

Adjusting Instructions

These Instructions Apply Only to Style 43200 G Equipped With Two Needle Bar Bearings

Description of Machine

43200 G For hemming overalls, jackets and similar garments; Seam Spec. 401-EFb-1, hem turned on under surface of fabric, stitch range 11 to 6 per inch, two needle bar bearings, split hemming attachment and knee press for opening same, standard widths of hem 3/8 and 1/2 inch (9.52 and 12.70 mm).

- 1 Check assembled machine tag with assembly symbol on the production order.
2. Clean the machine thoroughly. Fill oiling system, remove side cover and oil all bearings, particularly the eccentrics on the main shaft. Run machine slowly for a minute to allow the oil wicks to carry the oil to the bearings. See that the wicks are saturated by the flow from the oil reservoir and that they contact the oil holes in the straps. Then repeat the oiling and run for five minutes at 4500 R.P.M. Oiling diagram PL157 is available.
3. Put in a new needle Type 128 GS, size as specified.
4. With looper at right end of stroke, the point of looper should be 1/8 inch (3.17 mm) from center line of needle. Gauge No. 21225-1/8 can be used advantageously in making this adjustment.
5. Set the needle bar so that the top of the needle eye is 1/64 inch (.40 mm) below the looper when the point of the looper moving to the left is even with the left side of the needle.
6. The looper avoid adjustment is correct when the looper passes the front and rear of the needle as close as possible, at their closest approach, without contacting. This adjustment is made by moving the looper and ball joint assembly in its slot, and the top of the looper rocker.
7. Set the looper needle guard so that it barely clears the needle when the point of the looper, moving to the left, reaches the needle.
8. Set the feed dog so that the tips of the teeth raise 1/16 inch (1.59 mm) above the throat plate at highest point of travel. Tilt it so that the tips of the front teeth at high position are a scant 1/64 inch (.40 mm) higher than the tips of the rear teeth.
9. Draw the threads into the machine and start operating on a piece of fabric. Threading diagram PL158 is available.
10. Set the front eyelet for the needle thread tension so that the center of the eyelet is 1 3/8 inch (35.0 mm) below the milled surface on top of casting.
11. Set thread eyelet No. 43464 parallel with the top of the needle bar connection, to which it is attached.

