

## Drive flange housing, removing and installing

### Assembly overview

#### 1 - Bolt

◆ 40 Nm (30 ft lb)

#### 2 - Front crossmember

#### 3 - Bolt

◆ 40 Nm (30 ft lb)

#### 4 - Transmission support

#### 5 - Drive flange housing

#### 6 - Final drive housing

#### 7 - O-ring

#### 8 - Bolt

◆ 35 Nm (26 ft lb)

#### 9 - Bolt

◆ 23 Nm (17 ft lb)

#### 10 - Mounting bracket

◆ For exhaust system

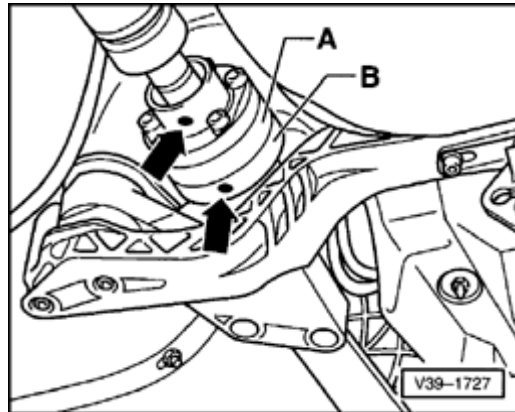
## Removing

- Rear differential installed

## Special tools and equipment

- ◆ VW771 with 771/15 multi-purpose tool
- ◆ VAG1306 drip tray
- ◆ VAG1359/2 universal mounting
- ◆ VAG1383A engine-/transmission hoist
- Place VAG1306 drip tray underneath transmission and drain fluid.
- Remove rear section of exhaust system located rearward of exhaust pipe clamp(s).

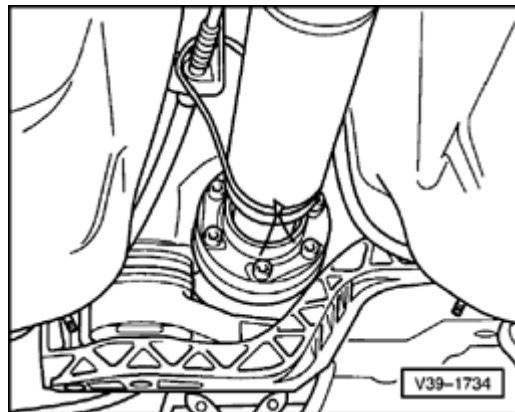
⇒ Repair Manual, Engine Mechanical, Repair Group 26



- Remove heat shield above driveshaft.
- Remove heat shield next to rear differential.

**A**

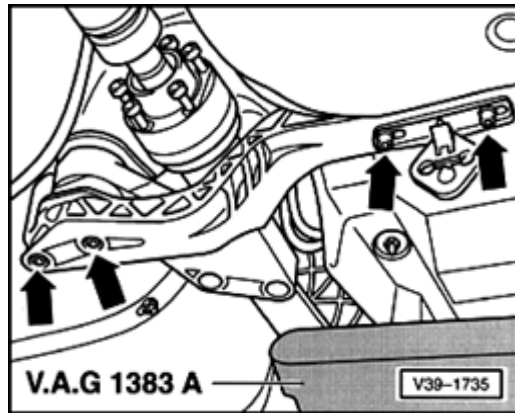
- Check for factory color marking on driveshaft. If not, mark position of driveshaft flange -A- to drive flange in rear differential -B- with color marking.
- Remove mounting bolts from driveshaft flange.

**A**

- Tie driveshaft to mount for parking brake cable using wire.

**Note:**

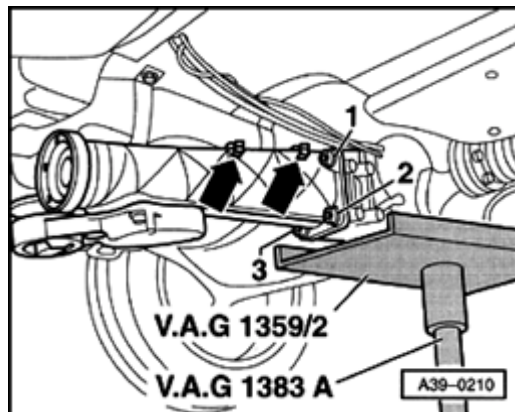
*If driveshaft cannot be pushed upward past flange, tie up driveshaft after lowering the differential. When lowering driveshaft, protect it from dropping and note the permissible bend angle of driveshaft ⇒ Notes, ⇒ [Page 39-68](#) .*



- Support final drive using VAG1383A.

