

# an **ANK** company

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www.driveriteair.com

DR.05.013355

**MERCEDES SPRINTER 5T** 

#### INSTALLATION INSTRUCTIONS







## Introduction

The purpose of this publication is to assist with the installation of the Drive-Rite Semi-Air suspension kit.

It is important to read and understand the entire installation guide before beginning installation or performing any maintenance, service or repair. The information here includes a hardware list and step-by-step installation information.

Drive-Rite reserves the right to make changes and improvements to its products and publications at any time. Contact Drive-Rite at +353 1 8612 632 or visit us online at www.driveriteair.com for the latest version of this manual.

#### **Important Safety Notice**

- The installation of this kit does not alter the Gross Vehicle Weight Rating (GVWR) or payload of the vehicle.
- Check your vehicle's owner's manual and do not exceed the maximum load listed for your vehicle.
- This kit should not be used to carry any greater load than manufacturers stated GVW.
- When the kit has been installed, please ensure there is adequate clearance (25mm) around the airspring so the airspring does not come in contact with any other parts.

#### **Precautions**

Never exceed the maximum and minimum recommended pressure limits:

Minimum Pressure

1 Bar (14.5 p.s.i)

Maximum Pressure

7 Bar (100 p.s.i)

NEVER DRIVE WITH DEFLATED AIRSPRINGS



# **Kit Contents**

# **→** Hardware List – DR.05.013355-C-0

Item Number	Part Number	Item Name	Thumbnail	Quantity
1	DRV-8434	HARDWARE BRACKET		1
2	DRV-8445	AIR SPRING LOWER PLATE		2
3	DRV-8447	HW BRACKET LOLLIPOP		1
4	DRV-8448	SPRINTER 5T SUBFRAME RHS		1
5	DRV-8449	SPRINTER 5T SUBFRAME LHS		1
6	DRV-8450	PANHARD ROD	•	1
7	DRV-8472	HEIGHT SENSOR UPPER BRACKET LEFT HAND SIDE		1
8	DRV-8473	HEIGHT SENSOR UPPER BRACKET RIGHT HAND SIDE		1
9	DRV-8474	HEIGHT SENSOR ARM		2



ГТ	1	T	T	
10	DRV-8475	HEIGHT SENSOR LOWER BRACKET LEFT HAND SIDE		1
11	DRV-8476	HEIGHT SENSOR LOWER BRACKET RIGHT HAND SIDE		1
12	DRV-8477	PANHARD ROD BRACKET		1
13	DRV-8479	RESERVOIR RBACKET	14	1
14	DRV-8481	RESERVOIR BRACKET INNER		2
15	DRV-8482	RESERVOIR BRACKET OUTER		2
16	DRV-8485	AIR SPRING BOLT SPACER		2
17	DRV-7299	CHASSIS SUPPORT		2
18	DR.07.015422	1T14C-3		2
19	DR.09.013355	MERCEDES SPRINTER 5T TRAILING ARM		2
20	DR.41.010625	1/4 NPT - 6mm STRAIGHT		3



21	DR.41.034254	M12 x 1.75 NYLOC NUT W S WASHER	2
22	DR.42.013069	3/8"-16 UNC x 3/4" Flanged Hex Bolt	4
23	DR.42.013916	M12x95-1096921-ZF	2
24	DRV-7444	M5 BOLTS/SF	8
25	DR.43.010014	M6 NYLOC NUT	3
26	DRV-7442	EJOT PT SCREW K60 X	2
27	DRV-7445	M5 HEX NUT	8
28	DRV.7405.1	VALVE BLOCK 3x2/2	1
29	DR.12.011210	LFK21 BAR COMPRESSOR A2936	1
30	DR.12.011214	COMPRESSOR ISOLATORS x3	1
31	DR.12.011401	AMK MOUNTING BRACKET R	1



32	DR.12.011402	AMK MOUNTING BRACKET LEFT	1
33	DR.12.011405	AMK MOUNTING BRACKET END SHORT	1
34	DR.42.013919	M16 X 116 FLANGE BOLT	1
35	DR.42.014053	M10x1.25x30-1096921-ZF	4
36	DR.43.010129	M16 X 1.5 FLANGE NUT	1
37	DR.43.013997	M10 x 1.25 NYLOC NUT WS WASHER	6
38	DR.44.010013	M10 SUBFRAME WASHER	6
39	DR.42.013342	1/2-13 UNC X 4 INCH SOCKET HEAD BOLT	2
40	DR.43.013995	M6 FLANGE NUT	2
41	DRV-7446	M6 BOLTS/SF	3
42	DR.41.013036	6MM TO 6MM STEM ELBOW	4



43	DR.42.010185	M10 X 90 SOCKET HEAD CAP SCREW	0	2
44	DR.45.010168	M8 rivnut		1
45	DRV-7436	FILTER CAP		1
46	DRV-7437	AIR FILTER		1
47	DR.50.010010	EDGE PROTECTORS		4
48	DRV-7447	M6 HEX NUT 7703034260		1
49	DR.50.017411	RENAULT X62 KIT BOX		1
50	DR.45.019037	CABLE TIES		25
51	DR.45.019065	0.7-3.0mm EDGE CLIP		5
52	DRV-7439	PUSH-IN CABLE TIE MOUNTS		8
53	DR.37.01407	3.0-6.0mm EDGE CLIP		5
54	DRV-7434	CONDUIT X62		10
55	DR.50.010020	PACKING CORES		4
56	DR.46.1364-1MB	6mm DRIVE-RITE TUBING- BLACK		10
57	DR.12.011404	COMPRESSOR TAPTITE SCREW		7
58	DRV-7435	AIR HOSE SHORT 140°		1
59	DR.12.011211B	COMPRESSOR FILTER TUBING		1
60	DR.08.011093	CRAFTER 55 SHOCK ABSORBER		2



61	DR.12.011211C	FILTER CLIP	3
62	DR.31.011528	SPRINTER HARNESS 2 CORNER REV 2	1
63	DR.14.019013	11.4L ALU RESERVOIR	1
64	DRV-8478	135 MM LINKAGE	2
65	DR.35.011405	HEIGHT SENSOR	2
66	DR.41.034258	M8x1.25-6H nyloc nut	5
67	DR.41.013269	1/4 BLANKING PLUG	2
68	DR.42.016035	M16X35 HEX HEAD BOLT	2
69	DR.43.018516	M16 NYLOC NUT	2
70	DR.44.010125	M16 FLAT WASHER	4
71	DR.42.012030	M12X30-1097380-ZP	4



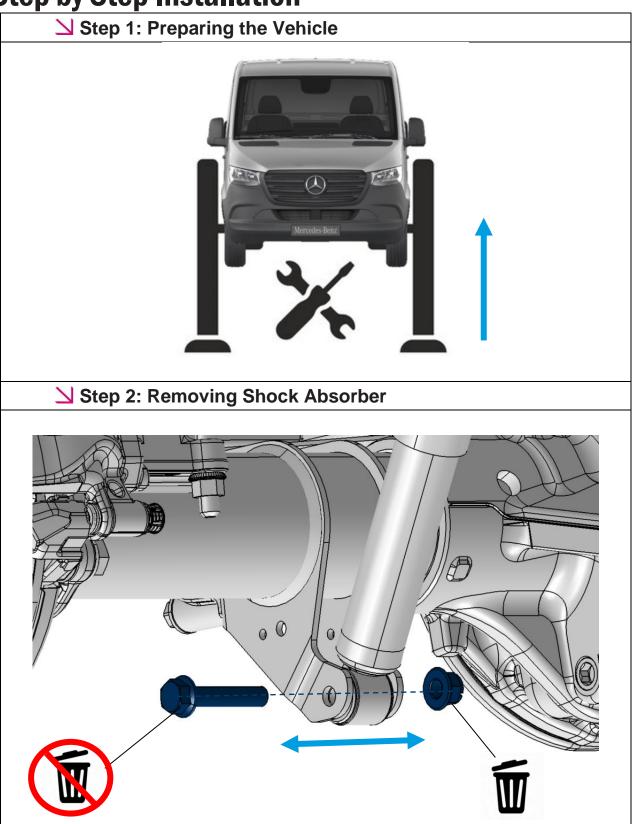
72	DR.43.013027	M8X30-1096921-ZF	1
73	DR.43.010232	M14 U-BOLT NUT	8
74	DR.48.011773	VW CRAFTER AXLE PLATE	2
75	DR.37.019107	MERCEDES SPRINTER SWITCH	1
76	DR.31.013014	HANDBRAKE DIODE PATCH LEAD	1
77	DR.42.017991	M6X30-1097991-ZP	4
78	DR.43.013277	M14X1.5 NUT	4
79	DR.43.015426	M16X1.5 NUT	2
80	DR.48.024200	U-BOLTS-215MM,120MM THREAD	4
81	DR.43.013993	M12 SHOCK ABSORBER NUT	4
82	DRV.7404.1	HANDHELD CONTROLLER 2C	1
83	DRV.7456	INTELLI HANDHELD HOLDER	1

