EN

FITTING INSTRUCTIONS

making everyday smoother

airsuspension

LAND ROVER DEFENDER

VB-FullAir 2C/4C
front and / or rear axle

FOR KIT: 1051601XXX

REVISION TABLE

Document number	730105160111			
New revision:	V2.1		Old revision:	V2.0
Release date (yyyy-mm-dd):	2022-04-30			
Page (new):	Changes:			
9	Updated: section 4.2 Step 12 Fitting the fuse holders			
11	Updated: section 4.2.2 Remote			
ALL	Updated: Renumbered all chapters			

TABLE OF CONTENTS

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.

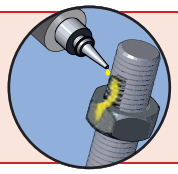
General safety rules

- 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.

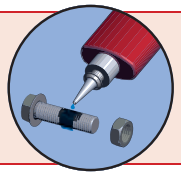
Important: for installation/removal, check the manufacturer's workshop manual. If in doubt, always follow the vehicle manufacturer's instructions.

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.







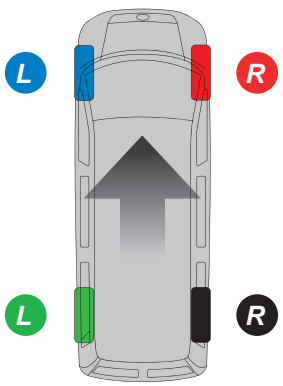

2. FITTING INSTRUCTIONS

- This manual has been put together with great care and contains a description of all the steps required to install the air suspension as stated on the front page. 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. The VB-FullAir-/VB-NivoAir kit may only be fitted by persons who have been authorised by VB-Airsuspension. Staff must be experienced in working on light commercial vehicles, particularly in relation to electrics/electronics, pneumatic technology and general vehicle mechanics.
- Your vehicle may differ from the one shown in the fitting instructions.

VB-Airsuspension is not liable for any damage resulting from not following these fitting instructions.

- Take the vehicle for a test drive before installing the air suspension.
- Check whether the TÜV documentation is valid for the vehicle.
- Ensure the correct calibration supports are available.
- Keep the work site clean and tidy.
- Use vehicle workshop manuals where necessary.
- The air suspension kit is supplied for four corners. If a part is intended for one specific corner, it is identified with a coloured sticker. Fit the air tubes in accordance with the colour code system used by VB-Airsuspension.
- Always follow the vehicle manufacturer's conversion instructions, unless expressly stated otherwise in this manual.
- Mark the removed parts to ensure they are refitted back in the right vehicle.
- All parts that are removed and reinstalled must be checked to ensure they are working properly.
- Always tighten the supplied nuts and bolts to the specified torque, unless expressly stated otherwise in this manual. In this case, follow the vehicle manufacturer's guidelines.
- Mark the bolted joint using security check paint marker.
- If alterations are made to the original anti-corrosion system, this must be rectified immediately. Use spray wax or a protective coating for this purpose.
- Always refit pipes and wires that have been removed in the same way as they were originally fitted.
- Secure pipes and wires with a sufficient number of tie-wraps. Ensure that no tension can be applied to the wires.
- Ensure there are no tight bends in air tubes and they cannot be kinked or chafe against other parts.
- Never attach air tubes, wires or other parts to the vehicle's brake lines.
- The supply cable must be at least 100 mm away from the ABS/ESP block, the sensors and other control equipment.
- Wires must not be routed above or across the battery.
- Do not leave any tools, cleaning cloths or other materials behind after completing work.
- Check the system for air tightness after fitting.
- Check that the air springs always have an all-round clearance of at least 10 mm at maximum pressure.
- After fitting, check the air suspension against the checklist. (This checklist should be retained by the dealer and must be available to VB-Airsuspension for inspection on request.)
- Follow the vehicle manufacturer's instructions, including when parking the vehicle.
- Take the vehicle for a test drive after fitting.

Axle:	Calibration height:	Order number:
Front axle	**X = 150 MM**	009 000 00 75
Rear axle	**X = 325 MM**	009 000 00 76



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

Colour	Description		Colour	Description
Green	Rear left		Blue	Front left
Black	Rear right		Red	Front right

3. EXPLANATORY NOTES TO THIS MANUAL

This manual is intended for the air suspension kit for the:

- Land Rover Defender

This manual describes the steps for fitting the air suspension to the front and/or rear axle. Follow the instructions in the appropriate section for the kit you are installing.

If you have a rear axle air suspension kit with part number 10516012XX, go to sections 4 and 5.

If you have a front axle air suspension kit with part number 10516014XX, go to sections 4, 5 and 6 of this manual to fit the front and rear axle air suspension.

The table below shows which sections you need to read:

Which axle?	Kit number	Section
Rear axle	105 16 01 2XX	4, 5
Front and rear axle	105 16 01 4XX	4, 5, 6

3.1 THE RIGHT AIR SPRING

It is important that the correct air spring is fitted to the correct axle to ensure correct installation of the air suspension kit.
The illustrations show various air springs and pistons for the Land Rover Defender 90, 110 and 130.

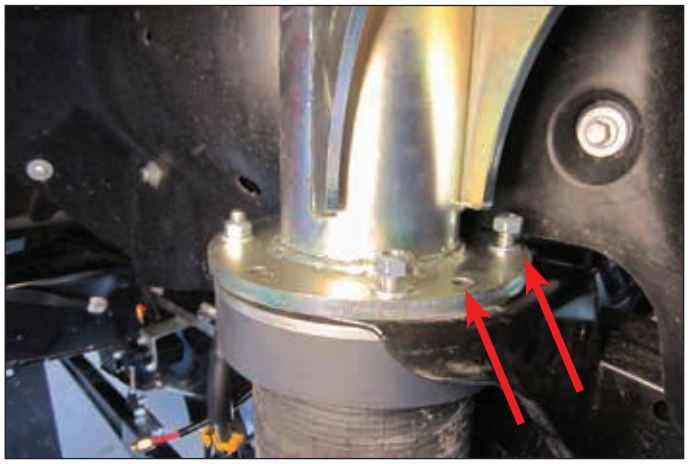
- The air spring shown on the left must be fitted to the front axle.
- The air spring shown on the right must be fitted to the rear axle.

- Differences in the installation steps for the Land Rover Defender 90 and the Land Rover Defender 110/130 are explicitly stated. The top right of the illustration is marked with „90“ or „110/130“, indicating the Land Rover Defender to which the relevant installation step applies.
- If this is not specified, the steps apply to all models.

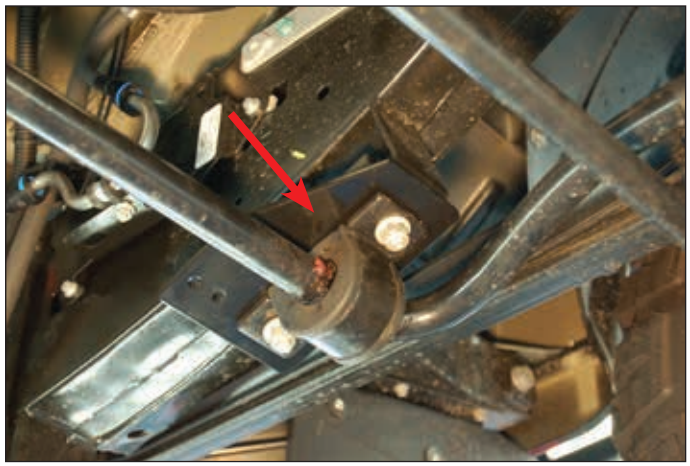
4. COMPRESSOR BOX AND WIRING HARNESS

4.1 COMPRESSOR BOX

1. Remove the marked bolts.
   Do this on both sides.



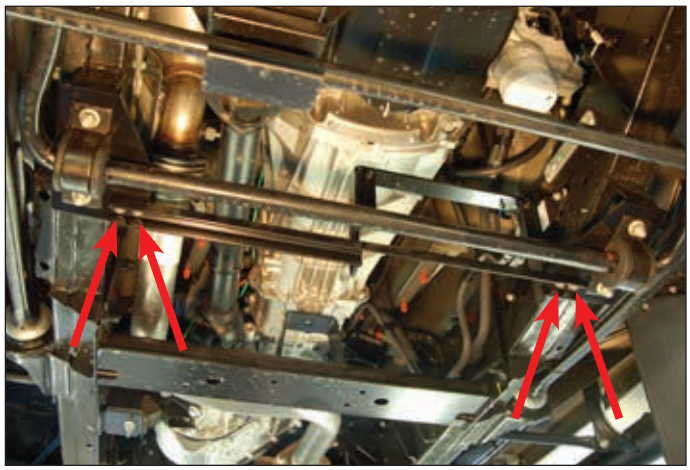
2. Fit the stabiliser arm to the rear axle using the mounting plate.
   **** Do not tighten the bolts yet.***



Original fasteners*	
Nm	***40 Nm***

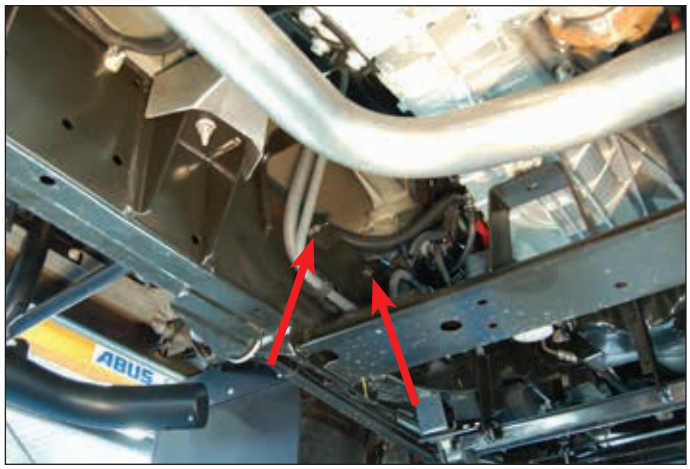
3. Fit the compressor box suspension support to the mounting plates.

4 x bolt	***M6 x 20***
8 x washer	***M6***
4 x lock nut	***M6***
Nm	***8 Nm***



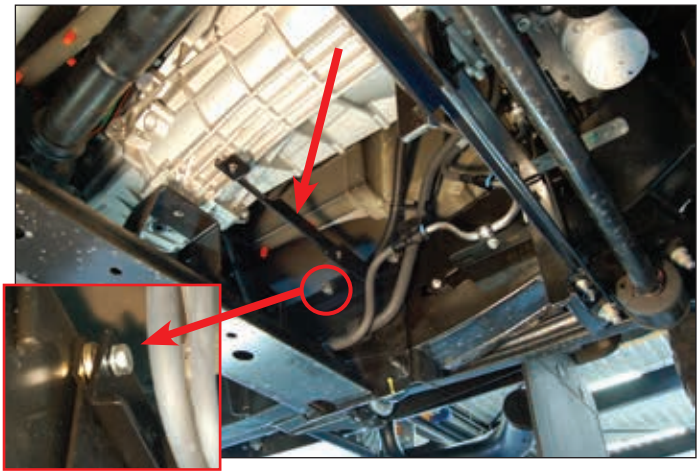
4. Tighten the bolts mentioned in step 2.

