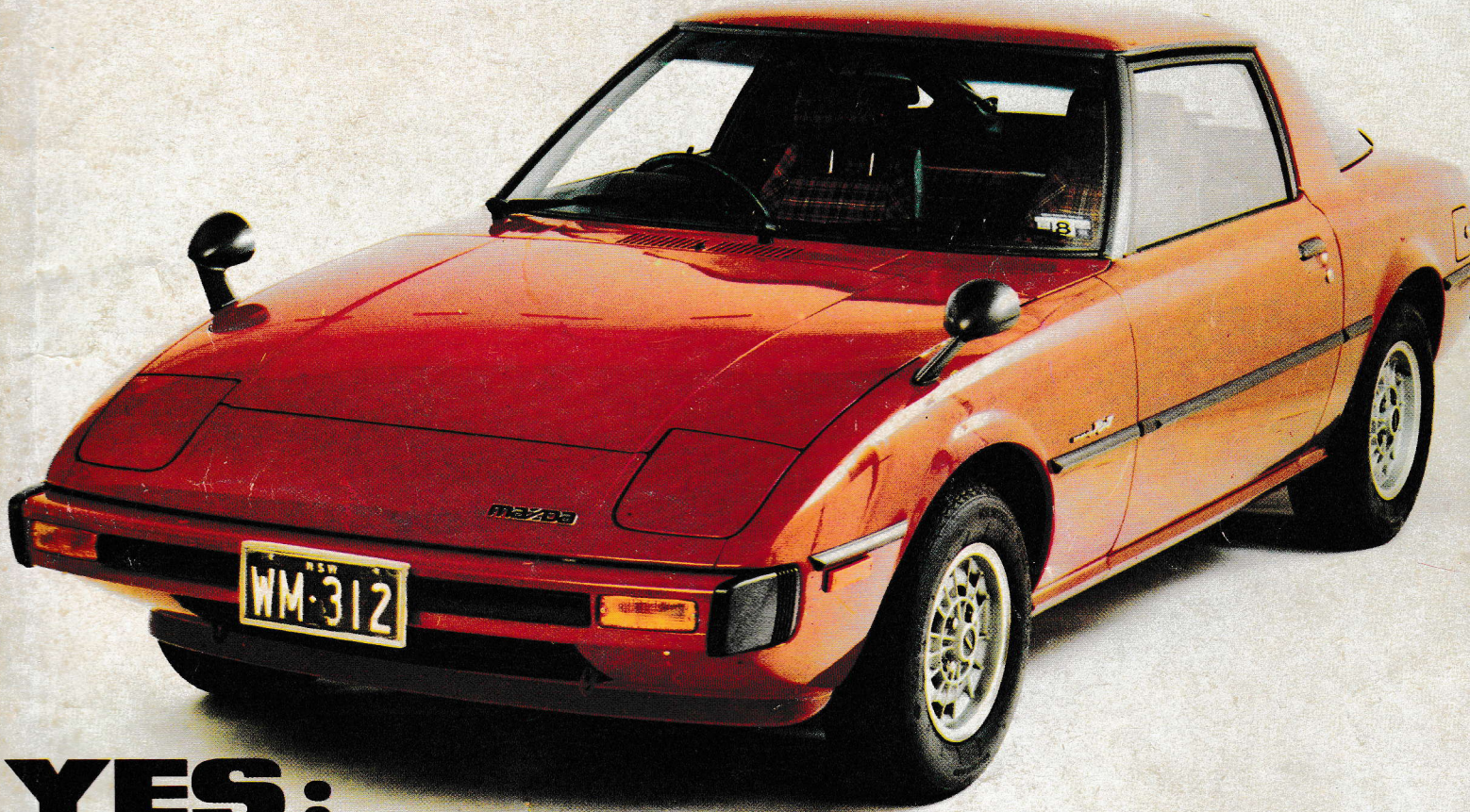


WHEELS



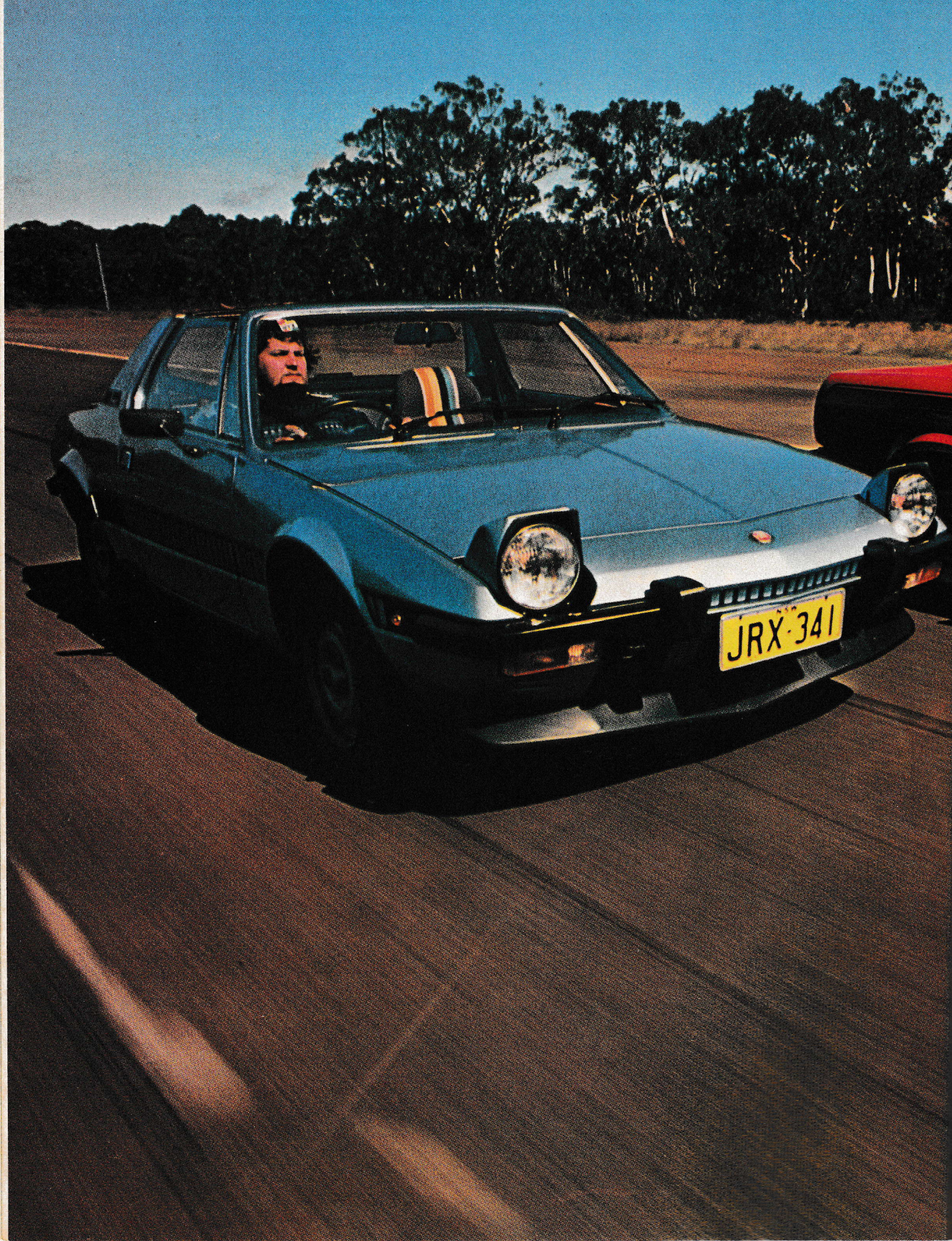
YES:

Mazda gets it right - RX7

NO:

**Datsun
gets it
wrong -
Stanza**







FIAT X1/9 versus TRIUMPH TR7

THE PURE SPORTS CARS?

The modern small sports car is far removed from the old bone shaker of 20 years ago. Today we have a closed two-seater coupe that calls itself a sports car and a tiny mid-engined targa-topped car that wants the same tag. Their prices are line-ball but which does the sports car job best? We find out.

WHEN THEY come to write the history of the sports car in the 1970s, the Fiat X1/9 and Triumph TR7 will be acknowledged as representing two extremes in design philosophy.

The TR7 was to be Leyland's answer to the all-powerful American dealers who wanted the replacement for the aging TR6 to be the British equivalent to the Datsun 240Z. They believed an uncomplicated, reliable sports car (not necessarily open) — in which looking the part was more important than actually being able to deliver the goods promised by the styling — would restore Leyland to the top of the sports car pile.

