

1 Earth points

1.1 Overview of earth points in engine compartment

15 - Earth point on cylinder head -1-

- Specified torque: 15 Nm
- Fitting location: [⇒ page 2](#)

685 - Earth point 1 on front of right longitudinal member -2-

- Specified torque: 9 Nm
- Fitting location: [⇒ page 2](#)

13 - Earth point on right in engine compartment -3-

- Specified torque: 9 Nm
- Fitting location: [⇒ page 3](#)

646 - Earth point 2 on bulkhead -4-

- Specified torque: 9 Nm
- Fitting location: [⇒ page 3](#)

647 - Earth point 3 on bulkhead -5-

- Specified torque: 9 Nm
- Fitting location: [⇒ page 3](#)

645 - Earth point 1 on bulkhead -6-

- Specified torque: 9 Nm
- Fitting location: [⇒ page 3](#)

1 - Earth strap, battery - body -7-

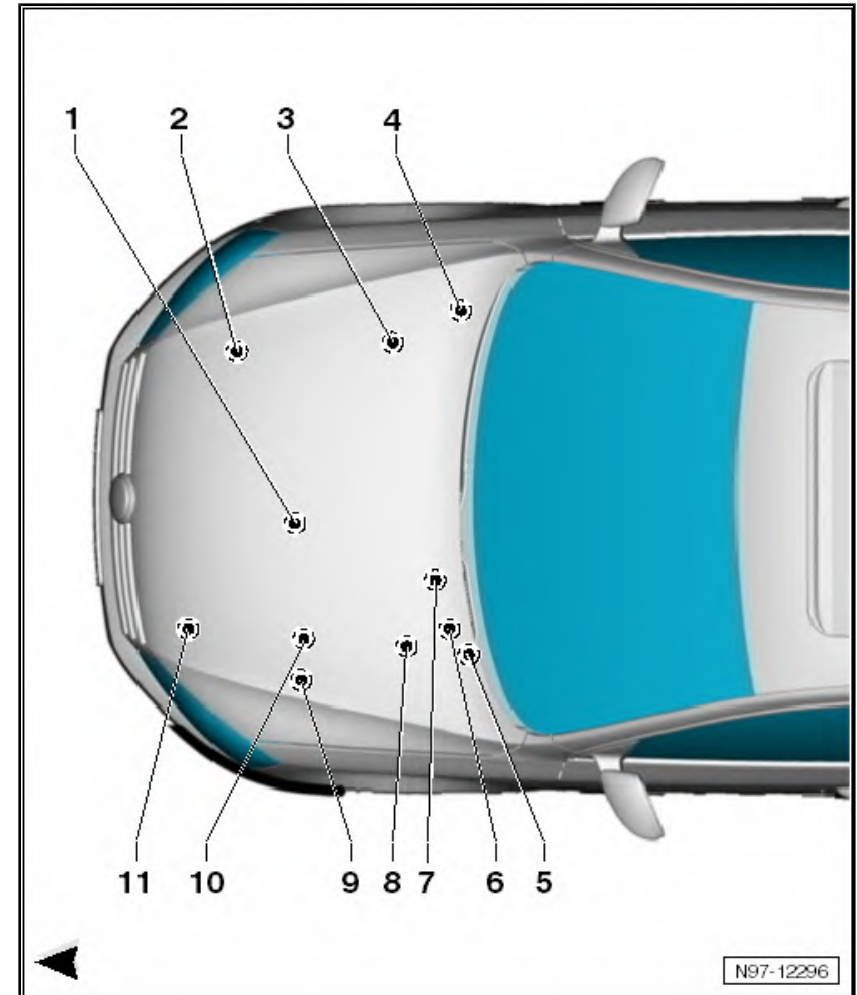
- Specified torque: 9 Nm
- Fitting location: [⇒ page 4](#)

12 - Earth point on left in engine compartment -8-

- Specified torque: 20 Nm
- Fitting location: [⇒ page 4](#)

671 - Earth point 1 on front of left longitudinal member -9-

- Specified torque: 9 Nm
- Fitting location: [⇒ page 4](#)



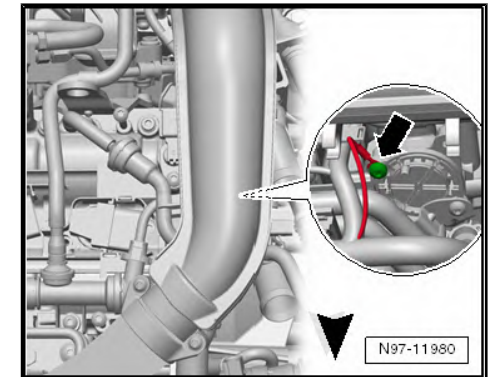
**652 - Earth point for engine and gearbox earth -10-**

- Specified torque: 20 Nm
- Fitting location: [⇒ page 4](#)

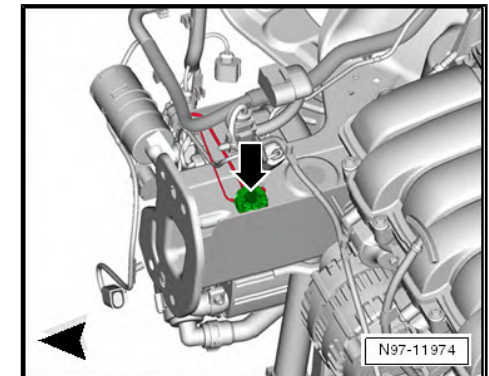
**673 - Earth point 3 on front of left longitudinal member -11-**

- Specified torque: 9 Nm
- Fitting location: [⇒ page 4](#)

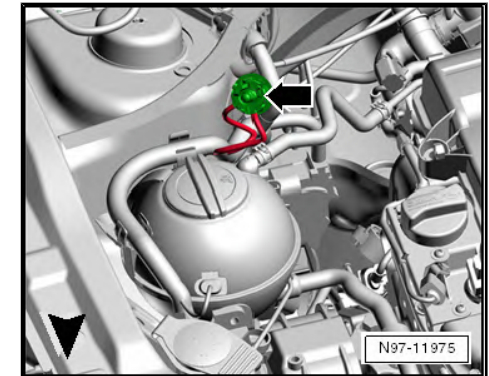
15 - Earth point on cylinder head -arrow-



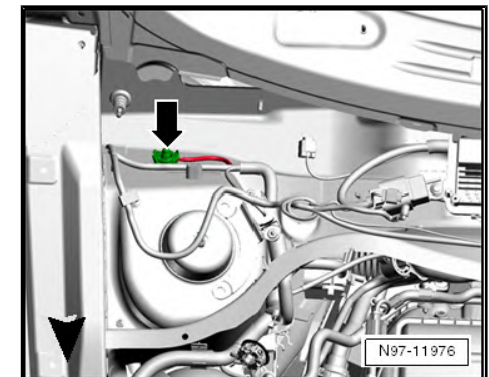
685 - Earth point 1 at front of right longitudinal member -arrow-



13 - Earth point, in engine compartment, right -arrow-

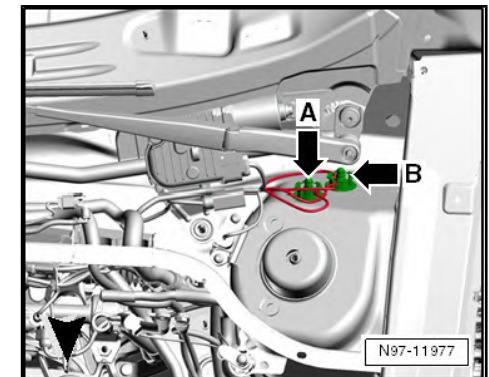


646 - Earth point 2 on bulkhead -arrow-

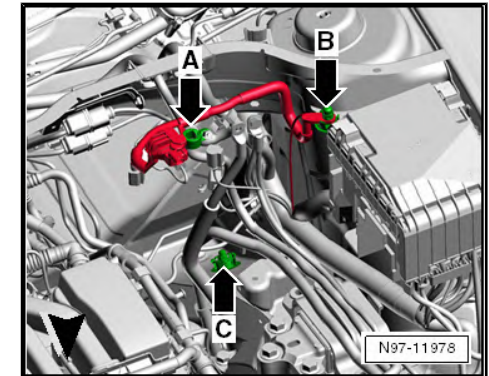


645 - Earth point 1 on bulkhead -arrow A-

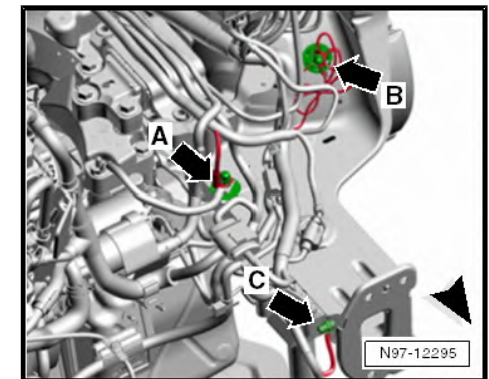
647 - Earth point 3 on bulkhead -arrow B-



- 1 - Earth strap, battery - body -arrow A-
- 12 - Earth point on left in engine compartment -arrow B-
- not used -arrow C-



- 652 - Earth point for engine and gearbox earth -arrow A-
- 671 - Earth point 1 at front of left longitudinal member -arrow B-
- 673 - Earth point 3 at front of left longitudinal member -arrow C-



## 1.2 Overview of earth points in vehicle interior

**610 - Earth point (audio) at front under centre console -1-**

- Specified torque: 9 Nm
- Fitting location: ⇒ [page 6](#)

**638 - Earth point on right A-pillar -2-**

- Specified torque: 9 Nm
- Fitting location: ⇒ [page 6](#)

**683 - Earth point on front of right side member -3-**

- Specified torque: 9 Nm
- Fitting location: ⇒ [page 6](#)

**687 - Earth point 1 on centre tunnel -4-**

- Specified torque: 9 Nm
- Fitting location: ⇒ [page 7](#)

**688 - Earth point 2 on centre tunnel -6-**

- Specified torque: 9 Nm
- Fitting location: ⇒ [page 7](#)

**78 - Earth point, lower part of right B-pillar -5-**

- Specified torque: 9 Nm
- Fitting location: ⇒ [page 7](#)

**77 - Earth point, lower part of left B-pillar -7-**

- Specified torque: 9 Nm
- Fitting location: ⇒ [page 7](#)

**689 - Earth point, front centre of roof -8-**

- Specified torque: 9 Nm
- Fitting location: ⇒ [page 8](#)

**684 - Earth point on front of left side member -9-**

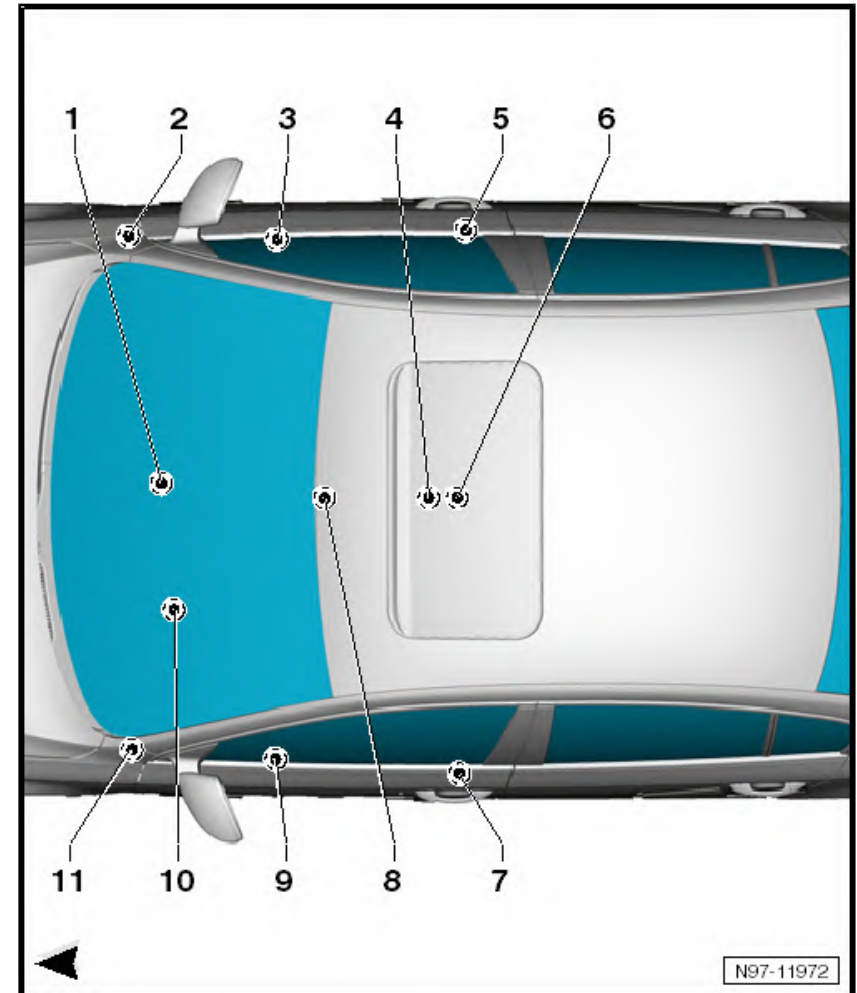
- Specified torque: 9 Nm
- Fitting location: ⇒ [page 8](#)

**42 - Earth point, next to steering column -10-**

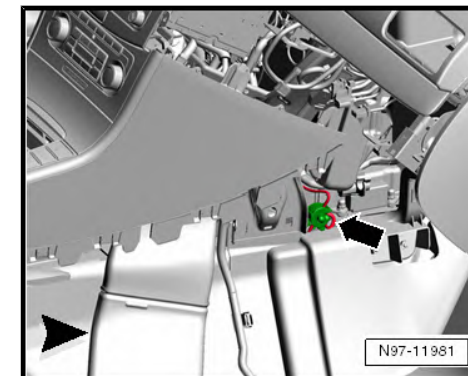
- Specified torque: 9 Nm
- Fitting location: ⇒ [page 8](#)

**639 - Earth point on left A-pillar -11-**

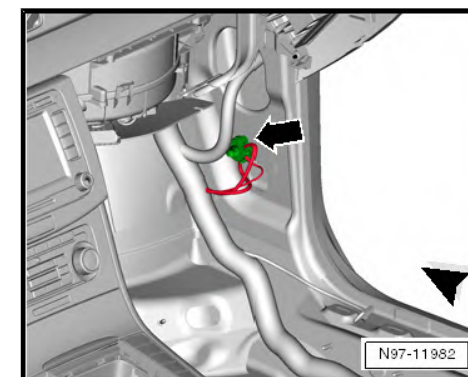
- Specified torque: 5 Nm
- Fitting location: ⇒ [page 8](#)



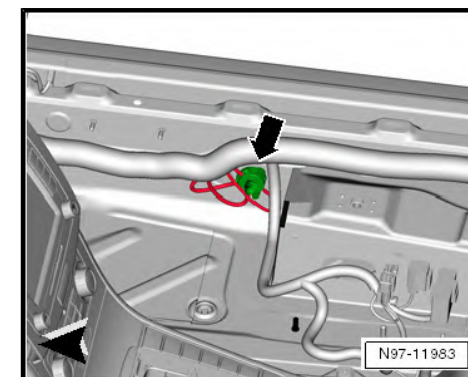
610 - Earth point (audio) at front under centre console -arrow-



638 - Earth point on right A-pillar -arrow-



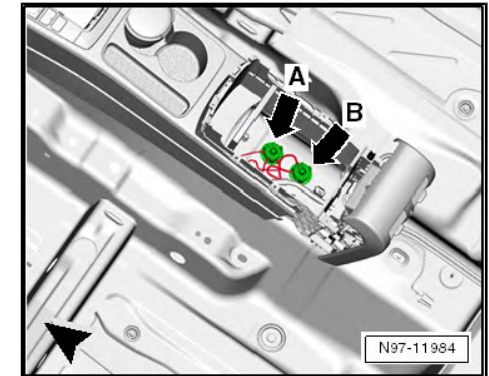
683 - Earth point on front of right side member -arrow-



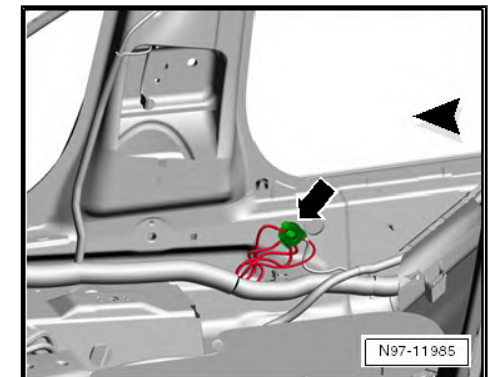


687 - Earth point 1 on centre tunnel -arrow A-

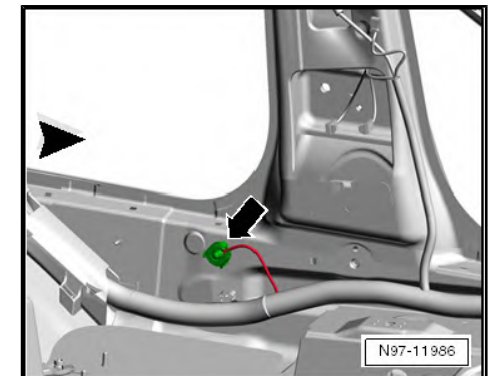
688 - Earth point 2 on centre tunnel -arrow B-



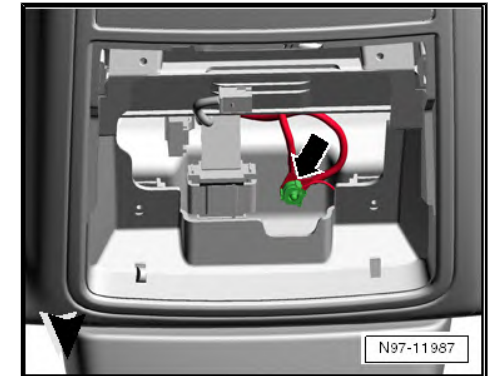
78 - Earth point on lower part of right B-pillar -arrow-



77 - Earth point on lower part of left B-pillar -arrow-

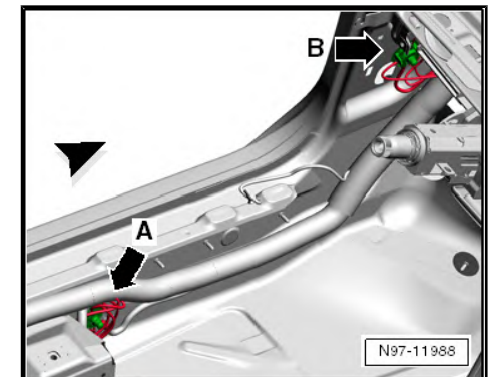


689 - Earth point, front centre of roof -arrow-

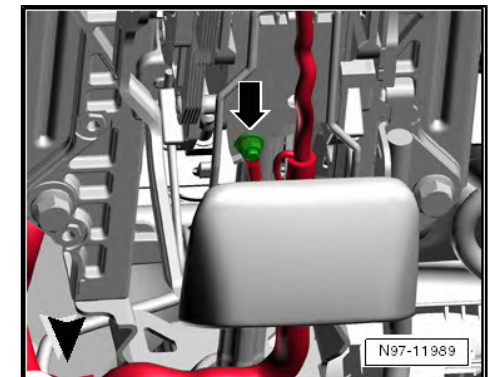


639 - Earth point on left A-pillar -arrow B-

684 - Earth point on front of left side member -arrow A-



42 - Earth point next to steering column -arrow-



### 1.3 Overview of earth points in luggage compartment



**659 - Earth point 1 on right near rear window -1-**

- Specified torque: 9 Nm
- Fitting location: ⇒ [page 10](#)

**51 - Earth point on right in luggage compartment -2-**

- Specified torque: 9 Nm
- Fitting location: ⇒ [page 10](#)

**612 - Earth point on centre rear lid (Variant only) -3-**

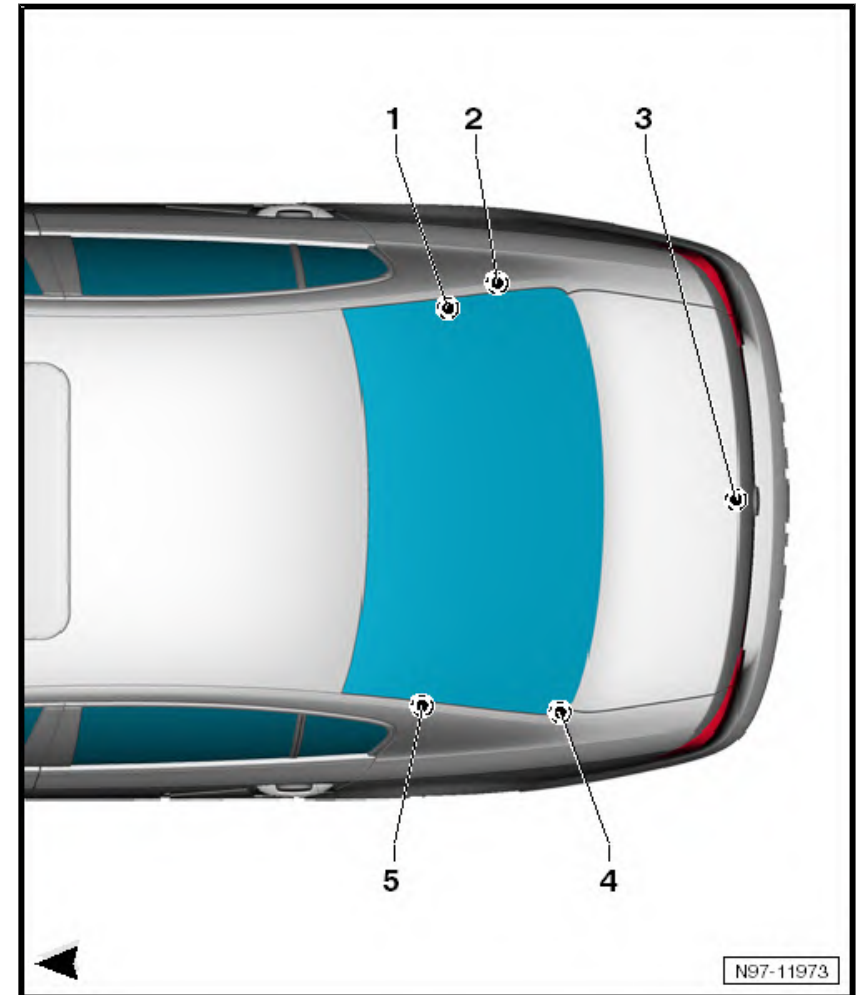
- Specified torque: 9 Nm
- Fitting location: ⇒ [page 11](#)

**676 - Earth point 2, on left in luggage compartment -4-**

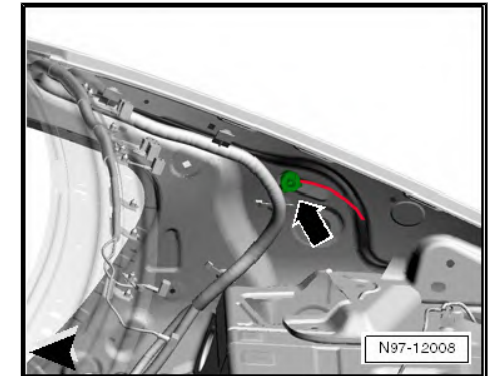
- Specified torque: 20 Nm
- Fitting location: ⇒ [page 11](#)

**50 - Earth point on left in luggage compartment -5-**

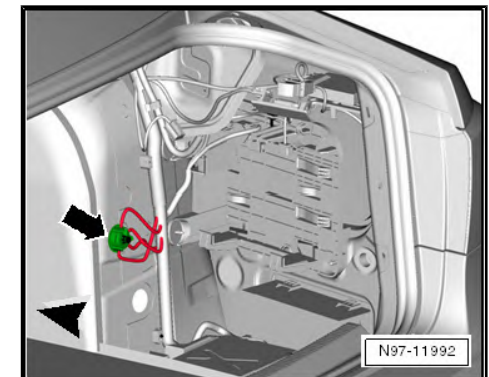
- Specified torque: 9 Nm
- Fitting location: ⇒ [page 12](#)



