

EN

FITTING INSTRUCTIONS

making everyday smoother



PEUGEOT BOXER, FIAT DUCATO, CITROËN JUMPER, OPEL/VAUXHALL MOVANO X250/X290

VB-SemiAir - Basic kit & Comfort kit
rear axle

FOR KIT: 1550307100 & VBSA-X250-0XXXX



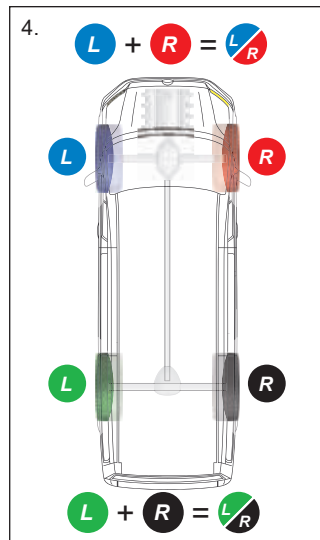
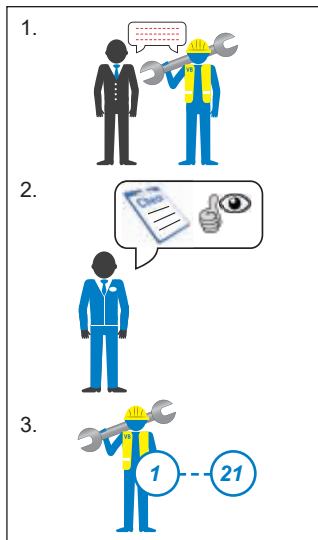
REVISION TABLE

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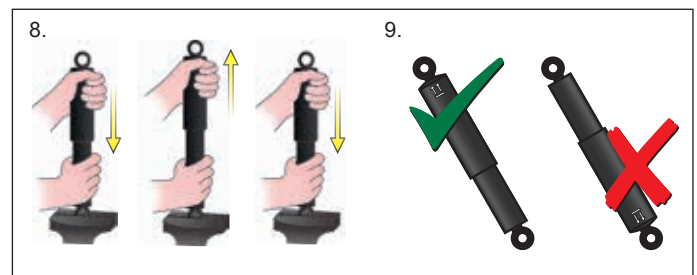
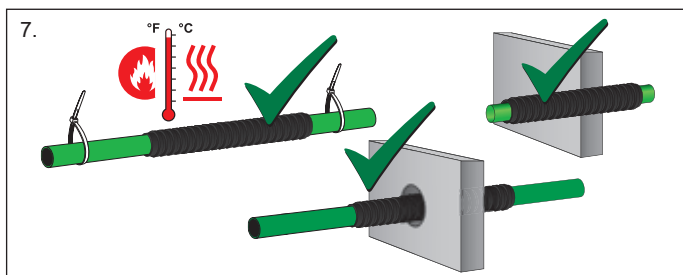
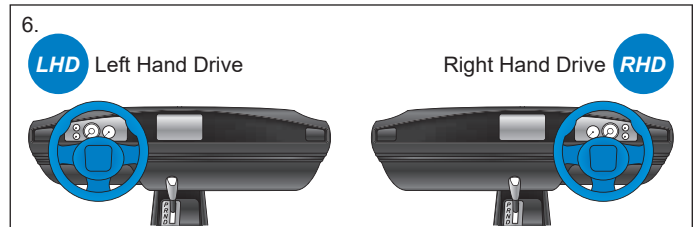
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1. SYMBOLS



5. Symbols		
	Air tube Front Left	=
	Air tube Front Right	=
	Air tube Rear Left	=
	Air tube Rear Right	=
	Air tube Air Tank	=
	Electric wire	=



- EN**
1. Consultation with the customer / dealer.
 2. Have the vehicle adjusted / checked by an authorized body.
 3. Sequence of steps, from (Step 1) to (Step 21).
 4. Color code marking the corners.
 5. Air tube & electric colour code / symbols.
 6. Symbols for Left hand drive & Right hand drive.

- NL**
1. Overleg met de klant / dealer.
 2. Laat het voertuig afstellen / controleren door een bevoegde instantie.
 3. Opeenvolging van stappen, van (Stap 1) tot (Stap 21).
 4. Kleurcode die de hoeken markeert.
 5. Lucht slang & elektrische kleurcode / symbolen.
 6. Symbolen voor linksgestuurd en rechtsgestuurd.

- DE**
1. Rücksprache mit dem Kunden / Händler.
 2. Lassen Sie das Fahrzeug von einer autorisierten Stelle einstellen / überprüfen.
 3. Schrittfolge von (Schritt 1) bis (Schritt 21).
 4. Farbcode zur Kennzeichnung der Ecken.
 5. Farbcode / Symbole für Luftschlauch und Elektrik.

- FR**
1. Consultation avec le client / concessionnaire automobile.
 2. Faire régler/vérifier le véhicule par un organisme agréé.
 3. Séquence d'étapes, de (Étape 1) à (Étape 21).
 4. Code de couleur marquant les coins.
 5. Code de couleur / symboles du tube à air et de l'électricité.
 6. Symboles pour conduite à gauche et conduite à droite.

- TR**
1. Müşteri / araç satıcısı ile istişare.
 2. Aracı yetkili bir kuruluşa ayarlatın/kontrol ettirin.
 3. (Adım 1) ile (Adım 21) arasındaki adımların sırası.
 4. Köşeleri işaretleyen renk kodu.
 5. Hava borusu ve elektrik renk kodu / sembolleri.
 6. Soldan direksiyonlu ve Sağdan direksiyonlu için semboller.

- IT**
1. Consultazione con il cliente/concessionario del veicolo.
 2. Far regolare/controlare il veicolo da un organismo autorizzato.
 3. Sequenza di passi, da (Step 1) a (Step 21).
 4. Codice colore che contrassegna gli angoli.
 5. Tubo dell'aria e codice colore elettrico/simboli.
 6. Simboli per guida a sinistra e guida a destra.

- ES**
1. Consulta con el cliente/concesionario del vehículo.
 2. Haga ajustar/revisar el vehículo por un organismo autorizado.
 3. Secuencia de pasos, desde (Paso 1) hasta (Paso 21).
 4. Código de color que marca las esquinas.
 5. Tubo de aire y código/símbolos de colores eléctricos.
 6. Símbolos para volante a la izquierda y volante a la derecha.

7. Place the protective cover around the air tubes where necessary. All parts must be at least 200 mm away from heat sources such as engine and exhaust.
8. Shock absorbers must be vented before they are fitted. Repeat this action until the slurping noise can no longer be heard.
9. Always hold the shock absorber with the top pointing up!

7. Plaats waar nodig de bescherming om de luchtslangen. Alle onderdelen moeten minimaal 200 mm verwijderd zijn van warmtebronnen zoals motor en uitlaat.
8. Schokdempers moeten worden ontlucht voordat ze worden gemonteerd. Herhaal de handeling totdat er geen slurpend geluid meer te horen is.
9. Houd de bovenkant van de schokdemper altijd naar boven gericht!

6. Symbole für Linkslenker und Rechtslenker.
7. Bringen Sie bei Bedarf die Schutzabdeckung um die Luftschläuche an. Alle Teile müssen mindestens 200 mm von Wärmequellen wie Motor und Auspuff entfernt sein.
8. Stoßdämpfer müssen vor dem Einbau entlüftet werden. Wiederholen, bis kein Schmatzgeräusch mehr vernehmbar ist.
9. Die Oberseite des Stoßdämpfers muss stets nach oben zeigen!

7. Placez le couvercle de protection autour des tubes d'air si nécessaire. Toutes les pièces doivent être à au moins 200 mm des sources de chaleur telles que le moteur et l'échappement.
8. Les amortisseurs doivent être purgés avant d'être démontés. Répéter l'opération jusqu'à ne plus entendre le moindre bruit de succion.
9. Toujours tenir le dessus de l'amortisseur orienté vers le haut!

7. Koruyucu kapağı, gerektiğinde hava tüplerinin etrafına yerleştirin. Tüm parçalar, motor ve egzoz gibi ısı kaynaklarından en az 200 mm uzakta olmalıdır.
8. Amortisörler yerleştirilmeden önce havalandırılmalıdır. Şapırtı sesi duyulmayana kadar bu işlemi tekrarlayın.
9. Amortisörü her zaman üst kısmı yukarıyı işaret edecek şekilde tutun..

7. Posizionare la copertura protettiva attorno ai tubi dell'aria dove necessario. Tutte le parti devono essere distanti almeno 200 mm da fonti di calore come motore e scarico.
8. Gli ammortizzatori devono essere sfiatati prima del montaggio. Ripetere questa operazione fino a non sentire più il gorgoglio.
9. Tenere sempre l'ammortizzatore con la parte superiore rivolta verso l'alto!

7. Coloque la cubierta protectora alrededor de los tubos de aire donde sea necesario. Todas las piezas deben estar a una distancia mínima de 200 mm de fuentes de calor como el motor y el escape.
8. Los amortiguadores se deben descargar antes de instalarlos. Repetir esta acción hasta que deje de escucharse el ruido de sorbido.
9. Sujetar el amortiguador siempre con la parte superior hacia arriba!



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.

Your vehicle may differ from the vehicles shown in the photographs. In some cases, it may not be possible to fit specific parts in the position indicated. In this case, you are advised to identify an alternative position for the parts yourself. A condition for an alternative position is that the compressor and the parts from the control panel must remain within the dimensions of the interior (these parts must remain dry at all times).

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

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

- Consult with the customer as to where they want the inflation valves fitted.
- Use vehicle workshop manuals where necessary.
- Always follow the vehicle manufacturer's conversion instructions, unless expressly stated otherwise in this manual.
- Always tighten nuts and bolts to the specified torque.
- 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.
- Wires must not be routed above or across the battery.
- 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.
- Fit the air tubes in accordance with the colour code system used by VB-Airsuspension.
- 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 at least a 1 cm all-round clearance at maximum pressure ($P_{max} = 3.5 \text{ bar}$).
- Take the vehicle for a test drive after fitting.



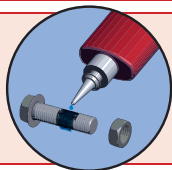
Where the warning symbol is displayed, information is given which is very important for the safety and/or health of those involved. This symbol is also used for procedures critical for the correct installation of the air suspension kit.



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



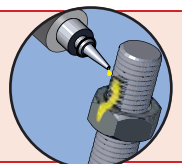
If thread locking is specified, use Loctite 243 as a minimum or a similar thread locker with the same characteristics.



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



Each bolt connection in this manual contains a tightening torque with which the bolt connection must be fixed and then marked with a durable security check paint marker. When the original nuts and bolts are reused, follow the guidelines of the vehicle manufacturer for the correct tightening torque.



