



The Automobile Association
Fanum House, Leicester Square, London WC2
Whitehall 1200



No. R/22

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General description

A roomy four-door four-seater saloon offering the considerable degree of refinement associated with this make of vehicle. The construction is unusual in that it makes use of a base assembly which carries all mechanical parts and provides a chassis and body framework to which all exterior panels are fitted as separate painted units.

The power unit, front and rear suspensions, and steering assemblies differ considerably from the normal Rover product, and the combination has resulted in excellent performance throughout the speed range with extra road-holding, and stability thus giving a very high degree of safety.

Upholstery is in leather, the floors are carpeted, and walnut finishes are fitted to doors and the parcel tray. The black synthetic finish on the fascia and propeller-shaft tunnel gives a pleasant appearance and a good non-reflecting surface.

Both front doors can be locked from the outside, but all doors can be locked without the use of a key.

Price at time of test: Basic £1,046 Purchase tax: £218 9s 7d
Total: £1,264 9s 7d.

Special features

An excellent heating and ventilating system is fitted and this, together with a screen washer and reversing light, is standard equipment.

Optional extras include safety harnesses, sliding roof, external spare wheel mounting, streamlined roof rack, laminated windscreen in place of toughened glass, heated rear window, and a choice of radios with front and/or rear speakers.

Upholstery colours available are Biscuit, Tan, Grey, Red, and Black. Light Grey or Biscuit headlinings, are fitted to blend with the appropriate main colour.

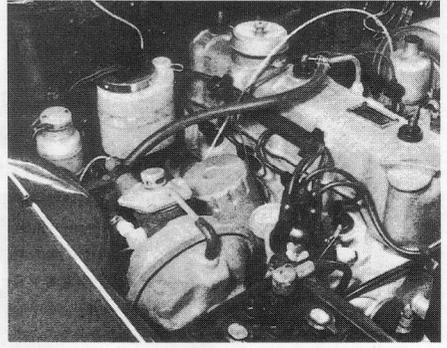
Paintwork colours available are Copper-leaf Red, Wedgewood Blue, Willow Green, City Grey and White.



Mechanical specification

This 2-litre engine has four cylinders of 3.375 in (85.7mm) bore and 3.375 in (85.7mm) stroke making a capacity of 1,978 cc; the compression ratio is 9 to 1. The maximum bhp is 90 at 5,000 rpm and the torque 113.5 lb ft (16.3 kg m) at 2,750 rpm. The car does 19.5 mph (31.6 kph) per 1,000 rpm.

The carburettor is SU, the fuel pump is AC mechanical, and the oil filter is of the external full-flow type. The cooling system is conventionally pressurized. Internally the engine has several interesting features including an oversize camshaft driven by a Duplex chain, and pistons with the combustion chambers machined in the crowns. The cylinder head is of aluminium alloy with a waterheated integral inlet-manifold incorporating a small exhaust-heated hot-spot.



Transmission

A single 8.5in (216mm) diameter dry-plate Borg and Beck diaphragm-spring clutch is fitted. It is hydraulically operated and transmits the drive to a four-speed gearbox. All forward gears are fitted with synchromesh.

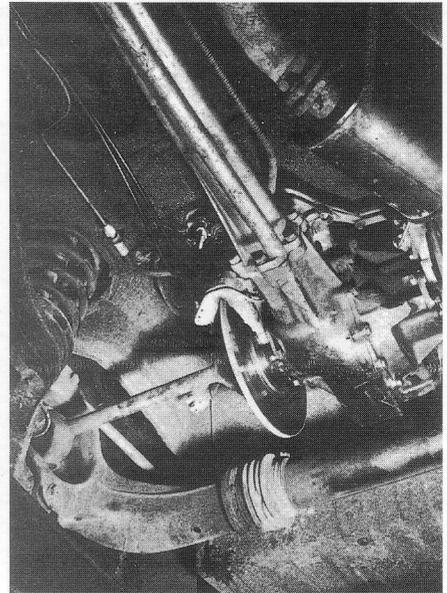
The over-all ratios are 12.83, 7.55, 4.92, and 3.54 to 1 for the forward speed, and 12.14 to 1 for reverse.

A one-piece Hardy-Spicer open-type propeller shaft couples the gearbox to the 3.54 to 1 ratio hypoid final-drive.

Suspension

The front suspension has transverse lower arms and leading top links which pivot on a common axis across the car. The car's weight is carried through the king-pins to the top links, which move horizontally mounted coil-springs. Hydraulic telescopic shock-absorbers, with a square section anti-roll bar, control damping and ride characteristics.

The rear suspension incorporates a telescopic de Dion tube with universally jointed fixed-length drive-shafts, the assembly being located by a Watts-type linkage with coil road-springs fitted between the forward link and the base unit. Hydraulic telescopic shock-absorbers control the ride.