5. Remove the marked bolts.

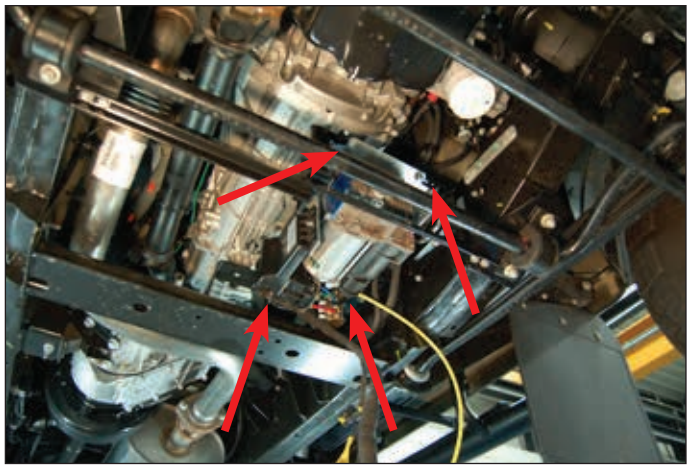


6. Fit the compressor box suspension support to the chassis. * ***Do not tighten the bolts yet.***

Fit 3 sheet-metal rings between the compressor box suspension support and the chassis.	
2 x bolt*	***M10 x 110***
6 x washer Ø 30	***M10***
2 x washer	***M10***
2 x lock nut	***M10***
Nm	***60 Nm***



Replace the two air couplings (Ø 6 mm) on the junction block with the two air couplings (Ø 4 mm) (RL and RR) supplied.	



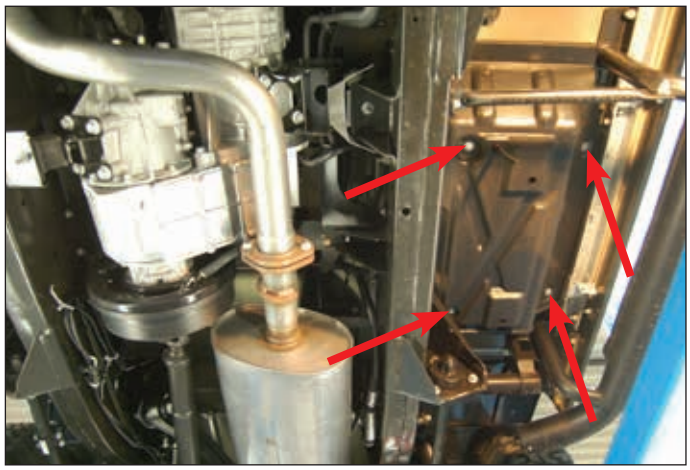
7. Fit the compressor box to the bracket.

4 x flange lock nut	***M6***
Nm	***8 Nm***

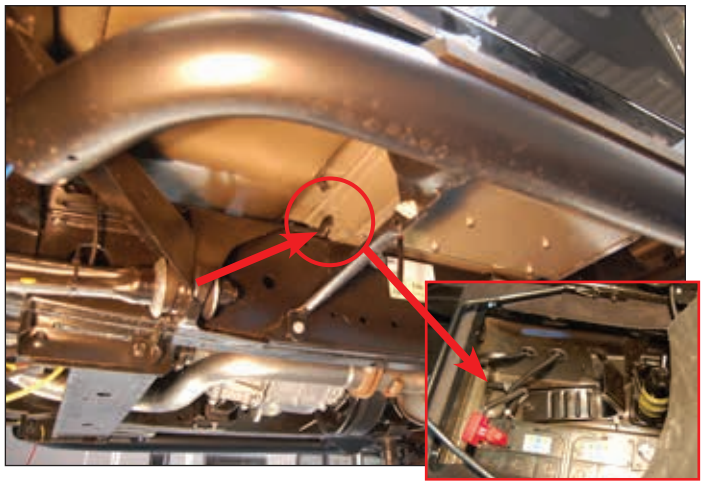
8. Tighten the bolts mentioned in step 6.

4.2 WIRING HARNESS

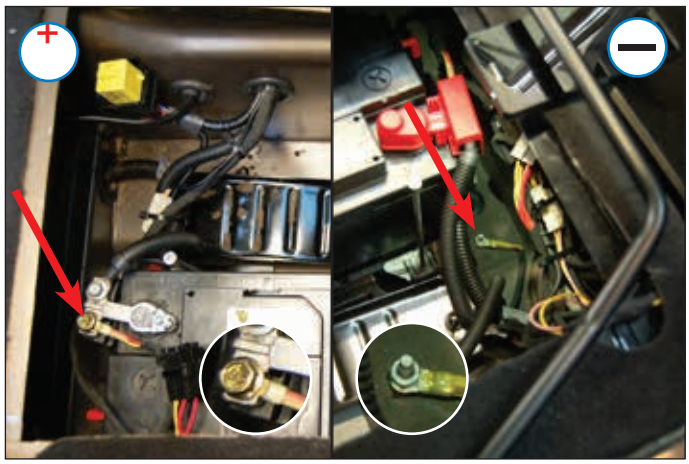
1. Remove the specified covers (if present).
2. Remove the seat area from the driver's seat.
3. Take the cover plate off the battery housing.



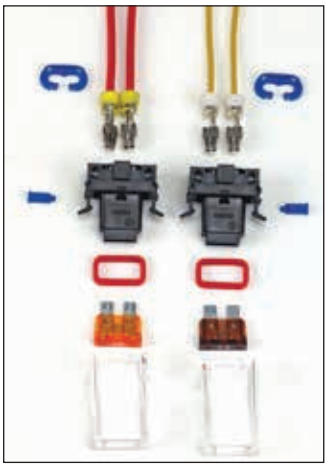
4. Route the wiring harness to the front of the driver's seat.
5. Route the VB wiring harness through the indicated hole to the inside.

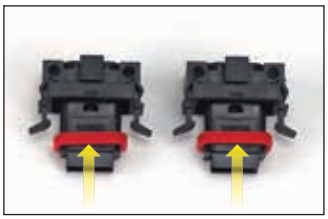


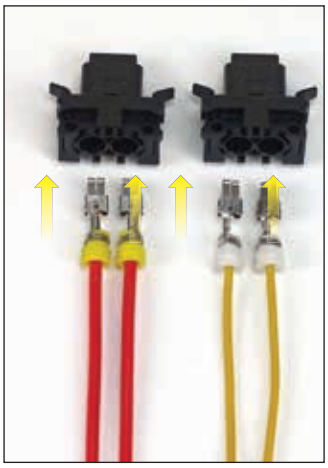
6. Connect the red wire to the connection marked on the positive battery terminal (+).
7. Connect the yellow and brown wire to the earth point.

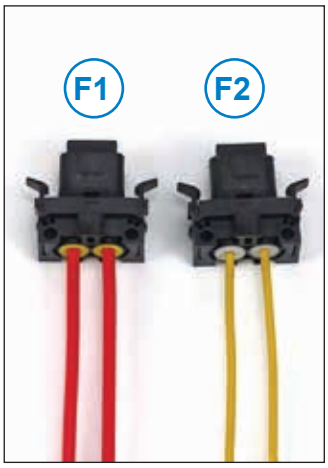


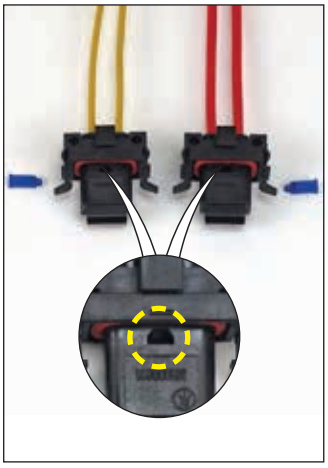
The fuse block may differ from the fuse block in the picture

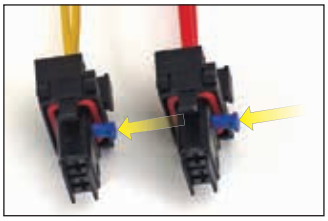


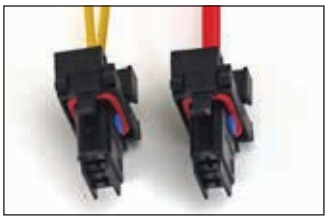




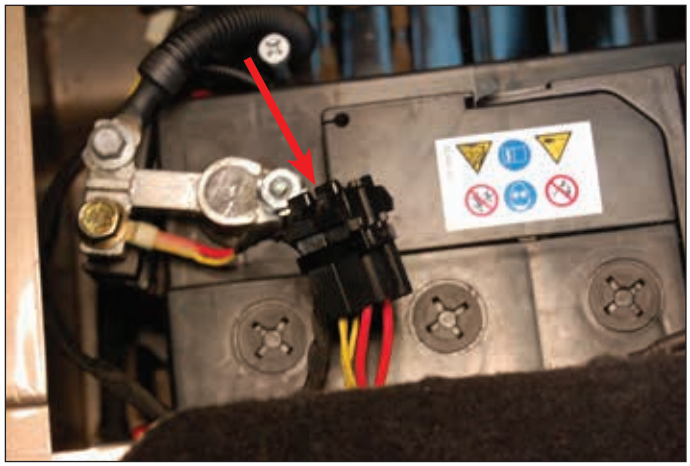








8. Connect the two yellow wires to the fuse block to which the ***F2 7.5 A*** fuse will later be connected.
9. Connect the two red wires to the fuse block to which the ***F1 40 A*** fuse will later be connected.
10. Do not fit the fuses yet.
11. Fit the fuse block as shown.

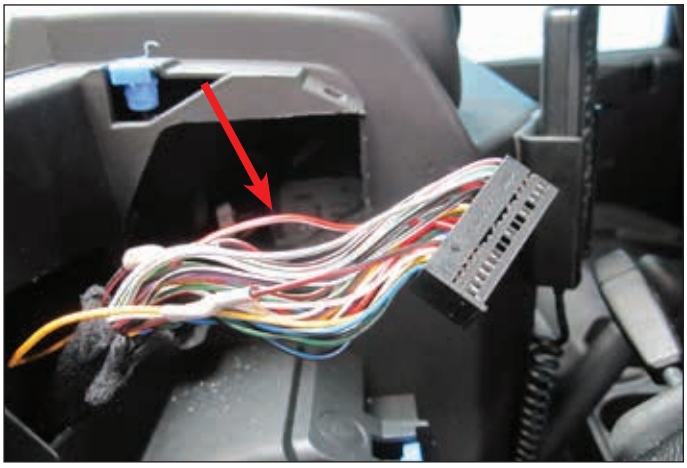


4.2.1 SUPPLY CABLE

1. Connect the supply cable to the white connectors.
2. Route the supply cable to the rear of the instrument panel.

3. Remove the instrument panel from the dashboard.

4. Using the red connector, connect yellow wire no. 18 to the speed signal wire (black/red) on pin 13 in the connector.Remove the dashboard panel.