#### 11/24 Revision A

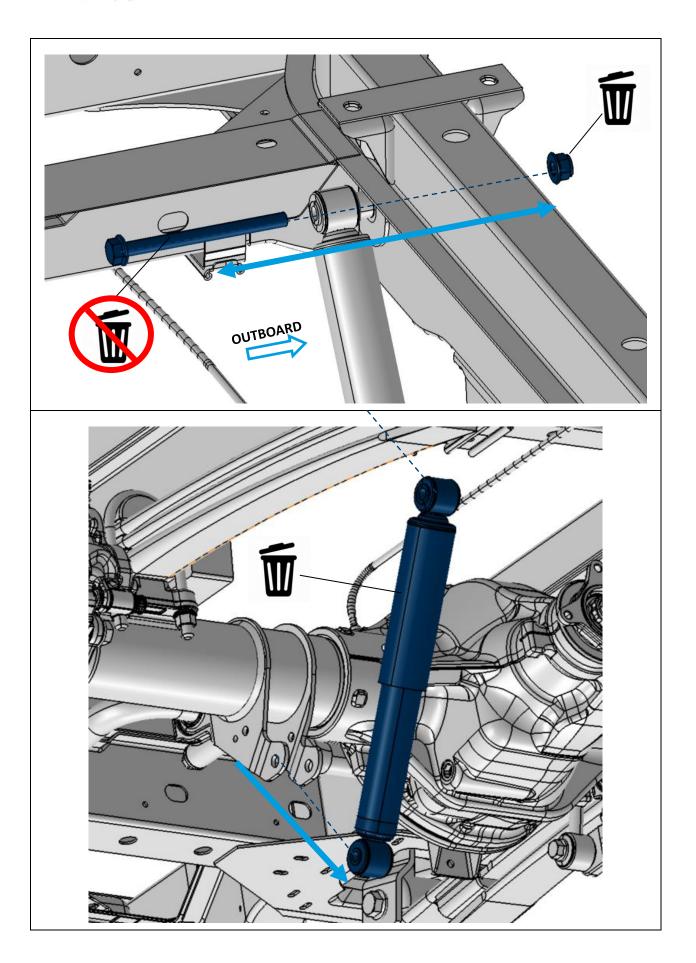
84	DR.19.013355	ECU ASSEMBLY FOR DR.05.013355	 1
85	DR.44.010128	M12 FLAT WASHER	2



