ROVER

3 Litre

REGISTERED TRADE MARK

OWNER'S INSTRUCTION MANUAL

Part No. 4344

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3 Litre

OWNER'S INSTRUCTION MANUAL

THE ROVER COMPANY LTD.

SOLIHULL
WARWICKSHIRE
ENGLAND

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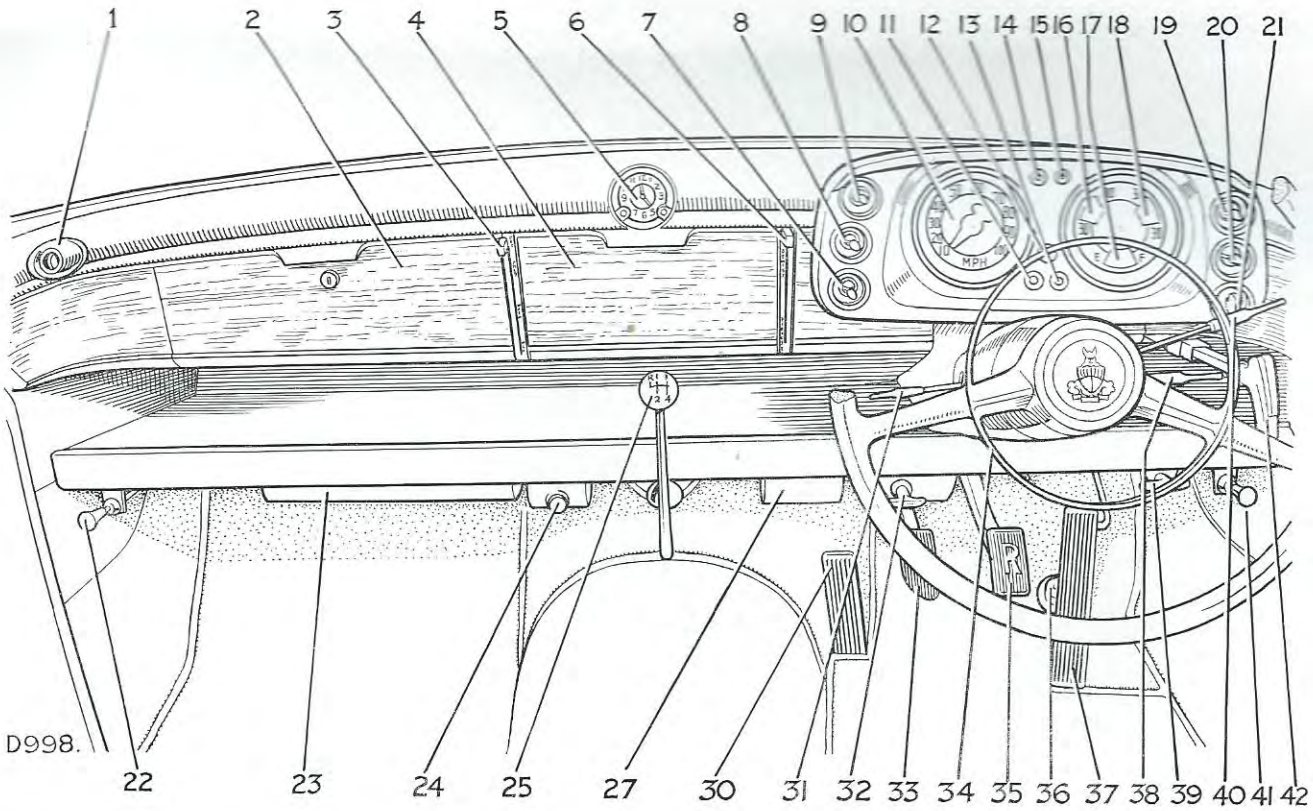
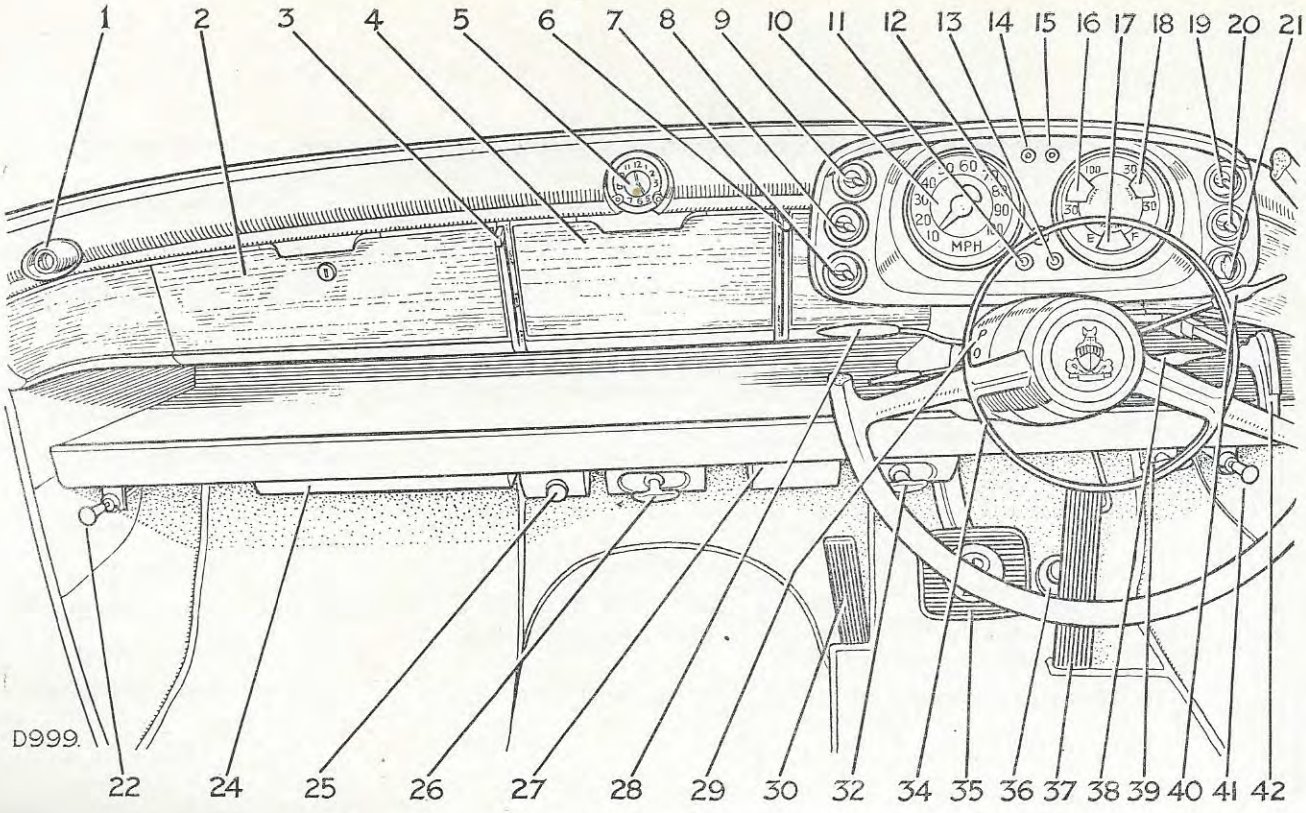
ROVER 3 LITRE