5. Remove the connector from the sigarette lighter.
6. Connect the VB connector to the original sigarette lighter connecter.
7. Connect the VB connector to the sigarette lighter.

4.2.2 REMOTE CONTROL

1. In consultation with the customer, identify a suitable location to install the remote control.
2. Mount the remote holder.

Make sure that no underlying parts can be damaged during installation.

3. Place the remote control in the holder.
4. Ensure the connector is not under tension.
5. Secure the end of the wire with a tie-wrap.

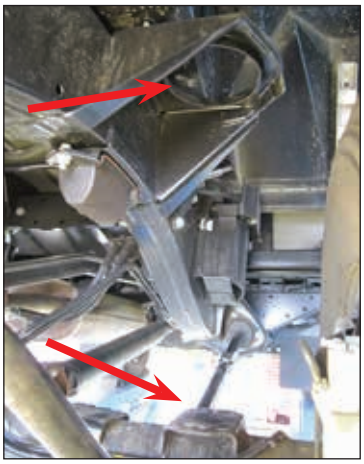
Ensure that the remote control is never in the way of the airbags.

6. Route the remote-control wire to the VB wiring harness under the seat console.
7. Connect the remote control wire to the VB wiring harness.
8. Refit the interior components removed earlier.

5. FITTING THE AIR SUSPENSION KIT FOR THE REAR AXLE

5.1 PREPARATIONS

1. Remove the shock absorbers.
2. Remove the springs.
3. Remove the lower spring bracket.



5.2 AIR SPRING

1. Fit the air couplings to the air springs.

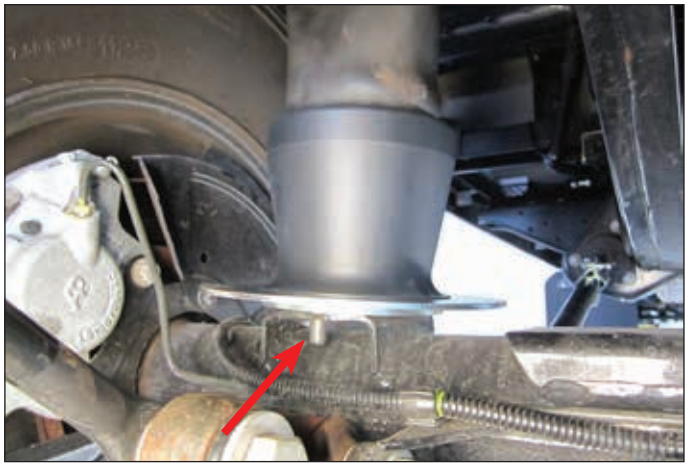
2 x air coupling	
Nm	***3 Nm***

2. Fit the top of the air spring.
3. Use the black mounting plate at the top of the air spring and the plate at the top of the bellows support. The air coupling must face skewed towards the front and inside of the vehicle.
4. Fit the air spring as far towards the outside as possible, see photograph.

4 x UNC-bolt*	***3/8 x 1 3/4***
4 x washer	***M10***
Nm	***20 Nm***

5. Fit the lower mounting support to the air spring.

2 x countersunk UNC-Allen screw	***3/8 x 2***
Nm	***20 Nm***

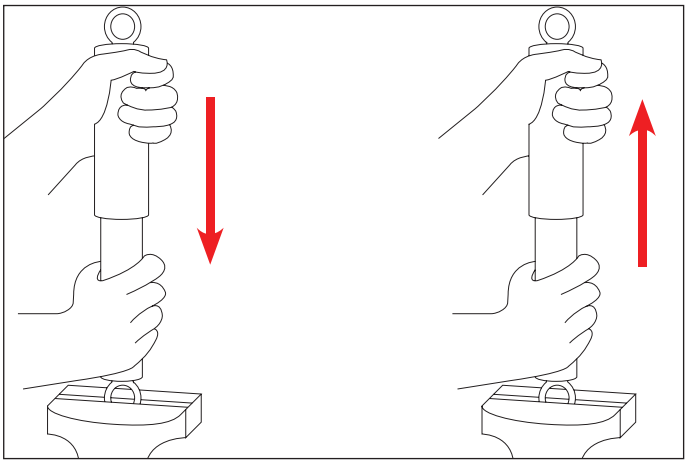


6. Fit the bottom of the air spring to the rear axle.
7. Pump air into the air springs with an external air supply so that the rubber is pulled straight.
8. Tighten the bolts at the top.

4 x lock nut	***M10***
4 x washer	***M10***
Nm	***20 Nm***

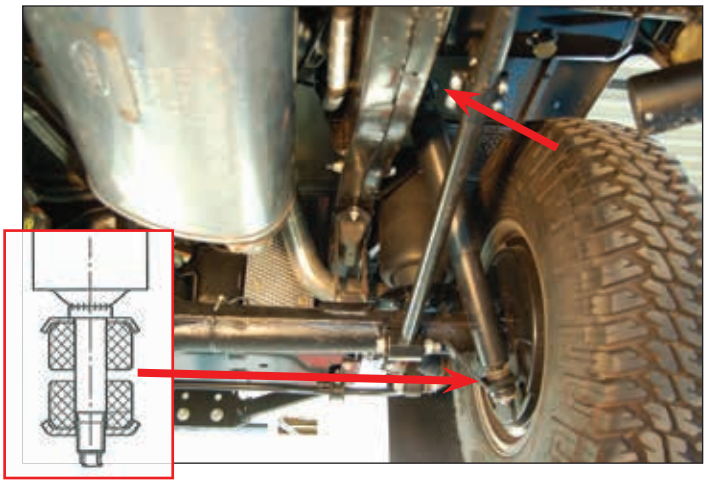
5.3 SHOCK ABSORBERS

1. First vent the shock absorbers before they are fitted.
2. Clamp the shock absorbers vertically in a bench vice.



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

3. Gently push the top down and then slowly pull it up again.
4. A slurping noise may be heard at the end of the stroke; this indicates the presence of air.
5. Continue this pumping action until the slurping noise is no longer heard.



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

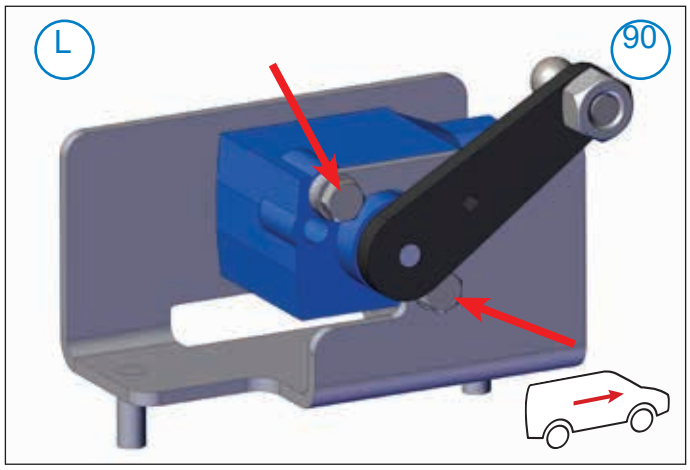
6. Fit the shock absorbers.

supplied fasteners
100 Nm

5.4 HEIGHT SENSORS

5.4.1 HEIGHT SENSORS DEFENDER 90

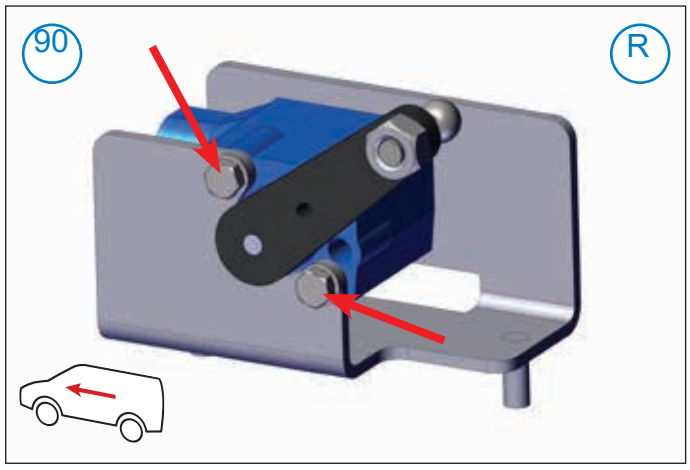
1. Fit the height sensor to the height sensor bracket.



The colour markings indicate which part is for the left and which for the right.
See 'Fitting instructions'.

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

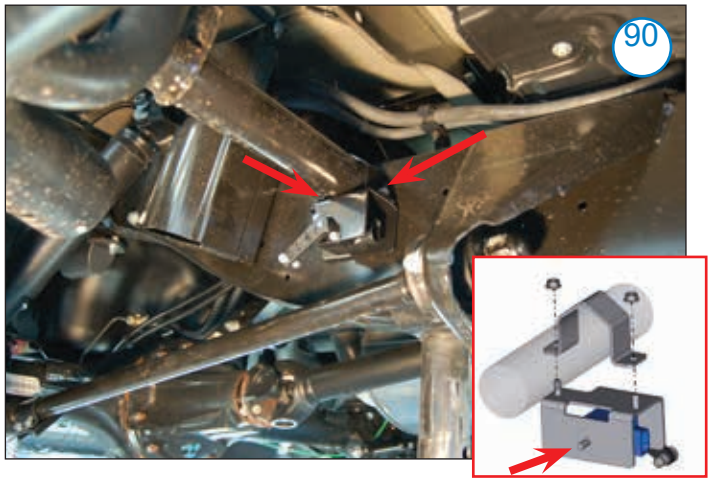
2. Fit the height sensor to the height sensor bracket.



The colour markings indicate which part is for the left and which for the right.
See 'Fitting instructions'.

