

2014 Volkswagen Golf, GTI, & Golf R Quick Reference Specification Book

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GENERAL INFORMATION

Decimal and Metric Equivalents

Distance/Length

To calculate: mm x 0.03937 = in.

mm	in.	mm	in.	mm	in.	mm	in.
0.002	0.00008	0.01	0.0004	0.1	0.004	1	0.04
0.004	0.00016	0.02	0.0008	0.2	0.008	2	0.08
0.006	0.00024	0.03	0.0012	0.3	0.012	3	0.12
0.008	0.00031	0.04	0.0016	0.4	0.016	4	0.16
0.010	0.00039	0.05	0.0020	0.5	0.020	5	0.20
0.020	0.00079	0.06	0.0024	0.6	0.024	6	0.24
0.030	0.00118	0.07	0.0028	0.7	0.028	7	0.28
0.040	0.00157	0.08	0.0031	0.8	0.031	8	0.31
0.050	0.00197	0.09	0.0035	0.9	0.035	9	0.35
0.060	0.00236	0.10	0.0039	1.0	0.039	10	0.39
0.070	0.00276	0.20	0.0079	2.0	0.079	20	0.79
0.080	0.00315	0.30	0.0118	3.0	0.118	30	1.18
0.090	0.00354	0.40	0.0157	4.0	0.157	40	1.57
0.100	0.00394	0.50	0.0197	5.0	0.197	50	1.97
0.200	0.00787	0.60	0.0236	6.0	0.236	60	2.36
0.300	0.01181	0.70	0.0276	7.0	0.276	70	2.76
0.400	0.01575	0.80	0.0315	8.0	0.315	80	3.15
0.500	0.01969	0.90	0.0354	9.0	0.354	90	3.54
0.600	0.02362	1.00	0.0394	10.0	0.394	100	3.94
0.700	0.02756	2.00	0.0787	20.0	0.787		
0.800	0.03150	3.00	0.1181	30.0	1.181		
0.900	0.03543	4.00	0.1575	40.0	1.575		
1.000	0.03937	5.00	0.1969	50.0	1.969		
2.000	0.07874	6.00	0.2362	60.0	2.362		
3.000	0.11811	7.00	0.2756	70.0	2.756		
4.000	0.15748	8.00	0.3150	80.0	3.150		
5.000	0.19685	9.00	0.3543	90.0	3.543		
6.000	0.23622	10.00	0.3937	100.0	3.937		
7.000	0.27559	20.00	0.7874				
8.000	0.31496	30.00	1.1811				
9.000	0.35433	40.00	1.5748				
10.000	0.39370	50.00	1.9685				
20.000	0.78740	60.00	2.3622				
30.000	1.18110	70.00	2.7559				
40.000	1.57480	80.00	3.1496				
50.000	1.96850	90.00	3.5433				
60.000	2.36220	100.00	3.9370				
70.000	2.75591						
80.000	3.14961						
90.000	3.54331						
100.000	3.93701						

Tightening Torque

Nm-to-lb·ft (ft·lb)

To calculate: Nm x 0.738 = lb·ft

Nm	lb·ft (ft·lb)	Nm	lb·ft (ft·lb)	Nm	lb·ft (ft·lb)
10	7	55	41	100	74
11	8	56	41	105	77
12	9	57	42	110	81
13	10	58	43	115	85
14	10	59	44	120	89
15	11	60	44	125	92
16	12	61	45	130	96
17	13	62	46	135	100
18	13	63	46	140	103
19	14	64	47	145	107
20	15	65	48	150	111
21	15	66	49	155	114
22	16	67	49	160	118
23	17	68	50	165	122
24	18	69	51	170	125
25	18	70	52	175	129
26	19	71	52	180	133
27	20	72	53	185	136
28	21	73	54	190	140
29	21	74	55	195	144
30	22	75	55	200	148
31	23	76	56	205	151
32	24	77	57	210	155
33	24	78	58	215	159
34	25	79	58	220	162
35	26	80	59	225	166
36	27	81	60	230	170
37	27	82	60	235	173
38	28	83	61	240	177
39	29	84	62	245	181
40	30	85	63	250	184
41	30	86	63	260	192
42	31	87	64	270	199
43	32	88	65	280	207
44	32	89	66	290	214
45	33	90	66	300	221
46	34	91	67	310	229
47	35	92	68	320	236
48	35	93	69	330	243
49	36	94	69	340	251
50	37	95	70	350	258
51	38	96	71	360	266
52	38	97	72	370	273
53	39	98	72	380	280
54	40	99	73	390	288
55	41	100	74	400	295

Nm-to-lb·in (in·lb), kg·cm

To calculate: Nm \times 8.85 = lb·in • Nm \times 10.20 = kg·cm

Nm	lb·in (in·lb)	kg·cm	Nm	lb·in (in·lb)	kg·cm
1	9	10	26	230	265
2	18	20	27	239	275
3	27	31	28	248	286
4	35	41	29	257	296
5	44	51	30	266	306
6	53	61	31	274	316
7	62	71	32	283	326
8	71	82	33	292	337
9	80	92	34	301	347
10	89	102	35	310	357
11	97	112	36	319	367
12	106	122	37	327	377
13	115	133	38	336	387
14	124	143	39	345	398
15	133	153	40	354	408
16	142	163	41	363	418
17	150	173	42	372	428
18	159	184	43	381	438
19	168	194	44	389	449
20	177	204	45	398	459
21	186	214	46	407	469
22	195	224	47	416	479
23	204	235	48	425	489
24	212	245	49	434	500
25	221	255	50	443	510

N·cm-to-lb·in (in·lb), kg·cm

To calculate: N·cm \times 0.089 = lb·in • N·cm \times 0.102 = kg·cm

N·cm	lb·in (in·lb)	kg·cm	N·cm	lb·in (in·lb)	kg·cm
50	4	5	250	22	25
60	5	6	300	27	31
70	6	7	350	31	36
80	7	8	400	35	41
90	8	9	450	40	46
100	9	10	500	44	51
110	10	11	550	49	56
120	11	12	600	53	61
130	12	13	650	58	66
140	12	14	700	62	71
150	13	15	750	66	76
160	14	16	800	71	82
170	15	17	850	75	87
180	16	18	900	80	92
190	17	19	950	84	97
200	18	20	1000	89	102

kg·cm-to-lb·in (in·lb), N·cm

To calculate: kg·cm x 0.868 = lb·in • kg·cm x 9.81 = N·cm

kg·cm	lb·in (in·lb)	N·cm	kg·cm	lb·in (in·lb)	N·cm
5	4	49	110	95	1079
6	5	59	120	104	1177
7	6	69	130	113	1275
8	7	78	140	122	1373
9	8	88	150	130	1471
10	9	98	160	139	1569
20	17	196	170	148	1667
30	26	294	180	156	1765
40	35	392	190	165	1863
50	43	490	200	174	1961
60	52	588	210	182	2059
70	61	686	220	191	2157
80	69	785	230	200	2256
90	78	883	240	208	2354
100	87	981	250	217	2452

Warnings and Cautions

WARNINGS

- Some repairs may be beyond your capability. If you lack the skills, tools and equipment, or a suitable workplace for any procedure described in this manual, we suggest you leave such repairs to an authorized dealer service department or other qualified shop.
- Do not reuse any fasteners that have become worn or deformed during normal use. Many fasteners are designed to be used only once and become unreliable and may fail when used a second time. This includes, but is not limited to, nuts, bolts, washers, self-locking nuts or bolts, circlips and cotter pins. Always replace these fasteners with new parts.
- Never work under a lifted car unless it is solidly supported on stands designed for the purpose. Do not support a car on cinder blocks, hollow tiles or other props that may crumble under continuous load. Never work under a car that is supported solely by a jack. Never work under the car while the engine is running.
- If you are going to work under a car on the ground, make sure the ground is level. Block the wheels to keep the car from rolling. Disconnect the battery negative (-) terminal (ground strap) to prevent others from starting the car while you are under it.

- Never run the engine unless the work area is well ventilated. Carbon monoxide kills.
- Remove rings, bracelets and other jewelry so they cannot cause electrical shorts, get caught in running machinery, or be crushed by heavy parts.
- Tie back long hair. Do not wear a necktie, a scarf, loose clothing, or a necklace when you work near machine tools or running engines. If your hair, clothing, or jewelry were to get caught in the machinery, severe injury could result.
- Do not attempt to work on your car if you do not feel well. You increase the danger of injury to yourself and others if you are tired, upset, or have taken medication or any other substance that may keep you from being fully alert.
- Illuminate your work area adequately but safely. Use a portable safety light for working inside or under the car. Make sure the bulb is enclosed by a wire cage. The hot filament of an accidentally broken bulb can ignite spilled fuel, vapors or oil.
- Use a suitable container to catch draining fuel, oil, or brake fluid. Do not use food or beverage containers that might mislead someone into drinking from them. Store flammable fluids away from fire hazards. Wipe up spills at once, but do not store oily rags which can ignite and burn spontaneously.
- Always observe good workshop practices. Wear goggles when you operate machine tools or work with battery acid. Wear gloves or other protective clothing whenever the job requires working with harmful substances.
- Greases, lubricants and other automotive chemicals contain toxic substances, many of which are absorbed directly through the skin. Read the manufacturer's instructions and warnings carefully. Use hand and eye protection. Avoid direct skin contact.
- Disconnect the battery negative (-) terminal (ground strap) whenever you work on the fuel or electrical system. Do not smoke or work near heaters or other fire hazards. Keep an approved fire extinguisher handy.
- Friction materials (such as brake pads or shoes or clutch discs) contain asbestos fibers or other friction materials. Do not create dust by grinding, sanding, or cleaning with compressed air. Avoid breathing dust. Breathing any friction material dust can lead to serious diseases and may result in death.

(*WARNINGS cont'd on next page*)

WARNINGS (cont'd)

- Batteries give off explosive hydrogen gas during charging. Keep sparks, lighted matches and open flame away from the top of the battery. If hydrogen gas escaping from the cap vents is ignited, it ignites the gas trapped in the cells and causes the battery to explode.
- Connect and disconnect battery cables, jumper cables or a battery charger only with the ignition off. Do not disconnect the battery while the engine is running.
- Do not quick-charge the battery (for boost starting) for longer than one minute. Wait at least one minute before boosting the battery a second time.
- Do not allow battery charging voltage to exceed 16.5 volts. If the battery begins producing gas or boiling violently, reduce the charging rate. Boosting a sulfated battery at a high charging rate can cause an explosion.
- The A/C system is filled with chemical refrigerant, which is hazardous. The A/C system should be serviced only by trained technicians using approved refrigerant recovery/recycling equipment, trained in related safety precautions, and familiar with regulations governing the discharging and disposal of automotive chemical refrigerants.
- Do not expose any part of the A/C system to high temperatures such as open flame. Excessive heat increases system pressure and may cause the system to burst.
- Some aerosol tire inflators are highly flammable. Be extremely cautious when repairing a tire that may have been inflated using an aerosol tire inflator. Keep sparks, open flame or other sources of ignition away from the tire repair area. Inflate and deflate the tire at least four times before breaking the bead from the rim. Completely remove the tire from the rim before attempting any repair.
- Some cars are equipped with a Supplemental Restraint System (SRS) that automatically deploys airbags and pyrotechnic seat belt tensioners in the event of a frontal or side impact. These are explosive devices. Handled improperly or without adequate safeguards, they can be accidentally activated and cause serious injury.
- The ignition system produces high voltages that can be fatal. Avoid contact with exposed terminals and use extreme care when working on a car with the engine running or the ignition on.

- Place jack stands only at locations specified by manufacturer. The vehicle lifting jack supplied with the vehicle is intended for tire changes only. Use a heavy duty floor jack to lift the vehicle before installing jack stands.
- Battery acid (electrolyte) can cause severe burns. Flush contact area with water, seek medical attention.
- Aerosol cleaners and solvents may contain hazardous or deadly vapors and are highly flammable. Use only in a well ventilated area. Do not use on hot surfaces (such as engines or brakes).
- Do not remove coolant reservoir or radiator cap with the engine hot. Burns and engine damage may occur.

CAUTIONS

- If you lack the skills, tools and equipment, or a suitable workshop for any procedure described in this manual, we suggest you leave such repairs to an authorized dealer or other qualified shop.
- Before starting a job, make certain that you have all the necessary tools and parts on hand. Read all the instructions thoroughly and do not attempt shortcuts. Use tools appropriate to the work and use only replacement parts meeting original specifications. Makeshift tools, parts and procedures will not make good repairs.
- Use pneumatic and electric tools only to loosen threaded parts and fasteners. Never use these tools to tighten fasteners, especially on light alloy parts. Always use a torque wrench to tighten fasteners to the tightening torque specification listed.
- Be mindful of the environment and ecology. Before you drain the crankcase, find out the proper way to dispose of the oil. Do not pour oil onto the ground, down a drain, or into a stream, pond or lake. Dispose of in accordance with Federal, State and Local laws.
- The control module for the Anti-lock Brake System (ABS) cannot withstand temperatures from a paint-drying booth or a heat lamp in excess of 95°C (203°F) and should not be subjected to temperatures exceeding 85°C (185°F) for more than two hours.
- Before doing any electrical welding on cars equipped with ABS, disconnect the battery negative (-) terminal (ground strap) and the ABS control module connector.
- Always make sure the ignition is off before disconnecting battery.

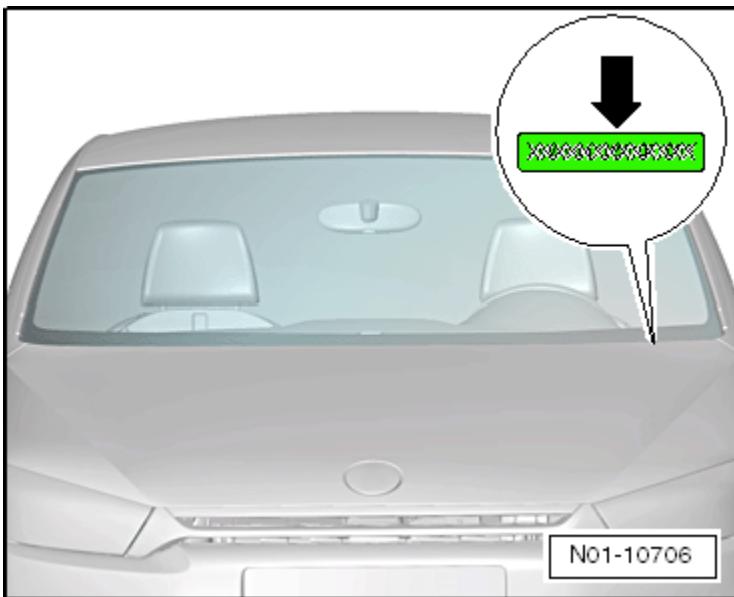
(CAUTIONS cont'd on next page)

CAUTIONS (cont'd)

- Label battery cables before disconnecting. On some models, battery cables are not color coded.
- Disconnecting the battery may erase fault code(s) stored in control module memory. Check for fault codes prior to disconnecting the battery cables.
- If a normal or rapid charger is used to charge the battery, disconnect the battery and remove it from the vehicle to avoid damaging paint and upholstery.
- Do not quick-charge the battery (for boost starting) for longer than one minute. Wait at least one minute before boosting the battery a second time.
- Connect and disconnect a battery charger only with the battery charger switched off.
- Sealed or "maintenance free" batteries should be slow-charged only, at an amperage rate that is approximately 10% of the battery's ampere-hour (Ah) rating.
- Do not allow battery charging voltage to exceed 16.5 volts. If the battery begins producing gas or boiling violently, reduce the charging rate. Boosting a sulfated battery at a high charging rate can cause an explosion.

VEHICLE IDENTIFICATION

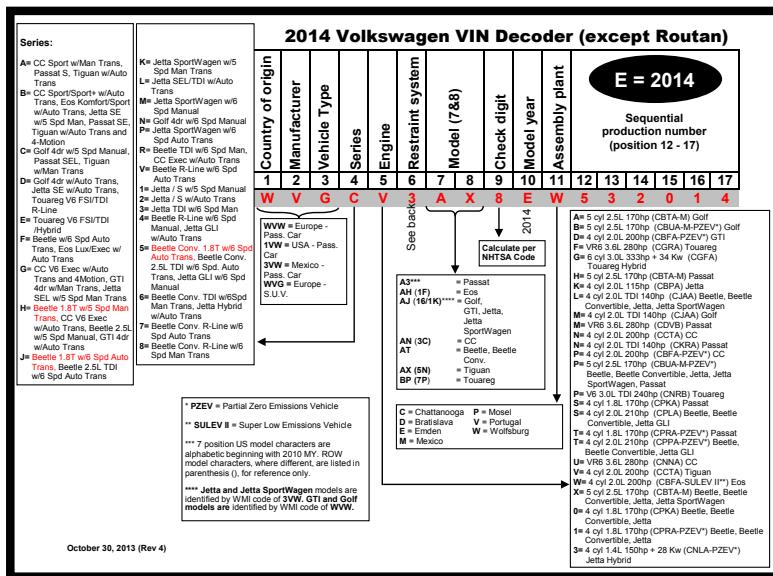
Vehicle Identification Number (VIN) Location



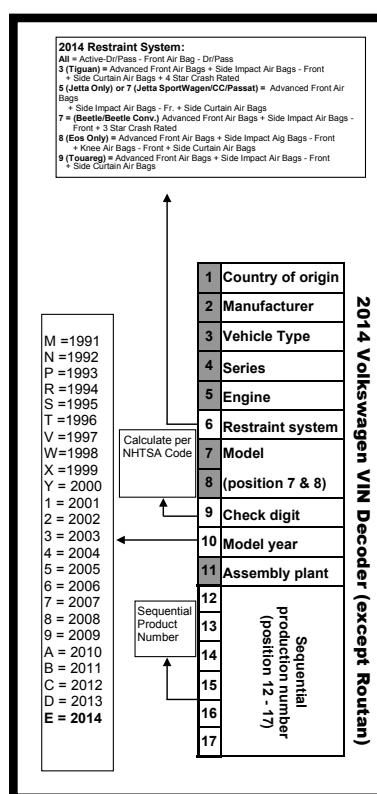
Vehicle
Identification

The VIN (➡) is on the left side of the vehicle in the area of the windshield wiper mount. It is visible from the outside (typical illustration shown).

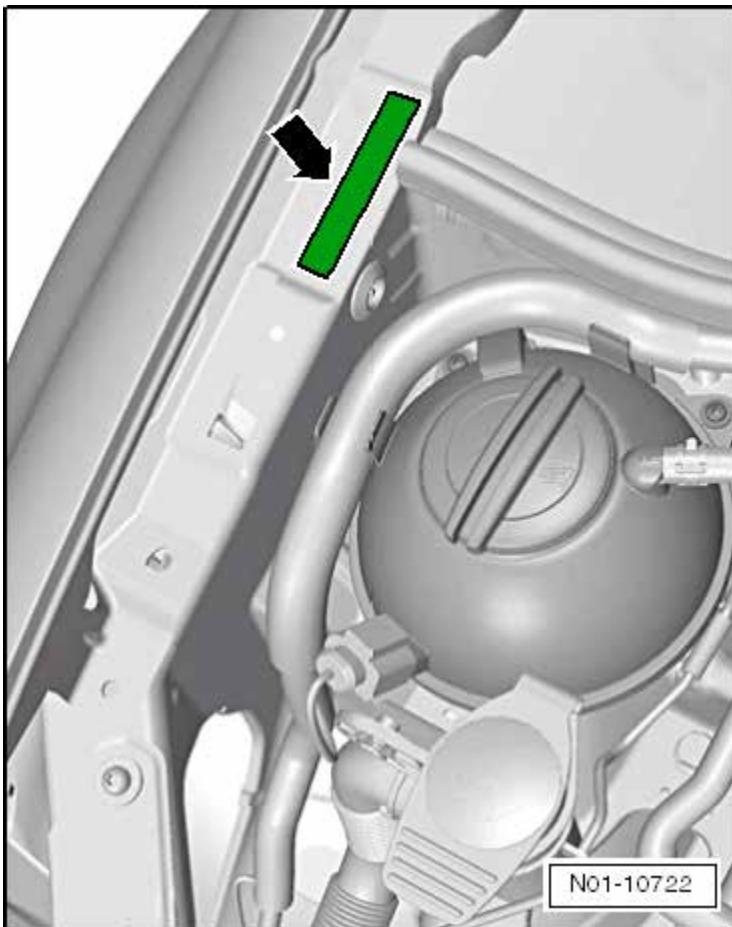
VIN Decoder



October 30, 2013 (Rev. 4)

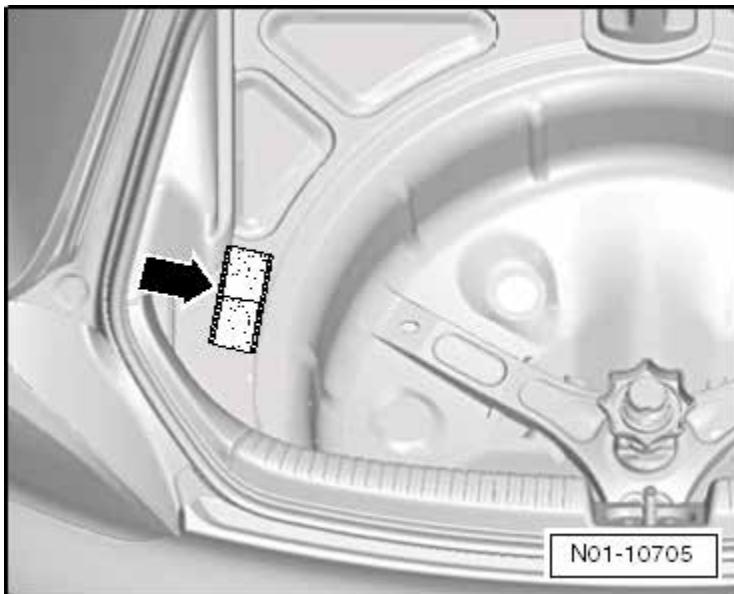


VIN on Longitudinal Member Extension



The Vehicle Identification Number (VIN) is located on the longitudinal member extension (➡).

Vehicle Data Label



The vehicle data label (➡) is located on the left side of the spare wheel well. The vehicle data label is also in the customer's Maintenance booklet.

SALES CODES

Engine Codes

CJAA	2.0L TDI 4-cylinder 4V turbo diesel
CBFA/CCTA	2.0L TFSI 4-cylinder 4V
CZRA	2.0L TFSI 4-cylinder 4V
CBTA/CBUA	2.5L 5-cylinder 4V

Transmission Codes

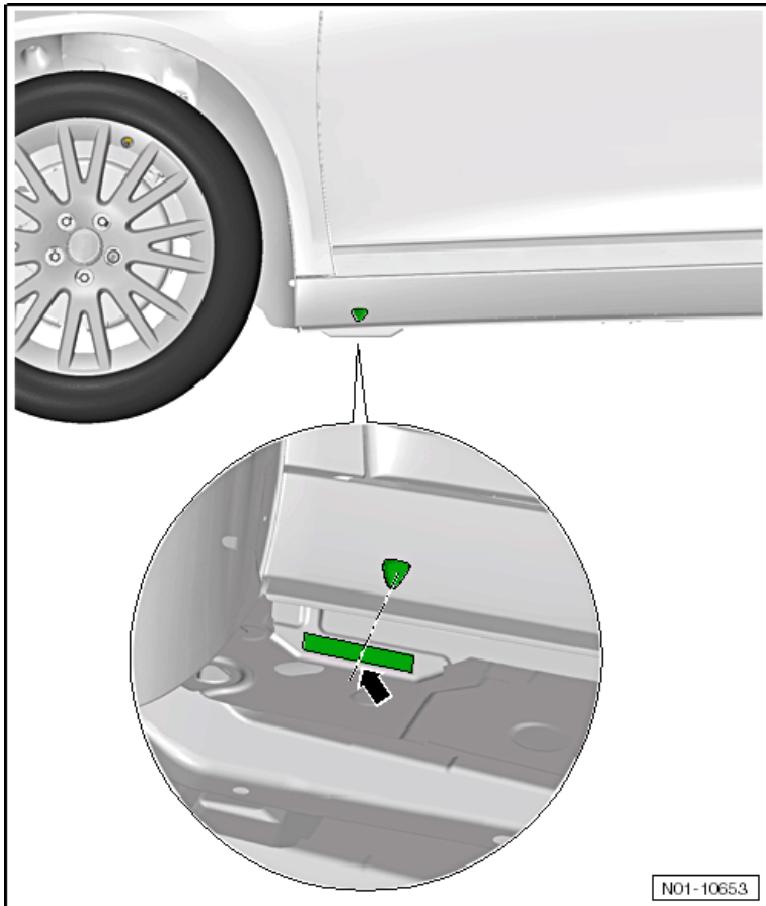
0A4	5-speed manual
02Q	6-speed manual
02E	6-speed Direct Shift Gearbox (DSG)
09G	6-speed automatic

Sales
Codes

VEHICLE LIFTING

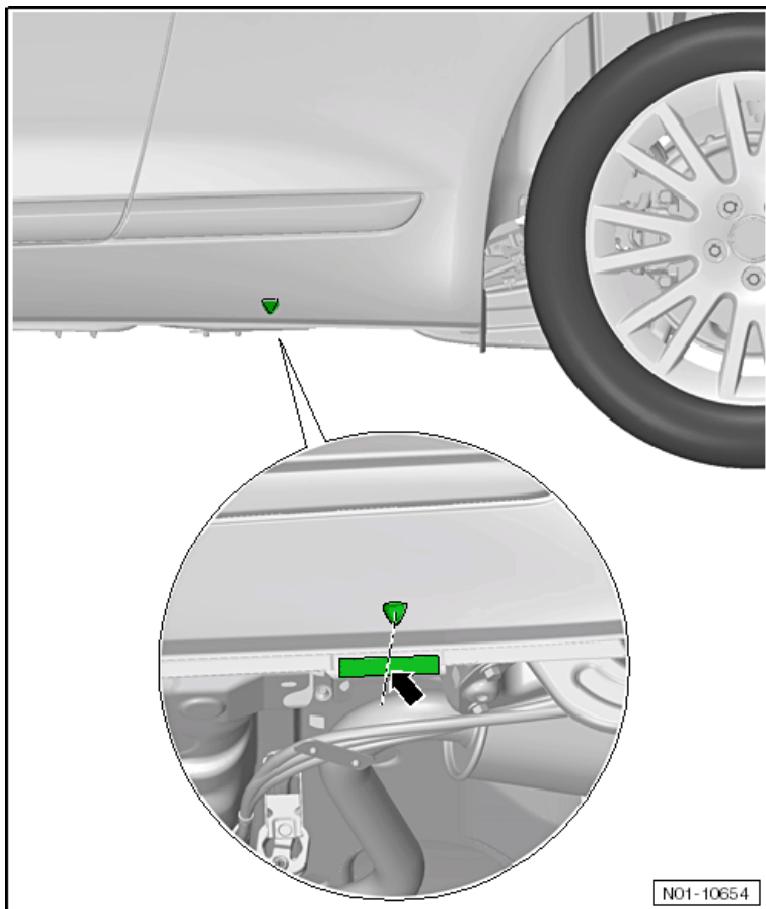
Hoist and Jack Mounting Points

Front



Position the support plate in the side member
vertical reinforcement area (►).

Rear



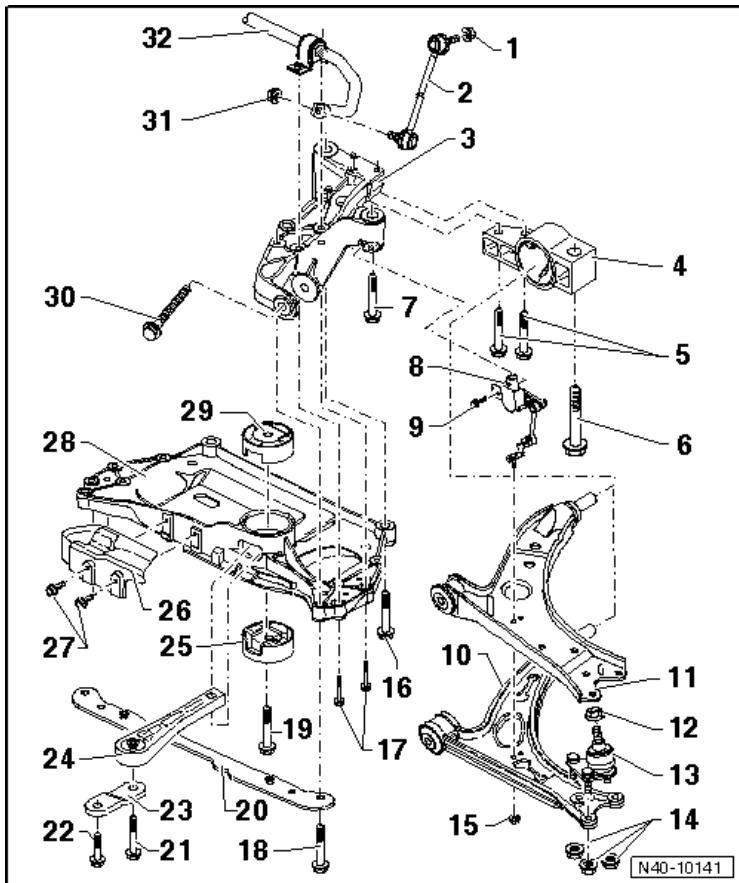
Position the support plate in the side member
vertical reinforcement area (➡).

Vehicle
Lifting

SUSPENSION, WHEELS, STEERING

Front Suspension

Subframe, Stabilizer Bar and Control Arms Overview



1 - Nut

- 65 Nm
- Always replace if removed

2 - Coupling Rod

3 - Bracket

4 - Mounting Bracket

5 - Bolt

- 50 Nm + 90° turn
- Always replace if removed

6 - Bolt

- 70 Nm + 90° turn
- M12 x 1.5 x 90
- Always replace if removed

7 - Bolt

- 70 Nm + 90° turn
- M12 x 1.5 x 90
- Always replace if removed

8 - Left Front Level Control System Sensor -G78-**9 - Bolt**

- 9 Nm

10 - Control Arm**11 - Control Arm****12 - Nut**

- 60 Nm
- M12 x 1.5
- Always replace if removed

13 - Ball Joint**14 - Nut**

- Cast steel control arm: 60 Nm
- Steel and aluminum control arms: 100 Nm
- Always replace if removed

15 - Nut

- 9 Nm
- Always replace if removed

16 - Bolt

- 70 Nm + 90° turn
- M12 x 1.5 x 100
- Always replace if removed

17 - Bolt

- 20 Nm + 90° turn
- Always replace if removed

18 - Bolt

- 70 Nm + 90° turn
- M12 x 1.5 x 75
- Always replace if removed

19 - Bolt

- 100 Nm + 90° turn
- M14 x 1.5 x 70
- Always replace if removed

20 - Underbody Protection Bracket**21 - Bolt**

- 50 Nm + 90° turn
- M10 x 75
- Always replace if removed

22 - Bolt

- 50 Nm + 90° turn
- M10 x 35
- Always replace if removed

23 - Bracket on Pendulum Support

24 - Pendulum Support

25 - Lower Bonded Rubber Bushing for Pendulum Support

26 - Shield

- For FWD vehicles only.

27 - Bolt

- 6 Nm

28 - Subframe

- Various versions

29 - Upper Bonded Rubber Bushing for Pendulum Support

30 - Bolt

- 70 Nm + 90° turn
- M12 x 1.5 x 110
- Always replace if removed

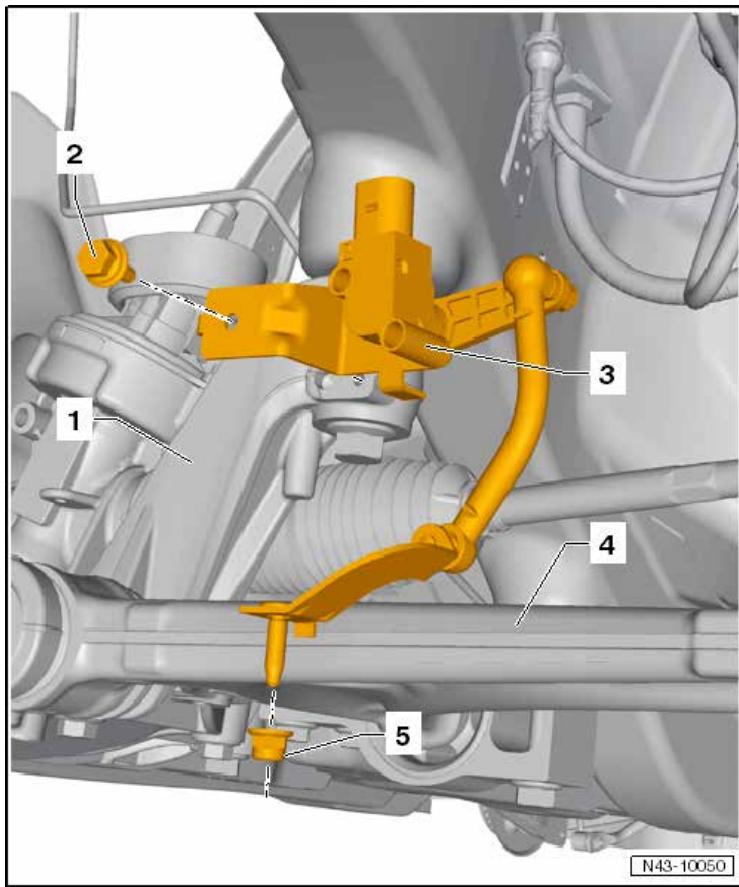
31 - Nut

- 65 Nm
- Always replace if removed

32 - Stabilizer Bar

- Various versions.

Left Front Level Control System Sensor Assembly Overview



1 - Subframe

2 - Bolt

- 9 Nm
- M6 x 16

3 - Left Front Level Control System Sensor -G78- and Right Front Level Control System Sensor -G289--

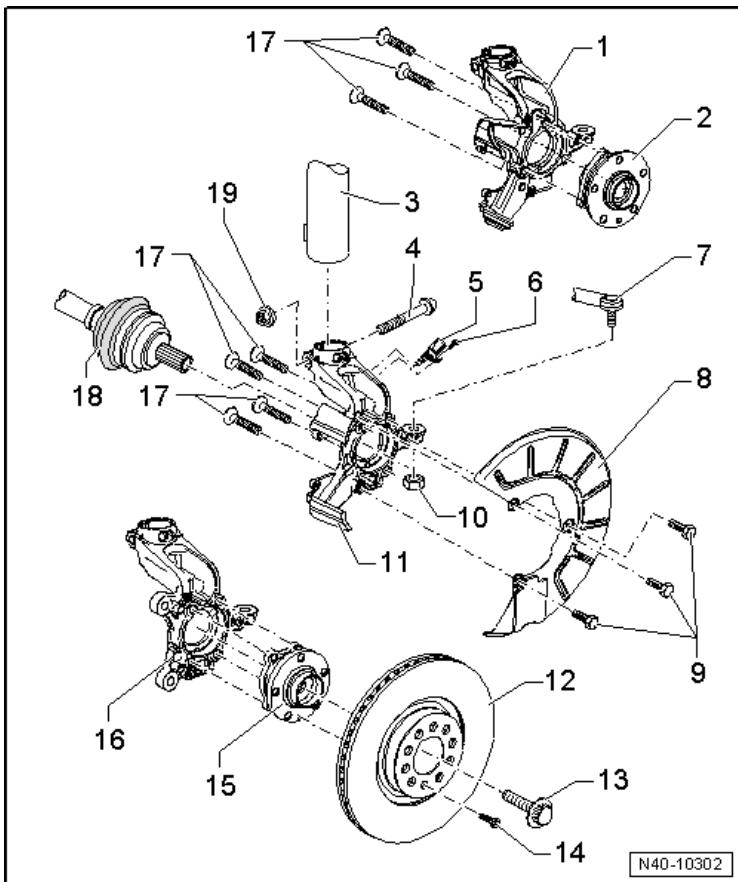
4 - Control Arm

5 - Nut

- 9 Nm
- Always replace if removed

Suspension,
Wheels, Steering

Wheel Bearing Assembly Overview



- 1 - Wheel Bearing Housing (3-Point Mount) - FS III Brake
- 2 - Wheel Hub with Wheel Bearing (3-Point Mount) - FS III Brake
- 3 - Suspension Strut
- 4 - Bolt
- 5 - Left Front ABS Wheel Speed Sensor -G47-/Right Front ABS Wheel Speed Sensor -G45-
- 6 - Bolt
 - 8 Nm
- 7 - Tie Rod End
- 8 - Cover Plate
- 9 - Bolt
 - 10 Nm
- 10 - Nut
 - 20 Nm + 90° turn
 - Always replace if removed
- 11 - Wheel Bearing Housing (4-Point Mount) - FS III Brake

12 - Internally Vented Brake Disc

13 - Bolt

- Various versions
- Always replace if removed

14 - Bolt

- Tightening specification, refer to Brake System; Mechanical Components

15 - Wheel Hub with Wheel Bearing (4-Point Mount)

16 - Wheel Bearing Housing (4-Point Mount) - FN3 Brake

17 - Bolt

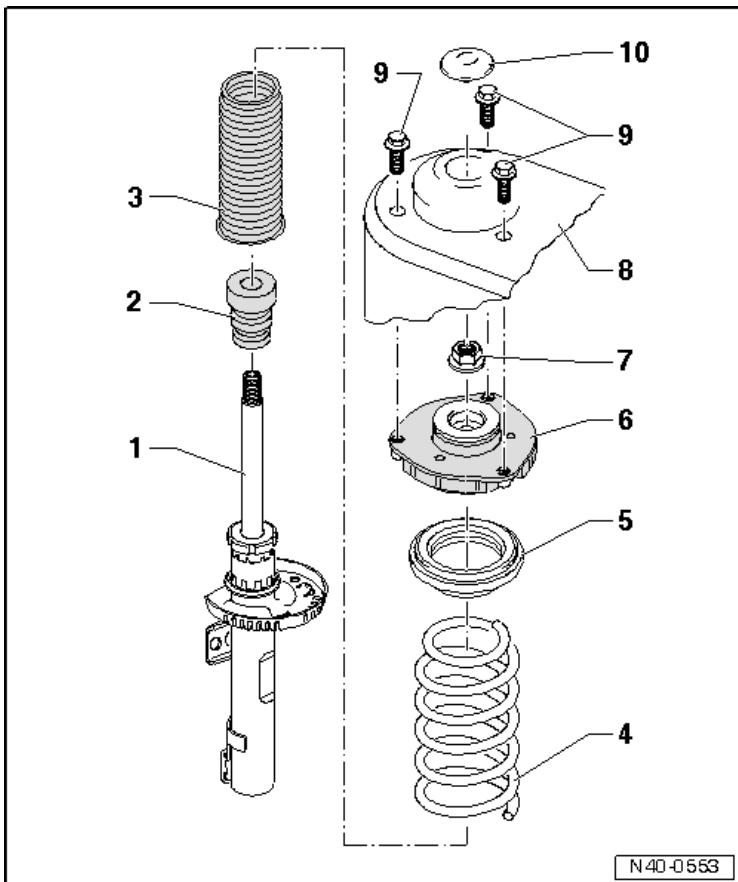
- 70 Nm + 90° turn
- Always replace if removed

18 - Drive Axle

19 - Nut

- 70 Nm + 90° turn
- Always replace if removed

Suspension Strut Assembly Overview



1 - Shock Absorber

2 - Buffer Stop

3 - Protective Sleeve

4 - Coil Spring

5 - Axial Groove Ball Bearing

6 - Suspension Strut Bearing

7 - Nut

- 60 Nm
- M14 x 1.5
- Always replace if removed

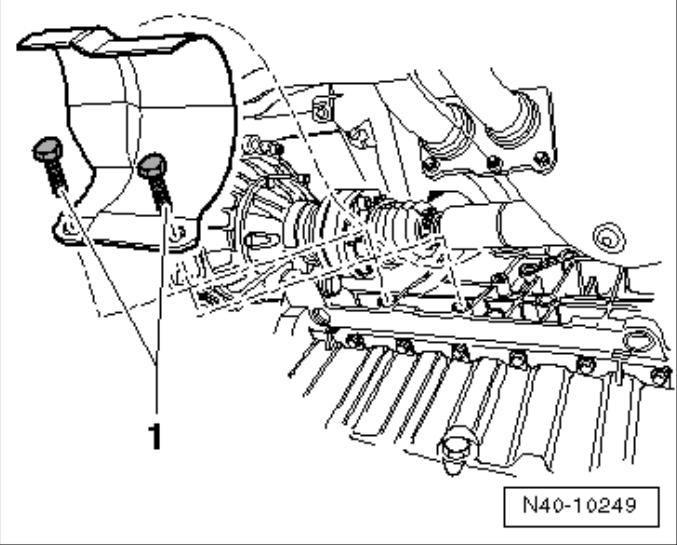
8 - Suspension Strut Dome

9 - Bolt

- 15 Nm + 90° turn
- Always replace if removed

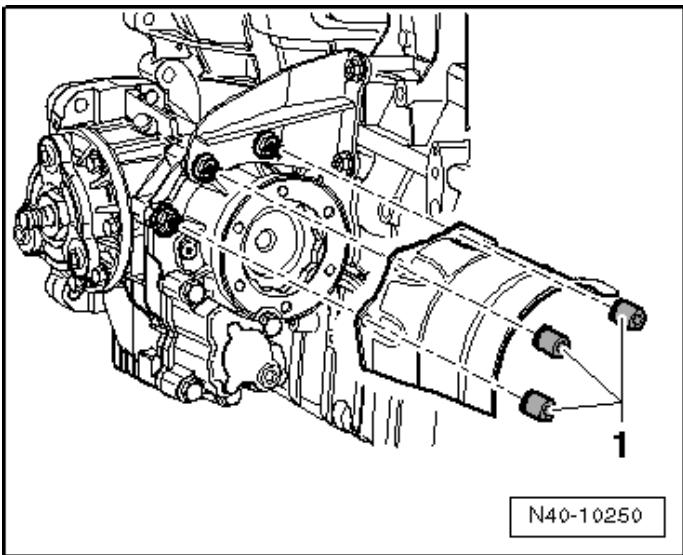
10 - Protective Cap

Drive Axle Heat Shields Front Wheel Drive (FWD)



Component	Nm
Bolts -1-	25 Nm

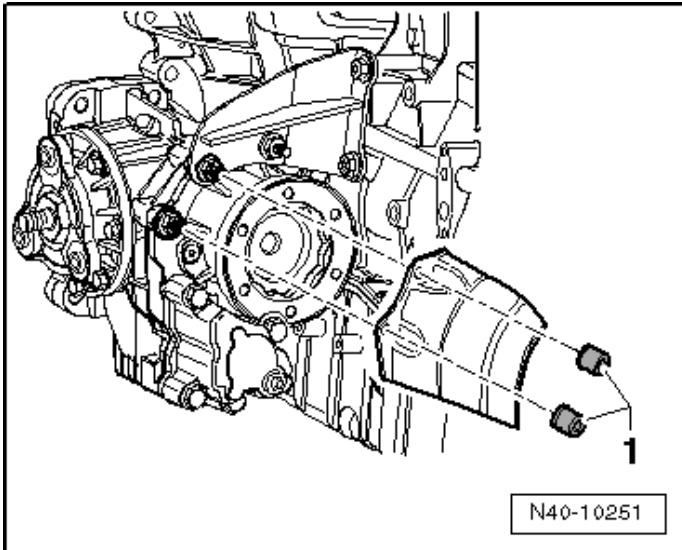
All Wheel Drive (AWD)



Suspension,
Wheels, Steering

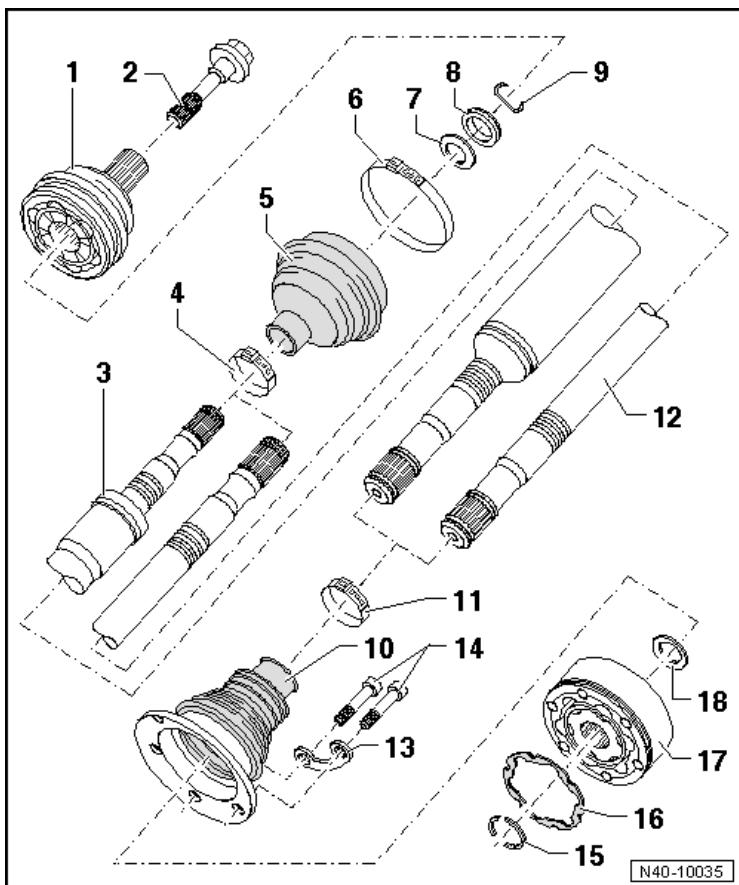
Component	Nm
Nuts -1-	20 Nm Pre-tighten all nuts to 10 Nm.

All Wheel Drive (AWD)



Component	Nm
Nuts -1-	20 Nm Pre-tighten all nuts to 10 Nm.