Fiat's solution to the same problem — selling large numbers of cars in America — was utterly different. It chose to build a car that not only looked like a mid-engined design but really did have the engine over the driver's shoulder. The Turin engineers



rationalised their way through the almost endless box of Fiat bits and built a relatively low-cost, mid-engined sports car based heavily around its 128 range.

For a body they went to Bertone who crafted a handsome wedge-shaped, two-seater design with targa top to provide, they hoped, an adequate compromise for those to whom a sports car can only be a sports car if you can remove the roof.

Open motoring wasn't considered until very late in the life of the TR7 — such a version of the car will probably reach American/British showrooms in early 1979 — because Leyland believed rag top cars would be outlawed by American safety requirements ... requirements that are further away today than ever.

The Fiat took five years to reach Australia, the TR7 three and a half. Quite by coincidence they arrived within months of each other and carry price tags that are so close as not to matter. At the time of writing the X 1/9 is \$9637 and the TR7 \$9695; obviously anybody who is interested in an under 10 Grand sports car is going to be looking very closely at the two. We've already had a number of phone calls and letters from prospective buyers wanting to know Which Is Best.

That's not a question which can be answered over the telephone for the two cars are very different in character and appeal to distinctly separate buying groups. To define the two cars here is to reach conclusions before stumps but we can emphasise that nobody should buy either the TR7 or the X 1/9 without driving both for at least 30 minutes ... you could make a most expensive mistake.

A knowledgeable understanding of the specifications gives a hint to the character of the two cars but that's all. It is left to the driving to establish beyond doubt that the Triumph is pure sports car ... except for two fundamental facts — its engine is a torque, lugging four and so obviously designed for a sedan, and it is a closed two-seater. Pure sports car? Perhaps the coupe bit and the engine make that a contradiction but that is a question only you can decide.

The Fiat is a complete contrast for its small-capacity, high-revving engine requires constant gear changing, and while it is not totally open it has a far more satisfactory compromise than the sunroof offered as an option (\$375) on the TR7.

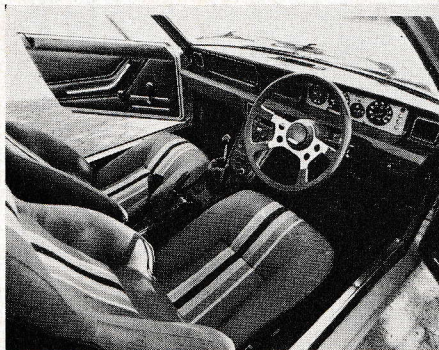
Carry this theme through to other aspects of the cars and you have a Fiat which is clearly aimed at the youth market — despite that price tag. More mature buyers will enjoy the Fiat but in short, sharp, fun-filled bursts perhaps once a week ... it is not a car for quiet, high speed touring.

The Triumph doesn't have the same urgency or verve although its handling, ride and comfort levels are of a high order and the tall gearing provided by the excellent Rover five-speed gearbox ensures that it has the ability to cruise relatively quietly — but only in non-sunroof form if our test car is typical.

ENGINES/PERFORMANCE:

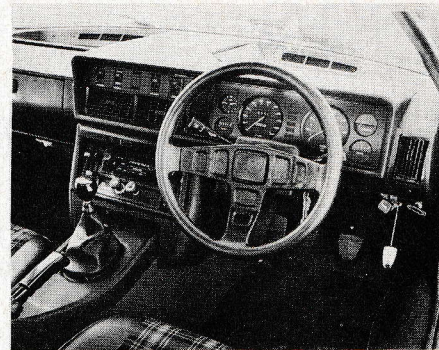
Fiat's small, single overhead cam 1.3-litre engine develops 54 kW at 6000 rpm and 98 Nm at a relatively high 3400 rpm; relate

FIAT X1/9



Fiat interior is cosy, yet driving position excellent for all but tall people. Multi-colored seats aren't out of place. Car lacks glove box, gets tiny bins in front of each door.

TRIUMPH TR7



Triumph is very comfortable, has driving position that will accommodate the very tall. Windscreen is well forward, creates visibility problems in wet conditions.

