

HIGH SPEED, LOW REVOLUTIONS

Impressions of an M.G. Midgette with Laycock-de Normanville overdrive

WHEN the M.G. Car Company introduced the post-war model Midgette, the motoring public was offered a good-looking saloon with sporting tendencies, and road holding par excellence; one of the very few criticisms of the ZA Midgette was the use of a 4.875 to 1 axle ratio, which many considered gave too low gearing for such a car. There was a fine gear box with a delightful remote control lever which simply begged to be used, but the car was apt to buzz if driven energetically. This has been remedied to a great extent in later ZA models and in the current ZB, which have a final drive ratio of 4.55 to 1.

Now, for owners of ZA and ZB' model Midgettes, the Alexander Engineering Co., Ltd., of Haddenham, Buckinghamshire, can supply and fit an overdrive which operates on third and top gears and, in practice, transforms an already fine small car.

The unit used is the Laycock-de Normanville D type overdrive, which has a ratio of 0.756 to 1. It is electrically operated by a solenoid, controlled by a fascia-mounted switch. A feature is that engine braking is available at all times, and the driver is able to switch the overdrive in or out instantaneously.

The ZB model Midgette used for this test of the fitting had the standard 4.55 to 1 axle ratio; overdrive top ratio was 3.44 to 1 and overdrive third 4.72 to 1.

Normal top and third are, of course, 4.55 to 1 and 6.25 to 1 respectively. For owners who prefer slightly lower gearing when overdrive is fitted, Alexander Engineering can supply a 4.875 to 1 axle ratio. However, experience showed that the Midgette's 1½ litre engine could deal quite comfortably with the 3.44 to 1 ratio of overdrive top.

Changes into and out of overdrive could be made under power, with little indication of what was happening except a change of engine note. The change up and down was very smooth, and little difference was noticed whether the car was laden or carrying the driver only. The car's speedometer, checked by an accurate electric road test speedometer, was found to be correct at 30 m.p.h., one m.p.h. fast at 40 and 50, and two m.p.h. fast at 60, 70 and 80 m.p.h.

Maximum speed in normal third gear was 70 m.p.h., which compares favourably with the performance of the ZB Midgette road tested by *The Autocar* in July of this year. Comparative acceleration tests also indicated that the car fitted with overdrive was in standard tune. The only visible mechanical difference, apart from the overdrive, was the use of flame traps on the carburettors instead of the full-sized air cleaner.

On a level stretch of road a maximum speedometer reading of 90 m.p.h. was seen in overdrive third—equivalent to a true 88 m.p.h.; this equalled the maximum top gear speed of the road test car. The enthusiastic driver then has the satisfaction of being able to change up to

overdrive top with the knowledge that under favourable road conditions, 80-85 m.p.h. cruising speeds may be maintained without overworking the engine.

Although the overdrive is not intended as an accelerating gear, the Midgette would pull away quite smoothly from approximately 25 m.p.h. with overdrive top engaged. The important advantage lies, of course, in the lower engine speed when driving fast, with a consequent lower rate of engine wear over a period and a reduction in fuel consumption.

Without overdrive the fuel consumption at a steady 30 and 50 m.p.h. on a level road was 36.5 and 32.7 m.p.g. Using the overdrive the consumption, in similar conditions, dropped to 38.7 and 35.3 m.p.g. respectively. A marked improvement was shown when using the full engine and gear box performance; over a distance of ten miles, the consumption was 22 m.p.g. without and 28.8 m.p.g. with overdrive.

The owner of an overdrive-equipped Midgette would have to cover a big annual mileage to enable the reduced fuel bill to balance the capital cost of the overdrive, but the pleasure of driving this desirable car would no doubt compensate to some extent. The cost of equipping a ZA Midgette with overdrive at Haddenham is £102; for the current ZB model it is £109. If the owner is in a position to do the work himself, the prices are less the fitting charges of £12 10s and £15 respectively.

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