

SINGER

117W5 to 8

PRICE LIST

OF

PARTS



MACHINES
OF
CLASS 117 w

INDEX

	PAGE
ACCESSORIES.....	14
BOBBIN WINDER.....	14
MACHINES NOS. 117w5 TO 117w8.....	7
NUMERICAL LIST OF PARTS.....	21
OBSOLETE PARTS.....	19
SPECIAL PARTS FOR OBSOLETE MACHINES NOS. 117w1 TO 117w4.....	17
STAND.....	16
THREAD UNWINDER.....	15

THE SINGER MANUFACTURING COMPANY

From the library of: Superior Sewing Machine & Supply LLC

Instructions for Ordering

In ordering from this list, use **ONLY** the **PART** number in the **FIRST** column.

The number stamped on a Sewing Machine Part is the number of the Single Part only, except when the part includes Set Screws, Clamping Screws, Studs and Rollers Spun on, Small Wires riveted, or Parts soldered together, etc., which it is necessary to furnish in combination.

Every combination of parts sent out has its specific number which, although not stamped on Parts (except in above cases) must be used when ordering the combination.

Each number always indicates the **SAME PART** in whatever list it appears, or for whatever Machine.

The letters after some of the numbers indicate the style of finish only, as follows:

- A. Hardened, Polished and Plated.
- B. Polished and Plated.
- C. Hardened only.
- D. Polished only.
- E. Soft, not polished.
- F. Hardened and Polished.
- H. Blued.

These letters **MUST BE USED** when they appear in the list and **AFTER** the number, as in the list.

In this series

200001 to 201500 are Screw Numbers.

201501 to 201800 are Nut Numbers.

201801 to 202000 are Roller Numbers.

202001 and upward are numbers of Machine Parts.

The figures in the second column refer only to the plate in which the illustration of the part is shown and are **NOT TO BE USED** in ordering.

Two or more numbers over a cut indicate that the difference between such parts is not visible in an illustration.

Parts marked with an asterisk (*) are furnished only when repairs are made at the factory.

LIST OF PARTS COMPLETE

FOR

MACHINES NOS. 117w5 TO 117w8

OSCILLATING HOOK, LOCK STITCH, POSITIVE STOP MOTION

For Sewing Shank Buttons on Shoes, Leggings, Overgaiters, Etc.

MACHINE HEAD AND STAND PARTS

Note: The Variety number covers Head, Stand and Motor.
The only difference between the 117w5 to 117w8 machines is the motor.

No.	Plate	Name	Each
235301	12901	Auxiliary Stop	\$1 25
235302	12901	" " Crank Shaft	1 75
201276b	12901	" " Hinge Screw	05
235303	12901	" " Releasing Crank	2 00
235306	12901	" " " " Link	40
200655c	12901	" " " " " "	•
		Screw Stud	08
201227c	12901	Auxiliary Stop Screw	05
235412	12921	Balance Wheel	2 00
235413	—	" " 235412 with 204741, 235328,	
		235396 and four 200567H	5 00
235440	12924	Balance Wheel Shaft	1 00
235309	12902	" " " Bushing	50
200379c	12902	" " " " Set Screw ..	02
203470	12902	Bobbin	06
*235310	—	" Case	—
235311	12902	" " Latch	60
*202056	—	" " " Pin	—
203473	12902	" " " Plunger	10
203474	12902	" " " Spring	01
235312	12902	" " Stop	35
235313	12902	" " " Block	30
200616c	12902	" " " " Screw (3)	02
235314	12902	" " " Finger	50
200106E	12902	" " " " Screw (2)	02
201307c	12902	" " " Screw	02
235315	12902	Bobbin Case complete, Nos. 202056,	
		203473, 203474, 235310 to 235312 and	
		two 201307c	3 25

No.	Plate	Name	Each
200488F	12902	Button Wire Thumb Screw	\$ 06
*235316	—	Frame	—
235317	12906	" Side Cover	1 00
204234E	12922	" " " Position Pin	01
201048B	12902	" " " Thumb Screw	10
*235318	—	Hook (sewing)	—
235319	12902	" 235318 with 235322 and two 201310F	3 50
235320	12902	" Bracket	4 00
204234C	12922	" " Position Pin	01
200100E	12923	" " Screw (2)	03
235321	12904	" Driving Gear (spiral)	2 00
201267C	12904	" " " Screw Bearing	20
201645C	12904	" " " " " Lock Nut	20
235322	12904	" Gib	30
201310F	12904	" " Screw	02
201278E	12904	" Screw	08
235323	12904	" and Needle Bar Driving Block with 200084F	2 50
200084F	12904	Hook and Needle Bar Driving Block Pinch Screw	03
235324	12904	Hook and Needle Bar Driving Connection (lower)	1 25
235325	12904	Hook and Needle Bar Driving Connection (upper) with two 200086C	2 50
201524E	12904	Hook and Needle Bar Driving Connection (upper) Check Nut	03
200086C	12904	Hook and Needle Bar Driving Connection Screw	03
201265C	12904	Hook and Needle Bar Driving Connection Screw Stud	08
201524E	12904	Hook and Needle Bar Driving Connection Screw Stud Nut	03
*235441	—	Hook and Needle Bar Driving Crank	—
235442	12905	" " " " " " 235441 with 448C, 743C, 855C, 201265C and 201524E	3 00
235400	12905	Hook and Needle Bar Driving Crank Guard	75
202140	12904	Hook and Needle Bar Driving Crank Guard Position Pin	01
200097C	12904	Hook and Needle Bar Driving Crank Guard Screw	03
743C	12904	Hook and Needle Bar Driving Crank Posi- tion Screw	05
448C	12904	Hook and Needle Bar Driving Crank Posi- tion Screw Check Screw	03
855C	12923	Hook and Needle Bar Driving Crank Set Screw	08
235427	12924	Machine Driving Flange with 200378C ..	2 50
40025	12923	" " " Position Pin	01

No.	Plate	Name	Each
200378c	12922	Machine Driving Flange Set Screw	\$ 02
235328	—	“ “ Friction (leather)	25
204741	12905	“ “ “ Clamp	40
200233c	12904	“ “ “ “ Screw (3) ..	10
204744	12904	“ “ “ “ Spring (3) ..	03
235396	12905	“ “ “ Position Plate	2 00
200567H	12904	“ “ “ “ Screw	05
235428	12924	“ Stop Arm (left) with 201347c and 201524E	1 00
235429	12924	Machine Stop Arm (right) with 201347c and 201524E	1 00
201271c	12904	Machine Stop Arm Hinge Screw Stud (2)	25
235335	12908	“ “ “ Operating Lever	2 25
235336	12907	“ “ “ “ “ Latch	85
201023c	12907	“ “ “ “ “ “ Hinge Screw	06
235337	12907	Machine Stop Arm Operating Lever Latch Plunger	10
235338	12907	Machine Stop Arm Operating Lever Latch Spring	02
235339	12907	Machine Stop Arm Operating Lever Link (2)	50
200250F	12907	Machine Stop Arm Operating Lever Link Hinge Screw (2)	06
201521c	12907	Machine Stop Arm Operating Lever Link Hinge Screw Nut (2)	03
232244	12907	Machine Stop Arm Operating Lever Pin	05
235340	12905	“ “ “ Pressure Bar	1 25
235341	12907	“ “ “ “ Spring	10
201269B	12907	“ “ “ “ “ “ Regulat- ing Thumb Screw	1 00
200383c	12914	Machine Stop Arm Pressure Spring Reg- ulating Thumb Screw Set Screw	02
202355	12907	Machine Stop Arm Pressure Spring Reg- ulating Thumb Screw Set Screw Pack- ing (brass)	01
235332	12908	Machine Stop Flange	1 25
235333	12908	“ “ “ Friction Ring	1 50
235334	12908	“ “ “ “ “ Spring	15
200051F	12907	“ “ “ Screw (3)	03
235342	12907	“ “ Segment (fibre) (2)	40
201347c	12923	“ “ “ Adjusting Screw ...	08
201524E	12904	“ “ “ “ “ Nut	03
235343	12907	“ “ “ Holder (2)	08
235344	12907	“ “ Tripping Point	25
200583H	12910	“ “ “ “ “ Screw	02
235436	12923	Needle Arm	3 50
235437	—	“ “ 235436 with 200301D, 200389c, 201351F, 202098 and 235438	4 00

No.	Plate	Name	Each
201304F	12907	Needle Arm Position Screw	\$ 03
202098	12907	" " Thread Guide Roller	05
235438	12923	" " " " " Cap	25
200301D	12923	" " " " " Screw	04
201351F	12923	" " " " " Screw Stud	02
235345	12908	" Bar	80
235434	12923	" " Bushing	1 00
200078E	12923	" " " Screw	03
200389C	12907	" Set Screw	02
235439	—	Needle Bar complete, Nos. 201304F, 235345 and 235437	4 75
235347	12909	Presser Foot and Button Holder	2 00
235408	—	" " " " " 235347 with 201277E and 235348	2 75
201320D	12909	Presser Foot and Button Holder Screw ..	04
201537H	12909	" " " " " Nut	03
235348	12909	" " Button Clamp	75
201277E	12909	" " " " Hinge Screw	03
235349	12909	" " " " Spring	04
235350	12909	" " Thread Cutter (for upper thread)	25
235416	12921	Presser Lever with 202619 and two 201340C	2 50
235417	12921	Presser Lever Bracket with 200488E and two 235395	2 50
201313F	12909	Presser Lever Bracket Screw (3)	05
235353	12909	" " Connection	1 50
235398	12909	" " Needle Guard	15
202619	12909	" " " " Position Pin Per 100	25
201340C	12922	Presser Lever Position Screw	04
235423	12923	" " Thread Leader Bracket with 208127	40
208127	12909	Presser Lever Thread Leader Bracket Pin	01
201279H	12909	Presser Lever Thread Leader Bracket Screw	04
202098	12907	Presser Lever Thread Leader Roller ...	05
214554	12909	" " " " " Cap	10
200171H	12909	" " " " " " Screw	02
202084	12909	Presser Lever Thread Leader Roller Cap Screw Washer	01
200315H	12909	Presser Lever Thread Leader Roller Screw	04
235424	—	Presser Lever Thread Leader complete, Nos. 200171H, 200315H, 202084, 202098, 214554 and 235423	65
235354	12909	Presser Spring	03

