

Cleaning and polishing metal sewing machine parts

Collectors of vintage and antique sewing machines often come across dull, grimy, rusty sewing machine parts that they need to clean up.

I am going to attempt to describe various cleaning methods, some requiring professional metal working tools and techniques such as those used by jewelers and metal smiths.

My professional tools were bought from jeweler's supply houses that cater to jewelry manufacturers. Most of my tools are well over a decade old, some getting closer to two decades. They were bought either locally in New York City, or via mail order catalogs. Unfortunately since I haven't bought tools in a very long time I don't know whom to recommend anymore. I tried looking up a few companies I used to do business with (whose names I remembered). Some I couldn't find at all, and others have websites, but don't have on-line catalogs to order from. You are going to have to do your own homework to find sources for these products.

The instructions below are only for metal parts that can be easily removed (and later reattached) from the sewing machine and that **do not have a japanned, painted, varnished, or decaled surface**. Using these methods on any decorated surface will permanently destroy the decorations and finish. If you are planning a repaint job on a totally messed up machine, there are detailed instructions available at: <http://www.sew2go.com/adfwrestoration.htm>. Don't ask me questions about repainting though, because I have never done it!

Grimy parts covered with old oil and gunk

Method #1

Place sewing machine parts in a glass jar filled with acetone (from the hardware store) to soak. Scrub with an old toothbrush, rags, paper towels or q-tips. No rinsing or drying is needed.

Method #2

Use a dental pick to get grime out of tiny little crevices like feed dogs, bobbin winders, screw threads, needle clamps, etc. Be very careful not to slip, because it can cause nasty scratches. Tooth picks can also work, but they tend to break and/or wear down quickly. They are safer though for valuable machines.

Method #3

Use a jeweler's ultrasonic cleaner that has a heat function. Place parts in basket. Set timer for an hour. They should be clean when you return, if not run them through again. Rinse with water, and dry with a hair dryer. You must immediately remove all moisture or they will rust.

Rusty parts

Method #1

Use WD-40 and a Scotch Brite pad to scrub them clean by hand. This is the gentlest method for use on collector's items with minor rust. No rinsing is needed.

Method #2

You can use a household cleaner called Zud (available in super markets), which is a powdered form of oxalic acid. It will remove all the rust, but will permanently dull and darken the nickel or chrome finish turning the item a dull gray. Only use this on very rusty nasty looking machine parts, not on valuable collector's items. Scrub the cleaner in with a Scotch Brite pad or some steel wool. It's ok to use the soapy kind like SOS or Brillo. Rinse and dry with hair dryer.

Method #3

Use a jeweler's flex shaft (Foredom and Procraft are good brands) or a Dremel with Cratex attachments to remove rust, scratches and burrs. This method will probably remove the plated finish as well, so it will never look new, but it will be clean and smooth. Cratex (www.cratex.com) offers a variety pack with different grits and shapes to get into different areas. Do not use this method on valuable collector's items. Scrub thoroughly with soap and hot water to remove any residue. Dry with hair dryer.

Polishing metal

Once you have all of the old oil, gunk, grime and rust removed you'll want to get your pieces as shiny as possible. If the plating is worn and flaky you can still try to polish up the metal underneath. If it isn't flaky or worn, use the gentlest methods Nos.1, 2 or 3.

Method #1 for nickel plated items

Use a silver polishing cloth that you can find in may super markets or jewelry stores. It is impregnated with jewelers rouge. Simply buff the items with the cloth and they will shine up again.

Start with Tripoli on a muslin or felt buff. Tripoli will remove minor scratches. Buff till very shiny. Scrub clean with hot soapy water.

Finish with jewelers rouge on a clean separate muslin buff.

Method # 2 for nickel plated items

Use ordinary household silver polish from the supermarket. Anything that is tinted pink will work. These are the ones that have rouge in them. Wipe it on with a rag or paper towel, then take an old tooth brush and scrub the polish into all the nooks and crannies. This works well on ornate face plate and back plates. Buff with a clean soft rag or paper towel till shiny, then rinse with water, and dry thoroughly with a hair dryer.

Never use the same buffs for Tripoli and rouge and always scrub all Tripoli residue off of the piece before using rouge or you will contaminate the rouge, and you will not get a mirror finish.

There are special rouges and tripolis on the market for chrome. I haven't tried them, but the catalogs should let you know which ones to buy. For older machines with nickel parts white Tripoli and red rouge would be best, for newer machines with chrome parts, you could probably use white Tripoli then finish with a green rouge, or a special chrome buffing compound.

Method #3 for chrome items

Follow instructions above for #2, but buy a polish suited for chrome.

Make sure you use separate buffs for each compound. Keep them in little Ziploc bags that are clearly labeled so you don't get them confused.

Method #4 for chrome or nickel plated items

This one requires a jeweler's flex shaft or Dremel.

After you are done with the Tripoli and/or Rouge you can use the ultra sonic cleaner (if you have one) to get the residue off between steps, instead of scrubbing. About 20-30 minutes should do it.

The item must be spotlessly clean of all residue from any other cleaning process, especially Cratex, sanding dust, or steel wool lint. All rust, oil and other gunk must already be removed too.

When working with power tools such as those mentioned in this article, always follow the following safety precautions:

- ◆ Tie your hair back if it is long. A braid is more secure than a pony tail.
- ◆ Remove rings and bracelets that could get caught in the machinery.
- ◆ Wear safety glasses and a dust mask.
- ◆ Keep a first aid kit fully stocked and near by.

Recommended reading

Metal techniques for Craftsmen by Oppi Untracht ©1968 ISBN # 0-385-03027-4

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