

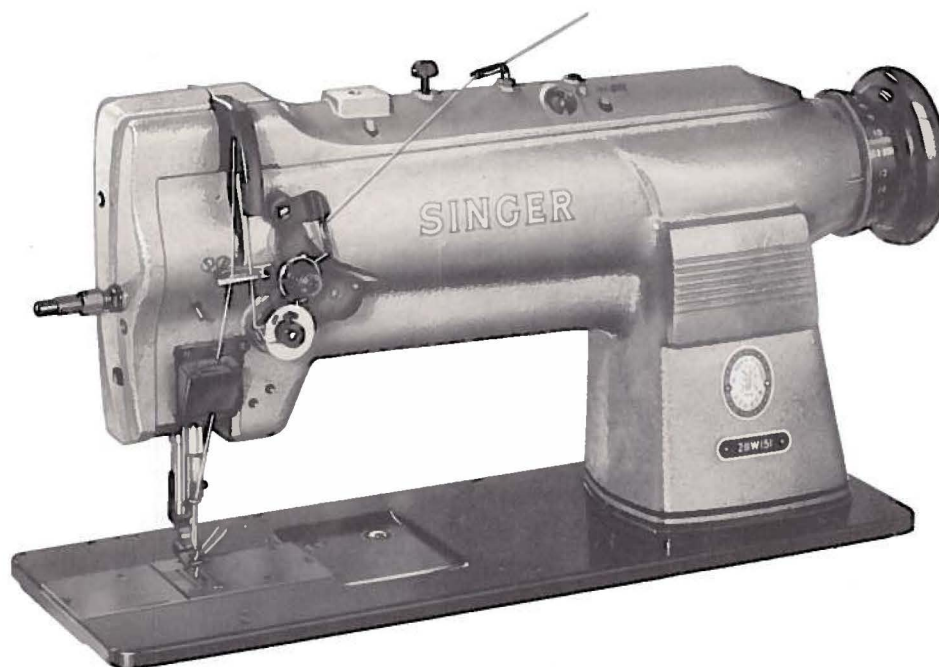
SERVICE MANUAL

FOR

SINGER* 211W151 machine

SINGLE NEEDLE

LOCK STITCH



This book contains complete information covering operation and adjustment of machine and a list of parts, accessories and special fittings. Illustrations and descriptions of parts in rear of book should be consulted when ordering any part of machine requiring renewal.

THE SINGER MANUFACTURING COMPANY

DESCRIPTION

Machine 211W151 produces high speed, precision stitching on coats, suits, overalls, rainwear, sports outerwear, work clothes and similar items of medium to heavy weight fabrics.

Single needle, lock stitch. Federal Stitch Type 301.

Belt driven rotary sewing hook on vertical axis makes two revolutions for each stitch.

Safety clutch, adjustable to suit sewing conditions, protects hook from damage resulting from accidental strain. Should any foreign matter clog the hook, this new type safety clutch will disengage itself and will re-engage only after area has been cleared.

Compound feed, combination of drop feed and needle feed.

Maximum length of stitch, 5 to inch.

Presser bar lift, 1/4 inch.

Hinged presser foot.

Needle bar stroke, 1-5/16 inches.

Needle thread lubricated by felt pad automatically supplied with oil from reservoir in face plate.

Bed, 20-3/8 inches long, 7 inches wide.

Space at right of needle, 10-1/2 inches.

SPEED

Maximum speed, 4000 R. P. M., depending on material being stitched. It is advisable to run a new machine slower than maximum speed for first few minutes to allow time for oil to reach moving parts. Machine pulley turns over toward operator.

SETTING UP

Fasten drip pan to table with its left end even with left end of cut-out. Fasten knee lifter bracket in location shown in Fig. 2. Assemble it so that lifter rod A does not strike drip pan. Screw slots in bracket provide necessary adjustment. Set stop stud B to stop action of knee lifter as soon as presser foot is raised enough to trip hand lever. Screw drain pipe C into drain

hole in drip pan and attach oil jar D, as shown.

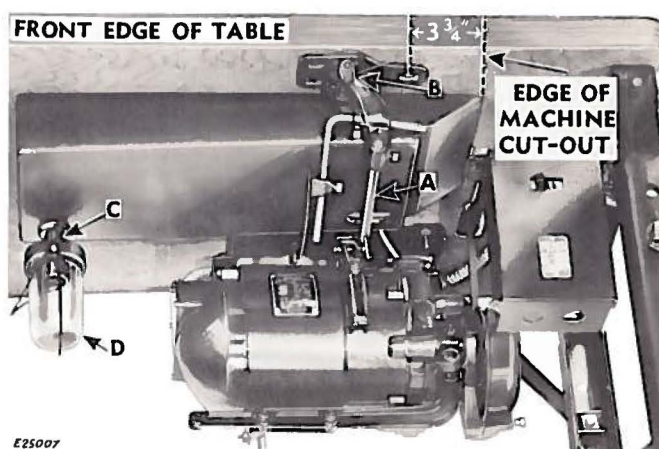


Fig. 2. Knee Lifter, Drip Pan and Oil Jar in Position

HOOK LUBRICATION

Hook saddle contains oil pumped to bobbin case raceway in hook during operation. To control amount of oil flow, tip machine back and loosen control valve set screw A, Fig. 3.

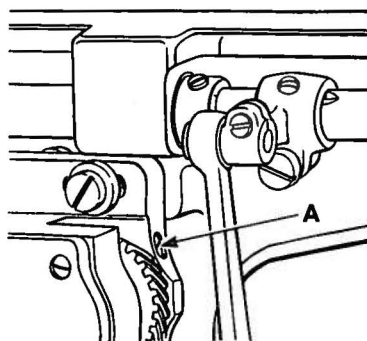


Fig. 3. Sewing Hook Oil Control Valve Set Screw

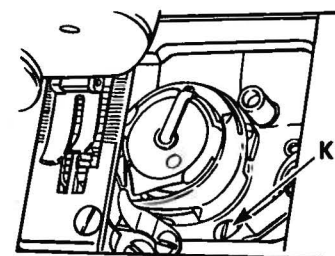


Fig. 4. Sewing Hook Oil Control Valve Screw

Return machine to upright position. Turn control valve K to right for more oil; to left for less oil. After desired adjustment is attained, re-tighten control valve set screw A. See complete lubricating instructions next.

LUBRICATION

Use **SINGER*** OIL, "TYPE A" or "TYPE C". Use "TYPE C" OIL when an oil is desired which will produce minimum stain on fabrics even after long period of storage.

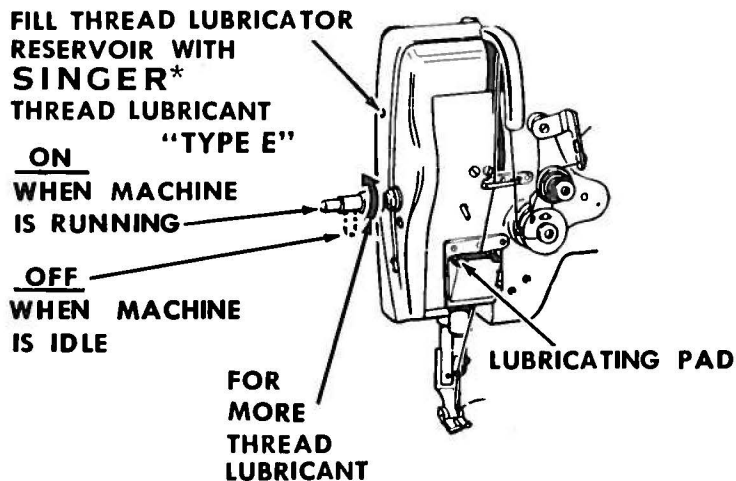


Fig. 5. Lubricating Machine Head

CLEANING

Clean out all lint and other waste from around sewing hook and between feed rows on underside of throat plate.

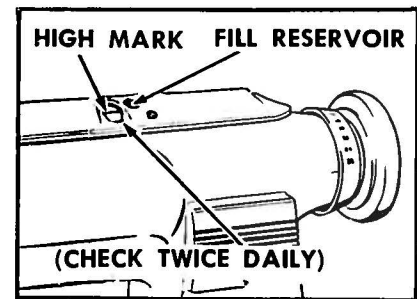


Fig. 6. Reservoir in Arm

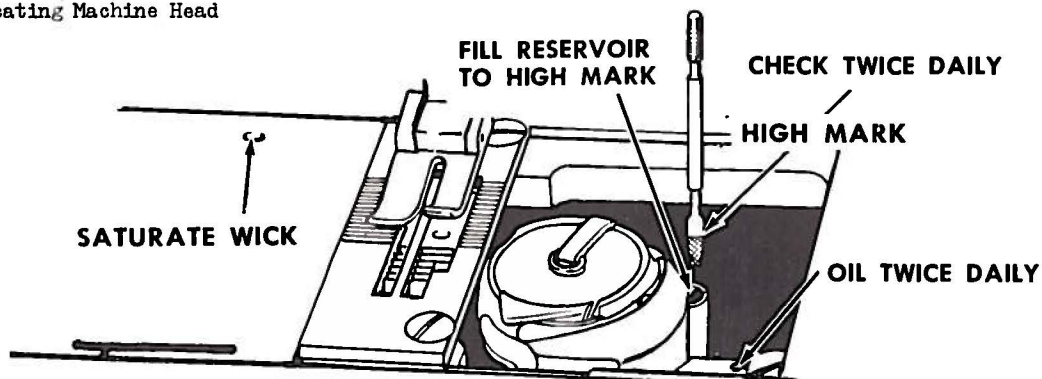


Fig. 7. Reservoir in Bed

NEEDLES

Use **SINGER*** Needles

Catalog 1901 (135x7)
when machine is set with 1/4" clearance under presser foot

or

Catalog 3355 (135x17)
when machine is set with 3/8" clearance under presser foot

Needle sizes determined by size of thread and type of material being sewn.

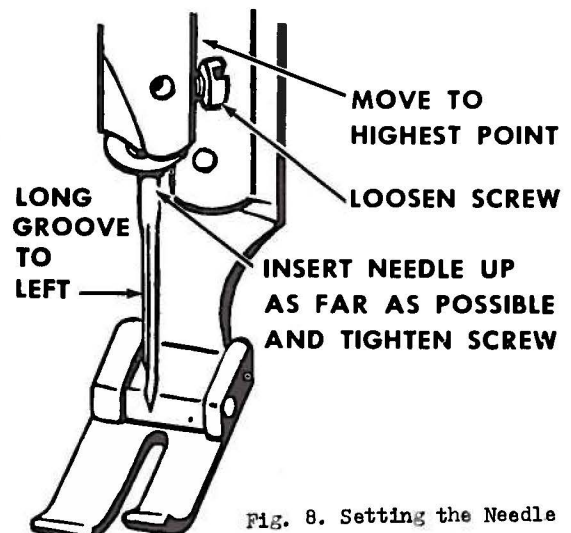


Fig. 8. Setting the Needle

THREADING NEEDLE

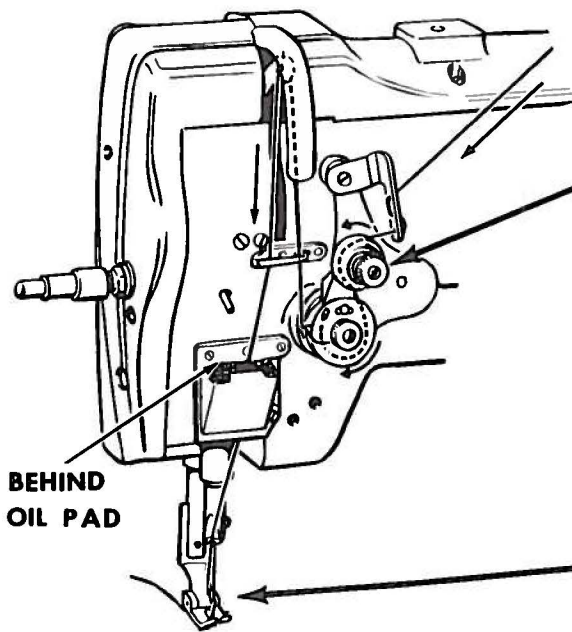


Fig. 9. Upper Threading Complete

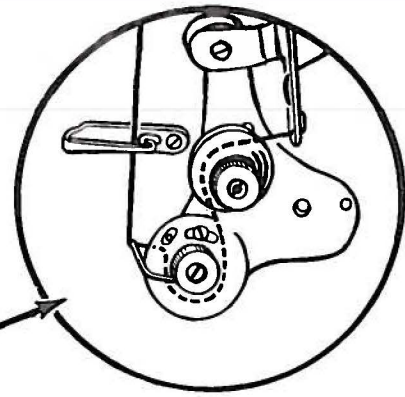


Fig. 10. Threading Tension Assembly

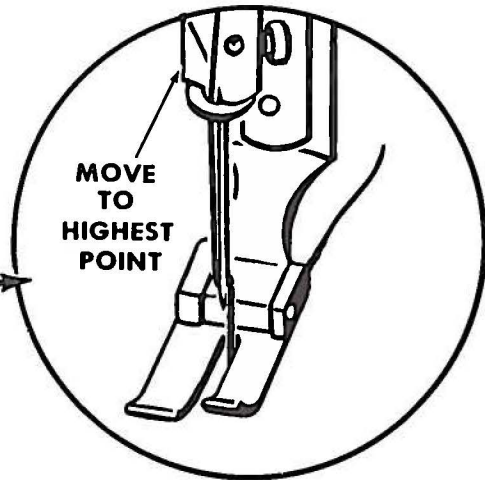


Fig. 11. Threading Needle

BOBBIN REMOVAL

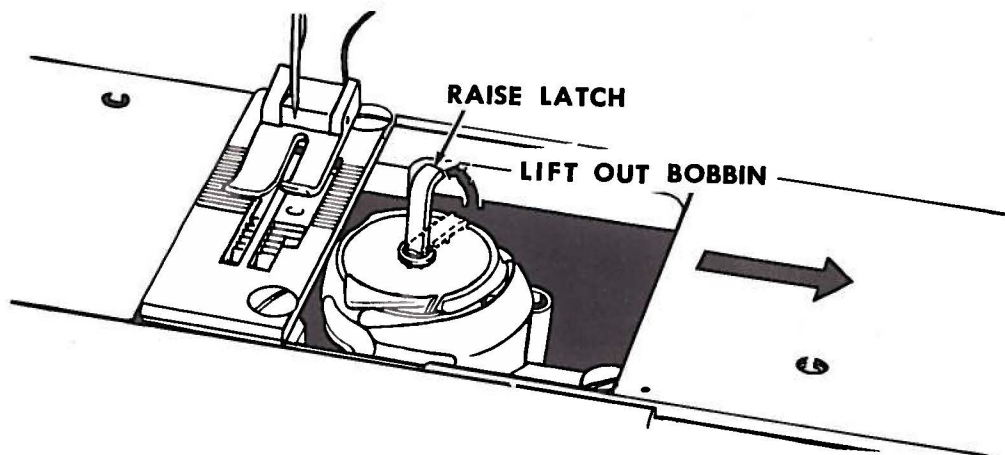


Fig. 12.

