

41-050 Removal and installation of propeller shaft

A. Models 107, 116

Lubricant

Centering sleeve, per sleeve approx. 6 g

refer to Specifications for Service Products, page 266.2

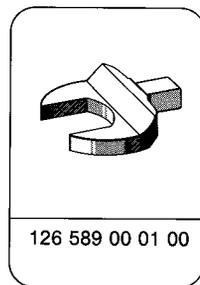
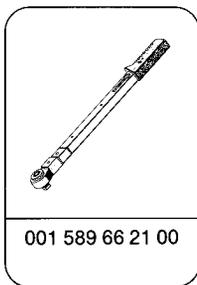
Clamp connection

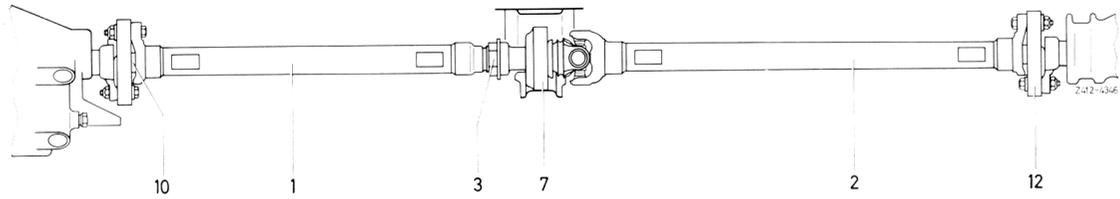
refer to Specifications for Service Products, page 266.2

Tightening torques

	Nm	
Self-locking hex. nuts for fastening flexible couplings	M 10	45
	M 12	65
Hex. head screws on propeller shaft intermediate bearing		25
Propeller shaft clamping nut		30 – 40
Hex. head screws for fastening tunnel closing plate to frame floor	M8	25
	M 10	45
Hex. head screws for fastening engine mount to tunnel closing plate		25

Special tools





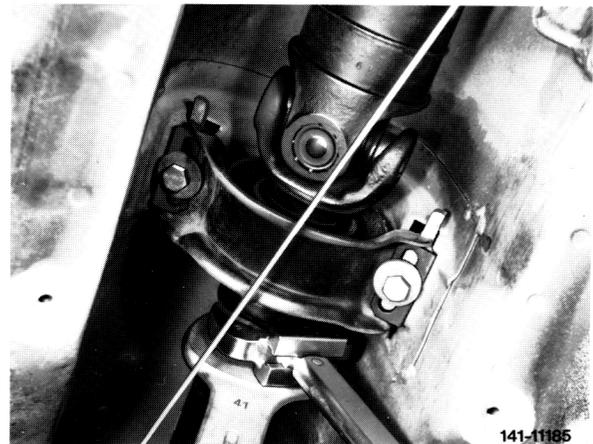
- | | | | |
|---|------------------------------|----|--------------------------------------|
| 1 | Front propeller shaft | 7 | Propeller shaft intermediate bearing |
| 2 | Rear propeller shaft | 10 | Centering sleeve |
| 3 | Propeller shaft clamping nut | 12 | Flexible coupling (companion plate) |

Removal

- 1 Remove exhaust system (49-100).
- 2 Unscrew exhaust shielding plate.

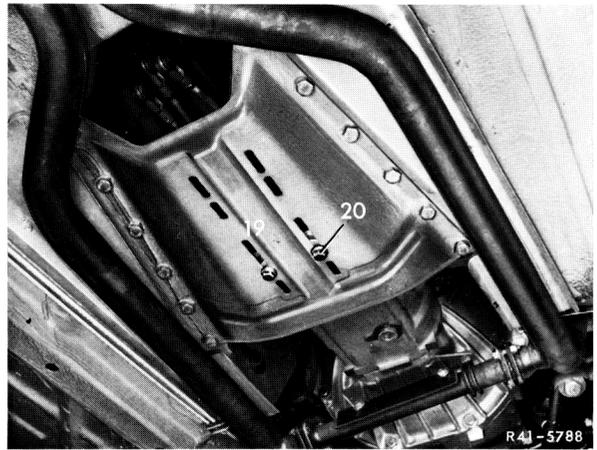


- 3 Lift transmission and support.
- 4 Release propeller shaft clamping nut for approx. two turns without sliding back rubber sleeve (will slide along).
Open-end wrench element 126 589 00 01 00.



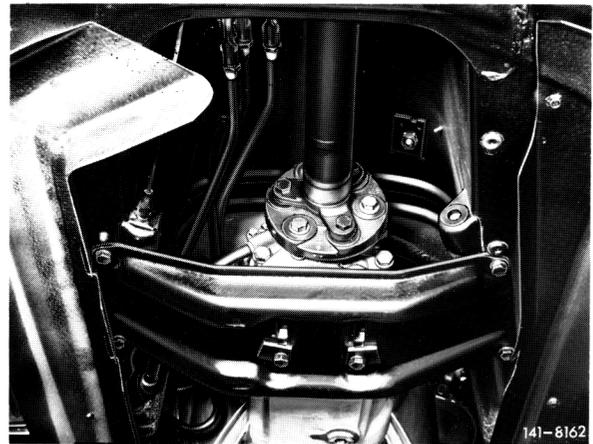
5 On model 107, unscrew hex. head screws on tunnel closing plate (19), as well as the two screws (20) of rear engine mount and remove tunnel closing plate.

Model 107



6 On model 116, unscrew hex. head screws of rear engine support on frame floor, as well as of rear engine mount and remove.

Model 116



7 Remove propeller shaft on transmission and on rear axle.

Note

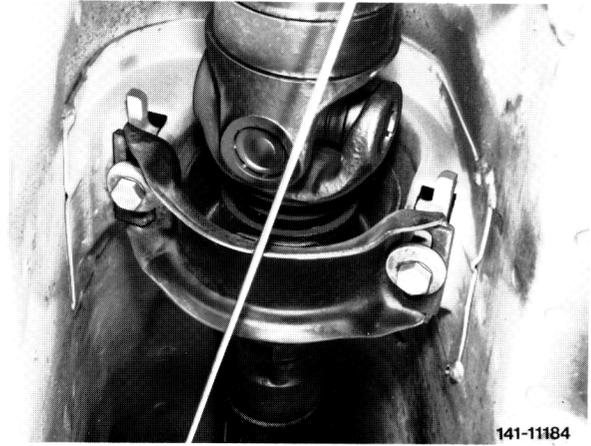
Flexible coupling remains on propeller shaft.



8 Disengage compensating lever of parking brake.



9 Unscrew hex. head screws of propeller shaft intermediate bearing on frame floor.



10 Force propeller shaft away from centering pin on transmission and rear axle and pull out toward the rear. Make sure that propeller shaft will not be separated.



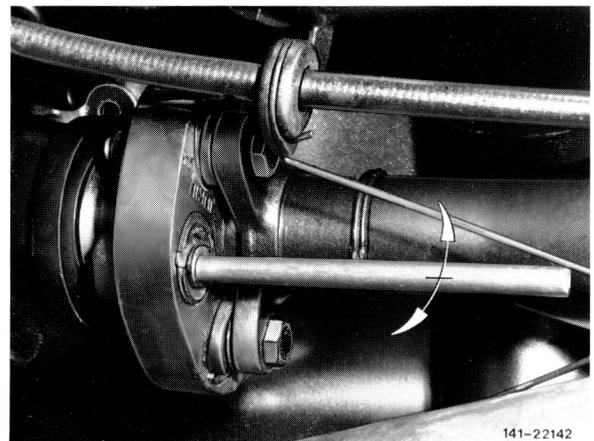
If a separation of propeller shaft is required, mark the respective parts in relation to each other, since the propeller shaft has been balanced in assembled condition. On model 107.042 starting 08/82 the front and the rear propeller shaft are properly identified.



11 On models 107.022/042 starting 09/82 with radially or tangentially soft flexible couplings, loosen the vulcanized centering bushings of flexible coupling prior to pushing back propeller shaft out of flexible coupling (arrows). For this purpose, use a cylindrical mandrel of 10 mm dia. and approx. 150 mm length.

Note

Check flexible couplings, centering sleeves and propeller shaft intermediate bearing for wear and renew parts, if required.



Installation

12 Grease cavities of both centering sleeves (refer to Specifications for Service Products page 266.2) with specified grease, filling capacity per sleeve approx. 6 g.

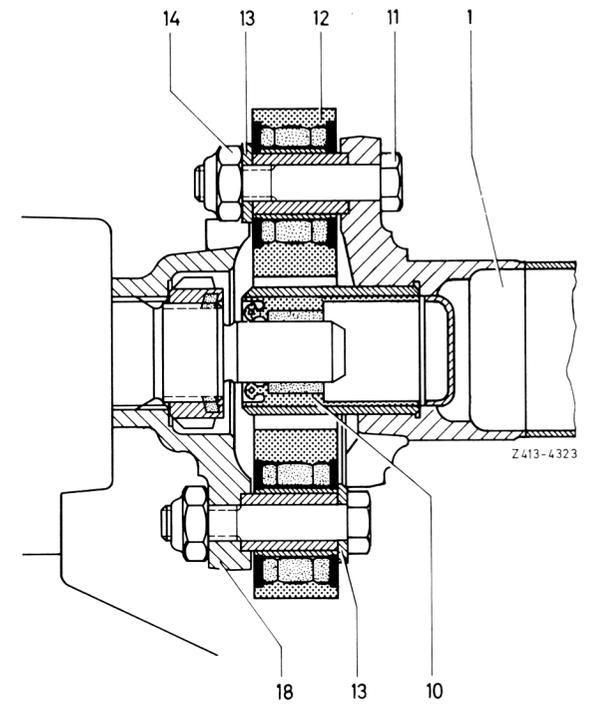
13 Slide propeller shaft with flexible couplings on centering pins on transmission and on rear axle.

14 Fasten propeller shaft intermediate bearing to frame floor, but do not yet tighten.

15 Fasten propeller shaft to transmission and to rear axle. Tightening torque of self-locking hex. nuts (14) for
M 10 = 45 Nm,
M 12 = 65 Nm.

Note

Renew self-locking hex. nuts.



- 1 Front propeller shaft
- 10 Centering sleeve
- 11 Hex. head screw
- 12 Flexible coupling (companion plate)
- 13 Washer
- 14 Self-locking hex. nut
- 18 Transmission three-legged flange

16 Mount tunnel closing plate or rear engine carrier to frame floor.

Tightening torque of hex. head screws:

M 8 = 25 Nm,

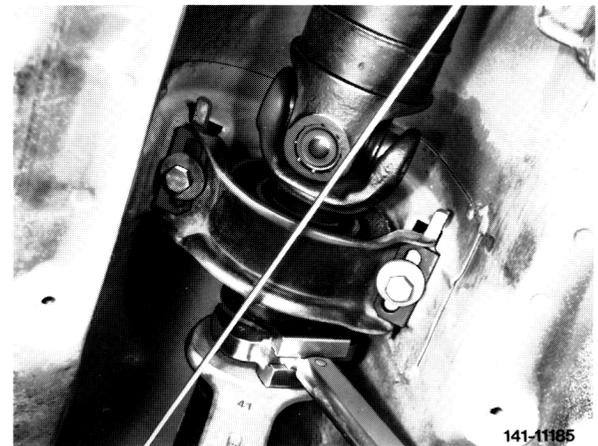
M 10 = 45 Nm.



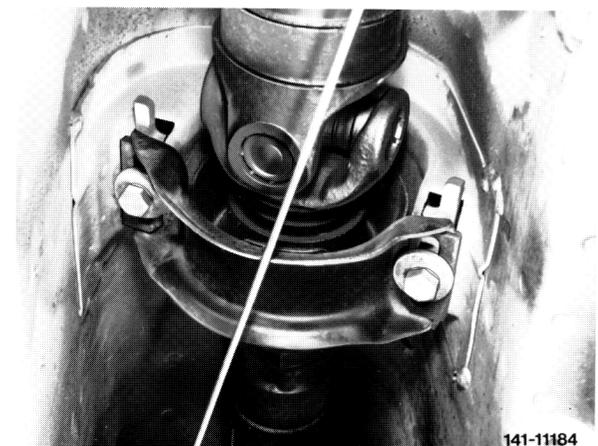
17 Lower transmission and tighten hex. head screws (20) for rear engine mount to 25 Nm.



18 Tighten propeller shaft clamping nut to 30 - 40 Nm while paying attention to correct seat of rubber sleeve.



19 Tighten hex. head screws of propeller shaft intermediate bearing to frame floor at 25 Nm.



20 Engage compensating lever of parking brake.



21 Screw on exhaust shielding plate.

22 Install exhaust system (49-100).



B. Models 114, 115

Lubricant

Centering sleeve, per sleeve approx. 6 g

refer to Specifications for Service Products page 266.2

Clamp connection

refer to Specifications for Service Products page 266.2

Tightening torques

Self-locking hex. nuts for fastening flexible couplings

Nm

45

Hex. head screws to propeller shaft intermediate bearing

25

Hexagon head bolts for bridges on frame floor

M8

25

M 10

45

Propeller shaft clamping nut

2-piece propeller shaft

30 – 40

3-piece propeller shaft

front

30 – 40

rear

200

Hex. head screws for fastening rear engine carrier to frame floor

M 10

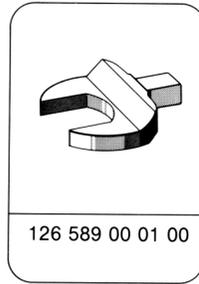
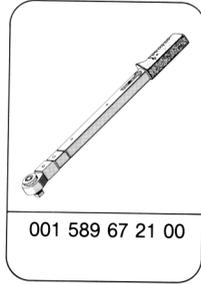
45

Hex. head screws for fastening rear engine mount to engine carrier

M 8

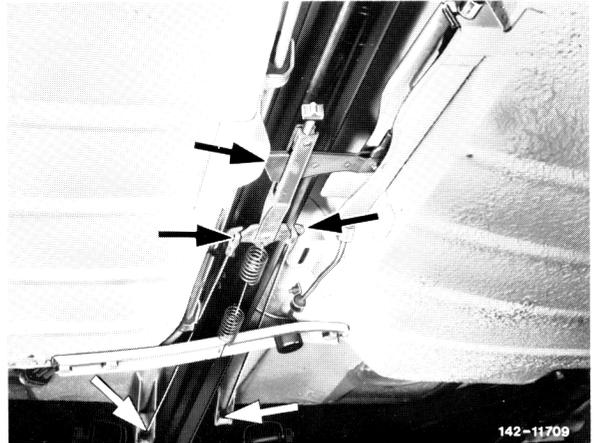
25

Special tools



Removal

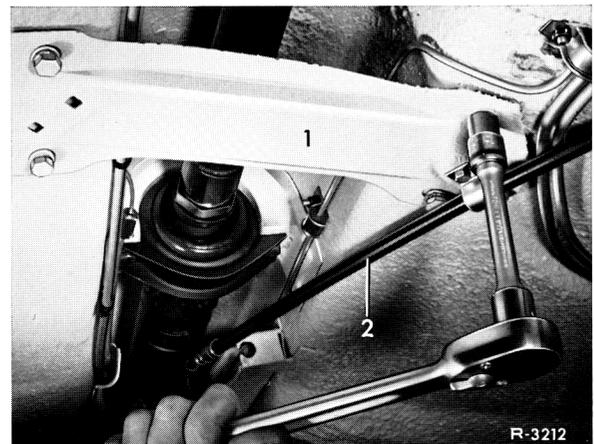
1 Disengage expansion lever and cable lines of parking brake.



