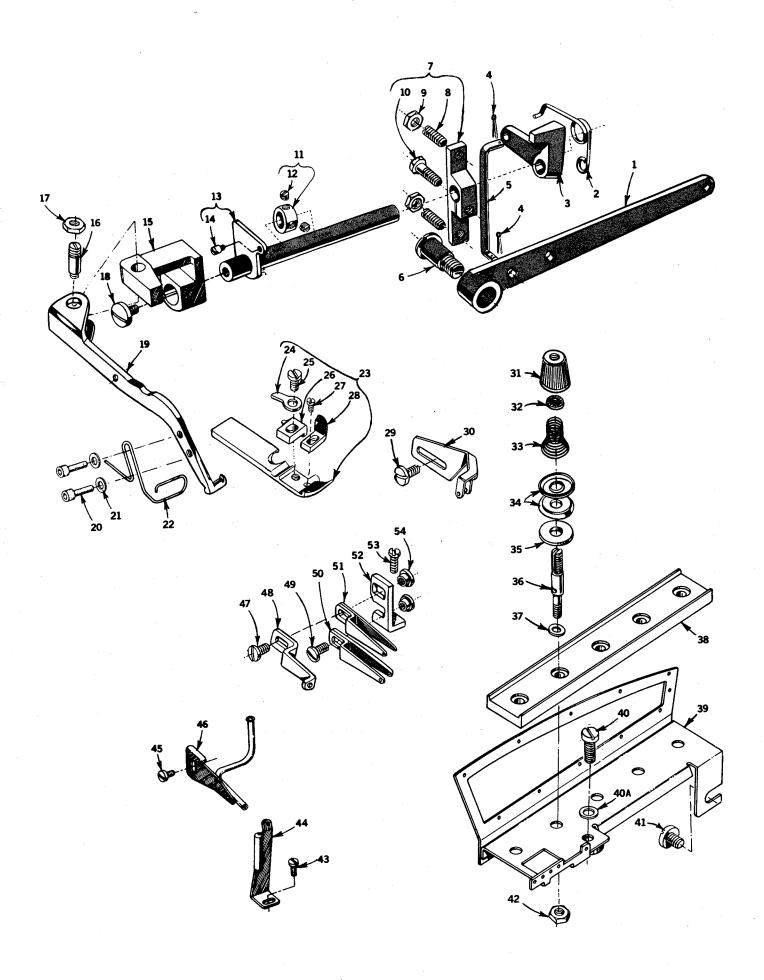
Ref.	Part No.	<u>Description</u>	Amt. Req.
1	39508 A	Upper Looper, marked "CC"	. 1
2	39543	Upper Looper Holder	i
3	22564 G	Screw, for upper looper	j
4	39543 A	Upper Looper Holder Collar	. i
5	77	Screw, for upper looper holder collar	i
6	22565 H	Spot Screw, for bushing and cam guide	1
7	1025 L	Lock Screw, for bushing and cam guide screw	i
/ 8*	39543 T	Cam Follower	. 1
9*	39543 S	Bushing and Cam Guide	. i
10*	39543 K	Upper Looper Drive Shaft	. 1
11	22503 F	Screw, for cam follower locking clamp	. i
12	39543 E	Cam Follower Locking Clamp	•
13	97	Screw, for ball joint guide fork	
14	39544 J	Ball Joint Guide Fork, for upper looper drive lever	. ī
15	482 C	Upper Looper Shaft Collar	
16	22894 C	Set Screw, for upper looper shaft collar	. 2
17	22565	Set Screw, for upper looper rock shaft	. ī
18	39543 X	Upper Looper Drive Lever Shaft	. i
19	22565 S	Spot Screw, for upper looper drive lever shaft	. i
20	39543 W	Upper Looper Drive Lever	. i
21	39543 AJ	Clamp Collar, for upper looper drive shaft	. i
22	22875 L	Screw, for clamp collar	. i
23	39543 P	Upper Looper Drive Shaft Thrust Washer	
23 24	39543 AK	Upper Looper Drive Lever Connecting Rod	. ī
25	39543 AF	Nut hamal	_ /
26	87 U	Screw, for oil splasher	. i
27	39594 N	Oil Splasher	. i
29	77	Screw, for lower looper bar connecting link pin	. i
30	39544 B	Lower Looper Bar Connecting Link	. i
31	39544 D	Lower Looper Bar Connecting Link Pin	
32	77	Screw, for lower looper bar connecting link pin	. ī
33	22894 AE	Set Screw, for lower looper driving shaft	- 2
34	482 C	Lower Looper Driving Shaft Collar	
35	22894 C	Set Screw, for lower looper driving shaft collar	2
36	660-206	"O" Ring, for lower looper driving shaft	
37	39544 V	lower Looper Driving Shaft	- 1
38	39508 P	Lower LooperNut, for lower looper bar	- i
39	39151	Nut. for lower looper bar	- 1
40	39544	Lower Looper Bar	- 1
41	39594 N	Oil Splasher	- 1
42	87 U	Screw, for oil splasher	- 1
43	29126 DF	Lower Looper Bar Driving Lever and Connecting Rod	
		Assembly	- 1
44	39544 N	Lower Looper Drive Lever Connecting Rod	-
45	22729 E	Screw, for connecting Rod	
46	22729 D	Screw, for connecting rod	- 2
47	39544 S	Ball Joint Guide Fork	- 1
48	97	Screw, for ball joint guide fork	- 2
49	39544 U	Lower Looper Bar Driving Lever	- 1

