

2014 Volkswagen Jetta Hybrid 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 x 8.85 = lb-in • Nm x 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 x 0.089 = lb-in • N·cm x 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: $\text{kg}\cdot\text{cm} \times 0.868 = \text{lb}\cdot\text{in}$ • $\text{kg}\cdot\text{cm} \times 9.81 = \text{N}\cdot\text{cm}$

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.

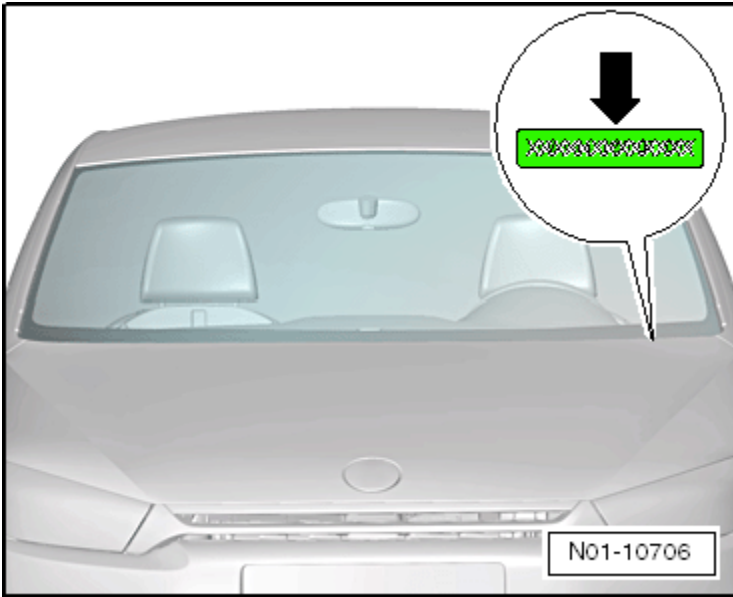
(CAUTIONS cont'd on next page)

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

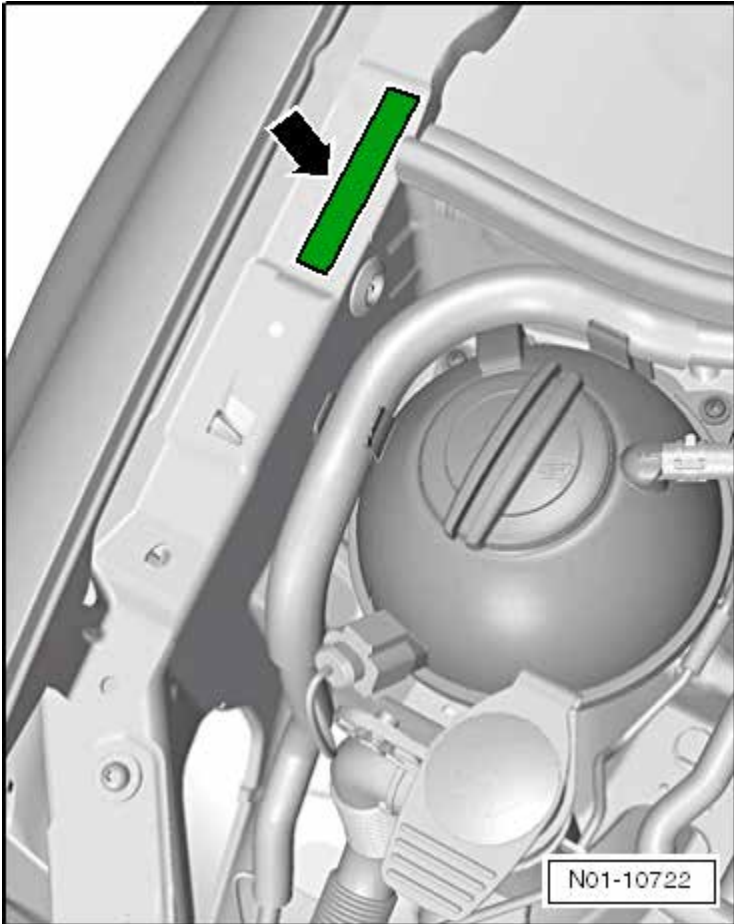
VIN on Lower Edge of Windshield



Vehicle
Identification

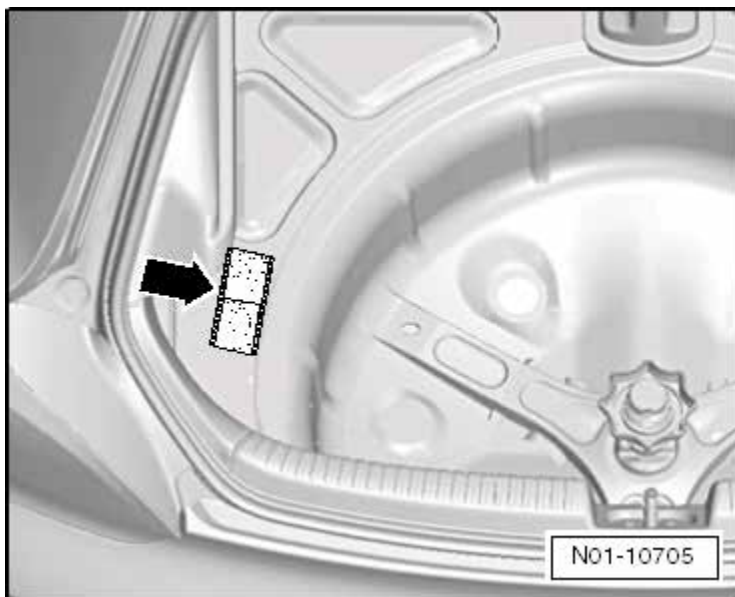
The VIN ➡ is on the left side of the vehicle in the area of the windshield wiper mount. It is visible from outside.

VIN on Longitudinal Member Extension



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

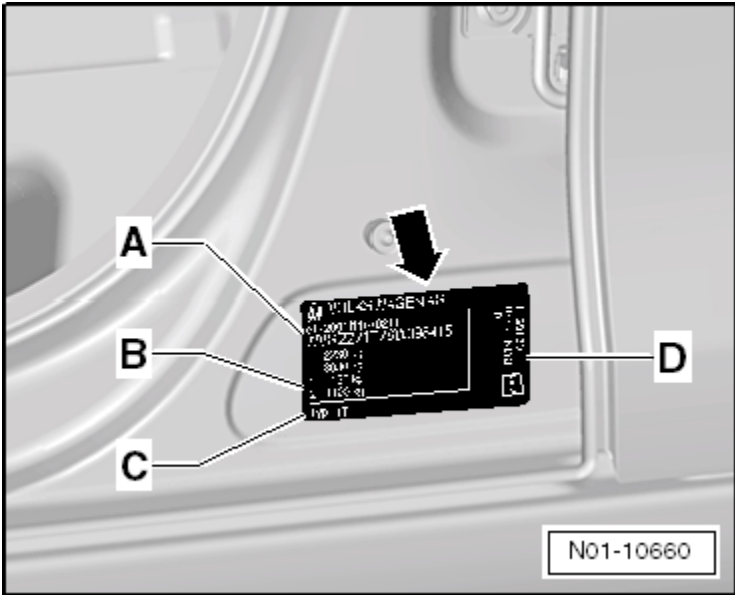
Vehicle Data Label



The vehicle data label ➔ is located in the left rear of vehicle in the spare wheel well. The vehicle data sticker can also be found in the customer's service schedule.

Vehicle
Identification

Type Plate



The type plate ➔ is visible at the bottom of the B-pillar when the left front door is open.

The type plate contains the following vehicle information:

- A – Vehicle Identification Number (VIN)
- B – Variable specifications (axle loads, total permissible weights, permissible towing weights)
- C – Type number
- D – Engine code

VIN Decoder

2014 Volkswagen VIN Decoder (except Routan)

Series:

A CC Sport w/Man Trans, Passat S, Tiguan w/Auto Trans

B CC Sport/Sport+ w/Auto Trans, Eos Komfort/Sport w/Auto Trans, Jetta SE w/Spd Man, Passat SE, Tiguan w/Man Trans

C Golf 4dr w/Spd Manual, Passat SEL, Tiguan w/Man Trans

D Golf 4dr w/Auto Trans, Jetta SE w/Auto Trans, Touareg V6 FSI/TDI R-Line

E Touareg V6 FSI/TDI Hybrid

F Beetle w/Spd Auto Trans, Eos Lux/Exec w/ Auto Trans

G CC V6 Exec w/Auto Trans and 4Motion, GTI 4dr w/Man Trans, Jetta SEL w/Spd Man Trans, CC V6 Exec w/Auto Trans, Beetle 2.5L w/Spd Manual, GTI 4dr w/Auto Trans

H Beetle 1.8T w/Spd Auto Trans, Beetle 2.5L w/Spd Auto Trans

J Beetle 1.8T w/Spd Auto Trans, Beetle 2.5L TDI w/Spd Auto Trans

K Jetta SportWagen w/5 Spd Man Trans

L Jetta SEL/TDI w/Auto Trans

M Jetta SportWagen w/6 Spd Manual

N Golf 4dr w/6 Spd Manual

R Beetle TDI w/Spd Man, CC Exec w/Auto Trans

V Beetle R-Line w/6 Spd Auto Trans

1 Jetta / S w/5 Spd Manual

2 Jetta / S w/Auto Trans

3 Jetta TDI w/6 Spd Man

4 Beetle R-Line w/6 Spd Manual, Jetta GLI w/Auto Trans

5 Beetle Conv. 1.8T w/6 Spd Auto Trans, Beetle Conv. 2.5L TDI w/6 Spd Auto Trans, Jetta GLI w/6 Spd Manual

6 Beetle Conv. TDI w/6 Spd Man Trans, Jetta Hybrid w/Auto Trans

7 Beetle Conv. R-Line w/6 Spd Auto Trans

8 Beetle Conv. R-Line w/6 Spd Man Trans

Country of origin	Manufacturer	Vehicle Type	Series	Engine	Restraint system	Model (7 & 8)	Check digit	Model year	Assembly plant	Sequential production number (position 12 - 17)						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
W	V	G	C	V	3	A	X	8	E	W	5	3	2	0	1	4

E = 2014

Calculate per NHTSA Code

2014

WWV = Europe - Pass. Car
VW = USA - Pass. Car
3W = Mexico - Pass. Car
WG = Europe - S.U.V.

A3** = Passat
AR (FP) = Eos
AJ (FR)** = Golf, GTI, Jetta, Jetta SportWagen
AN (GC) = CC
AT = Beetle, Beetle Conv., Tiguan
AX (SN) = Touareg
BP (FP) = Touareg

C = Chattanooga **P** = Mosel
D = Bratislava **V** = Portugal
E = Emden **W** = Wolfsburg
M = Mexico

A = 5 cyl 2.5L 170hp (CBTA-M) Golf
B = 5 cyl 2.5L 170hp (CBUA-M-PZE/V) Golf
D = 4 cyl 2.0L 200hp (CBFA-PZE/V) GTI
F = VR6 3.6L 280hp (CGFA) Touareg
G = 6 cyl 3.0L 330hp + 34 Kw (CGFA) Touareg Hybrid
H = 5 cyl 2.5L 170hp (CBTA-M) Passat
K = 4 cyl 2.0L 150hp (CBPA) Jetta
L = 4 cyl 2.0L TDI 140hp (CJAA) Beetle, Beetle Convertible, Jetta, Jetta SportWagen
M = 4 cyl 2.0L TDI 140hp (CJAA) Golf
N = VR6 3.6L 280hp (CDVB) Passat
N = 4 cyl 2.0L 200hp (CCTA) CC
N = 4 cyl 2.0L TDI 140hp (CKRA) Passat
Ph = 4 cyl 2.0L 200hp (CBFA-PZE/V) CC
Pr = 5 cyl 2.5L 170hp (CBUA-M-PZE/V) Beetle, Beetle Convertible, Jetta, Jetta SportWagen, Passat
Pr = V6 3.0L TDI 240hp (CNRB) Touareg
S = 4 cyl 1.8L 170hp (CPKA) Passat
S = 4 cyl 2.0L 210hp (CPLA) Beetle, Beetle Convertible, Jetta GLI
T = 4 cyl 1.8L 170hp (CPRA-PZE/V) Passat
T = 4 cyl 2.0L 210hp (CPPA-PZE/V) CC
U = VR6 3.6L 280hp (CNNA) CC
V = 4 cyl 2.0L 200hp (CCTA) Tiguan
V = 4 cyl 2.0L 200hp (CBFA-SULEV II**) Eos
X = 5 cyl 2.5L 170hp (CBTA-M) Beetle, Beetle Convertible, Jetta, Jetta SportWagen
0 = 4 cyl 1.8L 170hp (CPKA) Beetle, Beetle Convertible, Jetta
1 = 4 cyl 1.8L 170hp (CPRA-PZE/V) Beetle, Beetle Convertible, Jetta
3 = 4 cyl 1.4L 150hp + 28 Kw (CNLA-PZE/V) Jetta Hybrid

**** PZEV** = Partial Zero Emissions Vehicle

**** SULEV II** = Super Low Emissions Vehicle

***** 7** position US model characters are alphabetic beginning with 2010 MY. ROW model characters, where different, are listed in parenthesis (), for reference only.

****** Jetta and Jetta SportWagen models are identified by WMI code of VW. GTI and Golf models are identified by WMI code of WWW.**

Vehicle Identification

October 30, 2013 (Rev 4)

2014 Restraint System:

- 1** = Active-DirPass - Front Air Bag - DirPass
- 3** (**Tiguan**) = Advanced Front Air Bags + Side Impact Air Bags - Front
- + Side Curtain Air Bags + 4 Star Crash Rated
- 5** (**Jetta Only**) or **7** (**Jetta SportWagen/CPassat**) = Advanced Front Air Bags
- + Side Impact Air Bags - Fr. + Side Curtain Air Bags
- 7** = (**Beetle/Beetle Conv**) Advanced Front Air Bags + Side Impact Air Bags - Front + 3 Star Crash Rated
- 8** (**Eos Only**) = Advanced Front Air Bags + Side Impact Air Bags - Front
- + Knee Air Bags - Front + Side Curtain Air Bags
- 9** (**Touareg**) = Advanced Front Air Bags + Side Impact Air Bags - Front
- + Side Curtain Air Bags

M = 1991
N = 1992
P = 1993
R = 1994
S = 1995
T = 1996
V = 1997
W = 1998
X = 1999
Y = 2000
1 = 2001
2 = 2002
3 = 2003
4 = 2004
5 = 2005
6 = 2006
7 = 2007
8 = 2008
9 = 2009
A = 2010
B = 2011
C = 2012
D = 2013
E = 2014

1	Country of origin
2	Manufacturer
3	Vehicle Type
4	Series
5	Engine
6	Restraint system
7	Model
8	(position 7 & 8)
9	Check digit
10	Model year
11	Assembly plant
12	Sequential production number (position 12 - 17)
13	
14	
15	
16	
17	

Calculate per NHTSA Code

Sequential Product Number

SALES CODES

Engine Codes

CNLA	1.4L 4-cylinder 4V
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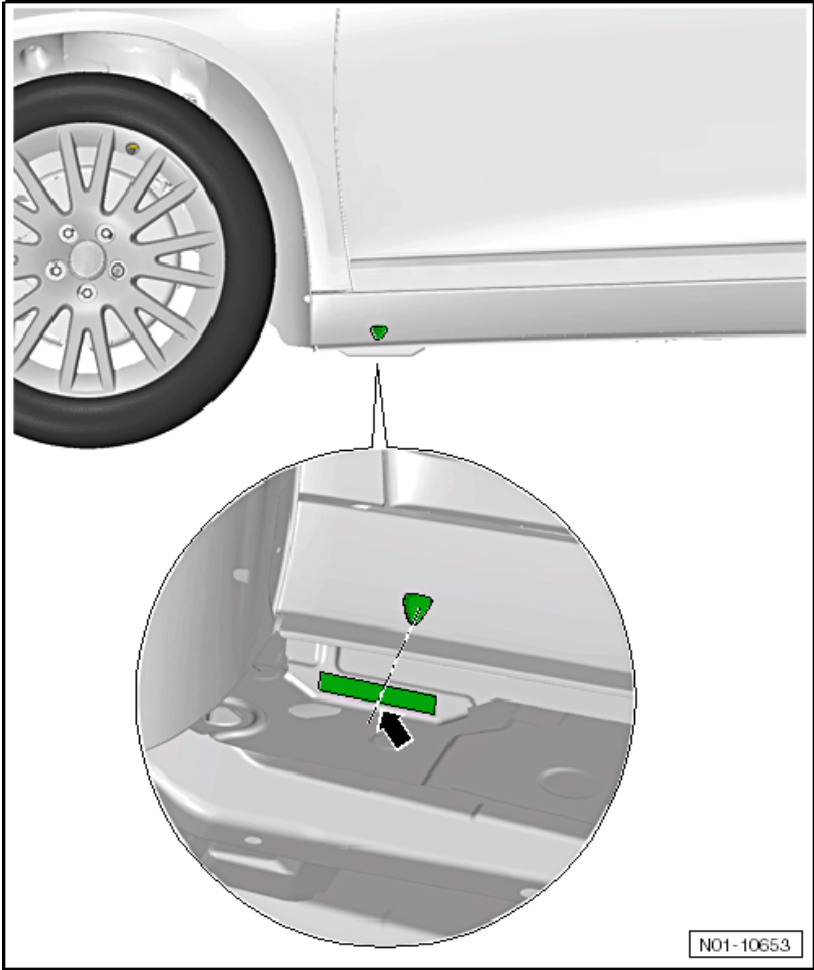
Transmission Codes

0CG	7-speed direct shift
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VEHICLE LIFTING

Hoist and Jack Mounting Points

Front

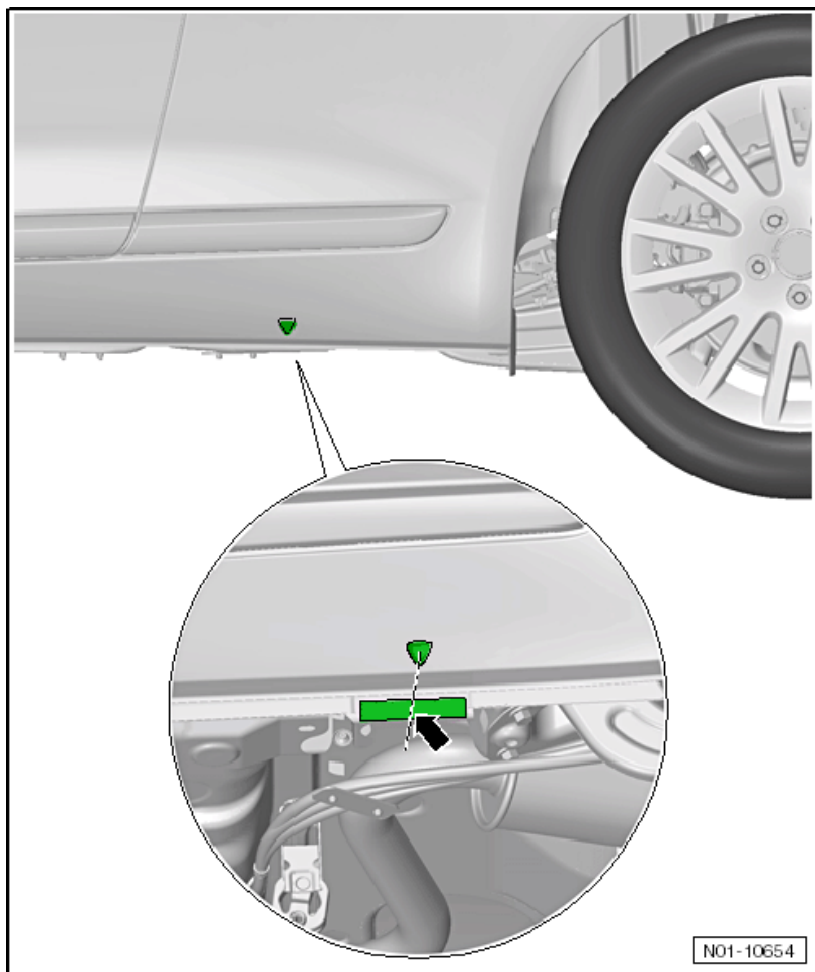


Position the support plate in the side member vertical reinforcement area ➡.

Sales
Codes

Vehicle
Lifting

Rear



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

BRAKE SYSTEM

General Information

Front Brakes

Engine Version	PR number	Front Wheel Brake
1.4l 110 kW	1ZA/1ZB/1LV	FN 3 (16")
2.0L 85 kW	1ZM/1ZQ	FS III (15")
2.5L 125 kW	1ZP/1ZE	FN 3 (15")
2.0L 103 kW TDI	1ZP/1ZE	FN 3 (15")
2.0L 147 kW	1ZA/1ZB/1LV	FN 3 (16")

Rear Brakes, Torsion Beam Rear Suspension

Engine Version	PR number	Rear Wheel Brake
2.5L 125 kW	1KS/1KT	Bosch
2.0 103 kW TDI		
2.5l 125 kW ¹⁾	1KG	TB 230 x 32
2.0L 85 kW	1KG	TB 230 x 32

¹⁾ SE version only

Rear Brakes, Multi-link Rear Axle

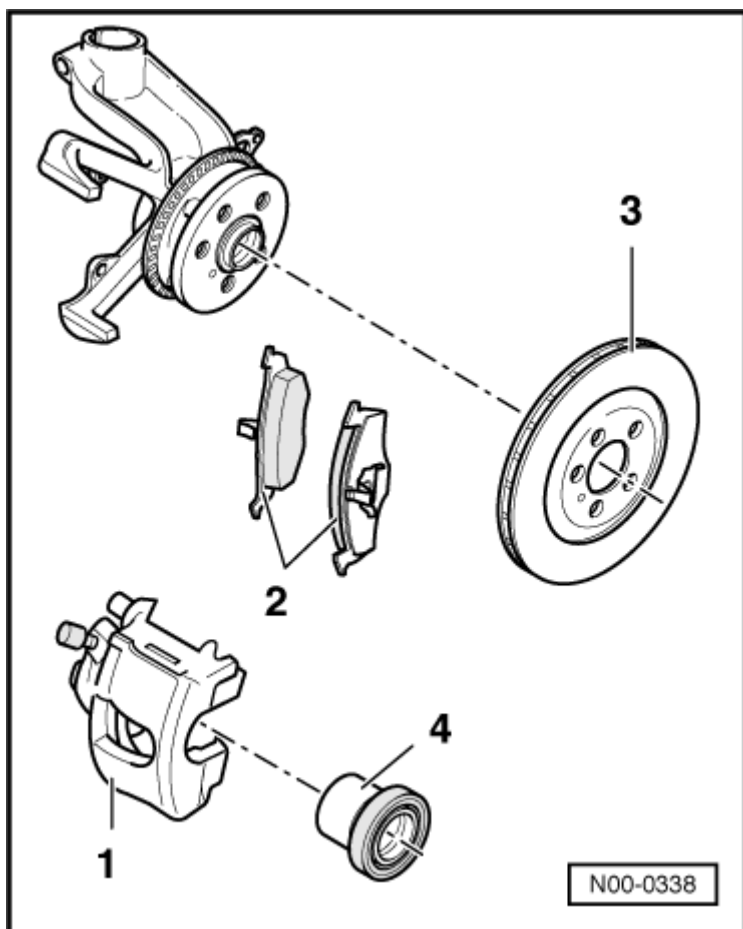
Engine Version	PR number	Rear Wheel Brake
1.4l 110 kW	1KS/1KT	Bosch
2.0L 147 kW	1KS/1KT	Bosch

Master Cylinder and Brake Booster

Brake master cylinder ¹⁾	Diameter in mm	22.2
Brake master cylinder ¹⁾	Diameter in mm	23.81
Brake booster	Diameter in inches	10

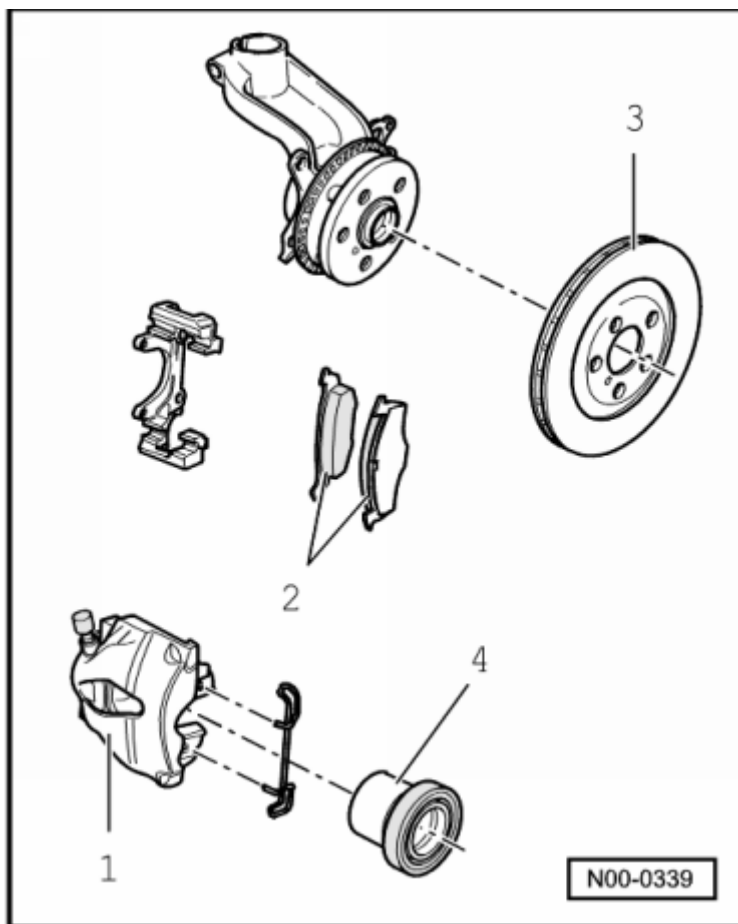
¹⁾ Allocation, refer to Electronic Parts Catalog (ETKA).

Front Brakes, FS III



Item	PR Number	1ZM/1ZQ	
1	Brake caliper	FS III (15")	
2	Brake pad, thickness without backing plate	mm	14
3	Brake rotor	Diameter in mm	280
	Brake rotor, thickness	mm	22
4	Brake caliper, piston	Diameter in mm	54

Front Brakes, FN 3

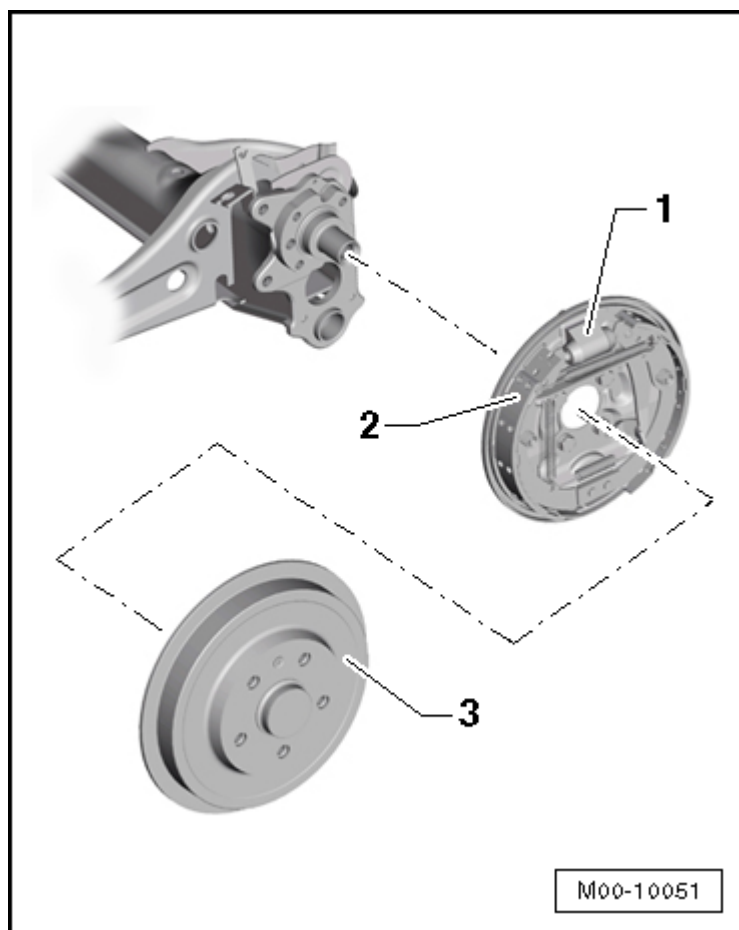


Item	PR number		1ZE/1ZP
1	Brake caliper		FN 3 (15")
2	Brake pad, thickness without backing plate	mm	14
3	Brake rotor	Diameter in mm	288
	Brake rotor, thickness	mm	25
4	Brake caliper, piston	Diameter in mm	54

Front Brakes, FN 3 (cont'd)

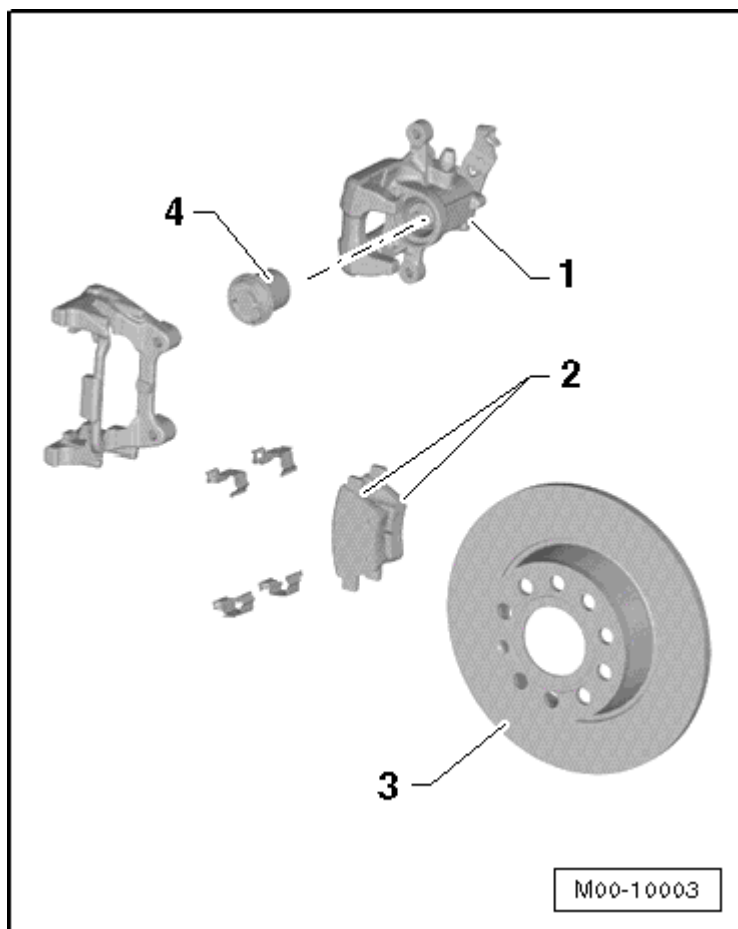
Item	PR number	1LV/1ZA/1ZB
1	Brake caliper	FN 3 (16")
2	Brake pad, thickness	mm 14
	Brake pad, wear limit without back plate	mm 2
3	Brake rotor	Diameter in mm 312
	Brake rotor thickness	mm 25
	Brake rotor, wear limit	mm 22
4	Brake caliper, piston	Diameter in mm 54

Rear Drum Brakes



Item	PR number		1KG
1	Wheel brake cylinder	mm	20
2	Brake pad, width	mm	32
	Brake pad, thickness	mm	5
	Brake pad, minimum thickness	mm	2.5
3	Brake drum	Diameter in mm	230
	Brake drum, wear limit	Diameter in mm	231.5

Rear Disc Brakes



Item	PR number	1KS/1KT	
1	Brake caliper	Bosch	
2	Brake pad, thickness without backing plate	mm	12
3	Brake rotor	Diameter in mm	272
	Brake rotor, thickness	mm	10
4	Brake caliper, piston	Diameter in mm	38

10 - Bracket

11 - ABS Hydraulic Unit -N55-

12 - Bolt

5.5 Nm

13 - ABS Control Module -J104-

14 - Brake Line

14 Nm

15 - Brake Line

14 Nm

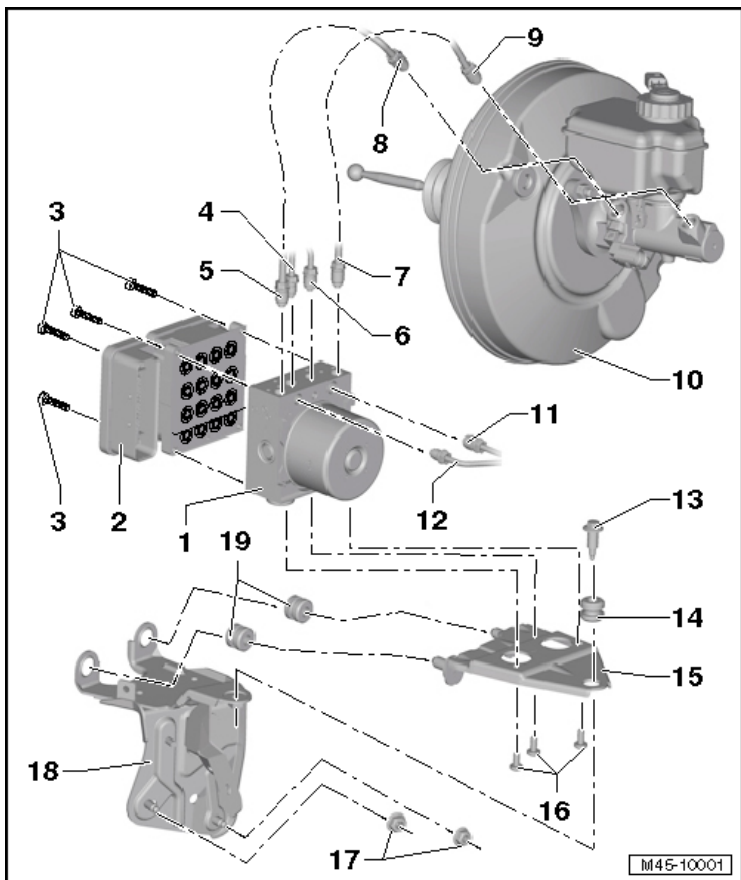
16 - Brake Line

14 Nm

17 - Brake Line

14 Nm

ABS Mark 60 EC (ABS/EDS/ASR/ESP) Overview



- 1 - ABS Hydraulic Unit -N55-
- 2 - ABS Control Module -J104-
- 3 - Brake Booster with Master Brake Cylinder
- 4 - Bolt
 - 2 Nm +/- 0.8 Nm
 - Always replace if removed
- 5 - Brake Line
 - 14 Nm
- 6 - Brake Line
 - 14 Nm
- 7 - Brake Line
 - 14 Nm
- 8 - Brake Line
 - 14 Nm
- 9 - Brake Line
 - 14 Nm

10 - Brake Booster with Master Brake Cylinder

11 - Brake Line

14 Nm

12 - Brake Line

14 Nm

13 - Hex Bolt

8 Nm

14 - Rubber Insulation

15 - Bracket

16 - Bolt

8 Nm

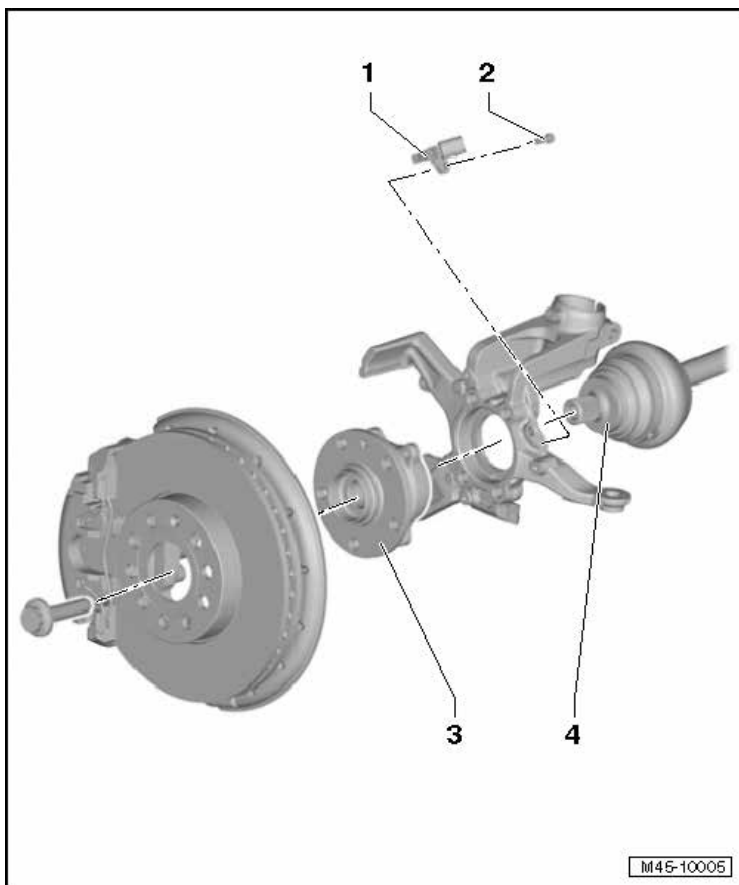
17 - Nut

8 Nm

18 - Bracket

19 - Rubber Insulation

Right Front ABS Wheel Speed Sensor -G45-/Left Front ABS Wheel Speed Sensor -G47- Overview



1 - Right Front ABS Wheel Speed Sensor -G45-/ Left Front ABS Wheel Speed Sensor -G47-

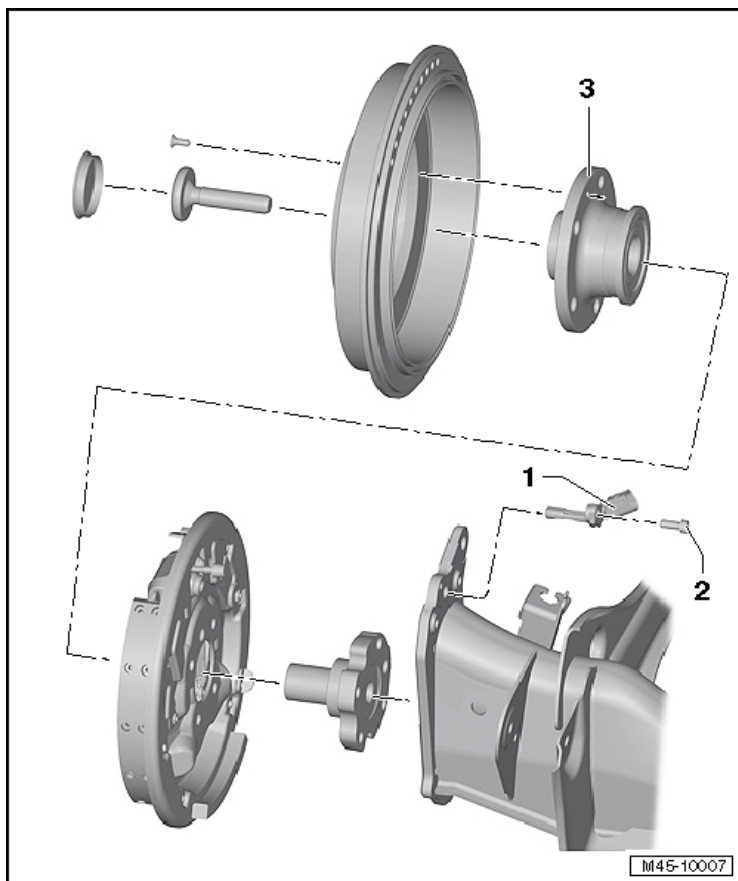
2 - Bolt

□ 8 Nm

3 - Wheel Bearing Unit

4 - Drive Axle

Right Rear ABS Wheel Speed Sensor -G44-/Left Rear ABS Wheel Speed Sensor -G46-, Twist Beam Rear Suspension and Drum Brakes Overview



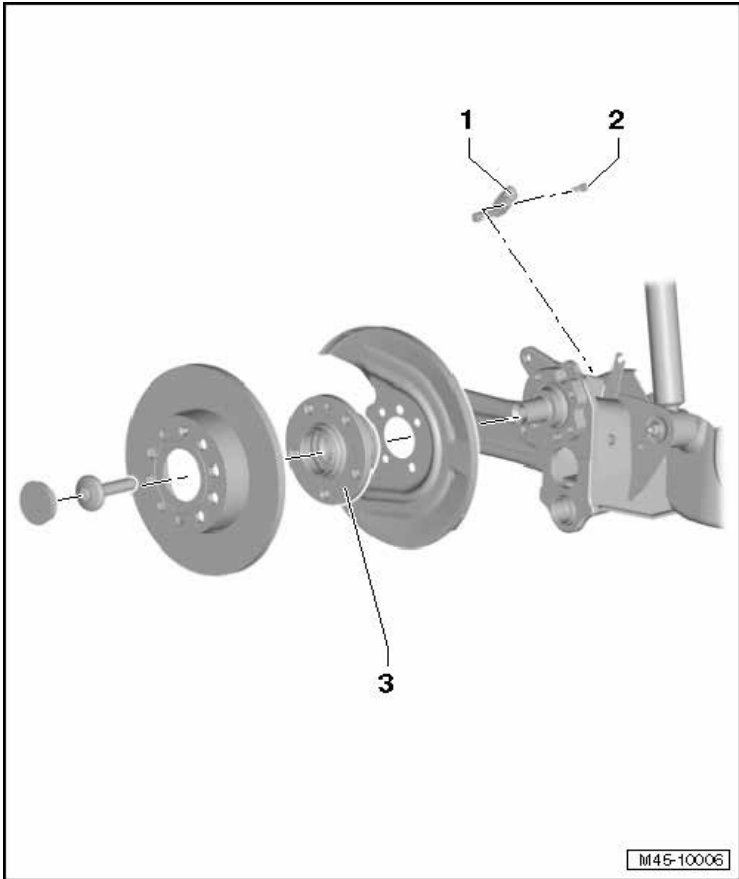
1 - Right Rear ABS Wheel Speed Sensor -G44-/ Left Rear ABS Wheel Speed Sensor -G46-

2 - Bolt

□ 8 Nm

3 - Wheel Bearing Unit

Right Rear ABS Wheel Speed Sensor -G44-/Left Rear ABS Wheel Speed Sensor -G46-, Twist Beam Rear Suspension and Disc Brakes Overview



