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Toyota Multi-Mode transmission (MMT) clutch replacement

The Toyota Multimode transmission has been fitted to various models, including the Aygo, Yaris, Corolla and Auris for many years. This is a sequential manual transmission system, with a conventional diaphragm clutch. It comes in both 5 and 6

<u>Tech Bits</u>

With Tim Stock

speed versions. It operates in a similar way to an automatic gearbox, except for rolling backwards on a hill, and a discernible gear



Location of the calibrated spring in the slave assembly



It may look like an automatic gearbox, but it isn't

change. It has a range selector similar to a traditional automatic gearbox. With the range selector and the absence of a clutch pedals, it can easily be mistaken for a fully automatic transmission.

The clutch, as with any traditional manual gearbox, will eventually require replacement due to wear of the friction or pressure plates. This is where the problems begin. Toyota requires that the transmission needs to be placed in service mode prior to disassembling any components. In many cases, we find the workshop neglected to perform this critical



critical **Tim Stock** first step.

After refitting the gearbox, and trying to select a gear, the N on the display will be flashing and no gear will be selected.

After some research, most garages will try to initialize the system via a scan tool, if a scan tool is available. Some will

try the manual method of bridging connectors in the DLC. But these methods often fail, due to the free play in the clutch mechanism. After some research, we found a method that will allow the transmission to continue with the basic initialization procedure.

Toyota have available a calibrated spring to overcome this problem. When fitted to the 2 mounting holes, one in the slave assembly and the other in the cylinder head to preload the slave assembly, the configuration can be completed as normal.

Volkswagen/Audi oil warning light remaining on at all times

For many years this issue has come to the attention of the Helpline for oil level problems for various Volkswagen and Audi models.

The first instance was with a Volkswagen Transporter T4 2.5 TDi Engine code AHY. It came into the workshop with an oil warning light on. The technician started with the diagnosis, checking oil pressure and oil level. Both of these where within manufacturers specification, so the oil pressure switch was replaced. But the fault persisted.

A circuit check on the oil level sensor revealed no faults. The power supply was load tested, as was the ground. The signal line to the cluster also passed a load test. But the warning light remained on. So, a new Oil Level /Temperature sensor component G266 was fitted. Still, the warning light remained on.

The technician was suspecting that the instrument cluster was the issue. Before committing to this diagnoses, he called the Helpline for confirmation. We have seen this on several VW models, and more recently Audi

recently Audi variants as well. We had just



Wiring diagram of the Oil Level/Temperature sensor circuit

being called by a garage about the exact same symptoms with an Audi A5 fitted with a 3.0 TDi CCWA engine. That technician had followed the same diagnostic path to no success.

We asked if the bonnet switch was working correctly. In both cases the switch had

failed and was not working. So, if the bonnet switch status is not showing the bonnet opened or closed, the oil warning light will not reset.

This was the fourth vehicle so far this year with this fault. The fault was found in Audi A4's Volkswagen Passat's and VW Transporters to name just a few.