**A**

- Remove bolts (arrows) from front crossmember for final drive.
- Remove crossmember front.
- Lower final drive approx. 10 cm (4 in.).

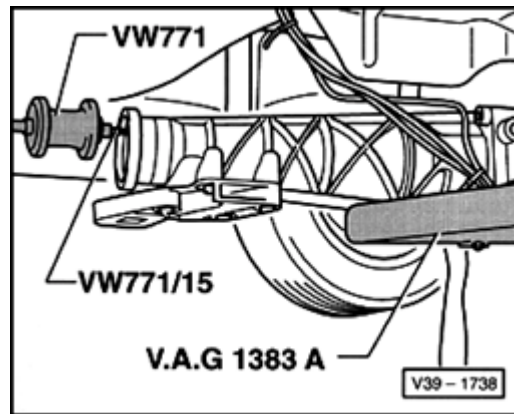


- Remove 4 bolts for drive flange housing -1-, -2- and -3-.

**A**

**Note:**

*The 4th bolt is not visible in the illustration.*



A

- Pull off drive flange together with housing.

### Installing

Installation is the reverse of removal, note the following:

#### Notes:

- ◆ *The threaded bores in the drive flanges of the transmission and the final drive should be cleaned of all locking compound residue after driveshaft has been removed. Otherwise there is a risk of seizing the bolt when tightening and break off at next disassembly.*
  - ◆ *Clean by using a thread tap.*
  - ◆ *Replace seals between driveshaft and drive flange (Remove protective film and bond seal to drive flange. Adhesive bond surface must be free of grease.*
  - ◆ *Always replace self-locking driveshaft bolts.*
- If driveshaft has factory color marking, determine radial deviation on flange/driveshaft ⇒ [Page 39-77](#) and align color marking on driveshaft to new color marking on drive flange.

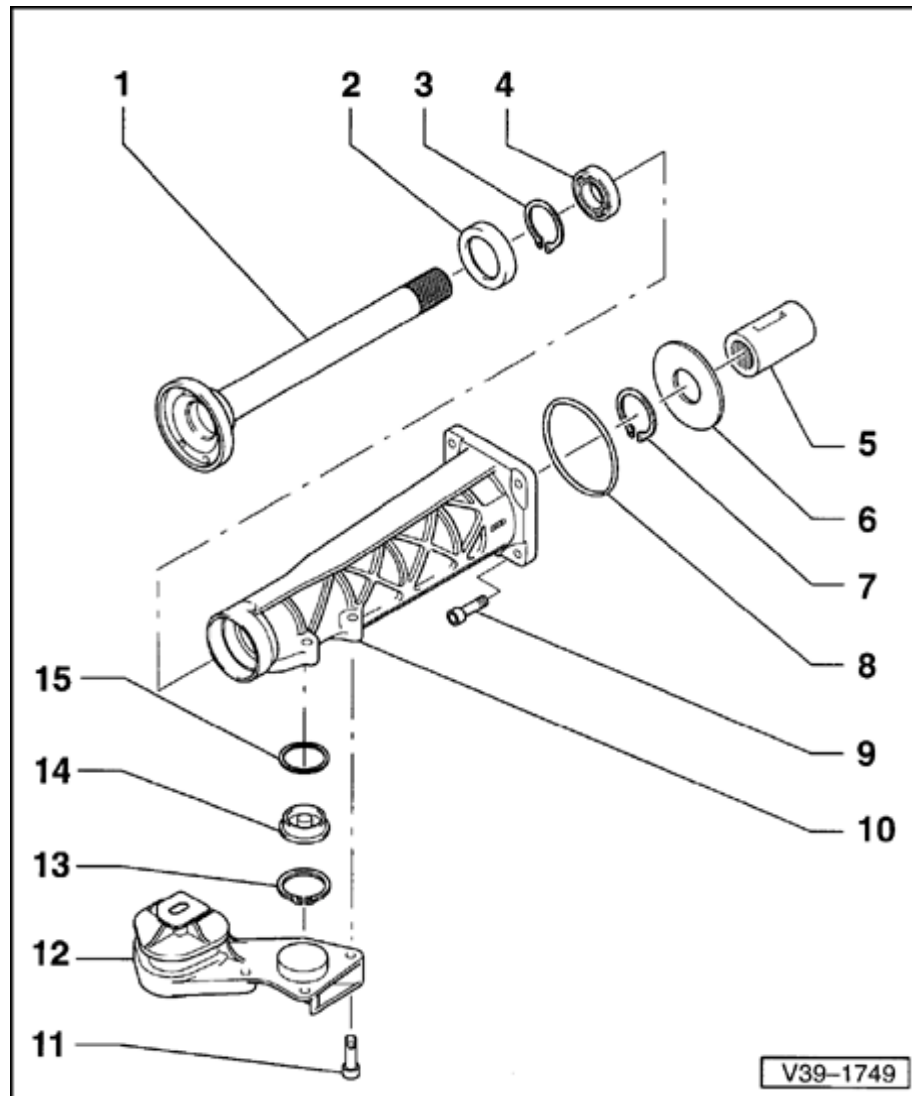
- Align exhaust system free of stress.

