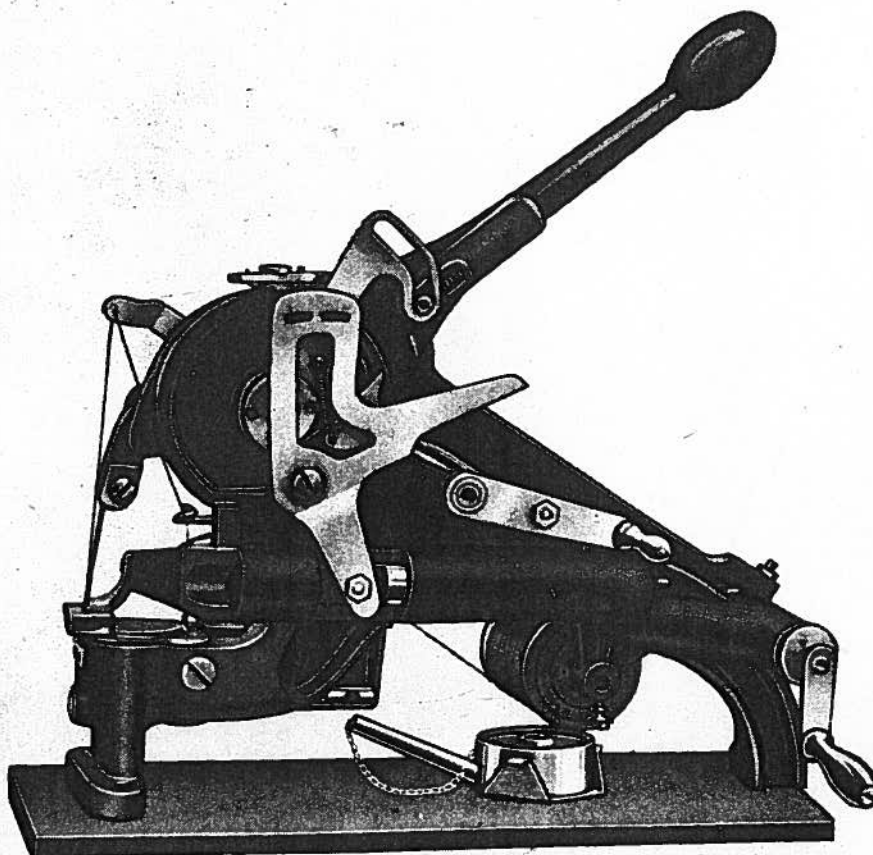


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**Working Instructions and Spare Part List
for Outsole Stitcher**

Model 308

Foreword.

By means of Model 308 Hand Sole Stitching Machine you can, in a few minutes, do work which would take hours if done by hand, and when done properly it is indistinguishable from the best hand work.

If desired, a special table (586) for the sewing of rubber soles can also be supplied.

Every machine is thoroughly tested before being sent out. Faulty handling only can cause incorrect stitching and it is therefore advisable to ascertain whether the needle has been placed in the machine according to the directions and whether the tension is correct before any attempt is made to alter the machine itself.

When properly used, kept in a clean state, and regularly oiled, the machine should work for many years in an absolutely dependable manner and without trouble.

The efficiency of the machine and the durability of the stitches depend a great deal on a serviceable needle and on a good thread. It is therefore advisable to procure the needles and thread from the suppliers of the machine.

Unpacking and Erecting the Machine.

The presser foot lever (146) which, to conserve packing space, is put in the machine in reverse must be taken out and fitted on the machine, as shown on fig. 4.

