

SINGER
51W45,W46,W47

LIST OF PARTS



MACHINES

Nos. 51w45, 51w46
and 51w47

THE SINGER MANUFACTURING COMPANY

COPYRIGHT, U. S. A., 1915, 1919 AND 1922
BY
THE SINGER MANUFACTURING CO.
ALL RIGHTS RESERVED FOR ALL COUNTRIES

INDEX

	PAGE
ACCESSORIES	30
BOBBIN WINDER	30
FOOT LIFTER	31, 32
KNIFE GRINDER	33
KNIVES	32
MACHINE NO. 51W45	7
" " 51W46	17
" " 51W47	29
NUMERICAL LIST OF PARTS	35
WOOD BASE	34
WORK PLATE PLATFORM	34

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.

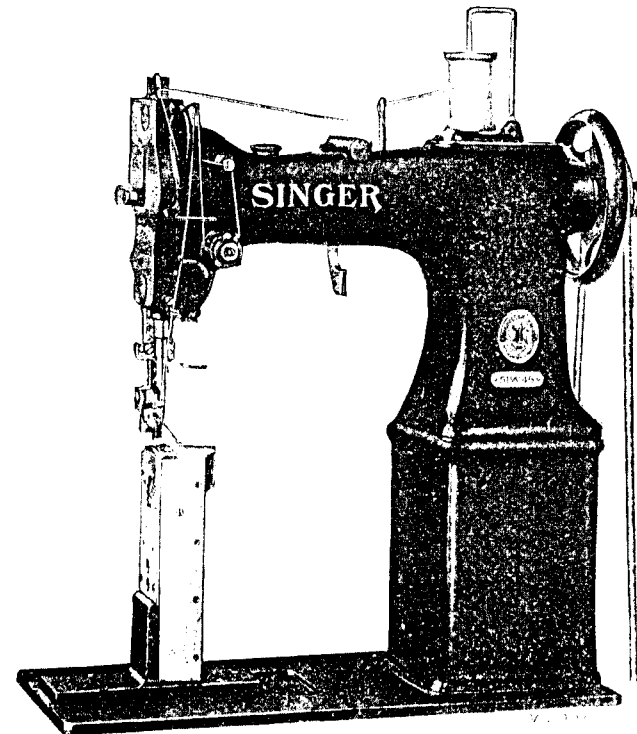
The figures in the second column refer only to the plate in which the illustration of the part is shown and are **NOT TO BE USED** in ordering.

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. 51w45

DROP FEED. ROLLER PRESSER

For Stitching a Seam and Trimming the Edges
at one Operation

For Leather and Gloves

No.	Plate	Name
*206921	—	Arm with 202243, 202245 and two 200338c
*234002	—	Arm Base
204235	10668	" " Position Pin (2)
200010E	10245	" " Screw (3)
202005	10245	" " Washer (3)
207073	13976	" Bushing Hole Plug

No.	Plate	Name
200352c	10248	Arm Bushing Hole Plug Set Screw
203091	13977	" Cap
200278H	13302	" " Screw
202248	13302	" " Washer
203089	10947	" " Spool Holder Base
203090	10947	" " " " " 203089 with 200079H and 204296
200585H	10373	Arm Cap Spool Holder Base Screw
204296	10947	" " " " Wire
200079H	10668	" " " " " Hinge Screw
203092	—	Arm Cap and Spool Holder complete, Nos. 203090, 203091 and two 200585H
10554	13976	Arm Position Pin (2)
200010E	10245	" Screw (3)
241501	13977	" Shaft with 200357E and 203100
202246	10947	" " Bushing (back) with 202244
202244	—	Arm Shaft Bushing (back) Oil Packing (wick)
200338c	13302	Arm Shaft Bushing (back) Set Screw
202245	10947	Arm Shaft Bushing (front) with 202036 and 202260
202260	—	Arm Shaft Bushing (front) Oil Packing (wick)
200502H	10246	Arm Shaft Bushing (front) Oil Packing Thumb Screw
202036	10668	Arm Shaft Bushing (front) Position Pin
200338c	13302	Arm Shaft Bushing (front) Set Screw
234003	13301	Arm Shaft Connection Belt
202635	13977	" " " " Pulley with 200327c, 200602E and two 202253
200602E	13302	Arm Shaft Connection Belt Pulley Position Screw
200327c	13302	Arm Shaft Connection Belt Pulley Set Screw
202253	13302	Arm Shaft Connection Belt Pulley Spring Flange
203100	—	Arm Shaft Oil Packing (wick)
200357E	13302	" " " " Stop Screw
234147	13301	Balance Wheel (belt groove 2 3/4 in. diam.) with 200328c and 200335c
200328c	13302	Balance Wheel Position Screw
200335c	10248	" " Set Screw

No.	Plate	Name
*234004	—	Bed
202258	12153	" Hinge Connection (2)
200570E	10245	" " " Screw (4)
203470	13302	Bobbin
*203498	—	" Case
203648	13302	" " Latch
*202056	—	" " " Pin
203473	13302	" " " Plunger
203474	13302	" " " Spring
234079	13302	" " Lever
234065	13302	" " " Driving Block
200076D	13302	" " " " Screw
201272c	13976	" " " Hinge Screw
203214	13302	" " Tension Spring
200984c	13302	" " " " Regulat- ing Screw
200594c	13302	Bobbin Case Tension Spring Screw
203216	—	" " Washer (cloth)
203500	13976	Bobbin Case complete, Nos. 200594c, 200984c, 202056, 203214, 203216, 203473, 203474, 203498 and 203648
206951	10947	Face Plate
234010	13977	Feed Bar
200641c	10246	" " Hinge Screw (driving)
201518E	13976	" " " " Nut
202276	10245	" " Slide Block
234084	—	" " " " Crank with 200038c
234011	13302	Feed Bar Slide Block Crank 234084 with 200205E, 201518E and 202276
200038c	10245	Feed Bar Slide Block Crank Pinch Screw
200205E	10245	Feed Bar Slide Block Hinge Screw
201518E	13976	" " " " " " " Nut
212637	13983	Feed Dog
241502	13977	" " Lever with 200098E
200362c	13976	" " " Adjusting Screw
201524E	11291	" " " " " " Check Nut
200263E	13302	Feed Dog Lever Hinge Screw
201528E	13302	" " " " " Nut
241503	13977	" " " Post
241504	—	" " " " 241503 with 200265E, 201525E, 203610, 221212, 241502, 241522, four each 200054E and 200578H

No.	Plate	Name
221209	13978	Feed Dog Lever Post Cover (back)
241507	13978	" " " " " (front)
200159F	13304	" " " " " "
		Clamp Screw
200583H	10668	Feed Dog Lever Post Cover (back or front) Screw
241522	13978	Feed Dog Lever Post Cover (side) with 200362c and 201524E
200578H	13976	Feed Dog Lever Post Cover (side) Screw
200024C	13304	Feed Dog Lever Post Screw (2) ..
203637	13976	" " " " " Washer (2)
221212	13978	Feed Dog Lever Post Support
200054E	10246	" " " " " Screw
200008C	13976	" " " " " " (2)
203637	13976	Feed Dog Lever Post Support Screw Washer (2)
203610	13304	Feed Dog Lever Slide Block
200265E	13304	" " " " " Hinge Screw
201525E	10245	Feed Dog Lever Slide Block Hinge Screw Nut
200098E	13304	Feed Dog Screw
234015	13301	" Driving Connection with 200049E and 202277
202298	10245	Feed Driving Connection Crank with 200038C
200038C	10245	Feed Driving Connection Crank Pinch Screw
200545C	10245	Feed Driving Connection Hinge Screw
201518E	13976	Feed Driving Connection Hinge Screw Nut
202277	—	Feed Driving Connection Oil Packing (wick)
200049E	13304	Feed Driving Connection Pinch Screw
202300	10246	Feed Driving Eccentric Regulating Bracket
203098	13306	Feed Driving Eccentric Regulating Bracket 202300 with 202635, two each 201014C and 201525E
201014C	10245	Feed Driving Eccentric Regulating Bracket Hinge Screw
201525E	10245	Feed Driving Eccentric Regulating Bracket Hinge Screw Nut
202301	10246	Feed Driving Eccentric Regulating Bracket Plunger

No.	Plate	Name
202595	10246	Feed Driving Eccentric Regulating Bracket Plunger Spring
200607C	10246	Feed Driving Eccentric Regulating Bracket Plunger Spring Stop Screw
201014C	10245	Feed Driving Eccentric Regulating Bracket Stop Screw
201525E	10245	Feed Driving Eccentric Regulating Bracket Stop Screw Nut
200429C	10246	Feed Driving Eccentric Regulating Screw
200383C	10246	Feed Driving Eccentric Regulating Screw Check Screw
202303	13301	Feed Driving Rock Shaft
234016	—	" " " " " 202303 with 200641C, 201518E and 234010
202305	10245	Feed Driving Rock Shaft Center (2)
200043C	10246	" " " " " Set Screw (2)
234017	13301	Feed Lifting Connection with 200049E and 202277
202307	13976	Feed Lifting Connection Eccentric with 200382C and 200437C
200437C	10246	Feed Lifting Connection Eccentric Position Screw
200382C	10373	Feed Lifting Connection Eccentric Set Screw
200545C	10245	Feed Lifting Connection Hinge Screw
201518E	13976	Feed Lifting Connection Hinge Screw Nut
202277	—	Feed Lifting Connection Oil Packing (wick)
200049E	13304	Feed Lifting Connection Pinch Screw
234018	13301	Feed Lifting Rock Shaft
202305	10245	" " " " " Center (2)
200043C	10246	" " " " " Set Screw (2)
207070	10947	Feed Regulating Spindle with 202311, 202443, 202619 and 210554
*202311	—	Feed Regulating Spindle Head ...
202443	13304	" " " " " Pin
202619	10668	" " " " " Position Pin
210554	10668	Feed Regulating Spindle Spring (flat)
241505	13978	Foot Lifter Lifting Lever
200262H	10248	" " " " " Hinge Screw

No.	Plate	Name
234019	13301	Foot Lifter Lifting Lever Rod with 202302
202302	10248	Foot Lifter Lifting Lever Rod Cotter Pin
203058	13304	Foot Lifter Lifting Lever Rod Coupling with 200530c
200530c	13976	Foot Lifter Lifting Lever Rod Coupling Set Screw
203059	13304	Foot Lifter Lifting Lever Rod Spring
203060	13304	Foot Lifter Lifting Lever Rod Spring Hook
*241519	—	Hook (sewing)
241520	13979	" 241519 with 201253e, 201376e and 203251
241521	13979	Hook and Bobbin Case complete. Nos. 203500 and 241520
241506	13978	Hook Bevel Gear Socket, 14 teeth
234024	13304	" " " " Friction Washer
200555u	13304	Hook Bevel Gear Socket Screw ..
234025	13304	" " Pinion, 28 teeth, with two 200378c
200378c	10668	Hook Bevel Pinion Set Screw
234026	13301	" Driving Shaft
202321	13979	" " " Bushing (3) ..
200346c	13979	" " " " Set Screw (3)
234027	13304	Hook Driving Shaft Collar with two 200378c (2)
200378c	10668	Hook Driving Shaft Collar Set Screw
234028	13306	Hook Driving Shaft Connection Belt Pulley with 202253 and two 201254c
201254c	13304	Hook Driving Shaft Connection Belt Pulley Set Screw
202253	13302	Hook Driving Shaft Connection Belt Pulley Spring Flange
224392	—	Hook Driving Shaft Oil Packing (wick) (3)
203251	13979	Hook Gib
201376e	13979	" " Hinge Screw
201253e	13304	" " Screw
234069	13306	" Post
241508	—	" " 234069 with 200555u, 202299, 221209, 221215, 221222, 234024, 241506, 241507, 241521 and eight 200583u

No.	Plate	Name
241509	—	Hook Post complete, Nos. 200159e, 241504 and 241508
202299	—	Hook Post Oil Packing (wick) ..
200008c	13976	" " Screw (2)
203637	13976	" " " Washer (2)
221215	13304	" " Slide
221222	13979	" Washer
207805	10620	Knife
241510	13980	" Bar
241511	—	" " 241510 with 202894, 202895, two each 200585u and 200898u ..
202889	10373	Knife Bar Driving Eccentric with 200382c and 200437c
202890	10373	Knife Bar Driving Eccentric Fork with 200382c and 201464c
201464c	13979	Knife Bar Driving Eccentric Fork Position Screw
200382c	10373	Knife Bar Driving Eccentric Fork Set Screw
200437c	10246	Knife Bar Driving Eccentric Position Screw
200382c	10373	Knife Bar Driving Eccentric Set Screw
202891	10947	Knife Bar Driving Shaft Crank with 200694e and 201525e
200694e	10373	Knife Bar Driving Shaft Crank Screw Stud
201525e	10245	Knife Bar Driving Shaft Crank Screw Stud Nut
202892	10373	Knife Bar Friction Gib
202893	10373	" " Lifting Spring (spiral) ..
202894	10373	" " " " Bracket ..
200585u	10373	" " " " " Screw
200485c	10373	Knife Bar Lifting Spring Thumb Screw
206949	13981	Knife Bar Stop Plate (lower) Face Plate Hinge and Holder
206950	13981	Knife Bar Stop Plate (upper) and Face Plate Stop
200582u	10252	Knife Bar Stop Plate Screw (4) ..
202895	13981	" Holder
200898u	13981	" " Screw
202897	13981	" " Switch-in Handle
200076u	13302	" Screw
202898	10947	" Switch-out Handle with two 200373c
200373c	10373	Knife Switch-out Handle Set Screw ..
202899	10373	" " " Shaft

No.	Plate	Name
202900	10373	Knife Switch-out Handle Spring (spiral)
241512	13981	Needle Bar with 200389c
202550	13981	" " Bushing
241513	—	" " " 202550 with 241512
200352c	10248	Needle Bar Bushing Set Screw ..
202552	13981	" " Connecting Link
202332	10668	" " " " Oil Guard
200161b	10247	Needle Bar Connecting Link Oil Guard Screw
202333	10248	Needle Bar Connecting Link Stud with 202254
202254	—	Needle Bar Connecting Link Stud Oil Packing (wick)
200374c	10668	Needle Bar Connecting Link Stud Set Screw
200383c	10246	Needle Bar Connecting Link Stud Set Screw
*206891	—	Needle Bar Connecting Stud
202329	10248	" " " " 206891 with 200086c and 202330
202330	—	Needle Bar Connecting Stud Oil Packing (wick)
200086c	10248	Needle Bar Connecting Stud Pinch Screw
202692	13980	Needle Bar Crank with 200335c, 200374c, 200383c, 200428c and 202333
241514	—	Needle Bar Crank 202692 with 202329, 202399, 202400, 202552 and 241518
203172	10248	Needle Bar Crank Friction Washer
200428c	10248	" " " Position Screw
200335c	10248	" " " Set Screw
200389c	10252	" Set Screw
207072	10249	Presser Bar Bushing
200352c	10248	" " " Set Screw
202339	10249	" " Lifter
200653c	10249	" " " Hinge Screw
202903	13982	" " Lifting Releasing Lever Bracket
200260b	10249	Presser Bar Lifting Releasing Lever Bracket Guide Screw
202342	10249	Presser Bar Lifting Releasing Lever Bracket Spring (spiral)
202337	10249	Presser Bar Position Guide
202338	10249	" " " " Lever with 200086c

