

EN

FITTING INSTRUCTIONS

making everyday smoother



FORD TRANSIT V363 RWD

*VB-FullAir 2C
rear axle*

FOR KIT: 1050619201



REVISION TABLE

Document number	730105061902		
New revision:	V2.5		Old revision: V2.4
Release date (yyyy-mm-dd):	2024-02-08		
Page (new):	Changes:		
15	Updated: Step 9		
16	Updated: Step 11 .. 14		

TABLE OF CONTENTS

1. Safety instructions	4
2. Fitting instructions	5
3. Fitting the air suspension kit for the rear axle	6
<i>3.1 Preparations</i>	6
<i>3.2 Main spring</i>	7
<i>3.3 Upper cross beam</i>	8
<i>3.4 Brake line bracket</i>	12
<i>3.5 Exhaust mounting</i>	13
<i>3.6 Air spring</i>	14
<i>3.7 Shockabsorber</i>	15
<i>3.8 Height sensors</i>	17
4. Compressor box and wiring harness	18
<i>4.1 Compressor box</i>	18
<i>4.2 Wiring harness</i>	19
<i>4.3 Driver's seat</i>	23
<i>4.4 Remote control</i>	23
5. Air tubes and air tank	24
<i>5.1 Air tubes</i>	24
<i>5.2 Height sensors wiring harness</i>	24
<i>5.3 Air tank</i>	25
<i>5.4 Spare wheel</i>	26
<i>5.5 Warranty stickers</i>	27
6. Calibration	28
7. Checklist	29
8. Electrical diagram	30

1. SAFETY INSTRUCTIONS

Personal safety rules

- Always wear suitable protective clothing and safety boots.
- Do not wear rings, watches or loose clothing.
- Do not carry loose items in your pockets.
- Tie back long hair.
- Never use broken tools. Only use tools for their intended purpose.
- Wear safety goggles.

General safety rules

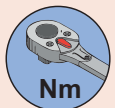
- If possible, always use a hydraulic ramp while working.
- Ensure the vehicle is properly supported when necessary.
- Ensure the vehicle is not able to roll away.
- Improper installation may result in a hazardous situation.



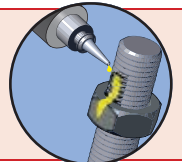
Where the warning symbol is displayed, information is given which is very important for the safety and/or health of those involved. This symbol is also used for procedures critical for the correct installation of the air suspension kit.



Important: for installation/removal, check the manufacturer's workshop manual. If in doubt, always follow the vehicle manufacturer's instructions.



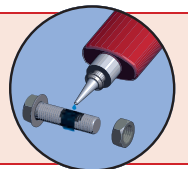
Each bolt connection in this manual contains a tightening torque with which the bolt connection must be secured and then marked with a safety paint for screws. When reusing the original bolts and nuts, follow the vehicle manufacturer's guidelines for proper tightening torques.



Important: all parts that are removed and reinstalled must be checked to ensure they are working properly.



If thread locking is specified, use Loctite 243 as a minimum or a similar thread locker with the same characteristics.



2. FITTING INSTRUCTIONS

This manual has been put together with great care and describes the steps for installing the air suspension indicated on the front page. However, the content of this manual is a snapshot view of the situation as at the time it was written.

VB-Airsuspension reserves the right to introduce technical changes at any time without warning.

The warranty is only valid if installation is carried out by a specialist workshop. Installation may only be carried out by suitably authorised personnel.

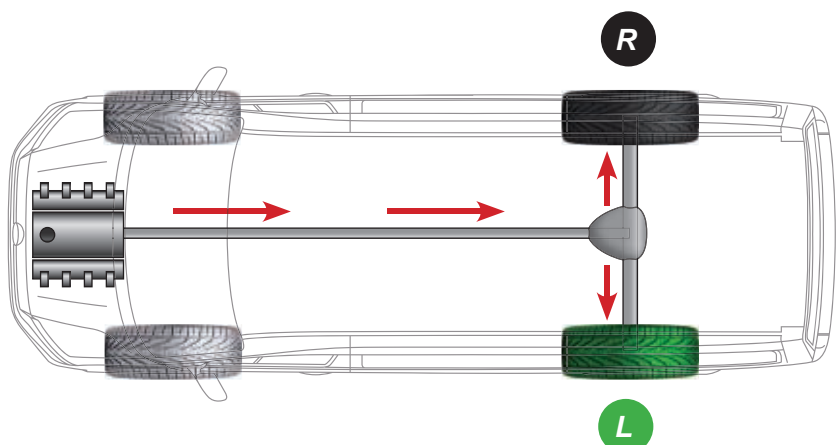
Staff must be experienced in working on light commercial vehicles, particularly in relation to electrics/electronics, pneumatics and general vehicle mechanics.

- Take a test drive prior to installing air suspension.
- Check whether the TUV documentation is valid for the vehicle.
- Also follow the vehicle manufacturer's instructions when storing the vehicle.
- Use vehicle workshop manuals where necessary.
- Always follow the vehicle manufacturer's conversion instructions, unless expressly stated otherwise in this manual.
- Mark removed parts so that they are put back in the correct vehicle.
- All removed parts that are remounted must be checked for correct operation.
- Keep workplace clean and tidy.
- Always tighten nuts and bolts to the specified torque and then marked with a screw security paint marker.
- If modifications have been made to the original anti-corrosion system, this must be rectified immediately. Use spray wax or a protective coating for this purpose.
- Always refit removed tubes and wires in the same way they were originally fitted.
- Secure pipes and wires with a sufficient number of tie-wraps. Ensure that the wires cannot be placed under tension.
- The supply cable must be at least 100 mm away from the ABS/ESP block, the sensors and other control equipment.
- Ensure that there are no tight bends in air tubes and that they cannot be kinked or chafe against other parts.
- Never attach air tubes, wires or other parts to the vehicle's brake lines.
- Do not leave any tools, cleaning cloths or other materials lying around.
- Use the checklist to check the air suspension system after fitting.
- Check the system for air tightness after fitting.
- Take the vehicle for a test drive after fitting.
- Ensure that the correct calibration supports are available. The correct calibration supports to be used with this kit are:

Axle:	Calibration height:	Order number:
Rear axle	<i>X = 150mm</i>	<i>009 000 00 82A</i>

- The air suspension kit is supplied for two corners. If a part is specifically for one corner, it is identified with a coloured sticker.

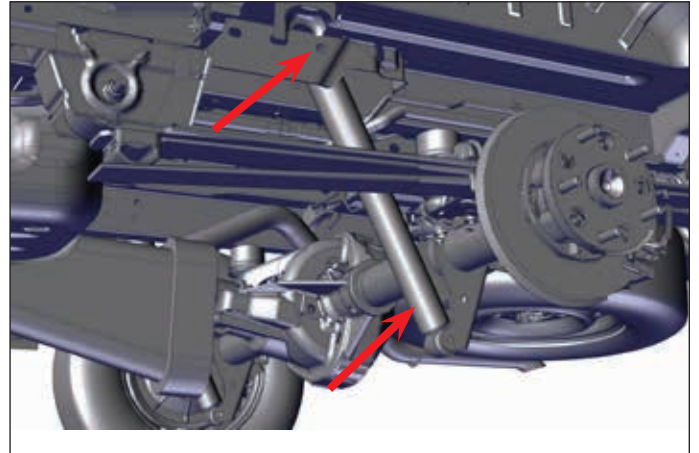
Colour	Description
Green	Rear left
Black	Rear right



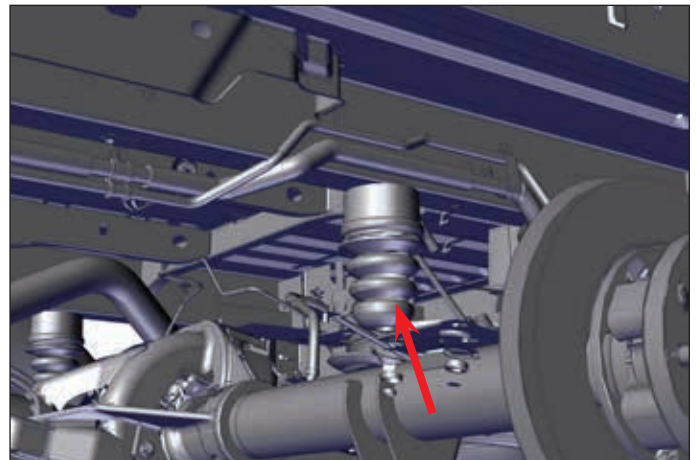
3. FITTING THE AIR SUSPENSION KIT FOR THE REAR AXLE

3.1 PREPARATIONS

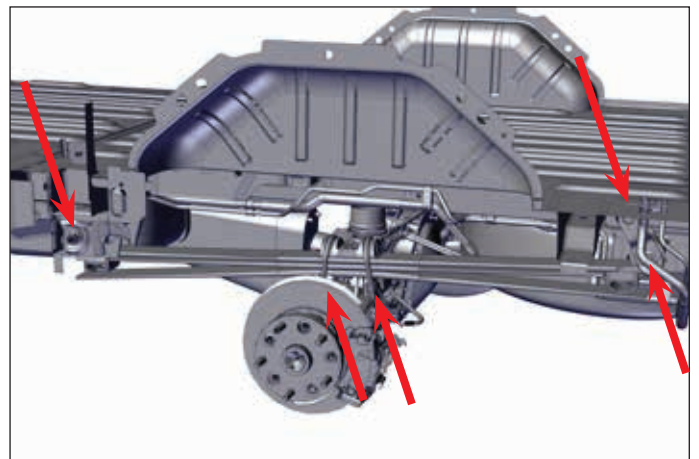
1. Ensure that the vehicle is properly supported.
2. Remove the spare wheel.
3. Remove the shock absorbers.
Note: The nuts and bolts will be re-used.



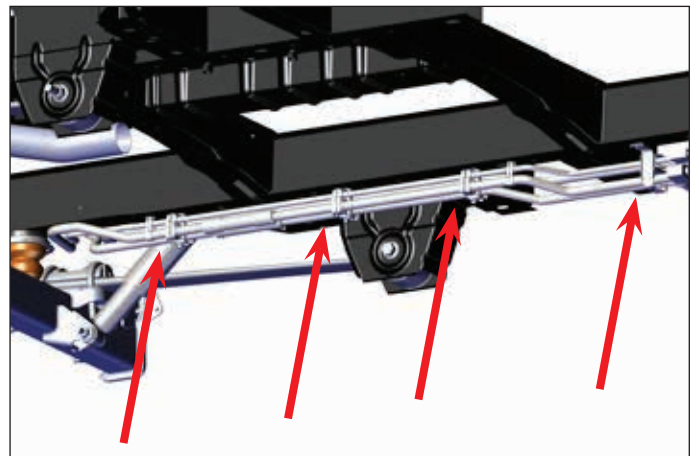
4. Remove the bump stops.
5. Remove the bump stop retainers.



6. Remove the U-bolts.
7. Remove the topmost bolt from the spring shackle.
8. Remove the bolt from the frontmost leaf-spring bracket.
9. Remove the leaf springs.
10. Remove the rearmost leaf-spring bracket.



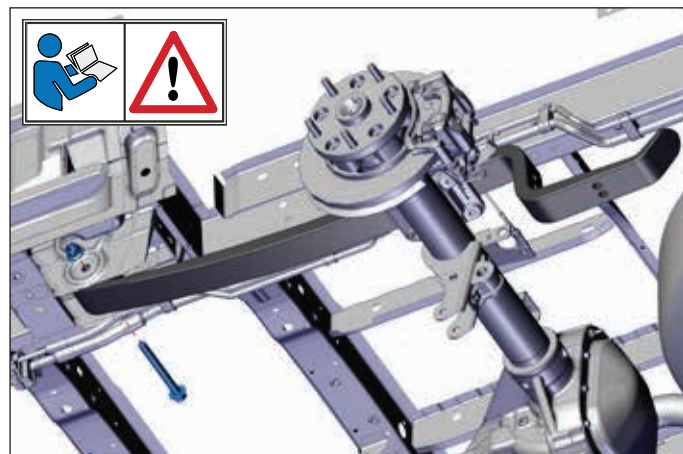
11. If the vehicle is equipped with air conditioning in the rear compartment, the indicated mounting brackets must be loosened so that the panhard torque rod bracket can be fitted.



3.2 MAIN SPRING

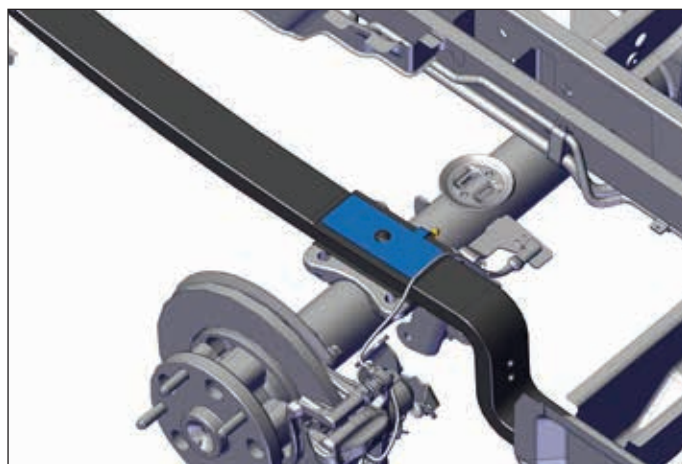
1. Place the main springs on the spring seats. Ensure that the centre bolt falls in the hole of the spring seat.
2. Fit the main spring in the frontmost leaf-spring bracket.

