

Refinishing Ferrous Metal Parts

As you know, ferrous metals like steel and iron oxidize over time. Eventually, the surface of the metal turns a blue/black color under the rust. Also, some ferrous metal parts are heat treated in the forming process. This also turns the surface of the metal a blue/black color. The cleaning process (wire brushing, chemicals, etc.) during restoration usually removes the color and returns the metal to its basic gray color.

The original blue/black color can be restored by using Instant Gun Blue. This product is used to refinish or repair the finish on gun barrels and other blued parts. The clear liquid applies with a cotton ball and immediately changes to color of the bare metal to Blue/black. This is called a "cold" bluing process. The brand I use is "Birchwood Casey Perma Blue". There are many other brands such as "Van's" and "Brownell's Formula 44/40". I don't think brand will matter. You can find gun blue at any sporting goods store that sells firearms or online. It also comes in a paste form that I have never used. I have been using the same 3 ounce bottle for a few years and it cost less than \$10.00.

I have included pictures of an Everhot SHSI model #20 (page 181 of Vintage Blowtorches) that I recently restored. The burner shield, feed tube, and front rest were all very well rusted pieces of steel. After subjecting the parts to rust stripper solvents and a rigorous medium wire wheel brushing, they became a shiny gray color. I used the gun blue to bring back, what I feel is the "aged metal" or "heat treated" color. With gun blue, the more applications, the darker the finish gets. I find this process works well on steel feed tubes, steel wind guards, the pump knob and cap on White torches, and jet control rods. It's very easy to use, just follow the instructions on the container. The instructions will recommend using gun oil on the refinished surface to prevent rusting. I use an Automobile paste wax instead.

Everyone might not agree with this. Some people like shiny steel. For me, it doesn't get any better than bronze, brass, and blued steel.

