

## Workshop Manual

### Audi A3 2004 ➤

### Audi A3 Cabriolet 2008 ➤

**7-speed dual clutch gearbox 0AM (S tronic)**

Edition 08.2017



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## List of Workshop Manual Repair Groups

### Repair Group

- 00 - Technical data
- 30 - Clutch
- 34 - Controls, housing
- 35 - Gears, shafts
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Technical information should always be available to the foremen and mechanics, because their careful and constant adherence to the instructions is essential to ensure vehicle road-worthiness and safety. In addition, the normal basic safety precautions for working on motor vehicles must, as a matter of course, be observed.

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## 00 – Technical data

### 1 Identification

(ARL005426; Edition 08.2017)

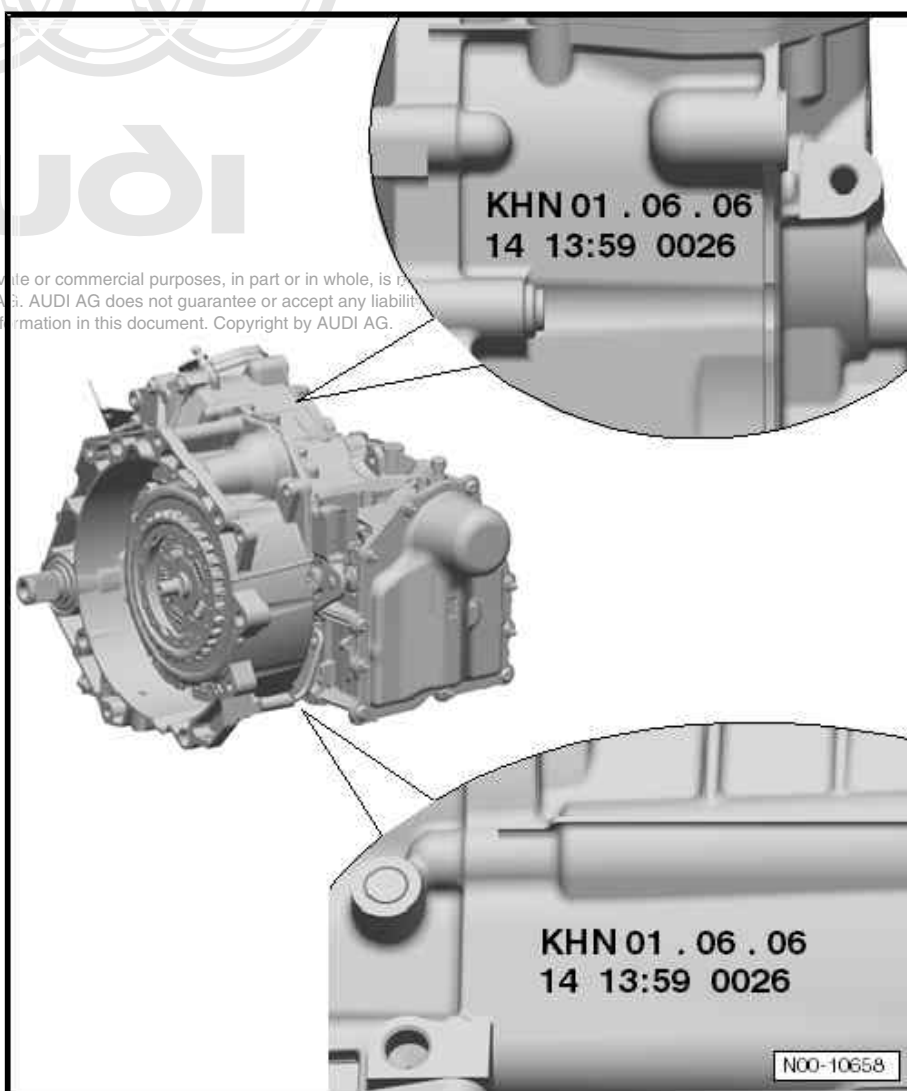
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#### 1.1 Gearbox identification

Allocation of gearbox code letters

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The following details are given at the top of the gearbox (example):

- ◆ KHN = gearbox code letters
- ◆ 01.06.06 = production date
- ◆ 14 = factory code
- ◆ 13:59 = time of production
- ◆ 0026 = serial number



**Note**

*The gearbox code letters are also printed on the vehicle data stickers.*



Audi

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## 2 Technical data

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⇒ [“2.2 Calculating ratio i”, page 7](#)

⇒ [“2.3 Capacities”, page 8](#)

### 2.1 Allocation of gearbox to engine

| Dual clutch gearbox             |                                                       | 0AM, front-wheel drive       |                              |                              |
|---------------------------------|-------------------------------------------------------|------------------------------|------------------------------|------------------------------|
| Gearbox                         | Code letters                                          | KHN                          | KHP                          | LKJ                          |
| Allocation                      | Model                                                 | Audi A3 2004 ►               | Audi A3 2004 ►               | Audi A3 2004 ►               |
|                                 | Engine                                                | 1.4 ltr. - 92 kW TFSI        | 1.8 ltr. - 118 kW TFSI       | 1.6 ltr. - 75 kW MPI         |
| Ratios                          | Final drive I<br>for 1st to 4th gear                  | 71 : 16 = 4.438              | 71 : 16 = 4.438              | 79 : 18 = 4.389              |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive II<br>for 5th and 6th gear                | 71 : 22 = 3.227              | 71 : 22 = 3.227              | 79 : 24 = 3.292              |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive III<br>for 7th gear and re-<br>verse gear | 71 : 17 = 4.176              | 71 : 17 = 4.176              | 79 : 19 = 4.158              |
|                                 | 1st gear                                              | 64 : 17 = 3.765              | 64 : 17 = 3.765              | 64 : 17 = 3.765              |
|                                 | 2nd gear                                              | 50 : 22 = 2.273              | 50 : 22 = 2.273              | 72 : 29 = 2.483              |
|                                 | 3rd gear                                              | 49 : 32 = 1.531              | 49 : 32 = 1.531              | 65 : 38 = 1.710              |
|                                 | 4th gear                                              | 46 : 41 = 1.122              | 46 : 41 = 1.122              | 63 : 51 = 1.235              |
|                                 | 5th gear                                              | 40 : 34 = 1.176              | 40 : 34 = 1.176              | 60 : 46 = 1.304              |
|                                 | 6th gear                                              | 39 : 41 = 0.951              | 39 : 41 = 0.951              | 54 : 51 = 1.059              |
|                                 | 7th gear                                              | 35 : 44 = 0.795              | 35 : 44 = 0.795              | 50 : 56 = 0.893              |
|                                 | Reverse gear                                          | 45 : 22 x 53 : 26 =<br>4.170 | 45 : 22 x 53 : 26 =<br>4.170 | 64 : 29 x 53 : 26 =<br>4.499 |

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| Dual clutch gearbox             |                                                       | 0AM, front-wheel drive |                                               |                      |
|---------------------------------|-------------------------------------------------------|------------------------|-----------------------------------------------|----------------------|
| Gearbox                         | Code letters                                          | LKM                    | LKN                                           | LQN                  |
| Allocation                      | Model                                                 | Audi A3 2004 ►         | Audi A3 2004 ►<br>Audi A3 Cabriolet<br>2008 ► | Audi A3 2004 ►       |
|                                 | Engine                                                | 1.4 ltr. - 92 kW TFSI  | 1.8 ltr. - 118 kW TFSI                        | 1.6 ltr. - 77 kW TDI |
| Ratios                          | Final drive I<br>for 1st to 4th gear                  | 71 : 16 = 4.438        | 71 : 16 = 4.438                               | 72 : 15 = 4.800      |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive II<br>for 5th and 6th gear                | 71 : 22 = 3.227        | 71 : 22 = 3.227                               | 72 : 21 = 3.428      |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive III<br>for 7th gear and re-<br>verse gear | 71 : 17 = 4.176        | 71 : 17 = 4.176                               | 72 : 16 = 4.500      |
|                                 | 1st gear                                              | 64 : 17 = 3.765        | 64 : 17 = 3.765                               | 63 : 18 = 3.500      |
|                                 | 2nd gear                                              | 50 : 22 = 2.273        | 50 : 22 = 2.273                               | 48 : 23 = 2.087      |
|                                 | 3rd gear                                              | 49 : 32 = 1.531        | 49 : 32 = 1.531                               | 47 : 35 = 1.342      |
|                                 | 4th gear                                              | 46 : 41 = 1.122        | 46 : 41 = 1.122                               | 42 : 45 = 0.933      |
|                                 | 5th gear                                              | 40 : 34 = 1.176        | 40 : 34 = 1.176                               | 37 : 38 = 0.973      |
|                                 | 6th gear                                              | 39 : 41 = 0.951        | 39 : 41 = 0.951                               | 35 : 45 = 0.777      |
|                                 | 7th gear                                              | 35 : 44 = 0.795        | 35 : 44 = 0.795                               | 32 : 49 = 0.653      |



| Dual clutch gearbox | 0AM, front-wheel drive    |                           |                           |
|---------------------|---------------------------|---------------------------|---------------------------|
| Reverse gear        | 45 : 22 x 53 : 26 = 4.170 | 45 : 22 x 53 : 26 = 4.170 | 42 : 23 x 53 : 26 = 3.722 |

| Dual clutch gearbox             |                                               | 0AM, front-wheel drive                     |                           |                           |
|---------------------------------|-----------------------------------------------|--------------------------------------------|---------------------------|---------------------------|
| Gearbox                         | Code letters                                  | LSS                                        | LSU                       | LWZ                       |
| Allocation                      | Model                                         | Audi A3 2004 ►<br>Audi A3 Cabriolet 2008 ► | Audi A3 2004 ►            | Audi A3 2004 ►            |
|                                 | Engine                                        | 1.8 ltr. - 118 kW TFSI                     | 1.6 ltr. - 75 kW MPI      | 1.4 ltr. - 92 kW TFSI     |
| Ratios                          | Final drive I for 1st to 4th gear             | 71 : 16 = 4.438                            | 79 : 18 = 4.389           | 71 : 16 = 4.438           |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive II for 5th and 6th gear           | 71 : 22 = 3.227                            | 79 : 24 = 3.292           | 71 : 22 = 3.227           |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive III for 7th gear and reverse gear | 71 : 17 = 4.176                            | 79 : 19 = 4.158           | 71 : 17 = 4.176           |
|                                 | 1st gear                                      | 64 : 17 = 3.765                            | 64 : 17 = 3.765           | 64 : 17 = 3.765           |
|                                 | 2nd gear                                      | 50 : 22 = 2.273                            | 72 : 29 = 2.483           | 50 : 22 = 2.273           |
|                                 | 3rd gear                                      | 49 : 32 = 1.531                            | 65 : 38 = 1.710           | 49 : 32 = 1.531           |
|                                 | 4th gear                                      | 46 : 41 = 1.122                            | 63 : 51 = 1.235           | 46 : 41 = 1.122           |
|                                 | 5th gear                                      | 40 : 34 = 1.176                            | 60 : 46 = 1.304           | 40 : 34 = 1.176           |
|                                 | 6th gear                                      | 39 : 41 = 0.951                            | 54 : 51 = 1.059           | 39 : 41 = 0.951           |
|                                 | 7th gear                                      | 35 : 44 = 0.795                            | 50 : 56 = 0.893           | 35 : 44 = 0.795           |
|                                 | Reverse gear                                  | 45 : 22 x 53 : 26 = 4.170                  | 64 : 29 x 53 : 26 = 4.499 | 45 : 22 x 53 : 26 = 4.170 |

| Dual clutch gearbox             |                                               | 0AM, front-wheel drive    |                           |                           |
|---------------------------------|-----------------------------------------------|---------------------------|---------------------------|---------------------------|
| Gearbox                         | Code letters                                  | LXA                       | LYG                       | MDH                       |
| Allocation                      | Model                                         | Audi A3 2004 ►            | Audi A3 2004 ►            | Audi A3 2004 ►            |
|                                 | Engine                                        | 1.4 ltr. - 92 kW TFSI     | 1.6 ltr. - 75 kW MPI      | 1.2 ltr. - 77 kW TFSI     |
| Ratios                          | Final drive I for 1st to 4th gear             | 71 : 16 = 4.438           | 79 : 18 = 4.389           | 71 : 16 = 4.438           |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive II for 5th and 6th gear           | 71 : 22 = 3.227           | 79 : 24 = 3.292           | 71 : 22 = 3.227           |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive III for 7th gear and reverse gear | 71 : 17 = 4.176           | 79 : 19 = 4.158           | 71 : 17 = 4.176           |
|                                 | 1st gear                                      | 64 : 17 = 3.765           | 64 : 17 = 3.765           | 64 : 17 = 3.765           |
|                                 | 2nd gear                                      | 50 : 22 = 2.273           | 72 : 29 = 2.483           | 50 : 22 = 2.273           |
|                                 | 3rd gear                                      | 49 : 32 = 1.531           | 65 : 38 = 1.710           | 49 : 32 = 1.531           |
|                                 | 4th gear                                      | 46 : 41 = 1.122           | 63 : 51 = 1.235           | 46 : 41 = 1.122           |
|                                 | 5th gear                                      | 40 : 34 = 1.176           | 60 : 46 = 1.304           | 40 : 34 = 1.176           |
|                                 | 6th gear                                      | 39 : 41 = 0.951           | 54 : 51 = 1.059           | 39 : 41 = 0.951           |
|                                 | 7th gear                                      | 35 : 44 = 0.795           | 50 : 56 = 0.893           | 35 : 44 = 0.795           |
|                                 | Reverse gear                                  | 45 : 22 x 53 : 26 = 4.170 | 64 : 29 x 53 : 26 = 4.499 | 45 : 22 x 53 : 26 = 4.170 |

| Dual clutch gearbox             |                                               | 0AM, front-wheel drive    |                                            |                           |
|---------------------------------|-----------------------------------------------|---------------------------|--------------------------------------------|---------------------------|
| Gearbox                         | Code letters                                  | MGK                       | MGL                                        | MGP                       |
| Allocation                      | Model                                         | Audi A3 2004 ►            | Audi A3 2004 ►<br>Audi A3 Cabriolet 2008 ► | Audi A3 2004 ►            |
|                                 | Engine                                        | 1.4 ltr. - 92 kW TFSI     | 1.8 ltr. - 118 kW TFSI                     | 1.6 ltr. - 75 kW MPI      |
| Ratios                          | Final drive I for 1st to 4th gear             | 71 : 16 = 4.438           | 71 : 16 = 4.438                            | 79 : 18 = 4.389           |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive II for 5th and 6th gear           | 71 : 22 = 3.227           | 71 : 22 = 3.227                            | 79 : 24 = 3.292           |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive III for 7th gear and reverse gear | 71 : 17 = 4.176           | 71 : 17 = 4.176                            | 79 : 19 = 4.158           |
|                                 | 1st gear                                      | 64 : 17 = 3.765           | 64 : 17 = 3.765                            | 64 : 17 = 3.765           |
|                                 | 2nd gear                                      | 50 : 22 = 2.273           | 50 : 22 = 2.273                            | 72 : 29 = 2.483           |
|                                 | 3rd gear                                      | 49 : 32 = 1.531           | 49 : 32 = 1.531                            | 65 : 38 = 1.710           |
|                                 | 4th gear                                      | 46 : 41 = 1.122           | 46 : 41 = 1.122                            | 63 : 51 = 1.235           |
|                                 | 5th gear                                      | 40 : 34 = 1.176           | 40 : 34 = 1.176                            | 60 : 46 = 1.304           |
|                                 | 6th gear                                      | 39 : 41 = 0.951           | 39 : 41 = 0.951                            | 54 : 51 = 1.059           |
|                                 | 7th gear                                      | 35 : 44 = 0.795           | 35 : 44 = 0.795                            | 50 : 56 = 0.893           |
|                                 | Reverse gear                                  | 45 : 22 x 53 : 26 = 4.170 | 45 : 22 x 53 : 26 = 4.170                  | 64 : 29 x 53 : 26 = 4.499 |

| Dual clutch gearbox             |                                               | 0AM, front-wheel drive    |                           |                           |
|---------------------------------|-----------------------------------------------|---------------------------|---------------------------|---------------------------|
| Gearbox                         | Code letters                                  | MLB                       | MLC                       | MLE                       |
| Allocation                      | Model                                         | Audi A3 2004 ►            | Audi A3 2004 ►            | Audi A3 2004 ►            |
|                                 | Engine                                        | 1.4 ltr. - 92 kW TFSI     | 1.8 ltr. - 118 kW TFSI    | 1.6 ltr. - 77 kW TDI      |
| Ratios                          | Final drive I for 1st to 4th gear             | 71 : 16 = 4.438           | 71 : 16 = 4.438           | 72 : 15 = 4.800           |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive II for 5th and 6th gear           | 71 : 22 = 3.227           | 71 : 22 = 3.227           | 72 : 21 = 3.428           |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive III for 7th gear and reverse gear | 71 : 17 = 4.176           | 71 : 17 = 4.176           | 72 : 16 = 4.500           |
|                                 | 1st gear                                      | 64 : 17 = 3.765           | 64 : 17 = 3.765           | 63 : 18 = 3.500           |
|                                 | 2nd gear                                      | 50 : 22 = 2.273           | 50 : 22 = 2.273           | 48 : 23 = 2.087           |
|                                 | 3rd gear                                      | 49 : 32 = 1.531           | 49 : 32 = 1.531           | 47 : 35 = 1.342           |
|                                 | 4th gear                                      | 46 : 41 = 1.122           | 46 : 41 = 1.122           | 42 : 45 = 0.933           |
|                                 | 5th gear                                      | 40 : 34 = 1.176           | 40 : 34 = 1.176           | 37 : 38 = 0.973           |
|                                 | 6th gear                                      | 39 : 41 = 0.951           | 39 : 41 = 0.951           | 35 : 45 = 0.777           |
|                                 | 7th gear                                      | 35 : 44 = 0.795           | 35 : 44 = 0.795           | 32 : 49 = 0.653           |
|                                 | Reverse gear                                  | 45 : 22 x 53 : 26 = 4.170 | 45 : 22 x 53 : 26 = 4.170 | 42 : 23 x 53 : 26 = 3.722 |

| Dual clutch gearbox |              | 0AM, front-wheel drive |                |                |
|---------------------|--------------|------------------------|----------------|----------------|
| Gearbox             | Code letters | MLF                    | MLJ            | MPH            |
| Allocation          | Model        | Audi A3 2004 ►         | Audi A3 2004 ► | Audi A3 2004 ► |



| Dual clutch gearbox             |                                               | 0AM, front-wheel drive    |                           |                           |
|---------------------------------|-----------------------------------------------|---------------------------|---------------------------|---------------------------|
|                                 | Engine                                        | 1.6 ltr. - 75 kW MPI      | 1.2 ltr. - 77 kW TFSI     | 1.4 ltr. - 92 kW TFSI     |
| Ratios                          | Final drive I for 1st to 4th gear             | 79 : 18 = 4.389           | 71 : 16 = 4.438           | 71 : 16 = 4.438           |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive II for 5th and 6th gear           | 79 : 24 = 3.292           | 71 : 22 = 3.227           | 71 : 22 = 3.227           |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive III for 7th gear and reverse gear | 79 : 19 = 4.158           | 71 : 17 = 4.176           | 71 : 17 = 4.176           |
|                                 | 1st gear                                      | 64 : 17 = 3.765           | 64 : 17 = 3.765           | 64 : 17 = 3.765           |
|                                 | 2nd gear                                      | 72 : 29 = 2.483           | 50 : 22 = 2.273           | 50 : 22 = 2.273           |
|                                 | 3rd gear                                      | 65 : 38 = 1.710           | 49 : 32 = 1.531           | 49 : 32 = 1.531           |
|                                 | 4th gear                                      | 63 : 51 = 1.235           | 46 : 41 = 1.122           | 46 : 41 = 1.122           |
|                                 | 5th gear                                      | 60 : 46 = 1.304           | 40 : 34 = 1.176           | 40 : 34 = 1.176           |
|                                 | 6th gear                                      | 54 : 51 = 1.059           | 39 : 41 = 0.951           | 39 : 41 = 0.951           |
|                                 | 7th gear                                      | 50 : 56 = 0.893           | 35 : 44 = 0.795           | 35 : 44 = 0.795           |
|                                 | Reverse gear                                  | 64 : 29 x 53 : 26 = 4.499 | 45 : 22 x 53 : 26 = 4.170 | 45 : 22 x 53 : 26 = 4.170 |

| Dual clutch gearbox             |                                               | 0AM, front-wheel drive    |                           |                           |
|---------------------------------|-----------------------------------------------|---------------------------|---------------------------|---------------------------|
| Gearbox                         | Code letters                                  | MPJ                       | MPL                       | MPQ                       |
| Allocation                      | Model                                         | Audi A3 2004 ►            | Audi A3 2004 ►            | Audi A3 2004 ►            |
|                                 | Engine                                        | 1.8 ltr. - 118 kW TFSI    | 1.6 ltr. - 77 kW TDI      | 2 ltr. - 77 kW TFSI       |
| Ratios                          | Final drive I for 1st to 4th gear             | 71 : 16 = 4.438           | 72 : 15 = 4.800           | 71 : 16 = 4.438           |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive II for 5th and 6th gear           | 71 : 22 = 3.227           | 72 : 21 = 3.428           | 71 : 22 = 3.227           |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive III for 7th gear and reverse gear | 71 : 17 = 4.176           | 72 : 16 = 4.500           | 71 : 17 = 4.176           |
|                                 | 1st gear                                      | 64 : 17 = 3.765           | 63 : 18 = 3.500           | 64 : 17 = 3.765           |
|                                 | 2nd gear                                      | 50 : 22 = 2.273           | 48 : 23 = 2.087           | 50 : 22 = 2.273           |
|                                 | 3rd gear                                      | 49 : 32 = 1.531           | 47 : 35 = 1.342           | 49 : 32 = 1.531           |
|                                 | 4th gear                                      | 46 : 41 = 1.122           | 42 : 45 = 0.933           | 46 : 41 = 1.122           |
|                                 | 5th gear                                      | 40 : 34 = 1.176           | 37 : 38 = 0.973           | 40 : 34 = 1.176           |
|                                 | 6th gear                                      | 39 : 41 = 0.951           | 35 : 45 = 0.777           | 39 : 41 = 0.951           |
|                                 | 7th gear                                      | 35 : 44 = 0.795           | 32 : 49 = 0.653           | 35 : 44 = 0.795           |
|                                 | Reverse gear                                  | 45 : 22 x 53 : 26 = 4.170 | 42 : 23 x 53 : 26 = 3.722 | 45 : 22 x 53 : 26 = 4.170 |

| Dual clutch gearbox |              | 0AM, front-wheel drive |                        |                                            |
|---------------------|--------------|------------------------|------------------------|--------------------------------------------|
| Gearbox             | Code letters | MQF<br>NQK             | MQJ<br>NQB<br>NTQ      | NAT                                        |
| Allocation          | Model        | Audi A3 2004 ►         | Audi A3 2004 ►         | Audi A3 2004 ►<br>Audi A3 Cabriolet 2008 ► |
|                     | Engine       | 1.4 ltr. - 92 kW TFSI  | 1.8 ltr. - 118 kW TFSI | 1.8 ltr. - 118 kW TFSI                     |

| Dual clutch gearbox             |                                                       | 0AM, front-wheel drive       |                              |                              |
|---------------------------------|-------------------------------------------------------|------------------------------|------------------------------|------------------------------|
| Ratios                          | Final drive I<br>for 1st to 4th gear                  | 71 : 16 = 4.438              | 71 : 16 = 4.438              | 71 : 16 = 4.438              |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive II<br>for 5th and 6th<br>gear             | 71 : 22 = 3.227              | 71 : 22 = 3.227              | 71 : 22 = 3.227              |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive III<br>for 7th gear and re-<br>verse gear | 71 : 17 = 4.176              | 71 : 17 = 4.176              | 71 : 17 = 4.176              |
|                                 | 1st gear                                              | 64 : 17 = 3.765              | 64 : 17 = 3.765              | 64 : 17 = 3.765              |
|                                 | 2nd gear                                              | 50 : 22 = 2.273              | 50 : 22 = 2.273              | 50 : 22 = 2.273              |
|                                 | 3rd gear                                              | 49 : 32 = 1.531              | 49 : 32 = 1.531              | 49 : 32 = 1.531              |
|                                 | 4th gear                                              | 46 : 41 = 1.122              | 46 : 41 = 1.122              | 46 : 41 = 1.122              |
|                                 | 5th gear                                              | 40 : 34 = 1.176              | 40 : 34 = 1.176              | 40 : 34 = 1.176              |
|                                 | 6th gear                                              | 39 : 41 = 0.951              | 39 : 41 = 0.951              | 39 : 41 = 0.951              |
|                                 | 7th gear                                              | 35 : 44 = 0.795              | 35 : 44 = 0.795              | 35 : 44 = 0.795              |
|                                 | Reverse<br>gear                                       | 45 : 22 x 53 : 26 =<br>4.170 | 45 : 22 x 53 : 26 =<br>4.170 | 45 : 22 x 53 : 26 =<br>4.170 |

| Dual clutch gearbox             |                                                       | 0AM, front-wheel drive       |                              |  |
|---------------------------------|-------------------------------------------------------|------------------------------|------------------------------|--|
| Gearbox                         | Code letters                                          | NBA<br>NTZ                   | NKA<br>NQE<br>NTT            |  |
| Allocation                      | Model                                                 | Audi A3 2004 ►               | Audi A3 2004 ►               |  |
|                                 | Engine                                                | 1.4 ltr. - 92 kW TFSI        | 1.6 ltr. - 77 kW TDI         |  |
| Ratios                          | Final drive I<br>for 1st to 4th gear                  | 71 : 16 = 4.438              | 72 : 15 = 4.800              |  |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive II<br>for 5th and 6th<br>gear             | 71 : 22 = 3.227              | 72 : 21 = 3.428              |  |
| Z <sub>2</sub> : Z <sub>1</sub> | Final drive III<br>for 7th gear and re-<br>verse gear | 71 : 17 = 4.176              | 72 : 16 = 4.500              |  |
|                                 | 1st gear                                              | 64 : 17 = 3.765              | 63 : 18 = 3.500              |  |
|                                 | 2nd gear                                              | 50 : 22 = 2.273              | 48 : 23 = 2.087              |  |
|                                 | 3rd gear                                              | 49 : 32 = 1.531              | 47 : 35 = 1.342              |  |
|                                 | 4th gear                                              | 46 : 41 = 1.122              | 42 : 45 = 0.933              |  |
|                                 | 5th gear                                              | 40 : 34 = 1.176              | 37 : 38 = 0.973              |  |
|                                 | 6th gear                                              | 39 : 41 = 0.951              | 35 : 45 = 0.777              |  |
|                                 | 7th gear                                              | 35 : 44 = 0.795              | 32 : 49 = 0.653              |  |
|                                 | Reverse<br>gear                                       | 45 : 22 x 53 : 26 =<br>4.170 | 42 : 23 x 53 : 26 =<br>3.722 |  |

## 2.2 Calculating ratio "i"

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|              | 7th gear             | Final drive          |
|--------------|----------------------|----------------------|
| Driving gear | ZG <sub>1</sub> = 44 | ZA <sub>1</sub> = 17 |
| Driven gear  | ZG <sub>2</sub> = 35 | ZA <sub>2</sub> = 71 |

$i = Z_2 : Z_1$  ( $Z_1$  = number of teeth on driving gear,  $Z_2$  = number of teeth on driven gear)

$i_G$  = gear ratio =  $Z_{G2} : Z_{G1} = 35 : 44 = 0.795$

$i_A$  = axle ratio =  $Z_{A2} : Z_{A1} = 71 : 17 = 4.176$

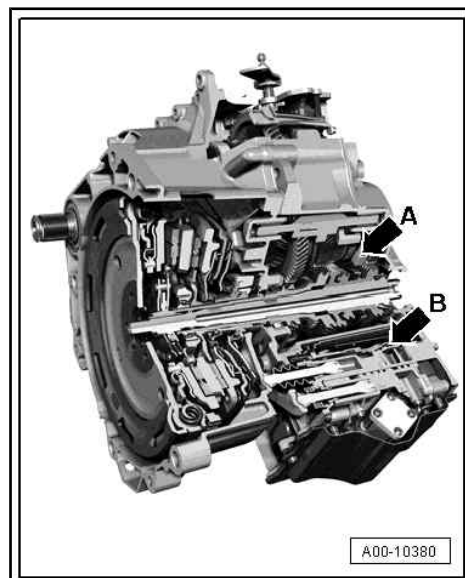
$i_{ov}$  = overall ratio =  $i_G \times i_A = 0.795 \times 4.176 = 3.320$

## 2.3 Capacities

The 7-speed dual clutch gearbox has separate oil and fluid fillings. One section is filled with gear oil -arrow A-, the other with hydraulic fluid -arrow B-.

| Capacities      | Gear oil section                                                              |
|-----------------|-------------------------------------------------------------------------------|
| Initial filling | 1.9 ltr.                                                                      |
| Oil change      | No change required                                                            |
| Lubricant       | Gear oil for dual clutch gearbox 0AM<br>Part No. ➔ Electronic parts catalogue |

| Capacities      | Hydraulic fluid section with mechatronic unit for dual clutch gearbox - J743-                                                                              |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Initial filling | 1 ltr.                                                                                                                                                     |
| Fluid change    | No fluid change possible<br>It is not possible to check the fluid level in the hydraulic section of the mechatronic unit for dual clutch gearbox - J743- . |
| Lubricant       | Hydraulic fluid                                                                                                                                            |



A00-10380



### Caution

#### Risk of damage to gearbox

- ◆ Use only the gear oil available as a replacement part for the 7-speed dual clutch gearbox 0AM ➔ Electronic parts catalogue .
- ◆ Other types of oil cause malfunctions and/or failure of the gearbox.
- ◆ It is not possible to check the fluid level in the hydraulic section of the mechatronic unit for dual clutch gearbox - J743- . When performing repairs, the breather opening on the mechatronic unit for dual clutch gearbox - J743- must be sealed off ➔ [page 115](#) . Fluid which escapes from the mechatronic unit for dual clutch gearbox - J743- cannot be replenished and the fluid level cannot be checked!
- ◆ If oil escapes from the gear oil section, the gear oil must be replaced completely ➔ [page 124](#) . It is not possible to check the level.
- ◆ Underfilling or overfilling either of the oil/fluid sections will impair the function of the gearbox.

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### 3 Transmission layout

⇒ [“3.1 Transmission layout - front-wheel drive”, page 9](#)

#### 3.1 Transmission layout - front-wheel drive

The 7-speed dual clutch gearbox 0AM is equipped with 5 shafts.  
 It consists of two input shafts and three output shafts.

A1 - Input shaft 1

A2 - Input shaft 2

B1 - Output shaft 1

B2 - Output shaft 2

B3 - Output shaft 3

C - Front final drive

K1 - Dual clutch 1

K2 - Dual clutch 2

M - Engine

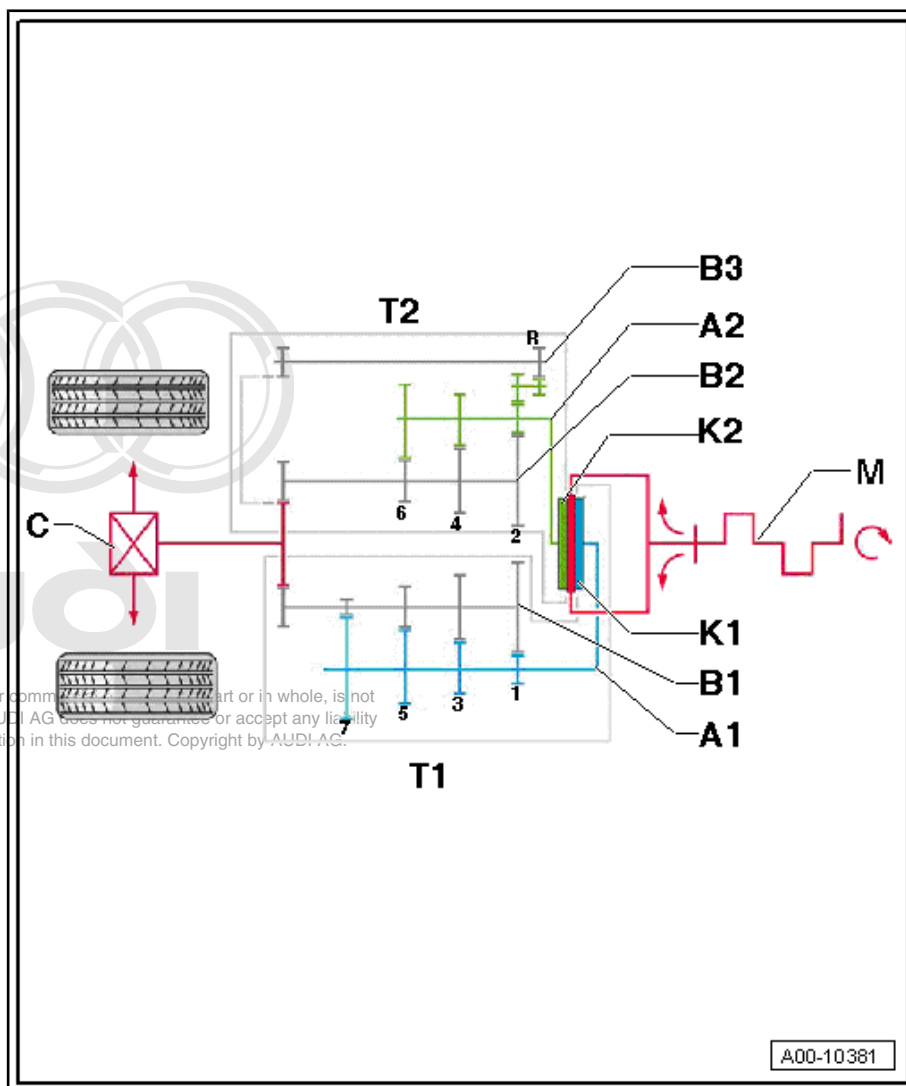
T1 - Gear train half 1

- With gears 1, 3, 5 and 7

T2 - Gear train half 2

- With gears 2, 4, 6 and reverse gear R

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## 4 Safety precautions

⇒ [“4.1 General safety precautions”, page 10](#)

⇒ [“4.2 Safety precautions when working on vehicles with start/stop system”, page 11](#)

⇒ [“4.3 Safety precautions when using testers and measuring instruments during a road test”, page 11](#)

⇒ [“4.4 Safety precautions when working on mechatronic unit for dual clutch gearbox J743”, page 12](#)

⇒ [“4.5 Notes on tow-starting and towing”, page 13](#)

### 4.1 General safety precautions

Observe the following precautions to avoid possible injury and/or damage to the vehicle:



#### WARNING

*Accidents and injury can be caused if a gear is inadvertently engaged while the engine is running.*

- ◆ *Before working on the vehicle while the engine is running, shift the selector lever into position “P” and apply the parking brake.*

Observe the following precautions to avoid possible injury and/or irreparable damage to electrical and electronic components:

- ◆ Switch off ignition before disconnecting and connecting test equipment.



#### Caution

*When disconnecting the battery there is a risk of irreparable damage to electronic components.*

- ◆ *Observe notes on procedure for disconnecting the battery.*
- ◆ *Always switch off the ignition before disconnecting the battery.*

– Disconnect battery ⇒ Electrical system; Rep. gr. 27 .

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## 4.2 Safety precautions when working on vehicles with start/stop system

Please note the following when working on vehicles with start/stop system:



### WARNING

*Risk of injury due to automatic engine start on vehicles with start/stop system.*

- ◆ *On vehicles with activated start/stop system (indicated by a message in the instrument cluster), the engine may start automatically if it needs to.*
- ◆ *Therefore it is important to ensure that the start/stop system is deactivated when performing repairs (switch off ignition, if required switch on ignition again).*

## 4.3 Safety precautions when using testers and measuring instruments during a road test

Observe the following precautions if test equipment has to be used when road-testing the vehicle.

All vehicles except for Audi A3 Cabriolet:

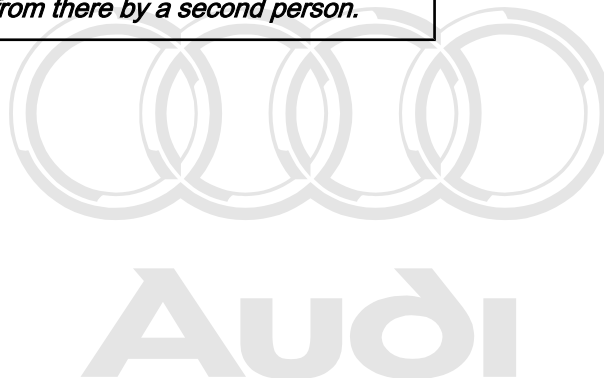


### WARNING

*Accidents can be caused if the driver is distracted by test equipment or if test equipment is not secured.*

*Injuries can be caused if the passenger's airbag is triggered in a collision.*

- *The use of test equipment while driving causes distraction.*
- *There is an increased risk of injury if test equipment is not secured.*
- ◆ *Always secure test equipment to the rear seat with a strap and have it operated from there by a second person.*



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On Audi A3 Cabriolet:



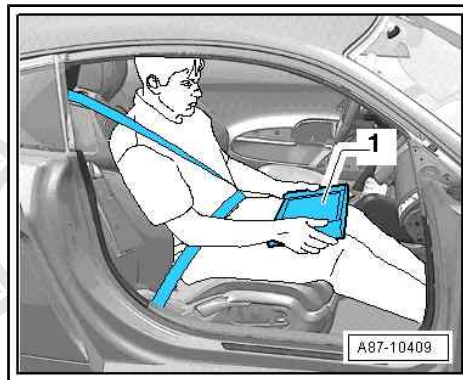
#### WARNING

*Accidents can be caused if the driver is distracted by test equipment while road-testing, or if test equipment is not secured.*

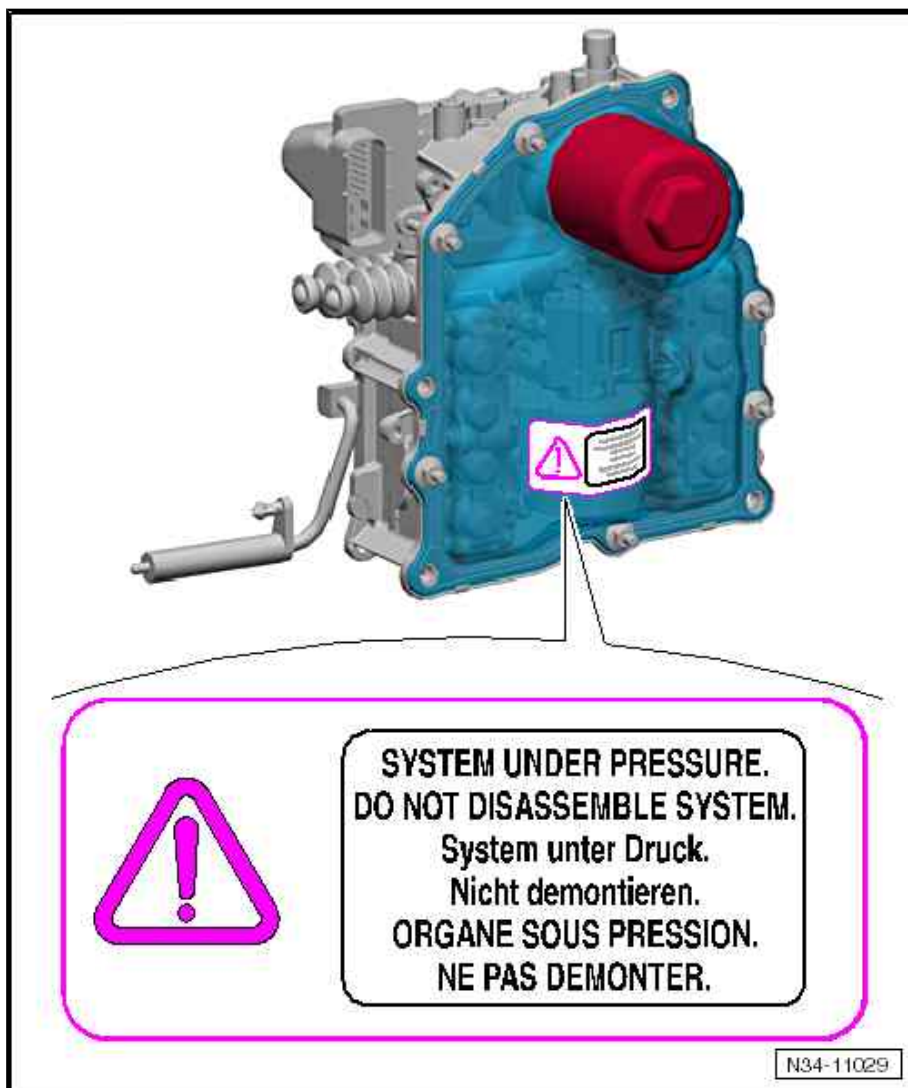
*Injuries can be caused if the passenger's airbag is triggered in a collision.*

- *The use of test equipment while driving causes distraction.*
- *There is an increased risk of injury if test equipment is not secured.*
- ◆ *Set front passenger seat to rearmost position.*
- ◆ *Test equipment may only be operated by the passenger; the tester -1- must be placed flat on the passenger's lap as illustrated.*

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## 4.4 Safety precautions when working on mechatronic unit for dual clutch gearbox - J743-





#### WARNING

*System is pressurised.*

*The mechatronic unit for dual clutch gearbox - J743- has an accumulator which maintains a system pressure of up to 60 bar.*

*The cover of the mechatronic unit for dual clutch gearbox - J743- and the accumulator must not be opened.*



#### Note

*The maximum specification for pressure in the accumulator, which is controlled by software and adjusted via the pump, is 60 bar. The pump is switched off if the pressure exceeds this value. When the pressure drops to 42 bar due to gearshifts, the pump is switched on again. In the event of a software fault, it is possible for the pressure to reach approx. 75 bar. The pressure relief valve then opens automatically.*

## 4.5 Notes on tow-starting and towing



#### Caution

*Risk of irreparable damage to gearbox.*

- ◆ *When the vehicle is towed, the selector lever must be set to position "N" and the vehicle must not be towed for a distance of more than 50 km or at a speed in excess of 50 km/h.*

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#### Note

*It is not possible to start the engine by means of tow-starting, for instance in the case of insufficient battery charge or if the starter is not working.*



## 5 Repair instructions

⇒ [“5.1 General notes”, page 14](#)

⇒ [“5.2 Rules for cleanliness”, page 16](#)

⇒ [“5.3 General repair instructions”, page 16](#)

⇒ [“5.4 Contact corrosion”, page 18](#)

### 5.1 General notes

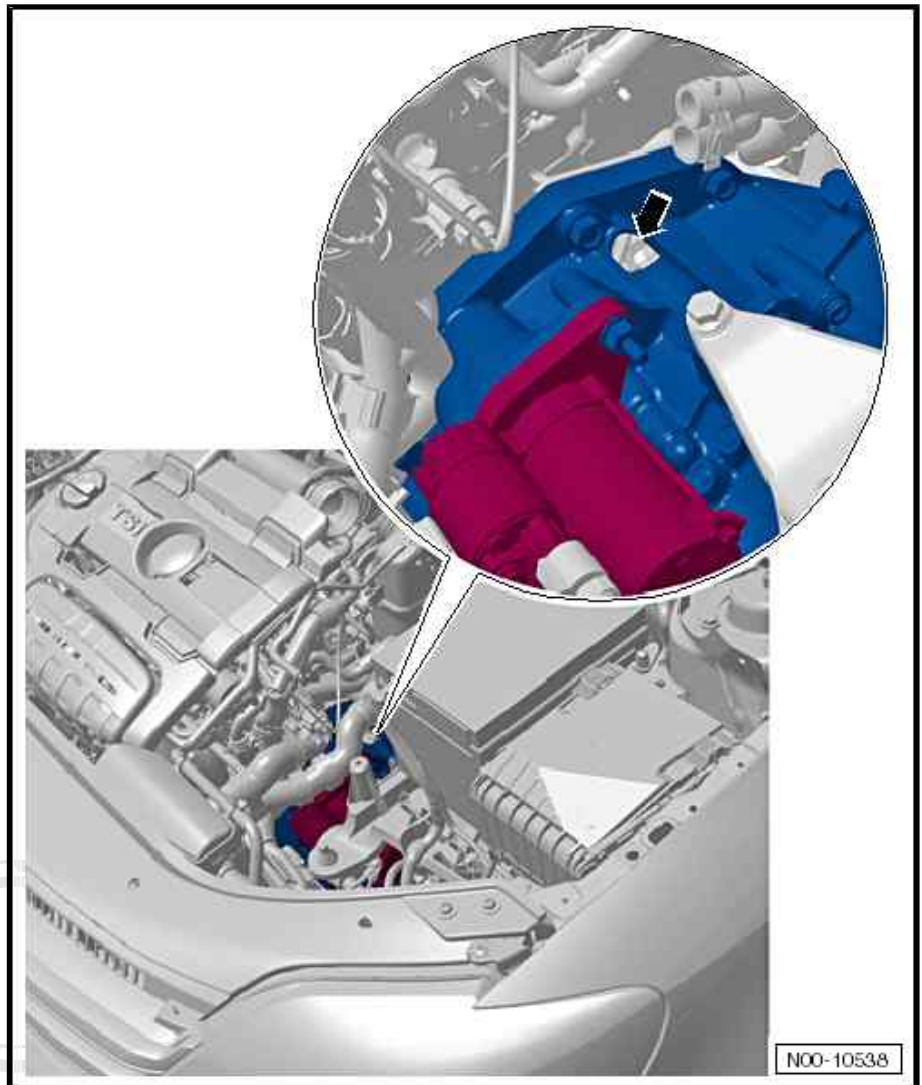
#### Gearbox

The engine torque is transferred to the dual clutch via the flywheel. The flywheel and the dual clutch are connected by splines. The two combined components perform the function of a dual-mass flywheel.

The layout of the gearbox is similar to that of a 7-speed manual gearbox. The two multi-plate dry clutches are regulated hydraulically and actuated alternately so that the gearbox is operated like an automatic gearbox. This means that the gears are engaged automatically, or can be selected manually using the tiptronic function. There is no clutch pedal.

Both clutches are disengaged when the ignition is switched off. The 1st gear on gear train half 1 and the reverse gear on gear train half 2 are engaged.

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The gearbox has an opening on the housing.

- Make sure no small parts drop into the gearbox through this opening -arrow- when carrying out repairs. Cover the opening if necessary.

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### Selector mechanism

The selector lever position is no longer transmitted mechanically to the gearbox via the selector lever cable and multi-function switch (gear sensor), as on the automatic gearbox. The selector lever positions and gear changes are transmitted to the gearbox control unit via CAN bus from a separate control unit in the shift unit. This means that gear shifts are effected without a cable. Exception: In selector lever position "P" the selector lever cable is used to mechanically engage the parking lock.

## Gear oil

The 7-speed dual clutch gearbox has separate oil and fluid fillings. One section is filled with gear oil -arrow A-, the other with hydraulic fluid -arrow B-.

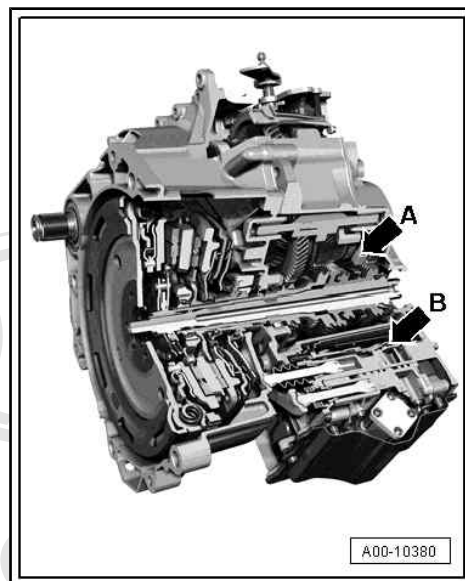
Only the types of gear oil available as a replacement part may be used for the dual clutch gearbox 0AM. Other types of oil will cause malfunctions and/or failure of the gearbox; for part number refer to ⇒ Electronic parts catalogue .

The gear oil level cannot be checked. The correct gear oil level can only be achieved by replacing the gear oil, e.g. if the gearbox is leaking ⇒ ["12 Renewing gear oil", page 124](#) .

## Variation of gear-change points for gradients

An additional gear change map automatically selects gear changes for gradients depending on accelerator pedal position and driving speed.

- Gear change map for extreme uphill gradients is matched to engine output.
- Gear change map for extreme downhill gradients is matched to the braking effect of the engine.
- Increased engine braking effect can also be obtained by directly selecting a specific gear via the tiptronic function, e.g. when towing a trailer on downhill gradients



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## 5.2 Rules for cleanliness

- ◆ Carefully clean connection points and the surrounding area with engine cleaner or brake cleaner and dry thoroughly before opening.
- ◆ Use cleaning fluid - D 009 401 04- to clean the gearbox and its components.
- ◆ Use lint-free cloths for cleaning, such as the "WYPALL X70 / WORKHORSE" cloth from Kimberly-Clark Professional.
- ◆ Seal off open lines and connections immediately with clean plugs or protective caps from engine bung set - VAS 6122- .
- ◆ After removal, place parts on a clean surface and cover them. Use sheeting and paper. Use lint-free cloths.
- ◆ Carefully cover or seal open components if repairs cannot be carried out immediately.
- ◆ Only install clean components; replacement parts should only be unpacked immediately prior to installation.
- ◆ Protect unplugged electrical connectors against dirt and moisture and make sure connections are dry when attaching.

## 5.3 General repair instructions

- ◆ Proper tools and the maximum possible care and cleanliness are essential for satisfactory repairs to the transmission units. The usual basic safety precautions also naturally apply when carrying out repair work.
- ◆ To avoid repetition, a number of generally applicable instructions for the various repair procedures are summarised here. They apply to the work described in this Manual.

## Guided Fault Finding, Vehicle self-diagnosis and Test Instruments

- ◆ Before servicing the gearbox, the cause of the fault should be identified as exactly as possible using the vehicle diagnostic

tester via Guided Fault Finding, Vehicle Self-diagnosis and Test Instruments.

### Special tools

For a complete list of special tools used in this Workshop Manual please refer to ⇒ "Workshop equipment and special tools" .

### Environmental and waste disposal regulations for oil

- ◆ ATF, gear oil and any other type of oil must be handled with care.
- ◆ Dispose of drained oil properly.
- ◆ Always adhere to statutory environmental and waste disposal regulations.
- ◆ Observe the information shown on the packaging of the oil.

### Gearbox

- ◆ Do not run the engine or tow the vehicle with the oil pan removed or when there is no gear oil in the gearbox.
- ◆ Thoroughly clean all joints and connections and the surrounding areas before disconnecting.
- ◆ When installing gearbox, ensure that dowel sleeves are fitted correctly.

### O-rings, seals, oil seals and gaskets

- ◆ Always renew O-rings, seals, oil seals and gaskets.
- ◆ In certain cases, seals are also referred to as oil seals.
- ◆ After removing gaskets and seals, always inspect the contact surface on the housing or shaft for burrs resulting from removal or for other signs of damage.
- ◆ Thoroughly clean housing joint surfaces before assembling.
- ◆ Always replace paper gaskets. Completely remove old gasket and clean sealing surfaces thoroughly.
- ◆ Lightly lubricate the outer circumference and sealing lip of oil seals with gear oil before installing.
- ◆ Lightly lubricate O-rings with gear oil or vaseline before installation to prevent them from getting crushed during assembly.
- ◆ Do not use any other lubricants where gear oil is specified. Otherwise, there is a risk of problems occurring in the gearbox hydraulics.
- ◆ The open side of the oil seals faces toward the side with fluid filling.
- ◆ When installing a new oil seal, position the seal in the housing so that the sealing lip does not contact the shaft in the same place as the old seal (make use of installation depth tolerances).
- ◆ Observe rules for cleanliness ⇒ [page 16](#) .

### Locking elements

- ◆ Do not over-stretch circlips.
- ◆ Renew circlips which have been damaged or over-tensioned.
- ◆ Circlips must be properly seated in the base of the groove.

### Nuts, bolts

- ◆ Loosen bolts in reverse sequence to the specified tightening sequence.



- ◆ Nuts and bolts which secure covers and housings should be loosened and tightened in diagonal sequence and in stages if no tightening sequence is specified.
- ◆ Renew self-locking nuts.
- ◆ Use a wire brush to clean the threads of bolts which are secured with locking fluid. Then apply locking fluid - AMV 185 101 A1- to bolt threads before installing.
- ◆ The tightening torques stated apply to non-oiled nuts and bolts.

## 5.4 Contact corrosion

Contact corrosion can occur if unsuitable fasteners (bolts, nuts, washers etc.) are used.

For this reason, only fasteners with a special surface coating are fitted.

Rubber or plastic parts and adhesives also consist of non-conductive materials.

If you are not sure whether used parts can be re-installed, always fit new parts ⇒ Electronic parts catalogue .

### **Please note:**

- ◆ Use only genuine spare parts: these have been fully tested and are compatible with aluminium.
- ◆ We recommend the use of accessories approved by Audi.
- ◆ Damage caused by contact corrosion is not covered by warranty.



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## 30 – Clutch

### 1 Clutch

For all repair work and tightening torques, refer to Workshop Manual "Servicing 7-speed dual clutch gearbox 0AM (S tronic)"  
⇒ Servicing 7-speed dual clutch gearbox 0AM (S tronic); Rep. gr. 30 ; Clutch .

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## 2 Clutch mechanism

For all repair work and tightening torques, refer to Workshop Manual "Servicing 7-speed dual clutch gearbox 0AM (S tronic)"  
⇒ Servicing 7-speed dual clutch gearbox 0AM (S tronic); Rep. gr. 30 ; Clutch mechanism .



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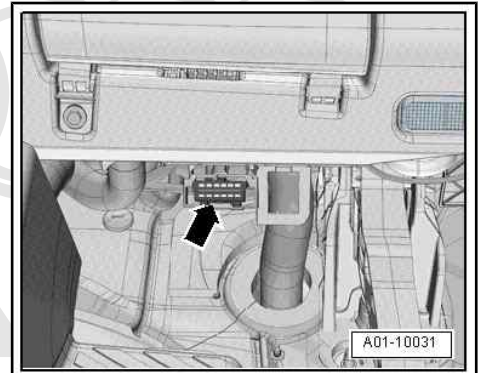
## 34 – Controls, housing

### 1 Electrical/electronic components and fitting locations

#### Diagnostic connection

Location: diagnostic connection -arrow- is located in driver's footwell.