3. PARTS

Item	Quantity	Description	Item number
A	2	Upper bellows support	1552040019
B	4	Spring plate	1506370224
C	2	Air spring	1505370208
D	2	Base plate ¹⁾	1552050094
E	2	Bolt M10x20x1,25	0010110020BA
F	6	Disc spring M10xØ22	0012010000
G	8	Allen screw M10x20	0010310020AA
H	4	Disc spring M10xØ16	0012010016
I	2	Air coupling Ø6 x G1/4" perpendicular	0020906021
K	4	Lock nut M8	0011008001AA
L	4	Washer M8	0011208000AA
N	2	U-bolt M8	1552010012
O	2	Spacer plate	1552020017

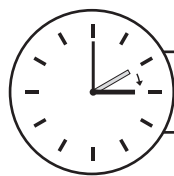
		Replacement Parts	
-	-	kit 1552030006B contains the components A t/m I	1552030006B
¹⁾ The kit identification number is shown on this part.			



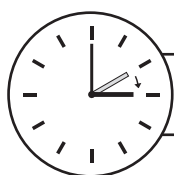
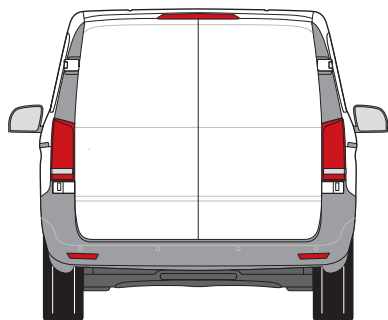
Item	Quantity	Description	Item number
1	4	Blind rivet nut M8	12908004
2	4	Spring washer M8	0011408000A
3	4	Bolt M8x25	0010108025CA
4	2	Bolt M6x16	0010106016AA
5	4	Washer M6	0011206000AA
6	2	Lock nut M6	0011006001AA
7	2	Pipe clamp Ø20	0014100006
8	2	Bracket	1552350045



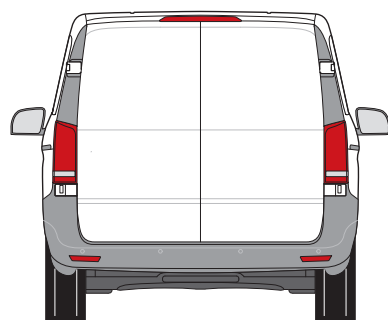
4. FITTING TIME



FITTING TIME
3 hours for Base kit



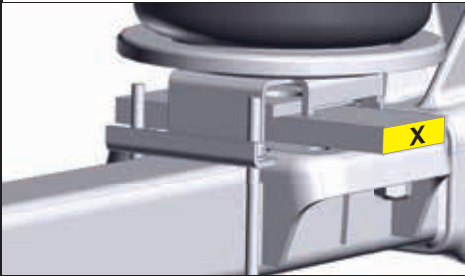
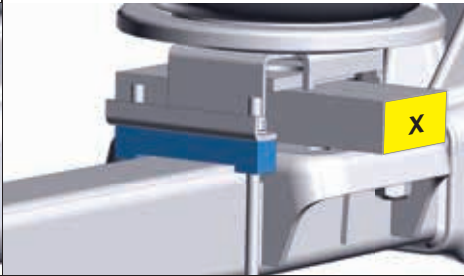
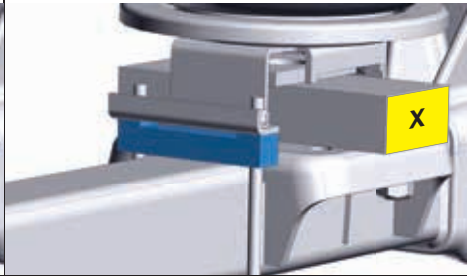
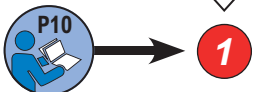
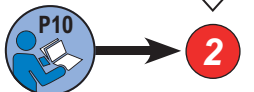
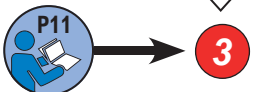
FITTING TIME
4 hours for Comfort kit



5. VEHICLE

Attention



X = 16 / 18 mm	X = 32 / 34 mm	X = 35 / 37 mm
 	 	 
		
		

6. KIT INSTALLATION

1. Support the vehicle and the axle properly.
2. Remove the bump stops.



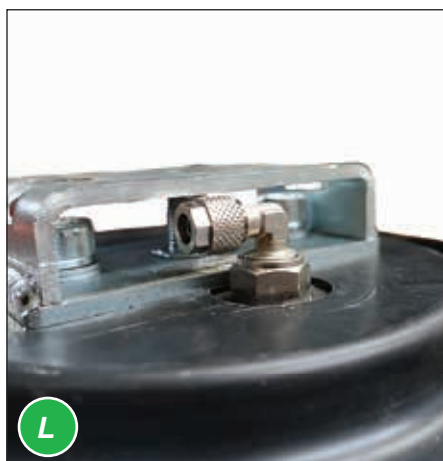
3. Slide the handbrake cable clips back.

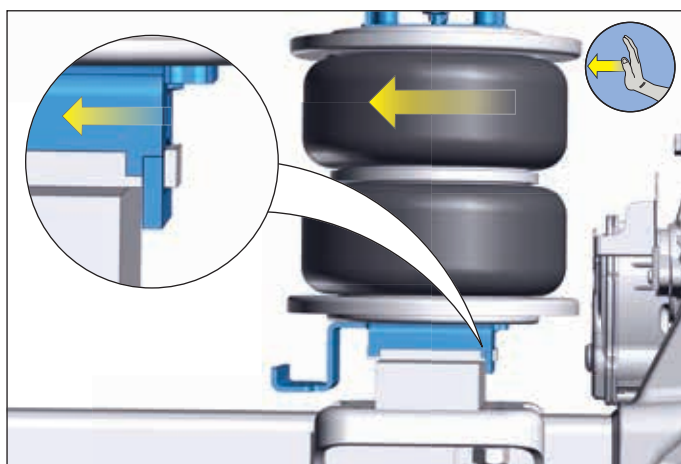
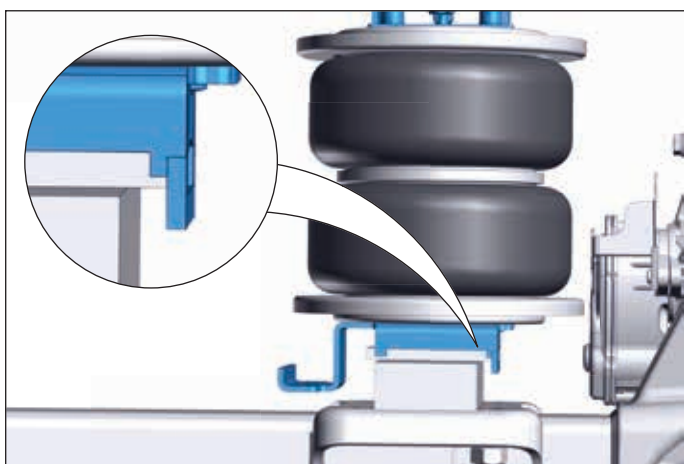
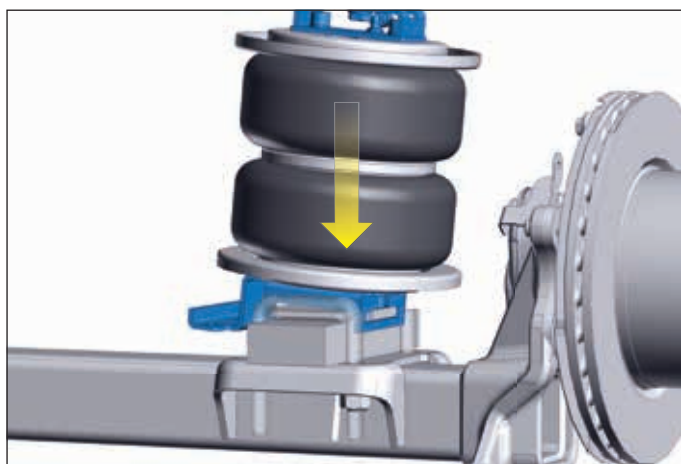
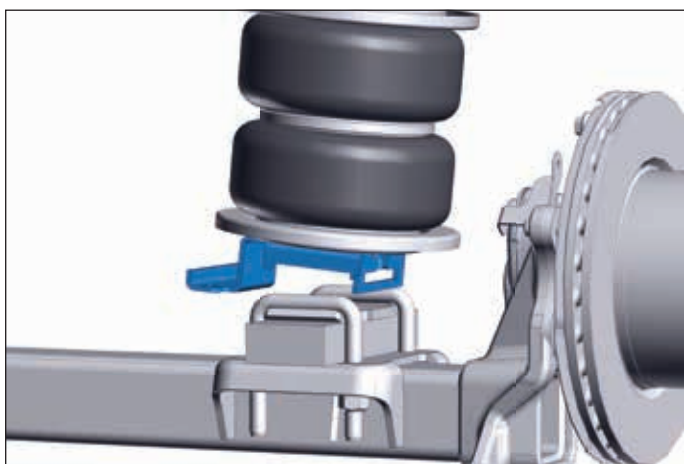


4. Fit the air tubes to the air springs.
5. Connect the green air tube to the left air spring.
6. Connect the black air tube to the right air spring.



