



FITTING INSTRUCTIONS

making everyday smoother



- Increased comfort • Better driveability • More safety



VOLKSWAGEN T5
with VB-FullAir 2-Corner rear axle air suspension

FOR KIT 10509062XX

What's changed

New version number:	V2.1	
Release date:	2/21/2013	
Changed compared to	V2.0	
Page:	What is changed:	
17	Picture of valve block changed	



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1. Safety regulations

Personal safety regulations

- Always wear appropriate safety clothes and safety shoes.
- Do not wear any rings, watches, or free hanging clothes.
- Never keep any loose goods in pockets of clothes.
- Bind long hair together.
- Never use defect tools. Use tools only for the purpose where it is meant for.
- Wear safety goggles.

General safety regulations

- Always use a car lift to perform the operations.
- Be sure the vehicle is always supported properly when necessary.
- Be sure the vehicle can not roll away.
- Incapable fitting operations may result in dangerous situations.

Used Symbols

Attention



When the warning symbol is displayed, information of great importance to the safety and / or health of the involved persons is provided. This symbol is also used in operations that are crucial for the correct mounting of the air suspension set.

Tip



When the tip symbol is displayed, advice is given to make the mounting of the air suspension set more easy.

Torque



xx Nm

Every bolted joint in this manual comes with a torque.

2. General fitting regulations

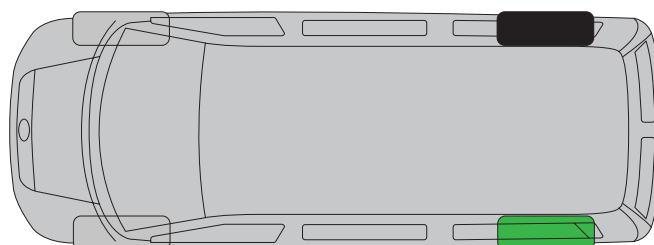
This manual has been carefully crafted to provide the best way to fit the air suspension mentioned on the cover of this manual. However, the manual is a random indication of the technical specifications at any given time.

VB-Airsuspension reserves the right to make technical changes in the air suspension kit without any notification.

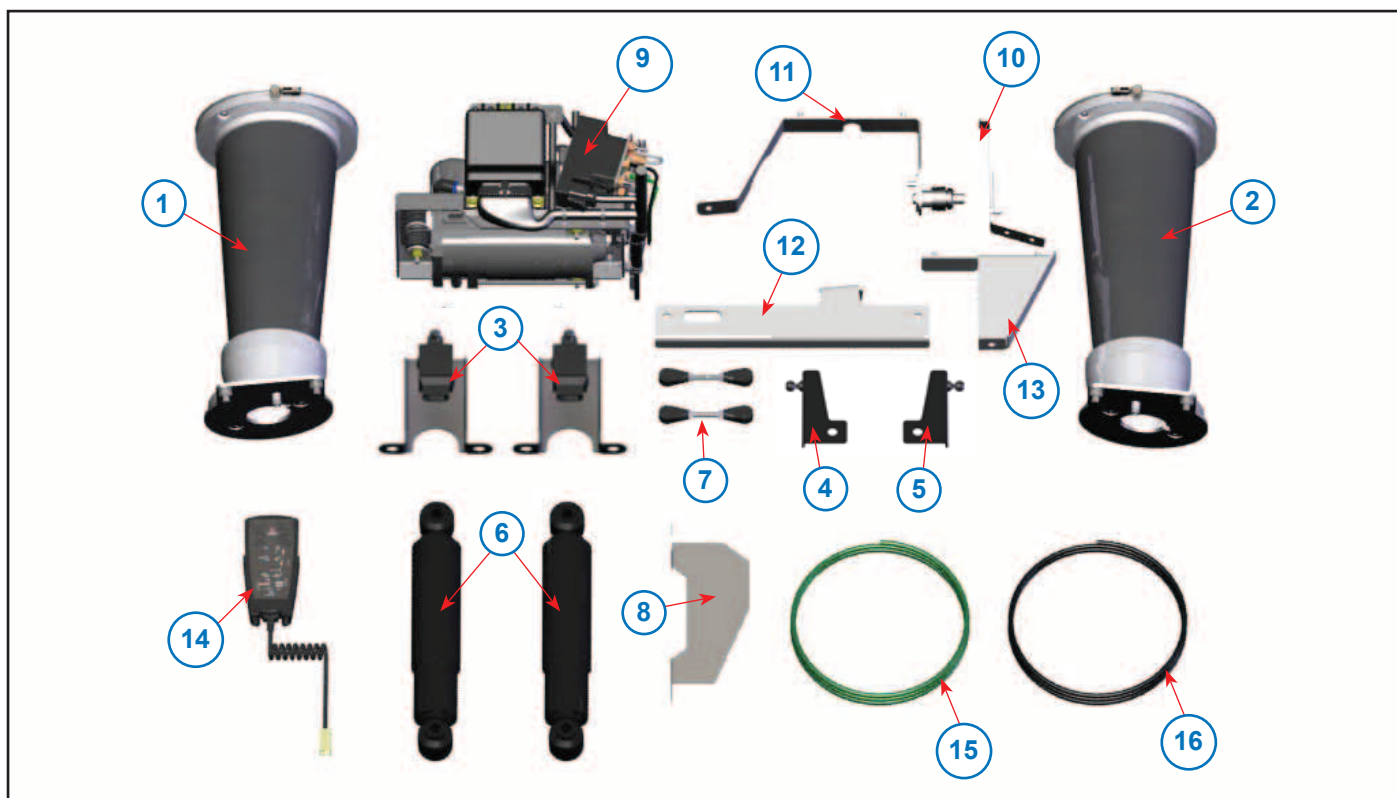
Fitting of the air suspension kit can only be done in a from VB-Airsuspension authorised workshop. The fitting can only be done by authorised mechanics. The mechanics must have proper experience in electric/electronics, pneumatics and regular vehicle technics.

- When necessary, use the work-shop manuals of the vehicle.
- Always follow the directions of the vehicle manufacturer, unless otherwise expressly stated in this manual.
- Work clean.
- Always tighten the bolts and nuts according the recommended torque.
- Whenever changes are made to the original corrosion protection, restore it immediately. For this purpose use for example protective coating or spray wax.
- Always re-fit the removed wires and tubes on the original way.
- Always secure the wires and air tubes with plenty of tie-wraps. Secure all connectors properly and make sure that there is no stress on them.
- All electrical cables must be kept at least 100 mm away from the ABS/ESP block, its sensors and other controllers.
- Make sure the air-tubes do not make sharp corners and can not bend or wear against other parts.
- Connecting electrical cables or air-tubes to brake lines is strictly prohibited!
- Make sure no tools, cleaning rags or other materials remain under the car.
- Check the air suspension after finishing the fitting according the checklist.
- Check after the fitting, the system for air leakage.
- When finishing the fitting, always make a test drive.
- The air-suspension is split up in two corners, which correspond to one corner of the vehicle. When a part is specific for one corner, this will be marked with a coloured sticker.

Colour	Description
Green	Left rear
Black	Right rear



3. Overview of the air-suspension kit



The air-suspension kit consists of numerous different parts. To keep things clear, only the main parts have been included on the above picture. The more common parts, like for example the fitting materials, have been left out.

Nummer	Beschrijving
1	Air spring, left
2	Air spring, right
3	Heightsensor
4	Ball joint bracket, left
5	Ball joint bracket, right
6	Shock absorber
7	Heightsensor rod
8	Heat shield
9	Compressorbox

Nummer	Beschrijving
10	Compressorbracket 1 Diesel *
11	Compressorbracket 2 Diesel *
12	Compressorbracket 1 Petrol *
13	Compressorbracket 2 Petrol *
14	Remote control
15	Air tube, left
16	Air tube, right

* Only the required brackets are in the set.

For an overview of the place where the different parts are located, please see the chapter “Exploded View” in chapter 8. You can also find the partnumbers there.

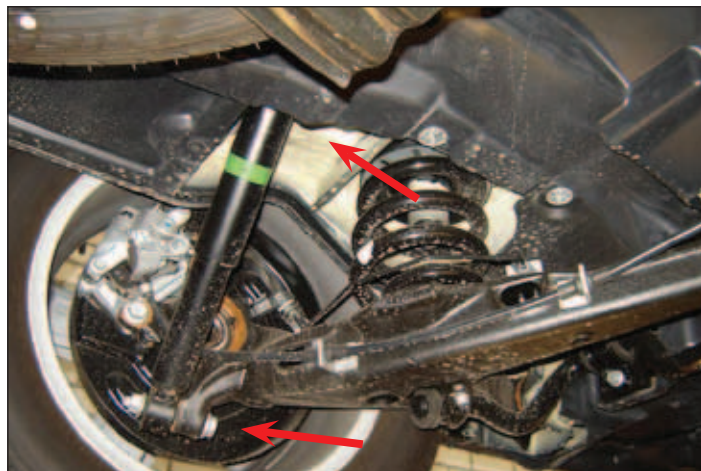
4. Fitting the air-suspension

4.1 Preparations

1. Remove the original shock absorbers. To do this, remove the marked bolts. Please notice that these bolts have to be re-used, so do not discard them!



Always secure the rear axle to prevent tension in the parts. Tension can induce unexpected behaviour and result in damage or even injuries!



2. Remove the original coil-springs.



Lower the rear axle a little to make this easier.



3. Remove the rubber top plates (1), bottom plates (2) and bump stops (3).



4. Cut-off the original bump-stop holders, to create space for the air-springs. Leave a piece of about **10 mm** to support the air-springs.