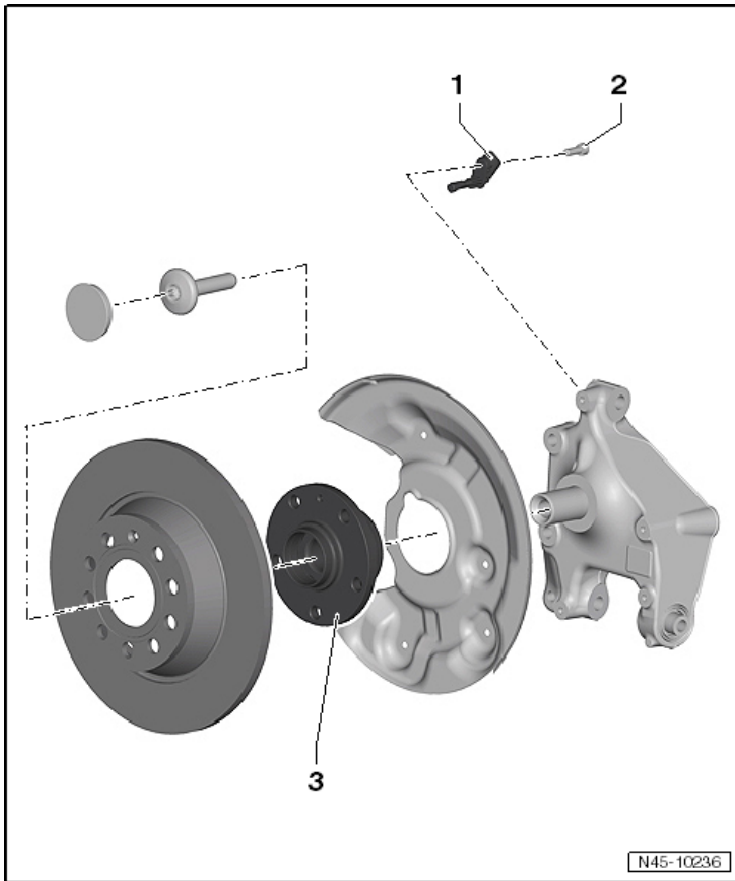
1 - Right Rear ABS Wheel Speed Sensor -G44-/ Left Rear ABS Wheel Speed Sensor -G46-

2 - Bolt

□ 8 Nm

3 - Wheel Bearing Unit

**Right Rear ABS Wheel Speed Sensor
-G44-/Left Rear ABS Wheel Speed Sensor
-G46, Multi-Link Rear Axle Overview**



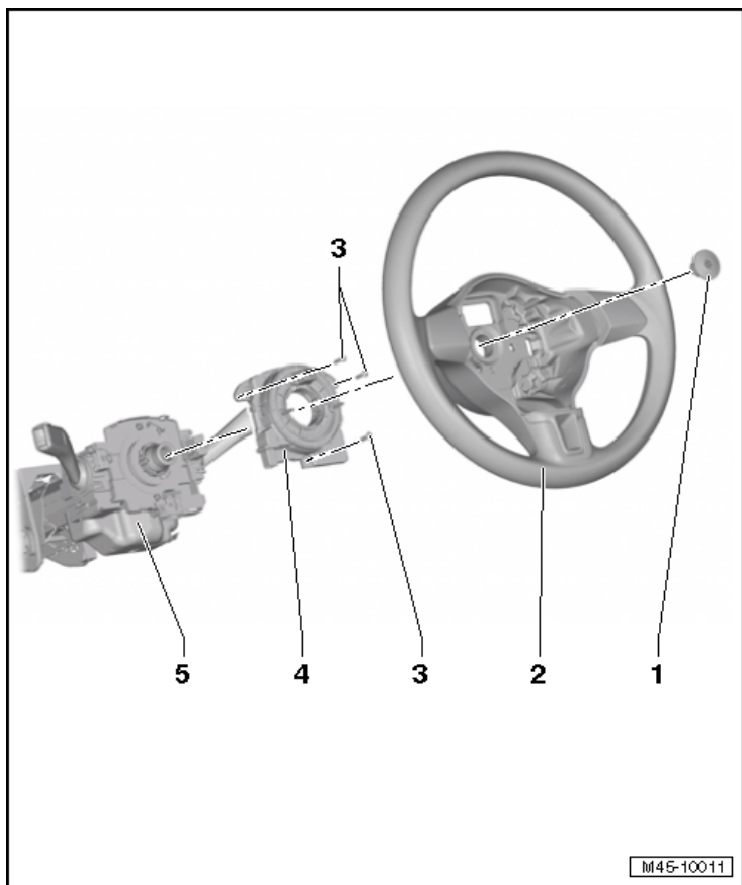
1 - Right Rear ABS Wheel Speed Sensor -G44-/ Left Rear ABS Wheel Speed Sensor -G46-

2 - Bolt

□ 8 Nm

3 - Wheel Bearing Unit

Steering Angle Sensor -G85-, on the Steering Column Overview



1 - Bolt

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

2 - Steering Wheel

3 - Bolt

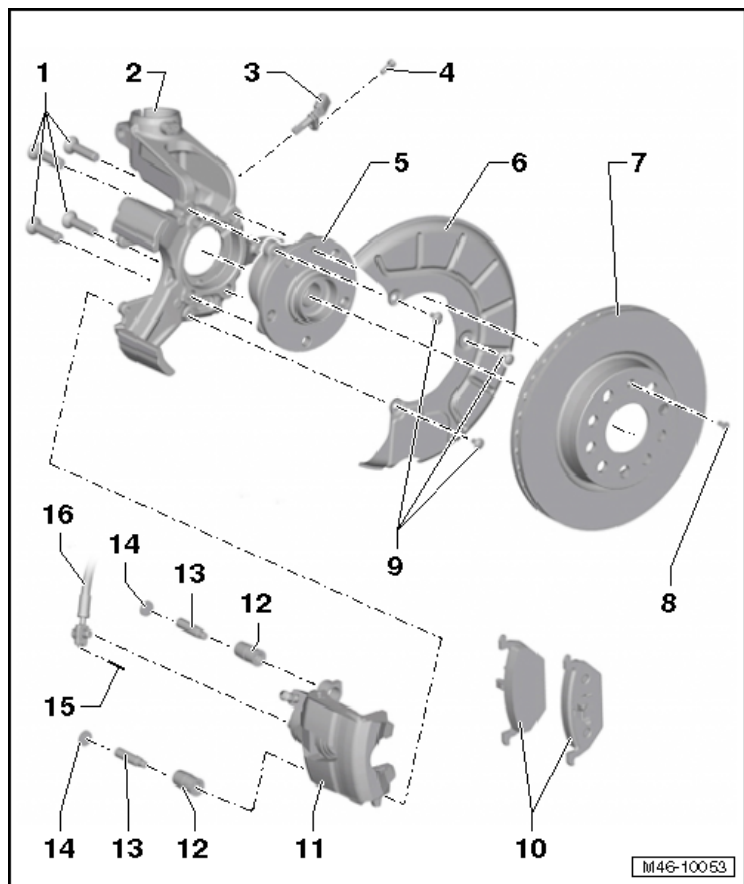
- 1.5 Nm

4 - Steering Angle Sensor -G85-

5 - Steering Column

Mechanical Components

Front Brakes Overview, FS III without Brake Pad Wear Indicator



1 - Bolt

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

2 - Wheel Bearing Housing

3 - Right Front ABS Wheel Speed Sensor -G45-/ Left Front ABS Wheel Speed Sensor -G47-

4 - Bolt

- 8 Nm

5 - Wheel bearing unit

6 - Cover Plate

7 - Brake Rotor

8 - Bolt

- 4 Nm

9 - Bolt

12 Nm

10 - Brake Pads

11 - Brake Caliper

12 - Bearing Bushing

13 - Guide Pins

30 Nm

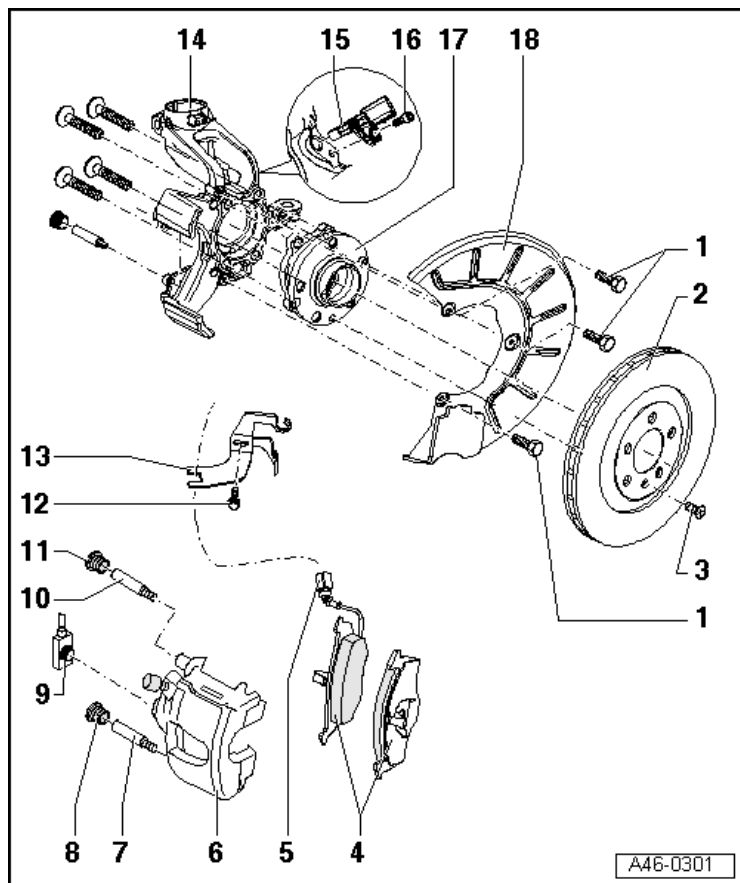
14 - Cap

15 - Adapter Sleeve

16 - Brake Hose with Ring Connection and Banjo Fitting

35 Nm

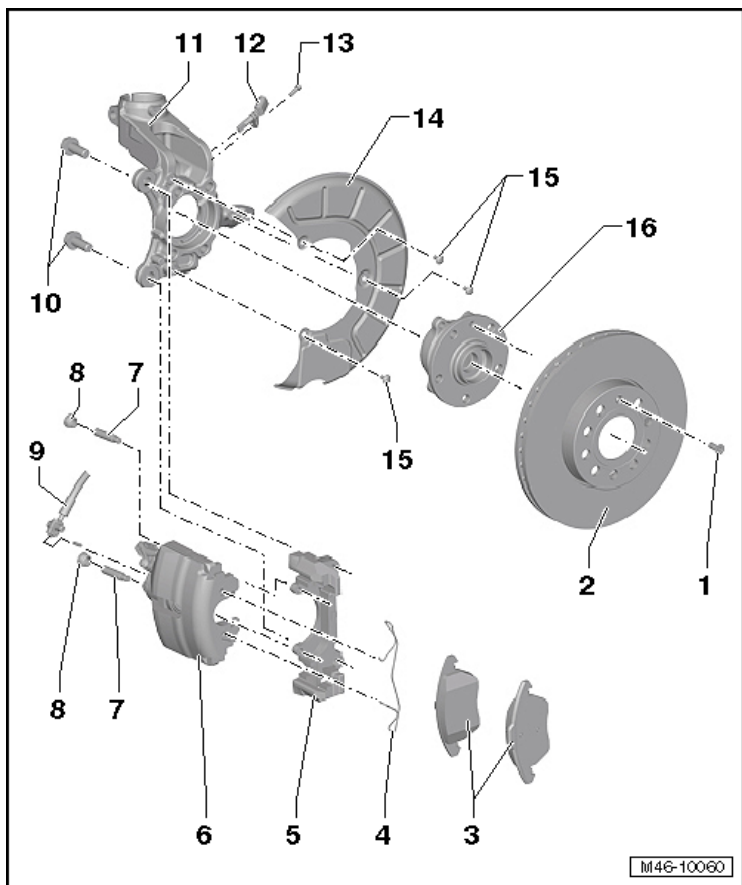
Front Brakes Overview, FS III with Brake Pad Wear Indicator



- 1 - Bolt**
□ 12 Nm
- 2 - Brake Rotor**
- 3 - Bolt**
□ 4 Nm
- 4 - Brake Pads**
- 5 - Harness Connector**
- 6 - Brake Caliper**
- 7 - Guide Pins**
□ 30 Nm
- 8 - Cap**
- 9 - Brake Hose with Ring Connection and Banjo Fitting**
□ 35 Nm
- 10 - Guide Pins**
□ 30 Nm

- 11 - Cap**
- 12 - Bolt**
- 13 - Bracket**
- 14 - Wheel Bearing Housing**
- 15 - Right Front ABS Wheel Speed Sensor -G45-/ Left Front ABS Wheel Speed Sensor -G47-**
- 16 - Bolt**
 - 8 Nm
- 17 - Wheel Bearing/Wheel Bearing Unit**
- 18 - Cover Plate**

Front Brakes Overview, FN 3 15/16 inch, without Brake Pad Wear Indicator



1 - Bolt

4 Nm

2 - Brake Rotor

3 - Brake Pads

4 - Spring

5 - Brake Carrier

6 - Brake Caliper

7 - Guide Pins

30 Nm

8 - Cap

9 - Brake Hose with Ring Connection and Banjo Fitting

35 Nm

10 - Bolt

- 200 Nm
- Clean if using again

11 - Wheel Bearing Housing

12 - Right Front ABS Wheel Speed Sensor -G45-/ Left Front ABS Wheel Speed Sensor -G47-

13 - Bolt

- 8 Nm

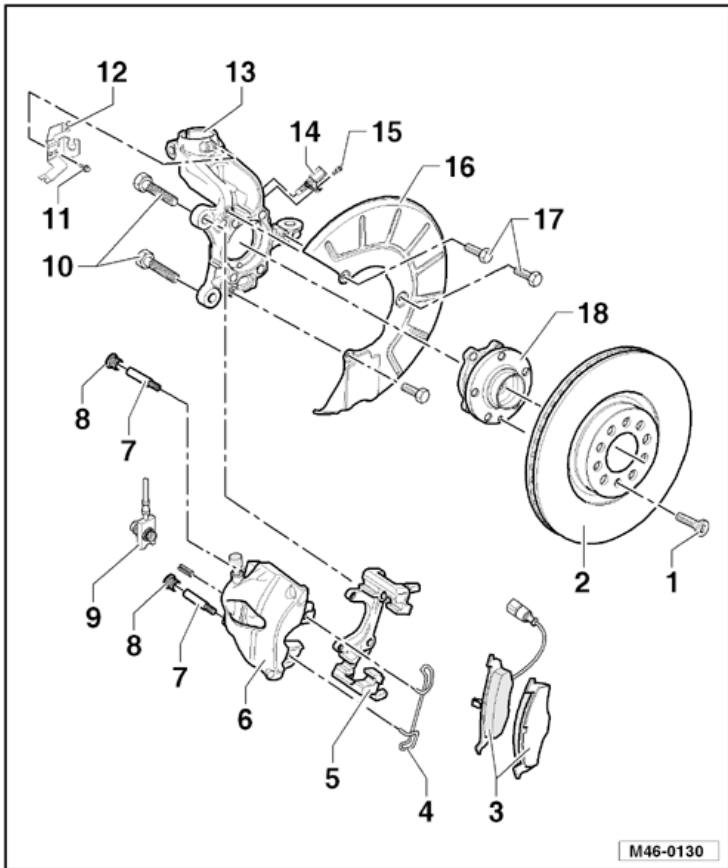
14 - Cover Plate

15 - Bolt

- 12 Nm

16 - Wheel Bearing Unit

Front Brakes Overview, FN 3 15/16 inch with Brake Pad Wear Indicator



1 - Bolt

- 4 Nm

2 - Brake Rotor

3 - Brake Pads

4 - Spring

5 - Brake Carrier

6 - Brake Caliper

7 - Guide Pins

- 30 Nm

8 - Cap

9 - Brake Hose with Ring Connection and Banjo Fitting

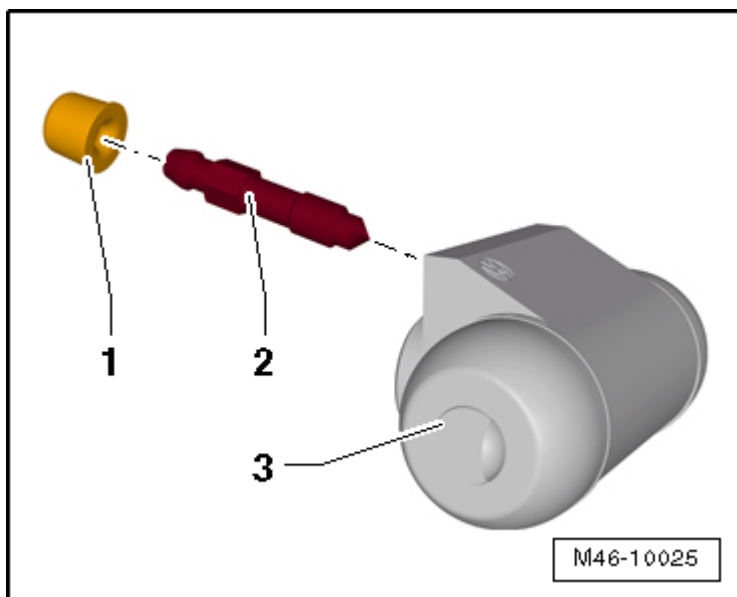
- 35 Nm

10 - Bolt

- 200 Nm
- Clean if using again

- 11 - Bolt**
- 12 - Bracket**
- 13 - Wheel Bearing Housing**
- 14 - Right Front ABS Wheel Speed Sensor -G45-/ Left Front ABS Wheel Speed Sensor -G47-**
- 15 - Bolt**
 - 8 Nm
- 16 - Cover Plate**
- 17 - Bolt**
 - 12 Nm
- 18 - Wheel Bearing/Wheel Bearing Unit**

Brake Cylinder Overview



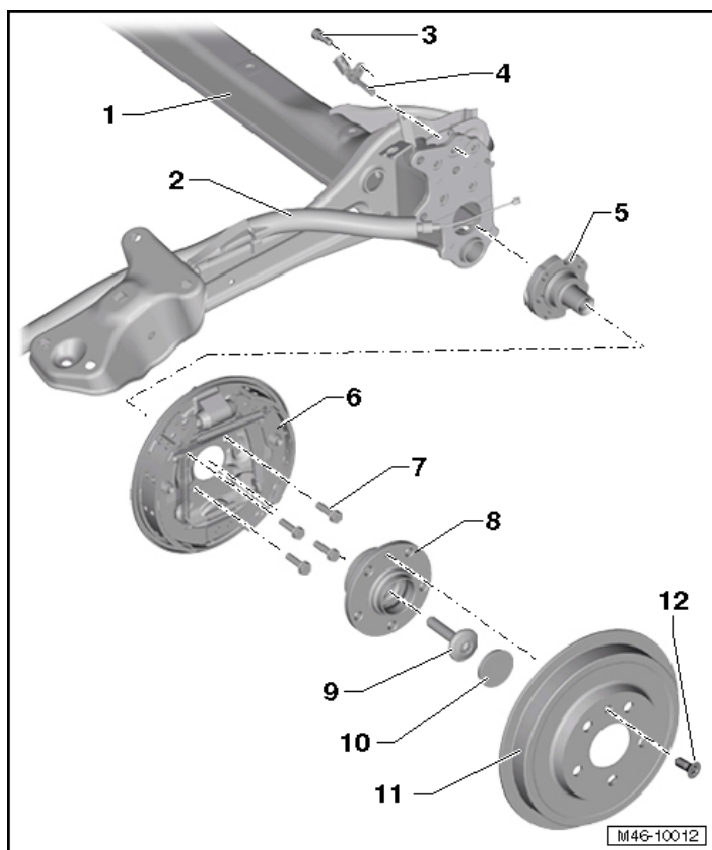
1 - Dust Cap

2 - Bleed Valve

□ 8 Nm

3 - Wheel Brake Cylinder

Drum Brakes Overview



1 - Axle Beam

2 - Parking Brake Cable

3 - Bolt

8 Nm

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

5 - Stub Axle

6 - Brake Carrier with Brake Shoes

7 - Bolt

30 Nm + 90° turn

Always replace if removed.

8 - Wheel bearing unit

9 - Bolt

Always replace if removed

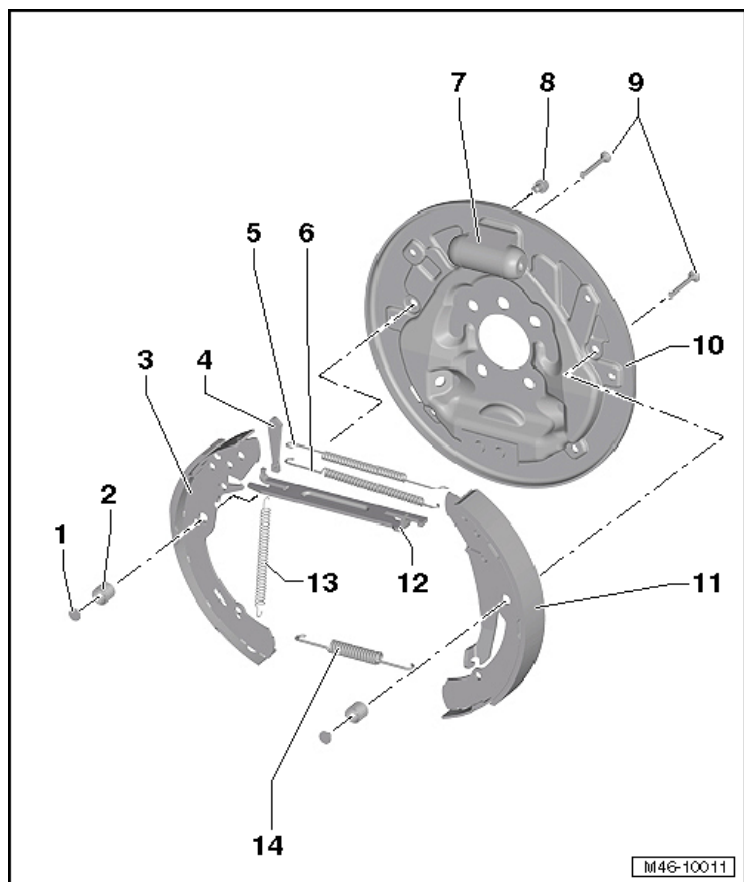
10 - Cover

11 - Brake Drum

12 - Bolt

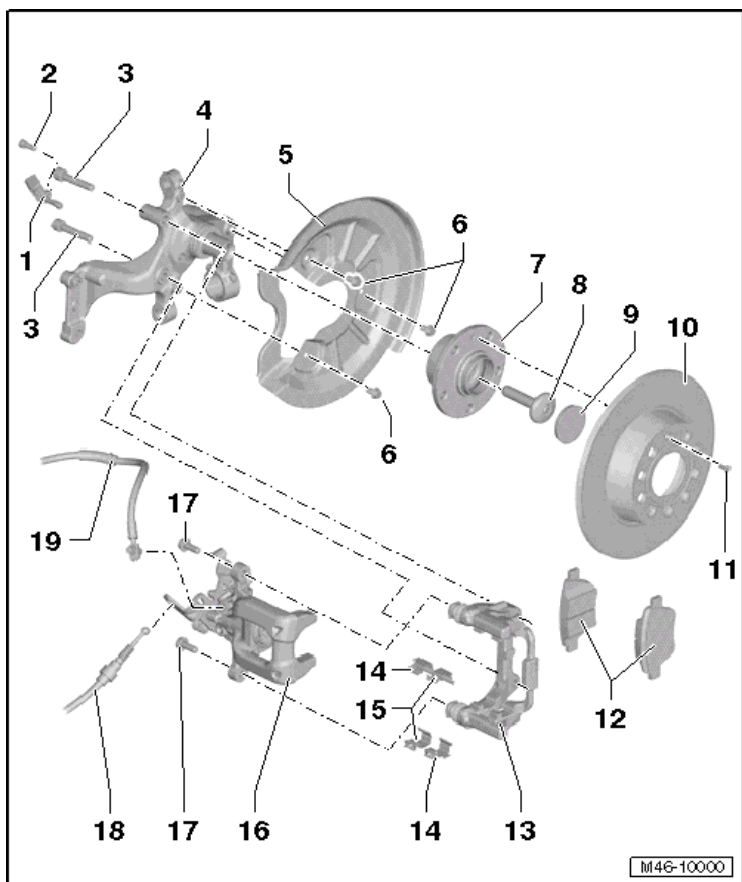
8 Nm

Drum Brakes Assembly Overview



- 1 - Spring Plate
- 2 - Pressure Spring
- 3 - Brake Shoe
- 4 - Wedge
- 5 - Upper Return Spring
- 6 - Contact Spring
- 7 - Wheel Brake Cylinder
- 8 - Bolt
 - 8 Nm
- 9 - Spring Pin
- 10 - Brake Carrier
- 11 - Brake Shoe with Parking Brake Lever
- 12 - Pressure Rod
- 13 - Tension Spring
- 14 - Lower Return Spring

Multi-link Rear Axle Overview (Bosch ZOH 38 Brakes)



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

2 - Bolt

- 8 Nm

3 - Bolt

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

4 - Axle Beam

5 - Brake Cover Plate

6 - Bolt

- 12 Nm
- M6 x 12

7 - Wheel Bearing Unit

8 - Bolt

- Always replace if removed

9 - Cover

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

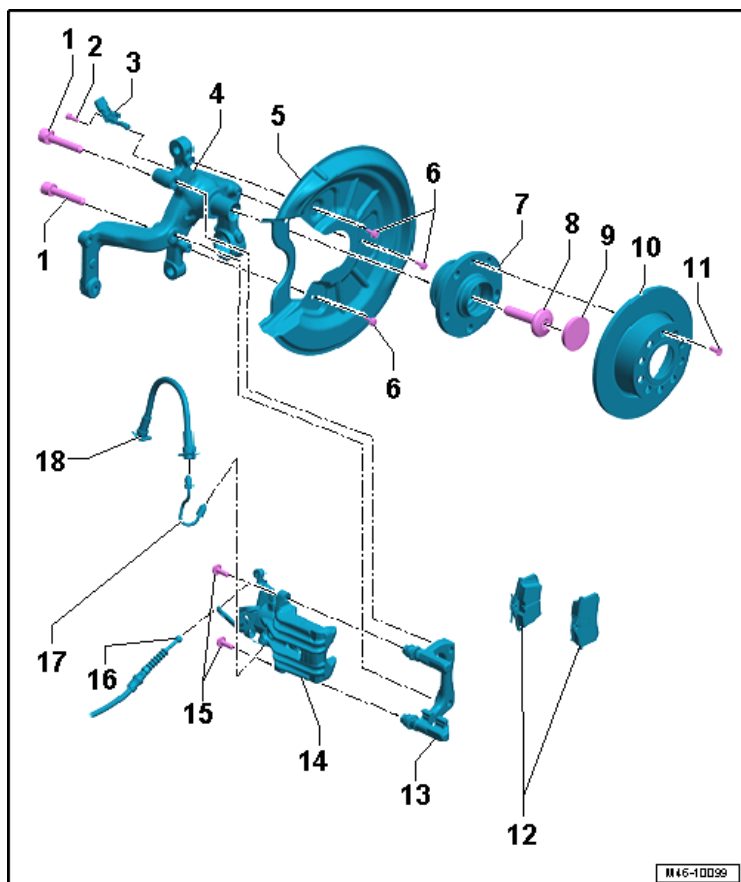
- 35 Nm
- Always replace if removed

18 - Parking Brake Cable

19 - Brake Hose

- 35 Nm

Multi-Link Rear Axle Overview (CI 38 Brakes)



1 - Bolt

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

2 - Bolt

- 8 Nm

3 - Rear ABS Wheel Speed Sensor

4 - Axle Beam

5 - Brake Cover Plate

6 - Bolt

- 12 Nm
- M6 x 12

7 - Wheel Bearing Unit

8 - Bolt

- Always replace if removed

9 - Cover

10 - Brake Rotor

11 - Bolt

- 4 Nm

12 - Brake Pads

13 - Brake Carrier with Different Guide Pins and Protective Cap

14 - Brake Caliper

15 - Bolt

- 35 Nm
- Always replace if removed

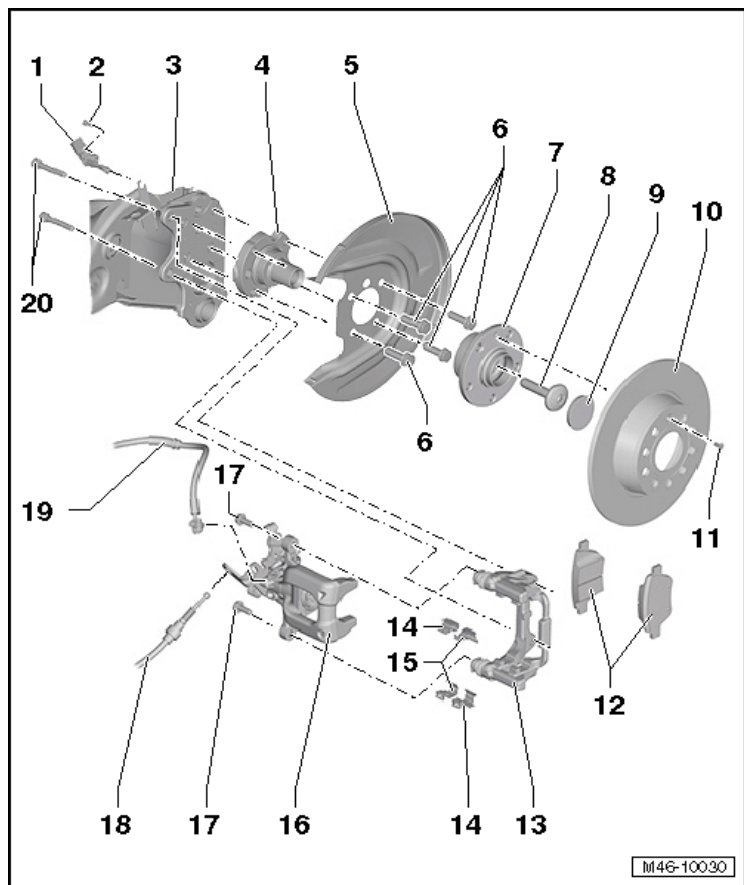
16 - Parking Brake Cable

17 - Brake Line

- 14 Nm

18 - Brake Hose

Twist Beam Rear Suspension Overview (Bosch ZOH 38 Brakes)



- 1 - Right Rear ABS Wheel Speed Sensor -G44-/ Left Rear ABS Wheel Speed Sensor -G46-**
- 2 - Bolt**
 - 8 Nm
- 3 - Axle Beam**
- 4 - Stub Axle**
- 5 - Brake Cover Plate**
- 6 - Bolt**
 - 30 Nm + 90° turn
 - Always replace if removed
- 7 - Wheel Bearing Unit**
- 8 - Bolt**
 - Always replace if removed
- 9 - Cover**
- 10 - Brake Rotor**

11 - Bolt

- 8 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

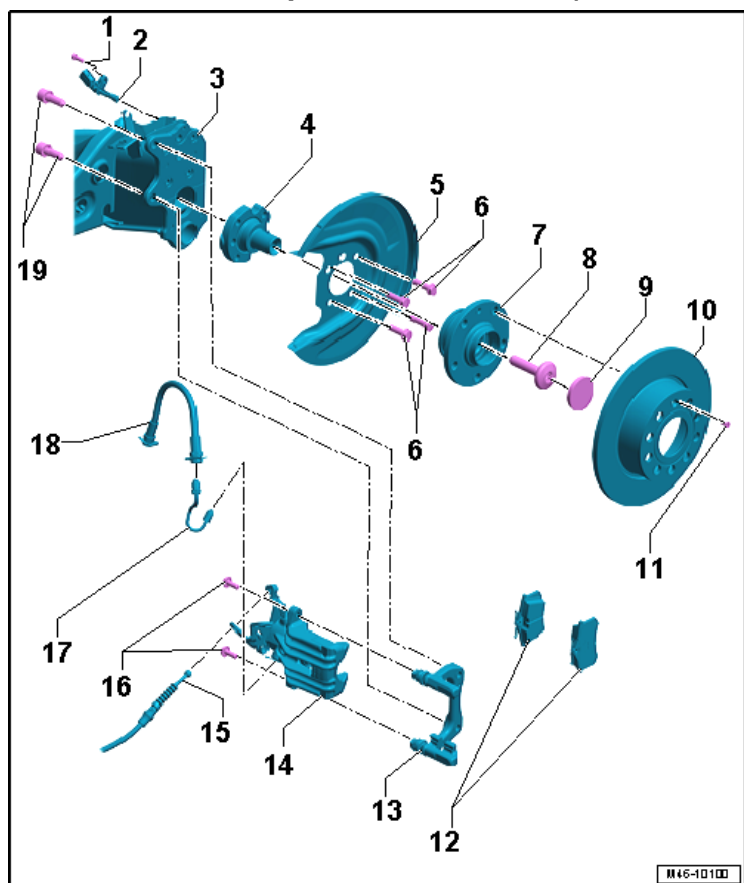
19 - Brake Hose

- 35 Nm

20 - Bolt

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

Twist Beam Rear Suspension Overview (CI 38 Brakes)



1 - Bolt

- 8 Nm

2 - Rear ABS Wheel Speed Sensor

3 - Axle Beam

4 - Stub Axle

5 - Brake Cover Plate

6 - Bolt

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

7 - Wheel Bearing Unit

8 - Bolt

- Always replace if removed

9 - Cover

10 - Brake Rotor

11 - Bolt

- 8 Nm

12 - Brake Pads

13 - Brake Carrier with Different Guide Pins and Protective Cap

14 - Brake Caliper

15 - Parking Brake Cable

16 - Bolt

- 35 Nm
- Always replace if removed

17 - Brake Line

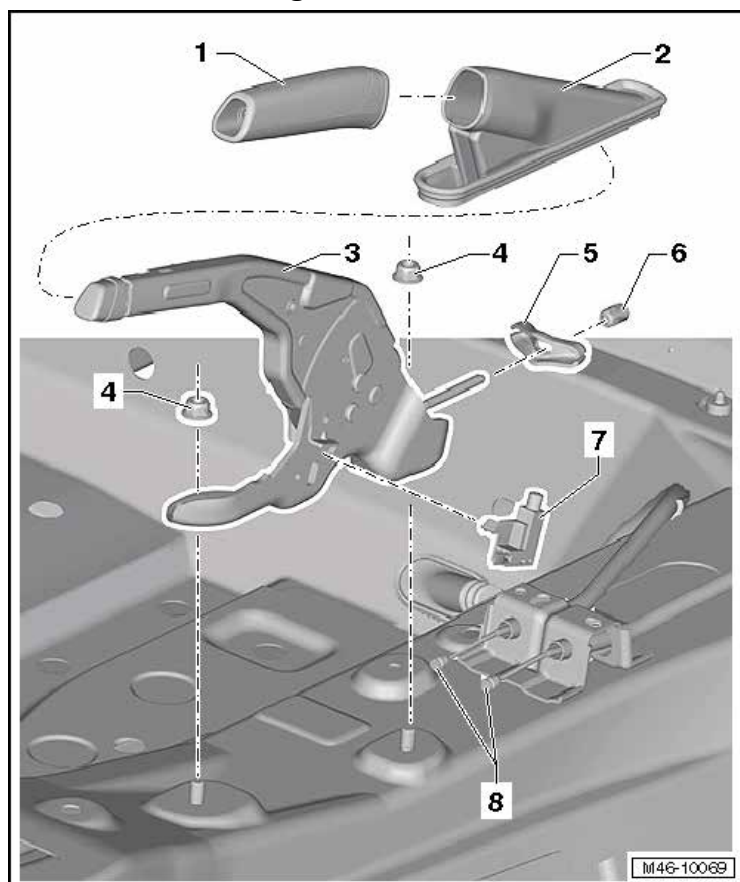
- 14 Nm

18 - Brake Hose

19 - Bolt

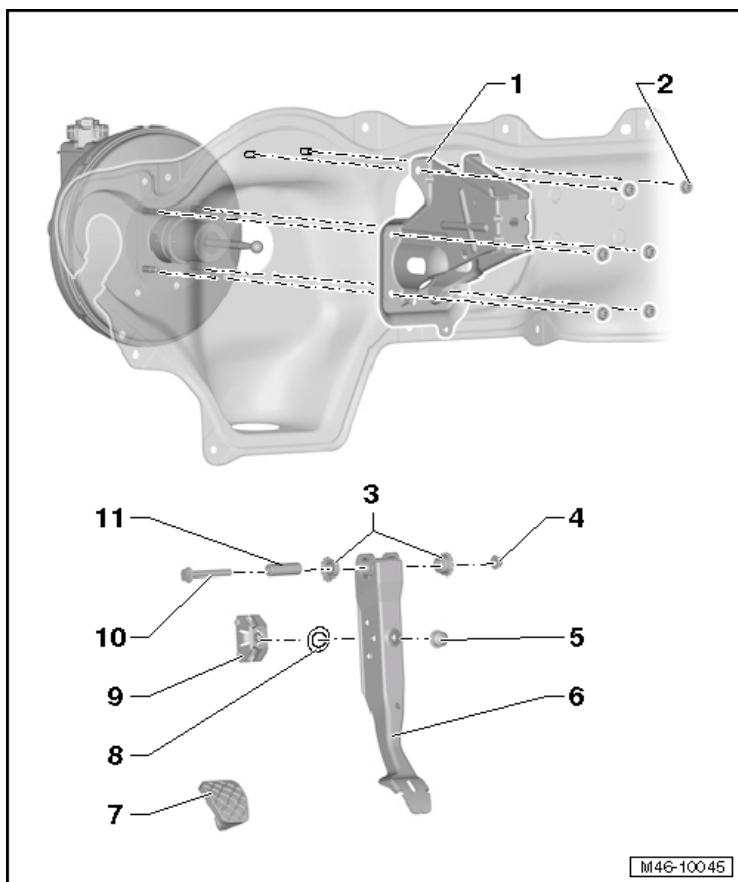
- 90 Nm + 90° turn
- Always replace if removed

Parking Brake Overview



- 1 - Handle for Parking Brake Lever
- 2 - Trim for Parking Brake Lever
- 3 - Parking Brake Lever
- 4 - Nut
 - 20 Nm
- 5 - Compensator
- 6 - Adjusting Nut
- 7 - Parking Brake Indicator Lamp Switch -F9-
- 8 - Parking Brake Cables

Brake Pedal Overview



1 - Bracket

2 - Nut

25 Nm

Always replace if removed

3 - Bearing Bushing

4 - Nut

25 Nm

Always replace if removed

5 - Stop Buffer

6 - Brake Pedal

7 - Cover

8 - Bearing Shell

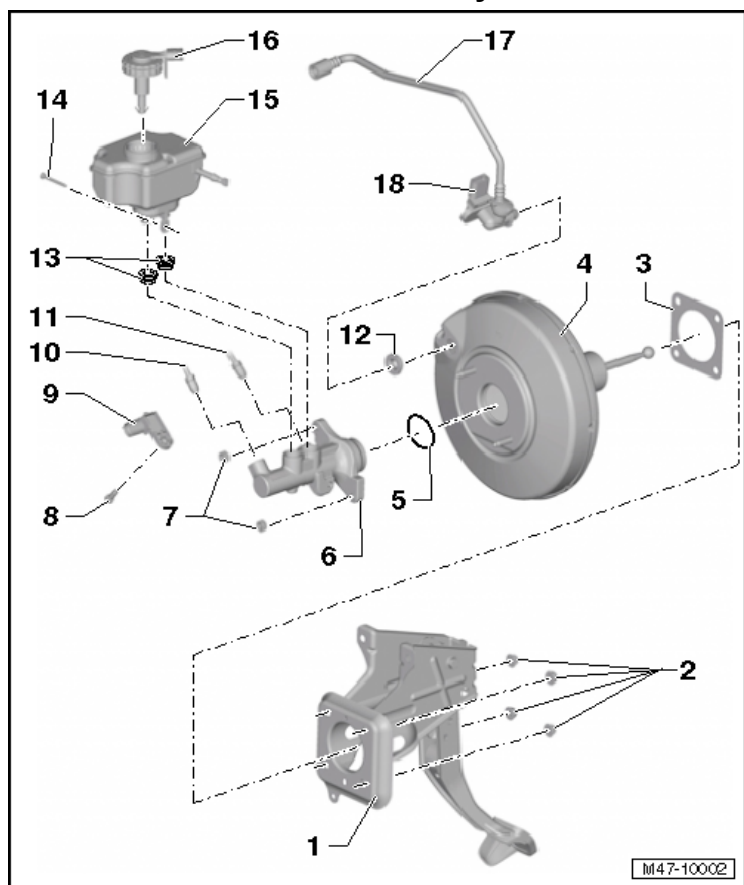
9 - Mount

10 - Bolt

11 - Bearing Pin

Hydraulic Components

Brake Booster/Brake Master Cylinder Overview



1 - Pedal Assembly

2 - Nut

25 Nm

Always replace if removed

3 - Seal

4 - Brake Booster

5 - Seal

6 - Brake Master Cylinder

7 - Nut

25 Nm

Always replace if removed

8 - Bolt

5 Nm

9 - Brake Lamp Switch -F-

10 - Brake Line

14 Nm

11 - Brake Line

14 Nm

12 - Sealing Plug

13 - Sealing Plug

14 - Mounting Pin

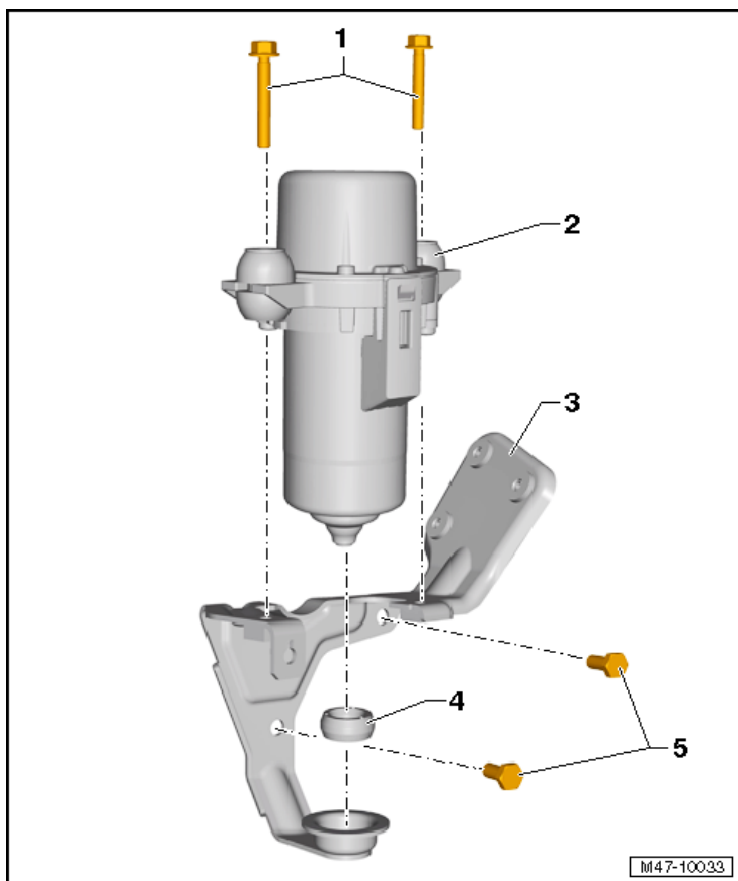
15 - Brake Fluid Reservoir

16 - Cap

17 - Vacuum Line

18 - Vacuum Sensor -G608-

Brake System Vacuum Pump -V192- Overview



1 - Bolt

7 Nm

2 - Brake System Vacuum Pump -V192-

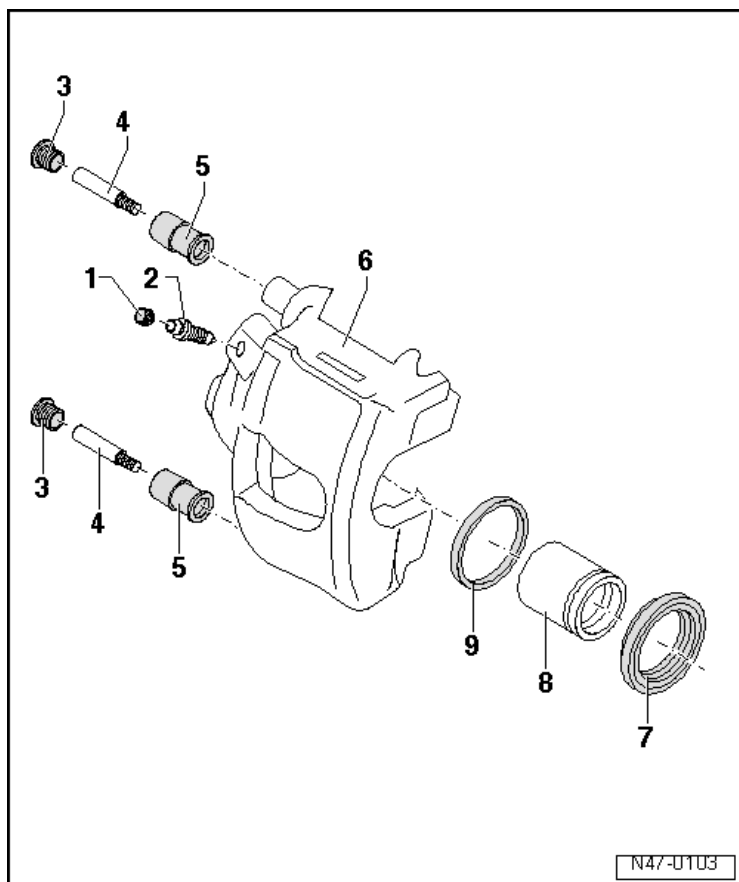
3 - Bracket

4 - Buffer

5 - Bolt

25 Nm

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 installing.

