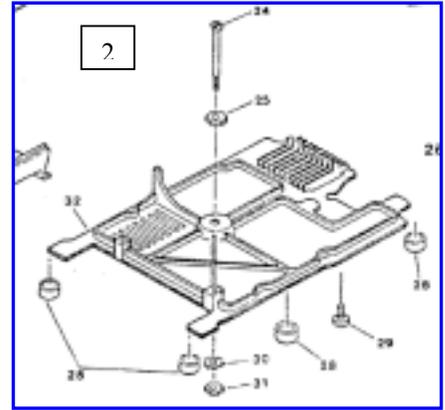
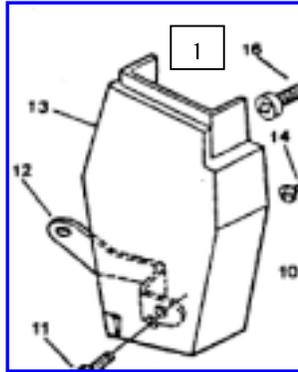


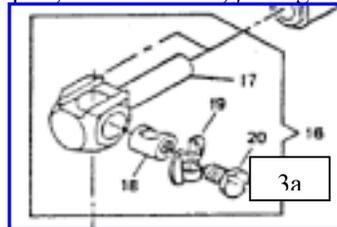
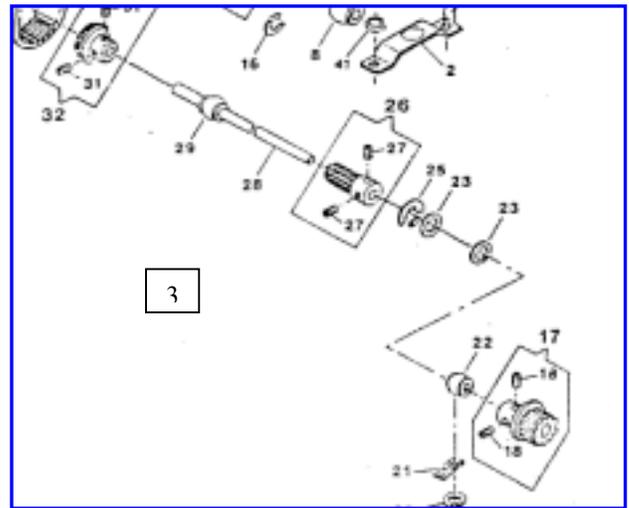
Singer 6233 – 34 – 35 Models
Hook / Needle Timing

Timing the 6233 – 34 – 35 series is a little tricky, as I don't recall these units having actual needle bar timing marks. So you may have to be creative, and make up some sort of cardboard type of gauge to help out with this repair. However, I do have a very limit supply available for \$4.95 each. See page two, fig. 5, for the gauge dimensions. Unplug the machine, and remove the needle. Always turn the machine towards you by hand, using the hand wheel. Refer to your owner's manual if you have one, or download the available parts schematic I have available.

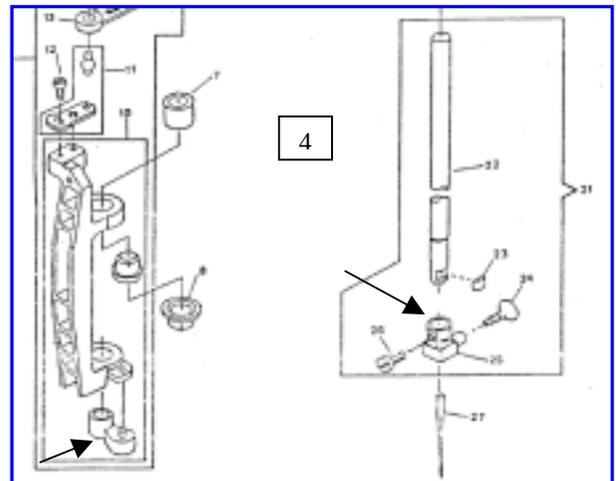
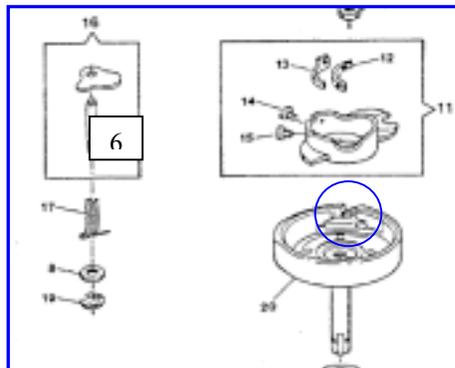
1. Set the machine to straight stitch
2. Remove the side cover, fig. 1, screw 11
3. Remove the bottom pan, fig 2
4. Remove the needle plate
5. Remove the bobbin case, fig 6 (Apollo type units only shown)
6. Insert a new needle, size 14 will work fine
7. Turn the machine until the needle would be at its lowest position



8. Insert the long edge of the gauge (d), between the needle clamp and needle bar carrier, fig 4, items 10 (left) and 25 (right) in the picture. Now honestly I don't recall if I used the very top of the needle clamp, or the part that where you tighten the needle, try both, but chances are it'll be the one that the gauge is closest to fitting properly in. If I recall correctly, I think I used the clamp itself.
9. If the long edge of the gauge is loose, or does not fit snugly, loosen screw 20 in fig 3a, and adjust so the needle bar and the gauge are snugly together.
10. Then turn the gauge around, and using the shorter side (c) turn the hand wheel towards you until the gauge is snug in the same spot as in step 6.
11. At this point, the hook point, fig 6, item 20 – blue circle, will be just behind the needle. Not past, and not before, just right behind it



12. In short, the needle has to reach a certain depth, and when it rises 3/32 of an inch, the hook point will be at the needle



13. If the hook isn't correct, then you will need to time the hook
14. In fig 3, either item 17, or item 32 is used. Now one of them will more than likely have a flat spot. General rule of thumb, use item 17 to make your adjustment. Turn the machine and ensure the feed dogs are in the down position, loosen the two setscrews on item 17. Position the hook point behind the needle, and tighten the two setscrews. Turn the machine a couple times, and recheck the settings. If all is ok, it should be in time, and work properly. To check, sew on a piece of knit fabric, using a zigzag stitch. It shouldn't skip stitches if all is correct. Again, use a good thread, not any of those bargain brands. Also ensure to use a needle that is made for knits.

Figure 5 shows the basic layout of the gauge, and the dimensions have to be exact.

The overall width is $\frac{3}{4}$ of an inch (a)

The overall length is $1 \frac{29}{32}$ of an inch (b)

Edge D $1 \frac{17}{32}$ of an inch, but $\frac{1}{2}$ will do ok

Edge C $1 \frac{26}{32}$ of an inch

Notch to resemble, but again, this has to be spot on, or it will not work properly.