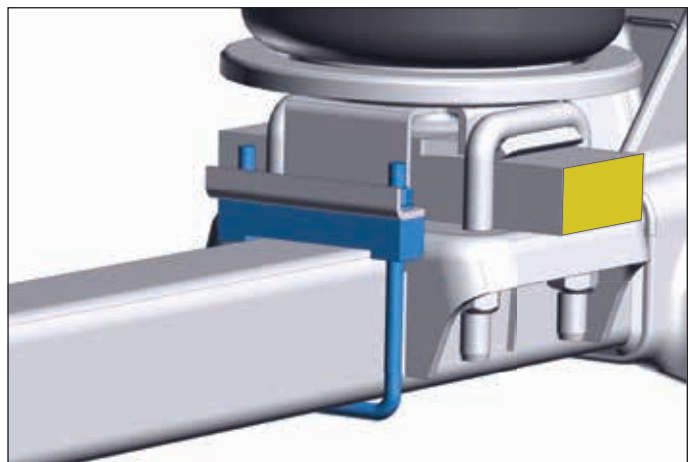
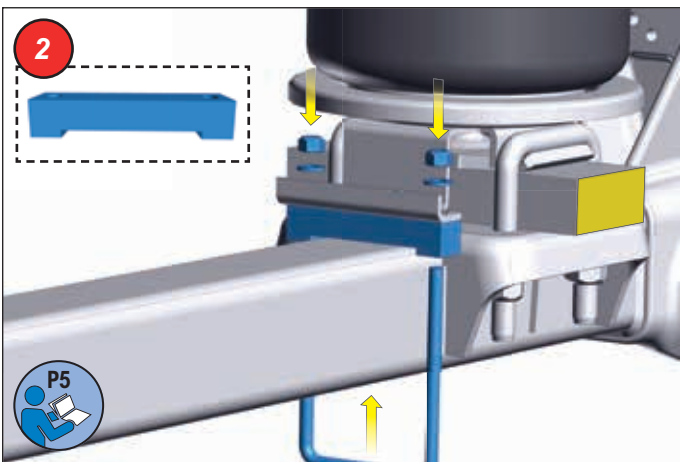
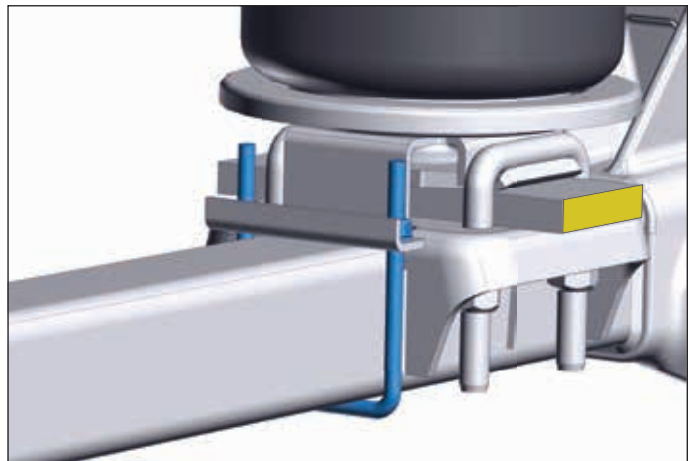
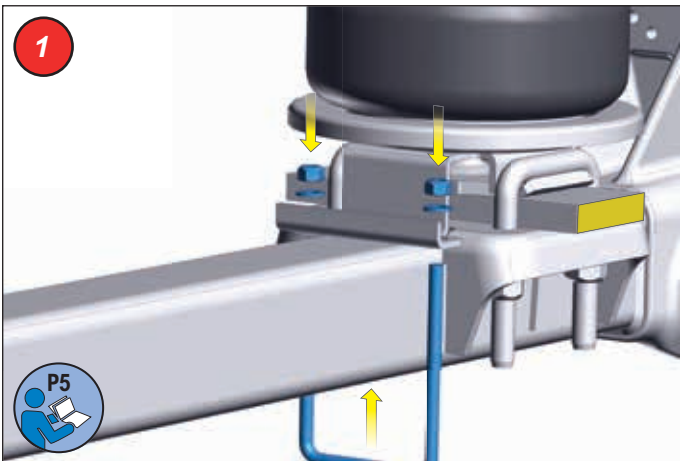
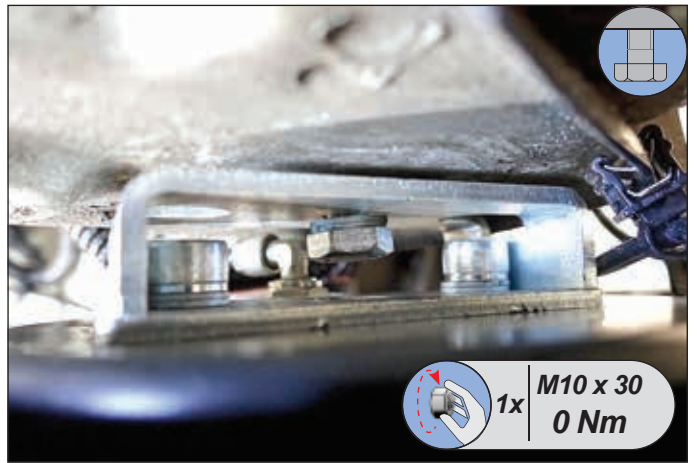
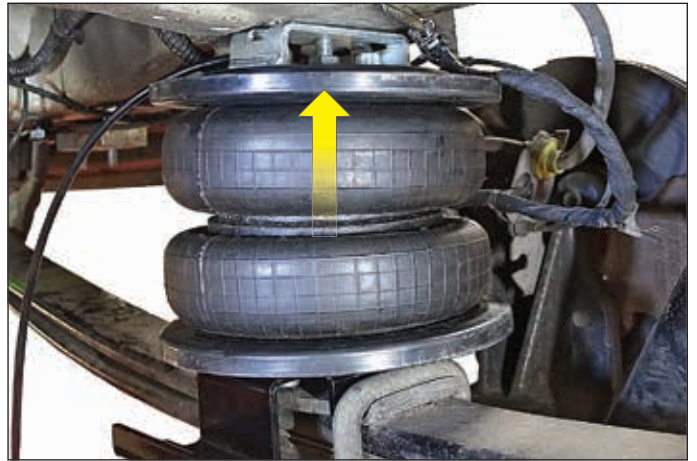
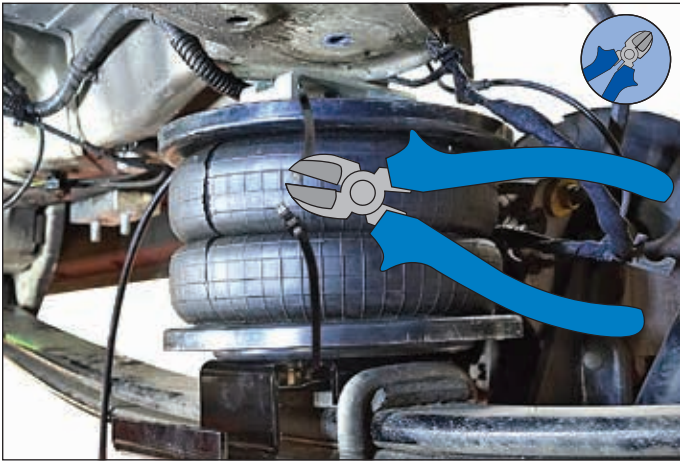
**Wrap the hose around the air spring.
If necessary, secure the hose in place with
some adhesive tape.**

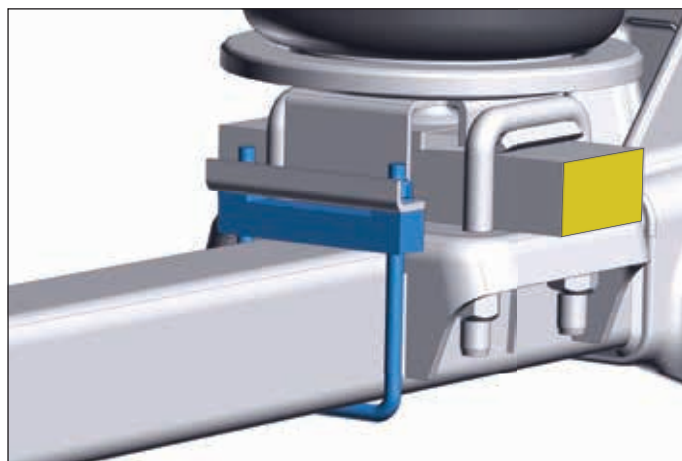
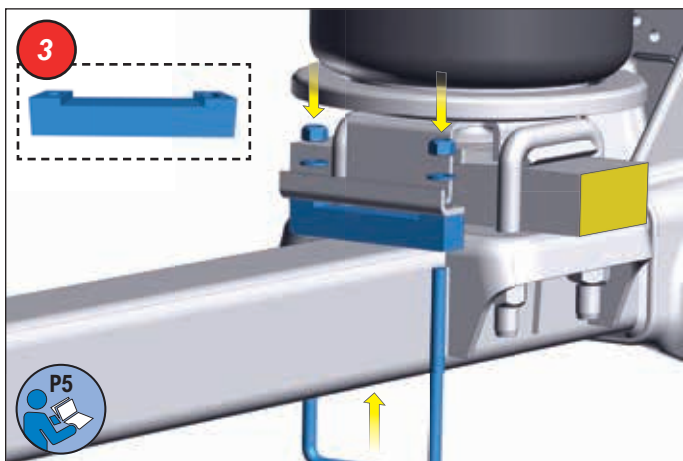




7. Cut off the tie-wraps so that the air spring takes up its position.
8. Screw the air spring onto the chassis in the place where the bump stop previously sat.
9. Fit the lower bellow supports.







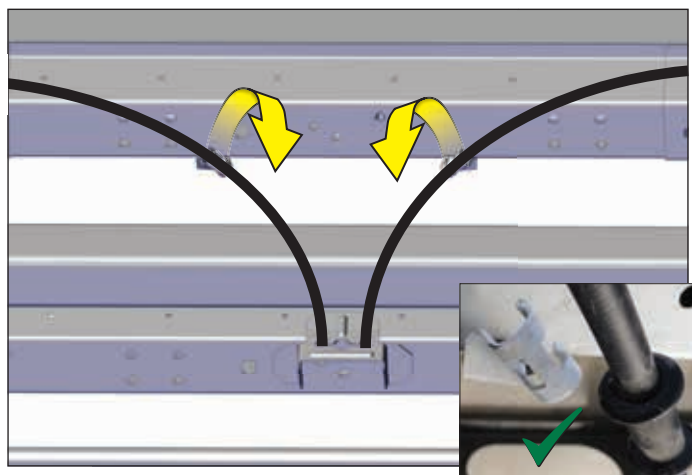
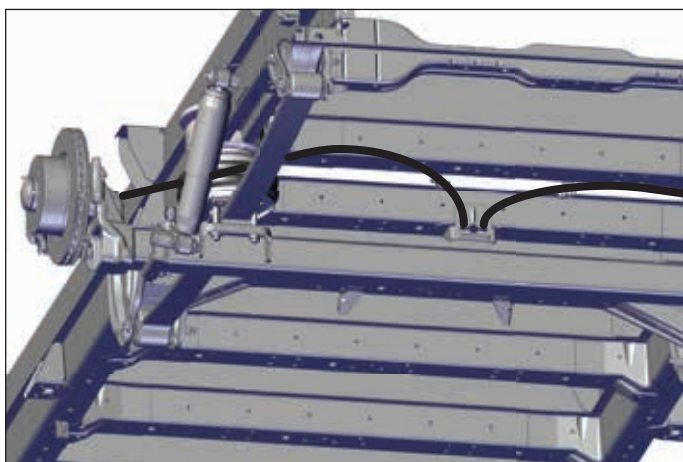
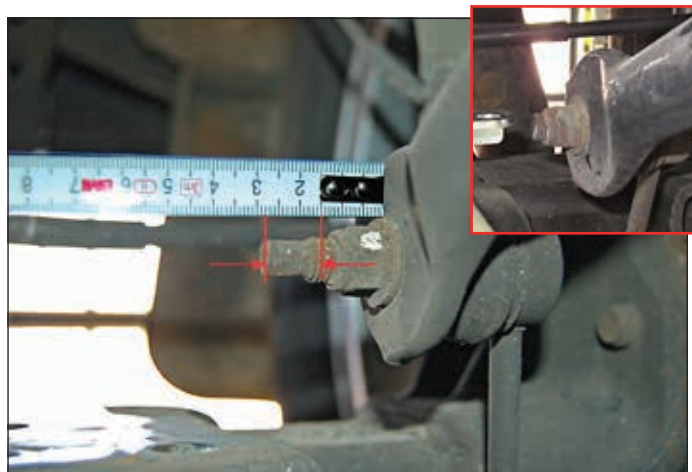
2 x U-bolt	M8
4 x lock nut	M8
4 x washer	M8
	8 Nm