^{*} The use of assembly No. 29126 EC is recommended instead of the individual parts.



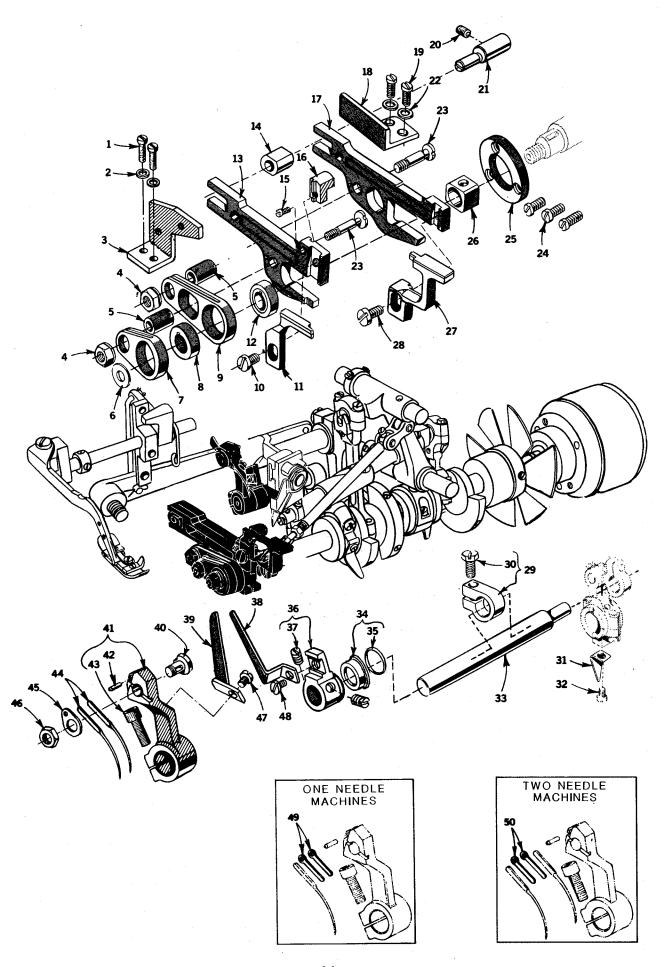
UPPER AND LOWER KNIFE

Ref.	=		Description	Amt. Req.
1		3 AD	Upper Knife Driving Connecting Rod	
2	2258	7 J	Screw, for upper knife driving connection rod -	
3	3957	3 E	Upper Knife Driving Lever	
4	5523	5 E	Nut, for upper knife driving lever	.]
5	604	2 A	Washer, for upper knife driving lever	. 1
6	5523	5 D	Locking Stud, for upper knife driving lever	. 1
7	3957	3 H	Upper Knife Driving Arm	.]
8	3957	'1 D	Upper Knife Clamp Stud	.]
9	2273	8	Screw, for upper knife clamp stud	. 1
10	3957	'3 A	Upper Knife Driving Arm Washer	.]
11	3957	2	Upper Knife Holder Block	. 1
12	3957	0	Upper Knife	.]
13	3957	1 F	Upper Knife Clamp	. 1
14	3957	1 B	Upper Knife Chain Guard	. 1
15	1407	77	Nut. for upper knife clamp stud	.]
16	3952	.5	Needle Guard, front	. 1
17	3952	5 E	Needle Guard, rear	. 1
18	2258	5 A	Screw, for needle guards	· 2
19	3958	O AJ	Throat Plate and Lower Knife Support Bracket	. 1
20	2265	3 B-12	Screw, for throat plate and lower knife support	- 2
21	3958	n F	Washer, for throat plate and lower knife support	_
	0300		bracket	. 2
22	1407	'7	Nut, for lower knife holder locking screw	
23	2289		Locking Screw, for lower knife holder	. 1
24	395		Lower Knife Holder Locating Stud	. j
25	2272		Screw, for lower knife holder locking stud	- 1
26		O AK	Lower Knife Holder	. i
27	3954		Lower Knife	. i
28		O AC	Knife Guide Plate	. j
29		O AE	Lower Knife Clamp Spring	. j
30)5 A	Screw, for lower knife clamp spring	- i
31	2258		Screw, for lower knife clamp	- j
32		O AD	Lower Knife Clamp	- j
33	395!		Lower Knife Holder Spring	. i
34	C3952		Throat Plate, Marked "LD", for Single Needle	-
			Machines	- 1
35	2252		Screw, for throat plate	- 1
36	C395	24 BA-1/8	Throat Plate, Marked "EM", for Two Needle Machines	- 1