The components listed below can be tested with the **Guided Fault Finding** function ⇒ Vehicle diagnostic tester.

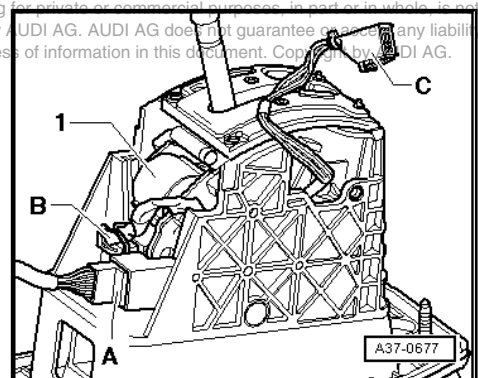


#### Selector lever lock solenoid - N110-

Fitting location: the selector lever lock solenoid - N110- -item 1- is a component part of the shift unit.

The selector lever lock solenoid - N110- cannot be renewed separately. If the part is defective, the shift unit must be renewed: up to 11.2009 ⇒ [page 44](#) , from 11.2009 onwards ⇒ [page 54](#) .

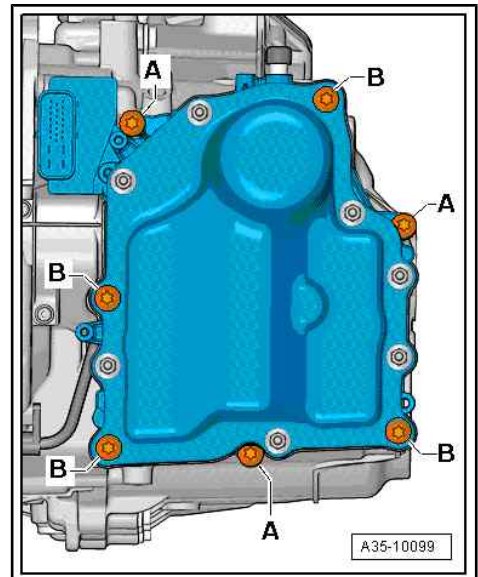
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#### Mechatronic unit for dual clutch gearbox - J743-

Fitting location: The mechatronic unit for the dual clutch gearbox - J743- is fitted to the front of the gearbox housing.

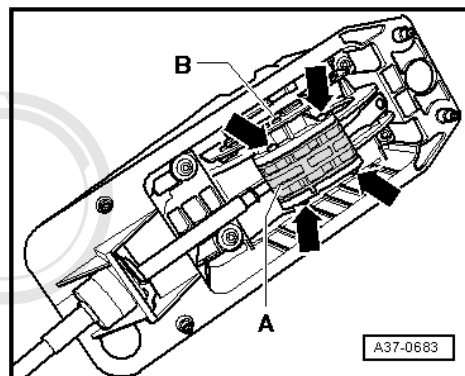
⇒ ["13.1 Exploded view - mechatronic unit for dual clutch gearbox J743", page 128](#)



### Selector lever sensors control unit - J587- with selector lever - E313- , tiptronic switch - F189- , selector lever locked in position P switch - F319-

Fitting location: the components are integrated in the printed circuit -B- of the shift unit; they cannot be renewed separately.

If a component is defective, the shift unit must be renewed: up to 11.2009 ➔ [page 44](#) , from 11.2009 onwards ➔ [page 54](#) .



### Selector lever position display - Y6-

Fitting location: integrated into instrument cluster

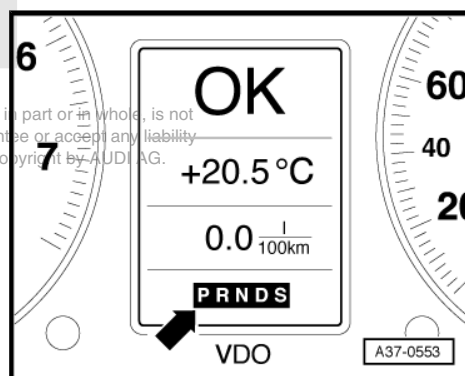


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*The selector lever position display can only be renewed together with the instrument cluster.*

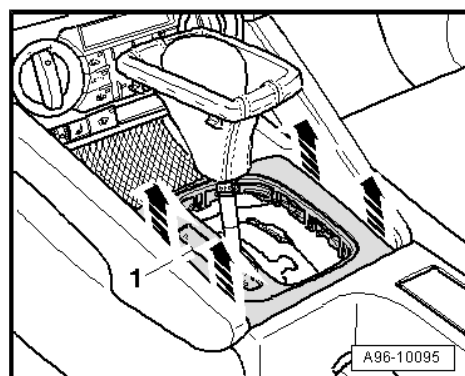
Removing and installing instrument cluster ➔ Electrical system; Rep. gr. 90



### Selector lever position display - Y26- with selector lever display illumination bulb - L101-

Fitting location: clipped into frame -1- for selector lever.

Removing and installing selector lever position display - Y26- with selector lever display illumination bulb - L101- : up to 11.2009 ➔ [page 33](#) ; from 11.2009 onwards ➔ [page 41](#)

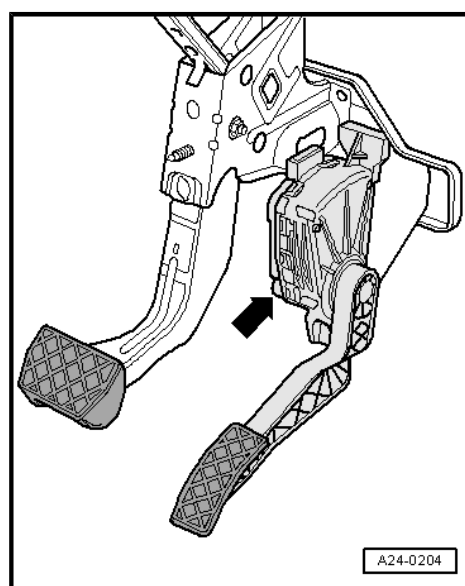


### Kickdown switch - F8-

A programmed value from accelerator position sender - G79- / accelerator position sender 2 - G185- (integrated in accelerator pedal module) is stored in the engine control unit as the kickdown signal.

- ◆ Signal transmission from engine control unit to gearbox control unit via CAN bus

Removing and installing accelerator pedal module ➔ Fuel supply system, petrol engines; Rep. gr. 20 or ➔ Fuel supply system, diesel engines; Rep. gr. 20 .



## 2 Basic settings

### Special tools and workshop equipment required

- ◆ Vehicle diagnostic tester

### Requirements for Basic setting:

- Vehicle diagnostic tester is connected.
- Selector lever is in position "P".
- Using diagnostic tester in **Guided Functions** mode, select **02 - Gearbox electronics** and then select the appropriate basic setting function.
- It is important to follow all the instructions given by the diagnostic tester exactly in order to complete the basic setting successfully.

The following "basic settings" are currently available:

- ◆ 1. **Basic setting complete**
- ◆ 2. **Basic setting neutral**
- ◆ 3. **Basic setting removal position**

### Description of basic settings:

#### 1. Basic setting complete

**Basic setting complete** must be performed after the following operations:

- ◆ When the dual clutch has been removed
- ◆ When the mechatronic unit for dual clutch gearbox - J743- with control unit has been renewed
- ◆ When gearbox repairs have been performed



#### Note

- ◆ The **basic setting complete** function on the vehicle diagnostic tester achieves a fast and comprehensive self-adaption of the clutch system. The clutch and gear actuators are re-adapted. The current clutch engagement point, the current degree of wear, the synchronisation points and the end positions of the gear actuators with gears engaged are detected and stored.
- ◆ Clutch self-adaption is performed regularly during normal driving, according to the amount of clutch wear. However, this adaption is only possible under specific driving conditions. For this reason the **Basic setting complete** must be performed after certain repairs, as listed above. This achieves optimum adjustment for gearshifts and clutch engagement when moving off.

#### 2. Basic setting neutral

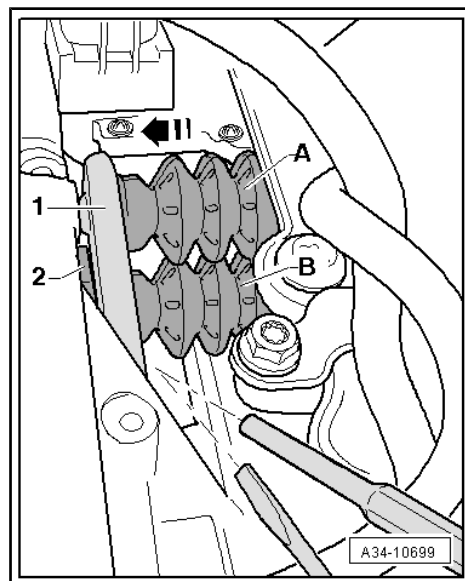
**Basic setting neutral** moves the gear actuators into the removal position. This ensures that the mechatronic unit does not "catch" during removal.

**Basic setting neutral** also attempts to shift out of all gears so that the vehicle can be pushed, e.g. if the clutch is defective.

### 3. Basic setting removal position

In the Basic setting removal position it is possible to check that the bellows of the clutch actuators -A- and -B- are correctly seated and not leaking or damaged.

- ◆ In the Basic setting removal position the two clutch actuators -A- and -B- are also moved all the way out in the direction of the -arrow-. The two clutch actuator levers -1- and -2- are thus pressed away from the mechatronic unit.
- ◆ The gear actuators are also moved to the removal position.
- ◆ When the ignition is switched off, the force is no longer applied to the two clutch actuators -A- and -B-. The clutch actuator levers -1- and -2- press the clutch actuators back into the mechatronic unit.



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### 3 Checking and adjusting selector mechanism



#### WARNING

*Accidents and injury can be caused if a gear is inadvertently engaged while the engine is running.*

- ◆ *Before working on the vehicle while the engine is running, shift the selector lever into position "P" and apply the parking brake.*

#### Overview:

- ◆ ⇒ ["3.1 Checking selector mechanism", page 25](#)
- ◆ ⇒ ["3.2 Checking and adjusting selector lever cable", page 26](#)
- ◆ ⇒ ["3.3 Checking function of ignition key removal lock", page 28](#)

#### 3.1 Checking selector mechanism

- ◆ It should not be possible to operate the starter while the selector lever is in position "S", "D" or "R" or in the tiptronic position.
- ◆ When travelling at speeds above 5 km/h and shifting into selector lever position "N", the solenoid for the selector lever lock must not engage and block the selector lever. The selector lever can be shifted into a driving gear.
- ◆ When travelling at speeds below 5 km/h (almost stationary), the solenoid for the selector lever lock should only engage about 1 second after you shift into selector lever position "N". Selector lever cannot be shifted out of position "N" until brake pedal is depressed.

##### Selector lever in position "P", button on selector lever pressed in and ignition switched on:

- Brake pedal not depressed:

When button is pressed in, selector lever is locked and cannot be shifted out of position "P". Selector lever lock solenoid blocks selector lever.

- Brake pedal depressed:

Selector lever lock solenoid releases selector lever. It is possible to shift into a driving gear. Shift selector lever slowly from "P" position through "R, N, D and S" and check whether the display in the instrument cluster shows the correct selector lever position in each case.

##### Selector lever in position "N", button on selector lever pressed in and ignition switched on:

- Brake pedal not depressed:

Selector lever is locked and cannot be shifted out of position "N". Selector lever lock solenoid blocks selector lever.

- Brake pedal depressed:

Selector lever lock solenoid releases selector lever. It is possible to shift into a driving gear.

**Note**

*When brake pedal is depressed, it is also possible to shift from position "N" to "D" without pressing the button on the selector lever. However, to shift from "N" to "R" you do have to additionally press the button on the selector lever.*

**Selector lever in position "D", ignition switched on:**

The selector lever is locked and cannot be shifted from position "D" to "S".

- Press button on selector lever:

The selector lever is released and can be shifted from position "D" to "S".

**Selector lever in position "D", ignition and lights switched on:**

- Shift selector lever into tiptronic gate:

The illuminated "D" symbol in the selector lever position display - Y26- should go out and the "+" and "-" symbols should light up.

The selector lever position display - Y6- in the instrument cluster should change from "PRNDS" to "7654321" when the selector lever is moved into the tiptronic gate.

- Move the selector lever in the tiptronic gate to "+" and "-".

When you move the selector lever to "+" or "-", the display "7654321" in the instrument cluster should move one gear up or down accordingly.

If the selector mechanism does not function as described:

- ⇒ ["3.2 Checking and adjusting selector lever cable", page 26](#)
- ⇒ ["3.3 Checking function of ignition key removal lock", page 28](#)

## 3.2 Checking and adjusting selector lever cable

**Checking adjustment of selector lever cable**

- Selector mechanism checked ⇒ [page 25](#) .
- Keep button pressed, while pulling selector lever approx. 5 mm to the rear out of position "P". Then keep lever in this position, do not move it into "R".
- Release selector lever.
- The selector lever should spring back into position "P" automatically.
- If this is not the case, adjust selector lever cable ⇒ [page 27](#) .
- Shift selector lever into position "N".
- Keep button pressed, while pulling selector lever approx. 5 mm to the rear out of position "N". Then keep lever in this position, do not move it into "D".
- Release selector lever.
- The selector lever should spring back into position "N" automatically.

- If this is not the case, adjust selector lever cable  
⇒ [page 27](#) .
- Keep button pressed, while pushing selector lever approx. 5 mm to the front out of position “N”. Then keep lever in this position, do not move it into “R”.
- Release selector lever.
- The selector lever should spring back into position “N” automatically.
- If this is not the case, adjust selector lever cable  
⇒ [page 27](#) .

#### Adjusting selector lever cable

- Make sure that securing clip -arrow- is pressed all the way down and properly seated.



#### Note

*Always renew securing clip -arrow- after removal.*

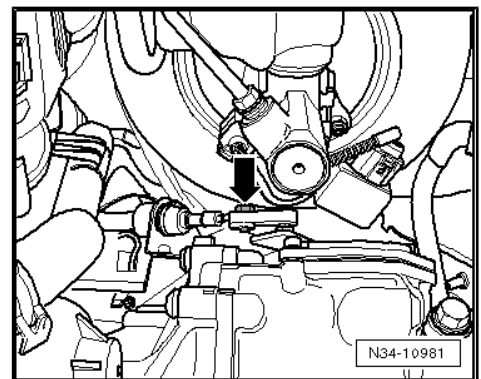
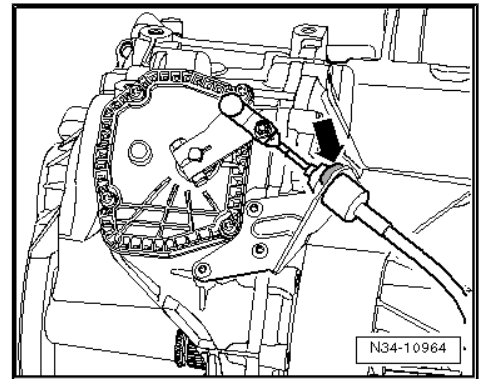
- Move selector lever from “P” to “S”.
- Check protective sleeve on front of shift unit (on selector lever cable) for damage. If damage is found, renew selector lever cable.
- Move selector lever to position “P”.
- The selector mechanism and selector lever cable should move smoothly; if necessary renew selector lever cable  
⇒ [page 47](#) or renew selector mechanism: up to 11.2009  
⇒ [page 44](#) , from 11.2009 onwards ⇒ [page 54](#) .
- Switch off ignition.
- Loosen bolt -arrow-.



#### Note

*The selector lever in the selector mechanism must remain in position “P” when the bolt -arrow- is loosened, otherwise the adjustment will not be correct.*

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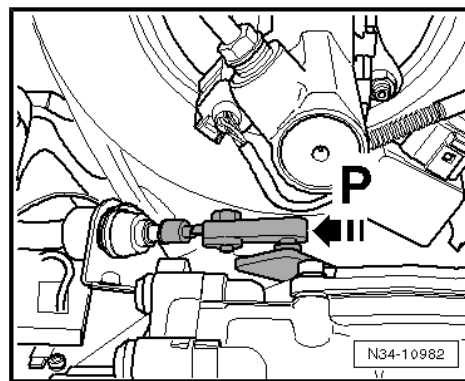


- Move gearbox selector lever into position “P” on gearbox by pushing lever towards cable support bracket -arrow-.
- Turn both front wheels in one direction, e.g. by pushing the vehicle forwards, until the detent lever in the gearbox engages in the parking lock gear.
- The parking lock has engaged when it is no longer possible to rotate both wheels in the same direction.
- Carefully move selector lever forwards and backwards slightly, but without shifting to another selector lever position.


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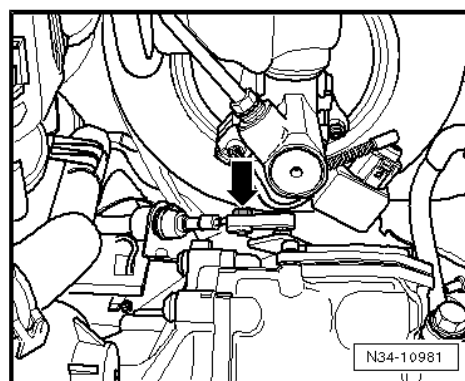
*The selector lever cable is then relieved of strain.*



- Tighten bolt -arrow- on selector lever cable smoothly and evenly (tightening torque: 13 Nm).


**Note**

*When tightening the bolt -arrow-, make sure the selector lever cable does not move out of position.*



### 3.3 Checking function of ignition key removal lock

- Switch on ignition.
- Press and hold brake pedal.
- When interlock button in selector lever handle is pressed, it should be possible to move selector lever out of position “P” without “catching”.
- Switch off ignition.
- It should not be possible to remove the ignition key when the selector lever is in any position other than “P”.
- Move selector lever to position “P”.
- Remove ignition key.
- It should only be possible to remove ignition key in selector lever position “P”.
- It should not be possible to shift selector lever out of “P” position with interlock button pressed and foot brake depressed.

If the ignition key removal lock does not function as described:

- ♦ ⇒ [“3.2 Checking and adjusting selector lever cable”, page 26](#)
- ♦ Check vehicle via Guided Fault Finding function ⇒ Vehicle diagnostic tester.

## 4 Exploded view - selector lever handle, selector lever position display - Y26- with selector lever display illumination bulb - L101- (vehicles up to 11.2009)

1 - Trim frame with selector lever position display - Y26- and selector lever display illumination bulb - L101-

- ❑ ⇒ [“4.4 Removing and installing selector lever position display Y26 with selector lever display illumination bulb L101 \(vehicles up to 11.2009\)”, page 33](#)

2 - Trim ring

- ❑ Removing and installing ⇒ [“4.3 Separating selector lever boot from selector lever handle \(vehicles up to 11.2009\)”, page 33](#)

3 - Selector lever handle

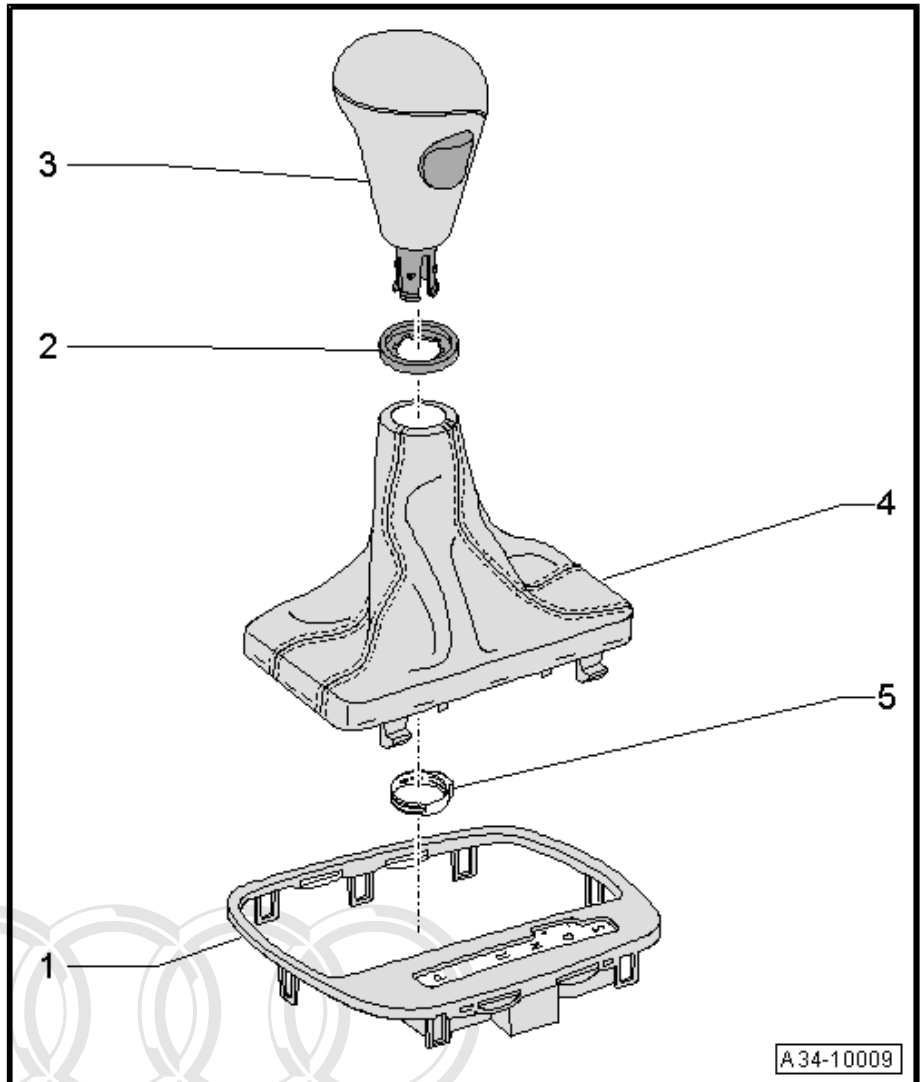
- ❑ ⇒ [“4.2 Removing and installing selector lever handle \(vehicles up to 11.2009\)”, page 30](#)

4 - Selector lever boot

- ❑ ⇒ [“4.3 Separating selector lever boot from selector lever handle \(vehicles up to 11.2009\)”, page 33](#)

5 - Clamp

- ❑ Secures selector lever handle to selector lever
- ❑ Removing and installing ⇒ [“4.2 Removing and installing selector lever handle \(vehicles up to 11.2009\)”, page 30](#)



### 4.1 Operating manual release for selector mechanism from position “P” (vehicles up to 11.2009)

- ◆ The selector lever lock solenoid - N110- locks the selector lever in position “P”. The selector lever can then only be shifted out of position “P” when the ignition is on / the engine is running, the brake pedal is depressed and the button on the selector lever handle is pressed ⇒ [page 25](#).
- ◆ In the event of malfunctions in the supply voltage to the selector lever lock solenoid (discharged battery or defective fuse) or if the solenoid is defective the selector lever cannot be shifted out of position “P”. The vehicle cannot be moved, as the parking lock is engaged.

In this case:

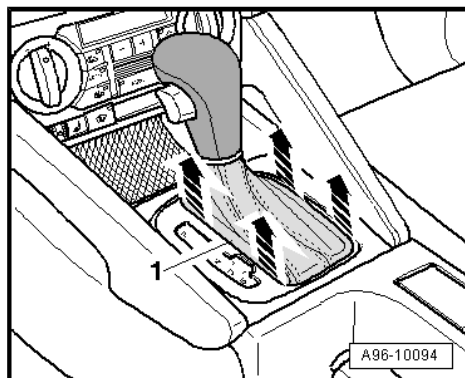
4. Exploded view - selector lever handle, selector lever position display Y26 with selector lever display illumination bulb L101 (vehicles up to 11.2009) **29**

- Check fuses ⇒ Current flow diagrams, Electrical fault finding and Fitting locations.
- Check battery voltage ⇒ Electrical system; General information; Rep. gr. 27 .

If fault finding has not been successful and selector lever can still not be shifted from “P” the solenoid must be released manually. However, if the selector lever is then moved back to “P” it will remain locked in position “P” once again.

#### Procedure

- Unclip retaining frame for selector lever boot -1- from centre console and lift off -arrows-.
- Turn up selector lever boot.



- Using a screwdriver, release selector lever lock solenoid -A-.
- To do so press lever -B- inwards -arrow- with the screwdriver and keep it in this position. The solenoid will then release the selector lever.



#### Caution

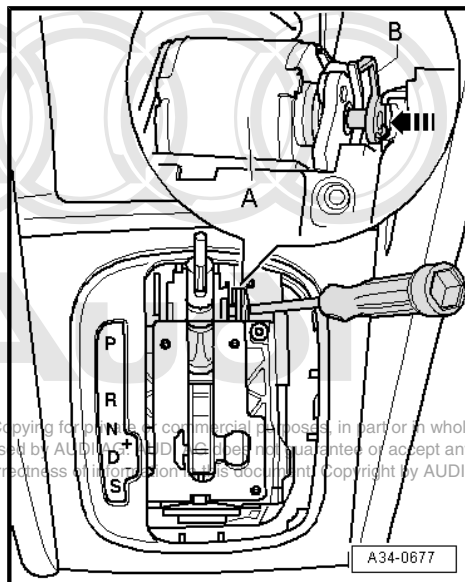
*The shift unit can only be renewed as a complete unit. If parts of the shift unit are damaged, the shift unit has to be renewed as a complete unit.*



#### Note

*The selector mechanism is shown without the selector lever handle for ease of illustration. However, it is not necessary to remove the selector lever handle to operate the manual release mechanism.*

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- Now press button on selector lever knob (with solenoid released) and shift selector lever out of “P”.



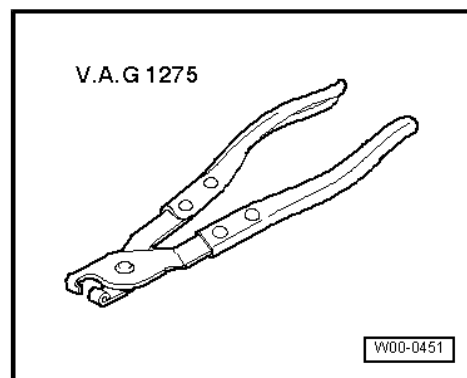
#### Note

*However, if the selector lever is now moved back to “P” the selector lever lock solenoid will once again mechanically lock it in position “P”. The solenoid must be released once again.*

## 4.2 Removing and installing selector lever handle (vehicles up to 11.2009)

Special tools and workshop equipment required

◆ Hose clip pliers - V.A.G 1275-



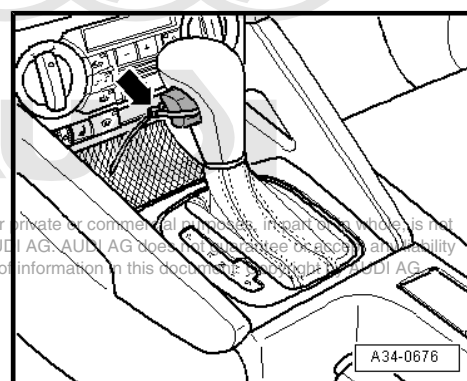
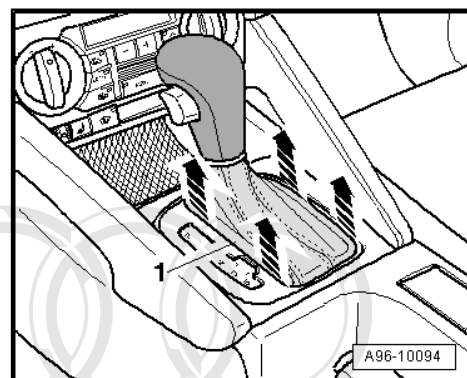
## Removing



### Note

*The selector lever handle is removed together with the selector lever boot.*

- Shift selector lever into position "N".
- Unclip retaining frame for selector lever boot -1- from centre console and lift off -arrows-.
- Use a cable tie to secure the interlock button in pulled-out position -arrow-, as shown in the illustration.



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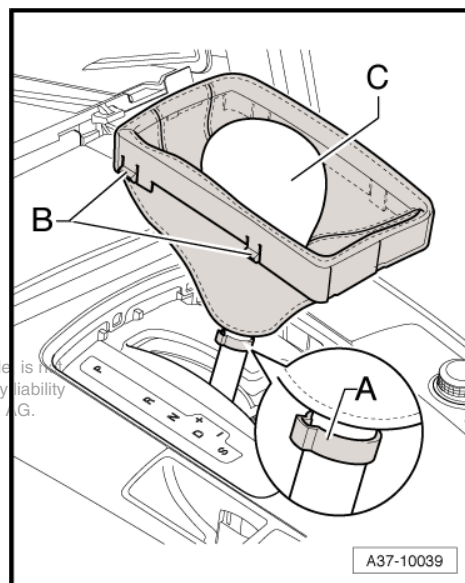
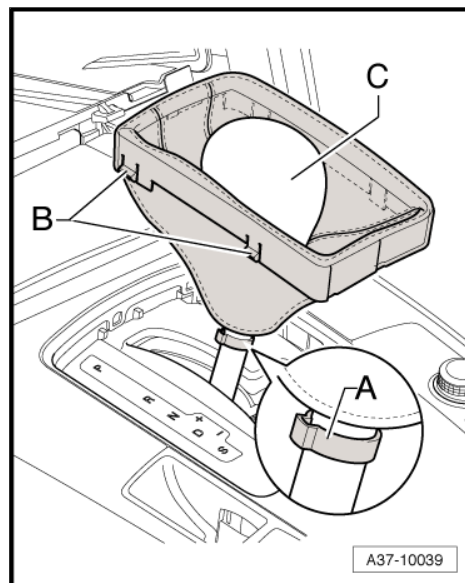
- Turn up selector lever boot -1- over selector lever handle -2-.
- Release clamp -arrow- and detach selector lever handle together with selector lever boot. Avoid touching the interlock button.

### Installing



#### Note

- ◆ *To install the selector lever handle the interlock button has to be pulled out to the stop. Then the handle must be secured with either a cable tie -arrow- or with the assembly aid supplied together with the new handle.*
- ◆ *If, by mistake, the button has not been secured, it must not be pulled out of the selector lever handle using mechanical tools. Position a compressed air gun at the bottom of the handle and press the button out with compressed air.*
- Place selector lever handle fully on selector lever - interlock button points towards the driver.
- The handle must engage in the annular groove on the selector lever.
- Remove cable tie or assembly aid. After removal, the interlock button mechanism engages in the vertical groove on the selector lever. If necessary, press interlock button on selector lever handle.
- Secure selector lever handle -2- onto selector lever with clamp -arrow-. Use hose clip pliers - V.A.G 1275- for this purpose.
- Clip retaining frame for selector lever boot -1- onto centre console.



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### 4.3 Separating selector lever boot from selector lever handle (vehicles up to 11.2009)

#### Removing

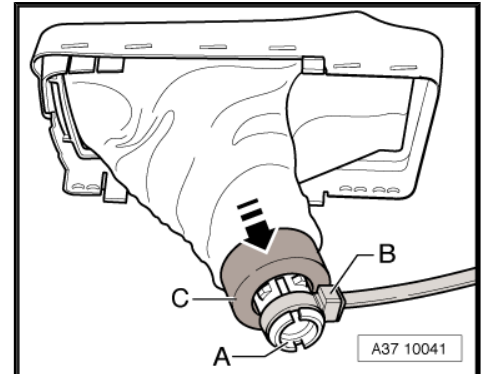
- Remove selector lever handle ⇒ [page 30](#) .
- Tie together spring tips -1- of selector lever handle using cable tie -3- as shown in illustration.
- Slide sleeve -2- of selector lever boot past retaining tabs on spring tips -arrow-.
- Remove cable tie and detach sleeve with selector lever boot from selector lever.

#### Installing

Installation is carried out in reverse sequence; note the following:

Fitting position of selector lever boot:

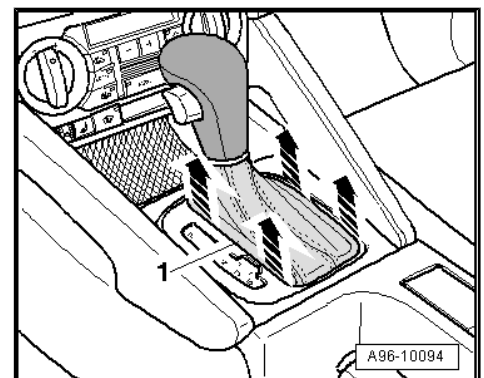
- The longer side of the retaining frame for the selector lever boot faces the driver's side.
- Install selector lever handle ⇒ [page 30](#) .



### 4.4 Removing and installing selector lever position display - Y26- with selector lever display illumination bulb - L101- (vehicles up to 11.2009)

#### Removing

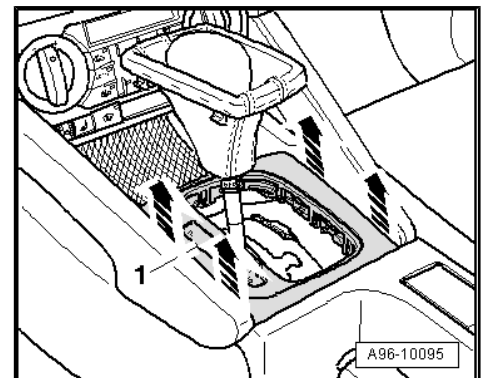
- Shift selector lever into position “N”.
- Switch off ignition and remove ignition key.
- Unclip retaining frame for selector lever boot -1- from centre console and lift off -arrows-.
- Turn up selector lever boot.



- Unclip retaining frame for selector lever -1- from centre console and lift off -arrows-.
- Detach selector lever cover.

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- Unplug electrical connector.

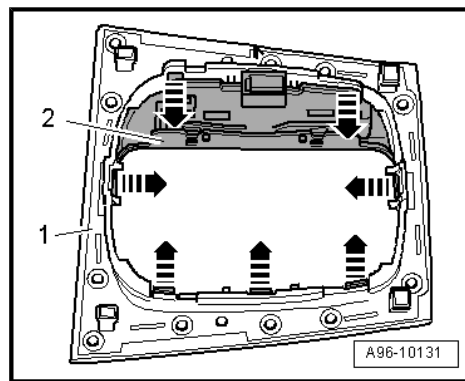




- Release retaining springs -arrows-.
- Detach trim frame with selector lever position display - Y26- and selector lever display illumination bulb - L101- -item 2- from selector lever cover -1-.

### Installing

Installation is carried out in reverse sequence.



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## 5 Exploded view - selector lever handle, selector lever position display - Y26- with selector lever display illumination bulb - L101- (vehicles from 11.2009 onwards)

1 - Trim frame with selector lever position display - Y26- and selector lever display illumination bulb - L101-

- ❑ ⇒ [“5.5 Removing and installing selector lever position display Y26 with selector lever display illumination bulb L101 \(vehicles from 11.2009 onwards\)”](#), page 41

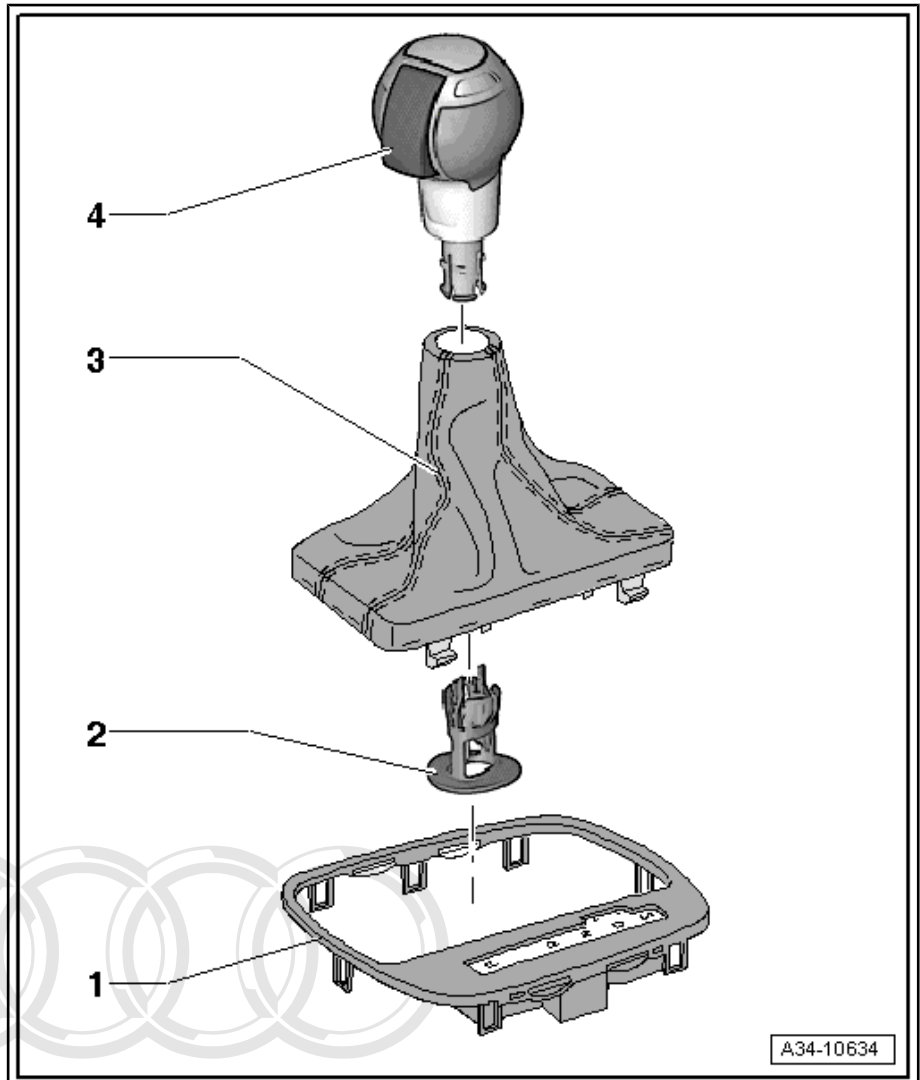
2 - Guide

3 - Selector lever boot

- ❑ ⇒ [“5.3 Separating selector lever boot from selector lever handle \(vehicles from 11.2009 onwards\)”](#), page 38

4 - Selector lever handle

- ❑ ⇒ [“5.2 Removing and installing selector lever handle \(vehicles from 11.2009 onwards\)”](#), page 36
- ❑ ⇒ [“5.4 Moving interlock button on selector lever handle into installation position \(vehicles from 11.2009 onwards\)”](#), page 40



### 5.1 Operating manual release for selector mechanism from position “P” (vehicles from 11.2009 onwards)

- ◆ The selector lever lock solenoid - N110- locks the selector lever in position “P”. The selector lever can then only be shifted out of position “P” when the ignition is on / the engine is running, the brake pedal is depressed and the button on the selector lever handle is pressed ⇒ [page 25](#) .
- ◆ In the event of malfunctions in the supply voltage to the selector lever lock solenoid (discharged battery or defective fuse) or if the solenoid is defective the selector lever cannot be shifted out of position “P”, i.e. the vehicle cannot be moved, as the parking lock is engaged.

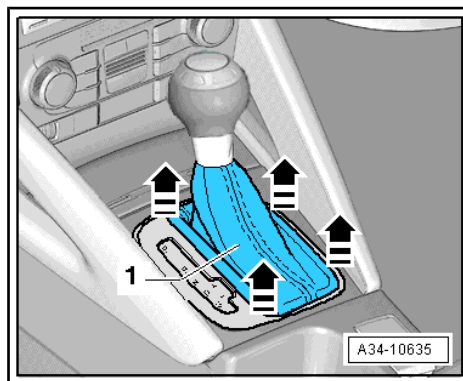
In this case:

- Check fuses ⇒ Current flow diagrams, Electrical fault finding and Fitting locations.
- Check battery voltage ⇒ Electrical system; General information; Rep. gr. 27 .

If fault finding has not been successful and selector lever can still not be shifted from “P” the solenoid can be released manually. However, if the selector lever is then moved back to “P” it will remain locked in position “P” once again.

#### Procedure

- Unclip retaining frame for selector lever boot -1- from centre console and lift off -arrows-.
- Turn up selector lever boot.

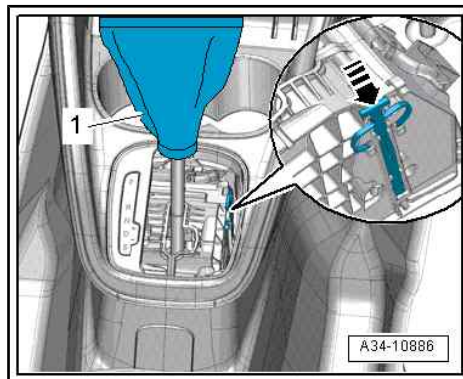


- Using a suitable screwdriver or similar, release selector lever lock solenoid - N110- -arrow-.



#### Caution

*If parts of the shift unit are damaged, the shift unit has to be renewed as a complete unit.*



- Now press button on selector lever handle (with solenoid released) and shift selector lever out of “P”.



#### Note

*However, if the selector lever is now moved back to “P” the selector lever lock solenoid will once again mechanically lock it in position “P”. The solenoid must be released once again.*

## 5.2 Removing and installing selector lever handle (vehicles from 11.2009 onwards)

### Removing

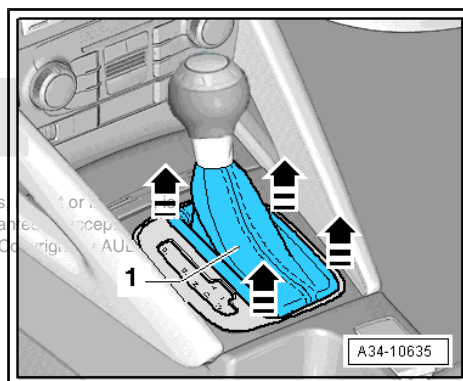


#### Note

*The selector lever handle is removed together with the selector lever boot.*

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- Apply handbrake.
- Shift selector lever into position “N”.
- Unclip selector lever boot on both sides and lift it off -arrows-.



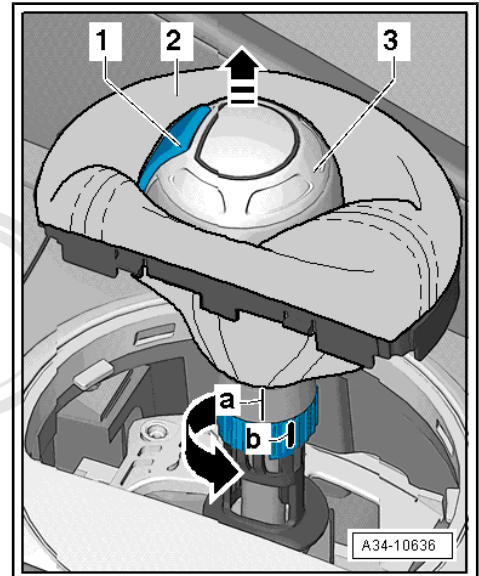
- Turn selector lever boot -2- inside out over selector lever handle -3-.
- Turn locking ring in direction of -arrow- as far as stop.
- Raised lug -b- on locking ring is moved away from lug -a-.



#### Caution

**Risk of damage to the selector mechanism.**

- ◆ **Do not touch the interlock button -1- on the selector lever handle when pulling off the handle.**
- ◆ **Otherwise the selector lever handle or the pull rod of the selector mechanism will be damaged when the handle is pulled off.**



- Pull off selector lever handle together with selector lever boot upwards -arrow-, taking care not to touch interlock button -1-.

### Installing

Installation is carried out in reverse sequence, note the following:

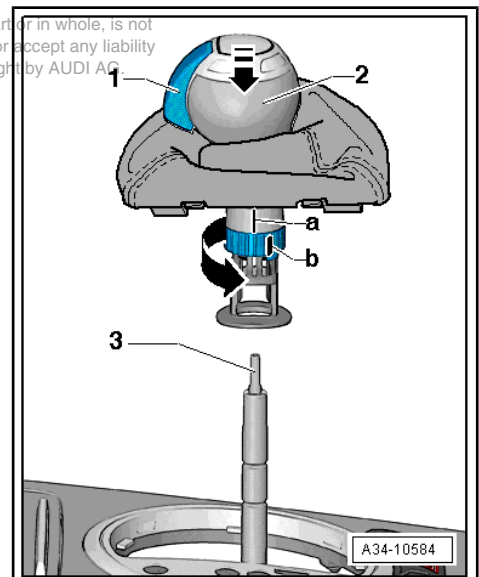
- Turn locking ring in direction of -arrow- as far as stop.
- Raised lug -b- on locking ring is moved away from lug -a-.
- Interlock button faces direction of travel.



#### Caution

**Risk of damage to the selector mechanism.**

- ◆ **The interlock button -1- must protrude from the selector lever handle during installation. If the interlock button was pressed in by mistake when the handle was removed, the interlock button must be moved back to its installation position ⇒ [page 40](#) .**
- ◆ **If the interlock button has been pressed in and the handle is installed with the interlock button in this position, the handle and the pull rod of the selector mechanism -3- will be damaged irreparably.**



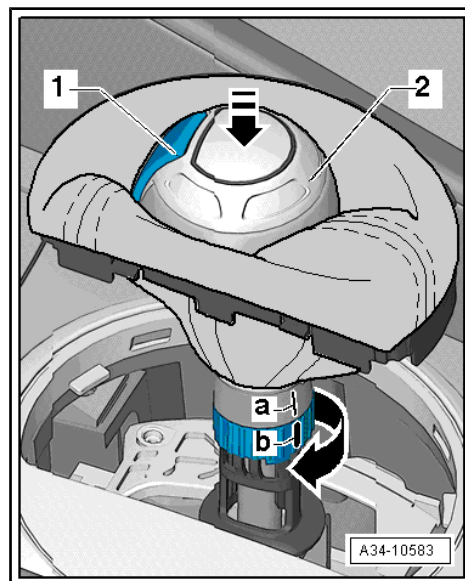
- Carefully press selector lever handle fully onto selector lever, taking care not to touch interlock button -1-.
- The handle must engage in the annular groove on the selector lever.

- Turn locking ring in direction of -arrow- as far as stop.
- It must be possible to turn the locking ring; press handle if necessary.
- Lug -a- must align with raised lug -b- on locking ring.



#### Note

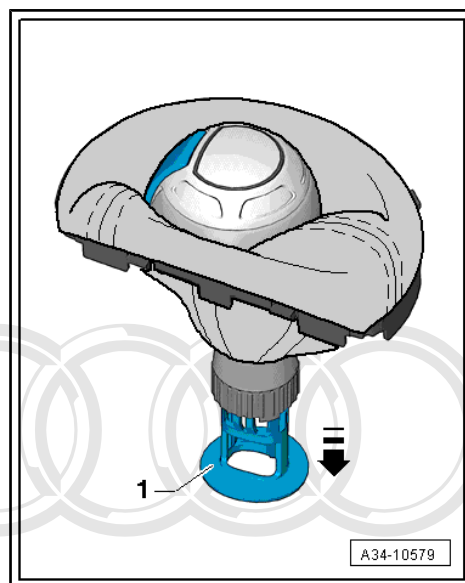
- ♦ *The handle is not locked until the locking ring has been turned. Only then should you press the interlock button on the handle.*
- ♦ *There may be increased resistance when you press the interlock button for the first time after installation.*
- Press interlock button -1- on selector lever handle.
- Fold selector lever boot down and clip it in.
- ➔ [“3.1 Checking selector mechanism”, page 25](#)



### 5.3 Separating selector lever boot from selector lever handle (vehicles from 11.2009 onwards)

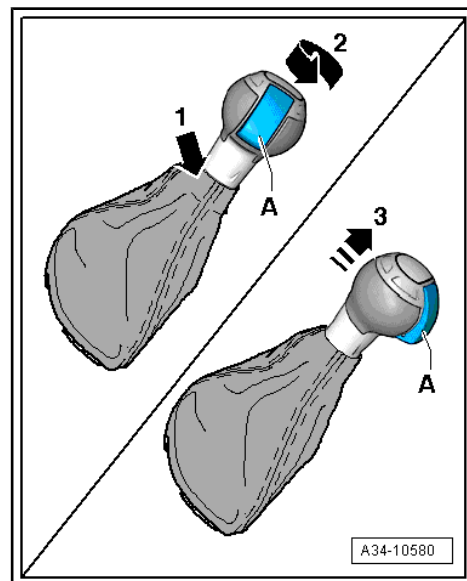
#### Procedure:

- Remove selector lever handle ➔ [page 36](#) .
- Pull guide -1- off in direction of -arrow-.



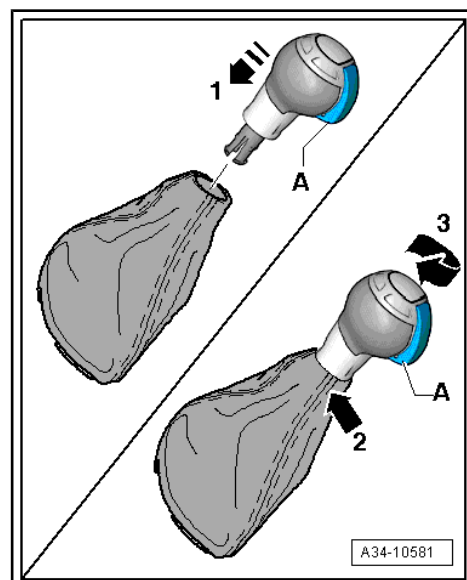
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- Do not touch interlock button -A- when selector lever handle has been removed.
- Hold upper end of selector lever boot -arrow 1-.
- Turn selector lever handle in direction of -arrow 2- and pull it off -arrow 3-.

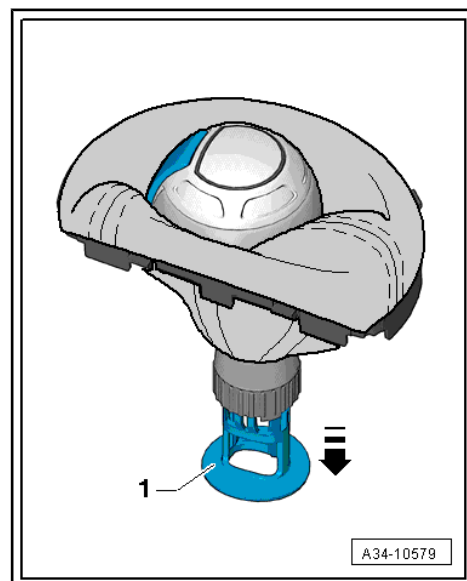


#### Installing selector lever boot with selector lever handle:

- Do not touch interlock button -A- when selector lever handle has been removed.
- Insert selector lever handle in selector lever boot -arrow 1- (with interlock button turned 90° out of position towards left).
- Hold upper end of selector lever boot -arrow 2-.
- Turn selector lever handle in direction of -arrow 3-.



- Clip guide -1- upwards into handle in opposite direction of -arrow-.
- Install selector lever handle ⇒ [page 36](#) .

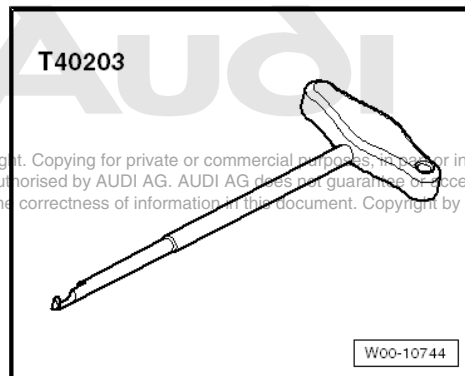


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## 5.4 Moving interlock button on selector lever handle into installation position (vehicles from 11.2009 onwards)

Special tools and workshop equipment required

- ◆ Release tool - T40203-

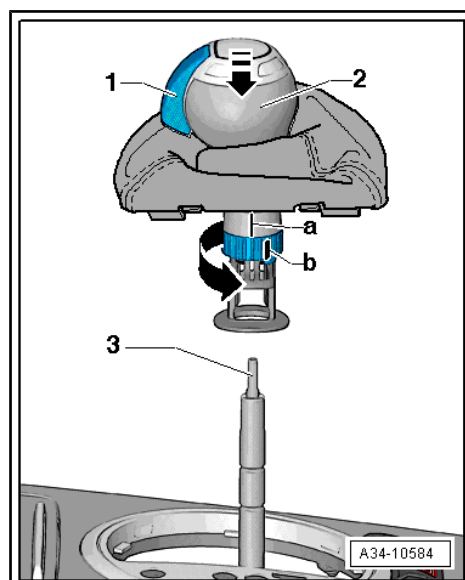


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**Selector lever handle with interlock button (front):**

- Installation position: The interlock button -1- must protrude from the selector lever handle.

If the interlock button has been pressed in, it must be moved back into its installation position so that the selector lever handle can be installed.



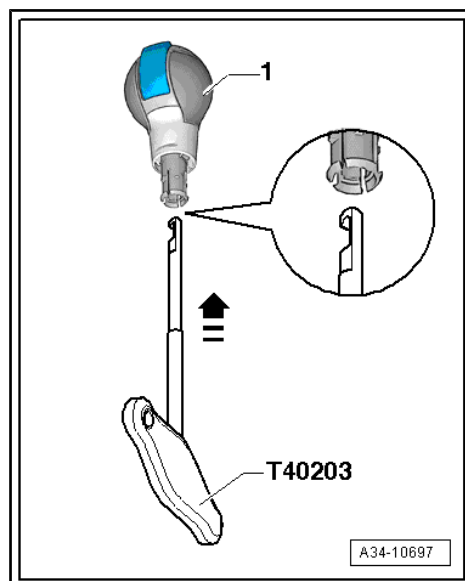
- Carefully insert release tool - T40203- into selector lever handle -1- as far as stop.



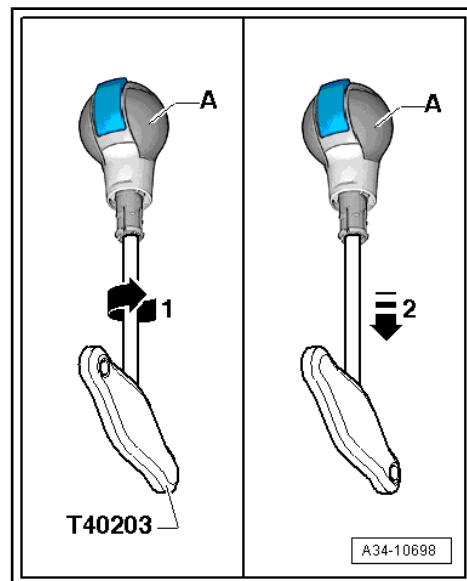
### Note

*For illustration purposes, the handle is shown without selector lever boot.*

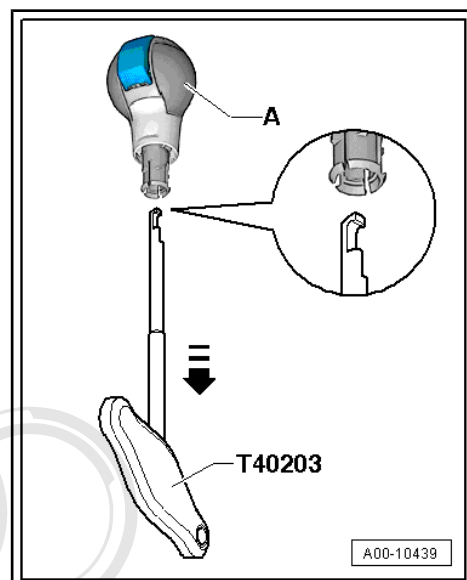
- Recess on release tool - T40203- should face interlock button, hook should point towards left.



