

## Sales Department Bulletin

SAXON MOTOR CAR CORPORATION

Serial Number

- - - N

C:0ES

FOUR

MILES

WHILE

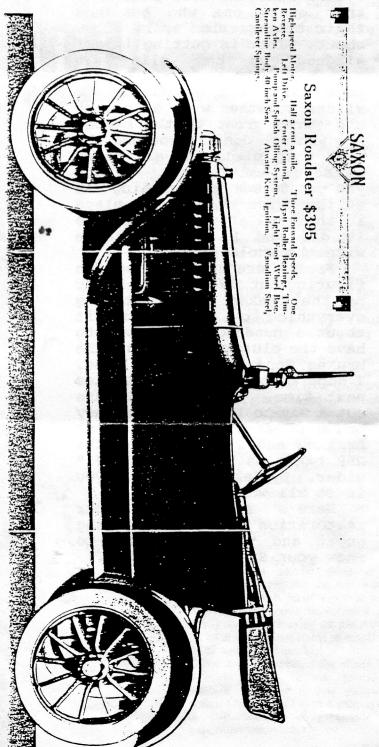
>

HORSE GOES

Detroit

503--2

How many of the lot shall we reserve for



Very truly yours,

SAKON MOTOR CAR CORPORATION.

Saxon times

March 1995

by

Walter Prichard

A registry of current Automobile owners. published twice a year about March and September to distribute information about the remaining Saxon cars and their owners. Also it should parts help locate information for these cars.

There is no charge for this out I put service. "SAXON TIMES' because I want return something to hobby for all the pleasure it gives me. I work for a living like most people and the cost I can handle. However if you would like to help, my out of pocket cost are about \$2.50 I would like to per year. all those who have helped me through the years. of Contributions Sale and wanted articles, for are welcome If you have encouraged. articles or restoration hints and you would like to write them in a form (columns) I can copy it would be even Please send helpful. correspondence to Prichard, 5250 N. W. Highland Dr., Corvallis, Oregon 97330

Saxon Times March 1995

Another day in restoring a Saxon!

Well I finally got off dead center and got the universal problem solved on my car. As some of you know I have been stalled for several years at the universal. I had one but not usable at my was I tried to find a standards. better one but that is pretty important part to be using something marginal. Finally I took the drive shaft to my local machine shop and talked to them as I have at least a a dozen times before. half This time I left it there with a plan of attack. A new drive line #1 and a new flanged universal #2. That has been the major stumbling block as they could not find one with the distance between the center and the flange. They finally took a John Deere universal and cut and welded and fussed and fumed and finally I have a work of art that fits the new drive shaft and is keyed on instead of a square drive they also figured out a new thrust bearing and new bearing on both ends,

While the machinist was working on my project happened to be at a place that makes gears for industry and was talking to an old machinist and showed him my drive gear. I really thought it was pretty good but to a professional it was a little rounded and nicked up. Well they looked into some old books and found the numbers needed to make a new gear. So for another hundred bucks they made a new one and hardened it. they had to do some machine work on it and said all those neat words about

hardened shaft that had to be drilled. Finally It was shrunk on and then welded and for all the world it looks brand new and still has the bushing in the middle and fits perfect.

Of course I took it apart about a three or four times getting the grease holes and shims all aligned and it fit

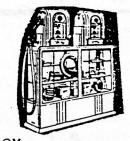
perfect every time.

Then came the real challenge that every one who has had their transmission apart knows That is getting it all slide it up and aligned together. This is an act of pure faith but eventually it slides together with a "clunk" and works great on the bench. Now you are done if you had the gasket in place and all doped up so it won't leak. If not you get to see if lightning can strike twice in the same place in the same afternoon. For me it did and I am comfortable with the whole project.

From there is has been fun figuring out the clutch and for me the brakes. I am taking everything to a friction outfit about a hundred miles away to have the clutch relined and the brakes done at the same time. I hope to talk about the brakes I hope to figure next time. out a way to line the emergency brake shoes for a little more braking and I want to use the B5R bands as they are a 1/2 " wider. By fall I will tell you if it all worked.

Here's hoping all your restoration project are going great and you have plans to show your Saxon this summer.