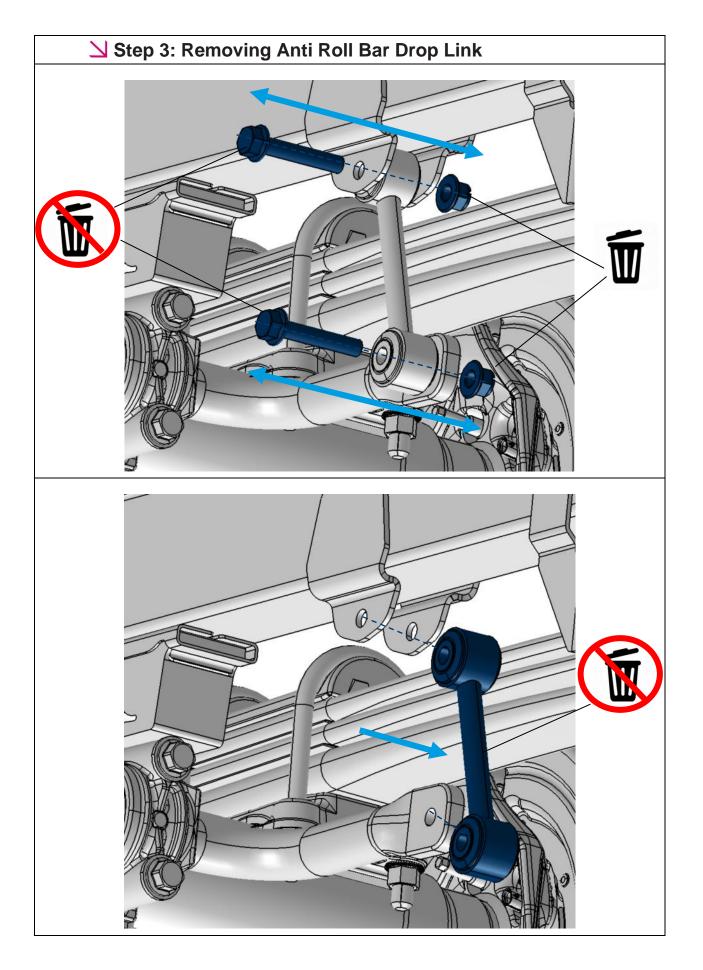
**Step by Step Installation** 



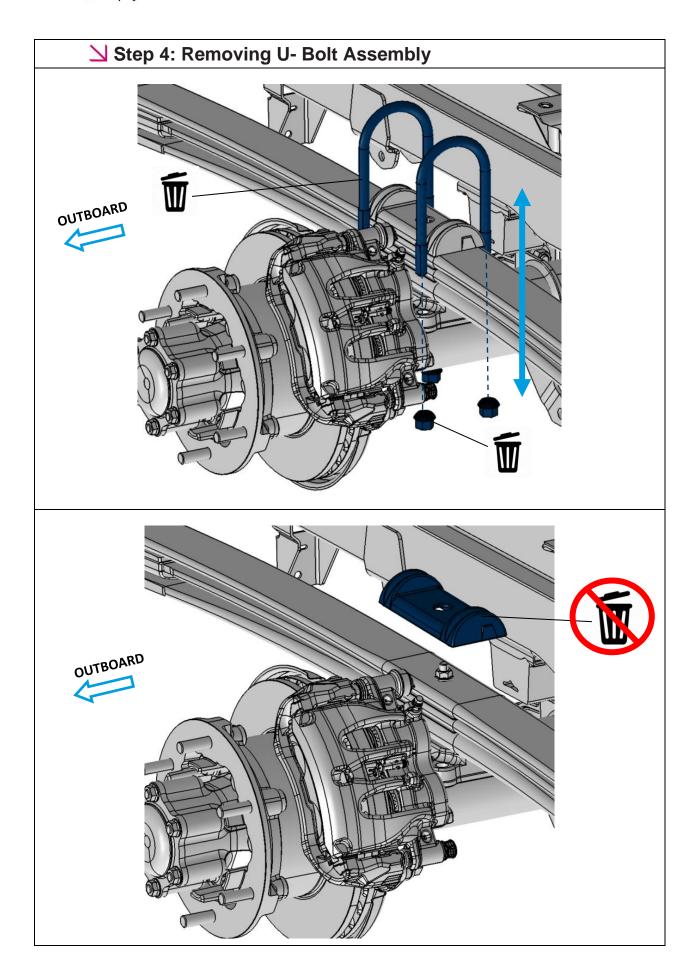




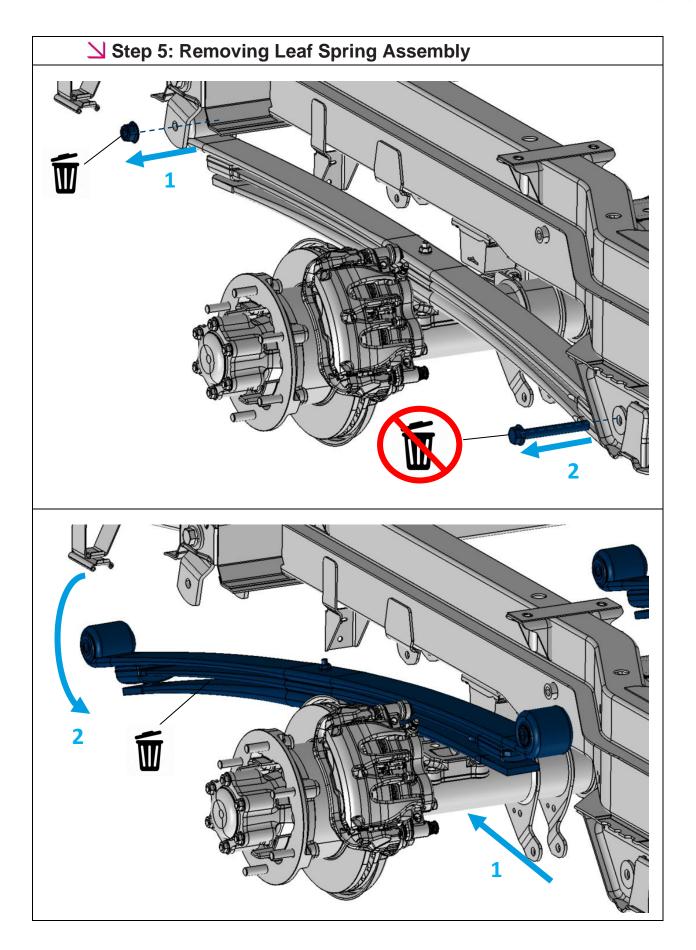




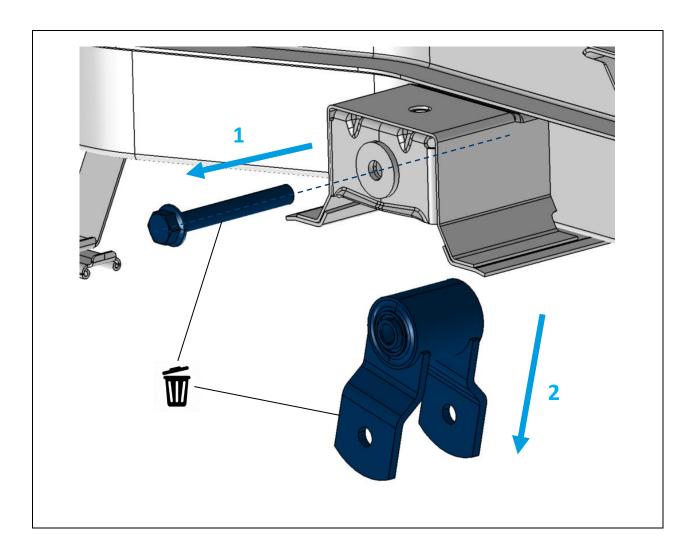




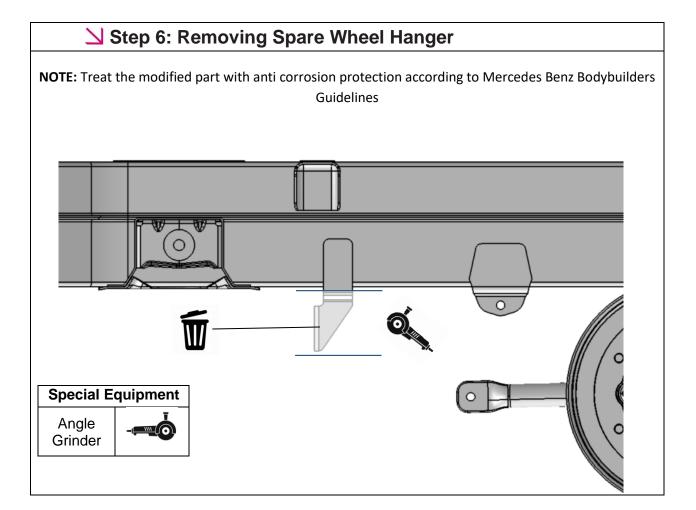




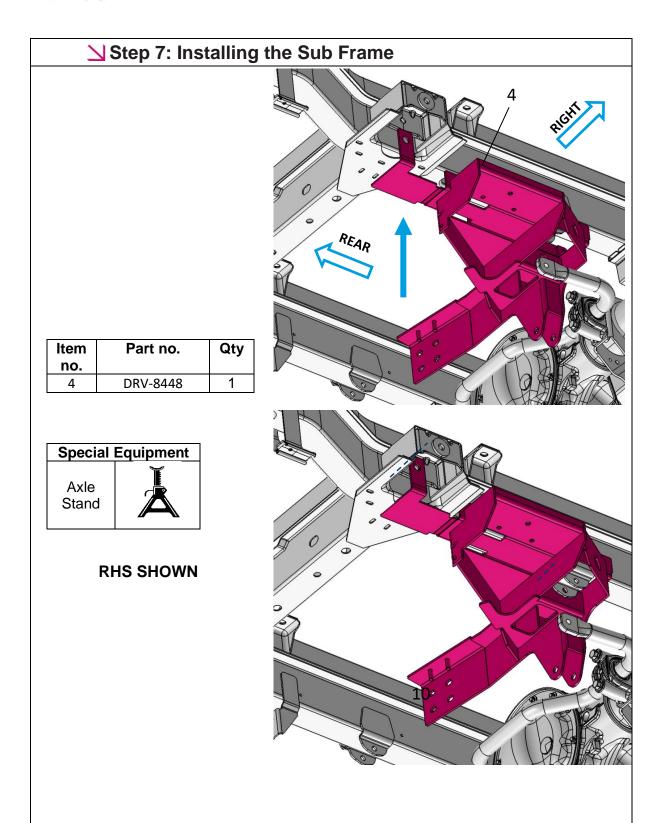




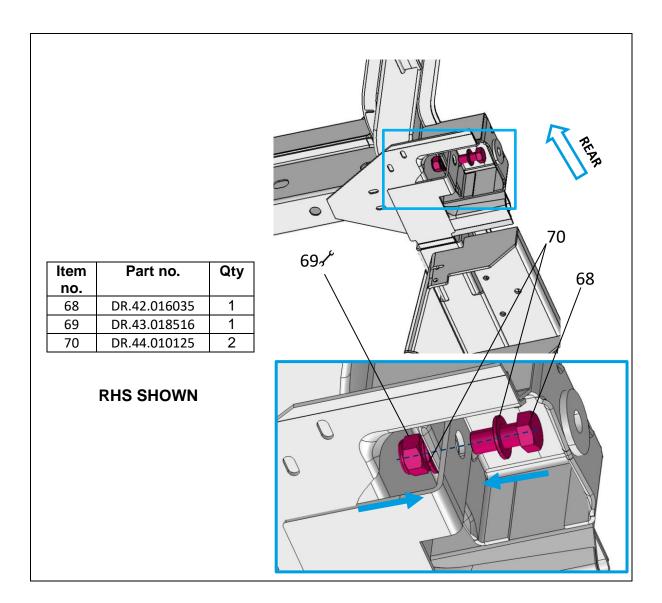




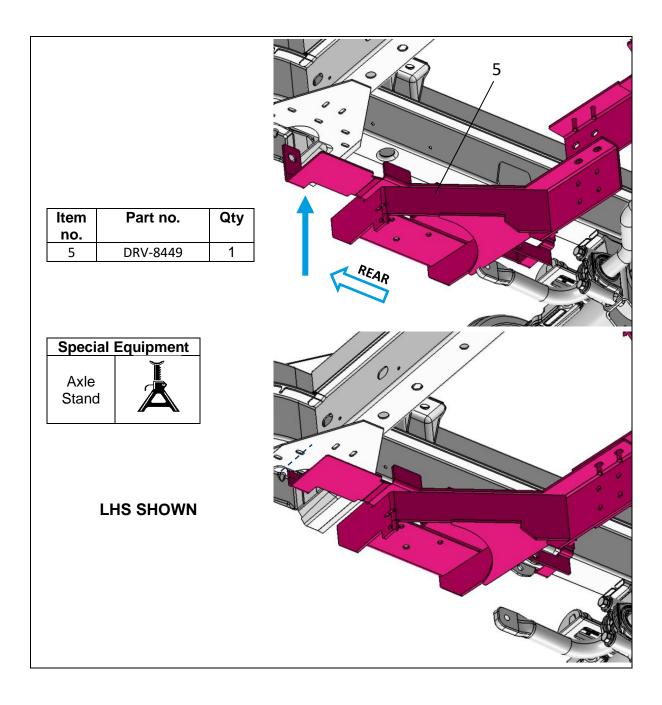




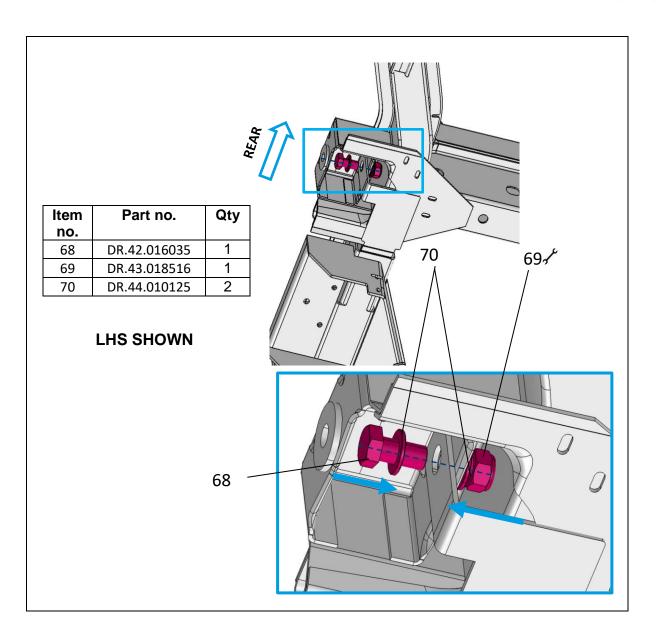




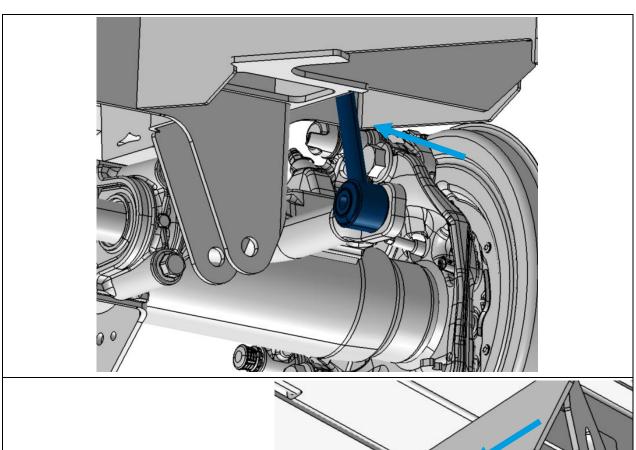




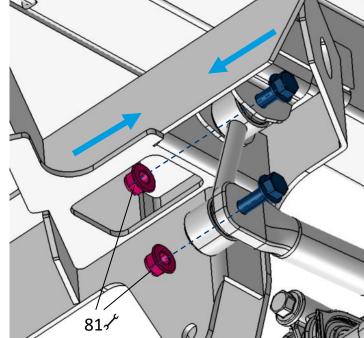




