

Overdrive Throttle Switch Disassembly – Removing the Camshaft

This tech tip assumes you have already read Roger Moments “One Approach to Restoring an Austin-Healey”, installment 14:More on Electrical Components published in the Austin-Healey Magazine – June 2007 and that you are familiar with and comfortable with the procedures to separate the case from the base.

After emailing the healey@autox.team.net enthusiasts questioning how to remove the camshaft inside of the OD throttle switch and receiving the equivalent of a blank stare it was realized that more research would be needed before the case and shaft could be zinc plated. People tried to help, but none of the responders knew how to accomplish this. Bob S. was very helpful in providing the tip that it was “probably” an interference fit.

The key to separating the cam from the shaft is having the right setup and tools. If you are restoring your car you know doubt have the tools and the setup is easy and quick to fabricate. You will need a small piece of 1x2 soft wood. It is important to use soft wood as this will minimize flattening of the brass rivet bearing. Drill a 17/64” hole in the wood such that the shaft can be inserted in the hole with the side of the case bearing fully on the wood. The hole should be off-center so the formed case edge will set below the flat of the wood. See the black hole in figure 1.

Figure 1



Fix the 1x2 in a vice and set the case shaft, with the base removed, into the hole. See figure 2.

Figure 2



Prior too this step, the cam was heated with a propane torch and an attempt to shrink the shaft with Freeze-Off was tried but did not seem to help. Freeze-Off is highly flammable so be careful and use common sense.

With this setup a wood nail punch was employed as a drift pin to hammer the shaft out. At first, several raps with a small light ball-peen hammer did not produce the desired results. Being somewhat impatient, a larger ball-peen was employed. The shaft came free quite easily. See Figures 3 and 4.

Figure 3

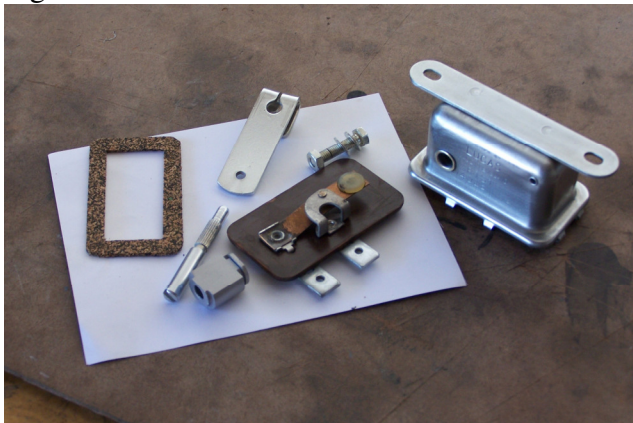


Figure 4



When you reassemble the OD throttle switch be sure to have some cork gasket material on-hand because you will most likely need to replace the gasket. See figure 5.

Figure 5

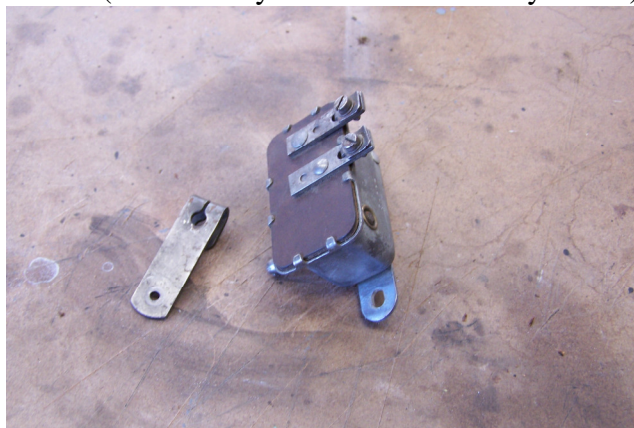


As they say in the instruction book; assembly is the reverse of disassembly. Use a little WD 40 as a lubricant (lets not debate this). Note the orientation of the cam, figure 6 (do this before removing it)!

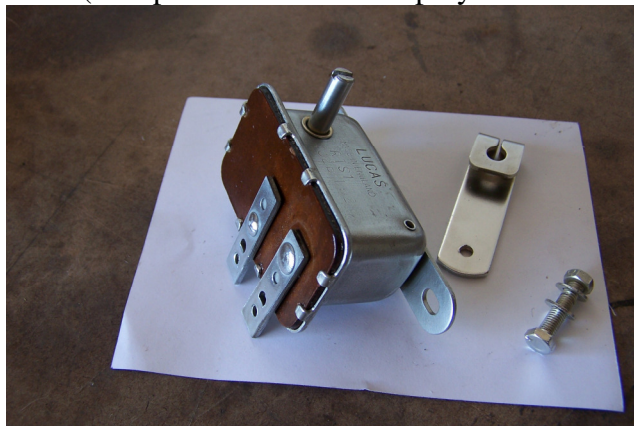
Figure 6



Before (note that my case was not heavily rusted)



After (zinc plated at home and sprayed with clear coat)



By John Spaur
1962 MKII BT7
August 23, 2010