659 - Earth point 1 on right near rear window -arrow-



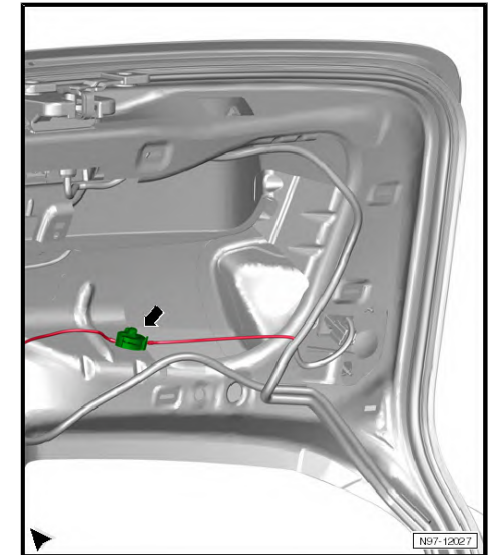
51 - Earth point, on right in luggage compartment -arrow-



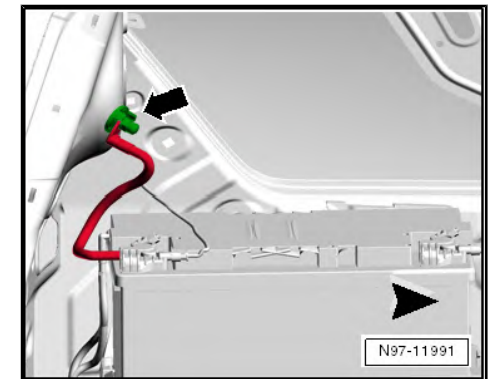
612 - Earth point, central on rear lid -arrow-

 **Note**

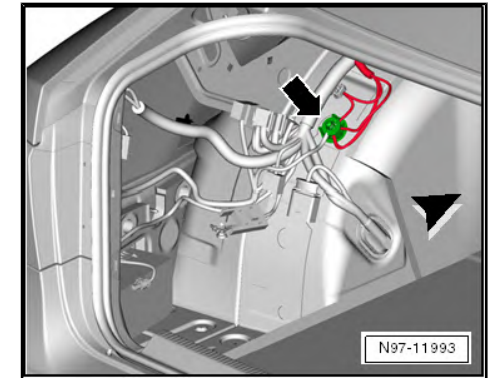
*Variant models only.*



676 - Earth point 2 on left in luggage compartment -arrow-



50 - Earth point, on left in luggage compartment -arrow-



# 1 Fuses

## 1.1 Overview of fuses

### 1 - Fuse holder D -SD-

- Fitting location: ⇒ [page 2](#)
- Fuse assignment, left-hand drive models: ⇒ [page 3](#)
- Fuse assignment, right-hand drive models: ⇒ [page 4](#)

### 2 - Fuse holder F -SF-

- Fitting location: ⇒ [page 4](#)
- Fuse assignment: ⇒ [page 5](#)

### 3 - Fuse 2 (30) -S205- (60 A)

- behind left side trim in luggage compartment

### 4 - Fuse holder C -SC-

- Fitting location: ⇒ [page 6](#)
- Fuse assignment, from November 2011: ⇒ [page 8](#)
- Fuse assignment, from May 2012: ⇒ [page 12](#)

### 5 - Safety cutout under dash panel, driver side

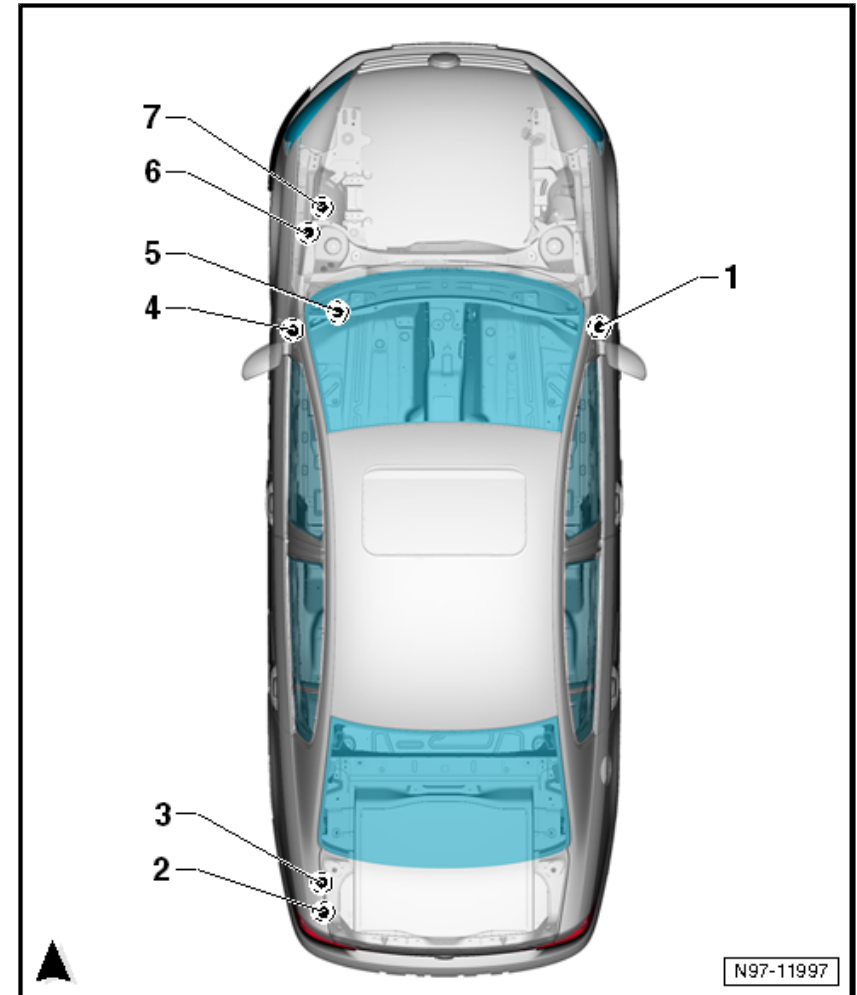
- Fuse assignment: ⇒ [page 16](#)

### 6 - Fuse holder B -SB-

- Fuse assignment for E-box low from November 2010 ⇒ [page 19](#)
- Fuse assignment for E-box low from November 2011 ⇒ [page 22](#)
- Fuse assignment for E-box low from May 2012 ⇒ [page 25](#)
- Fuse assignment for E-box high from November 2010 ⇒ [page 29](#)
- Fuse assignment for E-box high from November 2011 ⇒ [page 31](#)

### 7 - Fuse holder A -SA-

- Fuse assignment for E-box low ⇒ [page 34](#)
- Fuse assignment for E-box high ⇒ [page 36](#)



1.2 Fuse holder D -SD- on right in dash panel

1.2.1 Fitting location

Fitting location: on right of dash panel, near A-pillar

30 A - green

25 A - clear

20 A - yellow

15 A - blue

10 A - red

7.5 A - brown

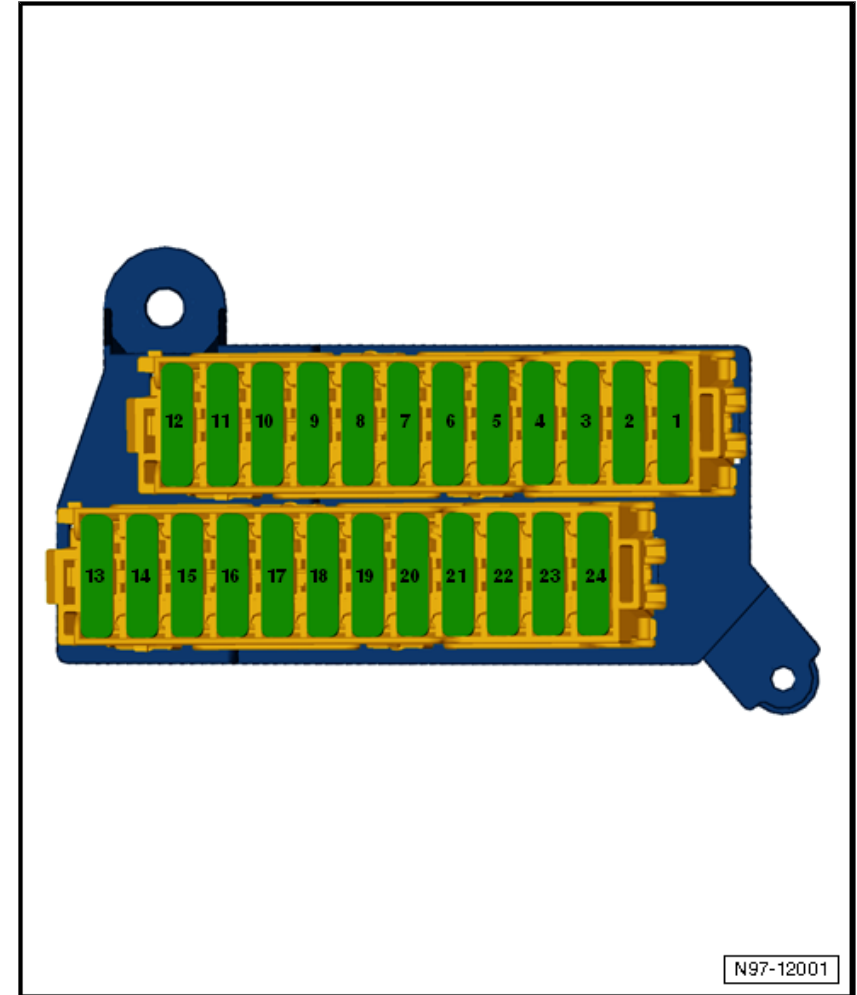
5 A - beige

3 A - purple



Note

*Fuses SD13-SD24 are reserved for special purpose vehicles.*





**1.2.2 Fuse assignment on fuse holder D -SD- , left-hand drive models**

No.	Current flow diagram designation	Nominal value	Function/component	Terminal
1	- Fuse 1 on fuse holder D -SD1-	30 A	- Rear lid control unit -J605- <sup>1)</sup>	30
2	- Fuse 2 on fuse holder D -SD2-	30 A	- Rear lid control unit 2 -J756- <sup>1)</sup>	30
3	- Fuse 3 on fuse holder D -SD3-	30 A	- Sunroof roller blind control unit -J394- <sup>1)</sup>	30
4	- Fuse 4 on fuse holder D -SD4-	15 A	- Electronically controlled damping control unit -J250-	75
5	- not assigned		-	
6	- not assigned		-	
7	- not assigned		-	
8	- not assigned		-	
9	- not assigned		-	
10	- not assigned		-	
11	- not assigned		-	
12	- not assigned		-	
13	- Fuse 13 on fuse holder D -SD13-		- -Special vehicles	
14	- Fuse 14 on fuse holder D -SD14-		- -Special vehicles	
15	- Fuse 15 on fuse holder D -SD15-		- -Special vehicles	
16	- Fuse 16 on fuse holder D -SD16-		- Charging station for hand-held 2-way radio -U24- Charging station 2 for hand-held 2-way radio -U28- Charging station 2 for torch -U29-	
17	- Fuse 17 on fuse holder D -SD17-		- -Special vehicles	
18	- Fuse 18 on fuse holder D -SD18-		- -Special vehicles	
19	- Fuse 19 on fuse holder D -SD19-		- -Special vehicles	
20	- Fuse 20 on fuse holder D -SD20-		- -Special vehicles	
21	- Fuse 21 on fuse holder D -SD21-		- -Special vehicles	
22	- Fuse 22 on fuse holder D -SD22-		- -Special vehicles	
23	- Fuse 23 on fuse holder D -SD23-		- -Special vehicles	
24	- Fuse 24 on fuse holder D -SD24-		- -Special vehicles	

<sup>1)</sup> Only estate

**1.2.3 Fuse assignment on fuse holder D -SD- , right-hand drive models**

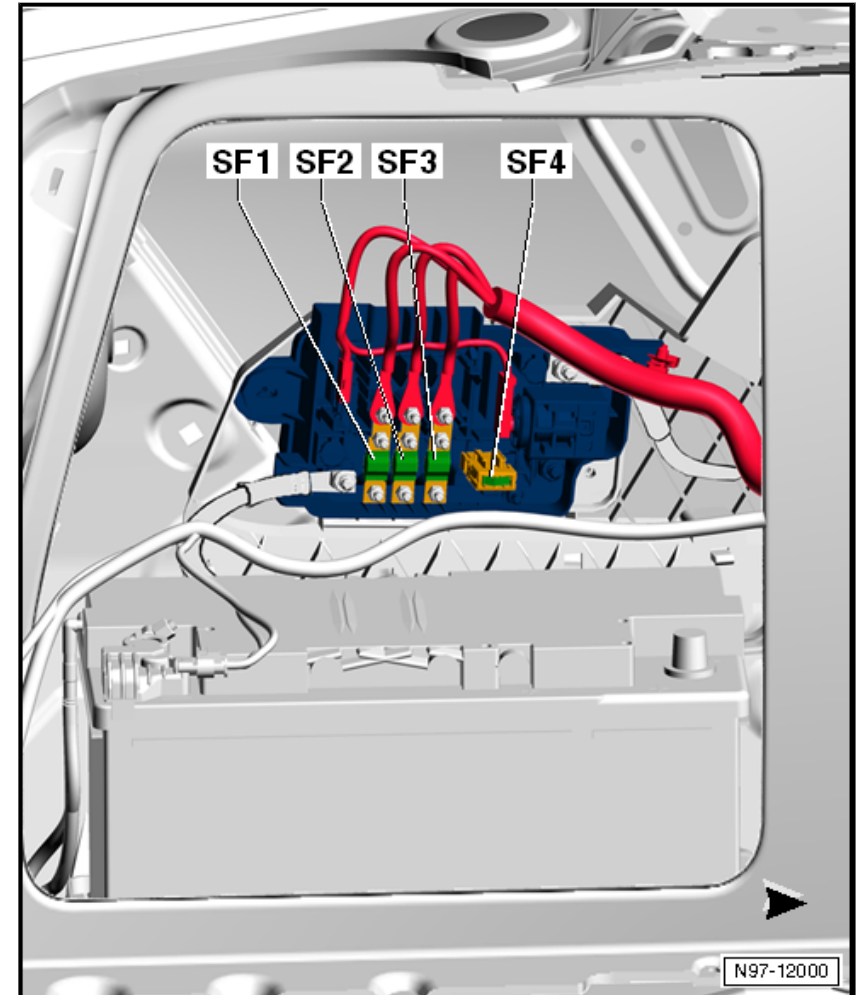
No.	Current flow diagram designation	Nominal value	Function/component	Terminal
1	- Fuse 1 on fuse holder D -SD1-	15 A	- Trailer detector control unit -J345-	30
2	- Fuse 2 on fuse holder D -SD2-	20 A	- Trailer detector control unit -J345-	30
3	- Fuse 3 on fuse holder D -SD3-	15 A	- Trailer detector control unit -J345-	30
4	- not assigned		-	
5	- not assigned		-	
6	- not assigned		-	
7	- not assigned		-	
8	- not assigned		-	
9	- not assigned		-	
10	- not assigned		-	
11	- not assigned		-	
12	- not assigned		-	
13	- Fuse 13 on fuse holder D -SD13-		-Special vehicles	
14	- Fuse 14 on fuse holder D -SD14-		-Special vehicles	
15	- Fuse 15 on fuse holder D -SD15-		-Special vehicles	
16	- Fuse 16 on fuse holder D -SD16-		- Charging station for hand-held 2-way radio -U24- Charging station 2 for hand-held 2-way radio -U28- Charging station 2 for torch -U29-	
17	- Fuse 17 on fuse holder D -SD17-		-Special vehicles	
18	- Fuse 18 on fuse holder D -SD18-		-Special vehicles	
19	- Fuse 19 on fuse holder D -SD19-		-Special vehicles	
20	- Fuse 20 on fuse holder D -SD20-		-Special vehicles	
21	- Fuse 21 on fuse holder D -SD21-		-Special vehicles	
22	- Fuse 22 on fuse holder D -SD22-		-Special vehicles	
23	- Fuse 23 on fuse holder D -SD23-		-Special vehicles	
24	- Fuse 24 on fuse holder D -SD24-		-Special vehicles	

**1.3 Fuse holder F -SF- , rear left in luggage compartment (BWS)**
**1.3.1 Specified torque settings**

⇒ Electrical system, Repair Group 97, Removing and installing fuse holders

**Fuse colours**

- 30 A - green
- 25 A - clear
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple



**1.4 Fuse assignment on fuse holder F -SF- , rear left in luggage compartment (BWS)**

No.	Current flow diagram designation	Nominal value	Function/component	Terminal
1	- Fuse 1 on fuse holder F -SF1-	30 A	-Left fuse holder (SC12 - SC17, SC27, SC29 - SC31, SC44)	30
2	- Fuse 2 on fuse holder F -SF2-	80 A	-Fuses in E-box (SB16 - SB26, SB49, SB50)	30
3	- Fuse 3 on fuse holder F -SF3-	125 A	-Power supply E-box	30

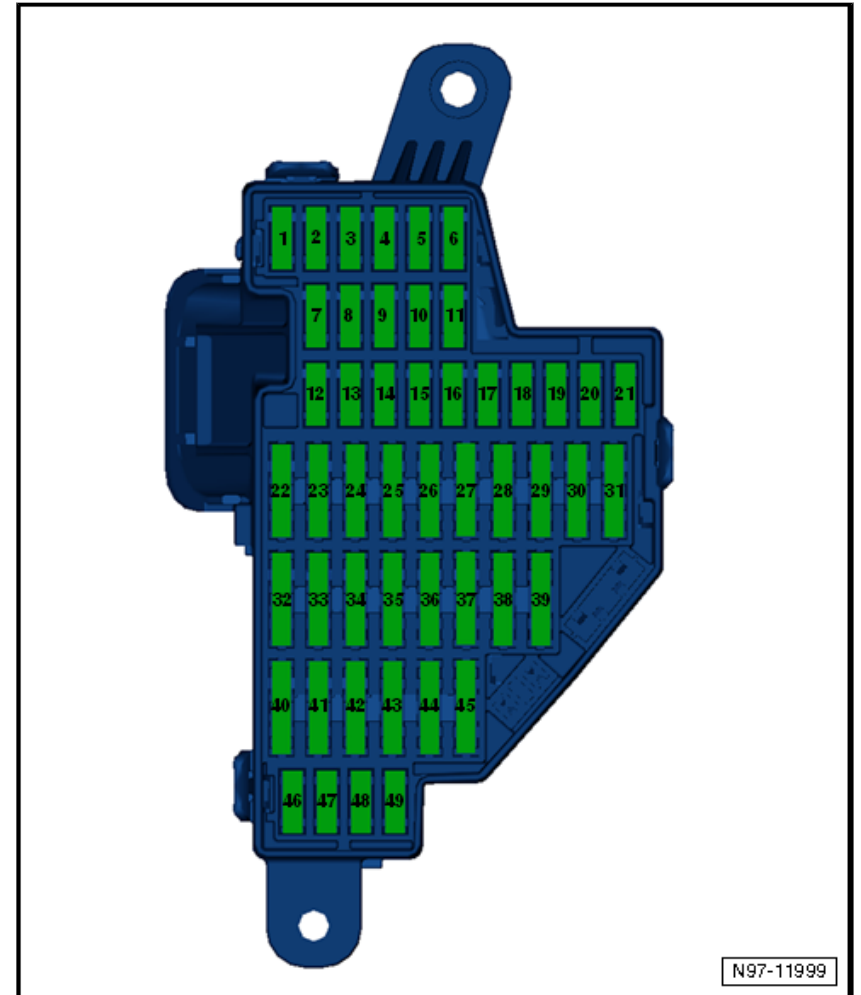
4	-	Fuse 4 on fuse holder F -SF4-	5 A	-	Onboard supply control unit -J519- Battery monitor control unit -J367-	30
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**1.5 Fuse holder C -SC- , on left of dash panel**

**1.5.1 Fitting location of fuse holder C -SC-**

Fitting location: on left of dash panel, near A-pillar

- 30 A - green
- 25 A - clear
- 20 A - yellow
- 15 A - blue
- 10 A - red
- 7.5 A - brown
- 5 A - beige
- 3 A - purple



**1.5.2 Fuse assignment of fuse holder C -SC- , from November 2011**

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
1	- Fuse 1 on fuse holder C -SC1-	10 A	- High-pressure sender -G65- Air quality sensor -G238- Oil level and oil temperature sender -G266- Fresh air blower relay -J13- DC/AC converter with socket, 12 V - 230 V -U13- Automatic anti-dazzle interior mirror -Y7- Heated rear left seat switch with regulator -E128- Heated rear right seat switch with regulator -E129-	15
2	- Fuse 2 on fuse holder C -SC2-	5 A	- Light switch -E1- TCS and ESP button -E256- Auto-hold button -E540- ABS control unit -J104- Power steering control unit -J500- Control unit for electromechanical parking brake -J540-	15
3	- Fuse 3 on fuse holder C -SC3-	10 A	- Current supply relay -J16- Heater element for crankcase breather -N79- Gas injection valve 1 -N366- Gas injection valve 2 -N367- Gas injection valve 3 -N368- Gas injection valve 4 -N369-	15
4	- Fuse 4 on fuse holder C -SC4-	10 A	- Rear roller blind switch -E149- Start/Stop operation button -E693- Electronically controlled damping control unit -J250- Adaptive cruise control unit -J428- Parking aid control unit -J446- Trailer detector control unit -J345- Park assist steering control unit -J791- Front camera for driver assist systems -R242- Diagnostic connection -U31-	15
5	- Fuse 5 on fuse holder C -SC5-	10 A	- Headlight range control regulator -E102- Left headlight range control motor -V48- Right headlight range control motor -V49- Front left headlight -MX1- 4)	15
6	- Fuse 6 on fuse holder C -SC6-	10 A	- All-wheel drive control unit -J492-	15
7	- Fuse 7 on fuse holder C -SC7-	5 A	- Control unit in dash panel insert -J285- Data bus diagnostic interface -J533-	15
8	- Fuse 8 on fuse holder C -SC8-	10 A	- Front right headlight -MX2- 4)	15
9	- Fuse 9 on fuse holder C -SC9-	10 A	- Airbag control unit -J234- Front passenger airbag deactivated warning lamp -K145-	15



Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
10	- Fuse 10 on fuse holder C -SC10-	10 A	- Air mass meter -G70- Voltage stabiliser -J532- Fuel pump control unit -J538- Engine control unit -J623- Terminal 50 voltage supply relay -J682- Voltage supply relay 2 -J710- Starter relay 1 -J906- Starter relay 2 -J907-	15
11	- Fuse 11 on fuse holder C -SC11-	5 A <sup>6)</sup>	- Pedal switch for warning buzzer on front passenger side -F349- <sup>6)</sup>	15
12	- Fuse 12 on fuse holder C -SC12-	20 A	- Convenience system central control unit -J393- Front passenger door control unit -J387- <sup>17)</sup> Rear passenger side door control unit -J927- <sup>17)</sup>	30
13	- Fuse 13 on fuse holder C -SC13-	10 A	- Light switch -E1- Selector lever -E313- ABS control unit -J104- Handbrake warning lamp -K139- Diagnostic connection -U31- ABS control unit -J104- T38/15	30
14	- Fuse 14 on fuse holder C -SC14-	10 A	- Interior monitor send and receive module 1 -G303- Alarm horn -H12-	30
15	- Fuse 15 on fuse holder C -SC15-	10 A	- Rain and light sensor -G397- Heated rear window relay -J9- Heated windscreen relay -J47- Climatronic control unit -J255- Air conditioning system control unit -J301- Reversing camera system control unit -J772- Control unit for terminal control and engine start -J942- Remote control receiver for auxiliary coolant heater -R149- Tyre Pressure Monitoring System control unit -J502-	30
16	- Fuse 16 on fuse holder C -SC16-	10 A	- Electronic ignition lock -D9- Control unit for electronic steering column lock -J764- Control unit for terminal control and engine start -J942-	30
17	- Fuse 17 on fuse holder C -SC17-	15 A	- Driver door control unit -J386- <sup>17)</sup> Rear driver side door control unit -J926- <sup>17)</sup> Emblem motor -V432- <sup>19)</sup> Rear lid handle release button -E234- <sup>19)</sup>	30
18	- Fuse 18 on fuse holder C -SC18-	3 A	- Onboard supply control unit -J519- Voltage stabiliser -J532- Engine control unit -J623- Voltage supply relay 2 -J710-	15
19	- not assigned		-	
20	- not assigned		-	