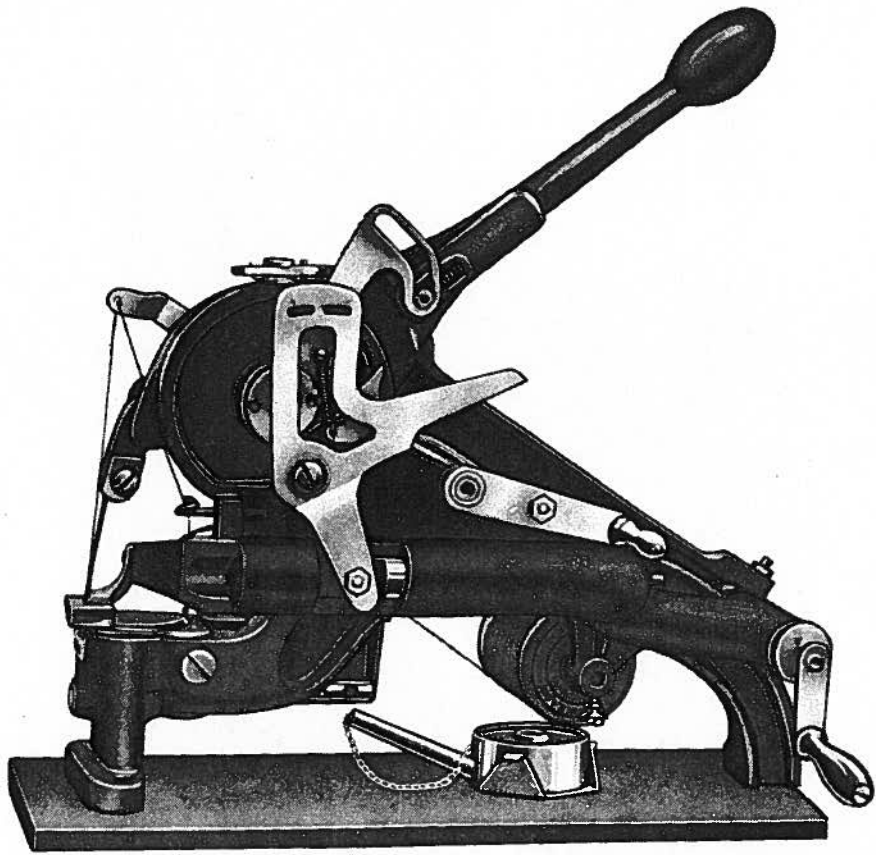


Fig. 4.

Preparation of the Shoe.

To obtain a perfect stitch it is essential that the shoe be properly prepared for the purpose. Before laying on the new sole the welt must be smoothed and flattened. The new sole is then fastened on, preferably by means of a few clamps or tacks, and then trimmed to the exact size required.

The channelling is the most important preliminary work for machine stitching. The channel must be cut fairly deep and the lip must be well raised. The channel for machine work differs from the channel for hand work in so far as the channel bed should be substantially wider for machine stitching than for hand work. The channel should be cut at a distance from the edge of the sole in accordance with the work.

In order to make stitching easier it is advisable to moisten the sole before clamping it on the boot.

Please note that perfect stitching of soles can only be achieved as a result of practice. It is impossible to stitch on a new sole perfectly at the first attempt. It must also be ascertained that the channel is accurately cut so as to provide an efficient guide to the work passing through the machine.

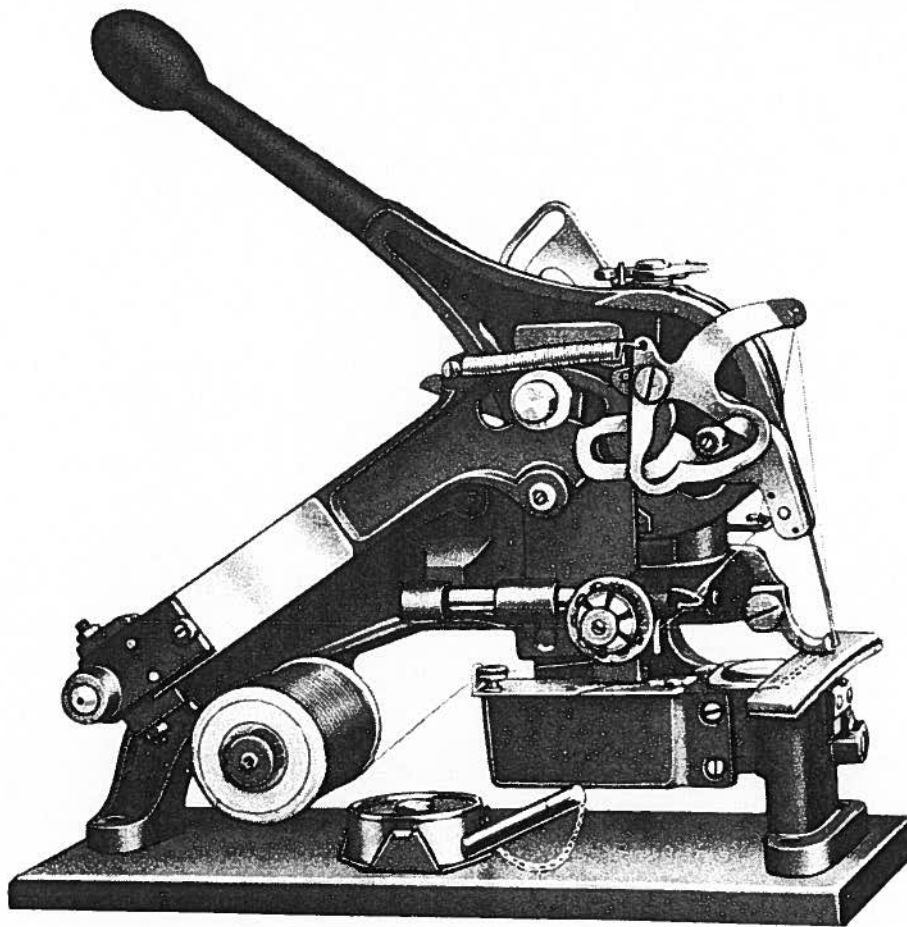


Fig. 5.