FIAT X1/9



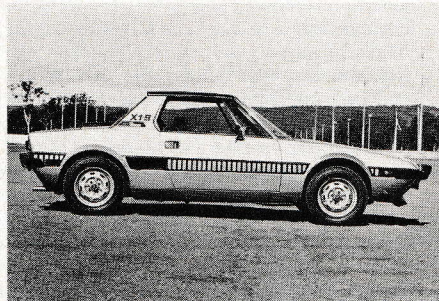
Door stays are weak on X1/9. Targa roof requires two people to lift it off and fit it into front boot. Seats are comfortable but lack rearward adjustment.

TRIUMPH TR7

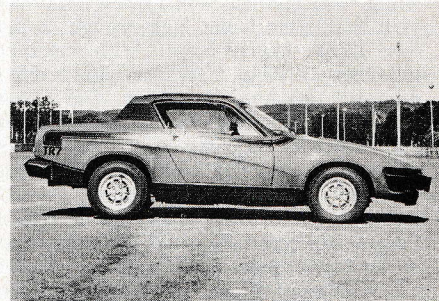


Sunroof is factory fitted option on TR7, open version is due for British release shortly. Dashboard is finished in black plastic.

FIAT X1/9



TRIUMPH TR7



that to its weight of 880 kg — a Golf weighs just 805 kg — and you begin to understand why its through-the-gears performance is inferior to the heavier — at 1068 kg — but more powerful, two-litre TR7 that has 68.6 kW at 5000 rpm and 148 Nm at 3200.

However, the Fiat is still able to give a very good account of itself because it is so willing ... if you use the gears often and run the engine out to the 6500 rpm orange line on the tacho or even to the 7000 rpm redline, then it responds accordingly and will flash (?) across the standing 400 metres

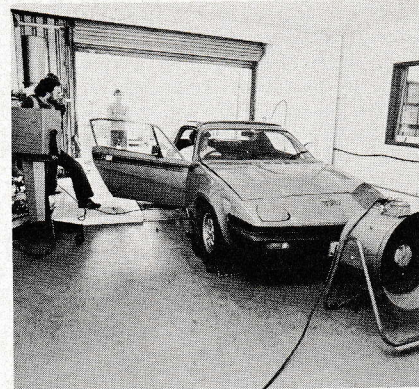
in 19.2 seconds. Driven with the right foot hard up against the firewall you don't notice the lack of bottom end torque although the necessity for a fifth gear ratio becomes obvious. It is when you are feeling lazy and the thought of constant 7000 rpm change-ups becomes boringly noisy that the X 1/9 displays the performance characteristics which are so clearly the give-away to its small engine capacity. On light throttle openings it is surprisingly flexible but the acceleration is slow in fourth gear — the TR7 is faster in fourth and it still has fifth

X1/9



RPM	Corrected kW	Torque (Nm)	Maximum power: 34.5 kW at 5500 rpm (and 6000 and 6500).
6500	34.5	50.7	Maximum torque: 61.6 Nm at 5000 rpm.
6000	34.5	54.9	Atmospheric correction factor: Plus 0.5 percent.
5500	34.5	59.9	
5000	32.2	61.6	
4500	27.7	58.9	
4000	24.7	59.1	
3500	21.0	57.3	
3000	18.0	57.3	
2500	14.2	54.4	
2000	11.2	53.7	
1500	7.5	47.7	

TR7



RPM	Corrected kW	Torque (Nm)	Maximum power: 52.5 kW at 5500 rpm.
6500	35.2	51.8	Maximum torque: 110.5 Nm at 3500 rpm.
6000	42.0	66.8	Atmospheric correction factor: Plus 0.5 percent.
5500	52.5	91.1	
5000	51.0	97.4	
4500	49.5	105.0	
4000	45.0	107.4	
3500	40.5	110.5	
3000	33.7	107.4	
2500	27.0	103.1	
2000	20.2	96.7	
1500	14.2	90.7	

gear to come — and progress demands a downchange if you want to pass another car, climb a hill or even negotiate a corner.

The Fiat is low geared with a 4.076 final drive ratio for 26.7 km/h per 1000 rpm in top gear and has a first gear ratio of 3.58 so that it is very eager off the line. Fast driving in give and take conditions points up the need for a lower fourth gear and a higher fifth for it is possible to reach the redline in top gear on a longish down-hill run. Which is exactly what the new X 1/9 1500 has got.

