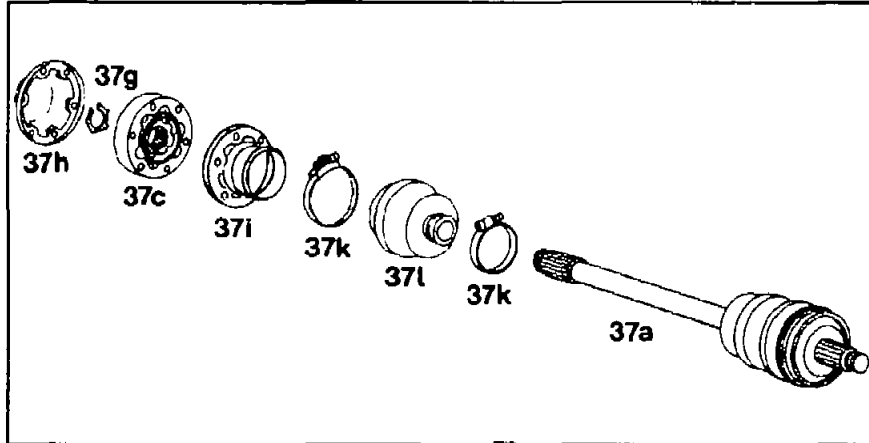


35-660 Replacement of rubber cup seal on rear axle shaft

Preceding work:
Removal and installation of rear axle shaft (35-620).

Operation no. of operation texts and work units
or standard texts and flat rates:
35-0170, 35-0171



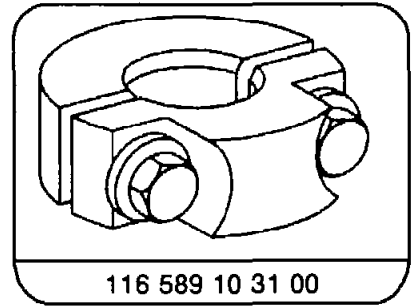
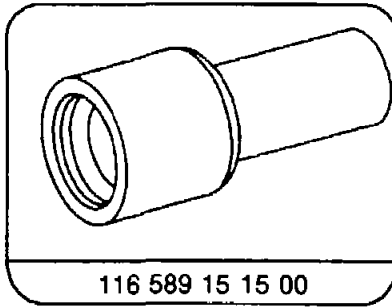
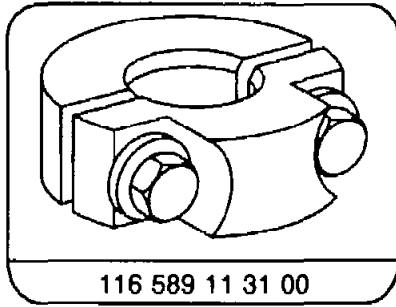
P35-0066-33

Hose clamp (37k)	Remove, install.
Closing plate (37h) and cup seal cap (37i)	Remove, install and coat sealing surface with sealing compound (numbers 3-4).
Circlip (37g)	Remove, replace and install (number 5).
Joint race (37c)	Press off, clean and press on (number 6). Removal and pressing-on tool 116 589 15 15 00, clamping jaws 116 589 10 31 00 or 116 589 11 31 00.
Rubber cup seal (37l)	Remove, install, assembly sleeve 115 589 01 63 00 (number 8).
Inner joint race (37c)	Check for wear, dismantle and assemble (numbers 9-15).

MB grease fill - grease in g

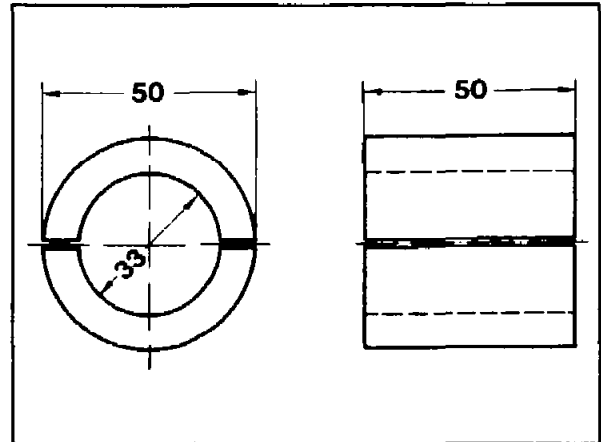
With pitch circle dia. of inner joint (mm)	86	94	102
Internal grease fill	100	120	150
External grease fill	100	120	120