⇒ Repair Manual, Engine Mechanical, Repair Group 26

- Top off transmission oil for final drive and check oil level ⇒ [Page 39-84](#) .

### Tightening torques

Component	Tightening torque
Drive flange housing to final drive	35 Nm (26 ft lb)
Driveshaft to final drive	55 Nm (41 ft lb)
Front crossmember for final drive to body	40 Nm (30 ft lb)
Front crossmember for final drive with mounting bracket for exhaust system to body	23 Nm (17 ft lb)
Oil filler plug	35 Nm (26 ft lb)
Nuts for clamping sleeve	40 Nm (30 ft lb)



## Drive flange housing

### Note:

Drive flange housing, removing and installing ⇒ [Page 39-85](#) .

### 1 - Drive flange

- ◆ Disassembling ⇒ [Page 39-94](#)
- ◆ When installing, circlip item -7- must be simultaneously installed through hole in housing ⇒ [Page 39-99](#)

### 2 - Seal

- ◆ Prying out ⇒ [Page 39-96](#)
- ◆ Driving in ⇒ [Page 39-98](#)

### 3 - Circlip

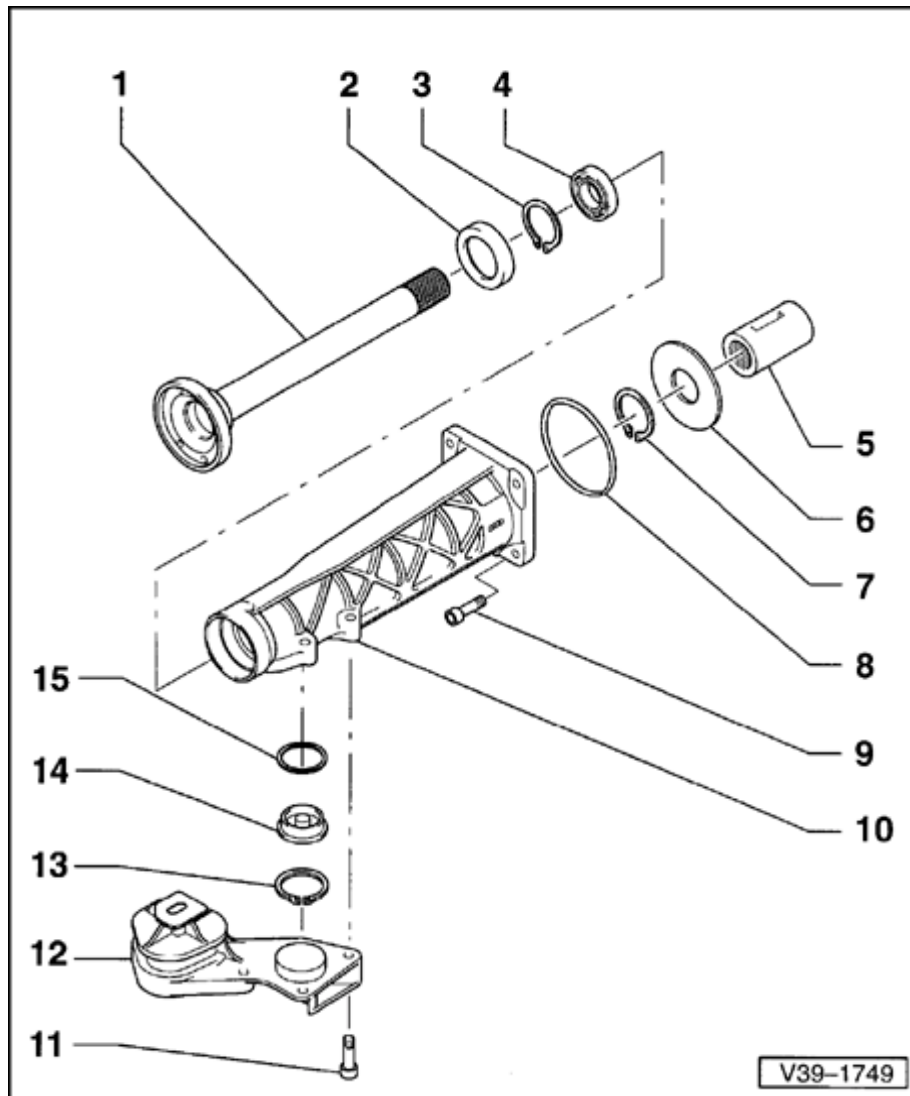
- ◆ Removing ⇒ [Page 39-96](#)

