

SINGER

108W5

LIST OF PARTS



MACHINE No. 108w5

THE SINGER MANUFACTURING COMPANY

INDEX

	PAGE
ACCESSORIES	15
BINDERS	18
BOBBIN WINDER	15
KNEE LIFTER	16
KNIFE GRINDER	18
MACHINE No. 108w5	7
NUMERICAL LIST OF PARTS	21
OBSOLETE PARTS	20
RIBBON REEL	17

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.

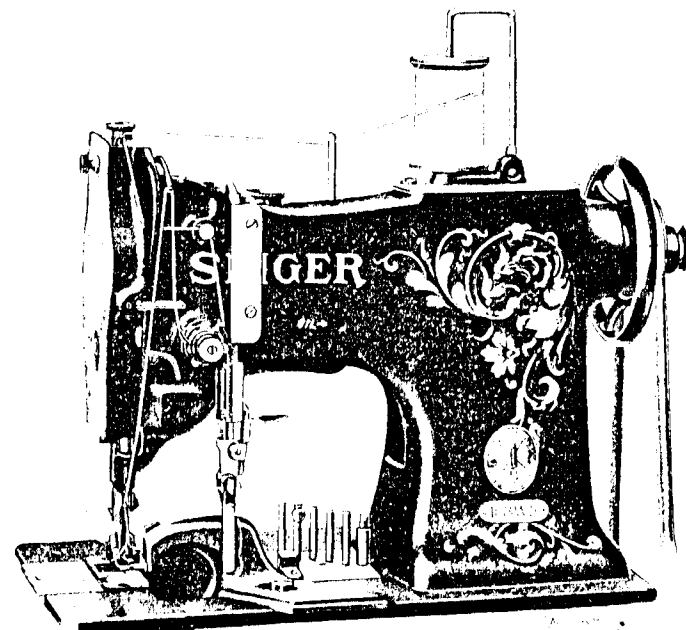
The figures in the second column refer only to the plate in which the illustration of the part is shown and are **NOT TO BE USED** in ordering.

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



MACHINE No. 108w5

For Trimming and Binding Corsets, Brassiers, Dresses,
and other similar work, at one operation.

No.	Plate	Name
*224601		Arm
203091	11670	" Cap
200278H	10244	" " Screw
202248	10244	" " " Washer
203089		" " Spool Holder Base
203090		" " " " " 203089 with 200079H and 204296
200585H	11672	Arm Cap Spool Holder Base Screw
204296	11670	" " " " Wire
200079H	10668	" " " " " Hinge Screw

No.	Plate	Name
203092	11670	Arm Cap and Spool Holder complete, Nos. 203090, 203091 and two 200585H
204235	10668	Arm Position Pin (2)
200010E	11672	" Screw (3)
202005	11672	" " Washer (3)
208523	11670	" Shaft with 200357E
202243	11670	" " Bushing (back) with 202244
202244	—	Arm Shaft Bushing (back) Oil Packing (wick)
200338c	10244	Arm Shaft Bushing (back) Set Screw
202245	11670	Arm Shaft Bushing (front) with 202036 and 202260
202260	—	Arm Shaft Bushing (front) Oil Packing (wick)
200502B	11693	Arm Shaft Bushing (front) Oil Packing Thumb Screw
202036	10668	Arm Shaft Bushing (front) Position Pin
200338c	10244	Arm Shaft Bushing (front) Set Screw
202530	11670	Arm Shaft Connection Belt
202252	10244	" " " " Pulley with 200327c, 200602E and two 202253
200602c	10244	Arm Shaft Connection Belt Pulley Position Screw
200327c	10244	Arm Shaft Connection Belt Pulley Set Screw
202253	10244	Arm Shaft Connection Belt Pulley Spring Flange
208573	11670	Arm Shaft Counter Balance with 200335c
200335c	10244	Arm Shaft Counter Balance Set Screw
200357E	10244	Arm Shaft Oil Packing Stop Screw
202255	11682	Balance Wheel (belt groove 2½ in. diam.) with 200328c and 200335c
200328c	10244	Balance Wheel Position Screw ..
200335c	10244	" " Set Screw
*224602	—	Bed
202258	12345	" Hinge Connection
200570E	11672	" " " Screw
210616	11670	" Slide (front)
200577H	11672	Binder Base Plate Screw
202265	11671	Bobbin
*202806	—	" Case
202267	11671	" " Latch

No.	Plate	Name
*202056	—	Bobbin Case Latch Pin
202269	11671	" " " Plunger
202270	11671	" " " Spring
202716	11671	" " Tension Spring
200984c	11671	" " " " Regulating Screw
200594c	11671	Bobbin Case Tension Spring Screw
202533	11671	Bobbin Case complete, Nos. 200594c, 200984c, 202056, 202267, 202269, 202270, 202716 and 202806
208535	11682	Face Plate
202135	11672	" " Position Pin
200462c	11672	" " Thumb Screw
208538	11672	Feed Driving Connection (brass) with 202277
202277	—	Feed Driving Connection Oil Packing (wick)
208539	11672	Feed Driving Connection Stud (eccentric) with 202254
202254	—	Feed Driving Connection Stud Oil Packing (wick)
200362c	11672	Feed Driving Connection Stud Set Screw
208331	11675	Feed Driving Eccentric Regulating Bracket
208332	—	Feed Driving Eccentric Regulating Bracket 208331 with 202252, two each 201014c and 201525E
202301	11691	Feed Driving Eccentric Regulating Bracket Plunger
202595	11691	Feed Driving Eccentric Regulating Bracket Plunger Spring
200607c	11691	Feed Driving Eccentric Regulating Bracket Plunger Spring Stop Screw
201014c	11672	Feed Driving Eccentric Regulating Bracket Hinge Screw
201525E	11672	Feed Driving Eccentric Regulating Bracket Hinge Screw Nut
201014c	11672	Feed Driving Eccentric Regulating Bracket Stop Screw
201525E	11672	Feed Driving Eccentric Regulating Bracket Stop Screw Nut
201002c	11675	Feed Driving Eccentric Regulating Screw
200383c	11691	Feed Driving Eccentric Regulating Screw Check Screw
208333	11675	Feed Driving Eccentric Regulating Screw Socket

No.	Plate	Name
208334	11675	Feed Driving Eccentric Regulating Slide
208335	11675	Feed Driving Eccentric Regulating Slide Spring
208360	11691	Feed Regulating Spindle with 202311, 202443, 202619 and 210554
*202311	---	Feed Regulating Spindle Head ...
202443	10244	" " " " Pin
202619	10668	" " " " Posi-
		tion Pin
210554	10668	Feed Regulating Spindle Spring (flat)
*208509	---	Hook (sewing)
206750	11671	" 208509 with 200145n, 200596e, 200614c, 202728, 203101, 206751, 206775 and 208579
206746	---	Hook and Bobbin Case complete, Nos. 202533 and 206750
208579	11671	Hook Gib
200614c	11671	" " Hinge Screw
200596e	11671	" " Screw
203101	---	" Oil Wick
*202728	---	" Shaft, 9½ in. long
202321	11671	" " Bushing (back)
200346c	11671	" " " " Set Screw
224653	11691	" " " (front)
200346c	11671	" " " " Set Screw
202323	10244	" " Connection Belt Pulley with 202324 and two 201018c ...
201018c	11672	Hook Shaft Connection Belt Pulley Set Screw
202324	10244	Hook Shaft Connection Belt Pulley Spring Flange
202260	---	Hook Shaft Oil Packing (wick) (2)
206775	11671	" " Pin
206751	11671	" Washer
200145n	11671	" " Screw
208542	11682	Knee Lifter Connection Lever with 202446
208543	---	Knee Lifter Connection Lever 208542 with 200224n, 200262n, 208544 and 208592
200224n	11672	Knee Lifter Connection Lever Hinge Screw
208592	11682	Knee Lifter Connection Lever Lifting Rod with 202302
202302	11691	Knee Lifter Connection Lever Lifting Rod Cotter Pin
202446	11691	Knee Lifter Connection Lever Pin
208544	11682	" " Lifting Lever

No.	Plate	Name
200262n	11672	Knee Lifter Lifting Lever Hinge Screw
224612	11692	Knife (oscillating)
224613	11692	" Bracket
224614	11692	" " Ring
200152n	11691	" " " Screw (2)
201396n	11691	" " Screw
228043	11691	" " " Washer
201465n	---	" Cover Hinge Screw
200152n	11691	" " Screw
224655	---	" " Section (lower)
224656	---	" " " (upper)
224616	11692	" Driving Bar
224617	11692	" " " Disengaging Slide
224618	---	Knife Driving Bar Disengaging Slide 224617 with 200366n, 215329, 224619 and 224621
224619	11691	Knife Driving Bar Disengaging Slide Latch
215329	11691	Knife Driving Bar Disengaging Slide Latch Hinge Pin
200366n	10252	Knife Driving Bar Disengaging Slide Latch Hinge Pin Set Screw
224620	11691	Knife Driving Bar Disengaging Slide Latch Plate
224621	11691	Knife Driving Bar Disengaging Slide Latch Spring
224622	11691	Knife Driving Bar Disengaging Slide Spring
224623	11691	Knife Driving Bar Disengaging Slide Spring Socket
200188n	11691	Knife Driving Bar Disengaging Slide Spring Socket Screw (2) ..
224624	11691	Knife Driving Bar Slide Block ...
224625	11693	" " " " Plate
200578n	11691	" " " " " Screw (2)
224626	11693	Knife Driving Link with 200125e ...
224627	11693	" " " " Hinge Stud ..
200125e	11693	" " " " " Set Screw
208545	11672	Lifting Bell Crank
224628	11693	" " " " Driving Crank
208547	11672	" " " " " Link
202277	---	Lifting Bell Crank Driving Crank Oil Packing (wick)
201012c	11672	Lifting Bell Crank Driving Crank Position Screw

