PREVENTATIVE MAGIC

THE THREE "R"S OF PROTECTIVE METAL COATINGS: RAW, RUSTY OR RPM!

STORY ANDY BOLIG

WE ALL KNOW THAT RUST NEVER SLEEPS.

It constantly chews away at our beloved autos until there's nothing left of those mid-'60s behemoths but some shards of glass and a whisp of vinyl.

There have been some major breakthroughs in coatings and many hard surfaces are available that will keep oxidation at bay, even under normal, daily-driving duties. The problem is that when our cars were new, many of the surfaces were never intended to have any coating applied to them. If you are striving for a factory-style appearance, or, simply don't wish to invest the time and cost of coating EVERY conceivable surface of your auto, then how do you keep those original parts from eventually succumbing to oxidation?

ECS Automotive has a simple solution. They have engineered a product called Rust Prevention Magic (RPM) that can keep those parts looking factory assembly-line fresh and rust-free. RPM is simply brushed onto the parts that you wish to protect. It should be noted that RPM does NOT treat rust, it only prevents it. If a part has been able to form oxidation on the surface, it must be removed first before treatment. Cast iron, stamped and cast metals, as well as aluminum, can benefit from RPM protection. Heads, alternator housings, carburetor bodies and just about any other untreated metal surface can benefit from RPM.

If you can operate a toothbrush, you can apply RPM with good results. Simply take a paintbrush and dab the bristles into the paste of RPM. We initially heated up the surface of the paste with a heat gun but found that this applied more RPM to the brush than we needed. Rubbing the brush across the surface of the paste should apply enough product for use on most small parts.

It does help to heat up the surface of the items you'll be treating, as it serves to open the pores of the material and helps RPM to flow more evenly. You will see RPM turn from a paste to a liquid form when the surface is the correct temperature, right around 150 to 160 degrees. A heat gun helps, or you can put the parts in an oven to warm them and then brush on RPM. We tried both ways with success. It mainly depends on the number of parts to be treated and their size.

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1 Other than a brush, the only other requirement is a little bit of heat. The surface temperature needs to be warm enough to liquify RPM so that it can fill in the pores of the material. A heat gun works well on small parts.

2 If you've got a bunch of parts (and a forgiving wife) you can use the oven to put some heat in the parts.

3 EVERY part can benefit from RPM. To apply it, simply heat the parts up to around 150 to 160 degrees.

Larger items like exhaust pipes and such can be laid out in the summer sun before treating. If they are freshly installed (no rust), you could fire up the engine and warm them that way as well. RPM works well on exhaust systems but is not recommended for the manifolds, as they would get too hot and simply burn off RPM. So long as RPM turns into a liquid state when applied, there's enough heat.

If you notice any brush strokes as you apply RPM, you are using too much product. RPM will appear wet and glossy when first applied but once the treated area cools, the gloss will disappear. RPM leaves a dry surface, so there is no waxy, sticky surface to attract dirt. If a part is subjected to abrasion or constant spray, you may need to re-apply, depending on the severity of use.

While RPM does not leave a waxy coating, it does repel water and prevent dirt, dust (and paint) from sticking to the surface of the metal. If you are going for the ultimate factory original detail with the necessary painted inspection marks and dabs, you can still protect the metal with RPM. Apply the necessary markings and then RPM, covering both the bare metal and the paint. The same can be done for any required stickers or emblems.

While we dearly love our cars, the reality is that when they were churned out from those famed plants year ago, they were merely, "someone else's dream". The employees that built them never dreamed that they would be revered members of the family decades later and the designers never imagined that anyone would be concerned about rust on a backing plate or brake master cylinder.

Yet, here we are, attempting to push grains of sand back up through the hourglass, rebuilding cars better than when they were new and hoping to keep them looking better as well. At least so far as rust and other forms of oxidation is concerned, we've now got RPM!

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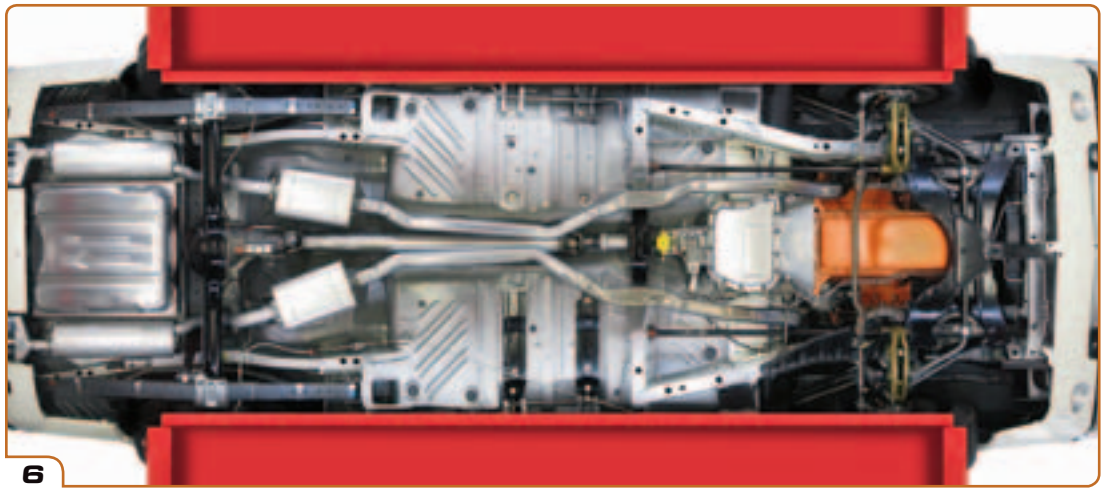

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4 We took some pieces of metal and did our own test of RPM. The metal originally had a protective coating applied. We sandblasted two pieces and treated one of them with RPM. Then, we waited out in the weather.

5 More than just rust, RPM prevents oxidation, which means that it works on brass, aluminum and other metals. We buffed up a brass fitting to see how it would hold up.

6 The entire underside of this Challenger 1970 R/T has been treated with RPM. It was the Best of Show and OE Gold Winner at the 2008 Mopar Nationals and is the highest point total car in the history of the Mopar Nationals.

7 ECS Automotive did some scientific testing with some various car parts. It's easy to see what areas were treated with RPM.

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8 RPM works great on non-clear coated aluminum rims. Prior to RPM application, these wheels had to be polished every month or so. Brake dust just hoses off now and this picture was taken approximately one year after treatment.

9 We treated half the surfaces of this brass fitting with RPM and after about a month, there was a noticeable difference in how much the untreated side began to oxidize.

10 Part A was the original steel with the original protective coating still intact. We sandblasted Part B and left it to the elements. Part C was also blasted and treated with RPM. AE

FOR YOUR INFORMATION:

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