Drive Axle Assembly Overview, with CV Joint VL90 and VL100



1 - Outer CV Joint

2 - Bolt

- Various versions
- Twelve-point bolt with ribs is 70 Nm + 90°
- Twelve-point bolt without ribs is 200 Nm + 180°
- Always replace if removed

3 - Right Drive Axle

4 - Clamp

5 - Protective Boot

6 - Clamp

- Always replace if removed

7 - Dished Washer

8 - Thrust Washer

9 - Securing Ring

10 - CV Boot

11 - Clamp

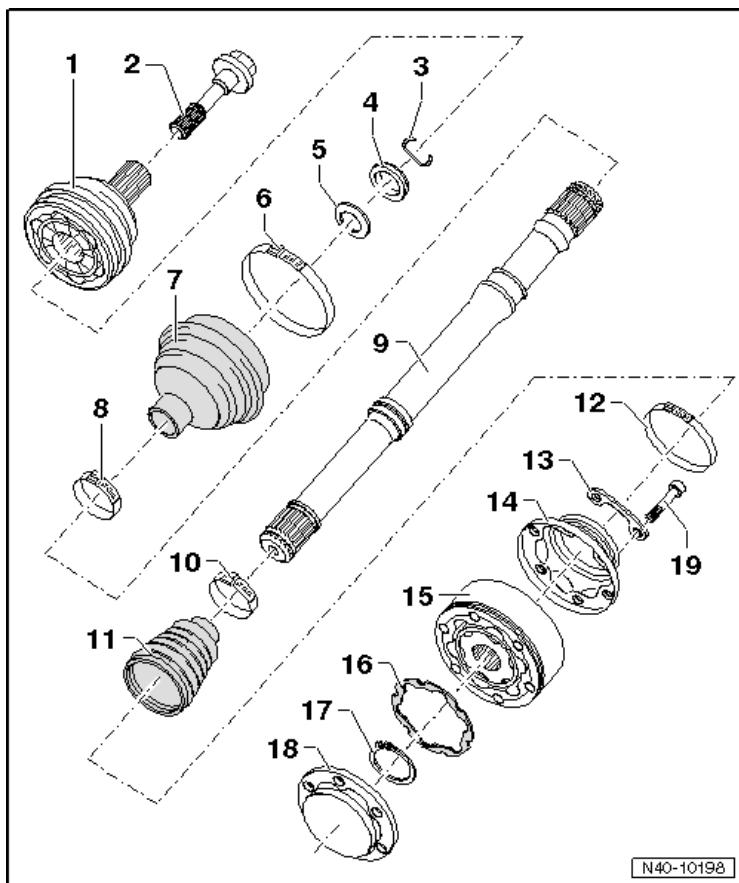
- Always replace if removed

12 - Left Drive Axle**13 - Backing Plate****14 - Bolt**

- First tighten to 10 Nm in a diagonal sequence, then tighten to tightening specification in a diagonal sequence.
- 40 Nm
- M8 x 48
- Always replace bolts after disassembly.

15 - Securing Ring**16 - Gasket****17 - Inner CV Joint****18 - Dished Washer**

Drive Axle Assembly Overview, with Bolted CV Joint VL107



1 - Outer CV Joint

2 - Bolt

- Various versions
- Twelve-point bolt with ribs is 70 Nm + 90°
- Twelve-point bolt without ribs is 200 Nm + 180°
- Always replace if removed

3 - Securing Ring

- Always replace if removed

4 - Thrust Washer

5 - Dished Washer

6 - Clamp

- Always replace if removed

7 - Protective Boot

8 - Clamp

- Always replace if removed

9 - Drive Axle

10 - Clamp

- Always replace if removed

11 - CV Boot

12 - Clamp

- Always replace if removed

13 - Backing Plate

14 - Cover

15 - Inner CV Joint

16 - Gasket

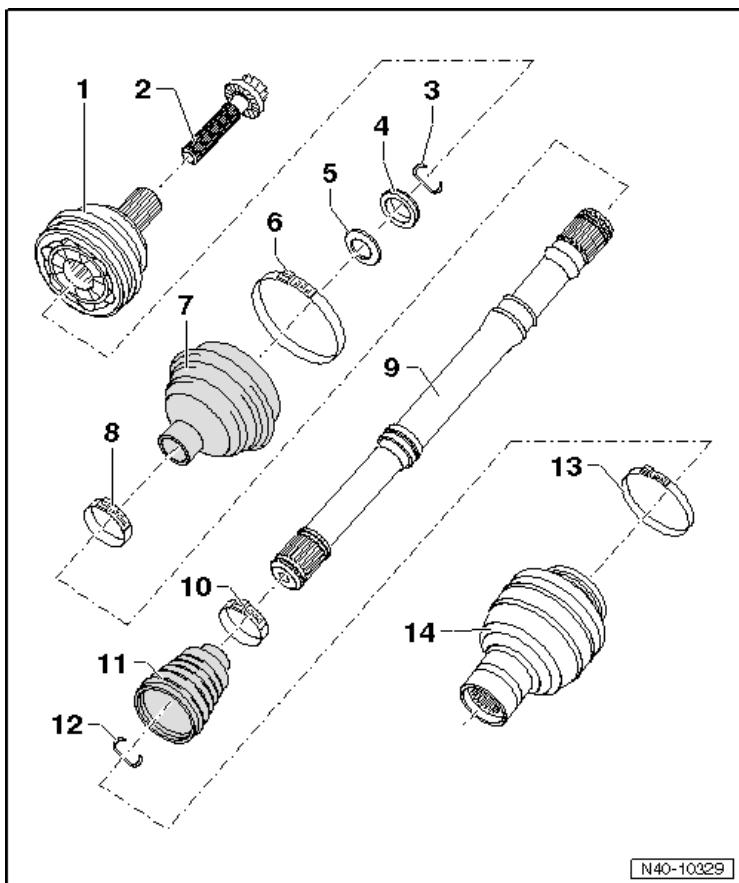
17 - Securing Ring

18 - Cover

19 - Bolt

- First tighten to 10 Nm in a diagonal sequence, then tighten to tightening specification in a diagonal sequence.
- 70 Nm
- M10 x 52
- Always replace bolts after disassembly.

Drive Axle Assembly Overview, with Mounted CV Joint VL107



1 - Outer CV Joint

2 - Bolt

- Various versions
- Twelve-point bolt with ribs is 70 Nm + 90°
- Twelve-point bolt without ribs is 200 Nm + 180°
- Always replace if removed

3 - Securing Ring

- Always replace if removed

4 - Thrust Washer

5 - Dished Washer

6 - Clamp

- Always replace if removed

7 - Protective Boot

8 - Clamp

- Always replace if removed

9 - Drive Axle

10 - Clamp

Always replace if removed

11 - CV Joint Protective Boot

12 - Securing Ring

Always replace if removed

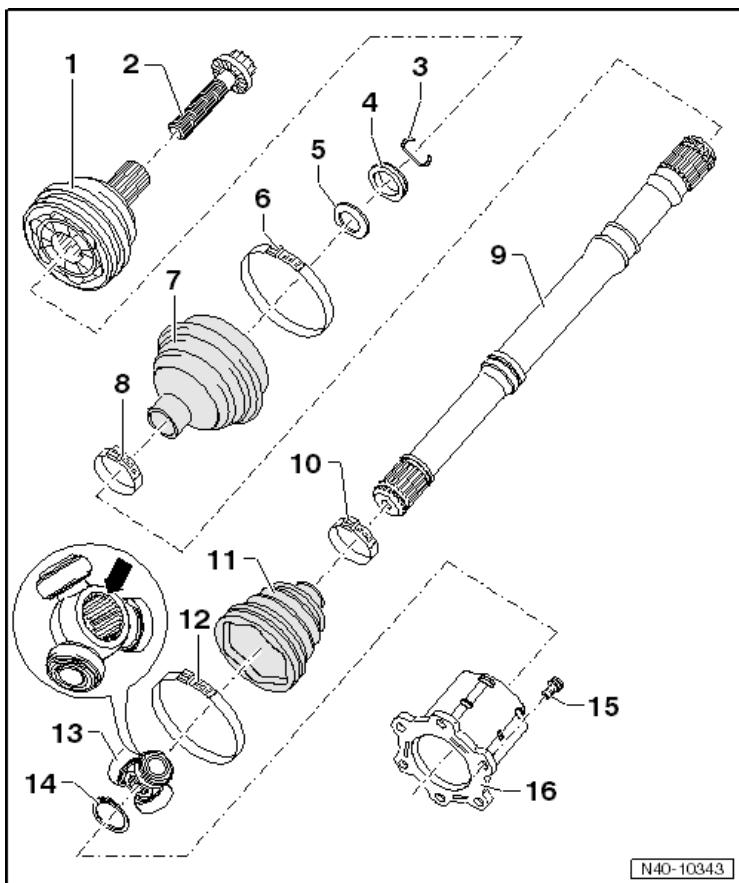
13 - Clamp

Always replace if removed

14 - CV Joint

Suspension,
Wheels, Steering

Drive Axle Assembly Overview, with Triple Roller Joint AAR3300i



1 - Outer CV Joint

2 - Bolt

- Various versions
- Twelve-point bolt with ribs is 70 Nm + 90°
- Twelve-point bolt without ribs is 200 Nm + 180°
- Always replace if removed

3 - Securing Ring

- Always replace if removed

4 - Thrust Washer

5 - Dished Washer

6 - Clamp

- Always replace if removed

7 - CV Boot

8 - Clamp

- Always replace if removed

9 - Drive Axle

10 - Clamp

- Always replace if removed

11 - Protective Joint Boot for Triple Roller Joint

12 - Clamp

- Always replace if removed

13 - Triple Roller Star with Rollers

14 - Securing Ring

- Always replace if removed

15 - Bolt

- First tighten to 10 Nm in a diagonal sequence, then tighten to tightening specification in a diagonal sequence.

- 70 Nm

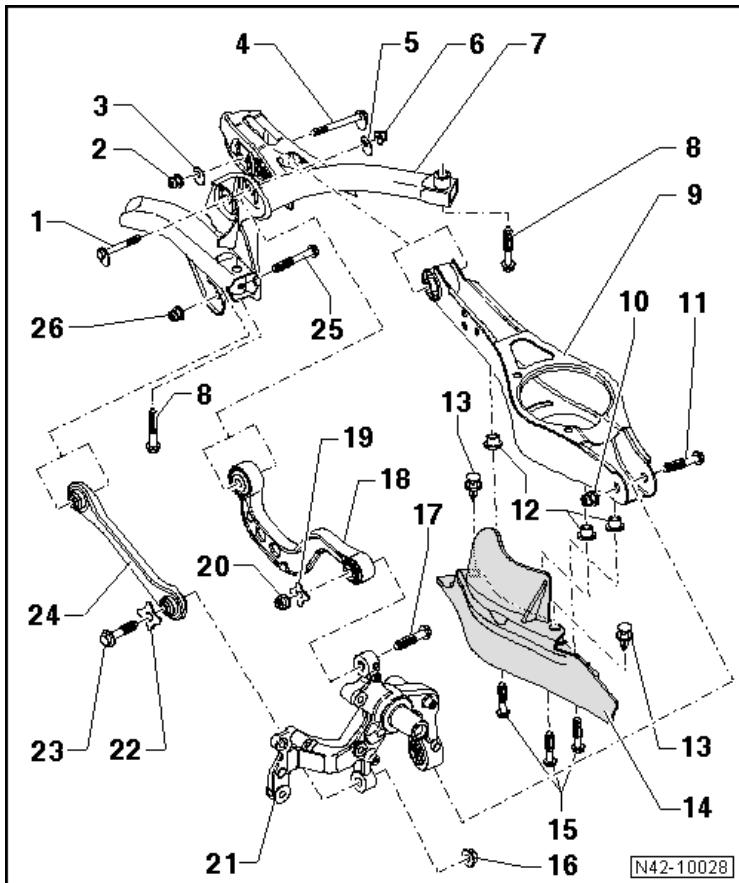
- M10 x 23

16 - Joint Piece

Rear Suspension

Front Wheel Drive (FWD)

Subframe Transverse Link and Tie Rod Overview



1 - Eccentric Bolt

2 - Nut

- 95 Nm
- Always replace if removed

3 - Eccentric Washer

4 - Eccentric Bolt

- After loosening, perform vehicle alignment

5 - Eccentric Washer

6 - Nut

- 95 Nm
- Always replace if removed

7 - Subframe

8 - Bolt

- 90 Nm + 90° turn
- Always replace if removed

9 - Lower Transverse Link**10 - Nut**

- 90 Nm + 90° turn
- Always replace if removed

11 - Bolt

- Always replace if removed

12 - Threaded Rivet

- M6

13 - Expanding Rivet**14 - Stone Chip Protection****15 - Bolt**

- 8 Nm

16 - Nut

- 130 Nm + 90° turn
- Always replace if removed

17 - Bolt

- Always replace if removed

18 - Upper Transverse Link**19 - Washer****20 - Nut**

- 130 Nm + 90° turn
- Always replace if removed

21 - Wheel Bearing Housing**22 - Washer****23 - Bolt**

- Always replace if removed

24 - Tie Rod

- Various versions

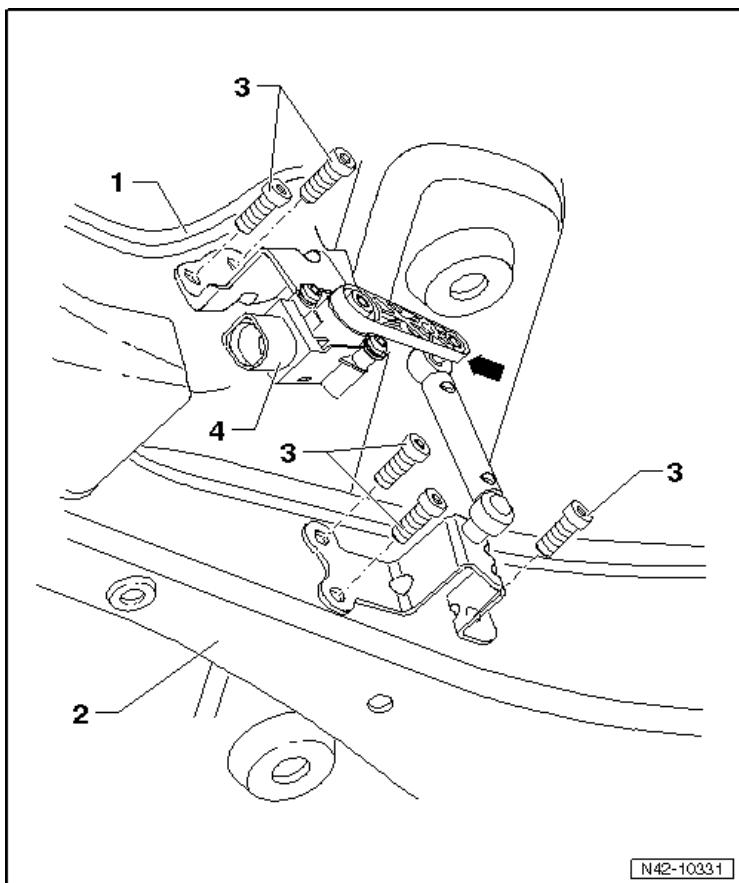
25 - Bolt

- Always replace if removed

26 - Nut

- 90 Nm + 90° turn
- Always replace if removed

Left Rear Level Control System Sensor -G76- Overview



1 - Subframe

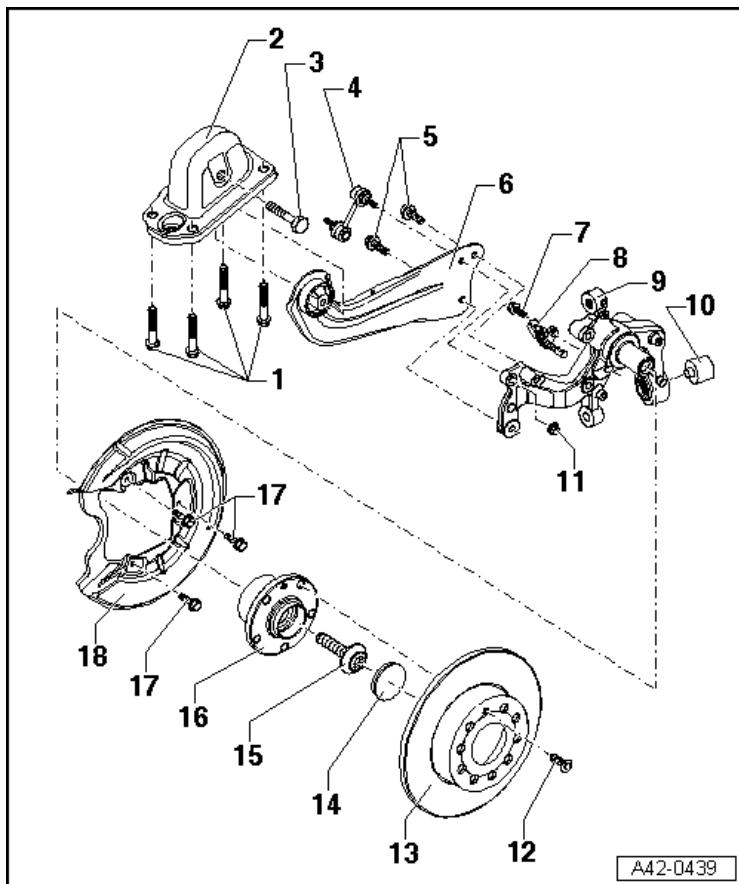
2 - Lower Transverse Link

3 - Bolt

- 5 Nm
- M5 x 20

4 - Left Rear Level Control System Sensor -G76-

Wheel Bearing Housing, Trailing Arm Overview



1 - Bolt

- 50 Nm + 90° turn
- Always replace if removed

2 - Mounting Bracket

3 - Bolt

- 90 Nm + 90° turn
- Always replace if removed

4 - Coupling Rod

5 - Bolt

- 90 Nm + 90° turn
- M12 x 1.5 x 40
- Always replace if removed

6 - Trailing Arm

7 - Bolt

- 8 Nm

8 - Right Rear ABS Wheel Speed Sensor -G44-/Left Rear ABS Wheel Speed Sensor -G46-

9 - Wheel Bearing Housing

10 - Bonded Rubber Bushing

11 - Nut

- 45 Nm
- Always replace if removed

12 - Bolt

- 4 Nm

13 - Brake Disc

14 - Dust Cap

- Always replace if removed

15 - Bolt

- 180 Nm + 90° turn
- Always replace if removed

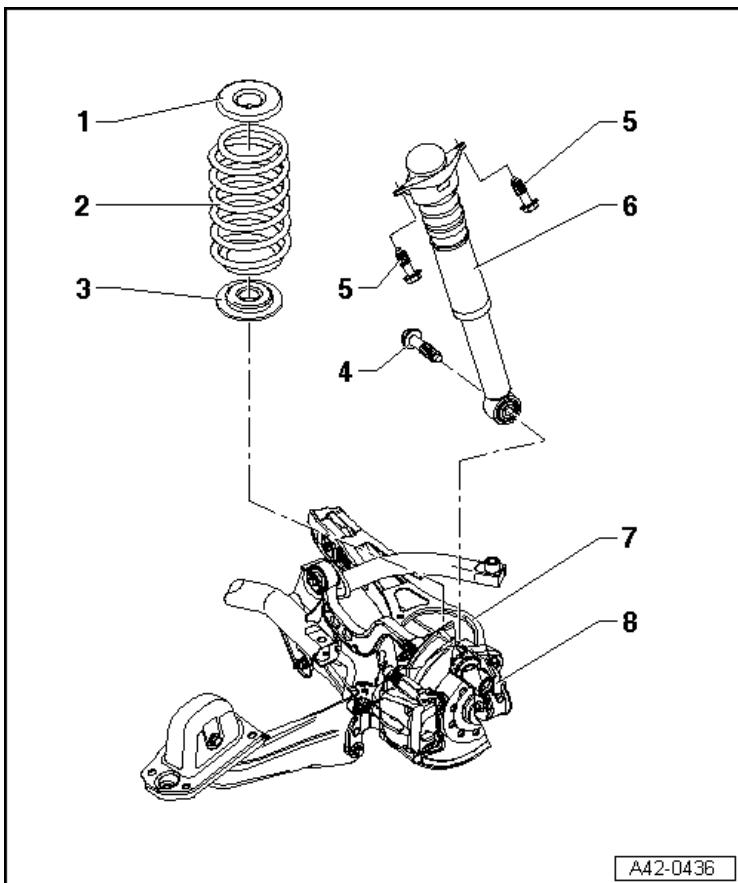
16 - Wheel Hub with Wheel Bearing

17 - Bolt

- 12 Nm

18 - Cover Plate

Shock Absorber, Coil Spring Overview



A42-0436

1 - Upper Spring Support

2 - Coil Spring

3 - Lower Spring Support

4 - Bolt

180 Nm

5 - Bolt

50 Nm + 90° turn

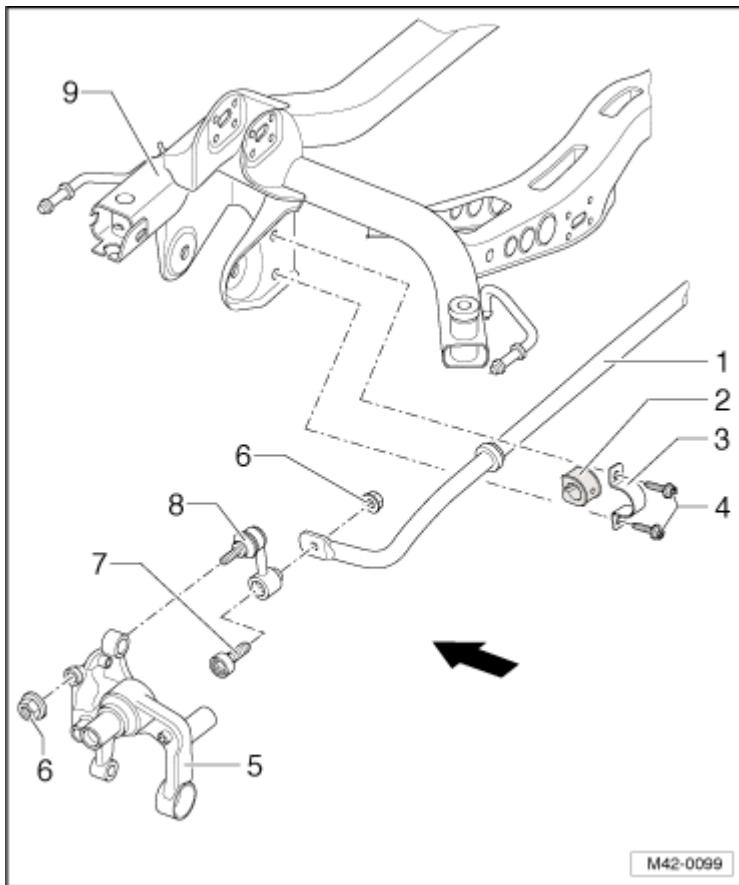
Always replace if removed

6 - Shock Absorbers

7 - Lower Transverse Link

8 - Wheel Bearing Housing

Stabilizer Bar Overview



1 - Stabilizer Bar

2 - Rubber Mount

3 - Clamp

4 - Bolt

- 25 Nm + 90° turn
- Tighten uniformly
- Always replace if removed

5 - Wheel Bearing Housing

6 - Nut

- 45 Nm
- Always replace if removed

7 - Bolt

- Always replace if removed

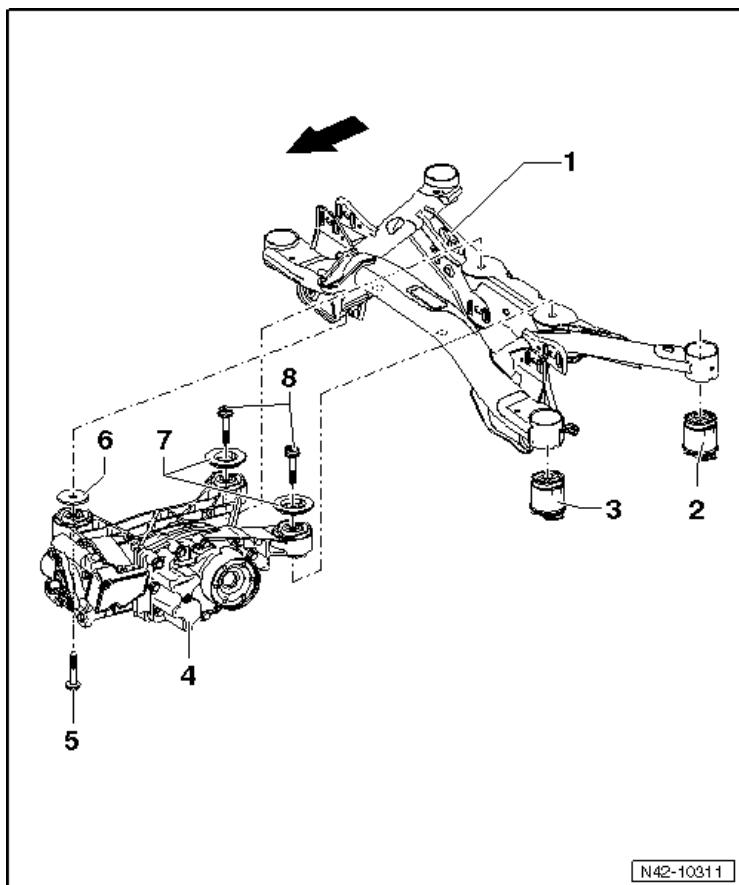
8 - Coupling Rod

9 - Subframe

Suspension,
Wheels, Steering

All Wheel Drive (AWD)

Subframe, Final Drive Overview



1 - Subframe

2 - Rear Bonded Rubber Bushing

3 - Front Bonded Rubber Bushing

4 - Final Drive

5 - Bolt

- 60 Nm + 90° turn
- Always replace if removed

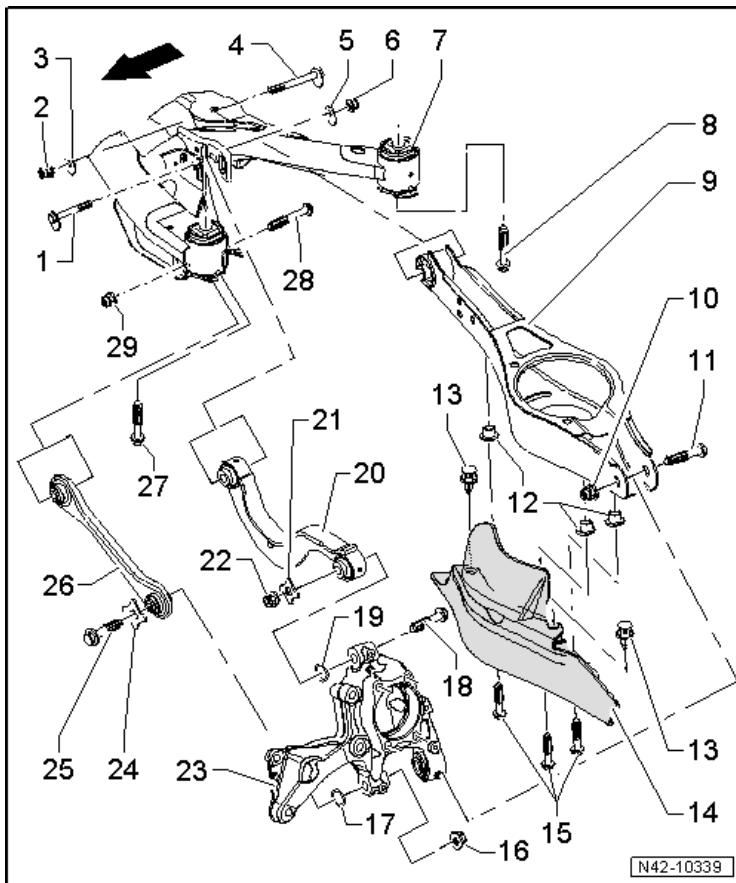
6 - Washer

7 - Washer

8 - Bolt

- 60 Nm + 90° turn
- Always replace if removed

Transverse Link, Tie Rod Overview



1 - Eccentric Bolt

2 - Nut

- 95 Nm
- When adjusting, can be loosened and tightened up to 5 times.
- Always replace if removed

3 - Eccentric Washer

4 - Eccentric Bolt

5 - Eccentric Washer

6 - Nut

- 95 Nm
- When adjusting, can be loosened and tightened up to 5 times.
- Always replace if removed

7 - Subframe

8 - Bolt

- 90 Nm + 90° turn
- Always replace if removed

9 - Lower Transverse Link**10 - Nut**

- 90 Nm + 90° turn
- Always replace if removed

11 - Bolt

- Always replace if removed

12 - Threaded Rivet

- M6

13 - Expanding Rivet**14 - Stone Chip Protection****15 - Bolt**

- 8 Nm

16 - Nut

- Always replace if removed

17 - Washer**18 - Bolt**

- 130 Nm + 90° turn
- Always replace if removed

19 - Washer**20 - Upper Transverse Link****21 - Washer****22 - Nut**

- Always replace if removed

23 - Wheel Bearing Housing**24 - Washer****25 - Bolt**

- 130 Nm + 90° turn
- Always replace if removed

26 - Tie Rod**27 - Bolt**

- 90 Nm + 90° turn
- Always replace if removed

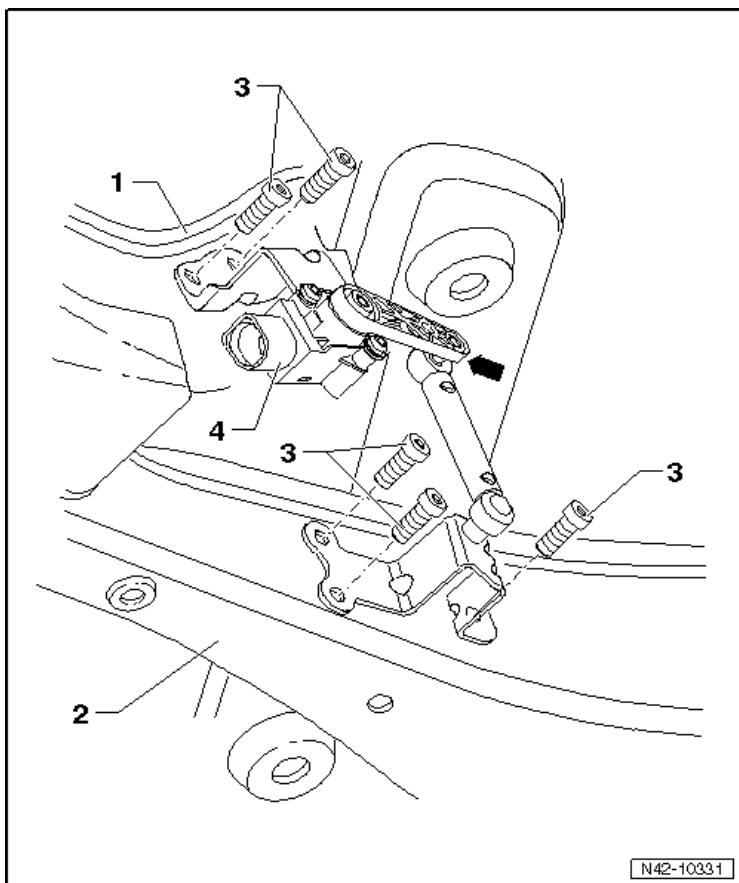
28 - Bolt

- Always replace if removed

29 - Nut

- 90 Nm + 90° turn
- Always replace if removed

Left Rear Level Control System Sensor -G76- Overview



1 - Subframe

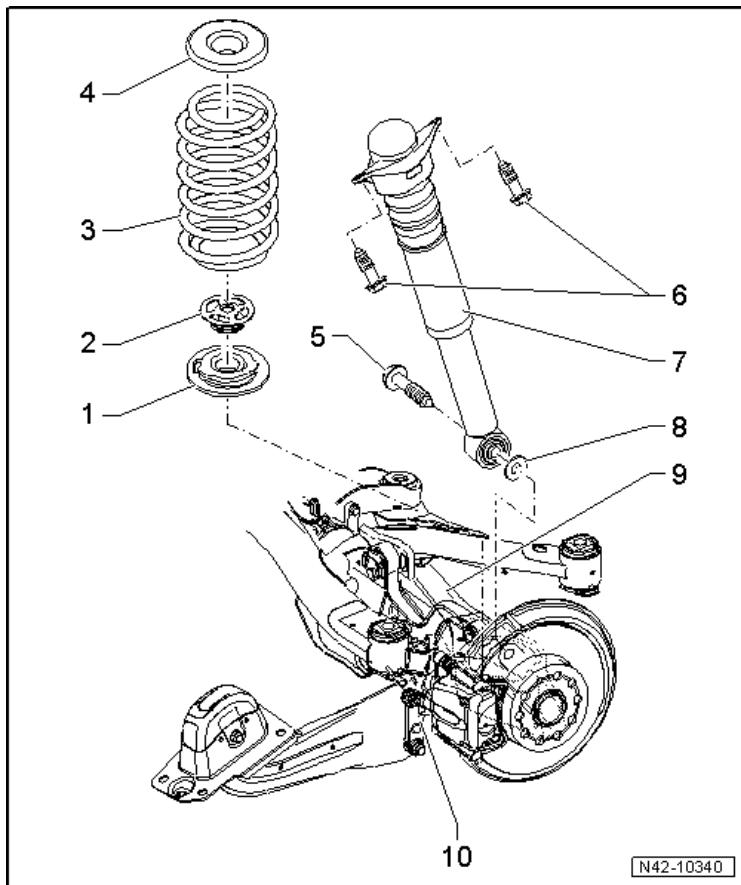
2 - Lower Transverse Link

3 - Bolt

- 5 Nm
- M5 x 20

4 - Left Rear Level Control System Sensor -G76-

Shock Absorber, Coil Spring



1 - Low Spring Support

2 - Assembly Aid

3 - Coil Spring

4 - Upper Spring Support

5 - Bolt

□ 180 Nm

6 - Bolt

□ 50 Nm + 90° turn

□ Always replace if removed

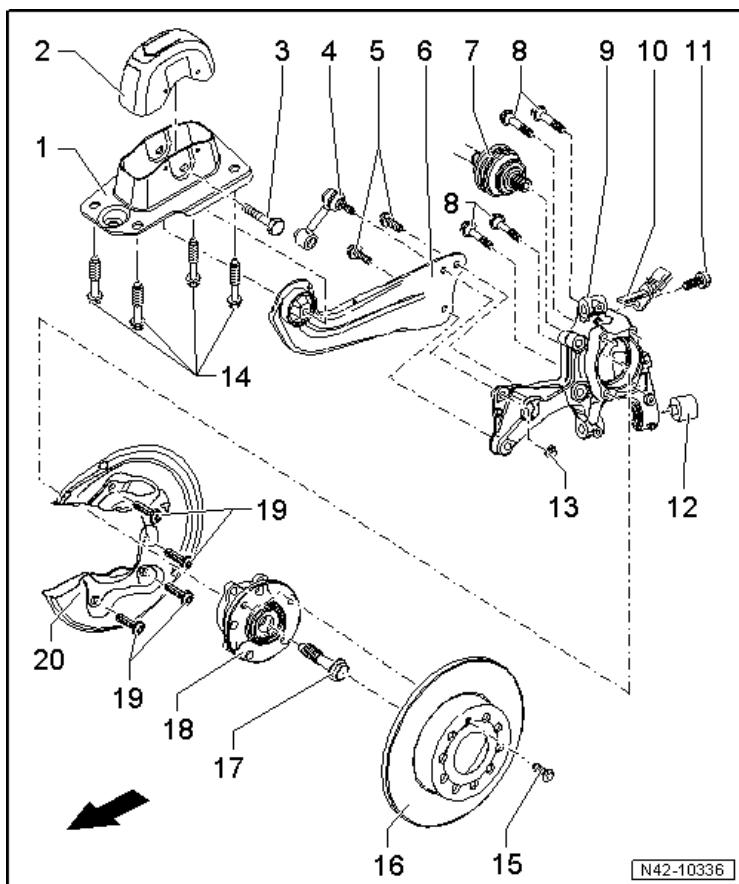
7 - Shock Absorbers

8 - Washer

9 - Lower Transverse Link

10 - Wheel Bearing Housing

Wheel Bearing Housing and Trailing Arm Assembly Overview



1 - Mounting Bracket

2 - Cover

3 - Bolt

- 90 Nm + 90° turn
- Always replace if removed

4 - Coupling Rod

5 - Bolt

- 90 Nm + 90° turn
- Always replace if removed

6 - Trailing Arm

7 - Drive Axle

8 - Bolt

- 70 Nm + 90° turn
- Always replace if removed

9 - Wheel Bearing Housing

10 - Right Rear ABS Wheel Speed Sensor -G44-/Left Rear ABS Wheel Speed Sensor -G46-

11 - Bolt

- 8 Nm

12 - Bonded Rubber Bushing

13 - Nut

- 45 Nm
- Always replace if removed

14 - Bolt

- 50 Nm + 90° turn
- Always replace if removed

15 - Bolt

- 4 Nm

16 - Brake Disc

17 - Bolt

- Various versions
- Twelve-point bolt with ribs is 70 Nm + 90° turn
- Twelve-point bolt without ribs is 200 Nm + 180° turn
- Always replace if removed

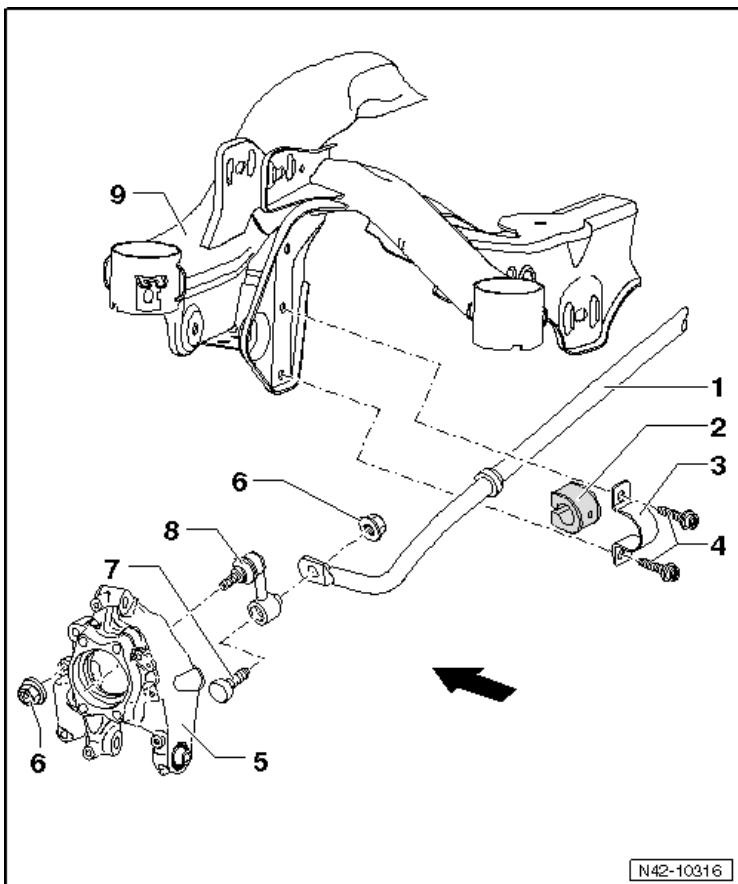
18 - Wheel Hub with Wheel Bearing

19 - Bolt

- 12 Nm

20 - Cover Plate

Stabilizer Bar AWD Overview



1 - Stabilizer Bar

2 - Rubber Mount

3 - Clamp

4 - Internal Multi-Point Bolt

- 25 Nm + 90° turn
- Always replace if removed

5 - Wheel Bearing Housing

6 - Nut

- 45 Nm
- Always replace if removed

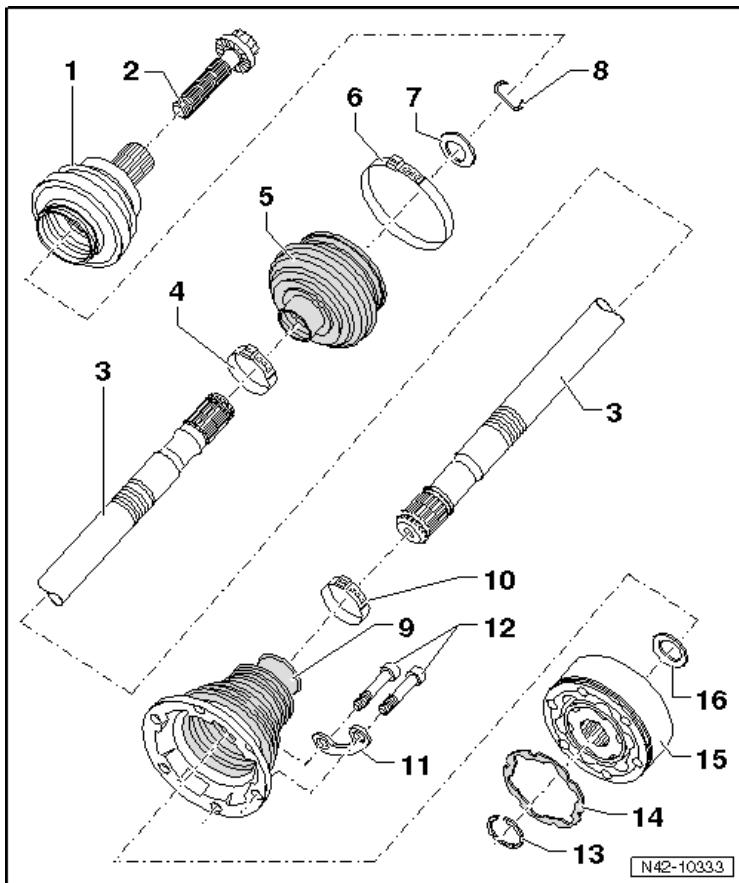
7 - Bolt

- Always replace if removed

8 - Coupling Rod

9 - Subframe

Drive Axle Overview



1 - Outer CV Joint

2 - Bolt

- Various versions
- Twelve-point bolt with ribs is 70 Nm + 90° turn
- Twelve-point bolt without ribs is 200 Nm + 180° turn
- Always replace if removed

3 - Drive Axle

4 - Clamp

- Always replace if removed

5 - Protective Boot

6 - Clamp

- Always replace if removed

7 - Dished Washer

8 - Securing Ring

- Always replace if removed

9 - CV Boot

10 - Clamp

- Always replace if removed

11 - Backing Plate**12 - Bolt**

- First tighten to 10 Nm in a diagonal sequence, then tighten to tightening specification in a diagonal sequence.
- 40 Nm
- M8 x 48
- Always replace if removed

13 - Securing Ring

- Always replace if removed

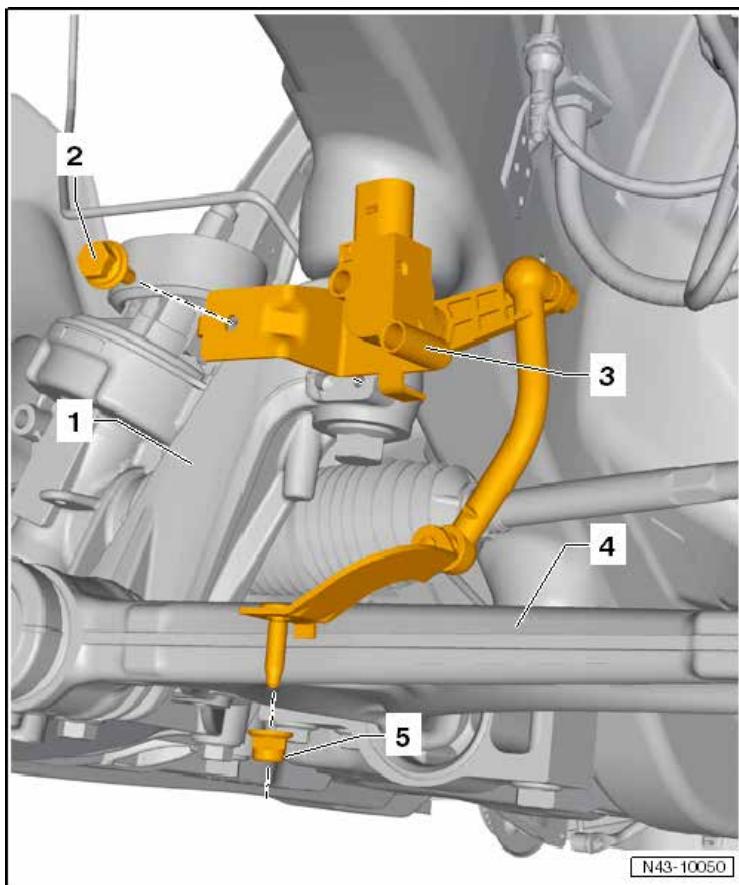
14 - Gasket

- Always replace if removed

15 - Inner CV Joint**16 - Dished Washer**

Self-Leveling Suspension

Left and Right Front Level Control System Sensor Overview



1 - Subframe

2 - Bolt

- 9 Nm
- M6 x 16

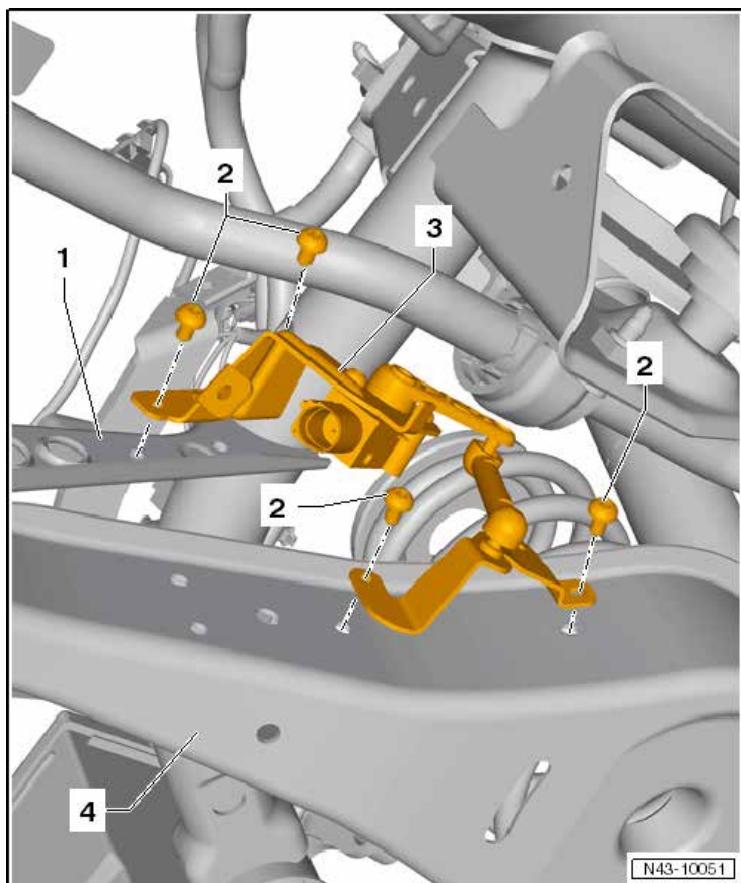
3 - Left Front Level Control System Sensor -G78- and Right Front Level Control Sensor -G289-