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
21	- Fuse 21 on fuse holder C -SC21-	10 A	- Rear roller blind control unit -J262-	15
22	- Fuse 22 on fuse holder C -SC22-	20 A	- Control unit for electromechanical parking brake -J540-	30
23	- Fuse 23 on fuse holder C -SC23-	15 A	- Trailer detector control unit -J345- Electronically controlled damping control unit -J250- 4)	30
24	- Fuse 24 on fuse holder C -SC24-	20 A	- Control unit for electromechanical parking brake -J540-	30
25	- Fuse 25 on fuse holder C -SC25-	5 A 8) 15 A 7) 30 A 4)	- Emergency assistance call button -E276- Trailer detector control unit -J345- Sunroof roller blind control unit -J394- 4)	30
26	- Fuse 26 on fuse holder C -SC26-	20 A	- Onboard supply control unit -J519-	30
27	- Fuse 27 on fuse holder C -SC27-	15 A <sup>1)</sup> 20 A <sup>2)</sup>	- Fuel pump control unit -J538- 1) Fuel pump relay -J17- 2) Electric fuel pump 2 relay -J49- 2)	15 <sup>1)</sup> 30 <sup>2)</sup>
28	- Fuse 28 on fuse holder C -SC28-	30 A	- Driver door control unit -J386- 9) Rear driver side door control unit -J926- 9) Front passenger door control unit -J387- 4) Rear passenger side door control unit -J927- 4)	30
29	- Fuse 29 on fuse holder C -SC29-	20 A	- Heated rear seats control unit -J786-	30
30	- Fuse 30 on fuse holder C -SC30-	20 A <sup>10)</sup> 30 A <sup>11)</sup>	- Sliding sunroof adjustment control unit -J245-	30
31	- Fuse 31 on fuse holder C -SC31-	30 A	- DC/AC converter with socket, 12 V - 230 V -U13-	30
32	- Fuse 32 on fuse holder C -SC32-	30 A	- Heated rear window relay -J9-	30
33	- Fuse 33 on fuse holder C -SC33-	30 A	- Headlight washer system relay -J39-	30
34	- Fuse 34 on fuse holder C -SC34-	25 A	- Heated front seats control unit -J774-	30
35	- Fuse 35 on fuse holder C -SC35-	15 A 4)	- Rear lid control unit -J605- 4) Driver seat lumbar support adjustment switch -E176- 9)	30
36	- Fuse 36 on fuse holder C -SC36-	15 A	- Driver seat lumbar support adjustment switch -E176- Driver seat lumbar support adjustment switch -E176- 4)	30
37	- Fuse 37 on fuse holder C -SC37-	20 A 9) 30 A 4)	- Trailer detector control unit -J345- 9) Rear lid control unit 2 -J756- 4)	30
38	- Fuse 38 on fuse holder C -SC38-	40 A <sup>12)</sup>	- Fresh air blower relay -J13- 14) Fresh air blower control unit -J126- 13)	75
39	- Fuse 39 on fuse holder C -SC39-	5 A 15 A <sup>18)</sup>	- Selector lever -E313- Reversing light switch -F4- Mechatronic unit for dual clutch gearbox -J743- Vacuum pump for brake -V192- 18)	15

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
40	- Fuse 40 on fuse holder C -SC40-	20 A	- Onboard supply control unit -J519- Rear window wiper motor -V12- Windscreen and rear window washer pump -V59-	75
41	- Fuse 41 on fuse holder C -SC41-	20 A	- Onboard supply control unit -J519- Cigarette lighter -U1- Rear cigarette lighter -U9-	75
42	- Fuse 42 on fuse holder C -SC42-	15 A	- 12 V socket -U5-	75
43	- Fuse 43 on fuse holder C -SC43-	20 A <sup>15)</sup>	- Auxiliary heater control unit -J364- <sup>15)</sup>	30
44	- Fuse 44 on fuse holder C -SC44-	30 A	- Driver door control unit -J386- <sup>4)</sup> Rear driver side door control unit -J926- <sup>4)</sup> Front passenger door control unit -J387- <sup>9)</sup> Rear passenger side door control unit -J927- <sup>9)</sup>	30
45	- Fuse 45 on fuse holder C -SC45-	20 A <sup>15)</sup>	- Auxiliary heater operation relay -J485- <sup>15)</sup>	30
46	- not assigned		-	
47	- Fuse 47 on fuse holder C -SC47-	5 A <sup>3)</sup>	- Analogue clock -Y- <sup>3)</sup> TV tuner -R78- <sup>3)</sup> Mobile telephone operating electronics control unit -J412- <sup>3)</sup> Control unit for navigation system -J856- <sup>3,16)</sup>	30
48	- Fuse 48 on fuse holder C -SC48-	5 A <sup>3)</sup>	- Control unit in dash panel insert -J285- <sup>3)</sup>	30
49	- Fuse 49 on fuse holder C -SC49-		- -Vacant	

1) Only models with a petrol engine

2) Only models with a diesel engine

3) Only models with start/stop system

4) Only right-hand drive models

5) Only models with xenon headlights

6) Only applicable to special vehicles

7) Only models with trailer socket

8) Only models with emergency call module

9) Only left-hand drive models

10) Only saloon

- 11) Only estate
- 12) Only models with auxiliary heating
- 13) Only models with Climatronic
- 14) Only models with Climatic
- 15) Only models with second battery
- 16) Only models with equipment for Korea
- 17) Only CC
- 18) Only models with equipment for Japan
- 19) Only models with reversing camera system

**1.5.3 Fuse assignment of fuse holder C -SC- , from May 2012**

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
1	- Fuse 1 on fuse holder C -SC1-	10 A	- High-pressure sender -G65- Air quality sensor -G238- Oil level and oil temperature sender -G266- Fresh air blower relay -J13- DC/AC converter with socket, 12 V - 230 V -U13- Automatic anti-dazzle interior mirror -Y7- Heated rear left seat switch with regulator -E128- Heated rear right seat switch with regulator -E129-	15
2	- Fuse 2 on fuse holder C -SC2-	5 A	- Light switch -E1- TCS and ESP button -E256- Auto-hold button -E540- ABS control unit -J104- Power steering control unit -J500- Control unit for electromechanical parking brake -J540-	15
3	- Fuse 3 on fuse holder C -SC3-	10 A	- Current supply relay -J16- Heater element for crankcase breather -N79- Gas injection valve 1 -N366- Gas injection valve 2 -N367- Gas injection valve 3 -N368- Gas injection valve 4 -N369-	15

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
4	- Fuse 4 on fuse holder C -SC4-	10 A	- Rear roller blind switch -E149- Start/Stop operation button -E693- Electronically controlled damping control unit -J250- Adaptive cruise control unit -J428- Parking aid control unit -J446- Trailer detector control unit -J345- Park assist steering control unit -J791- Front camera for driver assist systems -R242- Diagnostic connection -U31-	15
5	- Fuse 5 on fuse holder C -SC5-	10 A	- Headlight range control regulator -E102- Left headlight range control motor -V48- Right headlight range control motor -V49- Front left headlight -MX1- <sup>4)</sup>	15
6	- Fuse 6 on fuse holder C -SC6-	10 A	- All-wheel drive control unit -J492-	15
7	- Fuse 7 on fuse holder C -SC7-	5 A	- Control unit in dash panel insert -J285- Data bus diagnostic interface -J533-	15
8	- Fuse 8 on fuse holder C -SC8-	10 A	- Front right headlight -MX2- <sup>4)</sup>	15
9	- Fuse 9 on fuse holder C -SC9-	10 A	- Airbag control unit -J234- Front passenger airbag deactivated warning lamp -K145-	15
10	- Fuse 10 on fuse holder C -SC10-	10 A	- Air mass meter -G70- Voltage stabiliser -J532- Fuel pump control unit -J538- Engine control unit -J623- Terminal 50 voltage supply relay -J682- Voltage supply relay 2 -J710- Starter relay 1 -J906- Starter relay 2 -J907-	15
11	- Fuse 11 on fuse holder C -SC11-	5 A <sup>6)</sup>	- Pedal switch for warning buzzer on front passenger side -F349- <sup>6)</sup>	15
12	- Fuse 12 on fuse holder C -SC12-	20 A	- Convenience system central control unit -J393-	30
13	- Fuse 13 on fuse holder C -SC13-	10 A	- Light switch -E1- Selector lever -E313- ABS control unit -J104- Handbrake warning lamp -K139- Diagnostic connection -U31- ABS control unit -J104- T38/15	30
14	- Fuse 14 on fuse holder C -SC14-	10 A	- Interior monitor send and receive module 1 -G303- Alarm horn -H12-	30

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
15	- Fuse 15 on fuse holder C -SC15-	10 A	- Rain and light sensor -G397- Heated rear window relay -J9- Heated windscreen relay -J47- Climatronic control unit -J255- Air conditioning system control unit -J301- Reversing camera system control unit -J772- Control unit for terminal control and engine start -J942- Remote control receiver for auxiliary coolant heater -R149- Tyre Pressure Monitoring System control unit -J502-	30
16	- Fuse 16 on fuse holder C -SC16-	10 A	- Electronic ignition lock -D9- Control unit for electronic steering column lock -J764- Control unit for terminal control and engine start -J942-	30
17	- Fuse 17 on fuse holder C -SC17-	15 A	- Emblem motor -V432- <sup>18)</sup> Rear lid handle release button -E234- <sup>18)</sup>	
18	- Fuse 18 on fuse holder C -SC18-	3 A	- Onboard supply control unit -J519- Voltage stabiliser -J532- Engine control unit -J623- Voltage supply relay 2 -J710-	15
19	- not assigned		-	
20	- not assigned		-	
21	- Fuse 21 on fuse holder C -SC21-	10 A	- Rear roller blind control unit -J262-	15
22	- Fuse 22 on fuse holder C -SC22-	20 A	- Control unit for electromechanical parking brake -J540-	30
23	- Fuse 23 on fuse holder C -SC23-	15 A	- Trailer detector control unit -J345- Electronically controlled damping control unit -J250- <sup>4)</sup>	30
24	- Fuse 24 on fuse holder C -SC24-	20 A	- Control unit for electromechanical parking brake -J540-	30
25	- Fuse 25 on fuse holder C -SC25-	5 A <sup>8)</sup> 15 A <sup>7)</sup> 30 A <sup>4)</sup>	- Emergency assistance call button -E276- Trailer detector control unit -J345- Sunroof roller blind control unit -J394- <sup>4)</sup>	30
26	- Fuse 26 on fuse holder C -SC26-	20 A	- Onboard supply control unit -J519-	30
27	- Fuse 27 on fuse holder C -SC27-	15 A <sup>1)</sup> 20 A <sup>2)</sup>	- Fuel pump control unit -J538- <sup>1)</sup> Fuel pump relay -J17- <sup>2)</sup> Electric fuel pump 2 relay -J49- <sup>2)</sup>	15 <sup>1)</sup> 30 <sup>2)</sup>
28	- Fuse 28 on fuse holder C -SC28-	30 A	- Driver door control unit -J386- <sup>9)</sup> Rear driver side door control unit -J926- <sup>9)</sup> Front passenger door control unit -J387- <sup>4)</sup> Rear passenger side door control unit -J927- <sup>4)</sup>	30
29	- Fuse 29 on fuse holder C -SC29-	20 A	- Heated rear seats control unit -J786-	30



Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
30	- Fuse 30 on fuse holder C -SC30-	20 A <sup>10)</sup> 30 A <sup>11)</sup>	- Sliding sunroof adjustment control unit -J245-	30
31	- Fuse 31 on fuse holder C -SC31-	30 A	- DC/AC converter with socket, 12 V - 230 V -U13-	30
32	- Fuse 32 on fuse holder C -SC32-	30 A	- Heated rear window relay -J9-	30
33	- Fuse 33 on fuse holder C -SC33-	30 A	- Headlight washer system relay -J39-	30
34	- Fuse 34 on fuse holder C -SC34-	25 A	- Heated front seats control unit -J774-	30
35	- Fuse 35 on fuse holder C -SC35-	15 A <sup>4)</sup>	- Rear lid control unit -J605- <sup>4)</sup> Driver seat lumbar support adjustment switch -E176- <sup>9)</sup>	30
36	- Fuse 36 on fuse holder C -SC36-	15 A	- Driver seat lumbar support adjustment switch -E176- <sup>4)</sup> Trailer voltage supply relay -J941-	30
37	- Fuse 37 on fuse holder C -SC37-	20 A <sup>9)</sup> 30 A <sup>4)</sup>	- Trailer detector control unit -J345- <sup>9)</sup> Rear lid control unit 2 -J756- <sup>4)</sup>	30
38	- Fuse 38 on fuse holder C -SC38-	40 A <sup>12)</sup>	- Fresh air blower relay -J13- <sup>14)</sup> Fresh air blower control unit -J126- <sup>13)</sup>	75
39	- Fuse 39 on fuse holder C -SC39-	5 A 15 A <sup>17)</sup>	- Selector lever -E313- Reversing light switch -F4- Mechatronic unit for dual clutch gearbox -J743- Vacuum pump for brake -V192- <sup>17)</sup>	15
40	- Fuse 40 on fuse holder C -SC40-	20 A	- Onboard supply control unit -J519- Rear window wiper motor -V12- Windscreen and rear window washer pump -V59-	75
41	- Fuse 41 on fuse holder C -SC41-	20 A	- Onboard supply control unit -J519- Cigarette lighter -U1- Rear cigarette lighter -U9-	75
42	- Fuse 42 on fuse holder C -SC42-	15 A	- 12 V socket -U5-	75
43	- Fuse 43 on fuse holder C -SC43-	20 A <sup>15)</sup>	- Auxiliary heater control unit -J364- <sup>15)</sup>	30
44	- Fuse 44 on fuse holder C -SC44-	30 A	- Driver door control unit -J386- <sup>4)</sup> Rear driver side door control unit -J926- <sup>4)</sup> Front passenger door control unit -J387- <sup>9)</sup> Rear passenger side door control unit -J927- <sup>9)</sup>	30
45	- Fuse 45 on fuse holder C -SC45-	20 A <sup>15)</sup>	- Auxiliary heater operation relay -J485- <sup>15)</sup>	30
46	- not assigned		-	
47	- Fuse 47 on fuse holder C -SC47-	5 A <sup>3)</sup>	- Analogue clock -Y- <sup>3)</sup> TV tuner -R78- <sup>3)</sup> Mobile telephone operating electronics control unit -J412- <sup>3)</sup> Control unit for navigation system -J856- <sup>3,16)</sup>	30

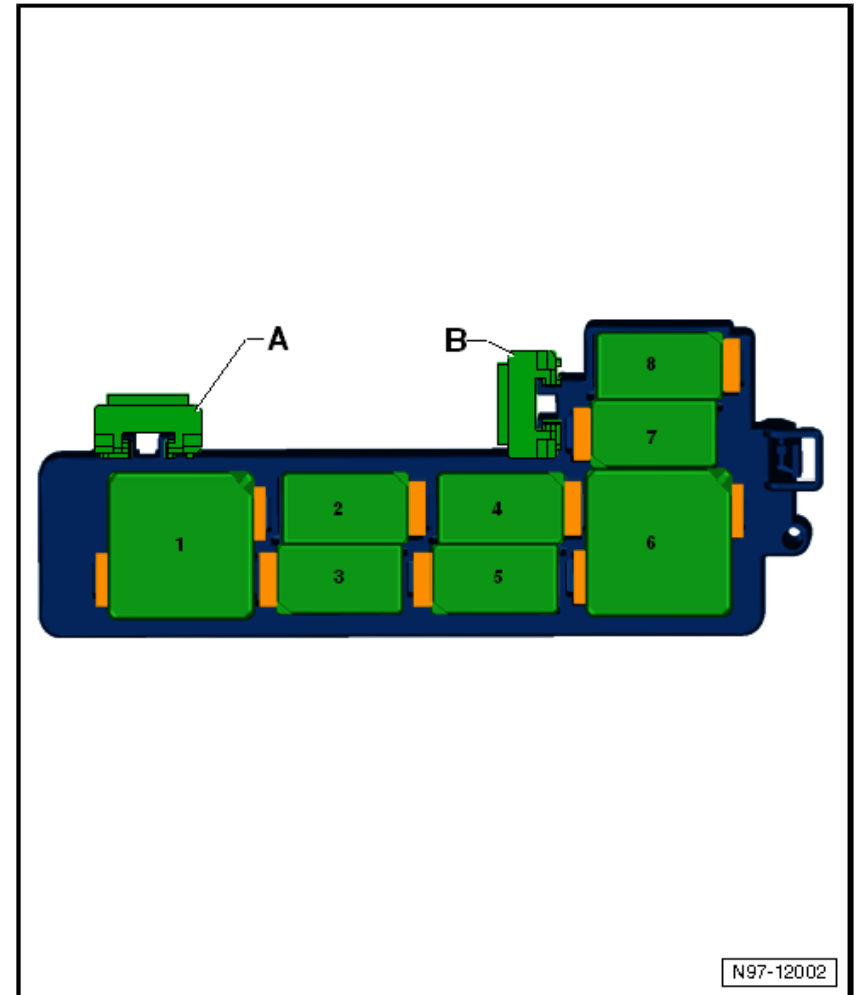
Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
48	- Fuse 48 on fuse holder C -SC48-	5 A <sup>3)</sup>	- Control unit in dash panel insert -J285- <sup>3)</sup>	30
49	- Fuse 49 on fuse holder C -SC49-		- -Vacant	

- 1) Only models with a petrol engine
- 2) Only models with a diesel engine
- 3) Only models with start/stop system
- 4) Only right-hand drive models
- 5) Only models with xenon headlights
- 6) Only applicable to special vehicles
- 7) Only models with trailer socket
- 8) Only models with emergency call module
- 9) Only left-hand drive models
- 10) Only saloon
- 11) Only estate
- 12) Only models with auxiliary heating
- 13) Only models with Climatronic
- 14) Only models with Climatic
- 15) Only models with second battery
- 16) Only models with equipment for Korea
- 17) Only models with equipment for Japan
- 18) Only models with reversing camera system

**1.6 Safety cutout under dash panel, driver side**

A - not assigned

B - Driver seat adjustment thermal fuse 1 -S44-



1.7 Fuse holder B -SB- on E-box low

1.7.1 Fitting location

on E-box low, on left in engine compartment

Fuse colours:

50 A - red

40 A - orange

30 A - green

25 A - clear

20 A - yellow

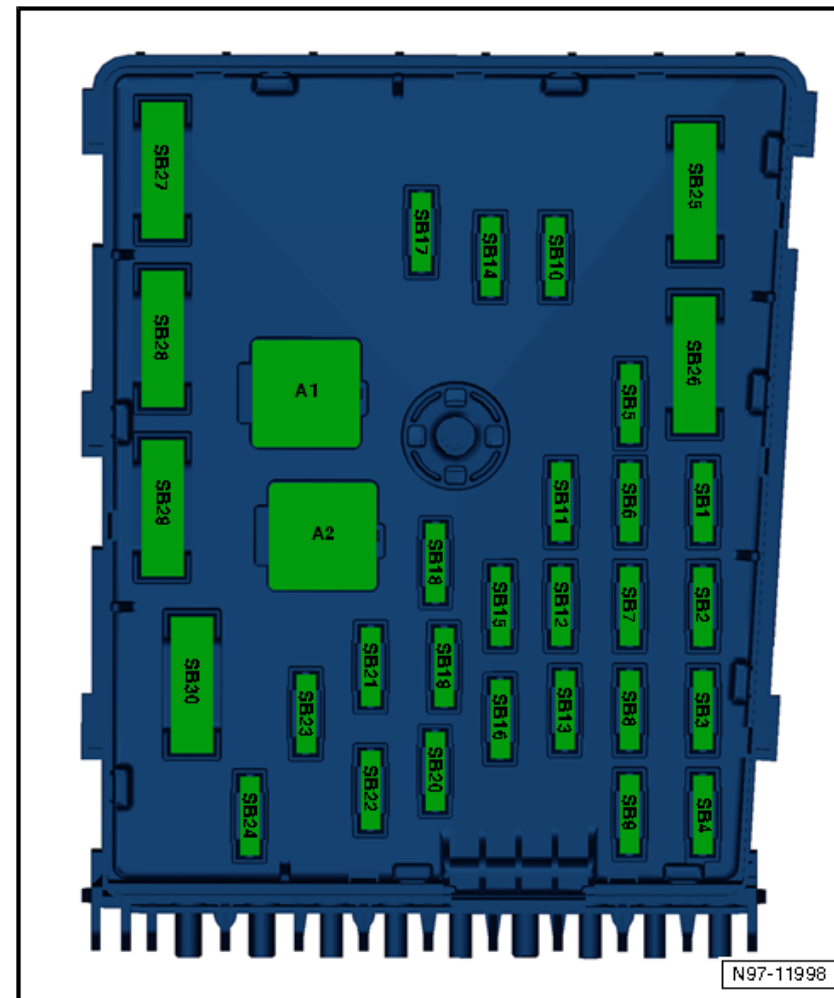
15 A - blue

10 A - red

7.5 A - brown

5 A - beige

3 A - purple



**1.7.2 Fuse assignment of fuse holder B -SB- on E-box low, from November 2010**

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB1	- Fuse 1 on fuse holder B -SB1-	7.5 A	- Only models with Rear Seat Entertainment (RSE)	
SB2	- Fuse 2 on fuse holder B -SB2-	30 A	- ABS control unit -J104-	30
SB3	- Fuse 3 on fuse holder B -SB3-	20 A	- Treble horn -H2- Bass horn -H7- Dual tone horn relay -J4-	30
SB4	- Fuse 4 on fuse holder B -SB4-	25 A	- Trailer detector control unit -J345-	30
SB5	- Fuse 5 on fuse holder B -SB5-	5 A	- Battery monitor control unit -J367- Onboard supply control unit -J519-	30
SB6	- Fuse 6 on fuse holder B -SB6-	5 A <sup>17)</sup> 15 A <sup>16)</sup>	- Automatic gearbox control unit -J217- Mechatronic unit for dual clutch gearbox -J743-	30
SB7	- Fuse 7 on fuse holder B -SB7-	15 A <sup>6.7)</sup> 20 A <sup>5.7)</sup> 30 A <sup>1)</sup>	- Radio -R- Control unit with display for radio and navigation -J503- Voltage stabiliser -J532- <sup>(1)</sup>	30
SB8	- Fuse 8 on fuse holder B -SB8-	30 A	- Mechatronic unit for dual clutch gearbox -J743-	30
SB9	- Fuse 9 on fuse holder B -SB9-	5 A	- Steering column electronics control unit -J527-	30
SB10	- Fuse 10 on fuse holder B -SB10-	20 A	- Ignition coil 1 with output stage -N70- Ignition coil 2 with output stage -N127- Ignition coil 3 with output stage -N291- Ignition coil 4 with output stage -N292- Fuel pressure regulating valve -N276- Fuel metering valve -N290-	87
SB11	- Fuse 11 on fuse holder B -SB11-	5 A	- Control unit in dash panel insert -J285-	30
SB12	- Fuse 12 on fuse holder B -SB12-	5 A	- TV tuner -R78- Mobile telephone operating electronics control unit -J412- Analogue clock -Y- Control unit for navigation system -J856- <sup>14)</sup>	30
SB13	- Fuse 13 on fuse holder B -SB13-	10 A	- Motronic current supply relay -J271- Terminal 30 voltage supply relay -J317- Engine control unit -J623-	30
SB14	- Fuse 14 on fuse holder B -SB14-	25 A <sup>3)</sup> 30 A <sup>2)</sup>	- Engine control unit -J623- Engine control unit -J623-	87
SB15	- Fuse 15 on fuse holder B -SB15-	5 A	- Data bus diagnostic interface -J533-	30