WINDING THE BOBBIN

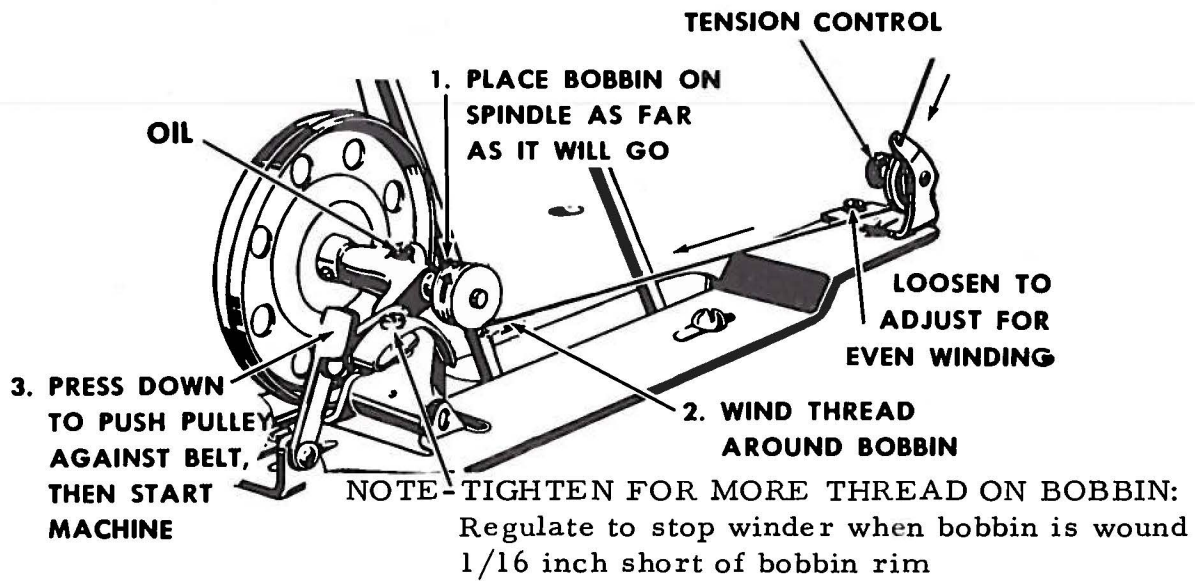


Fig. 13.

BOBBIN REPLACEMENT

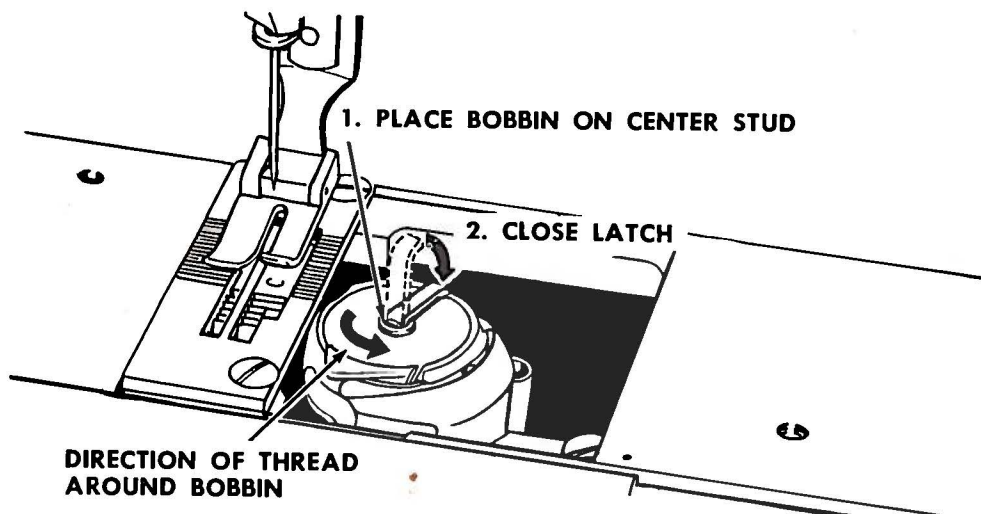


Fig. 14.

THREADING BOBBIN CASE

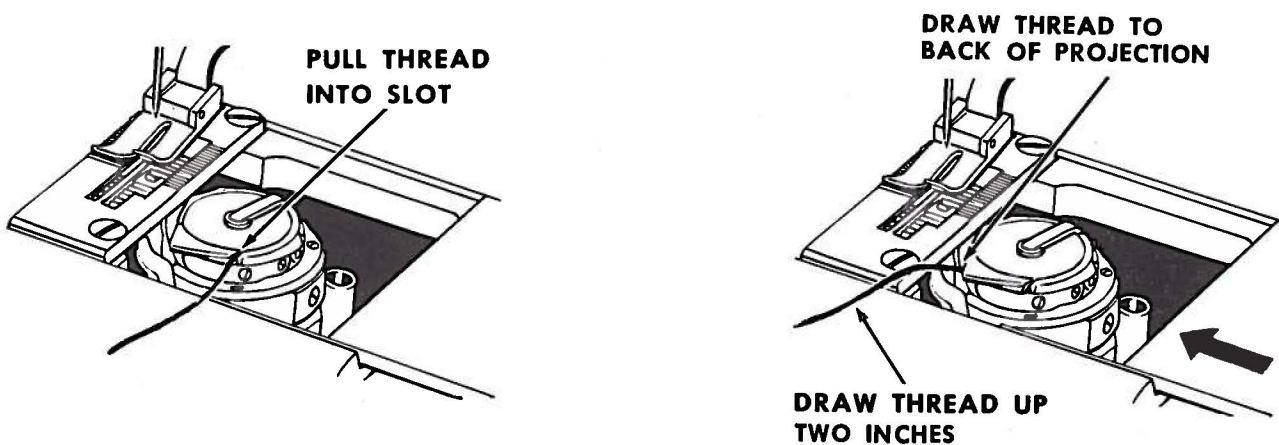


Fig. 15.

Fig. 16.

THREAD TENSIONS

Turn machine pulley until tension screw is accessible.

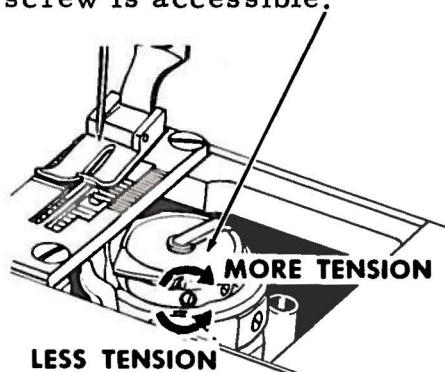


Fig. 17. Bobbin Thread Tension

Tension on threads should be as light as possible while still sufficient to set stitch in material.

Regulate needle thread tension only when presser foot is down.

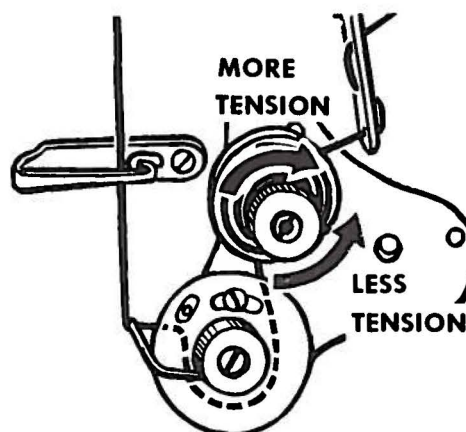


Fig. 18. Needle Thread Tension

STITCH LENGTH REGULATION

1. Stop machine.
2. Depress button shown in Fig. 19.
3. Turn machine pulley toward you slowly— until button drops (clicks).
4. Turn machine pulley until desired stitch length is opposite mark on arm (see Fig. 20).
5. Release button.

Never depress the button while the machine is running.
Make certain that plunger is disengaged before starting machine.

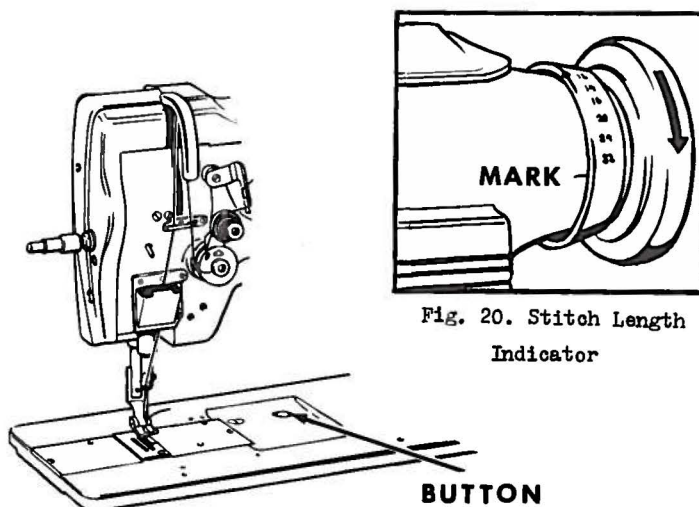


Fig. 20. Stitch Length Indicator

Fig. 19. Stitch Length Button Regulator

PRESSER FOOT PRESSURE

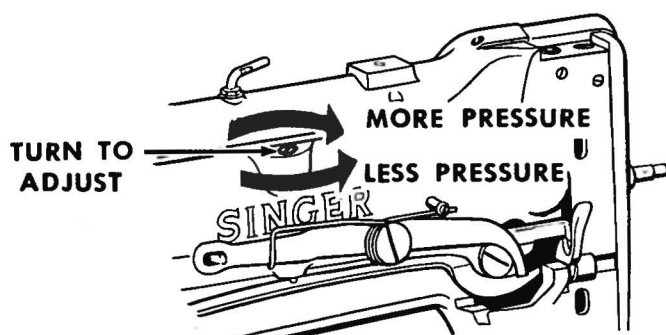


Fig. 21. Adjusting Pressure

The pressure on the material should be as light as possible, while still sufficient to insure correct feeding.

THREAD CONTROLLER

The function of the thread controller spring is to hold back the slack of the needle thread until point of needle reaches the goods in its descent, as without this controlling action of the spring, the slack thread (especially silk) will sometimes be penetrated by point of needle as needle is descending.

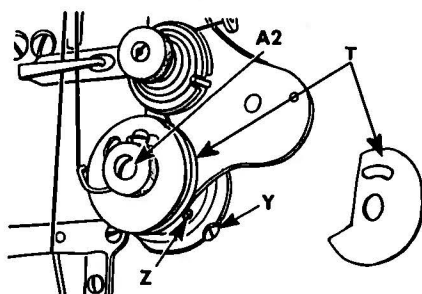


Fig. 22. Adjustment of Thread Controller

To change the thread controller stop for more controller action on the thread, loosen set screw Z, and turn thread controller spring stop T, Fig. 22 to the right; for less action, turn thread controller spring stop T to the left, after which securely tighten set screw Z.

It may be found advisable to increase tension of spring for coarse thread, or to lessen it for fine thread.

To increase tension of thread controller on thread, loosen tension stud set screw Y, located nearly under tension stud, and turn tension stud A2 slightly to the left. To decrease tension turn it to the right. Re-tighten stud set screw Y.

TO SET NEEDLE BAR

See that needle is up in the holder as far as it will go. There are two lines across the needle bar about two inches above the lower end. When needle bar is at its lowest position, the upper mark should be just visible at end of needle bar frame.

In case needle bar is not correctly set, loosen needle bar connecting stud pinch screw M, Fig. 23 and place needle bar in correct position as directed above, then re-tighten screw M.

TO SET A NEEDLE BAR WHICH HAS NO MARK

Regulate the stitch length as instructed on page 6, so that there is no feeding motion, then set needle bar so that when it rises $\frac{3}{32}$ inch from its lowest position and point of sewing hook is at center of needle, eye of needle will be about $\frac{1}{16}$ inch below point of hook.

RELATIVE POSITIONS OF NEEDLE BAR AND PRESSER BAR

The distance between the needle bar and presser bar (after regulating stitch length so that there is no feed movement) should be $\frac{17}{32}$ inch as shown below.

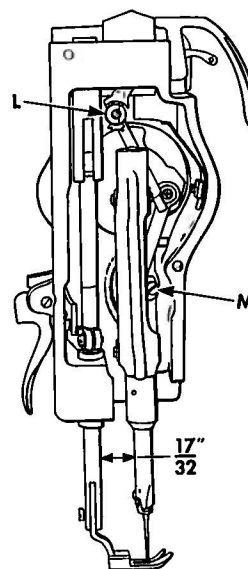
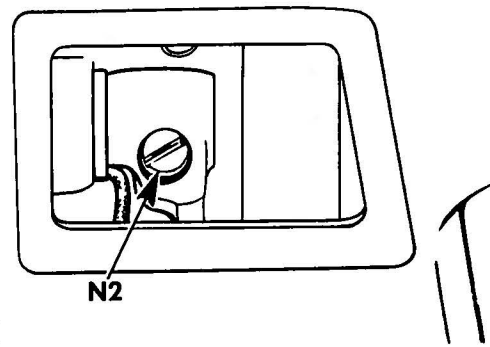


Fig. 23. Relative Positions of Needle Bar and Presser Bar

If the distance between needle bar and presser bar is more or less than $\frac{17}{32}$ inch, loosen needle bar frame shaft clamp screw N2, Fig. 24. While this screw is loose, needle bar frame can be moved forward or backward, as may be required,



until the distance between the needle bar and presser bar is $17/32$ inch. A piece of sheet metal $17/32$ inch wide may be used to determine the correct distance. When the adjustment has been made, securely tighten screw N2.

TO ADJUST HEIGHT OF SEWING HOOK

When lower timing mark A, Fig. 26 on needle bar is just visible at end of needle bar frame on upward stroke of needle bar, the hook point should be about $1/16$ inch above eye of needle, as shown in Fig. 26.

To adjust height of hook, fasten throat plate to bed of machine with bobbin case stop finger K, Fig. 26, in sewing position. Use .032 inch shim. Shim should slide between bobbin case stop finger K and throat plate. If the shim is too loose, turn machine pulley so that socket screws

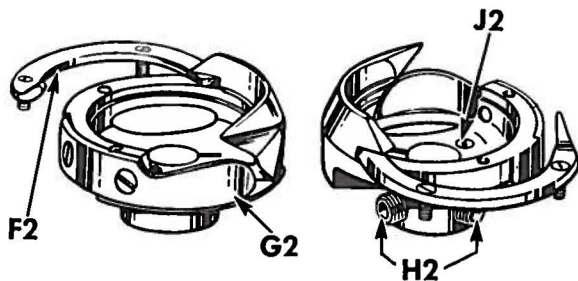


Fig. 25. Height Adjustment of Sewing Hook

H2, Fig. 25 are accessible with a socket wrench. Loosen both screws and remove cloth washer from bobbin case, then turn

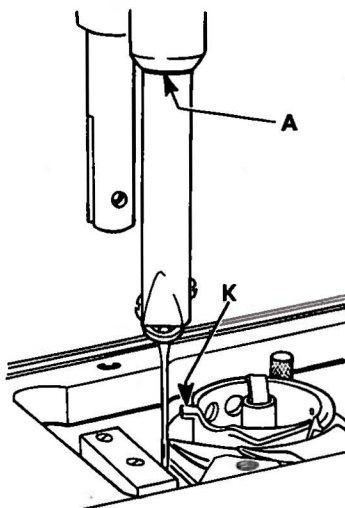


Fig. 26. Height Adjustment of Sewing Hook

hook so that a hole in bobbin case is in line with hook height adjusting screw J2, Fig. 25. To raise hook, turn down screw J2. If there is insufficient space for the shim to pass between bobbin case stop finger K and throat plate, turn up screw J2 and press down hook. Check timing and tighten socket screws H2, then turn screw J2 just enough to leave a light tension.

