TR7 FOR BRITAIN

Triumph's export earner revised for this country

By Michael Scarlett

THE TR7 began life in January last year as a sports two-seater aimed specifically at the North American market. The misunderstanding common to apparently all manufacturers about Federal safety requirements killing off the convertible (in 1970) caused the TR7, like the XJ-S, to be a fixed-head coupé, and not open as well. British sports-car enthusiasts will also be denied any sort of open version in the near future, which is a pity (though enough sales pressure could improve matters).

Although there are a lot of detail differences between the Federal TR7 and its newly introduced right-hand-drive brother, structurally — and in all the original passive safety features — the two are the same as described in *Autocar* of 25 January 1975. The body-chassis is a platform type with strong sills and floor, integral with the main body panels and roof. The front of the engine and the bottom of the front suspension are carried by a pressed sub-frame. Side-intrusion-resisting members bridge the doors, and the roof is strong enough comfortably to exceed roll-over strength needs.

Suspension is at first sight pretty conventional, but there are some interesting thoughts that explain why it works rather better than one might expect (see our driving impressions below). Coil springs are used, on MacPherson struts in front, with the anti-roll bar forming part of the bottom member, and on a live axle at the back, located by that simple but radially quarrelling trailing and semi-trailing four-link arrangement originally popular with Vauxhall. If you have enough rubber in the link pivots, and balance the consequent compliances aright, you have a cheap and quite effective way of keeping the axle in the right place. The TR7 follows Spen King's thinking closely in its suspension; in effect he appears to argue that if you're stuck with the cheapness of a live axle, you can make it work better than some other live axles if you (a) locate it fairly accurately and (b) allow it a bit more spring movement *without* allowing it to roll on to the bump stops in extreme cornering. (Cars which do lean on their back bump stops when cornered usually abruptly slide their rears, because of the sudden increase in rear roll stiffness, making them difficult for the unskilled to handle when caught out unexpectedly).

Independent rear suspension is expensive on a rear-drive car. It can be arranged to work perfectly in both ride and handling. But, especially in a less heavy sports-car, ride doesn't matter so much, and a reasonably located live axle which does not permit any sudden camber changes is very much preferable to the camber-changing skittishness of any semi-trailing irs, such as the later TR4 and TR5 and 6 had. In fact, our first impressions suggest that the TR7 rides surprisingly comfortably, as well as cornering safely *in extremis*.

Steering is naturally rack and pinion, and the brakes servo-

sisted disc and drum, with twin draulic circuits. A 12-gallon tank strapped to the back of the ckpit out of harm's way.

The engine is a sort of cross tween the 1,854 c.c. Dolomite one d the Sprint, since it uses the 78 m stroke of the former with the gger, 90.3 mm bore of the latter – t not the 16-valve head. Capacity therefore 1,998 c.c. As readers ll remember, it is mechanically e the Dolomite, with a cast iron e-bearing block, a light alloy linder head carrying a chain-dri- n single overhead camshaft, oss-flow porting, with wedge- aped combustion chambers, the hole unit inclined at 45 deg. The ur-speed gearbox has Dolomite tios but is derived from the arina single-rail box also used in e Midget and Spitfire 1500s. A ne-piece propellor shaft drives rough a 3.63-to-1 final drive, hich with the 70 profile 5SR13in. tyres fitted undergears e car at 17.9 mph at 1,000 rpm.

hanges for Britain

The first and most welcome one the elimination of the absurdly rottling Federal emission-control easures, although the TR7 here ill meets the more reasonable uropean emission requirements. ith a pair of SU HS6 carburettors place of the Federal Strombergs, 9.25 instead of 8-to-1 compression tio to make the best use of 97 stead of 92 octane fuel, no hot-air take for the carburettors, and no r pump for exhaust port air jection, the engine produces a aimed 105 bhp (DIN) at 5,500 rpm place of the 90 bhp of the Federal e at 5,000. Maximum torque, 119 ft. of it, occurs at 3,500 rpm. The d line is at 6,500 rpm instead of e Federal 6,000. Sadly, from an se of maintenance point, the ederal car's contact-breaker-less ucas electronic ignition is placed by the usual distributor y AC Delco) — because of the £25 so that the electronic set-up ould add to the retail cost. Plugs e Champion N12Y instead of 11Y and the timing goes forward 10deg before top dead centre with the elimination of the idle retard device (which retards to a maximum of 2deg after TDC).