The Triumph doesn't like to rev, whatever the redline of 6500 rpm might suggest. It will go that high but would much rather not, even 5500 rpm being high enough to produce frantic engine noises. With maximum power developed at 5000 rpm there really is no point to going any higher. The TR7 is very strong in mid-speed ranges and delivers a punch that surprised us. It doesn't feel quite as fast as the 18.1 seconds for the standing 400 metres would indicate.

The TR7 is far more relaxed with its taller gearing and higher speeds in gears, there are no noticeable gaps like the giant hole that exists between third and fourth on the Fiat so progress, even at speed, is smooth even if the engine isn't especially so. We found the TR7 wouldn't pull more than 5200 rpm in fifth gear but it will cruise at that if conditions allow, while the Fiat is screaming at 155 km/h and showing 6860 rpm on the tachometer.

Driven using all the revs the Fiat gives 9.3 km/l (26 mpg) but easing off the loud pedal just a little will increase this to 11 km/l (31 mpg). The Triumph isn't as good and returns 8.2 km/l (23 mpg) in hard driving and around 9.2 km/l (26 mpg) if you change up at 3500 rpm — something that is very easy to do — and use fifth gear sensibly.

The Fiat has a slightly smaller fuel tank — hidden behind the passenger's seat with the spare wheel behind the driver's — at 48.2 litres, while the Triumph's tank holds 54.5 litres so that both offer a reasonable touring range.

TRANSMISSIONS:

We've already mentioned the gearboxes because they play such an important part in establishing the performance parameters of each car. The Fiat's change is very good for a mid-engined car. It's rubbery with a narrow gate but requires just a push in the general direction going from second to third. Second back to first can produce a mild baulking and a snick, as if the synchromesh has almost been beaten, but otherwise the change is as fast as the driver likes to make it. Clutch travel is long, almost excessively so and despite the low geared first it is sometimes necessary to slip the clutch to get the car moving up a slope.

The TR7 sold in Australia comes with the Rover 3500 gearbox but we can't buy it with the optional-in-Britain automatic transmission. A very large, black gearshift knob tries to disguise an excellent gear change which is precise and yet light. Sometimes it is possible to get fifth — up and away from fourth — instead of third but generally it is a change drivers will enjoy for its own sake.

HANDLING/ROADHOLDING:

This was where we expected the X 1/9 to shine and it didn't let us down ... not that the TR7 isn't good, it is, but the advanced mid-engined layout of Turin's masterpiece does have some real advantages. Handling is as near to neutral as is possible but the car is so responsive that it really can be made to do exactly what the driver wants. Tight corners

taken under power produce slight understeer but a tiny back-off on the throttle and the understeer is neutralised. Backing right off tucks the nose in and throws the tail out into real oversteer, easily caught and controlled by powering on and applying opposite lock.

Both cars have rack and pinion steering. At only three turns lock to lock the Fiat's is beautifully direct and yet it is also light and amazingly accurate so that the full measure of the not-inconsiderable roadholding can be exploited. Since every facet of the car's dynamics is full of feel and precision as well as being inherently responsive — yes, that word again — the X 1/9 requires a degree of balance and sensitivity from the driver. Given this it becomes a delicate, marvellously satisfying car capable of providing pleasure in giant quantities.

The Triumph is very different and yet it has sharp handling with direct steering — the 3.9 turns lock to lock should be viewed in context with the 8.8 metre turning circle, much smaller than the Fiat's 9.63 metres — and very good roadholding. It isn't quite as entertaining as the X 1/9 — few cars are — but it displays none of the worrying features of many mid-engined designs — including the Fiat — where downhill corners taken quickly in the wet need to be treated with respect.

The TR7 is a consistent understeerer regardless of the speed or type of corner. Lifting off can provoke mild oversteer but the steering's accuracy allows the driver to enjoy this ... if only the engine were less breathless and more powerful. Only fault in the steering, and this is something we have not experienced in other TR7s, is a strong loading up in steering forces so that it becomes heavy.

In point to point motoring the TR7 still has enough power to leave the X 1/9 behind especially if it is hilly. In very twisty sections, however, the little Fiat keeps the TR7 honest and if the driver is bold enough it can take the lead and keep it.