- Hold selector lever handle -A- and turn release tool - T40203- 180° in direction of -arrow 1-.
- Hold handle and carefully pull out release tool - T40203- -arrow 2-.



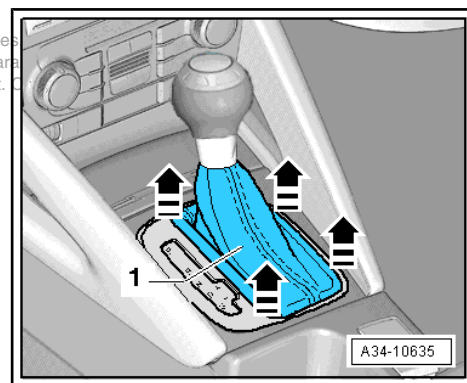
- When pulling out release tool - T40203- , interlock button -A- on selector lever handle is pressed out and locked in position.
- Do not touch interlock button on selector lever handle before installing handle so that interlock button is not pressed in again.



## 5.5 Removing and installing selector lever position display - Y26- with selector lever display illumination bulb - L101- (vehicles from 11.2009 onwards)

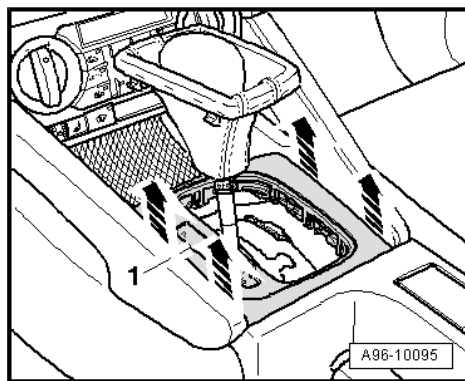
### Removing

- Shift selector lever into position "N".
- Switch off ignition and remove ignition key.
- Unclip retaining frame for selector lever boot -1- from centre console and lift off -arrows-.
- Turn up selector lever boot.





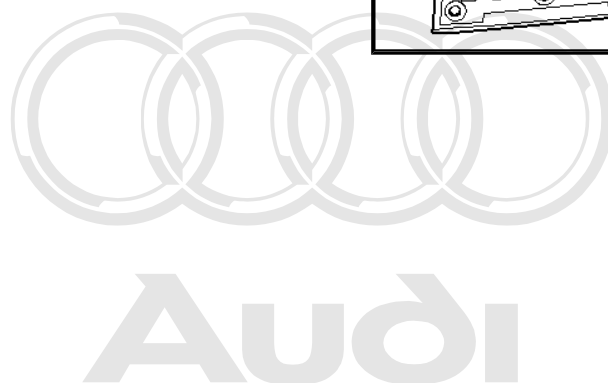
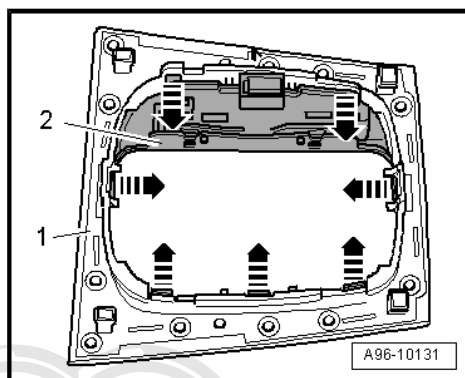
- Unclip retaining frame for selector lever -1- from centre console and lift off -arrows-.
- Detach selector lever cover.
- Unplug electrical connector.



- Release retaining springs -arrows-.
- Detach trim frame with selector lever position display - Y26- and selector lever display illumination bulb - L101- -item 2- from selector lever cover -1-.

### Installing

Installation is carried out in reverse sequence.



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## 6 Exploded view - selector mechanism (vehicles up to 11.2009)



### Note

*Lubricate bearings and moving surfaces with polycarbamide grease - G 052 142 A2- .*

#### 1 - Bolt

- ☐ 15 Nm

#### 2 - Gearbox selector lever

#### 3 - Cable support bracket

- ☐ Secures selector lever cable to gearbox

#### 4 - Bolt

- ☐ For adjusting selector lever cable
- ☐ 13 Nm

#### 5 - Locking plate

- ☐ Renew

#### 6 - Selector lever cable

- ☐ Do not bend or kink
- ☐ If the protective sleeve is damaged, the selector lever cable must be renewed
- ☐ ⇒ ["3.2 Checking and adjusting selector lever cable", page 26](#)
- ☐ ⇒ ["6.2 Removing and installing selector lever cable \(vehicles up to 11.2009\)", page 47](#)
- ☐ Do not lubricate cable eye and ball socket

#### 7 - Nut

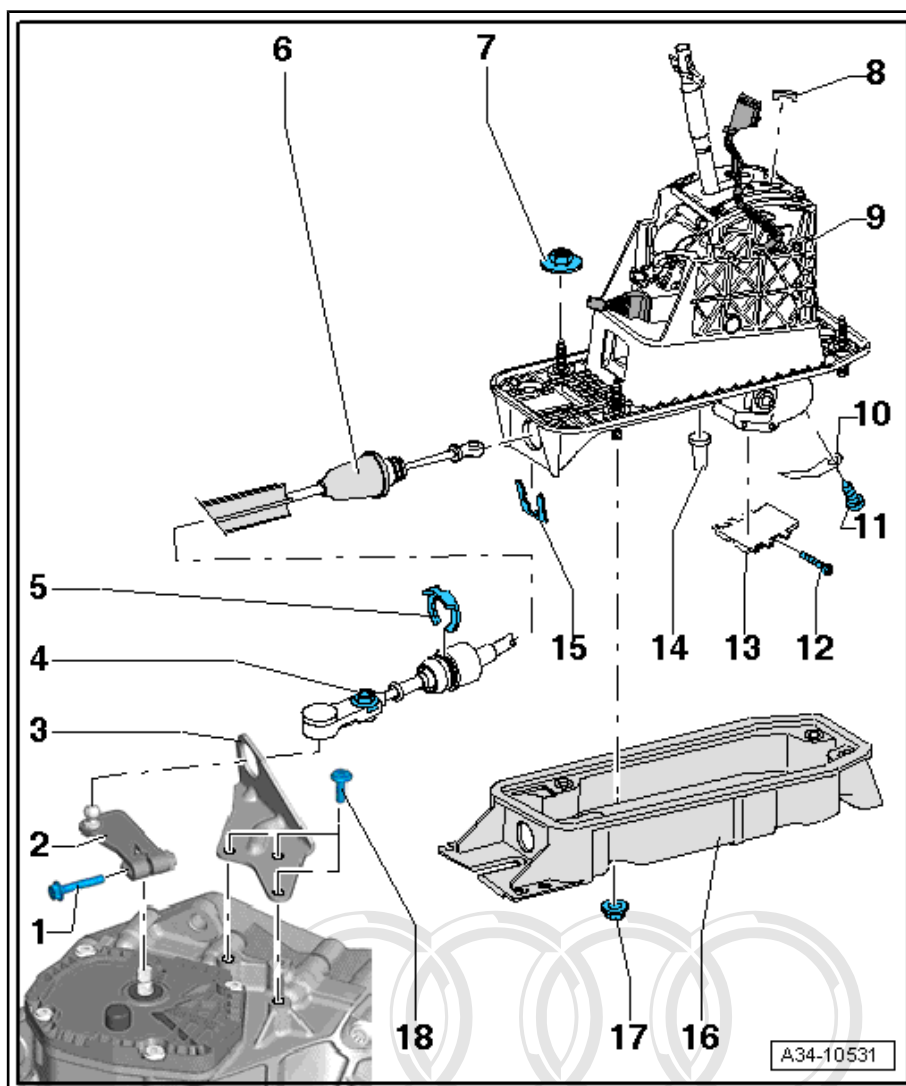
- ☐ 4x
- ☐ 8 Nm

#### 8 - Buffer stop for selector lever

- ☐ Clipped onto selector mechanism

#### 9 - Shift unit

- ☐ ⇒ ["4.1 Operating manual release for selector mechanism from position P \(vehicles up to 11.2009\)", page 29](#)
- ☐ ⇒ ["6.1 Removing and installing shift unit \(vehicles up to 11.2009\)", page 44](#)
- ☐ Incorporates the following components: selector lever sensors control unit - J587- with selector lever - E313- , tiptronic switch - F189- , selector lever locked in position P switch - F319- and selector lever lock solenoid - N110- (do not touch these components)
- ☐ Can be checked via [Guided Fault Finding](#) function ⇒ Vehicle diagnostic tester
- ☐ Selector lever sensors control unit - J587- with selector lever - E313- , tiptronic switch - F189- , selector lever locked in position P switch - F319- and selector lever lock solenoid - N110- can only be renewed together with shift unit as a complete unit ⇒ [page 44](#)



A34-10531

**10 - Detent spring****11 - Bolt**

- ☐ 3.5 Nm

**12 - Bolt**

- ☐ 3.5 Nm

**13 - Detent plate****14 - Pivot pin**

- ☐ For securing selector lever cable to selector mechanism

**15 - Locking plate**

- ☐ Secures selector lever cable to shift unit
- ☐ Renew

**16 - Cover**

- ☐ For shift unit
- ☐ With glued-on gasket

**17 - Nut**

- ☐ Self-locking
- ☐ Renew
- ☐ 9 Nm

**18 - Bolt**

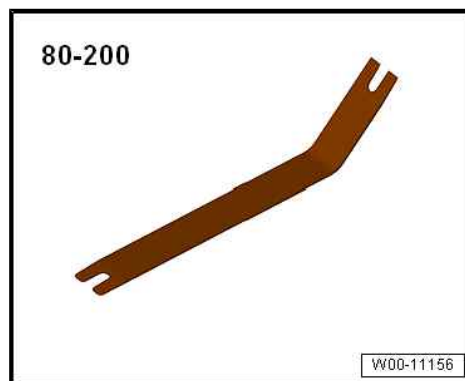
- ☐ Secures cable support bracket to gearbox
- ☐ Renew
- ☐ 8 Nm +90°

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## 6.1 Removing and installing shift unit (vehicles up to 11.2009)

**Special tools and workshop equipment required**

- ◆ Removal lever - 80 - 200-

**Removing**

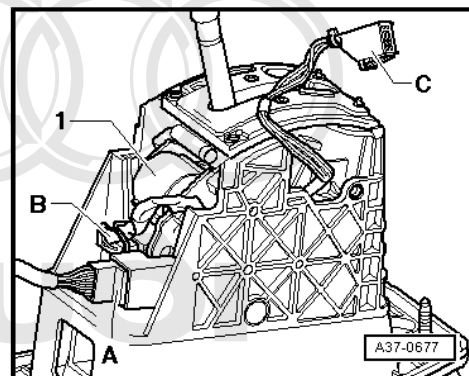
- Remove selector lever handle ⇒ [page 30](#) .
- Switch off ignition.
- Remove selector lever position display - Y26- with selector lever display illumination bulb - L101- ⇒ [page 33](#) .
- Remove ashtray or storage compartment in front of selector mechanism ⇒ General body repairs, interior; Rep. gr. 68 .

- Detach electrical connector -A- between the shift unit and the vehicle's wiring harness.

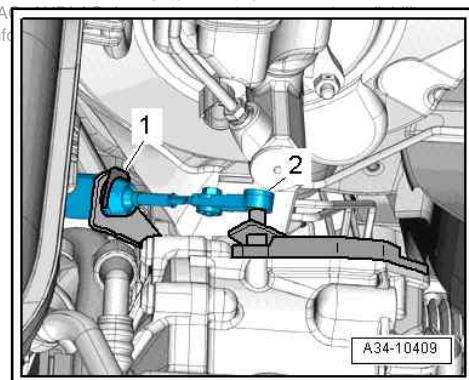
 **Note**

Items marked -1, B, C- and -arrow- can be disregarded.

- Move selector lever to position “P”.



- Pry selector lever cable -2- off gearbox selector lever using removal lever - 80 - 200- .
- Pull off securing clip -1- for selector lever cable.

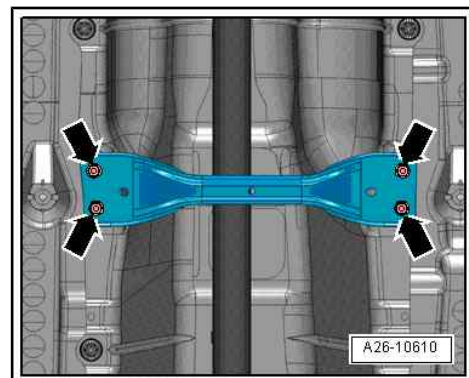


**Caution**

*Risk of damage to selector lever cable.*

- ◆ *Do not press selector lever cable towards rear out of cable support bracket. The selector lever cable is only guided out of the cable support bracket when the shift unit is detached.*

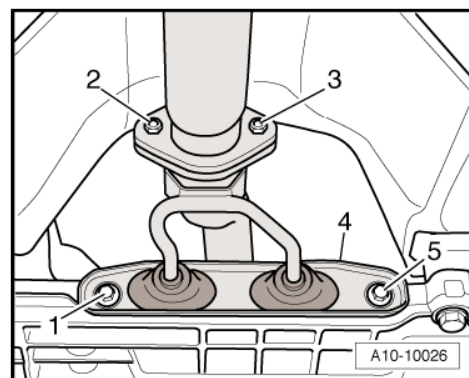
- Remove bolts -arrows- and detach front cross member on vehicle underside.



**Caution**

*Risk of damage to flexible joint.*

- ◆ *The flexible joint in the front exhaust pipe must not be bent further than 10°.*



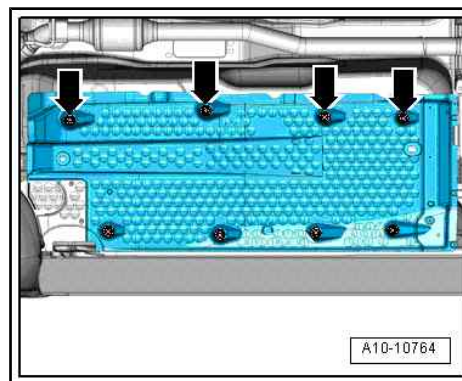
**Vehicles with 1.2/1.4 ltr. TFSI engine:**

- Remove nuts -2- and -3- and separate exhaust system.

**Continued for all vehicles:**

- Remove bolts -1- and -5-.
- Pull bracket -4- for exhaust system off pins on front exhaust pipe.
- Tie up front exhaust pipe on underbody.

- Remove nuts -arrows- from covers for vehicle underbody (both sides).



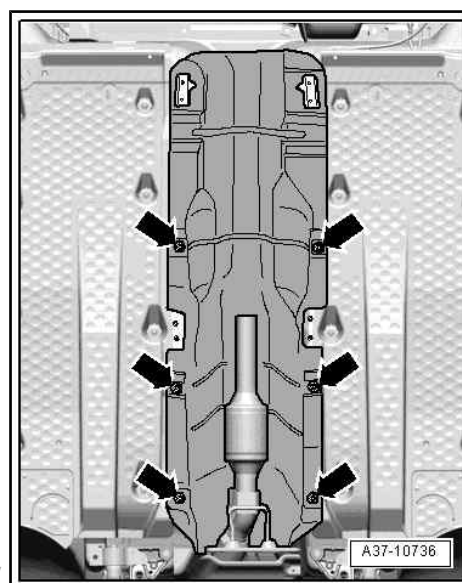
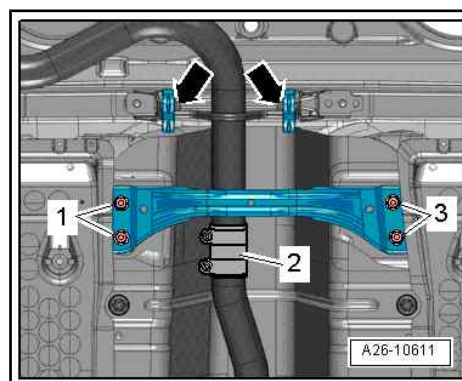
- Remove nuts -1- and -3- and detach rear cross member on vehicle underside.
- Unfasten bolted joints of clamp -2- and disconnect exhaust system.



### Note

*A second mechanic is required for removing the rear section of the exhaust system.*

- Disengage exhaust system at rubber mountings -arrows-.
- Detach rear silencer from rubber mountings and remove rear section of exhaust system.
- Loosen clips -arrows- and detach heat shield towards rear.



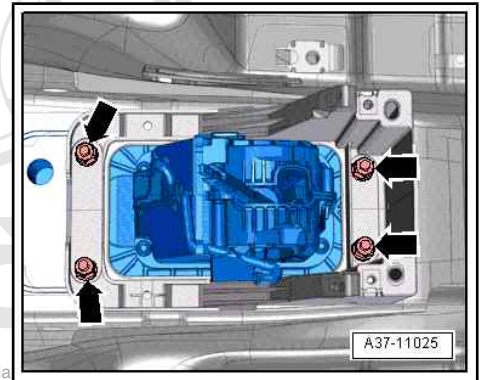
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#### Note

*The assistance of a second mechanic is required to detach the shift unit from below.*

- Remove nuts -arrows- in vehicle interior.
- Detach shift unit together with selector lever cable from below. Guide selector lever cable out of cable support bracket.



#### Note

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*Do not bend or kink the selector lever cable.*

### Installing

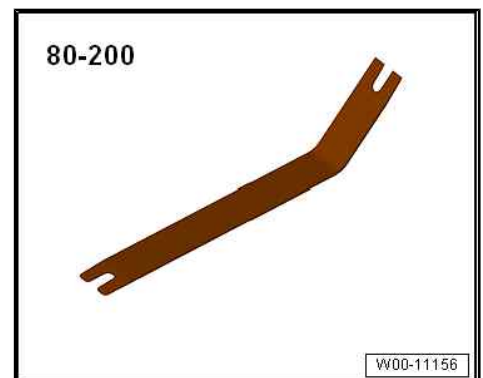
Installation is carried out in reverse sequence; note the following:

- Tightening torque  
⇒ ["6 Exploded view - selector mechanism \(vehicles up to 11.2009\)", page 43](#)
- Install heat shield and aerodynamic fairings (Cd panels) for underbody ⇒ General body repairs, exterior; Rep. gr. 66 .
- Install exhaust system so it is free of stress ⇒ Engine, mechanics; Rep. gr. 26 .
- Install ashtray or storage compartment in front of selector mechanism ⇒ General body repairs, interior; Rep. gr. 68 .
- Install selector lever position display - Y26- with selector lever display illumination bulb - L101- ⇒ [page 33](#) .
- Install selector lever handle ⇒ [page 30](#) .
- ⇒ ["3.3 Checking function of ignition key removal lock", page 28](#)
- ⇒ ["3.2 Checking and adjusting selector lever cable", page 26](#)
- ⇒ ["3.1 Checking selector mechanism", page 25](#)

## 6.2 Removing and installing selector lever cable (vehicles up to 11.2009)

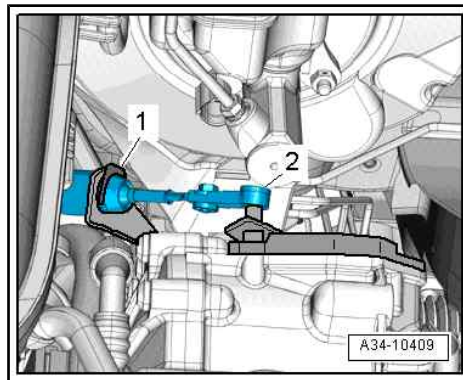
### Special tools and workshop equipment required

- ◆ Removal lever - 80 - 200-

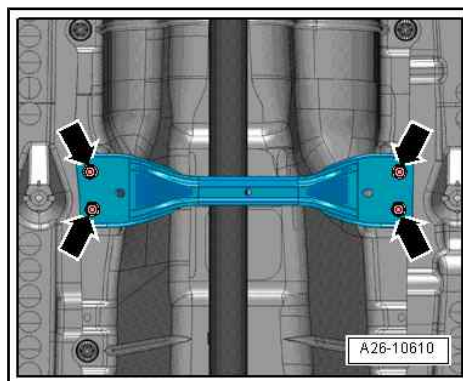


## Removing

- Shift selector lever to position “S”.
- Switch off ignition.
- Pry selector lever cable -2- off gearbox selector lever using removal lever - 80 - 200- .
- Pull off securing clip -1- for selector lever cable (selector lever cable remains in installation position).



- Remove bolts -arrows- and detach front cross member on vehicle underside.



### Caution

*Risk of damage to flexible joint.*

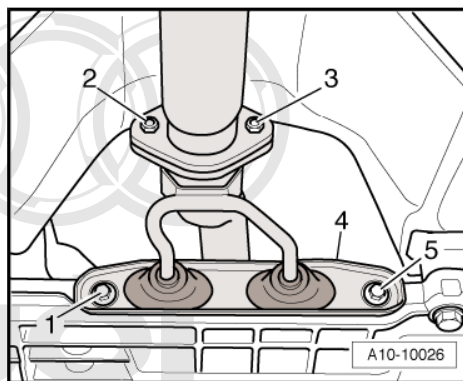
- ♦ *The flexible joint in the front exhaust pipe must not be bent further than 10°.*

### Vehicles with 1.4 ltr. TFSI engine:

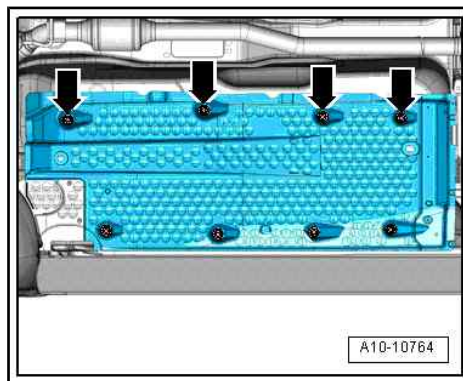
- Remove nuts -2- and -3- and separate exhaust system.

### Continued for all vehicles:

- Remove bolts -1- and -5-.
- Pull bracket -4- for exhaust system off pins on front exhaust pipe.
- Tie up front exhaust pipe on underbody.
- Remove nuts -arrows- from covers for vehicle underbody (both sides).



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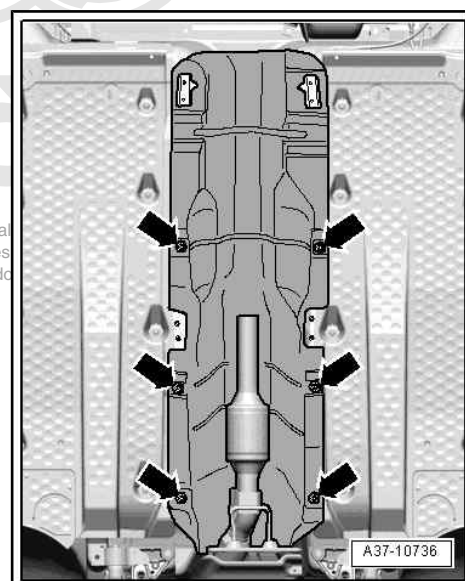
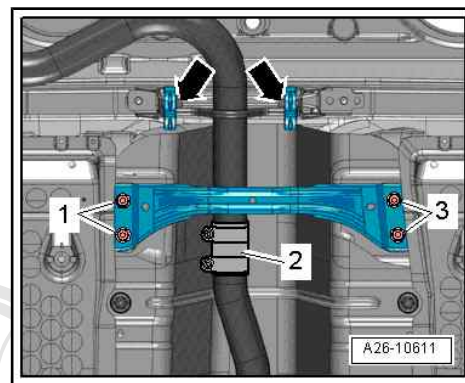


- Remove nuts -1- and -3- and detach rear cross member on vehicle underside.
- Unfasten bolted joints of clamp -2- and disconnect exhaust system.

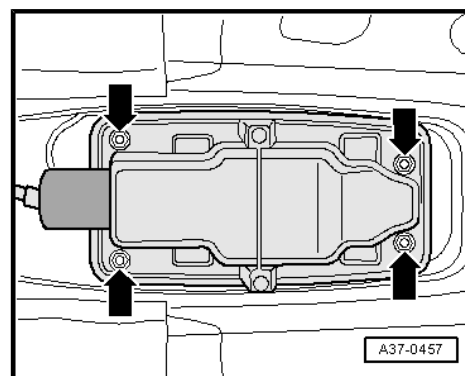
 **Note**

*A second mechanic is required for removing the rear section of the exhaust system.*

- Disengage exhaust system at rubber mountings -arrows-.
- Detach rear silencer from rubber mountings and remove rear section of exhaust system.
- Loosen clips -arrows- and detach heat shield towards rear.



- Remove bolts -arrows- and detach cover.
- Carefully push cover including protective sleeve forwards over selector lever cable. Take care not to damage the protective sleeve.



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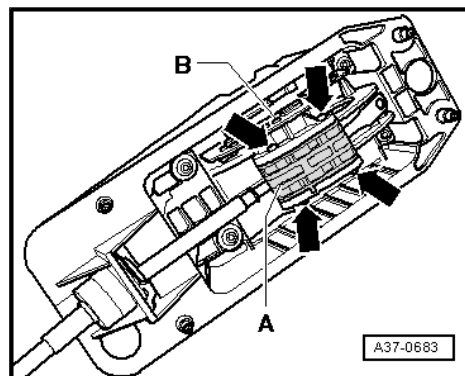
- Remove bolts -arrows-.



### Caution

*Electric components on printed circuit can be damaged by electrostatic discharge.*

- ◆ *Do not touch printed circuit -B- with bare hands.*



### Note

*The printed circuit can only be renewed together with the shift unit!*

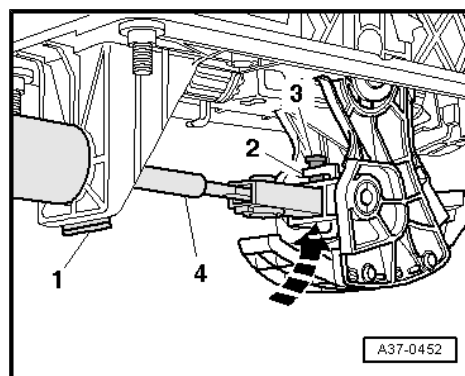
- Unclip retaining tabs on both sides and detach detent plate -A- from shift unit.



### Note

*This step can only be performed if the selector lever is in position "S".*

- Pull down retaining clip -1- for selector lever cable on selector mechanism and remove.
- Pull plastic retaining spring -2- forwards slightly and press pin -3- upwards only as far as necessary -arrow-.



### Note

*Ensure that pin is not pressed out completely.*

- Pull selector lever cable -4- out of shift unit.



### Note

*Do not bend or kink the selector lever cable.*

## Installing

Installation is carried out in reverse sequence; note the following:

- Tightening torque  
⇒ ["6 Exploded view - selector mechanism \(vehicles up to 11.2009\)", page 43](#)

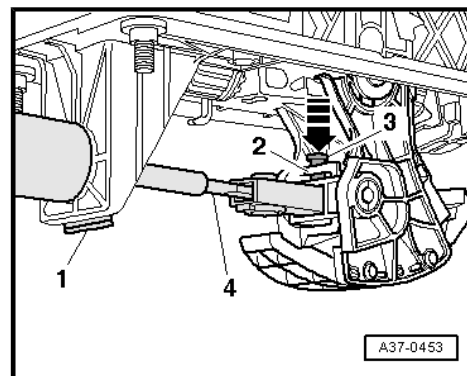
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### Note

- ◆ *Renew retaining clip for selector lever cable.*
- ◆ *Check protective sleeve for damage. The protective sleeve can only be renewed together with the selector lever cable.*
- ◆ *Check that the protective sleeve is seated correctly and not twisted.*

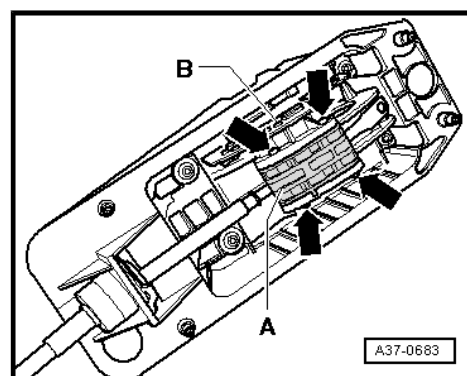
- Insert selector lever cable with protective sleeve into cover. Take care not to damage the protective sleeve.
- Insert end of selector lever cable -4- into joint on selector lever.
- Press pin -3- downwards -arrow- and check that plastic retaining spring -2- has engaged in pin.
- Insert locking plate -1- for selector lever cable.
- Installation position: angled end of clip faces towards shift unit.



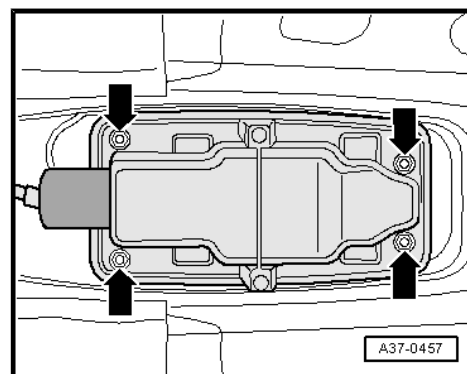
#### Caution

*Electric components on printed circuit can be damaged by electrostatic discharge.*

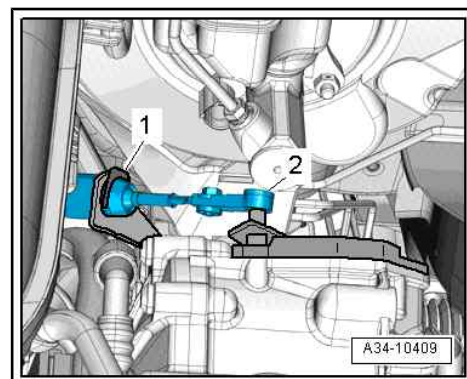
- ◆ *Do not touch printed circuit -B- with bare hands.*



- Clip in detent plate -A- and tighten bolts -arrows-.
- Hand-tighten cover (with glued-on seal) to selector mechanism -arrows-, making sure that seal is seated correctly.
- Insert protective sleeve on selector lever cable in cover.



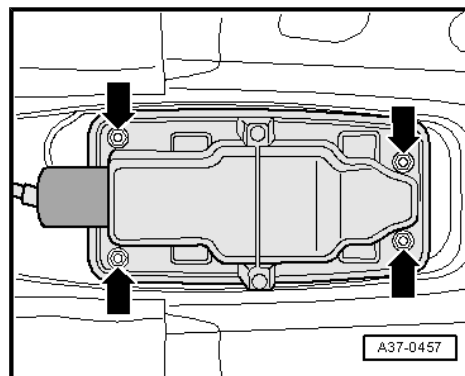
- Carefully push selector lever cable -2- onto gearbox selector lever and secure with retaining clip -1- to cable support bracket.
- Move selector lever from “S” to “P”.
- The selector mechanism and selector lever cable should move smoothly; if necessary renew selector lever cable or selector mechanism: up to 11.2009 ➔ [page 44](#) , from 11.2009 onwards ➔ [page 54](#) .





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- Tighten bolts -arrows- for cover (bottom).
- Install heat shield and aerodynamic fairings (Cd panels) for underbody ⇒ General body repairs, exterior; Rep. gr. 66 .
- Install exhaust system so it is free of stress ⇒ Engine, mechanics; Rep. gr. 26 .
- ⇒ [“3.2 Checking and adjusting selector lever cable”, page 26](#)
- ⇒ [“3.1 Checking selector mechanism”, page 25](#)



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## 7 Exploded view - selector mechanism (vehicles from 11.2009 onwards)



### Note

Lubricate bearings and moving surfaces with polycarbamide grease - G 052 142 A2- .

#### 1 - Bracket

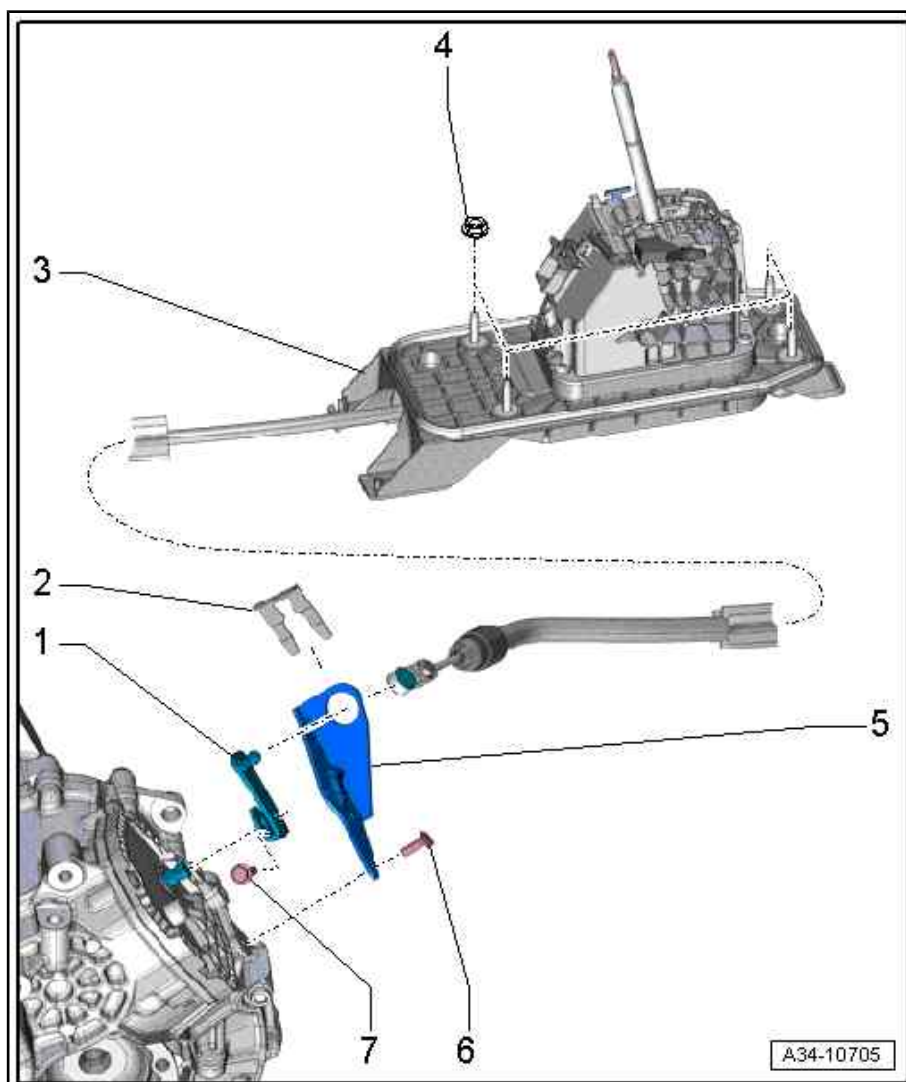
- ☐ For selector lever cable

#### 2 - Locking plate

- ☐ Renew
- ☐ Secures selector lever cable to support bracket

#### 3 - Shift unit

- ☐ ⇒ [“5.1 Operating manual release for selector mechanism from position P \(vehicles from 11.2009 onwards\)”, page 35](#)
- ☐ ⇒ [“7.1 Removing and installing shift unit \(vehicles from 11.2009 onwards\)”, page 54](#)
- ☐ Incorporates the following components: selector lever sensors control unit - J587- with selector lever - E313- , tiptronic switch - F189- , selector lever locked in position P switch - F319- and selector lever lock solenoid - N110- (do not touch these components)
- ☐ Can be checked via [Guided Fault Finding](#) function ⇒ Vehicle diagnostic tester
- ☐ Selector lever sensors control unit - J587- with selector lever - E313- , tiptronic switch - F189- , selector lever locked in position P switch - F319- and selector lever lock solenoid - N110- can only be renewed together with shift unit as a complete unit ⇒ [page 54](#)
- ☐ Selector lever cable can only be renewed together with complete shift unit ⇒ [page 54](#)
- ☐ ⇒ [“3.2 Checking and adjusting selector lever cable”, page 26](#)
- ☐ Do not grease selector lever cable



#### 4 - Nut

- ☐ Secures selector mechanism to body
- ☐ 4x
- ☐ 8 Nm

#### 5 - Support bracket

- ☐ For selector lever cable

#### 6 - Bolt

- ☐ Secures support bracket to gearbox

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- ☐ 2x
- ☐ 23 Nm

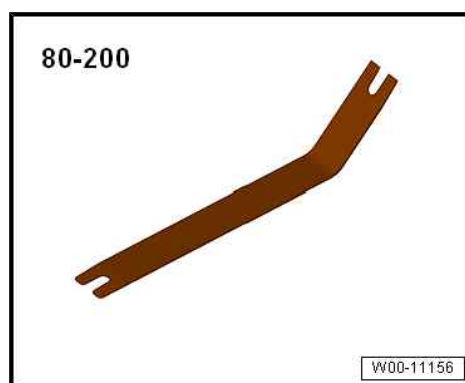
### 7 - Bolt

- ☐ Secures bracket to gearbox
- ☐ 2x
- ☐ 13 Nm

## 7.1 Removing and installing shift unit (vehicles from 11.2009 onwards)

### Special tools and workshop equipment required

- ◆ Removal lever - 80 - 200-



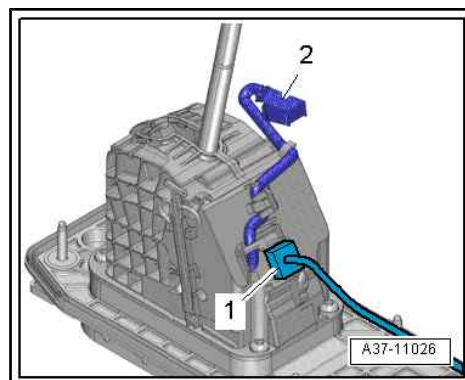
### Removing

- Remove selector lever handle ➔ [page 36](#) .
- Switch off ignition.
- Remove selector lever position display - Y26- with selector lever display illumination bulb - L101- ➔ [page 41](#) .
- Remove ashtray or storage compartment in front of selector mechanism ➔ General body repairs, interior; Rep. gr. 68 .
- Unplug electrical connector -1- between shift unit and vehicle wiring harness.

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*Disregard -item 2-.*

- Move selector lever to position "P".



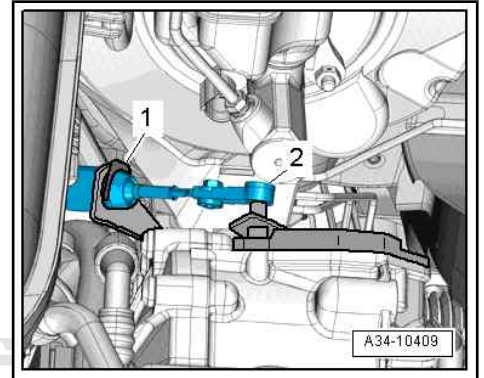
- Pry selector lever cable -2- off gearbox selector lever using removal lever - 80 - 200- .
- Pull off securing clip -1- for selector lever cable.



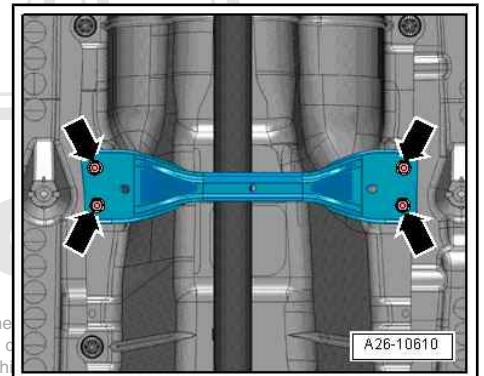
#### Caution

**Risk of damage to selector lever cable.**

- ◆ **Do not press selector lever cable towards rear out of cable support bracket. The selector lever cable is only guided out of the cable support bracket when the shift unit is detached.**



- Remove bolts -arrows- and detach front cross member on vehicle underside.



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#### Caution

**Risk of damage to flexible joint.**

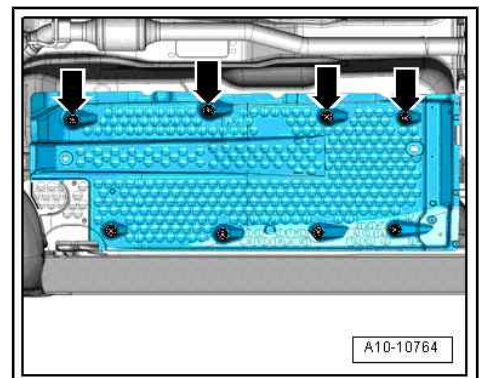
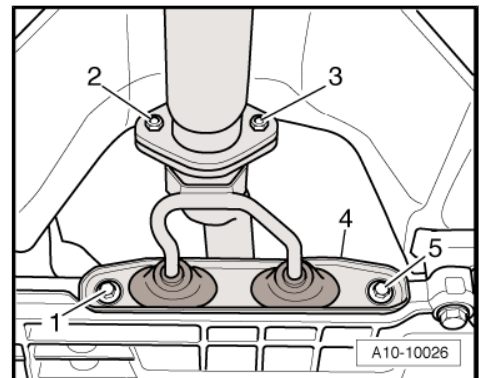
- ◆ **The flexible joint in the front exhaust pipe must not be bent further than 10°.**

#### Vehicles with 1.2/1.4 ltr. TFSI engine:

- Remove nuts -2- and -3- and separate exhaust system.

#### Continued for all vehicles:

- Remove bolts -1- and -5-.
- Pull bracket -4- for exhaust system off pins on front exhaust pipe.
- Tie up front exhaust pipe on underbody.
- Remove nuts -arrows- from covers for vehicle underbody (both sides).



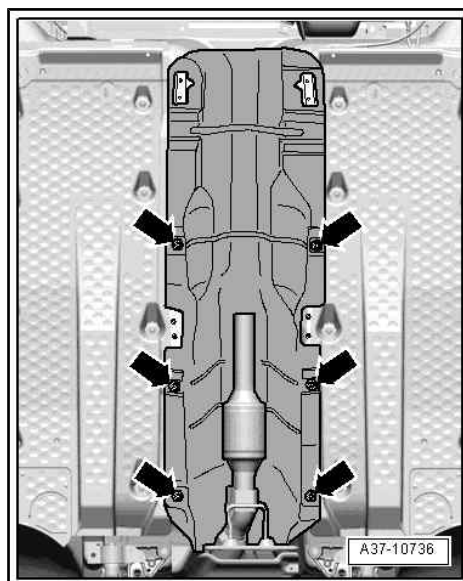
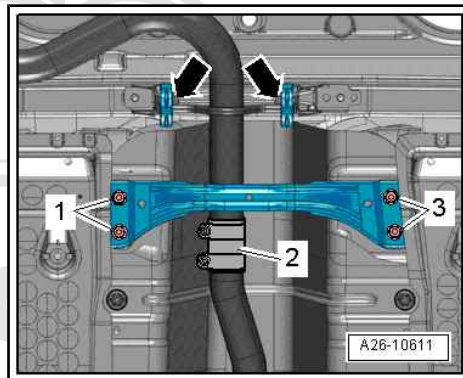
- Remove nuts -1- and -3- and detach rear cross member on vehicle underside.
- Unfasten bolted joints of clamp -2- and disconnect exhaust system.



### Note

*A second mechanic is required for removing the rear section of the exhaust system.*

- Disengage exhaust system at rubber mountings -arrows-.
- Detach rear silencer from rubber mountings and remove rear section of exhaust system.
- Loosen clips -arrows- and detach heat shield towards rear.





#### Note

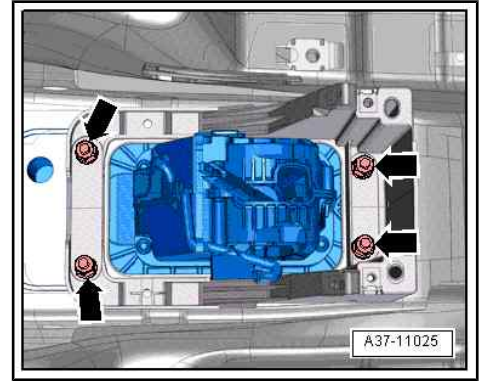
*The assistance of a second mechanic is required to detach the shift unit from below.*

- Remove nuts -arrows- in vehicle interior.
- Detach shift unit together with selector lever cable from below. Guide selector lever cable out of cable support bracket.



#### Note

*Do not bend or kink the selector lever cable.*



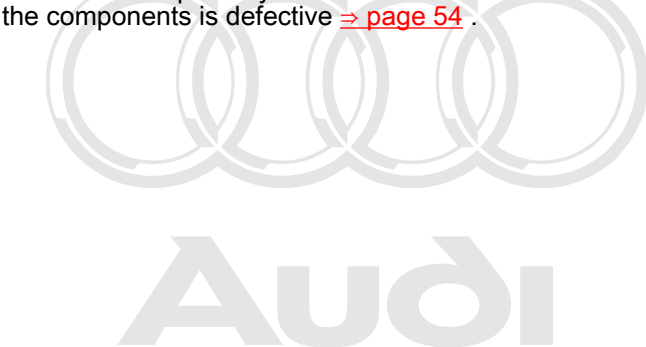
### Installing

Installation is carried out in reverse sequence; note the following:

- Tightening torque  
⇒ [“7 Exploded view - selector mechanism \(vehicles from 11.2009 onwards\)”, page 53](#)
- Install heat shield and aerodynamic fairings (Cd panels) for underbody ⇒ General body repairs, exterior; Rep. gr. 66 .
- Install exhaust system so it is free of stress ⇒ Engine, mechanics; Rep. gr. 26 .
- Install ashtray or storage compartment in front of selector mechanism ⇒ General body repairs, interior; Rep. gr. 68 .
- Install selector lever position display - Y26- with selector lever display illumination bulb - L101- ⇒ [page 41](#) .
- Install selector lever handle ⇒ [page 36](#) .
- ⇒ [“3.3 Checking function of ignition key removal lock”, page 28](#)
- ⇒ [“3.2 Checking and adjusting selector lever cable”, page 26](#)
- ⇒ [“3.1 Checking selector mechanism”, page 25](#)

## 7.2 Removing and installing selector lever cable (vehicles from 11.2009 onwards)

The selector lever cable is combined with the shift unit and cannot be renewed separately. The shift unit must be renewed if one of the components is defective ⇒ [page 54](#) .



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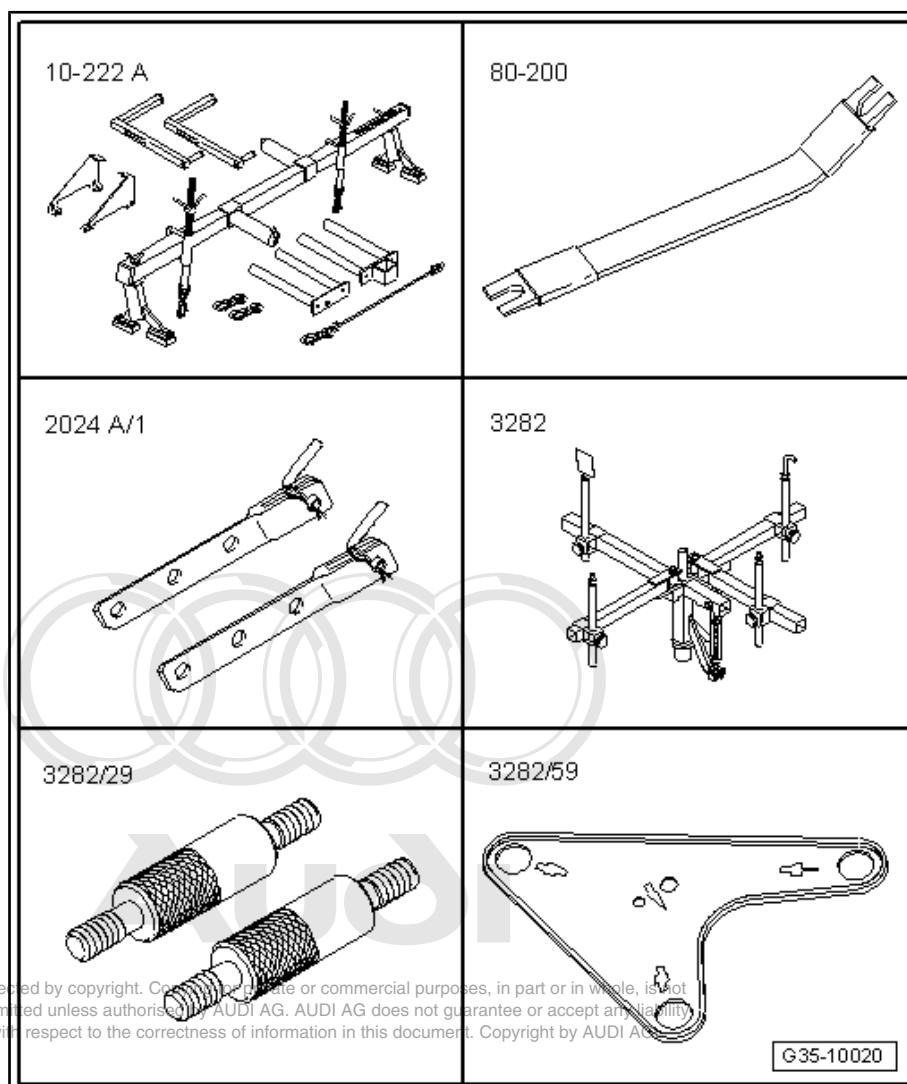
## 8 Removing and installing gearbox

### Overview:

- ◆ ⇒ ["8.1 Removing gearbox - vehicles with 1.2 ltr. TFSI engine", page 58](#)
- ◆ ⇒ ["8.2 Removing gearbox - vehicles with 1.4 ltr. TFSI engine", page 65](#)
- ◆ ⇒ ["8.3 Removing gearbox - vehicles with 1.6 ltr. MPI engine", page 76](#)
- ◆ ⇒ ["8.4 Removing gearbox - vehicles with 1.8 ltr. TFSI engine", page 86](#)
- ◆ ⇒ ["8.5 Removing gearbox - vehicles with 1.6 ltr. TDI engine", page 98](#)
- ◆ ⇒ ["8.6 Installing gearbox", page 108](#)

### 8.1 Removing gearbox - vehicles with 1.2 ltr. TFSI engine

#### Special tools and workshop equipment required



- ◆ Support bracket - 10 - 222 A-
- ◆ Removal lever - 80 - 200-

- ◆ Extension -2024 A /1-
- ◆ Gearbox support - 3282-
- ◆ Pin - 3282/29-
- ◆ Adjustment plate - 3282/59-
- ◆ Engine and gearbox jack - V.A.G 1383 A-



- ◆ Stepladder - VAS 5085-



- ◆ Drip tray for workshop hoist - VAS 6208-



- ◆ Tensioning strap - T10038-



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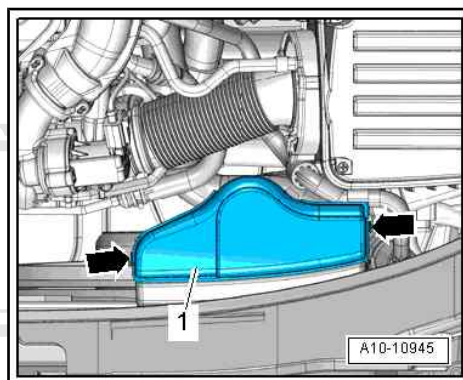
## Removing



### Note

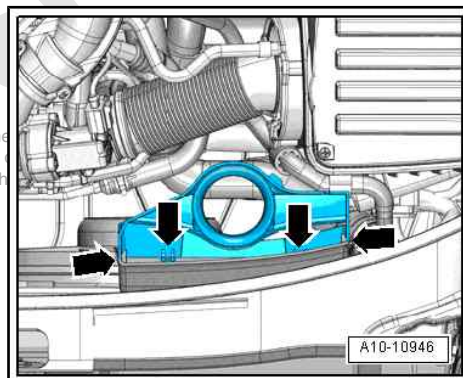
- ◆ ⇒ *"5 Repair instructions", page 14*
- ◆ ⇒ *"5.2 Rules for cleanliness", page 16*
- ◆ *Observe notes on dual clutch gearbox 0AM ⇒ page 14 .*
- ◆ *Re-attach all cable ties at the same locations when re-installing.*

- Move selector lever to position "P".
- Pull off cover -1- for air duct (release retaining clips -arrows- on the sides).

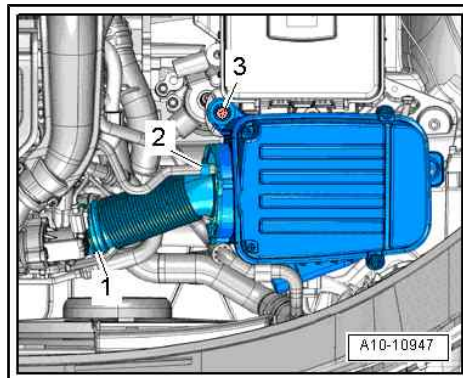


- Pull off bottom section of air duct (release retaining clips -arrows-).
- Detach bottom section of air duct with air hose.

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- Detach air hose -1- from turbocharger (release hose clip).
- Disconnect vacuum hose -2-.
- Remove bolt -3- and remove air cleaner housing.



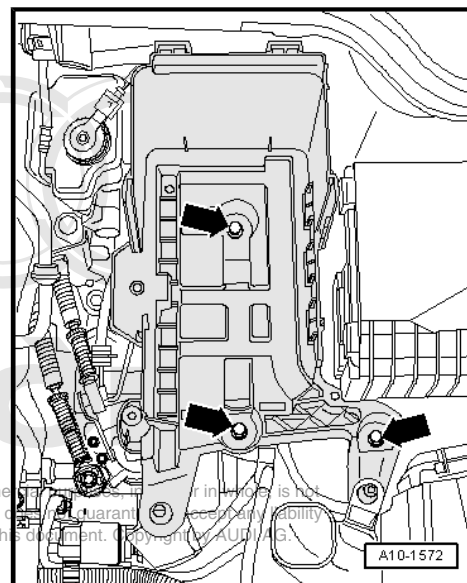


### Caution

*When disconnecting the battery there is a risk of irreparable damage to electronic components.*

◆ *Observe notes on procedure for disconnecting the battery.*

- Remove battery ⇒ Electrical system; Rep. gr. 27 .
- Remove bolts -arrows- and detach battery tray.