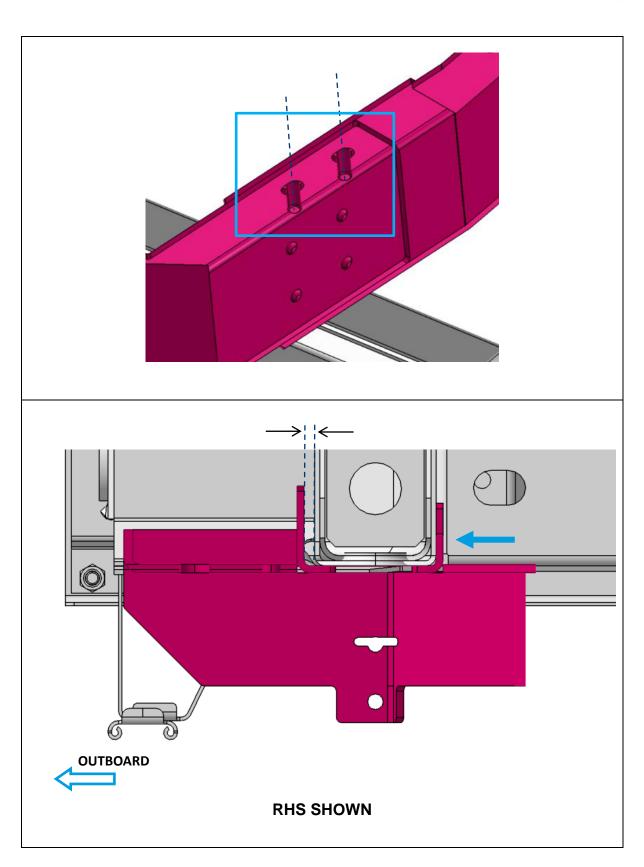




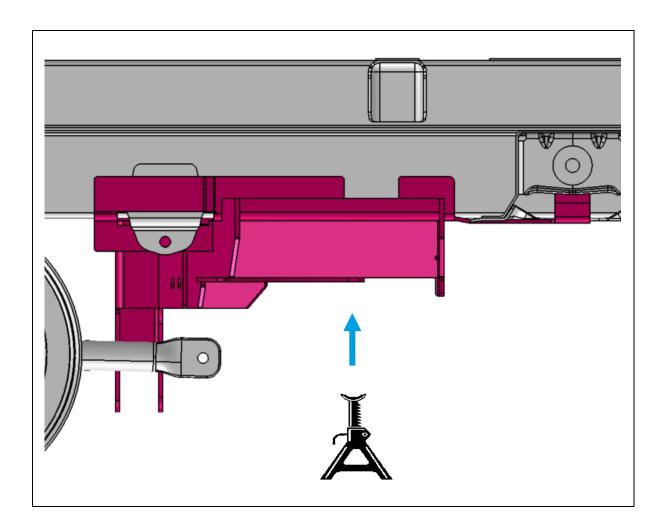
Item no.	Part no.	Qty
81	DR.43.013993	2



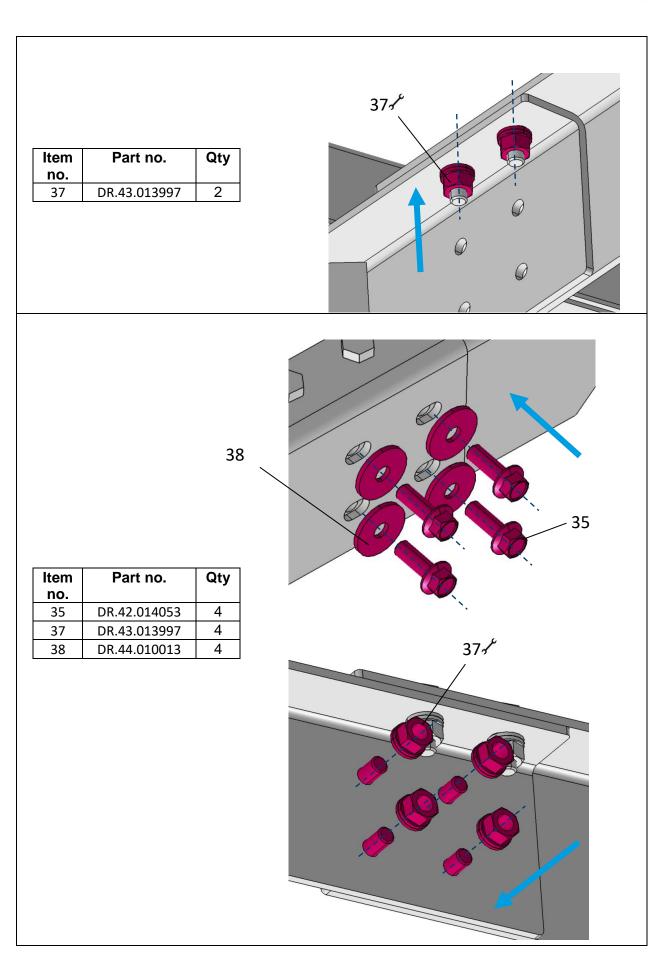




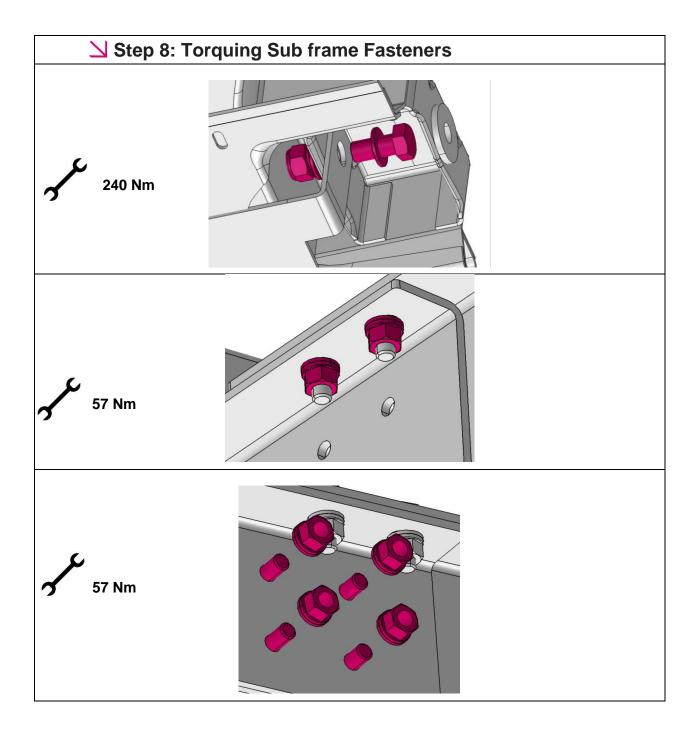




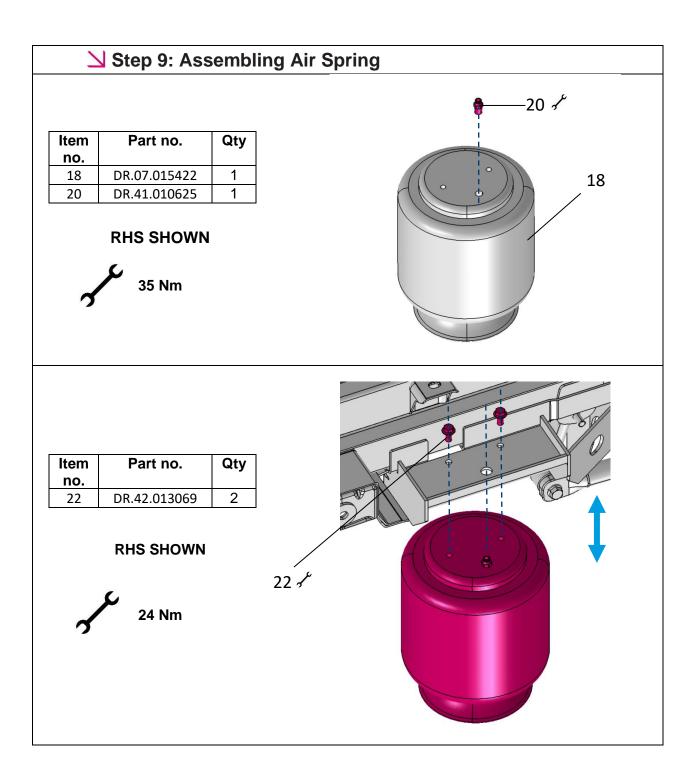




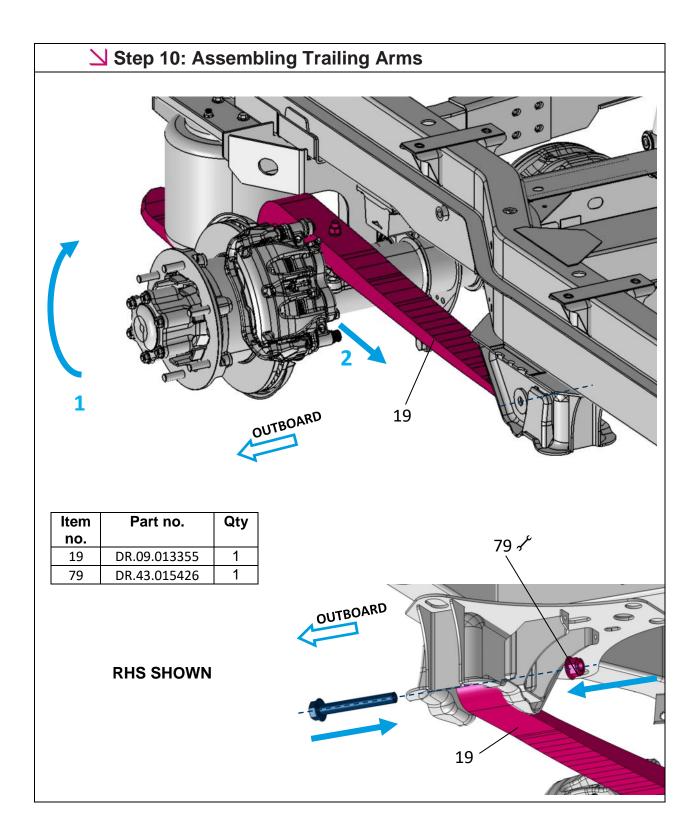




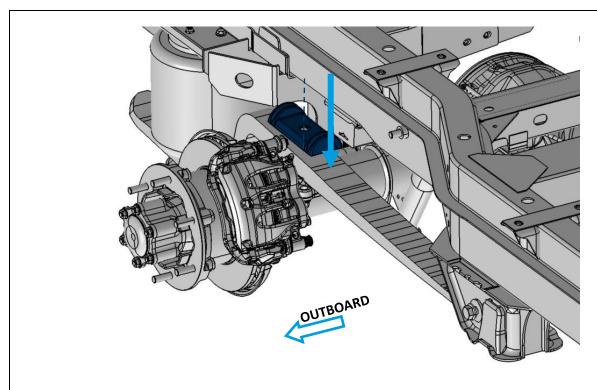




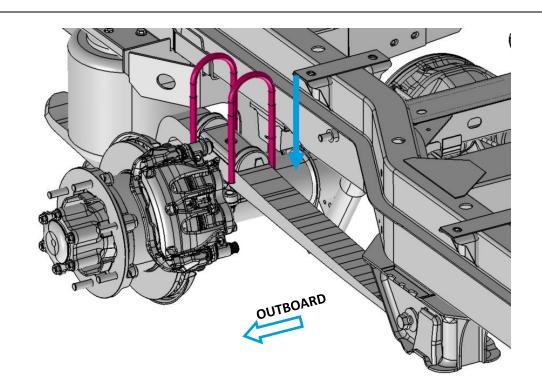








### **RHS SHOWN**

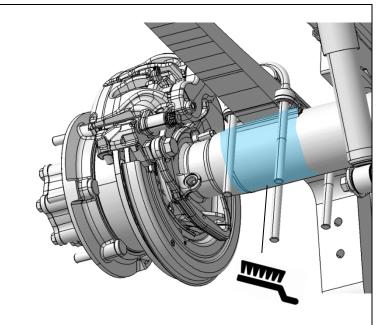


