



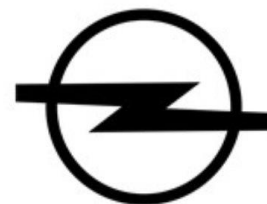
## WHEELCHAIR ACCESSIBLE VEHICLES



Berlingo  
M & XL



Rifter  
Standard & Long



Combo Life  
L1 & L2



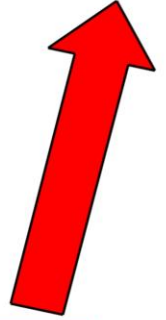
### SPACIOUS, FLEXIBLE AND VERSATILE

A reliable family car with a wide range of seating options and optimal space and visibility for wheelchair passenger.

Conversion manual

L?

## **Important!**



This manual contains instructions for the L1 as well as the L2. Most parts of the conversion are the same for the L1 and L2, when L1 or L2 SPECIFIC steps are depicted, it is shown in the top right corner as shown on this page.

## **Important!**

Remove the AdBlue liquid from the tank, catch it in a CLEAN closable container which is specifically used for AdBlue! Make sure the AdBlue is NOT mixed with other liquides.

When disassembling the AdBlue tank, the AdBlue lines must be capped after disconnection, otherwise the liquide will cristallize inside the lines.

# Contents

PART 1		page
001	<a href="#">Disassembly</a>	4
002	<a href="#">Exhaust diesel 2 mufflers #2</a>	8
003	<a href="#">Exhaust diesel 2 mufflers #3</a>	11
004	<a href="#">Exhaust diesel 1 muffler</a>	13
005	<a href="#">Exhaust petrol #1</a>	15
006	<a href="#">Fuel tank</a>	18
007	<a href="#">AdBlue tank</a>	20
008	<a href="#">Measuring and marking</a>	25
009	<a href="#">Cutting floor fitting cross members</a>	28
010	<a href="#">Front electric reels</a>	43
011	<a href="#">Shock absorbers #1</a>	54
012	<a href="#">Fitting lowered floor L1</a>	56
013	<a href="#">Fitting lowered floor L2</a>	66
014	<a href="#">OEM 2<sup>nd</sup> row reinforcement</a>	70
015	<a href="#">3<sup>rd</sup> row TriflexAir console</a>	84
016	<a href="#">Bodyguard ground plate</a>	88
017	<a href="#">Shock absorbers #2</a>	90
018	<a href="#">How to seal</a>	106
019	<a href="#">Sealant</a>	113
020	<a href="#">Electrics</a>	118
021	<a href="#">Park distance control</a>	129
PART 2		
022	TR04S seat preparation	
023	Finishing	
024	Ramp	
025	Fuel system diesel	
026	AdBlue	
027	Fuel system petrol	
028	3-point belt	
PART 3		
029	Front finishing strips	
030	2 <sup>nd</sup> row Tripod TR04S REMOVABLE seats	
031	2 <sup>nd</sup> row Tripod TR04S FIXED	
032	OEM 2nd row 3 single seats	
033	OEM 2nd row 60-40 seats	
034	OEM 2nd row fixed	
035	3 <sup>rd</sup> row TriflexAir seats	
036	Bodyguard	
037	Rear bumper modification	
038	Emergency exit handle	
039	Exhaust diesel 1 muffler	
040	Exhaust diesel 2 mufflers #2	
041	Exhaust diesel 2 mufflers #3	
042	Exhaust petrol 2	
043	Rear retractors	
044	Tightening torques	
045	Tools and chemicals used	

Disassembly



Disassembly



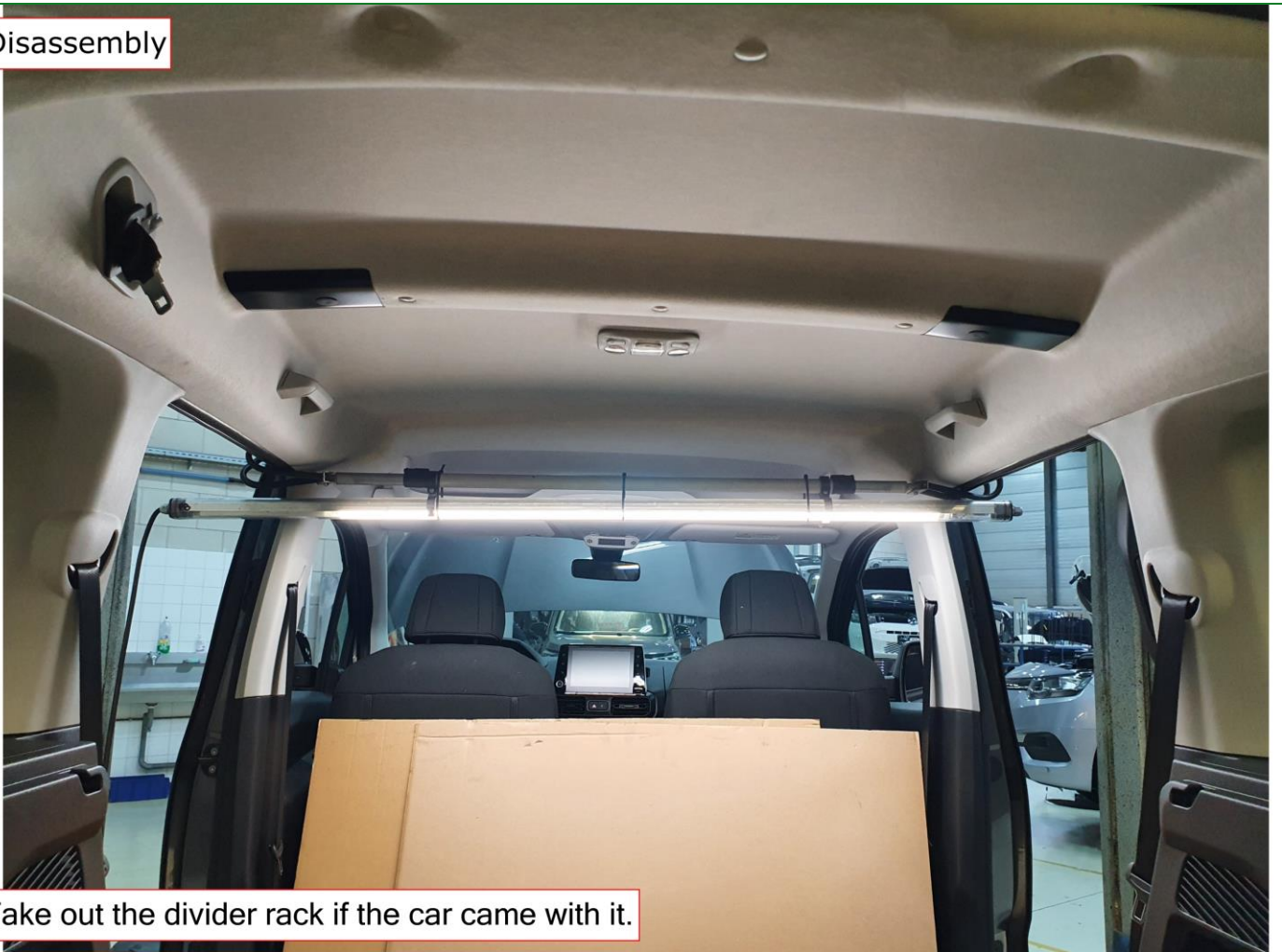
Disassembly



Disassembly



Disassembly



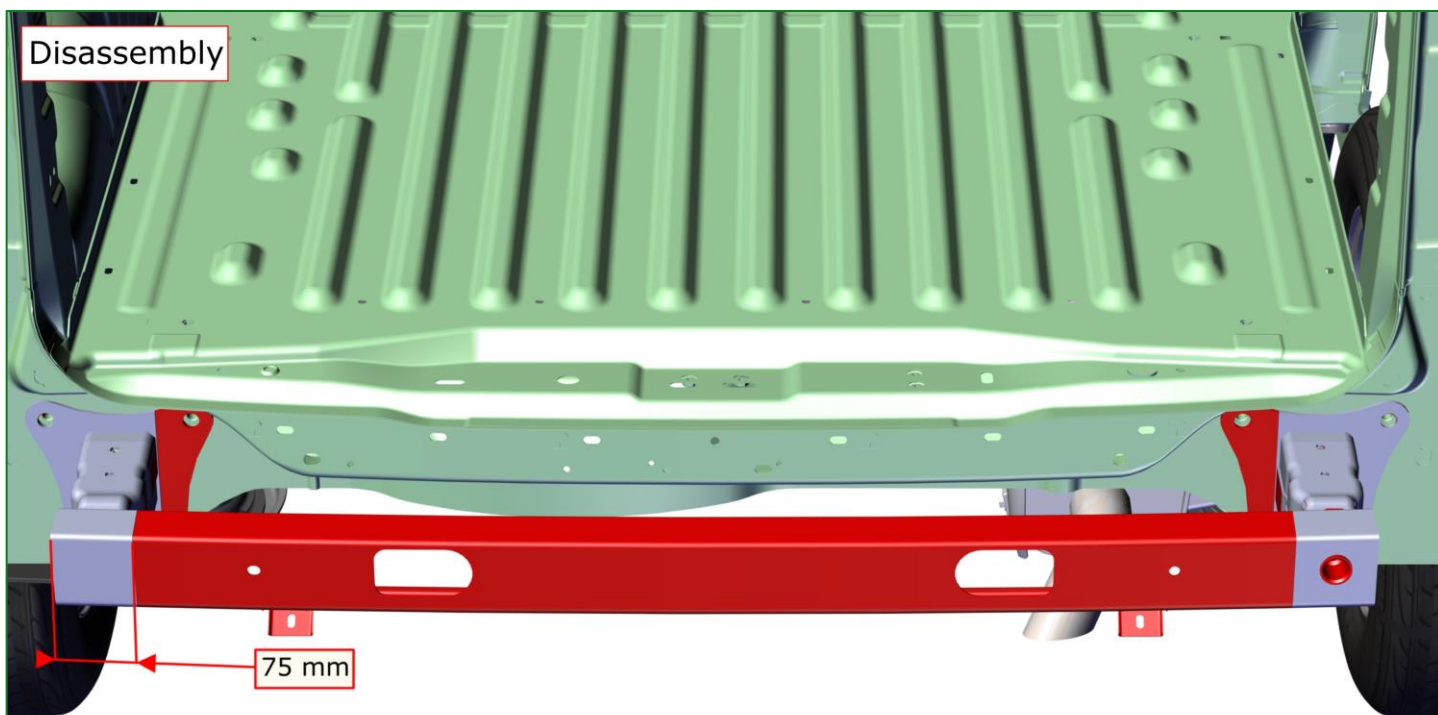
Take out the divider rack if the car came with it.

Disassembly



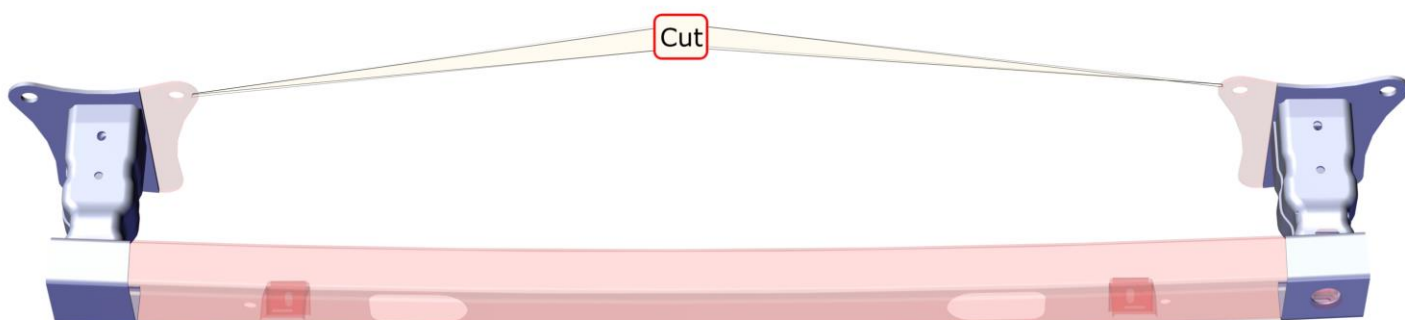
Install the covers as shown on both sides.  
Use the hole left over by removing the divider rack.

Disassembly



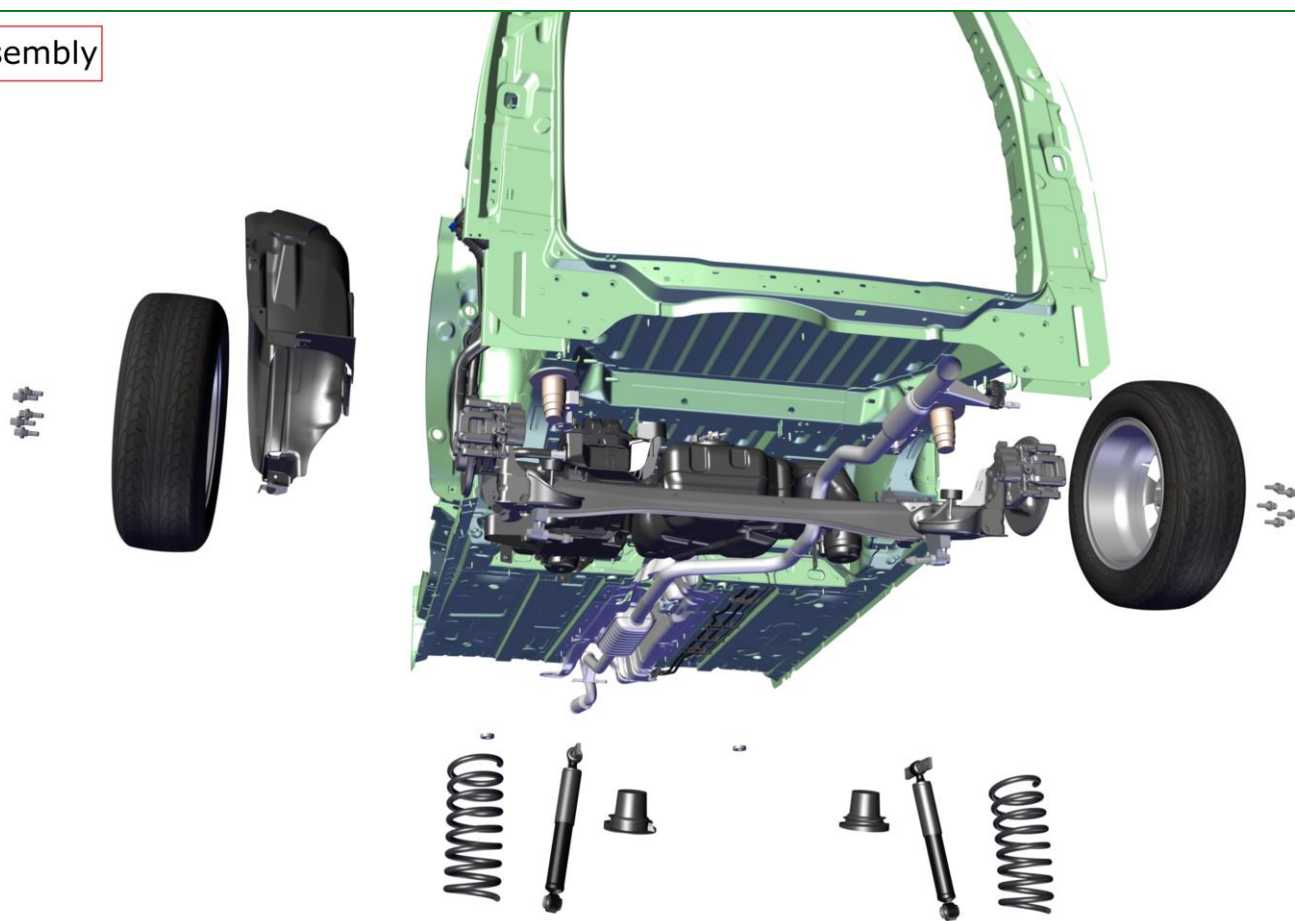
Cut the inner bumper 75mm from the ends

Disassembly

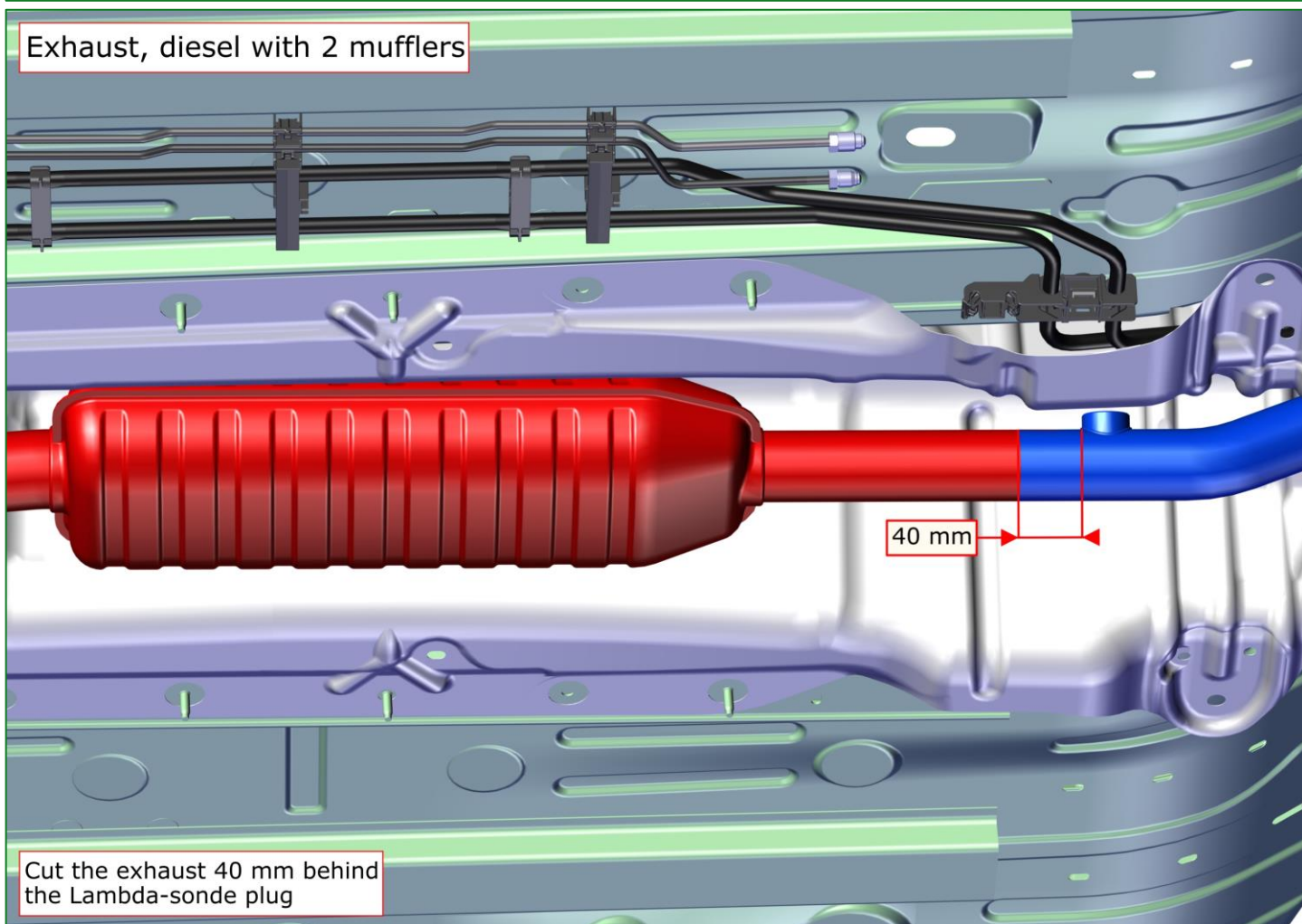


Remove the inner bumper and cut the inner flaps as shown

Disassembly



Exhaust, diesel with 2 mufflers



Cut the exhaust 40 mm behind the Lambda-sonde plug

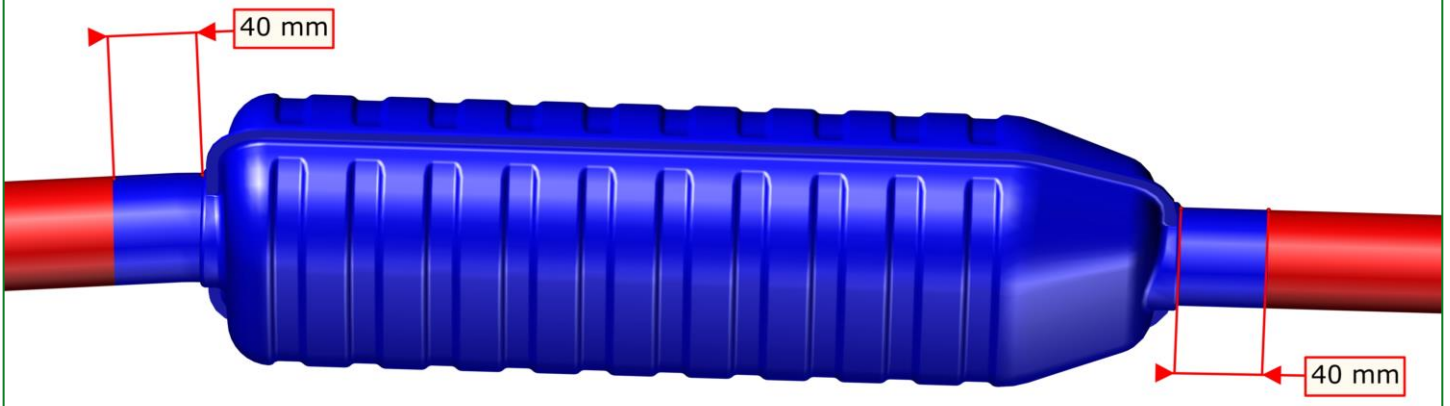


Exhaust, diesel with 2 mufflers



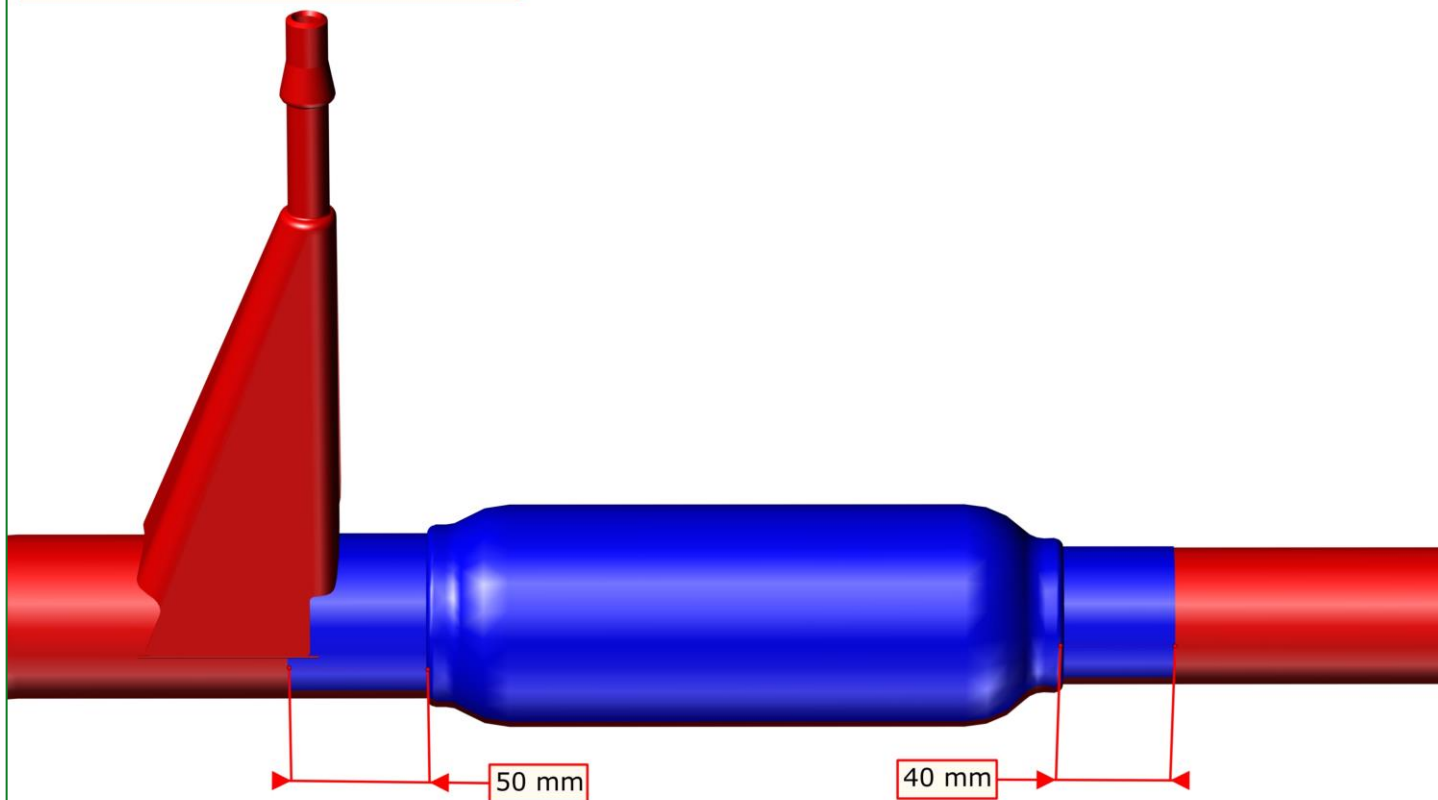
Cut the rest of the exhaust as shown in the following pictures

Exhaust, diesel with 2 mufflers



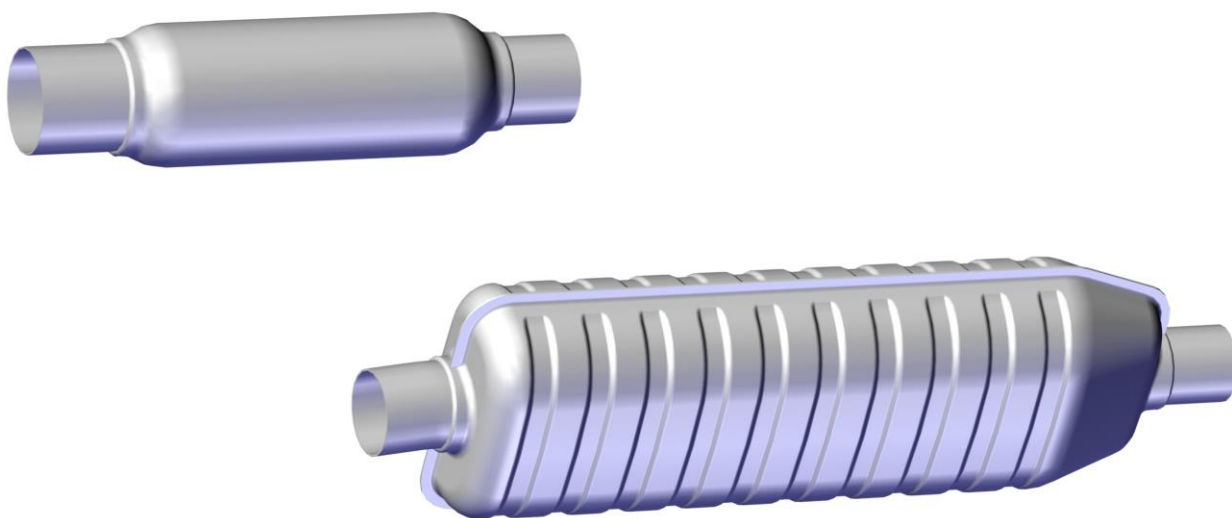
Front muffler

Exhaust, diesel with 2 mufflers

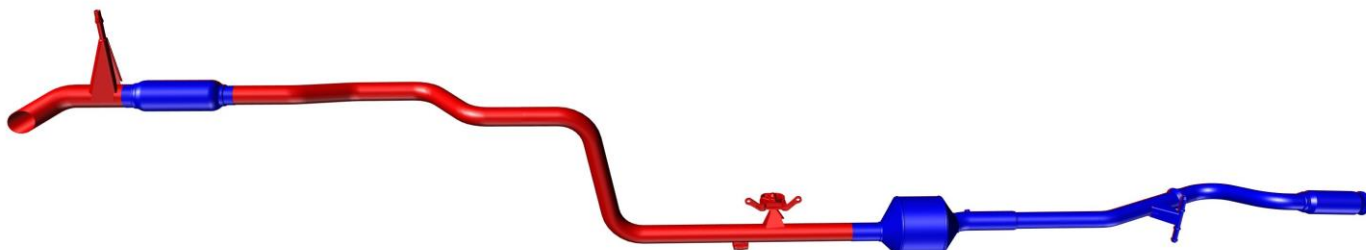


Rear muffler

Exhaust, diesel with 2 mufflers

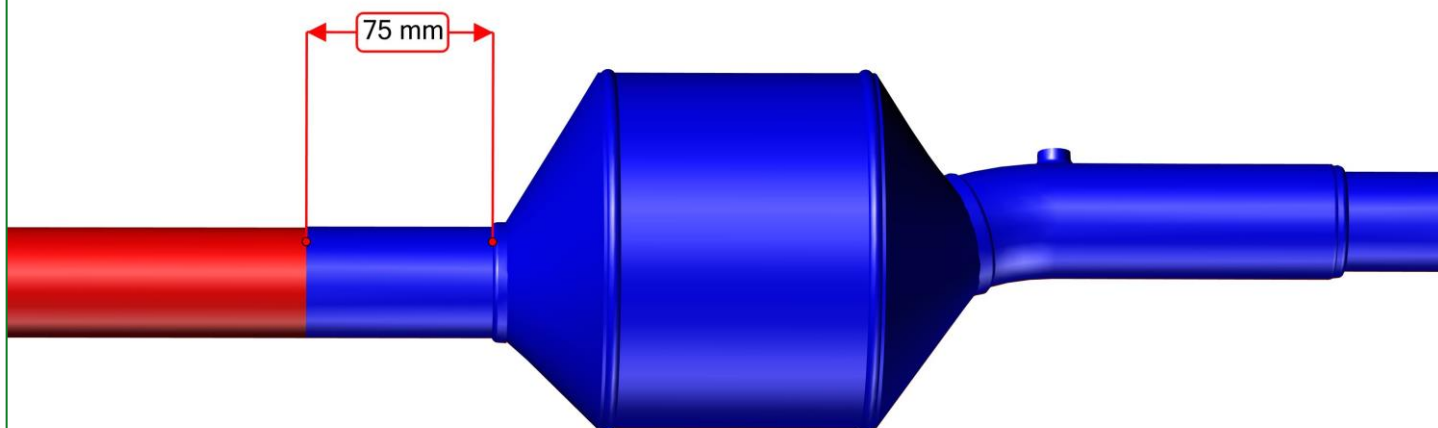


Exhaust diesel with 2 mufflers #3



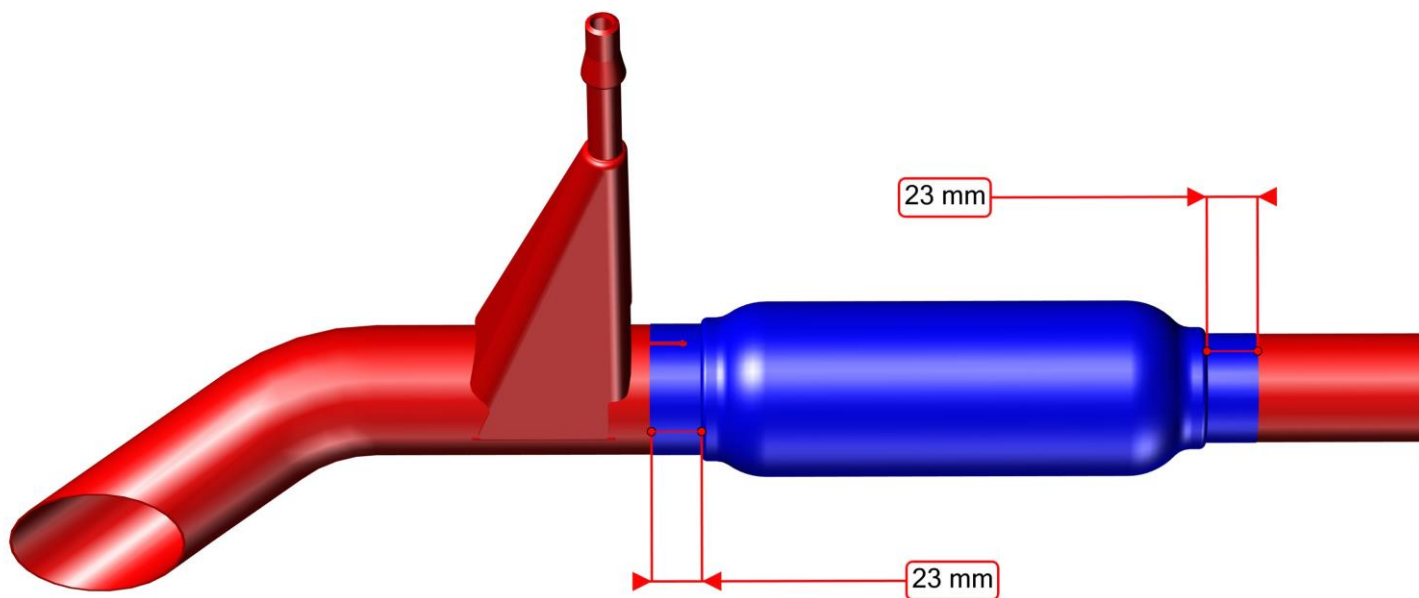
Cut out the silencers with the following instructions

Exhaust diesel with 2 mufflers #3



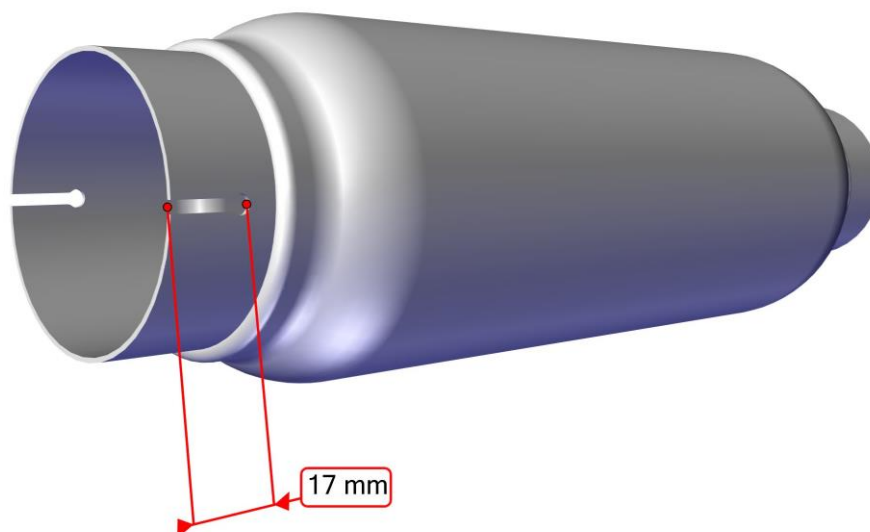
Cut the exhaust at the given distance as shown

Exhaust diesel with 2 mufflers #3



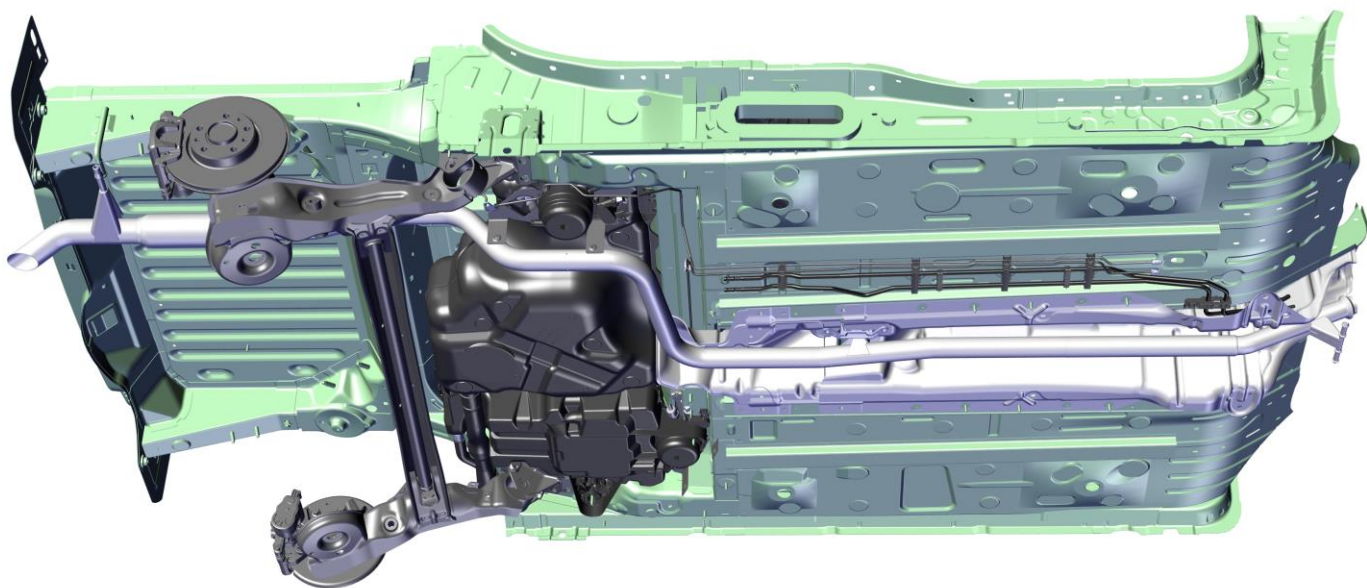
Cut out the rear muffler as shown

Exhaust diesel with 2 mufflers #3



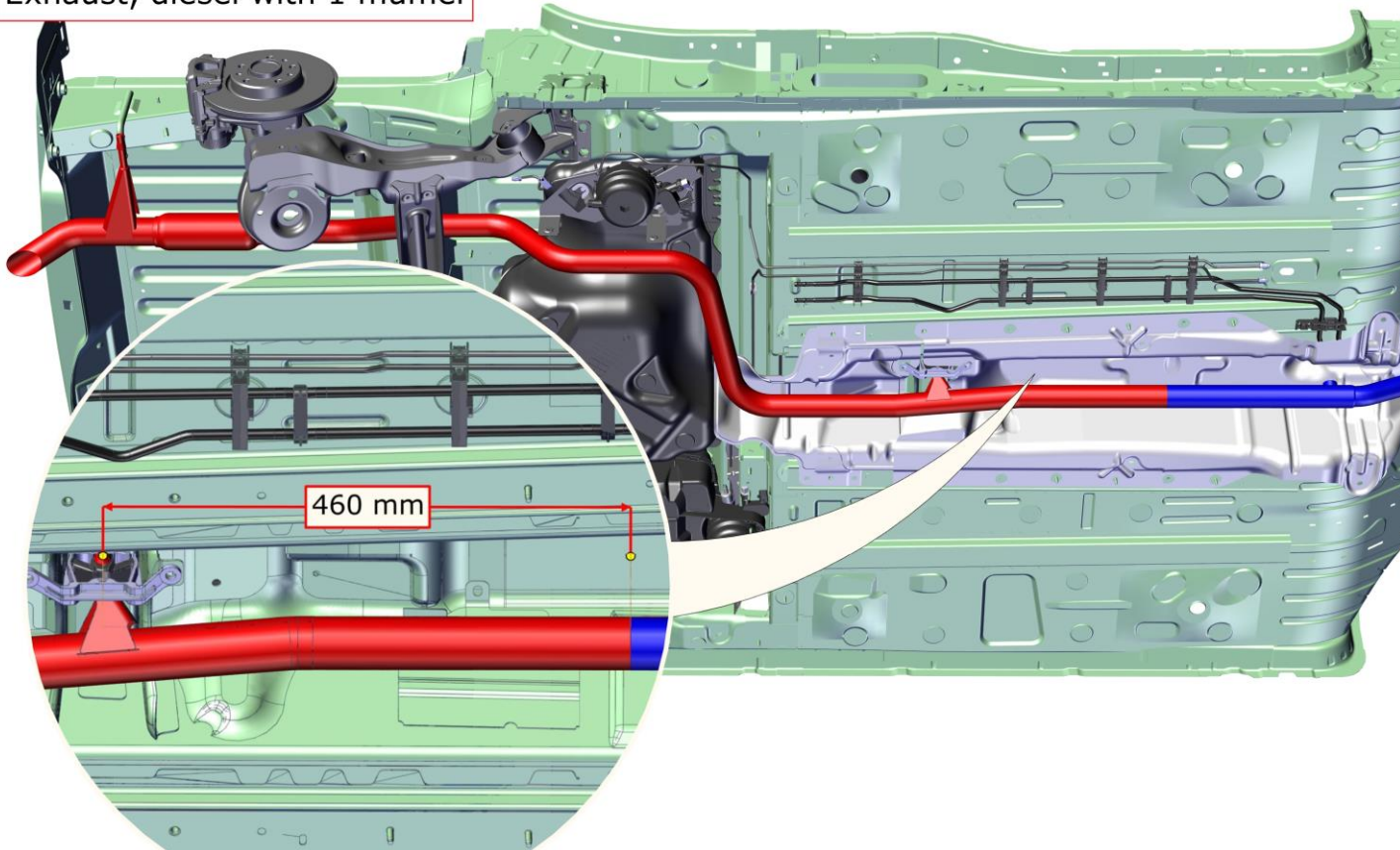
Cut 17mm into the edge

Exhaust, diesel with 1 muffler



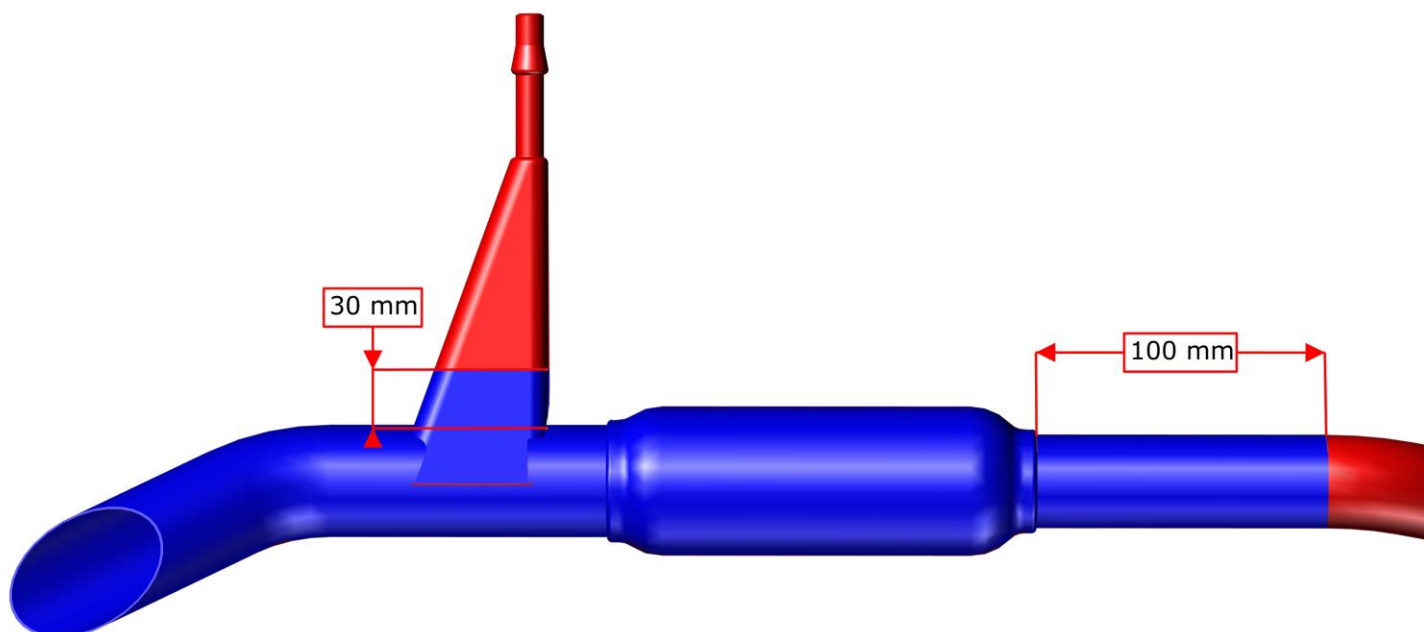
Only for cars with "YHY" on position 5-6-7 in the chassisnumber

Exhaust, diesel with 1 muffler



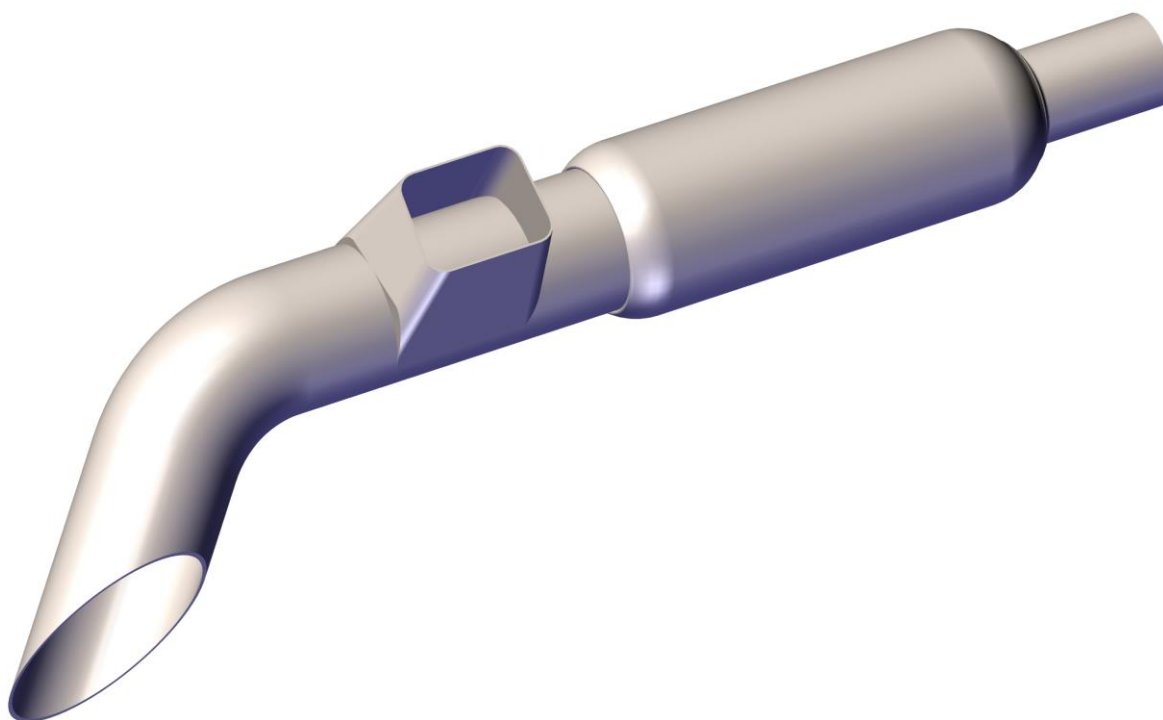
Only for cars with "YHY" on position 5-6-7 in the chassisnumber

Exhaust, diesel with 1 muffler



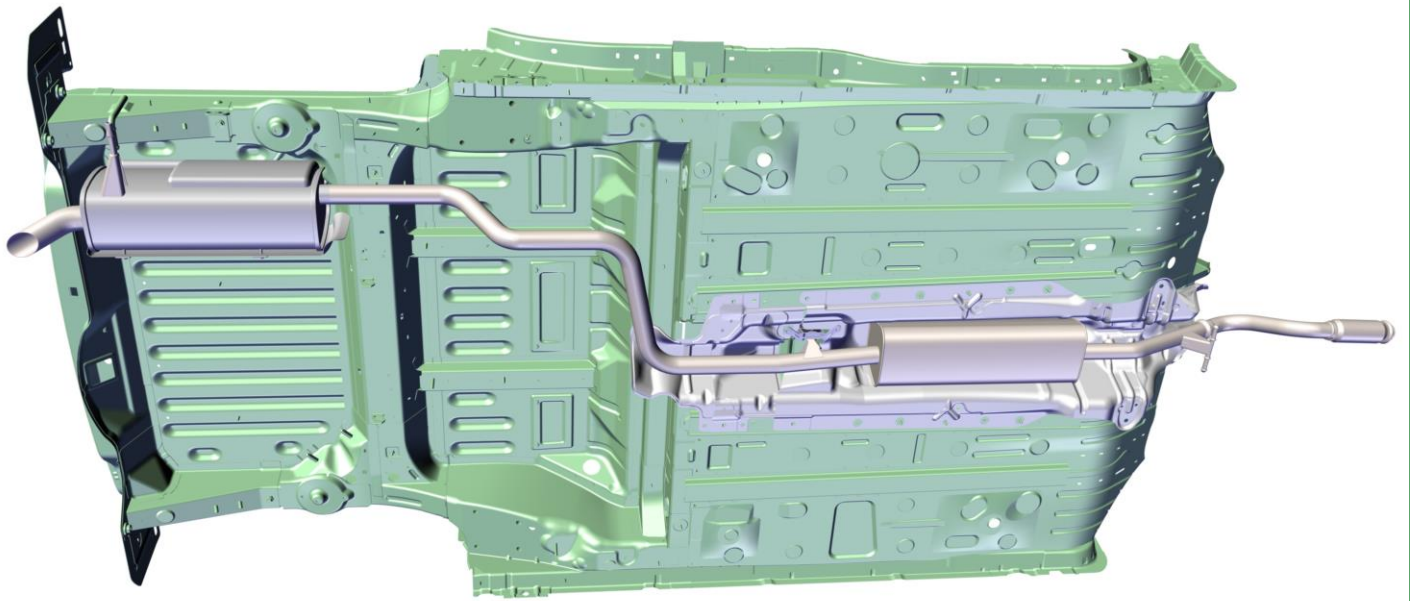
Only for cars with "YHY" on position 5-6-7 in the chassisnumber

Exhaust, diesel with 1 muffler

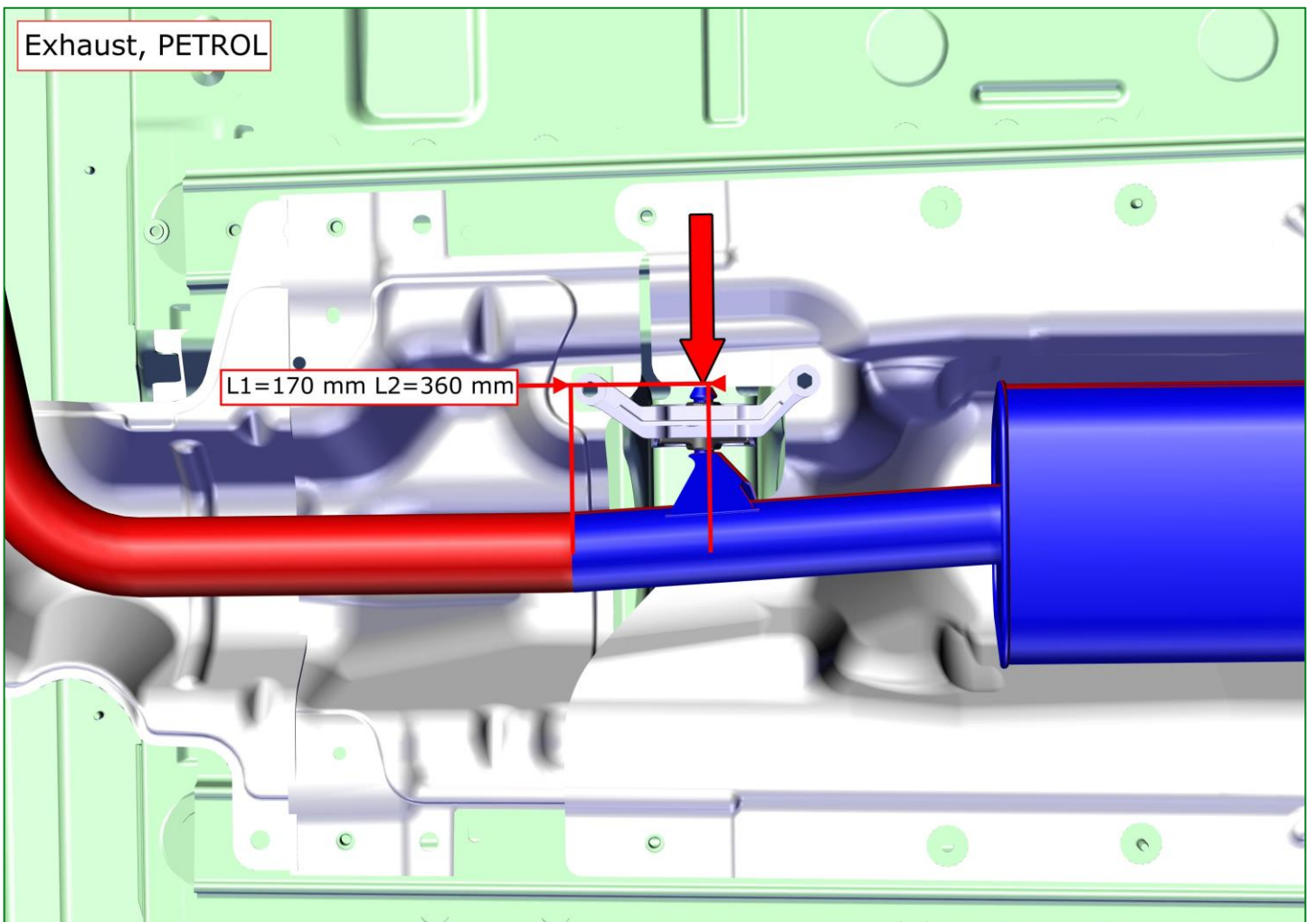


Only for cars with "YHY" on position 5-6-7 in the chassisnumber

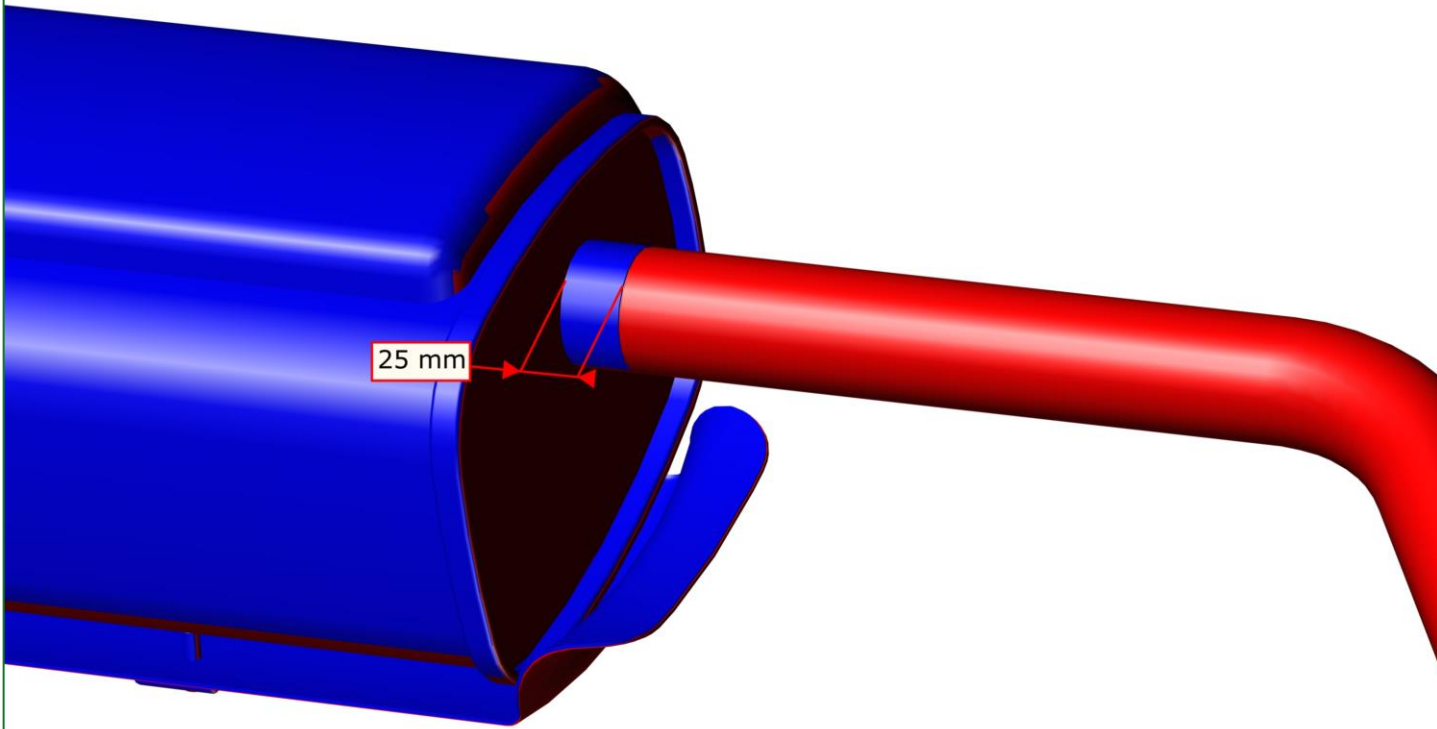
Exhaust, PETROL



Exhaust, PETROL

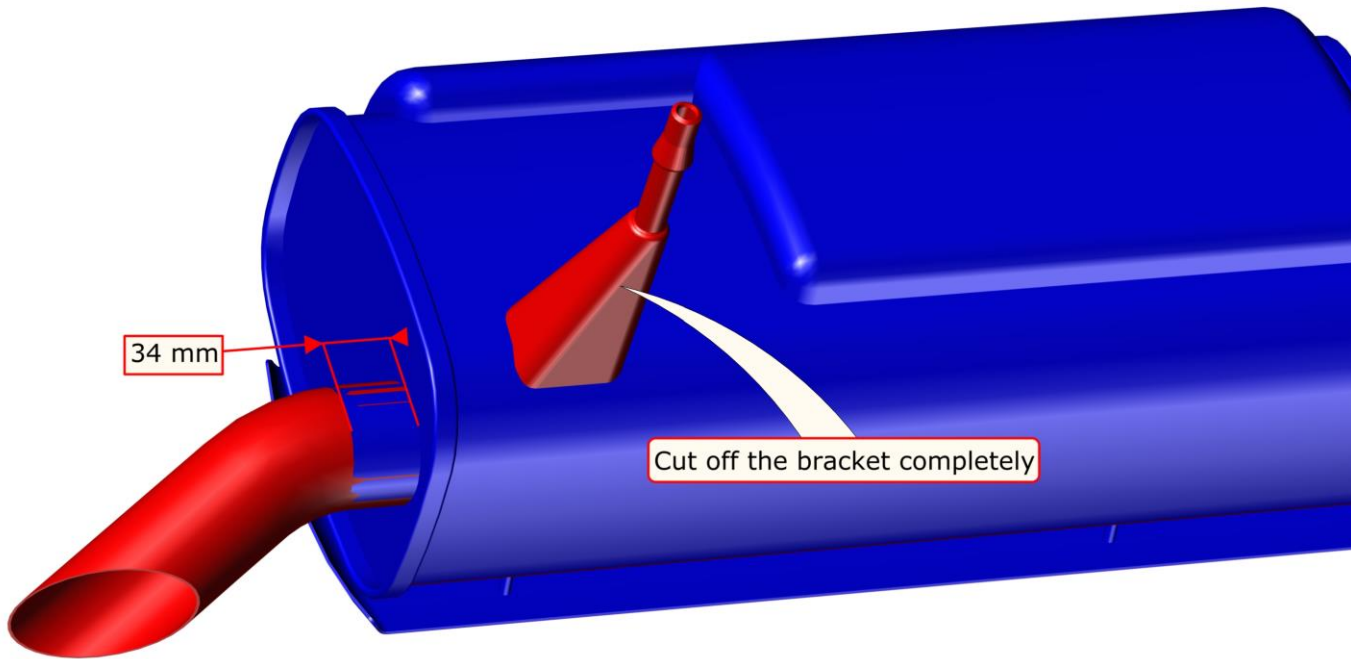


Exhaust, PETROL



Cut the rear silencer as shown, (pictured silencer may differ from reality)

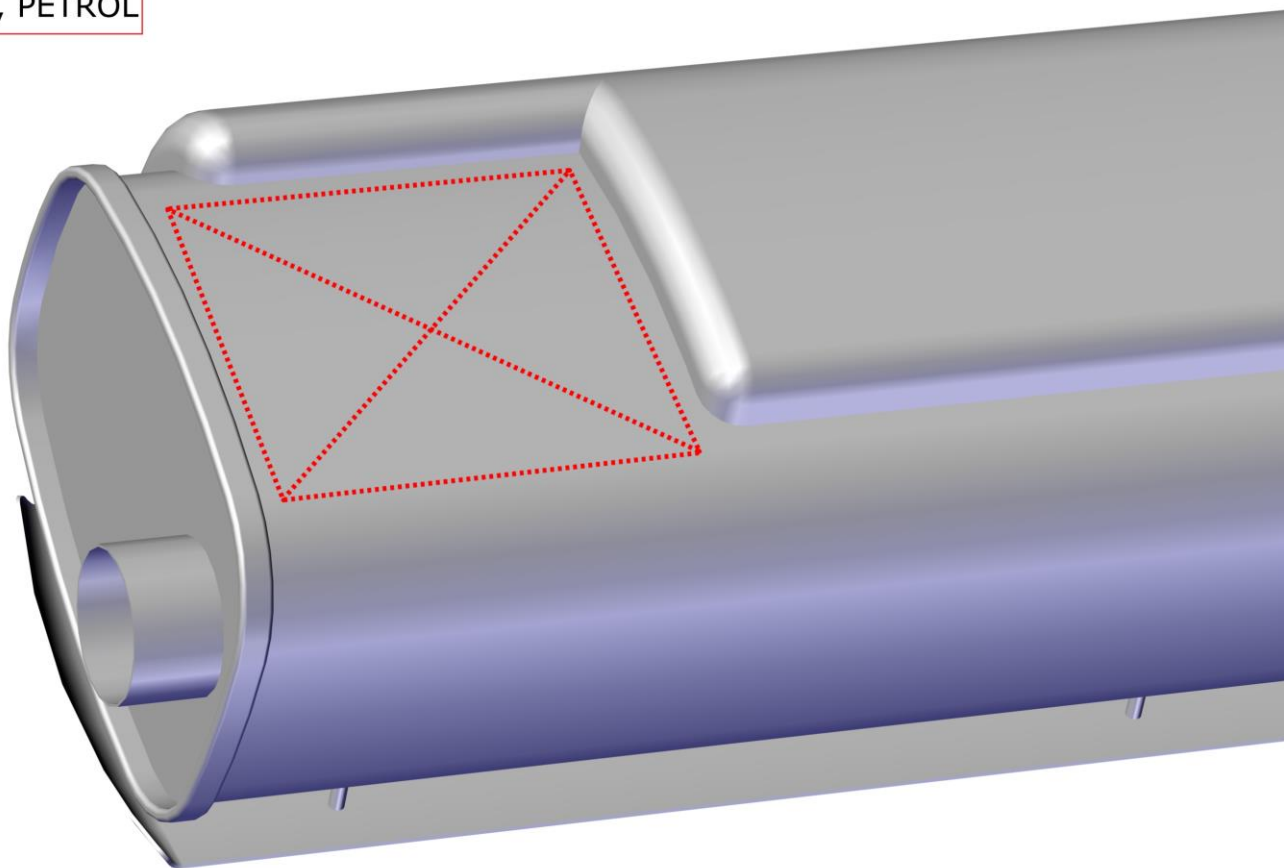
Exhaust, PETROL



Cut the rear silencer as shown, (pictured silencer may differ from reality)

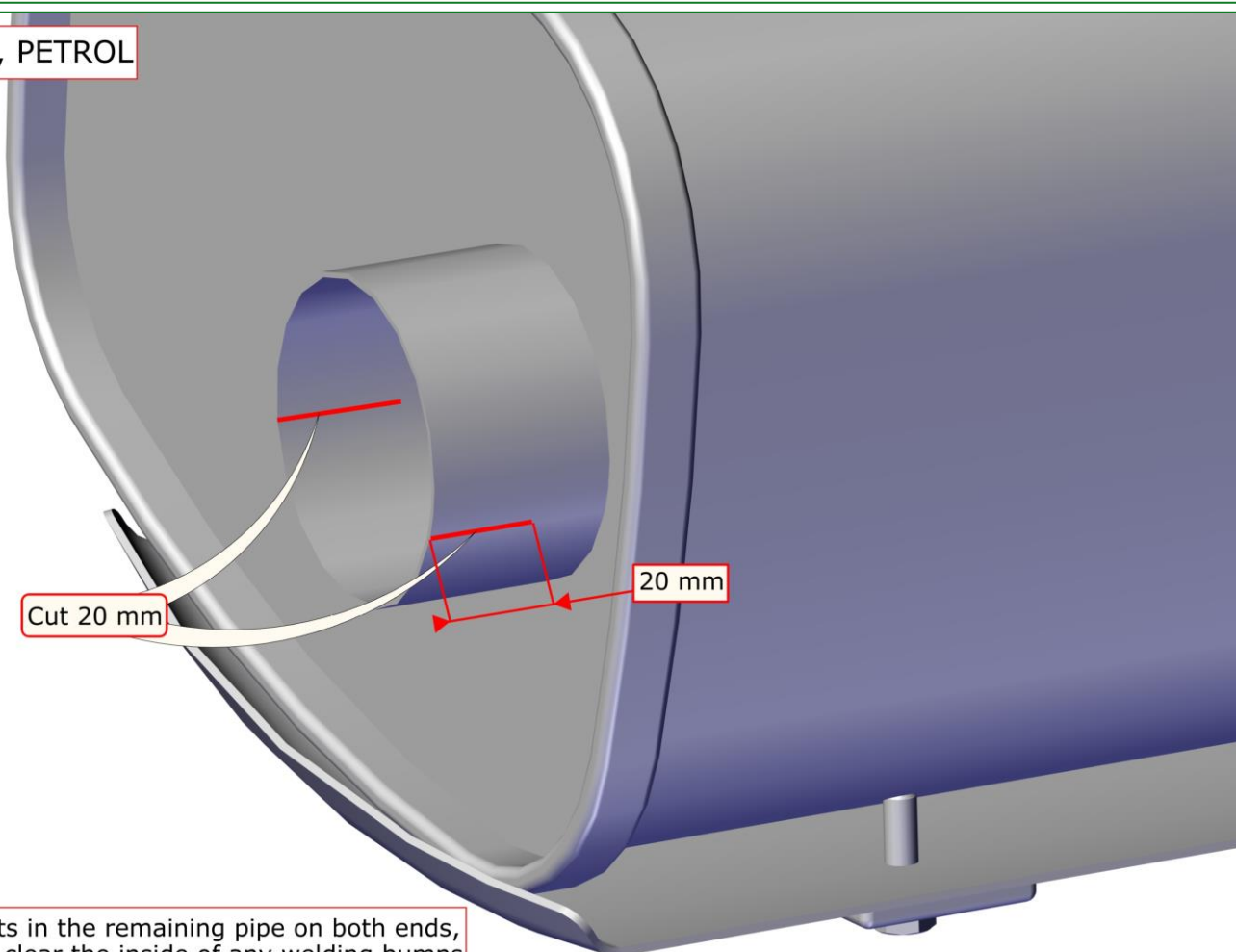


Exhaust, PETROL



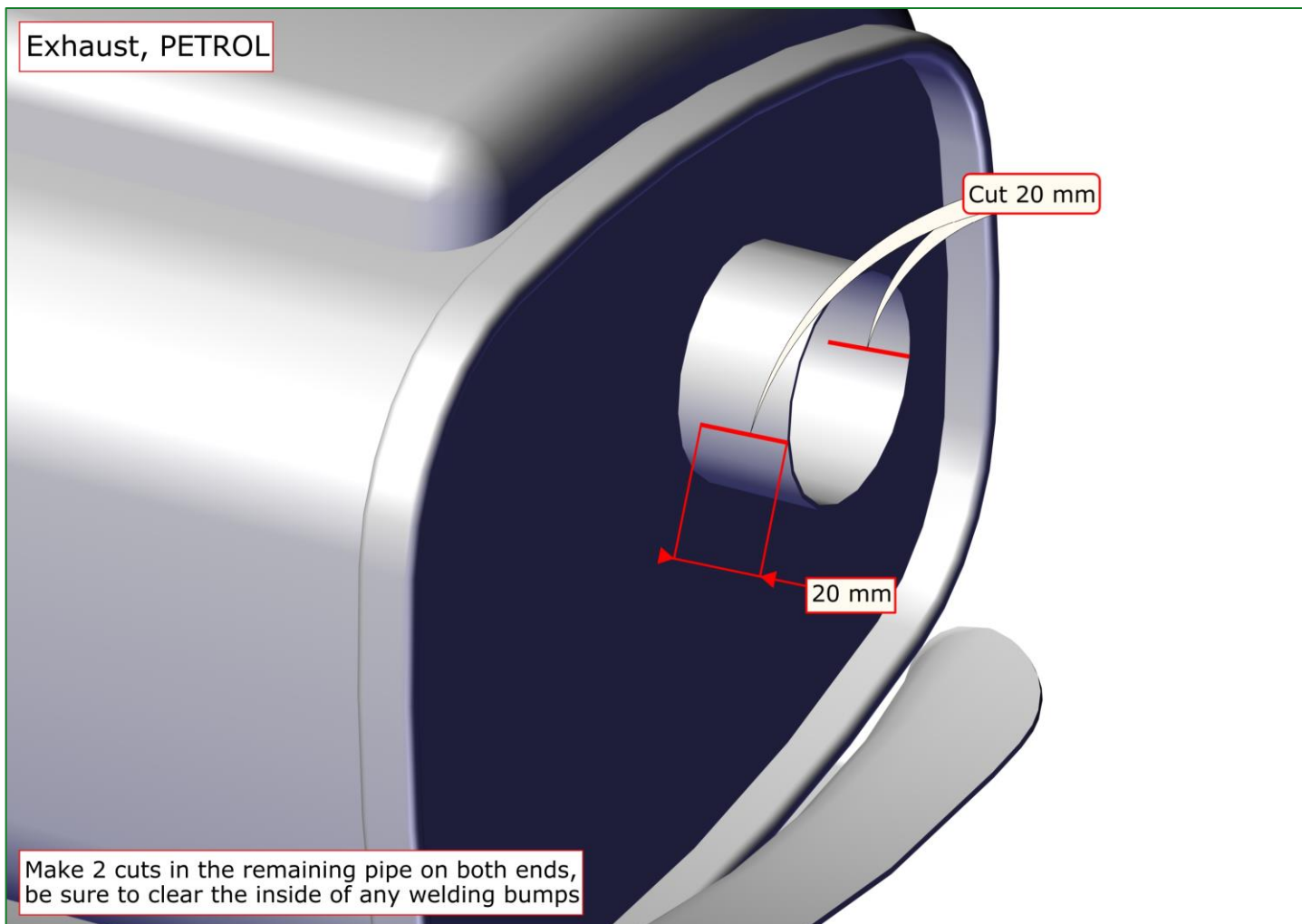
This area should be completely cleared from all pieces of bracket

Exhaust, PETROL

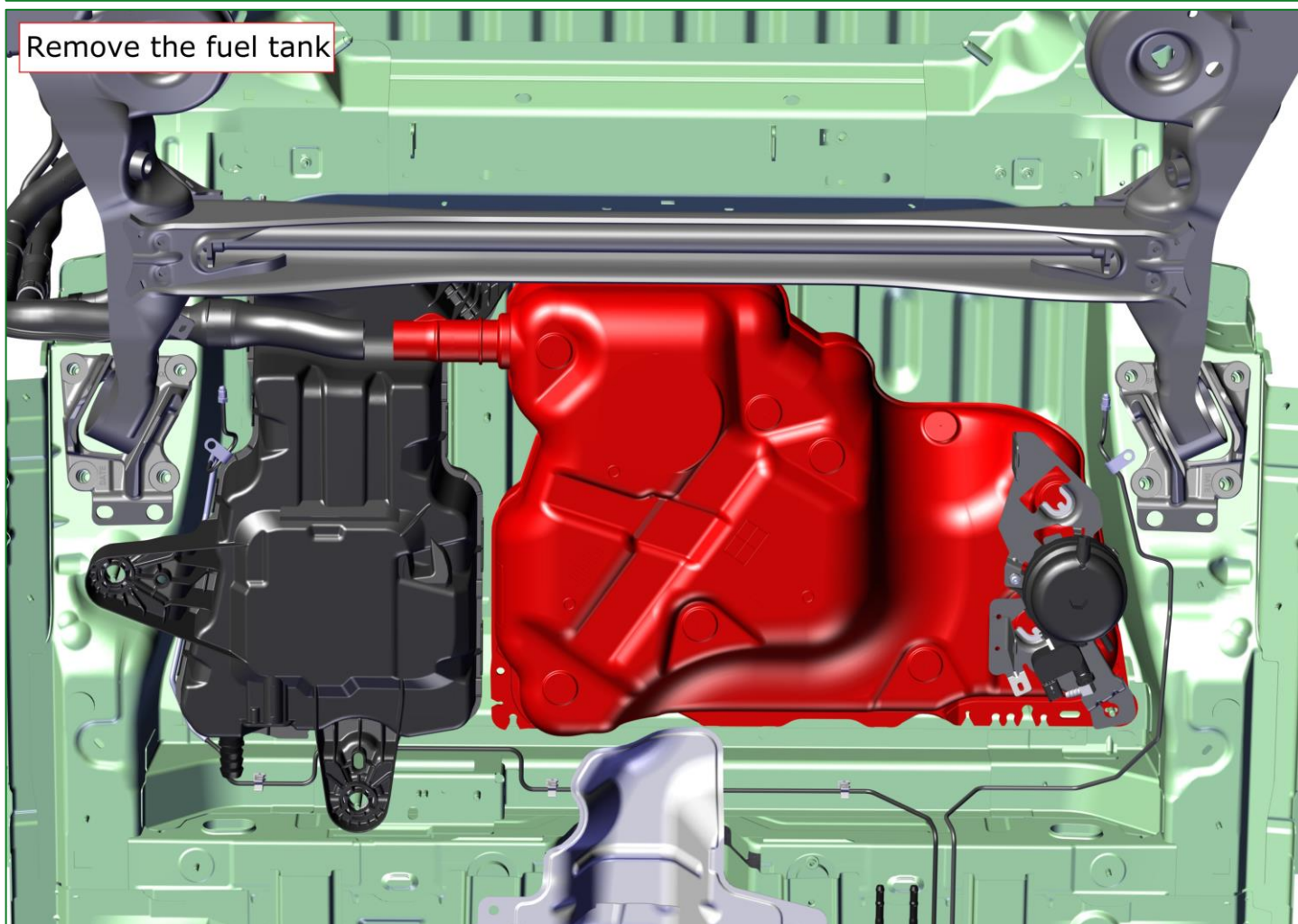


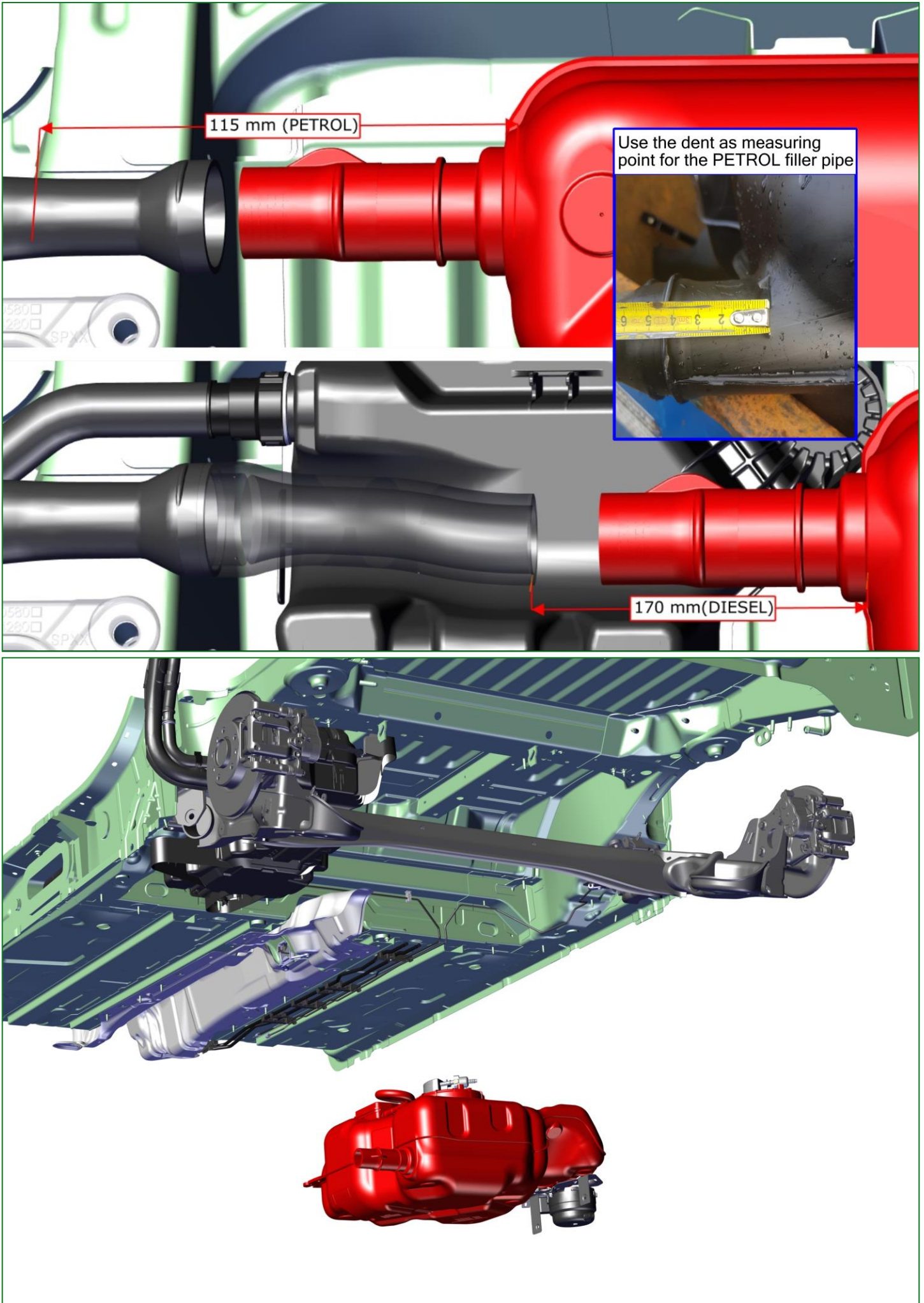
Make 2 cuts in the remaining pipe on both ends, be sure to clear the inside of any welding bumps

Exhaust, PETROL



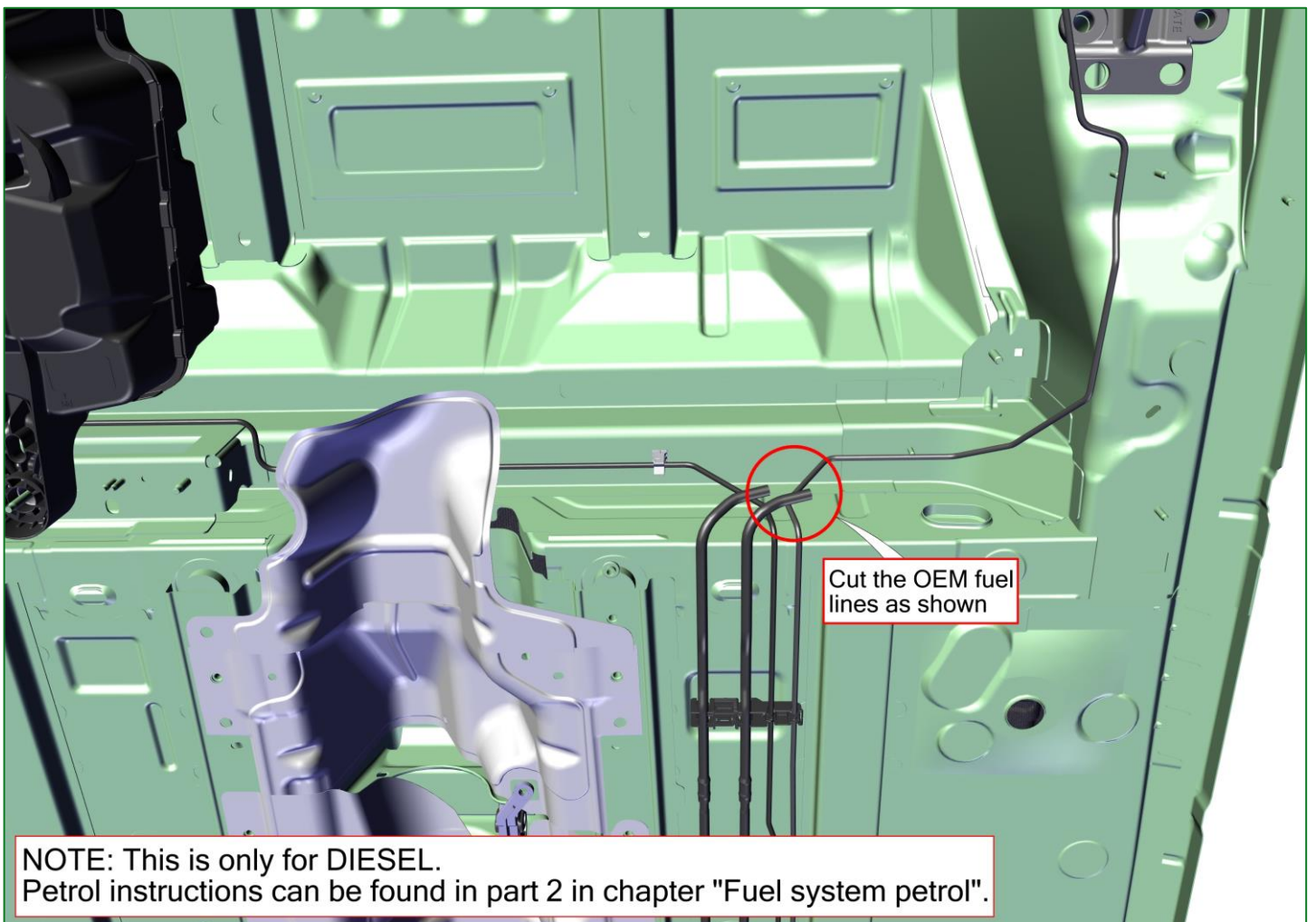
Remove the fuel tank



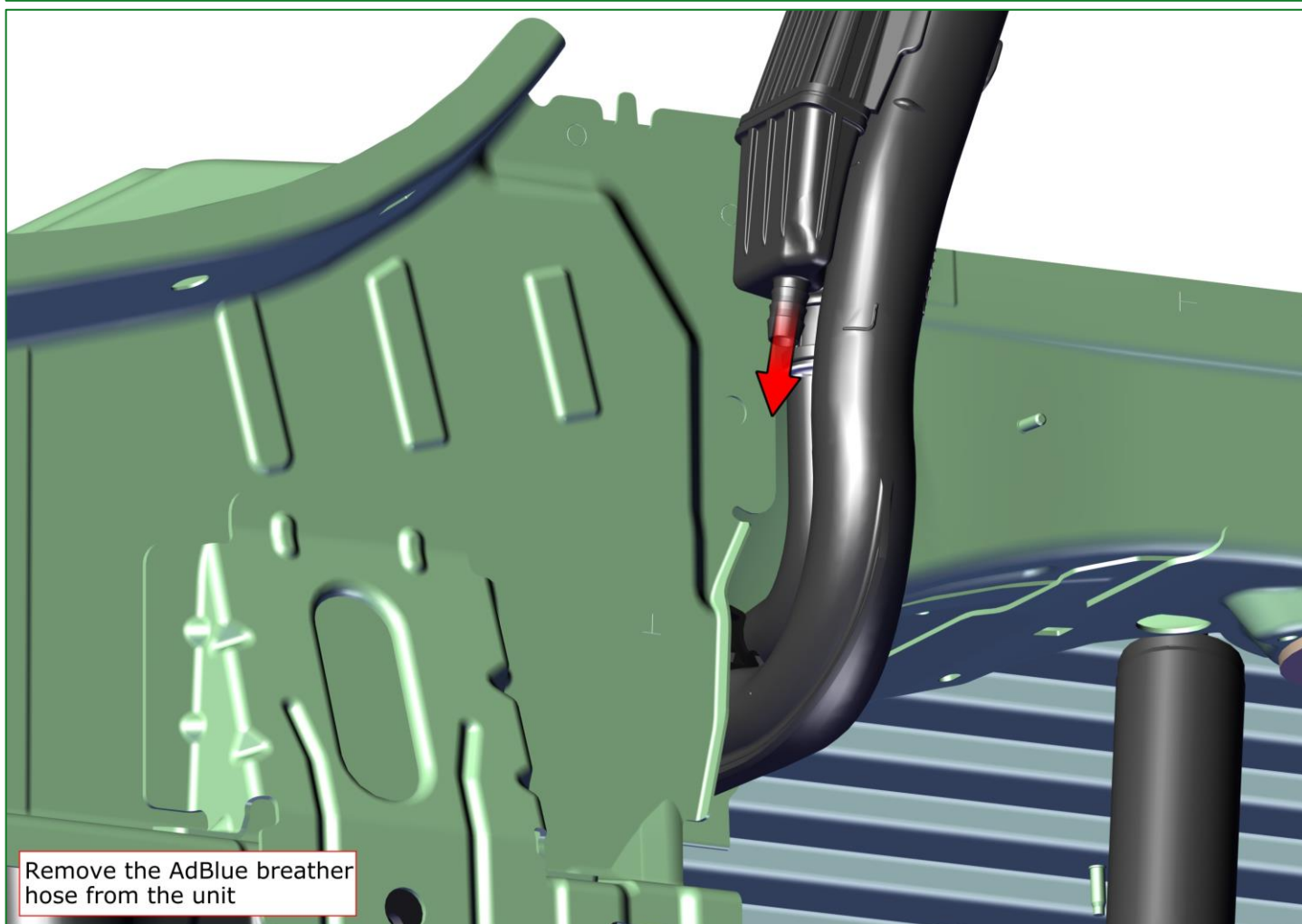
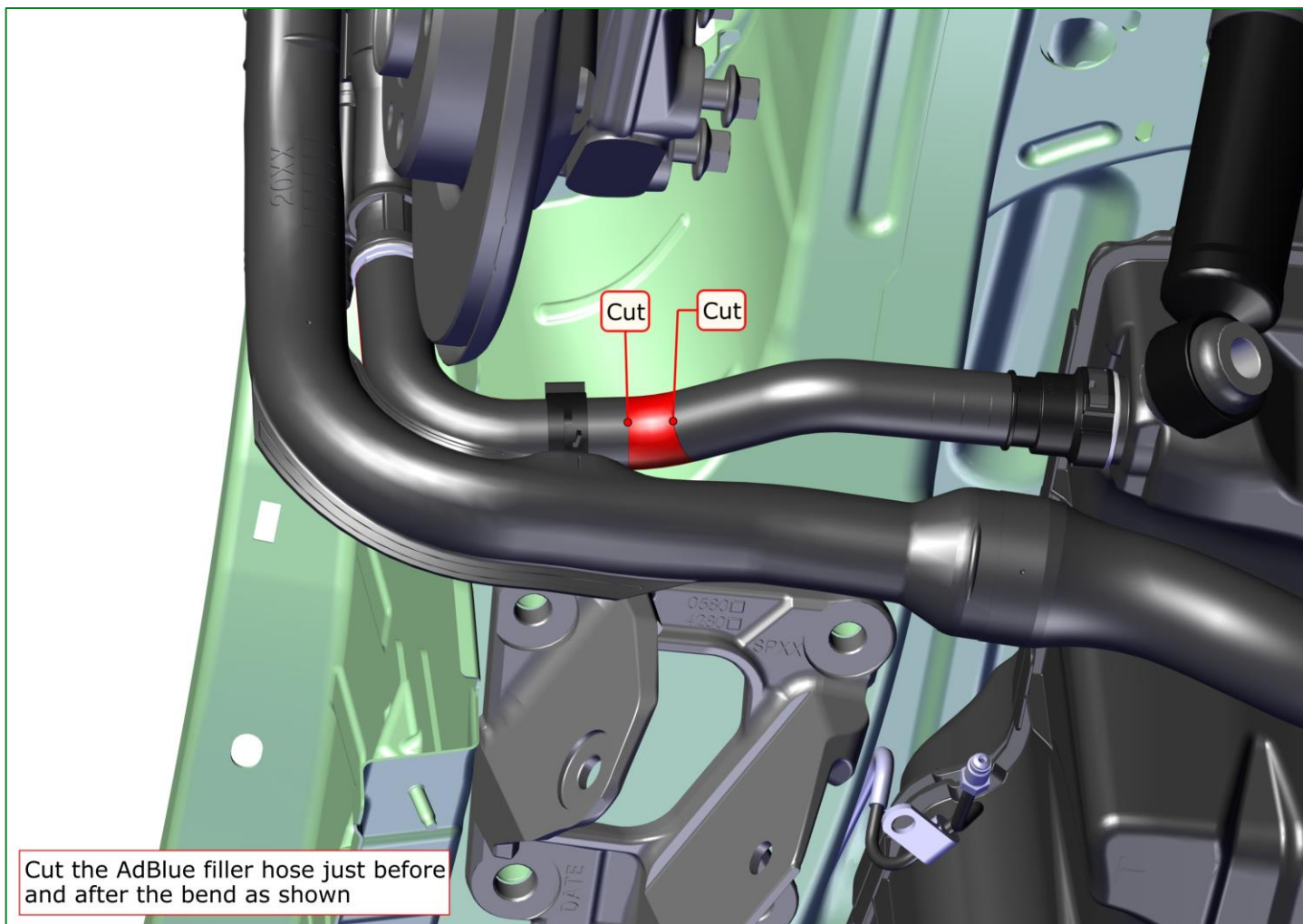


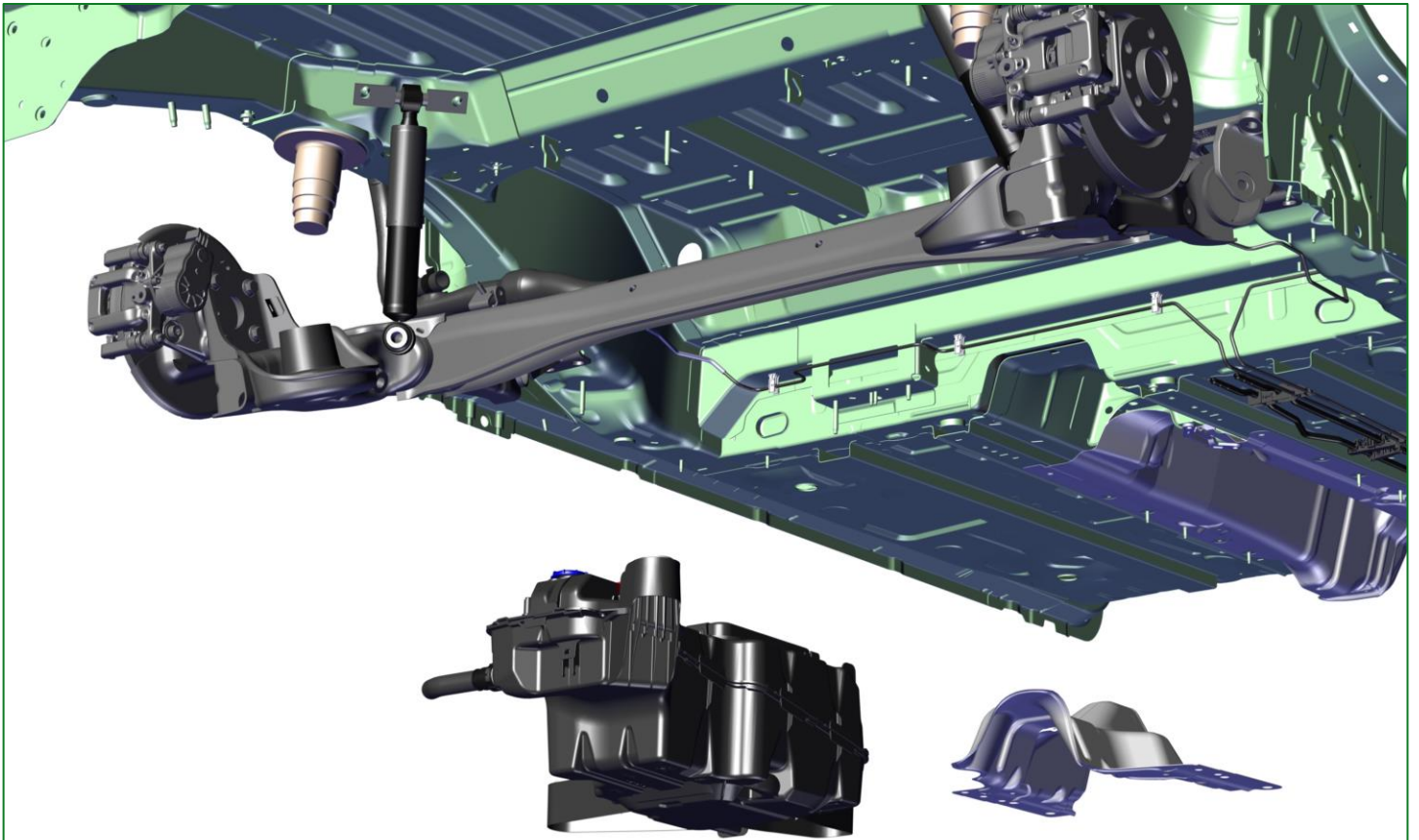


Remove the fuel pump/float, o-ring and the fuel filter they will be reused

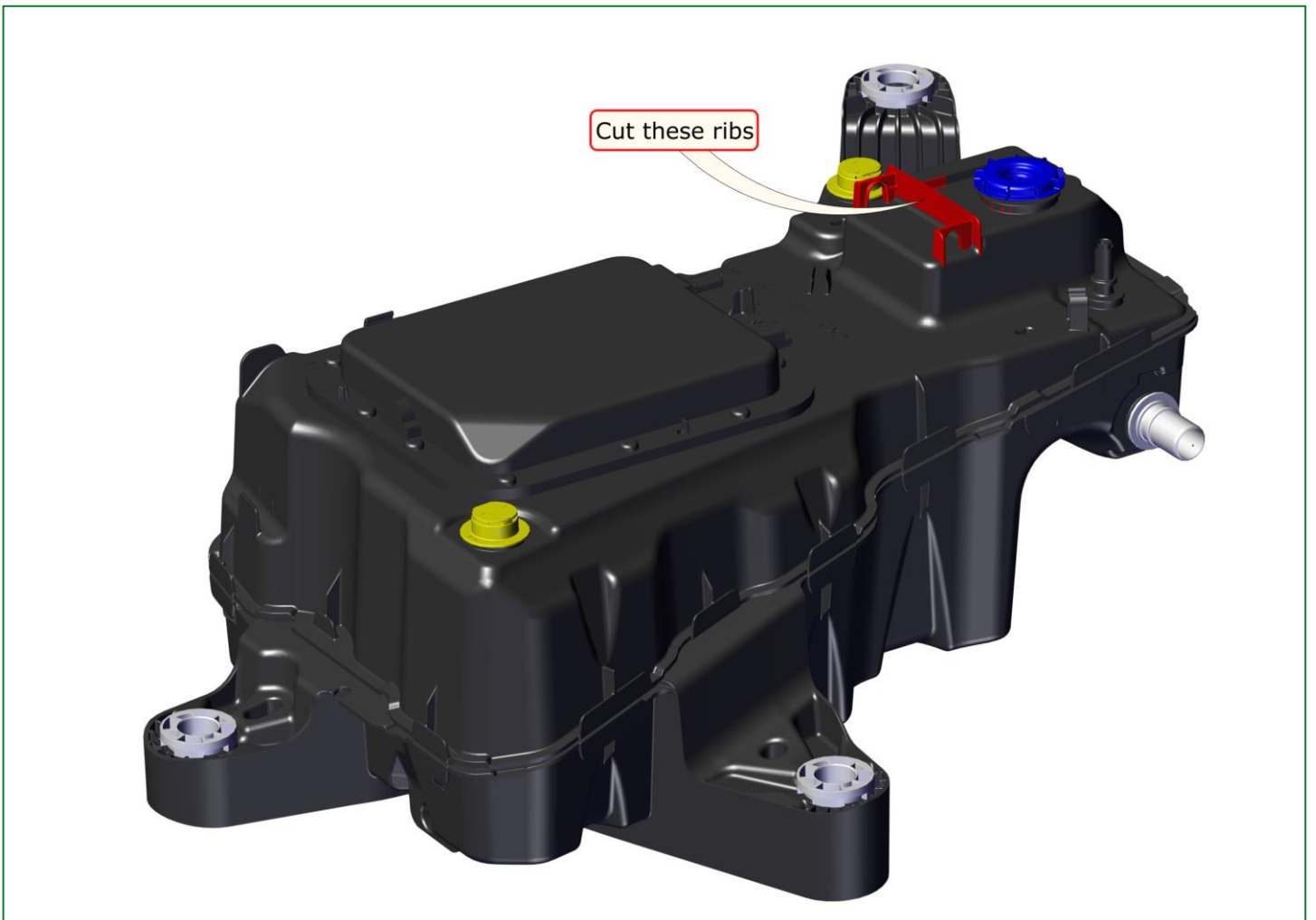


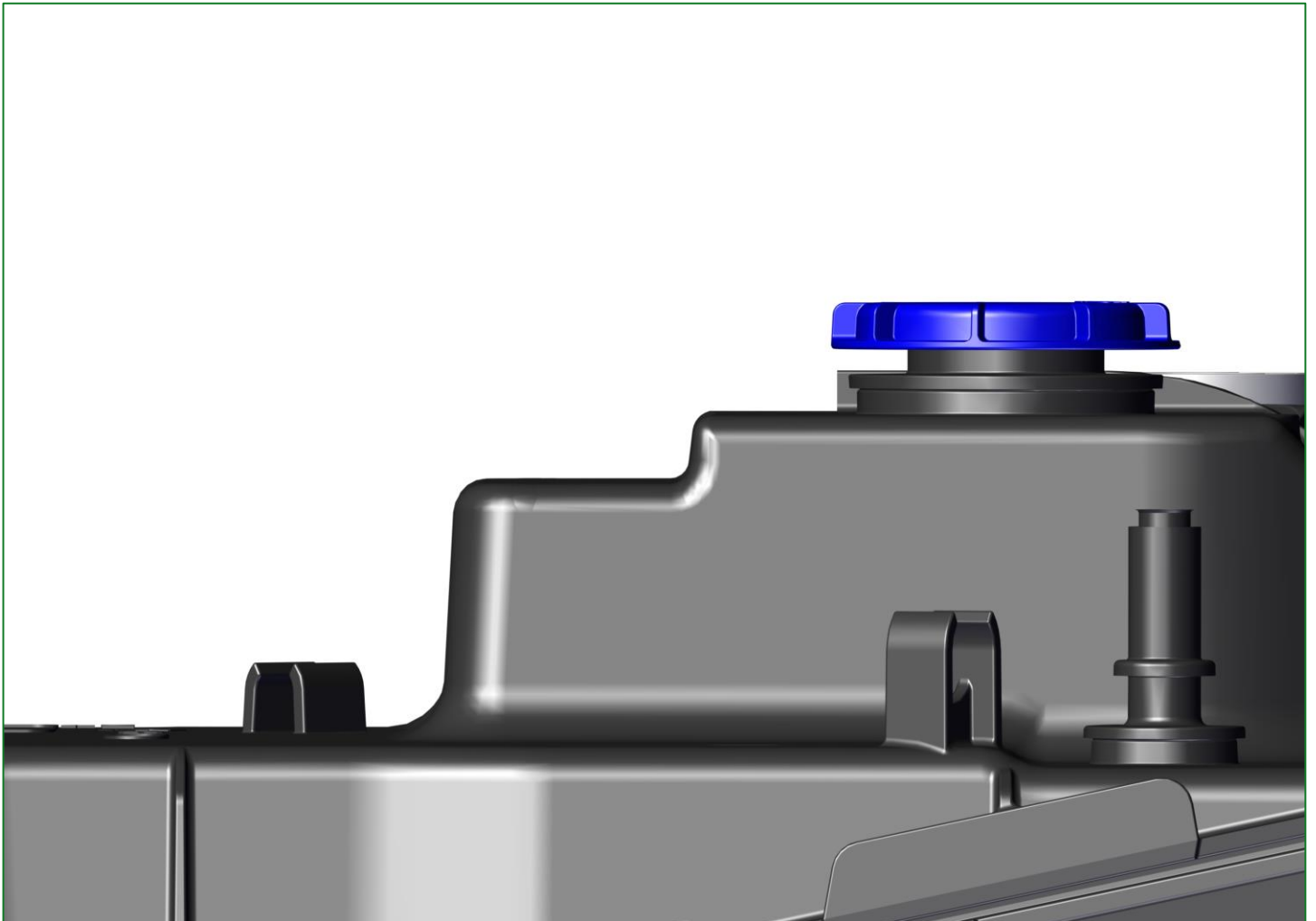
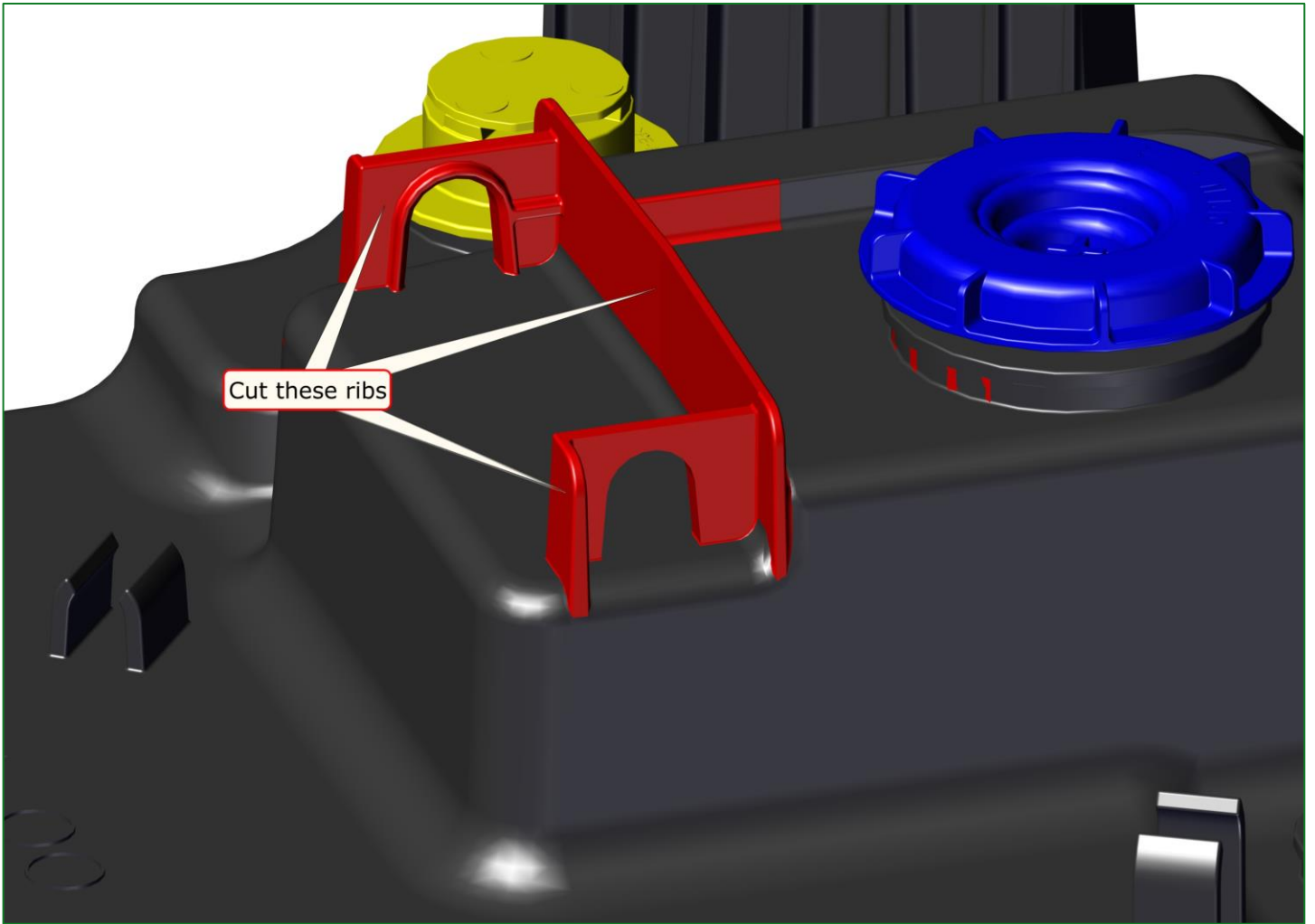
NOTE: This is only for DIESEL.  
Petrol instructions can be found in part 2 in chapter "Fuel system petrol".