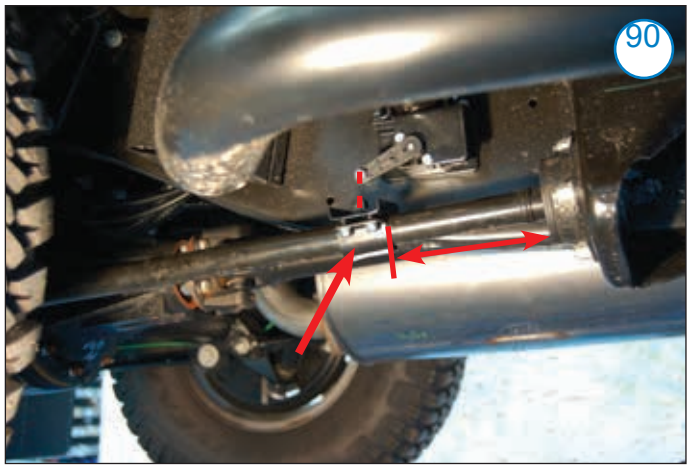
2 x bolt	*M5 x 10*
2 x washer	*M5*
	5 Nm

3. Fit the height sensor brackets in the position indicated.



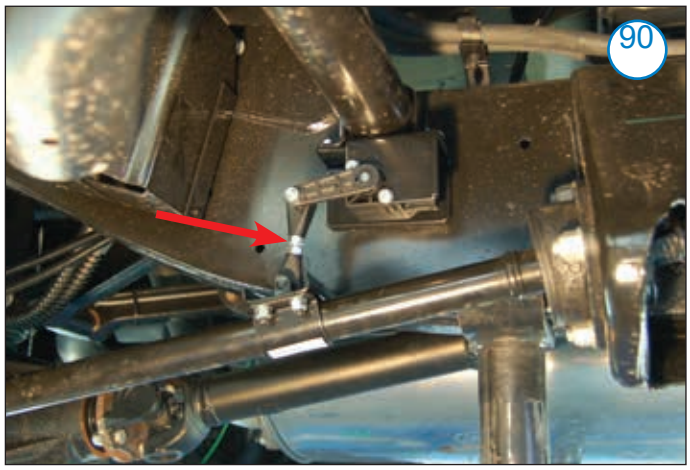
Fit the height sensor bracket locating pin when mounting on the chassis.	
2 x lock nut	***M6***
2 x washer	***M6***
Nm	***8 Nm***

4. Fit the ball-joint bracket to the torque arm.



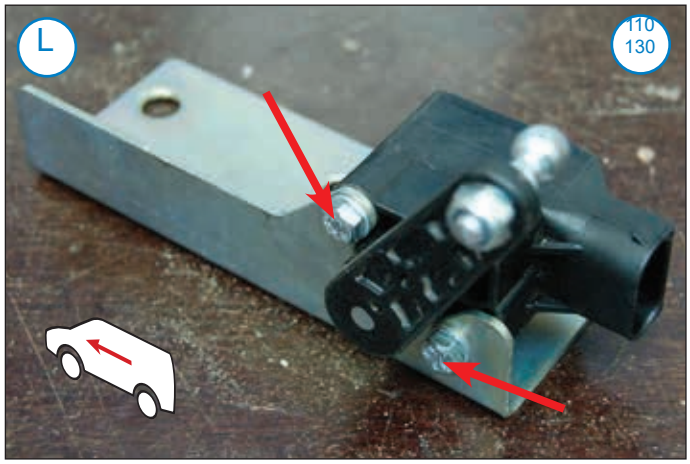
The distance between the ball-joint bracket and the flange on the torque arm is 140 mm.	
The height sensor rod must be fitted vertically.	
8 x flange lock nut	***M6***
Nm	***6 Nm***

5. Check the length of the height sensor rods (***L = 60 mm***) measured centre to centre.
6. Fit the height sensor rods to the height sensors.
7. Fit the height sensor rods to the ball-joints.



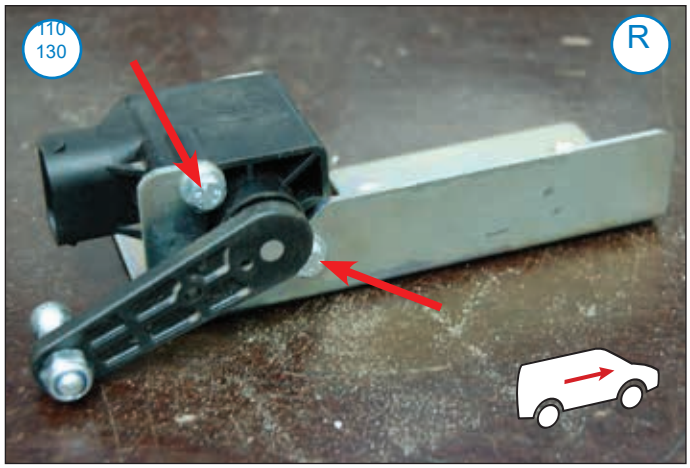
5.4.2 HEIGHT SENSORS DEFENDER 110&130

1. Fit the height sensor to the height sensor bracket.



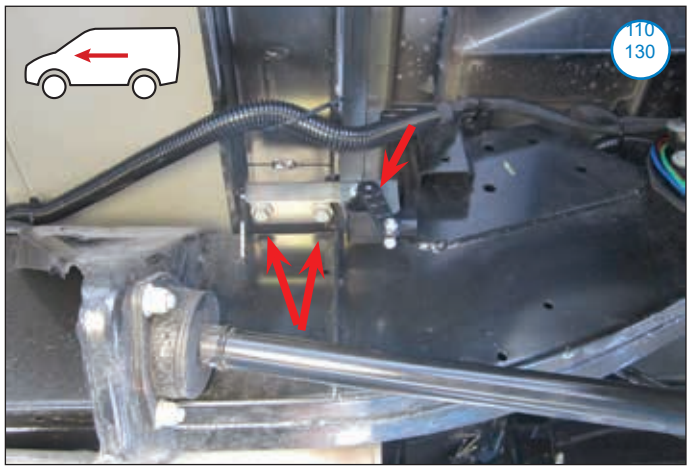
The colour markings indicate which part is for the left and which for the right. See 'Fitting instructions'.	
2 x bolt	***M5 x 10***
2 x washer	***M5***
Nm	***5 Nm***

2. Fit the height sensor to the height sensor bracket.



The colour markings indicate which part is for the left and which for the right. See 'Fitting instructions'.	
2 x bolt	***M5 x 10***
2 x washer	***M5***
Nm	***5 Nm***

3. Fit the height sensor brackets in the position indicated.

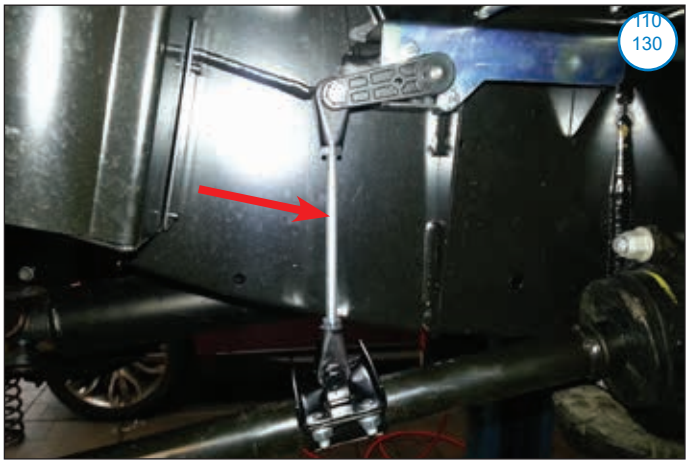


The height sensor bracket must be fitted at the point where the body is fitted to the chassis.	
original fasteners	
Nm	***20 Nm***

4. Fit the ball-joint bracket to the torque arm.

The distance between the ball-joint bracket and the flange on the torque arm is 140 mm.	
The height sensor rod must be fitted vertically.	
8 x flange lock nut	***M6***
Nm	***6 Nm***

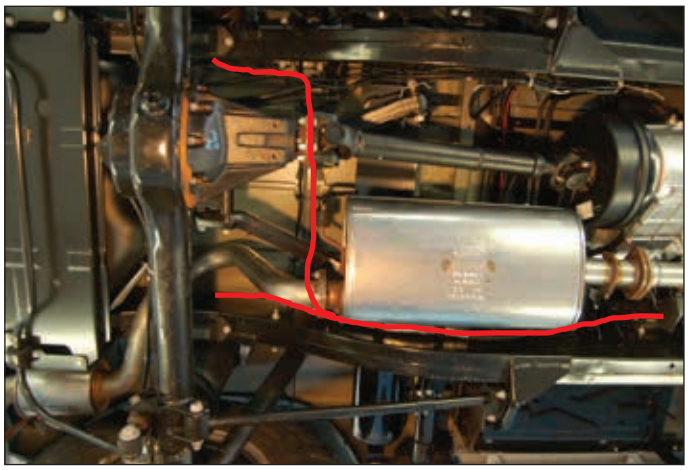
5. Check the length of the height sensor rods (***L = 145 mm***) measured centre to centre.
6. Fit the height sensor rods to the height sensors.
7. Fit the height sensor rods to the ball-joints.



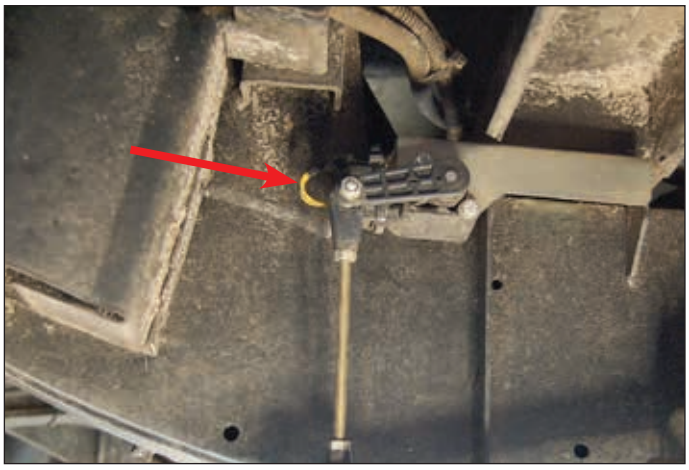
5.5 AIR TUBES

1. Connect the black air tube to the right air spring.
2. Connect the green air tube to the left air spring.

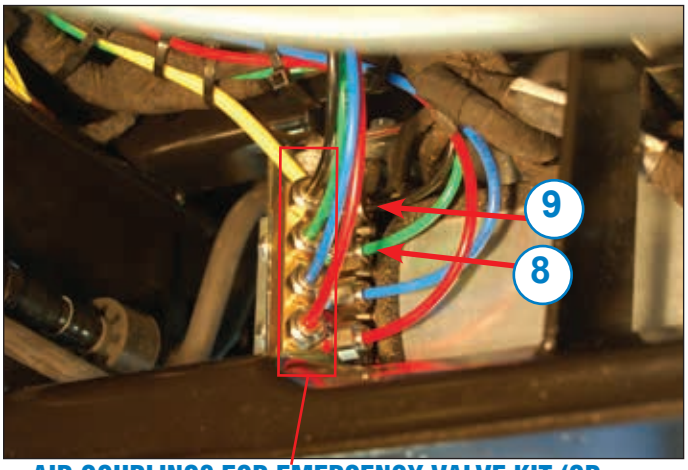
3. Route the air tubes along the left-hand side of the chassis to the compressor box.
4. Connect the height sensor wires on the rear axle to the connector with the white colour code.



5. Route the right height sensor cable along the black air tube to the rear right height sensor.
6. Route the left height sensor cable along the green air tube to the rear left height sensor.
7. Connect the cables to the height sensors.