Special tools



Shop-made tool

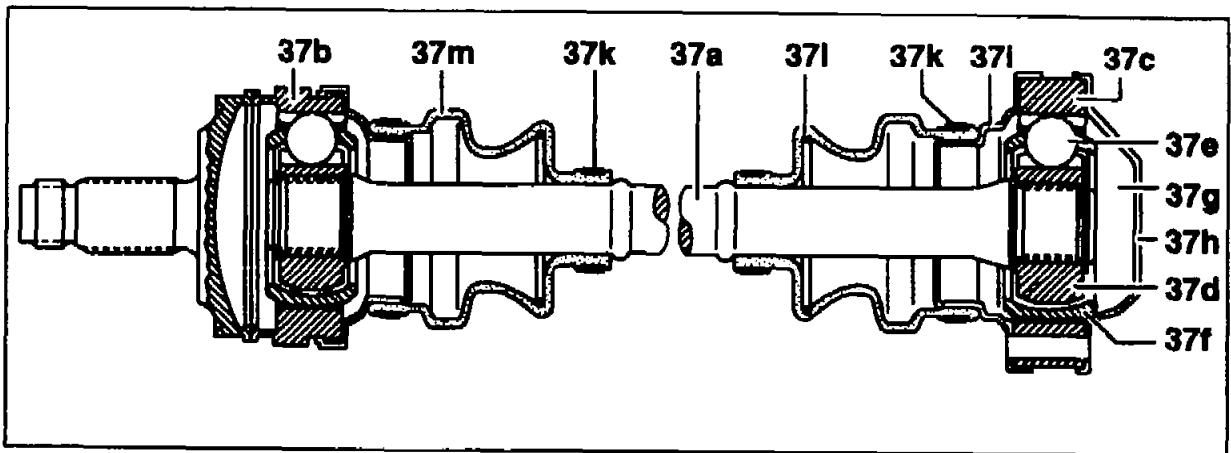
Split bearing shells for pressing off the annular joint.



P35-0067-13

Note

The rubber cup seal of the rear axle shaft can only be replaced at the outer joint (37b) after dismantling the inner joint, as the outer joint cannot be dismantled.



P35-0068-53

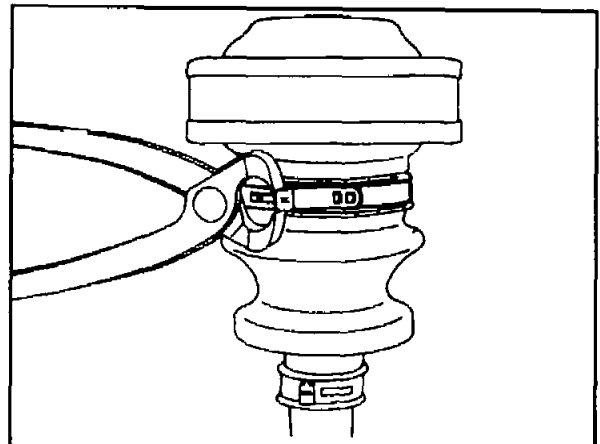
37a	Rear axle shaft	37g	Circlip
37b	Outer joint race	37h	Closing plate
37c	Inner joint race	37i	Cup seal cap
37d	Joint hub	37k	Hose clamp
37e	Ball	37l	Rubber cup seal
37f	Ball cage		

Removal, installation

1 Open hose clamps using pincers on the push-out tube and compress.

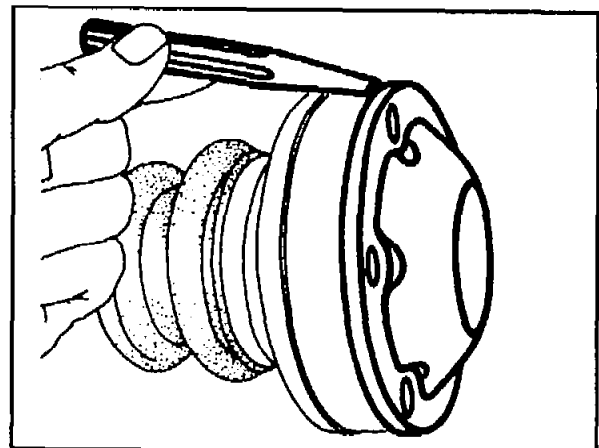
Installation note

Slide cup seal up to the bead located on the rear axle shaft or cup seal cap and fasten hose clamp. Ensure correct seating at the hose clamp.