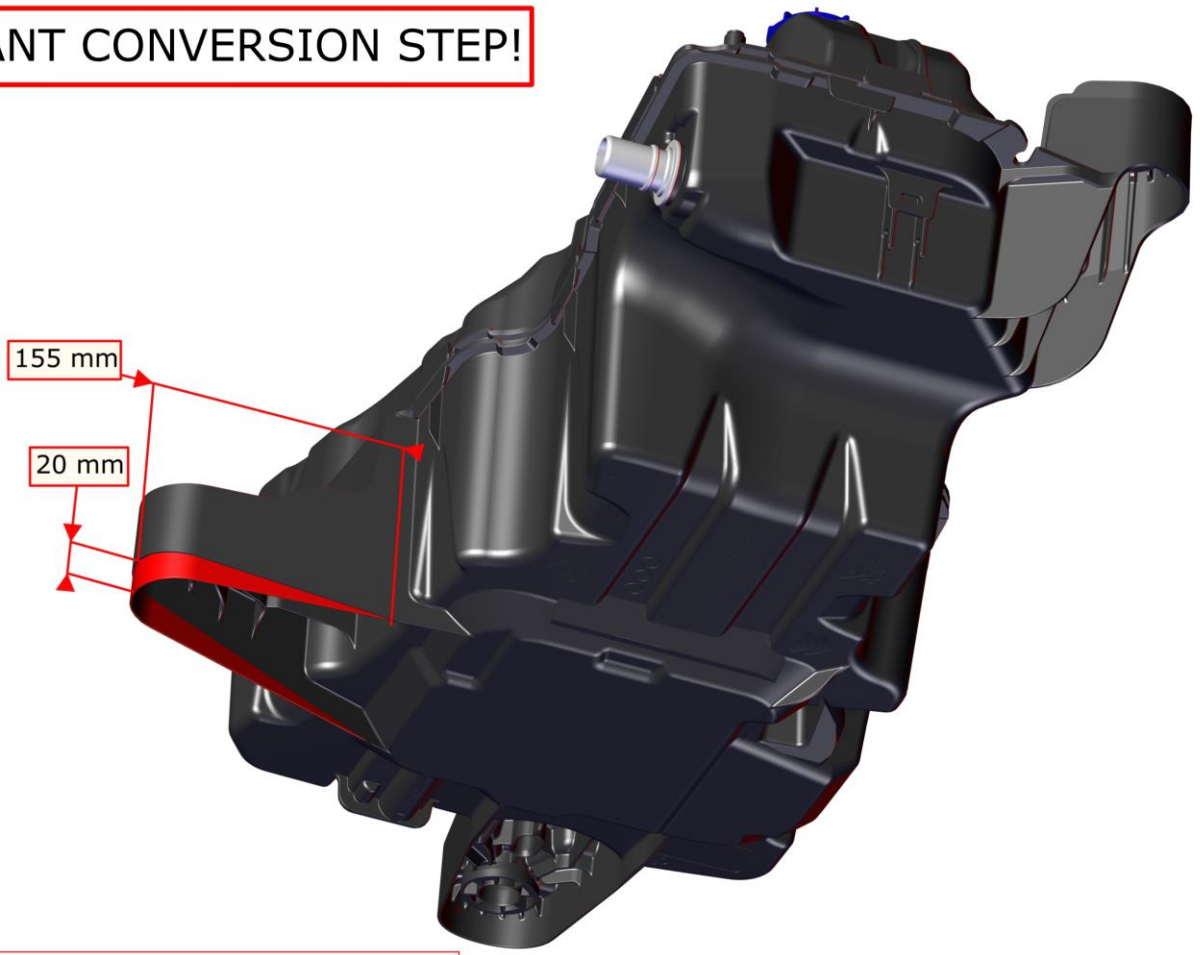


Remove the AdBlue tank and small rear heat shield

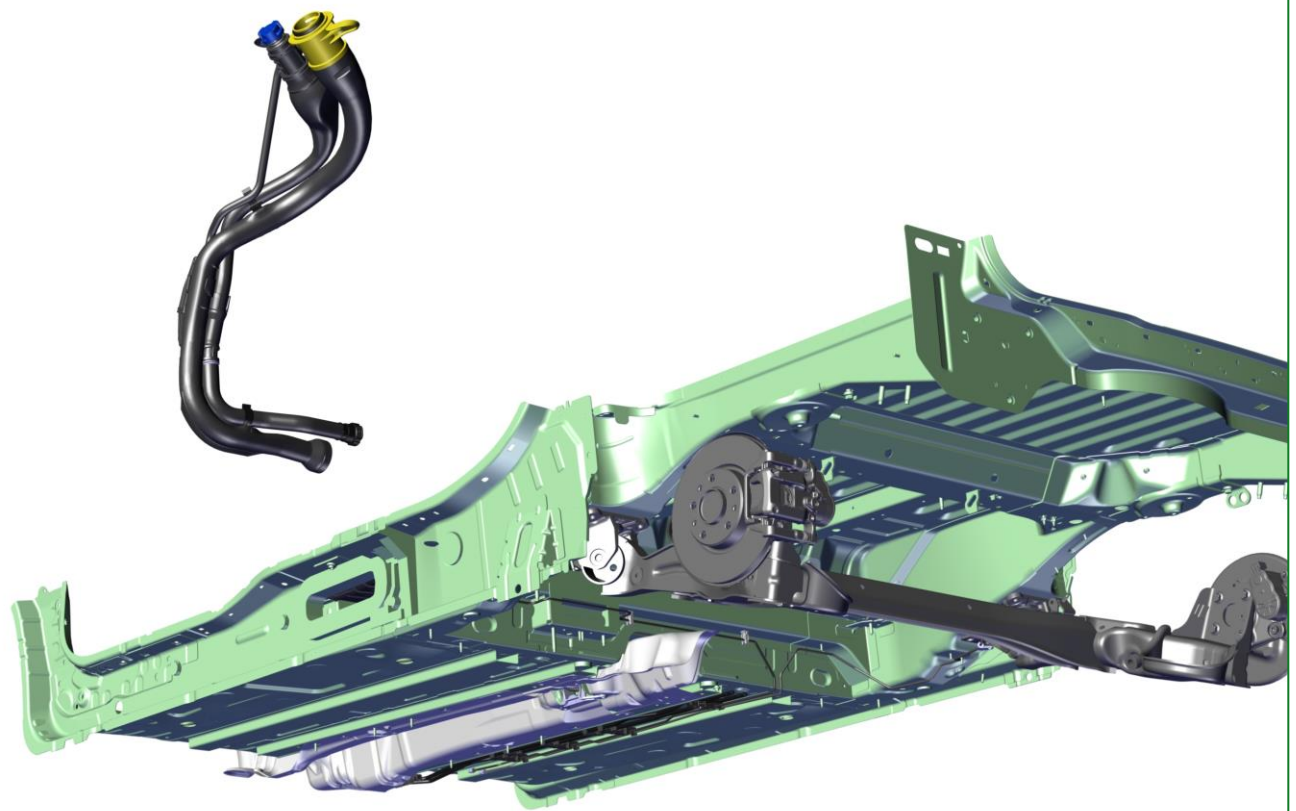




**IMPORTANT CONVERSION STEP!**



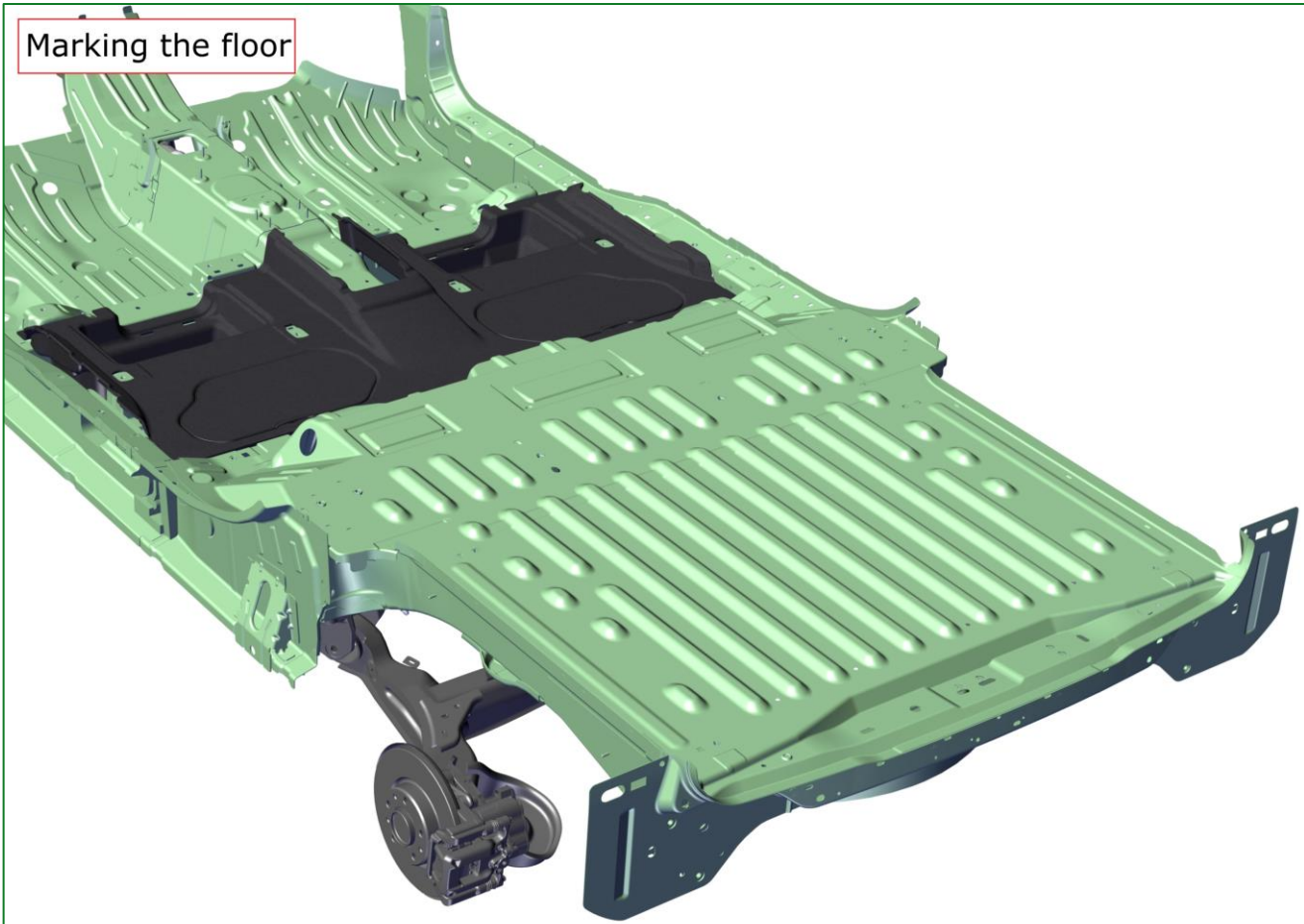
Cut off a piece of the mounting bracket (shown red)



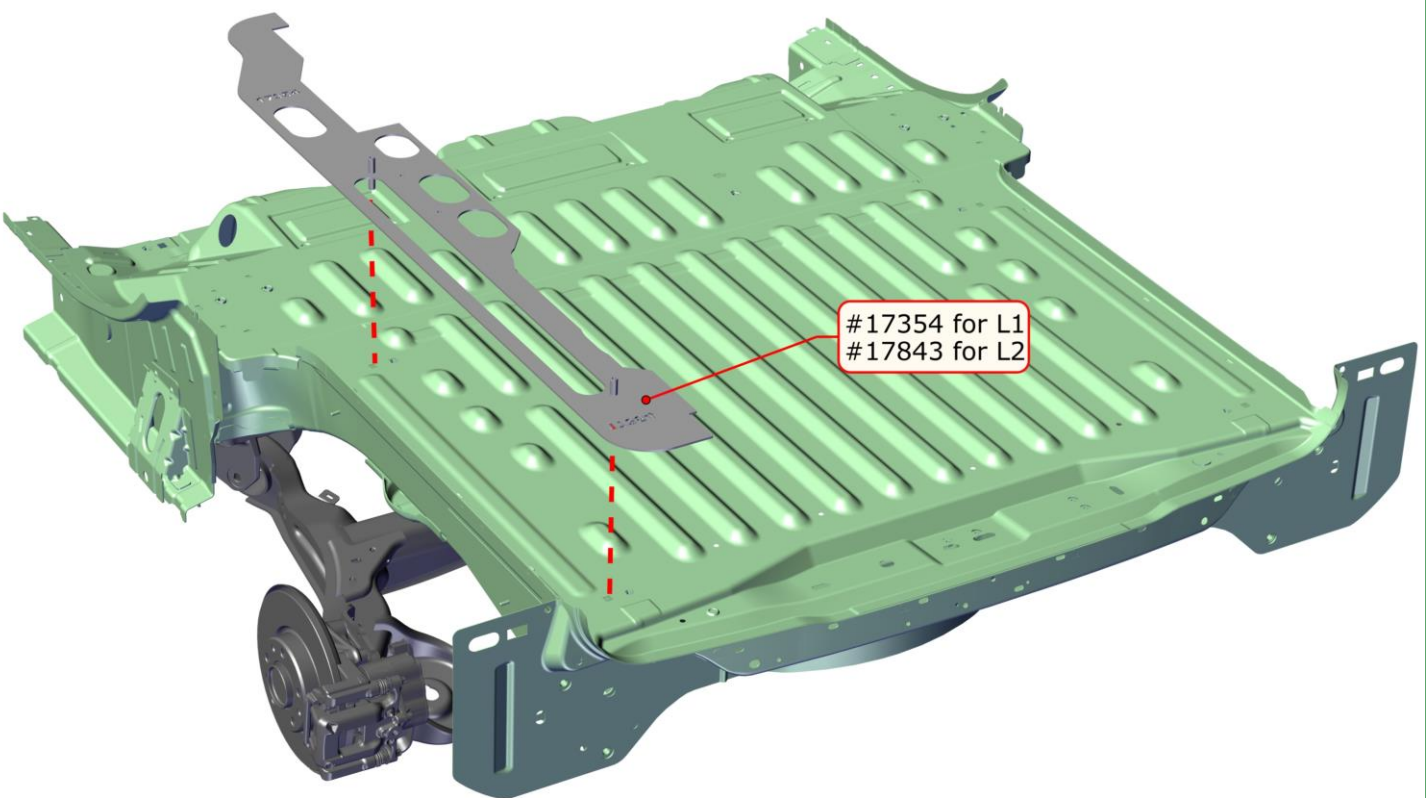
Remove the fuel/AdBlue filler pipe

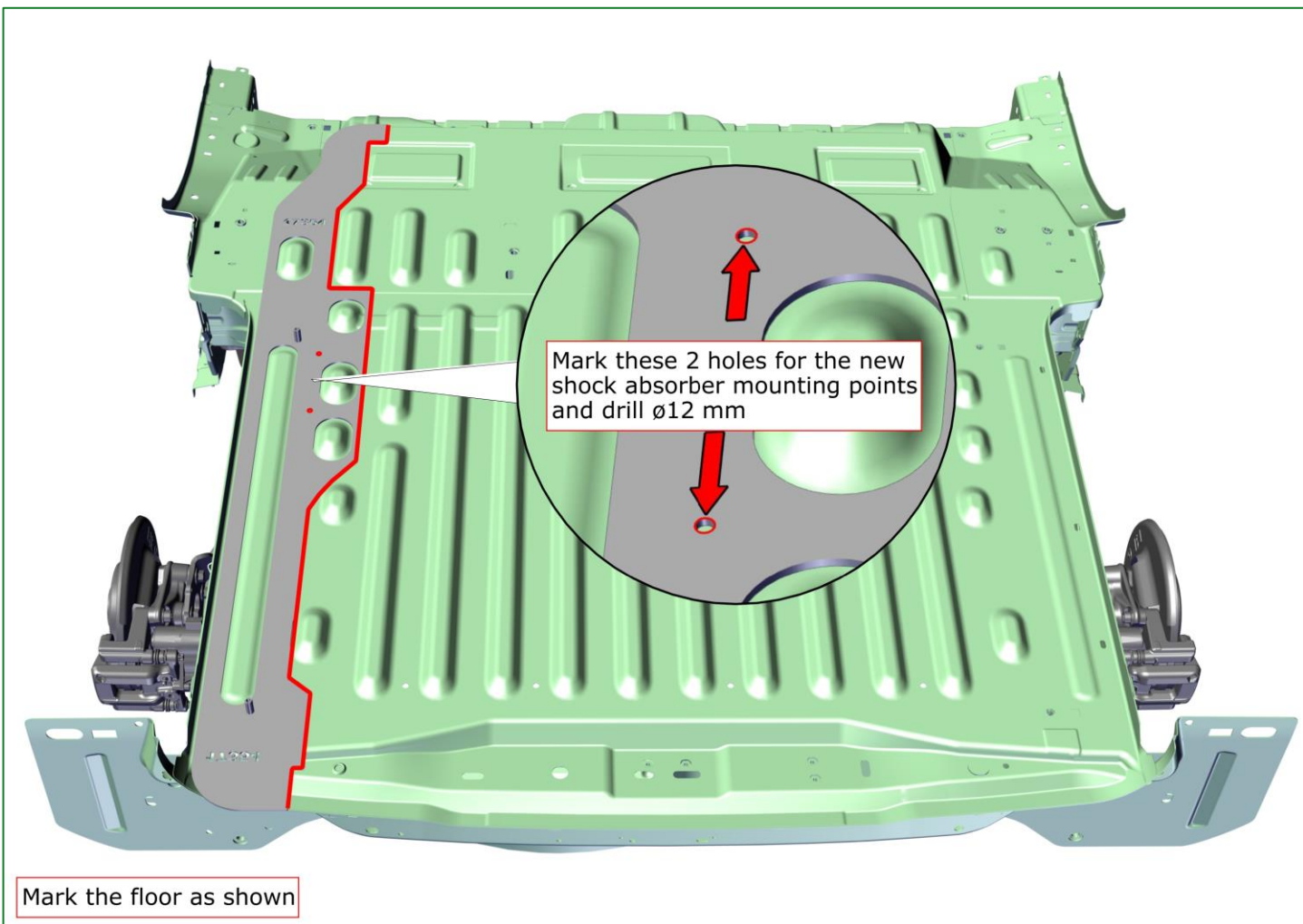
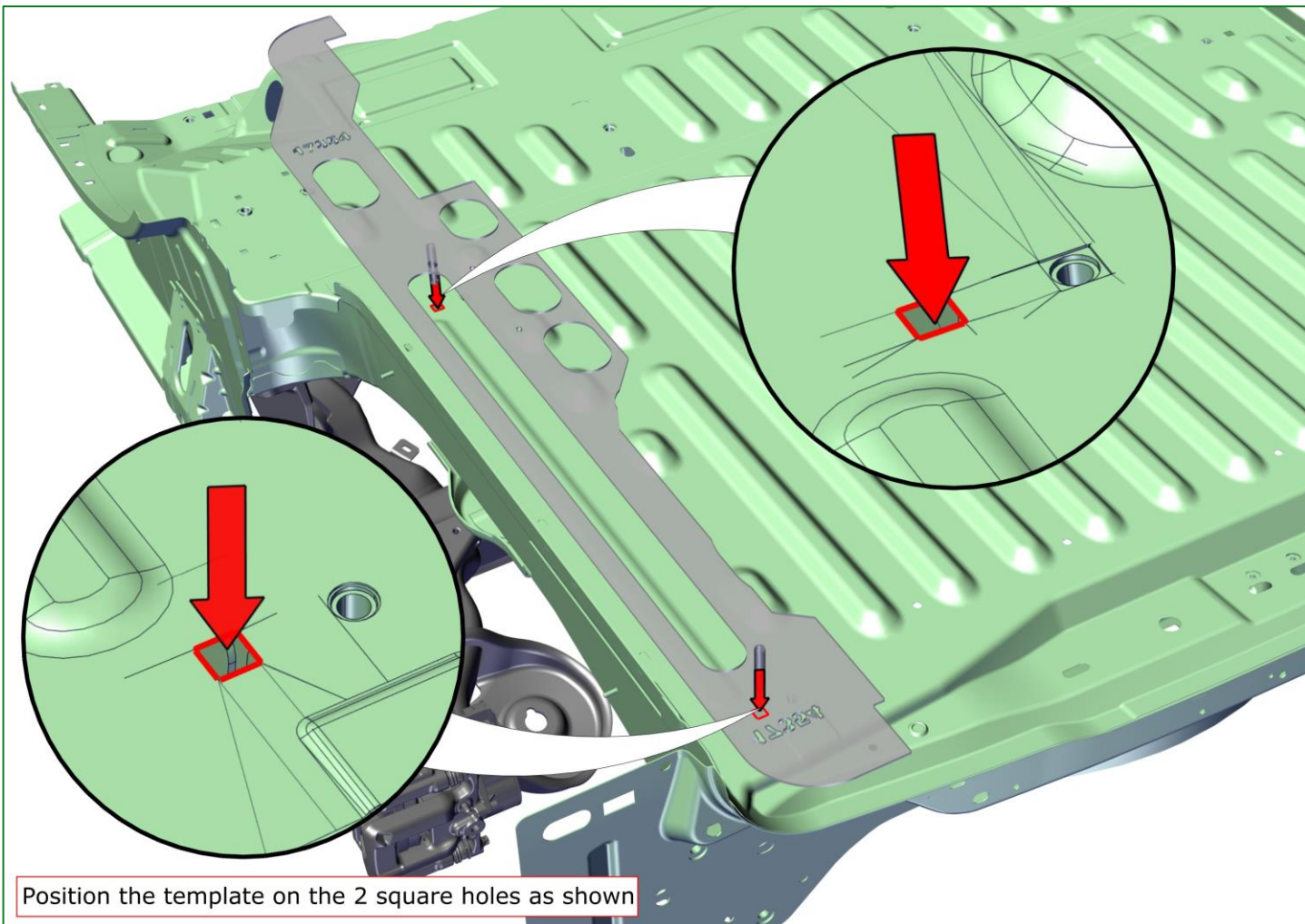


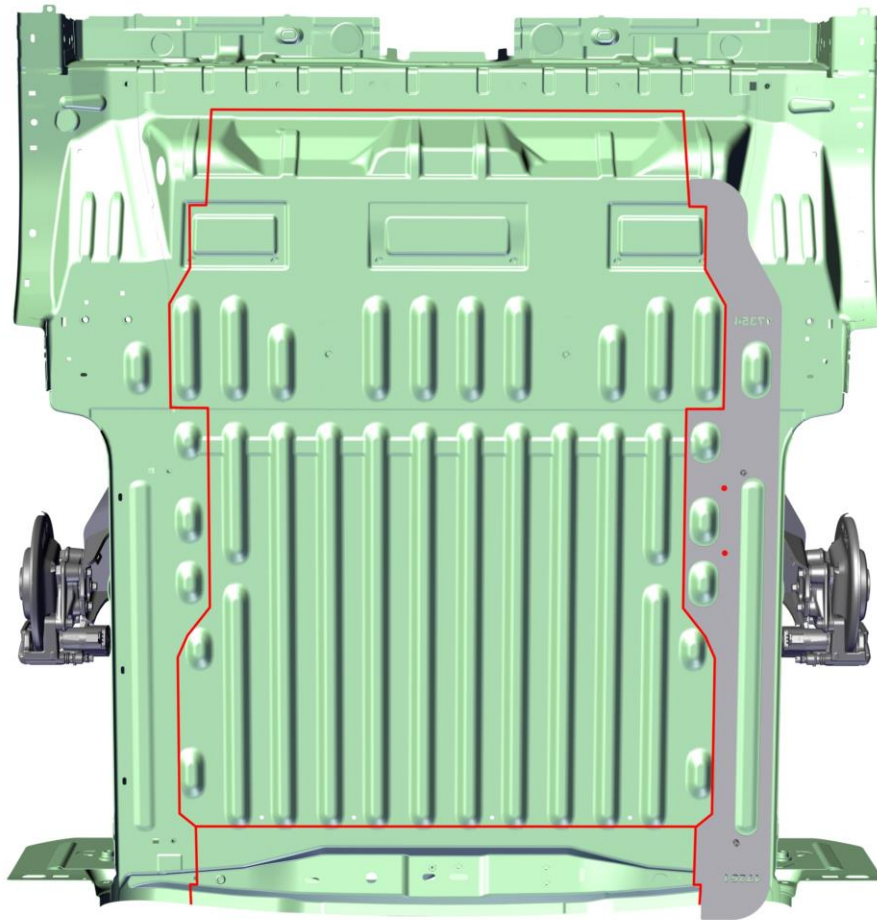
Marking the floor



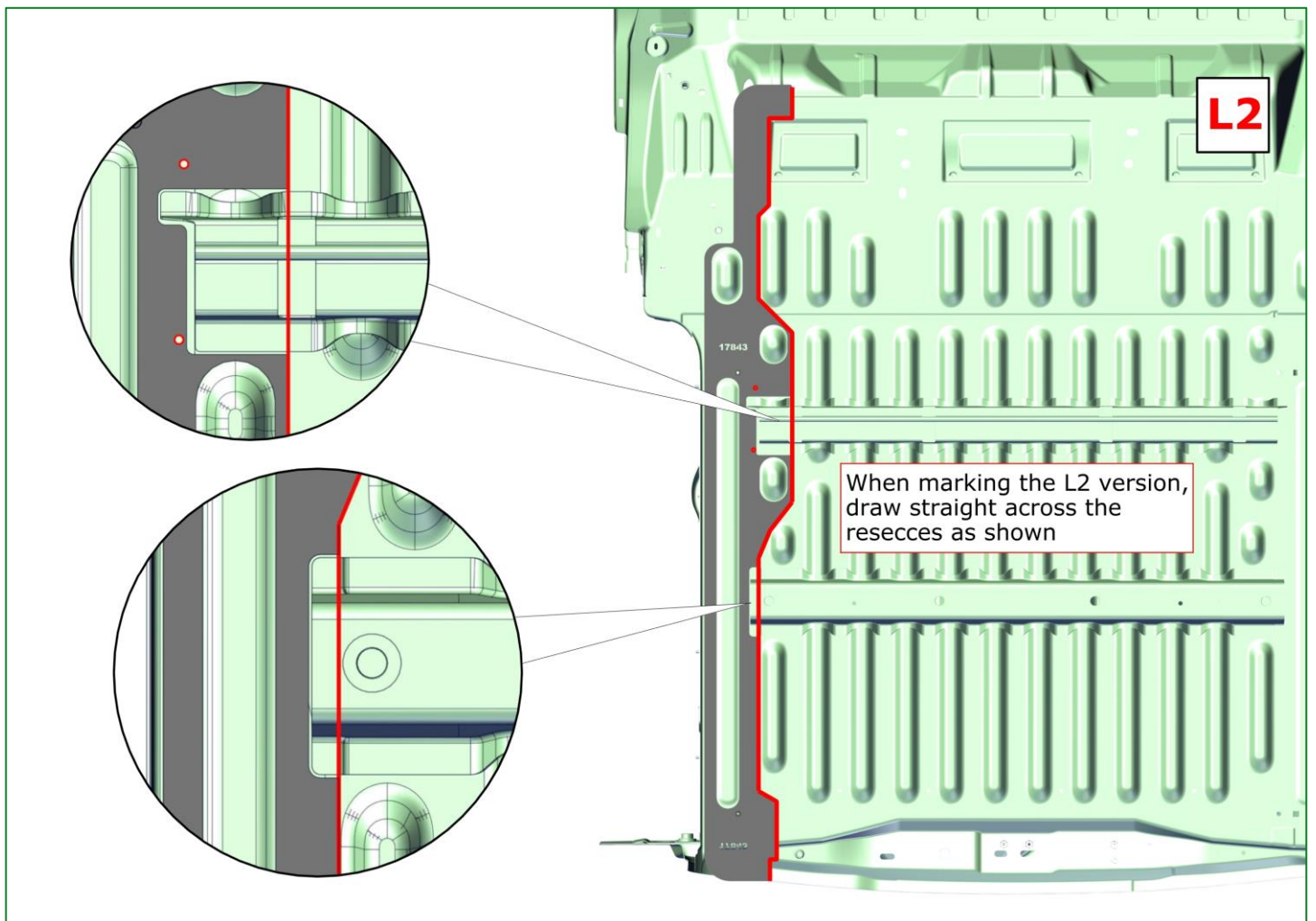
Place the template on the floor

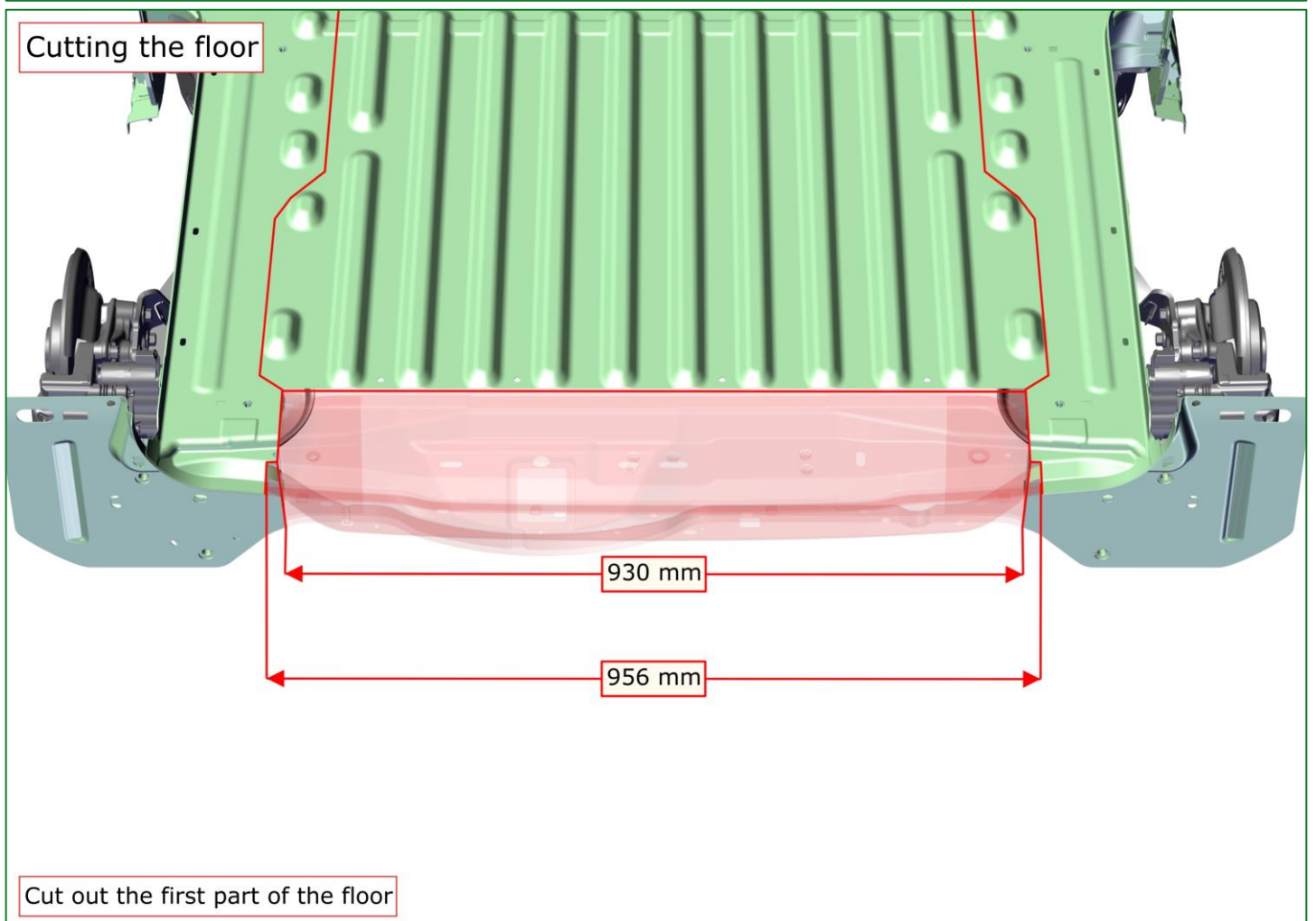
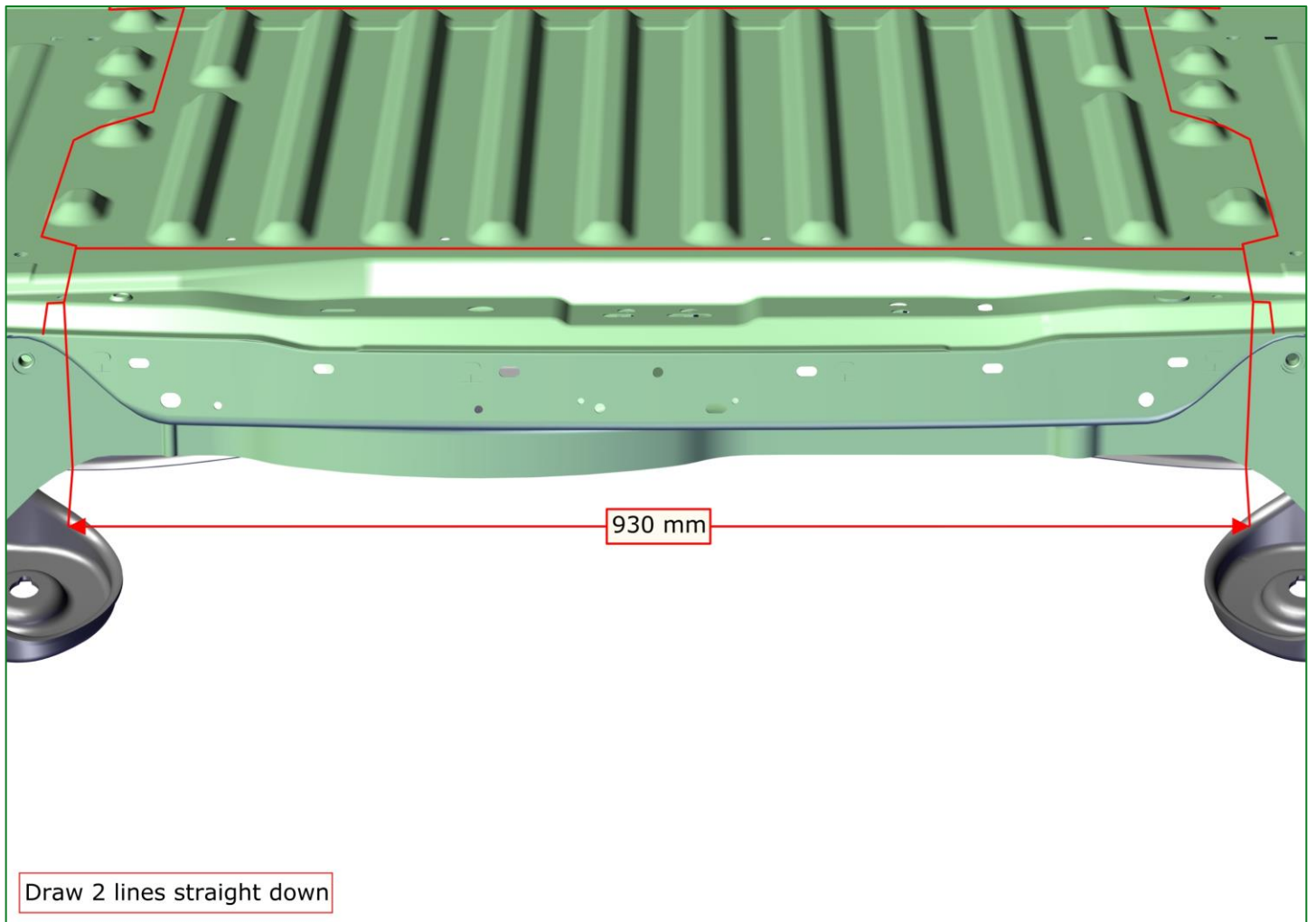


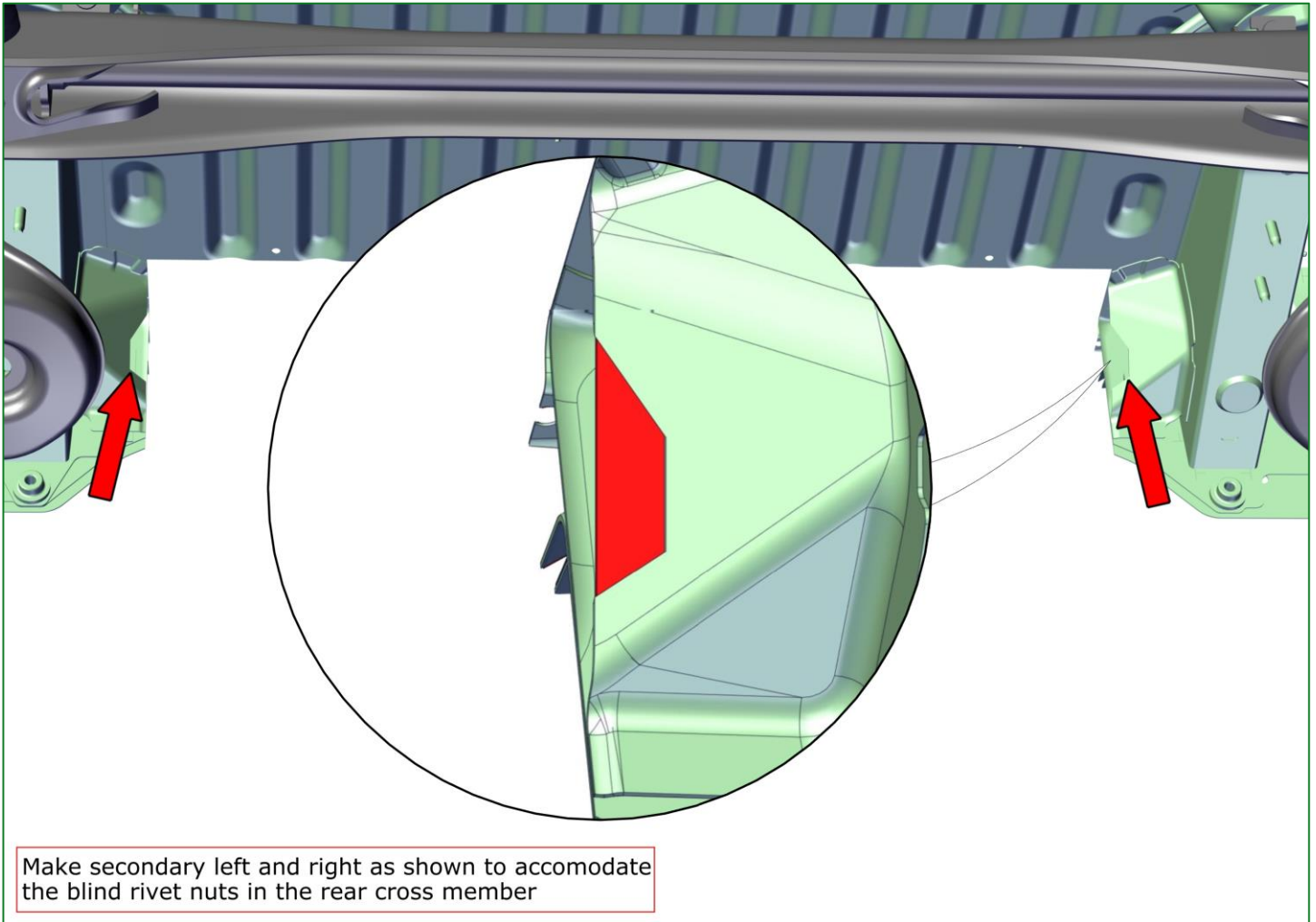
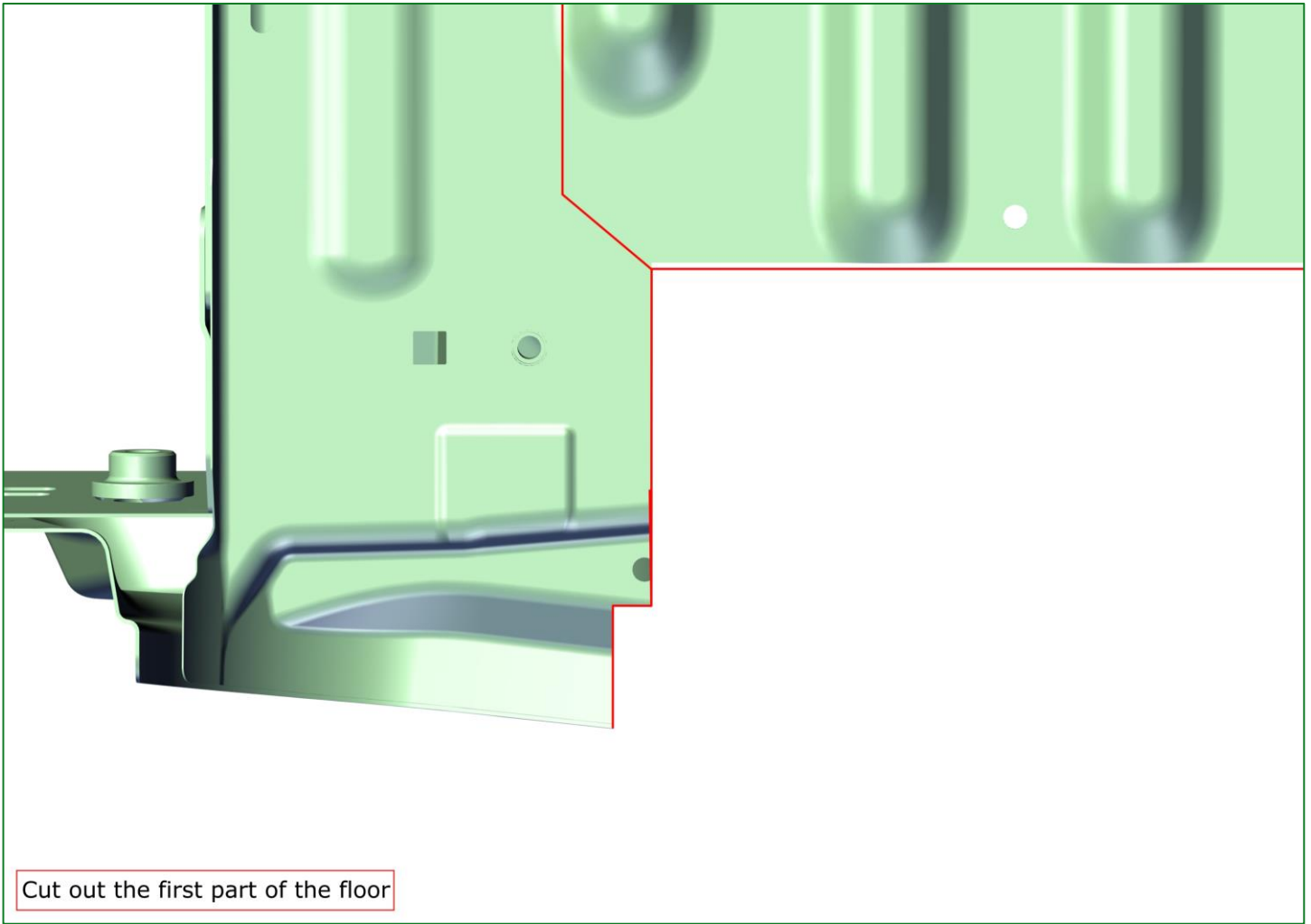




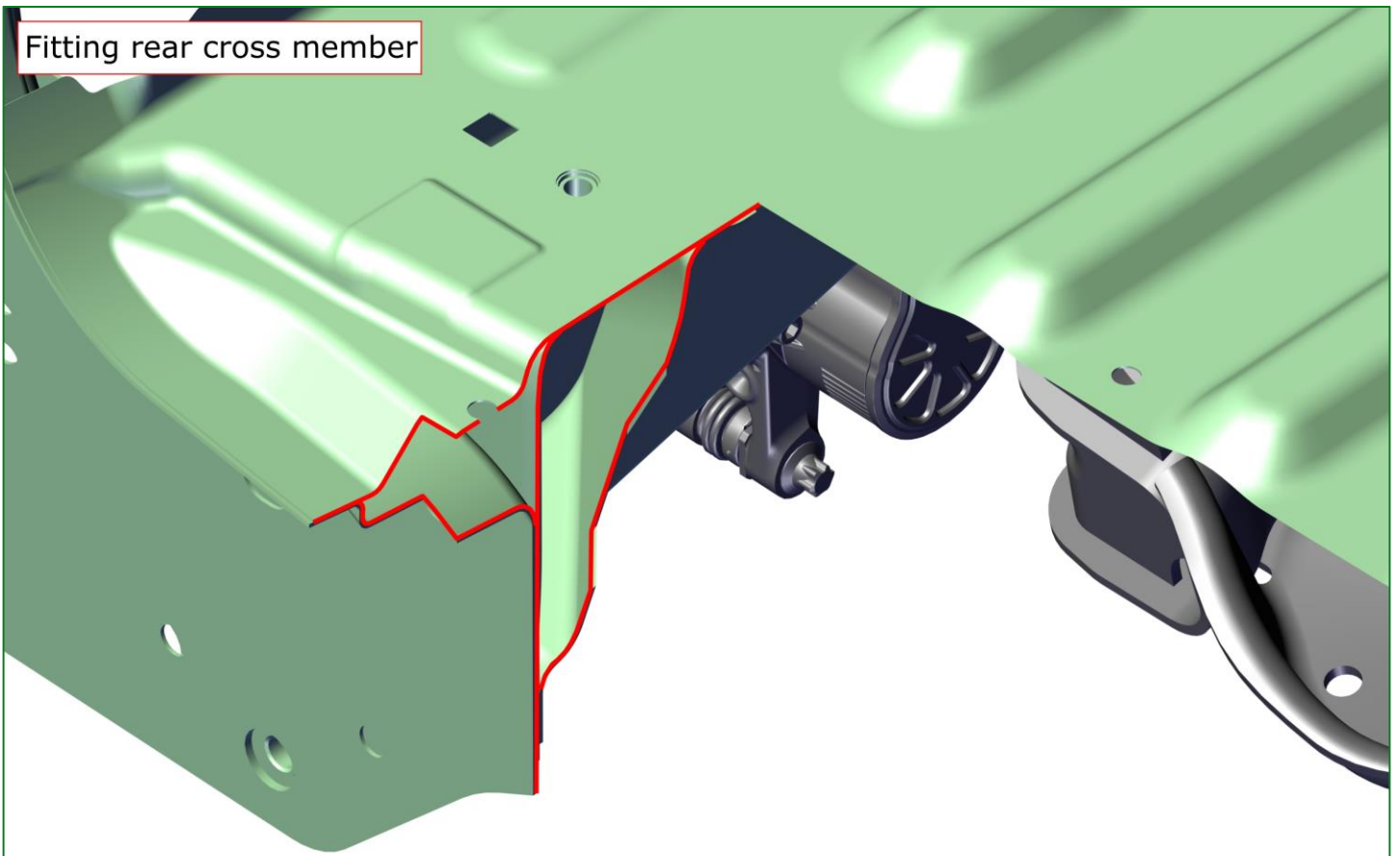
Use the same template to mark the right side as shown



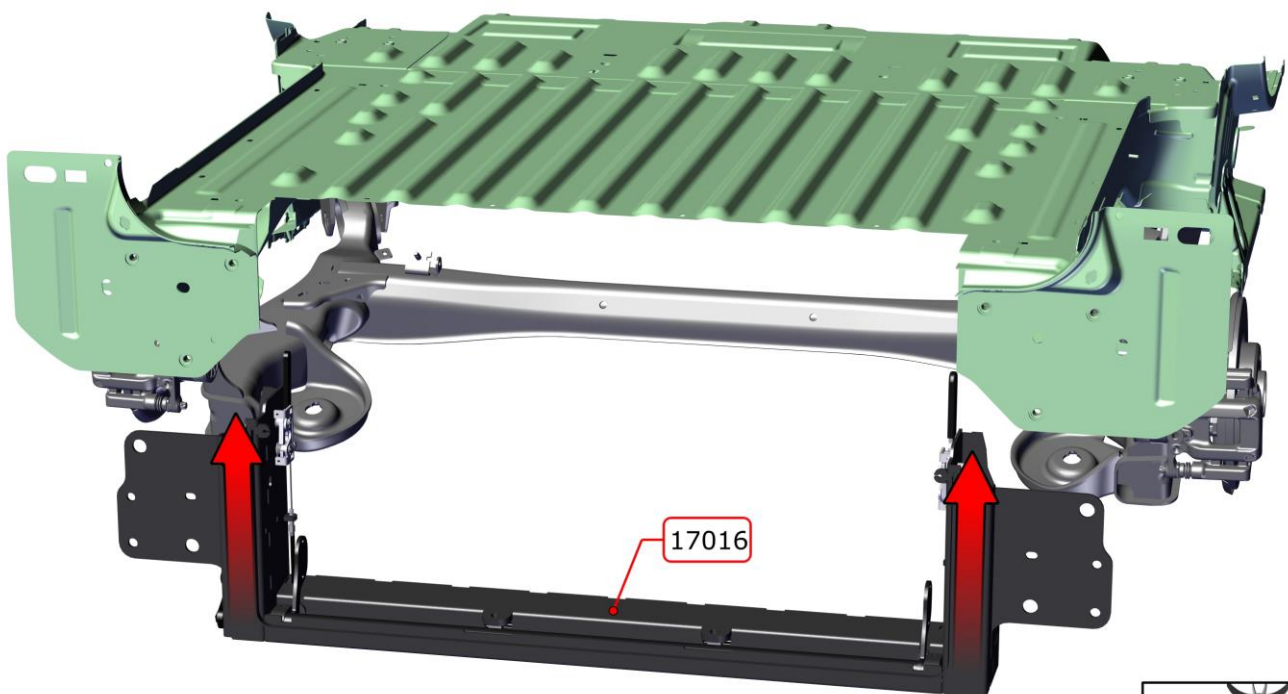




Fitting rear cross member

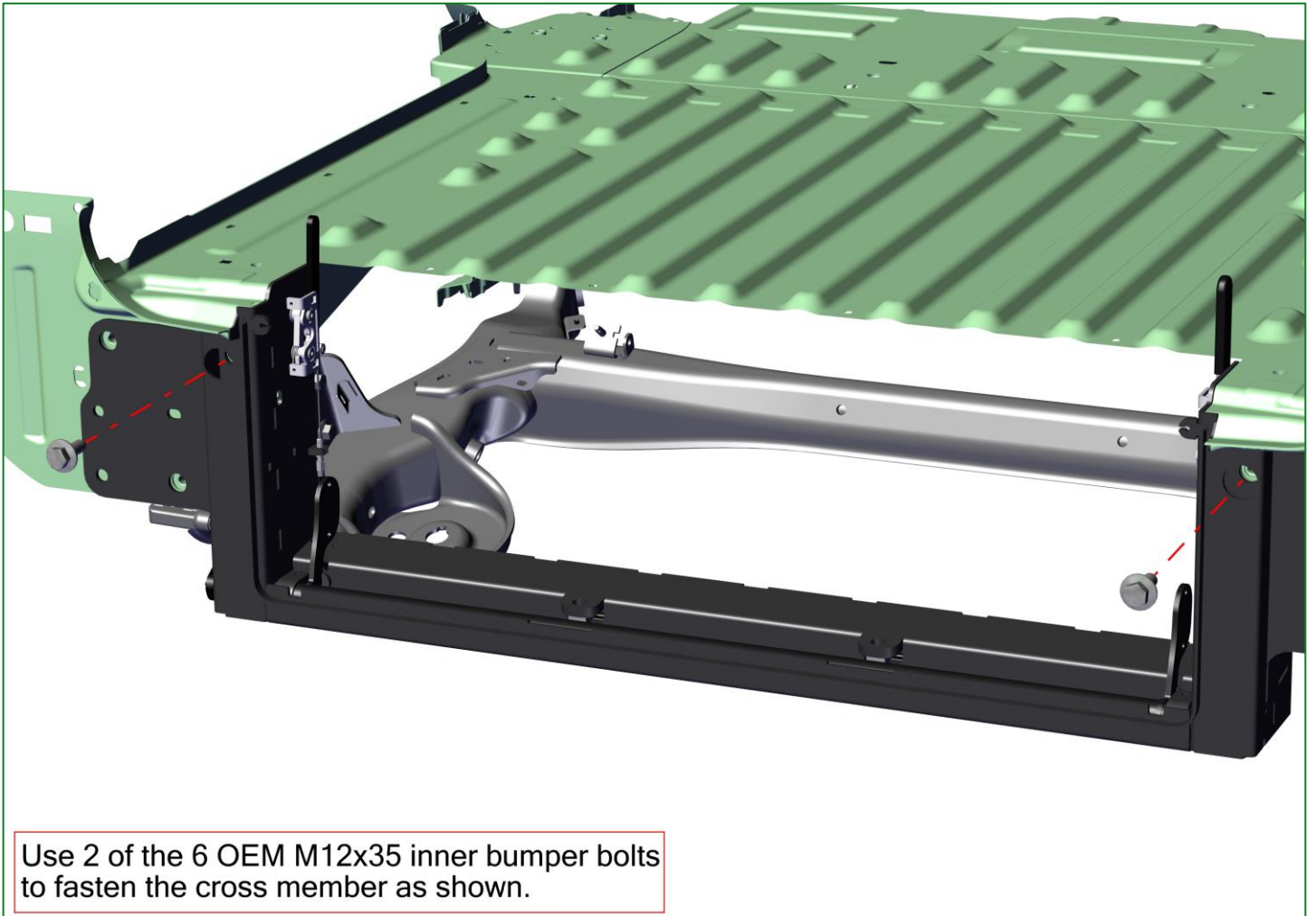
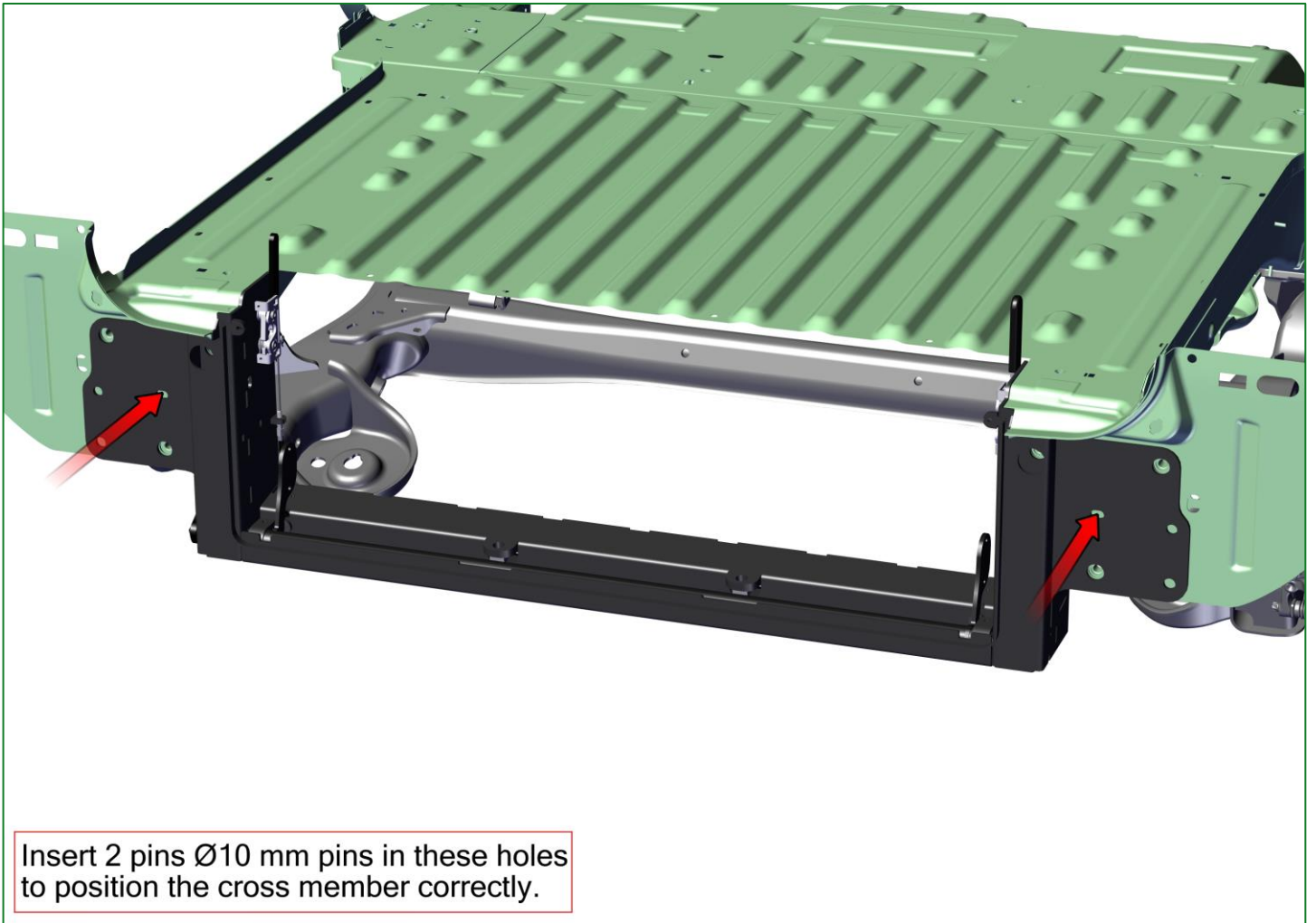


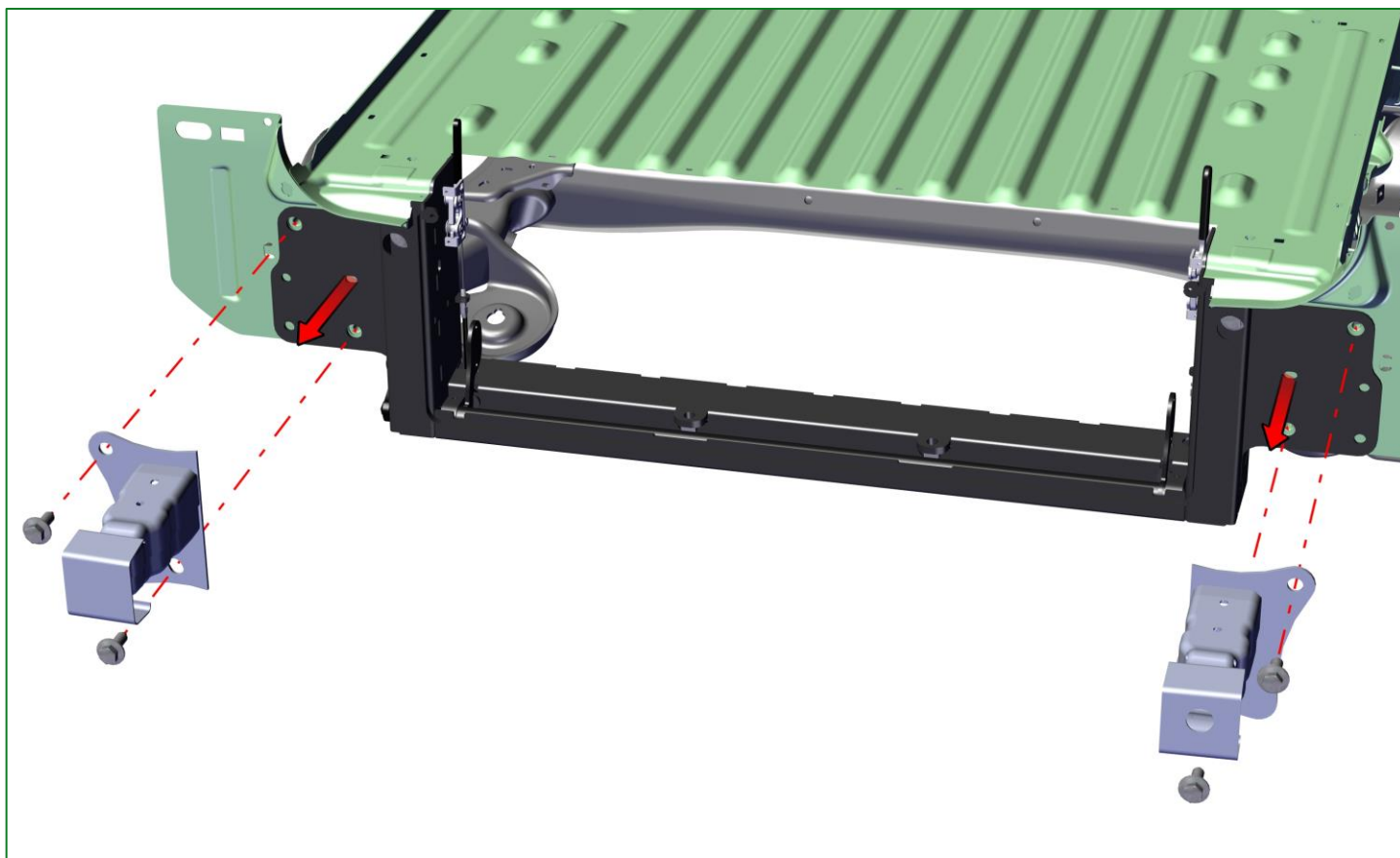
Degrease and apply anticorrosion paint on the bare metal where the cuts are made



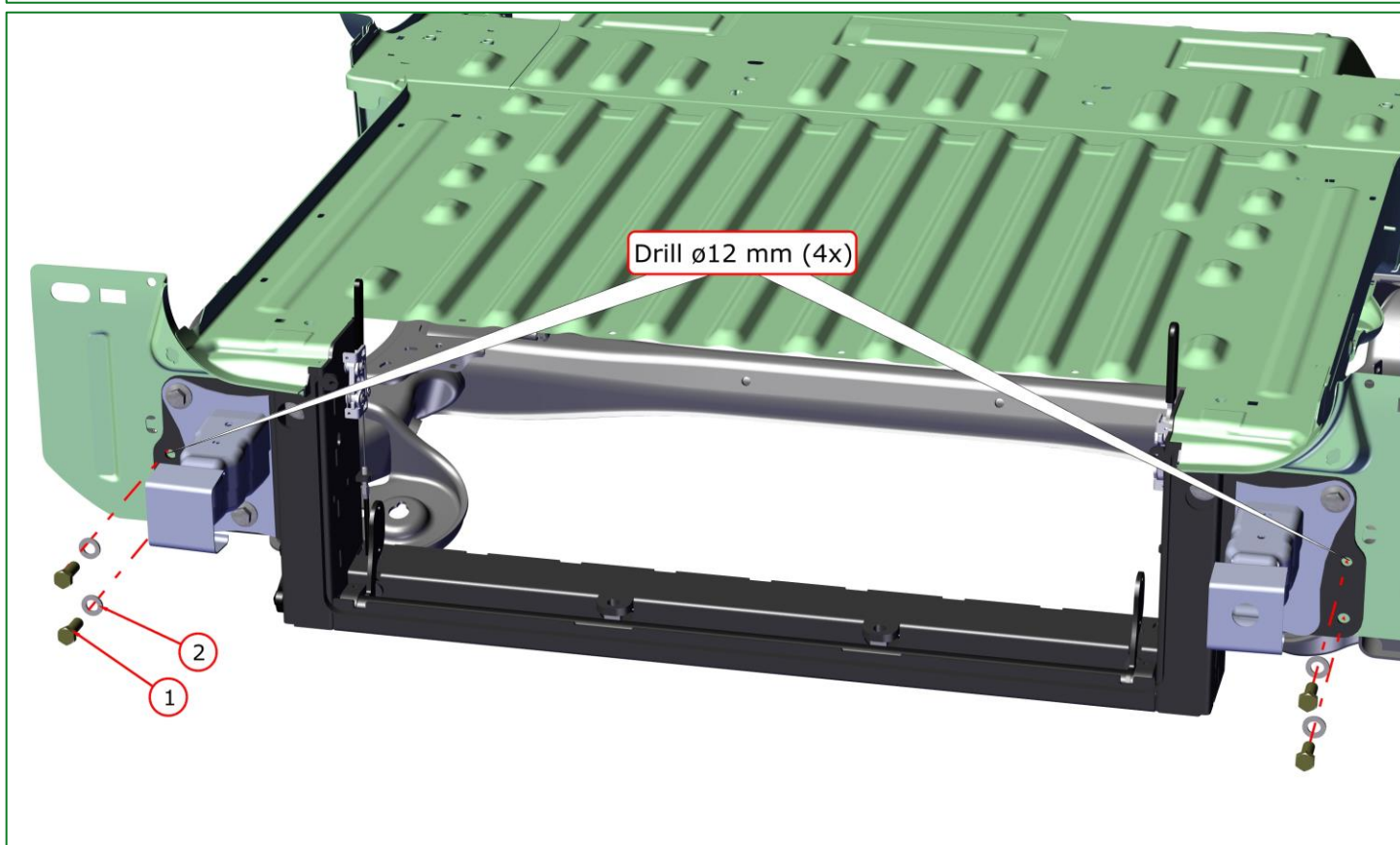
With a gearbox jack, position the rear cross member on the back of the body.







Remove the 2 centering pins and bolt on the 2 inner bumper pieces with the remaining 4 OEM M12x35 bolts.

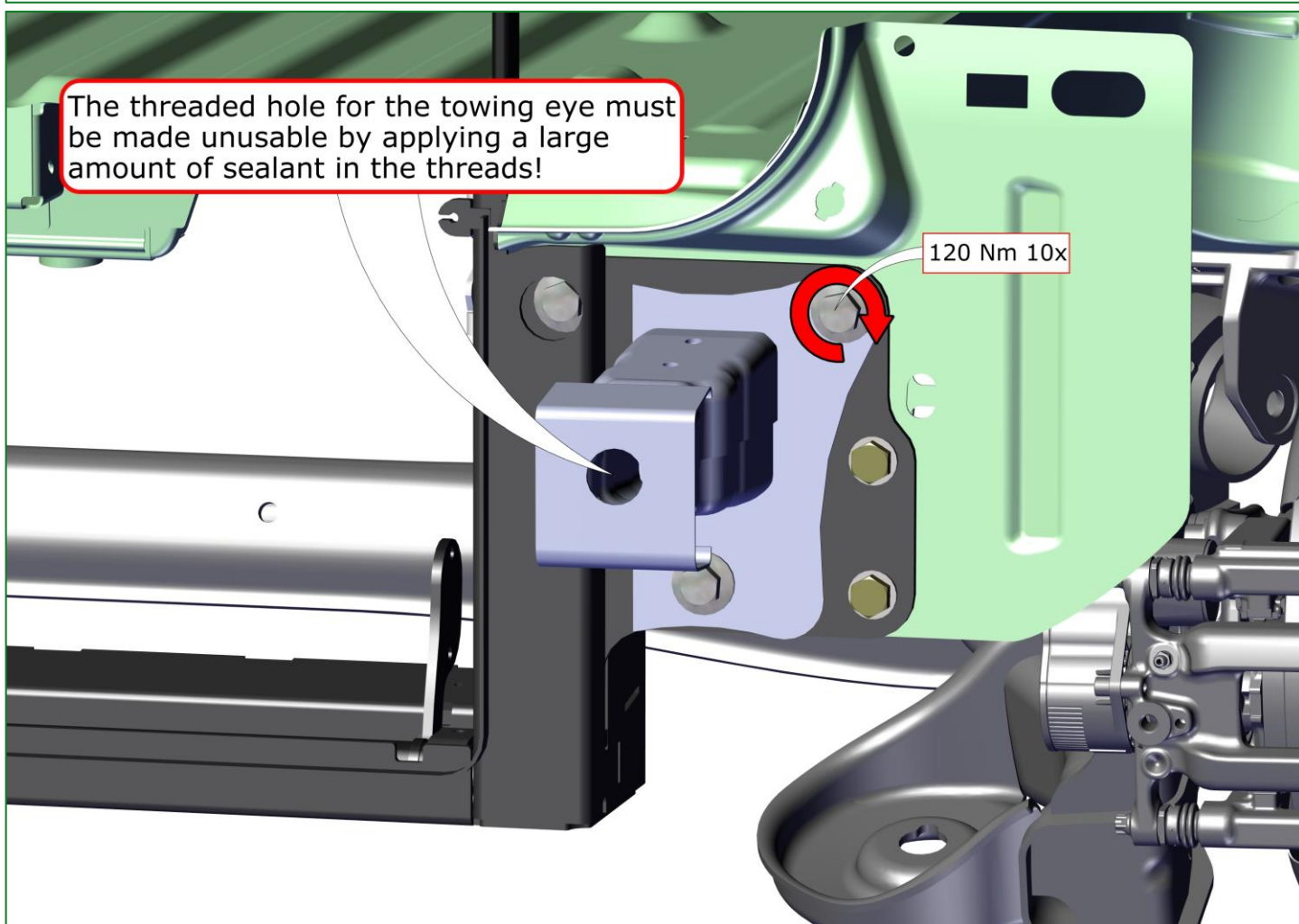
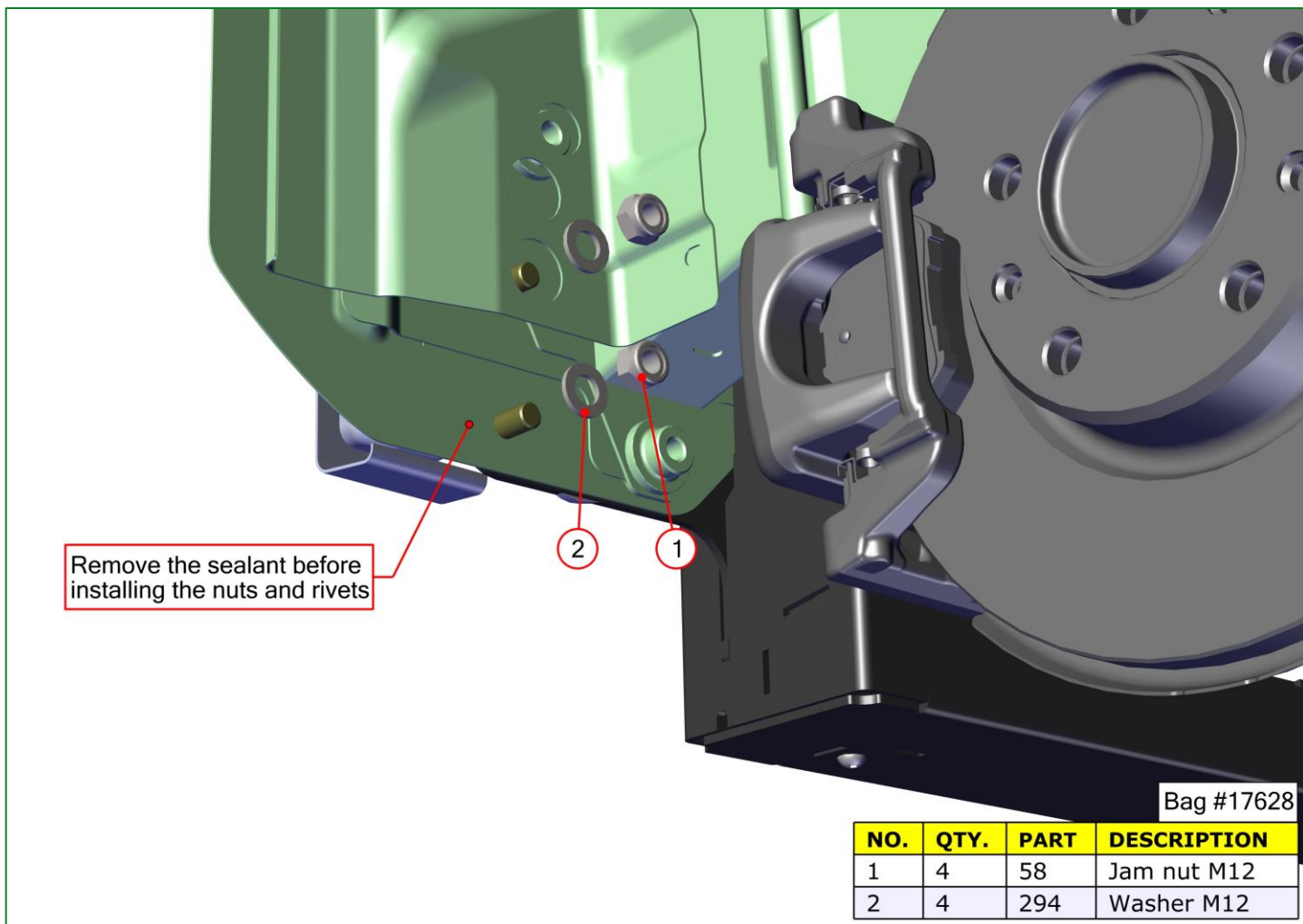


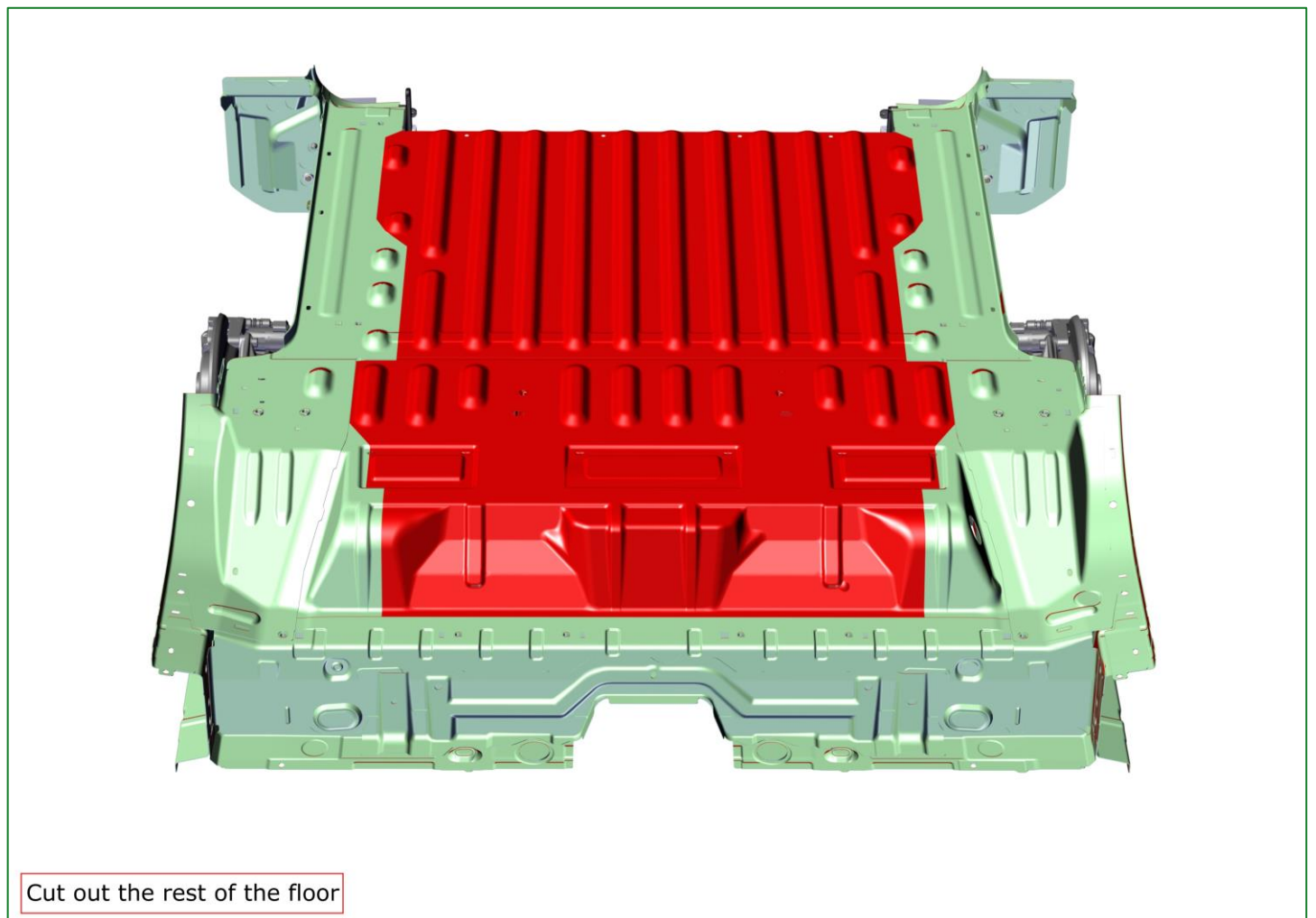
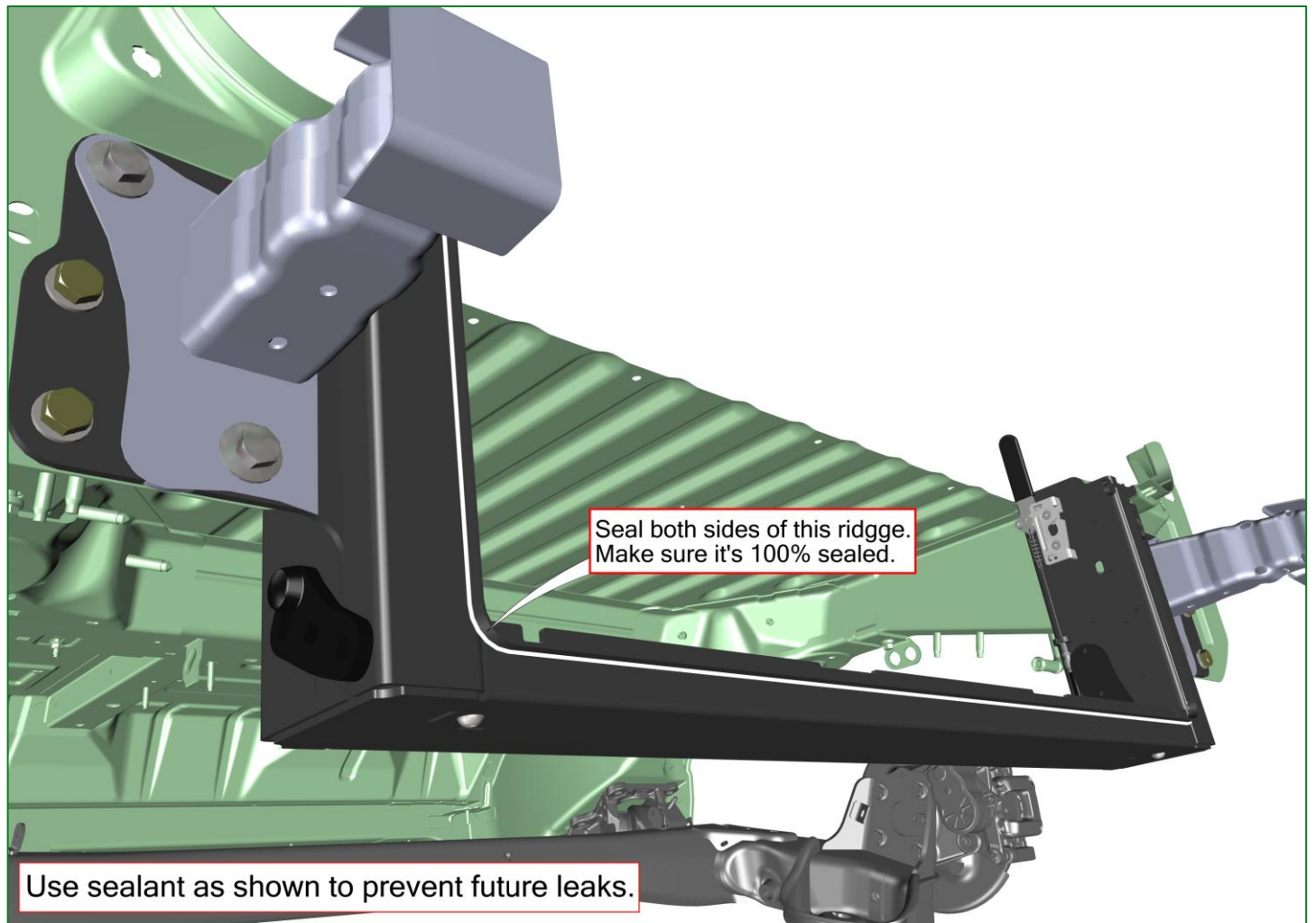
Drill through the outer 4 holes Ø12mm then insert the 4 M12x30 bolts.

