

SERVICE MANUAL

AND

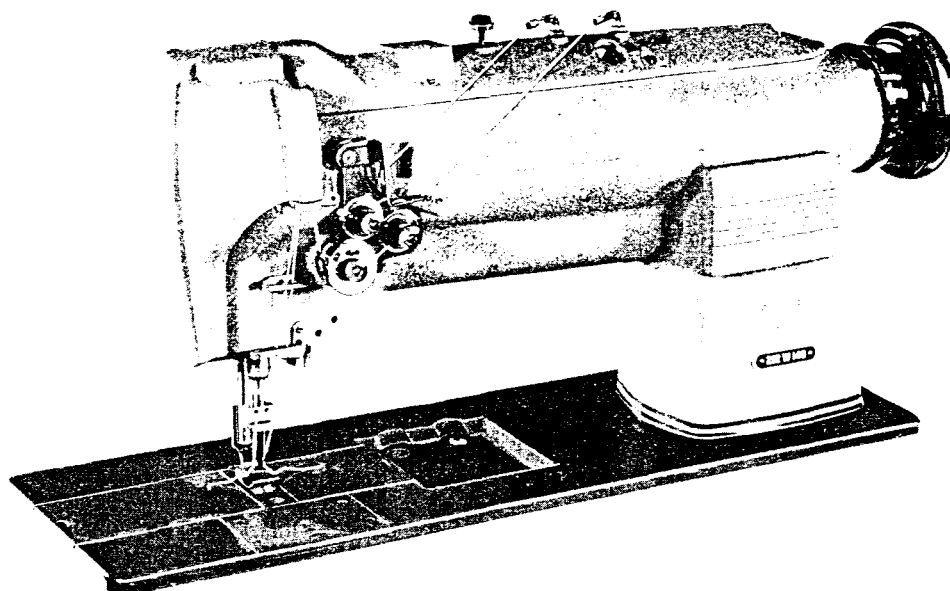
PARTS LIST

FOR

SINGER**

212w140

HIGH SPEED TWO NEEDLE
LOCK STITCH MACHINE

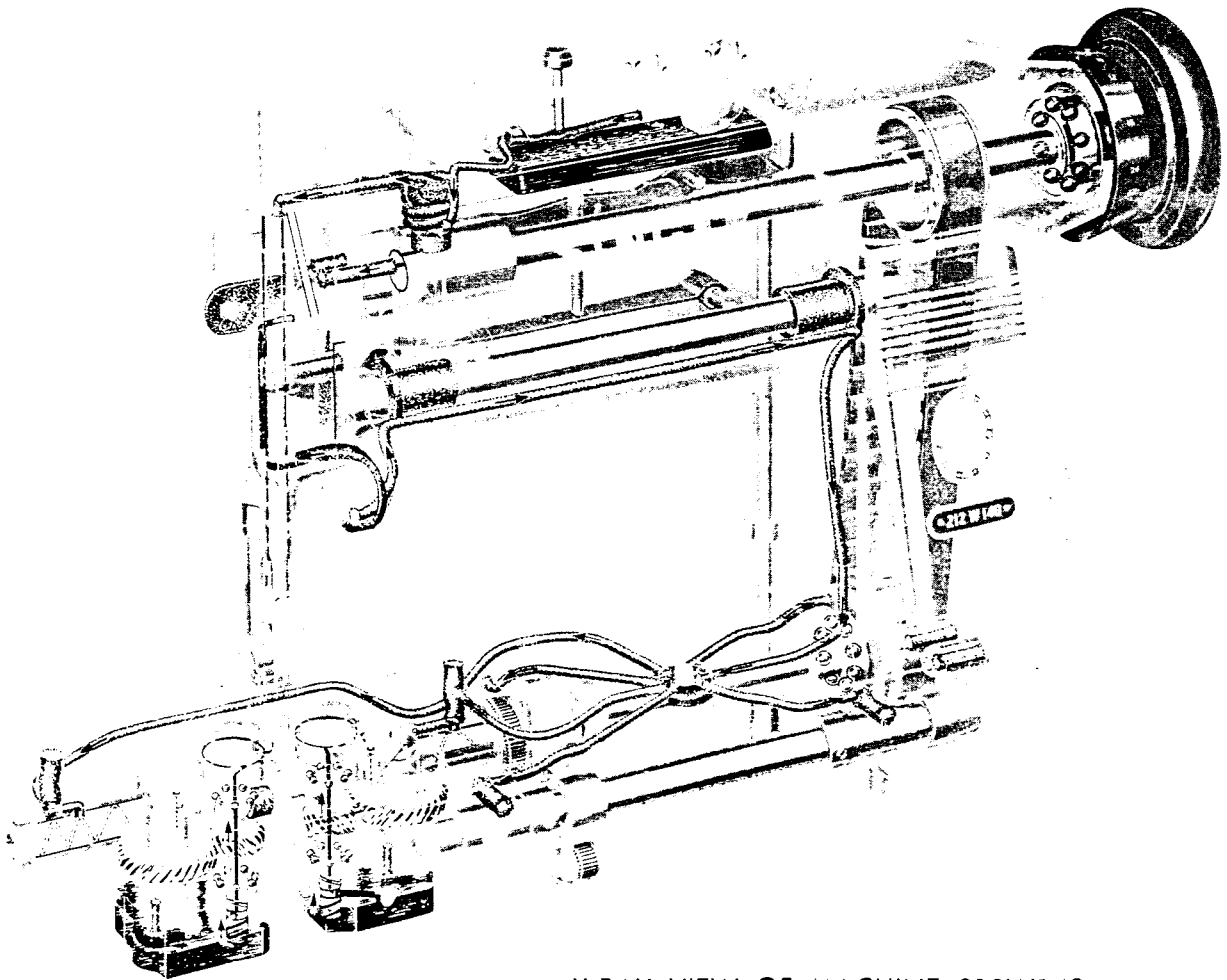


THE SINGER MANUFACTURING COMPANY

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FOREWORD

This book contains complete information covering operation, adjustment, parts list, attachments and special fittings for **Machine 212W140**. Descriptions and exploded views of all parts assemblies on **pages 15 to 68** inclusive, will be found helpful when ordering any part of the machine requiring renewal.



X-RAY VIEW OF MACHINE 212W140
(LUBRICATING SYSTEM SHOWN IN SOLID BLACK)

DESCRIPTION

Machine 212W140, for stitching corsets, overalls and clothing generally.

Two Needle, Lock Stitch.

Lubricated Link Take-up.

Two Belt Driven, Automatically Lubricated Rotary Sewing Hooks on Vertical Axis.

Compound Feed.

Maximum length of Stitch 6 to the inch.

Presser Bar Lift 1/4 inch.

Needle Bar Stroke 1-5/16 inches.

Machine Pulley with outside diameter of belt groove 2.90 inches for 3/8 inch "V" belt. Effective diameter for 5/16 inch round leather belt is 2-3/8 inches.

The Arm Shaft and Bed Shaft are mounted in Ball Bearings at the rear end and Automatically Lubricated Plain Bearings at the front end.

The Hook Shaft is mounted in Ball Bearings at upper end and Automatically Lubricated Plain Bearings at the lower end.

The Feed Driving Rock Shaft is mounted in Split Bearings, which may be adjusted.

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

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

Made in gauges from 1/32 inch to 1-1/2 inches.

One to one Bobbin Case Opener.

SPEED

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

SETTING UP

Fasten the drip pan to the table with its left end even with the left end of the cut-out. Fasten the knee lifter bracket in the location shown in Fig. 2, assembling it so that the lifter rod A does not strike the drip pan. The screw slots in the bracket provide the necessary adjustment. The stop stud B, Fig. 2 should be set to stop the action of the knee lifter as soon as the presser foot is raised enough to trip the hand lever. Then screw the drain pipe C into the drain hole in the drip pan and attach the oil jar D, as shown in Fig. 2.

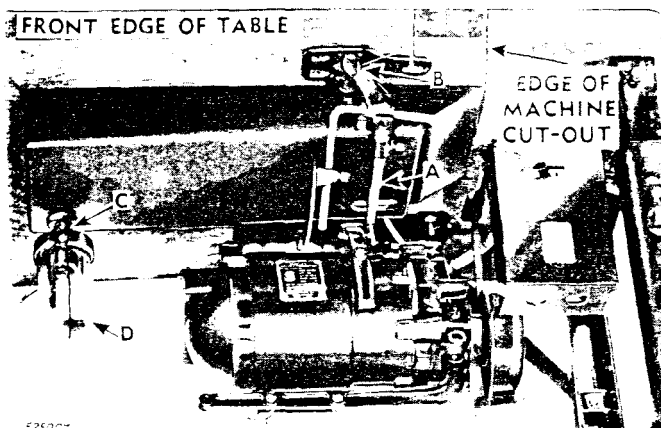


Fig. 2. Knee Lifter, Drip Pan and Oil Jar in Position

TO OIL THE MACHINE

When machine is received from the factory, it should be thoroughly cleaned and oiled.

Use "TYPE A" or "TYPE C" OIL sold by Singer Sewing Machine Company.

See inside front cover for description of these oils.

Before starting the machine, remove the two oil gauges E, Fig. 3, and fill the oil reservoirs in the sewing hook saddles to the full mark on the gauges. Fill oil reservoir on top of arm through oil filler hole J, Fig. 4, to high mark on oil sight H, Fig. 4. Push down and turn oil control plunger G, Fig. 4 until it locks in down position. Release plunger. If machine is to be left idle for more than an hour.

CAUTION: Oil control plunger G must be locked in a down position before starting machine.

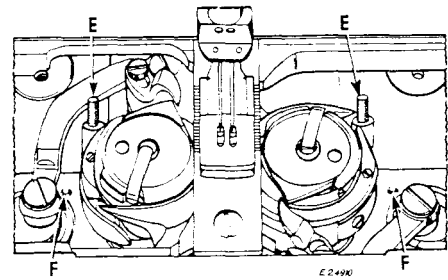


Fig. 3. Showing Gauges for Oil Reservoirs

To lubricate the hook gears and opener gears, a generous supply of oil should be applied AT LEAST TWICE DAILY to the two oil holes F, Fig. 3.

When machine is in continuous use, the oil level in the three reservoirs must be checked twice daily.

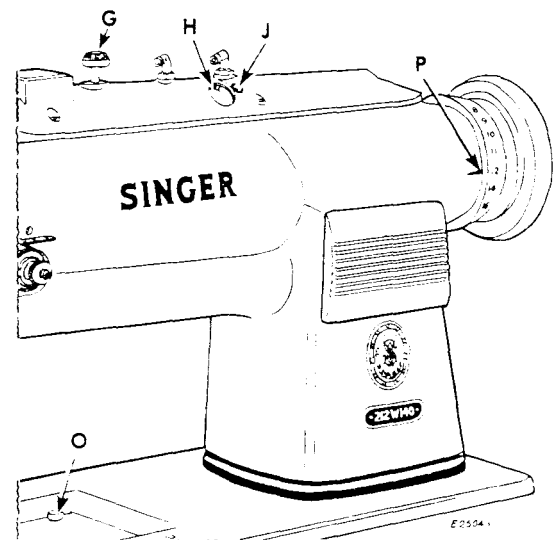


Fig. 4. Oiling Points on the Machine

TO REGULATE OIL FLOW TO HOOK RACEWAY

The amount of oil received by the hook raceway is very important. To check this, remove the bobbin case. With the machine running, hold a small piece of white paper near the hook for 15 seconds. Remove the paper and a small spray of oil should be visible. If no oil spray shows, check the oil level in the hook saddle reservoirs.

Then tip the machine back, away from the operator and loosen the oil control valve set screw J2, Fig. 22. Return the machine to its upright position. Turn the oil control valve screw L, Fig. 5 to the right for more oil or to the left for less oil. If there is no increase of oil noticeable on the test paper after 1/2 turn of the

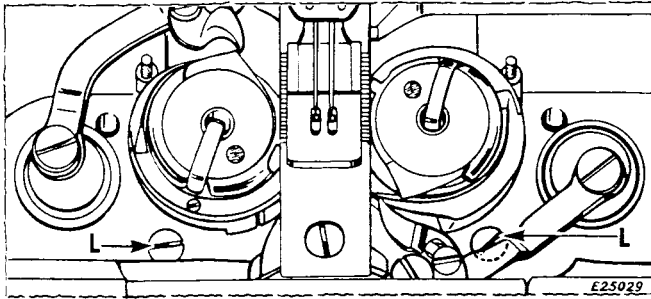


Fig. 5

control valve screw, remove the hook shaft cap screw **B**, Fig. 21 and check for interference of the oil flow.

After each adjustment, a short test run should be made; for additional oil, the short run is advisable to allow the increase of oil to flow through to the oil wick; for decreasing the flow of oil, the short run will allow the excess oil to disperse. After each adjustment, the oil control valve set screw **J2**, Fig. 22 should be securely tightened.

NEEDLES

Needles for **Machine 212W140** are of Class and Variety 135 x 7 which are made in sizes 12, 14, 16, 18, 20 and 21.

The above needles regularly have nickel finish, but can be supplied with chromium finish if ordered.

The size of the needle to be used should be determined by the size of the thread, which must pass freely through the eye of the needle. Rough or uneven thread, or thread which passes with difficulty through the eye of the needle will interfere with the successful use of the machine.

Orders for needles must specify the quantity required, the size number, also the class and variety numbers separated by an X.

The following is an example of an intelligible order:
"100 No. 16, 135x7 Needles"

The best stitching results will be obtained by using the needles sold by Singer Sewing Machine Company.

THREAD

Left twist thread should be used for both needles. Either right or left twist can be used for the bobbins.

Hold the thread as shown. Turn the thread over toward you between the thumb and forefinger of the right hand; if left twist, the strands will wind tighter. If right twist, the strands will unwind.

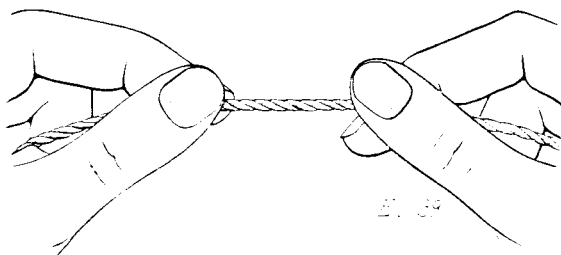


Fig. 6. How to determine the Twist

TO REMOVE THE BOBBINS

Draw out the slide plates in the bed of the machine. Turn the machine pulley over toward you until the needle bar moves up to its highest point. Raise the bobbin case latches **K**, Fig. 8 and lift out the bobbins.

TO WIND THE BOBBIN

Fasten the bobbin winder to the table with its driving pulley in front of the machine belt, so that the pulley will drop away from the belt when sufficient thread has been wound upon the bobbin.

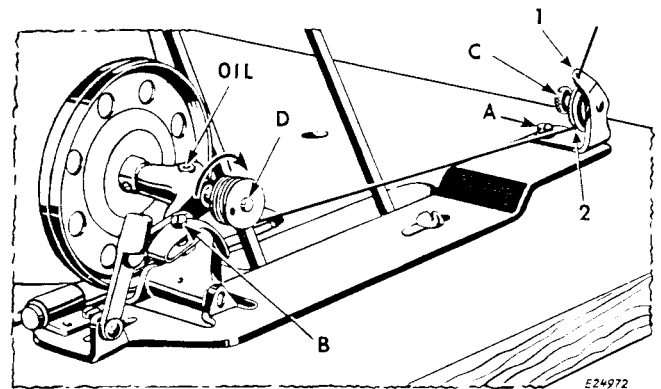


Fig. 7. Winding the Bobbin

Place the bobbin on the bobbin winder spindle and push it on as far as it will go.

Pass the thread down through the thread guide (1) in the tension bracket, around the back of and between the tension discs (2). Then wind the end of the thread around the bobbin a few times in the direction shown in Fig. 7, push the bobbin winder pulley over against the machine belt and start the machine.

When sufficient thread has been wound upon the bobbin, the bobbin winder will stop automatically.

If the thread does not wind evenly on the bobbin, loosen the screw **A** in the tension bracket and move the bracket to the right or left as may be required, then tighten the screw.

The amount of thread wound on the bobbin is regulated by the screw **B**. To wind more thread on the bobbin, turn the screw **B** inwardly. To wind less thread on the bobbin, turn the screw outwardly.

Bobbins can be wound while the machine is stitching.

When winding a bobbin with fine thread, a light tension should be used. Adjust the knurled nut **C**, Fig. 7 to regulate the tension.

TO REPLACE THE BOBBIN AND THREAD THE BOBBIN CASES

The following instructions apply to both bobbin cases:

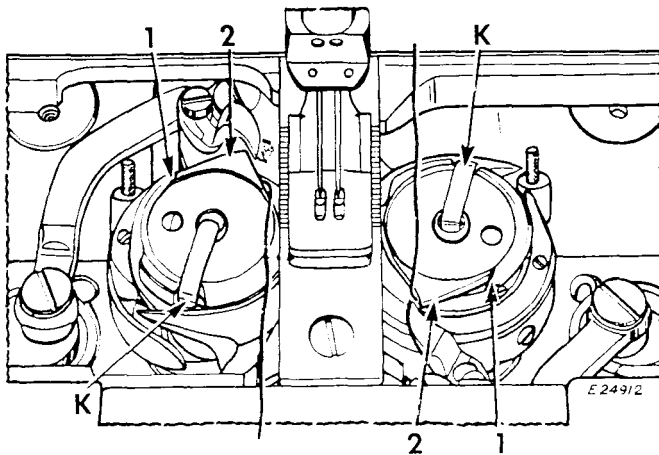


Fig. 8. Threading Bobbin Cases

Hold the bobbin between the thumb and forefinger of the right hand, the thread on the bottom from left to right, and place it on the center stud of the bobbin case, then push down the latch K, as shown in Fig. 8. Draw the thread into the slot 1 in the edge of the bobbin case and back of the projection 2, leaving a loose end of thread about two inches long above the slide. When closing the slides, leave just enough space for the threads to pass through.

TO SET THE NEEDLES

Turn the machine pulley over toward you until the needle bar moves up to its highest point. Loosen the set screws in the needle holder and put the needles up into the holder as far as they will go, the inside needle or the one nearest the upright part of the arm having its long groove toward the left, and the outside needle or the one farthest from the upright part of the arm having its long groove toward the right, the eyes of both needles being directly in line with the arm of the machine, then tighten the set screws.

UPPER THREADING

To thread the outside needle or the one farthest from the upright part of the arm, pass thread from left spool on spool stand, through left guide at top of

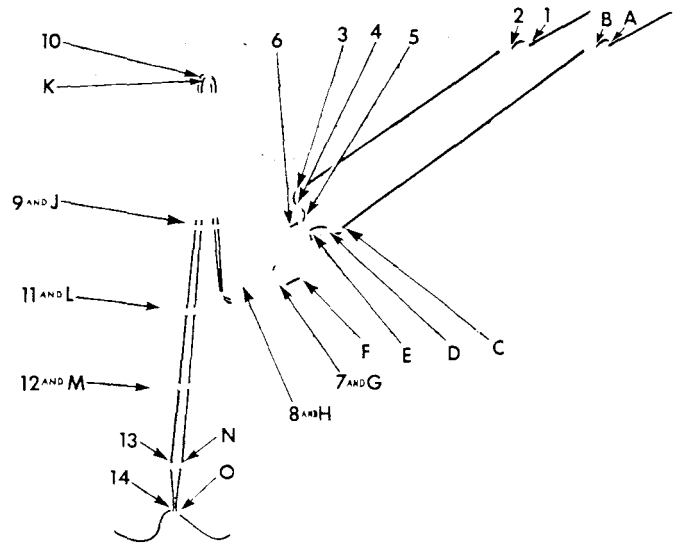


Fig. 9. Upper Threading

spool stand, down through hole (1), then through hole (2) in thread guide on top of arm, downward through holes (3, 4, and 5) in thread guide at front of machine, over from right to left between tension discs (6), down under from right to left around thread controller (7), up into fork (8), of thread controller against the pressure of wire controller spring, up through thread guide (9), up and from right to left through upper hole (10) in end of thread take-up lever, down through thread guide (9) again and through two thread guides (11 and 12), down through left hole (13) in needle holder and from right to left through eye of left or outside needle (14).

To thread the inside needle or the one nearest the upright part of the arm, pass thread from right spool on spool stand through right guide at top of spool stand, down through hole (A), then through hole (B) in thread guide on top of arm, downward through holes (C, D, and E) in thread guide at front of machine, under from right to left between right tension discs (F), down under from right to left around thread controller (G) up into fork (H) of thread controller against the pressure of wire controller spring up through thread guide (J), up and from right to left through lower hole (K) in end of thread take-up lever, down through thread guide (J) again and through two thread guides (L and M), down through right hole (N) in needle holder and from left to right through eye of right or inside needle (O).

TO PREPARE FOR SEWING

With the left hand, hold the ends of the needle threads, leaving them slack from the hand to the needles. Turn the machine pulley over towards you until the needles move down and up again to their highest point, thus catching the bobbin threads; draw up the needle threads and the bobbin threads will come up with them through the holes in the feed dog (see Fig. 10). Lay the threads back under the presser foot and close the slides.

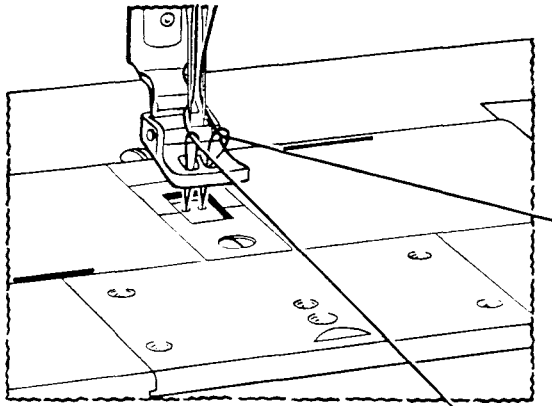


Fig. 10. Drawing up the Bobbin Threads

TO COMMENCE SEWING

Place the material beneath the presser foot, lower the presser foot and commence to sew, turning the machine pulley over toward you.

TO REMOVE THE WORK

Have the thread take-up lever at the highest point, raise the presser foot, draw the work back and cut the threads close to the goods. Lay the threads back under the presser foot.

TENSIONS

The needle and bobbin threads should be locked in the center of the thickness of the material, thus:



Fig. 11. Perfect Stitch

If the tension on the needle thread is too tight, or if that on the bobbin thread is too loose, the needle thread will lie straight along the upper surface of the material, thus:



Fig. 12. Tight Needle Thread Tension

If the tension on the bobbin thread is too tight, or if that on the needle thread is too loose, the bobbin thread will lie straight along the under side of the material, thus:

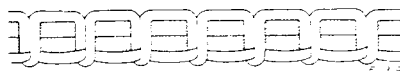


Fig. 13. Loose Needle Thread Tension

TO REGULATE THE TENSIONS

The tensions on the needle threads are regulated by the two thumb nuts **B2**, Fig. 15 at the front of the tension discs on the front of the machine. To increase the tension, turn these thumb nuts over to the right. To decrease the tension, turn the thumb nuts over to the left.