The Needle Thread.

Before use, examine closely how the machine is threaded. In fig. 6 the run of the thread is shown once more in a diagram for easier checking.

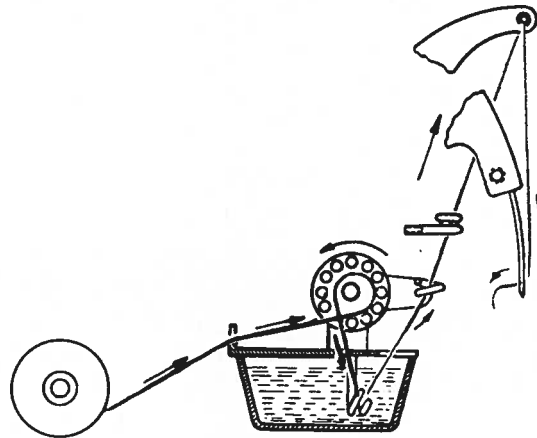


Fig. 6.

Shuttle Thread.

Fig. 7 A and B.

The satin finish top thread should never be used for the shuttle; use only waxed (pitched) thread for the shuttle.

The shuttle spool A, which can be wound by the little hand spool winder supplied with the machine (Fig. 4) or with any sewing machine, is put in shuttle B as shown in Fig. 7 A. Here again it is important that you note the direction of the thread.

Before putting the spool A in the shuttle B, put the thread c through hole e from the inside outwards, then under spring f (Fig. 7 B). Out again through hole g, and thence from underneath upwards through the hole in the thread guide h, which is movable. The spool is now put into the shuttle so that it unwinds in the direction of the arrow in Fig. 7 B.

The thread guide h (Fig. 7 A and B) is then pulled round towards the middle of the shuttle (Fig. 7 B) and care should be taken to see that the thread guide is pushed right home into the groove left for the purpose on the edge of the shuttle. Then a short length of thread is pulled out and the tension adjusted.

After inserting the shuttle turn the stitching plate (57) (Fig. 4) back into position and tighten it in position with the milled edge screw No. 7 placed at the side of the machine.

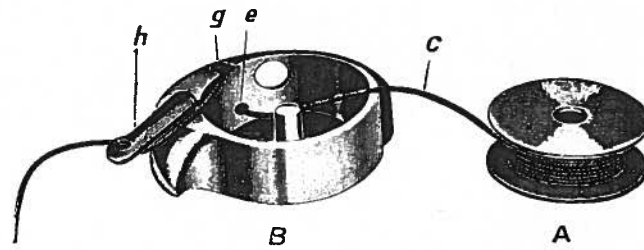


Fig. 7 A.

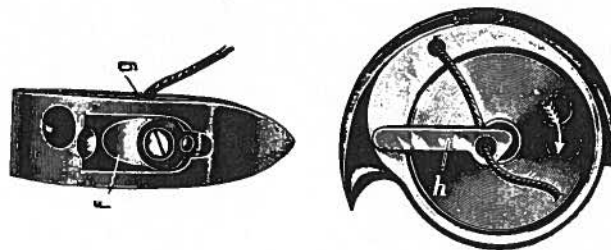


Fig. 7 B

Stitching.

The machine is now ready for stitching. The operating lever is pushed right back, which brings the needle to its highest position. The end of the needle thread and the end of the shuttle thread are put under the presser foot (132). The shoe is held lightly by the left hand, welt upwards, as in hand sewing, and the channel, prepared in the manner previously described, is placed over the channel guide of the stitching plate. The lifting lever (146) of the automatic presser arm (128) positioned at the right side of the machine is pushed back, then the presser foot (132) will hold the shoe on the channel guide.

The stitching is done by moving the operating lever in a regular movement completely forward, then completely back. It should be noted that the lever each time it is moved forward strikes the stop before being moved backwards.

The shoe is carried along automatically by the needle and should be held loosely, so that the needle does not meet with any resistance when carrying the work forwards, or the needle may bend or break.

