The large Austin 3-Litre, as modified by Downton, shows no external sign of any change.

Elegance, luxury and Downton performance

THE Austin 3-Litre is a large car with relatively modest performance and a rather heavy fuel consumption. As an executive or chauffeur-driven vehicle it has its virtues, but it is not the kind of car which AUTOSPORT normally tests. However, when given the Downton treatment by Daniel Richmond it becomes quite a high-performance car, and in spite of its extra speed it is also much more economical. Indeed, it gains some 12 or 15 mph and 4 or 5 mpg, while the acceleration figures are transformed. It was my intention to write the sort of brief article that I usually do for tuned cars. Having covered a large mileage, I decided that the big Austin Downton is a car in its own right, deserving a full road test report.

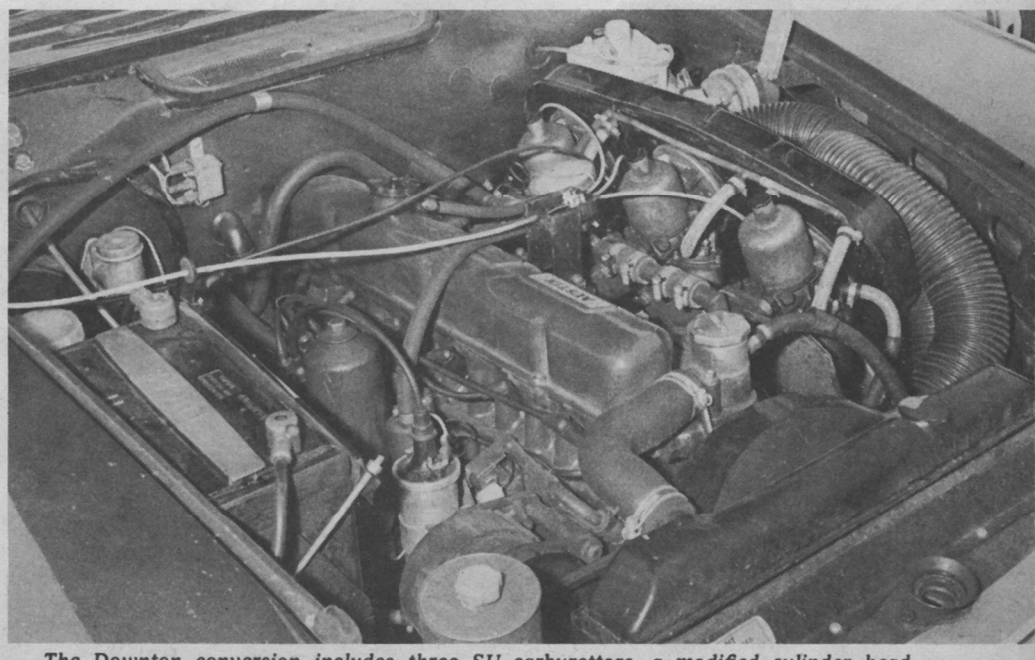
The Austin 3-Litre employs the body shell of the 1800, but it has a longer wheelbase, an extended bonnet and boot, and rear-wheel drive. The bonnet contains an in-line six-cylinder engine and, whereas the 1800 is a bit of a plain Jane, the 3-Litre has a long, low look that is most impressive. Indeed the car has almost a patrician air, with an absence of decoration, and its long wheelbase avoids excessive overhang which is the enemy of good looks. If the Mini replaces the old Austin Seven the 3-Litre is certainly the descendant of the Austin Twenty.

Independent suspension of all four wheels is accomplished by a Hydrolastic interconnected system, and there is an additional self-levelling feature to compensate for extra passenger and luggage weight. The rear wheels are on semi-trailing arms, and are driven by exposed shafts from a hypoid unit mounted on rubber. There are disc front and drum rear brakes, servo assisted.

ROAD TEST

by John Bolster

Downton Austin 3-Litre



The Downton conversion includes three SU carburettors, a modified cylinder head, new camshaft, special inlet manifolds and new exhaust system.

The work carried out on the engine at Downton is of a pretty radical nature, and the details are as set out below.

Modified cylinder head on exchange	65 0 0
Special inlet manifolds	28 10 0
Exhaust system	27 10 0
Camshaft	14 0 0
HS6 SU carburettor and piping	18 10 0
Air cleaners	5 5 0
Mixture control	3 15 0
Progressive throttle	2 10 0
Set of gaskets	6 15 0
Set of sparking plugs	1 16 0
In kit form	173 11 0
Fitting and road testing	40 0 0
	£213 11 0

Thus modified, the engine peaks at 5500 instead of 4500 rpm and runs easily up to 6000 rpm, beyond which I did not go. These extra revs greatly increase the maxima in the lower gears and it is now possible to touch 60 mph in second, while third is good for well over 90 mph. I timed the car at 112.5 mph on the direct top gear, and I believe that another tester has had 115 mph, possibly under more favourable conditions. In overdrive top the car was not quite so fast but ran very easily at about 110 mph, a speed which could also be approached at much higher revs in overdrive third, though I did not time this.