Protect the ABS sensoren in the rear wheels while cutting!



Protect the surface with an anti-corrosion substance as for example paint! Don't use a greasy substance because the air-spring has to be stuck together.



5. Check the size of the existing hole in the suspension arms, which is marked on the picture. The hole will be used for the head of an align screw and should be big enough for it. When necessary, please enlarge the hole to **ø10,5 mm**.



Protect the surface with an anti-corrosion substance as for example paint or spray-wax!



6. Plastic covers are either secured with bolts or with clamp rings. The latter can be removed by sticking a screw driver in a recess and loosening it like a normal nut.



7. Remove the cover at the left hand side of the vehicle as well.



8. Remove the cover, which is hanging just in front of the fuel tank as well.



9. Cut-off a small piece of the heat shield, with about the size of the marked area. This is necessary to be able to hang the compressor at this position.

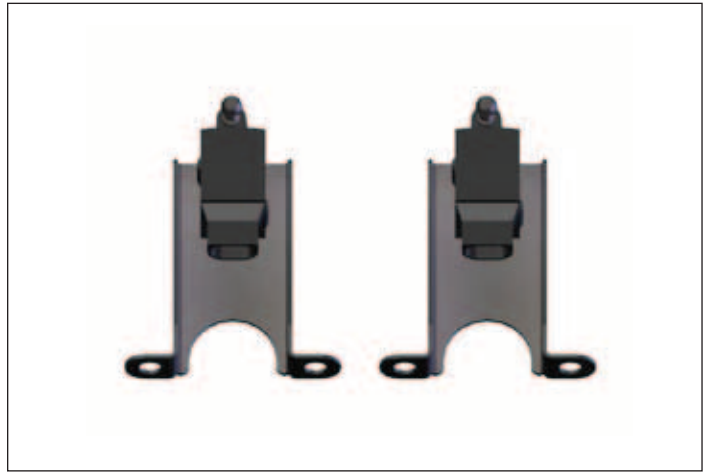


10. Remove the cover which is hanging just behind the fuel tank.





4.2 Heightsensoren

1. The next step is the fitting of the height-sensors. These have already been fitted to the brackets by VB-Airsuspension.




2. Secure the heightsensor assemblies to the chassis. To do so, use the supports of the stabiliser bar.

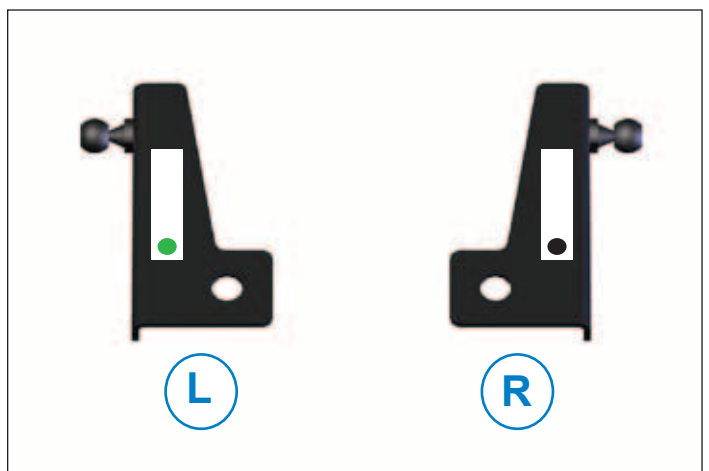
	4 x Original bolt M10
60 Nm	

	If the vehicle has Xenon lights, please first continue with chapter 10. The Xenon modificationkit would be mounted.
--	--




3. Mount the ball-joints to the ball-joint brackets, as can be seen to the right. Please notice that these brackets are different and that the ball-joints should point to the **inner side**.

	Notice the colour marks on the separate parts. This is to define the position in the car, see page 5 for details!
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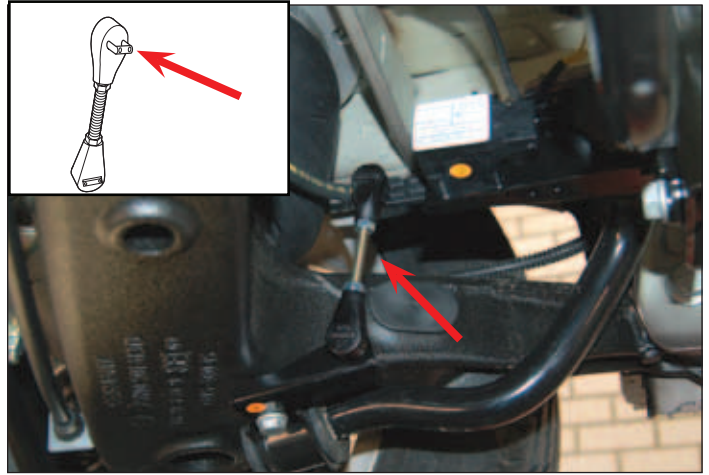


4. Mount the brackets to the suspension arm, as shown on the picture to the right. Use the original stabiliser bolts.

	4 x Original bolt M8
30 Nm	



5. Compare the length of the height sensor rods according to the size mentioned in the packing list. The length is measured between the centre of the two black ball-joints.
6. Mount the height sensor rods by pressing them onto the ball-joints at both ends, as can be seen on the picture on the right. Secure the rods by pressing the clips (see small picture).



4.3 The air-springs

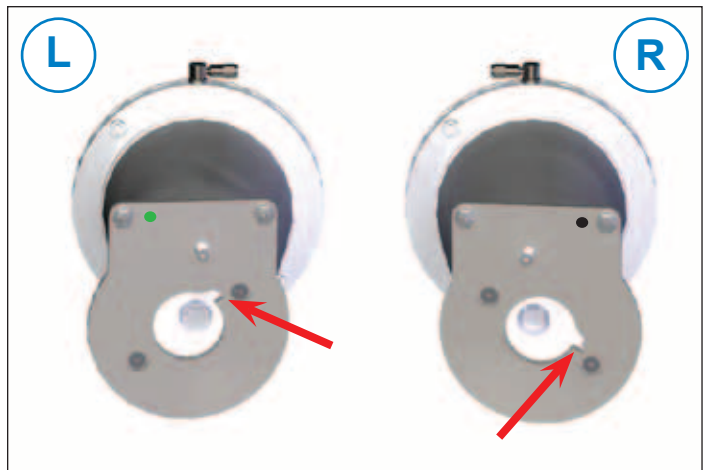
1. The next thing to do is fitting the air-springs. Please notice that these are different. The difference can easily be spotted, when looking at the position of the marked recess.



The air connections on the top side of the spring should point to the rear-middle of the vehicle.



Notice the colour marks on the separate parts. This is to define the position in the car, see page 5 for details!



2. Before mounting the air-springs, connect the air-tubes to them. This will be a lot more difficult later on!

Right : Black
Left : Green



Make sure that the tubes are clean and cut straight. Always use a special tool to do this!

3. Apply some glue to the chassis, in the area where the springs will be fit.



Make sure that the surface is properly cleaned and grease-proof!



4. Do the same to the bottom mounting plate of the air-springs.



Make sure that the surface is properly cleaned and grease-proof!



5. Mounting the air-springs at the original position of the coil-springs, as can be seen on the picture. Use a tyre valve to pump some air-pressure into the air-springs. This is to press the mounting plates properly against the chassis and suspension arms until the glue has hardened.



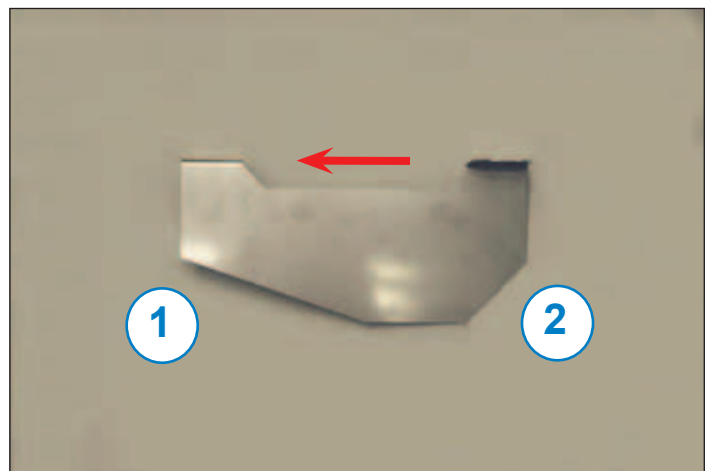
Remember the difference between the springs, see page 5 for details!



The glue should harden for at least 5 hours, before the pressure of the air-springs can be released!



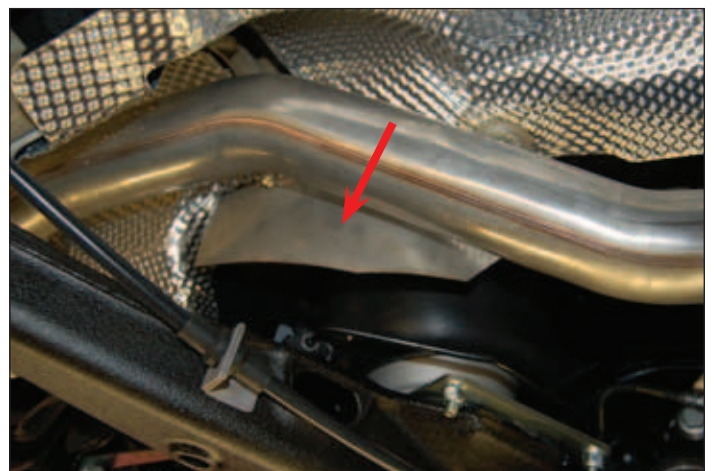
6. To protect the air-spring from the exhaust heat, the shield plate should be used. The plate is shown to the right. Please notice that the plate is asymmetrical. The long chamfered side (1) should point towards the front of the vehicle. The short chamfered side (2) to the rear.