3 - Caps

4 - Guide Pins

30 Nm

5 - Bearing Bushing

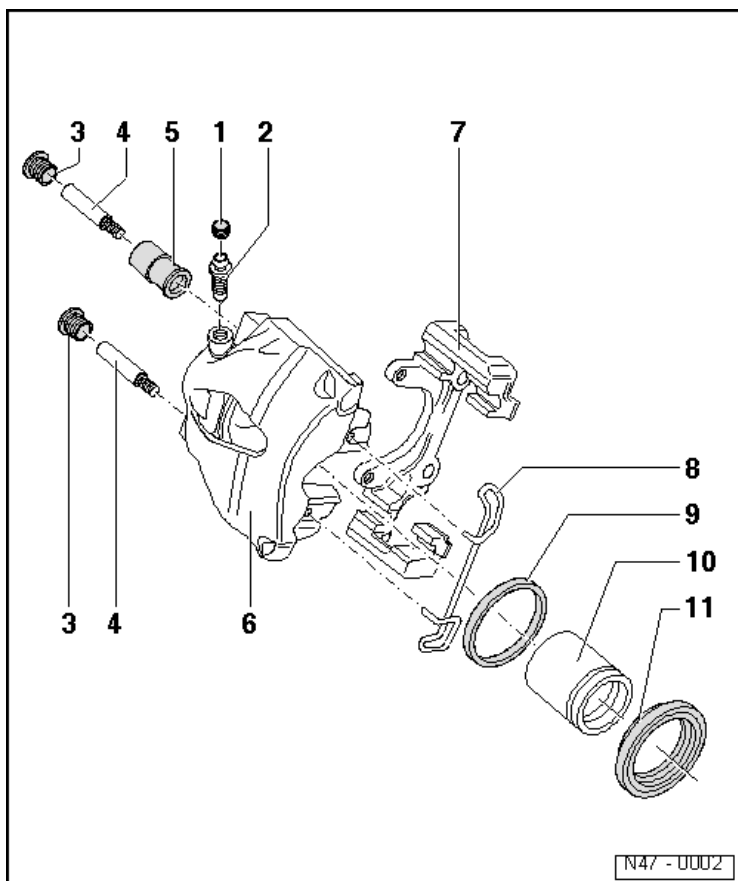
6 - Brake Caliper

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 installing.

3 - Caps

4 - Guide Pins

30 Nm

5 - Bearing Bushing

6 - Brake Caliper

7 - Brake Carrier

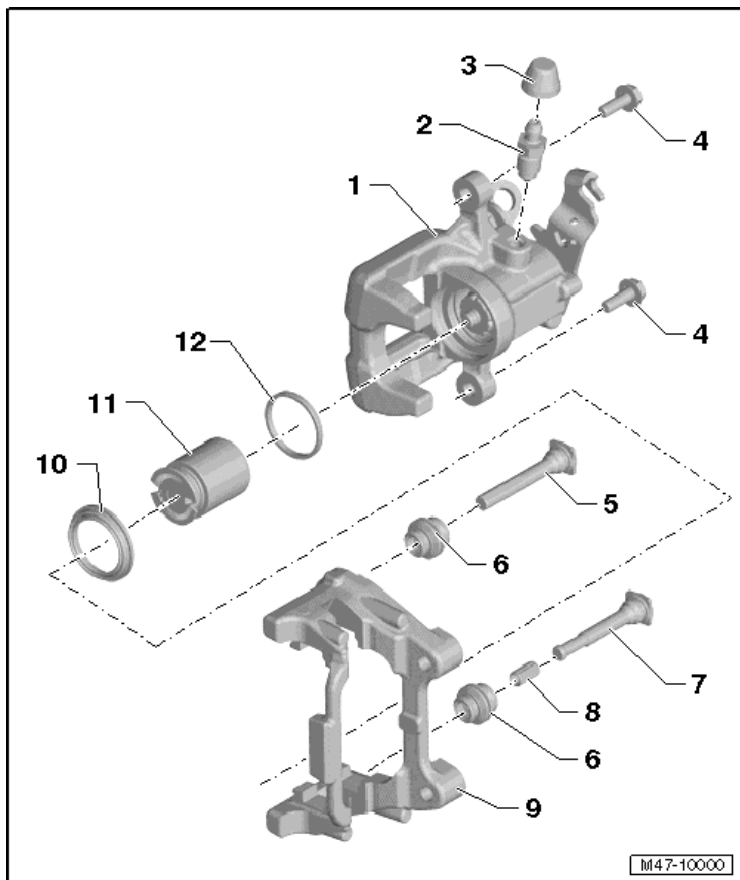
8 - Spring

9 - Seal

10 - Pistons

11 - Cap

Bosch ZOH 38 Rear Brakes Overview



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 installing.

3 - Dust Cap

4 - Bolt

35 Nm

Replace

5 - Upper Guide Pins

6 - Capl

7 - Lower Guide Pins

8 - Guide Grommet

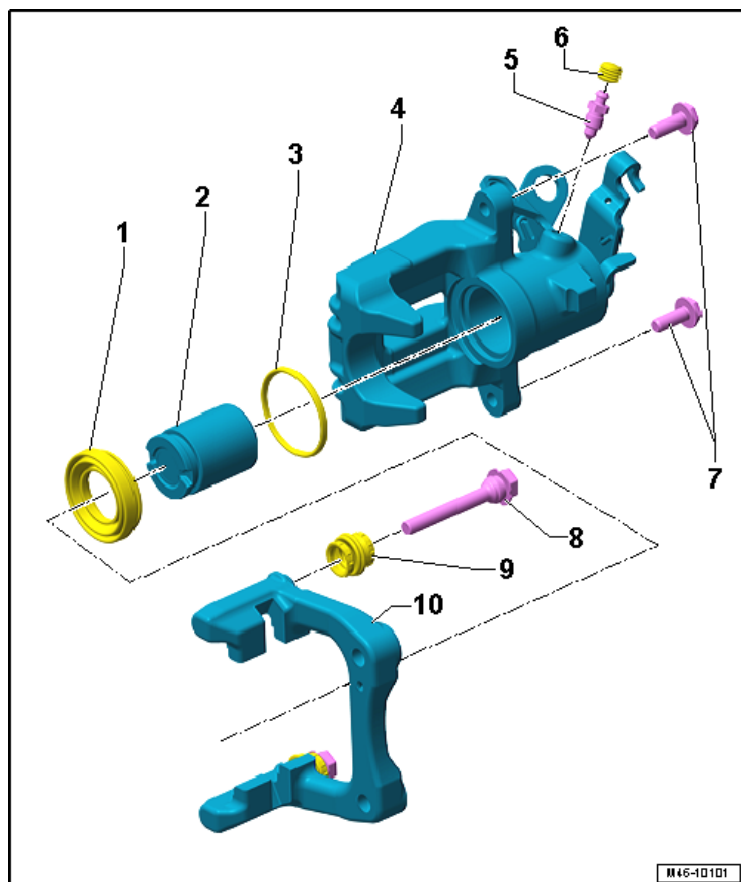
9 - Brake Carrier

10 - Cap

11 - Piston with Automatic Adjustment

12 - Seal

CI 38 Rear Brakes Overview



1 - Cap

2 - Piston with Automatic Adjustment

3 - Seal

4 - Brake Caliper

5 - Bleeder Valve

10 Nm

Apply a thin coat of Assembly Paste -G 052 150 A2- to the threads before installing.

6 - Dust Cap

7 - Bolt

35 Nm

Replace after removal

8 - Guide Pin

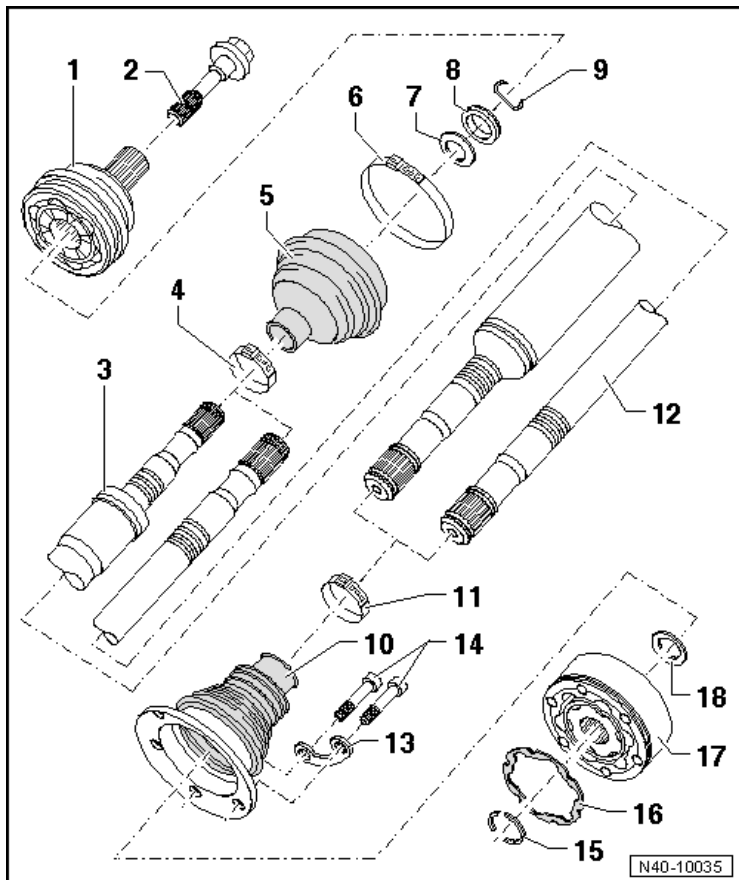
9 - Cap

10 - Brake Carrier

SUSPENSION, WHEELS, STEERING

Front Suspension

Drive Axle with CV Joint VL 100 Overview



1 - Outer CV Joint

2 - Bolt

- There are different versions
- Refer to the Parts Catalog.
- Always replace if removed

3 - Right Drive Axle

4 - Clamp

5 - CV Boot

6 - Clamp

7 - Plate Spring

8 - Thrust Ring

9 - Locking Ring

- Always replace if removed

10 - CV Boot

11 - Clamp

- Always replace if removed

12 - Left Drive Axle

13 - Locking Plate

14 - Internal Multi-Point Bolt

- First tighten diagonally to 10 Nm, then tighten diagonally again to the tightening specification:
- M8 = 40 Nm
- M10 = 70 Nm
- After disassembly, always replace bolts

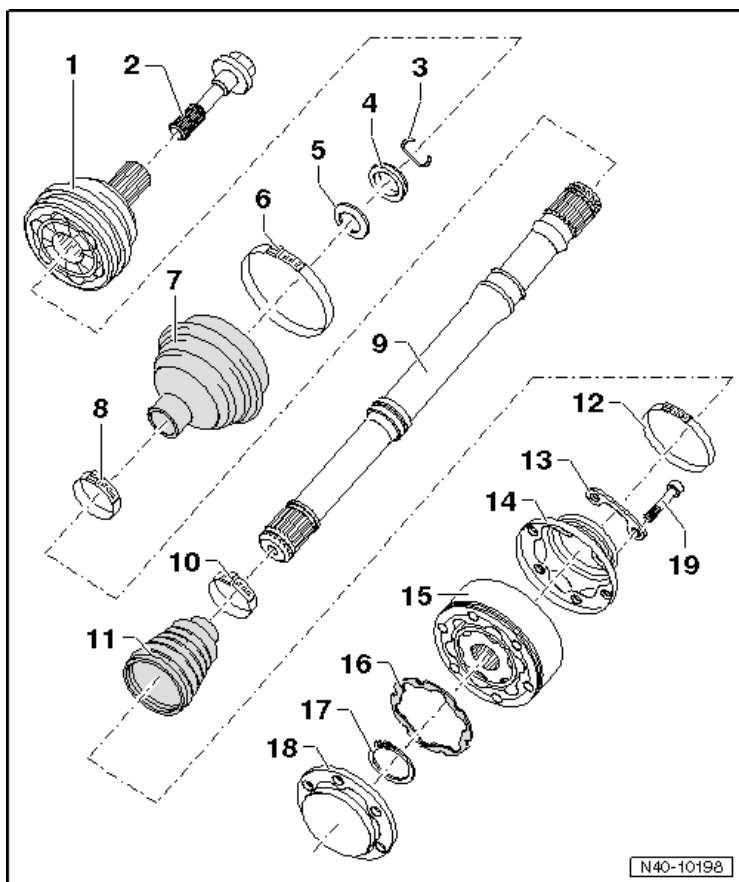
15 - Locking Ring

16 - Seal

17 - Inner CV Joint

18 - Plate Spring

Drive Axle Overview, with CV Joint VL 107



1 - Outer CV Joint

2 - Bolt

- There are different versions
- Refer to the Parts Catalog.
- Always replace if removed

3 - Locking Ring

- Always replace if removed

4 - Thrust Ring

5 - Plate Spring

6 - Clamp

7 - CV Boot

8 - Clamp

9 - Drive Axle

10 - Clamp

11 - CV Boot

12 - Clamp

13 - Locking Plate

14 - Cover

15 - Inner CV Joint

16 - Seal

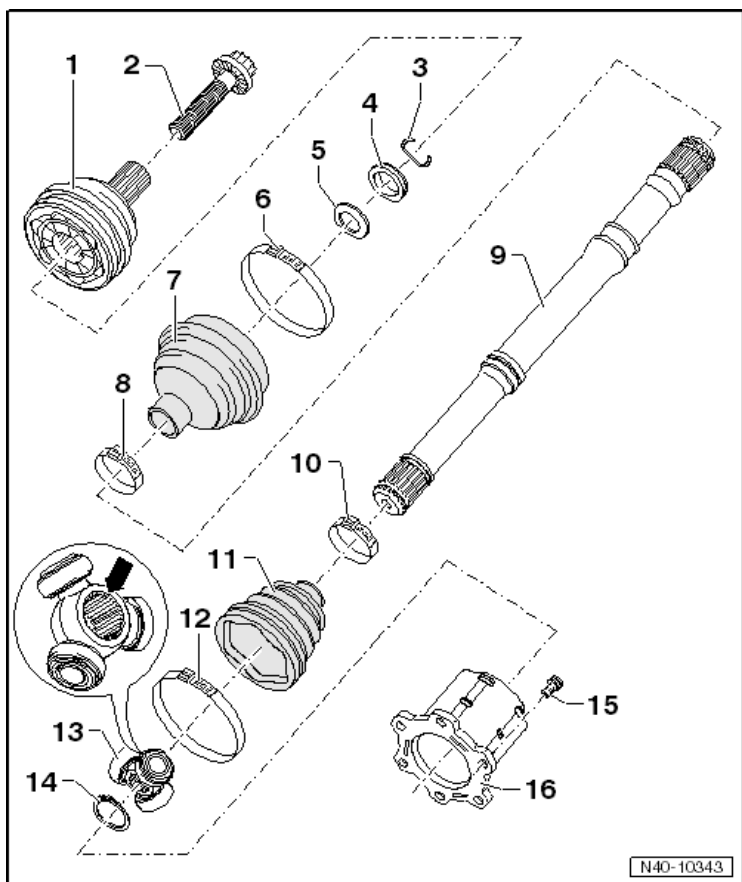
17 - Locking Ring

18 - Cover

19 - Internal Multi-Point Bolt

- 70 Nm
- First tighten diagonally to 10 Nm, then tighten diagonally again to the tightening specification
- M10 x 52

Drive Axle Overview with Triple Roller Joint AAR3300i



1 - Outer CV Joint

2 - Bolt

- There are different versions
- Refer to the Parts Catalog.
- Always replace if removed

3 - Locking Ring

- Always replace if removed

4 - Thrust Ring

5 - Plate Spring

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 - CV Boot for Triple Roller Joint**12 - Clamp**

- Always replace if removed

13 - Triple Roller Star with Rollers**14 - Locking Ring**

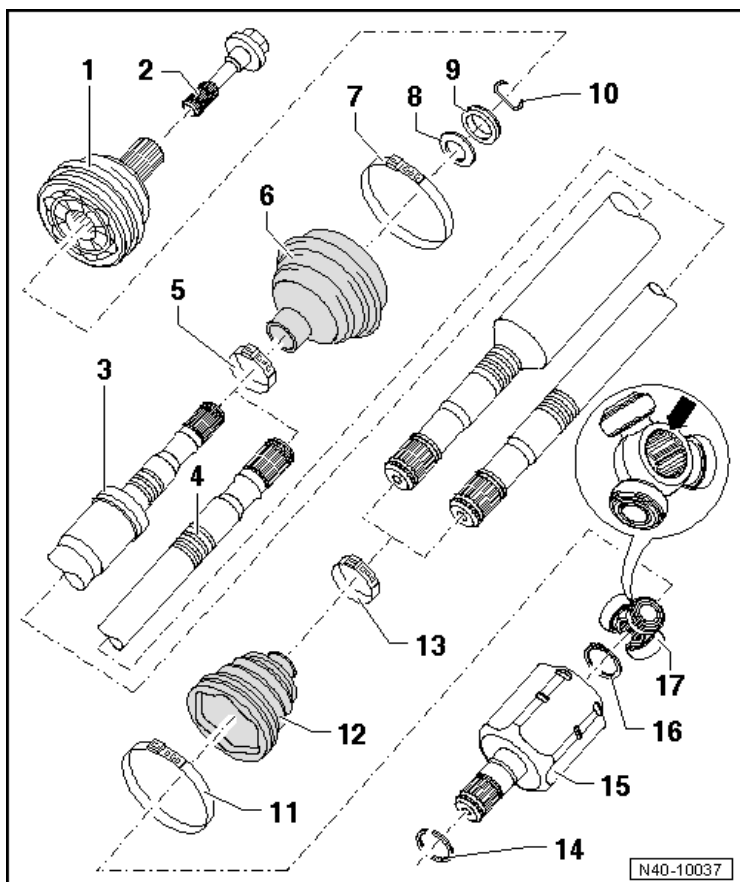
- Always replace if removed

15 - Internal Multi-Point Bolt

- 70 Nm
- First tighten diagonally to 10 Nm, then tighten diagonally again to the tightening specification
- M10 x 23

16 - Joint

Drive Axle Overview with Triple Roller Joint AAR2600i



1 - Outer CV Joint

2 - Bolt

- There are different versions
- Refer to the Parts Catalog.
- Always replace if removed

3 - Right Drive Axle

4 - Left Drive Axle

5 - Clamp

- Always replace if removed

6 - CV Boot

7 - Clamp

- Always replace if removed

8 - Plate Spring

9 - Thrust Ring

10 - Locking Ring

- Always replace if removed

11 - Clamp

- Always replace if removed

12 - CV Boot for Triple Roller Joint

13 - Clamp

- Always replace if removed

14 - Locking Ring

- Always replace if removed

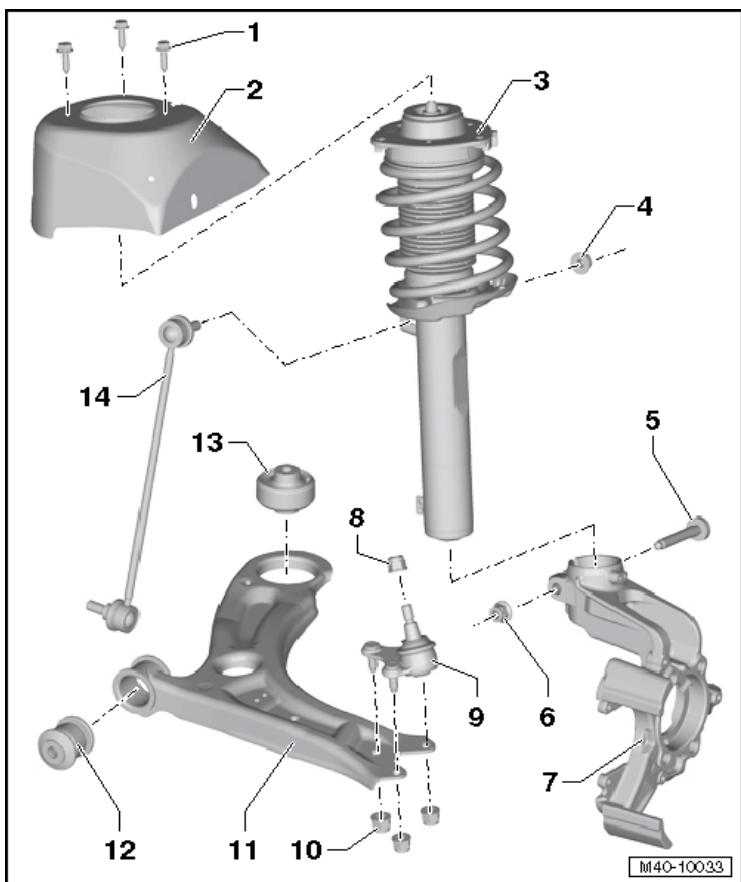
15 - Joint

16 - Locking Ring

- Always replace if removed

17 - Triple Roller Star with Rollers

Front Suspension and Control Arm Overview



1 - Bolt

- 15 Nm + 90° turn
- Replace after removal

2 - Body, Front

3 - Suspension Strut

4 - Nut

- 65 Nm

5 - Internal Multi-Point Bolt

6 - Nut

- 70 Nm + 90° turn
- Replace after removal

7 - Wheel Bearing Housing

- There are different versions.
- Refer to the Parts Catalog

8 - Nut

- 60 Nm

9 - Ball Joint

10 - Nut

100 Nm

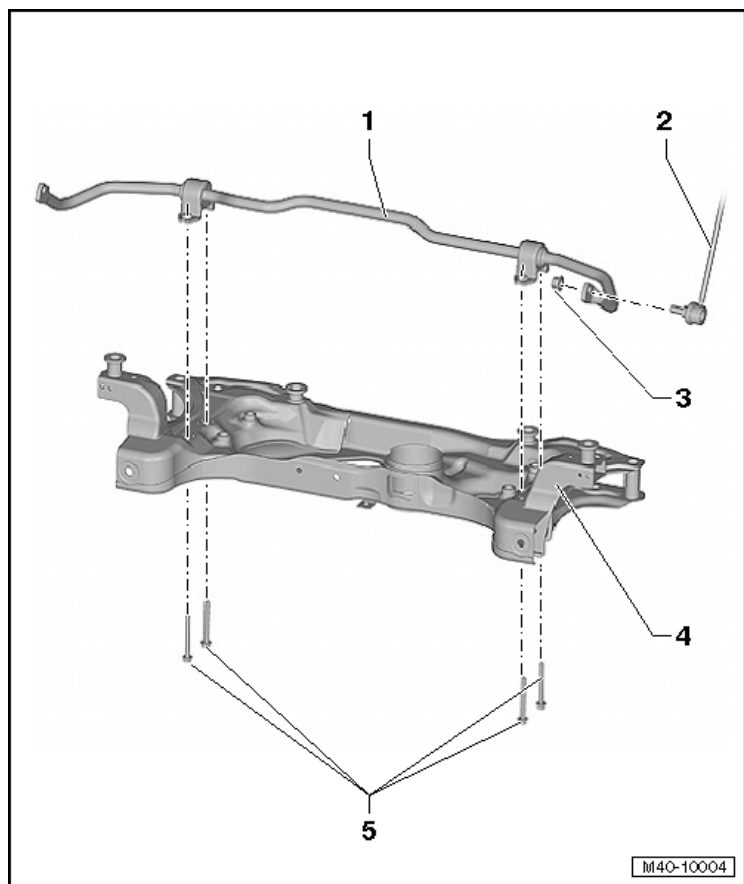
11 - Control Arm

12 - Front Bonded Rubber Bushing

13 - Rear Bonded Rubber Bushing

14 - Coupling Rod

Stabilizer Bar Overview



1 - Stabilizer Bar

- There are different versions.
- Refer to the Parts Catalog

2 - Coupling Rod

3 - Nut

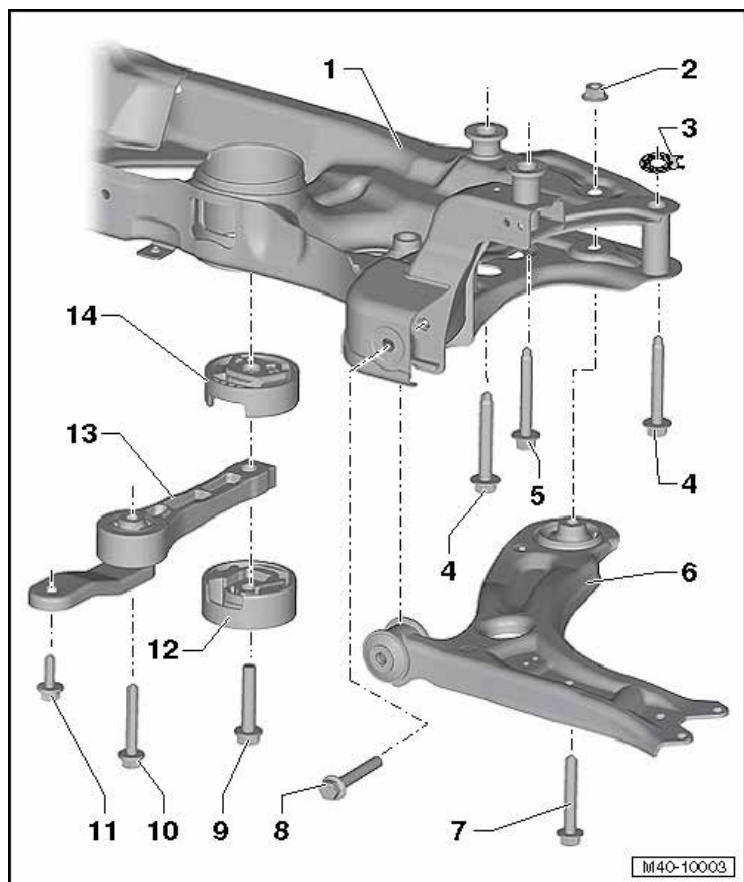
- 65 Nm

4 - Subframe

5 - Bolt

- 20 Nm + 90° turn
- Replace after removal

Subframe Overview



1 - Subframe

2 - Nut

3 - Intermediate Plate

Replace after removal

4 - Bolt

70 Nm + 180° turn

M12 x 1.5 x 100

Replace after removal

5 - Bolt

70 Nm + 180° turn

M12 x 1.5 x 90

Replace after removal

6 - Control Arm

7 - Bolt

70 Nm + 180° turn

M12 x 1.5 x 80

Replace after removal

8 - Bolt

- 70 Nm + 180° turn
- M12 x 1.5 x 80
- Replace after removal

9 - Bolt

- 100 Nm + 90° turn
- M14 x 1.5 x 70
- Replace after removal

10 - Bolt

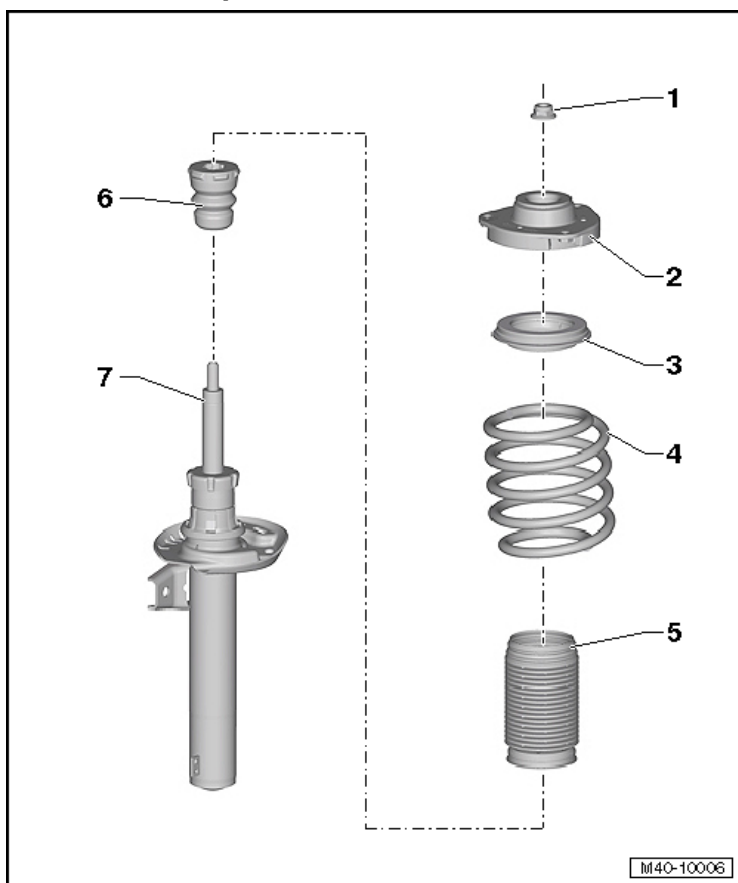
- 50 Nm + 90° turn
- M10 x 75
- Replace after removal

11 - Bolt

- 50 Nm + 90° turn
- M10 x 35
- Replace after removal

12 - Lower Bonded Rubber Bushing for Pendulum Support**13 - Pendulum Support****14 - Upper Bonded Rubber Bushing for Pendulum Support**

Suspension Strut Overview



1 - Nut

- 60 Nm
- Replace after removal

2 - Suspension Strut Bearing

3 - Axial Groove Ball Bearing

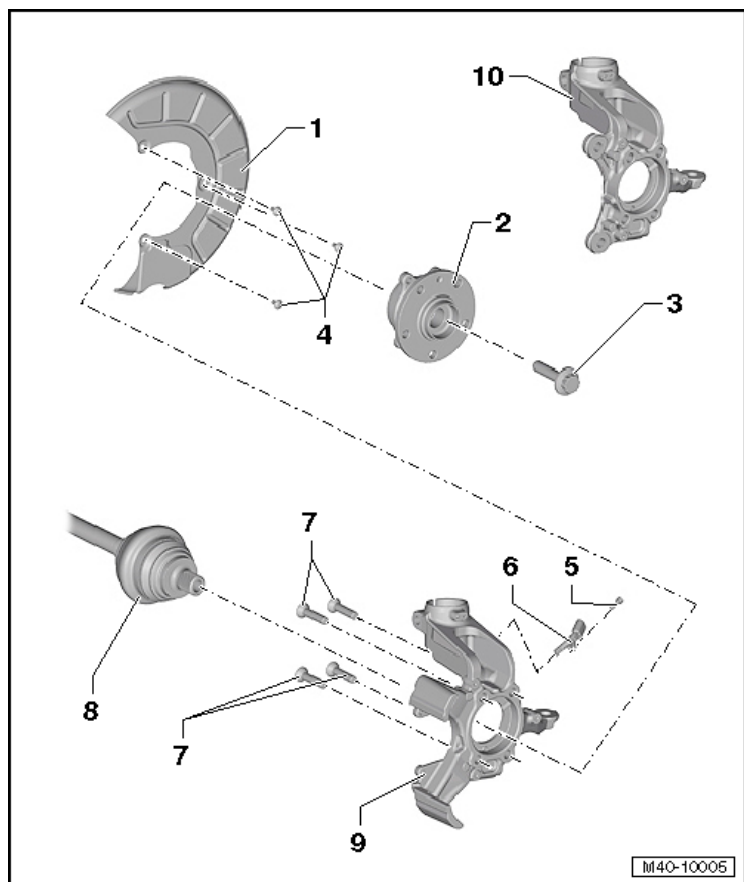
4 - Coil Spring

5 - Protective Sleeve

6 - Stop Buffer

7 - Shock Absorber

Wheel Bearing Overview



1 - Cover Plate

2 - Wheel Hub with Wheel Bearing

- There are different versions

3 - Bolt

- There are different versions
- Replace after removal

4 - Bolt

- 12 Nm

5 - Hex Socket Head Bolt

- 8 Nm

6 - Left Front ABS Wheel Speed Sensor -G47-/Right Front ABS Wheel Speed Sensor -G45-

7 - Bolt

- 70 Nm + 90° turn
- Replace after removal

8 - Drive Axle

9 - Wheel Bearing Housing

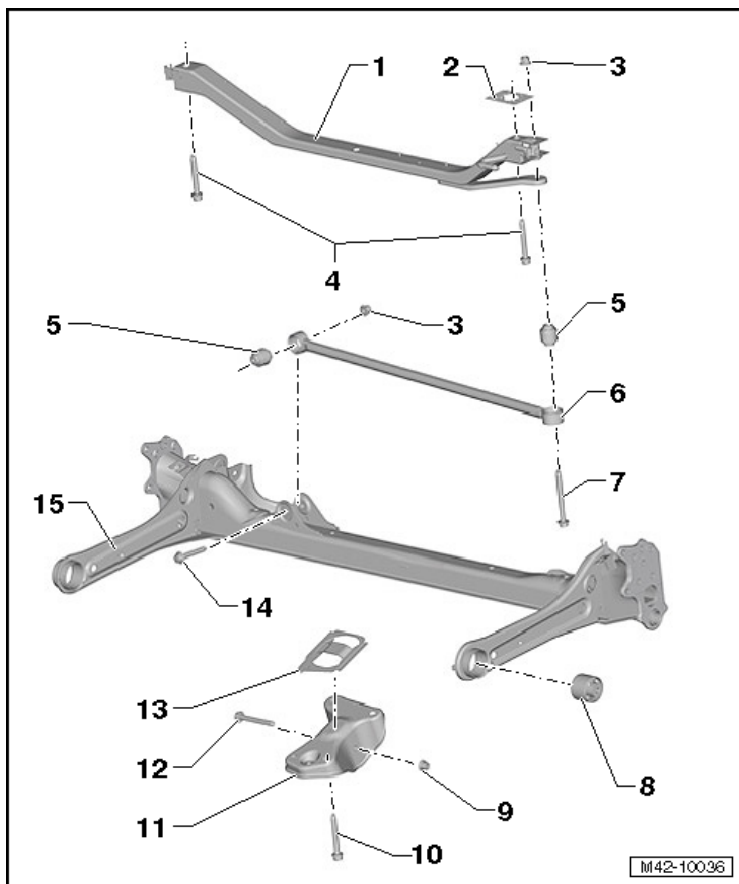
- With integrated brake carrier

10 - Wheel Bearing Housing

- With bolted brake carrier

Rear Suspension

Rear Suspension Axle Beam, Subframe and Crossbrace Overview



1 - Subframe

2 - Backing Plate

3 - Nut

- 70 Nm + 90° turn
- Replace after removal

4 - Bolt

- Follow the tightening sequence:
- 1. 90 Nm + 90° turn
- 2. Loosen one full turn (360°)
- 3. 90 Nm + 180° turn
- Replace after removal

5 - Bonded Rubber Bushing

6 - Crossbrace

7 - Bolt

- Always replace if removed.

8 - Bonded Rubber Bushing

9 - Nut

- 70 Nm + 180° turn
- Replace after removal

10 - Bolt

- 50 Nm + 45° turn
- Replace after removal

11 - Bracket

12 - Bolt

- Always replace if removed

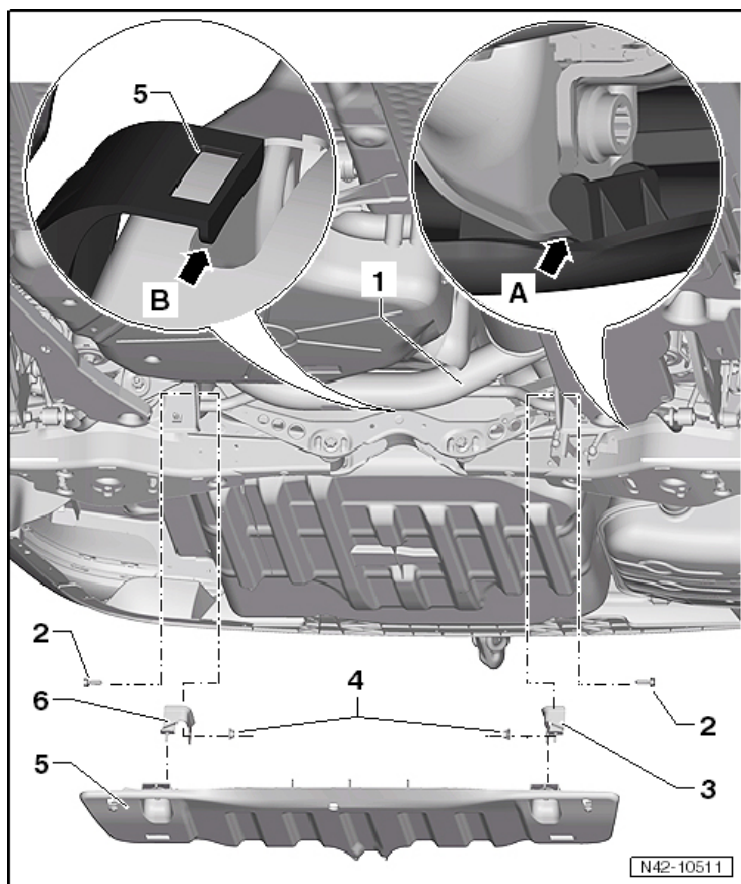
13 - Cover

14 - Bolt

- Always replace if removed.

