

Basic Maintenance for the 63900 Class machines

Union Special Corporation's Class 63900 single-needle, needle-feed lockstitch machines have long been chosen to perform the toughest sewing operations. They have earned the reputation of being rugged, reliable workhorse machines capable of sewing the heaviest, hard-to-handle materials while producing consistent, high quality seams.

Tolerant of punishing work conditions, these machines still require routine maintenance to insure they will continue to provide years of trouble-free service.

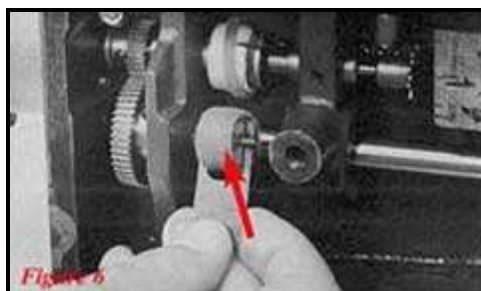
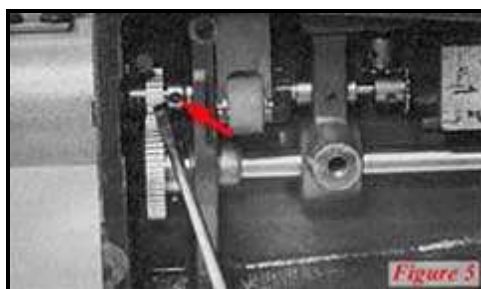
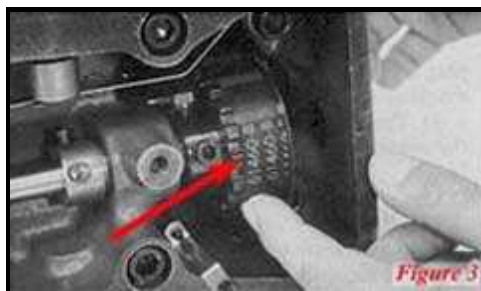
The following information covers the steps to be followed in performing basic preventative maintenance on all Class 63900 machines.

Whenever oil is changed, it is important to use Union Special Spec. 175 oil having the following characteristics:

Viscosity at 100F = 90-125
Flash point (minimum) = 350F
Color A.S.T.M (maximum) = 1
Viscosity index (minimum) = 85
Aniline No. = 175-225
Copper corrosion (maximum) = 1A
Neutralization No. (maximum) = 0.10M

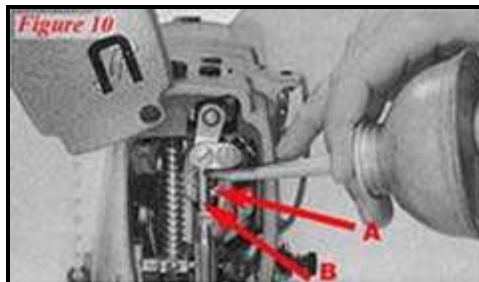
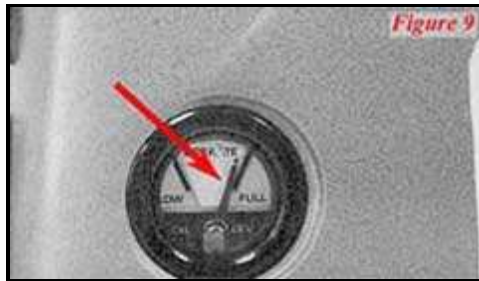
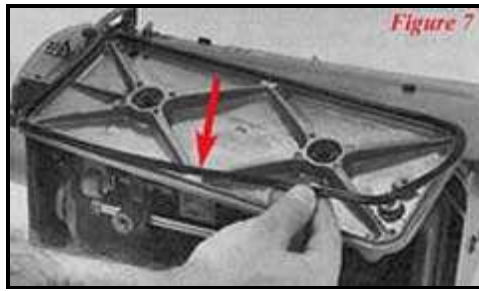
If the machine is new and is being operated 8 hours a day, the first oil change should be made after 6 weeks. Thereafter, the oil should be changed every 6 months.

1. To drain the old oil, remove the Allen head plug screw located in the oil reservoir bottom cover, **Figure 1**. It may be necessary to tip the machine to drain the oil completely.
2. The oil reservoir cover should be removed and the inside of the machine cleaned every 12 months. The reservoir cover can be removed by taking out the two 5/16" hex head machine screws, **Figure 2**. Clean the



inside thoroughly, being sure to remove all particles.