### 4 - Grooved ball bearing for drive flange

- ◆ Removing ⇒ [Page 39-97](#)
- ◆ Assembling ⇒ [Page 39-98](#)

### 5 - Sleeve

- ◆ Removing ⇒ [Page 39-94](#)
- ◆ Pressing on ⇒ [Page 39-99](#)

**6 - Washer**

- ◆ Press out only if damaged
- ◆ Installing ⇒ [Page 39-97](#)

**7 - Circlip**

- ◆ Expand to remove drive flange ⇒ [Page 39-95](#)

**8 - O-ring**

- ◆ Always replace

**9 - Bolt**

- ◆ 35 Nm (26 ft lb)
- ◆ For mounting drive flange housing to final drive housing

**10 - Drive flange housing****11 - Bolt**

- ◆ 40 Nm (30 ft lb)
- ◆ For fastening transmission support to drive flange housing

**12 - Transmission support****13 - Circlip**

- ◆ Removing ⇒ [Page 39-94](#)

**14 - Cap**



◆ Removing ⇒ [Page 39-94](#)

**15 - O-ring**

◆ Always replace

## Drive flange housing, disassembling and assembling

### Special tools and equipment

- ◆ VW402 thrust plate
- ◆ VW409 punch
- ◆ VW412 thrust disc
- ◆ VW433 thrust pad
- ◆ VW771 slide hammer-complete set with VW771/15 threaded piece
- ◆ 2051 arbor
- ◆ 2062 driver
- ◆ 2078 tappet tensioner
- ◆ Kukko 21/5 extractor

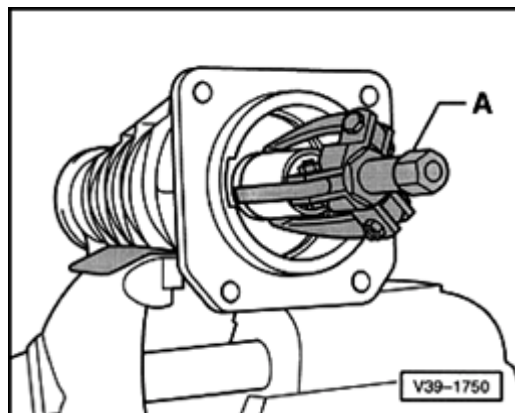
### **Note:**

*Drive flange housing removing and installing ⇒*

[Page 39-85](#)

### Disassembling

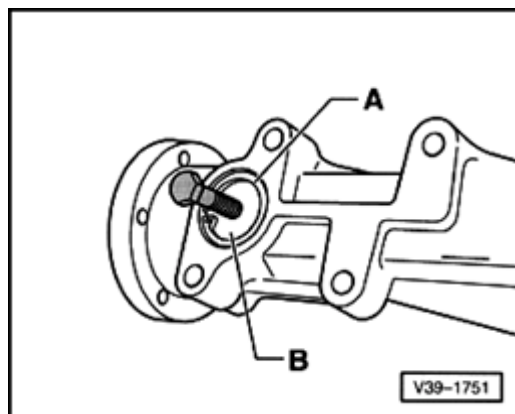
- Clamp drive flange housing in vise using protective jaws.

