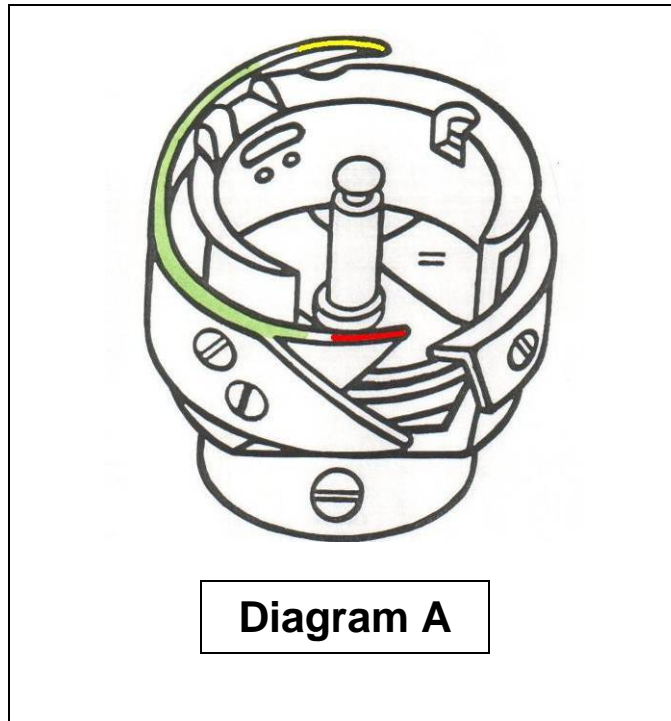


Appendix E

Hook Maintenance Instructions

Note that if you break a needle, there will be a burr or scratch somewhere on the hook assembly. Sometimes it may take a very thorough search to locate it. Good lighting and a magnifying glass will help locate any burrs or scratches.



This diagram shows some of the areas on the hook assembly that should be checked occasionally for abrasions or burrs, which can cause thread breakage and looping problems. If you ever break a needle or are having problems with thread breakage, follow the procedure described below. Note that the hook assembly does not need to be removed to work on it. **If the hook is removed for any reason you will have to re-time the hook.**

- **Step 1: Check the area marked in green.**

It should be shiny and as smooth as glass. Use your fingernail and slide it along the surface of this area. Sometimes you cannot see any

damage or roughness on this area but you can feel it with your fingernail.

- If you detect any imperfection in this surface, it must be polished smooth. **DO NOT POLISH THE AREA MARKED IN RED!** The red area is the hook point; it must stay very sharp on the tip. If the hook point is buffed, then the entire hook assembly will need to be replaced.

Rotate the hand wheel of the machine so that the area to be polished is on the bottom. This prevents the grit from the emery cloth from falling down into the rotating components of the hook assembly. Use fine grit emery cloth #320-400 and polish it smooth. Emery cloth (also called crocus cloth) can be purchased at a hardware store or auto parts store.

- **Step 2: Check the area marked in yellow.**

The front edge as well as the top side and back of this piece should be smooth.

- Follow the polishing procedure as described in Step 1 above. Once again, be sure to avoid the area of the hook colored in **red**.