

# SERVICE INFORMATION

## LAND-ROVER

### Vol.2 Issue 7



November, 1974

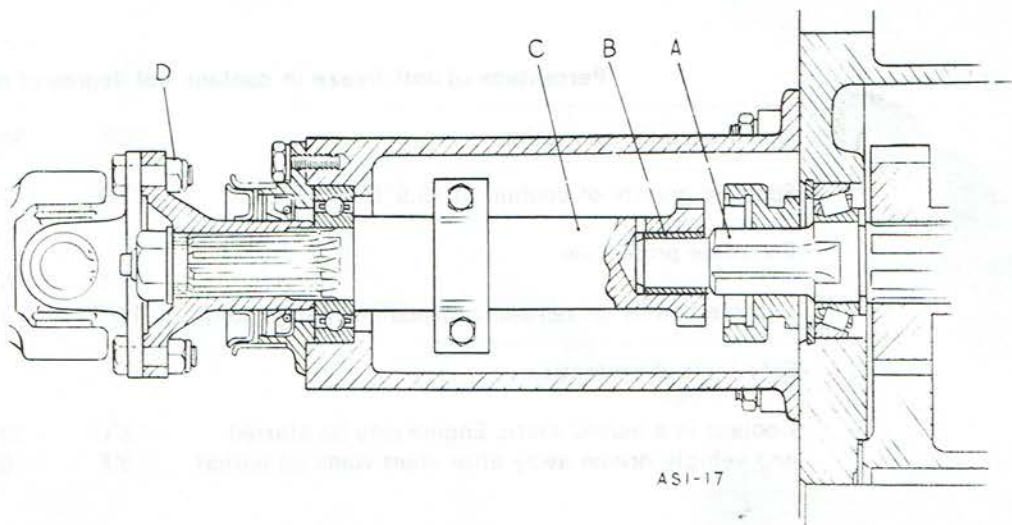
ITEM 13      Division : 00  
Subject : Index for Service Information  
Models : All  
Remarks :

To effect an economy, because of the present paper shortage, the index for Service Information will be printed bi-monthly until further notice. Therefore, the next index will be produced for Service Information Vol.2, Issue 8, December.

ITEM 14      Division : 00  
Subject : Roller testing  
Models : All Land-Rover  
Remarks :

A condition may arise when **prolonged** roller testing a Land-Rover in rear wheel drive (i.e. with the front wheels at rest) where the rear output shaft (A) revolving within the stationary front output shaft bush (B) could seize, causing the vehicle to move forward.

To prevent this condition occurring disconnect the front propellor shaft (C) from the transfer shaft flange (D) and engage four wheel drive before roller testing on rear wheels is started. Both front and rear output shafts will then revolve together while the front wheels remain stationary.





ITEM 15

Division : 12  
Subject : Engine pistons  
Models : All current engines  
Remarks :

With effect from October 1974 individually graded standard pistons will no longer be supplied by our Parts Department for Rover Triumph engines. The new standard grade pistons will be supplied in a 0.001 in (0.0254 mm) oversize condition.

Information relating to this change, including the new part numbers, will be found in the October issues of Rover Parts Technical Information, Volume R1, Number R10 and Triumph Parts Technical Information, Volume T1, Number T10.

As a result of this change it is now necessary when fitting the standard grade piston to a cylinder block in service, to offer the new piston to the bore, carefully check for correct piston to bore clearance, as appropriate to the piston type supplied, honing the cylinder bore as necessary in order to obtain the correct clearance.

ITEM 16

Division : 26  
Subject : Engine anti-freeze  
Models : All Land-Rover  
Remarks :

Due to a national shortage of engine anti-freeze materials for the 1974/75 winter season, a Service Recommendation for annual replacement of anti-freeze solutions in Rover vehicles has been revised as follows :

1. Retain anti-freeze solution in cooling system for **two** winter seasons. This is already recommended for Triumph models.
2. Prior to second winter use, check specific gravity of coolant and add fresh anti-freeze as necessary to give the required protection.
3. After second winter use, completely drain coolant, thoroughly flush cooling system and refill with a fresh anti-freeze solution.

**Percentage of anti-freeze in coolant and degree of protection**

Anti-freeze concentration	25%	30%	35%	50%
Specific gravity of coolant at 15.5°C (60°F)	1.039	1.048	1.054	1.076
Complete protection	-12°C	-16°C	-20°C	-36°C
Vehicle can be driven away immediately from cold	10°F	3°F	- 4°F	-33°F
Safe limit of protection				
Coolant in a mushy state. Engine may be started and vehicle driven away after short warm-up period	-18°C 0°F	-22°C - 8°F	-28°C -18°F	-41°C -42°F

**Anti-freeze Specification**

For engines with iron cylinder blocks and cylinder heads (Land-Rover) use anti-freeze to British Standard B.S.I. 3151 or B.S.I. 3152.

ITEM 33

Division : 57  
Subject : Power steering pumps  
Models : LD, LE, ME, MG, ML, MM, MN  
Remarks :

Referring to Newsletter 323, week ending 20 October 1972 and Triumph Service Information Volume 1, Issue 9, Item 38 we are still receiving a high number of power steering pumps under warranty for complaints of leaking which are found to have no fault when tested by the manufacturer. Because of this, the manufacturer is still of the opinion that symptoms of leakage are brought about by incorrect filling or topping up of the pump reservoir.

It is again stressed that it is essential for the fluid temperature to be taken into consideration when checking the power steering pump fluid level, as it is very easy to unintentionally overfill.

For instance, if the reservoir level check is taken with cold fluid, (ambient) and the level topped up to the 'full' or 'full hot', depending on the type of filler cap dipstick fitted, fluid can be forced out through the filler cap vent due to fluid expansion as the power steering system reaches its normal operating temperature.

The later type filler cap has a dipstick marked with a 'full hot' line and a 'full cold' line to enable fluid checks to be carried out under both hot and cold fluid temperature conditions. If only for the reason mentioned above, it is obviously important that these conditions are observed.

Complaints have also been received of :-

1. Knock from pump. In almost every instance this has been found to be due to a loose pulley.
2. Heavy steering, noise or low pressures. This can usually be attributed to pulley slip caused by a slack driving belt.

Please ensure that all possible checks are carried out before replacing power steering pumps.

ITEM 34

Division : 74  
Subject : Road wheel balance weights  
Model : VA  
Remarks :

To preclude the possibility of damage to road wheel protective lacquer and subsequent risk of corrosion, adhesive road wheel balancing weights have been incorporated on Dolomite Sprint vehicles in place of the clip-on weights previously used. The incorporation took place from vehicle Commission Number VA 8195.

It is strongly recommended that adhesive wheel balance weights are used for any re-balancing work on Dolomite Sprint road wheels in service.