Although it looks the same at first sight, the fuel filler is of course no longer a leaded-only type, but an anti-theft device which prevents siphoning is added. No air-conditioning and a less severe low temperature requirement allow a smaller battery and a less powerful alternator, 36 amps against the air-conditioning 66 amp one. Air-conditioning means extra weight in front (about 1cwt), so that on Federal cars so ordered, the front springs are of the same rate as "heater springs" but longer. American cars with exhaust catalysts are fitted with a heat shield below the pipe after the catalyst, otherwise grass could burn; the elimination of this means a small improvement in the car's already good ground clearance.

Other outward dimensional changes include 3.9 in. less rear overhang, and 0.5in. less in front, thanks to doing away with the heavy and very-costly-to-repair 5 mph bumpers. The European bumpers in fact give no bodywork damage at up to 3 mph according to Triumph, thanks to their steel channel section construction, covered in front with a polycarbonate moulding and, at the back — where the elimination of those boss extensions is responsible for the extra shortening of the car — a black nylon one. Nylon is used here because polycarbonate's surface will deteriorate when soaked with petrol.

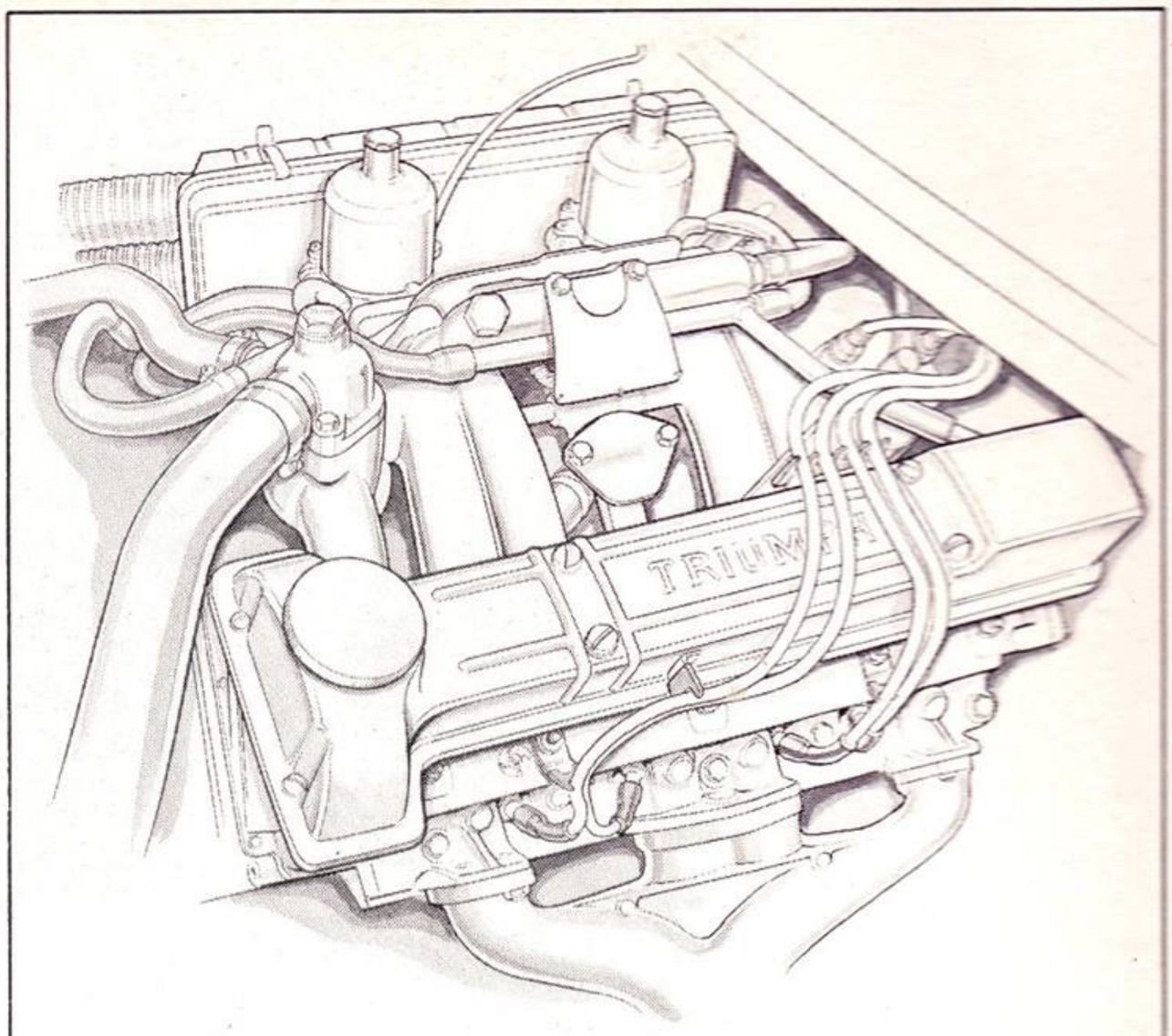
The car weighs 2,205lb with a full tank against the Federal 2,241lb. Fatheaded regulations in some European countries do not permit side indicator repeaters, so that is why black plastic pseudo grilles are found on the rear wings, and, less obviously, on the front corners. Americans are not supposed to have headlamp flashers, but as we can, the electrically lifted pop-up headlamps — which will erect themselves in 0.8sec — now have a 4sec delay once up to permit flashing. Lamps themselves are 60/45 watt units. The heater is the same except that it doesn't have the American footwell vents, which seems a pity. The steering is the same, with the identical energy absorption arrangements, but the wheel has less clumsy padding, since the Americans insist on more crash pad area.

