

## Servicing a Brother KH710 knitting machine

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Note: these instructions are probably suitable for the other 8 button machines in the Brother range, and partially suitable for the 4 button machines, but have not been tested on these or other machines.

With the machine set up try to determine which assembly/part is not working correctly. Try to replicate the correct movement of this assembly/part by moving it by hand, without using the controls. If it will move by hand back and forth, but not when using the controls, then it is probable that this part needs cleaning.

You will need:

- cross-head screwdrivers, medium and small
  - surgical spirit or equivalent solvent for cleaning
  - cotton buds or equivalent for use as cleaning tools
  - lithium grease
1. Remove the yarn feeding system **tension unit** (tension mast).
  2. Pull out the **row counter** by pulling it straight up.
  3. Pull off the plastic tops of the **reverse lever** (A to B) and the **change lever** (N and MC).
  4. Remove the **select lever** (spanner lever).
  5. Photograph the machine as is, so you have a guide for reassembly.
  6. Unscrew the arm that connects the **pattern centre** (the 8 patterning buttons) to the dial that slides *where* across the needle bed the pattern starts.
  7. Unscrew and remove the top plastic cover.
  8. Unscrew and remove patterning **slide dial indicator**. That connecting arm will come with it.
  9. Replace the arm's screw loosely and use Blue-Tak or similar to attach the plastic lever tops onto the sides of their metal lever arms, so they don't get lost.
  10. There are 3 screws holding the needle bed onto the plastic machine ends, two adjacent to the needle butts and one close to the hooks. These are two different types of screw. Undo them all and separate/mark and note them as coming from which screw hole.
  11. If you haven't already, do the 3 screws at the other end too!
  12. Using a small spanner, undo the 12 nuts under the **gatepegs**/gateposts. You do not necessarily need access to the bolt heads. Try it to see. Remove all 12 nuts only. The **number strip** will keep the bolts in place.
  13. Unscrew the brackets for holding onto a table or stand underneath the machine. Keep the machine the right way up whilst you do this and work from underneath it. Remove the brackets and screws.

You can now lift the machine's needle bed and workings out of the case. Should you want to turn the unit upside down to work on the bottom, it is advisable to remove the needles first to avoid them working loose from their positions and getting bent.

Access the required assembly. Using surgical spirit (or equivalent) on cotton buds (or equivalent), clean off all thick sticky grease from around the outer of the assembly, from any and all pivot points and any places where one piece goes across another due to the pivots. This could take a while! Keep working the pieces back and forth to drag more sticky grease out from under the moving parts until it is clear and the assembly moves freely.

Make sure all solvent has dried off completely. Lubricate afresh all pivot points, and all parts that pass over or under others. There should be no metal against metal without lubrication. If it's a part you can access readily, you can use oil (because when the oil dries out you will be able to re-lubricate easily) but otherwise use **lithium grease**. Do not use silicon grease.

If you have had to turn the machine upside down, turn it back the right way up and, replacing some of the needles if necessary, verify that the controls do what they are supposed to.

Now reassemble. Congratulations on repairing your machine!