No.	Plate	Name	Each
235355	12909	Presser Spring Guard	\$ 60
201656C	12922	" " Pressure Regulating Nut with 200061D	40
200061D	12923	Presser Spring Pressure Regulating Nut Pinch Screw	03
203349	12923	Presser Spring Pressure Regulating Nut Washer	03
235356	12909	Presser Spring Stop Pin	02
235357	12909	" " Washer	03
235358	12911	Ratchet Wheel	1 25
235359	12910	" " Driving Arm with 235399	2 25
235430	12923	" " " Eccentric with 201007C and 201348C	3 00
235361	12910	Ratchet Wheel Driving Eccentric Cap ..	20
200583H	12910	" " " " " Screw	02
201348C	12923	Ratchet Wheel Driving Eccentric Posi- tion Screw	05
201007C	12923	Ratchet Wheel Driving Eccentric Set Screw	03
235362	12910	Ratchet Wheel Driving Eccentric Strap ..	1 25
235363	12910	" " " Pawl with 235399	40
215200	12910	" " " " Spring	05
235399	12910	" " " " " Hook	03
235365	12911	" " Flange	2 25
235366	12910	" " Retaining Pawl	50
200173H	12910	" " " " Cap Screw	04
235367	12910	" " " " Spring	05
201268C	12910	" " " " " Screw Stud	12
201525E	12910	Ratchet Wheel Retaining Pawl Spring Screw Stud Nut	03
200576H	12910	Ratchet Wheel Screw (3)	04
235368	12910	Starting Treadle Starting Rod Guide ..	25
200580H	12912	" " " " " " Screw	03
235369	12911	Swinging Head with 200009H and 235411 ..	8 00
235370	12911	" " Bushing	2 00
200379C	12902	" " " Set Screw	02
235432	12923	" " Cam Shaft	2 75
235431	12924	" " " " Driver	1 75
235411	—	" " " " Oiling Felt ..	02
235374	12912	" " " " Spring	05
235375	12912	" " " " " Stop Col- lar with 200393C	25
200393C	12912	Swinging Head Cam Shaft Spring Stop Collar Set Screw	02
235376	12912	Swinging Head Cam Shaft Stop Bracket with 202140	2 00

No.	Plate	Name	Each
200046E	12912	Swinging Head Cam Shaft Stop Bracket Screw (2)	\$ 03
235377	12912	Swinging Head Cam Shaft Throw-out Segment	80
235378	12912	Swinging Head Cam Shaft Throw-out Segment Plunger	35
235409	12912	Swinging Head Cam Shaft Throw-out Segment Plunger Spring	02
200108F	12912	Swinging Head Cam Shaft Throw-out Segment Screw (2)	02
235379	12912	Swinging Head Collar with 200380c	35
200380c	12912	" " " Set Screw	02
235380	12912	" " " Driving Pinion	1 00
235381	12913	" " " " " Gear	1 50
235404	12912	" " " " " Posi- tion Pin	01
200567H	12904	Swinging Head Driving Pinion Gear Screw (2)	05
235404	12912	Swinging Head Driving Pinion Position Pin	01
200946E	12912	Swinging Head Driving Pinion Screw (2)	04
200009H	12914	" " " Pinch Screw	05
235382	12912	" " " Side Plate	35
201266H	12914	" " " " " Screw	06
202248H	12914	" " " " " Washer	05
235383	12913	Take-up Cam with 200335c, 200431c and two 200383c	2 50
200431c	12914	Take-up Cam Position Screw	08
200383c	12914	" " " " " Check Screw	02
200335c	12914	" " " Set Screw	04
200383c	12914	" " " " " Check Screw	02
235384	12913	" " " Lever with 200171H, 200315H, 202084, 202098 and 205778H	1 20
235385	12913	Take-up Lever Bracket with 201263c, 201525E, 201885 and 235410	1 75
201264c	12914	Take-up Lever Bracket Hinge Screw	35
201515H	12914	" " " " " Nut	03
201885	12914	" " " " " Roller	12
235410	—	" " " " " Oiling Washer (felt)	02
201263c	12914	Take-up Lever Bracket Roller Stud	10
201525E	12910	" " " " " Nut	03
202098	12907	" " " Roller	05
205778H	12914	" " " Guard	06
202084	12909	" " " " " Washer	01
200171H	12909	" " " " " Screw	02
200315H	12909	" " " " " Screw	04
200574H	12902	" " " " " Screw (2)	05

No.	Plate	Name	Each
235386	12914	Tension Disc	\$ 25
235419	12922	" Release Lever	12
200688c	12922	" " " Position Screw	03
200291E	12922	" " " " " Screw	05
235420	12922	" " " Plunger	08
235418	12922	" Releaser	1 25
202078	12914	" Spring	05
201280c	12914	" Stud	10
201572B	12914	" " Thumb Nut	04
201342F	12922	" " " " " Stop Screw	05
235407	12914	" Thread Guide	01
235388	12914	" " Roller	20
235443	12914	" Washer	05
235389	—	Tension complete, Nos. 201280c, 201342F, 201572B, 202078, 235388, 235420, 235443 and two 235386	1 10
235390	12914	Thread Controller Spring	12
235391	12914	" " " Adjusting Collar	50
235392	12914	" Cutter (for lower thread)	15
200598F	12914	" " " Screw	02
235393	12914	" Guide (lower)	30
210954	12914	" " (upper)	20
200582H	12922	" " " Screw (2)	02
235394	12913	Throat Plate with 200598F and 235392 ..	3 00
235395	12914	" " " Position Pin	03

ACCESSORIES

No.	Plate	Name	Each
235304	12901	Auxiliary Stop Releasing Crank Driving Block with 200025c	\$ 25
200025c	12901	Auxiliary Stop Releasing Crank Driving Block Set Screw	05
203470	12902	Bobbin (5)	06
26485	12915	" Case Screw Driver	05
235488	12915	Button Wire	03
117 N 1	—	Needles, three each, sizes 18 and 20	20
		Per doz.	20
36578	12915	Oiler with 36579	10
36579	12915	" Spout, 3 in. long	06
225498	12915	Screw Driver, 7 1/4 in. long	15
36472	12915	Thread Cutter	6 00
225554	12915	Wrench (steel)	10
		Two wood screws 1 3/4 in., No. 15.	

BOBBIN WINDER

Swing Automatic, Right Hand

223735	12917	Bobbin Winder Base	20
200577H	12916	" " " Screw	02
*210968	—	" " Bobbin Holder	—
202471	12917	" " Frame	15
200221D	12916	" " " Hinge Screw	12
202472	12917	" " " Spring	05
200161D	12916	" " " " Screw	04
235495	12917	" " Pulley with 200380c	20
200380c	12912	" " Set Screw	02
*210969	—	" " Spindle	—
210970	12917	" " " 210969 with 210968	75
210971	12916	" " Stop Latch	10
200056E	12916	" " " " Screw	03
202477	12916	" " " " Thumb Lever	15
200299H	12916	" " " " " "	
		Hinge Screw	05
200299H	12916	Bobbin Winder Stop Latch Thumb Lever Joint Screw	05
201537H	12909	Bobbin Winder Stop Latch Thumb Lever Joint Screw Nut	03
202478	12916	Bobbin Winder Stop Latch Trip Lever	10
200299H	12916	" " " " " "	
		Hinge Screw	05

No.	Plate	Name	Each
235496	12917	Bobbin Winder complete, Nos. 200056E, 200161D, 200221D, 201537H, 202471, 202472, 202477, 202478, 210970, 210971, 223735, 235495 and three 200299H	\$1 70
235486	12917	Bobbin Winder and Tension Bracket Base	1 50
235497	12917	" " Tension Bracket and Thread Guide	50
200169H	12916	Bobbin Winder Tension Bracket Screw	04
202482	12916	" " " Disc	02
205590	12916	" " " Spring	02
201574B	12916	" " " " " Thumb Nut	03
235498	12917	Bobbin Winder Tension Bracket complete, Nos. 201574B, 205590, 235497 and two 202482	60
235500	—	Bobbin Winder and Tension Bracket complete, Nos. 235486, 235496, 235498, two each 200169H, 200577H and wood screws 1 in., No. 13, R.H.B.	4 00

THREAD UNWINDER

202486	12916	Thread Unwinder Spool Pin	03
202487	—	" " " Rest	25
202488	12919	" " " " 202487 with 200363c, 200383c, and two 202486	35
202489	12919	Thread Unwinder Spool Rest Rod	05
235492	12919	" " " " Bracket with 200341c	50
200341c	12916	Thread Unwinder Spool Rest Rod Set Screw	04
200383c	12914	Thread Unwinder Spool Rest Rod Set Screw	02
202491	12919	Thread Unwinder Spool Washer (steel)	02
235489	12919	" " " Weight with 235490	25
235490	12916	Thread Unwinder Spool Weight Thread Guide	05
202794	12919	Thread Unwinder Thread Eyelet Rod	15
200363c	12904	" " " " " Set Screw	03
235494	12919	Thread Unwinder complete, Nos. 202488, 202489, 202794, 235492, two each 202491, 235489 and wood screws 1 in., No. 10, F.H.B.	1 60

STAND

No.	Plate	Name	Each
225243	—	Belt, size $\frac{7}{8}$ in. diam., length 58½ in., with 226317, for Machines Nos. 117w5 and 117w6	\$ 30
225251	—	Belt, size $\frac{7}{8}$ in. diam., length 59¾ in., with 226317, for Machines Nos. 117w7 and 117w8	30
226317	12918	Belt Hook	01
225224	12920	Brace	1 60
1025E	12918	" Screw	08
225225	12920	Leg (left or right)	1 60
225244	12920	Motor Cord Protector	1 25
225245	12918	" " " Clamp (lower)	08
200563H	12918	" " " " " Screw	06
225246	12918	" " " " (upper)	06
200558H	12918	" " " " " Screw	07
225226	12920	Starting Treadle with 200538c	50
225227	12918	" " Shaft	10
200538c	12918	" " " Set Screw	10
225241	12920	" " Starting Rod (lower half) with 202302	20
202302	12918	Starting Treadle Starting Rod (lower half) Cotter Pin	01
225242	12920	Starting Treadle Starting Rod (upper half)	10
225240	12918	Starting Treadle Starting Rod Coupling with two 200528c	20
200528c	12918	Starting Treadle Starting Rod Coupling Set Screw	05
225231	—	Stand complete (for Motor), Nos. 200558H, 225224, 225226, 225227, 225240 to 225246, two each 200563H, 225225 and four 1025E	—