Layout of controls and instruments—4-speed gearbox with overdrive

1 Cool air control L.H. upper
2 Outer glovebox lid*
3 Heater-fan control
4 Inner glovebox lid
5 Clock
6 Demister control
7 Windscreen wiper switch
8 Oil level switch
9 Panel light switch
10 Speedometer*
11 Oil pressure warning light
12 Ignition warning light
13 Cold start warning light
14 Direction indicator warning light
15 Main beam warning light
16 Water temperature gauge*
17 Fuel and oil level gauge*
18 Ammeter*
19 Main light switch
20 Fuel reserve switch
21 Ignition and starter switch
22 Cool air control knob L.H. lower
23 Tool tray*
24 Cigar lighter
25 Gear change lever
27 Ash tray
30 Headlamp dipper switch pedal*
31 Overdrive control switch*
32 Cold start control*
33 Clutch pedal*
34 Horn ring
35 Foot brake pedal*
36 Kickdown switch*
37 Accelerator pedal*
38 Headlamp switch*
39 Bonnet lock control
40 Direction indicator switch*
41 Cool air control knob R.H. lower
42 Hand brake lever*

The instrument panel complete and the items marked * are transferred to the opposite side on left-hand drive cars.



Layout of controls and instruments—Borg-Warner Automatic Transmission

1 Cool air control L.H. upper
2 Outer glove box lid*
3 Heater–fan control
4 Inner glove box lid
5 Clock
6 Demister control
7 Windscreen wiper switch
8 Oil level switch
9 Panel light switch
10 Speedometer*
11 Oil pressure warning light
12 Ignition warning light
13 Cold start warning light
14 Direction indicator warning light
15 Main beam warning light
16 Water temperature gauge*
17 Fuel and oil level gauge*
18 Ammeter*
19 Main light switch
20 Fuel reserve switch
21 Ignition and starter switch
22 Cool air control knob L.H. lower
24 Tool tray*
25 Cigar lighter
26 Second gear hold
27 Ash tray
28 Gear change selector*
29 Gear change quadrant*
30 Headlamp dipper switch pedal*
32 Cold start control*
34 Horn ring
35 Foot brake pedal*
36 Kickdown switch*
37 Accelerator pedal*
38 Headlamp switch*
39 Bonnet lock control
40 Direction indicator switch*
41 Cool air control knob R.H. lower
42 Hand brake lever*
43 Warning light, hand brake*

The instrument panel complete and the items marked * are transferred to the opposite side on left-hand drive cars.

PART THREE

GENERAL DATA

Engine

Bore	3.063 in. (77,8 mm)
Stroke	4.134 in. (105 mm)
Number of cylinders	Six
Cylinder capacity	183 cu. in. (2.995 c.c.)
Compression ratio	8.75 : 1
Compression ratio	7.5 : 1 certain export territories only
B.H.P.—8.75 : 1	115 at 4,500 r.p.m.
B.H.P.—7.5 : 1	109 at 4,500 r.p.m.
Maximum torque—8.75 : 1	164 lb ft at 1,500 r.p.m.
Maximum torque—7.5 : 1	155 lb ft at 1,500 r.p.m.
Firing order	1, 5, 3, 6, 2, 4
Sparking plugs—8.75 : 1	Champion N5 } 14 mm with suppressors and waterproof covers
Sparking plugs—7.5 : 1	Lodge CLN-H } 14 mm with suppressors and waterproof covers
Sparking plug point gap	.029 to .032 in. (0,75 to 0,80 mm)
Distributor contact breaker gap	.014 to .016 in. (0,35 to 0,40 mm)
Ignition timing, static—full retard	3° B.T.D.C. 8.75 : 1 compression ratio 2° B.T.D.C. 7.5 : 1 compression ratio
Tappet clearance—inlet	.006 in. (0,15 mm) } At running temperature
Tappet clearance—exhaust	.010 in. (0,25 mm) } At running temperature
Valve timing (No. 1 exhaust valve peak)	102½° B.T.D.C.
Oil pressure	55 to 65 lb sq.in. (3,8 to 4,6 kg/cm²) at 30 m.p.h. (50 k.p.h.) in top gear with engine warm
Lubrication	Full pressure
Oil filter—internal	Gauze pump intake filter in sump
Oil filter—external	Full-flow

Clutch, 4-speed gearbox

Type	Single dry plate, 10 in. diameter. Hydraulic operation
Adjustment	¾ in. (20 mm) free movement at pedal pad

Gearbox, 4-speed

Type	Single helical constant mesh with synchromesh on top, third and second speeds. Laycock De-Normanville automatic overdrive 1.286-1 ratio with Rover control

Gearbox, Borg-Warner Automatic Transmission

Hydraulic torque converter with direct drive, followed by two planetary gear sets providing two indirect gear ranges and reverse

Propeller shafts

Type	Open type with centre bearing and support

Rear axle

Type	Spiral bevel with semi-floating shafts

	4-speed box with Overdrive	Borg-Warner Automatic Transmission
Ratio	4.3-1	3.9-1

Gear ratios

Overdrive	.778-1	
Top	1.0-1	
3rd	1.377-1	
2nd	2.043-1	
1st	3.376-1	
Reverse	2.968-1	
High (top)		1.0-1
Intermediate (2nd)		1.435-1
Low (1st)		2.308-1
Reverse		2.009-1

Fuel system

Petrol pump	SU high pressure. Electric, located in luggage boot behind rear trim panel
Carburetter	SU HD 8. Single horizontal, dust-proof
Air cleaner	Oil bath type with air silencer

Cooling system

Type	Pump, fan and thermostat, pressurised

Electric system

Type	Positive earth
Voltage	12 v.
Battery capacity	57 AH
	Battery located in luggage boot under metal cover at right-hand rear
Ignition system	Coil
Charging circuit	Current-voltage regulator

