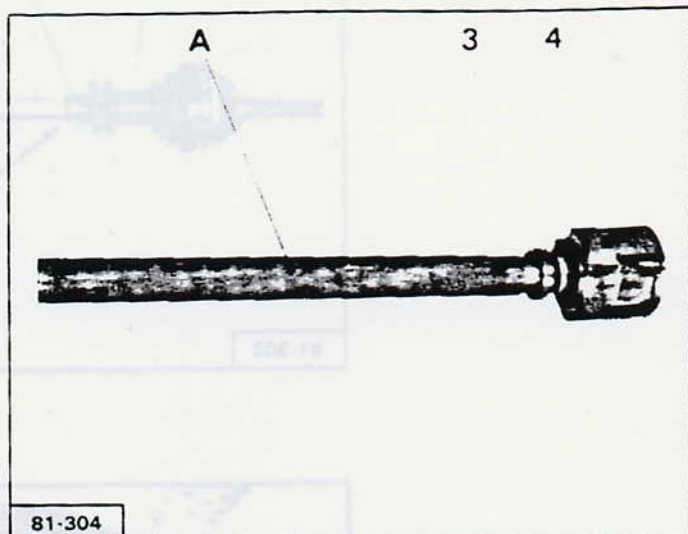
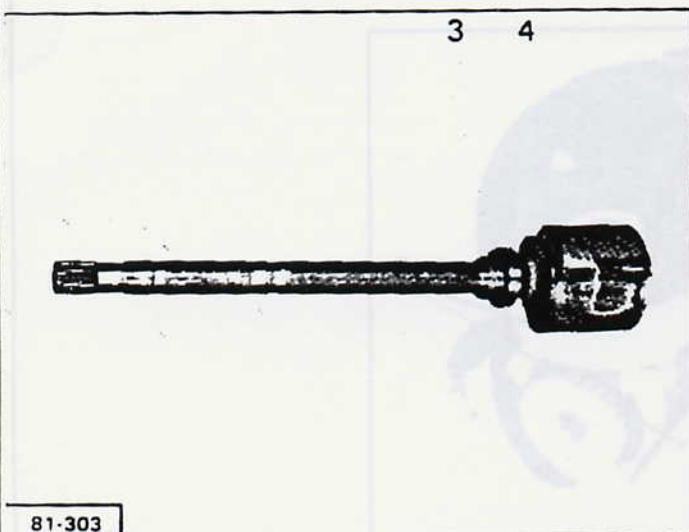


81-295



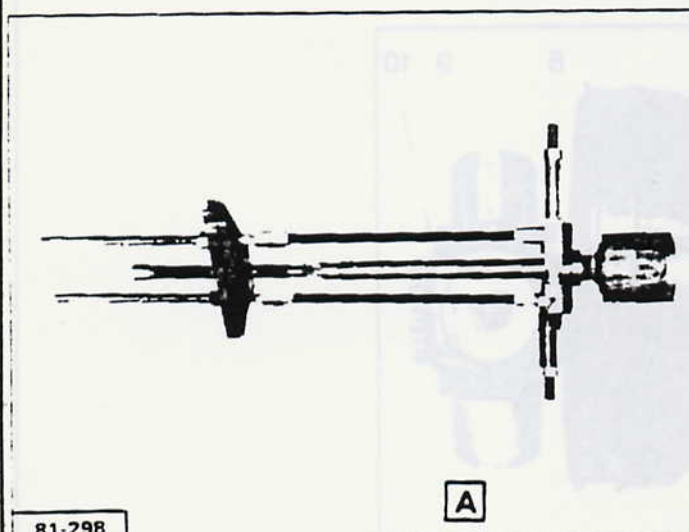
81-304

IV



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II



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V

J5	TRANSMISSION CONTENTS	4	1
		Pages	
B - TORQUE TUBE AND TRANSMISSION SHAFTS			
Viscous coupling			
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C - TRANSVERSE DRIVE SHAFTS			
Data			
Transverse drive shaft data		C1.001 to 003	
Removing - refitting			
Removing - refitting the transverse drive shafts		C4.001 to 003	
Overhauling			
Working on drive shafts		C5.001 to 005	