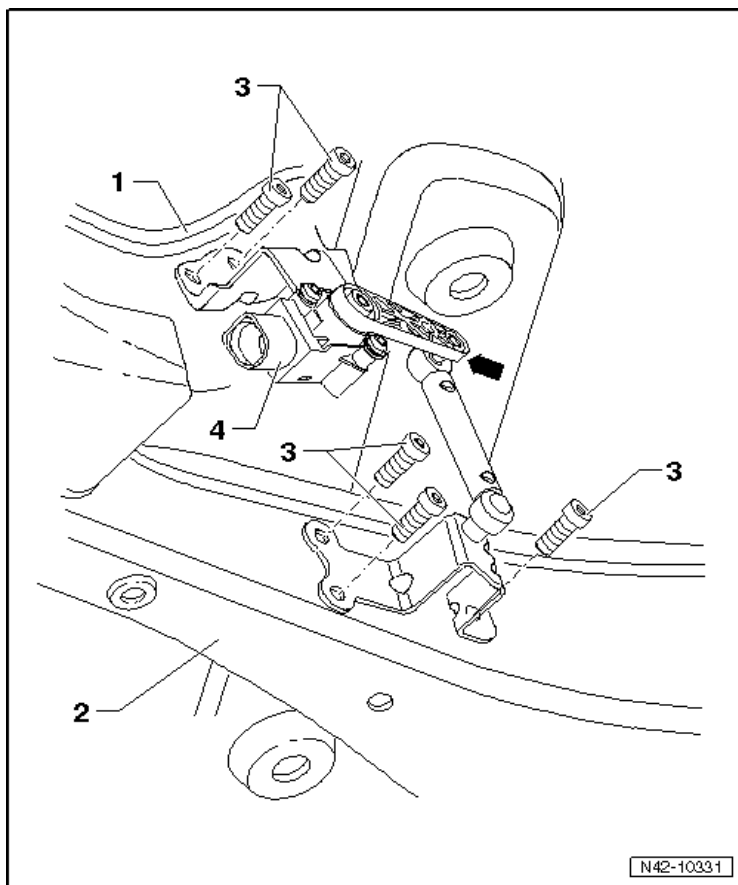
15 - Axle Beam

BlueMotion Vehicles Subframe Components Overview



- 1 - Subframe
- 2 - Bolt
 - 20 Nm
- 3 - Bracket
- 4 - Nut
 - 2 Nm
- 5 - Trim Panel
 - 2 Nm
- 6 - Angle Bracket

Left Rear Level Control System Sensor -G76- Overview



1 - Subframe

2 - Lower Transverse Link

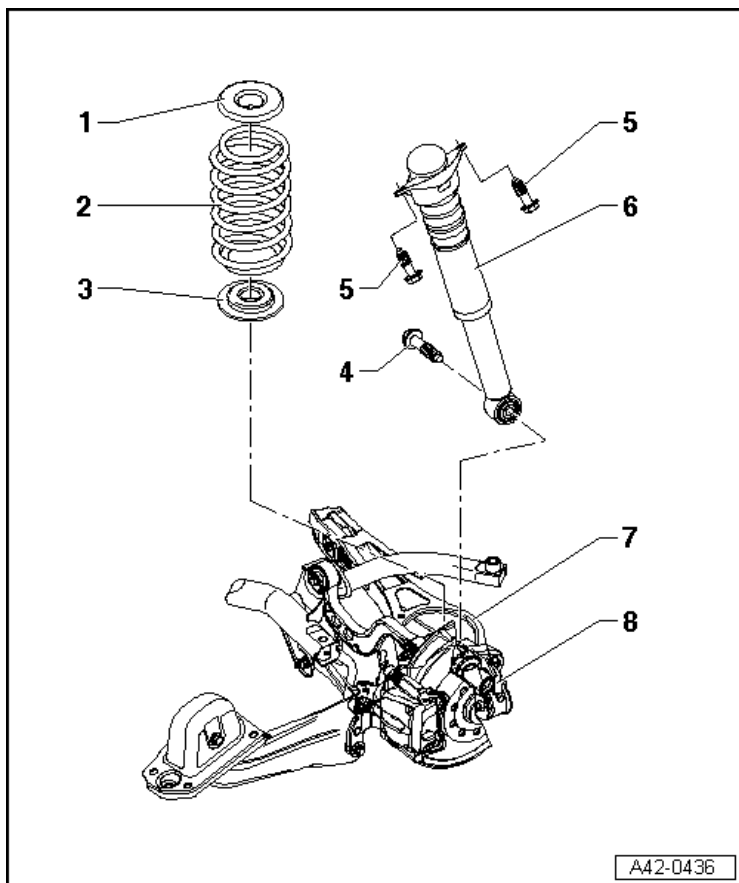
3 - Bolt

□ 5 Nm

□ M5 x 20

4 - Left Rear Level Control System Sensor -G76-

Shock Absorber and Coil Spring Overview, Multi-Link Rear Suspension



1 - Upper Spring Support

2 - Coil Spring

3 - Lower Spring Support

4 - Bolt

180 Nm

5 - Bolt

50 Nm + 45° turn

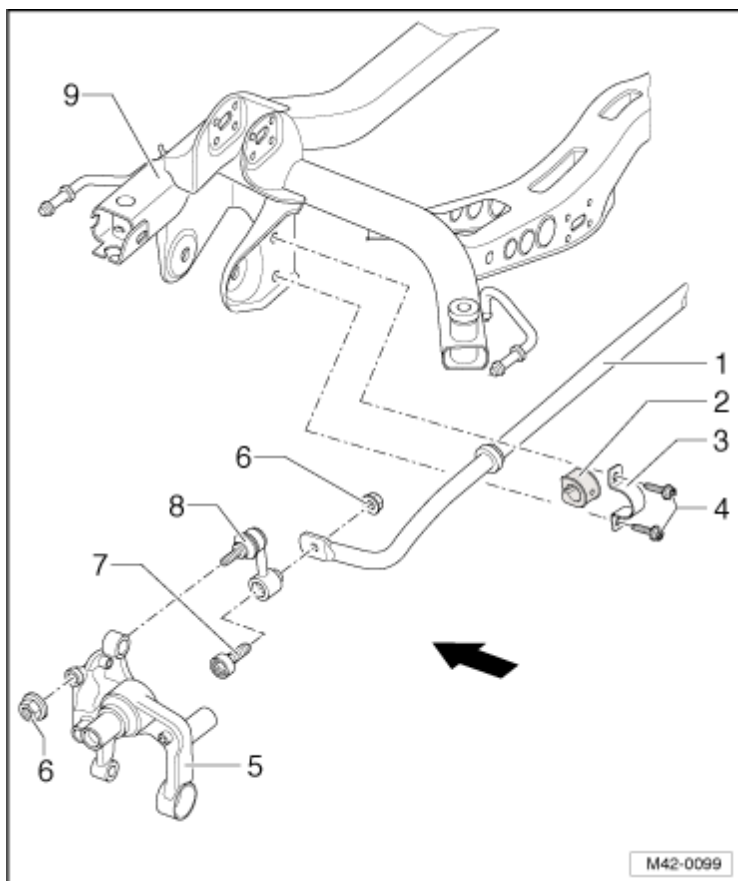
Replace after removal

6 - Shock Absorber

7 - Lower Transverse Link

8 - Wheel Bearing Housing

Stabilizer Bar Assembly Multi-Link Rear Suspension



1 - Stabilizer Bar

- There are different versions of the suspension

2 - Bearing

3 - Clamp

4 - Bolt

- 25 Nm + 45° turn
- Replace after removal

5 - Wheel Bearing Housing

6 - Nut

- 45 Nm
- Self-locking
- Replace after removal

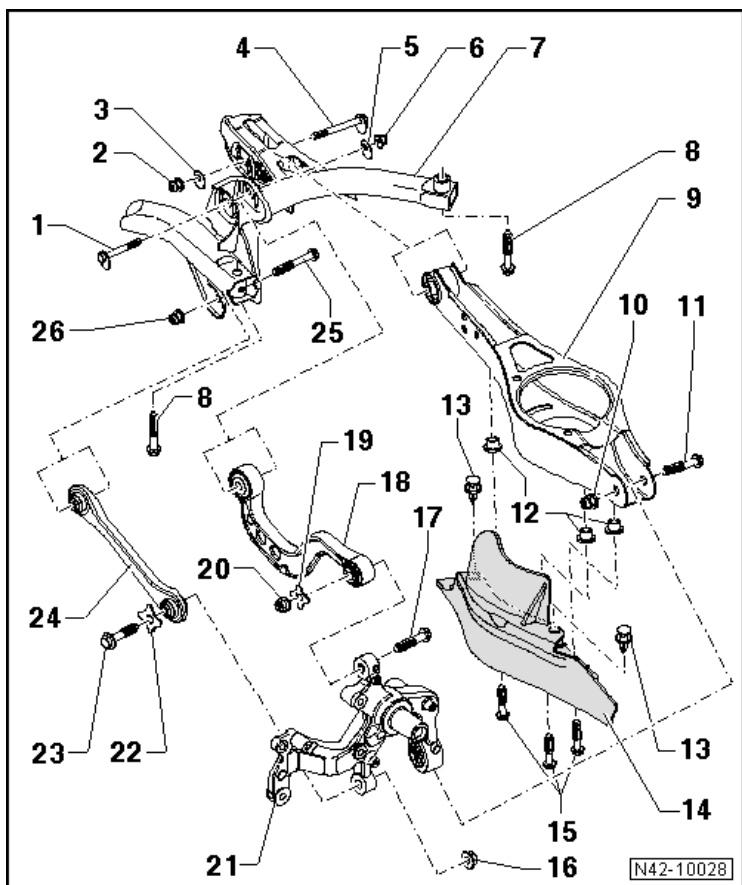
7 - Bolt

- Self-locking
- Replace after removal

8 - Coupling Rod

9 - Subframe

Subframe, Transverse Link and Tie Rod Overview, Multi-Link Rear Suspension



1 - Eccentric Bolt

2 - Nut

95 Nm

Replace after removal

3 - Eccentric Washer

4 - Eccentric Bolt

5 - Eccentric Washer

6 - Nut

95 Nm

Replace after removal

7 - Subframe

8 - Bolt

- Follow the tightening sequence:
- 1 - 90 Nm + 90° turn
- 2 - Loosen one full turn (360°)
- 3 - 90 Nm + 180° turn
- Replace after removal

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

- 70 Nm + 180° turn
- Replace after removal

11 - Bolt

- Replace after removal

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

- 8 Nm

16 - Nut

- Replace after removal

17 - Bolt

- 130 Nm + 90° turn
- Replace after removal

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

- Replace after removal

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

- 130 Nm + 90° turn
- Replace after removal

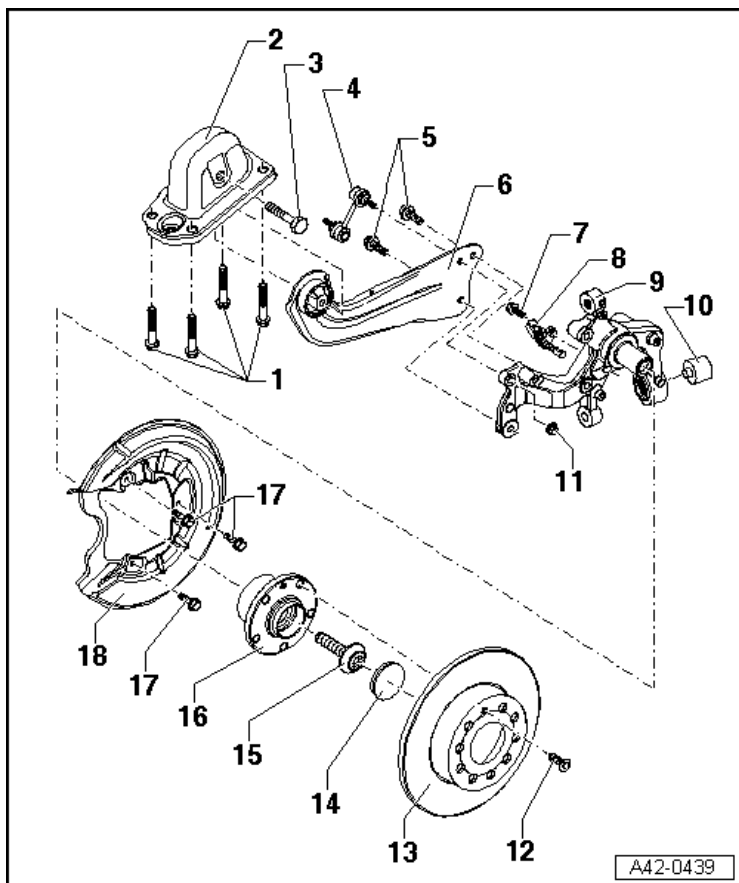
24 - Tie Rod**25 - Bolt**

- Replace after removal

26 - Nut

- 70 Nm + 180° turn
- Replace after removal

Wheel Bearing Housing and Trailing Arm Overview, Multi-Link Rear Suspension



1 - Bolt

- 50 Nm + 45° turn
- Replace after removal

2 - Bracket

3 - Bolt

- 90 Nm + 45° turn
- Replace after removal

4 - Coupling Rod

5 - Bolt

- 90 Nm + 45° turn
- Replace after removal

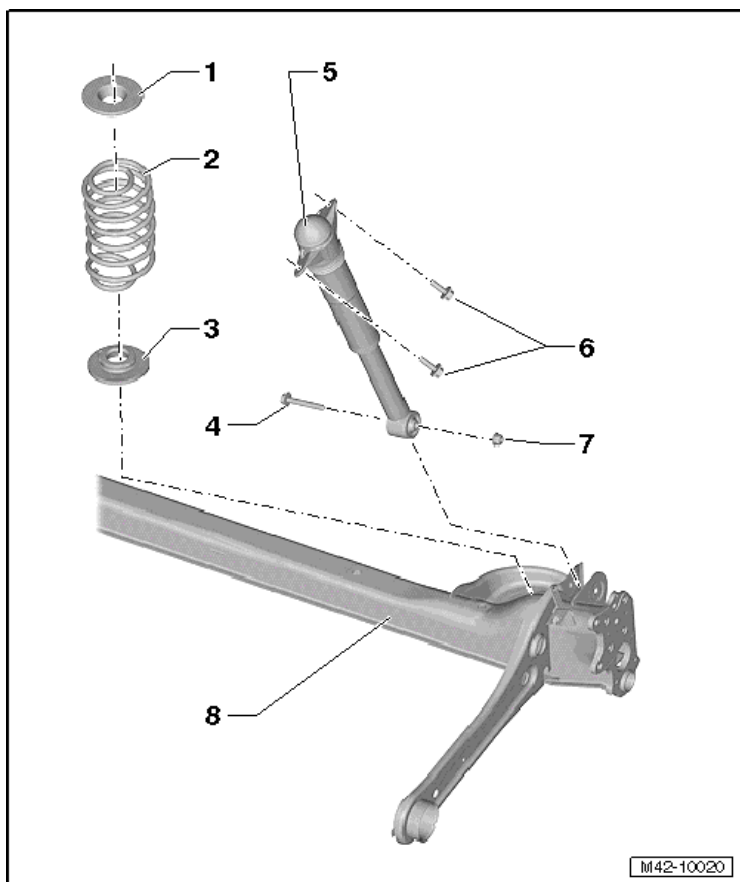
6 - Trailing link

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
 - Replace after removal
- 12 - Bolt**
 - 4 Nm
- 13 - Brake Rotor**
- 14 - Dust Cap**
- 15 - Bolt**
 - 180 Nm + 180° turn
 - Replace after removal
- 16 - Wheel Hub with Wheel Bearing**
- 17 - Bolt**
 - 12 Nm
- 18 - Cover Plate**

Rear Suspension Overview



1 - Spring Seat

2 - Coil Spring

3 - Base Plate

4 - Bolt

- 40 Nm + 90° turn
- Replace after removal

5 - Shock Absorber

6 - Bolt

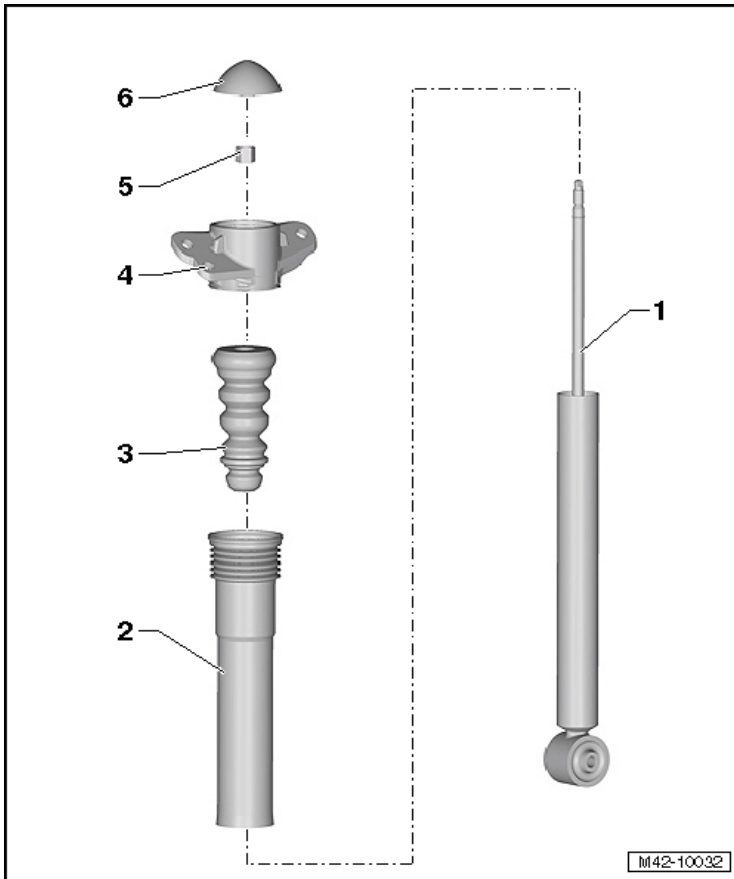
- 50 Nm + 45° turn
- Replace after removal

7 - Nut

- Replace after removal

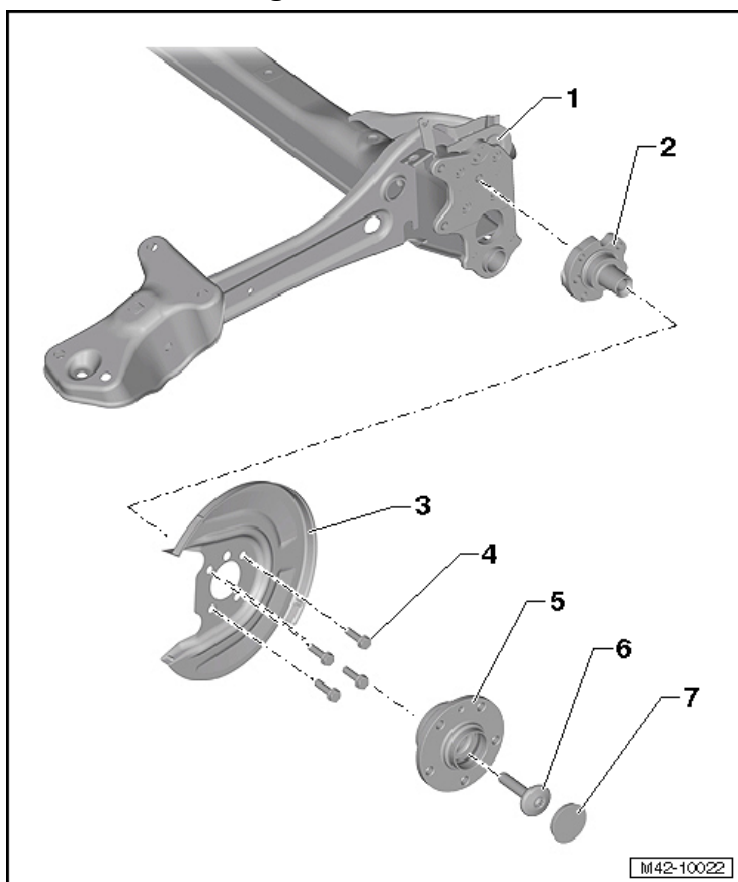
8 - Axle Beam

Shock Absorber Overview



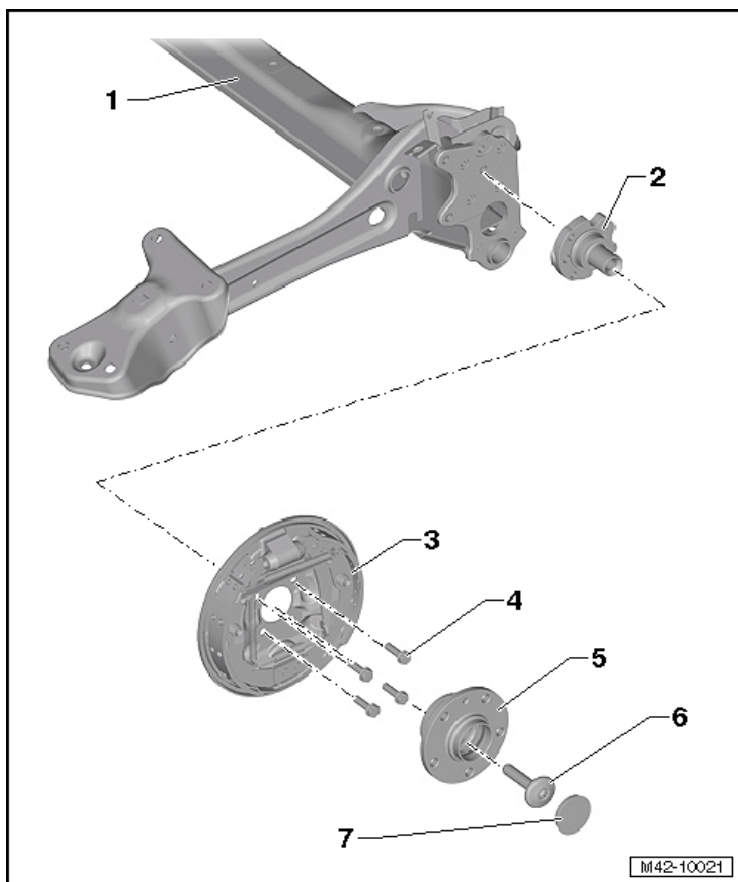
- 1 - Gas-Filled Strut
- 2 - Protective Tube
- 3 - Stop Buffer
- 4 - Shock Absorber Mount
- 5 - Nut
 - 25 Nm
 - Replace after removal
- 6 - Cap

Wheel Bearing and Disc Brake Overview



- 1 - Axle Beam**
- 2 - Stub Axle**
- 3 - Brake Carrier with Brake Shoes**
- 4 - Bolt**
 - 30 Nm + 90° turn
 - Replace after removal
- 5 - Wheel Hub with Wheel Bearing**
- 6 - Bolt**
 - 180 Nm + 180° turn
 - Replace after removal
- 7 - Dust Cap**
 - Replace after removal

Wheel Bearing and Drum Brake Overview



1 - Axle Beam

2 - Stub Axle

3 - Brake Carrier with Brake Shoes

4 - Bolt

- 30 Nm + 90° turn
- Replace after removal

5 - Wheel Hub with Wheel Bearing

6 - Bolt

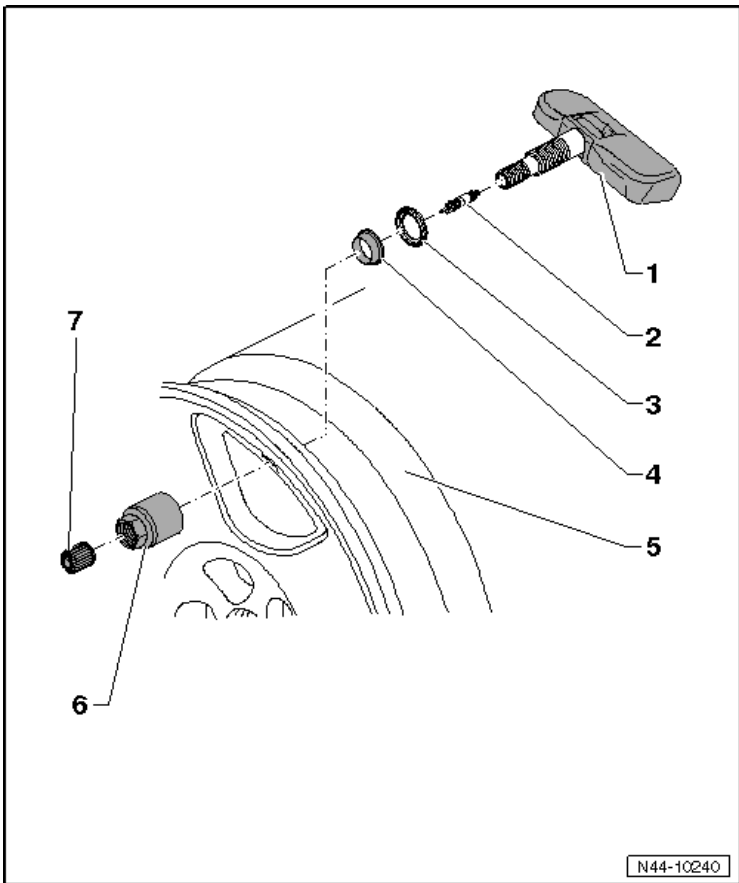
- 180 Nm + 180° turn
- Replace after removal

7 - Dust Cap

- Replace after removal

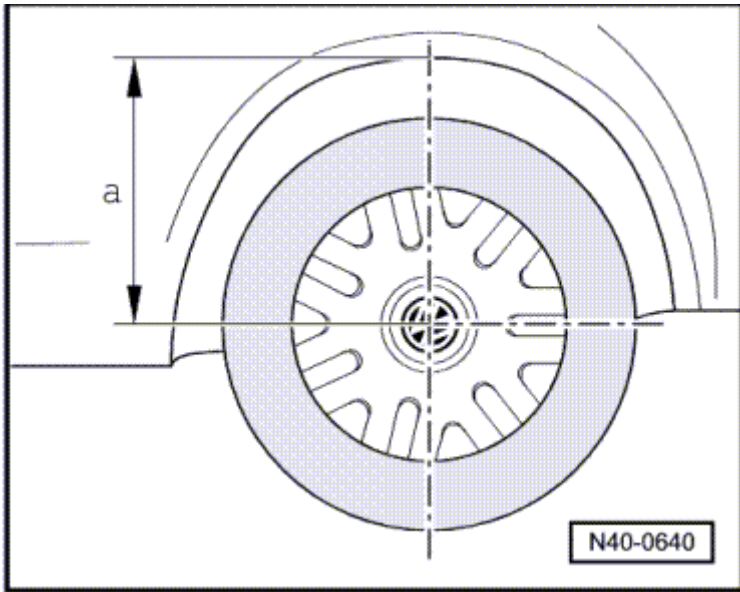
Wheels, Tires, Wheel Alignment

Tire Pressure Monitoring Sensor Overview



- 1 - Tire Pressure Monitoring Sensor
- 2 - Valve Insert
- 3 - Sealing Washer
- 4 - Seal
- 5 - Disc Wheel
- 6 - Union Nut
 - 8 Nm
- 7 - Valve Cap

Alignment Specifications with Torsion Beam Rear Suspension



Front Suspension	Basic	Sport
PR numbers	2UA	2UC
Total toe (wheels not pressed)	10' ± 10'	10' ± 10'
Camber (wheels in straight ahead position)	-30' ± 30'	-40' ± 30'
Maximum permissible difference between both sides	Maximum 30'	Maximum 30'
Toe out angle ¹⁾ with steering wheel turned 20° to left and right	1° 19' ± 20'	1° 31' ± 20'
Caster	7° 37' ± 30'	7° 53' ± 30'
Maximum permissible difference between both sides	Maximum 30'	Maximum 30'
Standing height	379 ± 10 mm	364 ± 10 mm

¹⁾ Depending on the manufacturer, the toe out angle difference can also be indicated negatively in the alignment computer.

Front Suspension	Comfort	Heavy Duty
PR numbers	2UD	2UB
Total toe (wheels not pressed)	10' ± 10'	10' ± 10'
Camber (wheels in straight ahead position)	-22' ± 30'	-13' ± 30'
Maximum permissible difference between both sides	Maximum 30'	Maximum 30'

Front Suspension	Comfort	Heavy Duty
Toe out angle ¹⁾ with steering wheel turned 20° to left and right	1°12' ± 20'	1°7' ± 20'
Caster	7° 27' ± 30'	7° 18' ± 30'
Maximum permissible difference between both sides	Maximum 30'	Maximum 30'
Standing height	389 ± 10 mm	399 ± 10 mm

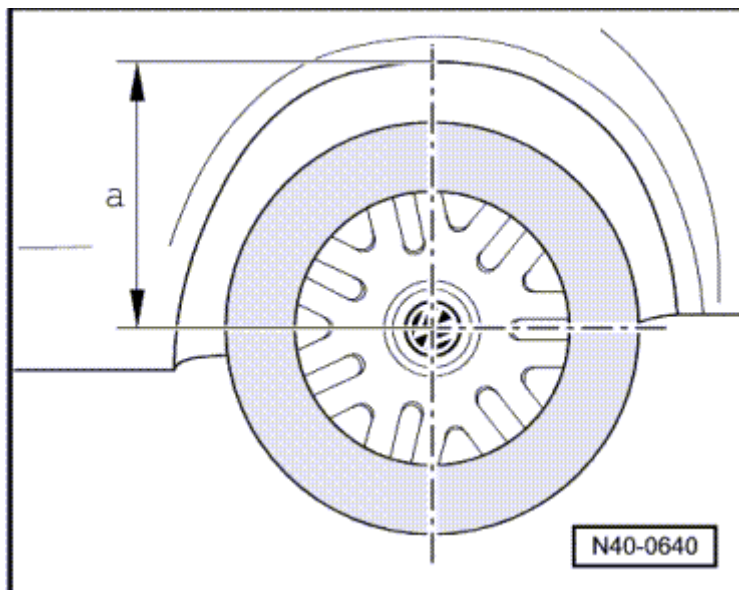
¹⁾ Depending on the manufacturer, the toe out angle difference can also be indicated negatively in the alignment computer.

Specified Values Valid for all Engine Versions

Rear Suspension	Basic	Sport
Camber	-1° ± 30'	-1° ± 30'
Maximum permissible difference between both sides	Maximum 30'	Maximum 30'
Total toe (at prescribed camber)	+20' ± 10'	+20' ± 10'
Maximum permissible deviation from direction of rotation	Maximum 20'	Maximum 20'
Standing height	379 ± 10 mm	364 ± 10 mm

Rear Suspension	Comfort	Heavy Duty
Camber	-1° ± 30'	-1° ± 30'
Maximum permissible difference between both sides	Maximum 30'	Maximum 30'
Total toe (at prescribed camber)	+20' ± 10'	+20' ± 10'
Maximum permissible deviation from direction of rotation	Maximum 20'	Maximum 20'
Standing height	389 ± 10 mm	399 ± 10 mm

Alignment Specifications, Multi-Link Rear Suspension



Front Suspension	Basic
PR numbers	2UA
Total toe (wheels not pressed)	10' ± 10'
Camber (wheels in straight ahead position)	-30' ± 30'
Maximum permissible difference between both sides	Maximum 30'
Toe out angle ¹⁾ with steering wheel turned 20° to left and right	1°19' ± 20'
Caster	7° 37' ± 30'
Maximum permissible difference between both sides	Maximum 30'
Standing height	379 ± 10 mm

¹⁾ Depending on the manufacturer, the toe out angle difference can also be indicated negatively in the alignment computer.

Front Suspension	Sport	Comfort	Heavy Duty
PR numbers	2UC	2UD	2UB
Total toe (wheels not pressed)	10' ± 10'	10' ± 10'	10' ± 10'
Camber (wheels in straight ahead position)	-40' ± 30'	-22' ± 30'	-13' ± 30'
Maximum permissible difference between both sides	Maximum 30'	Maximum 30'	Maximum 30'
Toe out angle ¹⁾ with steering wheel turned 20° to left and right	1°31' ± 20'	1°12' ± 20'	1°7' ± 20'
Caster	7° 53' ± 30'	7° 27' ± 30'	7° 18' ± 30'

Front Suspension	Sport	Comfort	Heavy Duty
Maximum permissible difference between both sides	Maximum 30'	Maximum 30'	Maximum 30'
Standing height	364 ± 10 mm	389 ± 10 mm	399 ± 10 mm

¹⁾ Depending on the manufacturer, the toe out angle difference can also be indicated negatively in the alignment computer.

Specified Values Valid for all Engine Versions

Rear Suspension	Basic
Camber	-1° ± 30'
Maximum permissible difference between both sides	maximum 30'
Total toe (at prescribed camber)	+20' ± 10'
Maximum permissible deviation from direction of rotation	Maximum 20'
Standing height	379 ± 10 mm

Rear Suspension	Sport	Comfort	Heavy Duty
Camber	-1° ± 30'	-1° ± 30'	-1° ± 30'
Maximum permissible difference between both sides	Maximum 30'	Maximum 30'	Maximum 30'
Total toe (at prescribed camber)	+20' ± 10'	+20' ± 10'	+20' ± 10'
Maximum permissible deviation from direction of rotation	Maximum 20'	Maximum 20'	Maximum 20'
Standing height	364 ± 10 mm	389 ± 10 mm	399 ± 10 mm

Fastener Tightening Specifications

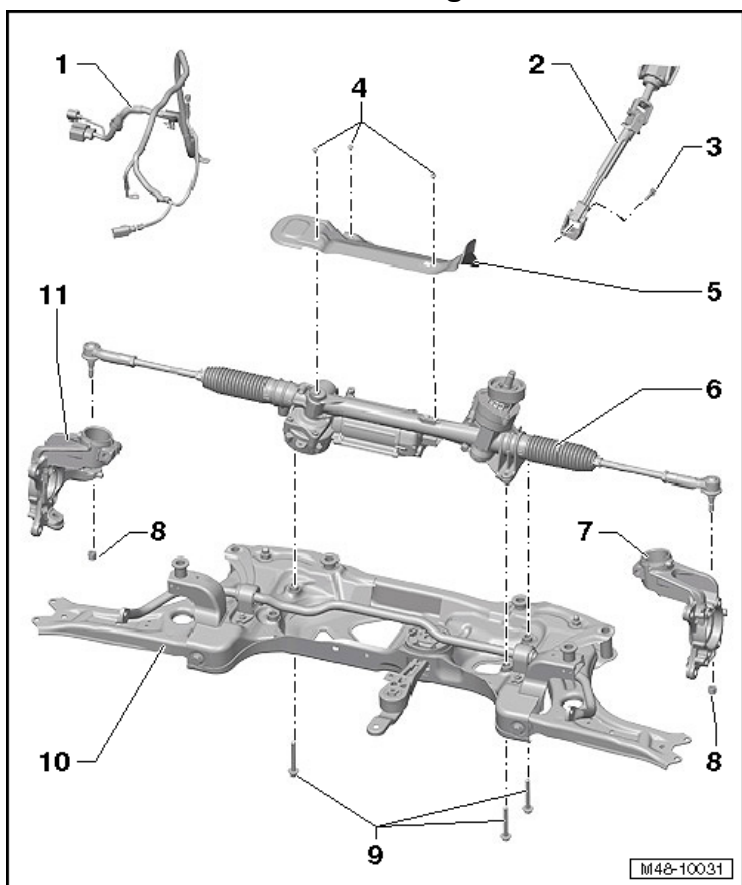
Component	Nm
Tire pressure sensor union nut	8
Front subframe to body bolt ¹⁾	70 plus an additional 180° (½ turn)
Front tie rod end to tie rod nut	70
Lower transverse link to rear subframe nut ¹⁾²⁾	8
Upper transverse link to rear subframe nut ¹⁾²⁾	95
Wheel bolt	120

¹⁾ Always replace after removal.

²⁾ Always tighten threaded connections in curb weight position. Refer to Chapter "Rear Axle, Lifting to Curb Weight Position" (all except GLI) or to Chapter "Rear Axle, Lifting to Curb Weight Position" (GLI only).

Steering

Electromechanical Steering Gear Overview



1 - Electrical Wire

2 - Universal Joint

3 - Bolt

30 Nm

M8 x 35

Always replace if removed.

4 - Torx® Bolt

6 Nm

5 - Heat Shield

6 - Power-Assisted Steering Gear

7 - Left Wheel Bearing Housing

8 - Power Steering Pump

9 - Bolt

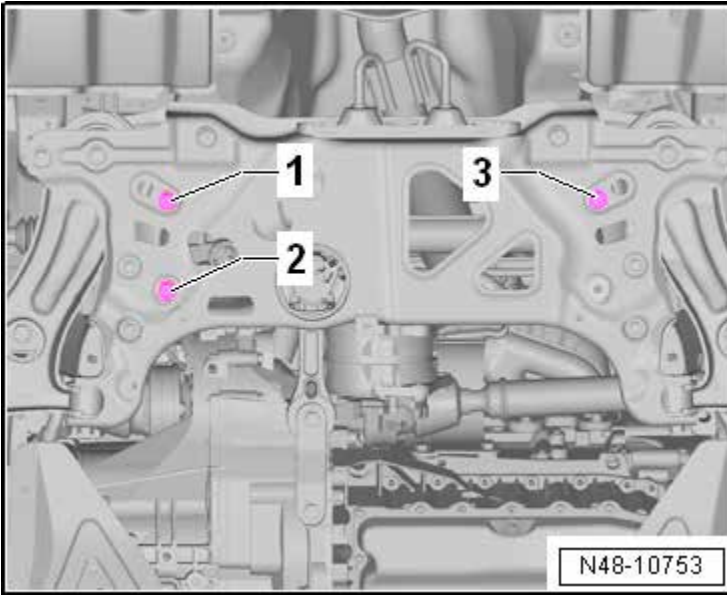
50 Nm + 90° turn

Always replace if removed.

10 - Subframe

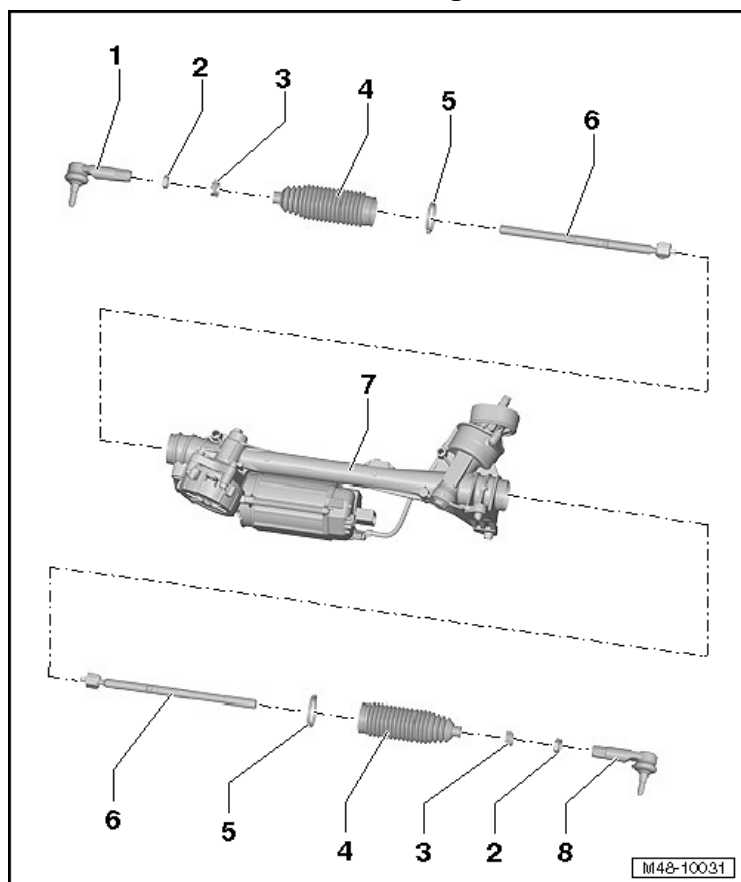
11 - Right Wheel Bearing Housing

Tightening Sequence for the Steering Gear to Subframe



Steps	Bolts	Tightening specification/ additional turn
1	Pre tighten the bolts -1, 2 and 3- after each other	Install all the way in by hand.
2	Pre-torque the bolts -1 and 2- after each other	Tighten lastly to 10 Nm in diagonal sequence and in stages
3	Tighten the bolts -1, 2 and 3- one after the other.	To tightening specification

Electromechanical Steering Gear Overview



1 - Right Tie Rod End

2 - Nut

70 Nm

3 - Clamp

4 - Boot

5 - Clamp

Replace

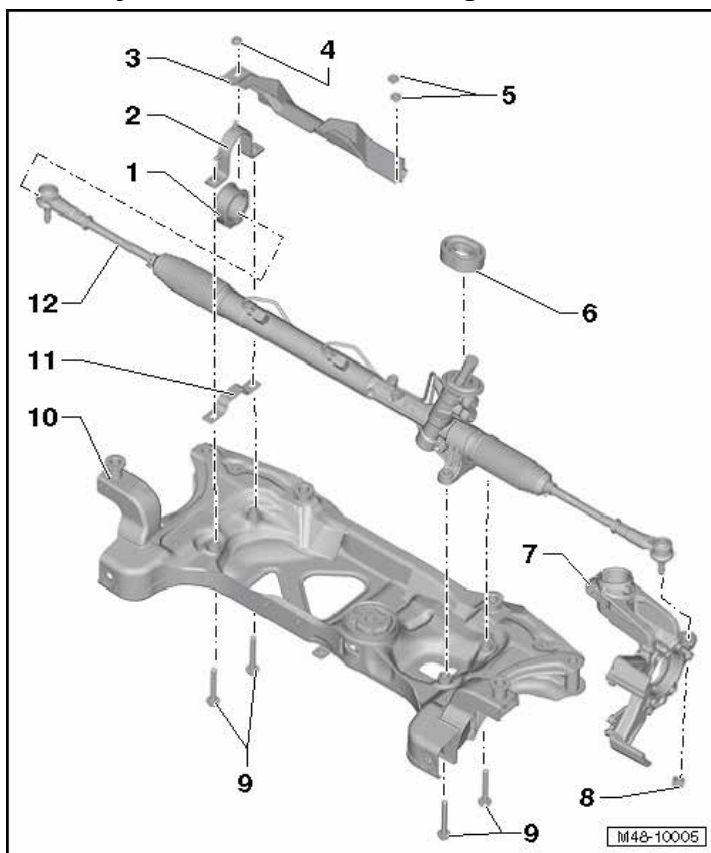
6 - Tie Rod'

100 Nm

7 - Spring Clamp

8 - Left Tie Rod End

Hydraulic Power Steering Overview



1 - Rubber Bushing

2 - Clamp

Replace after removal

3 - Heat Shield

4 - Nut

6 Nm

5 - Bolt

23 Nm

6 - Seal

7 - Wheel Bearing Housing

8 - Nut

20 Nm + 90° turn

9 - Bolt

50 Nm + 90° turn

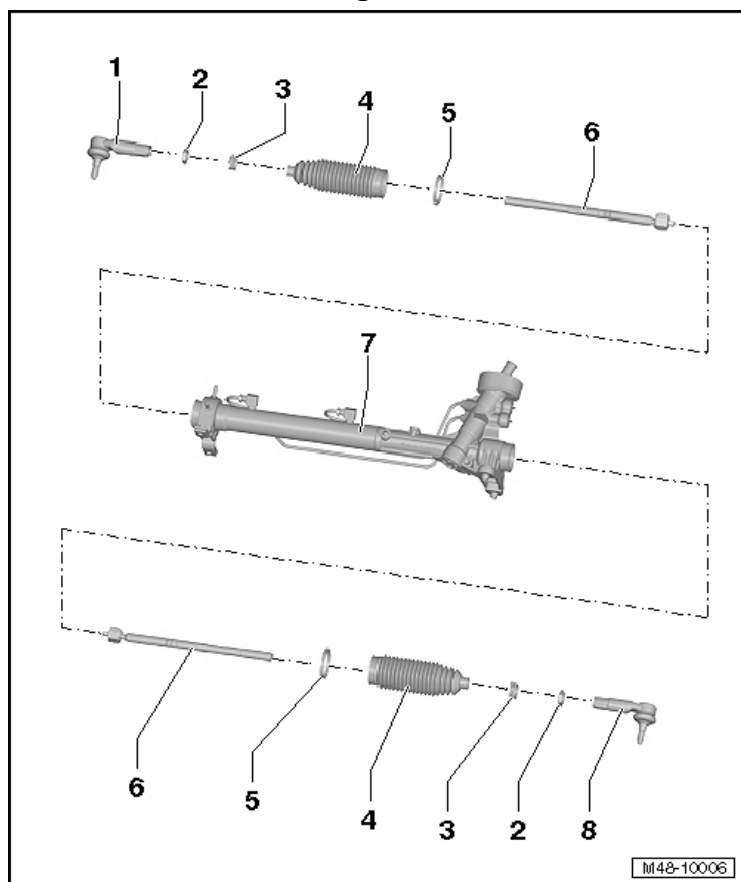
Replace after removal

10 - Subframe

11 - Washer

12 - Steering Gear

Power Steering Gear Overview



1 - Right Tie Rod End

2 - Nut

70 Nm

3 - Clamp

4 - Boot

5 - Clamp

Replace

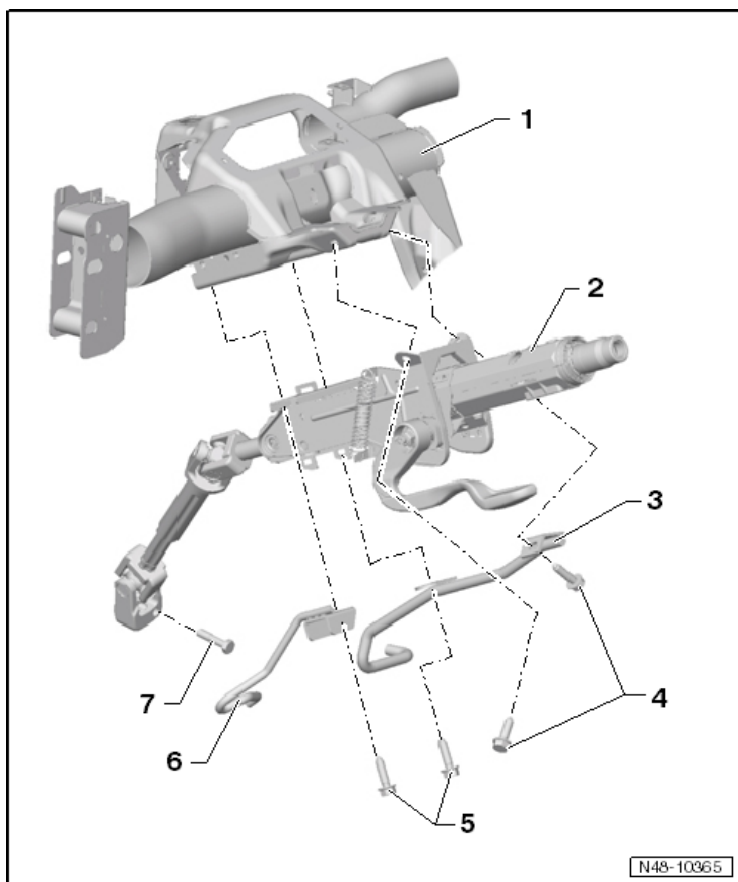
6 - Right Tie Rod

100 Nm

7 - Power-Assisted Steering Gear

8 - Left Tie Rod End

Steering Column Overview



1 - Assembly Carrier with Bracket

2 - Steering Column

3 - Brake Pedal Crash Brace

4 - Bolt

20 Nm

Follow tightening sequence, refer to Repair Manual

5 - Bolt

20 Nm

Follow tightening sequence, refer to Repair Manual

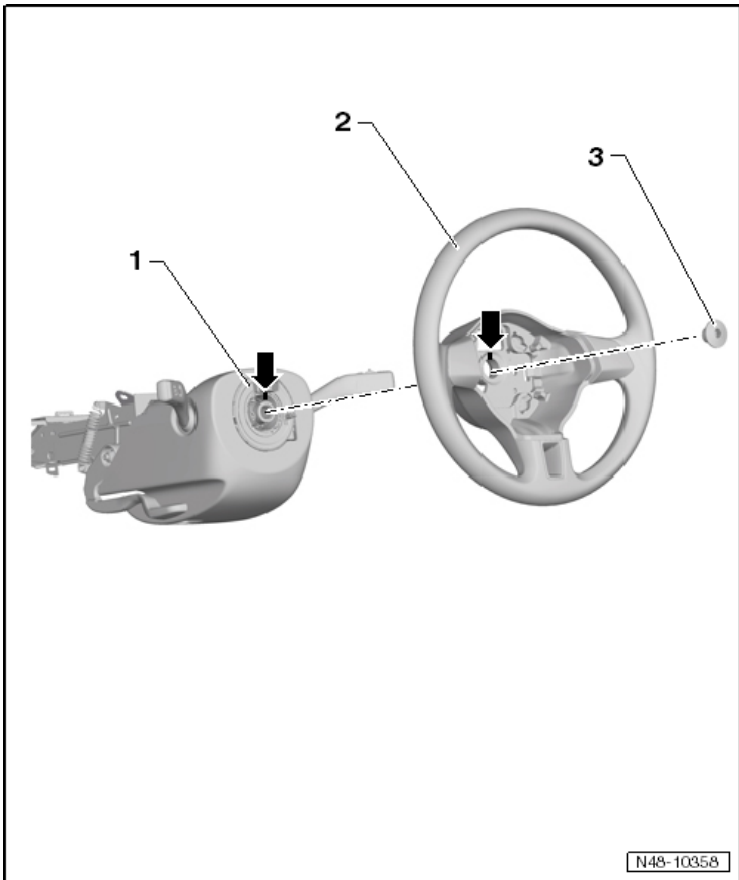
6 - Clutch Pedal Crash Brace

7 - Bolt

30 Nm

Replace after removal

Steering Wheel with Airbag Overview



1 - Steering Column

2 - Steering Wheel

3 - Bolt

- 30 Nm + 90° turn
- Replace after removal

ELECTRICAL SYSTEM

Communication

Fastener Tightening Specifications

Component	Nm
Amplifier-to-body nut	6
Antenna amplifier-to-C-pillar screw	2
FM frequency filter in positive wire-to-C-pillar	2
Frequency crossover	1.5
Front mid-range speaker	1.5
Radio-to-center console screw	1.5
Roof antenna-to-body nut	7
Satellite radio-to-rear shelf	4
Satellite tuner antenna-to-body nut	7
Subwoofer in rear shelf	4

