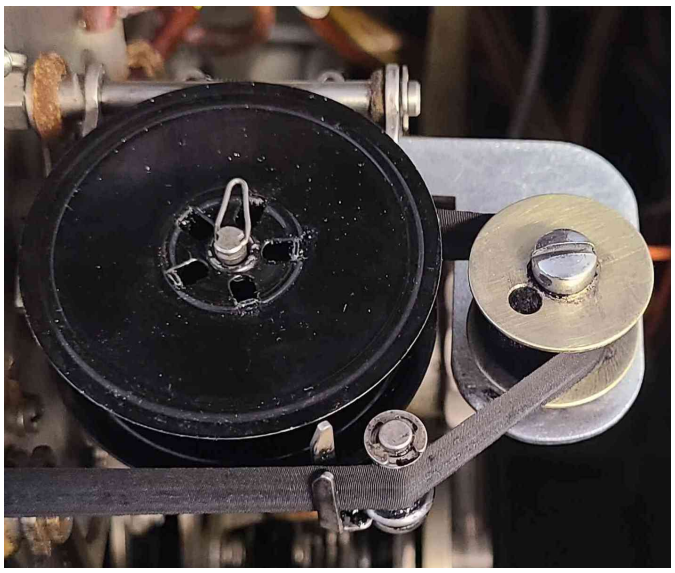
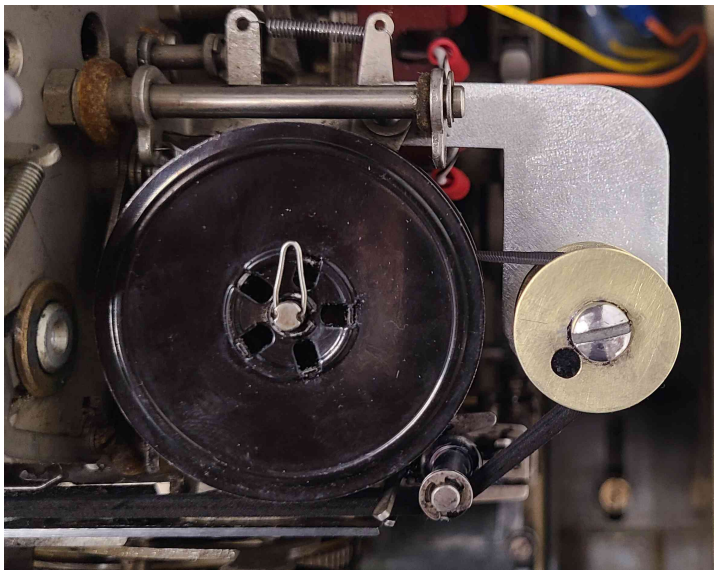
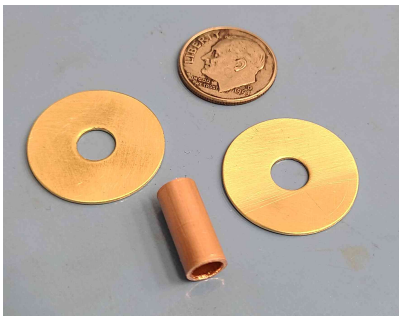
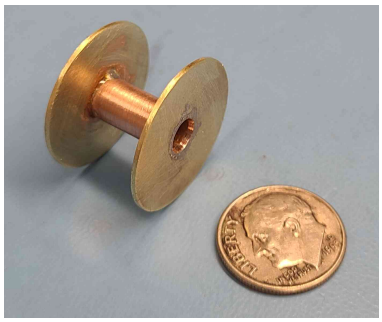
Teletype Model 28ASR re-inking attachment