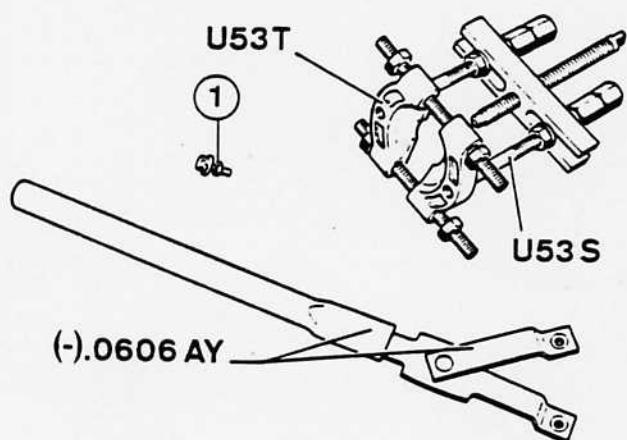
B5.002	4	4 x 4	VISCOUS COUPLING REPLACING THE BEARINGS	J5
<p>Special tools :</p> <ul style="list-style-type: none"> <li>- Hub locking tool (-)0606AY</li> <li>- (1) items required in addition to tool (-)0606AY :               <ul style="list-style-type: none"> <li>- 2 bolts HRDL 8 x 125 - 40</li> <li>- 2 nuts 8 x 125</li> <li>- 2 washers 9 x 20 - 4</li> </ul> </li> <li>- Facom extractor U53T</li> <li>- Cross piece U53S</li> </ul>			<ul style="list-style-type: none"> <li>- It is not necessary to use a press to refit the flange and the bell yoke.</li> <li>- After having repositioned all the parts, make up the same assembly as was used to extract the yoke and tighten the nut in the centre until the bearing and the yoke are fully emgaged.                Nut tightening torque 160 N.m (118 lbf.ft).</li> </ul>	
<ul style="list-style-type: none"> <li>- Grip the viscous coupling in a vice equipped with soft jaws.</li> <li>- Fit the tool (-)0606AY to the bell yoke to be extracted, using the bolts, washers and nuts described.</li> <li>- Remove the bell yoke securing nut.</li> <li>- Remove the yoke.</li> </ul>				
<ul style="list-style-type: none"> <li>- Fit extractor Facom U53T and cross piece U53S behind the flange and remove it.</li> </ul>				

J5

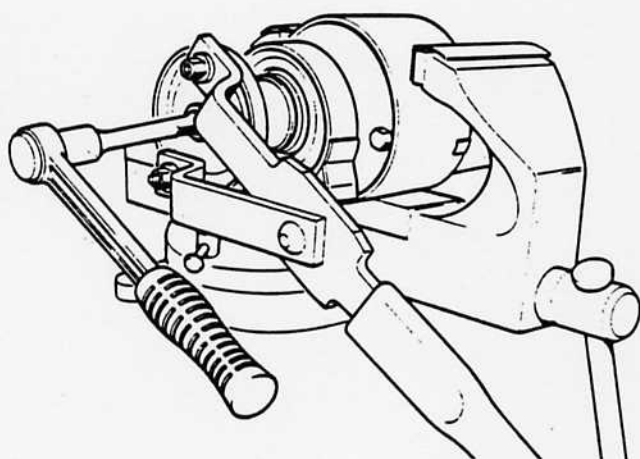
4 x4

4

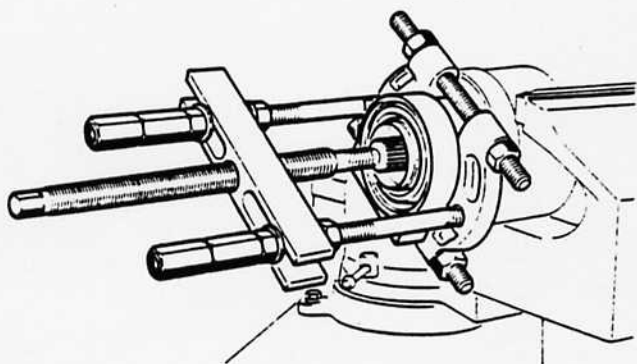
B5.003



23.11.88 CAR 3



23.11.88 CAR 1



23.11.88 CAR 2

# DRIVE SHAFT

## SPECIFICATIONS AND SPECIAL FEATURES

### SPECIFICATIONS :

- One ball type constant velocity joint at the wheel end.
- One spider joint at the gearbox end.