The tensions on the bobbin threads are regulated by means of the screw nearest the center of the tension spring on the outside of each bobbin case. To increase the tension, turn the screw over to the right. To decrease the tension, turn the screw over to the left.

TO REGULATE THE LENGTH OF STITCH

The number of stitches per inch is stamped on the machine pulley, Fig. 4 located on the arm shaft.

To change the length of stitch, press down the plunger **O**, Fig. 4 in the bed of the machine and at the same time turn the machine pulley slowly until the plunger enters a notch in the adjustable feed eccentric cam. Still holding the plunger, turn the machine pulley over a part of a revolution until the desired number of the stitches per inch on the machine pulley is opposite the reference mark **P**, Fig. 4 on arm, then release the plunger.

TO REGULATE THE PRESSURE ON MATERIAL

The pressure on the material is regulated by the screw **N**, Fig. 14 at the back of the machine, the screw acting on a flat spring. To increase the pressure, turn this screw downward. To decrease the pressure, turn this screw upward. The pressure should be only heavy enough to enable the feed to move the work along evenly.

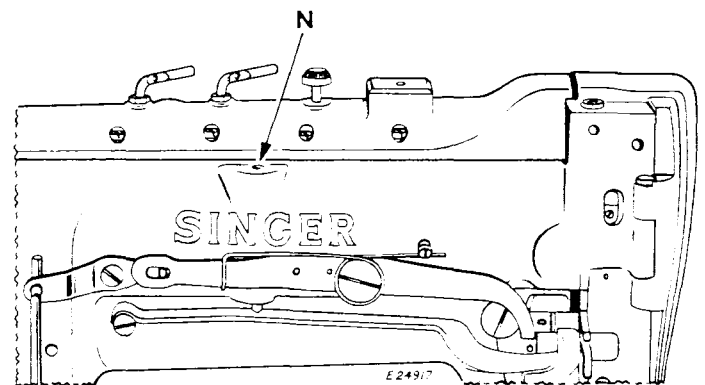


Fig. 14

TO RE-ENGAGE THE SAFETY CLUTCH

(If machine is so fitted)

When safety clutch has dis-engaged, first check to see that the bed shaft turns freely. Remove any thread that may have become jammed in the hook. To re-engage the clutch, press down the plunger **O**, Fig. 4 in the bed of the machine and at the same time turn the machine pulley slowly until the plunger enters a notch in the feed driving eccentric cam. Turn the machine pulley over toward you until the safety clutch is re-engaged. Then reset the length of stitch as described above.

HINTS FOR PERFECT OPERATION

Follow instructions and oil machine regularly.

The machine pulley must always turn toward the operator.

Do not run the machine with presser foot resting on the feed without cloth under the presser foot.

Do not run the machine when the bobbin cases and needles are threaded, unless there is material under the presser foot.

Do not try to help the machine by pulling the fabric, lest you bend the needles. The machine feeds the work without assistance.

The slides over the bobbin cases should be kept closed when the machine is in operation.

Do not press on the knee lifter lever while the machine is in operation, as this will prevent the work from feeding properly.

Occasionally remove the accumulation of lint from around the hooks and from between the feed rows beneath the throat plate.

NEVER TOUCH THE STITCH REGULATOR PLUNGER WHEN THE MACHINE IS RUNNING.

THREAD CONTROLLER

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

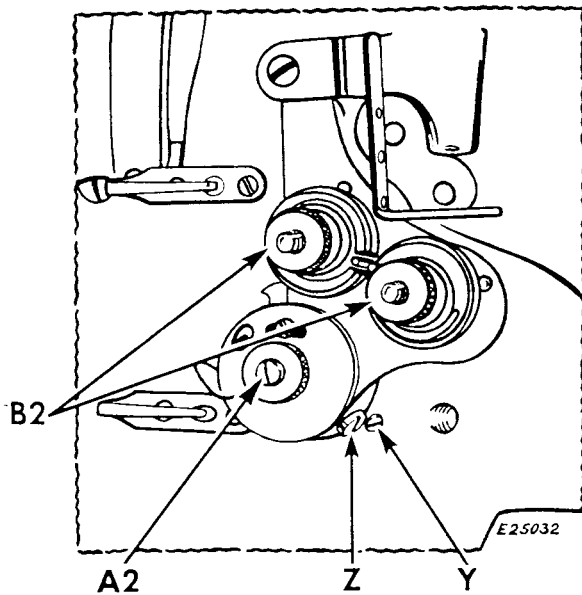


Fig. 15. Adjustment of Thread Controller

To change the thread controller stop for more controller action on the threads, loosen the set screw **Z**, **Fig. 15** and turn the thread controller spring stop to the right; for less action, turn the thread controller spring stop to the left, after which securely tighten the set screw **Z**.

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

To increase the tension of the thread controller on the threads, loosen the tension stud set screw **Y**, **Fig. 15** located nearly under the tension stud, and turn the tension stud **A2** slightly to the left with a screwdriver, or to decrease the tension, turn it to the right and retighten the stud set screw **Y**.

TO SET THE NEEDLE BAR

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

In case the needle bar is not correctly set, loosen the needle bar connecting stud pinch screw **M**, **Fig. 17**

and place the needle bar in the correct position as directed above, then retighten the screw **M**. To set a needle bar which has no mark, set the feed eccentric so that there is no feeding motion, then set the needle bar so that when it rises $\frac{3}{32}$ inch from its lowest position and the points of the sewing hooks are at the centers of the needles, the eyes of the needles will be about $\frac{1}{16}$ inch below the points of the hooks.

TO ADJUST HEIGHT OF SEWING HOOKS

On the upward stroke of the needle bar, with the lower marking **A**, **Fig. 16** just visible on the needle bar, the hook point should be $\frac{1}{16}$ inch above the eye of the needle as shown in **Fig. 16**. To adjust hook, fasten the throat plate to the bed of the machine with the bobbin case stop in sewing position. A .032 inch shim should slide between bobbin case stop and throat plate. If the shim is too loose, turn the machine pulley so that the Allen screws **H2**, **Fig. 20** are accessible with an Allen wrench. Loosen both screws and remove the cloth washer in the bobbin case, then turn the hook so that a hole in the bobbin case is in line with the hook height adjusting screw **J2**, **Fig. 20**. By turning the adjusting screw down, the hook is pushed higher. If the shim does not go between bobbin stop and throat plate, turn the adjusting screw left and press the hook down. Check the timing and tighten the Allen screw **H2**. After the Allen screws are tight, turn the adjusting screws **J2**, **Fig. 20** just enough to leave a small amount of tension.

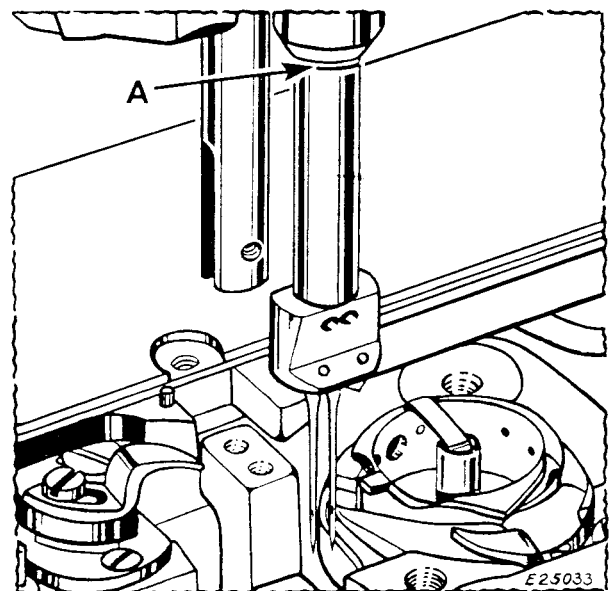


Fig. 16. Height Adjustment of Sewing Hook

RELATIVE POSITIONS OF NEEDLE BAR AND PRESSER BAR

The distance between the needle bar and presser bar, after adjusting the feed eccentric so that there is no feed movement, should be $\frac{17}{32}$ inch as shown on Fig. 17.

If the distance between the needle and presser bars is more or less than $\frac{17}{32}$ inch, loosen the needle bar frame shaft clamp screw **N2**, Fig. 23. While the screw is loose, the needle bar frame can be moved forward or backward, as may be required, until the distance between the needle and presser bars is $\frac{17}{32}$ inch. A piece of sheet metal $\frac{17}{32}$ inch wide may be used to determine the correct distance. When making the adjustment, be sure to see that the feed eccentric is set so that there is no feeding movement. When the adjustment has been made, securely tighten screw **N2**.

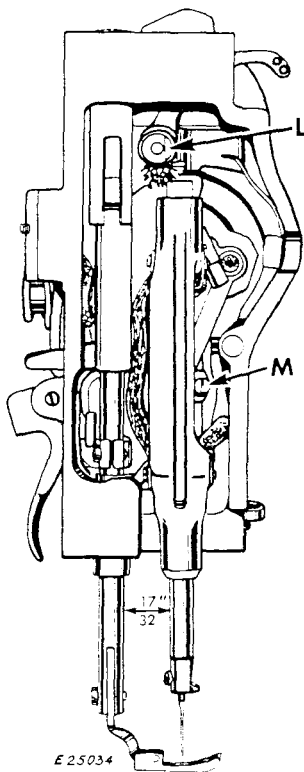


Fig. 17

TO SET THE SEWING HOOKS TO OR FROM THE NEEDLES

To prevent the points of the hooks from dividing the strands of the threads, they should run as close to the needles (within the scarf) as possible.

Turn the machine pulley over toward you until the points of the sewing hooks are at the centers of the

needles. Loosen the four screws **N,N** and **T,T**, Fig. 18 underneath the bed of the machine and move the hook saddles to the right or left, as may be required, until the points of the hooks are as close to the needles as possible without striking them, then securely tighten the four screws **N,N** and **T,T**.

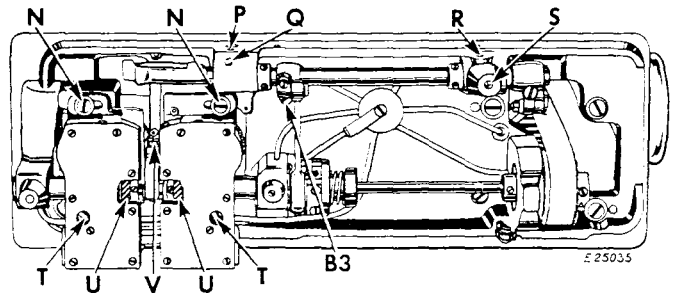


Fig. 18

CAUTION: Make sure hook driving gears **U**, Fig. 18 are set correctly with relation to face of hook saddle. Use .008 shim.

The function of the hook (needle guard) **G2**, Fig. 20, which is attached to the side of the sewing hook, is to prevent the point of the hook from striking the needle, if, when passing through the material, the needle is deflected toward the hook.

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

TO TIME THE SEWING HOOKS

Adjust the feed eccentric so that there is no feeding motion.

Remove the throat plate and turn the machine pulley over toward you until the lower mark across the needle bar is just visible at the end of the needle bar frame on the upward stroke of the needle bar. If the needle bar and sewing hooks are correctly timed, the point of each hook will be at the center of its needle and about $\frac{1}{16}$ inch above the eye.

In case the sewing hooks are not correctly timed, turn the machine pulley over toward you until the needle bar has descended to its lowest point and has risen until the lower timing mark across the needle bar is just visible at the end of the needle bar frame. Loosen the two screws **H2**, Fig. 20 in the hub of each hook and turn the hooks until the point of each hook is at the center of its needle. Then securely tighten the two screws **H2**.

TO REMOVE THE BOBBIN CASES FROM THE SEWING HOOKS

Remove the four hook gib screws **W**, Fig. 19 from the sewing hooks, lift off the hook gibs **F2**, Fig. 20 and remove the bobbin cases **X**, Fig. 19.

CAUTION: This machine is equipped with chrome plated bobbin cases, which should always be replaced with chrome plated bobbin cases.

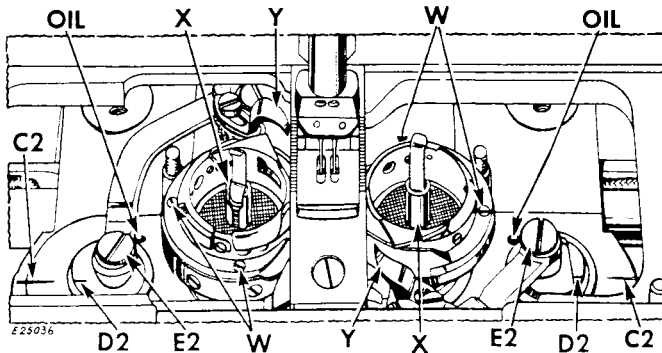


Fig. 19

TO REMOVE THE SEWING HOOKS FROM THE MACHINE

Remove the presser foot, throat plate and feed dog, then loosen two Allen set screws **H2**, Fig. 20 in hub of hook and lift hook off end of shaft. In order to remove hook shaft, first remove screws in ball bearing retaining cap directly under the hook. Next, tip machine back and loosen set screws **L2**, Fig. 22 in hook shaft gears 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. 22, then tap end of hook shaft.

CAUTION: Each hook is equipped with a screw in the hub for adjusting the vertical position of the hook relative to the throat plate seat. When replacing or installing new hooks, care must be taken to see that the bobbin case stop finger fits correctly in the throat plate. If it is too high, it will interfere with the free passage of thread.

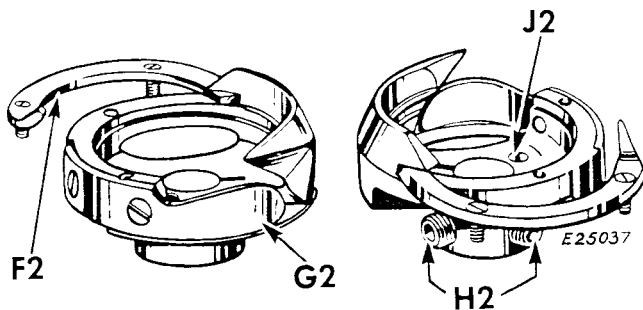


Fig. 20. Sewing Hook Removed from Machine Showing Hook Washer

If it is too low, it is apt to slip out and cause damage to the hook and bobbin case when the machine is in operation. To make the adjustment, remove the cloth

washer in the bottom of the bobbin case, loosen the Allen set screws in the hook hub, then turn the hook until the adjusting screw appears beneath one of the holes in the bottom of the bobbin case. Hold the hook down against its seat with one hand, and with the other hand, turn the adjusting screw with screwdriver until the proper up and down position is attained. Tighten Allen set screws in hub of hook.

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

TO REMOVE THE HOOK SHAFT FROM THE HOOK SADDLE

Remove the needles, slide plates, throat plate and feed dog. Turn the machine pulley, so that the Allen screws in the hub of the hook are easy to reach with an Allen wrench. Loosen the Allen screws **H2**, Fig. 20 and lift the hook from the shaft. It may be necessary to turn the machine pulley to bring the bobbin case opener into the most open position.

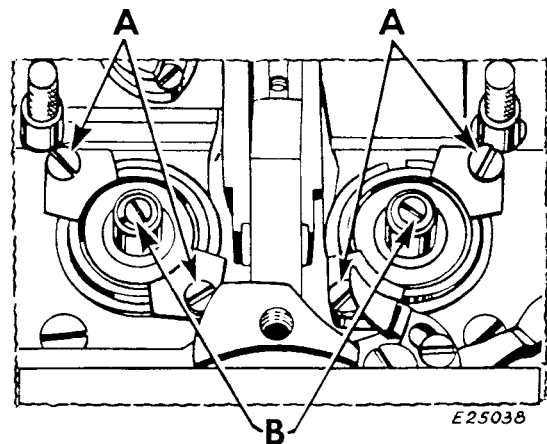


Fig. 21

Remove both ball bearing retainer screws **A**, Fig. 21. Tip the machine back away from the operator and with the Allen wrench, loosen the screws in the hub of the hook driving gears **L2**, Fig. 22. Pull the hook shaft through the top.

If the hook shaft does not lift out easily, loosen screws in cover plate of hook saddle sufficiently to permit oil to drain out, then remove the cover, being careful not to damage the gasket **M2**, Fig. 22, then tap end of hook shaft.

The above procedure also applies to the removal of the hook shaft gears.

TO ADJUST THE BOBBIN CASE OPENER

The bobbin case opener **Y**, Fig. 19 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 the throat plate and the bobbin case.

TO ADJUST TIMING OF BOBBIN CASE OPENER

Turn the machine pulley over toward you until lowest timing mark on needle bar is even with end of needle bar frame. In this position, the mark **D2**, Fig. 19 on the flange of the opener driving shaft should line up with the reference mark **C2**, Fig. 19 on hook saddle. If opener shaft is out of time, tip machine back and loosen set screws **K2**, Fig. 22 in opener driving gears, then return machine to upright position and turn shaft with screwdriver in **E2**, Fig. 19 at top end of shaft, then tighten set screws **K2**, Fig. 22 in gears.

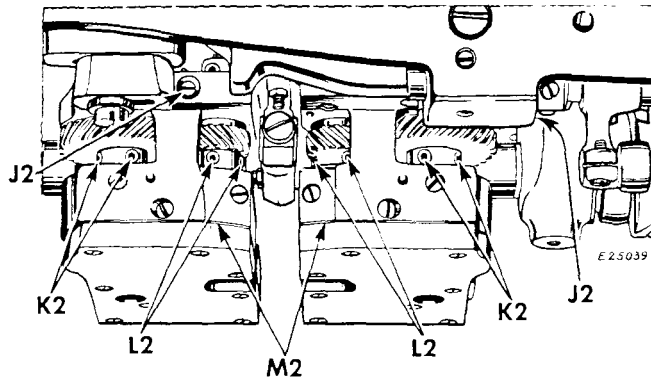


Fig. 22

TO ADJUST THE FEED ROCK SHAFT BEARINGS

The feed rock shaft is carried in split bushings which can be adjusted to take up any wear which may occur. Loosen the two lock screws **Q** and **R**, Fig. 18 and turn in the two adjusting screws **P** and **S**, Fig. 18 until all lost motion of the rock shaft has been eliminated, then securely tighten the lock screws **Q** and **R**.

TO RAISE OR LOWER THE FEED DOG

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

Remove the throat plate; clean the lint and dust from between the feed points and replace the throat plate; tip the machine back and turn the machine pulley towards you until the feed dog is at its highest position; loosen screw **V**, Fig. 18 in the feed lifting cam fork and raise or lower the feed dog, as may be required. Then tighten the screw **V**.

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

The feed dog should be set so that when the needles are down, they will be slightly in front of the center of the needle holes (toward the operator). In case the needles do not enter the holes in the feed dog correctly, loosen the pinch screw **B3**, Fig. 18 and adjust the feed dog as required, then securely tighten the pinch screw **B3** and check the relative position of the needle and presser bars as instructed on page 10.

TO REMOVE TAKE-UP LEVER

Remove arm cover at top of machine, loosen set screw **U2**, Fig. 25, and remove take-up lever hinge stud **L**, Fig. 17. Lift take-up lever out through slot in top of arm **V2**, Fig. 25.

TO REMOVE THE NEEDLE BAR ROCK FRAME

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

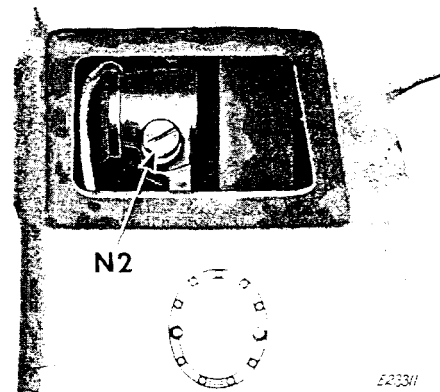


Fig. 23

THE FEED ECCENTRIC

The feed eccentric is provided with a gib **P2**, Fig. 24, which can be adjusted to take up any wear or loose motion between the feed eccentric and the eccentric body. To adjust the gib, loosen the two locking screws **Q2**, Fig. 24 nearest the gib, then turn the two adjusting screws **O2** against the gib until all play is eliminated and the eccentric fits snugly in the slot in the eccentric body. Securely tighten the two locking screws **Q2**.

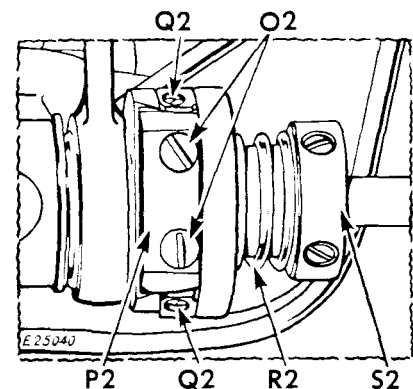


Fig. 24

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

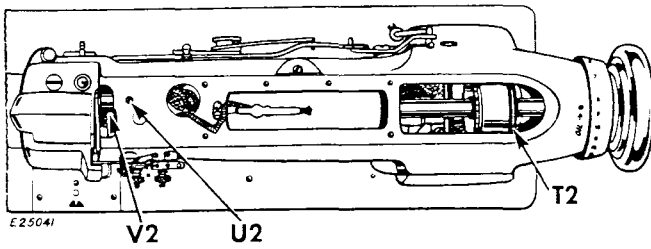


Fig. 25

TO REPLACE THE ARM SHAFT CONNECTION BELT

Remove the needles to avoid damaging while machine is out of time. Slide the belt off lower pulley **Z2**, **Fig. 26**. Loosen the two screws in the machine pulley and remove machine pulley and ball bearing which comes out with the wheel. Lift the belt up and draw it around the arm shaft through the space normally occupied by the ball bearing.

Replace the belt through the ball bearing hole. After placing the belt over the upper pulley **T2**, **Fig. 25**, replace the machine pulley. To remove all the end play from the shaft, lightly tighten the set screws in the machine pulley and, holding the needle bar crank in

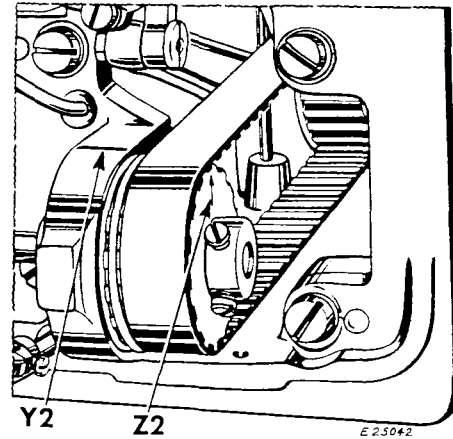


Fig. 26

place, tap the machine pulley into position with the palm of the hand, then tighten screws firmly. Turn the machine pulley over towards you until the thread take-up lever is at its highest point. Then turn the hook driving shaft until the arrow **Z2**, **Fig. 26** on the belt pulley is in line with the mark **Y2**, **Fig. 26** on the bed. Now, without disturbing either the arm shaft or hook driving shaft, slip the belt over the lower pulley. The feed will then be correctly timed with the needle.

PARTS LIST
FOR
MACHINE 212w140

INSTRUCTIONS FOR ORDERING

To simplify ordering of parts, exploded views of the various sections of the mechanism are shown in the same illustration as the assembly of those parts. On the page opposite the illustration is a list of parts with key or reference numbers to indicate the position of that part in the illustration. These key numbers in the first column are for reference only and are not to be used in ordering parts.

