Installation
Active Suspension Control –

Range Rover

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1. Disclaimer

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3. Safety Instruction

The installation can only be fulfilled by trained specialists. The installation has to be done while the car‘s battery is unplugged. The usage of the Active Suspension Control is only applicable for the car models mentioned in this mounting guideline. The installation has to be done step by step as it‘s described in this mounting guideline. The Cete Automotive GmbH does not take responsibility for damages, caused through:

- improper installation
- the usage of unsuitable connectors
- installations in not mentioned car models

The producer reserves the right to change components without giving reasons Errors and omissions excepted.

4. General Information

We ask you to read this manual thoroughly and completely and uphold to the given instructions. During the development we focused on safety, ease of use, design, innovative development, etc, to guarantee a high quality product for the consumer. Despite the greatest care improper installation and using or incorrect operation can result in material damages. Depending on the product and its purpose it may be necessary to check the legal requirements of the country before commissioning. To receive consideration for warranty claims the product hast to be send back with its original package, the proof of purchase and an error description. Please note the returns policies. The warranty regulations apply. The warranty claim and the operating permit expire through: unauthorized modification of the product, own repairing, violent impacts, improper use, opening the case.

5. General Remarks

Please note, that the Active Suspension Control is a vehicle requiring official approval product. Please register this product as soon as possible.

The Images and Content shown in this installation guide only serve as a help for you. Please remove the covers according to the repair manual of the respective manufacturer.

6. Technical Specifications

Productname:	Active Suspension Control
Operating temperatur:	-40 °C - 85 °C
Operating Voltage:	7 V - 20 V
average consumption:	250 mA





7. Installation Location

7.1 Range Rover Velar L560



Step 1)
Open the trunk.

The control unit for the air suspension is located behind the right side panel.
Please note the screw connections.



Step 2)
The two brackets on the right-hand side must be carefully removed; behind them there are additional screws that must be removed so that the right-hand side panel can be removed.



Step 3)
You must also expose the right rail by unscrewing the screws from the brackets and removing the brackets.



Step 4)
Carefully pry the panel out of the guide and watch out for any connected lines.



Step 5)
Locate the control unit for the air suspension.

Several plugs are connected.



Each of these plugs is color-coded so please don't mix it up.





We recommend laying the wiring harness along the carpet in the direction of the battery so that you can access the module later without great effort. A ByPass plug is also included in the package for temporary removal of the control unit without having to remove the entire cable harness.

7.2 Range Rover Vogue / Sport



Step 1)
Open the trunk.
The control unit for the air suspension is located behind the right side panel.
Please note the clips and connected cables.



Step 2)
The cladding is just clipped, use wedges for simplicity.



Step 3)
If the cladding has been put down, you can easily remove it.

The control unit is behind it.