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- Pry selector lever cable -2- off gearbox selector lever using removal lever - 80 - 200- .
- Pull off securing clip -1- for selector lever cable.

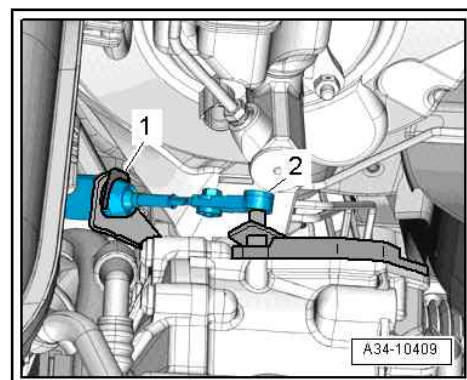


### Caution

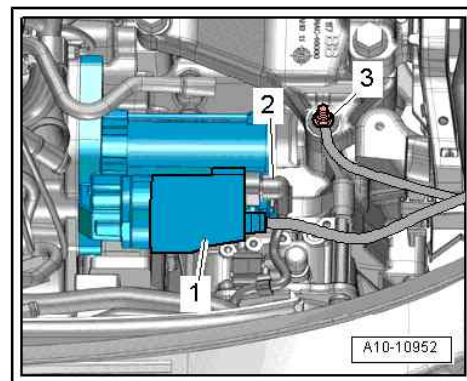
*Risk of damage to selector lever cable.*

◆ *Guide selector lever cable out of cable support bracket when lowering gearbox.*

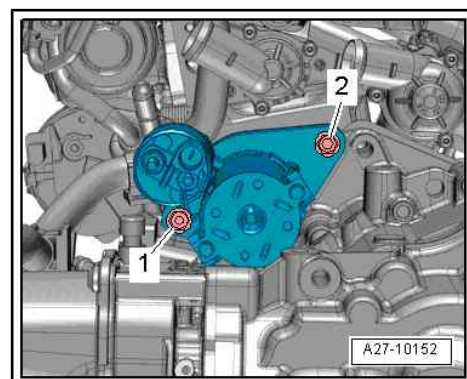
◆ *Do not bend or kink the selector lever cable.*



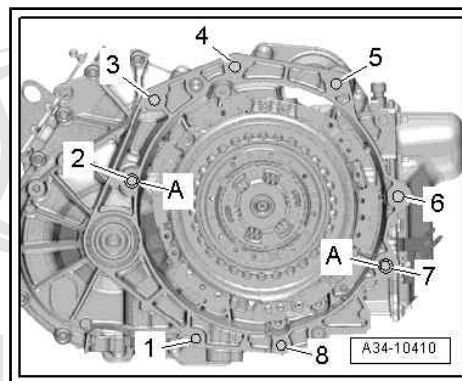
- Unplug electrical connector -2-.
- Push back dust boot -1- and disconnect B+ wire from starter solenoid.
- Remove nut -3- for earth wire.



- Remove bolts -1- and -2- and detach starter from gearbox.

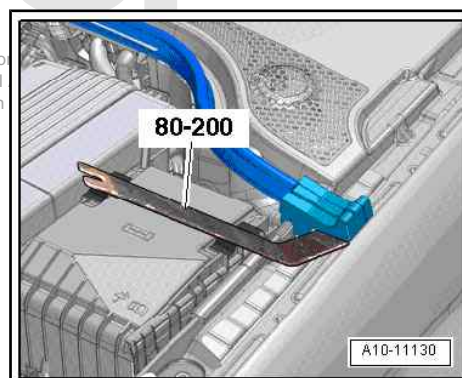


- Remove bolts -3, 4, 5- securing gearbox to engine.

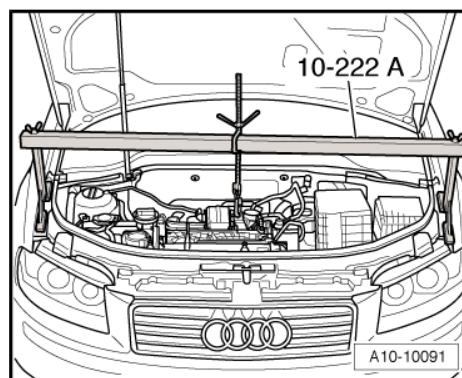


- Lever clip off sealing element using removal lever - 80 - 200- and fold up sealing element.

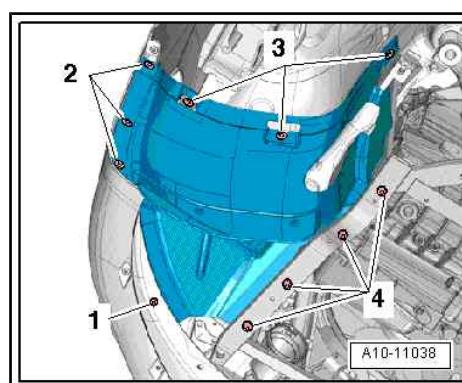
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- Set up support bracket - 10 - 222 A- on body flanges, as shown in illustration.
- Spindle faces to the front.
- Hook spindle of support bracket into engine lifting eye (left-side).
- Take up weight of engine with spindle; do not lift.
- Open filler cap on expansion tank.



- Remove both front wheels.
- Remove front section of front wheel housing liner on both sides ➔ General body repairs, exterior; Rep. gr. 66 .
- Remove front exhaust pipe ➔ Engine, mechanics; Rep. gr. 26 .



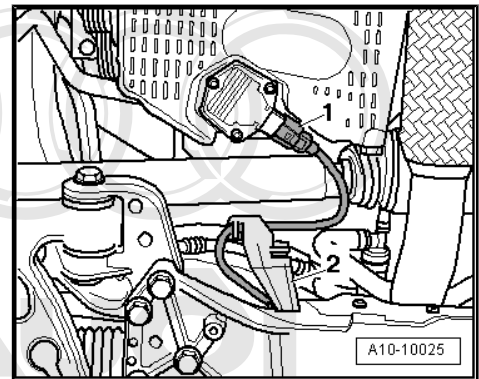
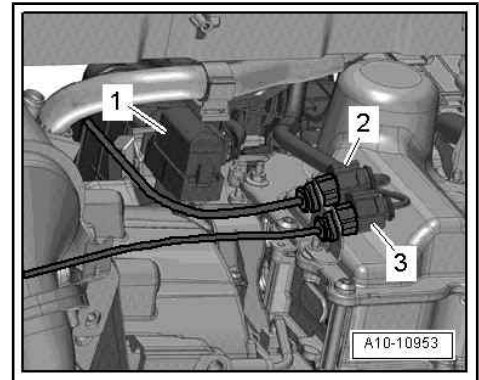


### Caution

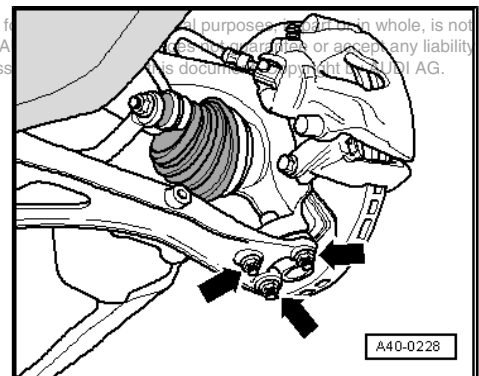
**Risk of irreparable damage to gearbox components.**

- ◆ **Never touch the contacts in the gearbox connector with your hands. Static discharge can seriously damage the control unit and mechatronic unit.**

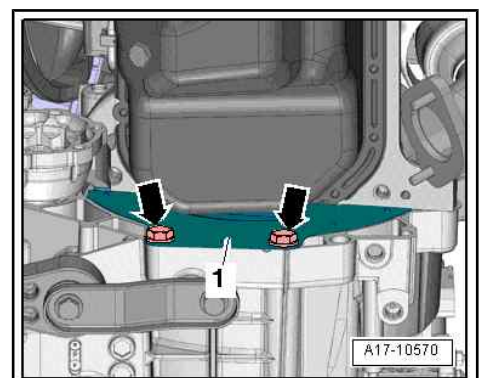
- Touch a suitable earthed object with your hand (without gloves) to discharge any static electricity.
- Unplug electrical connector -1- for mechatronic unit for dual clutch gearbox - J743- .
- Take electrical connectors -2- and -3- out of bracket and unplug.
- Remove all retainers from mechatronic unit for dual clutch gearbox - J743- .
- Move electrical wiring harness clear on gearbox.
- Unplug electrical connector -1- at oil level and oil temperature sender - G266- .
- Unclip bracket -2- for electrical wiring leading to oil level and oil temperature sender - G266- at subframe.



- Unbolt drive shafts (left and right) from gearbox flange shafts  
⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .
- Remove nuts -arrows- securing swivel joint (left and right).
- If fitted, unscrew nut on bracket for front left vehicle level sender -G78- .
- Disengage swivel joints from wishbones.



- Remove bolts -arrows- and detach cover plate -1-.



- Swivel suspension strut (left and right) outwards and support with extension -2024 A /1- , as shown in illustration.



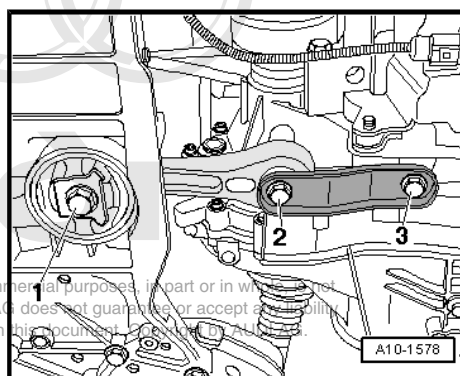
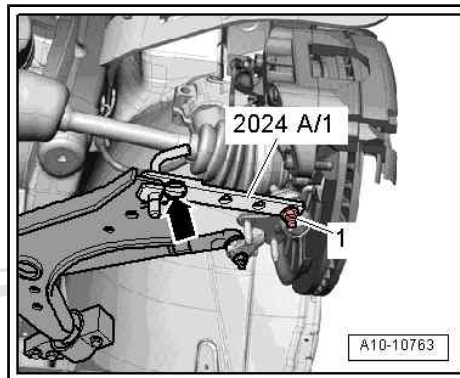
# WARNING

*Risk of accident if parts of support are not properly secured.*

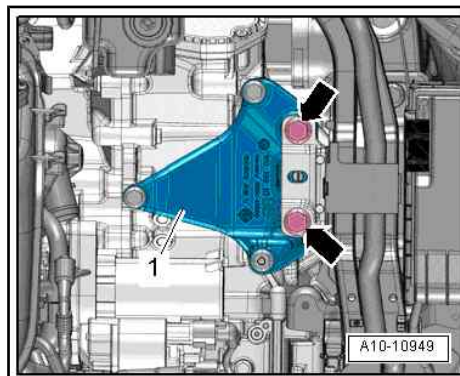
- ◆ *Secure locking pin and swivel joint with retaining clip -arrow- and nut -1-.*

- Remove flange shaft (right-side) ➔ [page 153](#) .

- Remove bolts -1, 2, 3- and detach pendulum support.

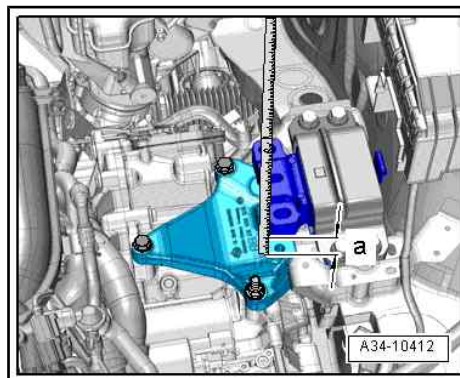


- Remove bolts -arrows- for assembly mounting on gearbox.

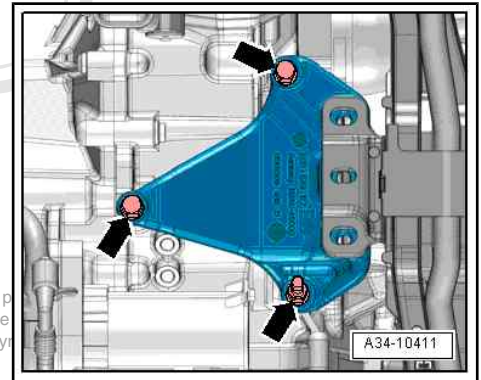


- Lower engine/gearbox assembly using spindle of support bracket - 10 - 222 A- until distance -a- is obtained between gearbox housing and gearbox mounting.

- Dimension -a- = 100 ... 110 mm



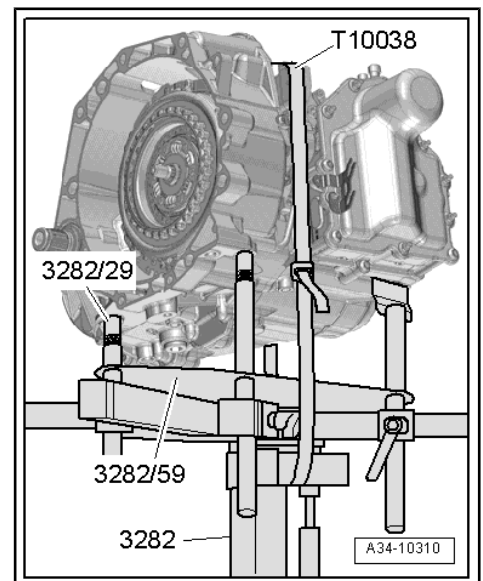
- Remove bolts -arrows- and detach gearbox support.



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To remove dual clutch gearbox 0AM, set up gearbox support - 3282- with adjustment plate - 3282/59- .

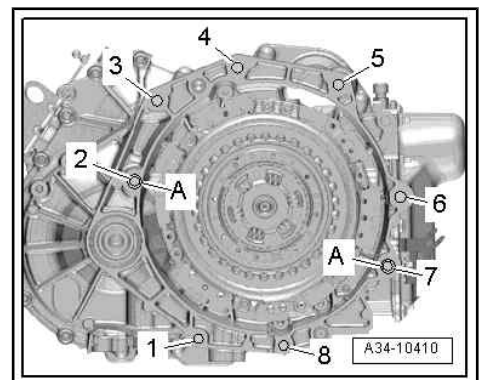
- Set up gearbox support - 3282- on engine and gearbox jack - V.A.G 1383 A- .
- Align arms of gearbox support according to holes in adjustment plate - 3282/59- .
- Secure support elements as illustrated on adjustment plate - 3282/59- .
- Place engine and gearbox jack - V.A.G 1383 A- underneath vehicle. The -arrow symbol- on the adjustment plate - 3282/42- points in the direction of travel.
- Align gearbox support - 3282- parallel with gearbox.
- Screw pin - 3282/29- into gearbox.
- Insert last support element in gearbox as illustrated.
- Use tensioning strap - T10038- to secure gearbox.
- Support gearbox by lifting from underneath with engine and gearbox jack - V.A.G 1383 A- .
- Remove remaining bolts -1, 2, 6, 7, 8- securing gearbox to engine.
- Press gearbox off dowel sleeves.
- Pull gearbox off engine.
- Carefully lower gearbox using engine and gearbox jack - V.A.G 1383 A- (press engine slightly forwards when doing so).
- Guide selector lever cable out of cable support bracket while lowering gearbox.



#### Note

*Do not bend or kink the selector lever cable.*

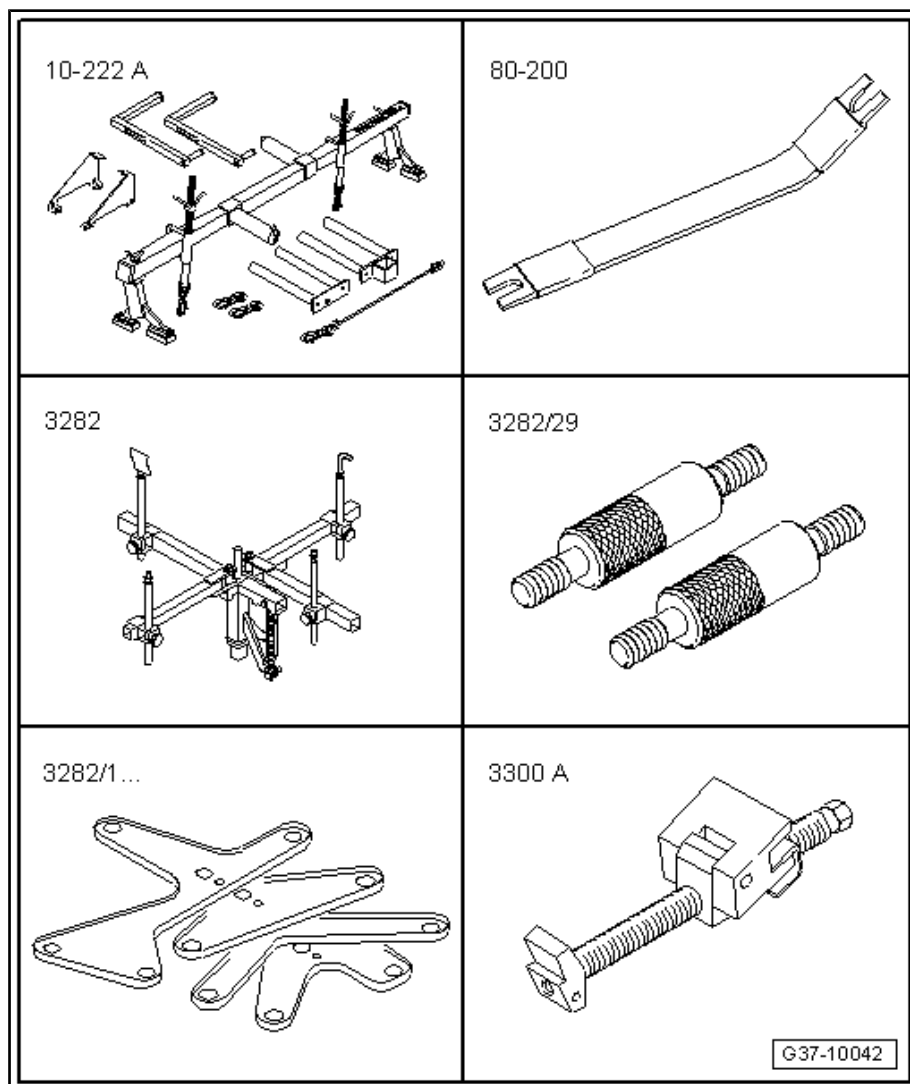
- While lowering gearbox, adjust position of gearbox using spindles on gearbox support - 3282- .



## 8.2 Removing gearbox - vehicles with 1.4 ltr. TFSI engine



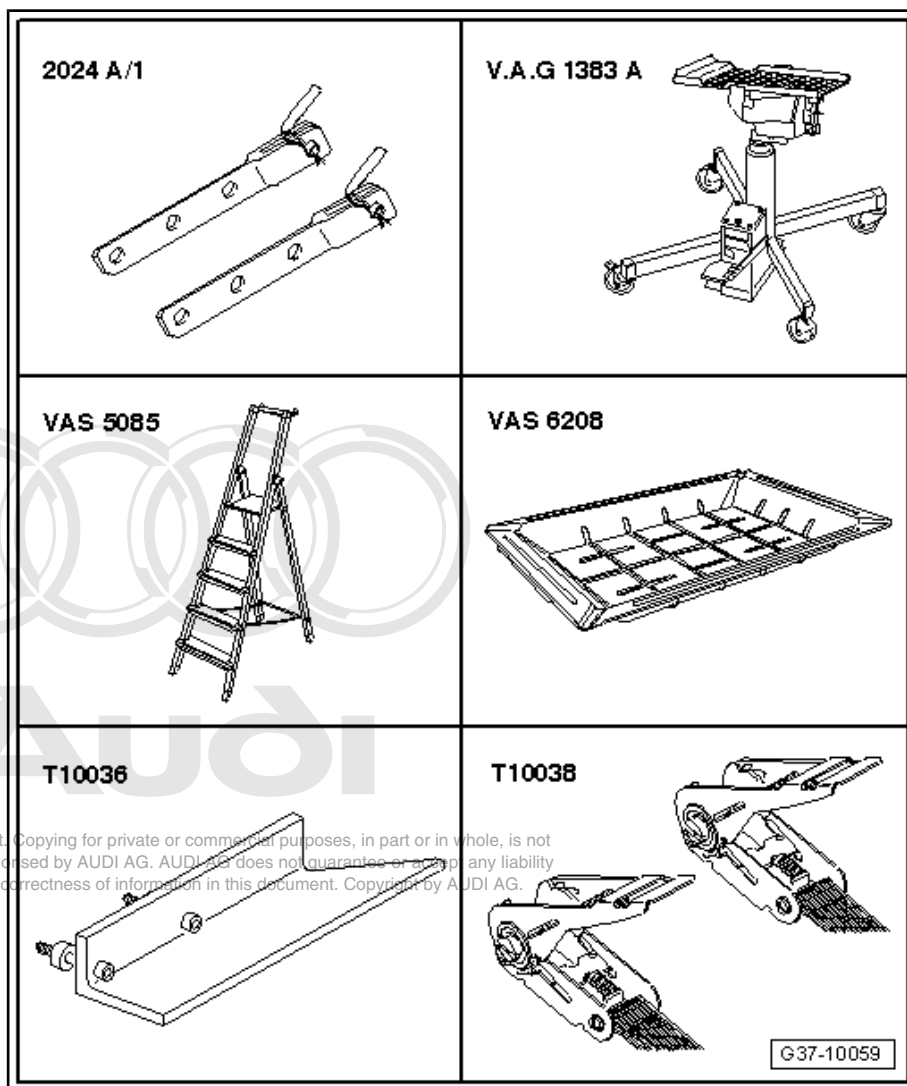
**Special tools and workshop equipment required**



- ◆ Support bracket - 10 - 222 A-
- ◆ Removal lever - 80 - 200-
- ◆ Gearbox support - 3282-
- ◆ Pin - 3282/29-
- ◆ Adjustment plate - 3282/59-
- ◆ Engine support - 3300 A-



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- ◆ Extension -2024 A /1-
- ◆ Engine and gearbox jack - V.A.G 1383 A-
- ◆ Stepladder - VAS 5085-
- ◆ Drip tray for workshop hoist - VAS 6208-
- ◆ Support - T10036-
- ◆ Tensioning strap - T10038-

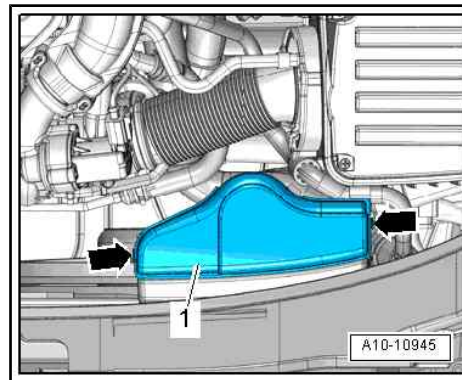
#### Procedure



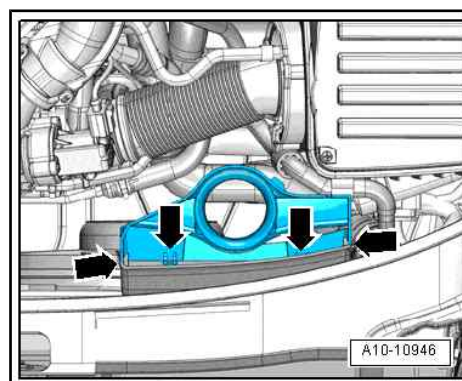
#### Note

- ◆ ⇒ *"5 Repair instructions", page 14*
  - ◆ ⇒ *"5.2 Rules for cleanliness", page 16*
  - ◆ *Observe notes on dual clutch gearbox 0AM ⇒ page 14.*
  - ◆ *Re-attach all cable ties at the same locations when re-installing.*
- Move selector lever to position "P".

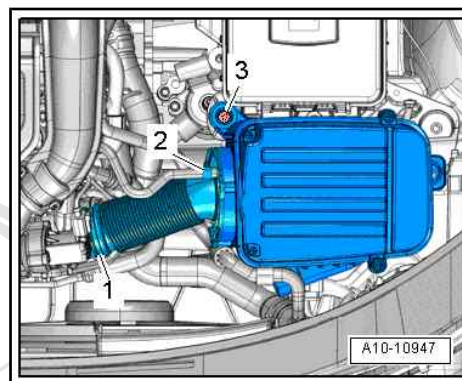
- Pull off cover -1- for air duct (release retaining clips -arrows- on the sides).



- Pull off bottom section of air duct (release retaining clips -arrows-).
- Detach bottom section of air duct with air hose.



- Detach air hose -1- from turbocharger (release hose clip).
- Disconnect vacuum hose -2-.
- Remove bolt -3- and remove air cleaner housing.

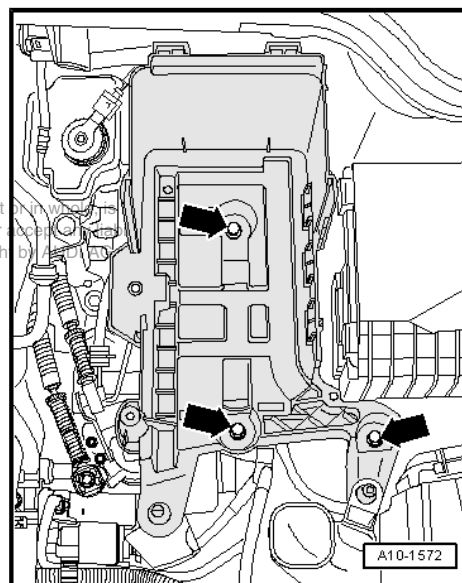


### Caution

**When disconnecting the battery there is a risk of irreparable damage to electronic components.**

- ♦ **Observe notes on procedure for disconnecting the battery.**

- Remove battery ⇒ Electrical system; Rep. gr. 27 .
- Remove bolts -arrows- and detach battery tray.



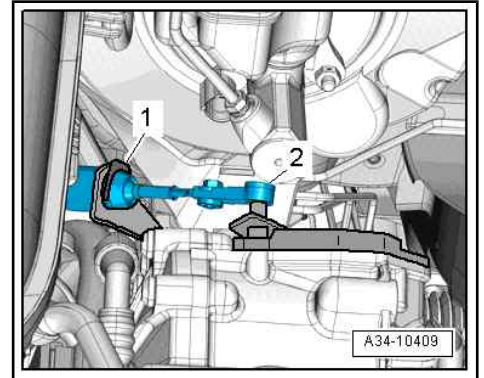
- Pry selector lever cable -2- off gearbox selector lever using removal lever - 80 - 200- .
- Pull off securing clip -1- for selector lever cable.



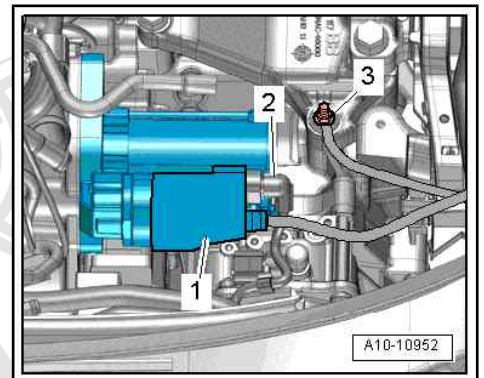
**Caution**

*Risk of damage to selector lever cable.*

- ◆ *Guide selector lever cable out of cable support bracket when lowering gearbox.*
- ◆ *Do not bend or kink the selector lever cable.*

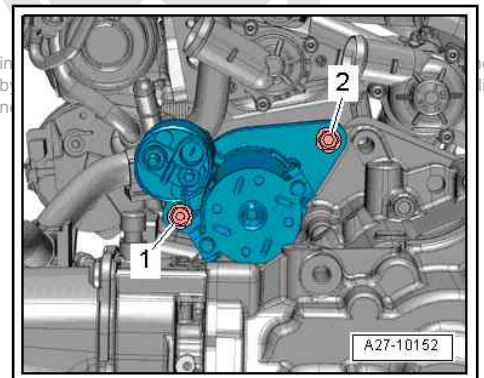


- Unplug electrical connector -2-.
- Push back dust boot -1- and disconnect B+ wire from starter solenoid.
- Remove nut -3- for earth wire.

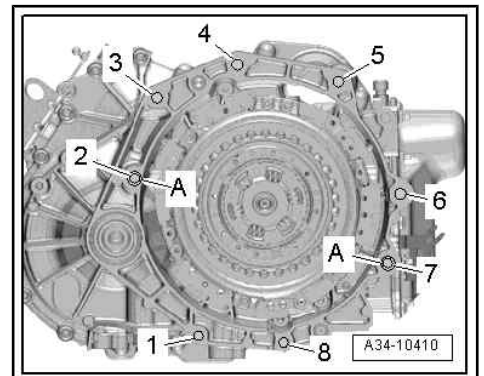


- Remove bolts -1- and -2- and detach starter from gearbox.

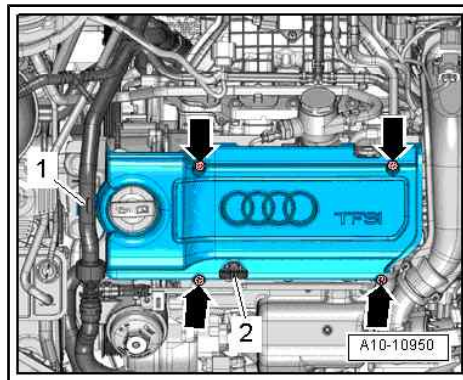
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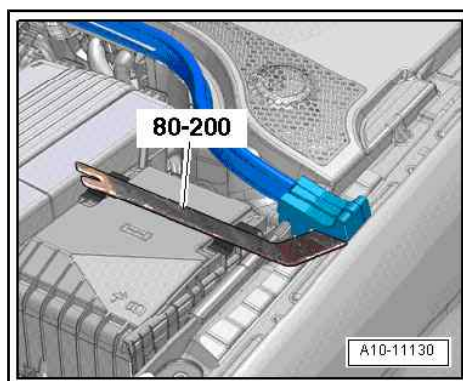
- Remove bolts -3, 4, 5- securing gearbox to engine.



- Remove cover and oil dipstick.

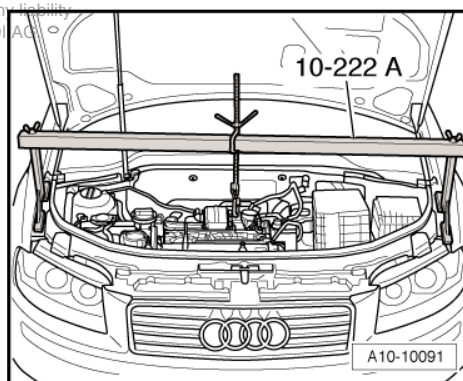


- If necessary, lever clip off sealing element using removal lever - 80 - 200- and fold up sealing element.



- Set up support bracket - 10 - 222 A- on wing mounting flanges (vehicles up to 05.2008) or on body flanges (vehicles from 05.2008 onwards).

- Spindle faces to the front.
- Hook spindle of support bracket into engine lifting eye (left-side).
- Take up weight of engine with spindle; do not lift.

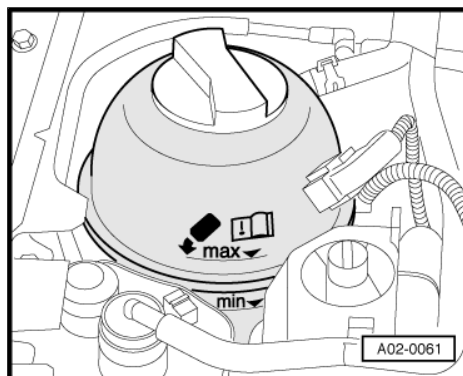


# WARNING

**Risk of scalding due to hot steam and hot coolant.**

- ◆ The cooling system is under pressure when the engine is hot.
- ◆ Cover filler cap on expansion tank with a cloth and open carefully to release pressure.

- Open filler cap on expansion tank.



- Remove both front wheels.
- Remove noise insulation ⇒ General body repairs, exterior; Rep. gr. 50 .

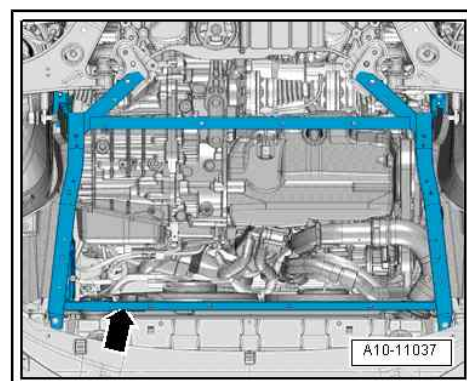
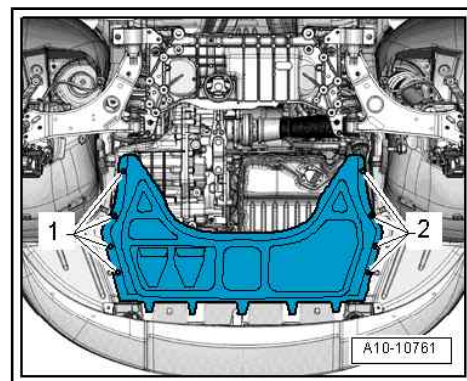
 **Note**

*Depending on version, different types of noise insulation may be fitted.*

### Audi A3 Cabriolet

- Remove noise insulation frame -arrow- ⇒ General body repairs, exterior; Rep. gr. 50 .

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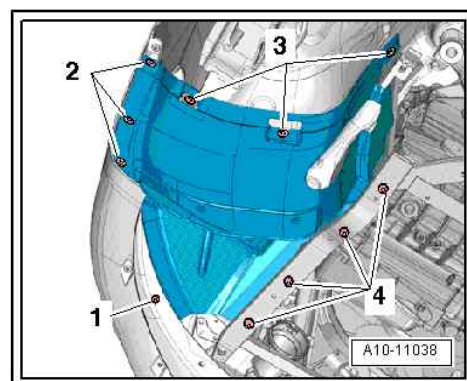


### Continued for all vehicles

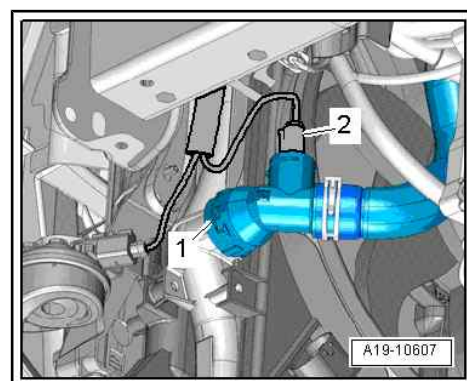
- Remove front section of front wheel housing liner on both sides ⇒ General body repairs, exterior; Rep. gr. 66 .

 **Note**

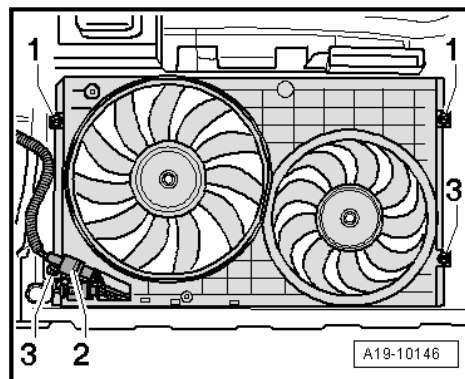
*Depending on version, different types of wheel housing liner may be fitted.*



- Unplug electrical connector -2- on radiator outlet coolant temperature sender - G83- .
- Place drip tray for workshop hoist - VAS 6208- under the engine.
- Detach coolant hose (bottom) -1- from radiator (lift retaining clip).



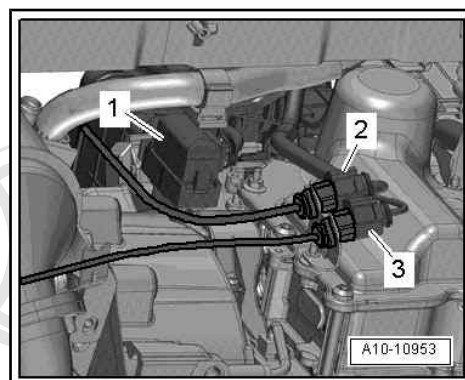
- Unplug electrical connector -2-.
- Remove bolts -1- and -3- and take out radiator cowl from below.



### Caution

**Risk of irreparable damage to gearbox components.**

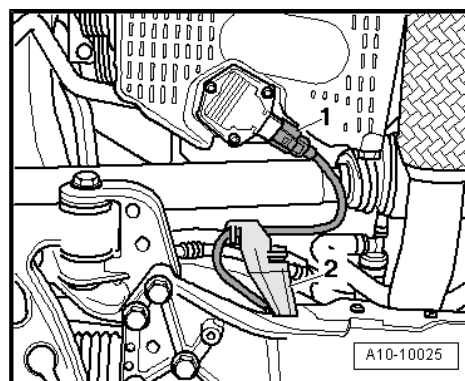
- ◆ **Never touch the contacts in the gearbox connector with your hands. Static discharge can seriously damage the control unit and mechatronic unit.**



- Touch a suitable earthed object with your hand (without gloves) to discharge any static electricity.
- Unplug electrical connector -1- for mechatronic unit for dual clutch gearbox - J743- .
- Take electrical connectors -2- and -3- out of bracket and unplug.
- Remove all retainers from mechatronic unit for dual clutch gearbox - J743- .
- Move electrical wiring harness clear of gearbox.

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- Unplug electrical connector -1- at oil level and oil temperature sender - G266- .
- Unclip bracket -2- for electrical wiring leading to oil level and oil temperature sender - G266- at subframe.

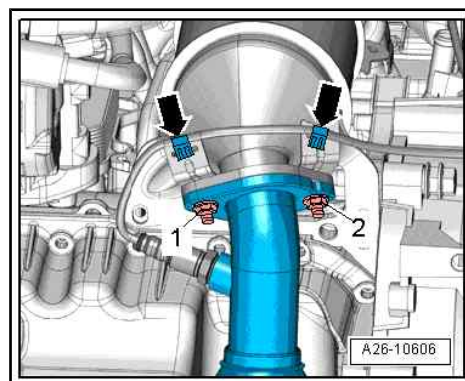


### Caution

**Risk of damage to flexible joint.**

- ◆ **The flexible joint in the front exhaust pipe must not be bent further than 10°.**

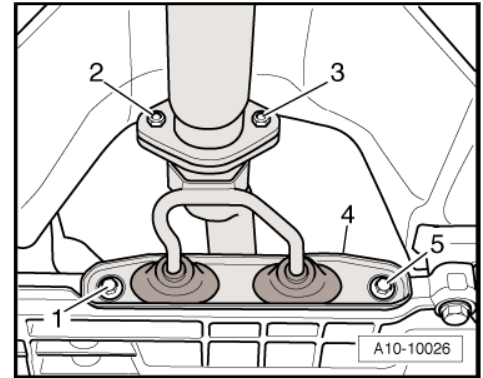
- Remove nuts -1- and -2-.
- Move electrical wiring for Lambda probe after catalytic converter - G130- clear -arrows-.



- Remove nuts -2- and -3- and separate exhaust system.
- Remove bolts -1- and -5-.
- Pull bracket -4- for exhaust system off pins on front exhaust pipe.
- Detach front exhaust pipe to front.

#### Vehicles with flange shafts:

- Unbolt drive shafts (left and right) from gearbox flange shafts  
⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .

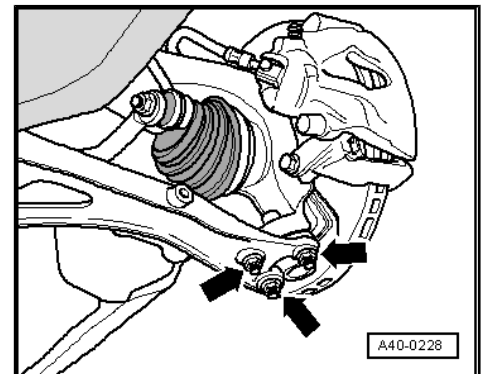


#### Continued for all vehicles:

- Remove nuts -arrows- securing swivel joint (left and right).
- If fitted, unscrew nut on bracket for front left vehicle level sender -G78- .
- Disengage swivel joints from wishbones.

#### Vehicles with stub shafts:

- Use assembly lever to press drive shafts (left and right) off gearbox.



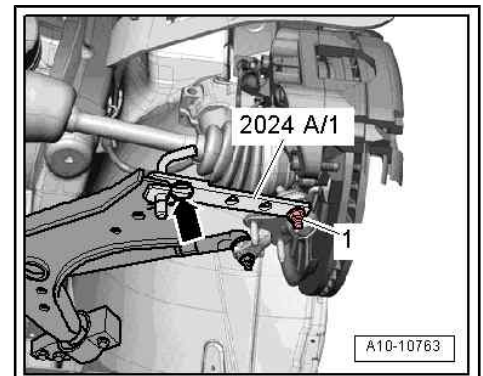
#### Continued for all vehicles:

- Swivel suspension strut (left and right) outwards and support with extension -2024 A /1- , as shown in illustration.

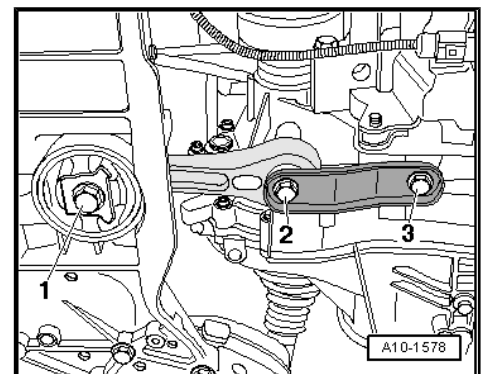
 **WARNING**

*Risk of accident if parts of support are not properly secured.*

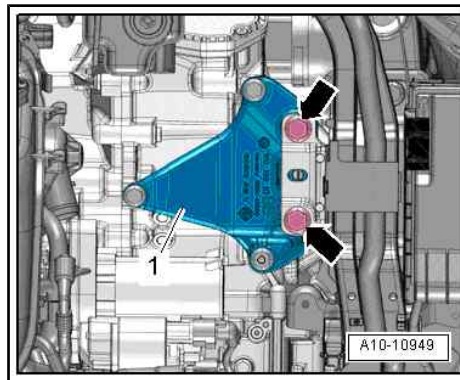
◆ *Secure locking pin and swivel joint with retaining clip -arrow- and nut -1-.*



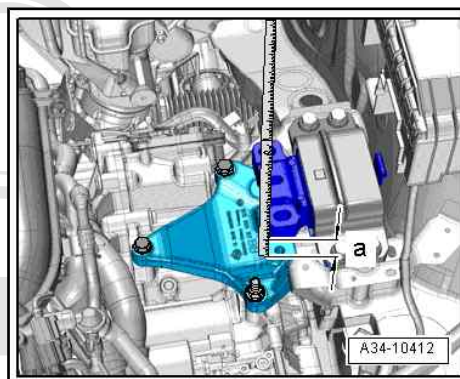
- Remove flange shaft (right-side) ⇒ [page 153](#) .
- Remove bolts -1, 2, 3- and detach pendulum support.



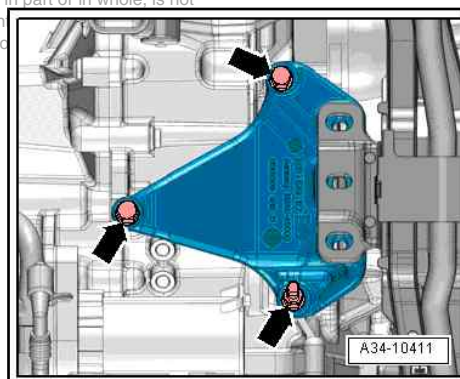
- Remove bolts -arrows- for assembly mounting on gearbox.



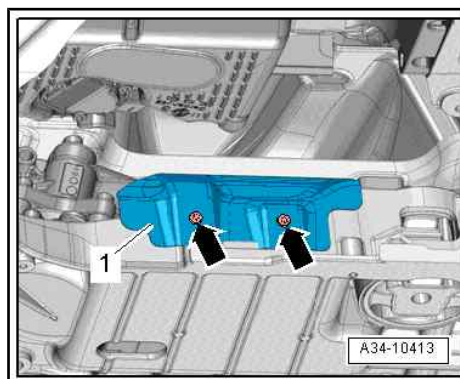
- Lower engine/gearbox assembly using spindle of support bracket - 10 - 222 A- until distance -a- is obtained between gearbox housing and gearbox mounting.
- Dimension -a- = 100 ... 110 mm



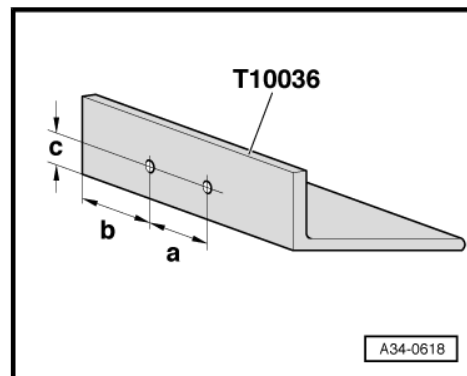
- Remove bolts -arrows- and detach gearbox support.



- Remove bolts -arrows- and detach heat shield -1-.

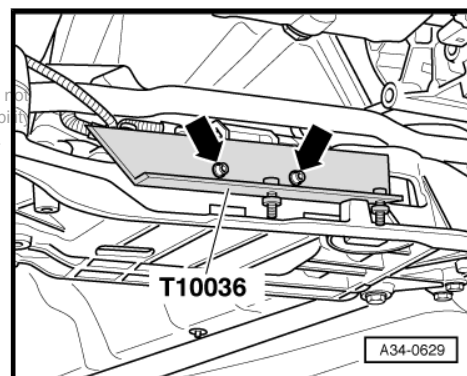


- Drill two 7 mm diameter holes in support - T10036- , as illustrated.
- Dimension -a- = 70 mm
- Dimension -b- = 98 mm
- Dimension -c- = 11 mm

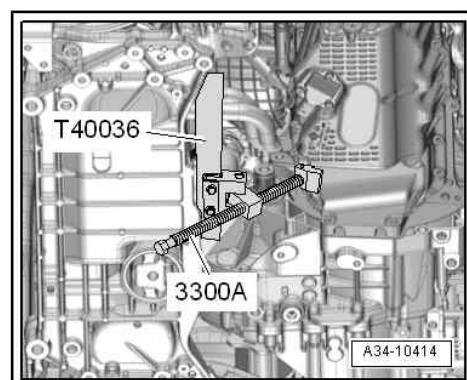


- Bolt support - T10036- onto subframe with two M6x20 mm bolts -arrows-.

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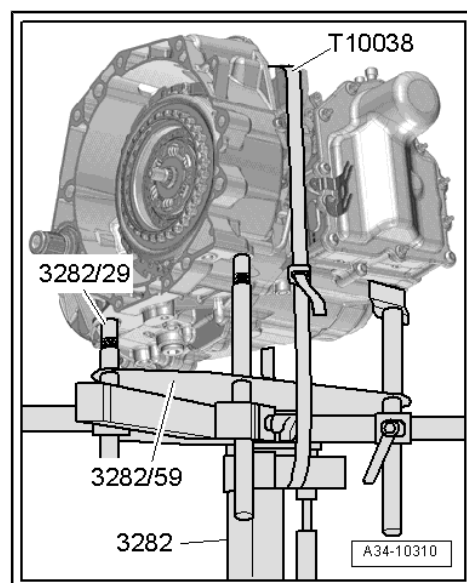


- Bolt engine support - 3300 A- to support - T10036- .
- Illustration shows a different tool number.
- Press engine approx. 50 mm towards front of vehicle using spindle of engine support.



To remove dual clutch gearbox 0AM, set up gearbox support - 3282- with adjustment plate - 3282/59- .

- Set up gearbox support - 3282- on engine and gearbox jack - V.A.G 1383 A- .
- Align arms of gearbox support according to holes in adjustment plate - 3282/59- .
- Secure support elements as illustrated on adjustment plate - 3282/59- .
- Place engine and gearbox jack - V.A.G 1383 A- underneath vehicle. The -arrow symbol- on the adjustment plate - 3282/42- points in the direction of travel.
- Align gearbox support - 3282- parallel with gearbox.
- Screw pin - 3282/29- into gearbox.
- Insert last support element in gearbox as illustrated.
- Use tensioning strap - T10038- to secure gearbox.
- Support gearbox by lifting from underneath with engine and gearbox jack - V.A.G 1383 A- .



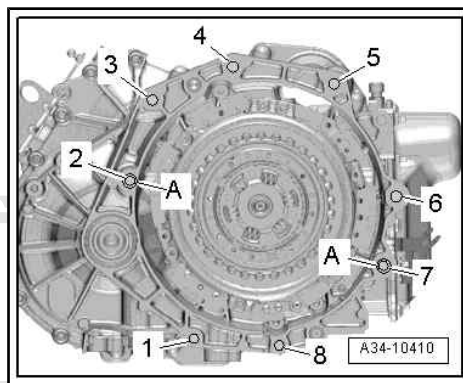
- Remove remaining bolts -1, 2, 6, 7, 8- securing gearbox to engine.
- Press gearbox off dowel sleeves.
- Pull gearbox off engine.
- Carefully lower gearbox using engine and gearbox jack - V.A.G 1383 A- .
- Guide selector lever cable out of cable support bracket while lowering gearbox.



### Note

*Do not bend or kink the selector lever cable.*

- While lowering gearbox, adjust position of gearbox using spindles on gearbox support - 3282- .



## 8.3 Removing gearbox - vehicles with 1.6 ltr. MPI engine

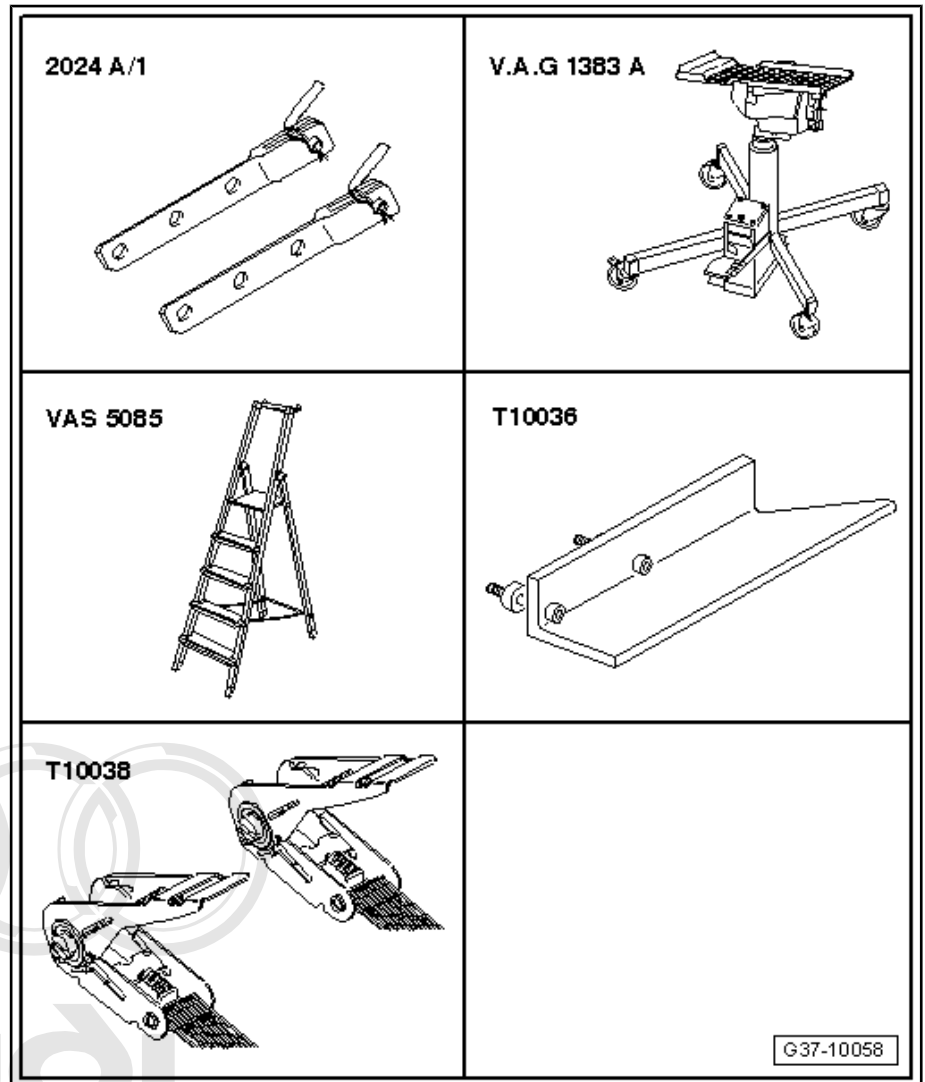
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### Special tools and workshop equipment required

|                  |                                |
|------------------|--------------------------------|
| <p>10-222 A</p>  | <p>80-200</p>                  |
| <p>3282</p>      | <p>3282/29</p>                 |
| <p>3282/1...</p> | <p>3300 A</p> <p>G37-10042</p> |

- ◆ Support bracket - 10 - 222 A-
- ◆ Removal lever - 80 - 200-

- ◆ Gearbox support - 3282-
- ◆ Pin - 3282/29-
- ◆ Adjustment plate - 3282/59-
- ◆ Engine support - 3300 A-



◆ **Extension 2024 A/1-** Potential damage to private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability for the use of the information in this document. Copyright by AUDI AG.

◆ **Engine and gearbox jack - V.A.G 1383 A-**

- ◆ Stepladder - VAS 5085-
- ◆ Support - T10036-
- ◆ Tensioning strap - T10038-

## Procedure

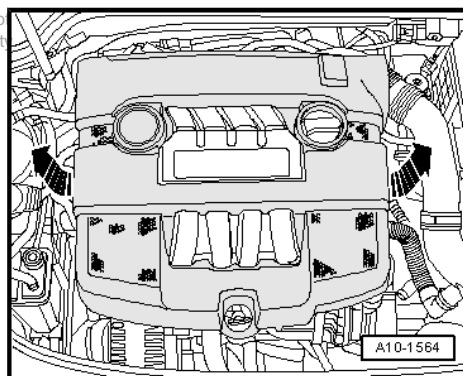


### Note

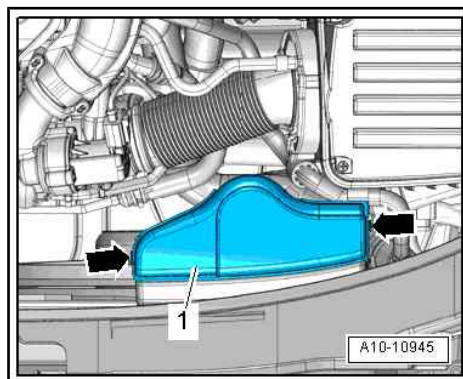
- ◆ ⇒ ["5 Repair instructions", page 14](#)
- ◆ ⇒ ["5.2 Rules for cleanliness", page 16](#)
- ◆ Observe notes on dual clutch gearbox 0AM ⇒ [page 14](#) .
- ◆ Re-attach all cable ties at the same locations when re-installing.