9 - Ground Cable

10 - Battery Monitoring Control Module -J367-

11 - Ground Cable Battery Terminal

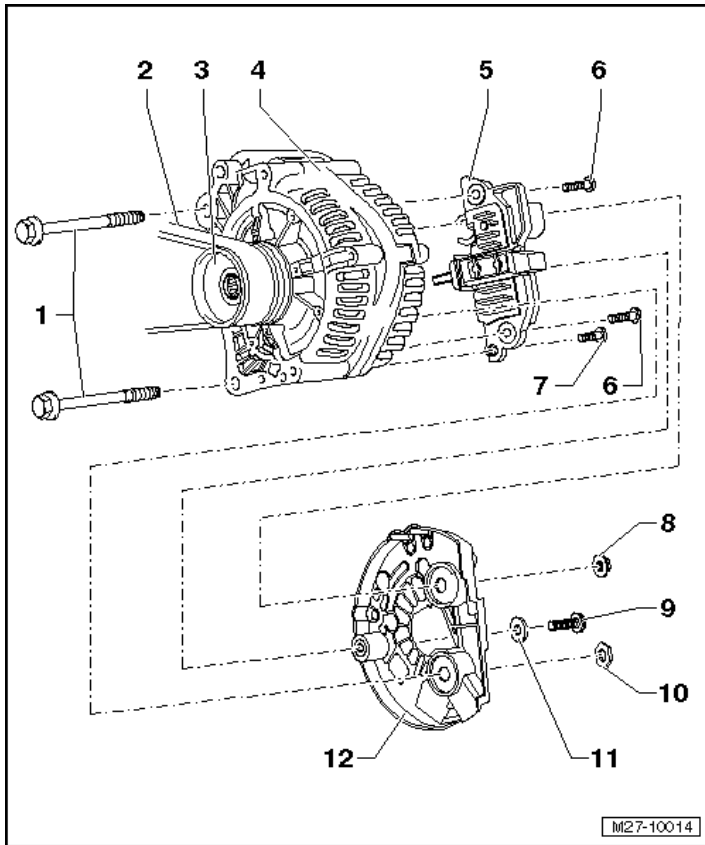
12 - Nut

20 Nm

No illustration

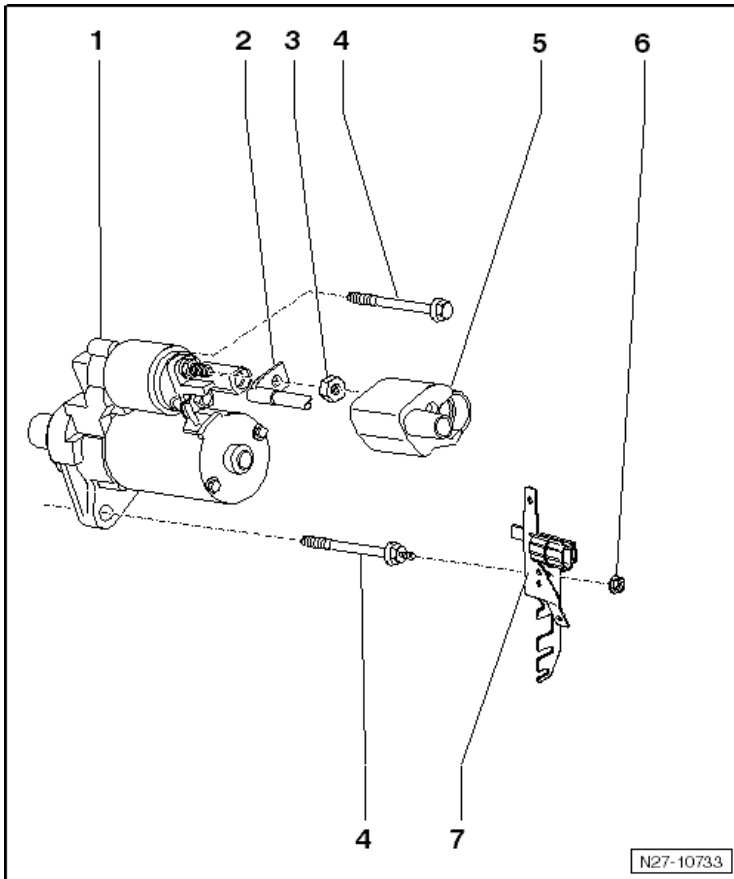
Battery tray bolts: 9 Nm

Generator Overview



- 1 - Bolt**
 - 23 Nm
- 2 - Ribbed Belt**
- 3 - Ribbed Belt Pulley**
- 4 - Generator -C-**
- 5 - Voltage Regulator -C1-**
- 6 - Bolt**
 - 2 Nm
- 7 - Bolt**
 - 2 Nm
- 8 - Nut**
 - 3.2 Nm
- 9 - Bolt**
 - 4.5 Nm
- 10 - Nut**
 - 20 Nm
- 11 - Washer**
- 12 - Cap**

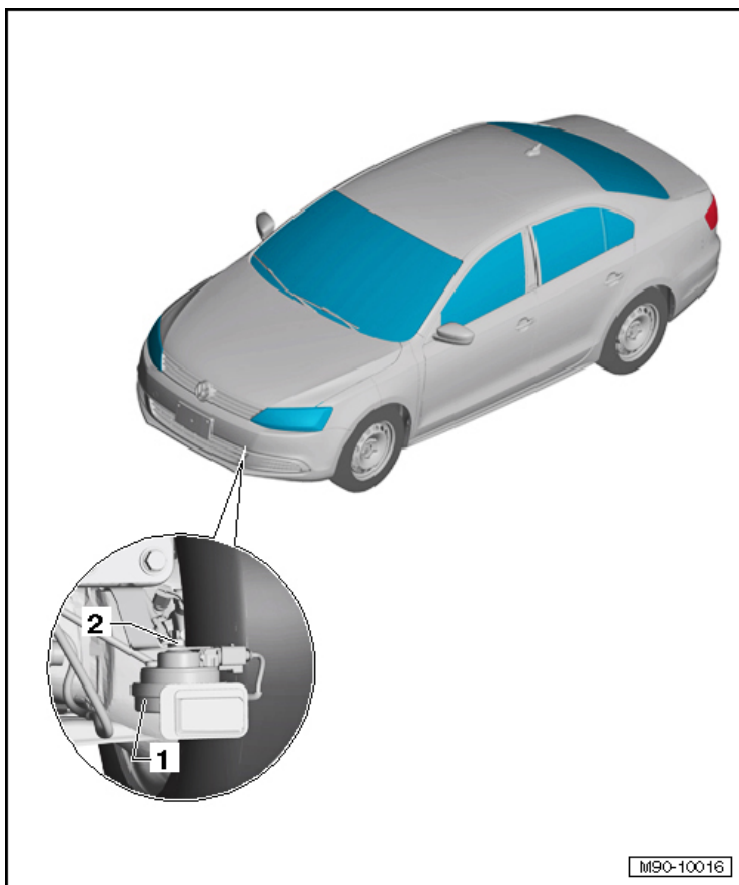
Starter Overview



- 1 - Starter -B-
- 2 - Connection, B+ wire to Starter -B-
- 3 - Nut
 - 20 Nm
- 4 - Bolt
 - M10 = 40 Nm
 - M12 = 75 Nm
- 5 - Cap
- 6 - Nut
 - 20 Nm
- 7 - Cable Holder

Instrument

Horn Overview



1 - Low Tone Horn -H7-

2 - Nut

10 Nm

Tightening specification bolt to longitudinal member: 20 Nm

3 - Nut

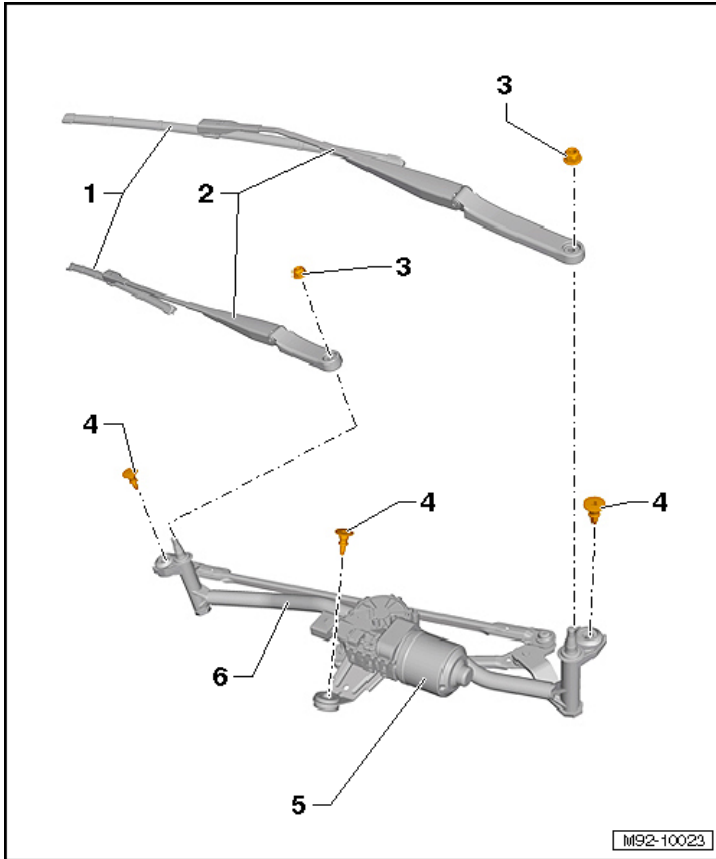
10 Nm

Tightening specification bolt to longitudinal member: 20 Nm

4 - High Tone Horn -H2-

Windshield Wiper/Washer System

Starter Overview



1 - Joint-Free Windshield Wiper

2 - Windshield Wiper Arm

3 - Nut

20 Nm

4 - Bolt

5 Nm

5 - Windshield Wiper Motor with Wiper Motor Control Module -J400-

6 - Wiper Frame with Linkage

No illustration

Windshield wiper motor -v- bolts for the wiper frame with linkage: 8 Nm

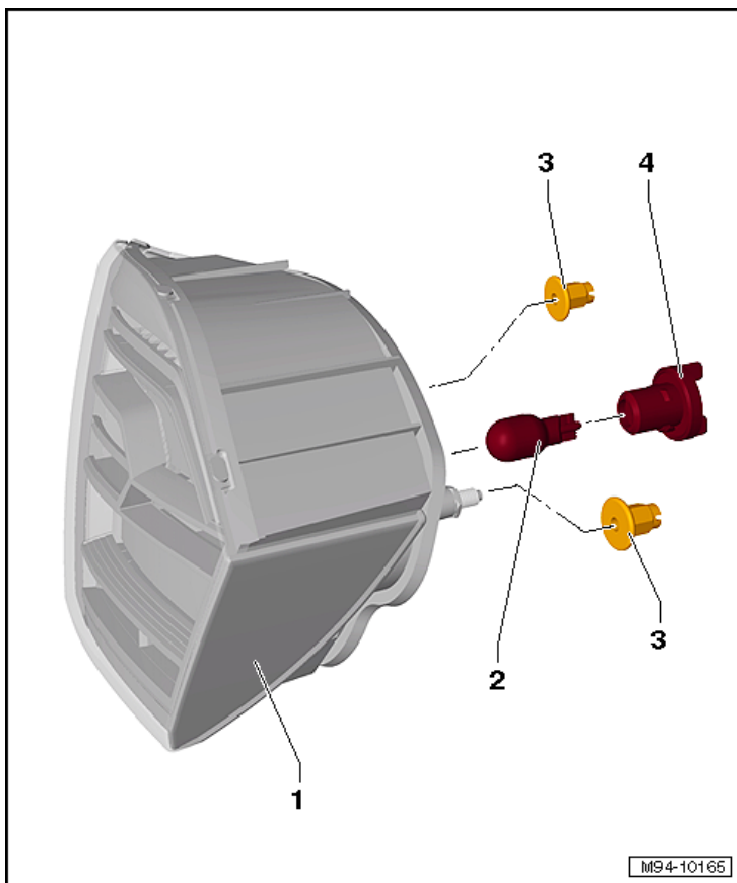
Windshield wiper motor crank to windshield wiper motor shaft: 18 Nm

Windshield washer fluid reservoir to body: 8 Nm

Spray jet telescopic cylinder on the front bumper cover: 4.5 Nm

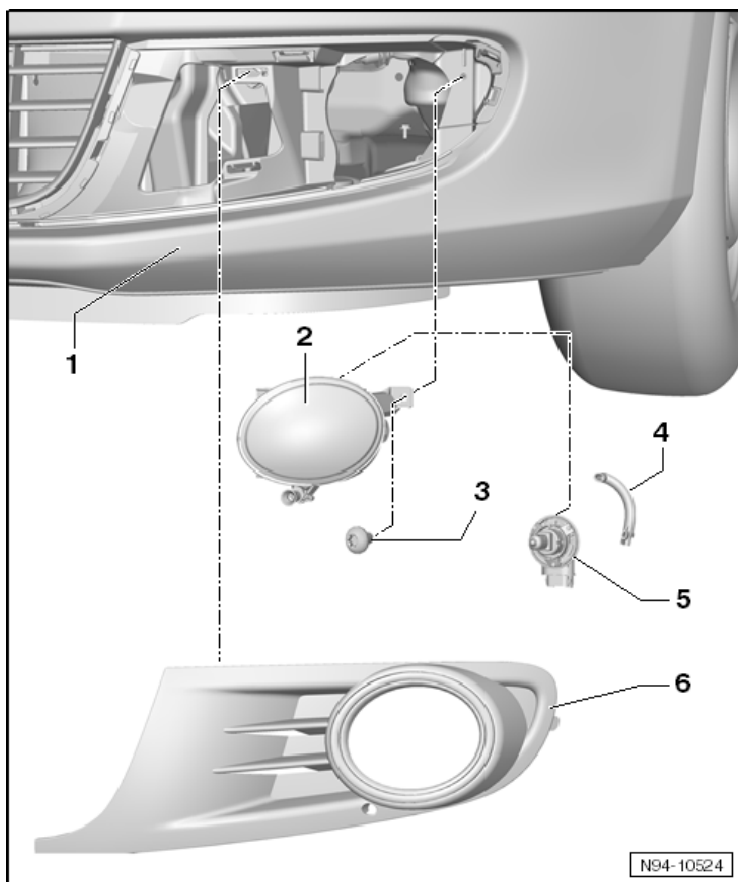
Exterior Lights, Switches

Tail Lamp LED Bulbs in Rear Lid Overview



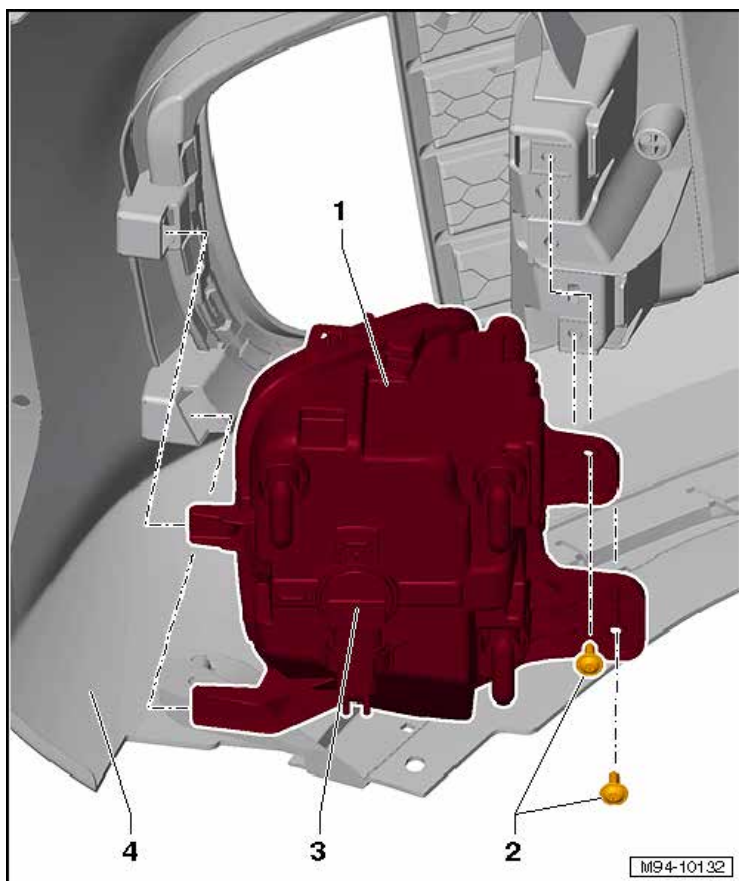
- 1 - Tail Lamp Assembly Housing in Rear Lid
- 2 - Left Back-Up Lamp Bulb -M16-/Right Back-Up Lamp Bulb -M17-
- 3 - Nut
 - 3 Nm
- 4 - Bulb Holder

Front Fog Lamp, Jetta Overview



- 1 - Front Bumper Cover
- 2 - Fog Lamp Housing
- 3 - Bolt
 - 2 Nm
- 4 - Ventilation Hose
- 5 - Left Front Fog Lamp Bulb -L22-/Right Front Fog Lamp Bulb -L23-
- 5 - Cap
- 6 - Cap

Front Fog Lamp, Jetta GLI Overview



1 - Fog Lamp Housing

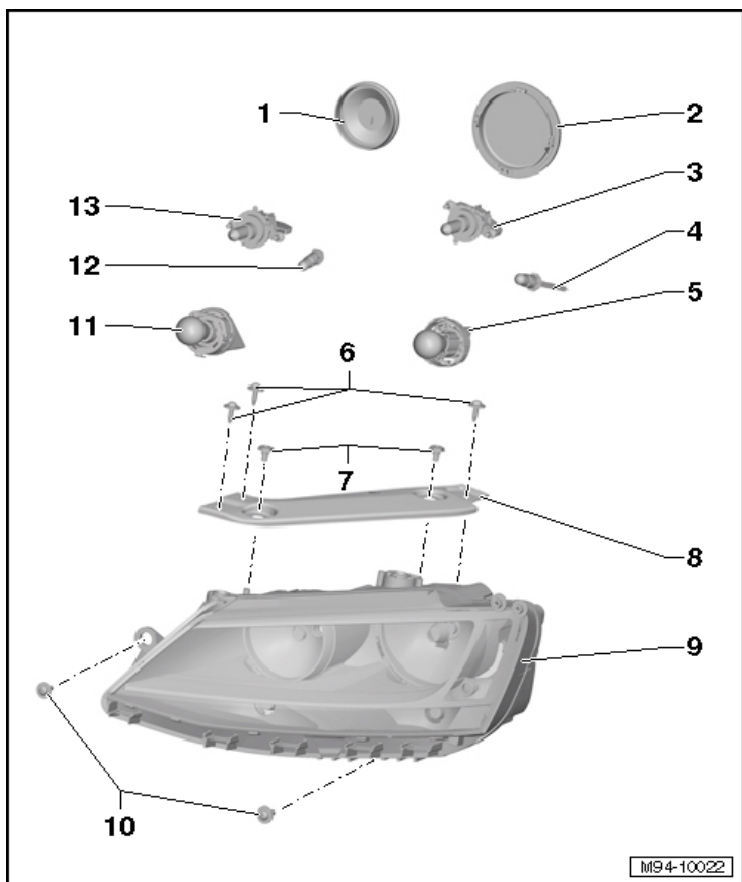
2 - Bolt

□ 2 Nm

3 - Left Front Fog Lamp Bulb -L22-/Right Front Fog Lamp Bulb -L23-

4 - Front Bumper Cover

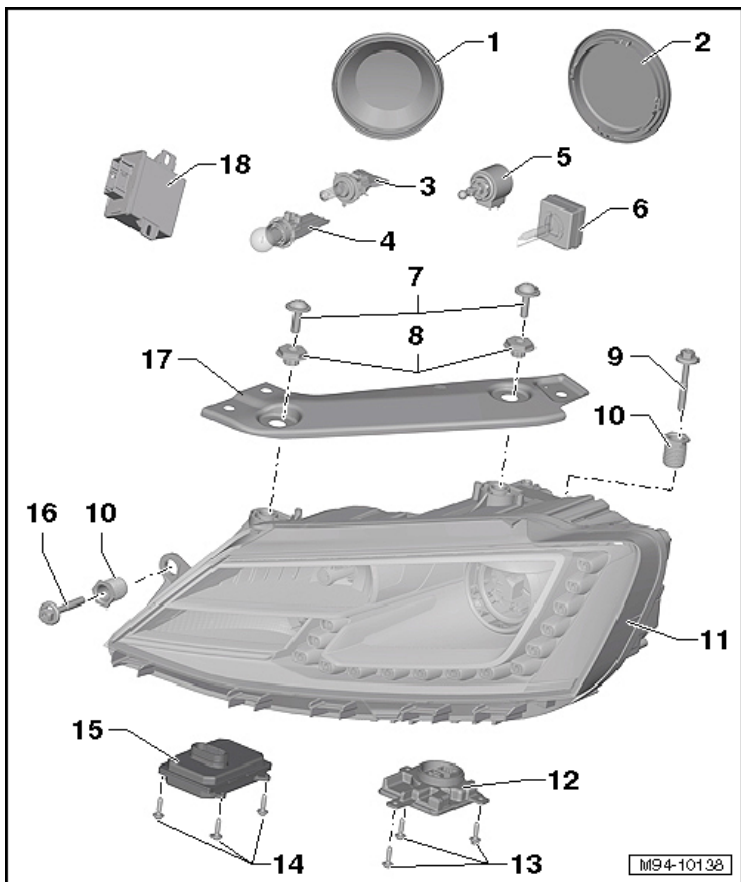
Halogen Headlamps Overview



- 1 - Cap
- 2 - Cap
- 3 - Left Low Beam Headlamp Bulb -M29-/Right Low Beam Headlamp Bulb -M31-
- 4 - Left Front Side Marker Lamp Bulb -M33-/Right Front Side Marker Lamp Bulb -M34-
- 5 - Left Daytime Running Lamp Bulb -L174-/Right Daytime Running Lamp Bulb -L175-
- 6 - Bolt
 - 8 Nm
- 7 - Bolt
 - 5 Nm
- 8 - Carrier, Front End
- 9 - Headlamps
- 10 - Bolt
 - 5 Nm

- 11 - Left Front Turn Signal Bulb -M5-/Right Front Turn Signal Bulb -M7-**
- 12 - Left Position Lamp Bulb -M1-/Right Position Lamp Bulb -M3-**
- 13 - Left High Beam Headlamp Bulb -M30-/Right High Beam Headlamp Bulb -M32-**

HID Headlamps and Cornering Lamp Overview



1 - Cap

2 - Cap

3 - Left Cornering Lamp Bulb -L148- or Right Cornering Lamp Bulb -L149-

4 - Left Front Turn Signal Bulb -M5-/Right Front Turn Signal Bulb -M7-

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

6 - Left HID Headlamp Bulb -L13-/Right HID Headlamp Bulb -L14-

7 - Bolt

□ 5 Nm

8 - Guide Sleeves

9 - Bolt

□ 5 Nm

10 - Adjusting Bushings

11 - Headlamps

12 - Left HID Headlamp Control Module -J343- and Right HID Headlamp Control Module -J344-

13 - Bolt

- 1.4 Nm

14 - Bolt

- 1.4 Nm

15 - Left Headlamp Power Output Stage -J667-/Right Headlamp Power Output Stage -J668-

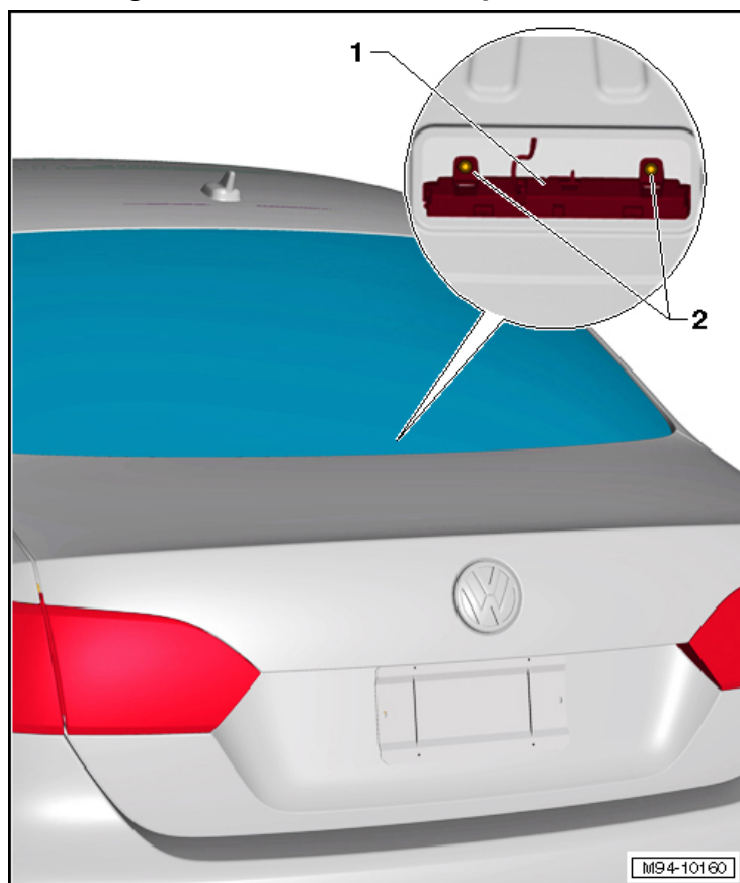
16 - Bolt

- 5 Nm

17 - Carrier, Front End

18 - Cornering Lamp And Headlamp Range Control Module -J745-

High-Mounted Brake Lamp Overview

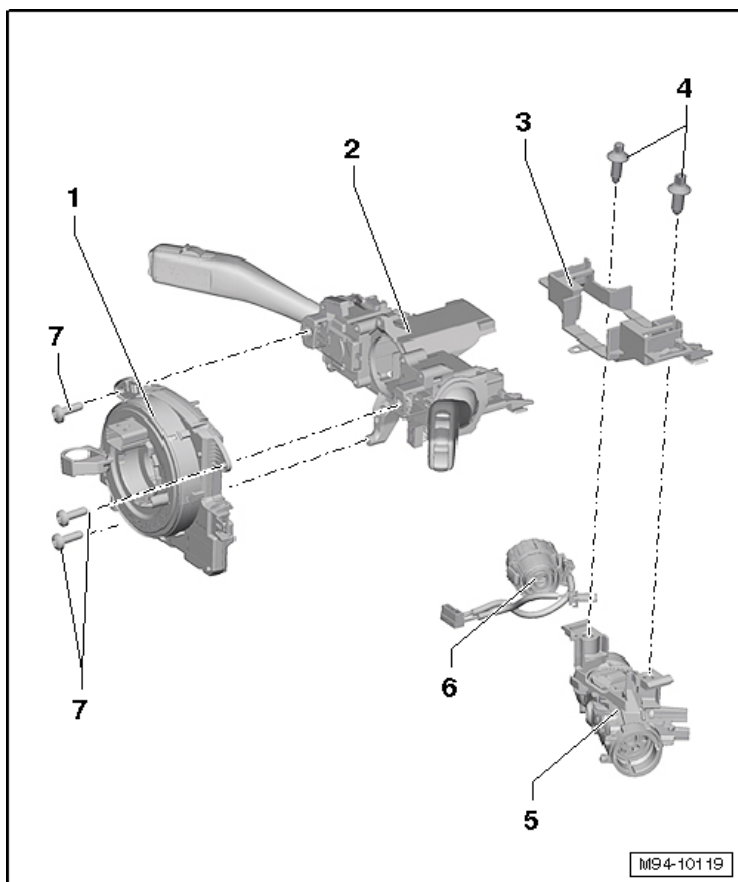


1 - High-Mounted Brake Lamp

2 - Bolt

2 Nm

Steering Column Switch Module Overview, Valeo



Electrical
System

1 - Steering Column Electronics Control Module -J527-

2 - Steering Column Combination Switch -E595-

3 - Steering Column Switch Mount

4 - Shear Bolts

□ 15 Nm

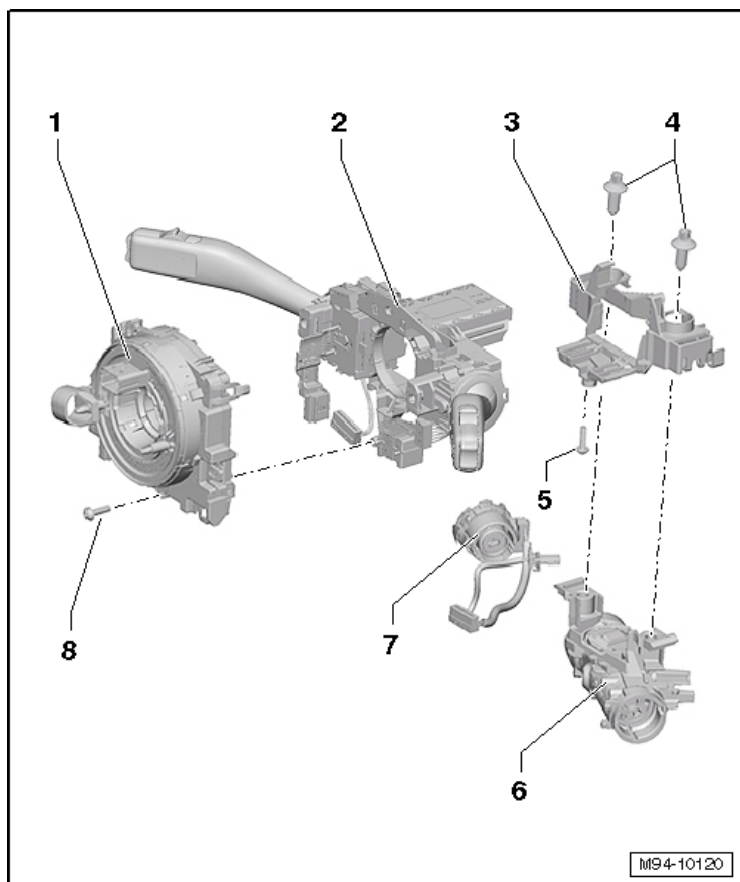
5 - Steering Lock Housing-

6 - Ignition Switch and Lock Cylinder

7 - Bolt

□ 1.5 Nm

Steering Column Switch Module Overview, Kostal



1 - Steering Column Electronics Control Module -J527-

2 - Steering Column Combination Switch -E595-

3 - Steering Column Switch Mount

4 - Shear Bolts

Break-off torque: approximately 15 Nm

5 - Bolt

2.5 Nm

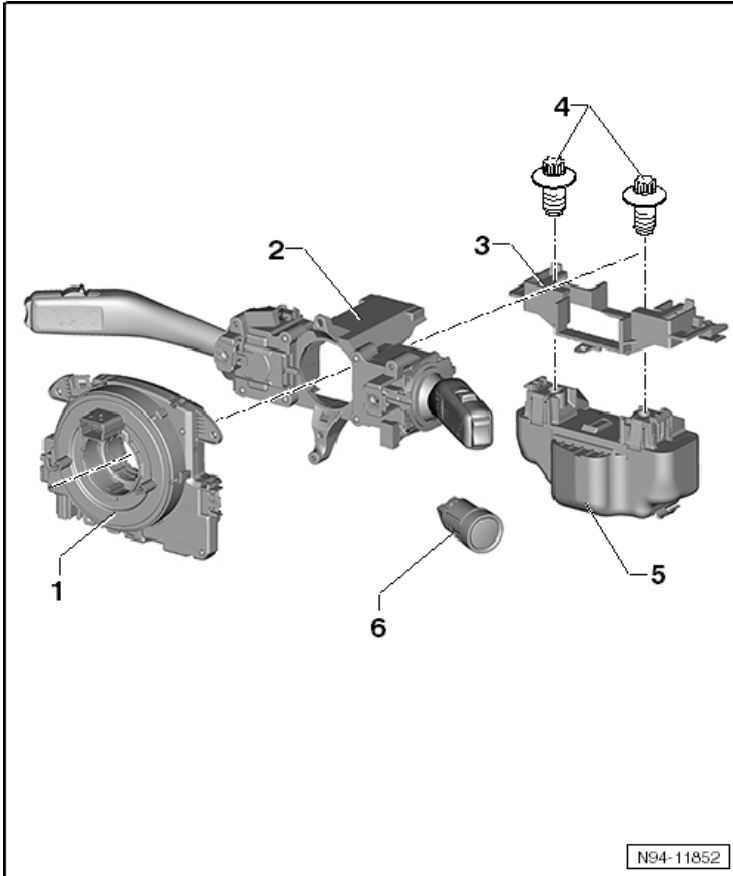
6 - Steering Lock Housing

7 - Ignition Switch -D- and Lock Cylinder

8 - Bolt

1.5 Nm

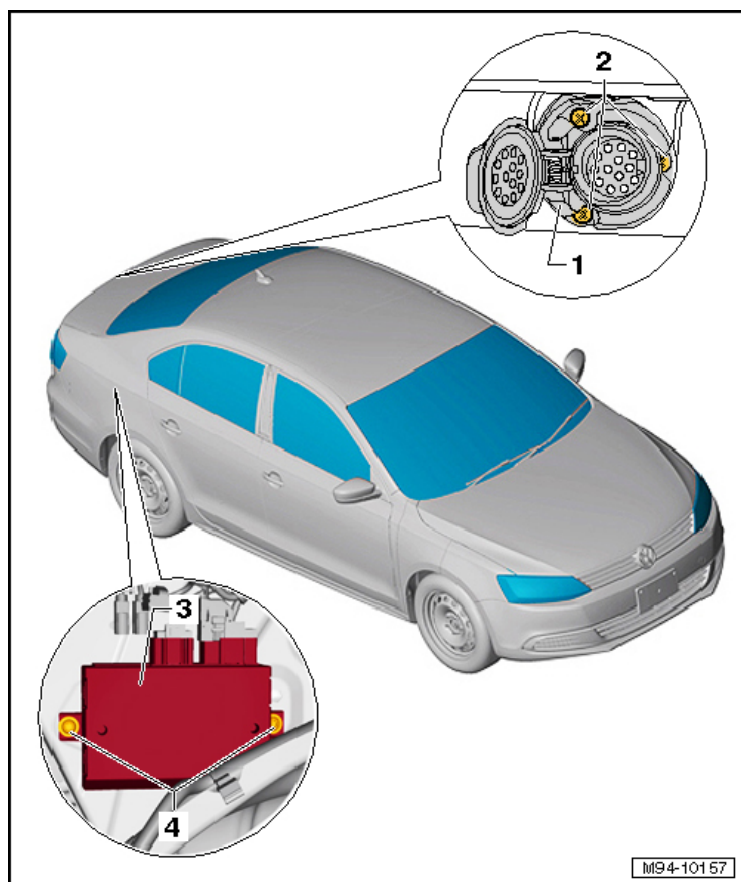
Steering Column Switch Module Overview, KESSY



Electrical
System

- 1 - Steering Column Electronics Control Module -J527-**
 - Bolts: 1.5 Nm
- 2 - Steering Column Combination Switch -E595-**
- 3 - Steering Column Switch Mount**
- 4 - Shear Bolts**
 - Break-off torque: approximately 15 Nm
- 5 - Electronic Steering Column Lock Control Module -J764-**
- 6 - Start System Button -E378-**

Trailer Socket -U10-, Overview



1 - Trailer Socket -U10-

2 - Bolt

□ 2 Nm

3 - Towing Recognition Control Module -J345-

4 - Bolt

□ 1.2 Nm

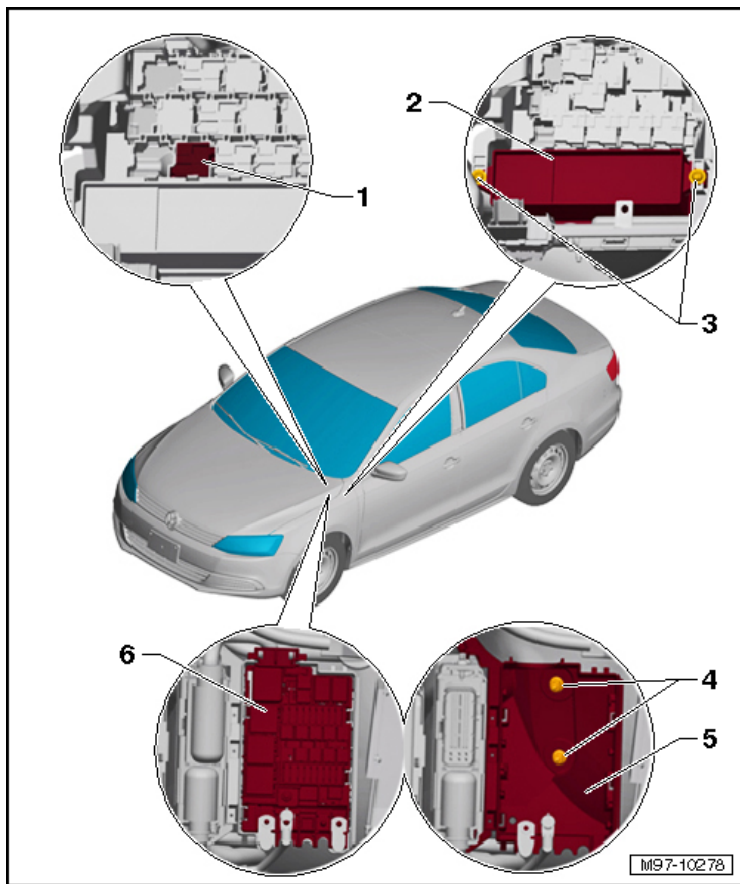
Interior Lights, Switches

Fastener Tightening Specifications

Component	Nm
Alarm Horn Nut	10
Frame bolts	2
Front Interior Lamp	2

Wiring

Relay Panels, Fuse Panels and E-Boxes Component Location Overview



1 - Vehicle Electrical System Control Module -J519- relay carrier

2 - Fuse Panel Behind the Instrument Panel on the Driver Side

3 - Bolt

- 2.5 Nm

4 - Nut

- 6 Nm

5 - E-box

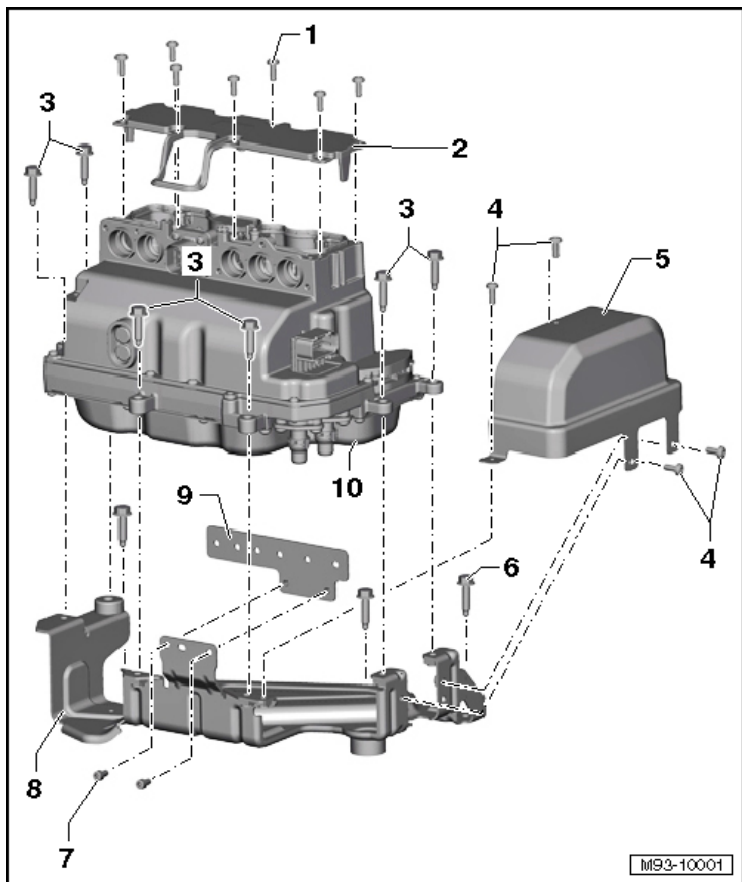
6 - Relay and Fuse Panel in the E-Box

Not illustrated

- Nuts (wire connections to the E-box): 9 Nm

Electrical Drive

Electric Drive Power and Control Electronics -JX1- Overview



1 - Bolt

7 Nm

2 - Cover

3 - Bolt

20 Nm

4 - Bolt

9 Nm

5 - High Voltage Connection Cover Plate

6 - Bolt

9 Nm

7 - Bolt

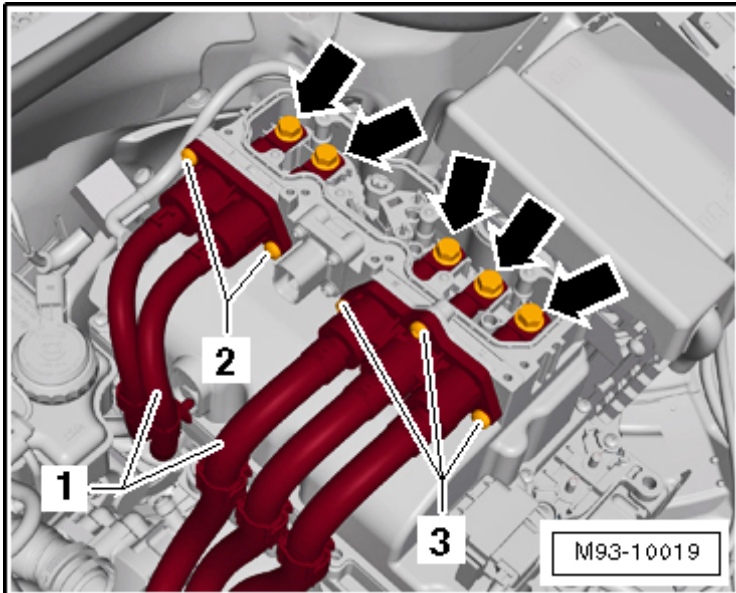
8 Nm

8 - Bracket

9 - Cable Bracket

10 - Electric Drive Power and Control Electronics -JX1-

Tightening Specifications, High Voltage Contacts



Electrical
System

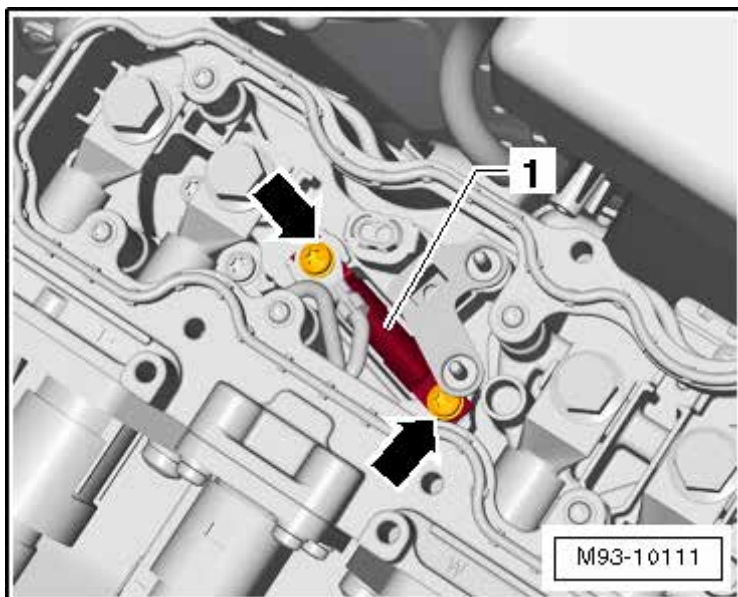
1 - High Voltage Contacts -arrows-

□ 20 Nm

2 - Threaded Connection -2- and -3-

□ 5 Nm

Tightening Specifications for the Electric A/C Compressor -V470- Fuse



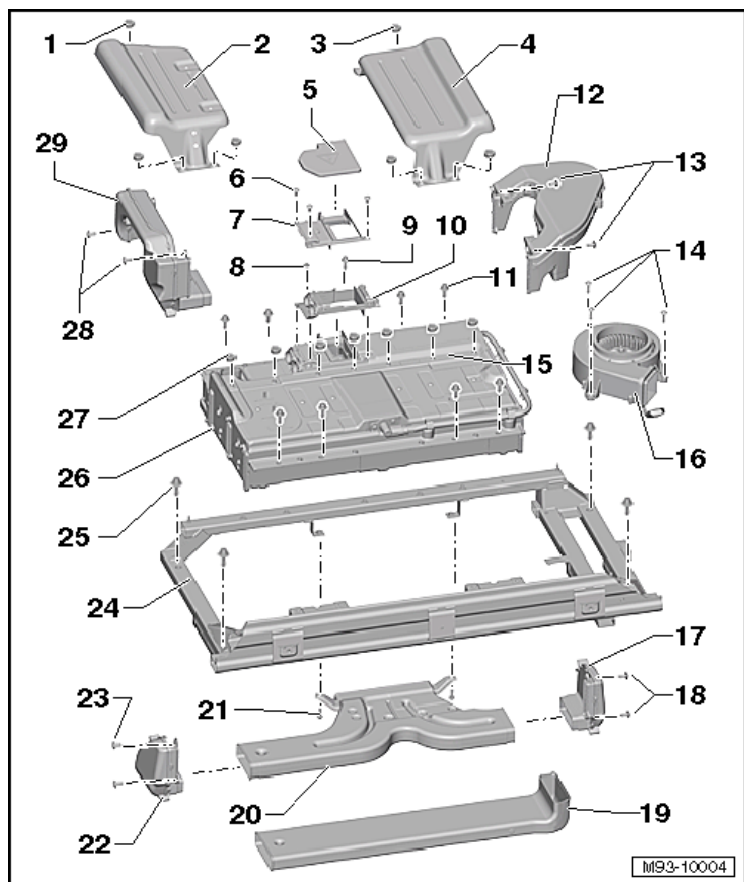
1 - Bolts -arrows-

- 2.7 Nm

2 - Tightening Specifications for Terminal 30/Terminal 31

- Nut 20 Nm

Hybrid Battery Unit -AX1- Overview



- 1 - Nut
□ 5 Nm
- 2 - Reinforcement
- 3 - Nut
□ 5 Nm
- 4 - Reinforcement
- 5 - Cap
- 6 - Bolt
□ 4 Nm
- 7 - Cover
- 8 - Bolt
□ 4 Nm
- 9 - Bolt
□ 10 Nm
- 10 - E-Box Housing
- 11 - Bolt
□ 10 Nm