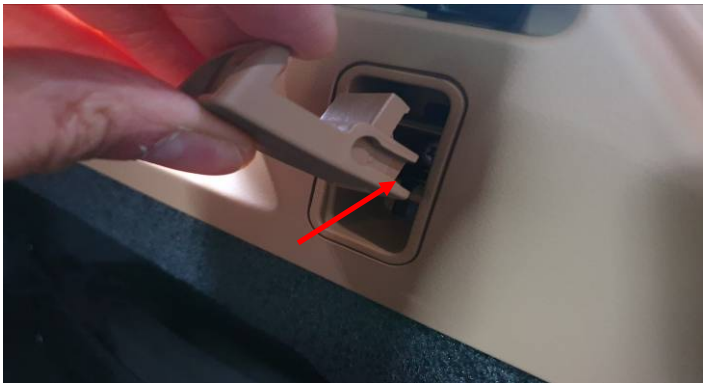


7.3 Range Rover L460 / L461

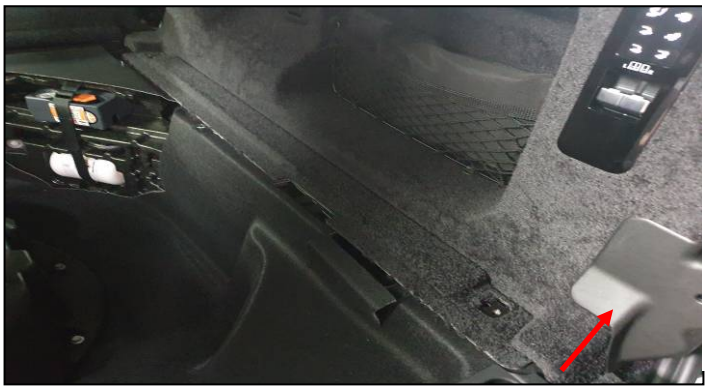


Step 1)
Open the trunk.

The control unit for the air suspension is located behind the right side panel.
Please note the screw connections.



Step 2)
You need to remove all screws on the right side, take care about hidden screws, as the shown example.



Step 3)
You also will need to remove additional things to be able to remove the right side cover.





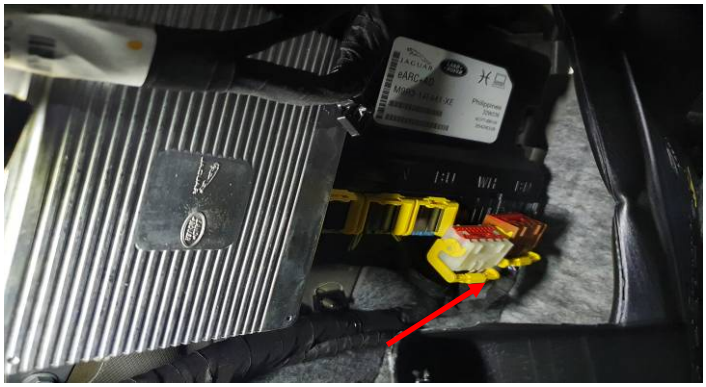






Step 4)
The ECU is hidden behind the air flow channel.





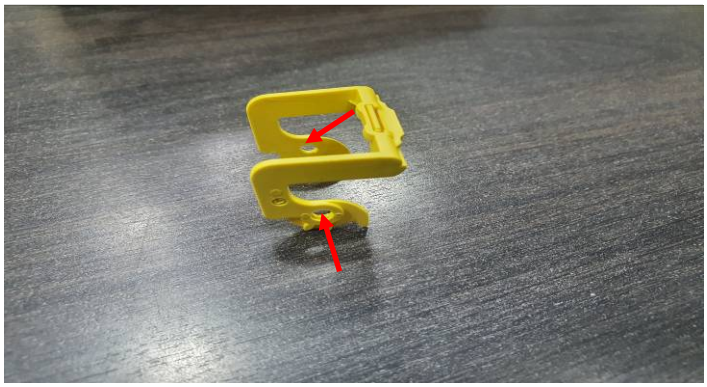
8. Installation – New Variant Plug&Play Connector

8.1 Main Connectors for Suspension Sensoric



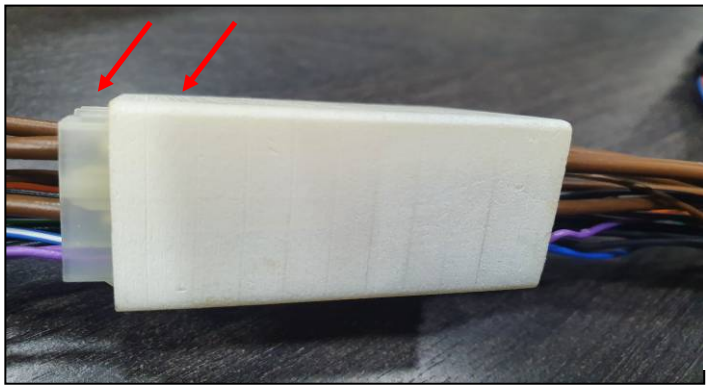
Step 1)
Access the Suspension Control Unit, here you need the brown and the white plugs.

Unplug them from the ECU.



Step 2)
As next step please unclick the yellow part from the connector.