No.	Plate	Name
200086c	10248	Presser Bar Position Guide Lever Pinch Screw
200352c	10248	Presser Bar Position Guide Set Screw
202378	13982	Presser Bar Spring
202346	10249	" " " Stop Rod
200492b	10249	" " Thumb Screw (pressure regulating)
201909	13982	Roller Presser, 1 1/8 in. diam., 3/8 in. face (coarse), with 200551c and 201534u
204328	13982	Roller Presser Arm
241515	13982	" " " 204328 with 201909
202560	10284	Roller Presser Arm Bracket (swing)
241516	—	" " " " 202560 with 200096b and 241515
200675c	13982	Roller Presser Arm Bracket Position Screw Stud
202558	10284	Roller Presser Arm Bracket Spring
202559	10284	" " " " " Stop
200141f	10248	Roller Presser Arm Bracket Spring Stop Screw
200096b	10284	Roller Presser Arm Screw
202557	10284	" " Bar
200551c	13982	" " Hinge Screw
201534u	10284	" " " " Nut
241517	13980	Roller Presser and Bar complete, Nos. 200675c, 202557 to 202559, 241516 and two 200141f
241518	13983	Take-up Lever
202399	10247	" " 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	10246	Take-up Lever Hinge Stud Set Screw
202401	10247	Take-up Lever Oiling Felt
200132e	10247	" " " " Screw
202402	10247	Tension Disc (back)
202403	10247	" " (front)
202404	10247	" Release Plunger
202405	10247	" " Washer

No.	Plate	Name
202407	10881	Tension Spring
200625F	10247	" Stud with 204925
200084F	13983	" " Set Screw
204925	10668	" " Washer
201572R	10881	" Thumb Nut
202409	10252	Tension complete, Nos. 200625F, 201572R, 202402, 202403, 202405, 202407 and 202410
202410	10252	Thread Controller Spring
202411	10252	" " " Stop
200132E	10247	" " " " Screw
202412	10252	" Guide
202413	10252	" "
202414	10252	" "
202415	10252	" "
202979	10252	" "
200582H	10252	" " Screw
200355H	10252	" " Set Screw
200368H	10668	" " " "
202091	10252	" Retainer Sleeve
202092	10252	" " Spring
204058	10252	" " Stud
200368H	10668	" " " Set Screw
204059	10668	Thread Retainer complete, Nos. 202091, 202092 and 204058
241523	13983	Throat Plate, 53 needle hole, for needle sizes 12 and 13, with 200178D, 200587D, 212664 and 215772, trims opposite the needle and .045, .060 and .085 in. to right of seam
215772	13983	Throat Plate Knife Follower
200587D	13983	" " " " Screw
212664	13983	" " " " Spring
200178D	13983	" " " " " " Screw
200577H	10473	Throat Plate Screw (2)

LIST OF PARTS COMPLETE

FOR

MACHINE No. 51w46

DROP FEED. ROLLER PRESSER

Oblique Underedge Trimmer. Trims Back of
Needle

For Leather

No.	Plate	Name
*241601	-----	Arm with 202243, 202245 and two 200338c
*234002	-----	Arm Base
204235	10668	" " Position Pin (2)
200010E	10245	" " Screw (3)
202005	10245	" " " Washer (3)
207073	13976	" Bushing Hole Plug
200352c	10248	" " " " Set Screw
203091	13977	" Cap
200278H	13302	" " Screw
202248	13302	" " " Washer
203089	10947	" " Spool Holder Base
203090	10947	" " " " " 203089 with 200079H and 204296
200585H	10373	Arm Cap Spool Holder Base Screw
204296	10947	" " " " Wire
200079H	10668	" " " " " Hinge Screw
203092	-----	Arm Cap and Spool Holder com- plete, Nos. 203090, 203091 and two 200585H
10554	13976	Arm Position Pin (2)
200010E	10245	" Screw (3)
241621	13977	" Shaft with 200357E and 203100
202243	10947	" " Bushing (back) with 202244
202244	-----	Arm Shaft Bushing (back) Oil Packing (wick)
200338c	13302	Arm Shaft Bushing (back) Set Screw
202245	10947	Arm Shaft Bushing (front) with 202036 and 202260

No.	Plate	Name
202260	—	Arm Shaft Bushing (front) Oil Packing (wick)
200502n	10246	Arm Shaft Bushing (front) Oil Packing Thumb Screw
202036	10668	Arm Shaft Bushing (front) Position Pin
200338c	13302	Arm Shaft Bushing (front) Set Screw
234003	13301	Arm Shaft Connection Belt
202635	13977	" " " " Pulley with 200327c, 200602n, and two 202253
200602E	13302	Arm Shaft Connection Belt Pulley Position Screw
200327c	13302	Arm Shaft Connection Belt Pulley Set Screw
202253	13302	Arm Shaft Connection Belt Pulley Spring Flange
203100	—	Arm Shaft Oil Packing (wick) ...
200357E	13302	" " " " Stop Screw
234147	13301	Balance Wheel (belt groove 2 3/4 in. diam.) with 200328c and 200335c
200328c	13302	Balance Wheel Position Screw ...
200335c	10248	" " Set Screw
*234004	—	Bed
202258	12153	" Hinge Connection (2)
200570E	10245	" " " Screw (4) ...
203470	13302	Bobbin
241530	13976	" Case Base with 202056, 203211 to 203213 and 203216
203211	13976	Bobbin Case Base Latch
*202056	—	" " " " Pin
203212	13976	" " " " Plunger ...
203213	13976	" " " " Spring ...
234081	13976	" " Cap with 200594c, 200984c and 203214
234079	13302	Bobbin Case Lever
234065	13302	" " " Driving Block
200076n	13302	" " " " " Screw
201272c	13976	Bobbin Case Lever Hinge Screw ..
203214	13302	" " Tension Spring
200984c	13302	" " " " Regulating Screw
200594c	13302	Bobbin Case Tension Spring Screw ..
203216	—	" " Washer (cloth)
241531	—	Bobbin Case complete, Nos. 234081 and 241530
204353	11283	Bracket (underedge) with 204411..
200517B	13976	" Screw (2)

No.	Plate	Name
213629	11283	Bracket (underedge) complete, Nos. 200047n, 200118E, 200577n, 200888, 202603, 204233, 204353, 204361, 204363 to 204365, 204368, 204372, 204373, 213772, 213774, 213777, 214053 and two 200028n
206951	10947	Face Plate
234010	13977	Feed Bar
200641c	10246	" " Hinge Screw (driving)
201518E	13976	" " " " Nut
202276	10245	" " Slide Block
234084	—	" " " " Crank with 200038c
234011	13302	Feed Bar Slide Block Crank 234084 with 200205E, 201518E and 202276
200038c	10245	Feed Bar Slide Block Crank Pinch Screw
200205E	10245	Feed Bar Slide Block Hinge Screw ..
201518E	13976	" " " " " " " Nut
213920	13983	Feed Dog
241502	13977	" " Lever with 200098E
200362c	13976	" " " Adjusting Screw
201524E	11291	" " " " " " Check Nut
200263E	13302	Feed Dog Lever Hinge Screw
201528E	13302	" " " " " " Nut..
241503	13977	" " " Post
241504	—	" " " " 241503 with 200265E, 201525E, 203610, 221212, 241502, 241522, four each 200054E and 200578n
221209	13978	Feed Dog Lever Post Cover (back) ..
241507	13978	" " " " " (front) ..
200159E	13304	" " " " " " Clamp Screw
200583n	10668	Feed Dog Lever Post Cover (back or front) Screw
241522	13978	Feed Dog Lever Post Cover (side) with 200362c and 201524E
200578n	13976	Feed Dog Lever Post Cover (side) Screw
200024c	13304	Feed Dog Lever Post Screw (2) ..
203637	13976	" " " " " Washer (2)
221212	13978	Feed Dog Lever Post Support
200054E	10246	" " " " " " Screw
200008c	13976	" " " " " " (2)

No.	Plate	Name
203637	13976	Feed Dog Lever Post Support Screw Washer (2)
203610	13304	Feed Dog Lever Slide Block
200265E	13304	" " " " " Hinge Screw
201525E	10245	Feed Dog Lever Slide Block Hinge Screw Nut
200098E	13304	Feed Dog Screw
234015	13301	" Driving Connection with 200049E and 202277
202298	10245	Feed Driving Connection Crank with 200038C
200038C	10245	Feed Driving Connection Crank Pinch Screw
200545C	10245	Feed Driving Connection Hinge Screw
201518E	13976	Feed Driving Connection Hinge Screw Nut
202277	—	Feed Driving Connection Oil Packing (wick)
200049E	13304	Feed Driving Connection Pinch Screw
202300	10246	Feed Driving Eccentric Regulating Bracket
203098	13306	Feed Driving Eccentric Regulating Bracket 202300 with 202635, two each 201014C and 201525E
201014C	10245	Feed Driving Eccentric Regulating Bracket Hinge Screw
201525E	10245	Feed Driving Eccentric Regulating Bracket Hinge Screw Nut
202301	10246	Feed Driving Eccentric Regulating Bracket Plunger
202595	10246	Feed Driving Eccentric Regulating Bracket Plunger Spring
200607C	10246	Feed Driving Eccentric Regulating Bracket Plunger Spring Stop Screw
201014C	10245	Feed Driving Eccentric Regulating Bracket Stop Screw
201525E	10245	Feed Driving Eccentric Regulating Bracket Stop Screw Nut
200429C	10246	Feed Driving Eccentric Regulating Screw
200383C	10246	Feed Driving Eccentric Regulating Screw Check Screw
202303	13301	Feed Driving Rock Shaft
234016	—	" " " " 202303 with 200641C, 201518E and 234010

No.	Plate	Name
202305	10245	Feed Driving Rock Shaft Center (2)
200043C	10246	Feed Driving Rock Shaft Center Set Screw (2)
234017	13301	Feed Lifting Connection with 200049E and 202277
202307	13976	Feed Lifting Connection Eccentric with 200382C and 200437C
200437C	10246	Feed Lifting Connection Eccentric Position Screw
200382C	10373	Feed Lifting Connection Eccentric Set Screw
200545C	10245	Feed Lifting Connection Hinge Screw
201518E	13976	Feed Lifting Connection Hinge Screw Nut
202277	—	Feed Lifting Connection Oil Packing (wick)
200049E	13304	Feed Lifting Connection Pinch Screw
234018	13301	Feed Lifting Rock Shaft
202305	10245	" " " " Center (2)
200043C	10246	" " " " " Set Screw (2)
207070	10947	Feed Regulating Spindle with 202311, 202443, 202619 and 210554
*202311	—	Feed Regulating Spindle Head ...
202443	13304	" " " " Pin
202619	10668	" " " " " Position Pin
210554	10668	Feed Regulating Spindle Spring (flat)
241505	13978	Foot Lifter Lifting Lever
200262H	10248	" " " " " Hinge Screw
234019	13301	Foot Lifter Lifting Lever Rod with 202302
202302	10248	Foot Lifter Lifting Lever Rod Cotter Pin
203058	13304	Foot Lifter Lifting Lever Rod Coupling with 200530C
200530C	13976	Foot Lifter Lifting Lever Rod Coupling Set Screw
203059	13304	Foot Lifter Lifting Lever Rod Spring
203060	13304	Foot Lifter Lifting Lever Rod Spring Hook
204355	11291	Guide Finger
204357	10473	" " Clamp with 200103B and 200136F

No.	Plate	Name
204358	10473	Guide Finger Clamp Bar
204359	10473	" " " " Carrier
		with 200875
213777	----	Guide Finger Clamp Bar Carrier
		204359 with 204357, 204358,
		204366 and 204367
204361	10473	Guide Finger Clamp Bar Carrier
		Latch
200802E	11291	Guide Finger Clamp Bar Carrier
		Latch Hinge Screw
204230	11291	Guide Finger Clamp Bar Carrier
		Latch Spring
204233	10473	Guide Finger Clamp Bar Carrier
		Latch Spring 204230 with 200802E
204364	10473	Guide Finger Clamp Bar Carrier
		Position Guide with 200078u and
		200387c
200078u	10473	Guide Finger Clamp Bar Carrier
		Position Guide Pinch Screw ...
200387c	10473	Guide Finger Clamp Bar Carrier
		Position Guide Set Screw
204363	10473	Guide Finger Clamp Bar Carrier
		Position Guide Slide
200577u	10473	Guide Finger Clamp Bar Carrier
		Position Guide Slide Screw
200785d	13976	Guide Finger Clamp Bar Carrier
		Screw (handle)
200875	10473	Guide Finger Clamp Bar Carrier
		Screw 200785d with 201537u ...
201537u	10473	Guide Finger Clamp Bar Carrier
		Screw (handle) Nut
204365	10473	Guide Finger Clamp Bar Carrier
		Spring
204366	10473	Guide Finger Clamp Bar Position
		Guide with 200140u
200140u	13976	Guide Finger Clamp Bar Position
		Guide Screw
204367	10473	Guide Finger Clamp Bar Spring ..
200103d	10473	" " " Pinch Screw ..
200136F	13976	" " " Screw
204368	10473	" " Suspending Stop (ad-
		justable)
200118F	13976	Guide Finger Suspending Stop
		Screw
202603	13976	Guide Finger Suspending Stop
		Screw Washer
*221214	---	Hook (sewing)
241602	13979	" 221214 with 201253F, 201376F
		and 241604

No.	Plate	Name
241603	13979	Hook and Bobbin Case complete,
		Nos. 241531 and 241602
241506	13978	Hook Bevel Gear Socket, 14 teeth
234024	13304	" " " " Friction
		Washer
200555u	13304	Hook Bevel Gear Socket Screw ..
234025	13304	" " Pinion, 28 teeth, with
		two 200378c
200378c	10668	Hook Bevel Pinion Set Screw ...
234026	13301	" Driving Shaft
202321	13979	" " " Bushing (3) ..
200346c	13979	" " " " Set Screw
		(3)
234027	13304	Hook Driving Shaft Collar with
		two 200378c (2)
200378c	10668	Hook Driving Shaft Collar Set
		Screw
234028	13306	Hook Driving Shaft Connection
		Belt Pulley with 202253 and two
		201254c
201254c	13304	Hook Driving Shaft Connection
		Belt Pulley Set Screw
202253	13302	Hook Driving Shaft Connection
		Belt Pulley Spring Flange
224392	----	Hook Driving Shaft Oil Packing
		(wick) (3)
241604	13979	Hook Gib
201376F	13979	" " Hinge Screw
201253F	13304	" " Screw
234069	13306	" Post
241605	----	" " 234069 with 200555u,
		202299, 221203, 221215, 221222
		234024, 241506, 241507, 241603 and
		eight 200583u
241606	----	Hook Post complete, Nos. 200159F,
		241504 and 241605
202299	----	Hook Post Oil Packing (wick) ...
200008c	13976	" " Screw (2)
203637	13976	" " " Washer (2)
221215	13304	" " Slide
221222	13979	" Washer
207805	10620	Knife
204369	11291	" Bar (hollow) with 200094F ..
213774	---	" " 204369 with 204342
204372	11291	" " Collar with two 200387c
200387c	10437	" " " Set Screw
241607	13980	" " Driving Bar with two
		200585u
200585u	10373	Knife Bar Driving Bar Screw ...

