Supplemental Information
on
454-010 or 27H9612 OVERRIDER, WITH BOLT
AHY 100-4, MG TD, TF, BUGEYE SPRITE

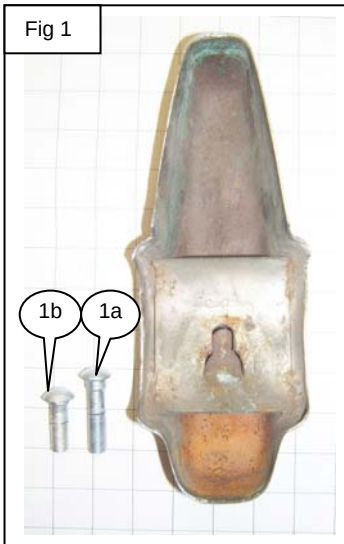
A Little History…

The overrider fitted to the Healey 100, the MG TD & TF, and the Bugeye Sprite wound up being the same part number through supercession to the Sprite overrider. Based on the information we have, we have always believed that if you walked into a BMC parts department in 1970 and asked for one of each, you would have received three 27H9612 overriders. This seems odd because the Healey facebar has a relatively deep longitudinal groove, while the T Series and the Sprite face bar have smooth curved surfaces. The factory overriders never fit perfectly. The packing pieces (400-418) which fit on the edges of the overrider where it contacts the facebar, protect the facebar and help obscure the unavoidable gaps between the two parts.

About the Moss Overrider…

We originally produced the 454-010 overrider with a captive nut welded to a plate that was in turn welded to the overrider. In production, the plate was difficult to position perfectly and the angle of the installed overrider depended on exactly where the captive nut was and the precise angle of the facebar. If the facebar was canted the least little bit, the overrider leaned either forward or backwards. It was a lot more noticeable with the overrider than the facebar. Because the nut was fixed in place, there was not a lot that could be done. As we tried to come up with a fixture that could be used in production to properly locate the captive nut, we found that an overrider that fit a T Series facebar just fine could not be fitted to a Sprite or a Healey. At that point we abandoned the idea of a captive nut and we started over.

Fig 1



Redesigning Moss Overrider…

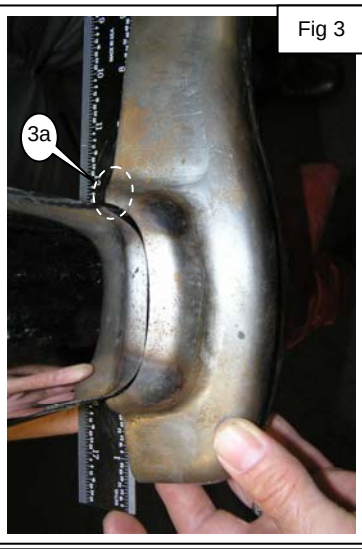
Roger Moment loaned us an original sample of an overrider off a Healey 100-4 (Fig 1). The mounting plate has a slot which accepts and traps the head of a carriage bolt. While both bolts are 7/16-20, the bolt used to in the rear of the 100-4 (1a), was longer than the bolt used in the front (1b).

We found that the slot provided a wide range of adjustment. Although the bolt did not move, you could move the overrider up or down quite a bit and tighten the nut when you were happy with the way it fit. We decided to re-tool the overrider using the slotted mounting plate. We also reshaped the curved edges (2a) to more closely follow the facebar.

In June 2007 we received our first unchromed pre-production samples of the new overriders. We fitted the samples on an original Healey facebar (Fig 2) and an original Sprite facebar (Fig 3) without the overrider packing (400-418) so we could better judge the fit. We also fitted them to the facebar on the Moss TD “pickup” and a selection of replacement facebars. The sample overriders could be installed on a Sprite, MG TD, and a Healey 100 without any trouble using a 3/8” carriage bolt 2 inches long.

Fig 2

Fig 3



Unchromed pre-production sample on an NOS Healey 100 (left) and an NOS Sprite facebar (right).facebar.

Current Production Moss Overrider

The newly retooled overriders and pressed from steel plate, and the edges are cleaned up by hand. The plates with the slot for the carriage bolt are pressed separately. The outer shell and the plates are assembled in a fixture that precisely locates the plate, and the two pieces are welded together. The overrider is chrome plated, and the back of the overrider is painted silver, which is how all bumpers and overriders were done by the factory. In September of 2007 we received our first shipment of the redesigned 454-010 overriders. We test fit them again, just to confirm that nothing had changed (and they still fit fine). The correct bolts for the Healey would be 7/16 UNF (20 TPI), and we do not have a source at this time, and we are not certain that the bolts used on the Healey would be correct for the MG TD & TF or the Sprite, which used a 3/8" UNF bolt. The overriders are supplied with one somewhat generic 3/8" UNC (16 TPI) x 2" carriage bolt. If you are fitting these to the front facebar on a 100-4, the carriage bolt supplied may be too long and it may show behind the facebar. If so, it can be shortened. There is a slight difference in the shape of the rear edge of the overrider where it meets the top of the face bar. On ours, the back edge (3a,5a) runs from the top to the facebar in nearly a straight line, and on the Healey at least, these edges angled forwards a bit near the face bar. We have tried to balance the features of original Sprite, T-series and Healey overriders while designing something that was practical to make.

About the Chrome Plating

Decorative chrome plating on automotive trim is often called nickel-chrome plating because nickel is always electroplated onto the object before the chrome. For maximum corrosion resistance, our overriders are nickel plated (0.005MM), then copper plated (0.025-0.030MM), after which they are polished. They then receive a layer of semi-bright nickel (0.015-0.018MM) then bright nickel (0.008-0.012MM). They are polished again, and finally chrome plated, after which they are polished once more. The nickel plating actually provides the smoothness, and most of the rust and corrosion resistance, which is greatly increased by the layering of two different nickel compounds. Contrary to what you may have heard, most of the reflectivity you see is due to the nickel. The chrome plating is exceptionally thin, measured in millionths of an inch rather than in thousandths. When you look at a decorative chromium plated surface like these overriders, most of what you are seeing is actually the effects of the nickel plating. The chrome adds a bluish cast, protects the nickel against tarnish, minimizes scratching, and symbiotically contributes to corrosion resistance. But the point is, without the brilliant nickel undercoating, you would not have the beautiful reflective surface we all call chrome.

Caring for Chrome

Clean all the chrome trim with soap and warm water only. DO NOT use harsh abrasives or polishing compounds to clean the chrome trim. Hard as it is, it is easy to scratch the chrome finish, leaving visible scratches and haze marks. After the chrome trim has been cleaned and dried, apply a coat of good-quality non-abrasive automotive wax. If you drive your vehicle in winter where the roads are treated for ice, or if you live near the coast, the chrome trim is exposed to moisture and salt and there is not much you can do about it except to clean and wax the chrome trim following any outing. Weekly maintenance in the face of such harsh conditions is the only way to properly protect and maintain your chrome trim.

The changes made to this product are significant and we feel the overall quality of the product has been improved substantially. We are very happy with the end result, and we believe you will too. Your comments are always welcome. Call Technical Services at 805-681-3411, or use the simple email form on the "Contact Us" page on our website:
http://www.mossmotors.com/AboutMoss/ContactUs.aspx

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