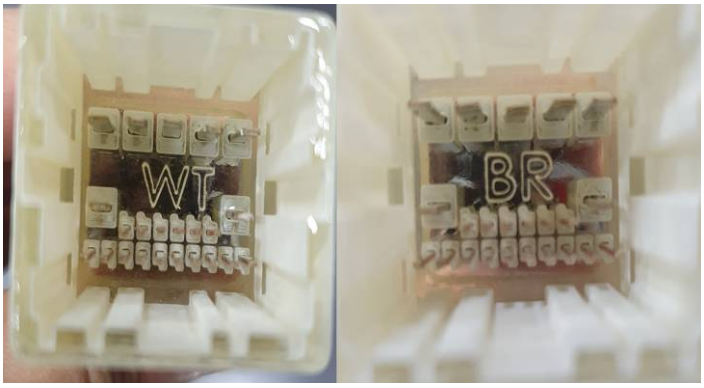
It is just clicked in outside of the connector.



Step 3)
Connect now the car's original connector with our Plug&Play Connector.

Make sure, that it is FULLY inserted and fix it with a cable tie.

(Be careful, not to damage the housing, just let it be fixed simply to secure that it will not get loose).



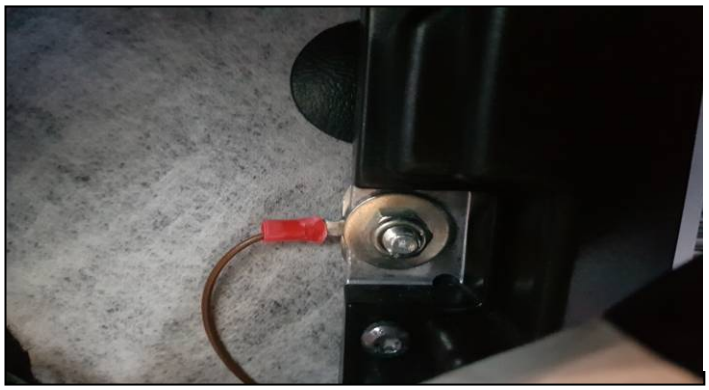
Step 4)
Inside of our adapter's you see which one belongs to the brown and which one to the white housings.

WT belongs together with the white connector and BR with the Brown one.

Put now the other end back to the ECU.

Sometimes you need to restart the car twice to have the errors in the dashboard gone.

8.2 Power Connection



Step 1)
Connect the ground line to a suitable ground point.



Step 2)
Measure which fuse a terminal 30 (permanent +) carries and connect it using the enclosed fuse holder.



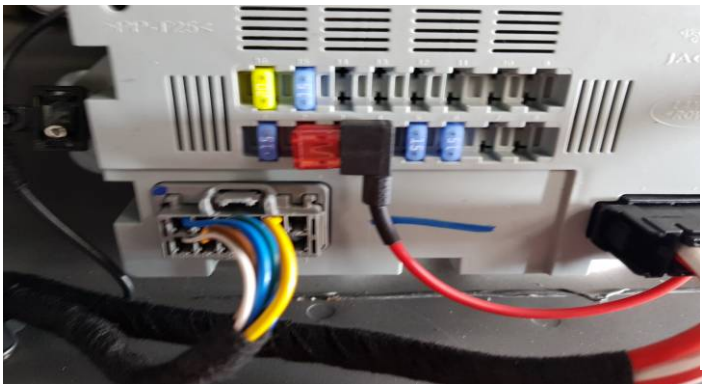
RangeRover Sport models, for example, can use backup location F56.

Please measure beforehand.



An example for the Range Rover Velar would be backup location 4.

Please measure yourself here too.