**A**

- Remove sleeve.

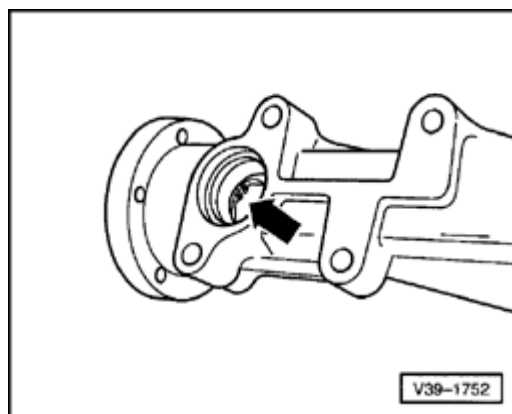
A- puller 30-37 mm, e.g. Kukko 21/5 extractor

- Remove transmission support.

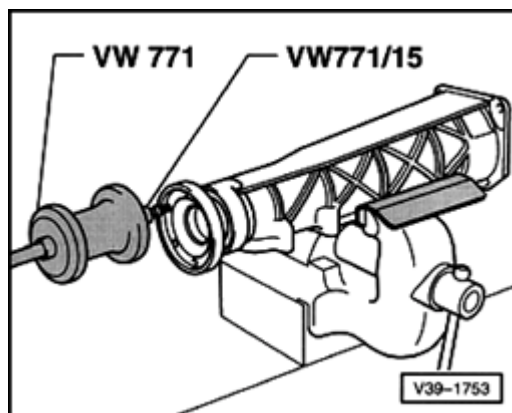
**A**

- Remove circlip -A-.
- Screw M8 bolt into thread bore of cap -B- and remove cap.

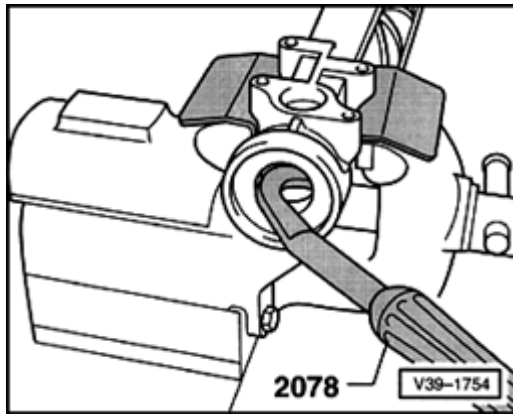
39-95



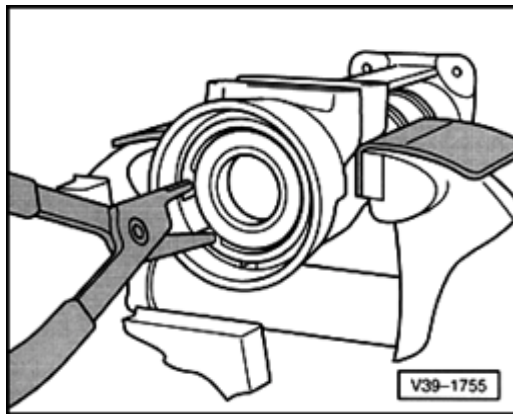
- A**
- Expand circlip (arrow) on drive flange and slide in direction of notched splining.



- A**
- Remove drive flange.
  - Remove circlip from drive flange housing.

