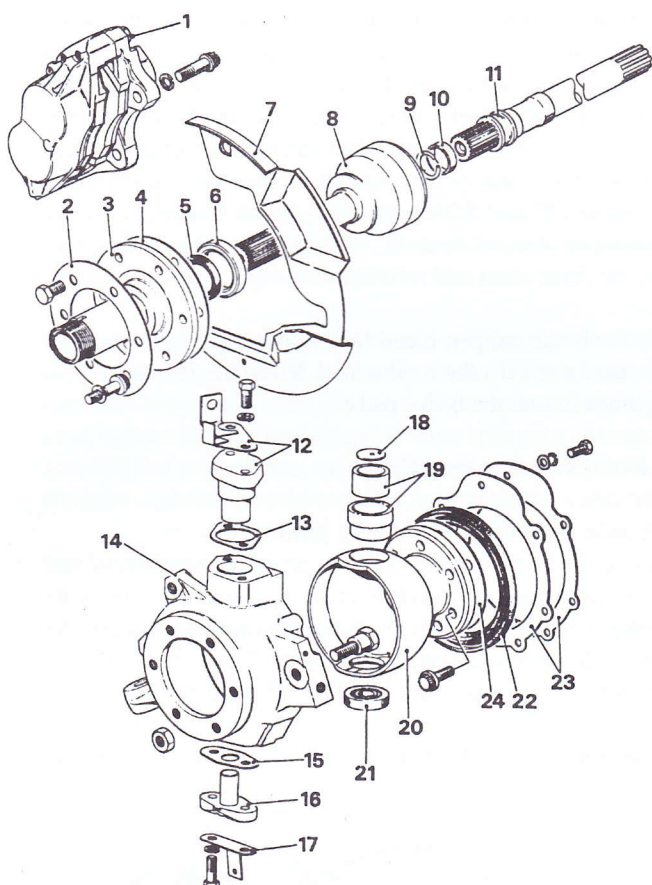


mallet to knock the constant velocity joint off the shaft (**FIG 7:17**). Take the circlip and collar off the axle shaft. Mark the relative positions of the three parts of the constant velocity joint, inner race, cage and outer race, for re-assembly, then tilt and swivel the cage and inner race to remove the balls (**FIG 7:18**). Swivel the cage sideways and turn it so that two opposite apertures coincide with the outer cage lands and it can be withdrawn. Then similarly turn the inner race at right angles in the cage and take it out. Clean and inspect all the parts: evident wear or damage to any of the balls or bearing surfaces will necessitate the renewal of the joint assembly.

If sound, re-assemble the joint, lubricating it with a recommended EP90 oil. Check that the end-float of the complete joint does not exceed 0.025in (0.64mm). Fit the collar and a new circlip to the axle shaft. Locate the constant velocity joint on the splines and drive it home with a soft mallet.



- | | |
|-------------------------------------|--------------------------------|
| 1 Brake caliper. | 13 Shim. |
| 2 Mud shield. | 14 Swivel pin housing. |
| 3 Stub axle. | 15 Washer. |
| 4 Gasket. | 16 Lower swivel pin. |
| 5 Intermediate seal. | 17 Brake shield bracket. |
| 6 Bronze bush. | 18 Thrust disc. |
| 7 Brake shield. | 19 Railko bush and housing. |
| 8 Constant velocity joint. | 20 Swivel pin bearing housing. |
| 9 Circlip. | 21 Lower taper bearing. |
| 10 Collar. | 22 Oil seal. |
| 11 Axle shaft. | 23 Gasket and retainer plate. |
| 12 Top swivel pin and hose bracket. | 24 Gasket. |

FIG 7:16 Components of the front swivel housing and drive shaft assembly

Stub axle oil seal and bush:

Removal of the bronze bush and intermediate oil seal from inside the stub axle requires a suitable extractor. Land Rover tool is 18G 284AAH used with a slide hammer. Check that the puller fingers locate behind the oil seal so that seal and bush are extracted together from the inboard end of the stub axle. Lubricate a new seal with EP90 oil and press it in open side first with a suitable tube. Then press the bush in up to the shoulder with a suitable tube or drift.

Remove swivel assembly:

Take off the brake shield which is held by a nut and bolt at the bottom front and a bolt behind. Disconnect the track rod from the swivel housing, also the drag link if applicable: use a ball joint separator if necessary, do not hammer the ball pins.

Take out the seven bolts holding the swivel pin housing retainer plate and separate the plate, gasket and oil seal from the swivel pin housing (**FIG 7:16**). The gasket can be scrapped at this stage, but the retainer plate and oil seal will remain loosely in place until the swivel pin bearing housing (the inner, spherical part of the assembly) is removed.

Take out the two bolts holding the lower swivel pin and remove the brake shield bracket. Remove the lower swivel pin and gasket by tapping the lug. Take out the top swivel pin bolts, remove the brake hose bracket, then remove the top swivel pin and shim or shims. Take off the swivel pin housing and catch the lower taper bearing. Unbolt the swivel pin bearing housing from the axle (seven bolts) and take it off. Remove the swivel pin housing retainer and oil seal.

Inspection and overhaul:

Prise out the oil seal from the back of the swivel pin bearing housing, drift out the lower swivel bearing track and press out the Railko bush and housing from the upper swivel. Clean and inspect the two parts of the housing: if the articulating surfaces are worn or pitted, or if there is other evident wear or damage, renew the housing. Take out the drain and filler-level plugs and the lock stop bolt and nut if the swivel pin housing is to be renewed. Renew the lower taper bearing and the upper Railko bush and thrust disc if worn. Renew all seals and gaskets.

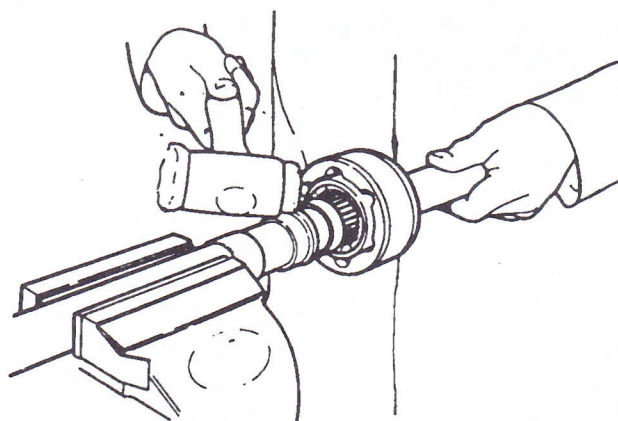


FIG 7:17 Using a soft-faced mallet to knock the constant velocity joint off the axle shaft