Example:

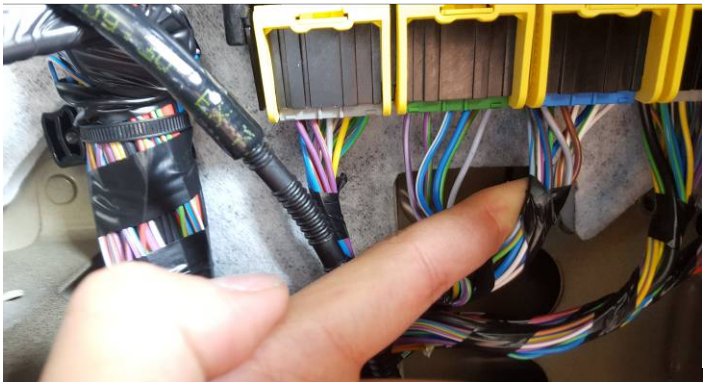
Range Rover Velar with fuse holder.



For the new L460/L461 or Range Rover Defender you will need a special fuse holder, not Standard Sized.

Measure which fuse a terminal 30 (permanent +) carries.

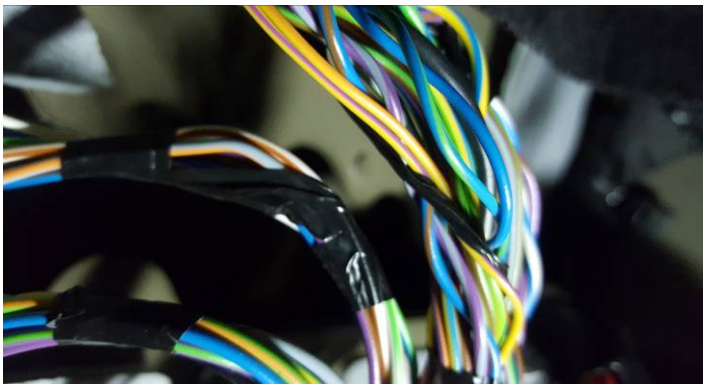
8.3 Can-Bus Connection



Step 1)
Locate the Can Bus at the Suspension ECU:
Blue = CAN-HIGH
Blue/Green = CAN-LOW

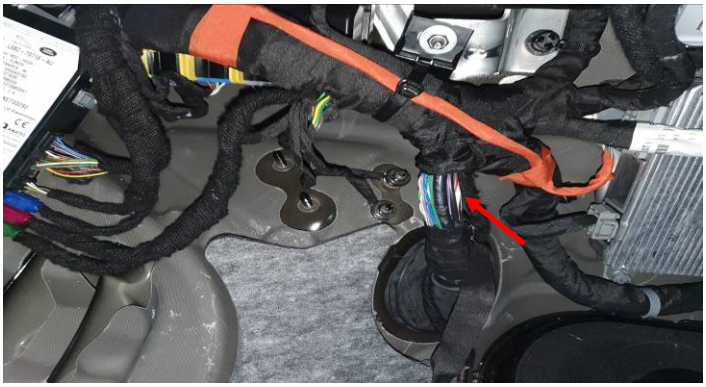
The Can-Bus is always a twisted pair.

Please note, the can-bus is only available on older cars at this location. For the newer models you need to take the can from the main wiring.



Please connect the can-bus as followed:

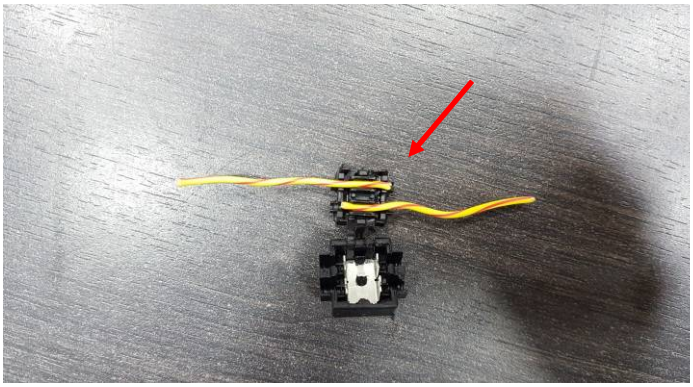
Orange/Black belongs to Blue.
Orange/Brown belongs to Blue/Green.



