AUTO TEST

Rover 2200TC

2,204 c.c.

Performance noticeably improved with larger engine but top speed less affected. Fuel consumption suffers slightly. Ride and handling also somewhat improved. Inconvenient control layout, small boot, slightly cramped interior, but good finish and attention to detail

SUFFICIENT time has now elapsed since its introduction for the larger-engined Rover 2200 to become a relatively familiar sight; not that it is very easily distinguished from late-series 2000s unless one is close enough to read the badges. Late last year, we tested the single-carburettor version in its automatic form and found the performance much improved; this time we turn our attention to the 2200TC, which like its predecessor is available only with manual transmission.

While the 2200SC gained a direct power benefit from the greater capacity of its bored-out engine, the picture is more complicated where the TC is concerned. Because its compression ratio is reduced compared with the 2000TC, to enable it to operate on four-star petrol, it has in effect lost as well as gained something. Direct comparison is made more difficult because British Leyland have switched from quoting their own net power output to the generally-accepted DIN specification; the 2200TC produces 115 bhp (DIN) at 5,000 rpm compared with 114 bhp (net) at 5,500 rpm for the 2000TC, though the actual gain is higher than those figures suggest. Comparing maximum speeds suggests the true gain to be of the order of 6 bhp.

As one might expect, however, the torque has gone up by a substantial margin and the results inevitably show themselves in acceleration figures, the more so since there is no change of gearing to complicate matters. Rover have in fact done the logical thing and produced a car which is quicker through the gears, but not much faster at the very top end. The only drawback is that the fuel consumption, both at steady speeds and overall, has suffered slightly in consequence.

Performance and economy

On a day of blustering and adverse conditions, the Rover lapped the MIRA high-speed circuit at a mean 107 mph, just 2 mph faster than the 2000TC, underlining the relatively small increase in top-end power; the best one-way speed was 112 mph. The maximum takes the engine well over its power peak, suggesting that slightly higher gearing might be used to benefit economy without unduly affecting performance – it is worth noting that the 2200 employs the same overall gearing as the 2000.

This similarity of gearing makes possible direct comparisons of the two models. Maximum speed depends mainly on power and frontal area, and it is no surprise to find the 2200TC only 2 mph faster than its predecessor. Acceleration on the other hand depends on torque and weight, and here the 2200 emerges as being considerably faster. Nearly a

No facelift accompanied the change to bigger engines, and the only easy way to tell the 2200 from earlier versions is to read the badges. Door-mounted mirror is standard

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second is carved from the time to 60 mph, which comes down to 11·4 sec – about par for this class of car, whereas the 2000 was beginning to be outrun by the competition. Even in adverse test conditions, it proved possible to record a sensible time to 100 mph, something which could not be done in the smaller-engined version. Despite the increase of nearly two hundredweight in the weight as tested, the extra torque shows to real advantage.

On the road, the 2200TC feels decidedly brisk. Third gear, capable as it is of over 80 mph at the red line, is just what one needs for overtaking the faster lorries, or gaggles of slower cars. Where law permits, 90 mph seems a natural cruising speed, and the car feels utterly unstrained at 70. The only drawback to quick driving on winding roads, and a slight one at that, is a relatively slow gearchange with an obstructive synchromesh that does not appreciate snatched changes; a fraction of a second is needed to allow it to match speeds before the lever will slide through.

Sadly, but not unexpectedly, the larger engine proves more thirsty. Our steady-speed figures show that 40 mph is actually a little more economical than 30, something we are finding more and more with emission-equipped cars. At no point does the 2200TC consumption curve match that of the 2000, the deficit mostly being between 1 and 2 mpg. Overall, the test car returned 20·9 mpg compared with 22·4 for the 2000TC (it is interesting to note that our 2200SC automatic managed 20·5 mpg compared with 21·8 mpg for *its* predecessor – almost exactly the same decrease). As always, our figure reflects the substantial proportion of hard driving involved, but the average owner should not reckon to better 25 mpg unless he knows he drives more gently than most. Throughout our test period, the car used too small a quantity of oil to be measurable.