No.	Plate	Name
200374c	10668	Lifting Bell Crank Driving Crank Set Screw
200996c	11673	Lifting Bell Crank Stop Screw ...
224629	11693	" Presser Foot Plate
224630	11693	" " " Shank
224631	---	Lifting Presser Foot (hinged) complete, Nos. 224629 and 224630 ..
200074f	11672	Lifting Presser Foot Screw
224654	11693	" " " Spring (flat)
200175H	11693	" " " " Screw
224632	11693	Needle Bar with 200141f
208549	11682	" " and Needle Plate Carrier Frame with 200362c, 200997c and 208550
200999c	11673	Needle Bar and Needle Plate Carrier Frame Hinge Screw
200998c	11673	Needle Bar and Needle Plate Carrier Frame Hinge Screw Stud ..
208550	11673	Needle Bar and Needle Plate Carrier Frame Hinge Screw Stud Bushing (split)
200997c	11673	Needle Bar and Needle Plate Carrier Frame Hinge Screw Stud Bushing Position Screw
202277	---	Needle Bar and Needle Plate Carrier Frame Hinge Screw Stud Oil Packing (wick)
208551	11673	Needle Bar Connecting Link
208552	11673	" " " Stud with 200086c and 202330
202330	---	Needle Bar Connecting Stud Oil Packing (wick)
200086c	11673	Needle Bar Connecting Stud Pinch Screw
224633	11692	Needle Bar Crank with 200335c, 200374c, 200428c and 201012c ...
224634	---	Needle Bar Crank 224633 with 200996c, 202398, 202400, 208545, 208547, 208551, 208552, 208555, 208557, 224624, 224628, 224643 and 224644
203172	11673	Needle Bar Crank Friction Washer
200428c	11673	" " " Position Screw ..
200335c	10244	" " " Set Screw
208315	11694	" Plate, 50 needle hole, for needle sizes 14 and 15
201387f	11693	Needle Plate Screw
224635	11694	" " Slide Plate (adjustable)

No.	Plate	Name
200054f	11693	Needle Plate Slide Plate Screw (2)
202101	11674	Needle Plate Slide Plate Screw Washer (2)
200141f	11674	Needle Set Screw
208554	11675	Oil Leader (brass) (for back hook shaft bearing)
208566	11670	Presser Bar with 200074f
208567	11674	" " Bushing
200352c	11674	" " " Set Screw
202339	11674	" " Lifter
200653c	11674	" " " Hinge Screw ..
208555	11673	" " Lifting Bracket with 200054b
200975f	11674	Presser Bar Lifting Bracket Guide Screw
200054b	11693	Presser Bar Lifting Bracket Pinch Screw
208556	11674	Presser Bar Spring
200494b	11674	" " Thumb Screw (pressure regulating)
200475e	10668	Presser Bar Thumb Screw Thumb Set Screw
202355	10668	Presser Bar Thumb Screw Thumb Set Screw Packing (brass)
224636	11694	Presser Foot (auxiliary)
224637	11694	" " " Guide Collar with 201397e
201397e	11694	Presser Foot (auxiliary) Guide Collar Screw
224638	11694	Presser Foot (auxiliary) Spring ..
201398c	11694	" " " " Stop Screw
202397	10668	Take-up (auxiliary)
200842e	10668	" " Screw
202398	10247	" Lever
208557	11673	" " Driving Stud with 202277
202277	---	Take-up Lever Driving Stud Oil Packing (wick)
202400	10247	Take-up Lever Hinge Stud with 202423
202423	---	Take-up Lever Hinge Stud Oil Packing (wick)
200383c	11691	Take-up Lever Hinge Stud Set Screw
208558	11674	Take-up Lever Oil Guard with 223655 and 224572

No.	Plate	Name
200161H	10272	Take-up Lever Oil Guard Screw ..
223655	---	" " Oiling Felt
224572	11694	" " " " Rivet ..
202402	10247	Tension Disc (back)
202403	10247	Tension Disc (front)
208583	11674	" Release Plunger
208559	11675	" " Slide
208560	11675	" " " Spring
202405	10247	" " Washer
202407	10881	" Spring
200625F	10247	" Stud with 204925
200084F	11674	" " Set Screw
204925	10668	" " Washer
201572H	10881	" Thumb Nut
202409	10252	Tension complete, Nos. 200625F, 201572H, 202402, 202403, 202405, 202407 and 202410
202410	10252	Thread Controller Spring
202411	10252	" " " Stop
200132E	10247	" " " " Screw
208574	11675	" Guide
202412	11675	" "
202415	10252	" "
208569	11675	" "
202582H	10252	" " Screw
200389C	10252	" " Set Screw
202091	10252	" Retainer Sleeve
202092	10252	" " Spring
204058	10252	" " Stud
200366H	10252	" " " Set Screw
204059	10668	Thread Retainer complete, Nos. 202091, 202092 and 204058
224639	11694	Throat Plate with 202534, 224640 to 224642 and two 200582H
202534	10668	Throat Plate Bobbin Case Stop
200582H	10252	" " " " " "
		Screw
224640	11694	Throat Plate Slide
224641	11694	" " " Spring
224642	11694	" " " Stop Pin
200577H	11672	" " Screw (2)
224643	11694	Vibrating Presser Bar
224644	11694	" " " Connecting Link
202277	---	Vibrating Presser Bar Oil Packing (wick)
224645	11693	Vibrating Presser Foot with 200175H, 201015F and 224654
201015F	11675	Vibrating Presser Foot Pinch Screw

ACCESSORIES

No.	Plate	Name
202265	11671	Bobbin (5)
*225482	---	" Case Screw Driver Blade ..
*225483	---	" " " " Handle ..
225497	12345	Bobbin Case Screw Driver com- plete, Nos. 225482 and 225483 ..
135 x 1	---	Needles, three each, sizes 12 and 14
208591	---	Drip Pan with four wood screws $\frac{1}{2}$ in., No. 5
41400	12345	Machine Rest Pin (wood)
36578	13245	Oiler with 36579
36579	12345	" Spout, $3\frac{1}{2}$ in. long, with 120117, for 36578
120117	---	Oiler Spout Washer
*225484	---	Screw Driver Blade
*225485	---	" " Handle
225498	12345	Screw Driver complete (7 $\frac{1}{2}$ in. long), Nos. 225484 and 225485 ..
225554	12345	Wrench (steel)

BOBBIN WINDER

Swing Automatic, Right Hand.

*225451	---	Bobbin Holder
225453	10882	Frame with 202277 and 225438
225454	10882	" Hinge Pin
202277	---	" Oil Packing (wick)
225438	10882	" " Well Cap
225455	10882	" Spring
225456	10882	" " Plunger
202473	10883	Pulley with 200380C
200380C	10272	" Set Screw
*225443	---	Spindle
225452	10882	" 225443 with 225451
225444	10882	Stop Latch
200056E	10882	" " Screw
225458	10882	" " Thumb Lever
225459	10882	" " " " Hinge Stud
225460	10882	Stop Latch Thumb Lever Joint Stud
202478	10882	Stop Latch Trip Lever
200299H	10882	" " " " Hinge Screw

No.	Plate	Name
225461	10881	Tension Bracket with 201499B ...
200082B	10881	" " Screw
202104	10881	" " Washer
2102	10881	" Disc
202407	10881	" Spring
201499B	10881	" Stud
201572B	10881	" " Thumb Nut
225462	10881	Bobbin Winder Tension Bracket complete, Nos. 201572B, 202407, 225461 and two 2102
225463	10883	Bobbin Winder and Tension Bracket Base
225436	10883	Universal Bobbin Winder complete, Nos. 200056B, 200082B, 200299B, 202104, 202473, 202478, 225444, 225452 to 225456, 225458 to 225460, 225462, 225463 and two round head wood screws 1 in., No. 13

KNEE LIFTER

227781	11682	Knee Lifter Rock Lever with 200522C and 200529C
227782	- - -	Knee Lifter Rock Lever 227781 with two each 202451 and 202452
227783	- - -	Knee Lifter Rock Lever 227782 with 202985 and 227784
202453	11682	Knee Lifter Rock Lever Knee Plate with 200526C
202985	- - -	Knee Lifter Rock Lever Knee Plate 202453 with 202455
202455	11682	Knee Lifter Rock Lever Knee Plate Arm (short)
200522C	11695	Knee Lifter Rock Lever Knee Plate Arm Set Screw
200526C	11695	Knee Lifter Rock Lever Knee Plate Set Screw
202451	11682	Knee Lifter Rock Lever Lug with two wood screws 7/8 in., No. 13B
202452	11695	Knee Lifter Rock Lever Lug Hinge Pin
227784	11682	Knee Lifter Rock Lever Rod, 3 in. long, with 227785
*227785	-	Knee Lifter Rock Lever Rod Cap or Oil Guard
200529C	11695	Knee Lifter Rock Lever Rod Set Screw

(Other Knee Lifter parts are listed with parts of machine head.)

No.	Plate	Name
RIBBON REEL		
225663		Ribbon Reel (9 in. diam.) with 225666 and three 205520
225664		Ribbon Reel Supporting Spindle
225665	11695	" " " " Base with 225664 and two wood screws 3/4 in., No. 7
230471		Ribbon Reel Supporting Spindle Hub
225666	11695	Ribbon Reel Supporting Spindle Hub 230471 with 225980
225980		Ribbon Reel Supporting Spindle Hub Base
205520	11695	Ribbon Reel Supporting Spindle Hub Base Rivet
225976		Ribbon Reel (9 in. diam.) complete, Nos. 225663 and 225665

BINDER

No.	Plate	Name
224603	11696	Binder Base Plate with 224604, 224605 and five 225671
208319	11695	Binder Head, .030 in. opening, for tapes or folded strips from $\frac{1}{8}$ to $\frac{3}{4}$ in., in steps of $\frac{1}{8}$ inch
208326	11695	Binder Head Adjusting Lever
200292e	11695	" " " " Hinge Screw
208327	11695	Binder Head Adjusting Lever Hinge Screw Washer
200133e	11695	Binder Head Screw
208318	11695	" " Slide Block
208329	11695	" Tape Guide, for tapes or folded strips from $\frac{1}{8}$ to $\frac{3}{4}$ in., in steps of $\frac{1}{8}$ inch
200907b	11695	Binder Tape Guide Screw
224604	11696	" " Tension Pin
225671	11696	" " " " " "
224605	11696	" " " " Roller
224606		Binder complete, .030 in. opening, for tapes or folded strips from $\frac{1}{8}$ to $\frac{3}{4}$ in., in steps of $\frac{1}{8}$ in., Nos. 200292e, 208318, 208319, 208326, 208327, 208329, 224603, two each 200133e and 200907b ..