12 - Exhaust Air Duct

13 - Bolt

2 Nm

14 - Bolt

4 Nm

15 - Cover Plate

16 - Battery Fan 1 -V457-

17 - Right Air Guide Duct

18 - Bolt

4 Nm

19 - Air Guide Duct

20 - Lower Supply Air Duct

21 - Bolt

4 Nm

22 - Left Air Guide Duct

23 - Bolt

4 Nm

24 - Frame

25 - Bolt

40 Nm

26 - Hybrid Battery Unit -AX1-

27 - Nut

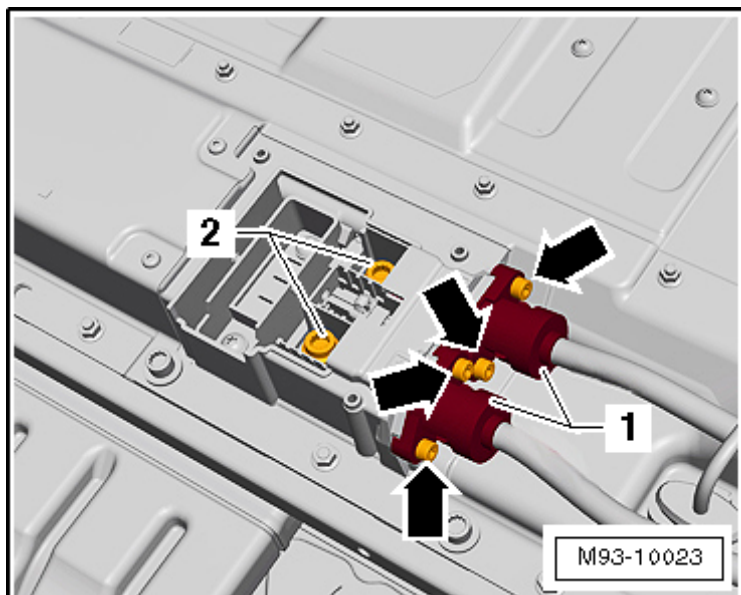
10 Nm

28 - Bolt

2 Nm

29 - Exhaust Air Duct

Tightening Specifications, High Voltage Contacts



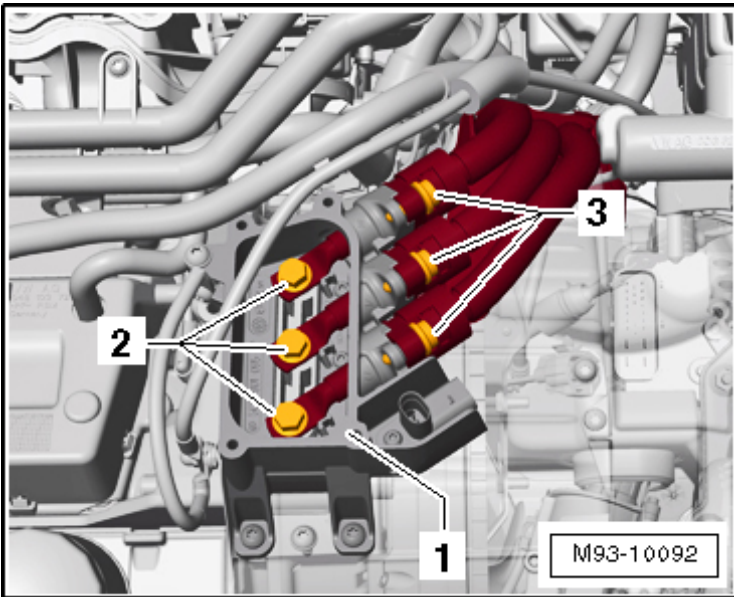
1 - High Voltage Contacts -2-

- 20 Nm

2 - Threaded Connection -arrows-

- 5 Nm
- If microencapsulated bolts -arrows- were used: replace.
- Bolt tightening specification for the Battery Regulation Control Module -J840-: 5 Nm

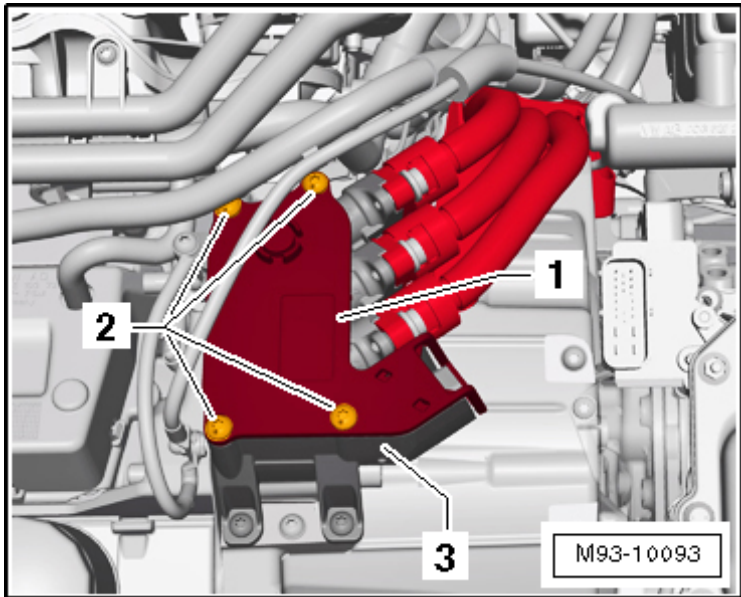
Tightening Specifications, High Voltage Contacts Electro-Drive Drive Motor -V141-



Electrical
System

- 1 - High Voltage Contacts -2-
 - 20 Nm
- 2 - Threaded Connection -3-
 - 5 Nm

Bolt Tightening Specification for the Electro-Drive Drive Motor -V141- Cover.



1 - Bolt -2-

- 20 Nm

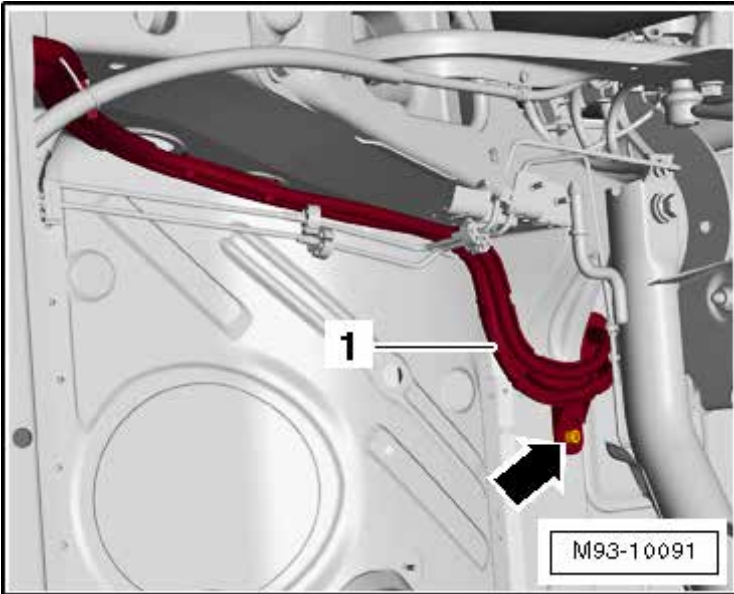
- Bolt tightening specification for the Electro-Drive Drive Motor V141- cover:

- 20 Nm

- Bolt tightening specification for the Electro-Drive Drive Motor -V141- connection box:

- 20 Nm

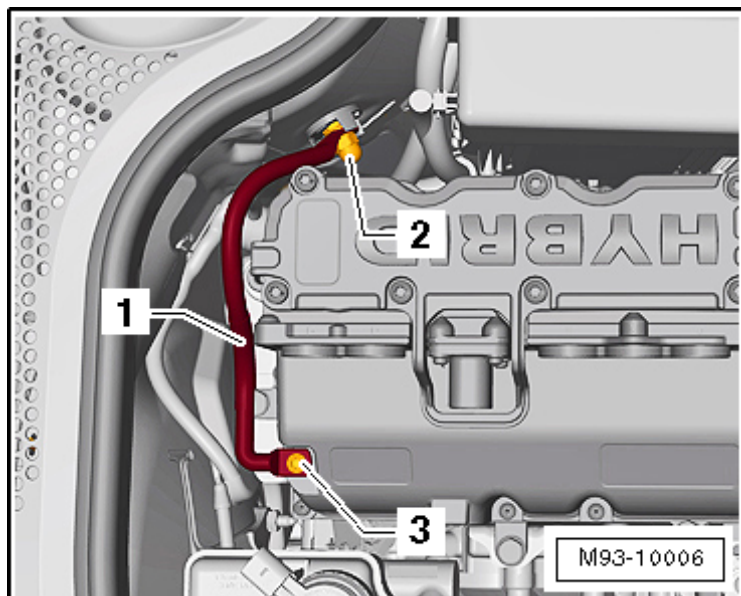
Bolt Tightening Specification for the Wiring Guide -1-



- Bolt -arrow-
- 20 Nm

Electrical
System

Tightening Specifications for the Potential Equalization Cable to Electric Drive Power and Control Electronics -Jx1- -1-



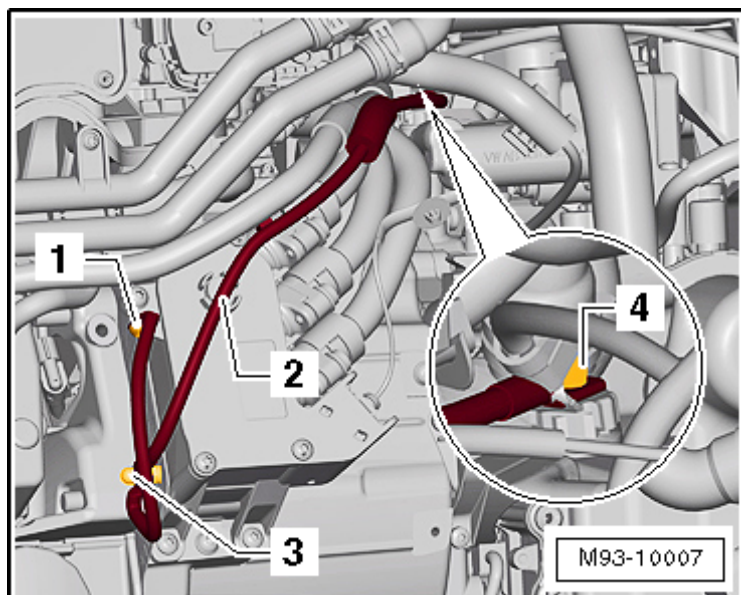
- Bolt to Electric Drive Power and Control Electronics -JX1--3-
tightening specification

9 Nm

- Nut -2-

20 Nm

Tightening Specifications for the Potential Equalization Cable -2- on the Electro-Drive Drive Motor -V141-

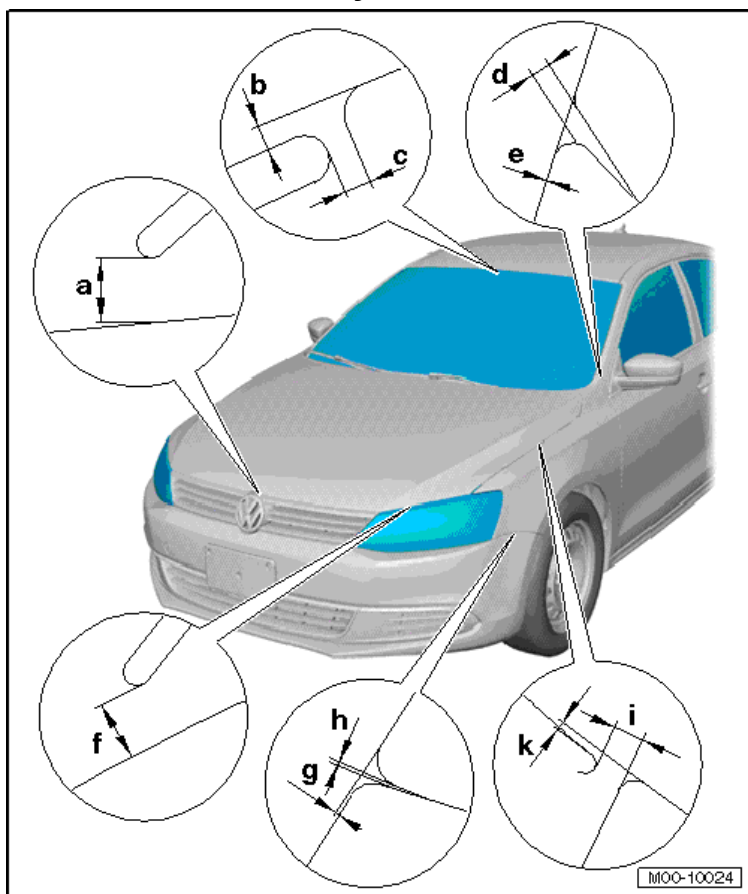


- Bolt tightening specification -1-:
 - 8 Nm
- Bolt tightening specification -3-:
 - 8 Nm
- Bolt tightening specification -4-:
 - 20 Nm

BODY

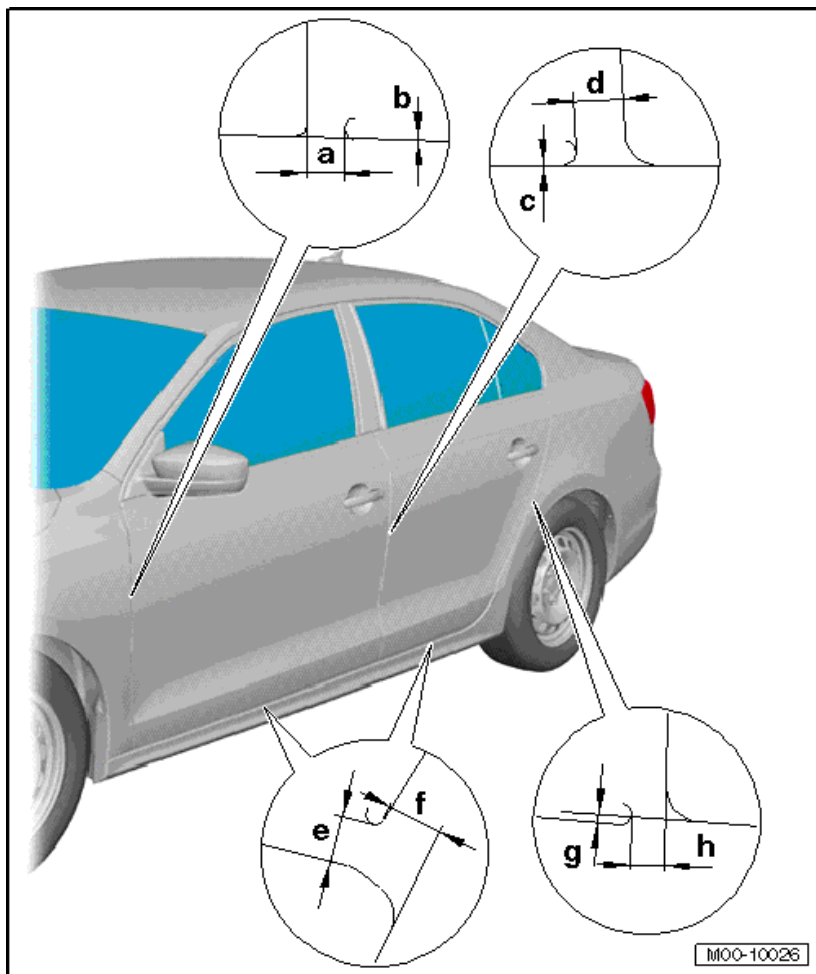
Body Dimensions

Body, Front



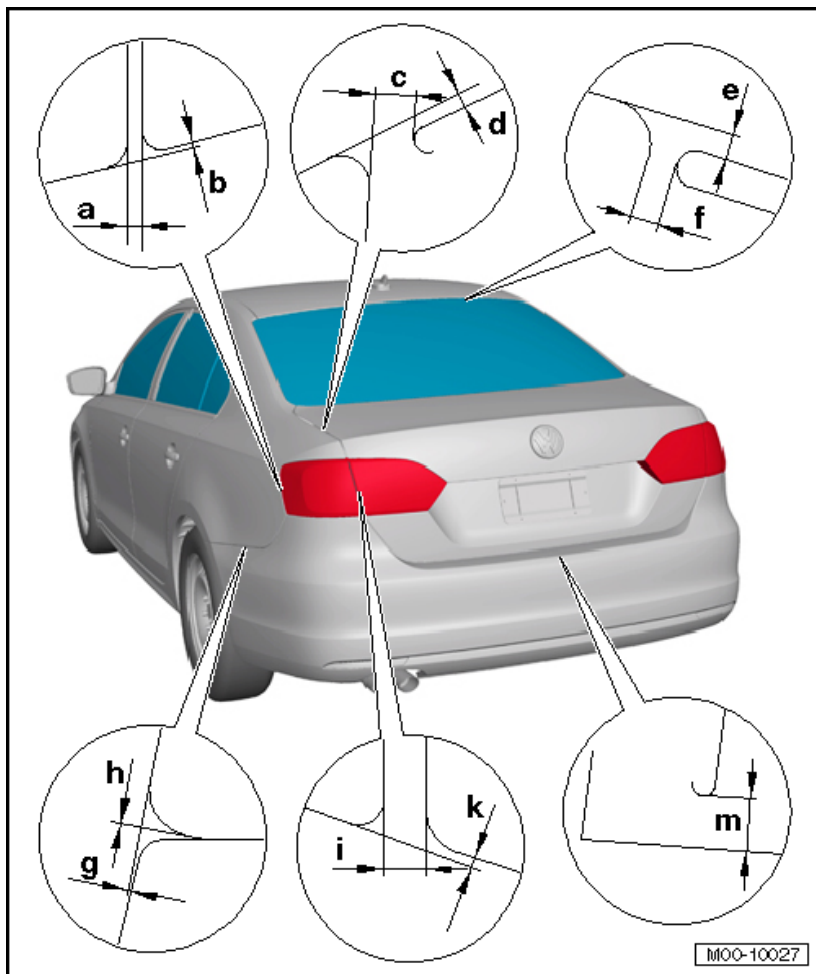
Component	mm
a	5.0 ± 0.5
b	1.9 ± 0.5
c	2.5 ± 0.5
d	2.0 ± 1.0
e	0.0 ± 0.5
f	4.9 ± 0.5
g	0.5 ± 0.5
h	0.5 ± 0.5
i	3.2 ± 1.5
k	0.5 – 1.6 ± 0.5

Body, Center



Component	mm
a	3.5 ± 0.5
b	0.0 ± 0.8
c	0.0 ± 1.0
d	4.2 ± 0.5
e	4.5 ± 0.5
f	5.1 ± 0.5
g	0.8 ± 1.0
h	3.5 ± 0.5

Body, Rear

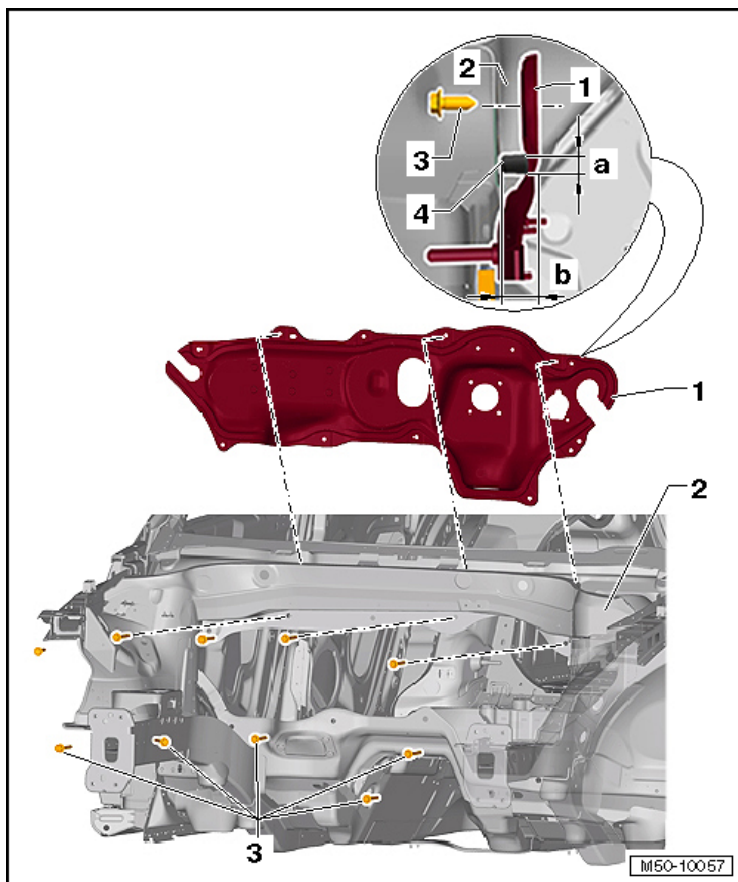


Component	mm
a	1.0 ± 0.5
b	0.5 ± 0.5
c	3.7 ± 0.5
d	0.0 - 0.5 ± 0.5
e	2.0 ± 0.5
f	2.5 ± 0.5
g	0.5 ± 0.5
h	0.0 ± 0.5
i	3.5 ± 0.5
k	0.8 + 0.5
m	5.0 ± 0.5

Body Exterior

Body Front

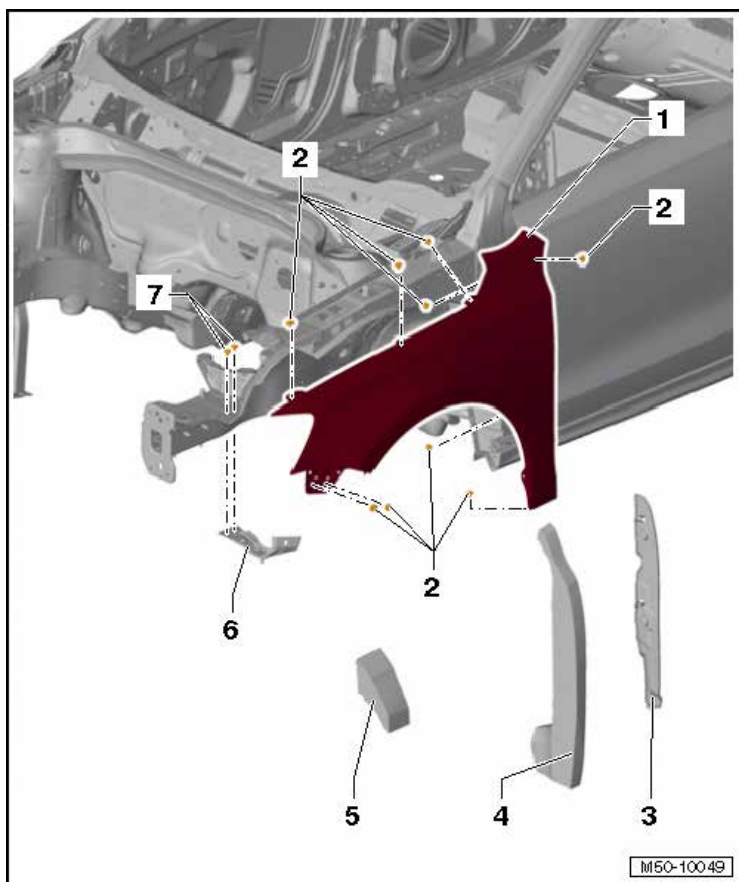
Bulkhead Overview



- 1 - Bulkhead
 - 2 - Body Flange
 - 3 - PUR Adhesive Sealant
 - 4 - Bolt
- 25 Nm

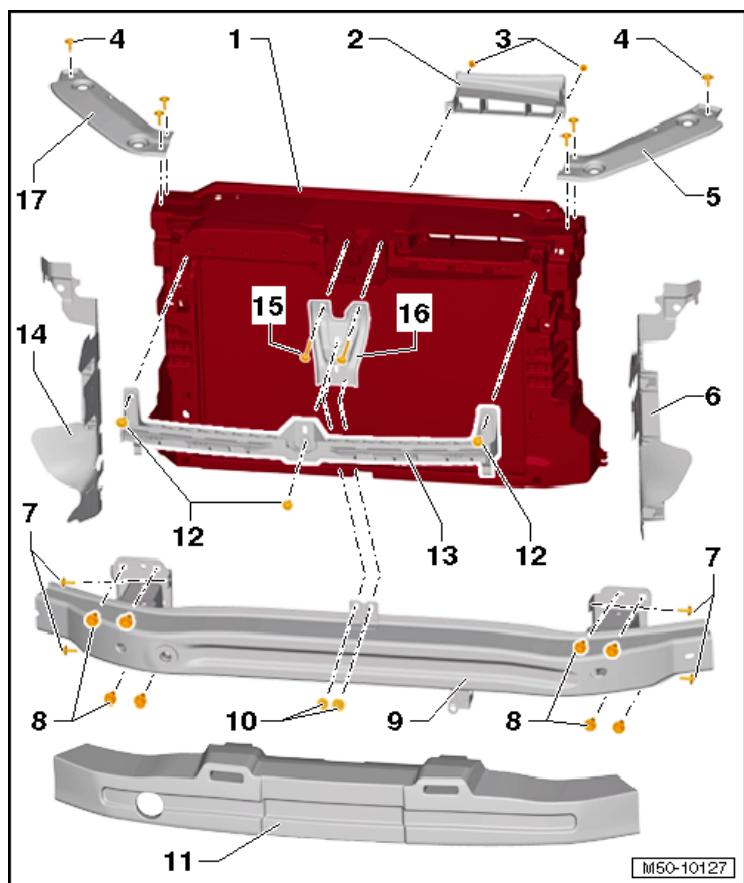
Electrical
System

Front Fender Overview



- 1 - Fender
- 2 - Bolt
 - 6 Nm
- 3 - Fender End Plate
- 4 - Noise Insulation, Fender End Plate
- 5 - Foam Piece
- 6 - Fender Brace
- 7 - Bolt
 - 6 Nm

Lock Carrier Overview



- 1 - Lock Carrier with Attachments**
- 2 - Air Guide Channel**
- 3 - Bolt**
 - 2 Nm
- 4 - Bolt**
 - 8 Nm
- 5 - Bracket**
- 6 - Air Ducts**
- 7 - Bolt**
 - 8 Nm
- 8 - Bolt**
 - 60 Nm
- 9 - Bumper Carrier**
- 10 - Nut**
 - 8 Nm
- 11 - Foam Piece**

12 - Bolt

8 Nm

13 - Center Guide

14 - Air Ducts

15 - Bolt

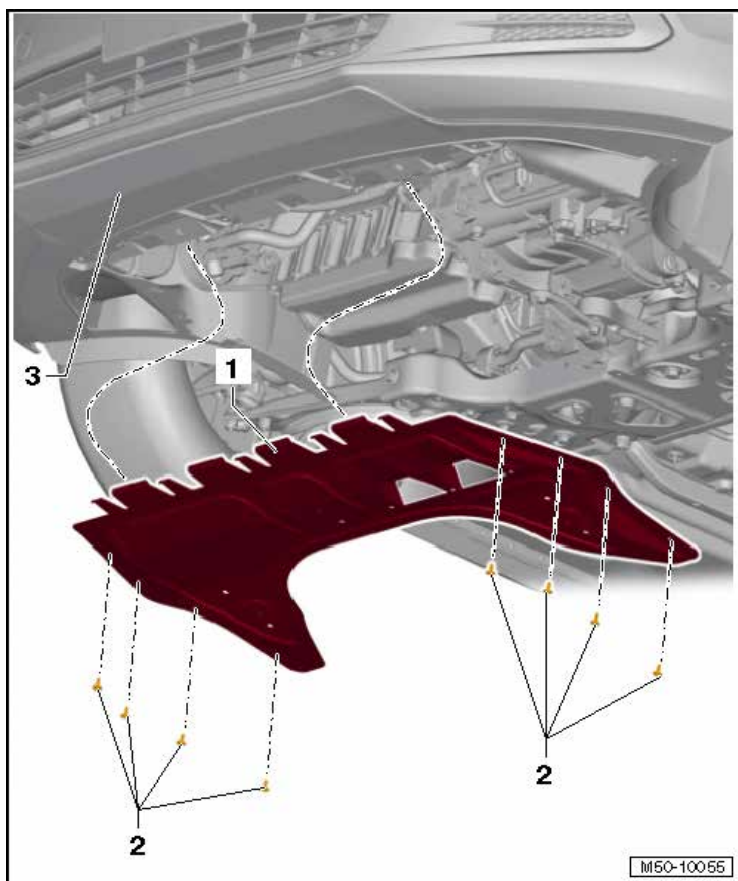
12 Nm

16 - Support

17 - Bracket

Body

Noise Insulation Overview, Gasoline



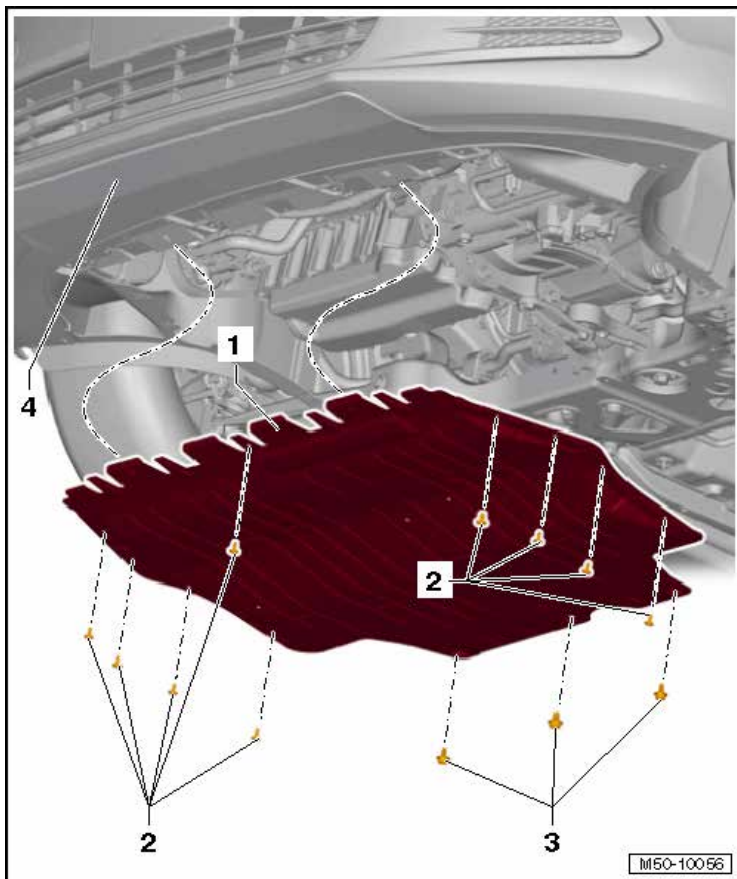
1 - Noise Insulation

2 - Bolt

□ 2 Nm

3 - Front Bumper Cover

Noise Insulation Overview, Diesel



Body

1 - Noise Insulation

2 - Bolt

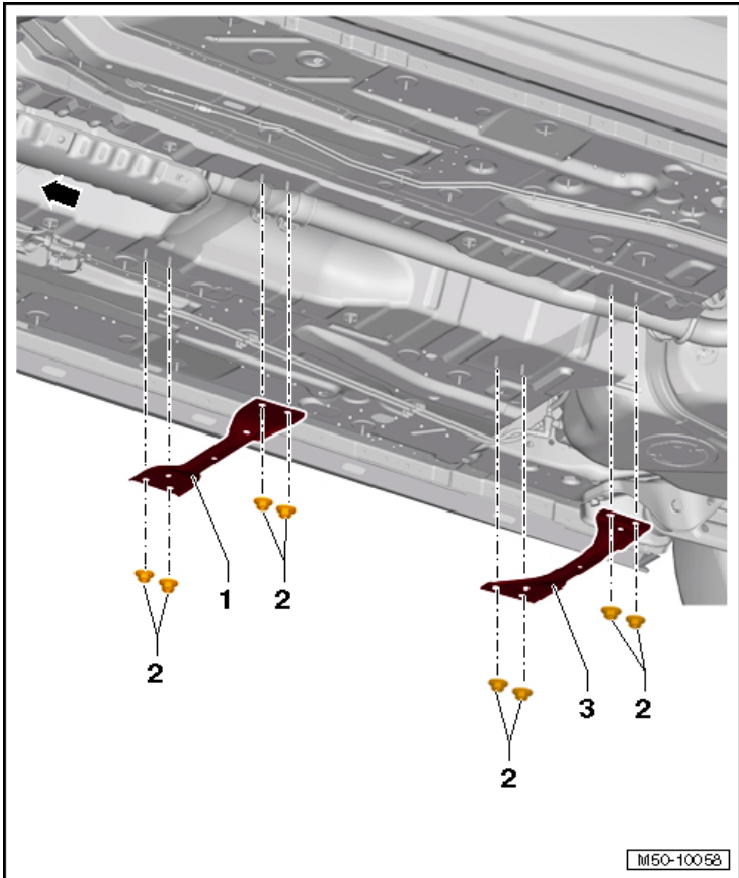
□ 2 Nm

3 - Bolt

□ 6 Nm

4 - Front Bumper Cover

Tunnel Bridge Overview



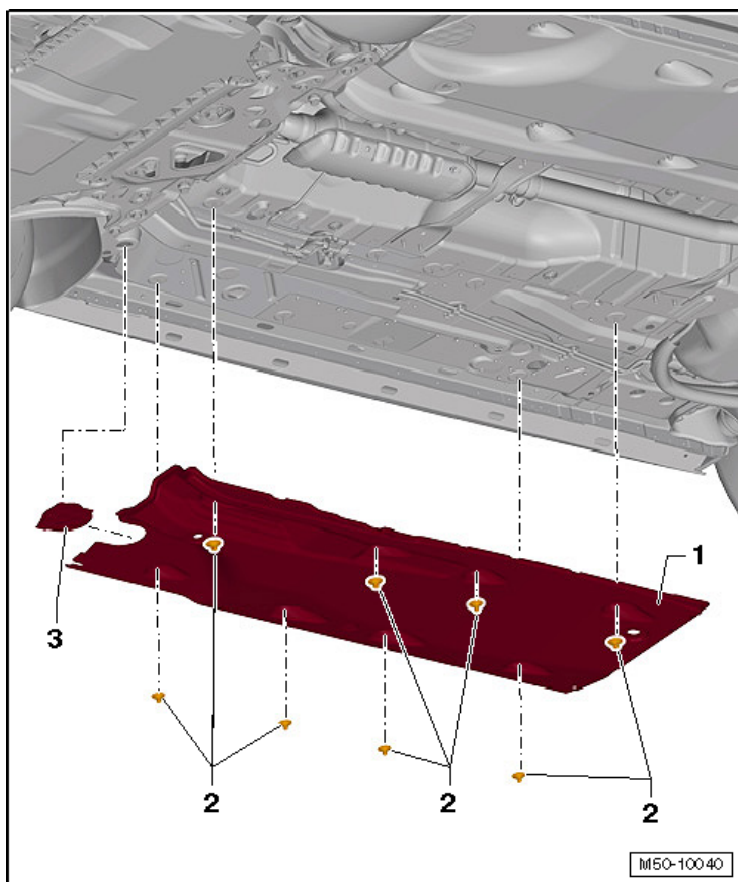
1 - Front Tunnel Bridge

2 - Hex Nut

□ 20 Nm

3 - Rear Tunnel Bridge

Underbody Trim Panel Overview



Body

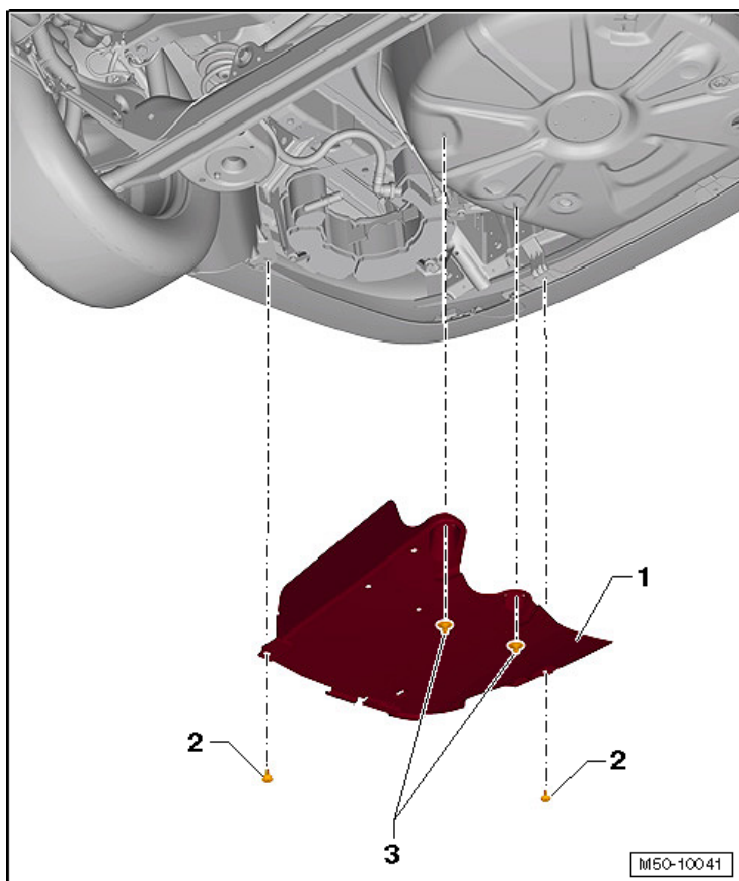
1 - Underbody Trim Panel

2 - Nut

□ 2 Nm

3 - Cover

Right Rear Underbody Trim Panel



1 - Right Rear Underbody Trim Panel

2 - Bolt

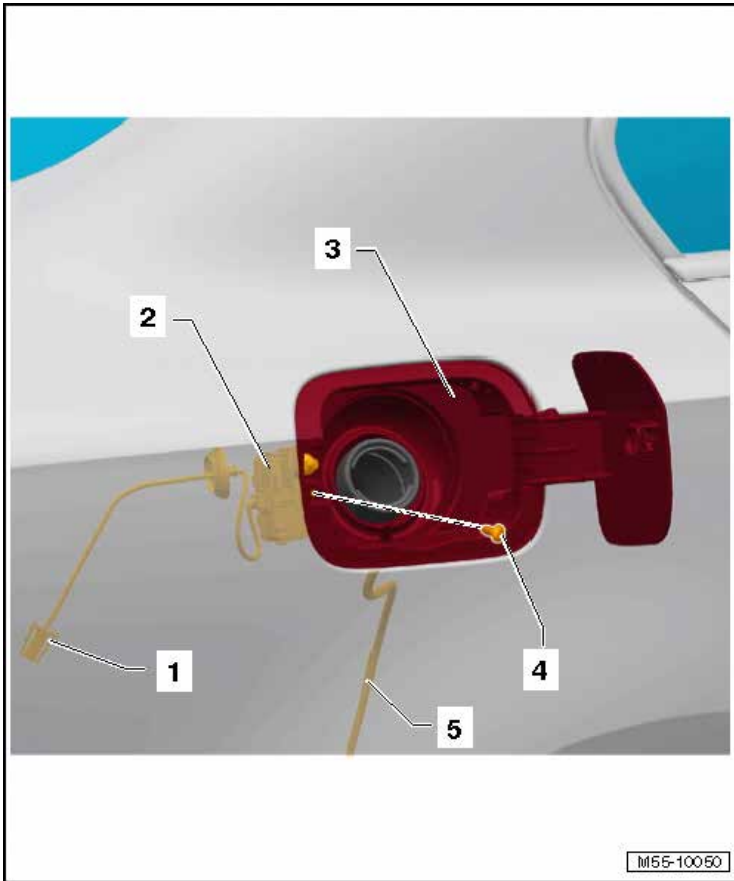
2.7 Nm

3 - Nut

2 Nm

Hood, Lids

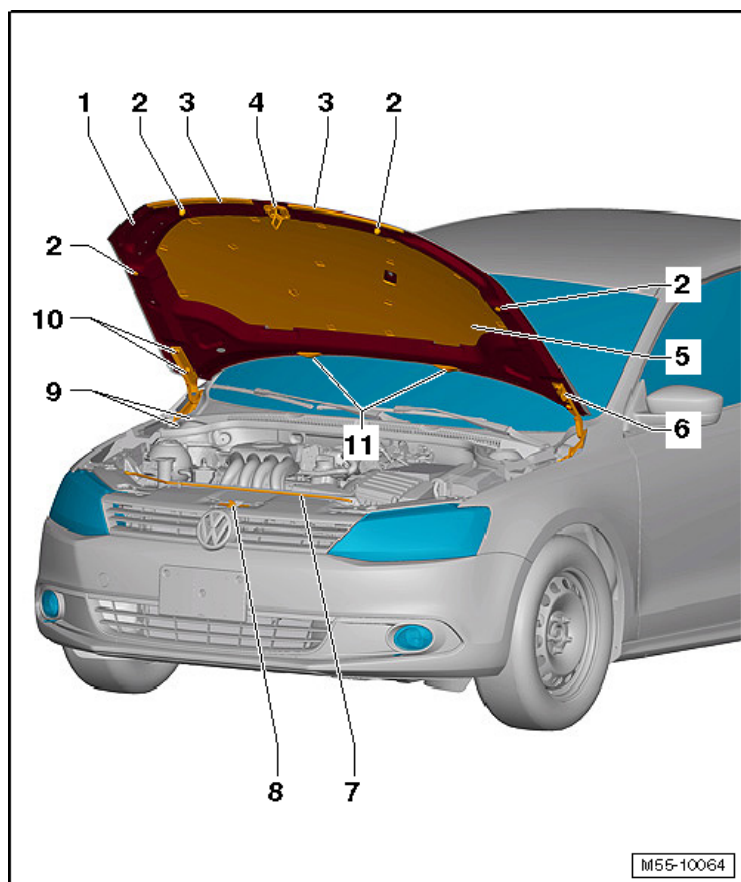
Fuel Filler Door Unit Overview



Body

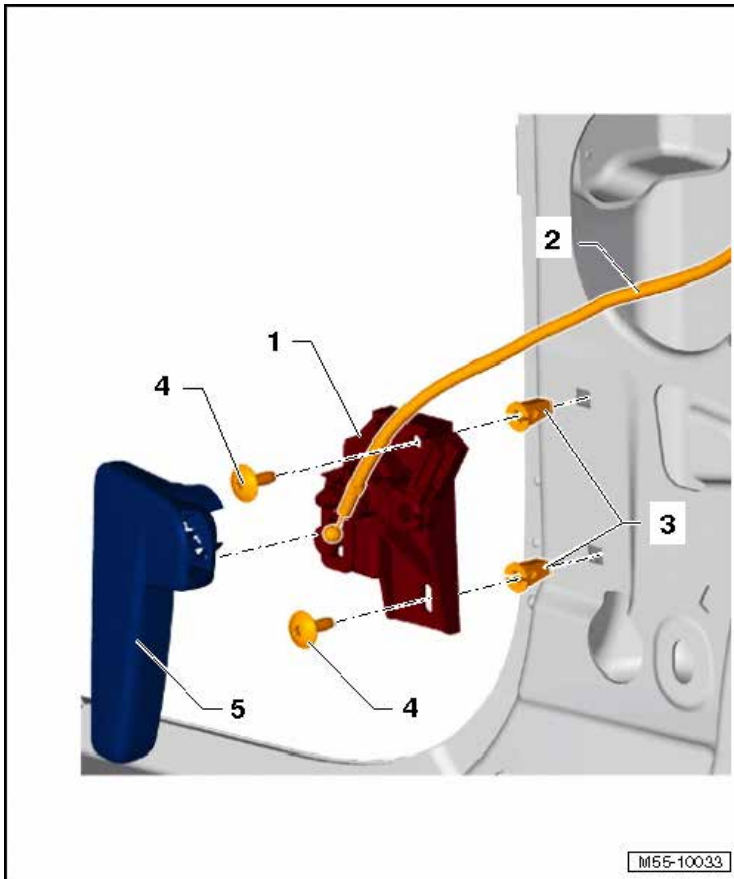
- 1 - Connector
- 2 - Fuel Tank Lid Unlock Motor -V155-
- 3 - Fuel Filler Door Unit
- 4 - Bolt
 - 1.5 Nm
- 5 - Water Drain Hose

