

# Land-Rover Service Newsletter Vol.3 No.21A



February, 1971

The Rover Company Limited Service Department: Solihull, Warwickshire, England

By Appointment to  
Her Majesty  
Queen Elizabeth  
the Queen Mother



Suppliers  
of  
Motor Cars and  
Land-Rovers

<b>Item 1</b>	<b>SUBJECT:</b>	<b>REAR AXLE</b>	
	<b>MODELS:</b>	Land-Rover 109 Bonneted Control Models for certain territories in the Export Market, and Station Wagons only in U.K.	
	<b>MODIFICATION:</b>	Introduction of a strengthened rear axle manufactured by Salisbury Transmission Ltd.	
	<b>LITERATURE AFFECTED:</b>	Land-Rover Parts Catalogue Part No. 605957 Land-Rover Workshop Manual Part No. 606408 Land-Rover Owner's Maintenance Manual Part No. 606162	
	<b>PARTS REQUIRED:</b>		
		Rear axle complete assembly .. .. .	1 576764
		Rear axle assembly (Comprises of axle assembly 576764 less axle shafts, hubs and brake units .. .. .	1 607247
		Differential case assembly .. .. .	1 607164
		Bolt (12 mm x 50 mm long) for differential case .. .. .	8 607165
		Bolt (12 mm x 60 mm long) fixing bearing cap .. .. .	4 607163
		Gear carrier casing .. .. .	1 607162
		Differential wheel .. .. .	2 607166
		Differential pinion .. .. .	4 607167
		Thrust washer for differential pinion .. .. .	4 607168
		Thrust washer for differential wheel .. .. .	2 607169
		Cross shaft for pinion .. .. .	1 607170
		Crownwheel and pinion .. .. .	1 607192
		Bolt (12 mm x 28 mm long) fixing crownwheel .. .. .	12 607193
		Collapsible spacer for bearing pre-load .. .. .	1 607197
		Pinion bearing, inner .. .. .	1 607180
		Shim, 0.003 in. } For inner	A/R 607177
		Shim, 0.005 in. } pinion	A/R 607178
		Shim, 0.010 in. } bearing	A/R 607179
		Pinion bearing, outer .. .. .	1 607181
		Oil thrower washer for pinion bearing .. .. .	1 607182
		Gasket for pinion oil seal .. .. .	1 607183
		Oil seal for pinion .. .. .	1 607184
		Driving flange .. .. .	1 607185
		Plain washer } Fixing flange to	1 607176
		Lock nut } pinion	1 607194
		Bearing for differential .. .. .	2 607187
		Shim, 0.003 in. } For	A/R 607188
		Shim, 0.005 in. } differential	A/R 607189
		Shim, 0.010 in. } bearing	A/R 607190
		Shim, 0.030 in. }	A/R 607191
		Rear cover for gear carrier casing .. .. .	1 607171
		Gasket for rear cover .. .. .	1 607175

Bolt (10 mm x 15 mm long)	} Fixing rear cover to gear carrier casing	10	607173
Lock washer		10	607174
Oil filler and level plug	.. .. .	1	607172
Drain plug	.. .. .	1	607172
Axle shaft R.H.	.. .. .	1	576767
Axle shaft L.H.	.. .. .	1	576768
Rear hub bearing sleeve	.. .. .	2	273886
Distance piece for bearing sleeve	.. .. .	2	217351
Joint washer, bearing sleeve to axle casing	.. .. .	2	500978
Rear hub assembly	.. .. .	2	576844
Stud for road wheel	.. .. .	10	576825
Hub bearing, inner	.. .. .	2	GHB 162
Oil seal for inner bearing	.. .. .	2	239422
Hub bearing, outer	.. .. .	2	GHB 163
Key washer	} Fixing hub bearing	2	217352
Special nut		4	217355
Locker	.. .. .	2	217353
Driving member for rear hub	.. .. .	2	571711
Joint washer for driving member	.. .. .	2	231505
Set bolt ( $\frac{3}{8}$ BSF x $1\frac{1}{2}$ in. long)	} Fixing driving member to hub	12	215331
Spring washer		12	3076
Circlip	} For axle shafts	2	549473
'O' ring		2	553263
Hub cap	.. .. .	2	219098
Bracket for brake jump hose	.. .. .	1	607186

REAR BRAKE COMPONENTS ARE UNCHANGED EXCEPT FOR THE FOLLOWING ITEMS WHICH REPLACE THE EQUIVALENT PARTS IN THE LAND-ROVER PARTS CATALOGUE.