KNIFE GRINDER

224646		Emery Wheel
206962	11697	" " Driving Shaft
201510b	11698	" " " " Nut
204101	11698	" " " " " " Washer
206963	11698	Emery Wheel Driving Shaft Pulley with two 200403e
200403e	11698	Emery Wheel Driving Shaft Pulley Set Screw

No.	Plate	Name
206969		Emery Wheel Washer (paper) ..
206964	11697	Frame with two 54897
54897	11698	" Oil Cup
202126	11698	Knife Bracket Ring Position Pin ..
201399b	11698	" Clamping Thumb Screw ..
224647	11697	" Holder Slide Bracket
224648		" " " " " " 224647 with 200326e, 201021e, 201399b, 201528e, 202126 and 224651
224649	11698	Knife Holder Slide Bracket Adjusting Collar with 200353e
200353e	11698	Knife Holder Slide Bracket Adjusting Collar Set Screw
200326e	11698	Knife Holder Slide Bracket Adjusting Screw
201528e	11698	Knife Holder Slide Bracket Adjusting Screw Nut
206966	11697	Knife Holder Slide Bracket Adjusting Screw Slide Plate
200577b	11672	Knife Holder Slide Bracket Adjusting Screw Slide Plate Screw
200457b	11698	Knife Holder Slide Bracket Adjusting Thumb Screw
201021e	11698	Knife Holder Slide Bracket Set Screw
224650	11697	Knife Holder Slide Bracket Shaft
205711	11698	" " " " " " Spring
227224	11698	Knife Holder Slide Bracket Shaft Spring Collar with 200380e
200380e	10272	Knife Holder Slide Bracket Shaft Spring Collar Set Screw
224651	11698	Knife Position Pin
224652		Knife Grinder complete, Nos. 200457b, 200577b, 201510b, 204101, 205711, 206962 to 206964, 206966, 224646, 224648 to 224650, 227224 and two 206969

OBSOLETE PARTS

No.	Plate	Name
202470	10271	Bobbin Winder Base
202471	10271	" " Frame
202472	10271	" " Spring
202474	10271	" " Spindle
202475	10272	" " Stop Latch
202477	10272	" " " " Thumb Lever
202479	10271	Bobbin Winder complete, Nos. 200056E, 200161D, 200221D, 201537D, 202470 to 202475, 202477, 202478, three 200299D and two round head wood screws 1 in., No. 13
202480	10271	Bobbin Winder Spool Holder Base with 200355D and 202484
202481	10271	Bobbin Winder Spool Holder Base Spool Pin
202482	10272	Bobbin Winder Spool Holder Ten- sion Disc (lower or upper)
202483	10272	Bobbin Winder Spool Holder Ten- sion Disc Spring (brass)
202484	10272	Bobbin Winder Spool Holder Ten- sion Disc Thread Guide
202485	10271	Bobbin Winder Spool Holder com- plete, Nos. 200011E, 202480, 202481, 202483, two 202482 and one wood screw 1 in., No. 13 ..