RIDE:

The X 1/9 bobs and darts around on the road but stays very flat and although the ride is firm it is still comfortable no doubt due in part, at least, to the relatively long 2202 mm wheelbase. The TR7 bumps and crashes around over potholes and sounds rather worse than it really is for it has a comfortable ride that is in complete harmony with the seats.

NOISE:

Here are two very noisy cars, at least in the forms we tested them. The TR7 had the crude sunroof fitted as an option to many of the cars sold here but it so increases the level of wind roar as it flexes and moves around on the frame that we feel it is useless. We're also sure that it contributed to the number of rattles present in the test car. Engine noise is low because of the tall gearing, and so is road noise.

The Fiat has a high revving engine immediately behind the driver's shoulder, while it has a delightful exhaust note it can become tiring on a long trip because so many revs are required for any respectable speed. The superbly designed targa roof (which is stored in the front boot) fits reasonably well but there were still a couple of whistles from around its leading edges. In fact we found the car less obtrusively noisy with the roof removed and the more consistently steady noise of wind rustling over the windscreen.

BRAKES:

The Fiat has unservoed four wheel discs while the TR7 has disc/drums with a servo. Once more the specifications are the guide to performance. The Fiat has a slightly heavy feel to the brakes but the pedal is progressive and if you push hard enough the little car will always stop. Not so the TR7 which can display quite alarming amounts of fade if you hammer the brakes on a long downhill section. No, the TR7 doesn't have the brakes we expect of a sports car in the '70s.

ACCOMMODATION:

Hands down to the TR if you are a tall driver, or even passenger. The Triumph has a very roomy cockpit with vast amounts of leg room while the X 1/9 is best for people of about average height. Not that its seats are uncomfortable, actually they are well shaped and padded with a deep cushion. The TR7 also has good seats and an excellent driving position with the small, soft-rimmed three-spoke steering wheel ideally positioned and the instruments easy to read. The dashboard is very plasticky but is well planned. The driver sits a long way from the windscreen which can cause visibility problems and especially in the rain.

Ventilation in the Triumph is poor although it does have independent foot-level

FIAT X1/9



Fiat's handling is brilliant, steering is ultra-sharp and the whole car so responsive it can be induced into any stance the driver requires.

TRIUMPH TR7



Triumph also handles well, has nimble handling although steering forces build up in tight conditions. Both cars could cope with more power.

FIAT X1/9



Mid-engined layout of Fiat does give it inherent advantages. There is nothing closer to a Dino.

TRIUMPH TR7



Triumph understeers on most corners but does move into oversteer at the limit. Can be placed accurately with precise throttle control.

vents, but we found it impossible to completely turn off the heater and that the face-level vents were totally inadequate.

The X 1/9 has much better ventilation at the face-level but it can get warm around the feet. It lacks a glove box of any kind and only has very small bins just forward of the doors. Its instruments have been re-styled for the third time and are now very easy to read and a great improvement over the designers' original efforts. Everything is close with three steering column stalks behind the small four-spoke steering wheel. Like most Fiats the door stays are weak to the point of being non-existent. Both cars lack radios as standard.

CONCLUSIONS:

Leyland has had quality control problems with the TR7 but the move from the old Speke plant to the Caley factory has seen an increase in quality from Leyland's own rating (out of 100) of the high 60s to the high 80s and certainly the car has gained more refinement in the time it has taken to

reach Australia. Still, it needs more work in this area to reduce the rattles and, pipe-dream or not, to extract more power from the engine and make it smoother and quieter. We still don't like the styling of the TR7 except from the three-quarter front but it does attract plenty of attention. As a soft-ish two-seater touring car with good handling and roadholding it will do very well but we can't consider it a proper sports car — in the same way as the X 1/9. The little Fiat demands more and gives more but it requires more compromises on the part of its owner and we wouldn't be happy to do any long trips in one. But cure the wind noise problem, give it another gear and a little more engine capacity for more torque and power and it becomes most desirable. But then we've given you the basis for the new 1500.

A winner? Well that's for you to decide . . . for touring we'd have the TR7, for commuting the X 1/9 every time. *

SPECIFICATIONS OVERLEAF

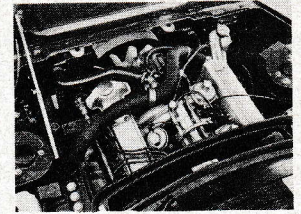
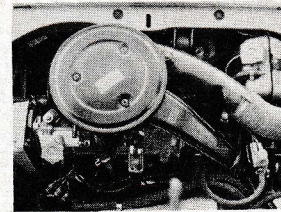
THE PURE SPORTS CAR?