7. Mount the shield at the marked location, between the exhaust pipe and the air-spring. Use the bolts and clamp rings, which are also used for the original heat shields.
8. The plate has to be bend a little when fitting it.

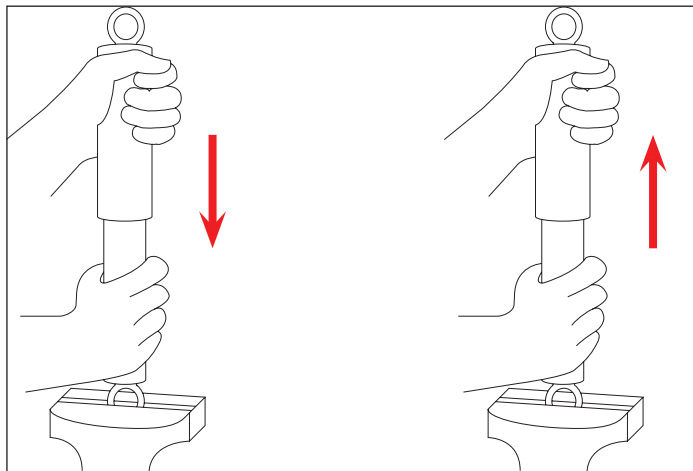


If the vehicle has Xenon lights, please first continue with chapter 10 point 3.



4.4 Fitting the shock absorbers

1. First, the air has to be released from the shock absorbers. To do this, fully press the top of the shock absorber down and then slowly pull it out again until you can't go any further. At the top of the stroke you may hear a slurping sound. This indicates that there's air in the shock absorber. Repeat this step until you cannot hear the sound any more, all the air will be released now. Please notice that this step may take from **2** up to **20** times!



2. Use all original fasteners to mount the shock absorbers.



Keep the top side of the shock absorbers pointing up at all times!



Upper original bolt

70Nm+90°



Lower original bolt

180Nm+180°



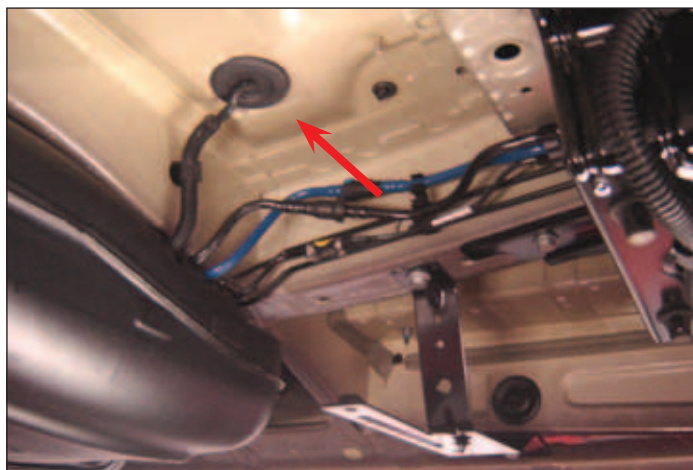
**** Do not secure these bolts yet! The vehicle has to be in driving height first!**

4.5 The compressor

There are 2 versions of the compressorbox. one is for the petrol cars and one for the diesel cars.

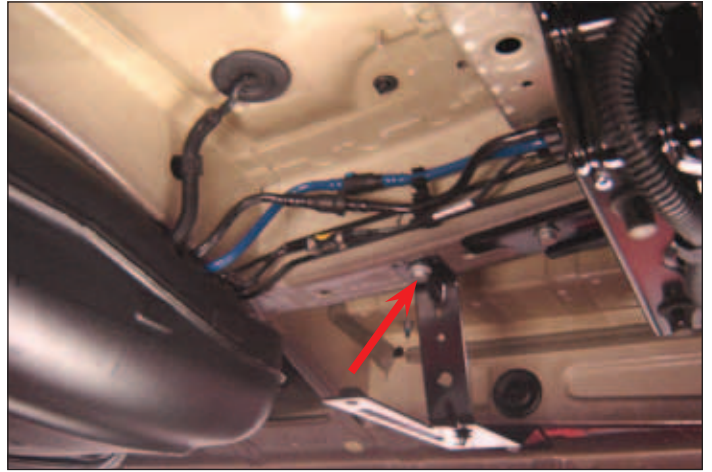
The position for the compressor-unit is directly in front of the fuel tank. The covers have been removed in a previous step.

1. Remove the grommet which is originally used to lead some cables into the cab. Enlarge the hole in the grommet and slip the VB-Airsuspension cable through it (the one with the two white connectors).
2. Press the grommet back into the chassis, thus leading the VB-Airsuspension cable into the cab.

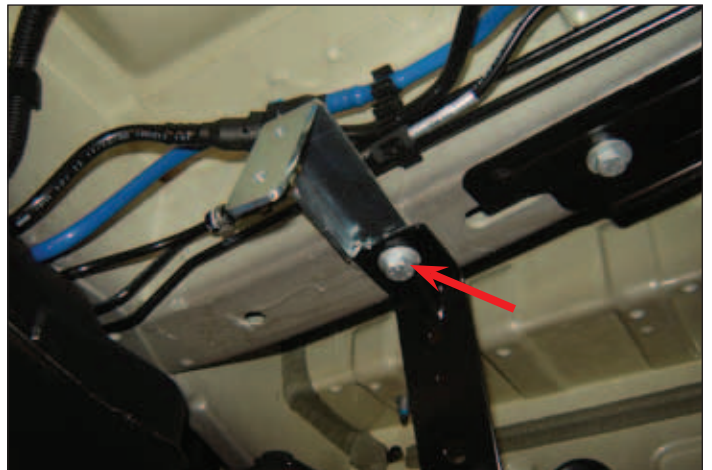


4.5.1 Vehicles with diesel engine

1. Loosen the screw shown in the picture.



2. Secure the first compressor support (see smaller picture) between the chassis and the previously removed support.
3. Use the supplied bolt instead of the original one.

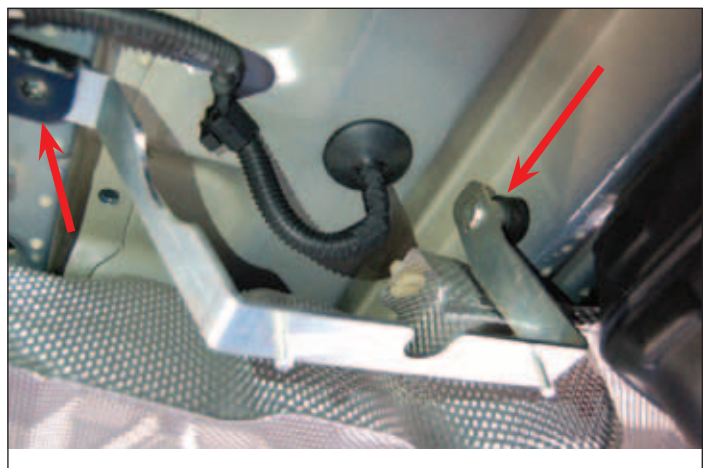


4. Press the supplied rubber grommet into the marked hole.

The grommet can only be fit in a single way.



5. Slide the steel rod into the grommet that has been pressed into the chassis. The other side has to be secured to the previously described hole.



	1 x Bolt M8x30
20 Nm	

	1 x Bolt M8x20 1 x Washer M8
20 Nm	

4.5.2 Vehicle with petrol engine

1. Mount the first compressor bracket between the chassis and the bracket which been loosen earlyer.

	1 x Bolt M8x30
20 Nm	



2. Monteer de steun op de aangegeven plaats.

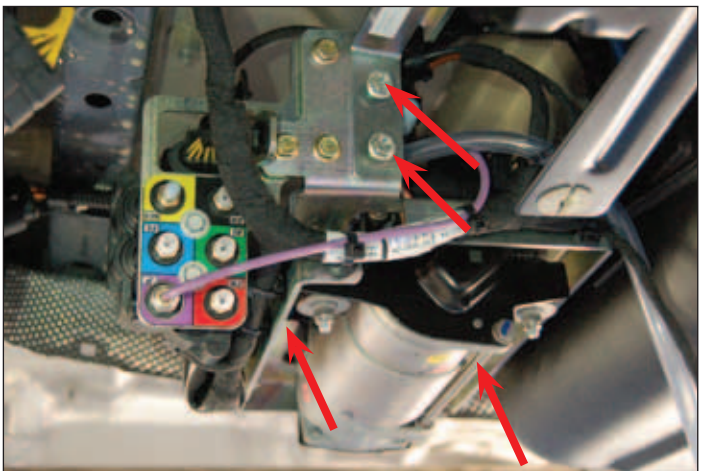
	1 x Bolt M8x20 1 x Washer M8
20 Nm	



4.5.3 For both types

1. Now secure the complete compressor assembly to the supports fit earlier.
2. Make sure that cable (1) can be lead to the front of the vehicle and cable (5) towards the back.

	4 x Flange lock nut M6
6 Nm	



3. Lead the tube along the fuel filling line up, all the way to the filler opening.
4. Lead the tube behind the support of the filler opening and secure it with a tie-wrap.

