

## Clutch release mechanism, servicing

### 1 - Transmission

### 2 - Intermediate piece

- ◆ Replace if damaged

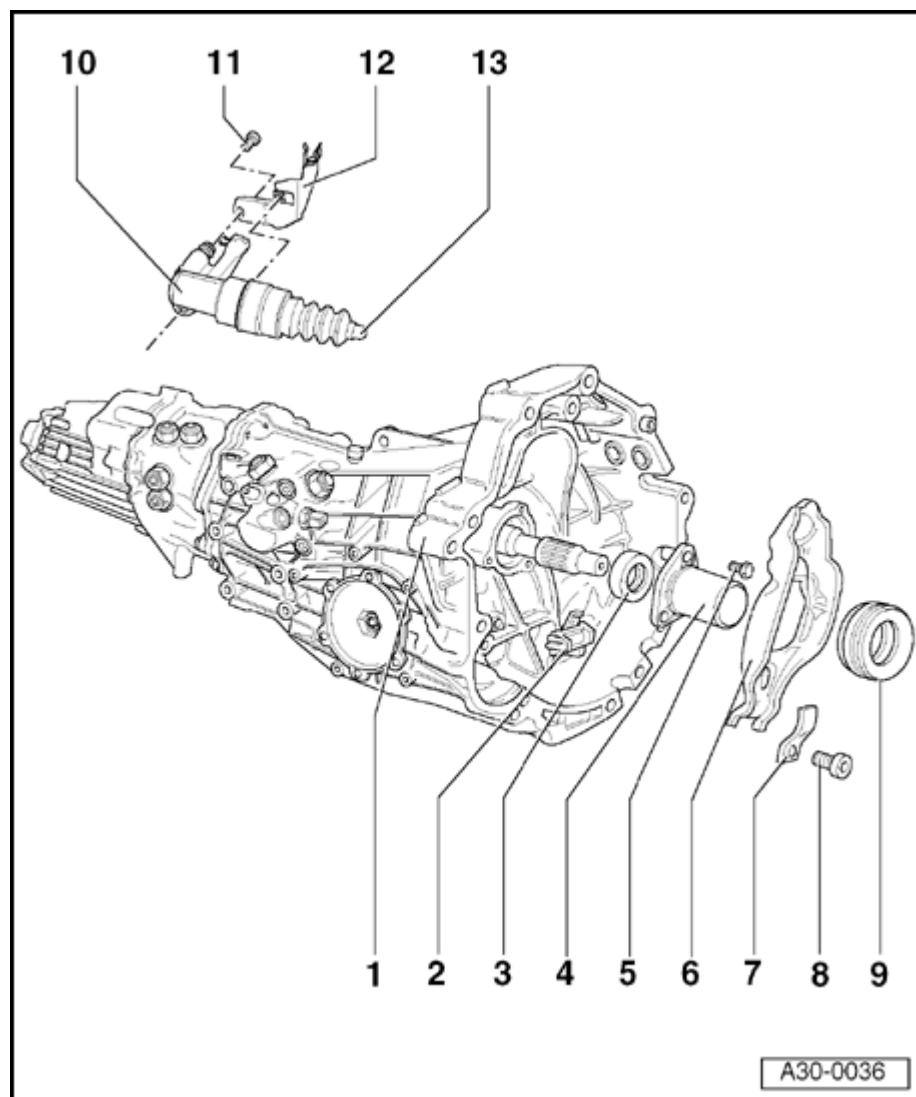
### 3 - Shaft seal

- ◆ For input shaft
- ◆ Removing ⇒ [Fig. 1](#)
- ◆ Installing ⇒ [Fig. 2](#)
- ◆ Pressing-in depth (factory): 3.5 mm
- ◆ Pressing-in depth (repairs): 4.5 mm

### 4 - Guide sleeve

### 5 - Bolt, 15 Nm

- ◆ Qty. 3



### 6 - Clutch release lever

- ◆ Removing ⇒ [Fig. 3](#)
- ◆ Must engage in the lugs in intermediate piece when installed ⇒ [Fig. 4](#)
- ◆ Before installing, coat contact surface of clutch slave cylinder push rod with a thin layer of copper grease, e.g. Z381 351 TE