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB16	- Fuse 16 on fuse holder B -SB16-	10 A <sup>9)</sup> 15 A <sup>8)</sup>	- Charge pressure control solenoid valve -N75- <sup>2)</sup> Exhaust gas recirculation cooler changeover valve -N345- Magnetic clutch for supercharger -N421- <sup>3)</sup> Continued coolant circulation relay -J151- <sup>3)</sup> Continued coolant circulation pump -V51- <sup>3)</sup> Coolant circulation pump 2 -V178-	87
SB17	- Fuse 17 on fuse holder B -SB17-	10 A 20 A <sup>18)</sup> 40 A <sup>10)</sup>	- Fuel pressure regulating valve -N276- Fuel tank shut-off valve 1 -N361- Fuel tank shut-off valve 2 -N362- Fuel tank shut-off valve 3 -N363- Coolant circulation pump -V50- Low heat output relay -J359- <sup>10)</sup>	87
SB18	- Fuse 18 on fuse holder B -SB18-	10 A <sup>9)</sup> 30 A <sup>8)</sup>	- Fuel quality sender -G446- High-pressure valve for gas mode -N372- Control unit for reducing-agent heater -J891-	87
SB19	- Fuse 19 on fuse holder B -SB19-	30 A	- Amplifier -R12- Special vehicle control unit -J608- <sup>11)</sup>	30
SB20	- Fuse 20 on fuse holder B -SB20-	5 A 15 A <sup>12), 15)</sup>	- Brake light switch -F- Clutch position sender -G476- Low heat output relay -J359- High heat output relay -J360- Engine component current supply relay -J757- Fuel pressure regulating valve -N276-	87
SB21	- Fuse 21 on fuse holder B -SB21-	20 A	- Auxiliary heater control unit -J364-	30
SB22	- Fuse 22 on fuse holder B -SB22-	30 A	- Wiper motor control unit -J400-	30
SB23	- Fuse 23 on fuse holder B -SB23-	10 A	- Brake light switch -F- Air mass meter -G70- Clutch position sender -G476- Fuel pump relay -J17- Automatic glow period control unit -J179- Radiator fan control unit -J293- Auxiliary engine coolant pump relay -J496- Charge pressure control solenoid valve -N75- Activated charcoal filter solenoid valve 1 -N80- Camshaft control valve 1 -N205- Turbocharger air recirculation valve -N249- Intake manifold flap valve -N316- Valve for oil pressure control -N428-	87
SB24	- Fuse 24 on fuse holder B -SB24-	10 A <sup>2,9)</sup> 15 A	- Lambda probe heater -Z19- Lambda probe 1 heater after catalytic converter -Z29- Control unit for NOx sender 2 -J881- <sup>8)</sup>	87
SB25	- Fuse 25 on fuse holder B -SB25-	40 A	- Onboard supply control unit -J519-	30

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB26	- Fuse 26 on fuse holder B -SB26-	40 A	- Onboard supply control unit -J519-	30
SB27	- Fuse 27 on fuse holder B -SB27-	60 A	- Heated windscreen relay -J47-	30
SB28	- Fuse 28 on fuse holder B -SB28-	50 A	- Automatic glow period control unit -J179- <sup>2)</sup>	30
SB29	- Fuse 29 on fuse holder B -SB29-	50 A	- Fuse 38 on fuse holder C -SC38- <sup>13)</sup> Fuse 40 on fuse holder C -SC40- to fuse 42 on fuse holder C -SC42- X-contact relief relay -J59-	30
SB30	- Fuse 30 on fuse holder B -SB30-	50 A	- Terminal 15 voltage supply relay -J329- Fuse 1 on fuse holder C -SC1- to fuse 11 on fuse holder C -SC11- Fuse 19 on fuse holder C -SC19- Fuse 20 on fuse holder C -SC20- Fuse 21 on fuse holder C -SC21- Fuse 39 on fuse holder C -SC39- Fuse 18 on fuse holder C -SC18- <sup>1)</sup>	30

1) Only models with start/stop system

2) Only models with diesel engines

3) Only models with a petrol engine

4) Depends on equipment

5) Only models with navigation system

6) Only models with radio

7) Only models with start/stop system

8) for models with reducing agent metering system only

9) Only models without reducing agent metering system

10) Only models with auxiliary air heater

11) Only applicable to special vehicles

12) for CNG models only

13) Only models with air conditioning system/Climatronic

14) Only models with equipment for Korea

15) Only ethanol vehicles

16) Only models with dual clutch gearbox (DSG)

17) Only models without dual clutch gearbox (DSG)

18) Only models with 1.8 l and 2.0 l petrol engines

### 1.7.3 Fuse assignment of fuse holder B -SB- on E-box low, from November 2011

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB1	- not assigned	-	-	
SB2	- Fuse 2 on fuse holder B -SB2-	30 A	- ABS control unit -J104-	30
SB3	- Fuse 3 on fuse holder B -SB3-	20 A	- Treble horn -H2- Bass horn -H7- Dual tone horn relay -J4-	30
SB4	- Fuse 4 on fuse holder B -SB4-	20 A	- Trailer detector control unit -J345-	30
SB5	- Fuse 5 on fuse holder B -SB5-	5 A	- Battery monitor control unit -J367- Onboard supply control unit -J519-	30
SB6	- Fuse 6 on fuse holder B -SB6-	15 A	- Mechatronic unit for dual clutch gearbox -J743-	30
SB7	- Fuse 7 on fuse holder B -SB7-	15 A <sup>6.7)</sup> 20 A <sup>5.7)</sup> 30 A <sup>1)</sup>	- Radio -R- Control unit with display for radio and navigation -J503- Voltage stabiliser -J532- <sup>(1)</sup>	30
SB8	- Fuse 8 on fuse holder B -SB8-	30 A	- Mechatronic unit for dual clutch gearbox -J743-	30
SB9	- Fuse 9 on fuse holder B -SB9-	5 A	- Steering column electronics control unit -J527-	30
SB10	- Fuse 10 on fuse holder B -SB10-	20 A	- Ignition coil 1 with output stage -N70- Ignition coil 2 with output stage -N127- Ignition coil 3 with output stage -N291- Ignition coil 4 with output stage -N292- Fuel pressure regulating valve -N276- Fuel metering valve -N290-	87
SB11	- Fuse 11 on fuse holder B -SB11-	5 A	- Control unit in dash panel insert -J285-	30
SB12	- Fuse 12 on fuse holder B -SB12-	5 A	- TV tuner -R78- Mobile telephone operating electronics control unit -J412- Analogue clock -Y- Control unit for navigation system -J856- <sup>14)</sup>	30
SB13	- Fuse 13 on fuse holder B -SB13-	10 A	- Motronic current supply relay -J271- Terminal 30 voltage supply relay -J317- Engine control unit -J623-	30
SB14	- Fuse 14 on fuse holder B -SB14-	25 A <sup>3)</sup> 30 A <sup>2)</sup>	- Engine control unit -J623- Engine control unit -J623-	87
SB15	- Fuse 15 on fuse holder B -SB15-	5 A	- Data bus diagnostic interface -J533-	30



Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB16	- Fuse 16 on fuse holder B -SB16-	10 A <sup>9)</sup> 15 A <sup>8)</sup>	- Charge pressure control solenoid valve -N75- <sup>2)</sup> Exhaust gas recirculation cooler changeover valve -N345- Magnetic clutch for supercharger -N421- <sup>3)</sup> Continued coolant circulation relay -J151- <sup>3)</sup> Continued coolant circulation pump -V51- <sup>3)</sup> Coolant circulation pump 2 -V178-	87
SB17	- Fuse 17 on fuse holder B -SB17-	10 A 40 A <sup>10)</sup>	- Fuel pressure regulating valve -N276- Fuel tank shut-off valve 1 -N361- Fuel tank shut-off valve 2 -N362- Fuel tank shut-off valve 3 -N363- Coolant circulation pump -V50- Low heat output relay -J359- <sup>10)</sup>	87
SB18	- Fuse 18 on fuse holder B -SB18-	10 A <sup>9)</sup> 30 A <sup>8)</sup>	- Fuel quality sender -G446- High-pressure valve for gas mode -N372- Control unit for reducing-agent heater -J891-	87
SB19	- Fuse 19 on fuse holder B -SB19-	30 A	- Amplifier -R12- Special vehicle control unit -J608- <sup>11)</sup>	30
SB20	- Fuse 20 on fuse holder B -SB20-	5 A 15 A <sup>12), 15)</sup>	- Brake light switch -F- Clutch position sender -G476- Low heat output relay -J359- High heat output relay -J360- Engine component current supply relay -J757- Fuel pressure regulating valve -N276-	87
SB21	- Fuse 21 on fuse holder B -SB21-	20 A	- Auxiliary heater control unit -J364-	30
SB22	- Fuse 22 on fuse holder B -SB22-	30 A	- Wiper motor control unit -J400-	30
SB23	- Fuse 23 on fuse holder B -SB23-	10 A	- Brake light switch -F- Air mass meter -G70- Clutch position sender -G476- Fuel pump relay -J17- Automatic glow period control unit -J179- Radiator fan control unit -J293- Auxiliary engine coolant pump relay -J496- Charge pressure control solenoid valve -N75- Activated charcoal filter solenoid valve 1 -N80- Camshaft control valve 1 -N205- Turbocharger air recirculation valve -N249- Intake manifold flap valve -N316- Valve for oil pressure control -N428-	87
SB24	- Fuse 24 on fuse holder B -SB24-	10 A <sup>2,9)</sup> 15 A	- Lambda probe heater -Z19- Lambda probe 1 heater after catalytic converter -Z29- Control unit for NOx sender 2 -J881- <sup>8)</sup>	87
SB25	- Fuse 25 on fuse holder B -SB25-	40 A	- Onboard supply control unit -J519-	30

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB26	- Fuse 26 on fuse holder B -SB26-	40 A	- Onboard supply control unit -J519-	30
SB27	- Fuse 27 on fuse holder B -SB27-	60 A	- Heated windscreen relay -J47-	30
SB28	- Fuse 28 on fuse holder B -SB28-	50 A	- Automatic glow period control unit -J179- <sup>2)</sup>	30
SB29	- Fuse 29 on fuse holder B -SB29-	50 A	- Fuse 38 on fuse holder C -SC38- <sup>13)</sup> Fuse 40 on fuse holder C -SC40- to fuse 42 on fuse holder C -SC42- X-contact relief relay -J59-	30
SB30	- Fuse 30 on fuse holder B -SB30-	40 A	- Terminal 15 voltage supply relay -J329- Fuse 1 on fuse holder C -SC1- to fuse 11 on fuse holder C -SC11- Fuse 20 on fuse holder C -SC20- Fuse 21 on fuse holder C -SC21- Fuse 39 on fuse holder C -SC39- Fuse 18 on fuse holder C -SC18- <sup>1)</sup>	30

1) Only models with start/stop system

2) Only models with diesel engines

3) Only models with a petrol engine

4) Depends on equipment

5) Only models with navigation system

6) Only models with radio

7) Only models with start/stop system

8) for models with reducing agent metering system only

9) Only models without reducing agent metering system

10) Only models with auxiliary air heater

11) Only applicable to special vehicles

12) for CNG models only

13) Only models with air conditioning system/Climatronic

14) Only models with equipment for Korea

15) Only ethanol vehicles

## 1.7.4 Fuse assignment of fuse holder B -SB- on E-box low, from May 2012

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB1	- Fuse 1 on fuse holder B -SB1-	15 A <sup>12)</sup> , 15)	- Mechatronic unit for dual clutch gearbox -J743- <sup>12)</sup> , <sup>15)</sup>	30
SB2	- Fuse 2 on fuse holder B -SB2-	30 A	- ABS control unit -J104-	30
SB3	- Fuse 3 on fuse holder B -SB3-	20 A	- Treble horn -H2- Bass horn -H7- Dual tone horn relay -J4-	30
SB4	- Fuse 4 on fuse holder B -SB4-	15 A	- Trailer detector control unit -J345-	30
SB5	- Fuse 5 on fuse holder B -SB5-	5 A	- Battery monitor control unit -J367- Onboard supply control unit -J519-	30
SB6	- Fuse 6 on fuse holder B -SB6-	15 A <sup>2)</sup> , <sup>16)</sup> 40 A <sup>12)</sup> , <sup>17)</sup>	- Mechatronic unit for dual clutch gearbox -J743- <sup>2)</sup> , <sup>16)</sup> Low heat output relay -J359- <sup>12)</sup> , <sup>17)</sup>	30
SB7	- Fuse 7 on fuse holder B -SB7-	15 A <sup>6.7)</sup> 20 A <sup>5.7)</sup> 30 A <sup>1)</sup>	- Radio -R- Control unit with display for radio and navigation -J503- Voltage stabiliser -J532- <sup>1)</sup>	30
SB8	- Fuse 8 on fuse holder B -SB8-	30 A	- Mechatronic unit for dual clutch gearbox -J743-	30
SB9	- Fuse 9 on fuse holder B -SB9-	5 A	- Steering column electronics control unit -J527-	30
SB10	- Fuse 10 on fuse holder B -SB10-	20 A	- Ignition coil 1 with output stage -N70- Ignition coil 2 with output stage -N127- Ignition coil 3 with output stage -N291- Ignition coil 4 with output stage -N292- Fuel pressure regulating valve -N276- Fuel metering valve -N290-	87
SB11	- Fuse 11 on fuse holder B -SB11-	5 A	- Control unit in dash panel insert -J285-	30
SB12	- Fuse 12 on fuse holder B -SB12-	5 A	- TV tuner -R78- Mobile telephone operating electronics control unit -J412- Analogue clock -Y- Control unit for navigation system -J856- <sup>14)</sup>	30
SB13	- Fuse 13 on fuse holder B -SB13-	10 A	- Motronic current supply relay -J271- Terminal 30 voltage supply relay -J317- Engine control unit -J623-	30
SB14	- Fuse 14 on fuse holder B -SB14-	25 A <sup>3)</sup> 30 A <sup>2)</sup>	- Engine control unit -J623- Engine control unit -J623-	87
SB15	- Fuse 15 on fuse holder B -SB15-	5 A	- Data bus diagnostic interface -J533-	30

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB16	- Fuse 16 on fuse holder B -SB16-	10 A <sup>9)</sup> 15 A <sup>8)</sup>	- Charge pressure control solenoid valve -N75- <sup>2)</sup> Exhaust gas recirculation cooler changeover valve -N345- Magnetic clutch for supercharger -N421- <sup>3)</sup> Continued coolant circulation relay -J151- <sup>3)</sup> Continued coolant circulation pump -V51- <sup>3)</sup> Coolant circulation pump 2 -V178-	87
SB17	- Fuse 17 on fuse holder B -SB17-	10 A 40 A <sup>10)</sup>	- Fuel pressure regulating valve -N276- Fuel tank shut-off valve 1 -N361- Fuel tank shut-off valve 2 -N362- Fuel tank shut-off valve 3 -N363- Coolant circulation pump -V50- Low heat output relay -J359- <sup>10)</sup>	87
SB18	- Fuse 18 on fuse holder B -SB18-	10 A <sup>9)</sup> 15A <sup>12)</sup> , 15) 30 A <sup>8)</sup>	- Fuel quality sender -G446- High-pressure valve for gas mode -N372- Control unit for reducing-agent heater -J891-	87
SB19	- Fuse 19 on fuse holder B -SB19-	30 A	- Amplifier -R12- Special vehicle control unit -J608- <sup>11)</sup>	30
SB20	- Fuse 20 on fuse holder B -SB20-	5 A	- Brake light switch -F- Clutch position sender -G476- Low heat output relay -J359- High heat output relay -J360- Engine component current supply relay -J757- Fuel pressure regulating valve -N276-	87
SB21	- Fuse 21 on fuse holder B -SB21-	20 A	- Auxiliary heater control unit -J364-	30
SB22	- Fuse 22 on fuse holder B -SB22-	30 A	- Wiper motor control unit -J400-	30
SB23	- Fuse 23 on fuse holder B -SB23-	10 A	- Brake light switch -F- Air mass meter -G70- Clutch position sender -G476- Fuel pump relay -J17- Automatic glow period control unit -J179- Radiator fan control unit -J293- Auxiliary engine coolant pump relay -J496- Charge pressure control solenoid valve -N75- Activated charcoal filter solenoid valve 1 -N80- Camshaft control valve 1 -N205- Turbocharger air recirculation valve -N249- Intake manifold flap valve -N316- Valve for oil pressure control -N428-	87
SB24	- Fuse 24 on fuse holder B -SB24-	10 A <sup>2.9)</sup> 15 A	- Lambda probe heater -Z19- Lambda probe 1 heater after catalytic converter -Z29- Control unit for NOx sender 2 -J881- <sup>8)</sup>	87

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB25	- Fuse 25 on fuse holder B -SB25-	40 A	- Onboard supply control unit -J519-	30
SB26	- Fuse 26 on fuse holder B -SB26-	40 A	- Onboard supply control unit -J519-	30
SB27	- Fuse 27 on fuse holder B -SB27-	60 A	- Heated windscreen relay -J47-	30
SB28	- Fuse 28 on fuse holder B -SB28-	50 A	- Automatic glow period control unit -J179- 2)	30
SB29	- Fuse 29 on fuse holder B -SB29-	50 A	- Fuse 38 on fuse holder C -SC38- 13) Fuse 40 on fuse holder C -SC40- to fuse 42 on fuse holder C -SC42- X-contact relief relay -J59-	30
SB30	- Fuse 30 on fuse holder B -SB30-	40 A	- Terminal 15 voltage supply relay -J329- Fuse 1 on fuse holder C -SC1- to fuse 11 on fuse holder C -SC11- Fuse 20 on fuse holder C -SC20- Fuse 21 on fuse holder C -SC21- Fuse 39 on fuse holder C -SC39- Fuse 18 on fuse holder C -SC18- 1)	30

1) Only models with start/stop system

2) Only models with diesel engines

3) Only models with a petrol engine

4) Depends on equipment

5) Only models with navigation system

6) Only models with radio

7) Only models with start/stop system

8) for models with reducing agent metering system only

9) Only models without reducing agent metering system

10) Only models with auxiliary air heater

11) Only applicable to special vehicles

12) for CNG models only

13) Only models with air conditioning system/Climatronic

14) Only models with equipment for Korea

15) Only ethanol vehicles

16) Only for petrol engine with forced induction

17) Only for petrol engine without forced induction

### 1.8 Fuse holder B -SB- on E-box high

#### 1.8.1 Fitting location

on E-box high, on left in engine compartment

**Fuse colours:**

50 A - red

40 A - orange

30 A - green

25 A - clear

20 A - yellow

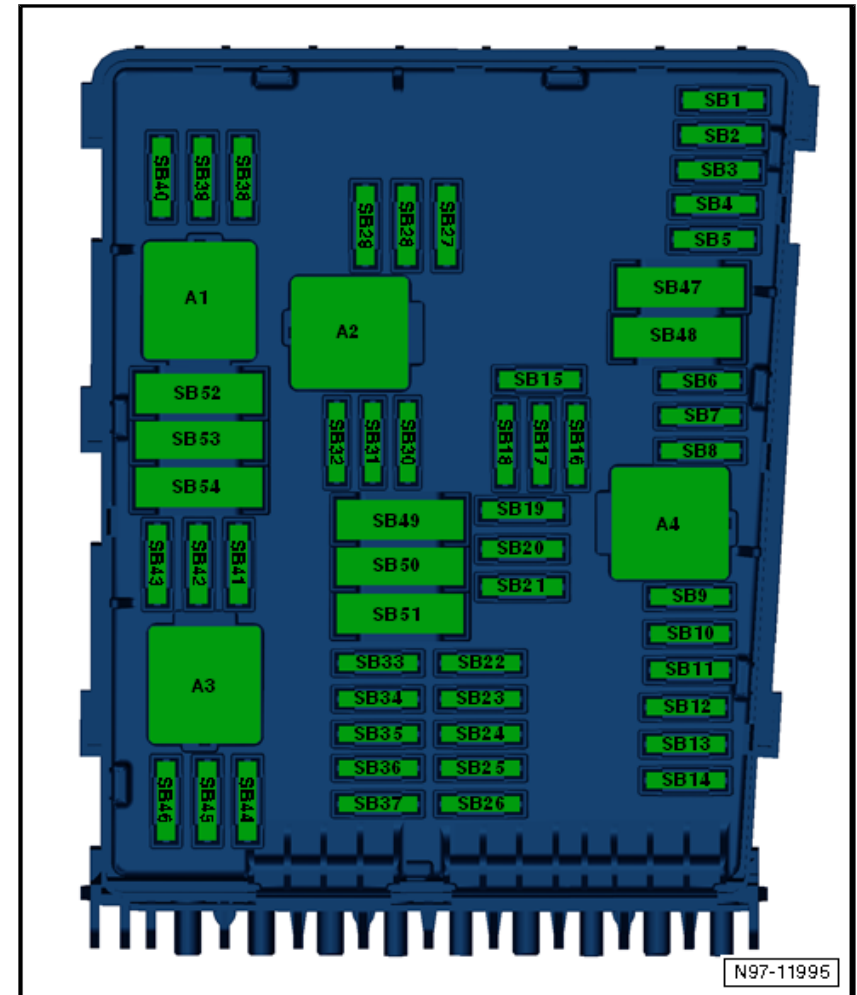
15 A - blue

10 A - red

7.5 A - brown

5 A - beige

3 A - purple



**1.8.2 Fuse assignment of fuse holder B -SB- on E-box high, from November 2010**

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB1	- Fuse 1 on fuse holder B -SB1-	5 A <sup>1)</sup> 15 A <sup>2)</sup>	- Automatic gearbox control unit -J217- Mechatronic unit for dual clutch gearbox -J743-	30
SB2	- Fuse 2 on fuse holder B -SB2-	30 A	- ABS control unit -J104-	30
SB3	- Fuse 3 on fuse holder B -SB3-	25 A	- Trailer detector control unit -J345-	30
SB4	- Fuse 4 on fuse holder B -SB4-	5 A	- Onboard supply control unit -J519-	
SB5	- Fuse 5 on fuse holder B -SB5-	20 A	- Treble horn -H2- Bass horn -H7- Dual tone horn relay -J4-	30
SB6	- Fuse 6 on fuse holder B -SB6-	20 A	- Ignition coil 1 with output stage -N70- Ignition coil 2 with output stage -N127- Ignition coil 3 with output stage -N291- Ignition coil 4 with output stage -N292- Ignition coil 5 with output stage -N323- Ignition coil 6 with output stage -N324-	87
SB7	- Fuse 7 on fuse holder B -SB7-	15 A	- Fuel pressure regulating valve -N276-	87
SB8	- Fuse 8 on fuse holder B -SB8-	5 A <sup>3)</sup> 10 A	- Brake light switch -F- Continued coolant circulation relay -J151- Radiator fan control unit -J293- Activated charcoal filter solenoid valve 1 -N80- Camshaft control valve 1 -N205- Exhaust camshaft control valve 1 -N318-	87
SB9	- Fuse 9 on fuse holder B -SB9-	5 A	- Circulation pump relay -J160-	87
SB10	- Fuse 10 on fuse holder B -SB10-	10 A	- Lambda probe 1 heater after catalytic converter -Z29- Lambda probe 2 heater after catalytic converter -Z30-	87
SB11	- Fuse 11 on fuse holder B -SB11-	25 A	- Engine control unit -J623-	87
SB12	- Fuse 12 on fuse holder B -SB12-	10 A <sup>3)</sup> 20A	- Lambda probe heater -Z19- Lambda probe heater 2 -Z28-	87
SB13	- not assigned		-	
SB14	- not assigned		-	
SB15	- Fuse 15 on fuse holder B -SB15-	10 A	- Continued coolant circulation pump -V51-	87
SB16	- Fuse 16 on fuse holder B -SB16-	5 A	- Steering column electronics control unit -J527-	30
SB17	- Fuse 17 on fuse holder B -SB17-	5 A	- Control unit in dash panel insert -J285-	30
SB18	- Fuse 18 on fuse holder B -SB18-	30 A	- Amplifier -R12-	