Amusingly, the fussy Americans are not so strict as we are about exhaust noise — Triumph had to make the car a little noisier in response to customer requests there — so that the European car has a different final silencer. Early complaints of initial fade for the first lining materials — you had to pre-fade them slightly at the beginning of their life — in America made Triumph change to Ferodo 2441 for all TR7s.

There are no great changes inside other than those mentioned — the excellent facia remains the same apart from minor warning lamp differences. The roomy and very comfortable cockpit is a civilised living space which should suit the majority of owners in every way (except for over-the-shoulder vision). You tend to forget after a while with the new Triumph that it is the older British sports-cars you should be comparing it with, rather than modern saloons — because its interior appointments are those of a good saloon.

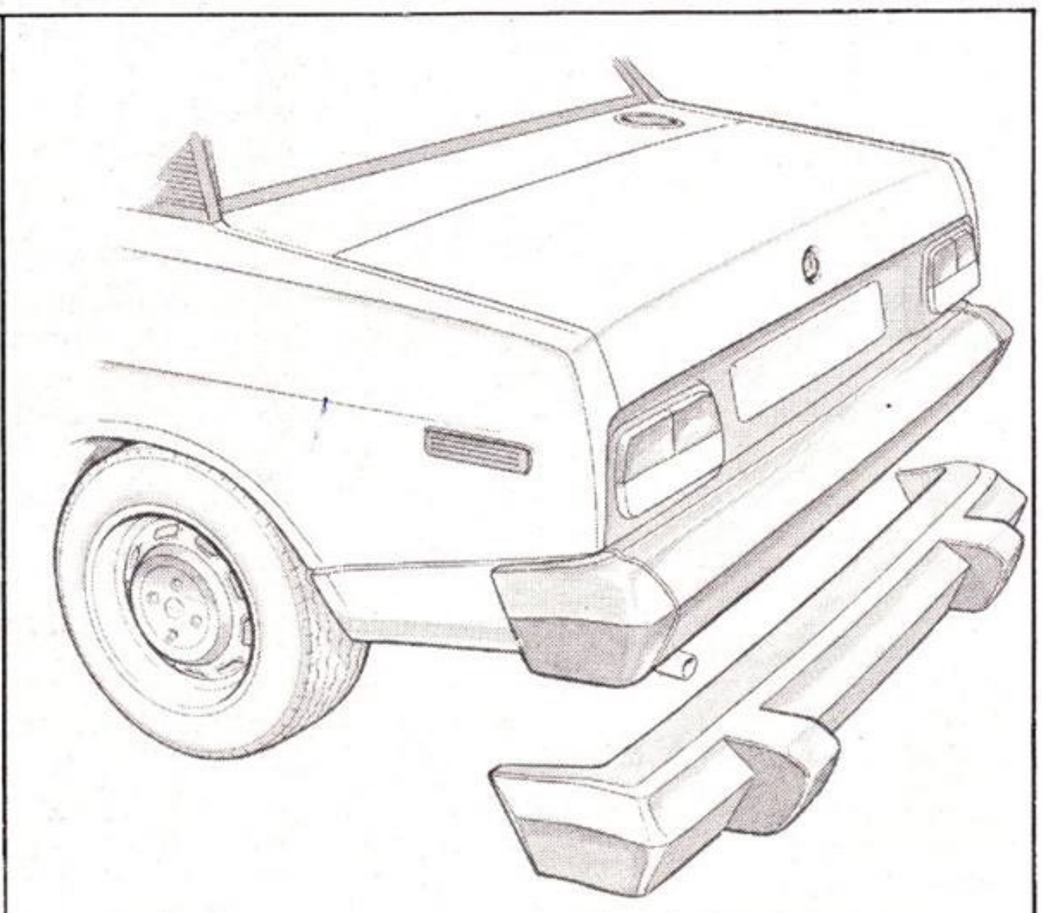
It should of course be faster than its unfortunate Federal-hobbled brother. Triumph claim an 0-60 of 9.4sec (Federal 11sec) and, in top gear, a 40-60 mph increment of 7.5 against 8.3sec. Because of the low overall gearing, top speed does not rise as much as it might — from 107 to 110 mph.