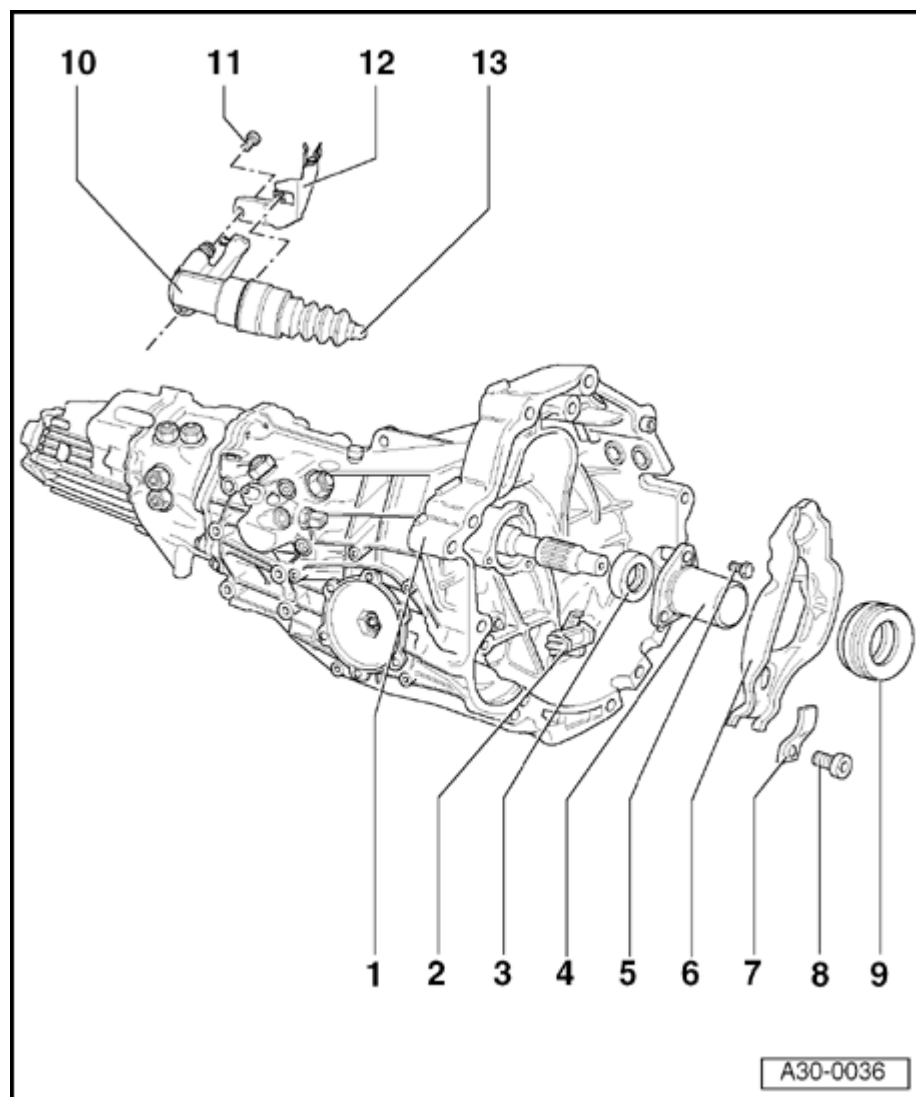
### 7 - Leaf spring

### 8 - Bolt, 25 Nm

- ◆ Self-locking
- ◆ Always replace

### 9 - Release bearing

- ◆ Do not wash out, wipe clean only
- ◆ Replace noisy bearings
- ◆ Retainer lugs on release bearing must engage in release lever



### 10 - Clutch slave cylinder

- ◆ Bleeding clutch system ⇒ [Page 30-25](#)
- ◆ Removing and installing ⇒ [Page 30-32](#)
- ◆ When installing, push on until the securing bolt can be fitted

### 11 - Bolt, 20 Nm

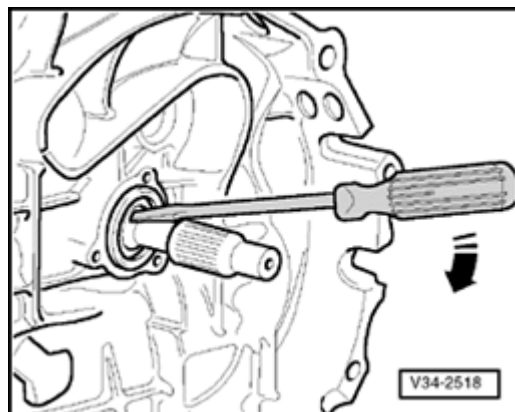
- ◆ Self-locking
- ◆ Always replace

### 12 - Bracket for hose/line assembly

- ◆ Engage in clutch slave cylinder

### 13 - Push rod

- ◆ Coat contact surface of push rod with copper grease, e.g. Z 381 351 TE

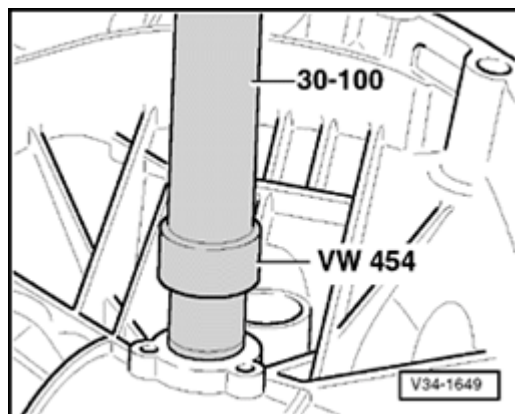


**A** **Fig. 1 Removing shaft seal for input shaft**

- pry seal out carefully with a screwdriver.

