

Steering Wheel Finishing

By Roger Moment

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(with additional notes and photos furnished by Roger Moment)

Tech Tips

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One of the parts that 99 percent of the time require major fixing as part of a restoration is the steering wheel. One option is to have it repaired and advertise this service, but my focus is on new wheels.

Unfortunately, a number of new parts, though serviceable as-received, really require some additional work to be equal to the original. The steering wheel is in this category. But before you start complaining, consider this. A new wheel has a solid cast plastic rim with no cracks to reopen with time. I've heard of perfect repairs, but have seen many re-cracks after a number of years. Also, considering the relatively small number of wheels being made, compared to the production level during the 1950's and 1960's, \$150.00 (give or take a few \$\$) is not really that much for a new one. So if you've convinced yourself that this is the way to go, what more needs to be done?

The new wheels have a few faults, when compared with a perfect original. First, there is a detectable mold parting flash that can be felt all along the outside and inside of the rim. Second, there are six 1/8" diameter holes on the back side among the finger grips (two between each set of spokes) that appear to have been used for holding the rim core positioned during the casting operation. Third, the paint quality on the central hub is not very high. Fourth, the screw-on chuck on adjustable wheels is not exactly the same as the original (a side by side comparison is necessary, however); and fifth, the set screws that hold the trafficator in the hub are too long. These faults are relatively easy to fix and with only a few hours effort the new wheel can be made to be indistinguishable from a genuine original.

The Rim

Carefully take small, 2" by 4" pieces of wet or dry carbide paper and sand the rim flash smooth. Start with 280 grit DRY, follow with 400 or 600, and then 1200 or 1500. Don't worry that you will scuff up a band about 1/4" wide along the inside and outside of the rim. This will all be polished out in the final operations. Start at one spoke boss and work your way around, until flash is completely gone. Don't over-sand. There is curvature on both inside and outside of the rim, which you don't want to make flat.

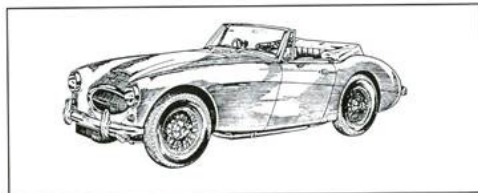
Next mix up some good epoxy for filling the six holes. J-B Weld is excellent for this, but is light gray in color. Buy a tube of artists lamp black (an oil paint), and mix a bit into the fresh epoxy to turn it black. It doesn't take much and the result is perfect. Using a sharp point, such as from a Number 11 modeler's knife blade, work the epoxy into each hole. Be sure you fill them completely. It is easy for air to be trapped that will form a bubble. Use the knife to smooth the surface so that it is not excessively rough. It should stick up from the wheel surface a few thousandths of an inch. This area is on the back side of the wheel, in among the finger grips, so a little "sculpting" is in order. When the epoxy is completely dry (about 24 hours), use the same carbide paper to sand back to the original surface line. Careful inspection will allow you to see when you have sanded to leave a round spot of the filled hole.

The next step is to polish the rim. This operation is exactly the same as polishing out a wet-sanded paint surface. Any paste polishing compound works well. Take a damp cloth and rub in a circular motion as you work your

way around the rim. Finish by rubbing along the rim circumference. In no time you will have a perfect gloss and it will be impossible to see the areas scuffed by sanding. The epoxy spots may not polish out as perfectly, but they will still be virtually invisible and I recommend that they be left as-is. The alternative would be to paint the entire rim, but the original plastic provides a more durable surface with respect to wear.

The Hub

Carefully mask each spoke wire next to the hub and then cover the balance of the spokes and rim with paper. Use 400 grit carbide paper to sand the painted hub smooth. A coat of primer, followed by a good glossy black enamel will finish this part of the job. The set screws provided with new wheels are about twice as long as the originals. It is best if you if you salvage these screws from your old original wheel, they can be transferred over with no problem, as the threads are identical. The screw-on wheels are identical. The screw-on chuck also I need refinishing, and can be done along with the wheel hub.



Roger subsequently also added the following:

Finally, while new reproduction wheels are available for the 6-cylinder Healeys, there is no reproduction of the 100 non-adjustable wheel. It differs from 6-cylinder non-adjustable one in two significant ways:

- 1) the spokes come together more closely at the rim, with equal and small spacing between each of the four
- 2) the finger grips are rather smooth bumps spaced quite a ways apart – you can see their shape in the upper left corner of my photo.