Heated rear window is now standard for home-market cars, but Sundym glass and laminated screen are an option

Ride, handling, brakes

The 165-14 radial-ply tyres, unchanged in size through the life of the model, seem to be exactly the right size even when one takes into account the modest increase in weight. There is enough roadholding to cope with all but the most extreme situations, whether the conditions be wet or dry, and there can be no criticism of the Dunlop SP Sports fitted to the test car even on the grounds of squeal. Nor is there any sign of over-tyring – there is plenty of feel to the steering, smooth and consistent steering response and no sudden aquaplaning.

This is not to say that the handling is entirely beyond reproach. As we have found before, the Rover does not feel as massively stable as some of its competitors. It tends to wander slightly, and it is only with experience that the driver learns that if he resists fighting the movement, the car follows a straight mean course. The steering likewise feels dead about the straight-ahead position, though the first small movement into a turn immediately brings it to life, and the driver is then well aware what the front wheels are doing, with plenty of warning of imminent loss of grip.

Perhaps because it rolls markedly, and suffers (as always) from an odd, small sideways shuffle when entering a corner, the Rover leads one to expect much lower handling limits than is actually the case. Especially when the lock is applied smoothly, one can end up with the impression that one could go on turning the wheel, pulling the car tighter and tighter almost indefinitely. Though the car is a relative heavyweight, it is well-balanced with only a slight forward bias, and when the limit is reached on a dry surface, all four wheels let go reluctantly and the Rover slithers outwards from the chosen line. At very high speed, as when entering the MIRA banking at 112 mph, or in really slippery conditions, there is more of a tendency for the front wheels to unstick first, sending the car sliding straight ahead. Conversely, an abrupt entry to a tight corner can result in the back wheels sliding as the sudden increase in roll angle takes effect.

In most circumstances, therefore, the Rover's handling is about as safe as it could be. Sudden acceleration or braking have little effect, and only the bravest (or silliest) drivers are likely to invoke its limits more than occasionally. The steering, thanks in part to the bigger-than-average wheel, is unlikely to prove too heavy for frail drivers except when manoeuvring in confined spaces.

The Rover's ride, of a high standard when it was introduced, has suffered relatively speaking because of the advances made by others in the meantime. It is still, however, a well-judged compromise and recent changes to bring the rear suspension into line with that of the 3500 have much reduced the swaying motion which, while unnoticed by some, proved nauseating for others. The springing remains fairly soft, the damping excellent, and rough roads are smoothed out very well. Long undulations cause more trouble, especially when the car sinks into the "troughs", and of course, the roll angles are perhaps more than would be looked for in a new design.

The brakes on the test car were much lighter in operation than those of the 2000TC, and indeed our figures suggest they are over-light, with an excellent best stop achieved for a modest 50lb pedal effort. One can only say that in practice they do not *feel* unduly sensitive, a tribute to the work which must have gone into making them so progressive. Only when holding ½g through a series of stops during the fade test does one become aware of their speed-sensitivity, the effort needed reducing as the speed falls off. This effect persisted until the brakes were thoroughly warmed through at the end of the fade test, which otherwise made no difference to their efficiency.

The best stop of 1·05g was achieved without undue drama: it was easy to hold the wheels on the point of locking on the dry surface. Any increase in pedal pressure locked three of the four wheels, the right rear wheel being apparently slightly less willing to slide. The handbrake held comfortably on the 1 in 3 test hill, though a restart was only just possible; it also gave a respectable 0·35g emergency stop when used on its own on the level.

