

**41—100 Removal and installation of propeller shaft intermediate bearing, replacement of radial ball bearing**

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A. Model 107, 114, 115, 116, 123, 126

**Lubricants**

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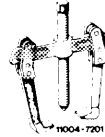
Clamp connection refer to specifications for service products page 266.2

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**Special tools**

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Two-arm puller



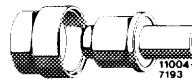
000 589 88 33 00

Puller arms (2 each)



116 589 03 33 00

Remover and installer for radial ball bearing



116 589 09 43 00

Mandrel for assembly of propeller shaft intermediate bearing and protective cap



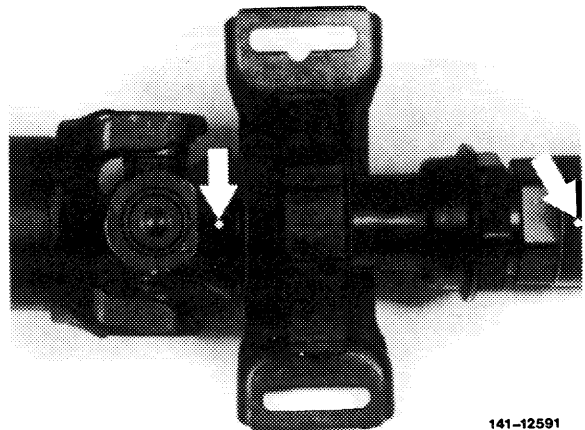
126 589 03 15 00

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**Note**

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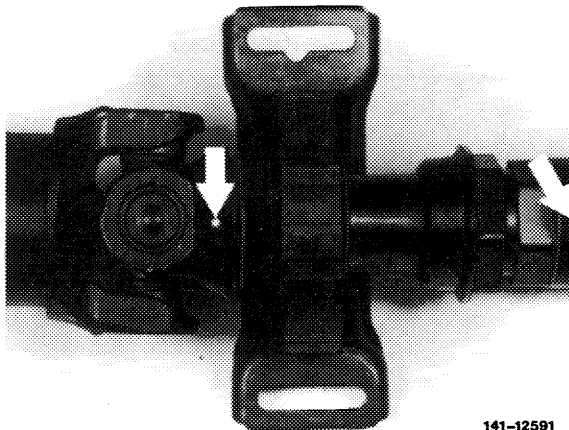
The components of propeller shafts are individually pre-balanced at the factory. To eliminate any residual unbalance which might still remain, re-balance the complete propeller shaft including the companion plates. For this reason, when disassembling the complete propeller shaft (e.g. when changing propeller shaft intermediate bearing) **mark individual components in relation to each other** (if no marks are in place) and reassemble to original shape.



141-12591

## Removal of propeller shaft intermediate bearing

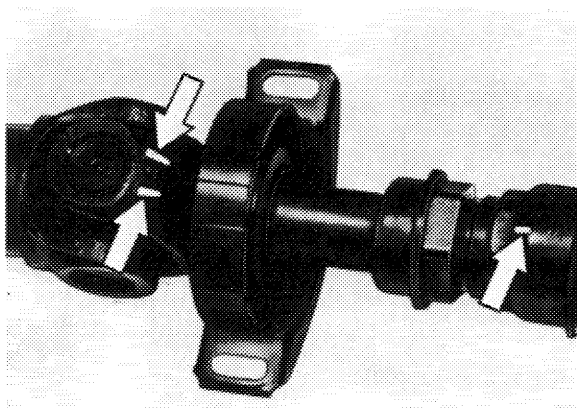
1 On vehicles up to July 1982, mark the individual propeller shaft components in relation to each other (arrows).



141-12591

2 On vehicles starting August 1982 the front and the rear propeller shaft are marked in relation to each other (arrows).

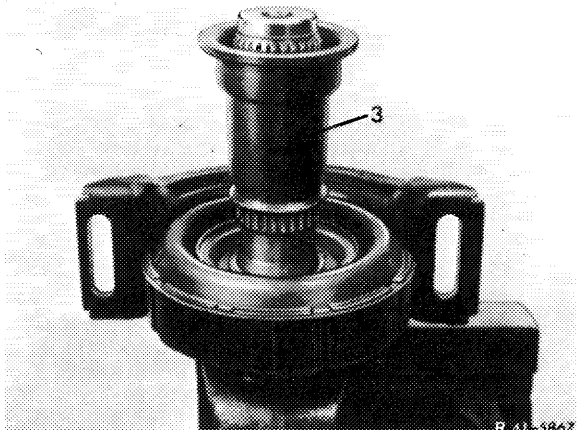
**Note:** The identification has been partially already in place on propeller shafts prior to August 1982, but has not been taken into consideration during assembly. For this reason, propeller shafts on which the marking is not in agreement, must be identified prior to removal and the two parts must be plugged together again following this identification.