Replacement bulbs

Headlamps:			
R.H.D.	Lucas No. 416	12 v.	60/40 w.
L.H.D. Except North America and Europe	Lucas No. 417	12 v.	60/40 w.
L.H.D. Europe except France	Lucas No. 410	12 v.	45/40 w. Duplo
L.H.D. France	Lucas No. 411	12 v.	45/40 w. Duplo (yellow)
North America	Sealed Lucas unit		
Side lamps	Lucas No. 222	12 v.	4 w.
Stop-tail lamps	Lucas No. 380	12 v.	21/6 w.
Direction indicator lamps	Lucas No. 382	12 v.	21 w.
Rear number plate lamp	Lucas No. 222	12 v.	4 w.
Instrument panel light	Lucas No. 987	12 v.	2.2 w.
Warning lights	Lucas No. 987	12 v.	2.2 w.
Interior lights	Lucas No. 222	12 v.	4 w.
Borg-Warner selector indicator lamp	Lucas No. 280	12 v.	1.5 w.
Panel plate	Carr Fastener No. 82/036	12 v.	1.2 w.
Clock	Lucas No. 281	12 v.	2 w.
Reverse lamp	Lucas No. 382	12 v.	21 w.
Rear luggage boot lamp	Lucas No. 222	12 v.	4 w.

Suspension

Front	Laminated torsion bar
Rear	Progressive rate semi-elliptic leaf
Hydraulic dampers	Telescopic, anti-aeration, non-adjustable

Brakes

Foot brake	Hydraulic servo assisted, disc brakes at front, drum brakes at rear
Hand brake	Mechanical linkage to rear wheels

Steering

Type	Re-circulating ball worm and nut, variable ratio
	Ratio: straight ahead 17.6 : 1
	full lock 28.5 : 1
Front wheel alignment	$\frac{1}{16}$ in. (1,5 mm) toe-in to $\frac{1}{16}$ in. (1,5 mm) toe-out
Camber angle	2°
Castor angle	1° negative
Swivel pin inclination	4°
	Static unladen position

Tyres

Size	6.70″ x 15″, or 7.10″ x 15″ as optional equipment

Pressures:

		Normal motoring			
		Front normal load	Front fully laden	Rear normal load	Rear fully laden
6.70 x 15 tyres	lb/sq.in.	24	26	22	30
	kg/cm²	1,7	1,8	1,5	2,1
7.10 x 15 tyres	lb/sq.in.	22	24	20	28
	kg/cm²	1,5	1,7	1,4	1,9

For sustained high speed motoring, that is speeds in excess of 80 m.p.h. (120 k.p.h.) for more than a few minutes, it is essential from the viewpoint of safety and satisfactory tyre life to increase tyre pressures as shown overleaf:

		High speed motoring			
		Front normal load	Front fully laden	Rear normal load	Rear fully laden
6.70 x 15 tyres	lb/sq.in.	30	32	28	36
	kg/cm²	2,1	2,2	1,9	2,5
7.10 x 15 tyres	lb/sq.in.	28	30	26	34
	kg/cm²	1,9	2,1	1,8	2,3

Capacities

Fuel tank	14 Imperial gallons (63½ litres) including a reserve of approximately 1½ gallons (7 litres)
Cooling system....	22½ Imperial pints (13 litres)
Engine oil	10 Imperial pints (5,5 litres) plus 1 pint (0,5 litre) after replacing filter element.
Gearbox oil, 4-speed with overdrive	5 Imperial pints (2,75 litres)
Gearbox oil, Borg-Warner Automatic Transmission	15 Imperial pints (8,5 litres)
Rear axle oil	3 Imperial pints (1,75 litres)
Air cleaner	1 Imperial pint (0,5 litre)
Turning circle	40 ft. (12,2 m), lock to lock 4½ turns

Dimensions

Overall length	186½ in. (4,74 m)
Overall width	70 in. (1,78 m)
Wheelbase	110½ in. (2,81 m)
Track, front	55 in. (1,4 m)
Track, rear	56 in. (1,42 m)
Ground clearance (under rear axle) :	
6.70″ x 15″ tyres	7⅞ in. (200 mm)
7.10″ x 15″ tyres	8⅛ in. (206 mm)

	4-speed Gearbox with Overdrive	Brog-Warner Automatic Transmission
Weight—with water, oil and 5 gallons of fuel	3,612 lb. (1.638 kg)	3,640 lb. (1.651 kg)