If the machine is used in a cold room the pitched thread may become stiff so that it is advisable to heat shuttle carrier in order that the pitched thread may soften to allow it to be pulled properly

through the work.

When the job is finished the operating lever is pushed right back and a few inches of needle thread are pulled out before same reaches the thread feeder, in order to avoid any pull on the needle. After the presser foot has been lifted up by means of the lifting lever the shoe can be removed. The threads on the machine should be left sufficiently long to have the machine ready for further sewing immediately.

Care should be taken especially when working in hard and thick leather that the needle thread goes through a thickish solution of gum tragacanth. If this is not done the tanning acids adhere to the needle making it difficult for the needle to penetrate and therefore causing it to break.

Beginners are advised to practice stitching on bits of channelled leather before they start stitching on footwear in order to get used to the movement. It is important to oil all parts exposed to friction frequently with a good quality sewing machine oil. It is also advisable to put a few drops of oil on the shuttle carrier when working with the machine warmed up.

Relative Sizes of Needles and Threads.

The following table will show:

Size of Needle	6	Size of thread	6.
"	"	"	5.

The size of thread must always correspond to the size of needle. It is advisable, according to the material to use thread of the same size as that of needle or one whole size smaller. The same size should be used for needle thread and shuttle thread.

Only flax-fibre linen thread, six strands, right-hand twist, is suitable. This can be obtained from the makers of the machine.

Tensions and Their Regulation.

The quality of the stitch depends on the tension on the needle thread which therefore requires careful attention. This tension should be regulated in such a manner that both threads are pulled

through evenly, so that the loop comes in the middle of the leather. The stitch must be alike on both sides to be perfect.

If, when stitching, the needle thread or the shuttle thread is not well pulled through, or if knots or loops occur, this can easily be remedied by adjusting the tension on the needle thread by tightening or loosening the screw of the tension wheel.

Length of Stitch.

The stitch can be lengthened up to a maximum of $\frac{1}{8}$ " by means of the stitch regulator (Fig. 5). To increase the length of the stitch the screw is turned clockwise after loosening the set screw. For a shorter stitch screw in the opposite direction. After adjusting to the desired length of stitch, the set screw must be screwed tight, or the screw may loosen whilst stitching and the length of the stitch may alter.

Faults and Their Correction.

Every machine is thoroughly tested before leaving the factory. Should any fault occur so that the machine does not stitch correctly the cause will usually be found to be due to one of the following:

The causes of the upper thread breaking may be —

1. That the eye of the needle is sharp and cuts the thread.
2. That the needle is not put in correctly or put in too deeply.
3. That the tension on the thread is too strong.
4. That the thread is uneven or knotty.
5. That thread is not properly threaded on the machine or has become tangled.
6. That the point of the shuttle may have been damaged by the needle (which occurs mainly if the movement backwards of the operating lever is not finished before the lever is pulled forward again). The point of the shuttle will then be roughened or notched and will cut the tread. In this case polish the shuttle or change it.
7. That the needle thread is stiff and brittle, instead of supple, as a result of sewing without the use of tragacanth.

8. That the needle and thread do not fit one another. Test this. Take out the needle and push it through a piece of leather. The thread should now be easily pulled through the long groove in the needle. Should the thread fit too tightly then the thread is too coarse for the needle and a stronger needle or finer thread must be used. Soft and badly prepared thread causes poor work, so use good thread only.

Loops or missed stitches occur —

1. When the thread has been incorrectly threaded or not threaded at all.
2. When the thread is not threaded properly in the shuttle, so that the shuttle tension is too loose.
3. When the needle is not put in properly or is put in too deeply.
4. When the machine is not oiled or is greasy and therefore works heavily.

Stitch is too loose —

1. Tighten first the tension on the needle thread.
2. Try tightening the tension on the shuttle thread by means of the spring f (Fig. 7 B).

When the upper stitch is good, but the shuttle thread lies flat on the leather —
If so, the tension on the needle thread is insufficient.

When the lower stitch is good, but the shuttle thread lies flat on the leather —
If so, the tension on the needle thread is too tight or on the shuttle thread too loose.

Breakage of the needle is mostly due to the following causes:

1. That the needle is bent and strikes on the side of the hole in the stitching plate.
2. That hard substances in the shoe (e. g. nails) come under the needle.
3. That the shoe is pushed or pulled whilst being stitched (beginners do this unconsciously).
4. That the presser foot is not screwed on sufficiently tight and moves whilst the stitching is being done.

