Replacement clutch master cylinder on an MGBGTV8

David Brown, with a rubber bumpered V8 Roadster Conversion carried out by David Franklin using a late 1980 MGB with a five speed gearbox, posted a query on fitting a replacement clutch master cylinder saying "having replaced the clutch slave cylinder, I set about replacing the clutch master cylinder too with part number GMC 1011 (plastic reservoir type). But I've found the plastic cap can't be undone as the cap fits under the pedal box recess on the bulkhead with insufficient clearance. I have stripped out that replacement unit and put back the old master cylinder. What do I need to do to make the replacement and what part number do I need? The clutch pedal was pretty heavy compared to the Factory MGBGTV8 we have but this has always been the case with this car.

Bleeding the clutch proved an issue too; what's the best way to bleed the clutch hydraulics and are there any good devices to help - my old Eezibleed must have had it as it was by no means easy! The system on my car has a braided hose between master and slave cylinders. Any advice will be gratefully received as three hours were spent getting nowhere this afternoon other than flushing all the muck from the master cylinder. It feels like a wasted afternoon and management feels my time should have been deployed on the garden!

Geoff King, with a V8 Roadster built on a Heritage shell, responded saying "you are not the first to discover that **GMC 1011** with the plastic reservoir doesn't fit but it can be made to fit by removing the reservoir from the master cylinder and refitting it the other way round.

Bleeding the clutch system should be easy with the Eezibleed, just connect it to the bleed nipple and bleed from the bottom up. Obviously stop the flow when the master cylinder reservoir is almost full."



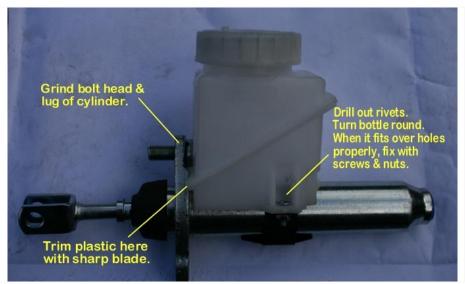
GMC 1011 replacement V8 clutch master cylinder (B&G website)

In a subsequent posting Geoff King highlighted the **Leacy Classics** at Perry Bar Birmingham have a **GMC 1011** (metal reservoir type) on their website: www.leacyclassics.com/gmc1011.html



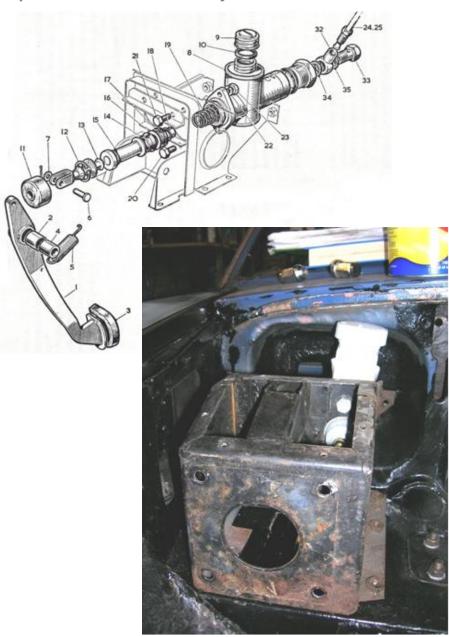
GMC 1011 V8 clutch master cylinder for an MGBGTV8 (1973-76) is shown on offer from Leacy Classics

Clive Wheatley noted "the hard clutch pedal problem could be the wrong clutch flexi pipe which could have the wrong internal diameter - like brake flexi. We have the correct flexi pipe in stock priced at £24.71 plus VAT. Also make sure your clutch slave cylinder is the correct way up with the bleed nipple at the top."



Modified GMC 1011 V8 clutch master cylinder (Mike Howlett)

Replacement clutch master cylinder on an MGBGTV8



Left: Diagram of the MGB pedal box and clutch master cylinder (MGB Workshop Manual, page E6 AKD3259). Right: a later MGB pedal box (Mike Howlett)

Mike Howlett added "I have fitted the plastic reservoir clutch master cylinder by turning around the reservoir. It isn't too difficult but does need a little ingenuity to make it work. I have a couple of photos I can email to illustrate the change." The photos Mike provided are included in this note. Mike then added "I bought **GMC 1011** from a well-known supplier and when I found it didn't fit, I contacted them and they were completely unhelpful saying they had never come across this before. There seemed to be no alternative but to swap the reservoir round, so that's what I did. I have had three year's use so far with no problem."

We contacted **Ron Gammons** at Brown & Gammons to see if they had come across this problem with the new plastic replacement V8 clutch master cylinders and he replied "there is a slight problem in that the GMC 1011 unit is currently on back order here so I cannot inspect a unit and check it for the difficulty David has experienced. That V8 unit has a bore of 0.7" whereas the MGB one (part number **GMC 1007**) has a bore of 0.75" The GMC 1007 is still available with a metal case at present. The smaller bore of the V8 unit is to reduce the pedal load of the heavier V8 clutch. When we get in new stock I will inspect the GMC 1011 and advise. In the meantime if you want to use the image by all means go ahead. As for the adjustment described to get the unit to fit, we believe that the **GMC 1011** replacement units we have had previously have had smaller plastic caps, because **we have not experienced the problem**. It's possibly a result of standardisation. If members want we can arrange for the original clutch master cylinder to be sleeved and re-rubbered which would help preserve the originality. I suppose that we could sleeve the new 1007 as well but that would be rather expensive!"

Mike Howlett later highlighted what may well be an explanation for the difficulty experienced by David Brown by saying "from memory, and from looking at my photo of my pedal box (see below) I think it was more than the cap size that prevented me from using the replacement clutch master cylinder without modification. I really wonder if it is only a problem with the very late MGB pedal box which I used and I believe David is also using. The Factory MGBGTV8s used single line brakes with remote servo didn't they? If so, the pedal box is quite different (see the diagram below reproduced from the workshop manual) to the later one designed for the in-line brake servo and dual circuit master cylinder. Have a look at my photo and see what you think."

Barrie Jones mentioned his way of bleeding the system – "I find it best to remove the two bolts holding the clutch slave cylinder to the bellhousing, pull the pushrod out of the gaiter, and allow the cylinder to dangle downwards on its flexible hose. Then I use a blunt Philips screwdriver to push the piston of the slave cylinder upwards two or three times. This forces the fluid up the pipe (including any bubbles of air). The bubbles exit the system via the master cylinder, so it may need topping up afterwards. No special tools, no bleeding, job done."

Footnote: GMC 1011 replacement V8 clutch master cylinders – B&G website: www.ukmgparts.com/product.aspx?CID=a06aab03-5ebc-49d9-a937-a6d8adfce6c1&SID=b3e9b2a3-0ce4-4a93-a552-69a661de0ec1&PID=de57daa4-7a34-4c98-ac75-9f15e08db85b