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

The number stamped on a Sewing Machine Part is the number of the single part only.

Every combination of parts sent out has its specific number which, although not stamped on Parts 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, Nickel Plated and Buffed.
- AL Heat Treated for Toughness.
- ALX Heat Treated for Toughness and Black Oxide.
- C Hardened only.
- D Polished only.
- E Soft, Not polished.
- F Hardened and Polished.
- W Polished and Nickel Plated.
- X Black Oxide, for Iron and Steel.
- XC Hardened and Black Oxide, for Iron and Steel.
- Z Chromium Plated.

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

In this series:

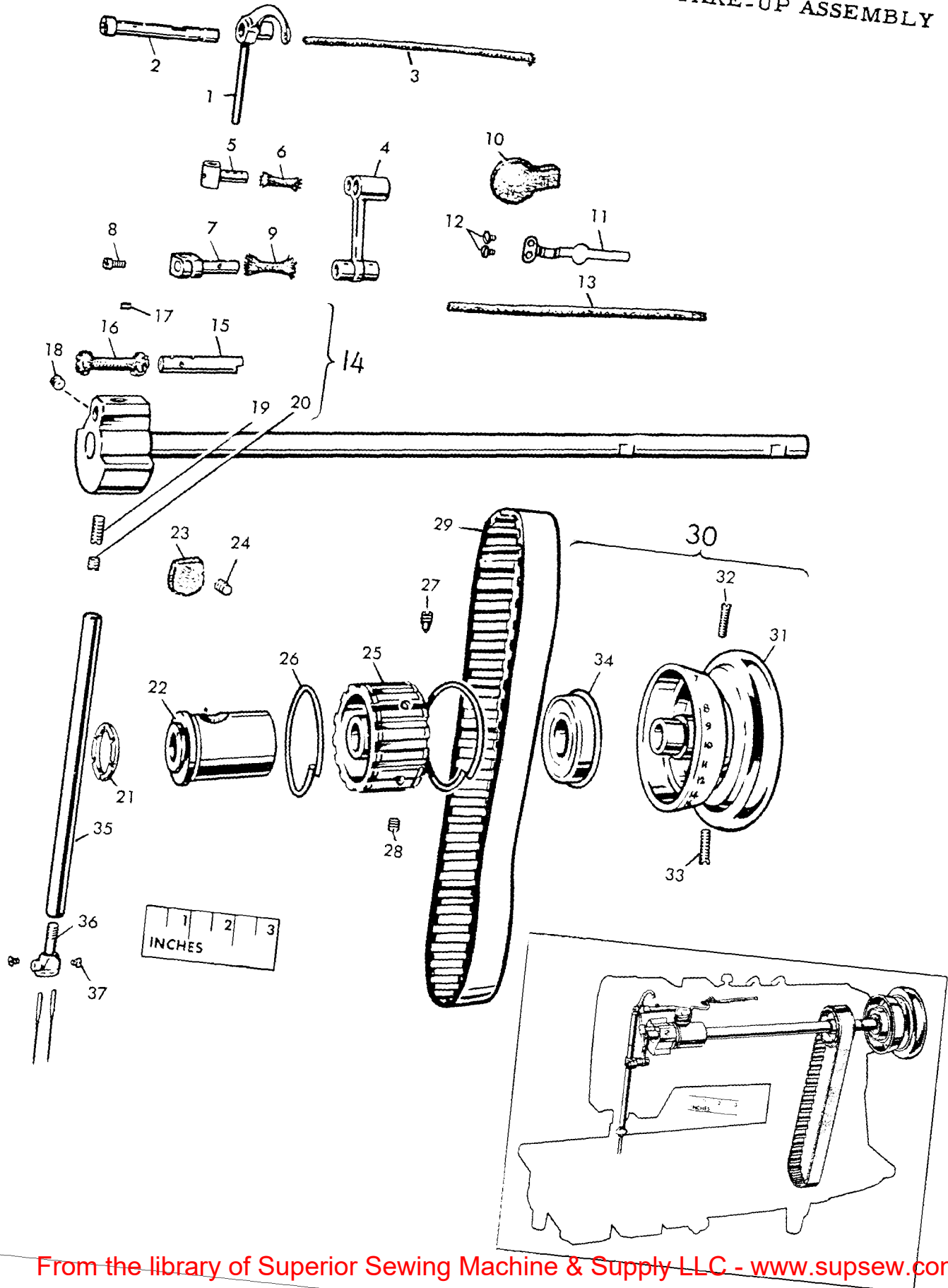
1 to 1500, 200001 to 201500 and 350001 to 351500 are Screw Numbers.
1501 to 1800, 201501 to 201800 and 351501 to 351800 are Nut Numbers.
1801 to 2000, 201801 to 202000 and 351801 to 352000 are Roller Numbers.
2001 to 50000 and 202001 to 350000 are Numbers of Machine Parts.

Parts marked with an asterisk (*) 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

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	267300	Take-up Lever
2	267239	Hinge Stud with 267240
3	267240	Oil Packing (wick)
4	202552	Connecting Link
5	202399	Driving Stud with 202277
6	202277	Oil Packing (wick)
7	264714	Connecting Stud with 200072C and 202330
8	200072C	Pinch Screw
9	202330	Oil Packing (wick)
10	267160	Oil Pad (felt) (upper)
11	267249	Oil Control Spring
12	200142E	Screw (2)
13	267236	Oil Reservoir Oil Wick
14	267247	Arm Shaft *267158 with 200333C, 200374AL, 200378C, 200388C, 267221 and *267222
15	267221	Connecting Link Stud with 202254
16	202254	Oil Packing (wick)
17	200374AL	Set Screw
18	200388C	Set Screw
19	200333C	Position Screw
20	200378C	Position Screw Check Screw
21	267224	Friction Washer
22	267159	Arm Shaft Bushing
23	204329	Oil Pad (felt) (lower)
24	200341C	Set Screw
25	267162	Belt Pulley with 200363AL, 350492C and two 202253
26	202253	Spring Flange
27	350492C	Position Screw
28	200363AL	Set Screw
29	267161	Connection Belt (reinforced neoprene)
30	267283	Machine Pulley 267282 with 270004
31	267282	Machine Pulley (aluminum alloy casting) for "V" belt (outside diam. of belt groove 2.9 in.) (rim diam. 4 in.) (inside belt groove) with 350540C and 350541C
32	350541C	Set Screw
33	350540C	Position Screw
34	270004	Bearing (back)
35	267267	Needle Bar
36	267269	Needle Holder, in gauges from 3/32 to 15/32 in., in steps of 1/32 in., with two 200141F
37	200141F	Set Screw
	*267158	Arm Shaft
	*267222	Needle Bar Crank

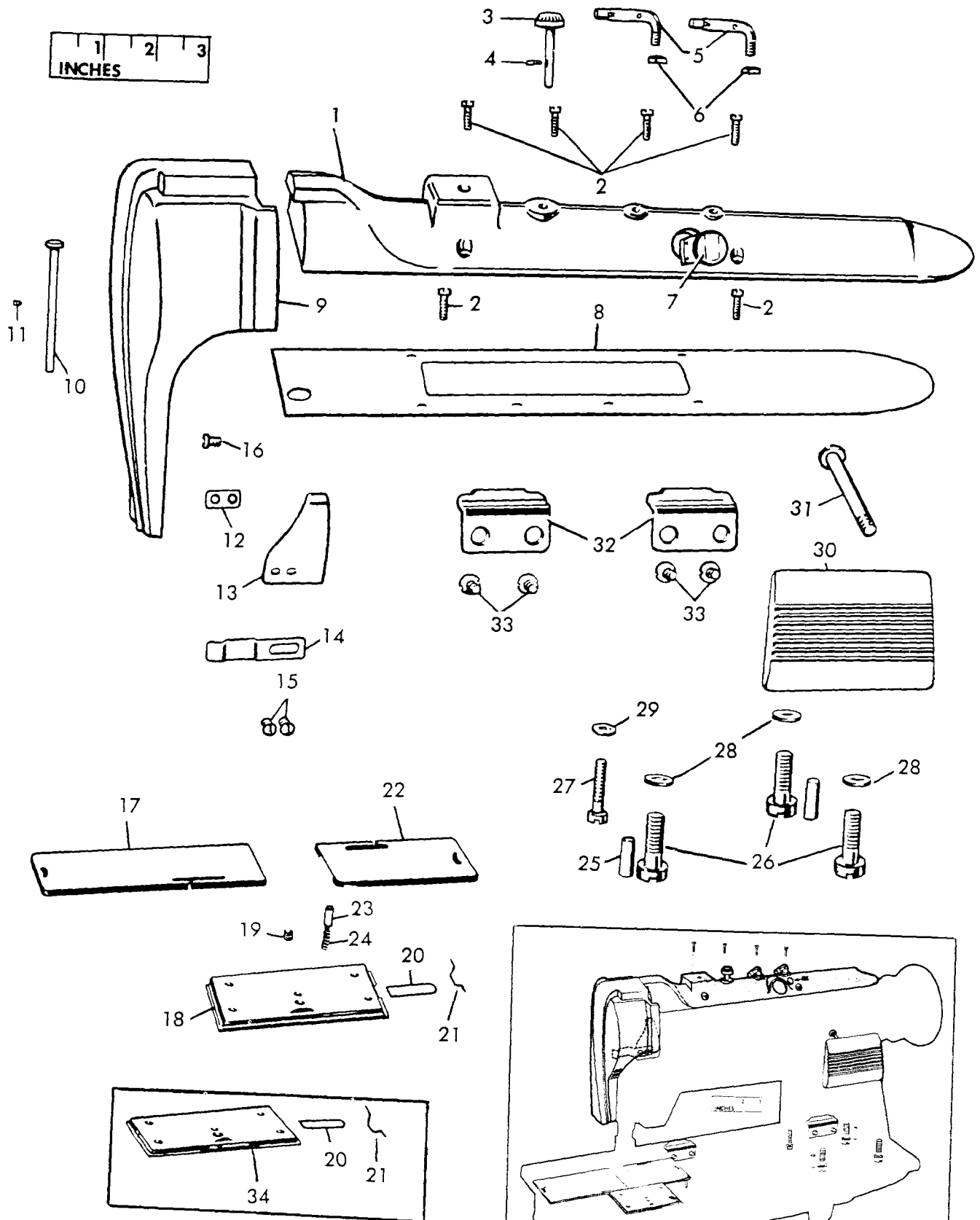
ARM SHAFT, NEEDLE BAR AND TAKE-UP ASSEMBLY



BED SLIDES, COVERS AND MISCELLANEOUS PARTS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	267153	Arm Cover (top) with 267272
2	200047X	Screw (6)
3	267250	Oil Control Spring Plunger with 201351E
4	201351E	Screw Stud
5	271017	Thread Guide (top of Arm) (2)
6	201525E	Lock Nut (2)
7	267272	Oil Level Indicator
8	267252	Gasket (vellumoid)
9	267176	Face Plate
10	267177	Hinge Pin
11	200389C	Set Screw
12	268197	Face Plate Lock Spring Plate
13	267220	Oil Guard
14	268032	Lock Spring
15	201313F	Screw (2)
16	228661	Face Plate Cushion (rubber)
17	223853	Bed Slide (front) for use with Throat Plates in gauges from 1/32 to 1/2 inch
17	224043	Bed Slide (front) for use with Throat Plates in gauges from 17/32 to 1 inch
17	224044	Bed Slide (front) for use with Throat Plates in gauges from 1-1/32 to 1-1/2 inch
18	224144	Attachment Slide Plate with 213479 and 236061
19	200386C	Lock Screw
20	236061	Friction Slide
21	213479	Spring
22	223852	Bed Slide (back)
23	223811	Stop
24	223812	Spring
25	204235	Arm Position Pin (2)
26	200004E	Arm Screw (large) (3)
27	200006E	Arm Screw (small)
28	202005	Washer (large) (3)
29	250473	Washer (small)
30	267152	Arm Cover (side)
31	350563E	Screw
32	202258	Bed Hinge Connection (2)
33	200570E	Screw (4)
34	224146	Attachment Slide Plate with 213479 and 236061, for use with depressed Throat Plates
	*267151	Arm
	*267163	Bed with 203376

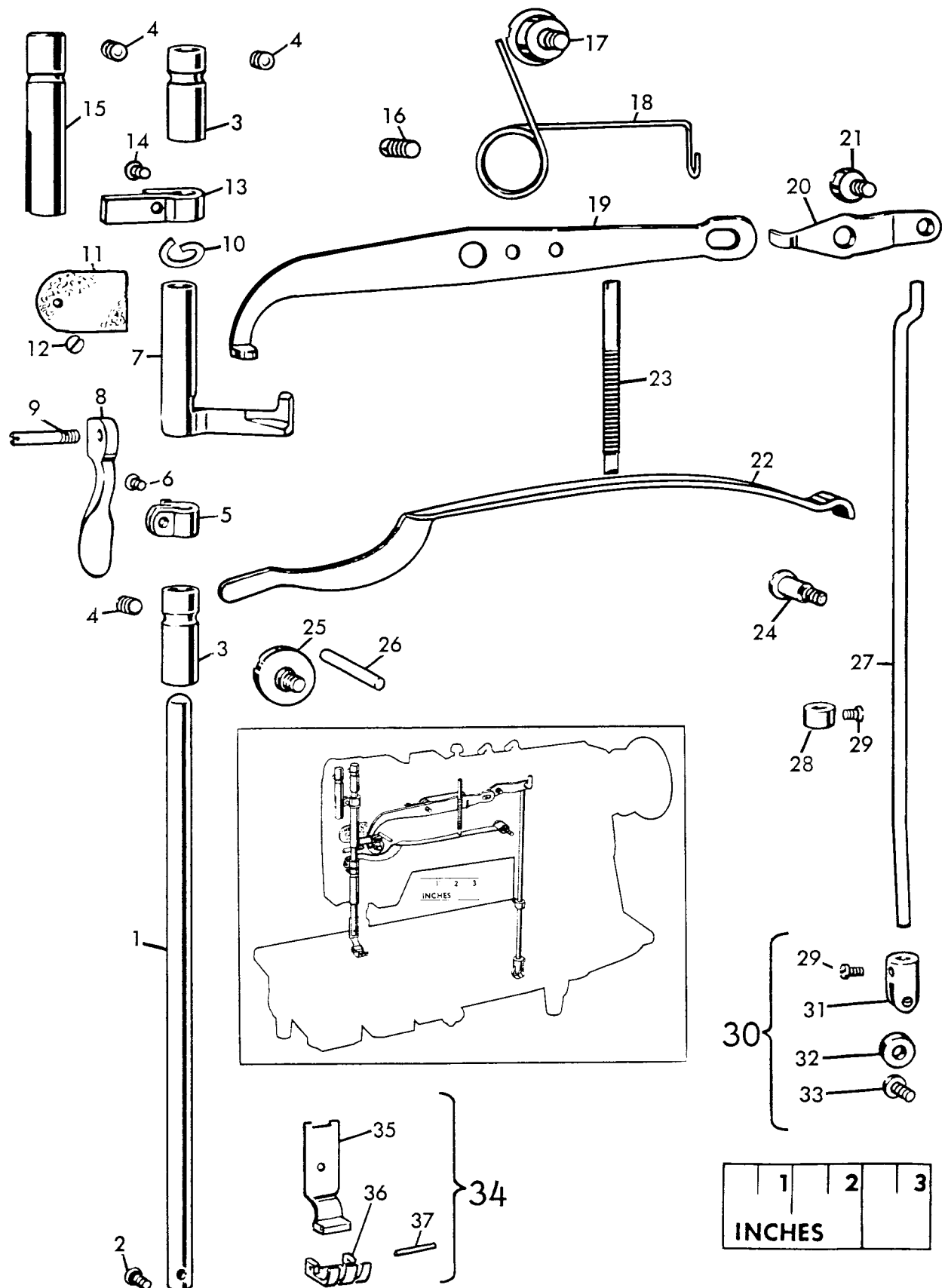
BED SLIDES, COVERS AND MISCELLANEOUS PARTS



PRESSER BAR, PRESSER FOOT AND PRESSER FOOT LIFTING ASSEMBLY

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	208566	Presser Bar with 200074F
2	200074F	Screw
3	207072	Presser Bar Bushing (2)
4	200352C	Set Screw (3)
5	210949	Spring Bracket with 200086C
6	200086C	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 200086F
14	200086F	Pinch Screw
15	202337	Position Guide
16	200738C	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	224413	Knee Lifter Connection Lever Lifting Rod Roller Bracket complete, Nos. 200270X, 224411 and 224412
31	224412	Rod Roller Bracket with 200113F
32	224411	Rod Roller
33	200270X	Hinge Screw
34	224062	Presser Foot (hinged) complete, 50 needle hole, in gauges 7/32, 1/4, 9/32 and 5/16 in., Nos. 223309, 224061 and 230795
35	223309	Shank
36	224061	Plate
37	230795	Hinge Pin

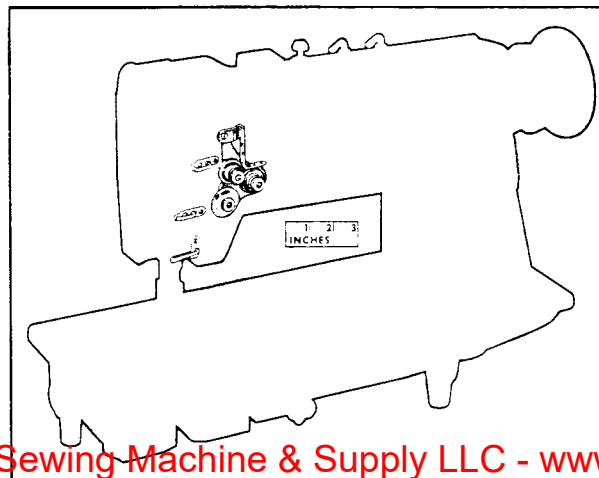
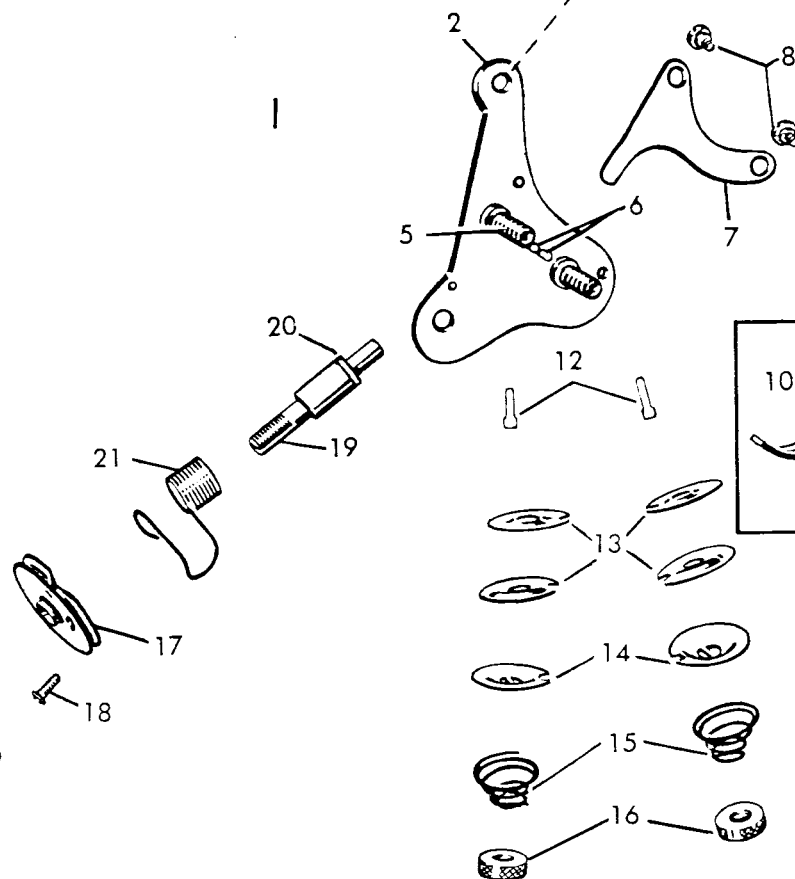
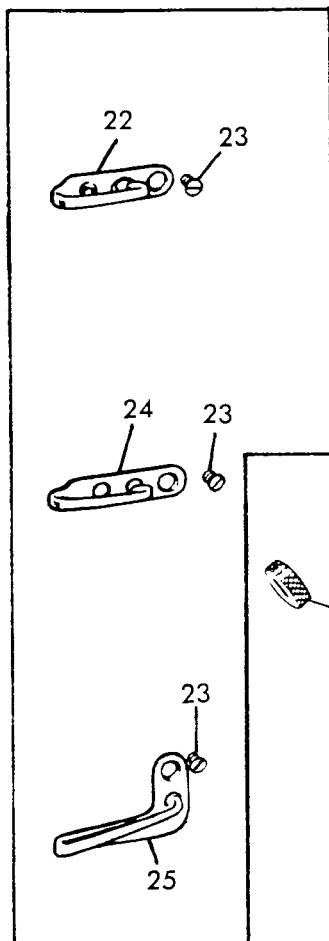
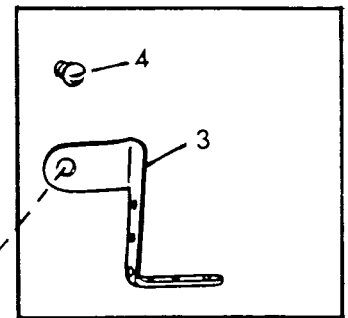
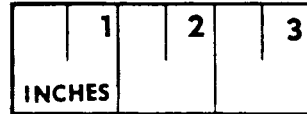
PRESSER BAR, PRESSER FOOT AND PRESSER FOOT LIFTING ASSEMBLY



TENSION COMPLETE AND THREAD GUIDES

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	223705	Tension Bracket complete, Nos. 200978X, 201199F, 223702, 223703, 223706, 237174, two each 13710, 200309E, 204271, 223704, three 201572X and four 244048
2	223702	Tension Bracket with two each 201224B and 236060
3	267288	Thread Retainer
4	200159F	Tension Bracket Screw
5	201224B	Tension Stud
6	236060	Tension Disc Position Pin
7	223703	Tension Release Lever
8	200309E	Screw
9	200337X	Thread Controller Stud Set Screw
10	241360	Thread Controller Spring Stop
11	200132E	Screw
12	223704	Tension Release Plunger
13	244048	Tension Disc
14	204271	Tension Release Washer
15	13710	Tension Spring
16	201572X	Thumb Nut
17	223706	Thread Controller Disc
18	200978X	Screw
19	201199F	Thread Controller Stud with 204925
20	204925	Washer
21	237174	Spring
22	267246	Thread Guide (upper)
23	200582X	Screw (3)
24	236007	Thread Guide (center)
25	224040	Thread Guide (lower)