141-23660

3 Separate front and rear propeller shaft on clamping connection.

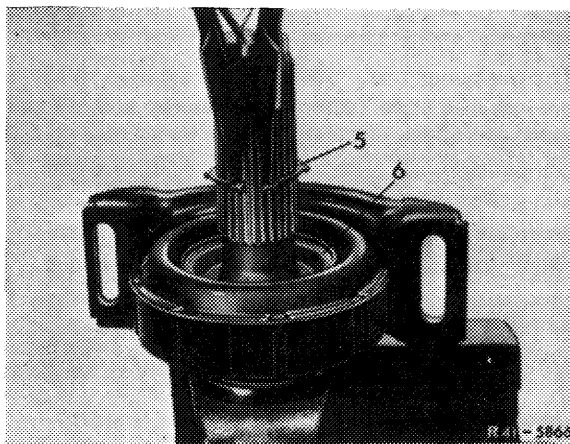
4 Pull off rubber sleeve (3) over splining.



R 41-3867

Rubber mount with outer V-fold

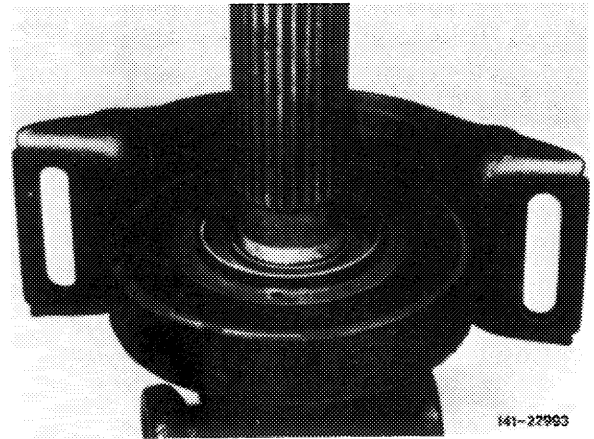
5 On vehicles up to July 1982, remove locking ring (5) from groove and take off together with front protective cap (6).



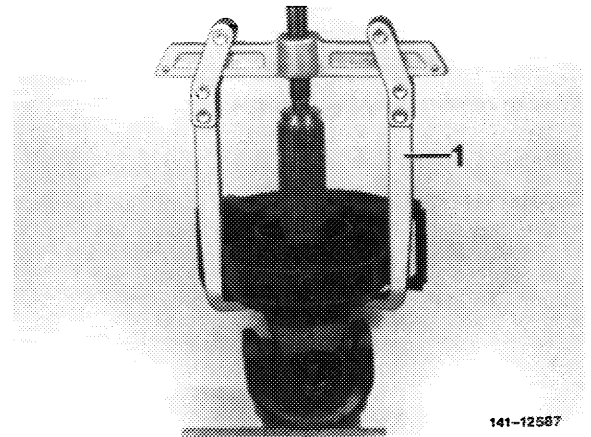
R 41-3868

Rubber mount with inner V-fold

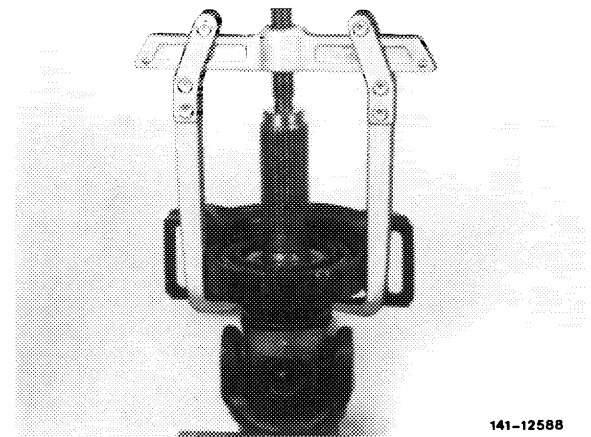
6 Vehicles starting August 1982 are not provided with a locking ring and for this reason the radial ball bearing is secured by the protective cap.



7 On vehicles up to July 1982, pull rubber mount and radial ball bearing together from yoke by means of two-arm puller (1).