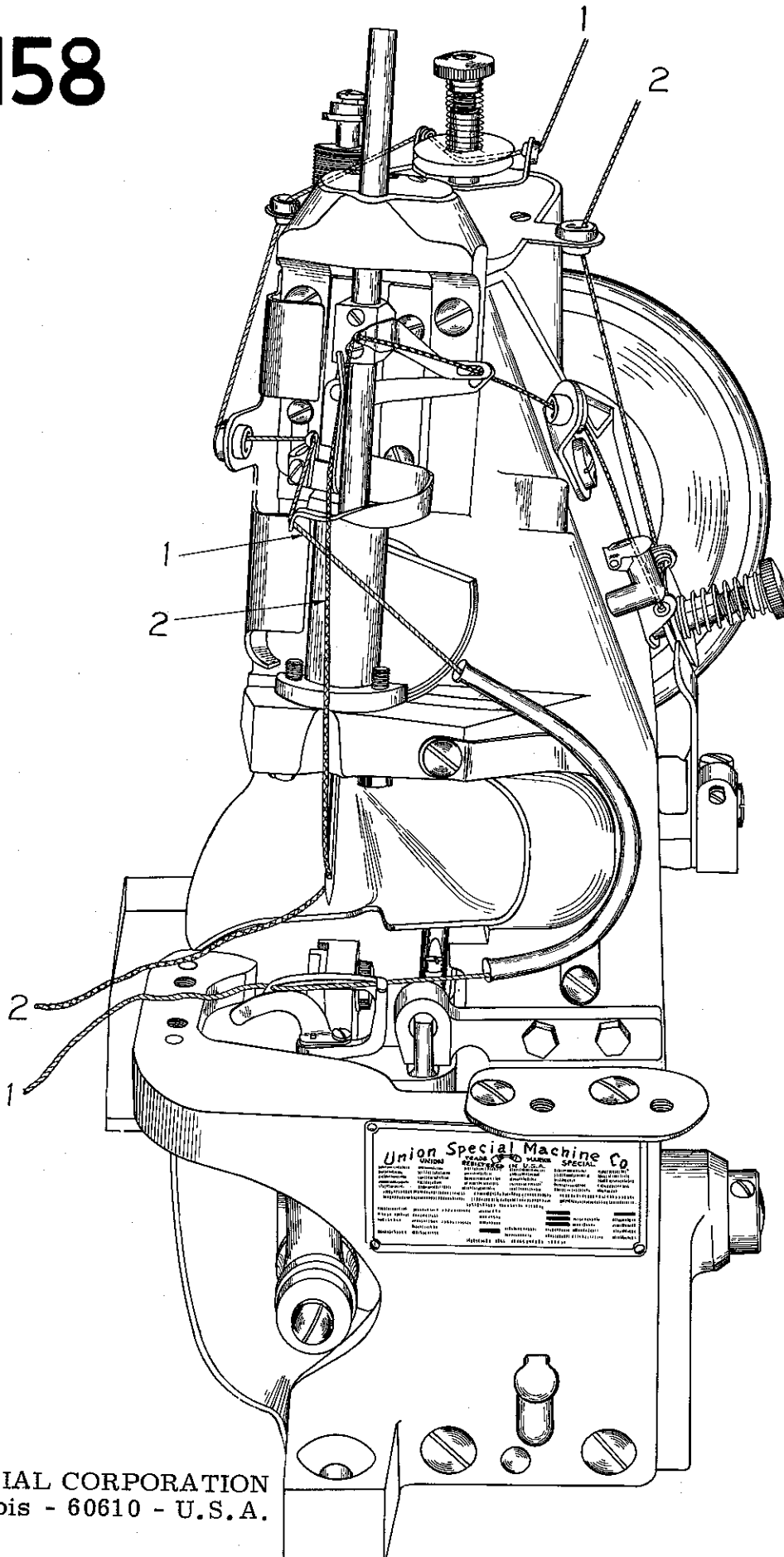
Signed By *K. Ruggaard*

Supersedes Sheet Dated
6176

No. of Sheets 2 Sheet No. 1

12. Set the needle bar link thread eyelet No. 43264 so that its extreme upper edge, when at its highest position is 1/4 inch (6.35 mm) below the milled surface on top of the casting. The position of this eyelet controls the size of the needle thread loop under the throat plate. Lowering the eyelet increases the size of the loop - raising it acts the reverse.
13. Set the needle thread take-up No. 43464 B so that the needle thread contacts it at the time the needle thread loop leaves the point of the looper.
14. Regulate pressure on presser foot so that it exerts only enough pressure to feed the work uniformly.
15. The tension on the needle thread should be as tight as is consistent with the strength of the thread and avoid puckering the fabric.
16. The tension on the looper thread should be barely sufficient to steady it in passing through the machine.
17. Check the minimum and maximum stitch length. It should range from 11 to 6 per inch. Set at length specified.
18. Set the needle rear guard horizontally so that it barely contacts the needle at its forward position. Set it vertically so that the needle eye is not below the upper edge of the guarding surface when the looper point moving to the left reaches the needle.
19. Make sewing test on three plies of denim or similar material. Make a 3 ply tuck and sew across it at top speed. Operate machine continuously at 4500 R.P.M. STEP ON IT!
20. Check the seam produced by unravelling the stitches and noting if thread is chafed or cut. Also note relative consumption of looper and needle thread, which should be approximately 50% needle thread and 50% looper thread.
21. Adjust the hemmer to make the desired width of hem. Check the throw-out adjustment.
22. Make test sample on 2.20 yard denim. Cross a felled seam at full speed.
23. Remove oil from all reservoirs to avoid soiling test sample and literature enclosed in shipping box.
24. The correct length between centers of the connecting rods are: feed drive eccentric 4 9/32 inches (108.74 mm), feed lift eccentric 3 11/16 inches (93.66 mm), looper drive eccentric 5 3/8 inches (136.52 mm), looper avoid eccentric 5 13/64 inches (132.16 mm). The three later measurements are vital. See that the eccentric straps are set at the proper angle so that they do not bind. They should be free to move sideways during the complete cycle of the shaft.

PL-158



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THREADING DIAGRAM FOR STYLE 43200G