2 Unscrew bridge (1) and rear bridge on frame floor.

Note

To loosen hex. head screws on lefthand side at rear bridge the rear exhaust line must be slightly lowered, if required.



3 Loosen propeller shaft clamping nut for approx. two turns.
On 3-piece propeller shaft, loosen front clamping nut only.



4 Lift transmission and support.

5 Unscrew hex. head screws of rear engine carrier.

6 Remove propeller shaft with flexible coupling (3) from transmission and rear axle.



7 Unscrew hex. head screws of propeller shaft intermediate bearing on frame floor.

8 Force propeller shaft from centering pin of rear axle and remove toward the rear. Make sure that propeller shaft is not separated.





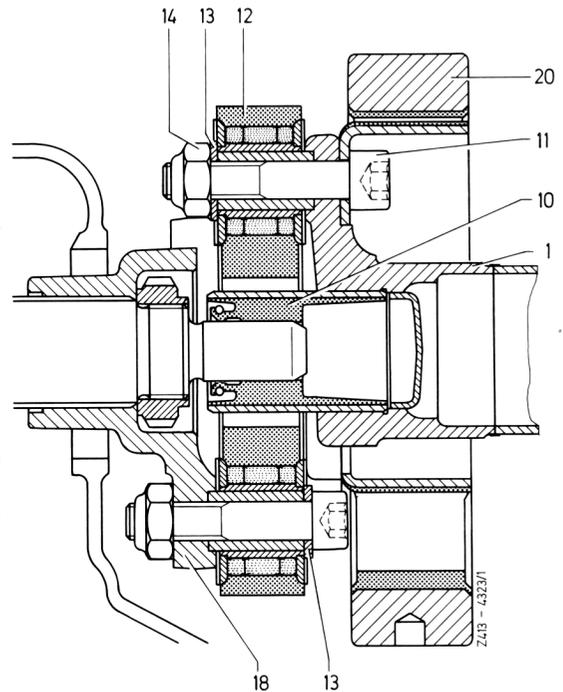
If a separation of propeller shaft is required, mark the respective parts in relation to each other, since the propeller shaft has been balanced in assembled condition.

On model 115.114 with manual transmission a vibration damper (20) has been installed on front propeller shaft during the period from the middle of 08/75 to the start of 12/75 (starting chassis end no. 027 060 to 040 338).

The vibration damper cannot be renewed. If a vibration damper is defective, the complete propeller shaft must be replaced.

If during renewal of flexible coupling the vibration damper is separated from propeller shaft, pay attention to the applied color marking during assembly.

9 Check flexible couplings, centering sleeves and propeller shaft intermediate bearing for wear, renew parts if required.



- 1 Front propeller shaft
- 10 Centering sleeve
- 11 Hex. head screw
- 12 Flexible coupling
- 13 Washer
- 14 Self-locking nut
- 18 Transmission flexible flange
- 20 Vibration damper

Installation

10 Grease cavities of the two centering sleeves of plastic bushing with Molykote grease (refer to Specifications for Service Products page 266.2), filling capacity per sleeve approx. 6 g.

11 Slide propeller shaft with flexible couplings on centering pins on transmission and on rear axle.

12 Fasten propeller shaft intermediate bearing to frame floor, but do not yet tighten.



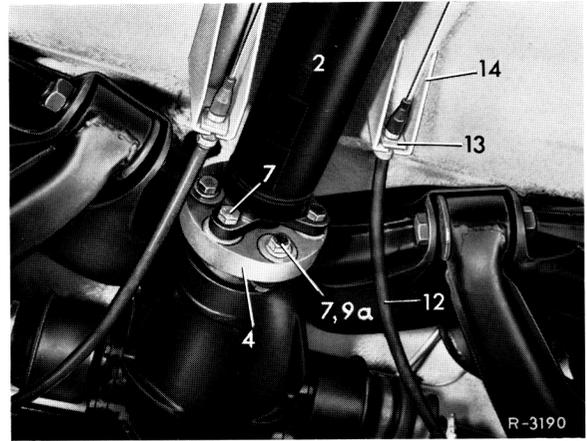
13 Fasten propeller shaft to transmission and to rear axle. Tightening torque of self-locking hex. nuts:

M 10 = 45 Nm,

M 12 = 65 Nm.

Note

Renew self-locking hex. nuts.



14 Attach rear engine carrier.

Tightening torque of hex. head screws:

M 10 = 45 Nm,

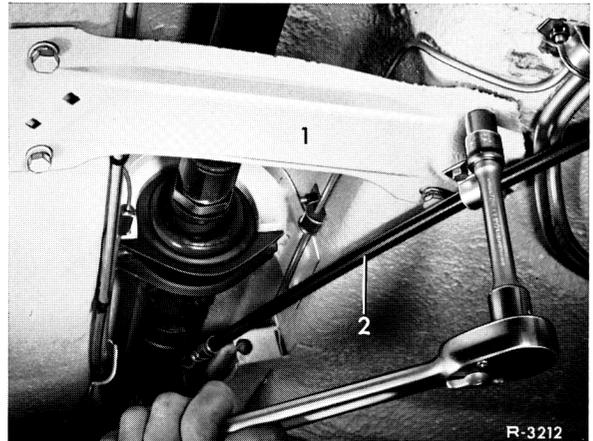
M 8 = 25 Nm.



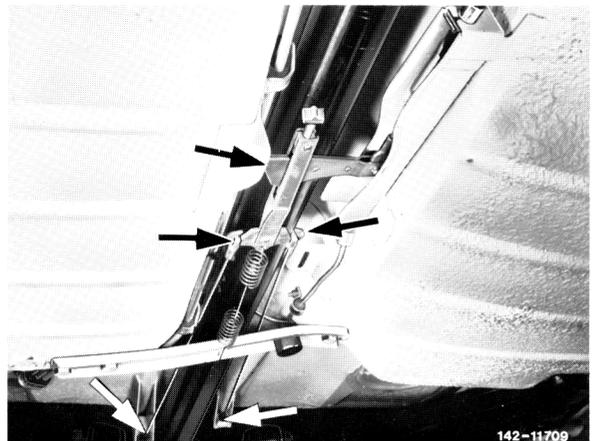
15 Fasten bridge (1) and rear bridge to frame floor. Tightening torque of hex. head screws:

M 10 = 45 Nm,

M 8 = 25 Nm.



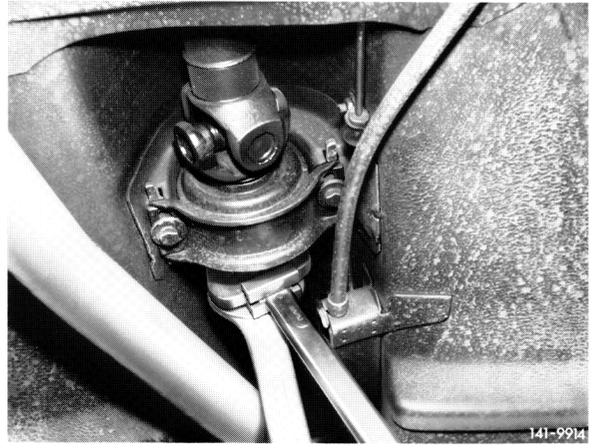
16 Engage compensating lever of parking brake and adjust (42-525).



17 Tighten propeller shaft clamping nut, while paying attention to correct seat of rubber sleeve. Tightening torque on 2-piece propeller shaft 30 - 40 Nm, on 3-piece propeller shaft at front 30 - 40 Nm, at the rear 200 Nm.

Note

Prior to tightening clamping nuts on 3-piece propeller shaft, make sure that the intermediate shaft is not knocking against front propeller shaft intermediate bearing, nor against rear propeller shaft intermediate bearing. The intermediate shaft should have the same distance to the respective intermediate bearing at its ends.



18 Tighten hex. head screws of propeller shaft intermediate bearing to frame floor at 25 Nm.

C. Model 123

Lubricant

Centering sleeve, per sleeve approx. 6 g

refer to Specifications for Service Products, page 266.2

Clamp connection

refer to Specifications for Service Products, page 266.2

Tightening torques

Nm

Self-locking hex. nuts for fastening flexible couplings

45

Hex. head screws on propeller shaft intermediate bearing

25

Propeller shaft clamping nut

2-piece propeller shaft

30 – 40

3-piece propeller shaft

front

30 – 40

rear

200

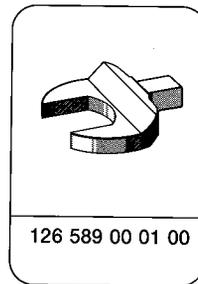
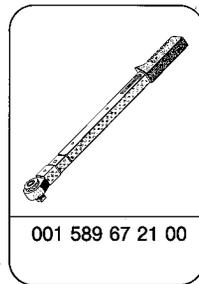
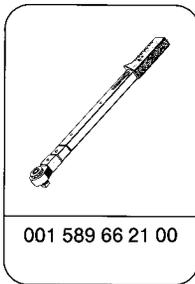
Hex. head screws for fastening rear engine carrier to frame floor

45

Hex. head screws for fastening rear engine mount to engine carrier

25

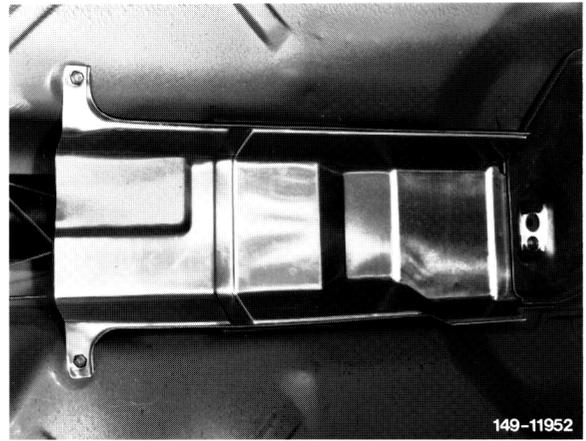
Special tools



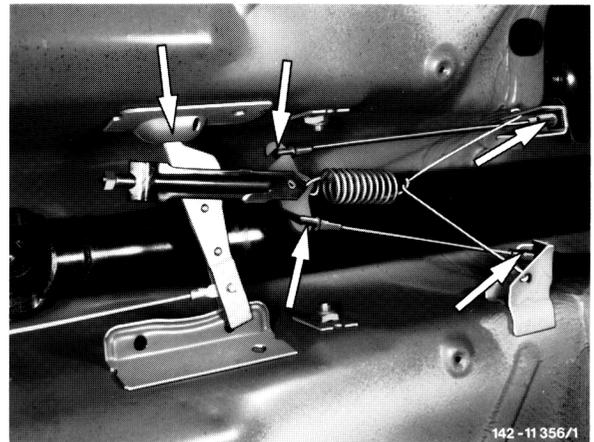
Removal

On vehicles with double pipe exhaust system.

- 1 Remove exhaust system (49-100).
- 2 Unscrew exhaust shielding plate.



- 3 Disengage compensating lever and cable lines (arrows) of parking brake.



- 4 Release propeller shaft clamping nut for approx. two turns.
Open-end wrench element 000 589 13 01 00.

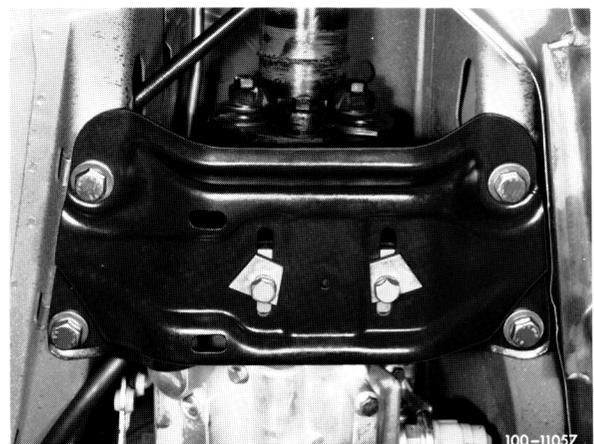
Note

On 3-piece propeller shaft loosen front clamping nut only.



- 5 Lift transmission and support.
- 6 Unscrew hex. head screws on rear engine carrier.

Rear engine carrier on all 5- and 6-cylinder engines and on 4-cylinder engines with automatic transmission.