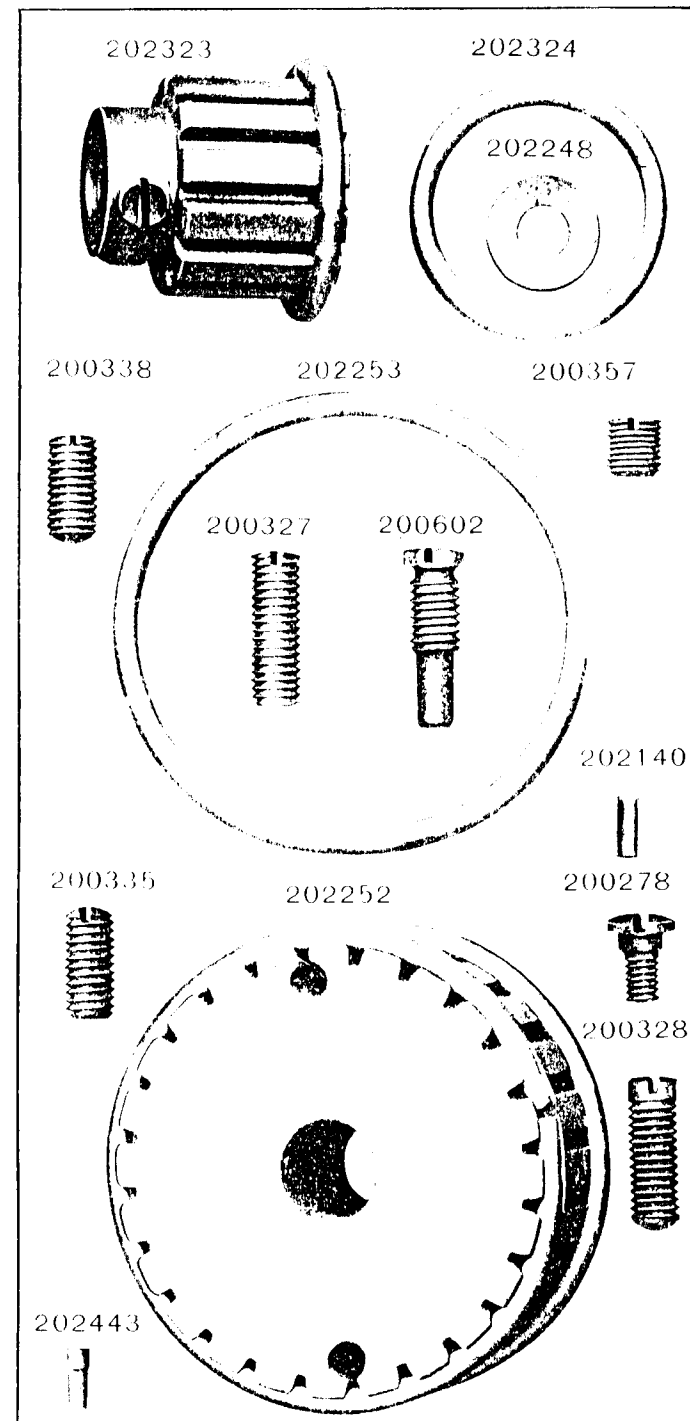


PLATE 10247—FULL SIZE

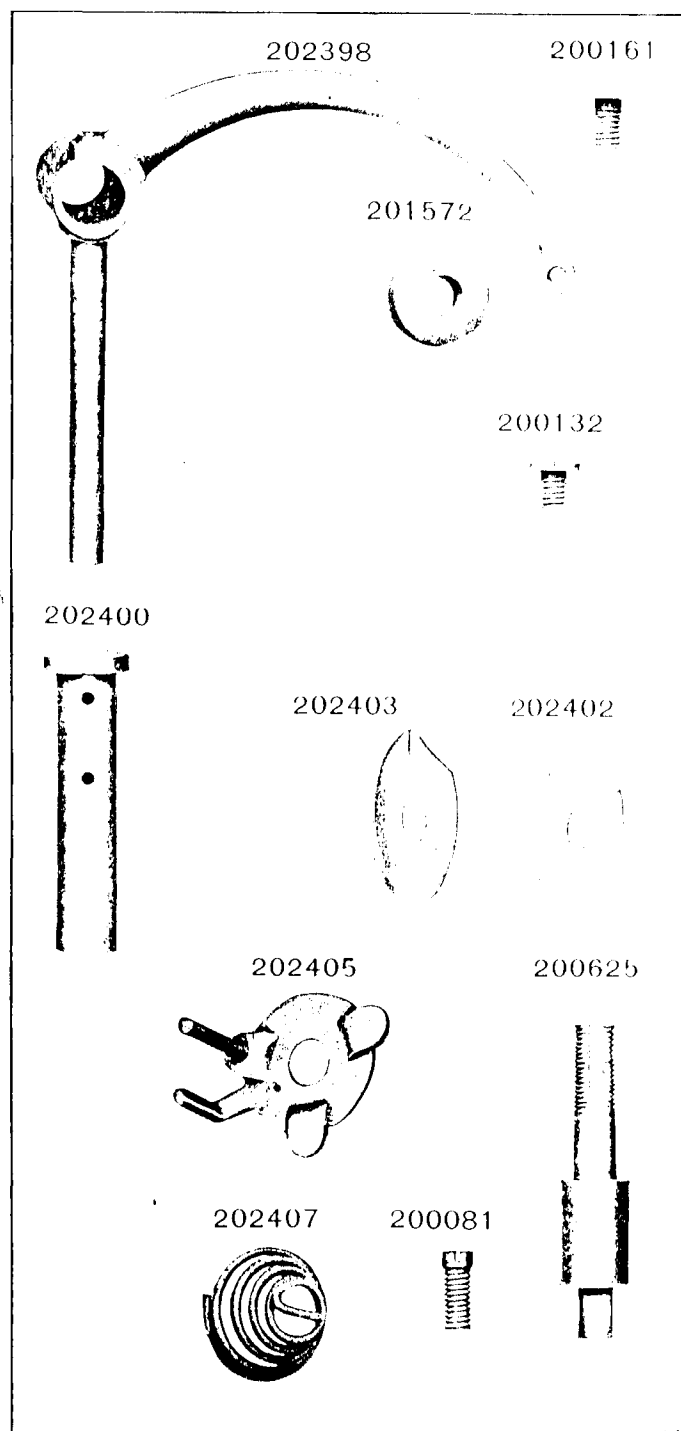


PLATE 10252—FULL SIZE

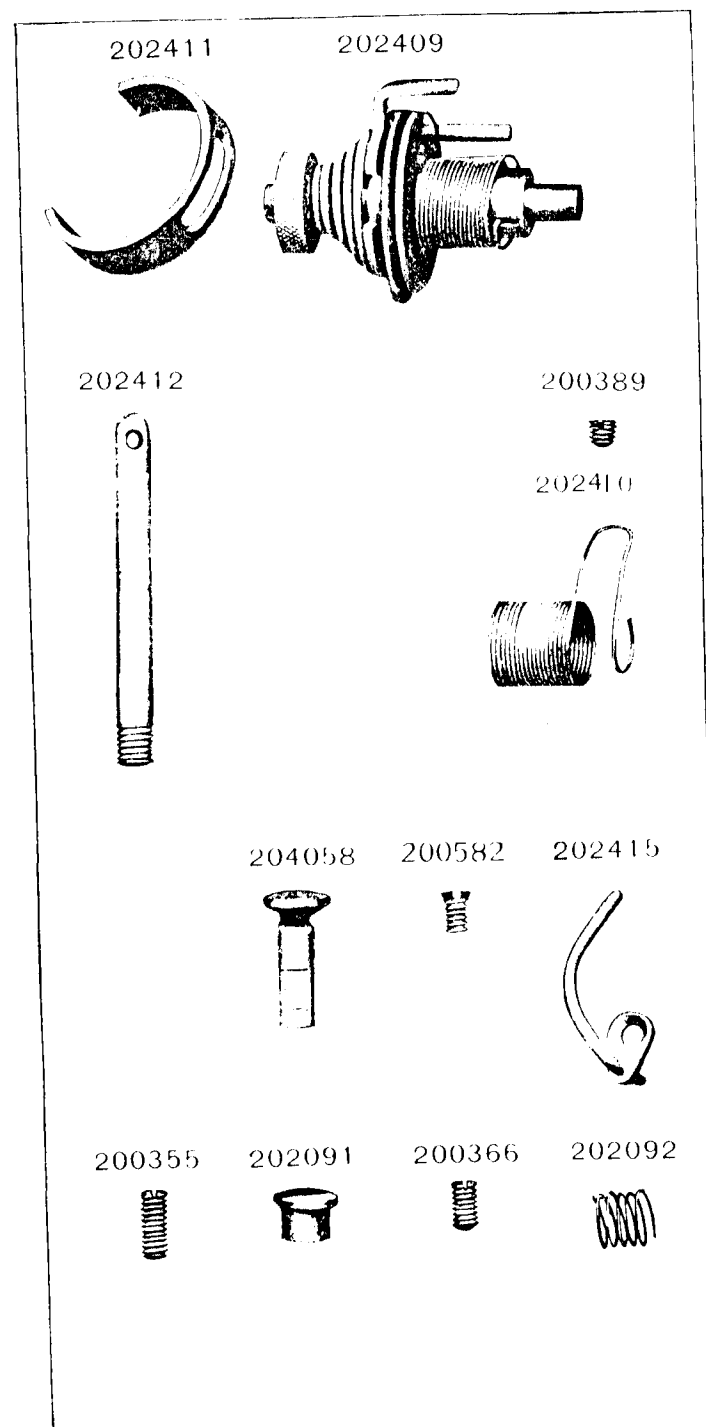


PLATE 10271--ONE-HALF SIZE

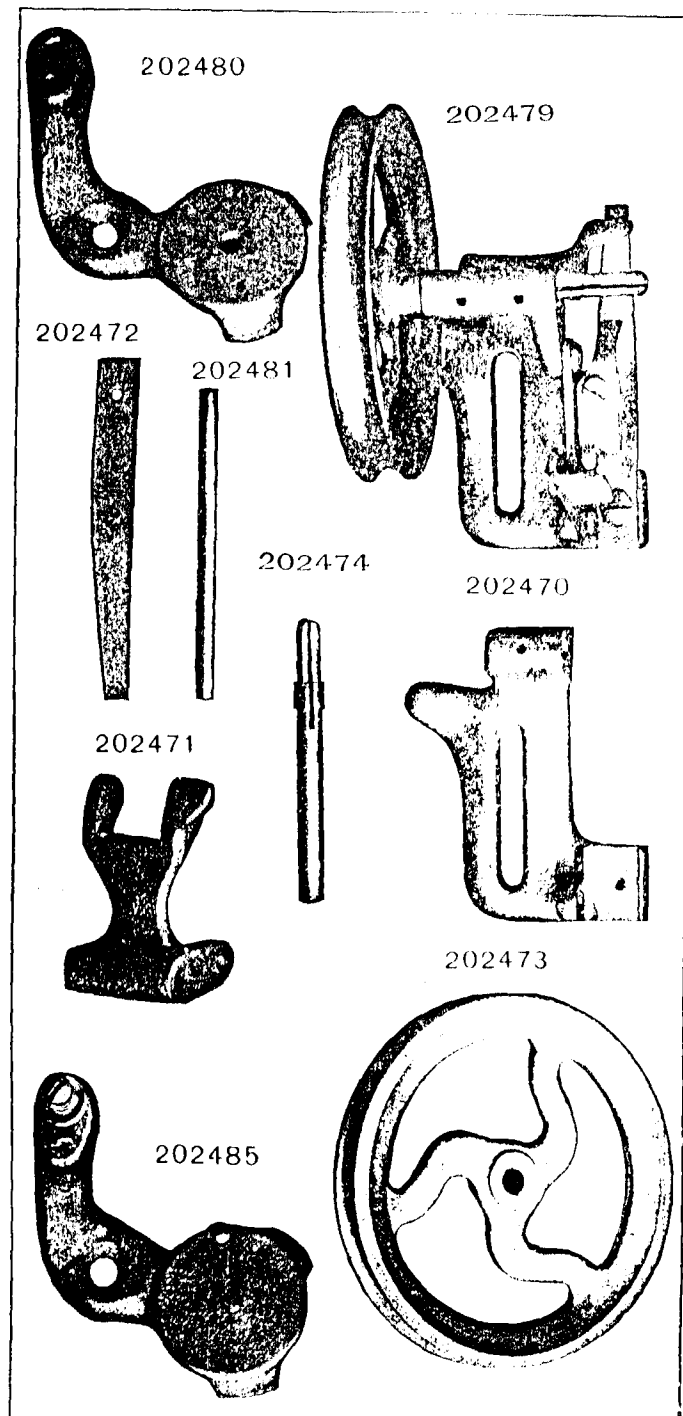


PLATE 10272--FULL SIZE

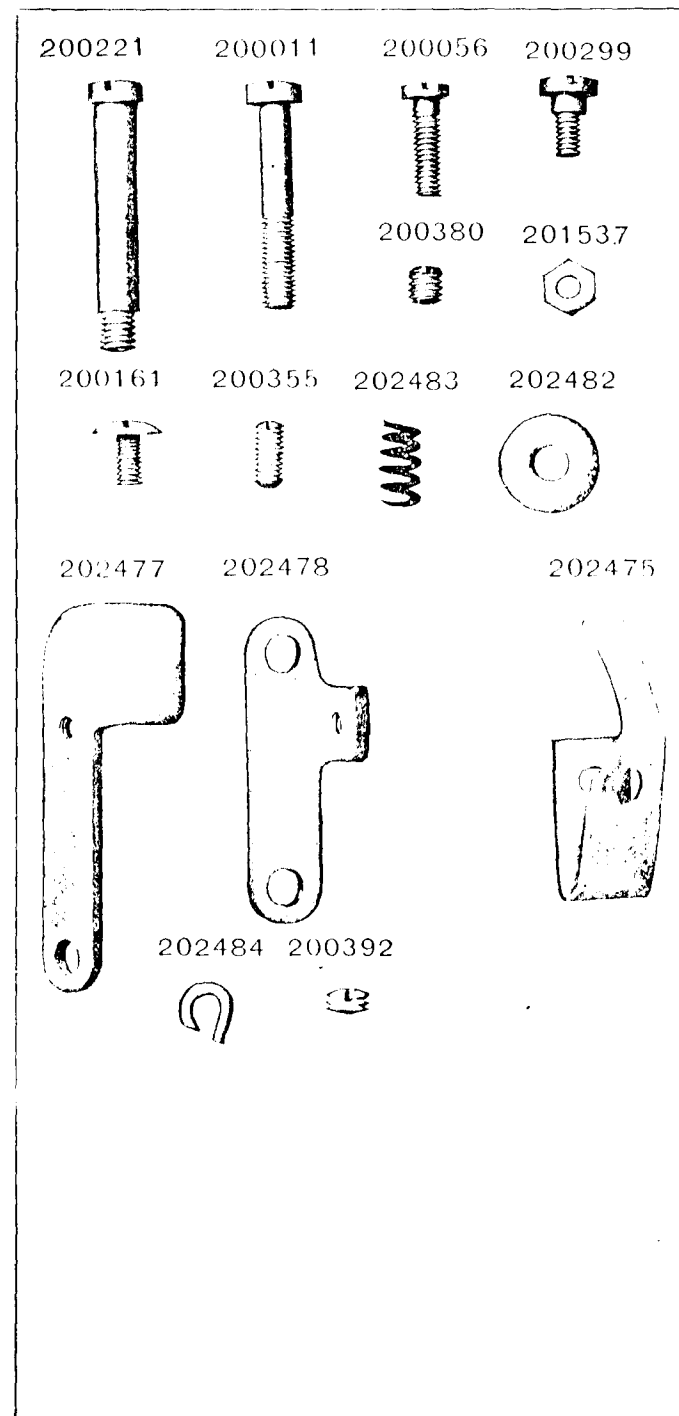


PLATE 10668—FULL SIZE