**** Do not tighten the bolts yet. Tighten them once the vehicle is at the ride height.**

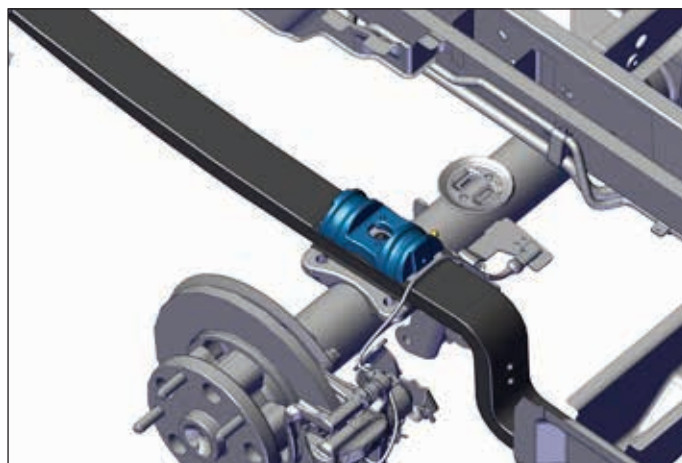


Original fasteners			
			¹ guidelines of the (vehicle) manufacturer.

3. Place the ball-joint brackets on the main spring. The ball-joint holes must face towards the inside and to the rear.



4. Place the original spring clamping plates on the main spring.

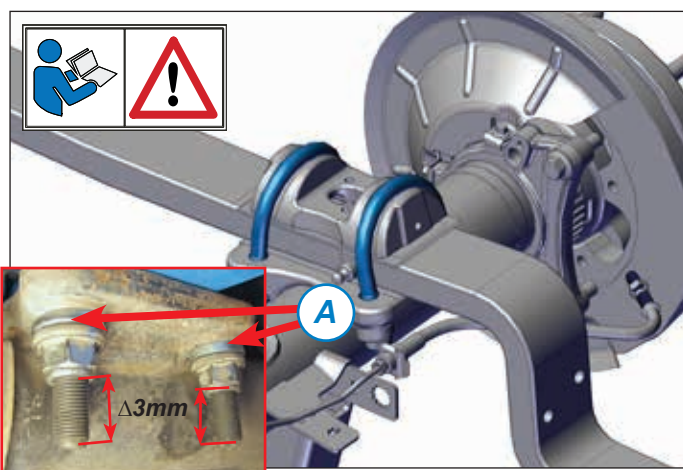


5. Fit the U-bolts with the original leaf-spring U-bolt nuts. Fit thick washers under the leaf-spring U-bolt nuts.

Fit the U-bolts in steps of **25, 50, 75, 100, 125, 150** until **175** Nm is reached.

**** Do not tighten the nuts yet. Tighten them once the vehicle is at the ride height.**
Note: After tightening, the difference in length must not be more than 3 mm (Δ).


8 x washer ø30xø14.5 L=10 M22

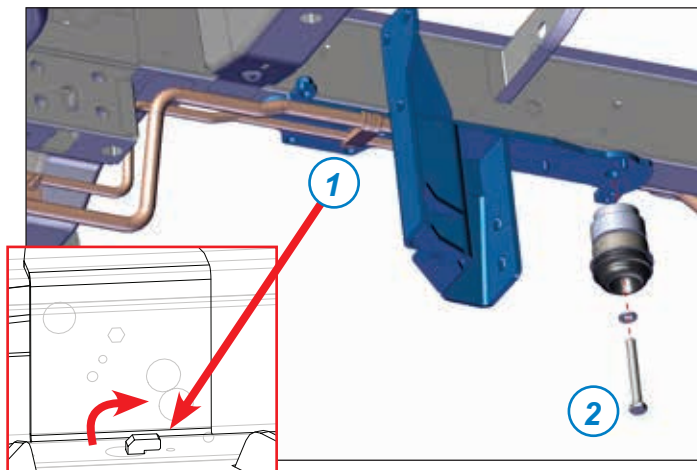


Original fasteners			
			¹ guidelines of the (vehicle) manufacturer.

3.3 UPPER CROSS BEAM

1. Fit the panhard rod bracket up against the chassis. To do this, push the lip in the hole of the chassis.
2. Replace the original bump stop with the VB bump stop and VB spacer block.

1 x bolt	M10 x 85
1 x washer	M10
 60 Nm	








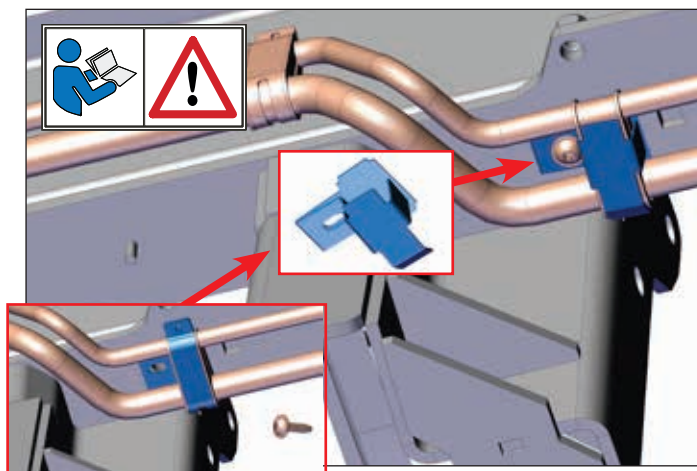
Only carry out steps 3 and 4 if the vehicle is fitted with air conditioning.

3. Replace the original clamp for the pipe rubber with the VB clamp.
4. Fit the new VB clamp in the original position.


Original fasteners

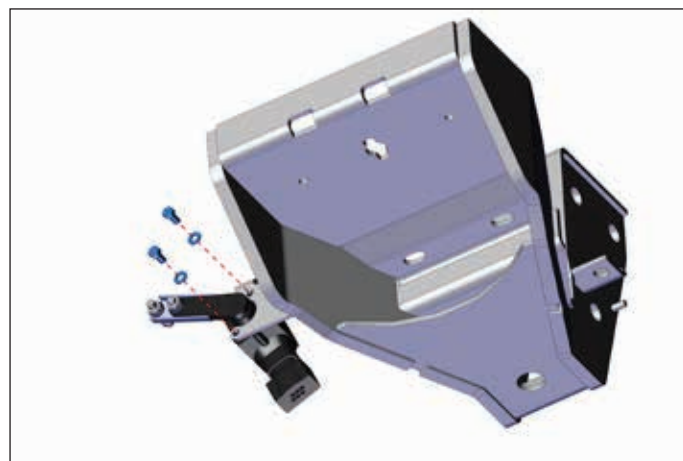




¹ guidelines of the (vehicle) manufacturer.




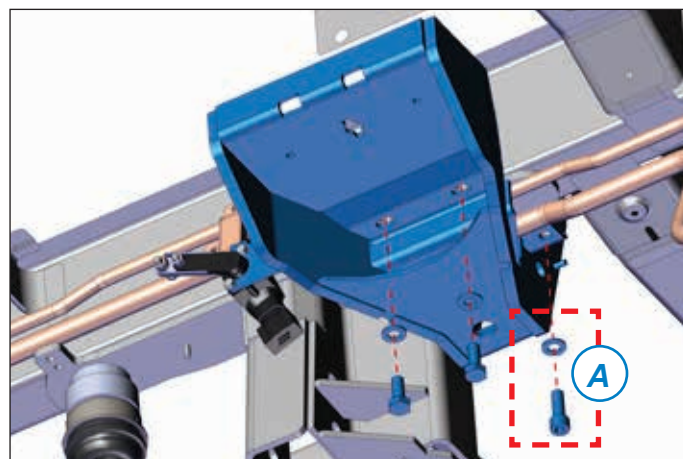
5. Fit the height sensor on the left upper spring plate as shown in the illustration.

2 x bolt	M5 x 10
2 x washer	M5
 5 Nm	



6. Place the left upper spring plate over the panhard rod bracket. Ensure that the A/C pipes (if present) run through the tunnel in the upper spring plate.
**** Do not tighten the bolts yet.**

1 x Allen screw (A)	M10 x 30
2 x bolt	M10 x 30
3 x washer	M10
 40 Nm	



7. Fit the height sensor on the right upper spring plate as shown in the illustration.

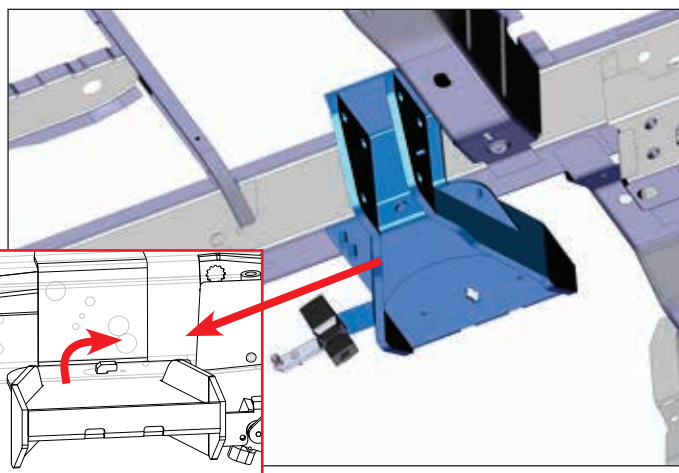


2 x bolt	M5 x 10
2 x washer	M5



5 Nm

8. Fit the right upper spring plate to the chassis. To do this, push the lip in the hole of the chassis.



9. Fit the upper spring plates on the chassis. To do this, push the lip in the hole of the chassis. (see inset).

2 x lock nut	M8
2 x washer	M8



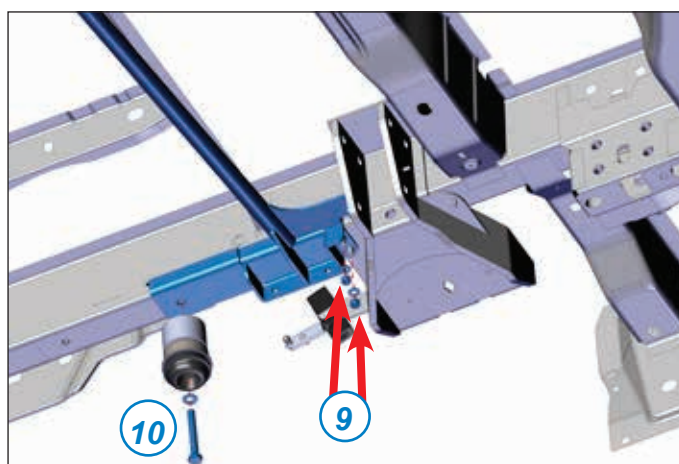
14 Nm

10. Mount the bump stop with the spacer block in the original position.

1 x bolt	M10 x 85
1 x washer	M10



60 Nm

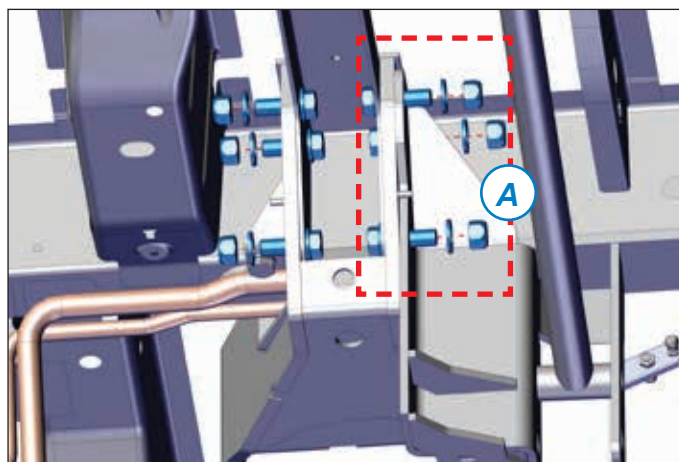


11. Fit the upper cross beam to the left upper spring plate.
The bolts must be fitted from the inside to the outside.
Push the upper spring plates as far out as they will go during fitting so that they are up against the chassis.

3 x bolt (A)	M12 x 40
3 x bolt	M12 x 35
12 x washer	M12
6 x lock nut	M12



100 Nm

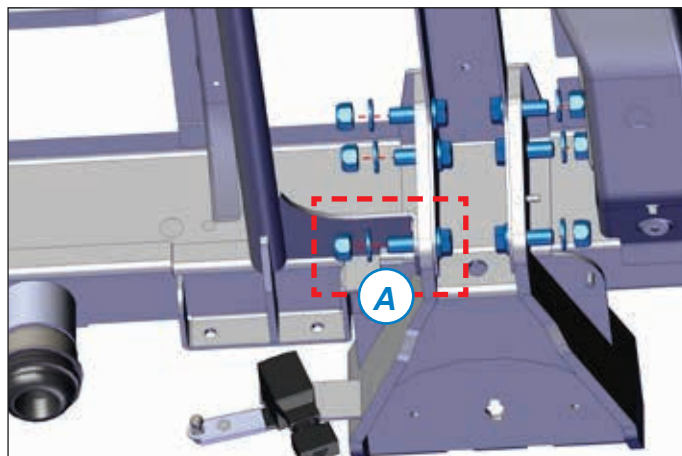


12. Fit the upper cross beam to the right upper spring plate.
The bolts must be fitted from the inside to the outside.
Push the upper spring plates as far out as they will go during fitting so that they are up against the chassis.