SPECIAL PARTS

FOR OBSOLETE MACHINES NOS. 117W1 TO 117W4

No.	Plate	Name	Each
235307	12903	Balance Wheel	\$2 00
235397	—	" " 235307 with 204741, 235328, 235396 and four 200567H	5 00
200776D	12901	Balance Wheel Adjusting Screw	20
235308	12903	" " Shaft	1 00
200574B	12902	Hook Bracket Screw	05
235326	12905	" and Needle Bar Driving Crank 235441 with 422c, 448c, 743c, 201265c and 201524E	3 00
422c	12904	Hook and Needle Bar Driving Crank Set Screw	05
235327	12903	Machine Driving Flange with two 200342c	2 50
200342c	12903	" " " Set Screw	03
200363c	12904	" " " " " Check Screw	03
235330	12906	Machine Stop Arm (left) with 200333c and 201524E	1 00
235331	12906	Machine Stop Arm (right) with 200333c and 201524E	1 00
200363c	12904	Machine Stop Arm Pressure Spring Regulating Thumb Screw Set Screw	03
200333c	12907	Machine Stop Segment Adjusting Screw	04
235401	12908	Needle Arm	3 50
235433	—	" " 235401 with 200389c, 201273F and 202098	3 60
235346	12908	Needle Bar Bushing	75
201273F	12907	" " Thread Guide Roller Screw	05
235403	12908	Needle Bar complete, Nos. 201304E, 235345 and 235433	4 50
235351	12903	Presser Lever with 202619 and two 200373c	2 50
235352	12903	Presser Lever Bracket with 200488F and two 235395	2 50
200373c	12903	Presser Lever Set Screw	02
208200	12909	" " Thread Leader Bracket with 208127	20

No.	Plate	Name	Each
208202	—	Presser Lever Thread Leader complete, Nos. 200171n, 200315n, 202084, 202098, 208200 and 214554	\$ 45
201649n	12909	Presser Spring Pressure Regulating Nut	40
201653	—	“ “ “ “ “	
		201649n with 200362c and 202355	45
200362c	12909	Presser Spring Pressure Regulating Nut Set Screw	03
202355	12907	Presser Spring Pressure Regulating Nut Set Screw Packing (brass)	01
228032	12909	Presser Spring Pressure Regulating Nut Washer	01
235360	12910	Ratchet Wheel Driving Eccentric with 200353c and 201270c	3 00
201270c	12910	Ratchet Wheel Driving Eccentric Posi- tion Screw	06
200353c	12910	Ratchet Wheel Driving Eccentric Set Screw	03
235372	12913	Swinging Head Cam Shaft with 201319c	2 75
235373	12913	“ “ “ “ Driver	1 75
201319c	12912	“ “ “ “ Stop Screw	03
235387	12903	Tension Releaser	1 25

OBSOLETE PARTS

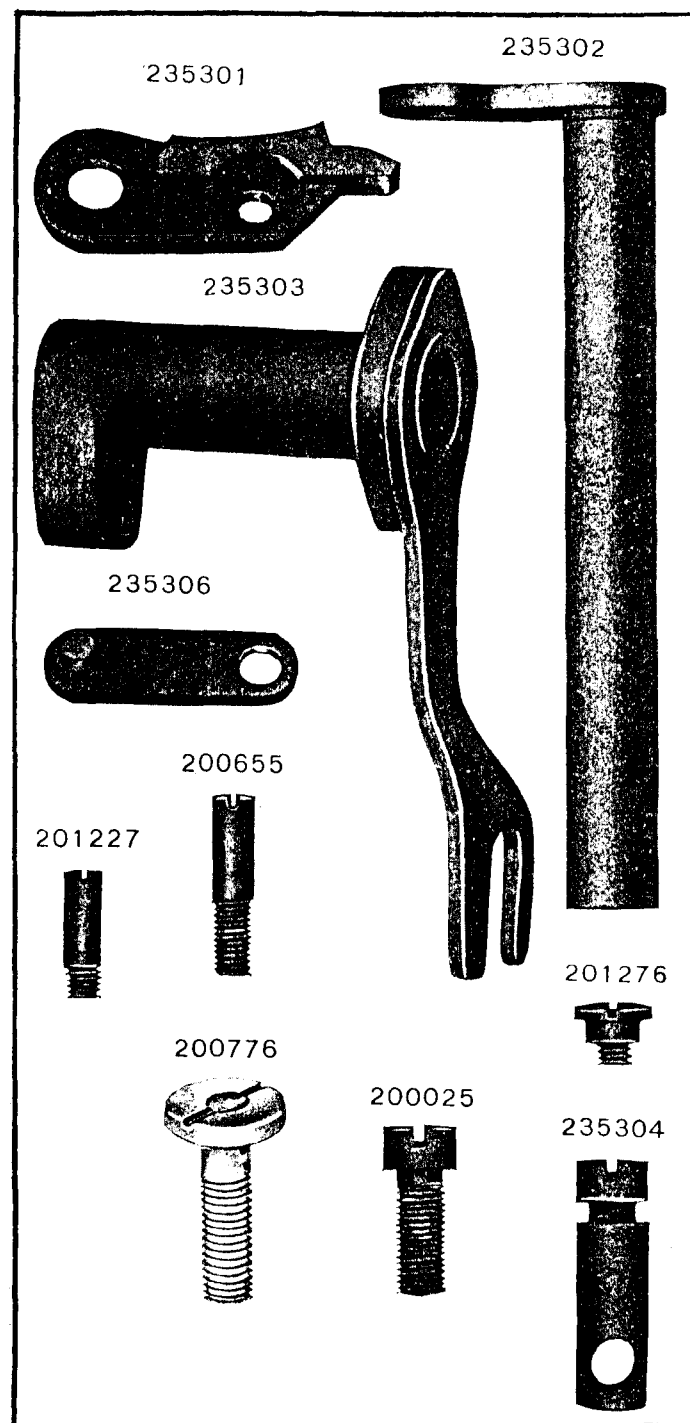
FOR MACHINES NOS. 117W1 TO 117W4

No.	Plate	Name	Each
235487	12924	Bobbin Winder Base	\$ 20
235364	12923	Ratchet Wheel Driving Pawl Spring	05

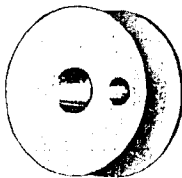
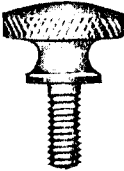
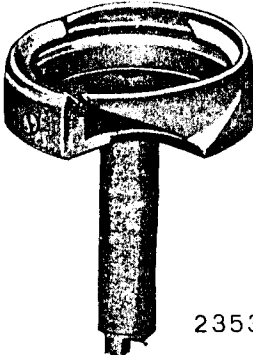
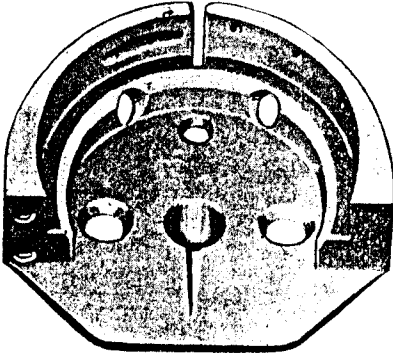
FOR MACHINES NOS. 117W5 TO 117W8

235414	12921	Balance Wheel Shaft	1 00
235426	12924	“ “ “	1 00
235415	12921	Machine Driving Flange with 200378c and 200396c	2 50
235401	12908	Needle Arm	3 50
235433	—	“ “ 235401 with 200389c, 201273f and 202098	3 60
235403	12908	Needle Bar complete, Nos. 201304f, 235345 and 235433	4 50