Hood Overview



- 1 - Hood
- 2 - Adjusting Buffer
- 3 - Center Seal
- 4 - Hood Catch
- 5 - Insulation
- 6 - Hinge
- 7 - Support Rod
- 8 - Hood Latch
- 9 - Bolt
 - 22 Nm
- 10 - Nut
 - 22 Nm
- 11 - Spray Nozzles

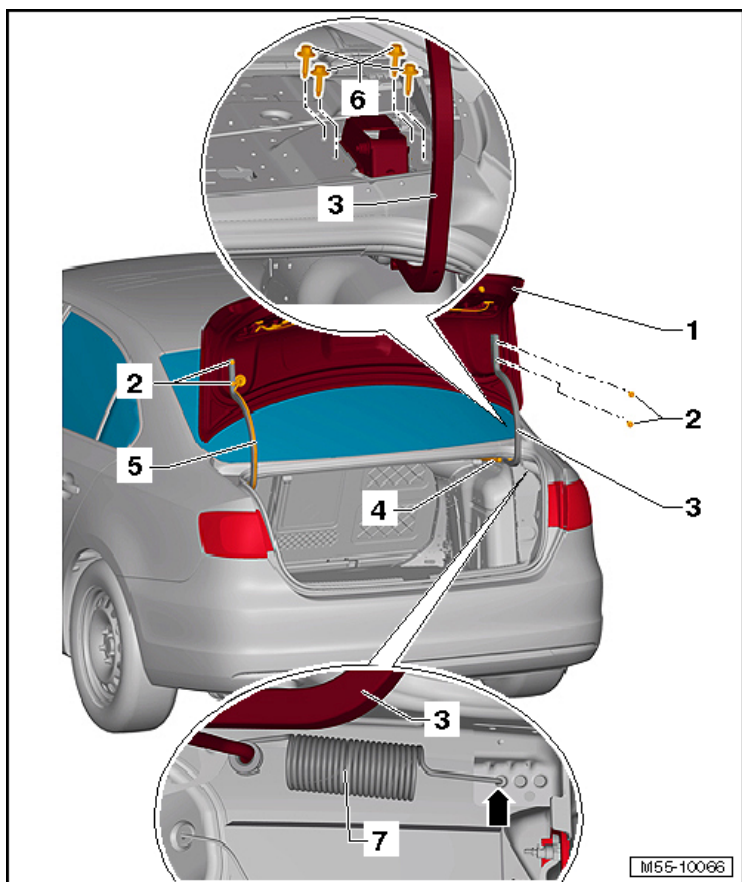
Hood Release Lever and Bracket Overview



Body

- 1 - Bracket
- 2 - Cable
- 3 - Expanding Nut
- 4 - Bolt
 - 1.5 Nm
- 5 - Hood Release Lever

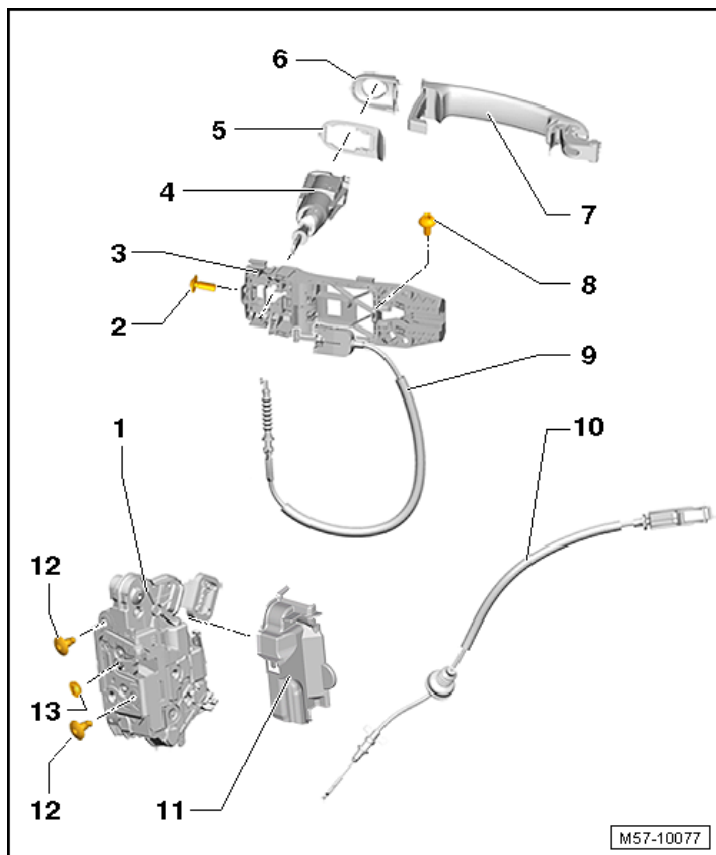
Rear Lid Hinge Overview



- 1 - Rear Lid
- 2 - Bolt
 - 9 Nm
- 3 - Hinge
- 4 - Gas-Filled Strut
- 5 - Electric Wire
- 6 - Bolt
 - 9 Nm
- 7 - Spring

Front Doors, Central Locking System

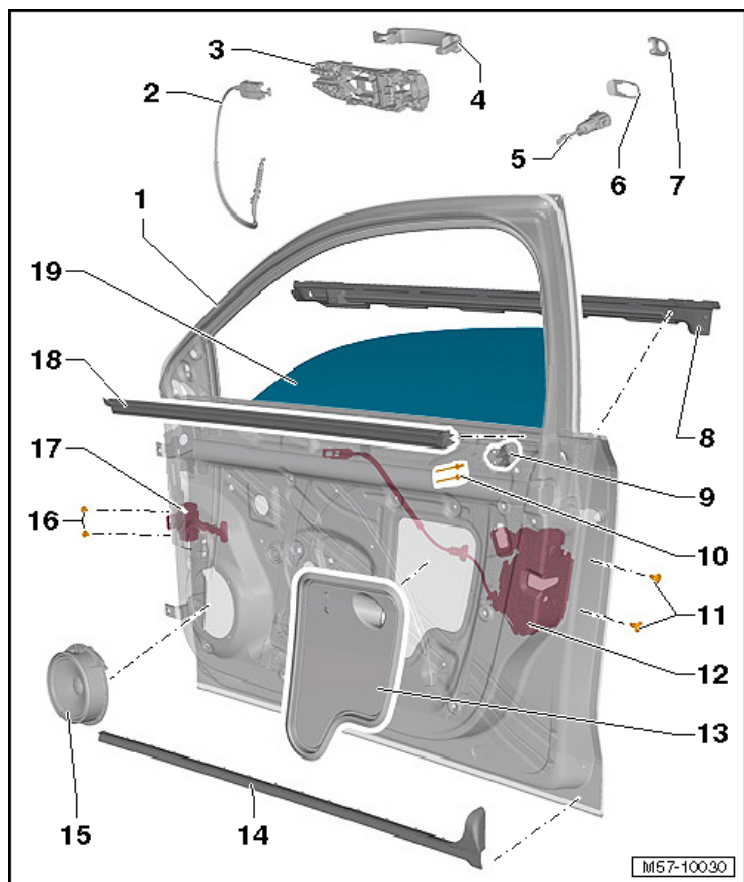
Door Handle and Door Lock Overview



- 1 - Door Lock
- 2 - Bolt
 - 4 Nm
- 3 - Bracket
- 4 - Lock Cylinder
- 5 - Backing
- 6 - Cover
- 7 - Door Handle
- 8 - Bolt
 - 1 Nm
- 9 - Cable
- 10 - Cable
- 11 - Door Lock Cover
- 12 - Nut
 - 18 Nm
- 13 - Cover

Body

Front Door Overview



- 1 - Door
- 2 - Cable
- 3 - Bracket
- 4 - Door Handle
- 5 - Lock Cylinder
- 6 - Backing
- 7 - Cover
- 8 - Outer Window Shaft Seal
- 9 - Bracket
- 10 - Rivet
- 11 - Bolt
- 18 Nm
- 12 - Door Lock
- 13 - Cover
- 14 - Outer Door Seal
- 15 - Speaker

16 - Bolt

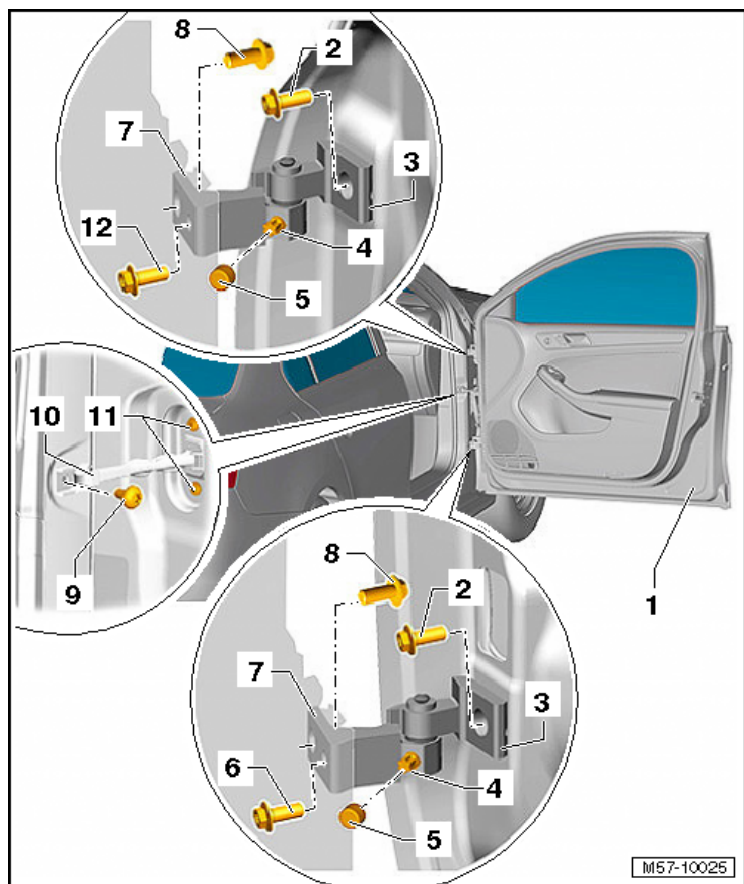
9 Nm

17 - Door Strap

18 - Inner Window Recess Seal

19 - Door Window

Door Hinge Overview



1 - Door

2 - Bolt

- 40 Nm
- Always replace

3 - Door Hinge

4 - Bolt

- 23 Nm

5 - Cover

6 - Bolt

- 40 Nm
- Always replace

7 - Door Hinge

8 - Bolt

- 40 Nm
- Always replace

9 - Bolt

- 30 Nm

10 - Door Strap

11 - Bolt

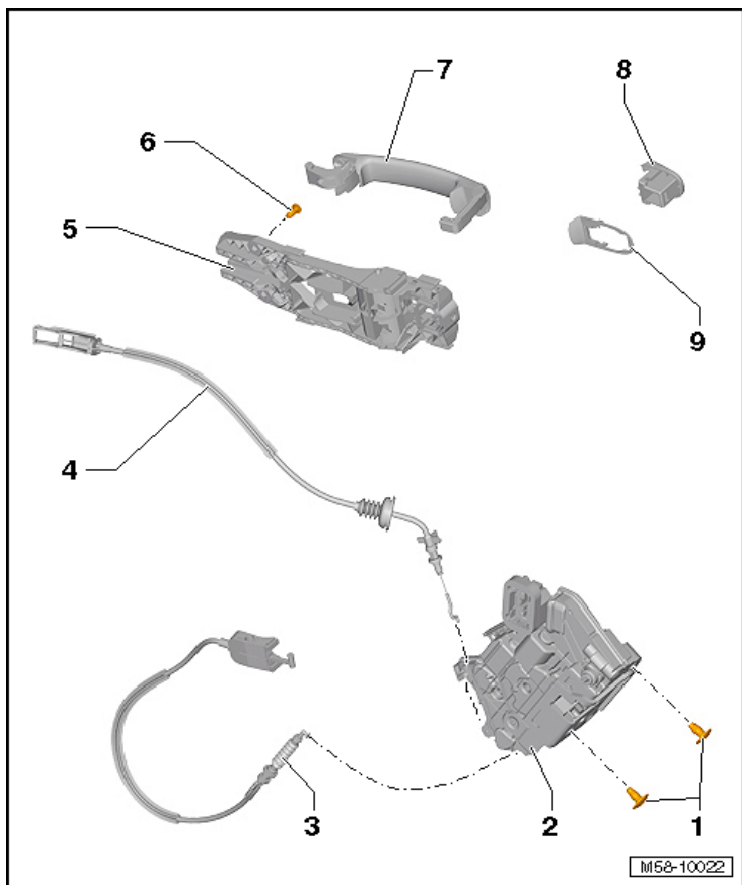
- 9 Nm

12 - Bolt

- 40 Nm
- Always replace

Rear Doors

Door Handle and Door Lock Overview



1 - Bolt

□ 18 Nm

2 - Dock Lock

3 - Cable

4 - Cable

5 - Bracket

6 - Bolt

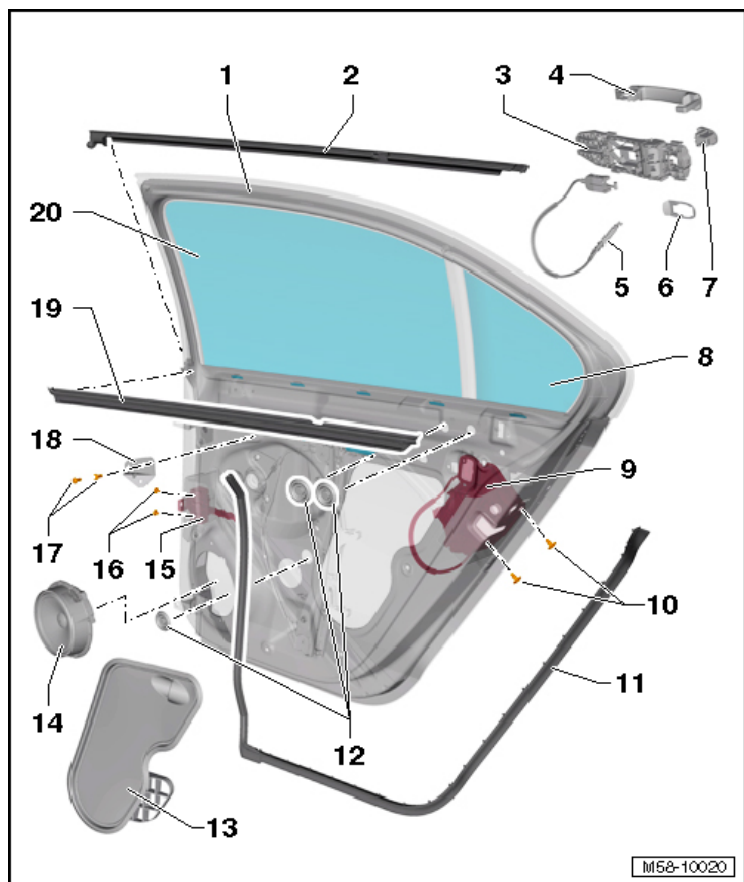
□ 1 Nm

7 - Door Handle

8 - Cap

9 - Backing

Rear Door Overview



- 1 - Door
- 2 - Outer Window Shaft Seal
- 3 - Bracket
- 4 - Door Handle
- 5 - Cable
- 6 - Backing
- 7 - Cap
- 8 - Fixed Door Window
- 9 - Dock Lock
- 10 - Bolt
 - 18 Nm
- 11 - Cap
- 12 - Bracket
- 13 - Cover
- 14 - Speaker

15 - Door Strap

16 - Bolt

9 Nm

17 - Bolt

4 Nm

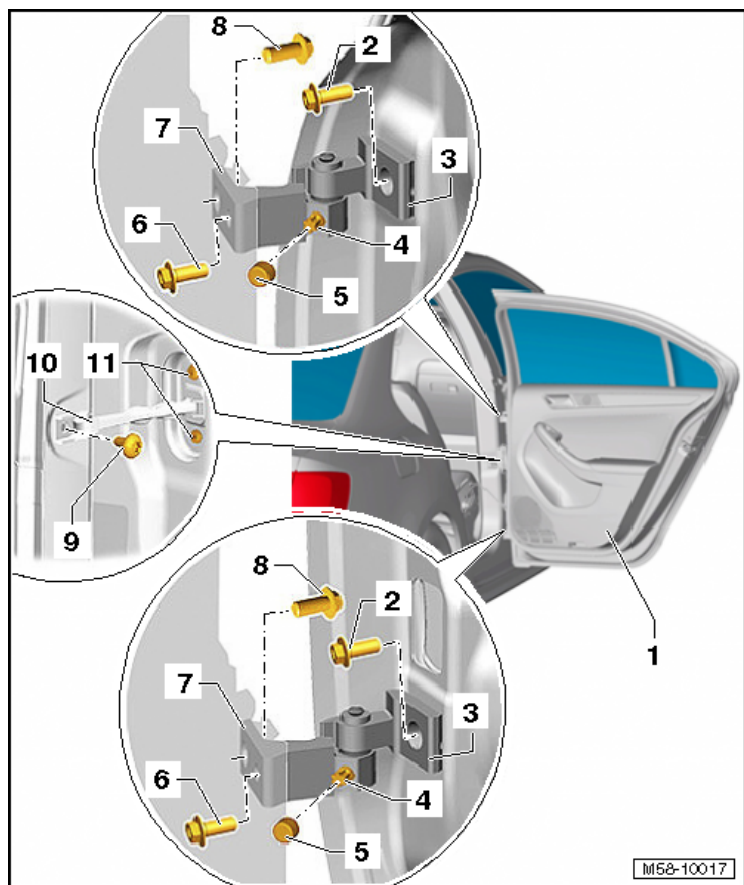
18 - Angle Bracket

19 - Inner Window Recess Seal

20 - Door Window

Body

Door Hinge Overview



1 - Door

2 - Bolt

- 40 Nm
- Always replace

3 - Door Hinge

4 - Bolt

- 23 Nm

5 - Cap

6 - Bolt

- 40 Nm
- Always replace

7 - Door Hinge

8 - Bolt

- 40 Nm
- Always replace

9 - Bolt

30 Nm

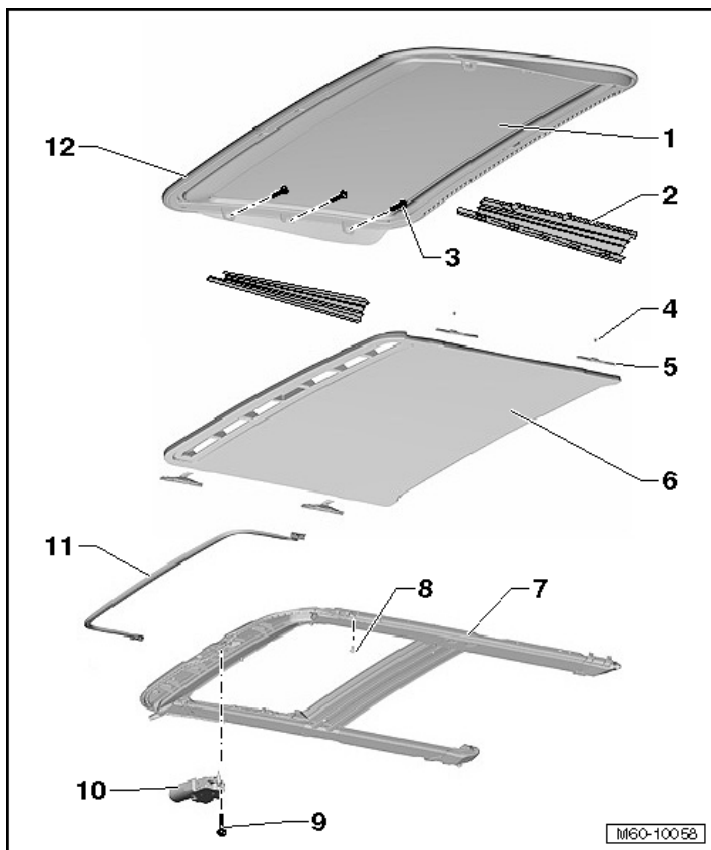
10 - Door Strap

11 - Bolt

9 Nm

Sunroof

Sunroof Overview



1 - Sunroof Glass Panel (one-piece safety glass)

2 - Bellows

3 - Bolt

7 Nm

4 - Bolt

1 Nm

5 - Guide Piece

6 - Sunshade

7 - Assembly Unit

8 - Bolt

8 Nm

9 - Bolt

4 Nm

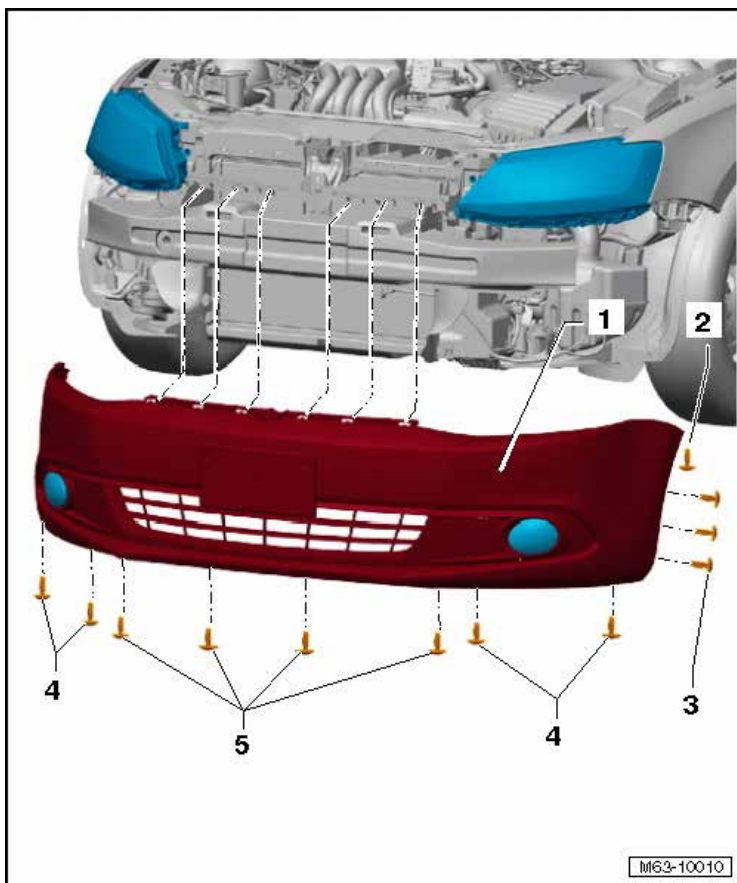
10 - Sunroof Motor

11 - Wind Deflector

12 - Panel Seal

Bumpers

Front Bumper Cover Overview



1 - Front Bumper Cover

2 - Bolt

2.7 Nm

3 - Bolt

2 Nm

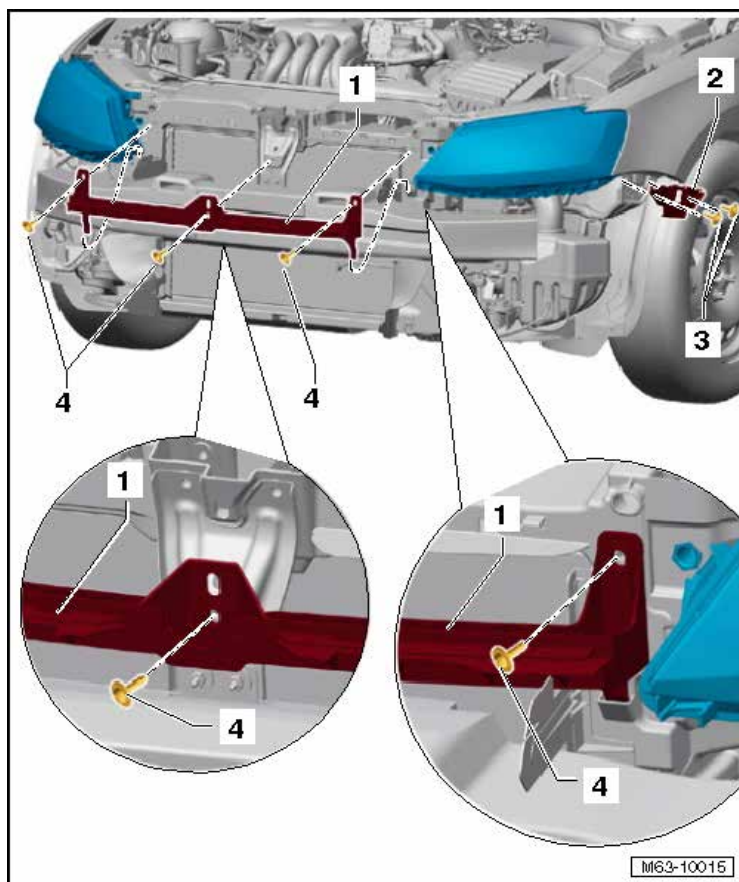
4 - Bolt

2 Nm

5 - Bolt

2 Nm

Front Bumper Cover Guides Overview



Body

1 - Center Guide

2 - Side Guide

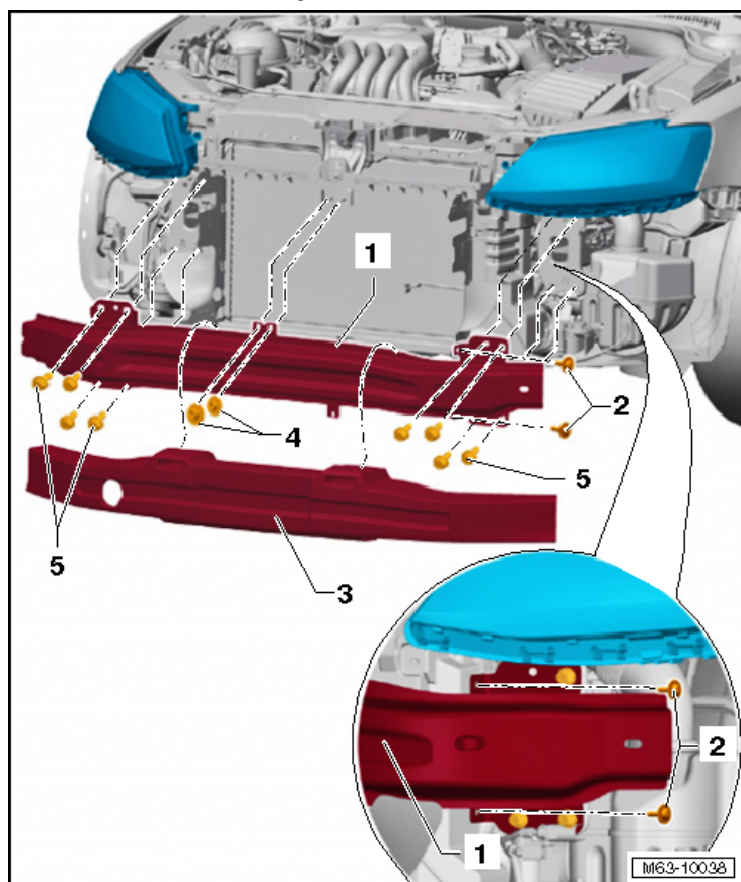
3 - Bolt

2.7 Nm

4 - Bolt

8 Nm

Front Bumper Carrier Overview



1 - Front Bumper Carrier

2 - Bolt

8 Nm

3 - Foam Piece

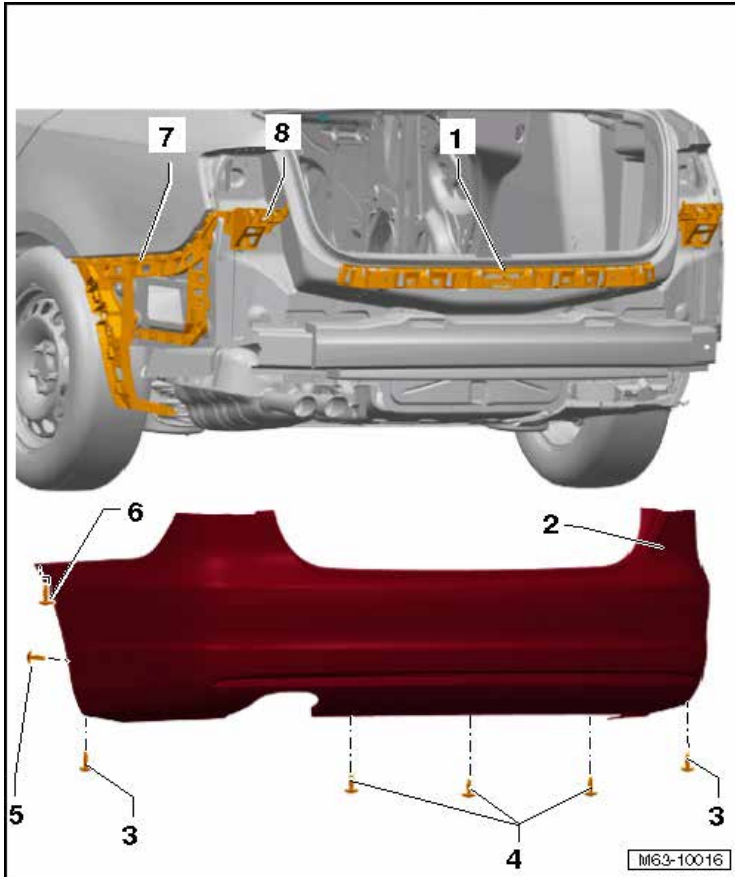
4 - Nut

8 Nm

5 - Bolt

60 Nm

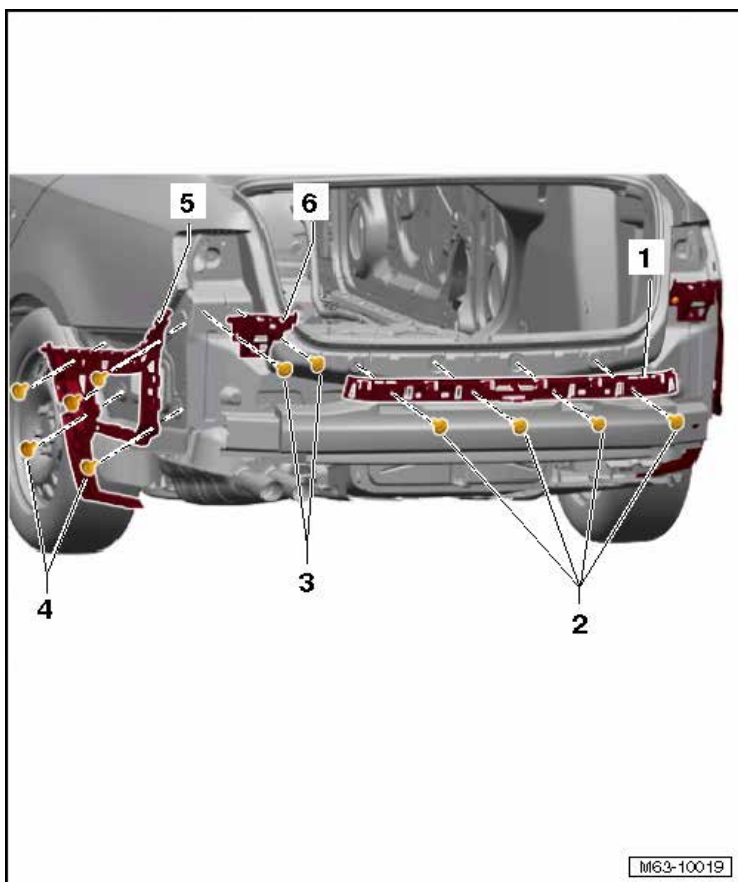
Rear Bumper Cover Overview



Body

- 1 - Center Guide
- 2 - Rear Bumper Cover
- 3 - Bolt
 - 2.7 Nm
- 4 - Bolt
 - 2.7 Nm
- 5 - Bolt
 - 2.7 Nm
- 6 - Bolt
 - 2.7 Nm
- 7 - Side Guide
- 8 - Angle Bracket

Rear Bumper Cover Guides Overview



1 - Center Guide)

2 - Bolt

4 Nm

3 - Bolt

4 Nm

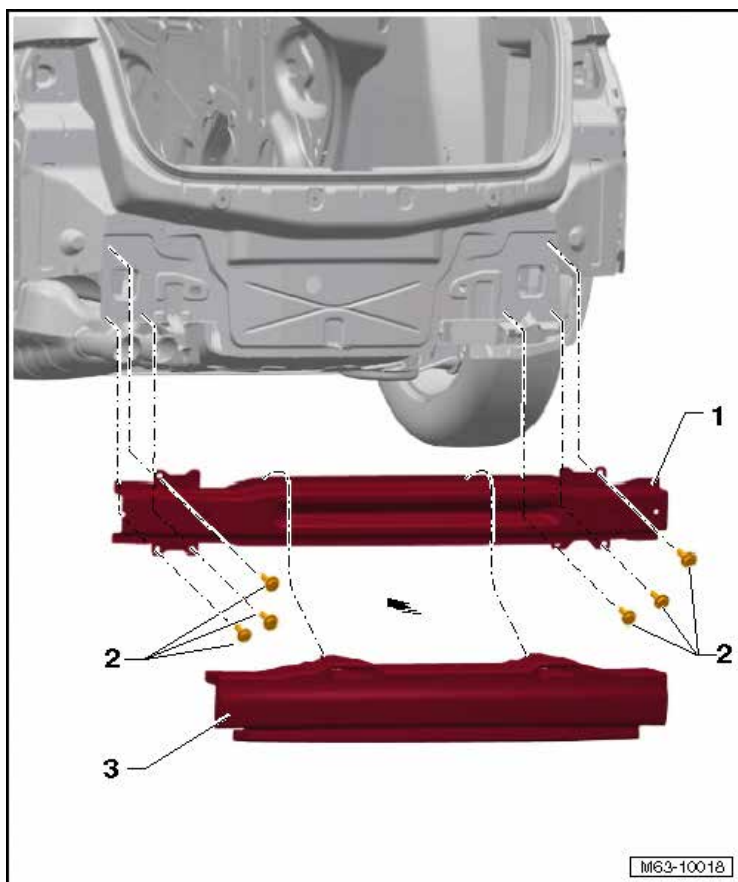
4 - Bolt

4 Nm

5 - Side Guide

6 - Angle Bracket

Rear Bumper Carrier Overview



Body

1 - Rear Bumper Carrier

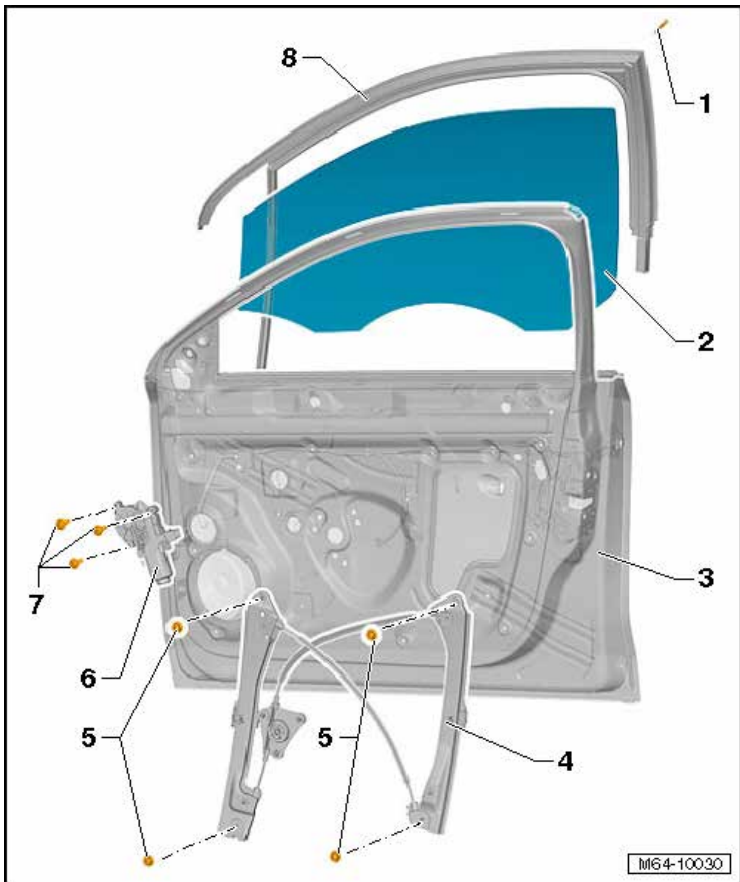
2 - Bolt

□ 20 Nm

3 - Foam Piece

Glass, Window Regulators

Front Door Window Overview



1 - Clip

2 - Door Window

3 - Front Door

4 - Window Regulator

5 - Nut

8 Nm

6 - Window Regulator Motor

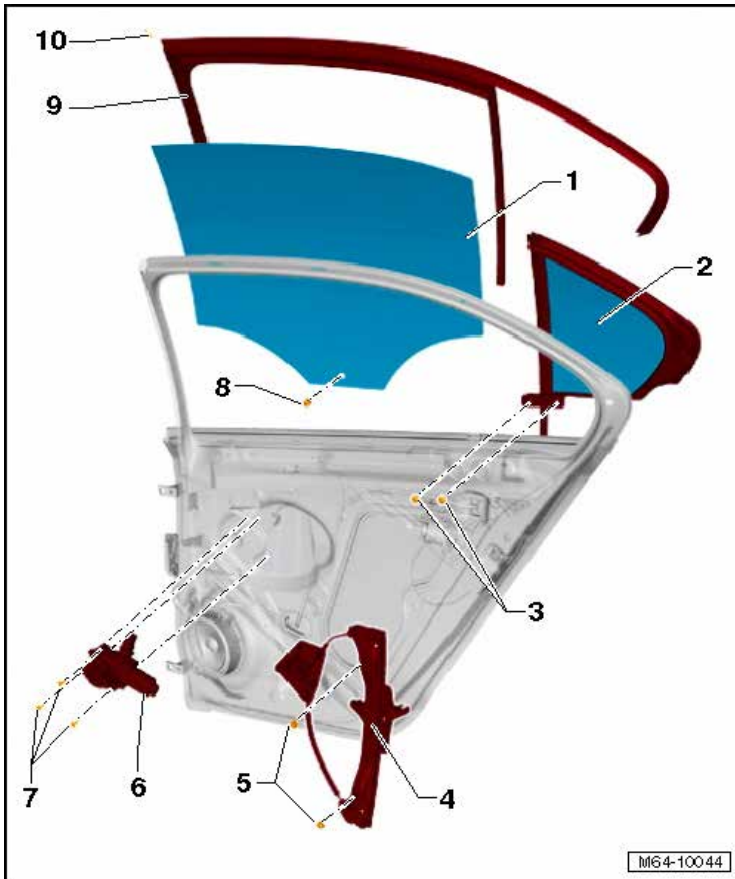
7 - Bolt

High equipment (AW1): 3 Nm

Low equipment (AW0): 4 Nm, note the tightening sequence, refer to Repair Manual

8 - Window Guide

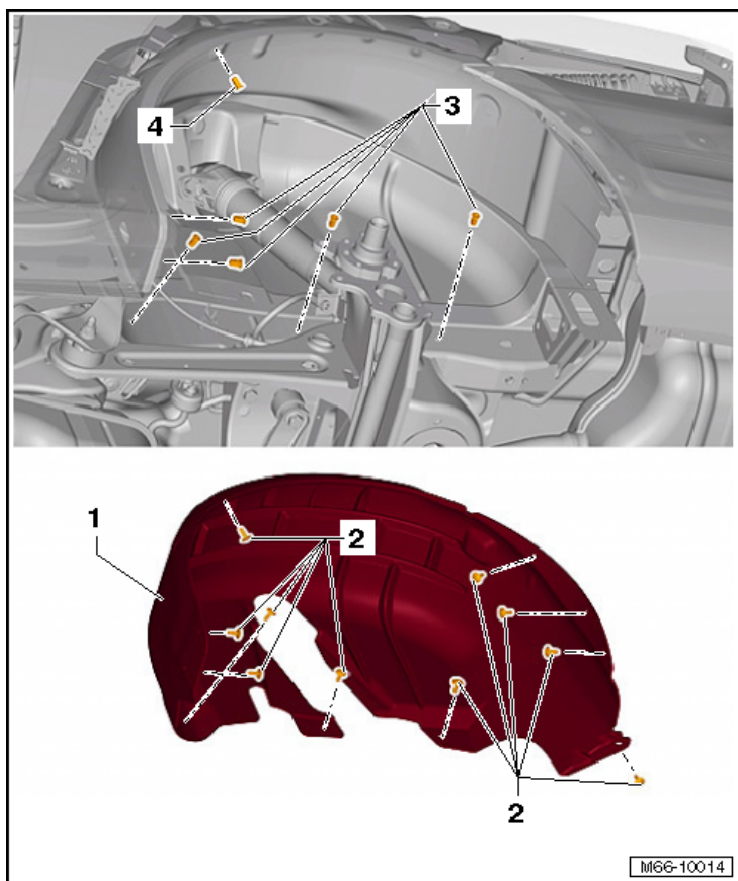
Rear Door Window Overview



Body

- 1 - Door Window
- 2 - Fixed Door Window
- 3 - Bolt
 - 5.5 Nm
- 4 - Window Regulator
- 5 - Nut
 - 8 Nm
- 6 - Window Regulator Motor
- 7 - Bolt
 - High equipment (AW1): 3 Nm
 - Low equipment (AW0): 4 Nm, note the tightening sequence, refer to Repair Manual
- 8 - Spreader Plug with Expanding Pin
- 9 - Window Guide
- 10 - Retaining Clip