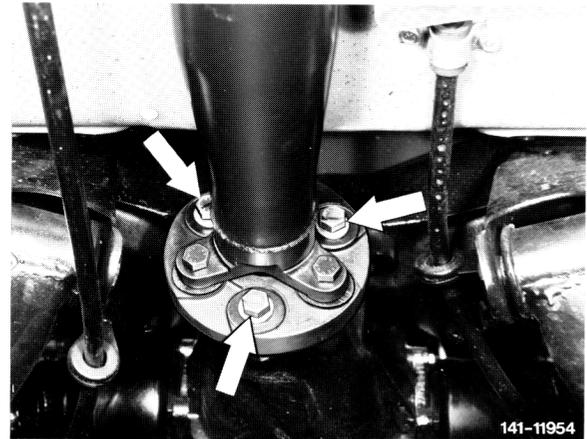
Rear engine carrier on 4-cylinder engines with manual transmission



7 Remove propeller shaft on transmission and on rear axle (arrows).

Note

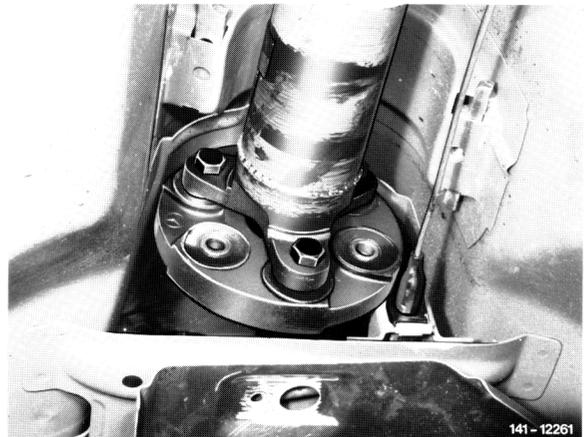
Flexible coupling remains on propeller shaft.



8 Unscrew hex. head screws (arrows) of propeller shaft intermediate bearing on frame floor.

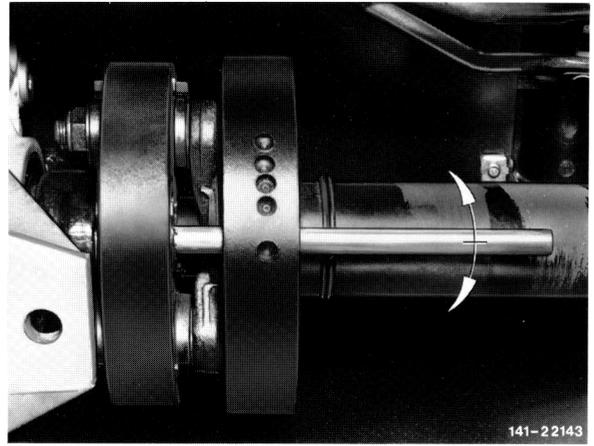


9 Force propeller shaft away from centering pin on transmission and on rear axle. Pull out propeller shaft without vibration damper toward the rear. Make sure that the propeller shaft will not be separated.



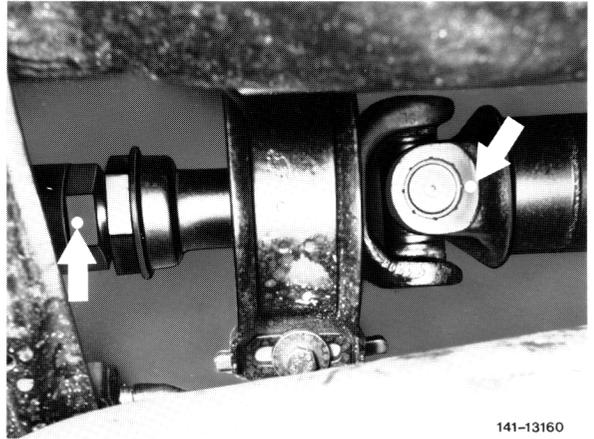
Note

On vehicles with radially or tangentially soft flexible couplings, loosen the vulcanized centering bushings of flexible coupling prior to pushing back propeller shaft out of flexible flange (arrows). For this purpose, use a cylindrical mandrel of 10 mm dia. and approx. 150 mm in length.



10 On vehicles up to 07/82 with 5-cylinder diesel engine, as well as with engine 102, mark the front and rear propeller shaft with vibration damper in relation to each other (arrows). Remove the front propeller shaft in forward direction and the rear propeller shaft toward the rear.

Removal of complete propeller shaft toward the rear is impossible on vehicles with vibration damper for reasons of available space.

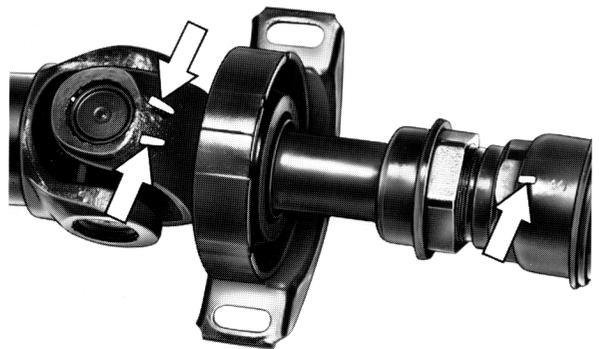


11 On vehicles starting 08/82, an identification mark is located on front and rear propeller shaft.

The front propeller shaft is provided with one hump and the rear propeller shaft with two arrow-shaped humps (arrows). The hump of the front propeller shaft should be located between the two arrows on fork-type flexible joint (arrows).

Note

The identifying mark has in part already been in place on propeller shaft prior to 08/82, but was not made use of during assembly. Propeller shafts, on which the markings are not in agreement, should therefore be identified prior to removal and the two parts should again be assembled after this identification.



12 Starting 09/79 a 2-piece propeller shaft with vibration damper is installed instead of a 3-piece propeller shaft on vehicles with engine 115. Here, a separation of the front and the rear propeller shaft is not required, since the vibration damper has a smaller diameter. For this reason, the complete propeller shaft can be removed toward the rear.

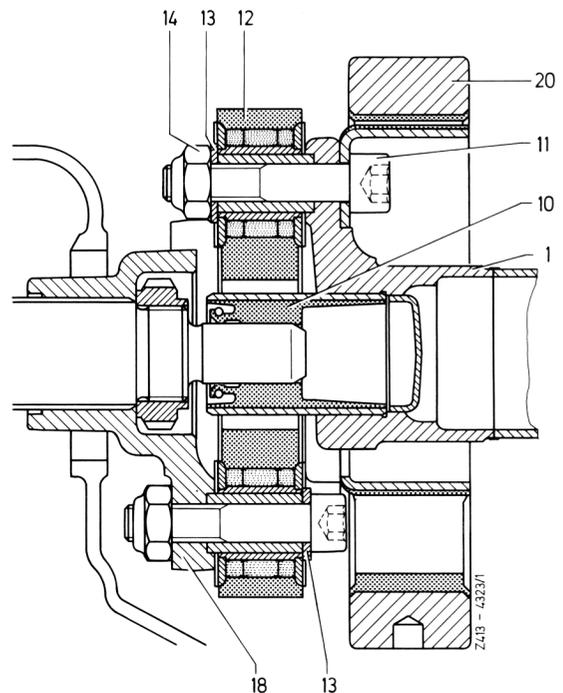


13 Check flexible couplings (12), centering sleeves (10) and propeller shaft intermediate bearing for damage, renew damaged parts.



If separation of the propeller shaft is required, mark the parts in relation to each other, since the propeller shaft has been balanced in assembled condition.

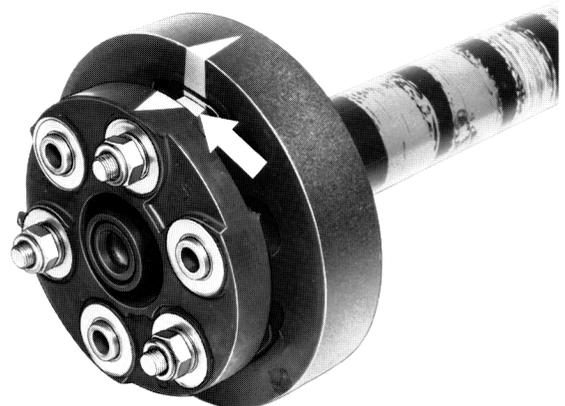
The vibration damper (20) cannot be renewed. If the vibration damper is defective, exchange front or complete propeller shaft.



- 1 Front propeller shaft
- 10 Centering sleeve
- 11 Hex. head screw
- 12 Flexible coupling
- 13 Washer
- 14 Self-locking hex. nut
- 18 Flexible flange
- 20 Vibration damper

On vehicles with vibration damper up to 08/81

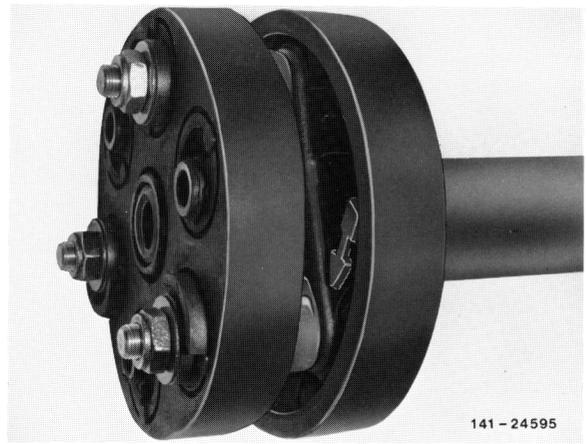
14 If the vibration damper is separated from propeller shaft when renewing flexible coupling, mark vibration damper and three-legged flange in relation to each other (arrow).



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On vehicles with vibration damper starting 09/81

15 If upon renewal of flexible coupling the vibration damper is separated from propeller shaft, mount vibration damper and three-legged flange as shown on drawing. The installation position is correct, if the arrow of the vibration damper points toward hump on three-legged flange.



Installation

16 Grease cavities of both centering sleeves on plastic bushing with Molykote grease (refer to Specifications for Service Products page 266.2, filling capacity per sleeve approx. 6 g).

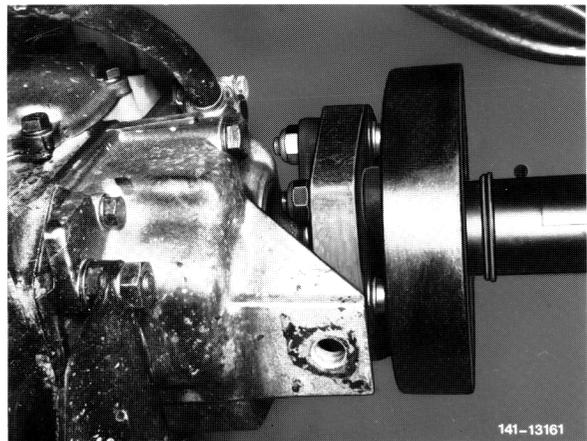
17 Slide propeller shaft without vibration damper onto centering pins on transmission and onto rear axle.

Note

Refers also to vehicles with engine 115 starting 09/79 with vibration damper.



18 Insert front propeller shaft with vibration damper from the front through the bridge and slide onto centering pin on transmission. Push rear and front propeller shaft at clamping connection against each other and slide on centering pin at rear axle.



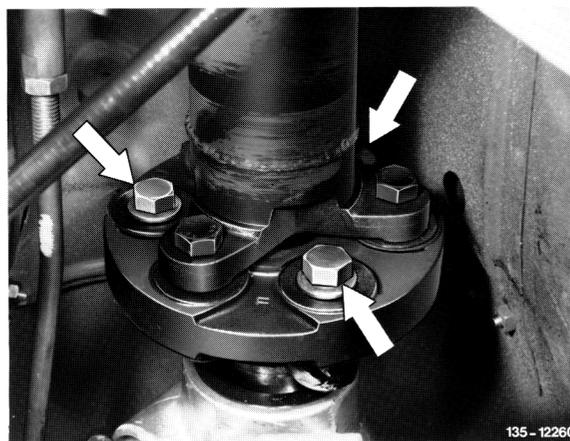
19 Fasten propeller shaft intermediate bearing on frame floor, but do not yet tighten.



20 Fasten propeller shaft to transmission and rear axle. Tightening torque of self-locking hex. nuts 45 Nm.

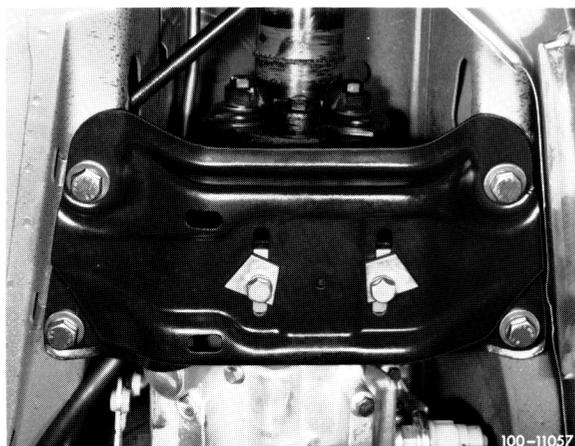
Note

Renew self-locking hex. nuts.



21 Mount rear engine carrier. Tightening torque of hex. head screws 45 Nm.

22 Lower transmission and tighten hex. head screw for rear engine mount to 25 Nm.



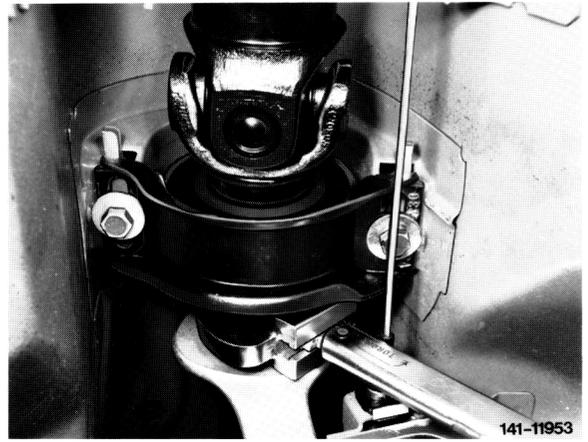
23 Engage cable lines and compensating lever of parking brake and adjust (42-525).



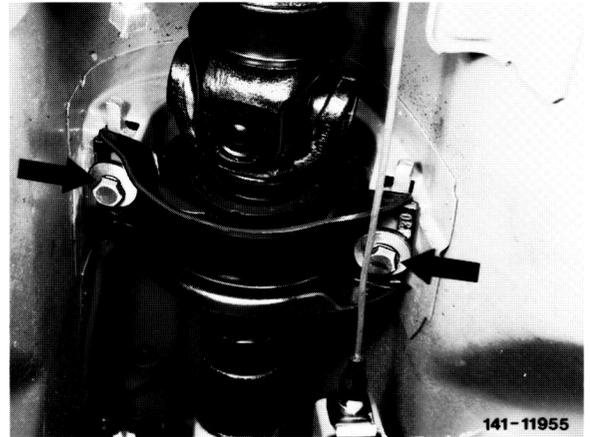
24 Tighten propeller shaft clamping nut on propeller shaft, while paying attention to correct seat of rubber sleeves. Tightening torque on 2-piece propeller shaft 30 - 40 Nm, on 3-piece propeller shaft at front 30 - 40 Nm, at the rear 200 Nm.

