

WE INVESTIGATE THE CAR INSURANCE RACKET - PAGE 8

# small car

2s

DECEMBER 1964

## TESTING TWO TOP KITCARS TVR VERSUS ROCHDALE



# Giant

## TVR Grantura mark 3 versus Rochdale Olympic phase 2

BOTH OF THIS MONTH'S GIANT Test cars are, to a degree, the products and at the same time the victims of peculiar and really rather British circumstances. They grew up under a suspect umbrella to begin with – the Taxman's, no less. And now the umbrella has developed some significant leaks. Other makers have got wet and gone long since to the wall. Rochdale and TVR are left. Are they in fact mere survivals, unworthy of consideration in a more realistic and less heavily taxed commercial climate? Or do the qualities that have helped them survive qualify them for consideration altogether outside the umbrella's inadequate sphere of protection?

As usual, SMALL CAR has tried hard and conscientiously to find out. We had both cars for a week, one after the other, and we did our best to explore their possibilities in an enormously varied range of conditions. The TVR we sampled first in city and inner-suburban streets, then wrung-out vigorously on Essex main roads before finally thrashing it hard through the very fast lanes of Berkshire and Wiltshire – not forgetting a spell of motorway work to test its flat-out potential and directional stability. The Rochdale we used for a strenuous two-day tour of Suffolk – a county with tremendous fast-driving possibilities – as well as for all the usual short-haul city chores before driving it hard through the night back to the factory up the M1 and the M6 via Knutsford (where we stayed as usual at the excellent though far from cheap Royal George hotel) then through Manchester to Rochdale itself.

Rochdale's Olympic grew up in the late 1950s as a substitute for lost trade in simple special bodies for old Fords. The TVR by contrast emerged as a totally new design from a new firm formed

specially to meet the demand for tax-free kitcars. Its big advantage in the early days was that it offered, for a suitably low price, almost all of the features which enthusiasts had begun to realise were indispensable in a competitive modern design yet which they simply couldn't buy elsewhere within hundreds of pounds of the price. In other words TVR was taking advantage of its ability as a supplier of kits and not of complete cars to undercut the big manufacturers, building-in extra value and not just offering the same old thing for less.

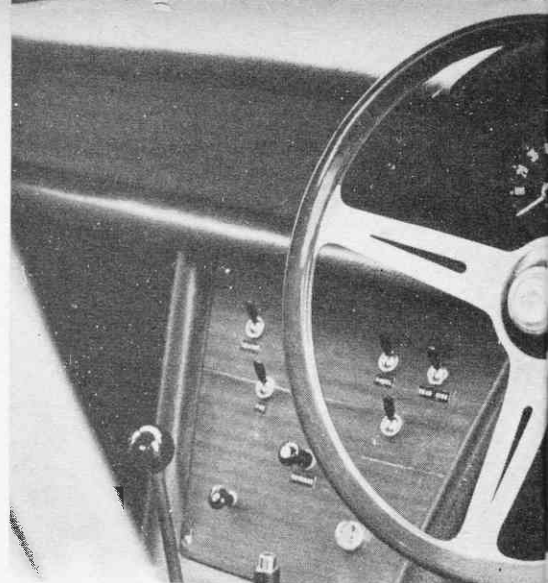
Both specialist firms did very well indeed for awhile. TVR especially, with its catchy specification sheet loaded high with wanted features (tubular space-frame, all-independent suspension) and its instant availability by contrast with Colin Chapman's much publicised but, until years later, bug-ridden and hard-to-get Lotus Elite, sold everything it could make. Rochdale suffered a sharp early setback when a devastating factory fire (glassfibre is a highly inflammable material before its elements are properly bonded together) stopped production for months. Afterwards, though, word got round that its roadability alone made it worth almost twice the asking price and before long Butterworth and friends too were swamped with more orders than they could handle.