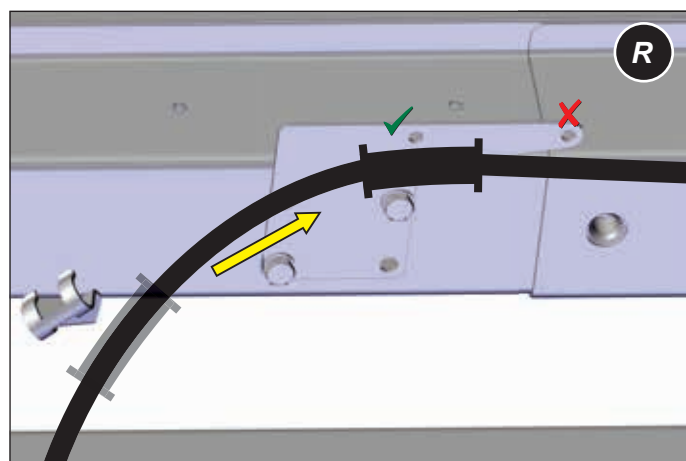
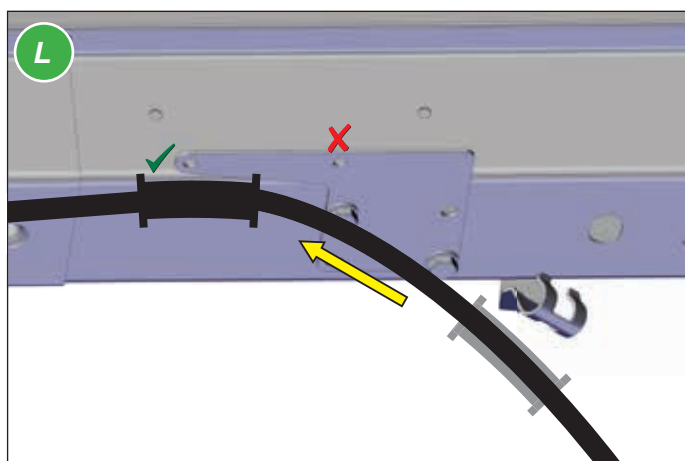
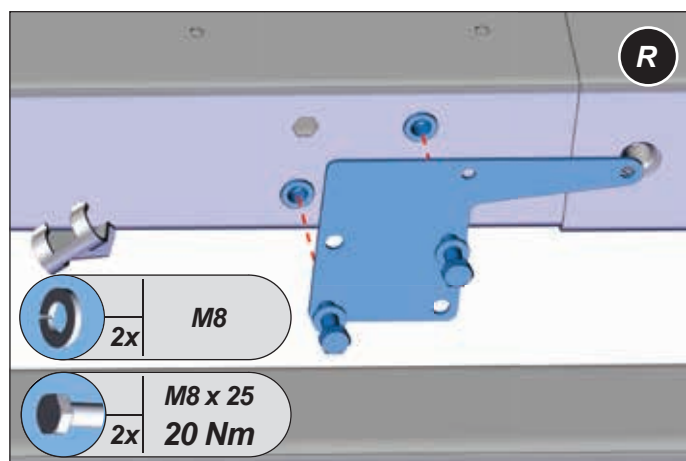
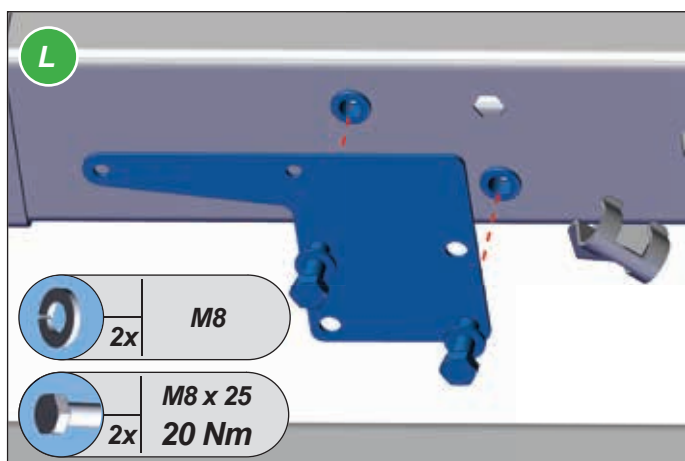
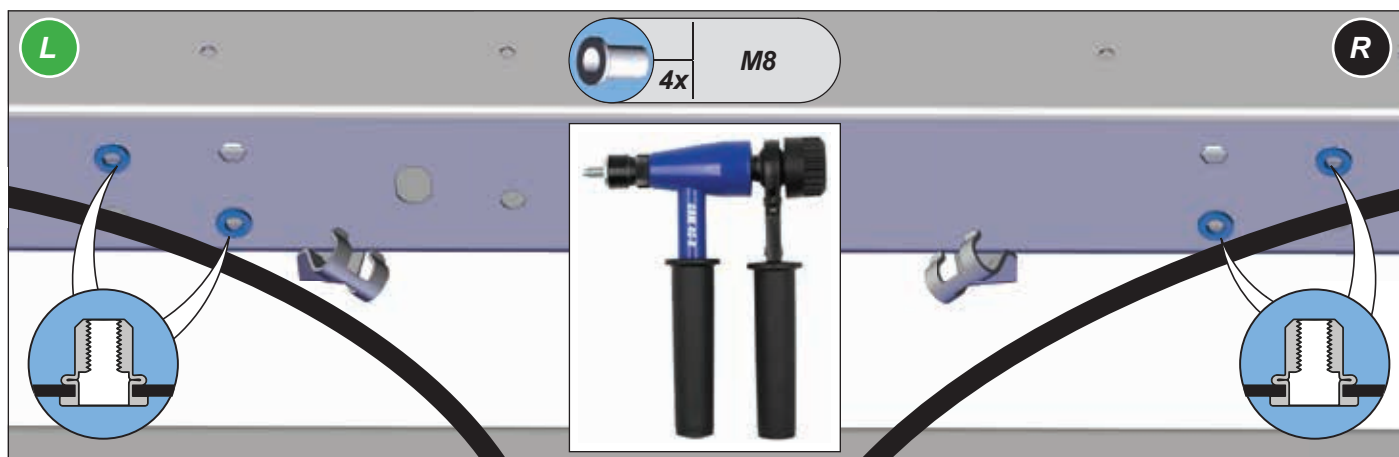
10. Tighten the bolt at the top of the air spring.

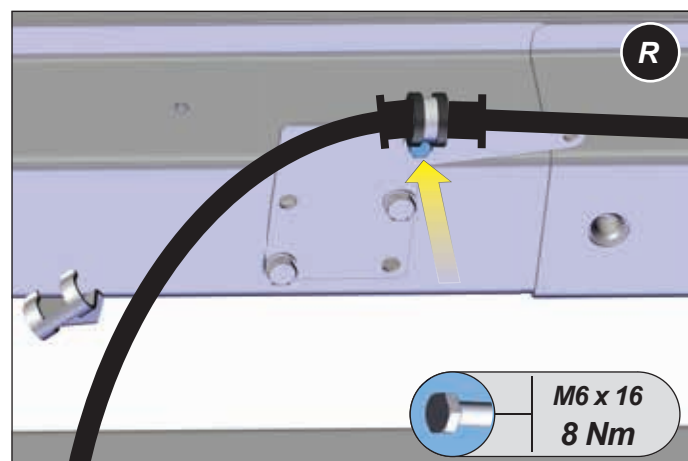
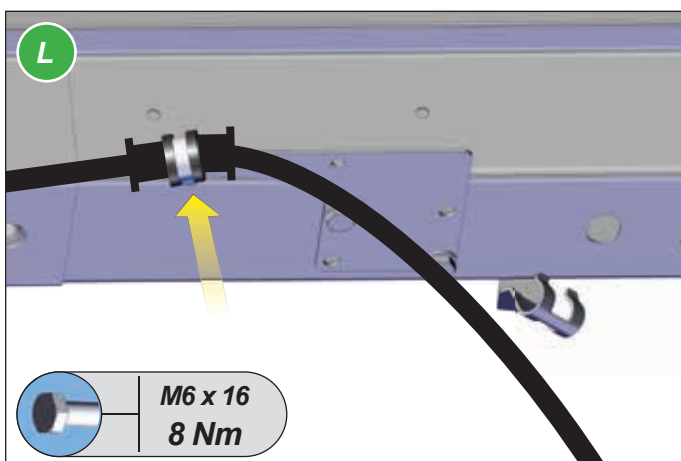
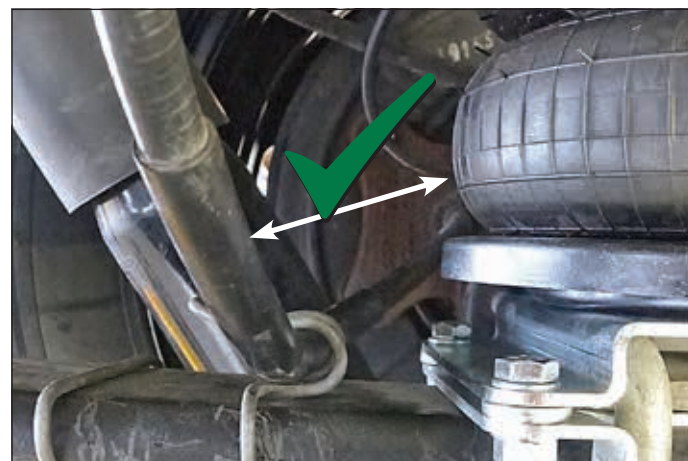
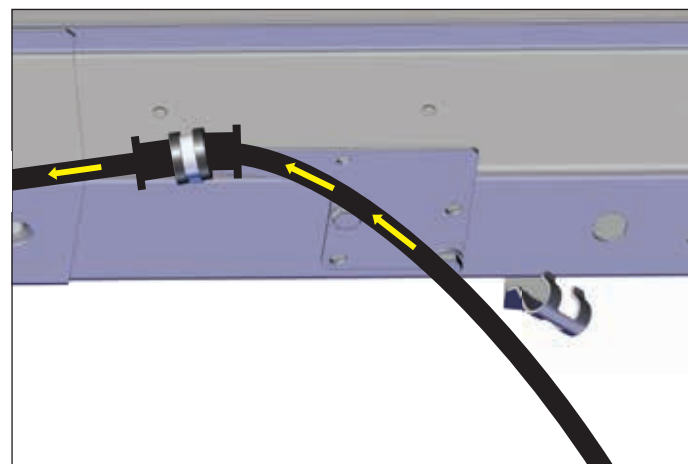
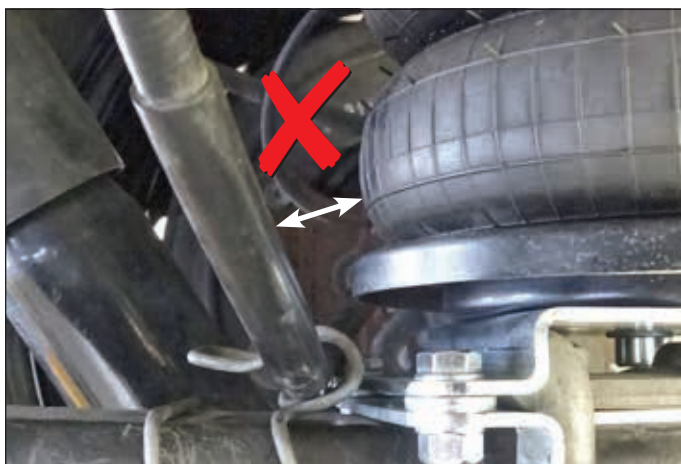
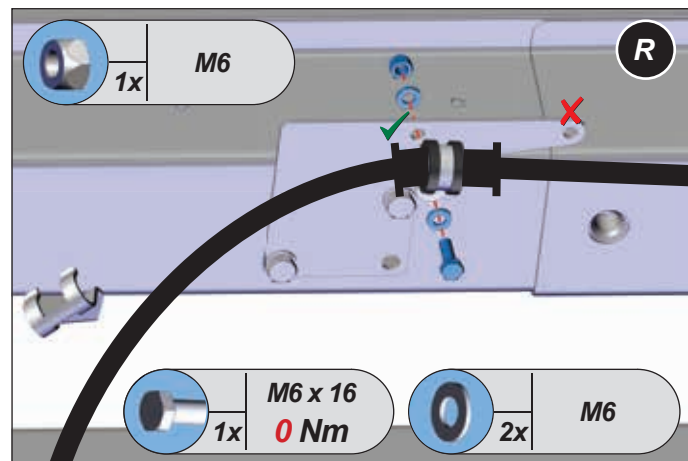
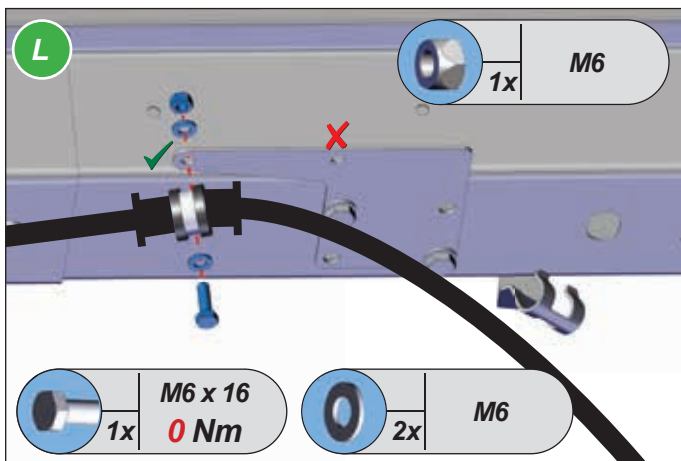