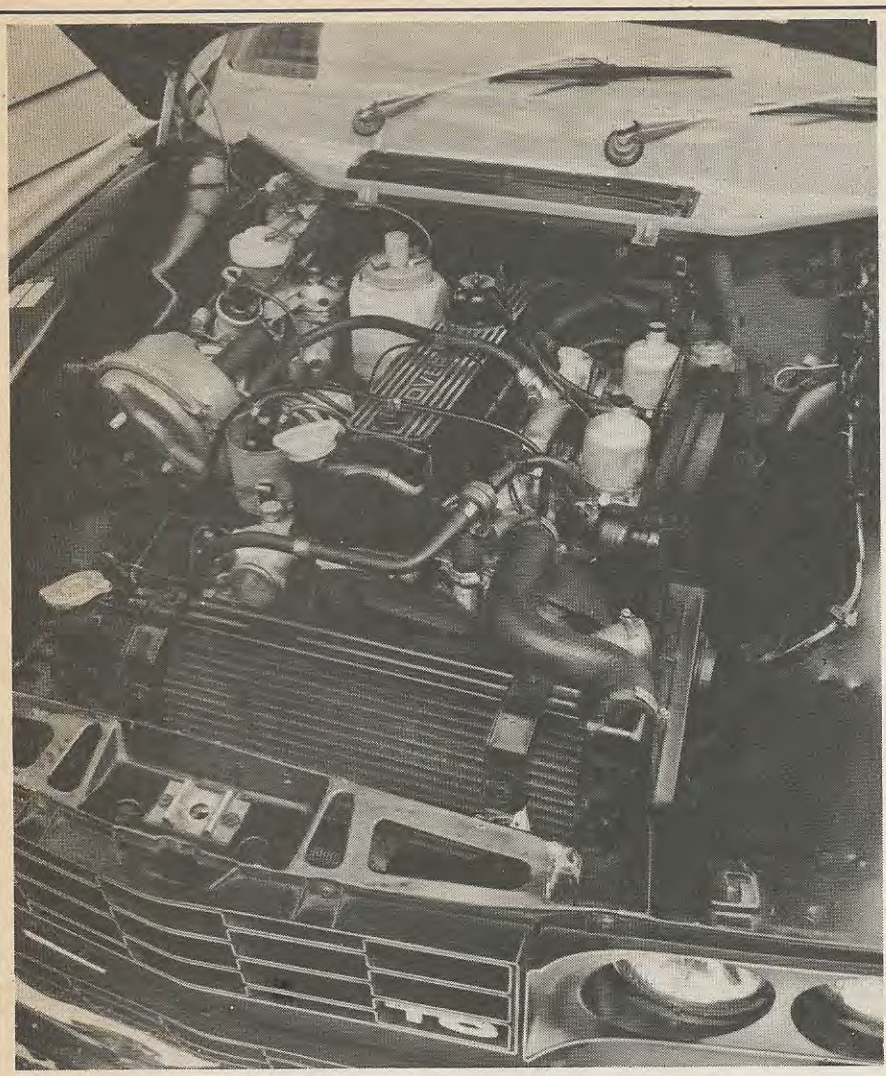
Comfort and convenience

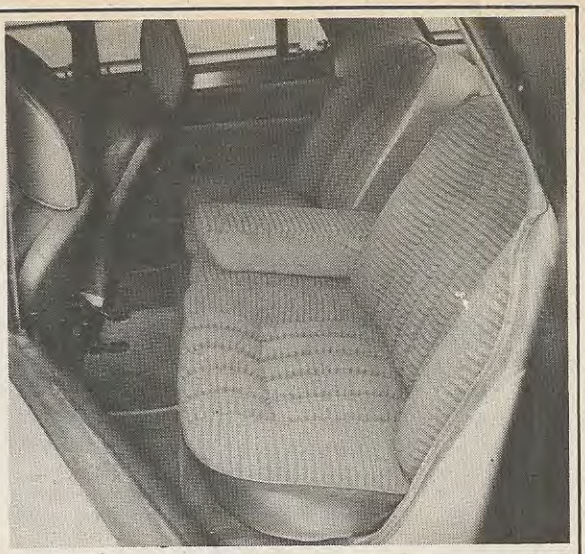
The last major facelift endowed the Rover with an impressive set of controls and instruments; the large circular speedometer and rev counter of the TC are clearly marked, easily seen and well lit at night. The calibration of the minor instruments is rather vague.