4 - Control Arm

5 - Nut

- 9 Nm
- Always replace if removed

Left Rear Level Control System Sensor Overview, FWD



1 - Subframe

2 - Bolt

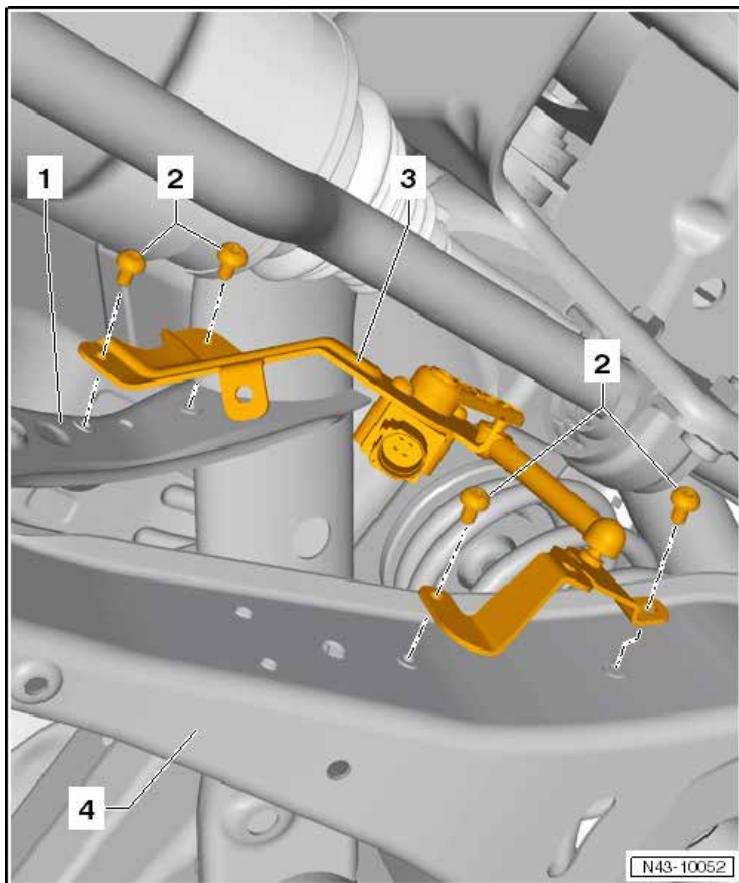
- 5 Nm
- M5 x 20

3 - Left Rear Level Control System Sensor -G76-

4 - Lower Transverse Link

Suspension,
Wheels, Steering

Left Rear Level Control System Sensor Assembly Overview, AWD



1 - Subframe

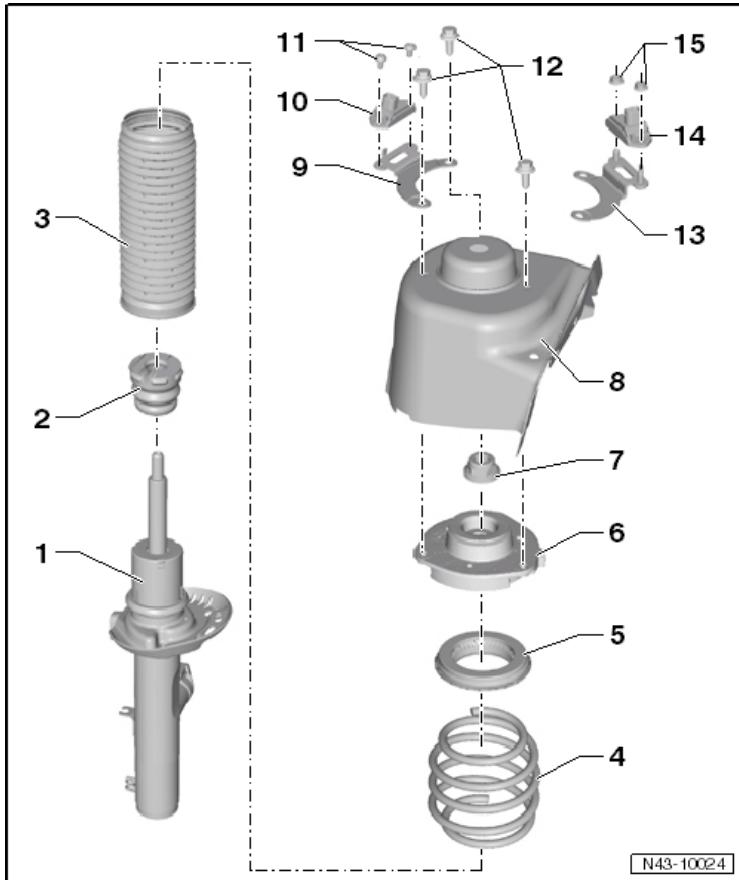
2 - Bolt

- 5 Nm
- M5 x 20

3 - Left Rear Level Control System Sensor -G76-

4 - Lower Transverse Link

Suspension Strut Overview



1 - Shock Absorber with Left Front Dampening Adjustment Valve

-N336-

2 - Buffer Stop

3 - Protective Sleeve

4 - Coil Spring

5 - Axial Groove Ball Bearing

6 - Suspension Strut Bearing

7 - Nut

- 60 Nm
- M14 x 1.5
- Always replace if removed

8 - Suspension Strut Dome

9 - Bracket

10 - Left Front Body Acceleration Sensor -G341-

11 - Bolt

- 5 Nm
- Always replace if removed

12 - Bolt

- 15 Nm + 90° turn
- Always replace if removed

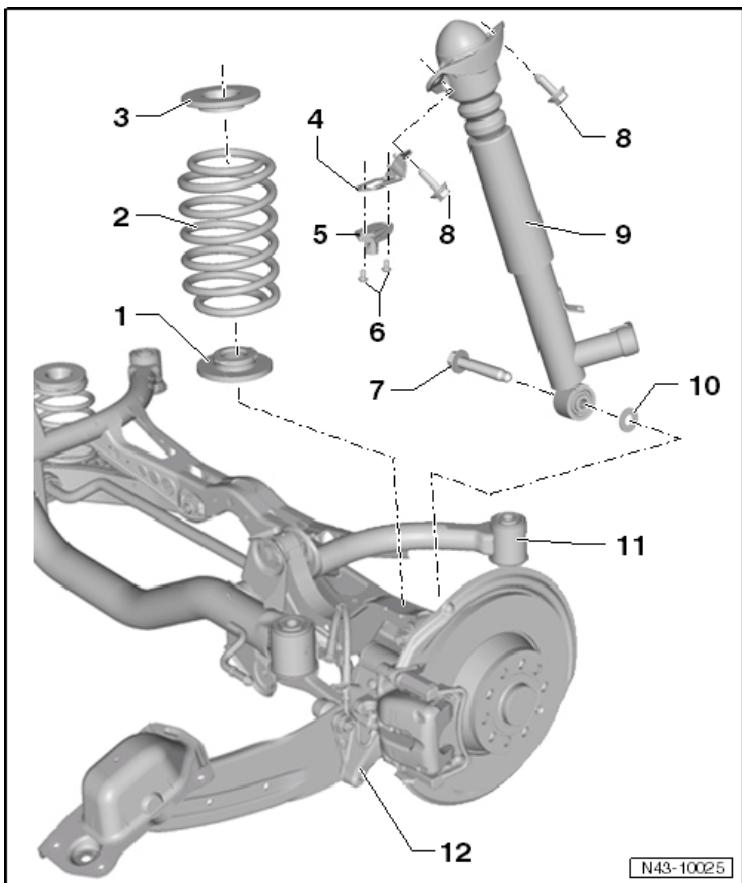
13 - Bracket

14 - Right Front Body Acceleration Sensor -G342-

15 - Nut

- 5 Nm
- Always replace if removed

Shock Absorber Overview, FWD



N43-10025

1 - Lower Spring Support

2 - Coil Spring

3 - Upper Spring Support

4 - Bracket

5 - Rear Body Acceleration Sensor -G343-

6 - Bolt

- 5 Nm
- Always replace if removed

7 - Bolt

- 180 Nm
- M14 x 1.5 x 85
- Always replace if removed

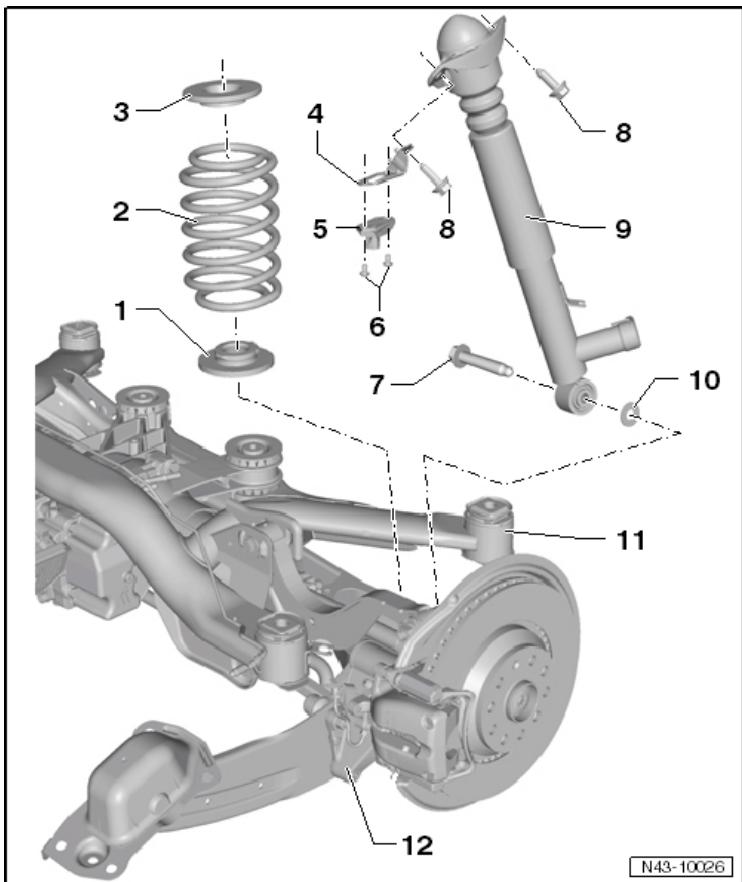
8 - Bolt

- 50 Nm + 90° turn
- M10 x 35
- Always replace if removed

- 9 - Shock Absorber with Left and Right Rear Dampening Adjustment Valve -N338/N339-**
- 10 - Washer**
- 11 - Lower Transverse Link**
- 12 - Wheel Bearing Housing**

Suspension,
Wheels, Steering

Shock Absorber Overview, AWD



N43-10026

1 - Lower Spring Support

2 - Coil Spring

3 - Upper Spring Support

4 - Bracket

5 - Rear Body Acceleration Sensor -G343-

6 - Bolt

- 5 Nm
- Always replace if removed

7 - Bolt

- 180 Nm
- M14 x 1.5 x 70

8 - Bolt

- 50 Nm + 90° turn
- M10 x 35

9 - Shock Absorber

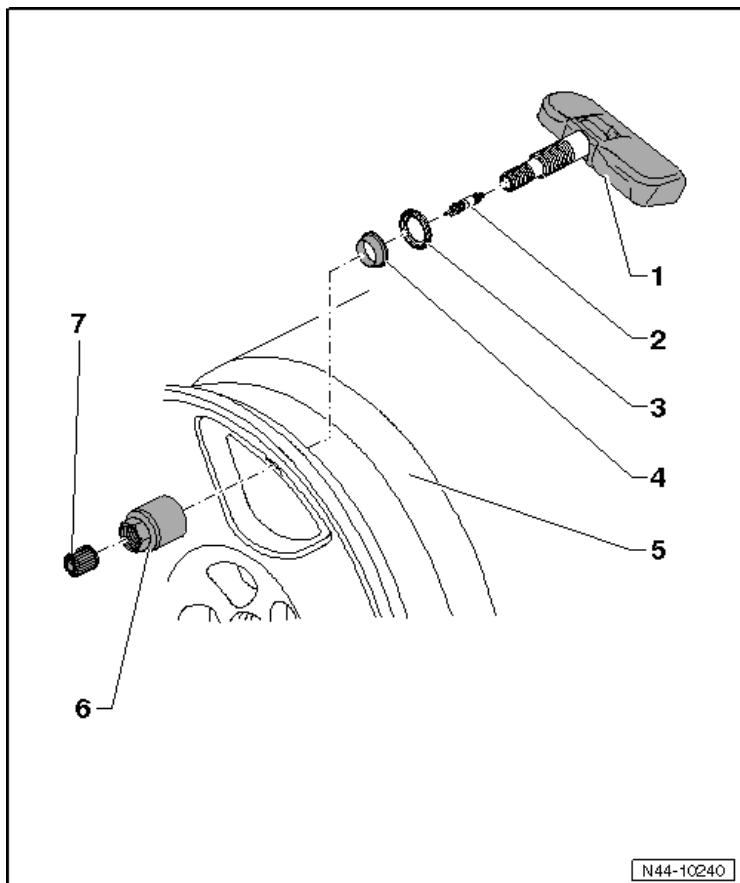
10 - Washer

- 11 - Lower Transverse Link
- 12 - Wheel Bearing Housing

Suspension,
Wheels, Steering

Wheels, Tires, Wheel Alignment

Tire Pressure Sensor Overview



1 - Tire Pressure Sensor

2 - Valve Core

3 - Sealing Washer

4 - Seal

5 - Disk Wheel

6 - Union Nut

8 Nm

7 - Valve Cap

Fastener Tightening Specifications

Component	Nm
Front Console to Body Bolt ¹⁾	70 plus an additional 180° (½ turn)
Front Subframe to Body Bolt ¹⁾	70 plus an additional 180° (½ turn)
Front Tie Rod End to Tie Rod Nut	70
Rear Lower Transverse Link to Subframe Nut ^{1) 2)}	95
Rear Upper Transverse Link to Subframe Nut ^{1) 2)}	95
Wheel bolts to wheel hub for all vehicles	120

¹⁾ Replace fastener(s).

²⁾ Always tighten in curb weight position.

Wheel Alignment Data

Wheel Alignment Specified Values

Front suspension	Basic Suspension	Sport Suspension without 18" wheels/ GTD without 18" wheels/ GTD with Adaptive Chassis DCC without 18" Wheels
Production Relevant No. (PR. No.)	2UA	G58, 2UC
Total toe (wheels not pressed)	$10' \pm 10'$	$10' \pm 10'$
Camber (wheels in straight ahead position)	$-30' \pm 30'$	$-41' \pm 30'$
Maximum permissible difference between both sides	30'	30'
Toe-out angle ¹⁾ with steering wheel turned 20° to left and right	$1^{\circ}38' \pm 20'$	$1^{\circ}40' \pm 20'$
Caster	$7^{\circ} 34' \pm 30'$	$7^{\circ} 47' \pm 30'$
Maximum permissible difference between both sides	30'	30'
Standing height (mm)	382 ± 10	367 ± 10

Front suspension	Sport Suspension with 18"/ GTI North America with 18" Wheels/ GTD with 18" Wheels/ GTD with 18" Wheels and Adaptive Chassis DCC	Heavy Duty Suspension
PR numbers	G02, G05, G07, G33, G58, 2UC,	2UB
Total toe (wheels not pressed)	10' ± 10'	10' ± 10'
Camber (wheels in straight ahead position)	-41' ± 30'	-14' ± 30'
Maximum permissible difference between both sides	30'	30'
Toe-out angle ¹⁾ with steering wheel turned 20° to left and right	1°40' ± 20'	1°38' ± 20'
Caster	7° 47' ± 30'	7° 17' ± 30'
Maximum permissible difference between both sides	30'	30'
Standing height (mm)	367 ± 10	402 ± 10

¹⁾ The toe angle difference can also be indicated negatively in alignment computer, depending on manufacturer.

Front suspension	Basic Suspension with Adaptive Chassis DCC	Basic Suspension with 18" Wheels and Adaptive Chassis DCC
Production Relevant No. (PR. No.)	G01, G03	G01, G03
Total toe (wheels not pressed)	10' ± 10'	10' ± 10'
Camber (wheels in straight ahead position)	-37' ± 30'	-37' ± 30'
Maximum permissible difference between both sides	30'	30'
Toe-out angle ¹⁾ with steering wheel turned 20° to left and right	1°27' ± 20'	1°27' ± 20'
Caster	7° 40' ± 30'	7° 40' ± 30'
Maximum permissible difference between both sides	30'	30'
Standing height (mm)	372 ± 10	372 ± 10

Front suspension	GTI without and with Adaptive Chassis DCC	Golf R
PR numbers	G02, G05, G07, G33, G58, 2UC,	2UB
Total toe (wheels not pressed)	$10' \pm 10'$	$10' \pm 10'$
Camber (wheels in straight ahead position)	$-44' \pm 30'$	$-45' \pm 30'$
Maximum permissible difference between both sides	30'	30'
Toe-out angle ¹⁾ with steering wheel turned 20° to left and right	$1^{\circ}22' \pm 20'$	$1^{\circ}22' \pm 20'$
Caster	$7^{\circ} 47' \pm 30'$	$7^{\circ} 51' \pm 30'$
Maximum permissible difference between both sides	30'	30'
Standing height (mm)	360 ± 10	358 ± 10

¹⁾ The toe angle difference can also be indicated negatively in alignment computer, depending on manufacturer.

Rear Suspension	Basic Suspension	Sport Suspension without 18" wheels/ GTD without 18" Wheels/ GTD with Adaptive Chassis DCC without 18" Wheels
Camber	$-1^{\circ} 20' \pm 30'$	$-1^{\circ} 20' \pm 30'$
Maximum permissible difference between both sides	30'	30'
Total toe (at prescribed camber)	$+10' \pm 12.5'$	$+10' \pm 12.5'$
Maximum permissible deviation from direction of rotation	20'	20'
Standing height (mm)	380 ± 10	365 ± 10

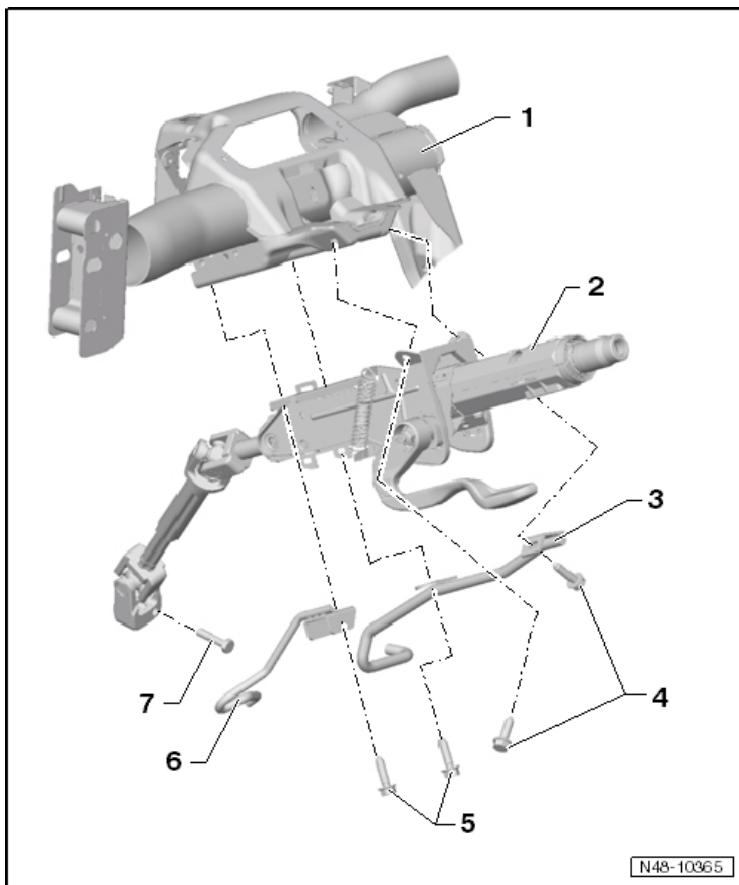
Rear Suspension	Sport Suspension with 18"/ GTI North America with 18" Wheels/ GTD with 18" Wheels/ GTD with 18" Wheels and Adaptive Chassis DCC	Heavy Duty Suspension
Camber	-1° 45' ± 30'	-1° 20' ± 30'
Maximum permissible difference between both sides	30'	30'
Total toe (at prescribed camber)	+10' ± 12.5'	+10' ± 12.5'
Maximum permissible deviation from direction of rotation	20'	20'
Standing height (mm)	365 ± 10	400 ± 10

Rear Suspension	Basic Suspension with Adaptive Chassis DCC	Basic Suspension with 18" Wheels and Adaptive Chassis DCC
Camber	-1° 20' ± 30'	-1° 20' ± 30'
Maximum permissible difference between both sides	30'	30'
Total toe (at prescribed camber)	+10' ± 12.5'	+10' ± 12.5'
Maximum permissible deviation from direction of rotation	20'	20'
Standing height (mm)	370 ± 10	370 ± 10

Rear Suspension	GTI without and with Adaptive Chassis DCC	Golf R
Camber	-1° 45' ± 30'	-1° 45' ± 30'
Maximum permissible difference between both sides	30'	30'
Total toe (at prescribed camber)	+10' ± 12.5'	+10' ± 12.5'
Maximum permissible deviation from direction of rotation	20'	20'
Standing height (mm)	365 ± 10	356 ± 10

Steering

Steering Column Assembly Overview, Vehicles without Knee Airbags



1 - Assembly Carrier with Bracket

2 - Steering Column

3 - Brake Pedal Crash Brace

4 - Bolt

20 Nm

5 - Bolt

20 Nm

6 - Clutch Pedal Crash Brace

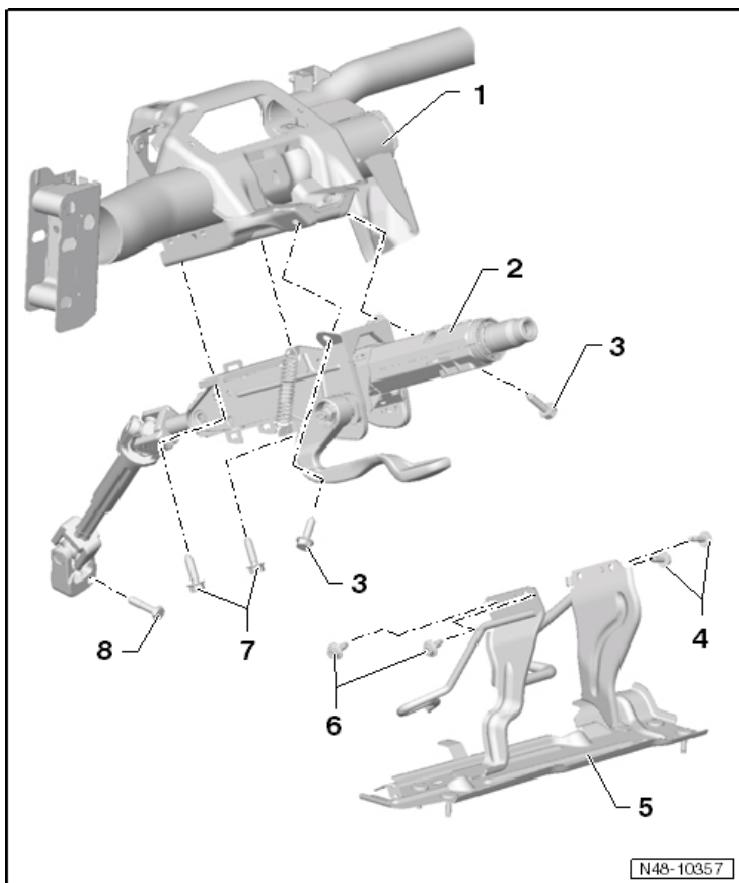
7 - Bolt

30 Nm

Always replace if removed

Suspension,
Wheels, Steering

Steering Column Assembly Overview, Vehicles with Knee Airbags



1 - Assembly Carrier with Bracket

2 - Steering Column

3 - Bolt

20 Nm

4 - Bolt

9 Nm

5 - Knee Airbag Mount

6 - Bolt

9 Nm

7 - Bolt

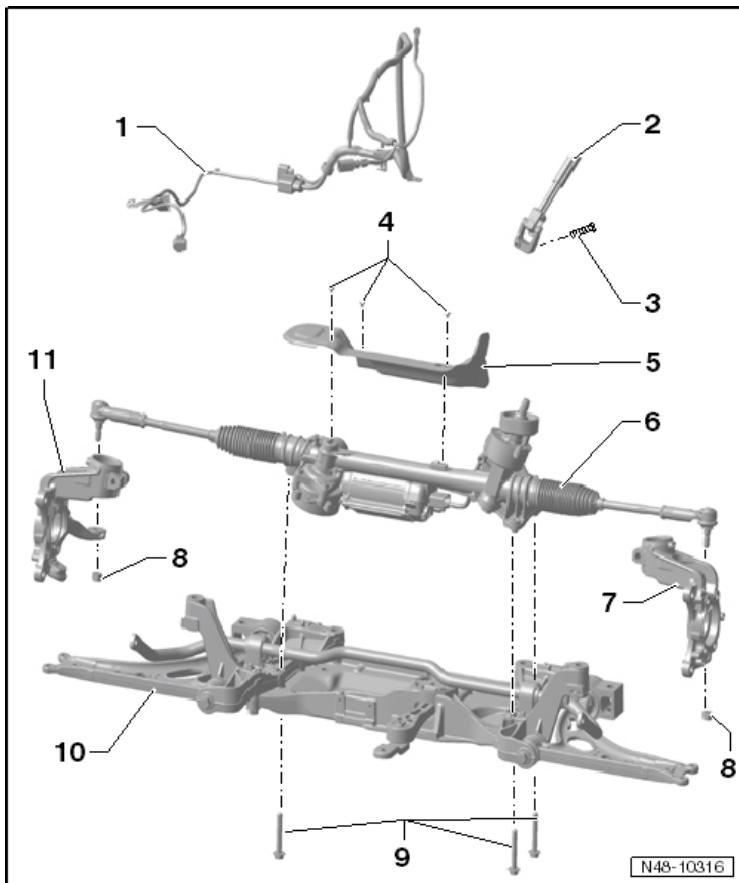
20 Nm

8 - Bolt

30 Nm

Always replace if removed

Electro-Mechanical Steering Gear Overview



1 - Electrical Wiring

2 - Universal Joint

3 - Bolt

- 30 Nm
- M8 x 35
- Always replace if removed

4 - Torx® Bolt

- 6 Nm

5 - Shield

6 - Steering Gear

7 - Left Wheel Bearing Housing

8 - Nut

- 20 Nm + 90° turn
- M12 x 1.5
- Always replace if removed

9 - Bolt

- 50 Nm + 90° turn
- Always replace if removed

10 - Subframe**11 - Right Wheel Bearing Housing**

Suspension,
Wheels, Steering

BRAKE SYSTEM

General, Technical Data

Vehicle Data Sticker PR Number Allocation

wwwzzz1K z 9 W 4 0 0 0 9 3

5K1 24K

GOLF 2,0 TREND

81 KW fTDI M5F

CBDC

KQM

LR7L-----

BB

BOA C8V GOC H6R JON D96

- 1AT 1G8 1MG 1NC 5RQ 5SL TU3

OBD 3U1 QG1 BAI 8GU BZH

1KD 1ZF - GO2 7MG

8RM ↑ 4X4 4R4 4K3 N4C 5MA
8RM ↓ OAD OBD 2UA 2G5

1 2

1JA LO7 OYB

Noo-10628

The Product Relevant (PR) number on the vehicle data label describes which brake system is installed in the vehicle.

Example:

- Arrow 1 - rear brakes - 1KD
- Arrow 2 - front brakes - 1ZF

There is a vehicle data label in the spare wheel well and also one in the customer Maintenance booklet.

Allocation, refer to the Parts Catalog.

The following tables explain the production control number. These are important for the combination brake caliper/brake disc and brake pad.

Front Brakes

Engine Version	PR Number	Front Wheel Brake
2.0L - 103 kW TDI	1ZE, 1ZP	FN 3 (15")
2.5L- 125 kW	1LJ, 1ZA, 1LL,1ZB	FN3 (16")
2.0L - 147 kW T- FSI	1LJ, 1ZA, 1LL,1ZB	FN3 (16")

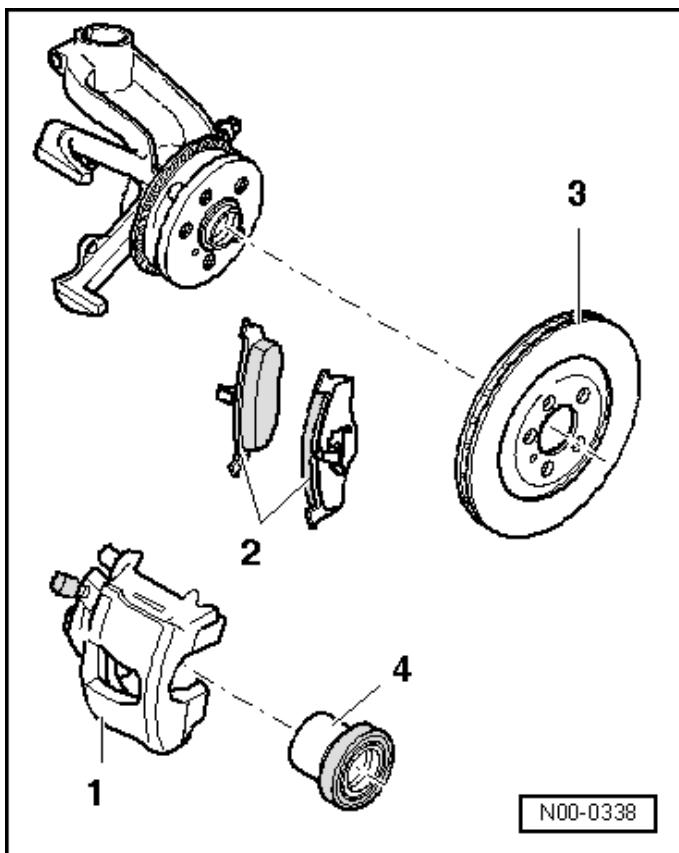
Rear Brakes

Engine Version	PR Number	Rear Wheel Brake
2.0L - 103 kW TDI	1KD	C 38 (15")
2.5L- 125 kW	1KS	Bosch ZOH 38 (16")
2.0L - 147 kW T- FSI	1KS	Bosch ZOH 38 (16")

Brake Master Cylinder and Brake Booster

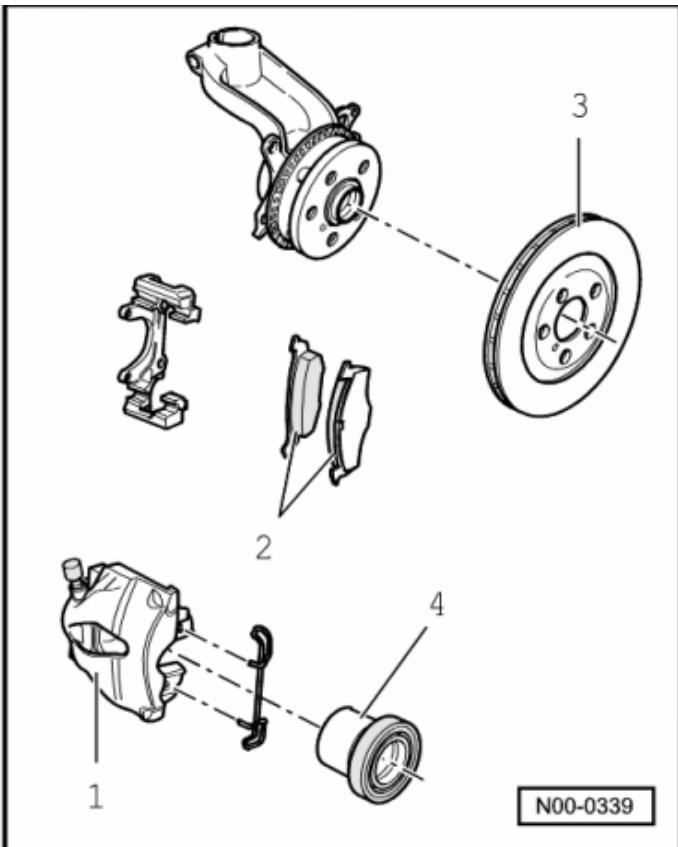
Component	Diameter in mm
Brake master cylinder	23.81
Brake booster	10

FS III Front Brakes



N00-0338

Item	PR Number		1ZF
1	Brake caliper		FS III (15")
2	Brake pad thickness	mm	14
	Brake pad, wear limit without back plate	mm	2
3	Brake disc	Diameter in mm	280
	Brake disc thickness	mm	22
	Brake disc, wear limit	mm	19
4	Brake caliper piston	Diameter in mm	54

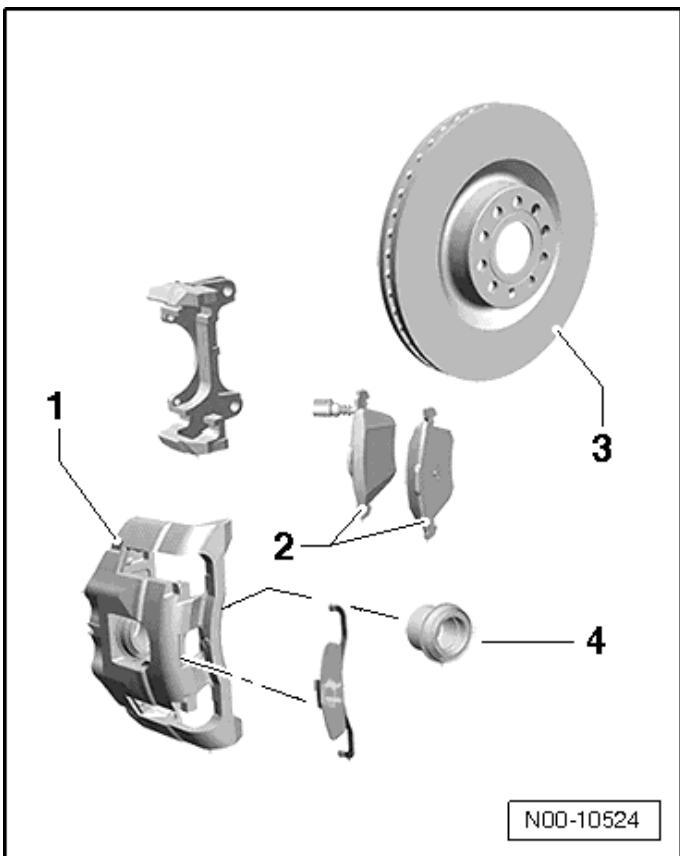
FN 3 Front Brakes

Item	PR Number	1ZE/1ZP	
1	Brake caliper	FN 3 (15")	
2	Brake pad thickness	mm	14
	Brake pad, wear limit without back plate	mm	2
3	Brake disc	Diameter in mm	288
	Brake disc thickness	mm	25
	Brake disc, wear limit	mm	22
4	Brake caliper piston	Diameter in mm	54

FN 3 Front Brakes (cont'd)

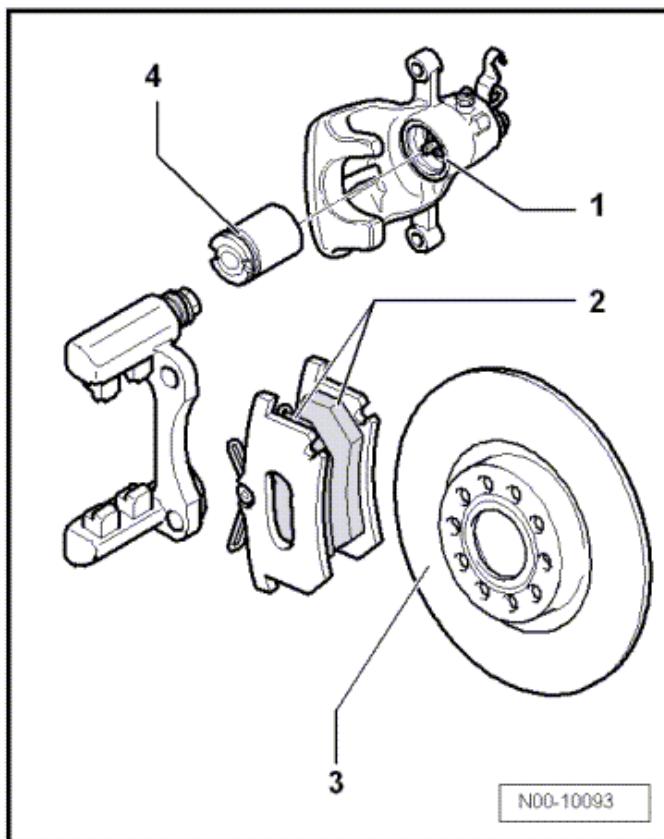
Item	PR Number		1LJ/1ZD/1LL 1LV/1ZA/1ZB
1	Brake caliper		FN 3 (16")
2	Brake pad thickness	mm	14
	Brake pad, wear limit without back plate	mm	2
3	Brake disc	Diameter in mm	312
	Brake disc thickness	mm	25
	Brake disc, wear limit	mm	22
4	Brake caliper piston	Diameter in mm	54

FNR-G Front Brakes



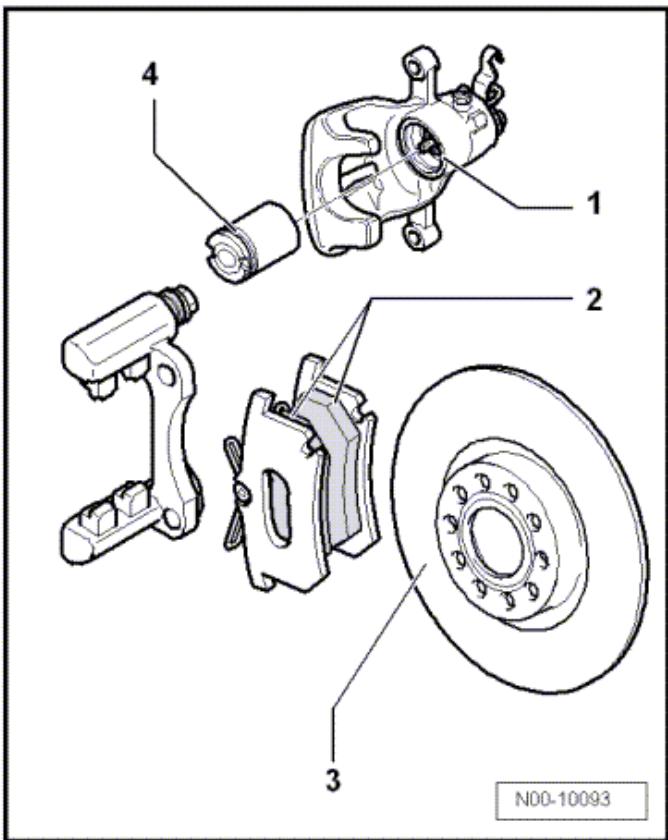
Item	PR Number	1ZK	
1	Brake caliper	FNR-G (17")	
2	Brake pad thickness	mm	14
	Brake pad, wear limit without back plate	mm	2
3	Brake disc	Diameter in mm	345
	Brake disc thickness	mm	30
	Brake disc, wear limit	mm	27
4	Brake caliper piston	Diameter in mm	57

C 38 Rear Brakes



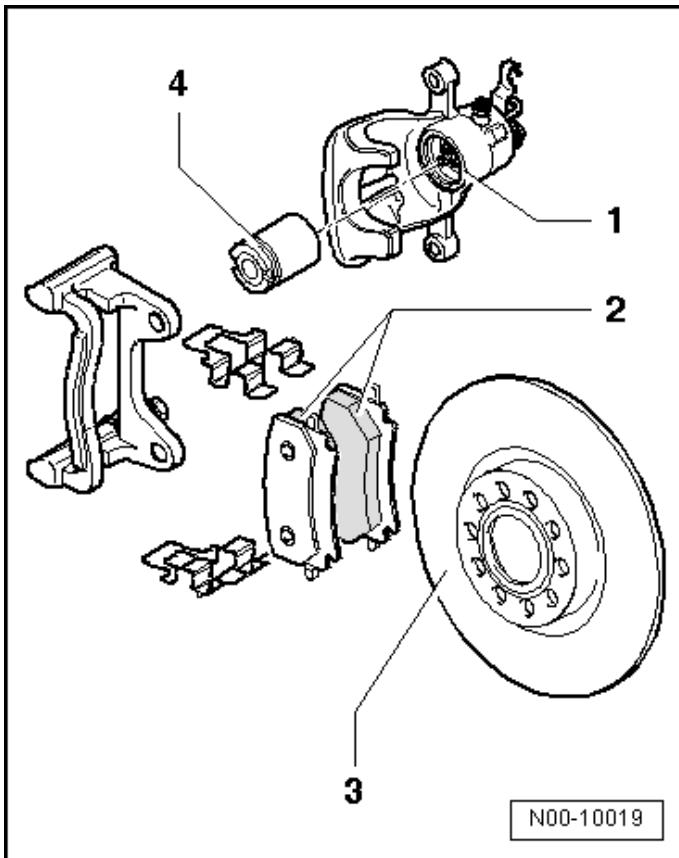
Item	PR Number	1KD
1	Brake caliper	C 38 (15")
2	Brake pad thickness	mm 11
	Brake pad, wear limit without back plate	mm 2
3	Brake disc	Diameter in mm 253
	Brake disc thickness	mm 10
	Brake disc, wear limit	mm 8
4	Brake caliper piston	Diameter in mm 38

CII 38 Rear Brakes

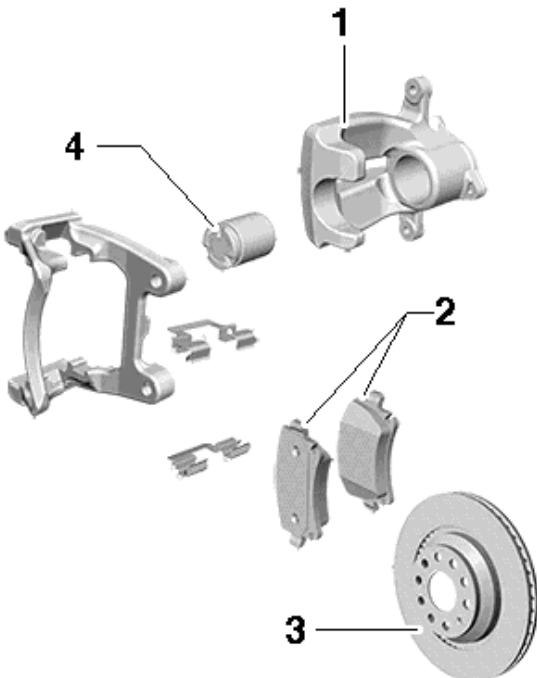


Item	PR Number		1KY / 1KV
1	Brake caliper		CII 38 (16")
2	Brake pad thickness	mm	11
	Brake pad, wear limit without back plate	mm	2
3	Brake disc	Diameter in mm	282
	Brake disc thickness	mm	12
	Brake disc, wear limit	mm	10
4	Brake caliper piston	Diameter in mm	38

CII 41 (15") Rear Brakes



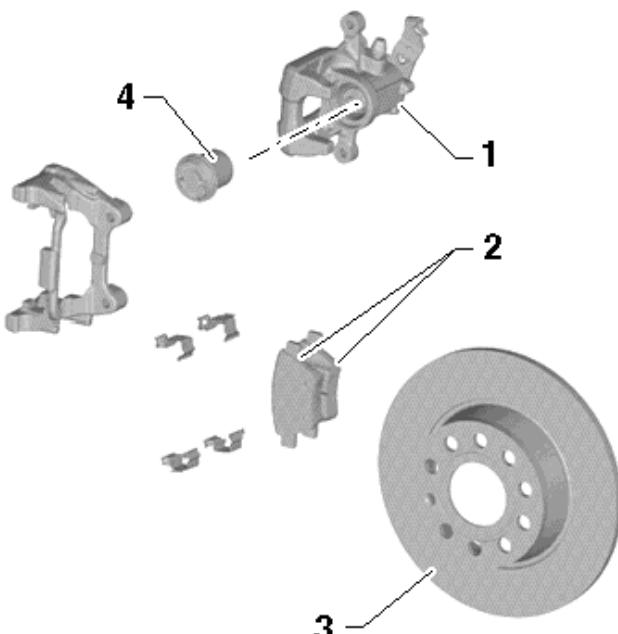
Item	PR Number	1KF / 1KE	
1	Brake caliper	CII 41 (15")	
2	Brake pad thickness	mm	11
	Brake pad, wear limit without back plate	mm	2
3	Brake disc	Diameter in mm	256
	Brake disc thickness	mm	12
	Brake disc, wear limit	mm	10
4	Brake caliper piston	Diameter in mm	41

CII 41 (17") Rear Brakes

N00-10632

Item	PR Number	1KW	
1	Brake caliper	CII 41 (17")	
2	Brake pad thickness	mm	11
	Brake pad, wear limit without back plate	mm	2
3	Brake disc	Diameter in mm	310
	Brake disc thickness	mm	22
	Brake disc, wear limit	mm	20
4	Brake caliper piston	Diameter in mm	41

Bosch ZOH 38 (16") Rear Brakes

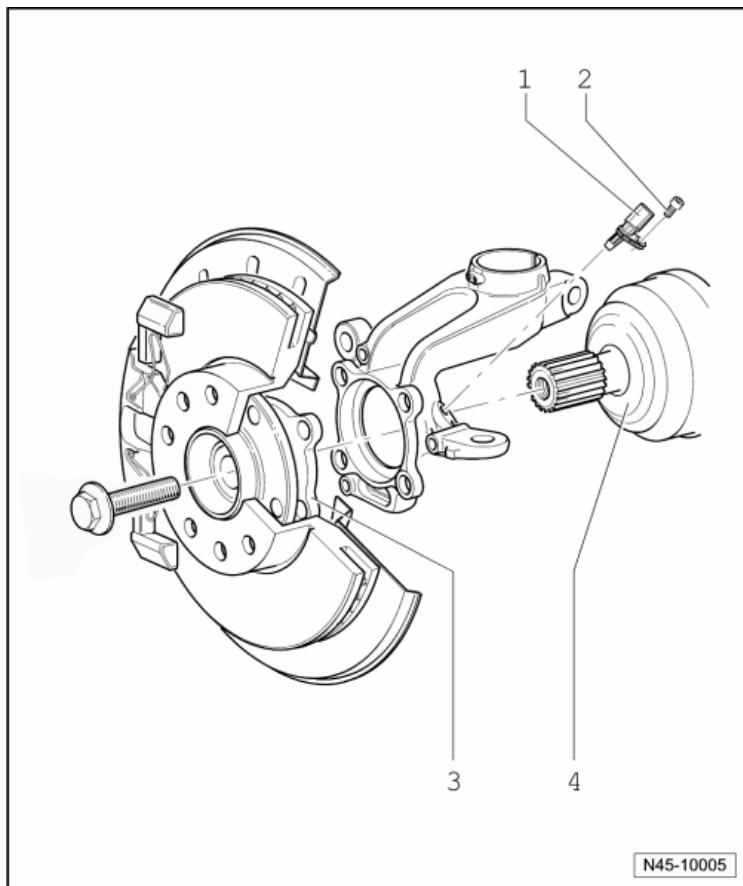


M00-10003

Item	PR Number	1KS/1KT	
1	Brake caliper	Bosch ZOH 38 (16")	
2	Brake pad thickness	mm	12
	Brake pad, wear limit without back plate	mm	2
3	Brake disc	Diameter in mm	272
	Brake disc thickness	mm	10
	Brake disc, wear limit	mm	8
4	Brake caliper piston	Diameter in mm	38

Anti-lock Brake System (ABS)

Front Wheel Speed Sensor Overview



N45-10005

1 - ABS Speed Sensor

- Before inserting the speed sensor, clean the inner surface of the hole and coat it with hot bolt paste G 052 112 A3.