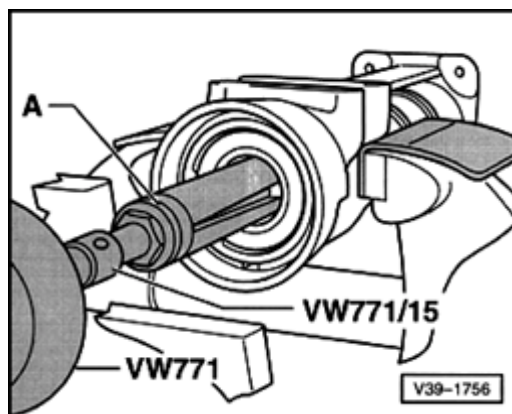


**A** - Pry out seal.



**A** - Remove circlip.

39-97



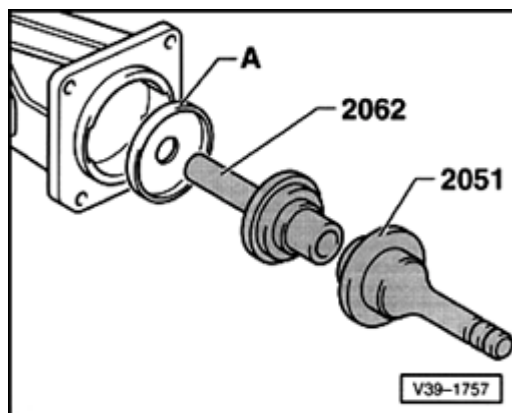
- A - Remove grooved ball bearing from drive flange.

A- Puller 30-37 mm, e.g. Kukko 21/5 extractor

**Note:**

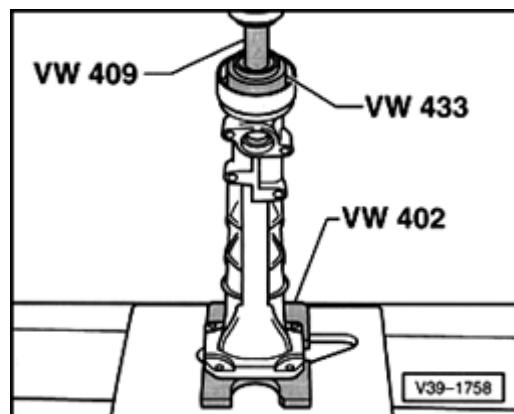
*The bearing is damaged when removed.*

**Only if washer is damaged**



- A - Push out damaged washer with drive flange.
- Install washer -A- until stop is reached.

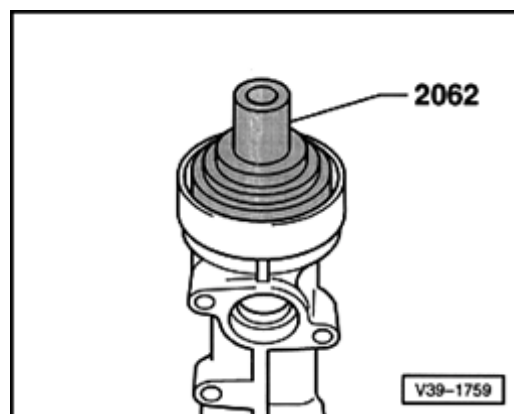
39-98



### Assembly

A

- Press grooved ball bearing into drive flange housing.
- Insert circlip outside.

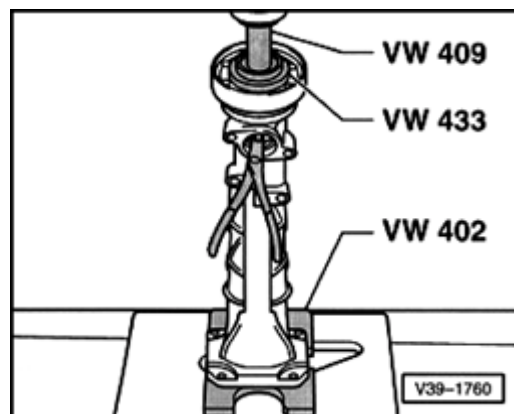


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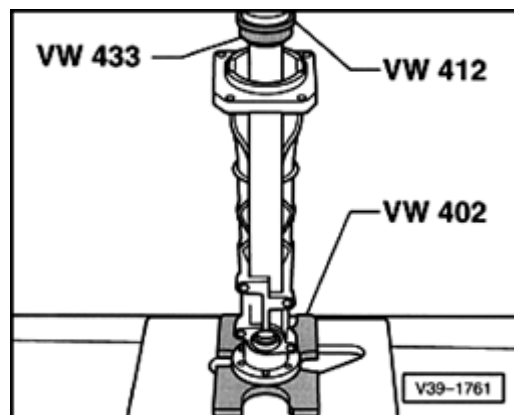
- Fill seal between sealing lip and dust lip with gear oil.
- Drive in O-ring until stop is reached.



39-99



- A**
- Insert circlip into drive flange housing and hold with pliers.
  - Press in drive flange.
  - Insert circlip in groove.