Leyland say that they have earned over £24 million of export sales with the 20,000-odd TR7s they have sold in America to date — 15,400 were sold there in 1975. The object is to outsell the combination of the TR6 (14,800 odd best yearly total, of which 90 per cent went abroad, most of those going to America) and GT6 (4,700 best in a year). The 6 is, apart from a few scattered around, no longer available here, and its production for America — it has sold alongside TR7 meanwhile — is expected to end in the next few months. We were agreeably surprised by two things about the right-hand drive TR7. The first was the announcement of the British price of the car comfortably before announcement date (19 May) — rarely do we hear this until a few days before — and the second was the price itself, which includes inertia reel belts (as do most Leyland prices), tinted glass, and like the Dolomite range, a loudspeaker and aerial. Taxes included, the TR7 is priced at £2,999.88, which should ensure reasonably good demand from the word go.



Lift the bonnet on the TR7 and this quite impressive sight is revealed; distributor access is much easier than it looks, thanks to quickly removable heater intake just visible on right

Carpet covers the spare and jack in the floor of the useful boot



Federal rear bumper compared with the European one. "Louvre" on tail quarter is actually just a panel to fill space left by American indicator repeater

TR7 Driving impressions *continued*

sports-car criteria, and really remarkable when one remembers that there is all the inertia of a live rear axle thumping about underneath. Our test drive did not take in anything like a French road, but the bumps we did meet disturbed the car far less than one might expect. It is firm in character, but rarely violent, and we suspect that the older driver who might fight shy of a sports-car, especially a British one, on the grounds of an uncomfortable ride will find the TR7 more than acceptable here. This is helped by seats which hold one sideways much better than most mass-production ones, and which are really very comfortable; there is enough adjustment fore and aft for up to 6ft drivers, and thanks to the seat-wide release bar found on more and more Leyland cars, they are easy to adjust.

Relatively soft rides on simply suspended, less-than-heavy cars don't usually promise the best of handling. Certainly, at the very first, there is a slight unease felt about the steering, hard to explain. Immediately about the straight-ahead the steering is oddly light, effort building up rather disproportionately beyond, though it never becomes heavy. Giving the car a flick of the wheel at speed on a clear road produces an oddly delayed reaction — there is a perceptible pause before it responds quite sharply — as though there was quite a lot of rubber between the suspension and the body, which the road noise insulation would suggest is so. But in fact, further acquaintance inspires the greatest confidence in the TR7's stability, which is very high indeed.

I was lucky enough to have the handling of the rally TR7 demonstrated to me along with other journalists by Brian Culcheth and Tony Pond. That works-prepared car was obviously superbly controllable, even if its professional rally drivers had not said so most enthusiastically. One came away nevertheless thinking that wasn't surprising, since it was a professionally prepared car. Having driven those production cars, it is good to be able to say that in spite of any initial reservations, the TR7 you can buy is certainly one of the most safe and easily handled cars, sporting or saloon or super-sports, available. It has no bad manners, none of the camber-changing abruptnesses of the somewhat treacherous semi-trailing-arm rear end of its forerunner — like all such arrangements. Chuck it at a bend which is wide, open and at the time private, and it will break its tail away, but not suddenly or sharply or for long. Go into the same bend faster and lift off the throttle with a jerk, plus a chuck of the wheel; again, the tail will break, but not suddenly or too far. You can catch it tidily with great ease, or hold it out a little longer with what power is available, at any rate in a second-gear turn; the inside wheel spins eventually, limiting things back to propriety. Roadholding, on Goodyear G800+S steel-braced 70 profile types, is good. There is some understeer, but not too much — enough to make the car a reasonable straight runner. Roll is acceptably controlled. The brakes work all right, if a little dead in character.