TO SET SEWING HOOK TO OR FROM NEEDLE

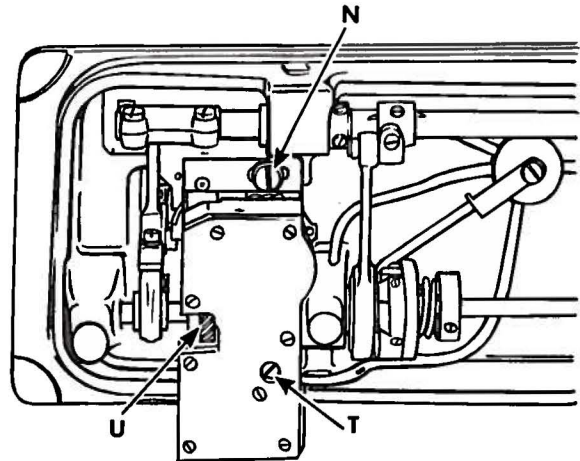


Fig. 27. Adjustments Underneath the Machine

To prevent point of hook from dividing strands of thread, it should pass as close as possible to the needle (within the clearance above needle eye).

Turn machine pulley over toward you until point of sewing hook is at center of needle. Loosen screws N and T, Fig. 27, underneath bed of machine and move hook saddle to the right or left, as may be required, until point of hook is as close to needle as possible without striking it, then securely tighten screws N and T.

CAUTION: Make sure hook driving gears U, are set correctly with relation to face of hook saddle. Use .008 shim.

The function of hook washer (needle guard) G2, Fig. 25, which is attached to bottom of sewing hook, is to prevent point of hook from striking needle if, when passing through material, needle is deflected toward hook.

The needle guard can be bent with a small pair of pliers until it prevents hook point from striking needle, but it should not be bent outward enough to deflect needle from its normal path.

TO TIME SEWING HOOK

Regulate the stitch length, as instructed on page 6, so that there is no feeding motion.

Remove throat plate and turn machine pulley over toward you until lower mark across needle bar is just visible at end of needle bar frame on upward stroke of needle bar, as shown in Fig. 26. If needle bar and sewing hook are correctly timed, the point of hook will be at center of needle (about 1/16 inch above the eye) as shown in Fig. 26.

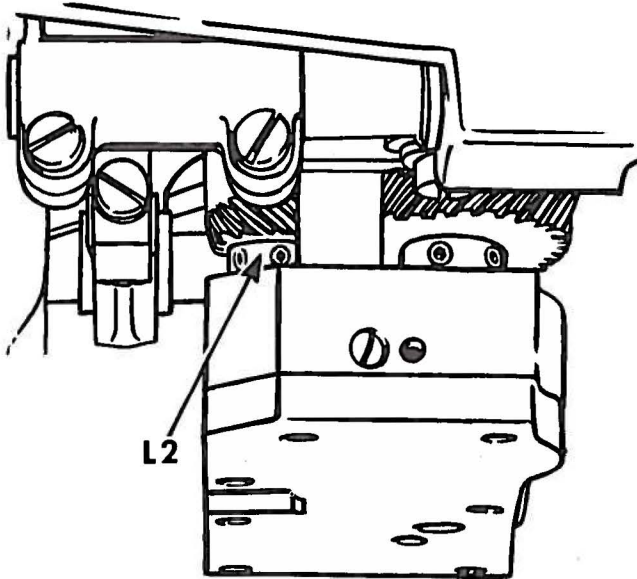


Fig. 28. Timing Sewing Hook

In case sewing hook is not correctly timed, turn machine pulley over toward you until needle bar has descended to its lowest point and has risen to the position where lower timing mark across needle bar is just visible at end of needle bar frame, as shown at A, Fig. 26. Loosen two socket screws in hub of hook shaft gear L2, Fig. 28 and turn hook until point of hook is at center of needle. Then securely tighten two socket screws in hook shaft gear L2.

TO REMOVE BOBBIN CASE FROM SEWING HOOK

(see Fig. 29)

Remove the two hook gib screws W, from sewing hook, lift off hook gib F2, and remove bobbin case X.

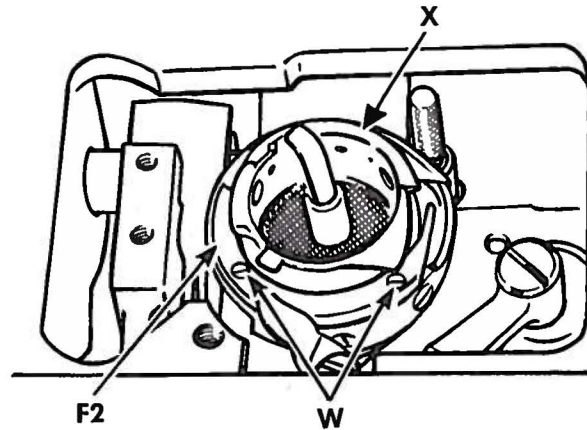


Fig. 29. To Remove Bobbin Case from Sewing Hook

TO REMOVE SEWING HOOK FROM MACHINE

Remove presser foot, throat plate and feed dog, then loosen two socket screws in hub of hook H2, Fig. 30 and lift hook off end of shaft. To remove hook shaft, first remove screws in ball bearing re-

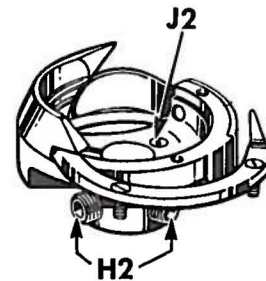


Fig. 30. To Remove Sewing Hook from Machine

taining cap directly under hook. Next, tip machine back and loosen set screws L2, Fig. 28 in hook shaft gear and lift hook shaft by top end. If shaft does not lift out easily, loosen screws in cover plate of hook saddle sufficiently to permit oil to drain out, then remove cover, being careful not to damage the gasket M2, Fig. 32, page 10, then tap end of hook shaft.

CAUTION: The hook is equipped with a screw in the hub for adjusting the vertical position of the hook relative to the throat plate seat. This position is set to a gauge at the factory. When replacing or installing a new hook, care must be taken to see that the bobbin case stop finger K, Fig. 31 fits correctly in the throat plate. If it is too high, it will interfere with the free passage of thread. If it is too low, it may slip out and cause damage to hook and bobbin case when machine is in operation. To make the adjustment, remove cloth washer in bottom of bobbin case, loosen socket screws H2, Fig. 30, page 9 in hook hub, then turn hook until adjusting screw appears beneath one of the holes in the bottom of bobbin case. Hold hook down against its seat and turn adjusting screw with screwdriver until the proper up and down position is attained. Tighten socket screws H2, Fig. 30 in hub of hook.

To remove ball bearing from hook shaft, rest bearing with shaft-end up on two pieces of sheet metal placed across the open jaws of a vise. Tap shaft until bearing is removed.

TO ADJUST BOBBIN CASE OPENER (see Fig. 31)

The bobbin case opener Y should be set so that it touches the bobbin case as lightly as possible, yet turns the bobbin case enough to make a sufficient opening for the free passage of the thread between throat plate and bobbin case.

TO TIME BOBBIN CASE OPENER (see Figs. 31 and 32)

Turn machine pulley over toward you until lower timing mark on needle bar is even with end of needle bar frame on upward stroke of needle. In this position, the mark D2, on flange of opener driving shaft, should line up with reference mark C2 on hook saddle. If opener shaft is out of time, tip machine back and loosen

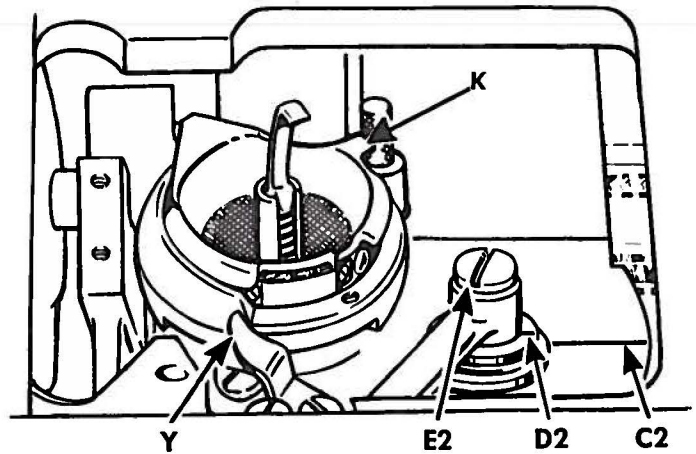


Fig. 31. Adjusting Bobbin Case Opener

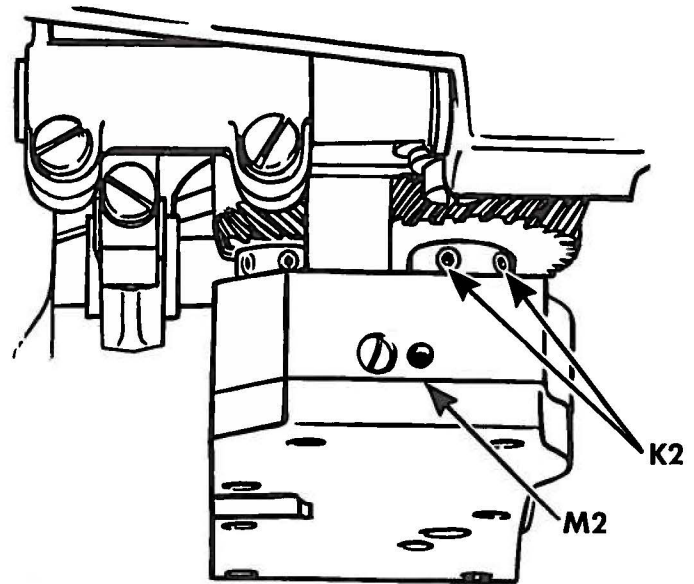


Fig. 32. Timing Bobbin Case Opener

socket screws K2 in opener driving gear then return machine to upright position and turn shaft with screwdriver in screw E2 at top end of shaft, then tighten socket screws K2 in gear.

TO RAISE OR LOWER THE FEED DOG (see Fig. 33)

Usually when feed dog is at its highest position, it should show a full tooth above throat plate.

To adjust, remove throat plate; clean the lint and dust from between feed points and replace throat plate; tip machine back and turn machine pulley toward you until feed dog is at its highest position; loosen screw V in feed lifting cam fork and raise or lower feed dog, as may be required. Then re-tighten screw V.

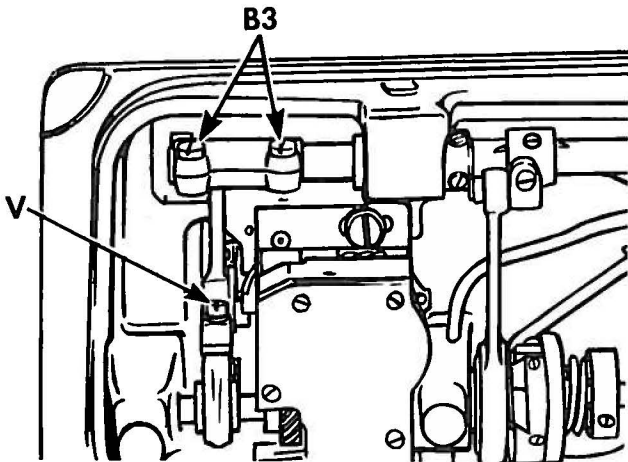


Fig. 33, Feed Adjustments

When raising or lowering feed dog, be careful that its underside does not drop low enough to strike sewing hook.

Feed dog should be set so that when needle is down it will be slightly in front of center of needle hole in feed dog. In case needle is not correctly located in needle hole, loosen pinch screws B3 and adjust feed dog as required. Then securely tighten pinch screws B3 and check relative position of the needle bar and presser bar as instructed on page 7.

THE FEED ECCENTRIC (see Fig. 34)

Feed eccentric is provided with a gib P2 which can be adjusted to take up any wear or loose motion between feed eccentric and eccentric body. To adjust gib, loosen two locking screws Q2 nearest gib and turn in the two adjusting screws O2 against gib until all play is eliminated and eccentric fits snugly in slot in eccentric body. Securely tighten two locking screws Q2.

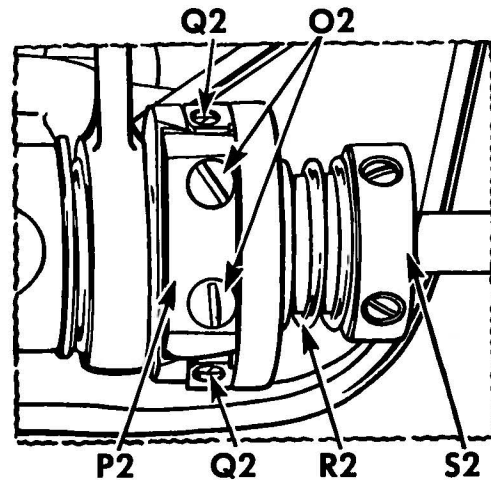


Fig. 34, Feed Eccentric

Spring R2 presses against feed eccentric cam to prevent it from moving out of position while machine is operating. Collar S2 may be moved to right or left to change spring pressure. It should ordinarily be set flush with end of hub of eccentric body.

TO REMOVE NEEDLE BAR ROCK FRAME

Open the face plate. Remove take-up hinge stud L, Fig. 23, page 7, and take-up. Remove cover plate on front upright portion of arm and loosen needle bar rock frame rock shaft connection pinch screw N2, Fig. 35. Pull needle bar rock frame with its shaft from machine.

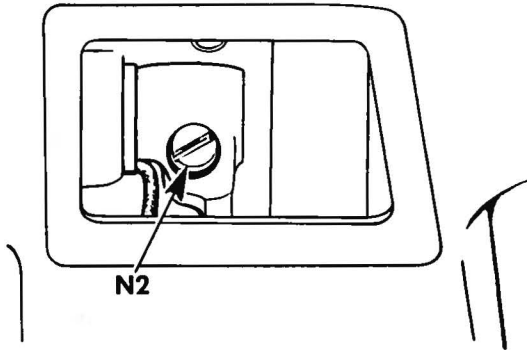


Fig. 35. To Remove Needle Bar Rock Frame

TO REMOVE TAKE-UP LEVER

Remove arm cover on top of machine. Loosen set screw U2, Fig. 36, and remove take-up lever hinge stud L, Fig. 23, page 7. Lift take-up lever out through slot V2 in top of arm.

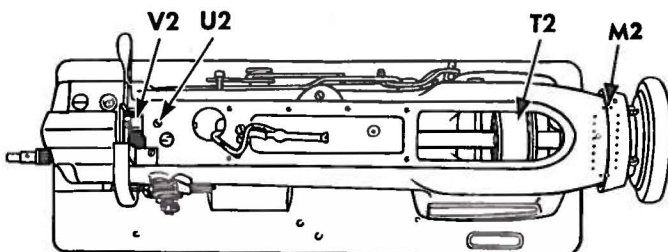


Fig. 36. To Remove Take-up Lever

TO REPLACE ARM SHAFT CONNECTION BELT

(see Fig. 37)

Remove needle to avoid damage while machine is out of time. Slide belt off lower pulley X2. Loosen two screws in machine pulley and remove machine pulley and ball bearing which comes out with the pulley. Lift belt up and draw it around arm shaft through space at M2, Fig. 36, normally occupied by ball bearing.