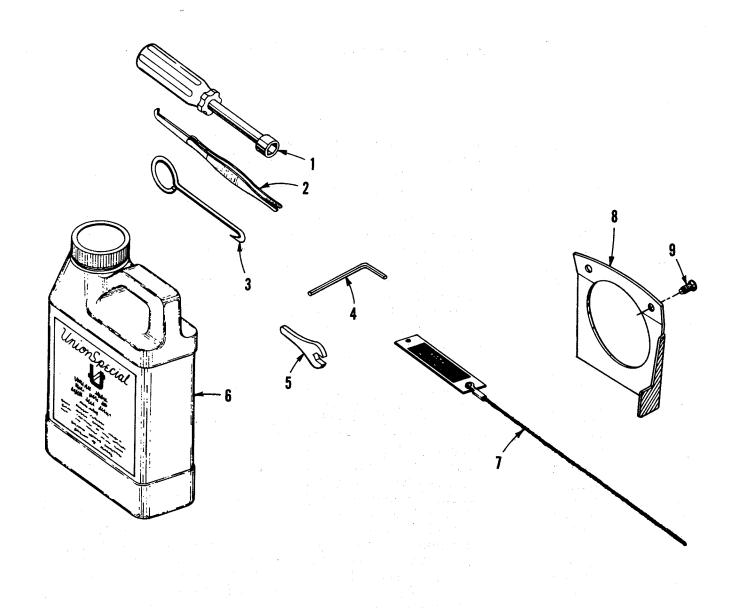
FOOT LIFTER, THREAD TENSION PARTS AND MISCELLANEOUS EYELETS

Ref.	Part		Amt.
No.	No.	Description	Req.
1	39855	Foot Lifter Lever	- 1
2	39555 B	Foot Lifter Lever Spring	- !
3	39555 D	Foot Lifter Intermediate Lever	- I - 2
4	660-142	Cotter Pin, for foot lifter lever connecting link Foot Lifter Lever Connecting Link	- Z - 1
5 6	39555 F 22566 B	Screw, for foot lifter lever	- - i
7	39555 C	Foot Lifter Lever Arm	- 1
8	22597 E	Set Screw, for foot lifter lever arm	- 2
ğ	12538	Lock Nut. for foot lifter lever arm	- 2
10	627	Screw, for foot lifter lever arm	- 1
11	12865	Foot Lifter Lever Shaft Thrust Collar	- 1
12	88	Screw, for foot lifter lever shaft collar	- 2
13	39555 AE	Presser Arm Support Bracket Shaft	-
14	22845 B	ScrewPresser Arm Support Bracket	- I - 1
15	39555 AF	Screw Pin, for presser arm	- ; 1
16 17	22791 H 258 A	Nut, for presser arm screw	<u> </u>
18	88 D	Screw	. . j
19	39556 S	Presser Arm	- 1
20	99360	Screw	- 2
21	95956	Washer	· - 2
22	99682 L	Finger Guard	-]
23	39520 BA	Presser Foot	· - !
24	39530 G	Hinge Spring	·- 1
25	22768 B	Screw, for stitch tongue and hinge spring Stitch Tongue, Marked "EK"	·- 1 1
26 27	39597 AB 22738	Screw, for chip guard	i
27 28	39530 P	Chip Guard	i
29	22569 D	Screw	. - j
30	39563 N	Needle Thread Evelet	1
31	39592 Z	Needle Tension Nut. Yellow. Left	1
-	39592 AA	Needle Tension Nut. Green, right	1
	39592 AB	Upper Looper Tension Nut, Blue	1
	39592 AC	Lower Looper Tension Nut, Red]
32	39592 AK	Tension Spring Ferrule	
33	39592 AR-5	Needle Thread Tension Spring, left, 2 needle machines	;]
	39592 AR-4 39592 AR-1	Needle Thread Tension Spring, right, 2 needle machines Looper Thread Tension Spring, 2 needle machines	2
	39592 AR-1 39592 AR-2	Needle Thread Tension Spring, single needle machines	- l
	39592 AR-4	Looper Thread Tension Spring, single needle machines	 2
34	39592 AD	Thread Tension Disc	- 6 or 8
35	39592 AF	Tension Disc Felt	- 3 or 4
36	39592 AL	Tension Post	- 3 or 4
37	8372 A	Washer	- 3 or 4
38	39592 AN	Tension Post Bar]
39	39592 AG-5	Tension Post Mounting Bracket] 1
40	22806 A	Screw, for tension mounting bracket	! 7
40 A	40-46	Screw, for tension post mounting bracket	; 1
41 42	22847 B 39592 AH	Nut, for tension post	- 3 or 4
42	22541 B	SCYAW +]
44	39582 EW	Feed Bar Cover Latch	1
45	88 A	Scraw	1
46	39568 AK	Thread Tube Bracket Assembly]
47	376 A	Screw, for upper looper thread evelet].
48	39568 E	Auxiliary Lower Looper Thread Evelet	1
49	376 A	Screw, for lower looper thread eyelet	i
50	39568 B	Lower Looper Thread Eyelet	! 1
51 50	39568 L	Upper Looper Thread Eyelet	! 1
52 53	39568 AD	Looper Thread Eyelet Mounting Bracket	! 1
53 54	22569 B	Nut, for looper thread eyelet screw	2
54	43139 A	nuc, for tooper chiead eyerec sciew	