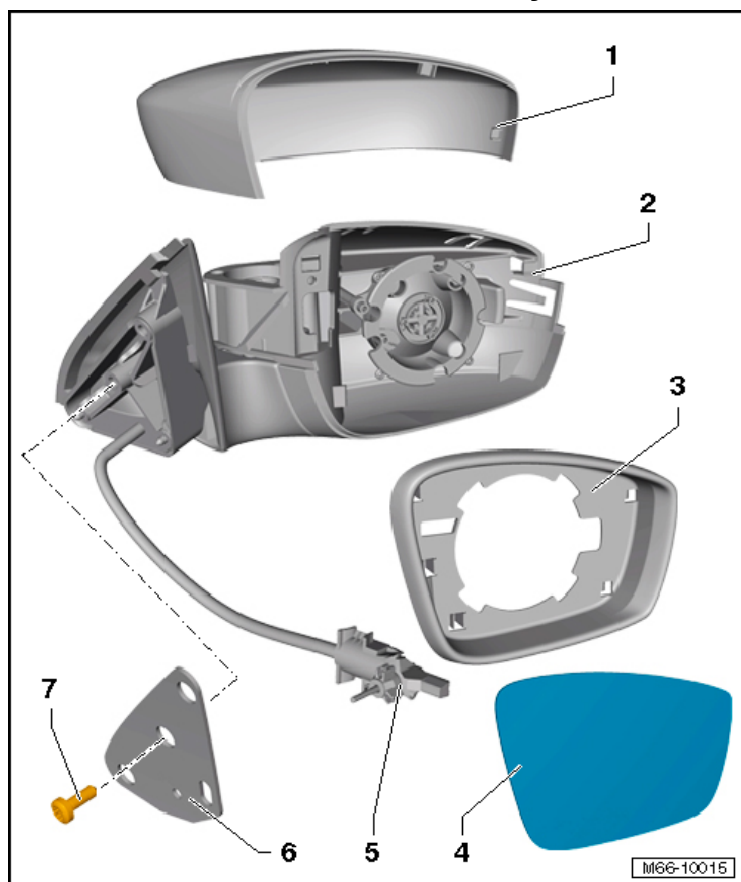
Rear Wheel Housing Liner Assembly Overview



- 1 - Wheel Housing Liner
- 2 - Bolt
 - 2 Nm
- 3 - Expanding Nut
- 4 - Expanding Nut

Body

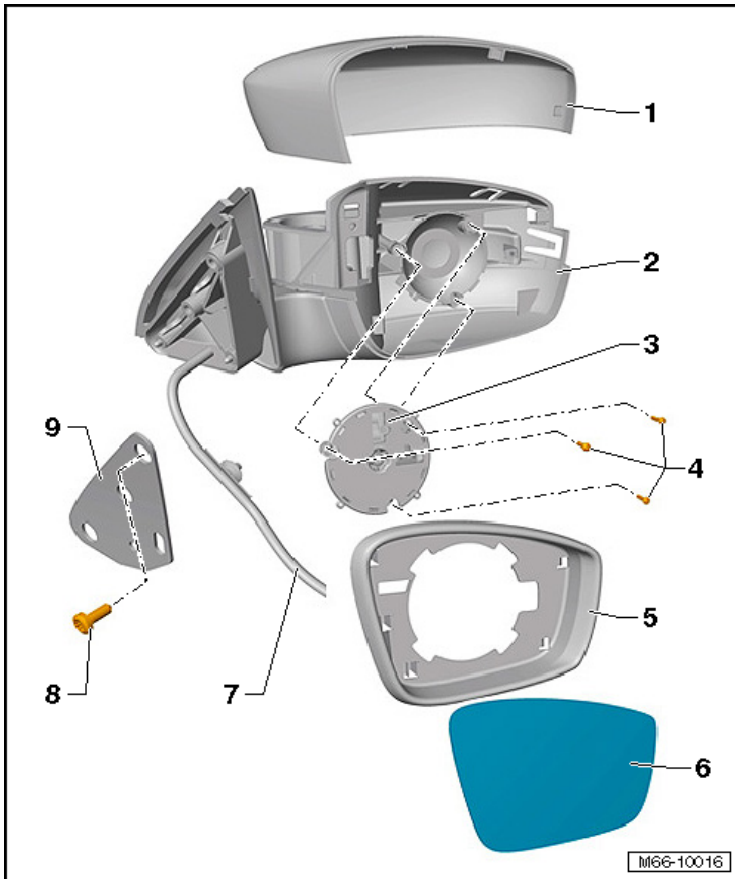
Manual Exterior Mirror Assembly Overview



- 1 - Mirror Housing
- 2 - Mirror Base Plate
- 3 - Trim
- 4 - Mirror Glass
- 5 - Adjusting Unit
- 6 - Insulation
- 7 - Bolt

□ 12 Nm

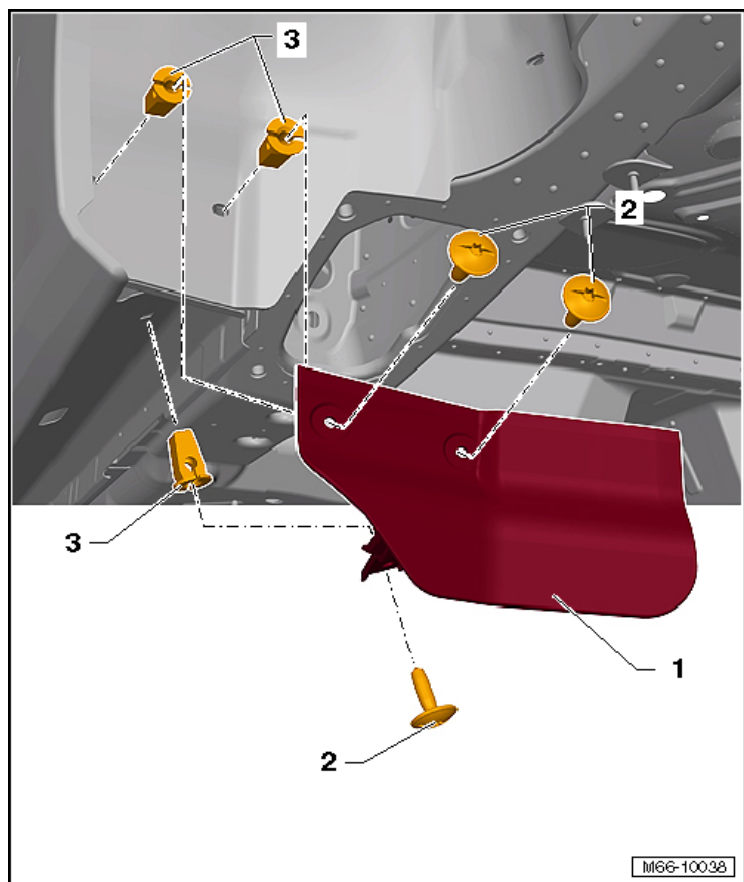
Power Exterior Mirror Assembly Overview



Body

- 1 - Mirror Housing
- 2 - Mirror Base Plate
- 3 - Adjusting Unit with Exterior Rearview Mirror Motor
- 4 - Bolt
 - 2 Nm
- 5 - Trim
- 6 - Mirror Glass
- 7 - Electric Wire with Connector
- 8 - Bolt
 - 12 Nm
- 9 - Mirror Glass

Sill Panel Cover Assembly Overview



1 - Sill Panel Cover

2 - Bolt

□ 2 Nm

3 - Expanding Nut

Body Interior

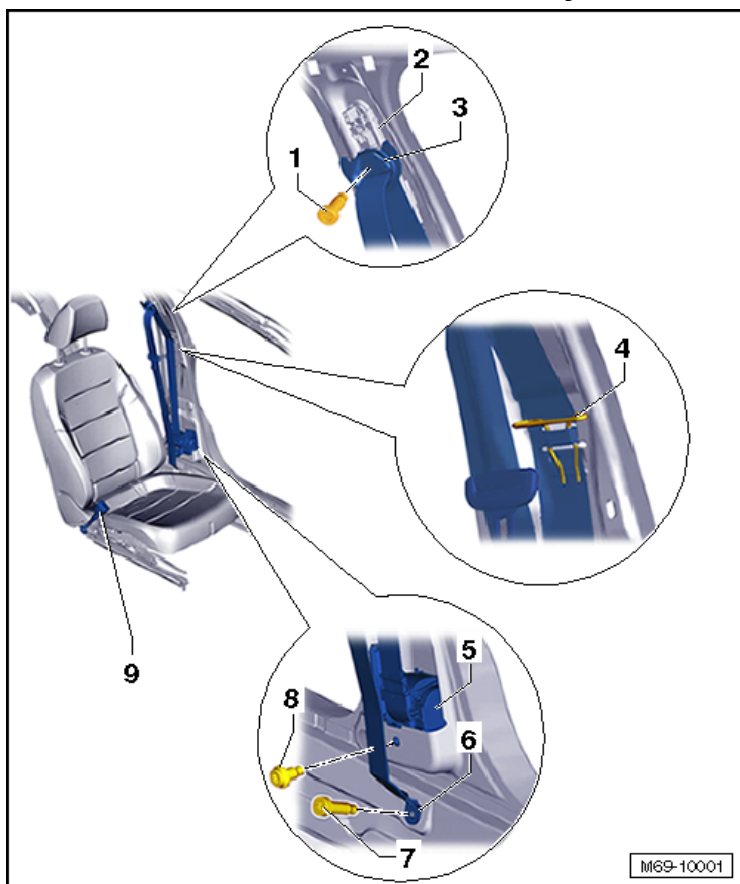
Interior Equipment

Tightening Specifications

Component	Nm
Center console storage compartment screws	1.5
Steering column trim screws	1.5
Driver side instrument panel cover screws	1.5
Glove compartment screws	1.5
Glove compartment decorative trim screws	1.5
Eyeglass compartment screws	1.5
Sunvisor mount screw	2
Roof grab handle bracket bolts	4.5
Rear center console trim bracket bolts, Comfort and Highline	1.5
Front console side mounting bracket screws	2
Center console mounting bracket nuts	8
Center console mounting bracket support nuts	8

Passenger Protection, Airbags, Seat Belts

Front Three-Point Seat Belt Assembly Overview



1 - Bolt

40 Nm

2 - Seat Belt Height Adjuster

3 - Seat Belt Guide Ring

4 - Seat Belt Guide

5 - Automatic Belt Retractor

6 - Belt End Fitting

7 - Bolt

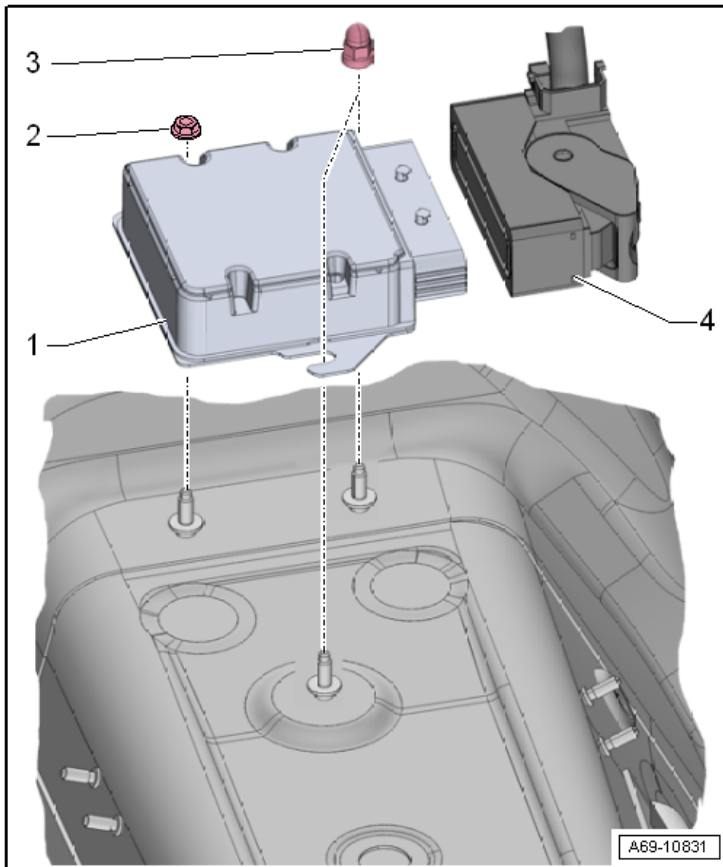
40 Nm

8 - Bolt

40 Nm

9 - Seat Belt Latch

Airbag Control Module -J234- Assembly Overview



Body

1 - Airbag Control Module -J234-

2 - Nut

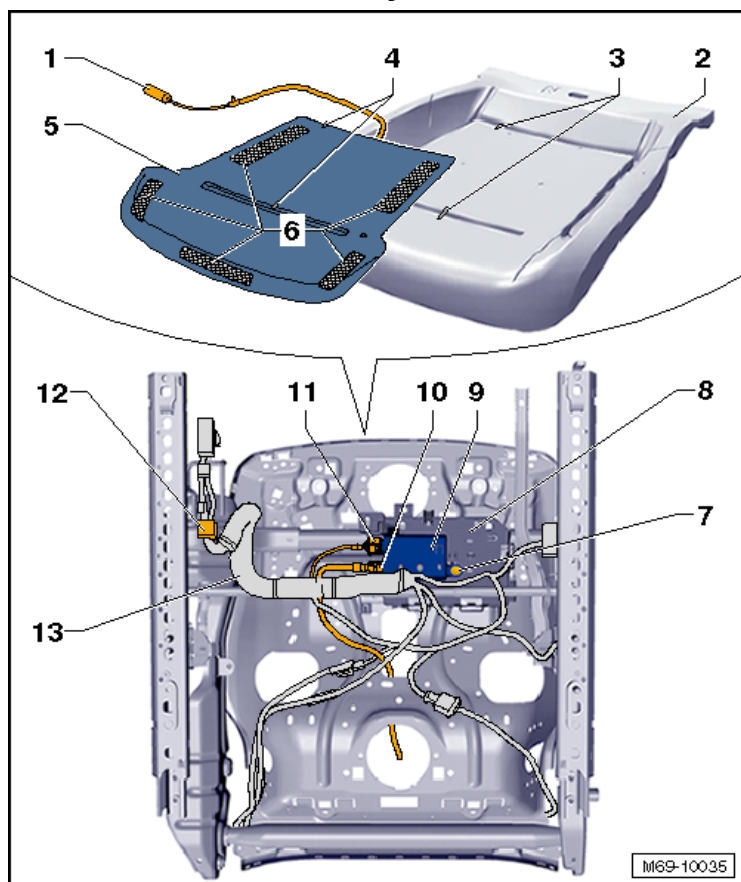
□ 9 Nm

3 - Nut

□ 9 Nm

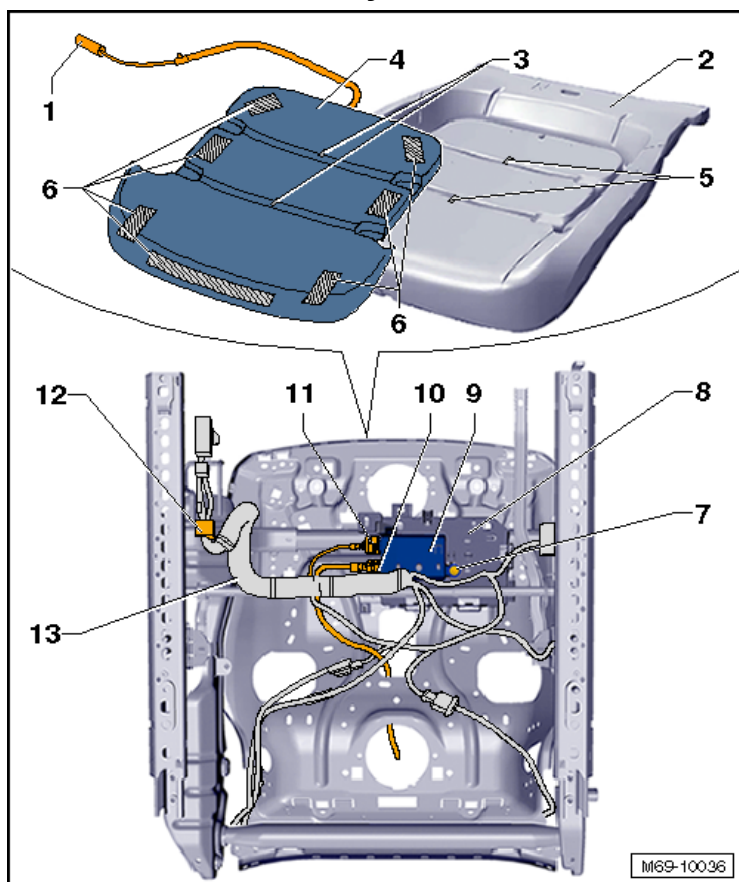
4 - Connector

Front Seat Assembly Overview, Basis



- 1 - Wiring Harness
- 2 - Front Seat Cushion
- 3 - Positioning Aids
- 4 - Positioning Aids
- 5 - Passenger Occupant Detection System Pressure Sensor -G452-
- 6 - Adhesion Surfaces
- 7 - Bolt
 - 1.5 Nm
- 8 - Bracket
- 9 - Passenger Occupant Detection System Control Module -J706-
- 10 - Connector
- 11 - Connector
- 12 - Connector
- 13 - Front Seat Wiring Harness

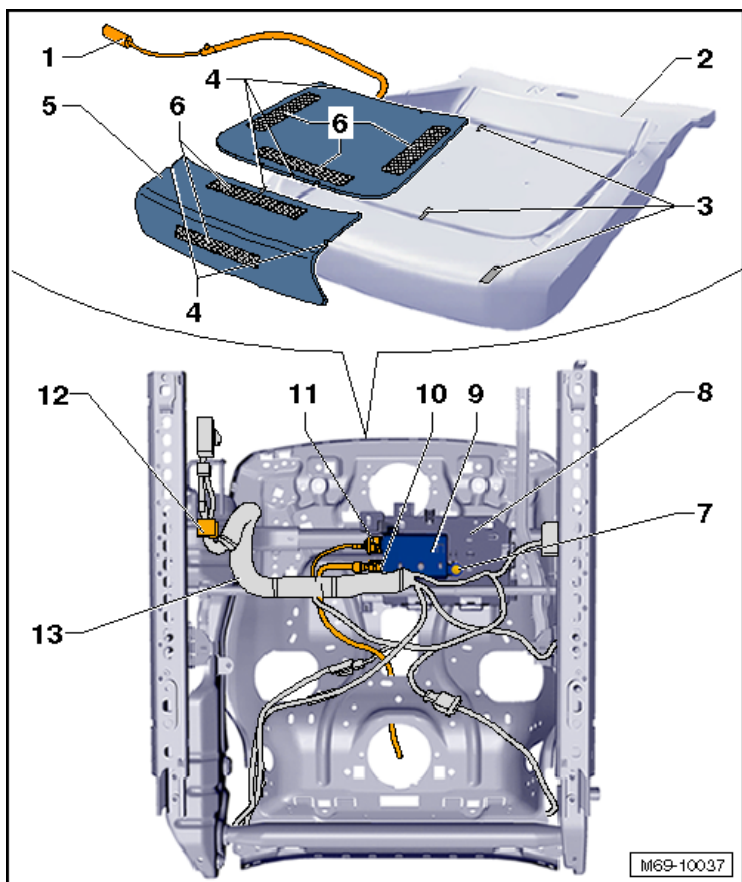
Front Seat Assembly Overview, Comfort



- 1 - Wiring Harness
- 2 - Front Seat Cushion
- 3 - Positioning Aids
- 4 - Passenger Occupant Detection System Pressure Sensor -G452-
- 5 - Positioning Aids
- 6 - Adhesion Surfaces
- 7 - Bolt
 - 1.5 Nm
- 8 - Bracket
- 9 - Passenger Occupant Detection System Control Module -J706-
- 10 - Connector
- 11 - Connector
- 12 - Connector
- 13 - Front Seat Wiring Harness

Body

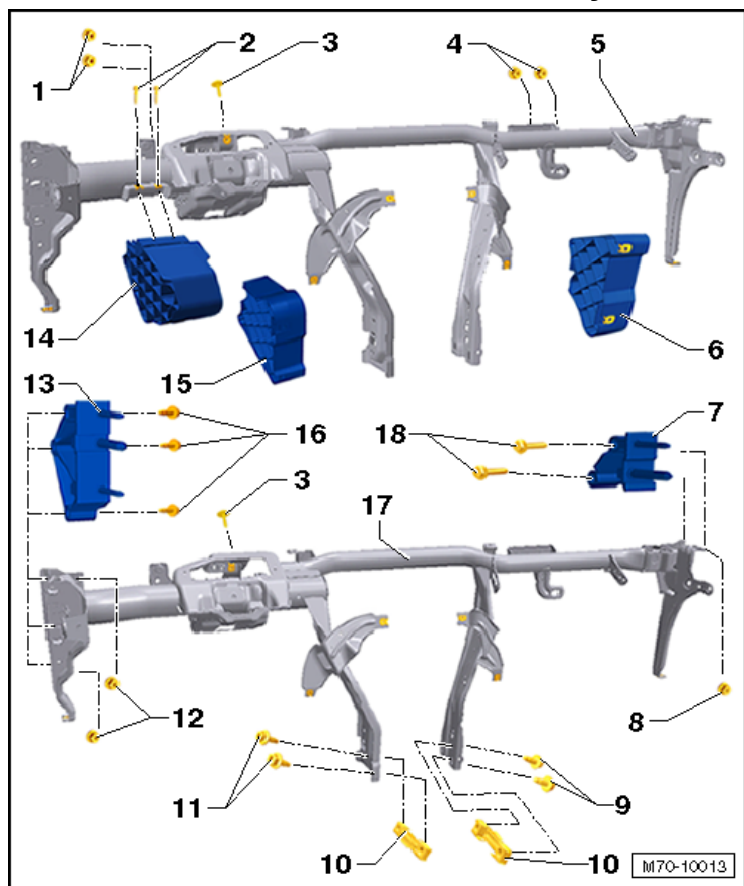
Front Seat Assembly Overview, Sport



- 1 - Wiring Harness
- 2 - Front Seat Cushion
- 3 - Positioning Aids
- 4 - Positioning Aids
- 5 - Passenger Occupant Detection System Pressure Sensor -G452-
- 6 - Adhesion Surfaces
- 7 - Bolt
 - 1.5 Nm
- 8 - Bracket
- 9 - Passenger Occupant Detection System Control Module -J706-
- 10 - Connector
- 11 - Connector
- 12 - Connector
- 13 - Front Seat Wiring Harness

Interior Trim

Instrument Panel Central Tube Assembly Overview



1 - Nut

- 9 Nm

2 - Bolt

- 1.5 Nm

3 - Bolt

- 20 Nm

4 - Nut

- 4.5 Nm

5 - Instrument Panel Central Tube

6 - Front Passenger Side Deformation Element

7 - Mount with Extensor

8 - Nut

- 20 Nm

9 - Bolt

20 Nm

10 - Threaded Plate

11 - Bolt

20 Nm

12 - Nut

20 Nm

13 - Mount with Extensor

14 - Driver Side Deformation Element

15 - Center Deformation Element

16 - Bolt

20 Nm

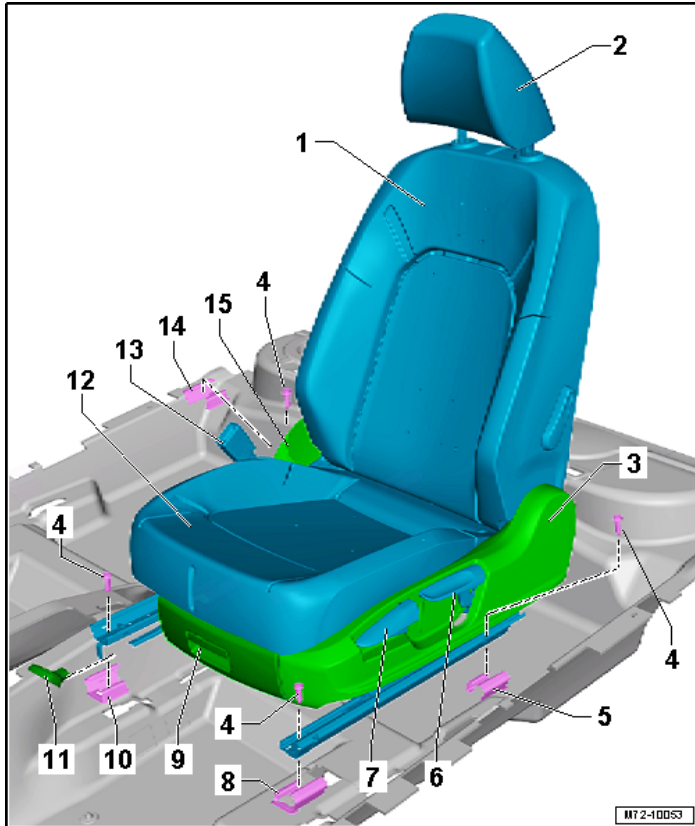
17 - Instrument Panel Central Tube

18 - Bolt

20 Nm

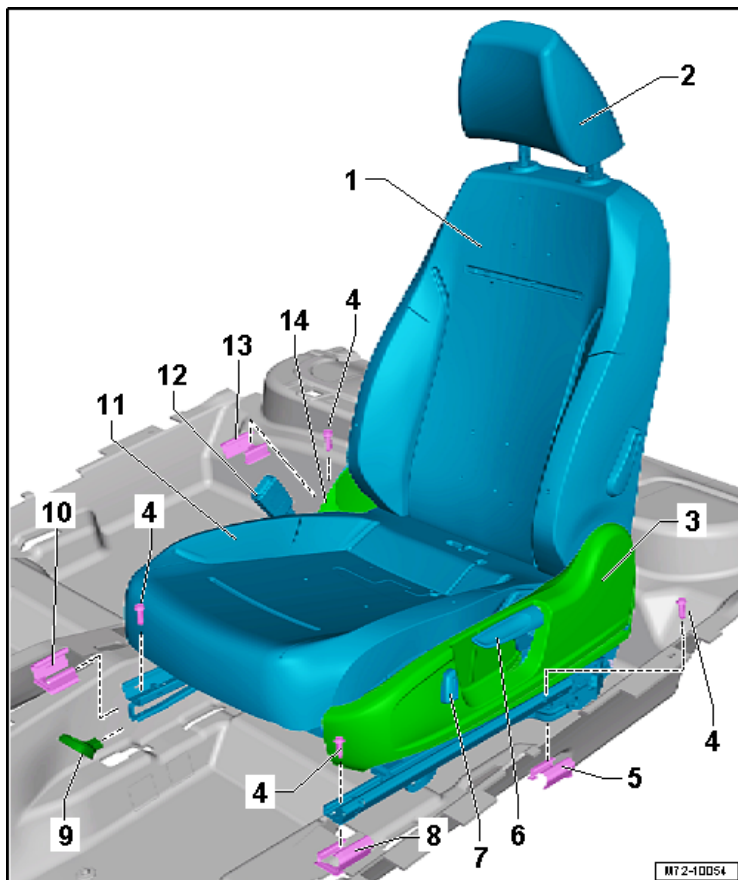
Seat Frames

Manual Front Seat Assembly Overview



- 1 - Backrest
- 2 - Headrest
- 3 - Door Sill Side Seat Trim
- 4 - Bolt
 - 40 Nm
- 5 - Cover
- 6 - Seat Height Adjuster
- 7 - Backrest Adjuster
- 8 - Cover
- 9 - Storage Compartment
- 10 - Cover
- 11 - Seat Forward/Back Adjustment Handle
- 12 - Lower Seat Frame
- 13 - Seat Belt Latch
- 14 - Cover
- 15 - Tunnel Side Seat Trim

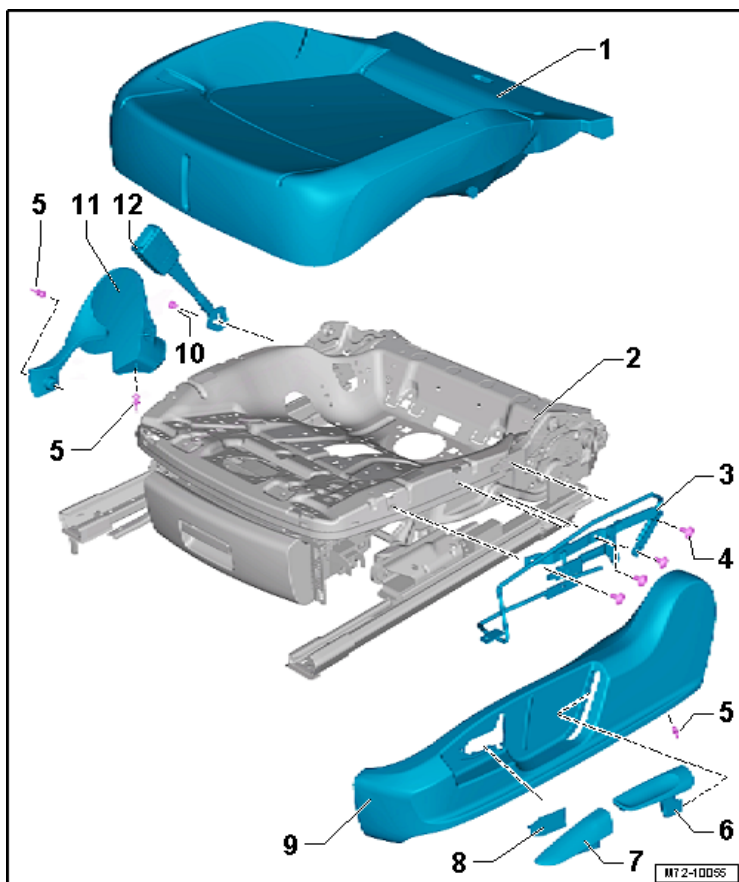
Partial Power Front Seat Assembly Overview



- 1 - Backrest
- 2 - Headrest
- 3 - Door Sill Side Seat Trim
- 4 - Bolt
 - 40 Nm
- 5 - Cover
- 6 - Seat Height Adjuster
- 7 - Backrest Adjustment Button
- 8 - Cover
- 9 - Seat Forward/Back Adjustment Handle
- 10 - Cover
- 11 - Lower Seat Frame
- 12 - Seat Belt Latch
- 13 - Cover
- 14 - Tunnel Side Seat Trim

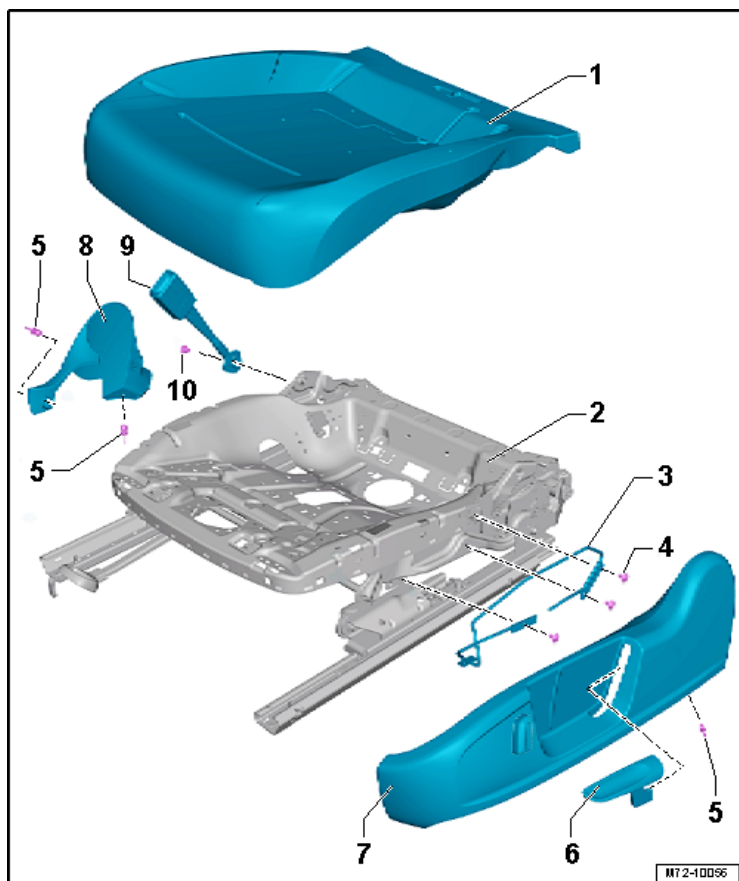
Body

Manual Lower Seat Frame Assembly Overview



- 1 - Seat Cushion
- 2 - Lower Seat Frame
- 3 - Bracket
- 4 - Bolt
 - 8 Nm
- 5 - Expanding Rivet
- 6 - Handle
- 7 - Handle
- 8 - Cover
- 9 - Seat Trim
- 10 - Bolt
 - 20 Nm
- 11 - Tunnel Side Seat Trim
- 12 - Seat Belt Latch

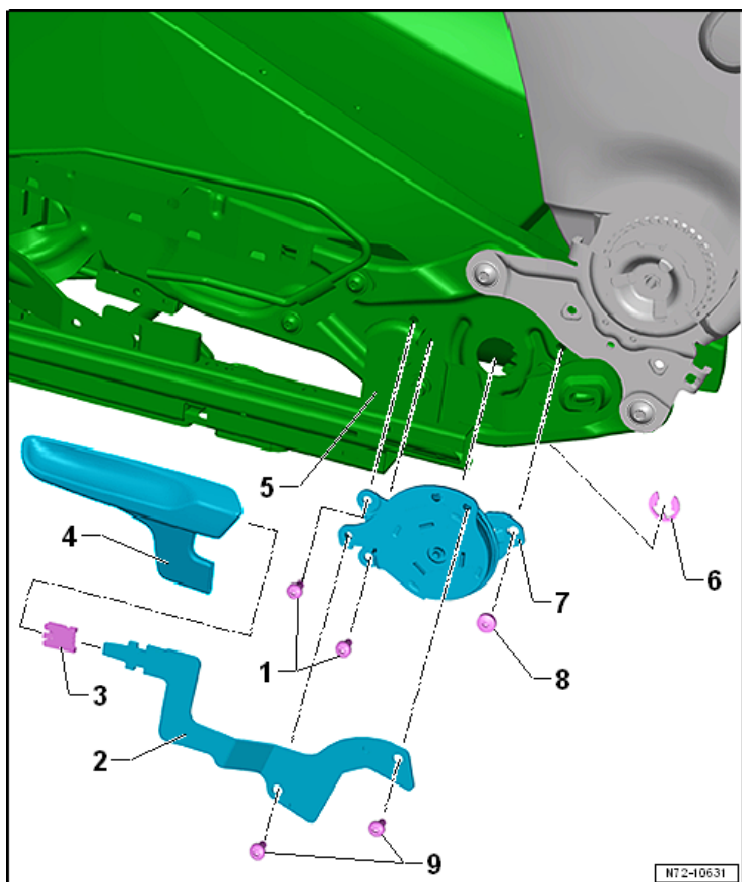
Partial Power Lower Seat Frame Assembly Overview



- 1 - Seat Cushion
- 2 - Lower Seat Frame
- 3 - Bracket
- 4 - Bolt
 - 8 Nm
- 5 - Expanding Rivet
- 6 - Handle
- 7 - Seat Trim
- 8 - Tunnel Side Seat Trim
- 9 - Seat Belt Latch
- 10 - Bolt
 - 20 Nm

Body

Seat Height Adjustment Assembly Overview



- 1 - Bolt
 - 6.5 Nm
- 2 - Seat Height Adjusting Lever
- 3 - Clip
- 4 - Seat Height Adjustment Handle
- 5 - Lower Seat Frame
- 6 - Lock Washer
- 7 - Seat Height Adjuster
- 8 - Bolt
 - 10 Nm
- 9 - Bolt
 - 8 Nm

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

Fastener Tightening Specifications

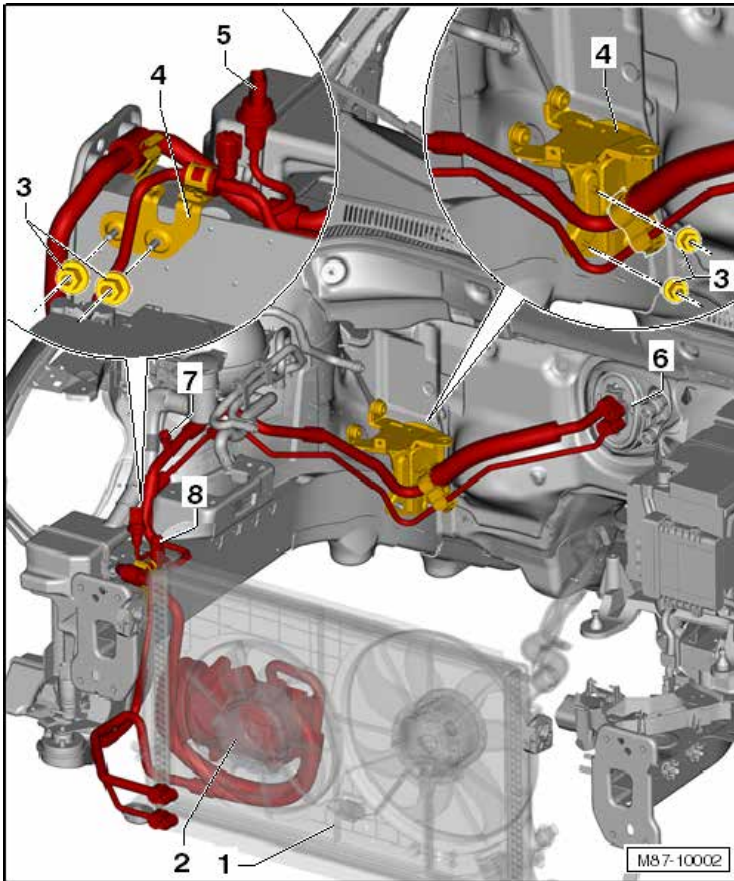
Component	Nm
Auxiliary heater heating element screw	1.4
Auxiliary heater heating element connector strip ¹⁾	9 ±1
Auxiliary heater heating element voltage supply nuts ²⁾	6 ±1
Fresh air blower bolt	1

¹⁾ From 1K-7M 119 727

²⁾ Through 1K-7M 119 726

Air Conditioning

Refrigerant Circuit Components Overview



- 1 - Condenser
- 2 - A/C Compressor
- 3 - Hex Head Nut
 - 6 Nm
- 4 - Bracket
- 5 - High Pressure Sensor -G65-
- 6 - Expansion Valve
- 7 - Evacuating and Charging Valve
- 8 - Evacuating and Charging Valve

Fastener Tightening Specifications

Component	Nm
A/C compressor bolts	25
Climatic	
Heating and A/C unit bracket (item 3) screws	4
Heating and A/C unit bracket (items 5, 11) screws	8
Climatronic	
Heating and A/C unit bracket (item 3) screws	4
Heating and A/C unit bracket (items 5, 11) screws	8
Climatronic control module	1.5 ± 0.2
Condenser attaching screws	5
Expansion valve bolts	5
Fluid reservoir	4.2 ± 0.7
Refrigerant line bolts	12
Refrigerant line at compressor bolts	22 ± 1