What put those great big rents in the umbrella? Well, you know and so do we. Taxman Maudling decided on budget day, 1963, to halve the purchase tax rate on all cars – just like that. His move meant that the difference in value for money between most kitcars, their basic elements either turned out in tiny numbers at high cost by uneconomic methods or else bought-in from the big boys them-

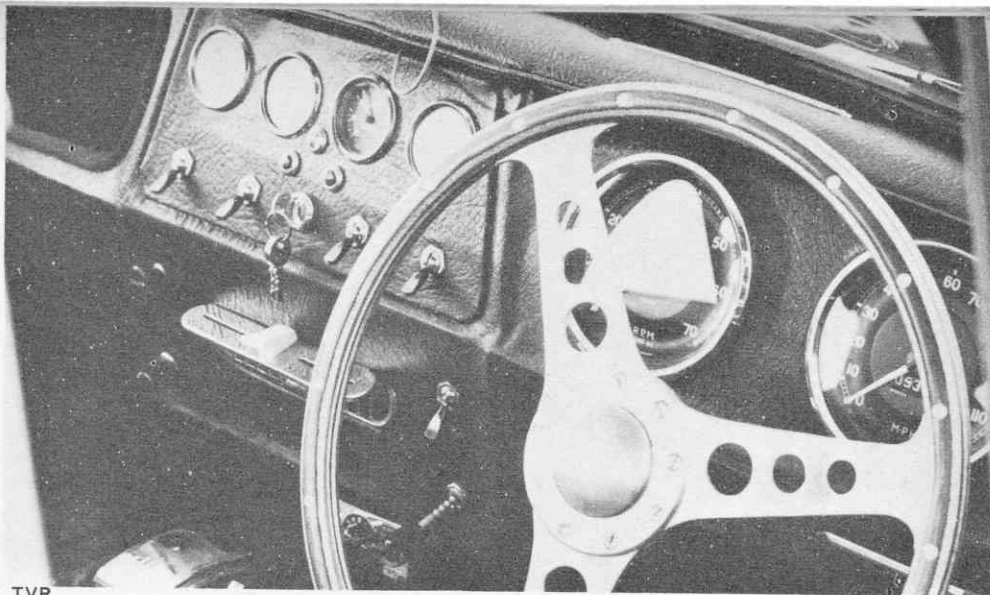
selves at unrealistic prices, and their infinitely cheaper-to-build mass-produced rivals shrank to less than the cost of the purchase tax instead of well over £100 more. One after another the small firms caved in. After a time even Lotus, which had developed from a tiny specialist racing workshop to an important manufacturer in its own right, quietly shifted the economic emphasis from its kitcar foot to the one which rested on normal showroom sales – and dropped the Elite. That left a mere handful of the old guard still marketing cars without wheels. Among them were Rochdale and (after a shaky period which had many observers crossing it off the list too) TVR. Tough times meant, for the survivors, drastic rationalisation coupled with an all-out effort at offering value for money. Like most trade crises, this one has resulted in fewer but far better products. And not unnaturally the companies concerned are healthier now than they were a year or so ago; their survival this far indicates they've found a niche and ought to be able to cling to it firmly in future.

Which brings us to the cars themselves. Both are two-seaters with glassfibre coupé bodywork. Both aim to offer fast, safe point-to-point transport for knowledgeable and discriminating enthusiasts who want something more than just a berkmobile to show off in. Neither puts much emphasis on competition. TVR Granturas still show up regularly on the race circuits, and under ex-Triumph team manager Ken Richardson the old firm (these days it's quite differently constituted with different money behind it – Mr Burton the tailor's, in fact) made a brief and not specially successful showing on the international rally front. But by and large the real emphasis has always been on private ownership for

ROCHDALE







TVR

normal road use, as it is with Rochdale's Olympic.

Similarities end about there - except that both cars cost usefully under £900 (the Rochdale well under) in kit form as tested provided you can be bothered screwing them together. The threatened purchase tax increase may make it all worth while again.

Unexpectedly, the TVR is in essence the more orthodox of the two. Its basis is an interesting cage of heavy-gauge steel tubes, pinched in the middle unlike the usual true space frame so that the occupants sit outside the main structure rather than within it. Mechanical parts are all inside the cage, flexibly mounted in rubber, and unequal-length wishbones carry the wheels at all four corners with double-universally-jointed halfshafts to take the power to the rear pair. Springing is by coils and tubular shock absorbers all round and steering is rack and pinion. The latest Mark 111 frame differs materially from the original type both in construction and in such details as suspension travel and spring rates. Engine type is standardised on BMC's MGB whereas in earlier days a buyer could choose among several, including the single-camshaft Coventry Climax. A much-modified version of the same car is just becoming available in Britain with the big 195bhp Ford V8 engine installed - a combination pioneered for the American market, where TVRs are called Griffith 200s.