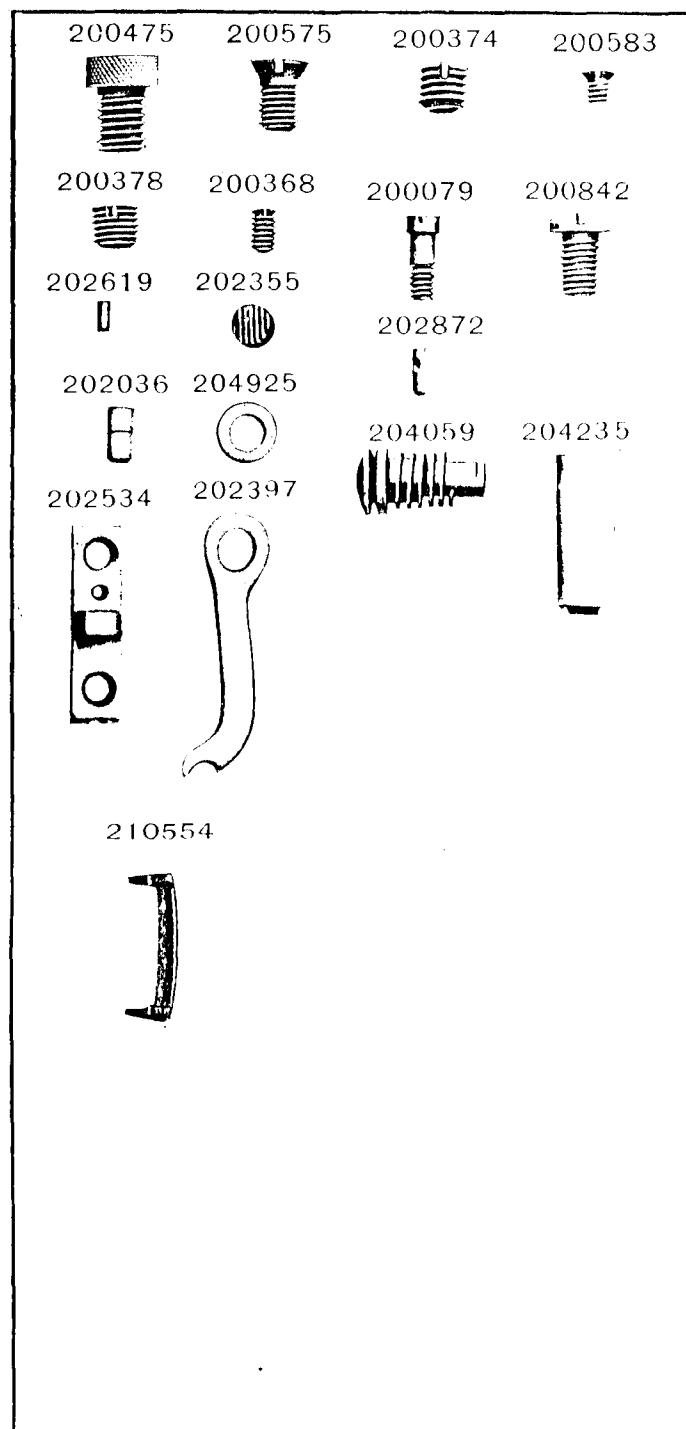


PLATE 10881—FULL SIZE

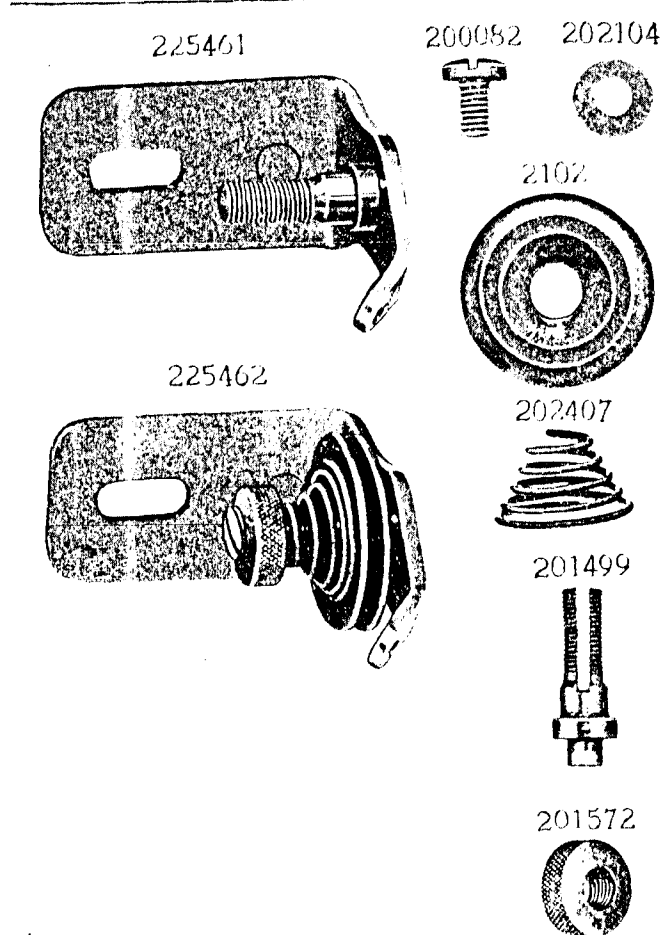


PLATE 10882—FULL SIZE

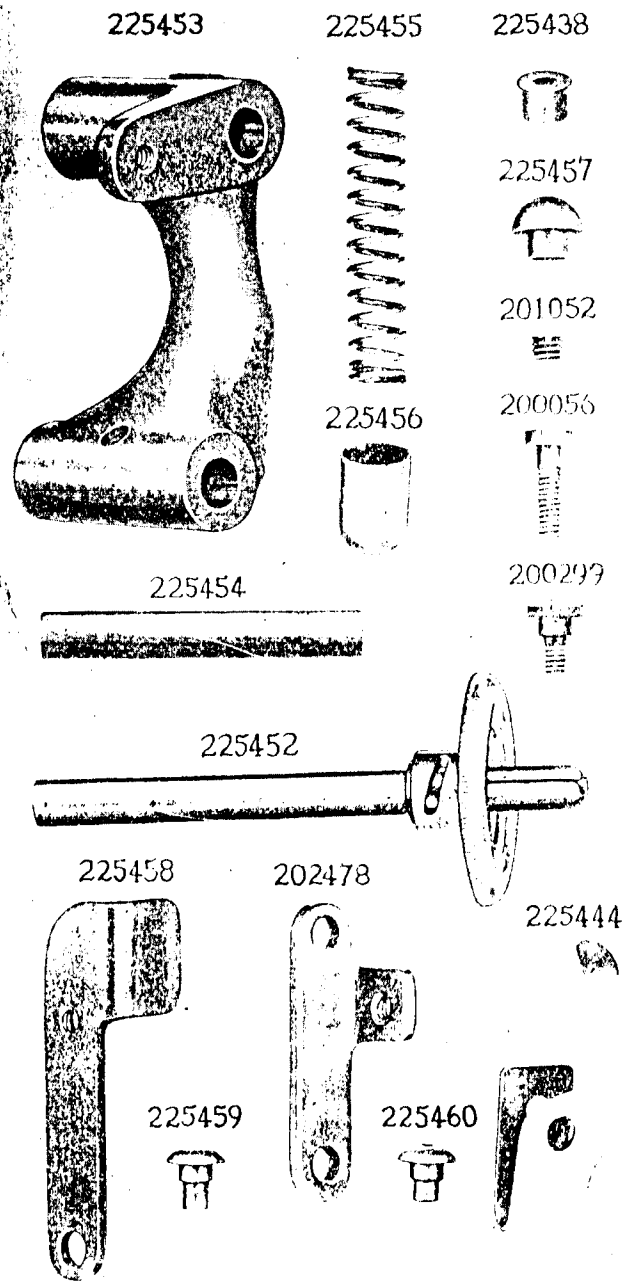


PLATE 10883—ONE-FOURTH SIZE

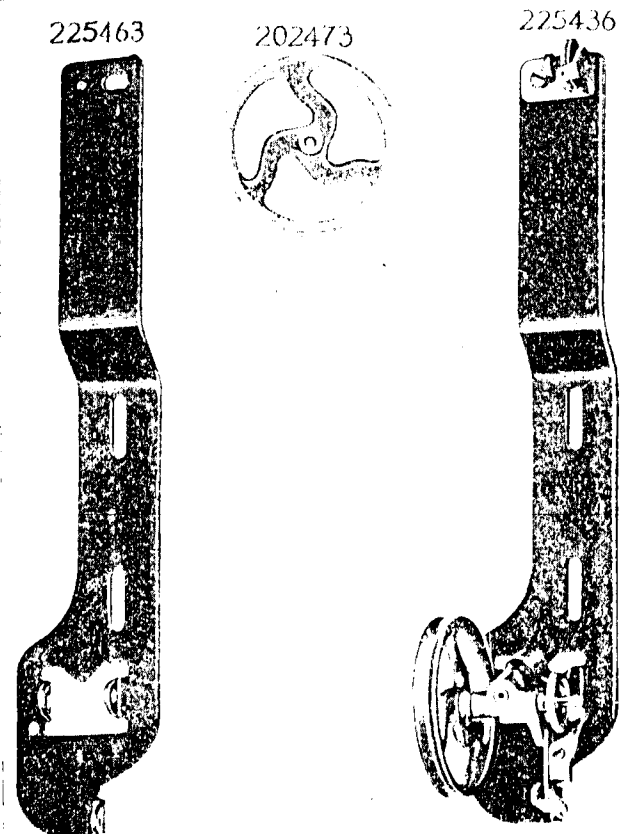


PLATE 11670-ONE-HALF SIZE

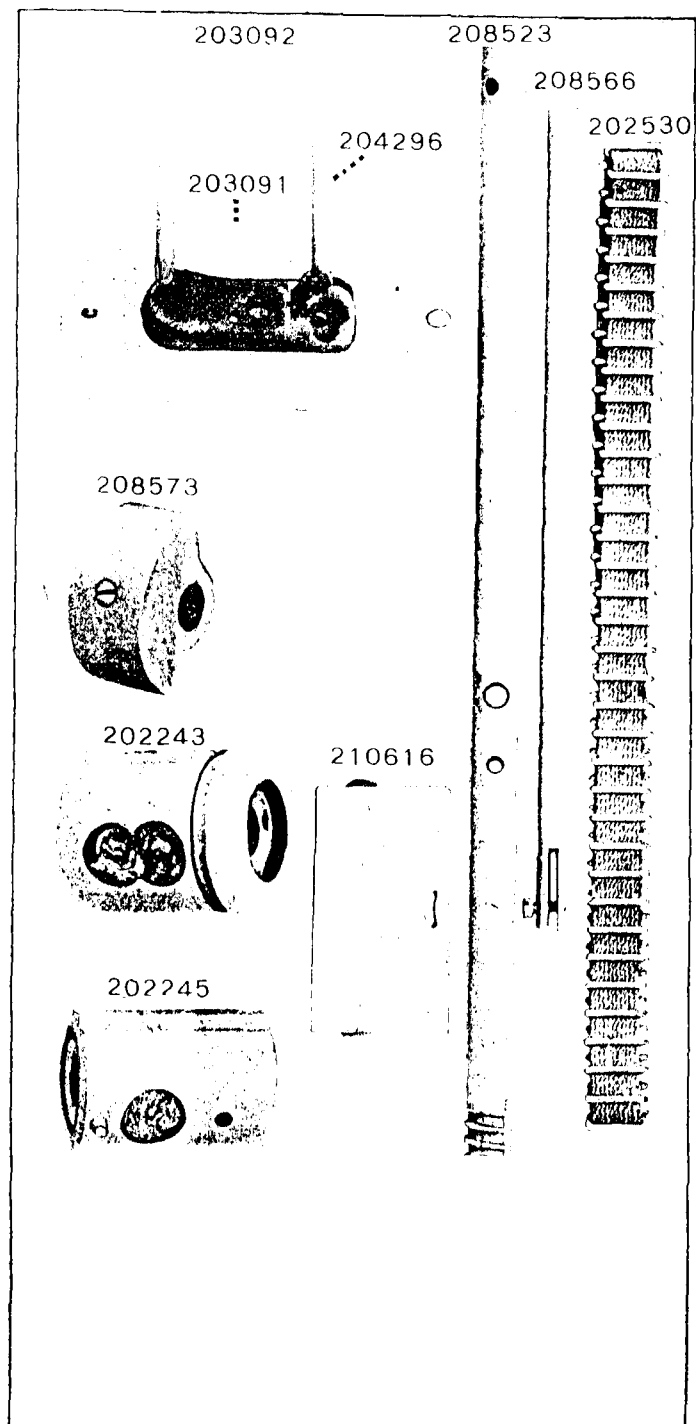