Steering

A Marles hour-glass cam and follower type is used with a 17in (434mm) diameter steering wheel geared to give $3\frac{3}{4}$ turns from lock to lock.

Brakes

Hydraulically operated servo-assisted discs are fitted both front and rear, the respective diameters being 10.75in (273mm), and 10.25 in (260mm). A handbrake lever mounted between the front seats operates separate calipers on the rear discs.

Performance Data

All data was obtained using premium fuel with tyres inflated as follows -

Front 26 psi (1.8 kg/cm²)

Rear 28 psi (1.9 kg/cm²)

Acceleration in upper gears (car speedometer reading)

mph	10-30	20-40	30-50	40-60	50-70	60-80	70-90	80-100
(kph)	(16-48)	(32-64)	(48-80)	(64-98)	(80-113)	(96-129)	(113-145)	(129-161)
Top (seconds)	-	11.2	11.3	13.0	13.5	14.9	16.0	36.6
Third (seconds)	8.1	8.1	8.0	8.9	9.4	12.7	-	-
Second (seconds)	4.5	4.9	5.6	-	-	-	-	-
First (seconds)	3.7	-	-	-	-	-	-	-

Acceleration through the gears (car speedometer reading)

mph	0-30	0-40	0-50	0-60	0-70	0-80	0-90	0-100
(kph)	(0-48)	(0-64)	(0-80)	(0-96)	(0-113)	(0-129)	(0-145)	(0-161)
Time (seconds)	5.0	8.2	11.0	16.6	21.0	28.8	40.4	55.0

Maximum speeds

		Top	Third	Second	First
Recorded speed	mph	103	92	56	34
	(kph)	(165.76)	(148.06)	(90.123)	(54.718)

True speed: within 2 mph (3.2 kph) of the recorded figure.

Suggested cruising speed: up to 90 mph (145 kph)

Tractive effort

Gear	Top	Third	Second	First
Tapley Reading lb/ton	210	280	430	-
Equivalent gradient	1 in 11	1 in 8	1 in 5	-

Braking

Deceleration at 30lb pedal load 0.40 g from 30 mph.

Deceleration at 60lb pedal load 0.88 g from 30 mph.

Deceleration at 30lb pedal load 0.48 g from 60 mph.

Deceleration at 60lb pedal load 0.88 g from 60 mph.

Prolonged use made only negligible difference.

Handbrake maximum deceleration 0.32g from 30 mph.

The footbrake's action was at all times smooth and fully progressive. The handbrake efficiency could be further improved on the test car because one of the wheels skidded on hard application.

Fuel Consumption

Except for over-all figure, all results were obtained from an average of several short-term tests, where the consumption was measured over distances of 1 mile (1.61 km).

	MPG	(L/100 km)
30 mph (40 kph)	49	5.77
40 mph (64 kph)	42.5	6.77
50 mph (80 kph)	39.5	7.15
60 mph (96 kph)	38.5	7.34
70 mph (113 kph)	28	10.09
80 mph (129 kph)	27	10.46
90 mph (145 kph)	24.7	11.4
100 mph (161 kph)	—	—
Over-all consumption for 1,830 miles (2,945.09 km)	27.7	10.2
Oil consumption over 1,830 miles	3 pints	(1.705 litres)

Standard of finish

- Exterior:* The paintwork and finish are of a standard associated with this manufacturer's products.
- Interior:* The general impression throughout is one of quiet opulence; the steering wheel, which is adjustable for rake, is comfortable for all types of driver and the controls are easy to reach.
- Plating:* The bright-metal work appears to have been kept to a minimum, a feature which enhances the pleasing functional lines of the body.

Seating

The individual front seats are both adjustable for height, and the squab can be angled from a vertical position to a horizontal position by a simple lever. The front seats can also be moved 9 in (22.8cm) fore and aft.

There are also 'bucket' seats in the rear with a centre folding armrest. Combined door-pulls and arm-rests are fitted to each door.

Doors

- Angle of opening: 85 degrees.
- Type of checks fitted: 'Stay-open'.
- Ease of entry and exit: Very good.

Bonnet

- Type:* Front opening panel with support stay on nearside.
- Location and ease of catch release:* Under right-hand end of facia in the panel locker; it is easily reached and the safety catch at the front of the bonnet is easily operated.
- Accessibility in engine compartment:* Satisfactory, but the unsupported dip-stick tube could be lifted out with the dip stick when checking the oil level.

Boot

- Capacity:* 16.25 cu ft (0.46 cu m); manufacturer's figure.
- Lid:* Upward-lifting and spring counterbalanced.
- The spare wheel is mounted vertically inside the boot on the nearside, and the tool kit is fitted into the recess formed by the nearside quarter and mud-guard. The interior is completely trimmed and illuminated.