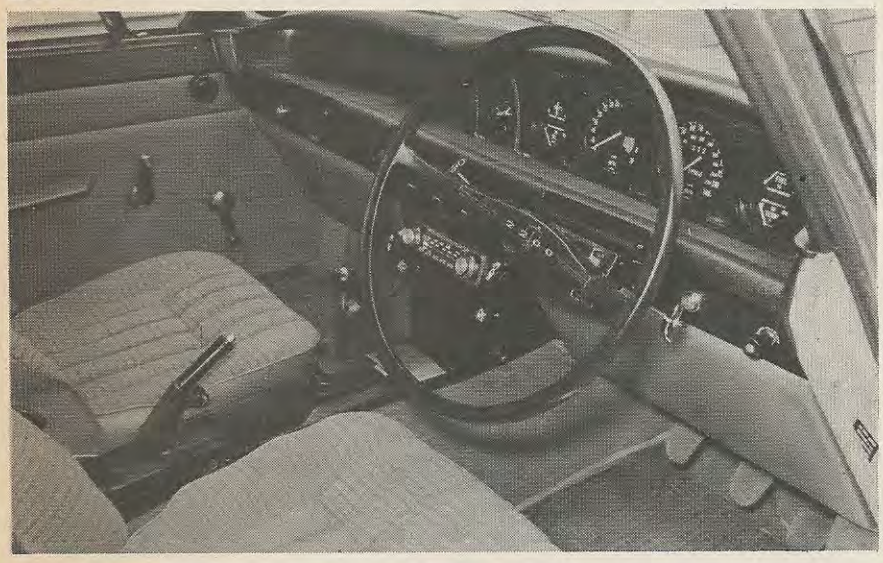
The story is less happy where the minor controls are concerned. While the pedals, handbrake and gearlever are all well placed and the steering wheel is adjustable for height, the lights and wiper switches are a fair stretch away on the facia. This is a case where British Leyland might easily have standardized on the much better arrangement to be found in the rival Triumphs, using column-mounted stalks for a greater number of functions.

The headlights are magnificent on main beam, thanks to the "up-gunned" Lucas 75W inner units, but the contrast when one switches to dipped beam is rather marked. The wipers offer two continuous speeds as well as variable-rate intermittent operation, but the blades themselves are too short and do not clear a sufficient area of the screen.

The rather cramped interior of the Rover is reminiscent of some of the latest safety car prototypes (and, of course, for much the same reasons). The logic of the slanting panels forward of the front occupants' knees cannot be denied, though the best protection is of course afforded by the inertia-reel belts now fitted as standard. Either cloth or leather may be specified for the upholstery of the seats with their fluted design, which seemed to make little difference to the overall comfort of the seats themselves. The test car had cloth upholstery in a rather vivid shade of orange (officially called Mango) of which we somewhat disapproved, and some of our larger drivers







Above left: Under-bonnet access to most engine components is good, but note absence of battery, removed to back end for better weight distribution. Carburettors are latest SU emission-regulated type

Left: Facia layout of TC features round instruments instead of SC-type strip display, though steering wheel is unchanged. Gear lever is longer than originally for easier changing, otherwise layout is little changed

Top: Test car had cloth upholstery rather than leather alternative; seats remained comfortable even in very hot weather. Deeply-fluted cushion and squab design is more relaxing than it looks. Back seat is still laid out to favour two occupants rather than three

Above: Rover boot is very small for its class, with space taken up by spare wheel on one side and battery on the other. Finish is good, and low sill is a useful feature. Spare wheel can be mounted on boot lid to gain some extra space

found the backrests lacked lumbar support, leading to backache at the end of a three-hour drive.

The heating and ventilation system is basically unchanged, and is one of those aspects where the Rover is beginning to show its age. The controls, vertical slides on either side of the centre console, are not easily reached although their functions are clearly marked. Heater output is adequate, but fresh air flow through the "letter box" ventilation slots is never sufficient to cope unaided with the heat and humidity of a summer day.

Though standards have improved in the last few years, the Rover is still one of the quieter cars in its class. When it is driven really hard, the engine begins to intrude; but for the most part, the most prominent noise is that caused by the tyres, too much of which is transmitted to the interior. Wind noise is never a problem as long as the windows remain closed.

Living with the Rover 2200TC

The dramatic price rises of the last few months have pushed the 2200TC to a tax-paid £2,541. This is still marginally less than the Triumph 2·5PI with which comparison is inevitable, but it is sad to recall that three years ago the list price of the 2000TC was only £1,867. There are relatively few listed extras, and of those our test car was fitted only with the head restraints, which add £19 to the cost. Other options include a laminated screen and Sundym glass, heavy-duty suspension and a fitting to enable the spare wheel to be mounted on the boot lid.

This last option highlights what many people have always regarded as the major drawback of the Rover: the limited space available considering the size of the car. It remains a fairly strict four-seater, and the boot is distinctly small. Interior stowage space on the other hand is generous, thanks to the full-width shelf in the front

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and the ingenious fold-away bins beneath the facia.