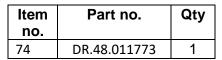
Item no.	Part no.	Qty
80	DR.48.024200	2



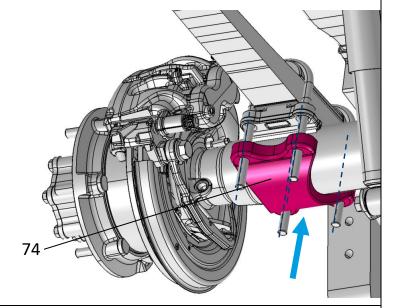
**Special Equipment** Wire Brush

#### **RHS SHOWN**

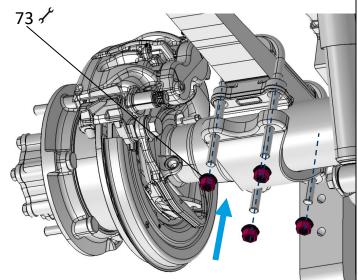




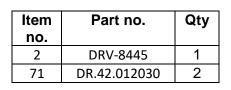
## **RHS SHOWN**



Item no.	Part no.	Qty
73	DR.43.010232	4

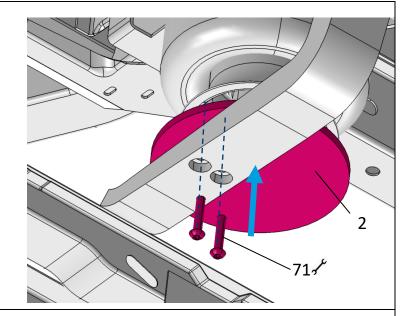








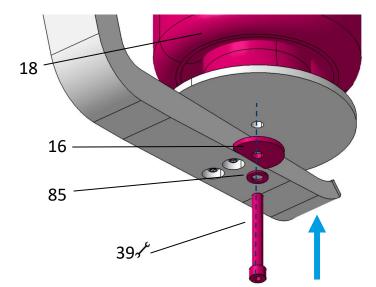
125 Nm



Item no.	Part no.	Qty
39	DR.42.013342	1
16	DRV-8485	1
85	DR.44.010128	1
18	DR.07.015422	1