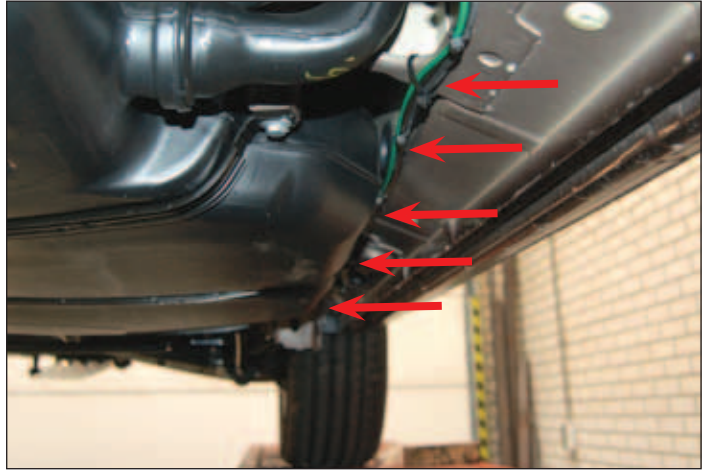


4.6 Air-tubes and heightsensor cables

1. Lead the heightsensor cables towards the rear of the vehicle, along the fuel tank. Secure the cables properly, using plenty of tie-wraps.



Secure the cables according the instructions on page 5!



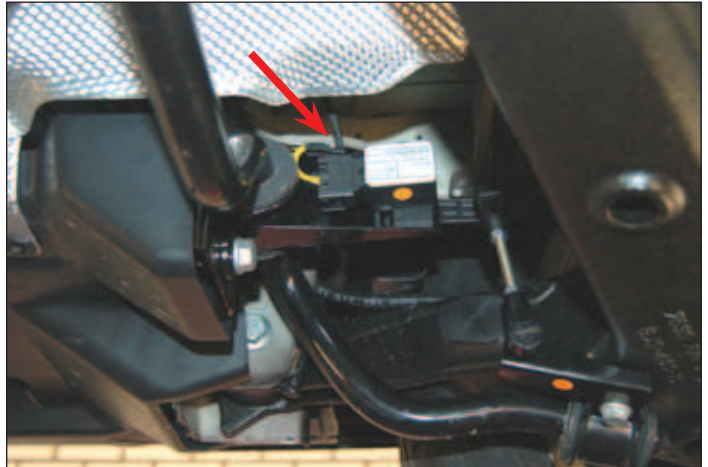
2. Lay the longer heightsensor cable, over the marked protection plate, to the right hand side of the vehicle.



3. Lead the cable over the protection plate to the heightsensor.
4. Connect the cable to the heightsensor. Secure the cable with a tie-wrap to the heightsensor support, at the marked hole.



Avoid possible stress in the connectors and wires!



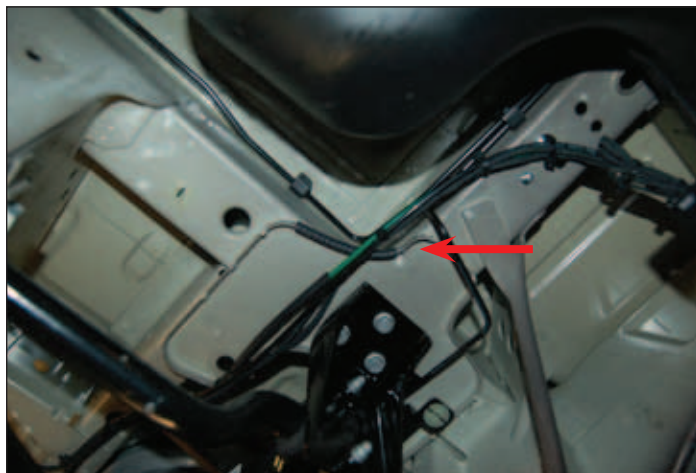
5. Lead the shorter heightsensor cable to the left hand heightsensor. Connect this cable to the heightsensor and secure it, with a tie-wrap, at the marked hole.



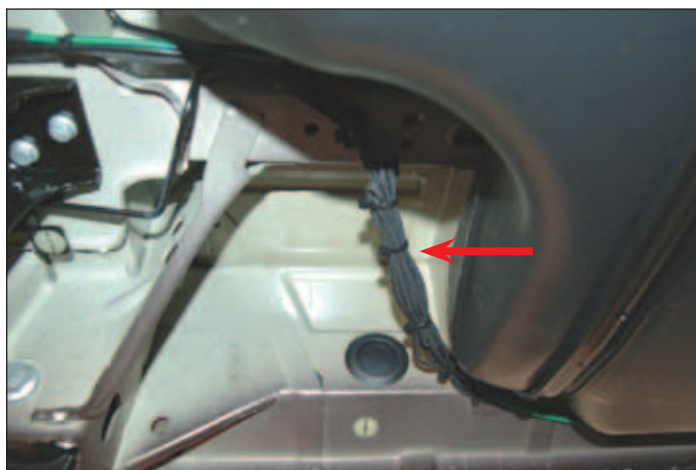
Avoid possible stress in the connectors and wires!



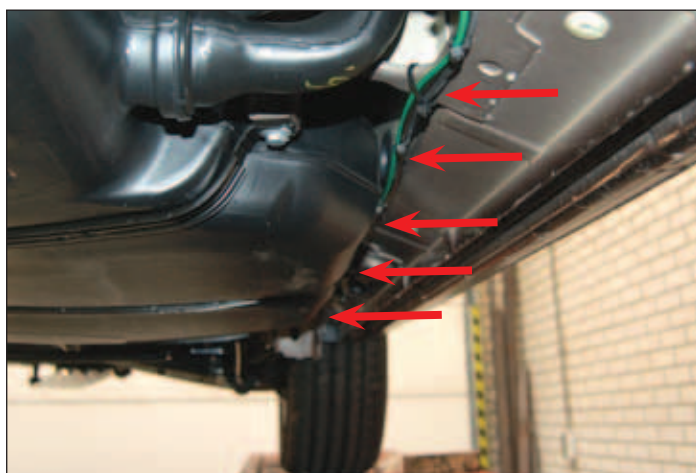
6. Lead the both air tubes to the shown position. The position is just in front of the stabiliser, on the left side of the vehicle.
7. Protect the air tubes with a protectionhose and tight them with cable ties.



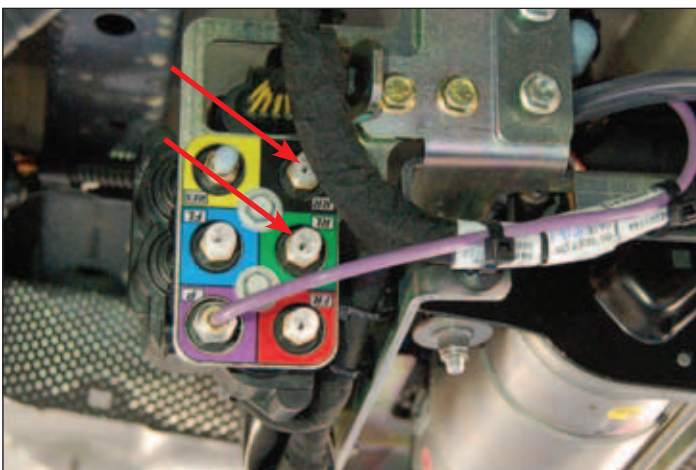
8. Lead both air-tubes towards the left hand side of the vehicle, right behind the fuel tank and just in front of the stabiliser bar.
9. Protect the air-tubes with, for example, conduit. Secure them properly, using plenty of tie-wraps.



10. Lead the air-tubes, along the previously secured heightsensor cables, to the compressor.



11. Connect the air-tubes to the compressor. Notice the colour marks, this defines the way to connect the air-tubes, see page 5 for details!
12. Plug the supplied end plugs in the unused air couplings.



5. The wiring harness

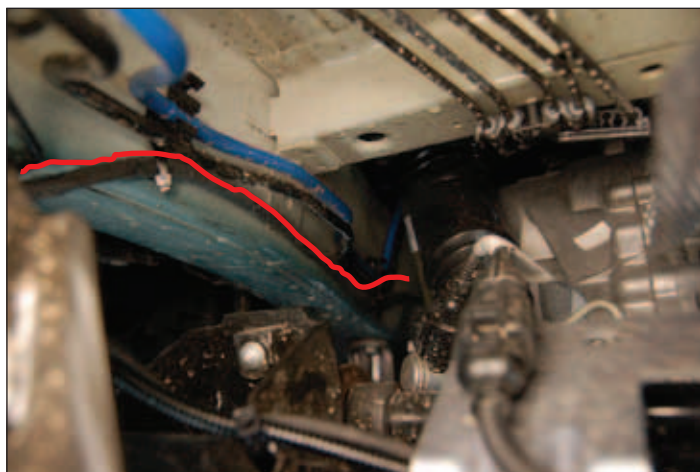
5.1 Power connection

1. Lead the main current cables to the front of the vehicle, as shown to the right. Secure the cables with plenty of tie-wraps and make sure they cannot grind.
2. Lead the wiring harness above the gearboxsupport to the top. (See red line)
3. Lead the cables up through the engine compartment. Make sure the cable ends up near the battery. Lead the cable from here on further to the front of the engine compartment.



Make sure that the cables cannot get near any heated or moving parts! Never secure anything to the brake lines!

4. Lead the cables underneath the front plastic plate of the battery compartment.



5. Connect the plus (+) cable, which the fuses are attached to as well, to the plus (+) of the battery. The other cable should be connected to the ground (-) of the battery. Neatly secure the cables with tie-wraps.