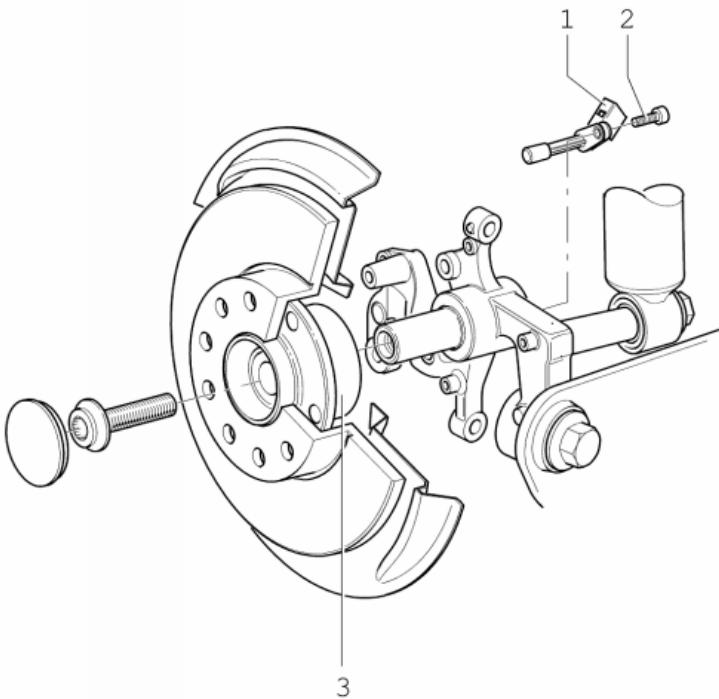
2 - Hex Socket Bolt

- 8 Nm

3 - Wheel Bearing Unit

4 - Drive Axle

Rear Wheel Speed Sensor Overview



N45-10006

1 - ABS Speed Sensor

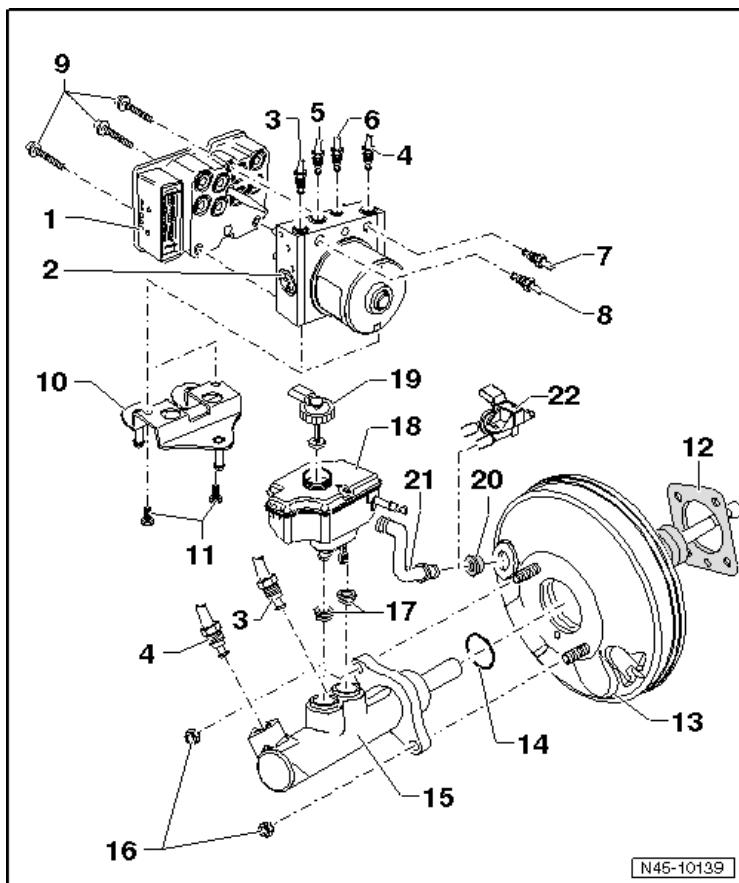
- Before inserting the speed sensor, clean the inner surface of the hole and coat it with hot bolt paste G 052 112 A3.

2 - Hex Socket Bolt

- 8 Nm

3 - Wheel Hub with Wheel Bearing

Hydraulic Unit and Brake Booster/Master Cylinder Overview, ABS Mark 70 (ABS/ASR)



1 - ABS Control Module -J104-

2 - ABS Hydraulic Unit -N55-

3 - Brake Line

4 - Brake Line

5 - Brake Line

6 - Brake Line

7 - Brake Line

8 - Brake Line

9 - Inner Torx® Bolt

- 5.5 Nm
- Use new bolts

10 - Bracket

11 - Bolt

- 8 Nm

12 - Gasket

13 - Brake Booster

14 - Seal

15 - Brake Master Cylinder

16 - Nut

25 Nm

Always replace if removed

17 - Sealing Plug

18 - Brake Fluid Reservoir

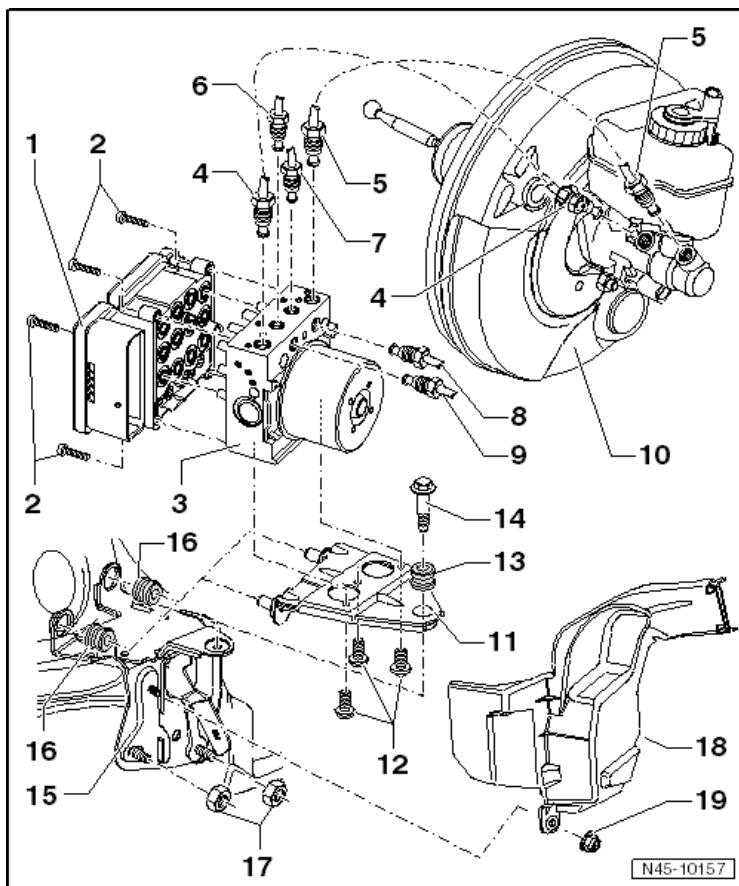
19 - Cap

20 - Sealing Plug

21 - Vacuum Hose

22 - Vacuum Sensor -G608-

Hydraulic Unit and Brake Booster/Master Cylinder Overview, ABS Mark 60 EC (ABS/EDL/ASR/ESP)



1 - ABS Control Module -J104-

2 - Inner Torx® Bolt

- 2 Nm + 0.8 Nm
- Use new bolts

3 - ABS Hydraulic Unit -N55-

4 - Brake Line

5 - Brake Line

6 - Brake Line

7 - Brake Line

8 - Brake Line

9 - Brake Line

10 - Brake Booster

11 - Bracket

12 - Torx® Bolt

- 8 Nm

13 - Rubber Insulation

14 - Hex Bolt

8 Nm

15 - Bracket

16 - Rubber Insulation

17 - Nut

20 Nm

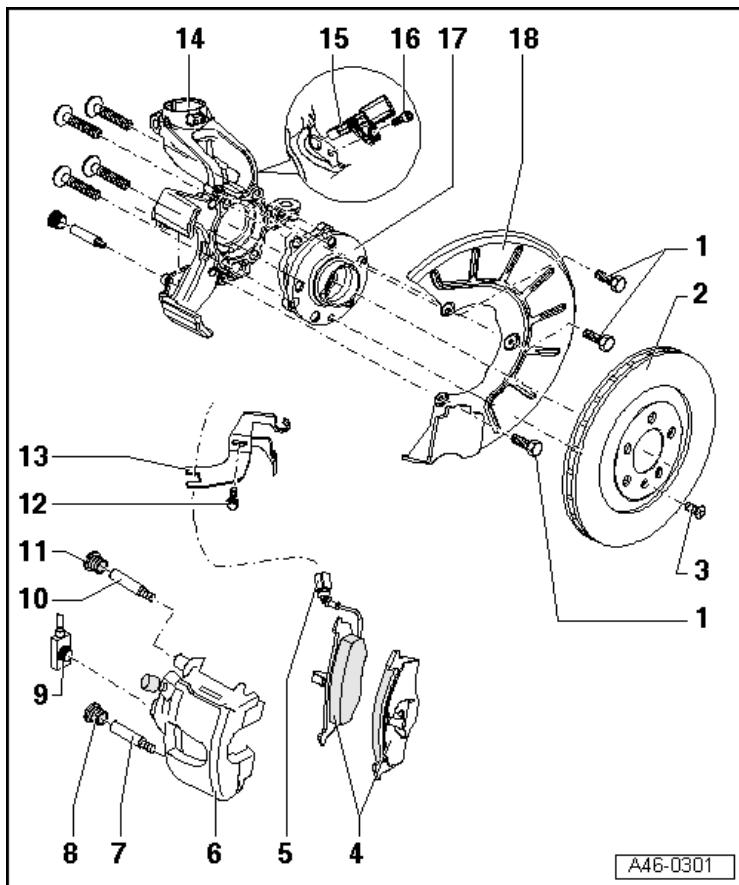
18 - Heat Shield

19 - Nut

8 Nm

Mechanical Components

Front Brakes Overview, FS III Overview



1 - Torx® Bolt

12 Nm

2 - Brake Rotor

3 - Torx® Bolt

4 Nm

4 - Brake Pads

5 - Harner Connector

6 - Brake Caliper

7 - Guide Pins

30 Nm

8 - Cap

9 - Brake Hose with Ring Connection and Banjo Bolt

35 Nm

10 - Guide Pins

30 Nm

11 - Universal Joint

12 - Cap

Remove

13 - Bracket

14 - Wheel Bearing Housing

15 - ABS Speed Sensor

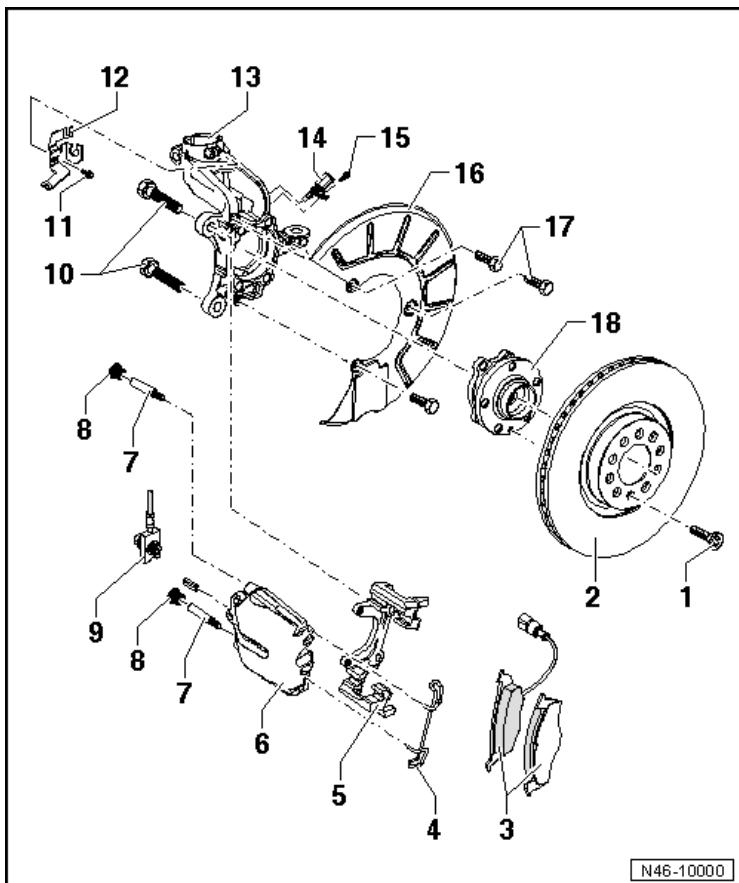
16 - Hex Socket Head Bolt

8 Nm

17 - Wheel Bearing Unit

18 - Cover Plate

Front Brakes Overview, FN 3



1 - Torx® Bolt

4 Nm

2 - Brake Rotor

3 - Brake Pads

4 - Spring

5 - Brake Carrier

6 - Brake Caliper

7 - Guide Pins

30 Nm

8 - Cap

Remvoe

9 - Brake Hose with Ring Connection and Banjo Bolt

35 Nm

10 - Ribbed Bolt

190 Nm

11 - Bolt

12 - Bracket

13 - Wheel Bearing Housing

14 - ABS Speed Sensor

15 - Hex Socket Head Bolt

□ 8 Nm

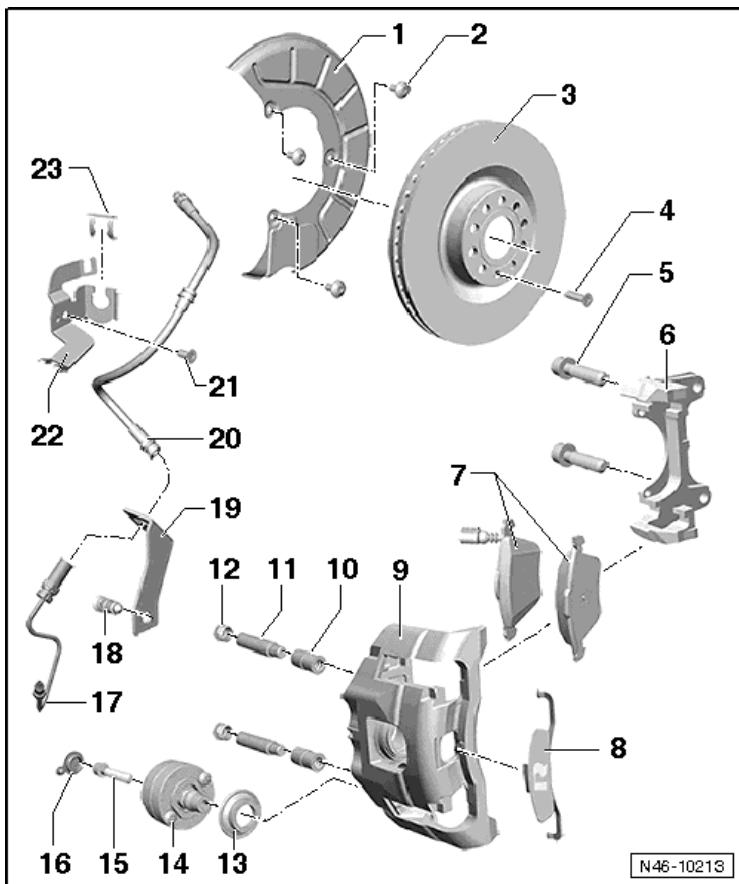
16 - Cover Plate

17 - Torx® Bolt

□ 12 Nm

18 - Wheel Bearing Unit

Front Brakes Overview, FNR-G



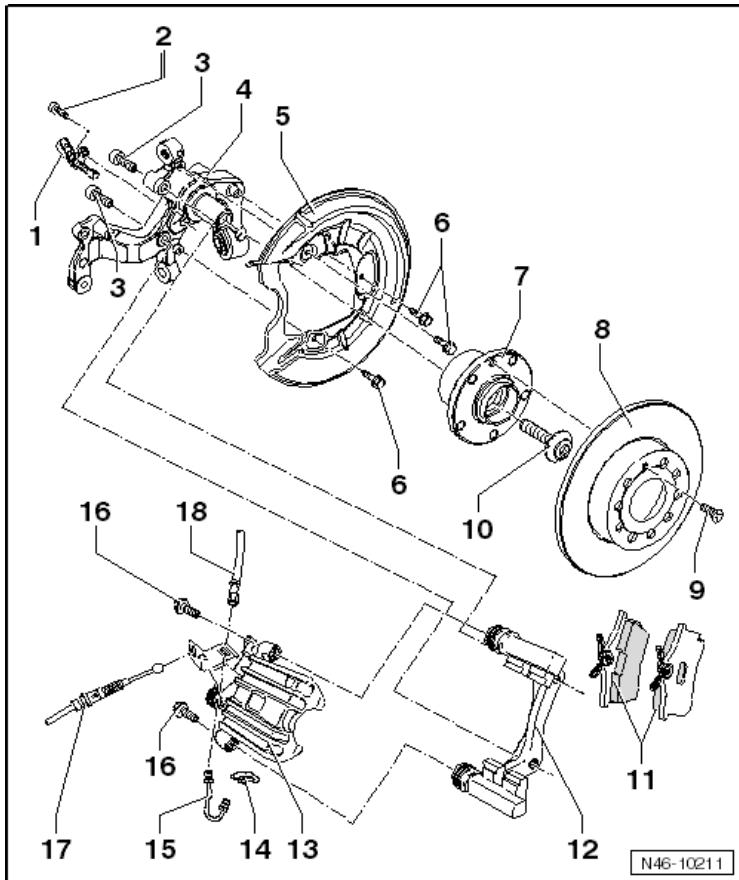
- 1 - Cover Plate
- 2 - Torx® Bolt
 - 12 Nm
- 3 - Brake Rotor
- 4 - Torx® Bolt
 - 4 Nm
- 5 - Ribbed Bolt
- 6 - Brake Carrier
- 7 - Brake Pads
- 8 - Spring
- 9 - Brake Caliper
- 10 - Guide Bushings
- 11 - Guide Pins
 - 30 Nm
- 12 - Cap
 - Remove

- 13 - Washer**
- 14 - Vibration Damper**
- 15 - Bolt**
 - 10 Nm
- 16 - Dust Cap**
- 17 - Brake Line**
 - 14 Nm
- 18 - Bolt**
 - 15 Nm
- 19 - Bracket**
- 20 - Brake Hose**
- 21 - Hex Socket Head Bolt**
 - 8 Nm
- 22 - Bracket**
- 23 - Spring Clamp**

Tightening Specification for the Ribbed Bolts

Step	Component	Nm
1	Tighten both ribbed bolts on the brake carrier	15
2	Tighten both ribbed bolts on the brake carrier	200

Rear Brakes Overview, C 38



1 - ABS Speed Sensor

2 - Hex Socket Head Bolt

- 8 Nm

3 - Internal Multi-Point Bolt

- 90 Nm + 90° turn
- Always replace if removed

4 - Wheel Bearing Housing

5 - Cover Plate

6 - Torx® Bolt

- 12 Nm

7 - Wheel Hub with Wheel Bearing

8 - Brake Rotor

9 - Bolt

- 4 Nm

10 - Bolt

11 - Brake Pads

12 - Brake Carrier with Guide Pins and Cap

13 - Brake Caliper

14 - Hose Retainer

15 - Brake Line

- 14 Nm

16 - Self-Locking Bolt

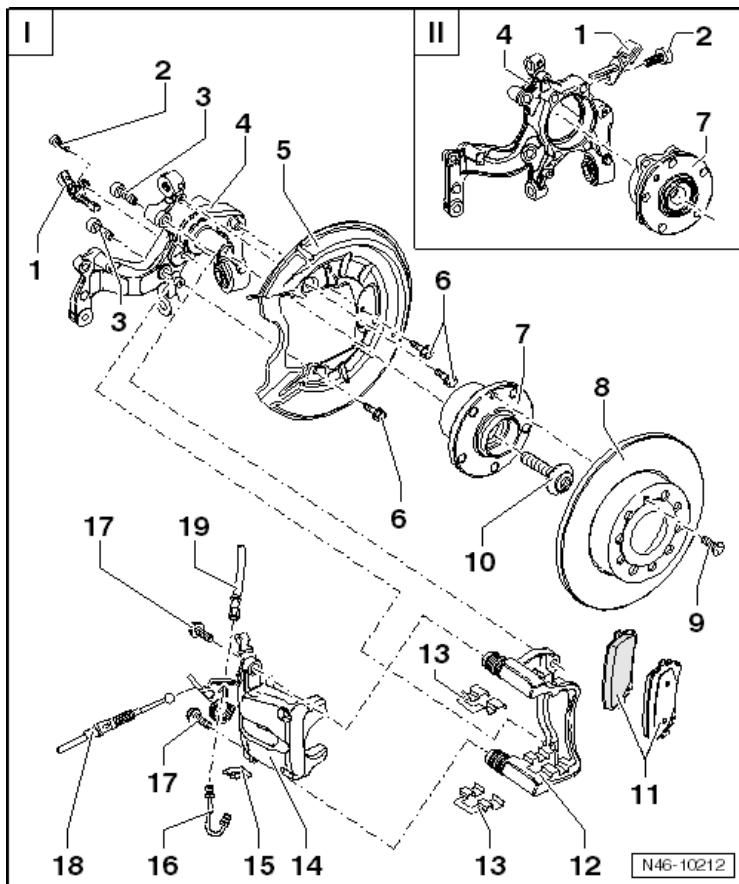
- 35 Nm

- Replace

17 - Parking Brake Cable

18 - Brake Hose

Rear Brakes Overview, CII 41



1 - ABS Speed Sensor

2 - Hex Socket Head Bolt

- 8 Nm

3 - Internal Multi-Point Bolt

- 90 Nm + 90° turn
- Always replace if removed

4 - Wheel Bearing Housing

5 - Cover Plate

6 - Torx® Bolt

- 12 Nm
- Torx® bolt M6 x 12

7 - Wheel Hub with Wheel Bearing

8 - Brake Rotor

9 - Torx® Bolt

- 4 Nm

10 - Ilar Bolt

11 - Brake Pads

12 - Brake Carrier with Different Guide Pins and Protective Cap

13 - Brake Pad Retaining Plate

14 - Brake Caliper

15 - Hose Retainer

16 - Brake Line

14 Nm

17 - Self-Locking Bolt

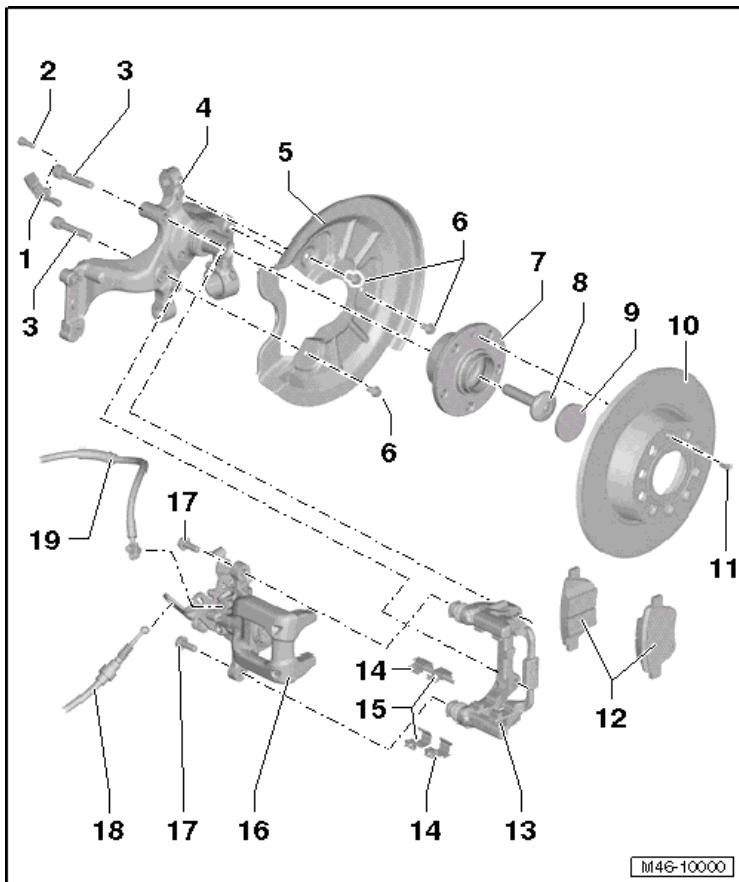
35 Nm

Always replace after removing

18 - Parking Brake Cable

19 - Brake Hose

Rear Brakes Overview, Bosch



M46-10000

1 - ABS Speed Sensor

2 - Bolt

8 Nm

3 - Bolt

90 Nm + 90° turn

Always replace if removed

4 - Wheel Bearing Housing

5 - Cover Plate

6 - Bolt

12 Nm

M6 x12

7 - Wheel Hub with Wheel Bearing

8 - Bolt

Refer to Suspension, Wheels, Steering; Rear Suspension

9 - Dust Cap

Only on front wheel drive

10 - Brake Rotor

11 - Bolt

- 4 Nm

12 - Brake Pads

13 - Brake Carrier with Different Guide Pins and Protective Cap

14 - Brake Pad Retaining Plate

15 - Brake Pad Retaining Plate

16 - Brake Caliper

17 - Bolt

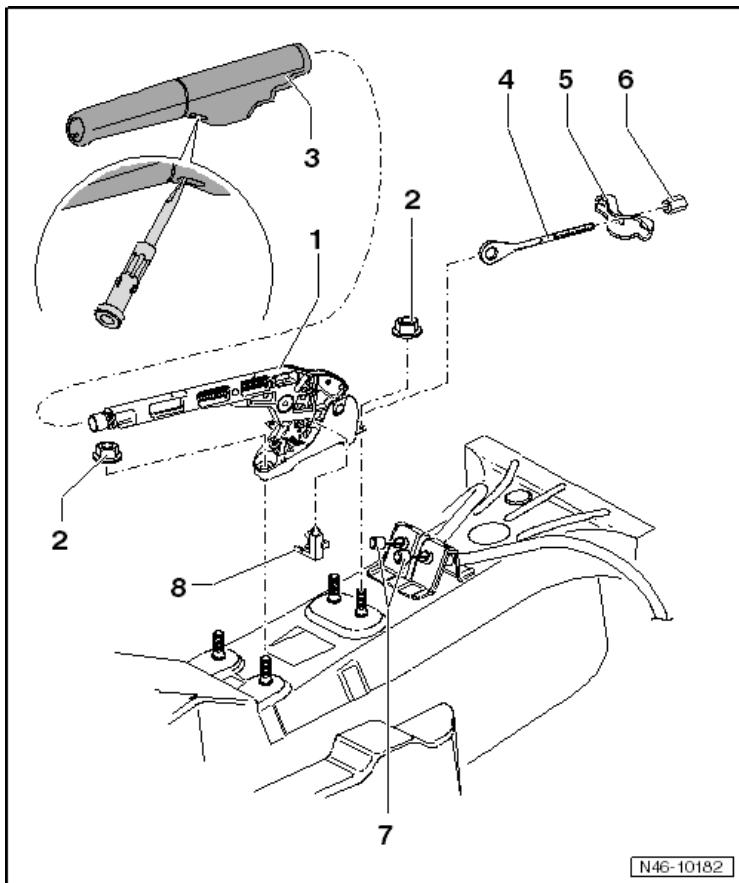
- 35 Nm
- Always replace if removed

18 - Parking Brake Cable

19 - Brake Hose

- 35 Nm
- With banjo bolt and seals.

Parking Brake Lever Overview



1 - Parking Brake Lever

2 - Nut

15 Nm

3 - Trim for Parking Brake Lever

4 - Relay Rod

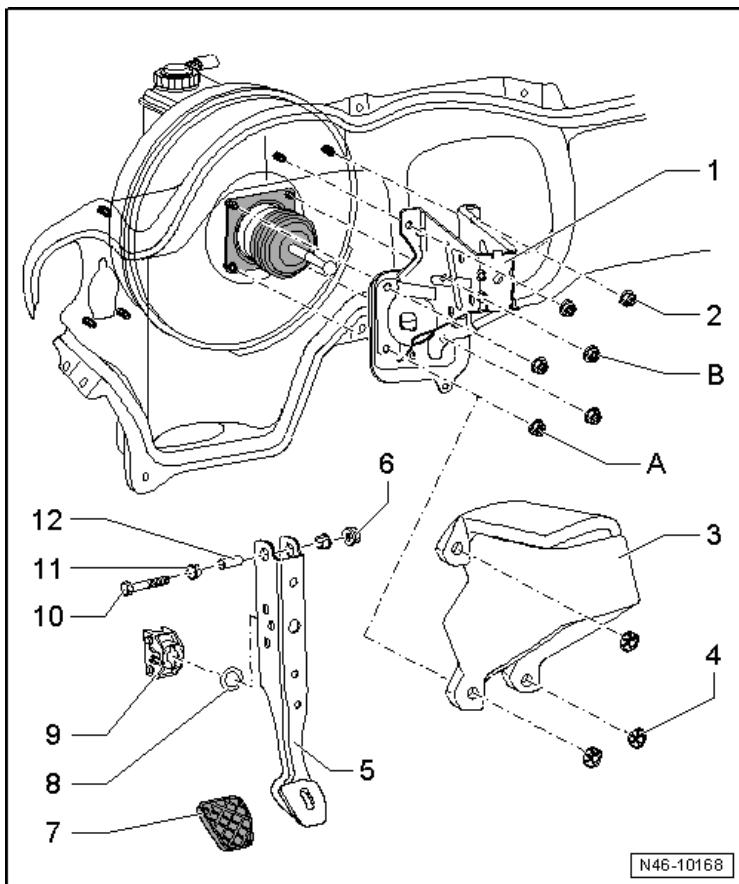
5 - Compensator

6 - Adjustment Nut

7 - Parking Brake Cables

8 - Parking Brake Switch

Brake Pedal Overview



N46-10168

1 - Bracket**2 - Self-Locking Nut**

- 25 Nm
- Always replace if removed

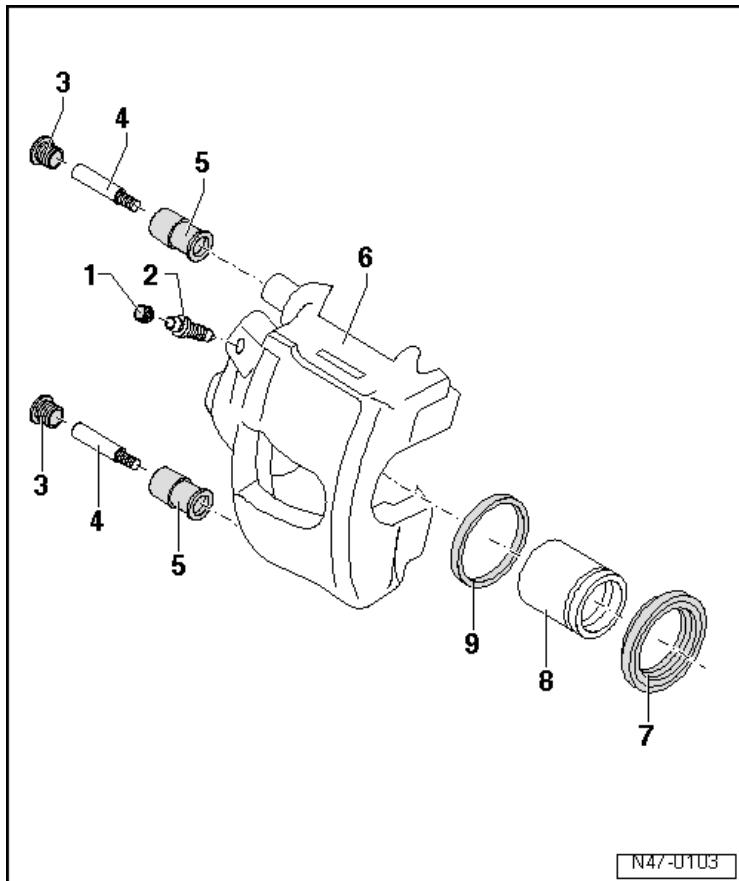
3 - Noise Insulation on the Brake Pedal**4 - Clamping Washer****5 - Brake Pedal****6 - Self-Locking Nut**

- 25 Nm

7 - Cover**8 - Bearing Shell****9 - Mount****10 - Bolt****11 - Bearing Bushing****12 - Bearing Pin**

Hydraulic Components

Front Brake Caliper Overview, FS III



1 - Dust Cap

2 - Bleeder Valve

- 10 Nm
- Apply a thin coat of assembly paste G 052 150 A2 to the threads before screwing in.

3 - Caps

4 - Guide Pins

- 30 Nm

5 - Bushing

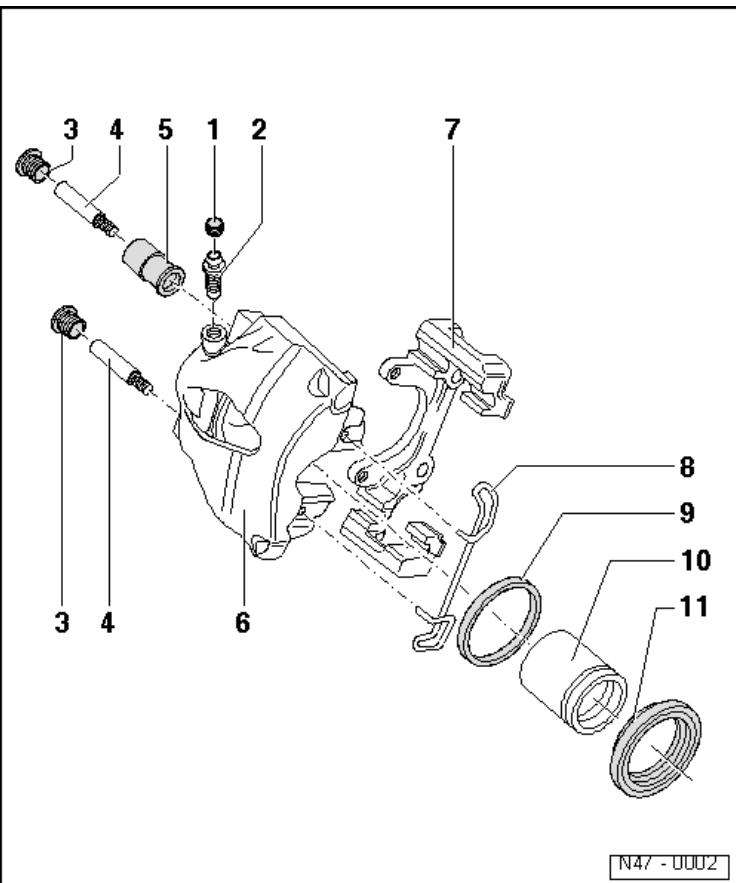
6 - Brake Caliper

7 - Cap

8 - Pistons

9 - Seal

Front Brake Caliper Overview, FN 3



1 - Dust Cap

2 - Bleeder Valve

- 10 Nm
- Apply a thin coat of assembly paste G 052 150 A2 to the threads before screwing in.

3 - Caps

4 - Guide Pins

- 30 Nm

5 - Bearing Bushing

6 - Brake Caliper

7 - Brake Carrier

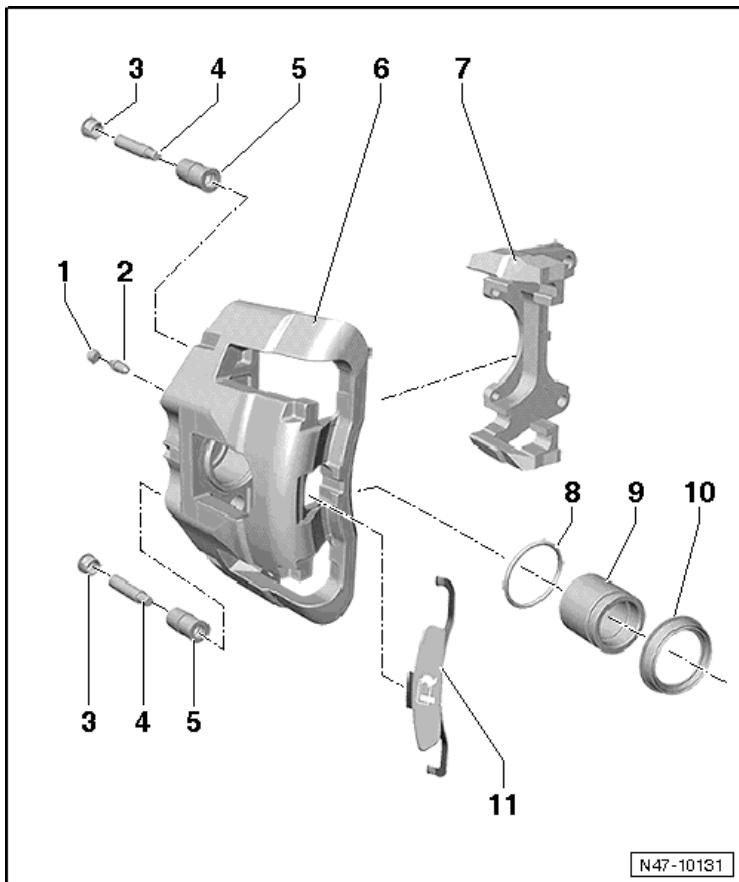
8 - Spring

9 - Seal

10 - Pistons

11 - Cap

Front Brake Caliper Overview, FNR-G



1 - Dust Cap

2 - Bleeder Valve

- 12 Nm
- Apply a thin coat of assembly paste G 052 150 A2 to the threads before screwing in.

3 - Caps

4 - Guide Pins

- 30 Nm

5 - Bearing Bushing

6 - Brake Caliper

7 - Brake Carrier

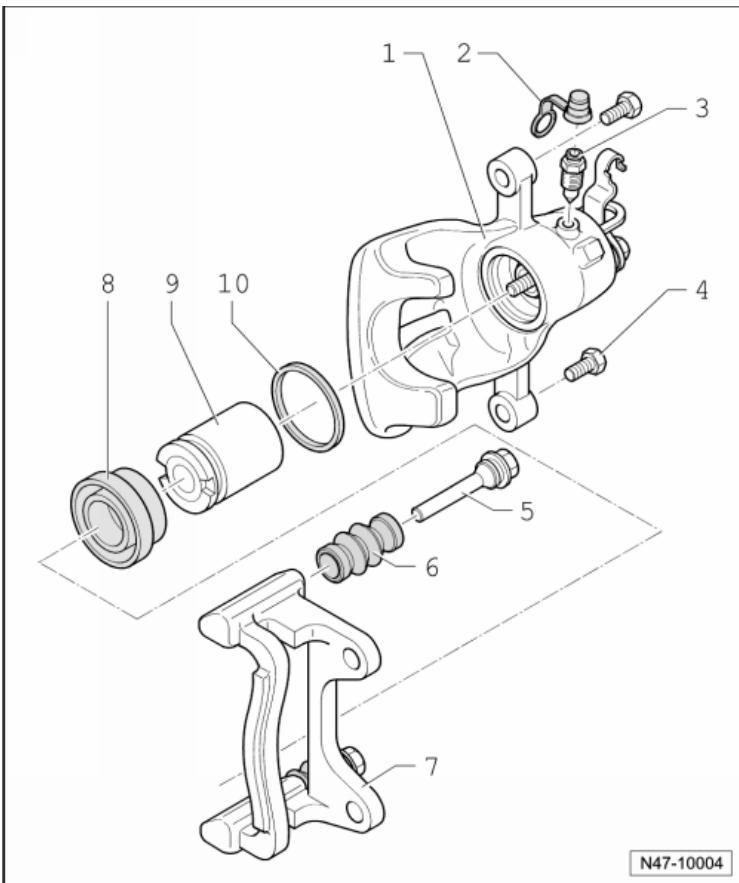
8 - Seal

9 - Pistons

10 - Cap

11 - Spring

Rear Brake Caliper Overview, C38



1 - Brake Caliper with Parking Brake Cable Lever

2 - Dust Cap

3 - Bleeder Valve

10 Nm

Apply a thin coat of assembly paste G 052 150 A2 to the threads before screwing in.

4 - Self-Locking Bolt

35 Nm

Replace

5 - Guide Pins

6 - Cap

7 - Brake Carrier with Guide Pins and Protective Caps

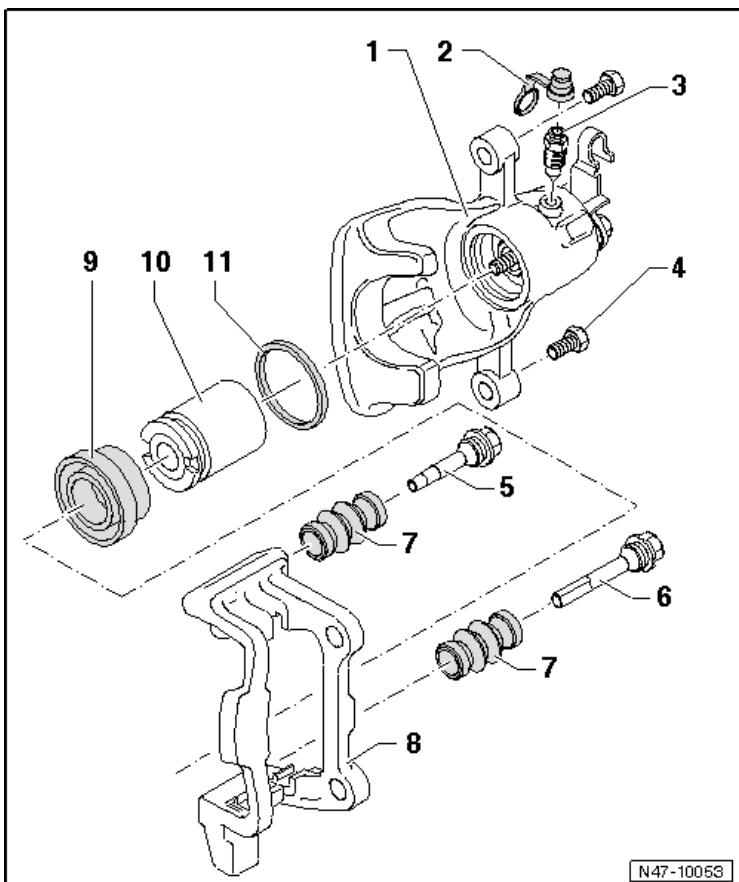
8 - Cap

9 - Piston with Automatic Adjustment

10 - Seal

Rear Brake Caliper, CII 41 Overview

15 inch Brake Caliper CII 41



1 - Brake Caliper with Parking Brake Cable Lever

2 - Dust Cap

3 - Bleeder Valve

- 10 Nm
- Apply a thin coat of assembly paste G 052 150 A2 to the threads before screwing in.