1 x bolt (A)	M12 x 40
5 x bolt	M12 x 35
12 x washer	M12
6 x lock nut	M12



100 Nm

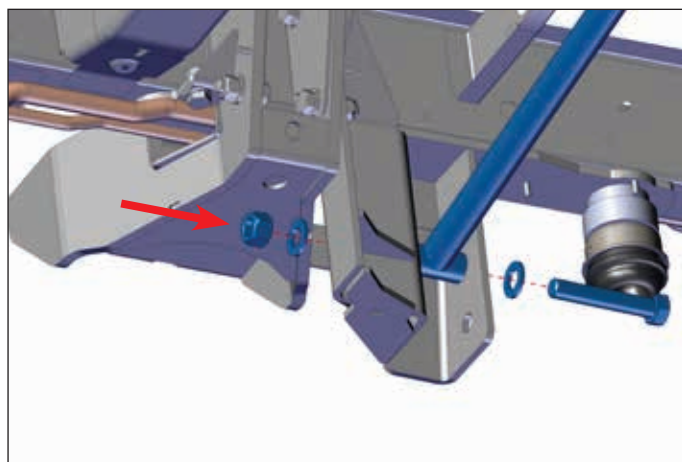


13. Fit the torque rod to the panhard rod bracket.

1 x bolt	M16 x 90
2 x washer	M16
1 x lock nut	M16



200 Nm



The following step can only be carried out when the vehicle is at the ride height.

14. Lower the vehicle onto the calibration supports.



Go to section 2 for details of the correct calibration supports for this kit.

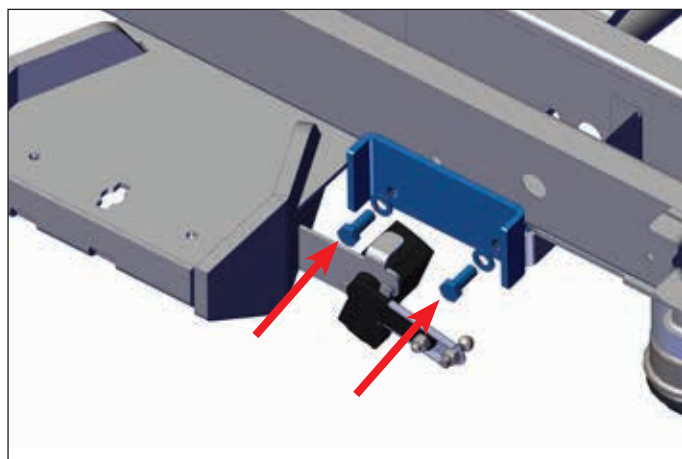


15. Fit the mounting plate to the right mounting strip.

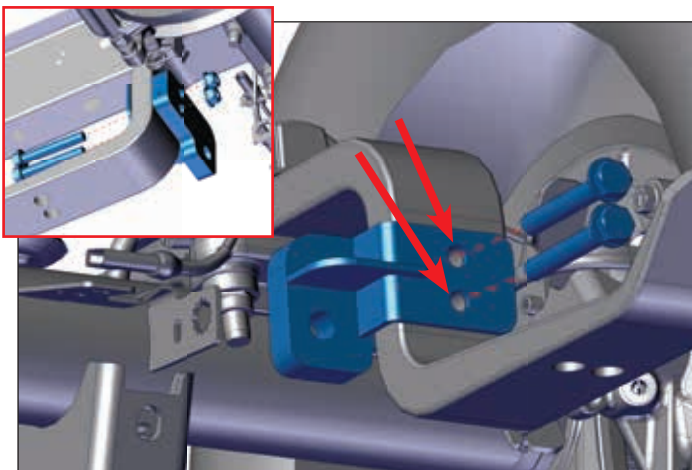
2 x bolt	M8 x 25
4 x washer	M8
2 x lock nut	M8



20 Nm



16. Fit the panhard rod ball-joint bracket to the right main spring.
17. The bolts must be fitted from the rear.

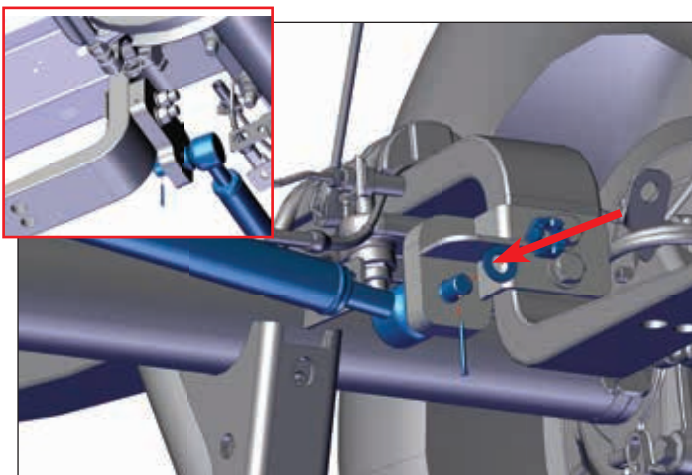


2 x flange bolt	M12 x 80 x 1.5
2 x flange nut	M12 x 1.5



110 Nm

18. Screw the panhard rod onto the ball joint. Apply grease to the thread.
**** Do not tighten the nut yet.**
19. Fit the panhard rod ball-joint to the panhard rod bracket.



1 x castellated nut	M14 x 1.5
1 x washer	M14
1 x split pin	M14



75-85 Nm

Keep on tightening until the split pin fits.

20. Fit the panhard rod to the panhard rod bracket.
**** Do not tighten the bolts yet.**

1 x bolt**	M16 x 90
2 x washer	M16
1 x lock nut	M16

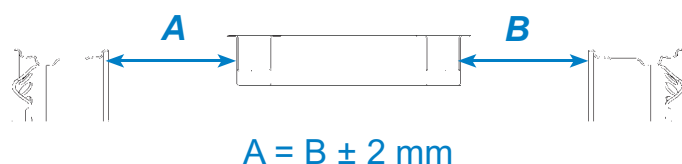


200 Nm



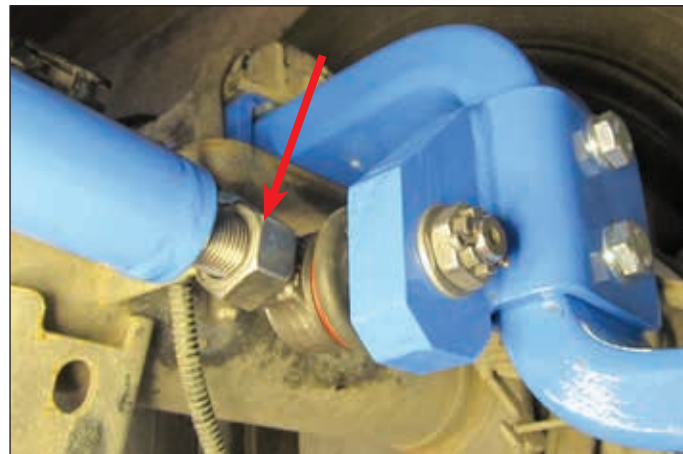
21. Secure the bolts from section 3.2, steps 2 and 5.
22. Secure the bolts from section 3.3, step 6.

23. Measure the distance (**A**) between the chassis and rim edge on the left-hand side.
24. Measure the distance (**B**) between the chassis and rim edge on the right-hand side.
25. If there is a difference greater than 2 mm between the left and right measurements, remove the panhard rod bolt.
26. Turn the panhard rod:
Anti-clockwise: when **A > B**
Clockwise: when **A < B**
27. Fit the bolt.
If the difference is > 2 mm, adjust!
If the difference is < 2 mm, continue!




When making adjustments: 1 turn is equivalent to 1.5 mm of movement.

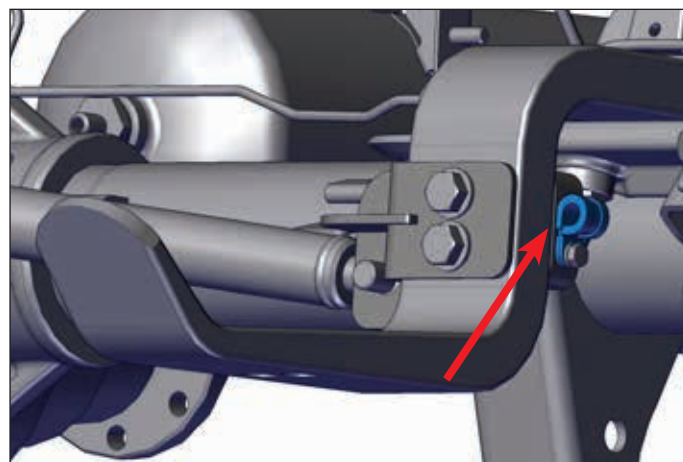
28. Ensure the ball joint is straight relative to the bracket when you tighten the lock nut.
29. Tighten the lock nut.



Nut supplied	
	65 Nm

30. Fit the brake line to the panhard rod ball-joint bracket using a pipe clamp.

1 x pipe clamp	Ø12
1 x bolt	M6 x 12
1 x washer	M6
	8 Nm



3.4 BRAKE LINE BRACKET

1. Remove the bolt from the original brake line bracket.



- Fit the adapter plate for the brake line bracket.

1 x countersunk Allen screw	M8 x 25
------------------------------------	----------------



8 Nm



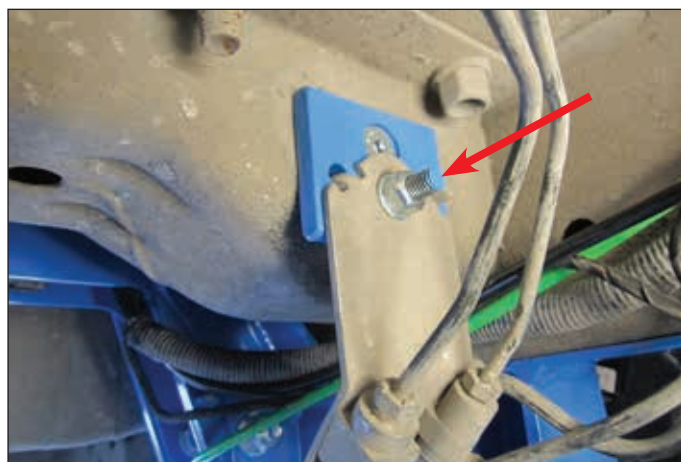
- Fit the original brake line bracket to the adapter plate.

1 x lock nut	M8
---------------------	-----------

1 x washer	M8
-------------------	-----------



14 Nm

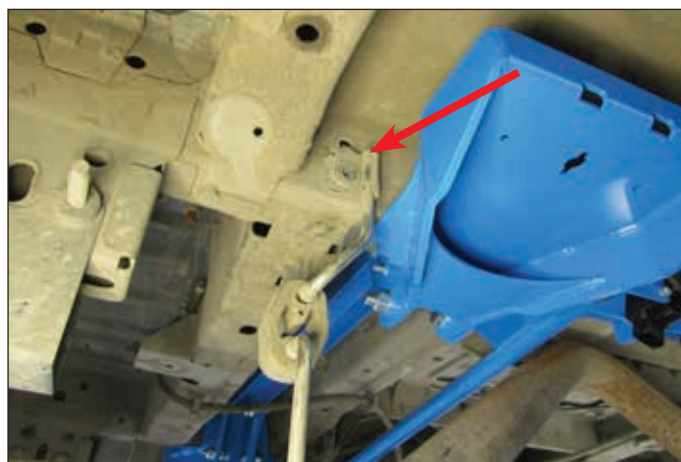


- Slide the black spiral hose over the brake line as shown.



3.5 EXHAUST MOUNTING

- Remove the bolt from the exhaust bracket.

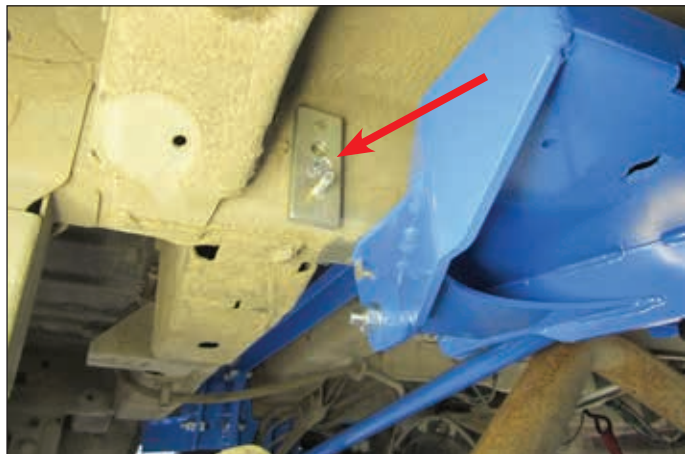


2. Fit the adapter plate to the chassis.

1 x countersunk Allen screw M8 x 25



8 Nm



3. Fit the original exhaust bracket to the adapter plate.

1 x lock nut M8

1 x washer M8

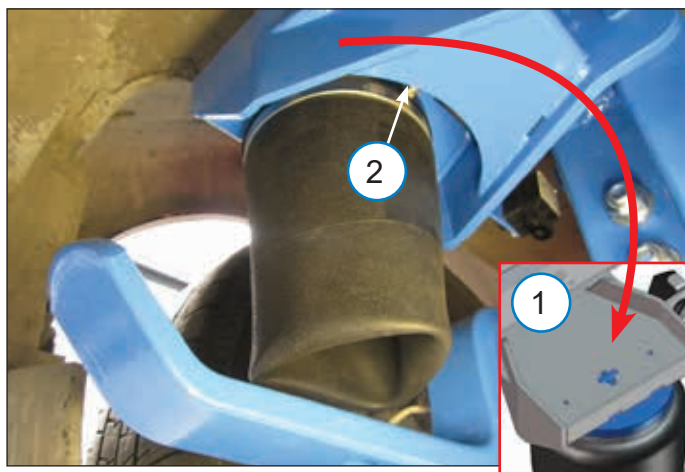


14 Nm



3.6 AIR SPRING

1. Fit the air springs to the lower spring plates with the quick fastener.
2. The air coupling must face towards the inside of the vehicle.