NEEDLE DRIVE AND FEED MECHANISM

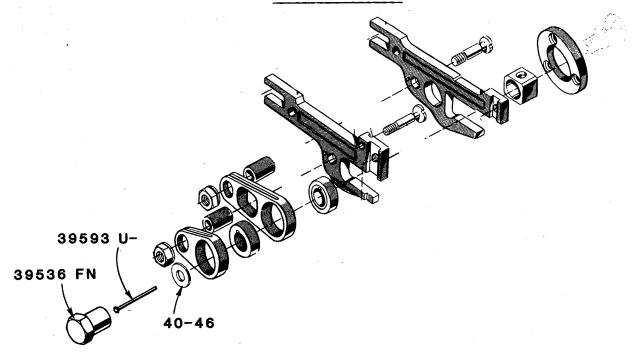
Ref.	Part No.	Description	Amt. Req.
No.	110.	÷	•
1	22541 B	Screw, for main feed bar guide, left	2 2
2	8372 A	Usahan for main food har dulide screw	4
3	39535 T	Main Faad Dag Cuado OTT	
4	39536 E	N+ for food has driving ctlic	_
5	39536 C		
6	40-46		
7	39536 AF	Main Food Bar Driving Connection	•
8	39540 B-12	Main Food Driving Eccentric	
9	39536 AE	Differential Feed Bar Driving Connection	. 1
10	93 A	Screw, for main feed dog	
11	39505 AB	Main Feed Dog	. i
12	39540 B-14	Differential Feed Driving Eccentric	
13	39534 AC	Main Feed BarFeed Bar Guide Block	
14	39535 J	Screw for knife drive block	. i
15	22797 A	Screw for knife drive blockKnife Drive Block	. i
16	39573 DA	Differential Feed Bar	- i
17	39534 G	Differential Feed Bar	- i
18	39535 U	Differential Feed Bar Guide, right	- 2
19	22569 B	Screw, for differential feed bar guide, right	- ī
20	22894 R	Screw, for feed adjusting pinFeed Ajusting Pin, marked "C"	- j
21	39535 AB	Feed Ajusting Pin, marked C	- 2
22 ·	53634 C	Washer, for differential feed bar guide screw	- 2
23	39535 B	Feed Bar Driving StudScrew, for thrust washer	- 3
24	22569 G	Differential Feed Bar Thrust Washer	- i
25	39534 AF	Feed Lift Block	- i
26	39538	Differential Feed Dog	- i
27	39526 AB	Screw, for differential feed dog	- i
28	22528	Needle Drive Shaft Thrust Collar	- i
29	39543 Y	Screw, for needle drive shaft thrust collar	- i
30	22782 A		- 1
31	39594 N		-
32	87 U		
33	39522 AN	Oil Seal, for needle driving shaft	- 1
34	39552 AG		
35	660-207	Looper Thread Pull-off Lever	- 1
36	39568 AL	Compar for Looper thread Bill toll 16861 for the	
37	88 B		
38	39568 AH	Naadla Thomas Com Dull-Att	1
39	39563 P 39551 S		- 1
40	39552 AW	usells Deiving Rom marked "Y"	
41	39552 AD	C+ Din fon nood	,
42	22596 E	Conou for moddle driving arm	;
43 44	154 GFS	Naadla faw two moodlo machines	
44	154 GHS	Noodle for single needle machines	,
AE	39551 R	N 37 - C7	
45 46	14077 A	Not for mondle clamp child	,
40 47	87 U	Conou for moddle thread Cam DHILL-OIL	,