4 - Self-Locking Bolt

- 35 Nm
- Replace

5 - Guide Pin with Stepping

6 - Guide Pins

7 - Cap

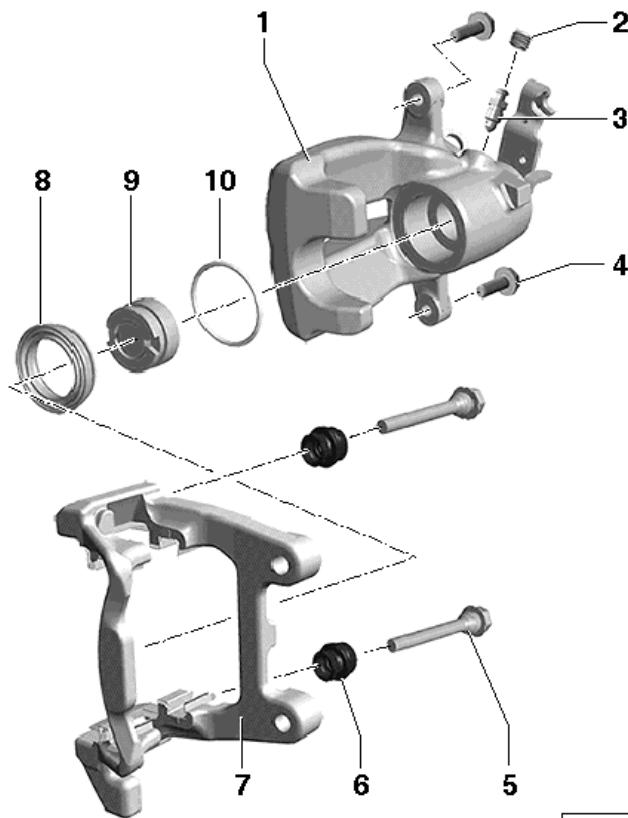
8 - Brake Pad with Damper

9 - Cap

10 - Piston with Automatic Adjustment

11 - Seal

Rear Brake Caliper, CII 41 Overview 17 inch Brake Caliper CII 41



1 - Brake Caliper with Parking Brake Cable Lever

2 - Dust Cap

3 - Bleeder Valve

- 10 Nm
- Apply a thin coat of assembly paste G 052 150 A2 to the threads before screwing in.

4 - Self-Locking Bolt

- 35 Nm
- Replace

5 - Guide Pins

6 - Cap

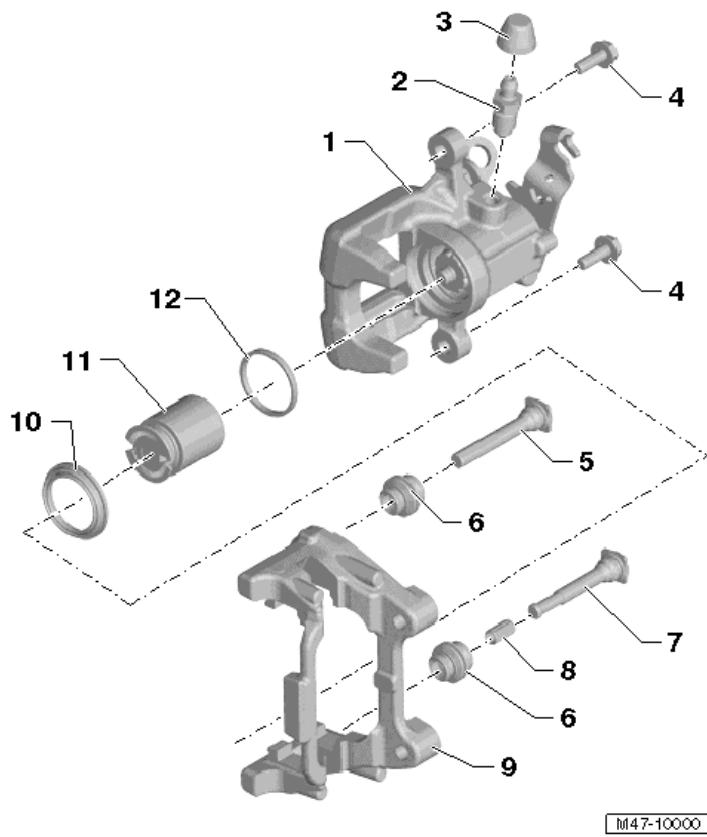
7 - Rear Brake Carrier

8 - Cap

9 - Piston with Automatic Adjustment

10 - Seal

Rear Brake Caliper Overview, Bosch



1 - Brake Caliper with Parking Brake Cable Lever

2 - Bleeder Valve

- 10 Nm
- Apply a thin coat of assembly paste G 052 150 A2 to the threads before screwing in.

3 - Dust Cap

4 - Bolt

- 35 Nm
- Replace

5 - Upper Guide Pins

6 - Cap

7 - Lower Guide Pins

8 - Guide Grommet

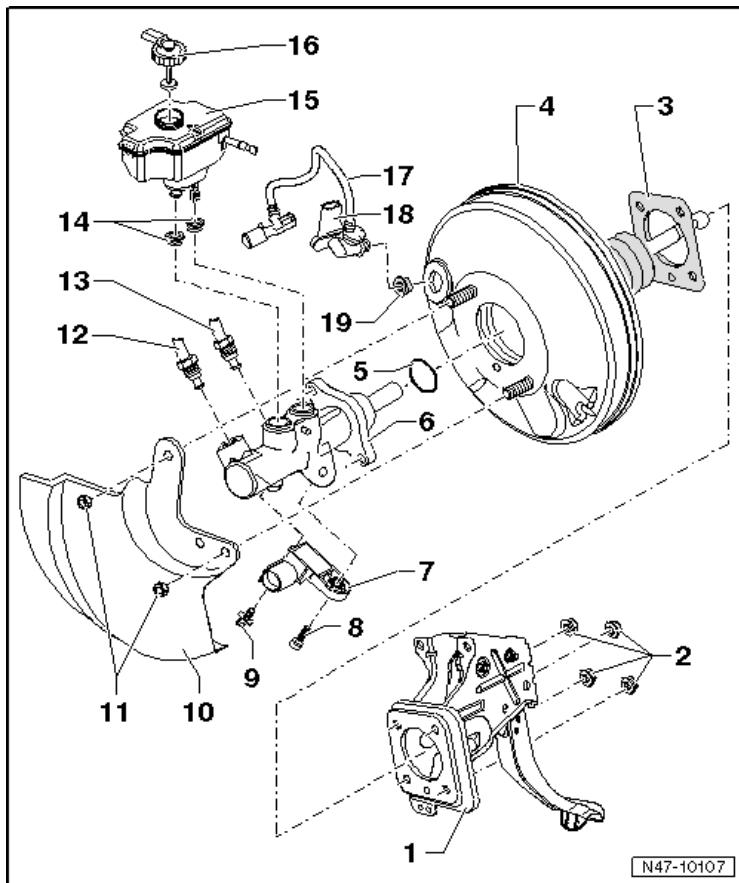
9 - Brake Carrier

10 - Cap

11 - Piston with Automatic Adjustment

12 - Seal

Brake Booster and Brake Master Cylinder Overview



1 - Pedal Assembly

2 - Self-Locking Nut

- 25 Nm
- Always replace if removed

3 - Gasket

4 - Brake Booster

5 - Seal

6 - Brake Master Cylinder

7 - Brake Lamp Switch -F-

8 - Inner Torx® Bolt

- 5 Nm

9 - Clip

10 - Heat Shield

11 - Self-Locking Nut

- 25 Nm
- Always replace if removed

12 - Brake Line

14 Nm

13 - Brake Line

14 Nm

14 - Sealing Plug

15 - Brake Fluid Reservoir

16 - Cap

17 - Vacuum Hose

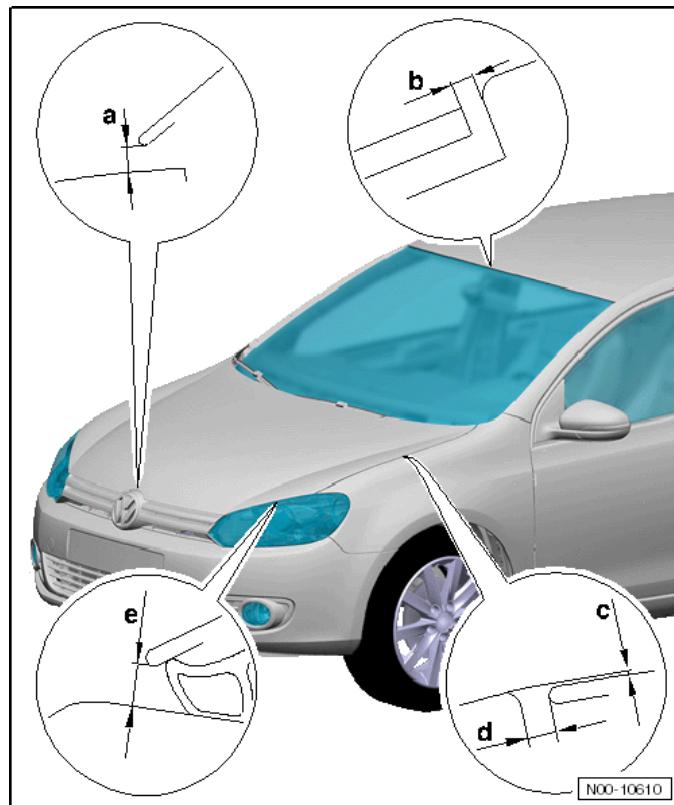
18 - Vacuum Sensor -G608-

19 - Sealing Plugs

BODY

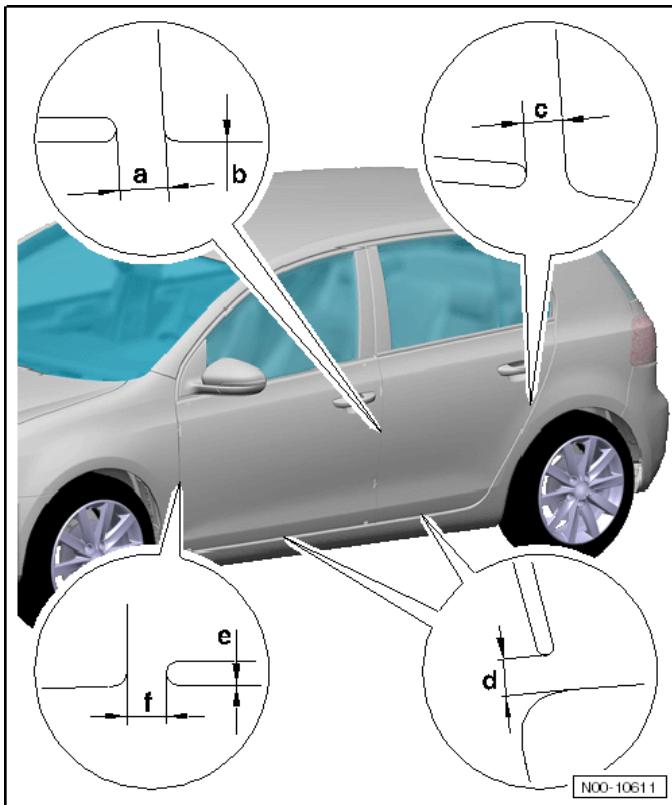
Body Exterior

Body, Front



Component	mm
a	4.5 ± 0.5
b	3.5 ± 0.5
c	0.5 ± 0.5
d	3.5 ± 0.5
e	5.0 ± 0.5

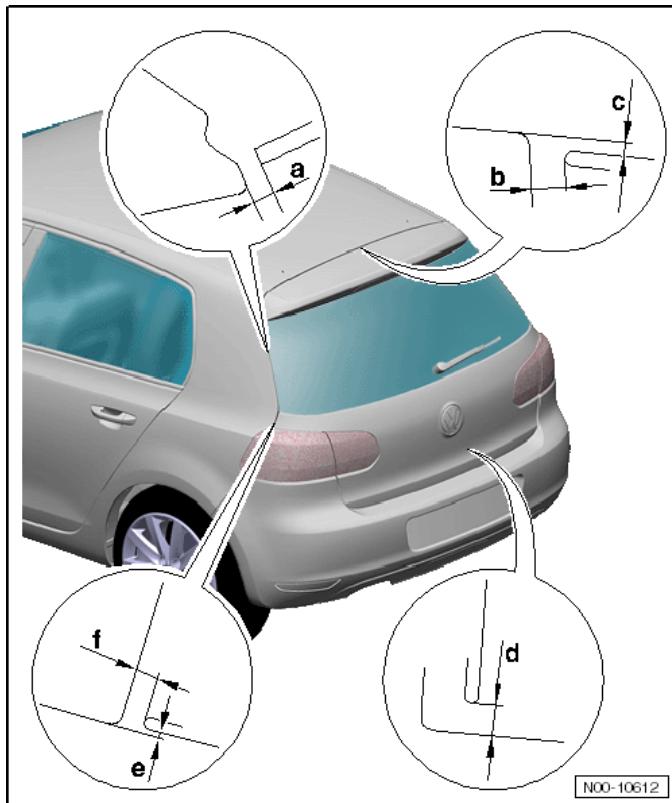
Body, Center



Body

Component	mm
a	4.5 ± 0.5
b	0.0 - 1.0
c	3.5 ± 0.5
d	4.5 ± 0.5
e	0.0 - 1.0
f	3.5 ± 0.5

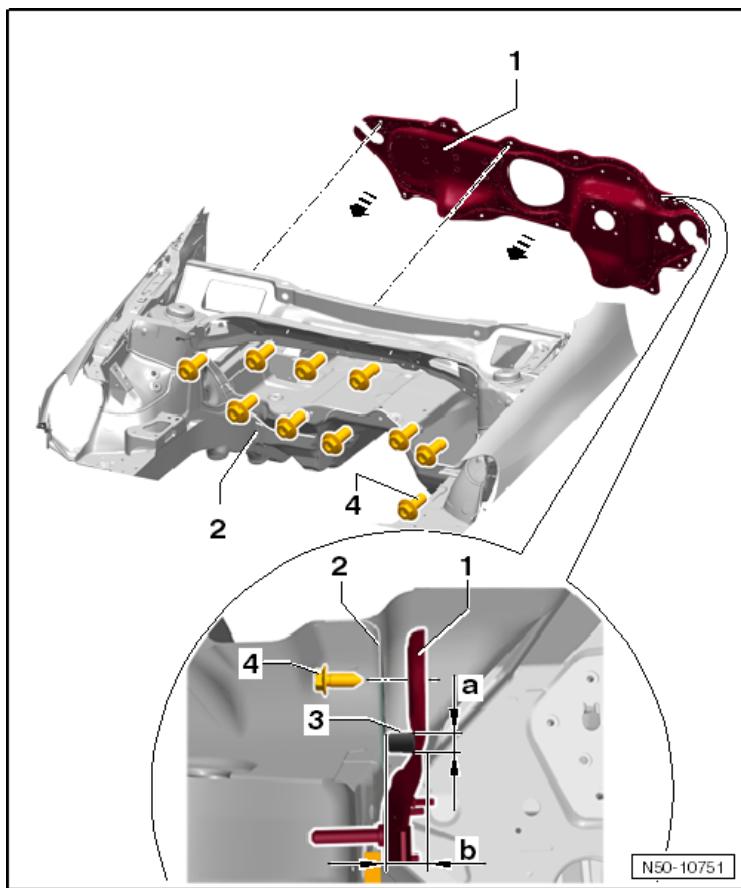
Body, Rear



Component	mm
a	4.0 ± 1.0
b	5.0 ± 0.5
c	2.0 ± 1.0
d	5.0 ± 0.5
e	1.0 ± 0.5
f	4.5 ± 0.5

Body Front

Bulkhead Overview



Body

1 - Bulkhead

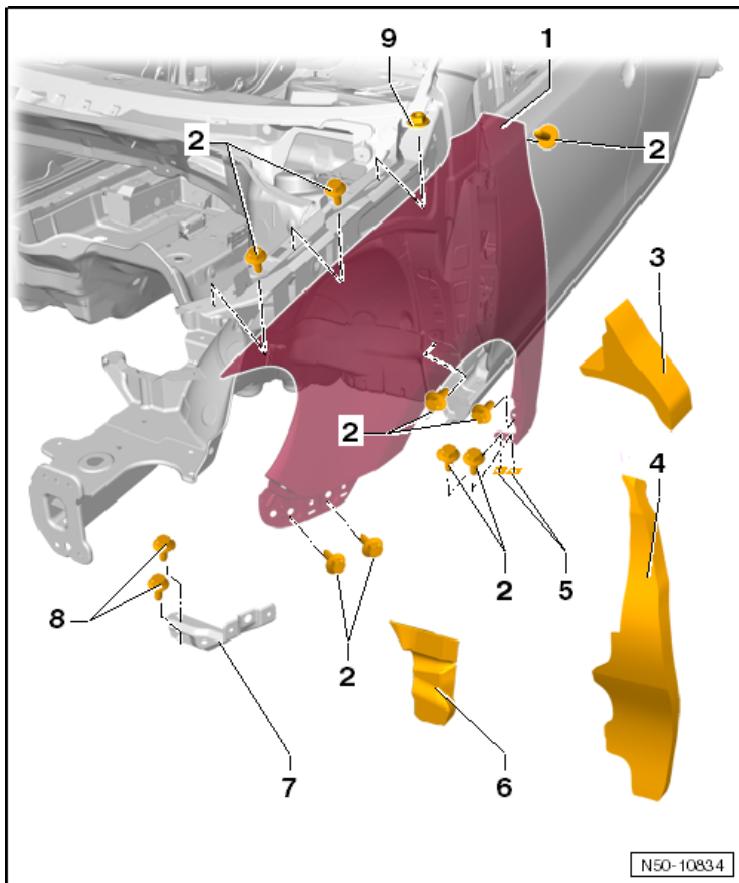
2 - Body Flange

3 - PUR Adhesive Sealant

4 - Bolt

25 Nm

Front Fender Overview



N50-10834

1 - Fender

2 - Bolt

6 Nm

3 - Foam Piece

4 - Fillet Plate Insulation

5 - Spacer

6 - Filler Piece

7 - Fender Brace

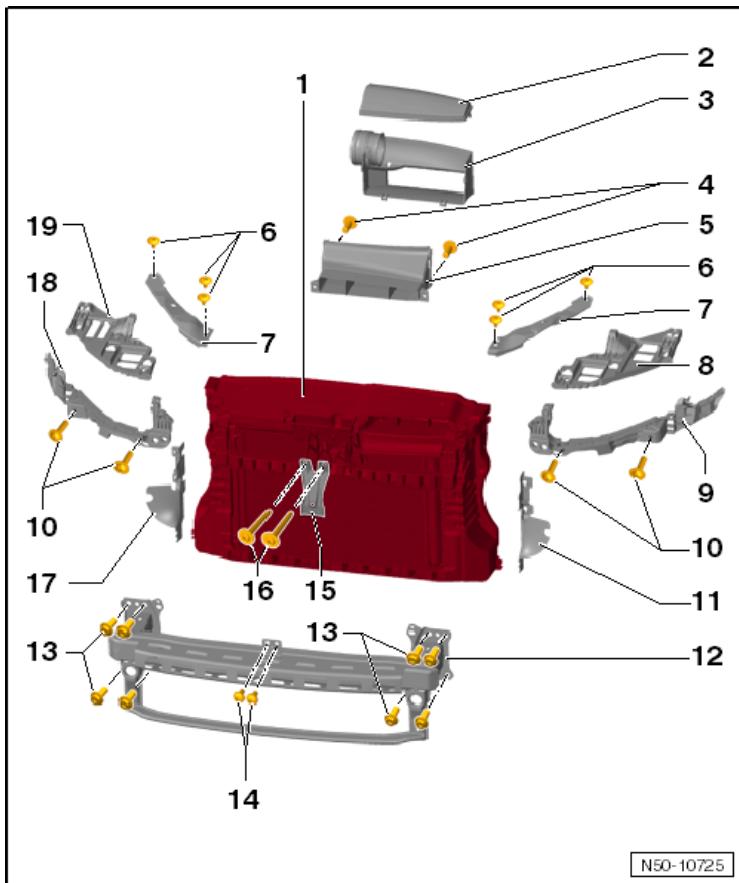
8 - Bolt

6 Nm

9 - Nut

6 Nm

Lock Carrier Assembly Overview



1 - Lock Carrier with Attachments

2 - Cover

3 - Assembly Piece

4 - Bolt

2 Nm

5 - Air Guide Channel

6 - Bolt

8 Nm

7 - Angle Bracket

8 - Retaining Plate

9 - Guide Piece

10 - Bolt

5 Nm

11 - Air Duct

12 - Cross Member

13 - Bolt

60 Nm

14 - Bolt

8 Nm

15 - Support Lock Carrier

16 - Bolt

12 Nm

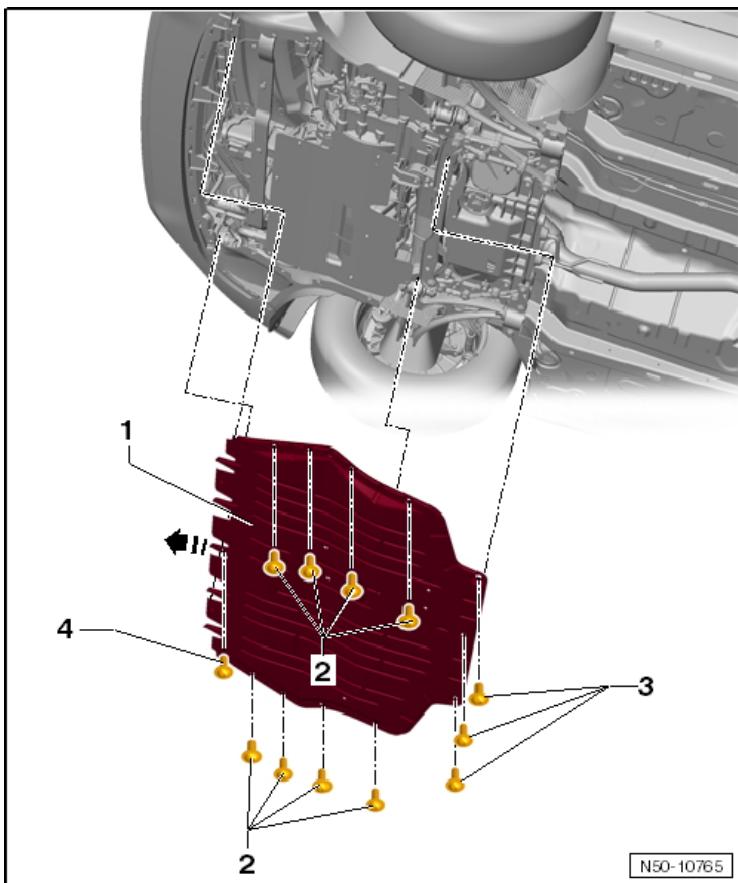
17 - Air Duct

18 - Guide Piece

19 - Retaining Plate

Body

Noise Insulation Overview



N50-10765

1 - Noise Insulation

2 - Bolt

2 Nm

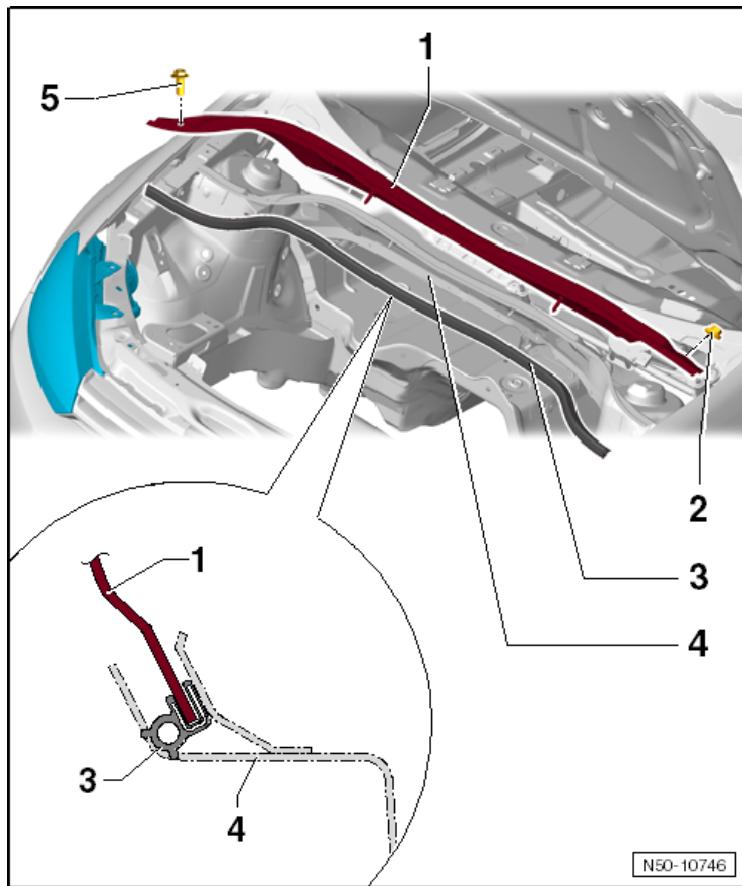
3 - Bolt

6 Nm

4 - Bolt

2 Nm

Plenum Chamber Bulkhead Overview



Body

1 - Plenum Chamber Bulkhead

2 - Nut

8 Nm

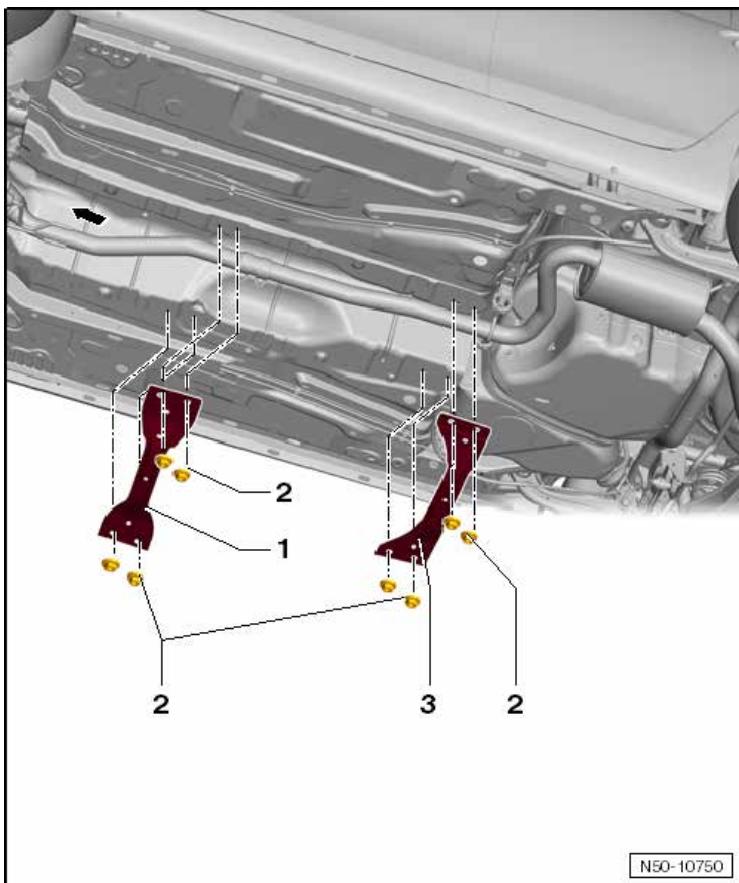
3 - Seal

4 - Plenum Chamber

5 - Bolt

8 Nm

Tunnel Bridge Overview



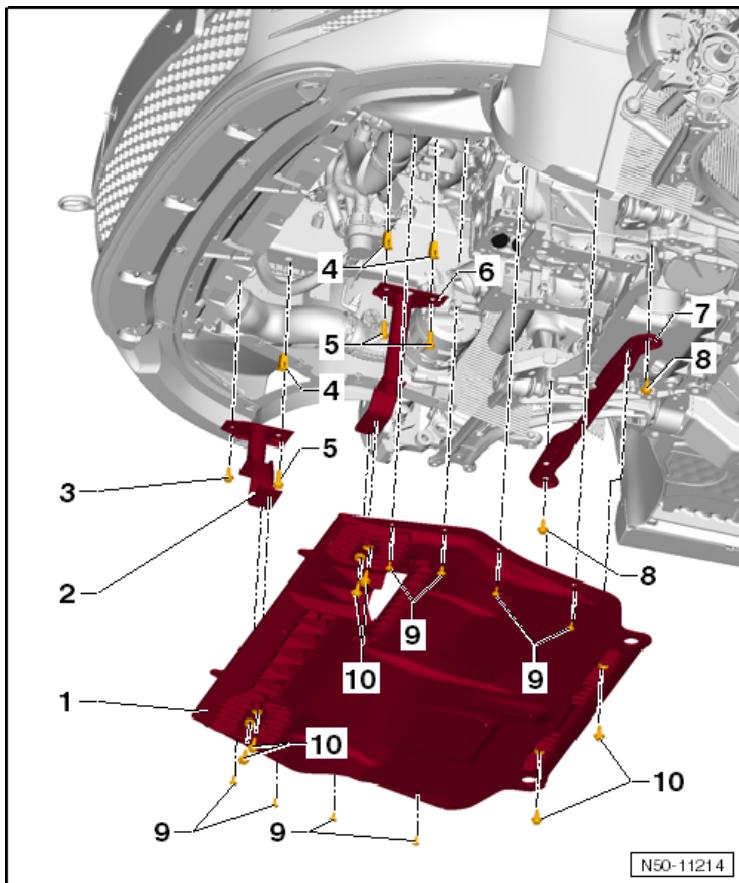
1 - Front Tunnel Bridge

2 - Nut

20 Nm

3 - Rear Tunnel Bridge

Underbody Impact Guard



Body

1 - Underbody Impact Guard

2 - Right Side Angle Bracket

3 - Hex Nut

20 Nm

4 - Threaded Rivet

5 - Bolt

35 Nm

6 - Left Side Angle Bracket

7 - Rear Retaining Strip

8 - Bolt

70 Nm

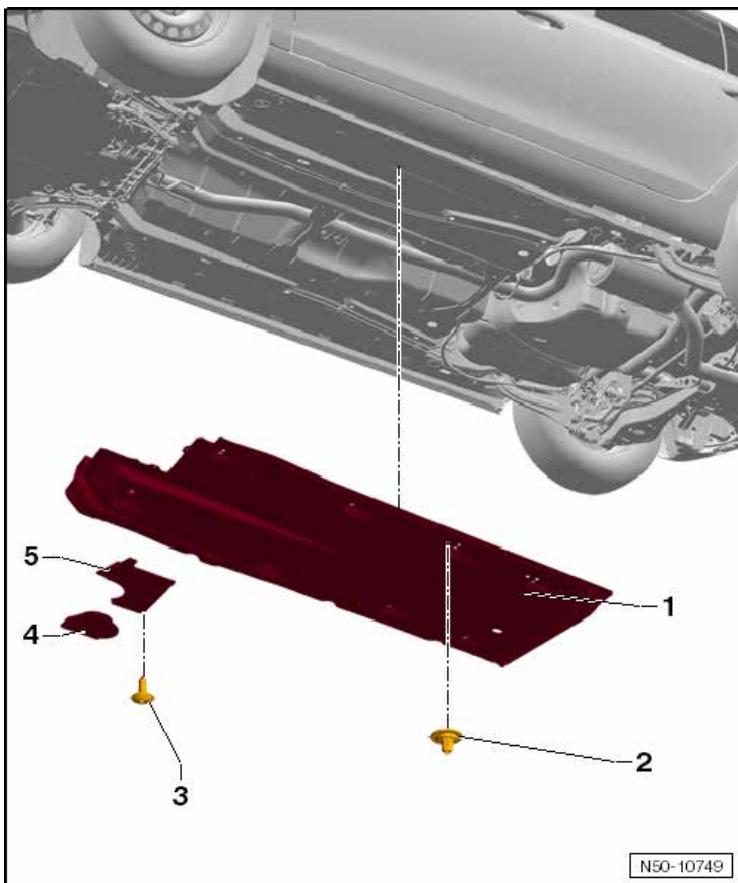
9 - Bolt

2 Nm

10 - Bolt

20 Nm

Underbody Trim Panel, Center Overview



1 - Underbody Cover

2 - Hex Nut

2 Nm

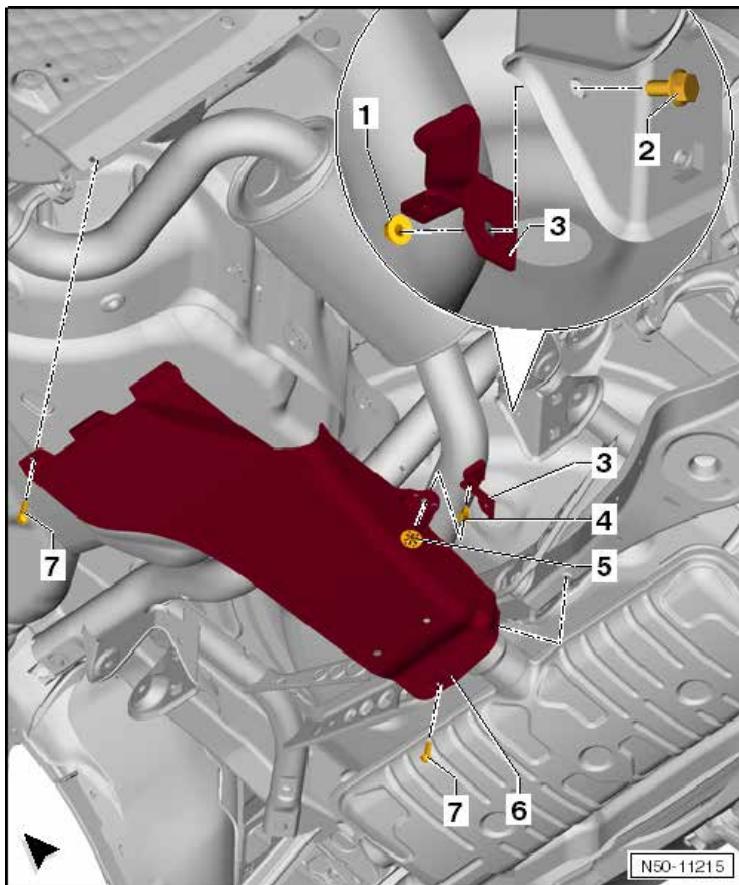
3 - Bolt

2 Nm

4 - Cover

5 - Cover

Underbody Trim Panel, Rear Overview



Body

1 - Hex Nut

20 Nm

2 - Bolt

20 Nm

3 - Angle Bracket

4 - Expanding Nut

5 - Lock Washer

1.5 Nm

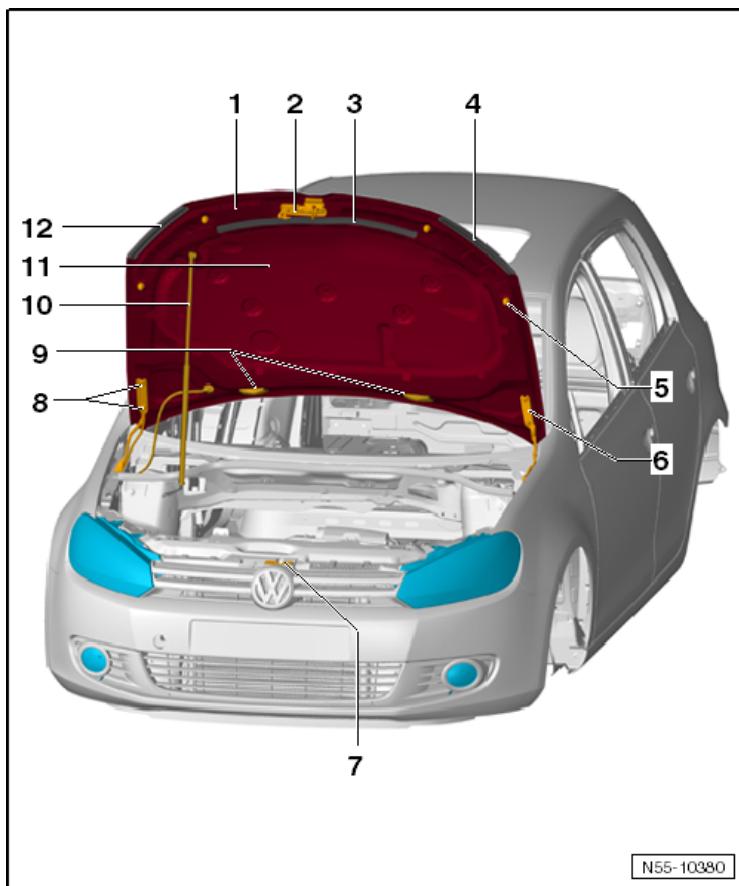
6 - Underbody Cover

7 - Bolt

2 Nm

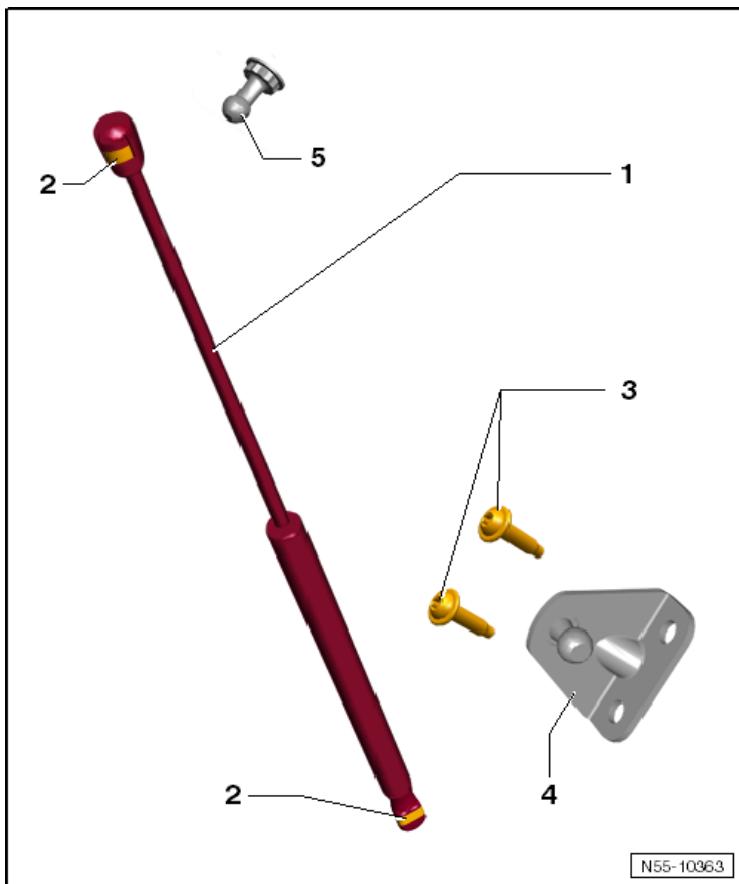
Hood, Lids

Hood Overview



- 1 - Hood
- 2 - Stiker Pin
- 3 - Center Seal
- 4 - Side Seal
- 5 - Adjusting Buffer
- 6 - Hinge
- 7 - Hood Lock
- 8 - Nut
 - 22 Nm
- 9 - Spray Nozzles
- 10 - Gas Strut
- 11 - Insulation
- 12 - Side Seal

Rear Lid Gas-Filled Strut Overview



Body

1 - Gas Strut

2 - Clips

3 - Bolt

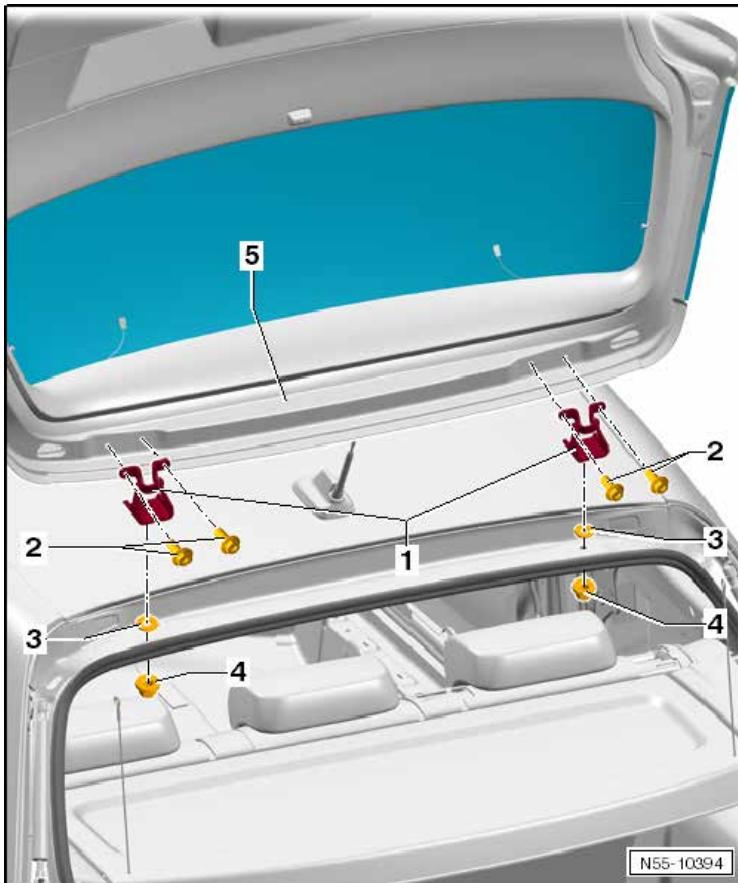
10 Nm

4 - Angle Bracket

5 - Ball Head Pin

20 Nm + 90° turn

Rear Lid Hinge Overview



1 - Hinge

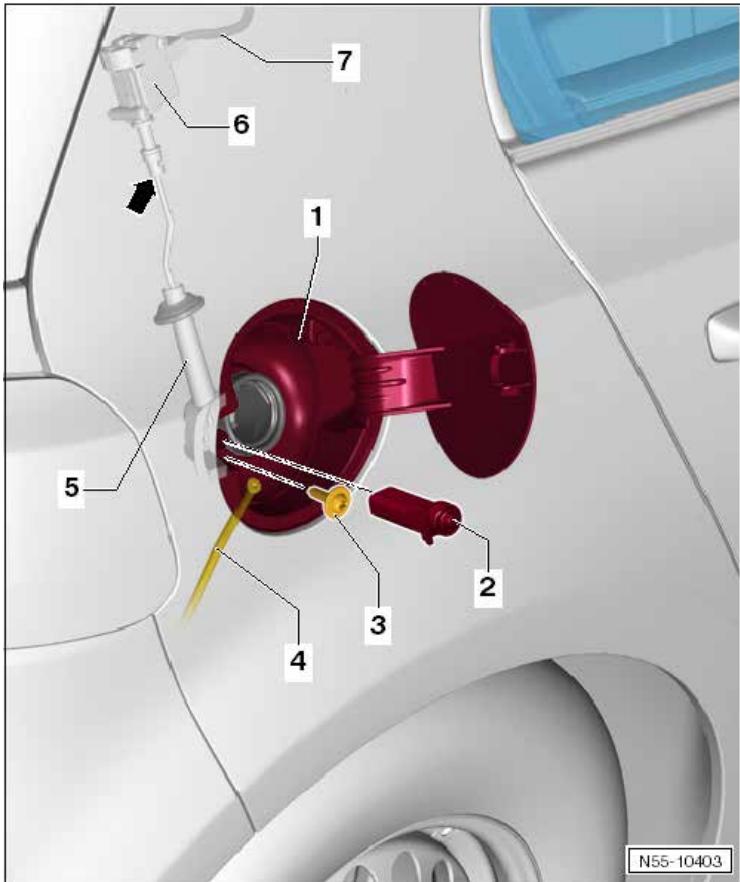
2 - Bolt

10 Nm

3 - Washer

4 - Rear Lid

Fuel Filler Door Unit and Actuator Overview



Body

1 - Fuel Filler Door Unit

2 - Opening Aid

3 - Bolt

1.5 Nm

4 - Water Drain Hose

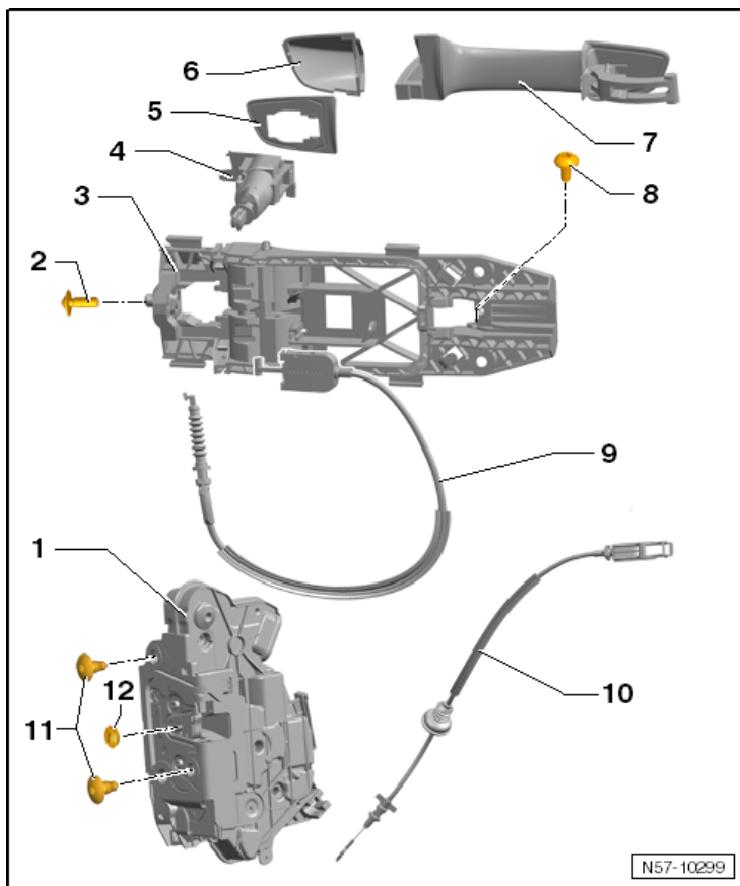
5 - Guide Piece

6 - Actuator

7 - Electrical Connection

Front Doors, Central Locking System

Door Handle and Door Lock Overview



1 - Door Lock

2 - Bolt

4 Nm

3 - Mounting Bracket

4 - Lock Cylinder

5 - Backing

6 - Cover

7 - Door Handle

8 - Bolt

1 Nm

9 - Cable

10 - Cable

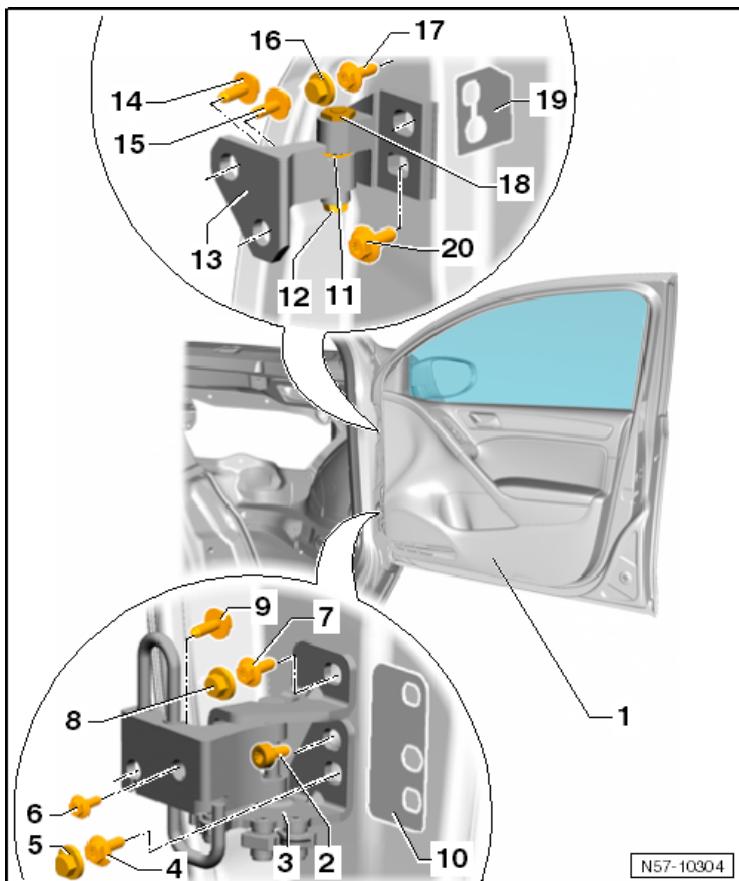
11 - Bolt

20 Nm

12 - Cover

Body

Door Hinge Overview



N57-10304

1 - Door

2 - Guide Bolt

- 10 Nm

3 - Door Hinge with Door Arrester

4 - Socket Head Bolt

- 38 Nm
- Always replace bolts after loosening them

5 - Cover

6 - Socket Head Bolt

- 50 Nm
- Always replace bolts after loosening them

7 - Socket Head Bolt

- 38 Nm
- Always replace bolts after loosening them

8 - Cover

9 - Socket Head Bolt

- 50 Nm
- Always replace bolts after loosening them

10 - Lower Spacer Plate**11 - Adjustment Ring****12 - Bolt**

- 28 Nm

13 - Door Hinge**14 - Socket Head Bolt**

- 50 Nm
- Always replace bolts after loosening them

15 - Socket Head Bolt

- 50 Nm
- Always replace bolts after loosening them

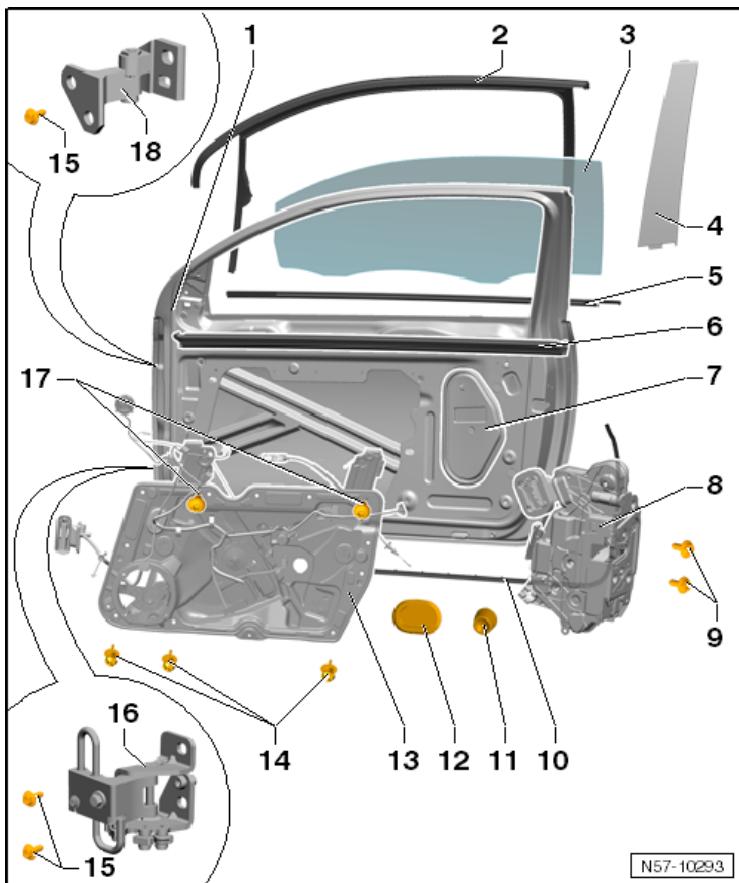
16 - Cover**17 - Socket Head Bolt**

- 50 Nm
- Always replace bolts after loosening them

18 - Eccentric Bolts**19 - Upper Spacer Plate****20 - Guide Bolt**

- 10 Nm

Front Door Overview



- 1 - Door
- 2 - Window Guide
- 3 - Door Window
- 4 - Trim
- 5 - Outer Window Recess Seal
- 6 - Inner Window Recess Seal
- 7 - Cover
- 8 - Door Lock
- 9 - Bolt
 - 20 Nm
- 10 - Outer Door Seal
- 11 - Buffer
- 12 - Cover
- 13 - Subframe
- 14 - Clips
- 15 - Bolt
- 16 - Bottom Door Hinge