3. Fit the air spring to the main spring.

**** Do not tighten the nuts yet.**

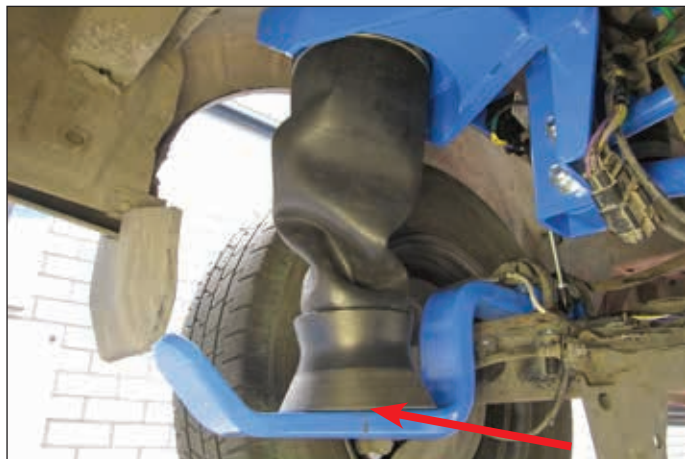


Only tighten the bolts when the air springs are pressurised. This ensures that the air springs are not twisted.

2 x Allen screw Tuflok M10 x 50

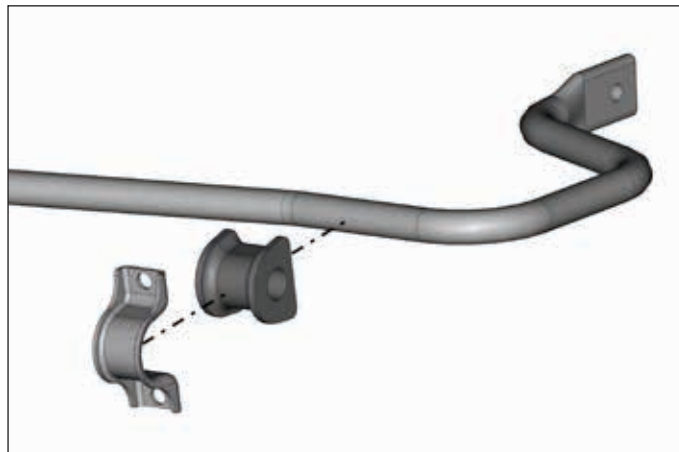


20 Nm



3.7 SHOCKABSORBER

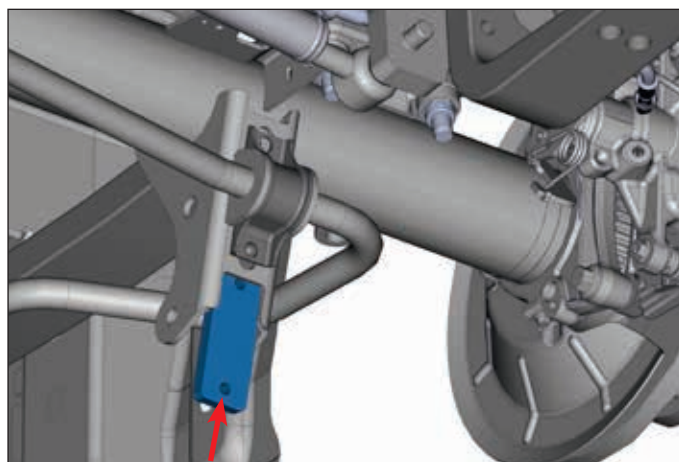
1. Fit the stabiliser arm rubbers with the brackets to the stabiliser arm.
Smear the rubbers with grease before fitting.



2. Fit the stabiliser arm to the rear axle using the mounting plate.

4 x flange bolt	M10 x 30
	40 Nm

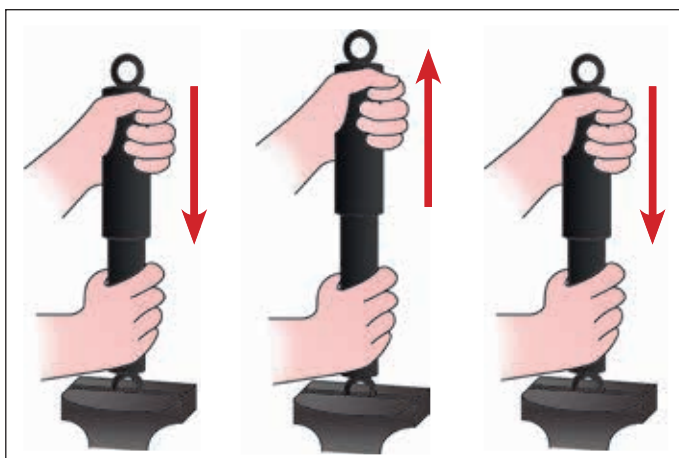
3. Shock absorbers must be vented before they are fitted.
4. Clamp the shock absorbers vertically in a bench vice.






The wide end of the shock absorber is viewed as the top.

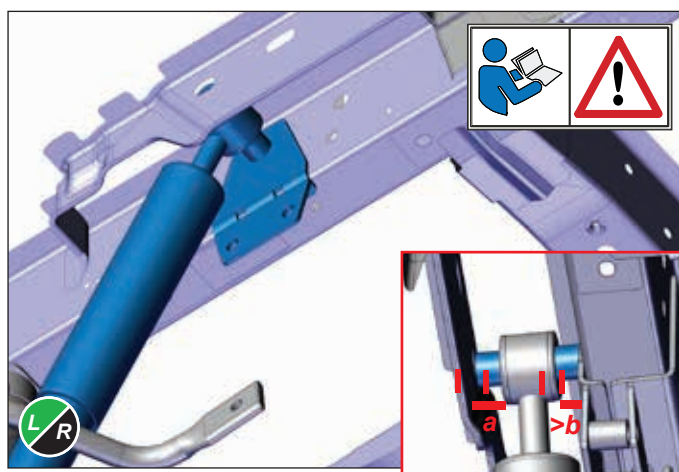
5. Gently push the top down and then slowly pull it up again.
6. A slurping noise can be heard at the end of the turn; this indicates the presence of air.
7. Continue this pumping action until the slurping noise is no longer heard.
8. Keep the shock absorbers vertical.





Always hold the shock absorber with the top pointing up. If you don't do this, air will enter the shock absorber again.

9. Fit the top end of the shock absorbers.
Apply some lubricant to the bolt shank, **NOT the threads!** The bolt must be fitted from the outside to the inside.
10. Fit the outer stabiliser brackets to the chassis.
Do not fit the nuts yet!





The wide end of the shock absorber bush must be secured on the outside.

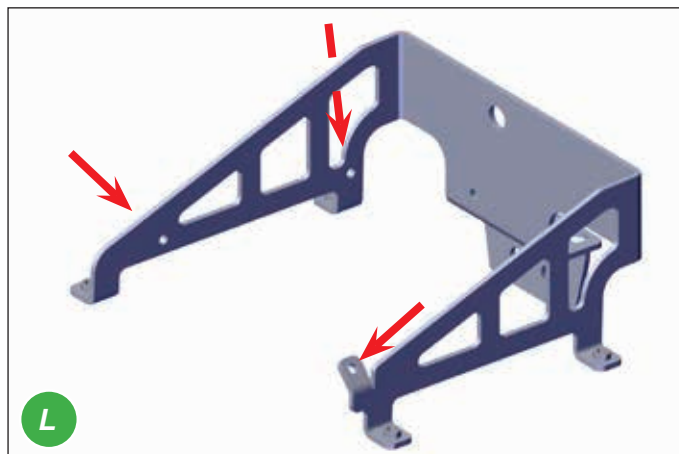
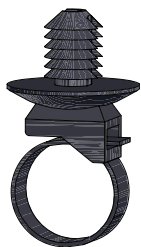
Original fasteners



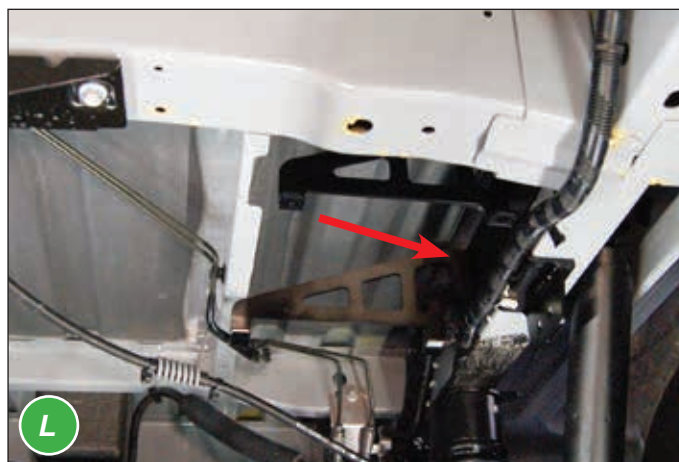



¹ guidelines of the (vehicle) manufacturer.

11. Fit the umbrella-type tie-wraps.



12. Fit the combined inner stabiliser bracket/compressor box bracket to the chassis.

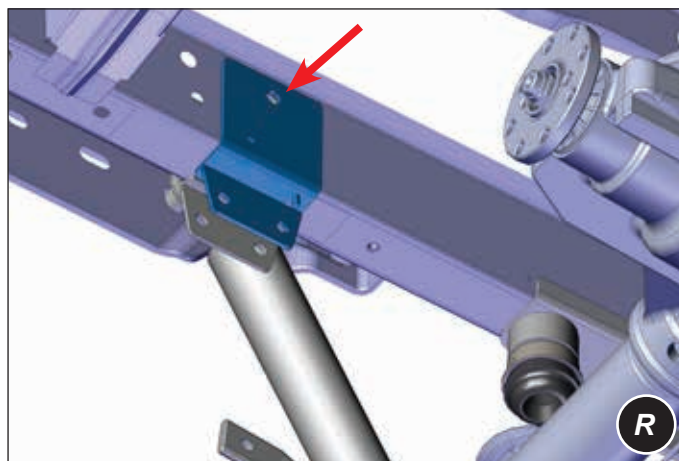


Original fasteners



175 Nm

13. Fit the right inner stabiliser brackets to the chassis.



Original fasteners



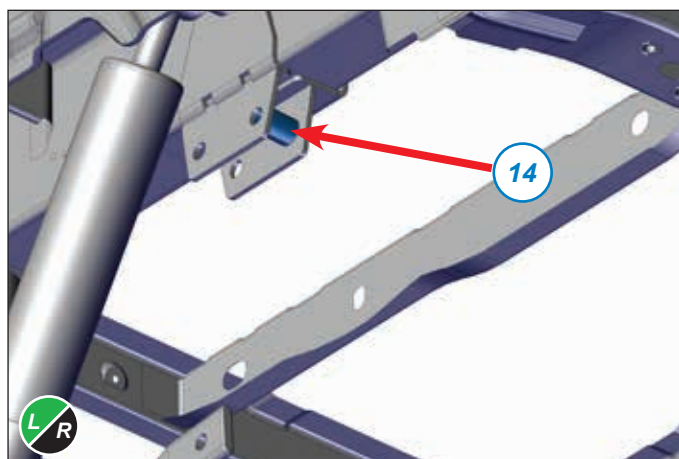
175 Nm

14. Fit the distance bush in the front hole.
**** Do not tighten the nuts yet.**

2 x bolt**	M12 x 55
4 x washer	M12
2 x lock nut	M12



100 Nm



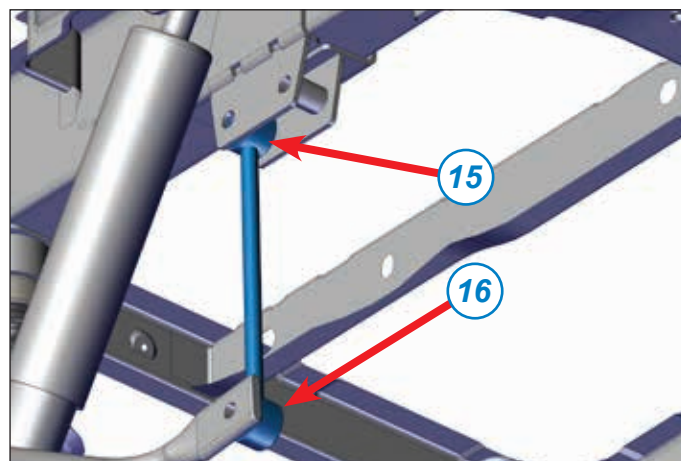
15. Fit the torque arms to the stabiliser bracket. The bolts must be fitted from the outside to the inside.

