## Overdrive on third gear on the MGBGTV8 is not so rare

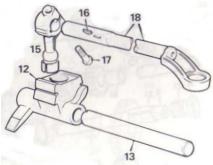
A writer compiling a new buying guide to British sportscars included a draft section on the MGBGTV8 model with the comment - "overdrive only on top". Well many V8 enthusiasts with a chrome bumper V8 have overdrive on third gear as well as top so know this is a much quoted but mistaken claim. With the help of Peter Beadle and Ron Gammons, Victor Smith clarifies some of the myths with overdrive on third gear for the MGBGTV8.

When the MGBGTV8 was launched in 1973 it was fitted with the gearbox selector plate 22B386 already in use in the MGB 1800 which was also in production at Abingdon at that time. The selector plate in the remote gearchange activates the plunger isolation switch 22B406. When that switch is engaged it cuts off the electrical power feed to the overdrive solenoid in any gear other than third or fourth for the earlier cars. The plunger isolation switch was necessary to prevent the overdrive being left engaged for the lower gears and crucially not engaged whilst in reverse gear as the unidirectional clutch in the overdrive will not take kindly to being driven in the wrong direction!



Circular opening at the back of the gearbox is for the gear lever which connects with the end of the remote control shaft that transmits the gear lever movements to the selector plate when you select gear. On either side of the gearbox are the twin terminals of two switches – on the offside the reverse light switch and on the other the overdrive isolation switch. (Photo: Gavin Bailey)

In the months following the launch of the MGBGTV8, the Factory at Abingdon received many reports that V8s were appearing at MG dealers with a damaged overdrive usually requiring a replacement unit under warranty. The high torque from the V8 engine in third gear was identified as the cause, so a production modification was introduced removing the overdrive option from third gear so the V8 model then had overdrive only on top gear. That change point was from gearbox A 1404 when the gearbox selector plate was replaced by part number 22B726 and the plunger isolation switch by 22B727.

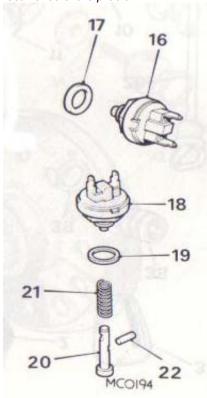


Gearbox selector plate 22B386, later replaced by 22B726, is item 12 in this diagram. Item 18 is the remote control shaft which transmits the gear lever movements to the selector plate when you select gear. (Diagram from page 108-C44 Parts Catalogue AKM0039)

Ron Gammons at B&G at Baldock notes "the reason for the removal of overdrive on third was because the torque build up in third gear was destroying the overdrive. The overdrive consists of two cone clutches running in oil in direct drive with the clutch held against its seat by spring pressure. With the overdrive selected, oil pressure in excess of 400 pounds/sq inch forces the mechanism to move to another cone which enables the epicyclic gear in overdrive to be engaged."

That change was made at Abingdon from early 1974 on the production line and to cars having work in Rectifications Department. But a number of V8s also had the change made as a retrofit whilst undergoing warranty work for damaged overdrives at MG dealers. Peter Beadle, who was parts manager at University Motors at Epsom at the time, recalls many of the cars going in for overdrive warranty work emerged with overdrive

on only top gear. The approach to the warranty work was that "as an engine and gearbox out takes 10 hours, then let's do the modification and avoid a recurrence of the problem".



Plunger isolation switch 22B406, later changed to 22B727, is item **20** in this diagram with the overdrive isolation switch (**18**) and reverse light switch (**16**) both part number 13H2154. (Diagram from page 108-C45 Parts Catalogue AKM0039)

So the net effect of the Factory modification and some changes made under warranty is we see a mix of overdrive options on chrome bumper MGBGTV8s today. Many of the earlier V8s still have overdrive on third, some do not where the modification was made during warranty work and some only have overdrive on top as they were made after the change was introduced at the Factory. This could easily have given rise to the mistaken belief that "only the very early production cars" had overdrive available on both third and fourth! Well over 60% of the 1,862 chrome bumper MGBGTV8s were produced with overdrive on third and fourth - a substantial portion of the Factory production in 1973/74 and almost half the total V8 production of 2,591. Or was

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it 2,591? Research by the late Geoff Allen, former V8 Historian and Archivist, indicates there were 2,600 or even 2,601 MGBGTV8s produced at Abingdon. There are always mysteries with MG but at least the overdrive on third myth can be laid to rest!

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