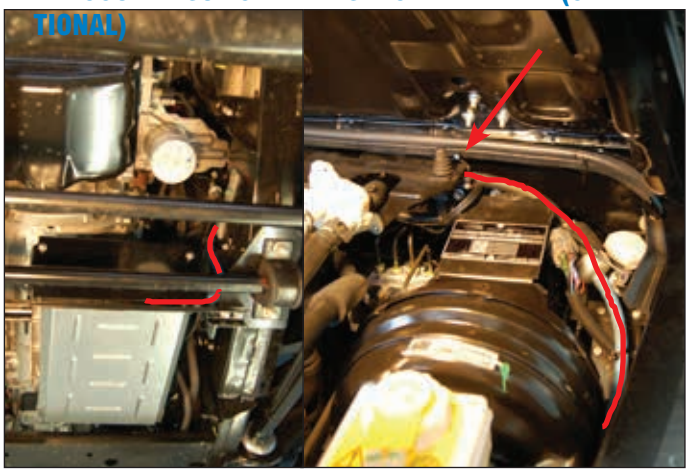


8. Fit the green air tube to the air coupling on the junction lock on the outside of the compressor box.
9. Fit the black air tube to the air coupling on the junction block on the outside of the compressor box.
10. Ensure that the colour markings match.
11. If kit *105 16 01 2XX* for the rear axle has been fitted, seal the unused air couplings with the end plugs supplied.

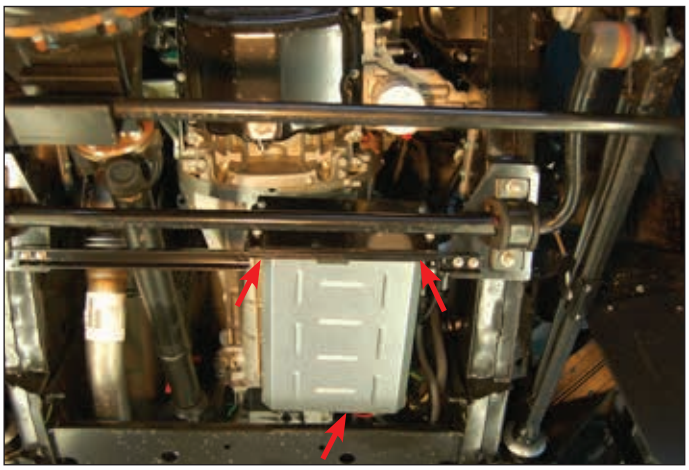


AIR COUPLINGS FOR EMERGENCY VALVE KIT (OPTIONAL)

12. If kit *105 16 01 4XX* for the front and rear axle has been fitted, continue from section 5.6.
13. Route the inlet line up via the brake servo unit as shown.
14. Fit the inlet filter on the inlet line.
15. Fit the inlet line under the bonnet.

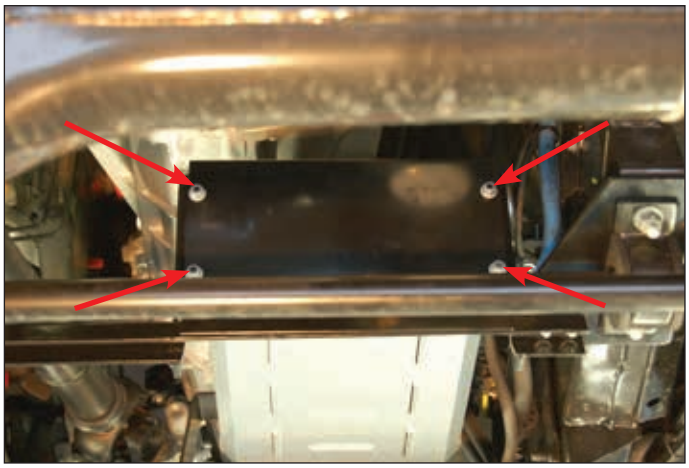


16. Fit the cover of the compressor box.



3 x flange lock nut	***M6***
Nm	***5 Nm***

17. Fit the cover plate to the compressor box.



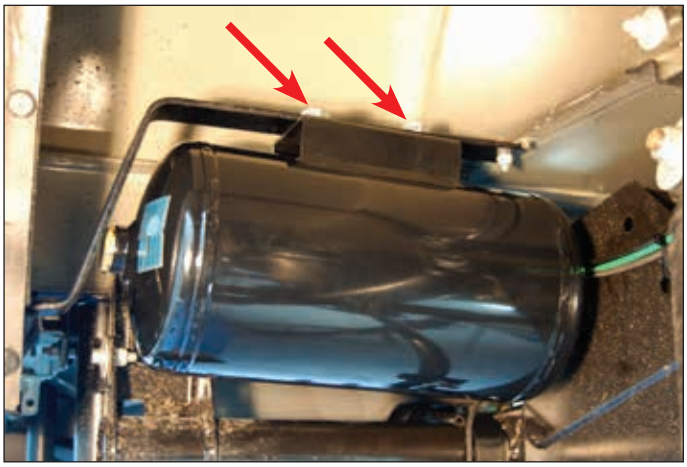
4 x flange lock nut	***M6***
Nm	***5 Nm***

5.6 AIR TANK

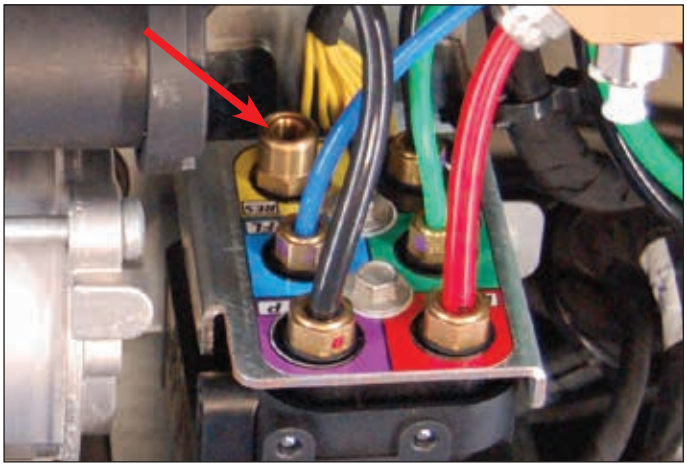
1. Find a suitable location for fitting the air tank.
   The location shown in the illustration is an example for a Land Rover Defender 90.
2. Construct a suspension support for the air tank.
   The supplied diagram may be useful here.

The yellow air tube of the air tank must not exceed 1.5 m in length.

3. Fit the air tank to the air tank bracket.
4. Fit the yellow air tube to the air tank.

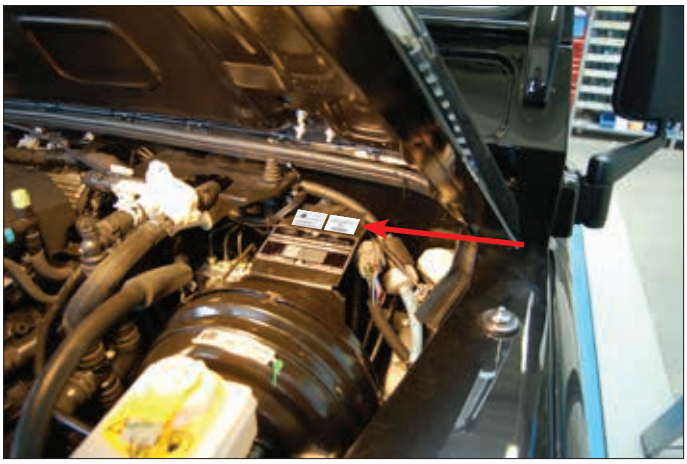


5. Route the yellow air tube to the compressor box.
6. Fit the yellow air tube to the valve block.
7. Ensure that the colour markings match.



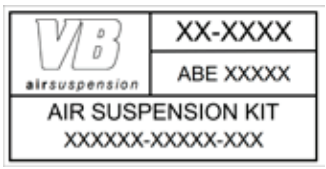
5.7 WARRANTY STICKERS

1. Affix the supplied warranty stickers ***A + B*** to the bracket above the vehicle type plate.
2. Affix protective film over the stickers.



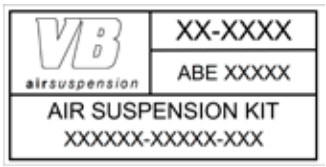
A

B

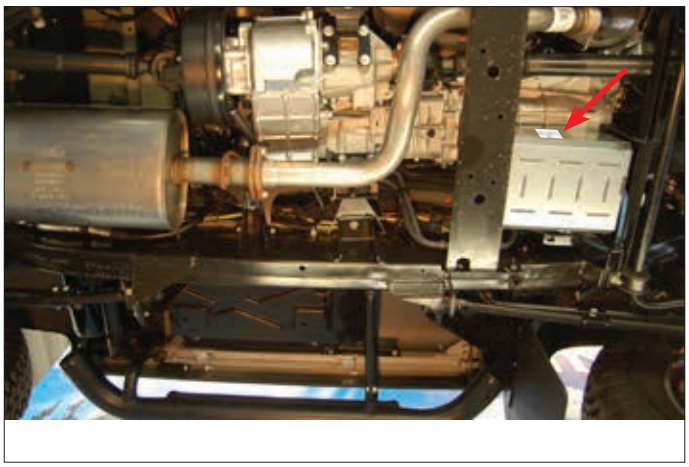


3. Affix sticker ***B*** to the upper spring plate.
4. Affix protective film over the sticker.

B



5. Affix sticker ***A*** on the compressor box.
6. Affix protective film over the sticker.



A

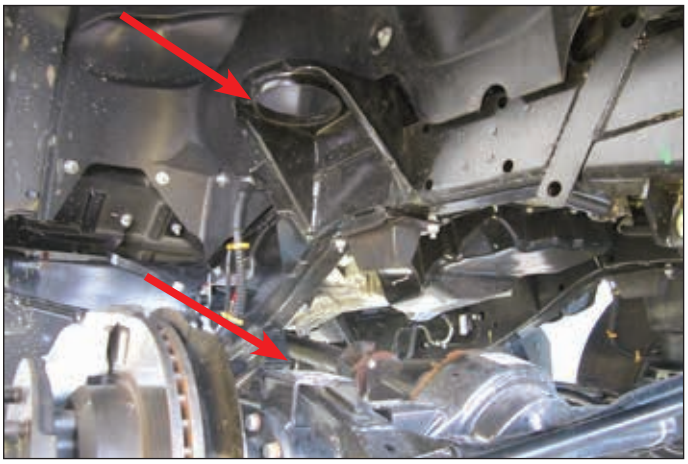
If kit 105 16 01 2XX for the rear axle has been fitted, continue from chapter 7.

If kit 105 16 01 4XX for the front and rear axle has been fitted, continue from chapter 6.

