## Staffordshire Morgans Technical Article



### **Replacing Morgan Plus 8 Speedometer Cable**

By Maurice W. 20 July 2023

No speeds on my Morgan – replacing a mechanical speedometer drive cable. Applicable mainly to Plus 8's and Plus 4's using the Rover LT77 or R 380 gearbox.

On our way back from Brooklands on the M42 and thankfully only 30 miles from home, the speedo on my 1987 Plus 8 suddenly stopped working.

It's not difficult driving the Mog within the speed limits and after 35 years with the car it's easy to judge the speed without resorting to calculations involving the rev counter, so getting home was no problem.

A quick call to Keith (again as he the fount of all Morgan knowledge) confirmed my suspicions of a broken cable, my only worry was access as I didn't want to go through the rigmarole of removing the transmission tunnel again.

No problem, said Keith, as access could easily (!!!) be gained through the large apertures provided from the factory in the passenger (left hand) side of the sheet metal tunnel.

Best place for a new cable suggested Keith was Speedograph Richfield of Nottingham – 0115 926 4235. Check their web site at <a href="https://www.speedographrichfield.com">www.speedographrichfield.com</a>

A communication with Tim Ingle at Speedograph indicated that cables were either in stock or could be made specially depending on length required, and at a very reasonable price.

#### **Procedure**

First lift the material covering the transmission tunnel to expose the nearside vertical panel and you'll see two circular holes covered by sliding metal plates. Sliding the plates out of the way the gearbox and associated cable connections can clearly (!!!) be seen.

A point to note - most early models up to the end of 1988 have one cable between the gearbox and the speedo head, later models from 1989 onwards have two separate cables separated by a reduction box installed either under the dashboard or on the bulkhead under the bonnet. A check would be needed to establish which of the two cables has broken. Newer models are electronic of course and have no physical speedo cable connection.

Getting back to my problem, I then removed the speedo head, partly because it's easier to remove the cable connection, and also because I wanted to add ON the missing 30 miles to keep the 8's records intact. Removing the speedo head is a little fiddly under the dash but not a major problem. Adding the miles with a handheld electric drill and spinning a small piece of squared rod (old coat hanger) in an anti-clockwise direction was easy but time consuming. 30 miles at 60mph = 30 minutes!

Next securely attach a length of strong rope to the speedo head end of the cable and withdraw the broken cable through the tunnel covering to ensure you can pull a new cable through. If you don't

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do that it would be virtually impossible to thread a new cable accurately through the top hole in the tunnel.

Next detach the two wire connections to the handbrake switch to give a little more access.

Then with the aid of a mirror, unless you're very agile, you'll see the gearbox end of the cable secured by a forked plate held on by a single 10mm bolt (see photo). Using a socket on a long extension, remove the bolt and the plate and the cable becomes free.

Withdraw the cable through the side aperture in the tunnel casing and measure its length. When checking stock items from Speedograph they proved to be about 4" longer than the one fitted, so another call to Tim and he had one made specially to the correct length and delivered within 4 days – excellent service and for about £25.00 including VAT and delivery.

Refitting the cable is a little trickier.

Reattach your rope to the speedo head end on the new cable and gently put pull though the transmission tunnel aperture and thence through the hole in the top.

Position the gearbox end of the cable into the gearbox drive outlet. At this point you'll realise that you can't get your fingers in to re-insert the 10mm bolt and securing plate.

You can just see the tapped hole on the gearbox through the rearmost circular aperture. I used thick grease to hold the socket, bolt and securing plate in place, and then with loads of patience screw into the hole in the gearbox casing.

Reconnect to the handbrake switch cables.

Then all that left is to thread the new cable under the dashboard and re attach to the speedo head, ensuring that the cable fits firmly into the head itself, otherwise the inner cable will not engage with the speedo drive internals.

Refit the speedo head, replace the tunnel covering.

Now test to make sure all's well. In my case I was worried as the speedo didn't work but I soon realised it was because I'd not made sure that the upper connection onto the speedo head was pushed firmly fully into its correct position.

Now all works perfectly, and the mileage is correct too.

I am indebted to Keith once again for his advice and pointing the way to Speedograph Richfield.

Incidentally Speedograph Richfield have been in business since the 1930's and make cables for all kinds of applications, including many for the classic car and older vehicle fraternity.

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