No.	Plate	Name
213178	11291	Knife Bar Driving Collar with 200381e and 200387c
213772	---	Knife Bar Driving Collar 213178 with 200097c, 200243e, 200252c, 213179, 213181, 213628 and two 201528e
200381e	11291	Knife Bar Driving Collar Screw ..
200387c	10437	" " " " Set Screw
213635	13980	" " " Eccentric with 200382c and 200437c
202890	10373	Knife Bar Driving Eccentric Fork with 200382c and 201464c
201464c	13979	Knife Bar Driving Eccentric Fork Position Screw
200382c	10373	Knife Bar Driving Eccentric Fork Set Screw
200437c	10246	Knife Bar Driving Eccentric Position Screw
200382c	10373	Knife Bar Driving Eccentric Set Screw
213181	11291	Knife Bar Driving Link
213179	11291	" " " " Bracket ..
200243e	13979	" " " " " Hinge Screw
201528e	13302	Knife Bar Driving Link Bracket Hinge Screw Nut
200252c	11291	Knife Bar Driving Link Hinge Screw
201528e	13302	Knife Bar Driving Link Hinge Screw Nut
202891	10947	Knife Bar Driving Shaft Crank with 200694e and 201525e
200694e	10373	Knife Bar Driving Shaft Crank Screw Stud
201525e	10245	Knife Bar Driving Shaft Crank Screw Stud Nut
213628	11291	Knife Bar Handle
200097c	11291	" " " Screw
204373	11291	" " Position Guide with 200890
200026b	11291	Knife Bar Position Guide Pinch Screw
200890	11291	Knife Bar Position Guide Pinch Screw 200026b with 201534h ...
201534h	10284	Knife Bar Position Guide Pinch Screw Nut
200028b	13979	Knife Bar Position Guide Screw ..
204411	13979	" " Sleeve (split)
200043c	10246	" " " Set Screw

No.	Plate	Name
200888	11291	Knife Bar Sleeve Set Screw 200043c with 201524e
201524e	11291	Knife Bar Sleeve Set Screw Nut
206949	13981	" " Stop Plate (lower) Face Plate Hinge and Holder
206950	13981	Knife Bar Stop Plate (upper) and Face Plate Stop
200582u	10252	Knife Bar Stop Plate Screw (4) ..
214053	11291	" " Throw-out Spring
200047d	13981	" " " " Screw (lower)
200301e	11291	Knife Bar Throw-out Spring Screw (upper)
204381	---	Knife Holder
204342	11291	" " 204381 with two 200126f
200094e	11291	" " Screw
241608	13980	" Switch-out Handle with two 200373c
200373c	10373	Knife Switch-out Handle Set Screw
202899	10373	" " " Shaft
202900	10373	" " " Spring (spiral)
200126f	13981	Knife Screw
241609	13981	Needle Bar with 200141e
202550	13981	" " Bushing
241610	---	" " " 202550 with 241609
200352c	10248	Needle Bar Bushing Set Screw ...
202552	13981	" " Connecting Link
202332	10668	" " " " Oil Guard
200161d	10247	Needle Bar Connecting Link Oil Guard Screw
202333	10248	Needle Bar Connecting Link Stud with 202254
202254	---	Needle Bar Connecting Link Stud Oil Packing (wick)
200374c	10668	Needle Bar Connecting Link Stud Set Screw
200383c	10246	Needle Bar Connecting Link Stud Set Screw
*206891	---	Needle Bar Connecting Stud
202329	10248	" " " " 206891 with 200086c and 202330
202330	---	Needle Bar Connecting Stud Oil Packing (wick)
200086c	10248	Needle Bar Connecting Stud Pinch Screw

No.	Plate	Name
202692	13980	Needle Bar Crank with 200335c, 200374c, 200383c, 200428c and 202333
241514	----	Needle Bar Crank 202692 with 202329, 202399, 202400, 202552 and 241518
203172	10248	Needle Bar Crank Friction Washer
200428c	10248	" " " Position Screw ..
200335c	10248	" " " Set Screw
200141F	10248	" Set Screw
207072	10249	Presser Bar Bushing
200352c	10248	" " " Set Screw
202339	10249	" " Lifter
200653c	10249	" " " Hinge Screw ..
202903	13982	" " Lifting Releasing Lever Bracket
200260b	10249	Presser Bar Lifting Releasing Lever Bracket Guide Screw
202342	10249	Presser Bar Lifting Releasing Lever Bracket Spring (spiral)
202337	10249	Presser Bar Position Guide
202338	10249	" " " " Lever with 200086F
200086F	10248	Presser Bar Position Guide Lever Pinch Screw
200352c	10248	Presser Bar Position Guide Set Screw
202378	13982	Presser Bar Spring
234044	13982	" " " Stop Rod
200492b	10249	" " Thumb Screw (pressure regulating)
201906	13982	Roller Presser, 1½ in. diam., ¾ in. face (fine), with 200548c and 201534u
202839	10284	Roller Presser Arm
204567	13982	" " " 202839 with 201906
202560	10284	Roller Presser Arm Bracket (swing)
202838	----	Roller Presser Arm Bracket 202560 with 200096b and 204567
200675c	13982	Roller Presser Arm Bracket Position Screw Stud
202558	10284	Roller Presser Arm Bracket Spring
202559	10284	" " " " " Stop
200141F	10248	Roller Presser Arm Bracket Spring Stop Screw

No.	Plate	Name
200096b	10284	Roller Presser Arm Screw
202557	10284	" " Bar
200548c	10284	" " Hinge Screw
201534u	10284	" " " " Nut ...
202840	10284	Roller Presser and Bar complete, Nos. 200675c, 202557 to 202559, 202838 and two 200141F
241518	13983	Take-up Lever
202399	10247	" " 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	10246	Take-up Lever Hinge Stud Set Screw
202401	10247	Take-up Lever Oiling Felt
200132E	10247	" " " " Screw ..
202402	10247	Tension Disc (back)
202403	10247	" " (front)
202404	10247	" Release Plunger
202405	10247	" " Washer
202407	10881	" Spring
200625F	10247	" Stud with 204925
200084F	13983	" " Set Screw
204925	10668	" " Washer
201572B	10881	" Thumb Nut
202409	10252	Tension complete, Nos. 200625F, 201572B, 202402, 202403, 202405, 202407 and 202410
202410	10252	Thread Controller Spring
202411	10252	" " " Stop
200132E	10247	" " " " Screw
202412	10252	" Guide
202413	10252	" "
202414	10252	" "
202415	10252	" "
202979	10252	" "
200582u	10252	" " Screw
200355u	10252	" " Set Screw
200368u	10668	" " " "
202091	10252	" Retainer Sleeve
202092	10252	" " Spring
204058	10252	" " Stud
200368u	10668	" " " Set Screw
204059	10668	Thread Retainer complete, Nos. 202091, 202092 and 204058

No.	Plate	Name
241611	13983	Throat Plate, 50 needle hole, for needle sizes 14 and 15, with 200178D, 200587D, 212655 and 212664, trims back of needle and .015, .025, .035 and .050 in. to right of seam, for 213920
212655	13983	Throat Plate Knife Follower
200587D	13983	" " " " Screw..
212664	13983	" " " " Spring
200178D	13983	" " " " "
		Screw
200577H	10473	Throat Plate Screw (2)

MACHINE No. 51w47

DROP FEED. ROLLER PRESSER

Oblique Underedge Trimmer. Trims Abreast
of Needle. For Leather

The same as Machine No. 51w46 with the
following exceptions:

No.	Plate	Name
204356	11291	Guide Finger, in place of 204355 ..
241651	13983	Throat Plate, 50 needle hole, for needle sizes 14 and 15, with 200178D, 200587D, 212658 and 212664, trims opposite the needle and .050, .060 and .075 in. to right of seam, in place of 241611
212658	13983	Throat Plate Knife Follower, in place of 212655

ACCESSORIES

No.	Plate	Name
203470	13302	Bobbin (5)
*225482	—	" Case Screw Driver Blade ..
*225483	—	" " " " Handle ..
225497	12153	Bobbin Case Screw Driver complete, Nos. 225482 and 225483 ..
207805	10620	Knife
225487	13982	Roller Presser Hinge Screw Nut Wrench
128 x 2	—	Needles, two each, sizes 11, 12 and 13
225191	—	Drip Pan with four wood screws $\frac{1}{2}$ in., No. 5
41400	12153	Machine Rest Pin (wood)
36578	12153	Oiler with 36579
36579	12153	" Spout, $3\frac{1}{2}$ in. long, with 120117
120117	—	" " Washer (leather)
*225484	—	Screw Driver Blade
*225485	—	" " Handle
225498	12153	Screw Driver complete (7 $\frac{1}{2}$ in. long), Nos. 225484 and 225485 ..
225554	12153	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 200105c
200105c	13976	" 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	" " " " Joint Stud
202478	10882	" " Trip Lever
200299H	10882	" " " " Hinge Screw

No.	Plate	Name
225461	10881	Tension Bracket with 201499B ...
200082D	10881	" " Screw
228026	13976	" " " 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
225433	10883	Bobbin Winder and Tension Bracket Base
225436	10883	Universal Bobbin Winder complete, Nos. 200056E, 200082D, 200299H, 202473, 202478, 225433, 225444, 225452 to 225456, 225458 to 225460, 225462, 228026 and two wood screws $\frac{3}{4}$ in., No. 13, R.H.B. ...

FOOT LIFTER

227952	11156	Foot Lifter Lever (left or right) with 227954
227678	11156	Foot Lifter Lever Chain, 48 in. long, with 202784
227954	13976	Foot Lifter Lever Chain Hook (lower)
202784	13976	Foot Lifter Lever Chain Hook (upper)
225016	13976	Foot Lifter Lever Hinge Pin
227953	11156	" " " Stand with two wood screws 1 in., No. 13
227955	11156	Foot Lifter Lever (left or right) complete, Nos. 225016, 227678, 227952 and 227953

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

FOOT LIFTER

Furnished in place of 227955 when so ordered.

No.	Plate	Name
227060	10556	Foot Lifter Lever (on floor) with 225592
227102	10556	Foot Lifter Lever 227060 with 227678 and two 204128
227678	11156	Foot Lifter Lever Chain, 48 in. long, with 202784
225592	13983	Foot Lifter Lever Chain Hook (lower)
202784	13976	Foot Lifter Lever Chain Hook (upper)
204128	10556	Foot Lifter Lever Stand with two wood screws 1 in., No. 13
241620	13983	Foot Lifter Spring

KNIVES

207801	10620	Knife
207802	10620	"
207803	10620	"
207804	10620	"
207805	10620	"
207806	10620	"
207807	10620	"
207808	10620	"

KNIFE GRINDER

No.	Plate	Name
206977		Emery Wheel, 2 in. diameter
206962	11296	" " Driving Shaft
201510b	11296	" " " " Nut
204101	11296	" " " " " Washer
206963	11296	Emery Wheel Driving Shaft Pulley with two 200403c
200403c	13981	Emery Wheel Driving Shaft Pulley Set Screw
206969	11296	Emery Wheel Washer (paper) ...
206964		Knife Grinder Frame with two 54897
54897		Knife Grinder Frame Oil Cup ...
207029	11296	" Holder Slide Bracket with 200394c, 200457b and two 200473b
200457b	11296	Knife Holder Slide Bracket Ad- justing Screw
206966	11296	Knife Holder Slide Bracket Ad- justing Screw Slide Plate
200577b	10473	Knife Holder Slide Bracket Ad- justing Screw Slide Plate Screw
200394c	11296	Knife Holder Slide Bracket Set Screw
206967	11296	Knife Holder Slide Bracket Shaft..
207031	11296	" " " " Stop Col- lar with 200473b
200473b	11296	Knife Holder Slide Bracket Stop Collar Thumb Screw
200473b	11296	Knife Set Screw
207032	11296	Knife Grinder complete, Nos. 200577b, 201510b, 204101, 206962 to 206964, 206966, 206967, 206977, 207029, 207031 and two 206969..

WORK PLATE PLATFORM

No.	Plate	Name
213855	11772	Work Plate
200019E	-----	" " Arm Screw
202622	13983	" " " " Washer ...
213856	11772	" " Bracket
200189C	13983	" " " Screw
200189C	13983	" " " Screw
213857	11772	" " Slide (back)
203301	11772	" " " (front)
213858	11772	Work Plate complete, Nos. 200019E, 202622, 203301, 213855 to 213857 and four 200189C

WOOD BASE (FLAT)

227493	12153	Bed Hinge Plate 202259 with two wood screws $\frac{3}{4}$ in., No. 13U
225589	-----	Machine Cushion (leather)
227902	-----	Wood Base with two 227493, four each 225589 and wood screws $1\frac{1}{4}$ in., No. 10

WOOD BASE (OBLIQUE)

227903	-----	Wood Base with two 227493, four 225589 and nine wood screws $1\frac{1}{4}$ in., No. 10
--------	-------	--

NUMERICAL LIST OF PARTS

No.	Plate	Name
2102	10881	Bobbin Winder Tension Disc, for 225462
10554	13976	Arm Position Pin
36578	12153	Oiler with 36579
36579	12153	" Spout, $3\frac{1}{2}$ in. long, with 120117, for 36578
41400	12153	Machine Rest Pin (wood)
54897	-----	Knife Grinder Frame Oil Cup, for 206964
120117	-----	Oiler Spout Washer (leather), for 36579
200008C	13976	Feed Dog Lever Post Support Screw
200008C	13976	Hook Post Screw
200010E	10245	Arm Base Screw
200010E	10245	" Screw
200019E	-----	Work Plate Arm Screw, for 213858
200024C	13304	Feed Dog Lever Post Screw
200026B	11291	Knife Bar Position Guide Pinch Screw, for 200890
200028B	13979	Knife Bar Position Guide Screw, for 213629
200038C	10245	Feed Bar Slide Block Crank Pinch Screw, for 234084
200038C	10245	Feed Driving Connection Crank Pinch Screw, for 202293
200043C	10246	Feed Driving Rock Shaft Center Set Screw
200043C	10246	Feed Lifting Rock Shaft Center Set Screw
200043C	10246	Knife Bar Sleeve Set Screw, for 200888
200047D	13981	Knife Bar Throw-out Spring Screw (lower), for 213629
200049E	13304	Feed Driving Connection Pinch Screw, for 234015
200049E	13304	Feed Lifting Connection Pinch Screw, for 234017
200054E	10246	Feed Dog Lever Post Support Screw, for 241504
200056E	10882	Bobbin Winder Stop Latch Screw, for 225436
200076D	13302	Bobbin Case Lever Driving Block Screw
200076D	13302	Knife Screw, for Machine No. 51W45