P35-2130-13

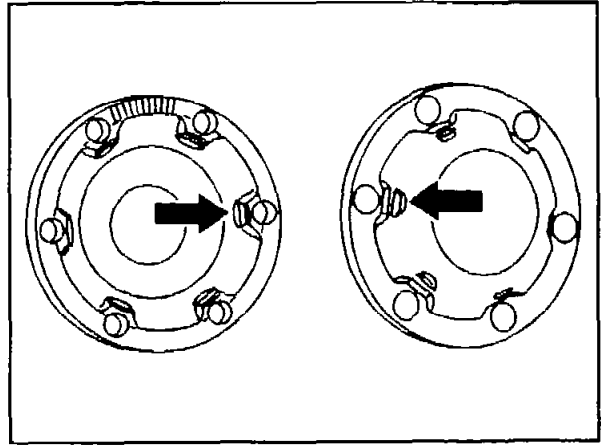
2 Remove closing plate and cup seal cap from joint race.



P35-5713-13

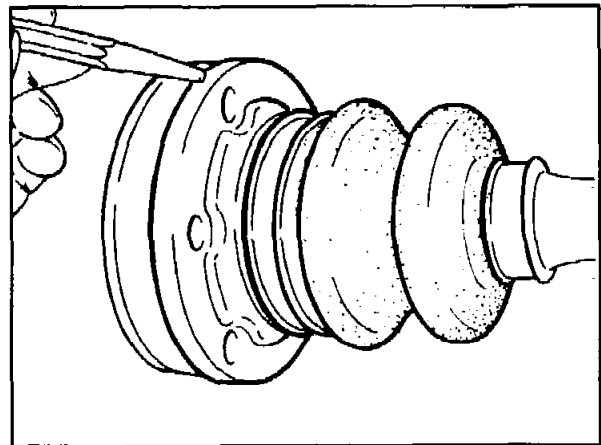
Note

As of 04/91 the rear axle shafts and connection flanges have a centering feature (arrows). Centered connection flanges can be installed with uncentered rear axle shafts (closing plate). However, rear axle shafts **with** centering feature cannot be combined with connection flanges **without** centering feature. In such cases a closing plate without centering feature must be installed if required and the grease quantity taken from the installed closing plate.



P35-5227-13

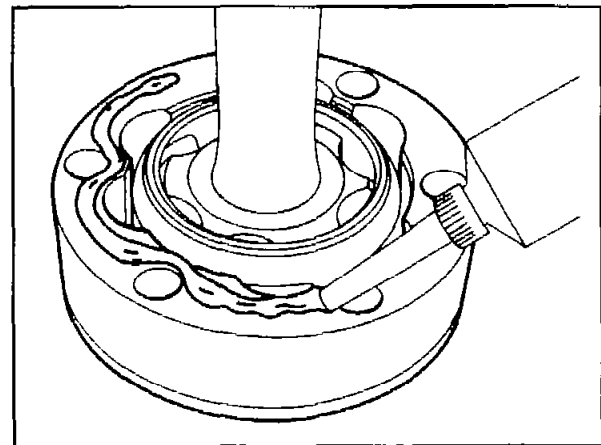
- 3 Push back rubber cup seal and cup seal cap on the rear axle shaft. Clean grease off joint.



P35-2131-13

Installation note

Coat sealing surface of annular joint of closing plate and cup seal cap with sealing compound (e.g. Curil, Loctite 574 or Hylomar) and install. First install the closing plate after packing with grease. Only fill annular joint with the specified lubricant in the quantity specified. (For grease fill, refer to Technical Data).

