



Check your antiroll bar drop links

Recently there have been some failures of the front antiroll drop links. These connect the outer ends of the antiroll bar to their respective lower suspension arm. The antiroll bar, as its name implies, stiffens the car's tendency to roll, by simply acting as a strong spring when one side of the car moves differentially to the other. It does not affect the overall stiffness of the front suspension; but does make a significant difference to the handling. It will be clear

that the forces involved in preventing body roll of 1,200 Kg vehicle cornering at speed are high, and the stress on these links is considerable. As some of our V8s are now over 40 years old, and its successor, the RV8 around half of that; Nic Houslip feels it is probably worth spending time checking the condition of the drop links. Failure of the link will affect handling, by allowing much more body roll in corners.

The general arrangement of the suspension is shown in Photo 1 taken of my MGBGT, but the V8 is similar, as is the RV8.

The MGC has a different arrangement of links and is not covered here. The ball ended part of the drop link is a bonded rubber to metal bush that allows some compliance as the movement of the lower suspension arm and the antiroll bar are not in the same plane and also minimizes the transmission of noise into the structure of the car. The top end, a forked metal pressing is attached to the end of the antiroll bar with a bolt that passes through another bonded rubber to metal bush inserted into an eye in the end of the roll bar.

## What to look for

The drop links are items that are inspected by the MOT Tester, usually a visual inspection for the condition of the rubber bonded parts and by using a pry bar to check its security and integrity. See Photo 2. They will apply significant force to do this. If you do this, take care not to rock that car off the axle stands. Do not do this check with the car on a jack, neither the one that came with the car nor any other.

The drop link failures seen recently (Photo 4) have occurred where the steel tube is welded to the forked end. Photo 3. Rust or corrosion in this area should be scraped or wire brushed away, if there is any sign of a crack or gap, the link is suspect and is best replaced, as they are not expensive. It is important to source good quality replacements. Buying replacements from a reputable source is a good idea, although there are some which seem to have a rather spotty weld quality where the steel tube is welded to the forked end. In Photo 5 you can see the forked end of two new drop links, obtained from B&G, the one on the left is for an RV8, Part Number ZKC5754, DROP LINK LH, (RH is ZKC 5755) while the one on the right is for an MGB, Part Number AHH6544A, DROP LINK LH ANTI-ROLL BAR (RH is AAH6543A).

Close inspection of these parts reveals some differences, not the least of which is the thickness of the material used for the fork and the depth of same, Photo 5. In other respects the parts are the same dimensionally except the diameter of the holes in the RV8 fork, which are 11mm dia. More on this later.







How to do the inspection

You will need to jack up car and put an axle stand or other support under the frame rail or the cross member before you get underneath the car. You will also need to remove the front wheel on each side to be able to see the links. Or if you are lucky enough to have access to a car lift, put the car on the lift. The replacement is relatively simple, but is best done with the weight off both wheels for best access, although it can be done with car with its weight on the wheels, so raising the car with a trolley jack under the centre cross member and then arranging axle stands to support the body is the best way, it allows both wheels to be removed, when access to the top bolt is easier. The nut on the threaded portion of the ball joint (3/4" AF) will be tight, so a longish ring or combination spanner will make this easier, as will a spray of penetrating fluid on the night before.

Having removed the nut, move to the upper end and remove the nut (5/8"AF) on the bolt that goes through the formed end and through the eye of the antiroll bar. The

link can then be replaced. Inspect the bush in the antiroll bar eye for obvious signs of rot, some slight surface cracking might be seen, but this is usual. If you have any doubt, or find that the bush can be moved with the fingers then replace, or have them replaced.

Bush replacement will probably require removal of the antiroll bar and the use of a workshop press.

Important note, do not attempt to remove a drop link with the car lifted on one side only. In this situation the antiroll bar will be doing its job and the links will be under tension or compression by a significant amount and attempting removal might lead to personal injury.

Check for residual stress. When you come to replace the links, there may be a slight difference in the length of the link that is needed, if it is so much that moving the link or the roll bar end by hand it is not possible to get the bolts to enter, suspect a twisted antiroll bar or a sagging front spring.

It appears to be possible to replace an MGB drop link with a later and stronger

RV8 part, but not vice versa, so to prove this I fitted an RV8 part to the left side of my MGB. The diameter of the hole in the fork needs slight modification to allow the bolt pass through, on the B the hole is 7/16" (0.43750") while the RV8 Part is drilled 11mm (0.43307").

To prove this modification works I have run the car for an extended period under hard cornering, in Photo 6 you can see me placing the LH link under extreme compression load and the RH link under tension; the opposite occurs when taking left hand corners. Note: this MGB is fitted with a thicker than normal antiroll bar so the test will be arduous.

The BGT and the BGTV8 weights are very similar, the V8 motor in fact weighs a little less than the iron block B series, but the V8 is shod with wider tires and higher cornering loads may be generated.



Photo 5 - MGB and RV8 links



Photo 6 – drop links working hard