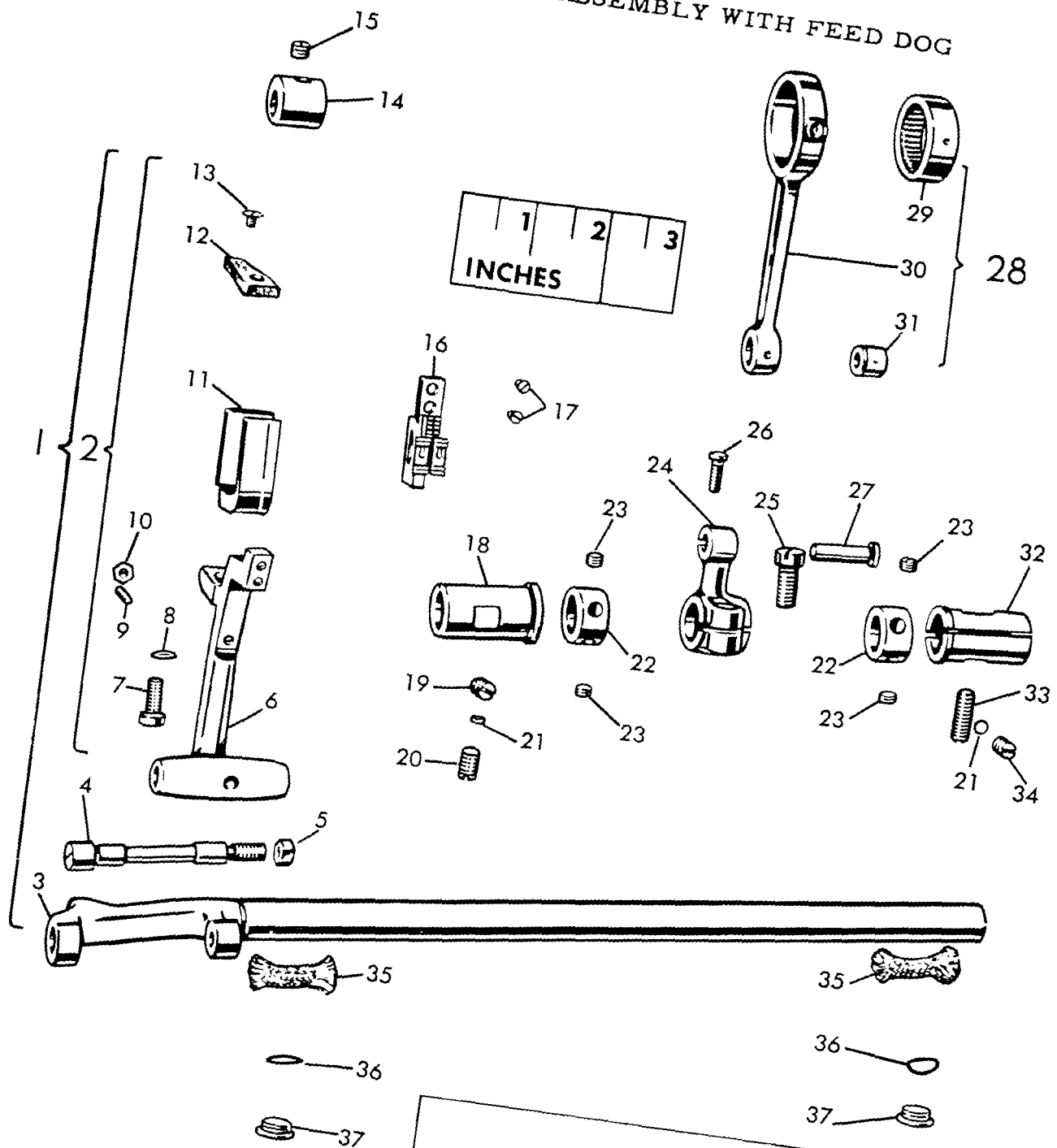
TENSION COMPLETE AND THREAD GUIDES



LOWER FEED ASSEMBLY WITH FEED DOG

<u>Ref.</u> <u>No.</u>	<u>Part</u> <u>No.</u>	<u>Description</u>
1	267275	Feed Driving Rock Shaft 223650 with 201518E, 267274 and 350393C
2	267274	Feed Bar 248406 with 200040AL, 225837 and 267273
3	223650	Rock Shaft
4	350393C	Hinge Screw (driving)
5	201518E	Nut
6	248406	Feed Bar with 200336E and 201535E
7	200040AL	Fork Screw
8	225837	Washer
9	200336E	Support Screw
10	201535E	Nut
11	267273	Eccentric Fork with 200173D and 223655
12	223655	Oiling Felt
13	200173D	Screw
14	267182	Eccentric with 201220C
15	201220C	Set Screw
16	223638	Feed Dog, 50 needle hole, in gauges 1/4 to 13/32 in., for 223884
17	200106E	Screw (2)
18	248420	Bushing (left) (split)
19	200347AL	(left) Pinch Screw
20	201007C	(left) Pinch Screw Set Screw
21	244084	Packing (fibre)
22	202625	Stop Collar with two 200383C (2)
23	200383C	Set Screw
24	267181	Crank with 200029E and 200054C
25	200029E	Pinch Screw
26	200054C	Pinch Screw
27	267034	Hinge Stud
28	267032	Connection 267031 with 268063 and 270653
29	268063	Needle Bearing
30	267031	Connection
31	270653	Needle Bearing
32	248421	Bushing (right) (split)
33	200327C	(right) Pinch Screw
34	200347AL	(right) Pinch Screw Set Screw
35	202254	Oil Wick (2)
36	243744	Gasket (2)
37	350366X	Oil Stop Screw (2)

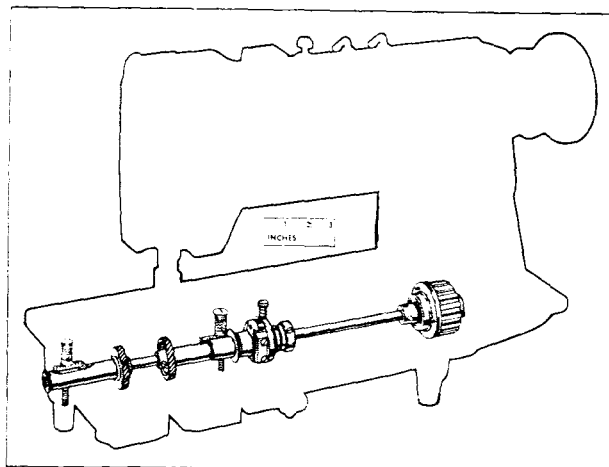
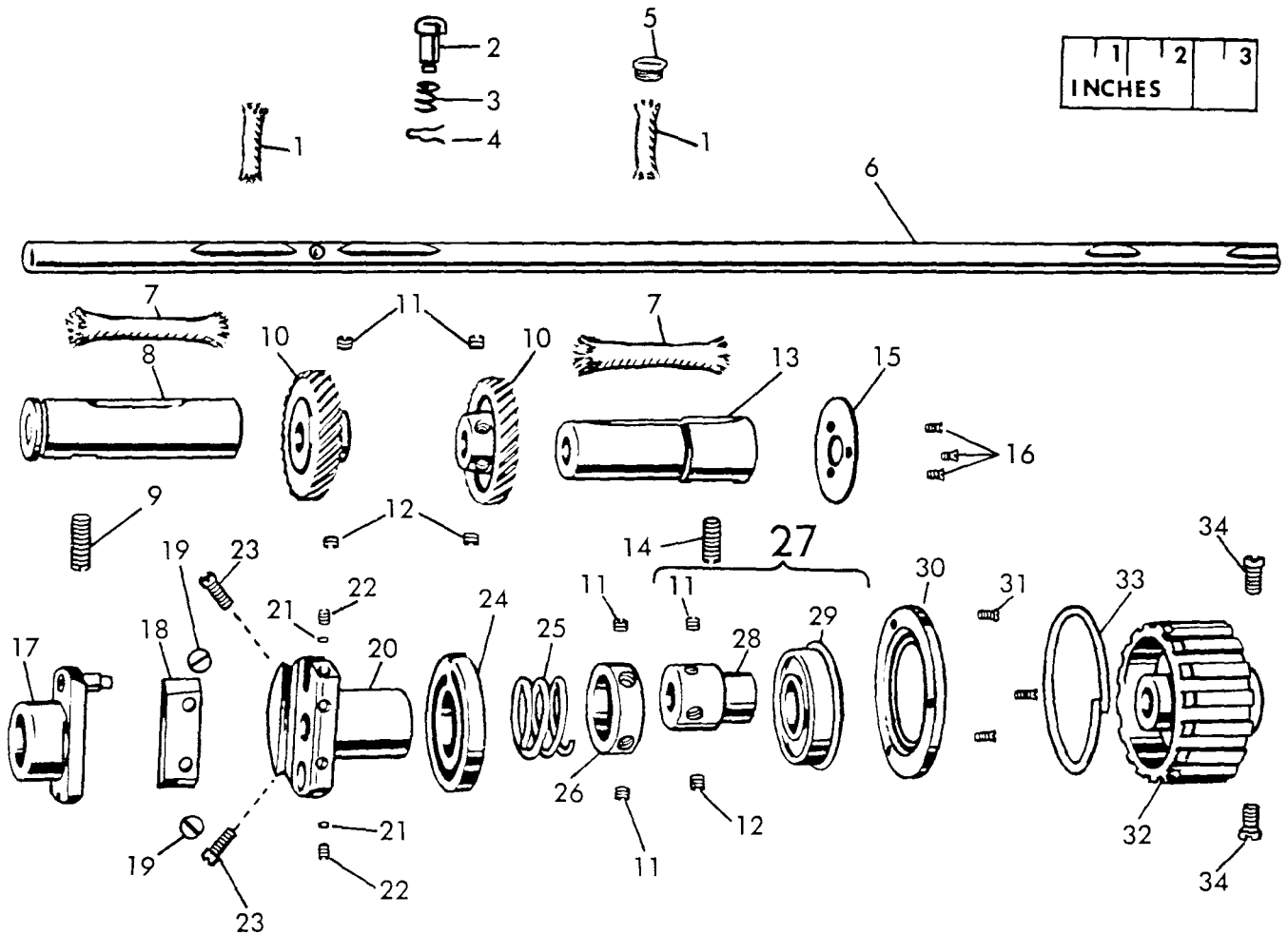
LOWER FEED ASSEMBLY WITH FEED DOG



HOOK DRIVING AND FEED DRIVING ECCENTRIC ASSEMBLY
WITH HOOK SADDLE BEARINGS

<u>Ref. No.</u>	<u>Part 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	267189	Driving Shaft
7	223847	Saddle Bearing Oil Packing (wick) (2)
8	267195	Saddle Bearing (left)
9	200327C	(left) Set Screw
10	267188	Gear (spiral) with 200382C and 201220C (2)
11	200382C	Set Screw
12	201220C	Position Screw
13	267196	Saddle Bearing (right)
14	200335C	(right) Set Screw
15	267033	Friction Washer
16	201403X	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 200382C
27	267191	Collar 267190 with 267060
28	267190	Collar with 200382C and 201220C
29	267060	Ball Bearing
30	267063	Retaining Washer
31	200580X	Screw (3)
32	267192	Belt Pulley with 202253 and two 201254C
33	202253	Spring Flange
34	201254C	Set Screw

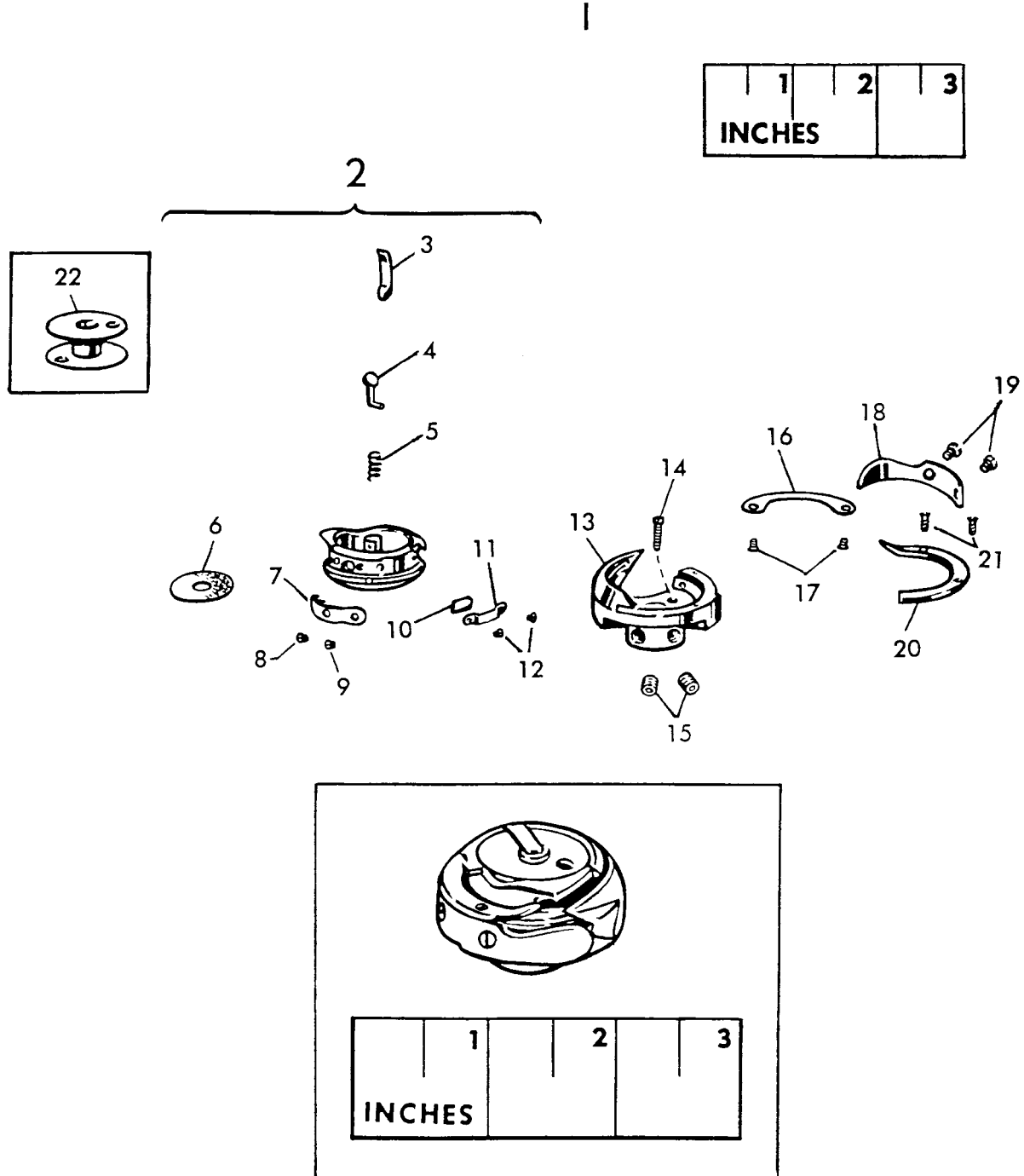
HOOK DRIVING AND FEED DRIVING ECCENTRIC ASSEMBLY WITH HOOK SADDLE BEARINGS



HOOK AND BOBBIN CASE WITH BOBBIN

<u>Ref.</u> <u>No.</u>	<u>Part</u> <u>No.</u>	<u>Description</u>
1	267357	Hook and Bobbin Case complete, Nos. 248460 and 267356
2	248460	Bobbin Case complete, Nos. 200594C, 201016C, *202056, 203216, 203473, 203474, 203648, 236083, 241674, 241675, *248459 and two 350405C
3	203648	Bobbin Case Latch
4	203473	Latch Plunger
5	203474	Latch Spring
6	203216	Washer (cloth)
7	236083	Tension Spring
8	201016C	Tension Spring Regulating Screw
9	200594C	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	203470	Bobbin (2)
	*202056	Bobbin Case Latch Pin
	*248459	Bobbin Case (chromium plated)
	*267355	Hook (sewing) with two 140434ALX

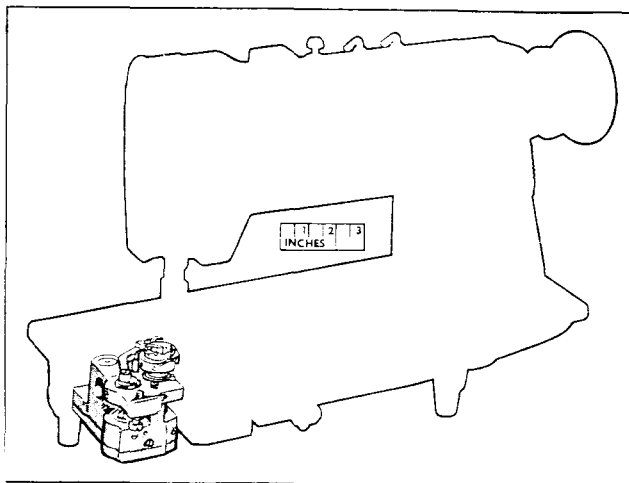
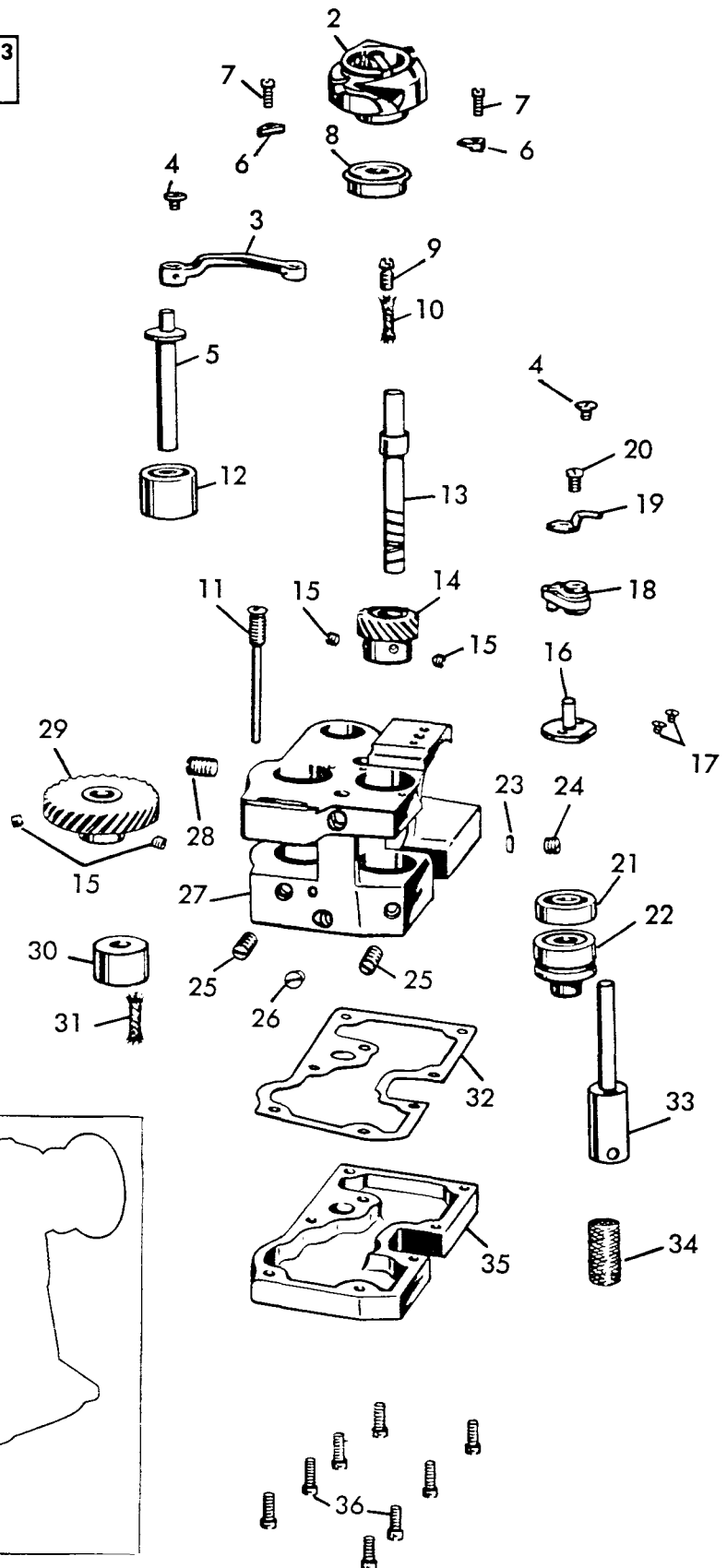
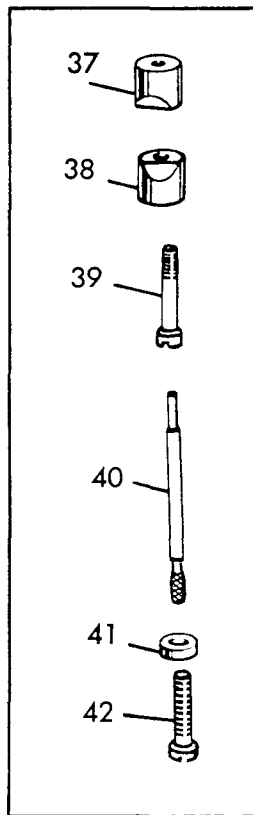
HOOK AND BOBBIN CASE WITH BOBBIN



HOOK SADDLE (LEFT) COMPLETE

<u>Ref.</u> <u>No.</u>	<u>Part</u> <u>No.</u>	<u>Description</u>
1	267291	Hook Saddle (left) complete, Nos. 200110D, 200378C, 244084, 267017, 267018, 267053, 267166, 267171, 267193, 267198, 267199, 267212, 267215, 267248, 267351, 267357, 267365, 267366, 350564E, two each 200089X, 200135C, 200143X, 267361 and eight 200061AL
2	267357	Hook and Bobbin Case complete
3	267171	Link (left)
4	200135C	Cap Screw
5	267018	Cam Shaft
6	267361	Retainer
7	200089X	Screw
8	267053	Hook Ball Bearing
9	276061	Oil Wick Holder
10	270880	Oil Wick
11	350564E	Oil Regulating Screw
12	267169	Cam Shaft Bushing (upper)
13	267215	Hook Shaft with 270880 and 276061
14	267366	Pinion (spiral) with two 350595XC
15	350595XC	Set Screw
16	267017	Hinge Bracket (left)
17	200143X	Screw
18	267166	Opener Crank
19	267351	Bobbin Case Opener
20	200110D	Screw
21	267248	Pinion Thrust Bearing
22	267367	Hook Shaft Bushing
23	244084	Check Screw Packing (fibre)
24	200378C	Oil Regulating Screw Check Screw
25	200335C	Bushing Set Screw
26	200972D	Oil Stop Screw
27	267193	Hook Saddle (left) with 200347AL, 200972D, 267168, 267169, 267367 and two 200335C
28	200347AL	Bushing (upper) Set Screw
29	267365	Cam Shaft Gear (spiral) with two 350595XC
30	267168	Cam Shaft Bushing (lower) with 206758
31	206758	Oil Packing (wick)
32	267212	Gasket
33	267198	Oil Gauge Sleeve with 267277
34	267277	Oil Strainer
35	267199	Oil Reservoir (left)
36	200061AL	Screw
37	267140	Pinch Sleeve (upper)
38	267139	Pinch Sleeve (lower)
39	200001E	Screw
40	267197	Oil Gauge
41	225585	Washer
42	200006E	Hook Saddle Screw