PLATE 11671-FULL SIZE

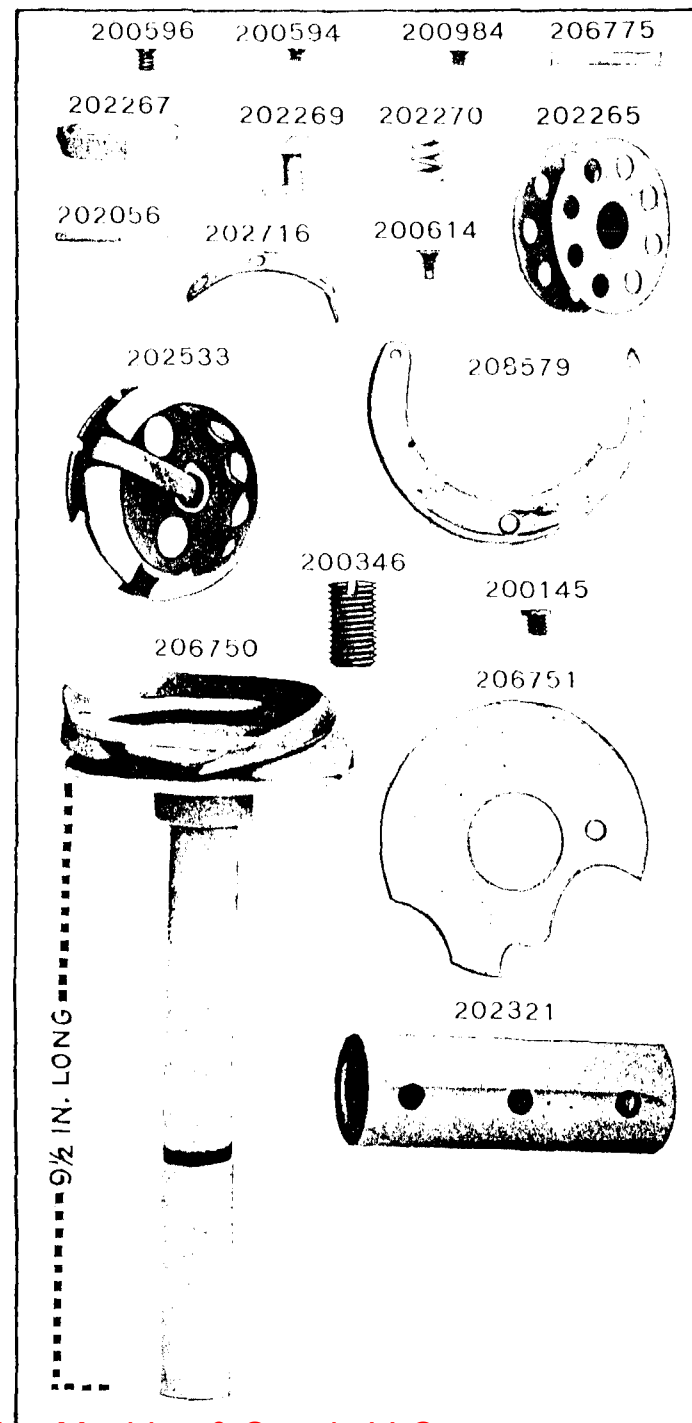


PLATE 11672-FULL SIZE

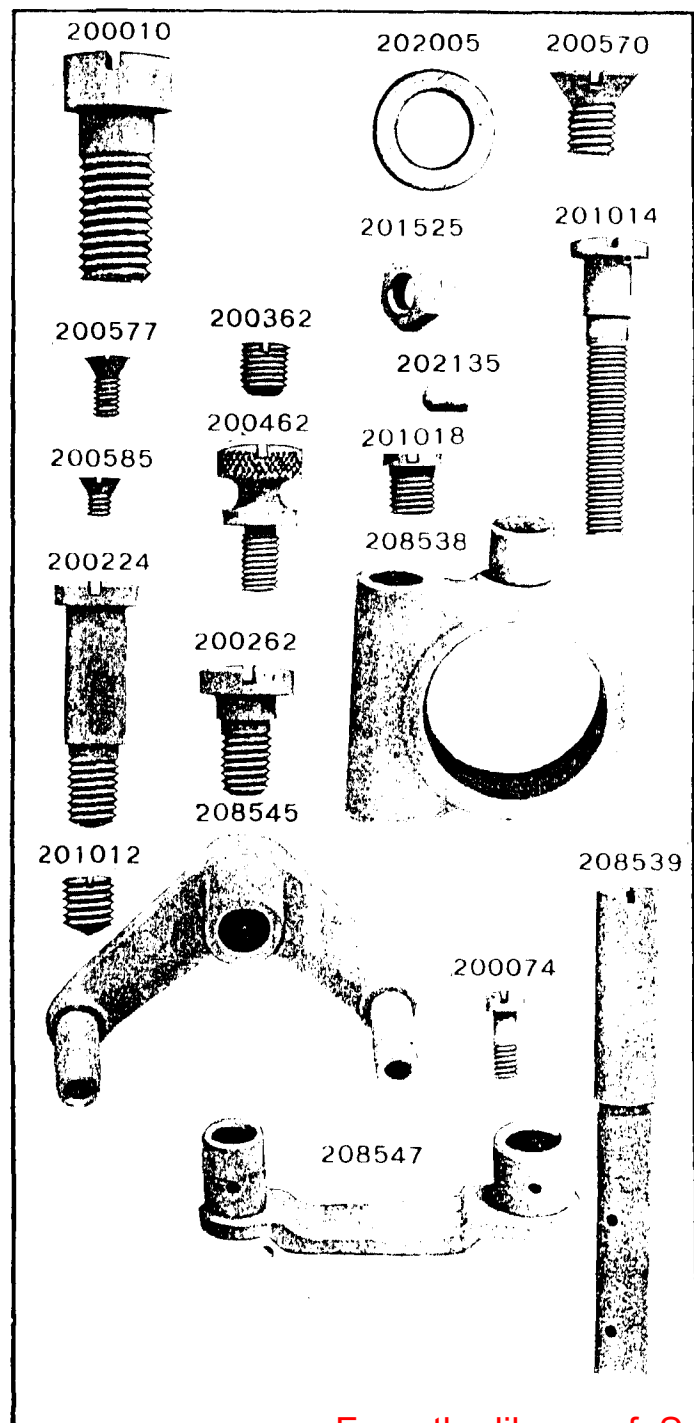


PLATE 11673-FULL SIZE

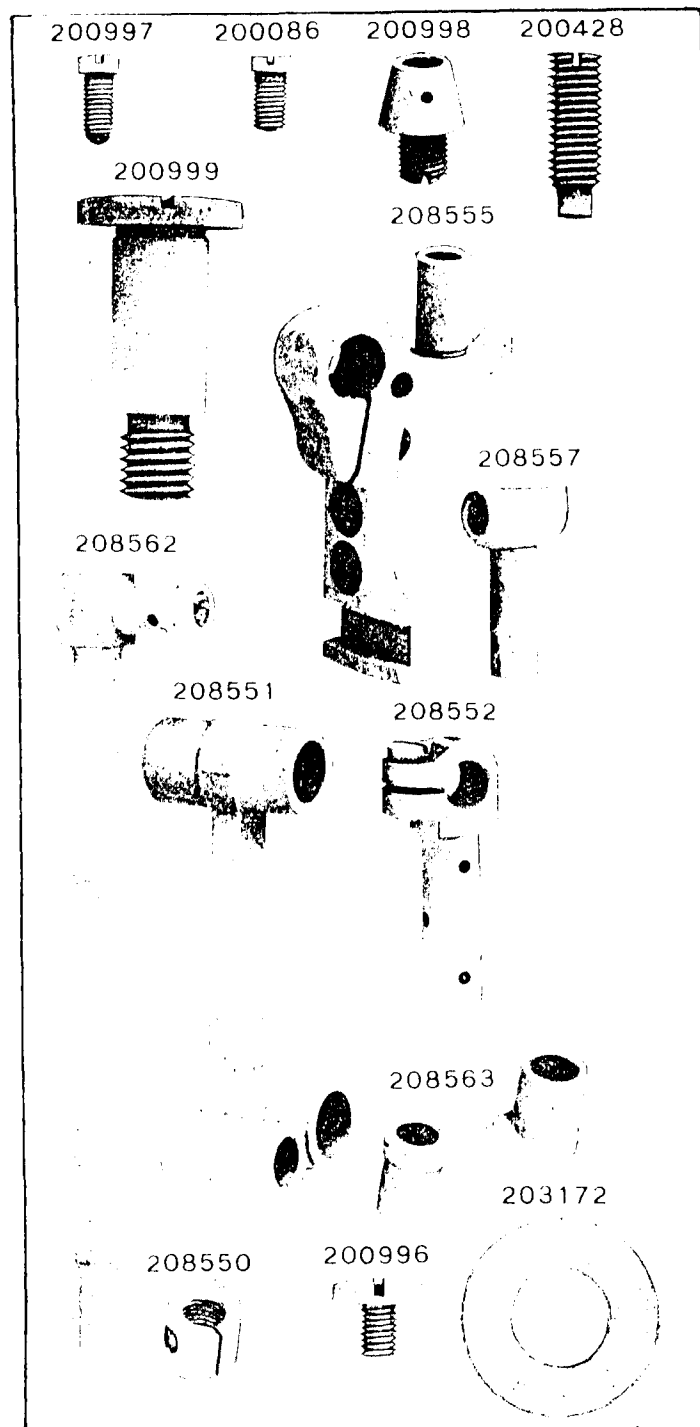


PLATE 11674 FULL SIZE

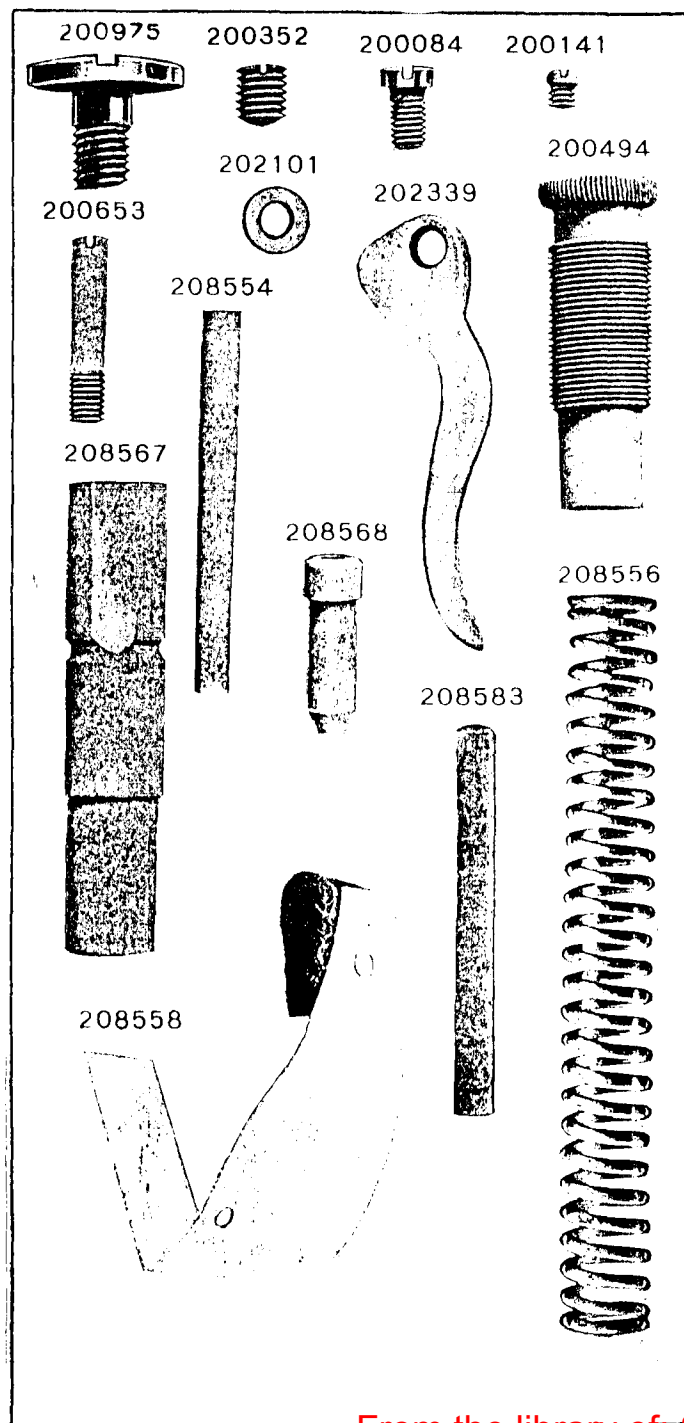


PLATE 11675 FULL SIZE

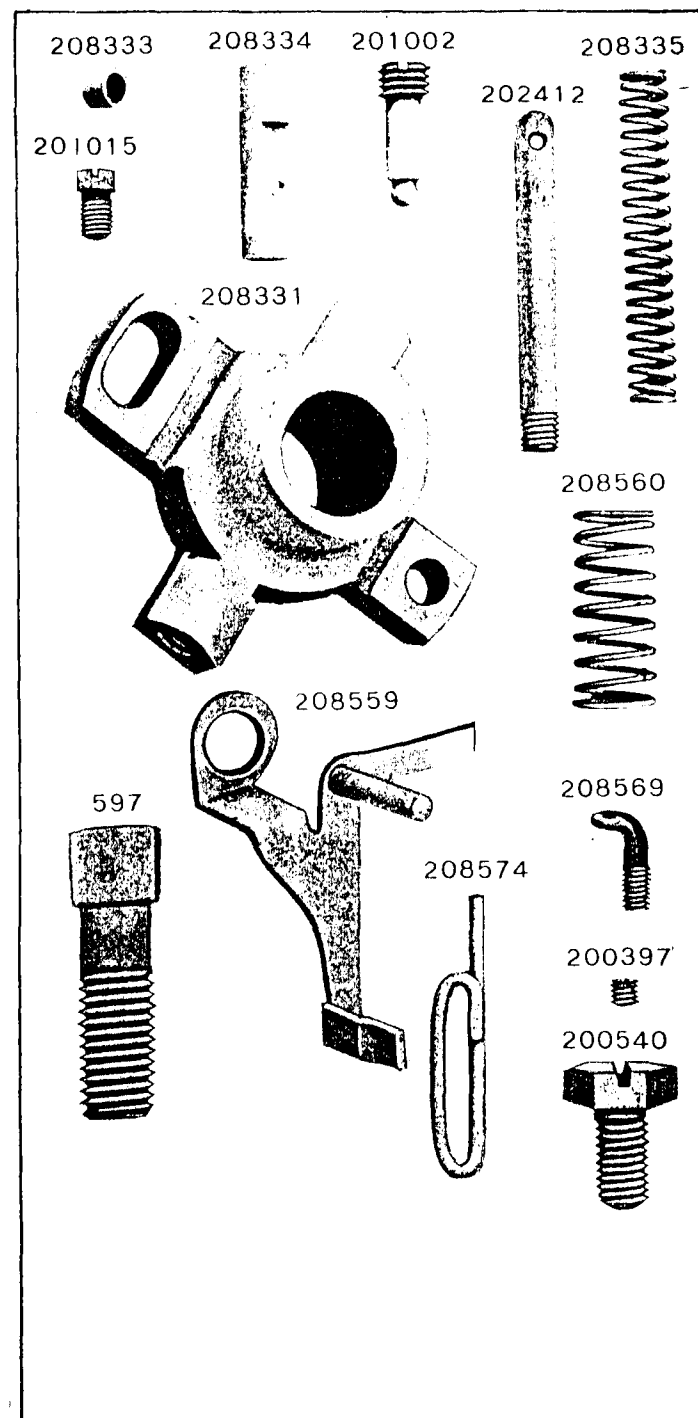