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB19	- Fuse 19 on fuse holder B -SB19-	15 A <sup>6.7)</sup> 20 A <sup>5.7)</sup>	- Radio -R- Control unit with display for radio and navigation -J503- Voltage stabiliser -J532- <sup>4)</sup>	30
SB20	- Fuse 20 on fuse holder B -SB20-	5 A	- Analogue clock -Y- TV tuner -R78- Mobile telephone operating electronics control unit -J412- Control unit for navigation system -J856- <sup>8)</sup>	30
SB21	- not assigned		-	
SB22	- Fuse 22 on fuse holder B -SB22-	7.5 A	- Only models with Rear Seat Entertainment (RSE)	
SB23	- not assigned		-	
SB24	- Fuse 24 on fuse holder B -SB24-	5 A	- Data bus diagnostic interface -J533-	30
SB25	- not assigned		-	
SB26	- Fuse 26 on fuse holder B -SB26-	10 A	- Motronic current supply relay -J271- Engine control unit -J623-	30
SB27	- not assigned		-	
SB28	- not assigned		-	
SB29	- not assigned		-	
SB30	- Fuse 30 on fuse holder B -SB30-	20 A	- Auxiliary heater control unit -J364-	30
SB31	- Fuse 31 on fuse holder B -SB31-	30 A	- Wiper motor control unit -J400-	30
SB32	- not assigned		-	
SB33	- not assigned		-	
SB34	- not assigned		-	
SB35	- Fuse 35 on fuse holder B -SB35-	20 A	- Auxiliary heater operation relay -J485-	30
SB36	- not assigned		-	
SB37	- not assigned		-	
SB38	- not assigned		-	
SB39	- not assigned		-	
SB40	- not assigned		-	
SB41	- not assigned		-	
SB42	- not assigned		-	
SB43	- not assigned		-	
SB44	- not assigned		-	
SB45	- not assigned		-	
SB46	- not assigned		-	



Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB47	- Fuse 47 on fuse holder B -SB47-	40 A	- Onboard supply control unit -J519-	30
SB48	- Fuse 48 on fuse holder B -SB48-	40 A	- Onboard supply control unit -J519-	30
SB49	- Fuse 49 on fuse holder B -SB49-	50 A	- Terminal 15 voltage supply relay -J329- Fuse 6 on fuse holder C -SC6- to fuse 11 on fuse holder C -SC11- Fuse 20 on fuse holder C -SC20- Fuse 21 on fuse holder C -SC21- Fuse 39 on fuse holder C -SC39- Fuse 18 on fuse holder C -SC18- 4)	30
SB50	- not assigned		-	
SB51	- Fuse 51 on fuse holder B -SB51-	60 <sup>3)</sup>	- High heat output relay -J360- <sup>3)</sup>	30
SB52	- Fuse 52 on fuse holder B -SB52-	60 A	- Heated windscreen relay -J47-	30
SB53	- Fuse 53 on fuse holder B -SB53-	50 A	- X-contact relief relay -J59-	30
SB54	- Fuse 54 on fuse holder B -SB54-	50	- Automatic glow period control unit -J179- <sup>3)</sup>	30

1) Only models with automatic gearbox

2) Only models with dual clutch gearbox

3) Only for countries with hot climate

4) Only models with start/stop system

5) Only models with navigation system

6) Only models with radio

7) Only models with start/stop system

8) Only models with equipment for Korea

### 1.8.3 Fuse assignment of fuse holder B -SB- on E-box high, from November 2011

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB1	- Fuse 1 on fuse holder B -SB1-	5 A <sup>1)</sup> 10 A <sup>2)</sup>	- Automatic gearbox control unit -J217- Mechatronic unit for dual clutch gearbox -J743-	30
SB2	- Fuse 2 on fuse holder B -SB2-	30 A	- ABS control unit -J104-	30
SB3	- Fuse 3 on fuse holder B -SB3-	15 A	- Trailer detector control unit -J345-	30
SB4	- Fuse 4 on fuse holder B -SB4-		- Vacant	

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB5	- Fuse 5 on fuse holder B -SB5-	20 A	- Treble horn -H2- Bass horn -H7- Dual tone horn relay -J4-	30
SB6	- Fuse 6 on fuse holder B -SB6-	20 A	- Ignition coil 1 with output stage -N70- Ignition coil 2 with output stage -N127- Ignition coil 3 with output stage -N291- Ignition coil 4 with output stage -N292- Ignition coil 5 with output stage -N323- Ignition coil 6 with output stage -N324-	87
SB7	- Fuse 7 on fuse holder B -SB7-	15 A	- Fuel pressure regulating valve -N276-	87
SB8	- Fuse 8 on fuse holder B -SB8-	5 A <sup>3)</sup> 10 A	- Brake light switch -F- Continued coolant circulation relay -J151- Radiator fan control unit -J293- Activated charcoal filter solenoid valve 1 -N80- Camshaft control valve 1 -N205- Exhaust camshaft control valve 1 -N318-	87
SB9	- Fuse 9 on fuse holder B -SB9-	5 A	- Circulation pump relay -J160-	87
SB10	- Fuse 10 on fuse holder B -SB10-	10 A	- Lambda probe 1 heater after catalytic converter -Z29- Lambda probe 2 heater after catalytic converter -Z30-	87
SB11	- Fuse 11 on fuse holder B -SB11-	25 A 30 A <sup>3)</sup>	- Engine control unit -J623-	87
SB12	- Fuse 12 on fuse holder B -SB12-	10 A <sup>3)</sup> 20A	- Lambda probe heater -Z19- Lambda probe heater 2 -Z28-	87
SB13	- not assigned		-	
SB14	- not assigned		-	
SB15	- Fuse 15 on fuse holder B -SB15-	10 A	- Continued coolant circulation pump -V51-	87
SB16	- Fuse 16 on fuse holder B -SB16-	5 A	- Steering column electronics control unit -J527-	30
SB17	- Fuse 17 on fuse holder B -SB17-	5 A	- Control unit in dash panel insert -J285-	30
SB18	- Fuse 18 on fuse holder B -SB18-	30 A	- Amplifier -R12-	
SB19	- Fuse 19 on fuse holder B -SB19-	15 A <sup>6.7)</sup> 20 A <sup>5.7)</sup> 30 A <sup>4)</sup>	- Radio -R- Control unit with display for radio and navigation -J503- Voltage stabiliser -J532- <sup>4)</sup>	30
SB20	- Fuse 20 on fuse holder B -SB20-	5 A	- Analogue clock -Y- TV tuner -R78- Mobile telephone operating electronics control unit -J412- Control unit for navigation system -J856- <sup>8)</sup>	30
SB21	- not assigned		-	
SB22	- not assigned		-	

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB23	- not assigned		-	
SB24	- Fuse 24 on fuse holder B -SB24-	5 A	- Data bus diagnostic interface -J533-	30
SB25	- not assigned		-	
SB26	- Fuse 26 on fuse holder B -SB26-	10 A	- Motronic current supply relay -J271- Engine control unit -J623-	30
SB27	- not assigned		-	
SB28	- not assigned		-	
SB29	- not assigned		-	
SB30	- Fuse 30 on fuse holder B -SB30-	20 A	- Auxiliary heater control unit -J364-	30
SB31	- Fuse 31 on fuse holder B -SB31-	30 A	- Wiper motor control unit -J400-	30
SB32	- not assigned		-	
SB33	- not assigned		-	
SB34	- not assigned		-	
SB35	- Fuse 35 on fuse holder B -SB35-	20 A 40 A <sup>3)</sup>	- Auxiliary heater operation relay -J485- Low heat output relay -J359- <sup>3)</sup>	30
SB36	- not assigned		-	
SB37	- not assigned		-	
SB38	- not assigned		-	
SB39	- not assigned		-	
SB40	- not assigned		-	
SB41	- not assigned		-	
SB42	- not assigned		-	
SB43	- not assigned		-	
SB44	- not assigned		-	
SB45	- not assigned		-	
SB46	- not assigned		-	
SB47	- Fuse 47 on fuse holder B -SB47-	40 A	- Onboard supply control unit -J519-	30
SB48	- Fuse 48 on fuse holder B -SB48-	40 A	- Onboard supply control unit -J519-	30
SB49	- Fuse 49 on fuse holder B -SB49-	50 A	- Terminal 15 voltage supply relay -J329- Fuse 6 on fuse holder C -SC6- to fuse 11 on fuse holder C -SC11- Fuse 20 on fuse holder C -SC20- Fuse 21 on fuse holder C -SC21- Fuse 39 on fuse holder C -SC39- Fuse 18 on fuse holder C -SC18- <sup>4)</sup>	30

Slot	Current flow diagram designation	Nominal value	Function/component	Terminal
SB50	- not assigned		-	
SB51	- Fuse 51 on fuse holder B -SB51-	60 <sup>3)</sup>	- High heat output relay -J360- <sup>3)</sup>	30
SB52	- Fuse 52 on fuse holder B -SB52-	60 A	- Heated windscreen relay -J47-	30
SB53	- Fuse 53 on fuse holder B -SB53-	50 A	- X-contact relief relay -J59-	30
SB54	- Fuse 54 on fuse holder B -SB54-	50	- Automatic glow period control unit -J179- <sup>3)</sup>	30

1) Only models with automatic gearbox

2) Only models with dual clutch gearbox

3) Only for countries with hot climate

4) Only models with start/stop system

5) Only models with navigation system

6) Only models with radio

7) Only models with start/stop system

8) Only models with equipment for Korea

## 1.9 Fuse holder A -SA-

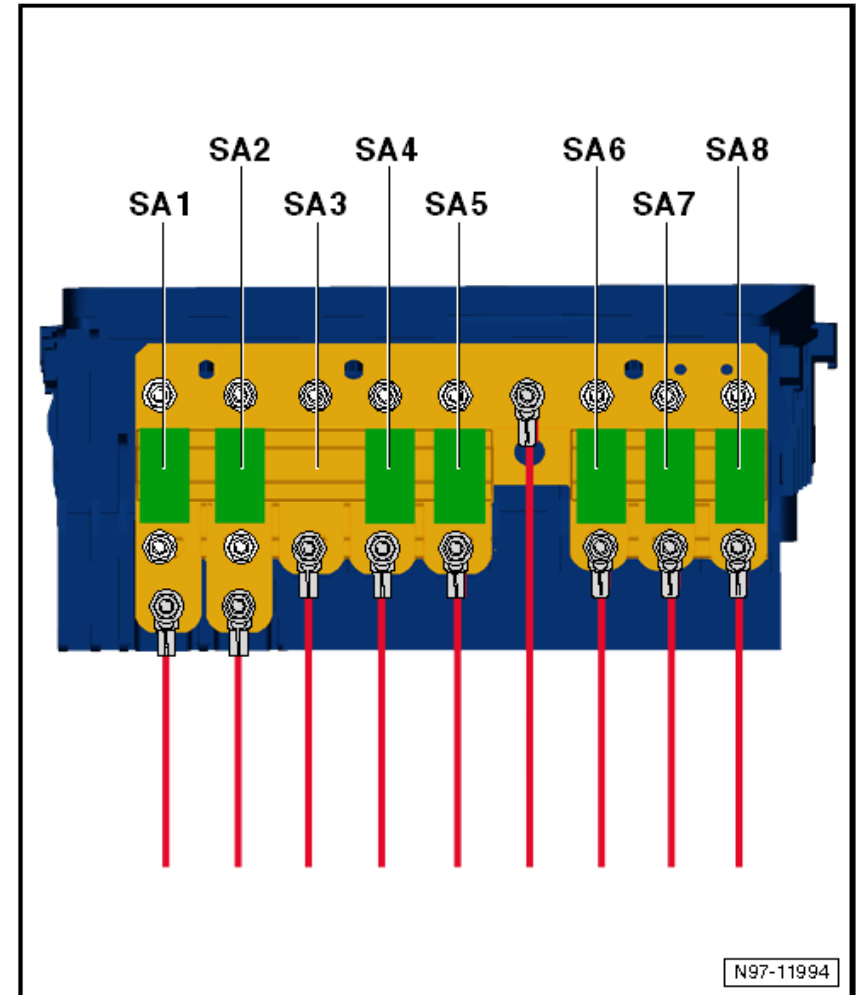
### 1.9.1 Fuse holder A -SA- , on E-box low

Multifuse strip fuse  
**Multifuse strip fuse**

⇒ Rep. Gr. 97 ; Removing and installing fuse holder

**i** Note

*The fuse strip (multifuse) must be replaced as a complete unit.*



Fuse assignment of fuse holder A -SA- , on E-box low

Screw location		Current flow diagram designation	Nominal value	Function/component	Terminal
SA1	-	Fuse 1 on fuse holder A -SA1-	150 A 180 A <sup>1)</sup>	- Alternator -C-	30
SA2	-	Fuse 2 on fuse holder A -SA2-	80 A	- Electromechanical power steering motor -V187-	30

Screw location		Current flow diagram designation	Nominal value		Function/component	Terminal
SA3	-	Fuse 3 on fuse holder A -SA3-	50 A	-	Radiator fan control unit -J293-	30
SA4	-	Fuse 4 on fuse holder A -SA4-	60 A	-	Fuse 12 on fuse holder C -SC12- to fuse 17 on fuse holder C -SC17- Fuse 22 on fuse holder C -SC22- to fuse 27 on fuse holder C -SC27- Fuse 28 on fuse holder C -SC28- Fuse 44 on fuse holder C -SC44- Fuse 46 on fuse holder C -SC46-	30
SA5	-	Fuse 5 on fuse holder A -SA5-	80 A	-	Fuse 29 on fuse holder C -SC29- to fuse 31 on fuse holder C -SC31-	30
SA6	-	Fuse 6 on fuse holder A -SA6-	70 A	-	Fuse 32 on fuse holder C -SC32- to fuse 37 on fuse holder C -SC37-	30
SA7	-	Fuse 7 on fuse holder A -SA7-	60 A	-	Second battery charging circuit relay -J713- High heat output relay -J360- Fuse 38 on fuse holder C -SC38- Fuse 43 on fuse holder C -SC43- Fuse 45 on fuse holder C -SC45-	30
SA8	-	Fuse 8 on fuse holder A -SA8-	40 A	-	ABS control unit -J104-	30

1) Only models with 180-A alternator, installed in alternator wire

### 1.9.2 Fuse holder A -SA- , on E-box high

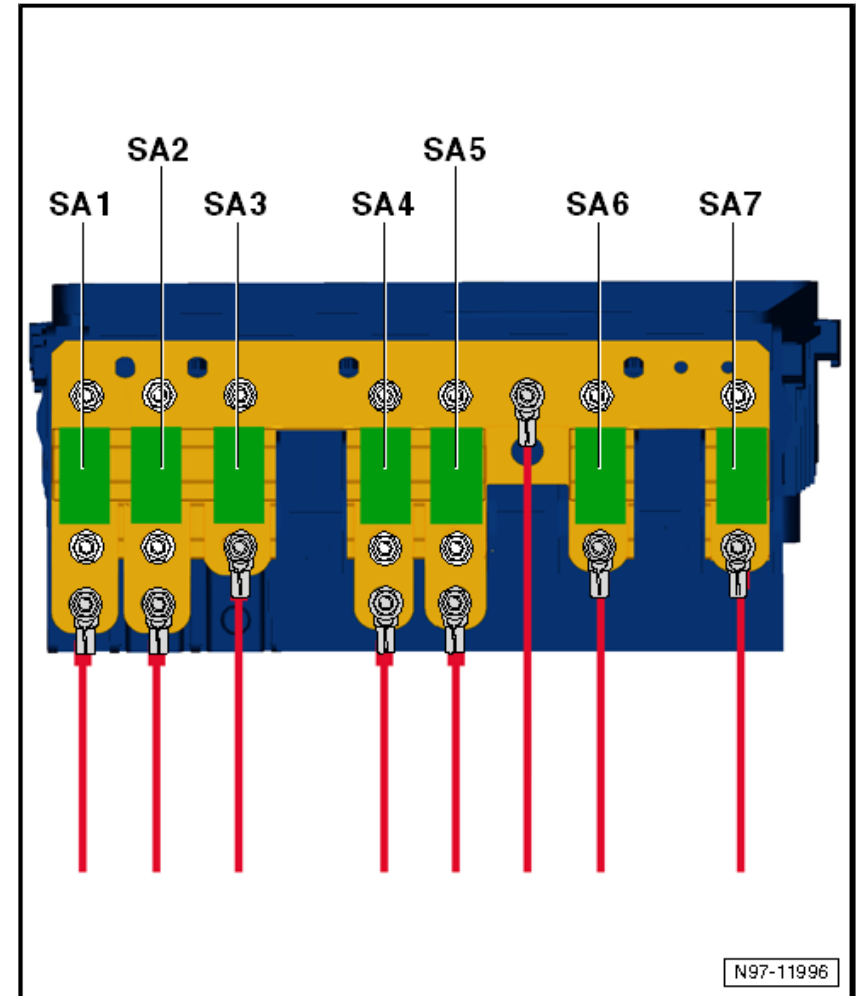
Fuse colours for MIDI fuse:

- ◆ 30 A - orange
- ◆ 40 A - green
- ◆ 50 A - red
- ◆ 60 A - yellow
- ◆ 70 A - brown
- ◆ 80 A - white
- ◆ 100 A - blue
- ◆ 125 A - pink
- ◆ 150 A - grey
- ◆ 200A - purple



Note

*Torque settings ⇒ Electrical system, Repair Group 97,  
Removing and installing fuse holders*



Fuse assignment of fuse holder A -SA- , on E-box high

Screw location	Current flow diagram designation	Nominal value	Function/component	Terminal
SA1	- Fuse 1 on fuse holder A -SA1-	150 A /180 A <sup>1)</sup>	- Alternator -C-	30
SA2	- Fuse 2 on fuse holder A -SA2-	80 A	- Electromechanical power steering motor -V187-	30

<b>Screw location</b>	<b>Current flow diagram designation</b>	<b>Nominal value</b>	<b>Function/component</b>	<b>Terminal</b>
SA3	- Fuse 3 on fuse holder A -SA3-	60 A	- Fuse 32 on fuse holder C -SC32- to fuse 37 on fuse holder C -SC37-	30
SA4	- Fuse 4 on fuse holder A -SA4-	50 A	- Radiator fan control unit -J293-	30
SA5	- not assigned	-	-	
SA6	- Fuse 6 on fuse holder A -SA6-	80 A	- Fuse 29 on fuse holder C -SC29- to fuse 31 on fuse holder C -SC31-	30
SA7	- Fuse 7 on fuse holder A -SA7-	40 A	- ABS control unit -J104-	30

1) Only models with 180-A alternator, installed in alternator wire



# 1 Relays

## 1.1 Overview of relay carriers

### 1 - Heated windscreen relay -J47-

- ❑ Fitting location: ⇒ [page 2](#)

### 2 - Relay carrier 1

- ❑ Fitting location: ⇒ [page 2](#)
- ❑ Relay assignment: ⇒ [page 2](#)

### 3 - Relay carrier 2

- ❑ Fitting location: ⇒ [page 3](#)
- ❑ Relay assignment: ⇒ [page 3](#)

### 4 - Relay carrier 3

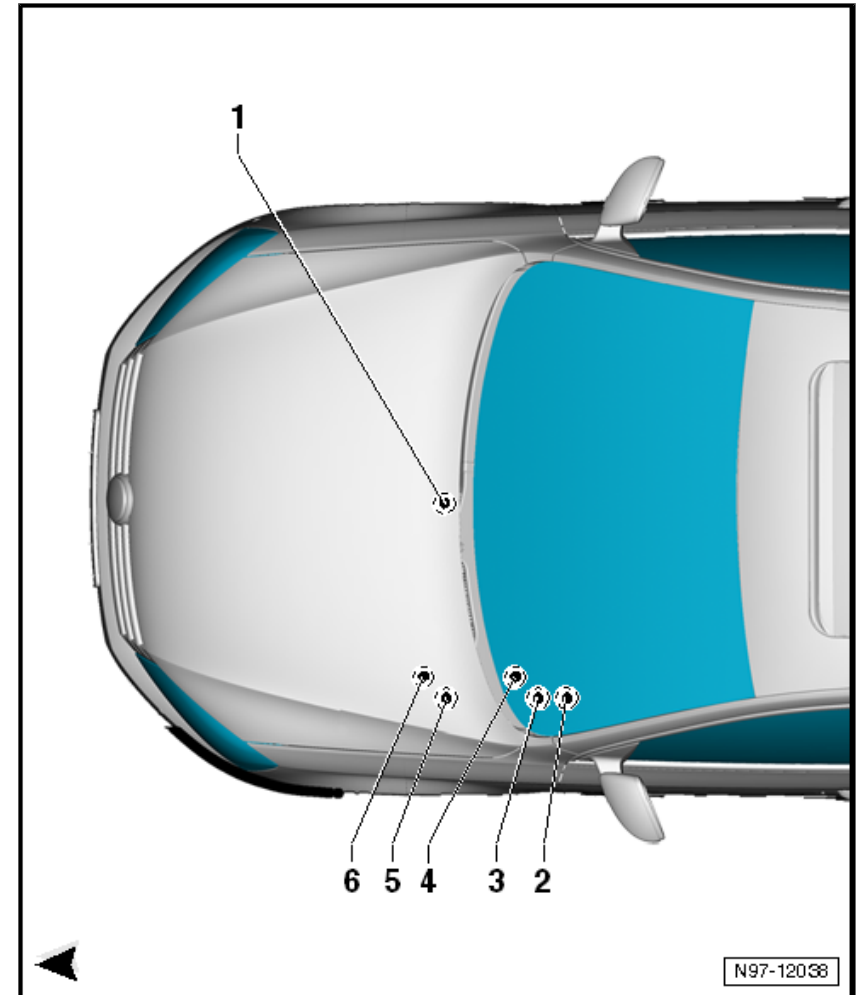
- ❑ Fitting location: ⇒ [page 4](#)
- ❑ Relay assignment: ⇒ [page 4](#)

### 5 - Additional relay carrier

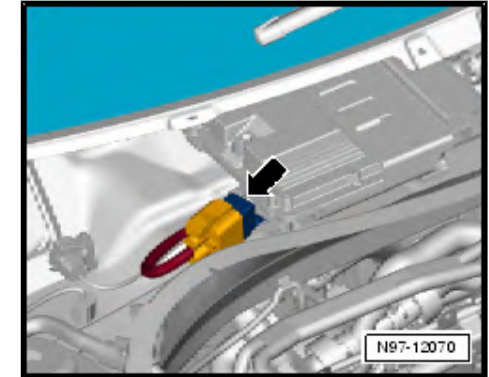
- ❑ Fitting location: ⇒ [page 5](#)
- ❑ Relay assignment: ⇒ [page 5](#)

### 6 - Relay carrier on E-box

- ❑ Fitting location: ⇒ [page 5](#)
- ❑ Relay assignment for E-box low ⇒ [page 5](#)
- ❑ Relay assignment for E-box high ⇒ [page 6](#)



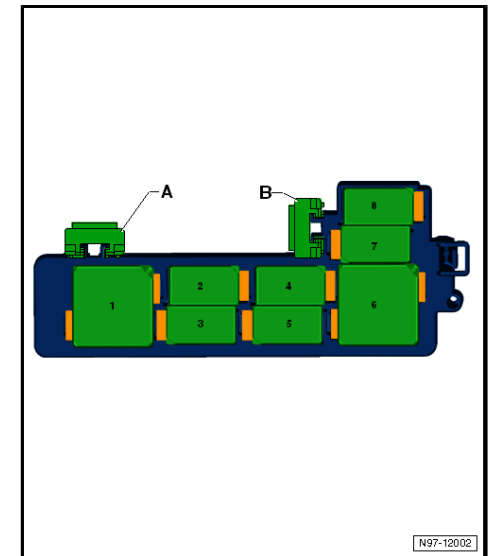
**1.2 Heated windscreen relay -J47-**



**1.2.1 Fitting location:**

In plenum chamber next to engine control unit -arrow-

**1.3 Relay carrier 1**



**1.3.1 Fitting location:**

on left under dash panel

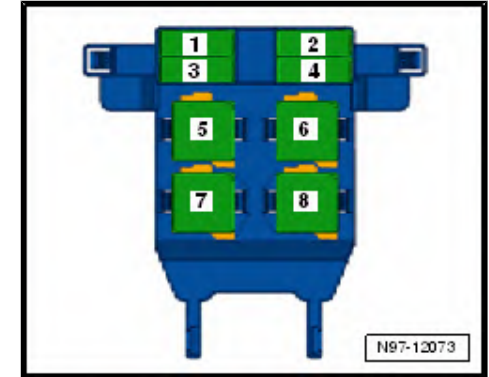
**1.3.2 Relay assignment:**

1 - Fresh air blower relay -J13- (Climatic with auxiliary heater)

2 - Auxiliary heater operation relay -J485- (Climatic with auxiliary heater)