5. That no tragacanth has been used and consequently tannic acid is deposited on the needle.

The operating lever sticks tightly —

If the operating lever cannot reach to both extremities it is possible that the rack controlling the movement of the shuttle carrier has been clogged. In this case lay the machine flat on its side, remove the screw under the shuttle and shuttle box and thoroughly clean and oil the small cog wheel under the shuttle carrier. Care must be taken to put carrier back in the correct position. The shuttle carrier is in the correct position when the operating lever is perpendicular on the top of the machine and the right edge of the shuttle carrier is flush with the left side of the needle channel. Before taking the part out of the machine, examine its position closely or mark it by pencil or chalk, so that it can be put back in the same position.

Should you notice that with every stitch the machine is becoming heavier to work this will be due to the needle thread having spilt, forming a pad, which accumulates, ultimately preventing the thread from going through causing it to break if the operating lever is forced. In this case cut the damaged thread and re-thread the needle. This can only occur if the needle eye is rough or sharp or if the thread is uneven or knotty.

When the tension is not tight enough the needle thread may jam in the shuttle. In this case remove the boot and move the stitching plate aside and loosen the jammed thread end.

Keep the shoe in a vertical position whilst stitching to prevent the needle from bending and striking against the shuttle.

Should you have tried all the foregoing without success do not give the machine to an engineer to repair, but send it back to your suppliers requesting them to return it to the manufacturer ensuring that you will receive the machine back in a perfect condition.

Repair of Veldtschoen Work.

For repairs the presser foot (160) for veldtschoen work is set for $\frac{1}{4}$ " wide welt. Thread No. 5 and needle No. 4 should be used.

Two different working methods may be used — according to the condition of the shoe.

The first working method is used when the shoes are much worn. The new sole is cut accurately to the shape of the old sole, then the channelling is done and lastly the edge of the sole is smeared with cementgum several times. After having opened the old sole and the old welt to the waist, the upper is also smeared with cementgum inside the welt, $\frac{3}{8}$ " wide. Then the sole is fastened in the waist. When the gummed places of the shoe and the sole are well dry, press firmly together. However, care must be taken that the edge of the upper does not overlap the sole, as the shoe will then be too narrow when finished. The channel is then opened and the lip bent backwards. The $\frac{3}{16}$ " wide welt is put in the opening of the presser foot and the shoe is stitched without last. After the stitching the upper leather must be moistened with warm water and a suitable last put in, so that the shoe keeps its shape.

The second working method is used when the shoes are only a little worn. The old sole remains on the shoe and is only pared thin at the edge. The old welt is separated from waist to waist and the new sole is cut accurately to the size and shape of the old one. The channelling is then done and the new sole is fastened at the waist and toe. The channel is opened and the lip bent backwards. The $\frac{3}{16}$ " wide welt is placed in the presser foot, the stitching and further treatment of the shoe is then done as described in the first working method.

Spare Parts.

Every machine is provided with the following Spare Parts free of charge —

1 Envelope with needles	1 Hand winder
3 Spools	1 Reel of thread No. 6
2 Screwdrivers	1 Reel of pitched thread No. 6
1 Special screw-wrench	
1 Oil can	1 Instruction Book