PLATE 12901—FULL SIZE



From the library of: Superior Sewing Machine & Supply LLC

235309	200379	203470
		
	200106	
		
235315	201307	235311
		
	200488	203473
		
	201048	203474
		
235319		235312
	200574	
		235313
		
	235320	200616
		
		235314
		

235307

235351

235387

235308

235327

200373

200342

PLATE 12904—FULL SIZE

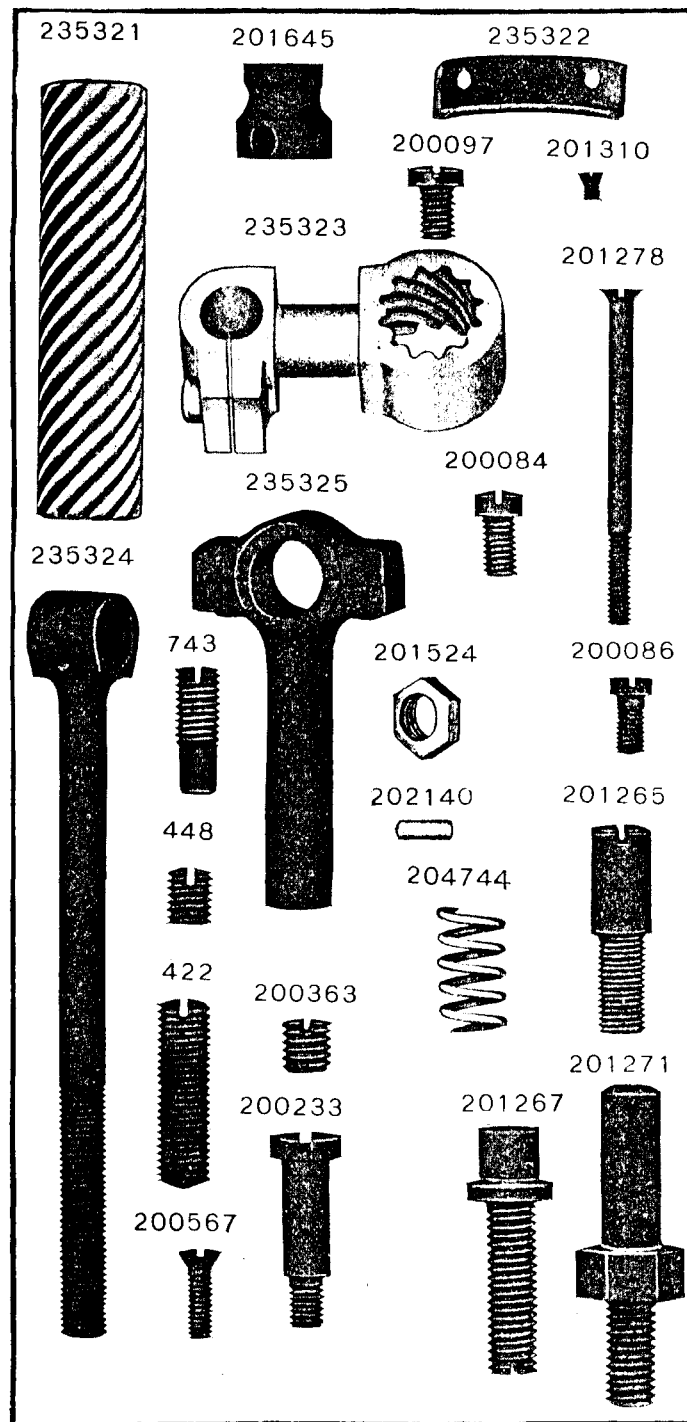


PLATE 12905—ONE-HALF SIZE

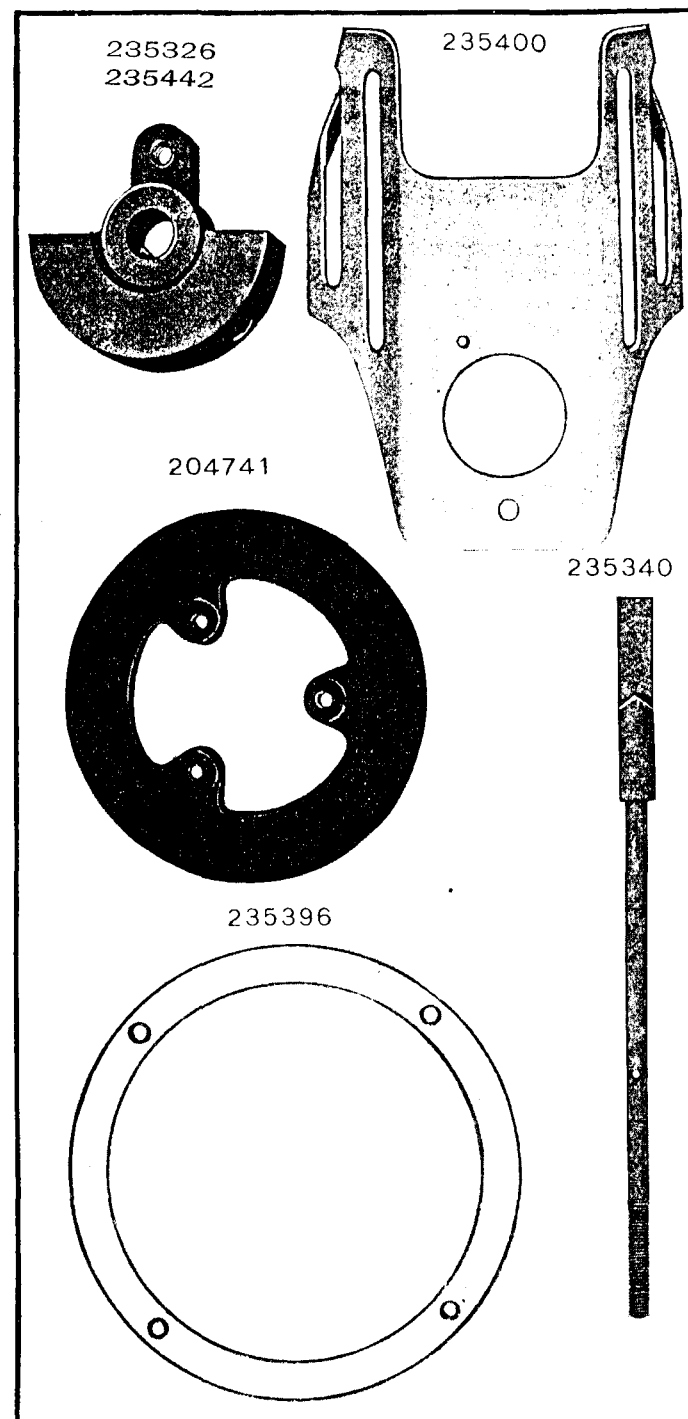


PLATE 12906-ONE-HALF SIZE

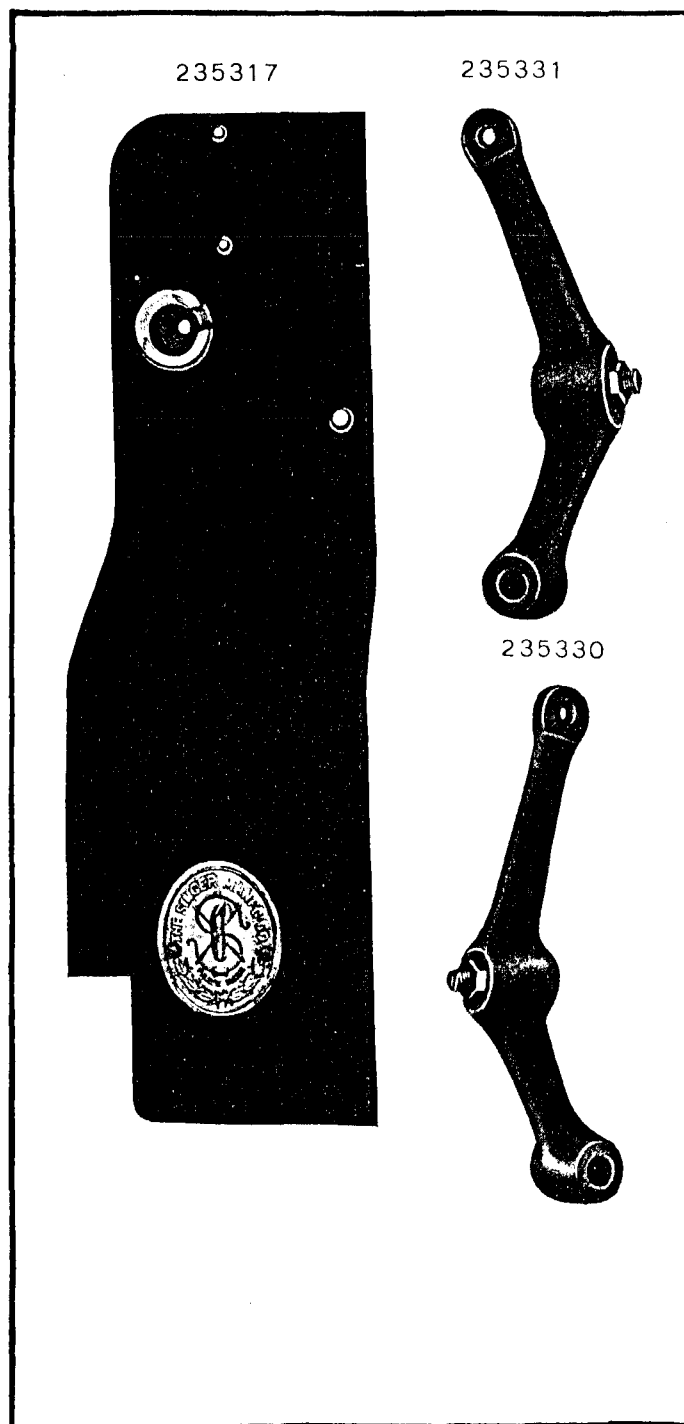


PLATE 12907-FULL SIZE

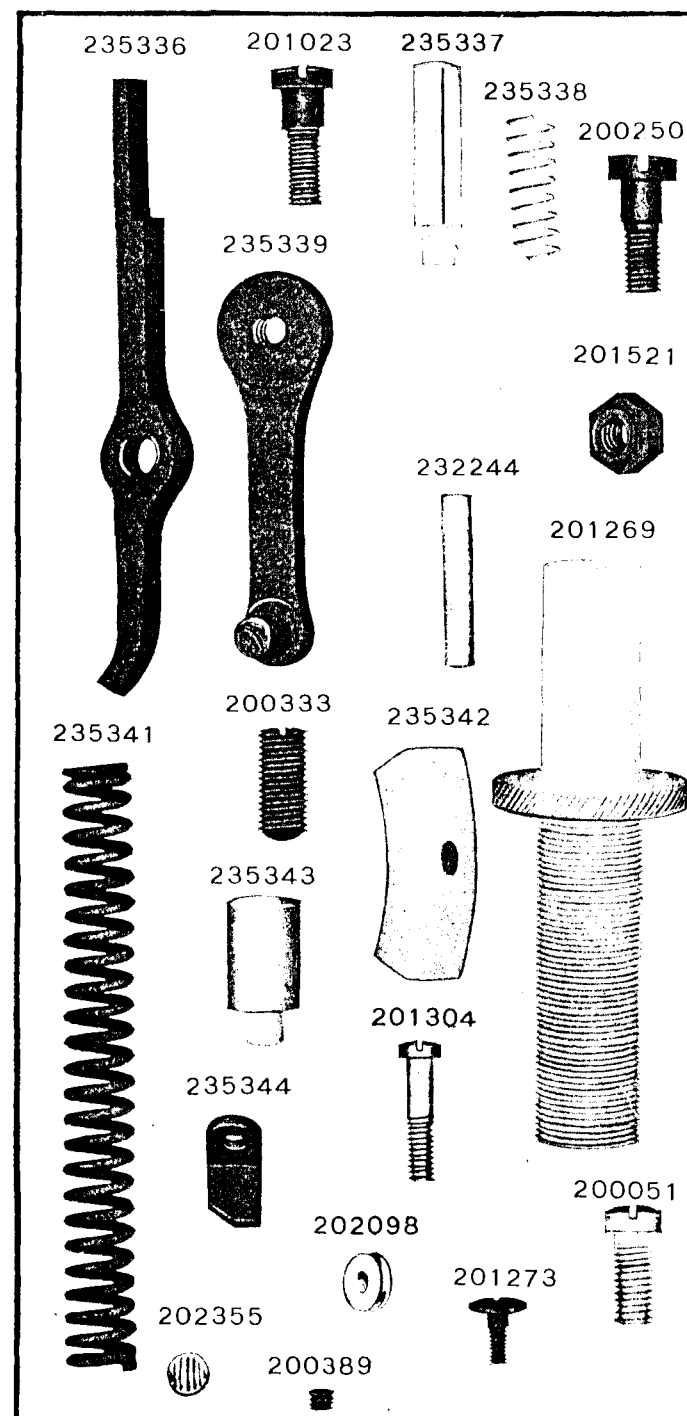


PLATE 12908-ONE-HALF SIZE

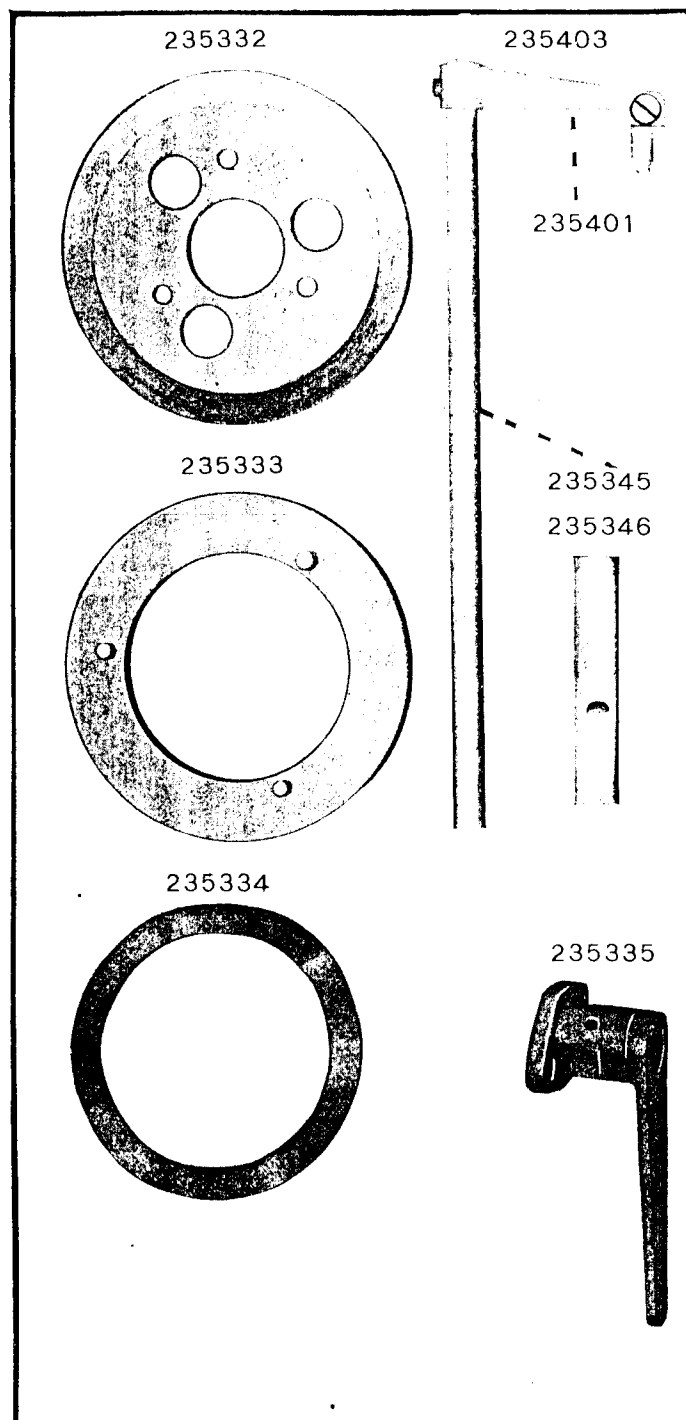