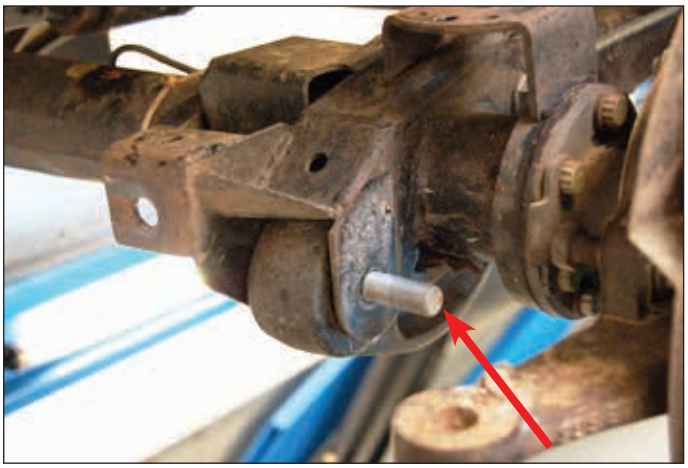
6. FITTING THE AIR SUSPENSION KIT FOR THE FRONT AXLE

6.1 PREPARATIONS

1. Remove the wheels
2. Remove the shock absorbers.
3. Remove the springs.
4. Remove the lower spring bracket.



5. Remove the nut from the torque rod.



6.2 AIR SPRING

1. Fit the air couplings to the air springs.

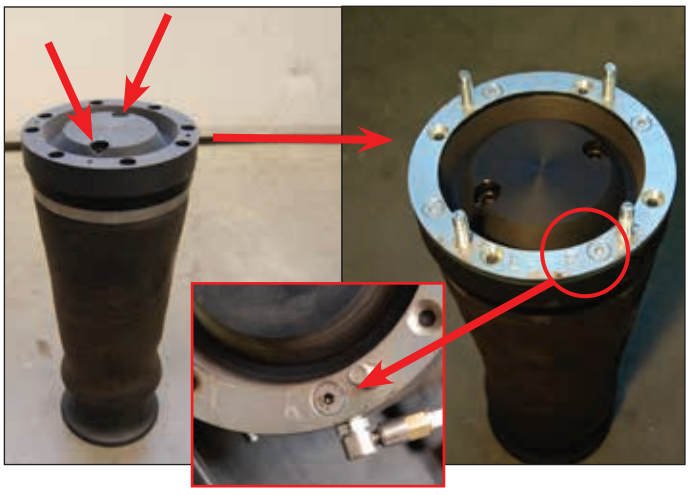
Air coupling
3 Nm

2. Fit the air spring to the black mounting plate.

4 x Allen screw UNC	*3/8 x 3/4*
8 Nm	

3. Fit the air spring to the upper mounting support. Observe L and R as shown.

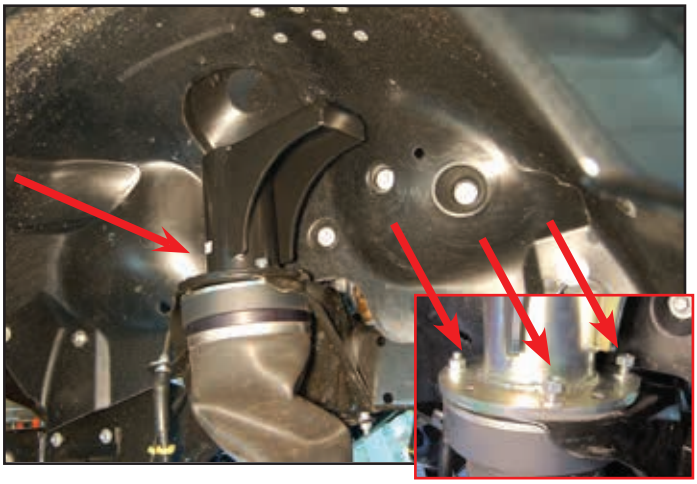
8 x countersunk Allen screw	*M6 x 16*
6 Nm	



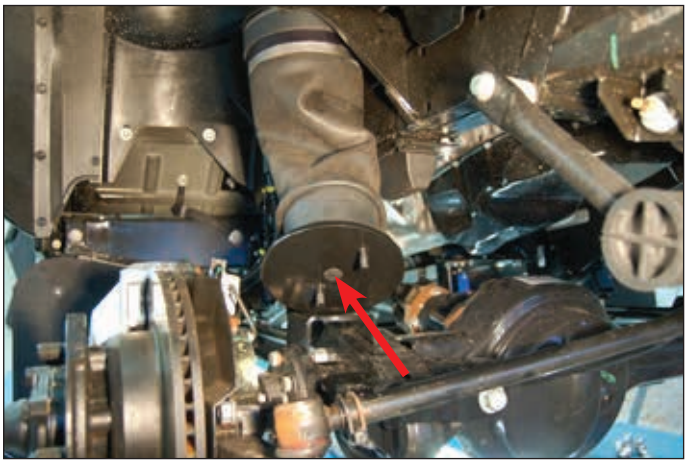
4. Fit the air spring to the top of the shock absorber bracket. The shock absorber must be fitted at the front.

The air coupling must face skewed towards the front and inside of the vehicle.

8 x lock nut	*M8*
8 x washer	*M8*
20 Nm	



5. Fit the lower mounting support to the air spring.



The centre of the air spring must be fitted behind the centre of the bracket.

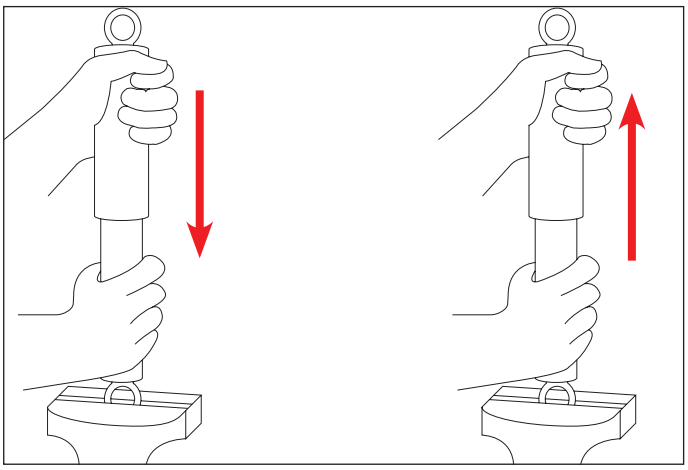
2 x countersunk Allen screw UNC	***3/8 x 1 1/2***
Nm	***10 Nm***

6. Fit the bottom of the air spring to the rear axle.
7. Pump air into the air springs with an external air supply so that the rubber is pulled straight.
8. Tighten the bolts at the top.

4 x lock nut	***M8***
4 x washer	***M8***
Nm	***20 Nm***

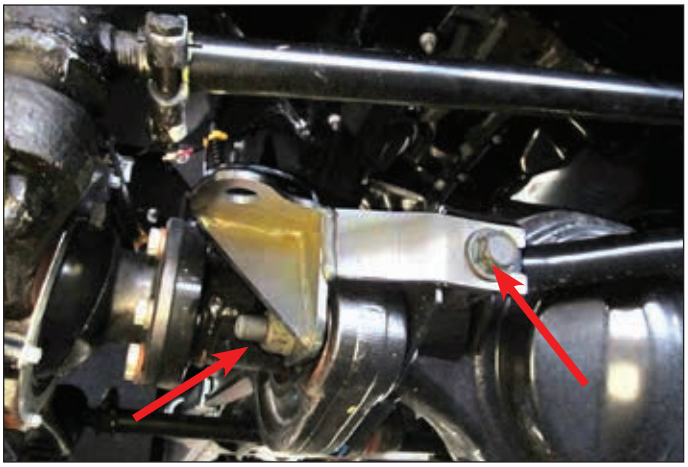
6.3 SHOCK ABSORBERS

1. First vent the shock absorbers before they are fitted.
2. Clamp the shock absorbers vertically in a bench vice.



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

3. Gently push the top down and then slowly pull it up again.
4. A slurping noise may be heard at the end of the stroke; this indicates the presence of air.
5. Continue this pumping action until the slurping noise is no longer heard.



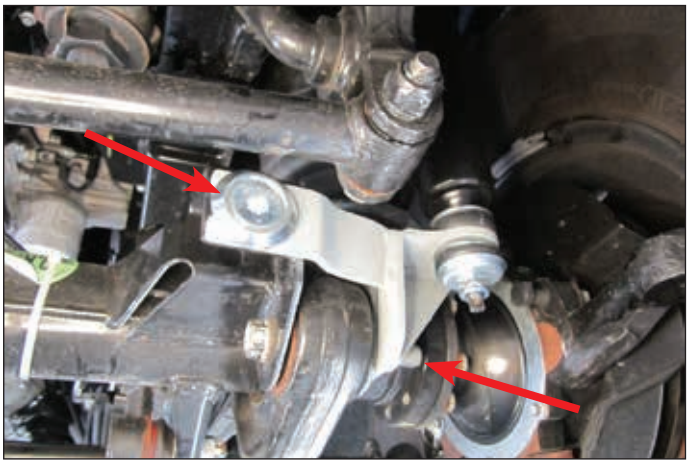
Always hold the shock absorber with the top pointing up. If you don't do this, air will enter the shock absorber again.

6. Fit the right shock absorber bracket.

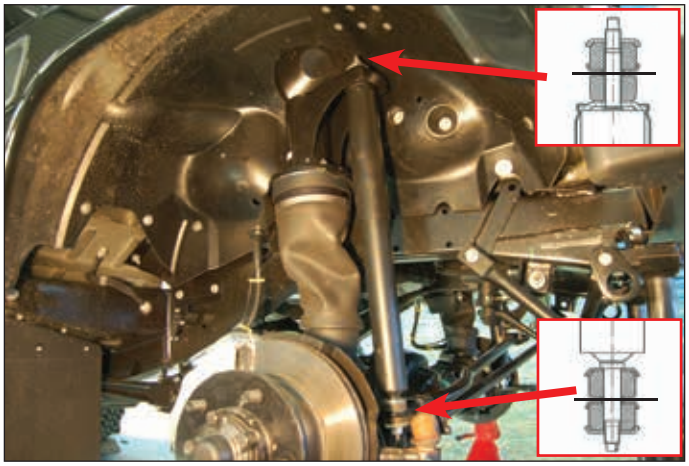
Original fasteners	
Nm	***120 Nm***

7. Fit the left shock absorber bracket.

1 x countersunk Allen screw	*M16 x 40*
1 x countersunk washer	*M16*
1 x washer	*M16*
1 x lock nut	*M16*
Nm	*120 Nm*
Original fasteners	
Nm	*120 Nm*