1 x bolt	M8
	8 Nm

11. If the vehicle has a stabiliser arm, cut off a section (± 1.5 cm) of the bolt used to secure the torque arm.









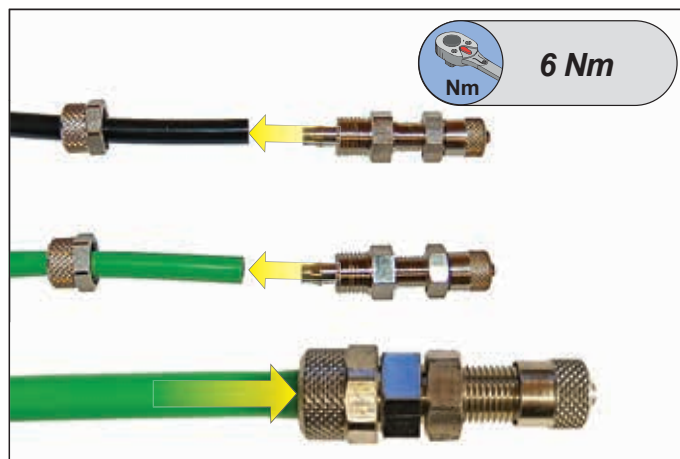
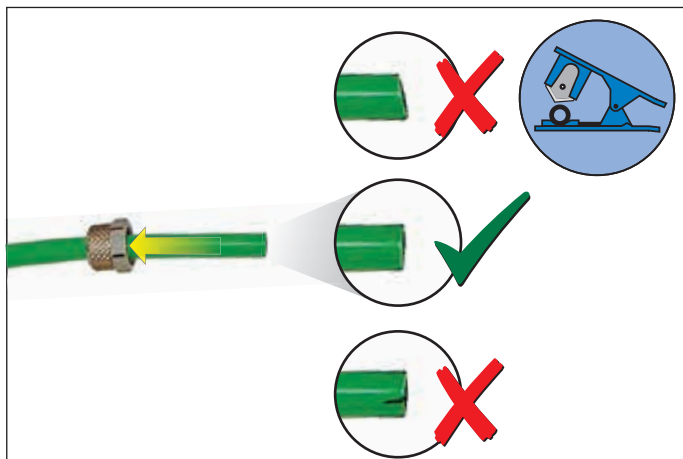
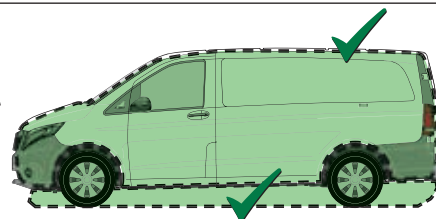
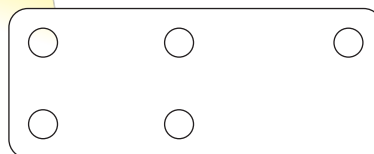
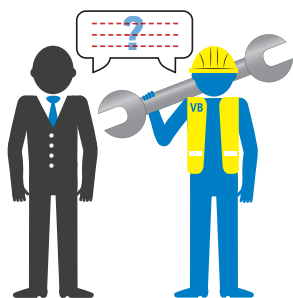
**If you are also fitting the comfort kit,
follow the fitting instructions in the next
section.**

12. Fit the inflation valves in the position agreed with the customer.



12

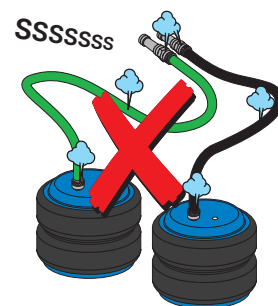
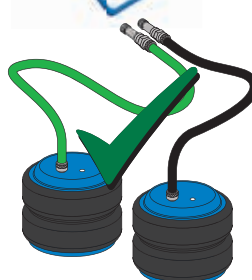
- | | |
|-----------------------------|-----|
| 2. Fitting instructions | P 6 |
| 2. Montagevoorschriften | P 6 |
| 2. Montageanweisungen | P 6 |
| 2. Instructions de montage | P 6 |
| 2. Istruzioni di montaggio | P 6 |
| 2. Montaj yönergeleri | P 6 |
| 2. Instrucciones de montaje | P 6 |



13. Route the air tubes to the inflation valves.
14. Connect the air tubes to the air springs.
15. Secure the air tubes under the vehicle using tie-wraps.
16. Check the system for air tightness.
17. Affix the bellows pressure sticker close to the inflation valves.



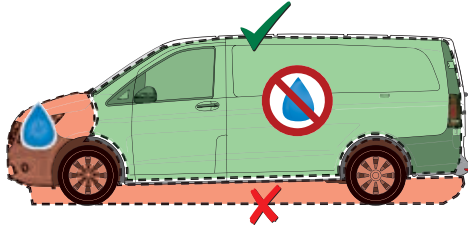
16



7. FITTING THE COMPRESSOR



Install the compressor in the vehicle at all times.

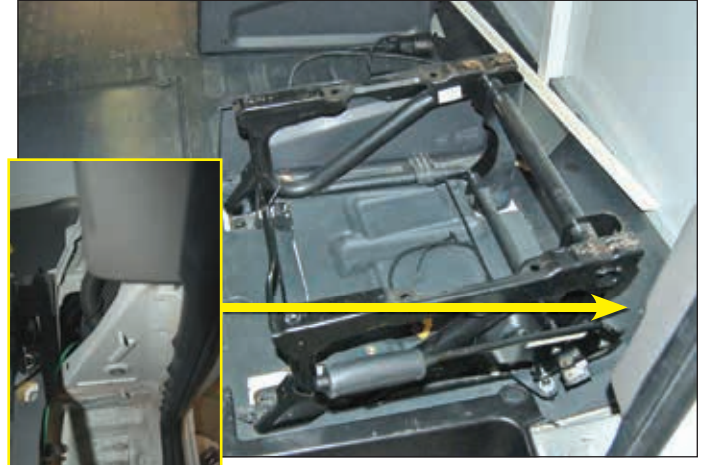


If a comfort kit is fitted, the inflation valves from the basic kit are not needed. In this case, the inflation valves must NOT be fitted.

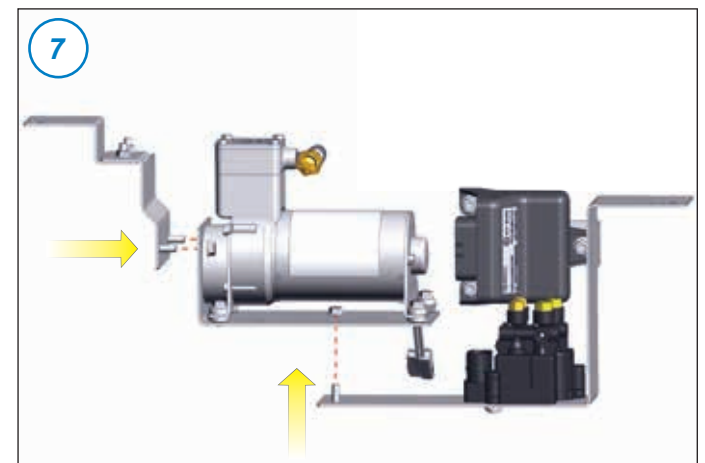
1. Route the green and black air tubes to the fuel tank filling neck.
2. Take the seat cover off the driver's seat (if fitted).
3. Remove the driver's seat.
4. Remove the entry trim.
5. Remove the cover of the B-pillar.



An alternative route to the inside of the cab for the air tubes is via the battery housing. For this purpose, drill a hole in the battery housing.