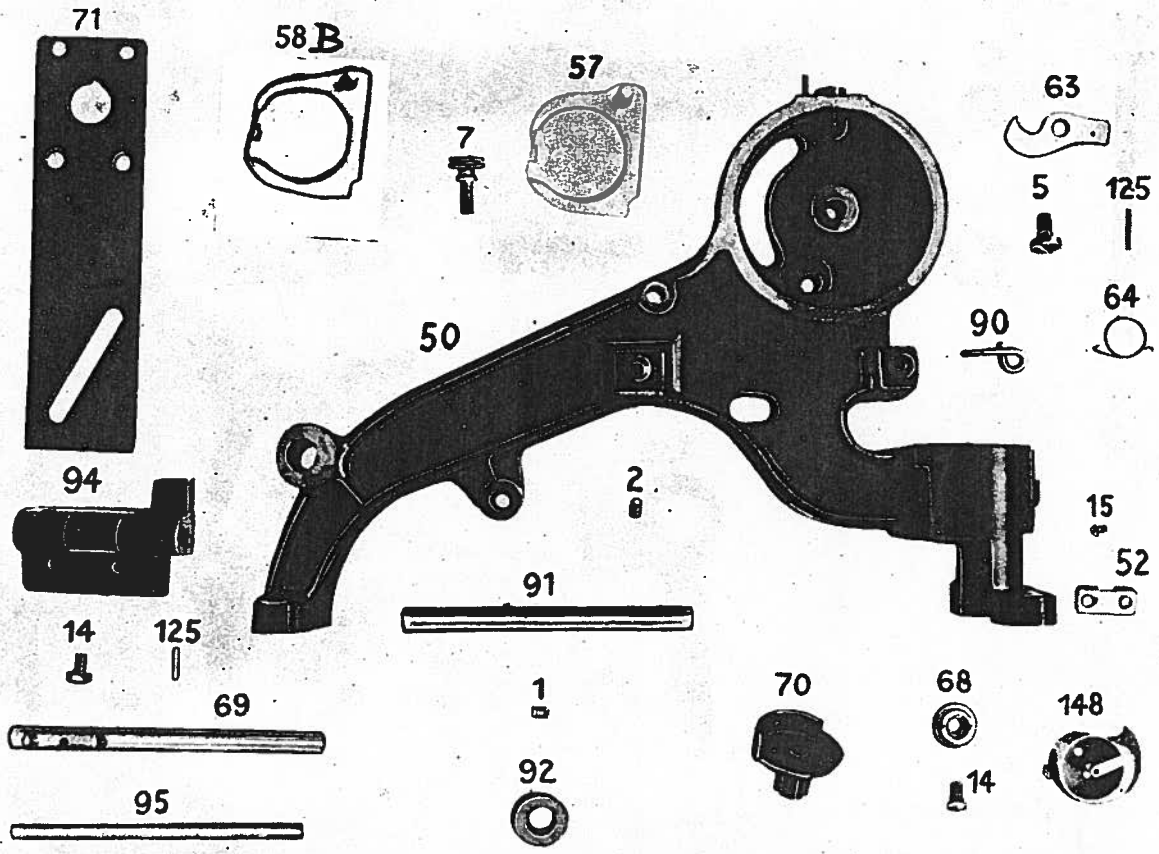
At extra charge we supply —

Presser foot for Veldtschoen repairs (No. 160)

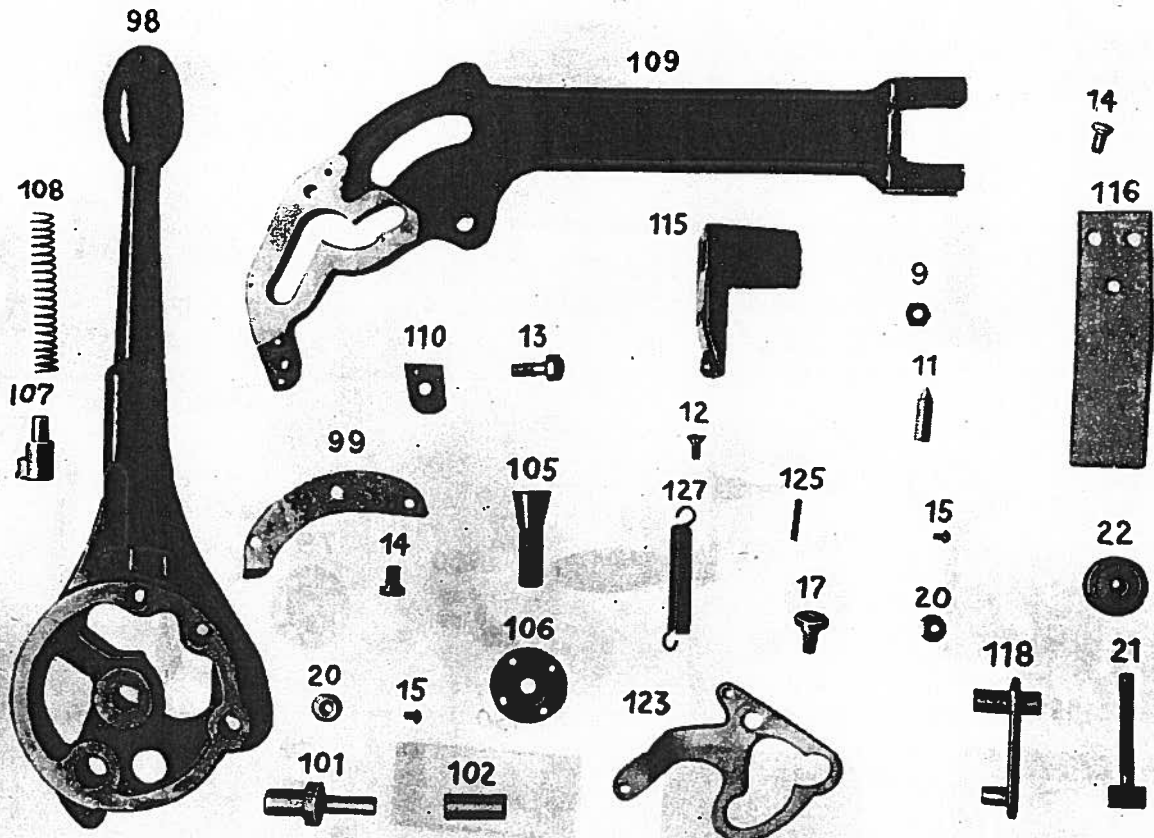
Stitching plate for flat-sewing (rubber soles) (No. 58B)