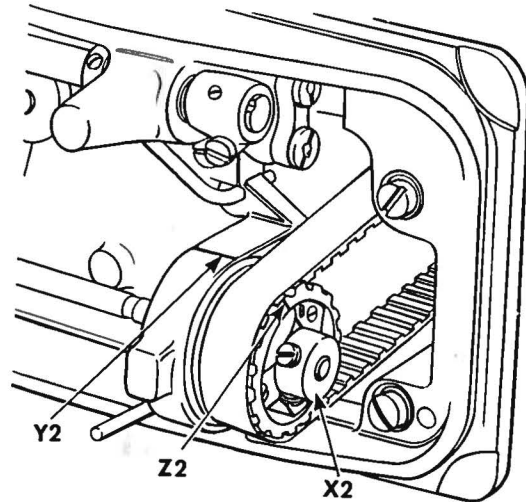


Fig. 37. To Replace Arm Shaft Connection Belt

Replace belt through ball bearing hole at M2, Fig. 36. After placing belt over upper pulley T2, Fig. 36 replace machine pulley with ball bearing. To remove all end play from shaft, lightly tighten set screws in machine pulley and (holding needle bar crank in place) tap machine pulley into position with palm of hand. Tighten machine pulley set screws firmly.

Turn machine pulley over toward you until thread take-up lever is at its highest point. Then turn hook driving shaft until the "B" setting mark at Z2 on safety clutch in pulley X2 is in line with mark Y2 cut into machine bed. Now, without disturbing either arm shaft or hook driving shaft, slip belt over lower pulley. The feed will then be correctly timed with needle.

NOTE: Safety clutch in lower belt pulley X2 has been set at factory for correct torque and must not be disturbed.

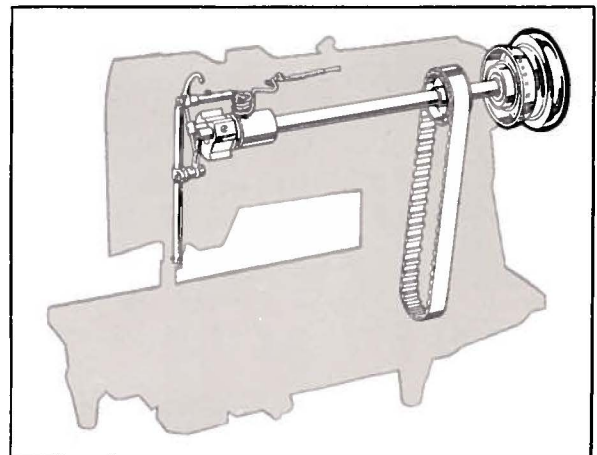
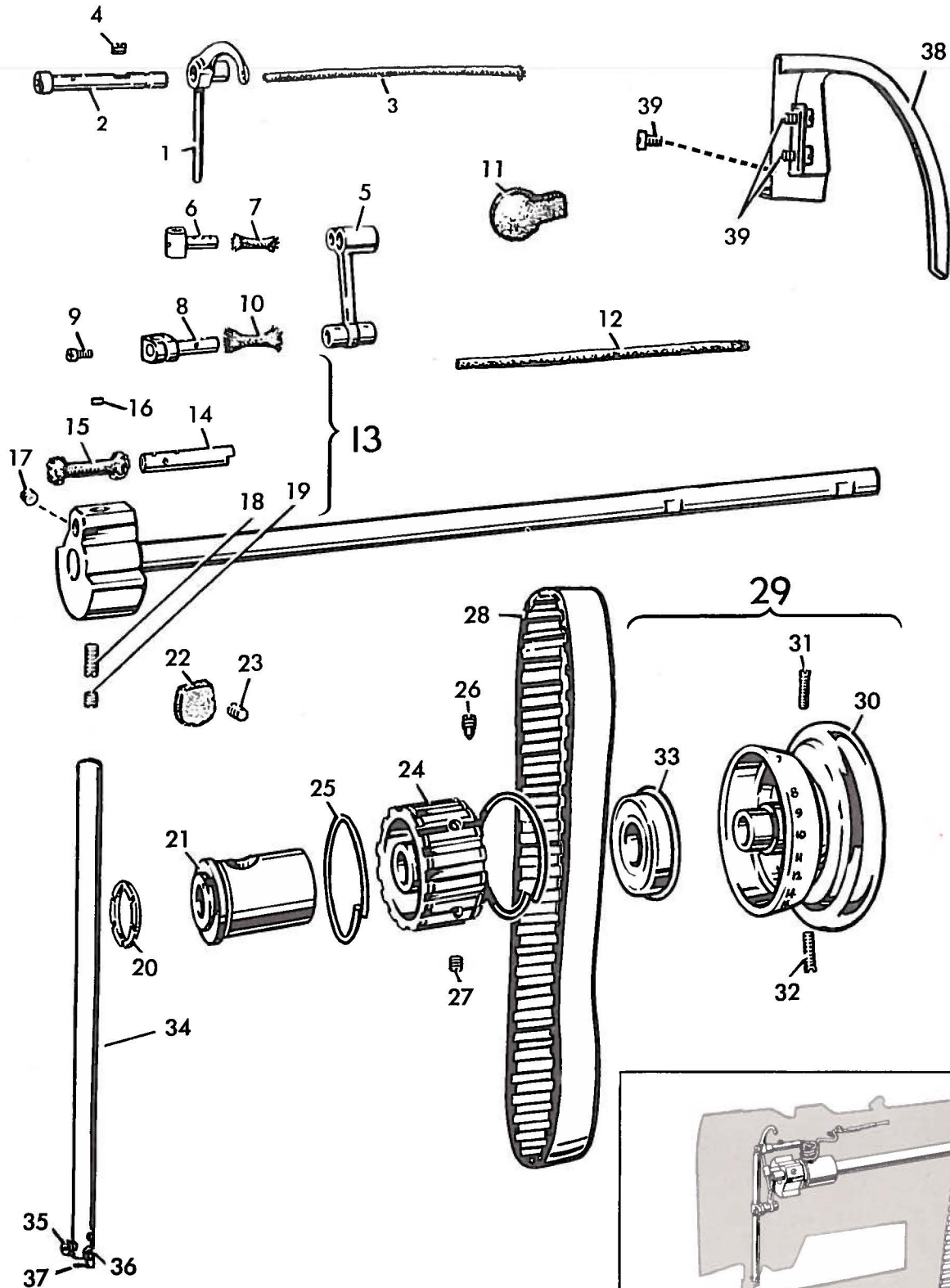
PARTS LIST
FOR
SINGER
211w151 MACHINE

Parts marked with a diamond (♦) are furnished only when repairs are made at the factory; these (♦) parts are named at bottom of descriptive list opposite illustration.

ARM SHAFT, NEEDLE BAR AND TAKE-UP ASSEMBLY

Ref.	Part	
No.	No.	Description
1	240139	Take-up Lever
2	267239	Hinge Stud with 235706
3	235706	Oil Packing (wick)
4	200383C	Hinge Stud Set Screw
5	202552	Connecting Link
6	202399	Driving Stud with 244071
7	244071	Oil Packing (wick)
8	264714	Connecting Stud with 200072C and 202330
9	200072C	Pinch Screw
10	202330	Oil Packing (wick)
11	267160	Oil Pad (felt) (upper)
12	267236	Oil Reservoir Oil Wick
13	267247	Arm Shaft ♦267158 with 200333C, 200347AL, 200378C, 200388C, 267221 and ♦267222
14	267221	Connecting Link Stud with 267466
15	267466	Oil Packing (wick)
16	200374AL	Set Screw
17	200388C	Set Screw
18	200333C	Position Screw
19	200378C	Position Screw Check Screw
20	267224	Friction Washer
21	244747	Arm Shaft Bushing
22	204329	Oil Pad (felt) (lower)
23	200341C	Set Screw
24	267162	Belt Pulley with 200363AL, 350492C and two 202253
25	202253	Spring Flange
26	350492C	Position Screw
27	200363AL	Set Screw
28	267161	Connection Belt (reinforced neoprene)
29	244722	Machine Pulley 244721 with 272142
30	244721	Machine Pulley (aluminum alloy casting) for "V" belt (outside diam. of belt groove 2.9 in.) (rim diam. 4 in.) (inside belt groove) with 141566C and 141567C
31	141566C	Position Screw
32	141567C	Set Screw
33	272142	Bearing (back) (double shielded bearing)
34	240020	Needle Bar with 200125ALX, 200175D and 240039
35	200125ALX	Set Screw
36	200175D	Needle Bar Thread Guide Screw
37	240039	Needle Bar Thread Guide
38	244726	Take-up Lever Guard
39	201341C	Guard Screw (3)
	♦267158	Arm Shaft
	♦267222	Needle Bar Crank

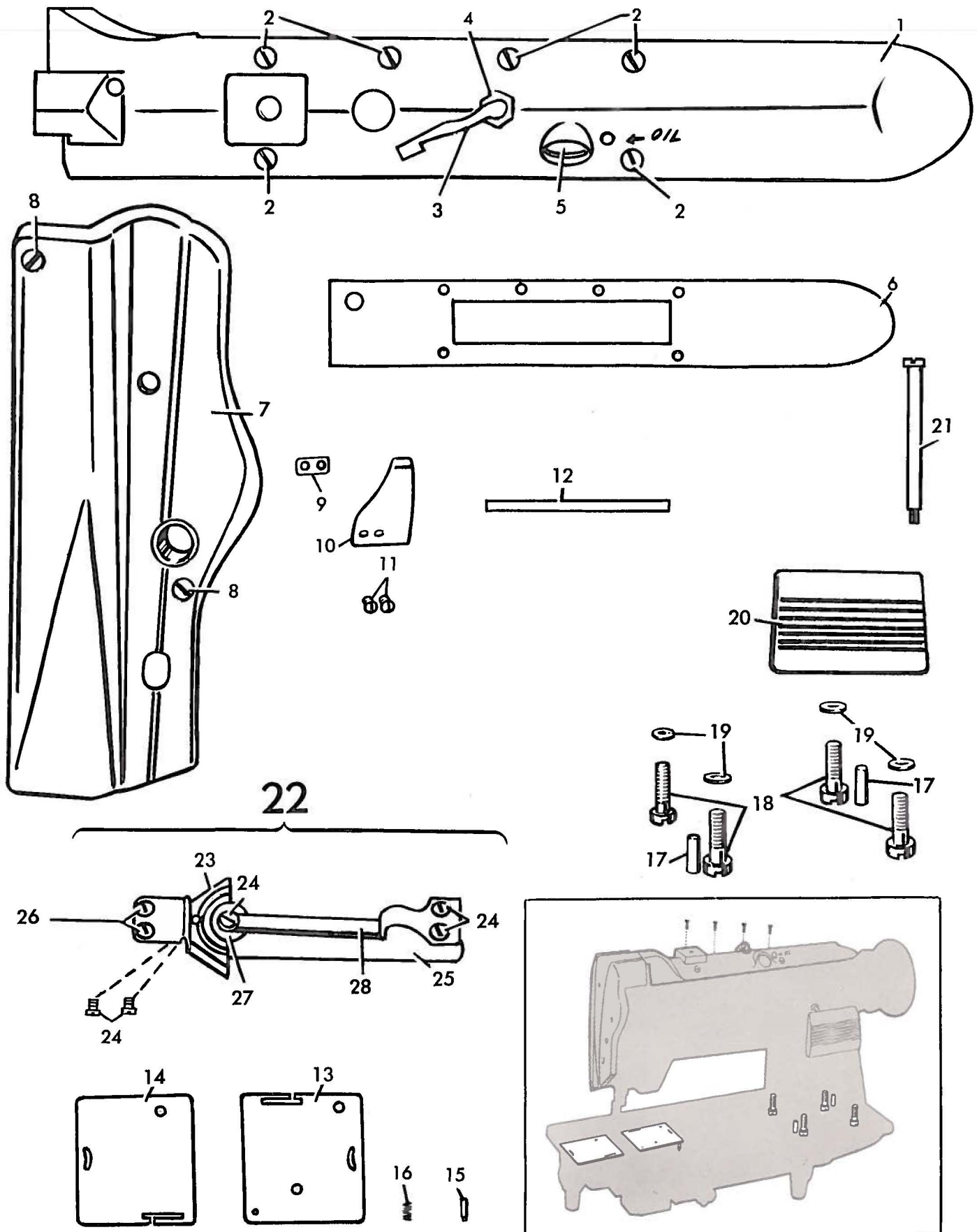
ARM SHAFT, NEEDLE BAR AND TAKE-UP ASSEMBLY



LUBRICATION DEVICE, BED SLIDES, COVERS AND MISCELLANEOUS PARTS

Ref.	Part	
No.	No.	Description
1	244751	Arm Cover (top) with 267272
2	200047X	Screw (6)
3	271017	Thread Guide (top of Arm)
4	201525E	Lock Nut
5	267272	Oil Level Indicator
6	267395	Gasket (vellumoid)
7	244705	Face Plate
8	200047D	Face Plate Screw (2)
9	268197	Needle Bar Connecting Link Oil Guard Lock Plate
10	267220	Oil Guard
11	201313F	Screw (2)
12	267388	Tension Release Lever Rod Tube
13	240003	Bed Slide (back)
14	240004	Bed Slide (front)
15	223811	Stop
16	223812	Spring
17	204235	Arm Position Pin (2)
18	200004E	Arm Screw (4)
19	202005	Washer (4)
20	267152	Arm Cover (side)
21	350563E	Screw
22	267400	Dynamic Head End Lubrication Device complete, Nos. 267396 267397, 267398, 267399 and five 237D
23	267396	Oil Vibrating Pump Block
24	237D	Oil Vibrating Pump Screw (5)
25	267397	Oil Vibrating Pump Bracket
26	200133E	Oil Vibrating Pump Bracket Screw (2)
27	267398	Oil Vibrating Pump Weight
28	267399	Oil Vibrating Pump Weight Spring
	♦244701	Arm with 267388
	♦244702	Bed