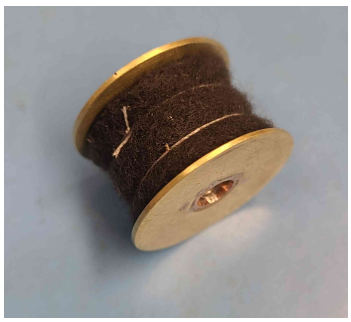
This details the attachment I made for my 28ASR to re-ink ribbons while the machine is running. It in no way alters the existing ribbon reversing or any other function. John (W9DDD) tells me his KSR has an additional 1/4” clearance, so this should work there as well. I always use nylon ribbons and the ink used is “archive compatible” black stamp pad ink that is oil based. Do not use standard water based stamp pad ink, as it will dry out on your ribbon. The inside of the spool is .06” wider than the ribbon and contains a length of tightly wound fabric on the spool for the ink. The spool is similar to a bobbin for a sewing machine. The reversing eyelets on the ribbon operate normally with this attachment. The ribbon is looped around the outside of spool. If desired, the design permits un-looping the ribbon back to normal without removing the modification. Remember, a little ink goes a long way, or you can end up with a cleaning job. A very dry ribbon may require a couple of passes to thoroughly wet the ribbon. The small hole in the top of the spool permits re-inking the felt with an eyedropper or syringe. Only add ink when the print starts to fade. A nylon ribbon will last a very long time with no lint and crisp characters.