Left hand drive shaft Fig. I and right hand drive shaft for engine XUD9A

Right hand drive shaft Fig. II except for engine XUD9A  
(1) Vent bush.

### SPECIAL FEATURES :

Lubrication :

MoS2 grease

MOLYDAL      Reference 1495

DOW CORNING      Reference MOLYKOTE LONGTERM 2.

Tightening torque :

Hub nut (with faces and threads lubricated) :

m.daN

Nm

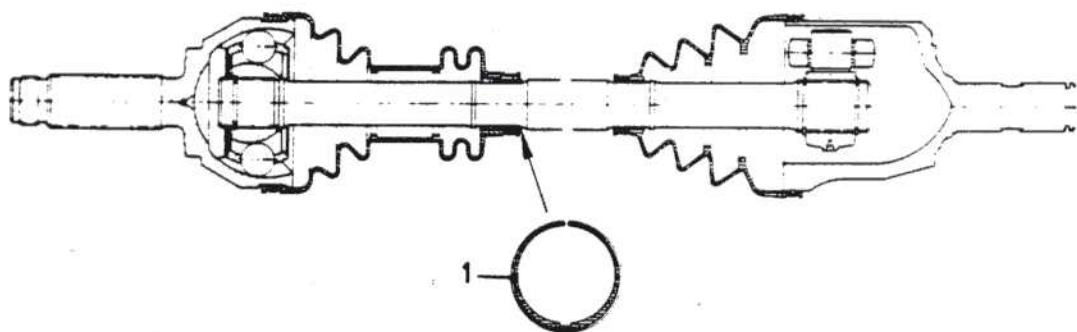
lbf ft

50

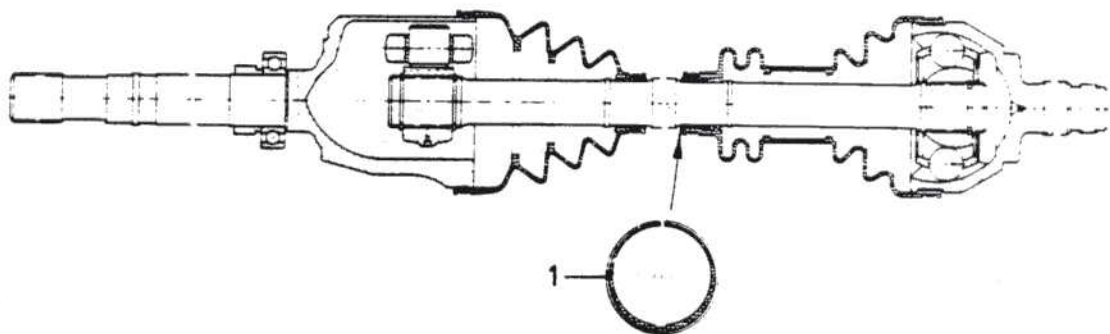
500

370

Damage to the drive shaft boots will cause all the grease to be lost and premature wear on the component parts.



UT. 37-2



UT. 37-1

## TIGHTENING TORQUE

	m.daN	Nm	lbf ft
Hub (drive shaft) nut	50	500	370

## REMOVING AND REFITTING THE PROTECTIVE HUB CAP

If the protective hub cap is to be re-used, the wheel will have to be removed so that the cap can be extracted using extractor U 53 T2 (for the operations involved in removing and refitting this plug see "Work on the rear hubs").