- 3 - Auxiliary heater operation relay -J485- (diesel engine with auxiliary heater)
- 4 - not assigned
- 5 - Continued coolant circulation relay -J151- (only 1.8l/2.0l TFSI)
- 5 - Current supply relay -J17-
- 6 - Terminal 50 voltage supply relay -J682- (not for models with start/stop system)
- 7/8 - Voltage supply relay 2 -J710- (not for models with start/stop system)

**1.4 Relay carrier 2**



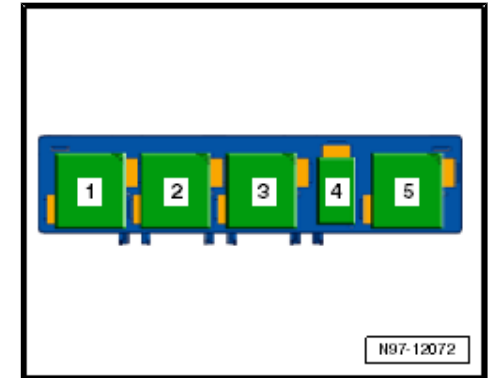
**1.4.1 Fitting location:**

on left under dash panel

**1.4.2 Relay positions:**

- 1 - not assigned
- 2 - not assigned
- 3 - not assigned
- 4 - not assigned
- 5 - not assigned
- 6 - not assigned
- 7 - Second battery charging circuit relay -J713- (100)
- 8 - not assigned

**1.5 Relay carrier 3**



**1.5.1 Fitting location:**

on left under dash panel

**1.5.2 Relay assignment:**

- 1 - Heated rear window relay -J9- (645)
- 2 - Terminal 15 voltage supply relay -J329- (645)
- 3 - Dual tone horn relay -J4- (646)
- 3 - Headlight washer system relay -J39- (646)
- 4 - Trailer voltage supply relay -J941- (from May 2012)
- 4 - not assigned
- 5 - X-contact relief relay -J59- (644)

**1.6 Additional relay carrier**



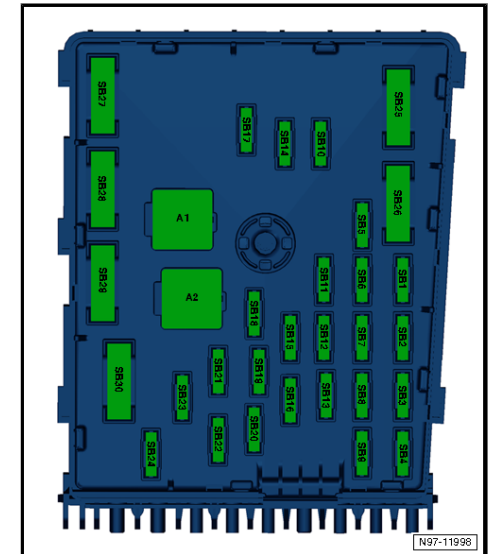
**1.6.1 Fitting location:**

Under electronics box in engine compartment, left

**1.6.2 Relay assignment:**

- 1 - Starter relay 1 -J906- (643) – only models with start/stop system
- 2 - Automatic glow period control unit -J179- (457)
- 3 - not assigned
- 4 - Low heat output relay -J359- (53)
- 5 - High heat output relay -J360- (100)
- 6 - Starter relay 2 -J907- (489) – only models with start/stop system

**1.7 Relay carrier on E-box low**



**1.7.1 Fitting location:**

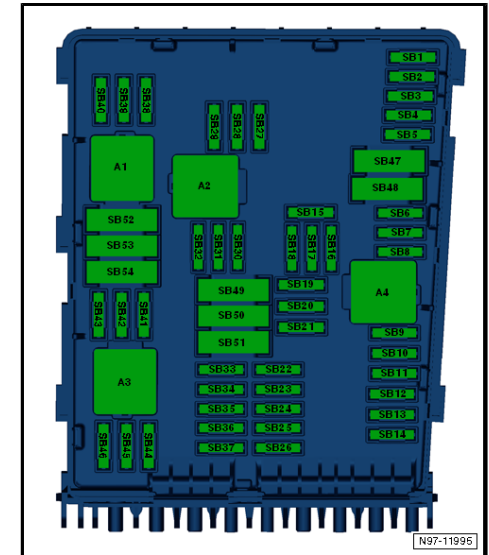
on left in engine compartment

**1.7.2 Relay assignment:**

- A1 - Engine component current supply relay -J757-
- A1 - Relay for gas shut-off valves -J908-
- A2 - Terminal 30 voltage supply relay -J317- (diesel engine)

A2 - Motronic power supply relay -J271- (petrol engine)

**1.8 Relay carrier on E-box high**



**1.8.1 Fitting location:**

on left in engine compartment

**1.8.2 Relay assignment:**

A1 - Current bridge

A1 - Relay for gas shut-off valves -J908-

A2 - Continued coolant circulation relay -J151- (100)

A3 - not assigned

A4 - Main relay -J271- (100)

1 Control units in engine compartment

1.1 Overview of control units

1 - Auxiliary heater control unit -J364-

- ❑ Fittings location: ⇒ [page 2](#)
- ❑ Pin assignment: ⇒ [page 2](#)

2 - Power steering control unit -J500-

- ❑ Fittings location: ⇒ [page 3](#)
- ❑ Pin assignment: ⇒ [page 3](#)

3 - ABS control unit -J104-

- ❑ Fittings location: ⇒ [page 4](#)
- ❑ Pin assignment: ⇒ [page 4](#)

4 - Automatic gearbox control unit -J217-

- ❑ Fittings location: ⇒ [page 5](#)
- ❑ Pin assignment: ⇒ [page 5](#)

4 - Voltage stabiliser -J532-

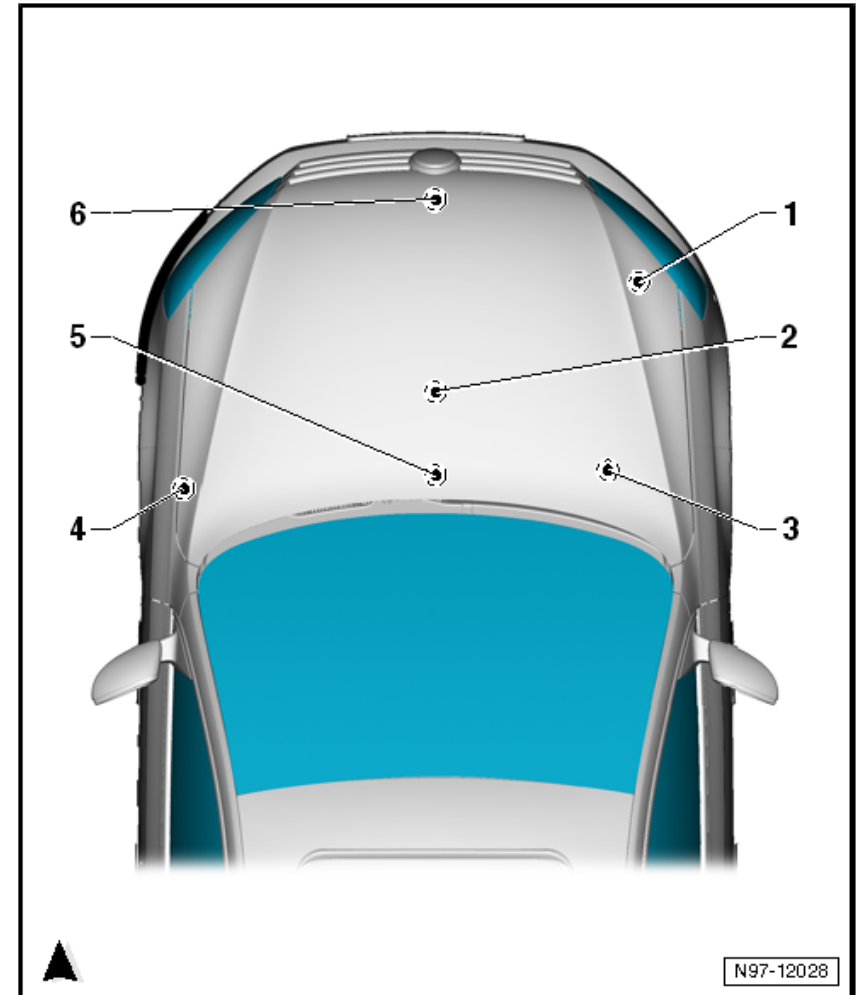
- ❑ Fittings location: ⇒ [page 6](#)
- ❑ Pin assignment: ⇒ [page 6](#)

5 - Engine control unit -J623-

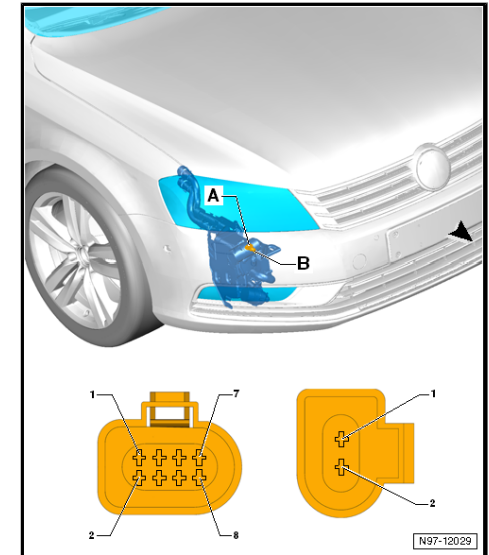
- ❑ Fittings location: ⇒ [page 7](#)
- ❑ Pin assignment: ⇒ [page 7](#)

6 - Adaptive cruise control unit -J428-

- ❑ Fittings location: ⇒ [page 8](#)
- ❑ Pin assignment: ⇒ [page 8](#)



**1.2 Auxiliary heater control unit -J364-**



**1.2.1 Fitting location:**

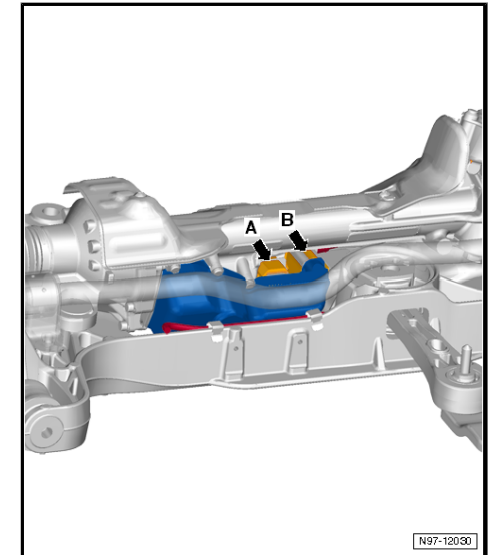
Behind the right front wheel housing liner

**1.3 Connector assignment:**

- Auxiliary heater control unit -J364-
- 2-pin connector -T2- -T2cn-
- 8-pin connector -T8- -T8ai-



1.4 Power steering control unit -J500-



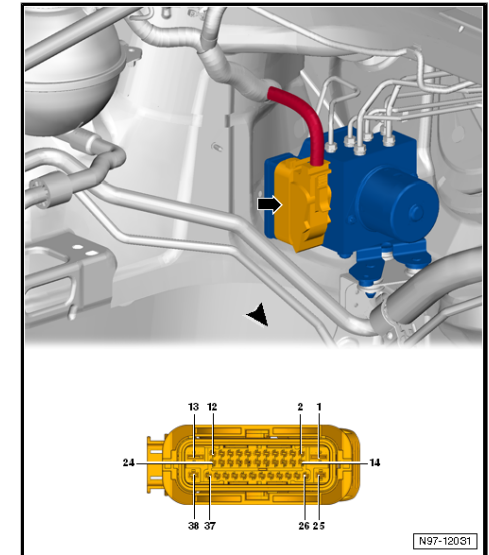
1.4.1 Fitting location:

At the steering on the subframe

1.4.2 Connector assignment:

A - 5-pin connector -T5- -T5z-

B - 2-pin connector -T2- -T2fn



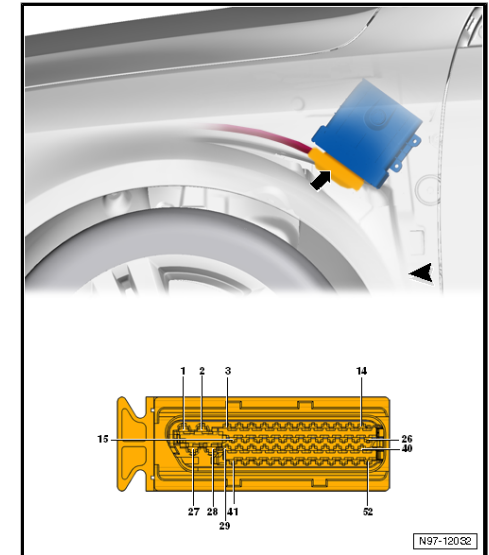
**1.5.1 Fitting location:**

On bulkhead, on right in engine compartment -arrow-

**1.5.2 Connector assignment:**

- 38-pin connector -T38- -T38-

**1.6 Automatic gearbox control unit -J217-**



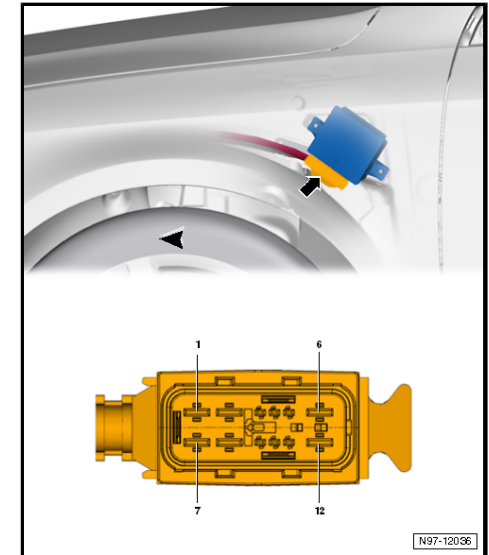
**1.6.1 Fitting location:**

In front left wheel housing -arrow-

**1.6.2 Connector assignment:**

- 52-pin connector -T52- -T52-

**1.7 Voltage stabiliser -J532-**



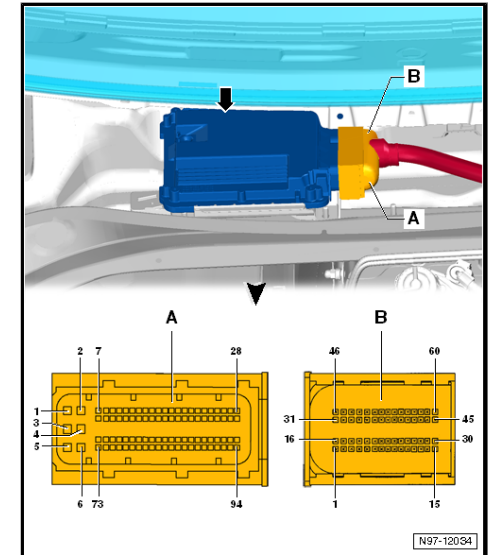
**1.7.1 Fitting location:**

In front left wheel housing -arrow-

**1.7.2 Connector assignment:**

- 12-pin connector -T12- -T12ad-

**1.8 Engine control unit -J623-**



**1.8.1 Fitting location:**

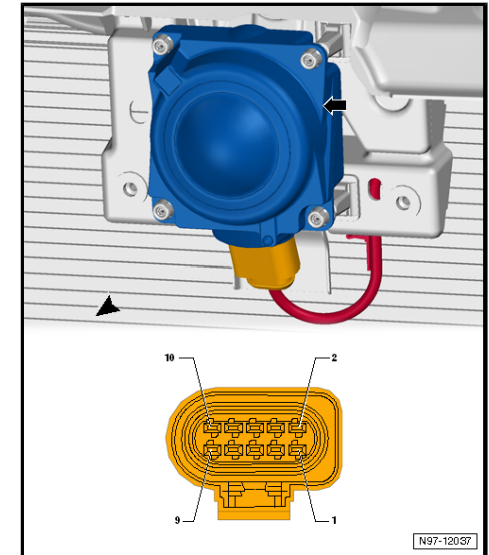
Under the plenum chamber cover, centre -arrow-

**1.8.2 Connector assignment:**

A - 94-pin connector -T94- -T94-

B - 60-pin connector -T60- -T60-

**1.9 Adaptive cruise control unit -J428-**



**1.9.1 Fitting location:**

Behind radiator in centre -arrow-

**1.9.2 Connector assignment:**

- 10-pin connector -T10- -T10y-

1 Control units in interior

1.1 Overview of control units

1 - Airbag control unit -J234-

- Fitting location: ⇒ [page 4](#)
- Connector assignment: ⇒ [page 4](#)

2 - Control unit for terminal control and engine start -J942-

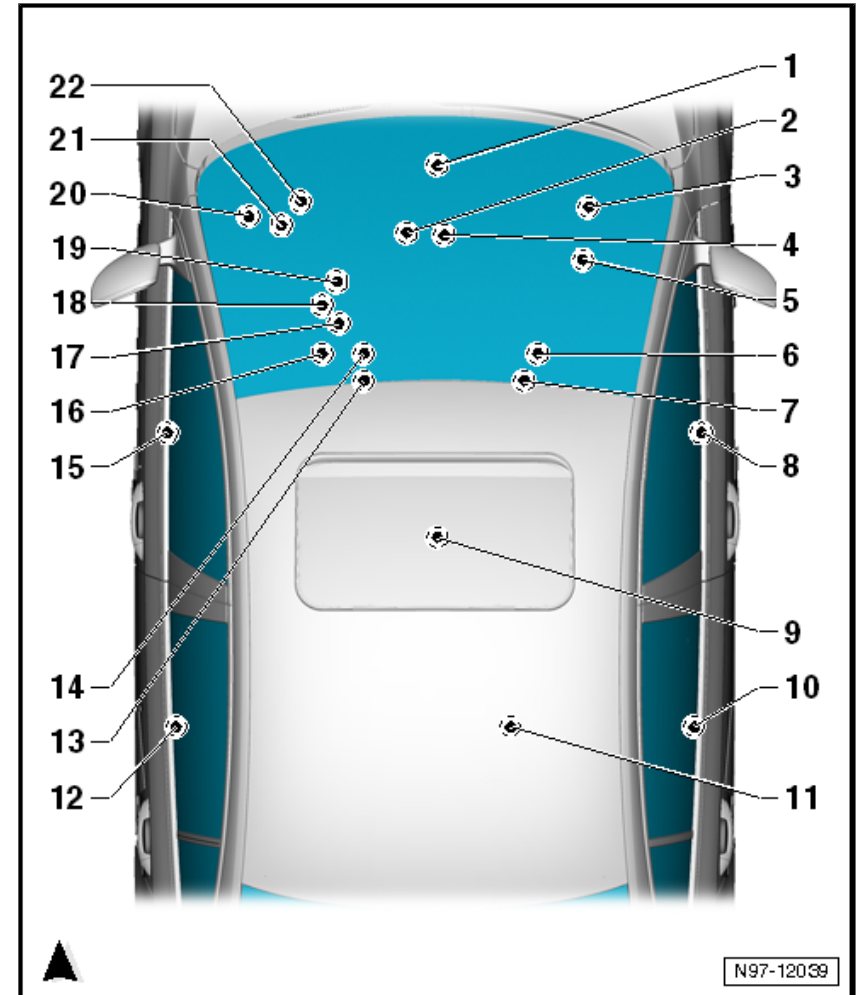
- Fitting location: ⇒ [page 5](#)
- Connector assignment: ⇒ [page 5](#)

3 - Convenience system central control unit -J393-

- Fitting location: ⇒ [page 6](#)
- Connector assignment: ⇒ [page 6](#)

4 - Air conditioning system control unit -J301- / Climatronic control unit -J255-

- Air conditioning system control unit -J301- ⇒ [page 6](#)
- Connector assignment: ⇒ [page 6](#)
- Climatronic control unit -J255-



Volkswagen Technical Site: <http://vwts.ru> <http://vwts.info>

[⇒ page 8](#)

- Connector assignment: [⇒ page 8](#)

**4 - Control unit with display for radio and navigation -J503-**

- Connector assignment [⇒ page 27](#)

**5 - Control unit for cornering light and headlight range control -J745-**

- Fitting location: [⇒ page 9](#)
- Connector assignment: [⇒ page 9](#)

**6 - Mobile telephone operating electronics control unit -J412-**

- Fitting location: [⇒ page 10](#)
- Connector assignment: [⇒ page 10](#)

**7 - Heated rear seats control unit -J786-**

- Fitting location: [⇒ page 11](#)

**8 - Front passenger door control unit -J387-**

- Fitting location: [⇒ page 12](#)
- Connector assignment: [⇒ page 12](#)

**9 - Control unit for electromechanical parking brake -J540-**

- Fitting location: [⇒ page 14](#)
- Connector assignment: [⇒ page 14](#)

**10 - Rear passenger side door control unit -J927-**

- Fitting location: [⇒ page 15](#)
- Connector assignment: [⇒ page 15](#)

**11 - Fuel pump control unit -J538-**

- Fitting location: [⇒ page 17](#)
- Connector assignment: [⇒ page 17](#)

**12 - Rear driver side door control unit -J926-**

- Fitting location: [⇒ page 15](#)
- Connector assignment: [⇒ page 15](#)

**13 - Heated front seats control unit -J774-**

- Fitting location: [⇒ page 18](#)

**14 - Driver seat adjustment control unit -J810-**

- Fitting location: [⇒ page 19](#)



**15 - Driver door control unit -J386-**

- Fitting location: ⇒ [page 12](#)
- Connector assignment: ⇒ [page 12](#)

**16 - Special vehicle control unit -J608-**

- Fitting location: ⇒ [page 19](#)

**16 - Amplifier -R12-**

- Fitting location: ⇒ [page 20](#)

**16 - Digital sound package amplifier -R184-**

- Fitting location: ⇒ [page 21](#)

**17 - Steering column electronics control unit -J527-**

- Fitting location: ⇒ [page 21](#)
- Connector assignment: ⇒ [page 21](#)

**18 - Dash panel insert -K- /  
control unit in dash panel insert -J285-**

- Connector assignment: ⇒ [page 22](#)

**19 - Control unit for electronic steering column lock -J764-**

- Fitting location: ⇒ [page 24](#)
- Connector assignment: ⇒ [page 24](#)

**20 - Park assist steering control unit -J791-  
/ parking aid control unit -J446-**

- Fitting location: ⇒ [page 24](#)
- Connector assignment: ⇒ [page 24](#)

**21 - Data bus diagnostic interface -J533-**

- Fitting location: ⇒ [page 25](#)
- Connector assignment: ⇒ [page 25](#)

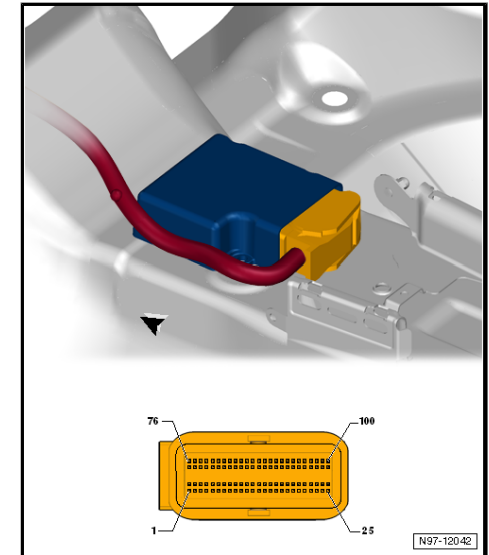
**21 - Onboard supply control unit -J519-**

- Fitting location: ⇒ [page 26](#)
- Connector assignment: ⇒ [page 26](#)

**22 - Taxi alarm remote control, control unit -J601-**

- Fitting location: ⇒ [page 27](#)

1.2 Airbag control unit -J234-



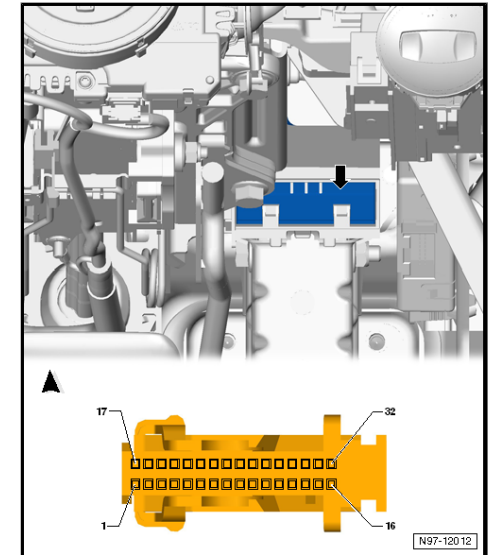
1.2.1 Fitting location:

under centre console, front

1.2.2 Connector assignment:

- 100-pin connector -T100-

**1.3 Control unit for terminal control and engine start -J942-**



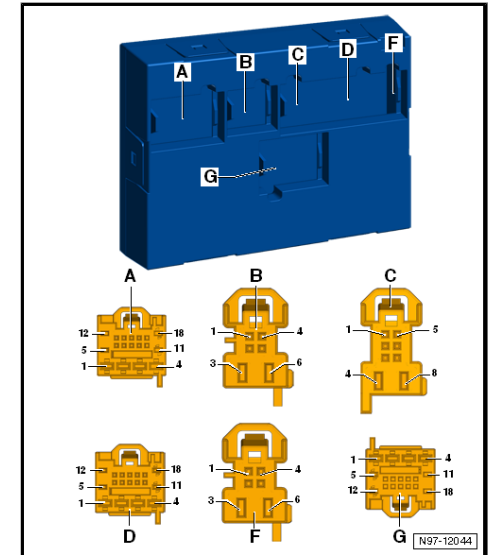
**1.3.1 Fitting location:**

Under the left side of the instrument panel above the pedals.