17 - Bolt

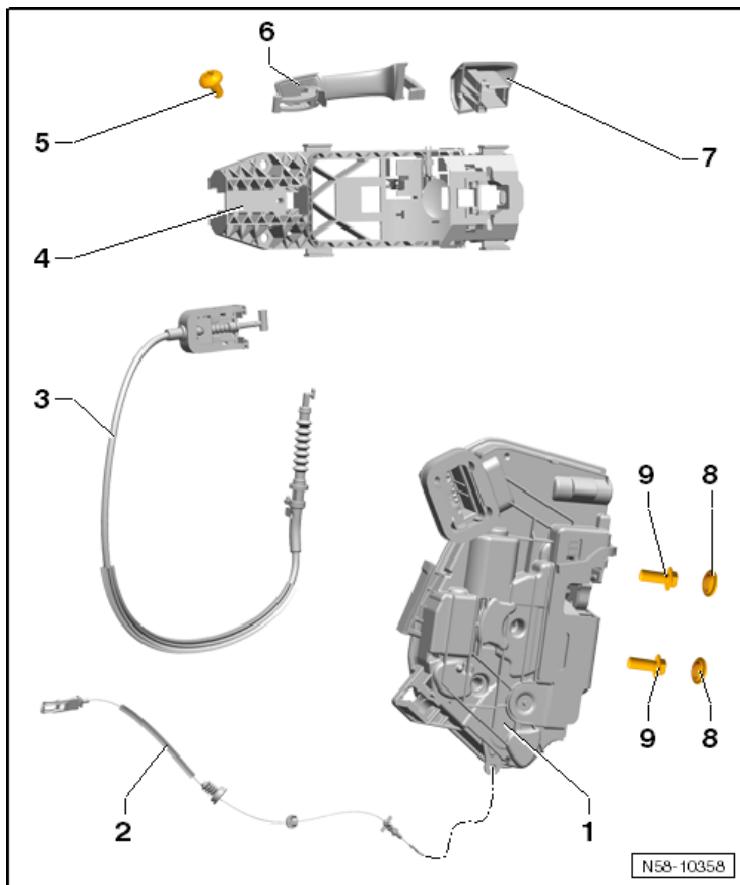
8 Nm

18 - Upper Door Hinge

Body

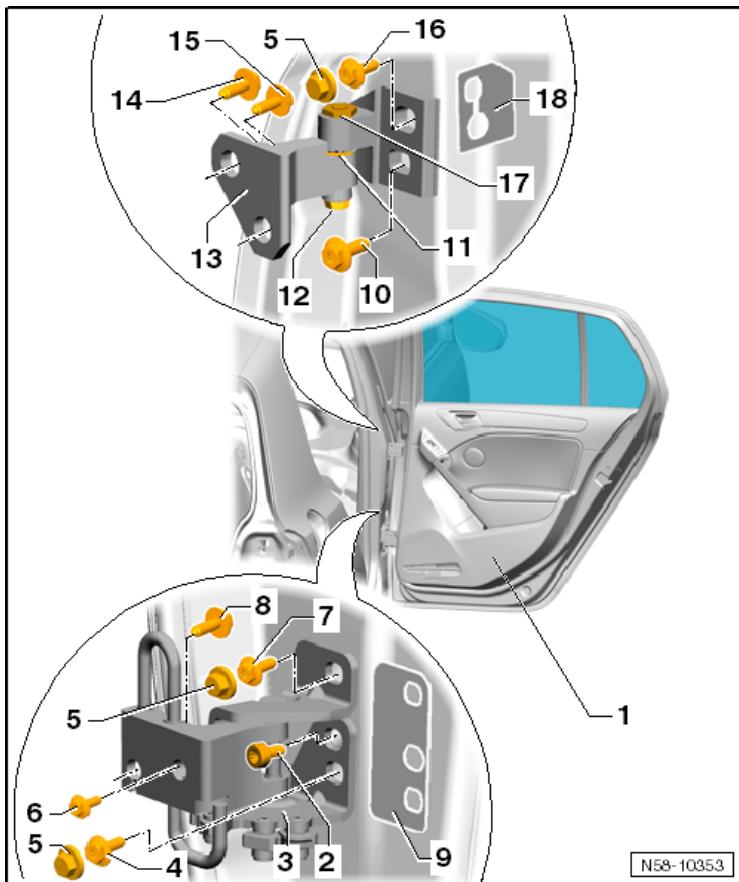
Rear Doors

Door Handle and Door Lock Overview



- 1 - Door Lock**
- 2 - Cable**
- 3 - Cable**
- 4 - Mounting Bracket**
- 5 - Bolt**
 - 4.5 Nm
- 6 - Door Handle**
- 7 - Cover**
- 8 - Cover**
- 9 - Bolt**
 - 20 Nm

Door Hinge Overview



N58-10353

1 - Door Hinge

2 - Guide Bolt

- 10 Nm

3 - Door Hinge with Door Arrester

4 - Socket Head Bolt

- 38 Nm

5 - Cover

6 - Socket Head Bolt

- 50 Nm

- Always replace bolts after loosening them

7 - Socket Head Bolt

- 38 Nm

- Always replace bolts after loosening them

8 - Socket Head Bolt

- 50 Nm

- Always replace bolts after loosening them

9 - Lower Spacer Plate

10 - Guide Bolt

- 10 Nm

11 - Adjustment Ring

12 - Bolt

- 28 Nm

13 - Door Hinge

14 - Socket Head Bolt

- 50 Nm
- Always replace bolts after loosening them

15 - Socket Head Bolt

- 50 Nm
- Always replace bolts after loosening them

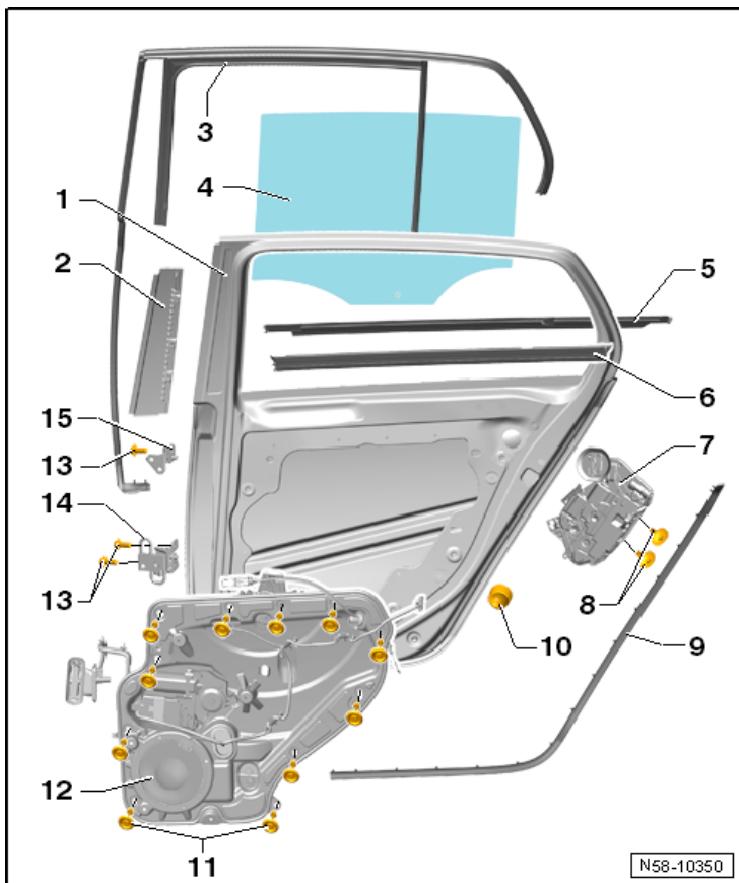
16 - Socket Head Bolt

- 38 Nm
- Always replace bolts after loosening them

17 - Eccentric Bolts

18 - Lower Spacer Plate

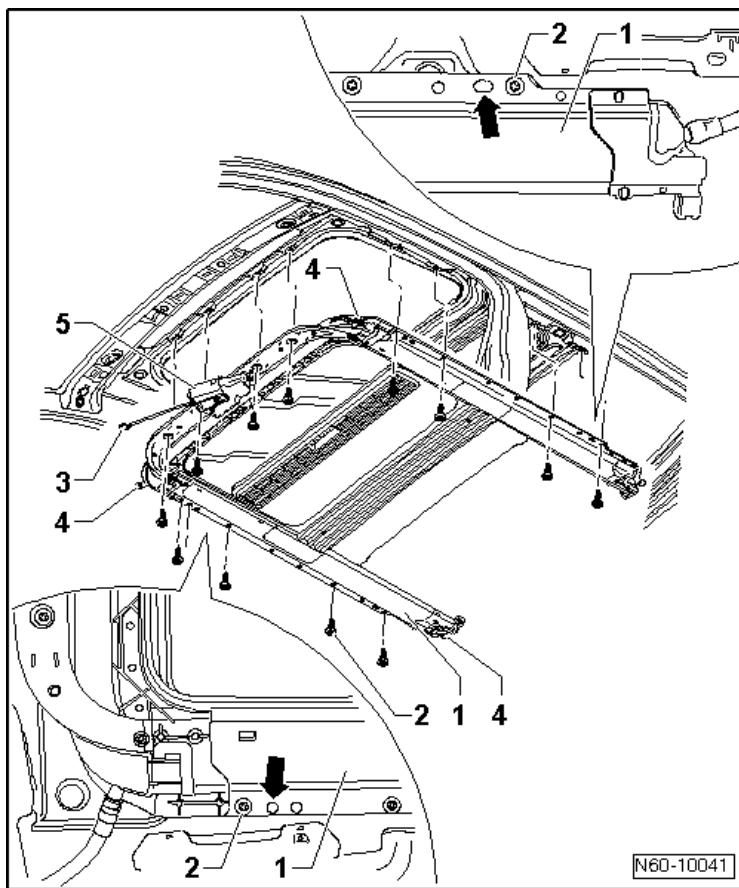
Rear Door Overview



- 1 - Door
- 2 - Trim
- 3 - Window Guide
- 4 - Door Window
- 5 - Outer Window Recess Seal
- 6 - Inner Window Recess Seal
- 7 - Door Lock
- 8 - Bolt
 - 20 Nm
- 9 - Outer Door Seal
- 10 - Buffer
- 11 - Clips
- 12 - Subframe
- 13 - Bolt
- 14 - Bottom Door Hinge
- 15 - Upper Door Hinge

Sunroof

Installation Unit Overview



Body

1 - Installation Unit

2 - Bolt

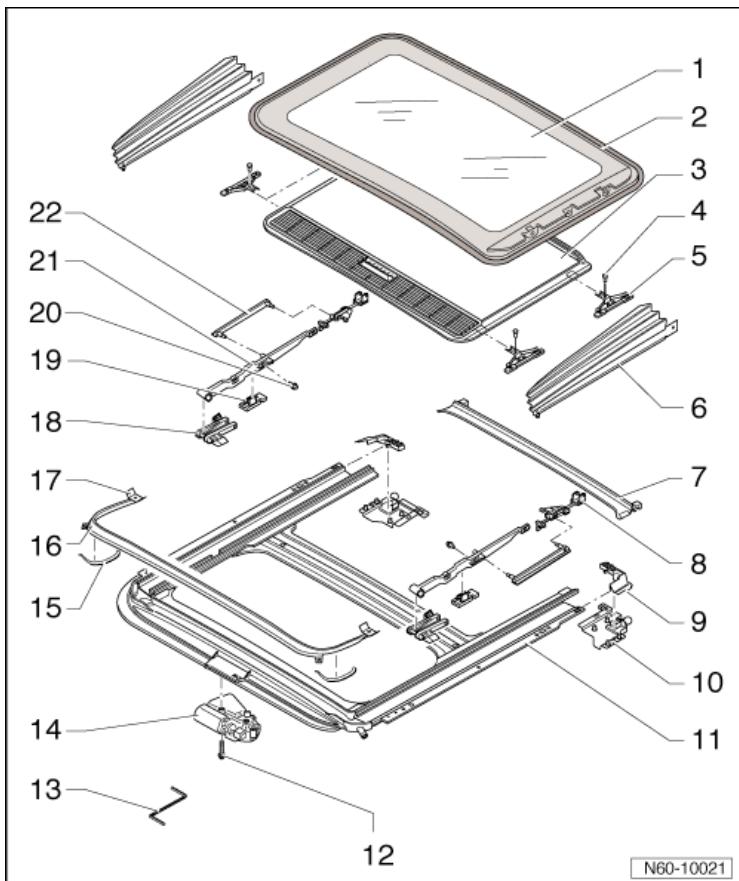
□ 8 Nm

3 - Connector

4 - Connections for Water Drain Hoses

5 - Sunroof Drive Motor

Sunroof with Glass Panel Overview



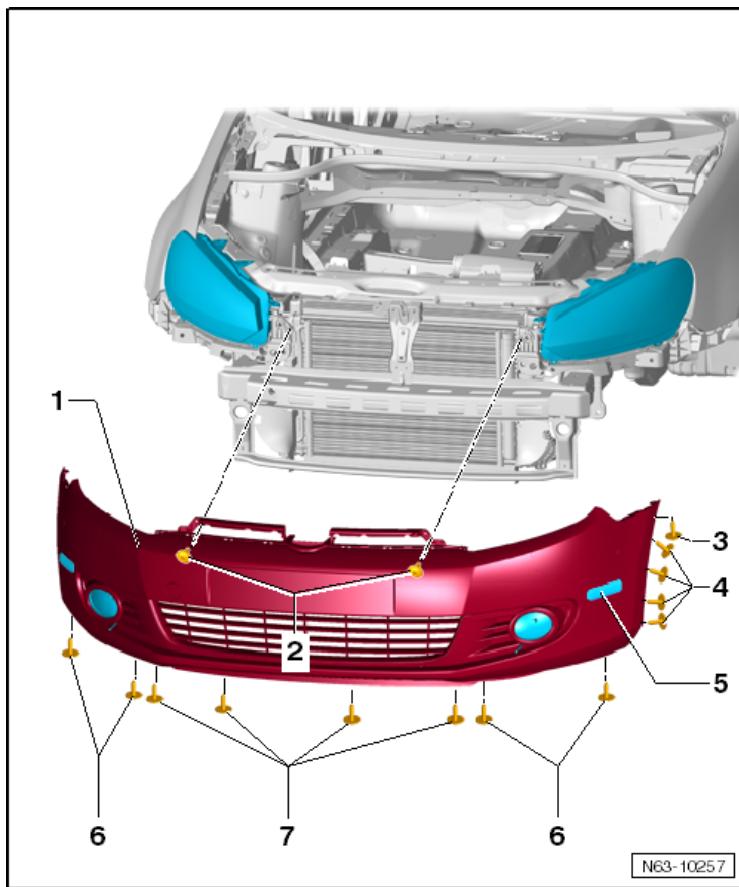
- 1 - Sunroof Glass Panel**
- 2 - Panel Seal**
- 3 - Sun Shade**
- 4 - Screw**
 - 1.8 Nm
- 5 - Spring Glider**
- 6 - Bellows**
- 7 - Water Channel**
- 8 - Guide Locking Hook**
- 9 - End Piece, Upper Part**
- 10 - End Piece, Lower Part**
- 11 - Installation Unit**
- 12 - Bolt**
 - 3.5 Nm
- 13 - Emergency Operation Hex Key**
- 14 - Electrical Drive Motor**
- 15 - Spring**

- 16 - Wind Deflector**
- 17 - Wind Deflector Bearing**
- 18 - Front Guide**
- 19 - Rear Guide, Lower Part**
- 20 - Screw**
 - 5 Nm
 - Torx® T25
- 21 - Slotted Guide Rail**
- 22 - Spacer**

Body

Bumpers

Front Bumper Cover Overview



1 - Front Bumper Cover

2 - Bolt

2 Nm

3 - Bolt

2 Nm

4 - Bolt

2 Nm

5 - Side Marker Lamps

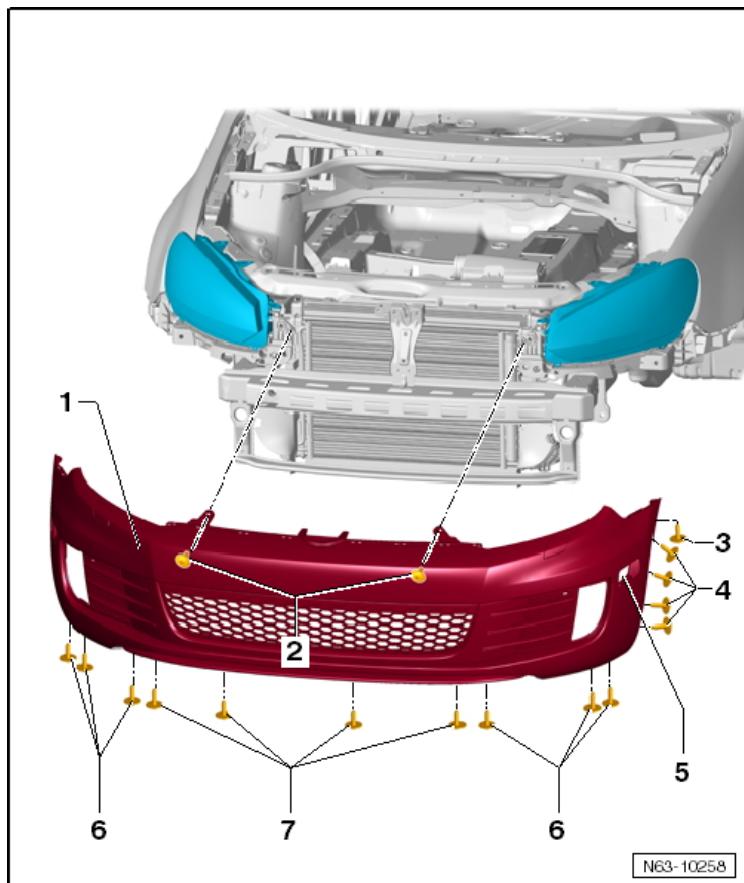
6 - Bolt

2 Nm

7 - Bolt

1.5 Nm

Bumper Cover Overview, GTI



Body

1 - Front Bumper Cover

2 - Bolt

2 Nm

3 - Bolt

2 Nm

4 - Bolt

2 Nm

5 - Side Marker Lamps

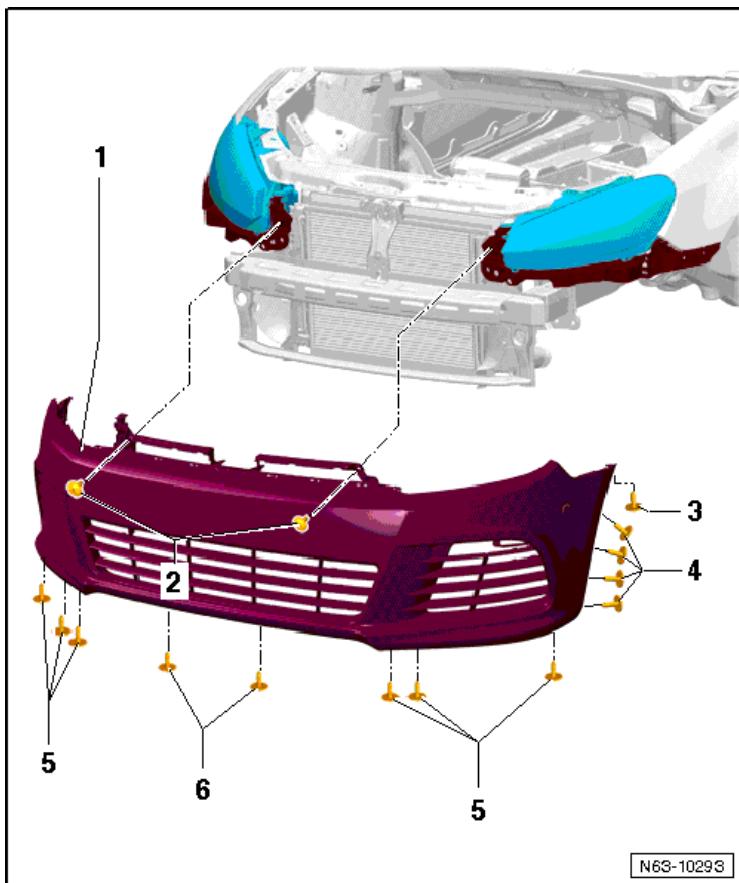
6 - Bolt

2 Nm

7 - Bolt

1.5 Nm

Bumper Cover Overview, Golf R



1 - Front Bumper Cover

2 - Bolt

2 Nm

3 - Bolt

2 Nm

4 - Bolt

2 Nm

5 - Bolt

2 Nm

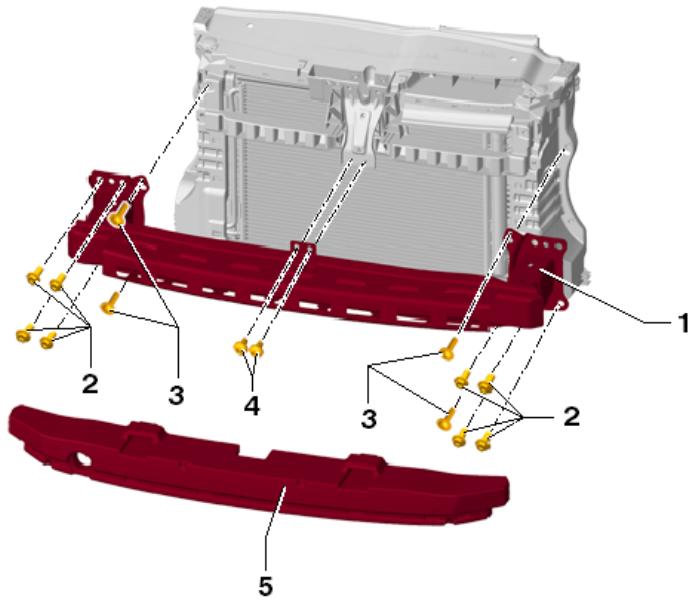
6 - Bolt

2 Nm

N63-10293

Front Bumper Carrier Overview

Body



N63-10246

1 - Front Bumper Cover

2 - Bolt

60 Nm

3 - Bolt

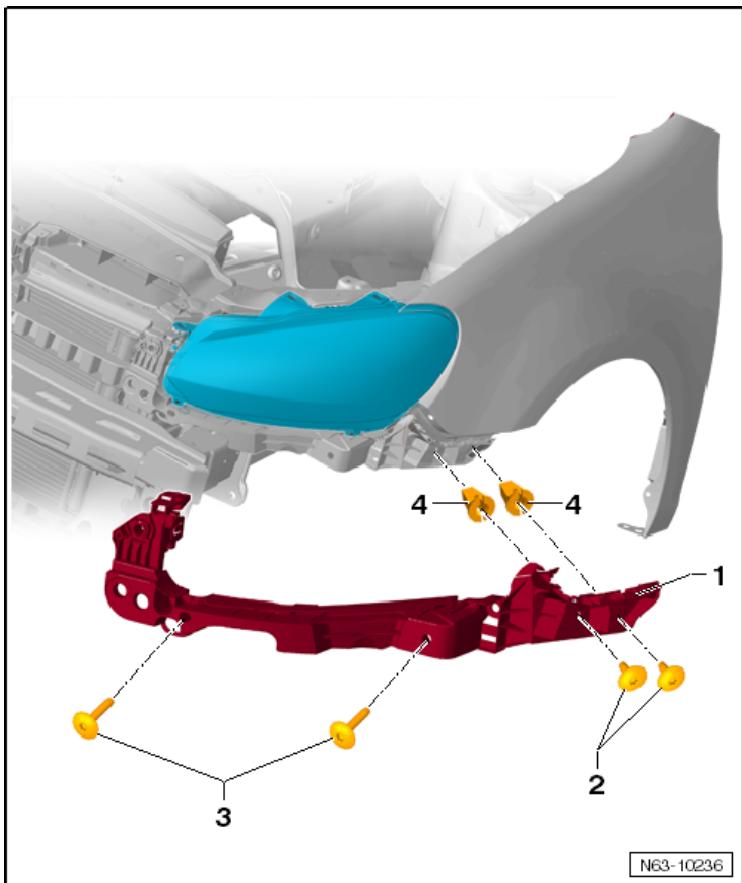
8 Nm

4 - Bolt

8 Nm

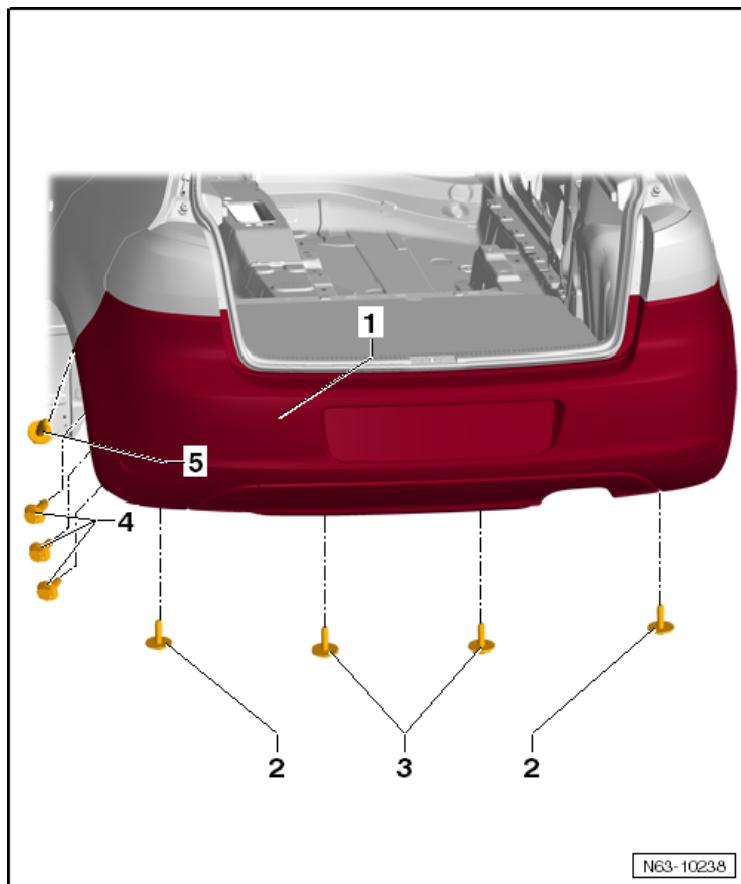
5 - Foam Piece

Side Guide Overview



- 1 - Side Guide**
- 2 - Bolt**
 - 2 Nm
- 3 - Bolt**
 - 5 Nm
- 4 - Expanding Nut**

Rear Bumper Cover Overview



Body

1 - Rear Bumper Cover

2 - Bolt

2 Nm

3 - Bolt

2 Nm

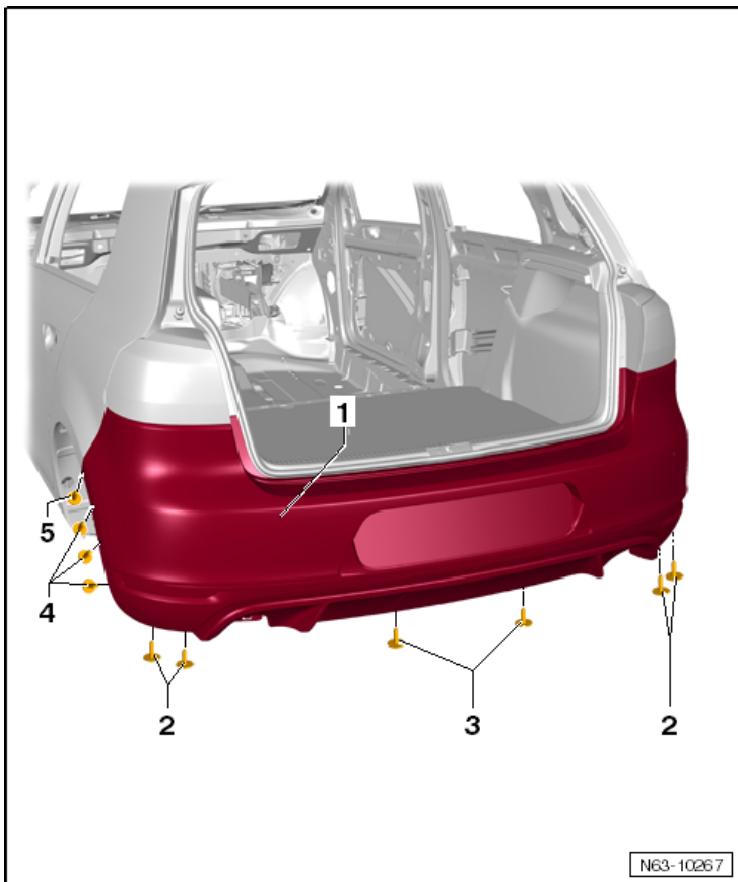
4 - Bolt

2 Nm

5 - Bolt

2 Nm

Rear Bumper Cover Overview, GTI



1 - Rear Bumper Cover

2 - Bolt

2 Nm

3 - Bolt

2 Nm

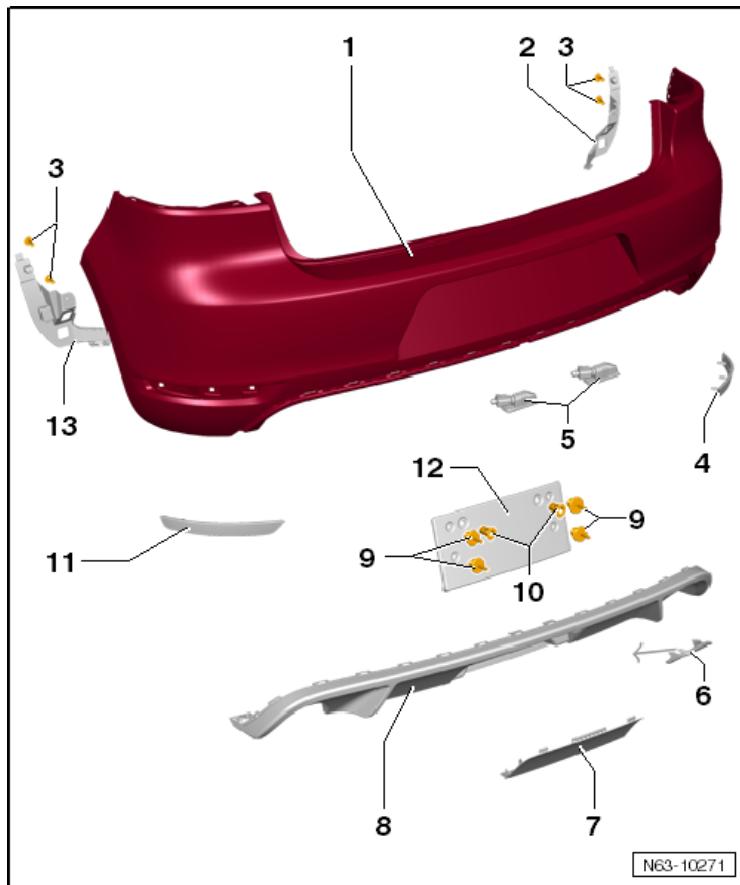
4 - Bolt

2 Nm

5 - Bolt

2 Nm

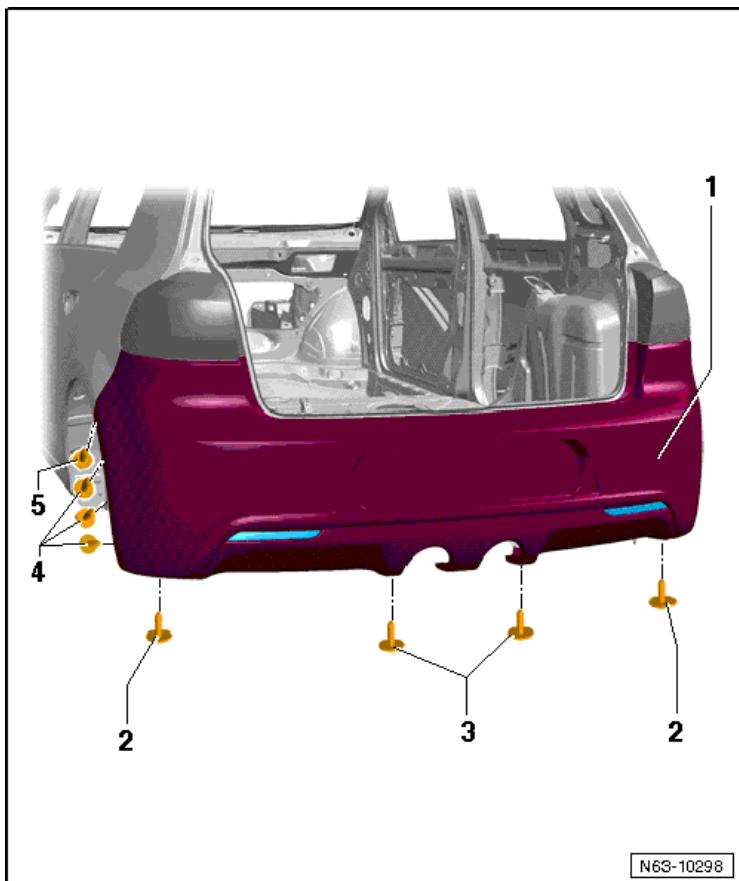
Rear Bumper Cover Attachments, GTI



- 1 - Rear Bumper Cover**
- 2 - Bracket**
- 3 - Bolt**
 - 2 Nm
- 4 - Right Rear Reflector**
- 5 - License Plate Lighting**
- 6 - Towing Eyelet Cap**
- 7 - Trailer Hitch Cover Cap**
- 8 - Spoiler**
- 9 - Clips**
- 10 - Pop Rivet Nut**
- 11 - Left Rear Reflector**
- 12 - License Plate Holder**
- 13 - Bracket**
- 14 - Bolt**
 - 2 Nm

Body

Rear Bumper Cover Overview, Golf R



1 - Rear Bumper Cover

2 - Bolt

2 Nm

3 - Bolt

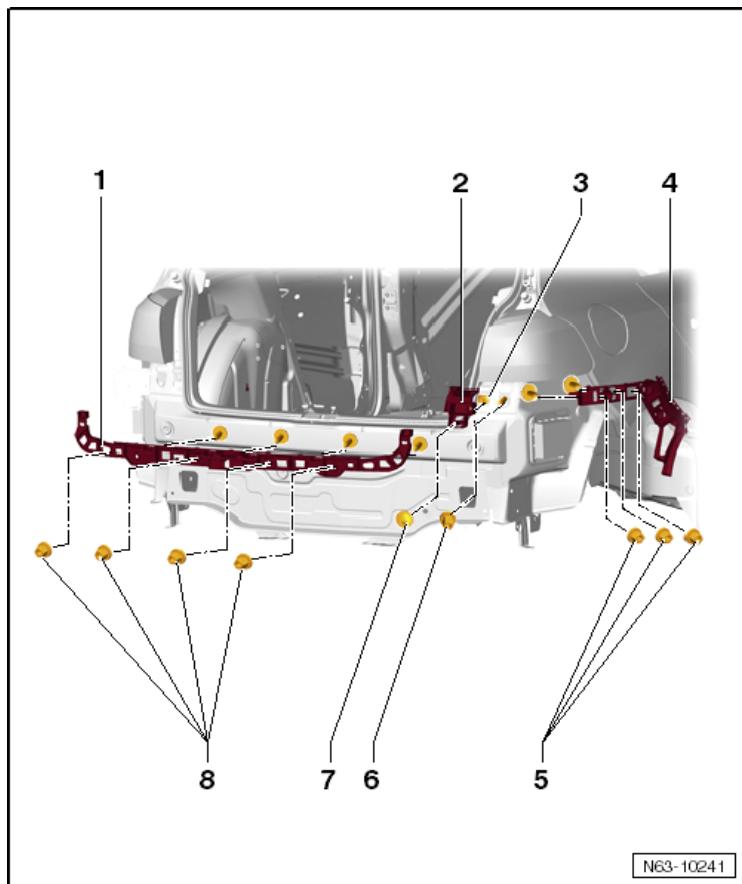
2 Nm

4 - Bolt

2 Nm

5 - Bolt

Rear Bumper Cover Substructure Overview



Body

1 - Center Guide

2 - Guide Trim

3 - Expanding Nut

4 - Guide Trim

5 - Nut

2 Nm

6 - Nut

2 Nm

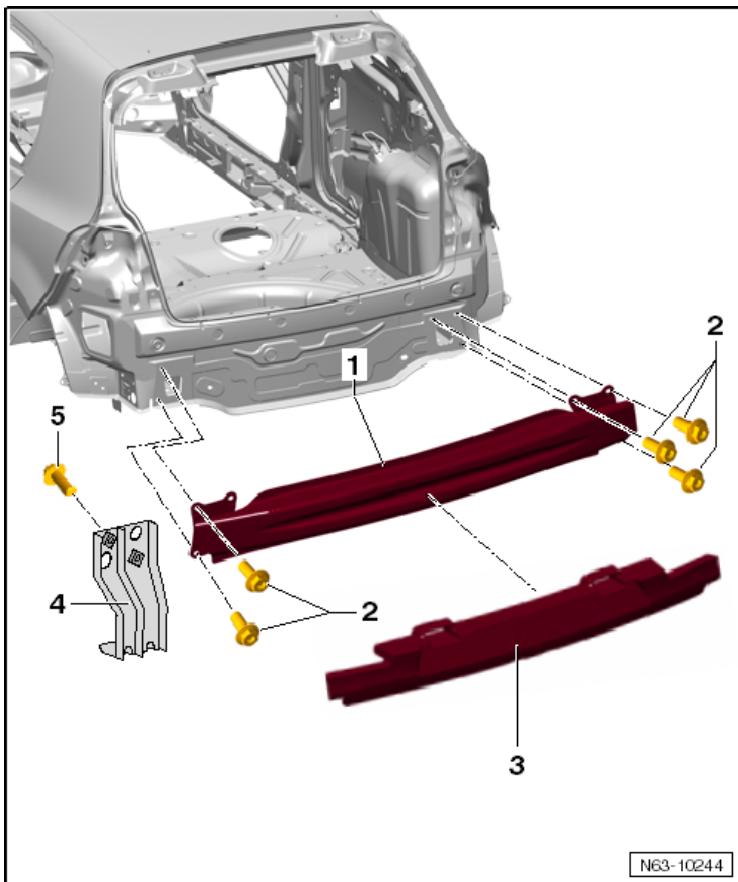
7 - Screw

2 Nm

8 - Nut

2 Nm

Rear Bumper Carrier Overview



1 - Rear Bumper Carrier

2 - Bolt

20 Nm

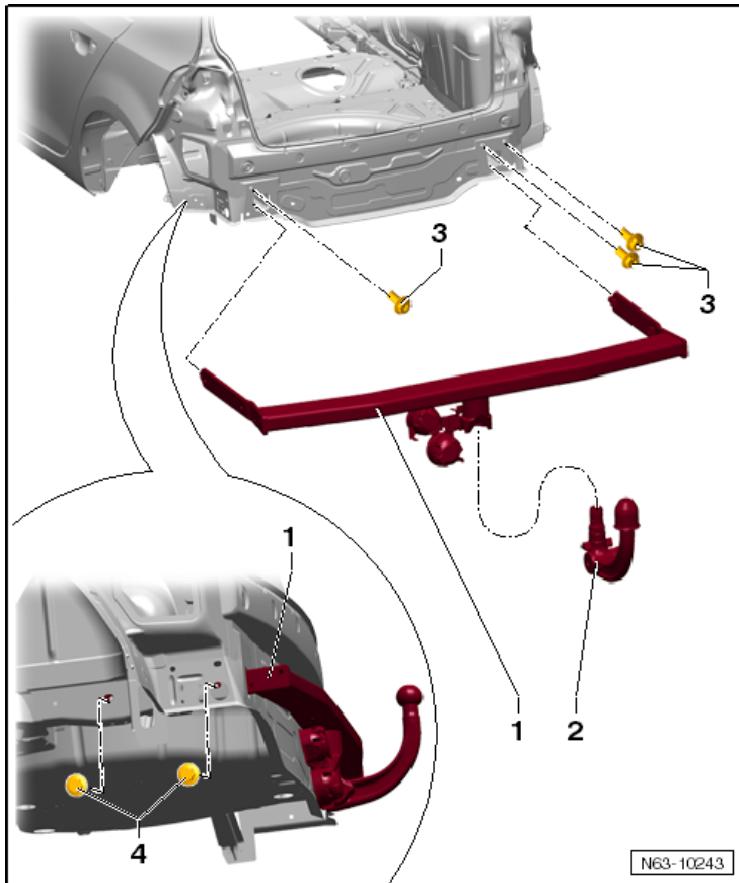
3 - Foam Piece

4 - Bracket

5 - Bolt

8 Nm

Trailer Hitch Overview



Body

1 - Trailer Hitch

2 - Ball Head

3 - Bolt

20 Nm

4 - Bolt

50 Nm + 90° turn

Always replace bolts after loosening them.