Note

Prior to tightening clamping nut on 3-piece propeller shaft, make sure that the intermediate shaft is not knocking against front propeller shaft intermediate bearing, nor against rear propeller shaft intermediate bearing. At its ends the intermediate shaft should have approximately the same distance from each respective intermediate bearing.



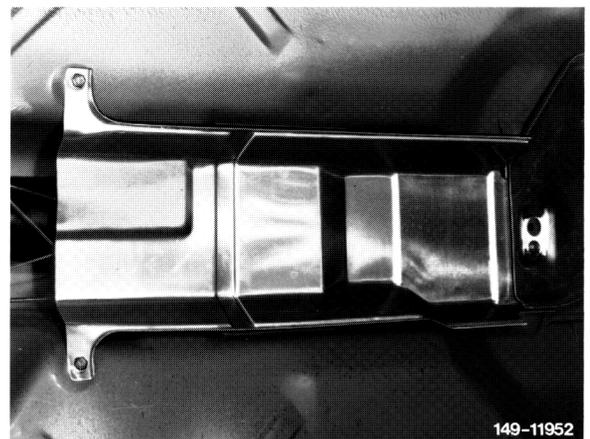
25 Tighten hex. head screws (arrows) of propeller shaft intermediate bearing on frame floor to 25 Nm.



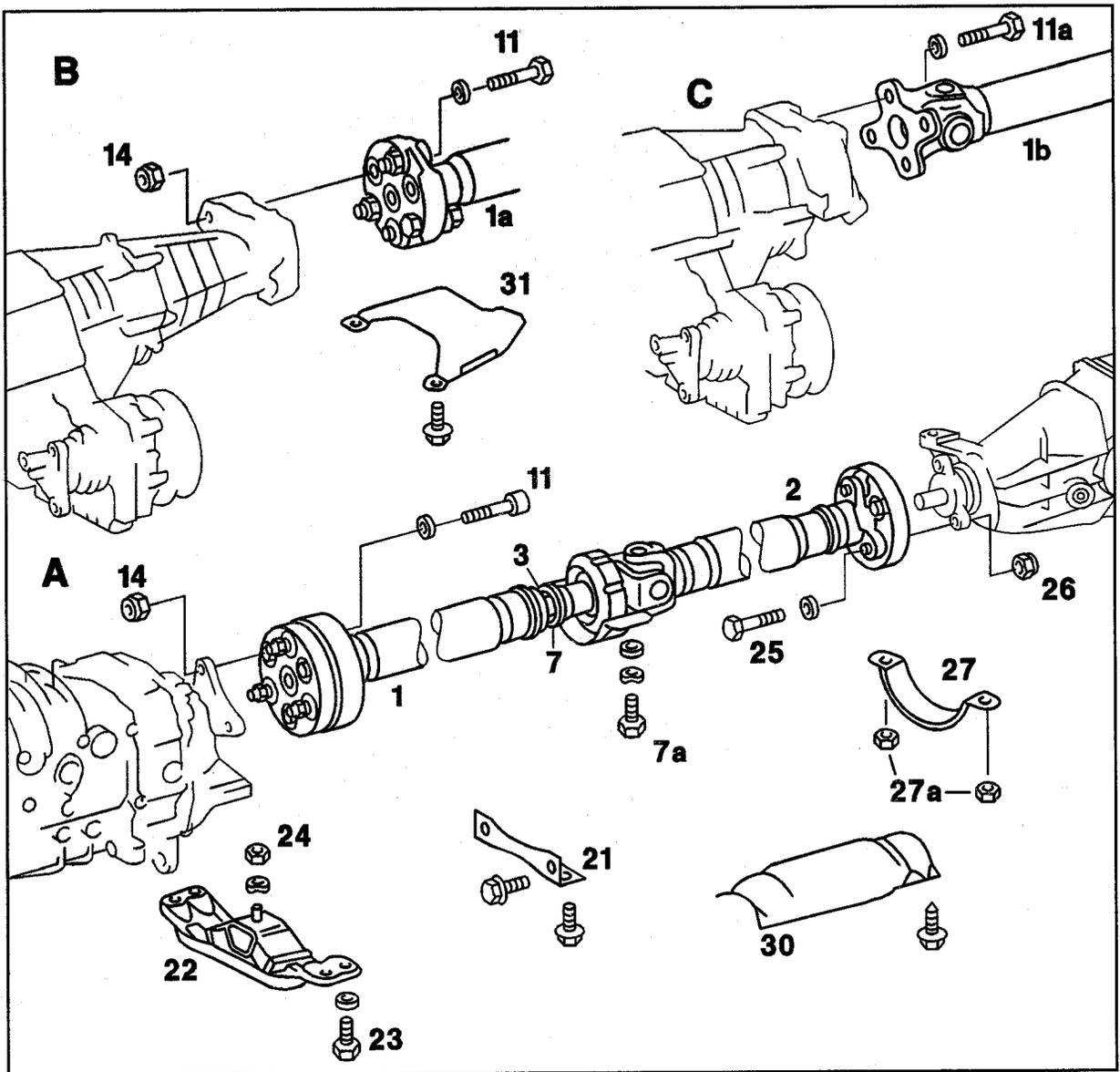
On vehicles with two-pipe exhaust system:

26 Mount shielding plate.

27 Install exhaust system (49-100).



D. Model 124



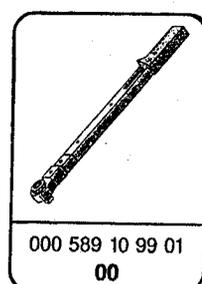
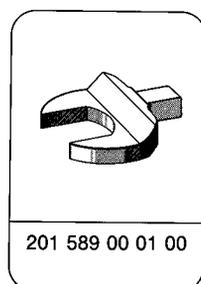
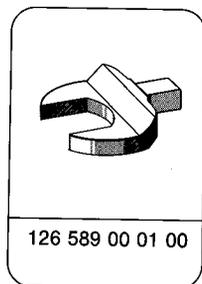
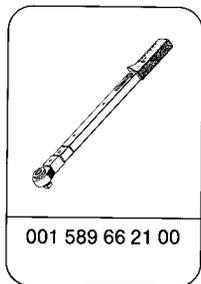
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Versions: A Standard
 B Models 124.2, 124.330, 393
 C Model 124.333

Exhaust shielding plate (30), 4MATIC (31)	screw off and on (items 1, 2).
Transmission	lift, support, lower.
Engine carrier (22)	screw off and on, (not with 4MATIC)
	Hex. head screws (23) 45 Nm,
	hex. nut (24) 70 Nm (item 4).
Cross bridge (21)	Unscrew, screw on, 25 Nm (item 5).
As of 09/89 bracket (27)	Unscrew, screw on (item 12).

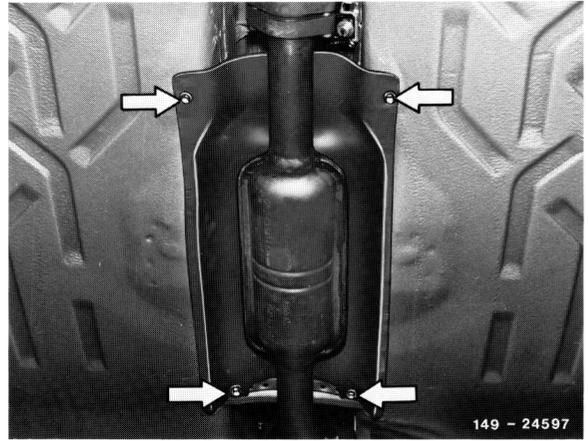
Propeller shaft clamping nut (3)	loosen for approx. two turns. Tightening torque 30 - 40 Nm. Torque wrench 001 589 66 21 00 Open end wrench element 126 589 00 01 00 or 201 589 00 01 00 (item 6).
Front propeller shaft (1, 1a)	mount off and on at transmission, 45 Nm. Loosen fitted sleeves with mandrel 10 mm dia. Renew self-locking hex. nuts (14) (item 7).
Front propeller shaft (1b) model 124.333	mount off and on at transmission, 55 Nm (item 8).
Rear propeller shaft (2)	mount off and on at rear axle center piece, 45 Nm. Renew self-locking hex. nuts (26) (item 10).
Propeller shaft intermediate bearing (7)	screw off and on, tighten hex. head screws (7a) only after fastening propeller shaft to transmission and rear axle, 25 Nm (item 11).
Propeller shaft, complete	force from centering pin on transmission and rear axle and pull out toward the rear (item 10 - 13).
Centering sleeves	check for wear, with plastic or bronze bushings, grease cavities with Molykote grease and use multi-purpose grease with multi-component bushings (refer to Specifications for Service Products page 266.2 and 267, quantity per sleeve approx. 6).

Special tools



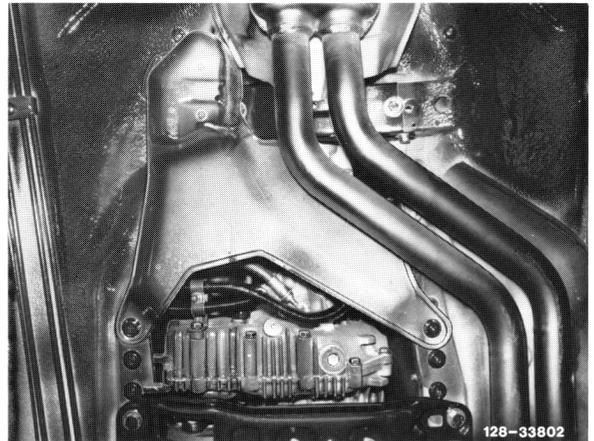
Removal and installation

- 1 Unscrew exhaust shielding plate (arrows).



4MATIC

- 2 Unscrew exhaust shielding plate.

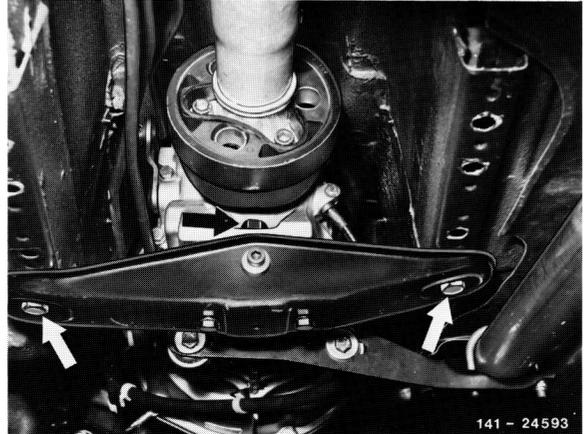


- 3 Lift transmission and support.

- 4 Unscrew hex. head screws and hex. nut (arrows) and remove rear engine carrier with engine mount (not with 4MATIC).

Installation note

Tightening torque hex. head screws 45 Nm, hex. nut 70 Nm.

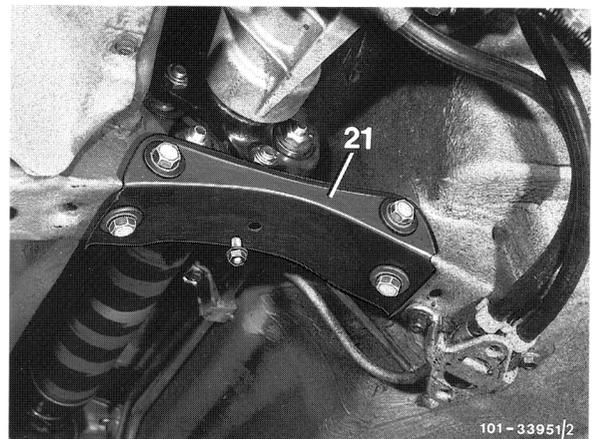


4MATIC

- 5 Unscrew cross bridge (21).

Installation note

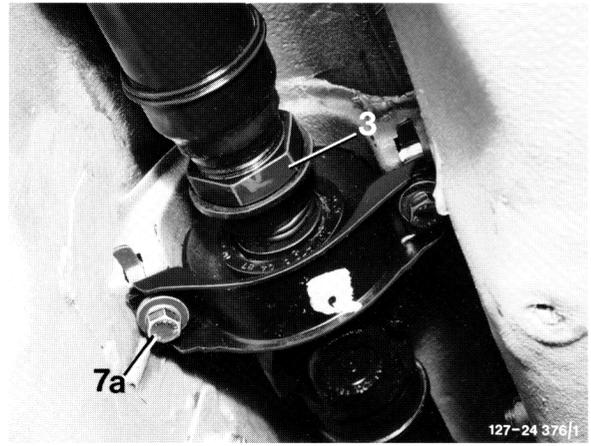
Tightening torque 25 Nm.



6 Loosen propeller shaft clamping nut (3) for approx. two turns without sliding back rubber sleeve (sliding along).

Installation note

Tightening torque 30 - 40 Nm, while paying attention to correct seat of rubber sleeve.



7 Remove front propeller shaft from transmission.

Note

Flexible coupling remains on propeller shaft.

Installation note

Renew self-locking hex. nuts.

Tightening torque M 10 = 45 Nm,
M 12 = 60 Nm.



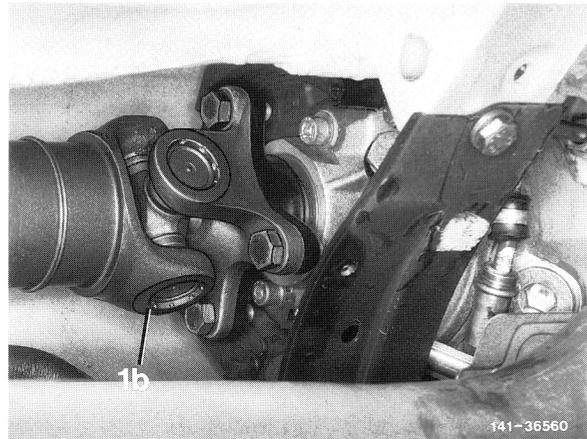
Model 124.333

8 Remove front propeller shaft (1b) from transfer case.

Installation note

Renew self-locking hex. nuts.

Tightening torque 55 Nm.