The Rochdale's big take-off point is its structure. It doesn't have a space-frame: in fact it has no frame at all. As in the Lotus Elite, the glassfibre body works like a monocoque steel structure and does the work of chassis and cladding simultaneously. (The TVR's bodywork by contrast serves no structural purpose at all.) The whole design is

the work of a young Bristol-trained designer called Richard Parker, whom Chapman himself hired away from Rochdale after the Olympic first appeared.

Mechanical elements and running gear are bolted or bonded to the main structure, sometimes with local steel strengthening to distribute the loads over a big enough area. Suspension is by modified Triumph Herald coils and wishbones in front, and at the back specially designed radius rods locate a BMC rigid axle in combination with coil springs each side. A Ford GT engine supplies the motive power in current cars, though older ones (and the still-available Phase Ones) used various alternatives including Riley's 1.5.

Like TVR, Rochdale favours rack and pinion steering - this time from Triumph. Braking in both cars is by discs at the front and orthodox drums behind.

One of the most striking things about the Grantura is its extreme compactness. In plan it looks almost square, because the unusual pinched frame remains much wider than a conventional chassis backbone even at its narrowest point and yet there must still be room for the people on their outriggers at either side. Wheelbase is short and the body has almost no overhang, so that the car emerges as far less wasteful of road space than most sporting rivals. Otherwise its layout is conventional enough, with the engine/gearbox unit (overdrive available, but extra) set well back from the front wheel axis (though because of the central frame it doesn't interfere with passenger space) and driving through a dwarf propshaft to a TVR-built final drive unit in the tail. Cooling arrangements are orthodox, with a low-set intake in the snout and a pair of extractor grilles set in the side of the body.

Luggage space is skimpy by contrast with the Olympic.

The Rochdale's engine lives even further back in the structure than the TVR's, which explains the sharp drop from scuttle to snout. A deep glassfibre cave surrounds it on three sides, making access to the plugs a bit of a stretch and causing an enormous hump behind the simple console between driver and passenger. Another unusual thing is the way the cooling system is isolated, with a complete structural bulkhead sealing it off from view and giving it a built-in air duct system which ensures that the cooling breeze goes out through the wheel arches just as fast as it comes in through the very low frontal intake. A remote filler cap is the only giveaway.

In appearance the Rochdale leads. Both cars look just a trifle dated because of their rounded rather than squared-off lines, but the TVR suffers additionally from an air of having been shaped that way by accident instead of scientifically planned and aerodynamically tested (*sic*) like the Rochdale. Certainly the Grantura has character and it looks about as rugged and masculine as a car can be, but it's no oil painting. The Rochdale, no matter what you may think of its rather crude frontal contours, is both functional and beautiful in a direct and dateless sort of way. The Grantura reminds us, if anything, of a condensed and distorted Jensen. The Olympic - partly because of its sloping Volkswagen headlamps - looks vaguely like a Porsche with a touch of Alfa Sprint. The sheer professionalism of its looks is most certainly part of the reason for its success.

Neither car is especially well-finished outside. Another of the Rochdale's unique points is that its body is self-coloured like a child's squashy toy and not painted after-



## ROCHDALE

wards like every other automobile we know. The idea is brilliant in theory because it means the surface is weather-resistant and totally unchippable as well as rustless and dent-proof. In practice, despite some fundamental changes in technique since production began, the surface is inclined to lack lustre and to show detail imperfections. And although our car was surprisingly smooth we've seen many Olympics with ripply sides.

Ripples are a problem in the TVR too, and we weren't happy about the way the bonnet fitted round the edges. Our car also showed some alarming signs of deterioration in the glassfibre rear panel, but dealer Gaston pointed out that was because it was one of the very first to come off the latest Mark III moulds and the workers hadn't got their quantities properly adjusted. Certainly we haven't noticed it on other Granturas.