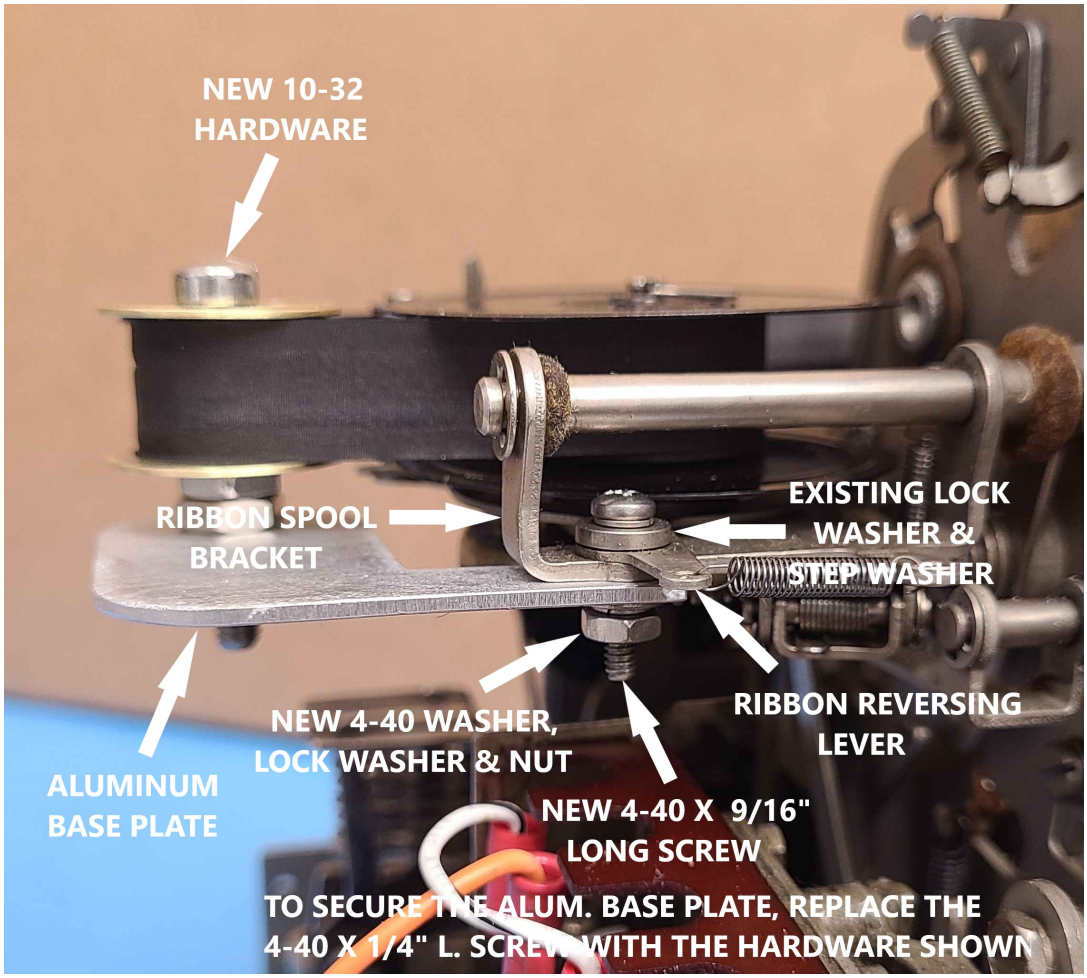






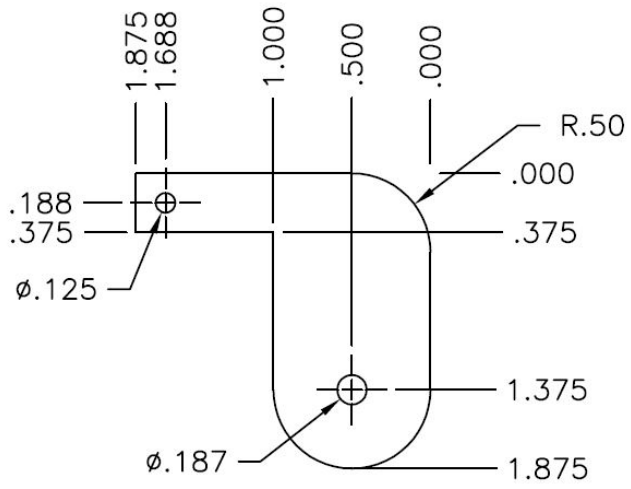
I used soft solder to join the pieces of the spool together, then cut a length of cloth wound it tightly to almost fill the spool, and secured it with two pieces of thread around the circumference. How long the fabric you need will depend on the thickness you use. Be sure to wind the fabric tightly. If it is loose the spool will not turn.

Use 10-32 hardware to secure the spool to the base bracket. I needed about 3/16” between the bottom of the spool and the base bracket to match the height of the 2” ribbon spool. Use two 10-32 nuts as jam nuts on either side of the base bracket. When completing adjusting the height of the spool, tighten the nuts and ensure that the spool can rotate easily.

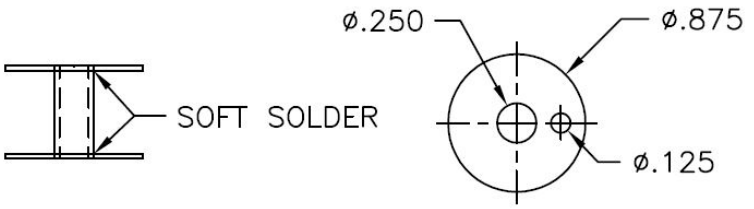


I replaced the existing 4-40 x 1/4”L. screw that retains one of the reversing mechanisms with a 4-40 screw 9/16” long. The inking mechanism attaches to that new screw with a flat washer, lock washer, and 4-40 nut from the bottom. When replacing this screw, be sure not to lose a small step washer, on top, needed for the reversing mechanism to operate properly.

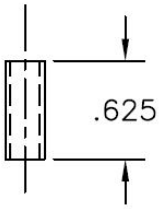
The aluminum base was cut out from a piece of aluminum sign, and the edges cleaned up with a file. All the other parts were obtained from the local Ace Hardware. You can wind virtually any fabric on the spool for the ink.