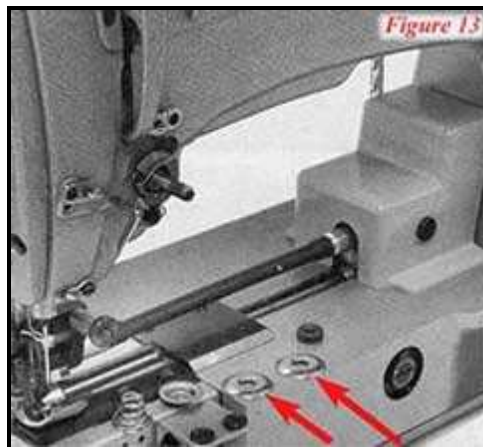
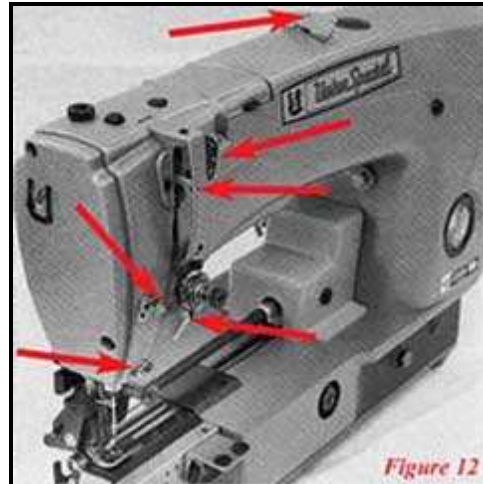
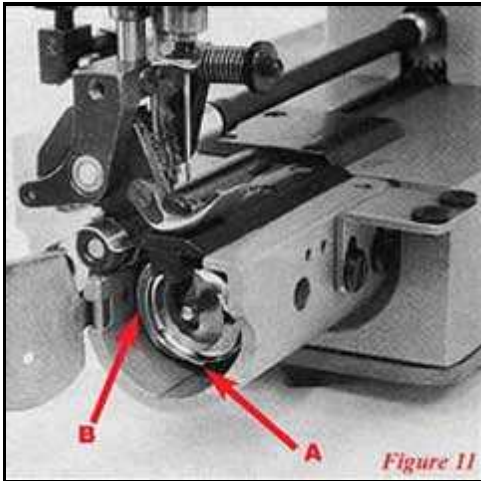
3. At this time, inspect the toothed feed driving belt for any cracks or cuts, **Figure 3**. If any are found, replace the feed driving belt with a new belt (#61460B).
4. Check to see if there is any left to right shake or movement on the feed driving shaft, **Figure 4**. There should be no perceptible movement of the shaft. If any is found, loosen the collar, then reposition it to eliminate the movement and retighten it on the shaft. If equipped with new oil pump assembly, thrust using pump, not collar.
5. Also check to make sure there is no lateral movement of the hook driving shaft, **Figure 5**. Reposition the shaft collar to eliminate any movement that might have been detected.
6. Inspect the hook oil feed roller and the felt around the metering cup to see if they are clean, **Figure 6**. If not, clean or replace them.
7. Inspect the gasket (#61482J) for the oil reservoir bottom cover for any cuts or cracks. Replace if needed and assemble the bottom cover, **Figure 7**, and torque the two screws to 72 in/lbs.
8. Level the machine, remove the plug screw located on the top of the machine and add oil, **Figure 8**.
9. The proper amount of oil is in the sewing machine when the needle in the oil gauge indicates 'full', **Figure 9**. Replace the plug screw.
10. If the machine is new or has been out of service for an extended period of time, it should be lubricated as follows: Remove the head cover and directly oil the needle bearings in the needle bar link and the take-up link (A) and needle bar (B), **Figure 10**. Replace the head cover
11. So far we have only covered how to oil the machine. However, from time to time it is a good idea to check the hook point (A) and thread deflector (B) for burrs, **Figure 11**.
12. The take-up lever's eyelet and



other thread handling components should be checked for wear and grooves which could be caused by the see-saw action of the thread as the machine is sewing, **Figure 12**.

13. The tensions discs and check spring should be checked periodically and cleaned with a small brush or cloth, **Figure 13**.

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