**** Do not tighten the nuts yet.**

2 x bolt**	M12 x 55
4 x washer	M12
2 x lock nut	M12



100 Nm



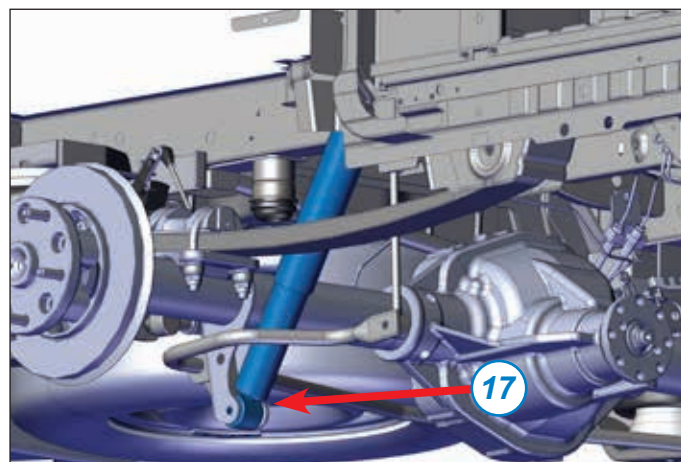
16. Fit the stabiliser arm to the torque arms. Use the large washer on the outside of the vehicle.

**** Do not tighten the nuts yet.**

2 x bolt	M12 x 60
2 x washer	M12
2 x large washer	M12
2 x lock nut	M12



100 Nm



17. Fit the bottom end of the shock absorbers.

Original fasteners



110 Nm

18. Secure the bolts from section 3.7, step 9.
19. Secure the bolts from section 3.7, step 13.
20. Secure the bolts from section 3.7, step 14.



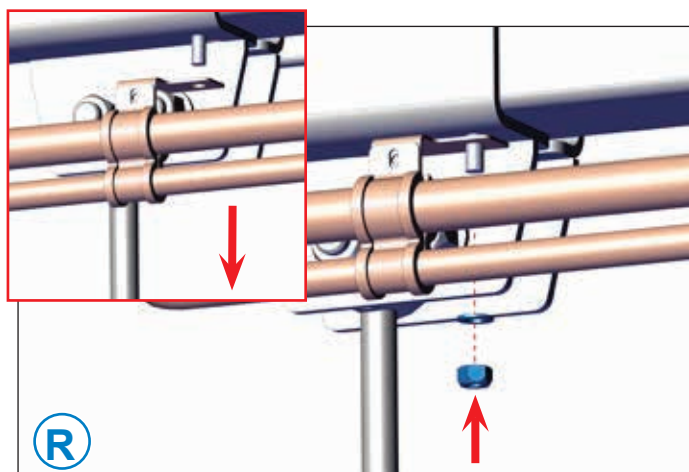
Only carry out step 21 if the vehicle is fitted with air conditioning.

21. Fit the original airconditioning pipe clamp to the stabiliser bracket.

1 x flange lock nut	M6
---------------------	----

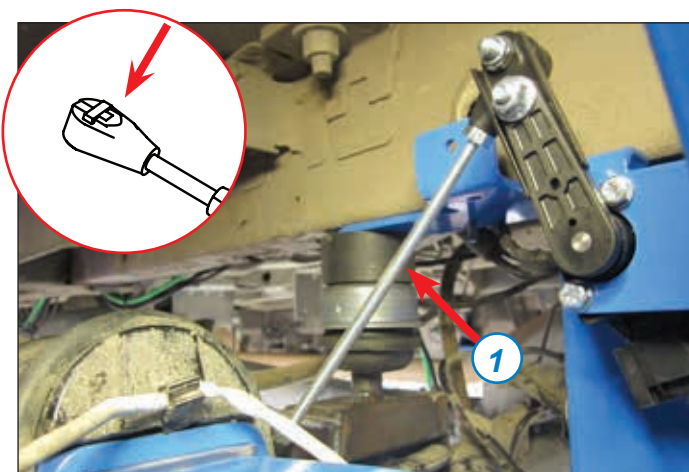


8 Nm



3.8 HEIGHT SENSORS


1. Check the length of the height sensor rods - **200 mm** - measured centre to centre.
2. Fit the height sensor rods to the height sensors.
3. Fit the height sensor rods to the ball-joint brackets.
4. Secure the height sensor rods by pushing in the clips.



4. COMPRESSOR BOX AND WIRING HARNESS

4.1 COMPRESSOR BOX



1. Fit the compressor box to the bracket.
2. Tighten the bolts.

4 x flange lock nut	M6
	8 Nm



3. Attach the VB wiring harness with all connectors to the compressor support as indicated by the blue line.





	The wiring harness must be away from the handbrake cable!
	Use sufficient tie-wraps to secure the air tubes and wires!

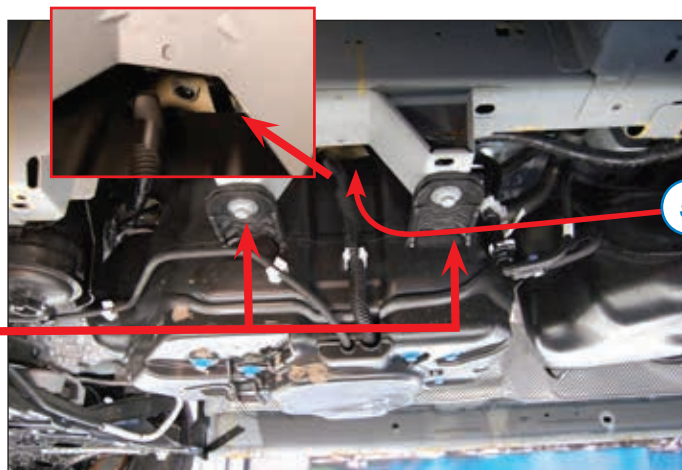
4. Route the wiring harness to the front of the vehicle.



	Use sufficient tie-wraps to secure the air tubes and wires!
---	--

5. Route the wiring harness and the loose yellow wires to the cable grommet.

	If a block heater or AdBlue tank is fitted, it is recommended that this is removed before fitting the wiring harness. Use vehicle workshop manuals where necessary.
	Use sufficient tie-wraps to secure the air tubes and wires!



4.2 WIRING HARNESS

1. Remove the driver's seat.



Consult the guidelines of the (vehicle) manufacturer.
The belt must not be removed.



Mark the seat with tape with the last 4 digits of the VIN number and place the seat next to the vehicle.

2. Remove the battery(ies)
3. Remove the battery housing.
4. Lift up the trim.



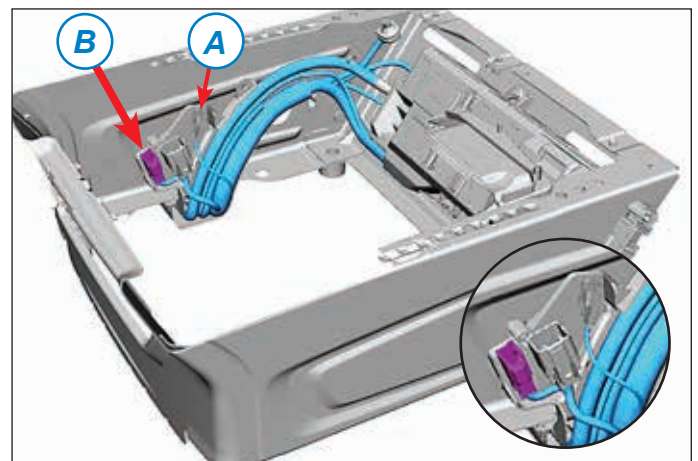
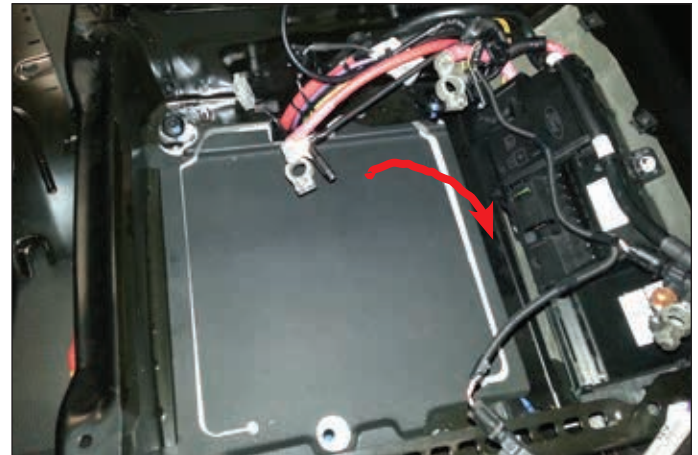
Ensure that tubes or wires cannot be placed under tension or become damaged.

5. Carefully pull the wire into the battery housing.

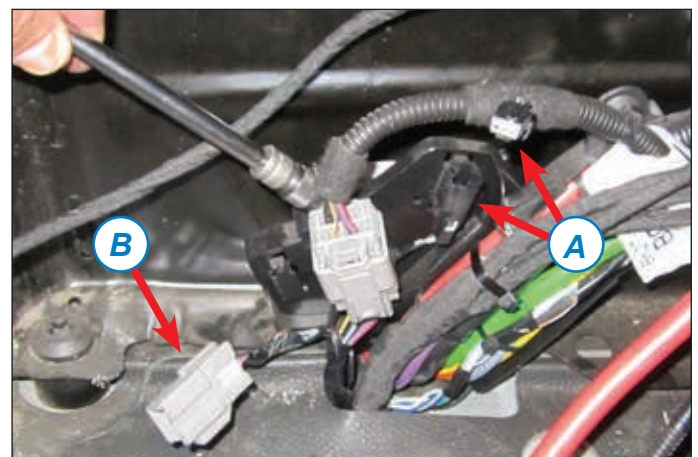
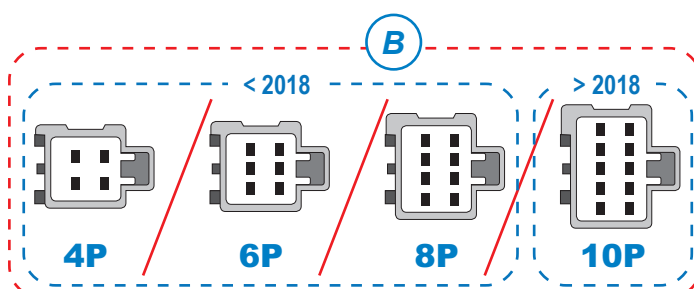


You may need to use a cable puller to feed the wiring harness through.

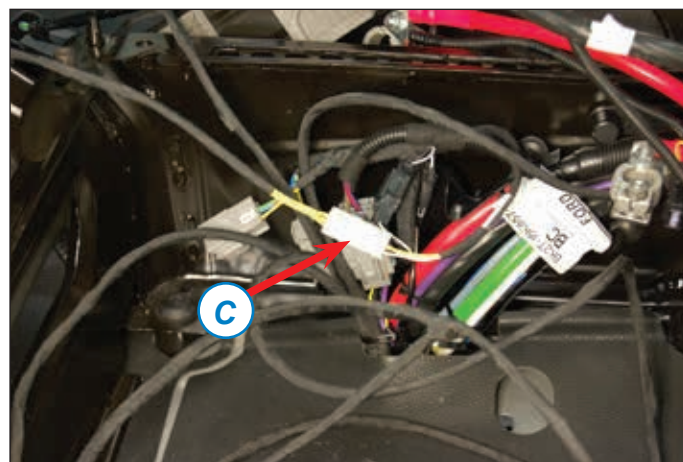
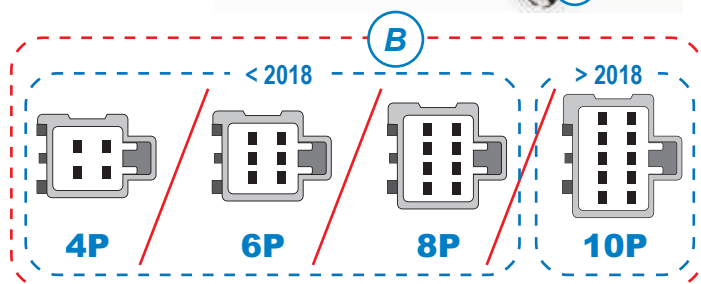
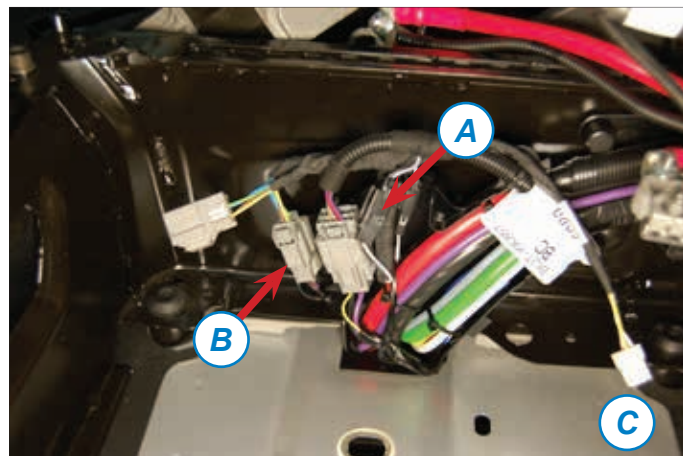
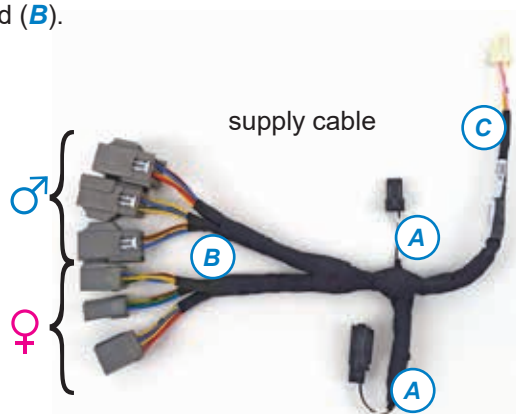
6. A black and grey connector can be found in the seat base.