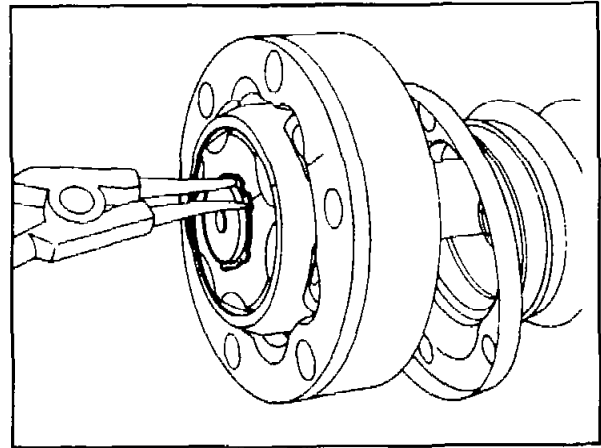


P35-2132-13

4 Remove circlip.

Installation note

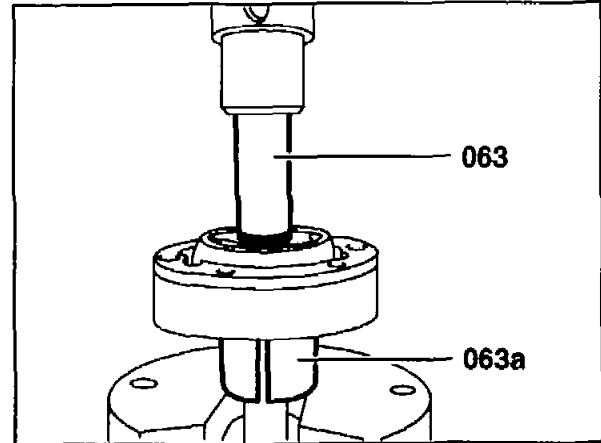
Replace circlip, ensuring correct seating.



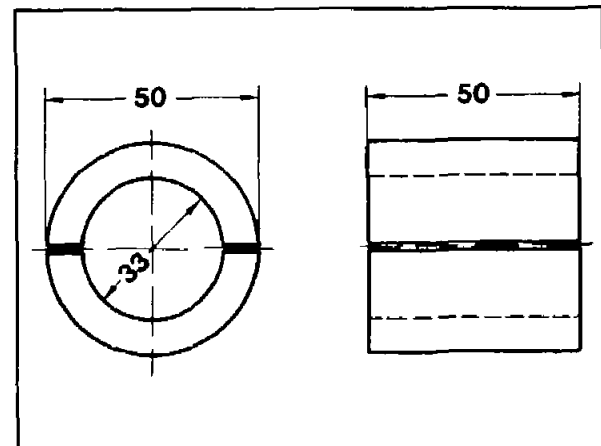
P35-2133-13

5 Press annular joint off rear axle shaft. To do this, use the two shop-made split bearing shells (063a) as well as the pressing on/off tool (063) 116 589 15 15 00.