PLATE 12909-FULL SIZE

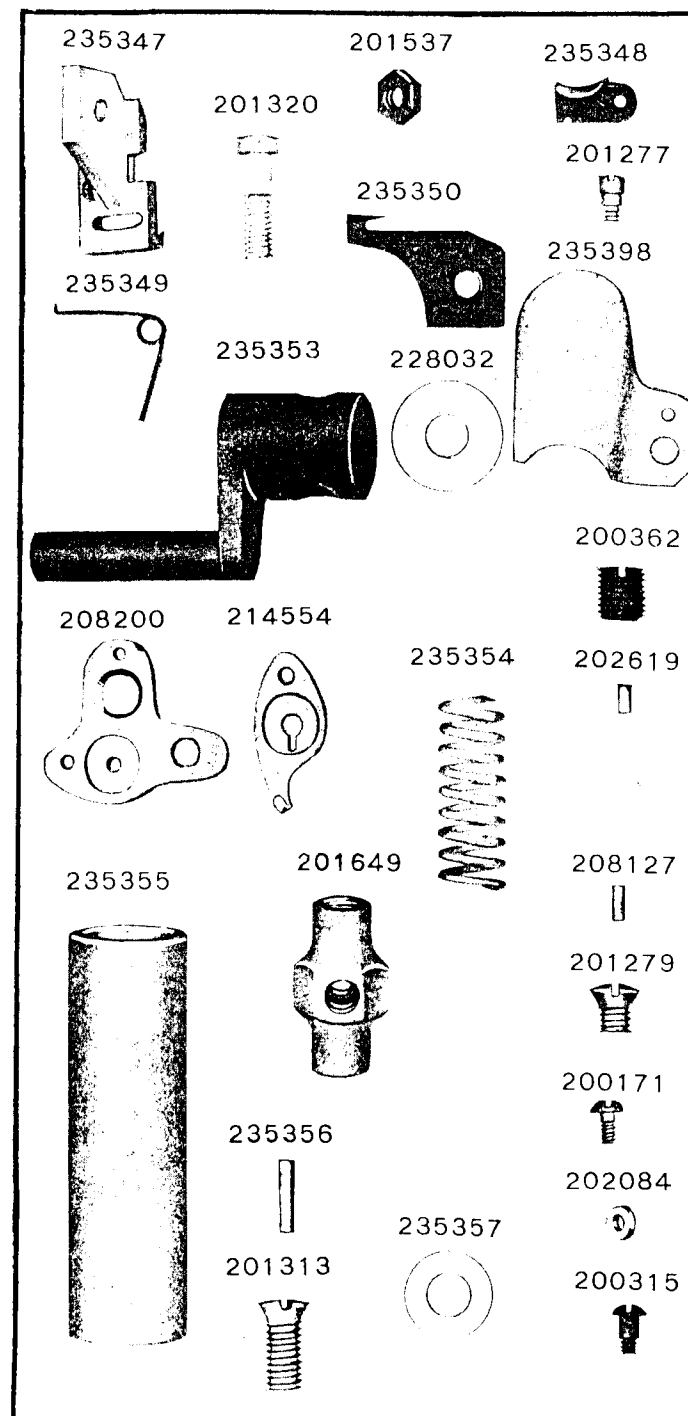


PLATE 12910-FULL SIZE

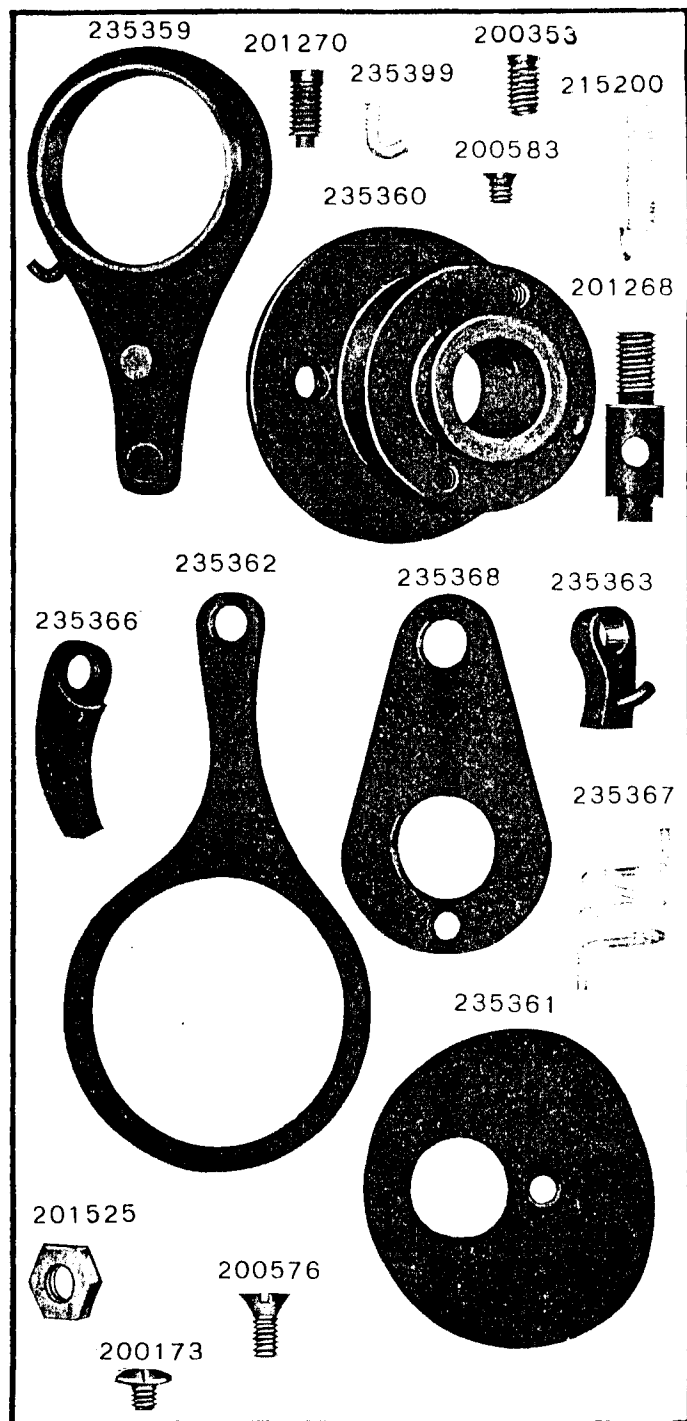


PLATE 12911-ONE-HALF SIZE

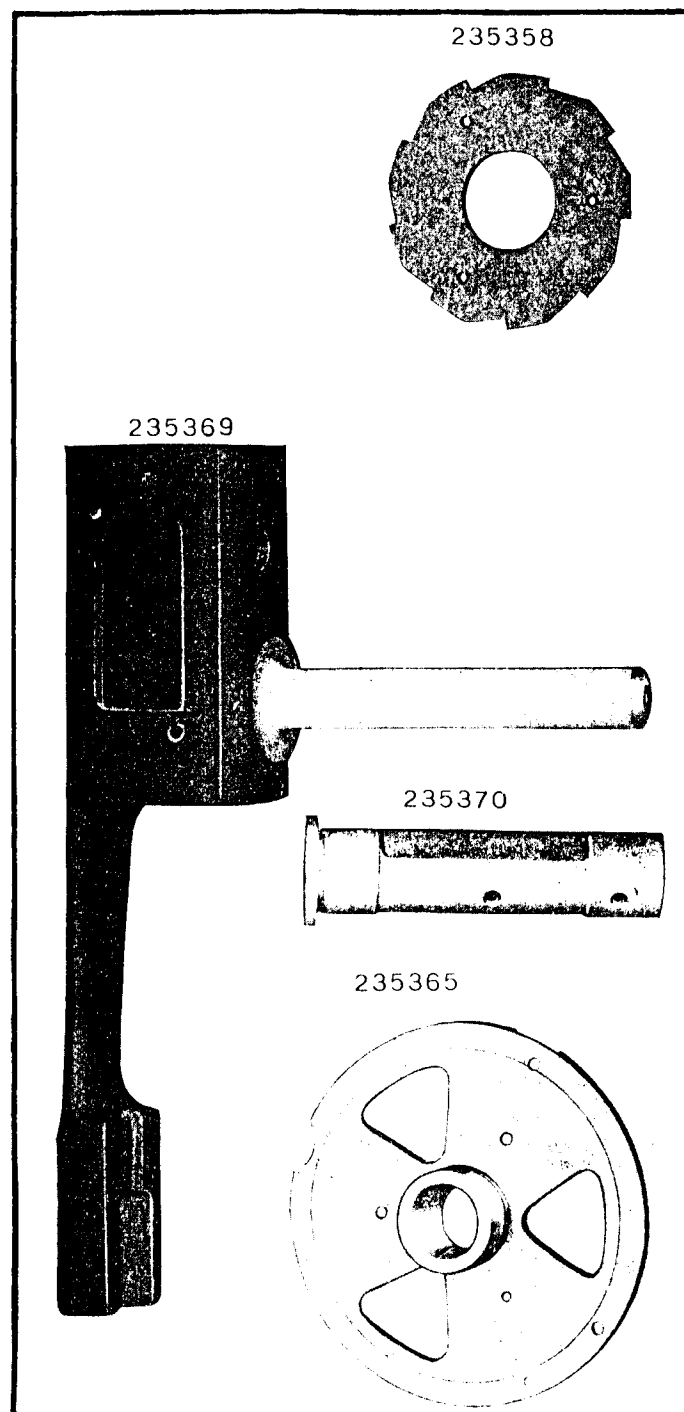


PLATE 12912—FULL SIZE

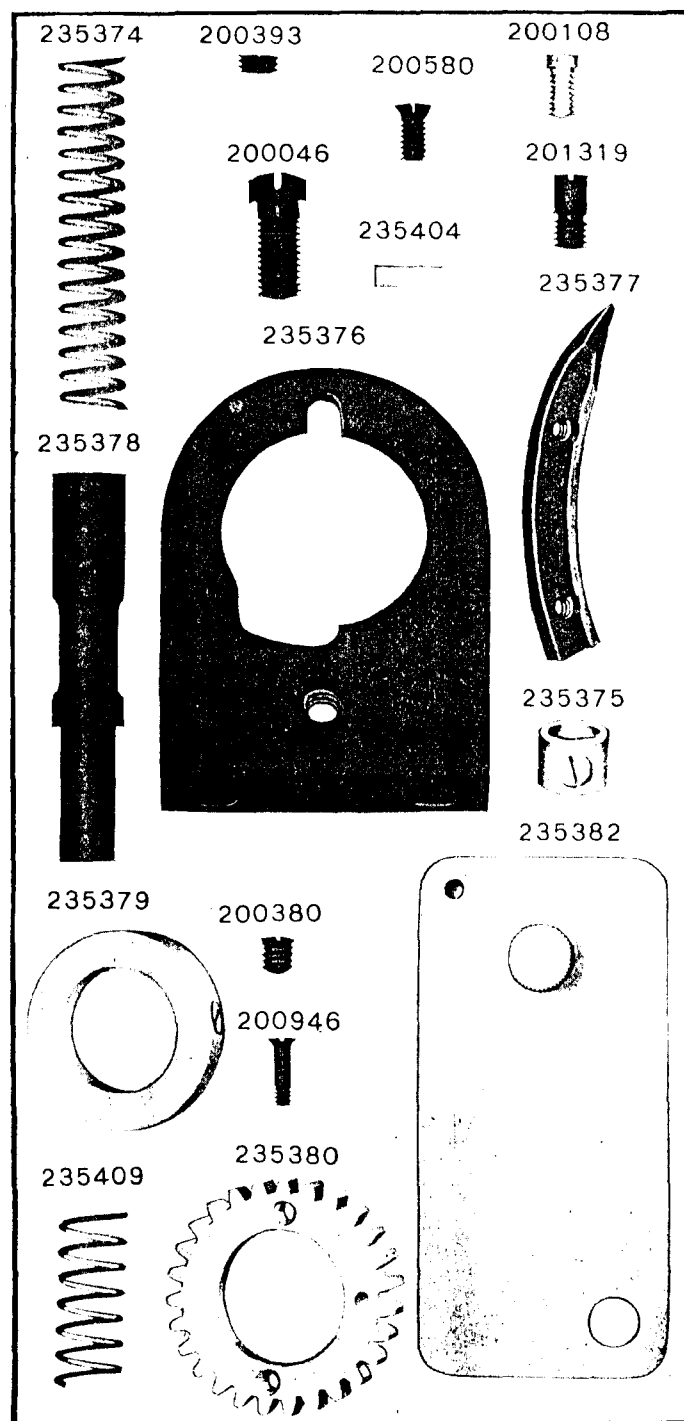
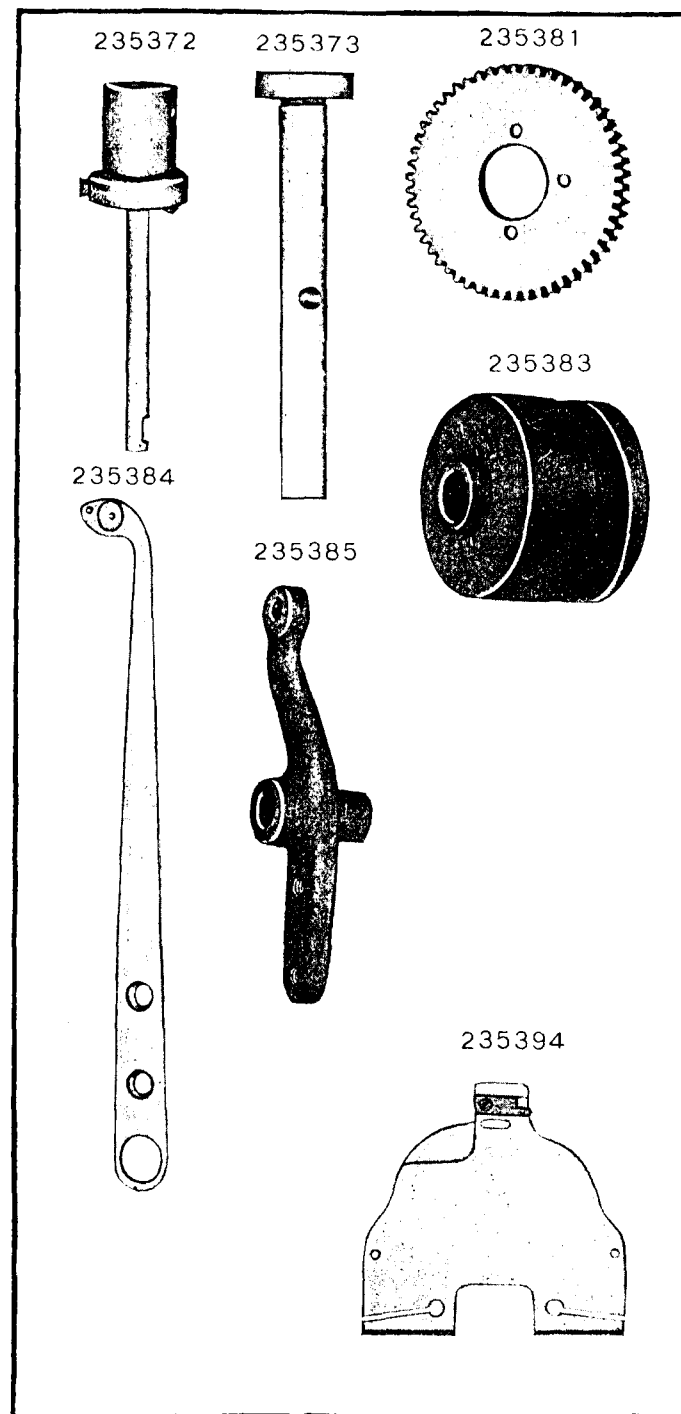