– Move selector lever to position "P".

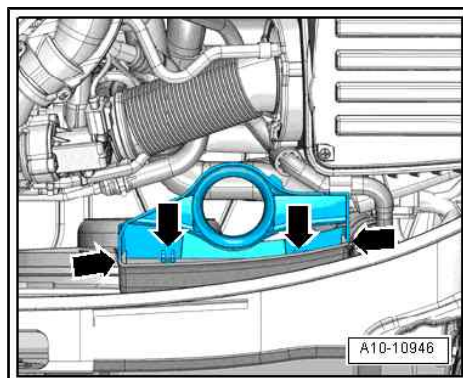
– Remove engine cover panel -arrows-.



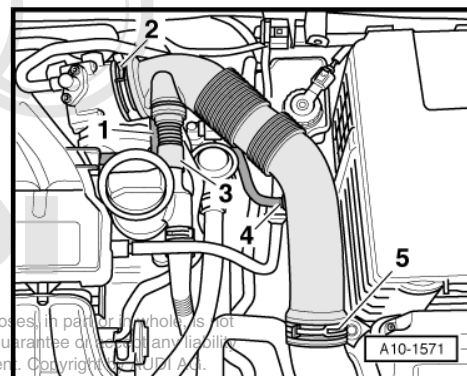
– Pull off cover -1- for air duct (release retaining clips -arrows- on the sides).



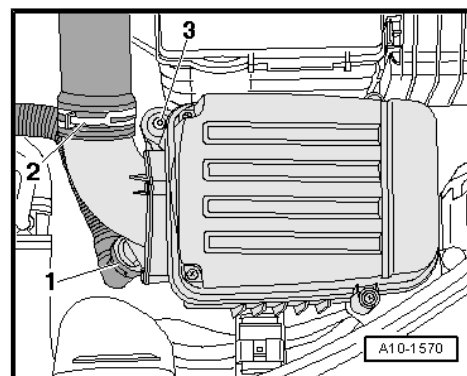
– Pull off bottom section of air duct (release retaining clips -arrows-).



- Detach vacuum hose -1- and crankcase breather hose -3-.
- Release hose clips -2- and -5- and remove air hose.



- Disconnect hoses -1- and -2- at air cleaner housing.
- Remove bolt -3-.
- Take out air cleaner housing.

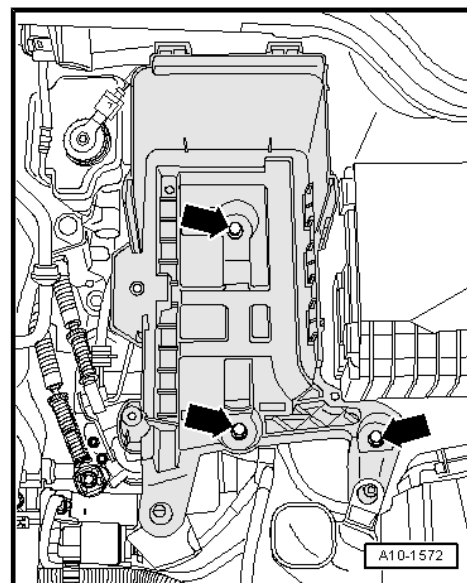


#### Caution

*When disconnecting the battery there is a risk of irreparable damage to electronic components.*

- ◆ *Observe notes on procedure for disconnecting the battery.*

- Remove battery ⇒ Electrical system; Rep. gr. 27 .
- Remove bolts -arrows- and detach battery tray.



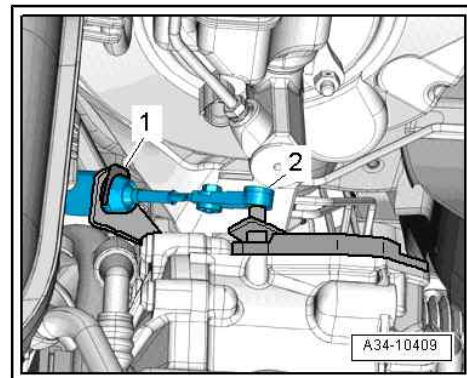
- Pry selector lever cable -2- off gearbox selector lever using removal lever - 80 - 200- .
- Pull off securing clip -1- for selector lever cable.



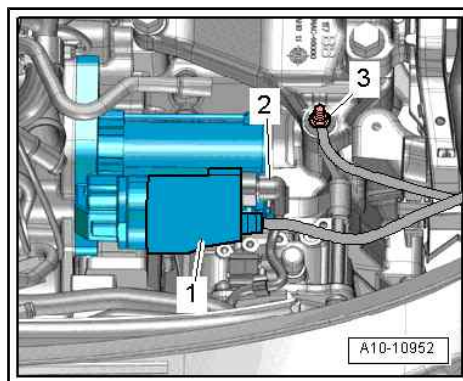
#### Caution

*Risk of damage to selector lever cable.*

- ◆ *Guide selector lever cable carefully out of cable support bracket.*
- ◆ *Do not bend or kink the selector lever cable.*

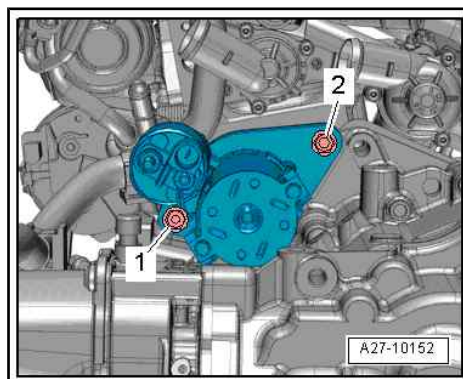


- Unplug electrical connector -2-.
- Push back dust boot -1- and disconnect B+ wire from starter solenoid.
- Remove nut -3- for earth wire.

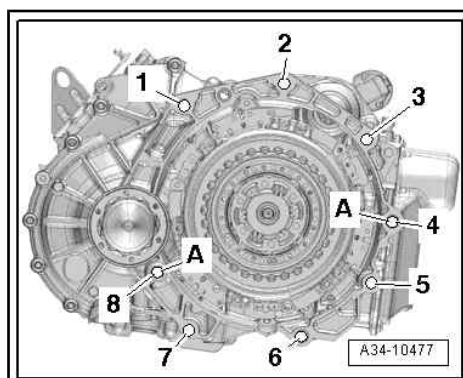


- Remove bolts -1- and -2- and detach starter from gearbox.

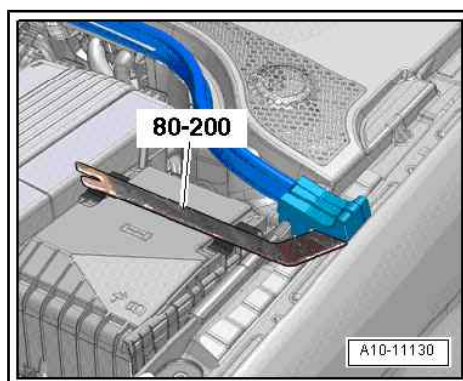
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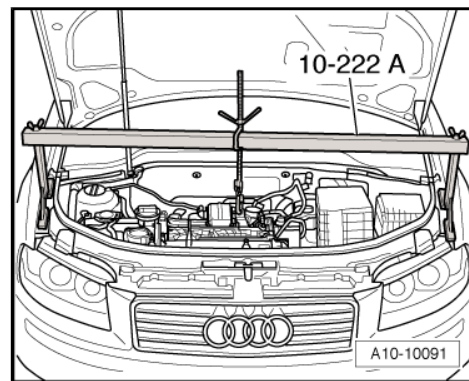
- Remove bolts -3, 4, 5- securing gearbox to engine.



- Lever clip off sealing element using removal lever - 80 - 200- and fold up sealing element.



- Set up support bracket - 10 - 222 A- on body flanges, as shown in illustration.
- Spindle faces to the front.
- Hook spindle of support bracket into engine lifting eye (left-side).
- Take up weight of engine with spindle; do not lift.

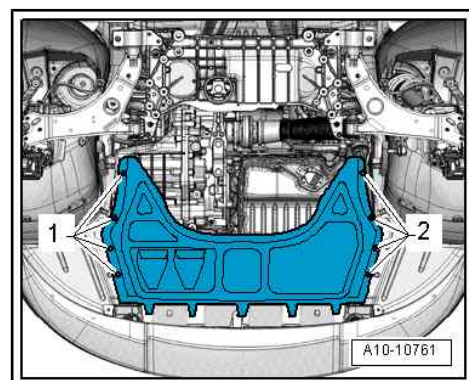


- Remove front left wheel.
- Remove noise insulation ⇒ General body repairs, exterior; Rep. gr. 50 .



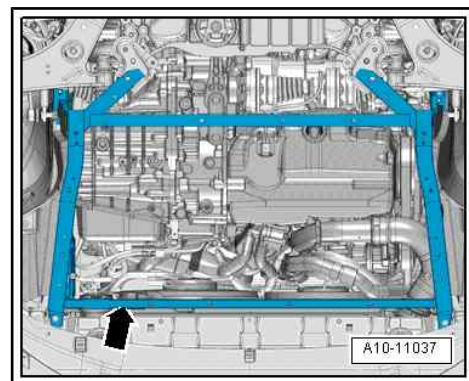
#### Note

*Depending on version, different types of noise insulation may be fitted.*



#### Audi A3 Cabriolet

- Remove noise insulation frame -arrow- ⇒ General body repairs, exterior; Rep. gr. 50 .



#### Continued for all vehicles

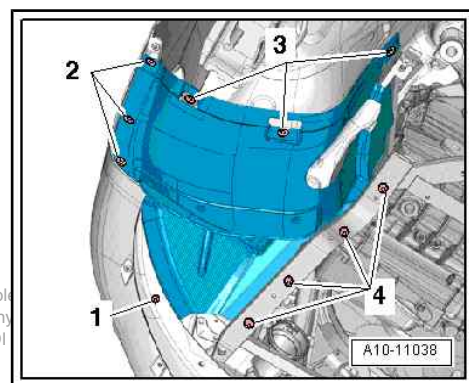
- Remove front section of front wheel housing liner (left-side) ⇒ General body repairs, exterior; Rep. gr. 66 .



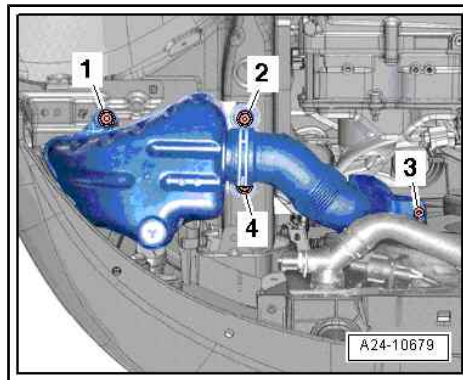
#### Note

*Depending on version, different types of wheel housing liner may be fitted.*

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- Remove bolt -3- and nuts -1, 2, 4- and detach resonator with air hoses.

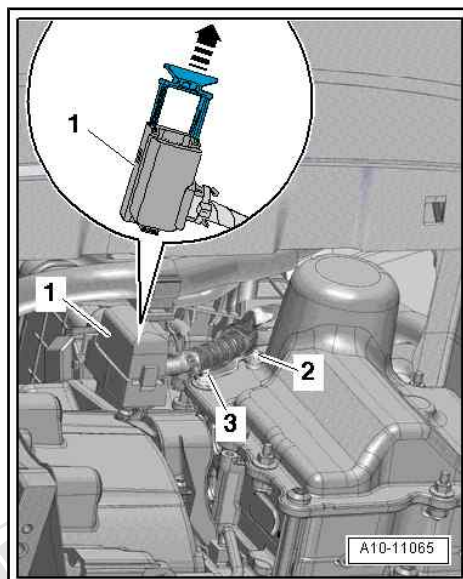


### Caution

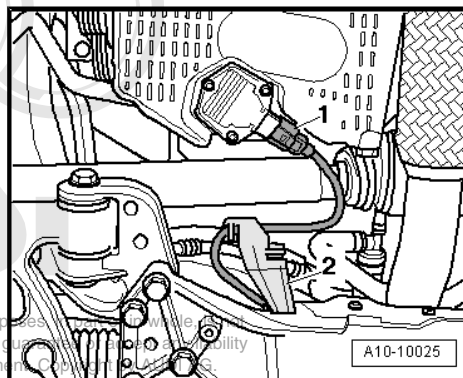
**Risk of irreparable damage to gearbox components.**

- ◆ **Never touch the contacts in the gearbox connector with your hands. Static discharge can seriously damage the control unit and mechatronic unit.**

- Touch a suitable earthed object with your hand (without gloves) to discharge any static electricity.
- Pull catch upwards -arrow- and unplug electrical connector -1- for mechatronic unit for dual clutch gearbox - J743- .
- Remove nuts -2- and -3- and detach bracket for electrical wiring from gearbox.



- Unplug electrical connector -1- at oil level and oil temperature sender - G266- .
- Unclip bracket -2- for electrical wiring leading to oil level and oil temperature sender - G266- at subframe.



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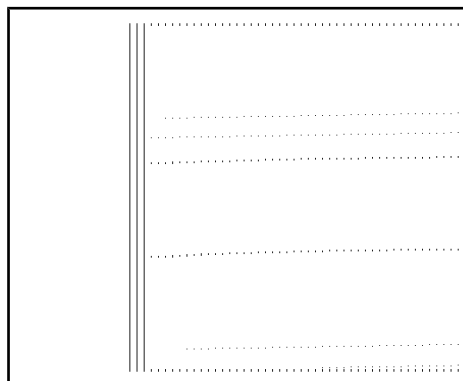


### Caution

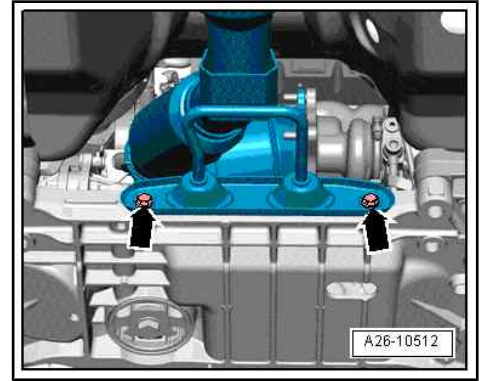
**Risk of damage to flexible joint.**

- ◆ **The flexible joint in the front exhaust pipe must not be bent further than 10°.**

- Disconnect exhaust system at clamp -arrows-.
- Push clamp towards rear and set front exhaust pipe down on cross member on vehicle underside.



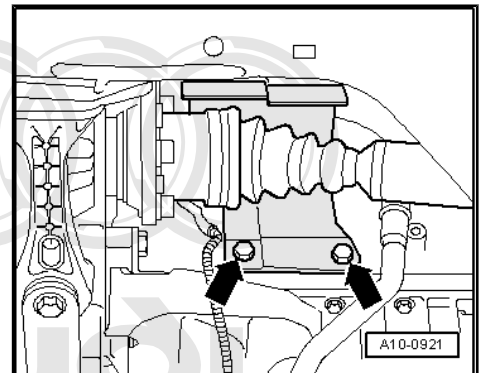
- Remove bolts -arrows- and pull bracket for exhaust system off pins on front exhaust pipe.



- Remove bolts -arrows- and detach heat shield for drive shaft (right-side).

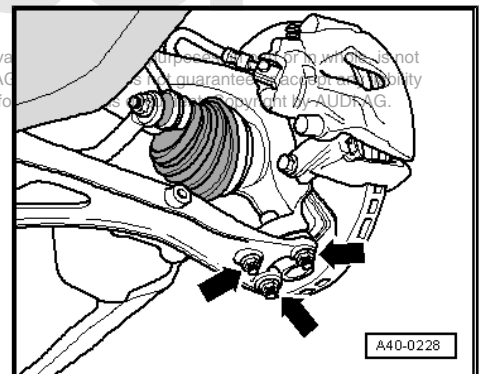
#### Vehicles with flange shafts:

- Unbolt drive shafts (left and right) from gearbox flange shafts  
⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .



#### Continued for all vehicles:

- Remove nuts -arrows- securing swivel joint (left-side).
- If fitted, unscrew nut on bracket for front left vehicle level sender -G78- .
- Disengage swivel joint from wishbone.



#### Vehicles with stub shafts:

- Use assembly lever to press drive shafts (left and right) off gearbox.

#### Continued for all vehicles:

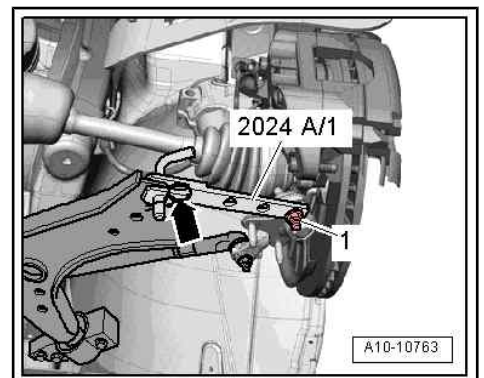
- Swivel suspension strut (left-side) outwards and support with extension -2024 A /1- as shown in illustration.



#### WARNING

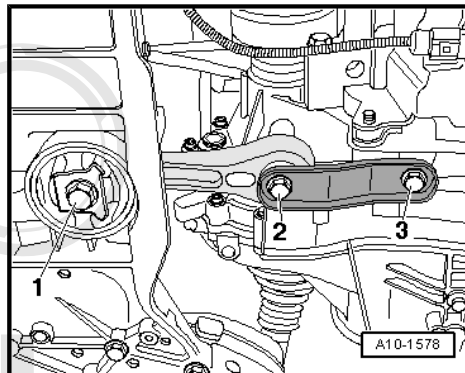
*Risk of accident if parts of support are not properly secured.*

- ◆ *Secure locking pin and swivel joint with retaining clip -arrow- and nut -1-.*



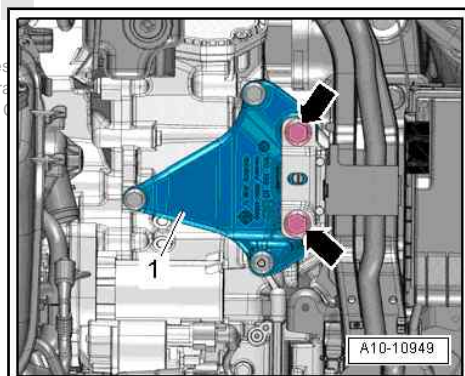
- Tie left and right drive shafts up to body.
- Remove flange shaft (right-side) ⇒ [page 153](#) .

- Remove bolts -1, 2, 3- and detach pendulum support.

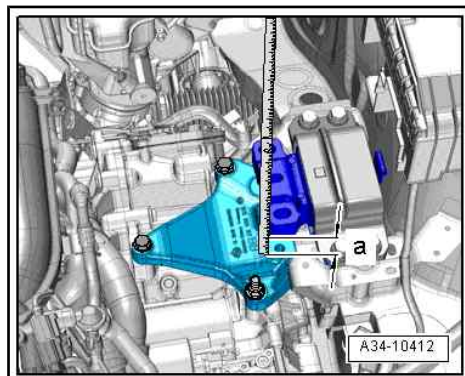


- Remove bolts -arrows- for assembly mounting on gearbox.

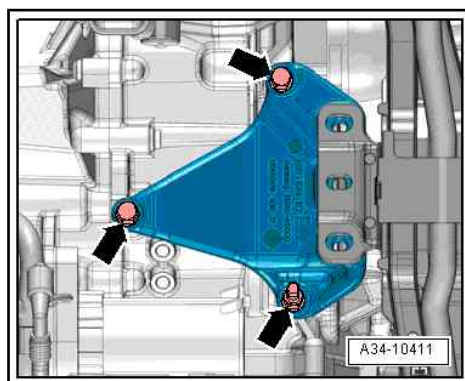
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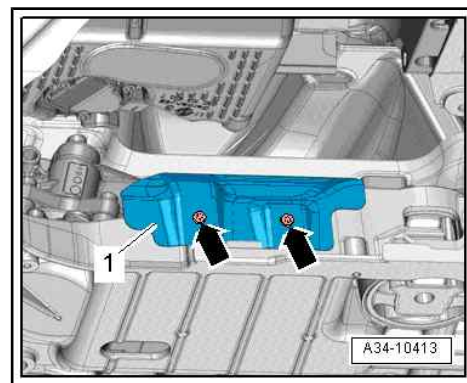
- Lower engine/gearbox assembly using spindle of support bracket - 10 - 222 A- until distance -a- is obtained between gearbox housing and gearbox mounting.
- Dimension -a- = 60 mm



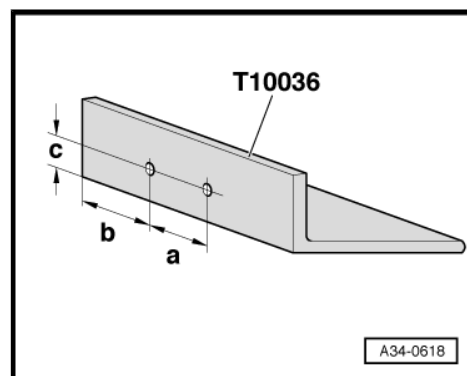
- Remove bolts -arrows- and detach gearbox support.



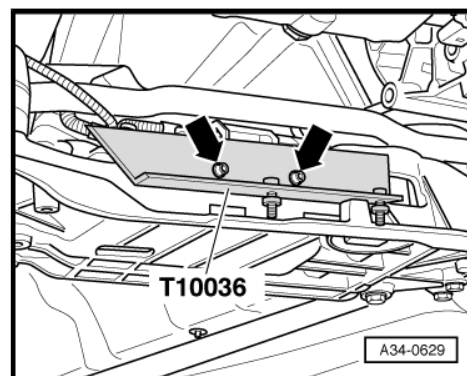
- Remove bolts -arrows- and detach heat shield -1-.



- Drill two 7 mm diameter holes in support - T10036- , as illustrated.
- Dimension -a- = 70 mm
- Dimension -b- = 98 mm
- Dimension -c- = 11 mm



- Bolt support - T10036- onto subframe with two M6x20 mm bolts -arrows-.

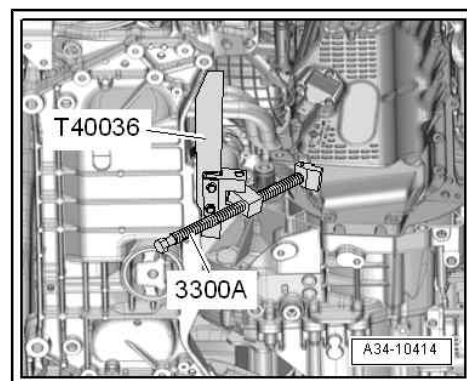


- Bolt engine support - 3300 A- to support - T10036- .
- Press engine approx. 50 mm towards front of vehicle using spindle of engine support.

 **Caution**

***Risk of damage to refrigerant lines.***

◆ ***Make sure there is sufficient clearance between poly V-belt pulley of air conditioner compressor and refrigerant lines.***



To remove dual clutch gearbox 0AM, set up gearbox support - 3282- with adjustment plate - 3282/59- .

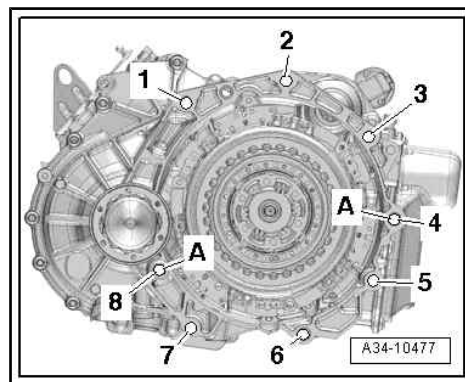
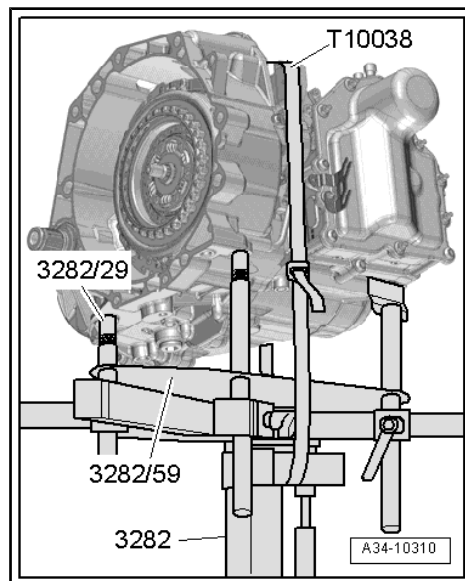
- Set up gearbox support - 3282- on engine and gearbox jack - V.A.G 1383 A- .
- Align arms of gearbox support according to holes in adjustment plate - 3282/59- .
- Secure support elements as illustrated on adjustment plate - 3282/59- .
- Place engine and gearbox jack - V.A.G 1383 A- underneath vehicle. The -arrow symbol- on the adjustment plate - 3282/42- points in the direction of travel.
- Align gearbox support - 3282- parallel with gearbox.
- Screw pin - 3282/29- into gearbox.
- Insert last support element in gearbox as illustrated.
- Use tensioning strap - T10038- to secure gearbox.
- Support gearbox by lifting from underneath with engine and gearbox jack - V.A.G 1383 A- .
- Remove remaining bolts -1, 2, 6, 7, 8- securing gearbox to engine.
- Press gearbox off dowel sleeves.
- Pull gearbox off engine.
- Carefully lower gearbox using engine and gearbox jack - V.A.G 1383 A- .
- Guide selector lever cable out of cable support bracket while lowering gearbox.



#### Note

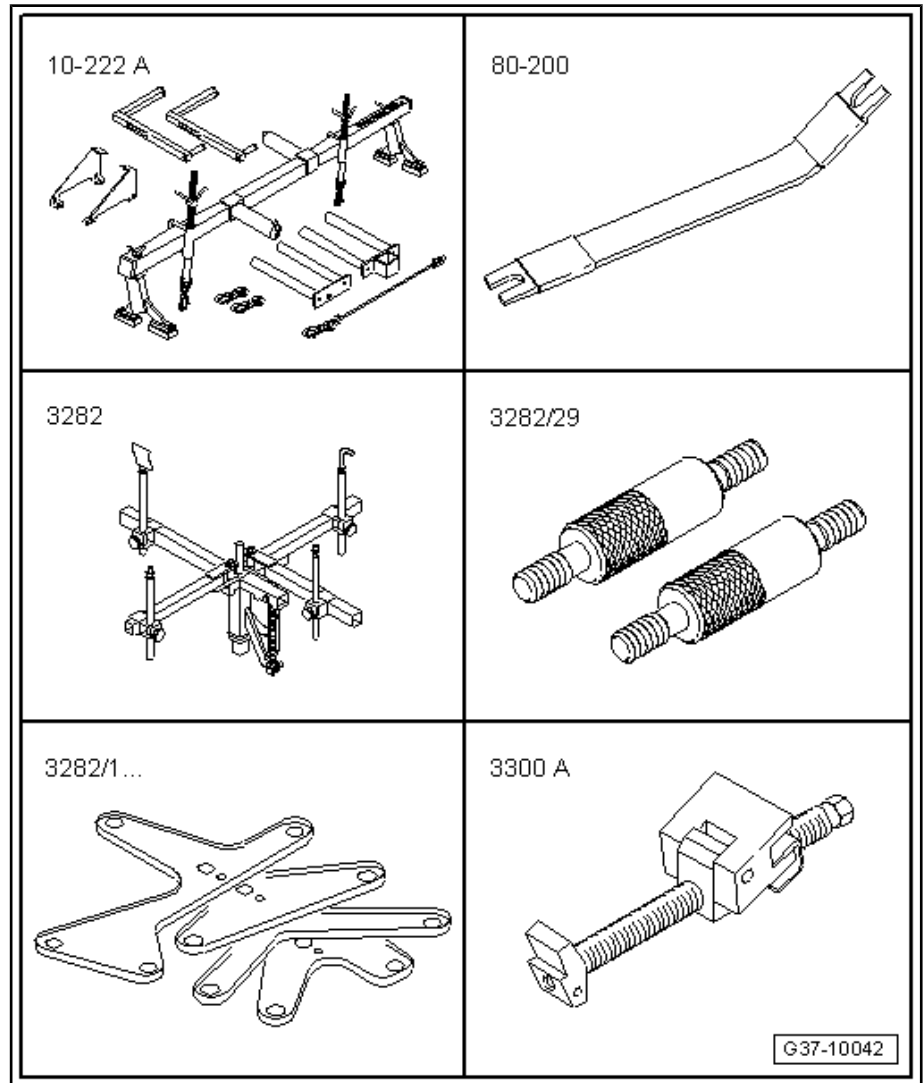
*Do not bend or kink the selector lever cable.*

- While lowering gearbox, adjust position of gearbox using spindles on gearbox support - 3282- .



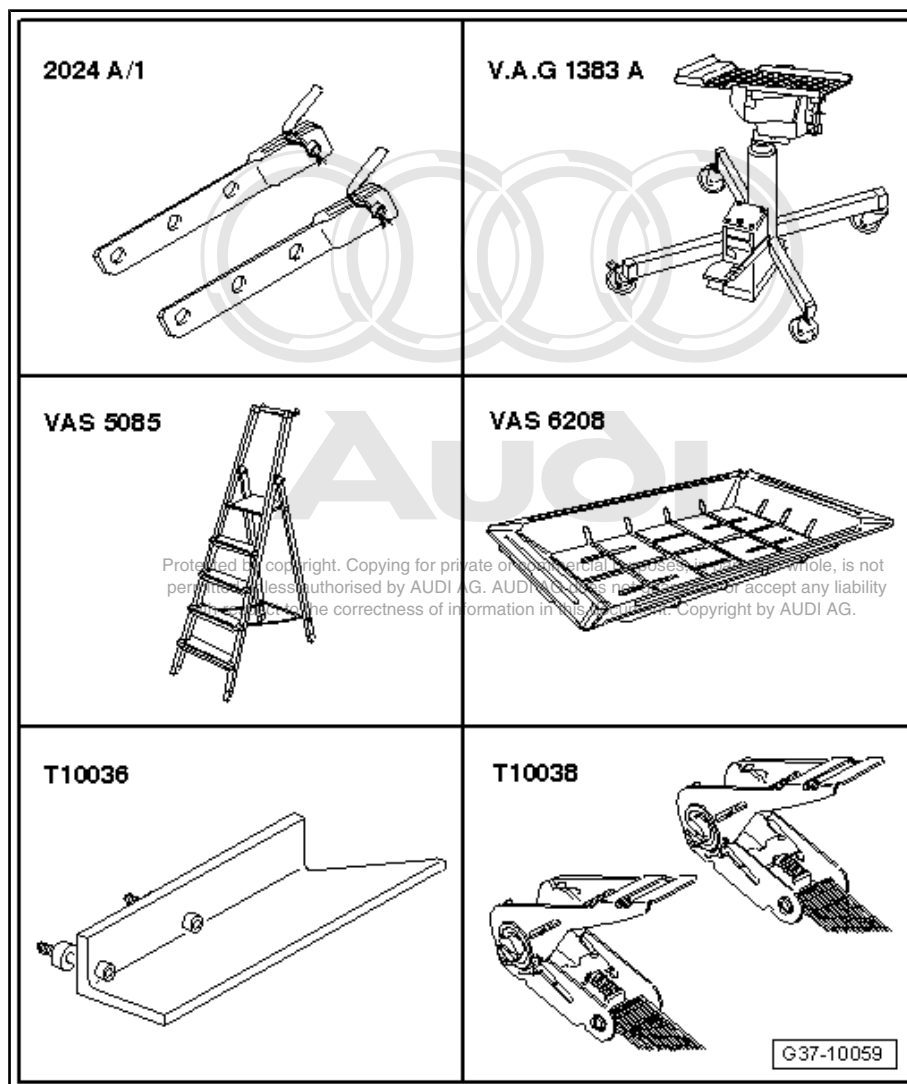
## 8.4 Removing gearbox - vehicles with 1.8 ltr. TFSI engine

**Special tools and workshop equipment required**



- ◆ Support bracket - 10 - 222 A-
- ◆ Removal lever - 80 - 200-
- ◆ Gearbox support - 3282-
- ◆ Pin - 3282/29-
- ◆ Adjustment plate - 3282/59-
- ◆ Engine support - 3300 A-

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- ◆ Extension -2024 A /1-
- ◆ Engine and gearbox jack - V.A.G 1383 A-
- ◆ Stepladder - VAS 5085-
- ◆ Drip tray for workshop hoist - VAS 6208-
- ◆ Support - T10036-
- ◆ Tensioning strap - T10038-

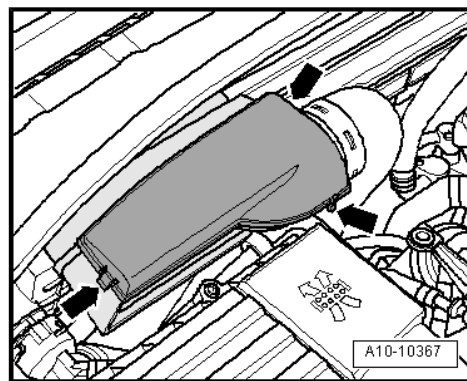
#### Procedure



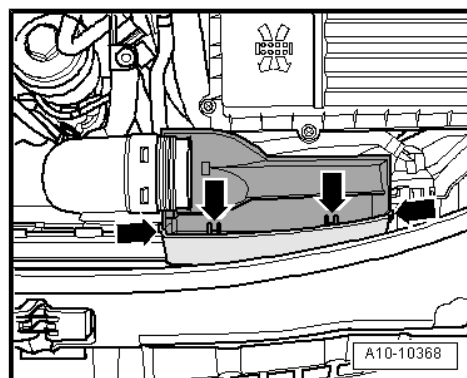
#### Note

- ◆ ⇒ *"5 Repair instructions", page 14*
  - ◆ ⇒ *"5.2 Rules for cleanliness", page 16*
  - ◆ *Observe notes on dual clutch gearbox 0AM ⇒ page 14 .*
  - ◆ *Re-attach all cable ties at the same locations when re-installing.*
- Move selector lever to position "P".

- Pull off cover for air duct (release retaining clips -arrows- on the sides).



- Pull off bottom section of air duct (release retaining clips -arrows-).
- Detach bottom section of air duct with air hose.



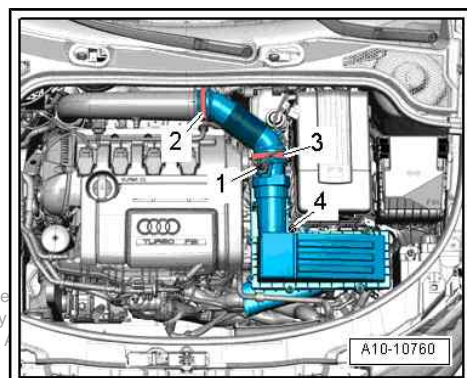
- Unplug electrical connector -1- at air mass meter - G70- .
- Detach air hose -2-.
- Remove bolt -4- and remove air cleaner housing.



#### Note

Disregard -item 3-.

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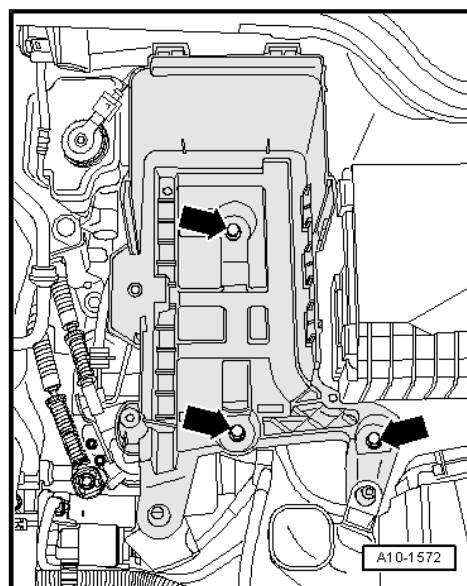


#### Caution

***When disconnecting the battery there is a risk of irreparable damage to electronic components.***

♦ ***Observe notes on procedure for disconnecting the battery.***

- Remove battery ⇒ Electrical system; Rep. gr. 27 .
- Remove bolts -arrows- and detach battery tray.



- Pry selector lever cable -2- off gearbox selector lever using removal lever - 80 - 200- .
- Remove bolts -2- for cable support bracket.



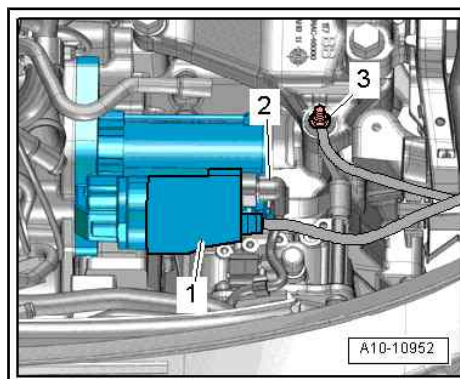
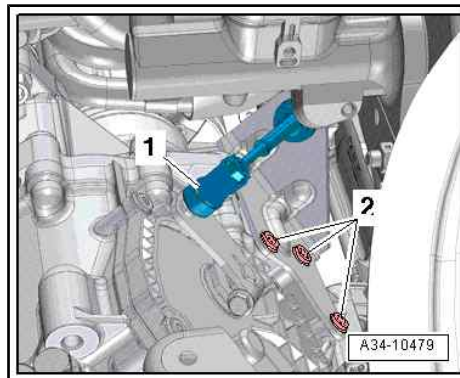
### Caution

**Risk of damage to selector lever cable.**

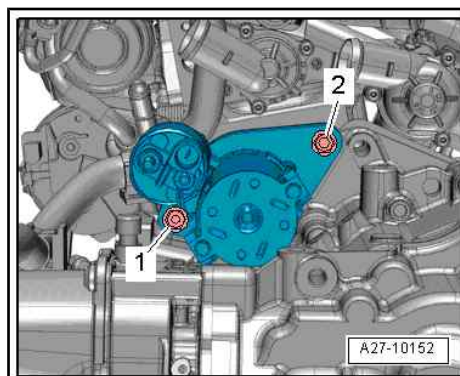
- ◆ **Do not bend or kink the selector lever cable.**

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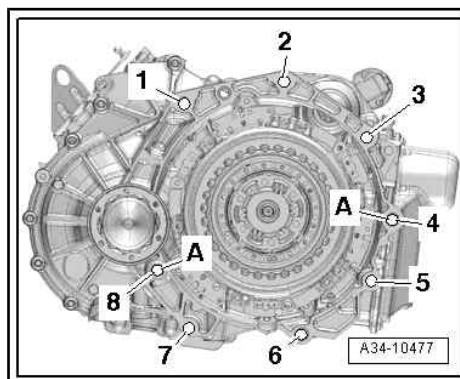
- Unplug electrical connector -2-.
- Push back dust boot -1- and disconnect B+ wire from starter solenoid.
- Remove nut -3- for earth wire.



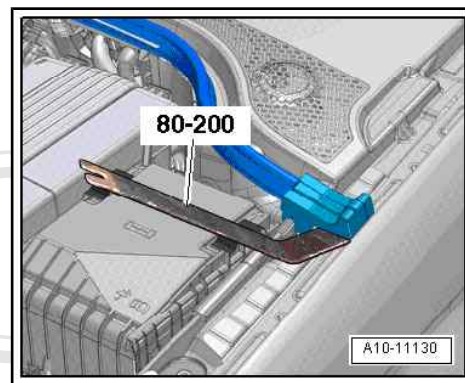
- Remove bolts -1- and -2- and detach starter from gearbox.



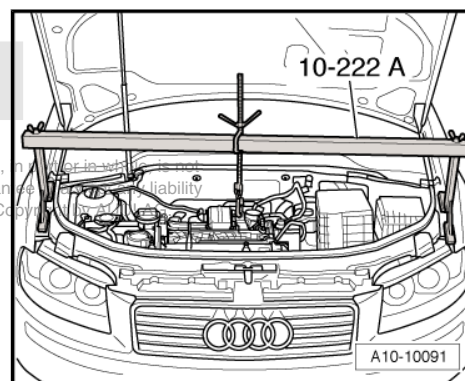
- Remove bolts -3, 4, 5- securing gearbox to engine.



- Lever clip off sealing element using removal lever - 80 - 200- and fold up sealing element.



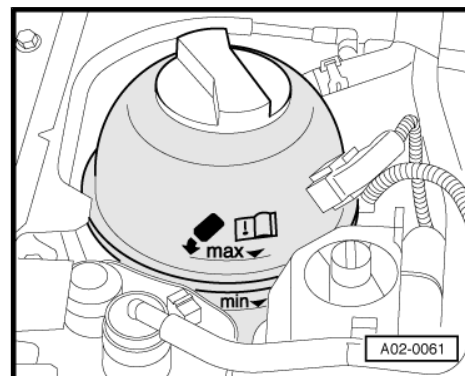
- Set up support bracket - 10 - 222 A- on body flanges, as shown in illustration.
- Spindle faces to the rear.
- Hook spindle of support bracket into engine lifting eye (left-side).
- Take up weight of engine with spindle, do not lift.



#### WARNING

*Risk of scalding due to hot steam and hot coolant.*

- ◆ *The cooling system is under pressure when the engine is hot.*
- ◆ *Cover filler cap on expansion tank with a cloth and open carefully to release pressure.*

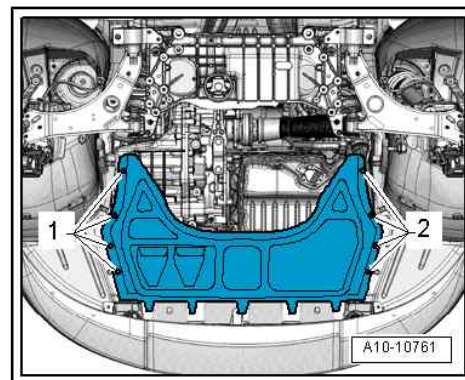


- Open filler cap on expansion tank.
- Remove both front wheels.
- Remove noise insulation ⇒ General body repairs, exterior; Rep. gr. 50 .



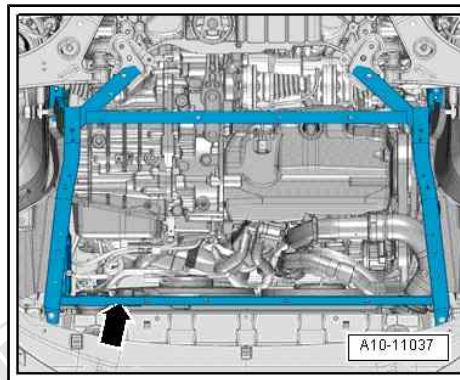
#### Note

*Depending on version, different types of noise insulation may be fitted.*



## Audi A3 Cabriolet

- Remove noise insulation frame -arrow- ⇒ General body repairs, exterior; Rep. gr. 50 .



## Continued for all vehicles

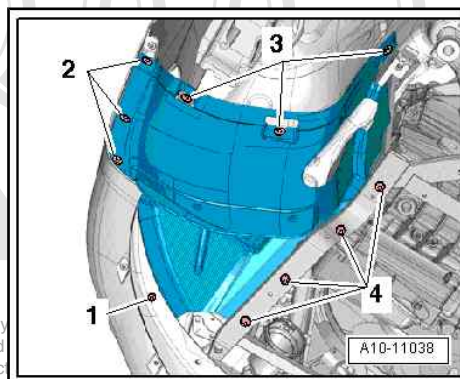
- Remove front section of front wheel housing liner on both sides ⇒ General body repairs, exterior; Rep. gr. 66 .



### Note

Depending on version, different types of wheel housing liner may be fitted.

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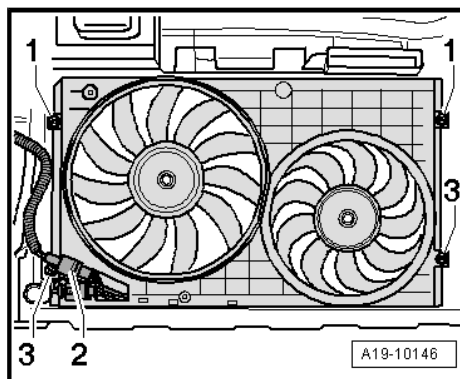


- Remove bolts -1- from above.



### Note

Disregard items -2 and 3-.

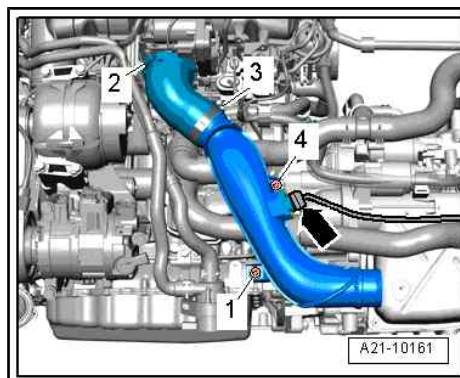


- Release hose clip -2-.
- Remove bolt -4-.
- Unplug electrical connector -arrow- and move wiring clear.



### Note

- ◆ Bolt -1- will be loosened later.
- ◆ Disregard -item 3-.

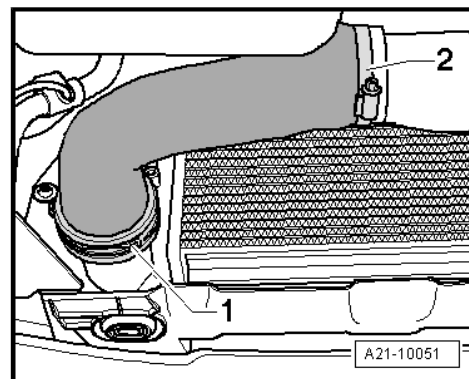


- Lift retaining clip -1- and disconnect air hose from charge air cooler.

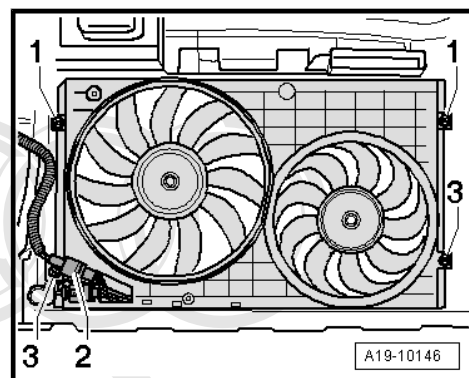


**Note**

*Disregard -item 2-.*



- Unplug electrical connector -2-.
- Remove bolts -3- and take out radiator cowl from below.



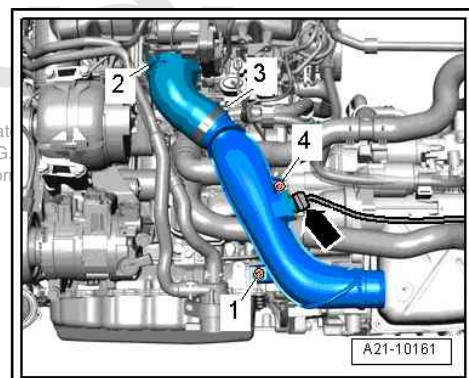
- Remove bolt -1- and detach air pipe from below.



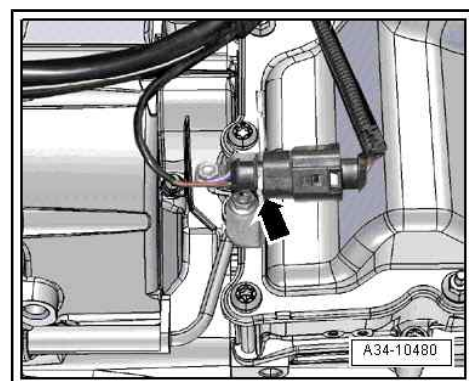
**Note**

*Disregard -item 3-.*

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- Take electrical connector -arrow- out of bracket on gearbox.



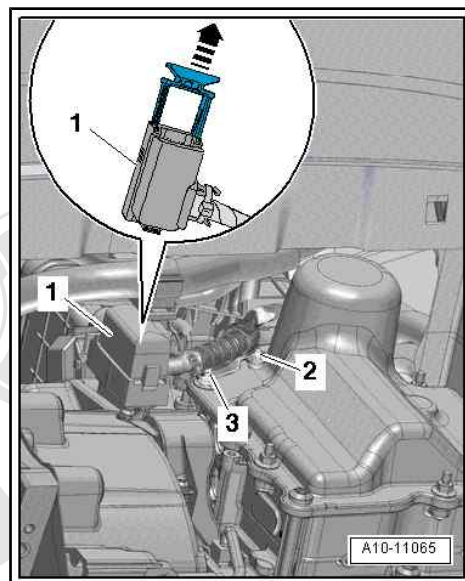


### Caution

**Risk of irreparable damage to gearbox components.**

- ◆ **Never touch the contacts in the gearbox connector with your hands. Static discharge can seriously damage the control unit and mechatronic unit.**

- Touch a suitable earthed object with your hand (without gloves) to discharge any static electricity.
- Pull catch upwards -arrow- and unplug electrical connector -1- for mechatronic unit for dual clutch gearbox - J743- .
- Remove nuts -2- and -3- and detach bracket for electrical wiring from gearbox.



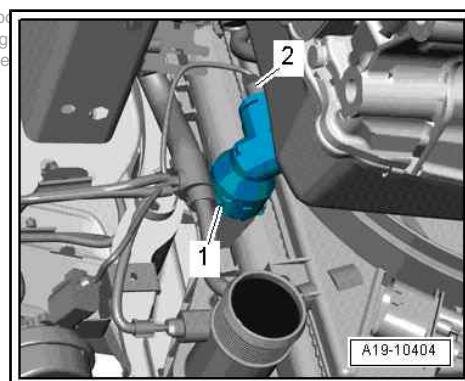
- Unplug electrical connector -2- for radiator outlet coolant temperature sender - G83- .



### Note

**Catch escaping coolant in a clean container for disposal or re-use.**

- Place drip tray for workshop hoist - VAS 6208- under the engine.
- Detach coolant hose -1- (pull out retaining clip and let coolant drain off).

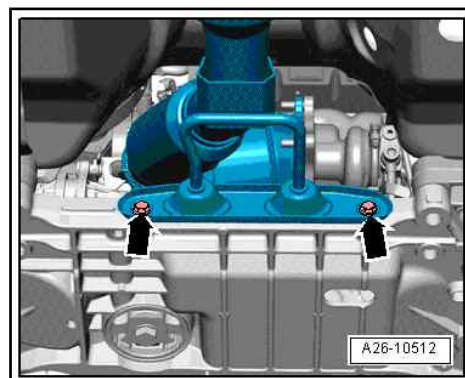
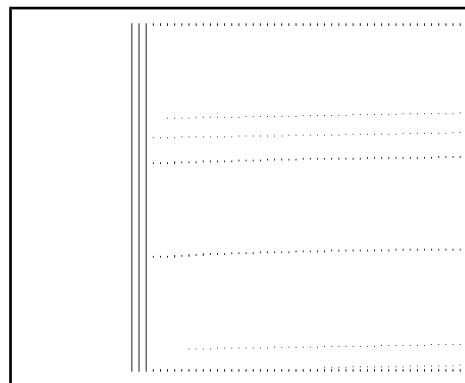


### Caution

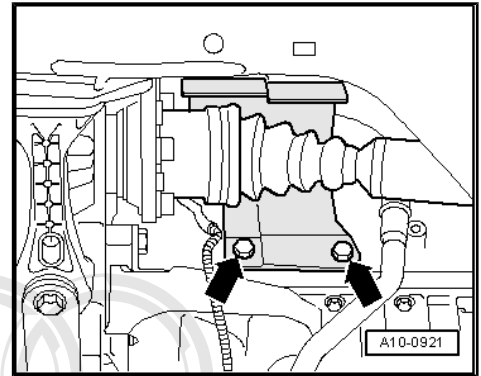
**Risk of damage to flexible joint.**

- ◆ **The flexible joint in the front exhaust pipe must not be bent further than 10°.**

- Disconnect exhaust system at clamp -arrows-.
- Push clamp towards rear and set front exhaust pipe down on cross member on vehicle underside.
- Remove bolts -arrows- and pull bracket for exhaust system off pins on front exhaust pipe.



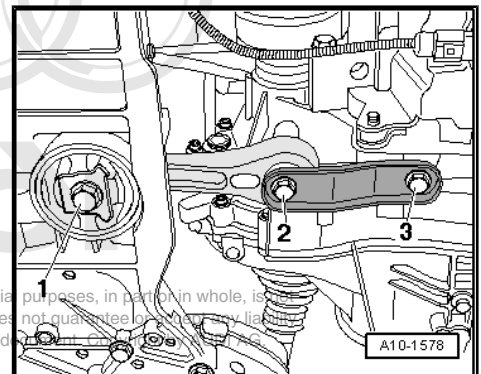
- Remove bolts -arrows- and detach heat shield for drive shaft (right-side).



- Remove bolts -1, 2, 3- and detach pendulum support.

#### Vehicles with flange shafts:

- Unbolt drive shafts (left and right) from gearbox flange shafts  
⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .



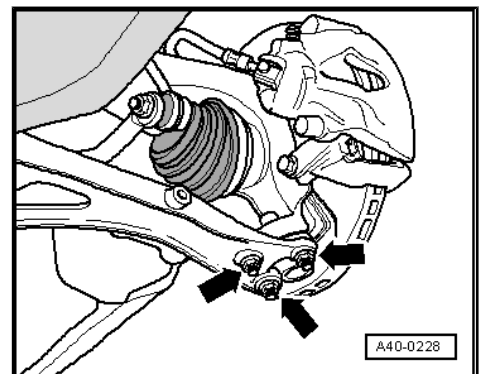
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#### Continued for all vehicles:

- Remove nuts -arrows- securing swivel joint (left and right).
- If fitted, unscrew nut on bracket for front left vehicle level sender -G78- .
- Disengage swivel joints from wishbones.

#### Vehicles with stub shafts:

- Use assembly lever to press drive shafts (left and right) off gearbox.



#### Continued for all vehicles:

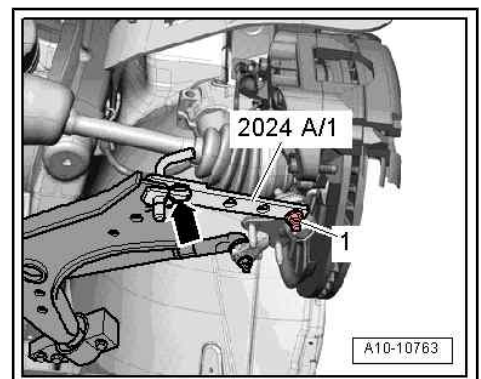
- Swivel suspension strut (left and right) outwards and support with extension -2024 A /1- , as shown in illustration.