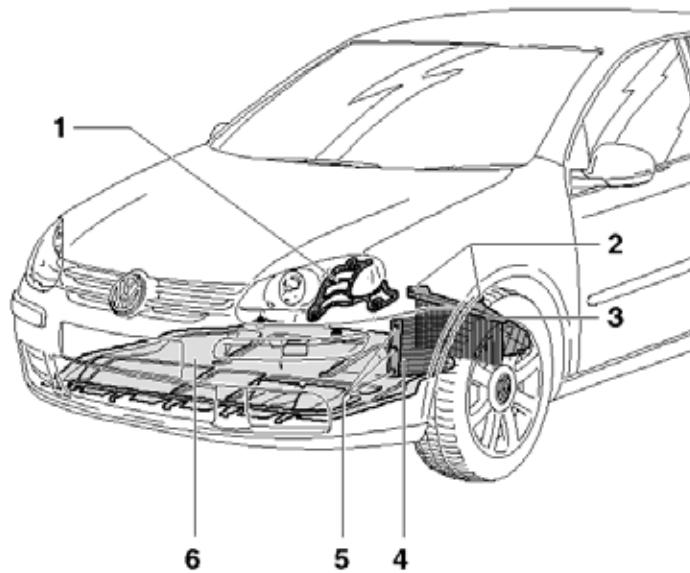
Glass, Window Regulators

Tightening Specification

Component	Nm
Front door window regulator motor bolts	3.5
Rear door window regulator motor bolts	3.5
Rear door fixed window bolts	8

Exterior Equipment

Anti-Rodent System Overview



Body

N66-10401

1 - Anti-Rodent System Protection

2 - Bolt

- 2 Nm
- 5 x 20

3 - Upper Protection

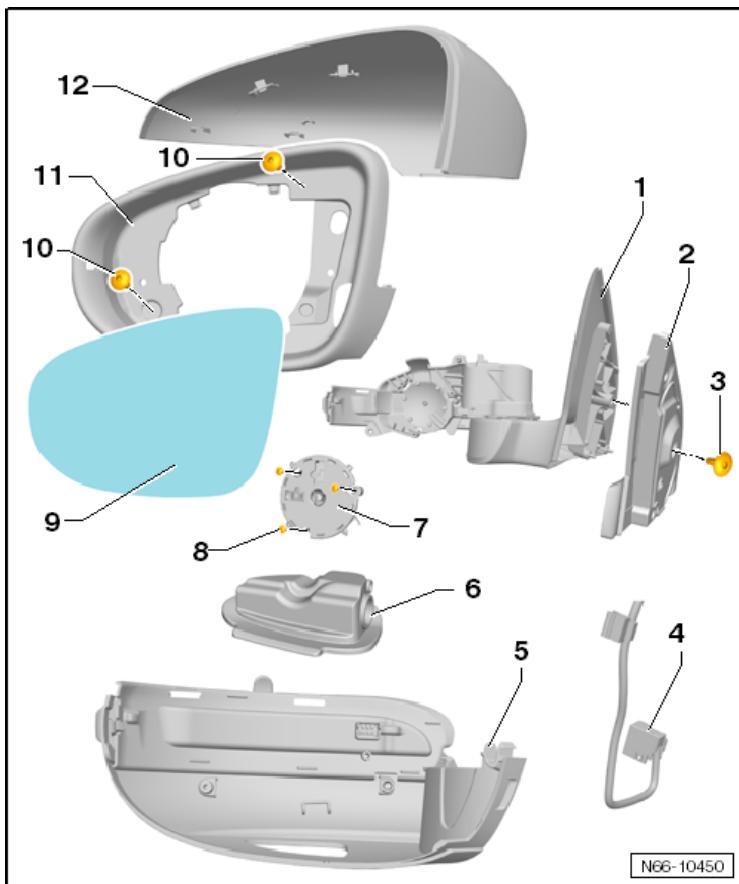
4 - Front Protection, Anti-Rodent System

5 - Bolt

- 2 Nm

6 - Noise Insulation

Exterior Mirror Overview



1 - Mirror Base Plate

2 - Insulation

3 - Bolt

10 Nm

4 - Connector

5 - Assembly Piece

6 - Entry Lamp Inside Exterior Mirror

7 - Adjusting Unit with Motor

8 - Bolt

1 Nm

9 - Mirror Glass

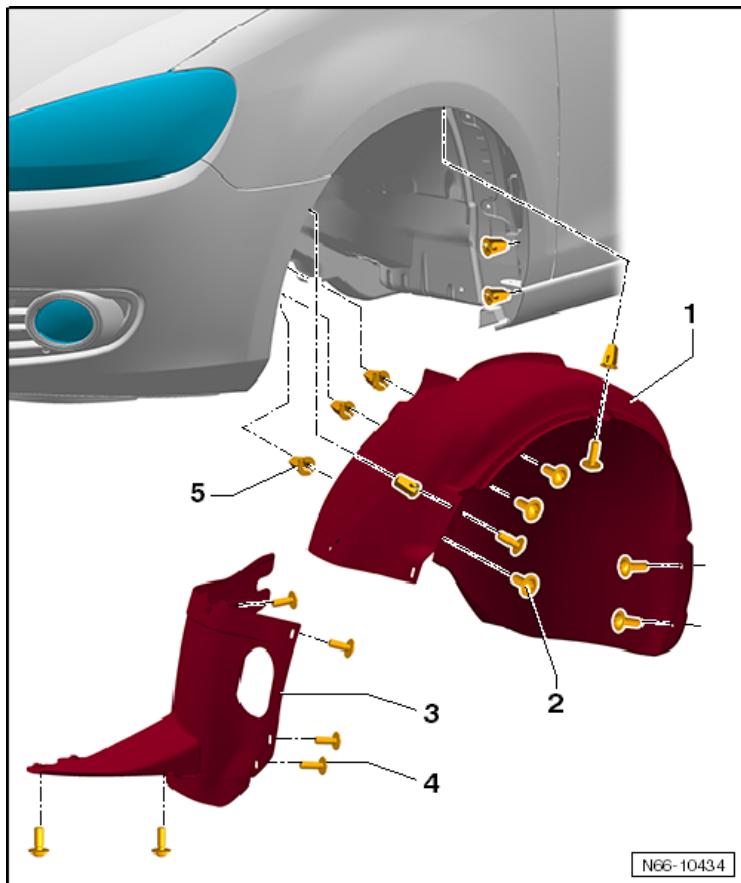
10 - Bolt

1 Nm

11 - Frame

12 - Mirror Housing

Front Wheel Housing Liner Overview



Body

1 - Rear Part of Wheel Housing Liner

2 - Bolt

2 Nm

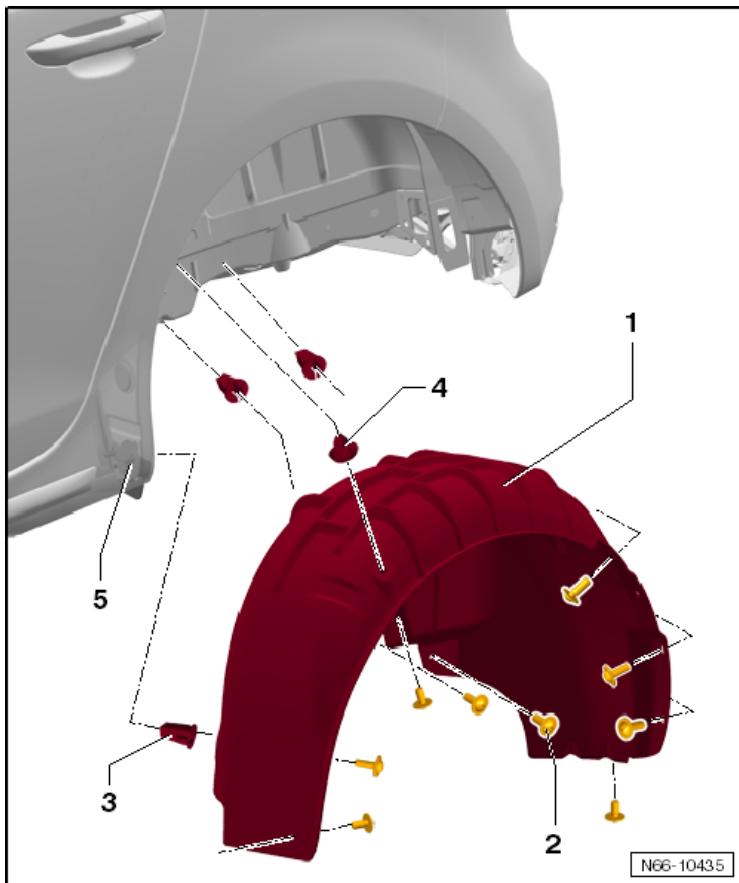
3 - Front Part of Wheel Housing Liner

4 - Bolt

2 Nm

5 - Nut

Rear Wheel Housing Liner Overview



1 - Rear Wheel Housing Liner

2 - Bolt

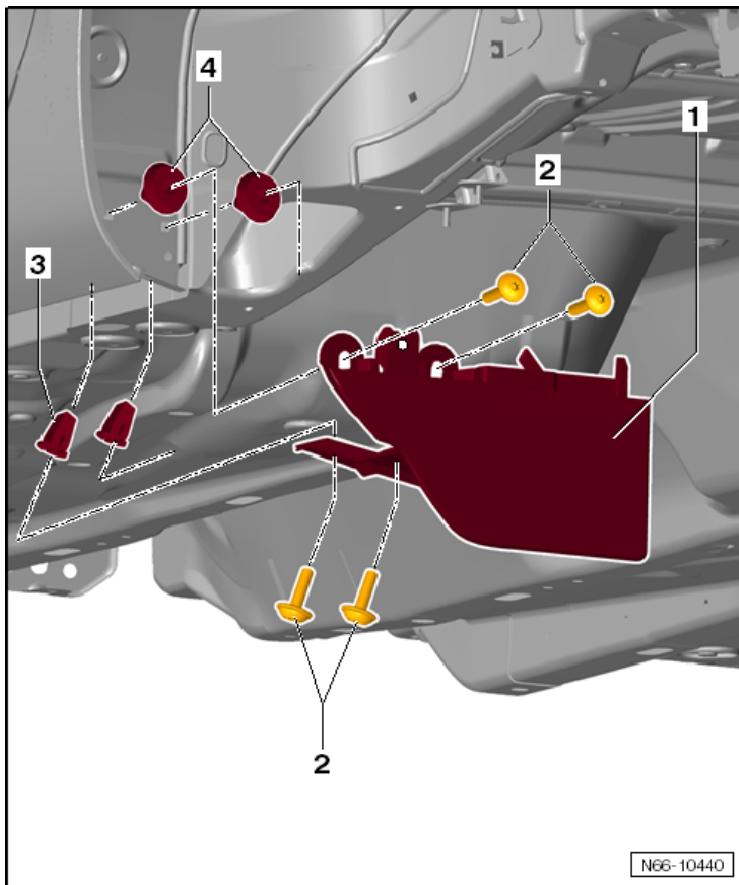
2 Nm

3 - Nut

4 - Nut

N66-10435

Sill Panel Cover Overview



Body

1 - Sill Panel Cover

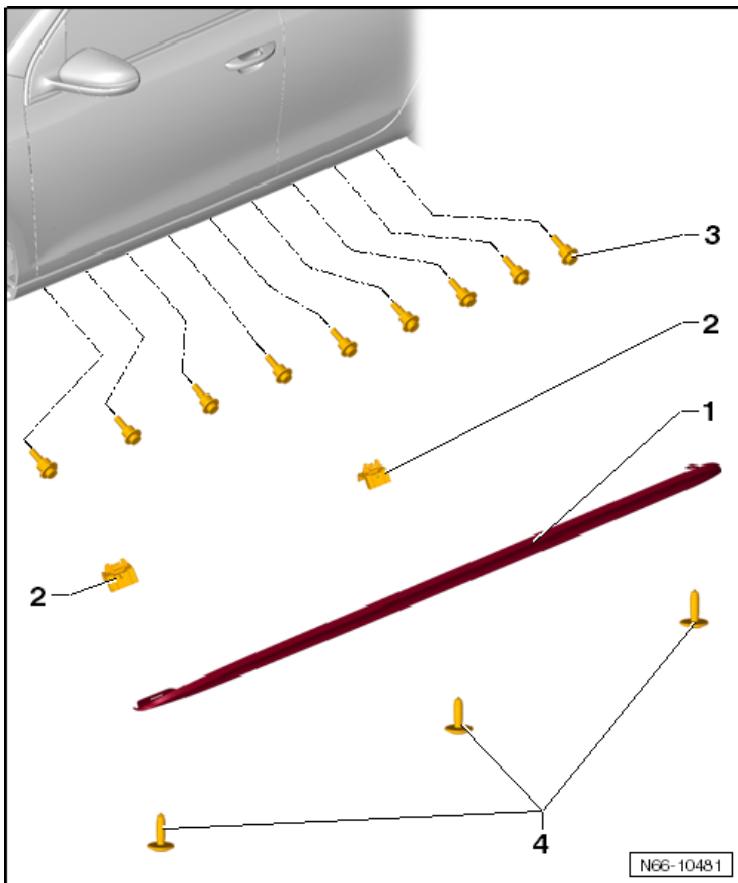
2 - Bolt

2 Nm

3 - Nuts

4 - Nuts

Sill Panel Extension Overview, GTI



1 - Extended Sill Panel

2 - Bracket

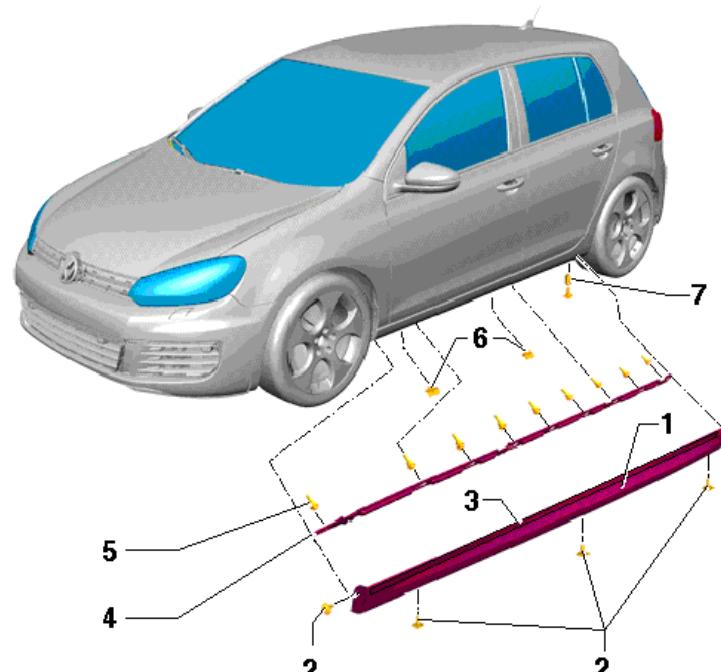
3 - Bolt

1.2 Nm

4 - Bolt

2 Nm

Sill Panel Extension Overview, Golf R



N66-10537

Body

1 - Sill Panel Extension

2 - Bolt

2 Nm

3 - Adhesive Tape

4 - Retaining Strip

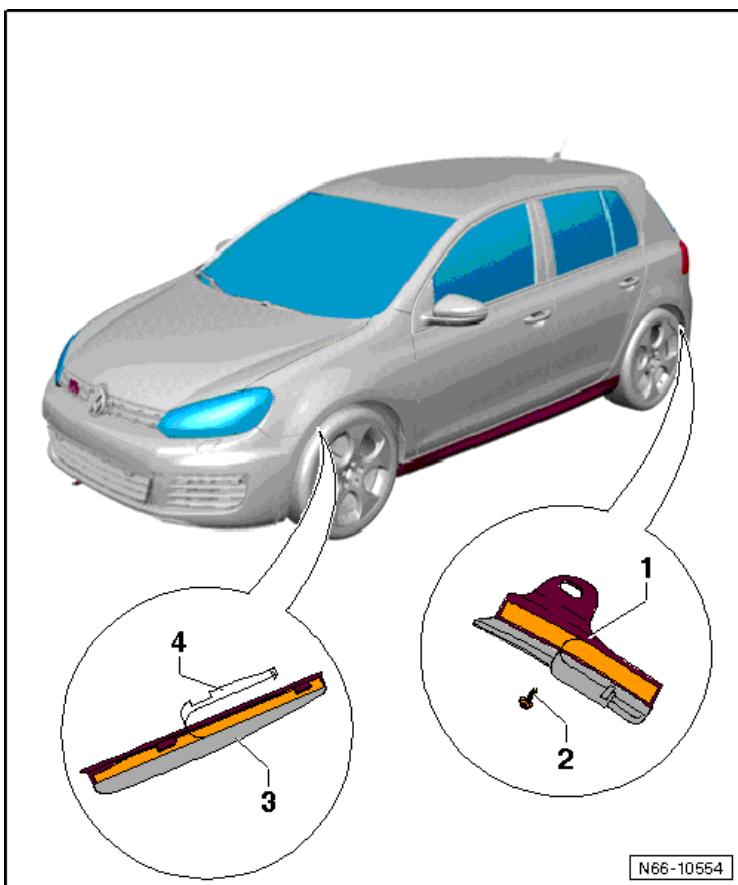
5 - Bolt

1.2 Nm

6 - Bracket

7 - Expanding Nut

Wheel Cover Trim Overview



1 - Rear Wheel Cover Trim

2 - Bolt

2 Nm

3 - Front Wheel Cover Trim

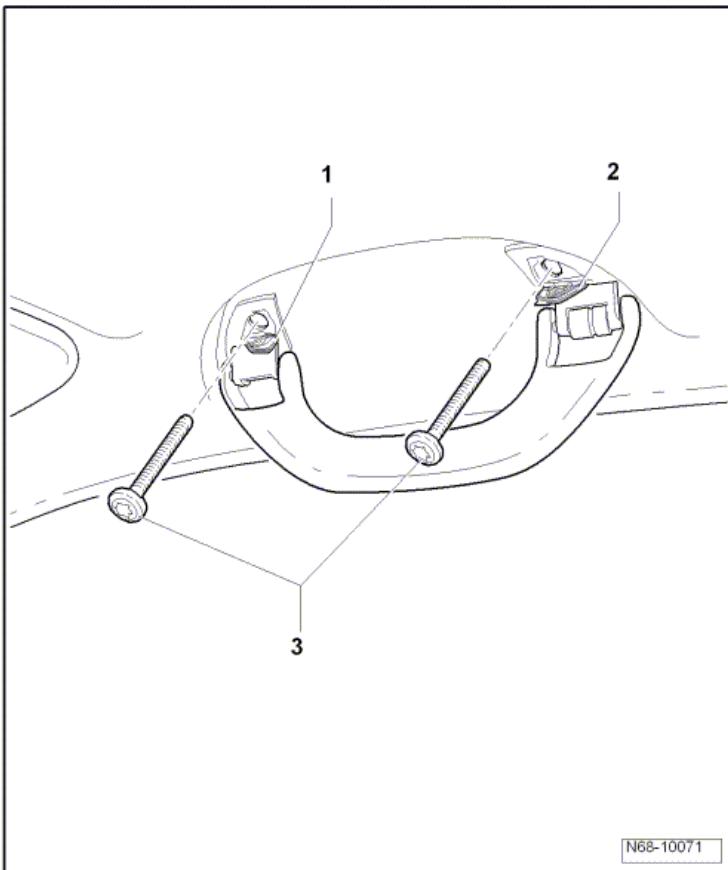
4 - Protective Film

N66-10554

Body Interior

Interior Equipment

Roof Grab Handles



Body

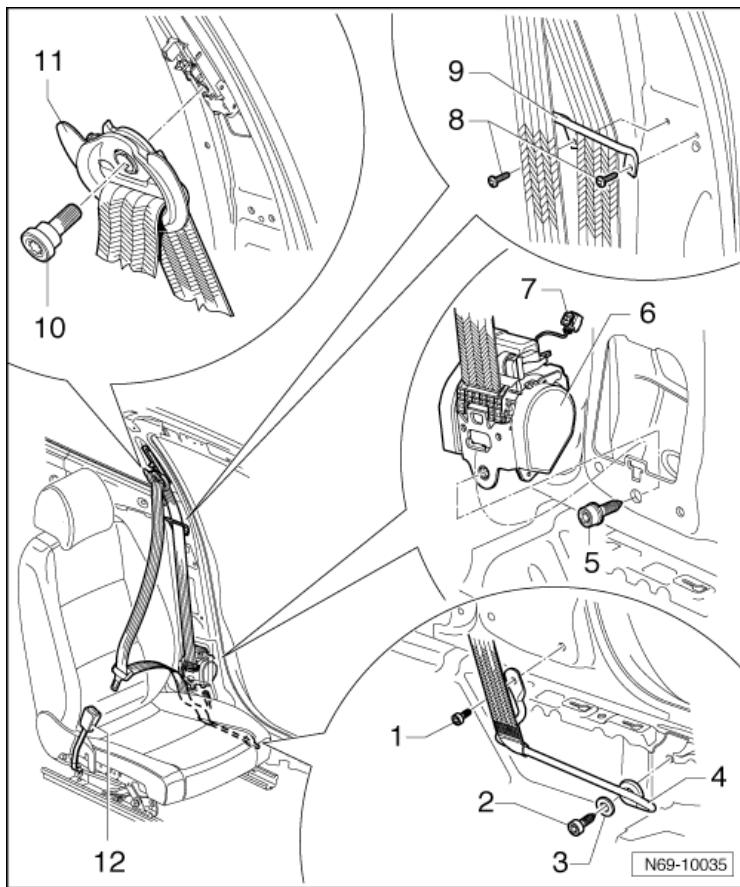
- 1 - Caps**
2 - Screws
 2 Nm

Tightening Specifications

Component	Nm
Inner wheel housing trim bolts (4-door, without Side Airbag)	1.5
Inner wheel housing trim nut	3.5
Inner wheel housing trim bolts	2.5

Passenger Protection, Airbags, Seat Belts

Front Seat Belts, 2-door, Assembly Overview



1 - Bolt

20 Nm

2 - Bolt

40 Nm

3 - Window

4 - Anchor Rail

5 - Bolt

40 Nm

6 - B-Pillar Automatic Belt Retractor

7 - Wiring Harness

8 - Screws

4.5 Nm

9 - Belt Guide

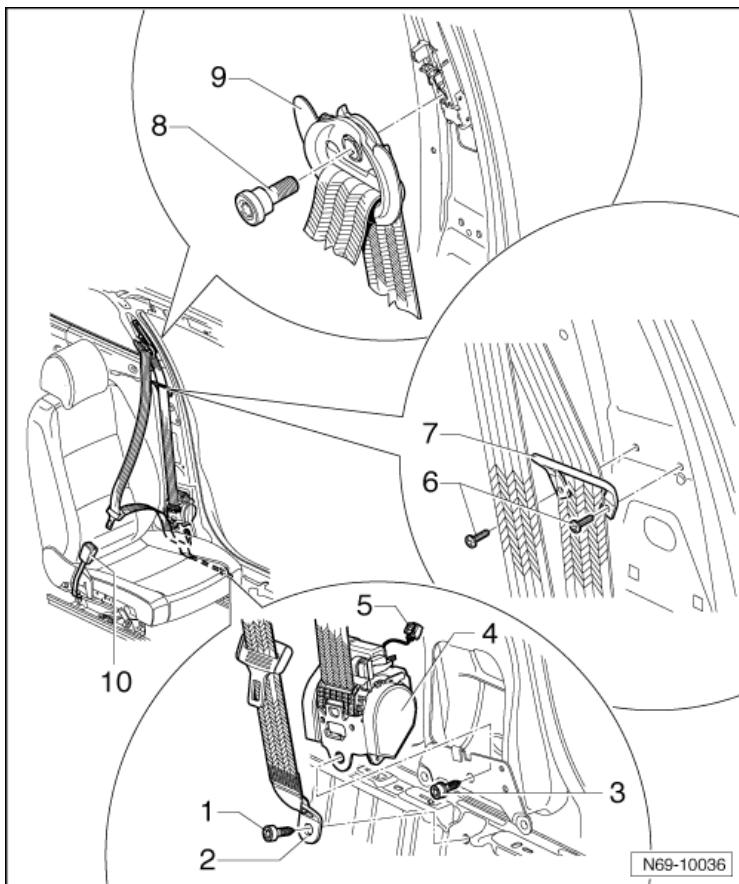
10 - Bolt

□ 40 Nm

11 - Belt Latch

Body

Front Seat Belts, 4-door, Assembly Overview



1 - Bolt

40 Nm

2 - Belt Anchor

3 - Bolt

40 Nm

4 - B-Pillar Automatic Belt Retractor

5 - Wiring harness

6 - Screws

4.5 Nm

7 - Belt Guide

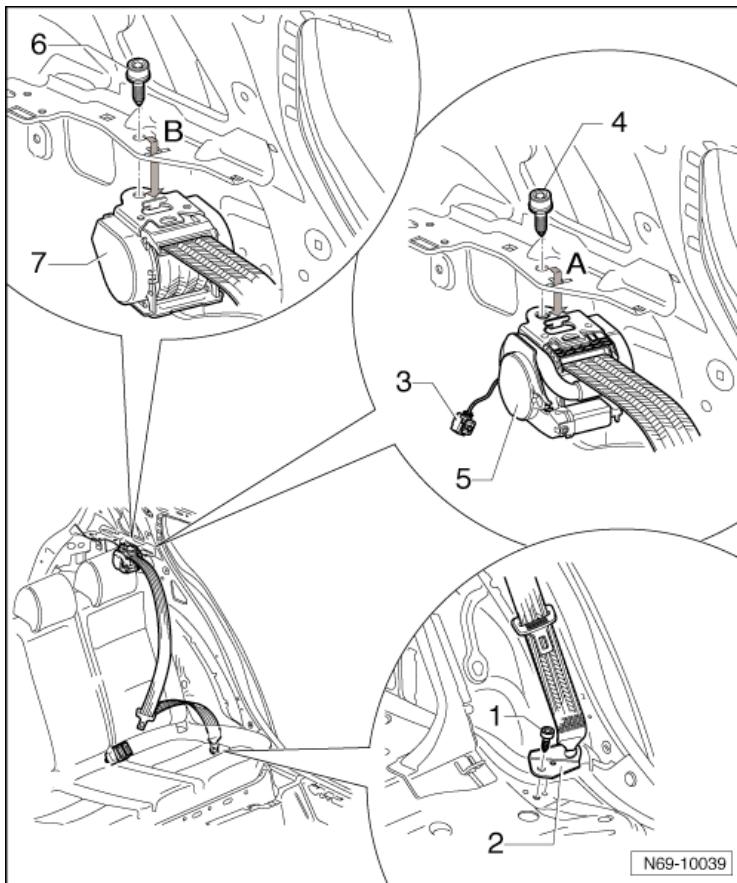
8 - Bolt

40 Nm

9 - Belt Guide Ring

10 - Belt Latch

Rear Outer Seat Belts Assembly Overview



Body

1 - Bolt

40 Nm

2 - Belt Anchor

3 - Wiring Harness

4 - Bolt

40 Nm

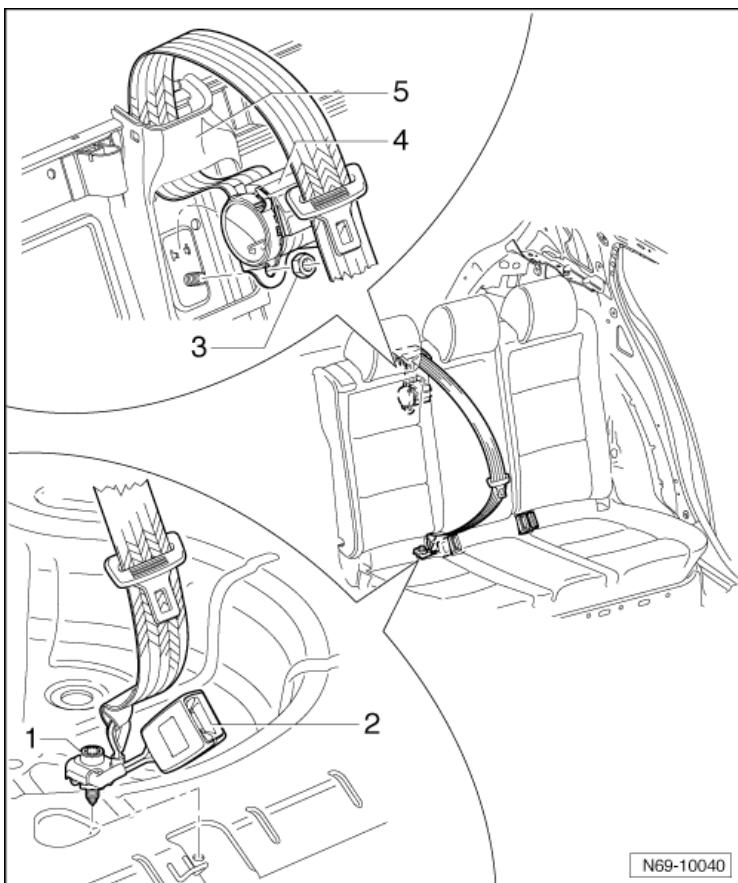
5 - Automatic Belt Retractor With Belt Tensioner

6 - Bolt

40 Nm

7 - Automatic Belt Retractor Without Belt Tensioner

Rear Center Three-Point Seat Belt Assembly Overview



1 - Bolt

40 Nm

2 - Belt Latch

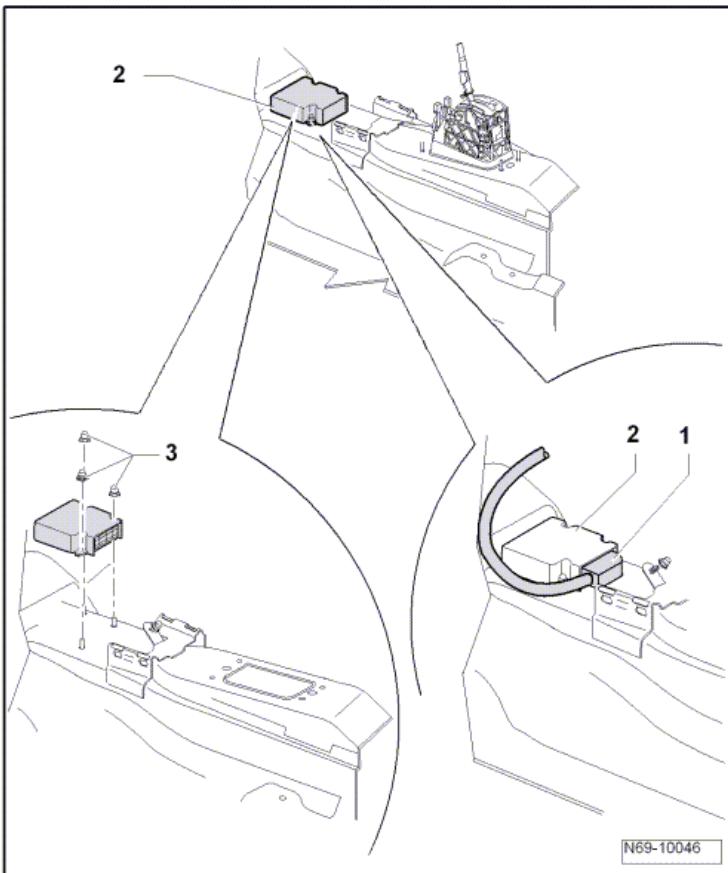
3 - Hex Nut

40 Nm

4 - Automatic Belt Retractor

5 - Console

Airbag Control Module J234



Body

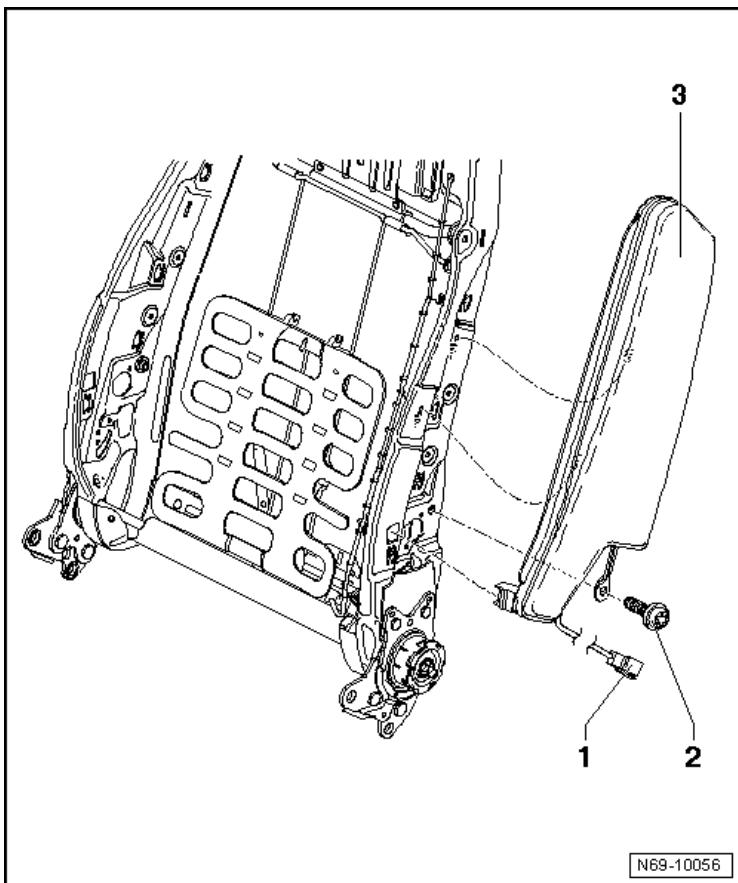
1 - Connector

2 - Control Module

3 - Nuts

9 Nm

Driver and Passenger Side Airbag



N69-10056

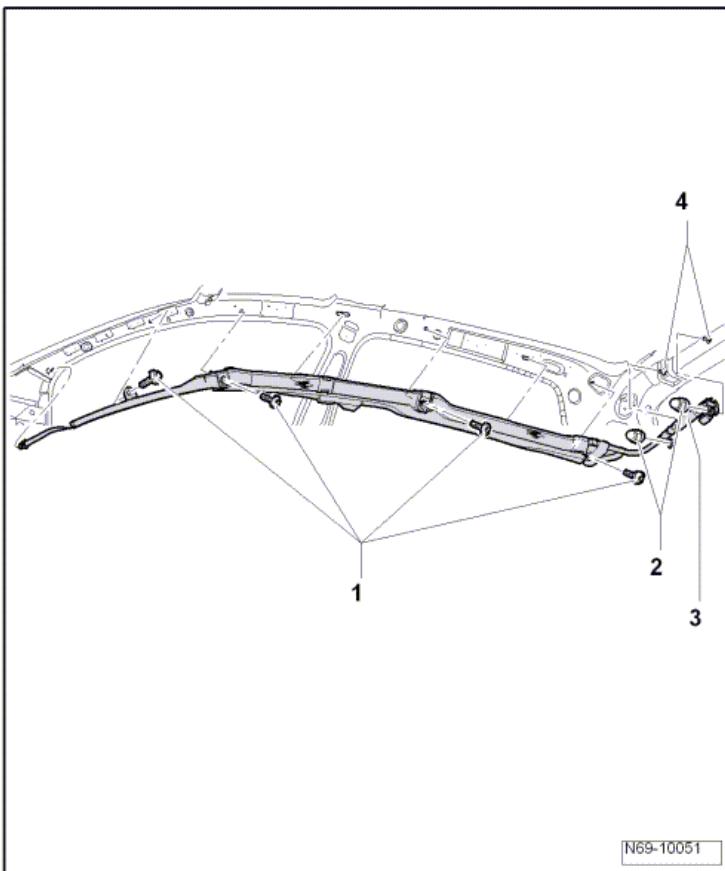
1 - Harness

2 - Bolt

9 Nm

3 - Side Airbag

Driver and Passenger Side Curtain Airbags



Body

1 - Screws

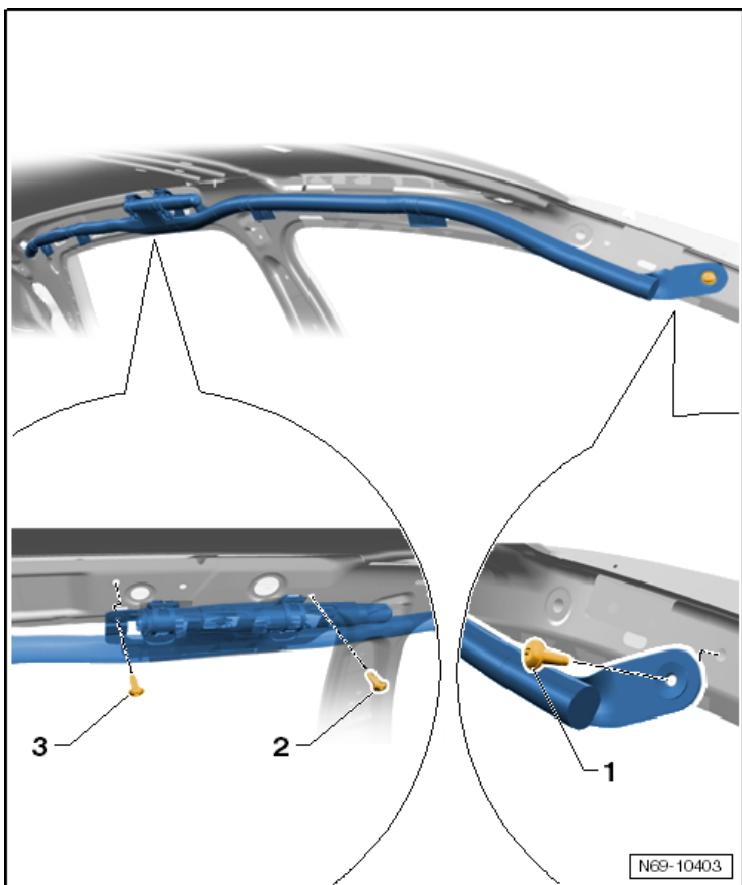
4.5 Nm

2 - Cap Nuts

3 - Igniter

4 - Threaded Pins

Driver and Front Passenger Side Curtain Airbag, 4-Door



1 - Bolt

4.5 Nm

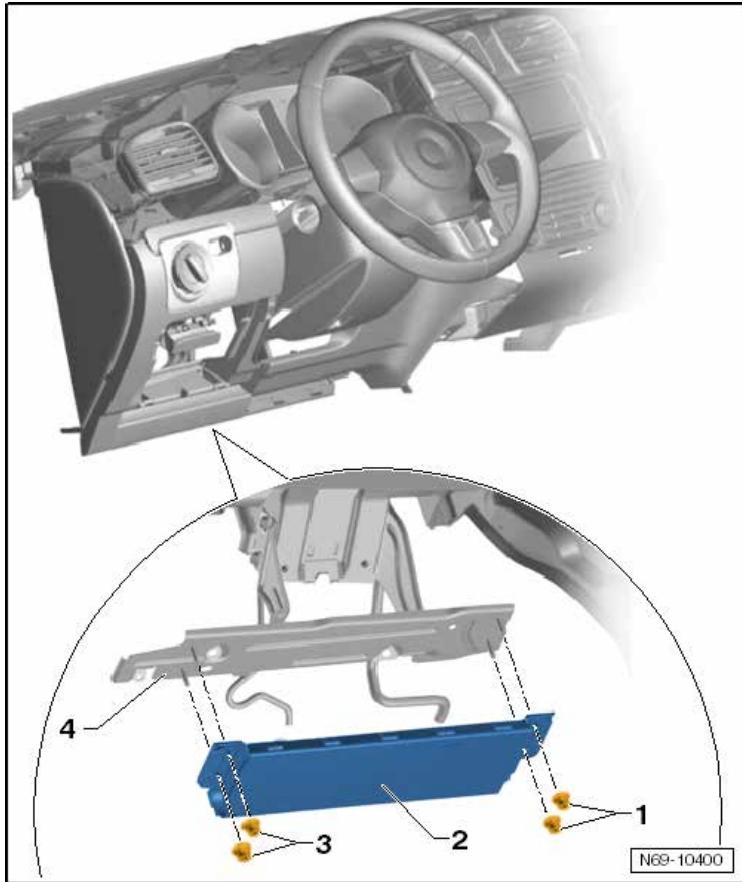
2 - Bolt

3 Nm

3 - Bolt

3 Nm

Knee Airbag



Body

1 - Nuts

9 Nm

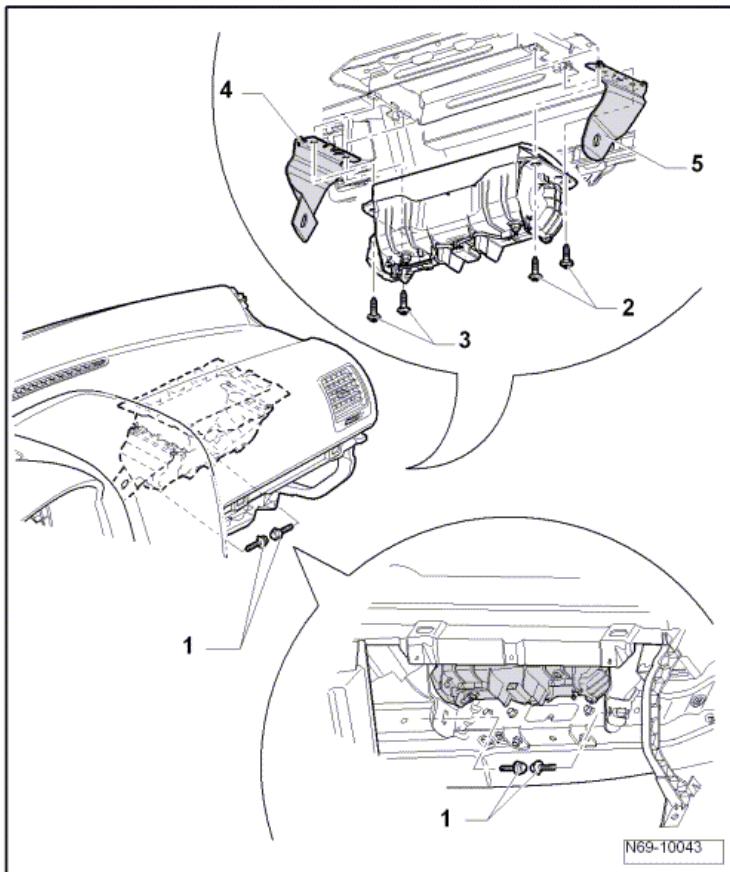
2 - Knee Airbag

3 - Nuts

9 Nm

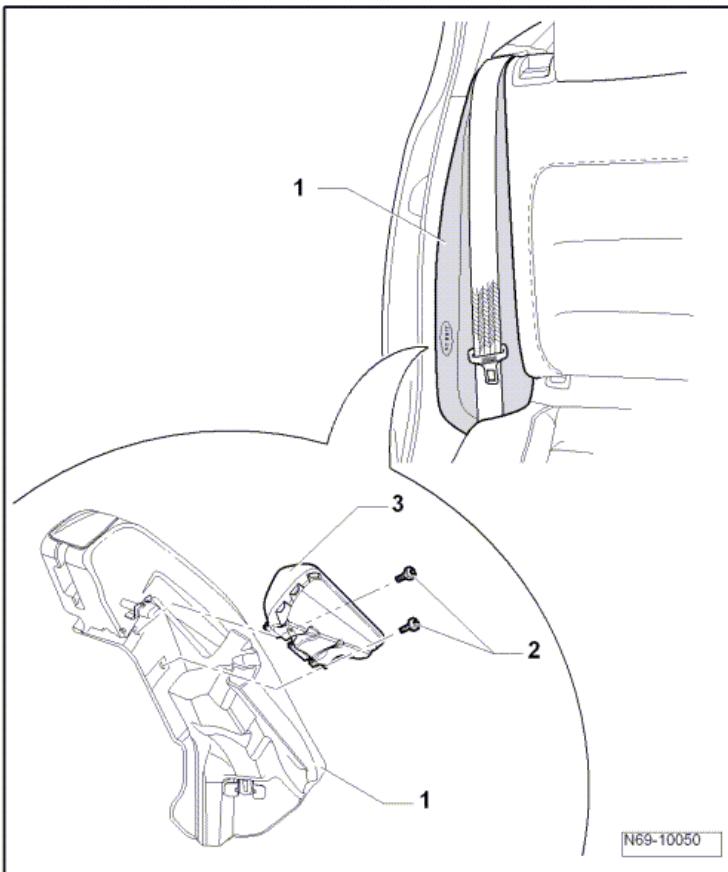
4 - Bracket

Passenger Airbag Unit



- 1 - Bolt**
 9 Nm
 - 2 - Bolt**
 9 Nm
 - 3 - Bolt**
 9 Nm
 - 4 - Brackets**
 - 5 - Brackets**