The petrol filler cap with its hinged cover is still situated on top of the left rear wing, which means care must be taken to avoid spilling petrol on the paintwork when inserting the pump nozzle. With the increase of the fuel tank capacity to 15 gallons, the safe range is over 300 miles, probably stretching to 400 for gentle touring. It is a sobering thought, however, that a full tank represents about £8 worth of petrol, even though the car now runs on four- rather than five-star fuel.

Under-bonnet access remains easy, the fuel pump being the only item really difficult to reach or work on. The battery, however, is mounted in the boot, which makes its checking more tedious. Regular servicing is called for every 6,000 miles.

Comparisons

MAXIMUM SPEED MPH

Ford Granada GXL (man)..(£2,703) 113
Rover 2200TC .....(£2,541) 107
Triumph 2·5PI Mk II.....(£2,582) 106
Volvo 144GL .....(£2,850) 105
Vauxhall Ventora.....(£2,153) 104

0–60 MPH, SEC

Ford Granada GXL.....9·1
Rover 2200TC .....11·4
Triumph 2·5PI .....11·5
Volvo 144GL.....11·6
Vauxhall Ventora.....12·6

STANDING ¼-MILE, SEC

Ford Granada GXL.....16·8
Triumph 2·5PI .....18·1
Rover 2200TC.....18·3
Volvo 144GL.....18·3
Vauxhall Ventora.....18·6

OVERALL MPG

Volvo 144GL .....23·8
Triumph 2·5PI .....21·8
Rover 2200TC .....20·9
Ford Granada GXL .....19·1
Vauxhall Ventora.....18·6

Performance

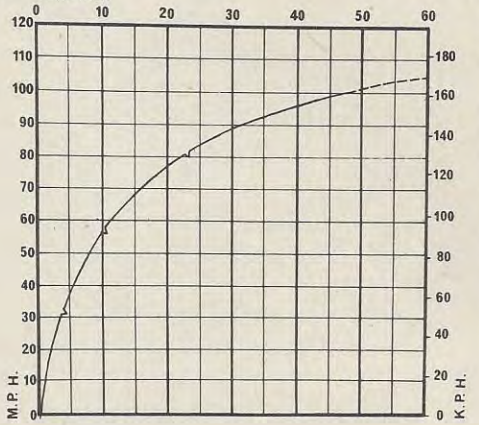
ACCELERATION

True speed mph	Time in Secs	Car Speedo mph
30	3·5	31
40	5·6	40
50	8·0	50
60	11·4	61
70	16·2	71
80	21·8	81
90	31·3	91
100	47·8	101

Standing ¼-mile
18·3 sec 74 mph

Standing kilometre
34·2 sec 92 mph

Mileage recorder:
1 per cent over-reading



GEAR RATIOS AND TIME IN SEC

mph	Top (3·54)	3rd (4·92)	2nd (7·55)
10–30	—	8·5	4·8
20–40	11·9	7.5	4·5
30–50	11·4	7·1	4·6
40–60	11·4	7·2	—
50–70	12·2	8·0	—
60–80	13·0	9·9	—
70–90	16·8	—	—
80–100	26·7	—	—

GEARING

(with 165–14 in. tyres)

Top..... 19·7 mph per 1,000 rpm
3rd..... 14·2 mph per 1,000 rpm
2nd..... 9·2 mph per 1,000 rpm
1st..... 5·4 mph per 1,000 rpm

MAXIMUM SPEEDS

Gear	mph	kph	rpm
Top (mean)	107	172	5,430
(best)	112	180	5,680
3rd	85	137	6,000
2nd	55	89	6,000
1st	32	52	6,000

BRAKES

FADE (from 70 mph in neutral)
Pedal load for 0·5g stops in lb

1	35–15	6	18
2	25–15	7	18–25
3	30–15	8	20–25
4	25–15	9	25–30
5	20–15	10	25

RESPONSE (from 30 mph in neutral)

Load	g	Distance
20lb	0·36	84ft
30lb	0·66	46ft
40lb	0·88	34ft
50lb	1.05	29ft
Handbrake	0.37	81ft
Max. Gradient	1 in 3	

CLUTCH

Pedal 26lb and 4½in.

