



MGBGTV8 – repositioning the rocker cover bracket to facilitate air filter assembly

Here Jim Livingstone describes a procedure which helps avoid the misalignment between the air filter and its mounting bracket on the rocker cover and a revised bolt tightening sequence.

Introduction

We have all read the instruction beloved of the authors of Workshop Manuals - “**Reassemble in the reverse order of dismantling**”. It is a quick and easy way to avoid repetition and effort and in most cases it results in a perfectly satisfactory reassembly. However, there are instances where a reversal of the dismantling sequence is not satisfactory. Such a case is the reassembly of the Air Filter Bracket to the Rocker Cover.

I had noticed on the rare occasions I had removed the Air Filter centre bolt I always experienced difficulty refitting it. On a casual inspection it looked like a case of inadequate taper on the lead thread and I decided that a **dog point*** was the appropriate solution. This, however, turned out to be an instance of lazy analysis and only effected a partial cure. The true cause **was misalignment between the Air Filter and its Mounting Bracket on the Rocker Cover** caused by the bracket being tightened in the wrong sequence during a previous assembly. The MG designers had recognised the considerable tolerance **stack up*** between the Air Filter and the Rocker Cover and had provided elongated holes in the Mounting Bracket. The consequence of this was if the bracket was reassembled to the Rocker Cover and prematurely tightened it was likely to be in the wrong position.

There is **another problem associated with the bracket’s position** and that is if the bracket is positioned too close to the Rocker Cover then the Air Filter bolt can contact the latter and cause minor damage to the ribbing. The procedure which follows describes an assembly sequence to avoid these issues.

Procedure

1. Remove the Air Filter (1 bolt) and Mounting Bracket (2 bolts).
2. Ensure that there are adequate size washers to cover the elongated holes in the bracket.
3. Refit the bracket and loosely secure with its bolts.
4. Refit the Air Filter with its centre bolt.
5. Engage the centre bolt with the **weldnut** in the bracket and tighten.

6. Check that there is clearance between the protruding tip of the centre bolt and the Rocker Cover. Raise the assembly, if necessary, to obtain clearance.
7. Tighten the 2 bolts to secure the bracket to the Rocker Cover.
8. Repeat the procedure for the Air Filter installation on the other bank.

*Explanation of terms used in the text

Dog point is where the first threads of a bolt or screw are removed to provide a short cylindrical portion which facilitates engagement with the female thread. It is commonly used where the female thread is floating e.g. in a caged nut.

Tolerance stack up is where individual component variations can add up to a significant total variation in an assembly. Unless allowed for, final assembly may not be possible.