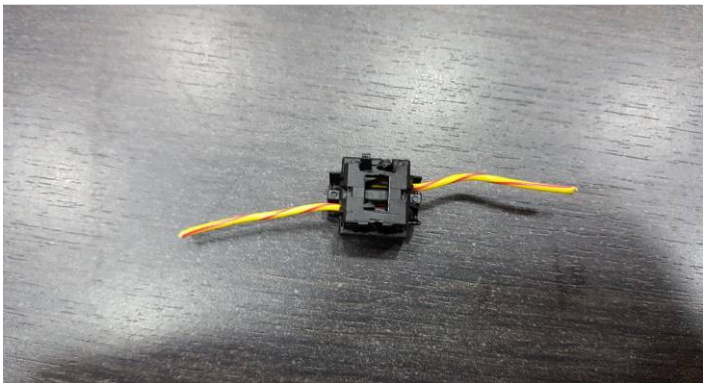
This shows as example the hidden can-bus wires in the new RangeRover L460/L461 models.



9. Installation – OLD Variant, without Plug&Play



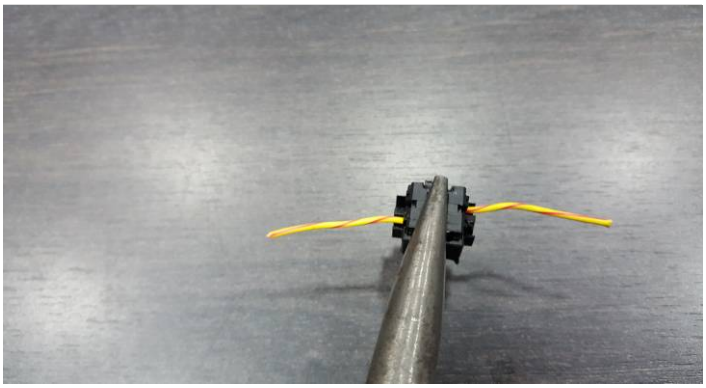
Step 1)
We have included adapters in the delivery so that you do not need to solder each individual line, you just have to squeeze it.



Tip)

Use the adapter shown for easier assembly.

Place the two ends to be connected into the black guide so that they are fixed



It’s essential to tighten the adapter with pliers.



Step 2)
The plugs from left to right are labeled A, B, C, D, E.

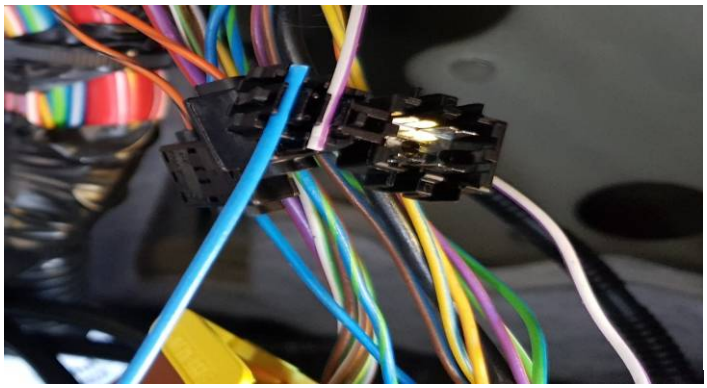
You have to cut the corresponding cable from the vehicle and then connect it to one another according to the table.

It is important that you DO NOT confuse the vehicle and the control unit.

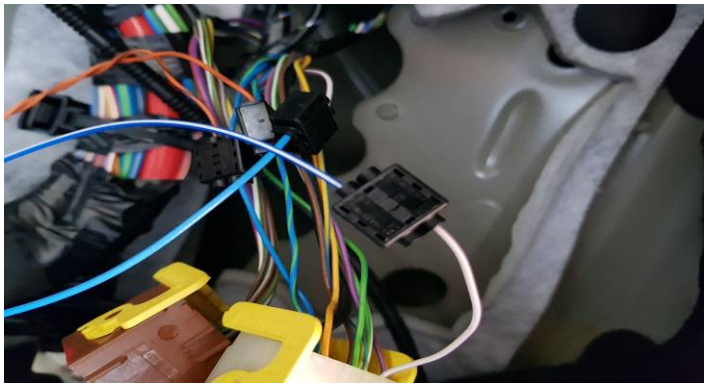
Please proceed using the pin assignment and check the color, it must match our specifications - otherwise there is something wrong. Please contact us if this is the case.

