DON'T LOSE YOUR INHIBITIONS

Since I bought my MGB three years ago the overdrive has only worked in 4th gear (it should work in 3rd and 4th gears).

Recently, when I switched on the overdrive in 4th gear it started to pulse in and out, with the engine revs rising and falling accordingly. I then switched it off in case it was doing any damage. When I next tried switching the overdrive on it didn't work at all at first. Then by pulling the gear lever over to the right when in 4th gear the overdrive would then engage and stay on. However, it was a bit tedious driving with one hand on the gear lever all the time!

I came to the conclusion the cause of the problem was the dreaded inhibitor switch on top of the gearbox (see Fig 1).

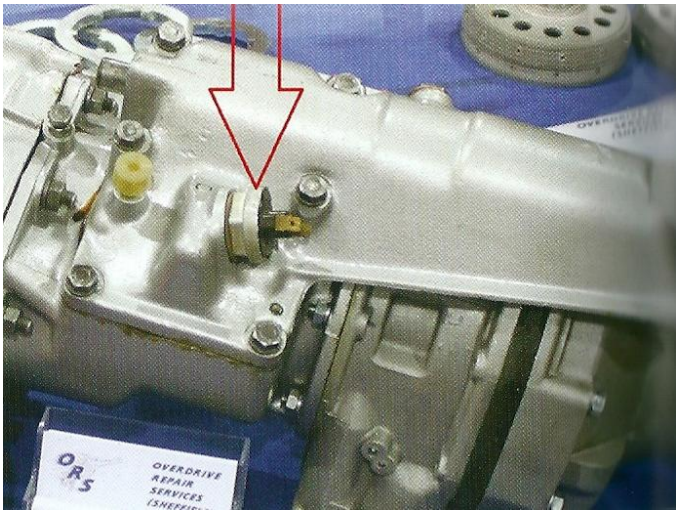

Fig 1. General view of gearbox showing overdrive inhibitor switch (arrowed).

The inhibitor switch is there to make sure the overdrive can only be engaged in 3rd and 4th gears. If overdrive is engaged in reverse gear evidently all sorts of nasty things happen to the mechanism! Also 1st and 2nd gears have too high a torque for the overdrive unit. The inhibitor switch is activated by a pad that is pressed up against the switch by the 3rd and 4th gear selector mechanisms. The switch is only activated, and therefore overdrive will only operate, in 3rd and 4th gears.

The position of the inhibitor switch in relation to the contact pad inside the gearbox is controlled by some fibre washers placed between the switch and the gearbox casing. As wear takes place, the number of washers has to be reduced to move the switch closer to the pad.

The inhibitor switch is notoriously difficult to reach from under the car and accessing it involves removing the gearbox support member and lowering the end of the gearbox as far as possible in order to reach up between the side of the gearbox and the transmission tunnel to remove the switch.

I wondered why MG hadn't put in an access hole on the side of the transmission tunnel to make the job easier. Searching the Internet I found an article on how to cut an access hole in the side of the tunnel to get at the switch, and decided to try this method.

Having first pushed the passenger seat as far back as possible I peeled back the carpet and the heat and sound insulation from the transmission tunnel. I measured, and re-measured, to decide the location of the access hole and drilled a 3mm hole in the centre of where I thought the switch location was. I put a bit of flex through the hole to dangle down inside the tunnel From underneath the car I could see the flex was in roughly the right position next to the switch. I then cut out a 20mm square in the tunnel at this position with a cutting disc in a Dremel (a saw blade would be too long and could damage the switch). This was to

allow me to shine a torch into the tunnel to check the final position of the access hole and adjust it if necessary. Then I used the Dremel to cut out the final oval access hole about 65mm x 55mm (Figs 2, 3 – note to self, hole could be a bit neater!).

Fig 2. Access hole in transmission tunnel.

Fig 3. Close up of access hole showing inhibitor switch.

Fortunately, the hole I cut was in the correct position. If anybody is contemplating doing this in future the centre of the hole needs to be on the passenger side of the transmission tunnel as high up as possible, and about 165mm forward of the gear lever.

I removed the two wires from the spade terminals on the switch with needle nose pliers. The next problem was finding a spanner to remove the switch itself. The switch has a hexagon nut that is about 30mm across the flats. This nut is sandwiched between the gearbox casing and a larger diameter part of the switch (see Fig 3), so it requires a big spanner with thin jaws, which is not a combination I had! Fortunately, I found I could grip the switch with a pair of plumbers' adjustable water pump pliers, the angled head on the pliers being also useful for access. Being careful not to damage the switch, I found I could move it a little at a time before the pliers fouled on the edge of the access hole and they had to be re-positioned. It was slow work but eventually I was able to remove the switch.

My switch had two fibre washers fitted, one of which I now removed (see Fig 4). I then cleaned up the switch and the contacts, checked it was working, and re-installed it. Before attaching a cover over the access hole, I checked the inhibitor switch was now doing its job by attaching a 12v bulb into the electrical circuit of the overdrive wiring. I then switched on the ignition and the dashboard overdrive

switch and put the gearbox into 3rd then 4th gear. Success, the bulb lit up both times! I then checked 1st, 2nd and reverse and, as expected, the bulb didn't light, showing that the switch was 'inhibiting' the overdrive in these gears.

Fig 4. Overdrive inhibitor switch showing one fibre washer removed.

I then fixed a cover plate over the access hole, sealing it with underseal, and attaching it with self-tapping screws, Fig 5. If I need to access the switch in the future it should only take about half an hour to remove it.

Fig 5. Cover plate fitted.

A final thought. Why didn't MG put the main overdrive switch on the steering column? The two usual locations for the MGB overdrive switch are on the dashboard, or, on later models, on top of the gear lever. Both these locations mean you have to take one hand off the steering wheel to operate the overdrive. Years ago I had a Standard Vanguard with overdrive, and its switch was on the steering column opposite the indicator stalk. Overdrive could be flicked in and out without taking a hand off the wheel, which was useful when driving along a fast twisty road that required frequent changes. I think some American spec MGBs had such a column overdrive switch, and also some TRs, so maybe one of these switches could be retrofitted. Alternatively, what about a foot mounted switch like the early headlamp dip switches – do I feel my next project coming along?

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