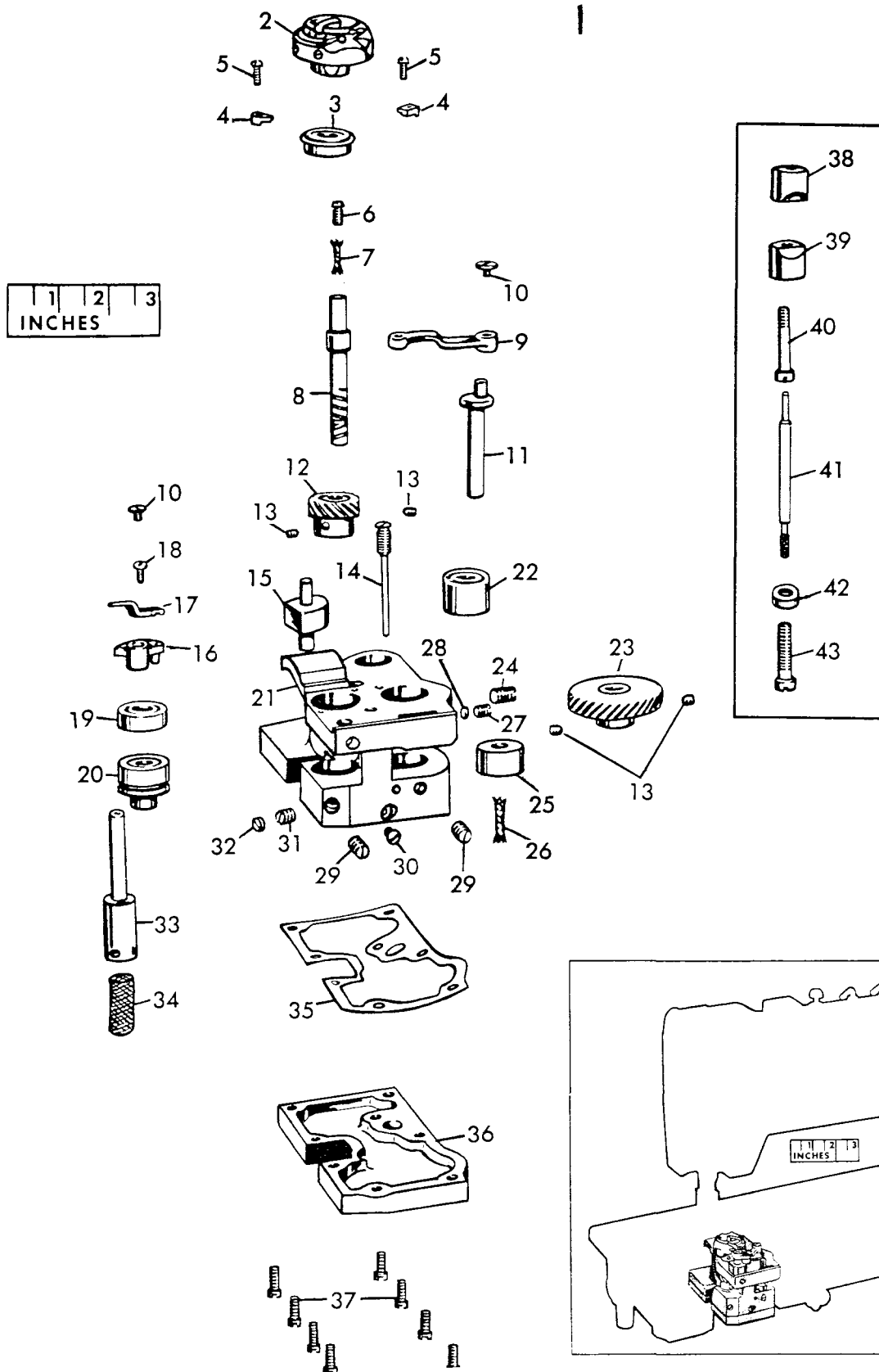
HOOK SADDLE (LEFT) COMPLETE



HOOK SADDLE (RIGHT) COMPLETE

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	267292	Hook Saddle (right) complete, Nos. 200110D, 200374AL, 200378C, 200388C, 244084, 267018, 267053, 267166, 267167, 267172, 267194, 267198, 267200, 267212, 267215, 267248, 267266, 267351, 267357, 267365, 267366, 350564E, two each 200089X, 200135C, 267361 and eight 200061AL
2	267357	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 (right)
10	200135C	Cap Screw
11	267018	Cam Shaft
12	267366	Pinion (spiral) with two 350595XC
13	350595XC	Set Screw
14	350564E	Oil Regulating Screw
15	267167	Hinge Stud (right)
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 (right) with 200347AL, 200972D, 267168, 267169, 267367 and two 200335C
22	267169	Cam Shaft Bushing (upper)
23	267365	Cam Shaft Gear (spiral) with two 350595XC
24	200347AL	Bushing (upper) Set Screw
25	267168	Cam Shaft Bushing (lower) with 206758
26	206758	Oil Packing (wick)
27	200378C	Oil Regulating Screw Check Screw
28	244084	Check Screw Packing (fibre)
29	200335C	Bushing Set Screw
30	200972D	Oil Stop Screw
31	200374AL	Hinge Stud (right) Set Screw
32	200388C	Check Screw
33	267198	Oil Gauge Sleeve with 267277
34	267277	Oil Strainer
35	267212	Gasket
36	267200	Oil Reservoir (right)
37	200061AL	Screw
38	267140	Pinch Sleeve (upper)
39	267139	Pinch Sleeve (lower)
40	200001E	Screw
41	267197	Oil Gauge
42	225585	Washer
43	200006E	Hook Saddle Screw

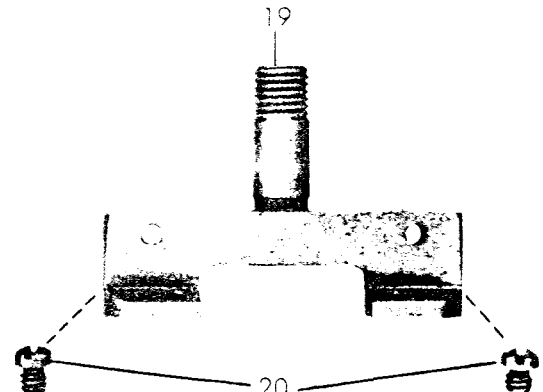
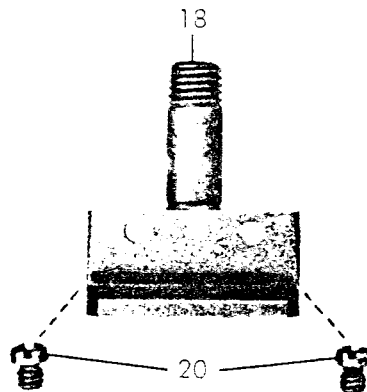
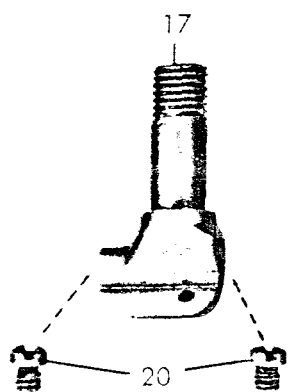
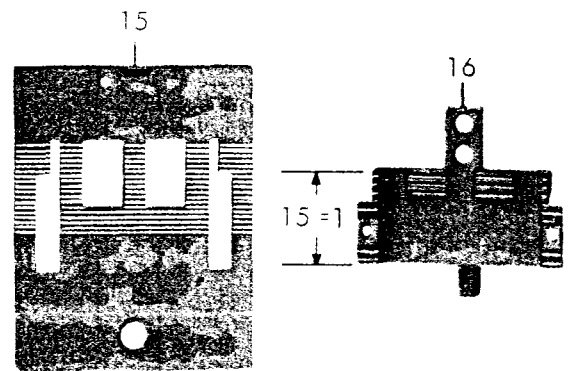
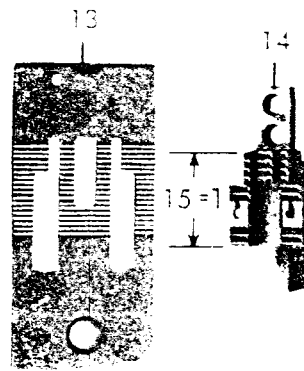
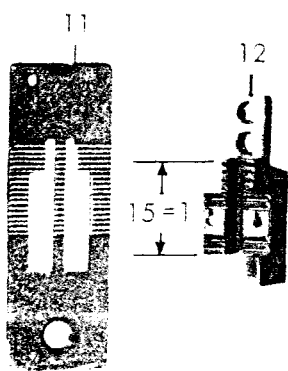
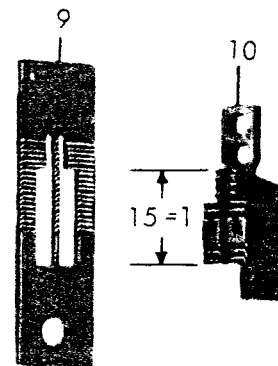
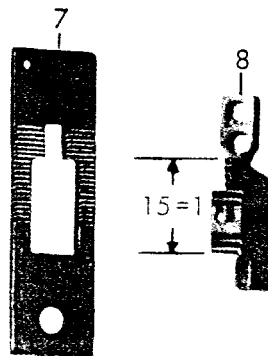
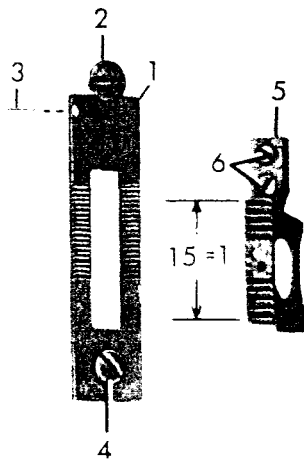
HOOK SADDLE (RIGHT) COMPLETE



FEED DOGS, NEEDLE HOLDERS AND THROAT PLATES

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	224059	Throat Plate, in gauges 1/32, 3/64 and 1/16 inch
2	200161D	Clamp Screw
3	203376	Position Pin
4	691F	Screw
5	224058	Feed Dog, 50 needle hole, needles 1/8 in. apart, in gauges 1/32, 3/64 and 1/16 in., for 224059
6	200106E	Screw (2)
7	224030	Throat Plate, in gauges 3/32 to 5/32 inch
8	223637	Feed Dog, 50 needle hole, in gauges 3/32 to 5/32 inch, for 224030
9	224031	Throat Plate, in gauges 3/16 and 7/32 inch
10	223639	Feed Dog, 50 needle hole, in gauges 3/16 and 7/32 in., for 224031
11	223884	Throat Plate, in gauges 1/4 to 13/32 inch
12	223638	Feed Dog, 50 needle hole, in gauges 1/4 to 13/32 in., for 223884
13	224033	Throat Plate, in gauges 7/16 to 31/32 inch
14	223634	Feed Dog, 50 needle hole, in gauges 7/16 to 31/32 in., for 224033
15	224035	Throat Plate, in gauges 1 to 1-1/2 inch
16	223641	Feed Dog, 50 needle hole, in gauges 1 to 1-1/2 in., for 224035
17	267268	Needle Holder, needles 1/8 in. apart and must be set diagonally, in gauges 1/32, 3/64 and 1/16 in., with two 200141F
17	267269	Needle Holder, in gauges 3/32 to 15/32 in., with two 200141F
18	267270	Needle Holder, in gauges 1/2 to 3/4 in., with two 200141F
19	267271	Needle Holder, in gauges 25/32 to 1-1/2 in., with two 200141F
20	200141F	Needle Set Screw

FEED DOGS, NEEDLE HOLDERS AND THROAT PLATES

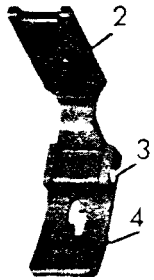


PRESSER FEET

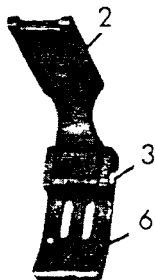
Ref. No.	Part No.	Description
1	224127	Presser Foot (hinged) complete, 50 needle hole, needles 1/8 in. apart in gauges 1/32, 3/64 and 1/16 in., Nos. 223309, 224126 and 230795
2	223309	Shank
3	230795	Hinge Pin
4	224126	Plate
5	224158	Presser Foot (hinged) complete, 50 needle hole, in gauges 3/32 and 1/8 in., Nos. 223309, 224157 and 230795
6	224157	Plate
7	223799	Presser Foot (hinged) complete, 50 needle hole, in gauges 5/32 and 3/16 in., Nos. 223309, 223798 and 230795
8	223798	Plate
9	224062	Presser Foot (hinged) complete, 50 needle hole, in gauges 7/32 to 5/16 in., Nos. 223309, 224061 and 230795
10	224061	Plate
11	224080	Presser Foot (hinged) complete, 50 needle hole, in gauges 11/32 to 7/16 in., Nos. 223309, 224079 and 230795
12	224079	Plate
13	224082	Presser Foot (hinged) complete, 50 needle hole, in gauges 15/32 to 9/16 in., Nos. 223309, 224081 and 230795
14	224081	Plate
15	224084	Presser Foot (hinged) complete, 50 needle hole, in gauges 19/32 and 5/8 in., Nos. 223309, 224083 and 230795
16	224083	Plate
17	223771	Presser Foot (hinged) complete, 50 needle hole, in gauges 21/32 to 3/4 in., Nos. 223309, 223770 and 230795
18	223770	Plate
19	224133	Presser Foot (hinged) complete, 50 needle hole, in gauges 25/32 to 15/16 in., Nos. 223309, 224132 and 230795
20	224132	Plate
21	224068	Presser Foot (hinged) complete, 50 needle hole, in gauges 31/32 to 1-1/16 in., Nos. 223309, 224067 and 230795
22	224067	Plate
23	224086	Presser Foot (hinged) complete, 50 needle hole, in gauges 1-3/32 to 1-3/16 in., Nos. 223309, 224085 and 230795
24	224085	Plate
25	224088	Presser Foot (hinged) complete, 50 needle hole, in gauges 1-7/32 to 1-7/16 in., Nos. 223309, 224087 and 230795
26	224087	Plate
27	224078	Presser Foot (hinged) complete, 50 needle hole, in gauges 1-15/32 and 1-1/2 in., Nos. 223309, 224077 and 230795
28	224077	Plate

PRESSER FEET

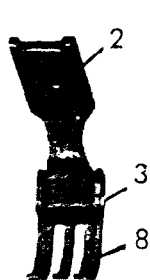
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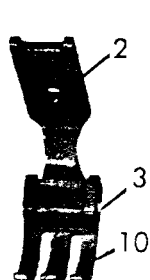
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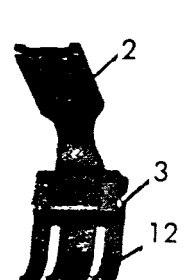
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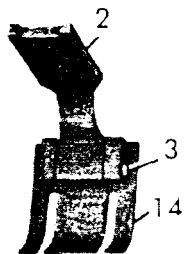
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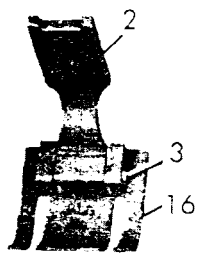
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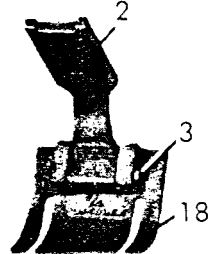
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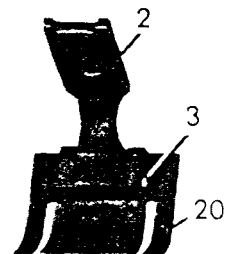
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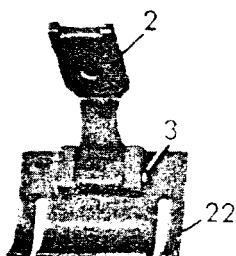
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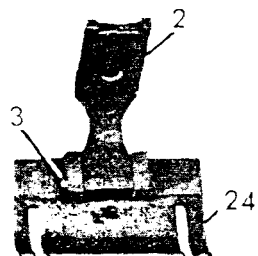
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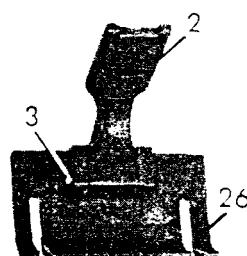
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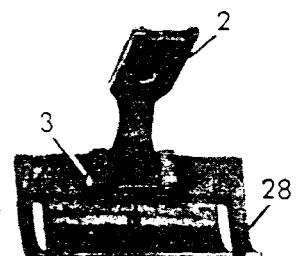
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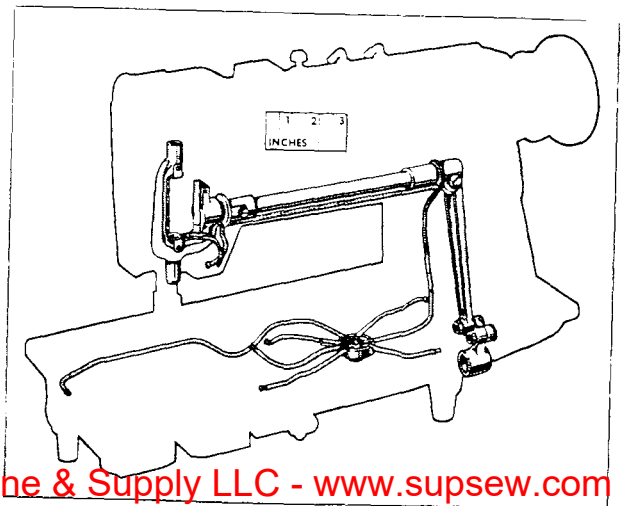
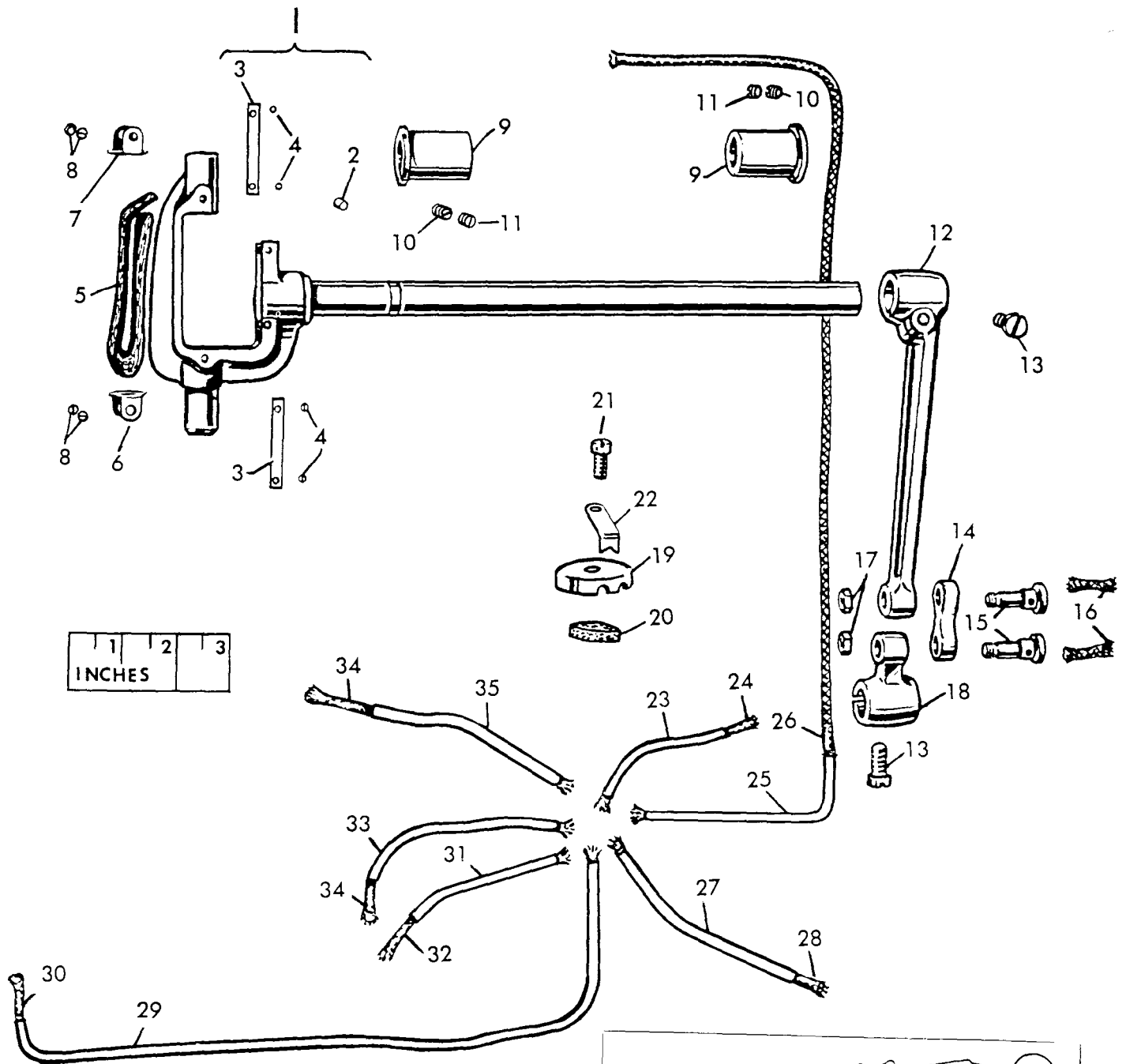
27



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

<u>Ref.</u> <u>No.</u>	<u>Part</u> <u>No.</u>	<u>Description</u>
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	200358C	Set Screw (2)
11	200383C	Set Screw Check Screw (2)
12	267229	Connection with 200029C
13	200029C	Pinch Screw
14	267230	Link
15	350566C	Hinge Screw with 202277 (2)
16	202277	Packing (wick)
17	201517E	Nut (2)
18	267228	Rock Shaft Crank with 200029C
19	267254	Bed Oil Tube Clamp
20	267276	Clamp Oiling Felt
21	200034C	Screw
22	267293	Feed Driving Eccentric Connection Oil Tube Support
23	267257	Feed Driving Rock Shaft Bushing (right) Oil Tube with 267263
24	267263	Wick
25	267253	Bed Oil Supply Tube with 267260
26	267260	Oil Wick
27	267290	Hook Driving Shaft Ball Bearing Oil Tube with 243743
28	243743	Wick
29	267258	Hook Saddle Bearing (left) Oil Tube with 267264
30	267264	Wick
31	267255	Feed Driving Eccentric Connection Oil Tube with 267261
32	267261	Wick
33	267259	Hook Saddle Bearing (right) Oil Tube with 267262
34	267262	Wick
35	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