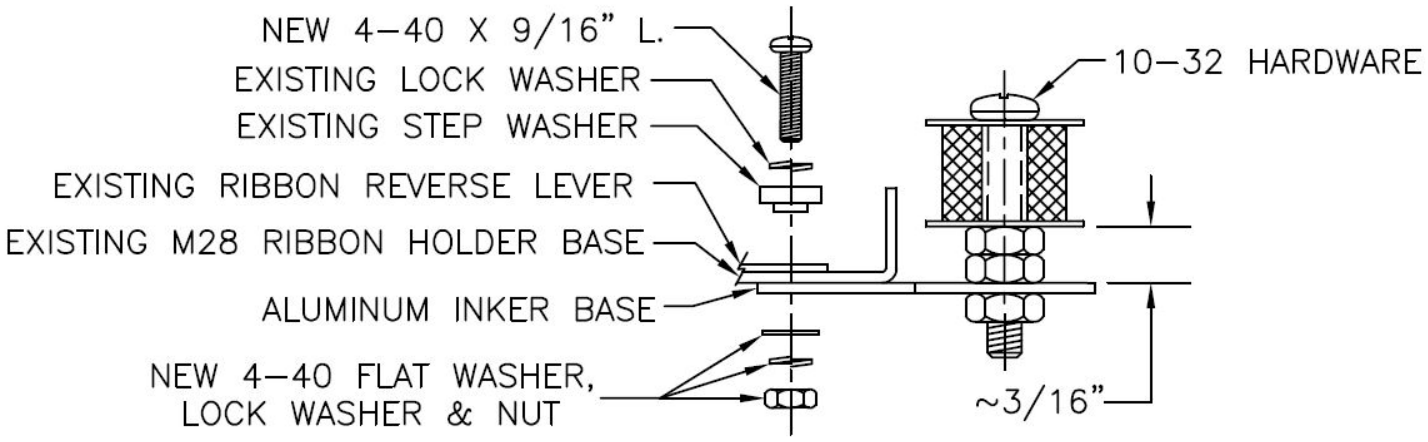
.06 THK ALUMINUM



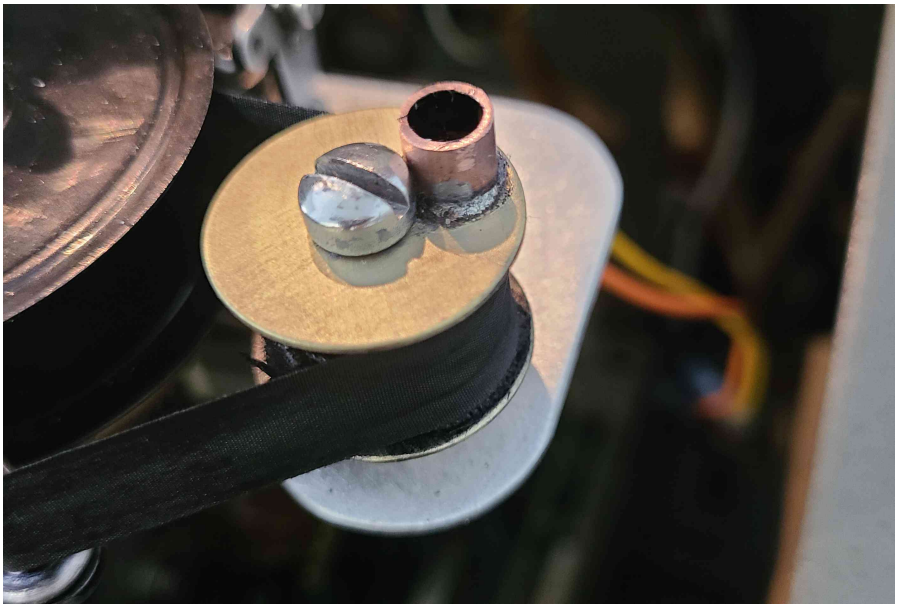
2EA. .03 THK BRASS



ø.25" OD X ø.19" ID
COPPER TUBING



HARDWARE SEQUENCE



Since installing, I soft soldered a small 3/16” long piece of 1/4” diameter copper tube to the top of the spool over the ink fill hole. This allows my ink bottle to put a drop or two on the spool without having to use a syringe.