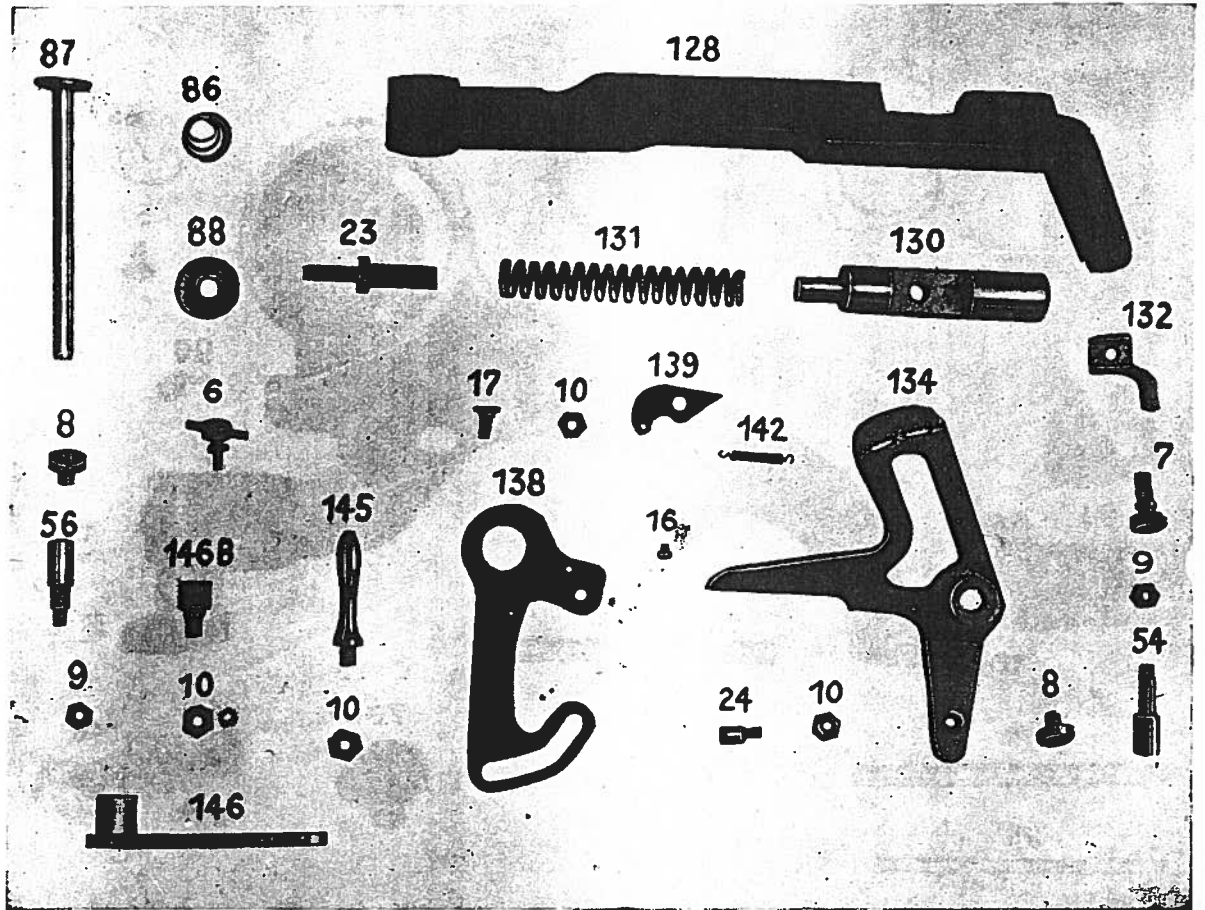
Stitching plate with guide for flat-sewing of belts and similar work (No. 58 DE)