Both cars give reasonable protection against parking scrapes with shapely alloy quarter-bumpers (a £5 extra for the Rochdale).

Cockpit access is reasonably easy in the Olympic, with its wide doors and unusual depth from floor to roofline, but the TVR suffers badly through having doors which are far too narrow - an unexpected fault, since in theory the size of the door opening should make little difference to rigidity in a design like this. As it is, a tall man has to fold up like a flick-knife in order to get in at all and for a girl the task is impossible without grave risk of prosecution for obscene exposure. Maybe that's the idea... in which case we wish we'd kept our big mouths shut.

The Grantura makes up for its entry problems, though, with a truly superb driving position. Wrap round Microcell-style seats hold you firmly at arms' length from the wheel (which in our car was a far

better one than the standard wood-rim type). Backrest rake is exactly right and there's proper support for legs and midriff. Legroom is just fine, the pedals are adequately spaced and there's even room for your spare left foot if you fancy parking it under the pendant clutch instead of beside it. The heavily and handsomely padded central tunnel makes a comforting fast-cornering wedge cum armrest.

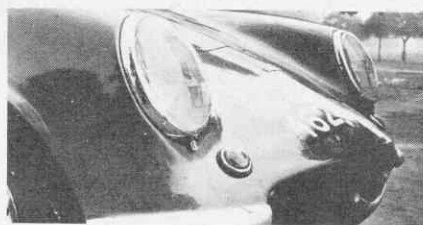
The Rochdale isn't quite so good just to sit in. The seats in our car were set too far forward, though we understand there's another set of holes for the front locating pins which would have given us the extra leg and arm room we needed. As things were we felt just a shade uncomfortable at having to bend our elbows and knees, and coupled with a strong feeling of rejection derived through having to sit hunched against the door it was enough to dull the impact of what are really very comfortable seats provided you set them with the maximum possible rake. Because you sit so close to the door the wheel - a dished woodrim affair costing £4 14s 6d extra - is offset to the left. It would be a good thing if it were flat, since the difference an extra couple of inches would make ought to be enough to give a straight-arm driving position even with the seats set in the position we had them. That in turn would leave adequate legroom for a couple of kids in the spacious tail. The other major controls are ideally set out, the gear lever a simple vertical affair in the middle of the tunnel and the handbrake an undorned lever right beside the seat.

The Grantura's classical layout extends to the dash as well. It's a full-width affair in leather-grained glassfibre, with an open glovebox (it fell out during the test) on the left, a detachable subsidiary panel for auxiliary instruments and con-

trols in the middle and the main binnacle for speedometer and tachometer right in front of you. The instruments themselves are real beauties - giant white-on-black dials with clear markings and needle-slim pointers, the speedo with both trip and total mileage recorders naturally. Switches are neat toggles with an upside-down action which takes time to get used to. There's a simple and, alas, ineffective heater. One surprising omission is a headlamp flasher.

The Rochdale's minor control layout is simpler and less attractive but no less functional. Instruments live in a single hooded nacelle just behind the wheel - three big black-bezel dials for (from left) tachometer, speedometer (again with trip and total mileage strips) and a combination of fuel gauge, water thermometer and oil pressure indicator - one down on the Grantura, which boasts an ammeter as well. Switches are scattered confusingly over the entire surface of the bogus wood-grain centre console, and despite careful labelling their positions can be very hard to learn. If only the toggles weren't all the same size and shape things might be easier. Meanwhile the headlamp flasher is ideally located a finger's reach from the wheel rim and the horn is in its old-fashioned place in the middle. The TVR's is combined with the indicators.