Visibility — well, like the other Leyland car whose wedge styling is credited to Harris Mann, it isn't the best. Wedges, if their points curve down, hide their noses from the driver, so that the careless may have good reason to be grateful for that stoutly clumsy bumper. The view from the driving seat is of a rather slit-like, curved screen, a little remote in the style of the passive safety car, framed by tolerable pillars. Three-quarter rear view is excellent, since the car is a two-seater and the cockpit-wide back glass is relatively close; it is five-eighths rear that is blind in the TR7, which is just as much of a nuisance, condemning those rear pillars as far as I'm concerned to the silly excesses of a particularly bad styling fashion now happily out of date on other cars. Leyland may take comfort perhaps in the thought that changing those pillars to a much thinner roll-bar sized design is an easy and very worthwhile way to re-style the TR7 when its first face-lift is due.

On the other hand, cockpit design gets very high marks indeed — very few inconveniences at all, and a brilliantly clear dashboard that recalls BMW and is actually better, since unlike BMW it does comprise a full set of instruments. A pity though, that the trip reset is an old-fashioned underneath twist type, rather than the increasingly and deservedly popular simple push-to-zero sort.

Drivers who smoke will welcome their door ashtray, since it is of course on their right. There is no centre ashtray for right-handed smoking passengers; theirs is in the other door. We felt that the supply of ram-fed cold air could be a little stronger; one had to use the first or second of the three fan speeds on the neat heater, which is a corporate design we shall see more of on future Leyland cars; initial impressions are that it works well. The bonnet opens fairly lightly, unlike the bootlid, which needs some spring support — it is surprisingly heavy – and reveals beneath delightfully tidy first view of th inclined engine. The secret is th way that pipes and cables hav been kept from straying across th camshaft cover or carburettors clipped to the engine bay side instead — plus the lack of any ugl frying pan aircleaner, and th addition of the classical propor tions of a pair of SUs in place of th truncated Strombergs of the Fe deral car. Immediate misgiving about the way the engine seems t be tucked back under the scutt are dismissed when one finds tha the heater intake can be unclippe so that you can get at the distribu tor.

In general, and in spite of th criticisms, I came away liking th TR7 a lot, and envying my co league, Sports Editor Peter Wind sor, who is to run *Autocar*'s lon term test. It is a satisfying and ver enjoyable closed two-seater whic should find a wide public. As far as am concerned, it will find a wide public when they hack off the l and give it a soft top – or bett still, the fully folding, steel-panell convertible that someone is goi to make me one day. When the TR appeared, a monthly fringe-co temporary described it as "a engine in search of a chassis". Th TR7 is a sort of revenge for th remark, or at any rate a reverse – chassis in search of an engine.

American readers will note the absence of the Federal TR7's large crash pad. Dashboard is exemplarily clear and easy to read, with tolerably good instrumentation. A driver's left footrest is provided

TRIUMPH TR 7:
IT DOESN'T CREATE AN IMAGE. IT CONFIRMS ONE.

In an especially perceptive insight from their enthusiastic review of this car, *Car and Driver* magazine said: *"The TR7 roadster is not for those who make a career of being fun, but for those who like to have fun."*

Car and Driver went on to say: *"It tracks straight as a laser and speaks through the steering in positive, reassuring tones."* Naturally: the steering is rack and pinion. The five-speed stick is smooth and precise. The two-liter engine is lively and strong. The brakes are a combination of discs up front and drums in the rear. But the sum of all these components is a quickness and agility that you must experience by driving the TR7.

"Comfortable, practical and, best of all, entertaining." These are the words of *Road & Track* magazine. We are confident you'll agree, for seldom has the excitement of a purebred sportscar come wrapped in such comfort. The bucket seats are extravagantly wide. The floor is covered in thick carpeting and twin speakers designed into the doors surround you with sound from one of our optional audio systems. In other words, the TR7 gives you front-row-center seating at one of the world's most entertaining performances. If that sounds like fun and excitement, it is. And we haven't even begun to talk about the fact that TR7 is also a remarkable value.

"...what it really makes one wonder is why anyone would buy a Porsche 924 with a bargain of this magnitude lurking down at the Jaguar Rover Triumph store." *Car and Driver* said it. But we leave it to you to drive the TR7 and make up your own mind.

You know who you are. And maybe that means you're ready for a very special breed of convertible sports machine: the TR7. For the name of the dealer nearest you, call these numbers toll-free: (800) 447-4700, or, in Illinois, (800) 322-4400.

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