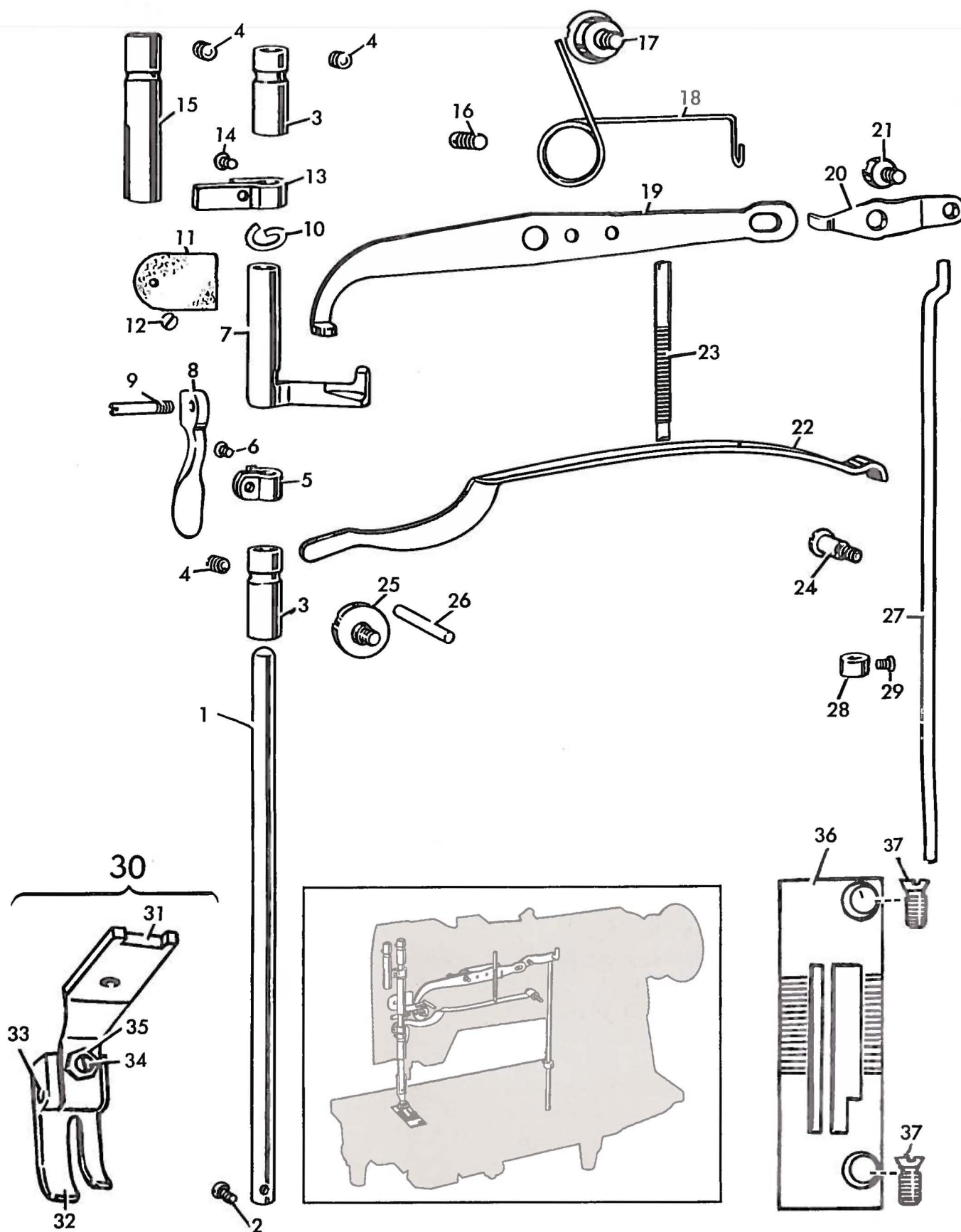
LUBRICATION DEVICE, BED SLIDES, COVERS AND MISCELLANEOUS PARTS



PRESSER BAR, PRESSER FOOT, PRESSER FOOT LIFTING ASSEMBLY
AND THROAT PLATE

<u>Ref.</u> <u>No.</u>	<u>Part</u> <u>No.</u>	<u>Description</u>
1	208566	Presser Bar with 200074F
2	200074F	Screw
3	207072	Presser Bar Bushing (2)
4	200352ALX	Set Screw (3)
5	210949	Spring Bracket with 200086ALX
6	200086ALX	Pinch Screw
7	267238	Releasing Lever Bracket
8	202671	Presser Bar Lifter
9	200653C	Hinge Screw
10	206608	Releasing Lever Bracket Spring
11	202401	Take-up Lever Oiling Felt
12	200132E	Oiling Felt Screw
13	202338	Guide Lever with 200086ALX
14	200086ALX	Pinch Screw
15	202337	Position Guide
16	200738X	Spring Stop Screw
17	350464X	Lever Hinge Screw
18	267289	Lifting Lever Spring
19	240068	Lifting Lever
20	240067	Connection Lever
21	200262X	Hinge Screw
22	267251	Spring (flat)
23	350581C	Spring Regulating Screw
24	200948F	Spring Support Screw
25	200975F	Lever Bracket Guide Screw
26	267265	Lever Rod
27	240564	Lifting Rod
28	227227	Lifting Rod Stop Collar with 200113F
29	200113F	Set Screw
30	275050	Presser Foot (hinged) complete, Nos. 202090, 203013 and 275049
31	275049	Shank with 200355X and 201537X
32	203013	Plate
33	202090	Hinge Pin
34	200355X	Plate Stop Screw
35	201537X	Stop Screw Lock Nut
36	240025	Throat Plate
37	691F	Throat Plate Screw (2)

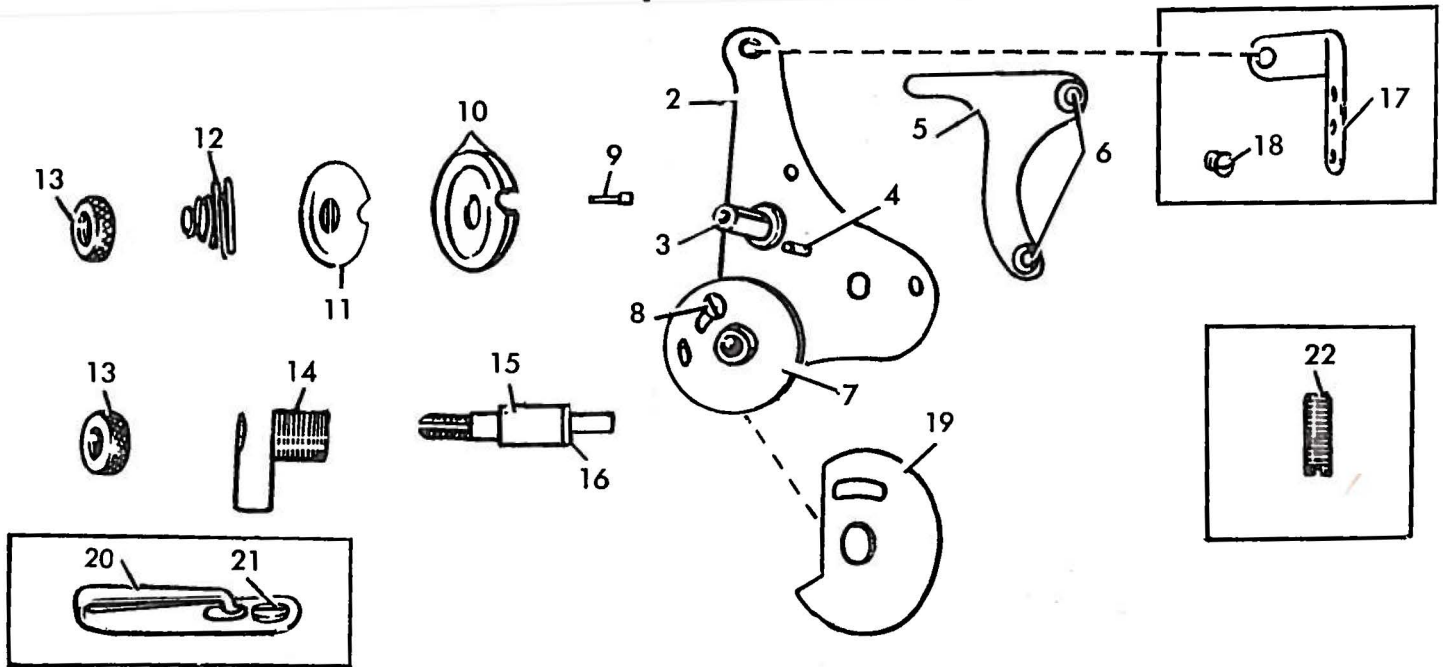
PRESSER BAR, PRESSER FOOT, PRESSER FOOT LIFTING ASSEMBLY AND THROAT PLATE



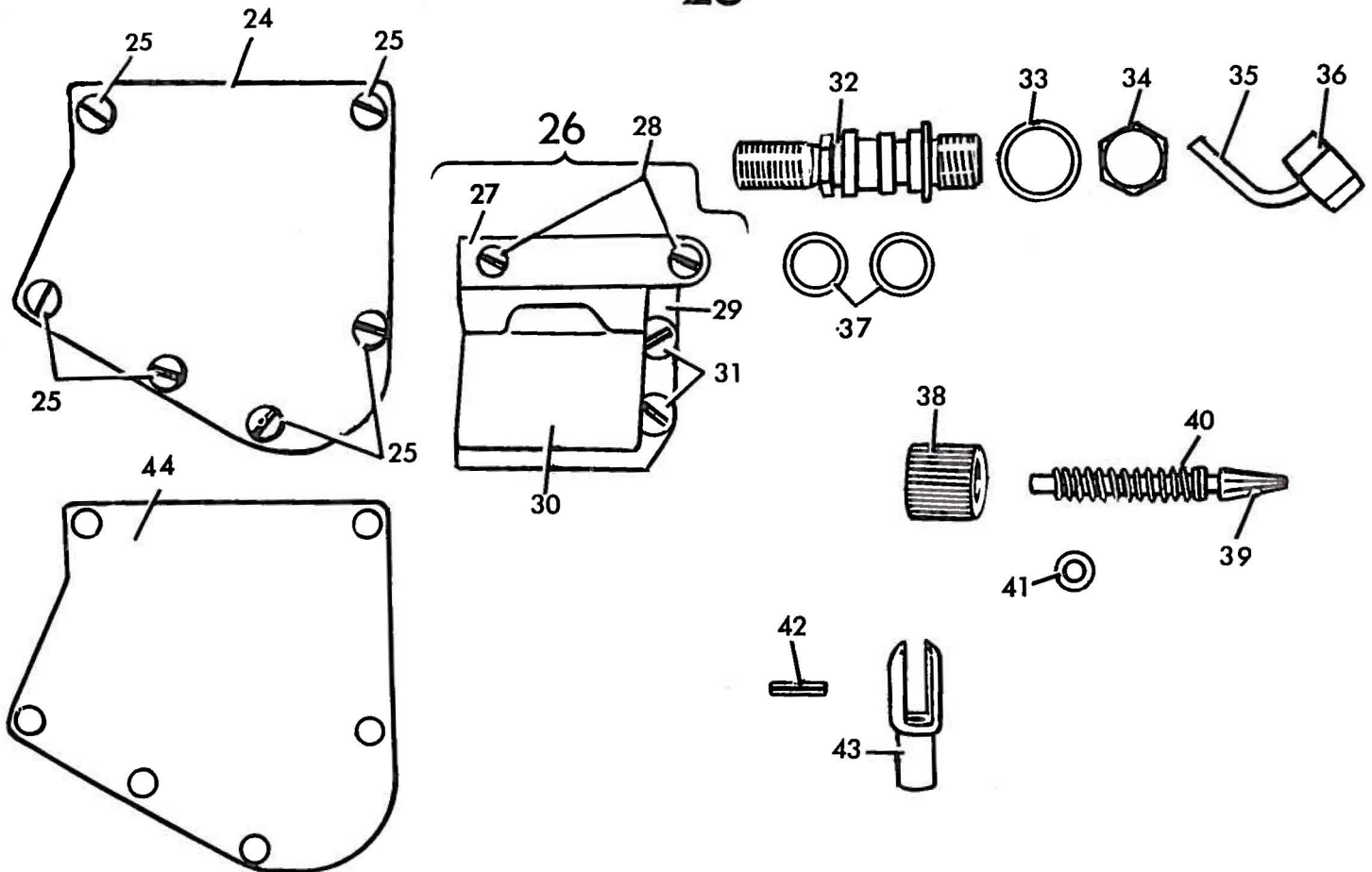
TENSION COMPLETE, THREAD GUIDES AND THREAD LUBRICATOR

Ref. No.	Part No.	Description
1	244727	Tension Bracket complete, Nos. 201199F, 204271, 223438, 223703, 223704, 223706, 240023, 267315, 267368, 350588X, two each 200309E, 201572X and 244048
2	240023	Tension Bracket with 201224X and 236060
3	201224X	Tension Stud
4	236060	Tension Disc Position Pin
5	223703	Tension Release Lever
6	200309E	Release Lever Screw
7	223706	Thread Controller Disc
8	350588X	Controller Disc Screw
9	223704	Tension Release Plunger
10	244048	Tension Disc
11	204271	Tension Release Washer
12	223438	Tension Spring
13	201572X	Thumb Nut
14	267368	Thread Controller Spring
15	201199F	Thread Controller Stud with 204925
16	204925	Thread Controller Stud Washer
17	244729	Thread Retainer
18	200159F	Tension Bracket Screw
19	267315	Thread Controller Spring Stop
20	267316	Thread Guide
21	200582X	Guide Screw
22	200337C	Thread Controller Stud Set Screw
23	244745	Thread Lubricator complete, Nos. 1623X, 201738X, 201750X, 244734 to 244743, 267323, two 244746 and six 201402X
24	244735	Thread Lubricator Oil Reservoir Cover
25	201402X	Cover Screw
26	244734	Thread Lubricator Oil Pad Holder complete, Nos. 241765, 244744, 263554 and two 200143X
27	244744	Thread Lubricator Plate
28	200582X	Plate Screw (2)
29	241765	Thread Lubricator Oil Pad (felt)
30	263554	Oil Pad Holder
31	200143X	Pad Holder Screw
32	244737	Thread Lubricator Oil Socket
33	244738	Socket Lock Nut Washer
34	1623X	Socket Lock Nut
35	244743	Oil Tube
36	201738X	Tube Nut
37	244746	Socket Oil Seal
38	201750X	Plunger Adjusting Nut
39	244739	Socket Plunger
40	244742	Plunger Spring
41	244740	Plunger Oil Seal (rubber)
42	267323	Plunger Release Lever Pin
43	244741	Plunger Release Lever
44	244736	Reservoir Cover Gasket