Interior finish is a vital factor in kitcar success. Here again the TVR scores head and shoulders over the smaller-volume Olympic. Its simple, symmetrically designed black vinyl trim is neatly applied and pleasant to look at. The carpeting is carefully done and rubber mats at wear points on the floor look smart and practical. Altogether one of the pleasanter sports cars to be in: the only thing we would alter is the headlining, which



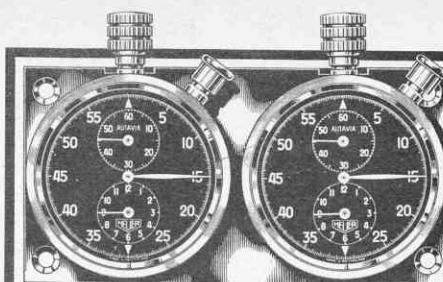
ROCHDALE



TVR even a trace of wind roar from any part of the body.

To generalise, the Rochdale's progress is sprightly - smooth, responsive and very rapid indeed whereas the TVR feels more ponderous and deliberate even though its ultimate performance isn't all that much less. One other point concerns what are commonly known as racing starts. In the TVR if you pile on more than the usual quantity of revs before letting in the clutch on first gear you get unexpectedly fierce wheelspin considering the independent rear end, but no axle tramp. In the Rochdale you get much less wheelspin, if any, and no axle tramp either thanks to the simple yet efficient system of axle location we talked about.

Ride is the next thing. The TVR is harsh in the vintage tradition - again a surprising characteristic for an all-independent layout. There are degrees of harshness and the Grantura certainly isn't as spectacular in that respect as, say, a Lotus Seven but it remains far from comfortable on anything but the most baby's-bottom surface and on a really bad road it can be a misery. Another reason for staying off rough stuff is that the car has an extremely shallow ground clearance, and a third is that the constant shaking brings on a host of sundry rattles from the body which can take time to trace. On the other hand, dust sealing is good and the chassis at least feels completely indestructible. The Rochdale rides much more easily. Its suspension has that uniquely absorbent yet far from soft feel which characterises the very best Continental fast cars and almost no British ones; that alone would have earned for it its catch-title Poor Man's Porsche if it weren't for certain other similarities which we'll come to in a minute. Bad bumps certainly get through to the occu-



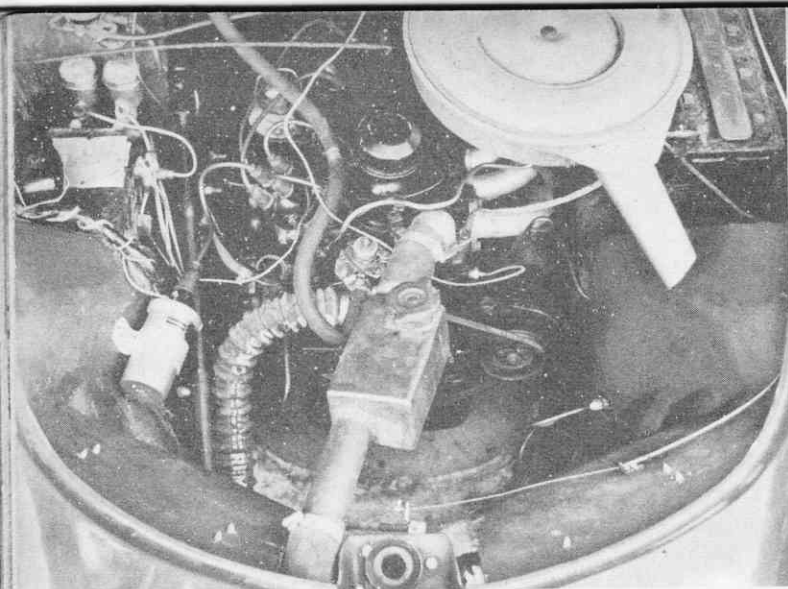
# ROAD TEST Giant

Figures are the mean of several runs in opposite directions, using a corrected speedometer. Surface: smooth bitumen. In the case of sports cars they are recorded with the hood and all windows in place

