OWNER'S MAINTENANCE MANUAL

ROVER 2000

PART No. 4601

OWNER'S MAINTENANCE MANUAL

By Appointment to Her Majesty Queen Elizabeth II

Manufacturers of Motor Cars and Land-Rovers

By Appointment to Her Majesty Queen Elizabeth the Queen Mother

Suppliers of Motor Cars and Land-Rovers

THE ROVER COMPANY LIMITED

SOLIHULL
WARWICKSHIRE
ENGLAND

ROVER 2000

Issued 1963
(5th Revision June, 1965)
Part No. 4601
Publication No. TP334/F

ROVER 2000

PART THREE

GENERAL DATA

Engine

Bore	3.375 in. (8,57 cm)
Stroke	3.375 in. (8,57 cm)
Number of cylinders	Four
Cylinder capacity	120.8 cu.in. (1,978 c.c.)
Compression ratio:	
Standard	9.0 : 1
For certain export territories	7.5 : 1
B.H.P.:	
9.0:1 compression ratio	90 at 5,000 r.p.m.
7.5:1 compression ratio	80 at 5,000 r.p.m.
Maximum torque:	
9.0:1 compression ratio	113.5 lb/ft. (15,5 mkg) at 2,750 r.p.m.
7.5:1 compression ratio	106 lb/ft. (14,8 mkg) at 2,500 r.p.m.
Firing order	1, 3, 4, 2
Sparking plugs:	
9.0 : 1 compression ratio	Champion N.9Y or Lodge HLNY } 14 mm with suppressors
7.5 : 1 compression ratio	Champion N.5 or Lodge HBLN } and waterproof covers
Sparking plug point gap	.023 to .027 in. (0,60 to 0,70 mm)
Distributor contact breaker gap	.014 to .016 in. (0,35 to 0,40 mm)
Ignition timing, static—full retard:	
9.0 : 1 compression ratio 95-97 octane fuel	4° B.T.D.C.*
7.5 : 1 compression ratio 79-93 octane fuel	6° B.T.D.C.

* Where 93 octane fuel is used set ignition timing to 2° B.T.D.C.

Tappet clearance—inlet	.008 in. (0,20 mm) } Adjustment only required
Tappet clearance—exhaust	.013 in. (0,30 mm) } at engine overhaul
Valve timing (No. 1 exhaust valve peak)	108° B.T.D.C.
Oil pressure	50 to 60 lb/sq.in. (3,5 to 4,2 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	Diaphragm spring single dry plate, 8½ in. diameter. Hydraulic operation
Fluid	Lockheed Super Heavy Duty Fluid. Specification SAE 70 R.3.

Gearbox, 4-speed

Type	Single helical constant mesh with synchromesh on top, third, second and first speeds

Gear ratios	Top	1.0-1
	3rd	1.391-1
	2nd	2.133-1
	1st	3.625-1
	Reverse	3.43-1
Overall ratios	Top	3.54-1
	3rd	4.924-1
	2nd	7.55-1
	1st	12.832-1
	Reverse	12.14-1

Final drive unit

Type	Hypoid crown wheel and bevel pinion
Ratio	3.54-1

Propeller shafts

Type	Open, Hardy Spicer type 1310, pre-packed joints

Fuel system

Fuel pump	AC mechanical
Carburetter	Single S.U. type H.S.6
Carburetter needle	RN
Air cleaner	AC paper element type

Cooling system

Type	Pump, fan and thermostat, pressurised to 4 lb/sq.in. (0,3 kg/cm²)
Fan belt adjustment	$\frac{5}{16}$ in. to $\frac{7}{16}$ in. (8 to 11 mm) free movement

Electrical system

Type	Positive earth
Voltage	12 v.
Battery capacity	60 ampere hours at 20 hour rate. (Battery located under bonnet)
Ignition system	Coil, Lucas, HA 12
Charging circuit	Current-voltage regulator
Dynamo output	30 amps

Hydraulic dampers Telescopic, anti-aeration, non-adjustable

Brakes

Foot brake	Dunlop outboard disc brakes at front and inboard disc brakes at rear, hydraulic, servo assisted
Hand brake	Dunlop disc hand brake with mechanical linkage, self-adjusting mechanism
Fluid	Dunlop Disc Brake Fluid. Specification SAE 70 R.3.

Steering

Type	Adamant hour-glass worm and roller followers
Ratio	20.3:1, $3\frac{3}{4}$ turns, lock to lock
Front wheel alignment	$\frac{1}{16}$ in. (1,5 mm) toe-in plus or minus $\frac{1}{16}$ in. (1,5 mm)
Camber angle	$0° \pm 1°$
Castor angle	$\frac{1}{4}°$ positive $\pm \frac{1}{2}°$
Swivel pin inclination	8°

Check with car in static unladen position. That is, car with water, oil and 5 gallons of fuel. Rock the car up and down at the front to allow it to take up a static position

Note: The camber of the front wheels on this car is 0°, with a tolerance of plus or minus 1°. That is, the bottom of the wheels can splay out slightly.