Make sure the battery can be removed fast in case of an accident! Never attach cables to the battery itself and don't lay them on top of the battery!



5.2 Signal connections



***The base vehicle has to be equipped with factory option: **UF1**
If not, please continue with chapter 11.***

1. Start by removing the passenger seat.



2. In case the vehicle is equipped with a second battery, this has to be removed temporarily. This is necessary to be able to lead the cables into the cab.



This step and the next are only necessary in case an extra battery is equipped!



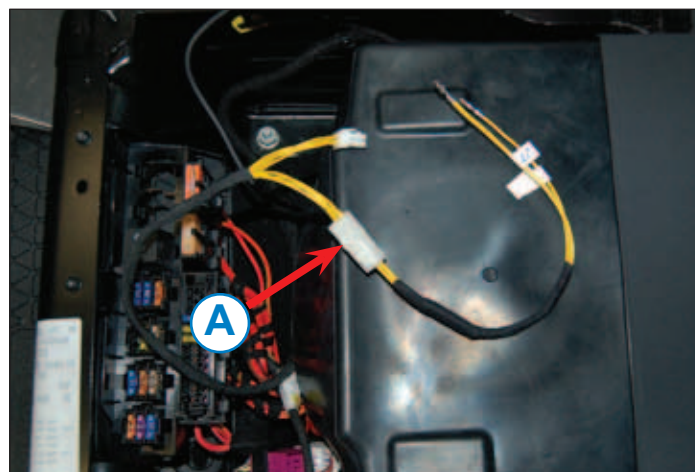
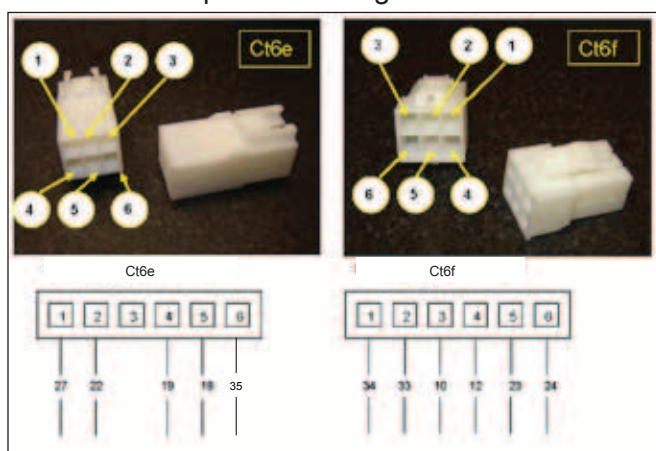
3. Loosen the seat console. It may be necessary to remove some other parts for this, as for example a relay.



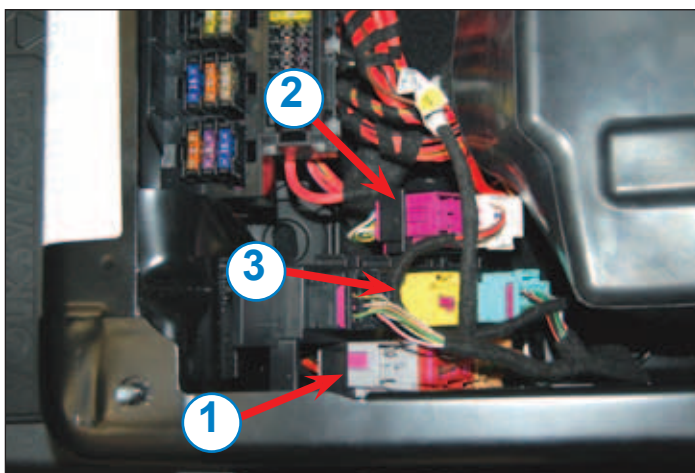
4. Now pull the control cables into the cab. These have been pushed through the grommet on page 13.



5. Connect the supplied 3-core wire (A) to the VB-Airsuspension wiring harness.



6. Check whether the three marked connectors are available underneath the seat console: grey (1), yellow (2) and purple (3).



7. Connect the wires from the signal cable according to the following table:

Wire	Signal	Position
27	Brake signal	Grey connector (1), pin 1
22	Ignition feed (15+)	Purple connector (2), pin 9
18	Speed signal	Yellow connector (3), pin 2

The pin position can be found on the connector

5.3 Remote control

1. Now the remote control has to be fitted. Find a suitable place to do this. VB-Airsuspension advises the compartment attached to the seat console. In case this isn't present one can use the supplied support.



Make sure that the remote NEVER gets in the way of airbags!

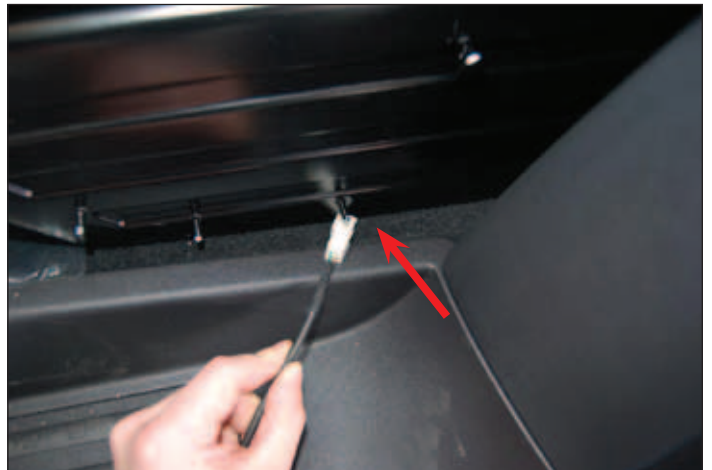
2. Carefully stick a screwdriver between the console and the compartment, loosening the compartment from the console.
3. Continue this process at different locations to remove the compartment completely.
4. Drill a $\varnothing 5\text{ mm}$ hole into the compartment, in the position shown to the right. Enlarge the holes to a slotted hole, to be able to slide the cable in them. Please check the next step as well.



5. Lay the straight part of the curled cable through the holes. Use a tie-wrap to pose as strain relief.



6. Lead the connector underneath the seat console to the VB-Airsuspension wiring harness, which can be found in the seat console.



7. Now connect the connector (1) to the VB-Airsuspension wiring harness.



8. Mount the seating console back into the vehicle. Neatly roll-up the excess cable. However, make sure that the connectors of the VB wiring harness can be reached from the front of the vehicle.
9. Now fit the seat back onto the console and, finally, re-fit the compartment.



10. Mount the fuseholder bracket to the bigger fuseholder.



1 x Screw 4,8x16

11. Slide the little fuseholder over the fuseholder bracket.



Pay attention that you mount the bracket to the right side of the bigger fuseholder.

12. Connect the fuse holders to the cable-tree. Slide the terminals of the red wires into a fuse-holder and put a **40 A** fuse in it (**Z1**). Now slide the terminals of the yellow wires into the other fuse-holder and put a **7,5 A** fuse in it (**Z2**).
13. Finally, mark the fuses with a label, to make it clear that these fuses are for the air-suspension.

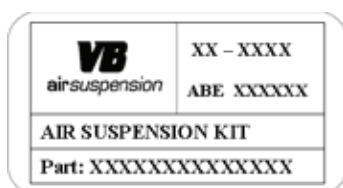


5.4 Warranty stickers

1. Stick the supplied warranty sticker, as on the picture, on the B-pillar on the passenger side.



2. Stick the kit-sticker, as on the picture, under the hood on the marked place.

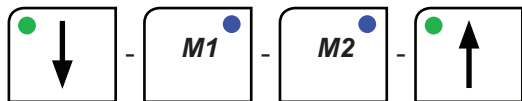


3. Stick one of each sticker also in the maintenance booklet of the vehicle.



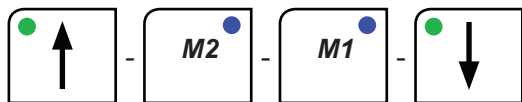
5.5 Calibration

1. Place the vehicle on a car lift and make the wheels hanging free from the ground. Turn the ignition on.
2. Press the **SERVICE**-key briefly (LED lights up) and then within 10 seconds the following code:



The system will give a long beep and reboot.

3. During the first beep, hold the **SERVICE**-key, until a second long beep is heard. Now enter the following code within 10 seconds:



The calibration mode is now activated.

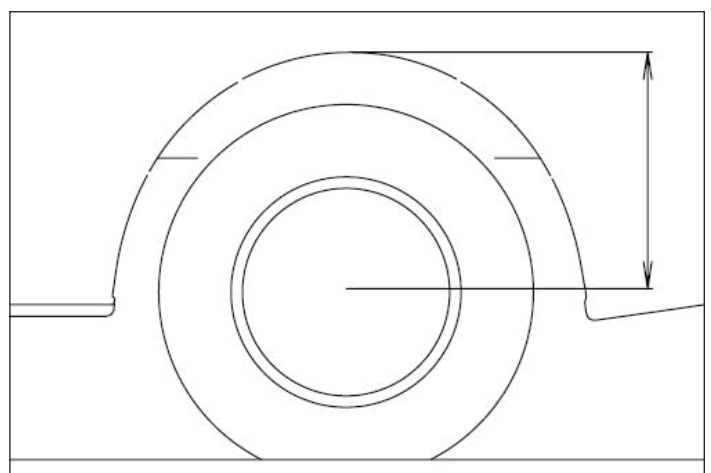
4. The vehicle will calibrate itself automatically.



It can occur the LED of the down-button will light up. If so, push this button until the compressor starts.