Rear Side Airbag, 4-Door



Body

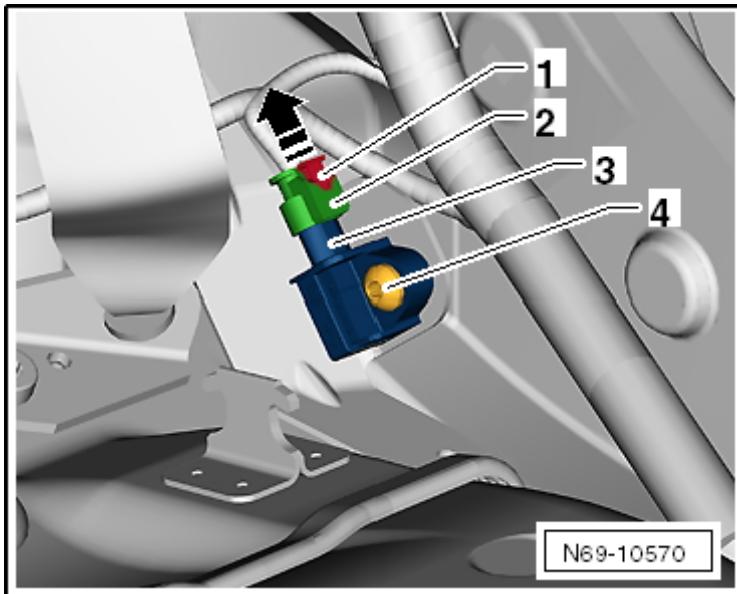
1 - Side Upholstery

2 - Bolt

9 Nm

3 - Rear Side Airbag

Driver Side Rear Side Airbag Crash Sensor G256



1 - Connector Lock

2 - Connector

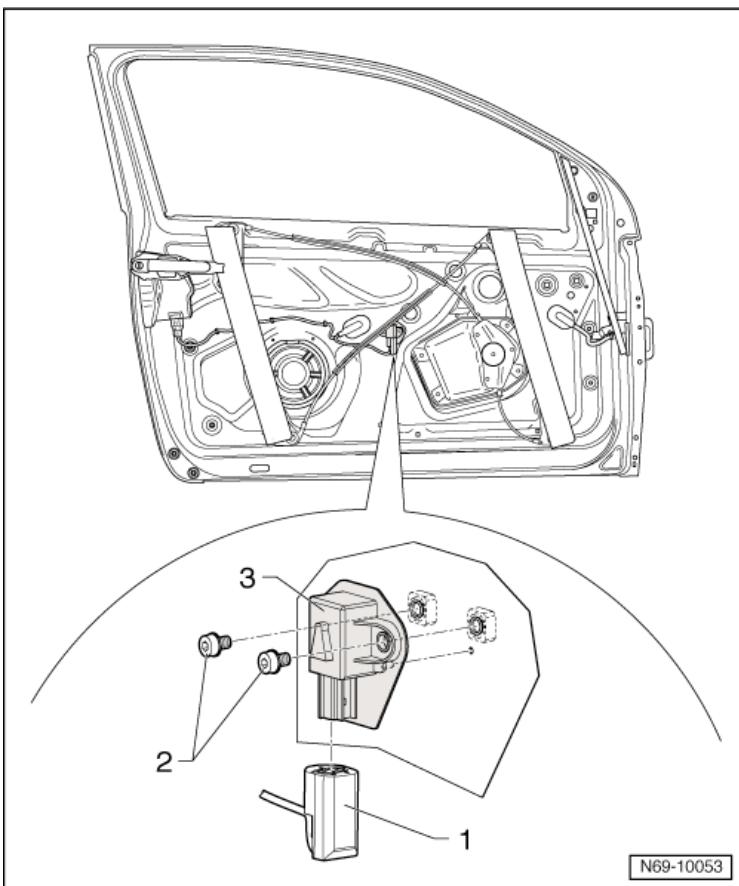
3 - Driver Side Rear Side Airbag Crash Sensor -G256

4 - Bolt

9 Nm

Front Door Crash Sensors

Body



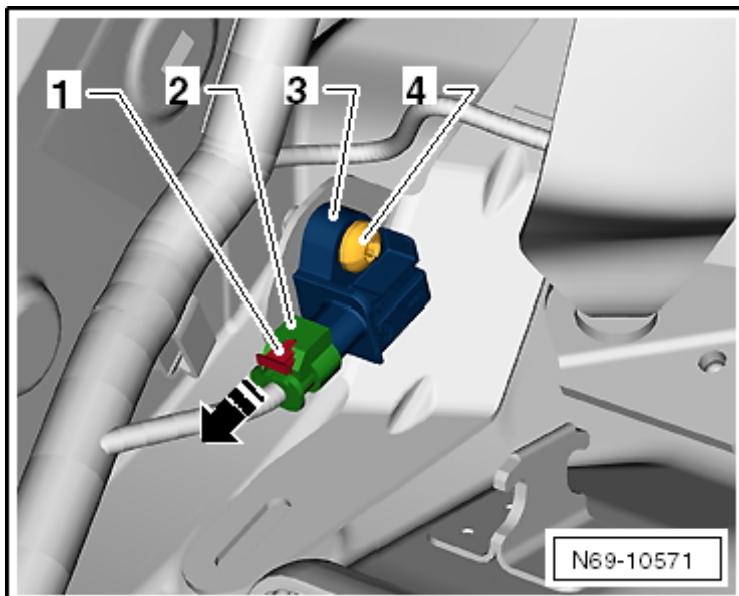
1 - Wiring Harness

2 - Bolt

2.5 Nm

3 - Crash Sensor

Front Passenger Side Rear Side Airbag Crash Sensor G257



1 - Connector Lock

2 - Connector

3 - Front Passenger Side Rear Side Airbag Crash Sensor -G257

4 - Bolt

9 Nm

Interior Trim

Interior Trim Tightening Specifications

Component	Nm
Belt anchor bolt	40
B-pillar trim bolt (under airbag emblem)	4
C-pillar trim bolt (under airbag emblem)	4
C-pillar trim nut	1.5
Front door trim bolts	4.5
Headliner storage compartment bolts	2
Lower B-pillar trim bolts	4
Luggage compartment side trim anchor point bolts	8
Rear door trim bolts	4.5
Rear lid trim panel handle recess bolt	1.5
Rear lid handle recess bolt	2
Side trim cover bolt, 2-door	2
Storage compartment, luggage compartment cover bolts	1.5

Body

Seat Frames

Tightening Specifications

Component	Nm
Front Seats	
Bucket seat pan bolts	24
Front seat bolts	40
Front bucket seat backrest bolts	34.5
Front seat support and operating lever bolts	3.5
Front bucket seat bracket and operating lever bolts	3.5
Seat trim bolts	2.5
Left front seat backrest bolt	34.5
Power seat bracket and support bolt	3.5
Right seat trim bolt	2
Seat drawer mount bolt	2
Rear Seats	
Center backrest bearing clamp bolt	9
Side upholstery nut	8

Seat Upholstery, Covers

Instrument Panel Tightening Specifications

Component	Nm
Center armrest storage compartment bolts	9

HEATING, VENTILATION & AIR CONDITIONING

General, Technical Data

Refrigerant Oil Distribution

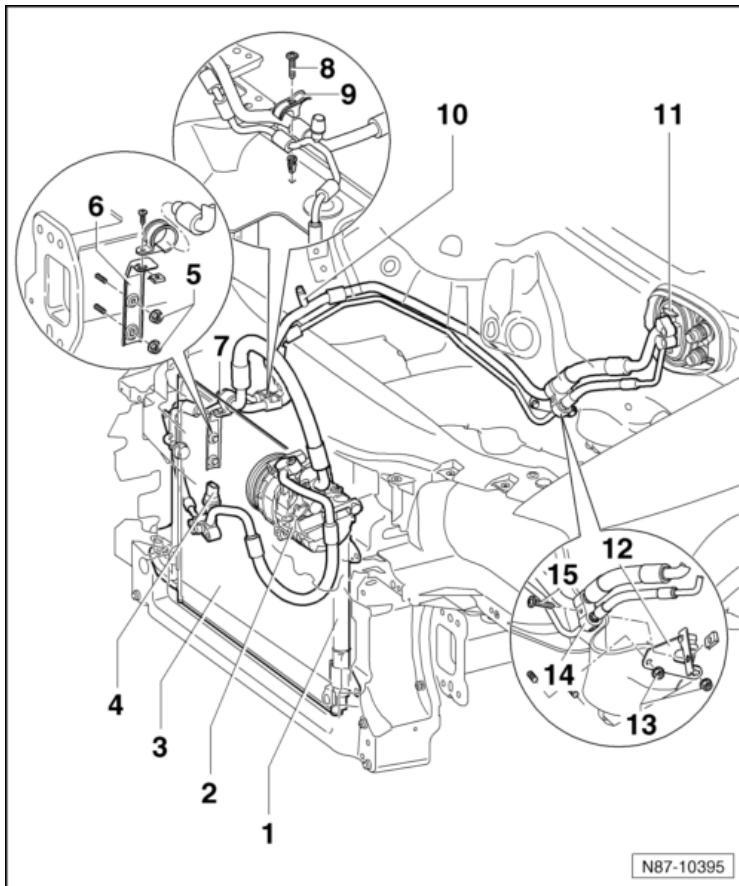
Component	Approximate % of total amount of oil in component
A/C compressor	50
Condenser	10
Suction hose	10
Evaporator	20
Fluid reservoir	10

Refrigerant R134a Vapor Pressure Table

Temperature in °C	Pressure in bar (positive pressure) of R134a
-45	-0.61
-40	-0.49
-35	-0.34
-30	-0.16
-25	0.06
-20	0.32
-15	0.63
-10	1.00
-5	1.43
0	1.92
5	2.49
10	3.13
15	3.90
20	4.70
25	5.63
30	6.70
35	7.83
40	9.10
45	10.54
50	12.11
55	13.83
60	15.72
65	17.79
70	20.05
75	22.52
80	25.21
85	28.14
90	31.34

Heating, Ventilation and Air Conditioning

Refrigerant Circuit System Overview



1 - Reservoir With Dryer Or Dryer Bag

2 - A/C Compressor

3 - Condenser

4 - High Pressure Sensor -G65-

5 - Nuts

6 Nm

6 - Bracket

7 - Evacuating and Charging Valve

8 - Screws

3.5 Nm

9 - Bracket

10 - Evacuating and Charging Valve

11 - Expansion Valve

12 - Bracket

13 - Nut

20 Nm

14 - Bracket**15 - Screw**

3.5 Nm

Fastener Tightening Specifications

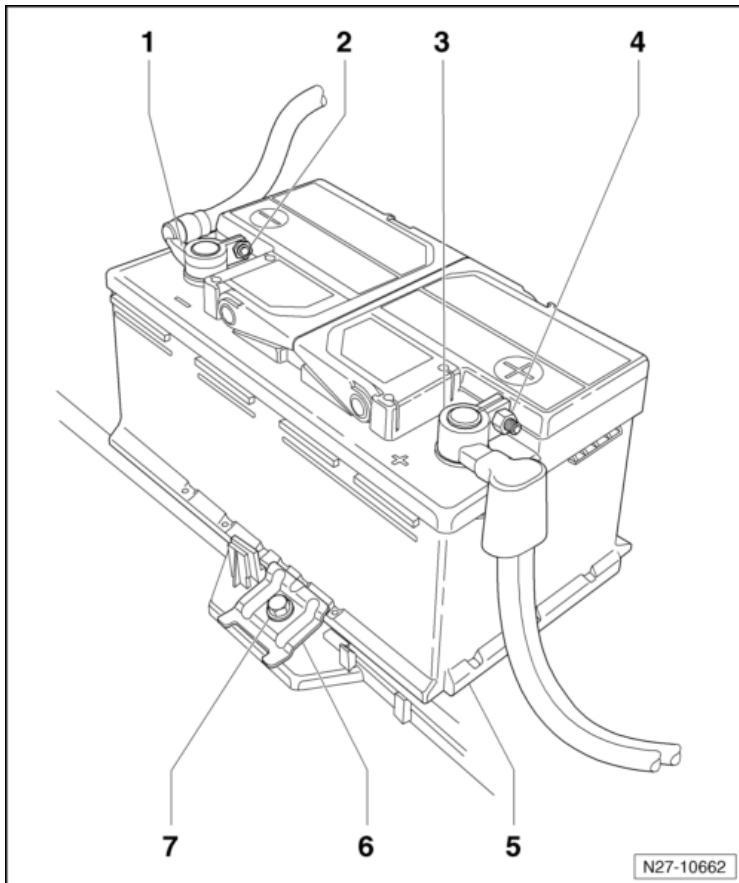
Component	Nm
A/C compressor bolts	25 ± 2
A/C control module J301 (electric manual)	1.5
A/C control Head (Climatronic)	9 ± 1.3
Air distribution door motor	1.5
Air distribution housing bolts	1.4
Aluminum support to crossmember bolt	9 ± 1.3
Auxillary heating element power supply nut	9 +/-1
Bracket to heating and A/C unit bolt	9 ± 1.3
Cable bracket to plenum chamber bolt	4.5 ± 0.7
Condenser mounting bolts	5 ± 0.5
Crossmember support bolt	20 ± 3
Evacuating and charging valve	2 ± 0.2
Expansion valve bolt	5
Fluid reservoir with dryer bolt	4.2 ± 0.7
Fresh air blower	1
Fresh air/recirculating air/back pressure door adjuster	1.4
Fresh air intake	2.5 +/- 0.4
Heater core connection flange screw	2
Heater core coolant pipe clamps	2
Heating and A/C unit bolt	8 ± 1
Heat shield in front of the expansion valve nut	6 ± 0.9
High pressure sensor	8 ± 1
Left temperature door motor	1.4
Radiator mounting bolt	7
Refrigerant lines to a/c compressor	22 ± 1
Refrigerant lines to condenser	12 ± 1.8
Refrigerant line to expansion valve bolt	10 ± 1
Ribbed belt pulley	35 ± 5
Right temperature door motor	1.4
Temperature regulator door motor	1.4

ELECTRICAL SYSTEM

Electrical Equipment

Battery, Starter, Generator, Cruise Control

Battery Overview



1 - Battery Terminal Clamp Ground Wire

2 - Mounting Nut For Battery Terminal Clamp Ground Wire

- 6 Nm
- M6

3 - Battery Terminal Clamp Positive Wire

4 - Mounting Nut For Battery Terminal Clamp Positive Wire

- 6 Nm
- M6

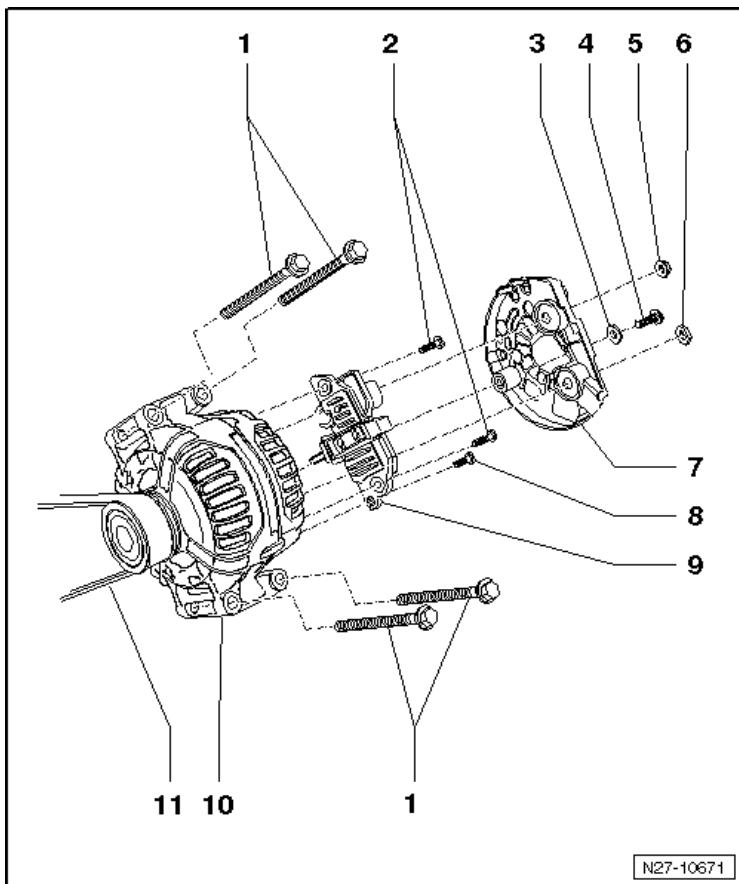
5 - Battery

6 - Clamping Plate

7 - Bolt

- 20 Nm
- M8 x 35

Generator Overview



1 - Collar Bolt

- 20 Nm
- M8 x 110

2 - Phillips Head Screws

- 2 Nm
- M4 x 19

3 - Washer

- M5

4 - Phillips Head Screws

- 4.5 Nm
- M5 x 21

5 - Nut

- 15 Nm
- M8

6 - Flat Hex Nut

- M8 Nm

7 - Generator Cap

8 - Phillips Head Screws

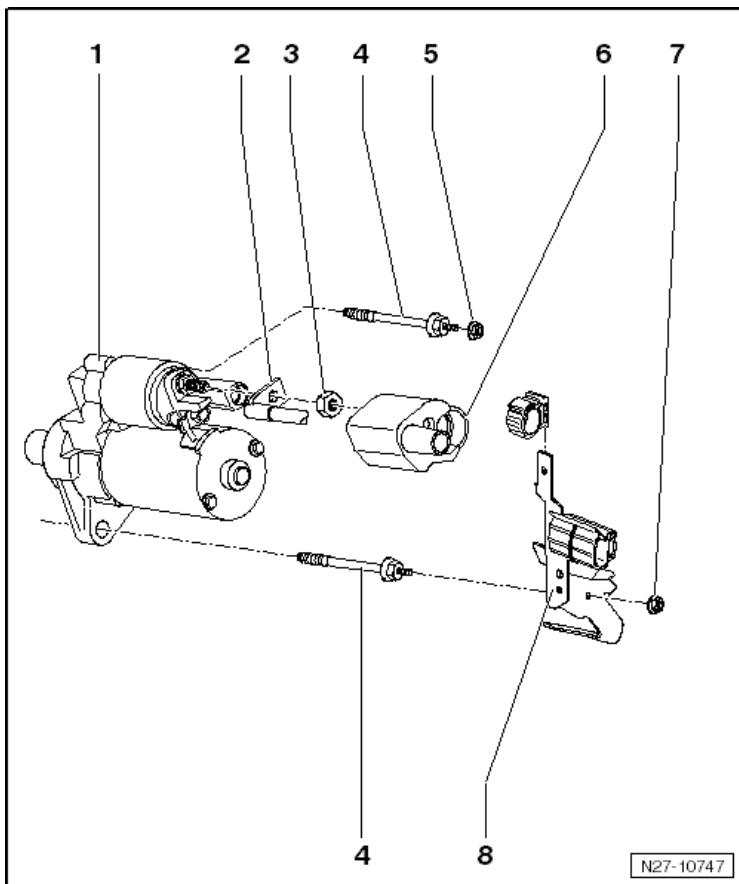
- 2 Nm
- M4 x 13

9 - Voltage Regulator

10 - Generator

11 - Ribbed Belt

Starter Overview



1 - Starter

2 - Connection B+ Wire To Starter

3 - Mounting Nut B+ Wire To Starter

4 - Starter Bolts

- 80 Nm
- M12

5 - Cap

6 - Cap

7 - Wiring Bracket Nuts

- 20 Nm
- M8

8 - Wiring Bracket

Mounting bolt, air filter housing to body

- 10 Nm

Fastener Tightening Specifications

Component	Fastener	Nm
A/C compressor mounting bolts	M8	23 ³⁾
Accessory bracket to engine bolts	-	25 ²⁾
Air filter housing to body, bolt	-	10
B+ terminal of generator	-	20
B+ wire to starter, mounting nut	M8	20
Battery terminal, mounting nuts	M6	6
Battery clamping plate, mounting bolt	M8 x 35	35
Generator to accessory bracket collar bolts	M8 x 90	25 ²⁾
	M8 x 90	20 ³⁾
	M8 x 110	20 ¹⁾
Hex bolt with washer and threaded piece for voltage regulator	M4 x 20, M4 x 15	2
Lower idler pulley with bracket	-	23 ²⁾
Protective cap phillips head screw	M5 x 21	4.5 ¹⁾
Protective cap hex head nut	M8	20
Ribbed belt tensioners	-	35 ²⁾
Ribbed belt pulley with freewheel	-	80
Ribbed belt pulley without freewheel	-	65
Starter bolts	M12	75
Starter bolts	M12	80
Starter wiring bracket, nut	M8	23 ^{2) 3)}
Starter wiring bracket, nut	M8	20 ¹⁾
Upper idler pulley with bracket	M6	8
Voltage regulator screws	-	2
Wire clamp nut to rear side of generator	M5	3.2 ^{2) 3)}

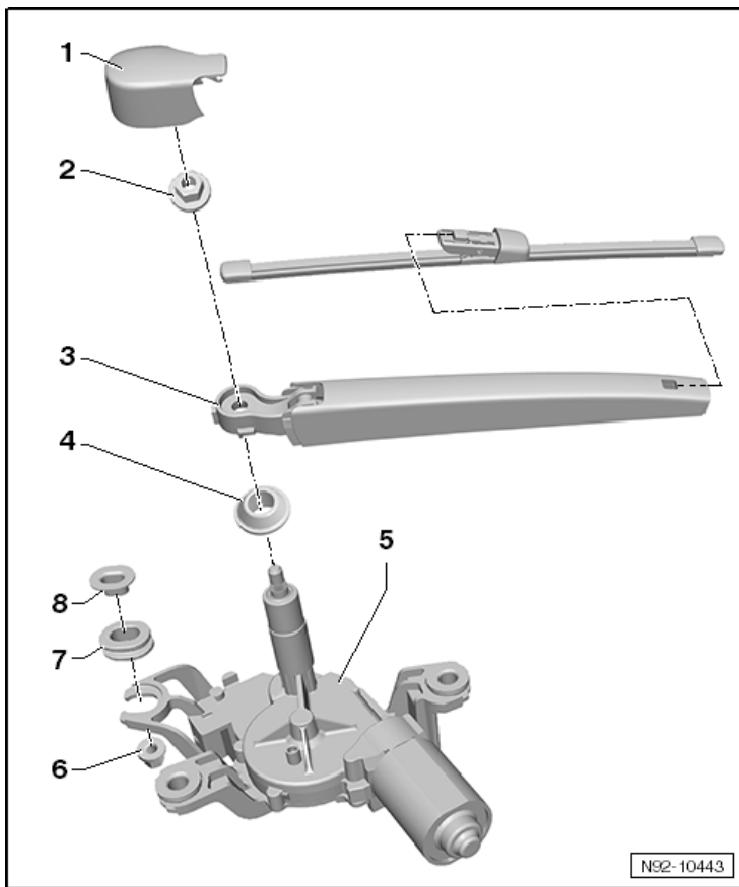
¹⁾ Applies to 2.0L TFSI

²⁾ Applies to 2.5L and Golf R

³⁾ Applies to 2.0L TDI

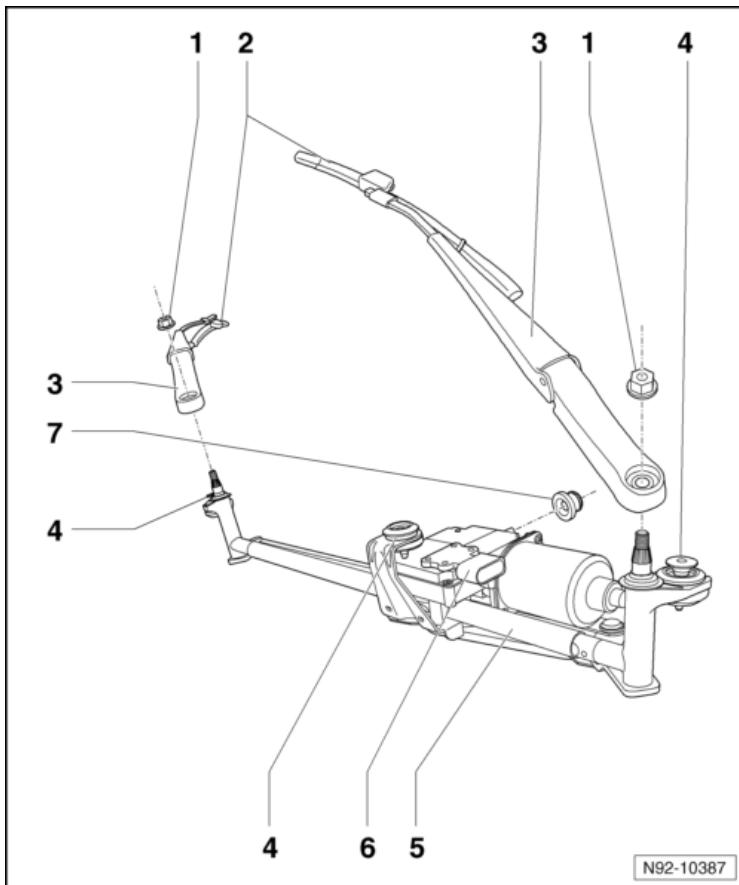
Windshield Wiper/Washer System

Rear Window Wiper System Overview



- 1 - Cap**
- 2 - Nut**
 - 12 Nm
- 3 - Wiper Arm**
- 4 - Gasket**
- 5 - Rear Window Wiper Motor -V12-**
- 6 - M6 Nut With Washer**
 - 8 Nm
- 7 - Rubber ring**
- 8 - Spacer**
- 9 - Windshield wiper**

Windshield Wiper System Overview



1 - Mounting Nuts, Wiper Arm to Linkage

- 20 Nm

2 - Windshield Wiper

3 - Wiper Arms

4 - Bolts for Wiper Frame with Linkage to Body

- 8 Nm

5 - Wiper Frame with Linkage

6 - Windshield Wiper Motor -V- with Wiper Motor Control Module

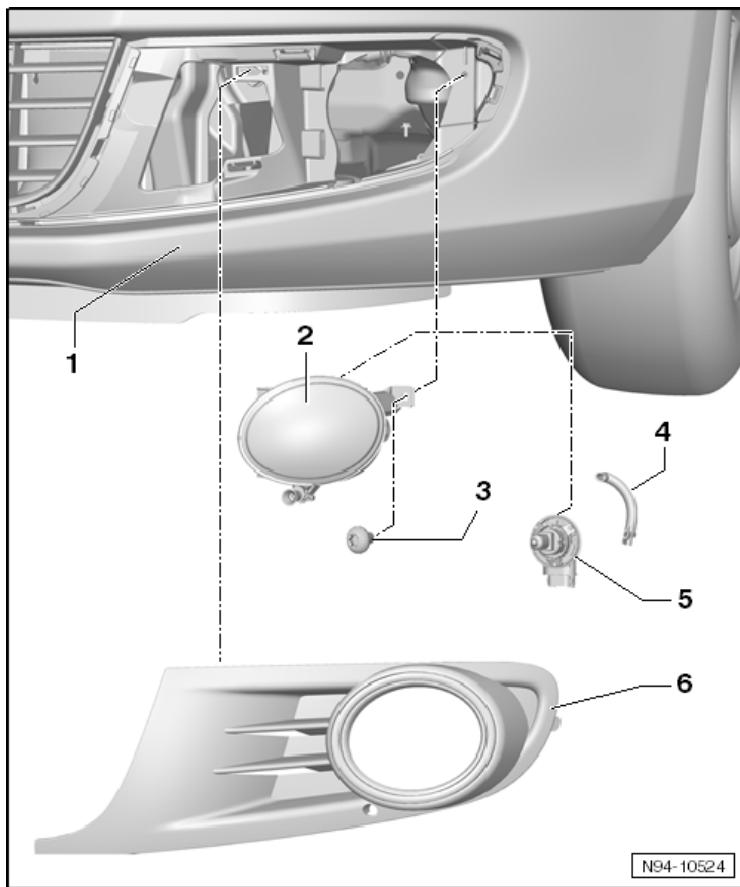
7 - Rubber Grommet in the Bulkhead

No Illustration

- Bolt: horn retaining plate to longitudinal member - 20 Nm
- Screws, windshield wiper motor to wiper frame and linkage - 9 Nm
- Windshield and headlamp washer fluid reservoir to body - 8 Nm.
- Windshield wiper motor crank to windshield wiper motor shaft - 18 Nm
- Wiper motor crank to wiper motor shaft hex nut - 21 Nm
- Wiper motor crank to wiper motor shaft hex collar nut - 25 Nm

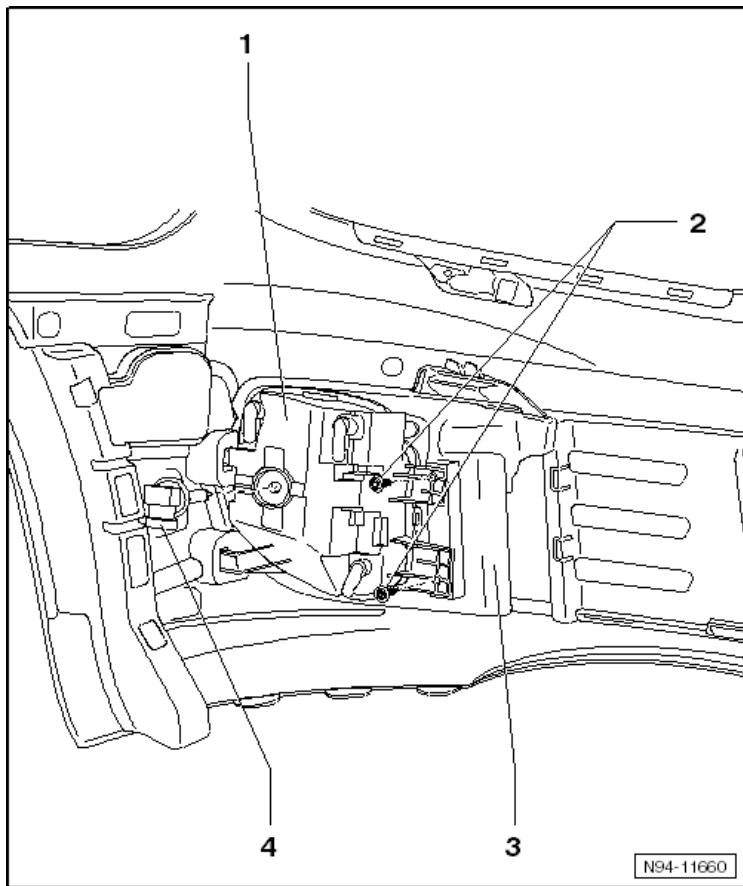
Exterior Lights, Switches

Fog Lamp, Golf Overview



- 1 - Front Bumper Cover
- 2 - Fog Lamp Housing
- 3 - Bolt
 - 2 Nm
- 4 - Ventilation Hose
- 5 - Left Fog Lamp Bulb -L22- Or Right Fog Lamp Bulb -L23- And Left Cornering Lamp Bulb -L148- And Right Cornering Lamp Bulb -L149-
- 6 - Cap

Fog Lamp, GTI Overview



1 - Fog Lamp Housing

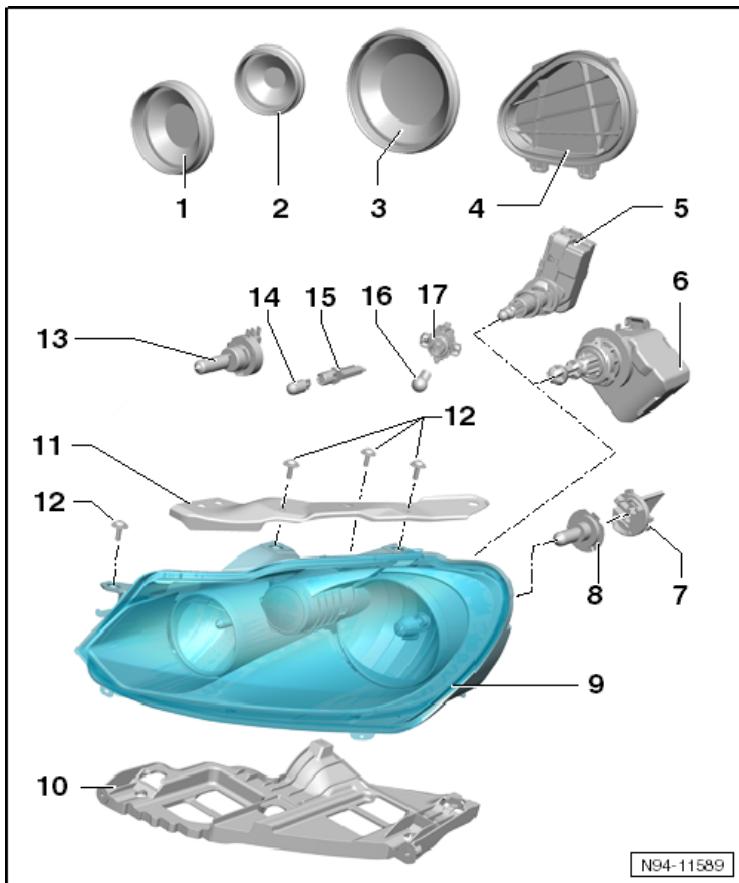
2 - Screws

2 Nm

3 - Front Bumper Cover

4 - Fog Lamp Bulb/Static Cornering Lamp

Halogen Headlamps Overview



1 - Cap

2 - Cap

3 - Cap

4 - Cap

5 - Left Headlamp Beam Adjustment Motor -V48- And Right Headlamp Beam Adjustment Motor -V49-

6 - Left Headlamp Beam Adjustment Motor -V48- And Right Headlamp Beam Adjustment Motor -V49-

7 - Lamp Socket With Grip Piece

8 - Left Low Beam Headlamp -M29- And Right Low Beam Headlamp -M31-

9 - Headlamp

10 - Guide

11 - Carrier, Front End

12 - Screws

5 Nm

M6 x 20

13 - Left High Beam Headlamp and Daytime Running Lamp Bulb And Right

High Beam Headlamp and Daytime Running Lamp Bulb

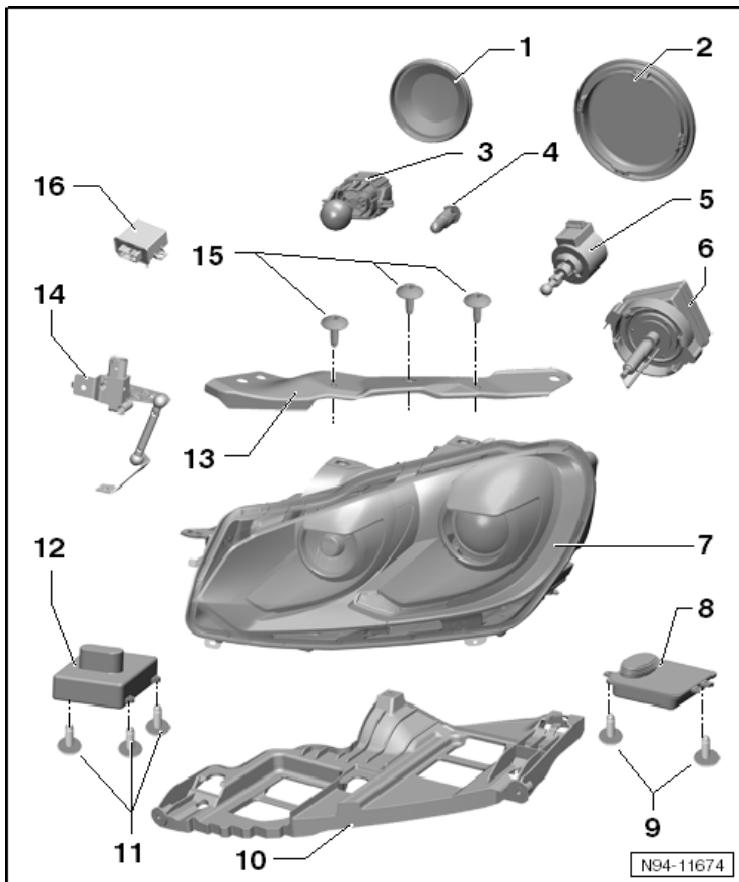
14 - Left Parking Lamp -M1- and Right Parking Lamp -M3-

15 - Lamp Socket With Grip Piece

16 - Left Front Turn Signal Light -M5- and Right Front Turn Signal Light -M7-

17 - Lamp Socket With Grip Piece

HID Headlamp and Cornering Lamp Overview

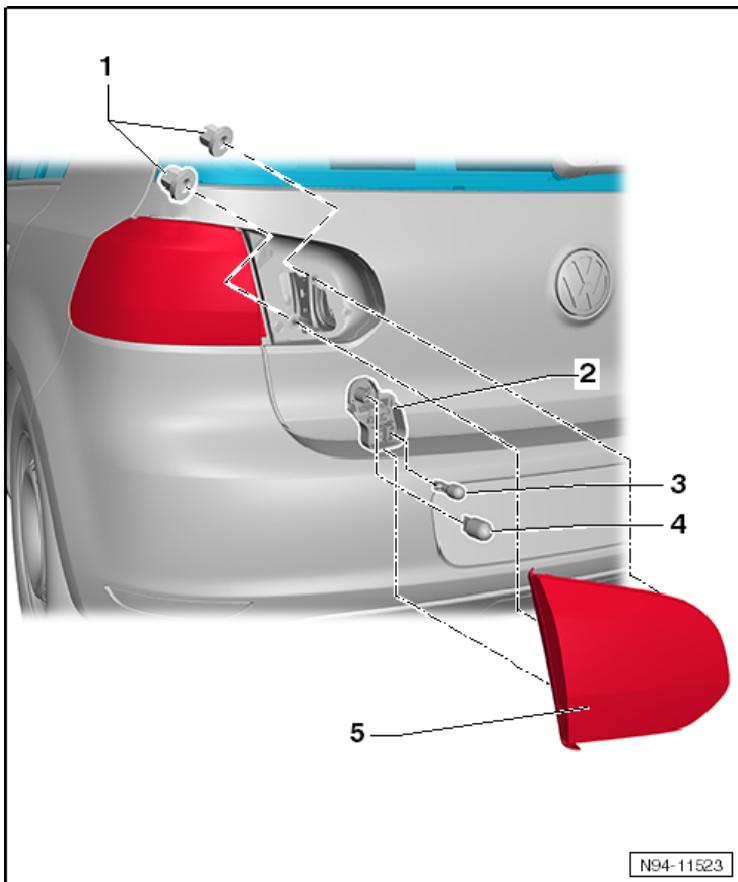


- 1 - Cap
- 2 - Cap
- 3 - Left Front Turn Signal Light -M5- and Right Front Turn Signal Light -M7-
- 4 - Left Parking Lamp -M1- and Right Parking Lamp -M3-
- 5 - Headlamp Range Control Positioning Motor
- 6 - Left High Intensity Gas Discharge (Hid) Lamp -L13- and Right High Intensity Gas Discharge (Hid) Lamp -L14-
- 7 - Headlamp
- 8 - Left High Intensity Gas Discharge (Hid) Lamp Ballast -J426- And Right High Intensity Gas Discharge (Hid) Lamp Ballast -J427-
- 9 - Hid Headlamp Ballast Screws
 - 1.4 Nm
- 10 - Guide
- 11 - Headlamp Power Output Stage Screws
 - 1.4 Nm

- 12 - Left Headlamp Power Output Stage -J667- or Right Headlamp Power Output Stage -J668-**
- 13 - Carrier, Front End**
- 14 - Level Control System Sensor**
- 15 - Screws**
 - 4 Nm
 - M6 X 20

16 - Headlamp Range Control Module

Rear Lid Tail Lamps Overview



N94-11523

1 - Nut

3 Nm

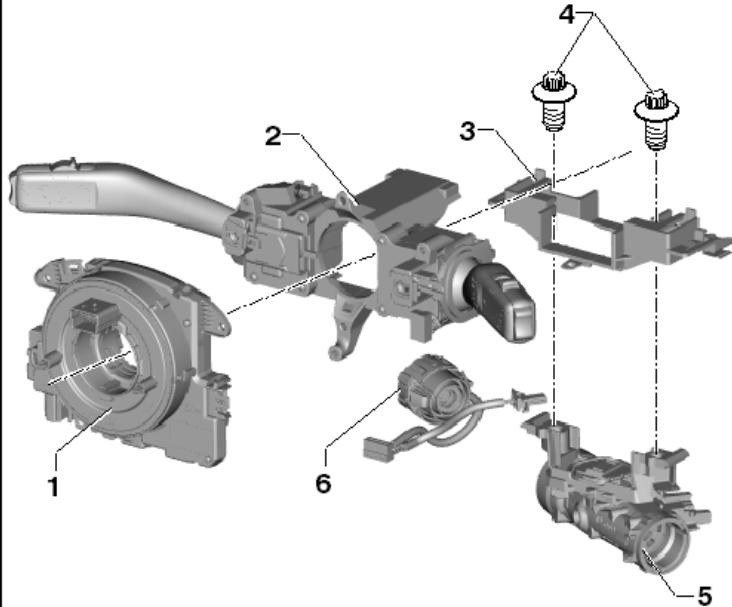
2 - Bolt Holder

3 - Left Tail Lamp -M4- and Right Tail Lamp -M2-

4 - Left Rear Fog Lamp -L46- and Right Rear Fog Lamp -L47- or Left Backup Lamp -M16- and Right Backup Lamp -M17-

5 - Tail Lamp Housing In Rear Lid

Steering Column Switch, Overview



N94-11851

1 - Steering Column Electronic Systems Control Module -J527-

2 - Steering Column Combination Switch -E595-

3 - Base Carrier for Steering Column Switches

4 - Shear Bolts

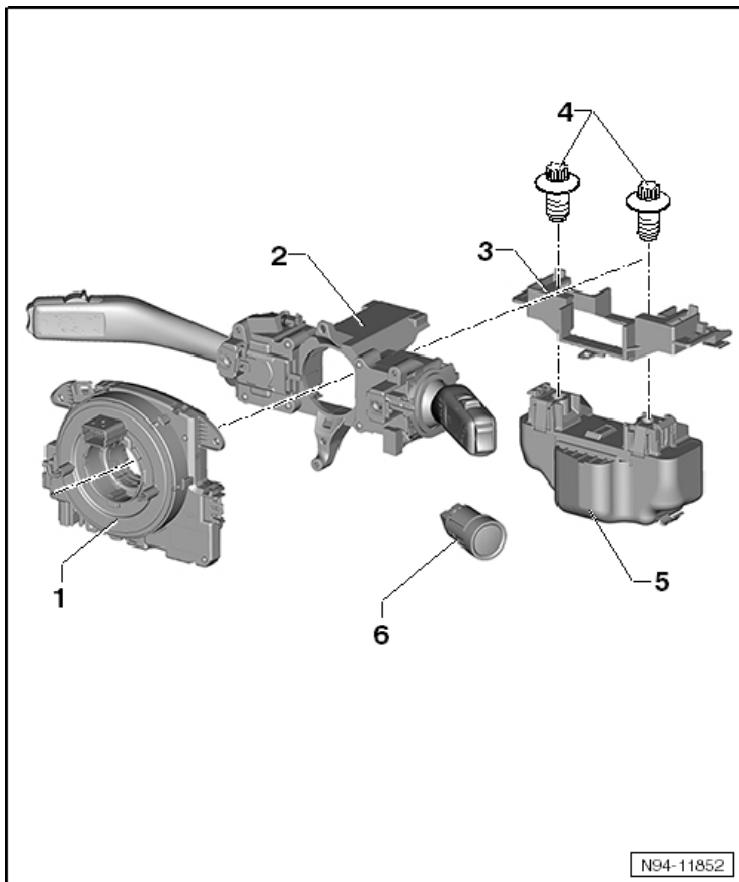
- Break-off torque: approximately 15 Nm
- M8 x 20

5 - Steering Lock Housing

6 - Ignition Switch and Lock Cylinder

Electrical
System

Steering Column Switch, with KESSY, Overview



1 - Steering Column Electronic Systems Control Module -J527-

- 1.5 Nm

2 - Steering Column Combination Switch -E595-

3 - Base Carrier for Steering Column Switches

4 - Shear Bolts

- Break-off torque: approximately 15 Nm
- M8 x 20

5 - Electronic Steering Column Lock Control Module -J764-

6 - Start System Button -E378-

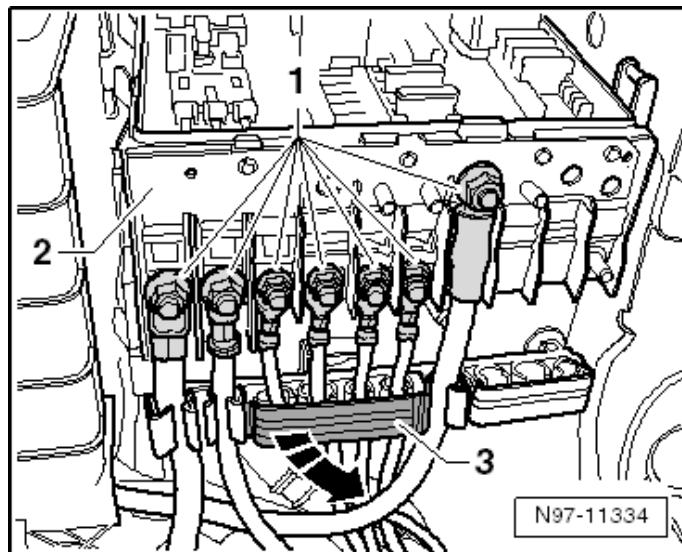
Interior Lights, Switches

Fastener Tightening Specification

Component	Nm
Horn bracket to longitudinal member	20
Left footwell lamp and diagnostic socket to bracket screw	1.5

Wiring

Left E-box in Engine Compartment Fastener Tightening Specifications



Component	Fastener Size	Nm
Central Bolt E-box	-	9
Securing nuts -1-	M5 (width 8)	4
Securing nuts -1-	M6 (width 10)	6

Fastener Tightening Specification

Component	Nm
Instrument panel fuse panel, bolts	4