6 Clean annular joint.



P35-2134-13

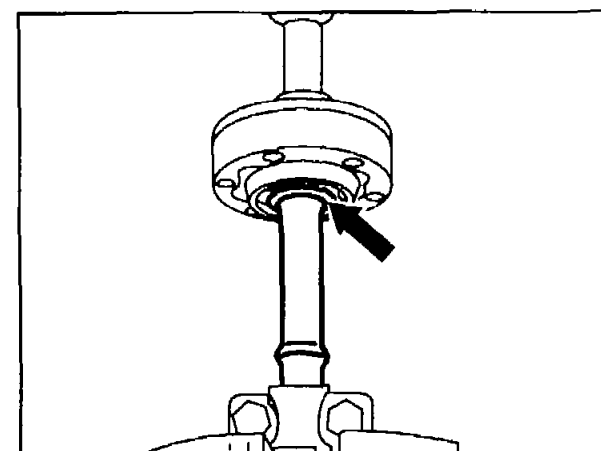


Shop-made split bearing shells

P35-0067-13

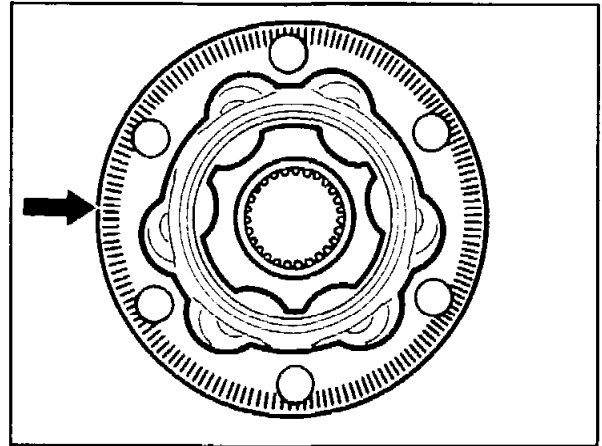
Installation note

Place clamping jaws on the cup seal collar of the rear axle shaft and using the press-on/press-off tool 116 589 15 15 00 press on up to the contact face of the rear axle shaft (arrow). Clamping jaws for 25 mm dia. rear axle shafts, 116 589 11 31 00 and for 32 mm dia., 116 589 10 31 00.



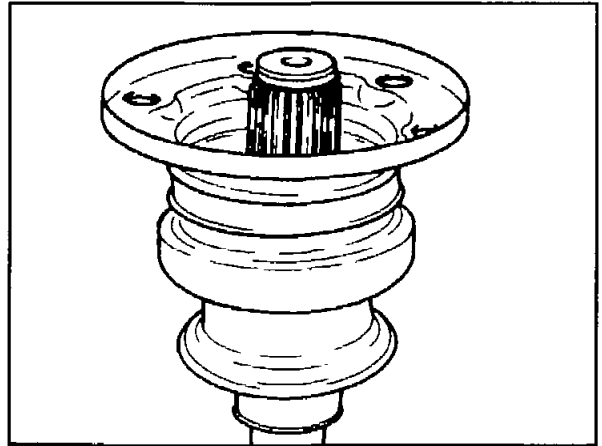
P35-2135-13

7 Press annular joint with knurled section (arrow) on circumference of joint race so that knurled section points towards closing plate.



P35-5162-13A

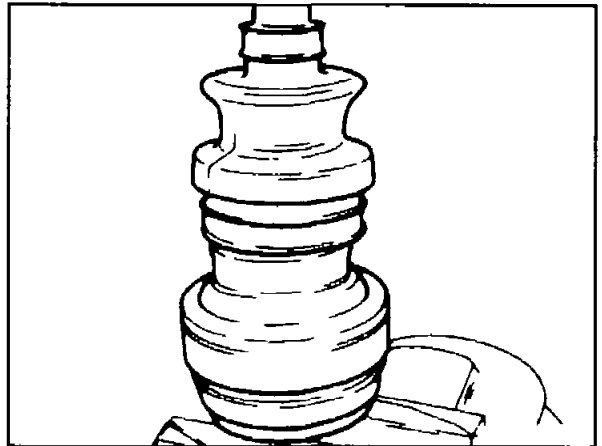
8 Pull cup seal cap and rubber cup seal off of rear axle shaft.



P35-2136-13

Note

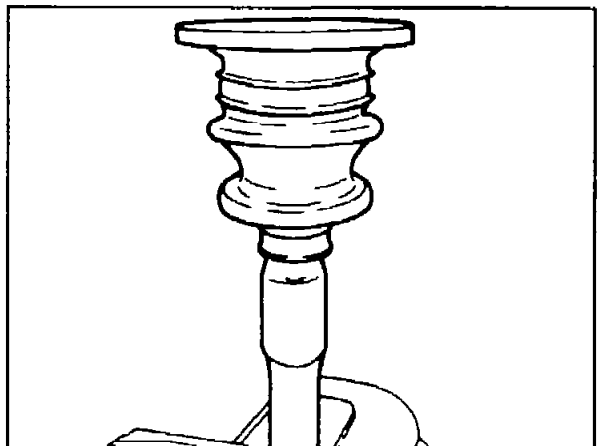
After loosening the hose clamps, the second rubber cup seal can now be withdrawn over the dismantled side of the rear axle shaft, if required. In the process, ensure that none of the grease fill is lost and no dirt can enter the inside of the joint. Wipe off any grease remaining in the inside of the rubber cup seal and pack into the annular joint.