6. Route the air tubes to the inside of the cab.
7. Assemble the compressor as shown.



3 x flange nut

M5



5 Nm

8. Fit the compressor.

2 x bolt

M8 x 16

2 x lock nut

M8

2 x washer

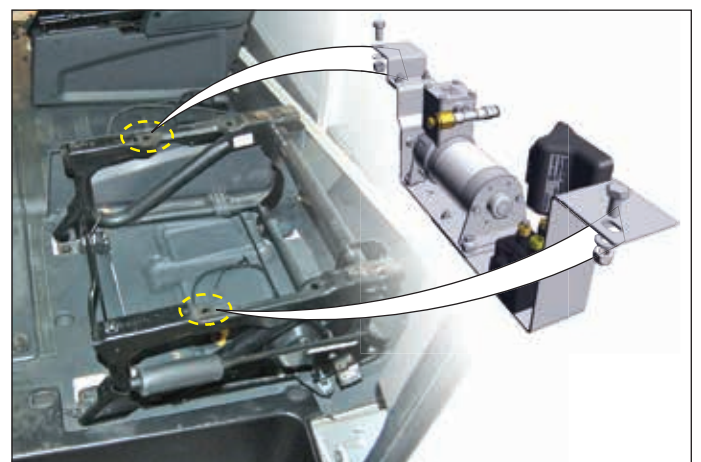
M8

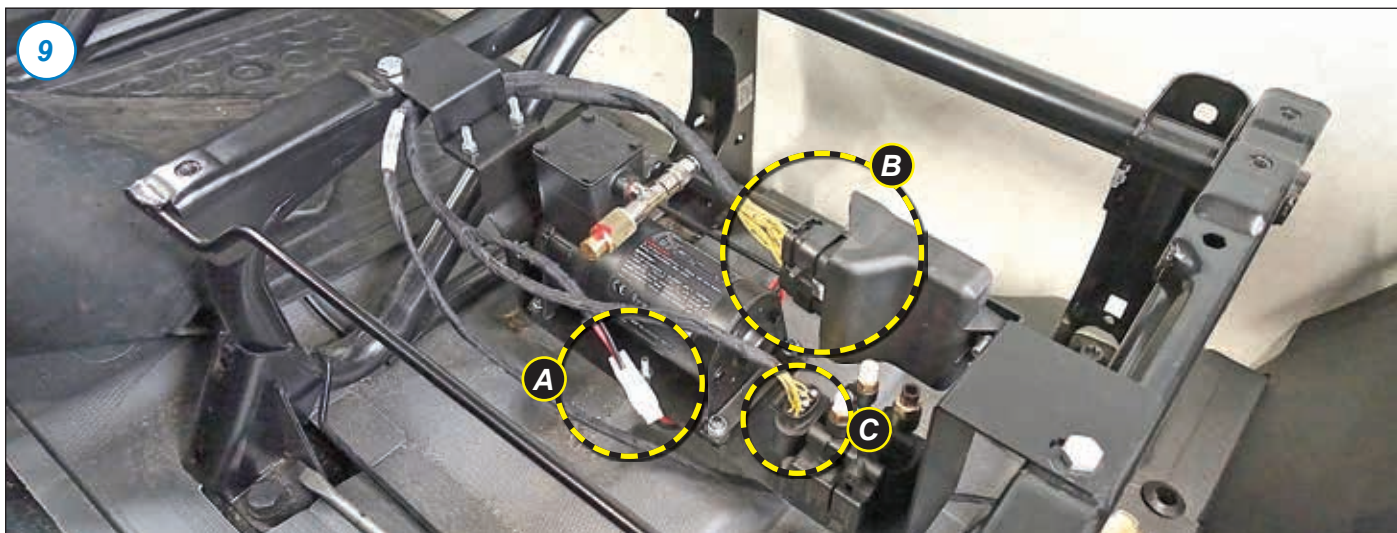


21 Nm



Do not fit a washer between the bolt head and the seat frame.



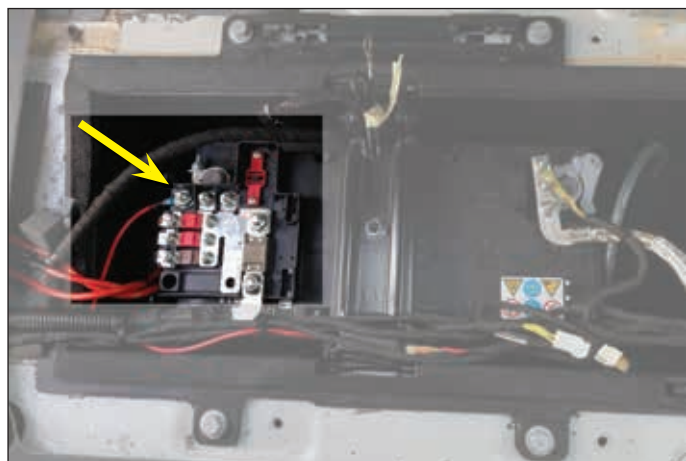


9. Connect the supply cable to the compressor. (A, B, C)
10. Take the cover plate off the battery housing.
11. Route the compressor supply cable to the battery.



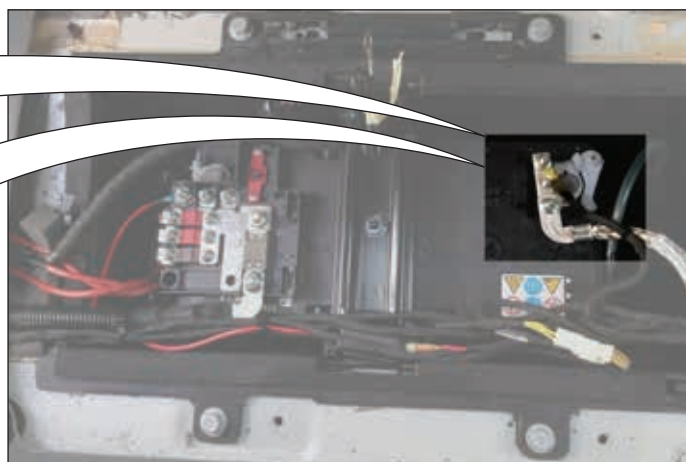
See Section 9 for an alternative mounting location for the compressor.

12. Connect the red wire to the connection marked on the positive battery terminal. (+).



If there are 2 batteries, always use the original starter battery and not the accessories battery.

13. Connect the black wire to the negative battery terminal (-)



With Relais:

+ 8 mm

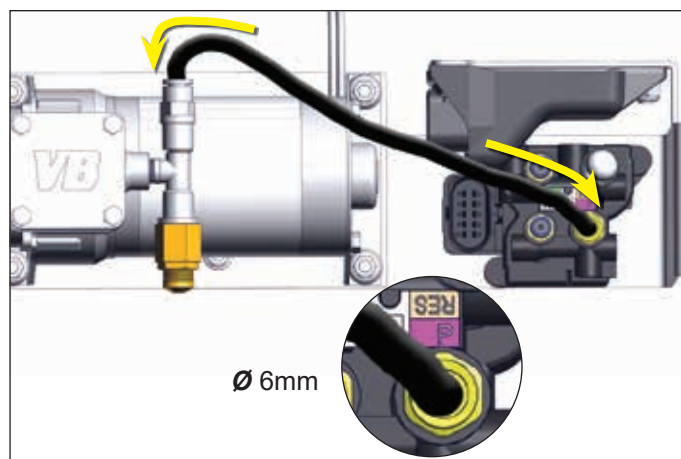
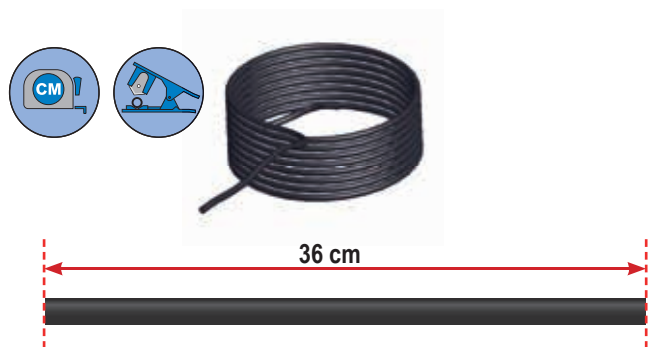


Without relays:

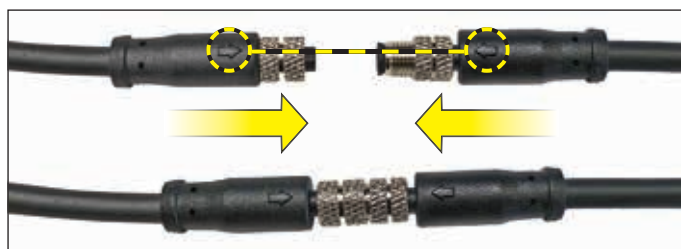


8. CONNECTING THE DIGITAL CONTROL UNIT

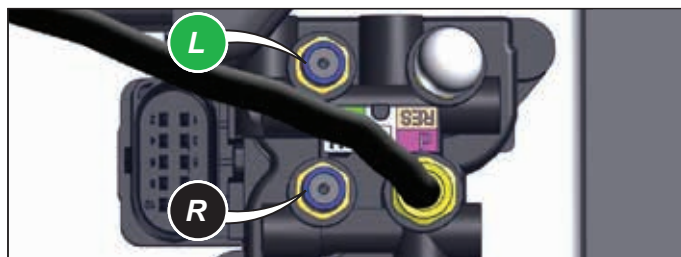
1. Connect the black air tube to the compressor.



