



The majority of these tips have appeared in club newsletters over the years. Please note that you use them at your own risk as neither the Bristol Austin 7 Club nor the authors can be responsible for the results of trying to follow the instructions given.

### Valve chest cover and fumes - Alastair Gill

For many years I've often found my car to be rather fumey, especially on protracted journeys. Sometimes more so than others. The amount of fumes seem to vary. I have checked out all the exhaust systems' joints which seem fine, with no tell tale grey/black stains where there is a leak.

So, I have therefore decided that the cause must be a fine spray of oil coming from the breather holes in the valve chest cover. The fine spray of oil gets cooked on the exhaust manifold and the exhaust pipe itself, resulting in unpleasant fumes.

Chatting with Ian Moorcraft about this at the Annual Rally for the Bristol Austin 7 Club in 2016 he showed me the system that he has set up to catch this spray of oil. A device that he attaches to the valve chest cover without any need to alter or damage the original valve chest cover itself.



I have taken his idea and rather ploddingly built a similar device out of copper sheet and copper tubing, 15mm and 22mm plus a brass compression fitting connector.

The cross section area of the 4 holes in the valve chest cover equate to 79 sq mm in total. So care is needed to ensure that at no point is the cross section area of any "escape/drain pipe" less than 79 sq mm. The cross section internal area of 15mm pipe is 84 sq mm.

I cut a cork gasket from a standard valve chest cover gasket and used a few fibre washers behind the 2 standard valve chest "nuts".

The pics show the constructed parts and the device finally fitted.

After a test run, sticking my nose under the bonnet, I'm greeted by "hot engine smell" rather than the fume smell that used to be there.

Now, the next part is to devise a "catch tank" of some sort to catch any oil that comes out of the drain pipe which I have cut short of the chassis cross member.