PLATE 10245—FULL SIZE

200010



200545



200462



200570



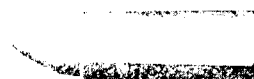
200577



202135



202305



202276



200205



200038



200139



200196



201518



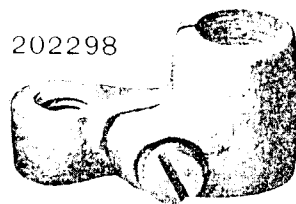
201014



202005



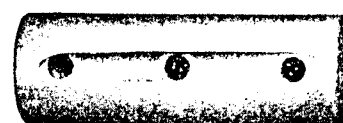
202298



201525



202321



200346



PLATE 10246—FULL SIZE

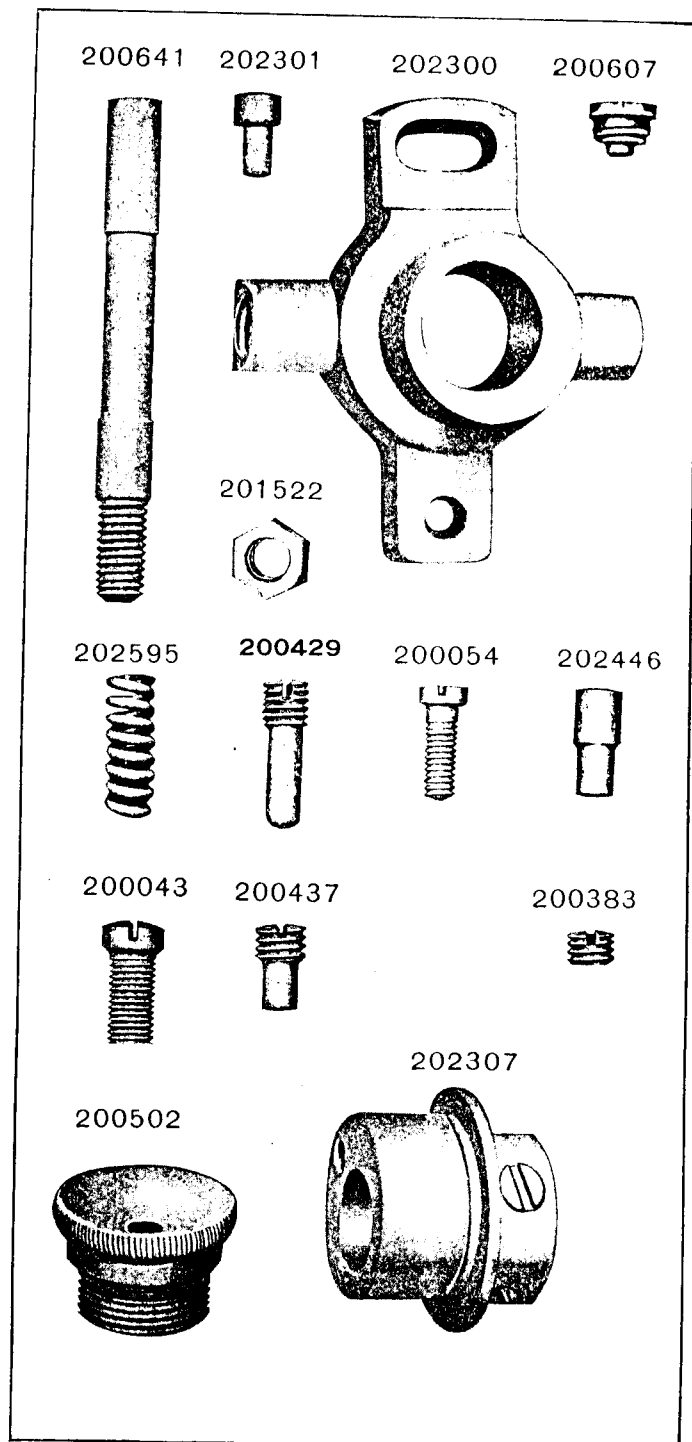


PLATE 10247—FULL SIZE

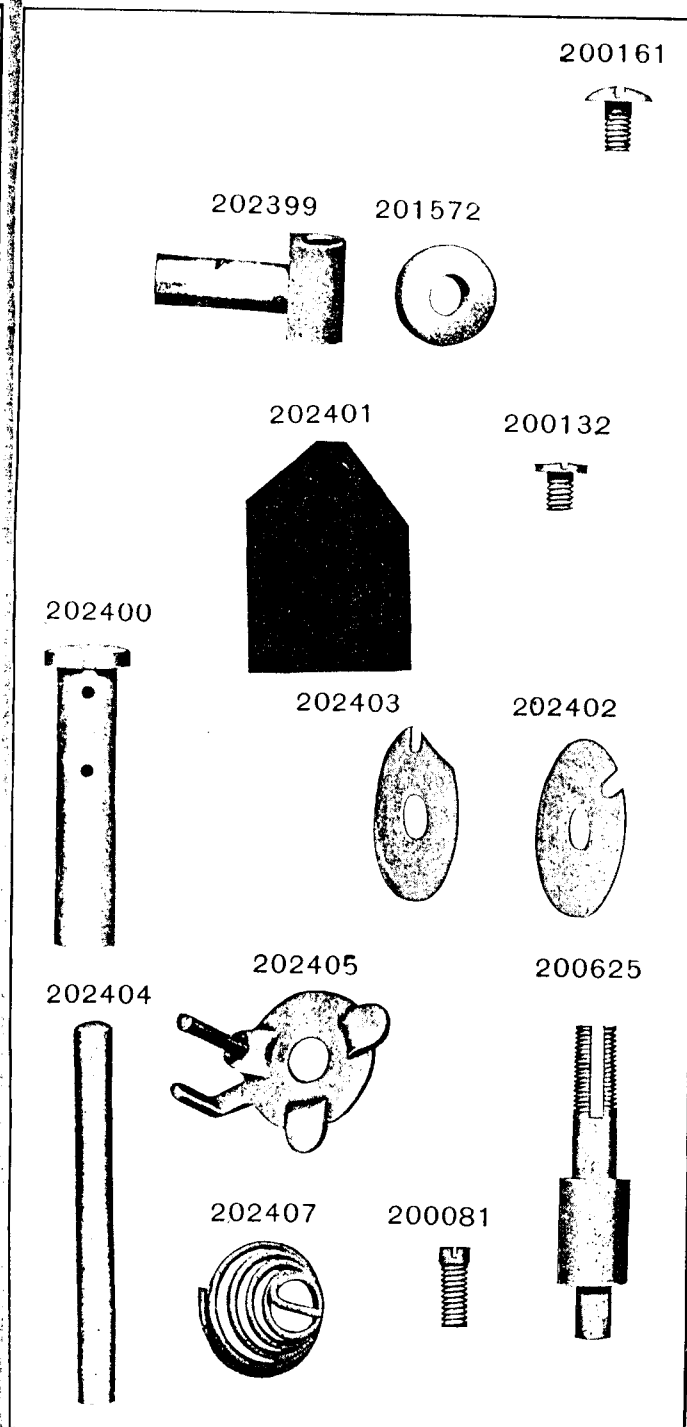
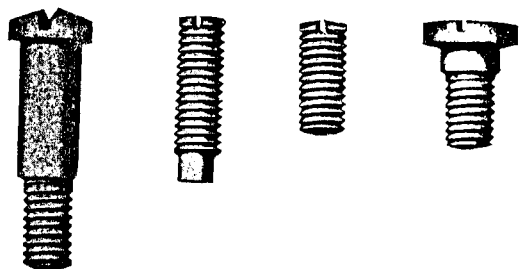
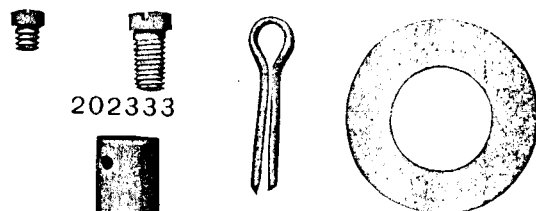