2. Connect the digital control unit connector to the supply cable connector.



3. Connect the green and black air lines from the air bellows to the valve block.



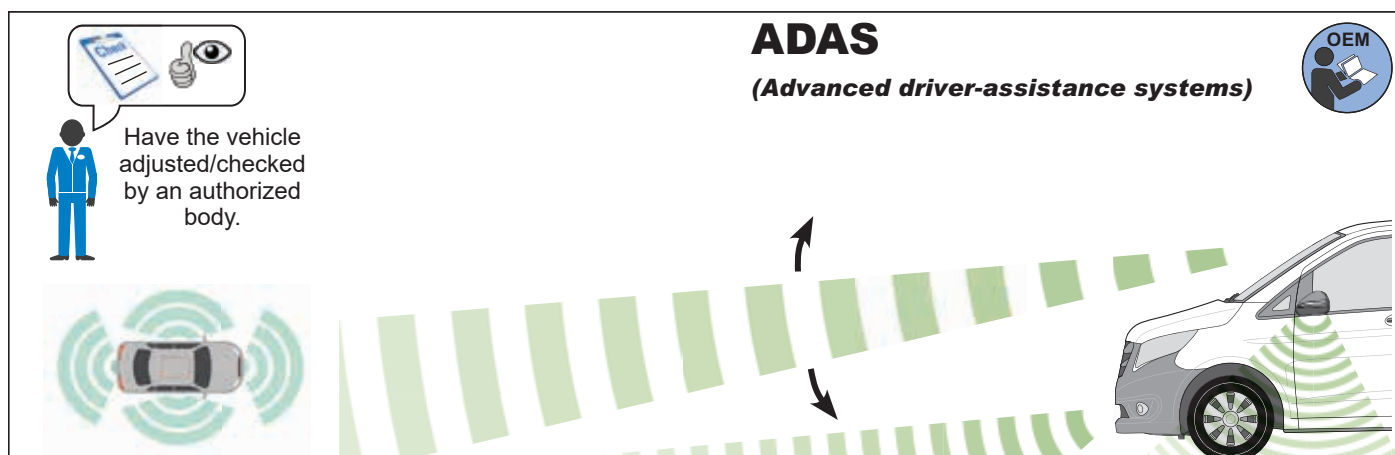
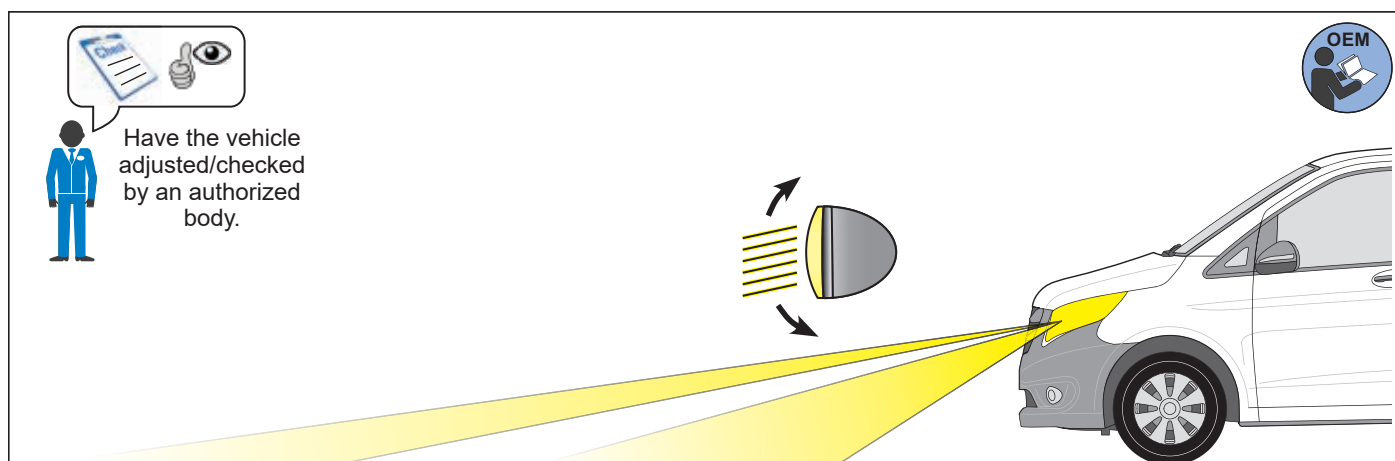
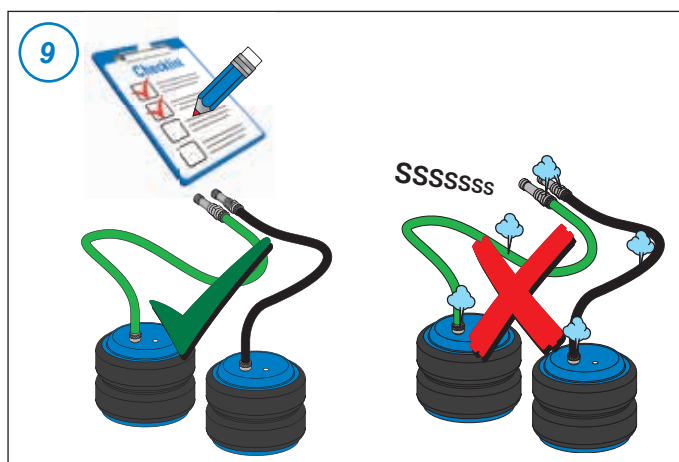
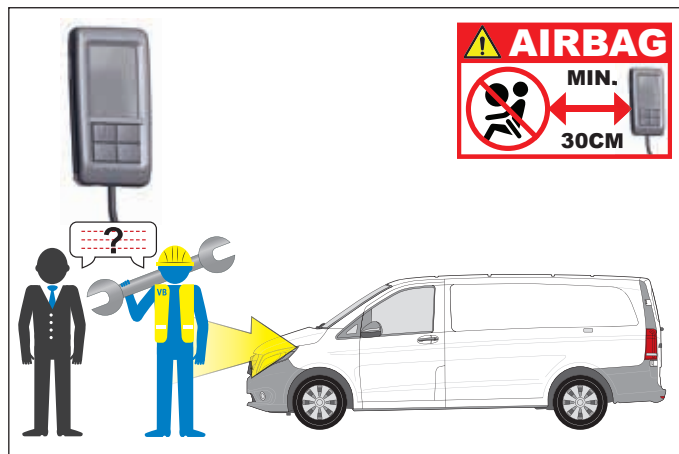
4. Fit the fuse.



5. Identify a suitable location to install the digital control unit.

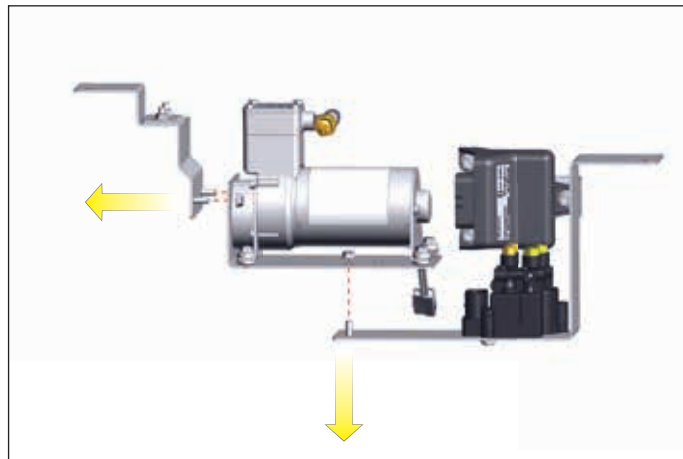


6. Place the digital control unit in the holder.
7. Ensure the connector is not under tension.
8. Check the system for function.
9. Check the system for air tightness.
10. Secure the air tubes under the vehicle using tie-wraps.
11. Refit all removed parts.
12. Affix the bellows pressure sticker close to the control panel.
13. Apply the bellows pressure stickers according to the instructions in chapter "Add the bellows pressure stickers" (P22).

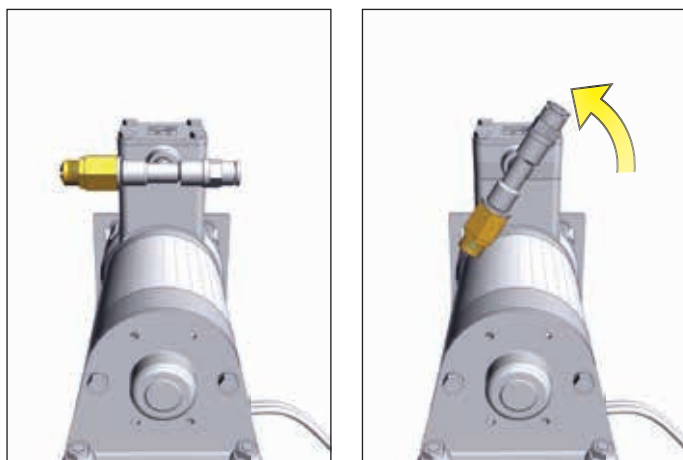


9. ALTERNATIVE COMPRESSOR LOCATION

1. Rotate the air coupling.



2. Remove the brackets.



3. Apply adhesive (VB item number 5400700003) to the bracket as shown.



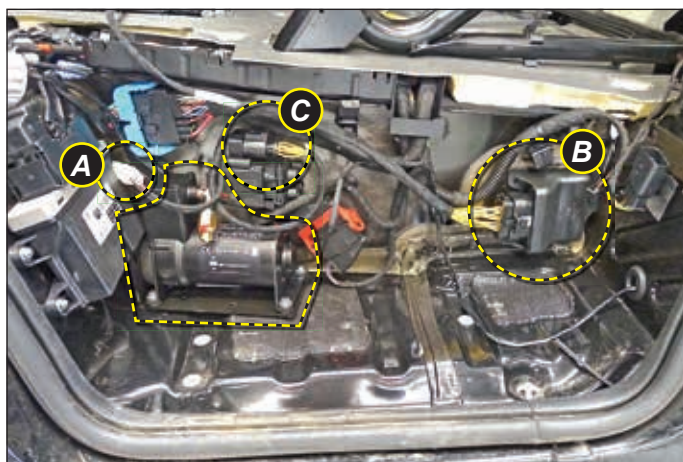
Thoroughly clean and remove any grease from the surface before applying the adhesive.

4. Apply adhesive in the area where the compressor will be fitted.
5. Place the compressor on the running board. The adhesive must be allowed to harden for at least 5 hours.



Thoroughly clean and remove any grease from the surface before applying the adhesive.

Continue installation as described in Section 8.



10. APPLY THE BELLOW PRESSURE STICKERS

BASE KIT

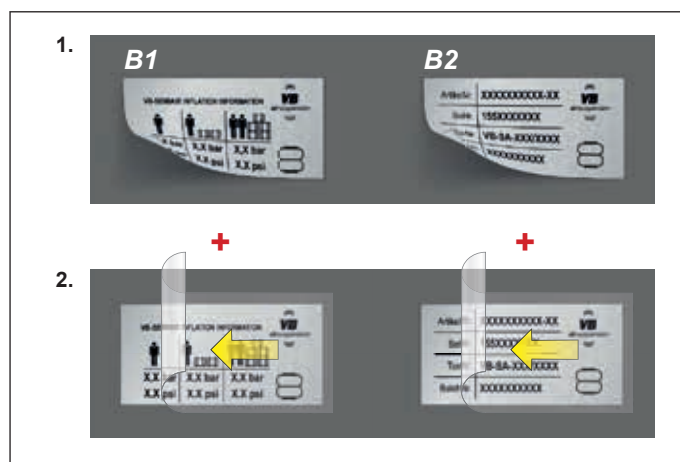
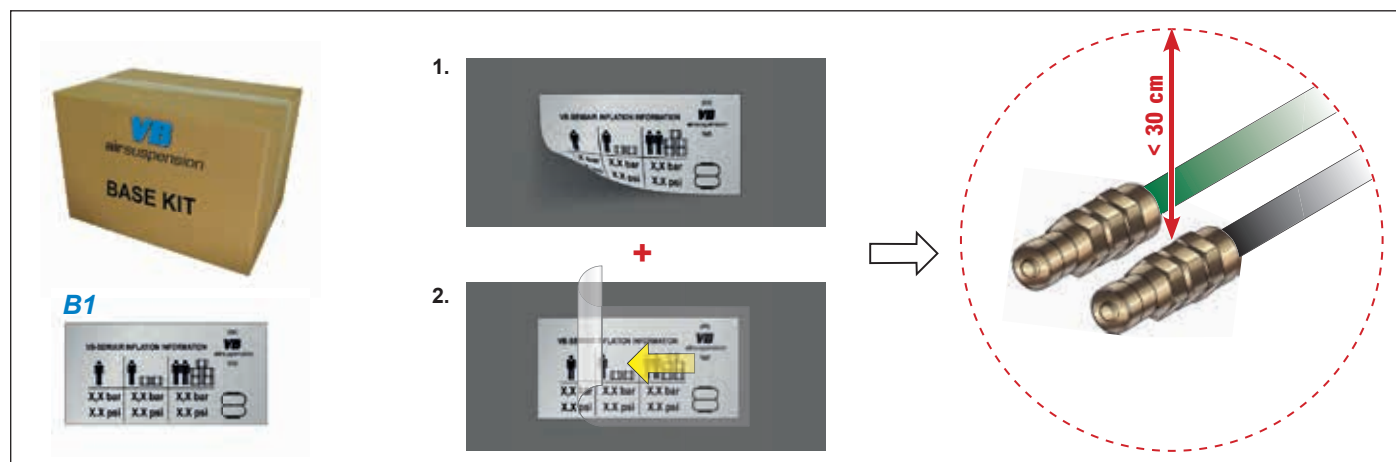
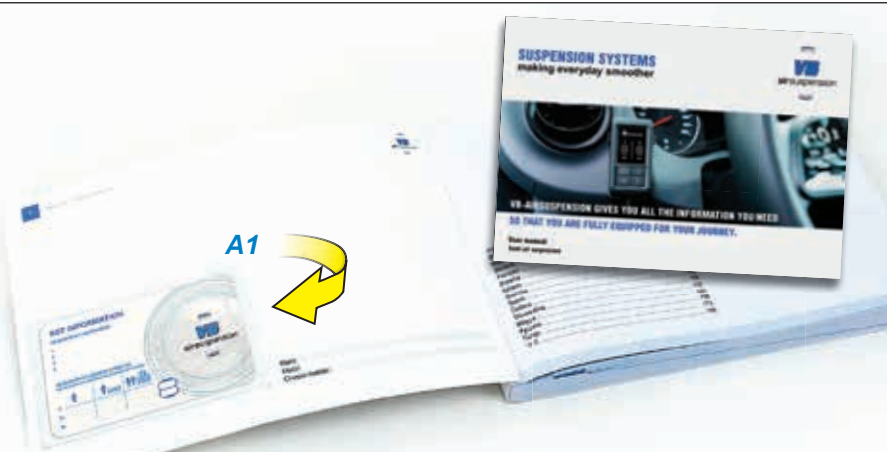
A1 (1x)