Stowage Space

Parcel lockers are fitted below the facia, one on each side and the upper face of the facia forms a narrow platform. The space provided between the rear window and the seat squab serves as a parcel tray and has provision for carrying the rear radio speaker.



Ashtrays

Two ashtrays with spring-open lids are situated on the propeller-shaft tunnel moulding at the front and rear.

Other equipment

A Pye radio and seatbelts formed the additional equipment fitted in the test car. The radio proved to be efficient but, due to wind noise, was inaudible at high road speeds. The seatbelts were less satisfactory because the buckle adjustment on the diagonal loosened even under light loads.

Dashboard and control layout

Pedal layout: All pedals are pendant and conventionally arranged; their positioning is comfortable for the driver

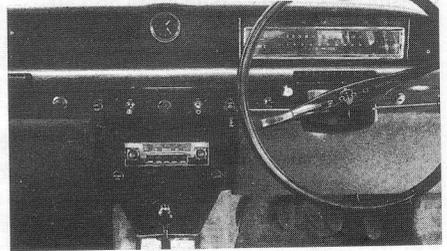
Main controls: Basically the fascia assembly has been carefully planned; the speedometer, fuel and temperature gauges, and all warning lights are incorporated in a rectangular unit conveniently arranged in front of the driver and recessed between the upper padded moulding and the glove shelf. The electrically wound clock is in the centre of the glove shelf. Switches, cigar lighter and screen washer control are conveniently placed along the centre of the fascia immediately over the radio set; the headlamp flasher / dip switch is operated by a stalk on the nearside of the steering column, and the horn / direction indicators by a similar switch on the offside. The heater and fresh-air controls are placed immediately below the main switches, and small flap-controlled vents are situated on either side of the fascia to give cooling air at about face level.

Courtesy lights are fitted at both front and rear, and are controlled individually by switches mounted on the door pillars; the boot light is also automatically controlled by a small switch at the nearside of the boot frame.

Accessibility: All controls, switches and ancillary equipment are easily reached, although the legends leave much to be desired, and familiarity is necessary before each can quickly be identified and operated.

Legibility: The indications of the gauges are readily assimilated, and at night the red ribbon of the speedometer draws immediate attention as it travels horizontally along the instrument face. One disquieting feature was that the gauge-panel glass was placed at such an angle that reflections from light clothing made the dials difficult to read in bright sunlight.

Illumination: The twin headlamps give good illumination, although the beam-spread appeared to be a little 'fuzzy'. When dipped, ie: two lights on only, illumination of the road is entirely adequate. Fog lamps fitted below the front bumper also proved satisfactory.

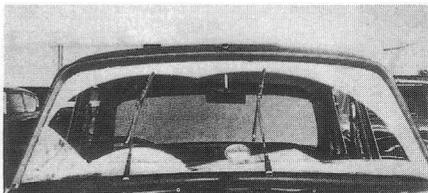


Screen wipers

Type: Electrically operated, with variable speed and self-parking.
Area swept: Acceptable, although, inevitably, blind areas are present on eash side.
Noise level: Low.
Efficiency: A degree of streakiness was apparent on the test car due to poor contact between blades and glass.

Screen washers

- Type:* Electrically operated, a 'press to hold' button.
Efficiency: Satisfactory.



Heater

- Type:* Fresh-air.
Over-all efficiency: The heater was very efficient; a long night-run was the only opportunity of trying out the heater output. Although the night was cool the heater coped well, still having a considerable reserve. During most of the test the weather was warm and gave an excellent chance of testing the fresh-air ventilation system which was very satisfactory.

Noise level: Low.

Visors

- Type:* Padded and capable of being swung to the side; each carries a vanity mirror, a feature which could give rise to injury in the event of an accident.
Effectiveness: These visors give complete protection of the screen and are excellent when adjusted to the side.

Lighting equipment

The headlights are very effective for high-speed driving, but the steering-column controlled dip-switch might prove difficult to operate for drivers with small hands, due to the long finger-stretch required from the steering wheel. There is provision to switch on the right-hand side and rear lights only for parking purposes. The degree of facia illumination is variable, and very satisfactory. An efficient reversing light is fitted below the centre of the rear bumper.

Interior lamp location: One at the rear centre of the roof and a shrouded courtesy light on each side of the facia. These can be switched on separately from inside the car.

Direction indicators

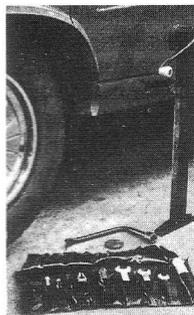
- Type:* Flashing.
Illumination level: Not controlled for day and night use.
Switch position: On and to the right of the steering column; easily operated.
Flashing frequency: 86 per minute; within legal requirements.