## HEEDEDEULE'E'SHEEPENAGE



THIS ISSUES PRODUCT SHOWCASE FEATURE COMES TO US FROM ONE OF OUR MEMBERS "DOWN UNDER". JAMES BUNNETT #705 SENT US THIS ARTICLE AND DIAGRAM BY PETER ZERBE, WHO HAS A SET UP FOR REMOVING THE "RUST GERM". JAMES TELLS ME HE HAS USED IT AND IT WORKS REAL WELL. AS WITH ANYTHING FEATURED HERE, BE CAREFUL AND USE AT YOUR OWN RISK.

You require a direct current supply, a 12 volt battery charger, or even a 12 volt battery capable of supplying the current for the required time, a plastic container, a supply of washing soda (Sodium Carbonate), a collection of clamps and a sacrificial anode of lead or steel.

The principle

The theory is the rusty treasure is connected to the negative side of the power supply and immersed in the solution of sodium carbonate. The positive side of the power supply is connected to a sheet of scrap steel or lead. The power supply is then turned on. Two things should happen, the solution will start to bubble and the amp meter on the battery will register the amount of power being used. Keep the power discharge within the safe working limits of the charger or battery. This can be done by altering the distance between the amount of current passed (preventing the charger from overheating) or lowering the

I have a 1.5 volt supply on my charger. The treasure should be turned around to present all faces to the anode or positive plate. The sodium carbonate in solution is alkaline and will not attack steel, also as the work is connected to the negative supply of the DC source, it is "cathodically protected" which means the steel of the

treasure is not croded.

In practice, you will not find this is a good disposal method for scrap. The magic explained. The rust is removed by the generation of hydrogen bubbles on the steel under the rust, which lifts the rust off the surface of the metal. All that remains to be done is to mechanically remove the rust with a cloth, wire brush, jet of water etc. even the hardest deposit is softened and easily removed, leaving the metal quite clean and therefore liable to rust if not dried and treated quickly.

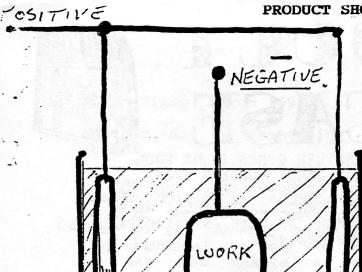
The article indicated the electrolyte solution should be one pound of sodium carbonate to one gallon of water. I have used I lb to 4 gallons and it still worked okay (room for experimentation here).

An example

As stated above, I have found the system to work well. My greatest trial was to try to de-rust what was left of . an old outboard motor that had been so badly attacked by rust that half the water jacket had burst away from the cylinder and all littings frozen in their threads. A mass of ferric oxide (rust), cast iron, brass and bronze. Its only real use was in this test. After 12 hours at only 1.5 volts at 6 amps, the major surface rust had loosened as had great lumps of the rust packed into the water cooling space, previously a solid mass. After mechanical removal of all loose rust, the engine was treated for another 12 hours. At this stage, all fittings, including the spark plug, could be removed with little trouble. Another 12 hours enabled the entire water space in the casting to be cleaned out. As a result, some more of the casting was found to be detached from the main body. The truth often hurts. The piston was finally moved and the engine dismantled. No sand blasting or dangerous chemicals used. Although I have not tried. I believe the rust could be removed from the hopper of a small engine by filling it with electrolyte, connecting the hopper to the negative terminal and introducing a scrap steel anode connected to the positive side of the power supply. A word of warning. A foam is formed if the action is rapid. I guess this consists of hydrogen and oxygen bubbles. A spark from the angle grinder hit the foam and a gunshot-like report resulted. I moved the de rust device outside. \*\*\*

## Removing the rust 'Germ' by Peter Zerbe

Rust. If you believe an article appearing in "English Mechanic and World of Science" No.2380 of November 1910, rust is a contagious disease of metal. "What but living germs could produce such results?" Engine restorers will agree the devil himself could not produce more havoc. Having tried all sorts of methods of removing the ferric oxide, I was sceptical about an article that appeared in the Model Engineer Vol. 106, No.3818, Titled "Removing Rust". The article explains how to electrically remove rust. From my experience it works and works well.



PIECE

TANK NON-CONDUCTIVE IE PLASTIC, FIBRE GLASS. WOOD ETC.