35 Nm

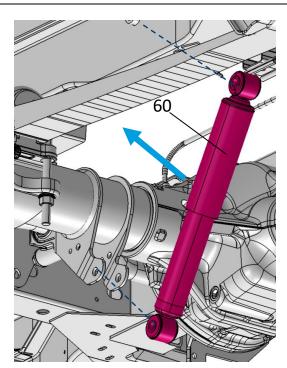




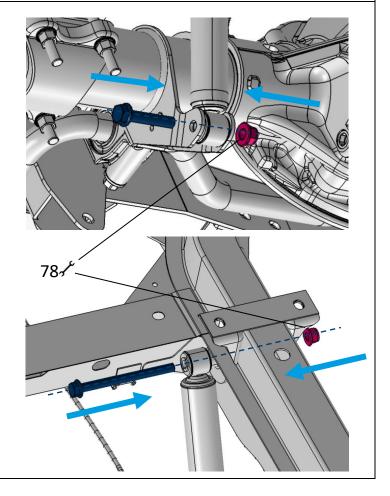
# Step 11: Assembling Shock Absorbers

Item	Part no.	Qty
no.		
60	DR.08.011093	1

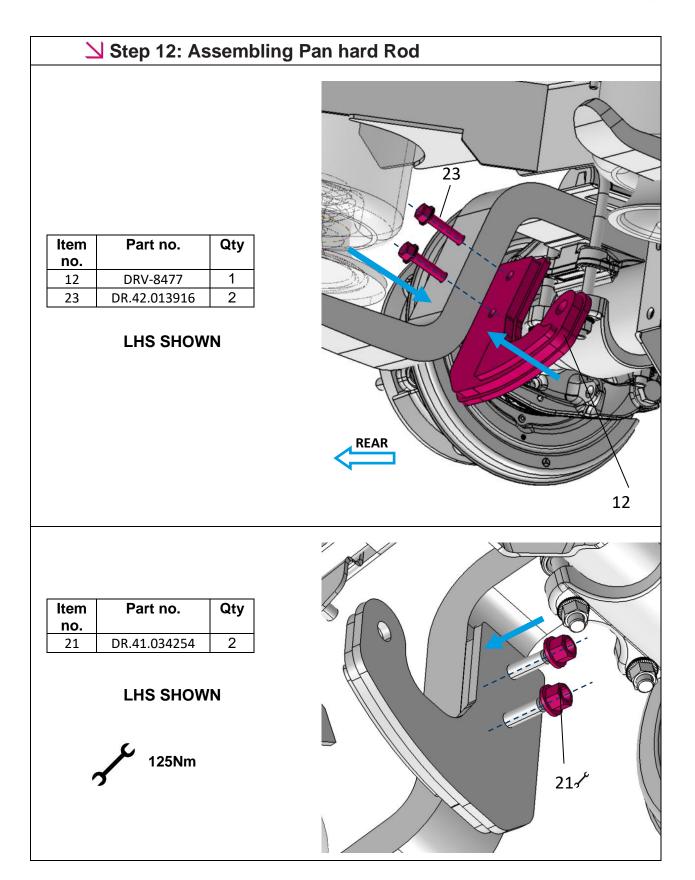
#### **RHS SHOWN**



Item no.	Part no.	Qty
78	DR.43.013277	2

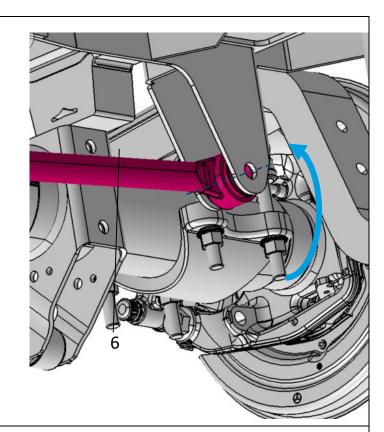


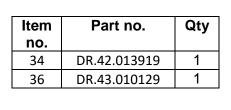


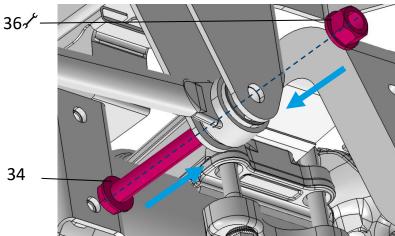




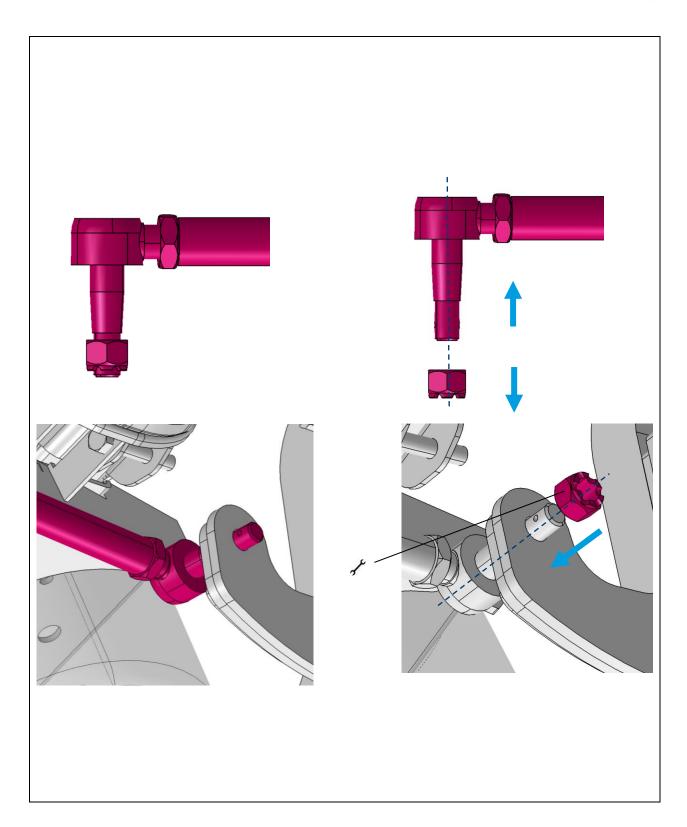








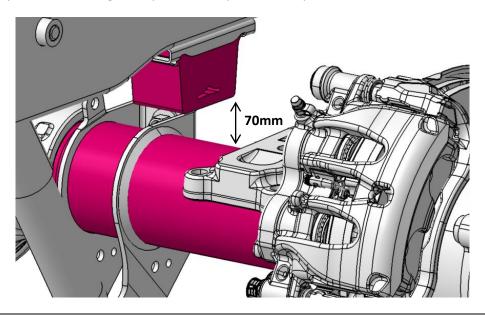


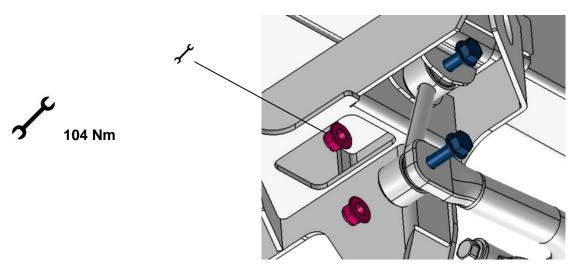


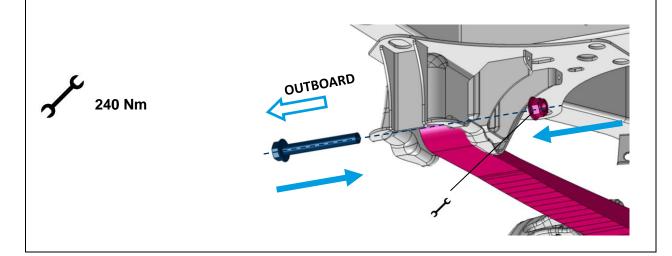


# **≥** Step 13: Torquing Of Assembled Suspension Components

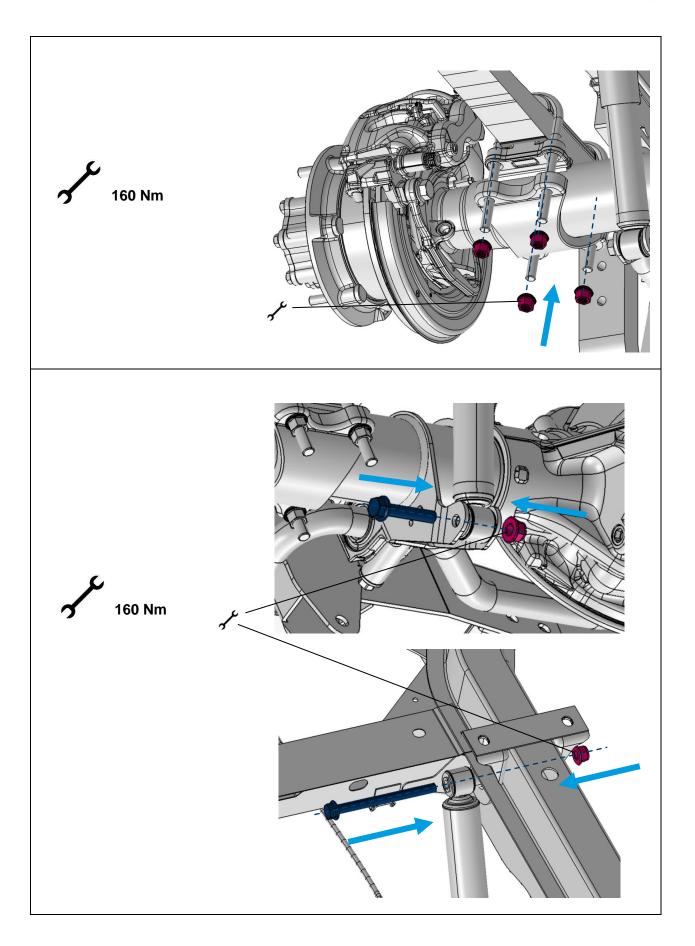
**NOTE:** Set System to ride height as specified. Suspension components hidden for better view.



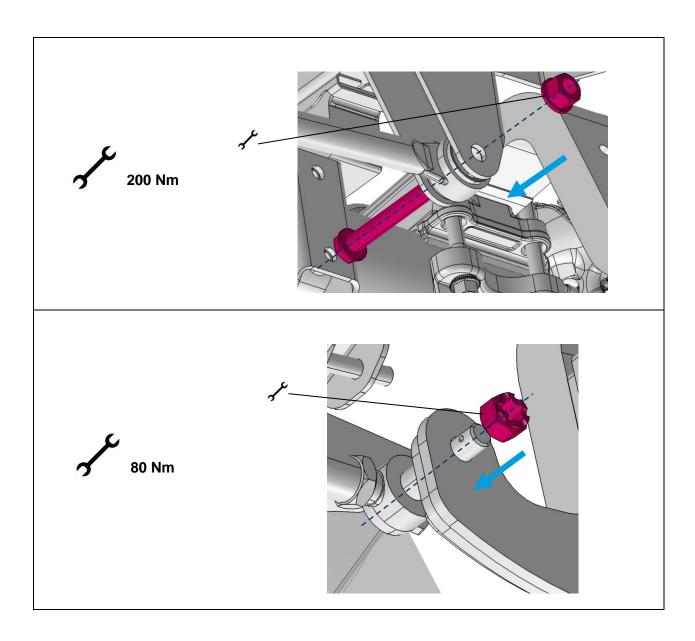




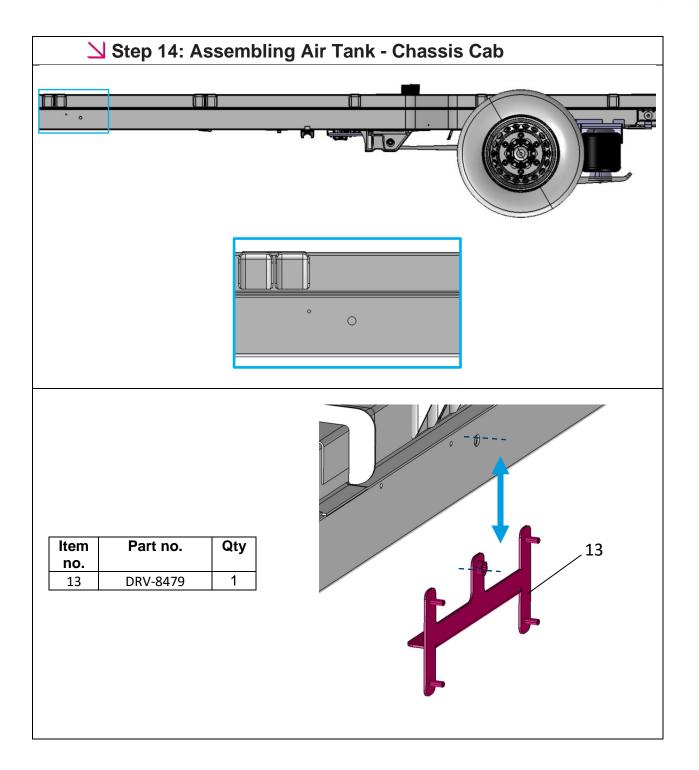








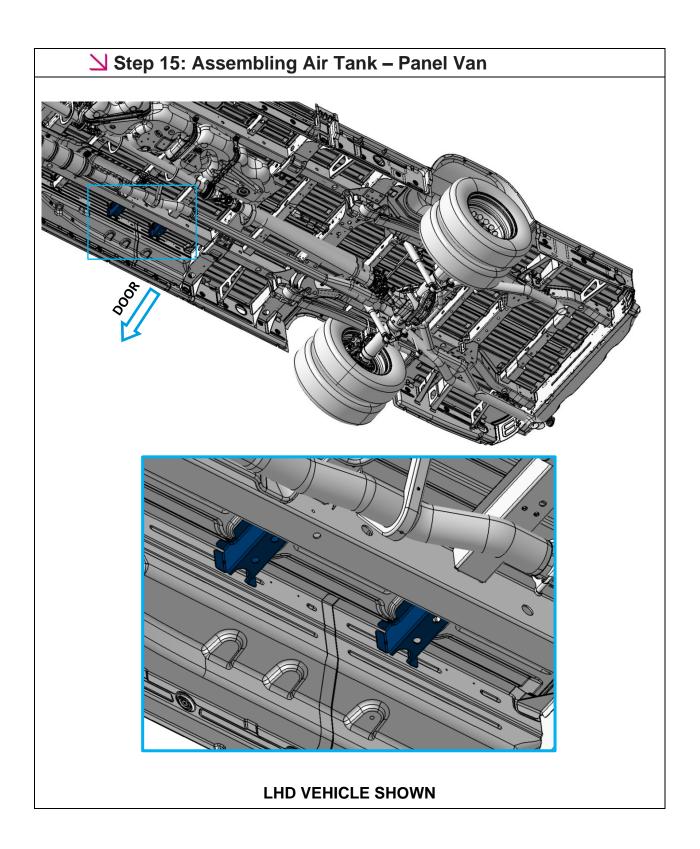




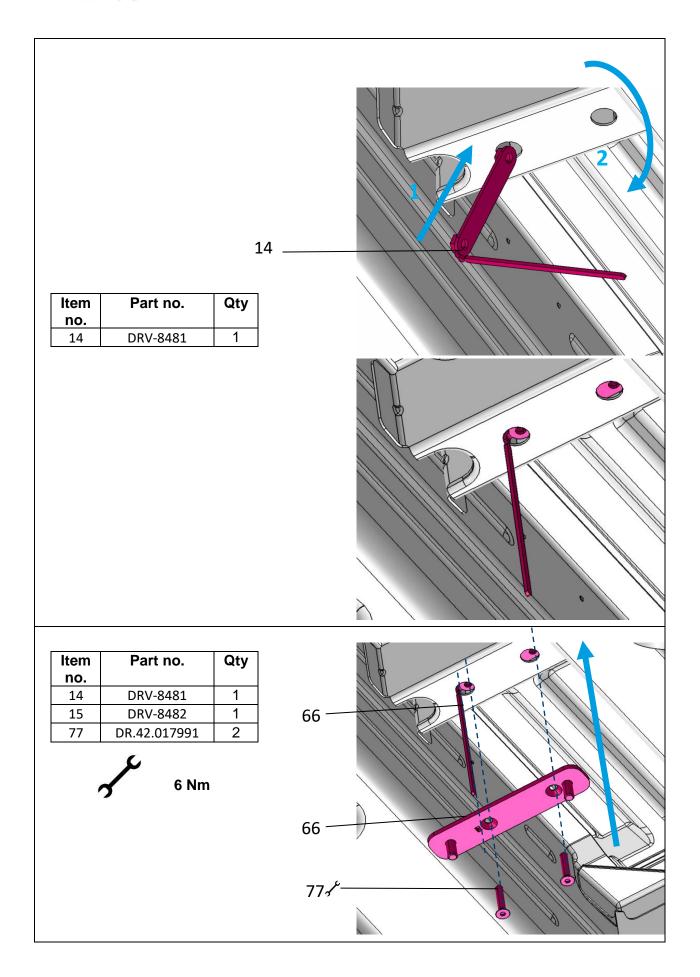


Item	Part no.	Qty
no.		
43	DR.42.010185	1
17	DRV-7299	1
38	DR.44.010013	1
゚゙゙゙゙゙゙゙゙゙゙	37 Nm	
Item no.	Part no.	Qty
63	DR.14.019013	1
66	DR.41.034258	4