Horns

- Number and type:* Twin windtones with well-matched tone.
Control - type and position: Incorporated in the flasher-switch control. Unfortunately the horn can be operated accidentally when the flashers are used, and the control might be considered too small for some drivers; a full or half ring on the steering wheel might be preferred by some.

Jacking

- Location and number of jacking points:* Four, one at each end of the body sills.
Type of jack: Screw with integral crank.
Ease of use: Simple, and suitably geared to provide low operating effort.
Spare wheel accessibility: Carried vertically in the nearside of the boot. Removal easy, but there is some loss of luggage space due to its position.



Suitability of driving position

The seating can be adjusted to suit all drivers and provides maximum comfort.

Visibility

Through windscreen: Inobstructed other than as noted under 'Screen wiper'.

Nearest point visible on road ahead: 12ft 6 in (3.810m) for persons of average height.

Rearward in mirror: Has a neat moulded surround and gives a complete view through rear window.

Nearest point on road to rear: 21ft 9 in (6.630m) as seen in the rear view mirror by a person of average height.

Location of mirror: Central, at the top of the windscreen.

Steering

Sensitivity: Light, positive and accurate.

Castor angle: Normal.

Stability in cross winds: Any deviation can be corrected immediately.

Characteristics: Neutral, tending to very light understeer.

Lock: Good at 31ft 6in (9.6m) between curbs.

Clutch

The clutch was positive in action with no slip, but slight judder was experienced with the car under test. 35lb (15.876 kg) pedal pressure was required.

Gearbox

Lever position and ease of use: The floor-type centrally mounted gear lever allowed rapid and easy changes.

Synchromesh: Excellent - could not be 'beaten'.

Noise level: Insignificant.

Suitability of gear ratios: Well chosen.

Reverse gear was occasionally difficult to engage, but the need to lift up an interlocking sleeve proved a very efficient safety device.

Brakes

Stability under frequent use: Excellent.

Degree of fade: Negligible.

Handbrake lever position and accessibility: 'Pull up' type mounted between front seats; easily accessible. During the course of the test, the pawl control tended to remain in the 'released' position.

General handling

On the road this car is a delightful vehicle at all speeds, the driver and passengers feel safe, and it can be handled safely and accurately under all conditions.

Fatigue inducement

Driver: No significant fatigue, even after long distances.

Passengers: No complaints and rear comfort in particular is high, although head room for tall persons is restricted.

Ventilation

The system provides for almost any atmosphere desired, the combined use of air vents and heater offering a wide temperature range. Air is fed to the heater from an opening below the outside of the windscreen, and positioned where the ingress of traffic fumes is minimized. Temperature control is by air mixing. Three large slots at the base of the screen provide good air distribution for demisting and defrosting.

Heating is at the front only, and the comfort of the rear passengers depends on heat distribution.

Draughtproofing

No draughts could be detected.

Water sealing

Satisfactory. The front door vent windows, when partly open to improve interior ventilation, allow water to enter the car.

Noise level

Mechanical: The noise level was commendably low. On starting the engine a noise came from the timing chain tensioner, but it disappeared immediately the oil began to circulate. Very slight transmission whine was just audible.

Road / tyre: Low.

Wind: Low when all windows closed, but the noise increases considerably at high speeds when the windows are open, rendering the radio inaudible.

Other sounds: The suspension appeared to be free from unwanted noises, but a slight brake-disc squeak could be heard at low speeds, and there was some harshness on light brake application. A slight vibration of the steering wheel at about 90 mph (145 kph) suggests a possibility of front-wheel patter.

Summary

Although this car does not conform to the traditional Rover pattern there is little doubt that it will please those discerning motorists who are interested in comfort allied with good performance, excellent stability and high cruising speeds.

The suspension is firm and gives a smooth and excellent ride, road defects being sensed rather than heard; the disc brakes, inboard at the rear, could not be faulted and, with the exception of a slight vibration, the steering called for no adverse criticism.

The seating and general internal furnishings gave an air of luxury without being ostentatious, a condition which was verified in the comfortable driving-position and the wrapped-round feeling produced by the driving seat. The adjustable rake steering is a very commendable feature and it did much to assist the driving comfort.

Fuel economy, including over-all consumption, is very good for a car of this type, bearing in mind the very high engine speeds. Oil consumption gave no cause for adverse comment. Maintenance has been cut to a minimum, and apart from normal servicing the only grease nipple - on the propeller shaft sliding joint - required lubrication every 5,000 miles only. Engine oil must be changed at 5,000 miles and transmission oil at 20,000 miles. The test car had completed some 23,000 miles and a certain degree of wear was to be expected, but examination and test brought to light no marked indication of such a condition except for a degree of accelerator quadrant roller wear which affected smoothness of operation. Engine tuning would, however, give further improvement in idling.