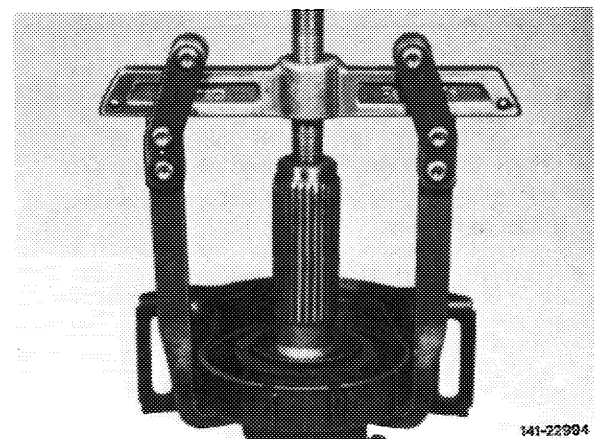


Rubber mount with outer V-fold

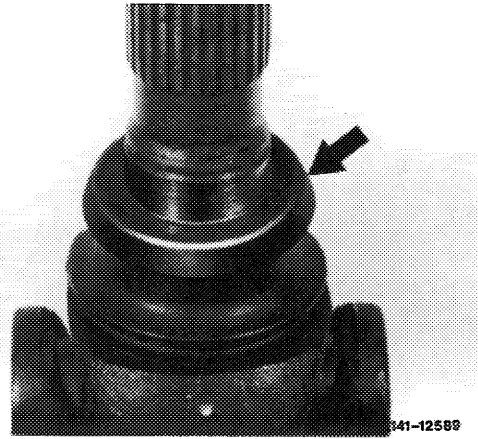


Rubber mount with inner V-fold

8 On vehicles starting August 1982, pull rubber mount, radial ball bearing and protective cap together from yoke by means of two-arm puller.



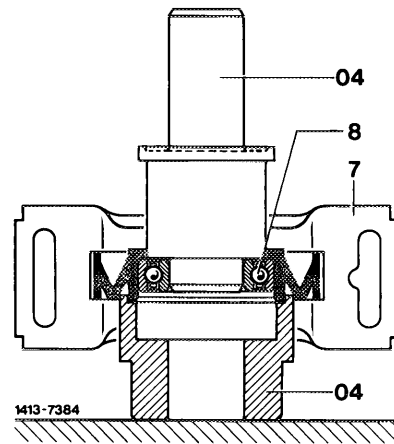
9 Remove rear protective cap on universal joint fork (arrow), on models 107, 116, 123 and 126 only).



### Replacement of radial ball bearing

10 Press radial ball bearing (8) out of rubber mount (7) with remover and installer (04).

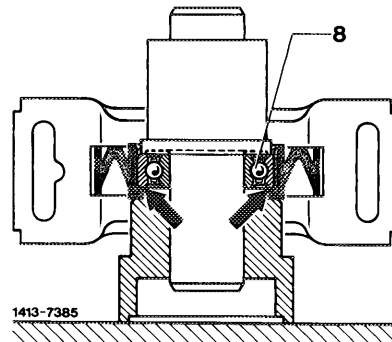
11 Check rubber mount and radial ball bearing for damage and replace, if required.



12 Slowly press radial ball bearing (8) in rubberized bearing seat up to contact surface (arrows).

### Attention!

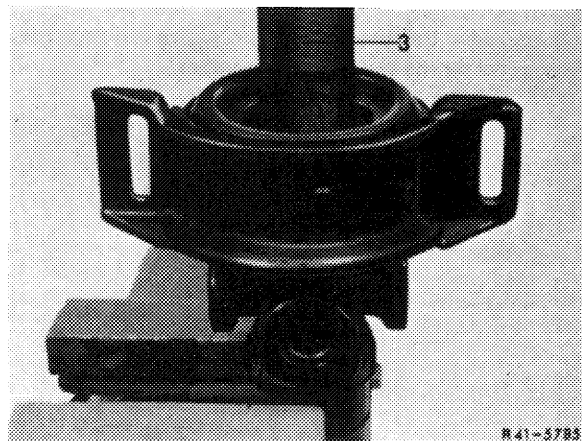
Watch out for good seat of radial ball bearing.



### Installation of propeller shaft intermediate bearing

13 Insert rear protective cap (on models 107, 116, 123 and 126 only).

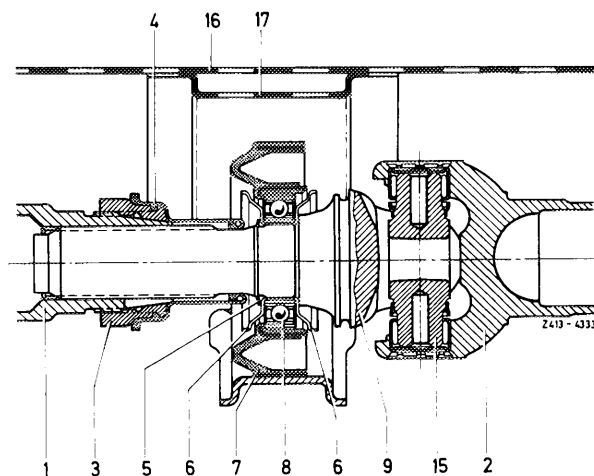
14 Press rubber mount with pressing-on sleeve (3) on yoke while paying attention to correct location of V-fold as follows:



On models 107 and 116 of 1st version the V-fold of rubber mount should point in driving direction.