P35-2137-13

Installation note

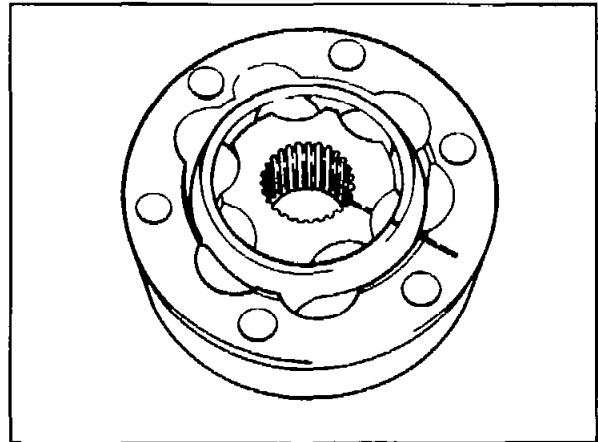
If assembly sleeve 115 589 01 63 00 is still present position it on the splined shaft section of the rear axle shaft. Slide rubber cup seal and cup seal cap onto rear axle shaft.



P35-2138-13

9 Strip down the joint to check the annular joint for wear.

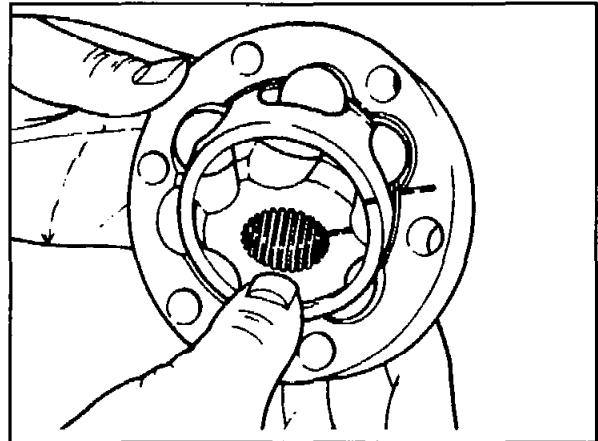
10 Prior to dismantling, mark the position of the joint race, joint hub and ball cage in relation to each other using an electric scribe or whetstone.



P35-2139-13

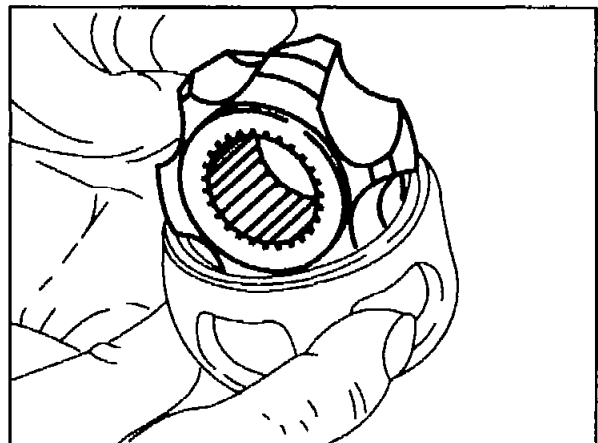
11 Swivel joint hub and ball cage and remove balls individually in sequence.

12 Remove joint hub and ball cage from joint race.



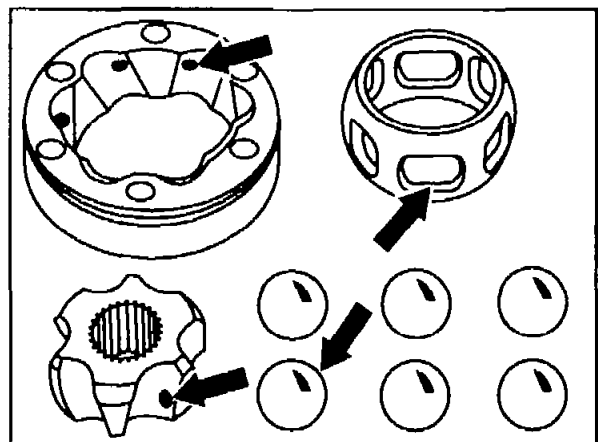
P35-2140-13

13 Swivel joint hub through 90° to the ball cage and remove.



P35-2141-13

14 Check ball tracks of joint race, joint hub, ball cage and balls for pitting and signs of wear (arrows). If these parts exhibit evidence of wear, the complete annular joint is to be replaced. Smoothed sections and evidence of operation which are caused by the balls do not justify replacement of the annular joint.