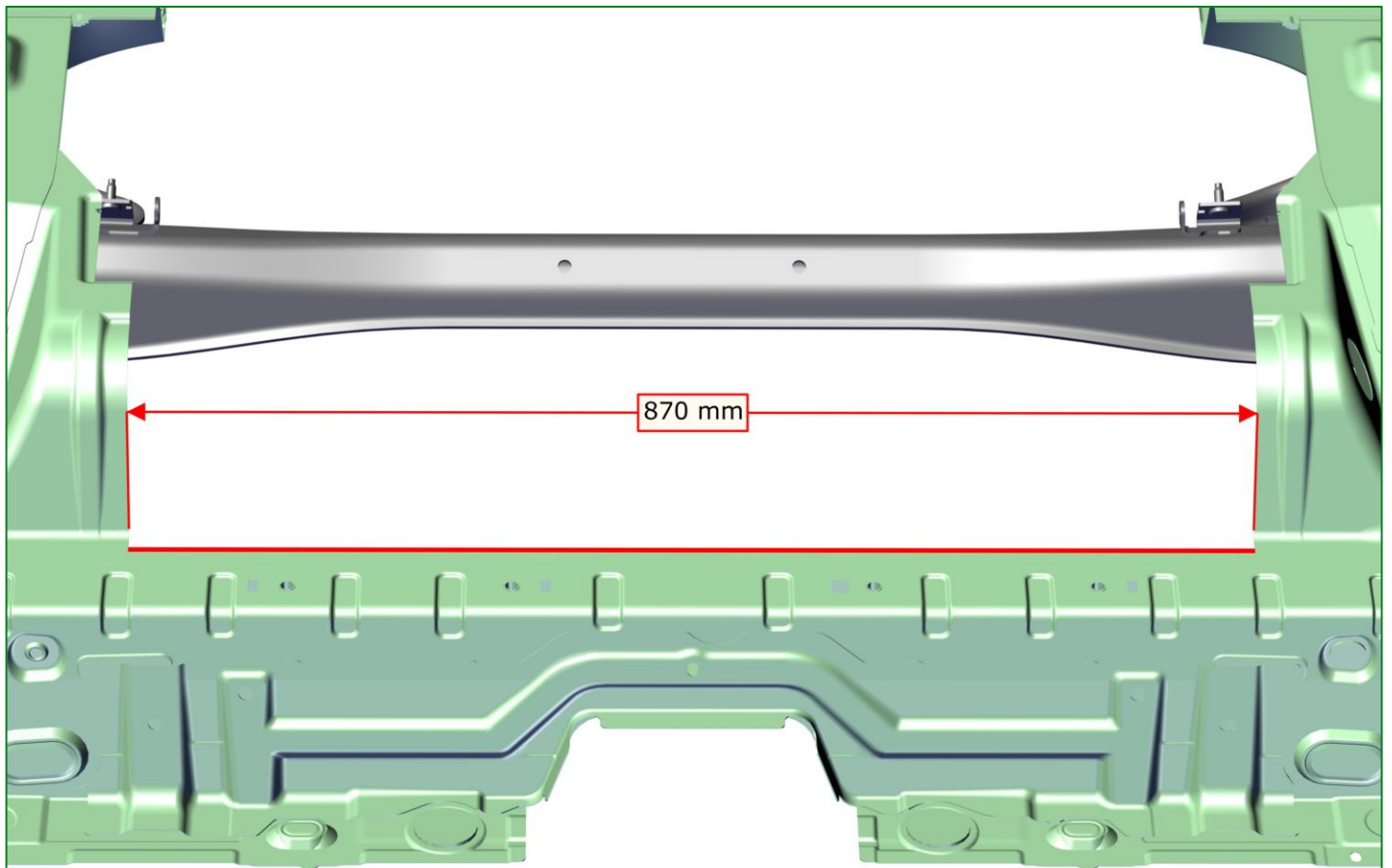
Bag #17628

NO.	QTY.	PART	DESCRIPTION
1	4	11335	M12x30 10.9 ISO 8676
2	4	294	Washer M12 ISO 7091

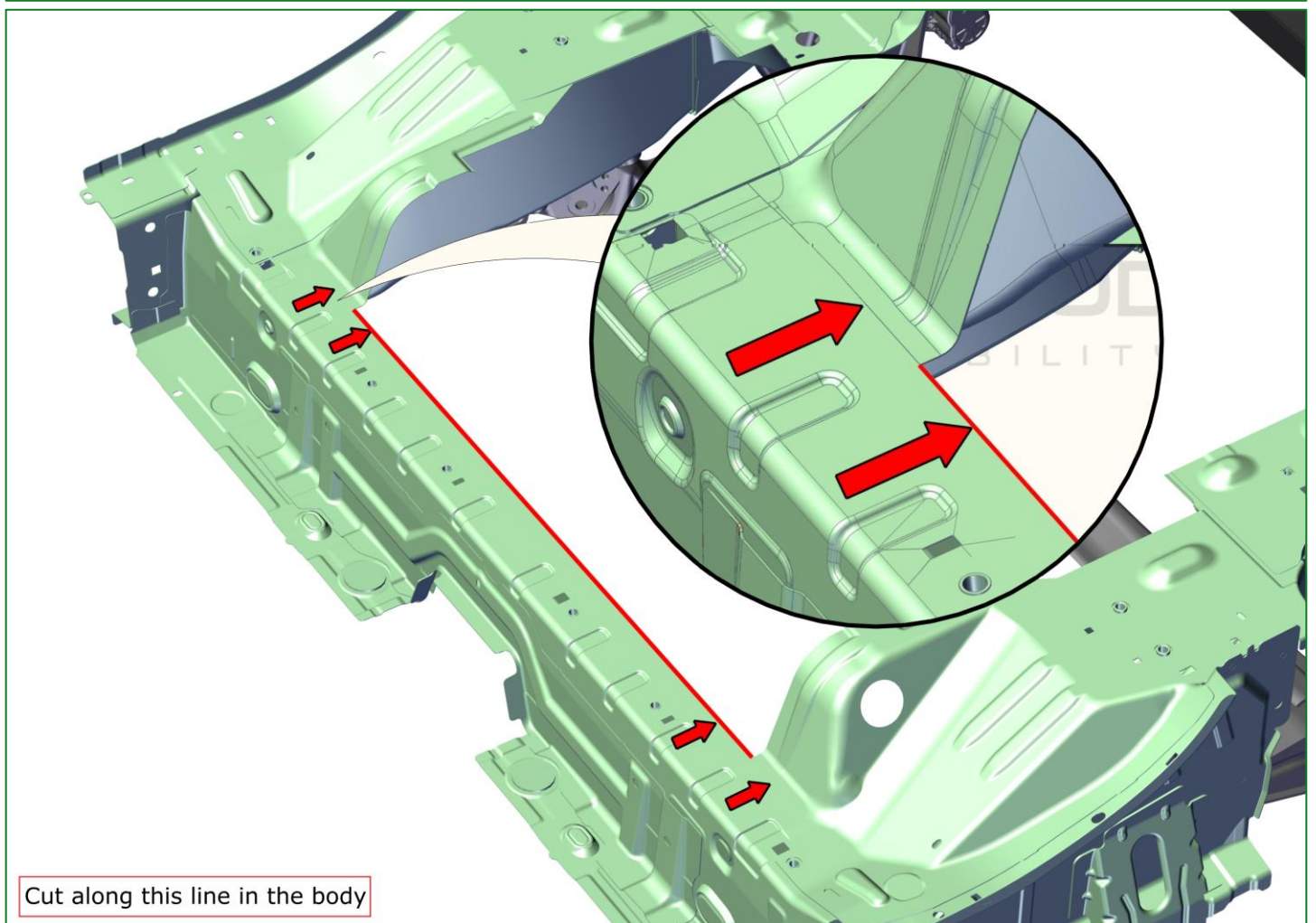




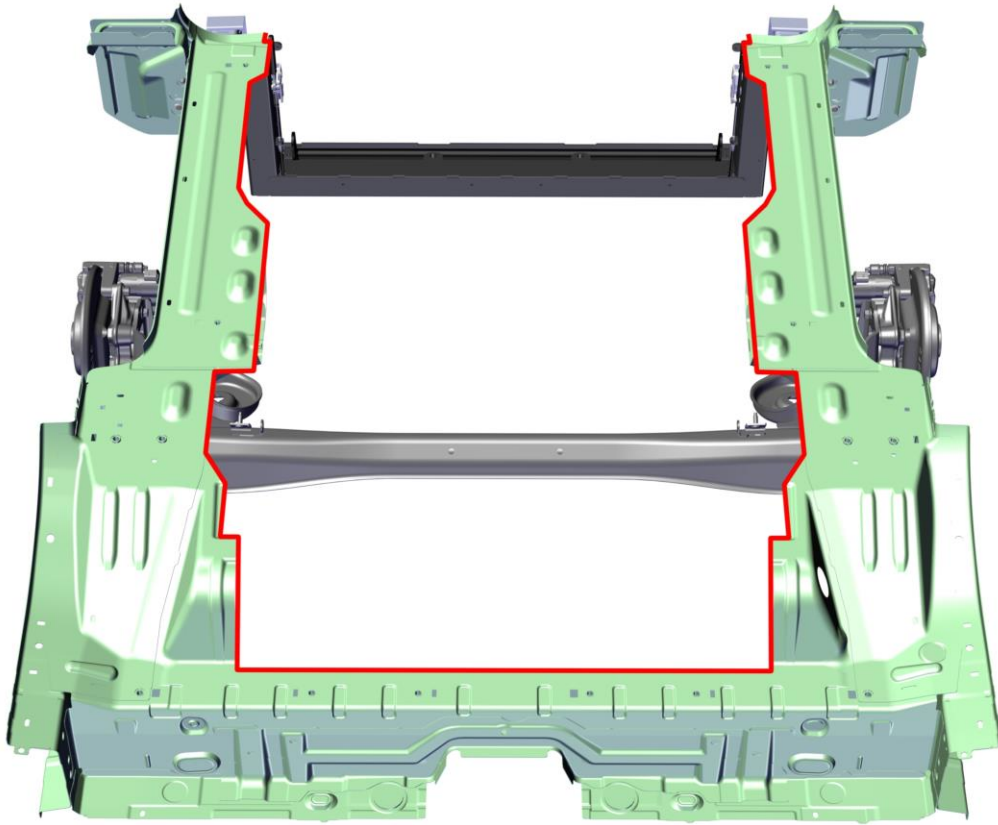




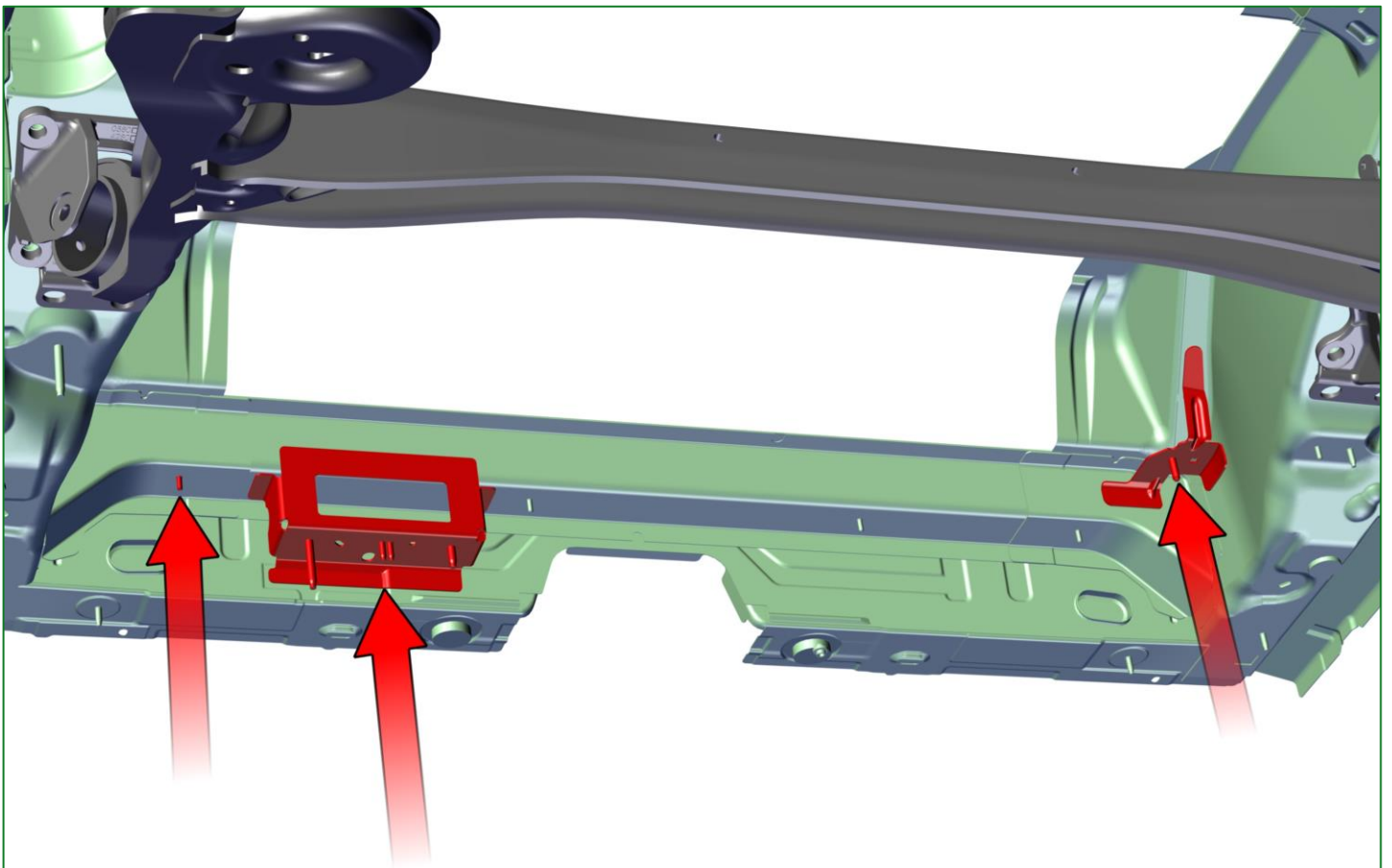
Cut out the rest of the floor



Cut along this line in the body

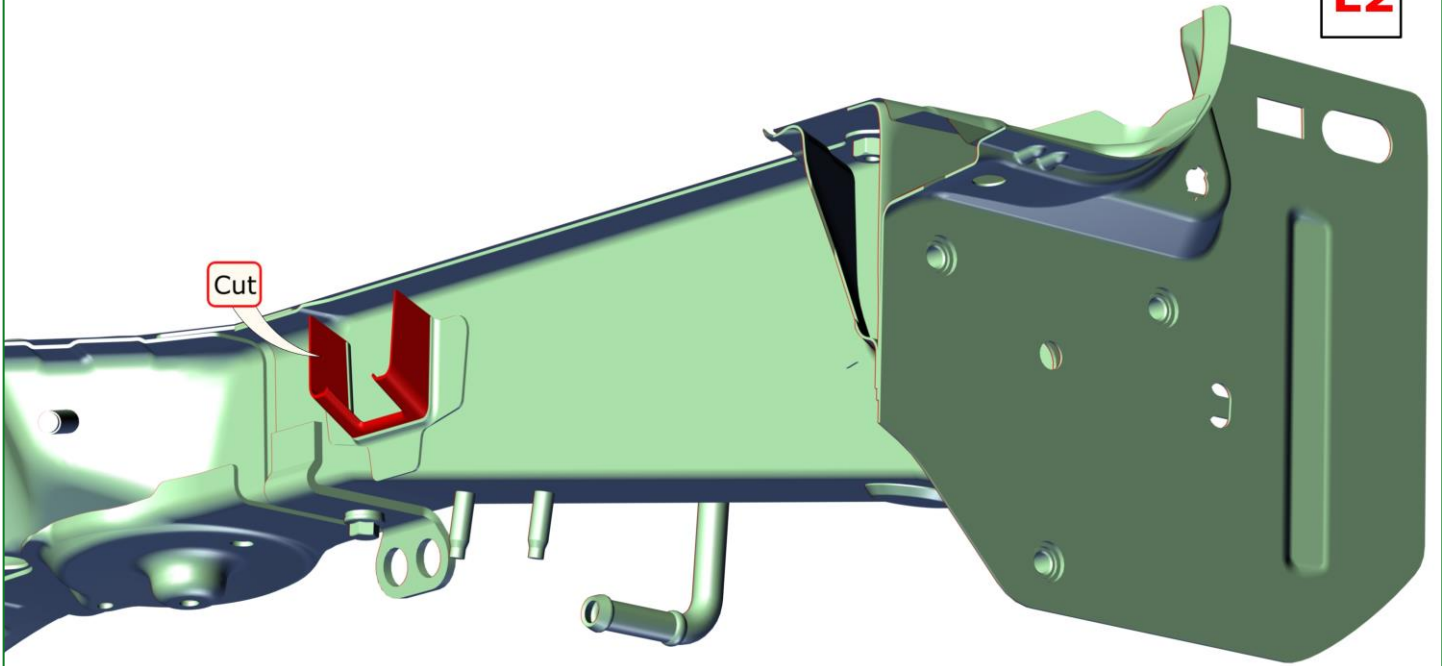


**Apply anti-corrosion paint on all bare metal parts**

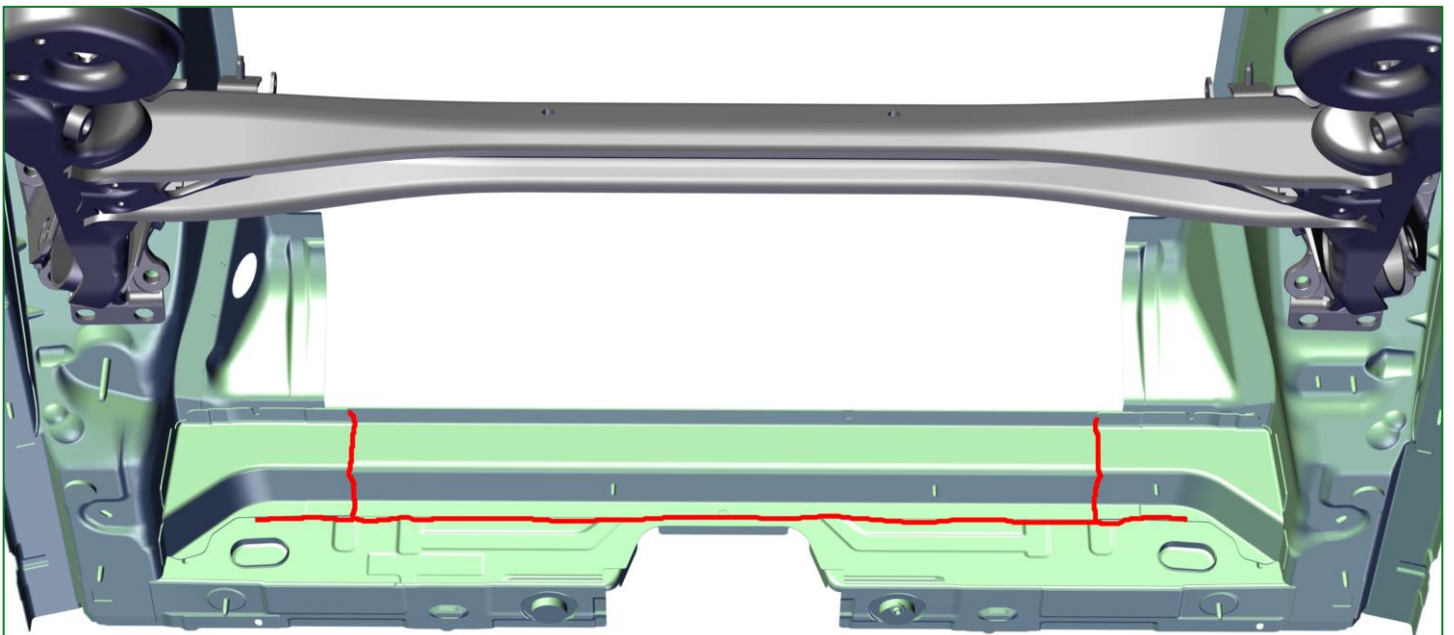


**Remove these 2 brackets and the threaded stud from the body**

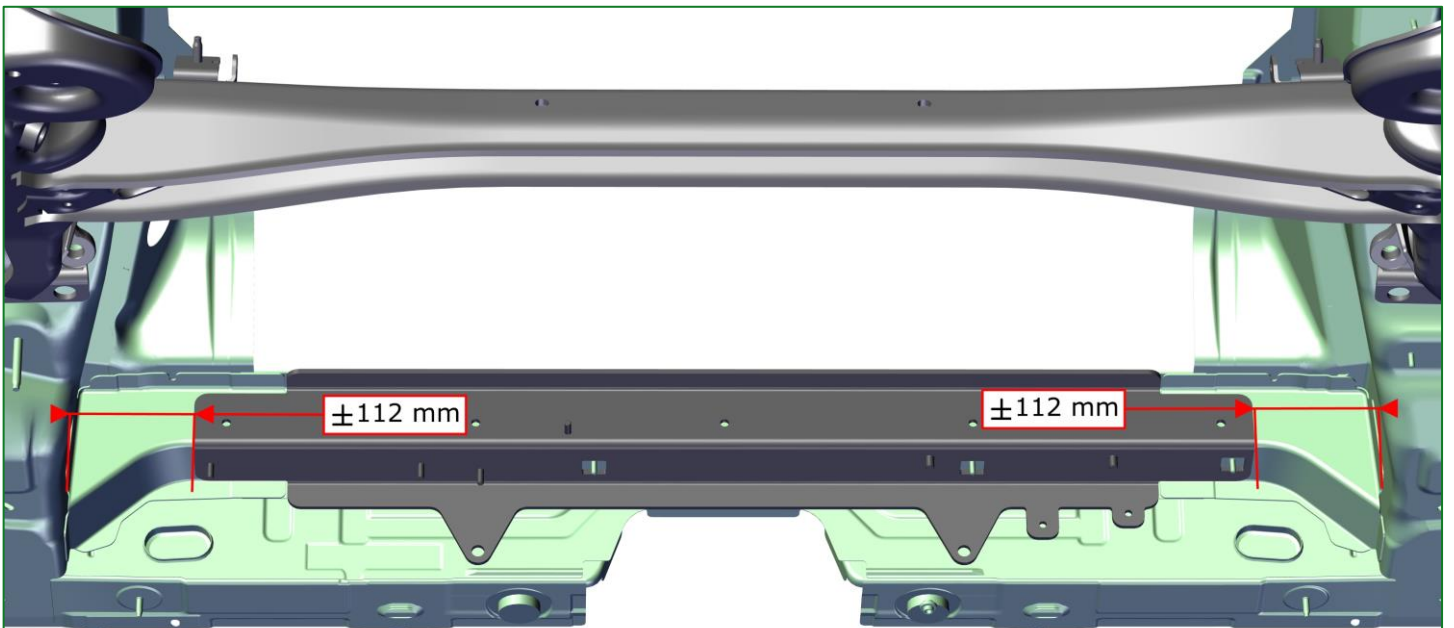
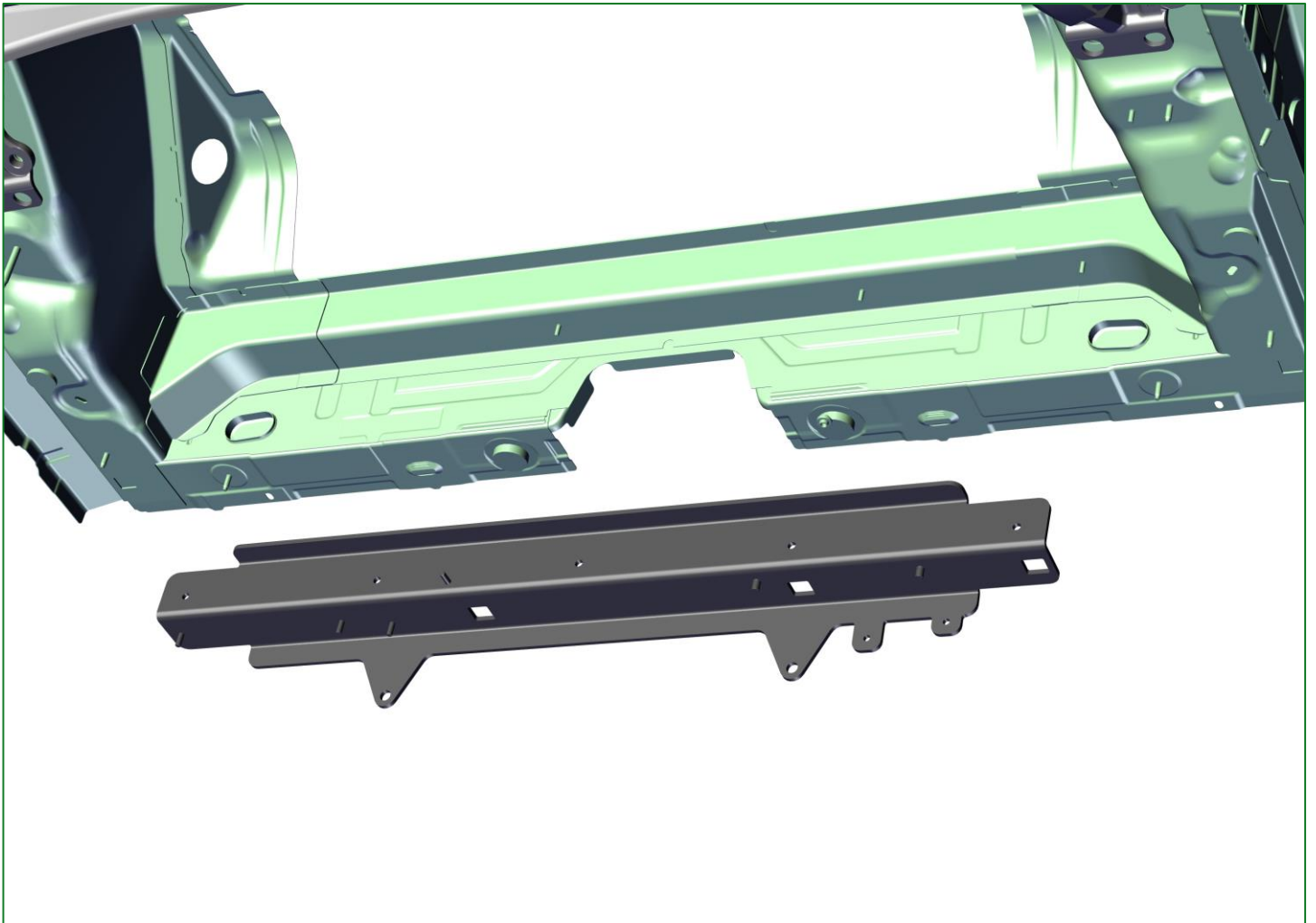
L2



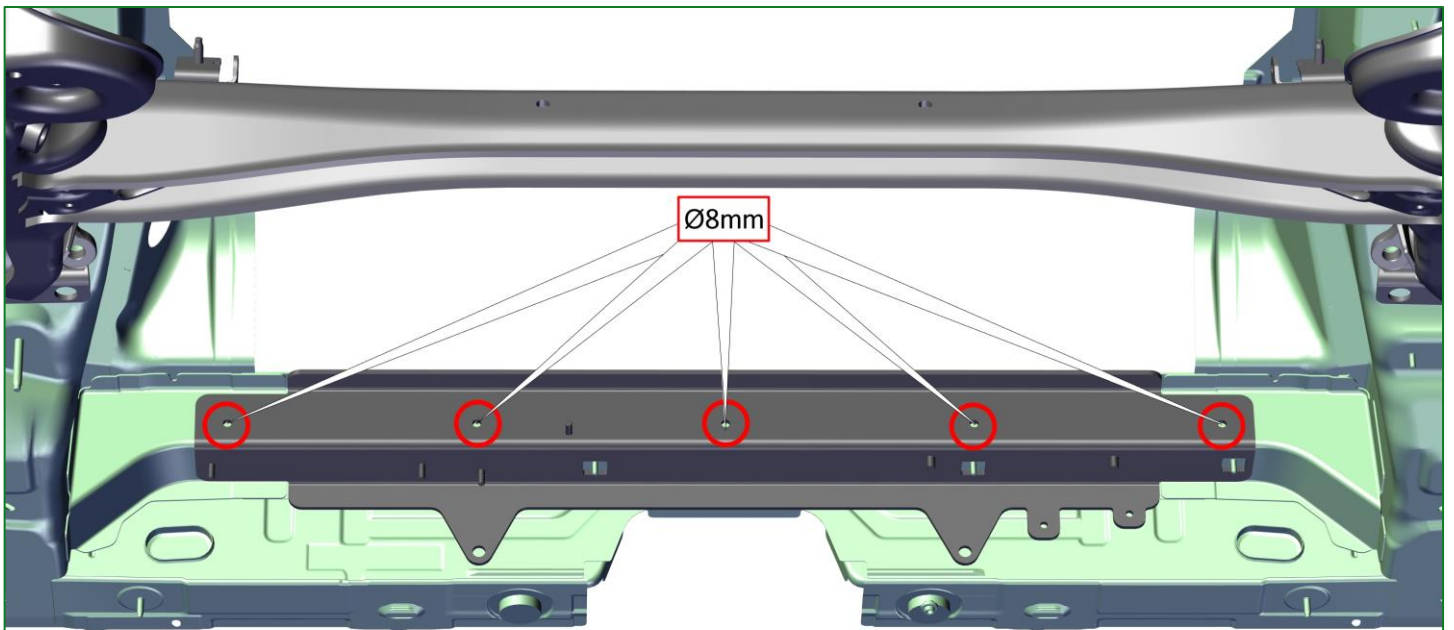
With the L2 version cut off the remaining rear cross member left and right as shown



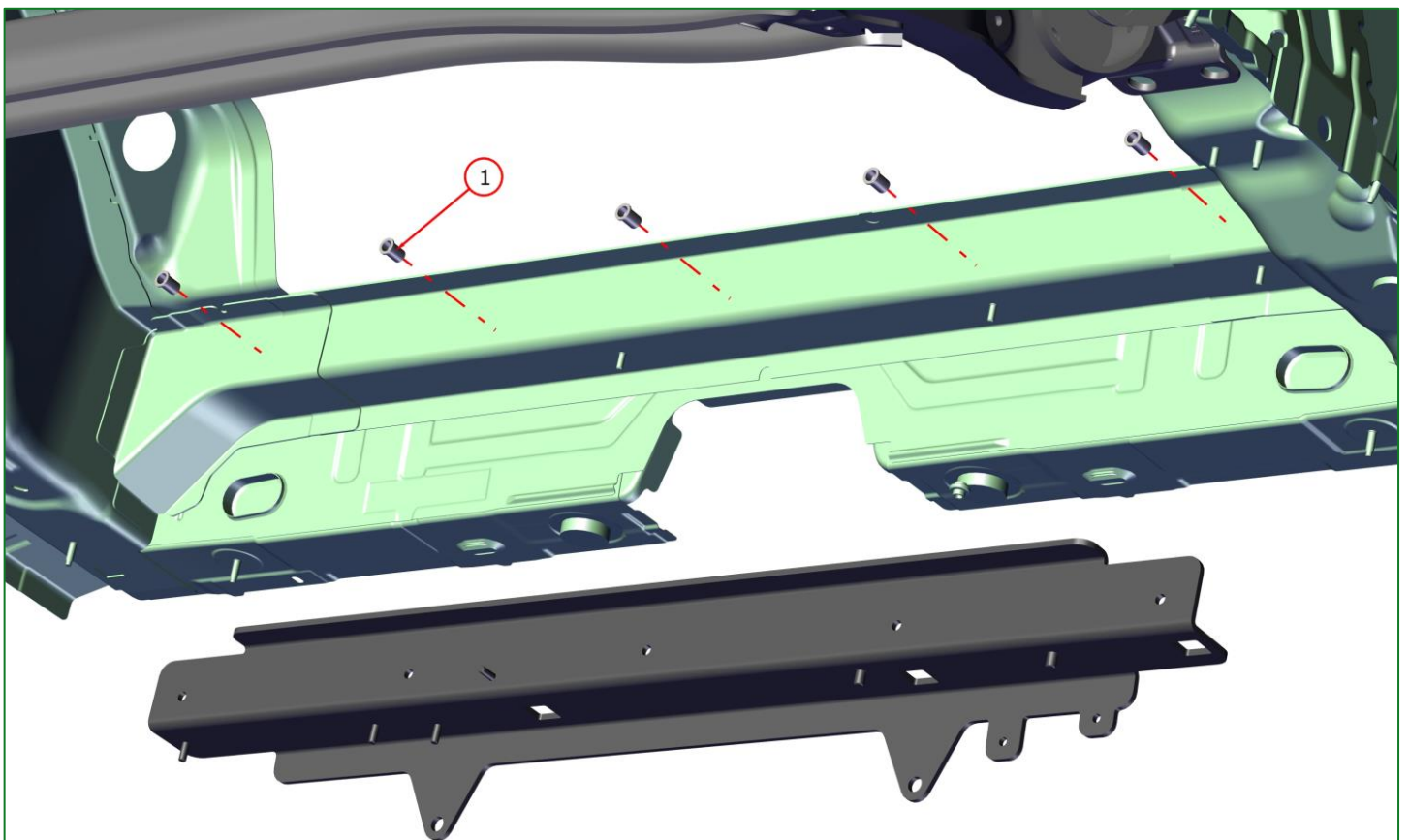
Remove any thick bonding from these areas to better accommodate the front cross member



Make sure the cross member is properly centered



Keep the cross member in place with a jack or clamps then drill through these holes



Re-bore the 5 holes to Ø11mm then insert the riveted nuts

Bag #17628

NO.	QTY.	PART	DESCRIPTION
1	5	3790	Blind rivet nut M8x16 steel

For PETROL car,  
leave this bolt out!

2  
1

Bag #17628

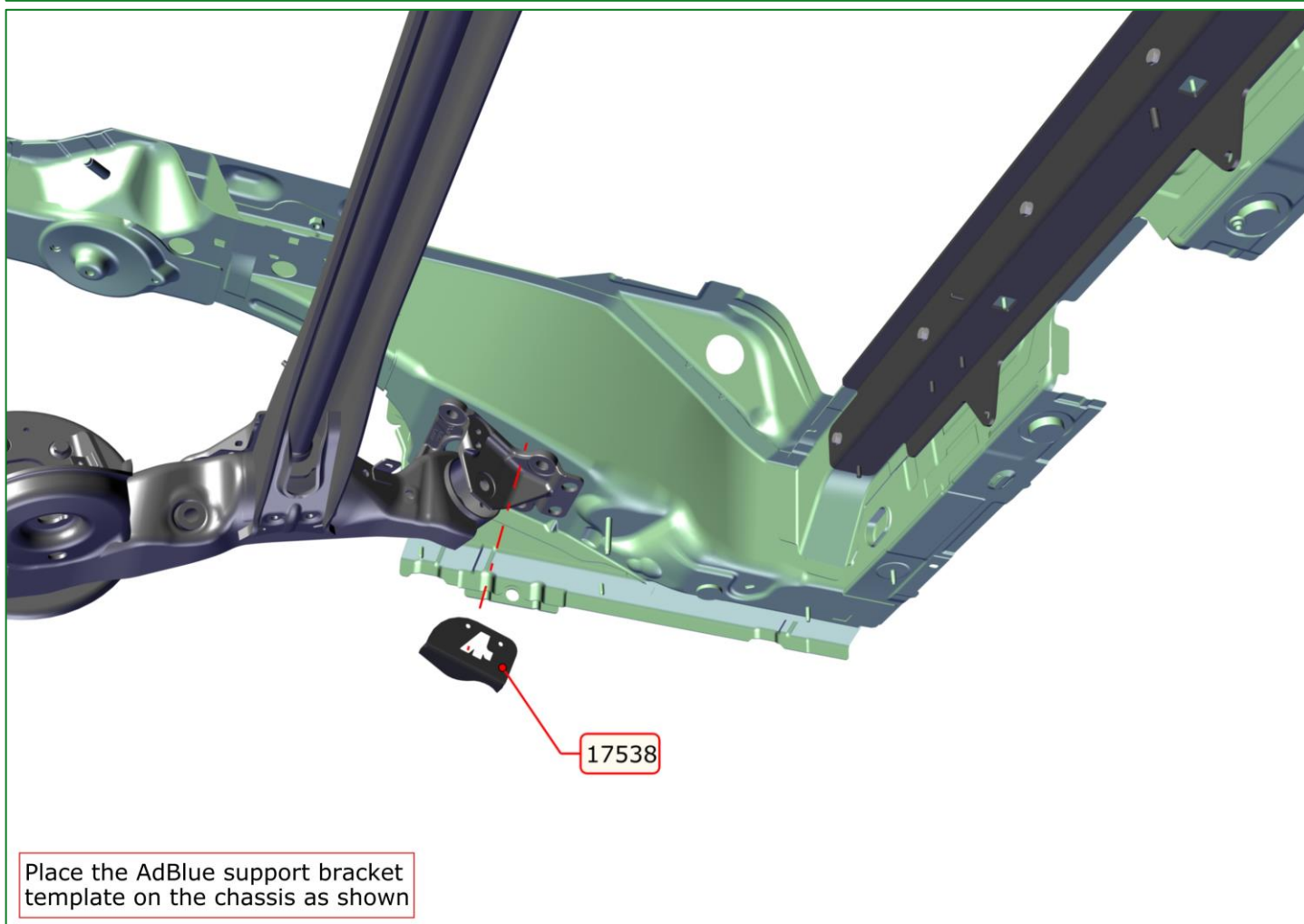
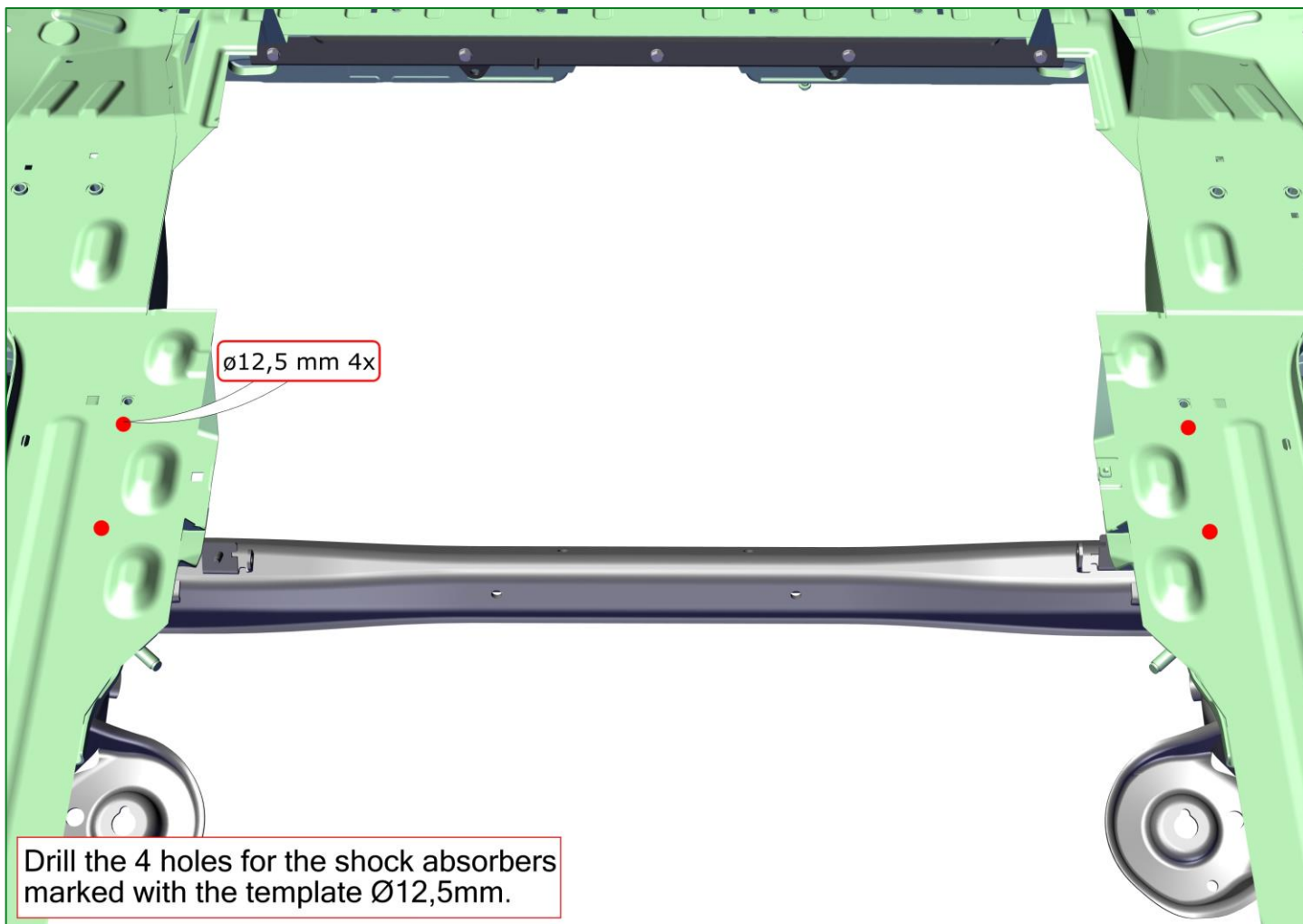
NO.	QTY.	PART	DESCRIPTION
1	5	210	Washer M8 class 8 ISO 7091
2	5	711	M8x25 8.8 ISO 4016

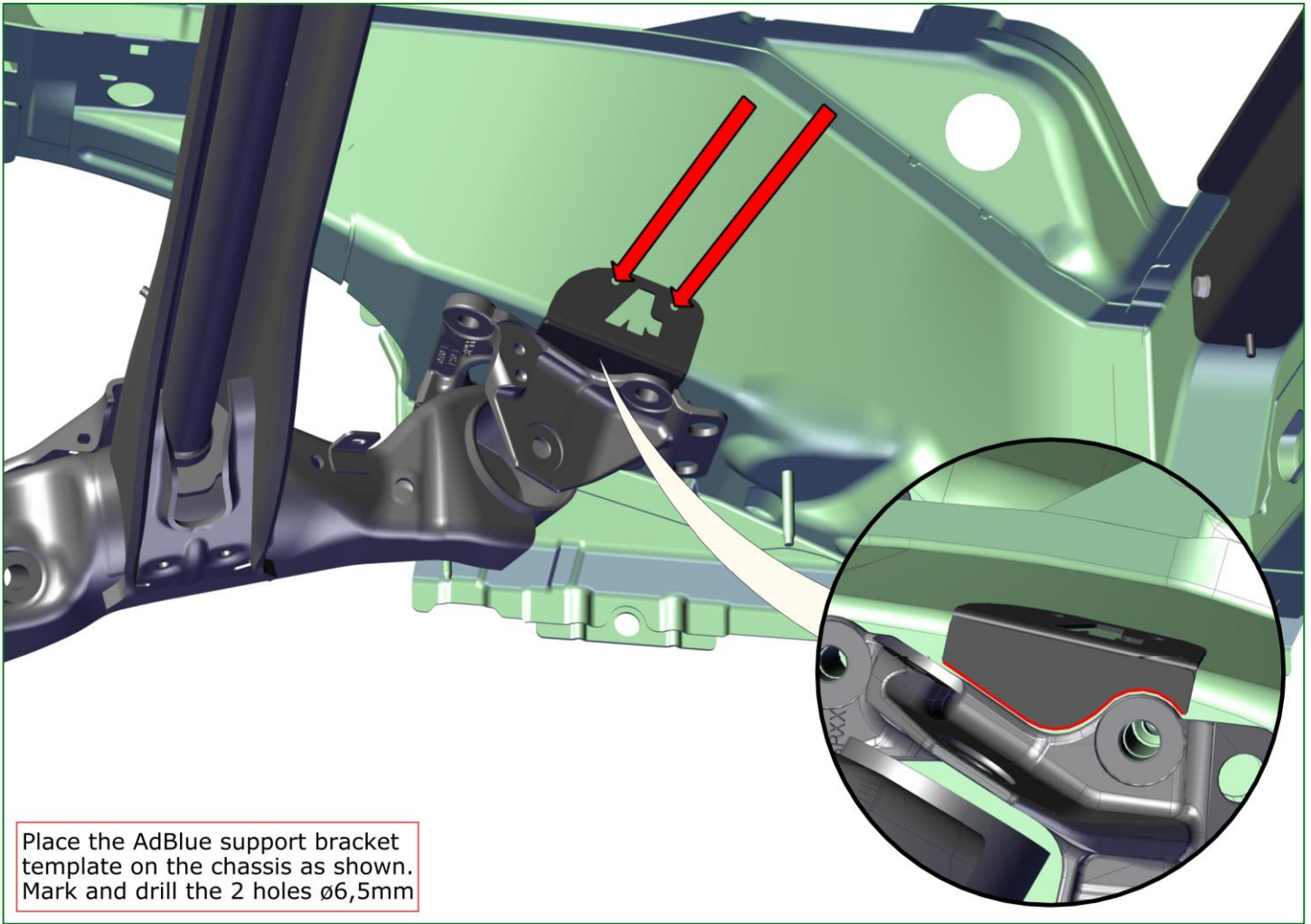
25Nm (5x)

Drill  $\varnothing$ 12 mm

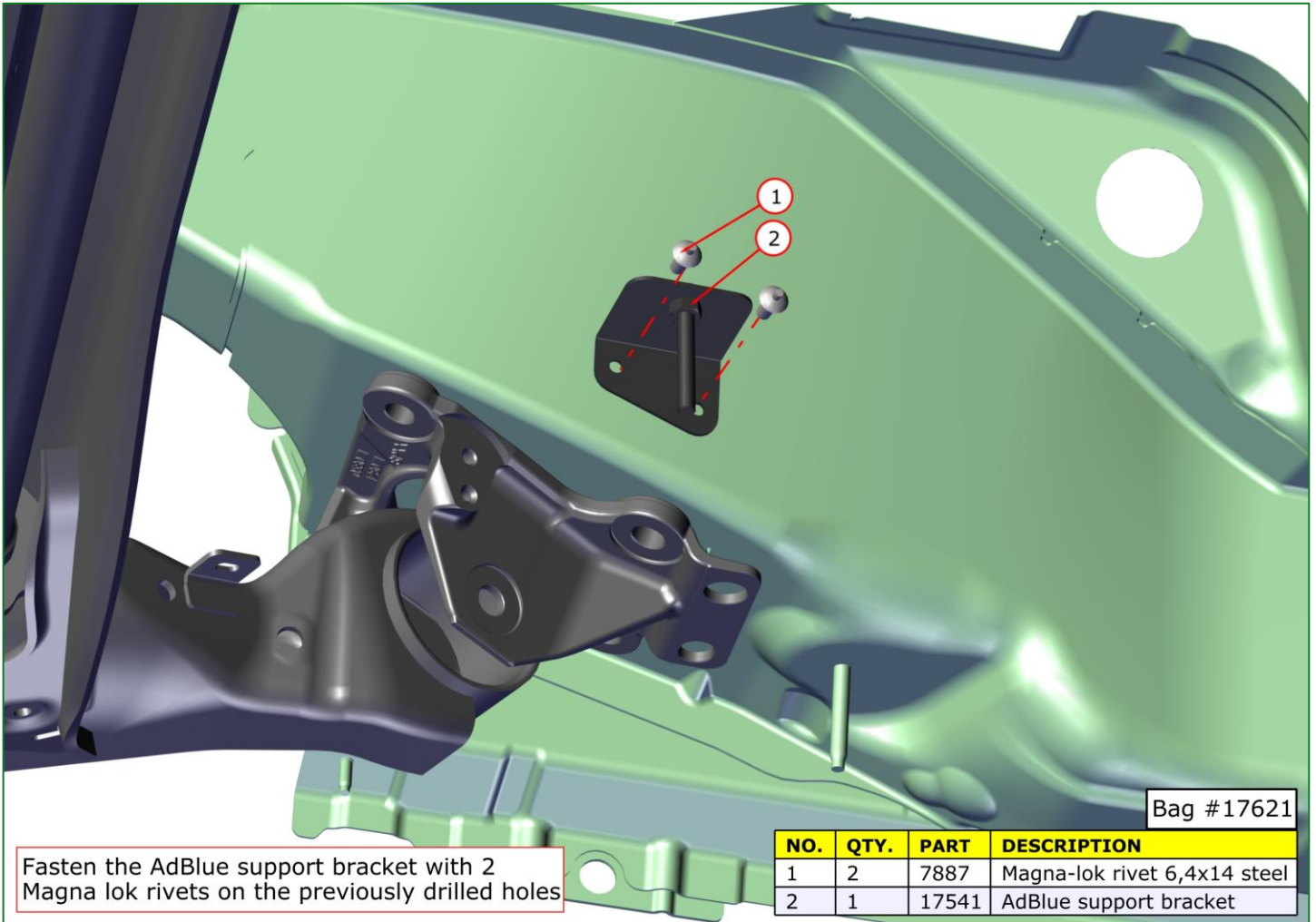
$\varnothing$ 7mm  
Only with a diesel version







Place the AdBlue support bracket template on the chassis as shown. Mark and drill the 2 holes  $\varnothing 6,5\text{mm}$



Bag #17621

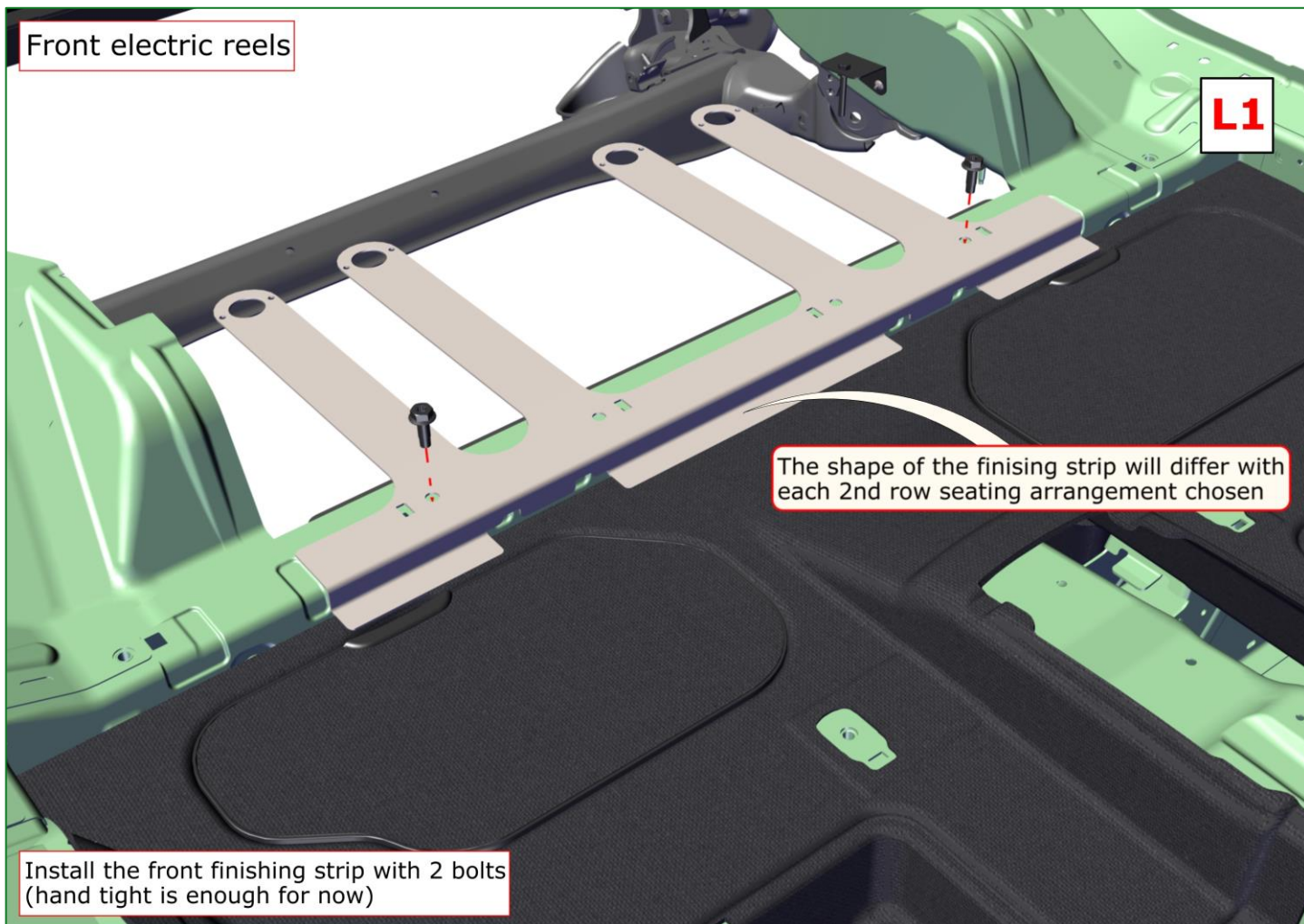
Fasten the AdBlue support bracket with 2 Magna lok rivets on the previously drilled holes

NO.	QTY.	PART	DESCRIPTION
1	2	7887	Magna-lok rivet 6,4x14 steel
2	1	17541	AdBlue support bracket



Self tapping screw  
6,3x19 #3601

Route the left rear brake line over the AdBlue bracket using the OEM clamp as shown

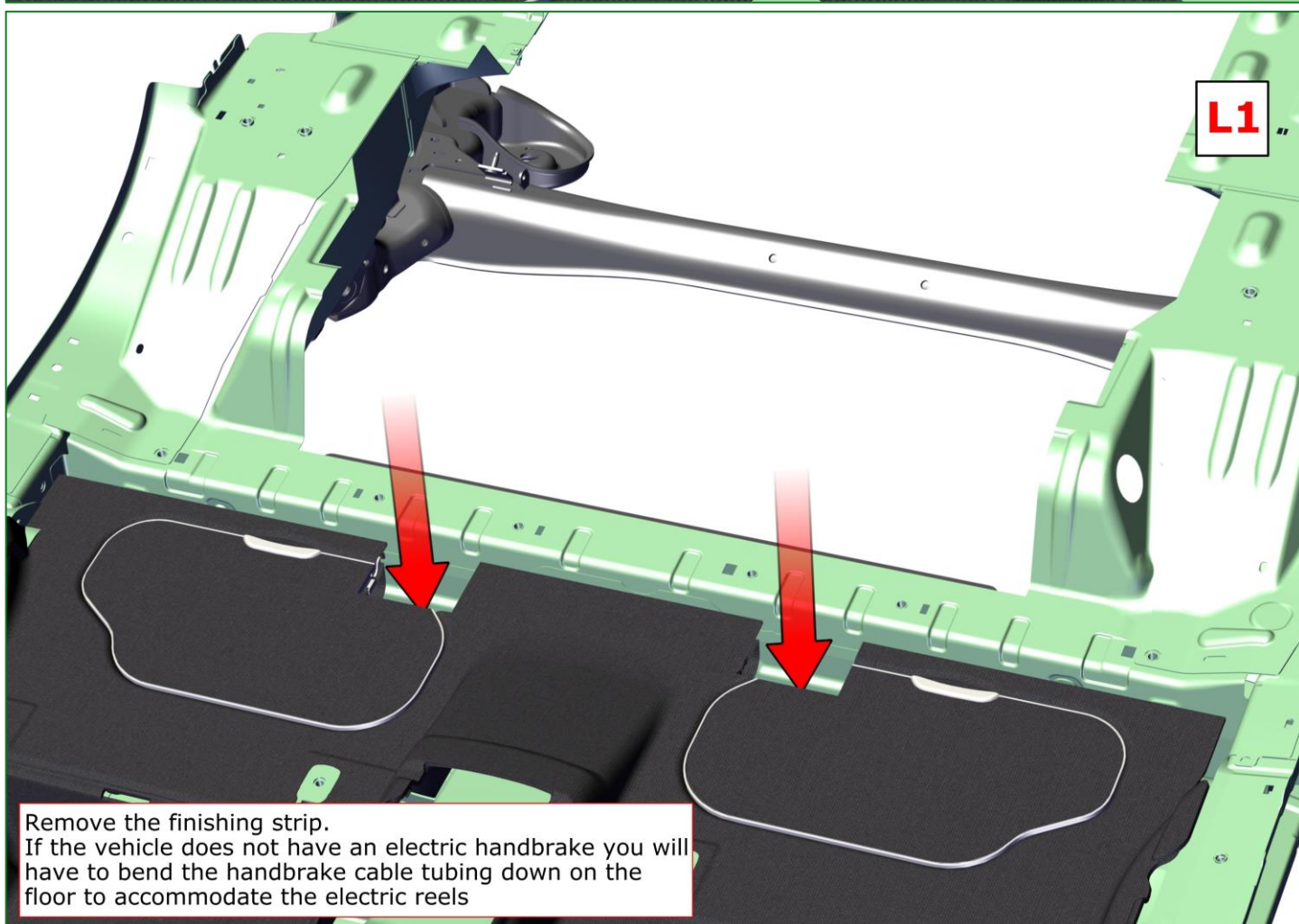
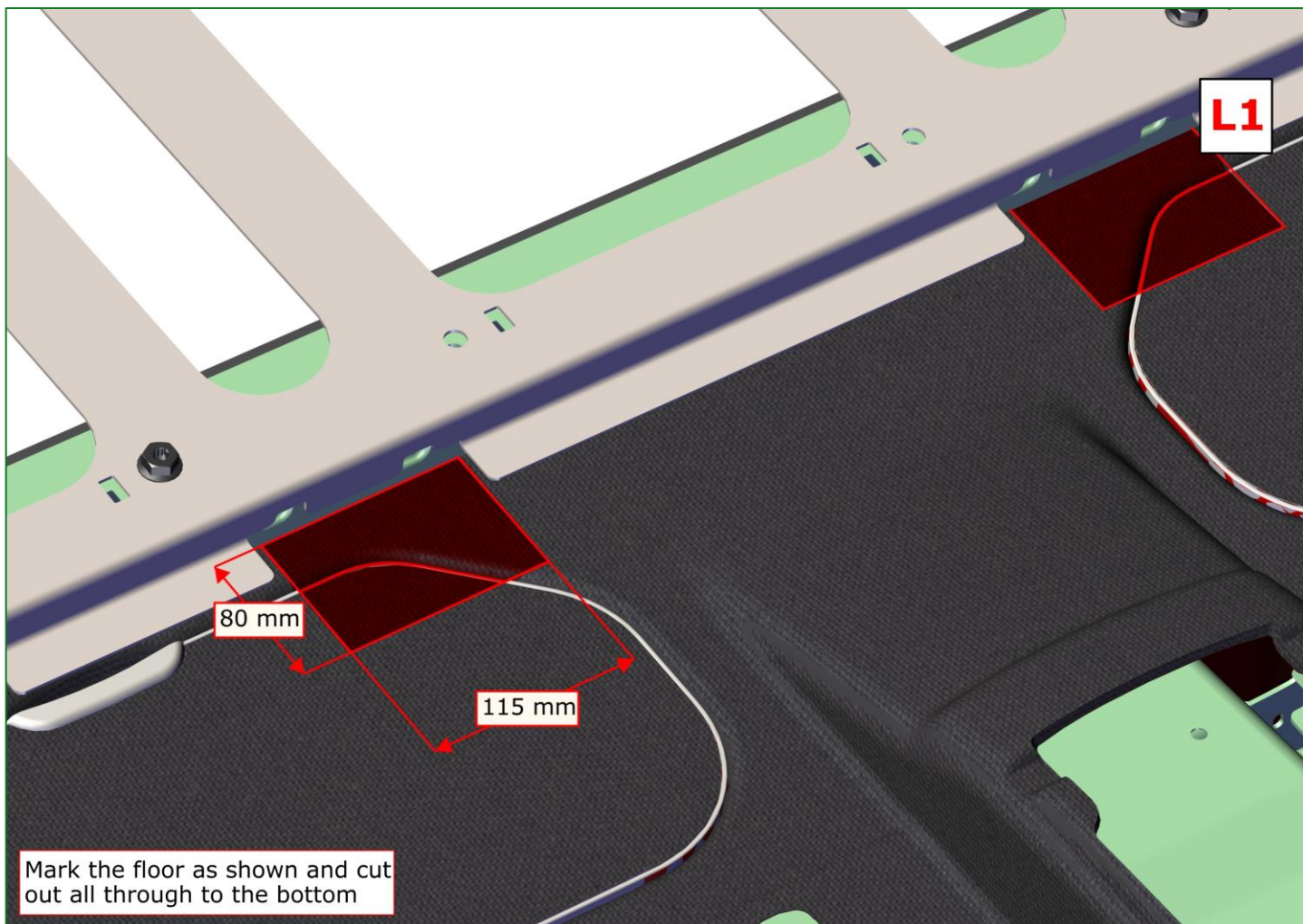


Front electric reels

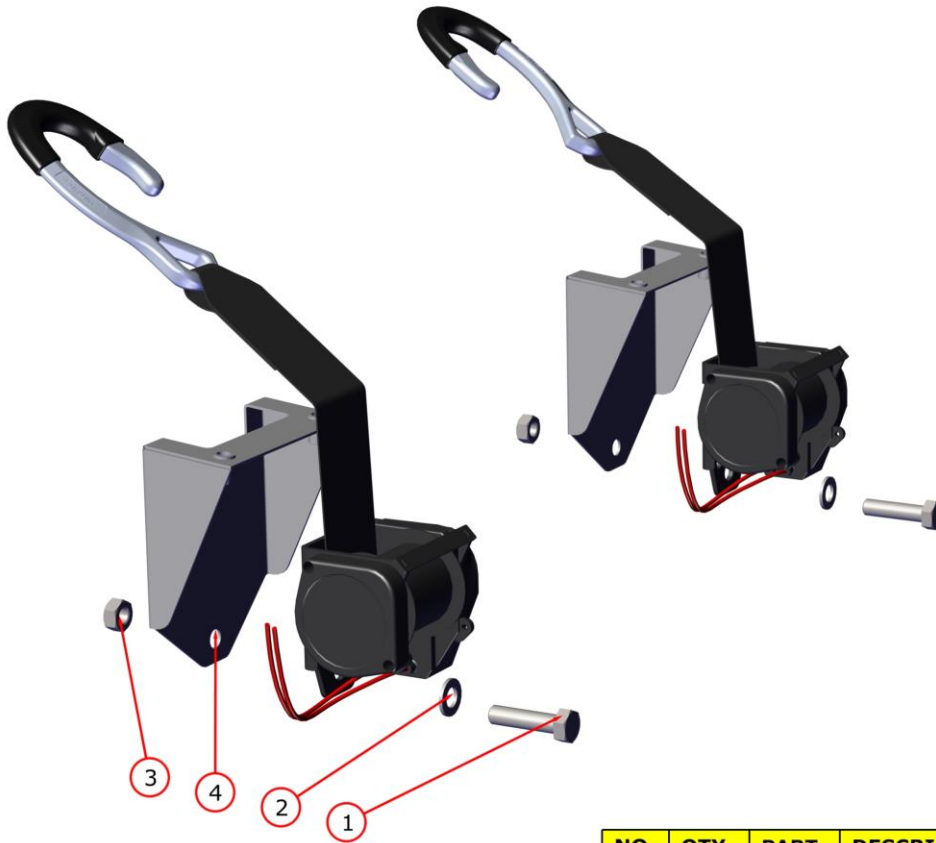
L1

The shape of the finishing strip will differ with each 2nd row seating arrangement chosen

Install the front finishing strip with 2 bolts  
(hand tight is enough for now)



L1

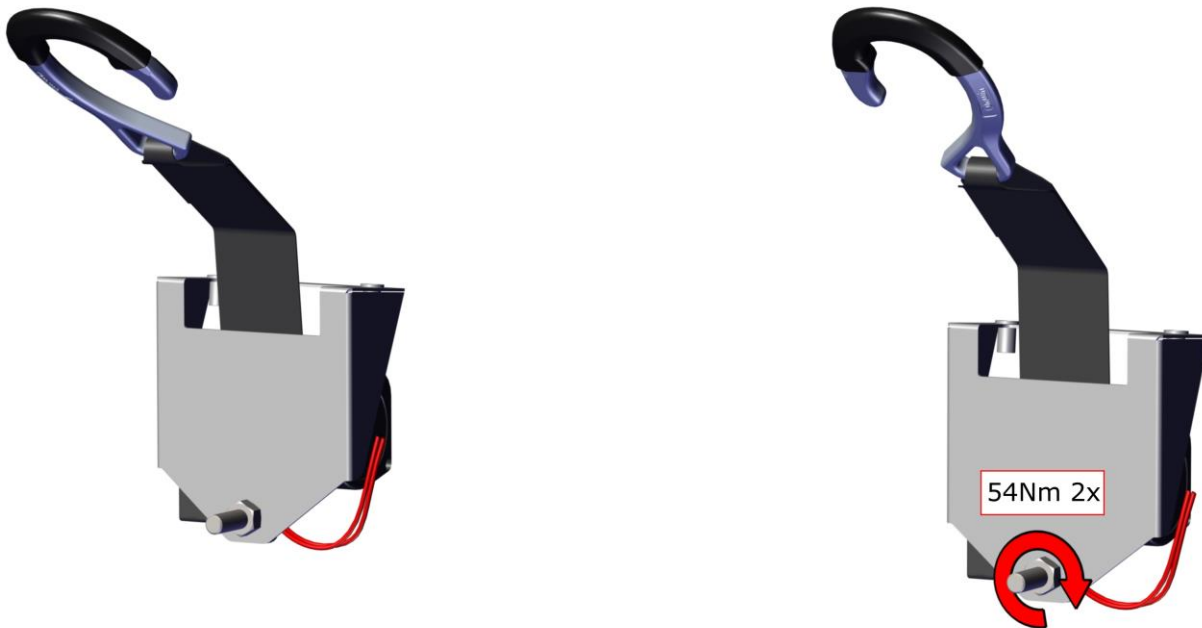


Bag #17050

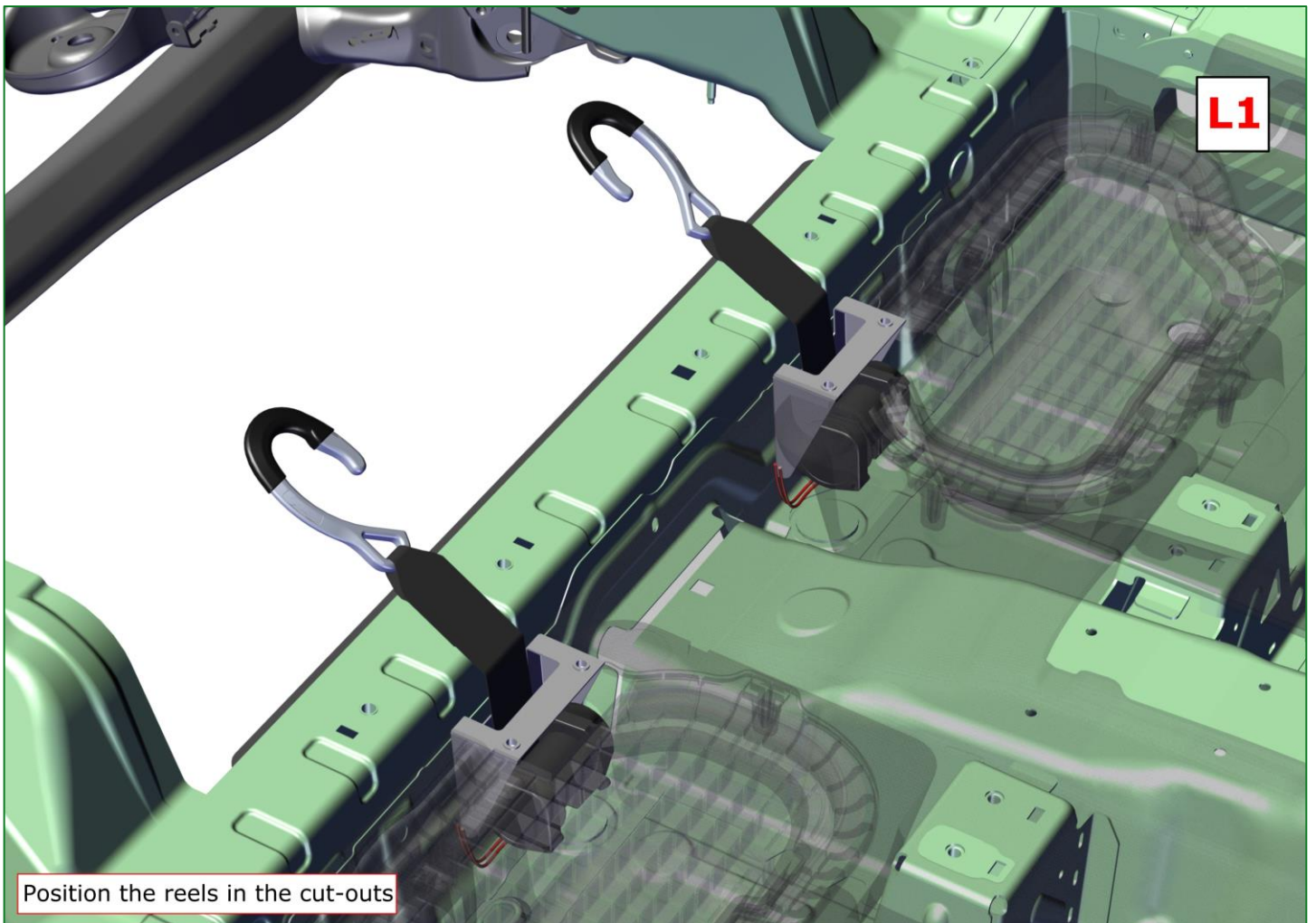
NO.	QTY.	PART	DESCRIPTION
1	2	180	M10x40 8.8 ISO 4016
2	2	173	Washer M10 ISO 7091
3	2	182	Hex nut M10 class 8 ISO 4032
4	2	17227	Electric reel bracket

Install the electric reels in the brackets

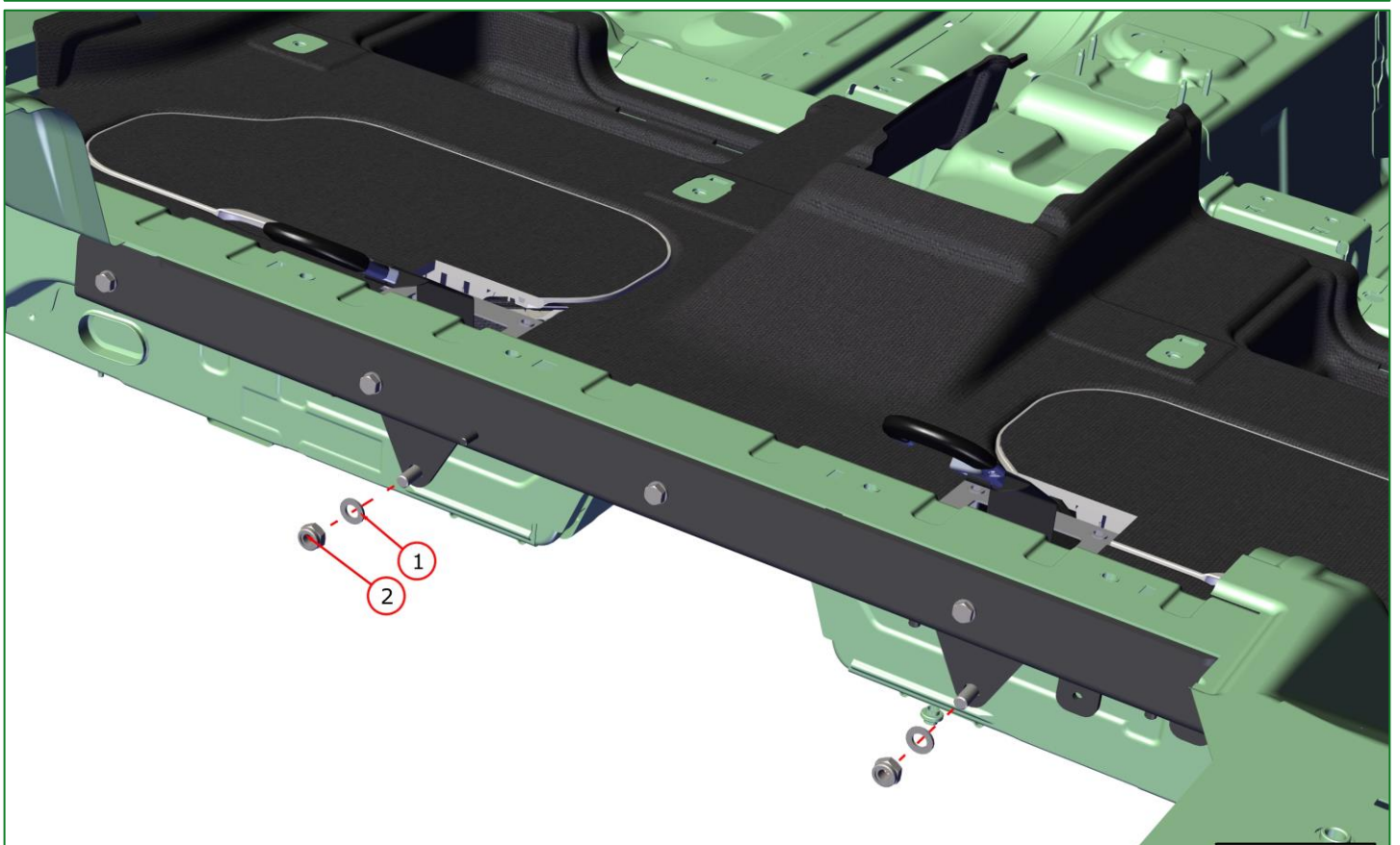
L1



Install the electric reels in the brackets



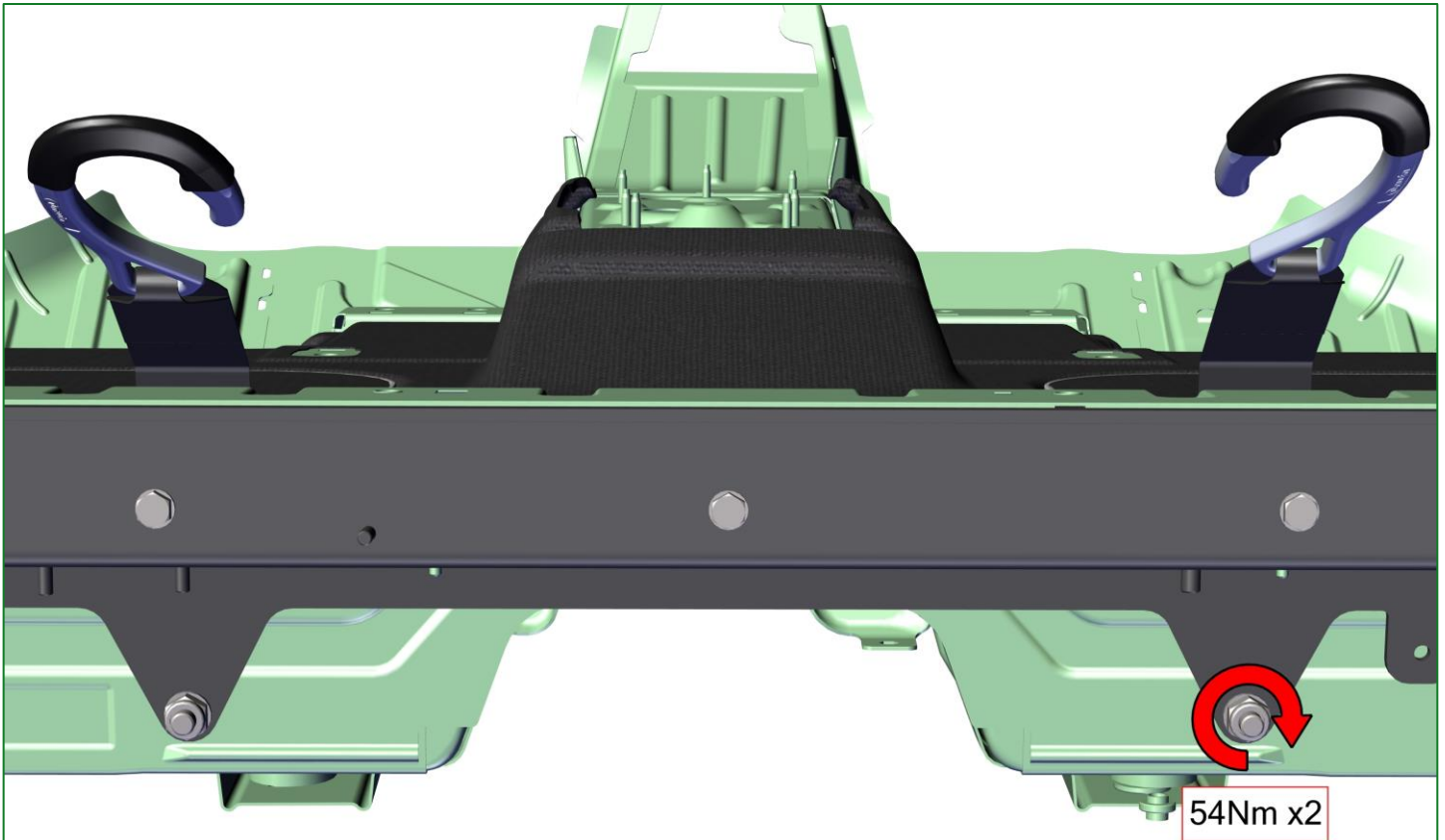
Position the reels in the cut-outs



Fasten the reels, keep the top of the brackets parallel with the floor cover.

Bag #17050

NO.	QTY.	PART	DESCRIPTION
1	2	173	Washer M10 ISO 7091
2	2	63	Torque nut M10 class 10 ISO 7041



54Nm x2

Fasten the reels, keep the top of the brackets parallel with the floor cover.

L2

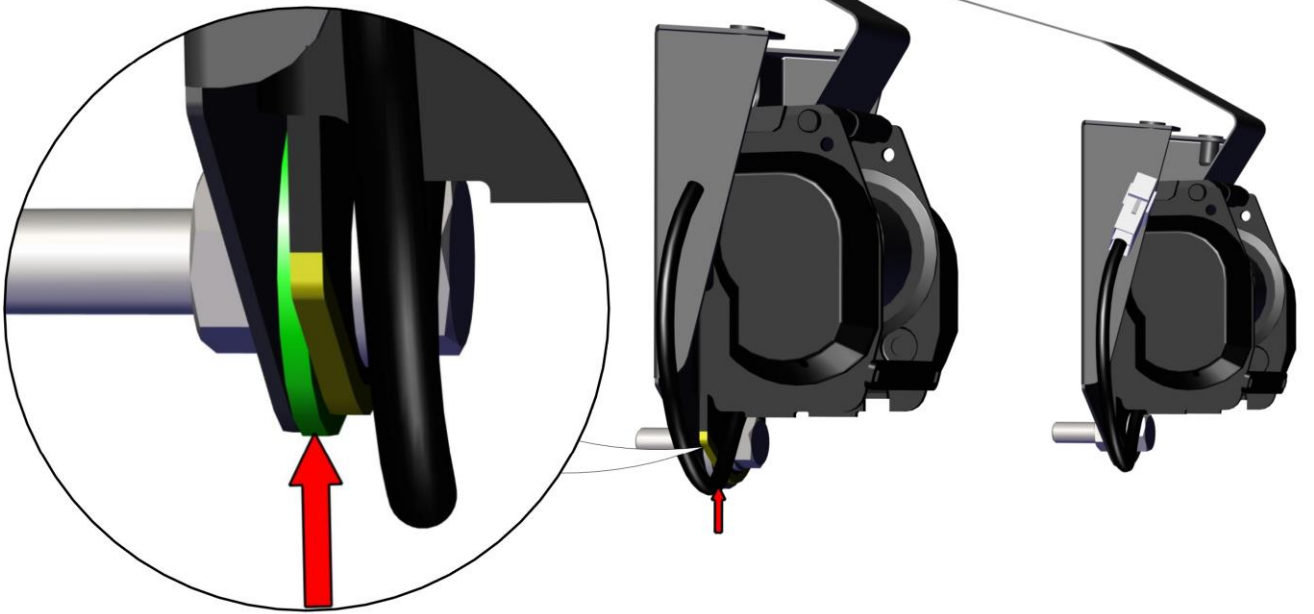


Bag #17050

NO.	QTY.	PART	DESCRIPTION
1	1	17605	Electric front tie down set, 4mtr
2	2	17810	Bracket electric belt
3	2	180	M10x40 8.8 ISO 4016
4	2	173	Washer M10 ISO 7091
5	2	9112	Washer M10x33x2,5 ISO 440R
6	2	182	Nut M10 class 3 ISO 4032

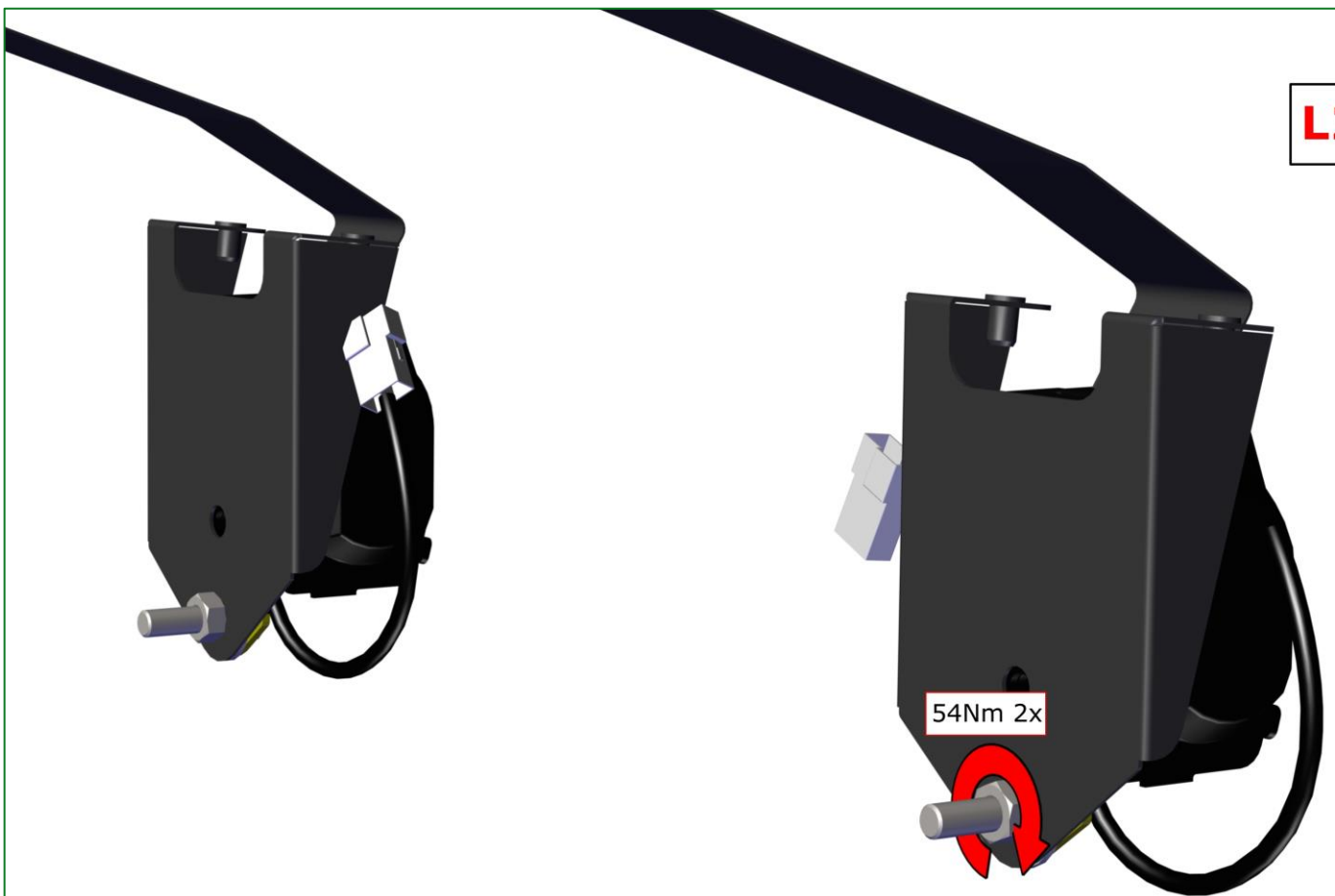
Install the electric reels in the brackets

L2

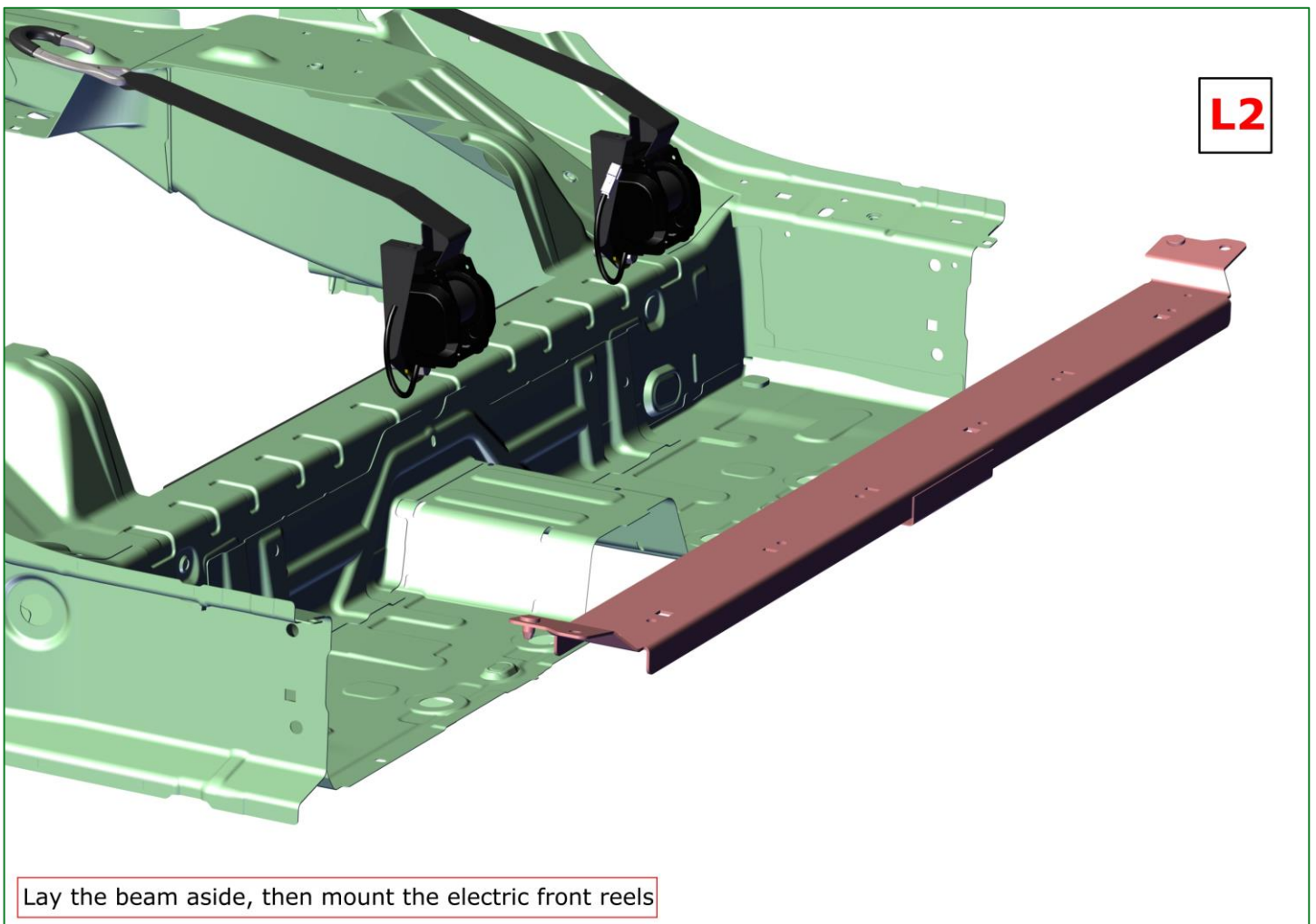
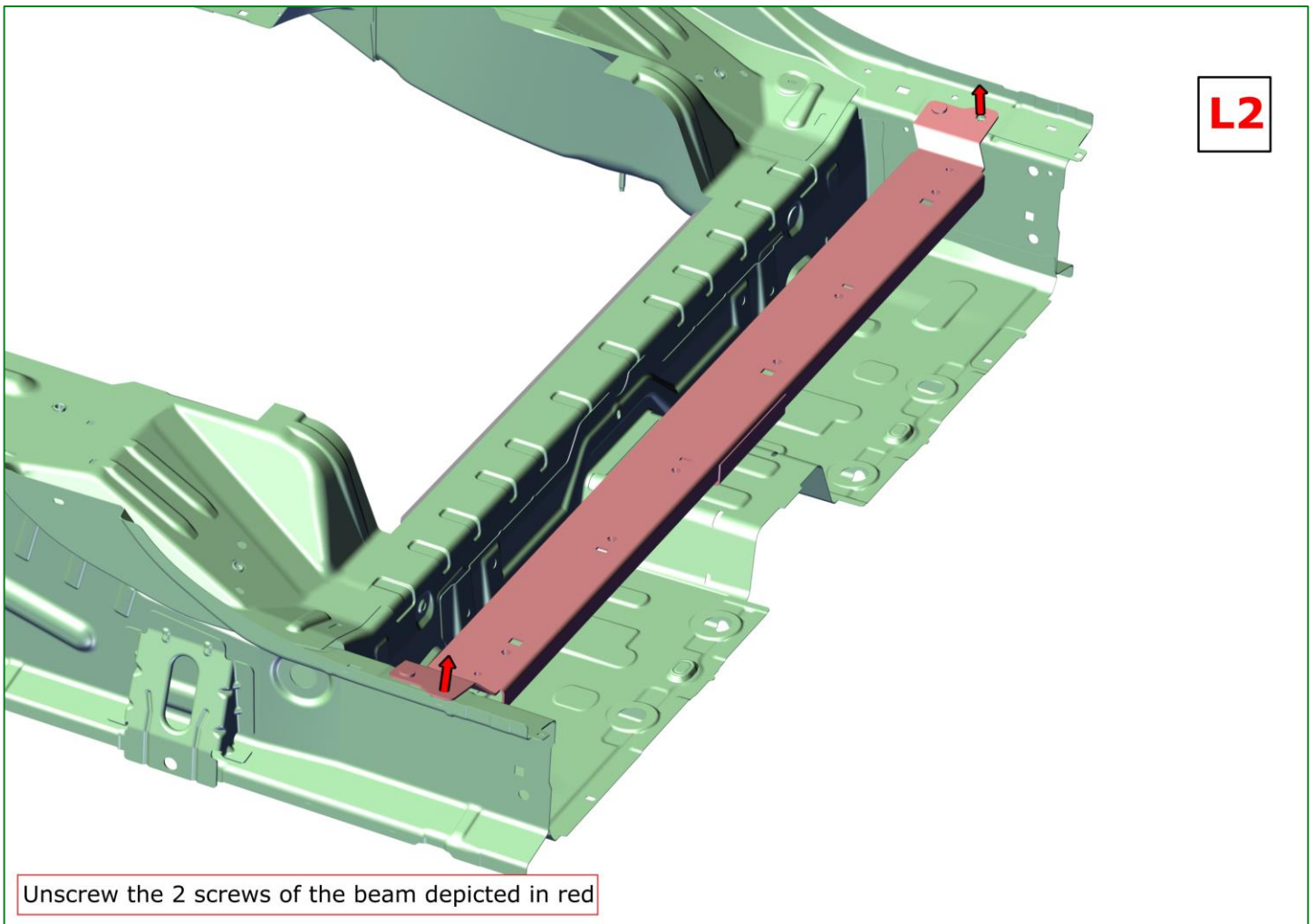


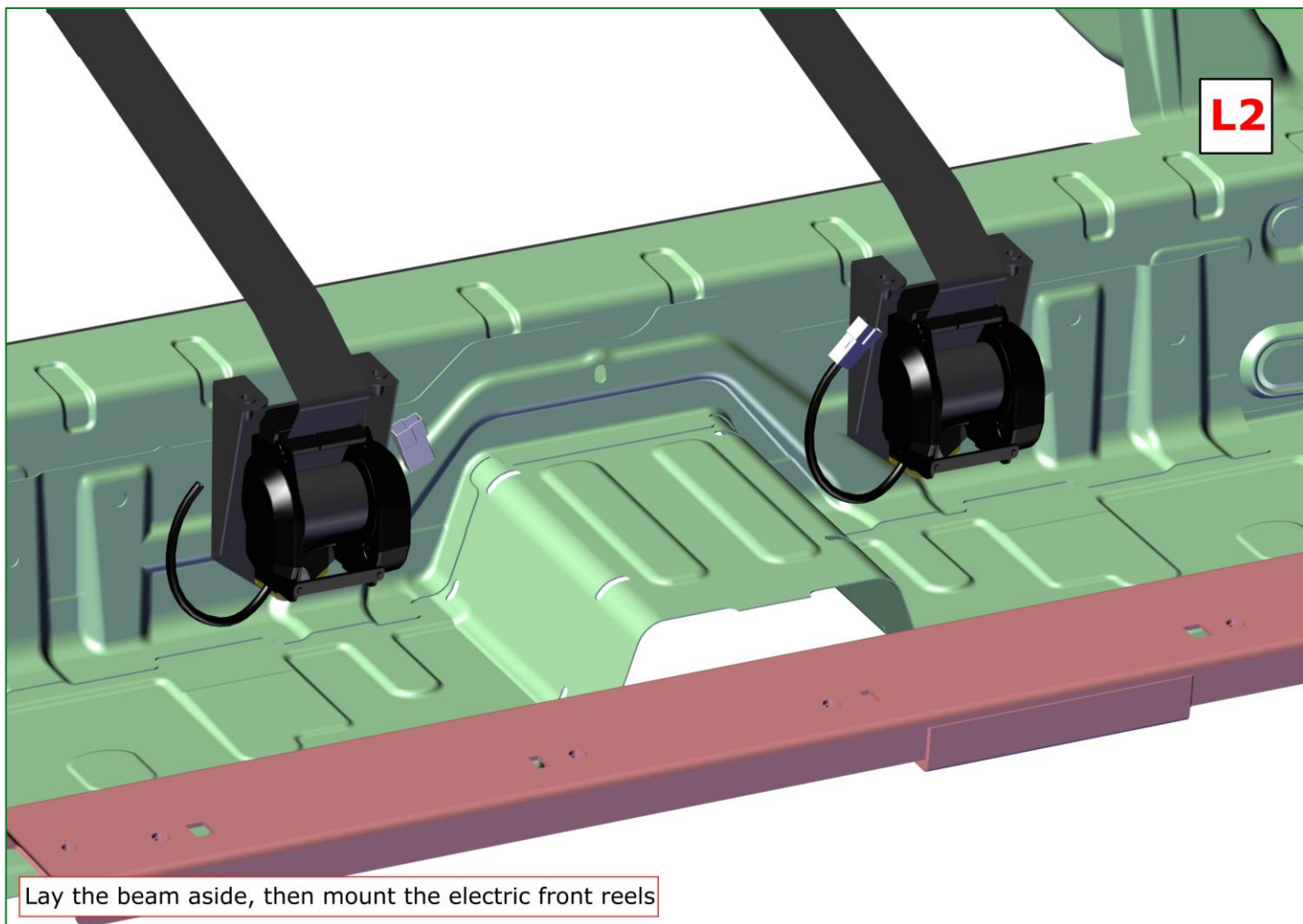
The large washer should be between bracket and tie down frame

L2

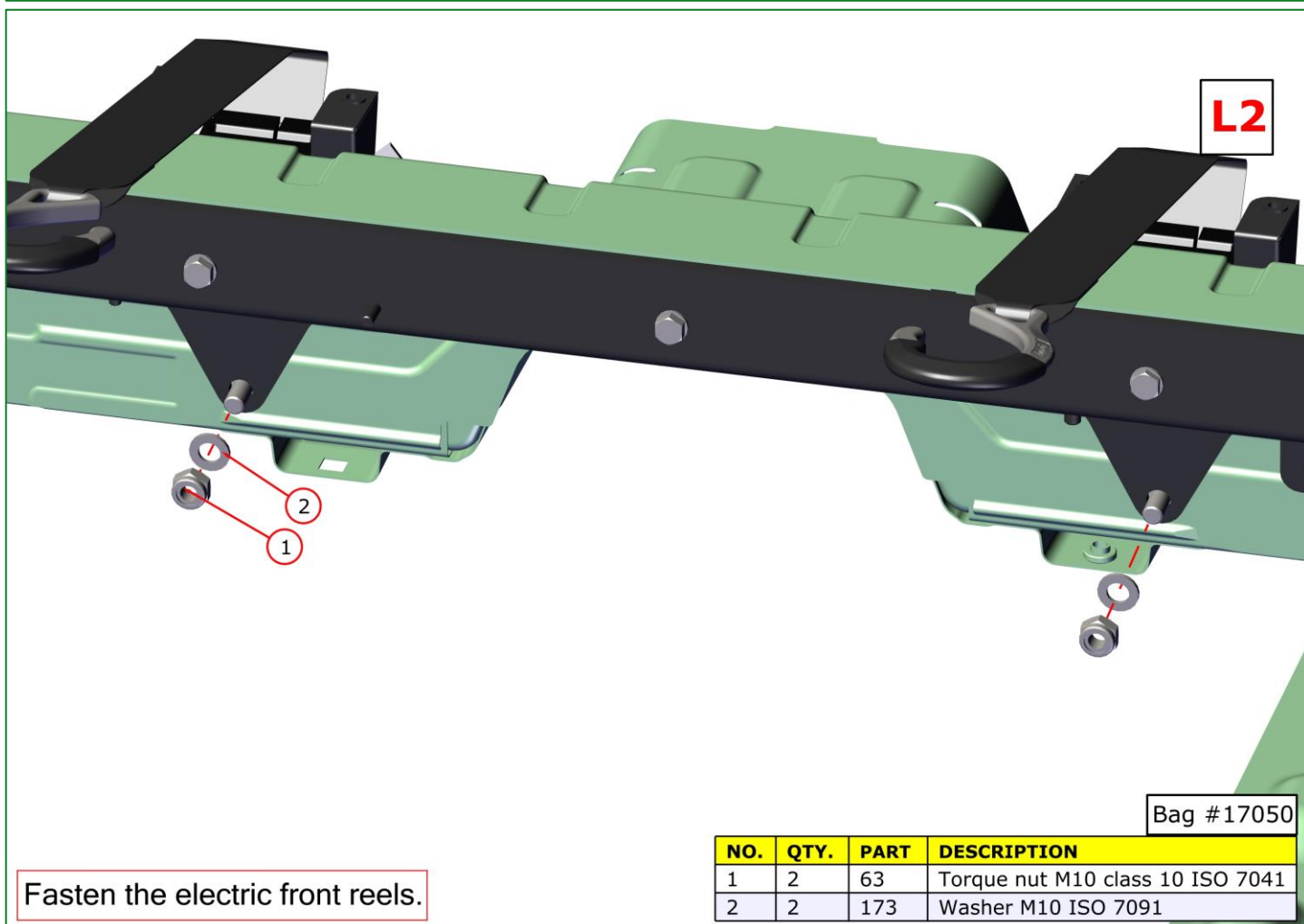








Lay the beam aside, then mount the electric front reels



Fasten the electric front reels.