5. When the calibration is finished, the remote control will give a long signal. The air-suspension will restart automatically and the air-suspension is back in normal user mode.
6. Finally, secure all bolts which have been marked by ***** Do not tighten these bolts yet!'** and check the vehicle according the checklist in the appendix!

	Standard	+30mm	Tolerance	Measure
X rear:	445 mm	475 mm	(+/- 10mm)	



6. Checklist

6.1 System finishing

OK

- | | | |
|------|---|--------------------------|
| 1.1 | Chassis height checked according the manual | <input type="checkbox"/> |
| 1.3 | Heightsensor correctly fitted | <input type="checkbox"/> |
| 1.4 | Shock absorbers relieved of air | <input type="checkbox"/> |
| 1.5 | Bolts tightened to the right torque and checked off in fitting instructions | <input type="checkbox"/> |
| 1.6 | Tubes, cables and connectors correctly secured | <input type="checkbox"/> |
| 1.7 | System checked for air-leaks | <input type="checkbox"/> |
| 1.8 | Space around the air-springs checked | <input type="checkbox"/> |
| 1.9 | Documentation present | <input type="checkbox"/> |
| 1.10 | Warranty form filled out and identification sticker fitted | <input type="checkbox"/> |

6.2 Functions of system

OK

- | | | |
|-----|--------------------|--------------------------|
| 2.1 | Manual raising | <input type="checkbox"/> |
| 2.2 | Automatic lowering | <input type="checkbox"/> |
| 2.3 | Manual lowering | <input type="checkbox"/> |
| 2.4 | Automatic raising | <input type="checkbox"/> |
| 2.5 | Testdrive approved | <input type="checkbox"/> |

7. Torque recommendations

7.1 Specific torque values

Connection	Torque
Upper bolts rear shock absorber	70 Nm + 90°
Lower bolts rear shock absorber	120 Nm + 180°

7.2 Standard torque values

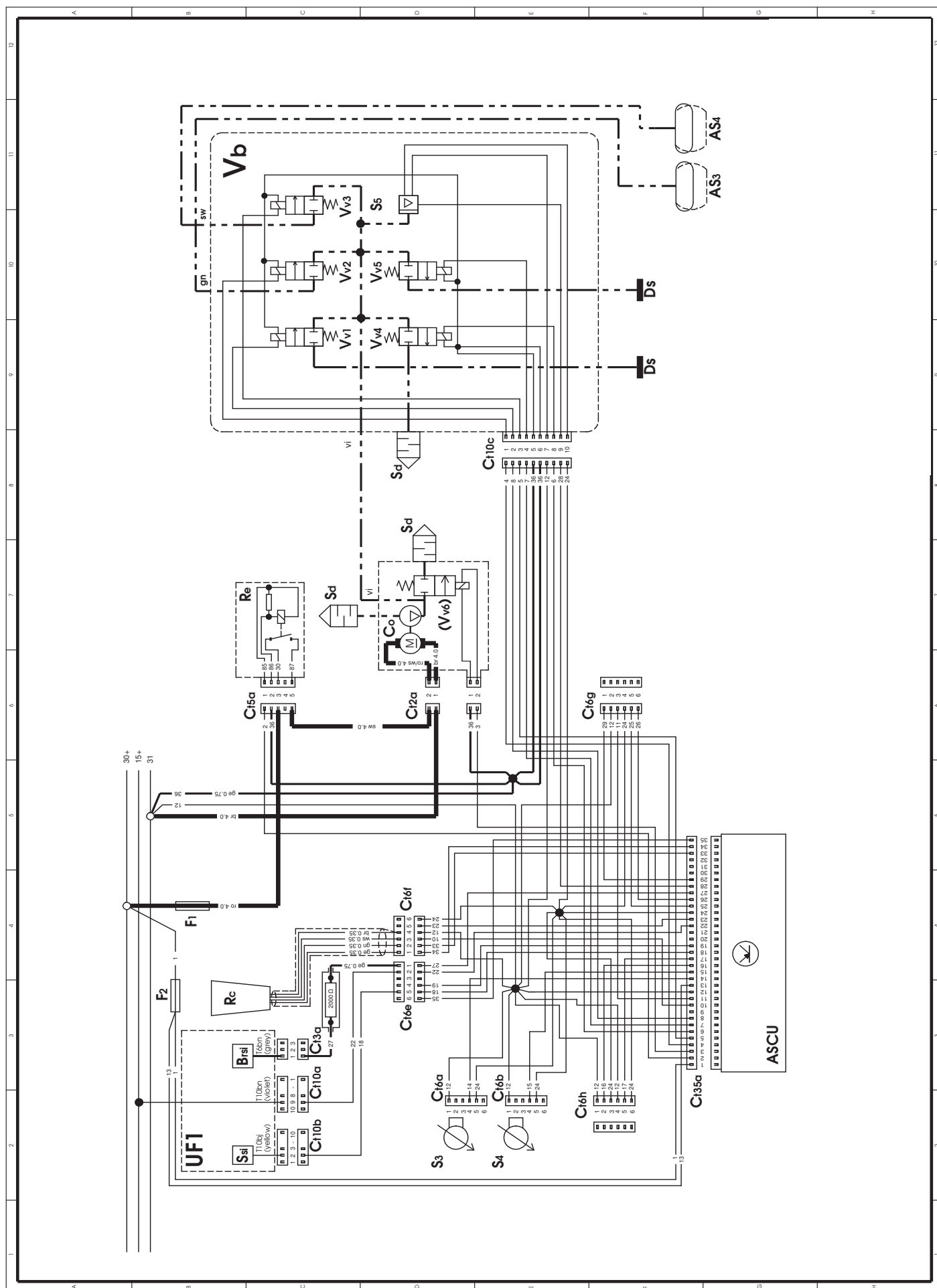
Attention: Torque values represented here are intend to be for general information, not for specific installations. In special instances, where the torque values of the factory service manual deviate from the torque values recommended here, always follow the factory service manual.

Bolt type	Grade 8.8	Grade 10.9
M3 x 0,50	1 Nm	1,5 Nm
M4 x 0,70	4 Nm	6 Nm
M5 x 0,80	6 Nm	8,5 Nm
M6 x 1,00	8,5 Nm	12,5 Nm
M7 x 1,00	14 Nm	20,5 Nm
M8 x 1,00	22 Nm	32 Nm
M8 x 1,25	20,5 Nm	30 Nm
M10 x 1,00	45 Nm	67 Nm
M10 x 1,25	43 Nm	64 Nm
M10 x 1,50	41 Nm	60 Nm
M12 x 1,25	77 Nm	112 Nm
M12 x 1,50	74 Nm	108 Nm
M12 x 1,75	71 Nm	104 Nm
M14 x 1,50	121 Nm	175 Nm
M14 x 2,00	113 Nm	165 Nm
M16 x 1,50	180 Nm	270 Nm
M16 x 2,00	170 Nm	250 Nm
M18 x 1,50	270 Nm	390 Nm
M18 x 2,50	245 Nm	350 Nm
M20 x 1,50	380 Nm	540 Nm
M20 x 2,50	350 Nm	490 Nm
M22 x 1,50	510 Nm	720 Nm
M22 x 2,50	470 Nm	670 Nm

Attention:

At the above listed torque values are in Nm. (NOT in lb.-ft.) The tolerance on the values is +/- 10%.