9 Prior to sliding back propeller shaft, loosen vulcanized fitted sleeves of soft pull-push flexible coupling installed on transmission end by means of a mandrel in flexible joint flange. For this purpose, use a cylindrical mandrel of 10 mm dia. and approx. 150 mm in length (not on models 124.333/393).



10 Remove propeller shaft from rear axle (arrows).

Note

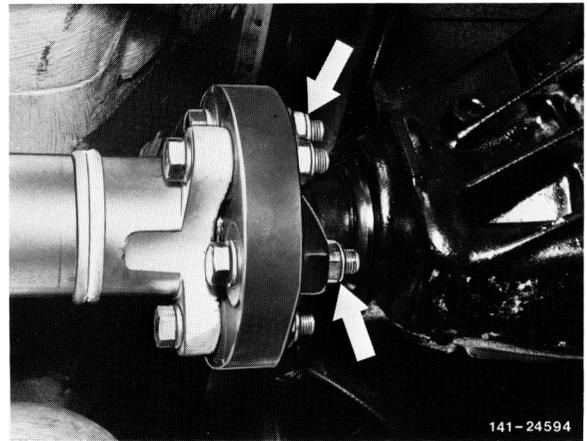
Flexible coupling remains on propeller shaft.

Installation note

Renew self-locking hex. nuts.

Tightening torque M 10 = 45 Nm,

M 12 = 60 Nm.



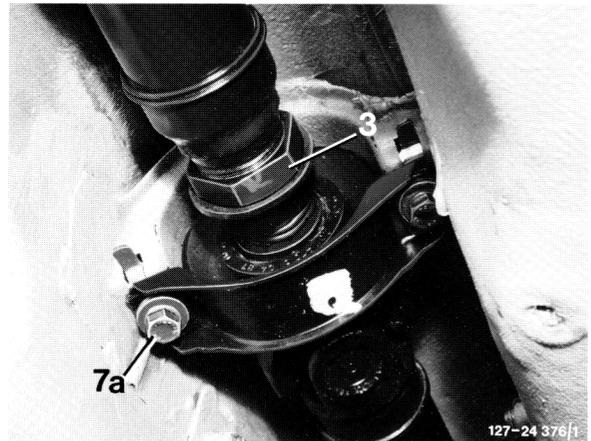
11 Unscrew hex. head screws (7a) of propeller shaft intermediate bearing on frame floor.

Installation note

Tighten hex. head screws only after fastening

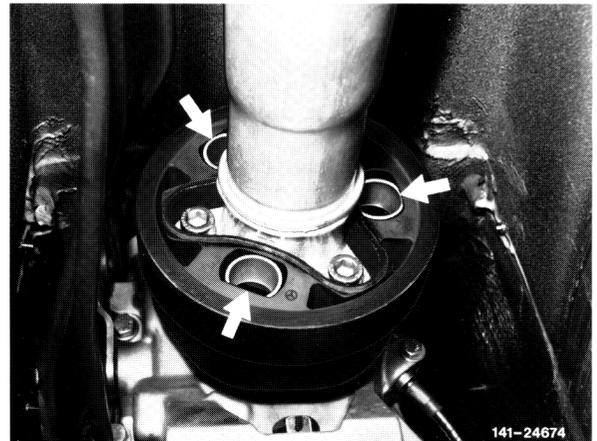
propeller shaft to transmission and rear axle,

tightening torque 25 Nm.



Note

On vehicles with manual transmission pay attention to correct seat of roller sleeves in vibration damper after tightening transmission-propeller shaft connection, press-in roller sleeves, if required (arrows).



12 Unscrew bracket for safety belt fixing on vehicles as of 09/89.

Installation note

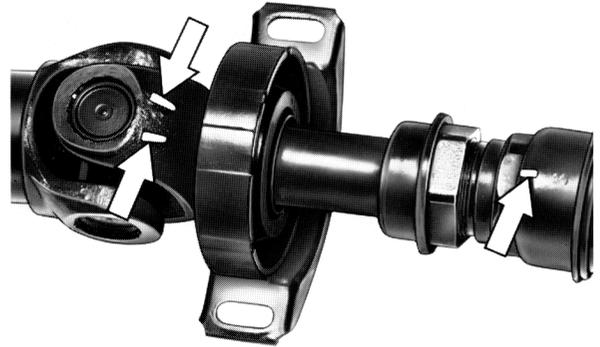
Tightening torque of hexagon nuts 280 Nm.

13 Force propeller shaft from centering pin on transmission and rear axle and remove toward the rear.





If a separation of the propeller shaft is required, reassemble the parts again as shown. The front propeller shaft is provided with a hump and the fork-type joint of the rear propeller shaft with two arrow-type humps. The hump of the front propeller shaft should be located between the two arrows on fork-type joint (arrows).

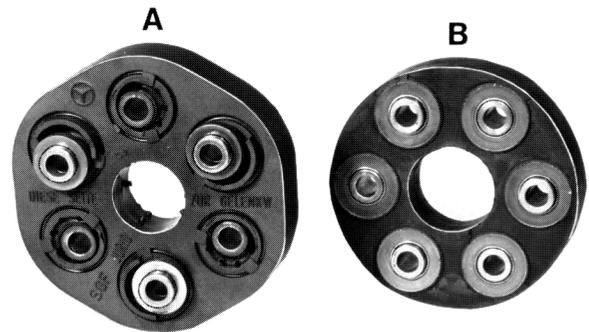


141-23660

14 Check flexible coupling, centering sleeves, vibration damper

Note

A soft or hard pull-push flexible coupling (except on models 124.333/393) is installed on the transmission and a hard flexible coupling is installed on the rear axle.

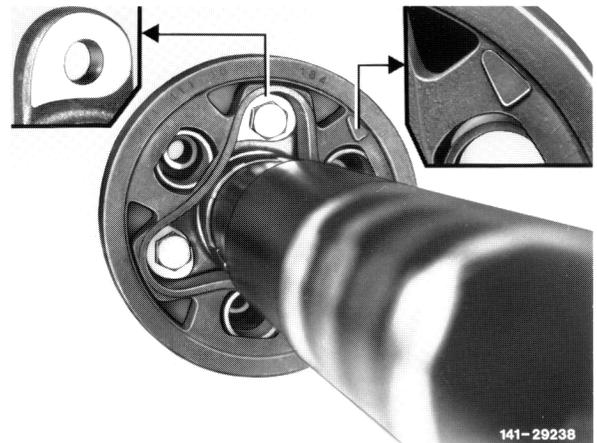


141 - 26418

- A Soft pull-push flexible couplin
- B Hard flexible coupling

15 If during renewal of flexible coupling the vibration damper is separated from propeller shaft or the vibration damper is renewed, mount vibration damper and three-legged flange as shown.

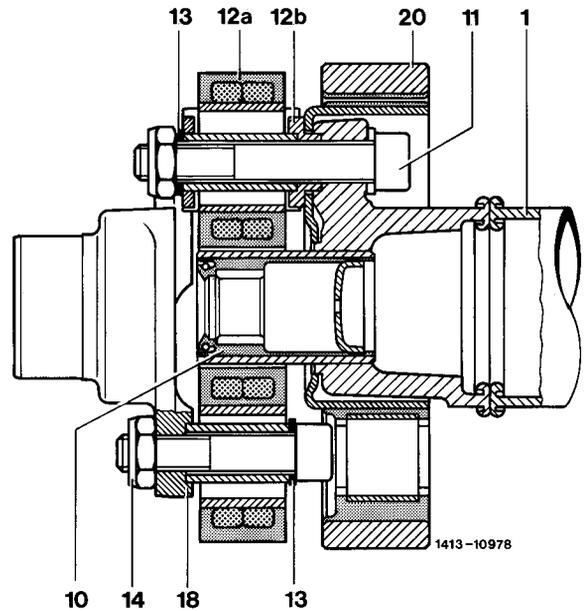
The installation position is correct if the arrow on the vibration damper is mounted behind the hump on the three-legged flange. (Model 124 with a bolt circle diameter of 80 mm.)



141-29238

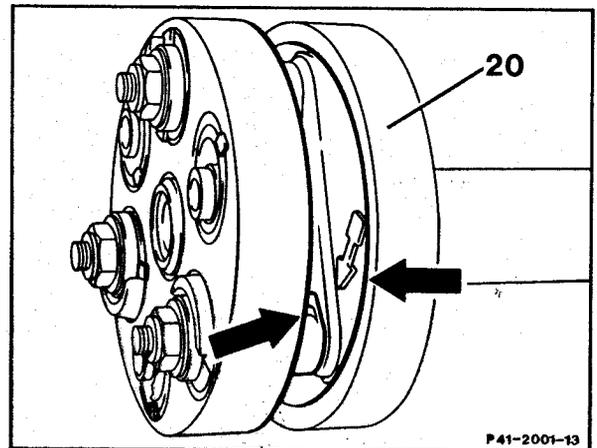
Layout model 124 with 80 mm bolt circle dia.

- 1 Front propeller shaft
- 10 Centering sleeve
- 11 Hex. head screw
- 12 Flexible coupling
- 12b Centering bushing
- 13 Washer
- 14 Self-locking hex. nut
- 18 Flexible flange
- 20 Vibration damper

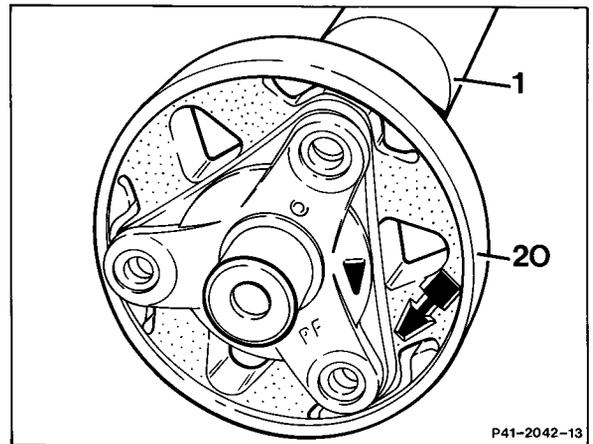


16 Model 124 with a bolt circle diameter of 90 mm. The installation position is correct when the arrow of vibration damper points to hump on three-legged flange.

Marking on 1st version up to 12/89



Marking on 2nd version as of 01/90

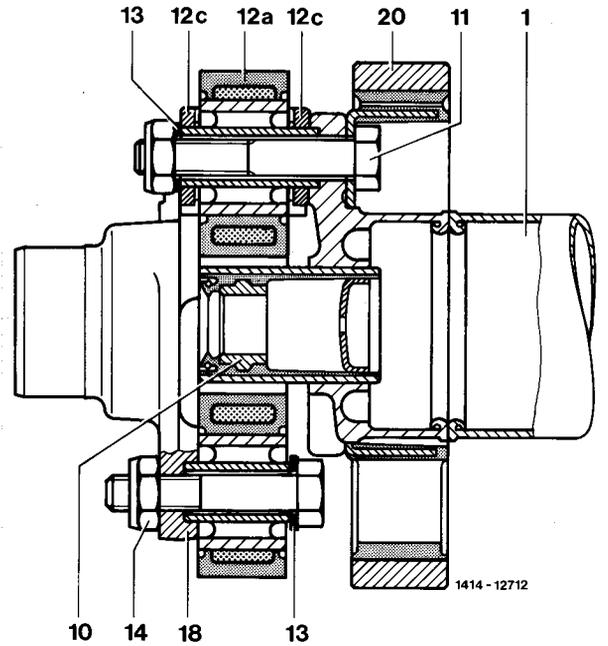


Layout models 124 with 90 mm bolt circle dia.

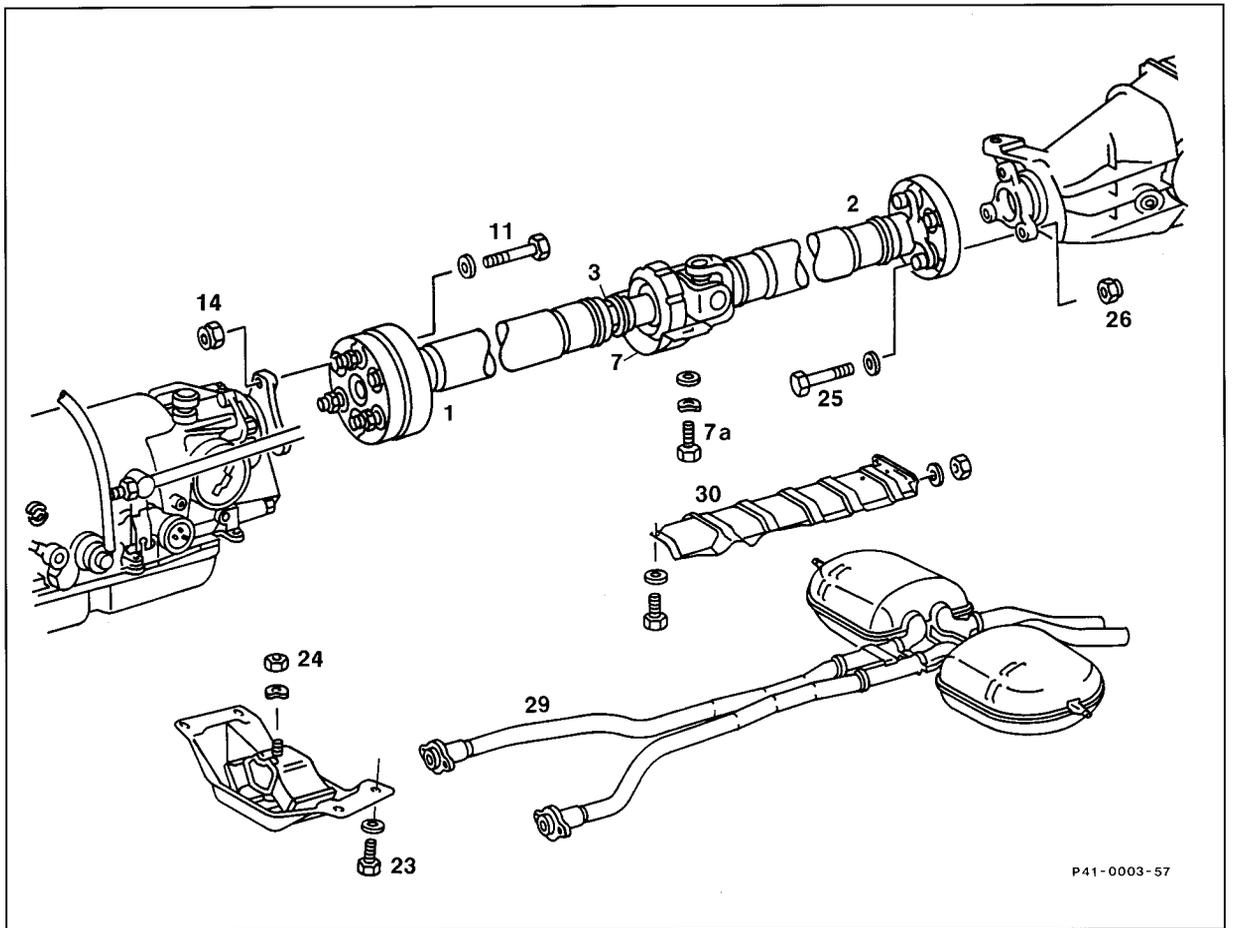
- 1 Front propeller shaft
- 10 Centering sleeve
- 11 Hex. head screw
- 12 Flexible coupling
- 12c Stop washers
- 13 Washer
- 14 Self-locking hex. nut
- 18 Flexible flange
- 20 Vibration damper

17 With plastic or bronze bushings, grease cavities of both centering sleeves with Molykote grease and use multi-purpose grease with multi-component bearing bushings (refer to Specifications for Service Products page 266.2 and 267, filling capacity per sleeve approx. 6 g).