## REMOVING

From the front hubs : figs. I and II

Remove the protective hub cap which covers nut (1).

Unlock the hub nut (1) and remove it.

Raise the vehicle and support it. (so that the wheels are hanging free).

Remove the bolts (4) that secure the lower ball joint and the bolts (2) that secure the steering lever.

Tilt the entire suspension assembly (3) towards the outside.

Free the pivot ball joint by pushing arm (5) : fig. II, downwards.

Withdraw the drive shaft from the hub.

On the right hand side : Fig. III

Loosen the two nuts (6) and swing down the tie rods.

Remove the drive shaft, the "O" ring, the teflon ring and the dust seal.

On the left hand side : Figs. V and VI.

Extract the drive shaft from the differential housing with a panel beater's drift (the drive shaft is retained in the sun gear by a circlip).

Push the drift between one of the differential housing bolts and the drive shaft yoke as shown in fig. V, then strike it, in a sideways direction, as shown in fig. VI.

Withdraw the drive shaft from the final drive.

## REFITTING

Left hand side : Fig. IV.

Check that the "O" ring seal is in place on the shaft and fit a new circlip (13).

Ensure that the circlip enters fully into its location within the sun gear.

Right hand side : Fig. III

Insert the drive shaft into the support bearing at (7).

Fit to the shaft :

- the dust seal (1),
- the ring (11),
- the "O" ring (12).

Fit the bearing race (8) to the bearing support (7).

Swing the tie rods (9) through half a turn so that they grip the bearing outer track.

Tighten the self locking nuts (6) to a torque of 0.7 m.daN (7 Nm, 5 lbf ft).

On both front hubs : Fig. II

Pass the drive shaft through the hub (grease the area on which the dust seal will bear).

Engage the ball joint in the stub axle by pushing on the suspension arm.

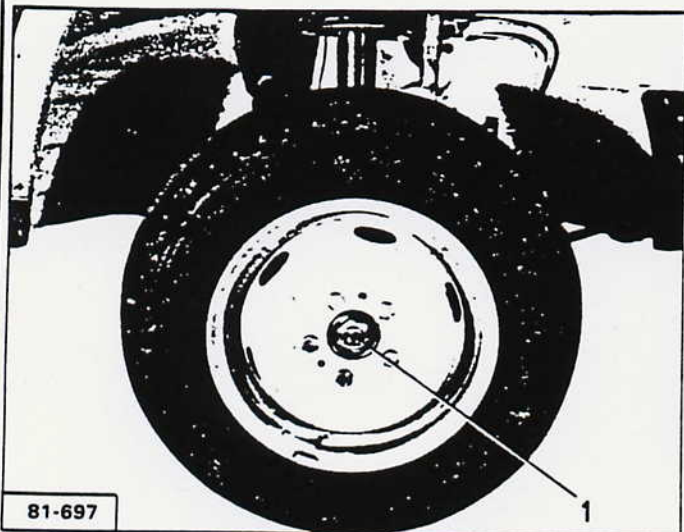
Fit the steering lever bolts (2) and the lower ball joint bolts (4).

Lower the vehicle on to its wheels : Fig. I.

Tighten and lock the hub nut (1). Its tightening torque is 50 m.daN\* (500 Nm, 370 lbf ft) with faces and threads greased) and it is to be locked at two points.

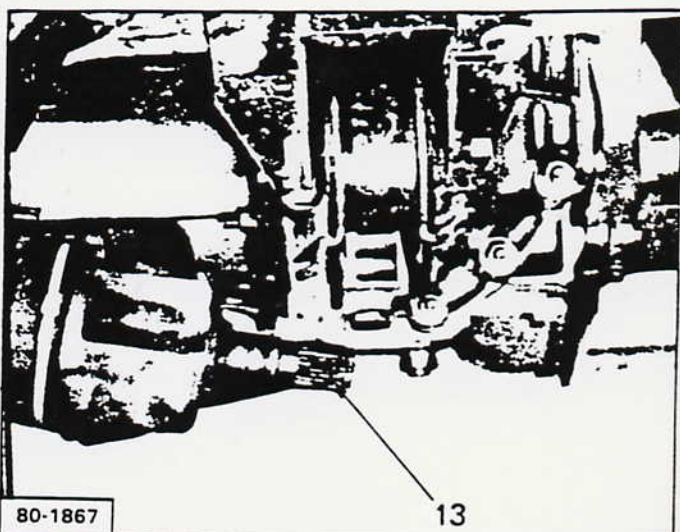
Fit the protective hub cap over the hub nut.