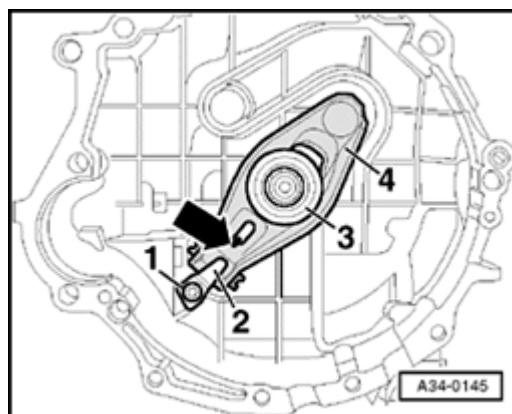
**Note:**

*Do not damage contact surface of shaft seal on input shaft.*



**A** **Fig. 2 Installing shaft seal for input shaft**

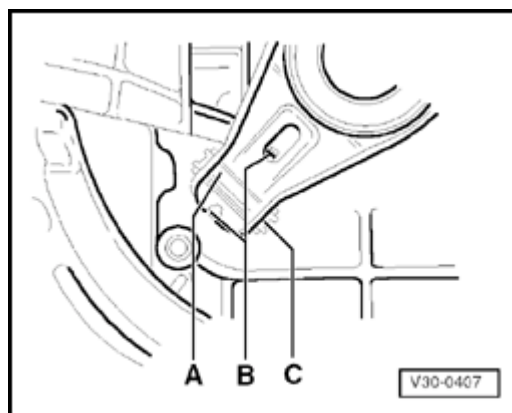
- Pack space between sealing lip and dust lip of new seal for input shaft with multi-purpose grease.
- Fit a thin protective hose tightly over input shaft splines.
- Drive on seal for input shaft.
  - ◆ Pressing-in depth when fitted at factory: 3.5 mm
  - ◆ Pressing-in depth after repair work: 4.5 mm
- Remove protective hose.



A

### Fig. 3 Removing clutch release lever

- Loosen bolt -1-, remove leaf spring -2- and press back detent (arrow).
- Remove clutch release lever -4- together with release bearing -3-.
- Disengage release bearing retainer lugs from release lever.



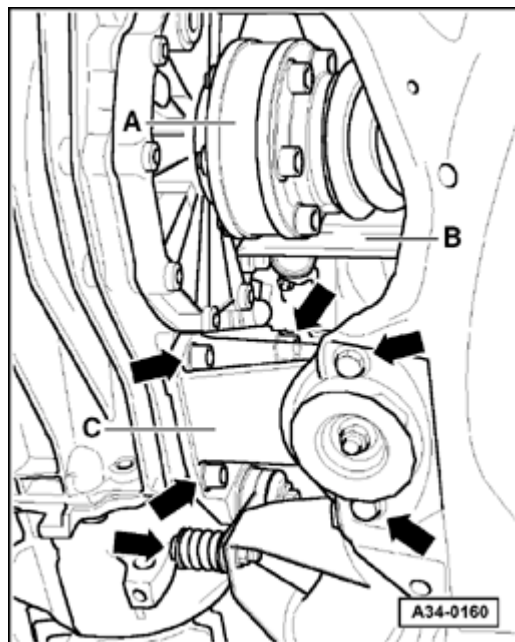
A

### Fig. 4 Installing clutch release lever

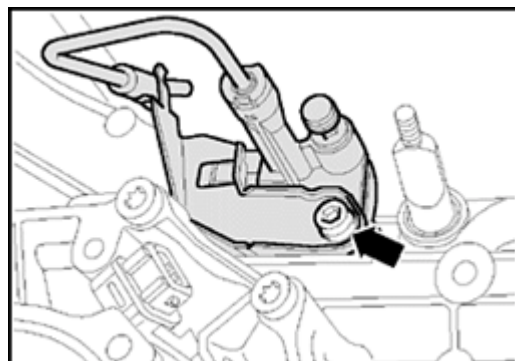
- Before installing clutch release lever, coat contact surface for slave cylinder push rod with with a thin layer of copper paste.
- Insert clutch release lever -A- into intermediate piece -C- and engage (detent -B- will come into view).
- Insert leaf spring (-item 7 -, Page ⇒ [Page 30-28](#) ) and tighten retaining bolt (-item 8 -, Page ⇒ [Page 30-28](#) ) to 25 Nm.