Bag #17050

NO.	QTY.	PART	DESCRIPTION
1	2	63	Torque nut M10 class 10 ISO 7041
2	2	173	Washer M10 ISO 7091

L2

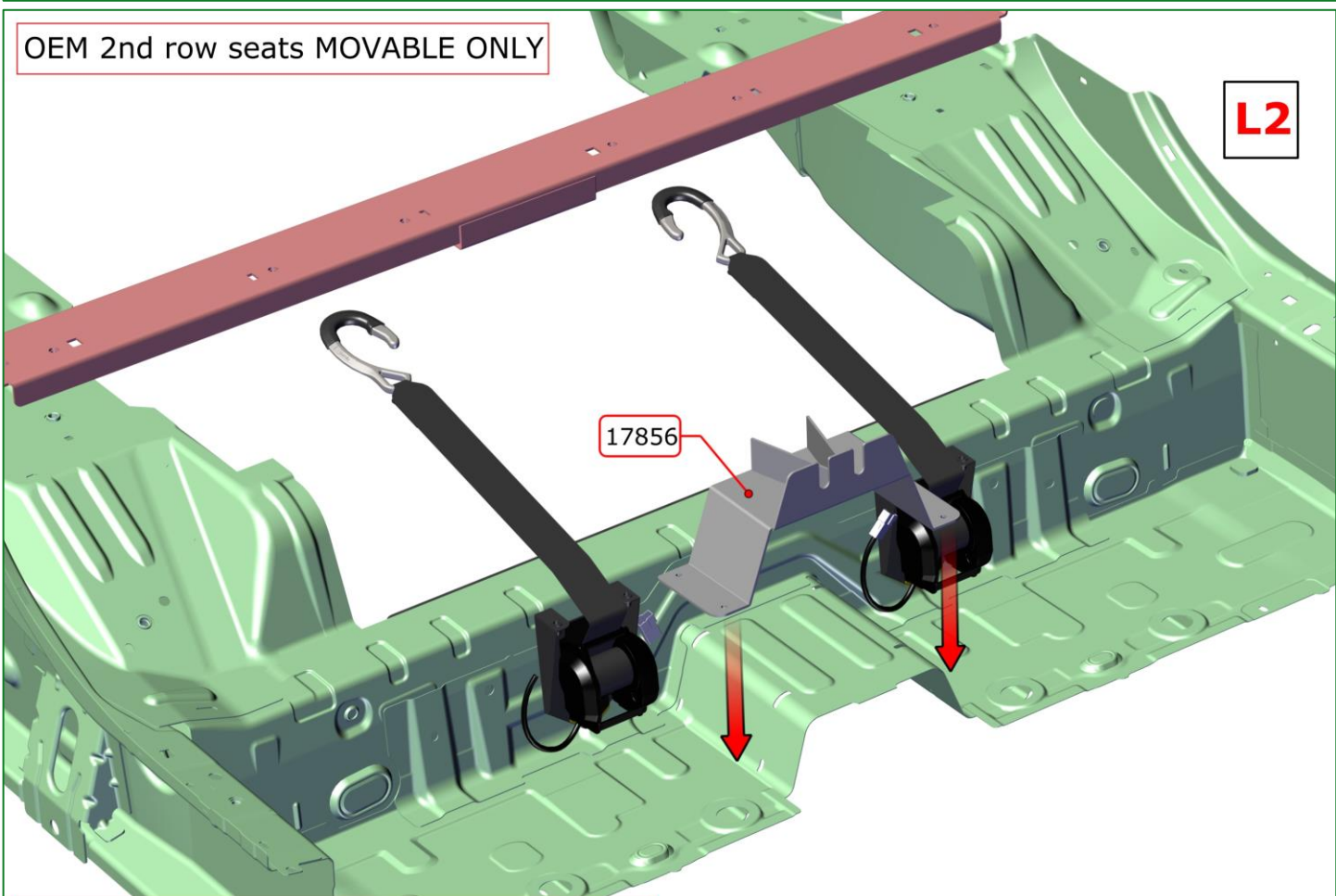


54Nm (2x)

Fasten the electric front reels.

OEM 2nd row seats MOVABLE ONLY

L2

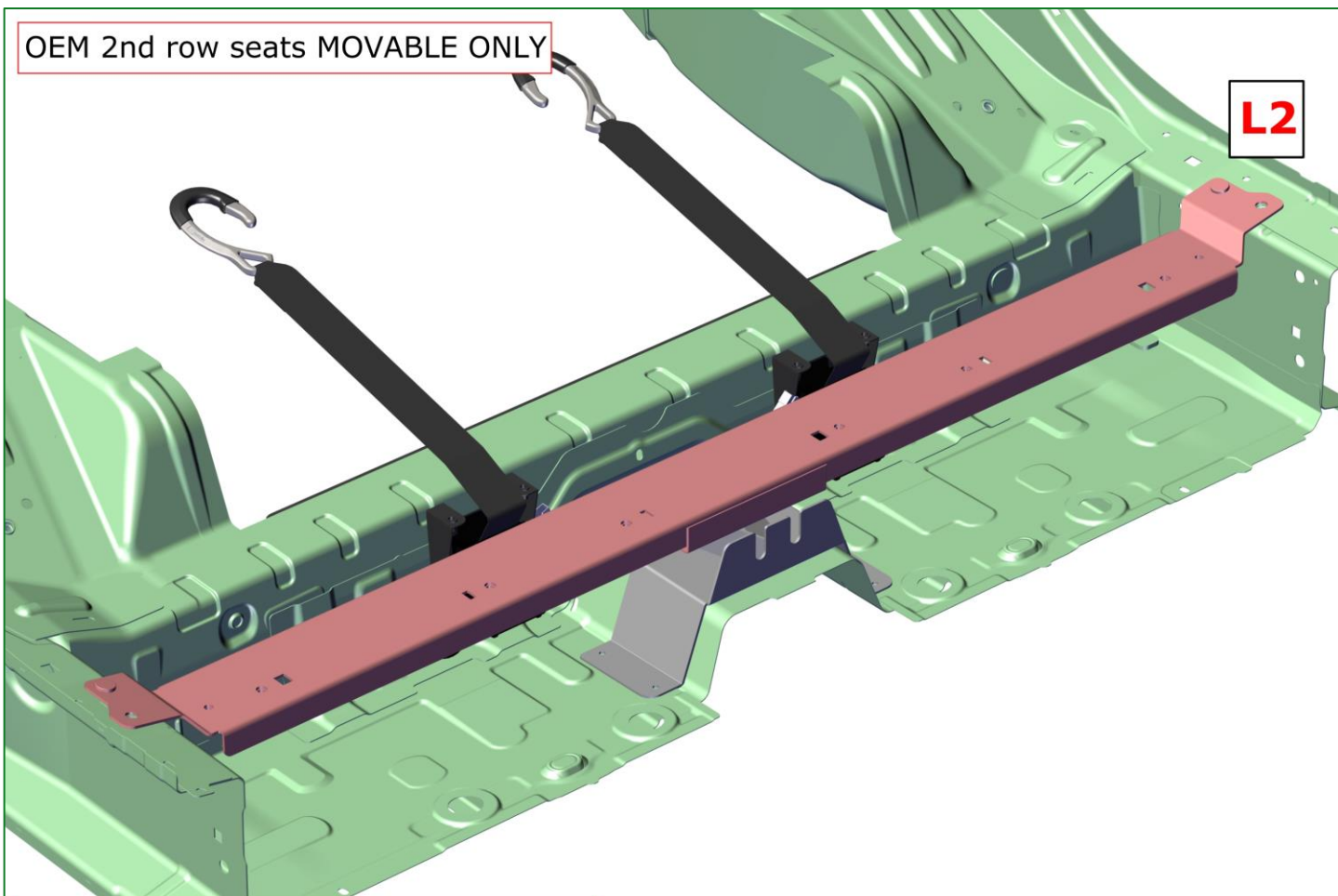


17856

Place the reinforcement bracket on the floor as shown

OEM 2nd row seats MOVABLE ONLY

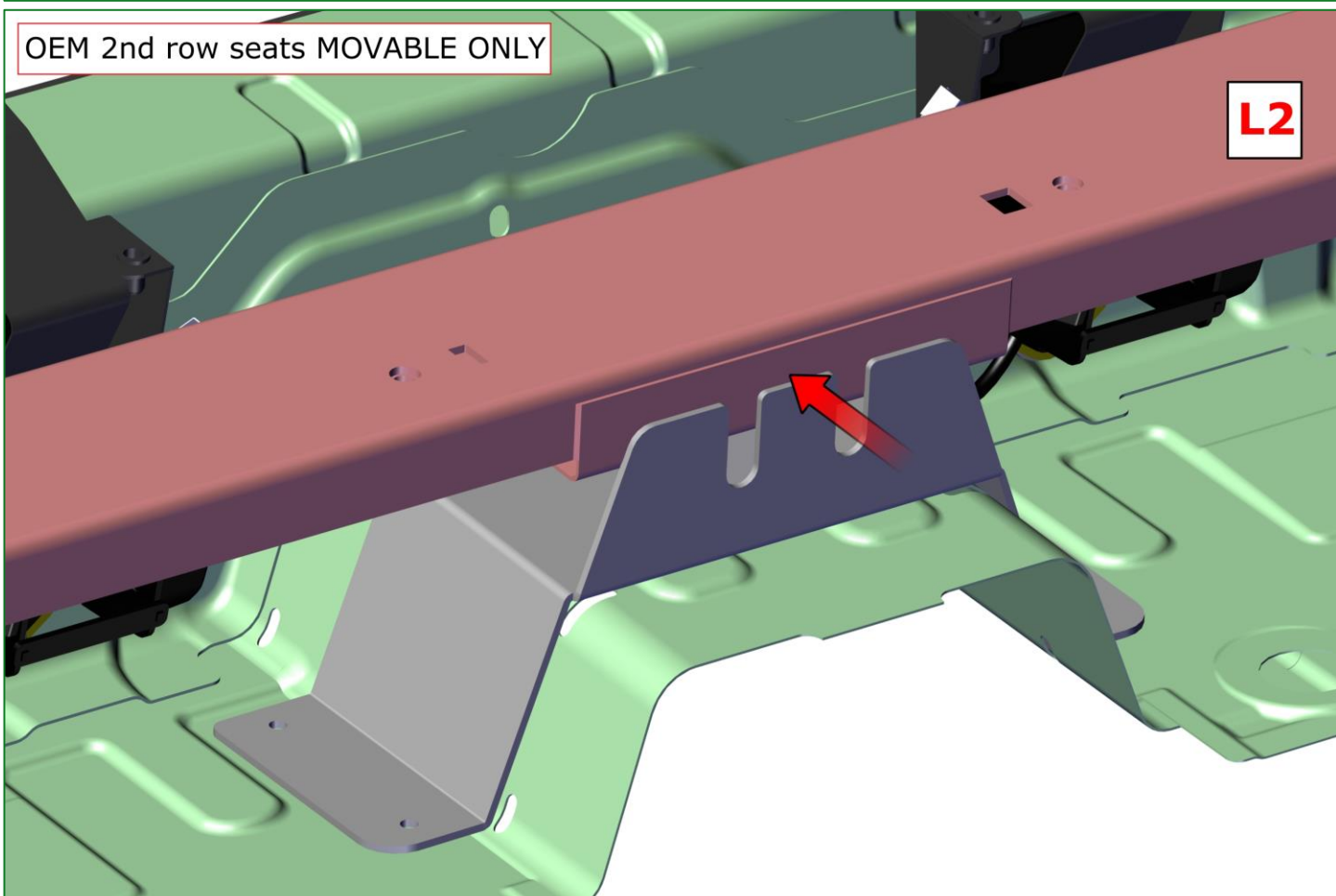
L2



Place the OEM cross member back to its position

OEM 2nd row seats MOVABLE ONLY

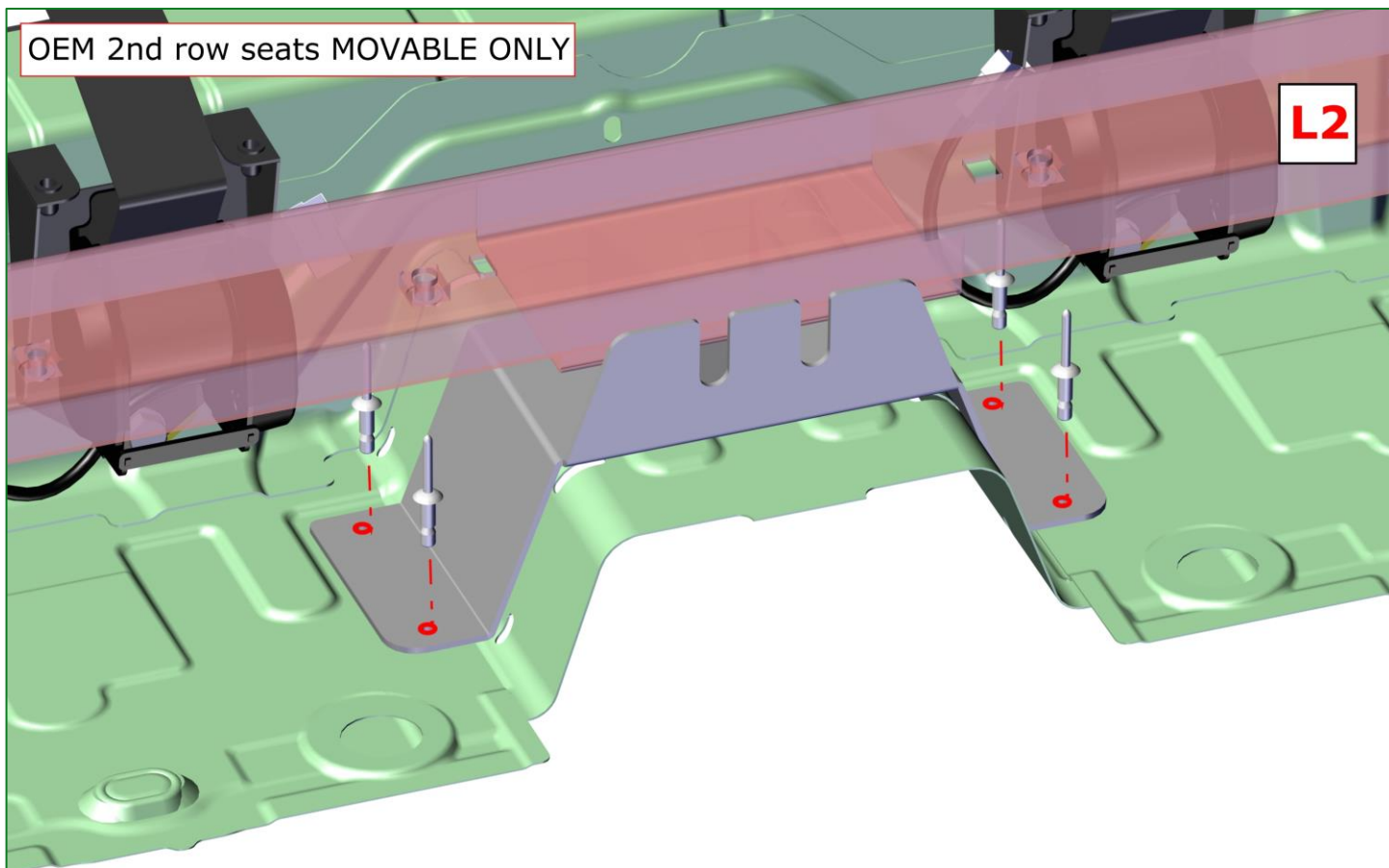
L2



Push the bracket against the front of the cross member as shown

OEM 2nd row seats MOVABLE ONLY

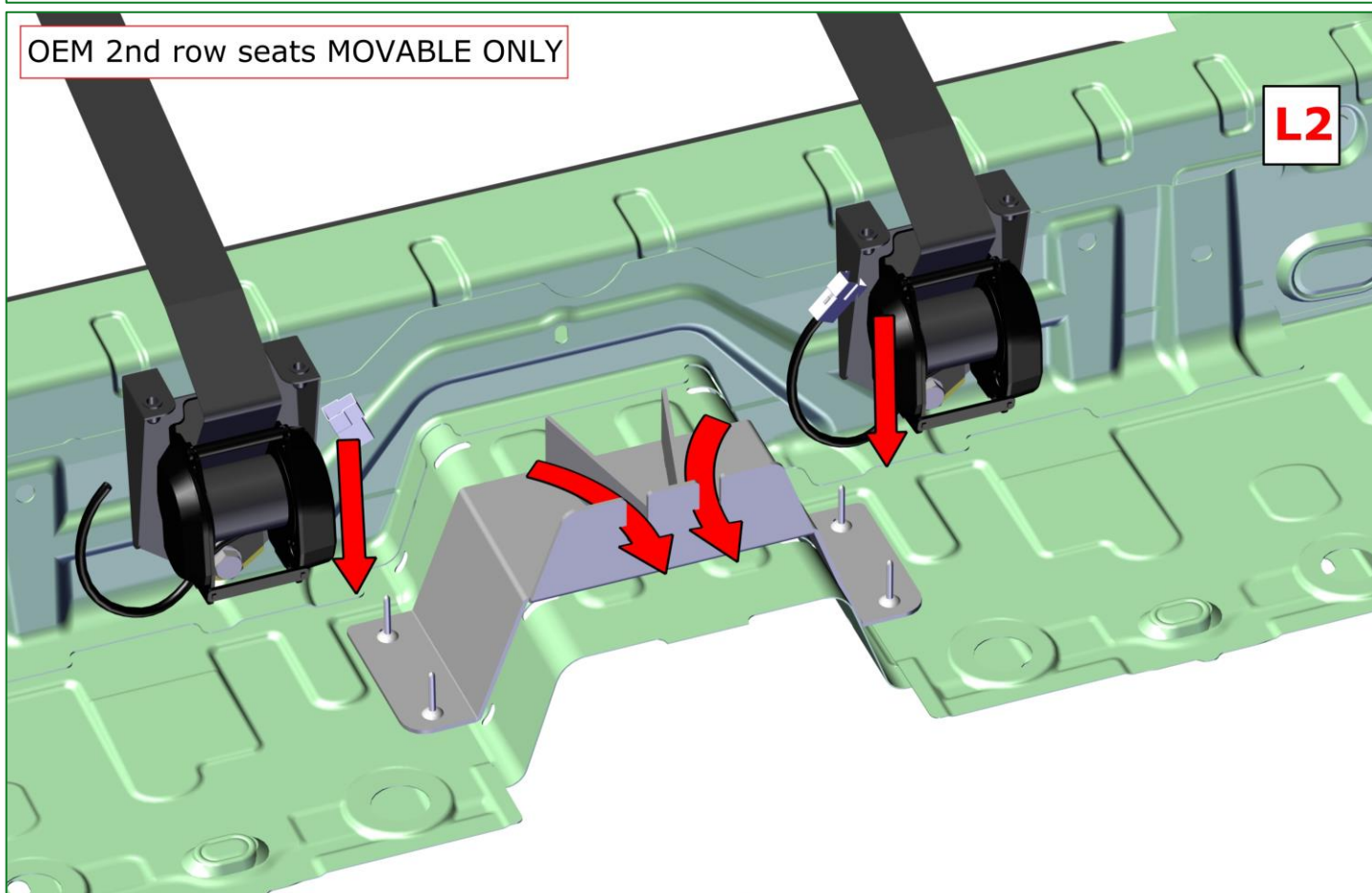
L2



Mark the 4 holes, drill  $\varnothing 6,5$  mm and fix with the Magna-loks  
remove cross member temporarily for easy access

OEM 2nd row seats MOVABLE ONLY

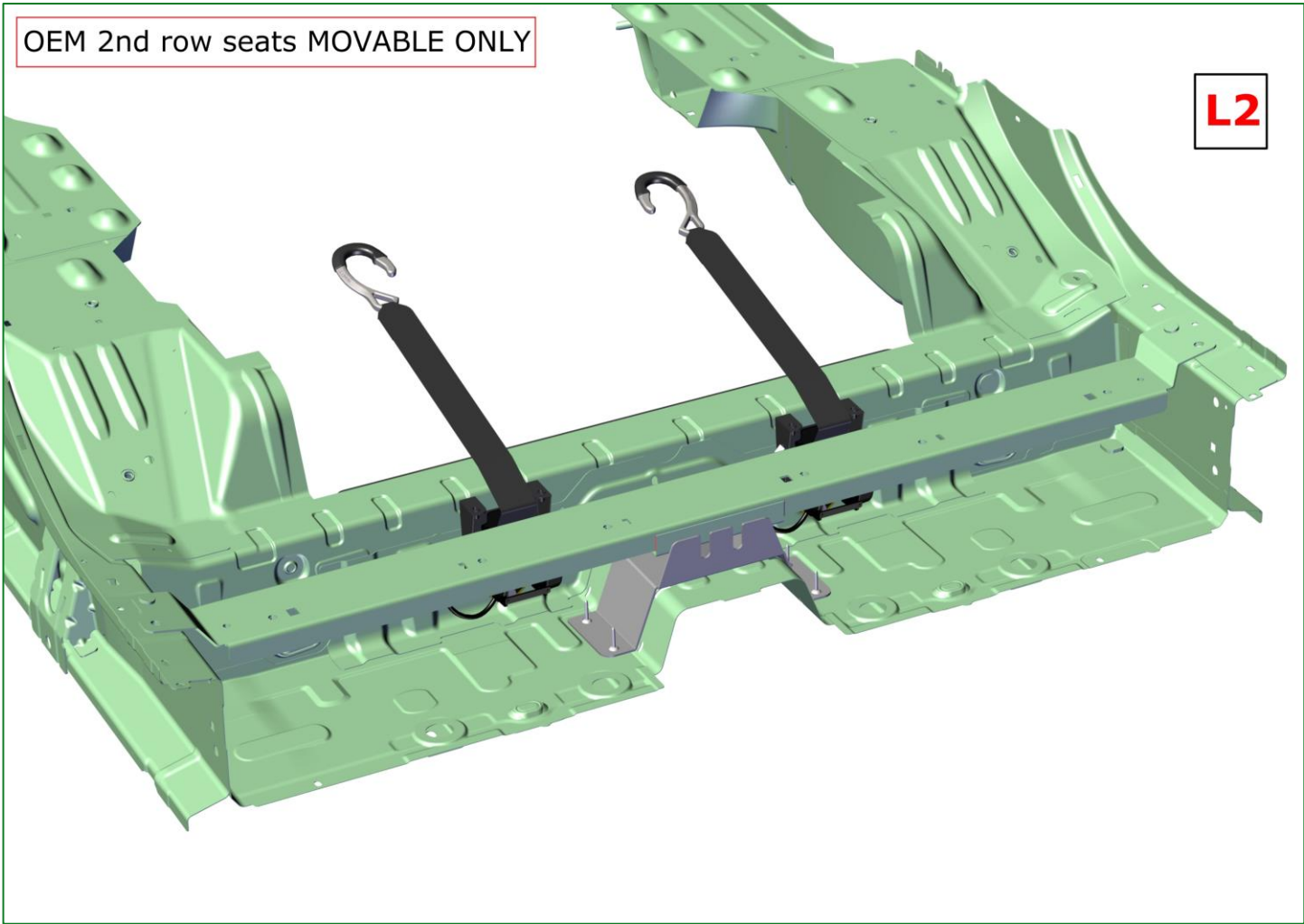
L2



In case of a manual E-brake, carefully bend the tubes under the reels and out through the openings in the bracket

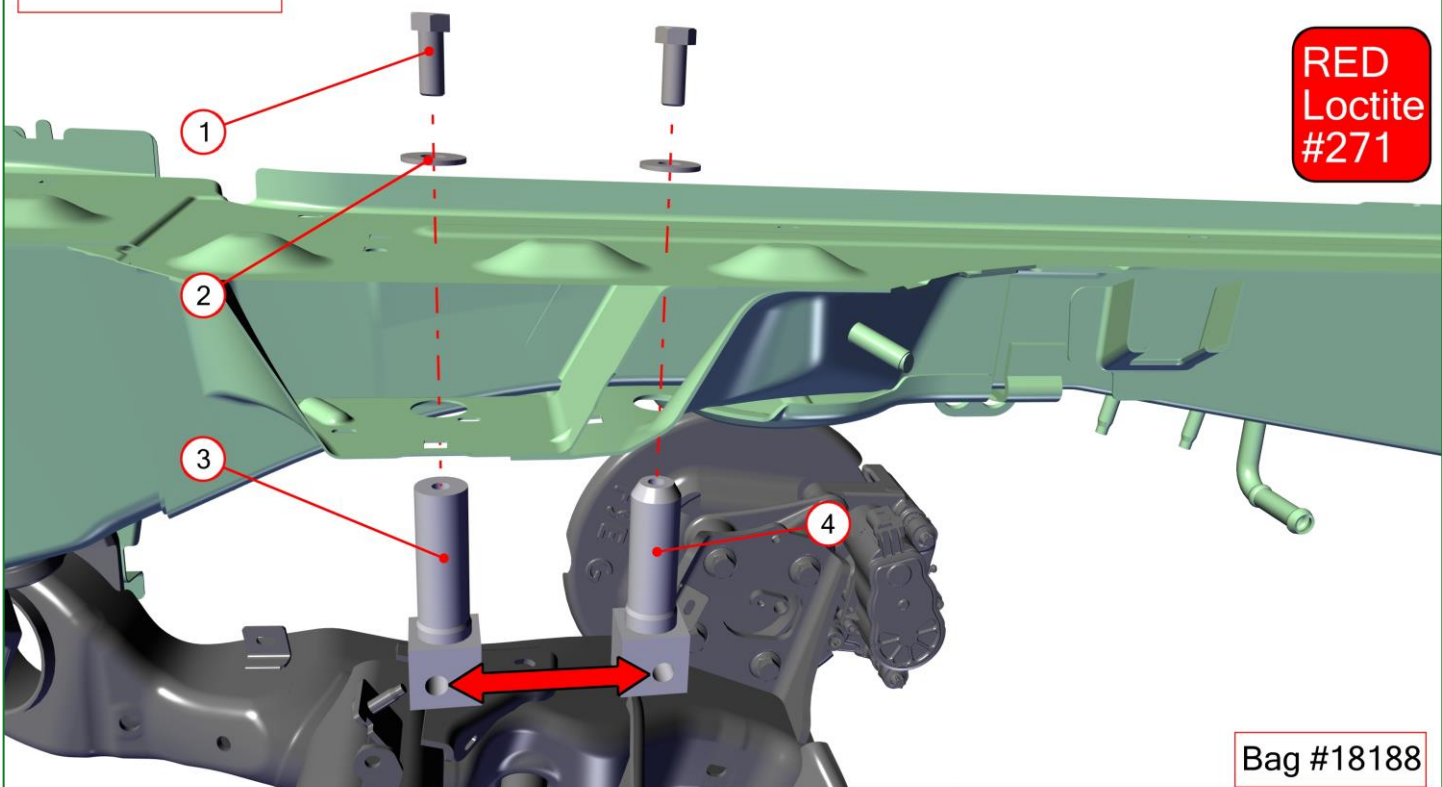
OEM 2nd row seats MOVABLE ONLY

L2



Shock absorbers

RED  
Loctite  
#271

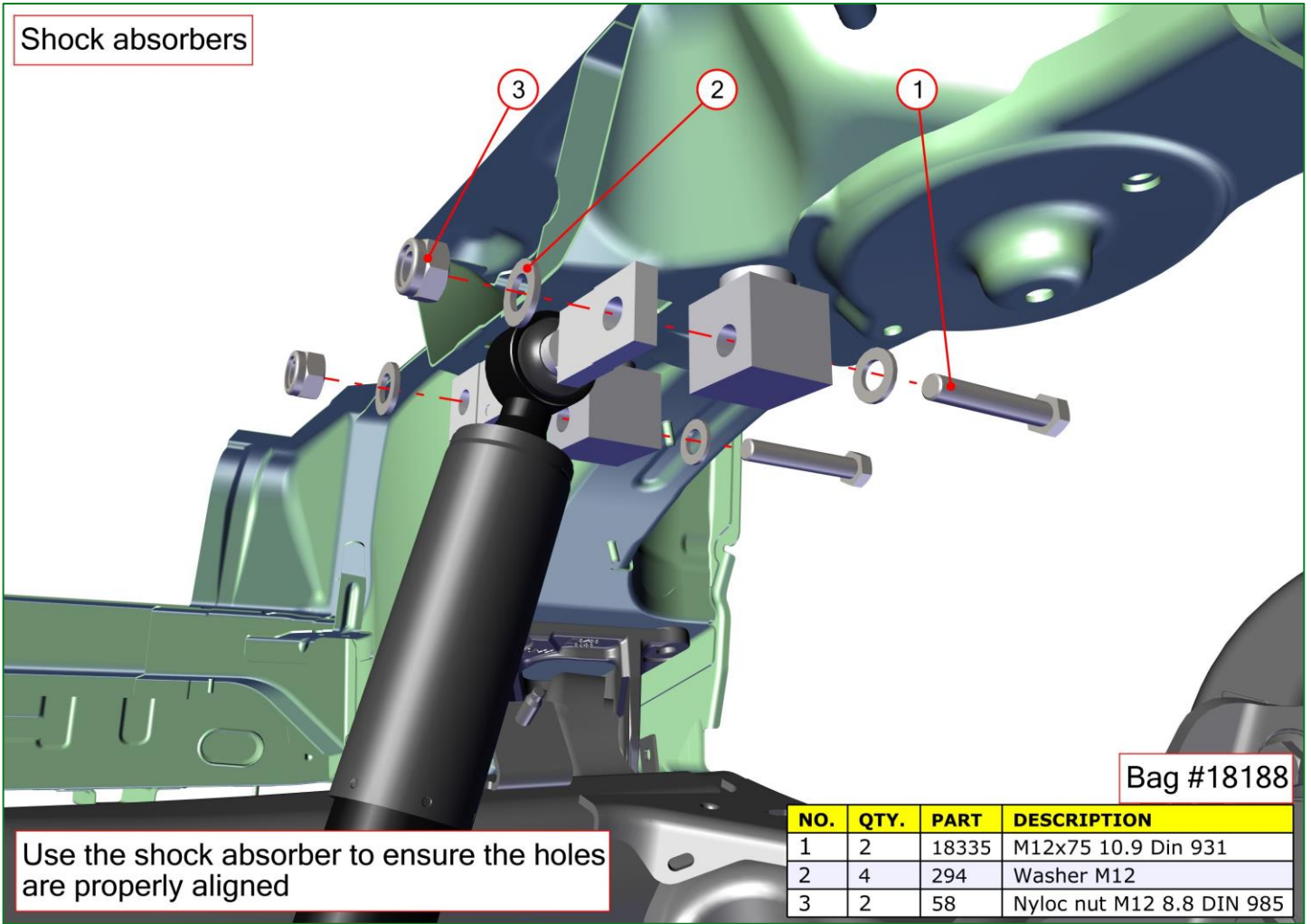


Bag #18188

Insert the brackets and position the holes on the outside as shown.

NO.	QTY.	PART	DESCRIPTION
1	2	11335	M12x30 10.9 DIN 933 ISO 4016
2	2	10869	Washer M12x30x1.5
3	1	18188	Suspension bracket shock absorber front
4	1	18084	Suspension bracket shock absorber rear

Shock absorbers

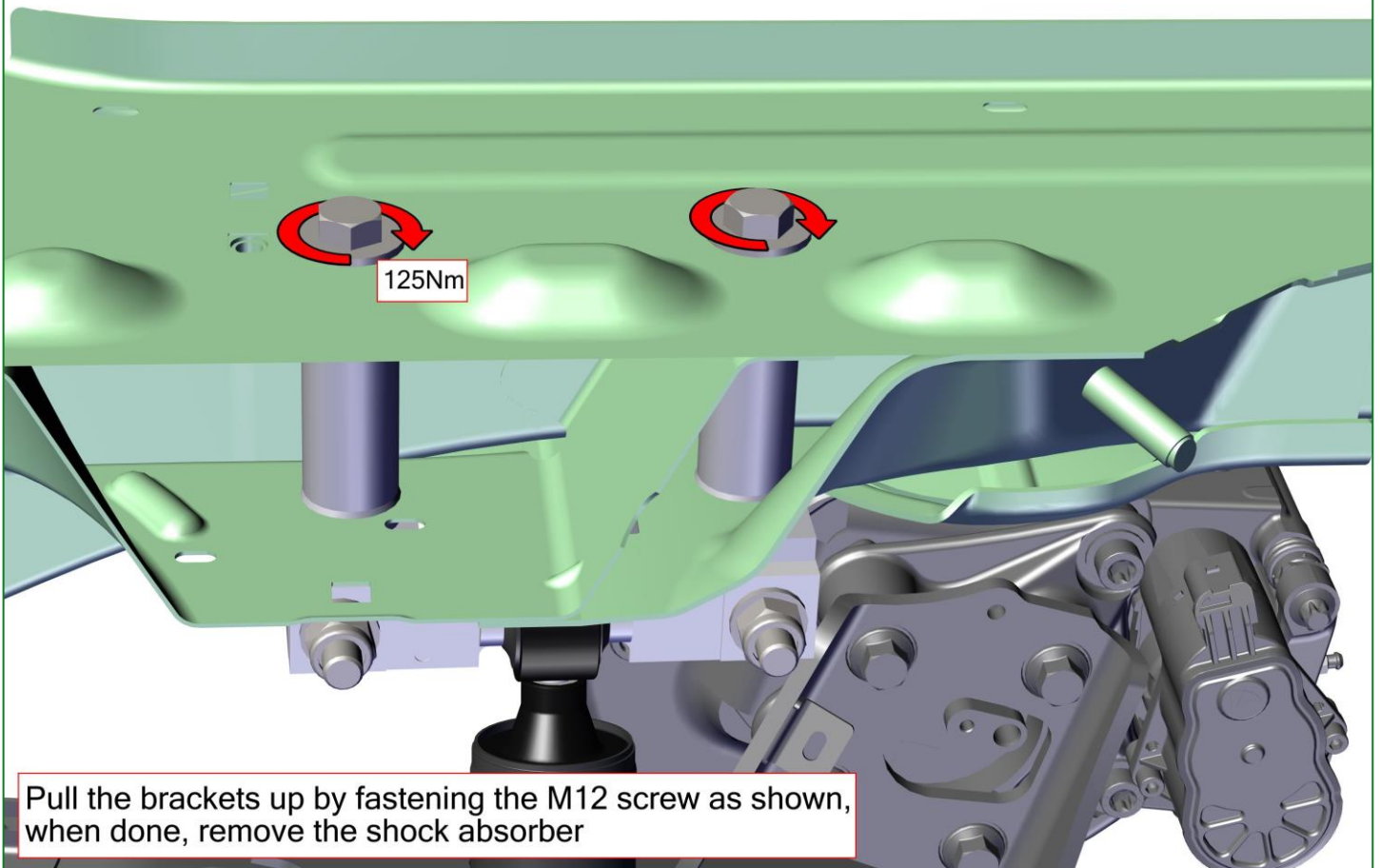


Bag #18188

NO.	QTY.	PART	DESCRIPTION
1	2	18335	M12x75 10.9 Din 931
2	4	294	Washer M12
3	2	58	Nyloc nut M12 8.8 DIN 985

Use the shock absorber to ensure the holes are properly aligned

Shock absorbers

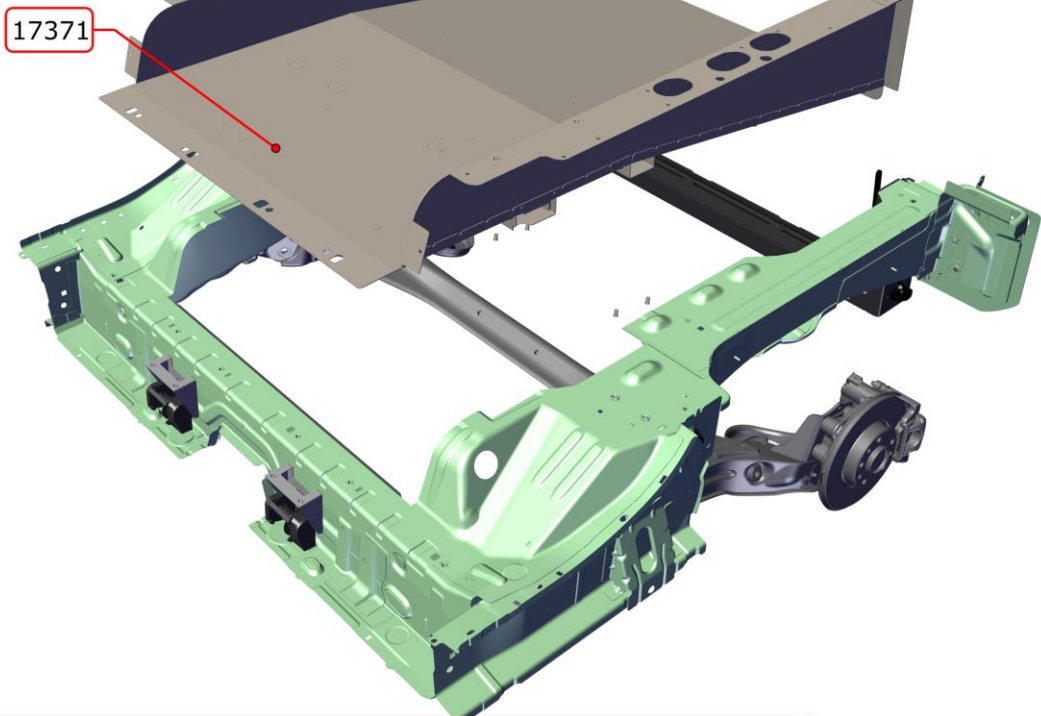


125Nm

Pull the brackets up by fastening the M12 screw as shown, when done, remove the shock absorber

Lowered floor L1

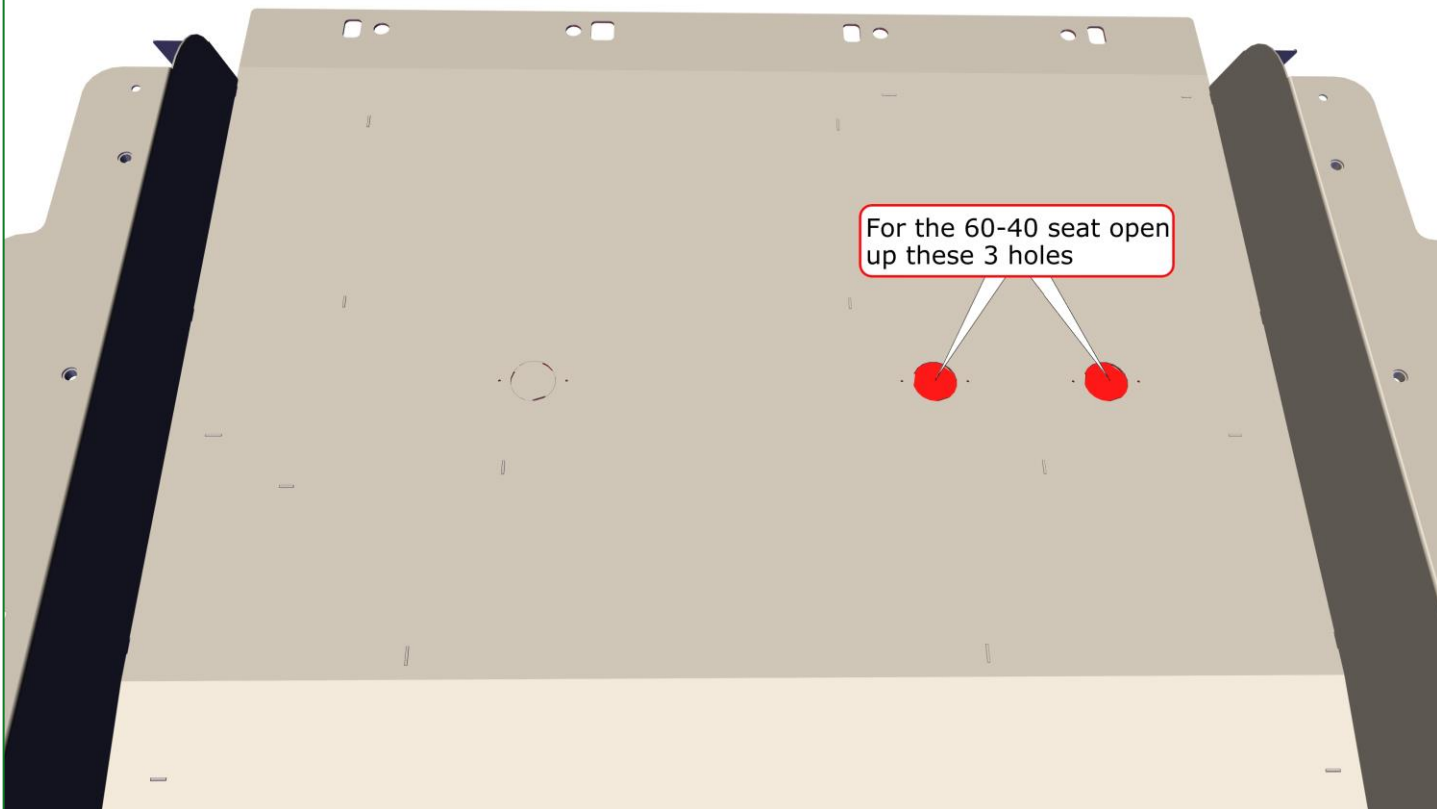
L1



When the seating configuration include Tripod TR03S 2nd row seats, place the floor and skip the next 5 views.

With OEM 2nd row seats

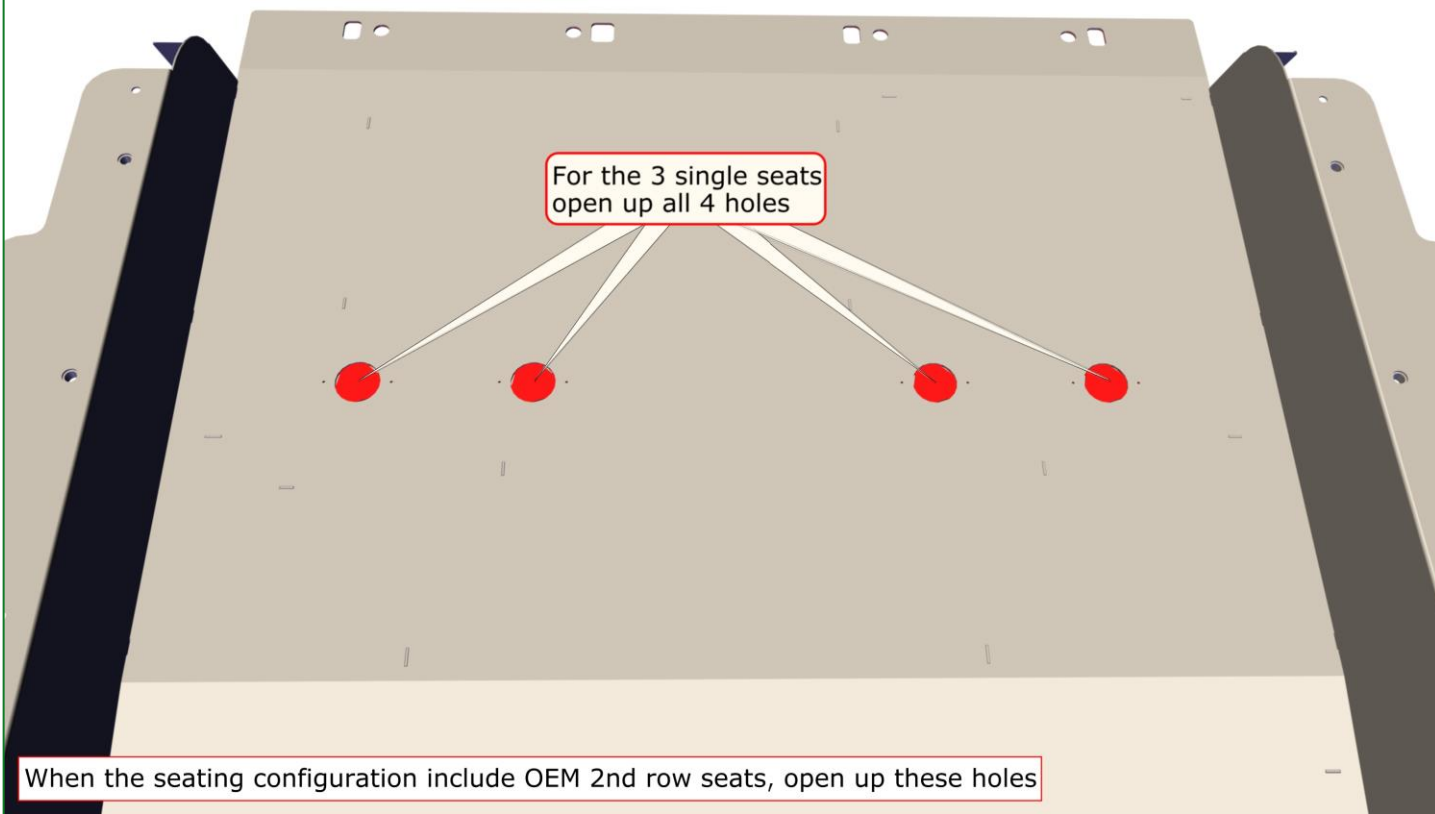
L1





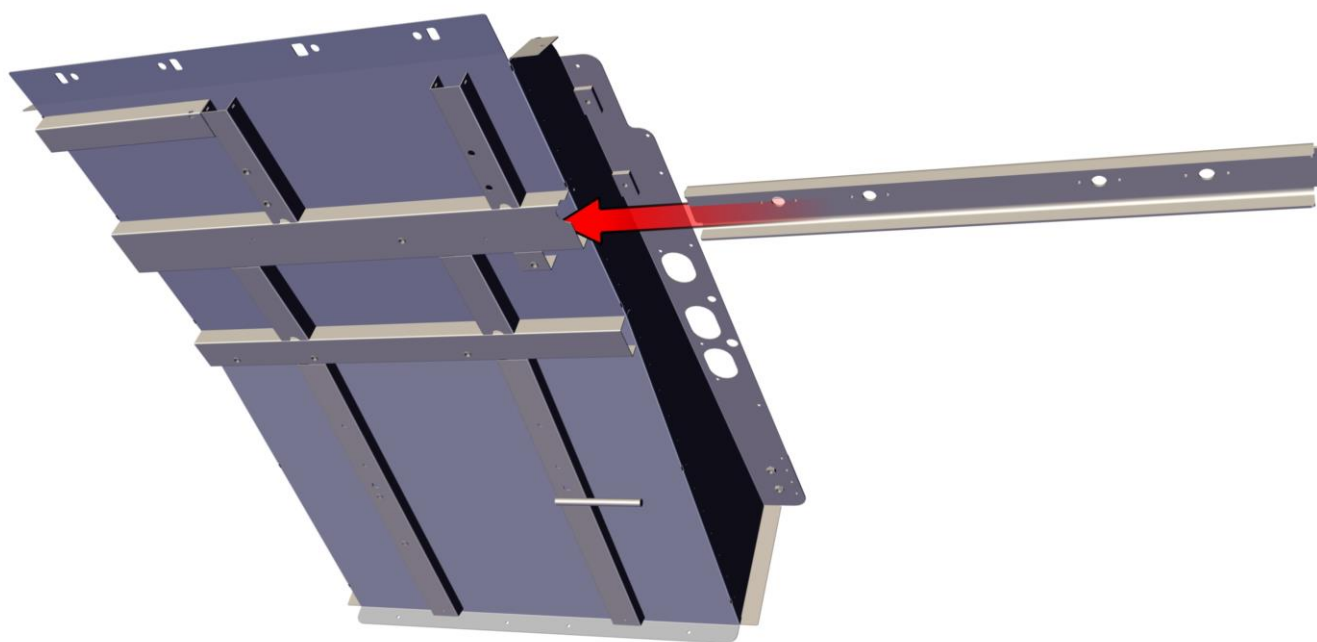
With OEM 2nd row seats

L1



With OEM 2nd row seats

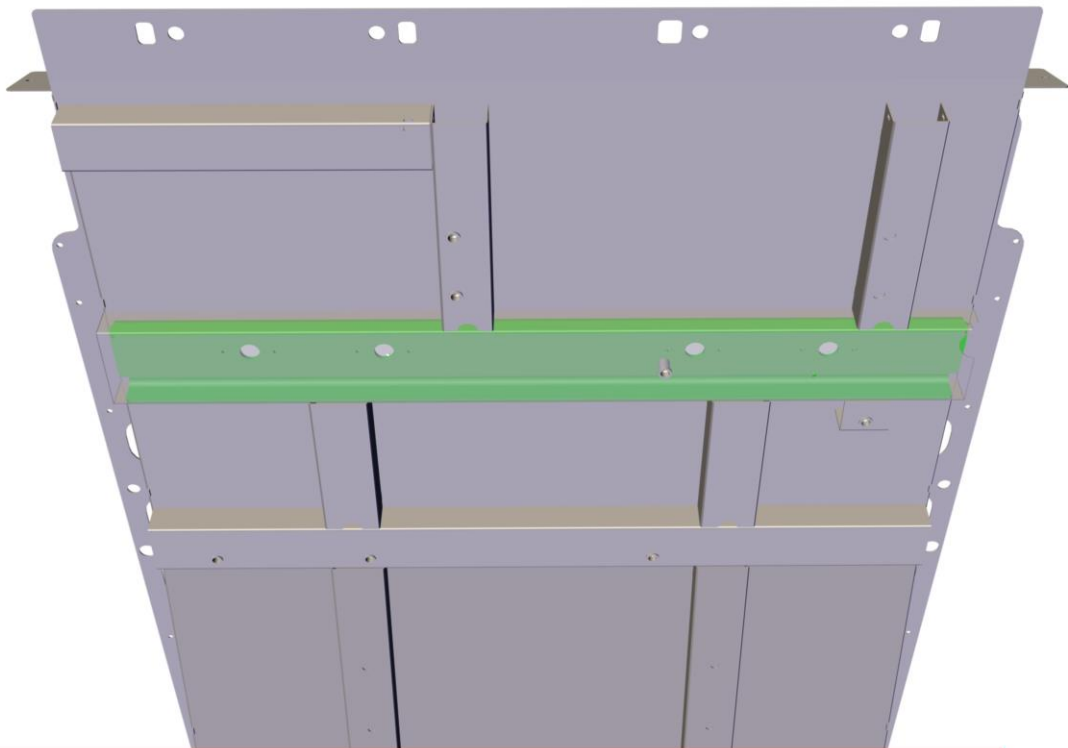
L1



When the seating configuration include OEM 2nd row seats, insert this reinforcement beam

With OEM 2nd row seats

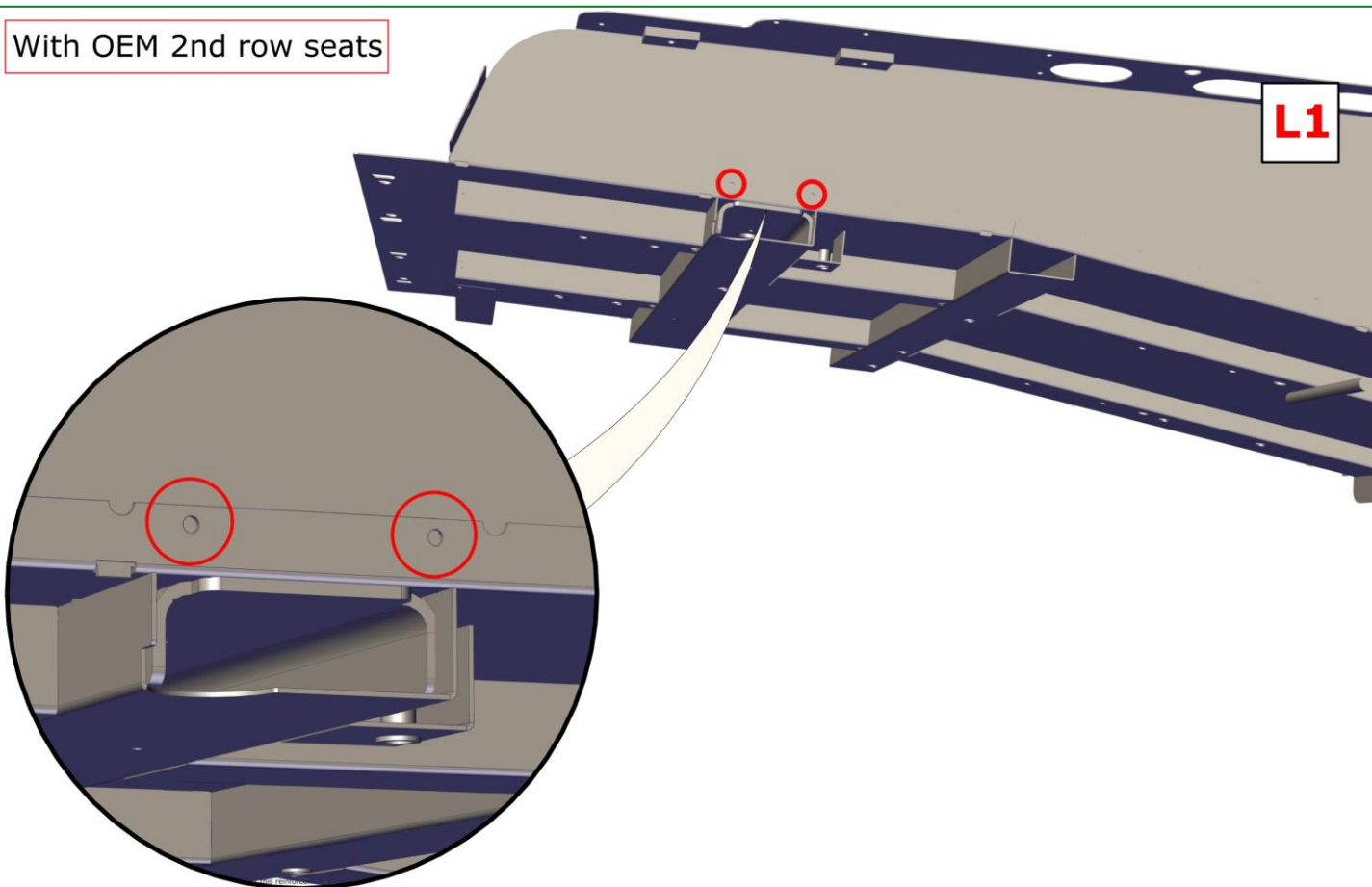
L1



When the seating configuration include OEM 2nd row seats, insert this reinforcement beam

With OEM 2nd row seats

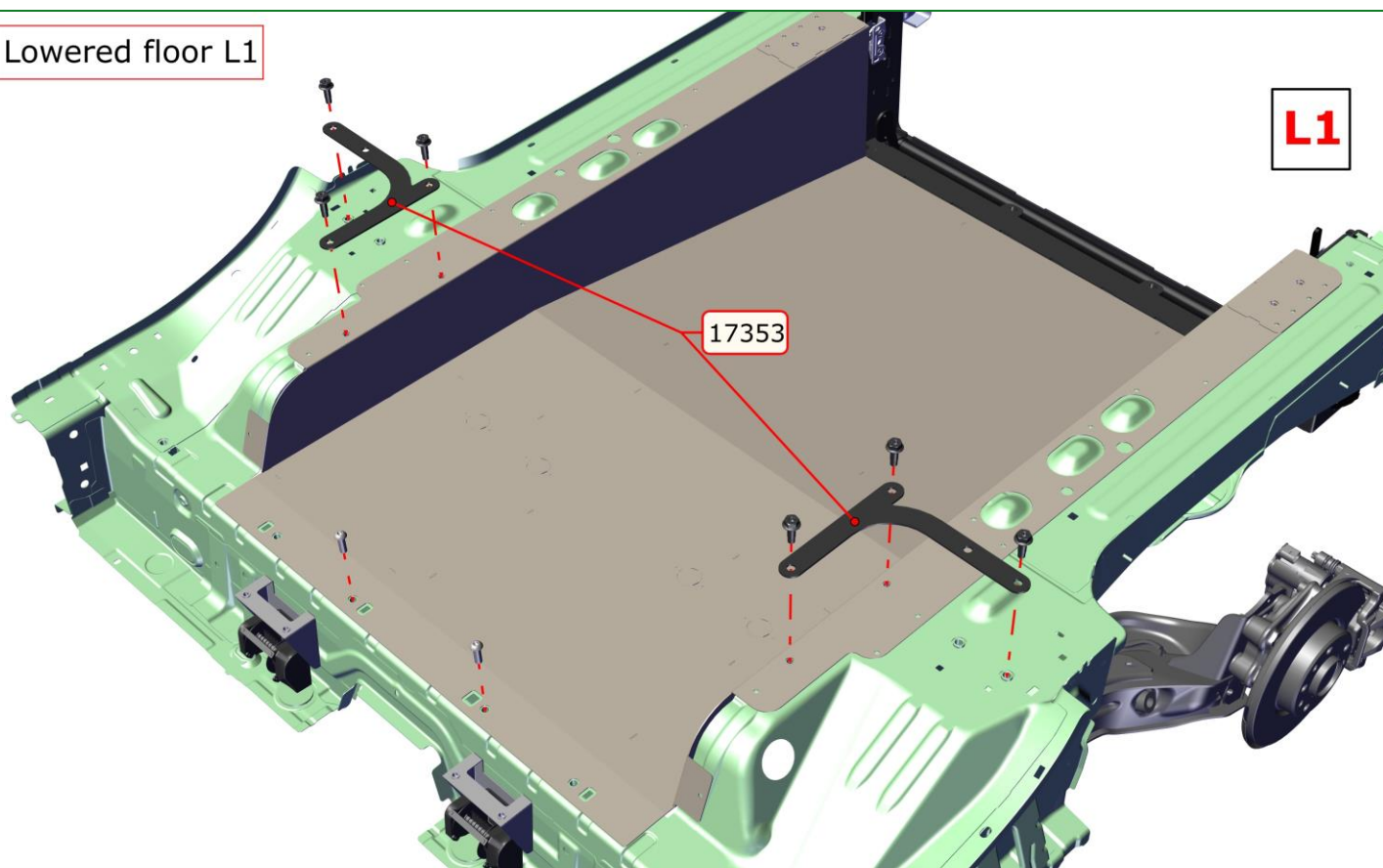
L1



When the seating configuration include OEM 2nd row seats, drill through these holes  $\varnothing 8$  mm, left and right side

Lowered floor L1

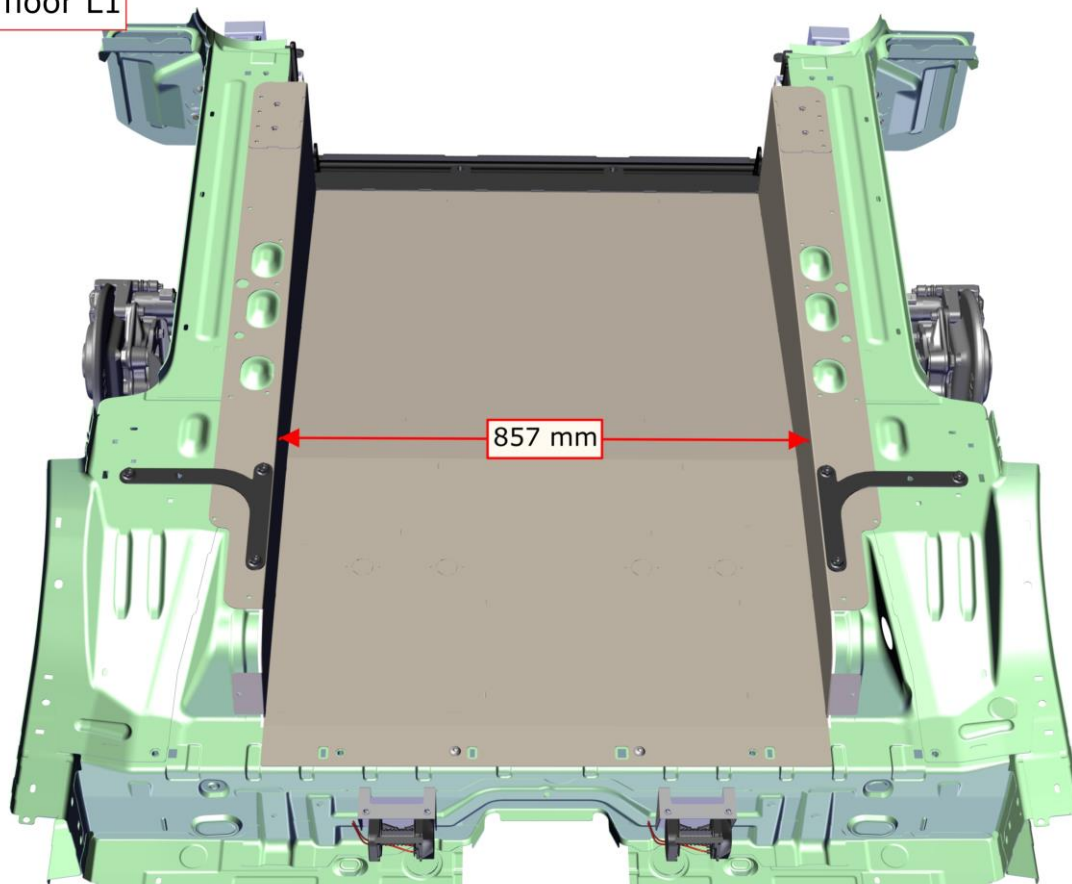
L1



To make sure the lowered floor is positioned correct, use the 2 templates as shown. Fasten the templates with the 6 OEM 2nd row seats bolts, and the front of the lowered floor with 2 M10 bolts.

Lowered floor L1

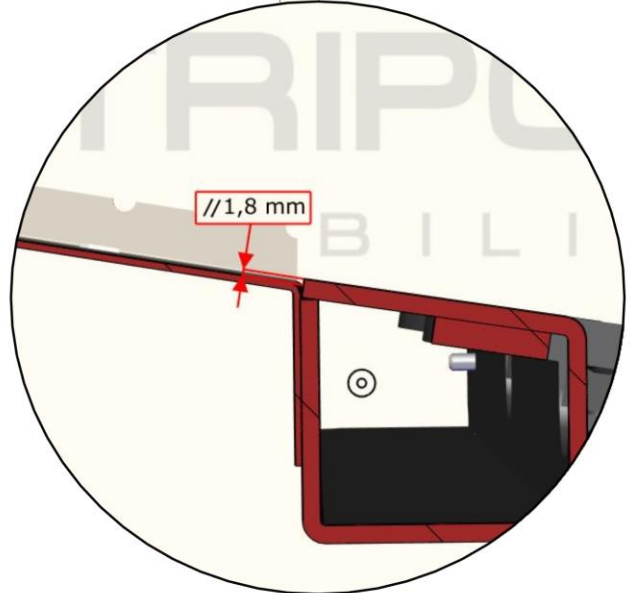
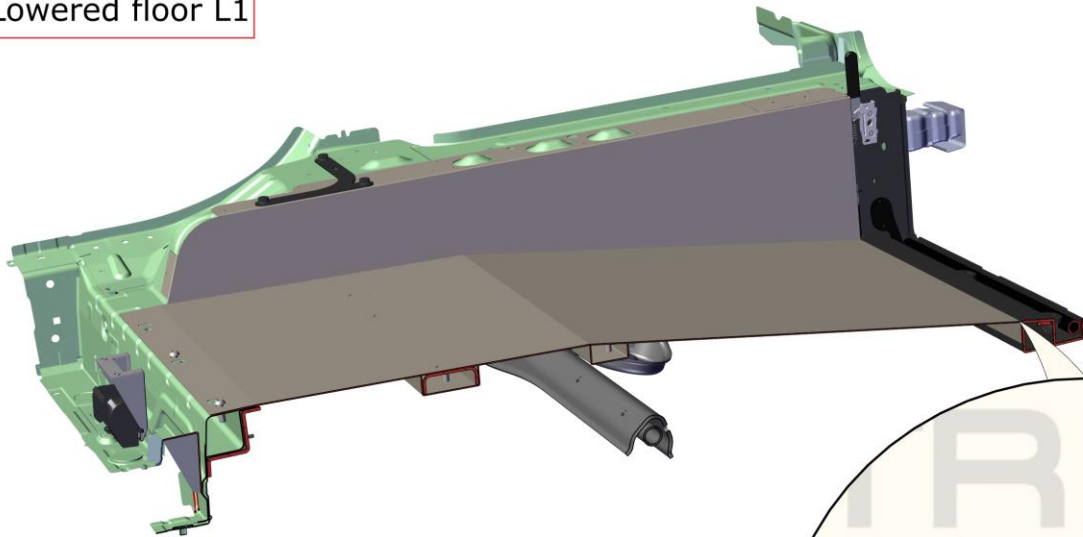
L1



Inside distance should be 857 mm

Lowered floor L1

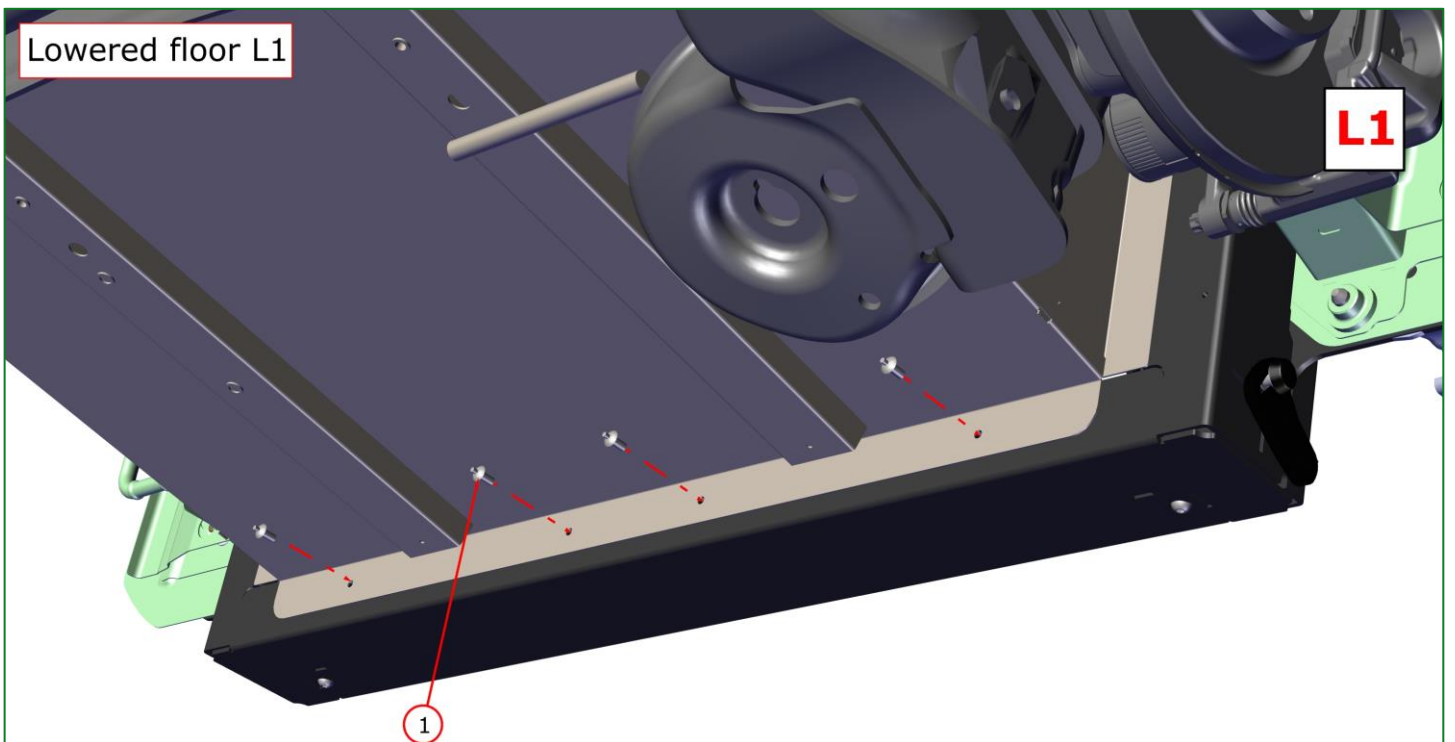
L1



The lowered floor should be parallel with the rear cross member and sit about 1,8 mm lower

Lowered floor L1

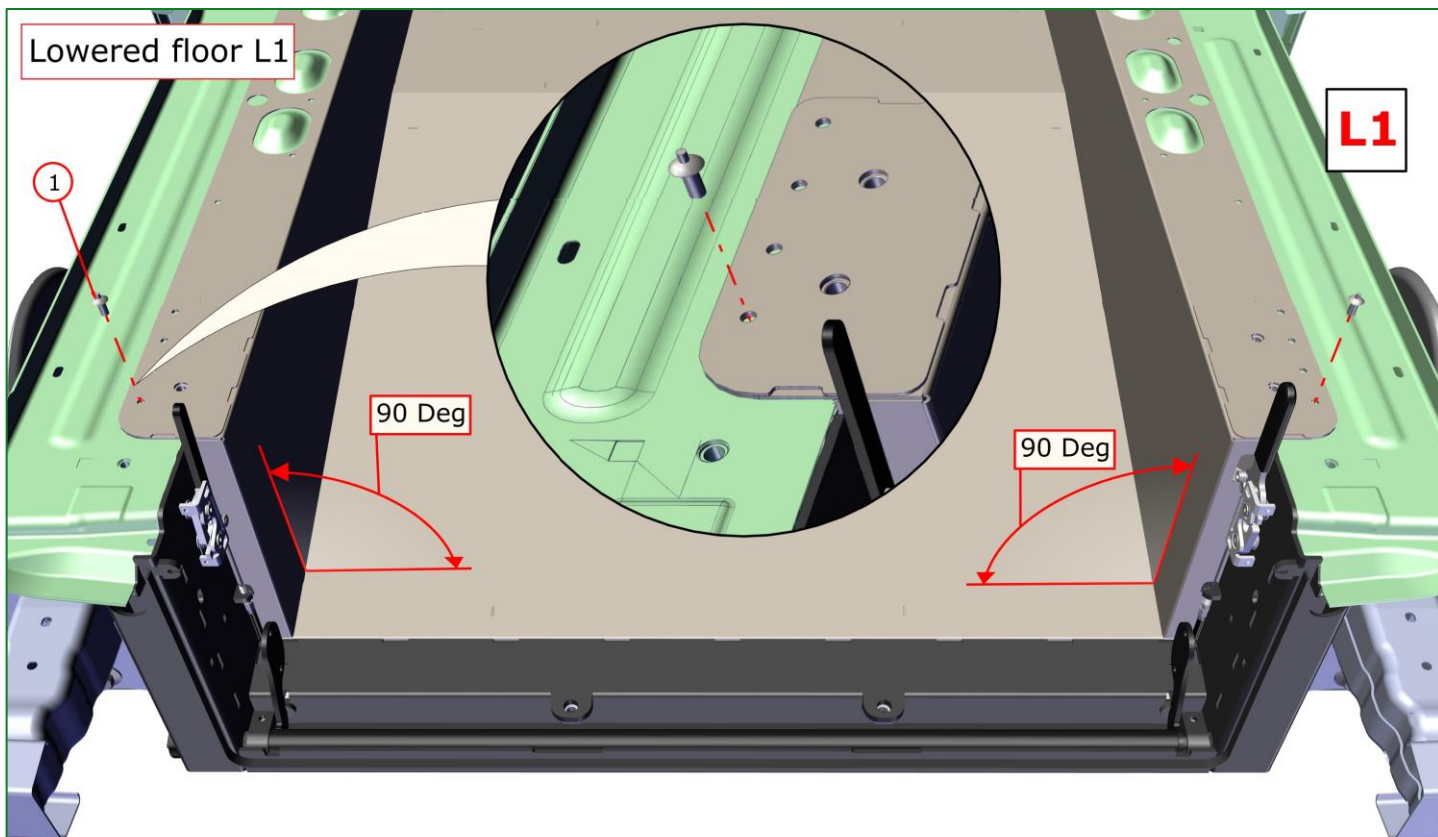
L1



Fasten the lowered floor to the rear cross member.

Bag #17628

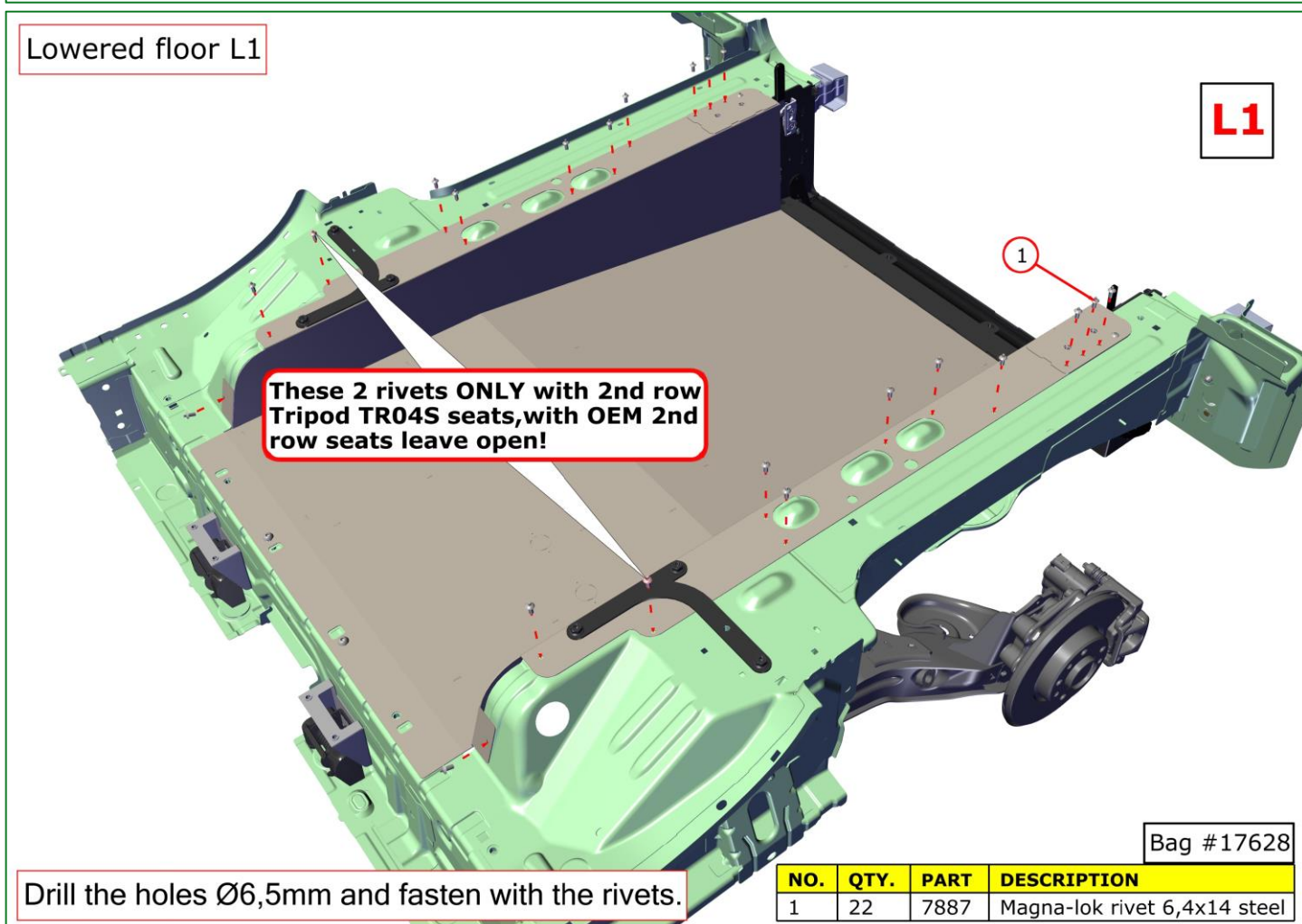
NO.	QTY.	PART	DESCRIPTION
1	4	7887	Magna-lok rivet 6,4x14 steel



Make sure the sides of the lowered floor are square, drill the 2 holes far back  $\text{\O}6,5\text{mm}$  and insert 2 rivets.

Bag #17628

NO.	QTY.	PART	DESCRIPTION
1	2	7887	Magna-lok rivet 6,4x14 steel



NO.	QTY.	PART	DESCRIPTION
1	22	7887	Magna-lok rivet 6,4x14 steel

Lowered floor L1

L1

These 2 rivets ONLY with 2nd row Tripod TR04S seats, with OEM 2nd row seats leave open!

1

Remove the templates and the M10 screws, then drill the last 2 holes  $\text{\O}6,5\text{mm}$  and fasten with the rivets.

Bag #17628

NO.	QTY.	PART	DESCRIPTION
1	2	7887	Magna-lok rivet 6,4x14 steel

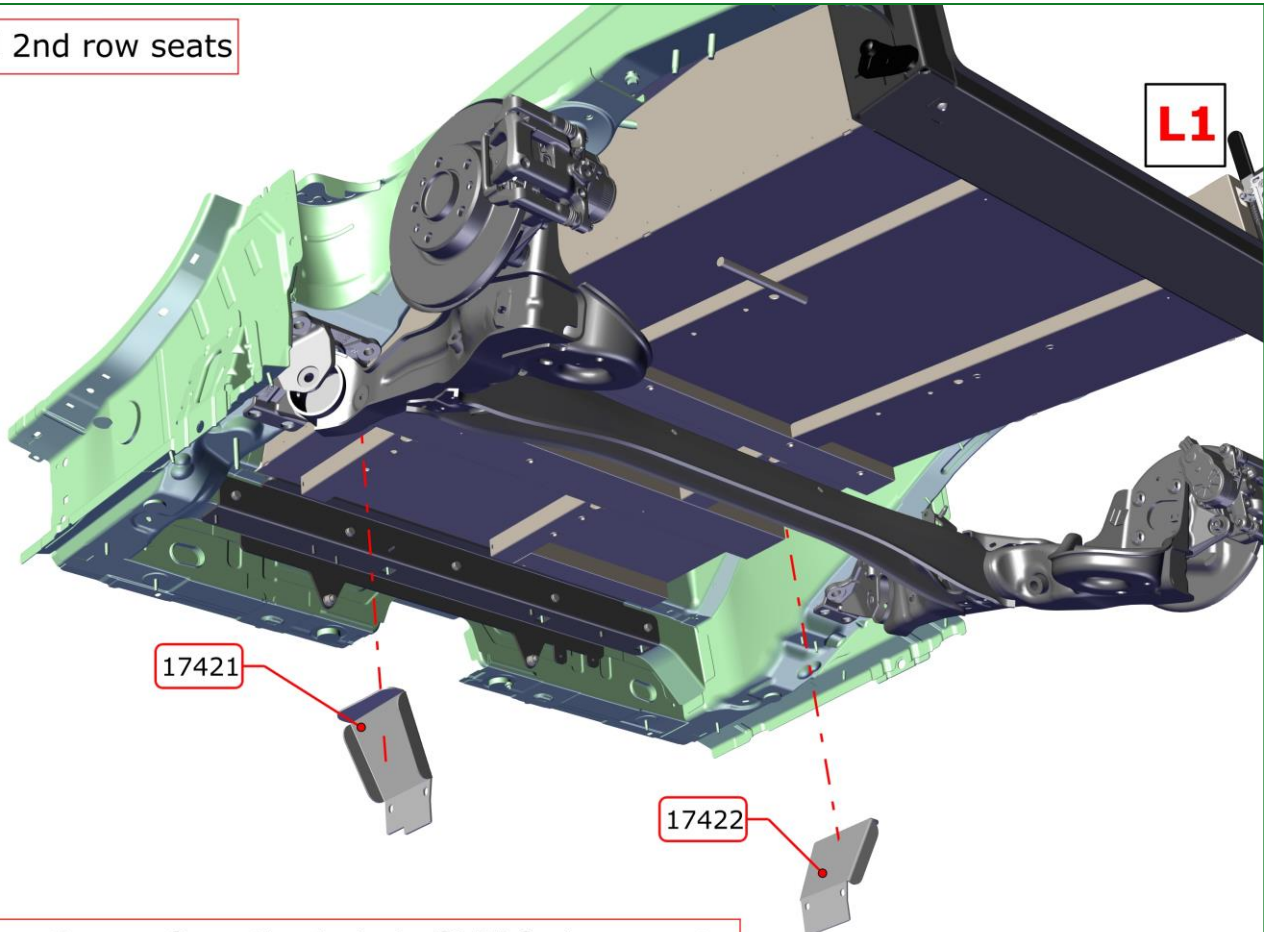
Lowered floor L1

L1

Using Sikaflex 221 white, seal every gap along the marked line (not further) to prevent water going through. Do this on both sides

With OEM 2nd row seats

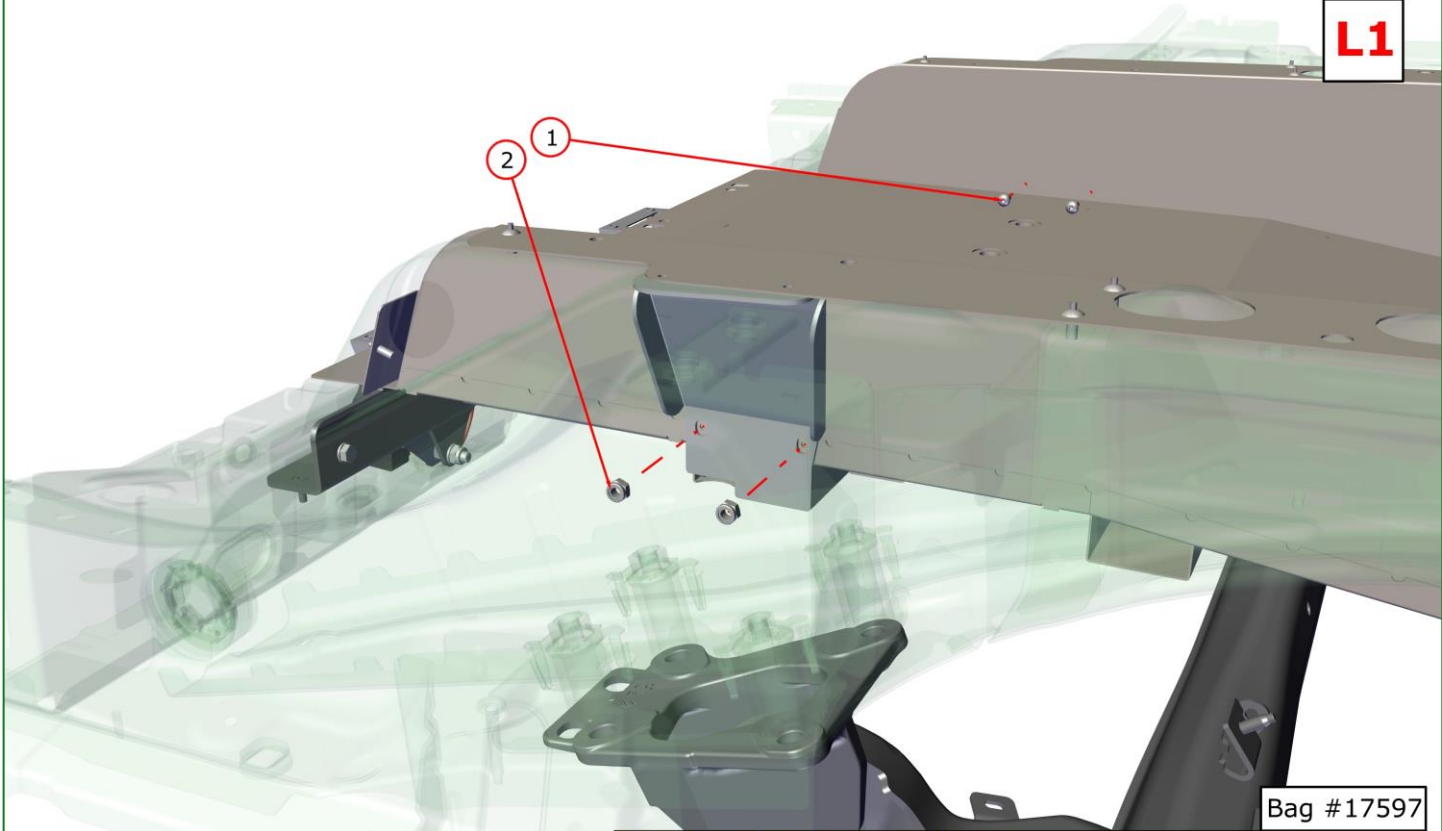
L1



When the seating configuration include OEM 2nd row seats, install the reinforcement brackets.

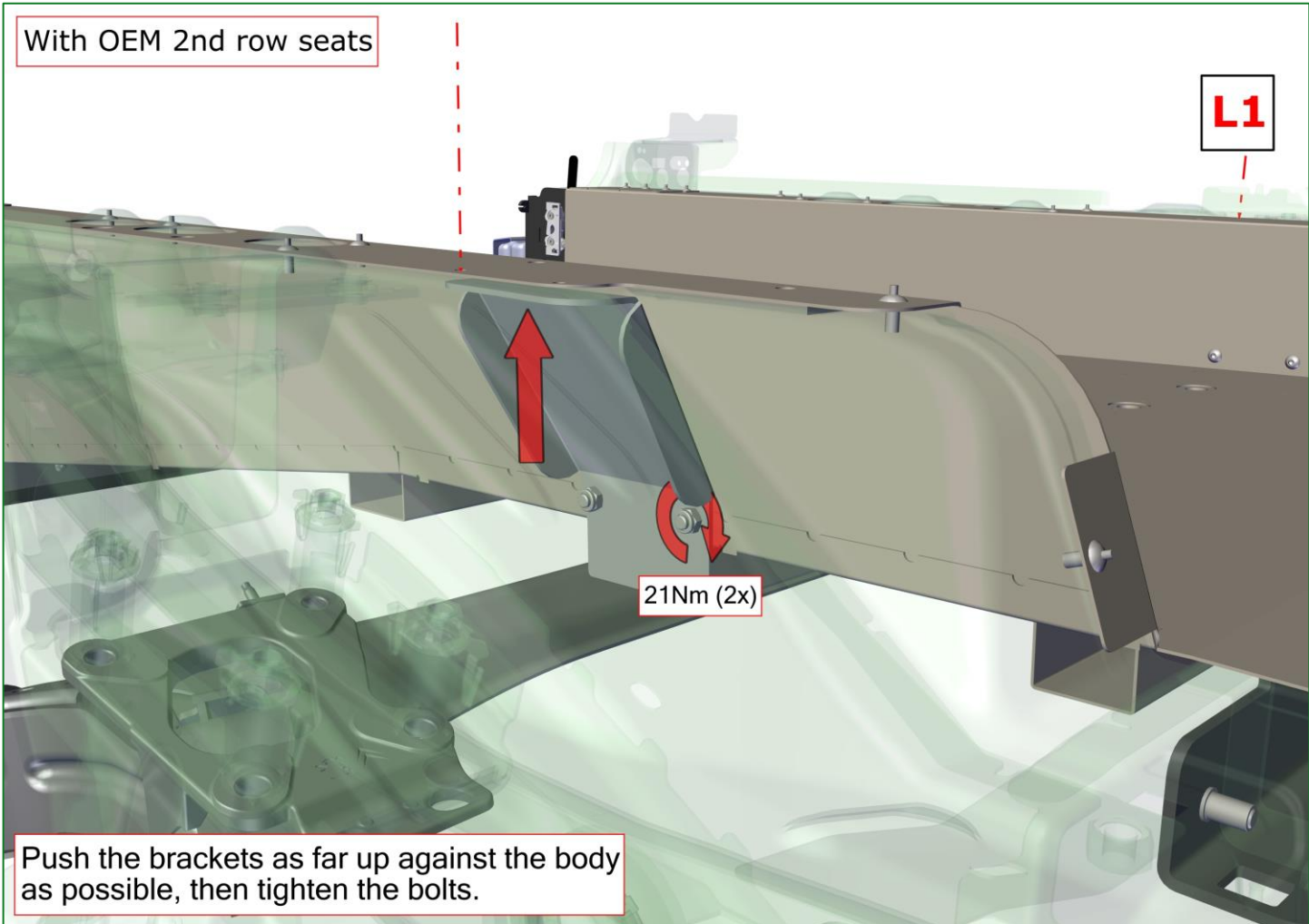
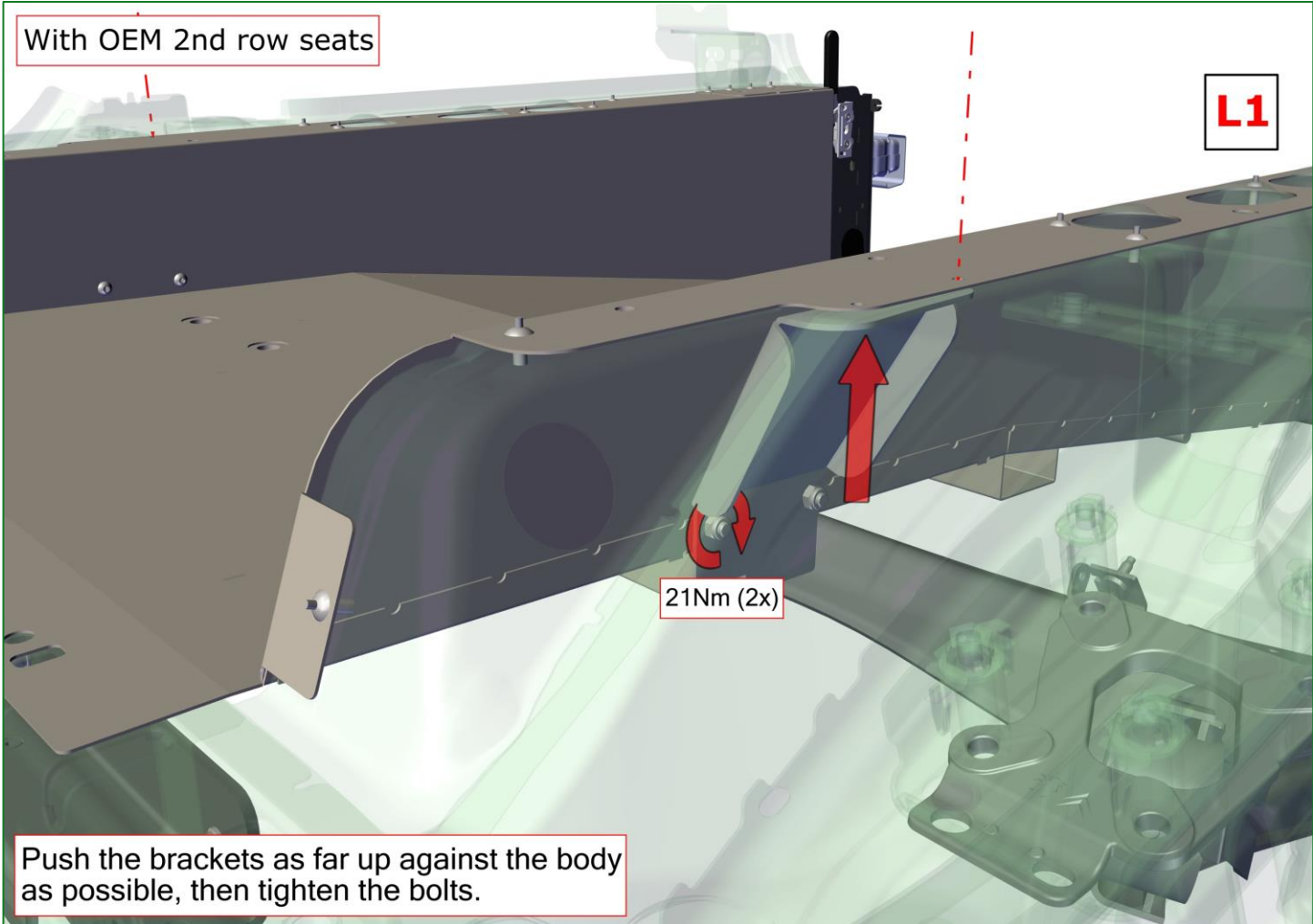
With OEM 2nd row seats

L1



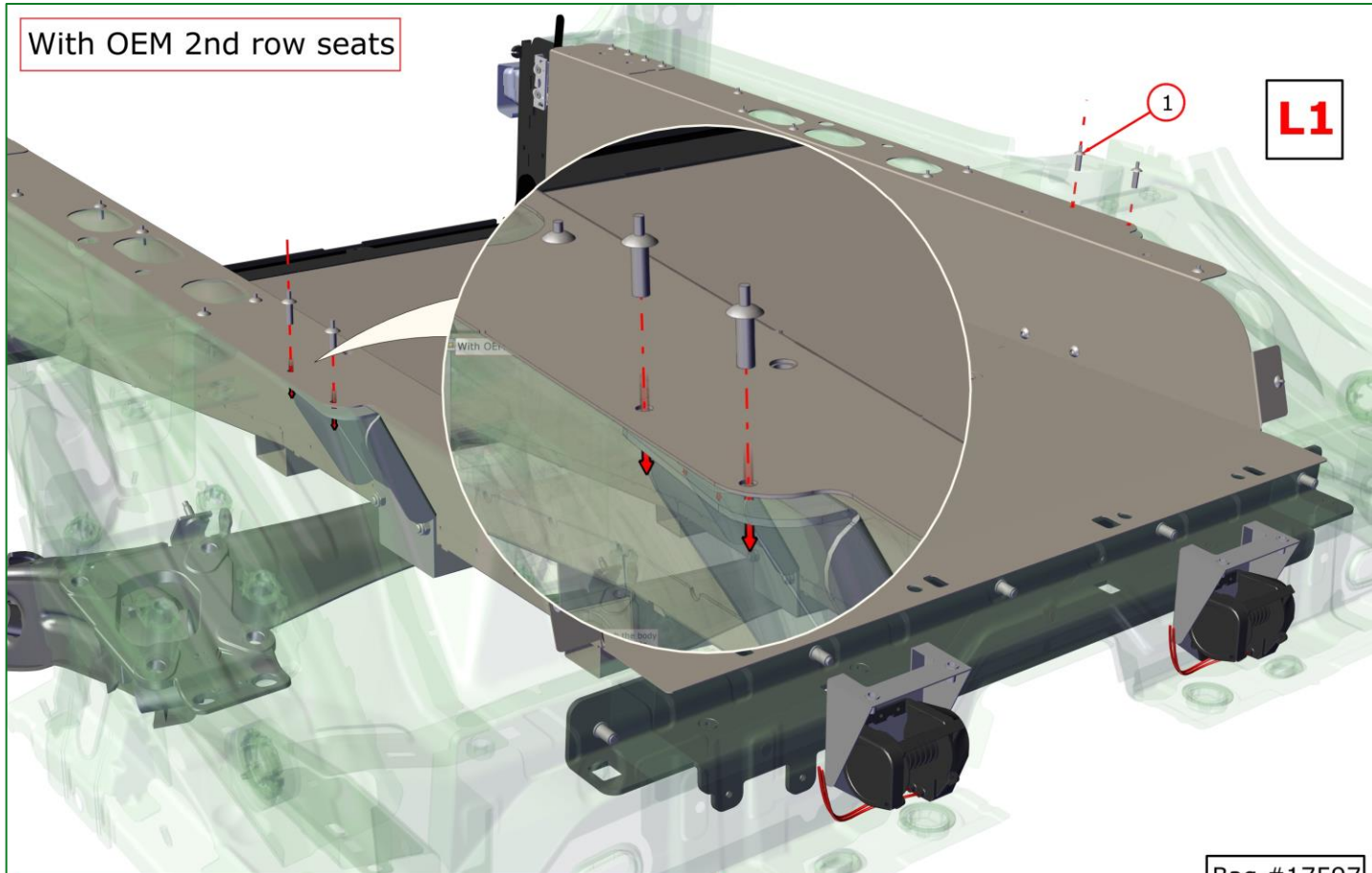
Bag #17597

NO.	QTY.	PART	DESCRIPTION
1	4	9555	Socket button head screw M8x16 A2-70 ISO 7380
2	4	10015	Torque nut M8 A2-70 ISO 7041





With OEM 2nd row seats



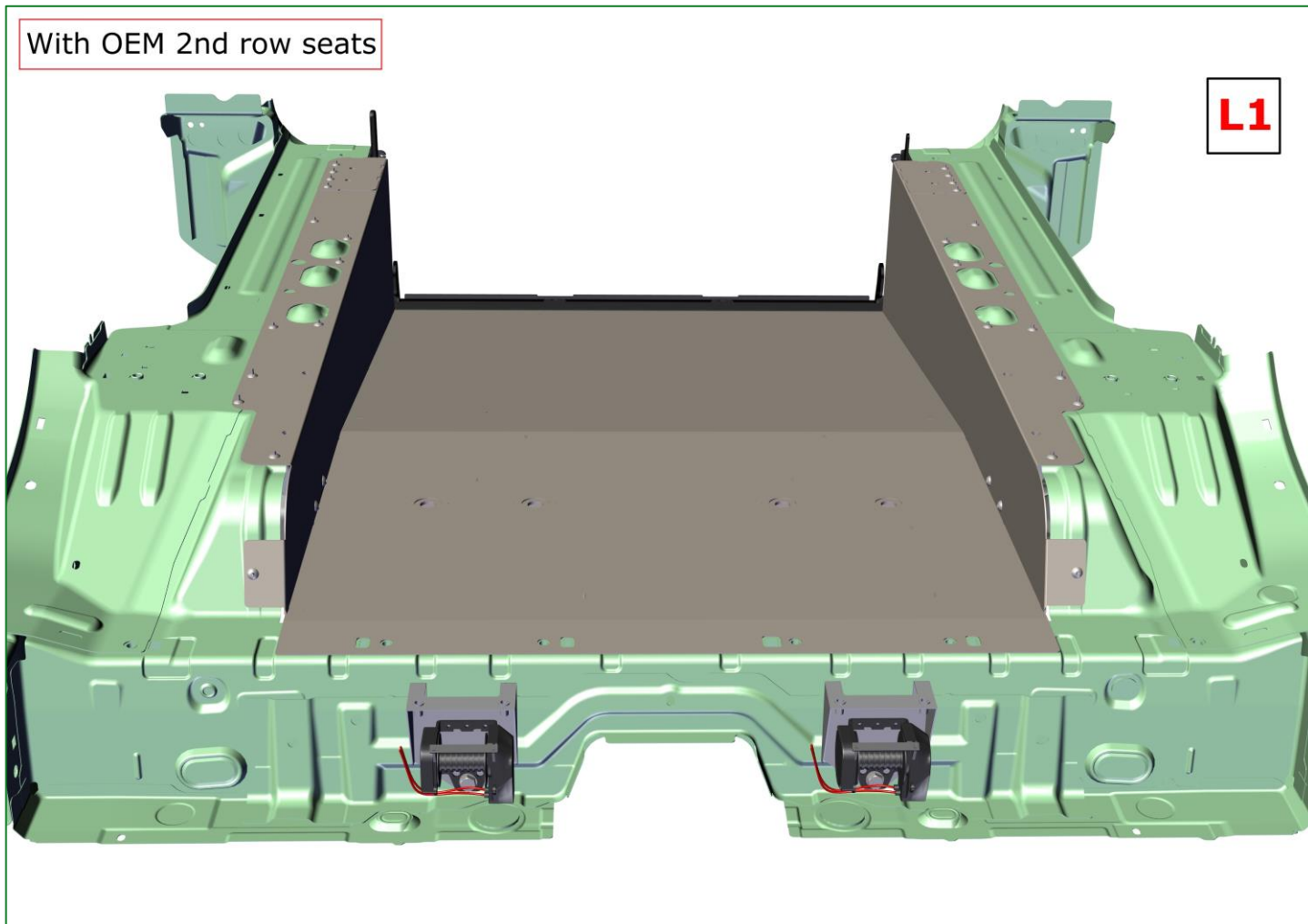
**L1**

With a sharp drill  $\varnothing 6,5\text{mm}$ , drill through the body and the brackets then insert the LONGER rivets.