PLATE 10248—FULL SIZE

200224 200428 200335 200262



200141 200086 202302 203172



202333



202329



200352

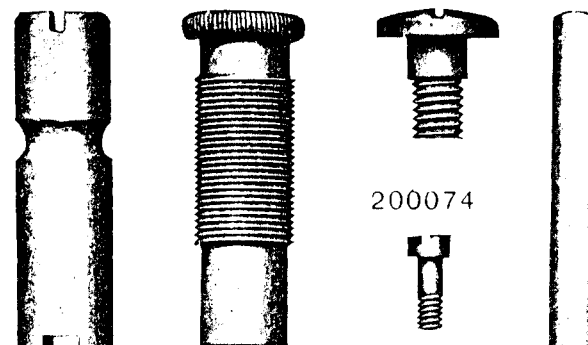


200363



PLATE 10249—FULL SIZE

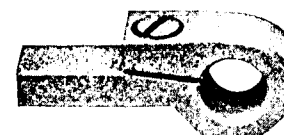
202337 200492 200260 202346



200074



202338



200347



200653



202342



207072



PLATE 10252—FULL SIZE

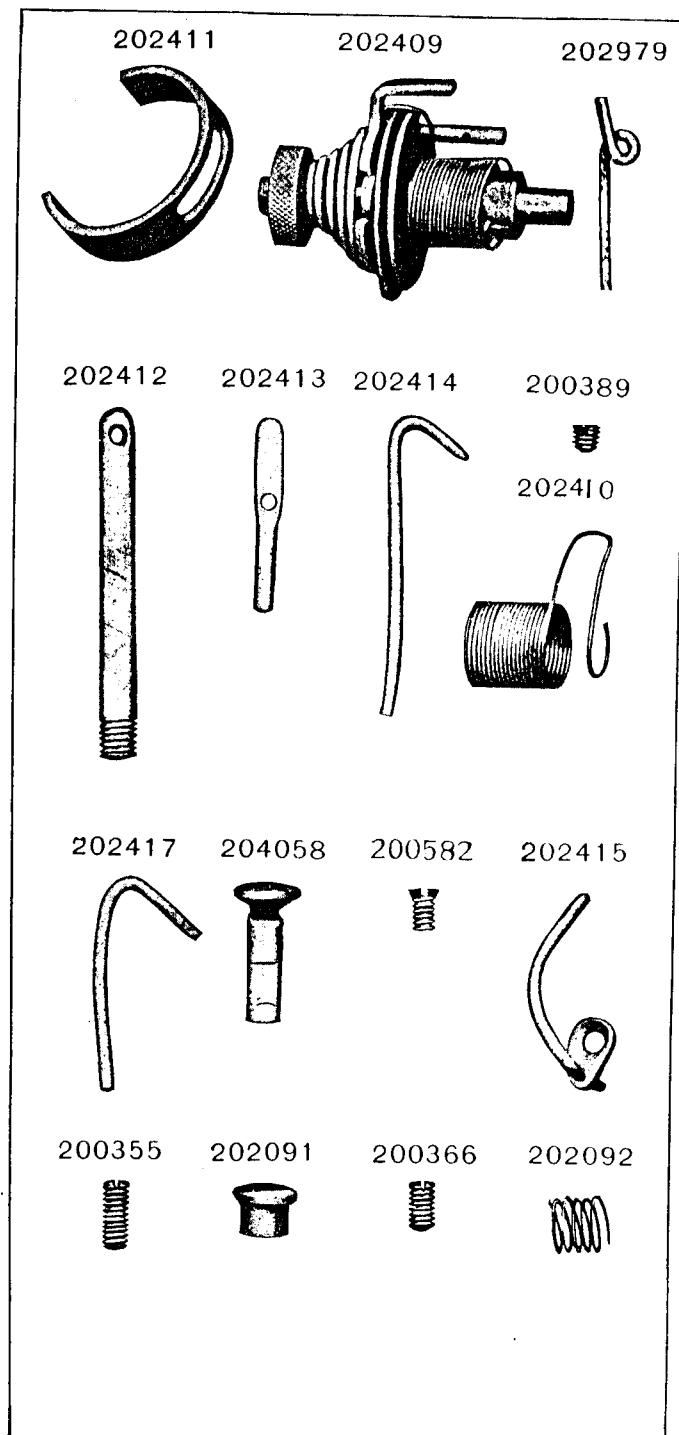


PLATE 10284—FULL SIZE

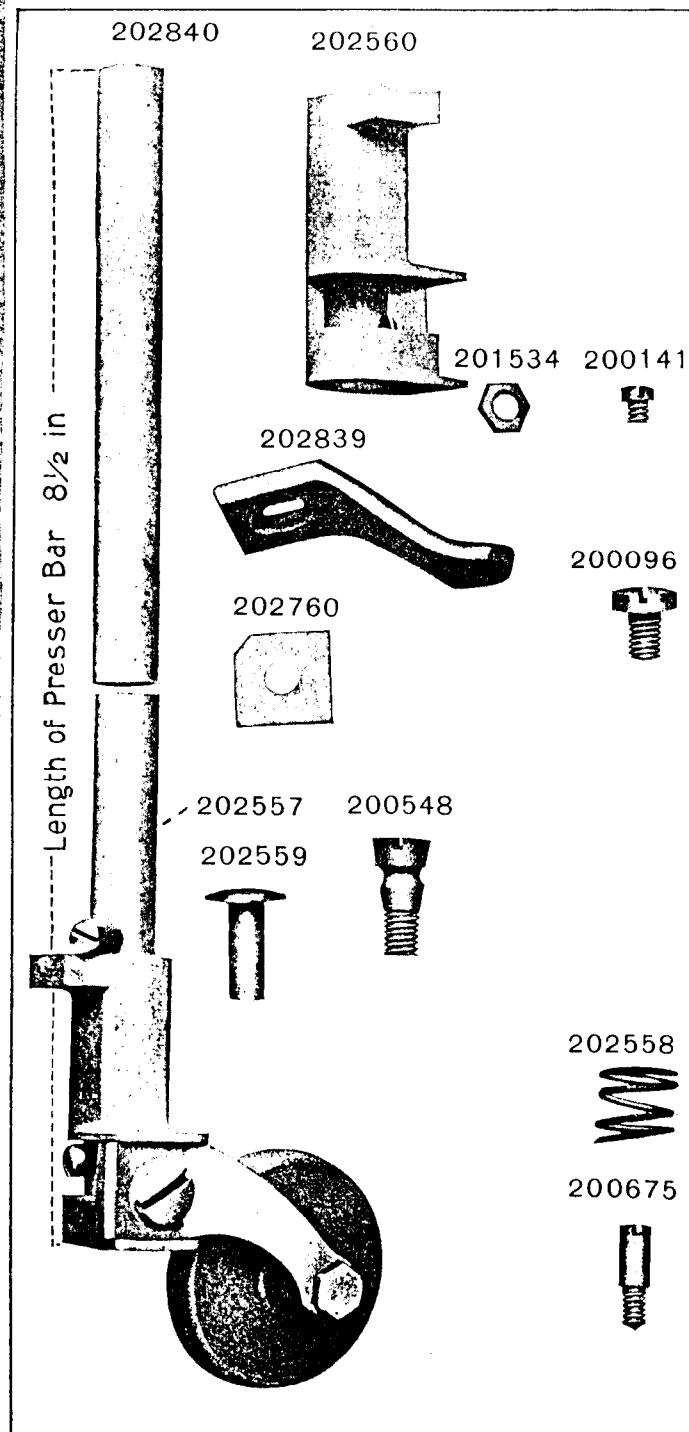


PLATE 10373—FULL SIZE

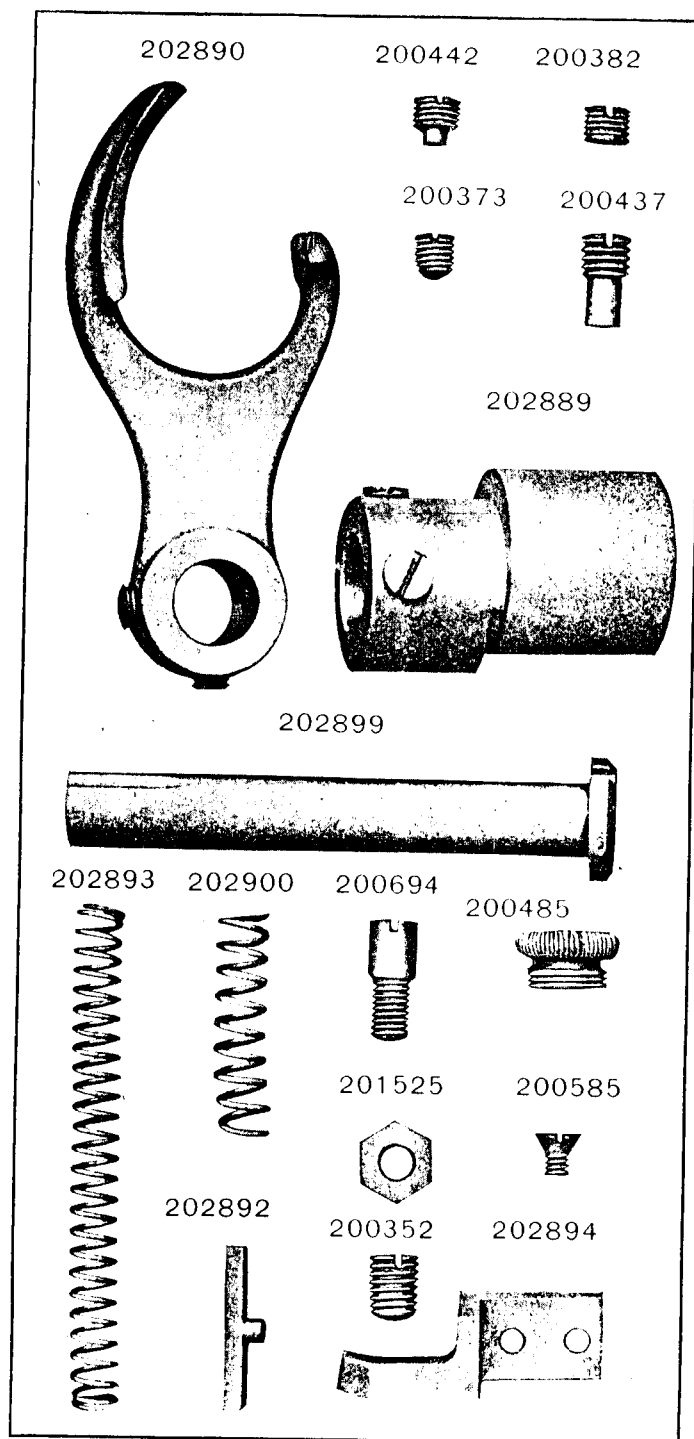


PLATE 10473—FULL SIZE

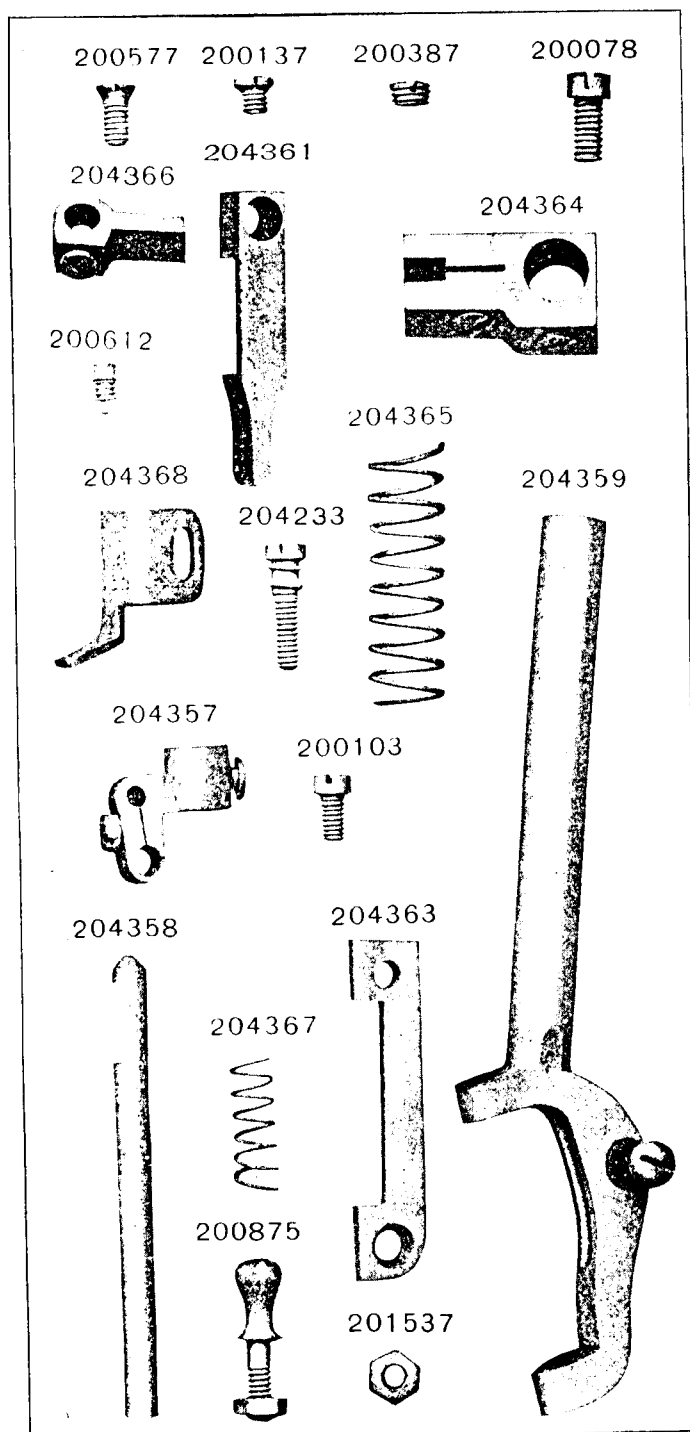
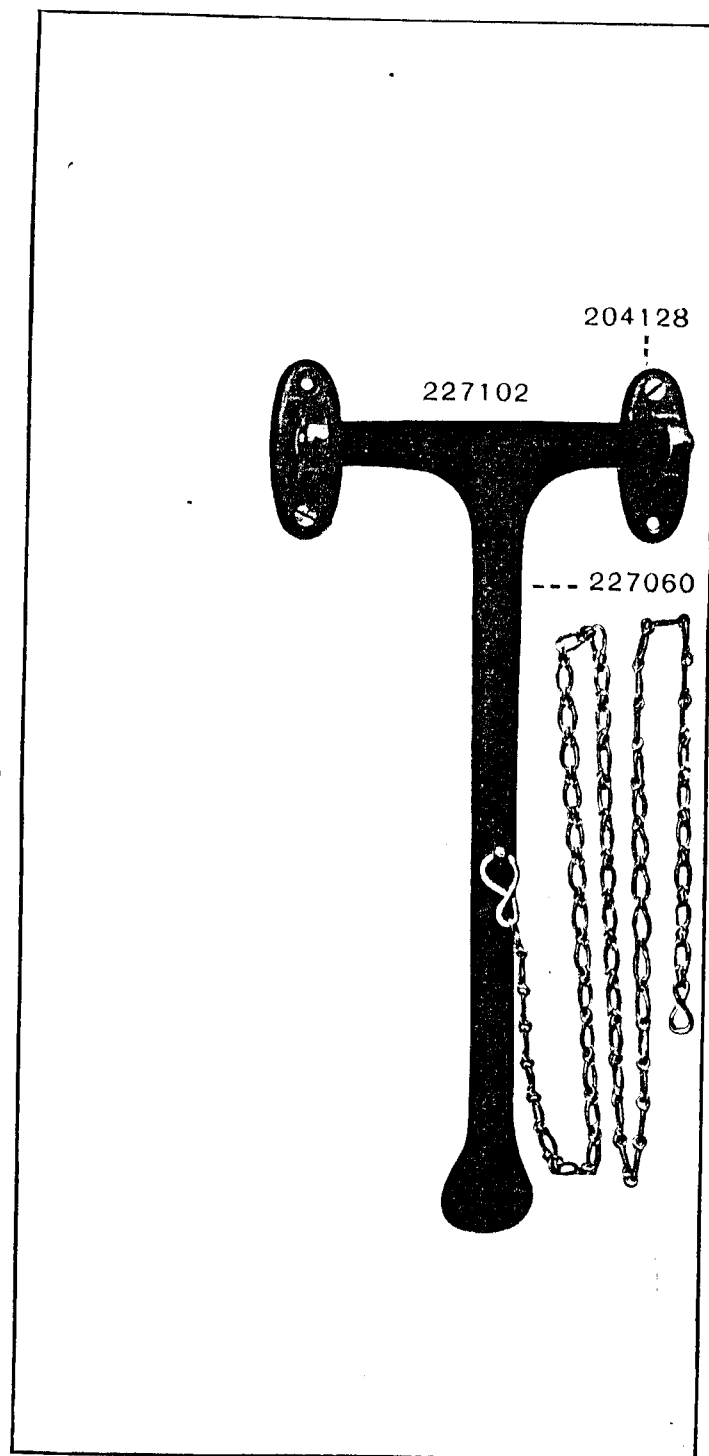