#### WARNING

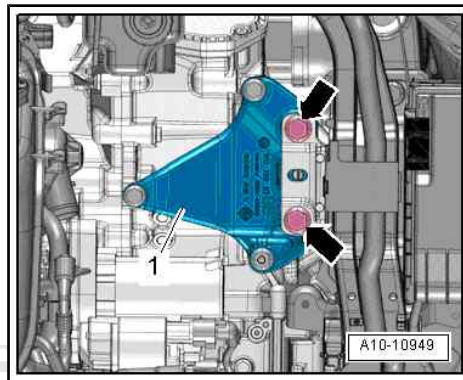
*Risk of accident if parts of support are not properly secured.*

- ◆ *Secure locking pin and swivel joint with retaining clip -arrow- and nut -1-.*

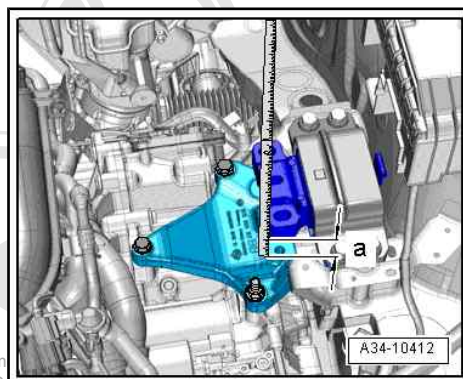


- Remove flange shaft (right-side) ⇒ [page 153](#) .

- Remove bolts -arrows- for assembly mounting on gearbox.

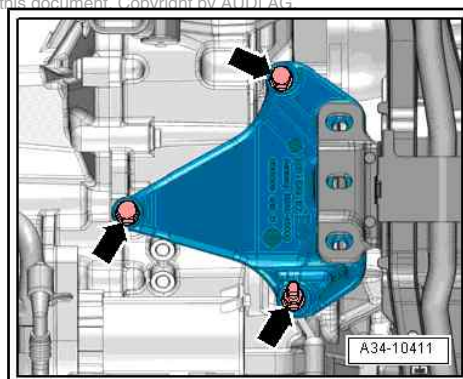


- Lower engine/gearbox assembly using spindle of support bracket - 10 - 222 A- until distance -a- is obtained between gearbox housing and gearbox mounting.
- Dimension -a- = 40 mm

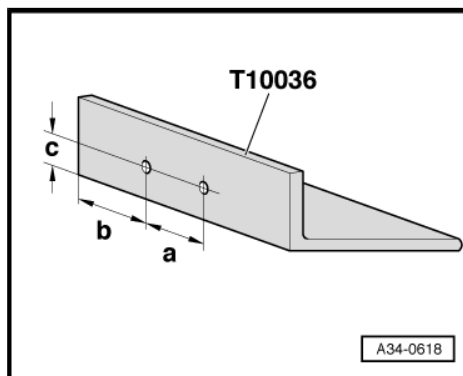


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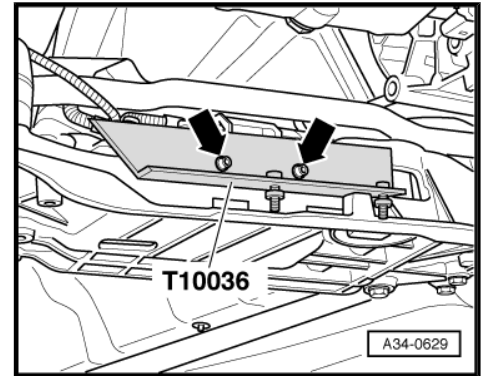
- Remove bolts -arrows- and detach gearbox support.



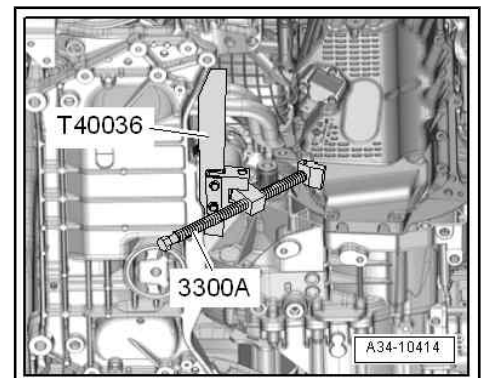
- Drill two 7 mm diameter holes in support - T10036- , as illustrated.
- Dimension -a- = 70 mm
- Dimension -b- = 98 mm
- Dimension -c- = 11 mm



- Bolt support - T10036- onto subframe with two M6x20 mm bolts -arrows-.

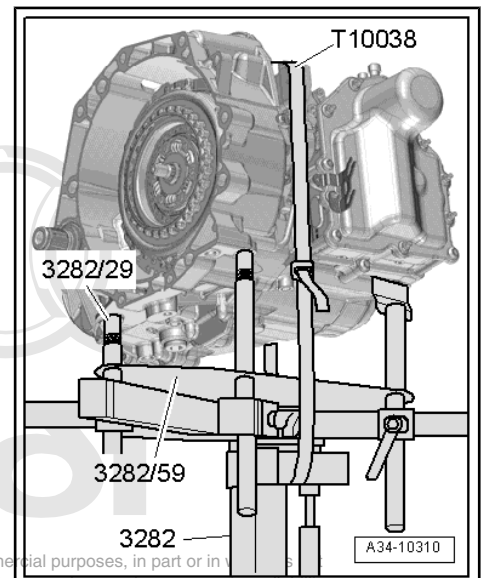


- Bolt engine support - 3300 A- to support - T10036- .
- Press engine 10 to 15 mm towards front of vehicle using spindle of engine support.



To remove dual clutch gearbox 0AM, set up gearbox support - 3282- with adjustment plate - 3282/59- .

- Set up gearbox support - 3282- on engine and gearbox jack - V.A.G 1383 A- .
- Align arms of gearbox support according to holes in adjustment plate - 3282/59- .
- Secure support elements as illustrated on adjustment plate - 3282/59- .
- Place engine and gearbox jack - V.A.G 1383 A- underneath vehicle. The -arrow symbol- on the adjustment plate - 3282/42- points in the direction of travel.
- Align gearbox support - 3282- parallel with gearbox.
- Screw pin - 3282/29- into gearbox.
- Insert last support element in gearbox as illustrated.
- Use tensioning strap - T10038- to secure gearbox.
- Support gearbox by lifting from underneath with engine and gearbox jack - V.A.G 1383 A- .



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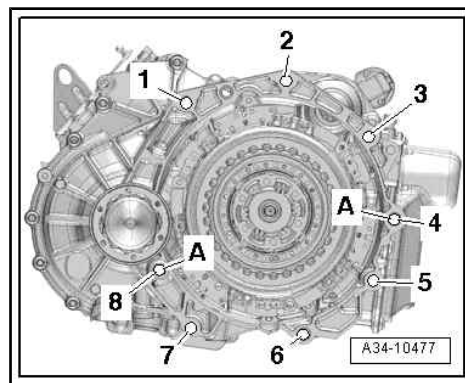
- Remove remaining bolts -1, 2, 6, 7, 8- securing gearbox to engine.
- Press gearbox off dowel sleeves.
- Pull gearbox off engine.
- Carefully lower gearbox using engine and gearbox jack - V.A.G 1383 A- .
- Guide selector lever cable out of cable support bracket while lowering gearbox.



### Note

*Do not bend or kink the selector lever cable.*

- While lowering gearbox, adjust position of gearbox using spindles on gearbox support - 3282- .



## 8.5 Removing gearbox - vehicles with 1.6 ltr. TDI engine

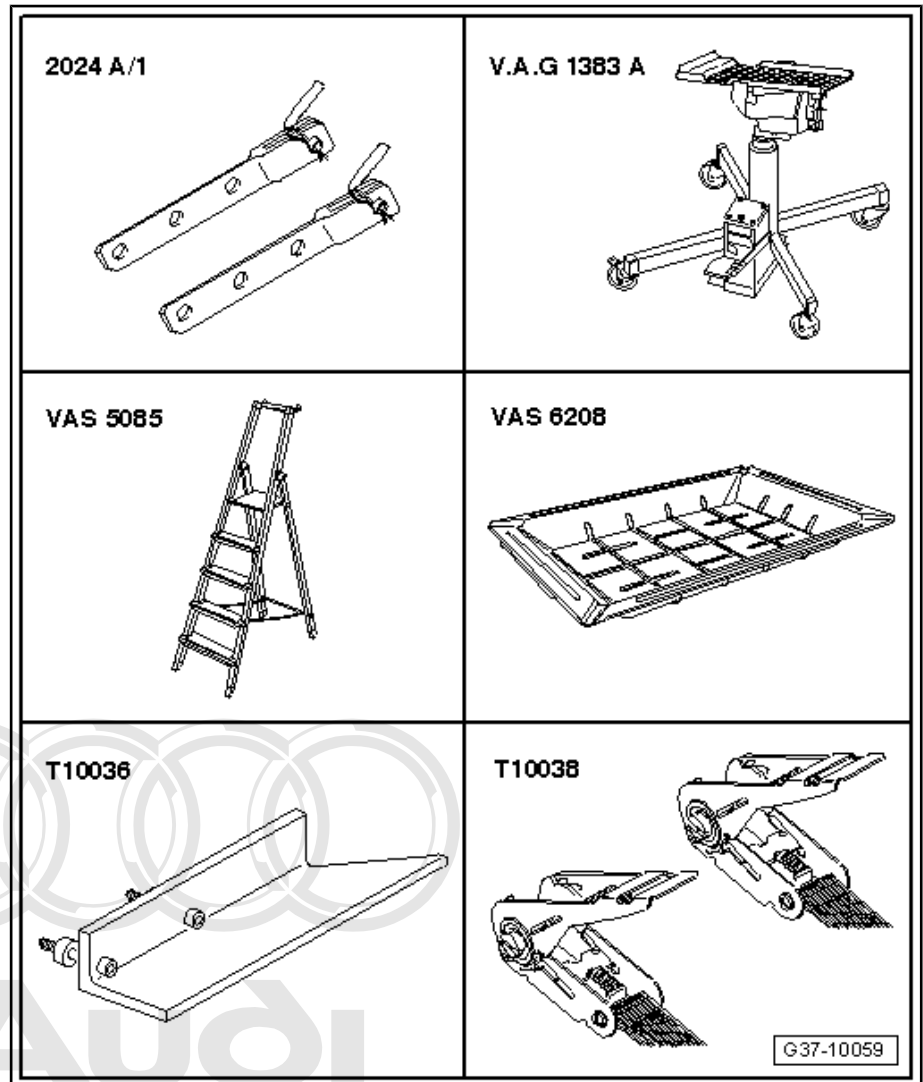
### Special tools and workshop equipment required

|                  |                                |
|------------------|--------------------------------|
| <p>10-222 A</p>  | <p>80-200</p>                  |
| <p>3282</p>      | <p>3282/29</p>                 |
| <p>3282/1...</p> | <p>3300 A</p> <p>G37-10042</p> |

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- ◆ Support bracket - 10 - 222 A-
- ◆ Removal lever - 80 - 200-

- ◆ Gearbox support - 3282-
- ◆ Pin - 3282/29-
- ◆ Adjustment plate - 3282/59-
- ◆ Engine support - 3300 A-



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- ◆ Extension - 2024 A/1-
  - ◆ Engine and gearbox jack - V.A.G 1383 A-
  - ◆ Stepladder - VAS 5085-
  - ◆ Drip tray for workshop hoist - VAS 6208-
  - ◆ Support - T10036-
  - ◆ Tensioning strap - T10038-

## Procedure

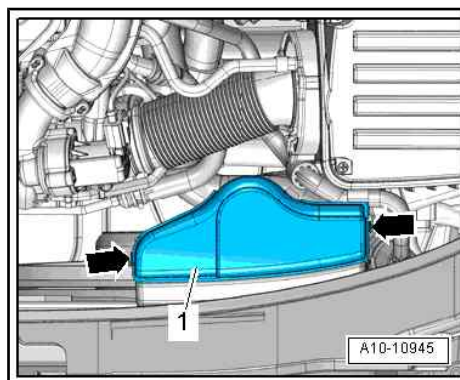


### Note

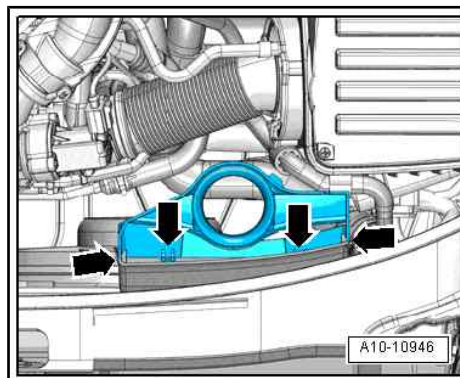
- ◆ ⇒ "5 Repair instructions", page 14
- ◆ ⇒ "5.2 Rules for cleanliness", page 16
- ◆ Observe notes on dual clutch gearbox 0AM ⇒ page 14.
- ◆ **Re-attach all cable ties at the same locations when re-installing.**

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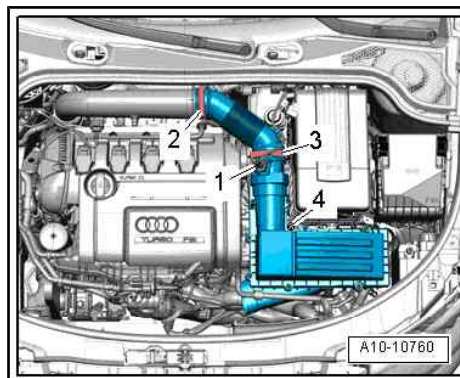
- Move selector lever to position "P".
- Pull off cover -1- for air duct (release retaining clips -arrows- on the sides).



- Pull off bottom section of air duct (release retaining clips -arrows-).
- Detach bottom section of air duct with air hose.



- Unplug electrical connector -1- at air mass meter - G70- .
- Detach air hose -2-.
- Remove bolt -4- and remove air cleaner housing.



### Note

Disregard -item 3-.

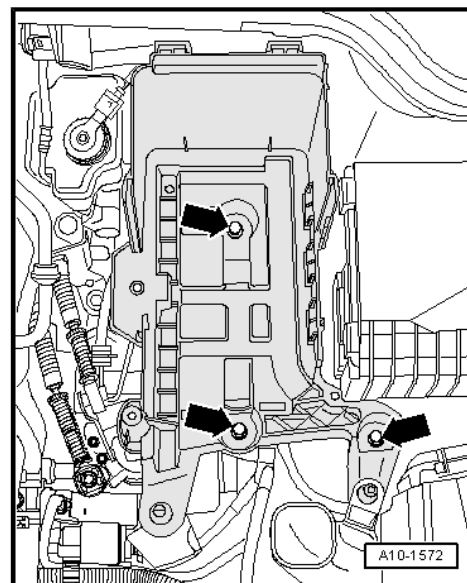


**Caution**

*When disconnecting the battery there is a risk of irreparable damage to electronic components.*

◆ *Observe notes on procedure for disconnecting the battery.*

- Remove battery ⇒ Electrical system; Rep. gr. 27 .
- Remove bolts -arrows- and detach battery tray.



- Pry selector lever cable -2- off gearbox selector lever using removal lever - 80 - 200- .
- Pull off securing clip -1- for selector lever cable.

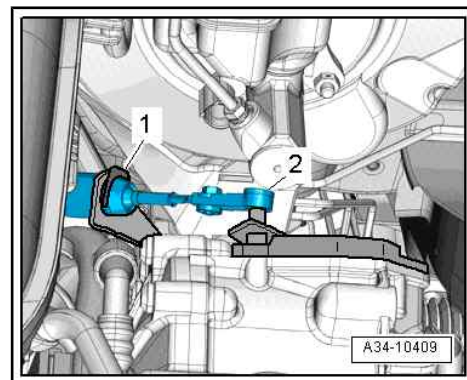


**Caution**

*Risk of damage to selector lever cable.*

◆ *Guide selector lever cable out of cable support bracket when lowering gearbox.*

◆ *Do not bend or kink the selector lever cable.*

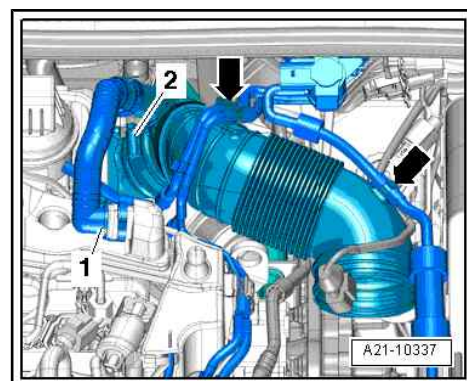


- Remove bolts -2- for cable support bracket.

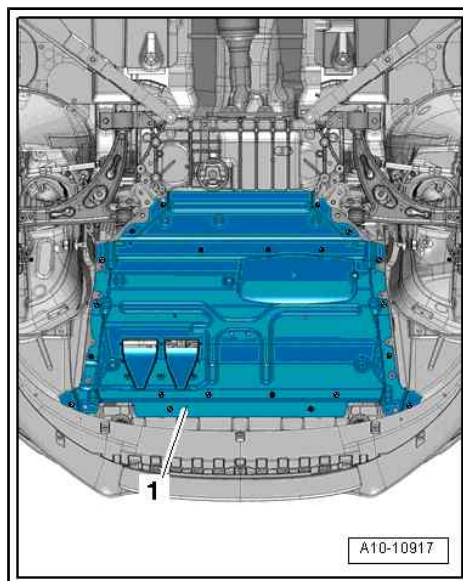
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– Press release tabs and disconnect crankcase breather hose -1- from cylinder head cover.

- Move clear vacuum hoses -arrows- at air pipe.
- Release hose clip -2- and detach air pipe.

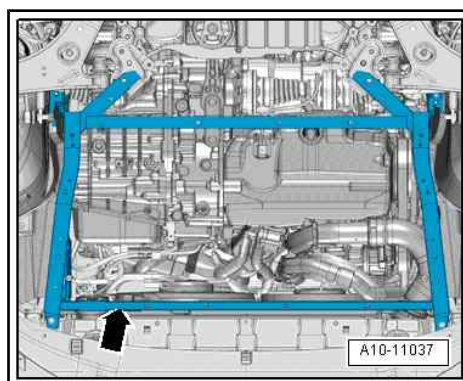


- Remove noise insulation -1- ➔ Rep. gr. 50 .



### Audi A3 Cabriolet

- Remove noise insulation frame -arrow- ➔ General body repairs, exterior; Rep. gr. 50 .



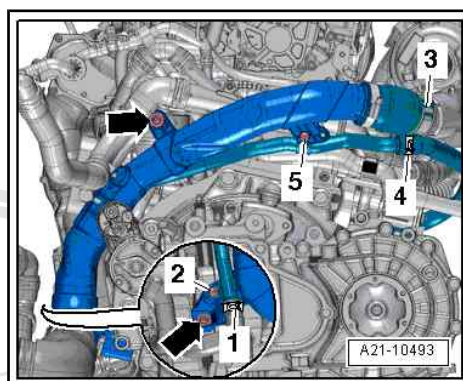
### Continued for all vehicles

- Remove bolts -arrows-.
- Move clear coolant hose at air pipe (left-side).



#### Note

-Items 1 ... 5- can be disregarded.



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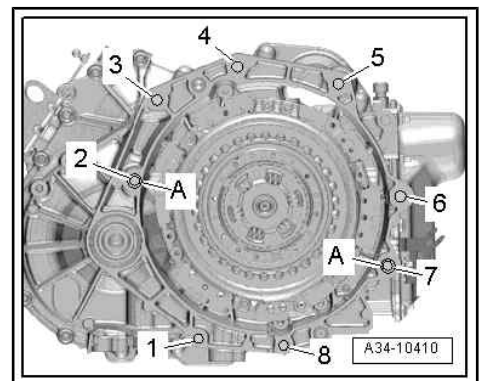
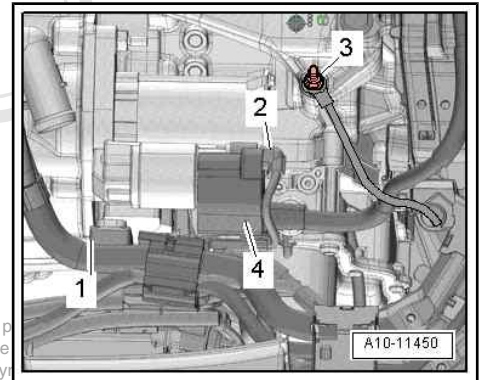


### Caution

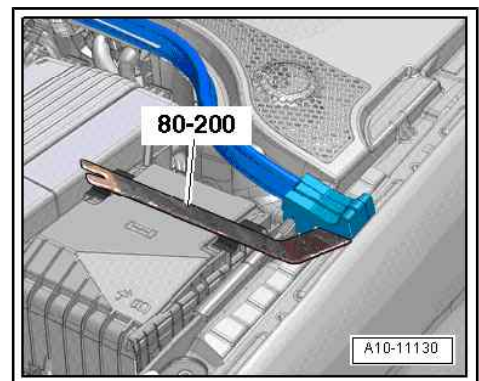
**Risk of irreparable damage to gearbox components.**

- ◆ **Never touch the contacts in the gearbox connector with your hands. Static discharge can seriously damage the control unit and mechatronic unit.**

- Touch a suitable earthed object with your hand (without gloves) to discharge any static electricity.
- Unplug electrical connector -1- for mechatronic unit for dual clutch gearbox - J743- .
- Unplug electrical connector -2-.
- Push back terminal cover -4- and disconnect B+ wire from starter solenoid.
- Remove nut -3- for earth wire.
- Remove bolts -3, 4, 5- securing gearbox to engine.



- Lever clip off sealing element using removal lever - 80 - 200- and fold up sealing element.



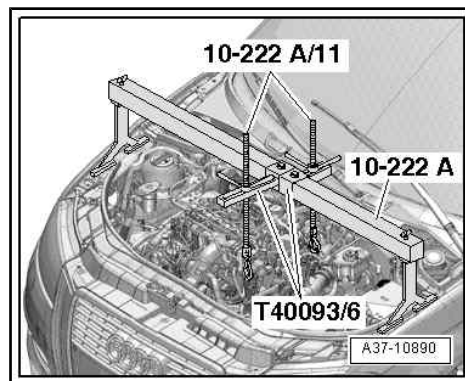
- Set up support bracket - 10 - 222 A- on body flanges, as shown in illustration.
- Hook spindles of support bracket onto engine lifting eyes.
- Take up weight of engine with spindles; do not lift.



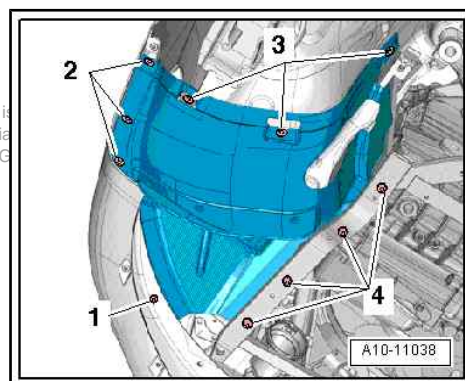
### WARNING

*Risk of scalding due to hot steam and hot coolant.*

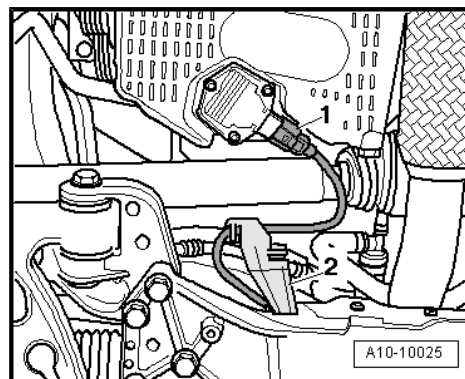
- ◆ *The cooling system is under pressure when the engine is hot.*
- ◆ *Cover filler cap on expansion tank with a cloth and open carefully to release pressure.*



- Open filler cap on expansion tank.
- Remove both front wheels.
- Remove front section of front wheel housing liner on both sides  
⇒ Rep. gr. 66.
- Remove all retainers from mechatronic unit for dual clutch gearbox - J743-.
- Move electrical wiring harness clear on gearbox.



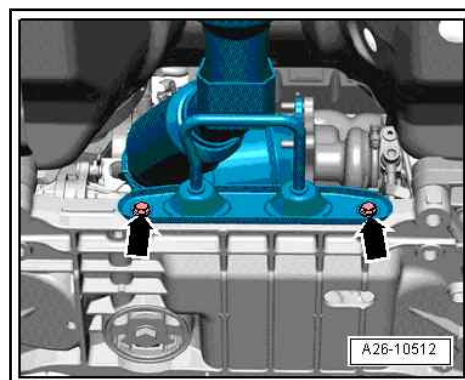
- Unplug electrical connector -1- at oil level and oil temperature sender - G266- .
- Unclip bracket -2- for electrical wiring leading to oil level and oil temperature sender - G266- at subframe.



- Remove bolts -arrows- and pull bracket for exhaust system off pins on front exhaust pipe.

### Vehicles with flange shafts:

- Unbolt drive shafts (left and right) from gearbox flange shafts  
⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .

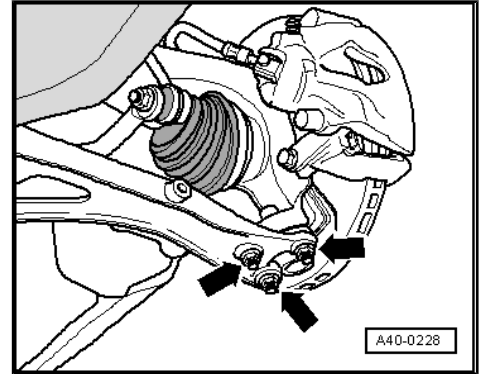


**Continued for all vehicles:**

- Remove nuts -arrows- securing swivel joint (left and right).
- If fitted, unscrew nut on bracket for front left vehicle level sender -G78- .
- Disengage swivel joints from wishbones.

**Vehicles with stub shafts:**

- Use assembly lever to press drive shafts (left and right) off gearbox.



**Continued for all vehicles:**

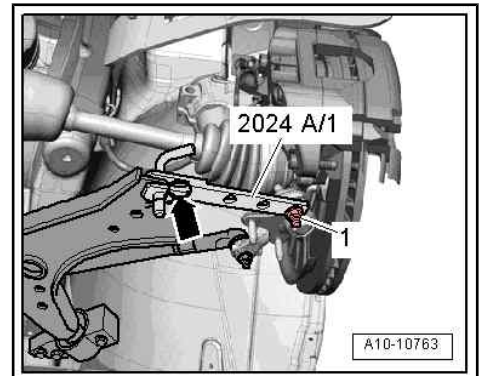
- Swivel suspension strut (left and right) outwards and support with extension -2024 A /1- , as shown in illustration.



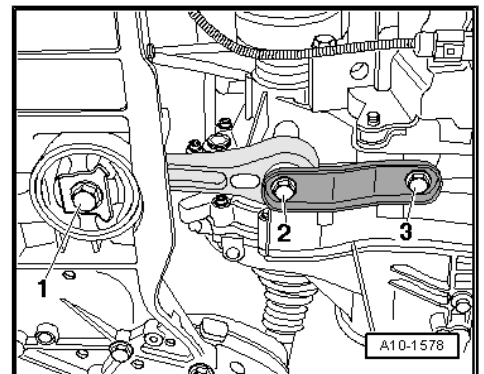
**WARNING**

*Risk of accident if parts of support are not properly secured.*

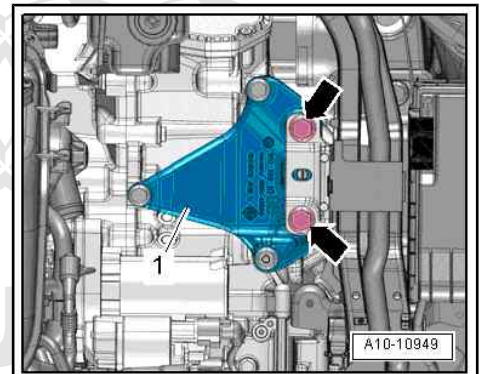
- ◆ *Secure locking pin and swivel joint with retaining clip -arrow- and nut -1-.*



- Remove flange shaft (right-side) ➔ [page 153](#) .
- Remove bolts -1, 2, 3- and detach pendulum support.

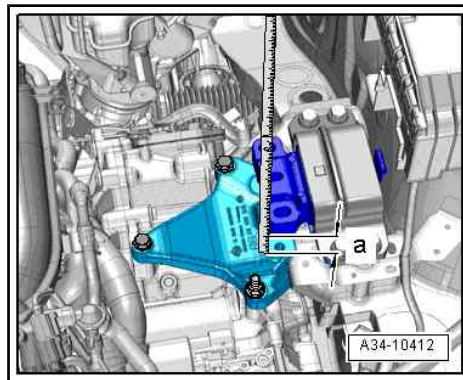


- Remove bolts -arrows- for assembly mounting on gearbox.

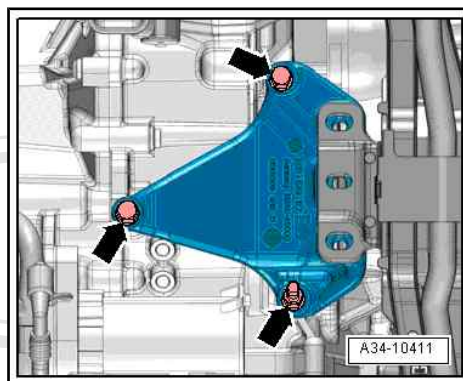


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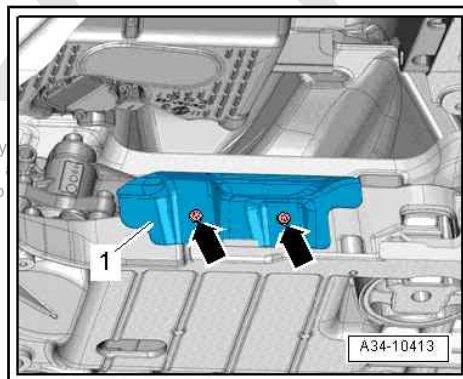
- Lower engine/gearbox assembly using spindle of support bracket - 10 - 222 A- until distance -a- is obtained between gearbox housing and gearbox mounting.
- Dimension -a- = 40 mm



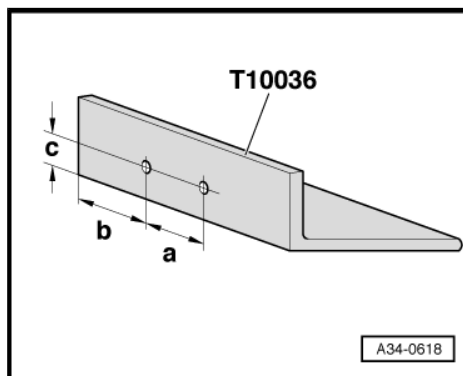
- Remove bolts -arrows- and detach gearbox support.



- If fitted, remove bolts -arrows- and detach heat shield -1-.



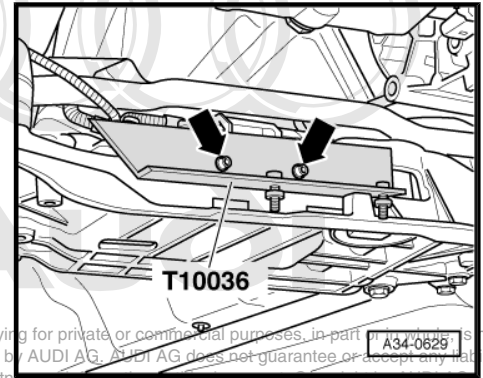
- Drill two 7 mm diameter holes in support - T10036- , as illustrated.
- Dimension -a- = 70 mm
- Dimension -b- = 98 mm
- Dimension -c- = 11 mm



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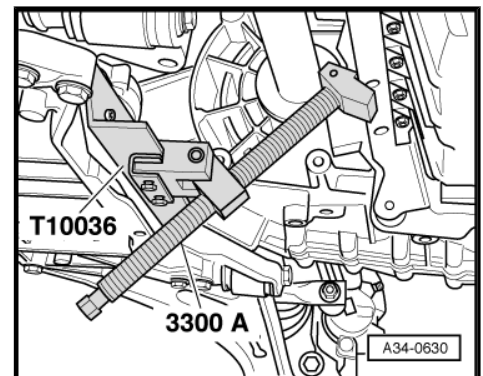
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- Bolt support - T10036- onto subframe with two M6x20 mm bolts -arrows-.



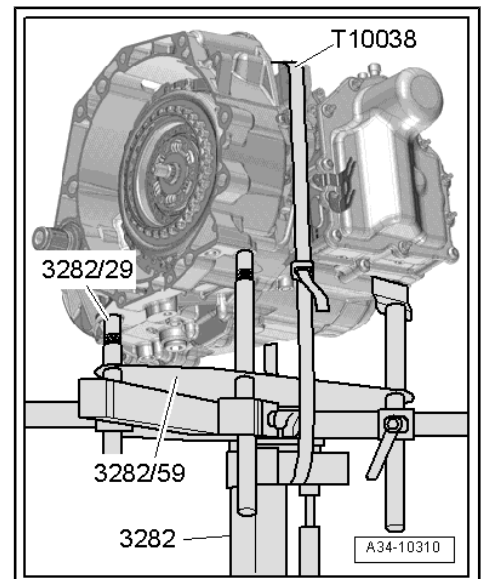
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- Bolt engine support - 3300 A- to support - T10036- .
- Press engine 10 to 15 mm towards front of vehicle using spindle of engine support.
- Alternator should only make light contact with refrigerant pipe.
- Air conditioner compressor must not make contact with connection for refrigerant pipe.



To remove dual clutch gearbox 0AM, set up gearbox support - 3282- with adjustment plate - 3282/59- .

- Set up gearbox support - 3282- on engine and gearbox jack - V.A.G 1383 A- .
- Align arms of gearbox support according to holes in adjustment plate - 3282/59- .
- Secure support elements as illustrated on adjustment plate - 3282/59- .
- Place engine and gearbox jack - V.A.G 1383 A- underneath vehicle. The -arrow symbol- on the adjustment plate - 3282/42- points in the direction of travel.
- Align gearbox support - 3282- parallel with gearbox.
- Screw pin - 3282/29- into gearbox.
- Insert last support element in gearbox as illustrated.
- Use tensioning strap - T10038- to secure gearbox.
- Support gearbox by lifting from underneath with engine and gearbox jack - V.A.G 1383 A- .



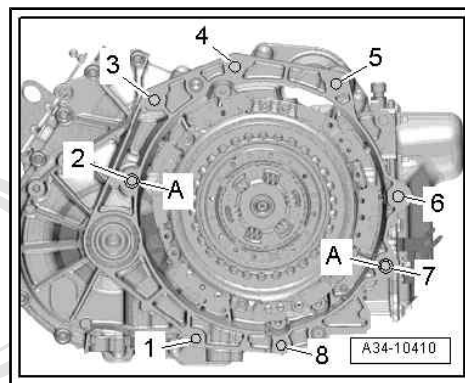
- Remove remaining bolts -1, 2, 6, 7, 8- securing gearbox to engine.
- Press gearbox off dowel sleeves.
- Pull gearbox off engine.
- Carefully lower gearbox using engine and gearbox jack - V.A.G 1383 A- .
- Guide selector lever cable out of cable support bracket while lowering gearbox.



#### Note

*Do not bend or kink the selector lever cable.*

- While lowering gearbox, adjust position of gearbox using spindles on gearbox support - 3282- .



## 8.6 Installing gearbox

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### Procedure

Installation is carried out in reverse sequence; note the following:

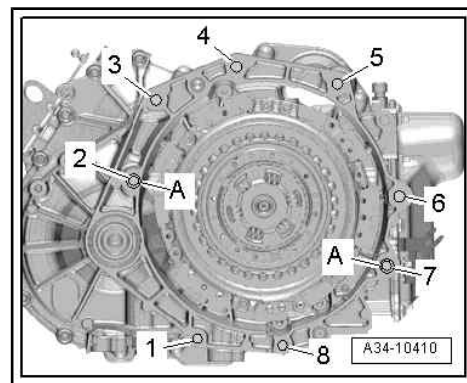
- Tightening torques for installing gearbox ➔ [page 112](#)



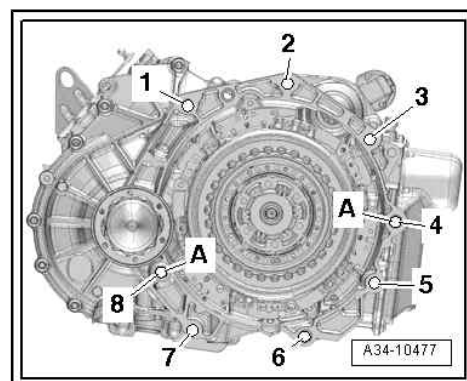
#### Note

- ◆ *Renew bolts which are tightened by turning through a specified angle.*
- ◆ *Renew seals, gaskets and self-locking bolts and nuts.*
- ◆ *Secure all hose connections with the correct type of hose clips (same as original equipment) ➔ Electronic parts catalogue .*
- ◆ *Hose connections and air pipes and hoses must be free from oil and grease before fitting.*
- ◆ *Secure all hose connections with the correct type of hose clips (same as original equipment) ➔ Electronic parts catalogue .*
- ◆ *To ensure that the charge air hoses can be connected securely, you must spray the screws on used screw-type clips with rust remover prior to installation.*
- ◆ *Re-attach all cable ties at the same locations when re-installing.*
- Clean input shaft splines and splines of torsion damper. Remove corrosion and lubricate splines with only a very thin coating of grease ➔ Electronic parts catalogue . It is important to remove excess grease.

- If not already fitted, install dowel sleeves -A- for centralising engine/gearbox in cylinder block.



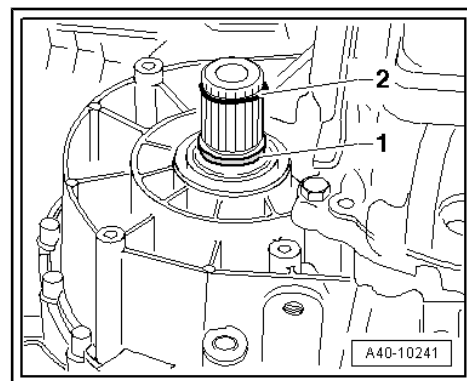
- ◆ Vehicles with 1.2/1.4 ltr. TFSI/1.6 ltr. TDI engine:
- ◆ Vehicles with 1.6 ltr. MPI/1.8 ltr. TFSI engine:



#### Gearbox with stub shafts:

If a new gearbox is not being installed:

- Renew O-ring -1- on stub shaft.
- Renew circlip -2- on stub shaft ⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .



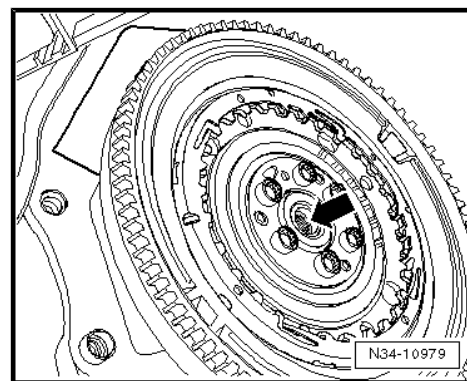
#### Continued for all vehicles:

Check condition of needle bearing in crankshaft -arrow-; renew if necessary ⇒ Engine, mechanics, Rep. gr. 13 .



#### Note

*If the needle bearing in the crankshaft is damaged, the gears cannot be shifted correctly because the clutch is supported by this bearing.*



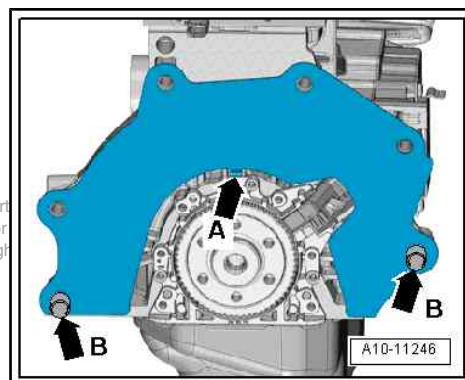
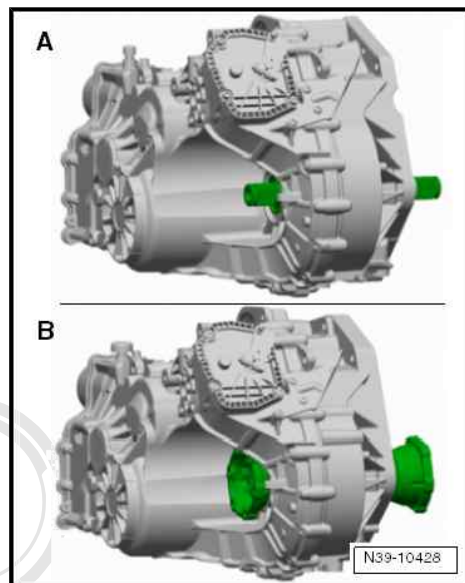


## Note

When installing a new gearbox, it may be necessary to change from the stub shaft version -A- to flange shaft version -B- ➔ *Electronic parts catalogue*.

- Make sure that the intermediate plate is engaged on the sealing flange -arrow A- and fitted on the dowel sleeves -arrows B-.

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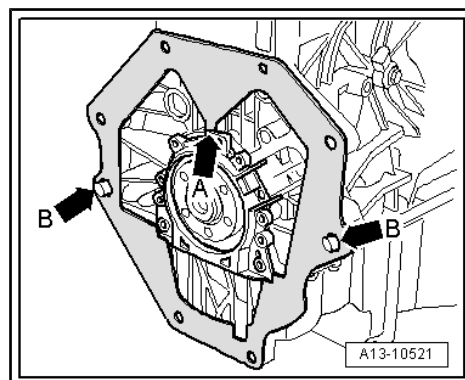
- ◆ Vehicles with 1.2 ltr. TFSI engine:
- ◆ Vehicles with 1.4/1.8 ltr. TFSI engine, 1.6 ltr. MPI engine, 1.6 ltr. TDI engine:
- Carefully raise gearbox using engine and gearbox jack - V.A.G 1383 A- and position correctly using gearbox support - 3282- .



## Caution

**Risk of damage to selector lever cable.**

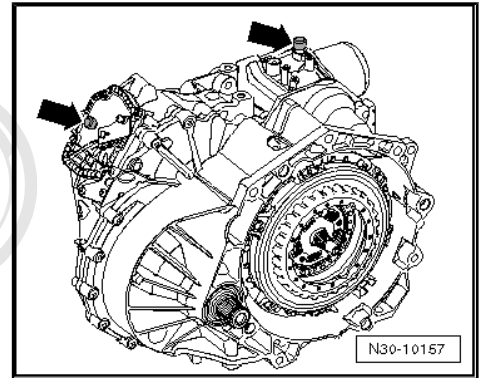
- ◆ **Carefully guide selector lever cable into cable support bracket when lifting gearbox.**
- ◆ **Do not bend or kink the selector lever cable.**



- Secure gearbox to engine.

If the gearbox was sealed with oil-tight plugs, e.g. after a gearbox repair or when installing a replacement gearbox:

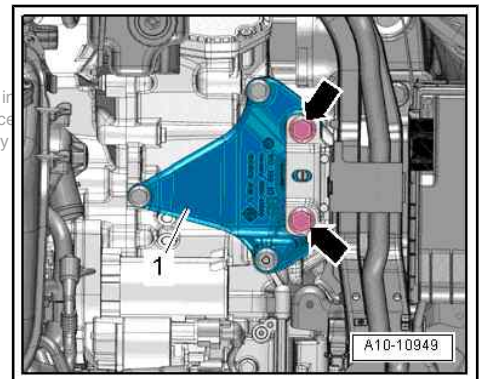
- Remove both plugs from breathers -arrows- and install breather caps.



Continued for all vehicles:

Install assembly mounting as follows:

- Fit gearbox support -1- between gearbox and support arm of gearbox mounting.
- Bolt gearbox support to gearbox.
- Pull gearbox up to support arm of gearbox mounting using spindle of support bracket.
- Hand-tighten bolts -arrow- securing gearbox mounting to gearbox support initially.
- Detach gearbox support - 3282- from gearbox.



**Gearbox with stub shafts:**

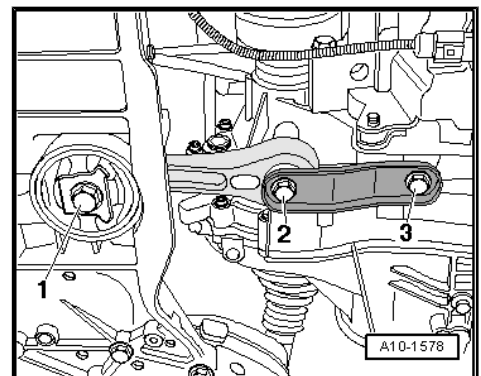
- Press drive shafts onto stub shafts of gearbox until circlip snaps into place ⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .

**Gearbox with flange shafts:**

- Install flange shaft (right-side) ⇒ [page 153](#) .
- Secure drive shafts to flange shafts on gearbox ⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .

Continued for all vehicles:

- Install pendulum support ⇒ [page 123](#) .
- Install exhaust system so it is free of stress ⇒ Engine, mechanics; Rep. gr. 26 .
- Install starter ⇒ Electrical system; Rep. gr. 27 .



- Check adjustment of assembly mountings ⇒ Engine, mechanics; Rep. gr. 10 .
- Detach support bracket - 10 - 222 A- from engine.
- Check adjustment of selector lever cable and adjust if necessary ⇒ [page 26](#) .
- If previously removed, install battery tray and battery ⇒ Electrical system; Rep. gr. 27 .
- If previously drained, refill coolant ⇒ Engine, mechanics; Rep. gr. 19 .

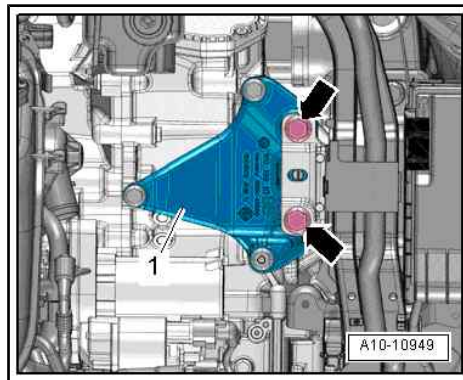
### Tightening torques (installing gearbox)



#### Note

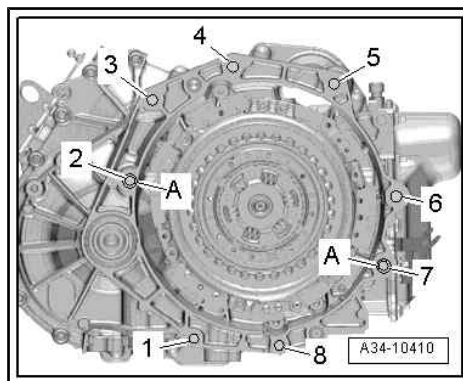
- ♦ *Tightening torques apply only to lightly greased, oiled, phosphated or black-finished nuts and bolts.*
- ♦ *Additional lubricant such as engine or gear oil may be used, but do not use graphite lubricant.*
- ♦ *Do not use parts which have been degreased.*
- ♦ *Tolerance for tightening torques is  $\pm 15\%$ .*

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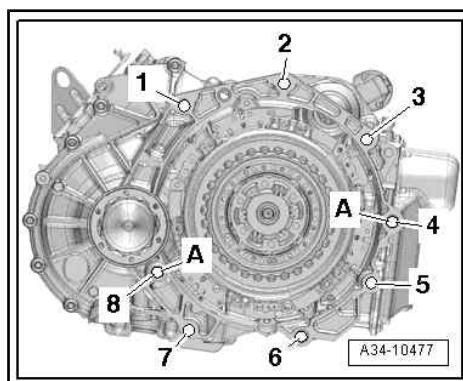
### Dual clutch gearbox to 1.2/1.4 ltr. TFSI engine:

| Item    | Bolt                           | Nm |
|---------|--------------------------------|----|
| 1, 8    | M10x50                         | 40 |
| 2, 6, 7 | M12x65                         | 80 |
| 3, 4, 5 | M12x55                         | 80 |
| A       | Dowel sleeves for centralising |    |



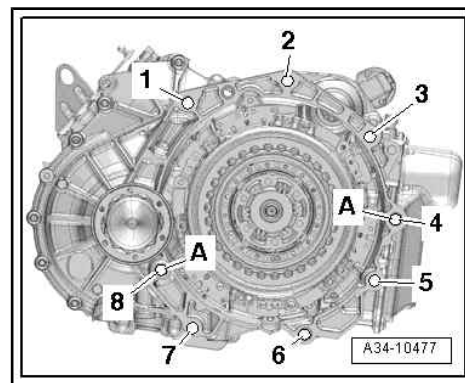
### Dual clutch gearbox to 1.6 ltr. MPI engine:

| Item    | Bolt                           | Nm |
|---------|--------------------------------|----|
| 1, 3    | M12x55                         | 80 |
| 2       | M12x170                        | 80 |
| 4       | M12x80                         | 80 |
| 5, 6, 7 | M10x50                         | 40 |
| 8       | M12x90                         | 80 |
| A       | Dowel sleeves for centralising |    |



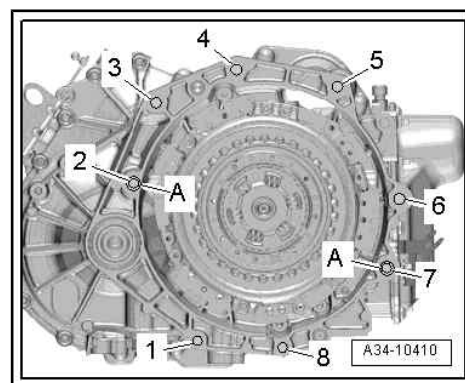
### Dual clutch gearbox to 1.8 ltr. TFSI engine

| Item | Bolt                           | Nm |
|------|--------------------------------|----|
| 1, 3 | M12x55                         | 80 |
| 2    | M12x155                        | 80 |
| 4, 8 | M12x65                         | 80 |
| 5    | M12x50                         | 80 |
| 6, 7 | M10x50                         | 40 |
| A    | Dowel sleeves for centralising |    |



### Dual clutch gearbox to 1.6 ltr. TDI engine:

| Item     | Bolt                           | Nm |
|----------|--------------------------------|----|
| 1, 3, 10 | M12x55                         | 80 |
| 5, 9     | M12x70                         | 80 |
| 6 ... 8  | M10x50                         | 40 |
| A        | Dowel sleeves for centralising |    |



### Additional tightening torques:

- ⇒ ["11 Exploded view - assembly mountings", page 119](#)



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## 9 Transporting gearbox

### Special tools and workshop equipment required

- ◆ Shackle - 10 - 222 A /12-

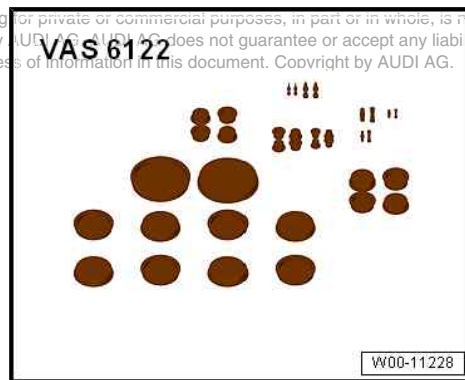


- ◆ Workshop hoist - VAS 6100-



- ◆ Engine bung set - VAS 6122-

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- ◆ 2x protective cap - 02M 409 120- (alternative to engine bung set - VAS 6122- )
- ◆ 1x protective cap - 0AM 325 120 A-

## Sealing gearbox

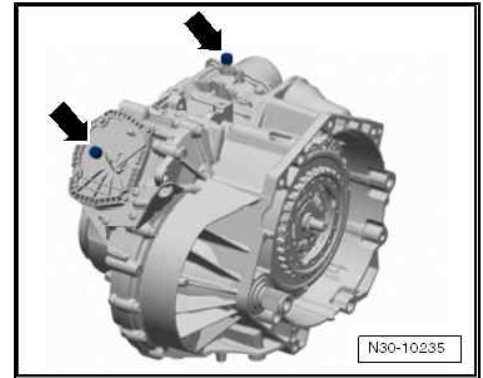


### Caution

#### *Risk of damage to gearbox*

*When performing repairs, the breather opening on the mechatronic unit for dual clutch gearbox - J743- (-rear arrow-) and gearbox breather (-front left arrow-) must be sealed off to avoid loss of fluid.*

- ◆ *Fluid which escapes from the mechatronic unit for dual clutch gearbox - J743- cannot be replenished and the fluid level cannot be checked! It is not possible to check the fluid level in the hydraulic section of the mechatronic unit for dual clutch gearbox - J743- .*
- ◆ *If oil escapes from the gear oil section, the gear oil must be replaced completely. It is not possible to check the level.*
- ◆ *Underfilling or overfilling either of the oil/fluid sections will impair the function of the gearbox.*



- Pull off both breather caps -arrows- (different types according to version).

#### **If both breather caps are the same size:**

- Seal gearbox breather and breather opening for mechatronic unit for dual clutch gearbox - J743- with clean plugs from engine bung set - VAS 6122- . Two protective caps - 02M 409 120- can also be used to seal the breather openings ⇒ Electronic parts catalogue

#### **If the breather cap for the mechatronic unit for dual clutch gearbox - J743- (-rear arrow-) is larger than the gearbox breather cap (-front left arrow-):**

- Order new breather cap for mechatronic unit for dual clutch gearbox - J743- ; breather cap must be renewed ⇒ Electronic parts catalogue .
- Seal off breather opening of mechatronic unit for dual clutch gearbox - J743- with protective cap - 0AM 325 120 A- to prevent fluid from escaping.

#### **Both versions:**

- After installing gearbox in vehicle, remove plugs and re-fit or renew breather caps.

