Metal Rescue® Rust Remover Bath
Rust Removal Tips for Vintage Signs, License Plates and Painted Items

A Rust Removal Overview
Metal Rescue® is a clean, safe and easy process for the removal of rust from iron and steel including vintage metal signs, antique license plates and other painted items. While we provide these basic tips for successful rust removal below, it is always best to consider the item you are looking to de-rust with a critical eye. We have had many customers use Metal Rescue® on their painted items with great success, but there are some vintage painted items that may not lend themselves well to soaking.

When used as directed, Metal Rescue® will remove rust without harming the vast majority of paint and coatings (see tip 1 below) or other dissimilar materials found on the surface of metal signs/license plates. We offer these helpful hints and special considerations to guide you in the removal of rust from your antique metal signs and license plates. If in doubt, please test in a small concealed area prior to full submersion.

Tip 1: Paint Precautions
Metal Rescue® will not remove or harm the vast majority of paint coatings. However, if there is a layer of rust under the paint some of the paint coating will be lost as Metal Rescue® removes the rust. Some paints and inks (typically red/orange), especially old paints, may use iron oxide pigments and because Metal Rescue® has been engineered to remove iron oxide, it may dissolve the pigment in these types of paints. It is always best to test a small section or hidden area prior to use and consider that some vintage items and antiques are simply not ideal for soaking and/or rust removal. A good rule of thumb is, if you believe soaking your painted item in any liquid for an extended period will loosen paint then soaking in Metal Rescue® will also loosen the paint and should be avoided.

As mentioned above, some paints and inks (typically red/orange), especially those found in old paints, may contain iron oxide pigments such as the red numbers on the old odometer pictured here.

Metal Rescue® has been engineered to remove iron oxide, and it may dissolve the pigment in these types of paints as shown in this “after” photo – notice the red numbers have been removed.
Tip 1: Paint Precautions-Continued

This is a good example of a painted sign that did not de-rust as well as others. In the “before” photo to the left you can see visible rust behind the paint. If rust is present behind any paint on a sign, the Metal Rescue® will remove the rust and therefore the paint with it. We would recommend NOT trying to de-rust a sign in this condition because of where the rust was on the sign.

In this “after” photo you can see the areas of the sign where the rust was removed. Since the rust was located underneath the paint, the paint was removed as well. Again, we would recommend NOT trying to de-rust a sign in this condition due to the location of the rust being behind the paint.

This is an old plate from 1927. The plate was soaked in warm solution and the white paint on the letters was removed. If there is concern that a warm water solution might remove the paint we would NOT recommend Metal Rescue® for that application. The paint on metal must be sturdy and able to withstand warm liquid. Test in a small concealed area prior to full submersion.
**Tip 2: Soak Time**
Once you have placed items in Metal Rescue®, it is important to check back on your items frequently. A prolonged soaking of anything antique/old/vintage in a liquid (even water) can cause paints and coatings to loosen and the same may be true of a lengthy soak in Metal Rescue®. For optimal results, check items each hour during the rust removal process and promptly remove once the item has reached your desired results.

![Image of a license plate](image)

This 1963 Michigan license plate was de-rusted halfway down the middle.

Note that the paint is untouched as this paint was sturdy and intact prior to de-rusting. This plate cleaned up extremely well with Metal Rescue®.

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**Step 3: Attention to Temperature**
The temperature of the Metal Rescue® liquid is very important. While we typically suggest warming Metal Rescue® to accelerate its rust removing abilities, when working with vintage metal signs or antique license plates or any painted items we suggest keeping the temperature between 68° and 78° to ensure that the heat does not disturb or dislodge the paint on the item. Note that even though room temperature may appear to be in this range, often a liquid takes longer to reach this temperature.

**Step 4: Filter and Save for Reuse**
When the de-rusting process is complete, pour the used Metal Rescue® back into the original container using a filter to skim any residue (cheese cloth or paint strainer works great), cap it up and replace on the shelf for future use (Metal Rescue® has a shelf life of one year after having been opened.)

**Step 5: Extended Rust Protection with Dry Coat™ Rust Preventative**
Dry Coat™ is a water-based liquid that once applied (via dip, spray or flowcoat) will provide a clear protective coating to help prevent rust from returning. Dry Coat™ will dry-to-touch within 30 minutes at ambient conditions and it does not attract dirt or dust, is non-hazardous and easily washes off using mild detergents or common metal cleaning solutions. Dry Coat™ is safe to use on ferrous metals, stainless steel and will not harm most elastomers or plastics. Dry Coat™ provides protection for up to one year for items stored indoors.

*NOTE: Please note that Workshop Hero™ is not responsible for damage to any product Metal Rescue® or Dry Coat™ are used. Workshop Hero™ is not able to assess the fragility or suitability of items for use with our products. Please read all instructions carefully and test Metal Rescue® in a concealed or hidden area prior to full submersion.*

- The Workshop Hero™ Team