ACTION		TVR	OLYMPIC
Top speed, mph		107.2	115.4
Speeds in gears, mph I		30	32
II		48	52
III		90	83
IV		105	115
Acceleration, sec		3.2	3.1
0-30		5.1	5.3
0-40		7.2	8.1
0-50		10.3	11.8
0-60		13.8	15.7
0-70		25.8	29.8
Fuel consumption, mpg overall		28.3	31.5
driven carefully		23-29	27-34
normal range			
Braking			
stopping distance from 30 mph, ft		31.2	30.5
degree of fade, percent		9	7
Speedometer error, mph			
recorded speed 30		30	30
true speed			
40		40	39
50		49	49
60		59	58
70		68	68
Weight, lb		1795	1664
as tested with two people			
SPECIFICATION			
General			
List price, in kit form, £		872	775
Wheelbase		86	87
Track		52	51
front		51	51
rear		138	147
Length		64	64
Width		49	50
Height		6	6
Ground clearance		36	37
Headroom		NA	NA
front		NA	NA
rear		42-50	39-48
Legroom		NA	NA
front		98/5400	78/5200
rear		110/3000	91/3600
Engine			
Power, bhp/rpm		cast iron	cast iron
Torque, lb ft/rpm		water	water
Material		in-line	in-line
Cooling		push-rod overhead	push-rod overhead
Configuration		4	4
Valve gear		80.3	80.9
Cylinders		88.9	72.8
Bore, mm		1798	1489
Stroke, mm		8.8	9.0
Capacity, cc		twin SU H4	single Weber DCD1
Compression			
Carburettors			
TRANSMISSION			
Synchromesh		baulk ring	baulk ring
Control		remote floor	remote floor
Ratios, overall			
I		14.8	13.2
II		9.0	9.8
III		5.7	5.3
IV		4.1	3.7
Clutch size, in		8	7.3
Tyre size, in		5.60/15	5.50/14
Type		rack and pinion	rack and pinion
Turning circle, ft		29.5	32.8
Steering		2.5	2.7
Turns, lock to lock			
Type		disc/drum	disc/drum
Brakes		10 1/2	9
Size, in		9	8
front			
rear			
Suspension		coil springs, wishbones	torsion bars wishbones
Type		coil springs, wishbones	coil springs, rigid axle
Structure		2 door, 2 seat glassfibre	2 door, 2 seat glassfibre
Type		coupe, steel tube space	coupe, integral chassis,
		frame, rear boot	rear baggage platform
OPERATION			
Fuel			
Type		super	super
Capacity, gal		10	5.5
Range, miles		258	173
Oil			
Type, SAE		30	30W
Capacity, pints		7.6	6.7
Change interval, miles		3000	3000
Lubricant			
Type, SAE (oil)/			
grade (grease)			
number of points		90/all purpose	90/all purpose
Change interval, miles		11	8
Tyre pressures, front		6000	300C
rear		20/25	24
Air		23/28	24







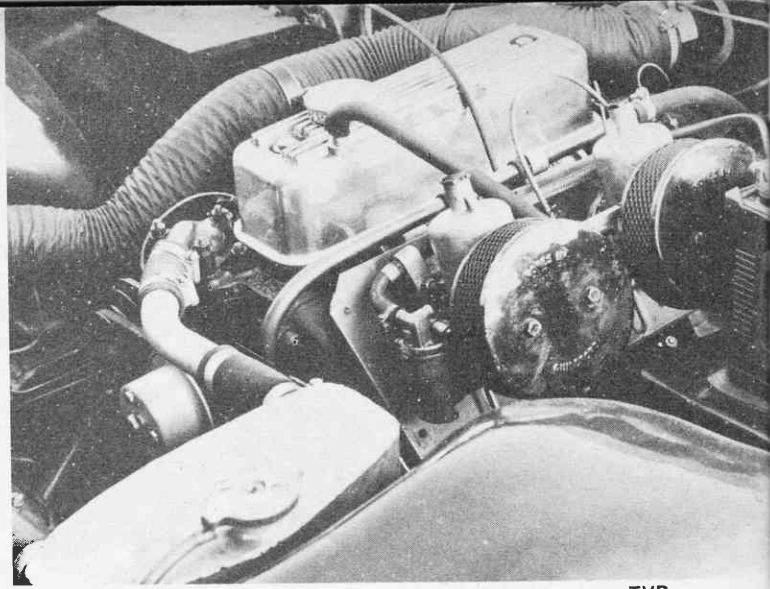
#### ROCHDALE

pants, but not as jarring crashes so much as movement of the whole car. Noise insulation is phenomenal considering the tiny firm's almost non-existent resources. In fact, helped by Mr Dunlop's matchless SP tyres this is quite the best-riding and most thoroughly sorted car of its kind we can think of. Ours didn't develop a single rattle or bottom its springs once during the entire test.