- A**
- Press sleeve onto drive flange until stop is reached.
  - Install cap with O-ring.
  - Install circlip.
  - Install transmission support.
  - Place O-ring on drive flange housing.

## Drive flange seals, replacing

- Final drive installed
- Refer to general repair instructions ⇒ [Page 00-14](#) .

### **Note:**

*The exhaust system needs to be removed only if the left seal is replaced.*

### **Special tools and equipment**

- ◆ 2062 driver
- ◆ 3066 seal installer set
- ◆ VAG1306 drip tray
- ◆ VAG1359/2 universal mount
- ◆ VAG1383A engine/transmission hoist

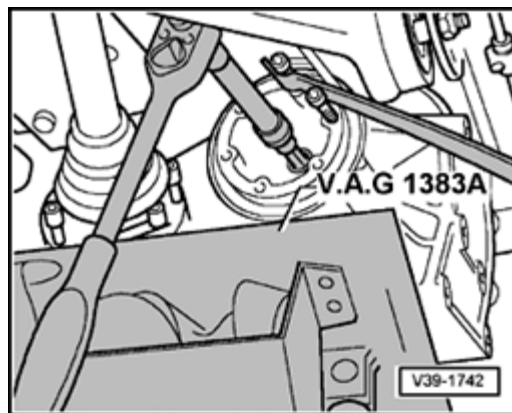
## Removing

- Remove rear section of exhaust system located rearward of exhaust pipe clamp(s).

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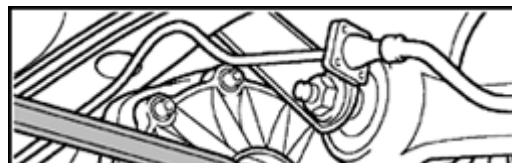
- Unbolt driveaxles on left and right from rear final drive and place to side.

⇒ [Repair Manual, Suspension, Wheels, Brakes, Steering, Repair Group 42](#)



A

- To loosen mounting bolts, screw two bolts into drive flange and counterhold using pry bar.
- Place VAG1306 drip tray underneath and drain oil.
- Remove drive flange using screwed in bolts.



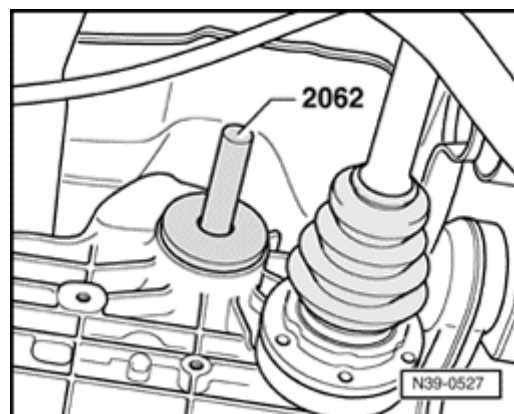
A

- Pry out drive flange seal using pry bar.

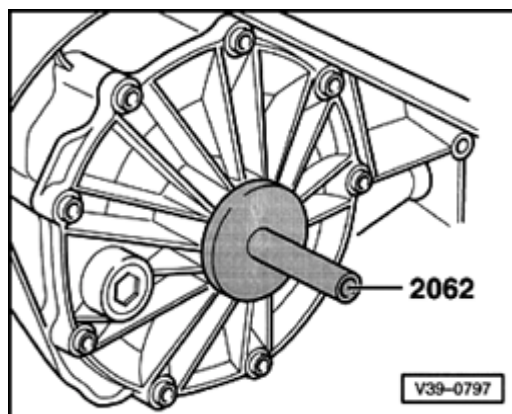
## Installing

Installation is the reverse of removal, note the following:

- Clean seat for O-ring.
- Lightly oil outer circumference of seal.
- Fill space between sealing lip and dust lip with gear oil.
- A** - Install seal for left drive flange using 2062 driver until stop is reached, without canting seal.



39-103



A

- Install seal for right drive flange using 2062 driver until stop is reached, without canting seal.
- Bolt on driveshaft.
- Align exhaust system free of stress.

⇒ Repair Manual, Engine Mechanical, Repair Group 26

- Top off gear oil in final drive and check oil level ⇒ [Page 39-84](#) .

#### Tightening torques

Component	Tightening torque
Drive flange to final drive	25 Nm (18 ft lb)