Bag #17597

NO.	QTY.	PART	DESCRIPTION
1	4	7886	Magna-lok rivet 6,4x20 steel

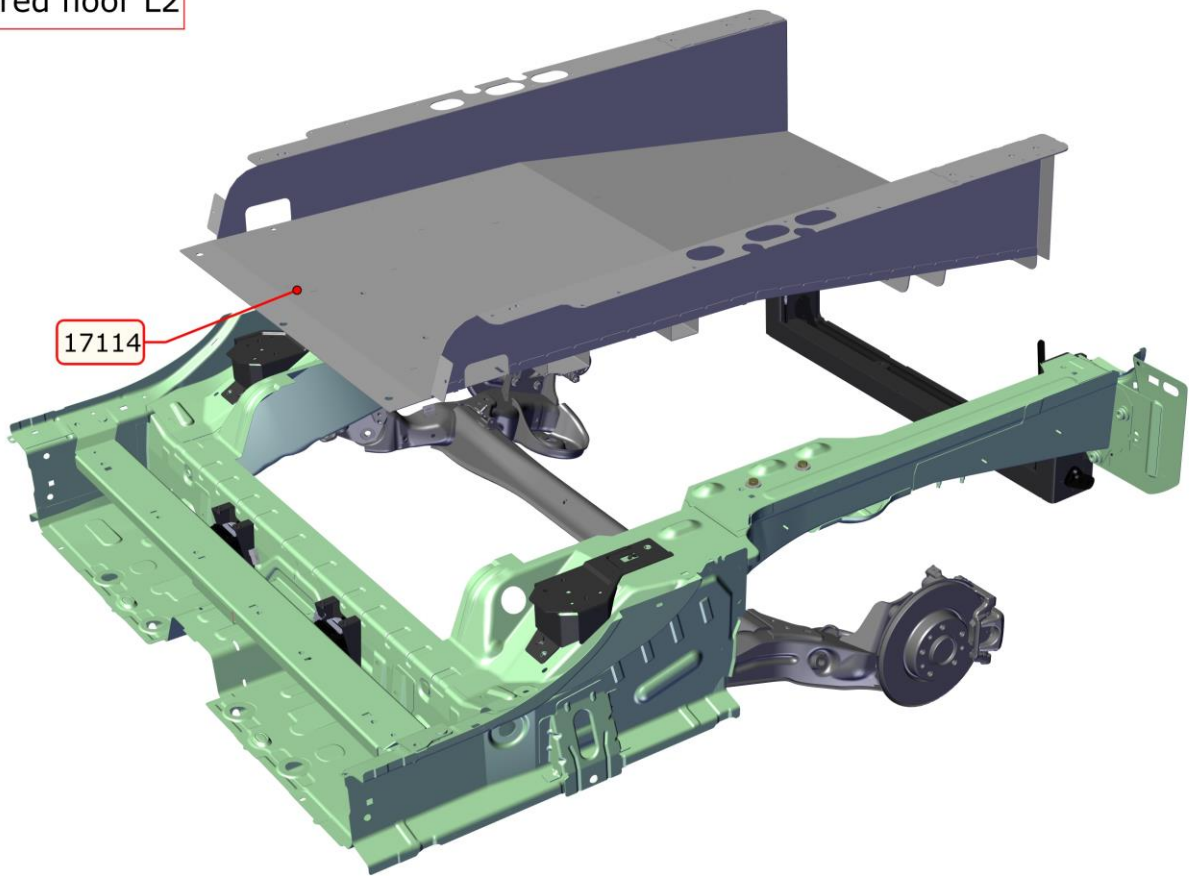
With OEM 2nd row seats



**L1**

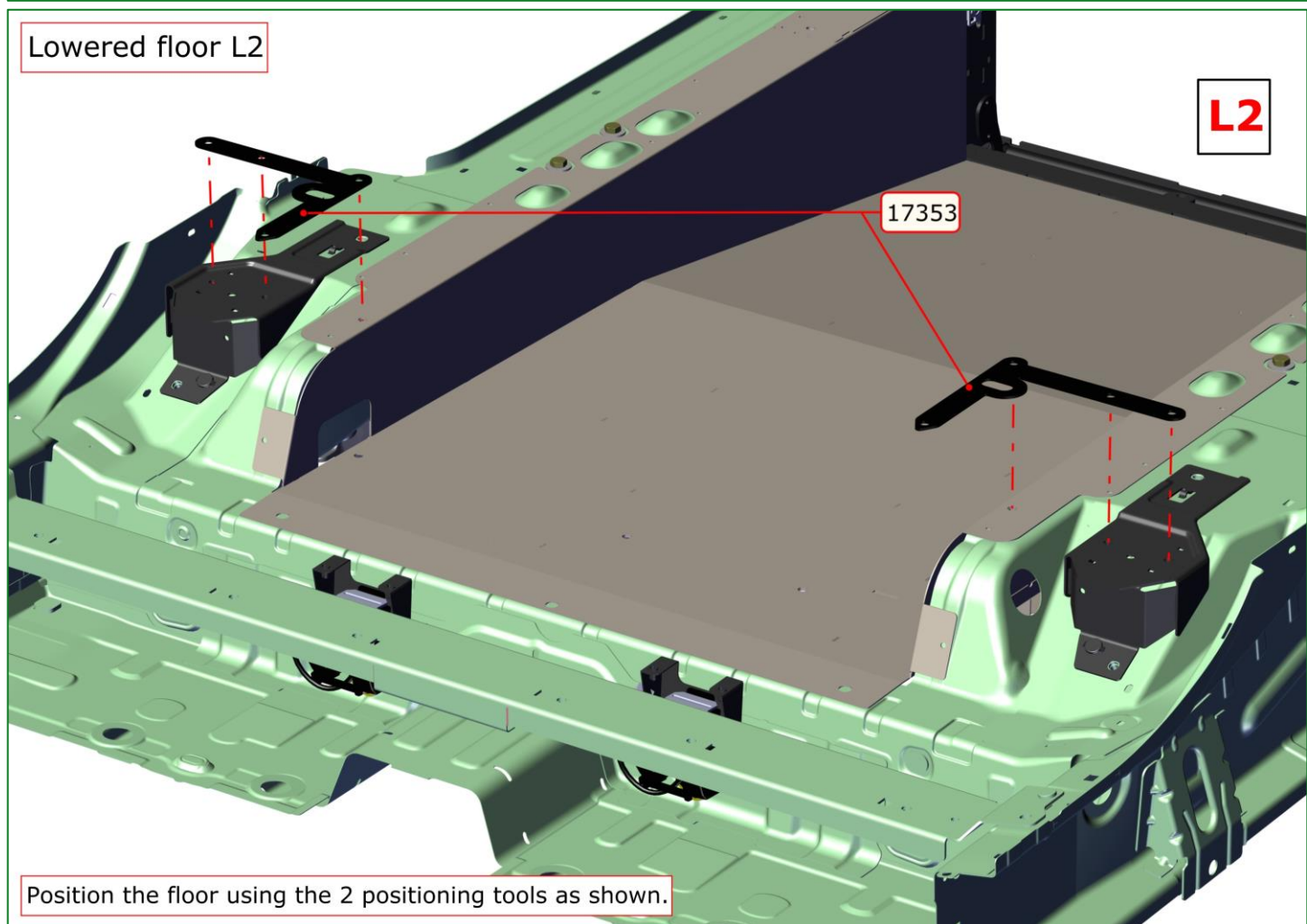
Lowered floor L2

L2

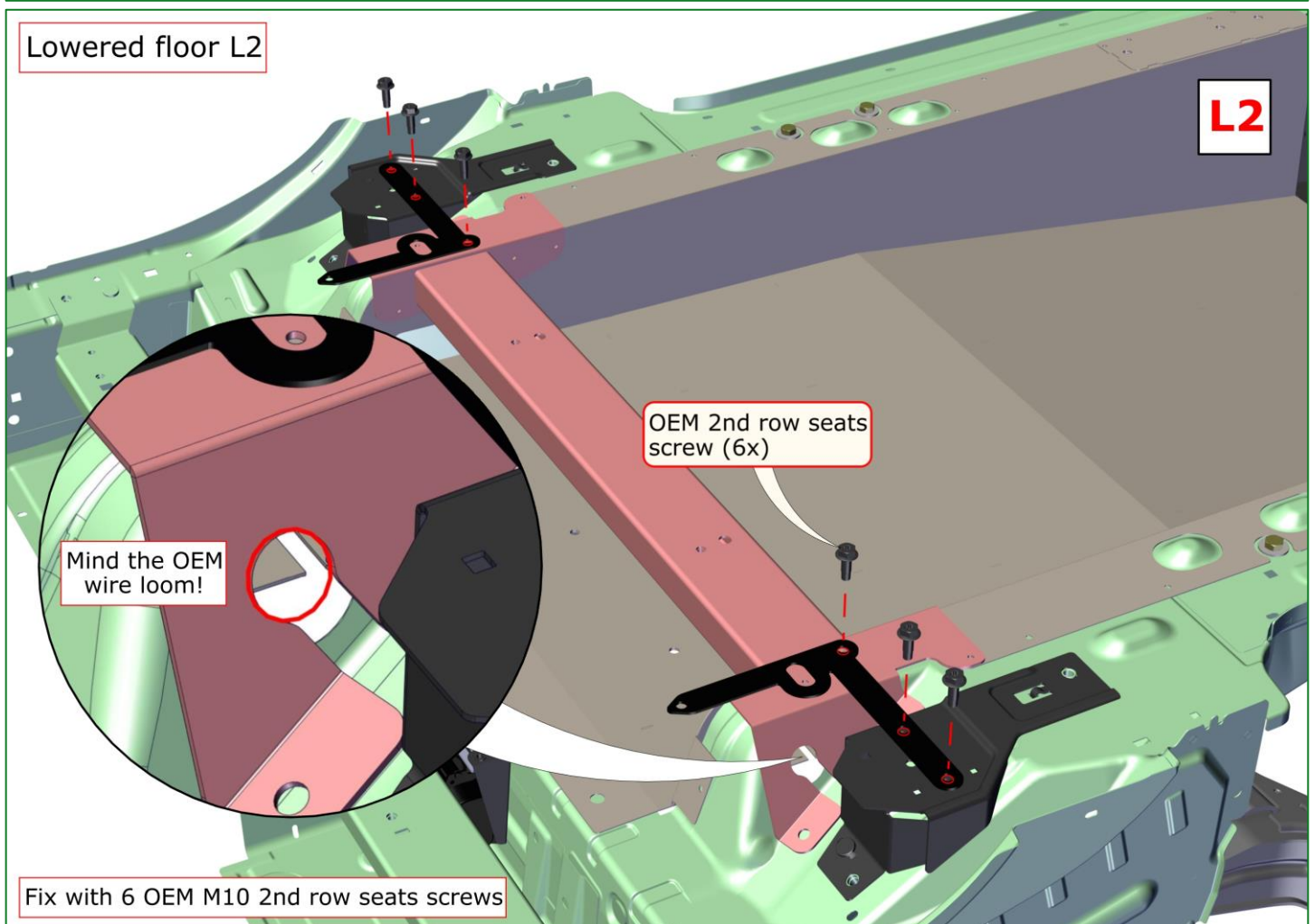
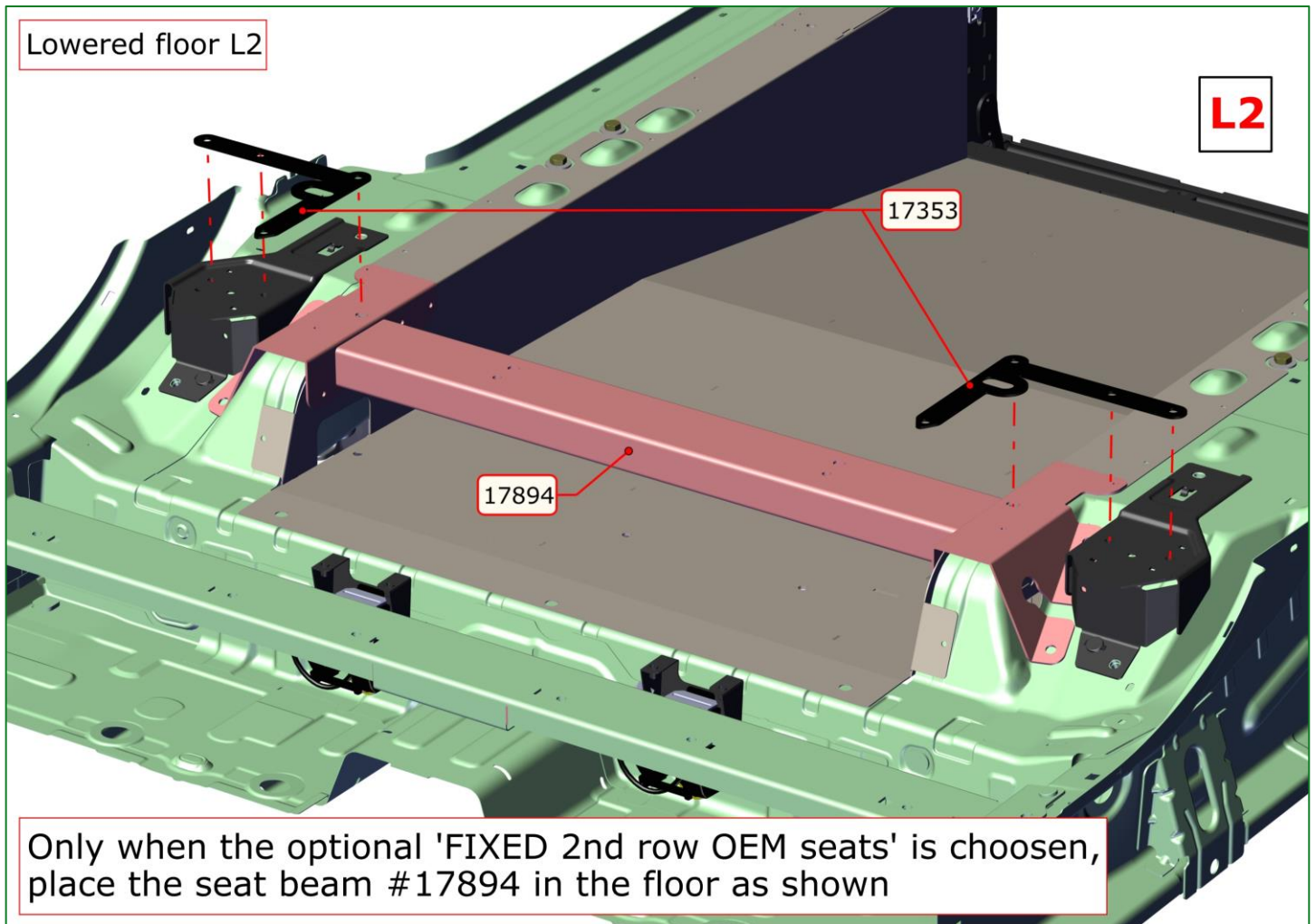


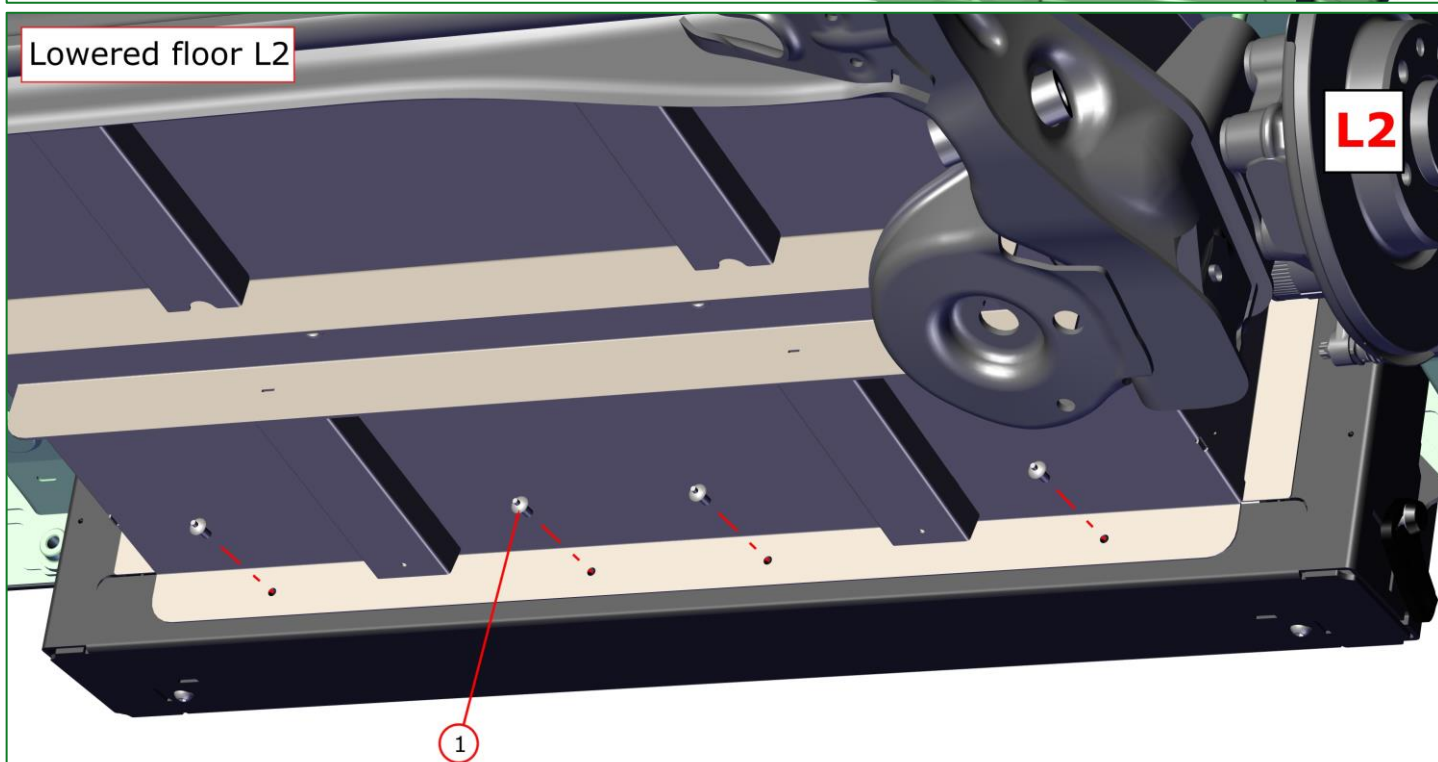
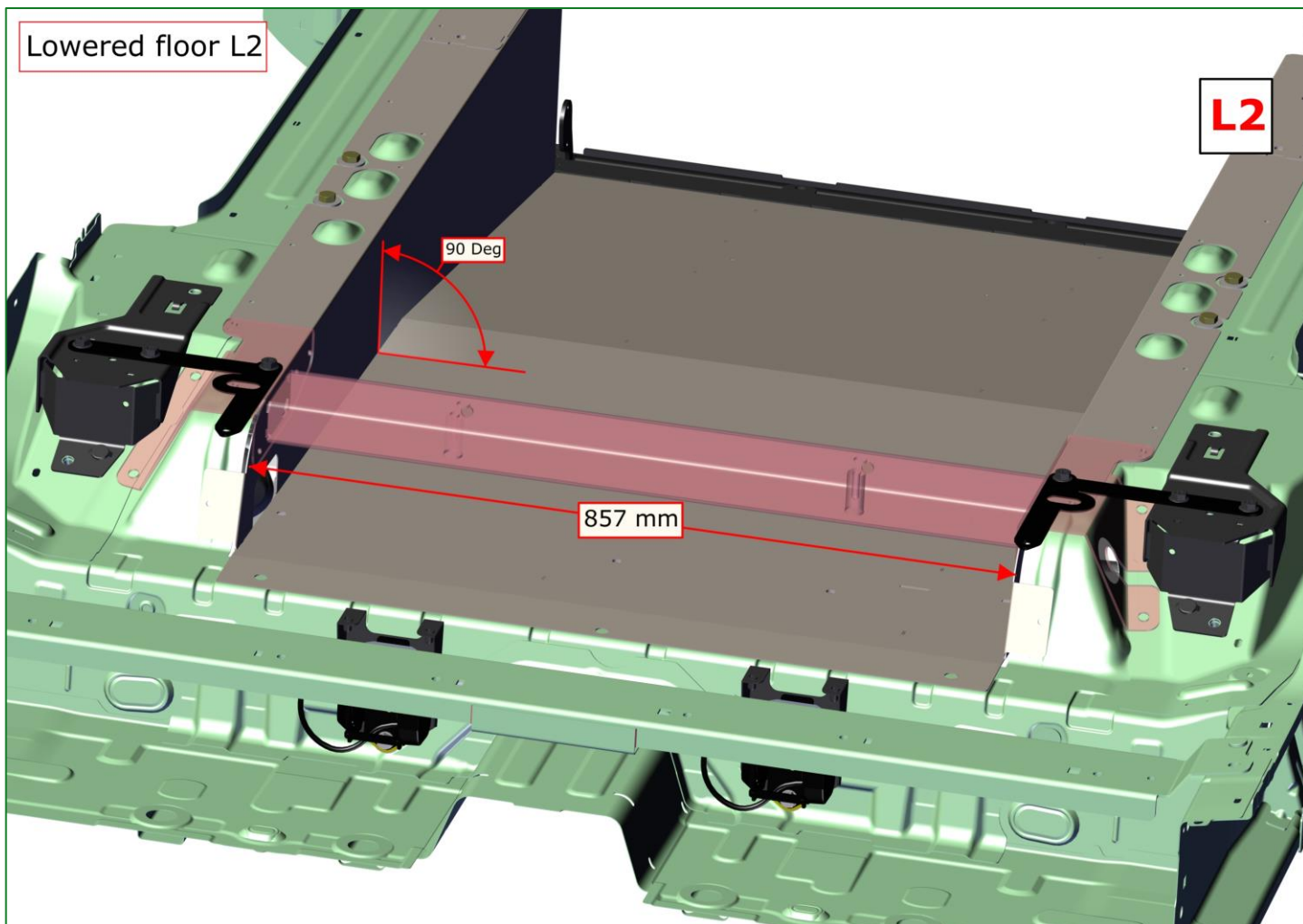
Lowered floor L2

L2



Position the floor using the 2 positioning tools as shown.





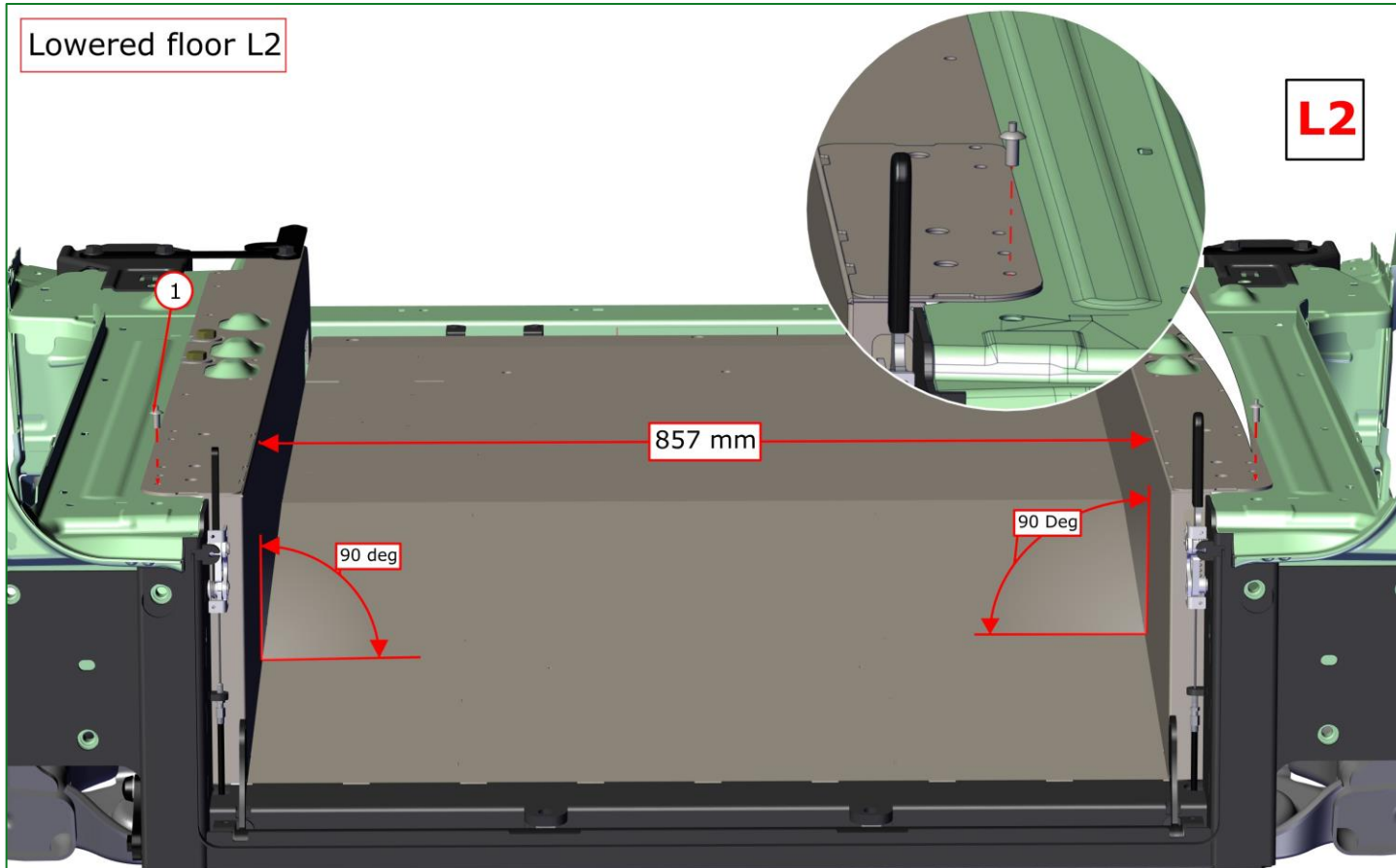
Bag #17824

Fasten the lowered floor to the rear cross member.

NO.	QTY.	PART	DESCRIPTION
1	4	7887	Magna-lok rivet 6,4x14 steel

Lowered floor L2

L2



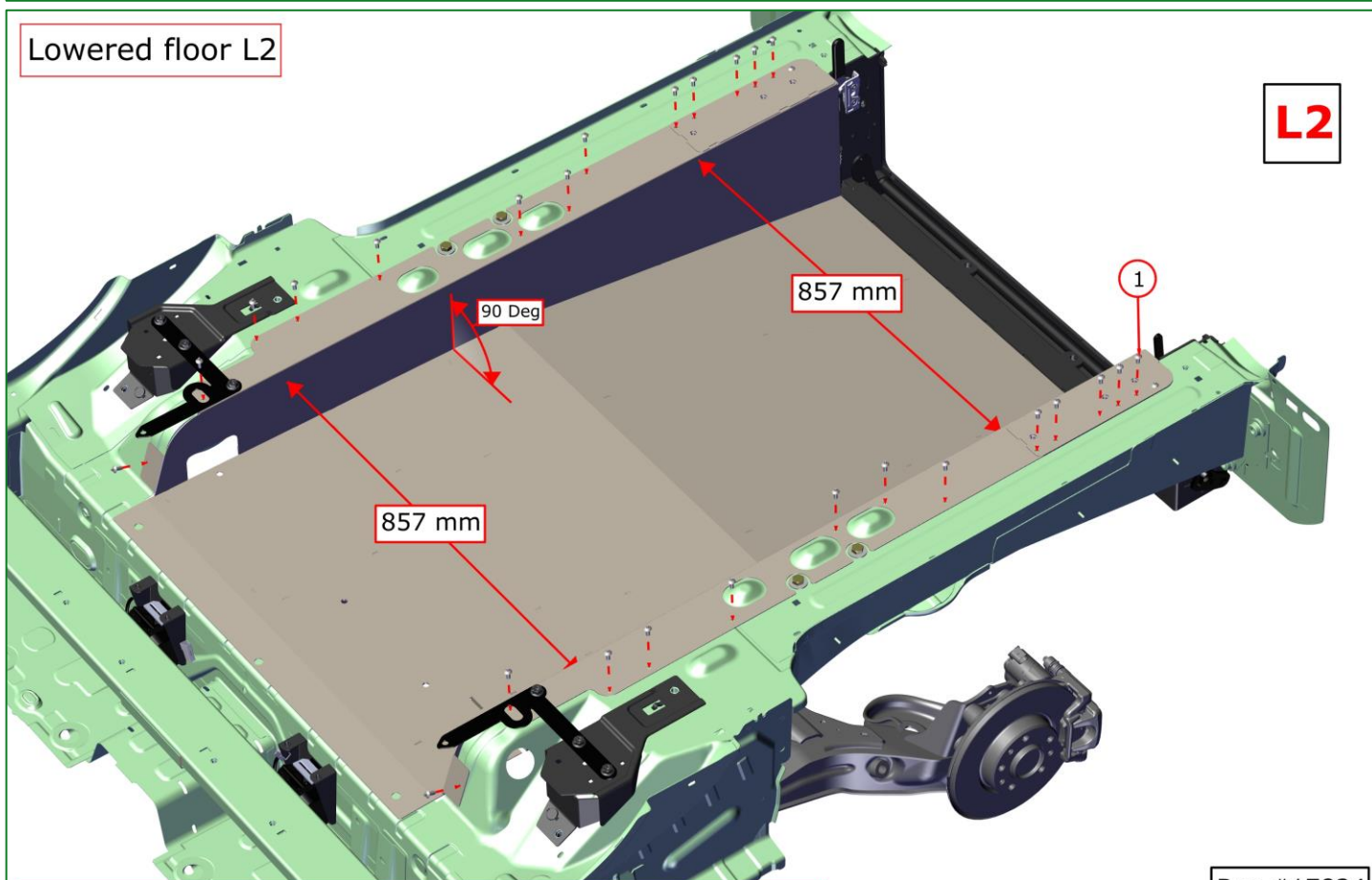
Make sure the sides of the lowered floor are square. Drill the 2 holes far back  $\text{\O}6,5$  and insert 2 rivet.

Bag #17824

NO.	QTY.	PART	DESCRIPTION
1	2	7887	Magna-lok rivet 6,4x14 steel

Lowered floor L2

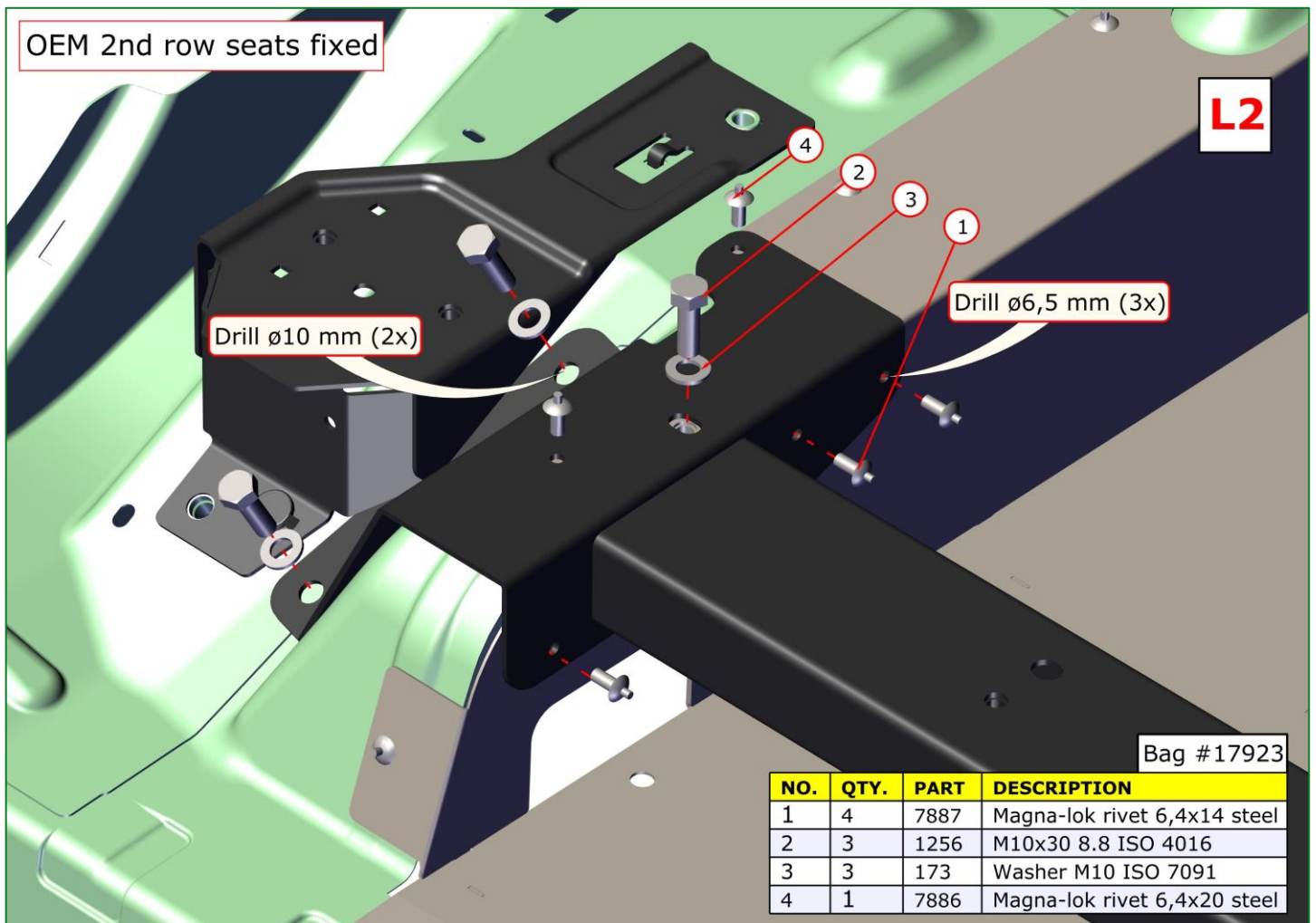
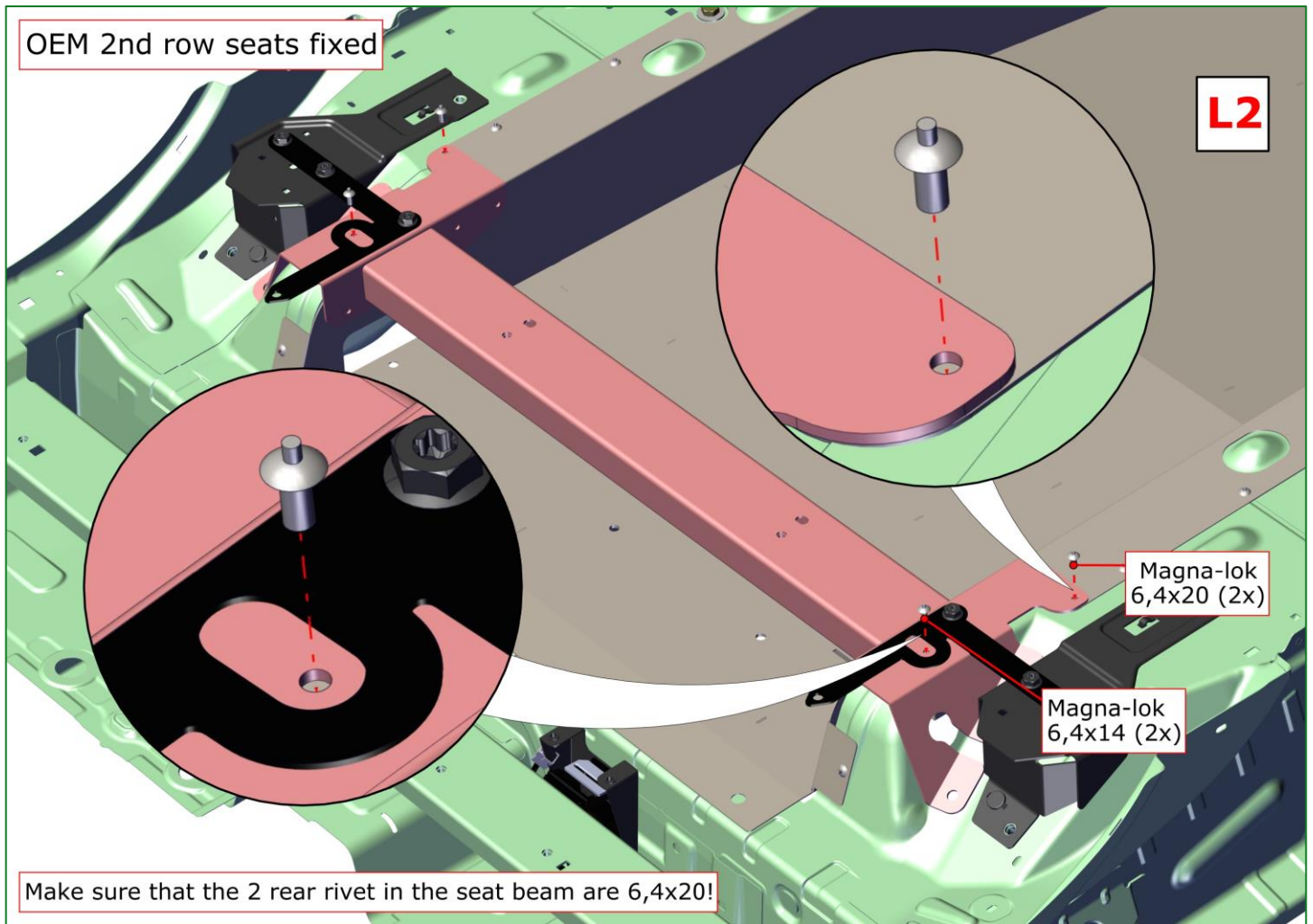
L2



Make sure the sides of the lowered floor are square, drill the remaining holes  $\text{\O}6,5$  and fix with the magna-locks.

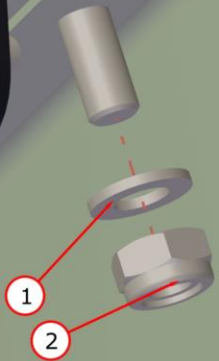
Bag #17824

NO.	QTY.	PART	DESCRIPTION
1	26	7887	Magna-lok rivet 6,4x14 steel



OEM 2nd row seats fixed

L2

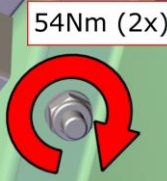


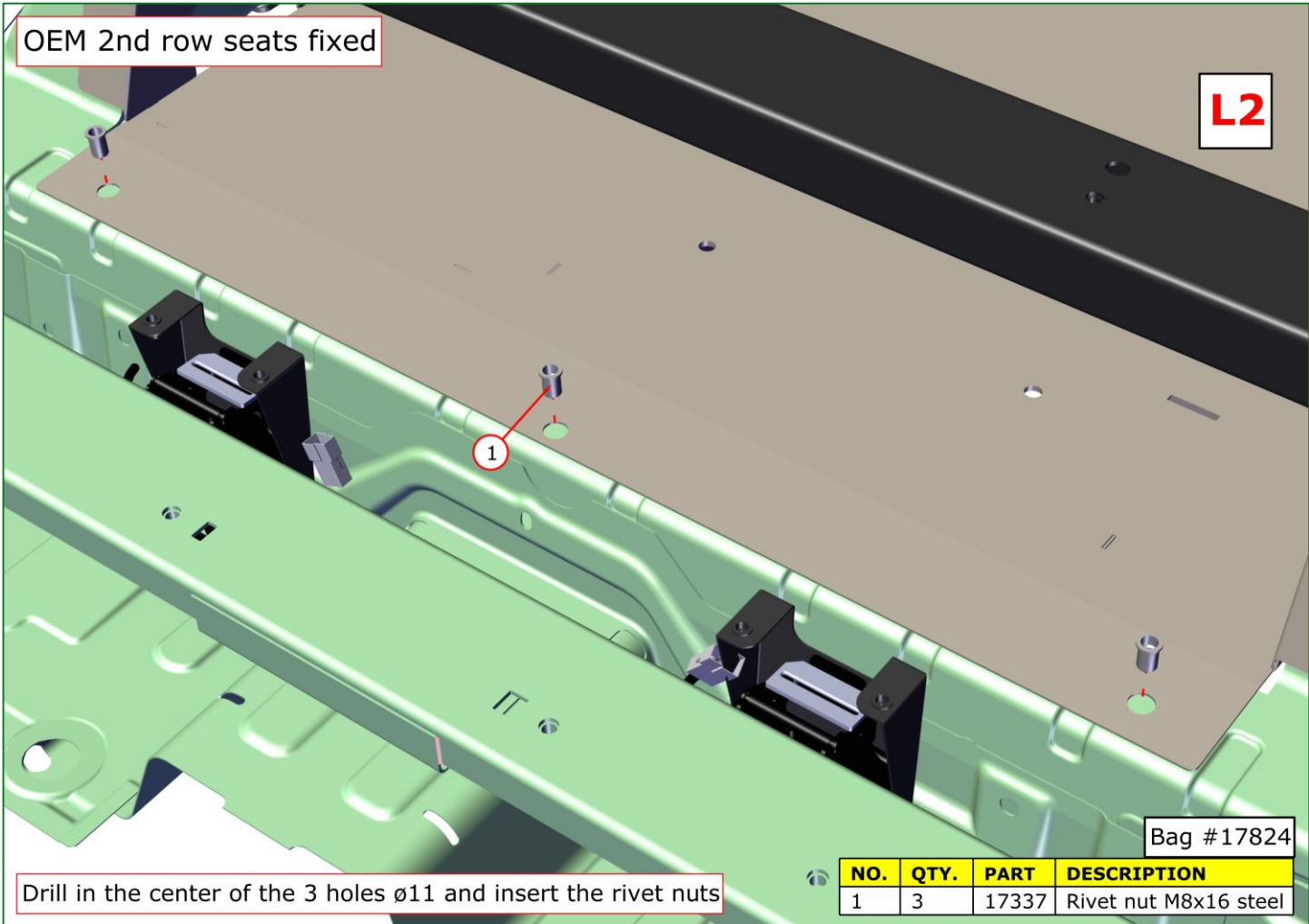
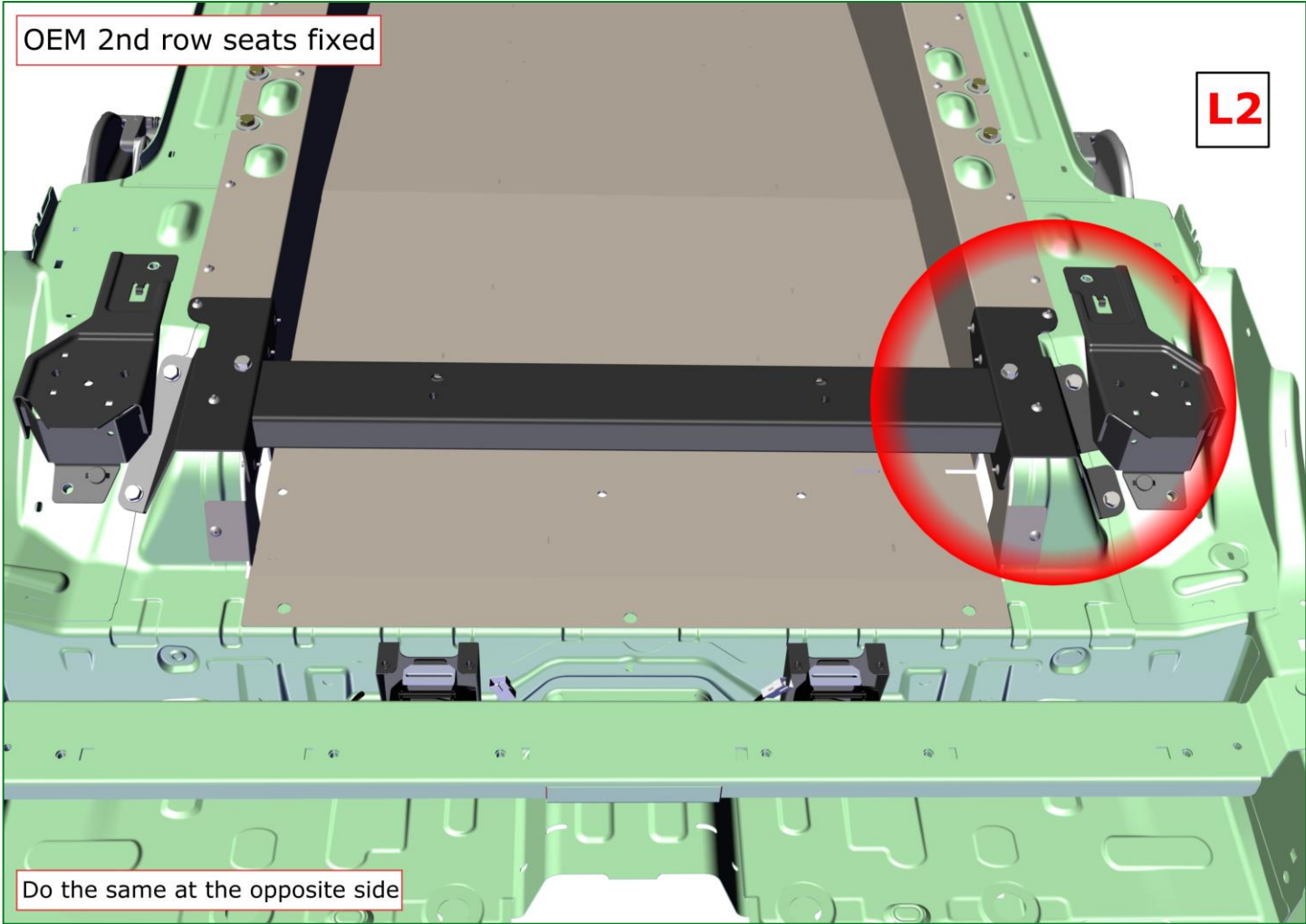
Bag #17923

NO.	QTY.	PART	DESCRIPTION
1	2	173	Washer M10 ISO 7091
2	2	63	Torque nut M10 class 8 ISO 7041

OEM 2nd row seats fixed

L2



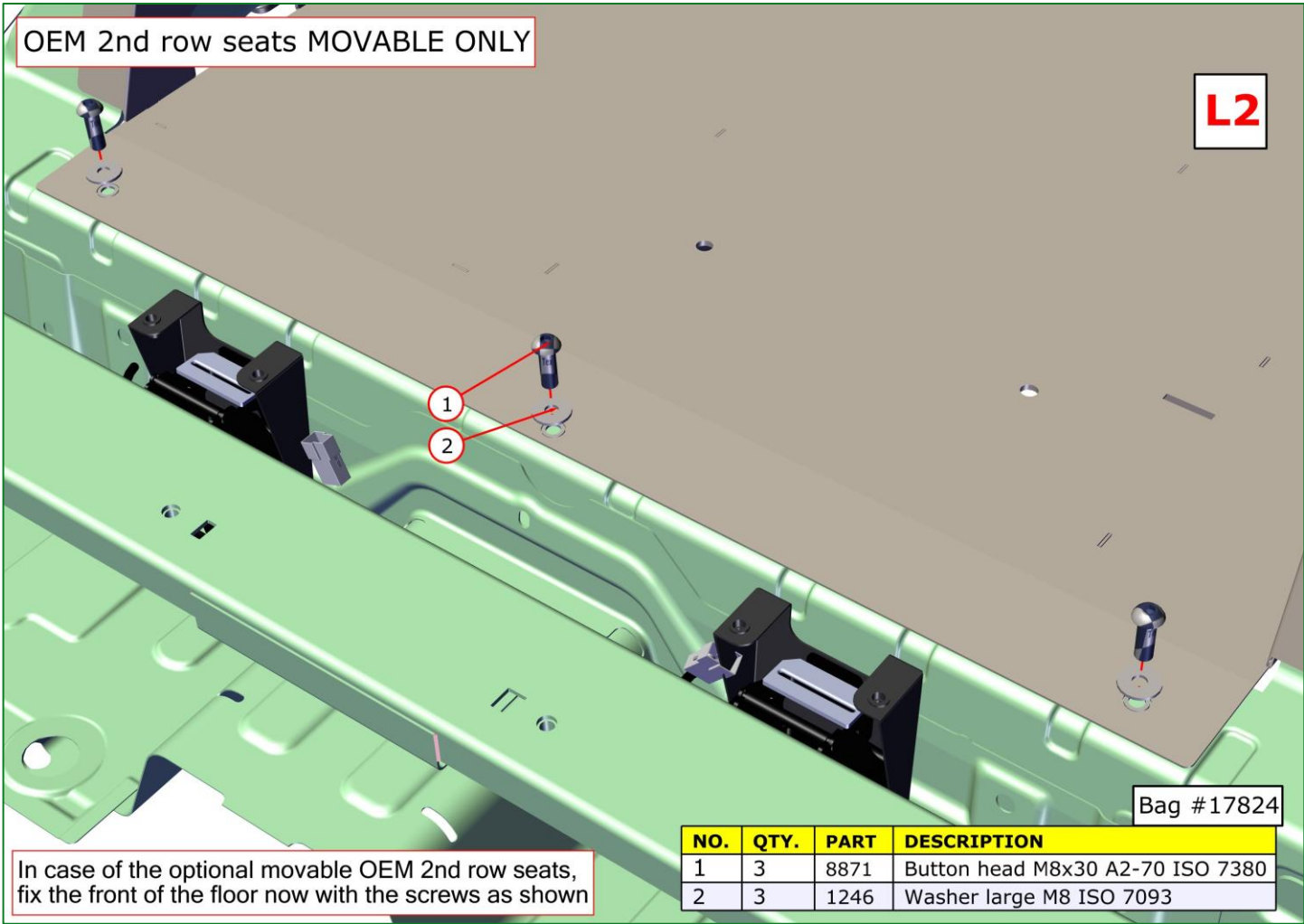


NO.	QTY.	PART	DESCRIPTION
1	3	17337	Rivet nut M8x16 steel



OEM 2nd row seats MOVABLE ONLY

L2

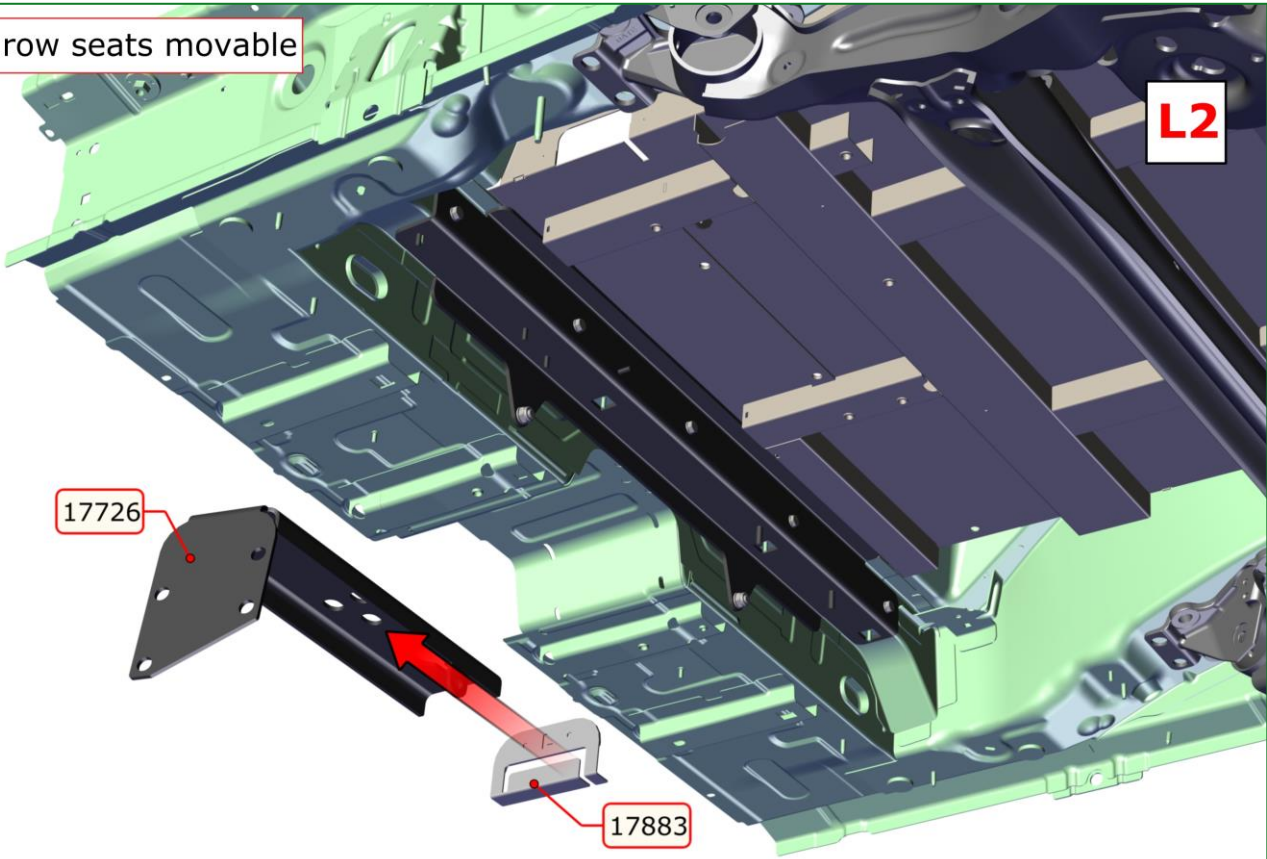


In case of the optional movable OEM 2nd row seats, fix the front of the floor now with the screws as shown

NO.	QTY.	PART	DESCRIPTION
1	3	8871	Button head M8x30 A2-70 ISO 7380
2	3	1246	Washer large M8 ISO 7093

OEM 2nd row seats movable

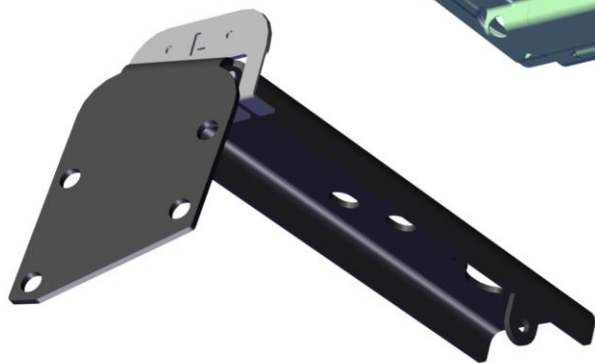
L2



Slide the cover panel over the seat bracket before mounting

OEM 2nd row seats movable

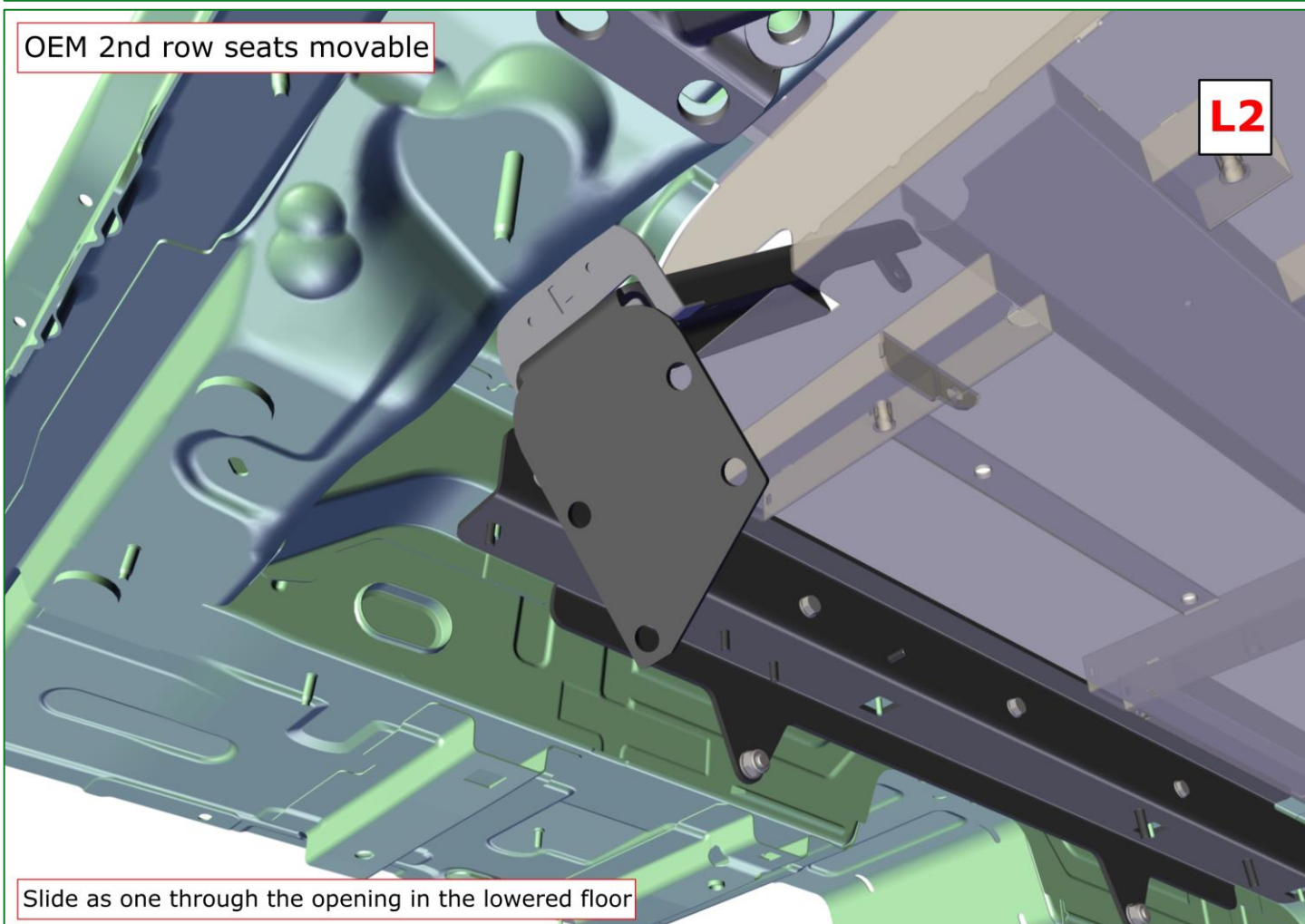
L2



Slide the cover panel over the seat bracket BEFORE mounting

OEM 2nd row seats movable

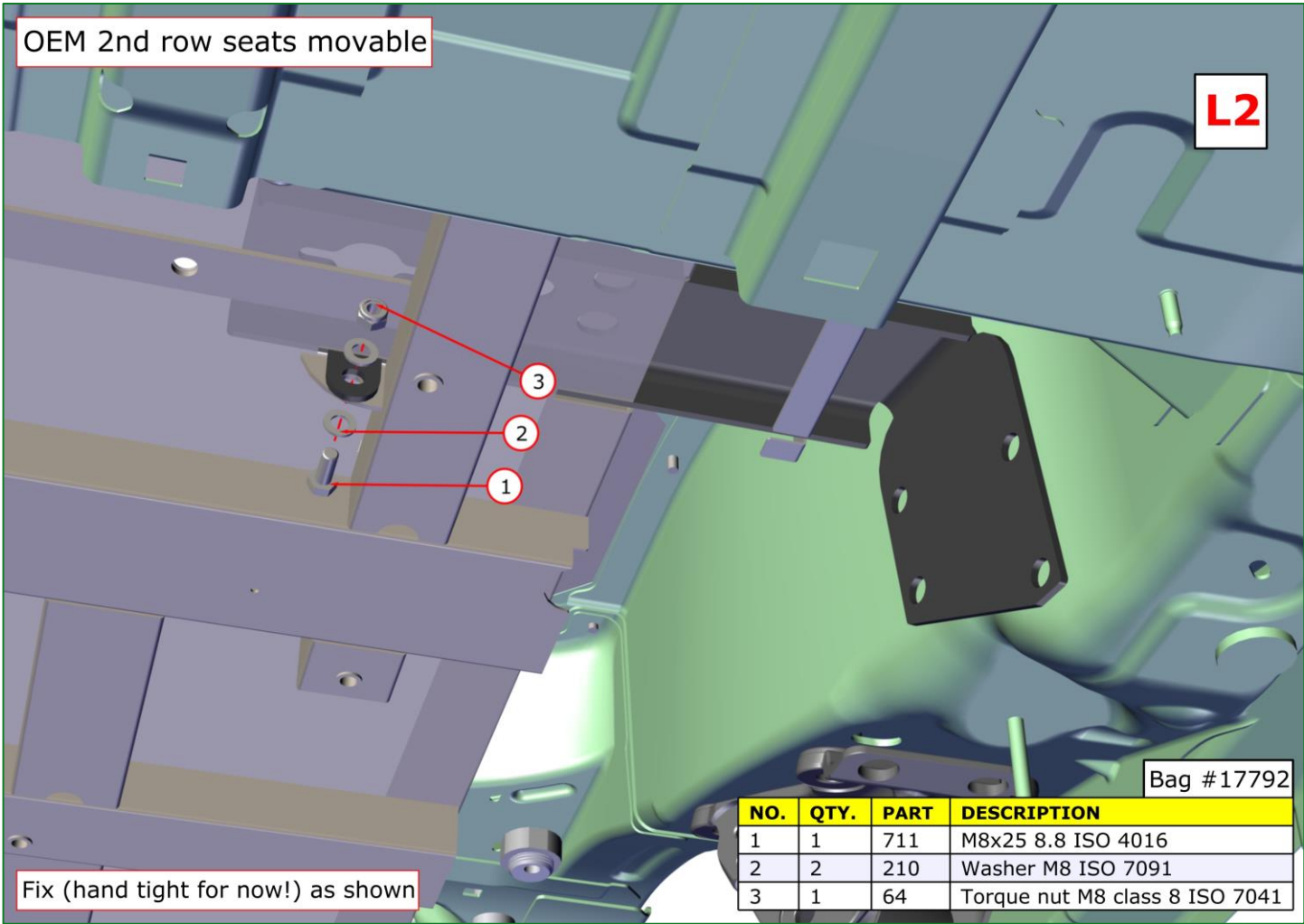
L2



Slide as one through the opening in the lowered floor

OEM 2nd row seats movable

L2



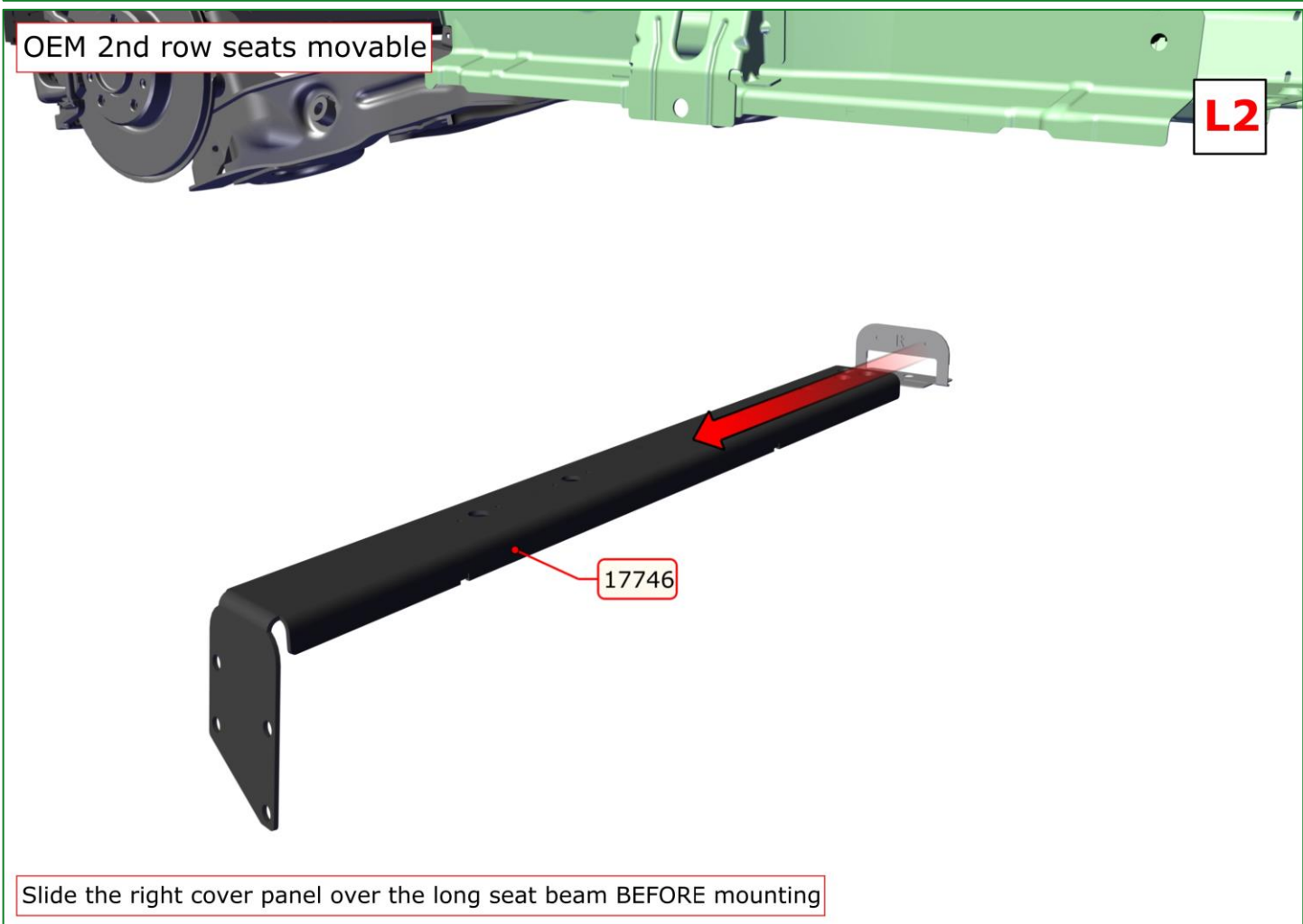
Bag #17792

NO.	QTY.	PART	DESCRIPTION
1	1	711	M8x25 8.8 ISO 4016
2	2	210	Washer M8 ISO 7091
3	1	64	Torque nut M8 class 8 ISO 7041

Fix (hand tight for now!) as shown

OEM 2nd row seats movable

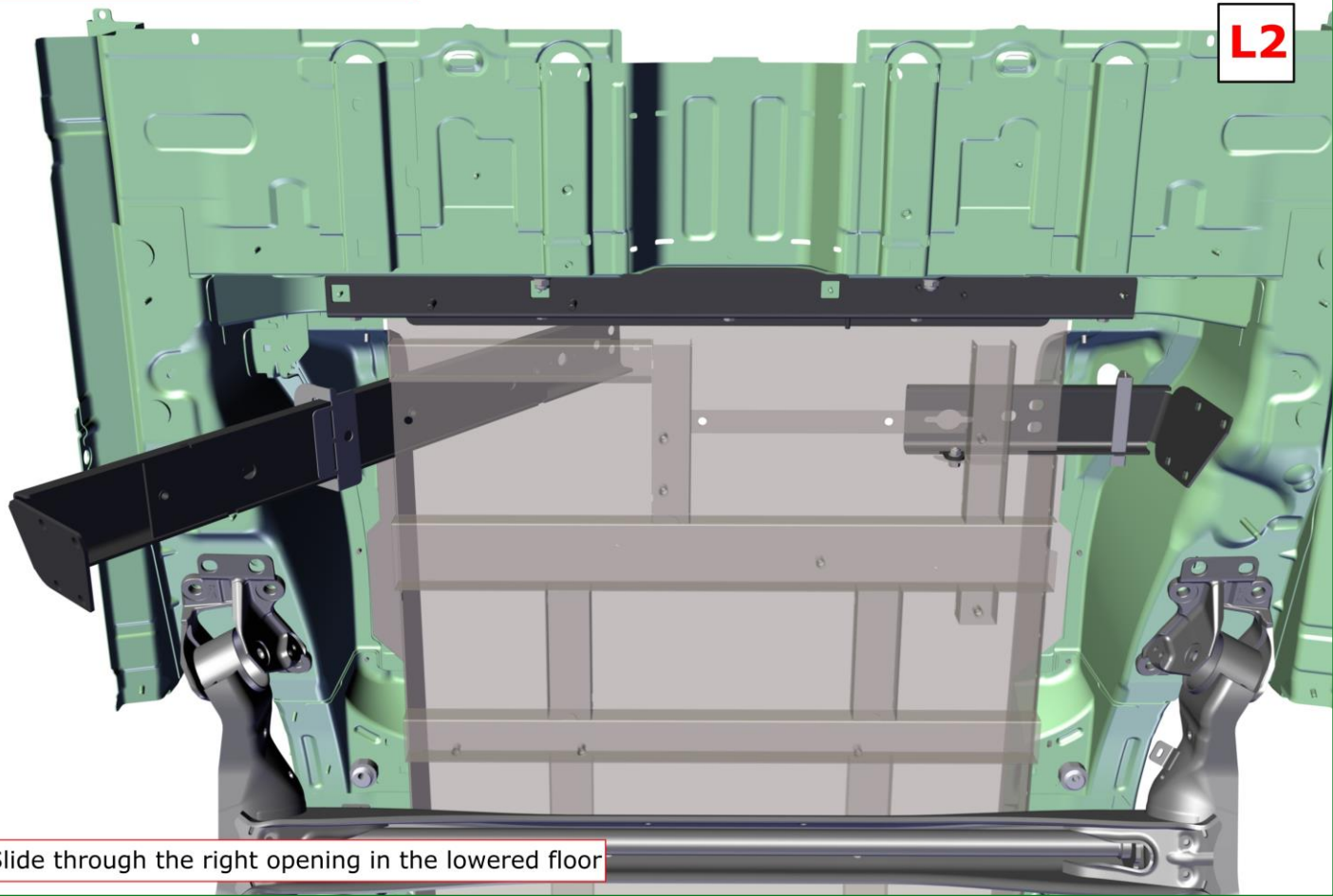
L2



Slide the right cover panel over the long seat beam BEFORE mounting

OEM 2nd row seats movable

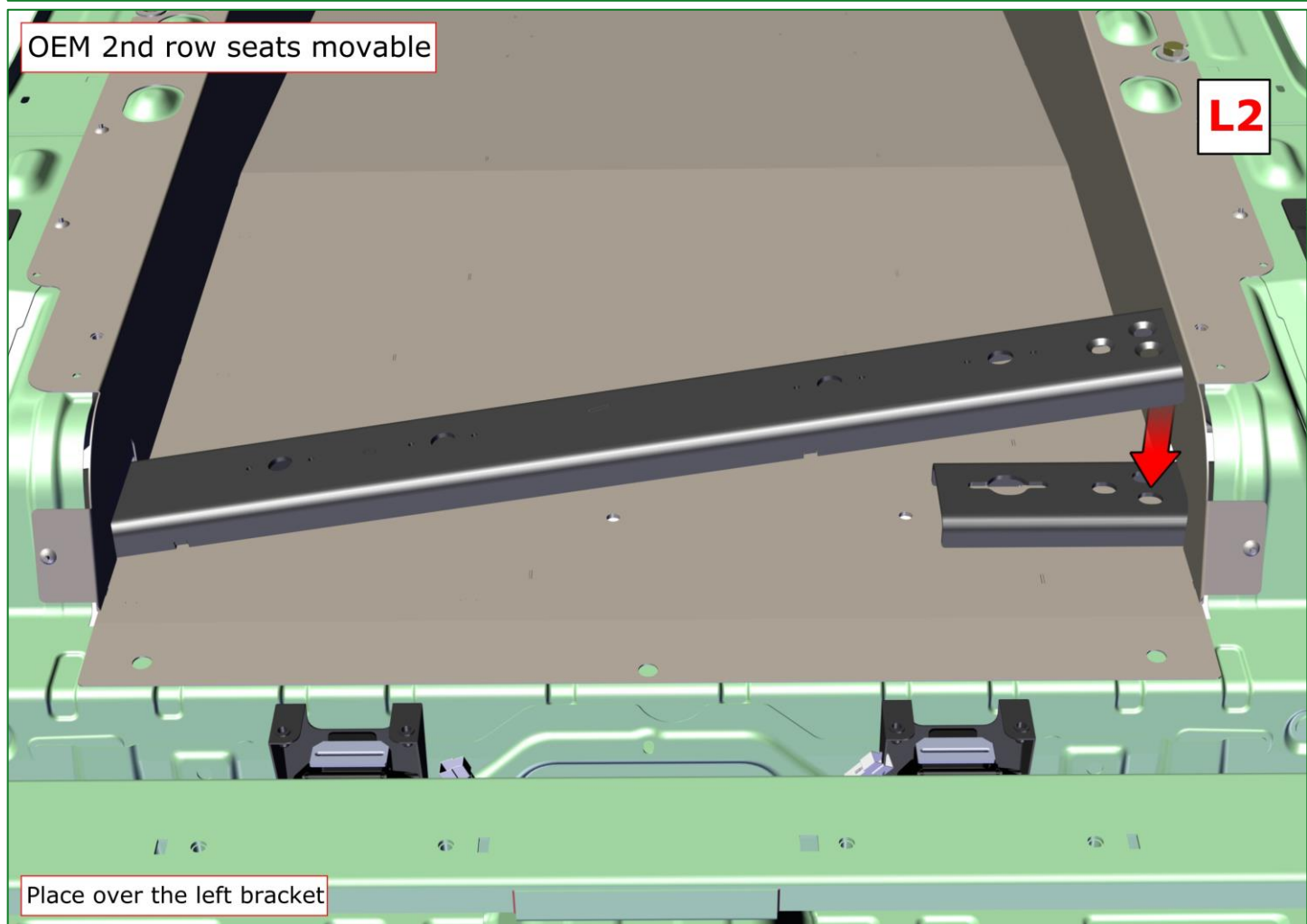
L2



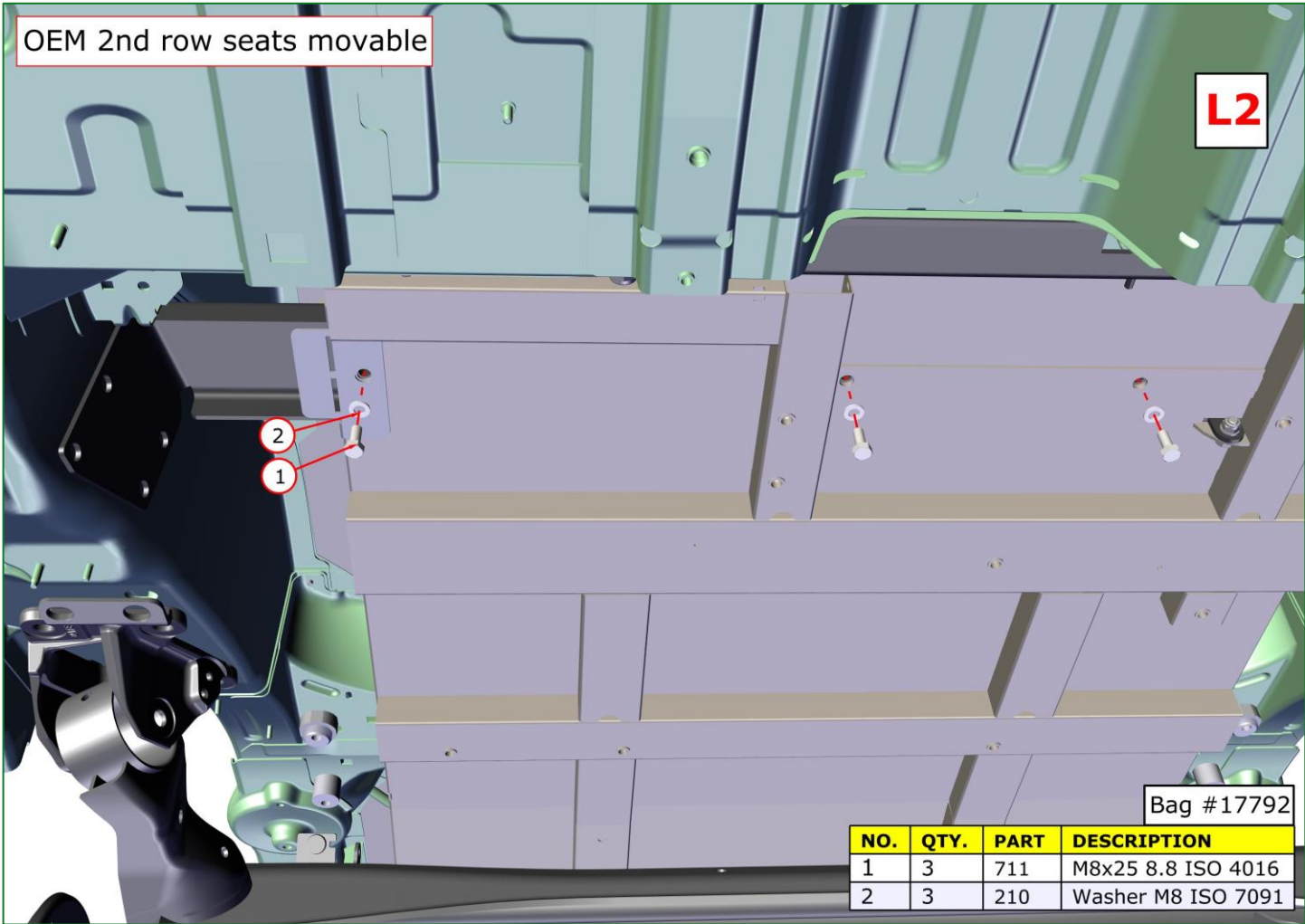
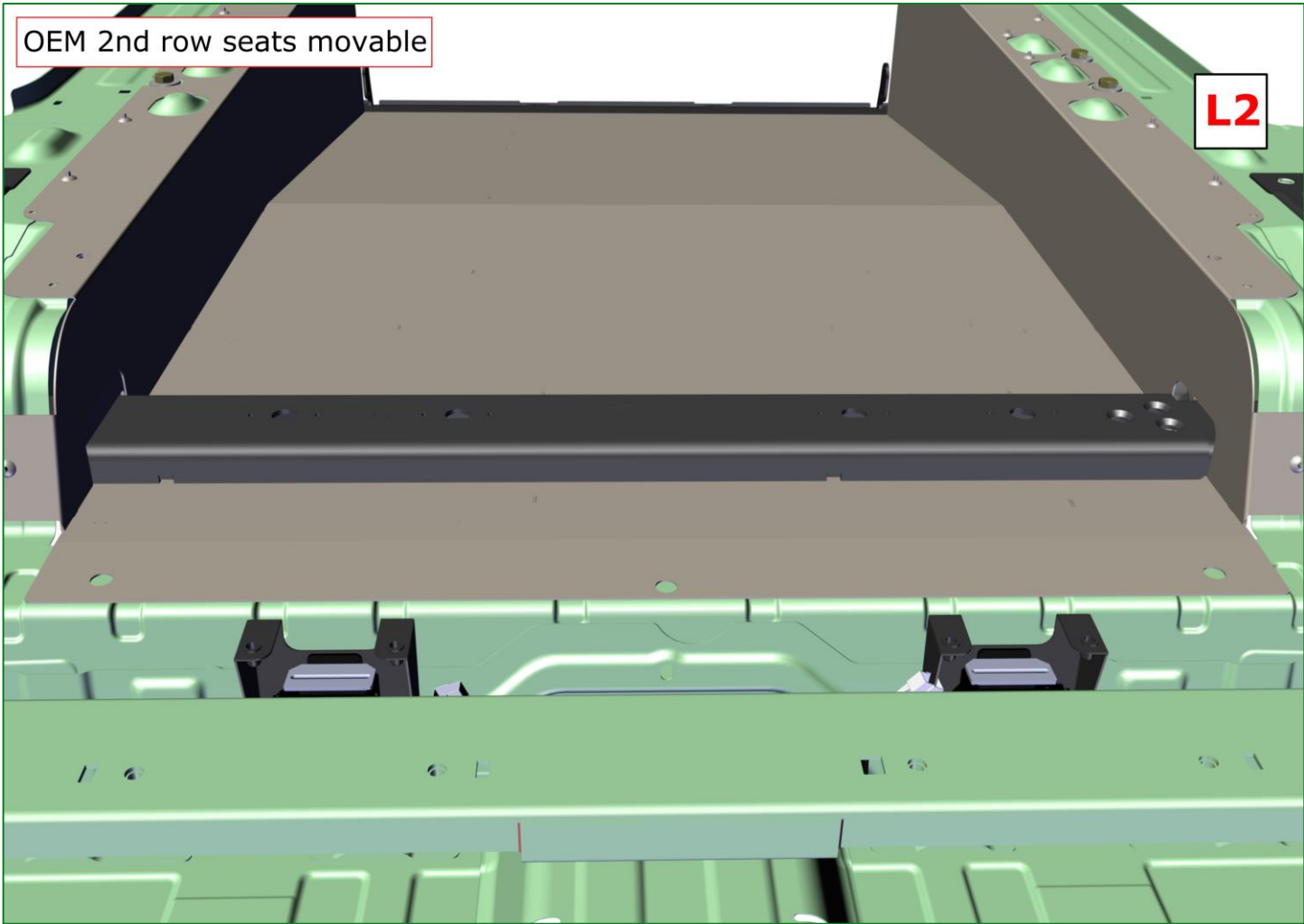
Slide through the right opening in the lowered floor

OEM 2nd row seats movable

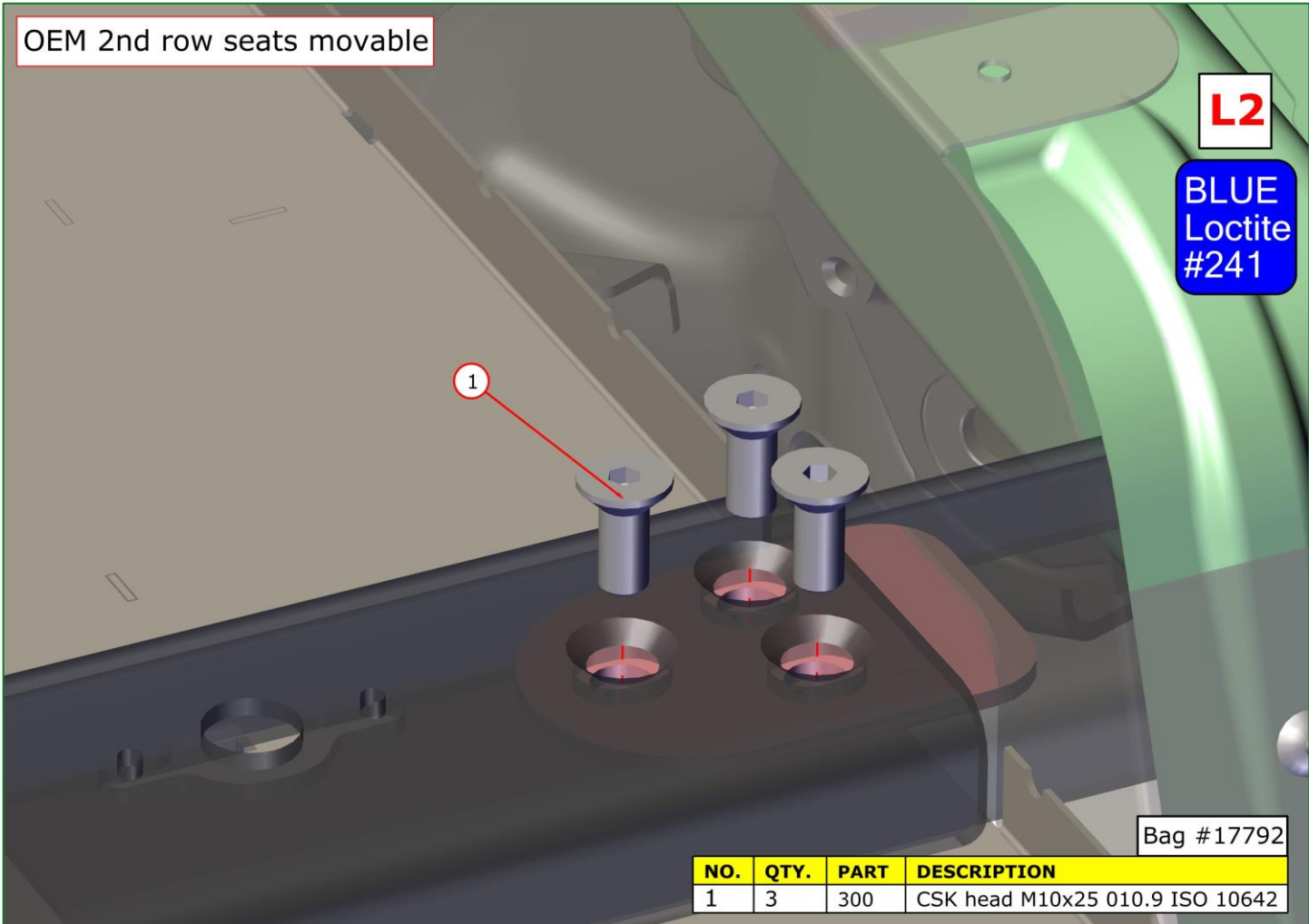
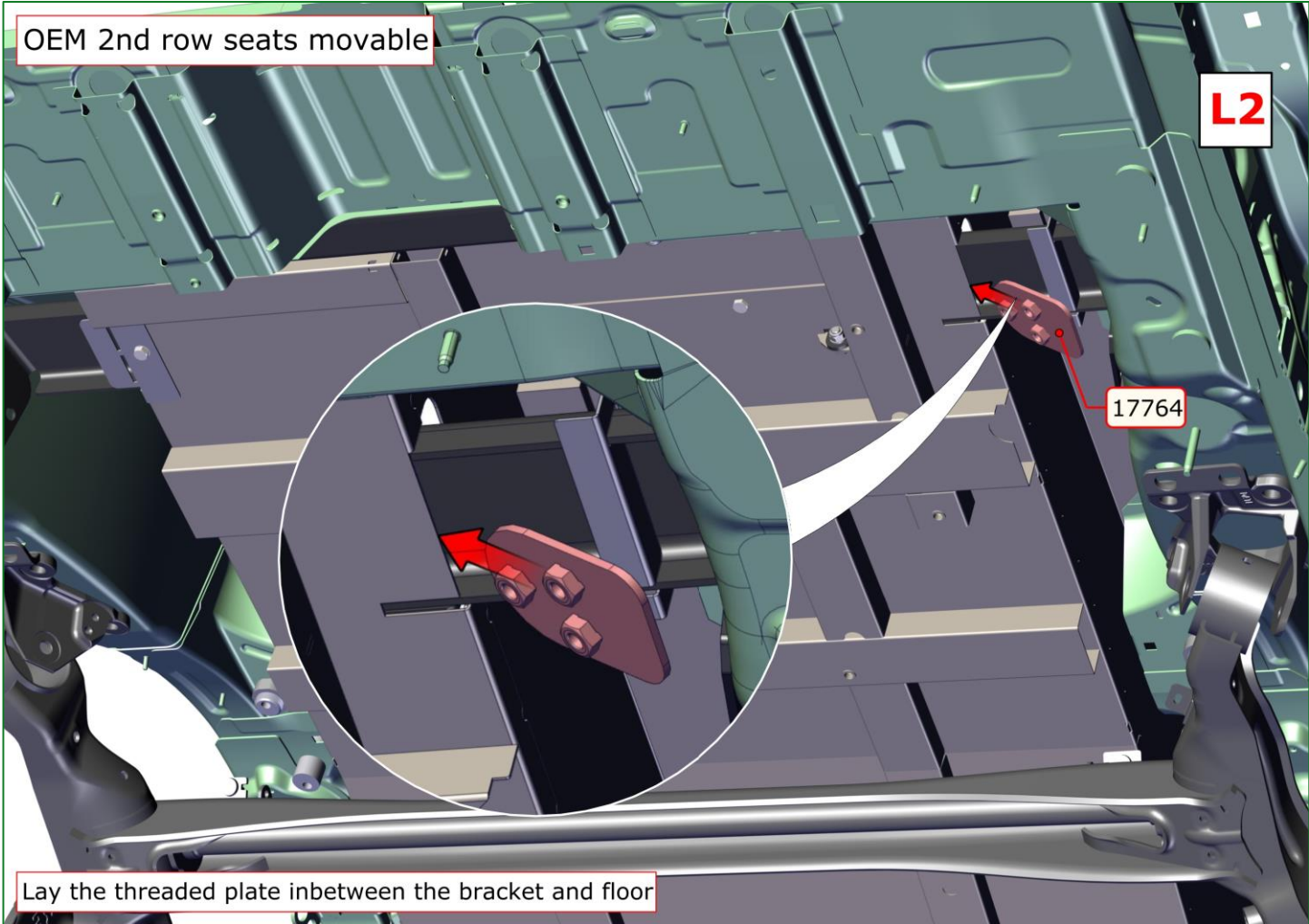
L2



Place over the left bracket

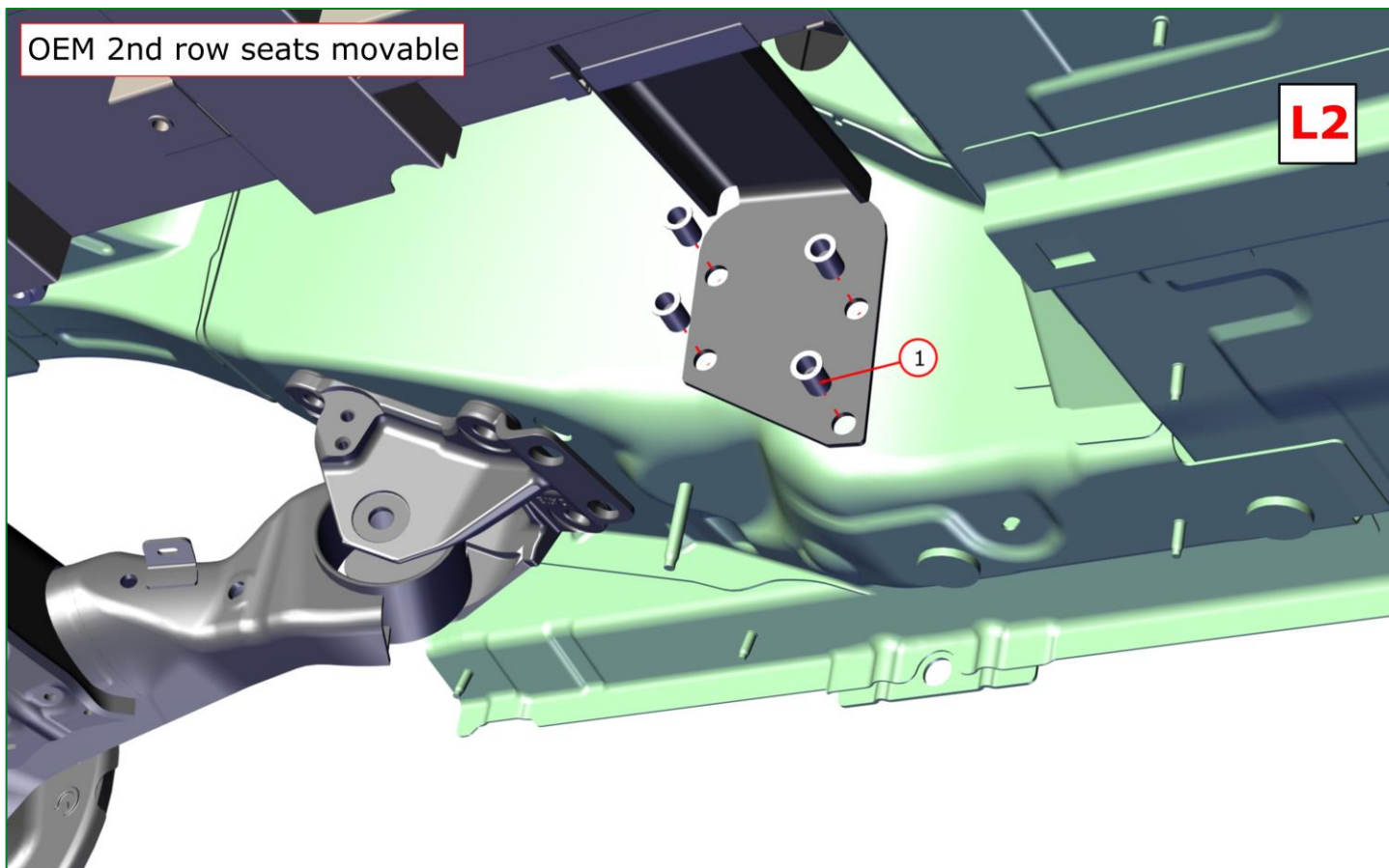


NO.	QTY.	PART	DESCRIPTION
1	3	711	M8x25 8.8 ISO 4016
2	3	210	Washer M8 ISO 7091



OEM 2nd row seats movable

L2



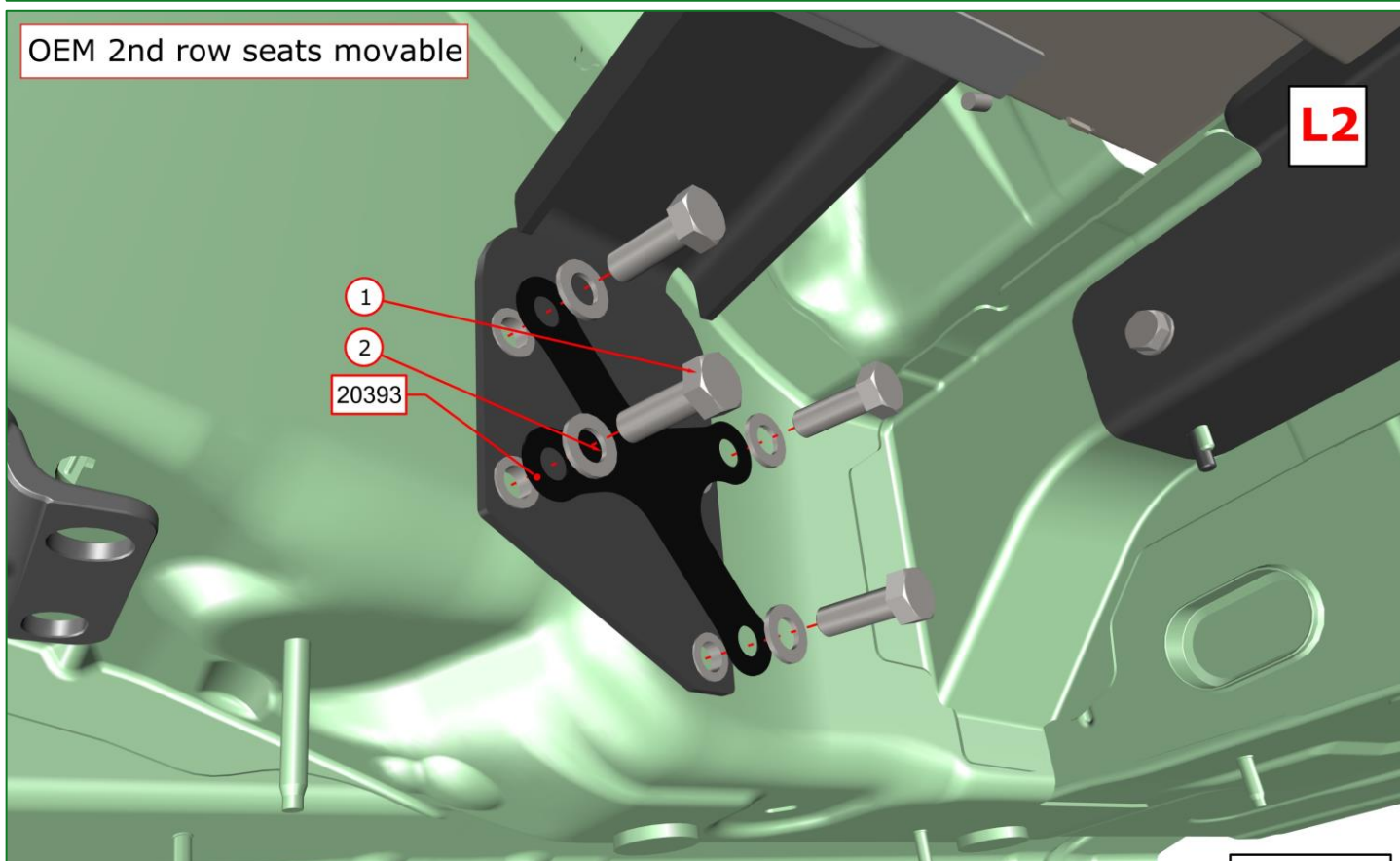
Make sure the flange is as flat against the chassis as possible, then drill through the holes  $\varnothing 13$  mm and secure with the rivet nuts. Use a good powerfull tool to fix the rivets nuts!