Consumption

FUEL

(At constant speed—mpg)

30 mph.....35·7
40 mph.....36·4
50 mph.....33·9
60 mph.....29·9
70 mph.....26·0
80 mph.....20·9
90 mph.....16·7
100 mph.....14·6

Typical mpg 24 (11·8 litres/100km)
Calculated (DIN) mpg
23·7 (11·9 litres/100km)
Overall mpg 20·9 (13·5 litres/100km)
Grade of fuel Premium, 4-star
(min. 97 RM)

OIL

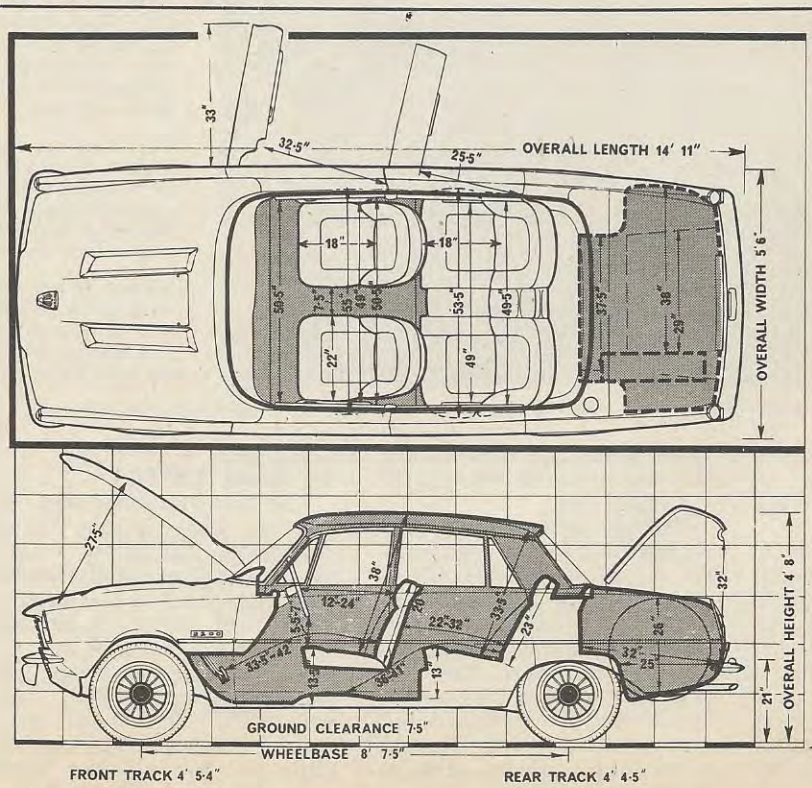
Consumption (SAE 20W/40) negligible

TEST CONDITIONS

Weather: Light showers
Wind: 15–20 mph
Temperature: 14 deg. C (58 deg F).
Barometer: 29·7 in. hg.
Humidity: 50 per cent
Surface: Dry concrete and asphalt.
Test distance: 838 miles

Figures taken by our own staff at the Motor Industry Research Association proving ground at Nuneaton.

Dimensions



STANDARD GARAGE
16ft×8ft 6in.

TURNING CIRCLES:
Between kerbs
L, 33ft 8in.; R, 32ft 9in.
Between walls
L, 35ft 10in.; R, 35ft 2in.
Steering wheel turns, lock to lock 3·6

WEIGHT:
Kerb Weight
25·8 cwt (2,887lb–1,310kg)
(with oil, water and half full fuel tank).
Distribution, per cent
F, 51·0; R, 49·0.
Laden as tested:
30·0cwt (3,357lb–1,523kg)

Keeping up well

The increase in engine size, coupled with its other recent changes, has ensured that the Rover, though basically a 1963 design, remains entirely competitive in 1974. Performance has been improved noticeably, with changes for the better – in our judgment – in ride and handling too. Thought might perhaps have been given to raising the gearing rather than sacrifice some of the economy, but in all probability most owners will be happy enough with the car as it stands. By the same token they will accept the rather cramped accommodation, happy with the thought that the name Rover still has a real meaning not yet submerged in the depths of a greater corporation. □