\*use FACOM S203 torque wrench and extension K 214.



81-697

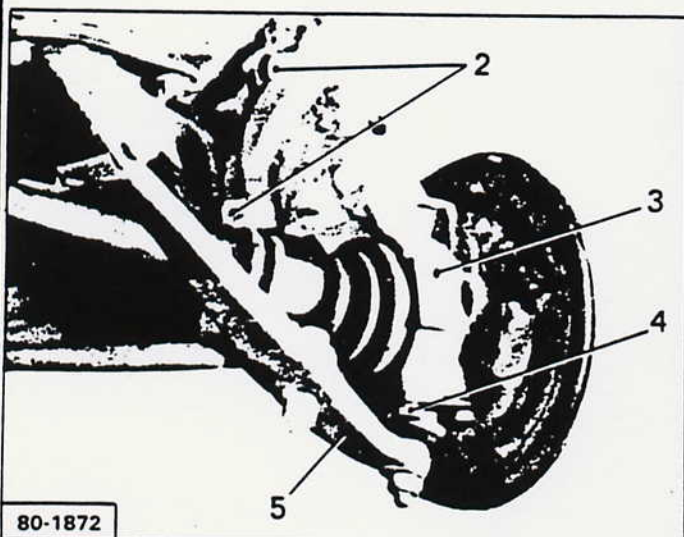
I



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13

IV



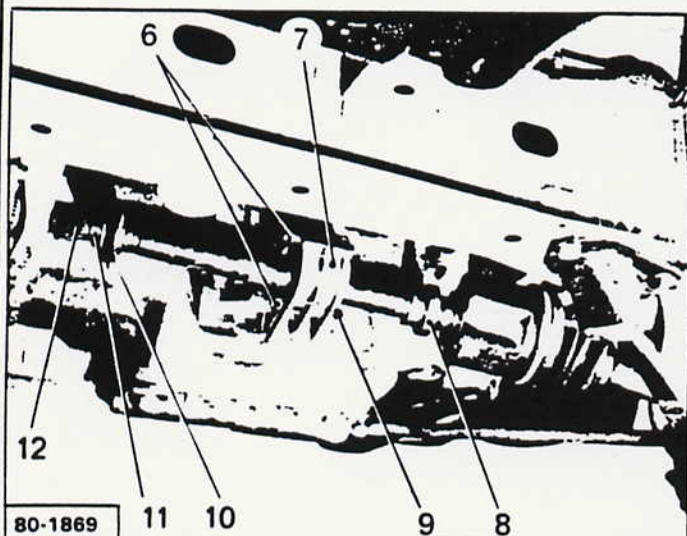
80-1872

II



81-691

V



80-1869

III



81-693

VI

## OVERHAULING A DRIVE SHAFT

Damage to the drive shaft boots will involve the loss of all the grease and premature wear on the component parts.

NOTE - All replacement boots supplied by the Parts Department are supplied with a sachet of grease.

NOTA - Only the final drive (inner) end of the shaft can be overhauled.

## Reassembly

Smear the grease over the ball type joint.

## DISMANTLING

Remove the clips (1), (3) and (5).

Remove the drive shaft drive end : figs. I, II and III.

Pull back the protective boot (4) on the drive end (6) and slide it towards the ball type joint end.

Remove the drive end (6) from the drive shaft assembly.

Remove :

- the rollers (7),
- the circlip (10),
- the spider (9),
- the circlip (8),
- the boots (4) and (2). (Take care with the vent bush : move it aside).