Tyres

Size: Pirelli Cinturato 165 x 14, with inner tubes
Dunlop SP41 165 x 14 tubeless

Pressures: Check with tyres cold

All speeds and normal loads—	Front	Rear
lb/sq.in.	26	28
kg/cm²	1,8	1,9

When the car is driven fully laden, the rear tyre pressures should be increased by 4 lb/sq.in. (0,3 kg/cm²).
When high speed touring, the tyre pressures should be checked much more frequently, even to the extent of a daily check.

Replacement headlamp units and bulbs

	Inner headlamp		Outer headlamp	
	Sealed beam unit	Bulb	Sealed beam unit	Bulb
Home market, R.H.D.	Lucas 54521805	—	Lucas 54521806	—
Export, except France, Austria, Italy, and North America	Lucas 54521805	—	—	Lucas 410
France	Lucas 54520931	—	—	Lucas 411
Austria	Lucas 54521615	—	—	Lucas 410
Italy	—	Lucas 410	—	Lucas 410
North America	Special	—	Special	—

Side lamps	Lucas No. 989
Stop-tail lamps	Lucas No. 380
Direction indicator lamps	Lucas No. 382
Rear number plate lamp	Lucas No. 989

Instrument panel light	Lucas No. 987
Warning lights, direction indicator and main beam	Lucas No. 643
Warning lights, choke, oil, brake and ignition	12 volt, 3.6 watt
Interior lights, festoon bulb	Lucas No. 254
Clock	Lucas No. 281
Reverse lamp	Lucas No. 382
Rear luggage boot lamp	Lucas No. 209
Switch panel illumination lamp	Lucas No. 256
Map reading lamp	Lucas No. 254

Suspension

Front	Coil springs, leading top links, transverse bottom links
Rear	de Dion sliding tube, coil springs, with a rear rod for transverse stability

Dimensions

Overall length	14 ft 10½ in. (4,53 m)
Overall width	5 ft 6 in. (1,68 m)
Overall height	4 ft 6¾ in. (1,39 m)
Wheelbase	8 ft 7⅜ in. (2,63 m)
Track, front	4 ft 5⅜ in. (1,35 m)
Track, rear	4 ft 4½ in. (1,33 m)
Ground clearance (under final drive unit)	8½ in. (21,6 cm)
Turning circle	31½ ft. (9,6 m), lock to lock, 3¾ turns of steering wheel
Weight, with water, oil and 5 gallons (22½ litres) of fuel	2,767 lb. (1.255 kg)

Capacities

Component	Imperial unit	U.S. unit	Litres
Engine sump oil	8 pints	9.5 pints	4,5
Extra when refilling after fitting new filter	1 pint	1.2 pints	0,5
Gearbox oil	1¾ pints	2 pints	1,0
Final drive unit oil	2½ pints	3 pints	1,5
Fuel tank	12 gallons	14 gallons	55,0
Including a reserve of	1¼ gallons	1½ gallons	6,0
Cooling system	17 pints	20½ pints	10,0

Recommended lubricants

These recommendations apply to temperate climates where operational temperatures may vary between approximately 10°F (–12°C) and 90°F (32°C).

Information on recommended lubricants for use under extreme winter or tropical conditions can be obtained from The Rover Co. Ltd., Technical Service Department, or your local Distributor or Dealer.

COMPONENTS	S.A.E.	B.P.	CASTROL	DUCKHAM'S	ESSO	MOBIL	REGENT TEXACO/ CALTEX	SHELL
ENGINE GEARBOX AND DE DION TUBE	20W	Energol SAE 20W	Castrolite	Duckham's NOL Twenty	Esso Motor Oil 20W/30	Mobiloil Arctic	Advanced Havoline 20/20W	Shell X-100 20W
STEERING BOX AND FINAL DRIVE UNIT	90EP	Energol SAE 90 EP	Castrol Hypoy	Duckham's Hypoid 90	Esso Gear Oil GP 90/140	Mobilube GX 90	Universal Thuban 90	Spirax 90 EP
PROPELLER SHAFT SLIDING SPLINE, FRONT AND REAR HUBS	—	Energrease L2	Castrolease LM	Duckham's LB10 Grease	Esso Multi-purpose Grease H	Mobilgrease MP or Mobilgrease Special	Marfak Multi-purpose 2	Retinax A

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