## Clutch slave cylinder, removing and installing

### Removing



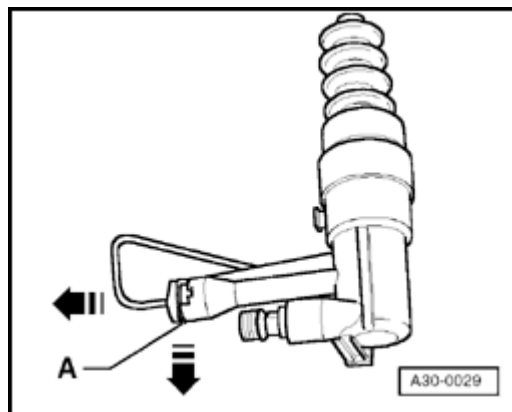
- A**
- Unbolt left drive axle -A- from transmission and move clear to one side.
  - Remove heat shield -B- from transmission.
  - Unscrew bolts (arrows) and remove left transmission support -C- together with transmission mounting.



- A**
- Remove bolt (arrow) and take out slave cylinder from the rear.

### **Note:**

*Do not depress clutch pedal after removing slave cylinder.*



A

- To disconnect line, first pry out retaining clip -A- with a screwdriver until it disengages audibly. Line can then be pulled out.

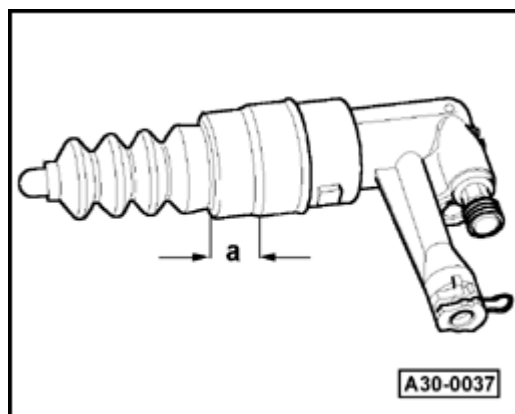
### Installing

Installation is carried out in the reverse order, when doing this note the following:

#### Note:

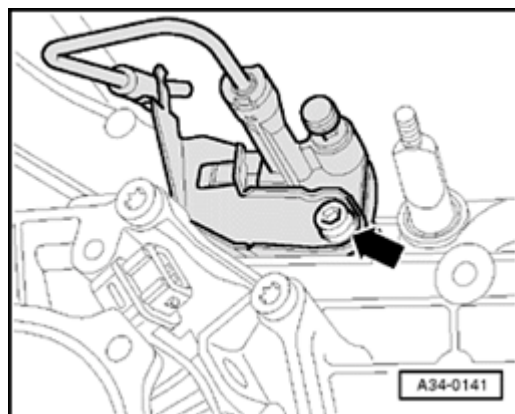
- ◆ Do not allow brake fluid to come into contact with the transmission. If necessary, clean the transmission housing.
- ◆ If the clutch slave cylinder is inserted off-line there is a danger that the push rod will be guided past the clutch release lever.
- ◆ To facilitate installation, engage 6th gear (6-speed transmission) or 4th gear (5-speed transmission) before fitting the slave cylinder.
- ◆ Pre-tension the clutch slave cylinder far enough for the securing bolt to be easily inserted.
- ◆ Always replace securing bolt.

30-34



A

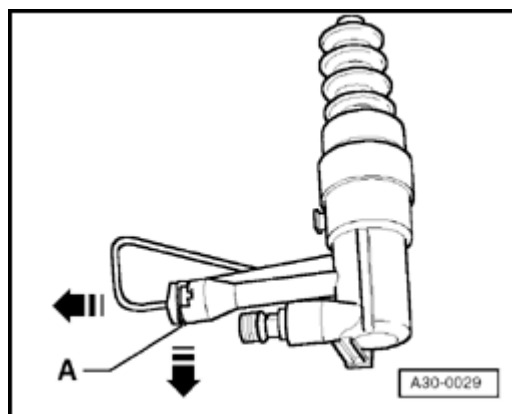
- Coat area -a- of collar with Lithium grease G 052 150 A2 before mounting the slave cylinder into the transmission housing.
- Lightly coat contact surface for plunger to clutch release lever using copper grease, e.g. Z 381 351 TE.



A

- Insert clutch slave cylinder into mounting hole in transmission housing, keeping it as far as possible in line with direction of operation of push rod, then tighten bolt (arrow).





A

- To connect line to slave cylinder, press in retaining clip -A- as far as it will go.
- Push line into slave cylinder until it engages audibly.
- Install transmission support and transmission mounting.
- Bleed clutch system ⇒ [Page 30-25](#)

### Tightening torques

Component	Nm
Clutch slave cylinder to transmission	20
Heat shield for drive axle	25
Drive axle to drive flange	M8 40
	M10 80
Transmission support to transmission	40
Transmission mounting to subframe	23