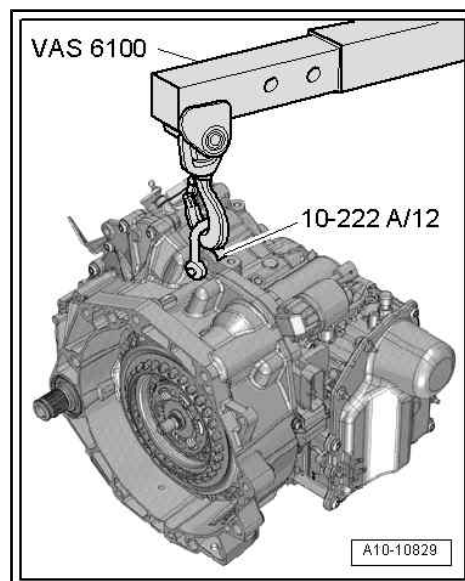
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## Transporting gearbox

Requirement:

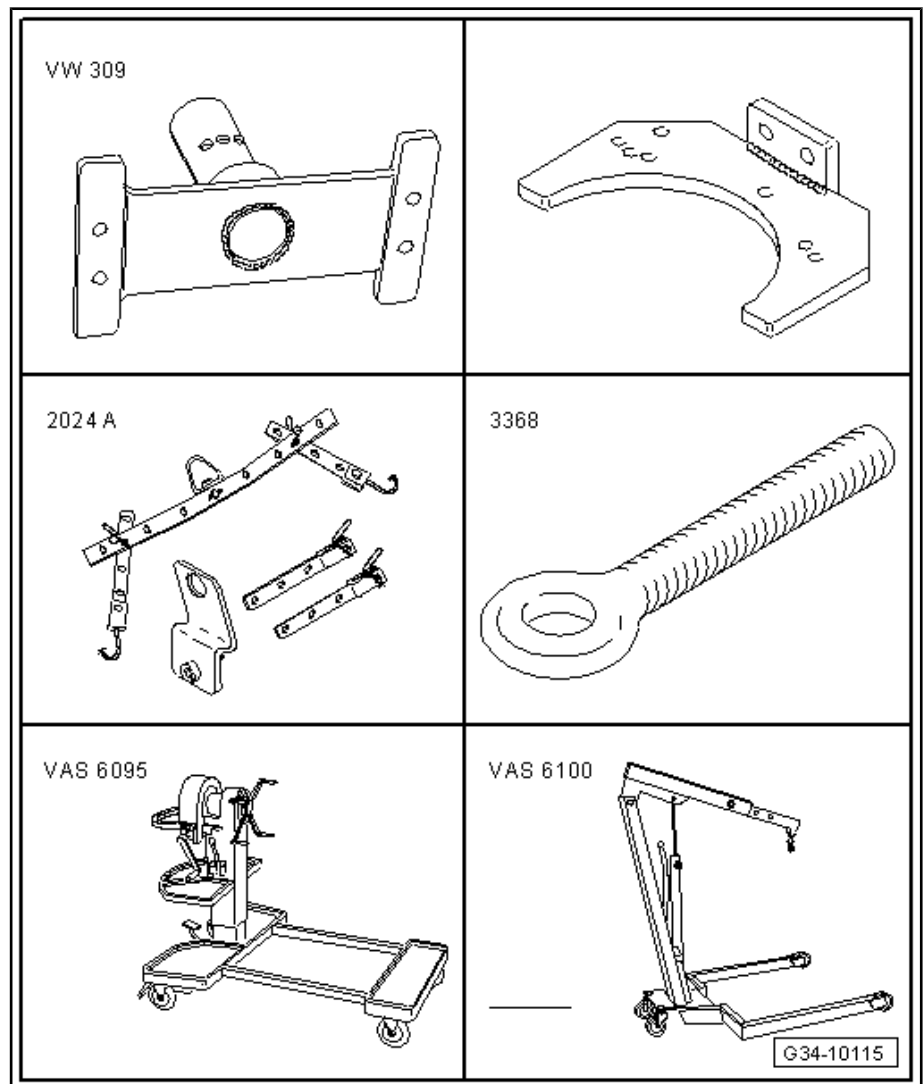
- Gearbox is sealed ⇒ [page 115](#) .



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## 10 Securing to engine and gearbox support

Special tools and workshop equipment required



- ◆ Retaining plate - VW 309-
- ◆ Gearbox support - VW 353-
- ◆ Lifting tackle - 2024 A-
- ◆ 2x eye-head bolt - 3368-
- ◆ Engine and gearbox support - VAS 6095-
- ◆ Workshop hoist - VAS 6100-

  
Audi

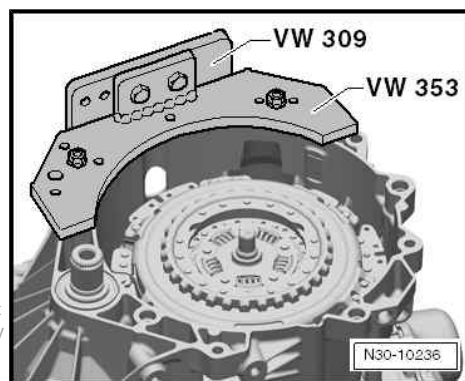
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## Securing gearbox on gearbox support - VW 353-

Requirement:

- Gearbox is sealed ➔ [page 115](#) .

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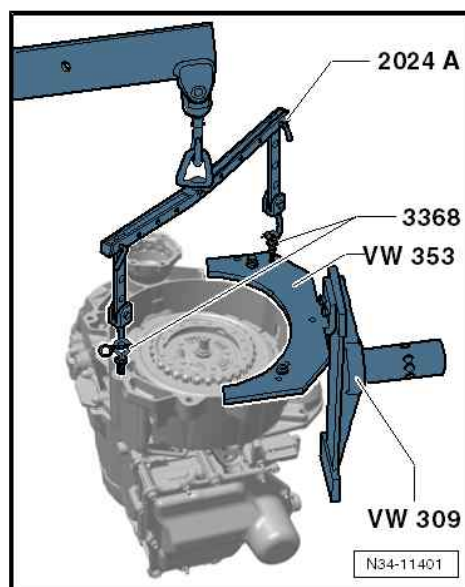


## Lifting gearbox into engine and gearbox support

Requirement:

- Gearbox is sealed ➔ [page 115](#) .

The gearbox is lifted onto the engine and gearbox support - VAS 6100- together with the gearbox support - VW 353- using the workshop hoist - VAS 6095- .



## 11 Exploded view - assembly mountings

### 1 - Gearbox support

- ☐ Removing and installing  
⇒ [page 120](#)

### 2 - Bolt

- ☐ Gearbox support to gearbox
- ☐ Renew
- ☐ 40 Nm +90°

### 3 - Bolt

- ☐ Gearbox support to gearbox
- ☐ Renew
- ☐ 40 Nm +90°

### 4 - Engine mounting

- ☐ Removing and installing  
⇒ Engine, mechanics;  
Rep. gr. 10

### 5 - Bolt

- ☐ Engine mounting to body
- ☐ Tightening torque ⇒ Engine, mechanics; Rep. gr. 10

### 6 - Retainer for activated charcoal filter

### 7 - Bolt

- ☐ Tightening torque ⇒ Engine, mechanics; Rep. gr. 10

### 8 - Nut

- ☐ Tightening torque ⇒ Engine, mechanics; Rep. gr. 10

### 9 - Bolt

- ☐ Connecting bracket to body
- ☐ Tightening torque ⇒ Engine, mechanics; Rep. gr. 10

### 10 - Bolt

- ☐ Connecting bracket to engine mounting
- ☐ Tightening torque ⇒ Engine, mechanics; Rep. gr. 10

### 11 - Connecting bracket

### 12 - Bolt

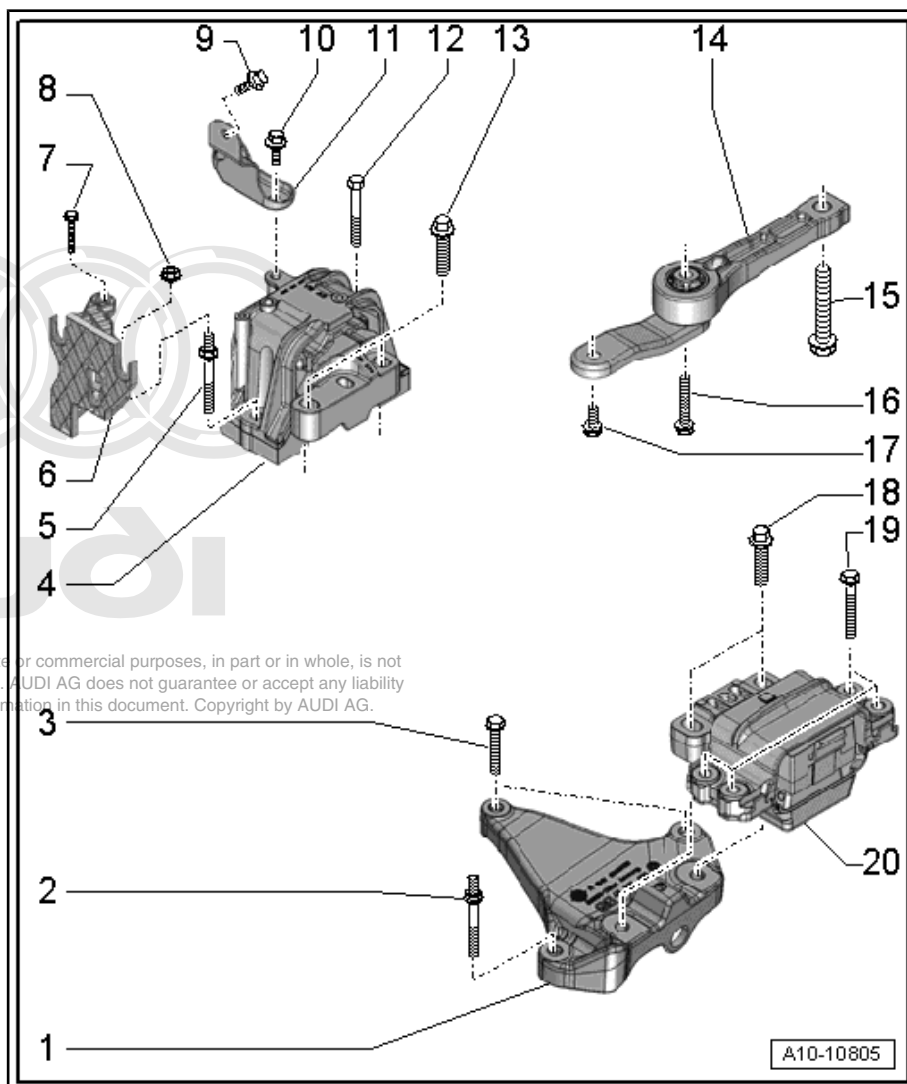
- ☐ Engine mounting to body
- ☐ Tightening torque ⇒ Engine, mechanics; Rep. gr. 10

### 13 - Bolt

- ☐ Engine mounting to timing chain cover
- ☐ Tightening torque ⇒ Engine, mechanics; Rep. gr. 10

### 14 - Pendulum support

- ☐ Removing and installing ⇒ [page 123](#)



**15 - Bolt**

- ☐ Pendulum support to subframe
- ☐ Renew
- ☐ 100 Nm +90°

**16 - Bolt**

- ☐ Pendulum support to gearbox
- ☐ Renew
- ☐ 50 Nm +90°

**17 - Bolt**

- ☐ Pendulum support to gearbox
- ☐ Renew
- ☐ 50 Nm +90°

**18 - Bolt**

- ☐ Gearbox mounting to gearbox support
- ☐ Renew
- ☐ 60 Nm +90°

**19 - Bolt**

- ☐ Gearbox mounting to body
- ☐ Renew
- ☐ 40 Nm +90°

**20 - Gearbox mounting**

- ☐ Removing and installing ⇒ [page 120](#)

## 11.1 Removing and installing gearbox mounting and gearbox support

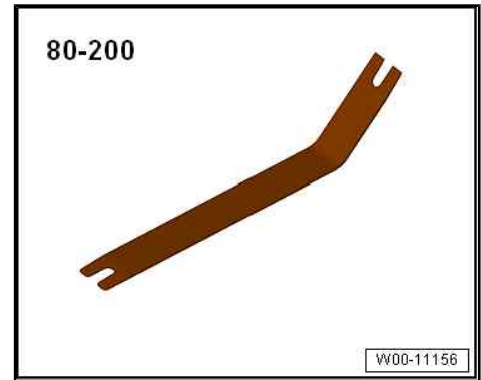
**Special tools and workshop equipment required**

- ◆ Support bracket - 10 - 222 A-



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◆ Removal lever - 80 - 200-



Removing

- Move selector lever to position “P”.
- Remove air cleaner housing ⇒ Injection and glow plug system; Rep. gr. 23 or ⇒ Injection and ignition system; Rep. gr. 24 .



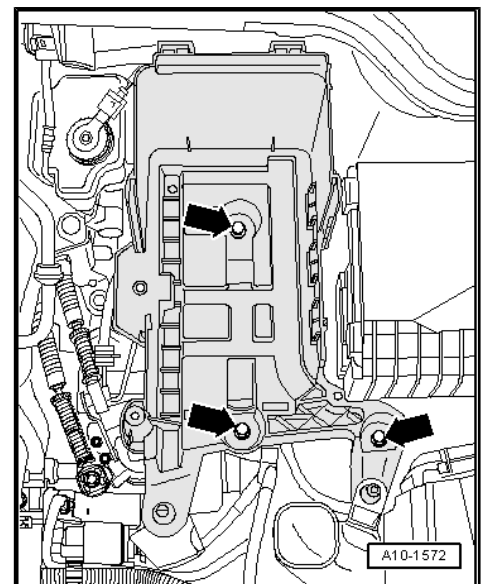
**Caution**

*When disconnecting the battery there is a risk of irreparable damage to electronic components.*

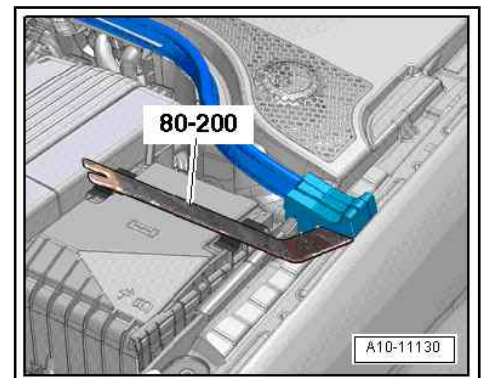
- ◆ *Observe notes on procedure for disconnecting the battery.*

- Remove battery ⇒ Electrical system; Rep. gr. 27 .
- Remove bolts -arrows- and detach battery tray

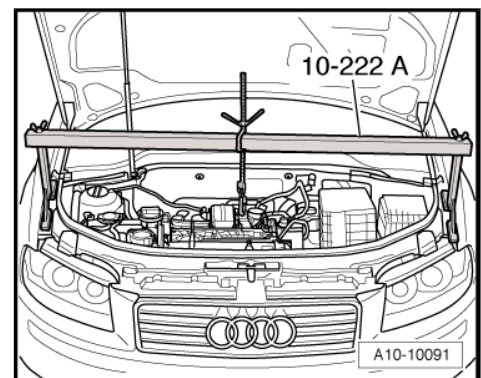
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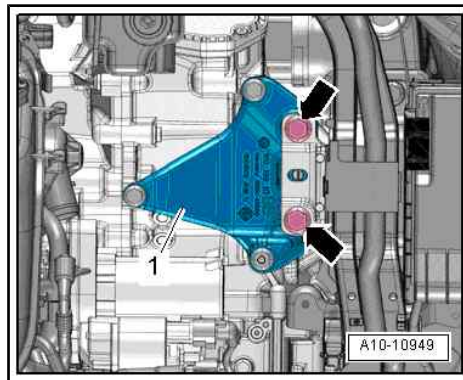
- If necessary, lever clip off sealing element using removal lever - 80 - 200- and fold up sealing element.



- Set up support bracket - 10 - 222 A- on wing mounting flanges (vehicles up to 05.2008) or on body flanges (vehicles from 05.2008 onwards).
- Hook spindle of support bracket into engine lifting eye (left-side).
- Take up weight of engine with spindle; do not lift.



- Remove bolts -arrows- securing gearbox mounting to gearbox support.
- Lower engine/gearbox assembly slightly via spindle of support bracket - 10 - 222 A- .



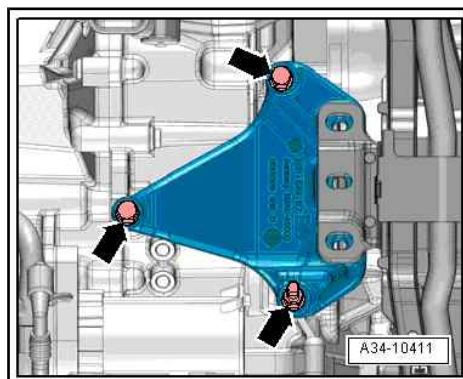
### Removing gearbox support:



#### Note

*The gearbox support does not have to be removed when removing the gearbox mounting.*

- Remove bolts -arrows- and detach gearbox support.



### Removing gearbox mounting:

- Remove all components which prevent access to bolts -1-.
- Remove bolts -1- and detach gearbox mounting.

### Installing

Installation is carried out in reverse sequence; note the following:

- Tightening torques  
⇒ ["11 Exploded view - assembly mountings", page 119](#)



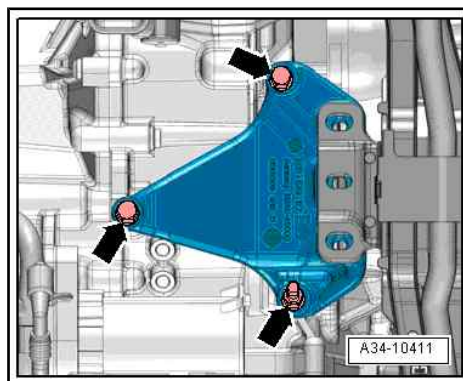
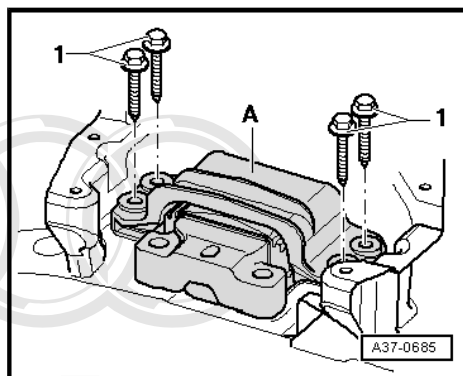
#### Note

*Renew bolts which are tightened by turning through a specified angle.*

- Install gearbox mounting -A-.

If removed previously:

- Install gearbox support -arrows-.



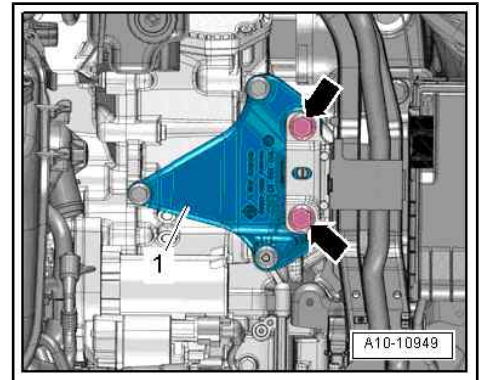
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- Pull gearbox up with spindle on support bracket - 10 - 222 A-until gearbox support contacts support arm of gearbox mounting.



#### Caution

*Before fitting the bolts -arrows-, the gearbox support and the support arm of the gearbox mounting must be aligned absolutely parallel. Otherwise the threads will be damaged. If necessary, push gearbox up at rear with trolley jack.*

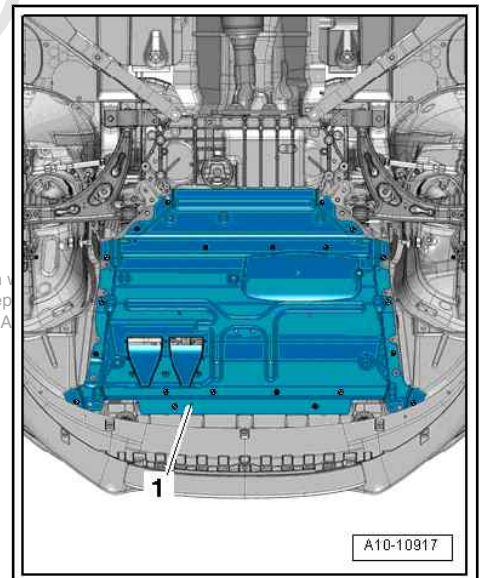


- Adjust assembly mountings ⇒ Engine, mechanics; Rep. gr. 10 .
- Secure support arm of gearbox mounting to gearbox support.
- Install battery tray and battery ⇒ Electrical system; Rep. gr. 27 .
- Install air cleaner housing ⇒ Injection and glow plug system; Rep. gr. 23 or ⇒ Injection and ignition system; Rep. gr. 24 .

## 11.2 Removing and installing pendulum support

### Removing

- Vehicles with large noise insulation: remove noise insulation -1- ⇒ Rep. gr. 50 .



- Unscrew bolts -1 ... 3- and remove pendulum support.

### Installing

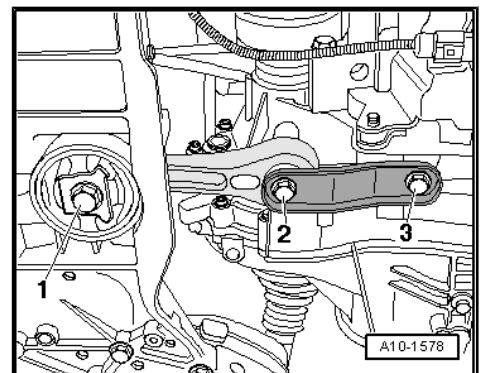
Installation is carried out in reverse sequence; note the following:

- Tightening torques  
⇒ ["11 Exploded view - assembly mountings", page 119](#)



#### Note

*Renew bolts which are tightened by turning through a specified angle.*

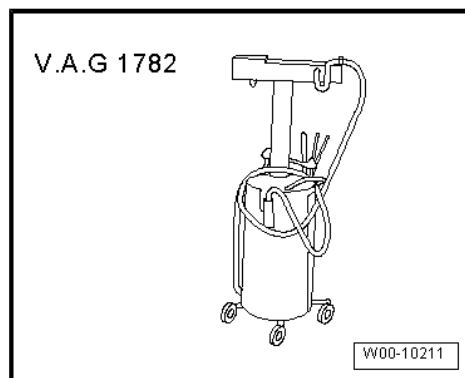


- First secure pendulum support to gearbox (bolts -2- and -3-), then on subframe -1-.
- Install noise insulation ⇒ Rep. gr. 50 .

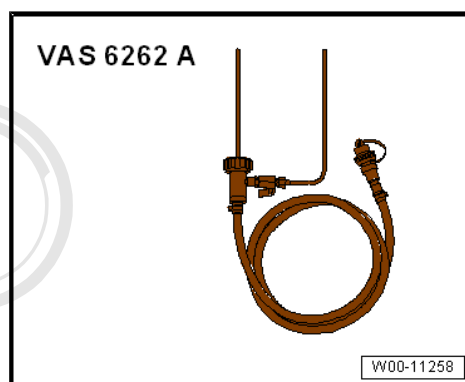
## 12 Renewing gear oil

### Special tools and workshop equipment required

- ◆ Used oil collection and extraction unit - V.A.G 1782-



- ◆ Adapter for oil filling - VAS 6262 A- with -VAS 6262/4-



- ◆ Adapter - VAS 6262/6- or adapter - VAS 6262/7-



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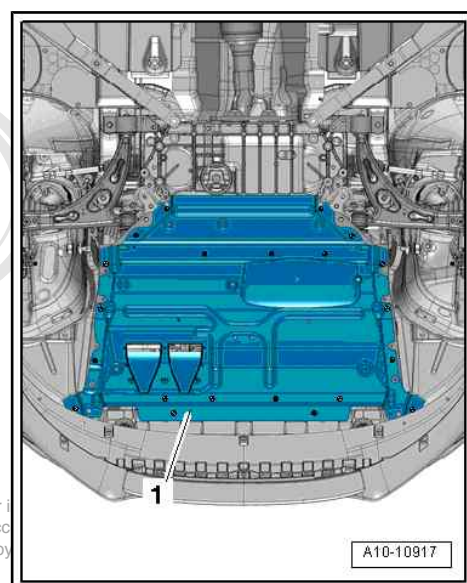
## Procedure



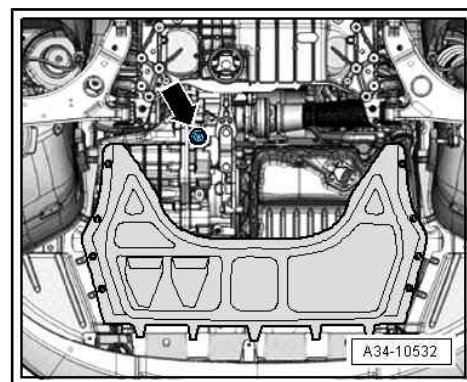
### Note

- ◆ ⇒ *"5 Repair instructions", page 14*
- ◆ ⇒ *"5.2 Rules for cleanliness", page 16*
- ◆ *Observe notes on gearbox, disposing of oil ⇒ page 14 .*
- ◆ *The gearbox is filled for life.*
- ◆ *The gear oil level cannot be checked.*
- ◆ *If the gearbox is leaking, trace the cause of the leak and repair as required.*
- ◆ *Then the gear oil must be completely drained off and the gearbox filled with new gear oil.*

- Engine not running.
- Move selector lever to position "P".
- Vehicles with large noise insulation: remove noise insulation -1- ⇒ Rep. gr. 50 .
- Place used oil collection and extraction unit - V.A.G 1782- below gearbox.



- Remove oil drain plug -arrow- from gearbox.



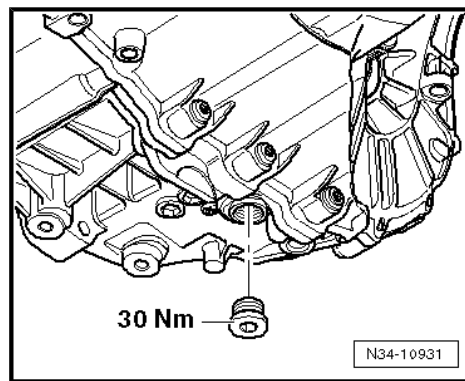
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- Drain gear oil.
- Tighten drain plug.



### Note

- ◆ *The gear oil level cannot be checked.*
- ◆ *It is important to fill in exactly the amount of gear oil specified.*
- ◆ *This is the only way to ensure the gearbox is filled correctly.*
- ◆ *Both overfilling and underfilling impair the function of the gearbox.*



### Caution

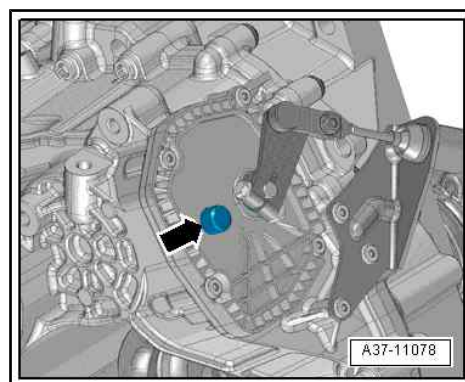
- ◆ *Use only the gear oil available as a replacement part for the 7-speed dual clutch gearbox. Other types of oil will cause malfunctions and/or failure of the gearbox; for part number refer to ➔ Electronic parts catalogue .*

- Pull off breather cap -arrow- next to gearbox selector lever.



### Note

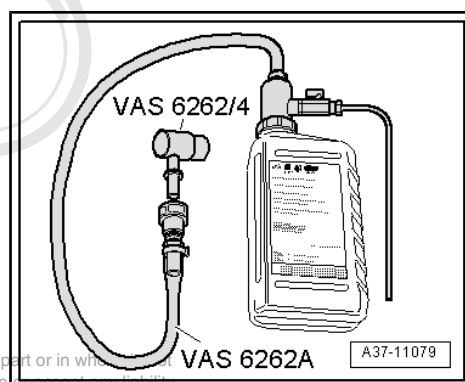
*For illustration purposes, the installation position is shown with the gearbox removed.*



### Caution

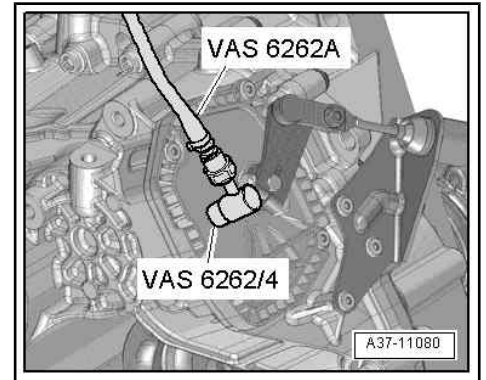
*The adapter for oil filling - VAS 6262 A- with -VAS 6262/4- must be clean; the gear oil must not be mixed with any other types of oil.*

- Screw container of gear oil for 7-speed dual clutch gearbox onto adapter for oil filling - VAS 6262 A- ; for part number refer to ➔ Electronic parts catalogue .
- Put down oil container so that oil does not run into filler hose.

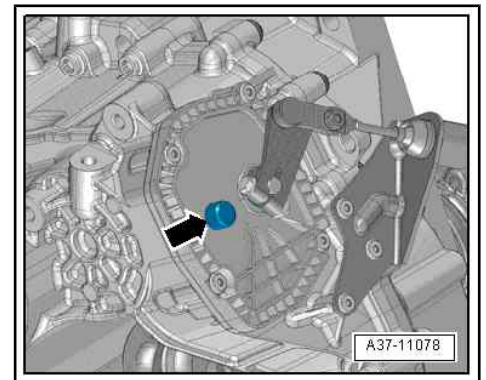


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- Attach adapter -VAS 6262/4- to filler hose and connect to breather opening on gearbox.
- Turn oil container upside down and fill gearbox with the exact amount of oil required; see specified capacity ➔ [page 8](#) .



- Disconnect adapter -VAS 6262/4- and fit breather cap -arrow-.



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## 13 Mechatronic unit

⇒ ["13.1 Exploded view - mechatronic unit for dual clutch gearbox J743", page 128](#)

⇒ ["13.2 Removing and installing mechatronic unit for dual clutch gearbox J743 with gearbox installed", page 129](#)

⇒ ["13.3 Moving mechatronic unit for dual clutch gearbox J743 into removal position by hand", page 140](#)

### 13.1 Exploded view - mechatronic unit for dual clutch gearbox - J743-

#### 1 - Bolt

- ☐ Secures cover over clutch actuator levers
- ☐ 8 Nm

#### 2 - Trim

- ☐ Over clutch actuator levers
- ☐ Depending on version

#### 3 - Bolt

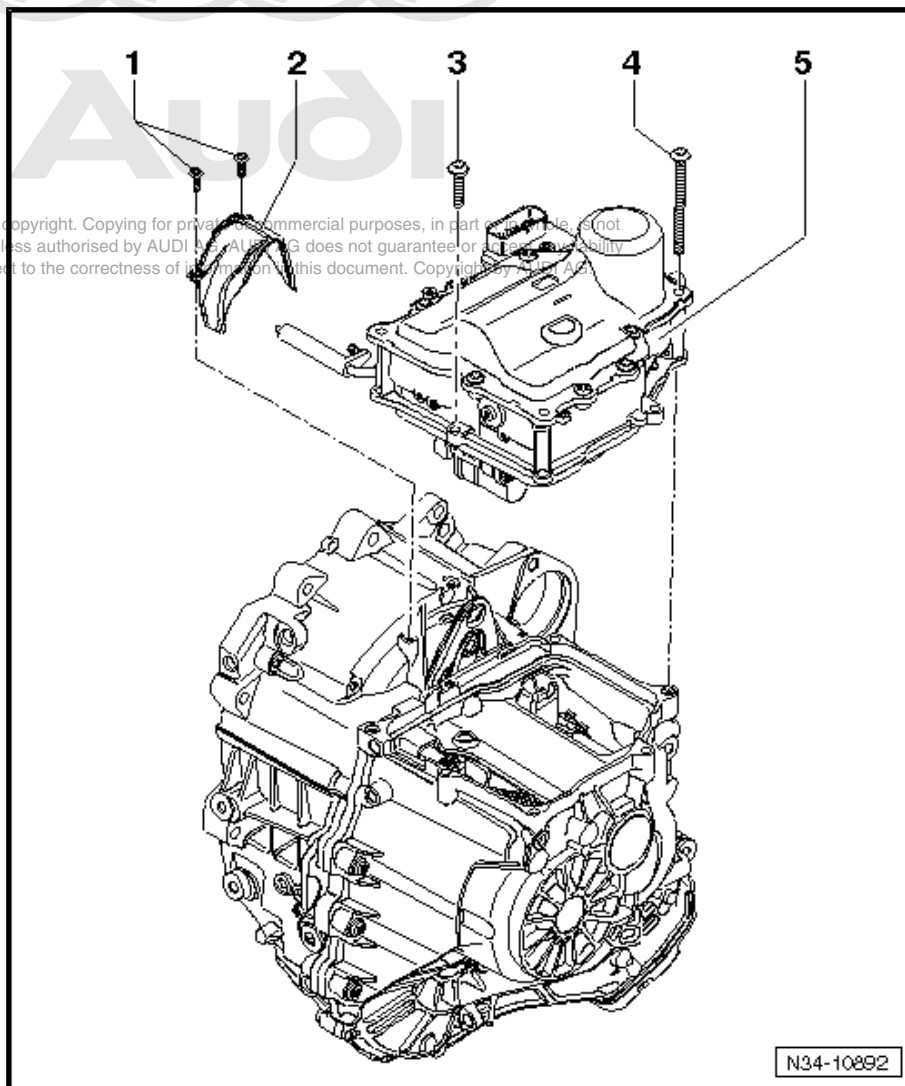
- ☐ For securing mechatronic unit for dual clutch gearbox - J743- to gearbox housing
- ☐ Qty. 3, M8 x 35
- ☐ Renew
- ☐ Tightening torque and sequence ⇒ [page 129](#)

#### 4 - Bolt

- ☐ For securing mechatronic unit for dual clutch gearbox - J743- to gearbox housing
- ☐ Qty. 4, M8 x 90
- ☐ Renew
- ☐ Tightening torque and sequence ⇒ [page 129](#)

#### 5 - Mechatronic unit for dual clutch gearbox - J743-

- ☐ ⇒ ["4.4 Safety precautions when working on mechatronic unit for dual clutch gearbox J743", page 12](#)
- ☐ ⇒ ["13.2 Removing and installing mechatronic unit for dual clutch gearbox J743 with gearbox installed", page 129](#)
- ☐ ⇒ ["13.3 Moving mechatronic unit for dual clutch gearbox J743 into removal position by hand", page 140](#)



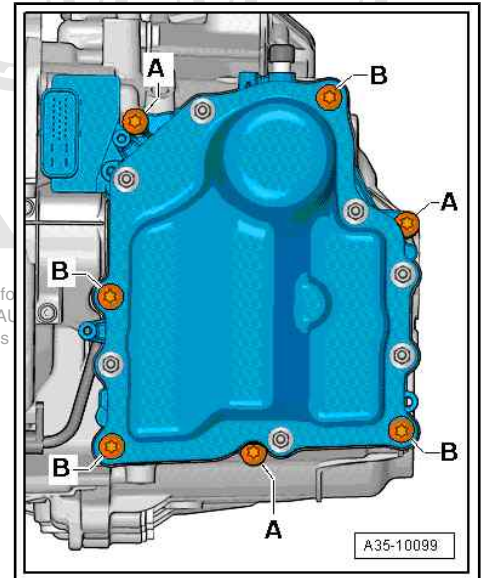
## Mechatronic unit for dual clutch gearbox - J743- : tightening torque and sequence



Renew bolts.

– Tighten bolts in 4 stages as follows:

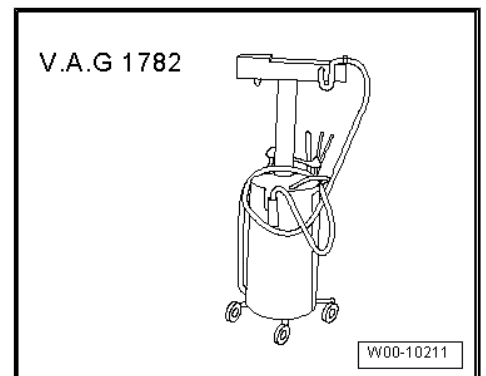
| Stage | Bolts                         | Tightening torque                      |
|-------|-------------------------------|----------------------------------------|
| 1.    | -A-                           | Screw in by hand until contact is made |
| 2.    | Unscrew guide pin - T10406- . |                                        |
| 3.    | -B-                           | Screw in by hand until contact is made |
| 4.    | -A, B-                        | 10 Nm in diagonal sequence             |



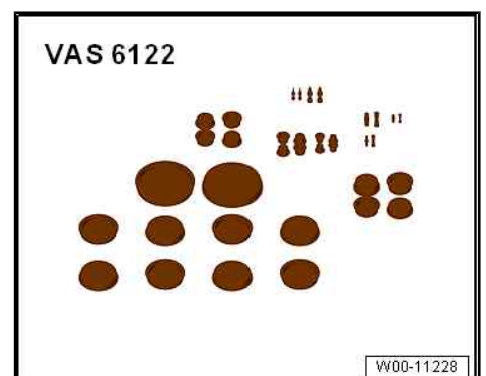
## 13.2 Removing and installing mechatronic unit for dual clutch gearbox - J743- with gearbox installed

Special tools and workshop equipment required

- ◆ Vehicle diagnostic tester
- ◆ Used oil collection and extraction unit - V.A.G 1782-



- ◆ Engine bung set - VAS 6122-



# ◆ Guide pin - T10406-



# ◆ Assembly lever - T10407-



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## Removing



### Caution

***Do not run engine or tow vehicle with mechatronic unit for dual clutch gearbox - J743- removed or when there is no gear oil in the gearbox.***



### Note

- ◆ ⇒ ["5 Repair instructions", page 14](#)
- ◆ ⇒ ["5.2 Rules for cleanliness", page 16](#)
- ◆ Observe notes on dual clutch gearbox 0AM ⇒ [page 14](#) .
- ◆ *The clutch is self-adjusting. Shocks can affect the adjusting mechanism. Even if the mechatronic unit has been removed, suddenly pulling out the assembly lever - T10407- from under the engaging levers can have a negative effect on the adjusting mechanism.*
- ◆ *A new mechatronic unit is supplied with the correct oil filling. Do not drain oil.*
- ◆ *After removal, the used mechatronic unit is sent back with its oil in. The mechatronic unit remains filled with oil.*

- Remove noise insulation ⇒ General body repairs, exterior; Rep. gr. 50 .

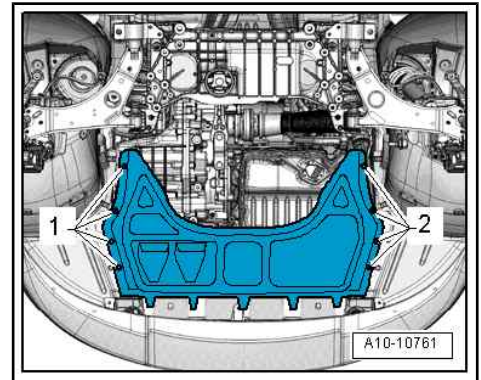
 **Note**

*Depending on version, different types of noise insulation may be fitted.*

 **Note**

- ◆ *The vehicle diagnostic tester moves all gear actuators into "neutral" position.*
- ◆ *In this position, insert assembly lever - T10407- between engaging lever and gearbox housing. This makes it possible to remove load from the plungers of the mechatronic unit so that they can be removed by hand from the retainers on the engaging levers.*

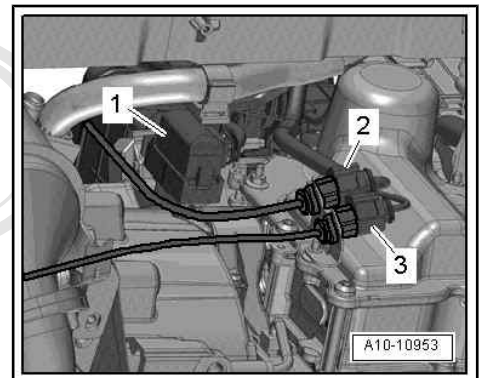
- Move selector lever to position "P".
- Connect vehicle diagnostic tester and switch on ignition.
- Select the following menu items:
  - ◆ **Guided Functions**
  - ◆ **02 - 7-speed dual clutch gearbox**
  - ◆ **Basic setting neutral**
- Switch off ignition.
- Vehicles with 1.8 ltr. TFSI engine: Disconnect coolant hose from radiator ⇒ Engine, mechanics; Rep. gr. 19 .



**Caution**

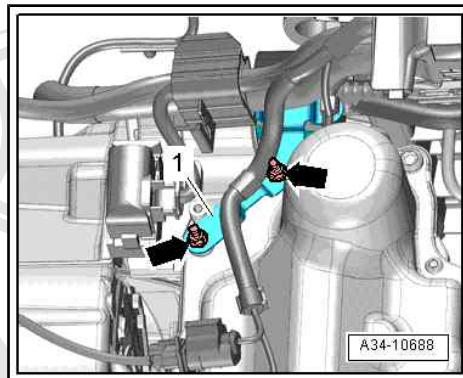
***Never touch the contacts in the gearbox connector with your hands. Static discharge could cause irreparable damage to the control unit and, consequently, the mechatronic unit.***

- Touch a suitable earthed object with your hand (without gloves) to discharge any static electricity.
- Release and unplug electrical connector -1- for dual clutch gearbox.
- Take electrical connector -3- out of bracket.
- Remove bracket and tie up together with connectors -2- and -3-.



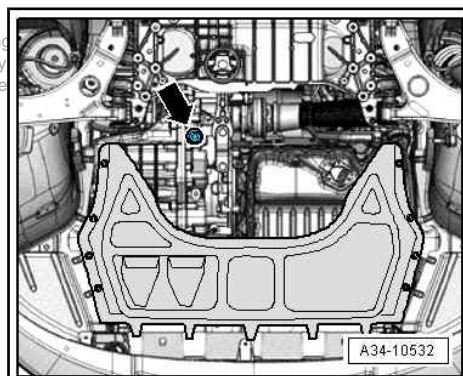
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- Remove nuts -arrows- and push bracket -1- to one side.

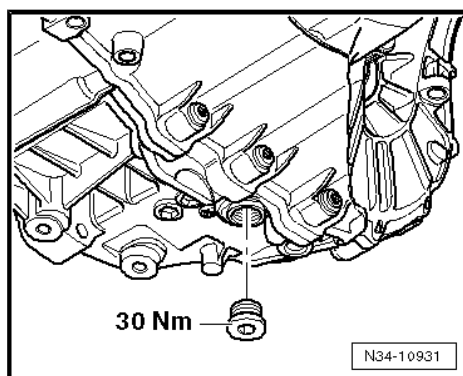


- Remove oil drain plug -arrow- from gearbox.

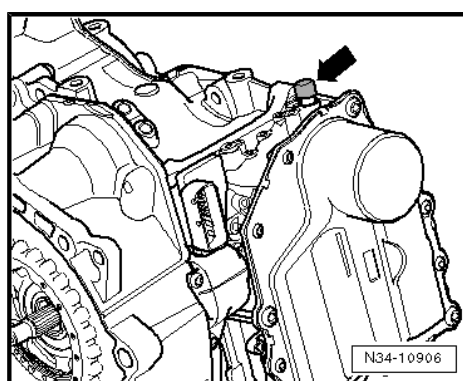
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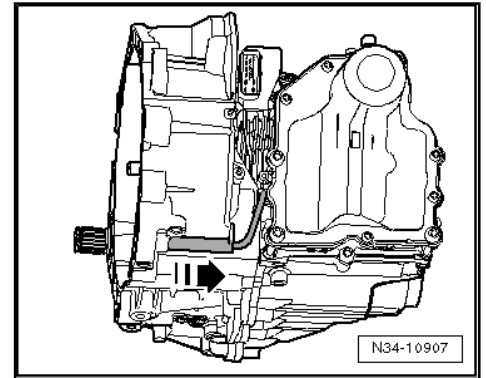
- Allow oil to drain off, then retighten oil drain plug.



- Remove cap from breather opening and seal off with a plug from engine bung set - VAS 6122- to prevent oil from escaping.



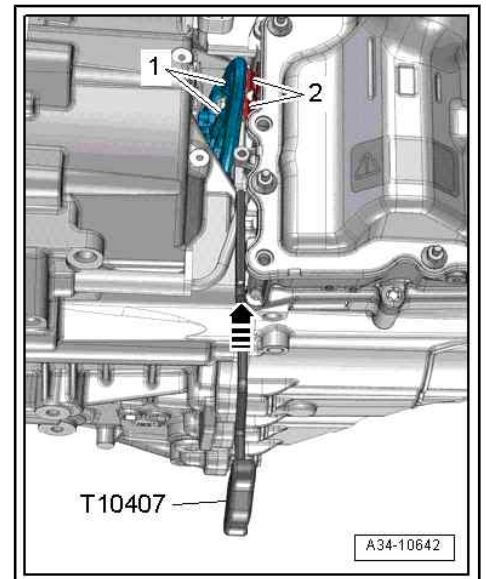
- Carefully pull gearbox input speed sender - G182- out of gear-box.



 **Note**

*The following step is necessary in order to lift the two engaging levers of the dual clutch away from the plungers of the mechatronic unit. Otherwise, the levers will jam the mechatronic unit at the plungers so that it cannot be removed.*

- Insert assembly lever - T10407- below plungers -2- between gearbox housing and the two engaging levers -1- -arrow-, as shown in illustration.

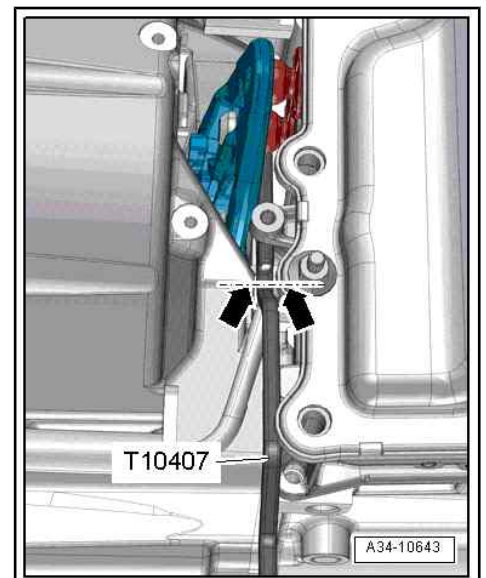


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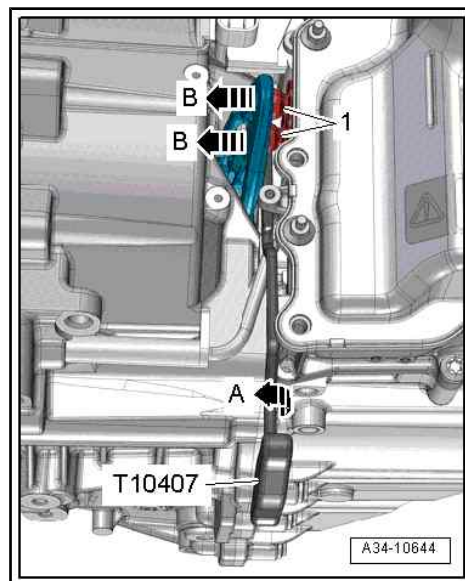
- Only slide in assembly lever - T10407- until groove on assembly lever is in line with rib on housing -arrows-, as shown in illustration. Do not slide it in all the way.

 **Note**

*The back of the assembly lever must make contact with the gear-box housing.*



- Now rotate assembly lever - T10407 - 90° anti-clockwise about its own axis -arrow A- so as to lift engaging levers away from plungers -1- -arrow B-.



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- If necessary, press the assembly lever - T10407- against the gearbox housing with a screwdriver to prevent it from slipping out when it is turned.

 **Note**

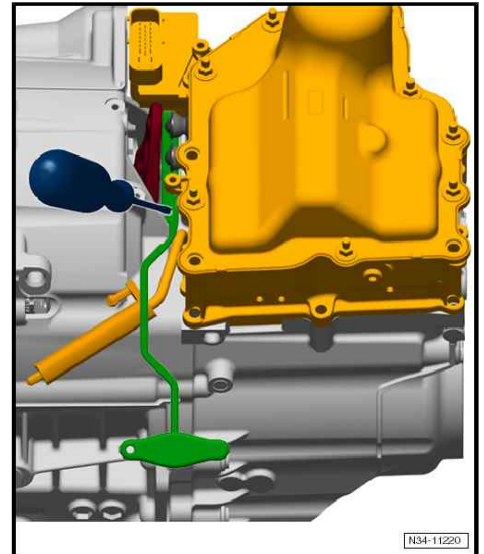
- ◆ *The assembly lever - T10407- remains inserted between the engaging levers and the gearbox housing while removing and installing the mechatronic unit.*
- ◆ *If necessary, press the assembly lever - T10407- against the gearbox housing.*



**Caution**

***Risk of irreparable damage to gearbox components.***

- ◆ ***Before touching or removing the mechatronic unit for dual clutch gearbox - J743- , always discharge any static electricity by touching an earthed object with your hand.***
- ◆ ***Never touch the contacts in the gearbox connector with your hands. Static discharge could cause irreparable damage to the control unit and, consequently, the mechatronic unit.***



- Touch vehicle earth with your hand (without gloves) to discharge any static electricity.

 **Note**

*Make sure that the screwdriver used to support the assembly lever - T10407- does not jam against the mechatronic unit.*



**Caution**

***Risk of damage to mechatronic unit for dual clutch gearbox - J743- !***

- ◆ ***Do not loosen bolts securing cover on mechatronic unit for dual clutch gearbox - J743- .***
- ◆ ***Make sure that no oil escapes through the breather hole when placing down mechatronic unit for dual clutch gearbox - J743- after removal.***
- ◆ ***Oil that has escaped cannot be refilled!***

 **Note**

*The mechatronic unit is returned for reconditioning complete with oil filling.*

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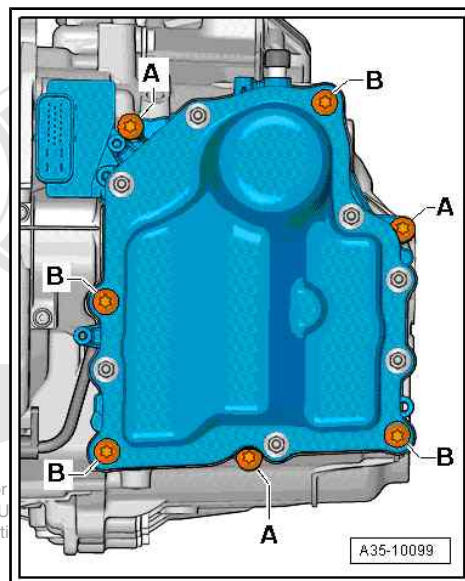
- Remove bolts -B- in diagonal sequence.
- Remove bolts -A- in diagonal sequence.
- Detach mechatronic unit from gearbox.



### Caution

**Risk of damage to mechatronic unit for dual clutch gearbox - J743- .**

- ◆ *In some cases it may not be possible to remove the mechatronic unit.*
- ◆ *This can happen if the gear actuator at the top left of the mechatronic unit is stuck.*
- ◆ *Do not attempt to remove the mechatronic unit by force.*
- ◆ *The mechatronic unit must be first brought into the correct position for removal by hand ➔ [page 140](#).*



### Installing

- Tightening torques  
➔ [Fig. "Mechatronic unit for dual clutch gearbox -J743- : tightening torque and sequence"](#), page 129



### Note

*A new mechatronic unit is supplied with the correct oil filling.*

- Seal off breather opening of mechatronic unit with a cap from engine bung set - VAS 6122- to prevent oil from escaping.



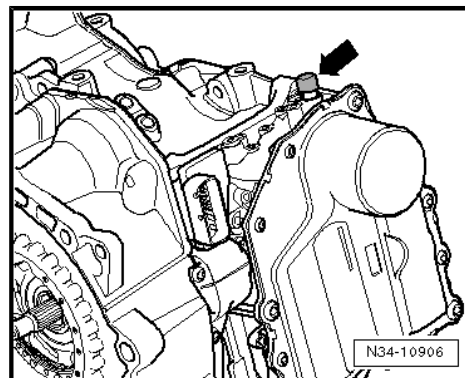
### Note

- ◆ *Make sure that all selector forks are in centre position before installing mechatronic unit for dual clutch gearbox - J743- .*
- ◆ *Centre position is position -N- (neutral) in the illustration below.*
- ◆ *No gear is engaged in this position, the gearbox is in neutral.*

- First check each of the 4 selector forks by hand.

Each selector fork has 3 positions:

- ◆ Gear engaged
- ◆ Neutral -N-
- ◆ Gear engaged
- Move the 4 selector forks once into each position -arrows-, one after the other.
- Then shift all selector forks back into »centre position«, position -N-.