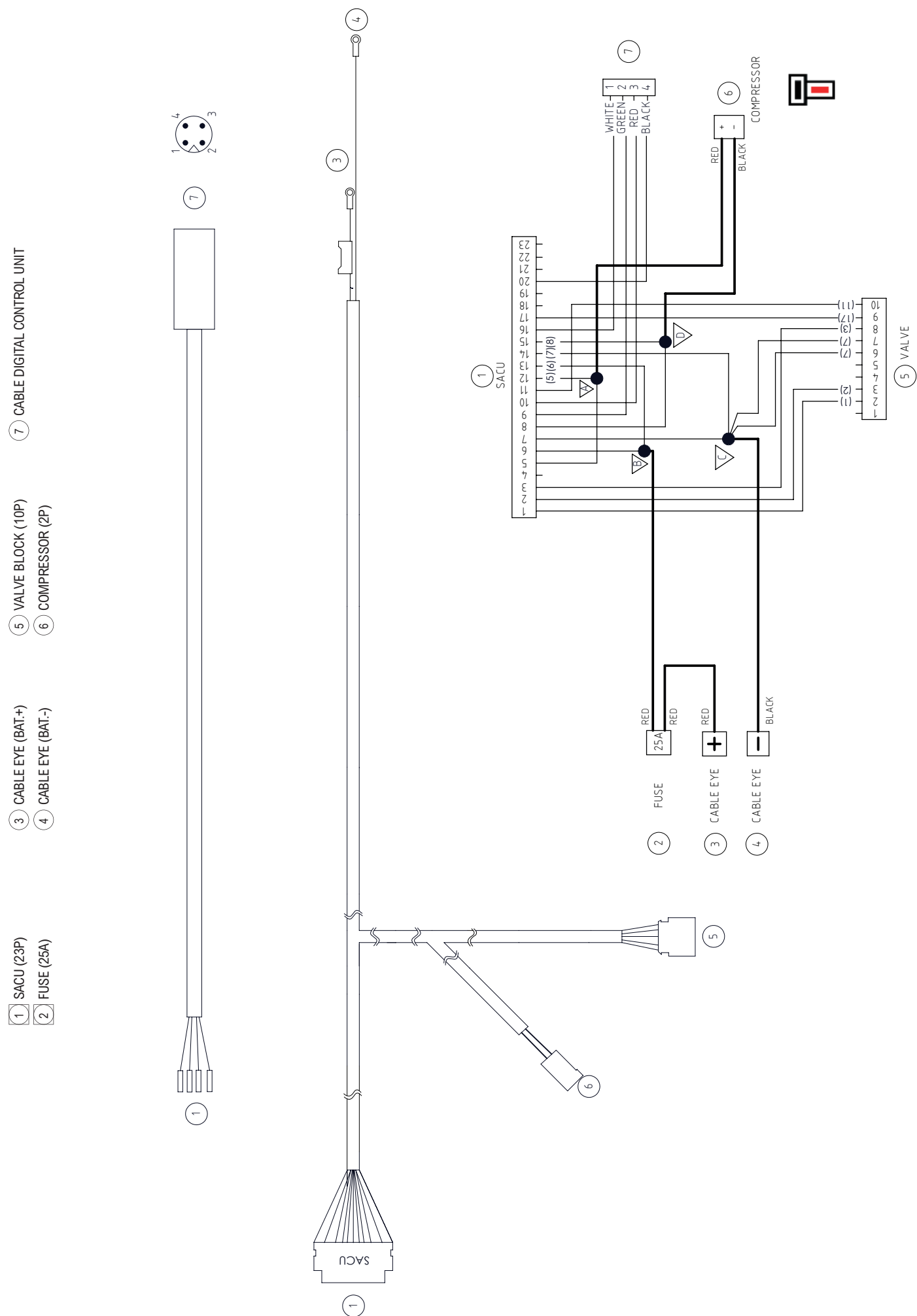
B1 (2x)



B2 (1x)



11. ELECTRICAL DIAGRAM



This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

13. CHECKLIST

EN

Checklist



- Bolts tightened to correct torque.
- System checked for air tightness.
- Headlamp adjustment checked.
- If prescribed, have ADAS (Advanced Driver Assistance Systems) recalibrated.

OK

☐
☐
☐
☐

NL

Controlelijst



- Bouten aangedraaid tot het juiste aanhaalmoment.
- Systeem op luchtdichtheid gecontroleerd.
- Afstelling van de koplamp gecontroleerd.
- Indien voorgeschreven ADAS (Advanced Driver Assistance Systems) opnieuw laten kalibreren.

OK

☐
☐
☐
☐

DE

Checkliste



- Schrauben mit ordnungsgemäßem Drehmoment festgezogen.
- System auf Luftdichtigkeit geprüft.
- Scheinwerfereinstellung überprüft.
- Wenn vorgeschrieben ADAS (Advanced Driver Assistance Systems) neu kalibrieren lassen.

OK

☐
☐
☐
☐

FR

Liste de contrôle



- Boulons serrés au couple correct.
- Contrôle de l'étanchéité à l'air du système.
- Contrôle du réglage du phare.
- Si nécessaire, faire recalibrer le système avancé d'assistance au conducteur (ADAS).

OK

☐
☐
☐
☐

TR

Kontrol listesi



- Civatalar doğru tork ile sıkıldı ve işaretlendi.
- Sistem, hava sızdırmazlığı açısından kontrol edildi.
- Far ayarı kontrol edildi.
- Gerekirse ADAS'ı (Gelişmiş Sürücü Destek Sistemleri) yeniden kalibre ettirin.

OK

☐
☐
☐
☐

IT

Liste de contrôle



- Bulloni serrati alla coppia corretta
- Sistema controllato per la tenuta all'aria.
- Controllo regolazione fari.
- Se prescritto, avere ADAS (Sistemi avanzati di assistenza alla guida) ricalibrato.

OK

☐
☐
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ES

Kontrol listesi

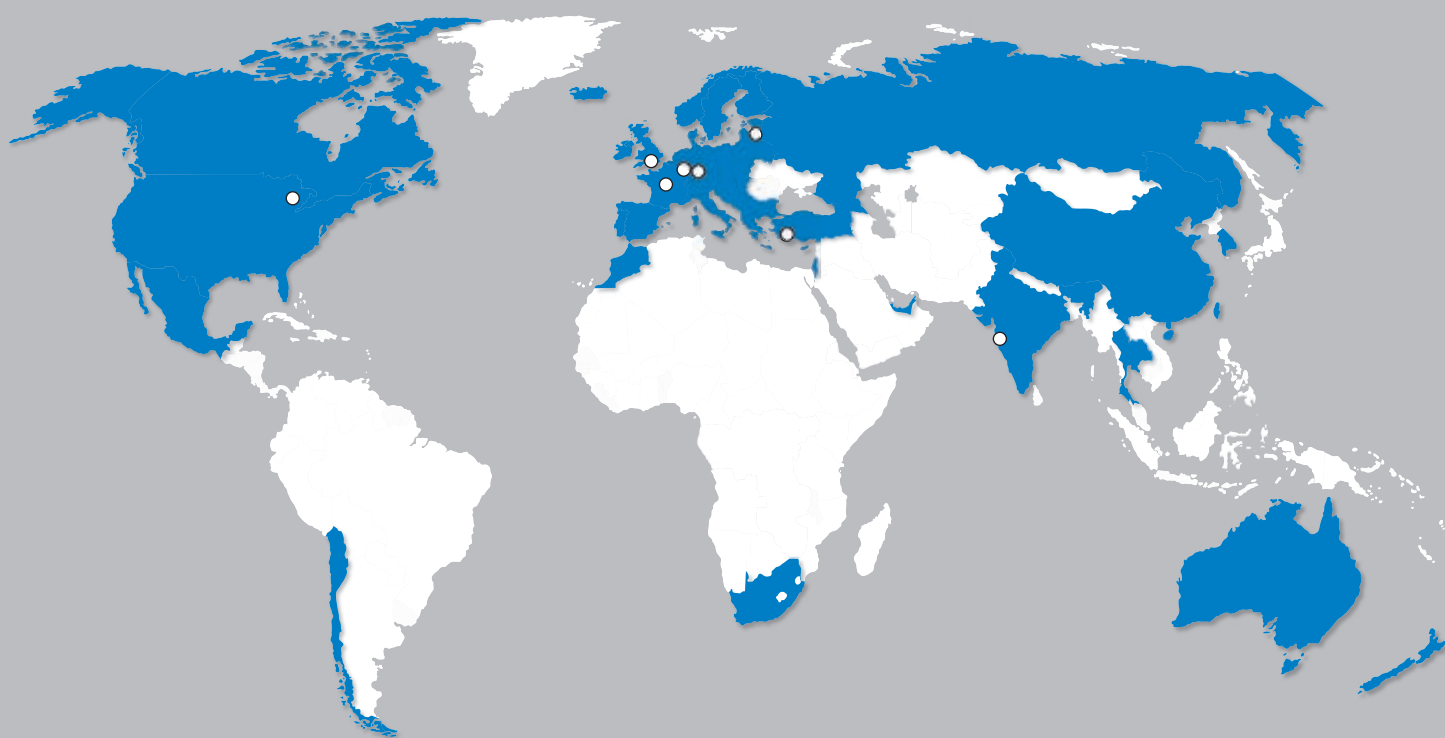


- Pernos apretados al par correcto.
- Sistema verificado para estanqueidad.
- Comprobación del ajuste de los faros.
- Si está prescrito, tenga ADAS (sistemas avanzados de asistencia al conductor) recalibrado.

OK

☐
☐
☐
☐

Lined paper template with horizontal ruling lines.



VB-AIRSUSPENSION,

INCREASED COMFORT, BETTER DRIVEABILITY, MORE SAFETY.