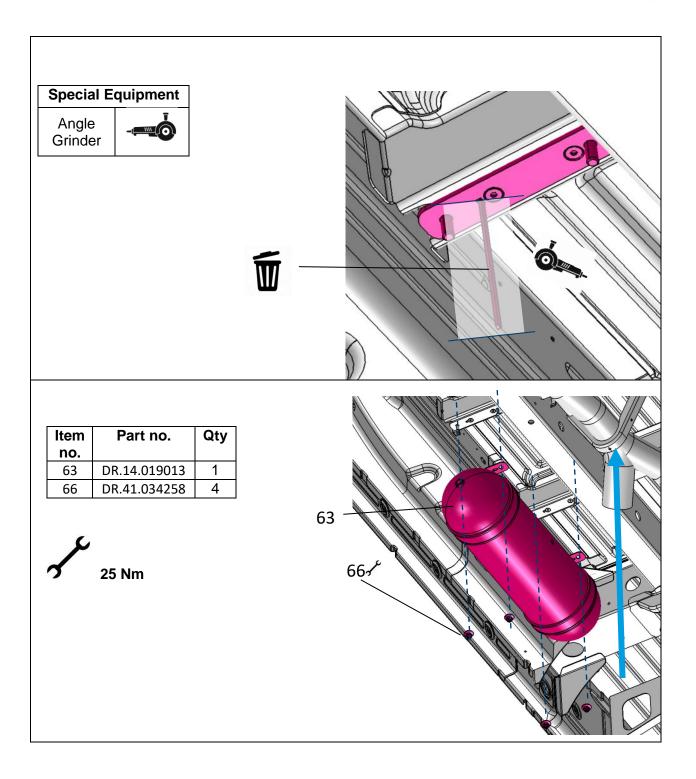




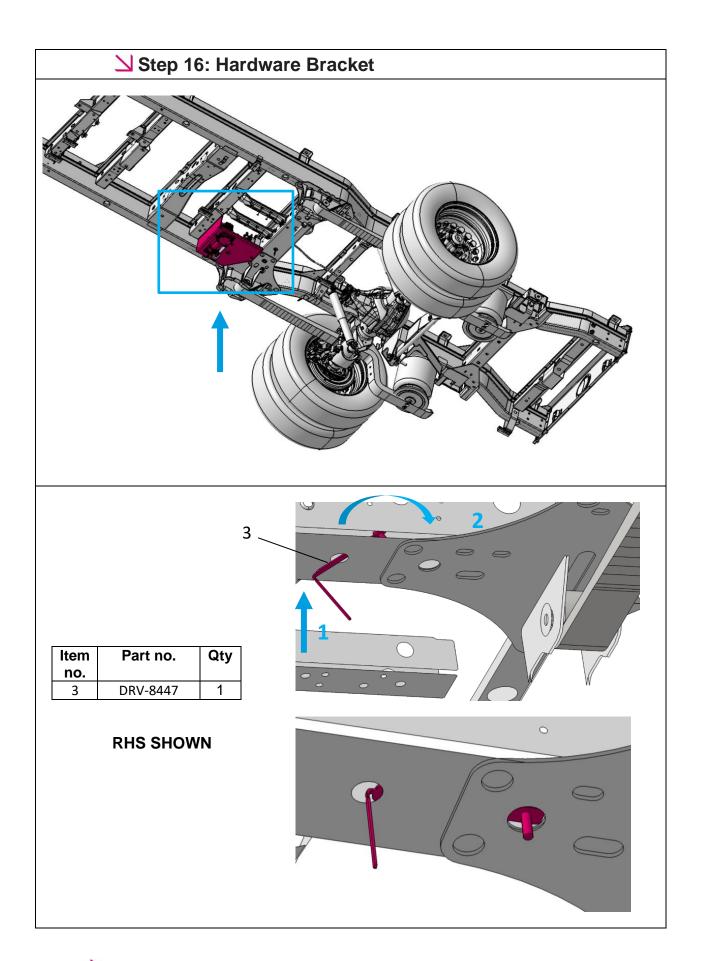




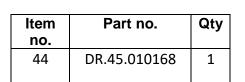


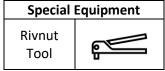


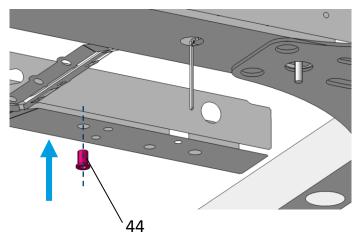


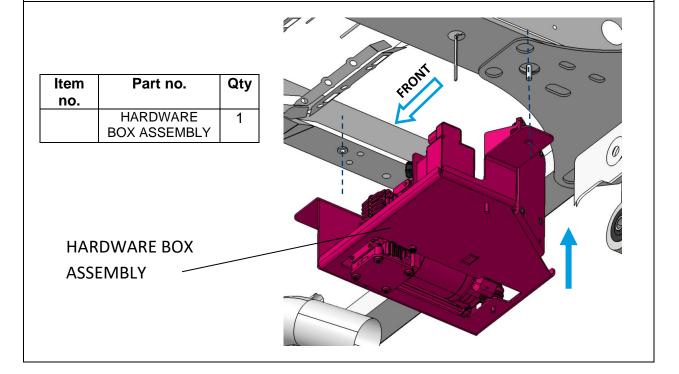




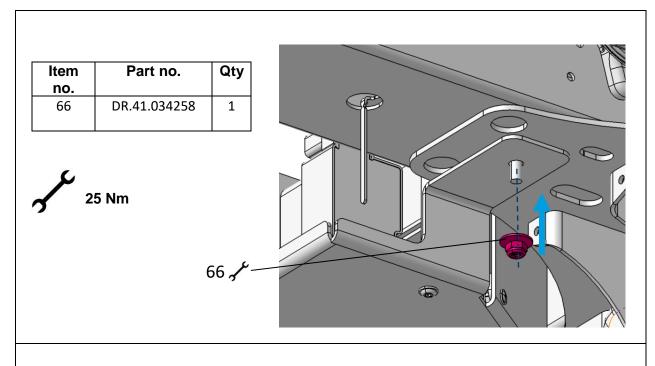


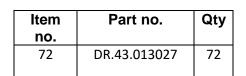




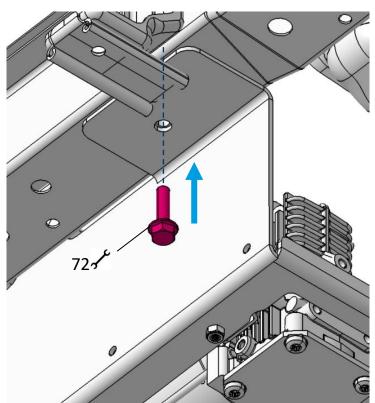




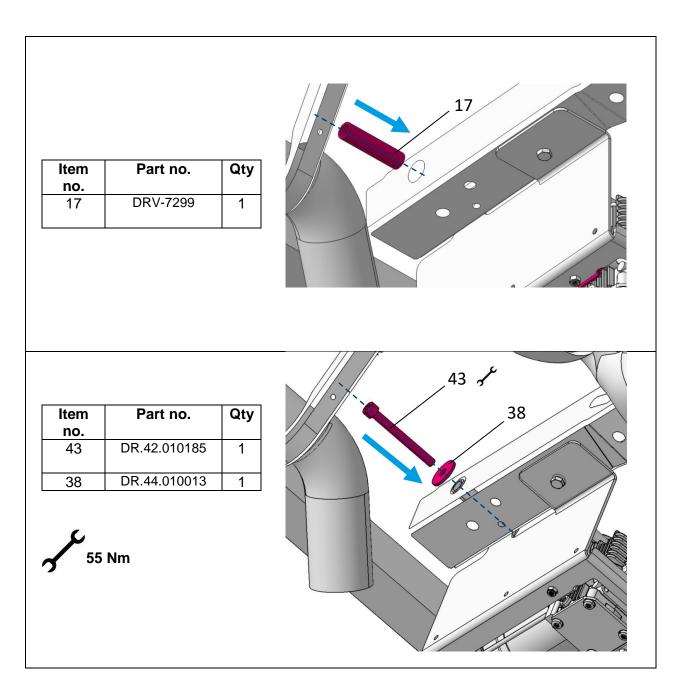




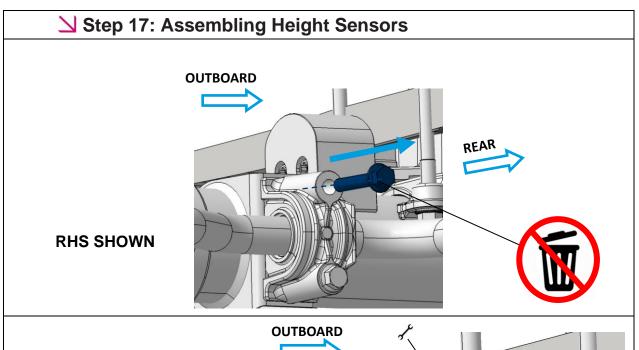








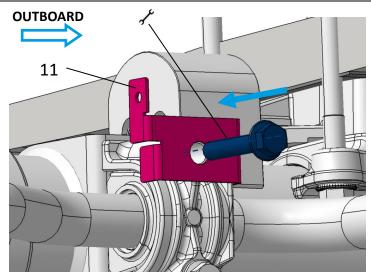




Item no.	Part no.	Qty
11	DRV-8476	1

### **LHS SHOWN**

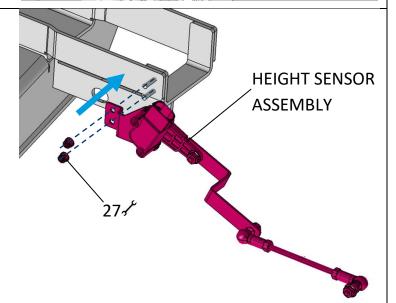




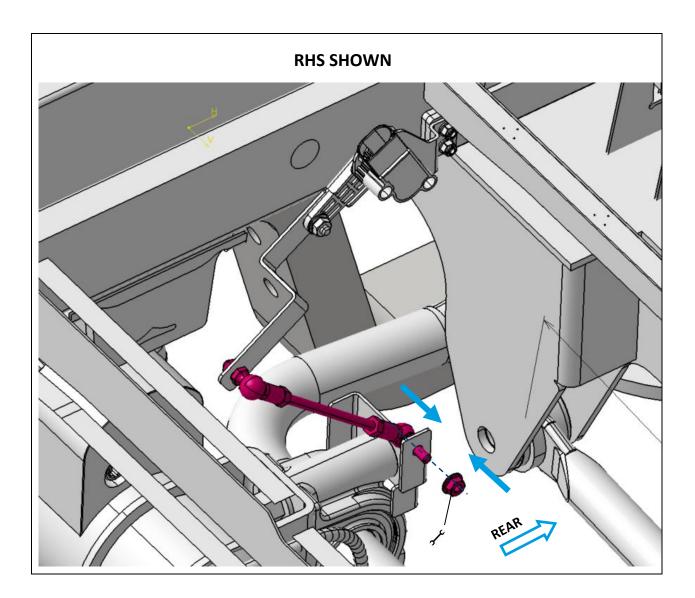
Item no.	Part no.	Qty
	HEIGHT SENSOR	1
	ASSEMBLY	
27	DRV-7445	2

## **LHS SHOWN**











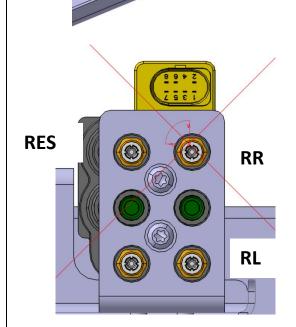
## Step 18: Routing & Connecting the Air Tubing

Connect an airline from the left air spring to the port on the valve block marked 'RL' *Rear Left*.

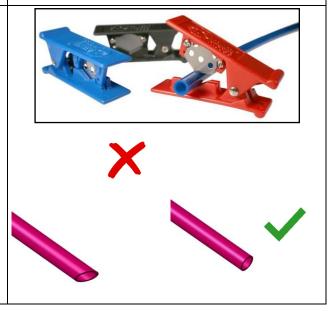
Connect an airline from the right air spring to the port on the valve block marked 'RR' Rear Right.

Connect the air tank to the valve block port marked 'RES'.

NOTE: Left port must be connected to the Left air spring and Right port must be connected to the Right Air Spring



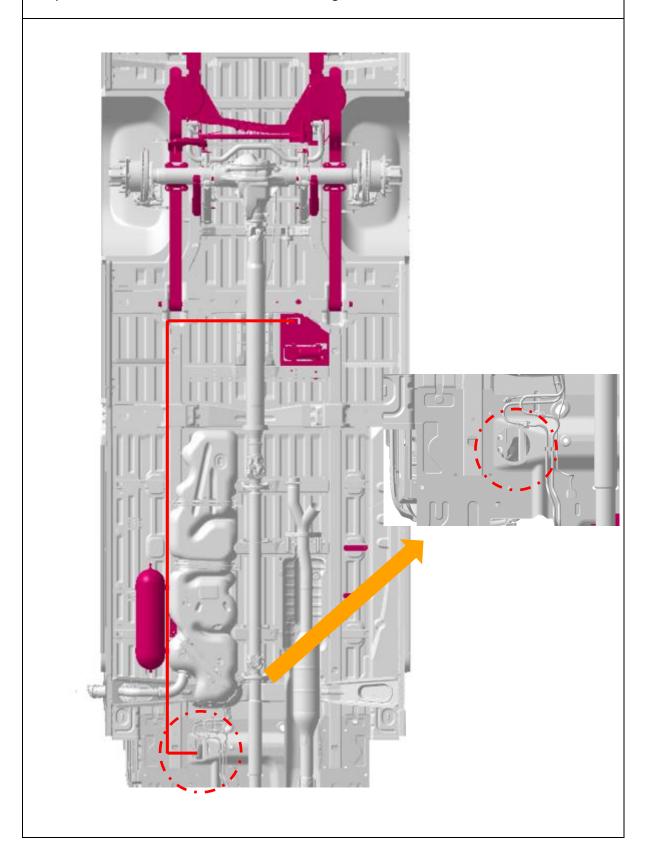
- To avoid leakage, do not cut tube at an angle
- Use appropriate tube cutter or sharp blade
- Use nylon cable ties to secure tubing.
- Cut tubing to connect Air spring to valve for both sides
- Separate inflation valves can be used per side.
- When using single inflation valve use T connector





# **Step 19: Electrical Harness Routing**

The picture below shows the recommended routing for the electrical harness.





# **Step 20: Connecting and Routing the Wire Harness**

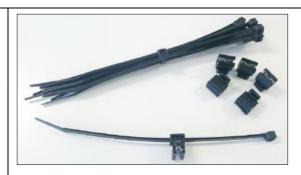
#### **IMPORTANT:**

- Attach all wire harness securely to the underneath of the vehicle using nylon ties provided.
- Do not attach to brake lines.

Protect the harness from any sharp edges or sources of heat.

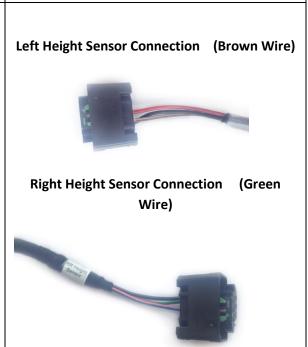
Secure the harness with the cable ties provided.

Where no good mounting point is available on the vehicle, mounting clips have been provided that can connect to the chassis.



Connect the height sensors.

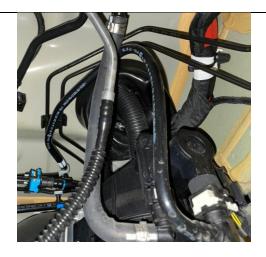
It is important these connections are placed on the correct side of the vehicle