SOLUTION
WASHING SODA.
(SODIUM CARBONATE)
QUANTITY APROX. & KILO TO
20 LITRES OF WATER.
| LB-To 19 allon rain water

ANODE (SACRIFICIAL)

LEAD OR SCRAP STEEL

MUST BE CONNECTED TO

POSITIVE LEAD.

WORK PIECE.

CAN BE MIXTURE OF METALS

I.E. CAST BODY WITH BRASS

ALUM. OR COPPER FITTINGS

NO DAMAGE WILL OCCUR TO

MATERIALS. WORK PIECE

MUST BE CONNECTED TO

NEGATIVE LEAD.

POSITIVE NEGATIVE

WORK

PIECE

(1.) ONE ANODE TANK

OPERATION

SET UP AS DIAGRAM

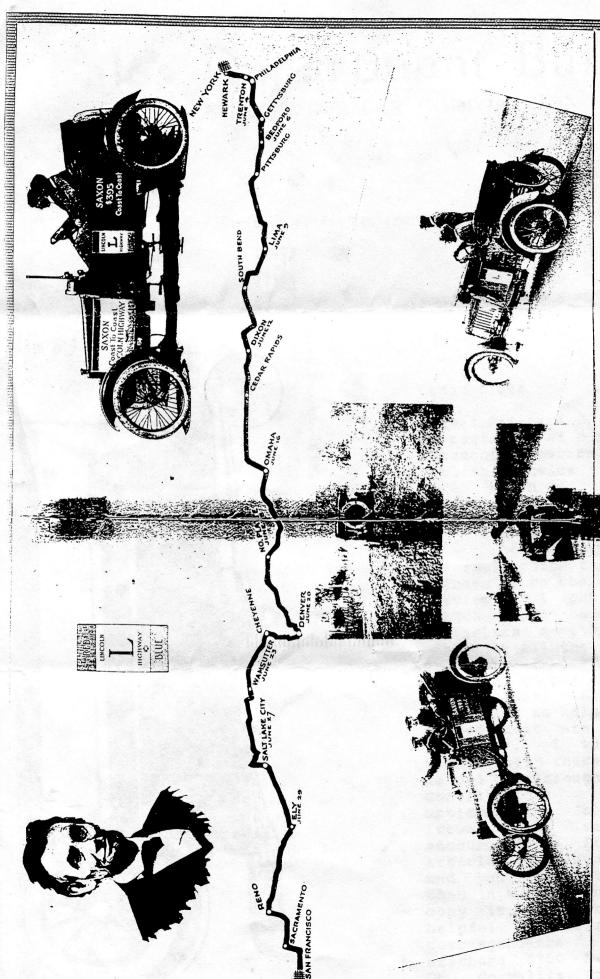
TURN ON POWER SUPPLY NOTE AMOUNT OF DISCHARGE
ON AMMETER. KEEP POWER DISCHARGE TO SAFE LIMIT

OF POWER SUPPLY BY ALTERING DISTANCE BETWEEN

ANDE AND WORK PIECE. INCREASING DISTANCE
BETWEEN ANDDE AND WORK PIECE WILL DECREASE

AMPERAGE PREVENTING POWER SUPPLY OVER HEATING
REMOVE AND CLEAN TO KEEP ACTION OF

TANK TO MAXIMUM PERFORMAINCE



## ntinent Over the Lincoln Highway Saxon Was the First Car to Cross

THE above illustrations tell graphically the story of the Saxon car that crossed the continent over the Lincoln Highway, and reached its destination on time—the first car ever to make the trip.

Shown in the upper group are the car and its drivers, M. A. Croker and Fred Wilkins; the route followed; the man whose memory this highway perpetuates.

In the lower group, from left to right, are pictured (1) the Saxon dipping its, pariwheels into the Atlantic Ocean, at Brighton Beach (2) pulling through Illinois gumb; (3) swimming a wanted out road in Nebraska; (4) dipping its front wheel; into the Pacific Ocean at San Francisco, thus marking the successful completion of its long journey.

This ocean to ocean run started June 4th. It ended July 4th, when the Saxon declared its independence of all road and weather conditions. In thirty days this car covered 3389 miles over the Allehanies, the Rockies; across the great American desert, through floods and roads that were worse than no roads at all. It held to its schedule and averaged 30 miles per gallon of gasoline all the way.