Models 107, 116

- |  |  |
|--|--|
| 1 Front propeller shaft                | 8 Radial ball bearing                      |
| 2 Rear propeller shaft                 | 9 Yoke                                     |
| 3 Clamping nut                         | 15 Spider with needle bearing and bushings |
| 4 Rubber sleeve                        | 16 Frame floor                             |
| 5 Locking ring                         | 17 Propeller shaft tunnel                  |
| 6 Protective cap                       |  |
| 7 Propeller shaft intermediate bearing |  |

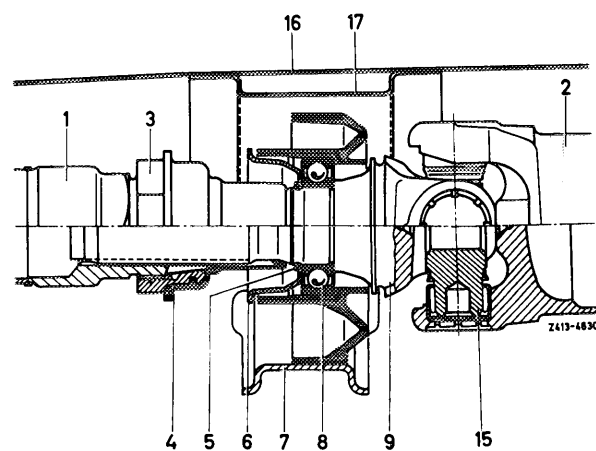


On models 114 and 115 with two-piece propeller shaft the V-fold should point toward the rear opposite to driving direction.

On three-piece propeller shaft the V-fold of front rubber mount should point in driving direction and that of the rear rubber mount opposite to the driving direction.

Models 114, 115

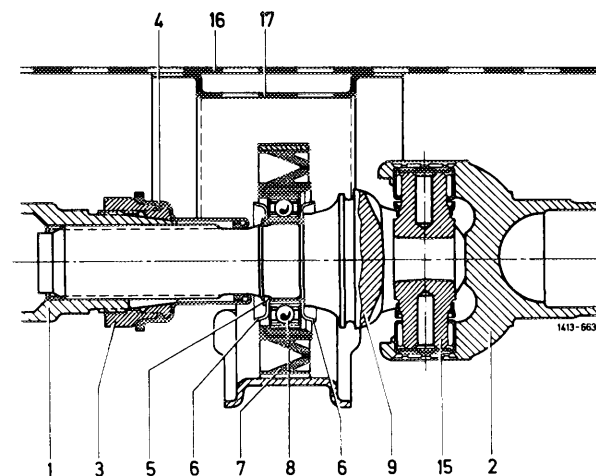
- |  |  |
|--|--|
| 1 Front propeller shaft                | 8 Radial ball bearing                      |
| 2 Rear propeller shaft                 | 9 Yoke                                     |
| 3 Clamping nut                         | 15 Spider with needle bearing and bushings |
| 4 Rubber sleeve                        | 16 Frame floor                             |
| 5 Locking ring                         | 17 Propeller shaft tunnel                  |
| 6 Protective cap                       |  |
| 7 Propeller shaft intermediate bearing |  |



Models 107, 116 of 2nd version, 123 and 126 have a rubber mount with inner V-fold. Install rubber mount in such a manner that inner V-fold points toward universal joint.

Models 107, 116 (2nd version), 123 and 126

- |  |   |
|--|---|
| 1 Front propeller shaft                | 8 Radial ball bearing                     |
| 2 Rear propeller shaft                 | 9 Yoke                                    |
| 3 Clamping nut                         | 15 Spider with needle bearing and bushing |
| 4 Rubber sleeve                        | 16 Frame floor                            |
| 5 Locking ring                         | 17 Propeller shaft tunnel                 |
| 6 Protective cap                       |   |
| 7 Propeller shaft intermediate bearing |   |