PLATE 12913—ONE-HALF SIZE



201266 202248 200383 201885

200009 202078 201263

200431 235386 235407

205778 201572 235443

200335

235388 235391 201264

201515

201280

235393 210954

235390

200598 235395 235392

26485

36578

36579

235488

225498

36472

225554

PLATE 12916—FULL SIZE

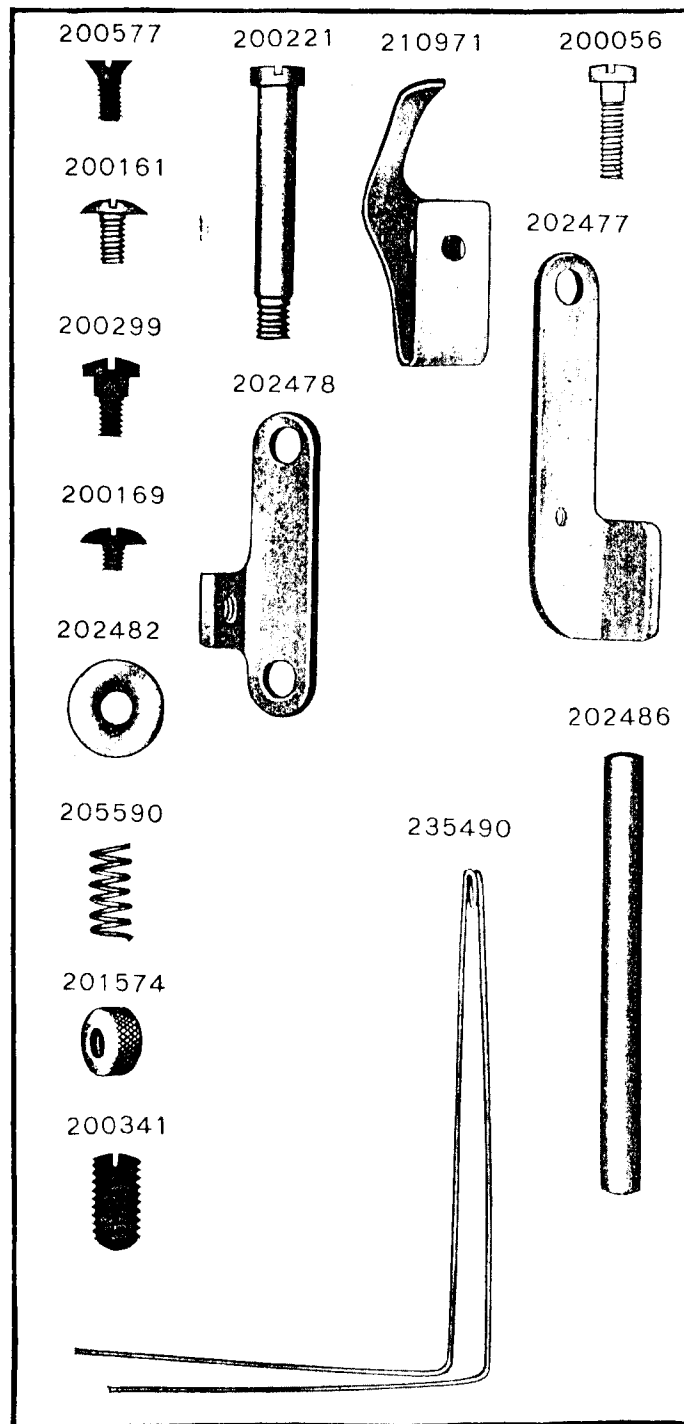


PLATE 12917—ONE-HALF SIZE

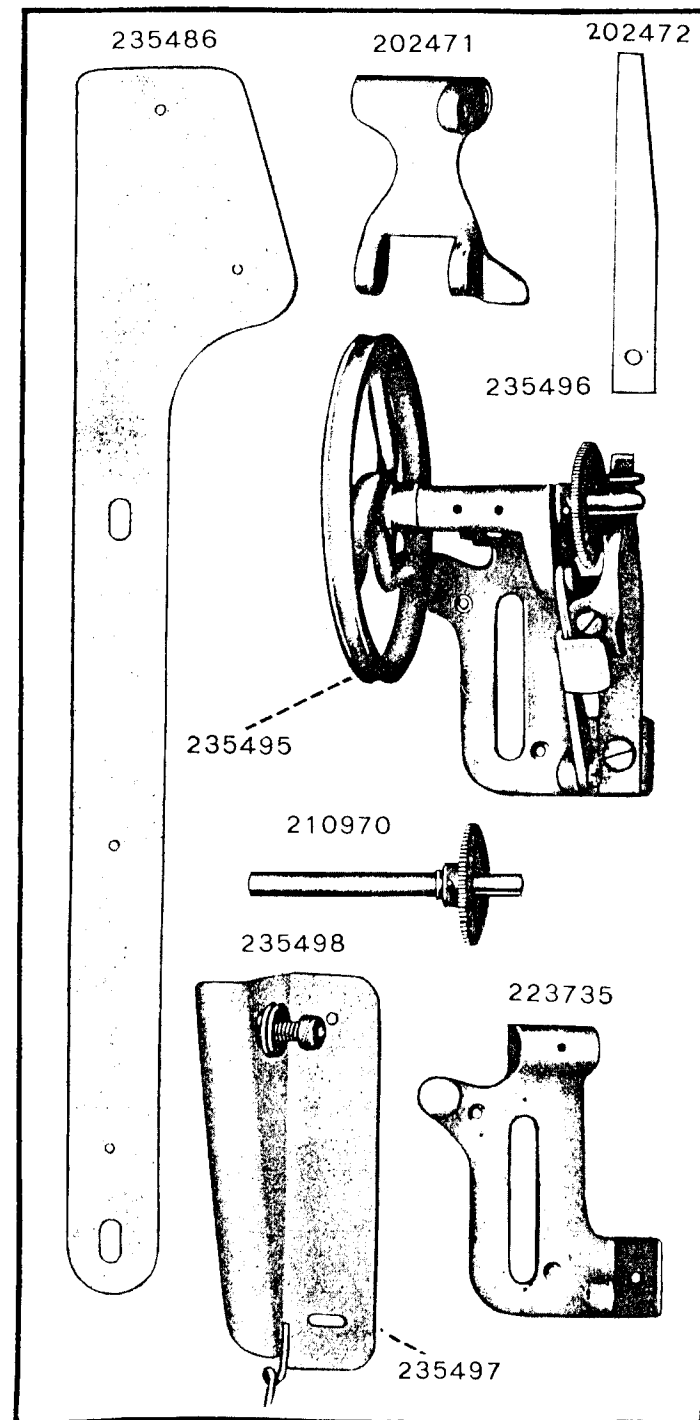


PLATE 12918—FULL SIZE