SPECIFICATIONS

	FIAT X1/9	TRIUMPH TR7
ENGINE:		
Cylinders	Four	Four
Cooling	Water	Water
Valves	Single ohc	Single ohc
Comp ratio	9.2	8.0
Bore/stroke	86 × 55.5 mm	90.3 × 78 mm
Capacity	1.290 litres	1.998 litres
Max power	54 kW at 6000 rpm	68.6 kW at 5000 rpm
Max torque	98 Nm at 3400 rpm	148 Nm at 3200 rpm
TRANSMISSION:		
First	3.580	3.32
Second	2.235	2.09
Third	1.454	1.40
Fourth	0.959	1.00
Fifth	—	0.83
Final drive	4.076	3.9
Km/h per 1000 rpm	26.7	33.5 (fifth)
SUSPENSION:		
Front	Independent, struts, coil springs, lower links.	Independent, struts, coil springs, lower links, anti-roll bar.
Rear	Independent, struts, lower wishbones.	Live axle, four links, coil springs.
BRAKES:		
Front/rear	Disc/disc	Disc/drum
STEERING:		
Type	Rack and pinion	Rack and pinion
Turning circle	9.63 m	8.8 m
Turns lock to lock	3.05	3.9
TYRES:		
	Michelin XAS 145HR13	Goodyear 185/70 SR13
Kerb mass	880 kg	1068 kg
Fuel capacity	48.2 litres	54.5 litres

DIMENSIONS

	Fiat	Triumph
Wheelbase	2202 mm	2160 mm
Track, front	1335	1409
Track, rear	1343	1404
Length	3830	4065
Width	1570	1681
Height	1170	1268
Dash to bulkhead	1070	1020
S/wheel to front seat; min/max	590/750	560/735
Front cushion depth	540	510
Pedals to front seat; min/max	310/470	340/515
Cushion to floor height	230	180
Luggage floor length		555
Luggage floor to lid/roof; min/max	w/roof F: 310 without 400	405
Lid/door opening	R: 210 F: 650	670
Loading lip height	R: 380 F: 740	830
Luggage floor width (max)	R: 380 F: 795	1530
Opening width	R: 1460 F: 1275	1270
Shoulder width	R: 1180	
Front door length	1260	1335
Front door height	1020	915
	780	730



PERFORMANCE

	Fiat X1/9	Triumph TR7
ACCELERATION		
0-50 km/h	4.9	3.9
0-70	7.8	6.6
0-90	12.1	10.3
0-110	17.2	14.7
0-130	25.2	21.8
Standing 0-400m	19.2	18.1
PASSING ACCELERATION		
Second gear		
30-60	3.5	3.5
40-70	3.8	3.7
50-80	—	3.8
60-90	—	—
Third gear		
30-60	5.6	5.3
40-70	5.5	5.6
50-80	5.5	5.4
60-90	5.6	5.3
70-100	5.8	5.2
80-110	6.7	6.4
90-120	—	7.7
100-130	—	11.1
Fourth gear		
30-60	9.0	7.8
40-70	8.9	7.8
50-80	8.8	8.1
60-90	9.1	7.8
70-100	9.5	7.8
80-110	10.2	7.6
90-120	11.0	7.6
100-130	12.0	10.0
Fifth gear		
30-60	—	10.4
40-70	—	10.6
50-80	—	10.2
60-90	—	10.7
70-100	—	10.2
80-110	—	11.0
90-120	—	11.3
100-130	—	12.8
Speed in gears		
First	50 km/h (7000 rpm)	55 km/h (6500 rpm)
Second	80 km/h (7000 rpm)	86 km/h (6500 rpm)
Third	123 km/h (7000 rpm)	135 km/h (6500 rpm)
Fourth	156 km/h (5850 rpm)*	167 km/h (6000 rpm)
Fifth	—	174 km/h (5200 rpm)
	* see text	
FUEL ECONOMY		
Overall	9.3 km/l (26 mpg)	8.2 km/l (23 mpg)