13

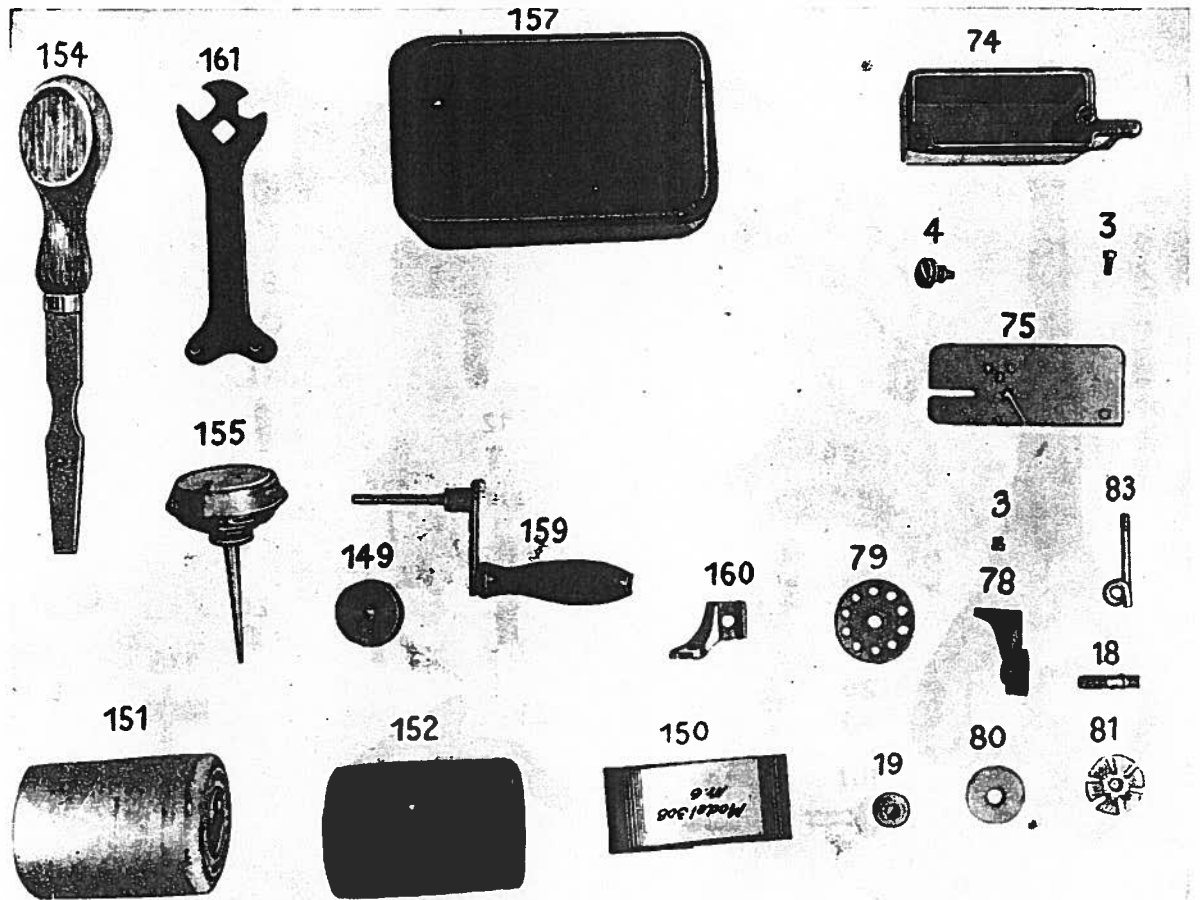


13 A





14 A



Part No.	Table No.	Part No.	Table No.
1	13 A	88	14 A
2	13 A	90	13 A
3	14 B	91	13 A
4	14 B	92	13 A
5	13 A	94	13 A
6	14 A	95	13 A
7	13 A-14 A	98	13 B
8	14 A	99	13 B
9	13 B-14 A	101	13 B
10	14 A	102	13 B
11	13 B	105	13 B
12	13 B	106	13 B
13	13 B	107	13 B
14	13 A-13 B	108	13 B
15	13 A-13 B	109	13 B
16	14 A	110	13 B
17	13 B-14 A	115	13 B
18	14 B	116	13 B
19	14 B	118	13 B
20	13 B	123	13 B
21	13 B	125	13 A-13 B
22	13 B	127	13 B
23	14 A	128	14 A
24	14 A	130	14 A
50	13 A	131	14 A
52	13 A	132	14 A
54	14 A	134	14 A
56	14 A	138	14 A
57	13 A	139	14 A
58 B	13 A	142	14 A
63	13 A	145	14 A
64	13 A	146	14 A
68	13 A	146 B	14 A
69	13 A	148	13 A
70	13 A	149	14 B
71	13 A	150	14 B
74	14 B	151	14 B
75	14 B	153	14 B
78	14 B	154	14 B
79	14 B	155	14 B
80	14 B		
81	14 B	157	14 B
83	14 B	159	14 B
86	14 A	160	14 B
87	14 A	161	14 B