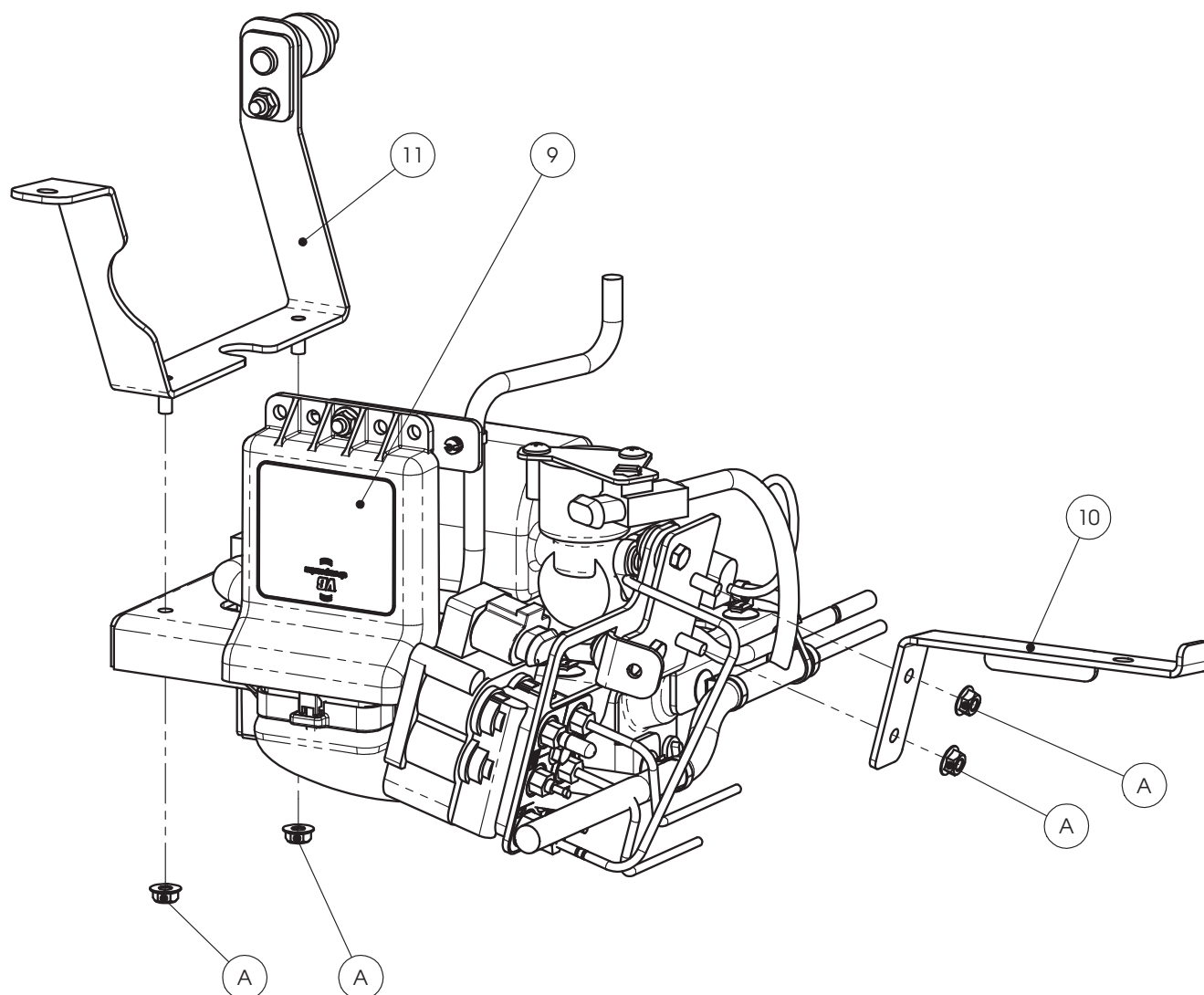
8. Wiring diagram



Nahme	Beschreibung
ASCU	VB-ASCU (Control unit)
AS3	Air spring left axle 2
AS4	Air spring right axle 2
Brsi	Brake signal
Ct2a	Connector, 2-pole, Compressor
Ct2b	Connector, 2-pole, Valve on compressor
Ct3a	Connector, 3-pole, Brake signal
Ct5a	Connector, 5-pole, Relay Re
Ct6a	Connector, 6-pole, Heightsensor left axle 2
Ct6b	Connector, 6-pole, Heightsensor right axle 2
Ct6e	Connector, 6-pole, VB-supply cable (white, delivery unassembled)
Ct6f	Connector, 6-pole, Remote control (white, delivery unassembled)
Ct6g	Connector, 6-pole, Option near compressor
Ct6h	Connector, 6-pole, Option for heightsensor axle 1
Ct10a	Connector, 10-pole, 15+ (black, delivery unassembled)
Ct10b	Connector, 10-pole, Speed signal
Ct10c	Connector, 10-pole, valve block
Ct35a	Connector, 35-pole, VB-ASCU
Co	Compressor
Ds	Screw plug
F1	Fuse compressor, 40A
F2	Fuse VB-ASCU, 7,5A
Re	Compressorrelay
Rc	Remote control
S3	Heightsensor left axle 2
S4	Heightsensor right axle 2
S5	Pressure sensor, on valve block
Sd	Noise killer
Ssi	Speed signal
Vb	Valve block
Vv1	Valve right axle 1, on valve block
Vv2	Valve left axle 2, on valve block
Vv3	Valve right axle 2, on valve block
Vv4	Dump valve, on valve block
Vv5	Valve left axle 1, on valve block
Vv6	Valve, in compressor
Colors: (not mentioned is yellow with numbers)	
bl	Blue
br	Brown
ge	yellow
gn	Green
ro	Red
ro/ws	Red/white
rs	pink
sw	black
vi	Violet
ws	White
_____	0,50 mm ²
_____	0.75 mm ²
_____	4,00 mm ²
— — — — —	Air tube ø4mm
- - - - -	Air tube ø8mm

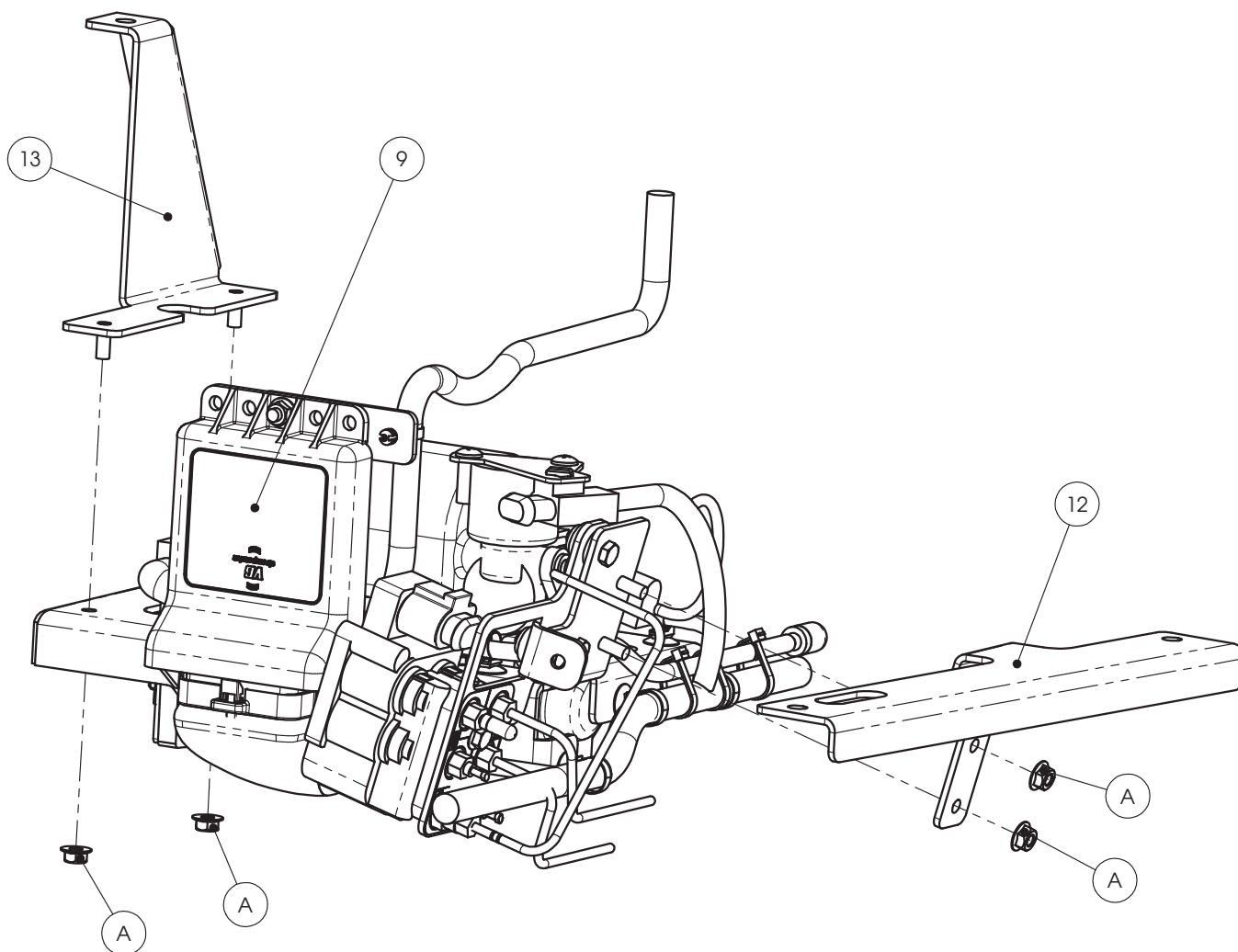
9. Exploded view

9.1 Compressorbox diesel



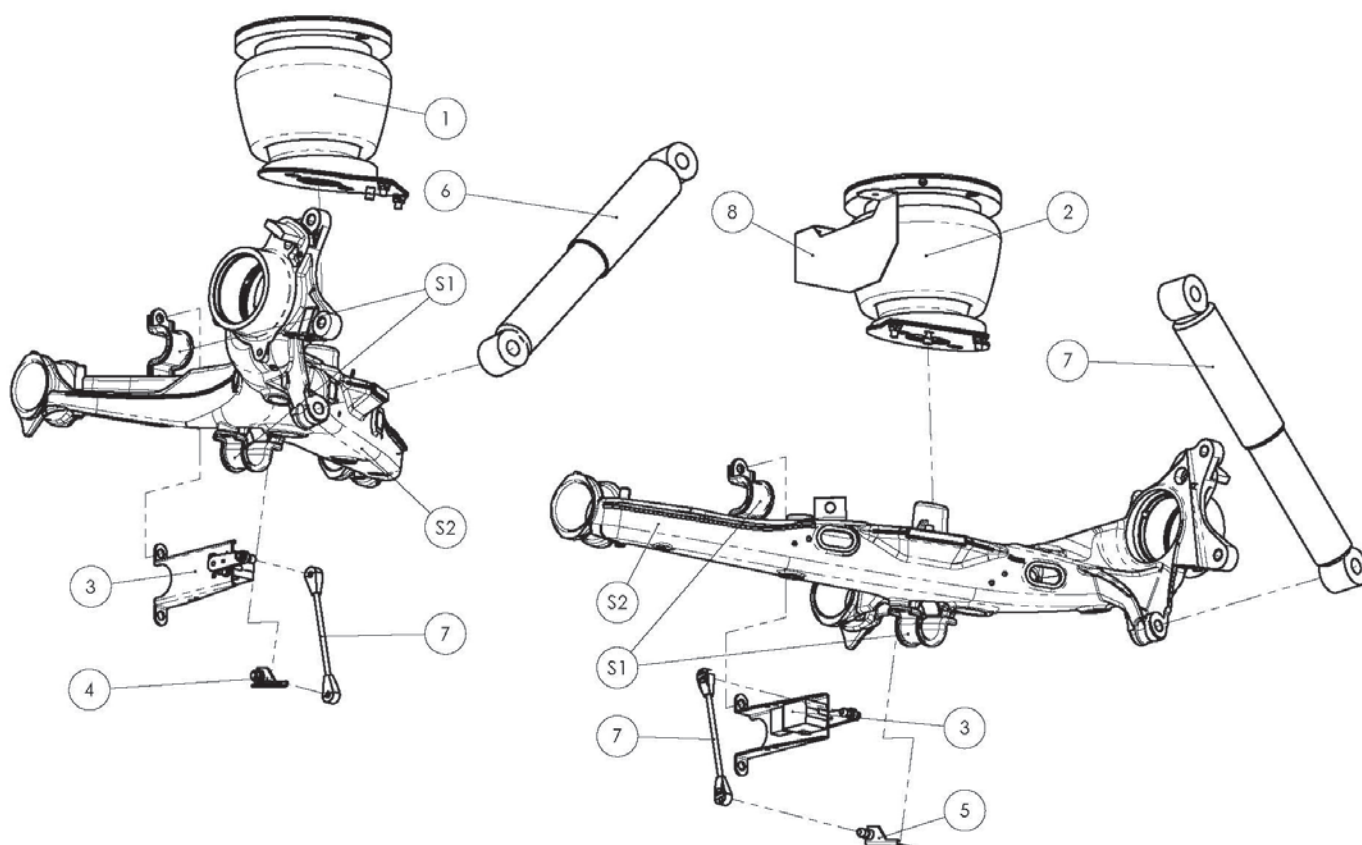
Item	Qty.	Description	Part. nr.
9	1	Compressor unit	105 213 01 12
10	1	Compressor bracket 1	105 213 10 89
11	1	Compressor bracket 2	105 213 10 90
A	4	Lock nut M6	001 100 60 01AB