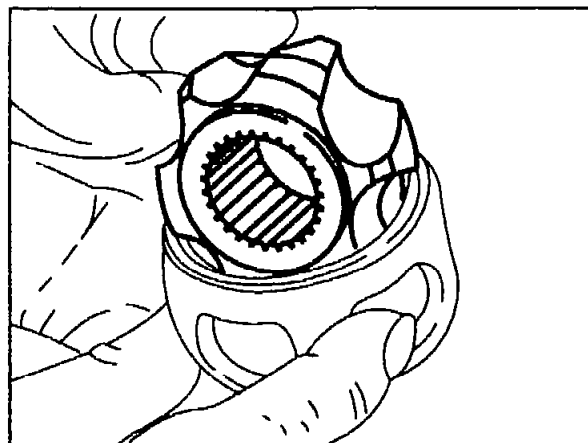
P35-2142-13

Note

A repair kit with all the required parts is available for replacing the cup seal. If a second cup seal is required for the same rear axle shaft, an additional rubber cup seal is to be used for this.

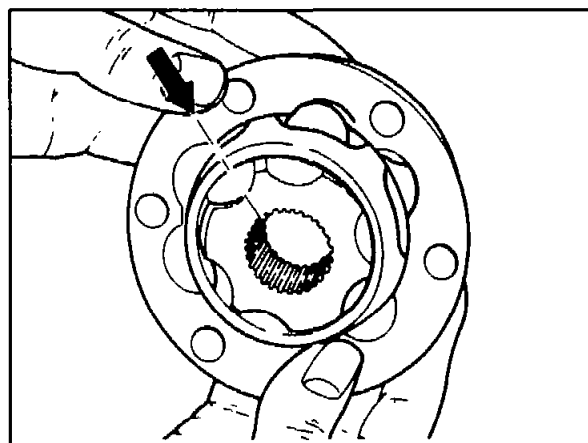
Installation note

Position joint hub at right angles to ball cage and insert. Insert one ball and note marking applied to the joint hub and ball cage.



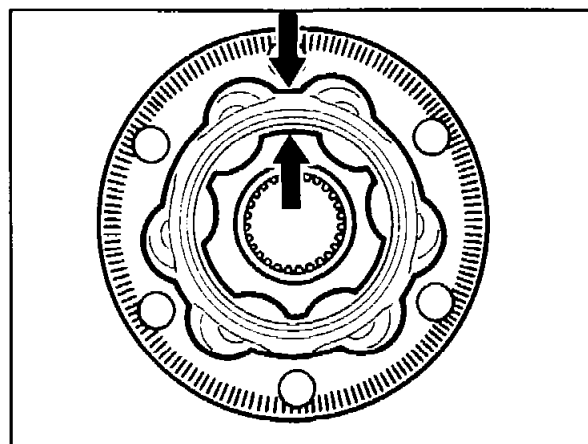
P35-2141-13

Install joint hub with ball cage and ball in the joint race and note the marking (arrow).



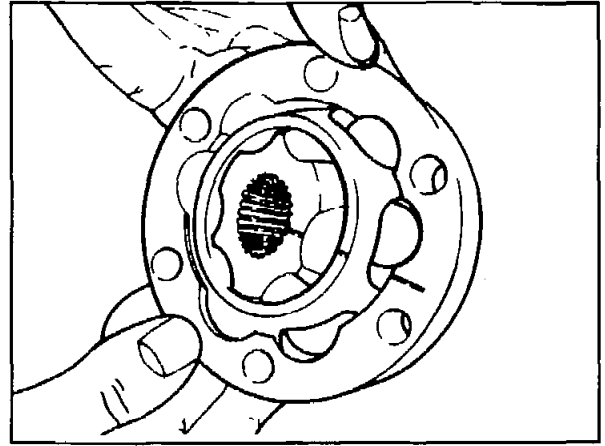
P35-2143-13

If the markings have not been applied, install joint race so that the narrow side of the ball track always points to the wide side of the joint hub, or vice versa.



P35-5162-13

Angle the joint hub and ball cage until one ball can be installed after another.



Sixth ball installed

P35-2144-13

15 Assemble in reverse sequence.