Bag #17792

NO.	QTY.	PART	DESCRIPTION
1	4	15403	High torque rivet nut M10

OEM 2nd row seats movable

L2



Place the torque plate 20394 on top of the blind rivet nuts, then secure with the bolts and washers, to prevent the blind rivet nuts from rotating.

Bag #17792

NO.	QTY.	PART	DESCRIPTION
1	4	1256	M10x30 8.8 ISO 4016
2	4	173	Washer M10 ISO 7091

OEM 2nd row seats movable

L2



54Nm (4x)

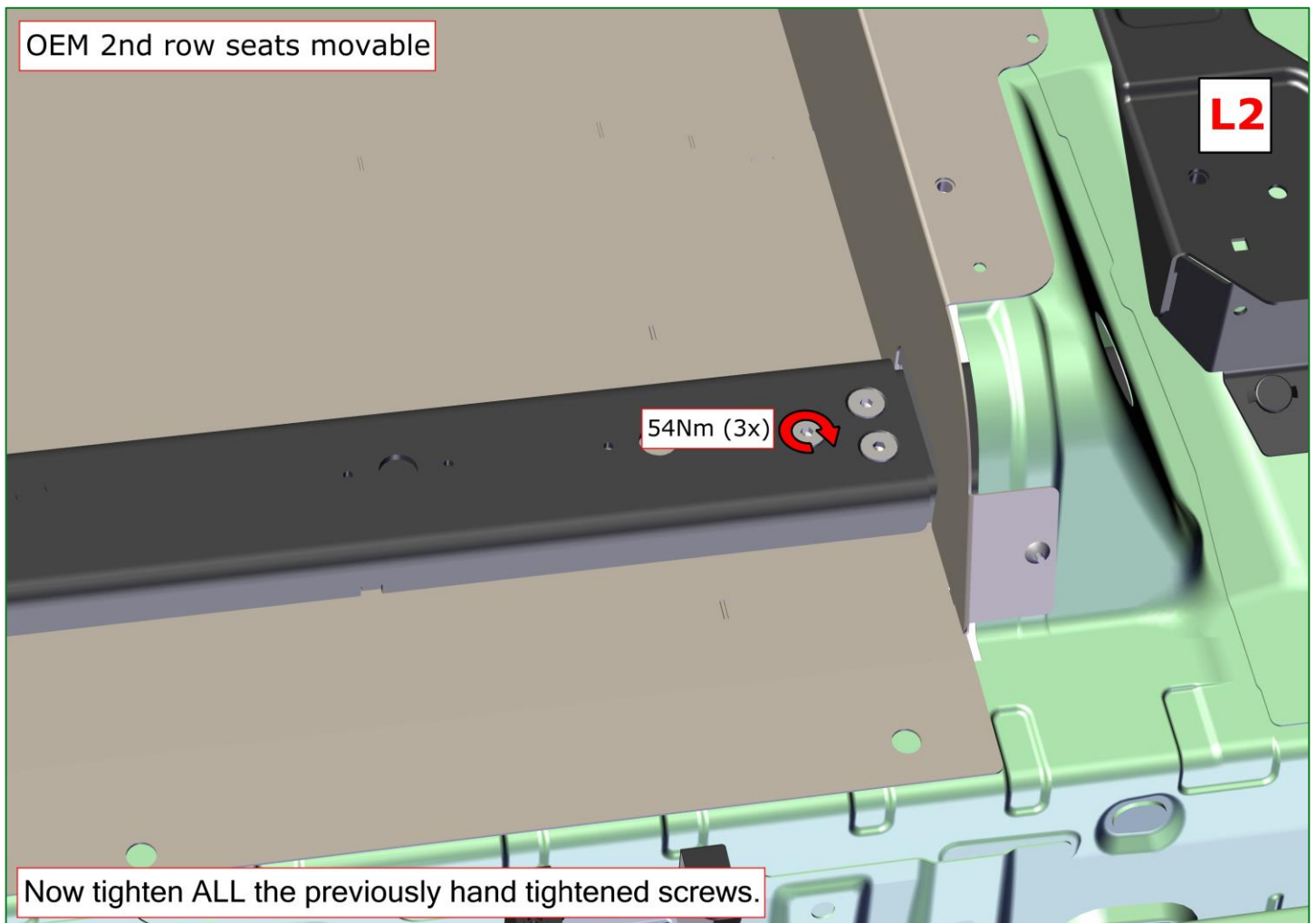
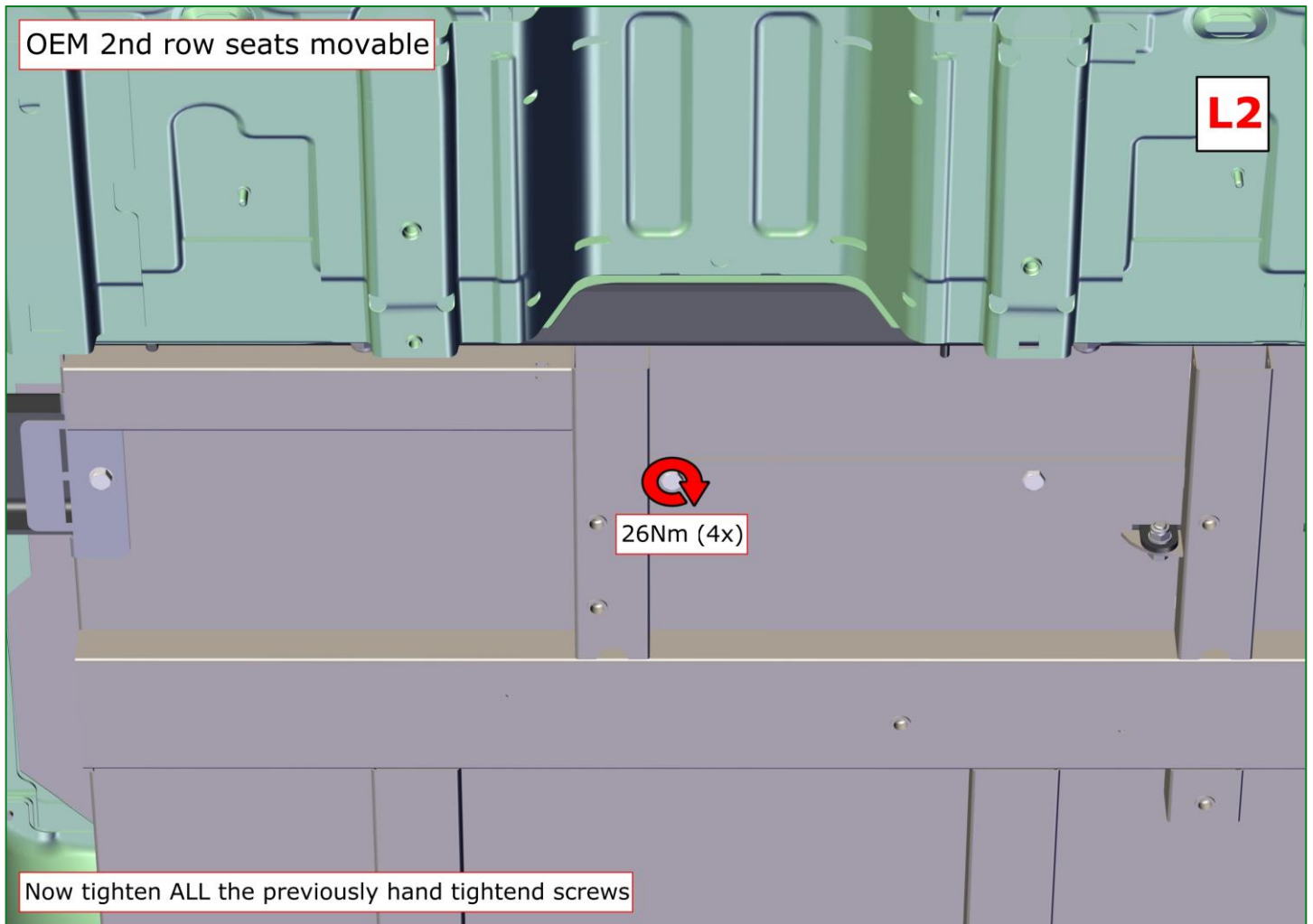
Secure everything with the M10 bolts.

OEM 2nd row seats movable

L2

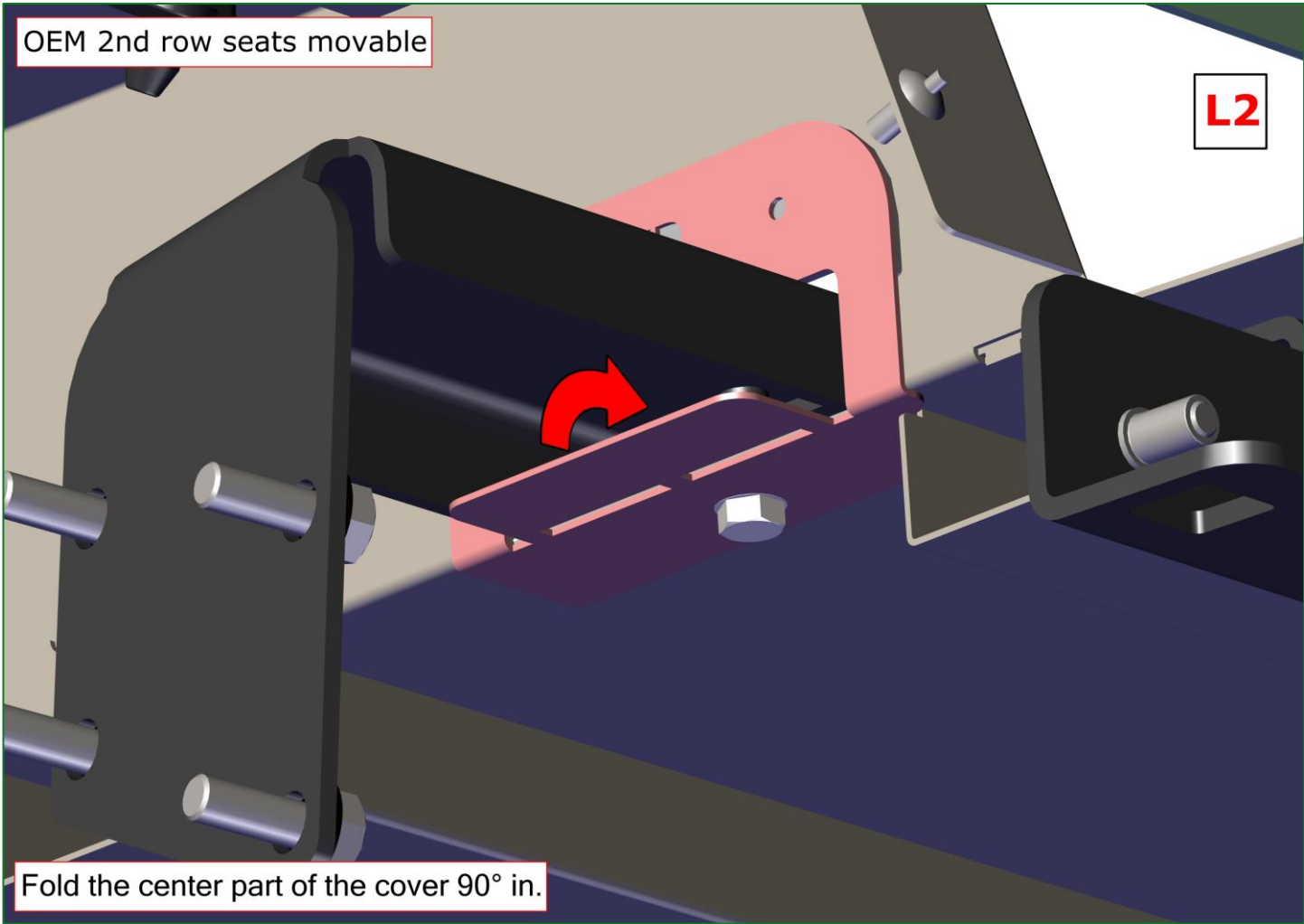
Do the same on the right side.





OEM 2nd row seats movable

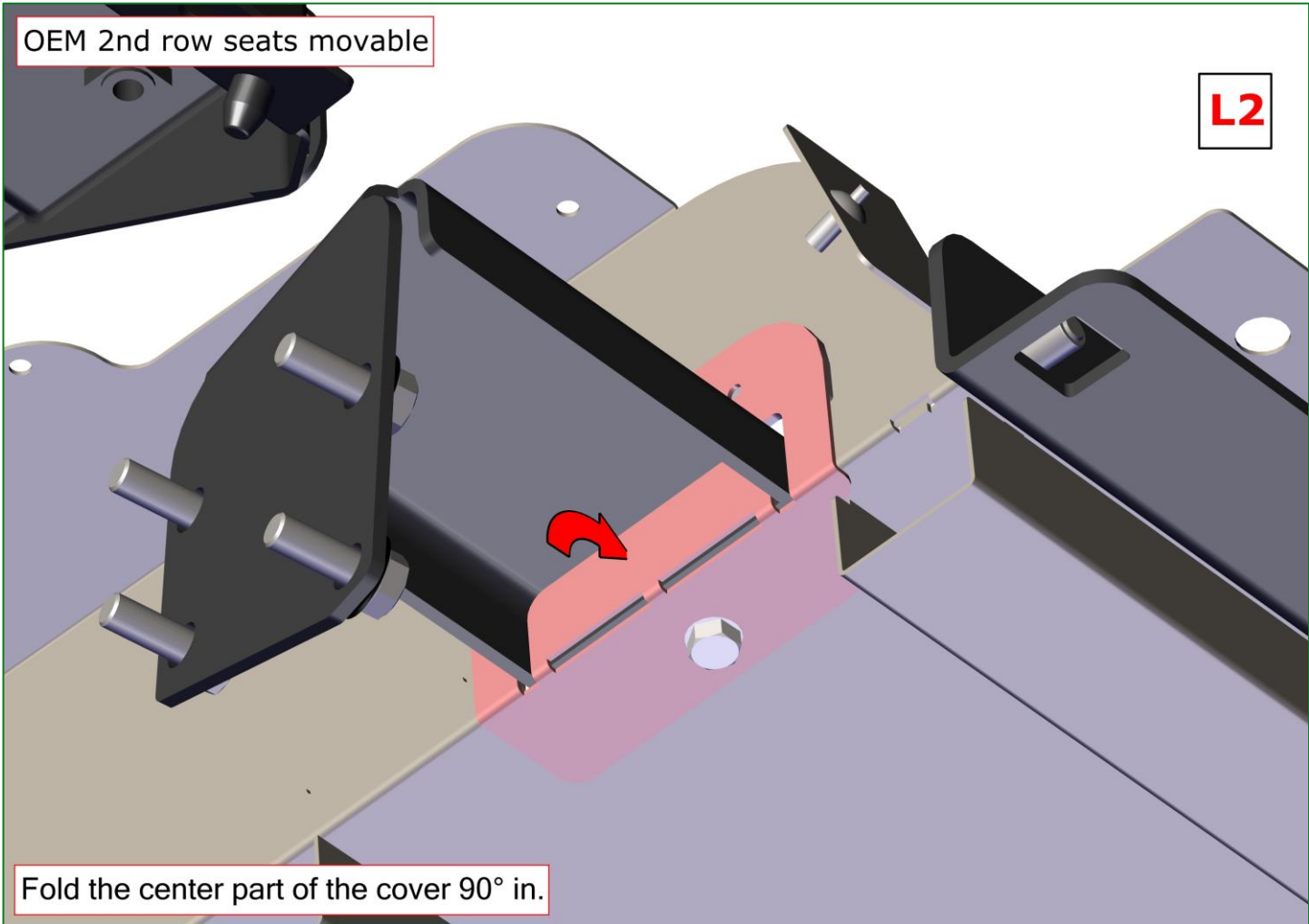
L2



Fold the center part of the cover 90° in.

OEM 2nd row seats movable

L2



Fold the center part of the cover 90° in.

OEM 2nd row seats movable

L2

Use sealant behind the left cover to hold and seal it

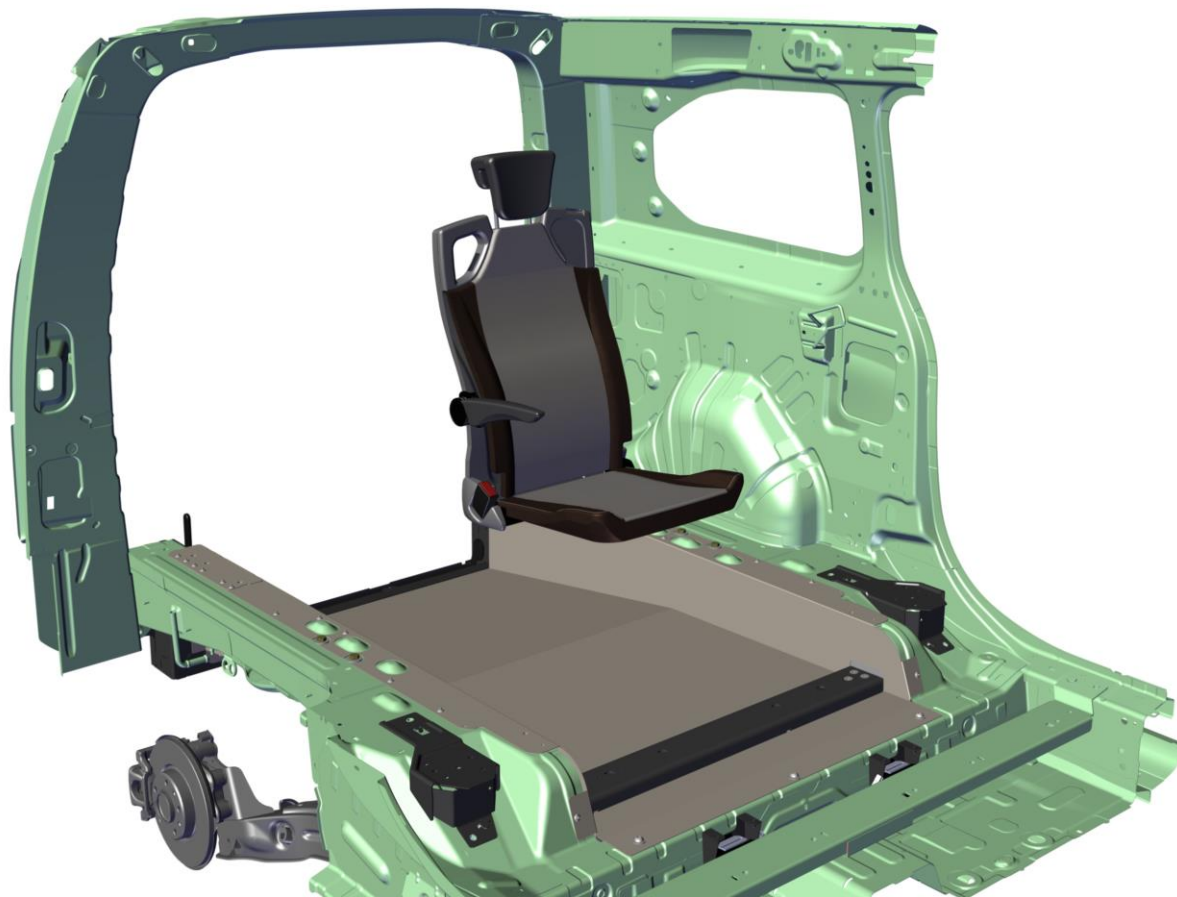
OEM 2nd row seats movable

L2

Use sealant behind the left cover to hold and seal it

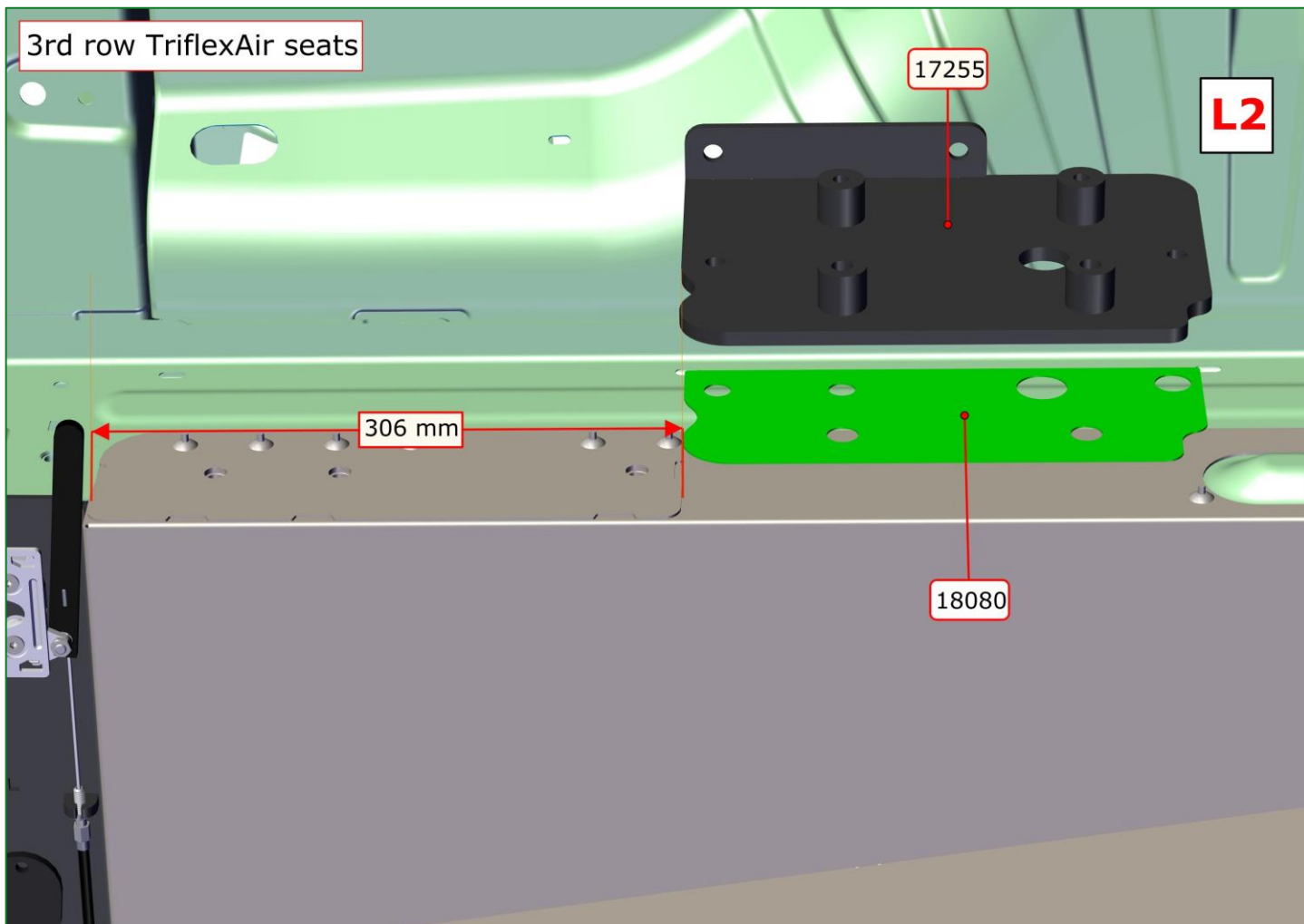
3rd row TriflexAir seats

L2



3rd row TriflexAir seats

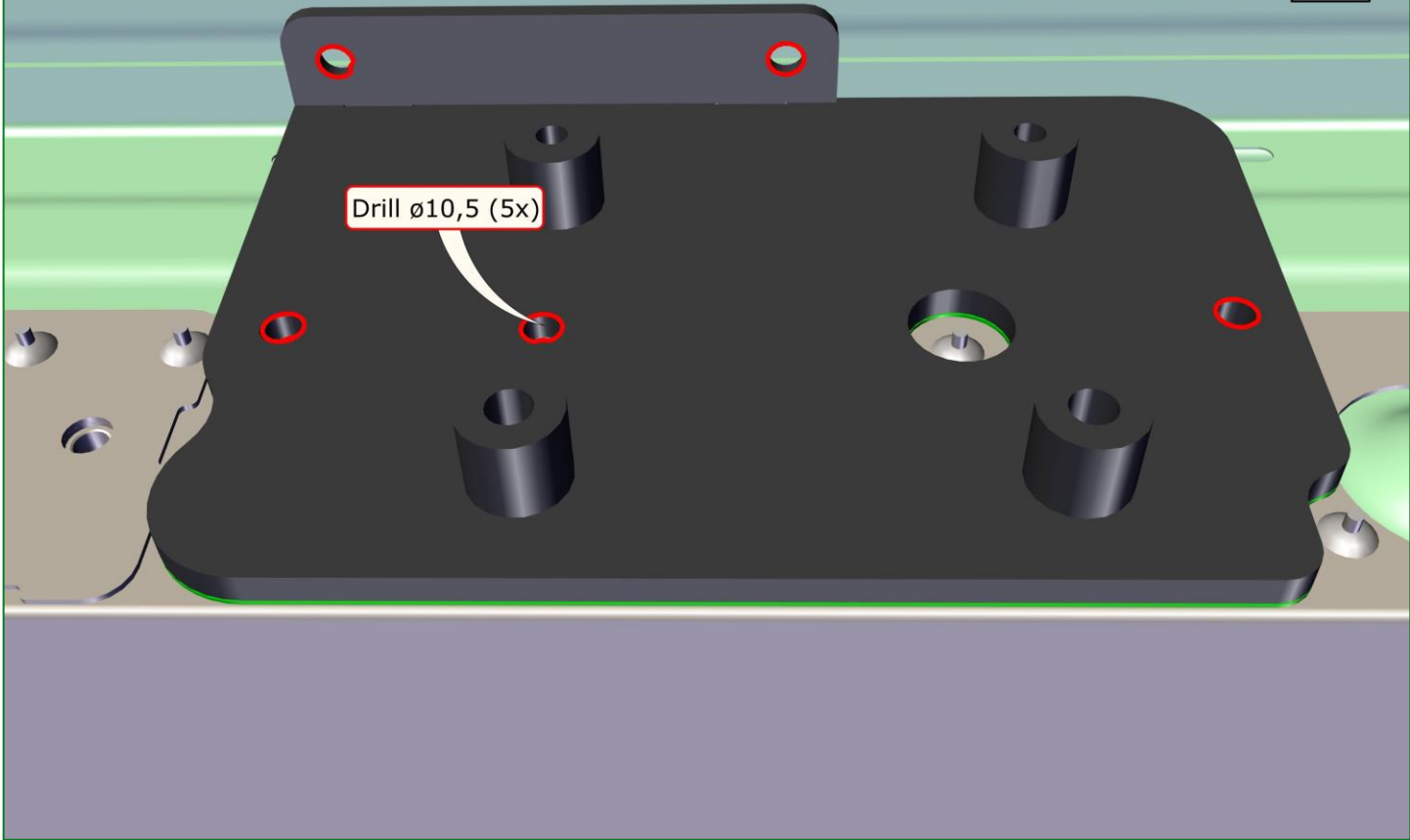
L2



3rd row TriflexAir seats

L2

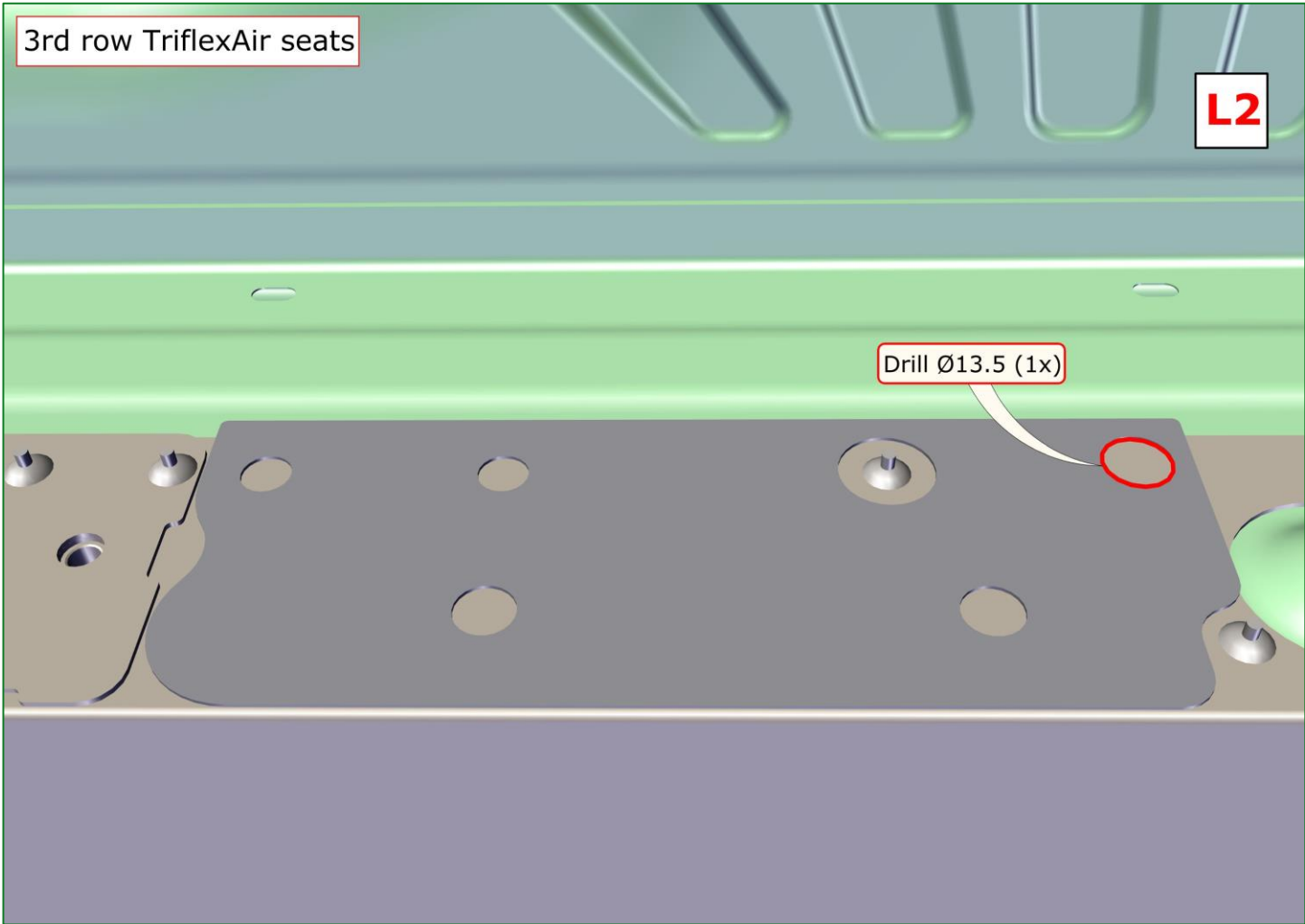
Drill  $\varnothing 10,5$  (5x)



3rd row TriflexAir seats

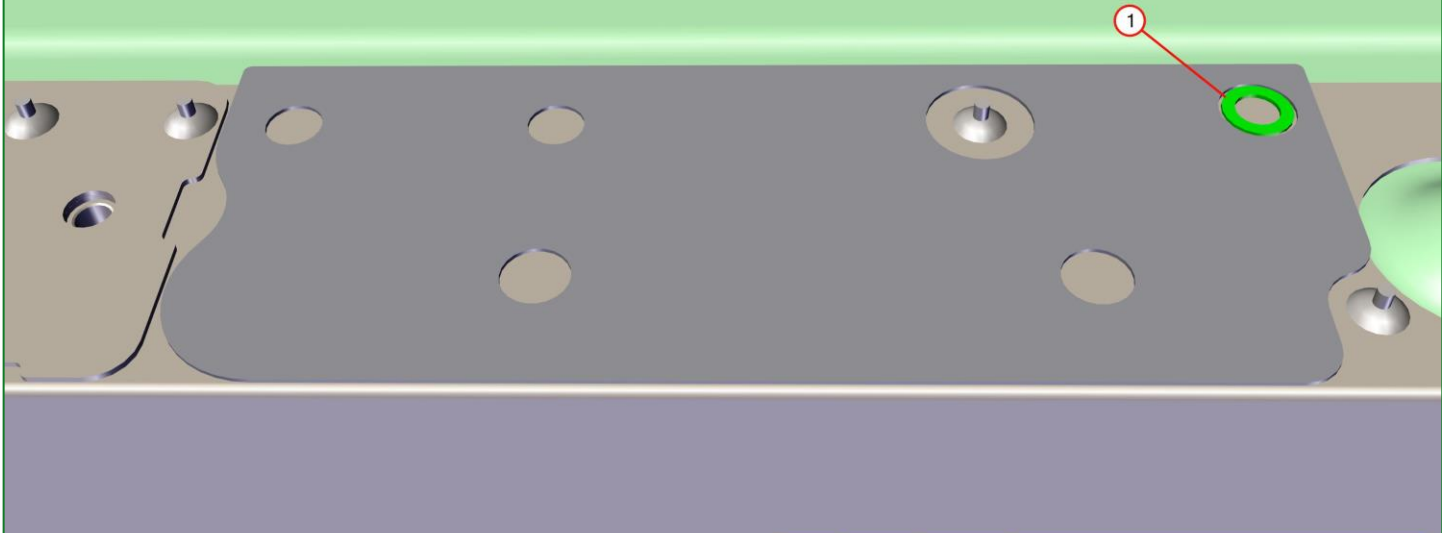
L2

Drill  $\varnothing 13.5$  (1x)



3rd row TriflexAir seats

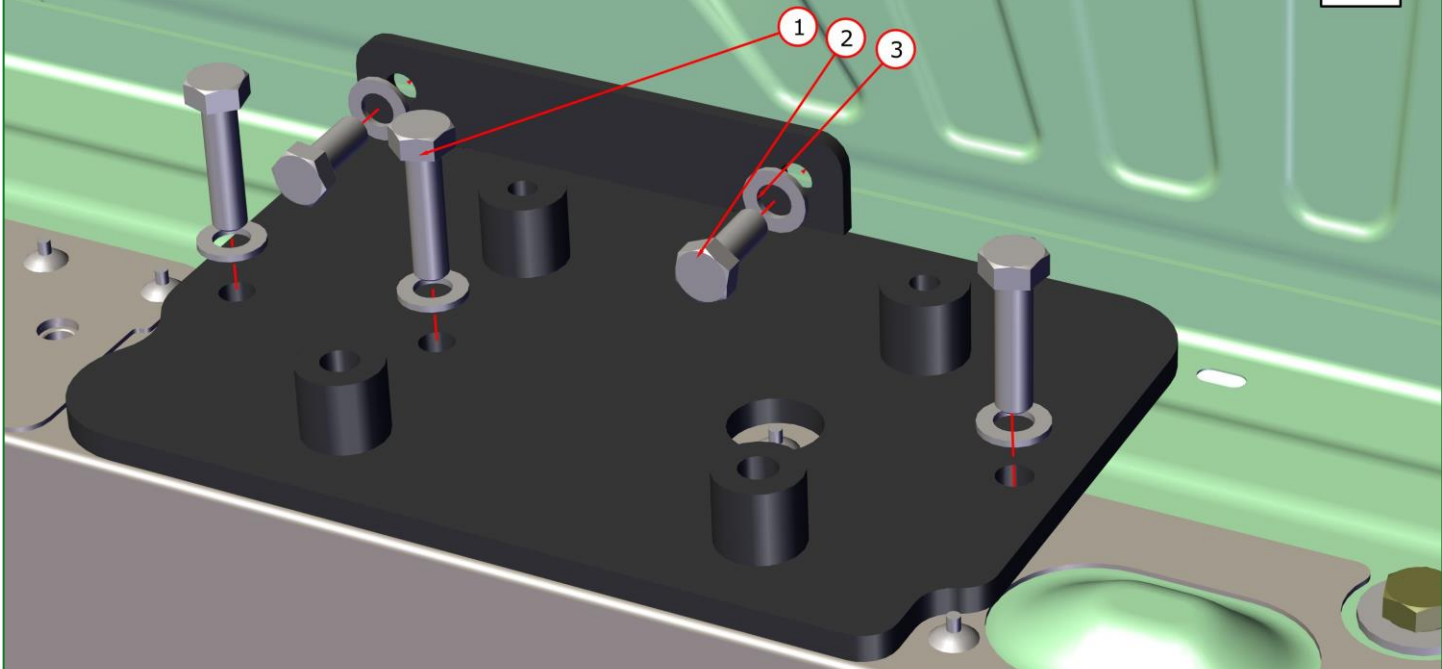
L2



NO.	QTY.	PART	DESCRIPTION
1	1	15403	Blind rivet nut M10x20 High Torque

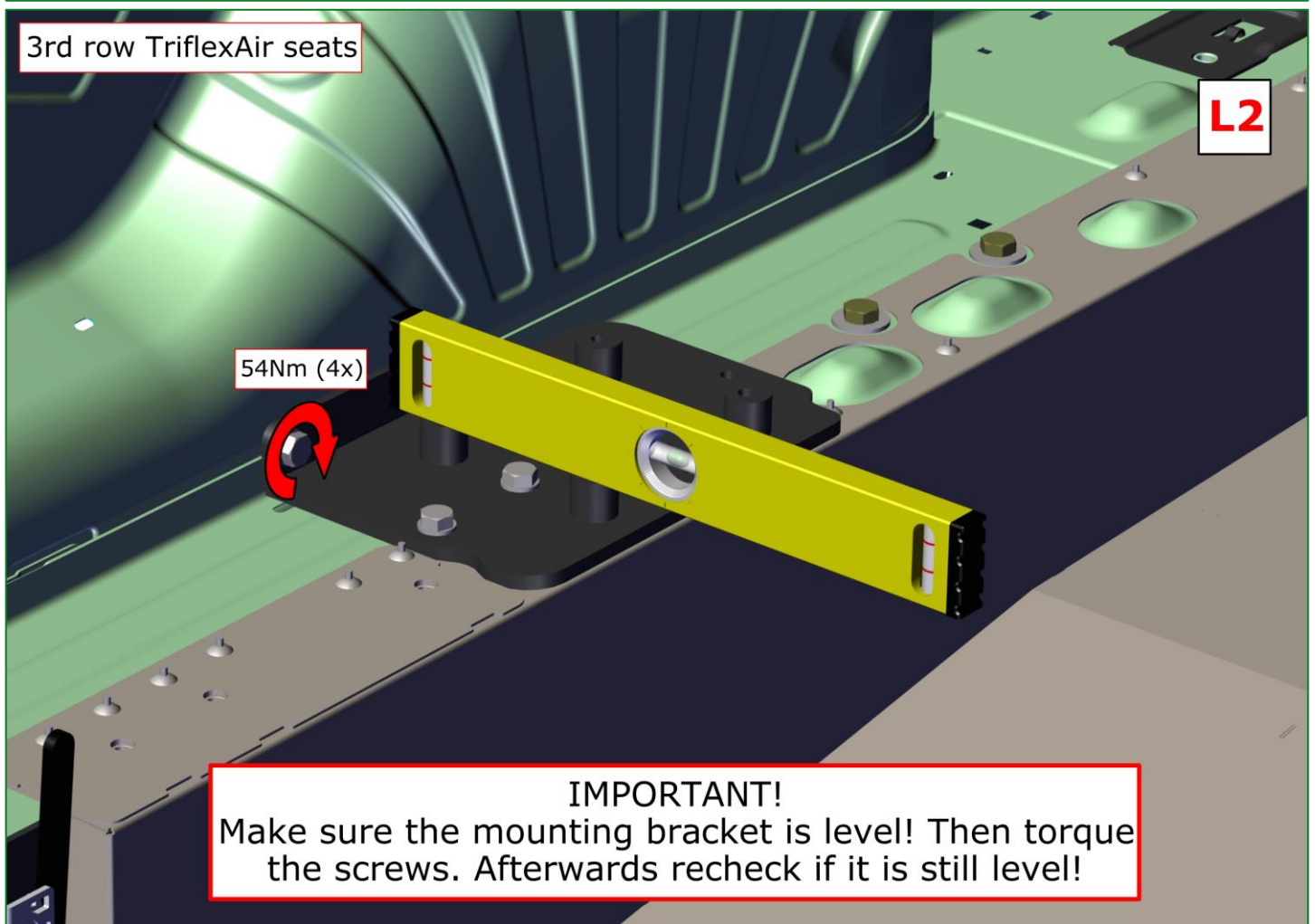
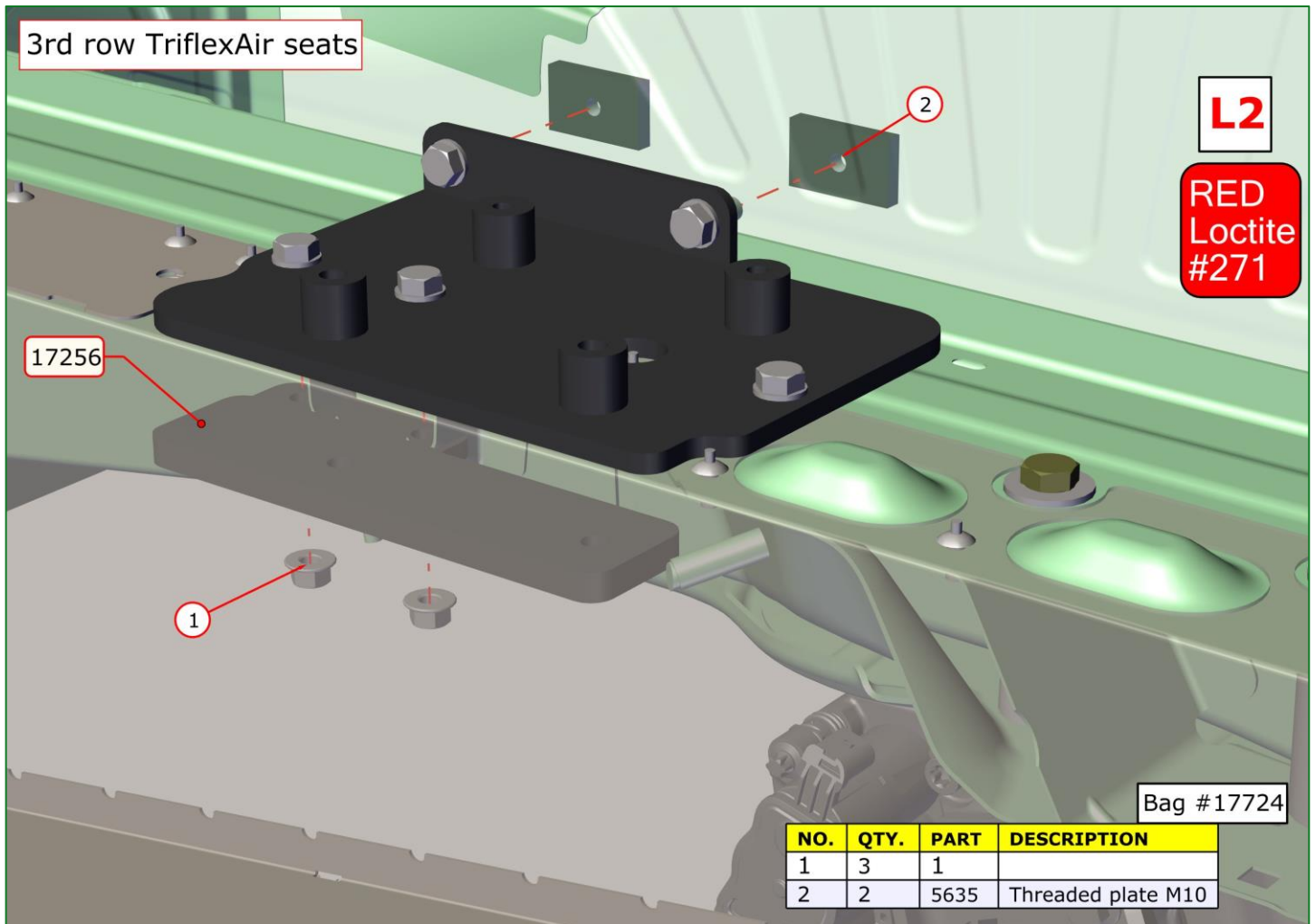
3rd row TriflexAir seats

L2



Bag #17724

NO.	QTY.	PART	DESCRIPTION
1	3	180	M10x40 8.8 ISO 4016
2	2	9113	M10x25 8.8 ISO 4016
3	5	173	Washer M10 Class 8 ISO 7091



3rd row TriflexAir seats

L2

Right side is exact mirror

Bodyguard mounting bracket

TM90

1

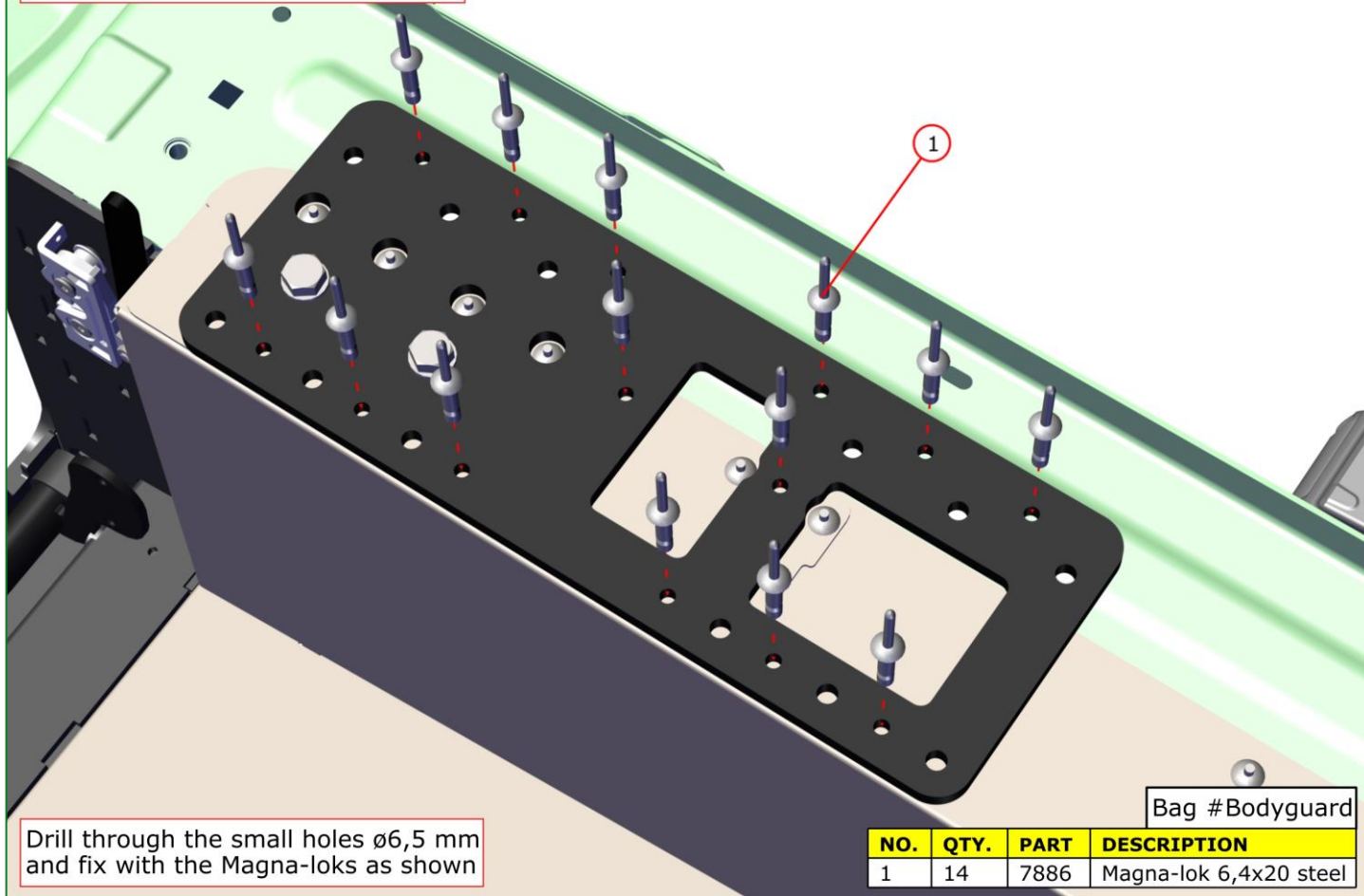
2

Bag #Bodyguard

NO.	QTY.	PART	DESCRIPTION
1	2	9113	M10x25 8.8 ISO 4016
2	2	173	Washer M10 ISO 7091



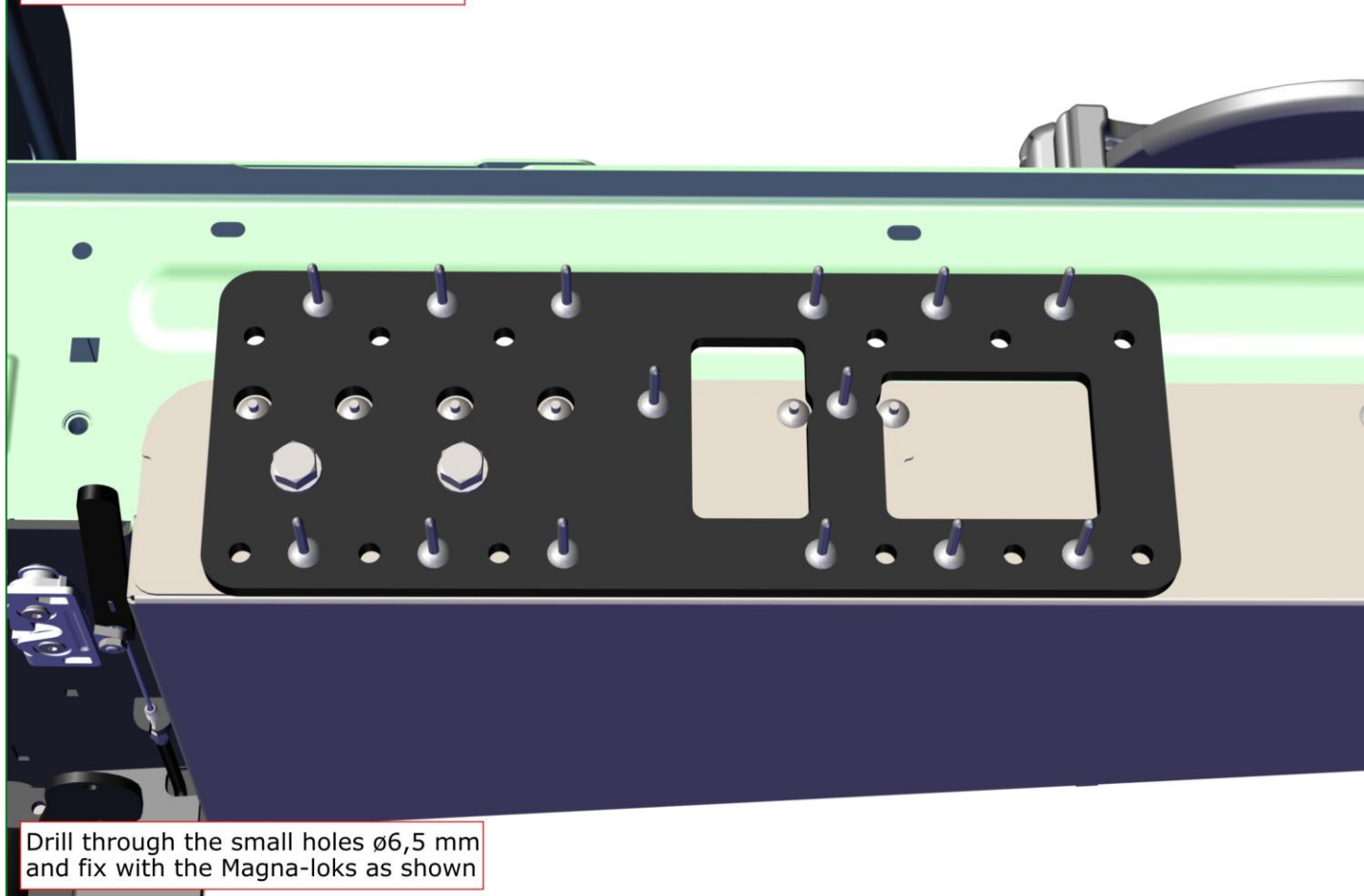
Bodyguard mounting bracket



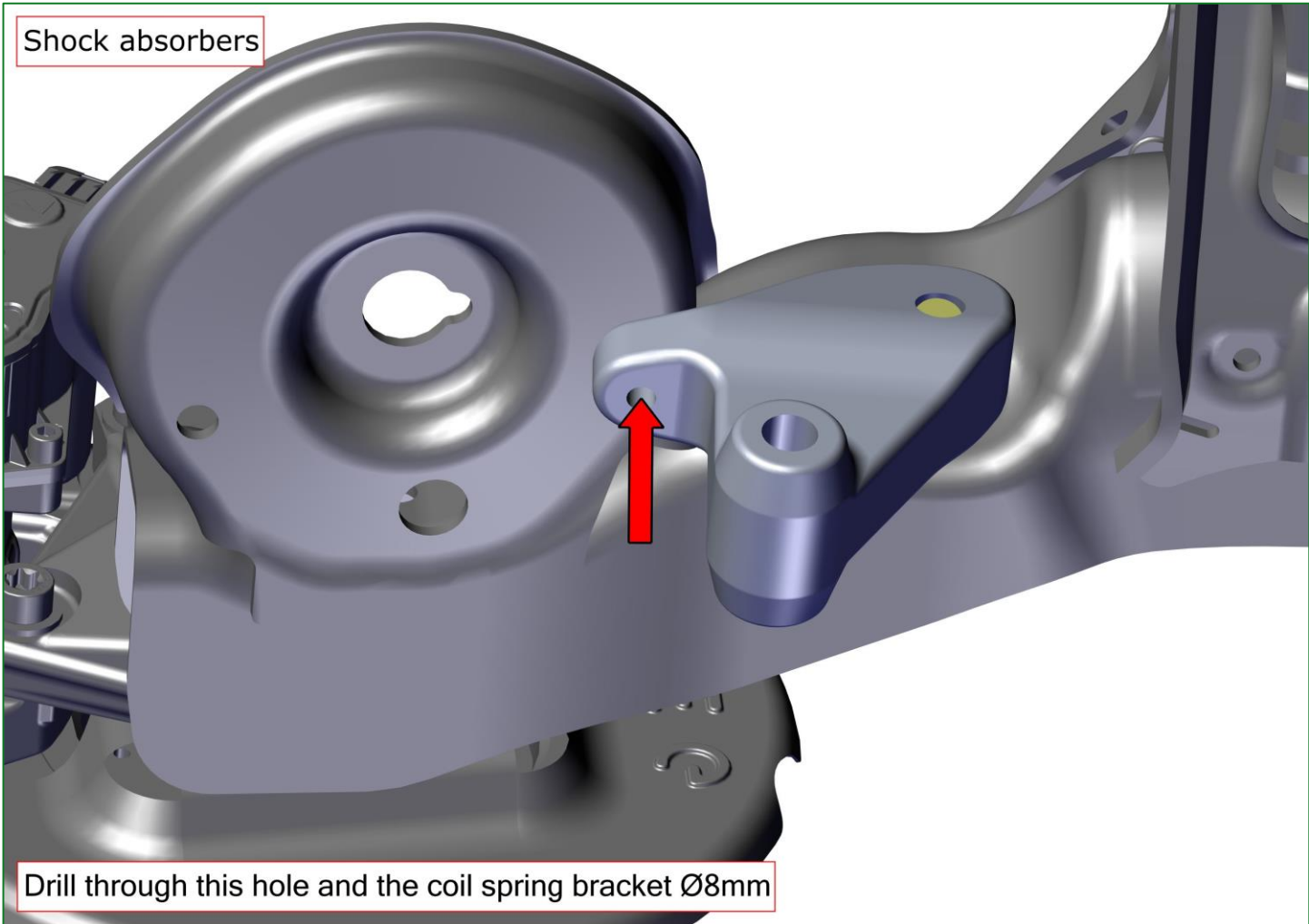
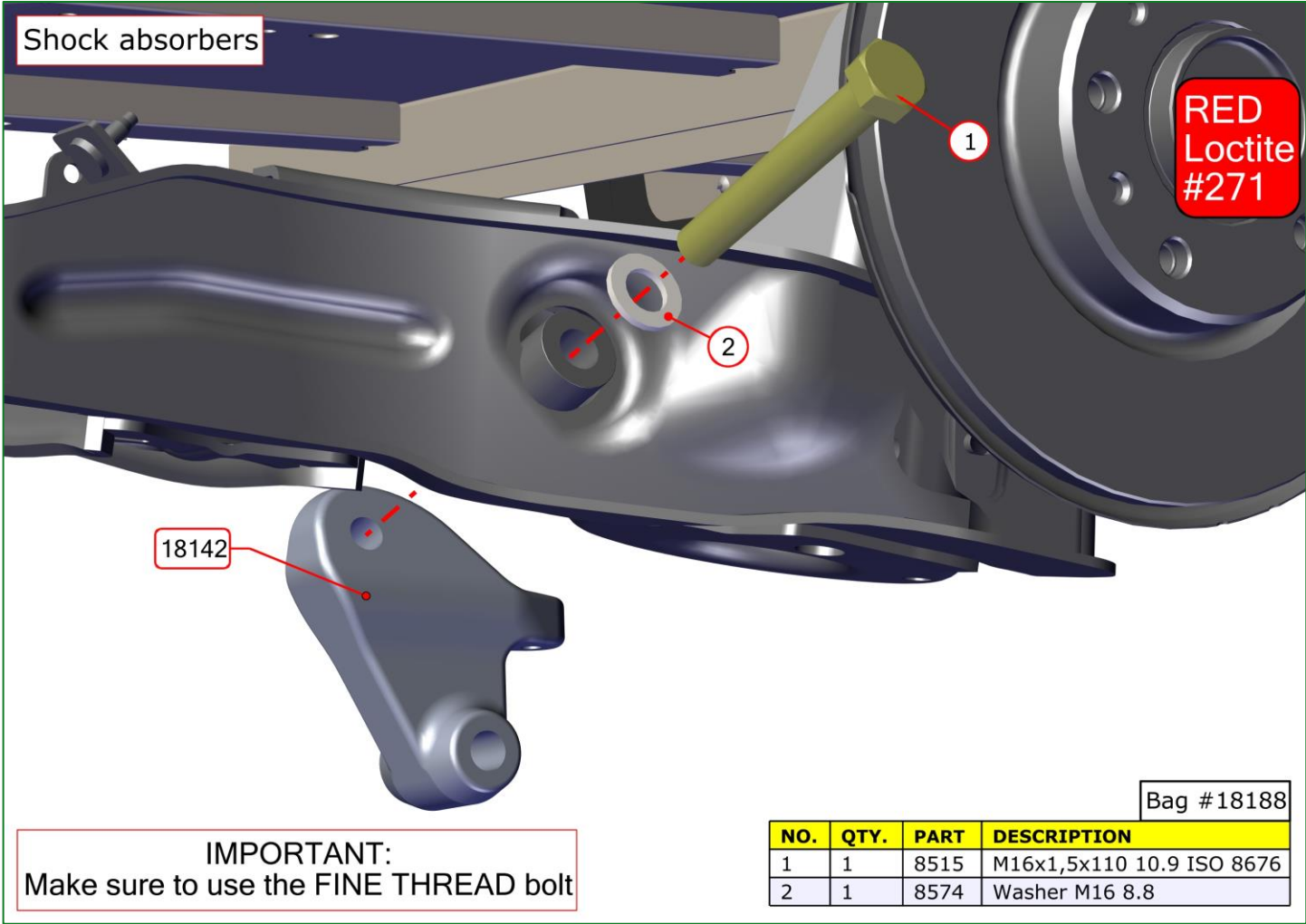
Drill through the small holes  $\varnothing 6,5$  mm and fix with the Magna-loks as shown

NO.	QTY.	PART	DESCRIPTION
1	14	7886	Magna-lok 6,4x20 steel

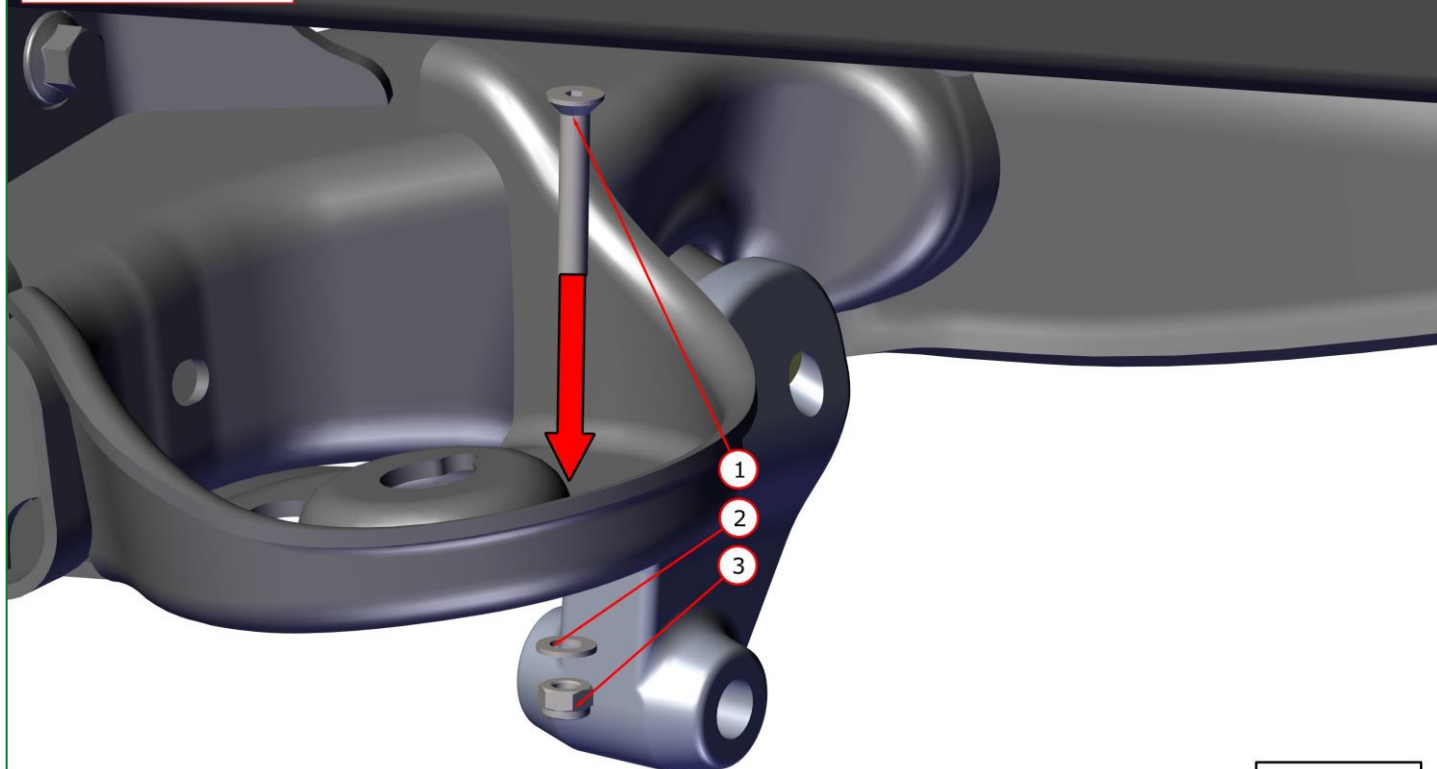
Bodyguard mounting bracket



Drill through the small holes  $\varnothing 6,5$  mm and fix with the Magna-loks as shown



Shock absorbers

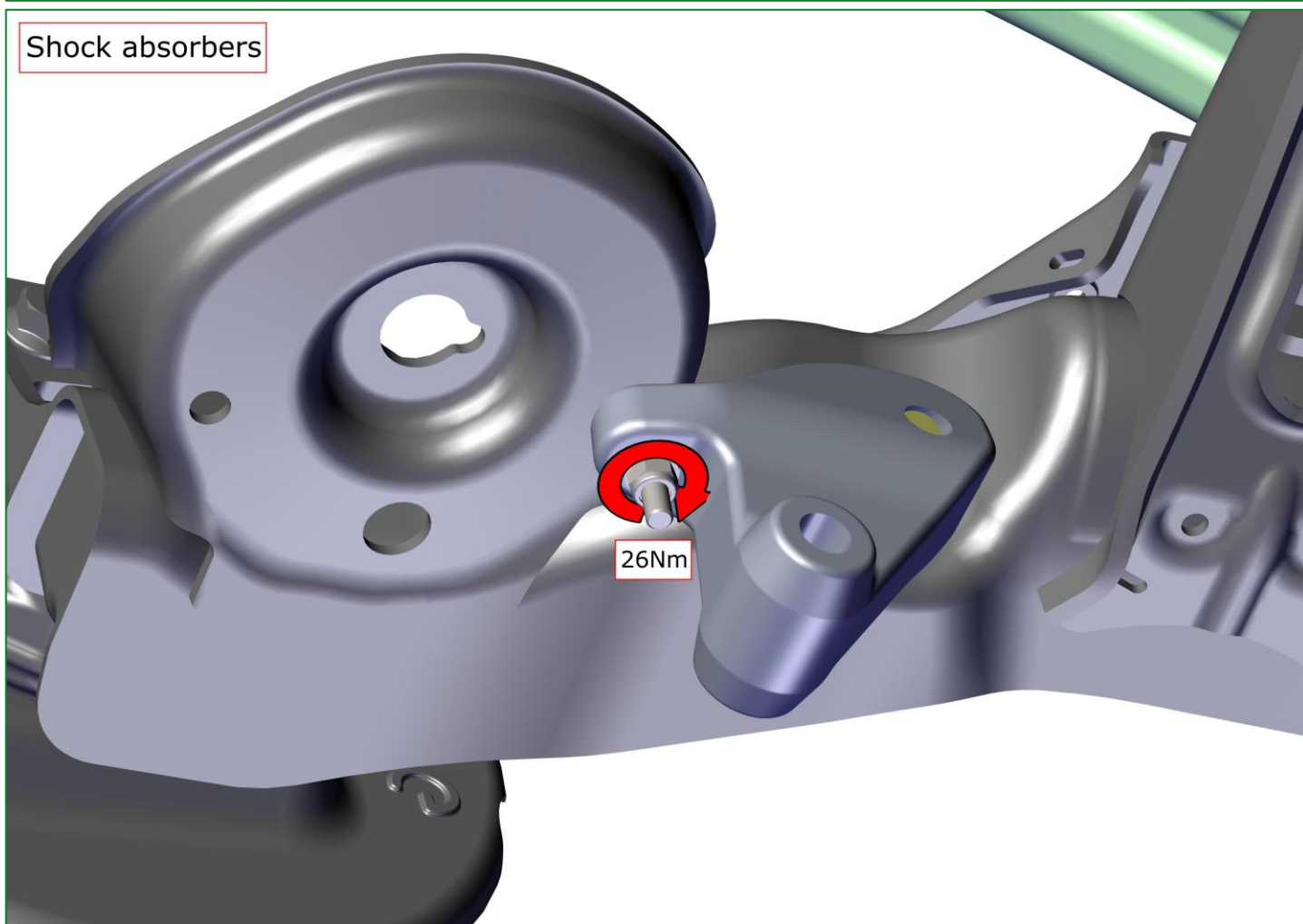


Bag #18188

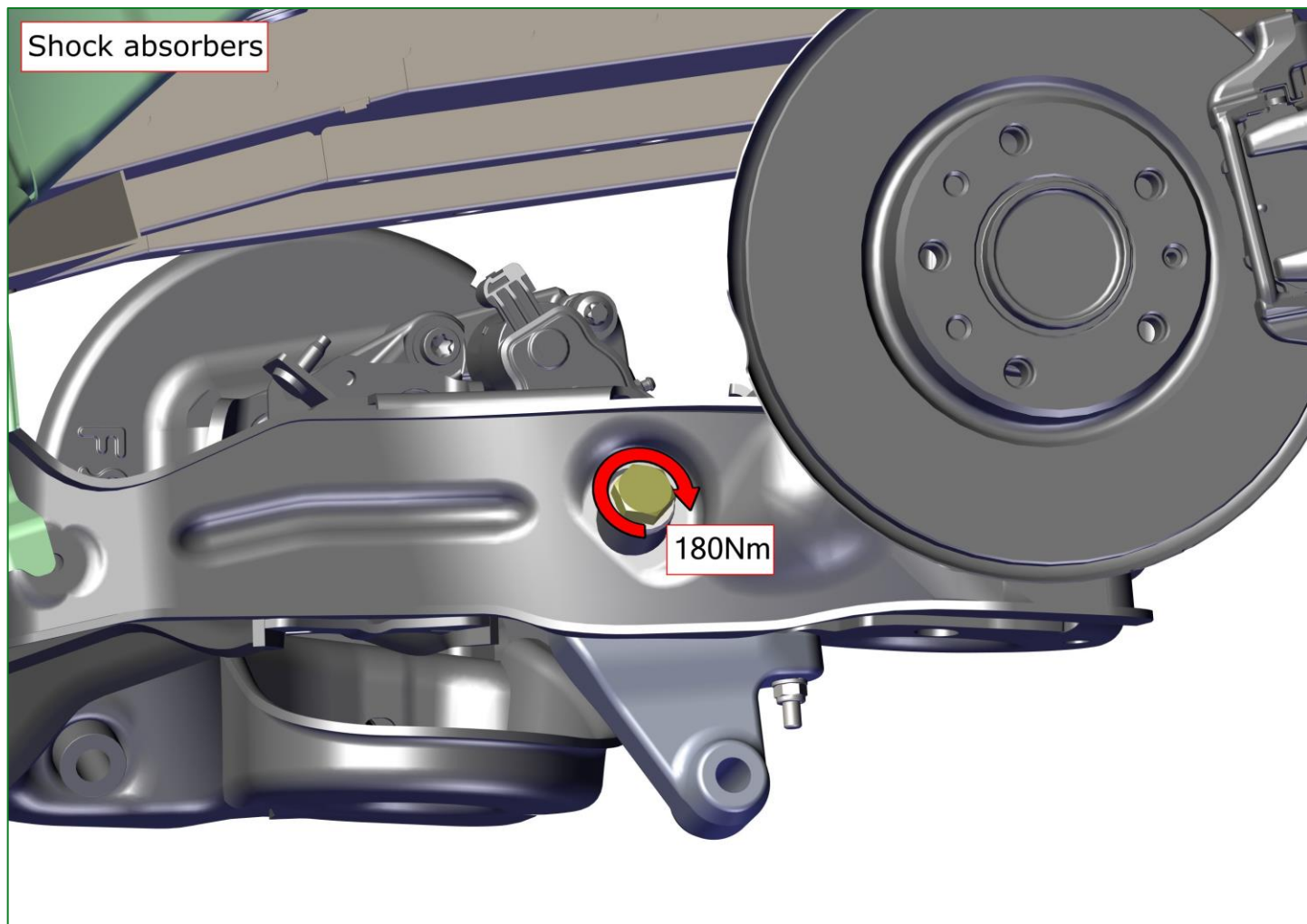
Counter sin the coil spring bracket and insert the CSK head screw

NO.	QTY.	PART	DESCRIPTION
1	1	11360	CSK head screw M8x50 010.9 ISO 10642
2	1	210	Washer M8 ISO 7091
3	1	64	Torque nut M8 class 8 ISO 7041

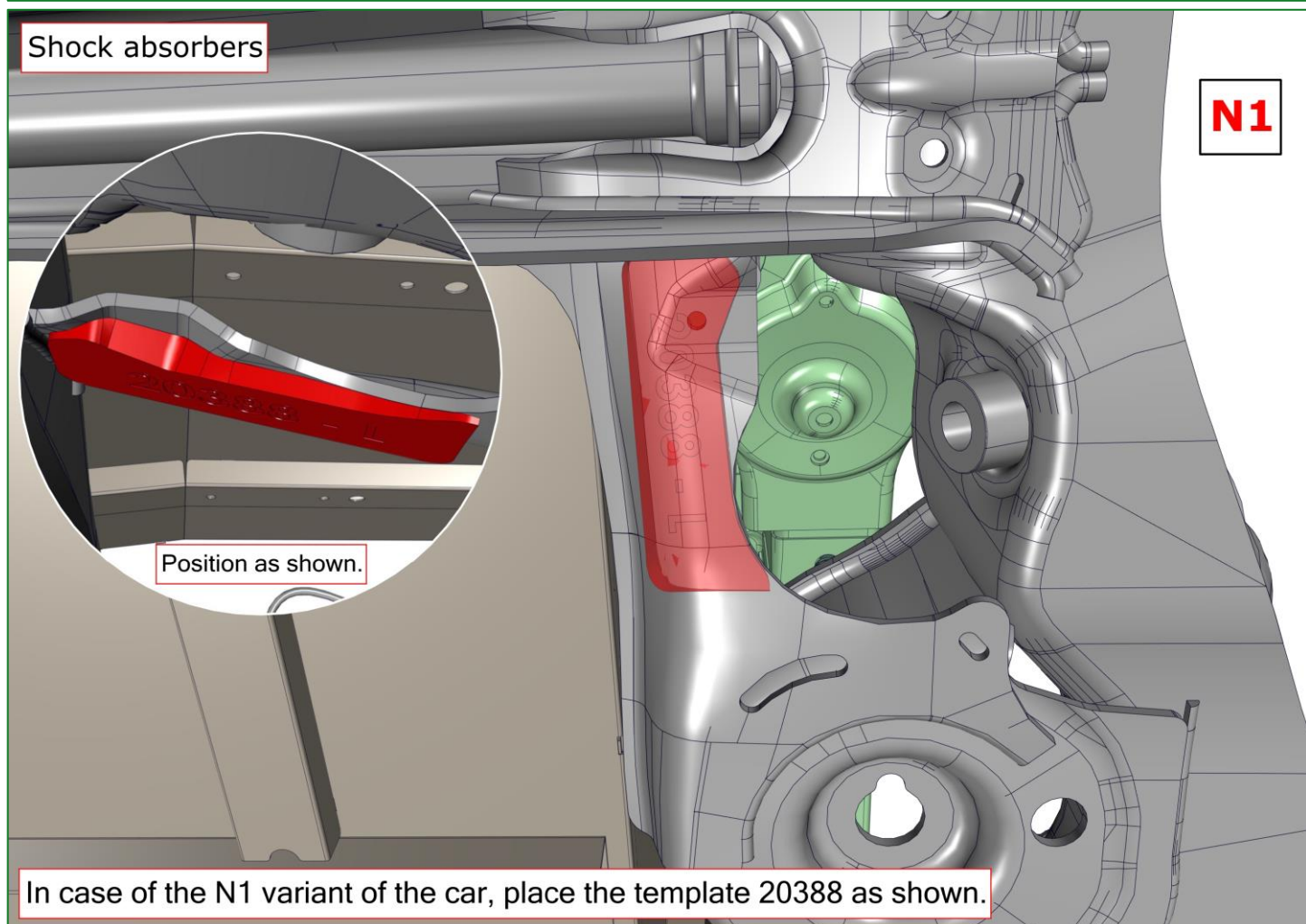
Shock absorbers



Shock absorbers

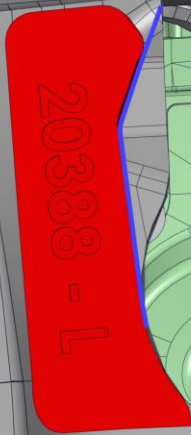


Shock absorbers



Shock absorbers

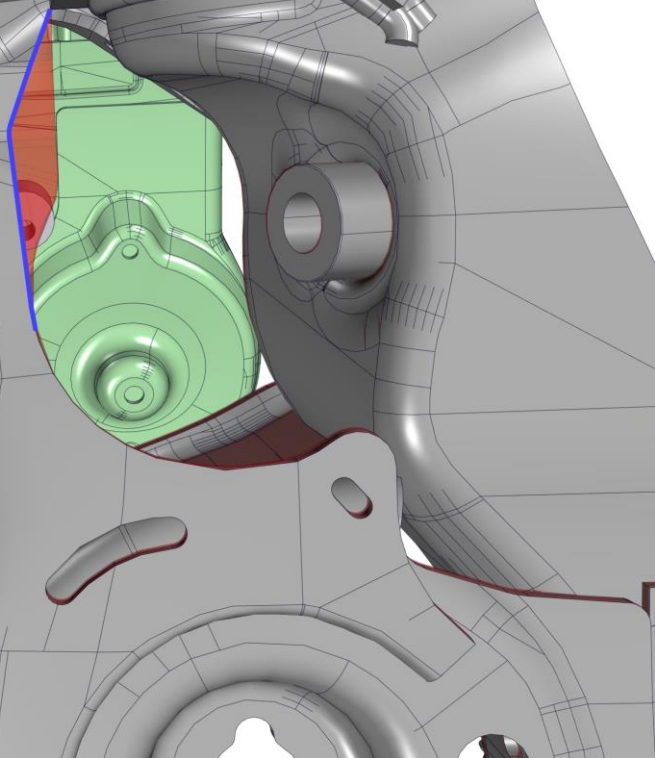
N1



Mark along the template as shown.

Shock absorbers

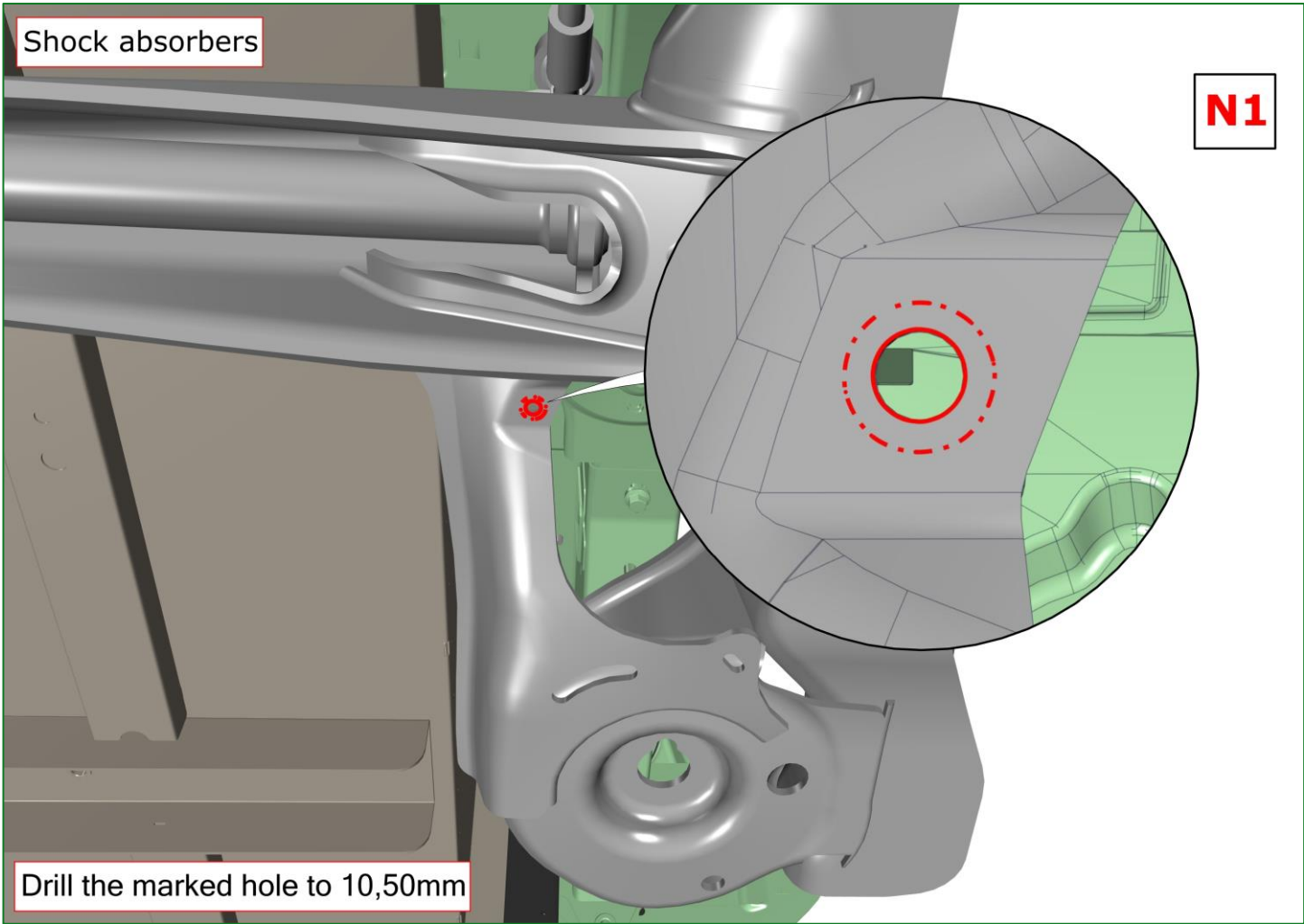
N1



Cut off the marked area.

Shock absorbers

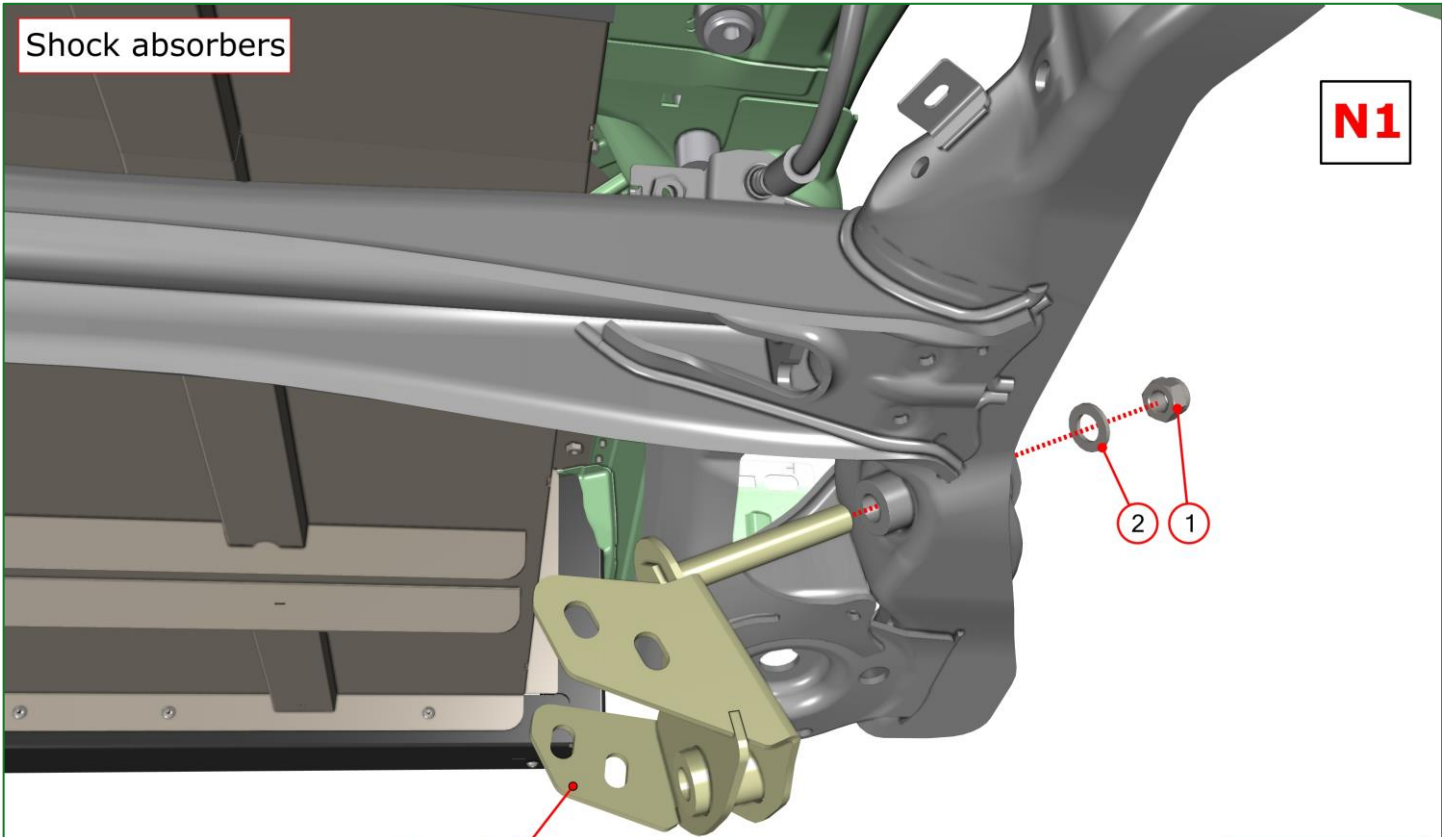
N1



Drill the marked hole to 10,50mm

Shock absorbers

N1



20228

Bag #20384

Mount the bracket as shown.

NO.	QTY.	PART	DESCRIPTION
1	1	15496	Torque nut M16 8.8
2	1	8574	Washer M16 8.8

Shock absorbers

N1

20383

3 2 1

Bag #20384

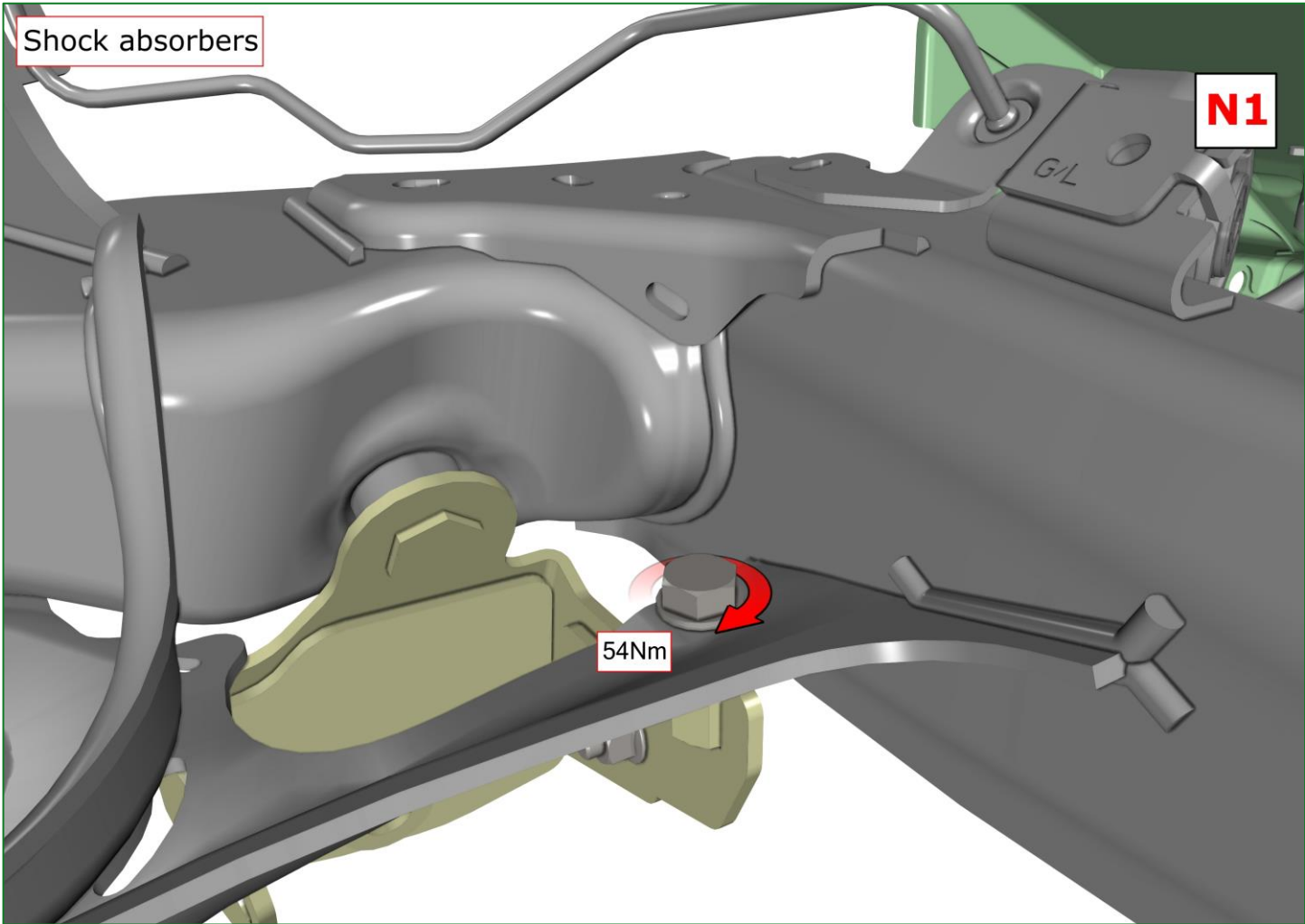
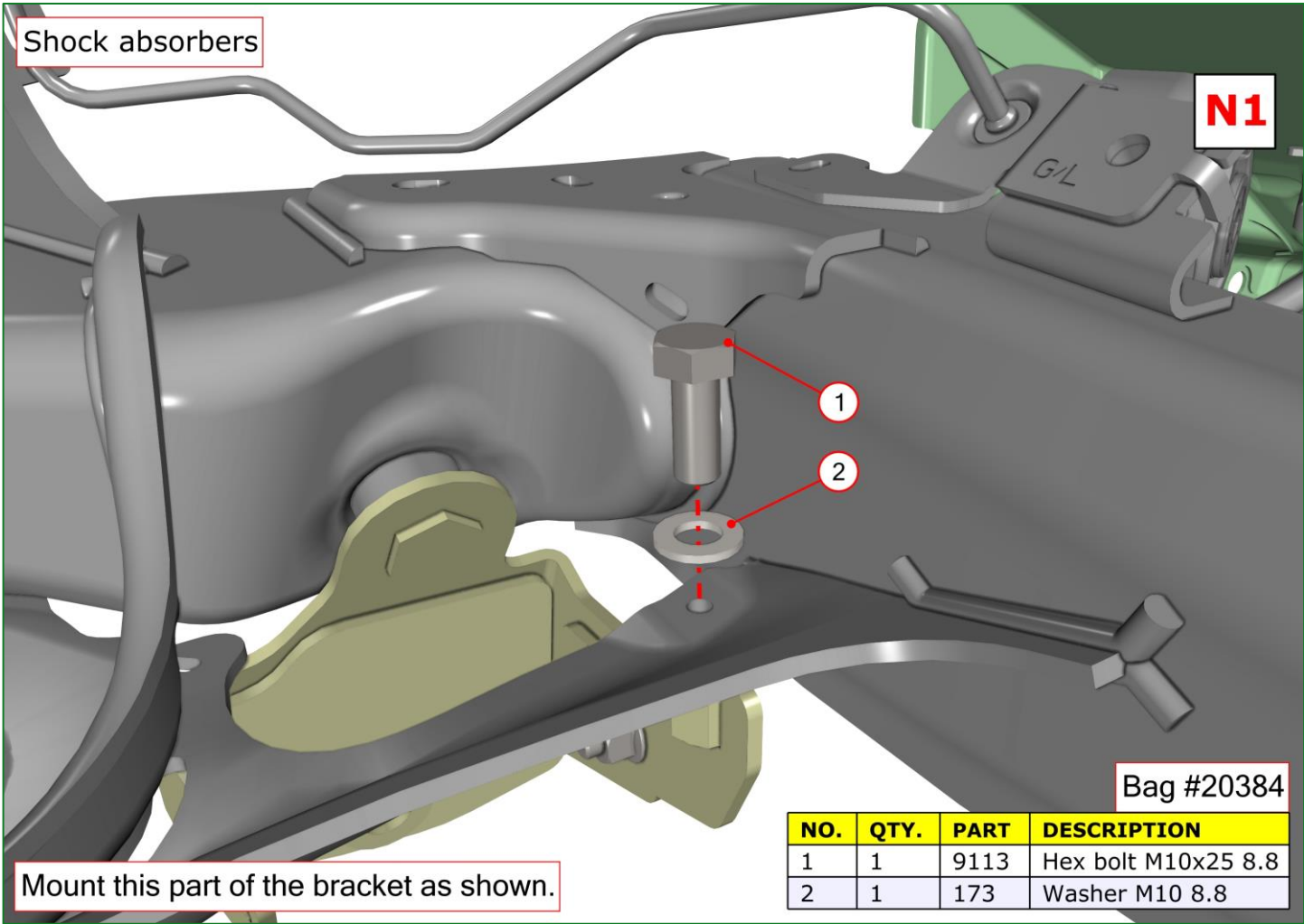
NO.	QTY.	PART	DESCRIPTION
1	2	9113	Hex bolt M10x25 8.8
2	2	173	Washer M10 8.8
3	2	11339	Hex flange nut M10 10.9

Mount this part of the bracket as shown.