7. Release the black connector (A) (<01-10-2020: 3P, >01-10-2020: 5P) from the mounting.
8. Release the grey "Vehicle Interface Connector" (VIC) (B) from the mounting (4P, 6P, 8P or 10P).

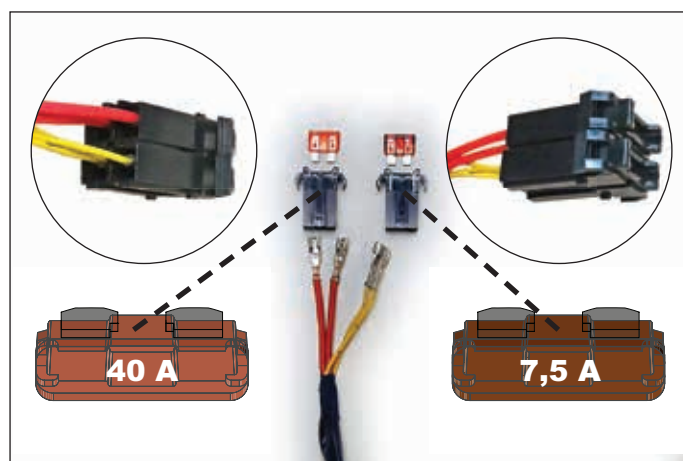


9. Connect the supply cable to these two connectors (A) and (B).



10. Connect the supply cable (C) to the white connector of the VB cable harness.

11. Connect the two red wires to the fuse block to which the **F1 40A** fuse will later be connected.
 12. Connect the two yellow wires to the fuse block to which the **F2 7.5A** fuse will later be connected.
 13. Do not fit the fuses yet.

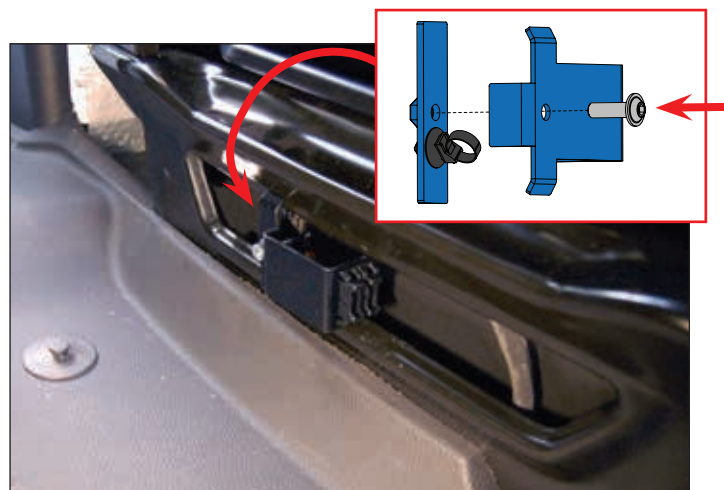


14. Fit the fuse blocks to the fuse block support as shown in the photograph.



Use sufficient tie-wraps to secure the air tubes and wires!

15. Fit the fuse block to an accessible place on the seat frame.



1 x round head screw **M6 x 30**



8 Nm

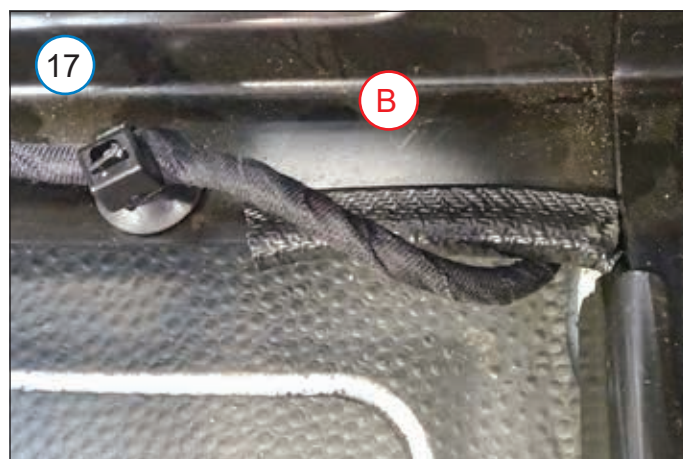
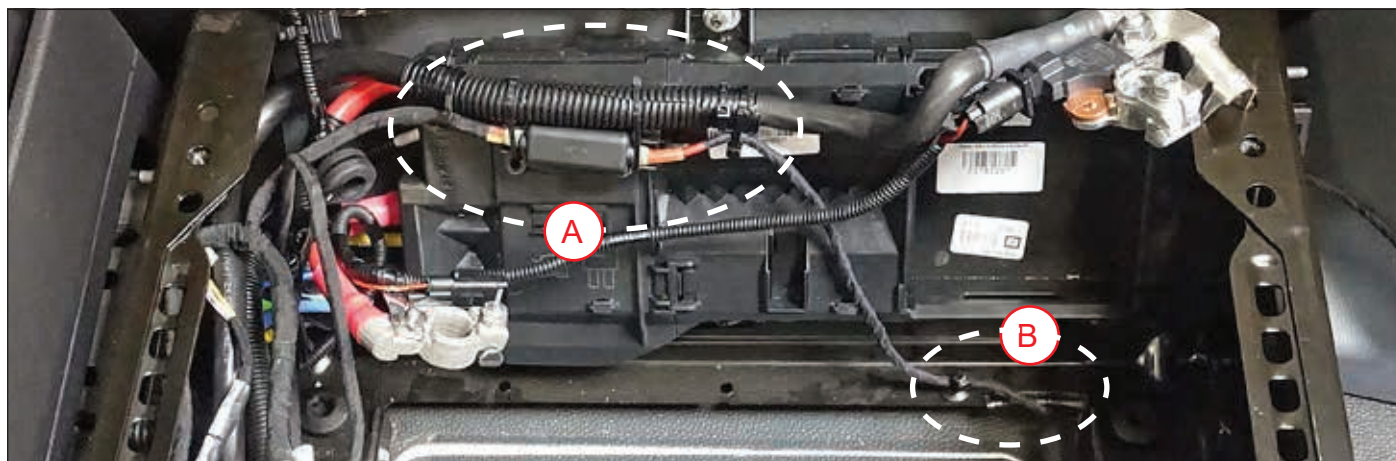
16. Connect the red & yellow cable to the 50A fuse.



Use sufficient tie-wraps to secure the air tubes and wires!



17. Route the wire under the seat console.



18. Install the battery(ies)
19. Connect the yellow and brown wire to the negative battery terminal of the rear battery. (-).

Original fasteners	
	¹ guidelines of the (vehicle) manufacturer.
	If there are 2 batteries, always use the accessories battery and not the original starter battery.




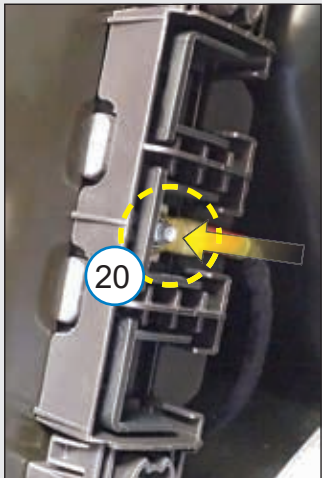
20. Connect the red wire of the 50A fuse to the marked connection (+).

Original fasteners	
	¹ guidelines of the (vehicle) manufacturer.




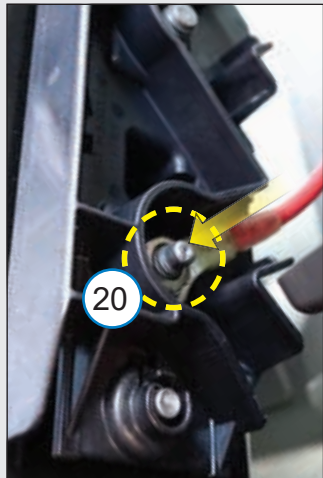
< June 2019

↓

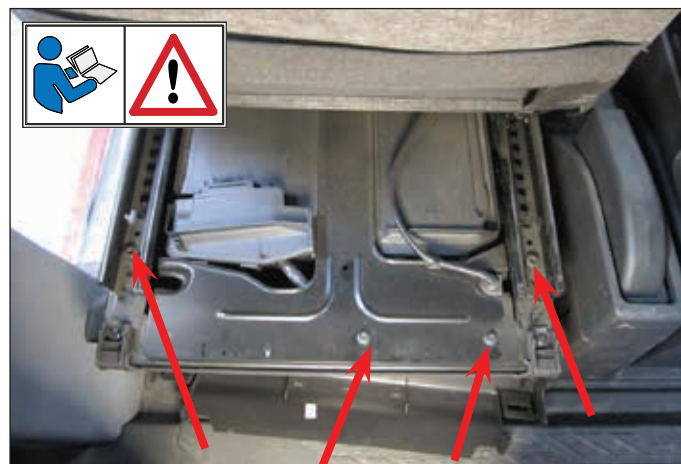
> June 2019

↓

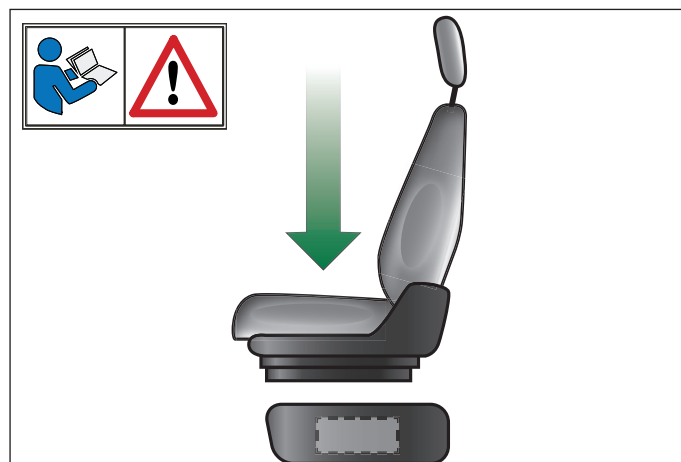
4.3 DRIVER'S SEAT

1. Refit the interior components removed earlier.



Original fasteners		
¹ guidelines of the (vehicle) manufacturer.		

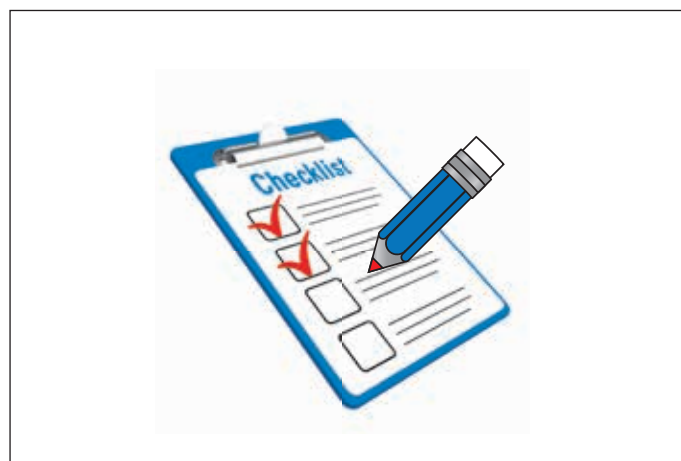
2. Refit the driver's seat ¹.



	Check the marking (adhesive tape with the last 4 digits of the VIN) to make sure that the correct seat is mounted in the correct vehicle.
--	--

Original fasteners		
¹ guidelines of the (vehicle) manufacturer.		

3. Check for correct operation:
 - seat adjustments
 - seat belt
 - seat belt warning light



		All removed parts that are remounted must be checked for correct operation.
--	--	--

		Consult the guidelines of the (vehicle) manufacturer.
--	--	--

4.4 REMOTE CONTROL

1. Connect the remote control wire to the VB wiring harness that has already been installed under the seat.
2. Identify a suitable location to install the remote control. VB-Airsuspension recommends the position shown in the photograph.
3. Place the remote control in the holder.
4. Ensure the connector is not under tension. Secure the end of the wire with a tie-wrap, as shown in the example.



	Ensure that the remote control is never in the way of the airbags.
--	---

5. AIR TUBES AND AIR TANK

5.1 AIR TUBES

1. Connect the **black** air tube to the right air spring.
2. Push 20 cm of black corrugated pipe over the **black** air tube as far as the air coupling.
3. Route the air tube along the **black** line to the compressor box.
4. Connect the **green** air tube to the left air spring.
5. Push 20 cm of black corrugated pipe over the **green** air tube as far as the air coupling.
6. Route the air tube along the **green** line towards the compressor box.