TENSION COMPLETE, THREAD GUIDES AND THREAD LUBRICATOR



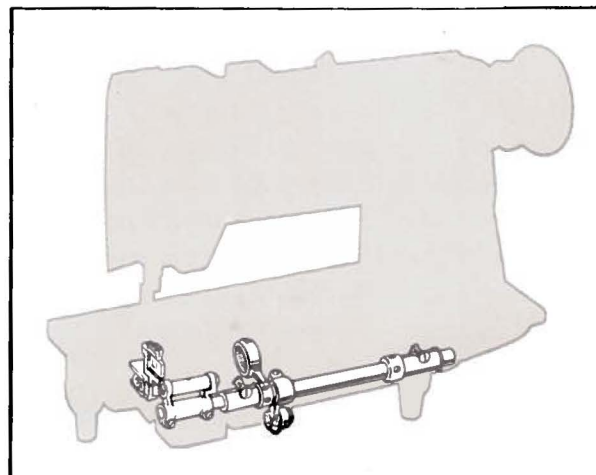
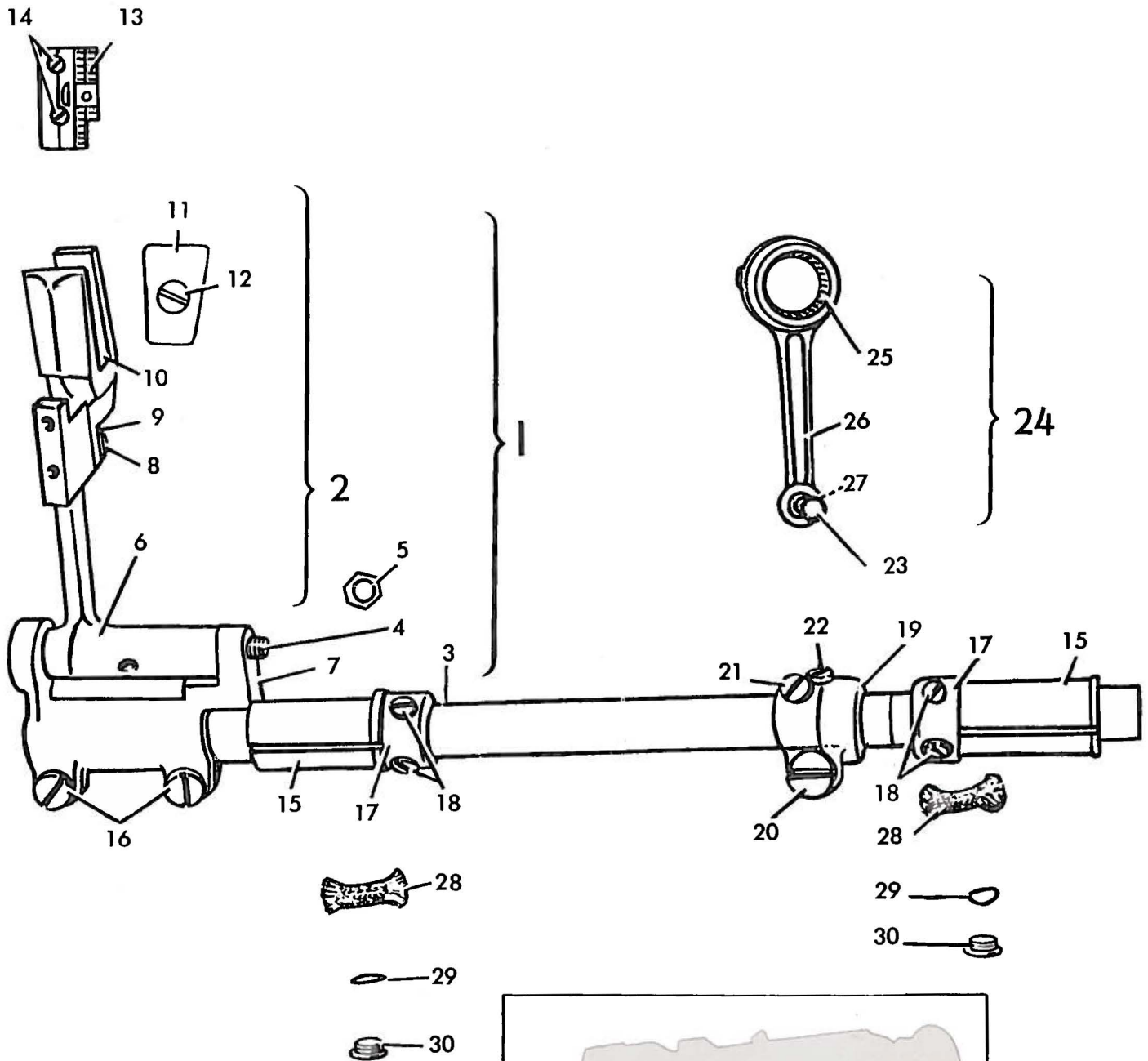
23



LOWER FEED ASSEMBLY WITH FEED DOG

Ref. No.	Part No.	Description
1	244709	Feed Driving Rock Shaft 244708 with 201518E, 240224, 244707 and 350393C
2	240224	Feed Bar 240223 with 225837, 267273 and 350197E
3	244708	Rock Shaft
4	350393C	Hinge Screw (driving)
5	201518E	Nut
6	240223	Feed Bar
7	244707	Feed Driving Rock Frame with two 200036E
8	350197E	Fork Screw
9	225837	Washer
10	267273	Eccentric Fork with 200173D and 223655
11	223655	Oiling Felt
12	200173D	Screw
13	240259	Feed Dog, 40 needle hole, for needle size 20 and 22
14	200106E	Screw (2)
15	244730	Bushing (left and right)
16	200036E	Rock Frame Pinch Screw
17	202625	Stop Collar with two 200383C (2)
18	200383C	Set Screw
19	244710	Crank with 200029E, 200054C and 200398C
20	200029E	Pinch Screw
21	200054C	Pinch Screw
22	200398C	Set Screw
23	267034	Hinge Stud
24	267032	Connection 267031 with 268063 and 270653
25	268063	Needle Bearing
26	267031	Connection
27	270653	Needle Bearing
28	202254	Oil Wick (2)
29	243744	Gasket (2)
30	350366X	Oil Stop Screw (2)

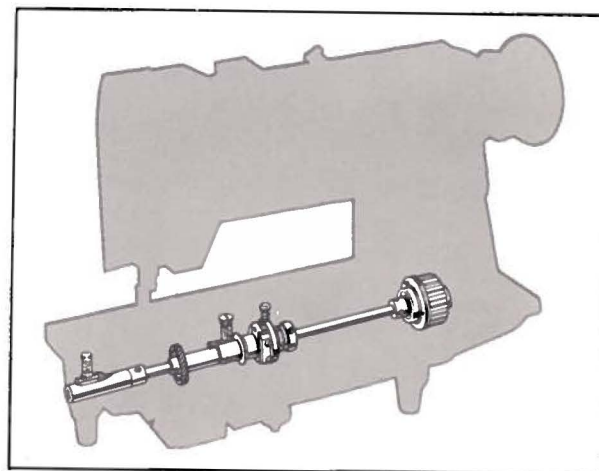
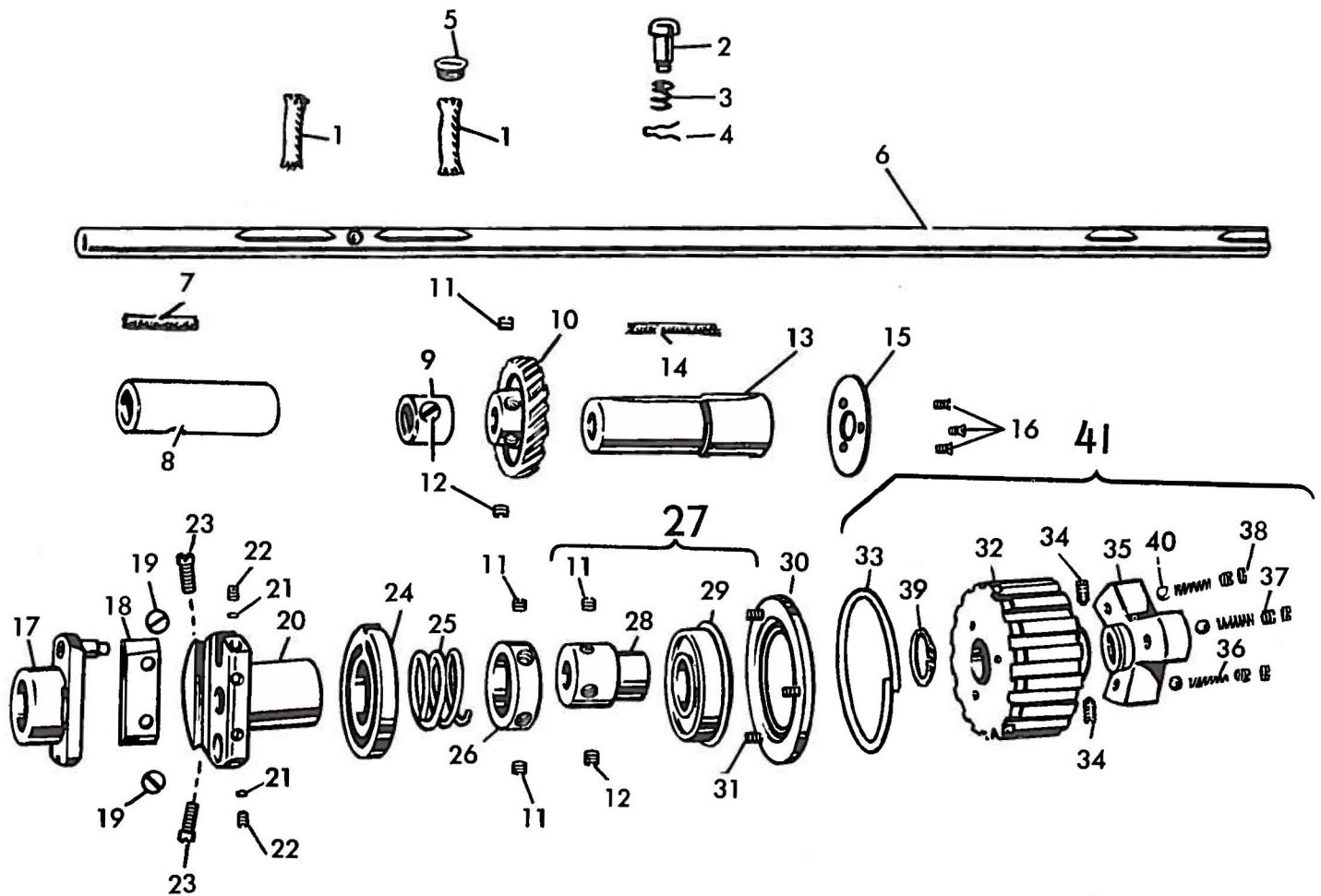
LOWER FEED ASSEMBLY WITH FEED DOG



HOOK DRIVING AND FEED DRIVING ECCENTRIC ASSEMBLY
WITH HOOK SADDLE BEARINGS

Ref.	Part	
<u>No.</u>	<u>No.</u>	<u>Description</u>
1	202254	Wick (2)
2	267245	Feed Regulating Stud
3	270026	Spring
4	240245	Retaining Spring
5	350440X	Bed Oil Screw
6	244712	Driving Shaft
7	263093	Driving Shaft Bearing Packing (wick)
8	244715	Driving Shaft Bearing (left)
9	267182	Feed Lifting Eccentric with 201220ALX
10	267188	Gear (spiral) with 200382ALX and 201220ALX
11	200382ALX	Set Screw
12	201220ALX	Screw
13	244718	Saddle Bearing (right)
14	223847	Saddle Bearing Oil Packing Wick
15	267033	Friction Washer
16	200582X	Screw (3)
17	268064	Feed Driving Eccentric
18	267623	Friction Plate
19	350548C	Screw
20	267180	Flange with 267623, two each 241763, 350467C, 350477C, and 350548C
21	241763	Set Screw Packing (brass)
22	350477C	Set Screw
23	350467C	Set Screw
24	268065	Adjusting Disc
25	268066	Spring
26	268067	Collar with two 200382ALX
27	244714	Collar 267190 with 244713
28	267190	Collar with 200382ALX and 201220ALX
29	244713	Ball Bearing
30	267063	Retaining Washer
31	200580X	Screw (3)
32	244760	Safety Clutch and Belt Pulley with 202253
33	202253	Spring Flange
34	140197AL	Safety Clutch Overload Pulley Set Screw
35	244761	Safety Clutch Overload Pulley with two 140197AL and three 1258AL
36	244762	Safety Clutch Driving Ball Spring
37	1258AL	Safety Clutch Overload Pulley Adjusting Screw
38	1266AL	Safety Clutch Overload Pulley Adjusting Screw Lock Screw
39	244763	Safety Clutch Retaining Ring
40	244764	Safety Clutch Driving Ball
41	244759	Safety Clutch and Belt Pulley, Complete

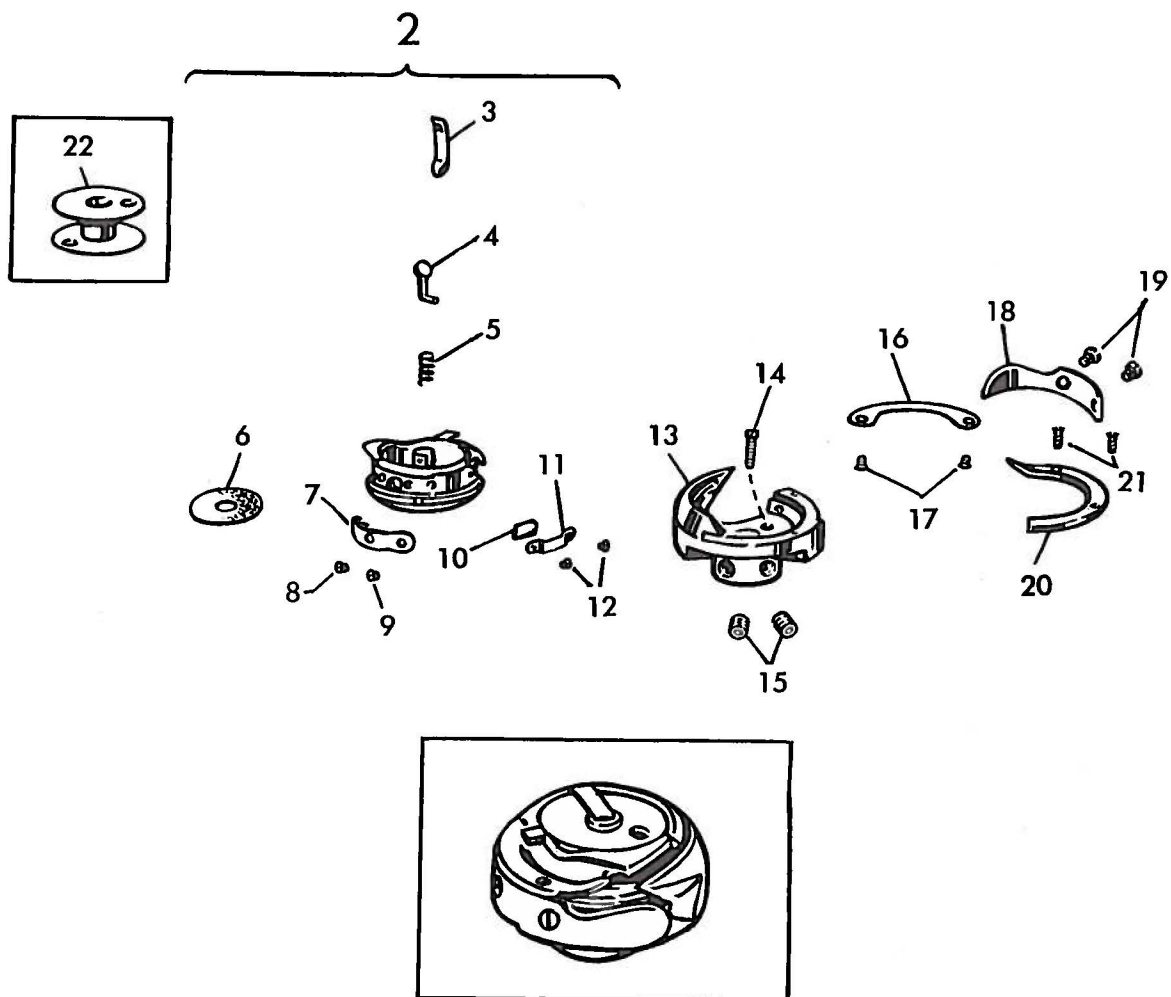
HOOK DRIVING AND FEED DRIVING ECCENTRIC ASSEMBLY WITH HOOK SADDLE BEARINGS



HOOK AND BOBBIN CASE WITH BOBBIN

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	244711	Hook and Bobbin Case complete, Nos 235100 and 267356
2	235100	Bobbin Case complete, Nos. 200594E, 200984C, ♦202056, 203214, 203216, 203473, 203474, 203648, ♦235099, 241674, 241675 and two 350405C
3	203648	Bobbin Case Latch
4	203473	Latch Plunger
5	203474	Latch Spring
6	203216	Washer (cloth)
7	203214	Tension Spring
8	200984C	Tension Spring Regulating Screw
9	200594E	Tension Spring Screw
10	241674	Oiling Felt
11	241675	Retainer
12	350405C	Screw
13	267356	Hook ♦267355 with 267358 to 267360, 350574F, two each 200591X, 201253F and 201409F
14	350574F	Hook Height Adjusting Screw
15	140434ALX	Set Screw
16	267360	Thread Guard
17	200591X	Screw
18	267359	Needle Guard
19	201409F	Screw
20	267358	Hook Gib
21	201253F	Screw
22	244750	Bobbin
	♦202056	Bobbin Case Latch Pin
	♦235099	Bobbin Case (chromium plated)
	♦267355	Hook (sewing) with two 140434ALX