Shock absorbers

N1

54Nm





Shock absorbers

**N1**

Mark here.

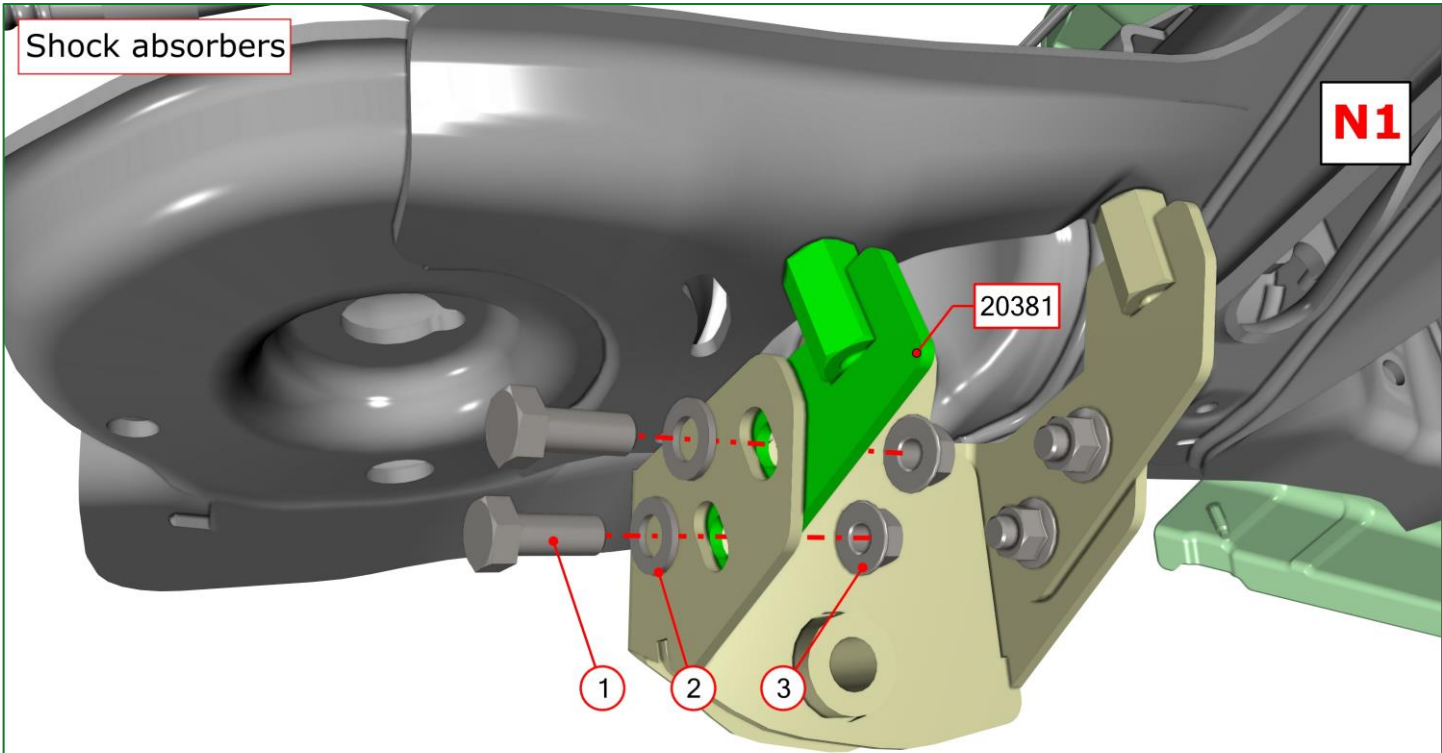
20381

Hold this part of the bracket in place or temporarily mount it to mark the position of the hole that needs to be drilled.

Shock absorbers

**N1**

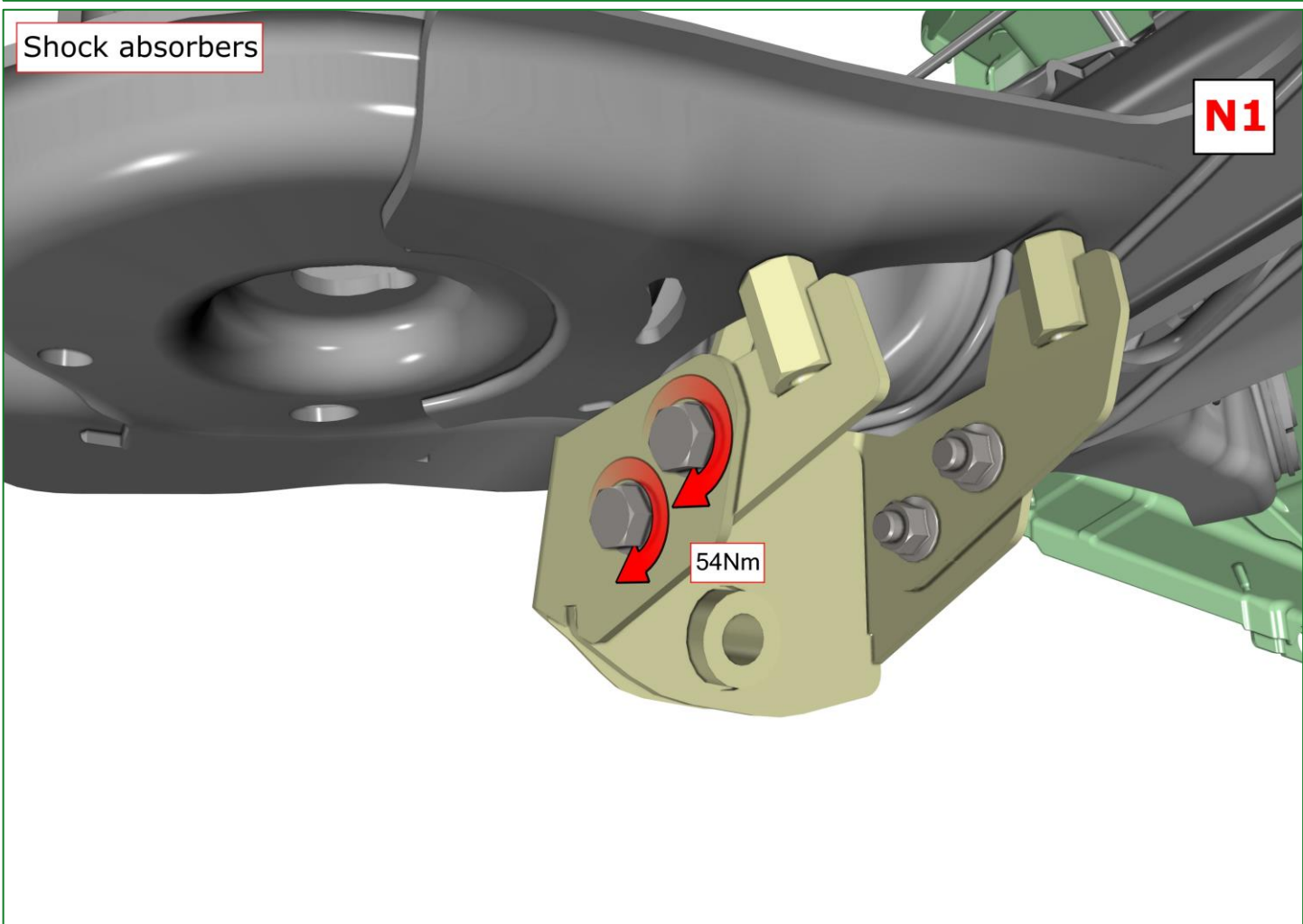
Drill a  $\text{Ø}10,50$  mm hole where marked.



Bag #20384

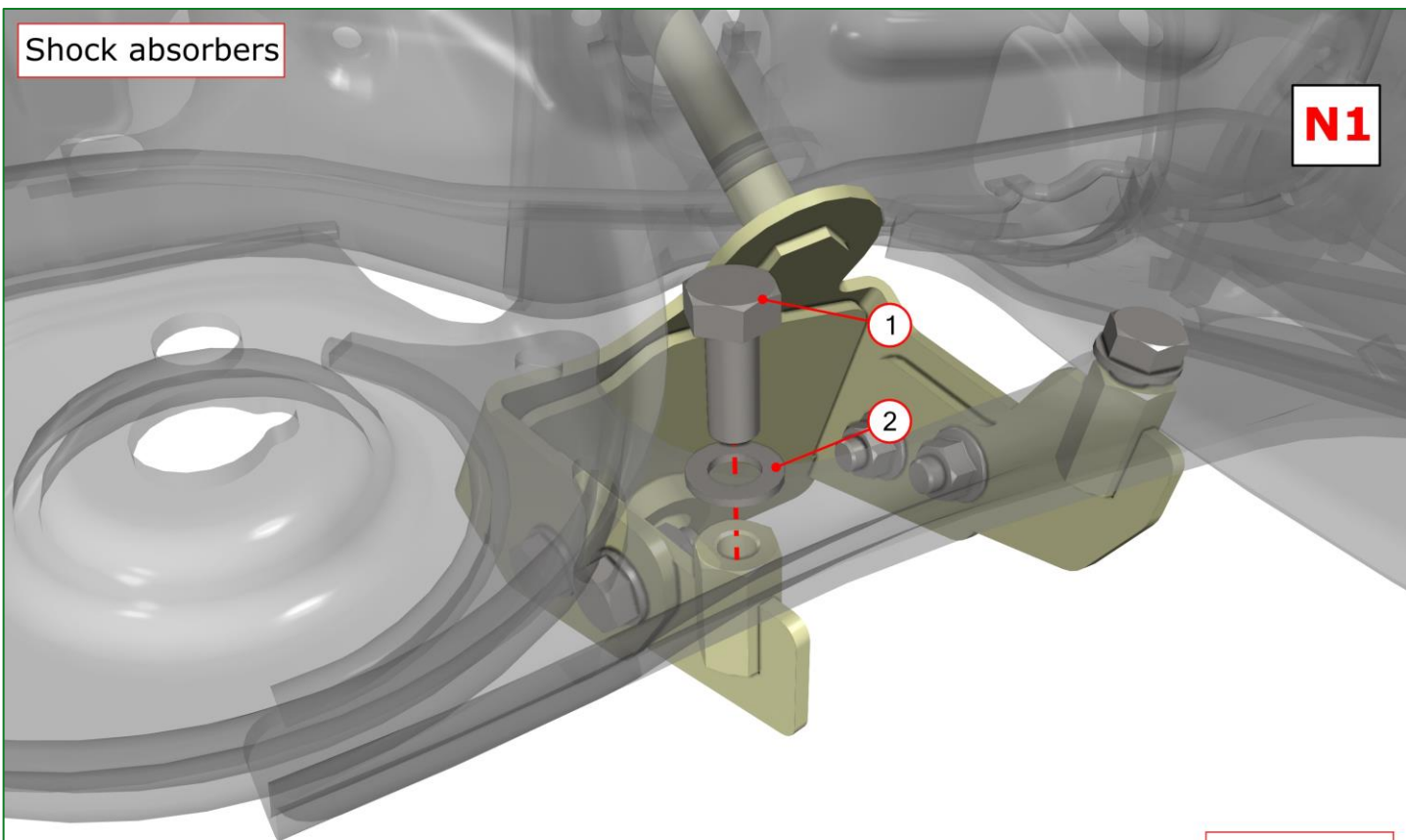
NO.	QTY.	PART	DESCRIPTION
1	2	9113	Hex bolt M10x25 8.8
2	2	173	Washer M10 8.8
3	2	11339	Hex flange nut M10 10.9

Mount this part of the bracket as shown.



Shock absorbers

**N1**



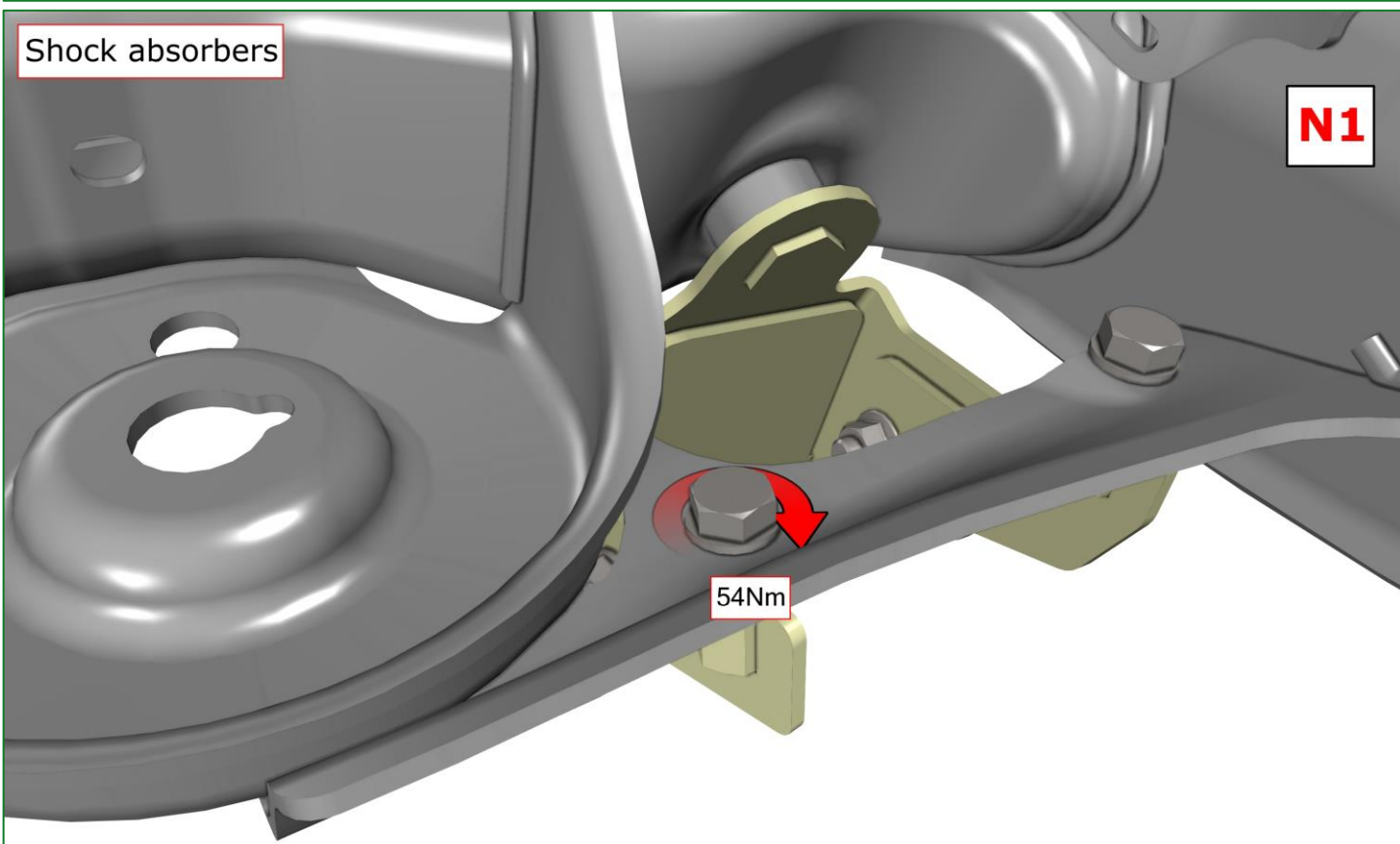
Bag #20384

NO.	QTY.	PART	DESCRIPTION
1	1	9113	Hex bolt M10x25 8.8
2	1	173	Washer M10 8.8

Mount this part of the bracket as shown.

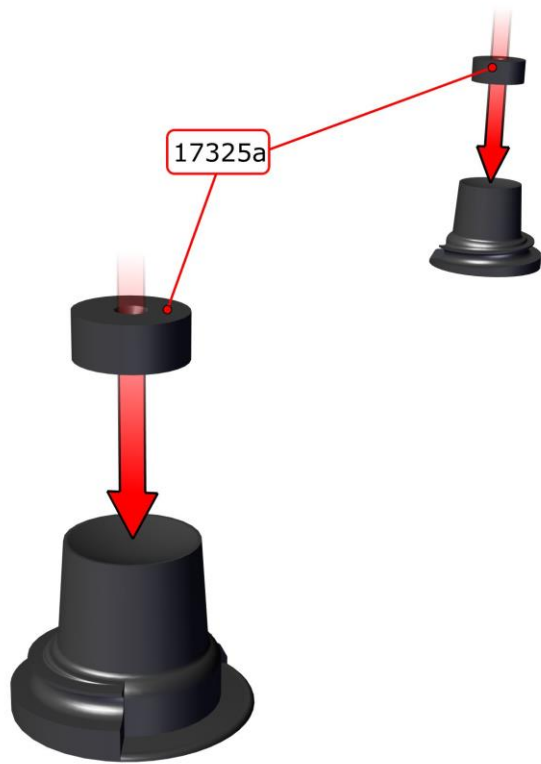
Shock absorbers

**N1**



Mount this part of the bracket as shown.

Rear suspension



Take the lower bump stops, put the travel limiters on top and drill Ø8mm through the bumpstops

Rear suspension



Bag #18188

NO.	QTY.	PART	DESCRIPTION
1	2	1246	Washer large M8 8.8
2	2	19169	Countersunk head M8x80 10.9
3	2	64	Torque nut M8 8.8

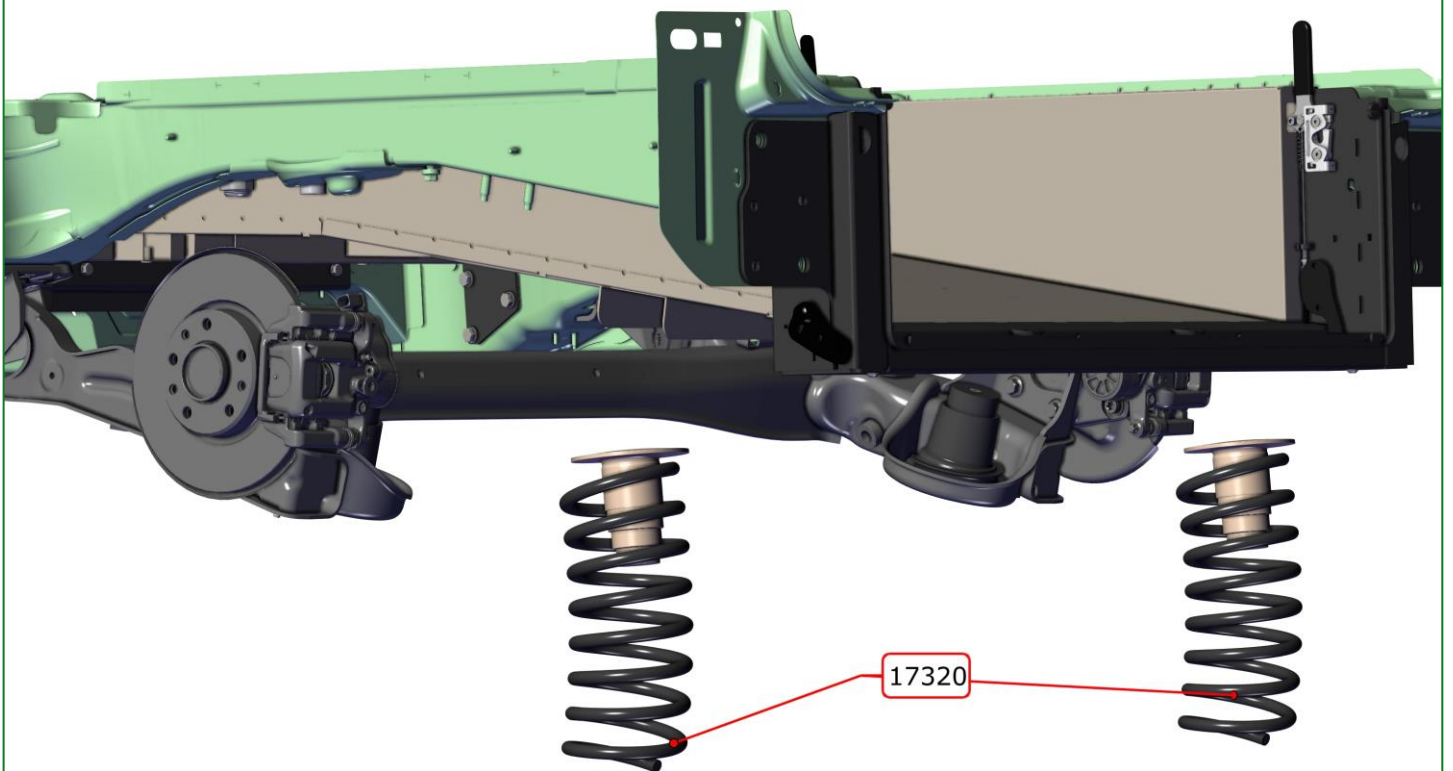
Fasten as shown

Rear suspension



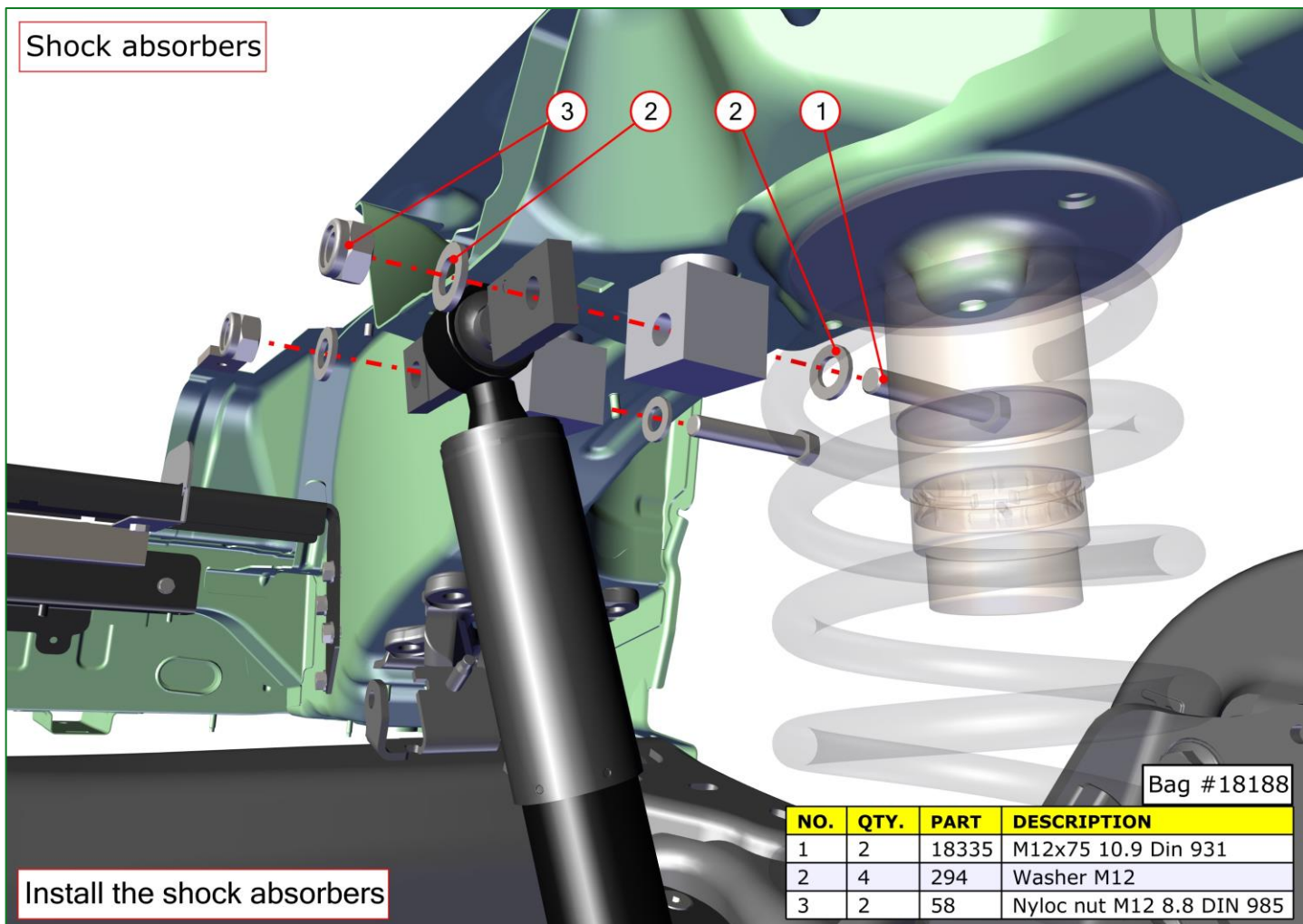
Fasten as shown

Shock absorbers



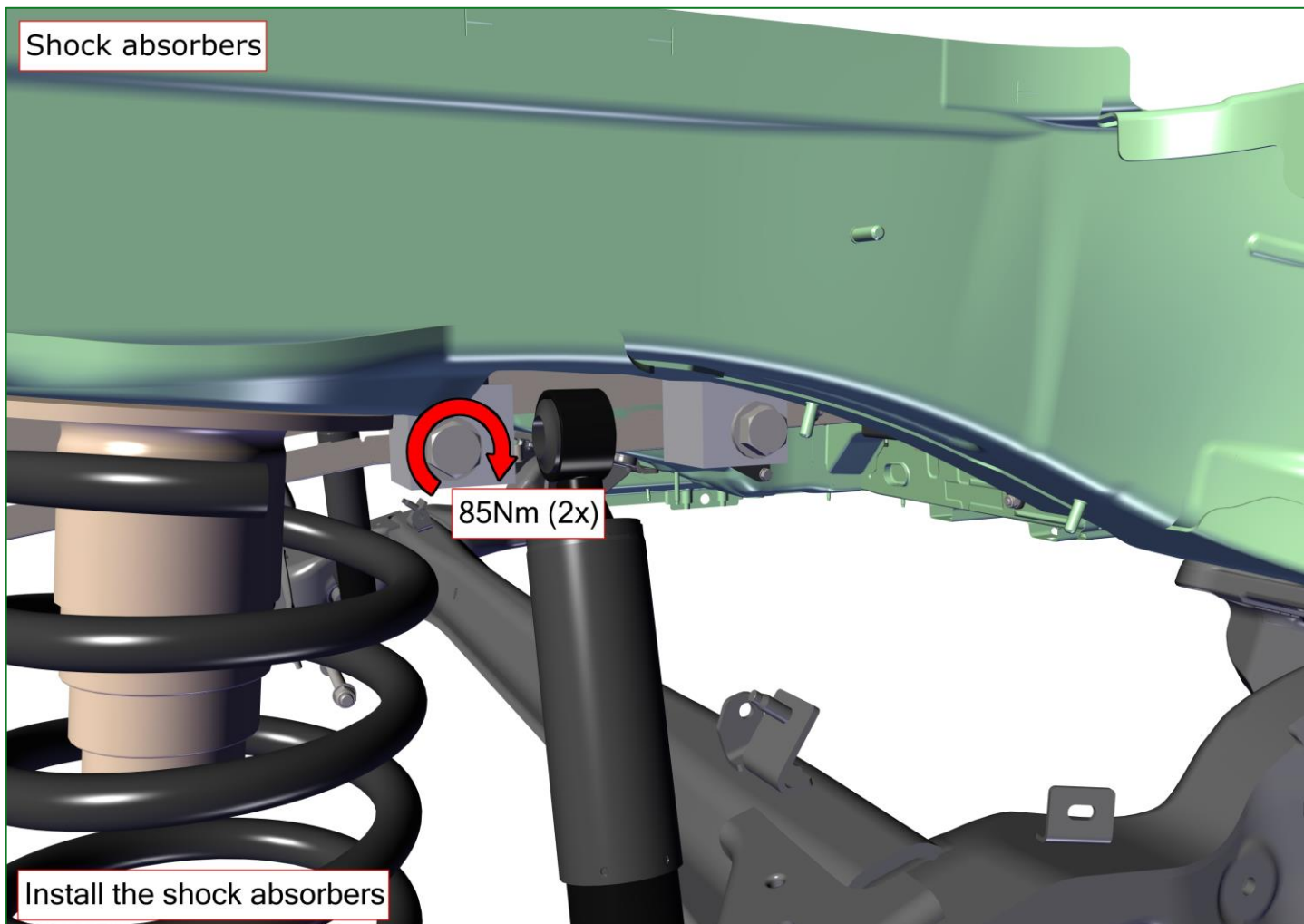
Install the upper bump stops and the new coil springs

Shock absorbers



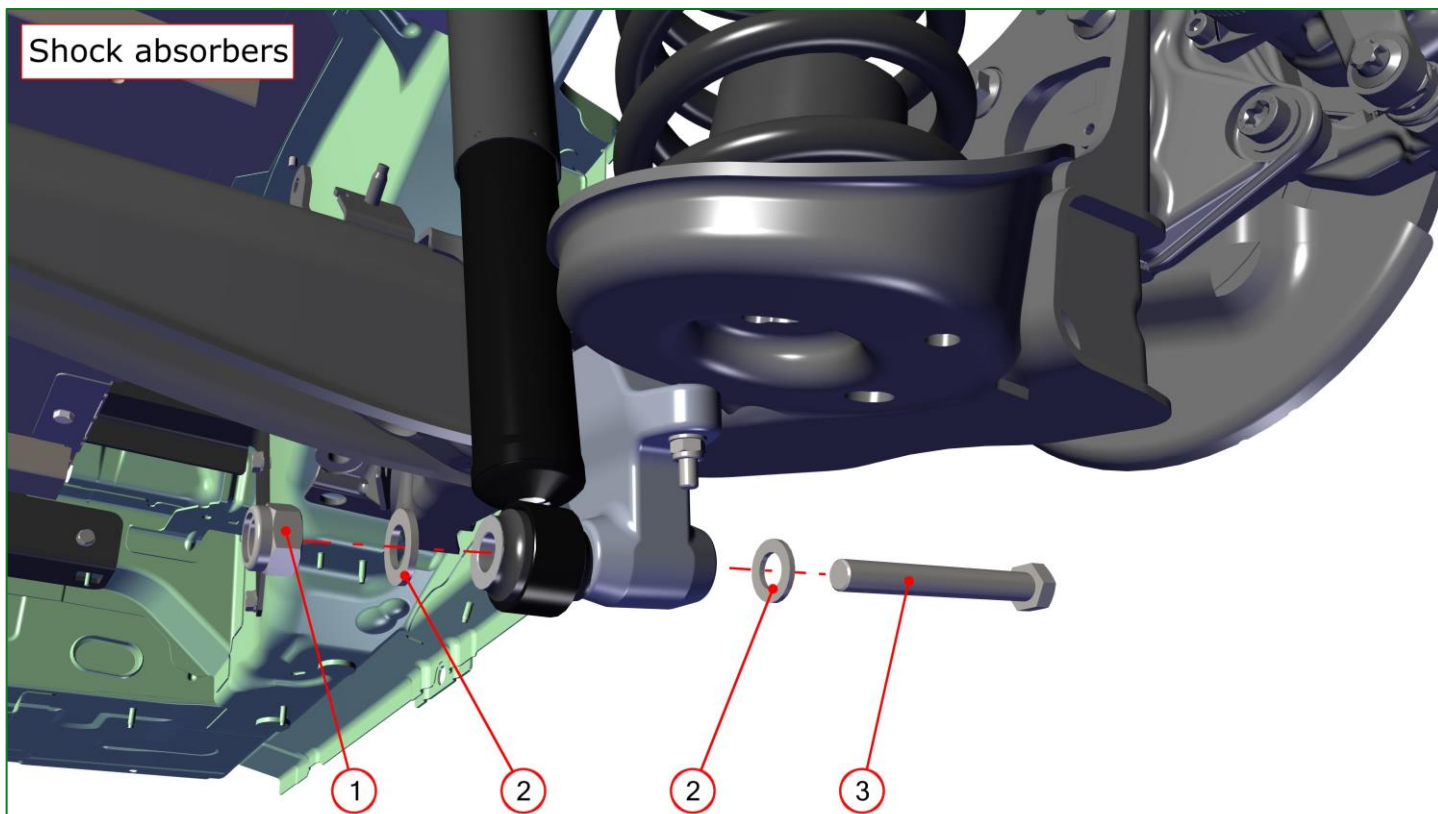
Install the shock absorbers

Shock absorbers



Install the shock absorbers

Shock absorbers

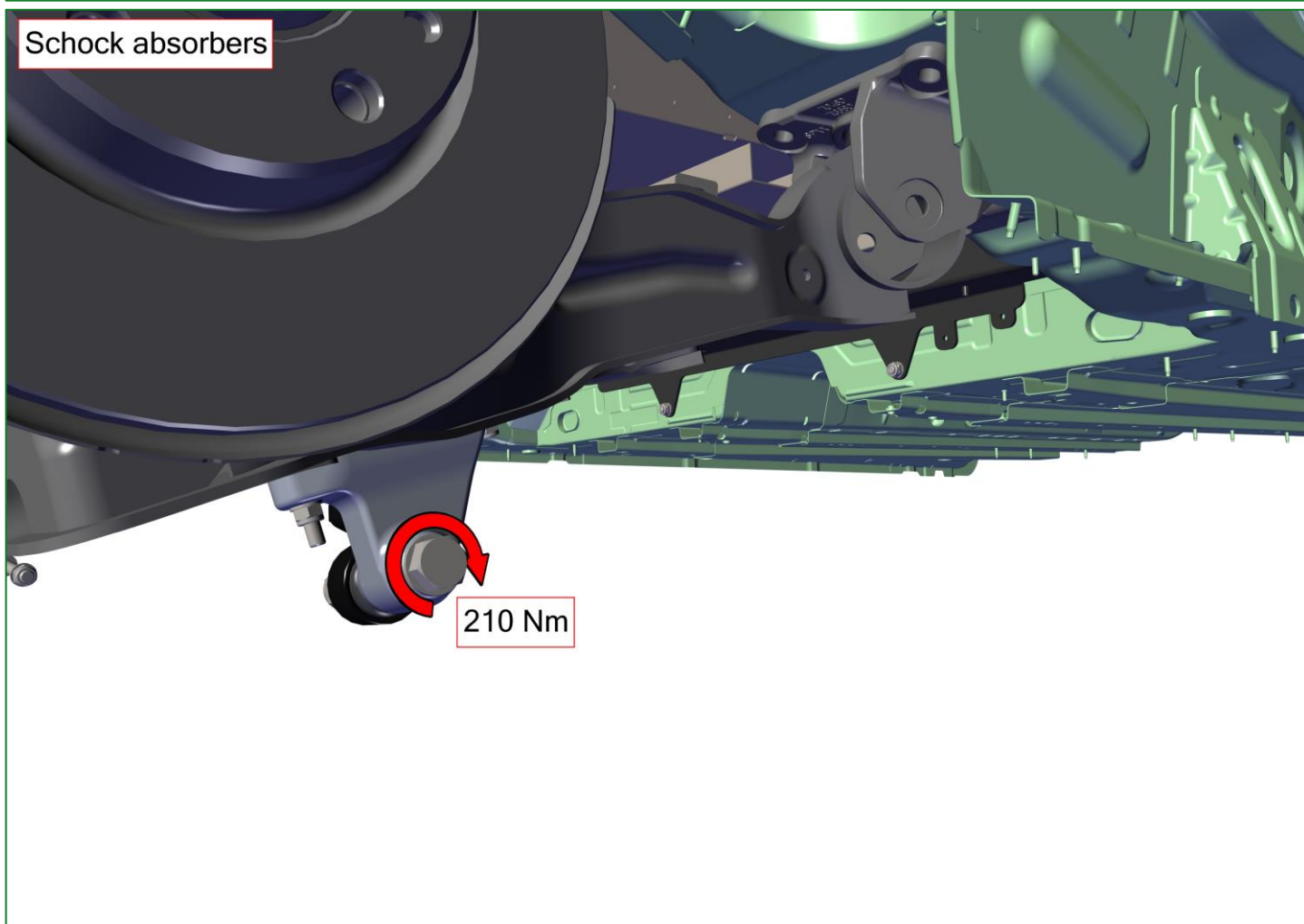


Bag #18188

NO.	QTY.	PART	DESCRIPTION
1	1	15439	Torque nut M16 class 8 ISO 7041
2	2	8574	Washer M16 ISO 7091
3	1	17592	M16x130 8.8 ISO 4016

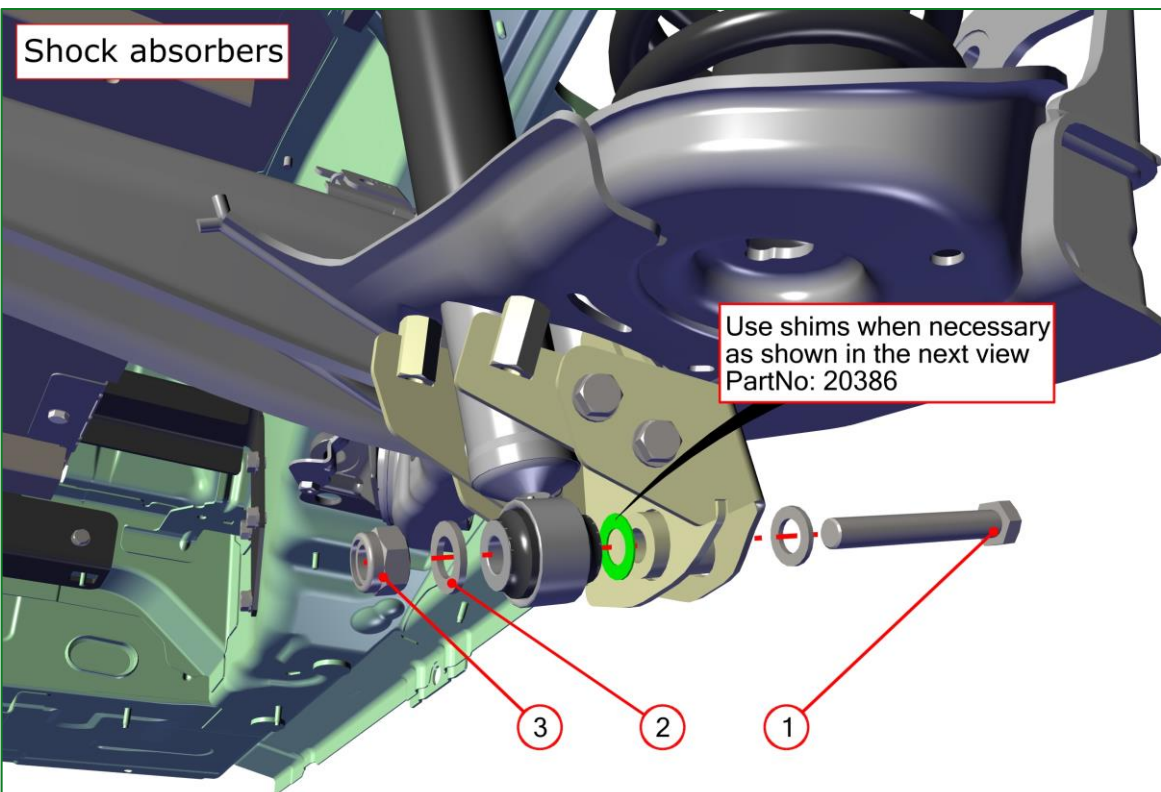
Install the shock absorbers

Schock absorbers



Shock absorbers

N1



Use shims when necessary as shown in the next view PartNo: 20386

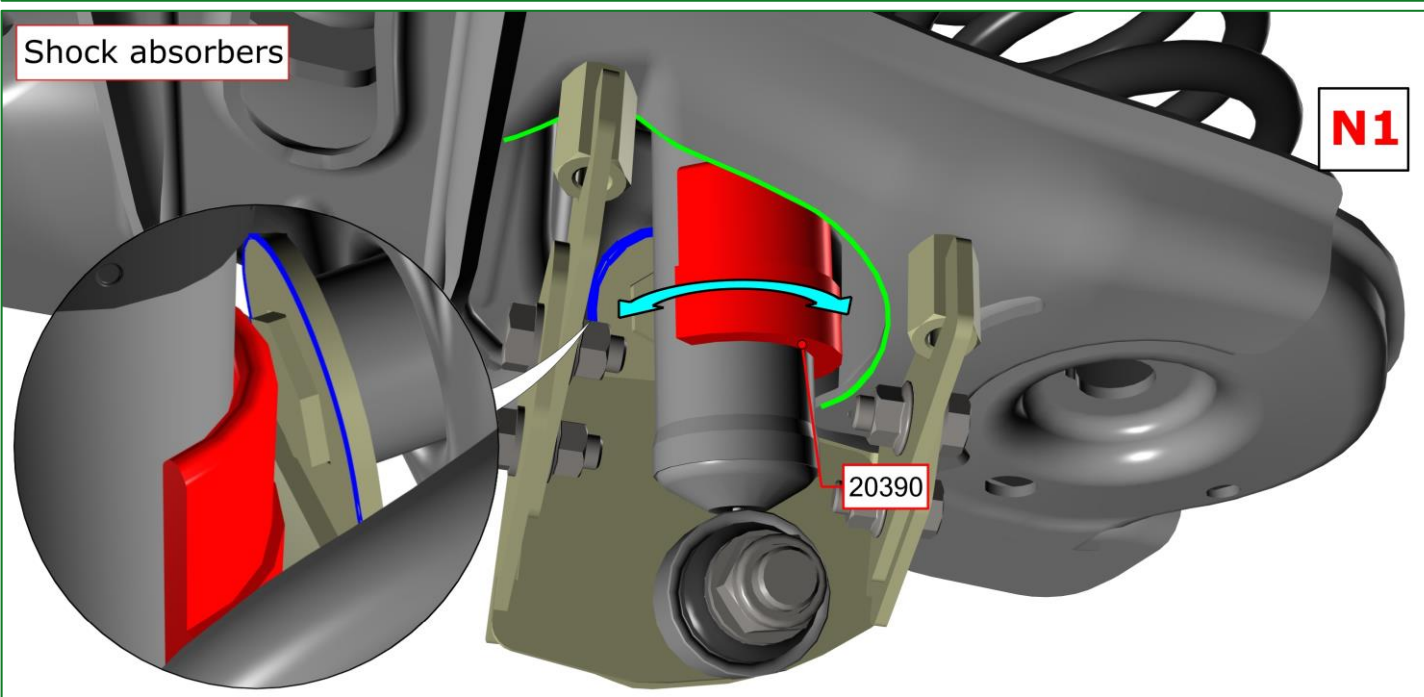
Bag #20384

NO.	QTY.	PART	DESCRIPTION
1	1	15496	Hex bolt M16x120 8.8
2	2	8574	Washer M16 8.8
3	1	15493	Torque nut M16 8.8

Install the shock absorbers

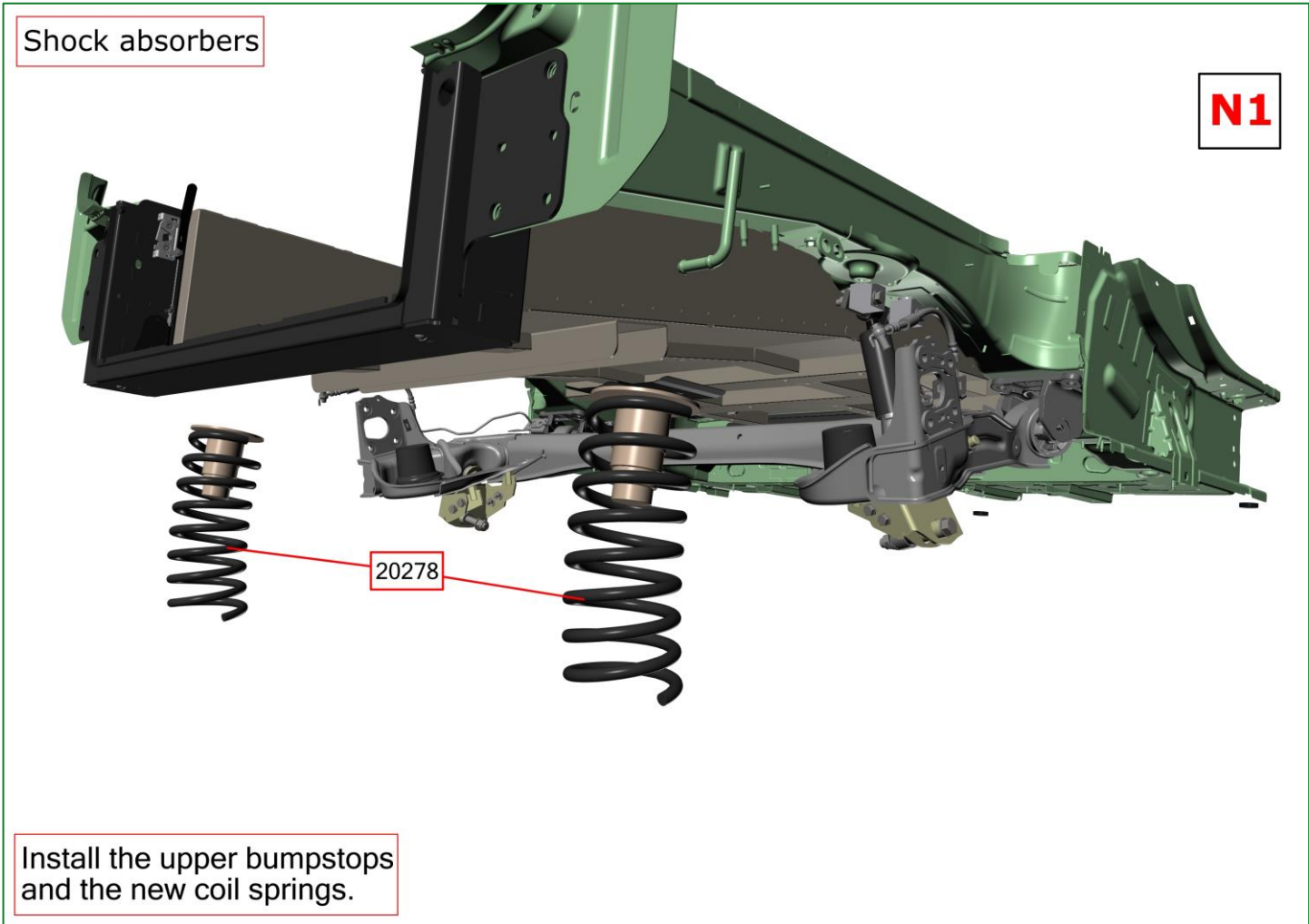
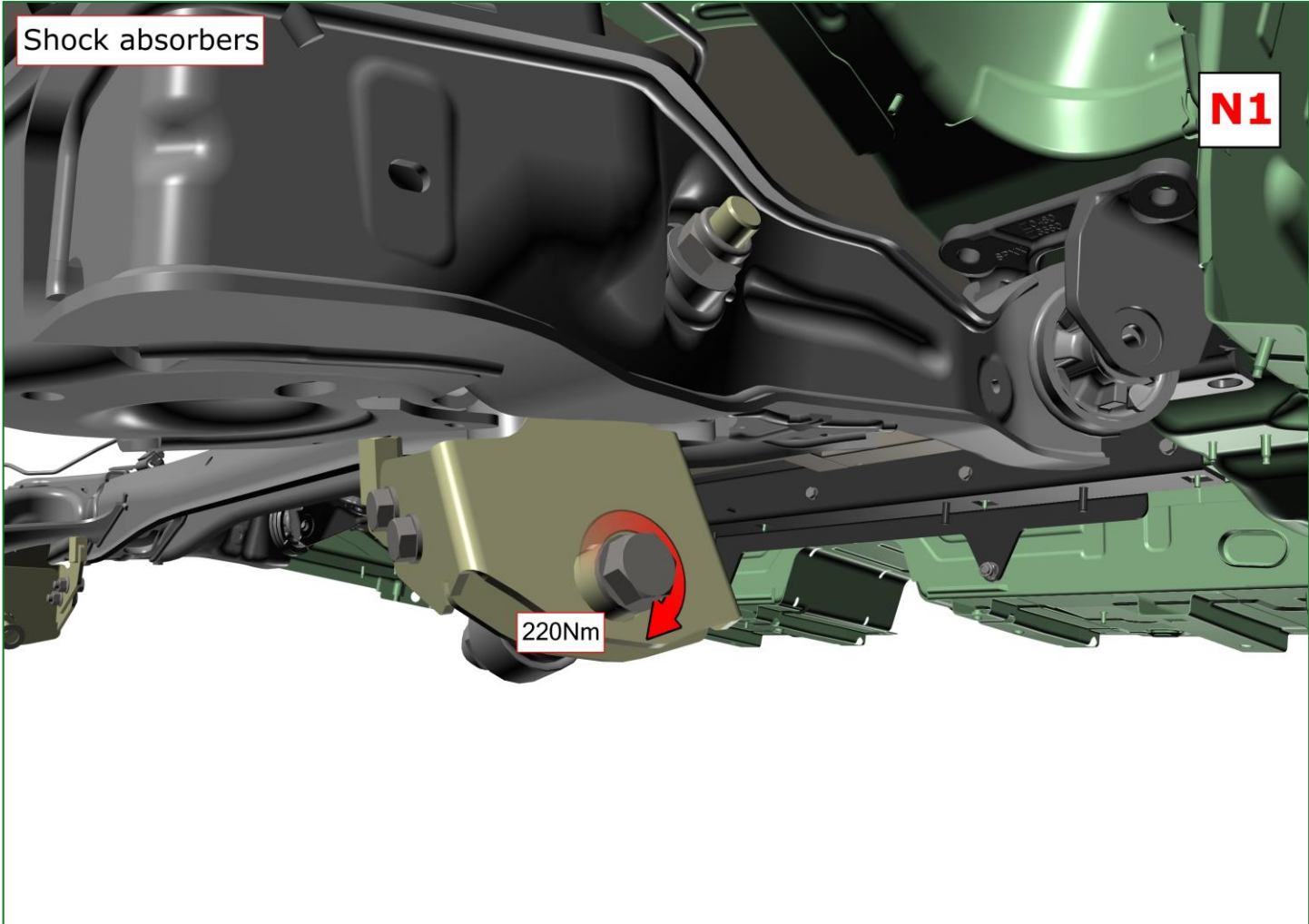
Shock absorbers

N1

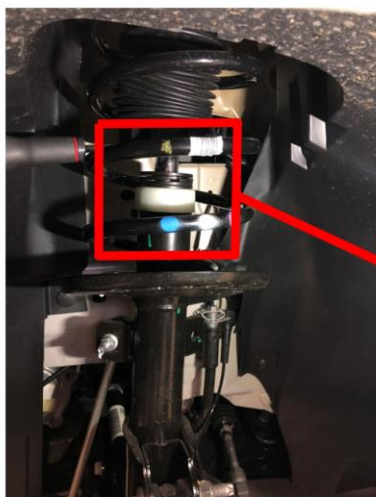


Be sure the shock absorber will NOT touch the marked edges. Test this by placing the template as shown and rotate fully round the shock absorber. The template should be able to make a full circle without touching the edges. If the thin side of the template does NOT fit between the shock absorber and the edges of the opening, use the shims mentioned in the previous view to adjust the shock absorbers position. The amount of shims necessary to achieve the correct position is a variable.





### Front suspension



17340



Place 4 spacers on each of the McPherson front struts as shown.

### How to seal



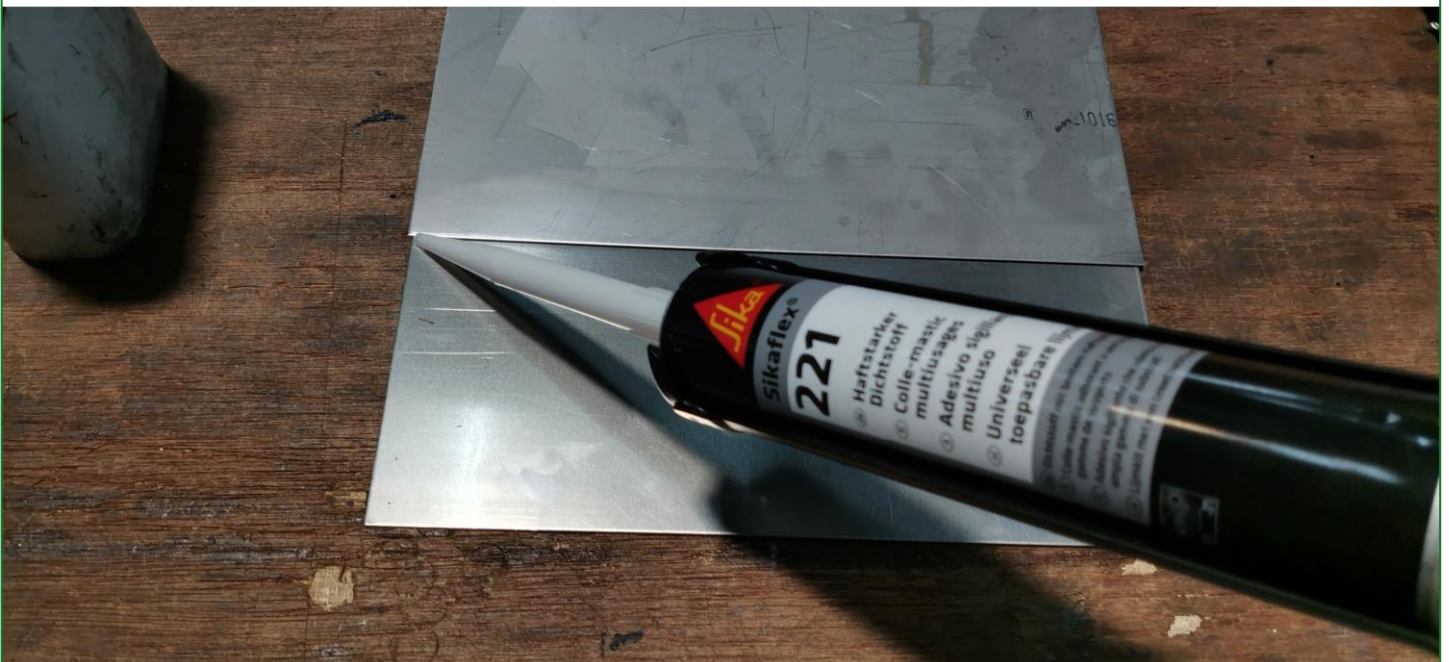
When applying sealant, first locate the edge or spot that needs sealant. Edges where 2 or more plates overlap each other or form a corner are an example. Also any spot where even a slight opening/gap from the outside to the inside of the vehicle or a closed beam is located.

How to seal



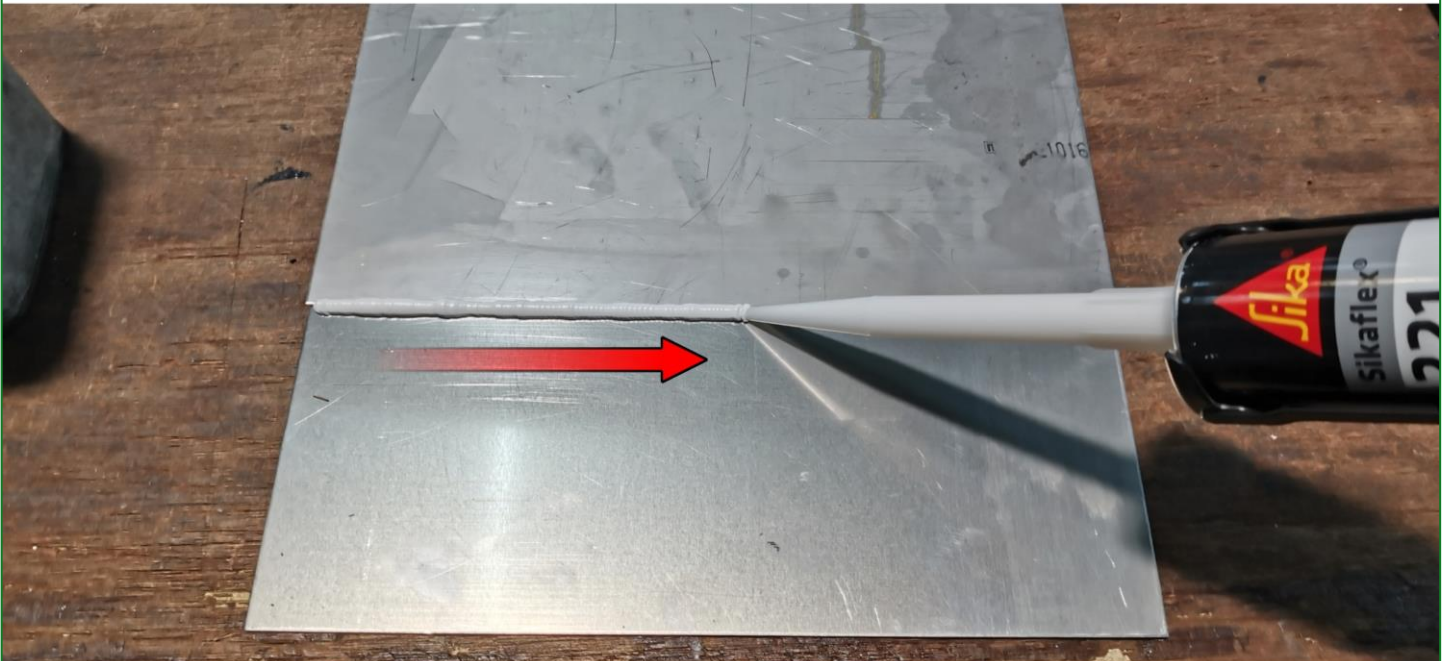
Degrease the surfaces that the sealant will be applied to.

How to seal



Position the sealant gun at the start of the edge.

## How to seal



With a smooth and controlled motion, move the sealant gun along the edge to apply the sealant. Use the trigger with a controlled matter to create an even line of sealant.

## How to seal



When done properly, the line of sealant should look like this. **BEWARE**, this is not the final step to properly seal.

## How to seal



To properly seal, the sealant must be spread out evenly by using a sealant bush.

## How to seal



Some people might prefer to cut the brush to a short size, this allows for more precise usage. This is not mandatory.

How to seal



Some people might prefer to cut the brush to a short size, this allows for more precise usage. This is not mandatory.

How to seal



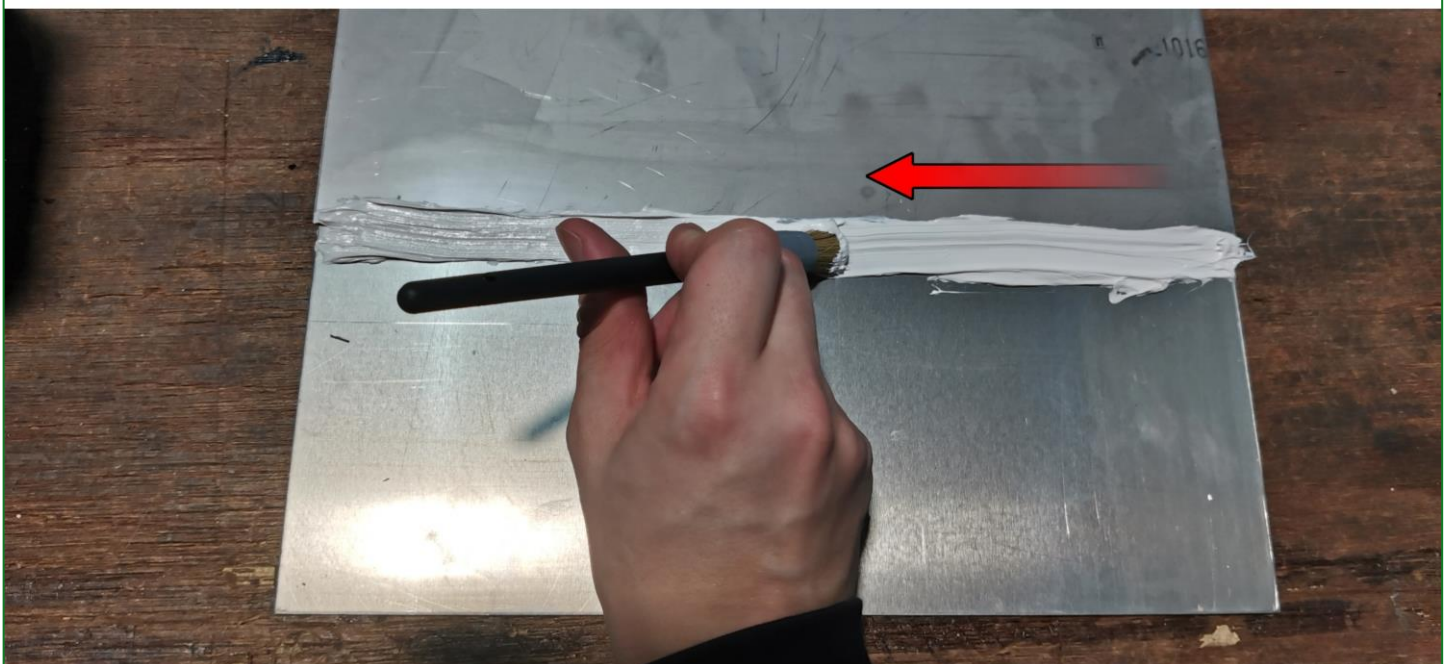
Start spreading the sealant with the brush. Start at the beginning of the sealant line.

How to seal



First use the brush in one direction.

How to seal



When finished in direction one, use the brush back in the other direction. This way the sealant will spread evenly and its use will be optimized.

## How to seal



Be sure to fully cover the edge/gap with sealant using the brush. If ALL edges and gaps have been covered, there should be no way possible for water to enter the vehicle where it could cause corrosion. Only then is has the sealant been applied properly.

## How to seal

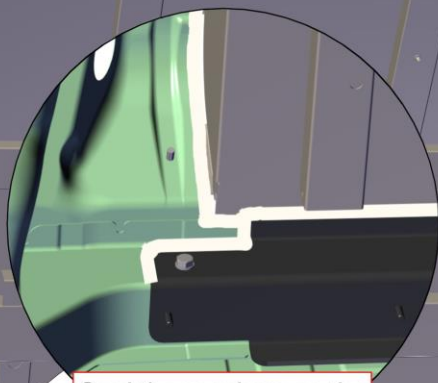


After sealing, wipe the sealant off the brush and place the brush in a cup with turpentine to get the sealant out of the brush.



Sealant

If the vehicle is equipped with a 2nd row seat, seal around the bracket. If not, seal straight through.



Seal these edges on the front beam as shown.

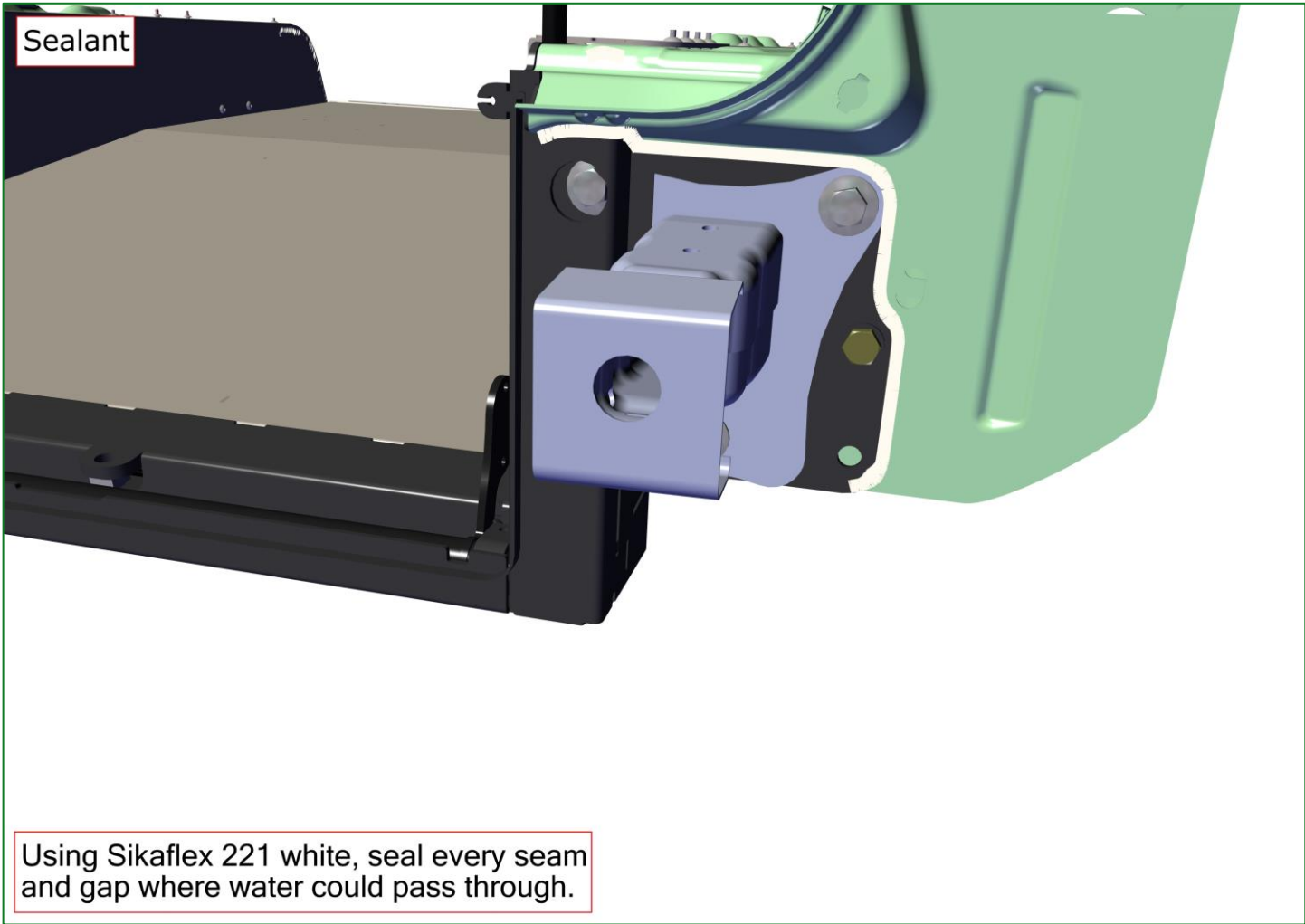
Using Sikaflex 221 white, seal every seam and gap where water could pass through.

Sealant

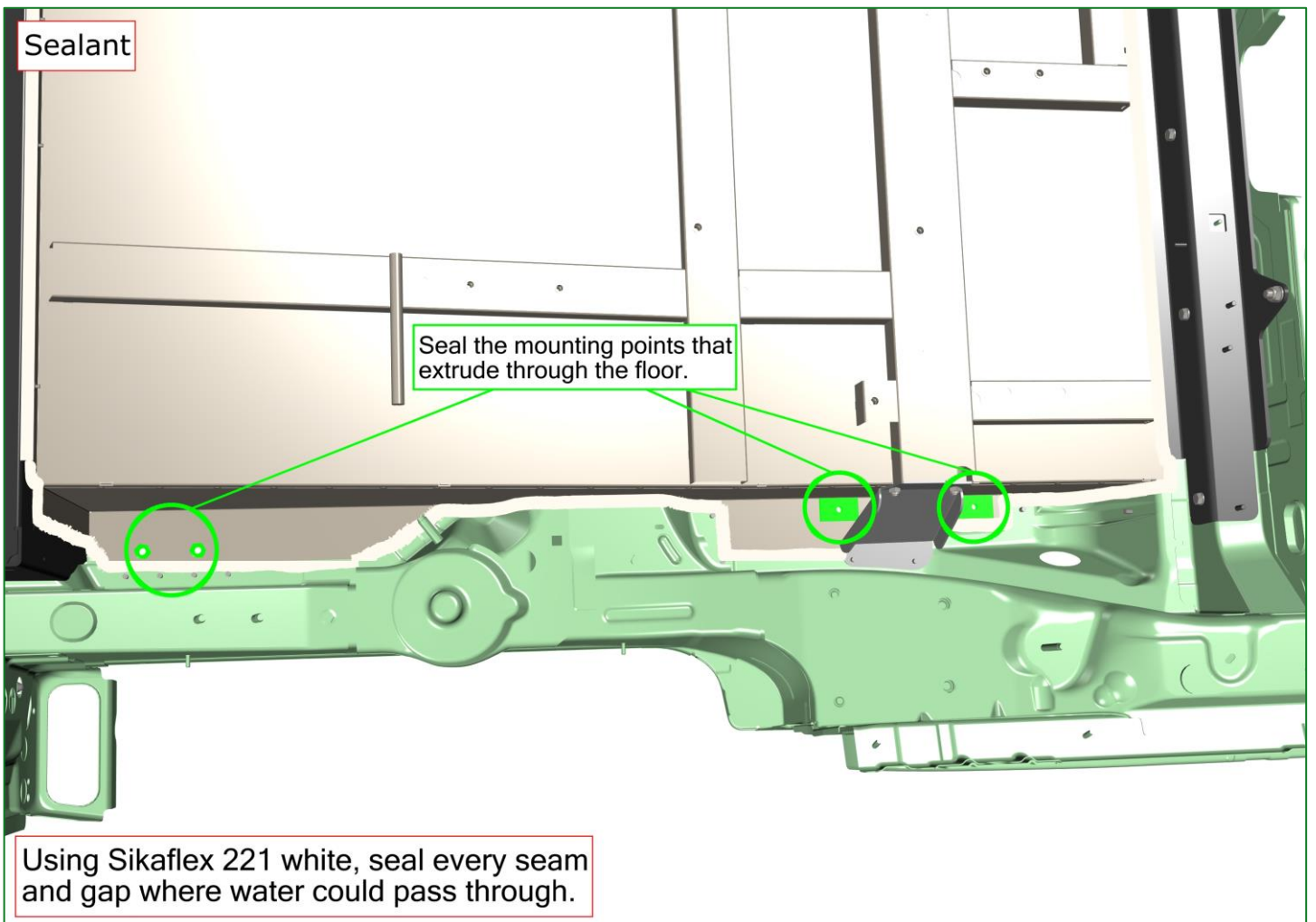
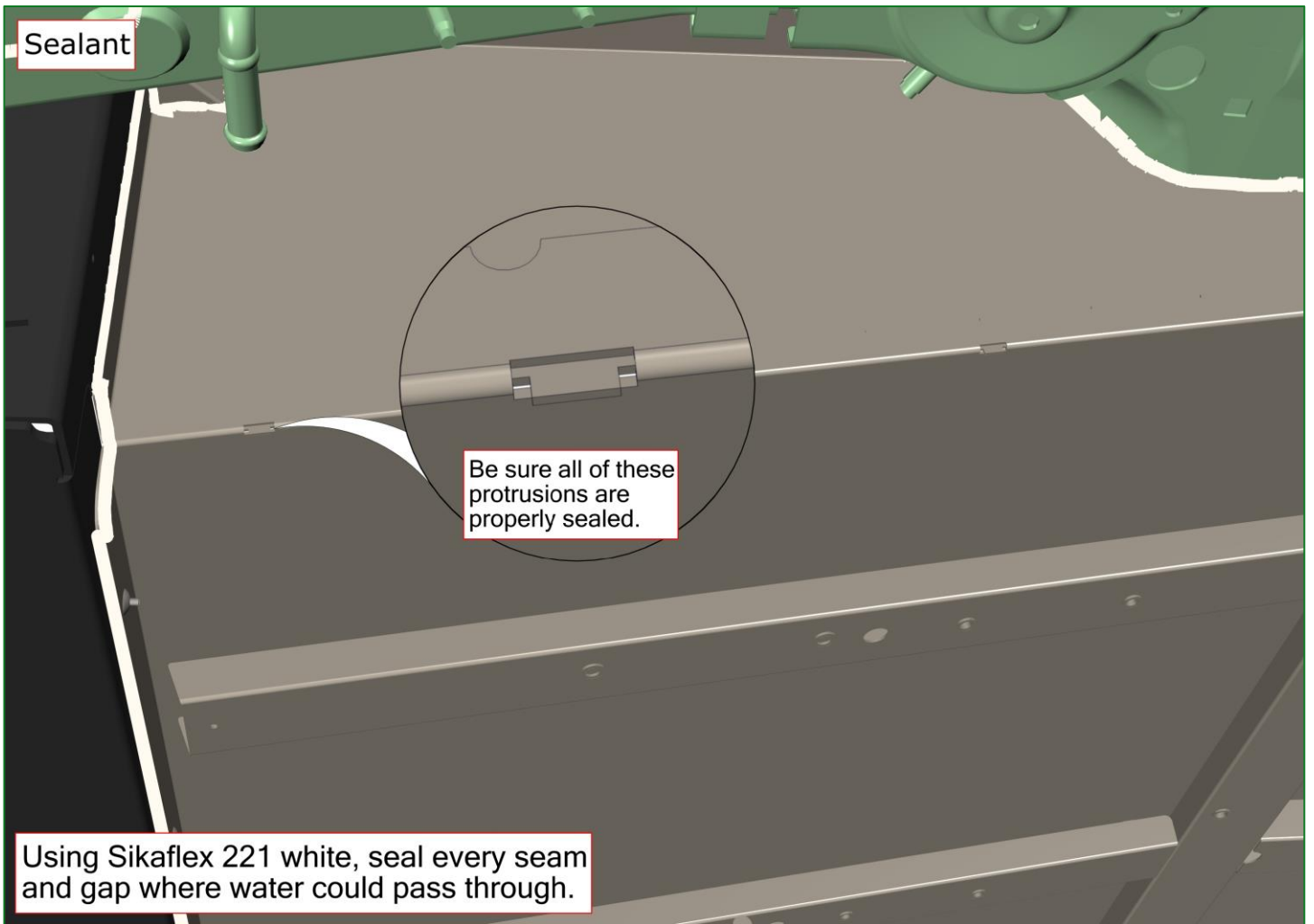
Using Sikaflex 221 white, seal every seam and gap where water could pass through.

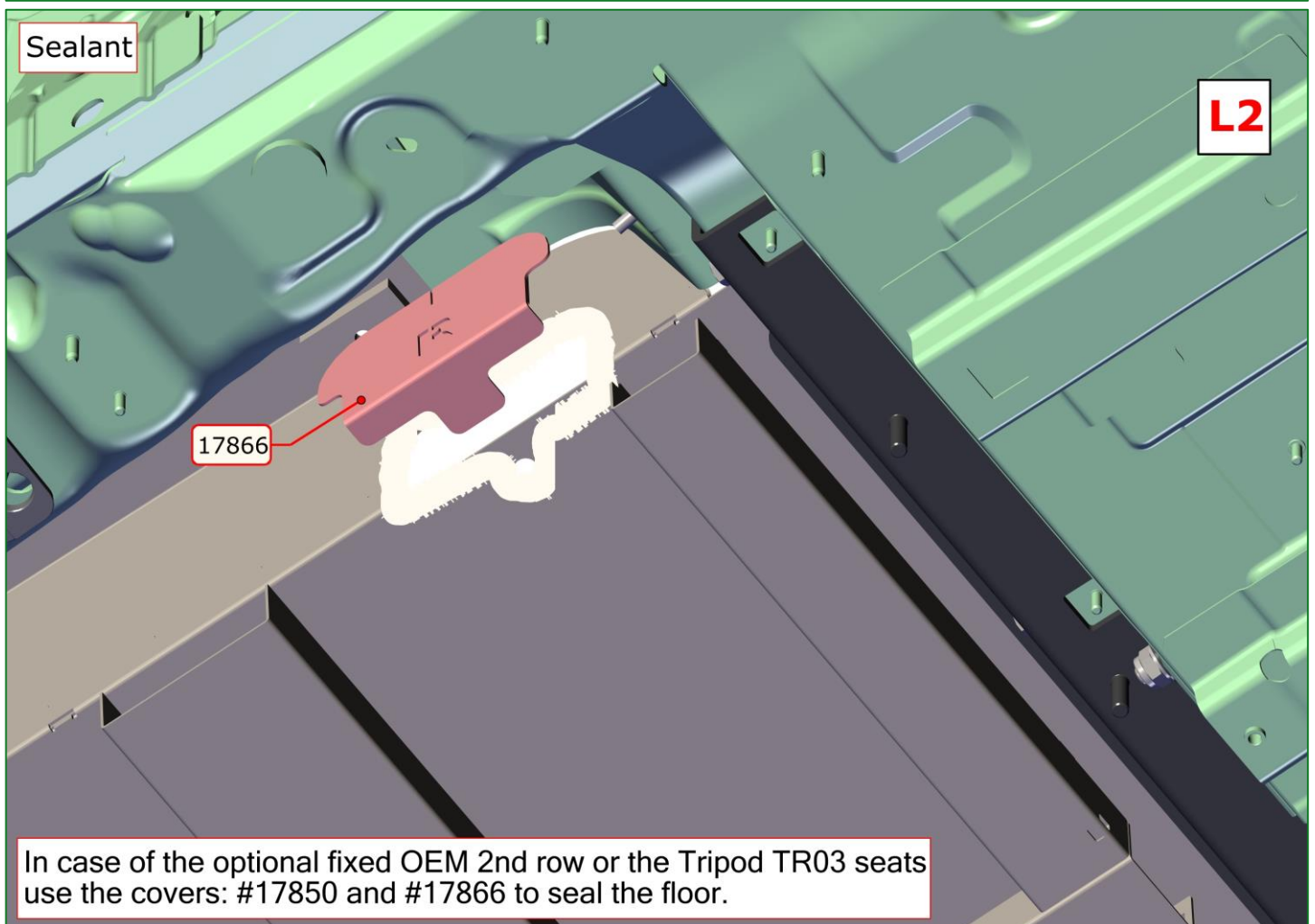
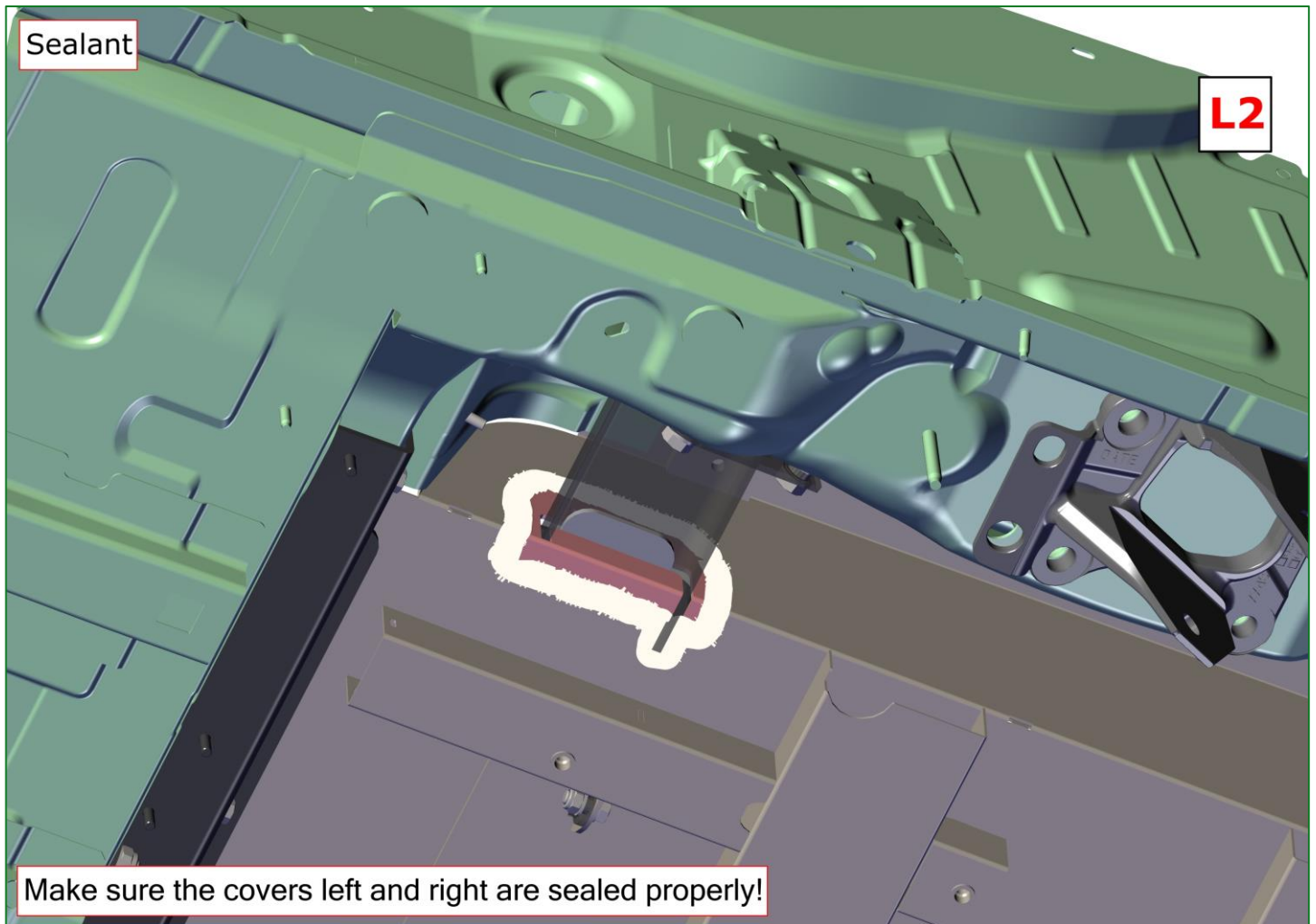


Using Sikaflex 221 white, seal every seam and gap where water could pass through.



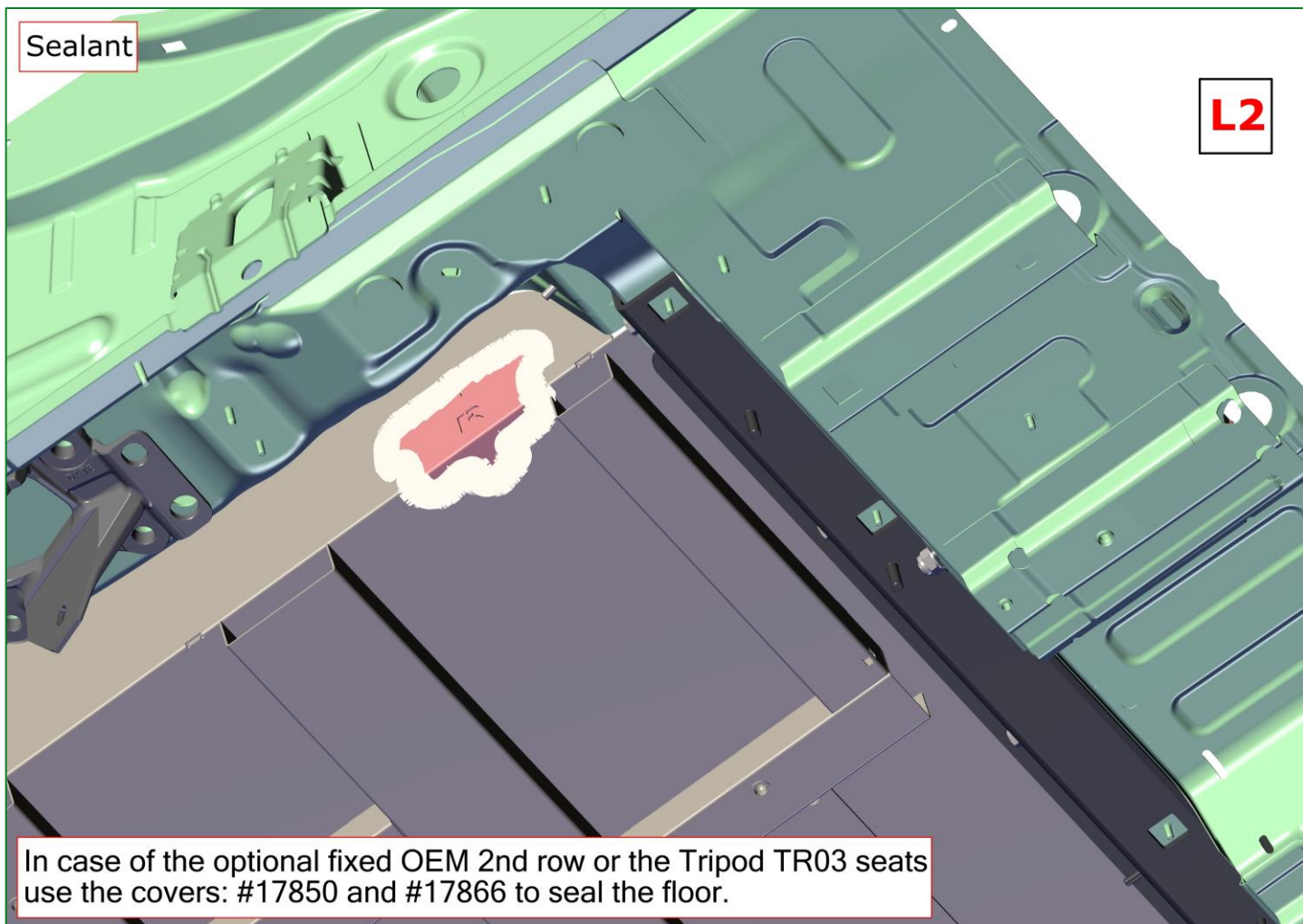
Using Sikaflex 221 white, seal every seam and gap where water could pass through.





Sealant

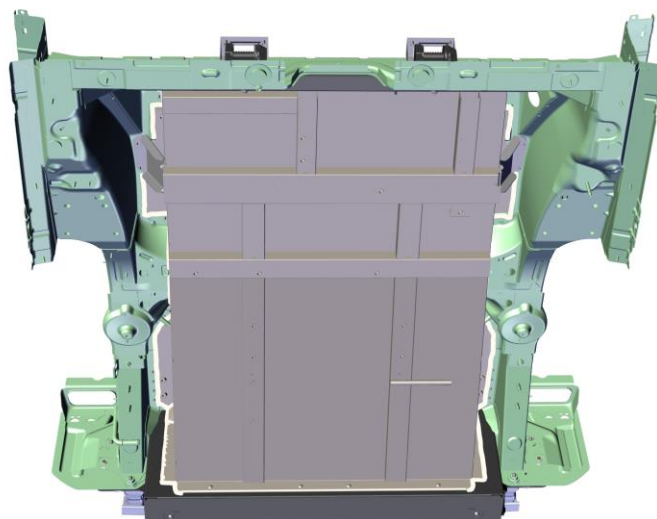
L2



In case of the optional fixed OEM 2nd row or the Tripod TR03 seats use the covers: #17850 and #17866 to seal the floor.

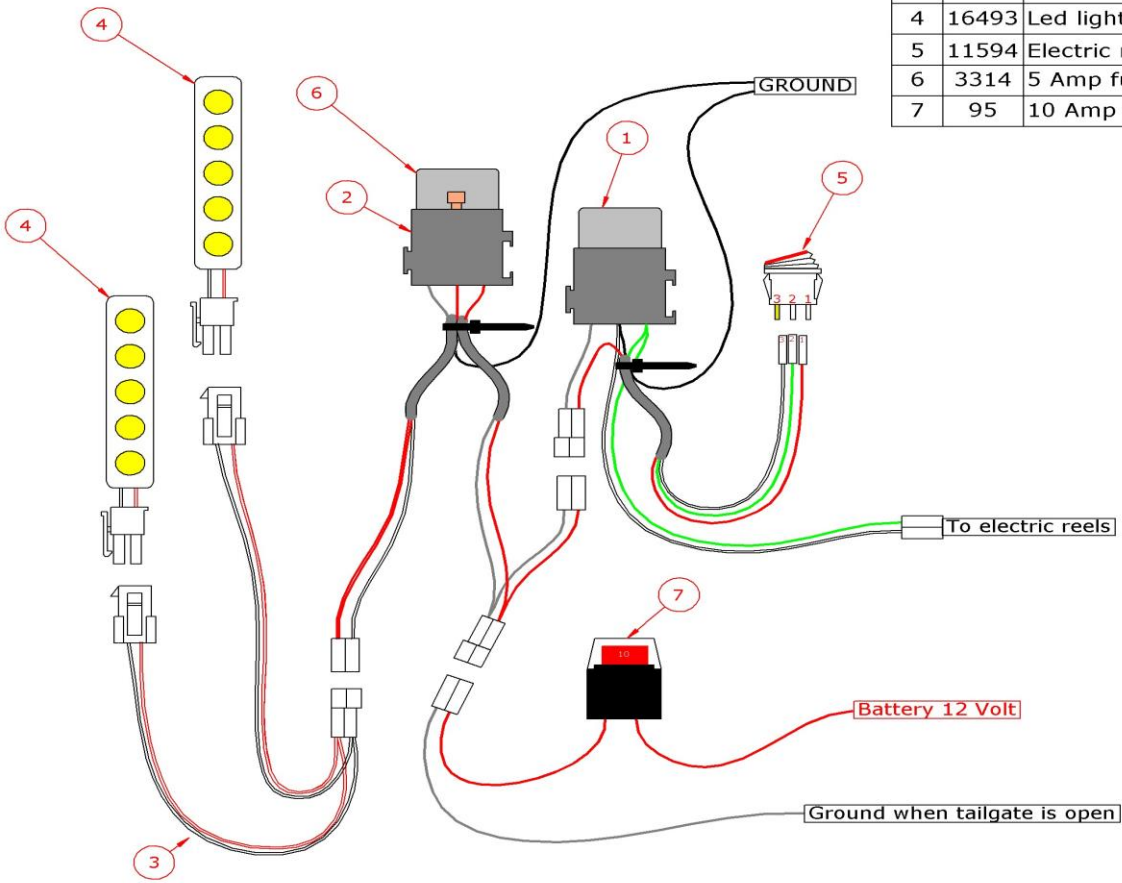
**NOTE:**

It is VERY IMPORTANT to let the sealant dry overnight!  
Only when the sealant is completely dry you can tectyl  
the chassis and lowered floor using:  
- Tectyl Terotex HV450 in all hollow beams and compartments  
- Tectyl Terotex Aqua 3000 on the entire lowered floor



# Electrics

NO.	PART	DESCRIPTION
1	7454	Electric reels relais/wire loom
2	16487	Led lights relais/wire loom
3	16492	Led lights extention cable
4	16493	Led light
5	11594	Electric reels switch
6	3314	5 Amp fuse
7	95	10 Amp fuse



# Wiring



Side note:  
 OEM pink wire is connected to the fuse in fuse slot F24.  
 OEM orange wire is connected to the fuse in fuse slot F3.

Underneath the drivers seat behind the upholstery is a pink or orange wire located.

Wiring



Under the drivers seat.

Cut the wire before the connector.

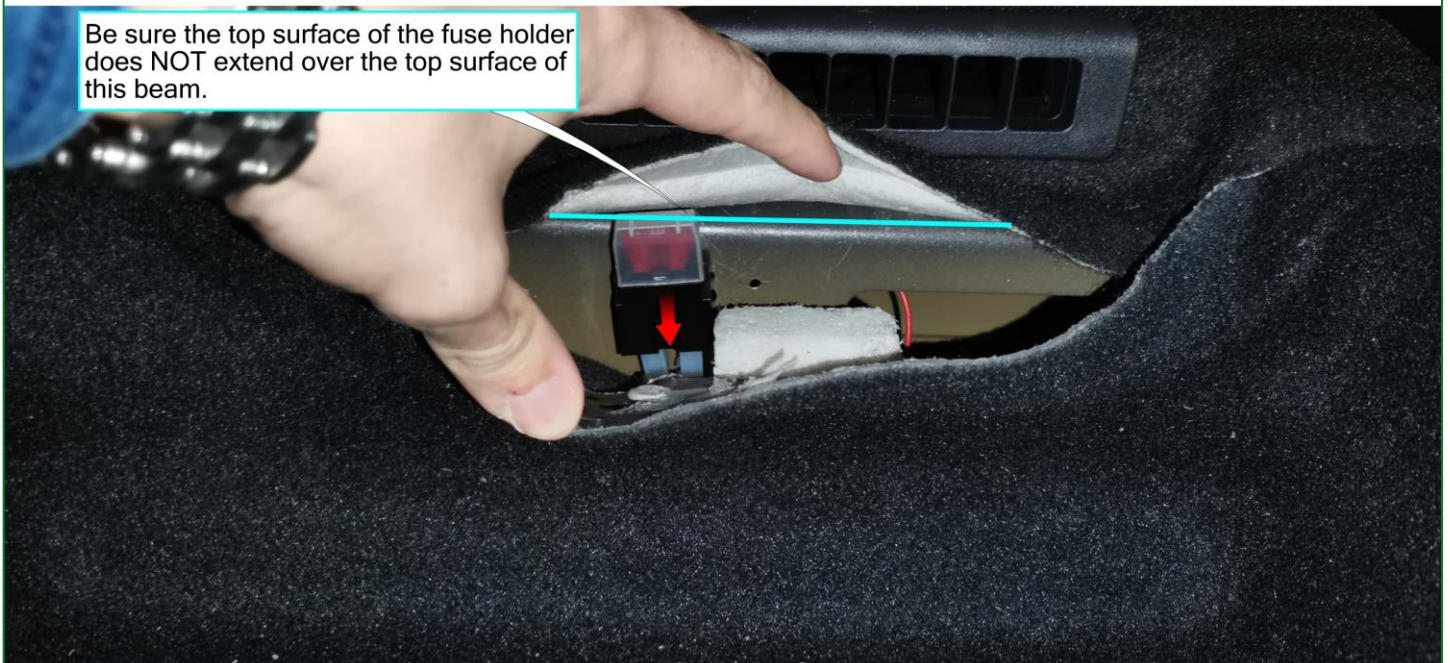
Wiring



Use a self tapping screw to mount the fuse holder mounting plate.