9.2 Compressorbox petrol



Item	Qty.	Description	Part. nr.
9	1	Compressor unit	105 213 01 12
12	1	Compressor bracket 1	105 213 10 87
13	1	Compressor bracket 2	105 213 10 95
A	4	Lock nut M6	001 100 60 01AB

9.3 Rearaxle



Item	Qty	Description	Order number
1	1	Air spring left	105 203 22 52
2	1	Air spring right	105 203 22 53
3	2	Heightsensor	105 209 51 86
4	1	Ball-joint left	105 209 51 53K
5	1	Ball-joint right	105 209 51 52K
6	2	Shock absorber	105 210 40 77
7	2	Heightsensor rod	105 209 50 02
8	1	Heat shield	105 235 00 14

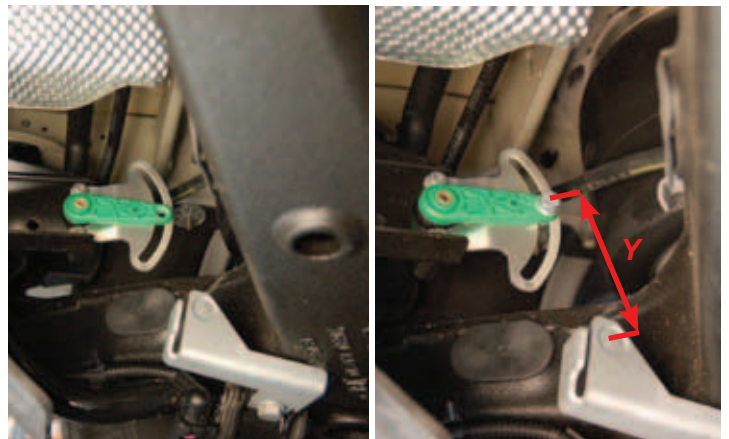
Item	Qty	Description
S1	4	Stabiliser bracket
S2	2	Suspension arm

10. Fitting the Xenon-modificationkit

1. Disconnect the original heightsensormount
2. First, continue with chapter 4.3.
3. Set the vehicle at ride height.
4. Disassemble the original heightsensor.
5. Drill with a Ø6mm drill the ball joint out of the heightsensormount.



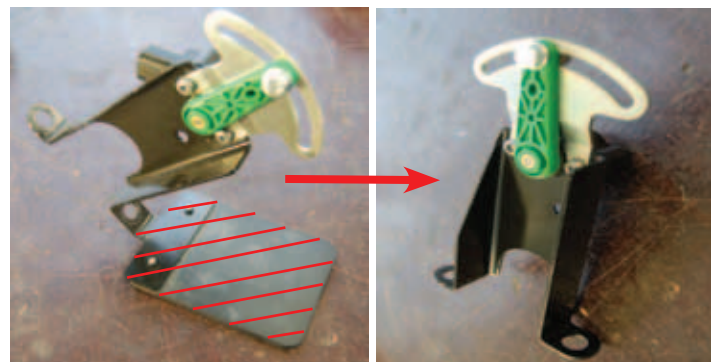
6. Mount the original heightsensor back at its bracket together with the mounting bracket for the heightsensormount.
7. Mount the original heightsensormount to the mounting bracket, the dimension Y must be the same length as the original heightsensormount.



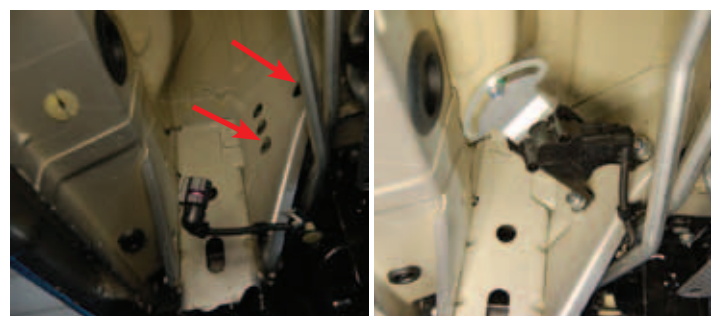
	1 x Bolt M6x20 2 x Washer M6
10 Nm	1 x Lock nut M6

8. Disassemble the original heightsensor with bracket.
9. Remove the marked rubber protection plate.

	Protect the surface with an anti corrosion substance.
--	--



10. Hang the original heightsensor bracket with the heightsensor at the shown place to make place for the VB heightsensor. This place is in front of the rear right wheel.
11. Connect the original connector back to the original heightsensor.
12. Remove the original ball joint bracket with the heightsensor rod.
13. Continue at page 10 with point 3.



11. Cable connecting when option UF1 is not available

Not all VW Transporters are equipped with the option UF1, so sometimes it is necessary to connect the wiring harness from VB to the vehicle on a different way.

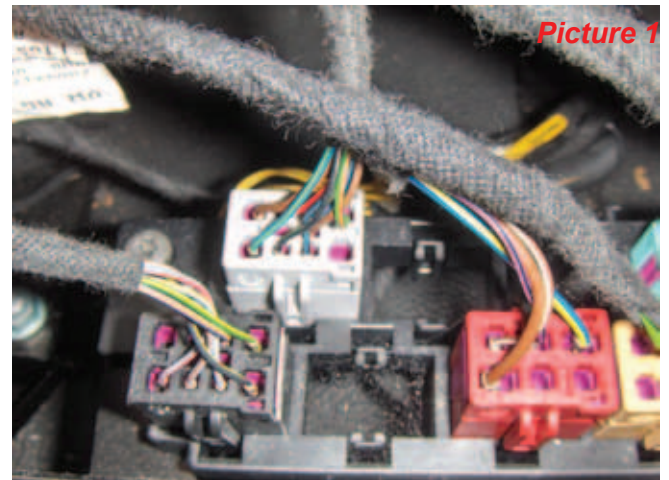
1. Remove the driver seat. If the vehicle is equipped with a secondary battery, remove the secondary battery. Remove the frame of the driver seat to pull the wiring harness easier to the cabin.



Cut the wire at 50 mm from the relay. Strip the wires at 5 mm from the end. Connect the wire with an isolated cable terminal. An example is shown.



2. The cable has three wires:
 - Wire 27 – brake signal
 - Wire 22 – contact + (15+)
 - Wire 18 – speed signal
3. Brake signal – wire 27 (Picture 1)
 - On the **blue** connector
 - Wire **black/red** of the vehicle
 - To connect with wire 27 **yellow** of the UF0 cable from VB



Picture 1

4. Signal contact+ - wire 22 (Picture 2)
 - On the **black** connector



Not always present, when not: get the contact plus by the light switch. (only when the vehicle doesn't have a CAN-BUS light switch)

- Wire **grey/brown** of the vehicle
- To connect with wire 22 **yellow** of the UF0 cable from VB



Picture 2

5. Speed signal – wire 18 (Picture 3)
- On the back of the instrument cluster
 - The wire ~~white~~ **Violet** of the vehicle
 - To connect with wire 18 **yellow** of the UF0 cable from VB



Picture 3



Always use the isolated cable terminals supplied by VB-Airsuspension. The cable terminals have to be double clamped and heated to isolate the wires. Before you put back the connector, protect the wires with tape. (Picture 4)



Picture 4



VB-Airsuspension is producing, as one of the few European manufacturers, a very broad range of different (air-) suspension systems. From reinforced coil springs, semi-air suspension systems, up to complete full air-suspension systems, we provide solutions for customers with different vehicle types, like ambulances, minibuses, car transporters, motorhomes, etc. Now you can see why more and more commercial vehicle body manufacturers specify VB-Airsuspension on their vehicles.



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