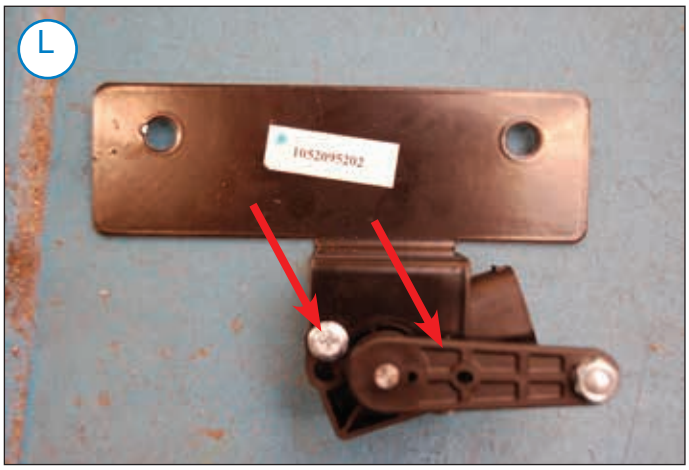
8. Fit the shock absorbers.



supplied fasteners	
Nm	*120 Nm*

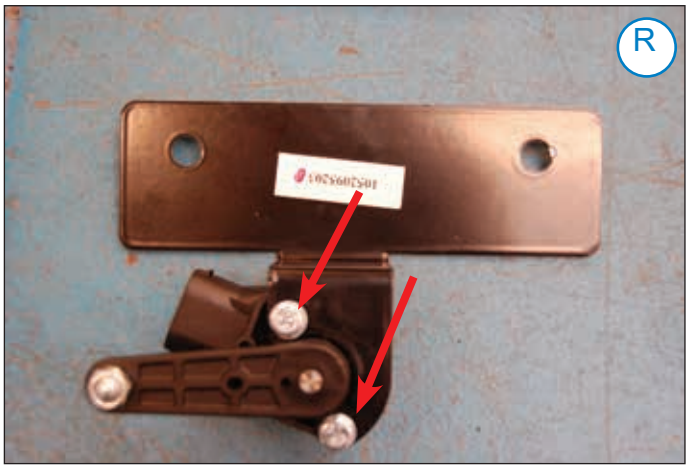
6.4 HEIGHT SENSORS

1. Fit the height sensor to the height sensor bracket.



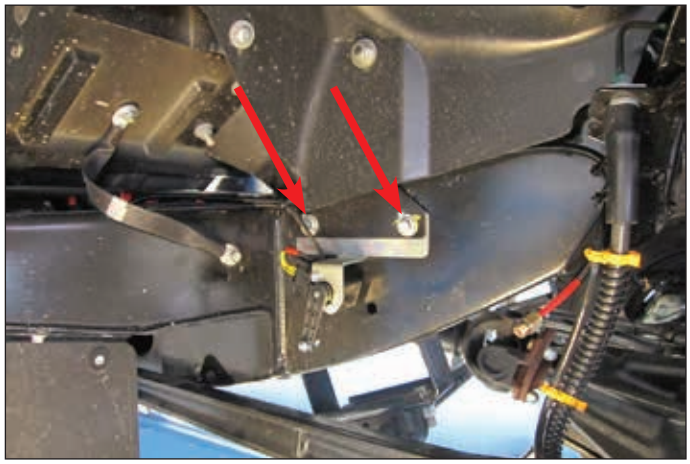
⚠	*The colour markings indicate which part is for the left and which for the right.* *See 'Fitting instructions'.*
2 x bolt	*M5 x 10*
2 x washer	*M5*
Nm	*5 Nm*

2. Fit the height sensor to the height sensor bracket.



⚠	*The colour markings indicate which part is for the left and which for the right.* *See 'Fitting instructions'.*
2 x bolt	*M5 x 10*
2 x washer	*M5*
Nm	*5 Nm*

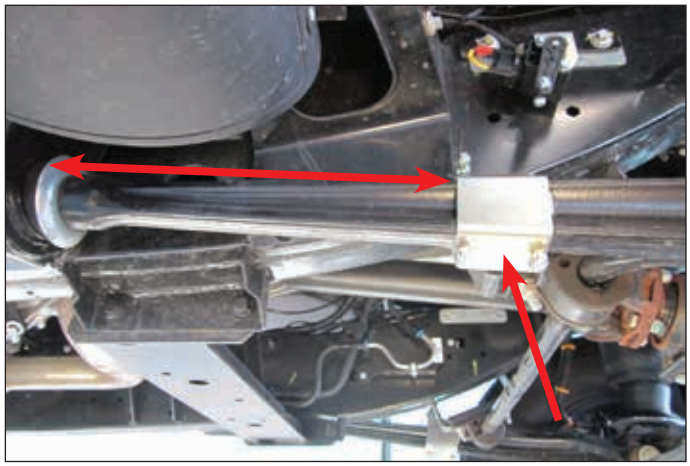
3. Fit the height sensor brackets at the specified point between the chassis and the body mounting plate.



Original fasteners
20 Nm

4. Fit the ball-joint bracket to the torque arm.

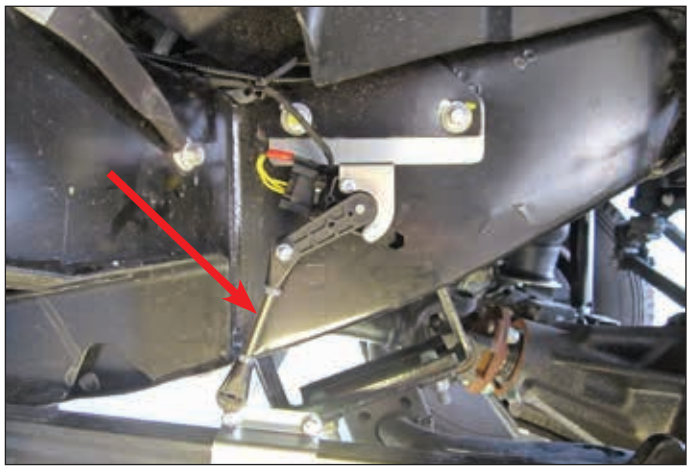
The breather hose must be fitted between the ball-joint bracket and the torque arm.
The distance between the ball-joint bracket and the flange on the torque arm is 305 mm.



8 x flange lock nut	*M6*
8 Nm	

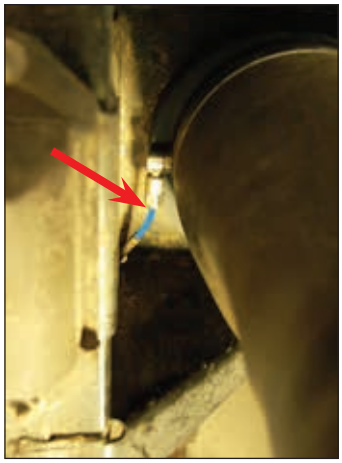
The height sensor rod must be fitted vertically.

5. Check the length of the height sensor rods (***L = 100 mm***) measured centre to centre.
6. Fit the height sensor rods to the height sensors.
7. Fit the height sensor rods to the ball-joints.

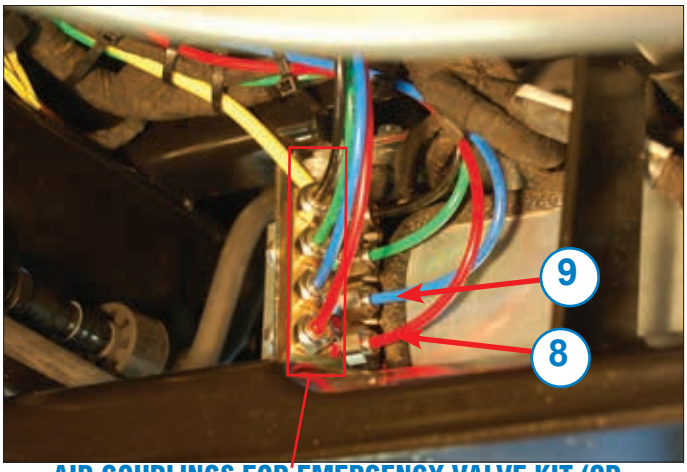


6.5 AIR TUBES

1. Connect the ***blue*** air tube to the left air spring.
2. Connect the ***red*** air tube to the right air spring.
3. Route the air tubes along the left-hand side of the chassis to the compressor box.

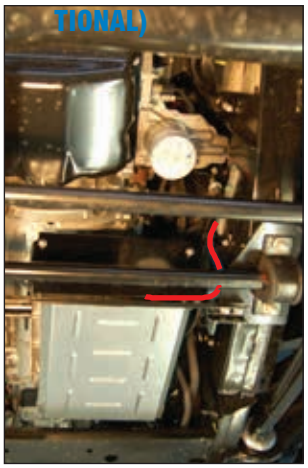


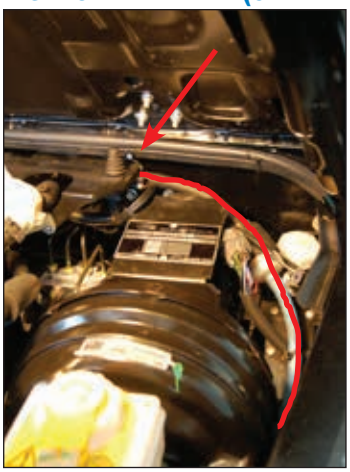
4. Connect the front axle height sensor cable using the connector marked in brown.
5. Route the left height sensor cable along the blue air tube to the front left height sensor.
6. Route the right height sensor cable along the red air tube to the front right height sensor.
7. Connect the cables to the height sensors.
8. Fit the red air tube to the air coupling on the junction lock on the outside of the compressor box.
9. Fit the blue air tube to the air coupling on the junction block on the outside of the compressor box.
10. Ensure that the colour markings match.



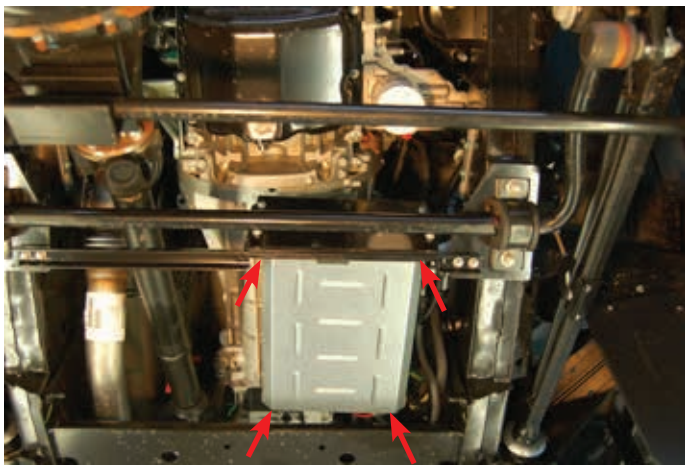
AIR COUPLINGS FOR EMERGENCY VALVE KIT (OPTIONAL)

11. Route the inlet line up via the brake servo unit as shown.
12. Fit the inlet filter on the inlet line.
13. Fit the inlet line under the bonnet.