## CLEAN ALL THE PARTS

(Remove the old grease from the ball type wiping it with a clean cloth).

Ball joint type end :

Smear the grease over the ball type joint and the protective boot (2).

Fit :

- the boot over the ball type joint,
- the vent bush at "a".

Fit the "LIGAREX" clips (1) and (3).

At the drive end :

Fit :

- the circlip (8),
- the spider (9),
- the circlip (10).

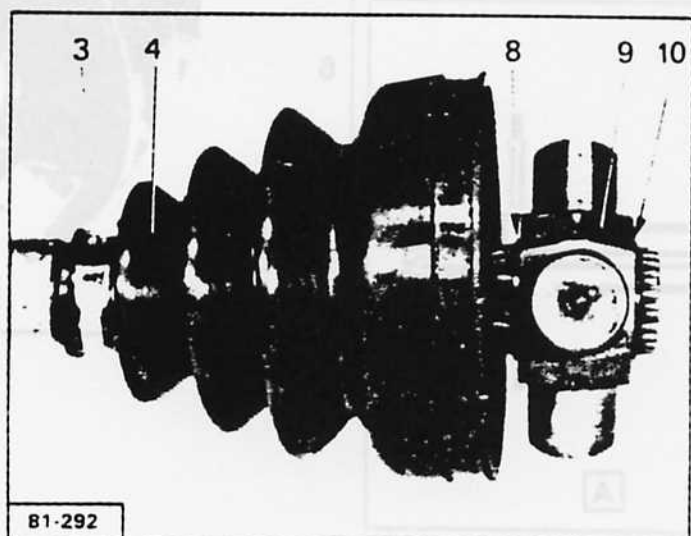
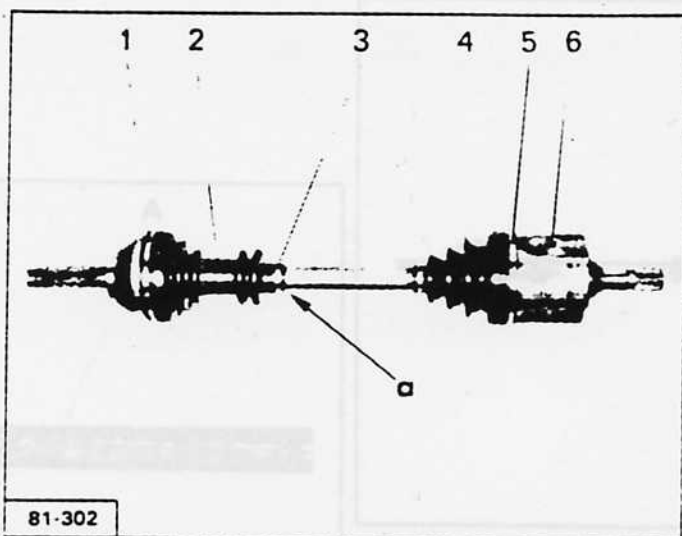
Coat the rollers (7) with grease and fit them to spider (9).

Spread grease throughout the drive end (6) and inside the protective boot (4).

Fit :

- the drive end (6),
- the boot (4) over the drive end.

Fit the "LIGAREX" clips (3) and (5).



## REPLACING THE GUIDE BEARING (right hand drive shaft)

## REMOVING

Removing the drive shaft drive end : fig. I

Remove the clip (2) and take off the drive end (1).

Removing the circlip (3) and bearing (4) : figs. II and III.

Carry out these operations with the extractor  
[A] FACOM U53T2 fitted with its extensions.

CAREFULLY CLEAN ALL THE PARTS.

## REASSEMBLY

Fitting the bearing (4) : fig. IV.

Fit the bearing using the tube A (i.d. = 36 mm, length = 450 mm).

Fitting the circlip (3) :

Use tube A.

Coat the roller (5) with grease and fit them to the spider : fig. V.

Spread the grease contained in the sachet inside the drive end and in the protective boot (6). (the grease is supplied with all new boots).

Fit the drive end :

Fit the "LIGAREX" clip (2).