18 For installation, proceed vice versa.



E. Model 126

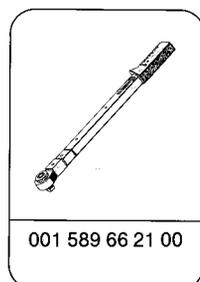
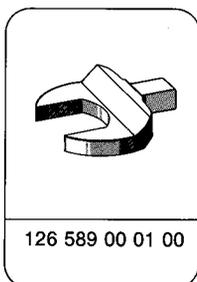


Exhaust system (29) as of plug connection

- | | |
|------------------------------------|-----------------------------------|
| (connector) | remove and install (49-100). |
| Exhaust shielding plate (30) | screw off and on, 25 Nm (item 2). |
| Transmission | lift, support, lower. |

Engine carrier	screw off and on, 45 Nm (item 4).
Propeller shaft clamping nut (3)	loosen for approx. two turns. Tightening torque 30 - 40 Nm, open end wrench element 126 589 00 01 00 (item 6).
Front propeller shaft (1)	remove from and mount on transmission, M 10 = 45 Nm, M 12 = 65 Nm. On model 126.02 loosen fitted sleeve of flexible coupling with mandrel of 10 mm dia. Renew self-locking hex. nuts (14) (items 7, 8).
Rear propeller shaft (2)	remove from and mount on rear axle, M 10 = 45 Nm, M 12 = 65 Nm. Renew self-locking hex. nuts (26) (item 9).
Propeller shaft intermediate bearing (7)	screw off and on. Tighten hex. head screws (7a) only after fastening propeller shaft to transmission and rear axle, 25 Nm (item 10).
Propeller shaft, complete	force off centering pin on transmission and rear axle and pull out toward the rear (item 11).
Centering sleeves	check for wear, with plastic or bronze bushings, grease cavities with Molykote grease and use multi-purpose grease with multi-component bushings (refer to Specifications for Service Products page 266.2 and 267, quantity per sleeve approx. 6 g).

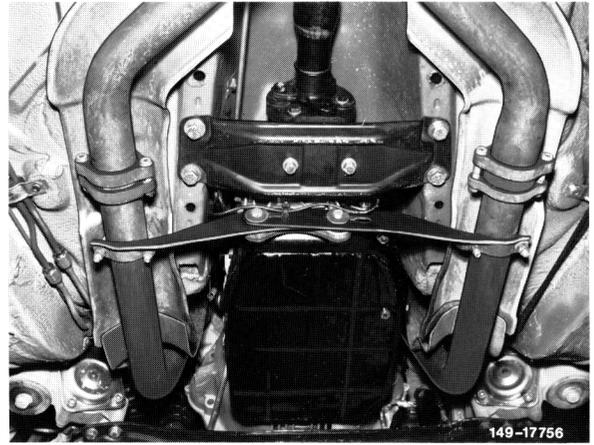
Special tools



Handwritten scribble

Removal and installation

- 1 Remove exhaust system as of plug connection (49-100).



- 2 Unscrew exhaust shielding plate.

Installation note

Tightening torque of hex. head screws or nuts
25 Nm.

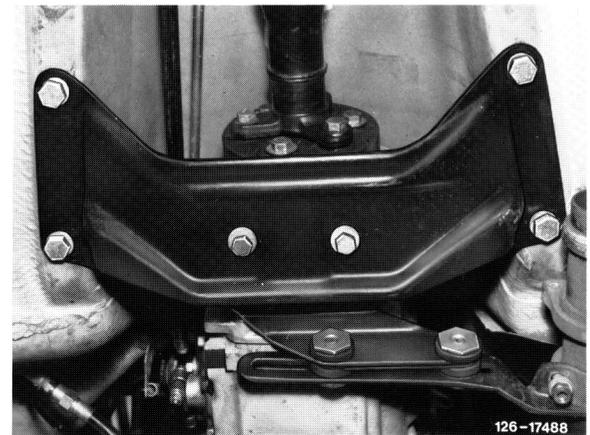


- 3 Support transmission.

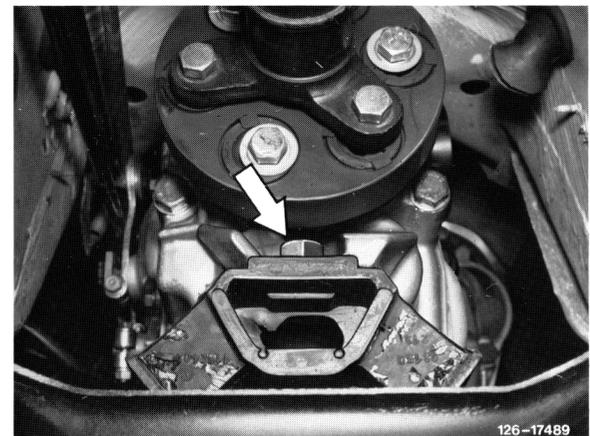
- 4 Unscrew hex. head screws of rear engine carrier from frame floor.

Installation note

Tightening torque 45 Nm.



- 5 Unscrew hex. nut (arrow) and remove engine carrier.



6 Loosen propeller shaft clamping nut for approx. two turns without sliding back rubber sleeve (sliding along).
Open-end wrench element 126 589 00 01 00.

Installation note

Tightening torque 30 - 40 Nm, while paying attention to correct seat of rubber sleeve.



7 Remove front propeller shaft from transmission (arrows).

Note

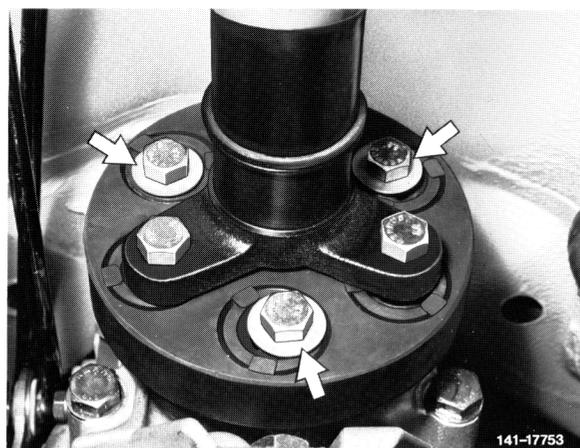
Flexible coupling remains on propeller shaft.

Installation note

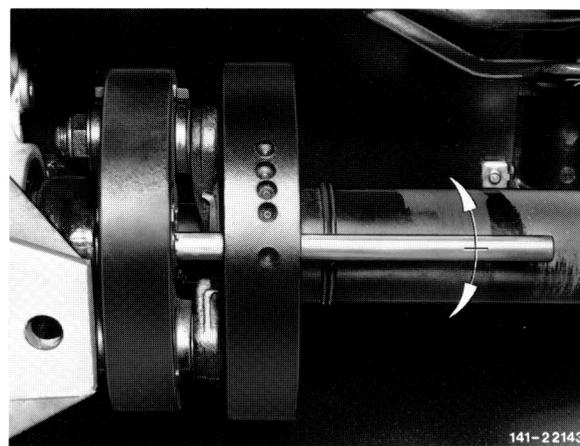
Renew self-locking hex. nuts.

Tightening torque: M 10 = 45 Nm,
M 12 = 65 Nm.

Use washers with dimensions 10.5x25x1 (on models 126.02 only and on models 126.032/033 up to 08/80).



8 On model 126.02 with radially or tangentially soft flexible couplings, loosen vulcanized fitted sleeves of flexible coupling prior to pushing back of propeller shaft in flexible flange (arrows). For this purpose, use a cylindrical mandrel of 10 mm dia. and approx. 150 mm in length.



9 Remove propeller shaft from rear axle (arrows).

Note

Flexible coupling remains on propeller shaft.

Installation note

Renew self-locking hex. nuts.

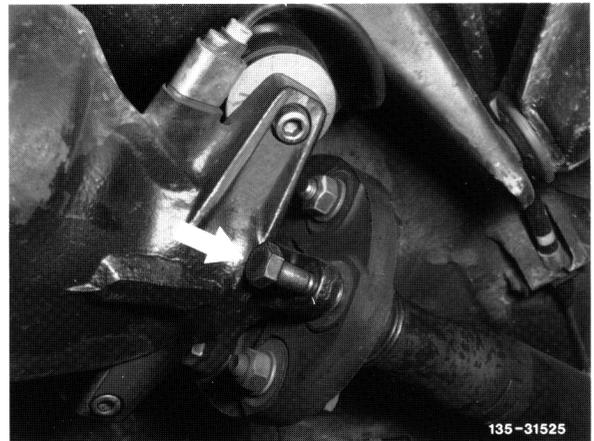
Tightening torque: M 10 = 45 Nm,
M 12 = 65 Nm.

Use only washers with dimensions 10.5x25x1 (on models 126.02 only and on models 126.032/033 up to 08/80).



Installation note

On the first vehicles (models 126.03/04 from 09 to 10/85) the three hex. head screws for fastening the flexible coupling to flexible flange must be mounted from the rear to the front for reasons of available space. The hex. head screws can be inserted only if the flexible flange is located at the level of the rear axle housing identified by an arrow.



10 Unscrew hex. head screws (arrows) of propeller shaft intermediate bearing on frame floor.

Installation note

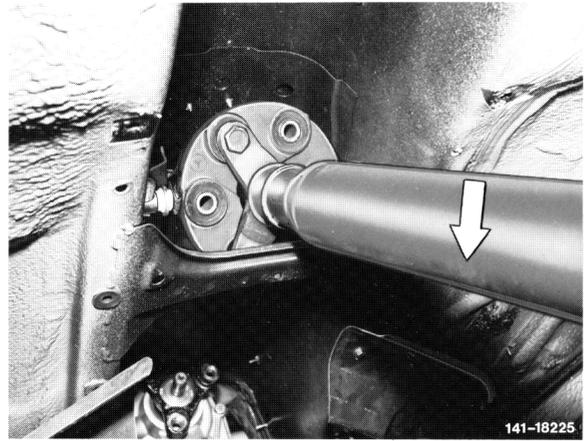
Tighten hex. head screws (arrows) only after fastening propeller shaft to transmission and rear axle, tightening torque 25 Nm.



11 Force propeller shaft from centering pin on transmission and rear axle and remove in downward direction. Make sure that propeller shaft will not be separated. On models 126.032/033 starting 09/80 and on models 126.036/037 remove propeller shaft owing to larger flexible couplings of 110 mm dia. angularly through the welded-in cross member.



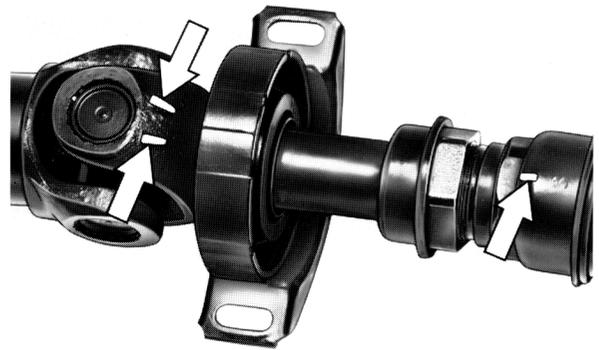
If a separation of the propeller shaft is required, mark these parts in relation to each other, since the propeller shaft has been balanced in assembled condition.



141-18225

12 All vehicles starting 08/82 carry an identification mark on front and rear propeller shaft.

The front propeller shaft is provided with a hump and the flexible fork of the rear propeller shaft with two arrow-type humps (arrows). The hump of the front propeller shaft should be located between the two arrows on the flexible fork (arrows).



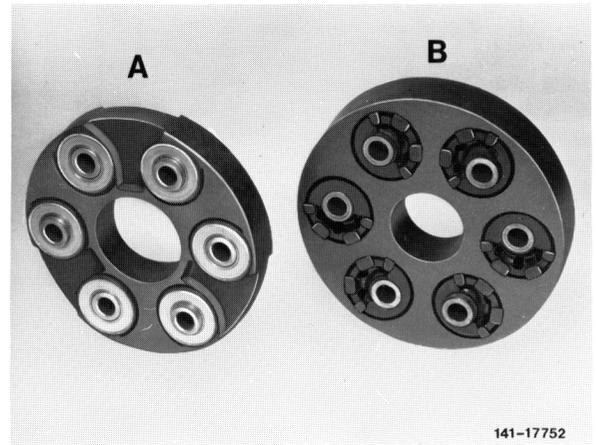
141-23660

Note

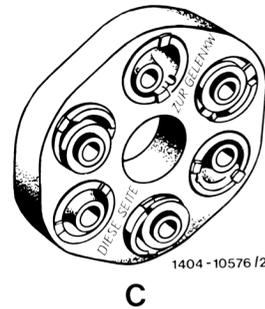
Propeller shafts on which the markings are not identical, should be marked in each case prior to removal.

13 Check flexible couplings, centering sleeves and propeller shaft intermediate bearing for wear and renew parts if required.