We've said both cars use proprietary rack and pinion steering gear. The Rochdale's is Triumph-derived and shares all of the Spitfire's characteristics, including a rather dead feel round the straight-ahead position and a phenomenal turning circle. The ratio suits this slightly more stately application better than the Spitfire and careful insulation of the mechanism from the body seals off the rattles and vibrations we've so often complained of in Triumphs to the point where your hands receive no massage at all from even the most consistently poor surfaces.

In the TVR there's a much more direct feeling of contact with the road, which is commendable until you hit a definite bump such as a pothole. It's then that you come up against the car's worst bad point; the steering kicks back so hard through the wheel that it can actually twitch it right out of your hands, and we collected several bruises until we learned to grip really hard all the time. This is a characteristic unique in our experience and we're surprised the manufacturer hasn't done something about it before now.

Brakes are excellent in both cars. Our only criticism of the TVR setup is that you have to press much too hard to get decent results, although the grade of lining used on our particular car may have had something to do with that. The Rochdale's brakes



are light and sensitive, and equally efficient. We found no fade.

Handlingwise, the TVR responds best to a real he-man technique with plenty of throttle and an iron hand on the controls. You can take it into a fast bend at any speed you like and come out safe the other side. Tighter turns call for more judgment, but provided you take a careful line you can still apply bags of poke and get away with it. Overdone, what you end up with is sudden oversteer and a marked degree of rear-wheel steering effect which can get you comprehensively crossed-up unless you keep your head. Again the formula applies: press hard rather than back off, and remember the wheel is there to be used.

The Rochdale once more is gentler and its heavily cambered front suspension gives an easy transition from mild understeer to the other thing. We never managed to hang the tail out more than a tiny bit, although in the wet we persuaded the car to slide gracefully and all of a piece towards the outside verge more than once, but drivers who know (two quite well-known motor noters actually own Rochdales, so there) tell us that when you do overcook it in the dry it's the tail that gets dropped first.

We would be hard put to it to decide which of the two cars has the most ultimate cornering power. The TVR rolls less: it corners almost flat whereas the Rochdale leans noticeably due to its altogether higher centre of gravity. The Rochdale is the more progress and manageable of the two, the TVR the more fun to play about with provided you know what you're doing.

That almost sums them up all round. A kitcar's big characteristic now that the tax position has become more rationalised is that it's tailored to suit the needs of a

minority for whom the big boys don't cater. Speaking as just such a minority, we'll say the Rochdale Olympic suits us better than the TVR Grantura. But you may well think precisely the opposite.

The TVR is odd-looking in a pug-nacious sort of way, compact, hairy, nicely finished inside and interesting in its specification. Its reputation for ruggedness seems to us well-deserved. Its driving position is certainly one of the best we know. But debatable points such as rock-hard springing and ultra-solid steering tend to put us off, and in ultimate acceleration and top speed it just isn't all that fast. Not that that ought to put you off: the whole point about this kind of car is that you can do things to it yourself, and plenty of people make inexpensive bits for the MGB.

The Rochdale on the other hand suits us as individuals phenomenally well in most basic respects. It is fast, civilised, astonishingly quiet, predictable, smooth-riding. We really could have believed at times, belting it through those Suffolk lanes at night, that we were driving an all-independent Porsche costing twice as much. Finish is the thing that lets it down; to us, the present level particularly inside the cockpit just isn't acceptable and if we were to buy one the first thing we would do would be rip out all the trim and start spending money with someone who knew what he was about.

If we did that, though, we would feel confident we'd got ourselves one of the very few really outstanding British grand tourers. The wonder of it all is that no big manufacturer hasn't stepped in and taken over the tiny Lancashire firm lock, stock and locomotion. Certainly some of them would be a lot better doing that than mucking about with the rubbish they're turning out now. ❀

ROCHDALE



PHOTOGRAPHY CHARLES POCKLINGTON

