



Replacement Mazda gearbox now available for an MGBGTV8

With the availability of replacement parts and original complete gearboxes for the MGBGTV8 increasingly difficult to find, many owners have looked to alternative gearboxes as replacements like LT77 and R380 boxes but they too are becoming less easy to find. So the news that Vitesse now offer a 5 Speed Mazda Gearbox Conversion Kit for the MGBGTV8 is very welcome. What is their replacement kit like, how do the ratios compare with those of the original 4 speed box with overdrive on top gear, how does it perform, what does the installation involve and how much does it cost?

What's the 5 Speed Mazda Gearbox Conversion Kit like?

Vitesse now offer their Mazda based replacement gearbox kit for the whole MGB range not just the 1800 model. They have supplied over 6,000 of these gearboxes as original equipment to British sports car manufacturers such as Morgan, Caterham, Westfield and Ginetta. The box is the proven Mazda MX5 Mk3.5 unit. The kit comes with a Vitesse gearbox case and bellhousing for the V8 engine, a machined billet front plate, a modified rear case with Mazda mechanical speedo drive assembly, a bespoke 9.5" clutch friction plate, a gear shift lever which is kept in the original position for the MGBGTV8, concentric slave cylinder assembly, braided clutch pipe with a remote bleed pipe for easy bleeding, a replacement prop shaft, spigot bush with Mazda OE needle roller bearing assembly, and the necessary new gearbox rear mounting bracket assembly and isolator. The kit also includes a complete geomet coated UNF fixings kit and a speedo drive cable.

The Vitesse gearbox comes fully assembled including the clutch slave cylinder assembly so the fitting is only as complicated as replacing an original gearbox. As OE Mazda components are used where possible, parts quality and also serviceability is ensured. All brackets are electro coated ensuring maximum resistance to corrosion.

The installation requires the removal of the V8 engine, so should the customer have the capability to carry this out, fitting the new Vitesse gearbox is straight forward as it bolts straight in with no cutting or welding.

How do the ratios compare with those of the original 4 speed box with overdrive?

The [gear ratios](#) are very well chosen and at **0.814:1** fifth gear is virtually identical to the MGBGTV8's overdrive ratio of **0.82:1**. Retaining the original **3.071** back axle the difference in the overall ratios is very little. In fact the Vitesse Mazda box is **0.72% lower** at **27.80 mph/1,000rpm compared with the original of 28**. Third gear is 5.65% higher giving the replacement box slightly longer legs in third with fourth the same 1.000 as the original gearbox. That provides a main benefit for the new 5-speed gearbox. Vitesse say it transforms the driveability of the MGBGTV8 or MGBV8 conversions providing a considerable improvement on the original.

Same gear lever position with gear knob options

The gear lever of the Vitesse box protrudes through the standard gaiter and shroud in the same position as the original. Furthermore it is the same length as the original and has a thread which is the same as the original so the original gear knob can be reused. Alternatively you can use the un-branded knob with 5 speed diagram on the top of the knob showing the gear selection positions which comes with the kit.

Speedo connection

The original speedo in an MGBGTV8 has to be sent off to Speedograph to be recalibrated at a cost of about £60. There are two speedos (100mm and 80mm depending on the VIN change point). Vitesse have thought about a geared angle drive fitted to the gearbox so no recalibration of the speedo would be needed but on balance they feel a recalibration is the better option. The recalibration can also be arranged to suit alternative tyre sizes, particularly with MGBV8 conversions where 15" wheels and fatter tyres have been used. The recalibration provides more accurate speed and mileage recordings.

Gear shift feel

Former RV8 owner Peter Wallis now has a Mazda MX5 and says he finds the Mazda gearbox is a sporty box, light and precise with a short throw. Vitesse have found when customers have driven their development car, their reaction when they only get as far as 3rd gear is "Yes, I want one".

Vitesse's in service experience

Vitesse say that since Autumn 2016 they have fitted production kits to two MGBGTV8s, two MGBV8 Roadsters, a Costello MGBV8 and an MG RV8. Vitesse say the in-service feedback has been good. With the torque characteristics of an MGBGTV8 there will be torque load build up on long climbs of hills but the experience so far is the Vitesse Mazda box copes well with that and with the effects on the lay cluster. Vitesse gearboxes have been granted BMH approval.

How much does it cost?

The Vitesse replacement Mazda 5 speed gearbox kit for the MGBGTV8 is offered at £2,250 plus VAT (**£2,700** in total). Together with the installation the combined cost including VAT is likely to be around **£3,210 to £3,500**. Vitesse includes free shipping for Mainland UK orders over £49.99 plus VAT and can get competitive door to door delivery prices for overseas customers.

Full details of the replacement Mazda gearbox for the MGBGTV8 are on the [Vitesse website](#). We understand Vitesse will be releasing a new webpage dedicated to their new replacement gearbox for the MGBGTV8.