14 A radially softer flexible coupling (B) is installed at transmission end on models 126.02. This version should be particularly checked for damage in range of fitted sleeves.



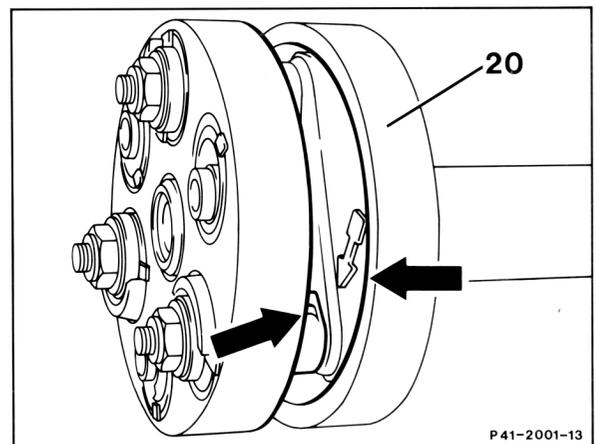
- A Flexible coupling at front and rear on models 126.03 with 110 mm bolt circle and at the rear on models 126.02 with 90 mm bolt circle.
- B Radially soft flexible coupling, at transmission end only on models 126.02 up to 08/85.



- C Soft pull-push flexible coupling, at transmission end only on models 126.02 starting 09/85.

15 Model 126.02 with manual 5-speed transmission. If the vibration damper is separated from propeller shaft during renewal, mount vibration damper and three-legged flange as shown.

The installation position is correct, if the arrow of the vibration damper (20) points toward hump on three-legged flange.

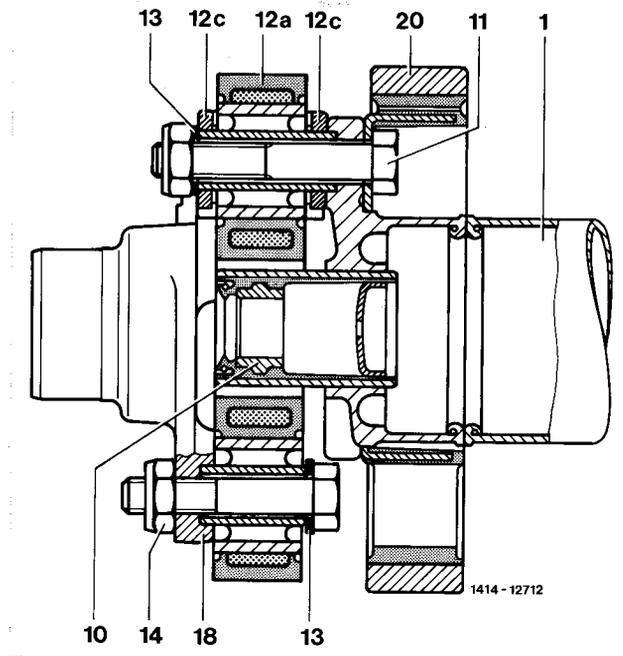


16 With plastic or bronze bushings, grease cavities of both centering sleeves with Molykote grease and use multi-purpose grease with multi-component bearing bushings (refer to Specifications for Service Products page 266.2 and 267, filling capacity per sleeve approx. 6 g).

17 For installation proceed vice versa.

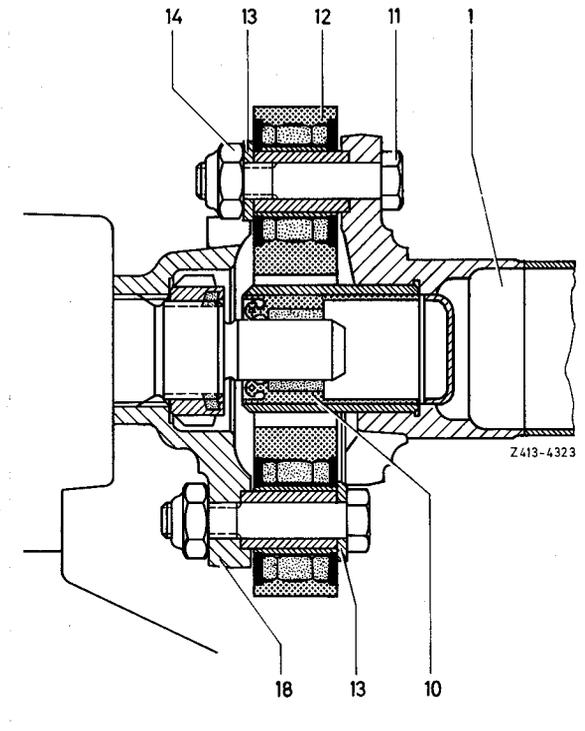
Layout model 126.02 with 90 mm bolt circle dia. and vibration damper on vehicles with manual transmission.

- 1 Front propeller shaft
- 10 Centering sleeve
- 11 Hex. head screw
- 12 Flexible coupling
- 12c Stop washers
- 13 Washer
- 14 Self-locking hex. nut
- 18 Universal flange
- 20 Vibration damper

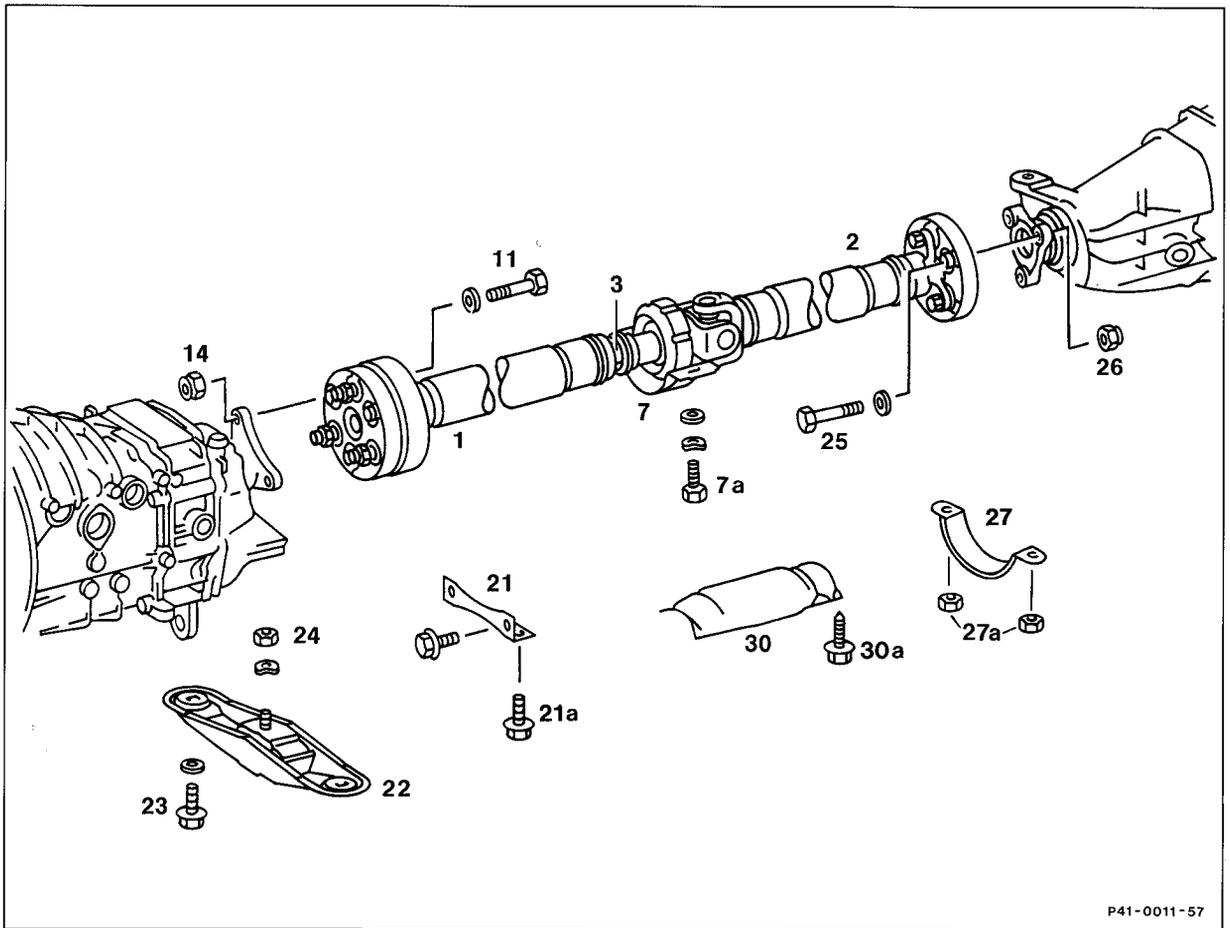


Layout model 126.03/04 with 110 mm bolt circle dia.

- 1 Front propeller shaft
- 10 Centering sleeve
- 11 Hex. head screw
- 12 Flexible coupling
- 13 Washer
- 14 Self-locking hex. nut
- 18 Universal flange



F. Model 201

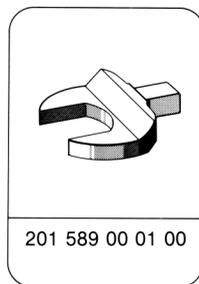


P41-0011-57

- | | |
|--|---|
| Exhaust shielding plate (30) | screw off and on (item 1). |
| Transmission | lift, support, lower. |
| Engine carrier (22) | screw off and on, 45 Nm (item 3). |
| Starting 09/88 bracket (27) | screw off and on (item 4). |
| Propeller shaft clamping nut (3) | loosen for approx. two turns,
Tightening torque 30 - 40 Nm.
Open end wrench element 126 589 00 01 00
(item 5). |
| Front propeller shaft (1) | remove from and mount on transmission,
45 Nm.
Loosen fitted sleeves with mandrel of 10 mm
dia. Renew self-locking hex. nuts (14) (item 6). |
| Rear propeller shaft (2) | remove from and mount on rear axle, 45 Nm.
Renew self-locking hex. nuts (26) (item 8). |

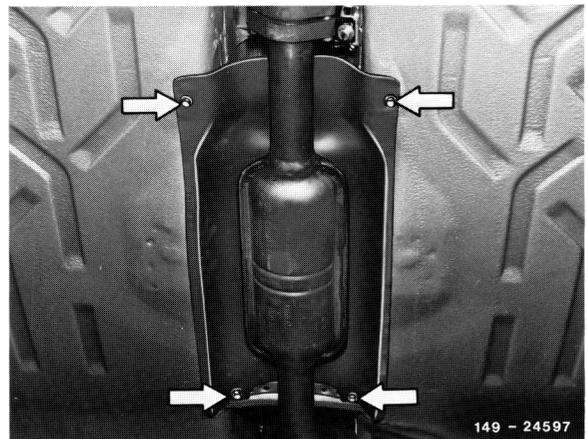
Propeller shaft intermediate bearing (7)	screw off and on. Tighten hex. head screws (7a) only after fastening propeller shaft to transmission and rear axle, 25 Nm (item 9).
Propeller shaft, complete	force off centering pin on transmission and rear axle and pull out toward the rear.
Centering sleeves	check for wear, with bronze bushings, grease cavities with Molykote grease and use multi-purpose grease with multi-component bearing bushings (refer to Specifications for Service Products page 266.2 and 267, quantity per sleeve approx. 6 g).

Special tools



Removal and installation

- 1 Unscrew exhaust shielding plate (arrows).

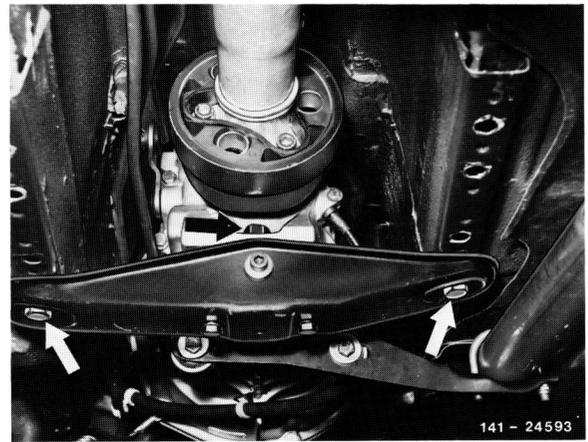


2 Lift transmission and support.

3 Unscrew hex. head screws and hex. nut (arrows) and remove rear engine carrier with engine mount.

Installation note

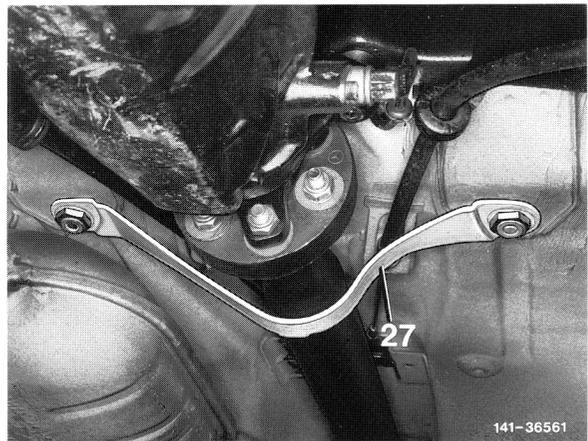
Tightening torque 45 Nm.



4 Unscrew bracket (27) for fastening seat belt on vehicles starting 09/88.

Installation note

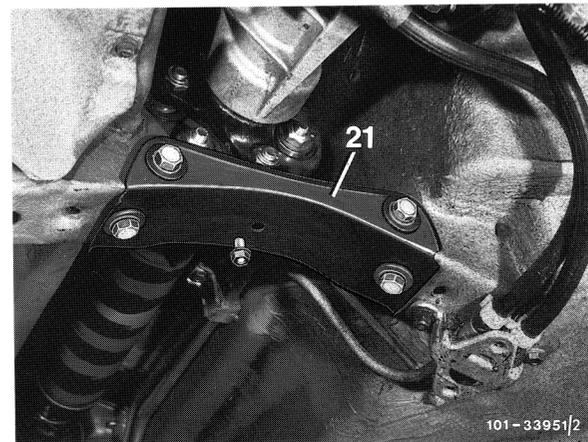
Tightening torque of hexagon nuts 280 Nm.



5 Unscrew cross-bridge (21) if installed from tunnel.

Installation note

Tightening torque 25 Nm.