MANUFACTURER

Rover Cars, British Leyland UK Ltd., Lode Lane, Solihull, Warwickshire

PRICES	
Basic	£2,132.00
Special Car Tax	£177.67
VAT	£230.97
Total (in GB)	**£2,540.64**
Licence	£25.00
Delivery charge (London)	£15.00
Number plates	£6.00
Total on the Road (exc. insurance)	**£2,586.64**
Insurance	Group 5
EXTRAS (inc. VAT)	
Head restraints*	£19.48
Boot lid spare mounting	£24.43
Sundym glass	£29.07
Laminated screen	£25.98
**Fitted on test car*	
TOTAL AS TESTED ON THE ROAD	**£2,606.12**

Specification

Rover 2200TC

FRONT ENGINE, FRONT-WHEEL DRIVE

ENGINE

Cylinders	4, in line
Main bearings	5
Cooling system	Water; pump, fan and thermostat
Bore	90·5mm (3·56in.)
Stroke	85·7mm (3·38in.)
Displacement	2,204 c.c. (134·6 cu. in.)
Valve gear	Single overhead camshaft, chain-driven
Compression ratio	9·0-to-1. Min. octane rating: 97RM
Carburettors	2 SU HIF6
Fuel pump	AC mechanical
Oil filter	Full-flow, replaceable element
Max. power	115 bhp (DIN) at 5,000 rpm
Max. torque	135 lb. ft. (DIN) at 3,000 rpm

TRANSMISSION

Clutch	Diaphragm-spring, 8·5in. diameter
Gearbox	4-speed, all-synchromesh
Gear ratios	Top 1·0 Third 1·39 Second 2·13 First 3·63 Reverse 3·43
Final drive	Hypoid bevel, ratio 3·54-to-1
Mph at 1,000 rpm in top gear	19·7

CHASSIS AND BODY

Construction	Steel skeleton base unit with detachable panels

SUSPENSION

Front	Independent; leading top links, transverse lower links, coil springs, telescopic dampers, anti-roll bar
Rear	De Dion sliding tube located by Watt linkage; fixed-length drive shafts, transverse link, coil springs, telescopic dampers

STEERING

Type	Worm and roller
Wheel dia	17·0in.

BRAKES

Make and type	Disc front and rear
Servo	Vacuum type
Dimensions	F 10·4in. dia. R 10·7in. dia.
Swept area	F 204 sq. in., R 152 sq. in. Total 356 sq. in. (237 sq. in./ton laden)

WHEELS

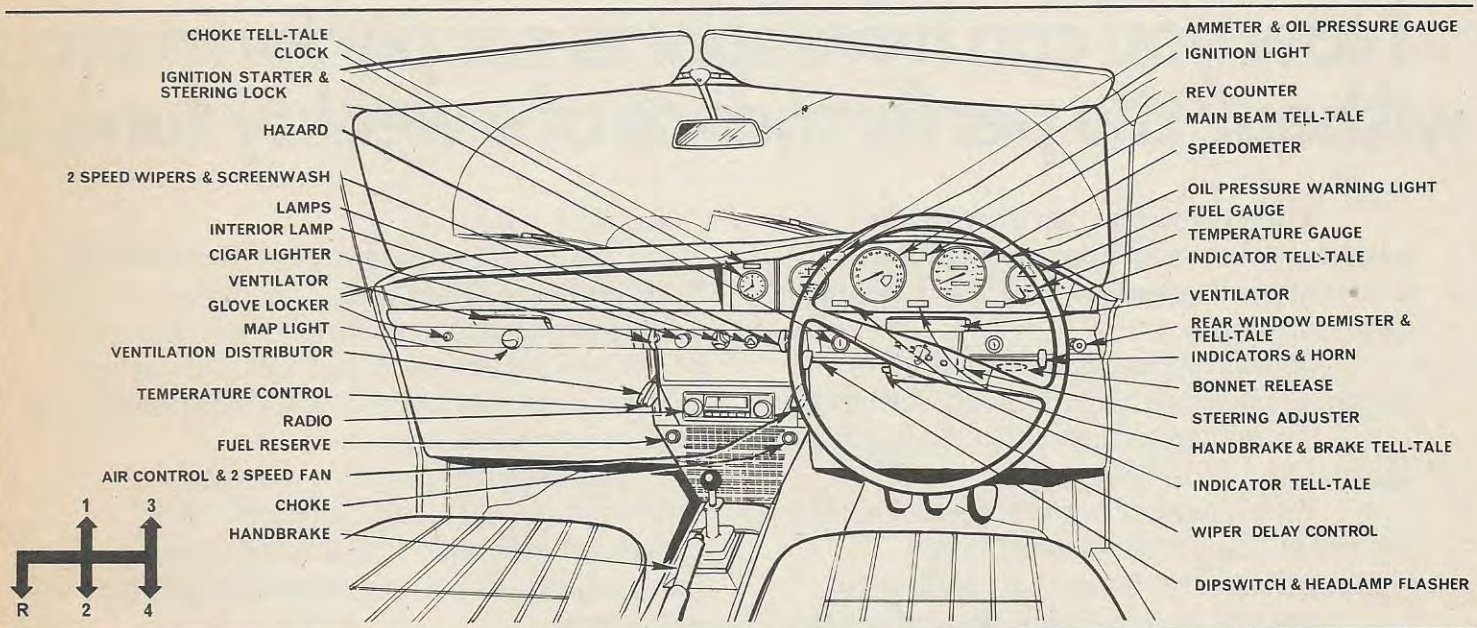
Type	Pressed steel disc, 5-stud fixing, 5·0in. wide rim.
Tyres—make	Dunlop SP Sport
—type	radial ply tubeless
—size	165–14in.