PLATE 11682-ONE-FOURTH SIZE

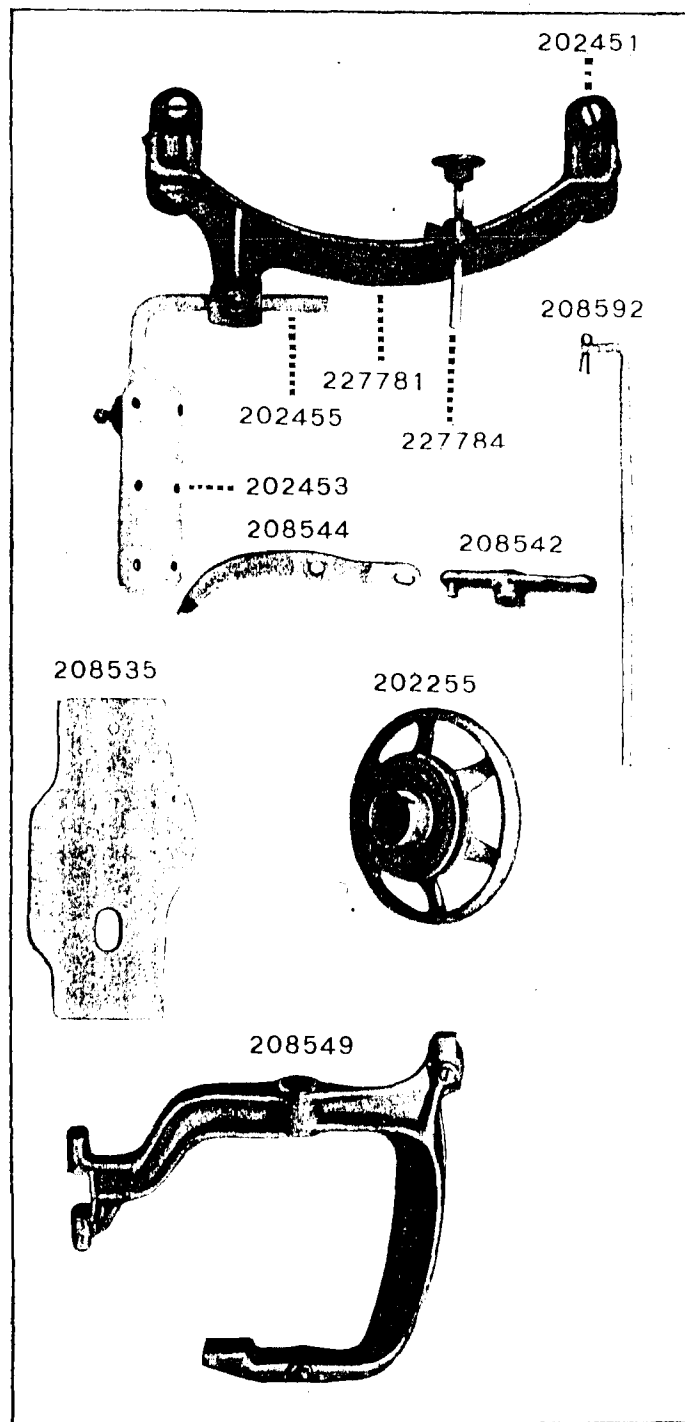


PLATE 11691-FULL SIZE

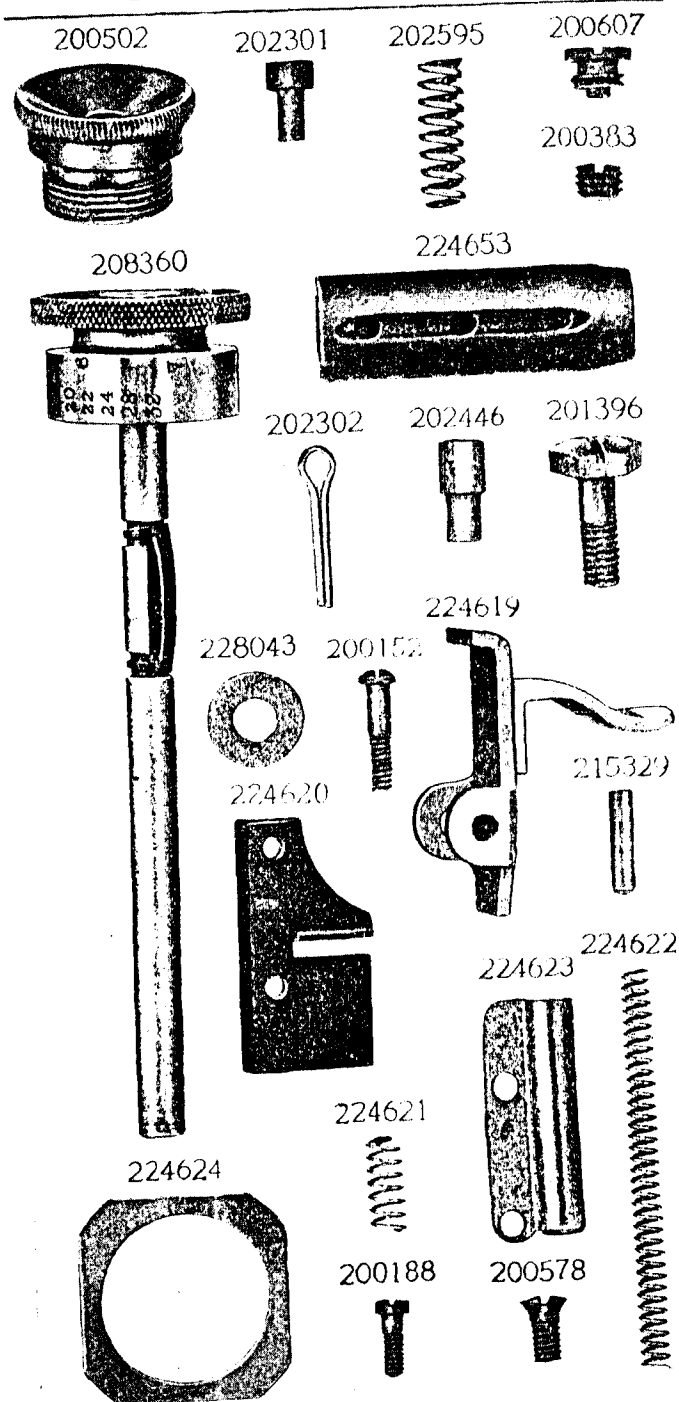


PLATE 11692—ONE-HALF SIZE

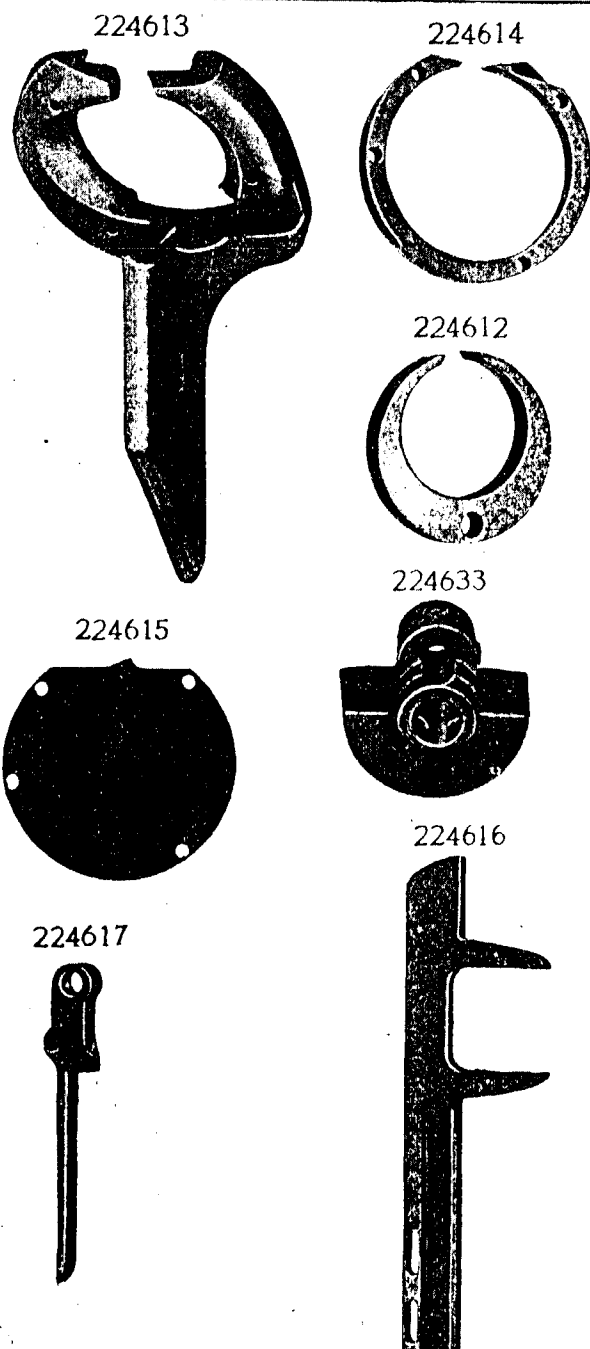


PLATE 11693—FULL SIZE

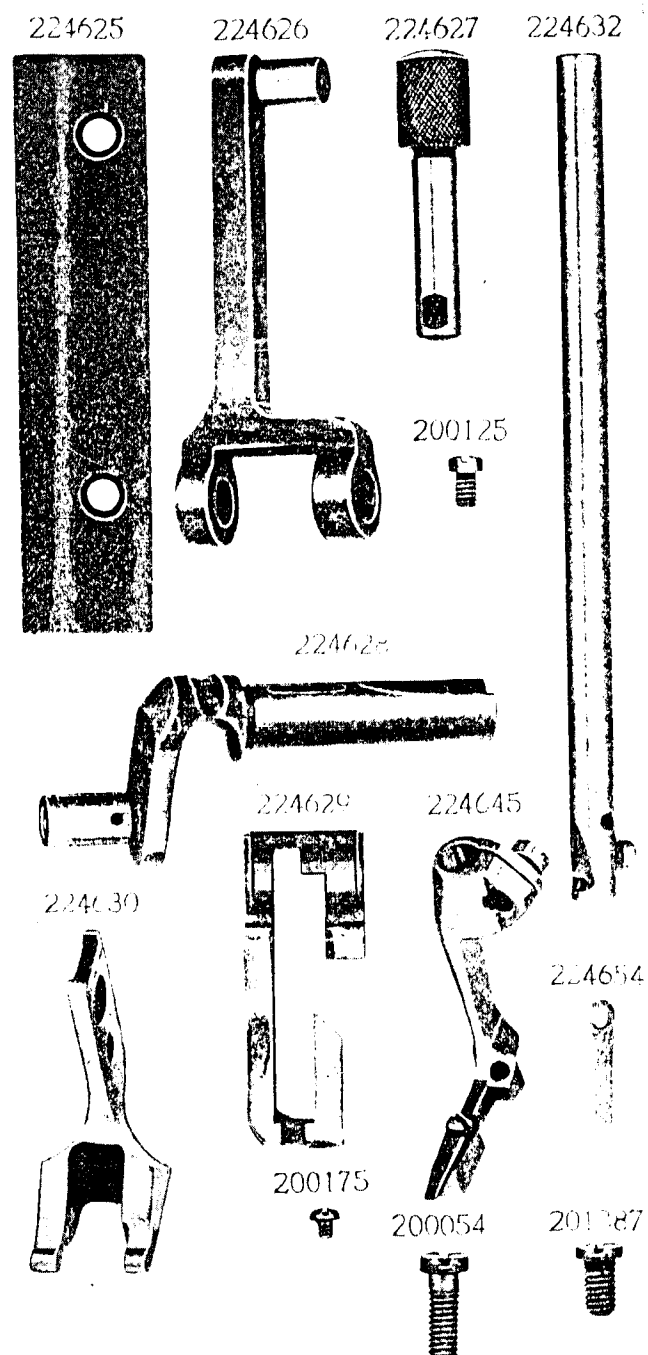
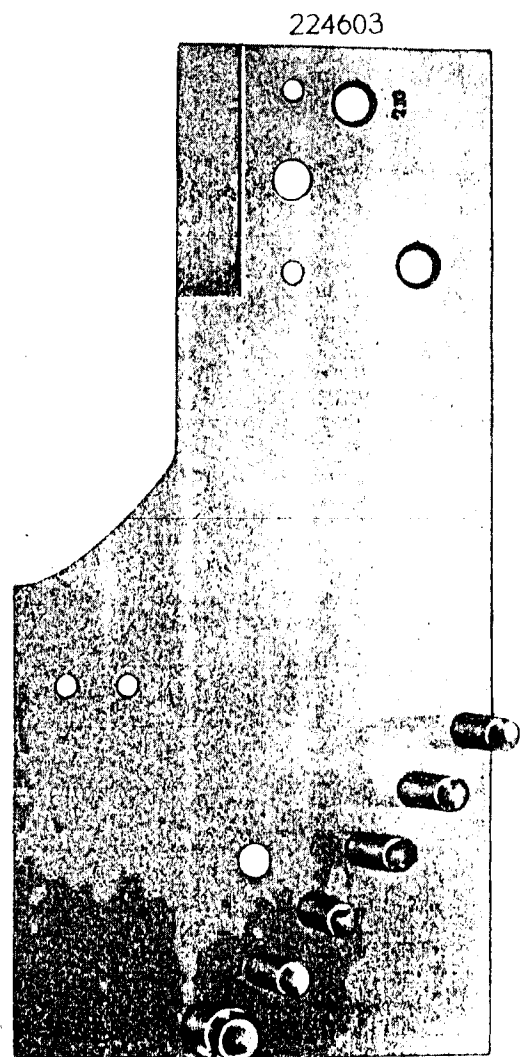


PLATE 11696—FULL SIZE