**1.3.2 Connector assignment:**

- 32-pin connector -T32g-

**1.4 Convenience system central control unit -J393-**



**1.4.1 Fitting location:**

Below the dash panel, behind the glove compartment

**1.4.2 Connector assignment:**

A - 18-pin connector -T18d-

B - 6-pin connector -T6ao-

C - 8-pin connector -T8r-

D - 18-pin connector -T18a-

F - 6-pin connector -T6an-

G - 18-pin connector -T18c-

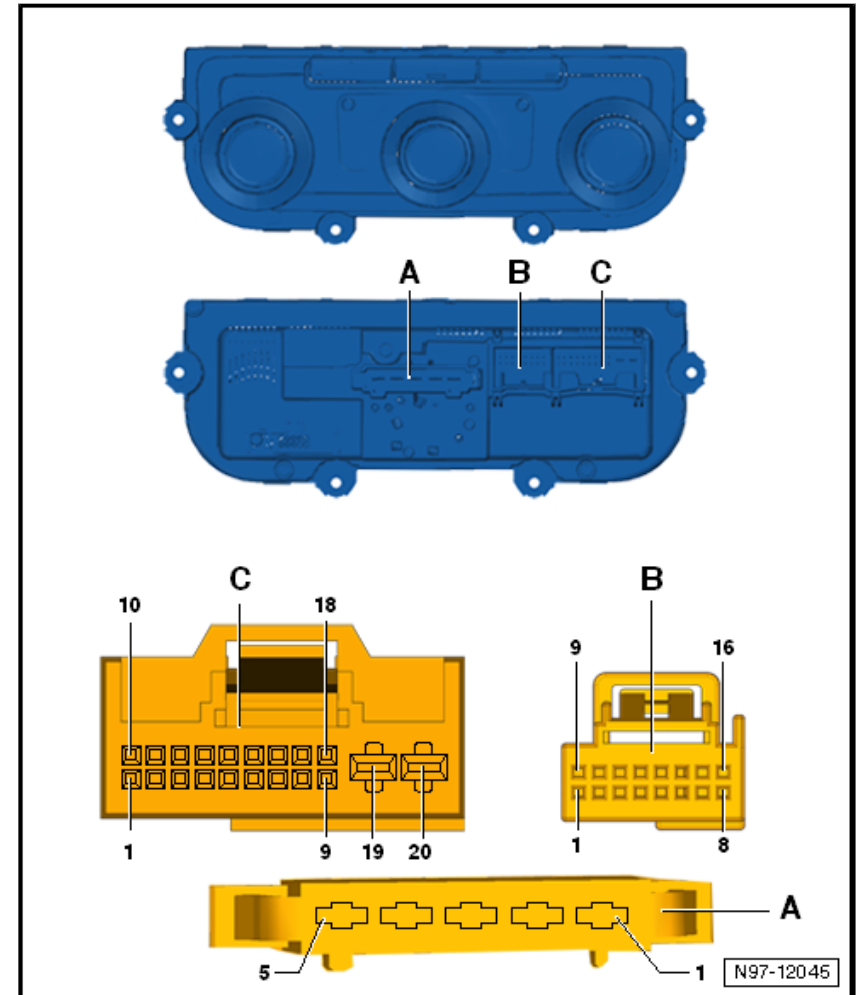
**1.5 Air conditioning system control unit -J301-**

**1.5.1 Connector assignment:**

A - 5-pin connector -T5r-

B - 16-pin connector -T16j-

D - 20-pin connector -T20b-



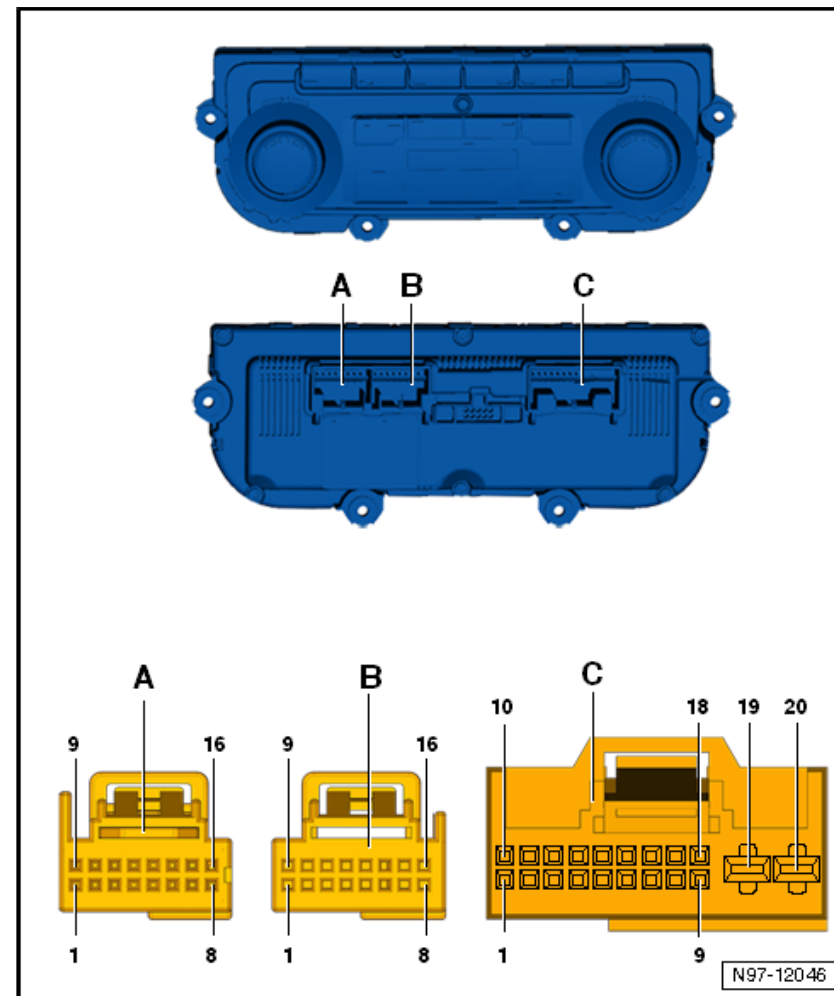
1.6 Climatronic control unit -J255-

1.6.1 Connector assignment:

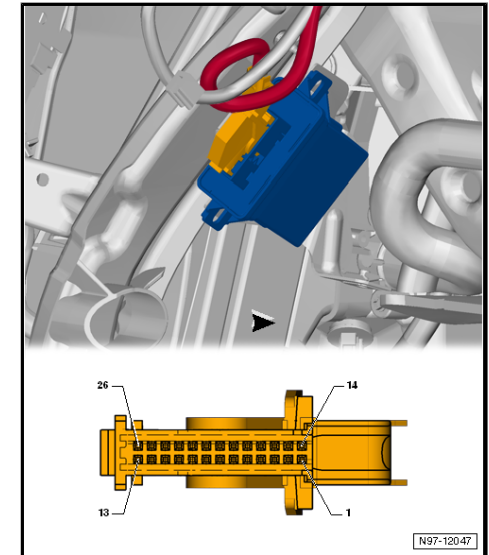
A - 16-pin connector -T16h-

B - 16-pin connector -T16i-

C - 20-pin connector -T20c-



1.7 Headlight range control unit -J431-



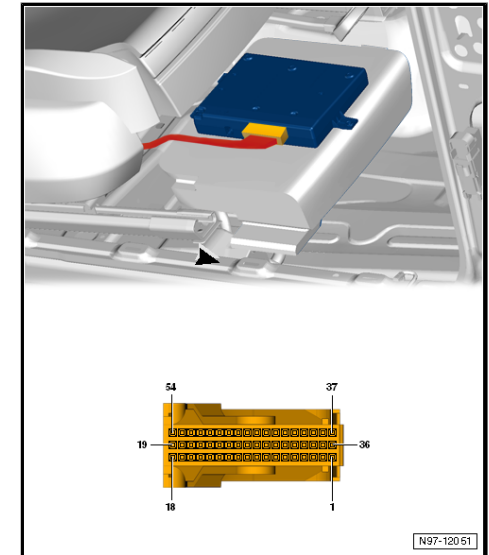
1.7.1 Fitting location:

Behind the glove compartment, left

1.7.2 Connector assignment:

- 26-pin connector -T26-

- 1.8 Mobile telephone operating electronics control unit -J412- / telephone controls control unit -J738-



**1.8.1 Fitting location:**

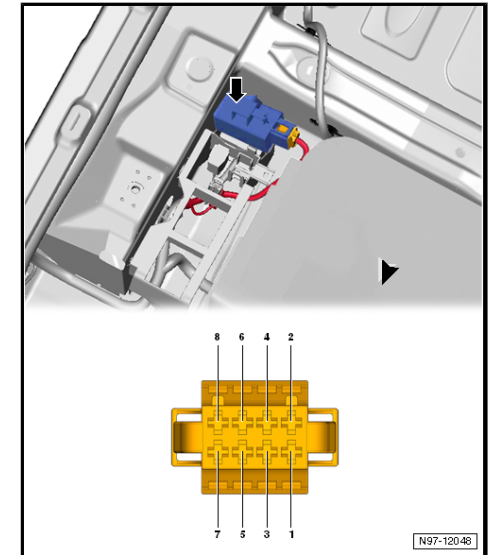
under the seat on front right

**1.8.2 Connector assignment:**

- 54-pin connector -T54-



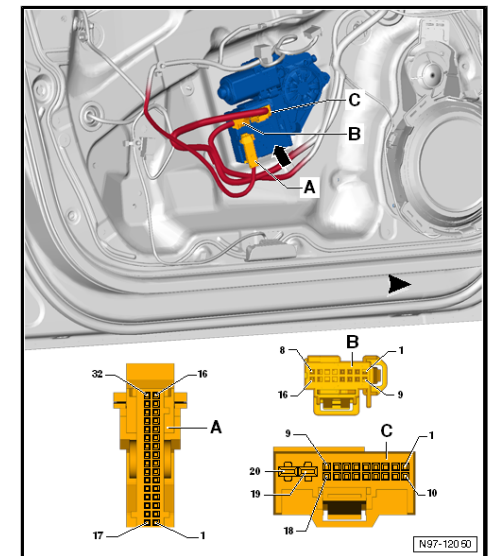
1.9 Heated rear seats control unit -J786-



1.9.1 Fitting location:

Under seat on front right -arrow-

1.10 Front passenger door control unit -J387-



**1.10.1 Fitting location:**

On inside of front passenger door -arrow-

**1.11 Driver door control unit -J386-**

**1.11.1 Fitting location:**

On inside of driver door -arrow-



**Note**

*The illustration shows the driver side. The front passenger side is similar.*

**1.11.2 Connector assignment:**

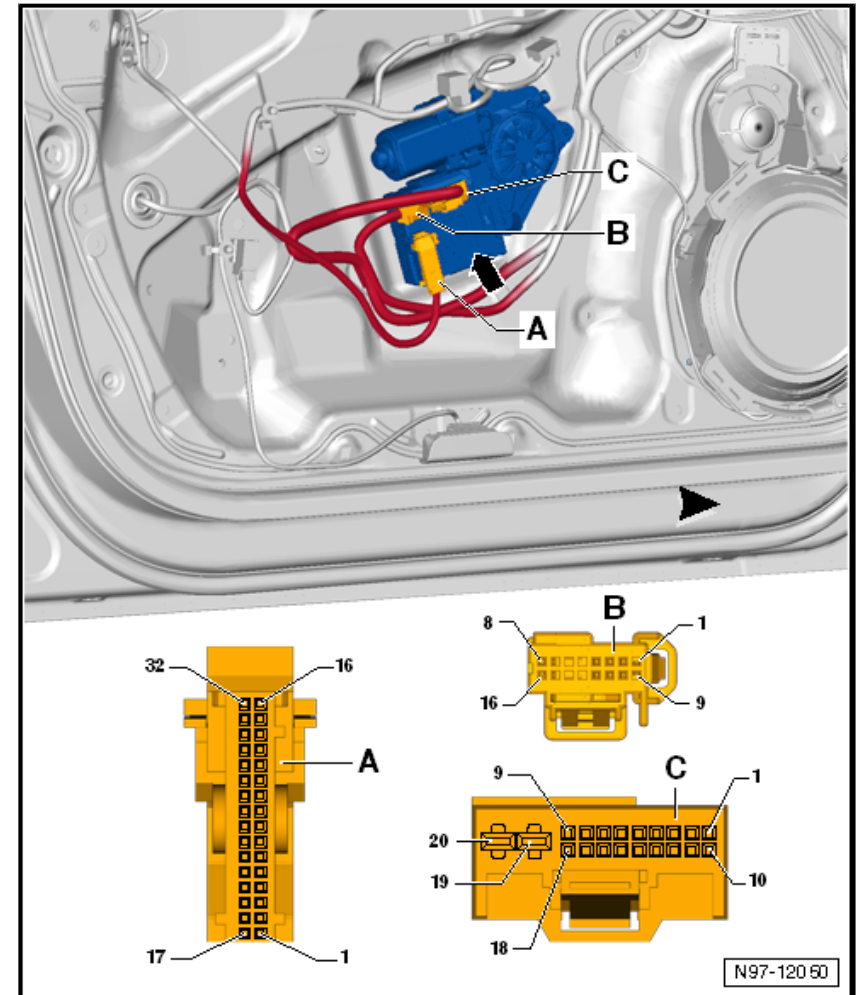
- Front passenger door control unit -J387- , driver door control unit -J386-

Connector:

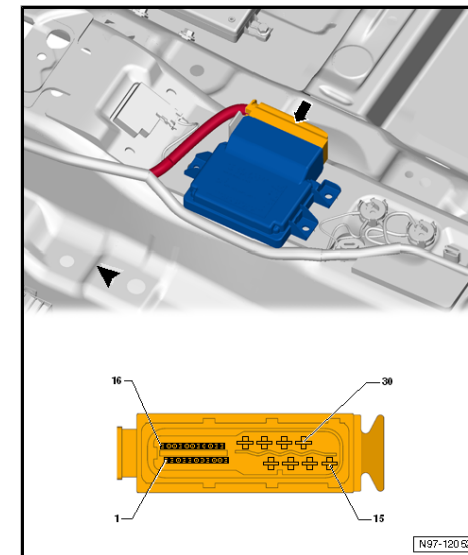
A - 32-pin connector -T32a- , - 32-pin connector -T32b-

B - 16-pin connector -T16k- , - 16-pin connector -T16l-

C - 20-pin connector -T20g- , - 20-pin connector -T20h-



**1.12 Control unit for electromechanical parking brake -J540-**



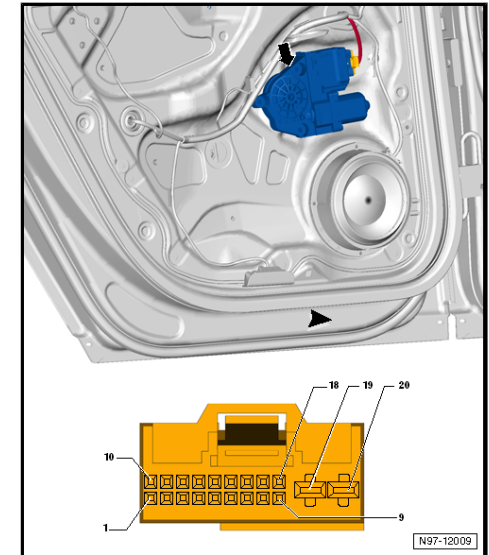
**1.12.1 Fitting location:**

On rear of centre tunnel -arrow-

**1.12.2 Connector assignment:**

- 30-pin connector -T30-

**1.13 Rear passenger side door control unit  
-J927-**



**1.13.1 Fitting location:**

On inside of rear door on front passenger side -arrow-

**1.14 Rear driver side door control unit -J926-**

**1.14.1 Fitting location:**

On inside of rear door on driver's side -arrow-



**Note**

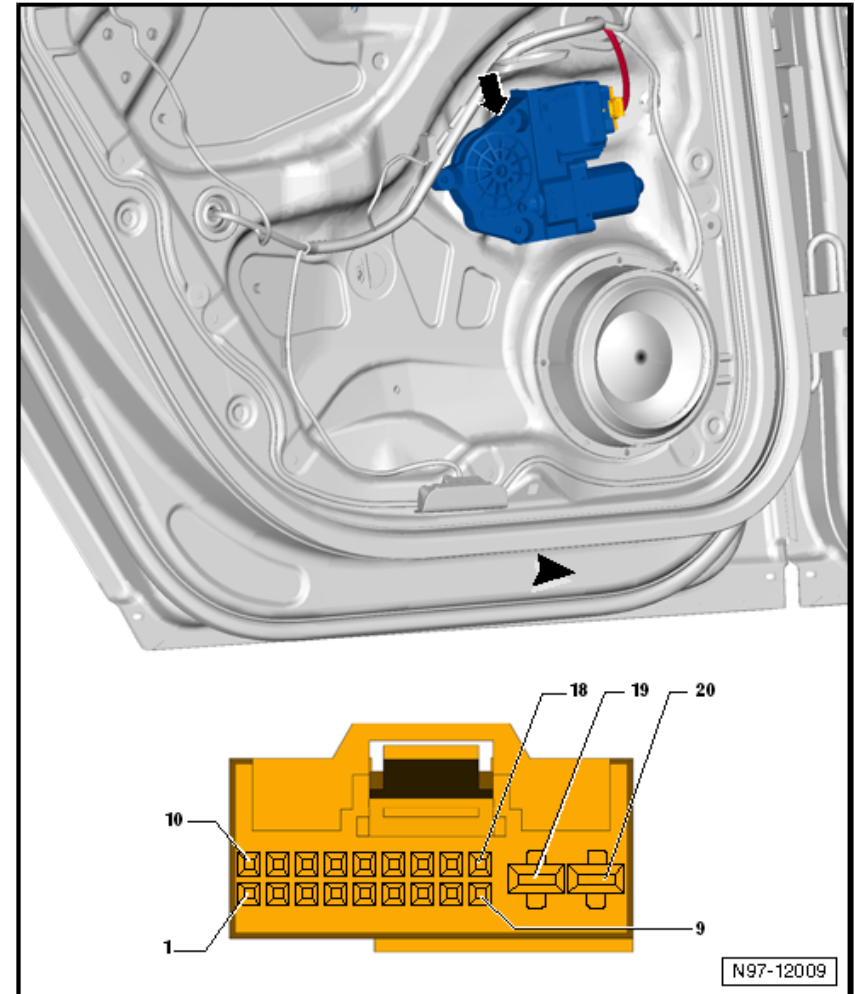
*The illustration shows the driver side. The front passenger side is similar.*

**1.14.2 Connector assignment:**

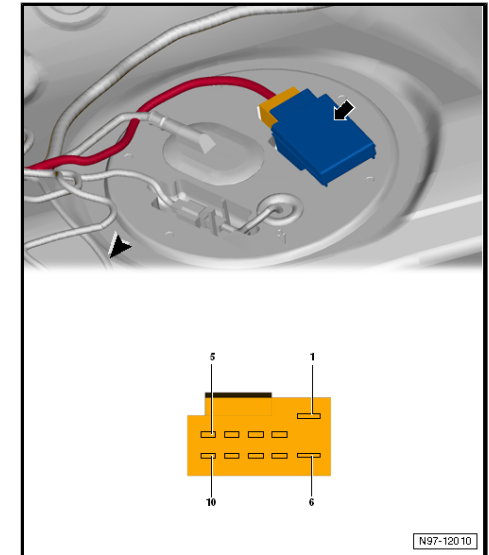
- Rear driver side door control unit -J926- / rear passenger side door control unit -J927-

Connector:

- 20-pin connector -T20k- / 20-pin connector -T20l-



**1.15 Fuel pump control unit -J538-**



**1.15.1 Fitting location:**

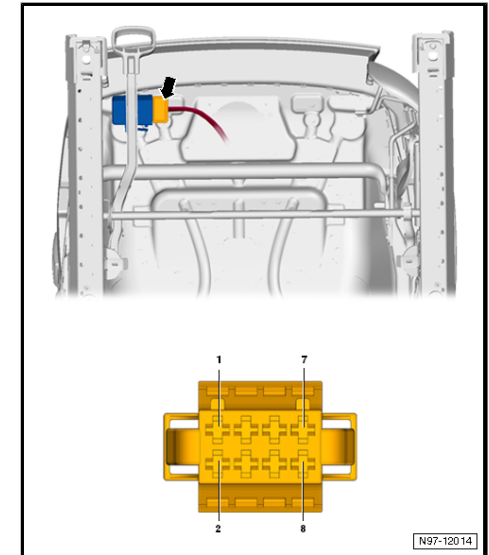
under rear right seat, on fuel delivery unit -arrow-

Fitting location in natural gas vehicles: on left in luggage compartment

**1.15.2 Connector assignment:**

- 10-pin connector -T10p-

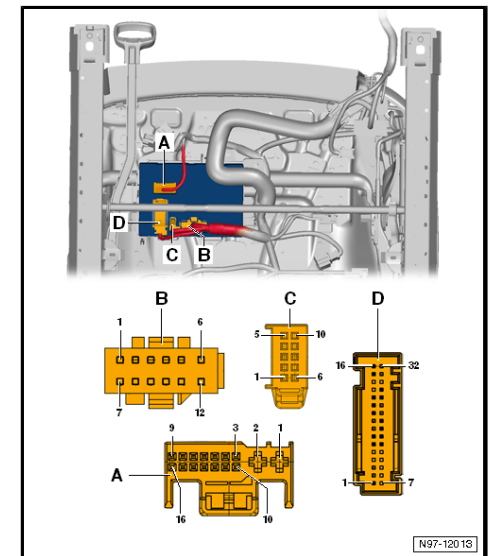
1.16 Heated front seats control unit -J774-



1.16.1 Fitting location:

On driver's seat frame -arrow-

1.17 Driver seat adjustment control unit -J810-

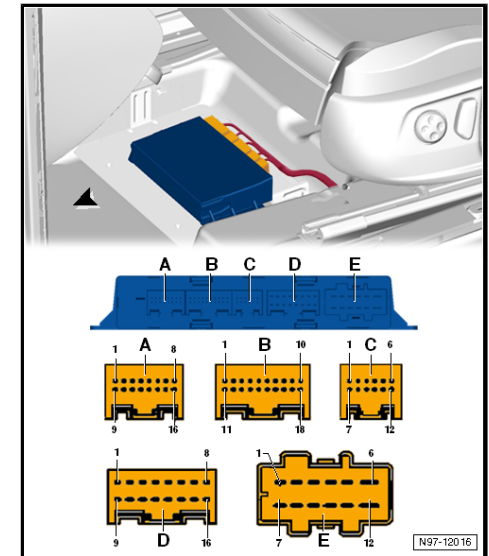




**1.17.1 Fitting location:**

Under the front driver side seat

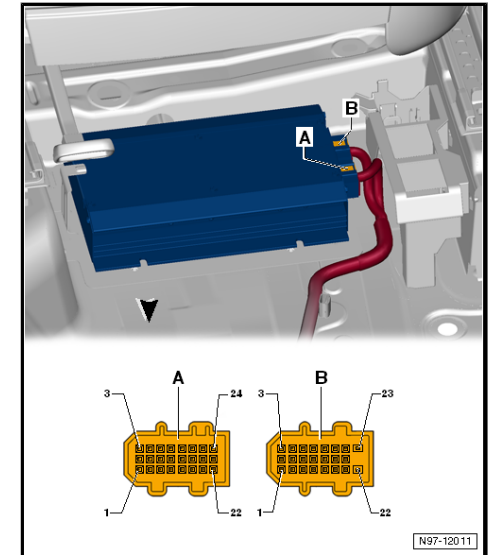
**1.18 Special vehicle control unit -J608-**