EQUIPMENT

Battery	12 volt 60 Ah.
Alternator	Lucas 18 ACR, 43 amp a.c.
Headlamps	Lucas sealed-beam, 225/100 watt (total)
Reversing lamp	Standard
Electric fuses	12
Screen wipers	Two-speed plus intermittent
Screen washer	Standard, electric
Interior heater	Standard
Heated backlight	Standard
Safety belts	Standard, inertia-reel type
Interior trim	Cloth seats, pvc headlining.
Floor covering	Carpet
Jack	Screw pillar type
Jacking points	2 each side under sills
Windscreen	Zone-toughened
Underbody protection	Mastic overall

MAINTENANCE

Fuel tank	15 Imp. gallons (68 litres)
Cooling system	14 pints (inc. heater)
Engine sump	8 pints (4·6 litres) SAE 20W-50 Change oil every 6,000 miles Change filter every 6,000 miles
Gearbox	1·75 pints. SAE 20W. Check every 6,000 miles
Final drive	2·25 pints. SAE 90EP. Check every 6,000 miles
Grease	1 point every 6,000 miles
Valve clearance	Inlet 0·008–0·010in. (cold) Exhaust 0·013–0·015in. (cold)
Contact breaker	0·014–0·016in. gap; 60 deg. dwell
Ignition timing	8 deg. BTDC (static)
Spark plug	Type: Champion N7Y. Gap 0·024–0·026in.
Tyre pressures	F 26; R 28 psi (normal driving) F 30; R 32 psi (high speed) F 26; R 32 psi (full load)
Max. payload	917lb (416kg)



Servicing

	3,000 miles	6,000 miles	12,000 miles
Time Allowed (hours)	1·3	3·5	3·8
Cost at £3.30 per hour	£4.30	£11.55	£12.55
Engine oil	—	£2.00	£2.00
Oil Filter	—	£2.05	£2.05
Air Filter	—	—	£1.45
Contact Breaker Points	—	—	£0.39
Sparking Plugs	—	—	£1.30
Total Cost:	£4.30	£15.60	£19.74

Routine Replacements:	**Time hours**	**Labour**	**Spares**	**TOTAL**
Brake Pads – Front (2 wheels)	1·0	£3.30	£4.99	£8·29
Brake Pads – Rear (2 wheels)	1.8	£5.95	£5.40	£11.35
Exhaust System (complete)	3.0	£9.90	£33.80	£43.70
Clutch (centre + driven plate)	11·4	£37.60	£13.06	£50.66
Dampers – Front (pair)	1·6	£5.30	£10.40	£15.70
Dampers – Rear (pair)	2·8	£9.25	£13.60	£22.85
Replace Drive Shaft	5·7	£18.80	£45.00	£63.80
Replace Alternator	1·0	£3.30	£27.75	£31.05
Replace Starter	2·3	£7.60	£45.00	£52.60