It is necessary to be critical of the rubber-mounted hypoid unit, which jumps about alarmingly when really quick gear-changes are snatched. Peugeot and Ferrari use a full-length torque tube to locate the final drive, which avoids this effect. At very low speeds these soft rubber mountings also produce surging similar to that caused be rubber doughnut universal joints on other cars. This apart, the gearchange is excellent, though reverse is a trifle stiff to engage.

The roadholding and brakes are well up to the enhanced performance. There is a moderate degree of understeer and the car is very stable at speed. It rolls a good deal, and at first feels rather large when cornered hard. Confidence comes with practice, and the big machine is then found to corner much faster than would be expected. The ride is not too soft and there is a total absence of choppy movement or pitching, the Austin having that ease of movement which only a long wheelbase can give. The power-assisted steering is not excessively light, but might be a little higher geared with advantage.

The engine is always smooth and very quiet at the natural cruising speed of 90 to 100 mph, though there is some power roar at maximum revs. Road noise is well suppressed on most surfaces, but the quarter-lights of the front doors produce a good deal of wind noise. Apart from this, the car is most restful for long fast journeys, and the further I drove it the better I liked it. For such a large heavy car the fuel consumption is moderate, and seems to increase very little when the maximum speed is often enjoyed. Unfortunately, many British cars are fussy and uncomfortable when driven hard on the Continent, but the Downton 3-litre has the long stride which such roads demand.

For business reasons, many people find it advisable to run a big, good-looking car. The Austin 3-Litre fulfils these requirements, but in standard form it has a rather uninspiring performance. Both on the circuits and for the road, Downton Engineering Works have produced many fast cars, but the work they have done on this big Austin is one of their most impressive achievements. They have turned rather a dull car into a most-enjoyable machine with a personality of its own, and if the price seems high, think of the time and petrol you can save!

SPECIFICATION AND PERFORMANCE DATA

Car Tested: Austin 3-Litre de luxe saloon with overdrive, price £1647, plus £214 for Downton conversion (see text).

Engine: Six cylinders, 83.34 mm x 88.9 mm, 2912 cc. Pushrod-operated overhead valves. Compression ratio 9.3:1. 174 bhp (net) at 5500 rpm. Three SU HS6 carburettors.

Transmission: Diaphragm-spring clutch. 4-speed all-synchromesh gearbox with Laycock-de Normanville overdrive, ratios 0.82 (overdrive), 1.0, 1.07 (overdrive 3rd), 1.302, 2.058, and 2.98:1. Divided propeller shaft. Hypoid final drive, ratio 3.91:1.

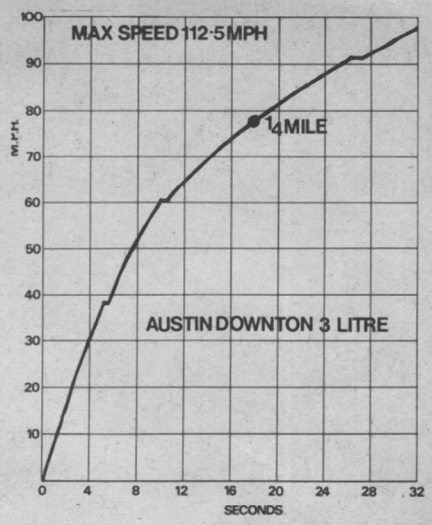
Chassis: Combined steel body and chassis. Independent suspension of all four wheels with wishbones in front and semi-trailing arms behind, all on interconnected Hydrolastic system, with engine-driven pump for self-levelling rear end. Power-assisted rack and pinion steering. Disc front and drum rear brakes with servo assistance. Bolt-on disc wheels fitted 185-14 Dunlop radial ply tyres.

Equipment: 12-volt lighting and starting with alternator. Speedometer. Rev-counter (extra). Water temperature and fuel gauges. Clock. Cigar lighter. Heating, demisting, and ventilation system with electrically-heated rear window. 2-speed windscreen wipers and washers. Flashing direction indicators. Reversing lights. Radio (extra).

Dimensions: Wheelbase 9ft 7.5ins. Track (front) 4ft 8.25ins (rear) 4ft 8ins. Overall length 15ft 5.7ins. Width 5ft 6.75ins. Weight 1 ton 9 cwt 3 qrs.

Performance: Maximum speed (direct top): 112.5 mph. Speeds in gears: Third 92 mph, Second 60 mph, First 38 mph. Standing quarter-mile 18.2 s. Acceleration: 0-30 mph 4 s, 0-50 mph 7.8 s, 0-60 mph 10.1 s, 0-80 mph 19.4 s, 0-90 mph 26 s.

Fuel Consumption: 18.5 to 21 mpg.



Bolster found the 3-Litre's roadholding and brakes well up to the extra performance provided by the Downton conversion.