224604



224605



225671



PLATE 11697—ONE-HALF SIZE

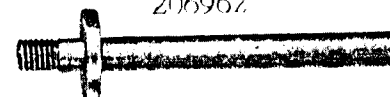
206966



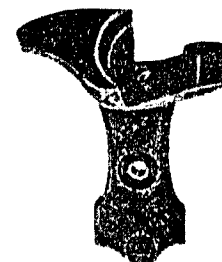
224650



206962



224647



206964

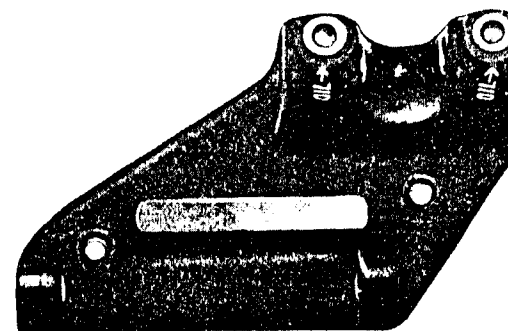


PLATE 11698—FULL SIZE

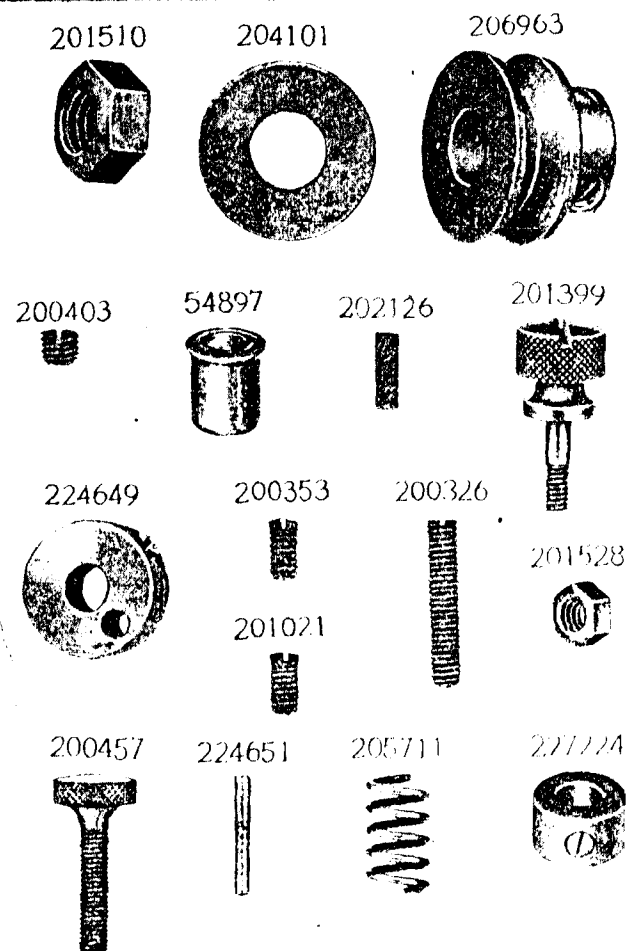


PLATE 12345—ONE-HALF SIZE