PLATE 10556—ONE-FOURTH SIZE



PIATE 10620—FULL SIZE

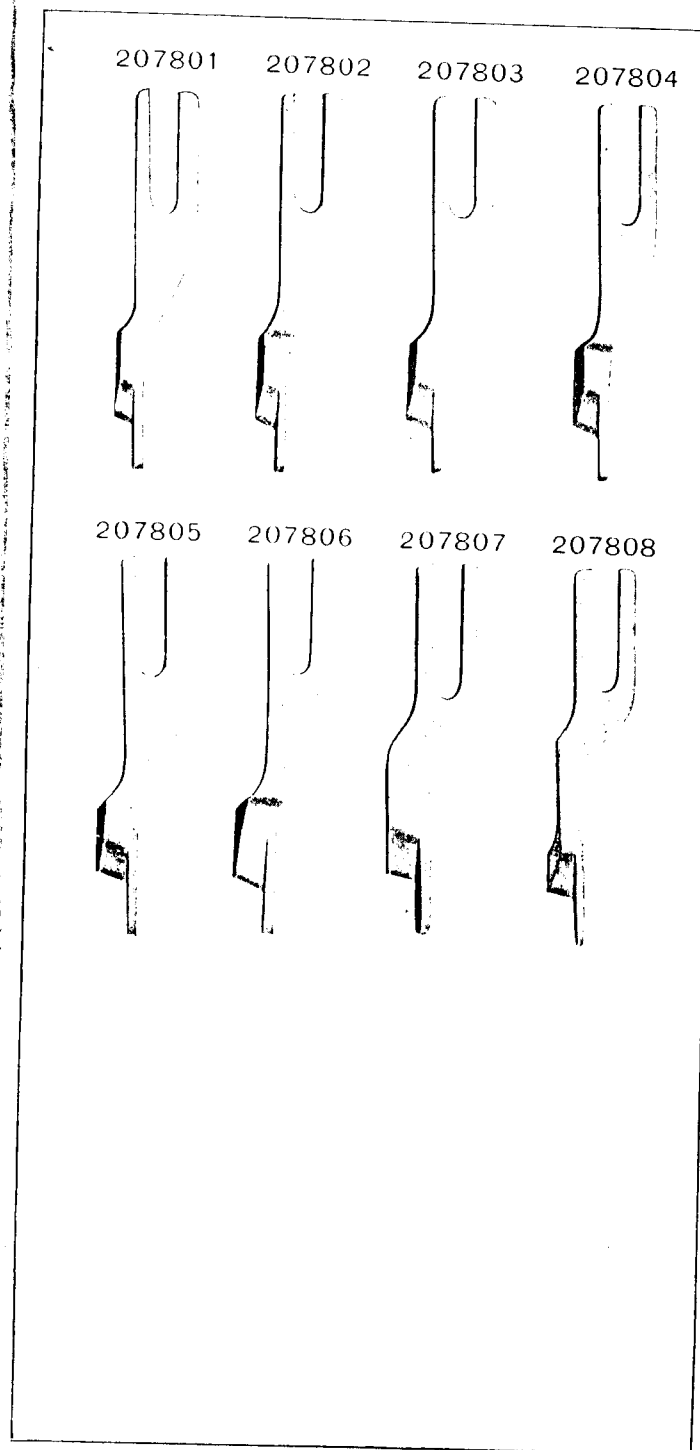


PLATE 10668—FULL SIZE

200475 200575 200374 200583



200378



200368



200079



200842



202619



202355



202872



202036



204925



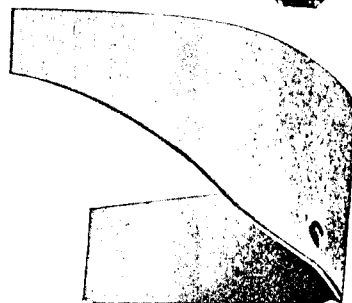
204059



204235



202332

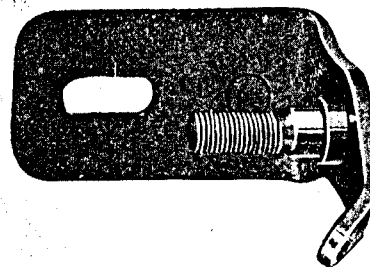


210554



PLATE 10881—FULL SIZE

225461



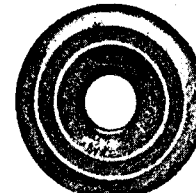
200082



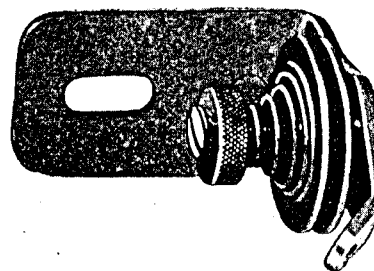
202104



2102



225462



202407



201499



201572



PLATE 10882—FULL SIZE

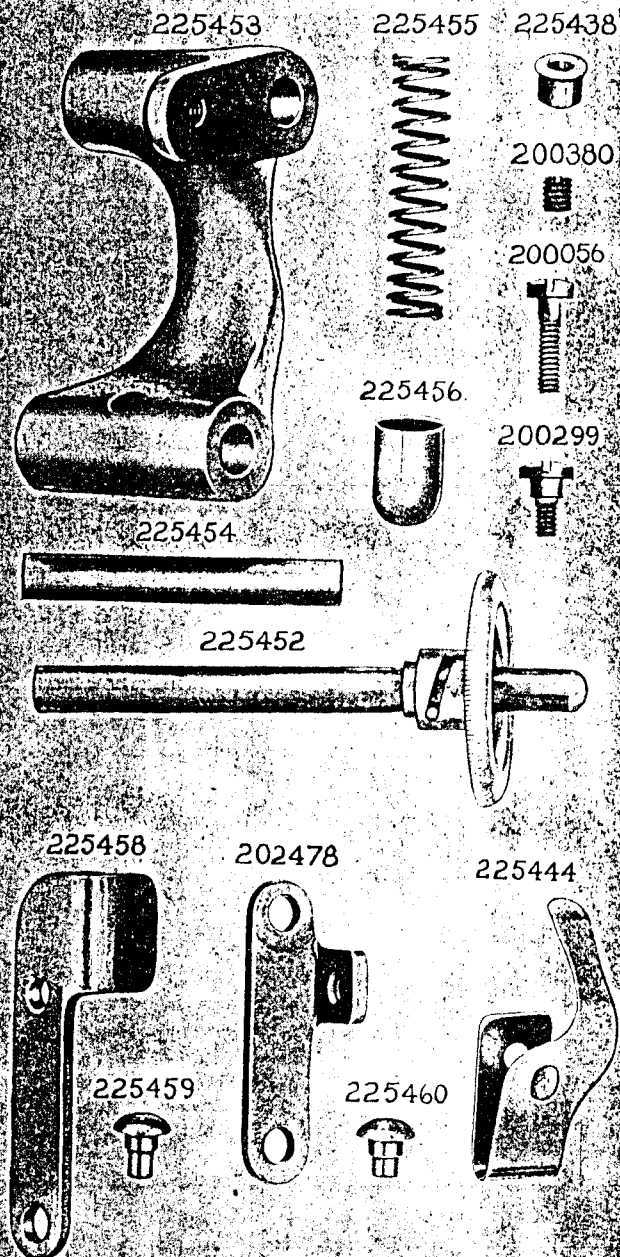


PLATE 10883 ONE-FOURTH SIZE

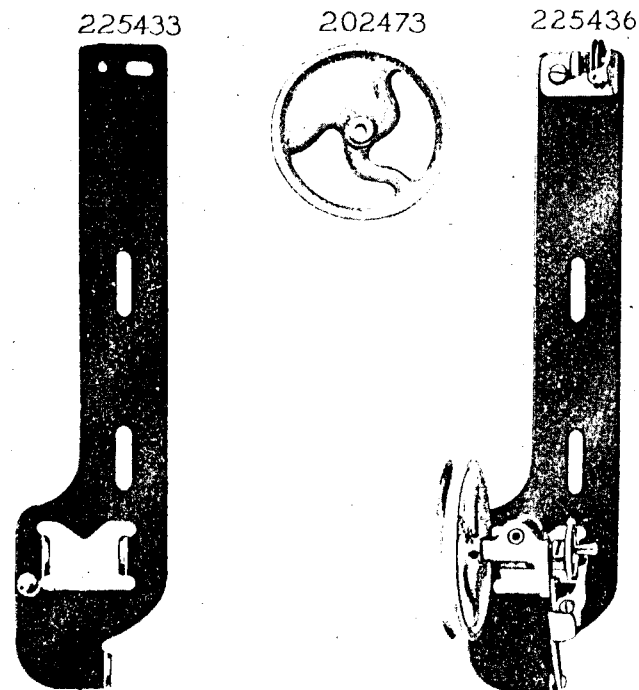


PLATE 10947—ONE HALF SIZE

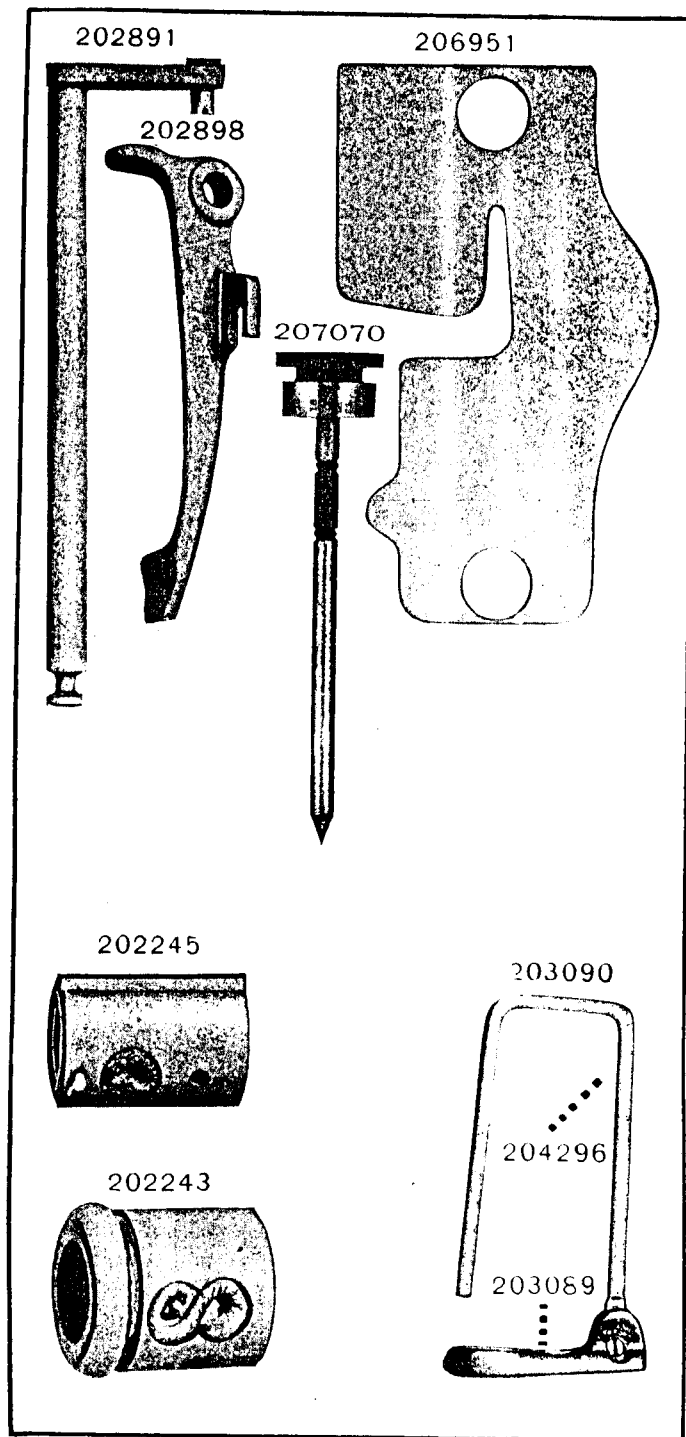


PLATE 11156—ONE-FOURTH SIZE

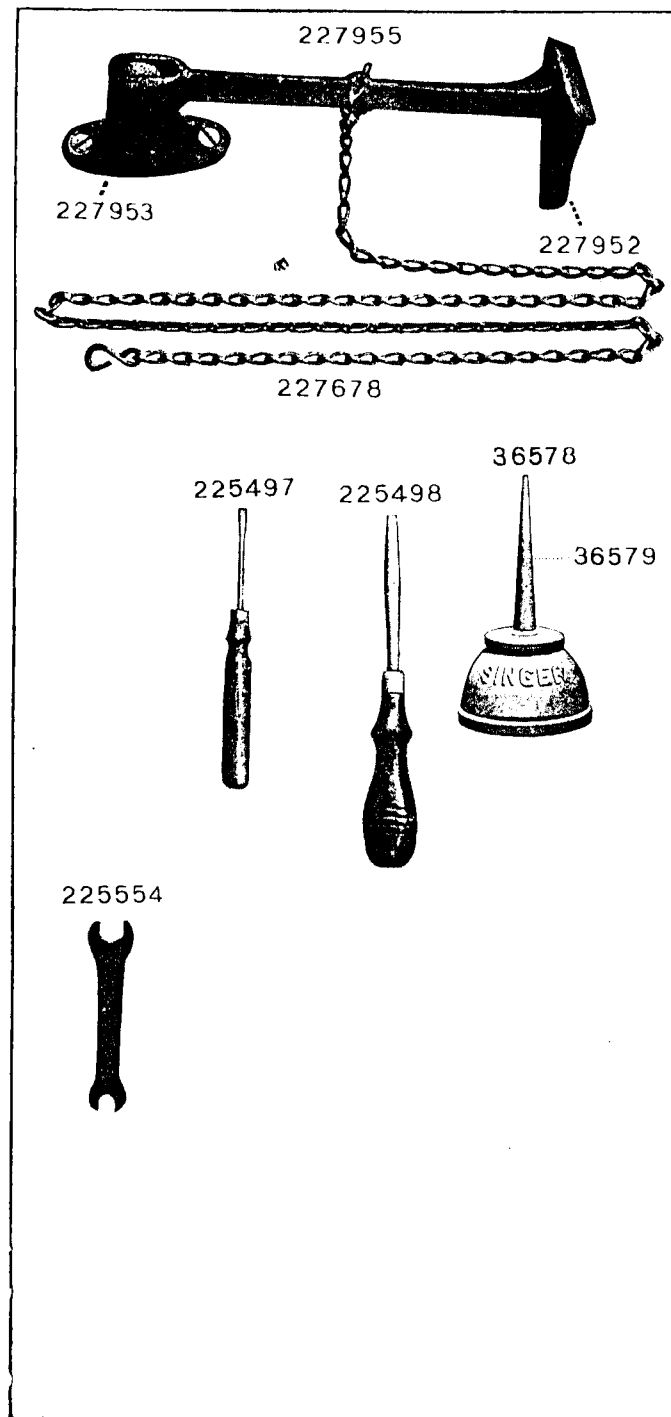


PLATE 11283—ONE-HALF SIZE

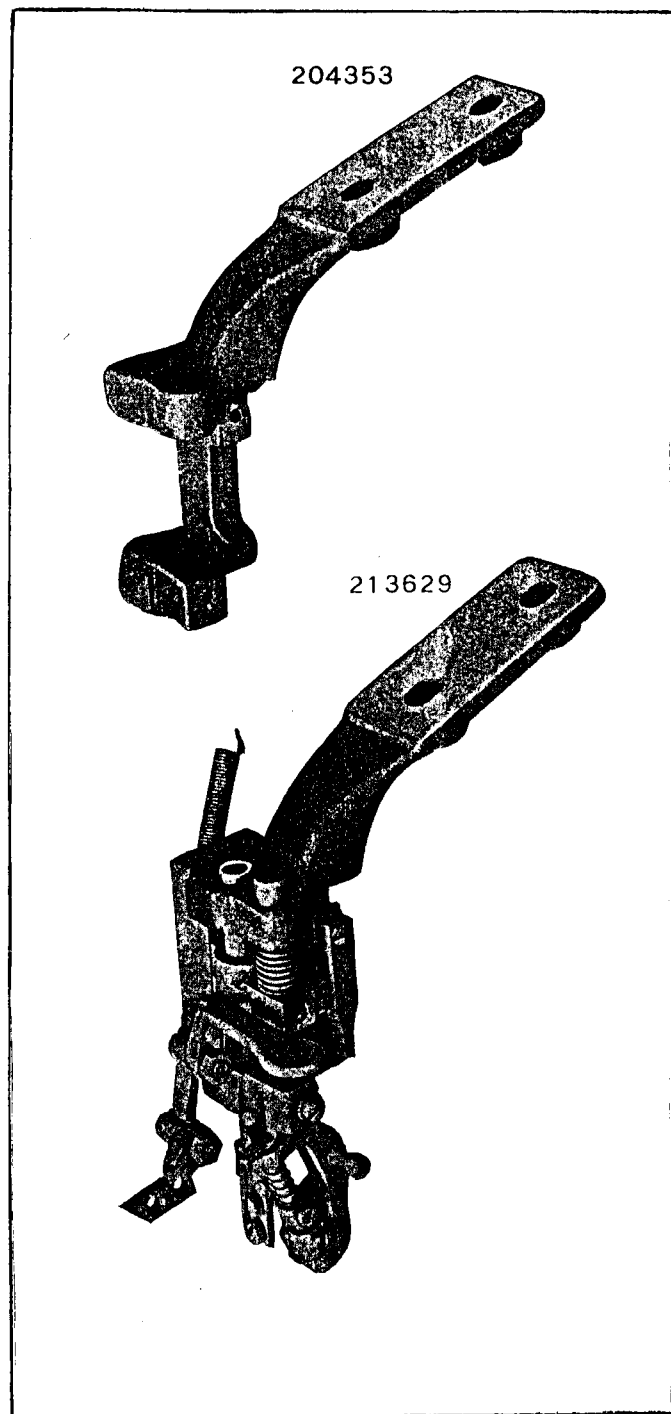


