V8

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Get your V8 Servo Checked!

Fortunately brake failures from servo problems are rare but, unlike difficulties with slave cylinders where early warning signs can usually be detected, signs of potential servo failure are few. The key feature of a series of alarming servo failures reported by V8 members is that the loss of braking is very rapid indeed as the servo swallows the brake fluid! Fortunately they have been at low speeds and without damage to the car or personal injury. The effect is spine chilling, but how does it happen? Simply the rubber seals in the servo fail allowing the brake fluid to escape to the body of the servo where there is a vacuum. So brake pedal pressure is lost completely.

A natural tendency is to think it can never happen to you - your brakes are operating well, without the slightest hint of any servo problems. But those who have had that experience would urge you to have a 35 year old servo examined off the car and replaced or where necessary professionally refurbished. The reliability of your V8 brakes is not something to scrimp on – that cost is modest in terms of your peace of mind and personal safety!

So to encourage fellow members to take a positive step and have their V8 servo checked, we have arranged a special V8 Servo Check Offer with a group of leading MGV8 service providers which will run for the next three months to May.

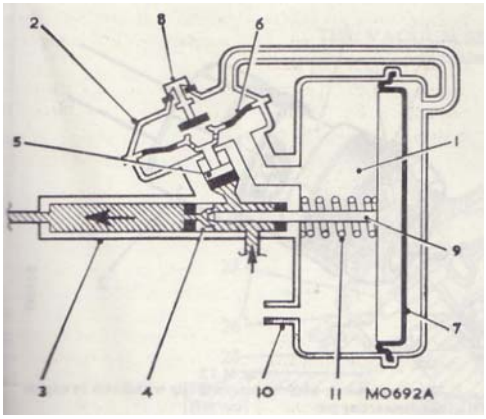
V8 Servo Check Offer

The offer is very straightforward – your servo is removed and replaced with a new servo, the system is recharged with fresh brake fluid, bled and tested – all for a fixed charge. The offer includes a free brake safety check of your master cylinder, front rubber flexible pipes, slave cylinders and all brake lines so if any recommended maintenance work is identified, it will be reported to you for prior approval as an additional charge. Your original servo will be returned to you so you can get that reconditioned if you wish. Full details of the V8 Servo Check Offer are on the V8 website.

Remote or indirect servos

The fault - servo related brake failure - only happens with remote or indirect servos which were fitted to many cars in the 60s and 70s as enhancements to existing non-servo braking systems. Curiously the MGB Register has had few if any reports. Remote or indirect servos sense the **fluid** pressure and assist this - see the extract from the service manual on the V8 website as V8NOTE395 to see the principle of operation. The advantage of a remote servo is that it can be placed anywhere in the system and does not have to be at the pedal. The remote type is sensing fluid pressure and assisting via a diaphragm with vacuum from the inlet manifold and the two are separated by a seal.

This rubber seal is overlooked when the brakes are serviced and leakage at the seal produces no tell-tale fluid seeps or brake pull. This is because the fluid leaks are drawn into the engine or stay in the large bowl of the servo. Moreover, the engine vacuum is **always** there to draw fluid through the servo seal, unlike other brake seals which only experience a pressure differential under actual braking. Consequently a servo seal leak can be quietly emptying your brake master cylinder reservoir as you sail along the road and the first you know of a serious loss of fluid is when you apply the brakes - and find you do not have any!



A schematic diagram showing the principle of operation and the main components of the V8 vacuum servo unit. The hatched area represents brake fluid.

RV8 braking system

The RV8 has a hydraulic braking system comprising a **direct acting** vacuum operated servo on a **dual circuit** braking system. The dual system is split front to rear with the primary system operating the rear drums and the secondary system operating the front calipers. Failure of the direct acting servo would just mean you needed two and a half times the pedal pressure for the same braking effect. Both brake circuits would still work so you would still have fully effective brakes, but much heavy pedal pressure would be needed without the usual servo assistance. So the braking system on the RV8 is a considerable improvement on the earlier system used in the V8 some twenty years earlier and provides better protection against the consequences of brake component or system failures.