Brake drum	.. .. .	2	576973	
Check strap for rear axle	.. .. .	2	592181	
Tee piece for brake pipe on axle	.. .. .	1	537761	
Brake pipe on axle, R.H.	.. .. .	1	577670	
Brake pipe on axle, L.H.	.. .. .	1	577671	
Propeller shaft	.. .. .	1	591279	$2\frac{1}{4}$ Litre
Propeller shaft	.. .. .	1	591283	2.6 Litre
Rear spring bottom plate	.. .. .	2	592179	
'U' bolt for rear spring	.. .. .	4	592182	
Self locking nut (12 mm) for 'U' bolt	.. .. .	8	810502	

**Note:** Universal joint cover E.1712 cannot be fitted to initial supplies of the Salisbury axle which have a tapered pinion housing nose. Later supplies will have a parallel nose.

COMMENCING NUMBERS:

Vehicles with suffix letter 'H' onwards  
Rear axles numbered in the range 91100001A onwards

REMARKS:

This special News Letter has been prepared to give Rover Distributors and Dealers an outline of the Salisbury rear axle and to provide Service information. As this new rear axle has a limited application, it is not our intention to circulate to Distributors and Dealers Workshop information appertaining to this unit. However, a fully illustrated Workshop Manual Supplement Part No. 607289 will shortly be available for those Distributors and Dealers who may be dealing with vehicles fitted with the Salisbury rear axle, copies on application to:

The Rover Co. Ltd., Technical Service Department, Solihull, Warwickshire, England.

The Salisbury axle provides large diameter axle shafts, a strengthened axle case, a differential unit with four pinion gears and a strengthened crown wheel and hypoid bevel pinion. The axle is used in conjunction with modified propeller shaft and with wheel hub assemblies similar to the E.N.V. type hubs but with strengthened brake drums and 16 mm road wheel studs.

The Salisbury axle is not interchangeable with Rover and E.N.V. type axles; the applicable type must therefore be stocked for all Service replacements.

**SERVICE INFORMATION: Lubricants and capacity**

Recommended lubricants for the Salisbury axle are as currently specified for Rover and E.N.V. axles in the Workshop Manual Part No. 606408 and Owner's Maintenance Manual, Part No. 606162.

Lubricant capacity for the Salisbury axle is 4.5 pints (U.K.), 5.4 pints (U.S.), 2,5 Litres.

**Differential unit, drain/refill**

The procedure for draining and refilling the differential and for checking the lubricant level is as described in the Workshop Manual and Owner's Literature.

The accompanying illustration shows the location of the filler/level plug and the drain plug.

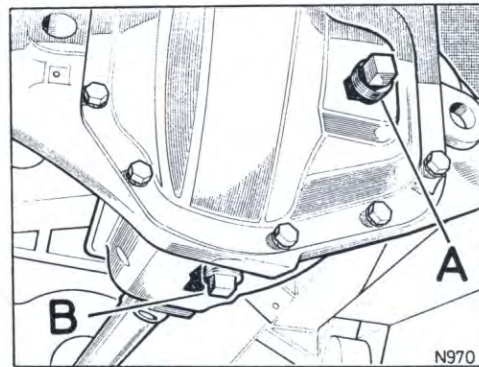


Fig. 1. Differential filler/level and drain plug, Salisbury rear axle

A—Filler/level plug  
B—Drain plug

**Hub bearing end float**

To check and adjust end float, refer to Workshop Manual Part No. 606408, Operation E.1-4, E.N.V. type axles. Hub bearing end float. 0,05 to 0,10 mm (0.002 to 0.004 in.).

**Axle ratio**

Rear axle differential ratio is 4.7:1.