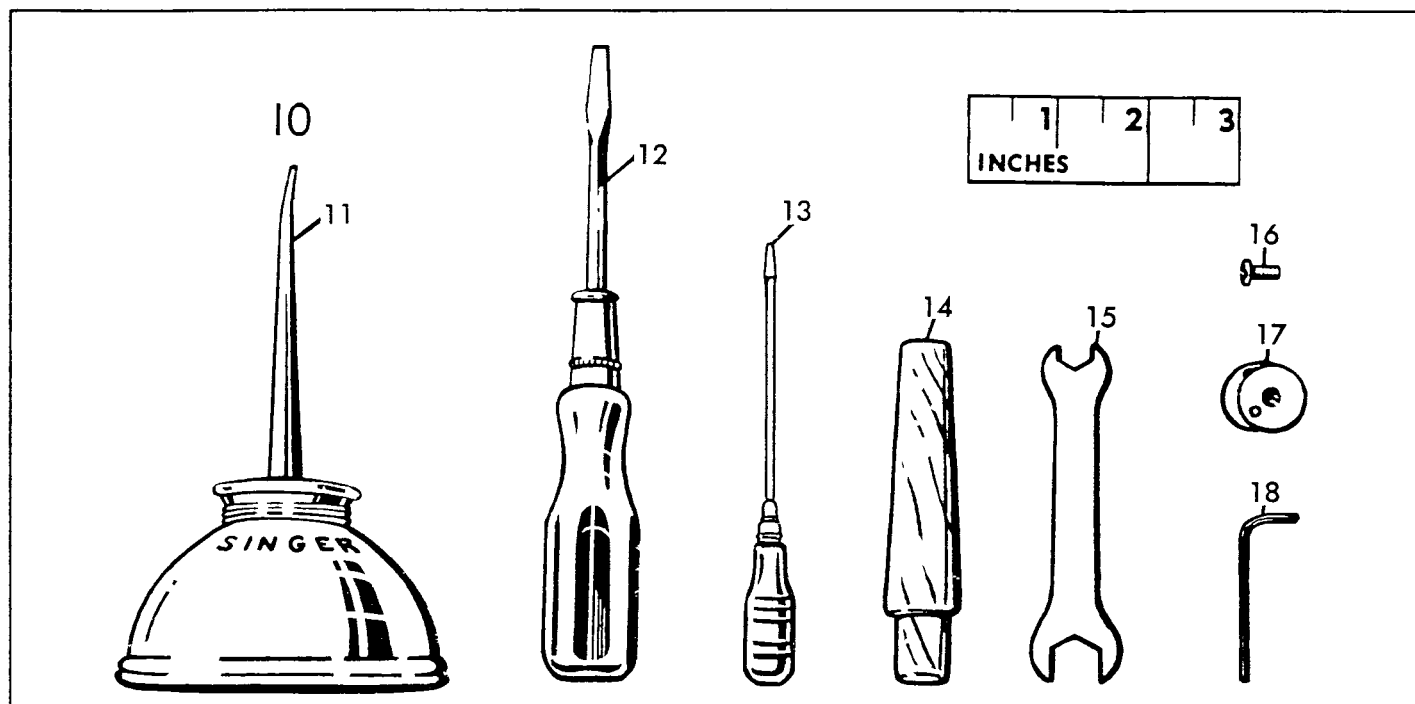
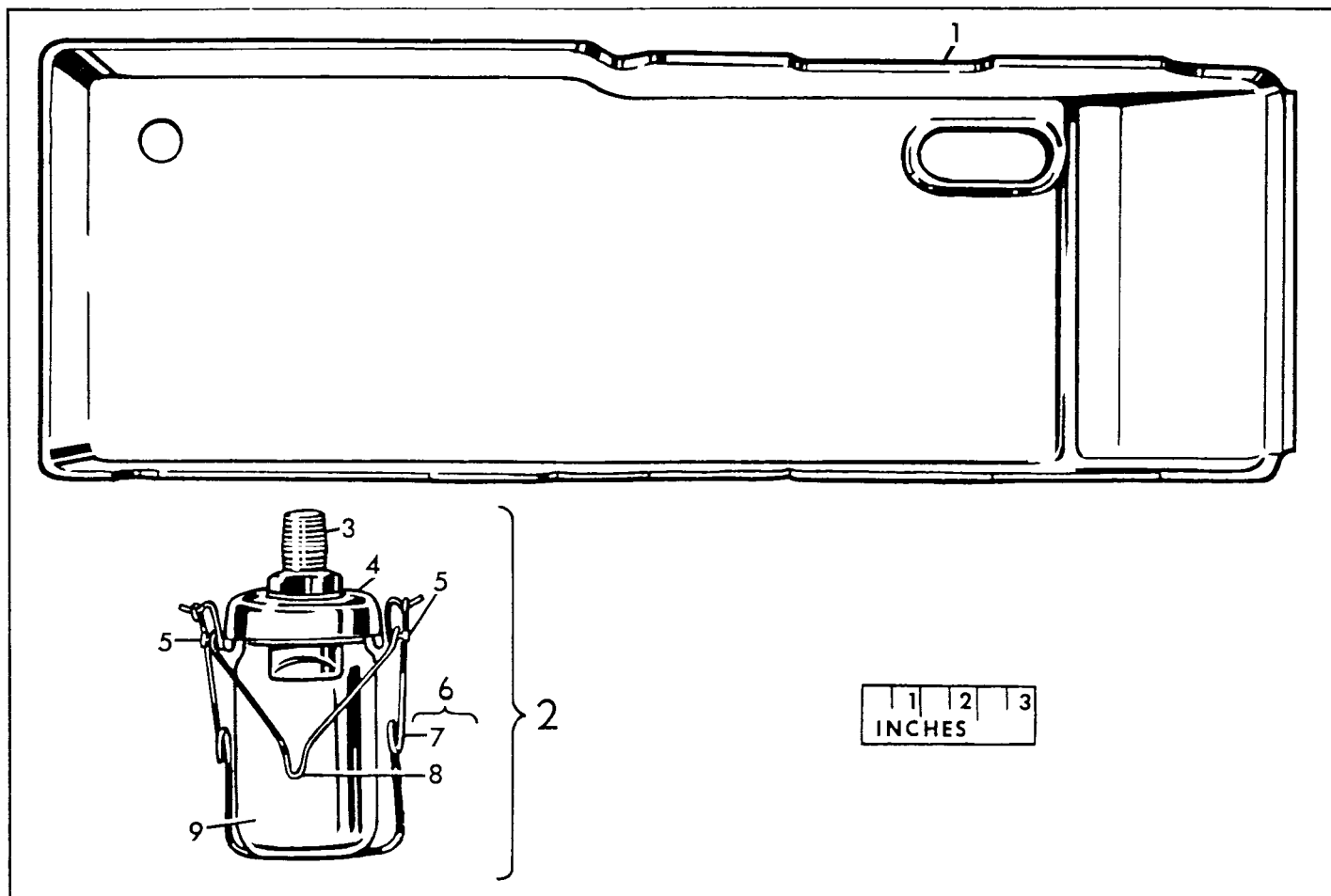
NEEDLE BAR ROCK FRAME, NEEDLE BAR ROCK FRAME ROCK SHAFT AND LUBRICATING WICKS



ACCESSORIES

<u>Ref.</u> <u>No.</u>	<u>Part</u> <u>No.</u>	<u>Description</u>
1	228736	Drip Pan with four 3/4 in. wire nails
2	228452	Machine Base Oil Drain Jar complete, Nos. 131217, 131266, 131961, 131962 and two 1247C
3	131266	Nipple
4	131962	Cap
5	1247C	Clamp Screw
6	131217	Clamp 131188 with 131189
7	131188	Clamp
8	131189	Clamp Lever
9	131961	Jar (glass)
10	120342	Oiler (copper plated) with 120343
11	120343	Spout
12	225498	Screw Driver
13	228476	Screw Driver (Bobbin Case)
14	41400	Machine Rest Pin (wood)
15	225554	Wrench
16	200157E	Attachment Screw
17	203470	Bobbin (4)
18	267242	Wrench (3/32 in. Hex.)
	135x1	Needles (twelve) No. 14
	3113W	Instruction Book

ACCESSORIES



ACCESSORIES

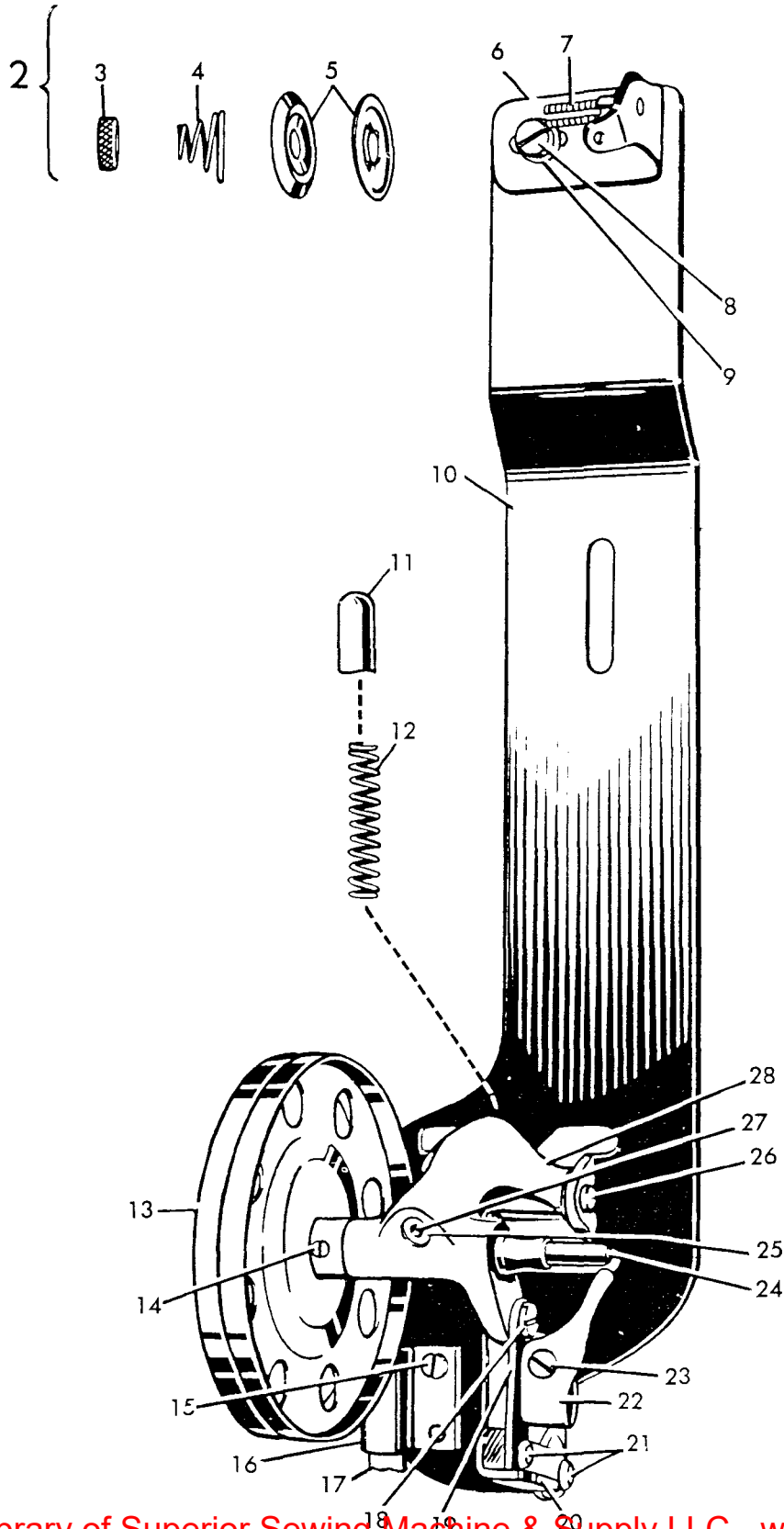
BOBBIN WINDER (SWINGING AUTOMATIC, RIGHT HAND)
FOR "V" BELT DRIVE

<u>Ref.</u> <u>No.</u>	<u>Part</u> <u>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, 259461, 259662, 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	259461	Pulley with 200380C
14	200380C	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	202277	Oil Packing (wick)
28	225453	Frame with 202277 and 259660

ACCESSORIES

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

1

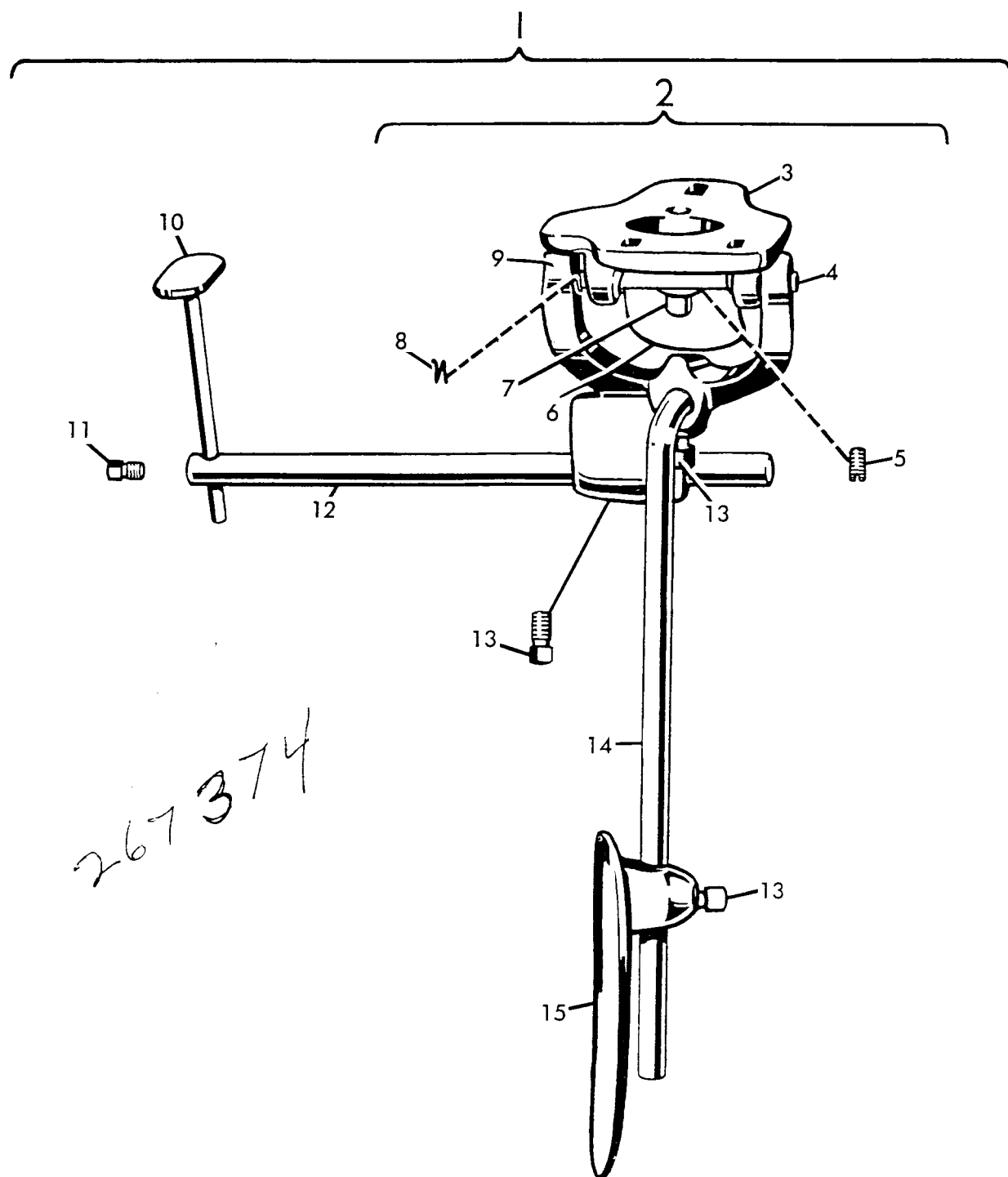


ACCESSORIES

KNEE LIFTER

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	228754	Knee Lifter Rock Lever complete, Nos. 228318, 228364, 228365, 228370 and 228751
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	228370	Extension with 200530C
13	350231C	Set Screw
14	228318	Knee Plate Arm
15	228364	Knee Plate with 350231C

ACCESSORIES
KNEE LIFTER



ACCESSORIES

THREAD UNWINDER

FOR THREE SPOOLS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	259143	Thread Unwinder (for three spools) complete, Nos. 201696X, 225257, 225259, 225324, 225326, 225388, 259658, three each 150203, 225391 and wood screws 7/8 in., No. 12
2	225324	Rod with 208AL and 225322
3	201696X	Lock Nut
4	225391	Thread Guide
5	225322	Rod Washer
6	225326	Position Cup
7	208AL	Screw
8	228692	Spool Pin
9	228693	Washer
10	201528X	Nut
11	150203	Spool Rest Cushion (felt)
12	225257	Spool Rest (for two spools) (flat) with 201018C, two each 201528X, 228692 and 228693
13	201018C	Set Screw
14	225388	Spool Rest Rod
15	225259	Spool Rest (for one spool) (flat) with 201018C, 201528X, 228692 and 228693
16	200383C	Set Screw
17	259658	Spool Stand with 200383C

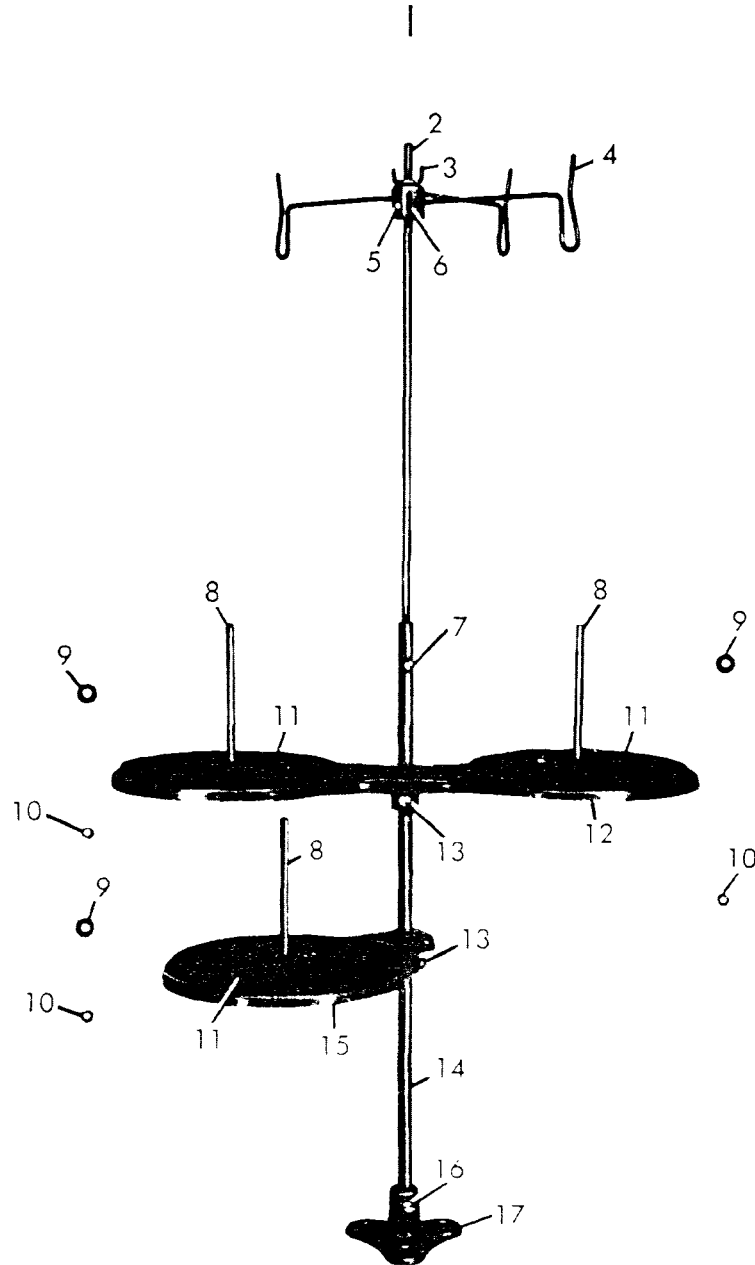
MISCELLANEOUS PARTS

USED IN CONJUNCTION WITH THREAD UNWINDER

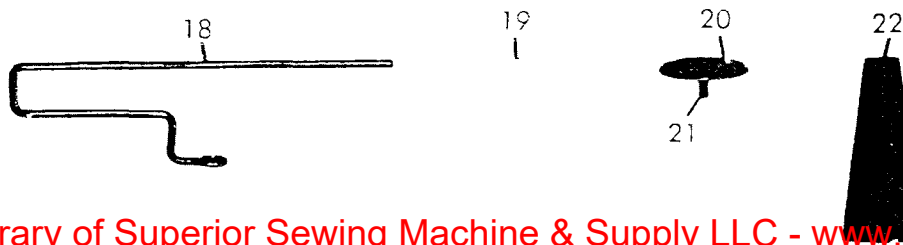
18	225377	Spool Wire (for small spools)
19	225390	Thread Cone Holder
20	60913	Spool Weight with 60914
21	60914	Center Pin
22	27739	Thread Cone (wood)

ACCESSORIES

THREAD UNWINDER FOR THREE SPOOLS



MISCELLANEOUS PARTS USED IN CONJUNCTION WITH THREAD UNWINDER



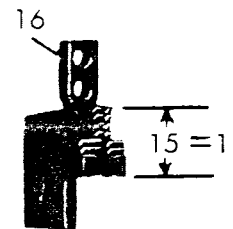
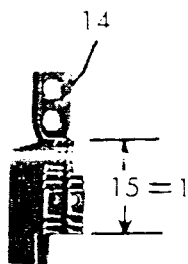
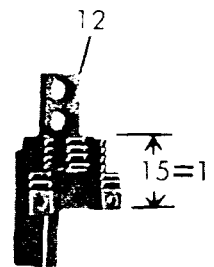
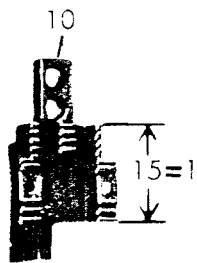
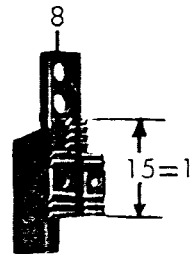
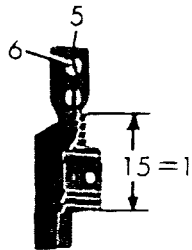
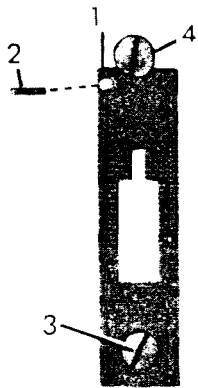
FITTINGS