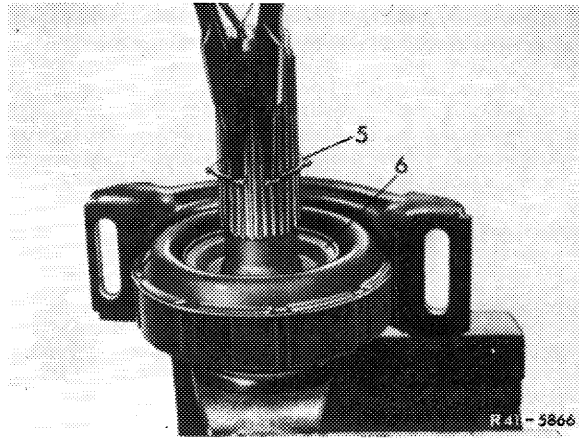


15 Plug front protective cap on vehicles up to July 1982.

16 Insert locking ring (5) into groove of yoke in such a manner that cap rests tightly against inner bearing race.

**Attention!**

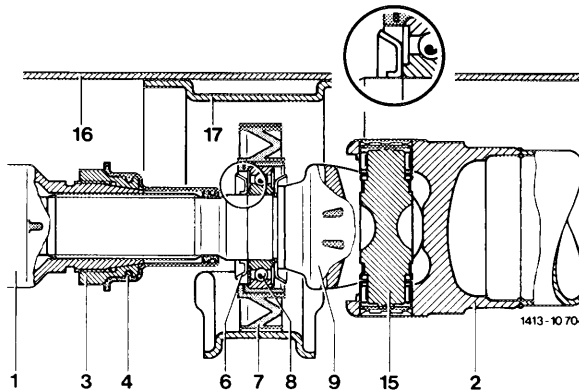
The inside crown of locking ring is pointing toward the cap.



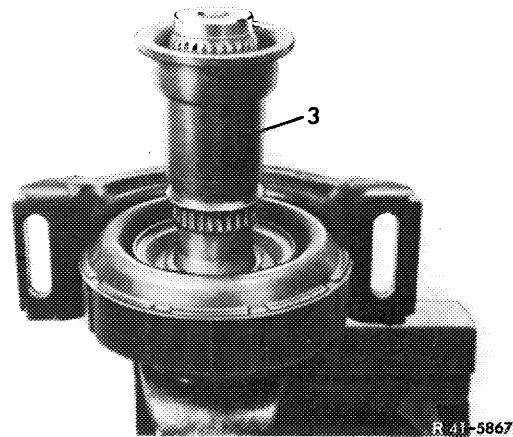
17 On vehicles starting August 1982, mount self-locking protective cap with pressing-on sleeve while making sure that the protective cap is resting well against radial ball bearing (cutout in Fig.).

**Attention!**

Use pressed-on protective cap only once.

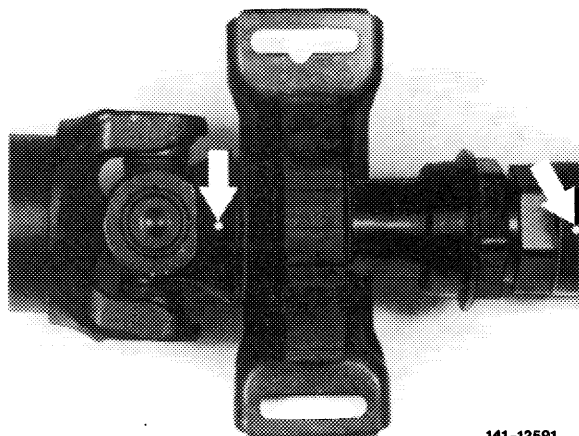


18 Pull rubber sleeve (3) over splining of yoke. Make sure that the sleeve is correctly seated at small diameter.

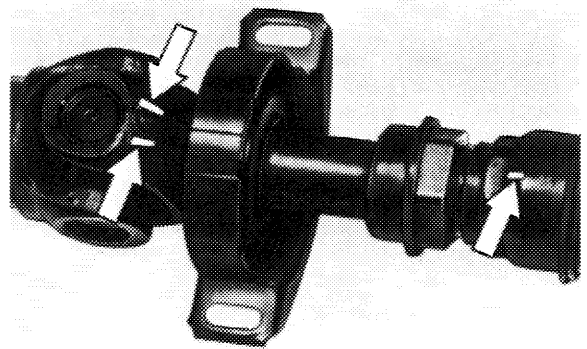


19 Coat splining with specified grease.

20 On vehicles up to July 1982, plug front and rear propeller shaft together as shown on drawing.



21 On vehicles starting August 1982 the identification is located on front and rear propeller shaft. The front shaft has one hump and the yoke of the rear shaft has two arrow-like humps (arrows). The hump of the front shaft should be located between the two arrows on yoke (arrows).



141-23660