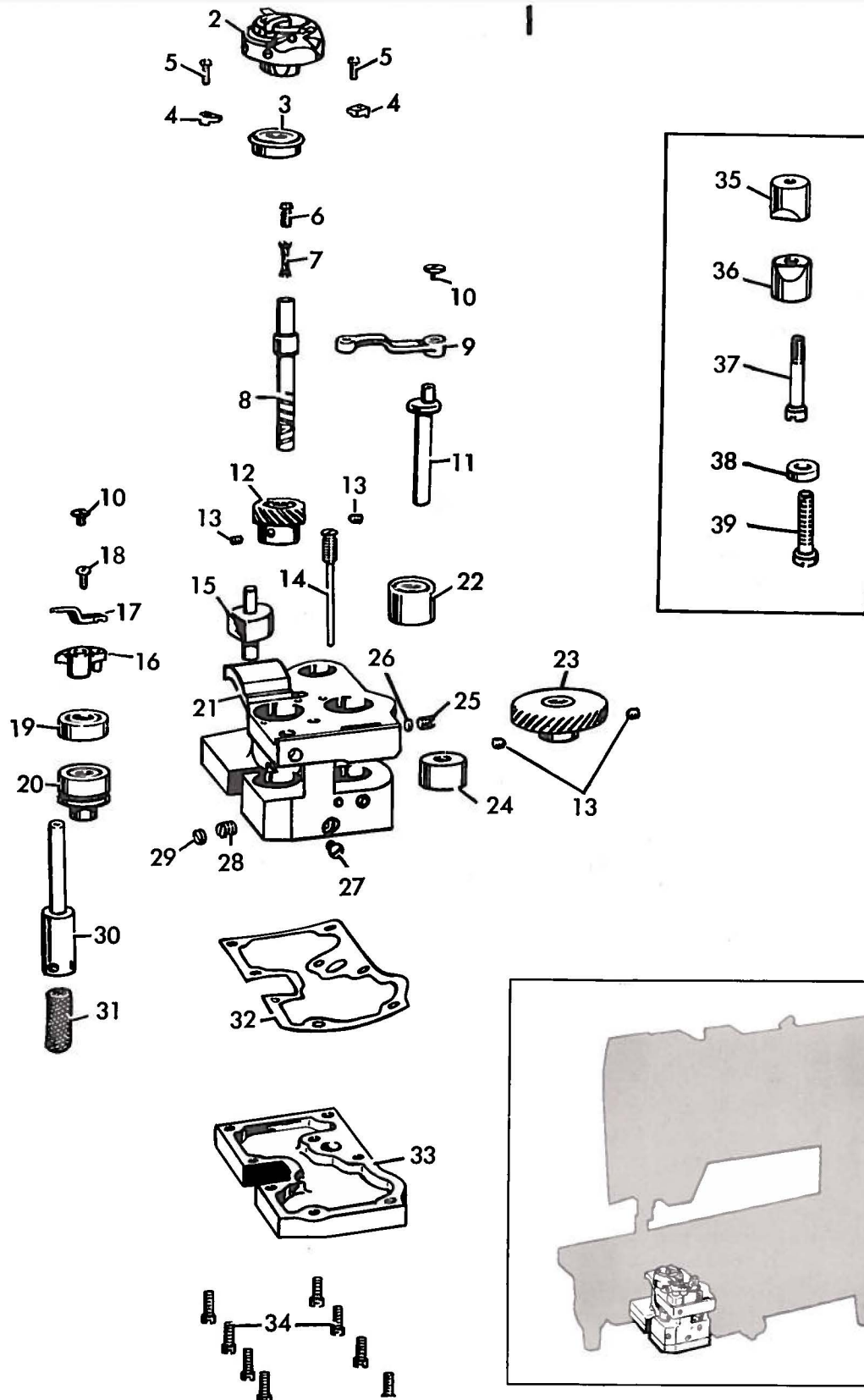
HOOK AND BOBBIN CASE WITH BOBBIN



HOOK SADDLE COMPLETE

Ref.	Part	
<u>No.</u>	<u>No.</u>	<u>Description</u>
1	244720	Hook Saddle complete, Nos. 200110D, 200374ALX, 200378C, 200388C, 244084, 244704, 244711, 267053, 267166, 267167, 267172, 267194, 267198, 267200, 267212, 267215, 267248, 267351, 267365, 267366, 350564E, two each 200089X, 200135C, 267361 and eight 200061ALX
2	244711	Hook and Bobbin Case complete
3	267053	Hook Ball Bearing
4	267361	Retainer
5	200089X	Screw
6	276061	Oil Wick Holder
7	270880	Oil Wick
8	267215	Hook Shaft with 270880 and 276061
9	267172	Link
10	200135C	Cap Screw
11	244704	Cam Shaft
12	267366	Pinion (spiral) with two 350595XC
13	350595XC	Set Screw
14	350564E	Oil Regulating Screw
15	267167	Hinge Stud
16	267166	Opener Crank
17	267351	Bobbin Case Opener
18	200110D	Screw
19	267248	Pinion Thrust Bearing
20	267367	Hook Shaft Bushing
21	267194	Hook Saddle with 200185D, 267367, 267370 and 267371
22	267371	Cam Shaft Bushing (upper)
23	267365	Cam Shaft Gear (spiral) with two 350595XC
24	267370	Cam Shaft Bushing (lower)
25	200378C	Oil Regulating Screw Check Screw
26	244084	Check Screw Packing (fibre)
27	200185D	Oil Stop Screw
28	200374ALX	Hinge Stud Set Screw
29	200388C	Check Screw
30	267198	Oil Gauge Sleeve with 267277
31	267277	Oil Strainer
32	267212	Gasket
33	267200	Oil Reservoir
34	200061ALX	Screw
35	267140	Pinch Sleeve (upper)
36	267139	Pinch Sleeve (lower)
37	200001E	Screw
38	225585	Washer
39	200006E	Hook Saddle Screw

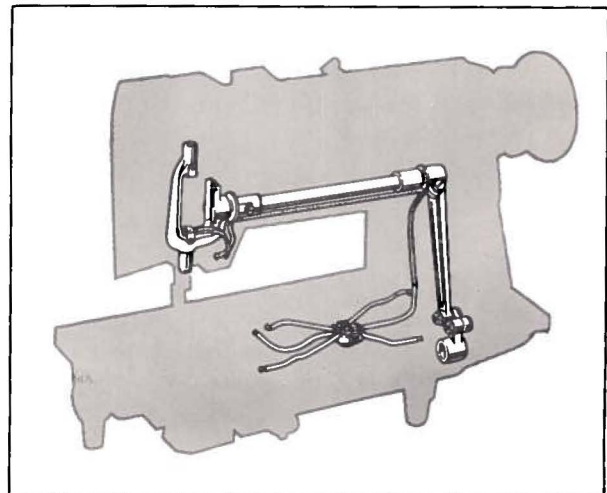
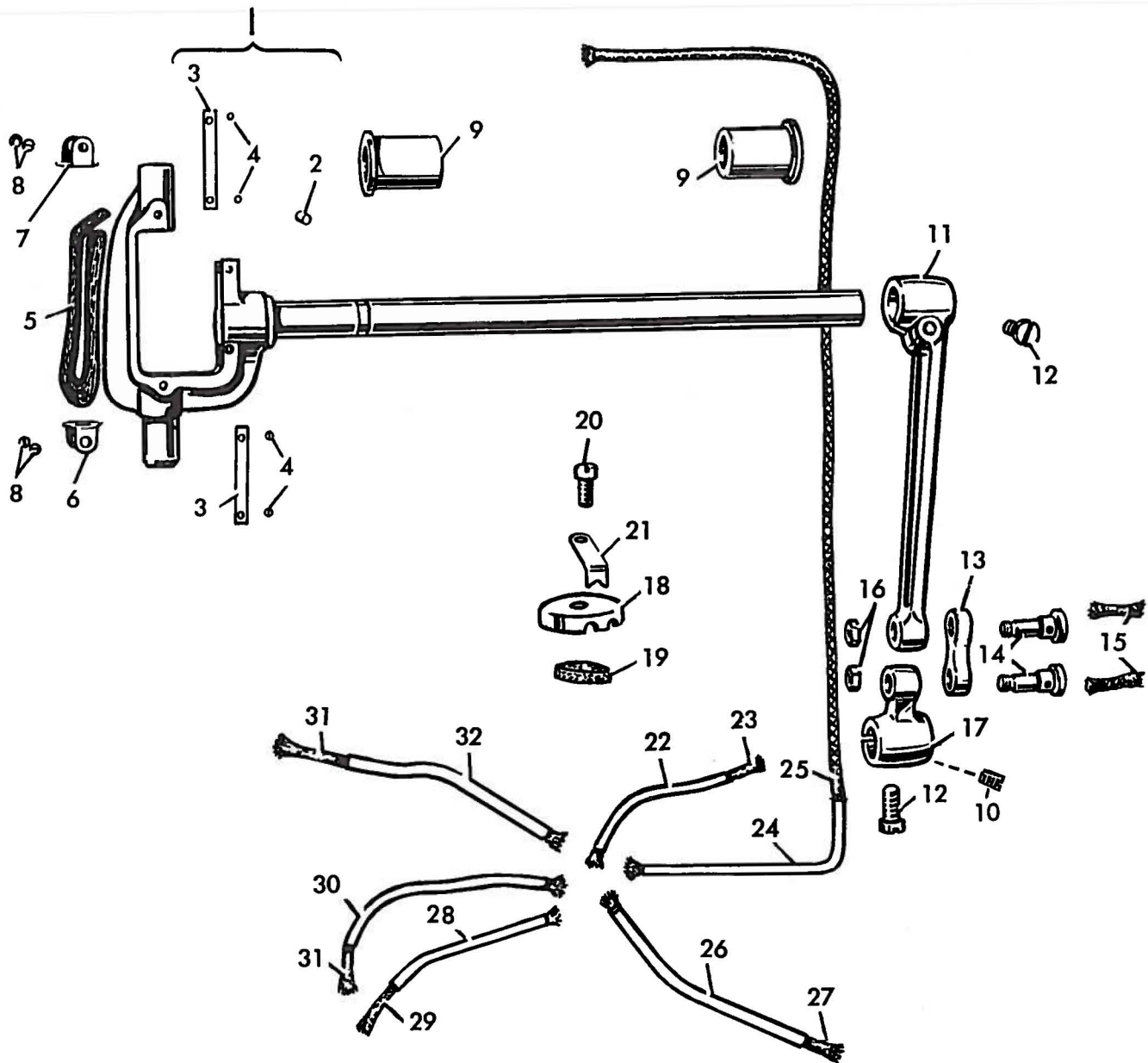
HOOK SADDLE COMPLETE



NEEDLE BAR ROCK FRAME, NEEDLE BAR ROCK FRAME
ROCK SHAFT AND LUBRICATING WICKS

Ref. No.	Part No.	Description
1	267286	Needle Bar Rock Frame Rock Shaft ♦267285 with 40025 and ♦267284
2	40025	Position Pin
3	267287	Wear Plate
4	200587D	Screw
5	267231	Oiling Felt
6	267233	Retainer (lower)
7	267232	Retainer (upper)
8	200176E	Screw (4)
9	267362	Rock Shaft Bushing (2)
10	200398C	Set Screw
11	267229	Connection with 200029C
12	200029C	Pinch Screw
13	267230	Link
14	350566C	Hinge Screw with 202277 (2)
15	202277	Packing (wick)
16	201517E	Nut (2)
17	244725	Rock Shaft Crank with 200029C and 200398C
18	267254	Bed Oil Tube Clamp
19	267276	Clamp Oiling Felt
20	200034C	Screw
21	267293	Feed Driving Eccentric Connection Oil Tube Support
22	267257	Feed Driving Rock Shaft Bushing (right) Oil Tube with 267263
23	267263	Wick
24	267321	Bed Oil Supply Tube with 267322
25	267322	Oil Wick
26	244716	Hook Driving Shaft Ball Bearing Oil Tube with 244717
27	244717	Wick
28	244706	Feed Driving Eccentric Connection Oil Tube with 267261
29	267261	Wick
30	244719	Hook Saddle Bearing (right) Oil Tube with 267262
31	267262	Wick
32	267256	Feed Driving Rock Shaft Bushing (left) Oil Tube with 267262
	♦267284	Needle Bar Rock Frame with two 267287 and four 200587D
	♦267285	Needle Bar Rock Frame Rock Shaft