FEED DOGS AND THROAT PLATES

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	224030	Throat Plate, in gauges 3/32 to 7/32 inch
2	203376	Position Pin
3	691F	Screw
4	200161D	Clamp Screw
	Nos. 223629, 223630, 223637 and 223889, for 224030	
5	223629	Feed Dog, 46 needle hole, in gauges 1/8 to 7/32 inch
5	223630	Feed Dog, 40 needle hole, in gauges 1/8 to 7/32 inch
5	223637	Feed Dog, 50 needle hole, in gauges 3/32 to 7/32 inch
5	223889	Feed Dog, 53 needle hole, in gauges 3/32 to 3/16 inch
6	200106E	Screw (2)
7	223884	Throat Plate, in gauges 1/4 to 13/32 inch
	Nos. 223628, 223631, 223638 and 223890, for 223884	
8	223628	Feed Dog, 46 needle hole, in gauges 1/4 to 3/8 inch
8	223631	Feed Dog, 40 needle hole, in gauges 1/4 to 13/32 inch
8	223638	Feed Dog, 50 needle hole, in gauges 1/4 to 13/32 inch
8	223890	Feed Dog, 53 needle hole, in gauges 1/4 to 3/8 inch
9	224033	Throat Plate, in gauges 7/16 to 31/32 inch
	Nos. 223632 to 223634 and 223891, for 224033	
10	223632	Feed Dog, 46 needle hole, in gauges 7/16 to 31/32 inch
10	223633	Feed Dog, 40 needle hole, in gauges 7/16 to 31/32 inch
10	223634	Feed Dog, 50 needle hole, in gauges 7/16 to 31/32 inch
10	223891	Feed Dog, 53 needle hole, in gauges 1/2 to 7/8 inch
11	224037	Throat Plate, in gauges 7/16 to 27/32 inch
	Nos. 224010 and 224011, for 224037	
12	224010	Feed Dog, 50 needle hole, in gauges 7/16 to 3/4 inch
12	224011	Feed Dog, 46 needle hole, in gauges 7/16 to 27/32 inch
13	224031	Throat Plate, in gauges 3/16 and 7/32 inch
	Nos. 223639, 223642 and 224007, for 224031	
14	223642	Feed Dog, 46 needle hole, in gauges 3/16 and 7/32 inch
14	223639	Feed Dog, 50 needle hole, in gauges 3/16 and 7/32 inch
14	224007	Feed Dog, 53 needle hole, in gauges 3/16 and 7/32 inch
15	224036	Throat Plate, in gauges 1/4 to 13/32 inch
	Nos. 224009 and 224057, for 224036	
16	224009	Feed Dog, 46 needle hole, in gauges 1/4 to 13/32 inch
16	224057	Feed Dog, 50 needle hole, in gauges 1/4, 5/16 and 3/8 inch

FITTINGS

FEED DOGS AND THROAT PLATES



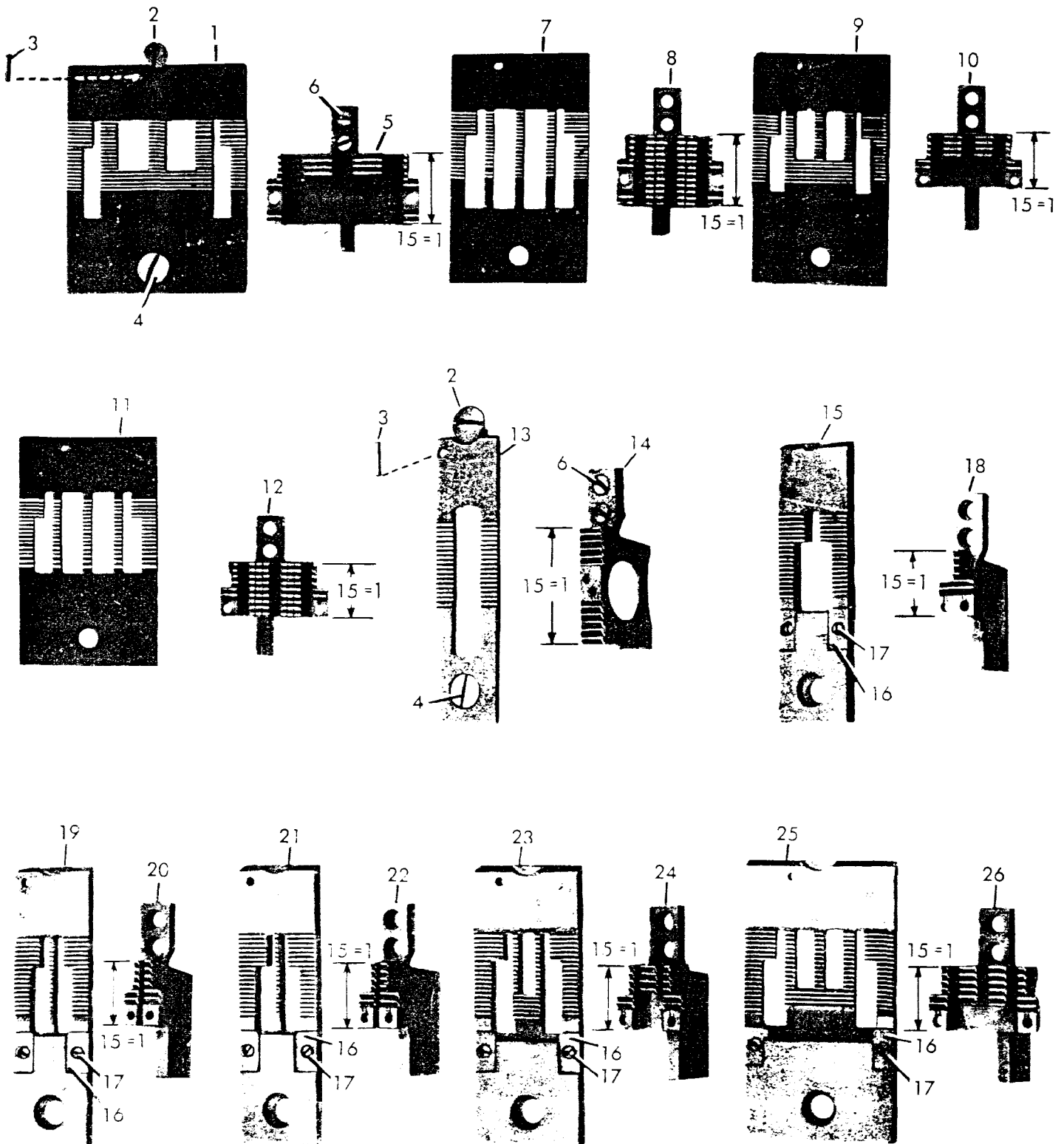
FITTINGS

FEED DOGS AND THROAT PLATES

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	224035	Throat Plate, in gauges 1 to 1-1/2 inch
2	200161D	Clamp Screw
3	203376	Position Pin
4	691F	Screw
	Nos. 223635, 223636 and 223641, for 224035	
5	223635	Feed Dog, 46 needle hole, in gauges 1 to 1-1/2 inch
5	223636	Feed Dog, 40 needle hole, in gauges 1 to 1-1/2 inch
5	223641	Feed Dog, 50 needle hole, in gauges 1 to 1-1/2 inch
6	200106E	Screw (2)
7	224029	Throat Plate, in gauges 1 to 1-1/2 inch
	Nos. 224006, 224012 and 224013, for 224029	
8	224006	Feed Dog, 40 needle hole, in gauges 1 to 1-1/2 inch
8	224012	Feed Dog, 50 needle hole, in gauges 1 to 1-1/2 inch
8	224013	Feed Dog, 46 needle hole, in gauges 1 to 1-1/2 inch
9	224032	Throat Plate, in gauges 7/8 to 1-1/2 inch
10	223640	Feed Dog, 46 needle hole, in gauges 7/8 to 1-1/2 inch, for 224032
11	224034	Throat Plate, in gauges 1 to 1-1/2 inch
12	224008	Feed Dog, 40 needle hole, in gauges 1 to 1-1/2 in., for 224034
13	224059	Throat Plate, in gauges 1/32, 3/64 and 1/16 inch
14	224058	Feed Dog, 50 needle hole, in gauges 1/32, 3/64 and 1/16 in., for 224059
15	224038	Throat Plate with two each 201132D and 237318, in gauges 1/8 to 7/32 inch
16	237318	Edge Guide
17	201132D	Screw
18	224014	Feed Dog, 46 needle hole, in gauges 1/8 to 3/16 in., for 224038
19	224039	Throat Plate with two each 201132D and 237318, in gauges 3/16 and 7/32 inch
20	224015	Feed Dog, 50 needle hole, in gauges 3/16 and 7/32 in., for 224039
21	224053	Throat Plate with two each 201132D and 237318, in gauges 1/4 to 13/32 inch
22	224009	Feed Dog, 46 needle hole, in gauges 1/4 to 13/32 in., for 224053
23	224054	Throat Plate with two each 201132D and 237318, in gauges 7/16 to 27/32 inch
	Nos. 224010 and 224011, for 224054	
24	224010	Feed Dog, 50 needle hole, in gauges 7/16 to 3/4 inch
24	224011	Feed Dog, 46 needle hole, in gauges 7/16 to 27/32 inch
25	224056	Throat Plate with two each 201132D and 237318, in gauges 7/8 to 1-3/8 inch
26	224055	Feed Dog, 46 needle hole, in gauges 7/8 to 1-3/8 in., for 224056

FITTINGS

FEED DOGS AND THROAT PLATES



FITTINGS

FOOT LIFTER AND MACHINE PULLEYS
MACHINE PULLEYS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	267175	Machine Pulley 267174 with 270004
2	267174	Machine Pulley for "V" belt (outside diam. of belt groove 2.9 in.) (rim diam. 4 in.) with 350540C and 350541C
3	350541C	Set Screw
4	350540C	Position Screw
5	270004	Arm Shaft Ball Bearing (back)
6	267283	Machine Pulley 267282 with 270004
7	267282	Machine Pulley (aluminum alloy casting) for "V" belt (outside diam. of belt groove 2.9 in.) (rim diam. 4 in.) (inside belt groove) with 350540C and 350541C

FOOT LIFTER

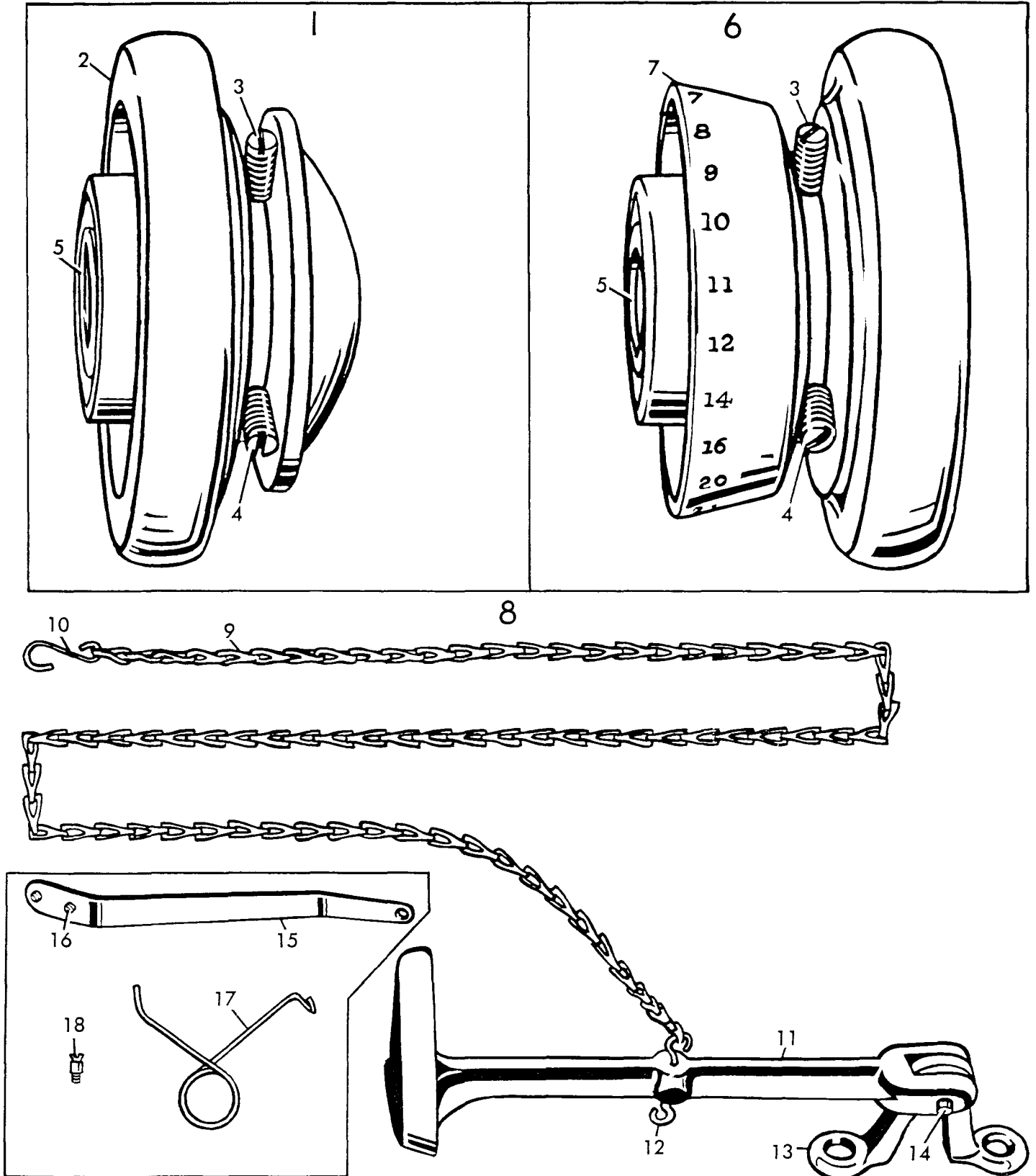
8	227955	Foot Lifter Lever complete, Nos. 225016, 227678, 227939 and 227952
9	227678	Chain, 48 in. long, with 202784
10	202784	Chain Hook (upper)
11	227952	Lever with 227954
12	227954	Chain Hook (lower)
13	227939	Stand with two wood screws 1 in., No. 12
14	225016	Hinge Pin

PARTS REQUIRED FOR CHANGING FROM
KNEE LIFTER TO FOOT LIFTER

15	223733	Lever Extension
16	200082D	Screw (2)
17	227561	Spring
18	200835D	Spring Stop Screw

FITTINGS

FOOT LIFTER AND MACHINE PULLEYS

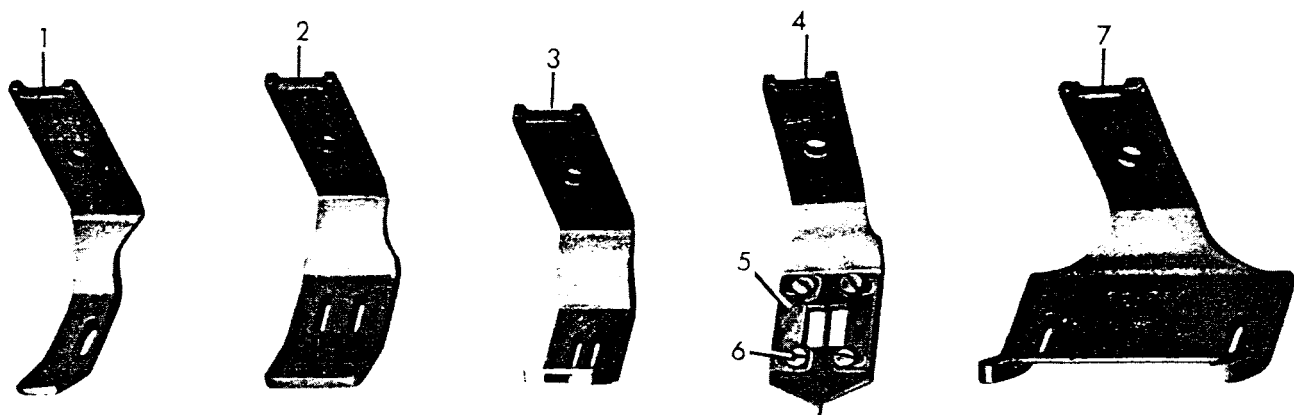


FITTINGS

PRESSER FEET

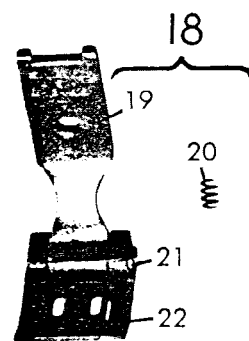
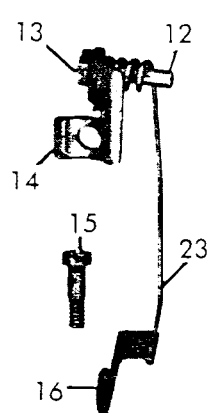
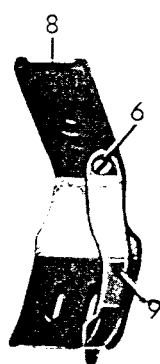
Ref. No.	Part No.	Description
1	224060	Presser Foot, for 1/32 in. gauge, needles 1/8 in. apart
2	224166	Presser Foot, 50 needle hole, in gauges 1/8 to 1/2 inch
3	224185	Presser Foot, 50 needle hole, in gauges 1/8 to 5/16 inch, for strip work
4	224176	Presser Foot, adjustable from 3/32 to 7/32 in., with two 224175 and four 200172X, for inside staying
5	224175	Needle Guide
6	200172X	Screw
7	224170	Presser Foot, 46 needle hole, in gauges 1/2, 3/4 and 1-11/16 in., for strip work
8	224165	Presser Foot, 53 needle hole, in gauges 1/8 to 1/2 in., with 200172X and 229541
9	229541	Spring Guide, in gauges 1/8 to 1/2 inch
10	248458	Presser Foot with Spring Guide complete, in gauges 3/16 to 1/4 in., Nos. 201031F, 248453, 248457 and 248508
11	248457	Presser Foot, 53 needle hole, in gauges 3/16 to 1/4 inch
12	350422X	Spring Guide Screw Stud
13	201535E	Nut
14	248453	Spring Guide Bracket with 201535E and 350422X
15	201031F	Presser Foot Screw
16	248508	Spring Guide
17	248454	Presser Foot (hinged) with Spring Guide complete, in gauges 3/16 to 1/4 in., Nos. 201031F and 248451 to 248453
18	248451	Presser Foot (hinged) complete, 53 needle hole, in gauges 3/16 to 1/4 in., Nos. 226080, 230795, 248450 and 248455
19	248455	Shank
20	226080	Spring
21	230795	Hinge Pin
22	248450	Plate
23	248452	Spring Guide
24	223695	Presser Foot (hinged) complete, 50 needle hole, in gauges 1/8 to 5/16 in., Nos. 223309, 223694 and 230795, for lap seam felling
24	224156	Presser Foot (hinged) complete, 53 needle hole, in gauges 1/8 to 5/16 in., Nos. 223309, 224155 and 230795, for lap seam felling
25	223309	Shank
26	223694	Plate
26	224155	Plate
27	223755	Presser Foot (hinged) complete, 50 needle hole, in gauges 11/32 to 7/16 in., Nos. 223309, 223754 and 230795, for lap seam felling
28	223754	Plate
29	224064	Presser Foot (hinged) complete, 50 needle hole, in gauges 15/32 to 5/8 in., Nos. 223309, 224063 and 230795, for lap seam felling
30	224063	Plate
31	224070	Presser Foot (hinged) complete, 50 needle hole, in gauges 21/32 to 3/4 in., Nos. 223309, 224069 and 230795, for lap seam felling
32	224069	Plate

55
FITTINGS
PRESSER FEET

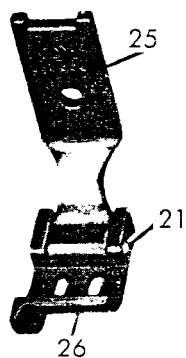


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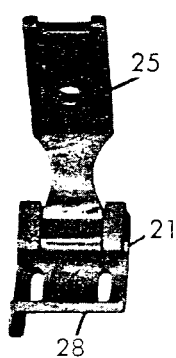
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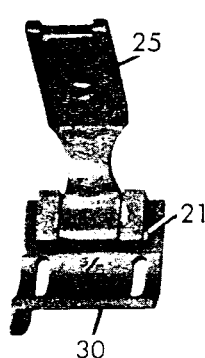
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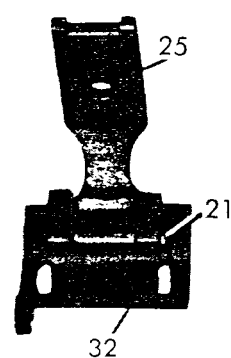
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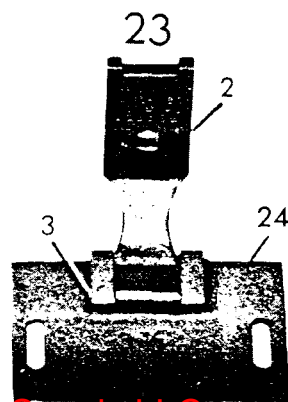
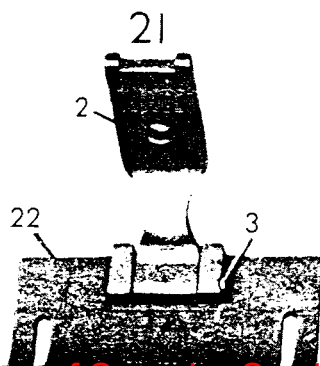
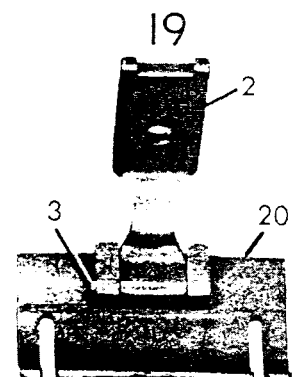
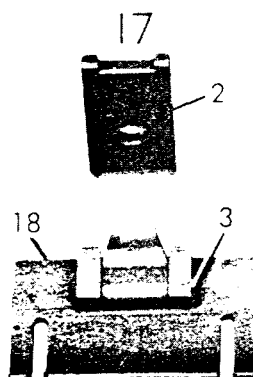
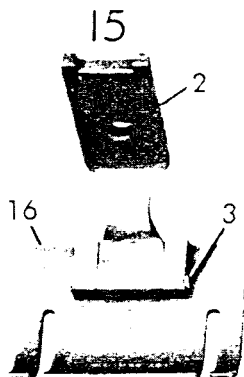
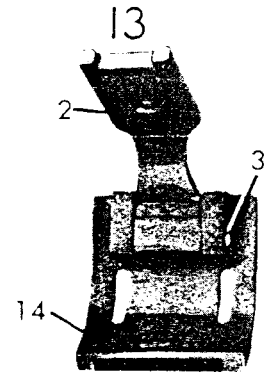
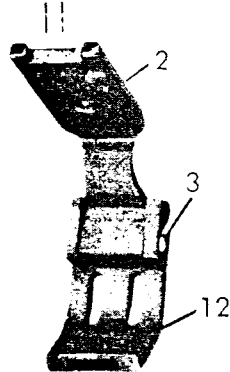
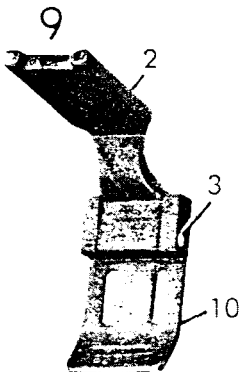
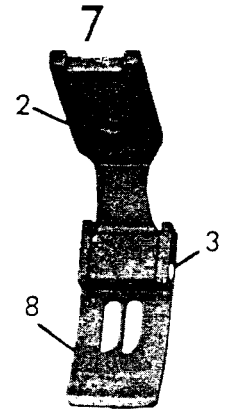
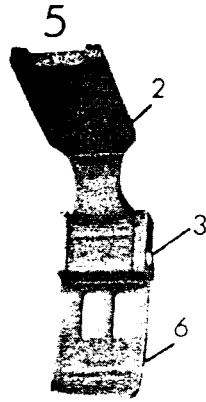
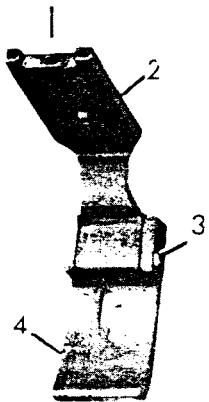
FITTINGS