6 Loosen propeller shaft clamping nut for approx. two turns without sliding back rubber sleeve (sliding along).

Open-end wrench element 201 589 00 01 00.

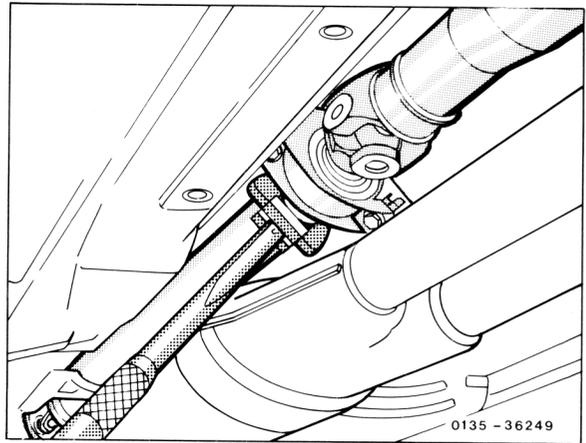
Installation note

Tightening torque 30 - 40 Nm, while paying attention to correct seat of rubber sleeve.



Layout with single-pipe exhaust system

Layout with double-pipe exhaust system



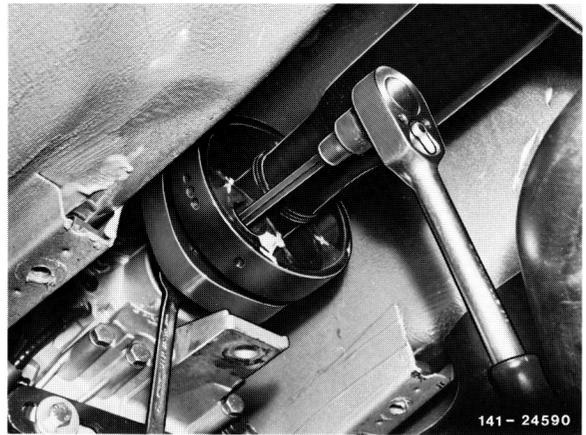
7 Remove front propeller shaft from transmission.

Note

Flexible coupling remains on propeller shaft.

Installation note

Renew self-locking hex. nuts, tightening torque 45 Nm.



8 Prior to sliding back propeller shaft, loosen fitted sleeves of soft pull-push flexible coupling installed on transmission end by means of a mandrel in the joint flange. For this purpose, use a cylindrical mandrel of 10 mm dia. and approx. 150 mm in length.



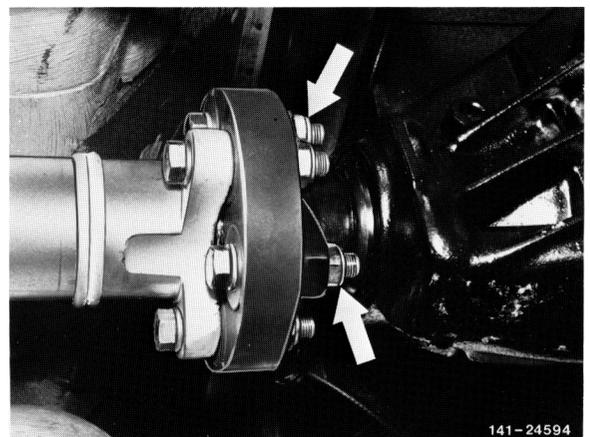
9 Remove propeller shaft from rear axle.

Note

Flexible coupling remains on propeller shaft.

Installation note

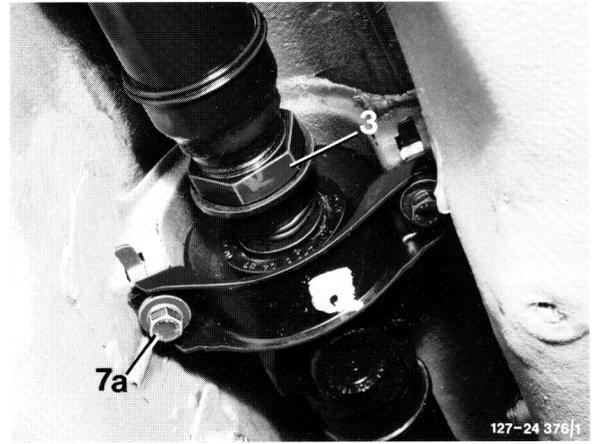
Renew self-locking hex. nuts (arrows), tightening torque 45 Nm.



10 Unscrew hex. head screws (7a) of propeller shaft intermediate bearing on frame floor.

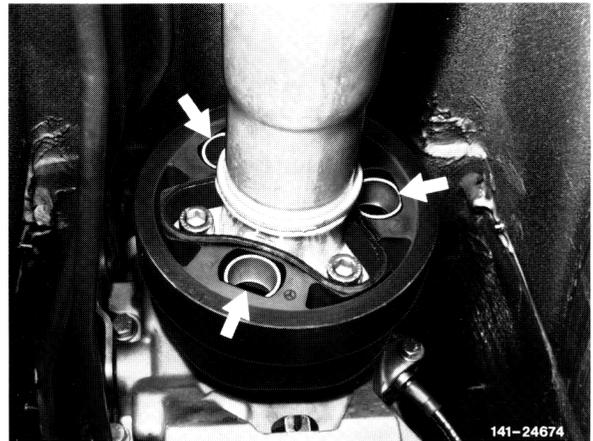
Installation note

Tighten hex. head screws only after fastening propeller shaft on transmission and rear axle, tightening torque 25 Nm.



Note

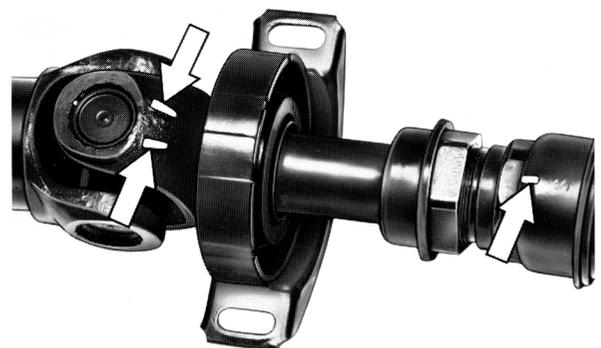
On vehicles with manual transmission, after tightening transmission propeller shaft connection, pay attention to correct seat of rollers in vibration damper and force in rollers, if required (arrows). die Rollen eindrücken (Pfeile).



11 Force propeller shaft from centering pin on transmission and rear axle and remove toward the rear.



If a separation of the propeller shaft is required, reassemble the parts again as shown. The front propeller shaft is provided with a hump and the flexible fork of the rear propeller shaft with two arrow-type humps (arrows). The hump of the front propeller shaft should be located between the two arrows on the flexible fork (arrows).

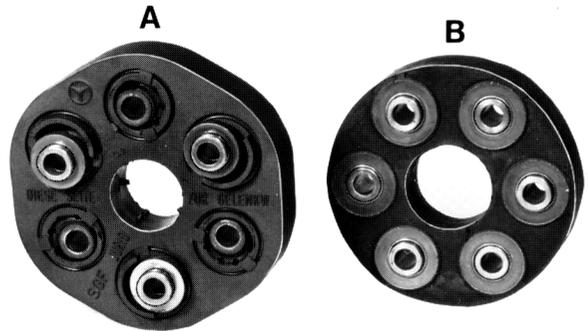


12 Check flexible couplings, centering sleeves, vibration damper and propeller shaft intermediate bearing for wear and renew parts if required.

Note

A soft pull-push (tangential) flexible coupling or a hard flexible coupling is installed on transmission end. Special attention should be paid to damage particularly in area of vulcanized fitted sleeves in the case of the soft pull-push flexible coupling.

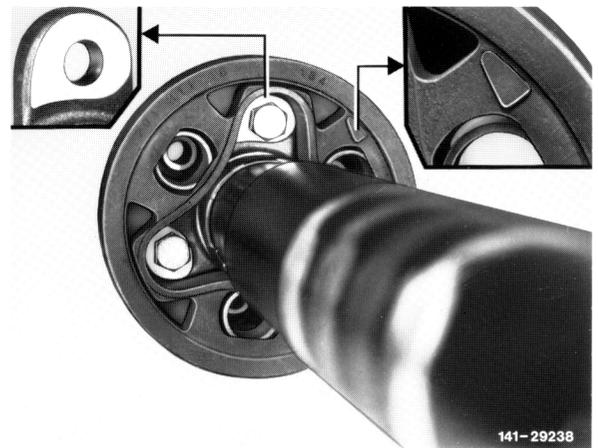
- A Soft pull-push flexible coupling front model 201
- B Rear flexible coupling model 201 and model 201.034/035 front and rear



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13 If during renewal of flexible coupling the vibration damper is separated from propeller shaft, mount vibration damper and three-legged flange as shown.

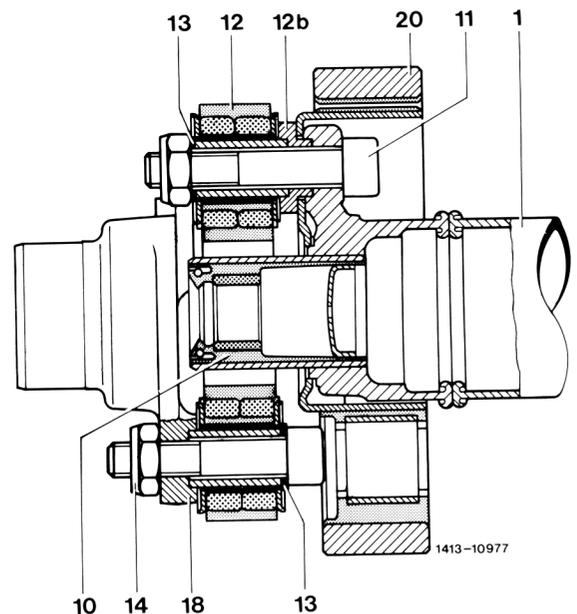
The installation position is correct when the arrow on vibration damper is mounted behind hump on three-legged flange. (Model 201 with a bolt circle diameter of 80 mm).



141-29238

Layout model 201 with 80 mm bolt circle dia.

- 1 Front propeller shaft
- 10 Centering sleeve
- 11 Hex. socket screw
- 12 Flexible coupling
- 12b Centering bushing
- 13 Washer
- 14 Self-locking hex. nut
- 18 Universal flange
- 20 Vibration damper



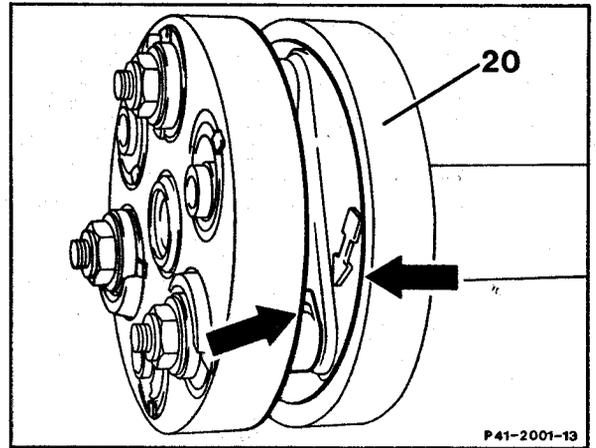
1413-10977

41.1-050/42

14 Model 201 with a bolt circle diameter of 90 mm.

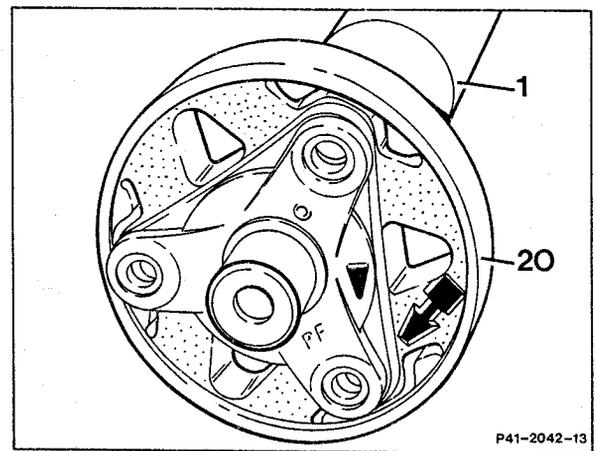
The installation position is correct when the arrow of vibration damper (20) is pointing toward hump on three-legged flange.

Marking on 1st version up to 12/89



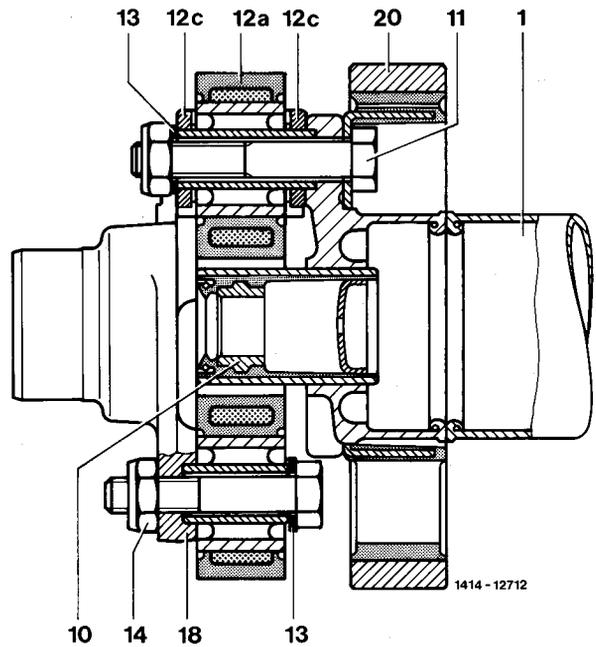
Marking on 2nd version as of 01/90

- 1 Front propeller shaft
- 20 Vibration damper



Layout model 201 with 90 mm bolt circle diameter

- 1 Front propeller shaft
- 10 Centering sleeve
- 11 Hex. head screw
- 12 Flexible coupling
- 12c Stop washers
- 13 Washer
- 14 Self-locking hex. nut
- 18 Universal flange
- 20 Vibration damper



15 With bronze bushing, grease cavities of both centering sleeves with Molykote grease and use multi-purpose grease with multi-component bearing bushings (refer to Specifications for Service Products page 266.2 and 267, filling capacity per sleeve approx. 6 g).

16 For installation proceed vice versa.