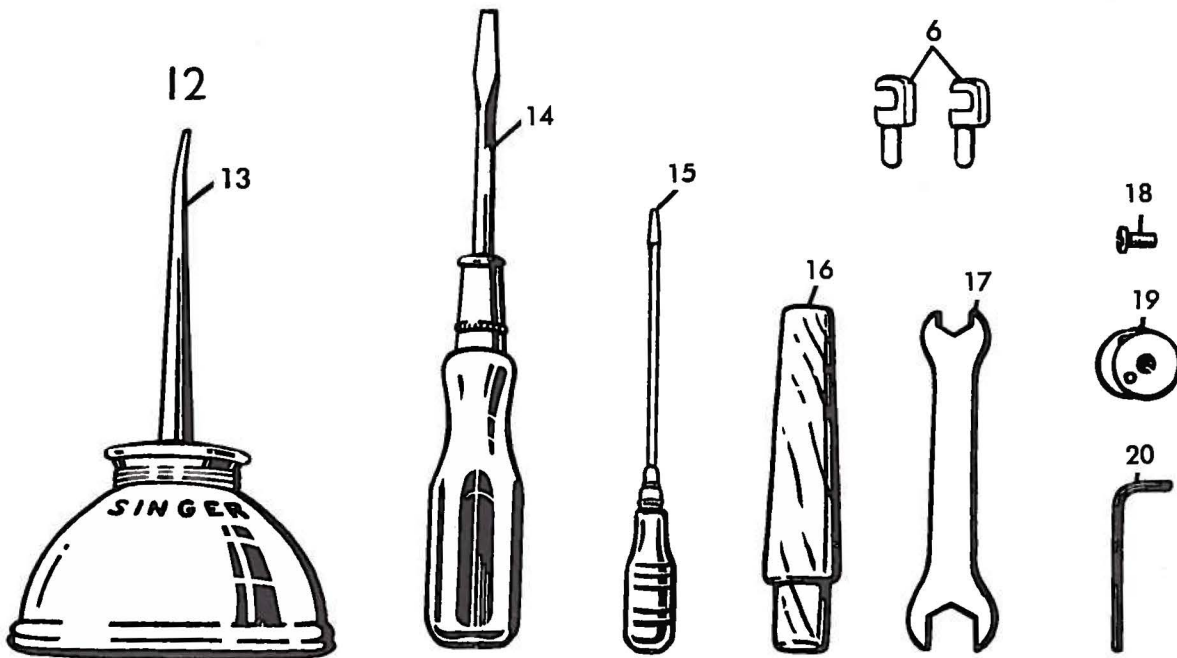
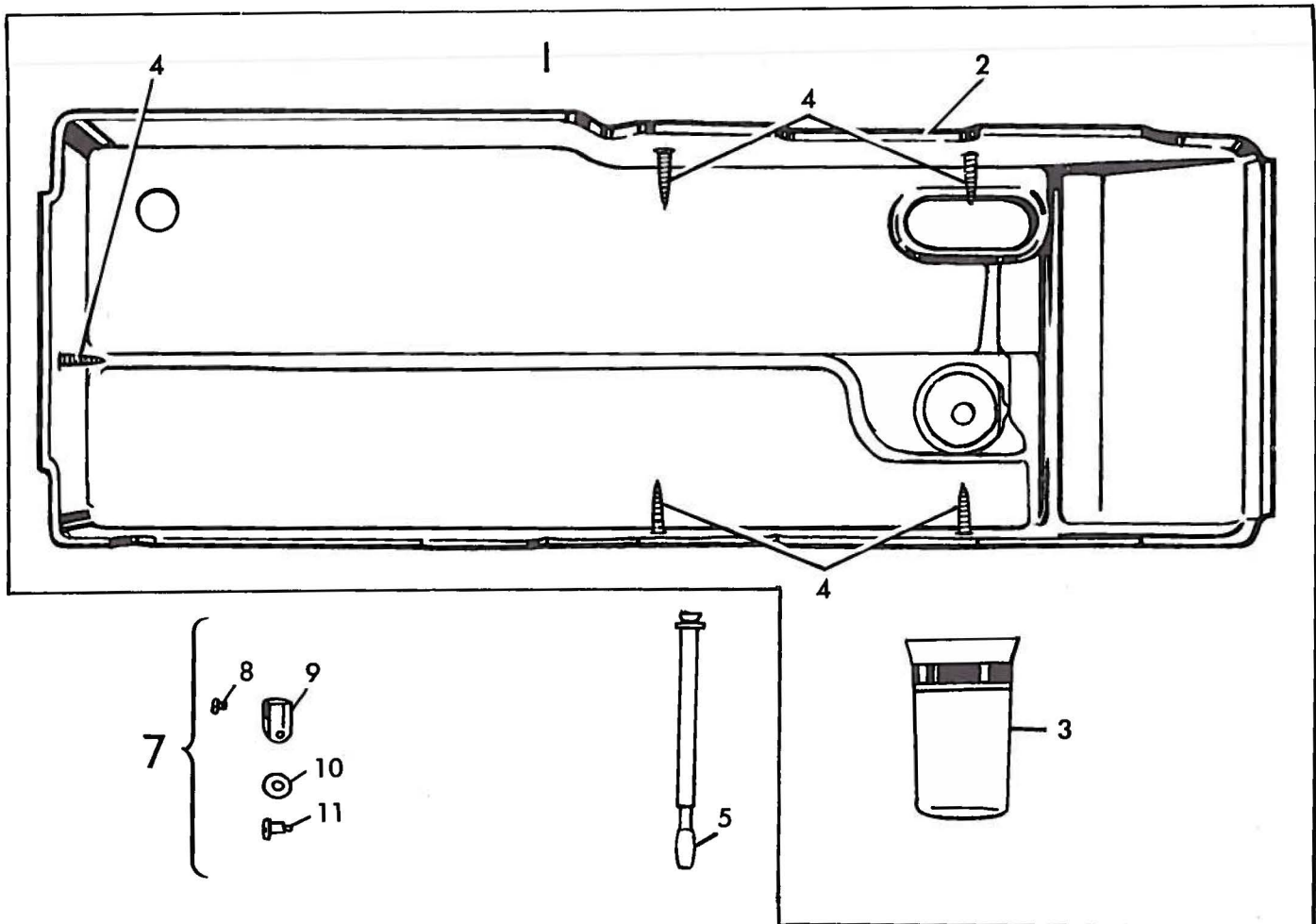
NEEDLE BAR ROCK FRAME, NEEDLE BAR ROCK FRAME ROCK SHAFT AND LUBRICATING WICKS



ACCESSORIES

<u>Ref.</u> <u>No.</u>	<u>Part</u> <u>No.</u>	<u>Description</u>
1	228886	Drip Pan (Plastic) complete, Nos. 228883, 228885 and five 350708
2	228885	Drip Pan
3	228883	Drip Pan Drain Jar
4	350708	Drip Pan (Plastic) Screw Nail
5	267197	Hook Saddle Oil Gauge
6	12361	Machine Hinge Connection (2)
7	224413	Knee Lifter Connection Lever Lifting Rod Roller Bracket complete, Nos. 200270X, 224411 and 224412
8	200113F	Set Screw
9	224412	Rod Roller Bracket with 200113F
10	224411	Rod Roller
11	200270X	Hinge Screw
12	120342	Oiler (copper plated) with 120343
13	120343	Spout
14	225498	Screw Driver
15	228476	Screw Driver (Bobbin Case)
16	41400	Machine Rest Pin (wood)
17	225554	Wrench
18	200157X	Attachment Screw
19	244750	Bobbin
20	267242	Wrench (3/32 in. Hex.)
	135 x7Y	Needles, six, size 21 with Supplementary Shoulders

ACCESSORIES

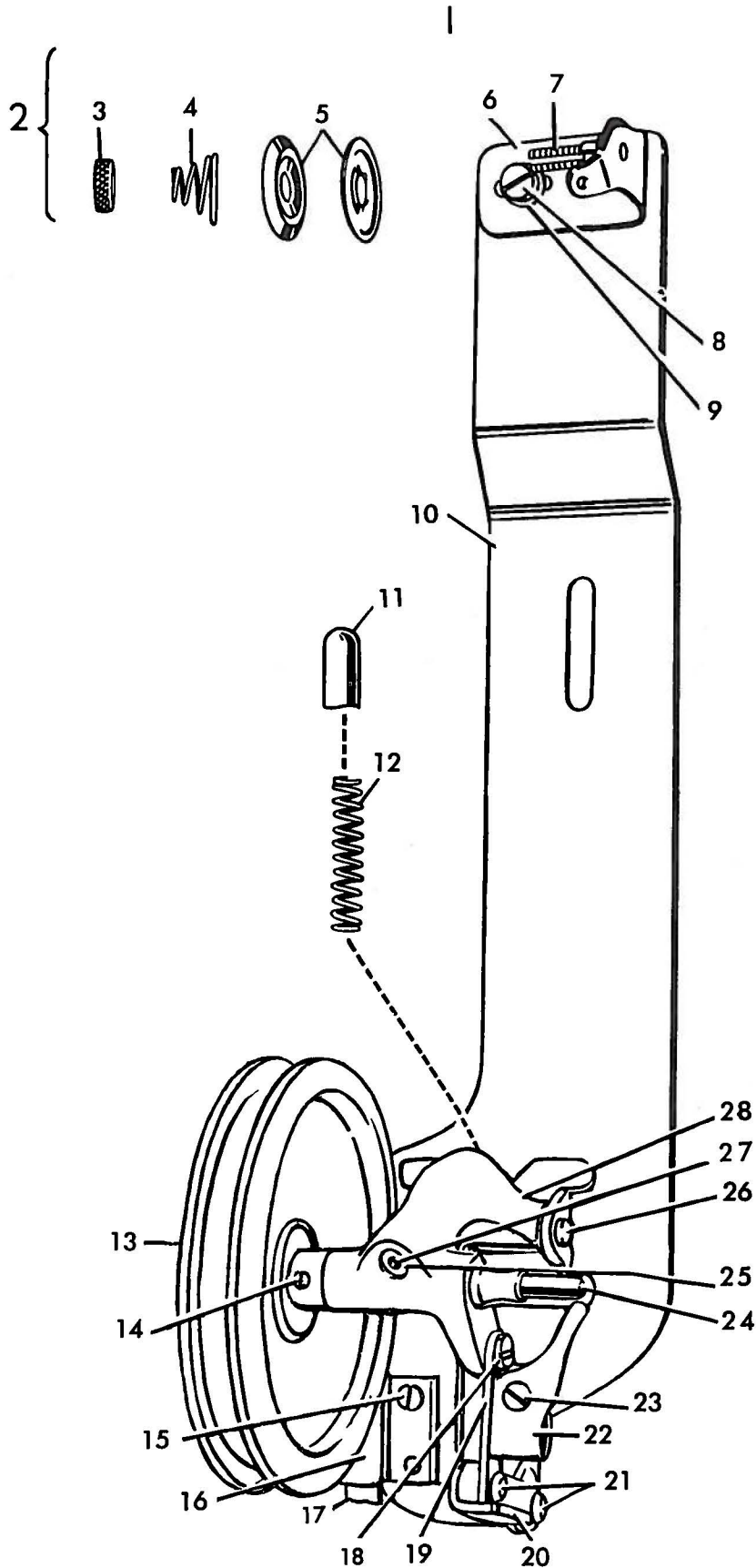


ACCESSORIES

BOBBIN WINDER (SWINGING AUTOMATIC, RIGHT HAND)
FOR "V" BELT DRIVE

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	259462	Universal Bobbin Winder complete, Nos. 200056E, 200082D, 200113F, 200299X, 202478, 225381, 225444, 225453 to 225456, 225458, 225462, 228026, 259428, 259429, 259662, 259930, two each 225459 and wood screws 3/4 in., No. 12, R.H.B.
2	225462	Bobbin Winder Tension Bracket complete, Nos. 13710, 201572X, 225461 and two 2102
3	201572X	Tension Stud Thumb Nut
4	13710	Tension Spring
5	2102	Tension Disc
6	225461	Tension Bracket with 201499X
7	201499X	Tension Stud
8	200082D	Tension Bracket Screw
9	228026	Washer
10	259662	Bobbin Winder and Tension Bracket Base
11	225456	Frame Spring Plunger
12	225455	Frame Spring
13	259930	Pulley with 457AL
14	457AL	Set Screw
15	200113F	Brake Clamp Screw
16	259429	Brake Clamp
17	259428	Brake (leather)
18	200299X	Trip Lever Hinge Screw
19	202478	Stop Latch Trip Lever
20	225458	Stop Latch Thumb Lever
21	225459	Stud
22	225444	Stop Latch
23	200056E	Screw
24	225381	Spindle
25	259660	Oil Well Washer
26	225454	Frame Hinge Pin
27	244071	Oil Packing (wick)
28	225453	Frame with 244071 and 259660

ACCESSORIES

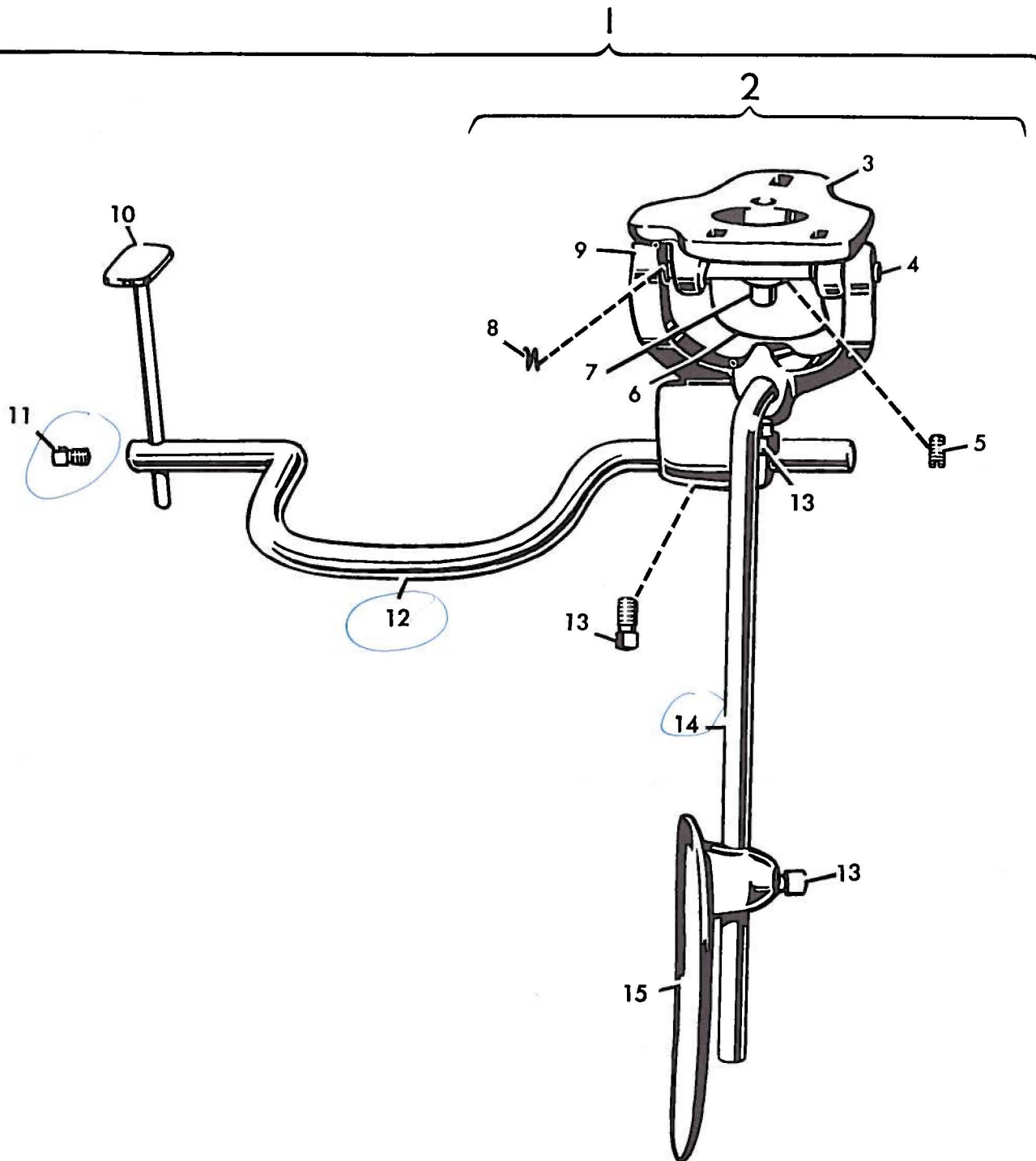
BOBBIN WINDER (SWINGING AUTOMATIC, RIGHT HAND)
FOR "V" BELT DRIVE

ACCESSORIES

KNEE LIFTER

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	228904	Knee Lifter Rock Lever complete, Nos. 228318, 228364, 228365, 228751 and 267374
2	228751	Bracket 228707 with 228363, 228367, 228386, 228455 and 228752
3	228707	Bracket with 200347AL and three wood screws 7/8 in., No. 12
4	228363	Hinge Pin
5	200347AL	Stop Stud Set Screw
6	228455	Position Spring
7	228367	Stop Stud
8	228386	Spring
9	228752	Rock Lever with two 350231C
10	228365	Rod
11	200530C	Set Screw
12	267374	Extension with 200530C
13	350231C	Set Screw
14	228318	Knee Plate Arm
15	228364	Knee Plate with 350231C

ACCESSORIES
KNEE LIFTER



NUMERICAL LIST OF PARTS

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200034C.....	30	200591X.....	26	204329.....	14	228904.....	36
200036E.....	22	200594E.....	26	204925.....	20	♦235099.....	26
200047D.....	16	200653C.....	18	206608.....	18	235100.....	26
200047X.....	16	200738X.....	18	207072.....	18	235706.....	14
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200056E.....	34	200975F.....	18	210949.....	18	240003.....	16
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