PRESSER FEET

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	224127	Presser Foot (hinged) complete, 50 needle hole, needles 1/8 in. apart, in gauges 1/32, 3/64, 1/16 and 3/32 in., Nos. 223309, 224126 and 230795
2	223309	Shank
3	230795	Hinge Pin
4	224126	Plate
5	224187	Presser Foot (hinged) complete, 53 needle hole, in gauges 3/32 to 3/16 in., Nos. 223309, 224186 and 230795
5	224158	Presser Foot (hinged) complete, 50 needle hole, in gauges 3/32 to 3/16 in., Nos. 223309, 224157 and 230795
6	224186	Plate
6	224157	Plate
7	224189	Presser Foot (hinged) complete, 46 needle hole, in gauges 1/8 to 3/16 in., Nos. 223309, 224188 and 230795
8	224188	Plate
9	223759	Presser Foot (hinged) complete, 50 needle hole, in gauges 7/32 to 5/16 in., Nos. 223309, 223758 and 230795
10	223758	Plate
11	224174	Presser Foot (hinged) complete, 50 needle hole, in gauges 3/16 to 5/16 in., Nos. 223309, 224173 and 230795
12	224173	Plate
13	224169	Presser Foot (hinged) complete, 50 needle hole, in gauges 11/32 to 5/8 in., Nos. 223309, 224168 and 230795
14	224168	Plate
15	224068	Presser Foot (hinged) complete, 50 needle hole, in gauges 31/32 to 1-1/16 in., Nos. 223309, 224067 and 230795
16	224067	Plate
17	224086	Presser Foot (hinged) complete, 50 needle hole, in gauges 1-3/32 to 1-3/16 in., Nos. 223309, 224085 and 230795
18	224085	Plate
19	224088	Presser Foot (hinged) complete, 50 needle hole, in gauges 1-7/32 to 1-7/16 in., Nos. 223309, 224087 and 230795
20	224087	Plate
21	224078	Presser Foot (hinged) complete, 50 needle hole, in gauges 1-15/32 and 1-1/2 in., Nos. 223309, 224077 and 230795
21	224125	Presser Foot (hinged) complete, 46 needle hole, in gauges 1-15/32 and 1-1/2 in., Nos. 223309, 224124 and 230795
22	224077	Plate
22	224124	Plate
23	224178	Presser Foot (hinged) complete, 40 needle hole, in 1-1/4 in. gauge, Nos. 223309, 224177 and 230795
24	224177	Plate

FITTINGS

PRESSER FEET



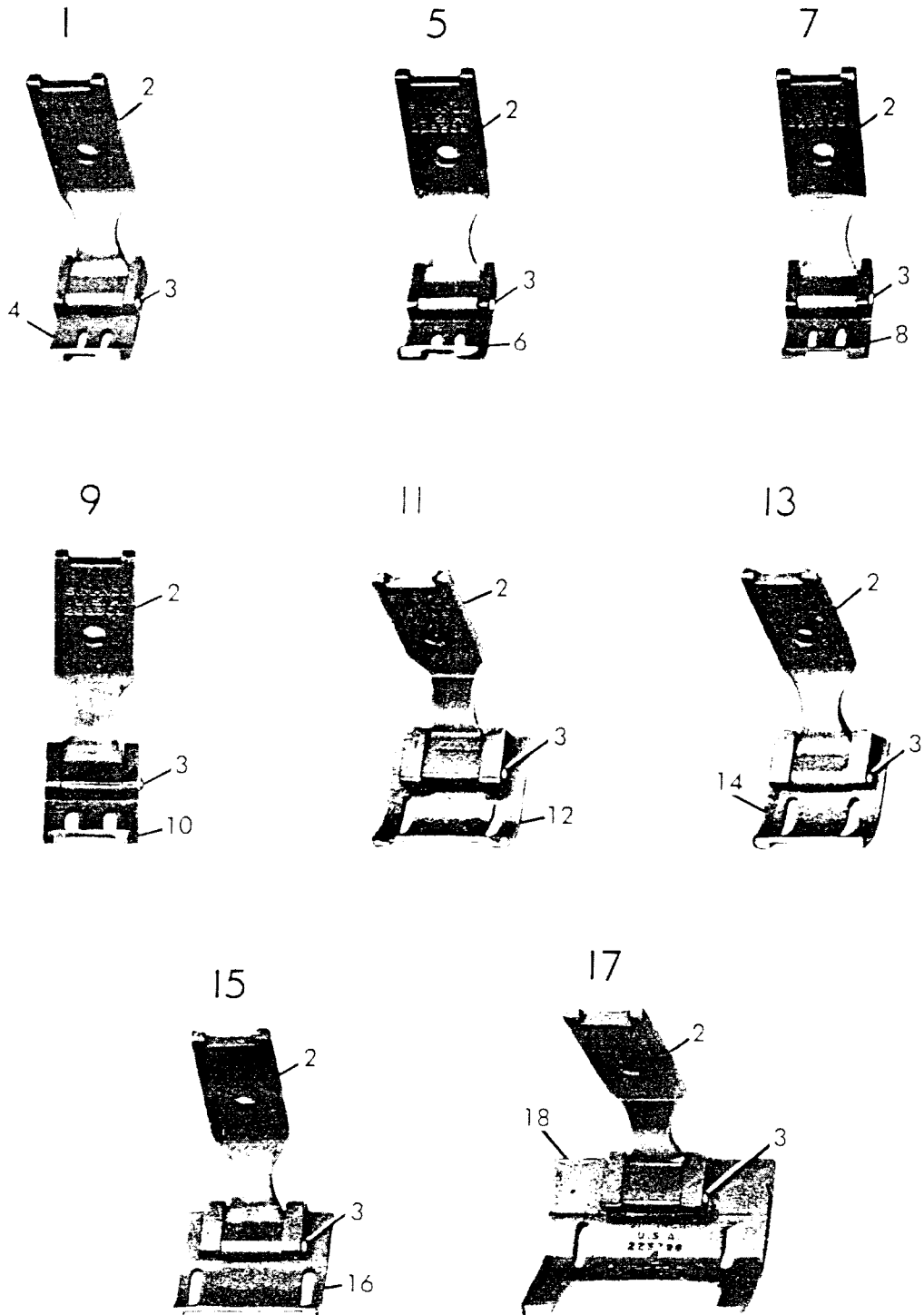
FITTINGS

PRESSER FEET

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	224066	Presser Foot (hinged) complete, 53 needle hole, in gauges 3/32 to 3/16 in., Nos. 223309, 224065 and 230795, for lap seam felling
2	223309	Shank
3	230795	Hinge Pin
4	224065	Plate
5	224191	Presser Foot (hinged) complete, 50 needle hole, in gauges 1/8 to 3/16 in., Nos. 223309, 224190 and 230795
5	224172	Presser Foot (hinged) complete, 53 needle hole, in gauges 1/8 to 3/16 in., Nos. 223309, 224171 and 230795
6	224190	Plate
6	224171	Plate
7	224184	Presser Foot (hinged) complete, 53 needle hole, in gauges 1/8 to 3/16 in., Nos. 223309, 224183 and 230795, for felling
8	224183	Plate
9	224072	Presser Foot (hinged) complete, 50 needle hole, in gauges 7/32 to 5/16 in., Nos. 223309, 224071 and 230795
10	224071	Plate
11	224164	Presser Foot (hinged) complete, 50 needle hole, in gauges 15/32 to 5/8 in., Nos. 223309, 224163 and 230795
12	224163	Plate
13	224074	Presser Foot (hinged) complete, 50 needle hole, in gauges 11/32 to 7/16 in., in Nos. 223309, 224073 and 230795
14	224073	Plate
15	224076	Presser Foot (hinged) complete, 50 needle hole, in gauges 21/32 to 3/4 in., Nos. 223309, 224075 and 230795
15	224182	Presser Foot (hinged) complete, 53 needle hole, in gauges 21/32 to 3/4 in., Nos. 223309, 224181 and 230795
16	224075	Plate
16	224181	Plate
17	223797	Presser Foot (hinged) complete, 50 needle hole, in gauges 5/16 to 1-1/2 in., Nos. 223309, 223796 and 230795, for shirt facing
18	223796	Plate

FITTINGS

PRESSER FEET



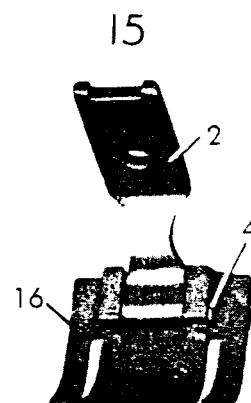
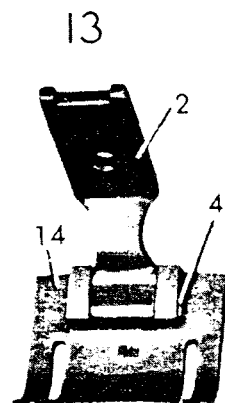
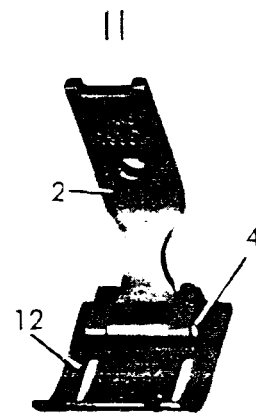
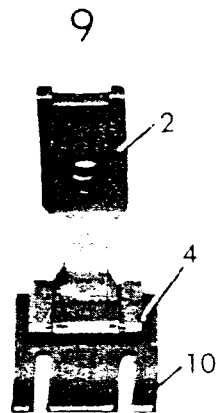
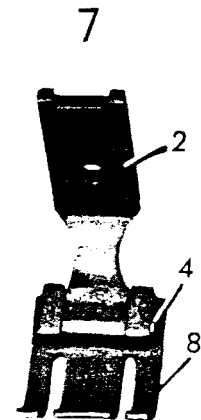
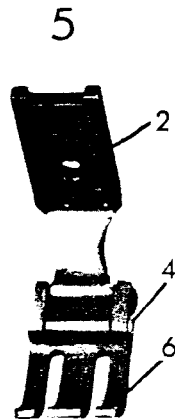
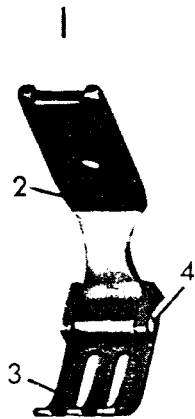
FITTINGS

PRESSER FEET

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	223799	Presser Foot (hinged) complete, 50 needle hole, in gauges 5/32 and 3/16 in., Nos. 223309, 223798 and 230795, for shirt facing
2	223309	Shank
3	223798	Plate
4	230795	Hinge Pin
5	224062	Presser Foot (hinged) complete, 50 needle hole, in gauges 7/32 to 5/16 in., Nos. 223309, 224061 and 230795
5	223747	Presser Foot (hinged) complete, 46 needle hole, in gauges 7/32 to 5/16 in., Nos. 223309, 223746 and 230795
6	224061	Plate
6	223746	Plate
7	224080	Presser Foot (hinged) complete, 50 needle hole, in gauges 11/32 to 7/16 in., Nos. 223309, 224079 and 230795
7	223699	Presser Foot (hinged) complete, 46 needle hole, in gauges 11/32 to 7/16 in., Nos. 223309, 223698 and 230795
8	224079	Plate
8	223698	Plate
9	224082	Presser Foot (hinged) complete, 50 needle hole, in gauges 15/32 to 9/16 in., Nos. 223309, 224081 and 230795
9	223749	Presser Foot (hinged) complete, 46 needle hole, in gauges 15/32 to 9/16 in., Nos. 223309, 223748 and 230795
10	224081	Plate
10	223748	Plate
11	224084	Presser Foot (hinged) complete, 50 needle hole, in gauges 19/32 and 5/8 in., Nos. 223309, 224083 and 230795
11	223745	Presser Foot (hinged) complete, 46 needle hole, in gauges 19/32 and 5/8 in., Nos. 223309, 223744 and 230795
12	224083	Plate
12	223744	Plate
13	223771	Presser Foot (hinged) complete, 50 needle hole, in gauges 21/32 to 3/4 in., Nos. 223309, 223770 and 230795
13	223751	Presser Foot (hinged) complete, 46 needle hole, in gauges 21/32 to 3/4 in., Nos. 223309, 223750 and 230795
14	223770	Plate
14	223750	Plate
15	224133	Presser Foot (hinged) complete, 50 needle hole, in gauges 25/32 to 15/16 in., Nos. 223309, 224132 and 230795
15	223786	Presser Foot (hinged) complete, 46 needle hole, in gauges 25/32 to 15/16 in., Nos. 223309, 223785 and 230795
16	224132	Plate
16	223785	Plate

FITTINGS

PRESSER FEET



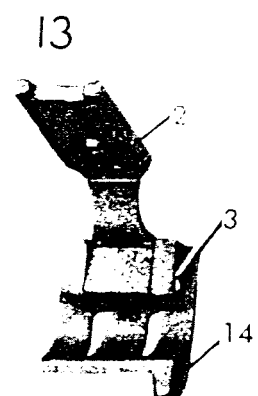
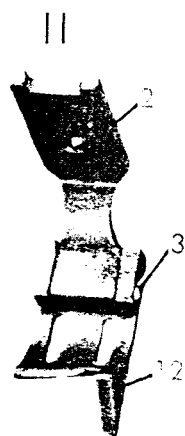
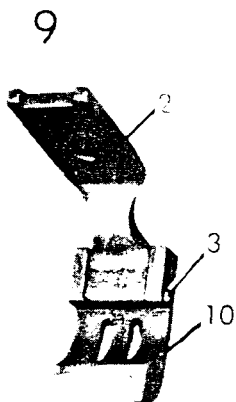
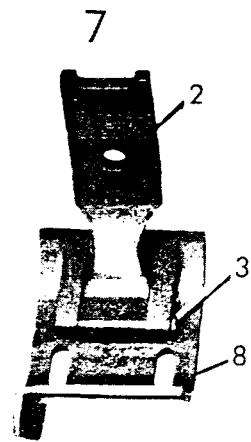
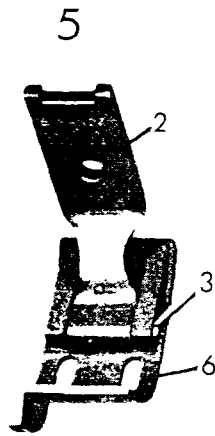
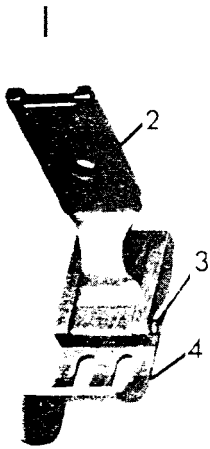
FITTINGS

PRESSER FEET

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	223697	Presser Foot (hinged) complete, 40 needle hole, in gauges 1/4 to 7/16 in., Nos. 223309, 223696 and 230795, for overall felling and other heavy material
2	223309	Shank
3	230795	Hinge Pin
4	223696	Plate
5	224129	Presser Foot (hinged) complete, 40 needle hole, in gauges 1/4 to 7/16 in., Nos. 223309, 224128 and 230795
6	224128	Plate
7	224131	Presser Foot (hinged) complete, 40 needle hole, in gauges 15/32 to 5/8 in., Nos. 223309, 224130 and 230795
8	224130	Plate
9	223773	Presser Foot (hinged) complete, 50 needle hole, in gauges 1/8 to 5/16 in., Nos. 223309, 223772 and 230795, for lap seam felling
10	223772	Plate
11	224135	Presser Foot (hinged) complete, 46 needle hole, in gauges 1/8 to 5/16 in., Nos. 223309, 224134 and 230795, for patch pocket work
12	224134	Plate
13	225285	Presser Foot (hinged) complete, 50 needle hole, in gauges 11/32 to 1-1/2 in., Nos. 223309, 225284 and 230795
14	225284	Plate

FITTINGS

PRESSER FEET



FITTINGS

STRIP REELS AND STRIP TENSION DEVICE

STRIP REELS

ATTACHED TO THE TOP OF THE ARM

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	227212	Double Strip Reel complete, Nos. 200017C, 227108, 227113, 227115, two each 226198, 226199 and 227210
2	227210	Collar 227116 with 200731E and 227327
3	227116	Collar
4	200731E	Wing Screw
5	227327	Tension Spring (spiral)
6	226199	Disc (6 in.diam.) with 225980
7	201484C	Rod Set Screw
8	227115	Rod (upper) with Strip Guide
9	225980	Base
10	227113	Rod (lower) with Strip Guide
11	226198	Disc (9 in.diam.) with 225980
12	227108	Strip Reel Support with two 201484C
13	200017C	Support Screw

STRIP REEL

ATTACHED TO THE UNDER SIDE
OF THE BENCH

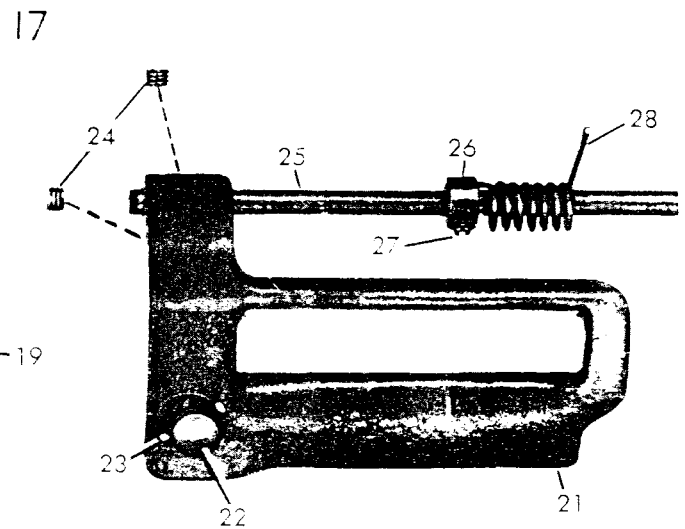
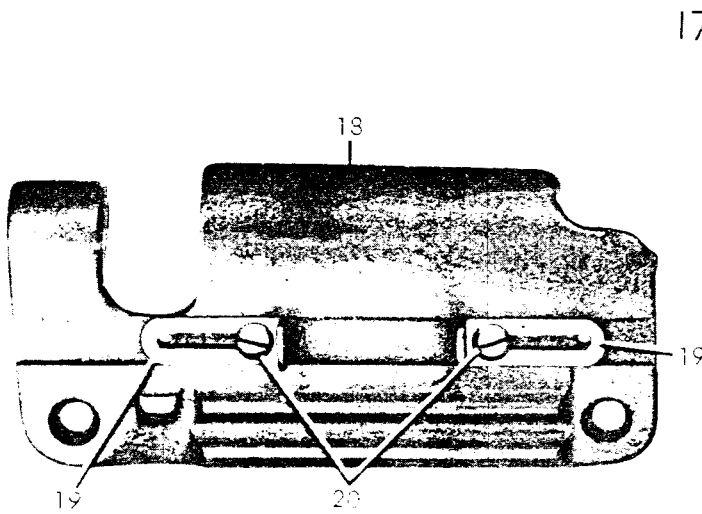
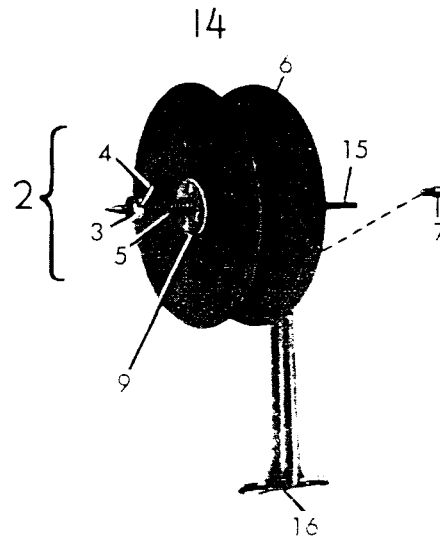
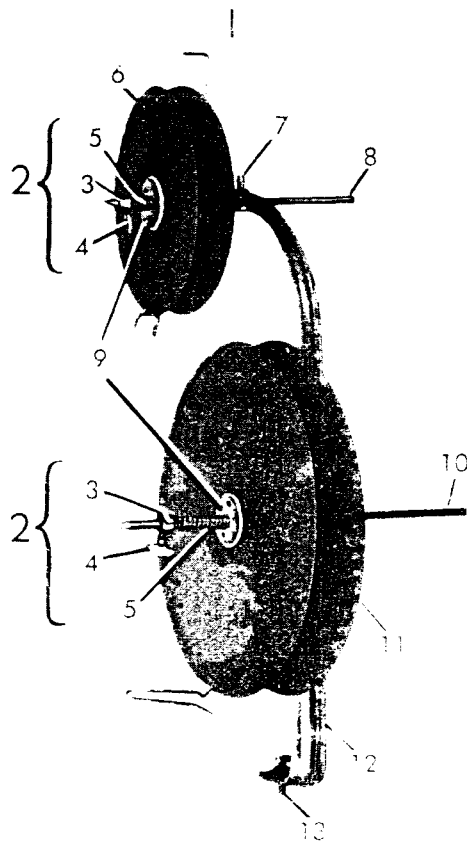
14	227139	Strip Reel complete, Nos. 227138, 227148, 227210, two each 226199 and wood screws 1 in., No. 10
15	227148	Rod
16	227138	Strip Reel Support with 201484C

STRIP TENSION DEVICE

17	231369	Strip Tension Device complete (adjustable for strips up to 3 in. in width) Nos. 231363 to 231367, two each 200162D, 231368 and wood screws 1 in., No. 12 F.H.B.
18	231363	Base
19	231368	Strip Guide
20	200162D	Screw
21	231364	Strip Tension Plate with 200457D, 201599X and two 200383C
22	200457D	Adjusting Thumb Screw
23	201599X	Nut
24	200383C	Set Screw
25	231365	Shaft
26	231367	Spring Adjusting Collar with 200380C
27	200380C	Set Screw
28	231366	Tension Plate Spring

FITTINGS

STRIP REELS AND STRIP TENSION DEVICE



NUMERICAL LIST OF PARTS

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
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691F.....	34,48,50	200161D.....	34,48,50	201018C.....	46	204925.....	22
1247C.....	40	200162D.....	64	201031F.....	54	206608.....	20
2102.....	42	200172X.....	54	201132D.....	50	206758.....	30,32
13710.....	22,42	200173D.....	24	201199F.....	22	207072.....	20
27739.....	46	200176E.....	38	201220C.....	24,26	208566.....	20
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