

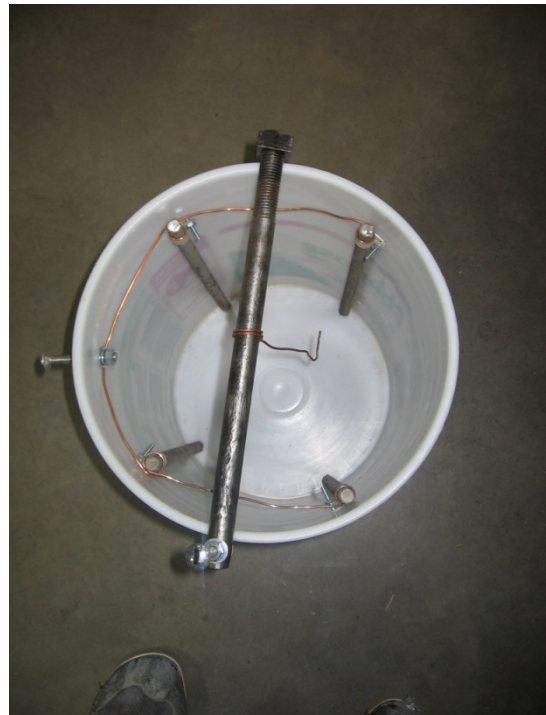
## AN UPDATE TO THE “RUST REMOVAL” ARTICLE BY GARY TILLSTROM FROM APRIL 2003

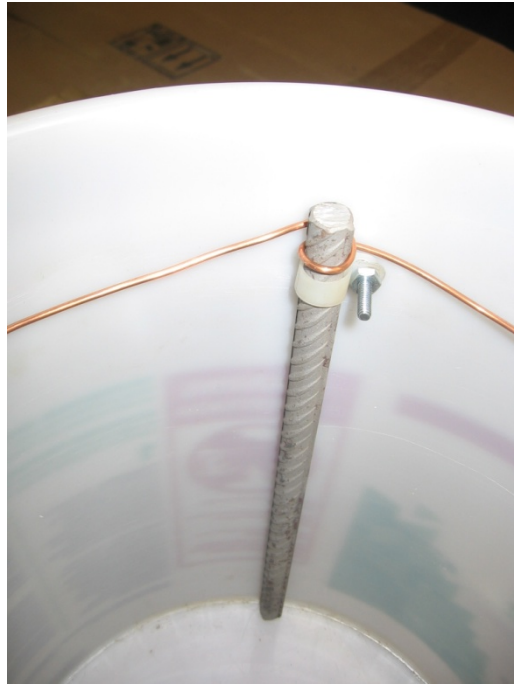
### REPRODUCED IN OUR LAST NEWSLETTER ISSUE

On April 4th 2020 Herb Iffrig posted a topic titled ELECTROLYSIS on the Model T Forum with a YouTube link on the subject. This 27 minute video features Keith Rucker of Vintage Machinery ([www.VintageMachinery.org](http://www.VintageMachinery.org)). At 6 minutes 27 seconds into the video Mr. Rucker talks about the chemicals used in electrolysis their benefits and drawbacks through minute 8 ½. The video links is <https://www.youtube.com/watch?v=NKZv14-K71g>

His recommended salt is Arm & Hammer brand Super Washing Soda which is sodium carbonate. It can be found in the laundry section of grocery stores or on-line at Amazon.com. Rucker states salts are needed because pure water does not conduct electricity well. Table salt is sodium chloride if used gives off chlorine gas which is dangerous if inhaled and corrosive. Baking Soda is sodium bicarbonate if used gives off hydrogen gas which is highly flammable. It can be processed by sprinkling it on a flat sheet and cooked at 300 degrees in an oven to convert it to sodium carbonate. Regardless, when removing rust via electrolysis efficiency is a desired consideration, HEALTH & SAFETY should be the major consideration so be sure to work in a well ventilated area.

I want to thank Gary for sharing the design of this unit and Bill for his work republishing this article. I have assembled a 5 gallon electrolysis tank utilizing the plans Gary has designed and laminated the following instructions for future reference when restoring rusted parts:





# RUST REMOVAL INSTRUCTIONS

(ELECTROLYSIS)

1. Dissolve one (1) cup of Washing Soda/Sodium Carbonate into five (5) gallons of water.
2. Place bucket outside in well ventilated area. (Hydrogen bubbles pose a hazard)
3. Connect **Rusted Part** to Parts Bar with wire.
4. Place Parts Bar across the top of bucket with Rusted Part hanging in bucket so it is submerged and **DOES NOT** touch rebar.
5. Connect 12 vt. Battery Charger **POSITIVE (+) LEAD** to bucket/rebar terminal (Anode).
6. Connect **NEGATIVE (-) LEAD** to Parts Bar terminal (Cathode).
7. Check part after three (3) hours. (brush surface with laundry brush to remove rust)

Eventually the rebar will load up and need to be sandblasted to remove the rust plated on it. The higher the amps, the faster the rust removal. For larger parts a 30 gallon blue plastic barrel or kid's plastic swimming pool may need to be used.

Dom D.