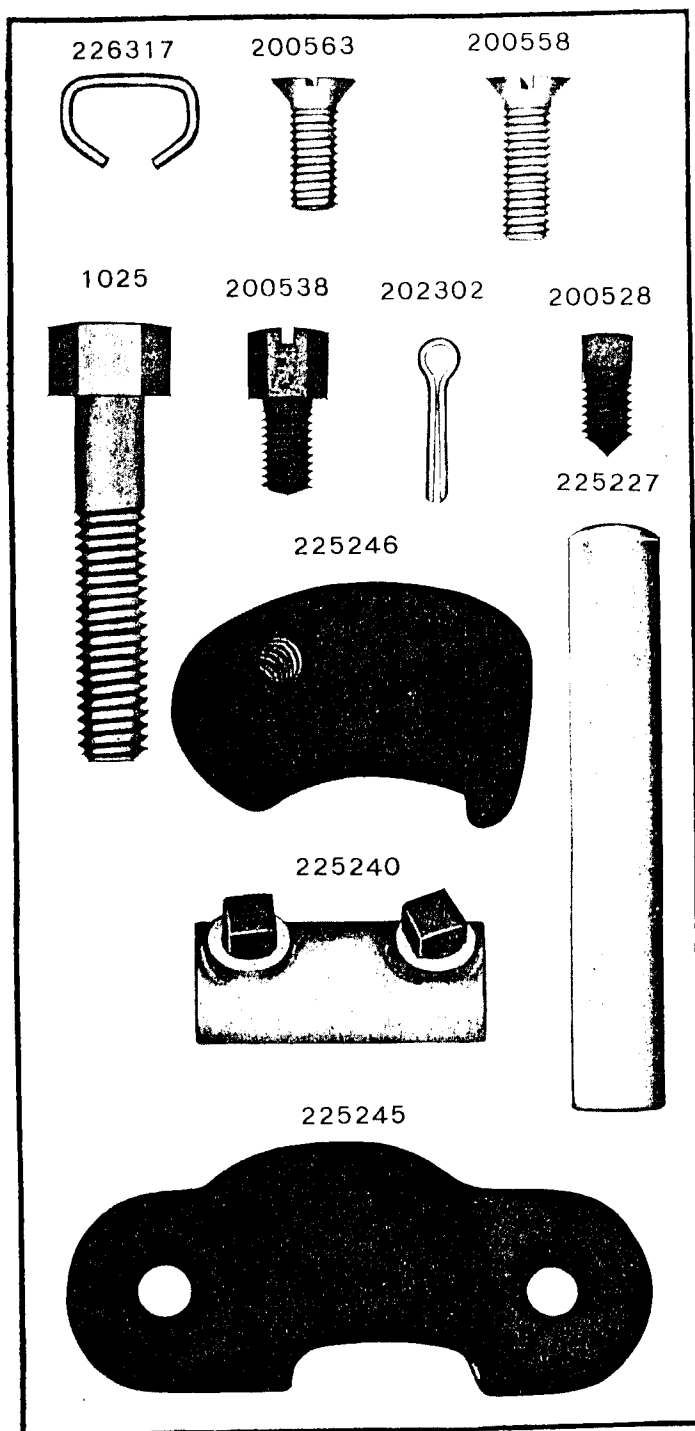


PLATE 12919—ONE-FOURTH

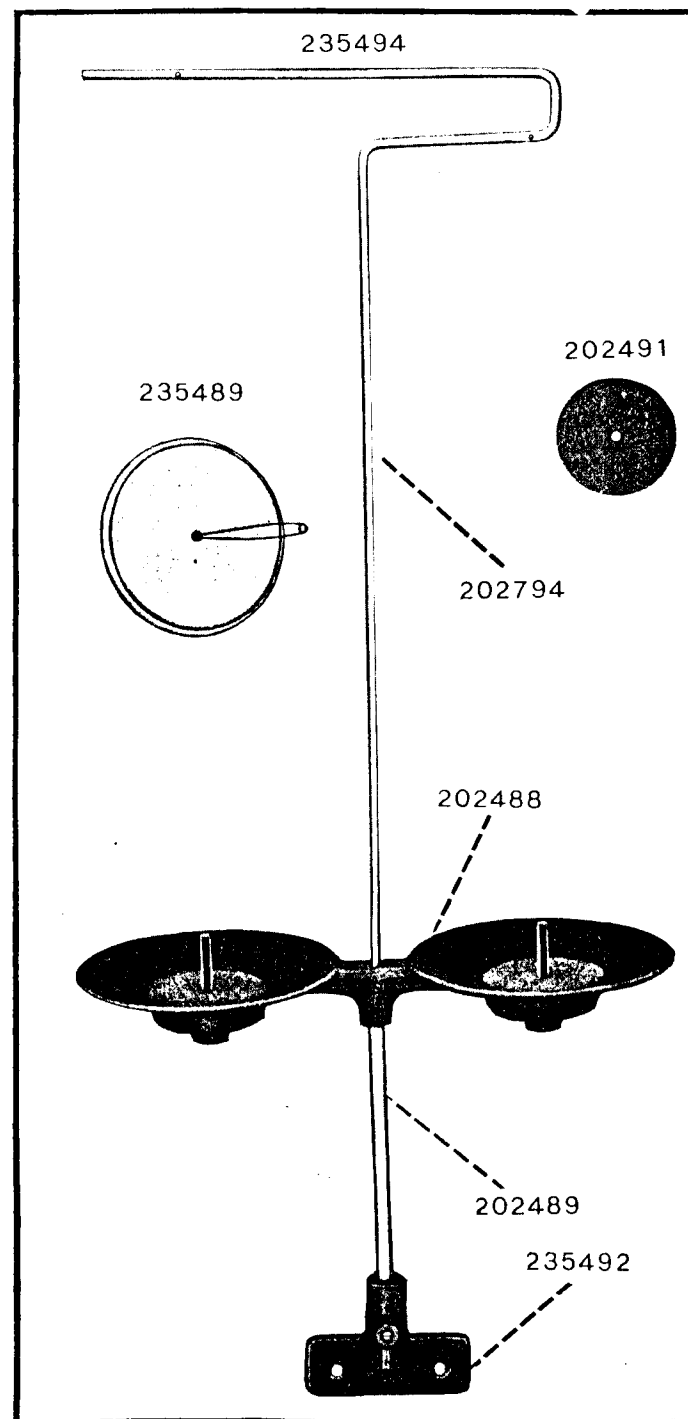


PLATE 12920—ONE-NINTH SIZE

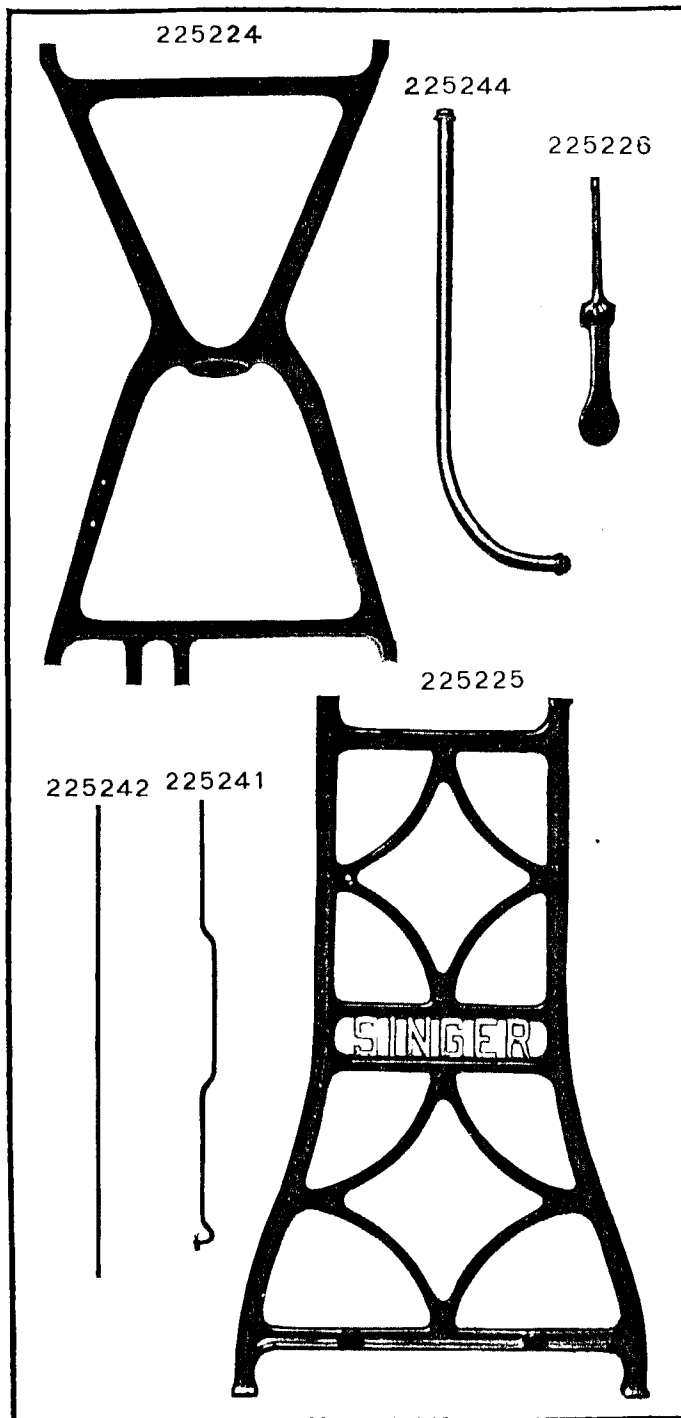


PLATE 12921—ONE-HALF SIZE

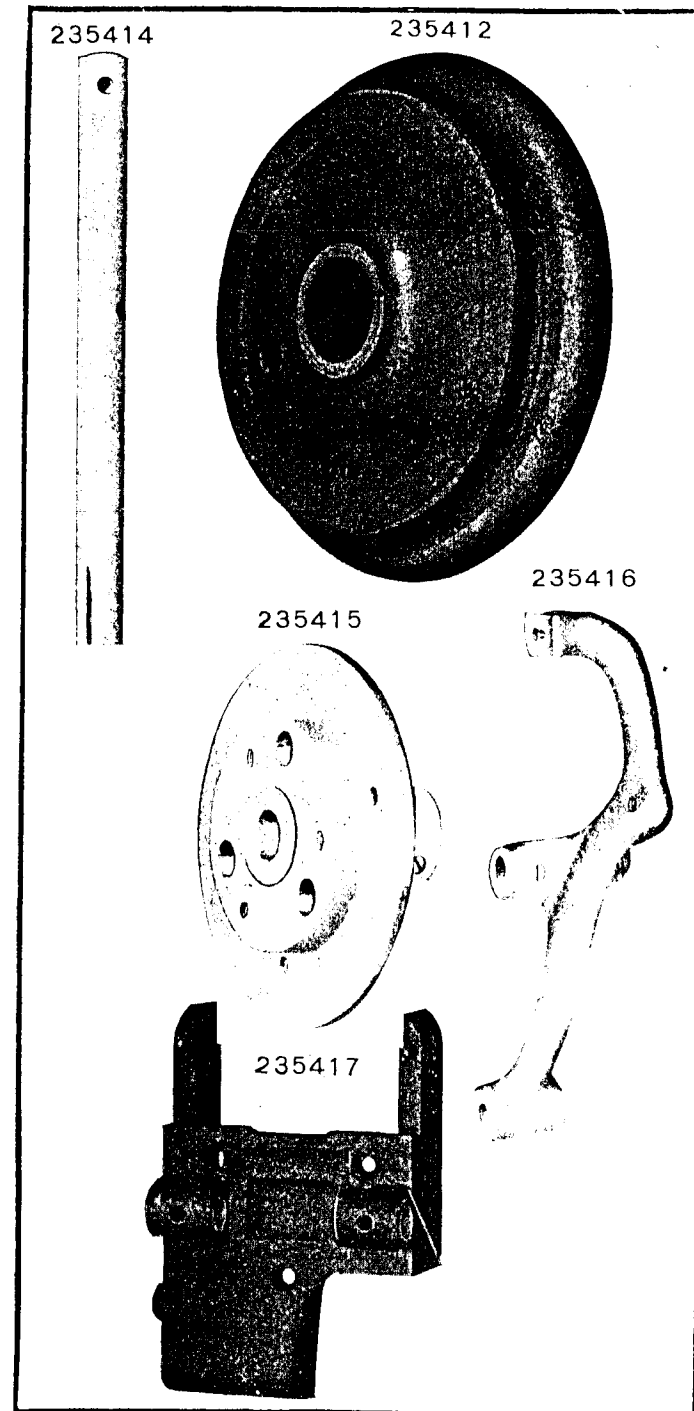


PLATE 12922—FULL SIZE

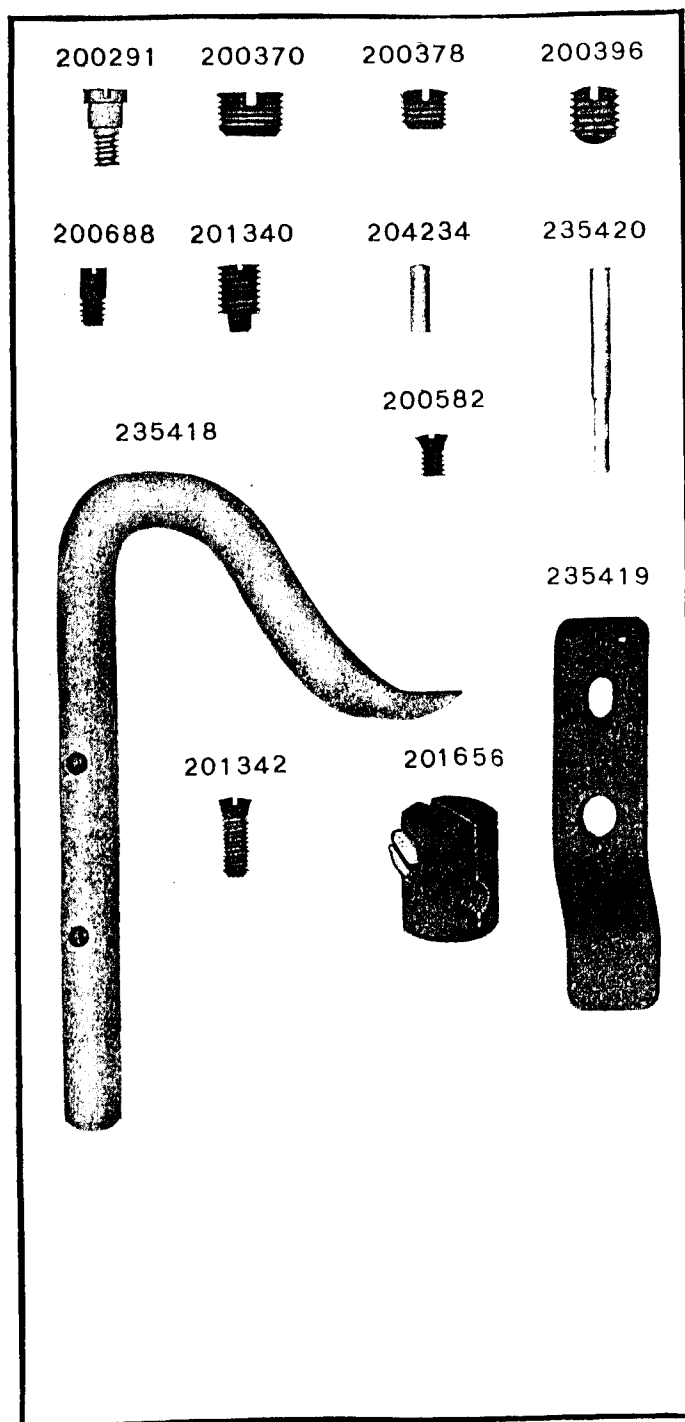


PLATE 12923—FULL SIZE

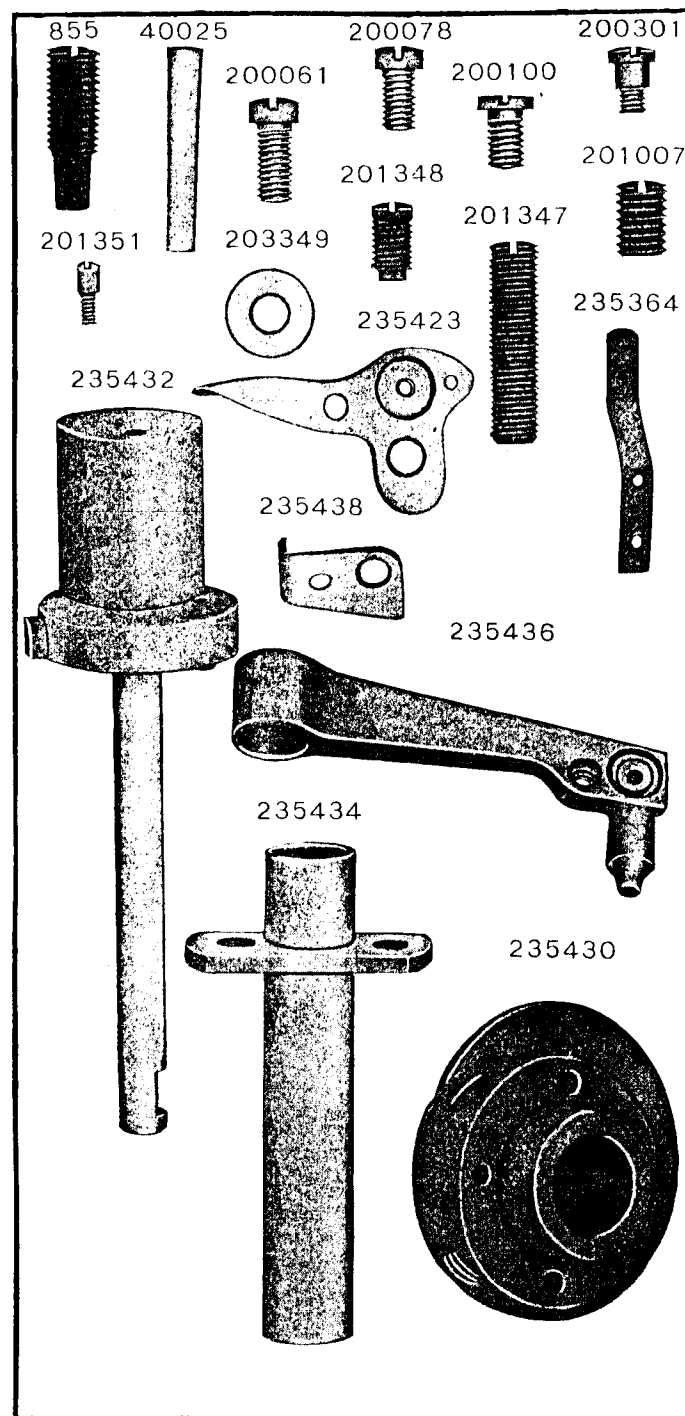


PLATE 12924—ONE-HALF SIZE