PLATE 11291—FULL SIZE

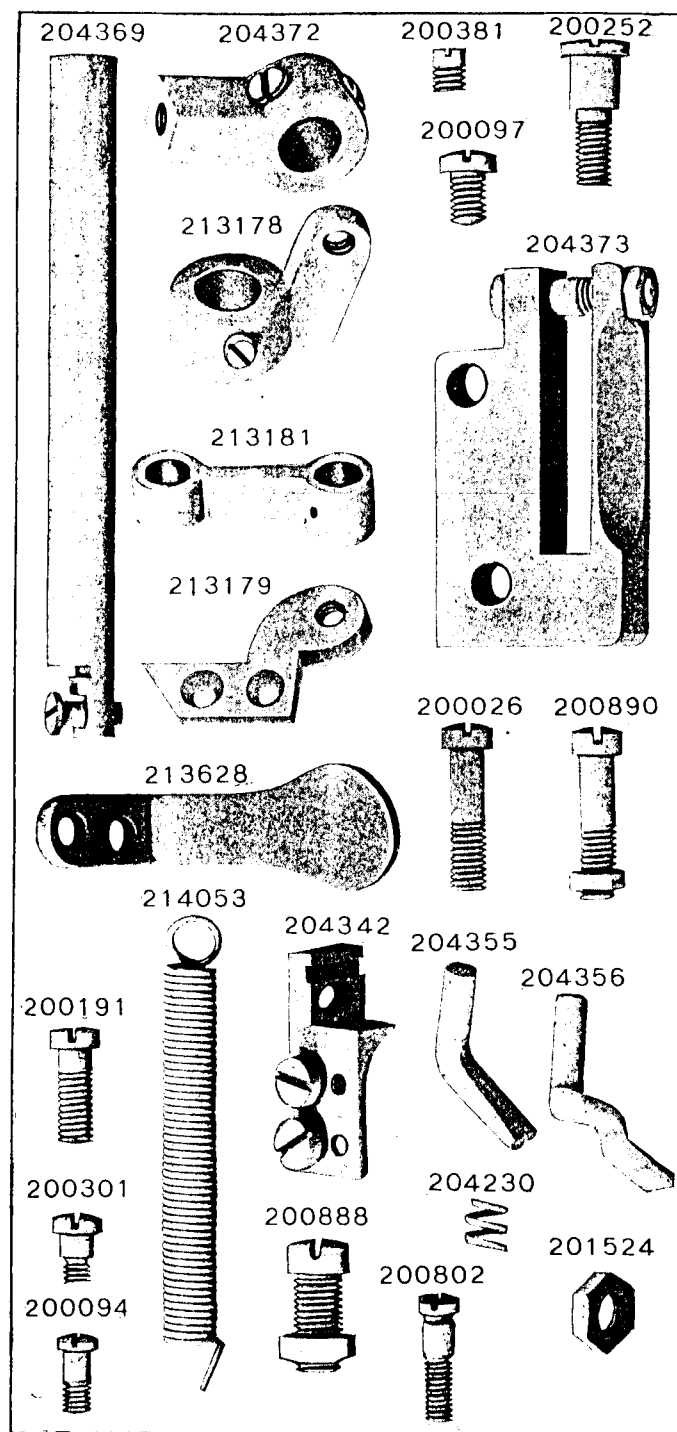


PLATE 11296--ONE-HALF SIZE

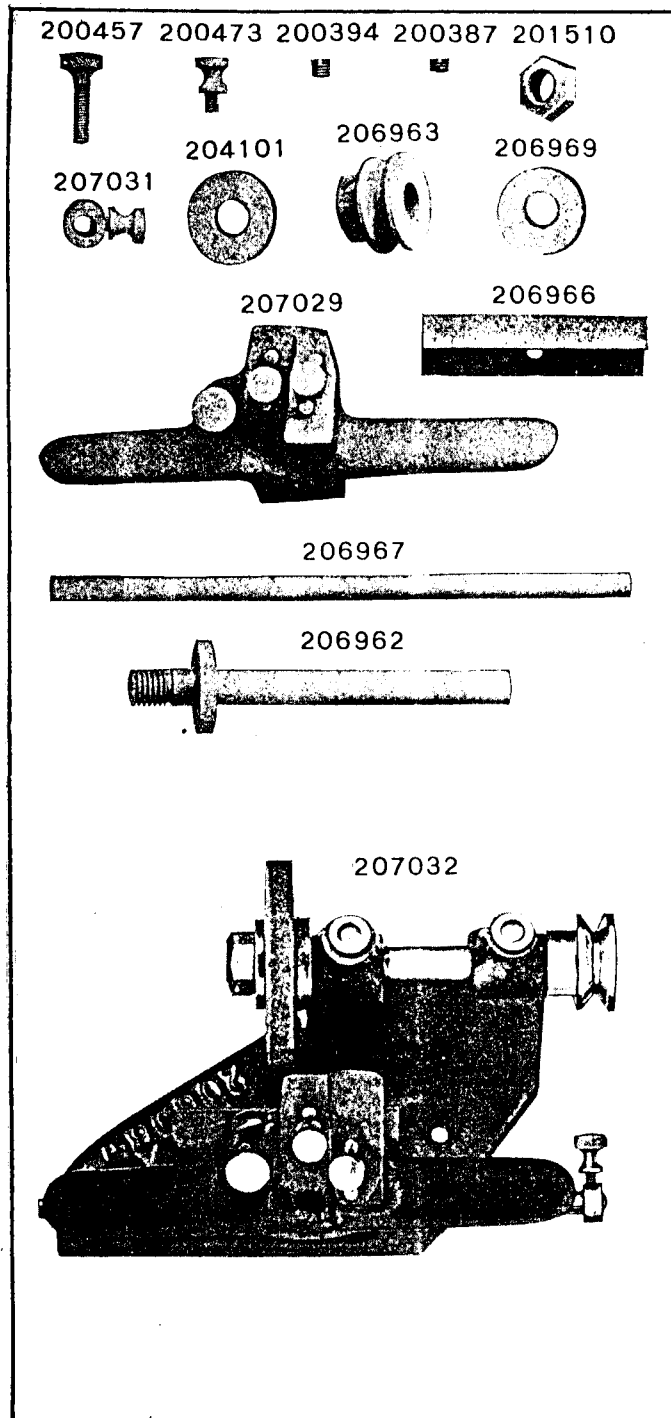


PLATE 11772--ONE-FOURTH SIZE

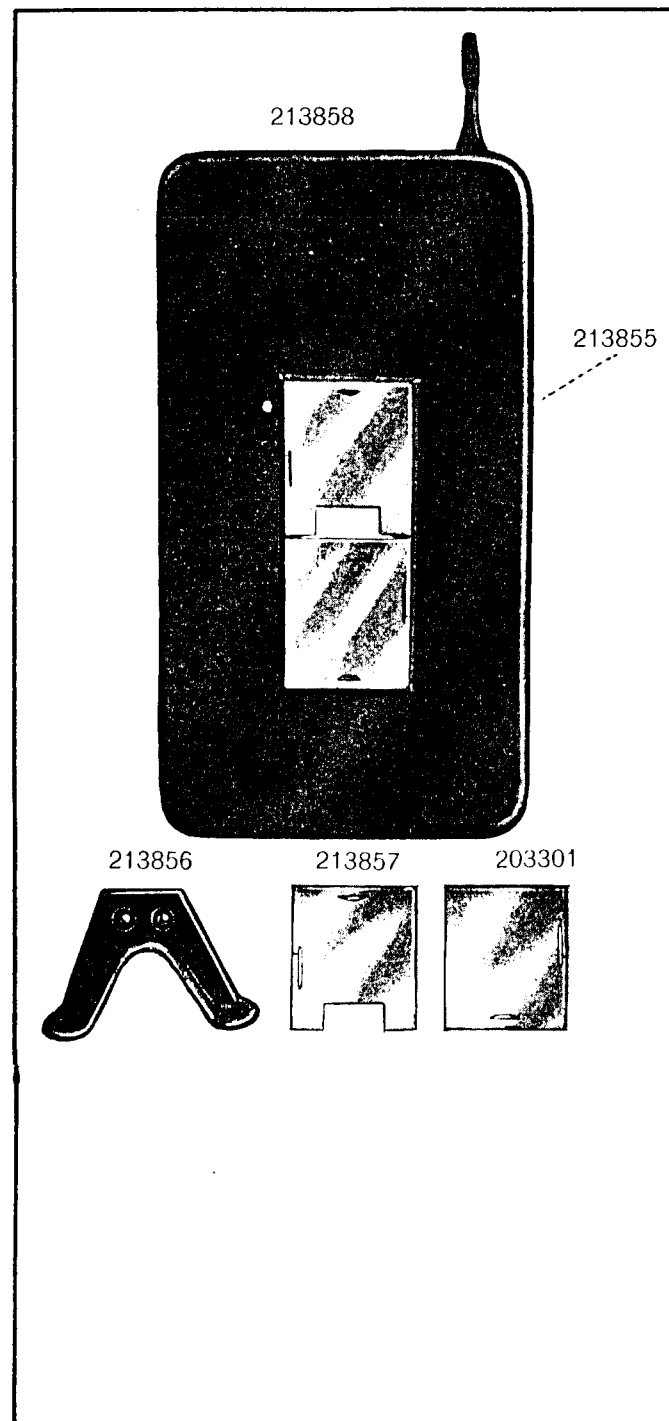


PLATE 12153—ONE-HALF SIZE

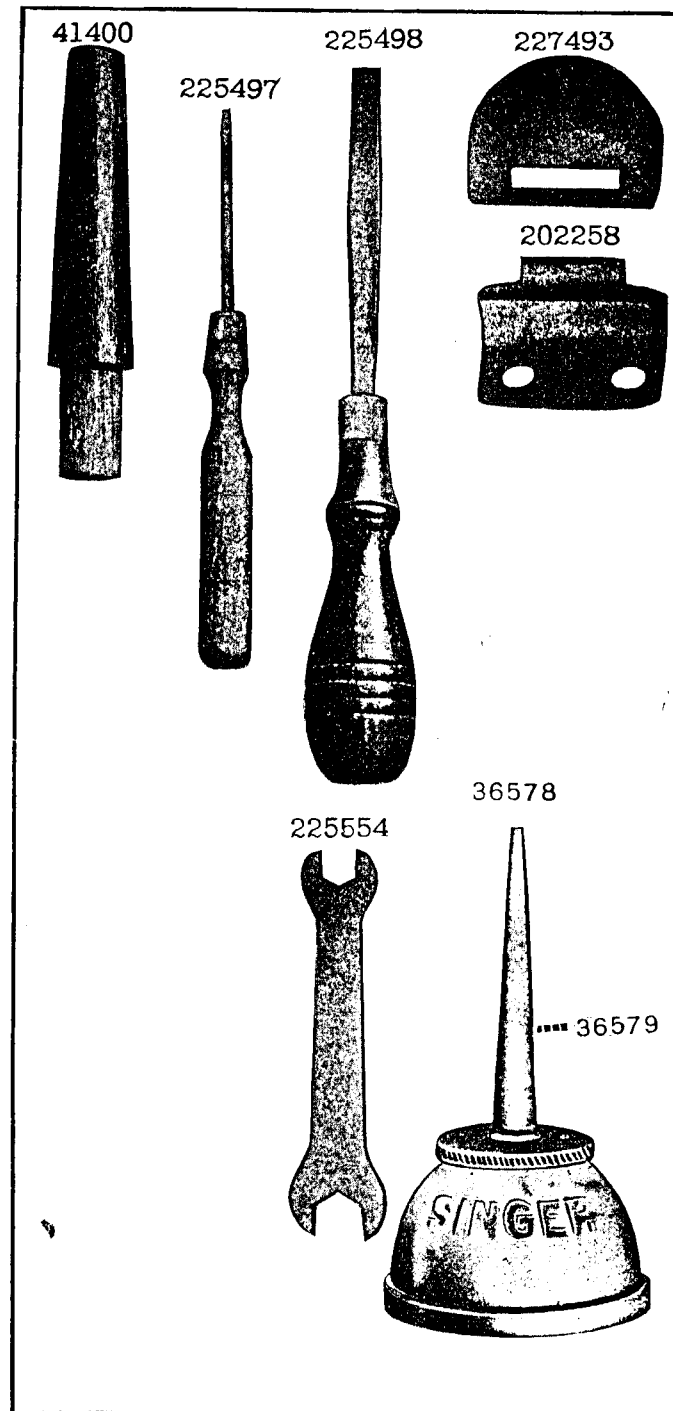
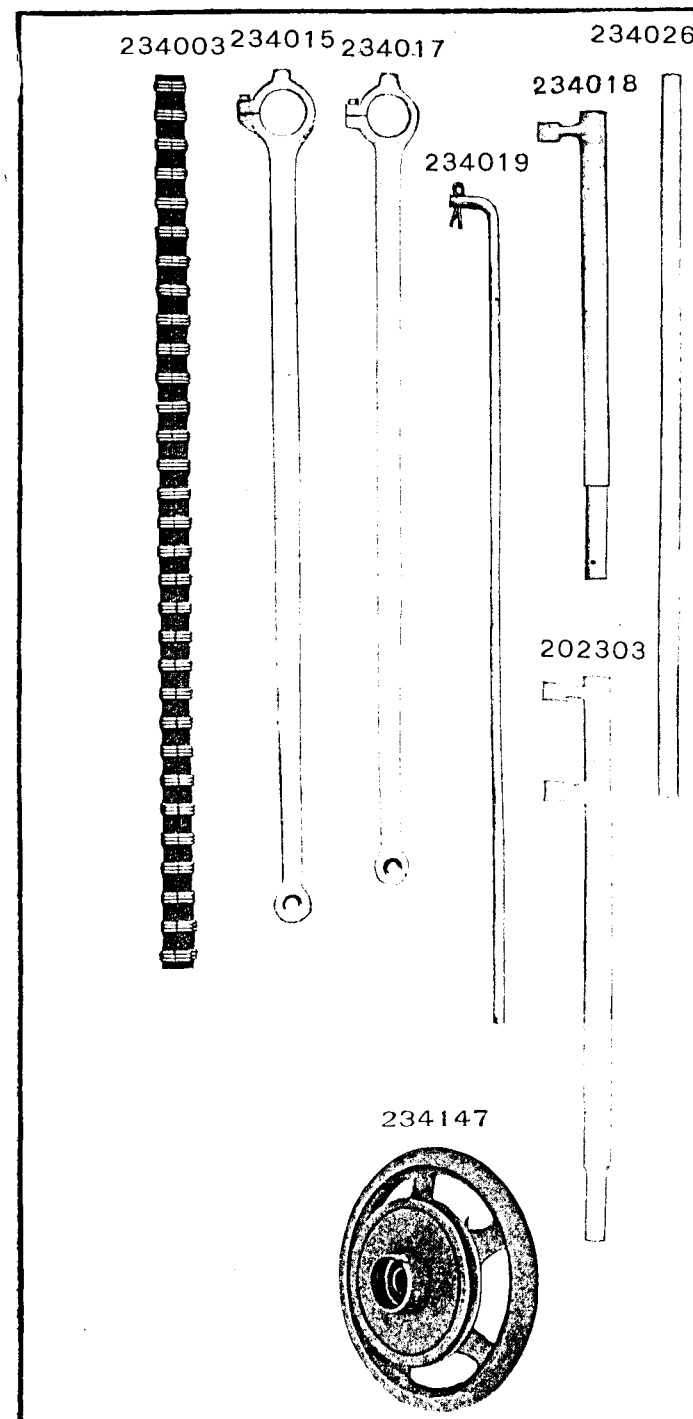


PLATE 13301—ONE-FOURTH SIZE



200278 200338 200602
 202248 202036 200327
 202253 200357 200328
 200335 203470
 203473 200263 203474 203648
 200076 201257
 234079 234065 203214
 200984 200594
 201528 234011

200024 214713 203610 200049
200098 202443 202619 200265 200555
200382 203059 203058 200262
203060 234025 234024 200378
201254 234027 200159 221215
200583 200616 201253

PLATE 13306-ONE-HALF SIZE

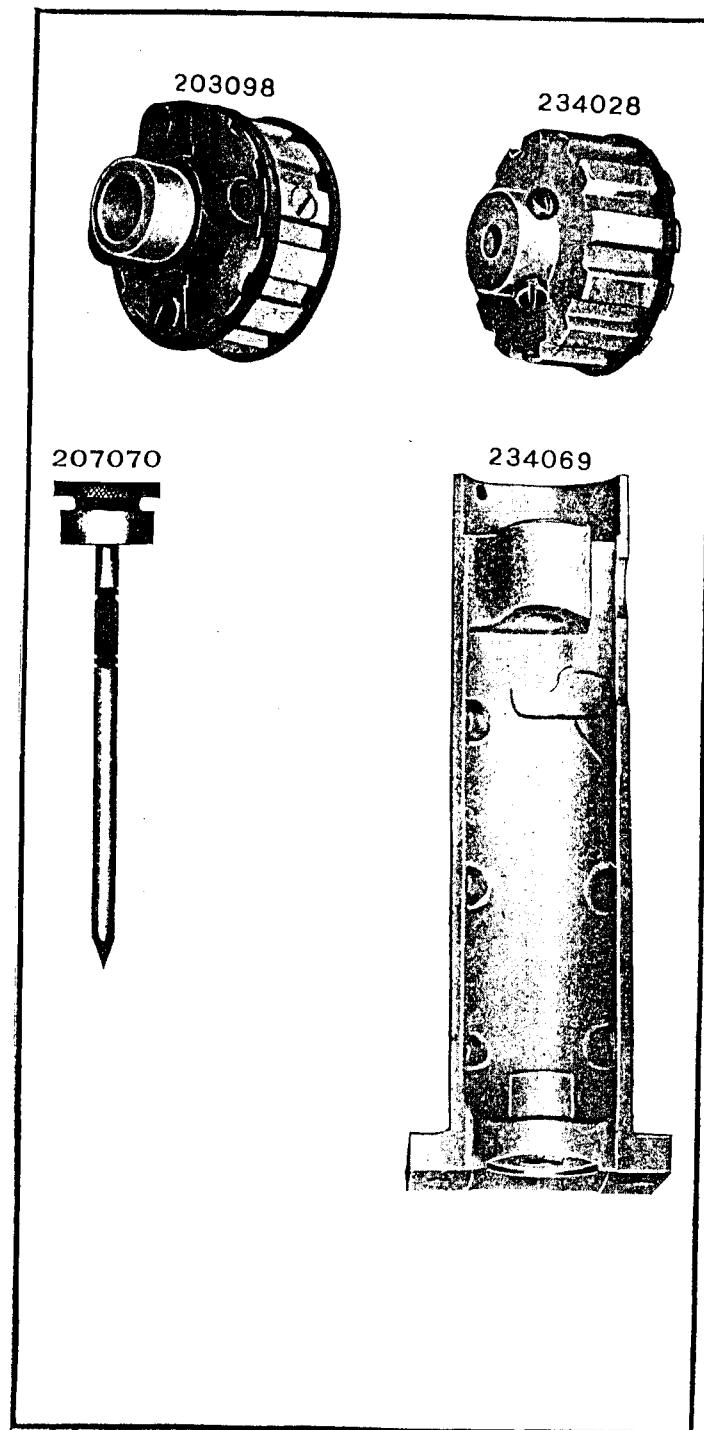


PLATE 13976-FULL SIZE

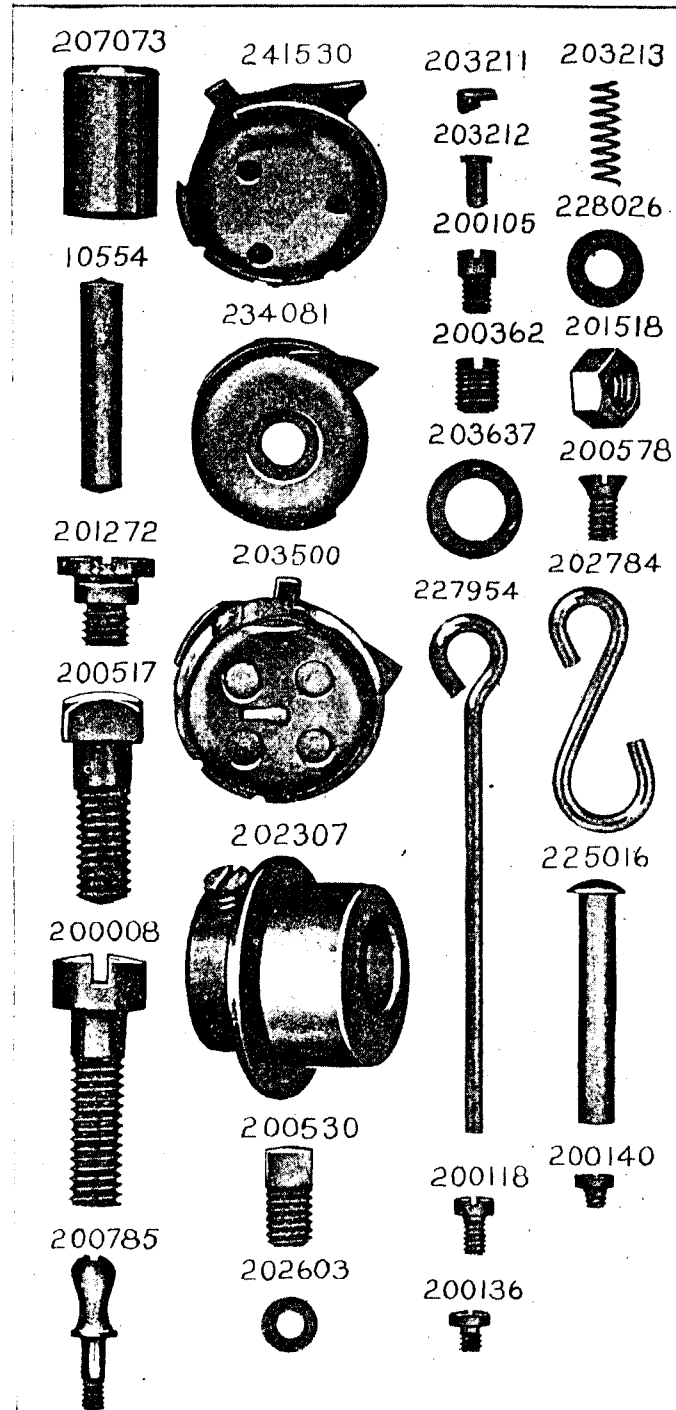
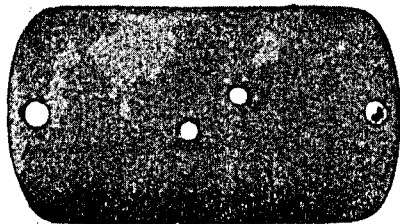
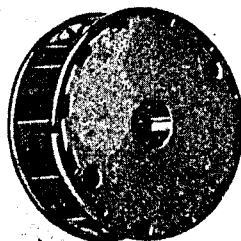