## Wiring

Be sure the top surface of the fuse holder does NOT extend over the top surface of this beam.



Add a wire connector (4,0-6,0mm) to the OEM wire and connect it to the fuse in the fuse holder. Install the fuse holder on the mounting plate.

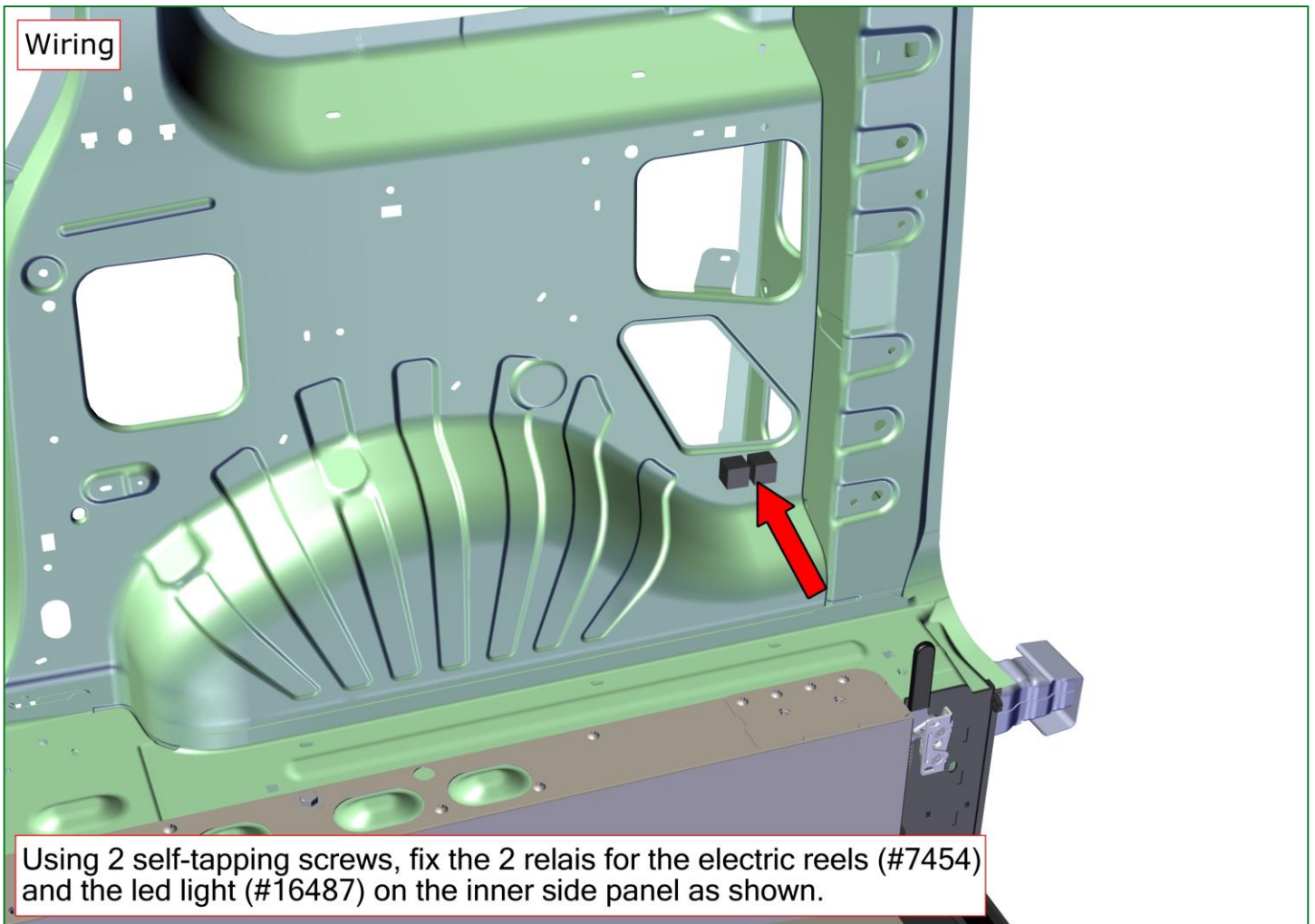
## Wiring



Screw the cable ring on the terminal as shown.

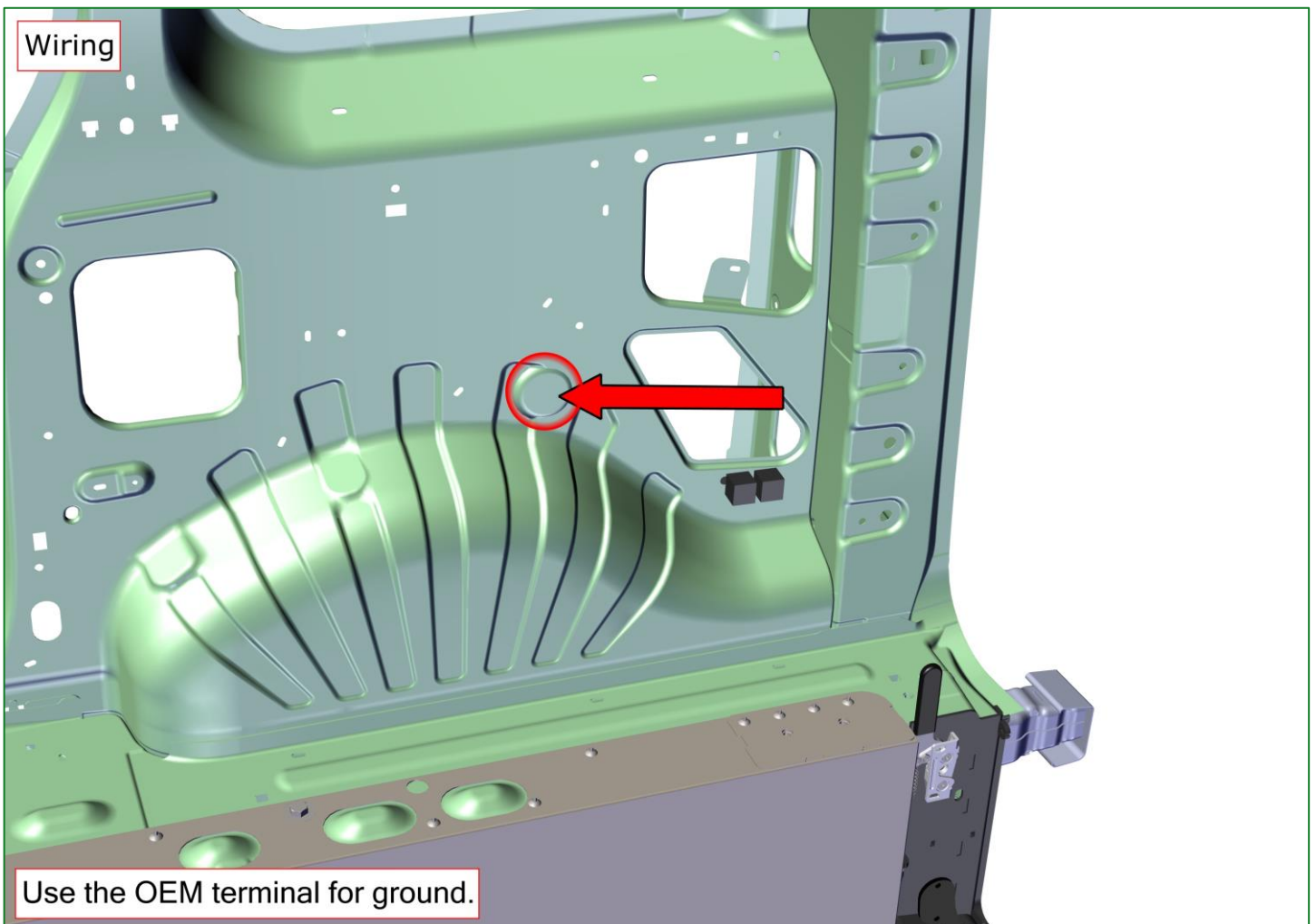


Wiring



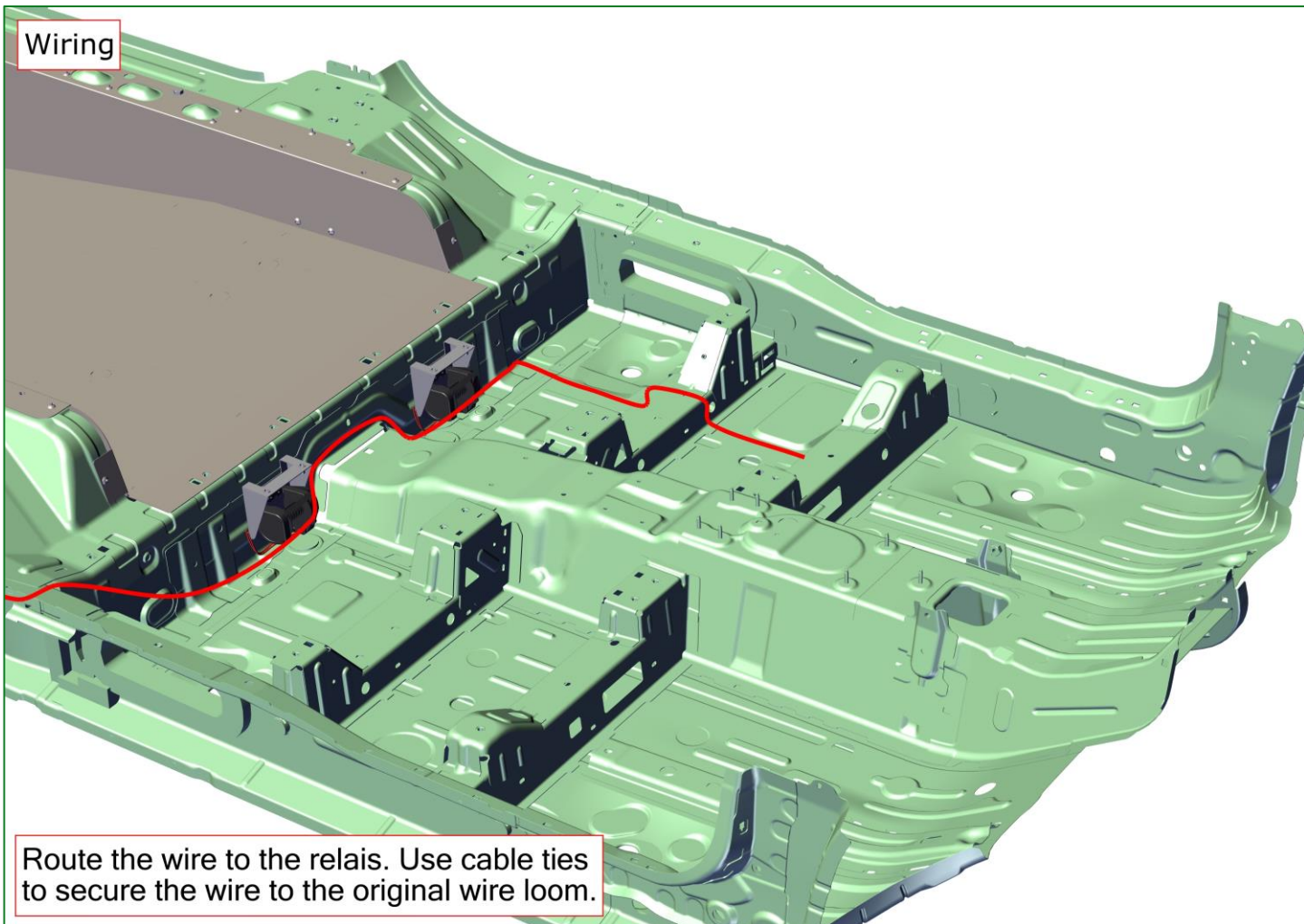
Using 2 self-tapping screws, fix the 2 relays for the electric reels (#7454) and the led light (#16487) on the inner side panel as shown.

Wiring



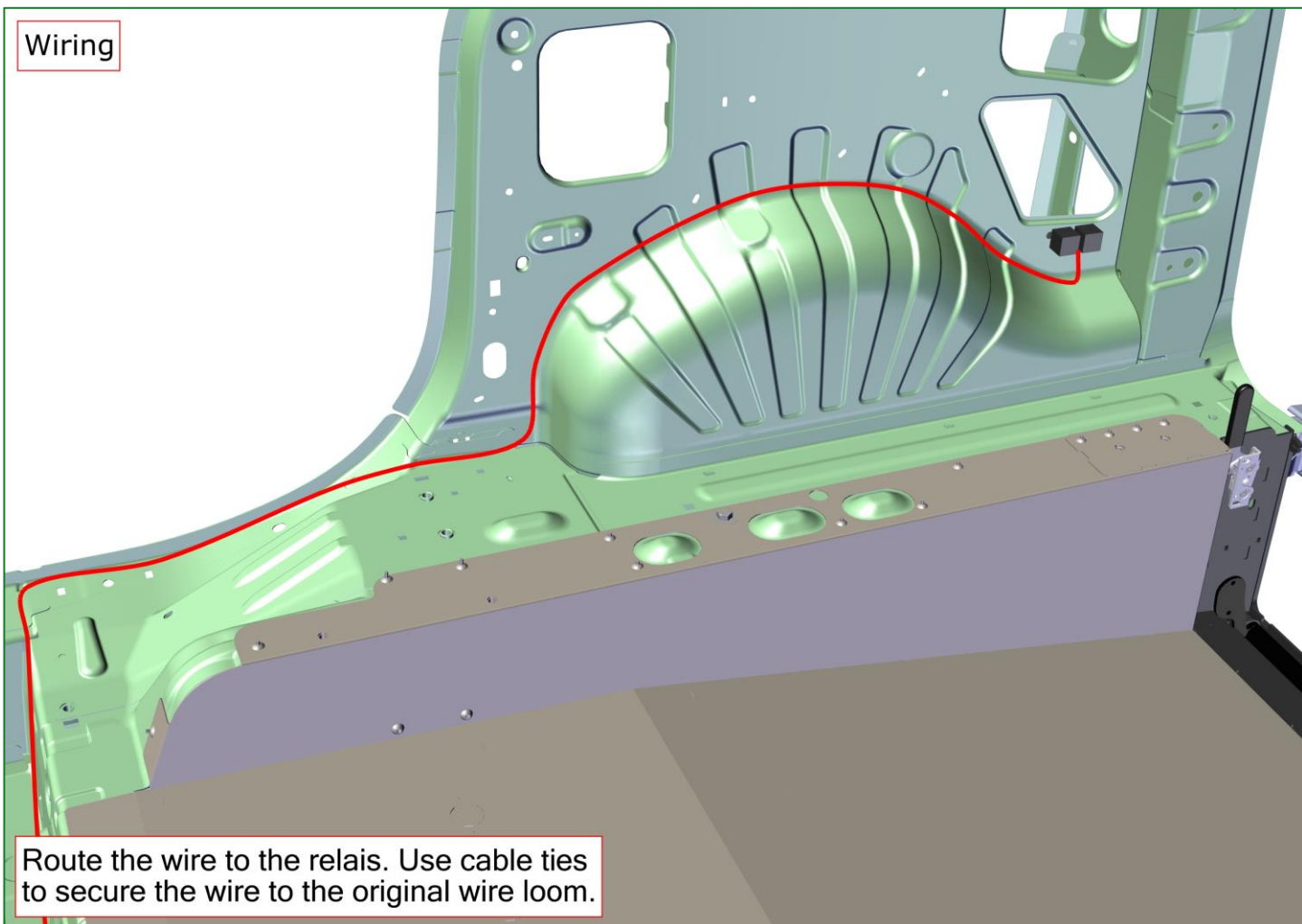
Use the OEM terminal for ground.

Wiring



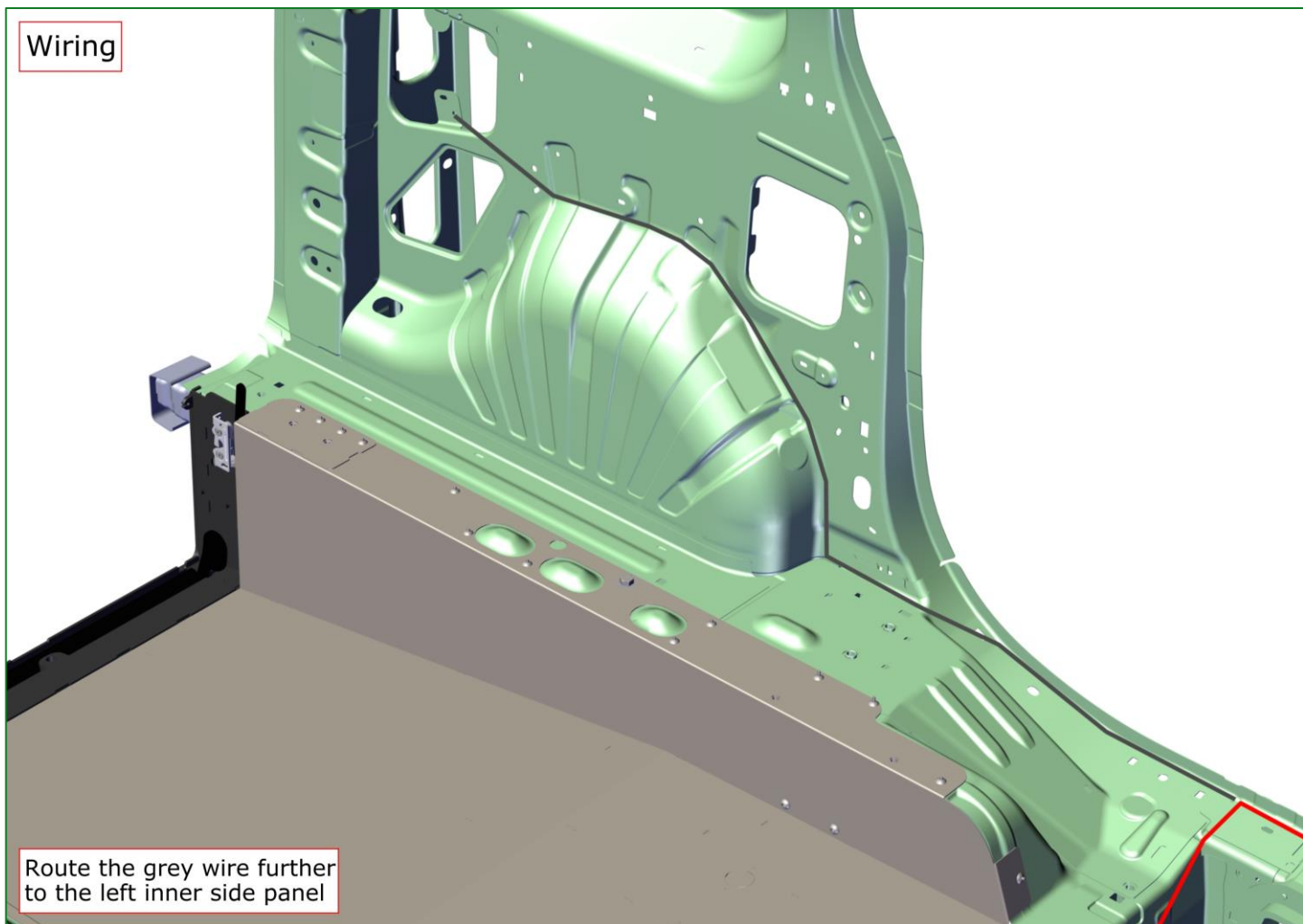
Route the wire to the relays. Use cable ties to secure the wire to the original wire loom.

Wiring



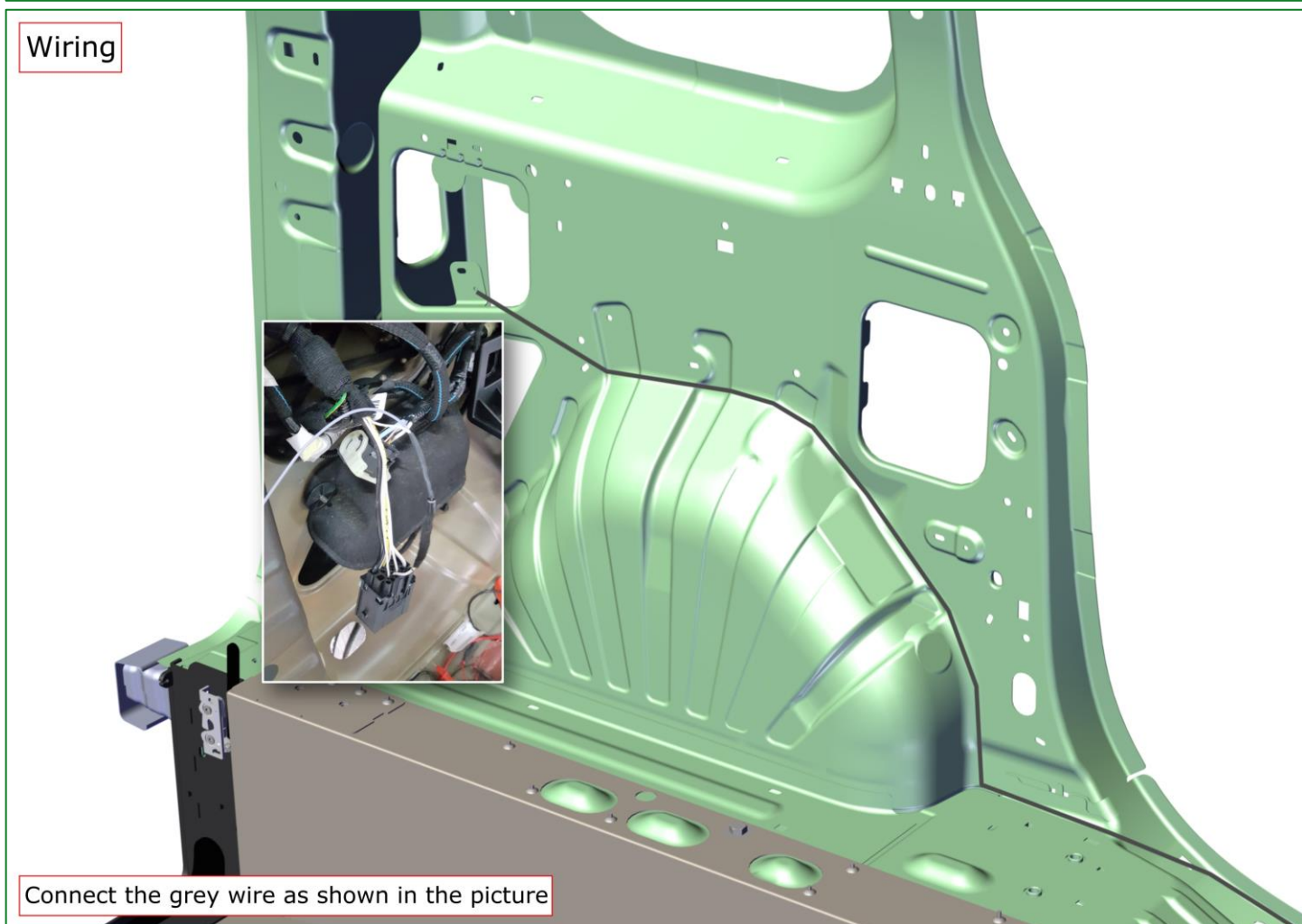
Route the wire to the relays. Use cable ties to secure the wire to the original wire loom.

Wiring



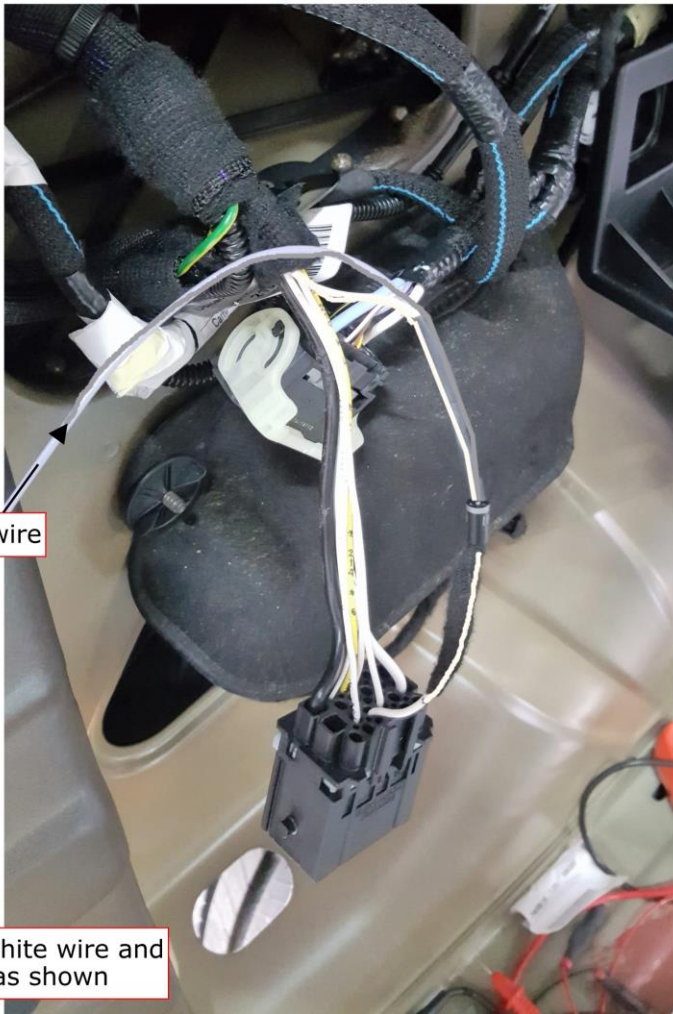
Route the grey wire further to the left inner side panel

Wiring



Connect the grey wire as shown in the picture

Wiring



Grey wire

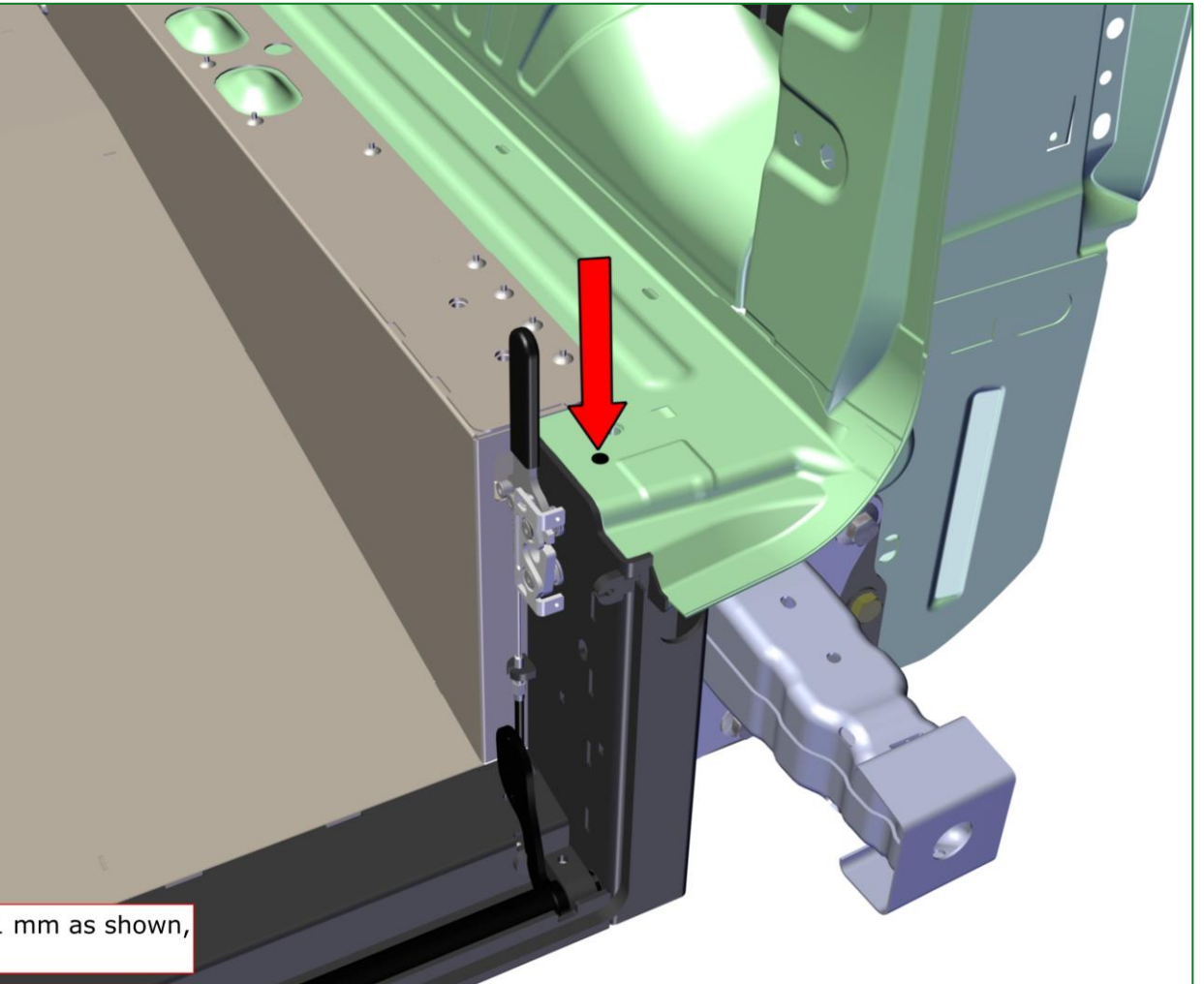
Cut the OEM white wire and use the diode as shown

OEM white wire from tailgate side and Tripod grey wire



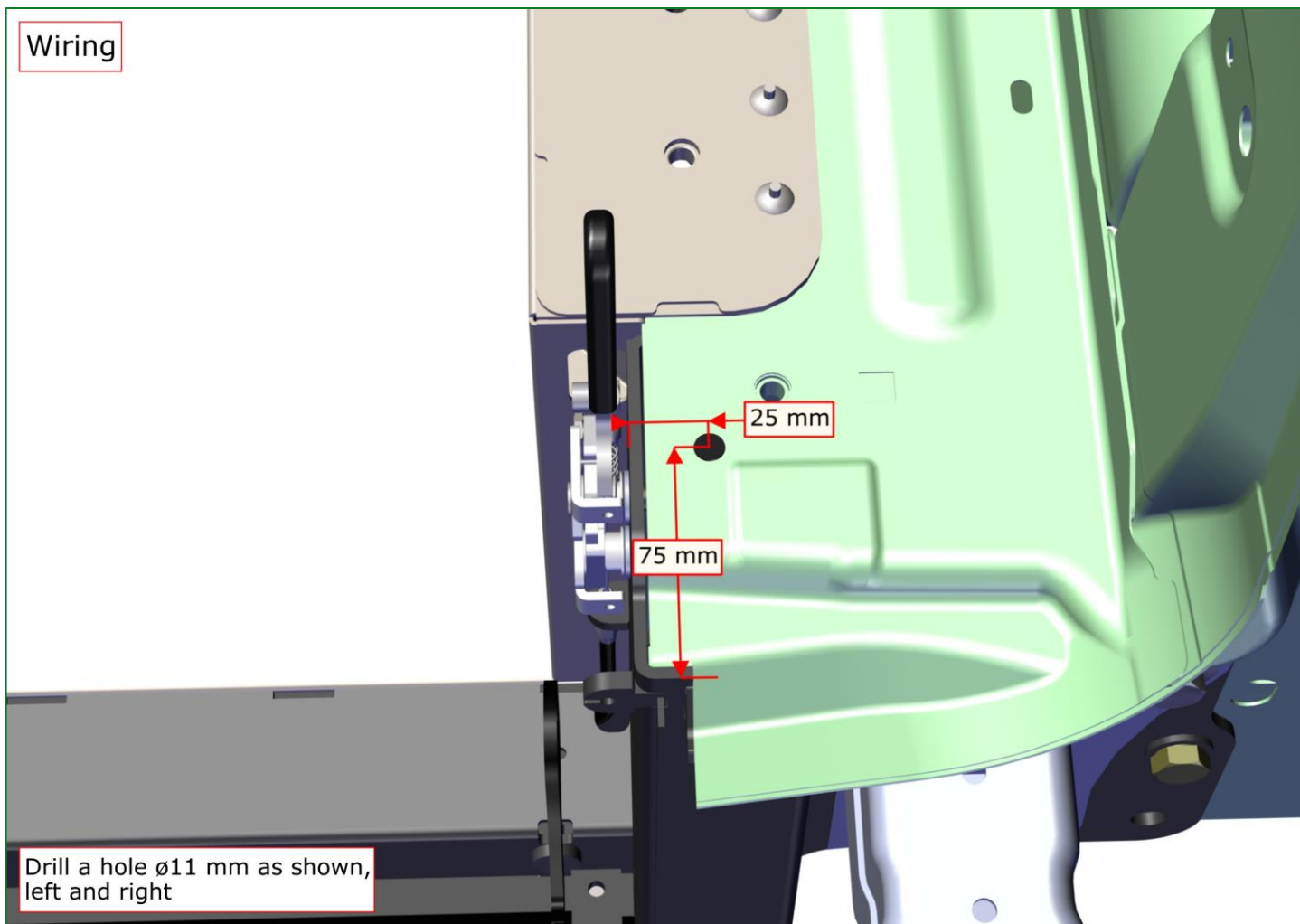
OEM white wire from ECU side

Wiring



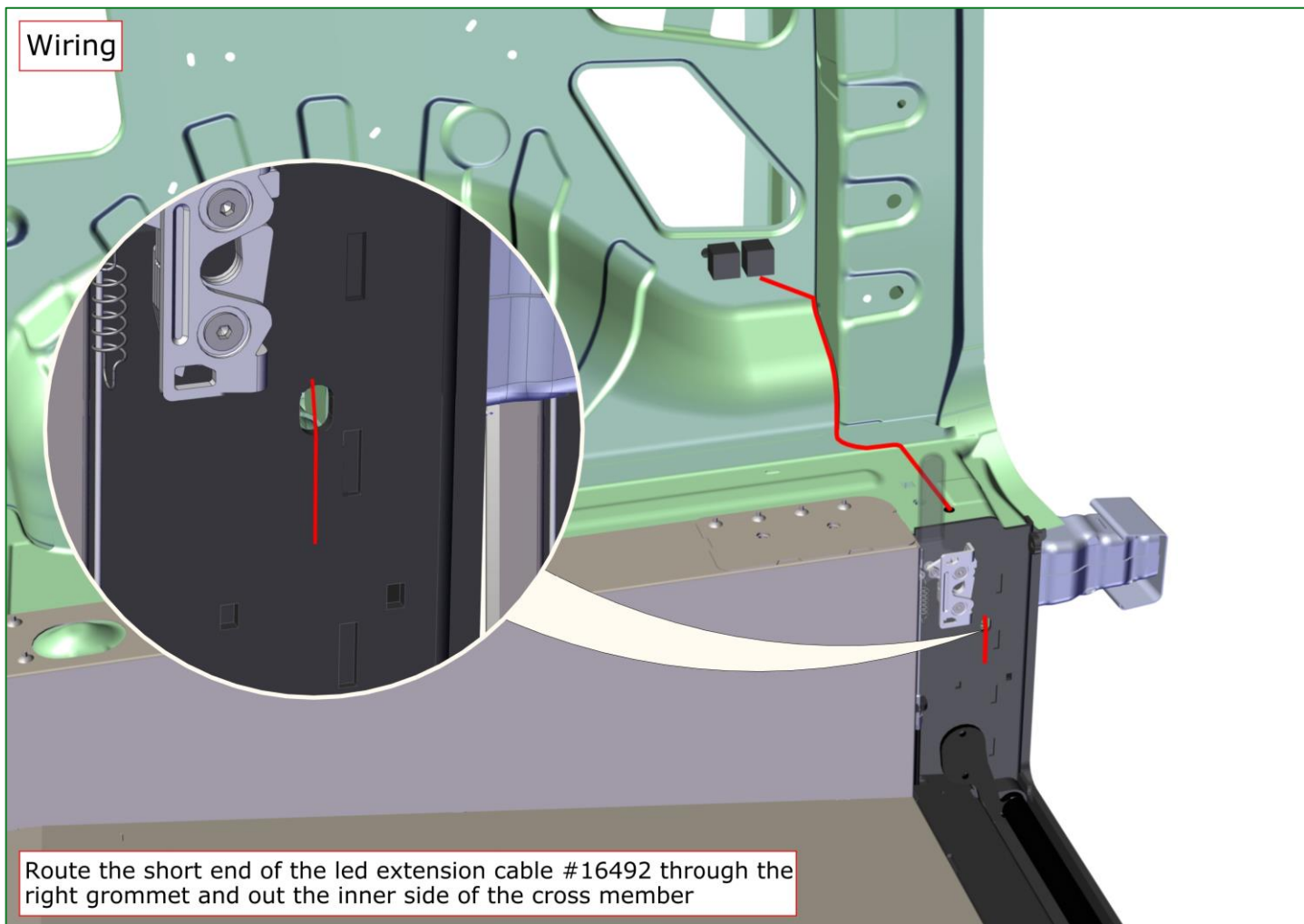
Drill a hole  $\varnothing 11$  mm as shown, left and right

Wiring



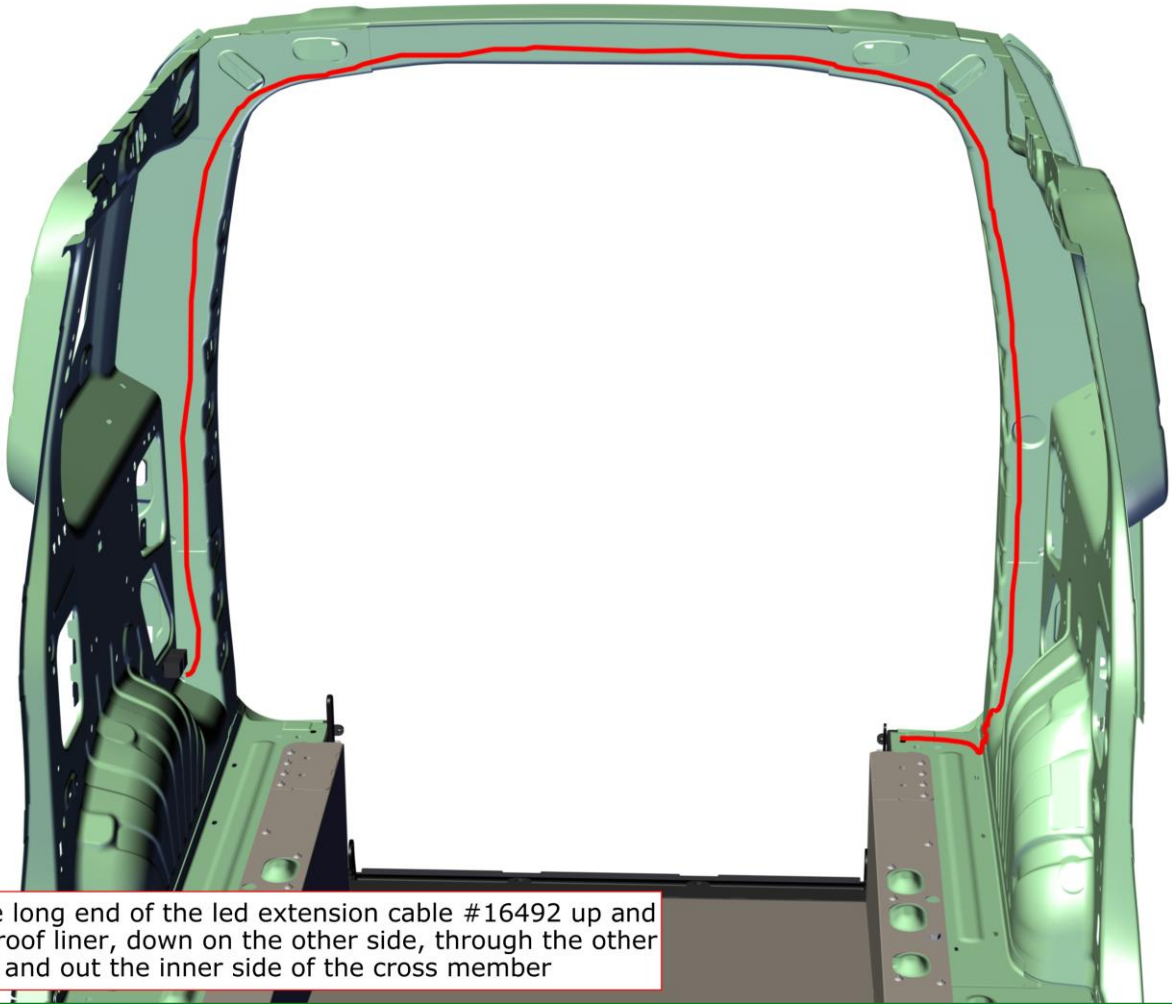
Drill a hole  $\varnothing 11$  mm as shown, left and right

Wiring



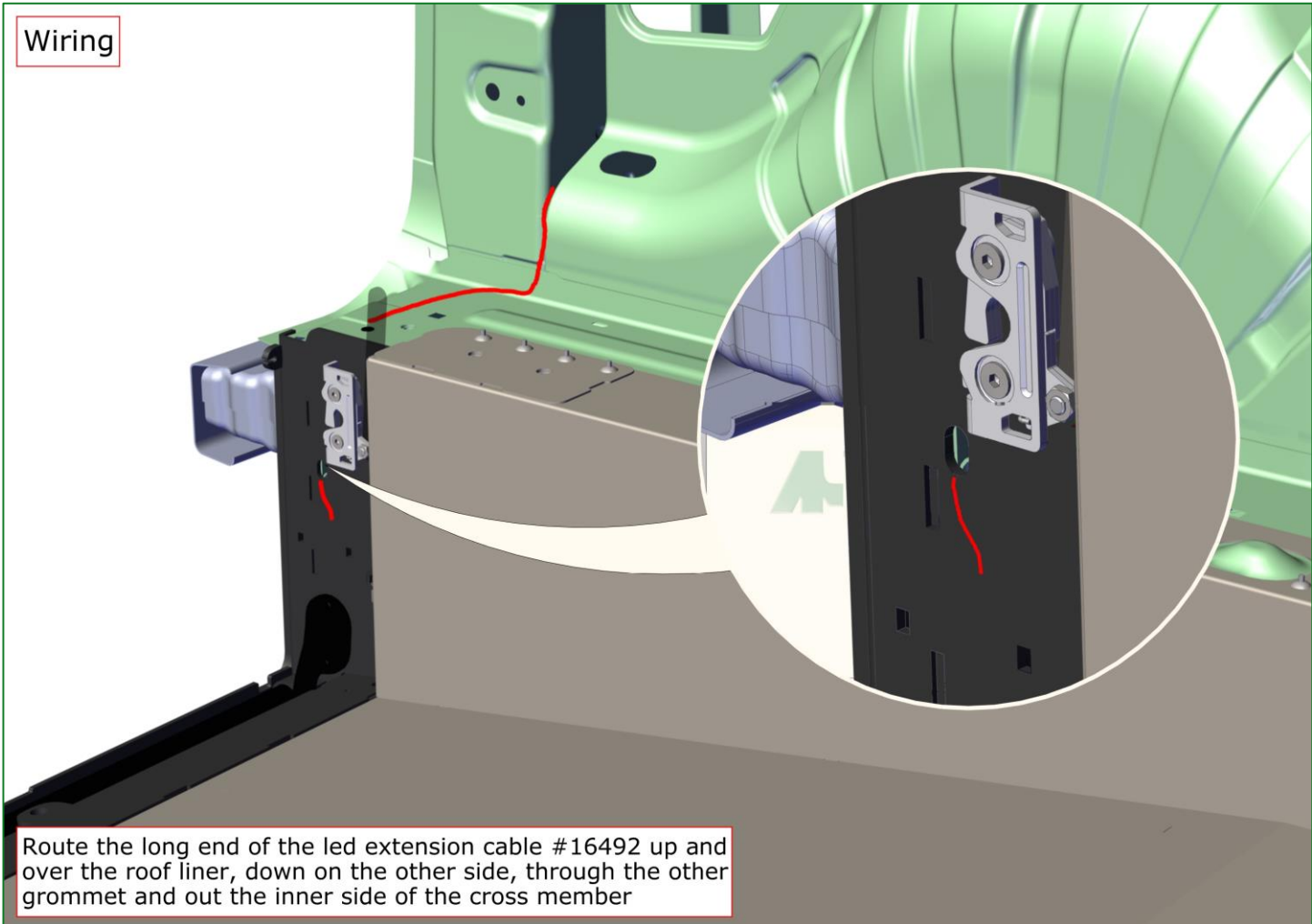
Route the short end of the led extension cable #16492 through the right grommet and out the inner side of the cross member

Wiring



Route the long end of the led extension cable #16492 up and over the roof liner, down on the other side, through the other grommet and out the inner side of the cross member

Wiring



Route the long end of the led extension cable #16492 up and over the roof liner, down on the other side, through the other grommet and out the inner side of the cross member

Wiring



16115

Apply cyanoacrylate glue (super/instant glue) to the back of the led housing and fix them to the crossmember using the square holes as reference.

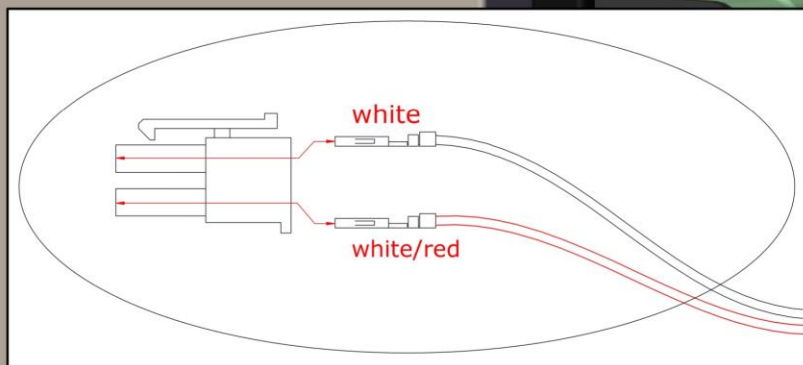
Wiring



16493

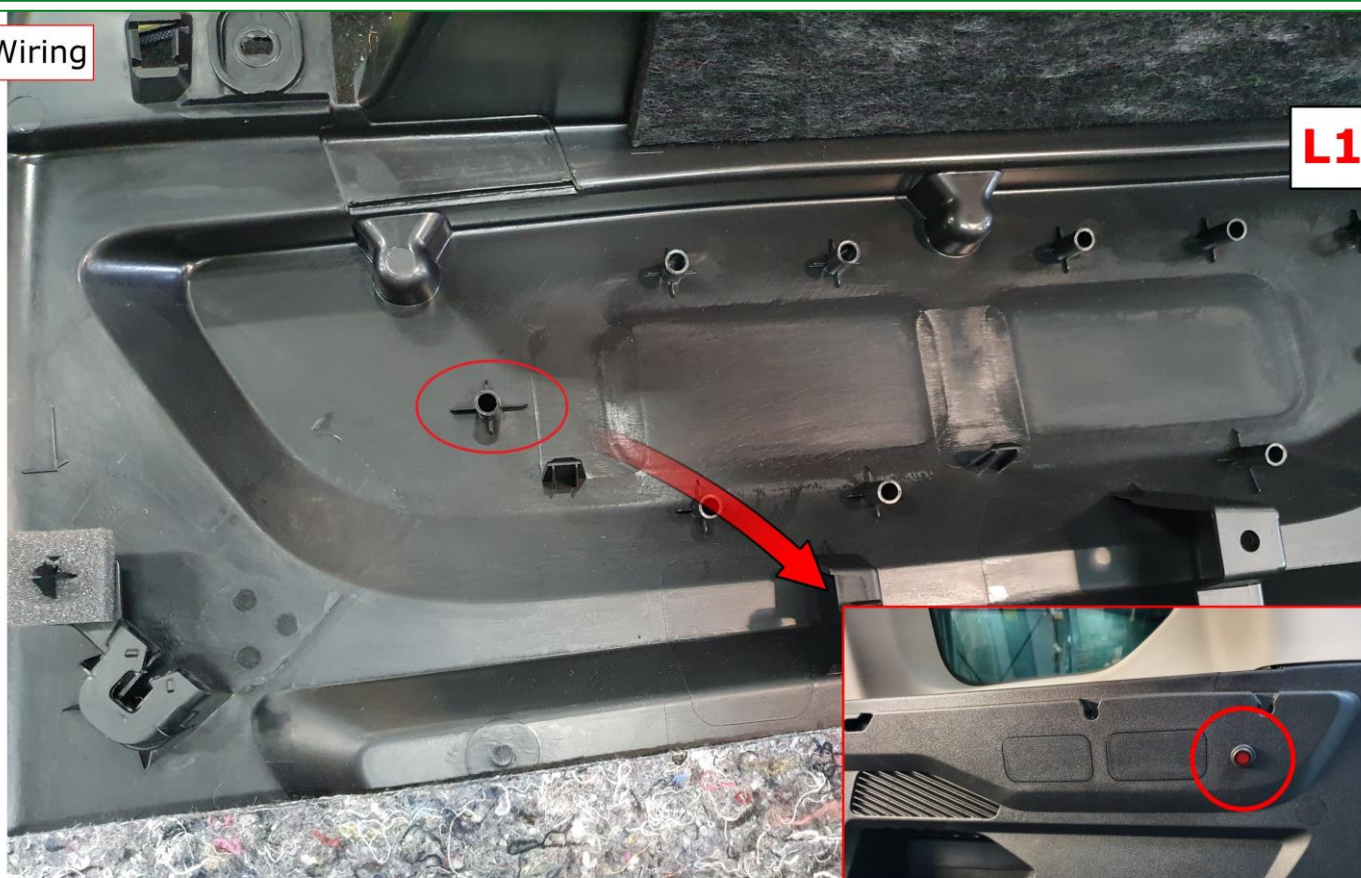
Pull off the foil from the back of the led lights and position them centred in the housing on the cross member

Wiring



Connect the wires as shown

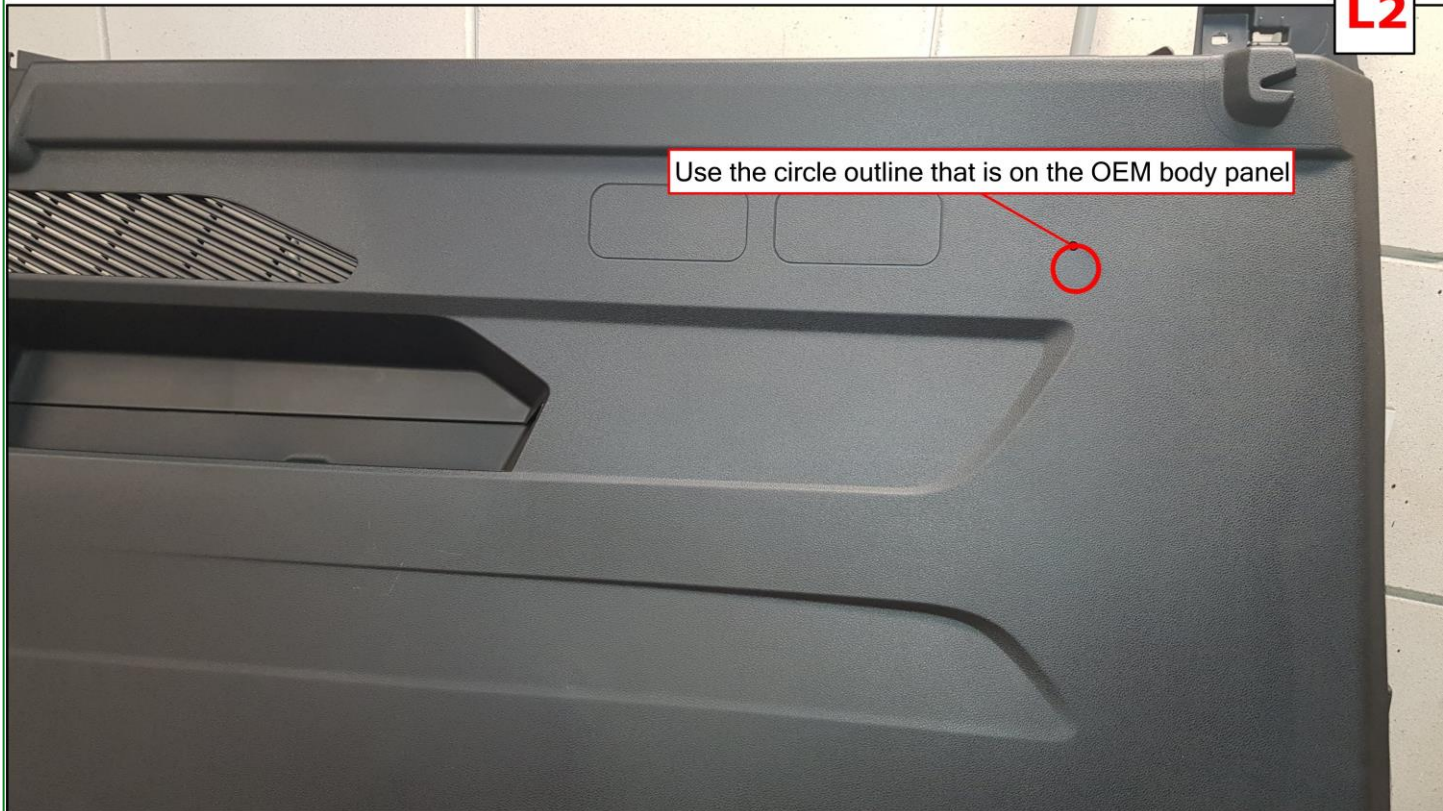
Wiring



On the back of the right/rear interior panel, drill a small hole 4mm through the marked extrusion. Drill that small hole larger to the size of the switch

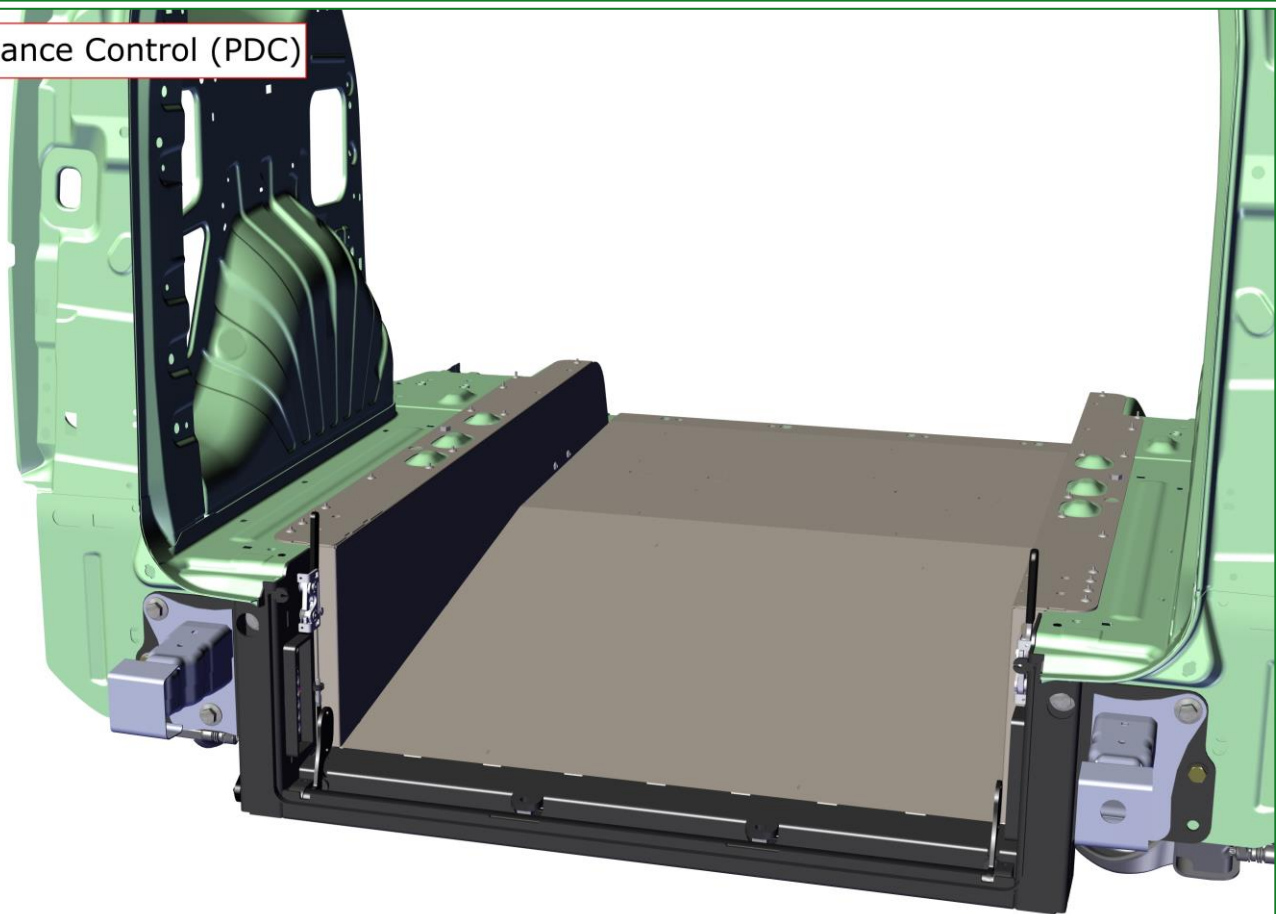


Use the circle outline that is on the OEM body panel



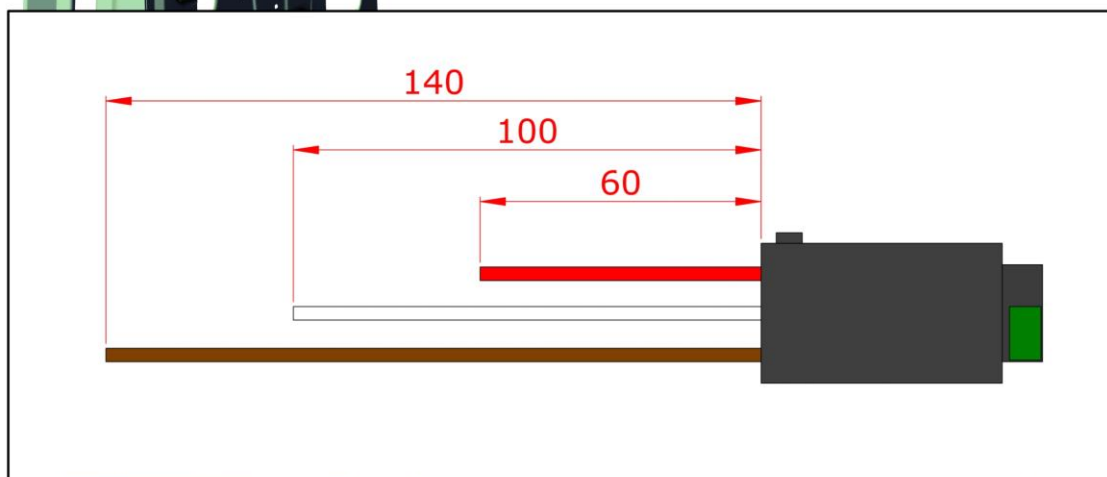
Position the switch for the electric reels as shown

Park Distance Control (PDC)



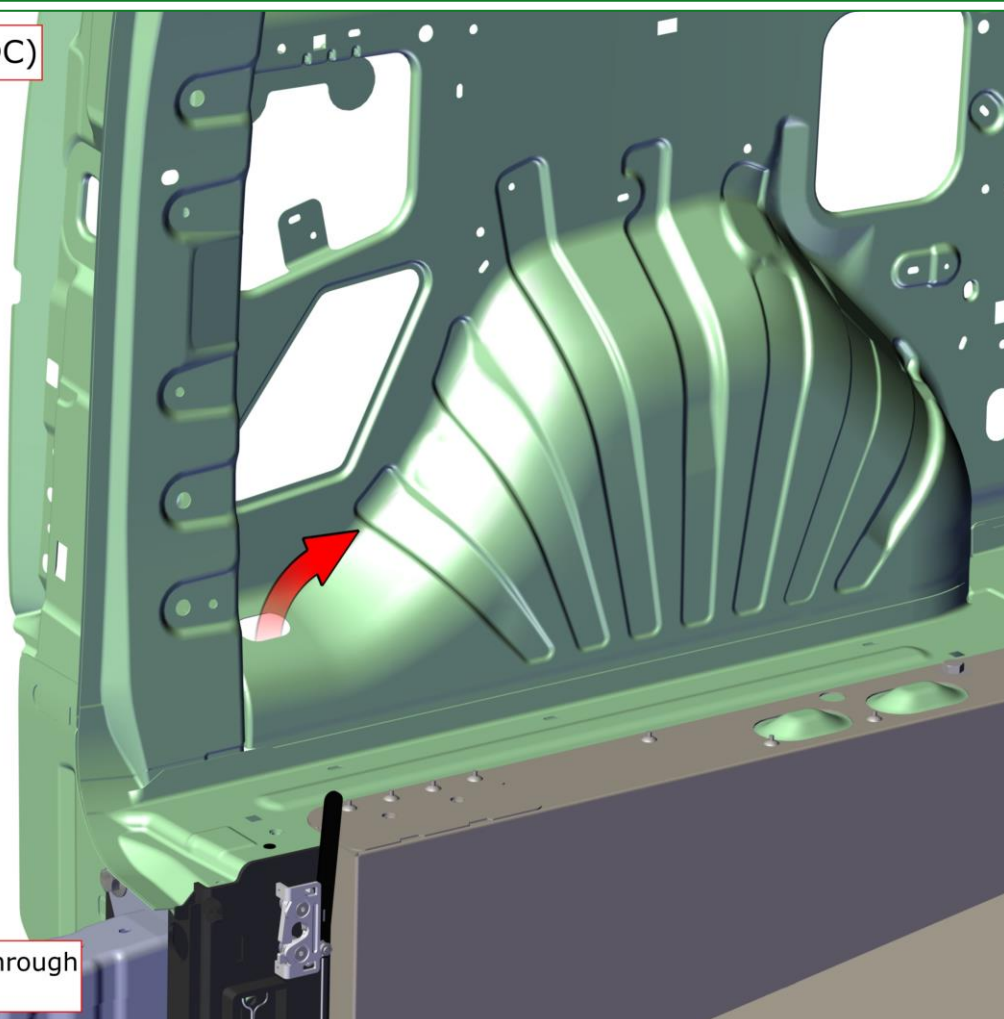
Mark the 4 (or 6) PDC sensor connectors and cables 1,2,3,4 (5,6) with the outer left #1 and the outer right #4 (or #6)

Park Distance Control (PDC)



After the connectors are marked, cut them off leaving a difference in cable length as shown.

Park Distance Control (PDC)



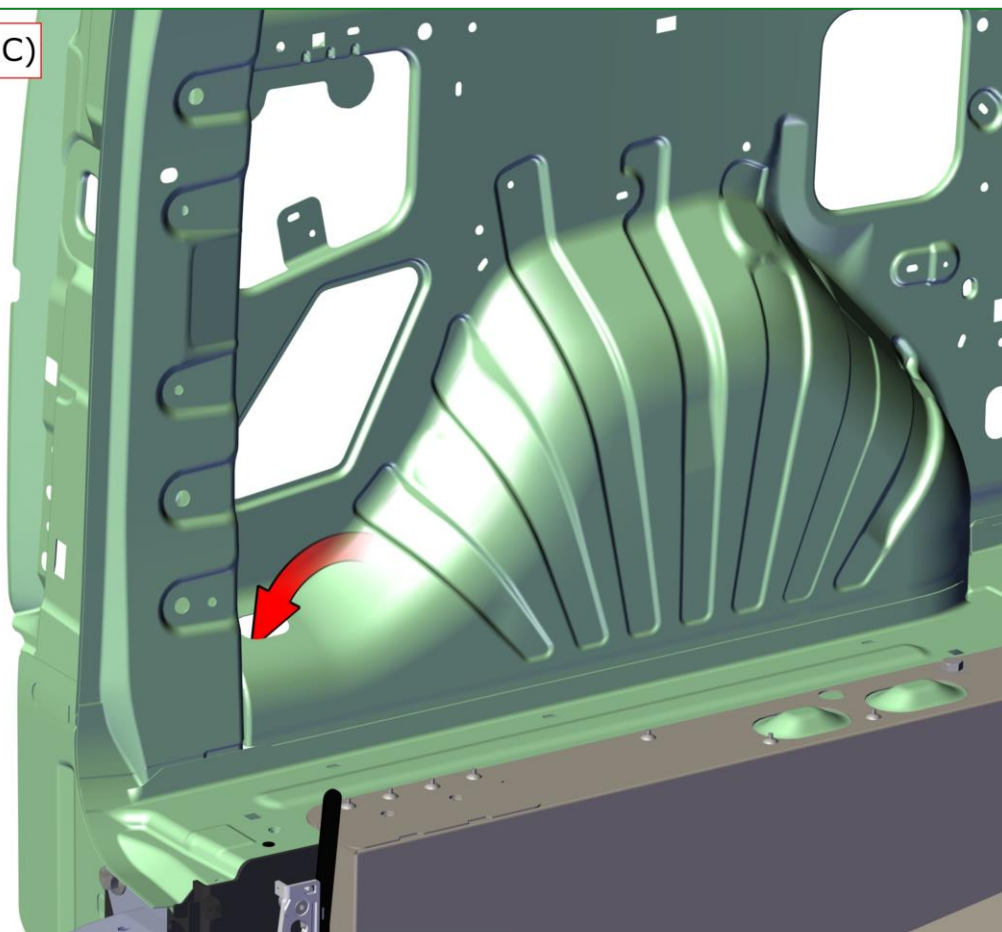
Pull the PDC sensor wire loom through the grommet inside the car

## Park Distance Control (PDC)



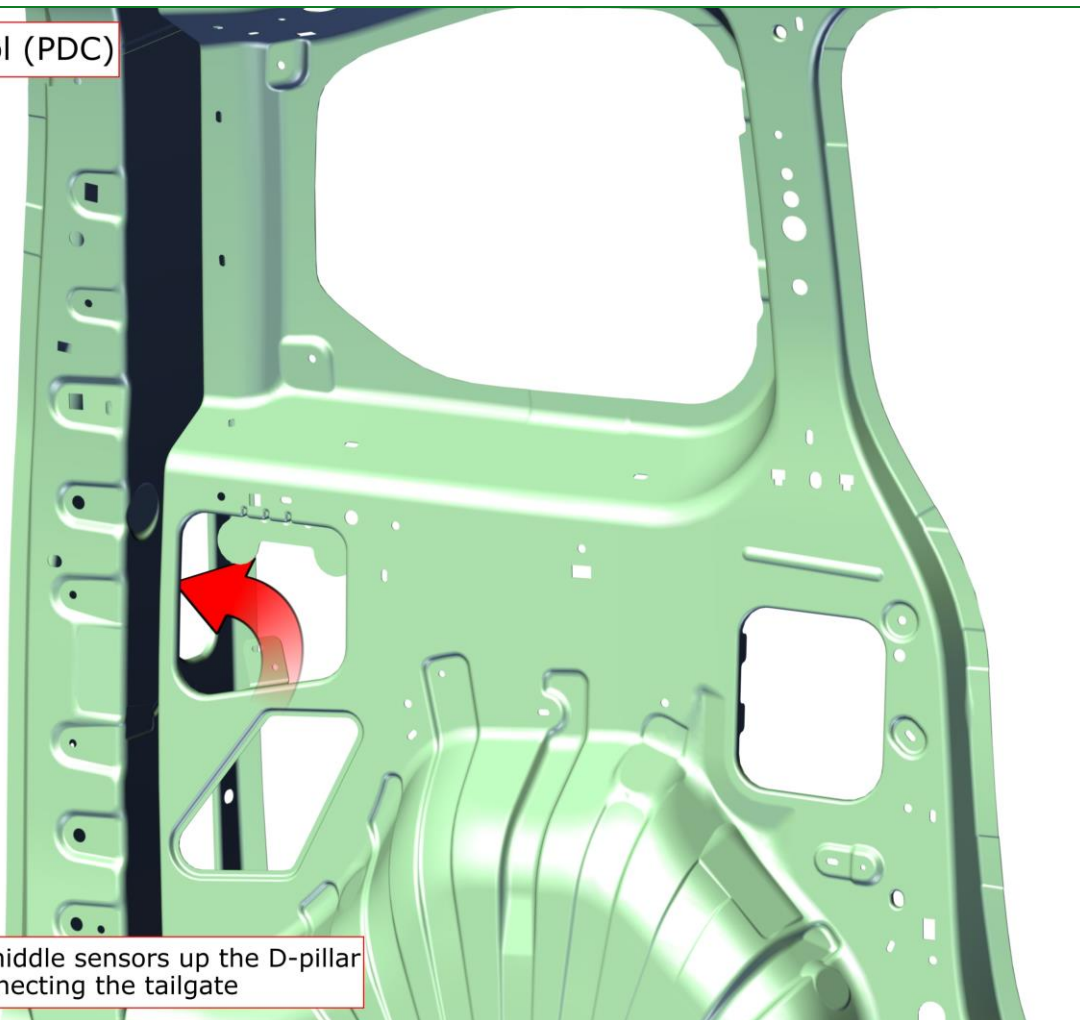
Connect the extension cables #17301 (4 sensors) or #17025 (6 sensors) to the OEM wire loom, be sure to match the numbering!

## Park Distance Control (PDC)



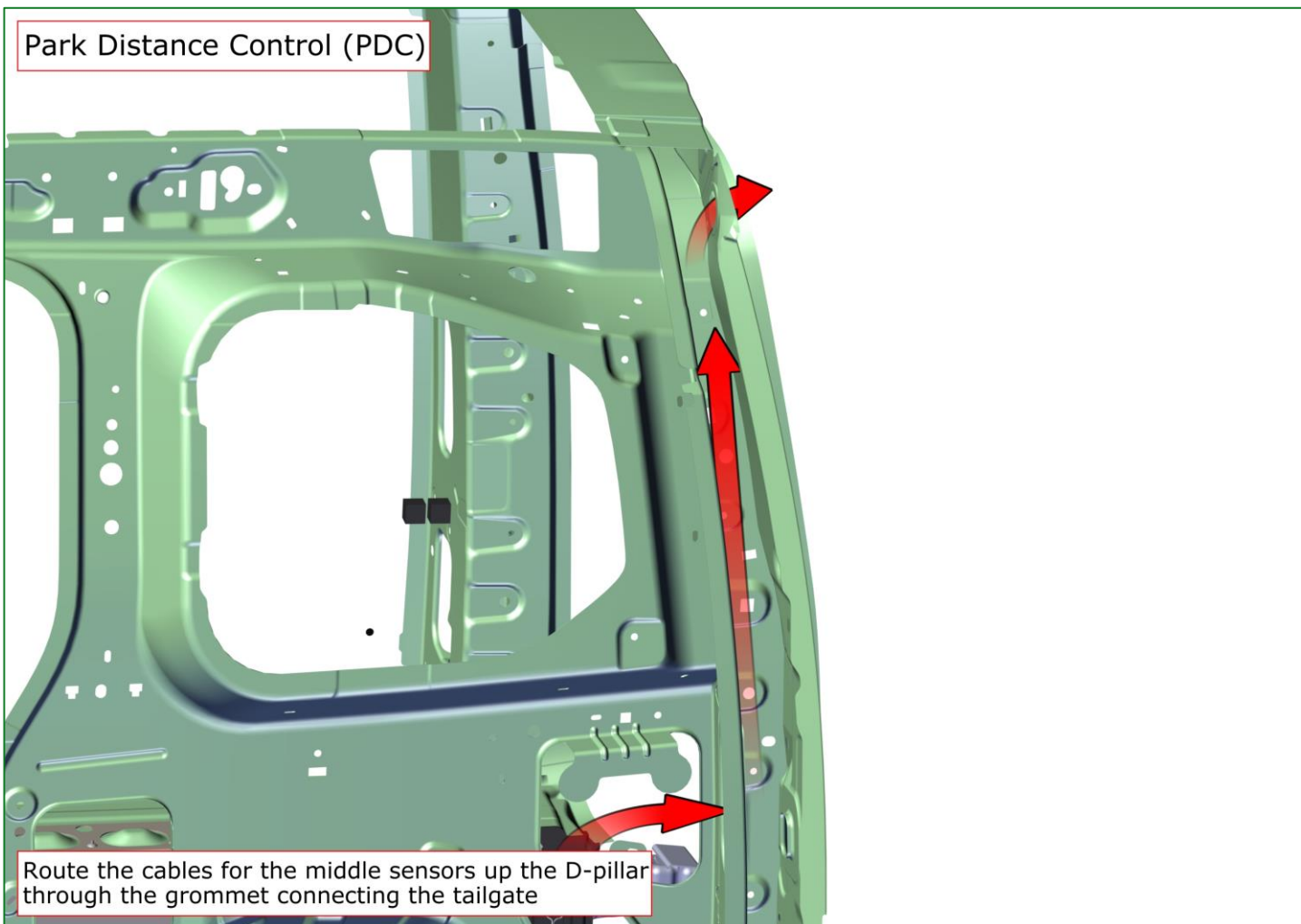
Route the cables for the outer sensors back outside through the grommet (#1 and #4 for 4 sensors and #1,#2 and #5,#6 for 6 sensors)

Park Distance Control (PDC)



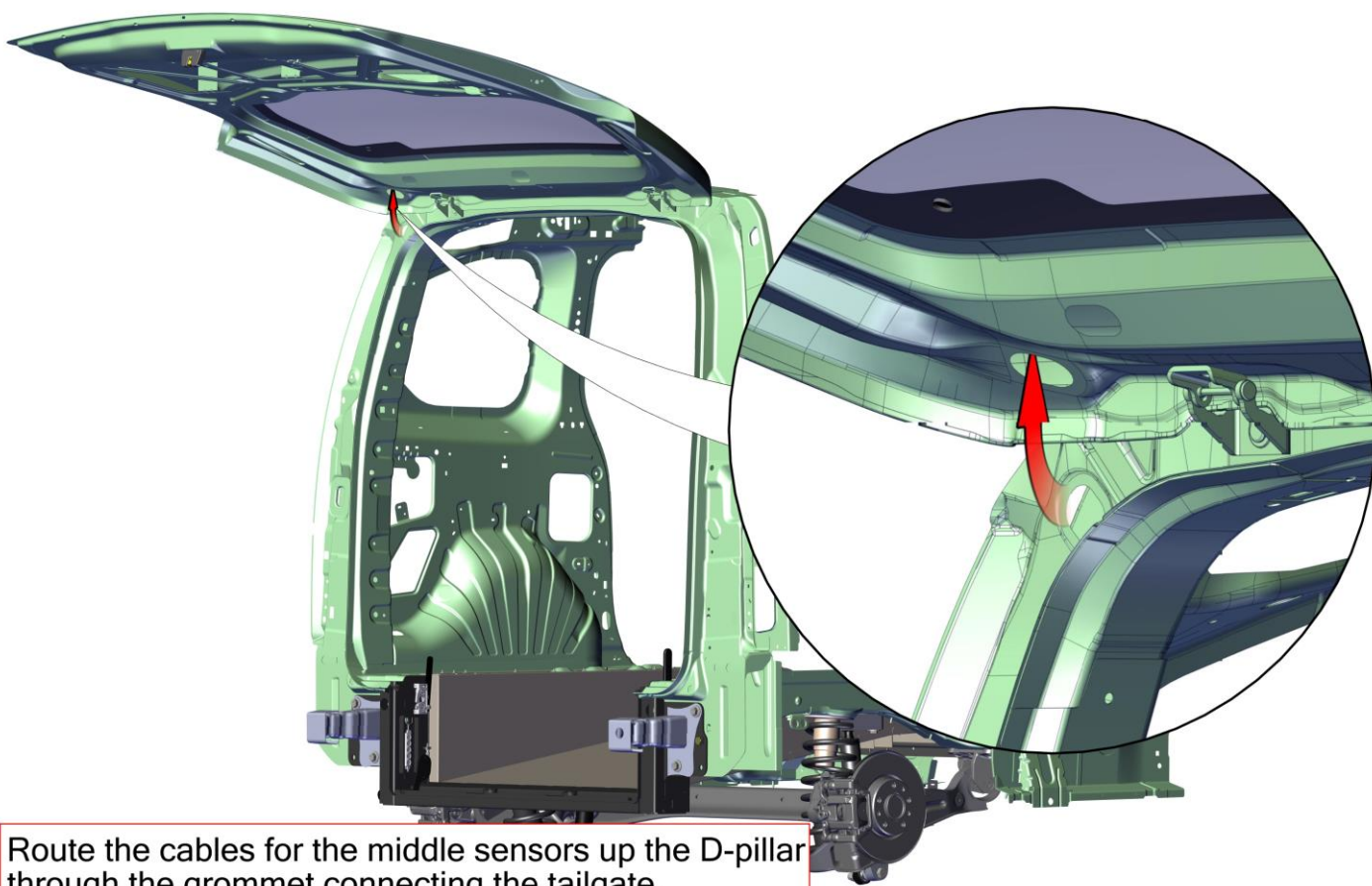
Route the cables for the middle sensors up the D-pillar through the grommet connecting the tailgate

Park Distance Control (PDC)



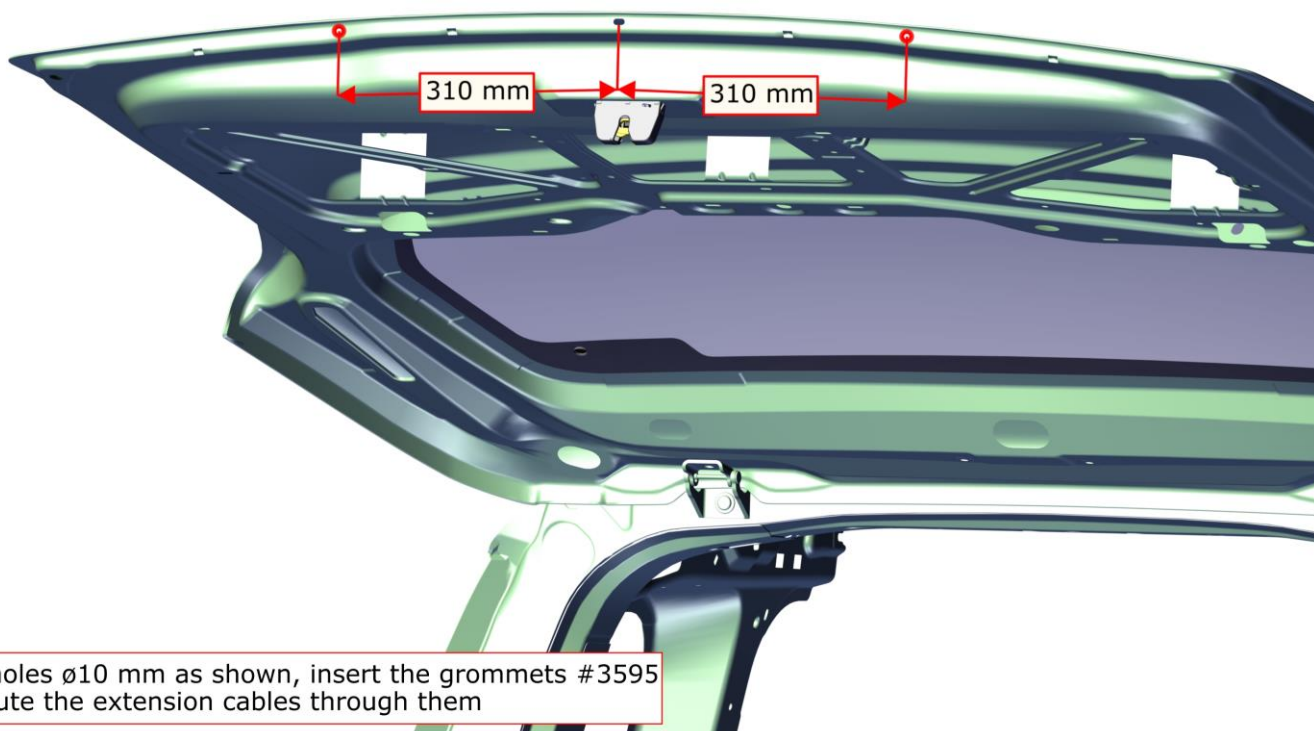
Route the cables for the middle sensors up the D-pillar through the grommet connecting the tailgate

### Park Distance Control (PDC)



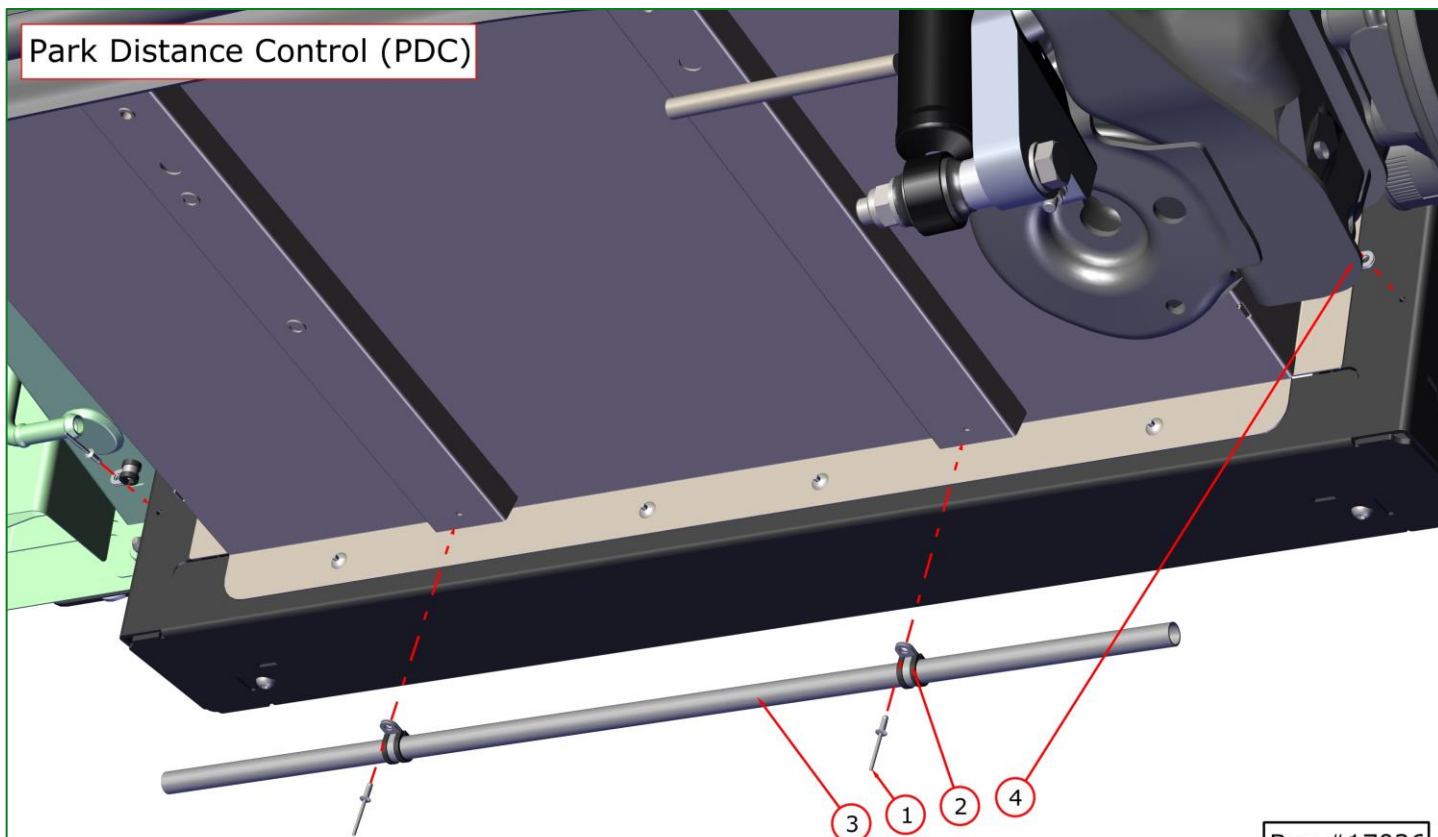
Route the cables for the middle sensors up the D-pillar through the grommet connecting the tailgate.

### Park Distance Control (PDC)



Drill 2 holes  $\varnothing 10$  mm as shown, insert the grommets #3595 then route the extension cables through them

Park Distance Control (PDC)

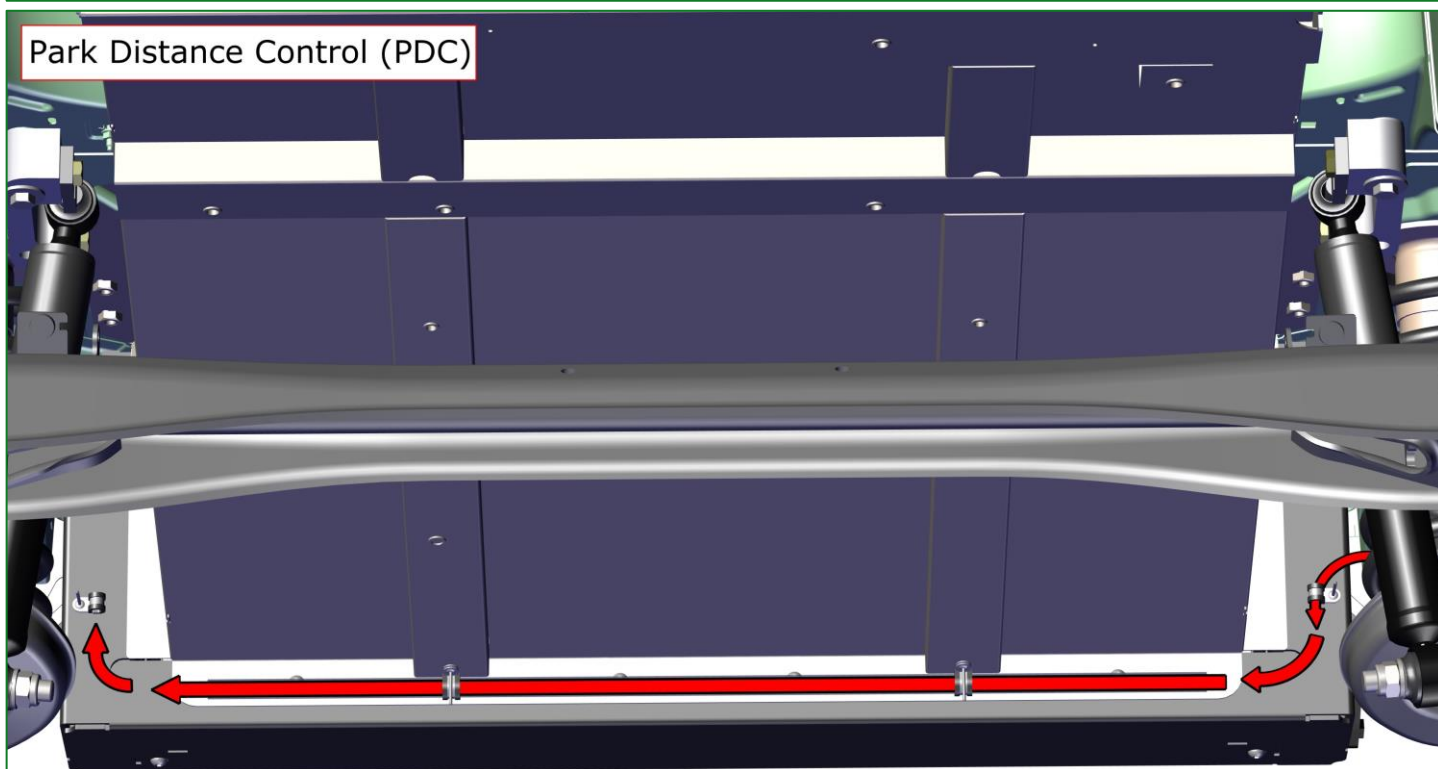


Bag #17026

NO.	QTY.	PART	DESCRIPTION
1	4	439	Rivet 4,0x10 steel
2	2	810	Hose clamp RSGU 18/12
3	1	8955	PVC tube
4	2	390	Hose clamp RSGU 10/12

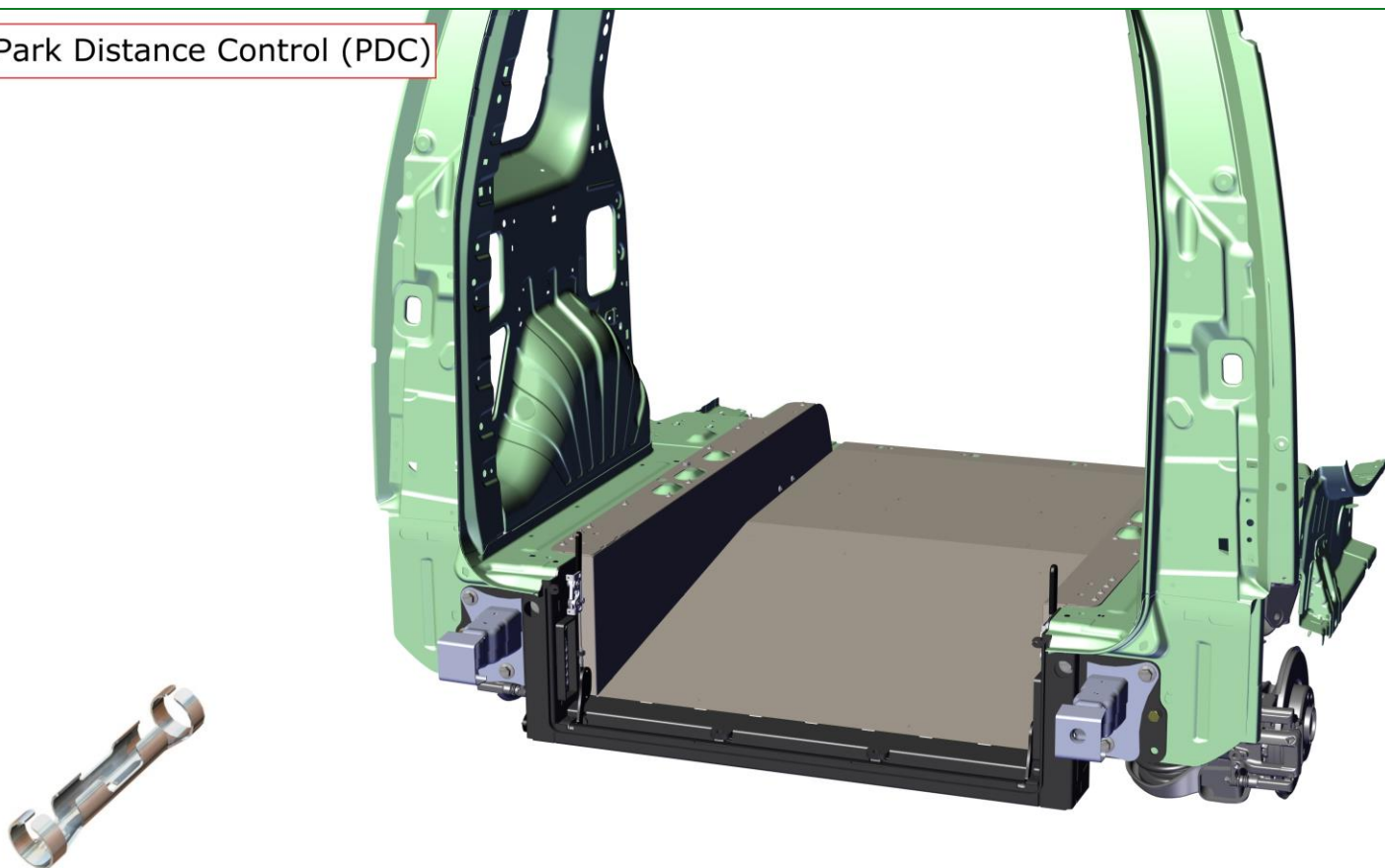
Install the cable guide underneath the lowered floor.

Park Distance Control (PDC)



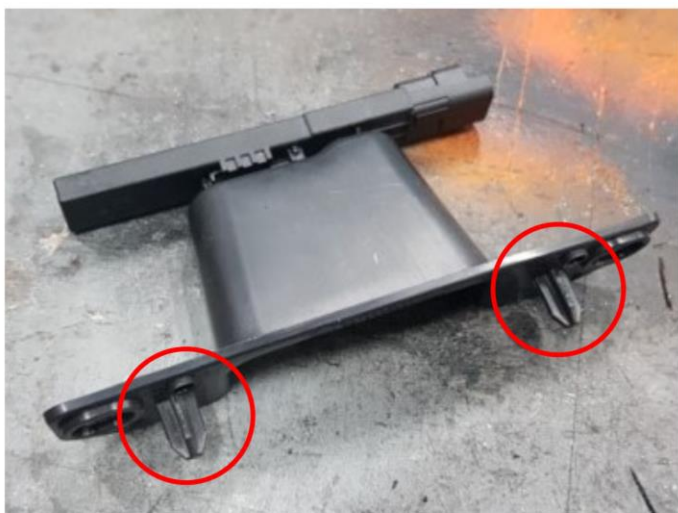
Install the cable guide underneath the lowered floor.

### Park Distance Control (PDC)



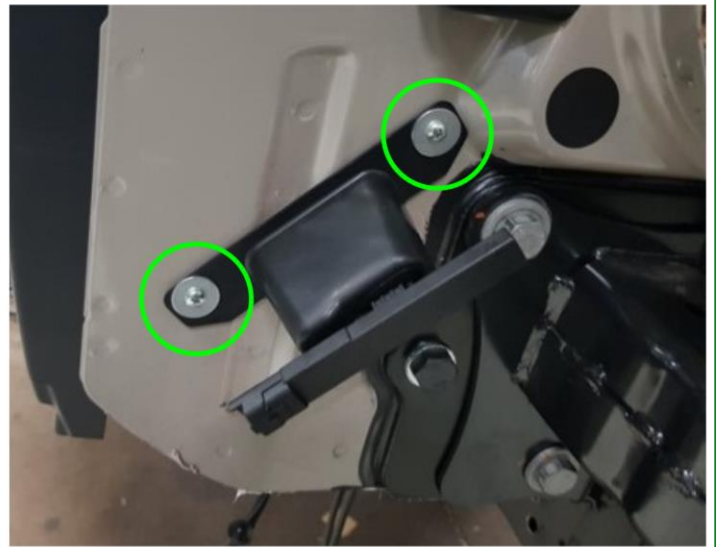
Attach all cut sensors connectors to the extension cables using the contact connectors #7163. Be sure to match the numbering 1 to 4 (or 6).

### Keyless entry sensor



Cut the guide pins of the sensor bracket

## Keyless entry sensor



Position the sensor as shown and fix with 2 large washers and screws

# END OF PART 1

*Disclaimer; descriptions are based on the information available during publication and are valid until further notice. We cannot guarantee the correctness and completeness of the information given and therefore do not accept liability.*



[www.tripodmobility.com](http://www.tripodmobility.com) • Collseweg 10, 5674 TR Nuenen, the Netherlands  
T +31(0)40 283 6442 • F +31(0)40 283 6245 • E [info@tripodmobility.com](mailto:info@tripodmobility.com)