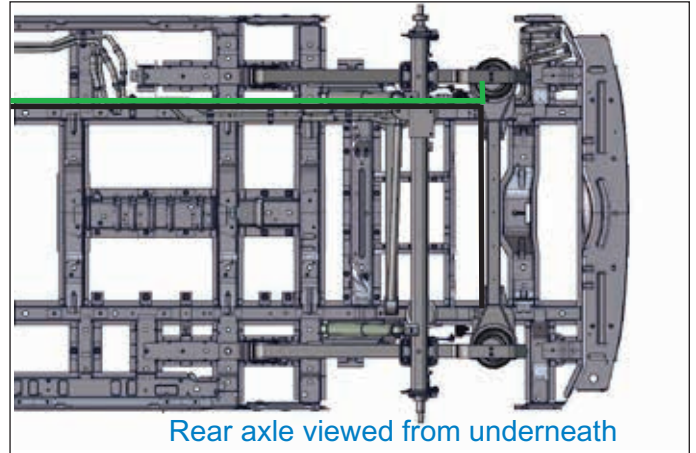


Use sufficient tie-wraps to secure the air tubes and wires!

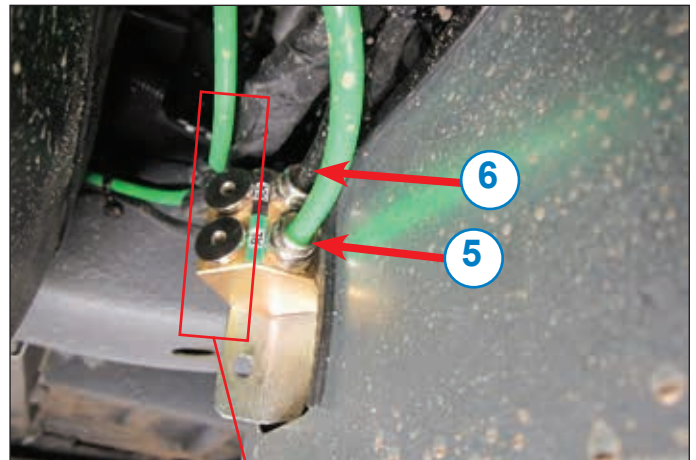


Never attach tubes, wires or other parts to the vehicle's brake lines.

7. Fit the **green** air tube to the air coupling on the junction block on the outside of the compressor box.
8. Fit the **black** air tube to the junction block air coupling on the outside of the compressor box.
9. Ensure that the colour markings match.
10. Seal the unused air couplings with the supplied end plugs.



Rear axle viewed from underneath



Air couplings for emergency valve kit (optional)

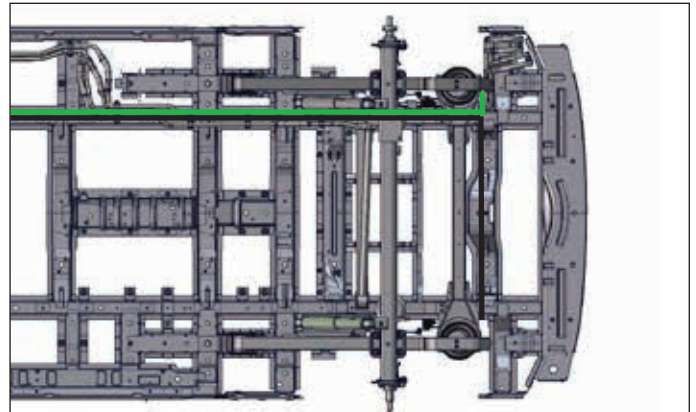
5.2 HEIGHT SENSORS WIRING HARNESS

1. Connect the height sensor cables on the rear axle to the connector with the white colour code.
2. Route the right height sensor cable along the **black** air tube to the rear right height sensor.
3. Route the left height sensor cable along the **green** air tube to the rear left height sensor.



Use sufficient tie-wraps to secure the wires.

4. Push 30 cm of black corrugated pipe at the height sensor end over the right height sensor cable.
5. Connect the cables to the height sensors.
6. Route the right height sensor cable along the top of the upper spring plate. See the red line.



7. Fit the left brake line using the flexible tie-wrap.

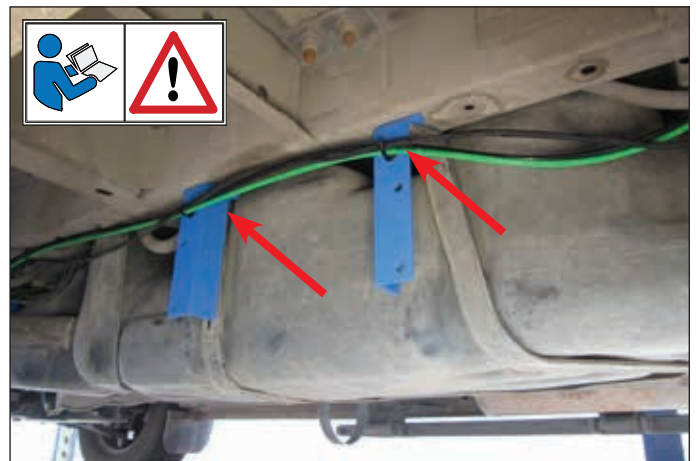


5.3 AIR TANK

1. Loosen the two rear left bolts of the fuel tank. Do not remove them.



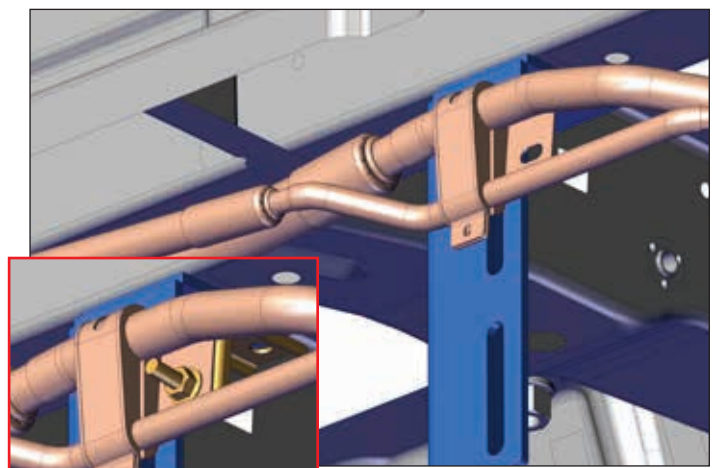
2. Slide the air tank mounting bracket under the bolts loosened in point 1 - the bracket must be pushed under the bolts from the front.
3. Fit the bolts of the fuel tank.



Original fasteners		
		¹ guidelines of the (vehicle) manufacturer.

	Only carry out steps 4 and 5 if the vehicle is fitted with air conditioning.
--	---

4. Remove the original clamp from the A/C pipe.
5. Secure the A/C pipe to the front air tank bracket using tie-wraps.



6. Fit the air tank to the air tank bracket.

4 x lock nut	M8
4 x washer	M8



20 Nm

7. Make sure the sealing plug is positioned on the underside.
8. Fit the yellow air tube to the air tank.
9. Route the yellow air tube to the compressor box.
10. Fit the yellow air tube to the valve block.
11. Ensure that the colour markings match.



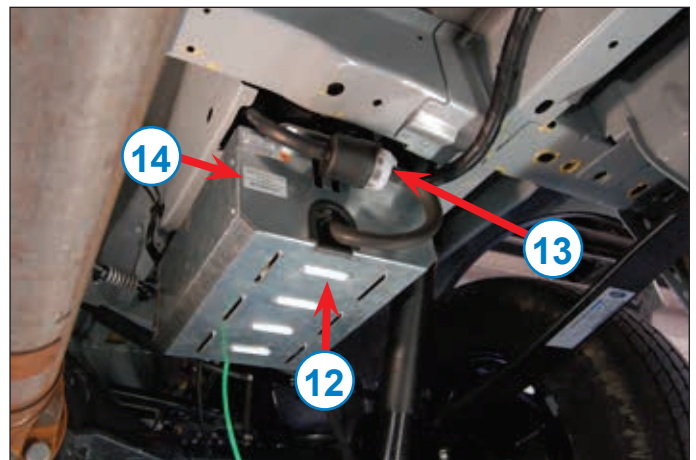
12. Fit the cover to the compressor box.

3 x flange lock nut	M6
----------------------------	-----------



8 Nm

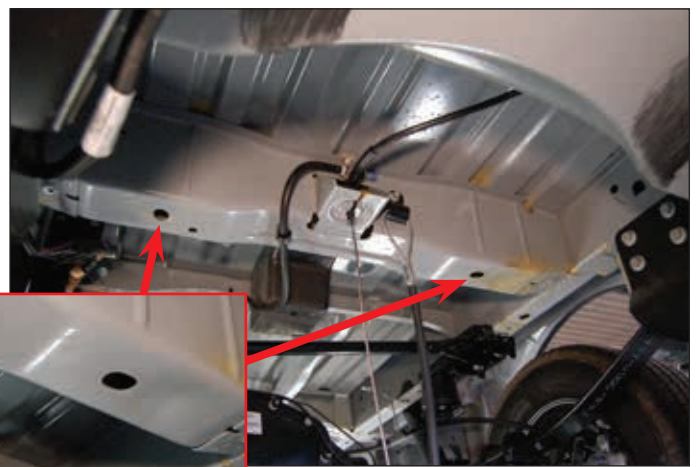
13. Route the inlet line into the chassis.
14. Affix sticker **A** on the compressor box.



A



15. Affix protective film over the sticker.



5.4 SPARE WHEEL

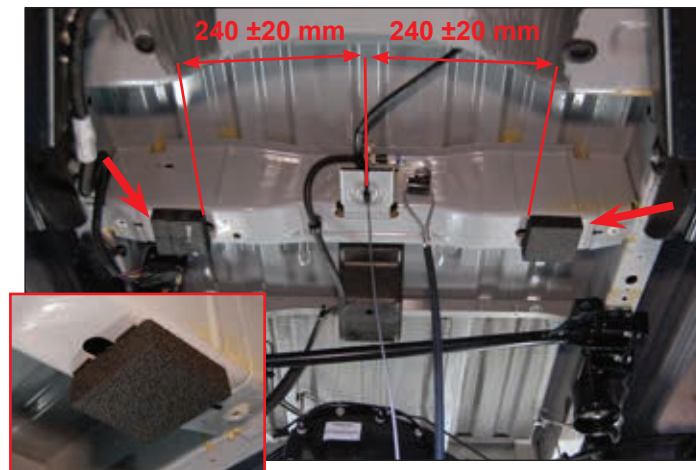
1. Thoroughly clean and degrease the surface before applying adhesive!



2. Apply the adhesive.



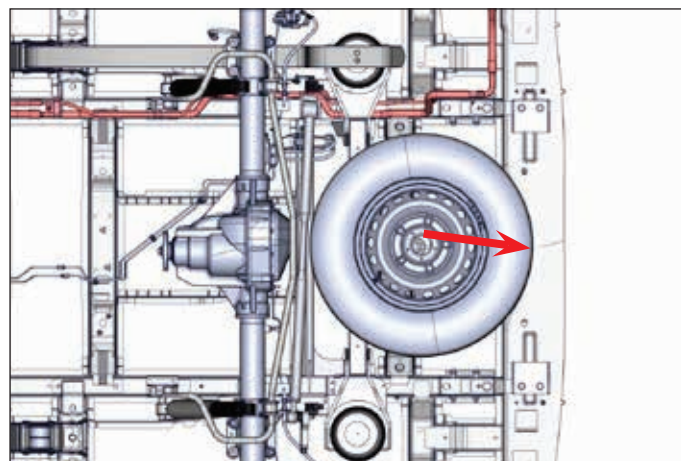
- Fit the spacer blocks.



- Fit the spare wheel.



- Fit the spare wheel as far back as possible to ensure space between the spare wheel and the panhard rod.



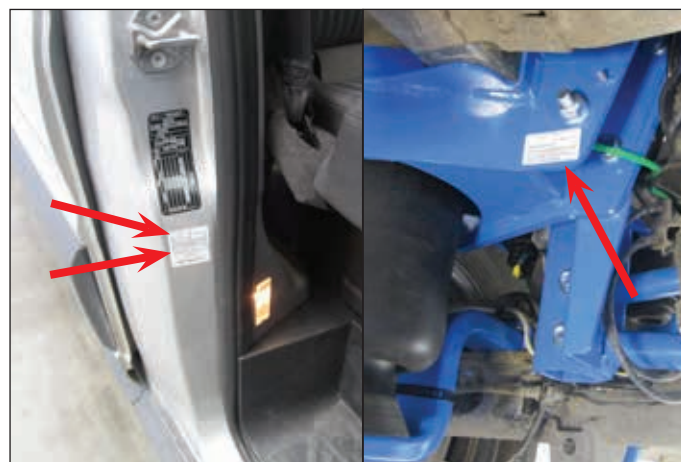
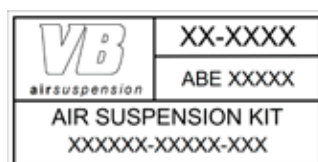
5.5 WARRANTY STICKERS

- Affix the supplied warranty stickers **A + B** to the B-pillar on the passenger's side.
- Affix protective film over the stickers.
- Affix sticker **B** to the left upper spring plate.
- Affix protective film over the sticker.

A




B




6. CALIBRATION

- Place the fuses in the fuse blocks.
(F1 = 40 A + F2 = 7.5A).
- Program the VB-ASCU via the SMT according to manual 733105000001 in the SMT.
- Calibrate the vehicle via the SMT, or via the steps below:

- Turn the ignition on.
- Pull the handbrake slightly.
- Ensure that the vehicle is resting on the wheels on a flat surface.
- Briefly press the -button once (LED lights up). Enter the following code within 10 seconds:






1 – **3** – **4** – **2**

The LEDs on the remote control will go out.