The electrical harness should enter the vehicle on the left hand side, underneath the seat.

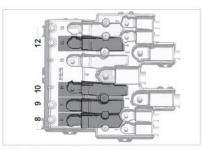
For ease of installation it is recommended to remove the seat which contains the fuse holder.





# **Step 20: Connecting the Wiring**

Connect the supplied power lead to the 12V+ Battery source on the vehicle as per Body Builder Guideline specification.

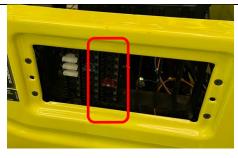


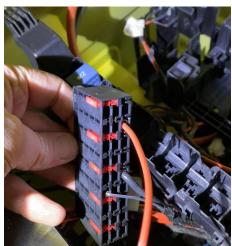
Additional fuse for camper vans

Code	E1R	E1Y
Main fuse locations	I <sub>max.</sub> [A]	
F8	100	100
F9	150	80
F10	80	80
F12	40	40

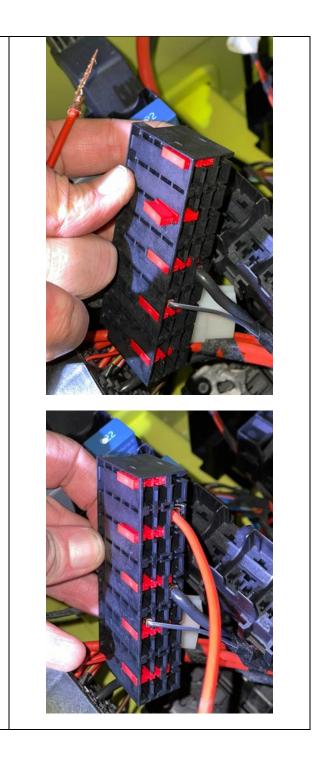
Remove the fuse strip from the vehicle and connect power lead to this.

Note – The fuse strip which has 3 x free terminals should be removed for ease of installation









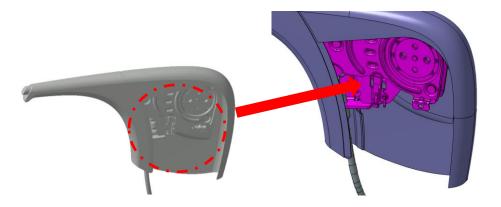


	22   22   24   25   25   25   25   25
Install compressor power wire and 40A fuse	
Install ECU wire and 20A fuse	
Re assemble	



# **Step 21: Handbrake Connection**

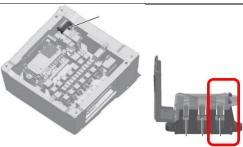
Using the supplied diode connect to the handbrake and crimp to intelliride harness





**Step 22: Ignition Connection** 

For vehicles with EK1 option – connect to M6 ring terminal as shown





## **≥** Special Instructions for Air Connections

- To cut the tubing correctly an appropriate cutter must be used (not scissors)
- When inserting the tubing into the connection, it must be pushed in approximately 14mm until a 'click' is heard.
- To remove the tube, you must push the flange in on the connection and at the same time pull the tube. (No tool is necessary.)
- When a tube is removed always trim 14mm from the end before reconnection.
- It is advisable that a sealant be used on the threaded fittings.
- Attach all tubing securely to the underneath of the vehicle using nylon ties.
- Do not attach to brake lines.
- Protect the tube with the sleeves provided where there are any sharp edges or sources of heat.
- Ensure all fittings are fastened to recommended torque.

#### **EXAMINATION:**

After assembly, inflate air springs and check all mounting bolts are tight. Screw all connections tight again. It must be ensured that the mounting brackets cannot move. If the plates touch the brake hose at the air springs, then these must be moved by suitable means.



