

Here is the latest article from Kevin Prosser. Kevin chose the title but I'm sure you will find it very informative, and for a few pounds worth having in your tool box.

### **WHAT A BORE!**

My son recently had a water leak from his newly installed bathroom (what has this got to do with MGs, I hear you ask – more later). The leak made itself known as a wet patch on the kitchen ceiling, directly beneath the bathroom. There was no obvious leak from the toilet, shower, bath or hand basin, so we suspected a leak from the pipework under the floor. The bathroom fitter had used plastic pipe with push-on connectors for the water supply (my father, who served his apprenticeship as a plumber using good old fashioned soldered copper joints would turn in his grave!).

As we had just installed a new hardwood floor in the bathroom we were reluctant to lift the floor, especially as we weren't sure where the source of the leak was – water has a habit of running along pipework before choosing to drip down at the lowest point, so the leak may not have been directly above the damp patch.

We had the bright idea of buying a cheap endoscope type camera which you can get for less than £20 on the internet. These are flexible, battery powered, have an LED light built in and send a signal wirelessly to an I Phone or I Pad. Figure 1 shows the camera looking at a pound coin, and the resulting image on an I Pad.



Figure 1. Endoscope camera and resulting image.

After getting the camera we drilled a few  $\frac{1}{4}$ " diameter holes in the kitchen ceiling and inserted the camera to see where the leak was coming from. Sure enough, we found a plastic push-on connector which was leaking. We then cut out an A5 sized patch out of the plasterboard of the kitchen ceiling at the location of the connector, and had enough access to push the connector fully home, which cured the leak. It was much easier to repair the plaster board ceiling than it would have been to take up the hardwood floor.

Now the MG bit! After we had finished finding the leak I started looking for other uses for this endoscope camera. My MGB had been fitted with a Gold Seal replacement engine in the 1980's, and as far as I could work out this had only done about 20,000 miles since it was fitted. I don't know how well it had been looked after and was interested to see what the condition of the cylinder bores were, so I removed the spark plugs and put the camera through the spark plug holes. I was pleased to see that the bores still had the original circumferential honing marks on them, and the tops of the pistons looked clean, Figure 2. From this I deduced that there had been very little wear in the bores.

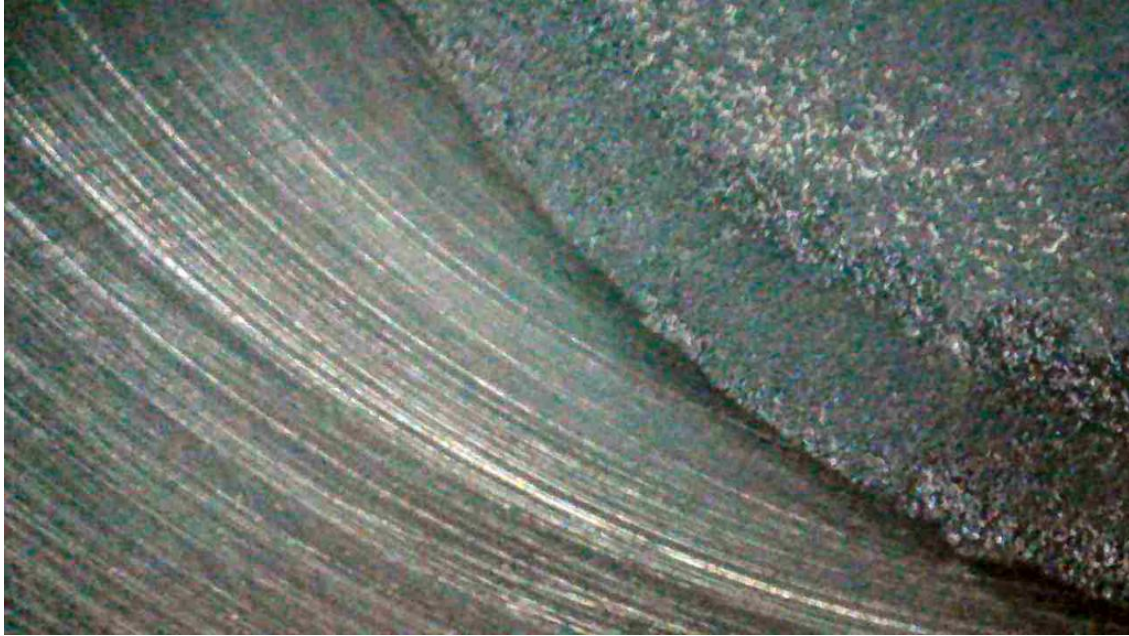


Figure 2. Cylinder bore showing honing marks and piston crown.

Unfortunately, I was not able to bend the camera sufficiently to see the condition of the inlet and exhaust valves (even using the little 90 degree prism supplied with the camera didn't work).

Other MG uses might be to look inside gearboxes and differentials if broken gear teeth are suspected, and to look up under the dashboard when tracing wiring. I am sure there must be lots of other uses - definitely £20 well spent!

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