- Press the -button within 3 seconds and hold down the button until a long tone is heard.
- Enter the following code within 20 seconds:






2 – **4** – **3** – **1**

Calibration mode has been activated.

- The -LED and the -LED will start to flash.
- Press button **2** or  to raise the vehicle.
- Place the calibration supports under the vehicle.
- Hold down button **1** or  to allow all the air to vent from the air-springs.
The air-springs are empty once the hissing sound can no longer be heard.
The calibration height has been reached.
- Hold down the -button until the long tone is heard.
The ride height has been stored.



2C calibration: Continue at step 14.
4C calibration: Continue at step 12.

- Briefly press the -button once (LED lights up).
The system restarts.
- Repeat steps 8 through 11
- Briefly press the -button once.
calibration mode is closed.
The system restarts.
- Briefly press the -button once.
-mode is closed.
- Press button **2** or  to raise the vehicle.
- Remove the calibration supports from under the vehicle.
- Set the vehicle to the ride-height.
- Turn the ignition off.
- Tighten all nuts and bolts indicated in the manual with ******.



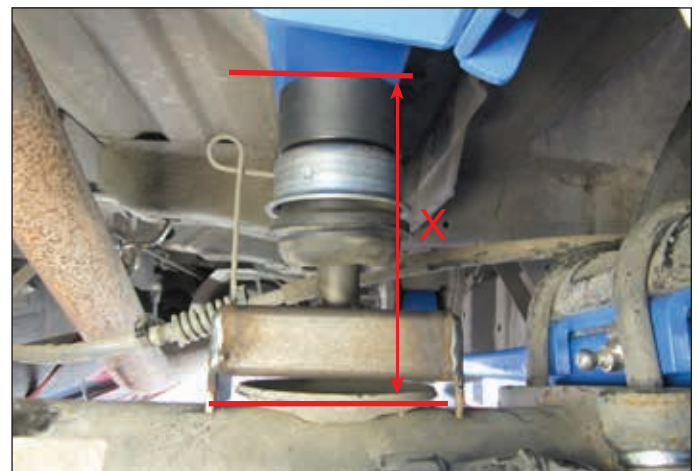
LCV
2C / 4C



Camper
2C



Camper
3C / 4C



For an overview of the correct calibration supports for the kit, see the manual.

- Have the headlamp adjustment checked by a dealer.
- Check the vehicle using the checklist in the manual.

7. CHECKLIST

Final checks

- 1.1 ☐ Safety rules and fitting instructions read and followed.
- 1.2 ☐ Ride height correctly calibrated.
- 1.3 ☐ Front axle/rear axle aligned.
- 1.4 ☐ Height sensors correctly fitted.
- 1.5 ☐ Shock absorbers vented.
- 1.6 ☐ Bolted joints tightened to the correct torque and marked with security check paint marker.
- 1.7 ☐ Air tubes, wires and connectors properly secured.
- 1.8 ☐ All parts that were removed have been refitted and checked to ensure they are working properly.
- 1.9 ☐ System checked for air tightness.
- 1.10 ☐ Clearance around air springs checked.
- 1.11 ☐ Identification stickers, plus protective film, affixed to the vehicle.
- 1.12 ☐ Headlamp adjustment checked.
- 1.13 ☐ If required, have ADAS (Advanced Driver Assistance Systems) recalibrated.
- 1.14 ☐ If required, have the vehicle aligned.
- 1.15 ☐ VB-ID card inside cover of user manual.
- 1.16 Documentation present in vehicle: ☐ - User manual
☐ - TÜV/ABE documentation
☐ - Original vehicle documentation
- 1.17 ☐ Battery voltage (<12.4 volt = charge).
- 1.18 ☐ Tyre pressures correct.

System functions

- 2.1 ☐ * Raise manually.
- 2.2 ☐ * Lower automatically.
- 2.3 ☐ * Lower manually.
- 2.4 ☐ * Raise automatically.
- 2.5 ☐ Test drive carried out.

☐ **SYSTEM OK**

* Not for VB-NivoAir

Completed as a true and accurate record:

Date: - -

VIN:

Dealer: _____ VB-ID-no.: - -

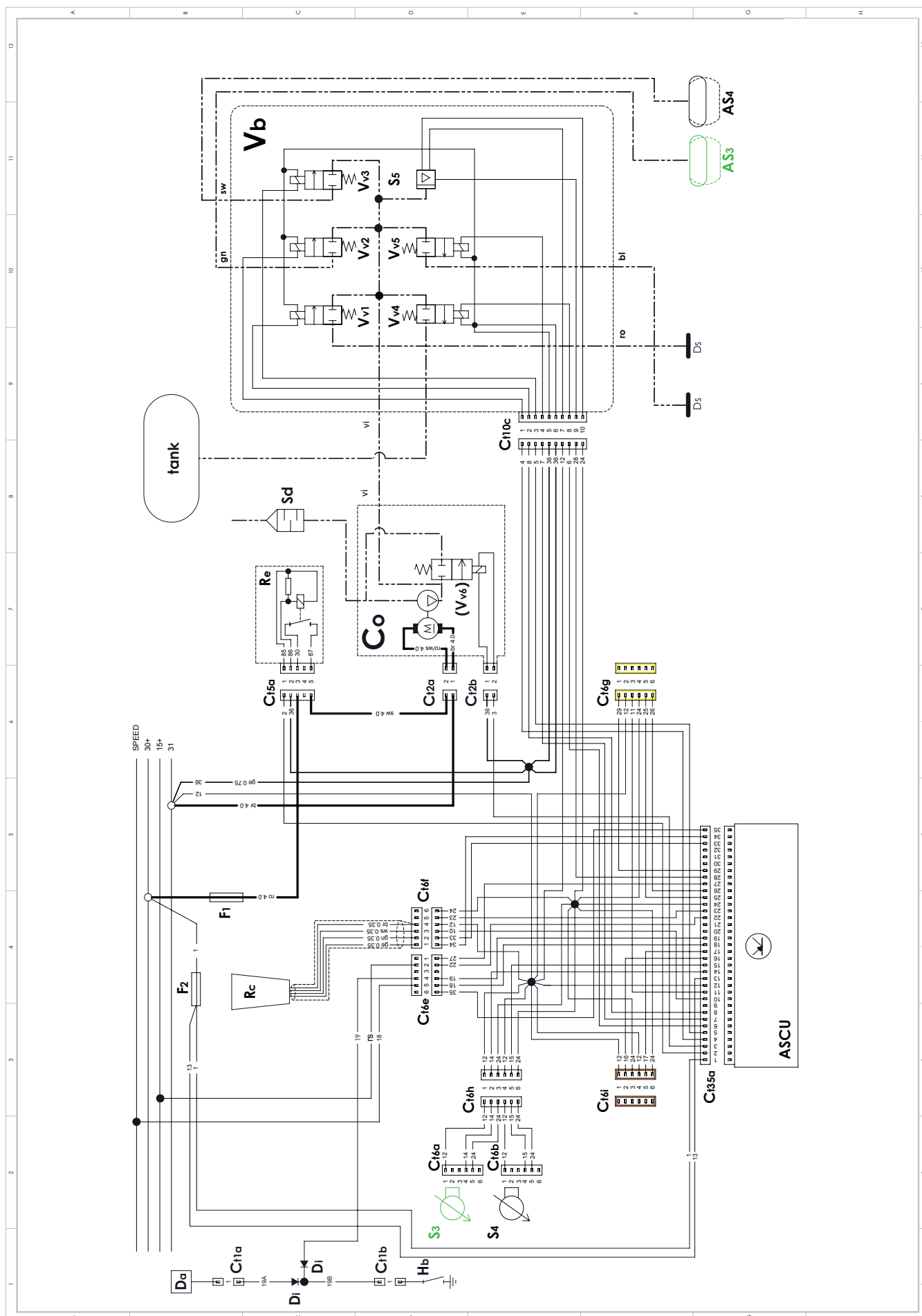
Kit numbers(s):

Fitting instructions no.:

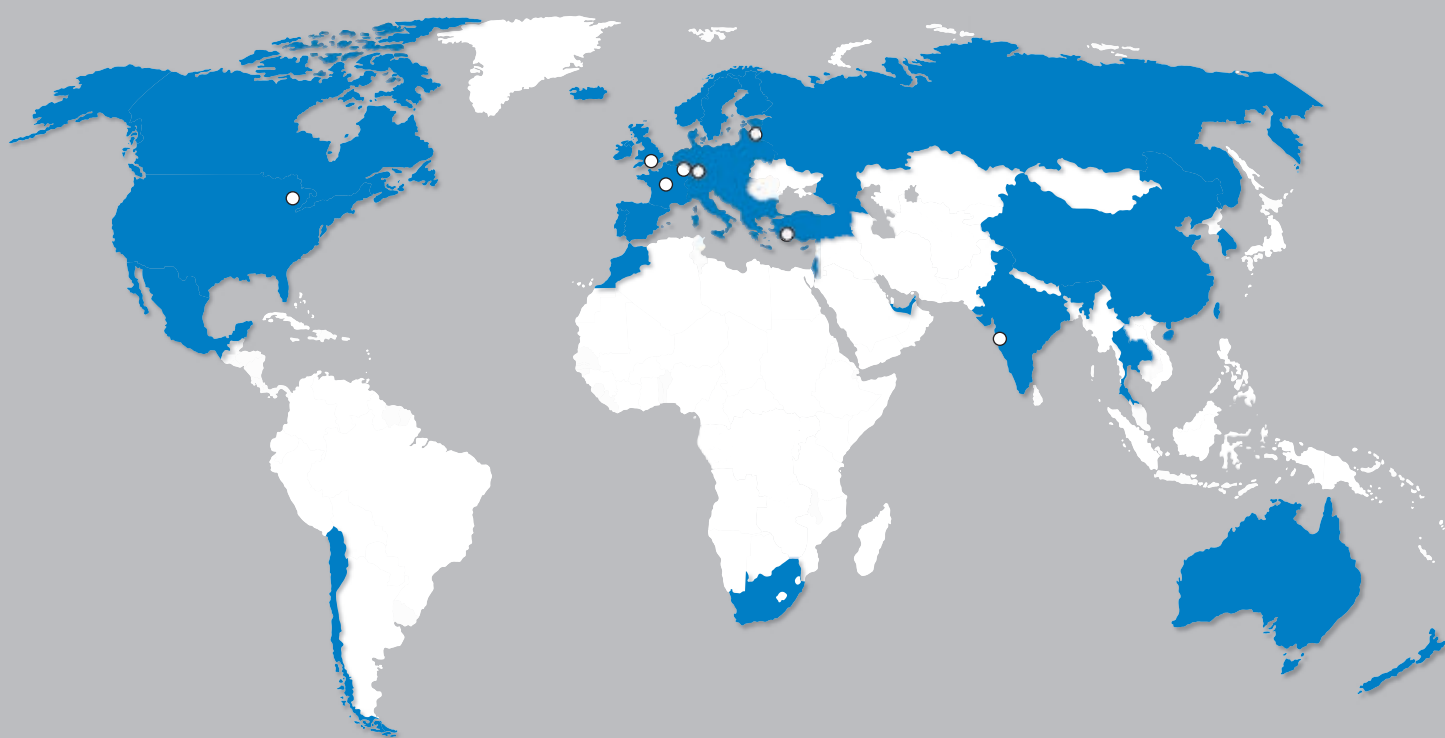
Version:

This checklist should be retained by the dealer and must be available to VB-Airsuspension for inspection on request.

8. ELECTRICAL DIAGRAM



Name	Description
ASCU	VB-ASCU (electronic control unit)
AS3	Air spring, rear left
AS4	Air spring, rear right
Ct2a	Connector, 2-pin, compressor power supply
Ct2b	Connector, 2-pin, dump valve on compressor
Ct5a	Connector, 5-pin, compressor relay
Ct6c	Connector, 6-pin, height sensor left
Ct6d	Connector, 6-pin, height sensor right
Ct6e	Connector, 6-pin, VB supply cable
Ct6f	Connector, 6-pin, remote control
Ct6g	Connector, 6-pin, connector option (yellow)
Ct6h	Connector, 6-pin, rear axle height sensors (white)
Ct6i	Connector, 6-pin, front axle height sensors (brown)
Ct10c	Connector, 10-pin, valve block
Ct35a	Connector, 35-pin, VB-ASCU
Co	Compressor
Ds	End plug
F1	Fuse, compressor, 40 A
F2	Fuse, VB-ASCU, 7.5 A
Re	Compressor relay
Rc	Remote control
S3	Height sensor, rear left
S4	Height sensor, rear right
S5	Pressure sensor on valve block
Sd	Air silencer/filter
Tank	Air tank (option)
Vb	Valve block
Vv1	Valve for front right air spring on valve block
Vv2	Valve for rear left air spring on valve block
Vv3	Valve for rear right air spring on valve block
Vv4	Dump valve to vent air on valve block
Vv5	Valve for front left air spring on valve block
Vv6	Dump valve on compressor
Colour codes (yellow with wire number is not indicated)	
bl	Blue
br	Brown
ge	Yellow
gn	Green
ro	Red
ro/ws	Red/white
rs	Pink
sw	Black
vi	Purple
ws	White
	0.50 mm²
	0.75 mm²
	4.00 mm²
	Air tube



VB-AIRSUSPENSION,

INCREASED COMFORT, BETTER DRIVEABILITY, MORE SAFETY.