48	22513	Screw for looper thread DULL-OTT	1
49	39551 L	Needle Spacer, (.022 inch)(.556 mm) Thick for	
47	JJ331 L	one needle machines	1
50	39551 P	Needle spaces (012 inch)(305 mm) Thick, for	-
30	4244. '	two needle machines	1



ACCESSORIES

Ref. Part No. No.	D <u>escription</u> Amt. Req.
1 21388-AU	Socket Wrench, Size 3/8" 1
2 118	Tweezers 1
3 21227 BF	Feed Eccentric Hook 1
4 WR65	Allen Wrench, Size 1/16" 1
5 116	Wrench, Size 9/32 1
6 28604 R	Machine oil 16 Fl. oz 1
7 39899 A	Looper Threader 1
8 21375 BB	Belt Guard 1
9 80	Belt Guard Screws 2
(not shown)	Plastic Machine Cover 1
(not shown)	Threading Diagram 1

OIL METERING PIN



Beginning with machine serial number 1620485 the wood oil metering plug is now being replaced by a steel metering pin which is inserted inside the main shaft on all Class 39500 Machines.

The pin is easy to remove. On the "Mark IV" machines the head is protruding beyond the end of the shaft and it can be pulled out with a tweezers. With the wood plug the rate of oil flow was determined by the grain of the wood itself and could not be varied or adjusted. The steel pin, on the other hand, can be easily replaced with a slightly larger or smaller diameter pin to reduce or increase the flow to a precise degree.

NOTE: One final point - metering pins can <u>not</u> be added to machines with serial numbers below 1620485, because the crankshafts are not prepared for them. A new crankshaft assembly would have to be installed with the pre-selected metering pin in it.

39593 U	METI	ERING PIN SIZE CH	NRT
		PIN DIA	AMETER
PART NUM	MBER	INCH	mm
39593 U-	-125	0.1250	3.175
39593 U-		0.1260	3.200
39593 U-	-1265	0.1265	3.213
39593 U-	-127	0.1270	3,225
39593 U-		0.1275	3.238
39593 U-	-128	0.1280	3.251
39593 U-		0.1285	3.263
39593 U-	-129	0.1290	3.276

MACHINE INVENTORY INFORMATION

	Date Of Purchase
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DDITIONAL INFORMATION:	

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Notes:		·				
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