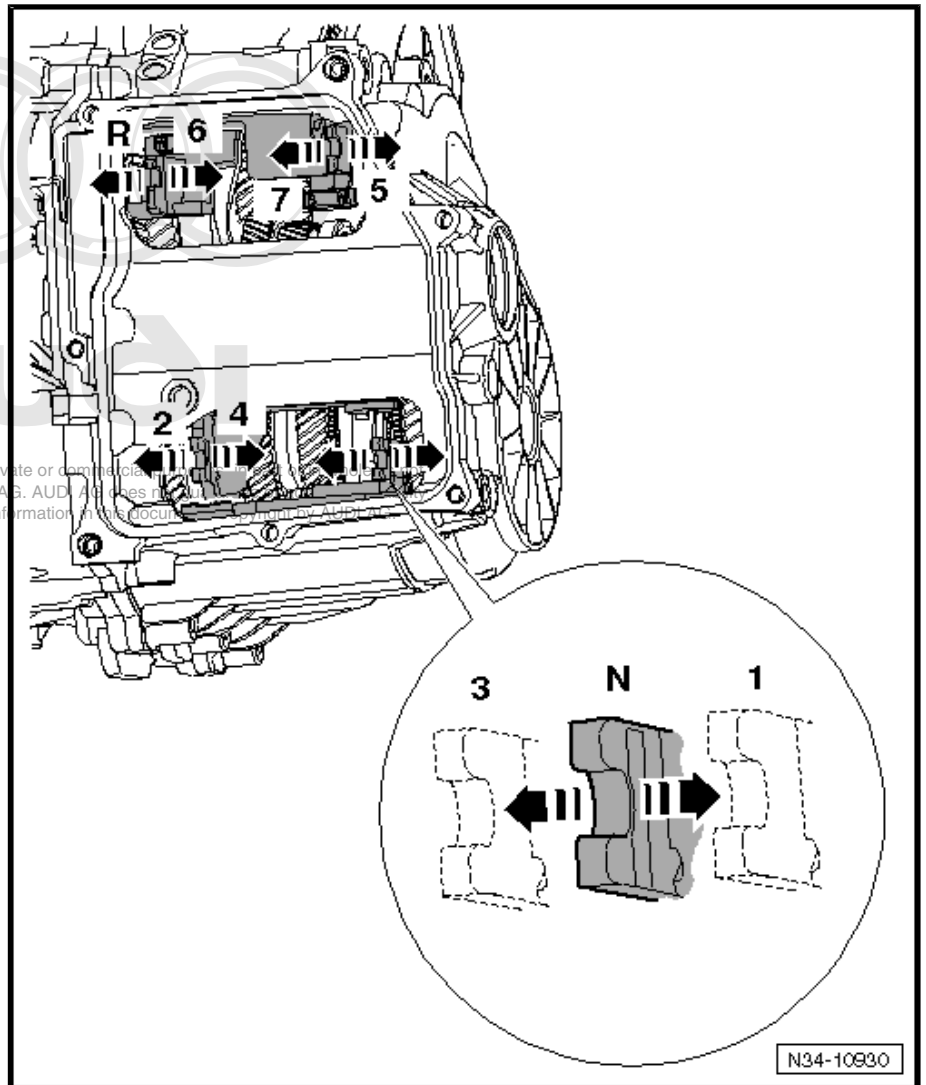


### Note

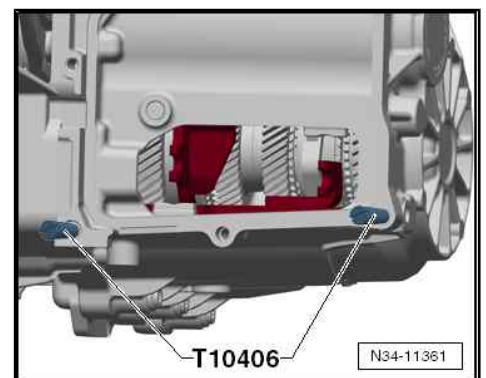
*Turn one of the wheels slightly to make it easier to move the selector forks.*

- N - Neutral
- R - Reverse gear
- 1 - First gear
- 2 - Second gear
- 3 - Third gear
- 4 - Fourth gear
- 5 - Fifth gear
- 6 - Sixth gear
- 7 - Seventh gear

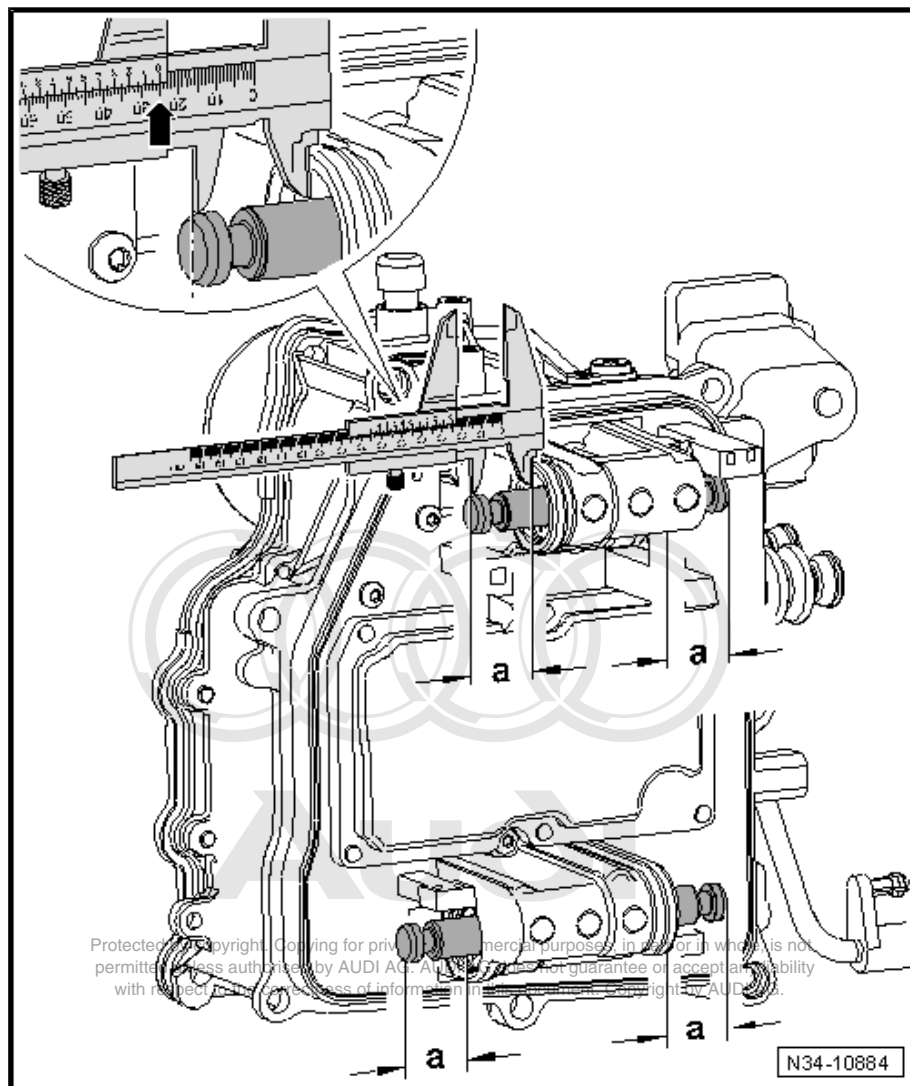
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- Clean sealing surface on which mechatronic unit is to be installed.
- Screw in guide bolts - T10406- hand-tight.



Adjusting gear actuators:



### Caution

***Risk of damage to mechatronic unit for dual clutch gearbox - J743-.***

***Do not apply any pressure to the sensors when levering out the plungers.***

- Adjust the four gear actuators on the reverse side of mechatronic unit for dual clutch gearbox - J743- to the specified positions.
- Specified position: -a- = 25 mm
- Clean sealing surface on mechatronic unit.
- The gasket positioned round the mechatronic unit for dual clutch gearbox - J743- must be properly seated in the groove all round.

- Put on mechatronic unit.
- Tighten bolts for mechatronic unit ➔ [page 129](#) .



### Caution

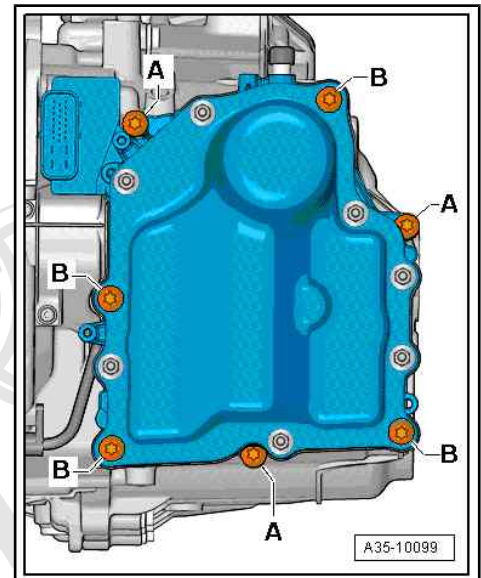
*The clutches can be damaged.*

- ◆ *If the clutch engaging levers contact the clutch actuators of the mechatronic unit abruptly, this can move the actuators out of position and activate the clutch self-adjustment. The status prior to self-adjustment cannot be recovered.*

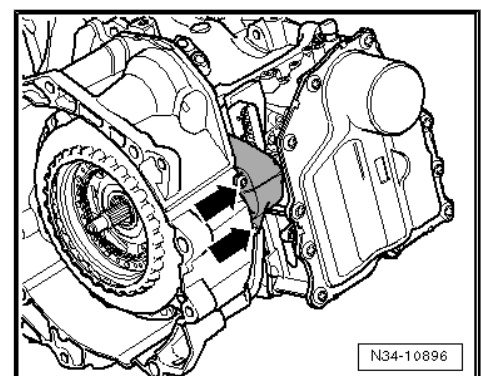
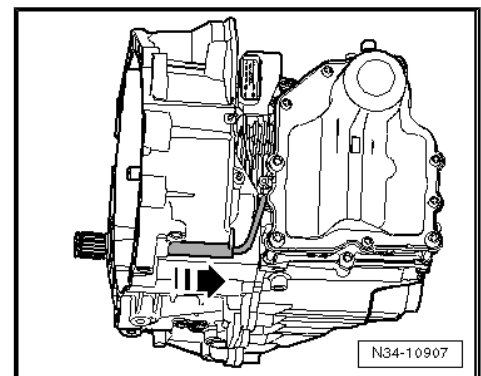
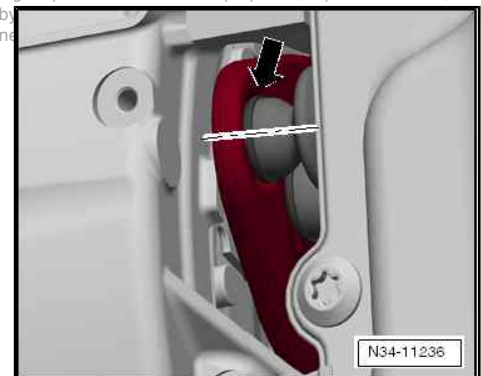
- Both clutch actuators must be properly engaged in the retainers on the clutch engaging levers.
  - The rubber grommets of the clutch actuators must not be damaged.
  - The rubber grommets must seal off at the mechatronic unit properly.
- Turn assembly lever - T10407- slowly and carefully in clock-wise direction and remove.
  - The plungers should slide slowly into the retainers.
  - Pull out plungers by hand until they are seated correctly in retainers.

- Install gearbox input speed sender - G182- in opposite direction of -arrow-.

- Fit cover.



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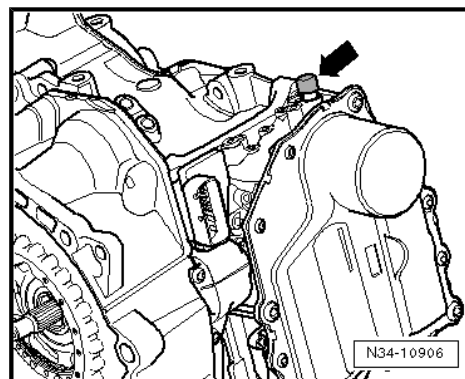


- Remove sealing plug from breather opening of mechatronic unit and fit breather cap -arrow-.



#### Note

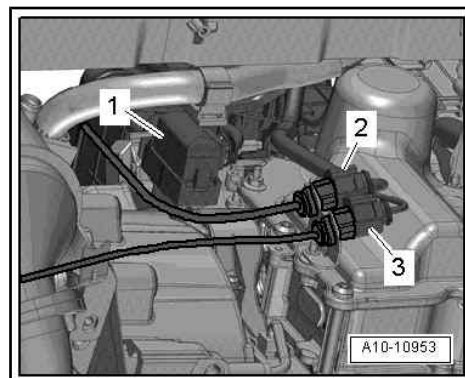
- ◆ If the mechatronic unit is being renewed, fit the sealing plug on the old mechatronic unit so it remains oil-tight when it is returned for reconditioning.
- ◆ Do not drain oil out of the old mechatronic unit.



#### Caution

**Risk of damage to gearbox components.**

- ◆ **Never touch the contacts in the gearbox connector with your hands. Static discharge could cause irreparable damage to the control unit and, consequently, the mechatronic unit.**



- Touch a suitable earthed object with your hand (without gloves) to discharge any static electricity.
- Attach electrical connector -1- for dual clutch gearbox and lock.
- Install bracket with connectors -2- and -3-.

Remaining assembly is carried out in reverse sequence; note the following:

- Fill up gear oil ⇒ [page 124](#) .
- Vehicles with 1.8 ltr. TFSI engine: Top up coolant (if drained previously) ⇒ Engine, mechanics; Rep. gr. 19 .
- Check adjustment of selector lever cable and adjust if necessary ⇒ [page 26](#) .
- After installing gearbox, run **Basic setting complete** function in **Guided Functions** ⇒ Vehicle diagnostic tester.

### 13.3 Moving mechatronic unit for dual clutch gearbox - J743- into removal position by hand



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*The mechatronic unit can be set to the removal position by hand; this should only be done if it is not possible to move it to this position with the vehicle diagnostic tester.*

**Moving mechatronic unit for dual clutch gearbox - J743- into removal position by hand; refer to Workshop Manual "Servicing 7-speed dual clutch gearbox 0AM (S tronic)" ⇒ Servicing 7-speed dual clutch gearbox 0AM (S tronic); Rep. gr. 34 ; Mechatronic unit; Moving mechatronic unit for dual clutch gearbox - J743- into removal position by hand**

## 35 – Gears, shafts

### 1 Parking lock

Removing and installing cover for parking lock; refer to Workshop Manual "Servicing 7-speed dual clutch gearbox 0AM (S tronic)"  
⇒ Servicing 7-speed dual clutch gearbox 0AM (S tronic); Rep. gr. 35 ; Parking lock; Removing and installing cover for parking lock

Removing and installing parking lock; refer to Workshop Manual "Servicing 7-speed dual clutch gearbox 0AM (S tronic)" ⇒ Servicing 7-speed dual clutch gearbox 0AM (S tronic); Rep. gr. 35 ; Parking lock; Removing and installing parking lock

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## 39 – Final drive - differential

### 1 Oil seals

⇒ [“1.1 Overview of fitting locations - oil seals”, page 142](#)

#### 1.1 Overview of fitting locations - oil seals

##### 1 - Oil seal for inner input shaft

- ❑ Renewing oil seal for inner input shaft; refer to Workshop Manual “Servicing 7-speed dual clutch gearbox 0AM (S tronic)” ⇒ Servicing 7-speed dual clutch gearbox 0AM (S tronic); Rep. gr. 30 ; Clutch; Renewing oil seal for inner input shaft

##### 2 - Input shaft oil seal

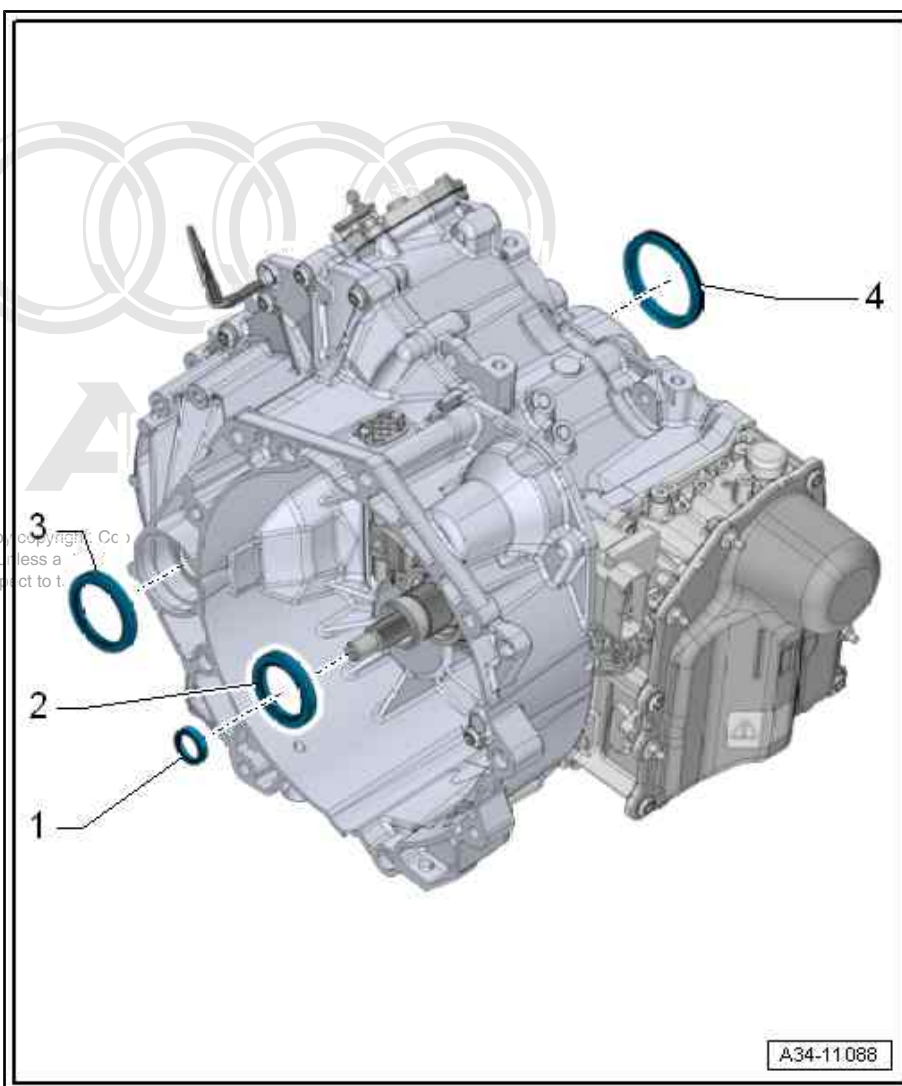
- ❑ Renewing oil seal for input shaft; refer to Workshop Manual “Servicing 7-speed dual clutch gearbox 0AM (S tronic)” ⇒ Servicing 7-speed dual clutch gearbox 0AM (S tronic); Rep. gr. 30 ; Clutch; Renewing oil seal for input shaft

##### 3 - Oil seal (right-side)

- ❑ ⇒ [“2.4 Renewing oil seal for right stub shaft”, page 149](#)
- ❑ ⇒ [“3.4 Renewing flange shaft oil seal \(right-side\)”, page 155](#)

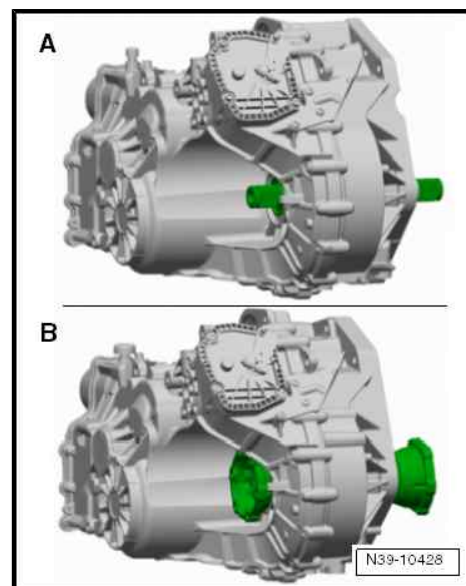
##### 4 - Oil seal (left-side)

- ❑ ⇒ [“2.2 Removing and installing stub shaft \(right-side\)”, page 145](#)
- ❑ ⇒ [“3.3 Renewing flange shaft oil seal \(left-side\)”, page 154](#)



## 2 Exploded view - stub shafts and oil seals

Either stub shafts -A- or flange shafts -B- are installed on the gearbox. For description of flange shafts refer to  
⇒ [“3 Exploded view - flange shafts and oil seals”, page 151](#) .



### 1 - Stub shaft oil seal (right-side)

- ☐ ⇒ [“2.4 Renewing oil seal for right stub shaft”, page 149](#)

### 2 - Stub shaft (right-side)

- ☐ ⇒ [“2.2 Removing and installing stub shaft \(right-side\)”, page 145](#)

### 3 - O-ring

- ☐ Renew

### 4 - Circlip

- ☐ Renew; for description refer to ⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40

### 5 - Countersunk bolt

- ☐ 30 Nm
- ☐ Renew

### 6 - Stub shaft oil seal (left-side)

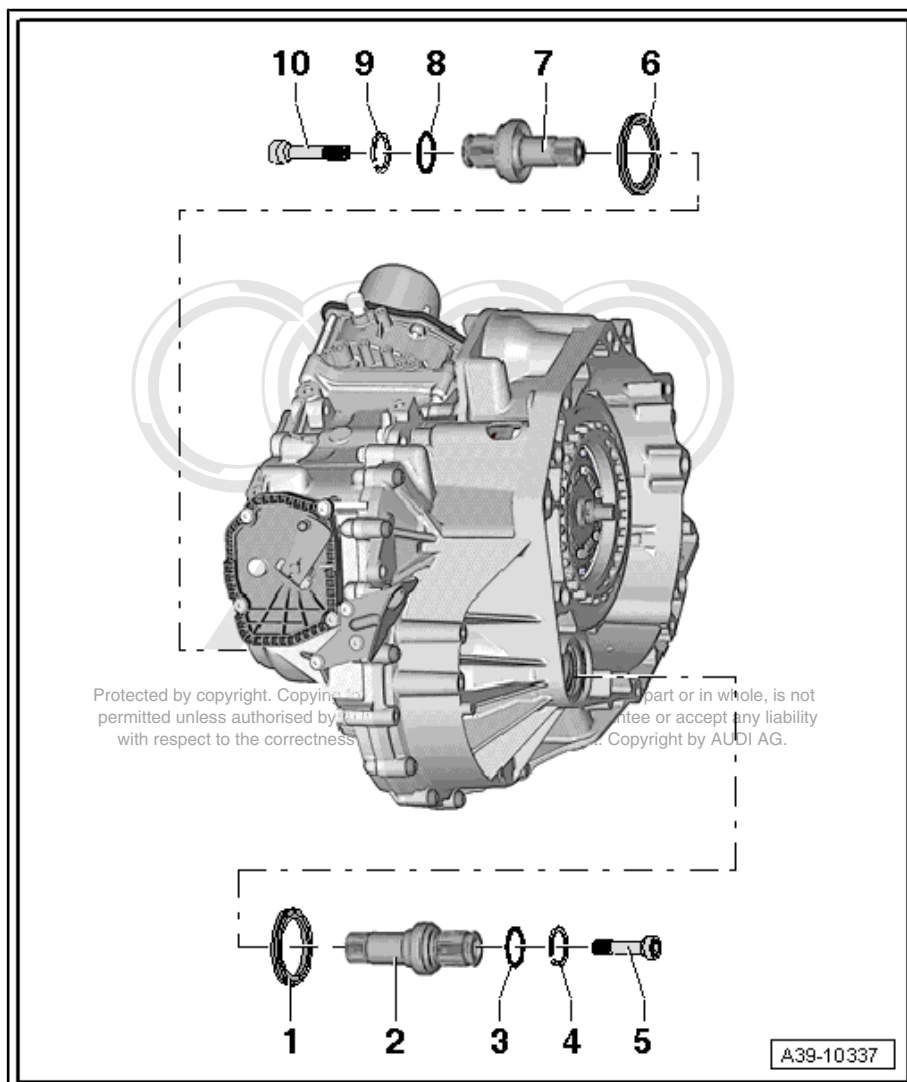
- ☐ ⇒ [“2.3 Renewing stub shaft oil seal \(left-side\)”, page 147](#)

### 7 - Stub shaft (left-side)

- ☐ ⇒ [“2.1 Removing and installing stub shaft \(left-side\)”, page 144](#)

### 8 - O-ring

- ☐ Renew





## 9 - Circlip

- ☐ Renew; for description refer to ➔ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40

## 10 - Countersunk bolt

- ☐ 30 Nm
- ☐ Renew

## 2.1 Removing and installing stub shaft (left-side)

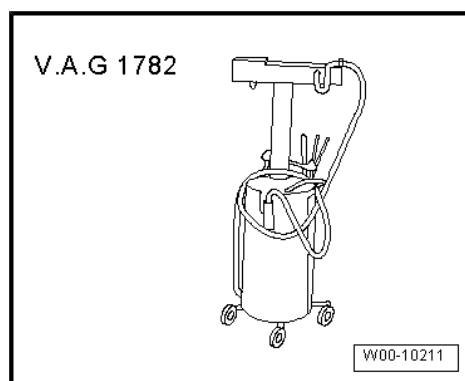
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### Special tools and workshop equipment required

- ◆ Hexagon key - V.A.G 1669- or socket and extended bit - T10107 A-



- ◆ Used oil collection and extraction unit - V.A.G 1782-



### Removing



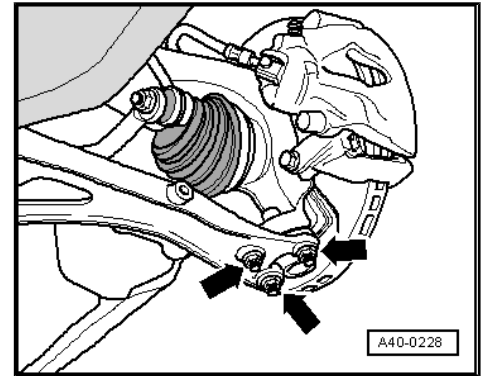
#### Note

- ◆ ➔ *["5 Repair instructions", page 14](#)*
  - ◆ ➔ *["5.2 Rules for cleanliness", page 16](#)*
  - ◆ *Do not remove both drive shafts from the gearbox together. One drive shaft must remain in place so the opposite wheel can be held in position when fitting the bolts into the stub shafts.*
  - ◆ *Do not loosen both securing bolts in the left and right stub shafts at the same time. If the differential bevel gears turn it is very difficult to reinstall the bolts.*
- Move selector lever to position "P".

- Remove nuts -arrows- securing swivel joint (left-side).
- Disengage swivel joint from wishbone.

 **Note**

- ◆ *The bolt securing the drive shaft at the wheel end does not have to be removed.*
- ◆ *The drive shaft does not have to be removed; it is sufficient to tie it up.*
- ◆ *The drive shaft must not be left suspended under its own weight; excessive bending will damage the inner joint.*

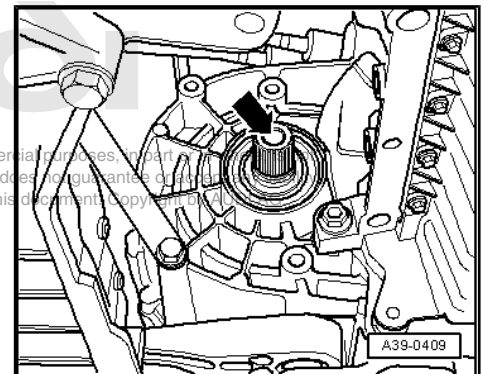


- Use assembly lever to press drive shaft (left-side) off gearbox  
⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .
- Tie up drive shaft as high as possible. Do not damage paint on drive shaft.
- Place used oil collection and extraction unit - V.A.G 1782- below gearbox.
- Use hexagon key - V.A.G 1669- to remove bolt -arrow- in stub shaft.

 **Note**

*Hold opposite wheel in position to **loosen bolt**.*

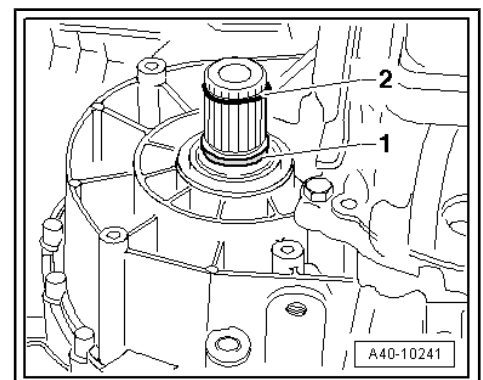
- Pull out stub shaft.



## Installing

Installation is carried out in reverse sequence; note the following:

- Tightening torques ⇒ [page 143](#)
- Renew O-ring -1- on stub shaft.
- Renew circlip -2- on stub shaft ⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .
- Press drive shaft onto stub shaft of gearbox until circlip snaps into place ⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .
- Renew gear oil ⇒ [page 124](#) .



 **Note**

*The gear oil must be renewed; the correct gear oil level cannot be achieved otherwise.*

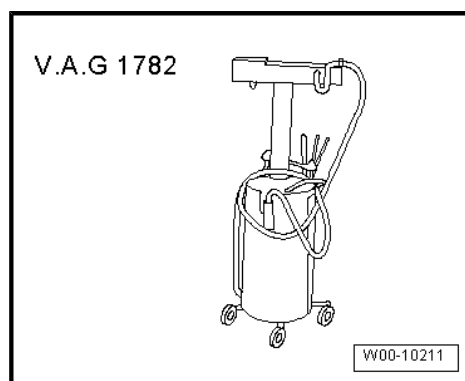
## 2.2 Removing and installing stub shaft (right-side)

Special tools and workshop equipment required

- ◆ Hexagon key - V.A.G 1669- or socket and extended bit - T10107 A-



- ◆ Used oil collection and extraction unit - V.A.G 1782-



## Removing

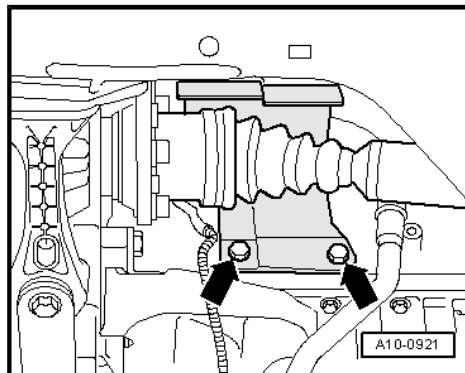


### Note

- ◆ ➔ [“5 Repair instructions”, page 14](#)
- ◆ ➔ [“5.2 Rules for cleanliness”, page 16](#)
- ◆ *Do not remove both drive shafts from the gearbox together. One drive shaft must remain in place so the opposite wheel can be held in position when fitting the bolts into the stub shafts.*
- ◆ *Do not loosen both securing bolts in the left and right stub shafts at the same time. If the differential bevel gears turn it is very difficult to reinstall the bolts.*

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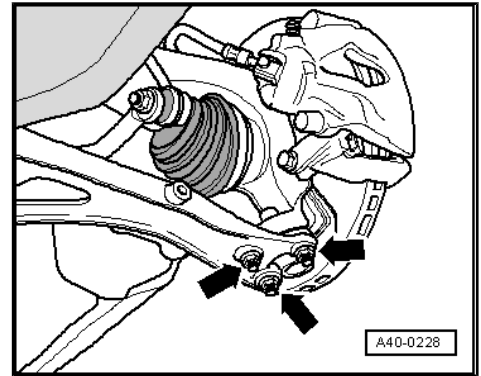
- Move selector lever to position “P”.
- If fitted, detach heat shield for drive shaft from engine -arrows-.



- Remove nuts -arrows- securing swivel joint (right-side).
- Disengage swivel joint from wishbone.

 **Note**

- ◆ *The bolt securing the drive shaft at the wheel end does not have to be removed.*
- ◆ *The drive shaft does not have to be removed; it is sufficient to tie it up.*
- ◆ *The drive shaft must not be left suspended under its own weight; excessive bending will damage the inner joint.*

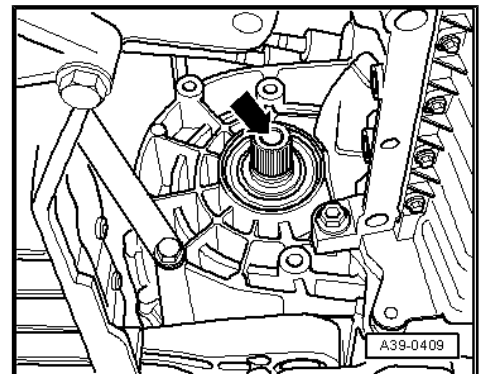


- Use assembly lever to press drive shaft (right-side) off gearbox  
⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .
- Tie up drive shaft as high as possible. Do not damage paint on drive shaft.
- Place used oil collection and extraction unit - V.A.G 1782- below gearbox.
- Use hexagon key - V.A.G 1669- to remove bolt -arrow- in stub shaft.

 **Note**

*Hold opposite wheel in position to loosen bolt.*

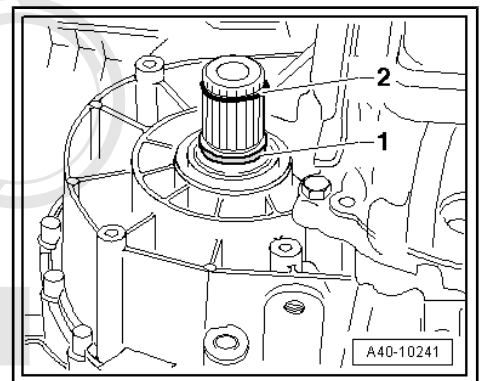
- Pull out stub shaft (right-side).



## Installing

Installation is carried out in reverse sequence; note the following:

- Tightening torques  
⇒ ["2 Exploded view - stub shafts and oil seals", page 143](#)
- Renew O-ring -1- on stub shaft.
- Renew circlip -2- on stub shaft; for description refer to ⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .
- Press drive shaft onto stub shaft of gearbox until circlip snaps into place ⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .
- Renew gear oil ⇒ [page 124](#)



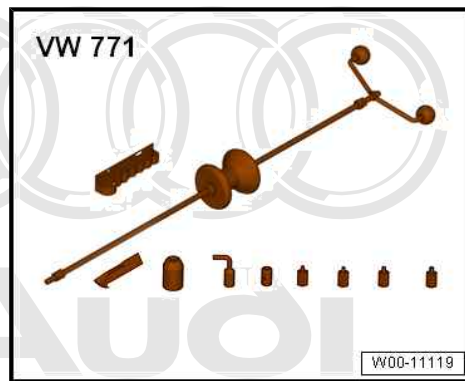
 **Note**

*The gear oil must be renewed; the correct gear oil level cannot be achieved otherwise.*

## 2.3 Renewing stub shaft oil seal (left-side)

Special tools and workshop equipment required

◆ Multi-purpose tool - VW 771-



◆ Thrust piece - 3305-



◆ Sealing grease ⇒ Electronic parts catalogue

Procedure



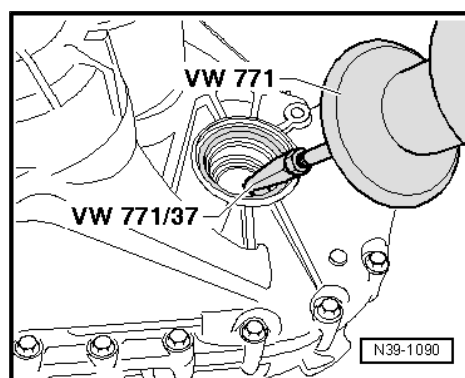
Note

- ◆ ⇒ ["5 Repair instructions", page 14](#)
- ◆ ⇒ ["5.2 Rules for cleanliness", page 16](#)
- Remove stub shaft (left-side) ⇒ [page 144](#) .
- Pull out stub shaft oil seal using multipurpose tool - VW 771- and extractor tool - VW 771/37- .

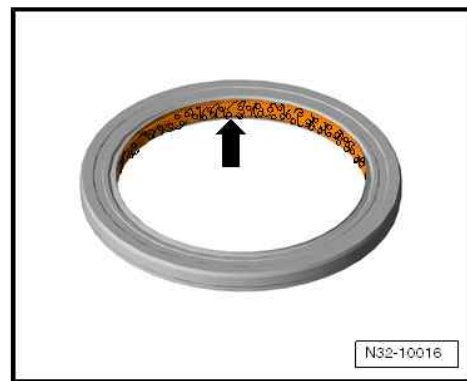


Note

Oil seal can also be removed using extractor tool - T20143- .



- Pack space between sealing lip and dust lip -arrow- half full with sealing grease ⇒ Electronic parts catalogue .



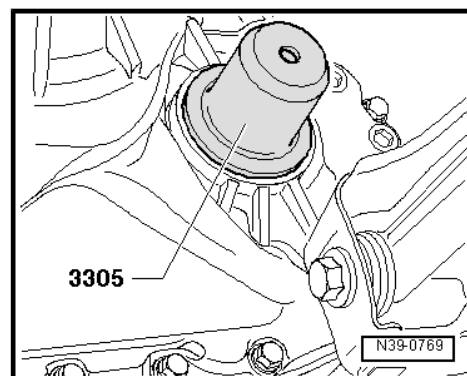
- Drive in new oil seal onto stop (take care to keep oil seal straight).



#### Note

*If required, a new dust ring can be pressed onto stub shaft using drift sleeve - 40 - 20- . Do not use a hammer.*

- Install stub shaft (left-side) ⇒ [page 144](#) .



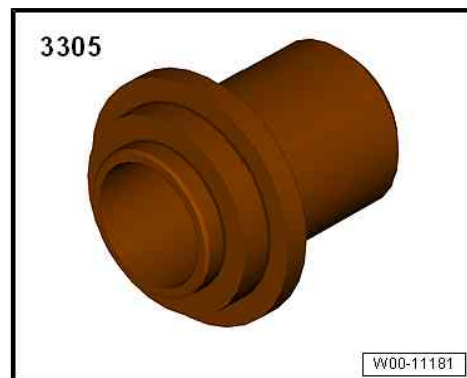
#### Note

*Renew gear oil after installing stub shaft. The correct gear oil level cannot be achieved otherwise.*

## 2.4 Renewing oil seal for right stub shaft

Special tools and workshop equipment required

- ◆ Thrust piece - 3305-



- ◆ Sealing grease ⇒ Electronic parts catalogue

#### Procedure



#### Note

- ◆ ⇒ ["5 Repair instructions", page 14](#)
- ◆ ⇒ ["5.2 Rules for cleanliness", page 16](#)

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- Remove stub shaft (right-side) ⇒ [page 145](#) .
- Pry out oil seal using assembly lever.

- Pack space between sealing lip and dust lip -arrow- half full with sealing grease ⇒ Electronic parts catalogue .



### Note

- ◆ Do not drive in thrust piece - 3305- as far as stop!
- ◆ The oil seal contacts the stop in the gearbox earlier than the thrust piece - 3305- .
- ◆ It is therefore not possible to drive in thrust piece - 3305- as far as the stop.

- Drive in new oil seal onto stop (take care to keep oil seal straight).



### Note

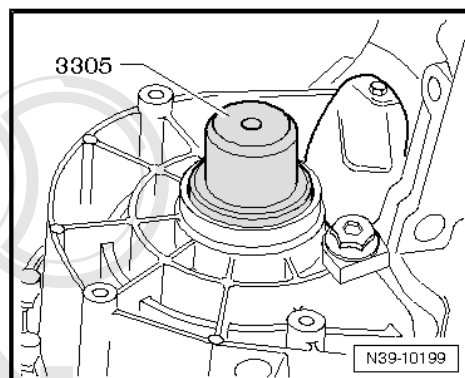
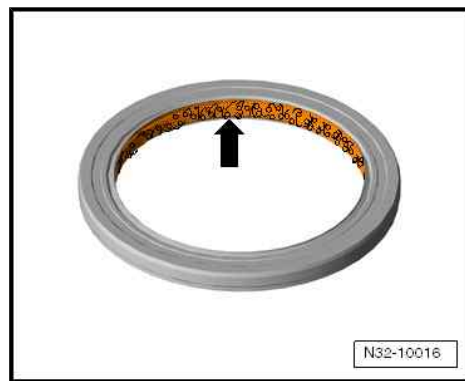
If required, a new dust ring can be pressed onto stub shaft using tube - 2010- . Do not use a hammer.

- Install stub shaft (right-side) ⇒ [page 145](#) .



### Note

Renew gear oil after installing stub shaft. The correct gear oil level cannot be achieved otherwise.



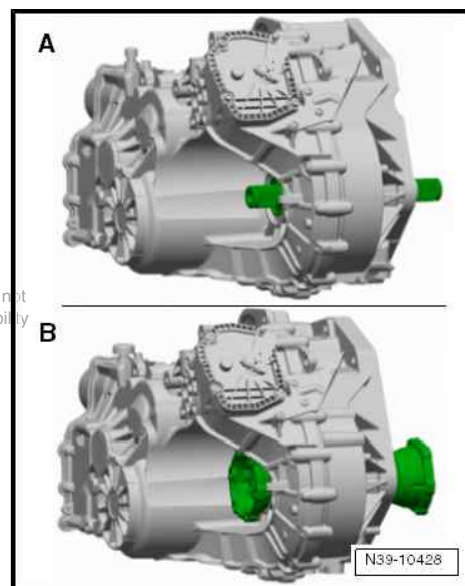
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### 3 Exploded view - flange shafts and oil seals

Either flange shafts -B- or stub shafts -A- are installed on the gearbox. For description of stub shafts refer to  
⇒ [“2 Exploded view - stub shafts and oil seals”, page 143](#).



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#### 1 - Bolt

- ☐ 30 Nm
- ☐ Renew

#### 2 - Flange shaft (right-side) with spring

- ☐ Removing and installing  
⇒ [page 153](#)

#### 3 - Flange shaft oil seal (right-side)

- ☐ Renewing ⇒ [page 155](#)

#### 4 - Bolt

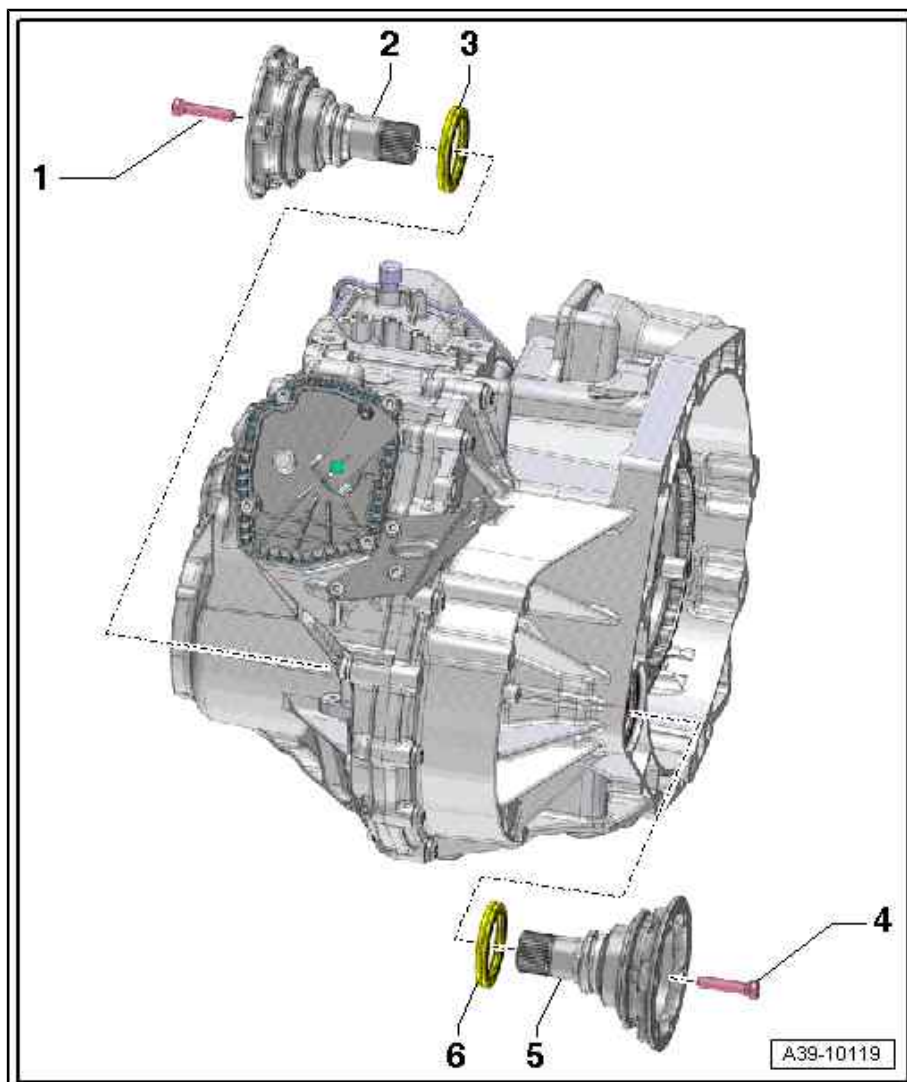
- ☐ 30 Nm
- ☐ Renew

#### 5 - Flange shaft (left-side) with spring

- ☐ Removing and installing  
⇒ [page 152](#)

#### 6 - Flange shaft oil seal (left-side)

- ☐ Renewing ⇒ [page 154](#)



### 3.1 Removing and installing flange shaft (left-side)

#### Removing



#### Note

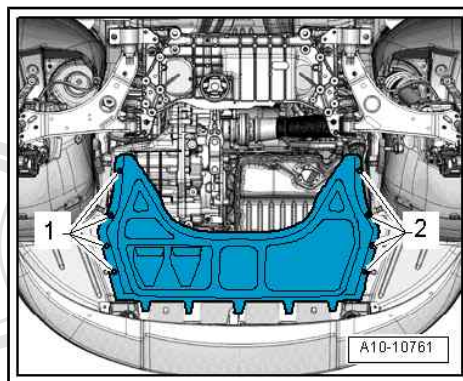
- ♦ ⇒ ["5 Repair instructions", page 14](#)
- ♦ ⇒ ["5.2 Rules for cleanliness", page 16](#)

- Remove front left wheel.
- Remove noise insulation ⇒ General body repairs, exterior;  
Rep. gr. 50 .



#### Note

*Depending on version, different types of noise insulation may be fitted.*



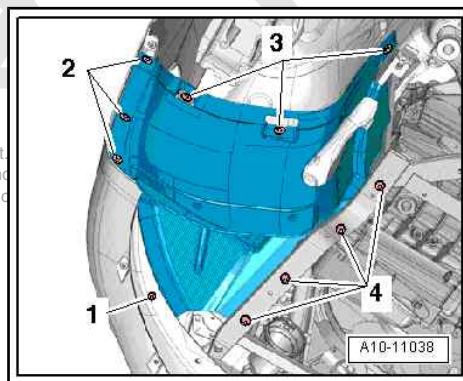
- Remove front section of front wheel housing liner (left-side) ⇒  
Rep. gr. 66 .



#### Note

*Depending on version, different types of wheel housing liner may be fitted.*

- Unbolt drive shaft (left-side) from flange shaft on gearbox and tie up to body.



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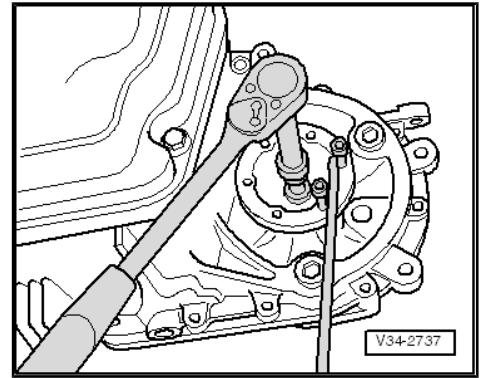
- Remove bolt -arrow- securing flange shaft (left-side). To do so, screw two bolts into flange and counterhold flange shaft with suitable lever.
- Pull out flange shaft together with spring, thrust washer and tapered ring.

#### Installing

- Tightening torque  
⇒ [“3 Exploded view - flange shafts and oil seals”, page 151](#)

Installation is carried out in reverse sequence; note the following:

- Push flange shaft in against spring pressure and secure with bolt.
- Install drive shaft (left-side) ⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .
- Renew gear oil ⇒ [page 124](#) .



#### Note

*The gear oil must be renewed; the correct gear oil level cannot be achieved otherwise.*

## 3.2 Removing and installing flange shaft (right-side)

### Removing



#### Note

- ◆ ⇒ [“5 Repair instructions”, page 14](#)
- ◆ ⇒ [“5.2 Rules for cleanliness”, page 16](#)

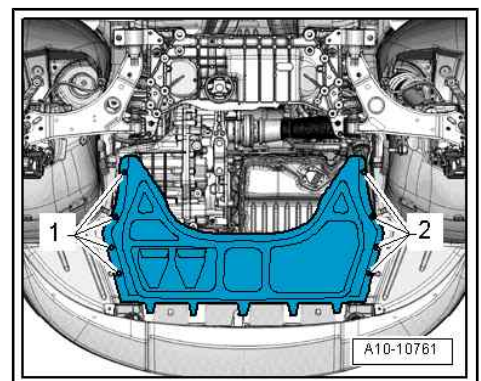
- Remove front right wheel.
- Remove noise insulation ⇒ General body repairs, exterior; Rep. gr. 50 .



#### Note

*Depending on version, different types of noise insulation may be fitted.*

- Turn steering to full right lock.
- Unbolt drive shaft (right-side) from flange shaft on gearbox and tie up to body.



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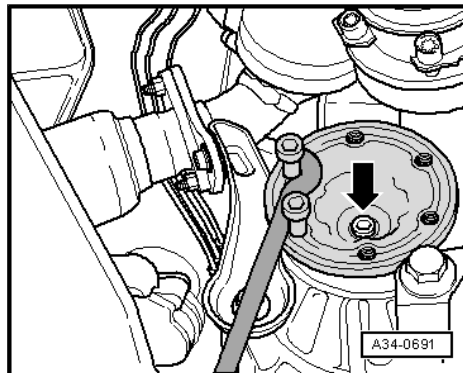
- Remove bolt securing flange shaft (right-side). To do so, screw two bolts into flange and counterhold flange shaft with suitable lever.
- Pull out flange shaft together with spring, thrust washer and tapered ring.

#### Installing

- Tightening torque ⇒ [page 151](#)

Installation is carried out in reverse sequence; note the following:

- Push flange shaft in against spring pressure and secure with bolt.
- Install drive shaft (right-side) ⇒ Running gear, front-wheel drive and four-wheel drive; Rep. gr. 40 .
- Renew gear oil ⇒ [page 124](#) .



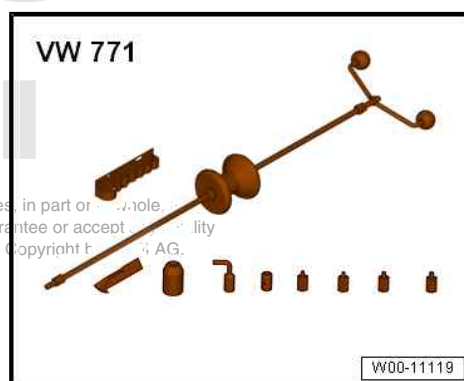
#### Note

*The gear oil must be renewed; the correct gear oil level cannot be achieved otherwise.*

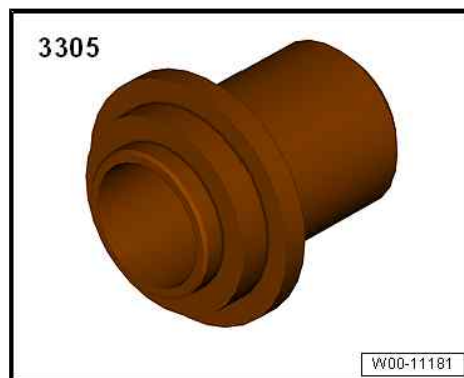
### 3.3 Renewing flange shaft oil seal (left-side)

#### Special tools and workshop equipment required

- ◆ Multi-purpose tool - VW 771-



- ◆ Thrust piece - 3305-



- ◆ Sealing grease ⇒ Electronic parts catalogue

## Procedure



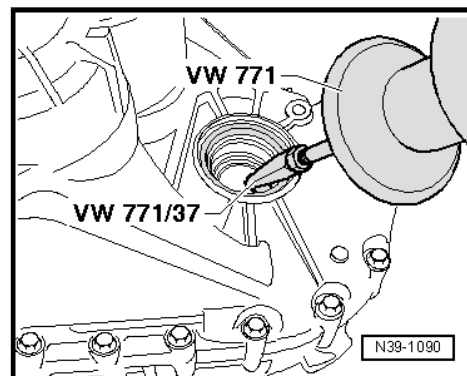
### Note

- ◆ ⇒ *"5 Repair instructions", page 14*
- ◆ ⇒ *"5.2 Rules for cleanliness", page 16*
- Remove flange shaft (left-side) ⇒ [page 152](#) .
- Pull out oil seal using multi-purpose tool - VW 771- and extractor tool - VW 771/37- .

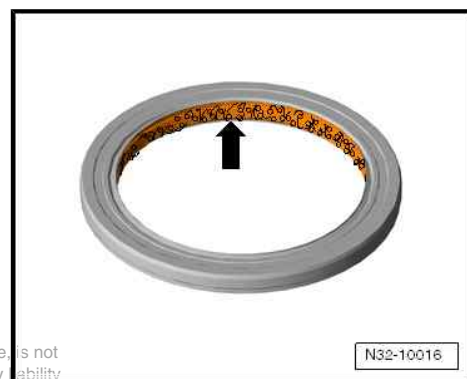


### Note

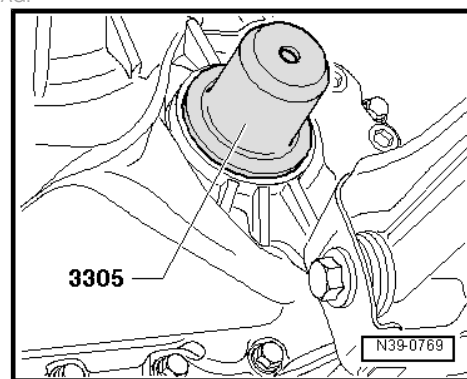
*Oil seal can also be removed using extractor tool - T20143- .*



- Pack space between sealing lip and dust lip -arrow- half full with sealing grease ⇒ *Electronic parts catalogue* .



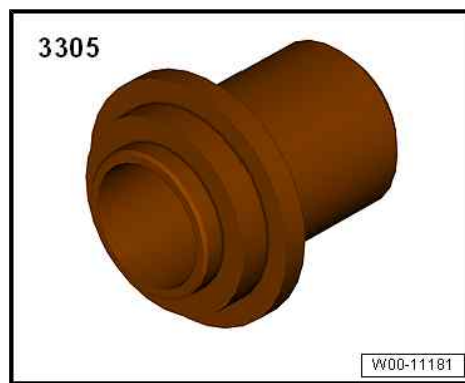
- Drive in new oil seal onto stop (take care to keep oil seal straight).
- Install flange shaft (left-side) ⇒ [page 152](#) .



## 3.4 Renewing flange shaft oil seal (right-side)

Special tools and workshop equipment required

# ♦ Thrust piece - 3305-



## ♦ Sealing grease ⇒ Electronic parts catalogue

### Procedure



#### Note

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♦ ⇒ [“5 Repair instructions”, page 14](#)

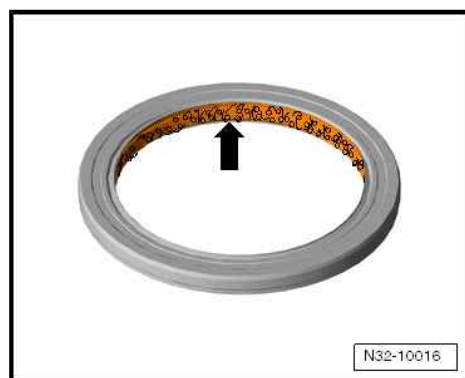
♦ ⇒ [“5.2 Rules for cleanliness”, page 16](#)

- Remove flange shaft (right-side) ⇒ [page 153](#) .
- Pry out oil seal using assembly lever.
- Pack space between sealing lip and dust lip -arrow- half full with sealing grease ⇒ Electronic parts catalogue .



#### Note

- ♦ *Do not drive in thrust piece - 3305- as far as stop!*
- ♦ *The oil seal contacts the stop in the gearbox earlier than the thrust piece - 3305- .*
- ♦ *It is therefore not possible to drive in thrust piece - 3305- as far as the stop.*



- Drive in new oil seal onto stop (take care to keep oil seal straight).



#### Note

*If required, a new dust ring can be pressed onto flange shaft using tube - 2010- . Do not use a hammer.*

- Install flange shaft (right-side) ⇒ [page 153](#) .