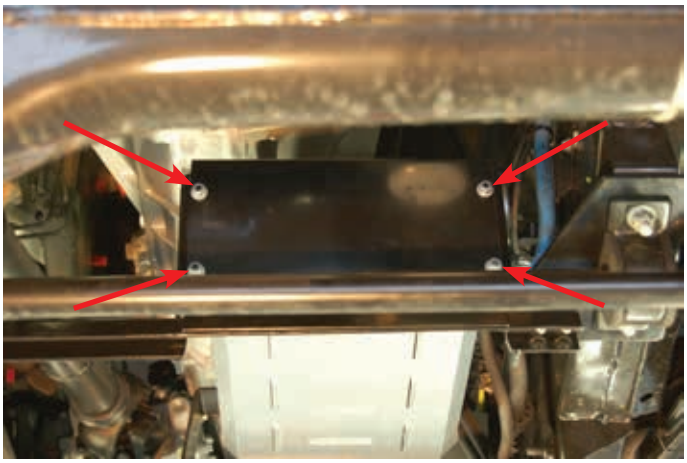


14. Fit the cover of the compressor box.



3 x flange lock nut	*M6*
Nm	*5 Nm*

15. Fit the cover plate to the compressor box.



4 x flange lock nut	*M6*
Nm	*5 Nm*

7. 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:

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

   1 – 3 – 4 – 2

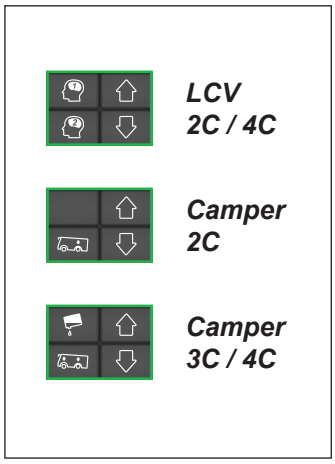
   The LEDs on the remote control will go out.
5. Press and hold the -button untill a long tone is heard.
6. Enter the following code within 20 seconds:

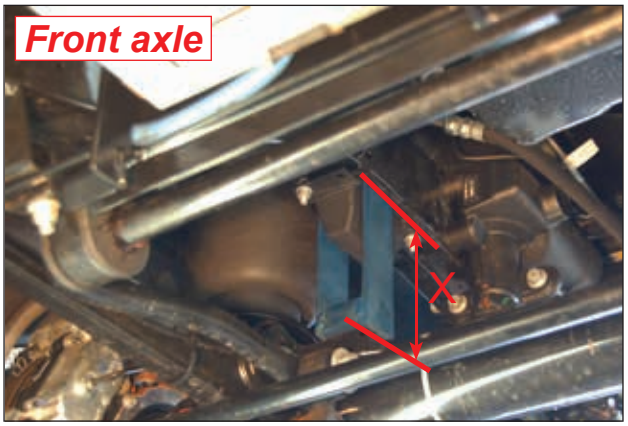
   2 – 4 – 3 – 1

   Calibration mode has been activated.
7. The / -LED and the -LED will start to flash.
8. Press button **2** or to raise the vehicle.
9. Place the calibration supports under the vehicle.
10. 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.
11. 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.

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





The bump stop must be removed from the front axle before calibration.

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

8. 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 ☐ VB-ID card inside cover of user manual.
1.15 Documentation present in vehicle:
☐ - User manual
☐ - TÜV/ABE documentation
☐ - Original vehicle documentation
1.16 ☐ Battery voltage (<12.4 volt = charge).
1.17 ☐ 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: □□□□□□□□□□□□□□□□□

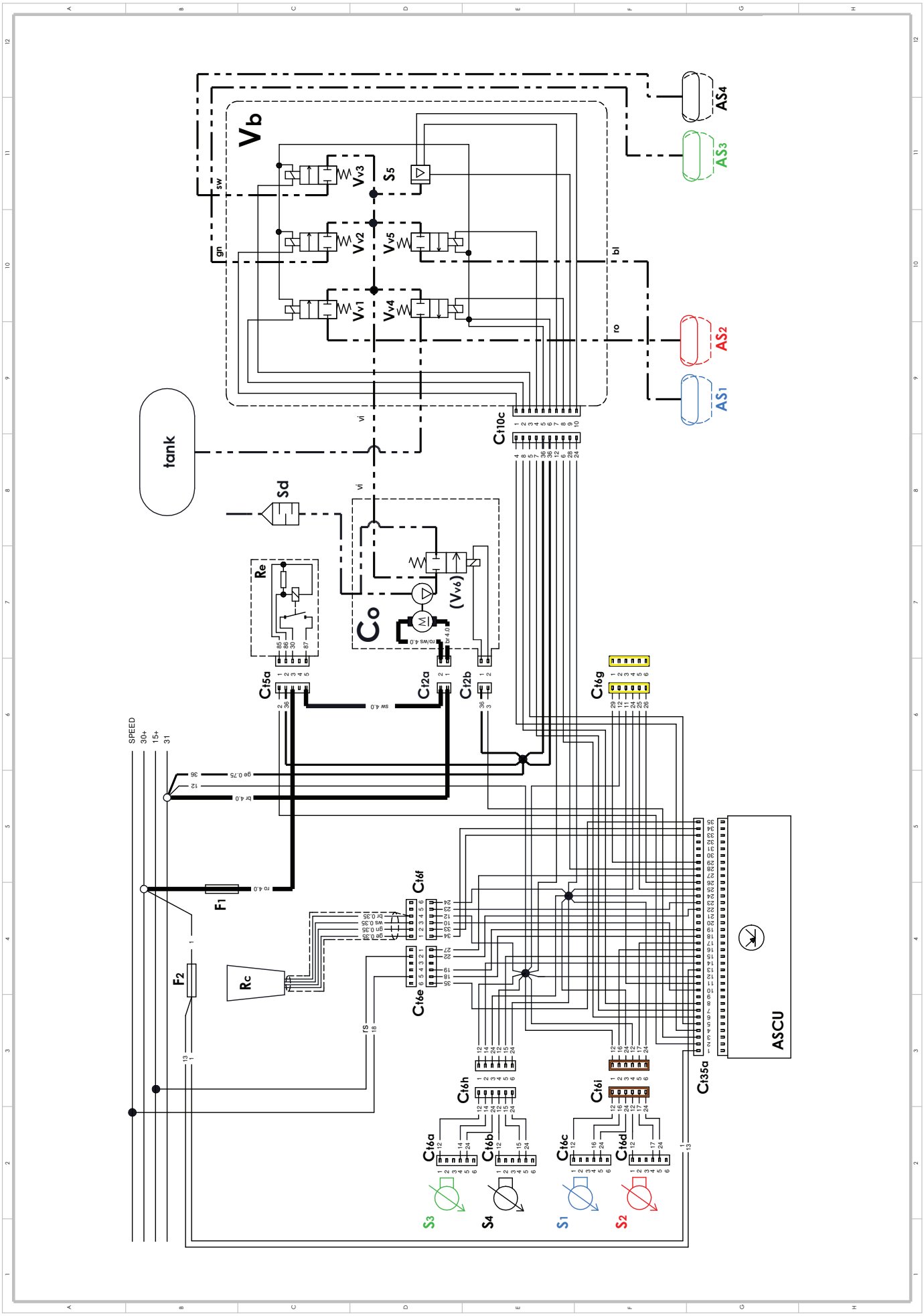
Dealer: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ VB-ID-no.: □□□□□□ - □□□□□ - □□□

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.

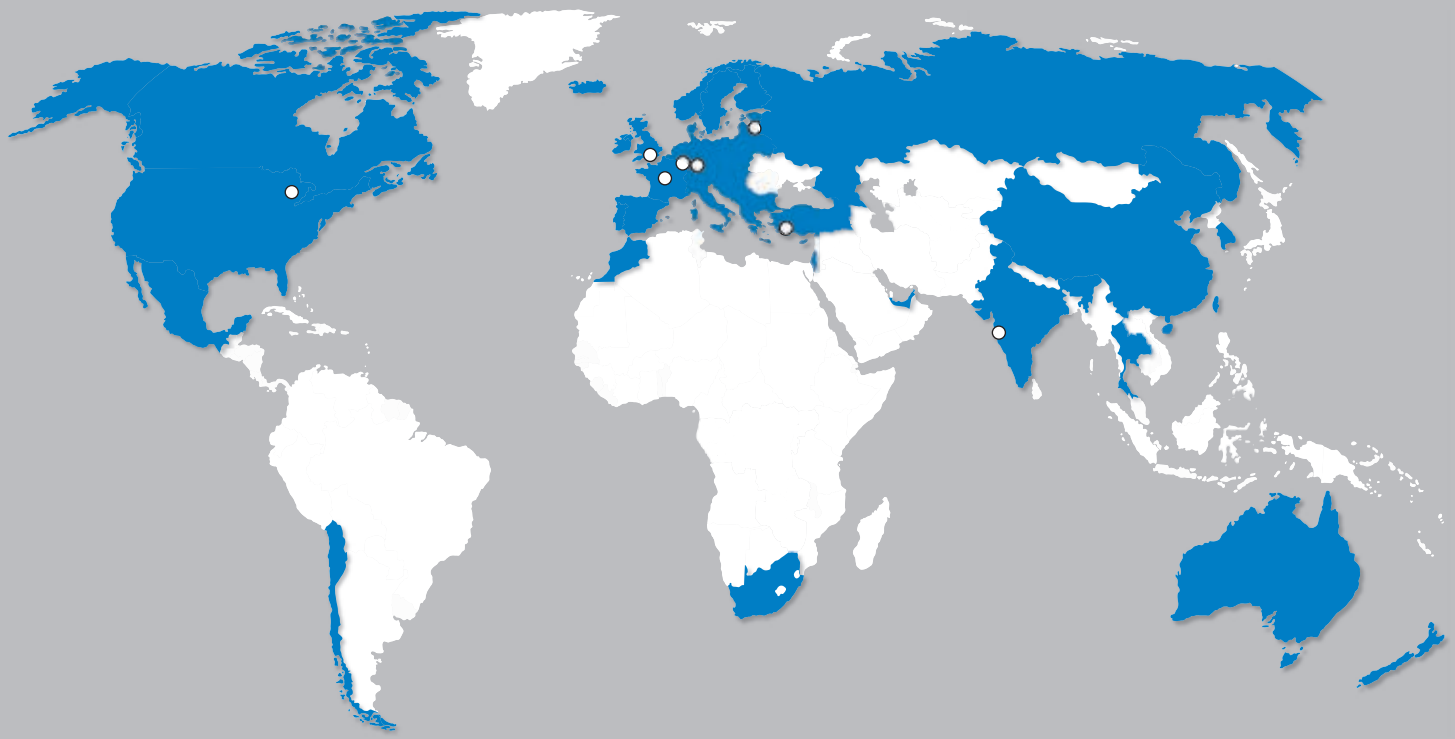
9. ELECTRICAL DIAGRAM



Name	Description
ASCU	VB-ASCU (electronic control unit)
AS1	Air spring, front left
AS2	Air spring, front right
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
S1	Height sensor, front left
S2	Height sensor, front right
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

Name	Description
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

airsuspension



VB-AIRSUSPENSION,

INCREASED COMFORT, BETTER DRIVEABILITY, MORE SAFETY.

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