**1.18.1 Fitting location:**

Under driver seat -arrow-

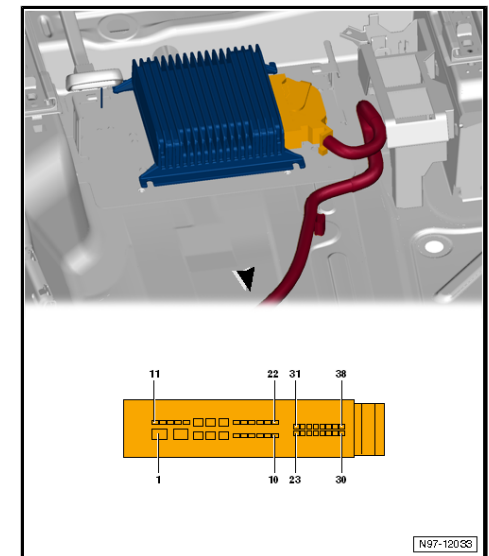
1.19 Amplifier -R12-



1.19.1 Fitting location:

under driver seat

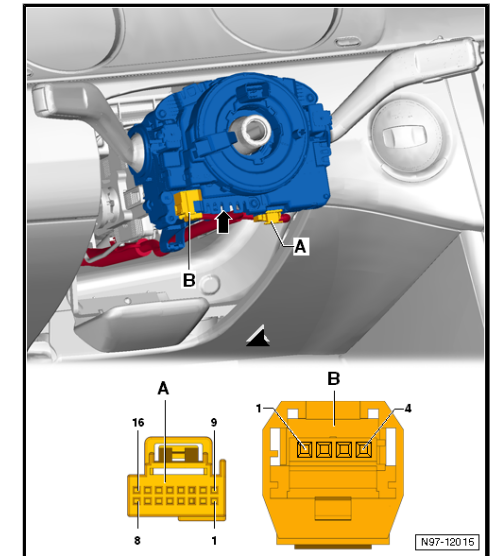
1.20 Digital sound package amplifier -R184-



**1.20.1 Fitting location:**

under driver seat

**1.21 Steering column electronics control unit  
-J527-**



**1.21.1 Fitting location:**

under steering column, near steering column switch -arrow-

**1.21.2**

**1.22 Connector assignment:**

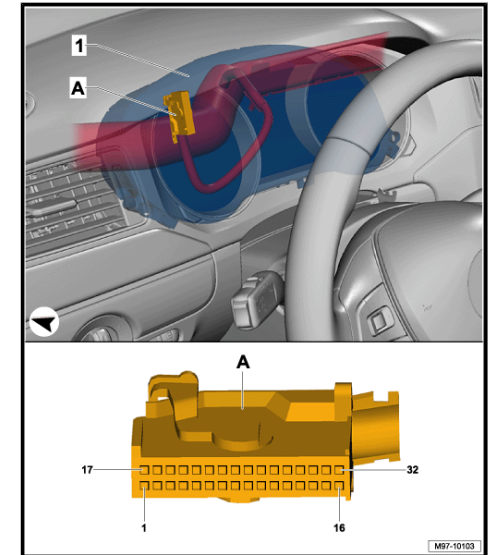
A - 16-pin connector -T16o-

B - 4-pin connector -T4ae-

**1.23 Dash panel insert -K- / control unit in dash panel insert -J285-**

 **Note**

*The illustration does not correspond with the selected vehicle, but the fitting location is the same.*

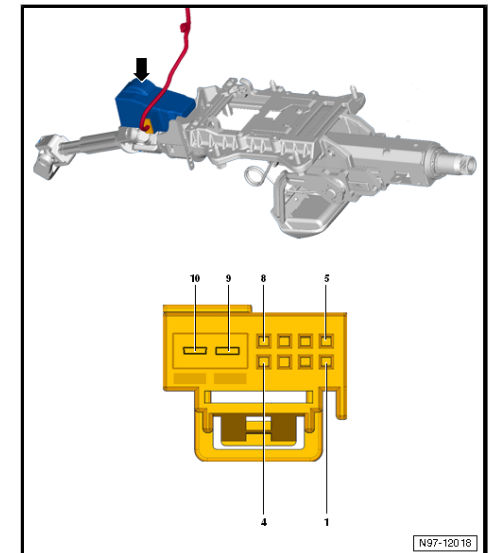


**1.23.1 Connector assignment:**

- 1 - Fuel gauge sender (full)
- 2 - Fuel gauge sender (empty)
- 3 - Fuel level sensor (full), only for all-wheel drive
- 4 - Fuel level sensor (empty), only for all-wheel drive
- 5 - not assigned
- 6 - not assigned
- 7 - not assigned
- 8 - not assigned
- 9 - Speed signal, sliding sunroof control unit output , control unit with display for radio and navigation system
- 10 - not assigned
- 11 - Oil level and oil temperature sender
- 12 - not assigned
- 13 - not assigned
- 14 - not assigned
- 15 - Front left brake pad wear sender

- 16 - Terminal 31
- 17 - Washer fluid level warning lamp
- 18 - Coolant temperature and coolant shortage warning lamp
- 19 - Ambient temperature sensor
- 20 - Terminal 31, sensor earth
- 21 - not assigned
- 22 - not assigned
- 23 - not assigned
- 24 - not assigned
- 25 - Electric park/handbrake warning lamp
- 26 - Brake fluid level warning lamp
- 27 - Oil pressure warning lamp
- 28 - Diagnostic interface for dash panel insert CAN data bus, high
- 29 - Diagnostic interface for dash panel insert CAN data bus, low
- 30 - not assigned
- 31 - Voltage supply, terminal 15
- 32 - Voltage supply, terminal 30

**1.24 Control unit for electronic steering column lock -J764-**



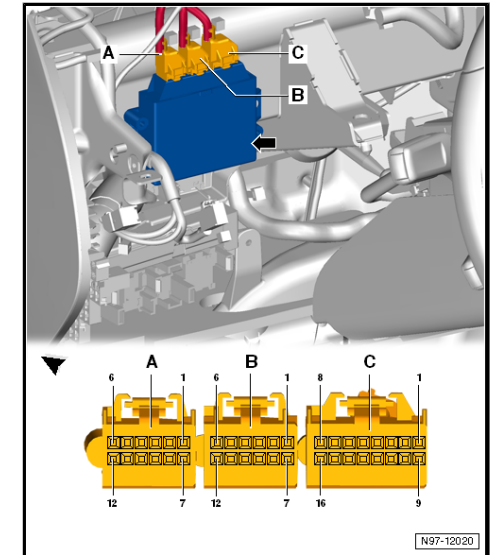
**1.24.1 Fitting location:**

On steering column -arrow-

**1.24.2 Connector assignment:**

- 10-pin connector -T10k-

**1.25 Park assist steering control unit -J791- /  
parking aid control unit -J446-**



**1.25.1 Fitting location:**

Under dash panel on left, behind relay carrier above onboard supply control unit -arrow-

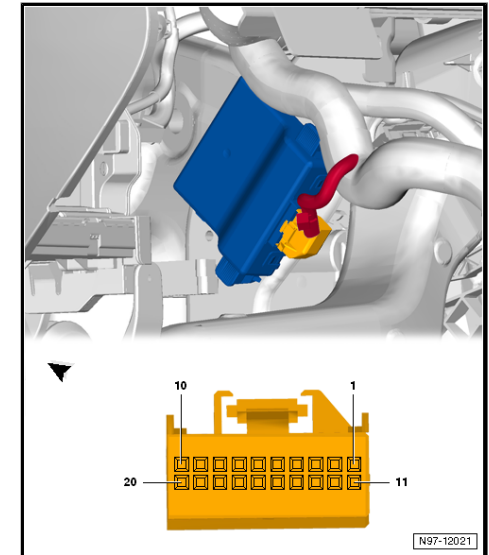
**1.25.2 Connector assignment:**

A - 12-pin connector -T12-

B - 12-pin connector -T12a-

C - 16-pin connector -T16-

1.26 Data bus diagnostic interface -J533-



**1.26.1 Fitting location:**

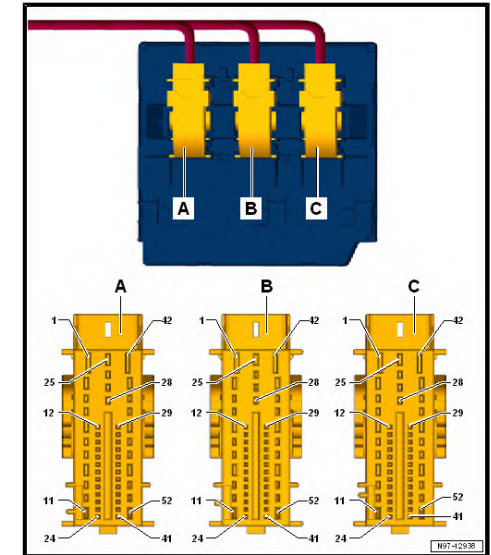
Left-hand drive models: in driver footwell, near pedal cluster

Right-hand drive models: in centre console underneath radio unit/navigation system, not illustrated.

**1.26.2 Connector assignment:**

- 20-pin connector -T20-

1.27 Onboard supply control unit -J519-



**1.27.1 Fitting location:**

Under dash panel on driver's side, below relay carrier.

**1.27.2 Connector assignment:**

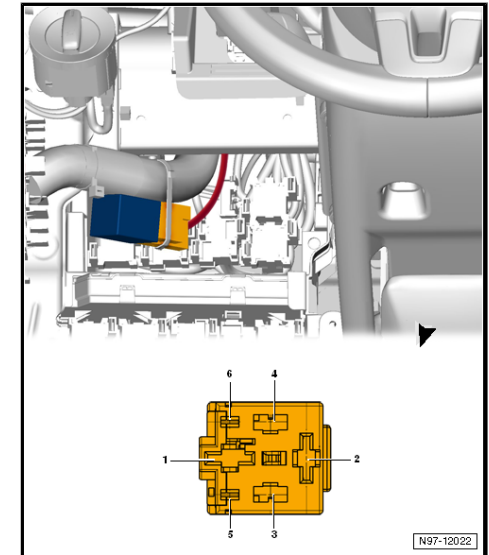
A - 52-pin connector -T52c- , brown

B - 52-pin connector -T52b- , white

C - 52-pin connector -T52a- , black



**1.28 Taxi alarm remote control, control unit -J601-**



**1.28.1 Fitting location:**

In driver footwell, behind relay carrier -arrow-.

**1.29 Control unit with display for radio and navigation -J503-**

1 - Control unit with display for radio and navigation -J503-

A - DAB input

- Only for Europe

A - SDRS input

- Only for American markets

A - GPS input

- Only for Japan

B - FM/AM input

C - FM input

D - GPS input

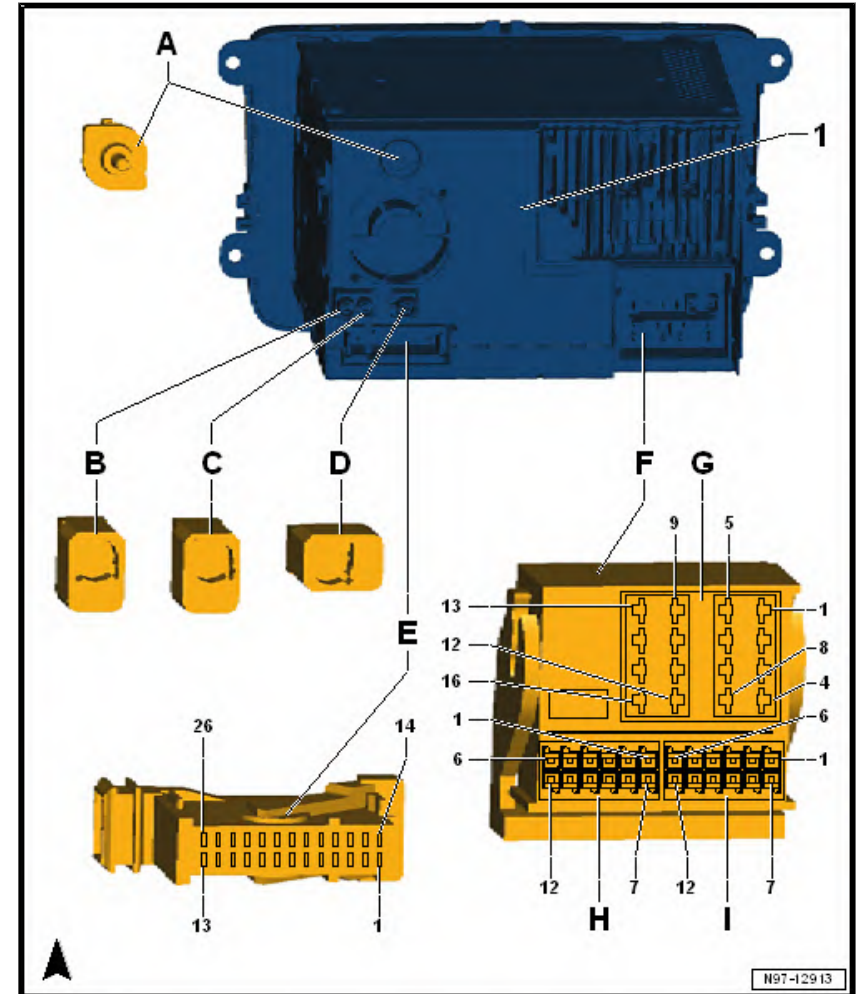
E - 26-pin connector -T26g-

F - Multi-pin connector

G - 16-pin connector -T16c-

H - 12-pin connector -T12j-

I - 12-pin connector -T12l-



Volkswagen Technical Site: <http://vwts.ru> <http://vwts.info>

### 1.29.1 Connector assignment

-T26g- (E)	Designation	-T16c- (G)	Designation
1	not assigned	1	Amplifier -R12- (sound system) Rear right bass loudspeaker -R17- +
2	not assigned	2	Amplifier -R12- (sound system) Front right bass loudspeaker -R23-

-T26g- (E)	Designation	-T16c- (G)	Designation
3	not assigned	3	Amplifier -R12- (sound system) Front left bass loudspeaker -R21-
4	not assigned	4	Amplifier -R12- (sound system) Rear left bass loudspeaker -R15-
5	not assigned	5	Amplifier -R12- (sound system) Rear right bass loudspeaker -R17-
6	Telephone bracket -R126-	6	Amplifier -R12- (sound system) Front right bass loudspeaker -R23-
7	Telephone bracket -R126-	7	Amplifier -R12- (sound system) Front left bass loudspeaker -R21-
8	Telephone bracket -R126-	8	Amplifier -R12- (sound system) Rear left bass loudspeaker -R15-
9	not assigned	9	Data bus diagnostic interface -J533- (CAN bus, high)
10	TV tuner -R78-	10	Data bus diagnostic interface -J533- (CAN bus, low)
11	TV tuner -R78-	11	not assigned
12	TV tuner -R78-	12	Terminal 31
13	TV tuner -R78-	13	not assigned
14	not assigned	14	not assigned
15	not assigned	15	Terminal 30
16	not assigned	16	Terminal 30
17	not assigned		
18	not assigned		
19	not assigned		
20	Telephone bracket -R126-		
21	not assigned		
22	TV tuner -R78-		
23	TV tuner -R78-		
24	TV tuner -R78-		
25	TV tuner -R78-		
26	TV tuner -R78-		

-T12j- (H)	Designation		-T12l- (l)	Designation
1	Connection for external audio sources -R199- (Aux-In)		1	Voice command microphone -R206- (micro in -)
2	Connection for external audio sources -R199- (Aux-In earth)		2	not assigned
3	CD changer -R41-		3	not assigned
4	CD changer -R41- (terminal 30)		4	not assigned
5	not assigned		5	Mobile telephone operating electronics control unit -J412-
6	CD changer -R41- (CD bus radio DATA)		6	Mobile telephone operating electronics control unit -J412-
7	Interface for external multimedia unit -R215- (Aux-In audio)		7	Voice command microphone -R206- (micro in +)
8	CD changer -R41- (CD-X audio left)		8	not assigned
9	CD changer -R41- (CD-X audio right)		9	not assigned
10	CD changer -R41- (terminal 15)		10	not assigned
11	CD changer -R41- (CD bus)		11	Mobile telephone operating electronics control unit -J412-
12	CD changer -R41-		12	Mobile telephone operating electronics control unit -J412-

# 1 Control units in luggage compartment

## 1.1 Overview of control units

### 1 - TV tuner -R78-

- Fitting location: ⇒ [page 2](#)

### 2 - Reversing camera system control unit -J772-

- Fitting location ⇒ [page 3](#)

### 3 - Electronically controlled damping control unit -J250-

- Fitting location: ⇒ [page 3](#)

- Pin assignment ⇒ [page 3](#)

### 4 - control unit for reducing-agent heater -J891-

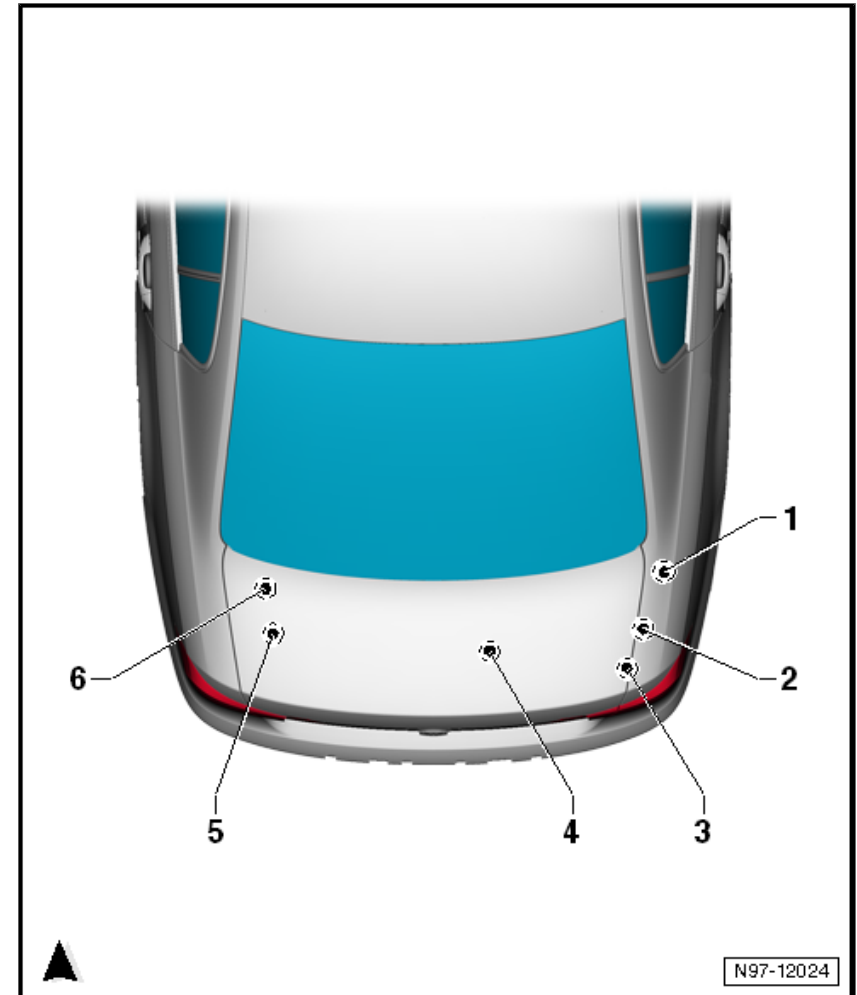
- Fitting location: ⇒ [page 4](#)

### 5 - Trailer detector control unit -J345-

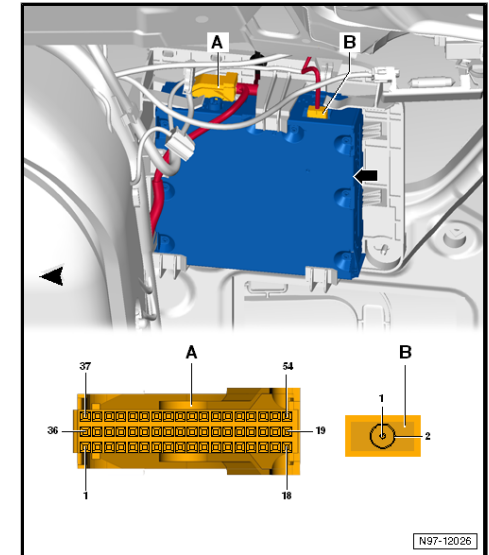
- Fitting location: behind the luggage compartment left side trim

### 6 - Multimedia system control unit -J650-

- Fitting location: behind the luggage compartment left side trim



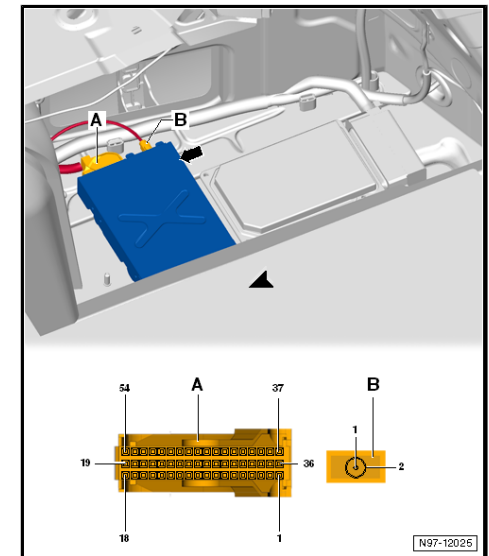
1.2 TV tuner -R78-



1.2.1 Fitting location:

behind right luggage compartment side trim panel -arrow-

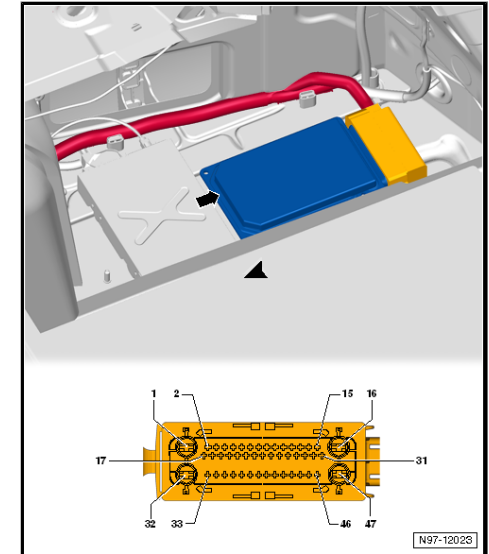
1.3 Reversing camera system control unit -J772-



**1.3.1 Fitting location:**

behind right luggage compartment side trim panel -arrow-

**1.4 Electronically controlled damping control unit -J250-**



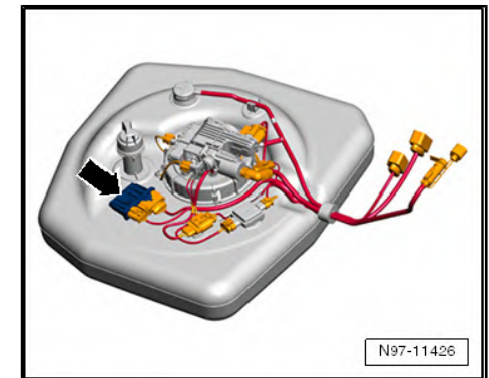
**1.4.1 Fitting location:**

behind right luggage compartment side trim panel -arrow-

**1.4.2 Connector assignment.**

- 47-pin connector -T47a-

**1.5 control unit for reducing-agent heater -J891-**



**1.5.1 Fitting location:**

The control unit for reducing-agent heater -J891- is located in spare wheel well -arrow-