PLATE 13977—ONE-HALF SIZE

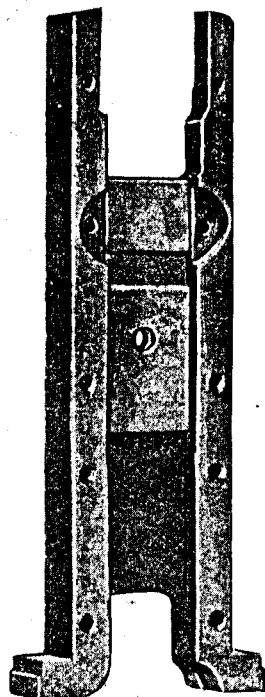
203091



202635



241503



234010



241502



241501
241621



PLATE 13978—ONE-HALF SIZE

221209



241507



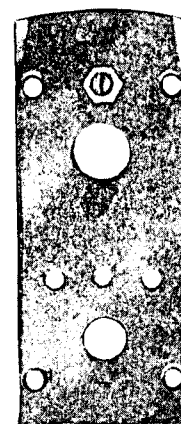
241506



241505



241522



221212

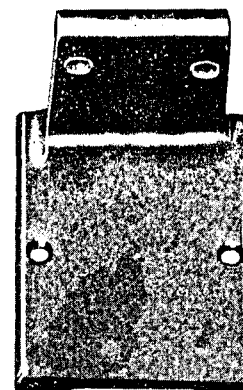


PLATE 13979—FULL SIZE

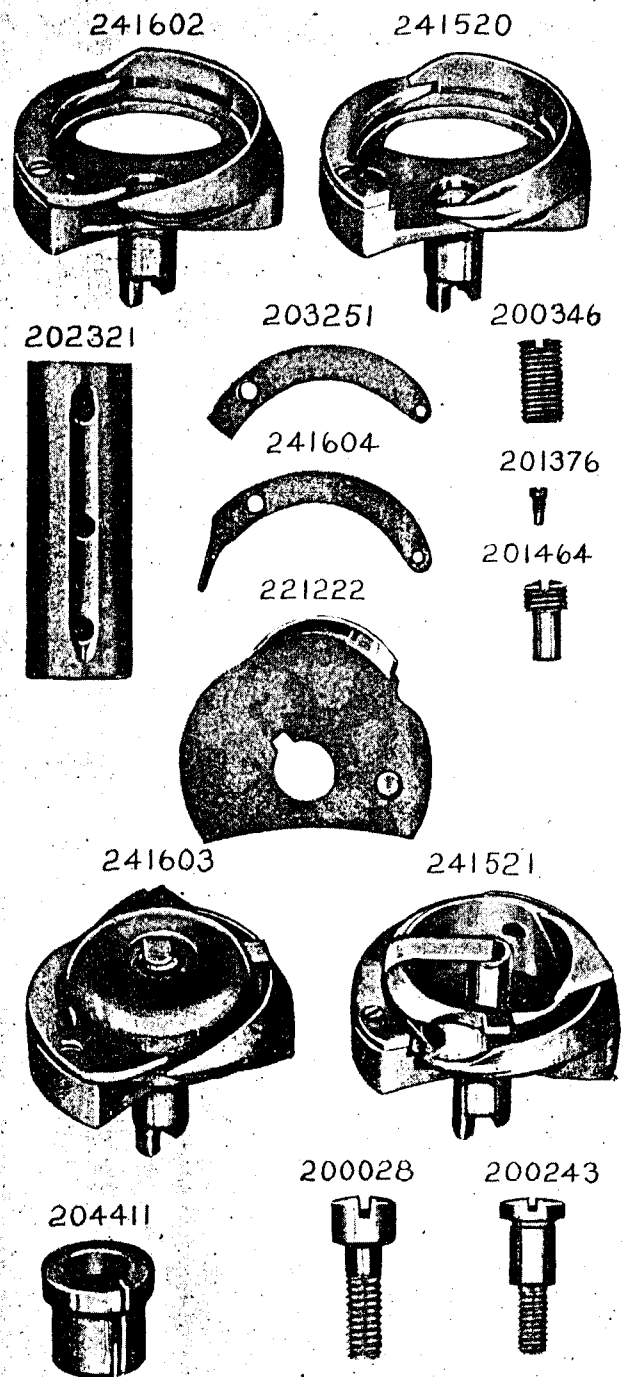


PLATE 13980—ONE-HALF SIZE

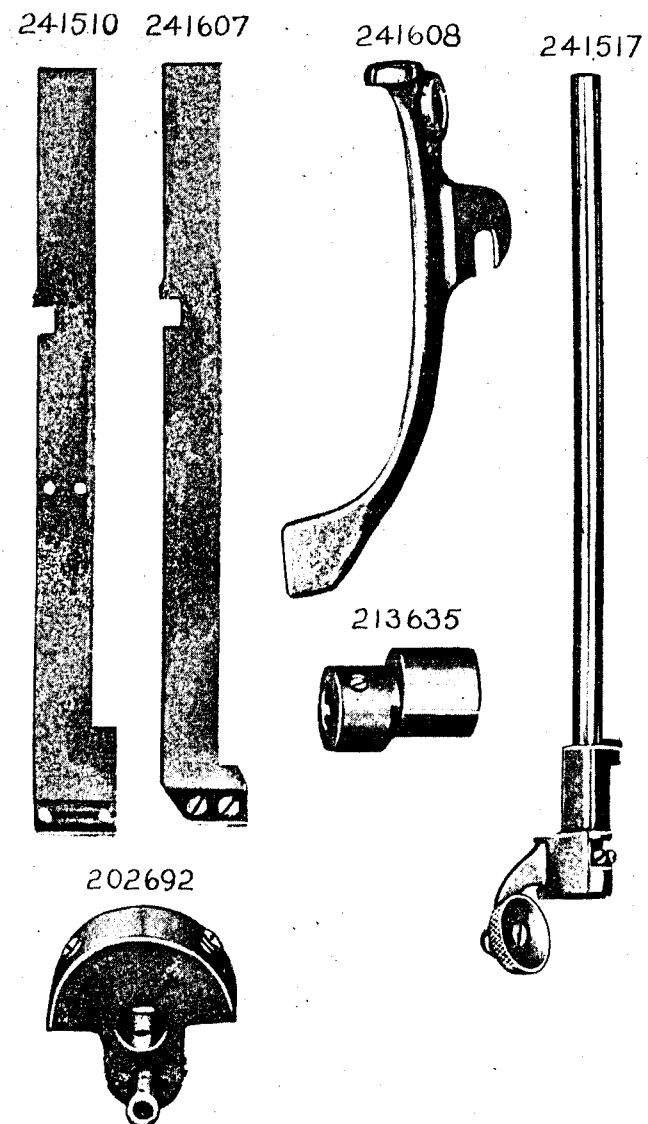


PLATE 13981—FULL SIZE

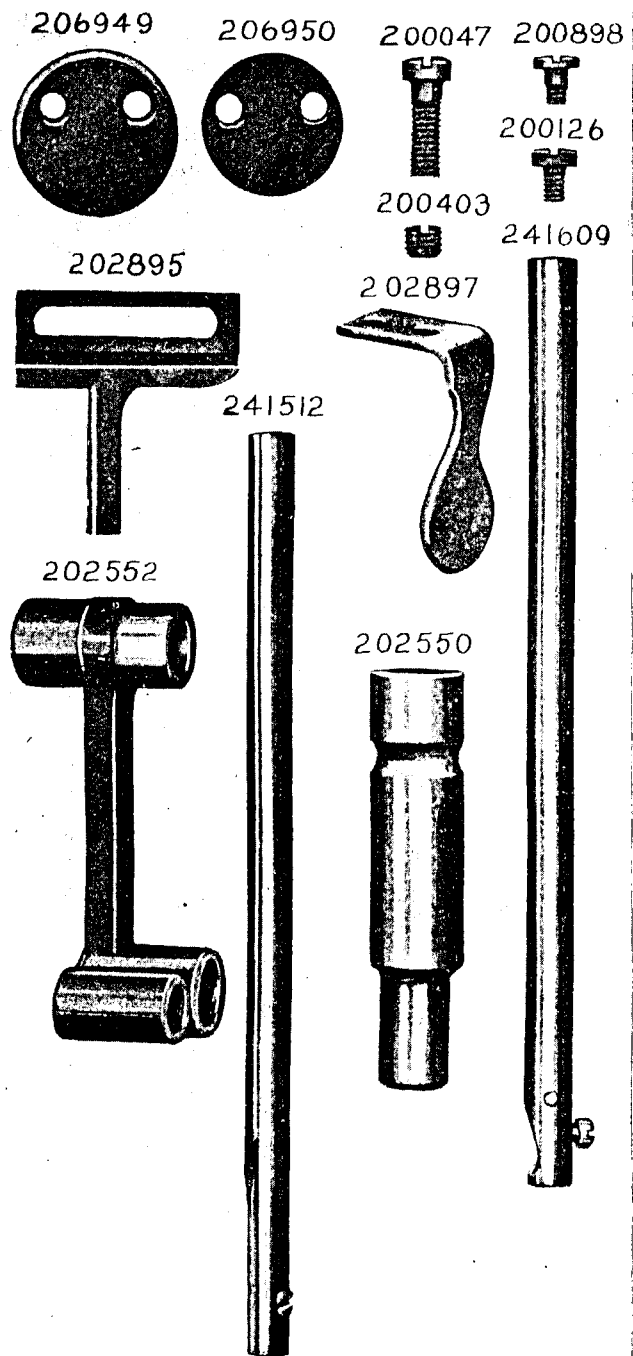


PLATE 13982—FULL SIZE

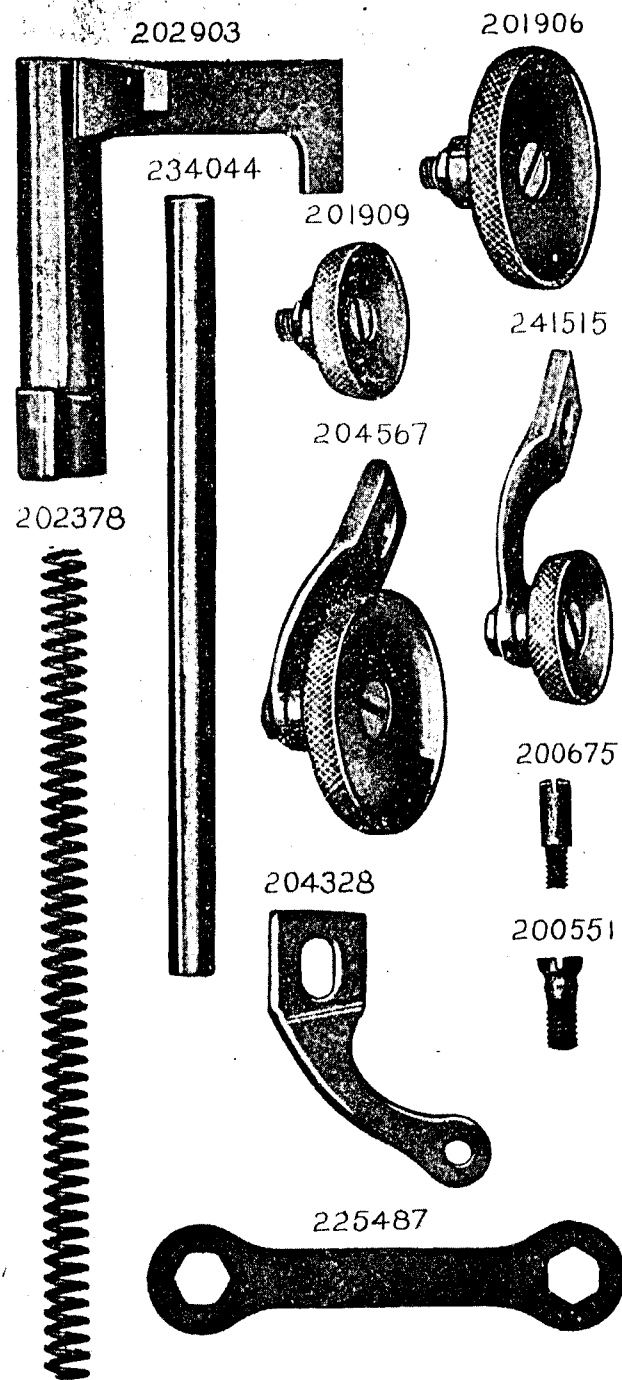
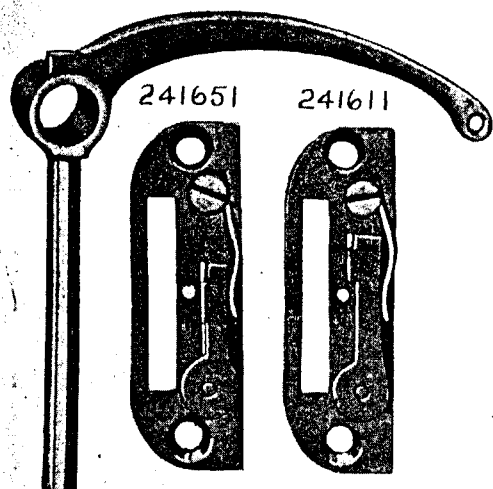


PLATE 13983—FULL SIZE

241518

200084



212655



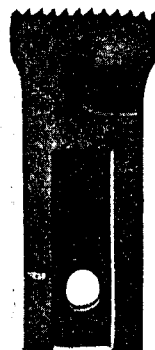
212658



213920

212637

241523



215772



200587



212664

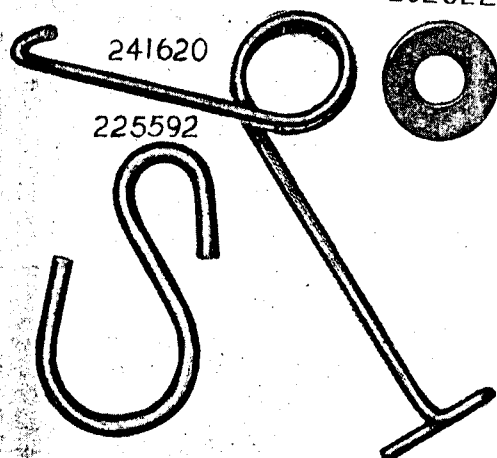


202622



241620

225592



200178



200189