On the control unit side => points in the direction of the colored contact housing.

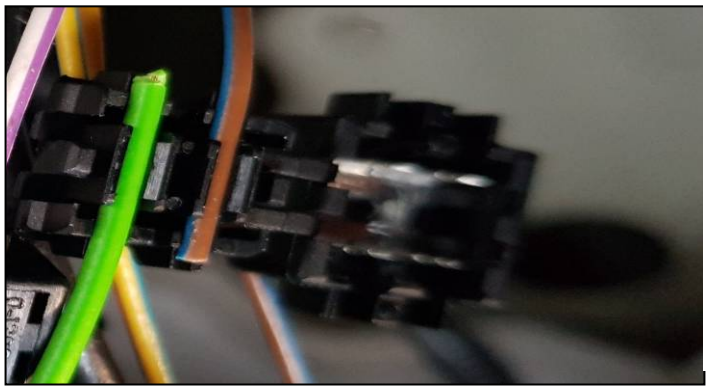
Pin assignment ASC			
Red	Solder 12V - permanent positive (BU / RD) 14A-6	Brown	Solder the ground (Black) 14D-6
Orange/Black	BU 14D-8 clamp in parallel	Orange/Brown	BU/GN 14D-9 clamp in parallel
Violet	VT/OG 14D-23 clamp in parallel	-	-
-	-	-	-
Blue	WH/VT 14D-22	Blue/White	
Green	BN/BU 14D-12	Green/White	
Black	WH/GN 14E-22	Black/White	
White (50cm)	GY/BN 14E-12	Red/White	
	connect vehicle side		connect control unit side



Step 3)
Example using the first sensor: WH / VT 14D-22
Cut the line from the vehicle.
Use the adapter to connect the blue line to the WH / VT that comes from the vehicle.

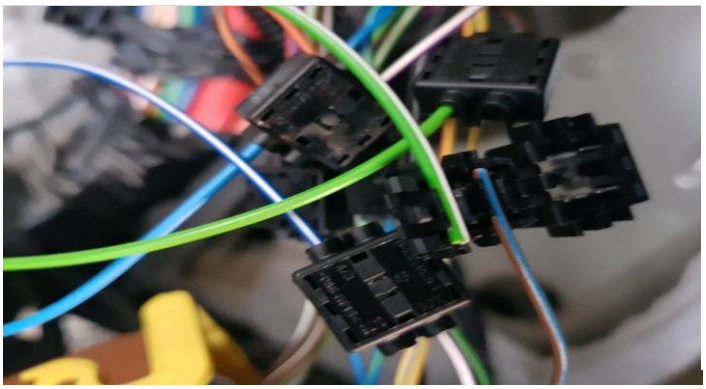


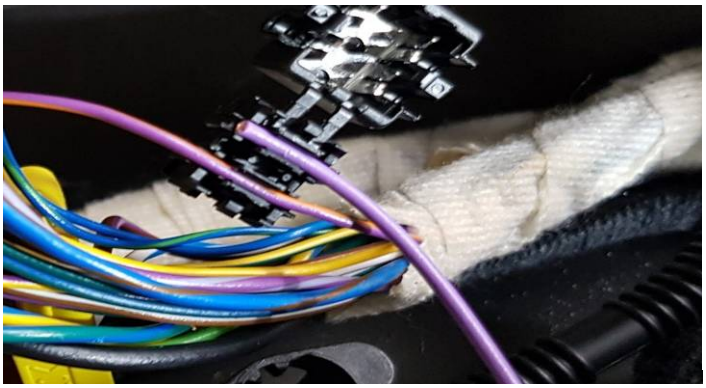
Now also connect the WH / VT line that points to the control unit with our blue / white line.



Step 4)
Proceed in the same way with the other lines according to the circuit diagram.

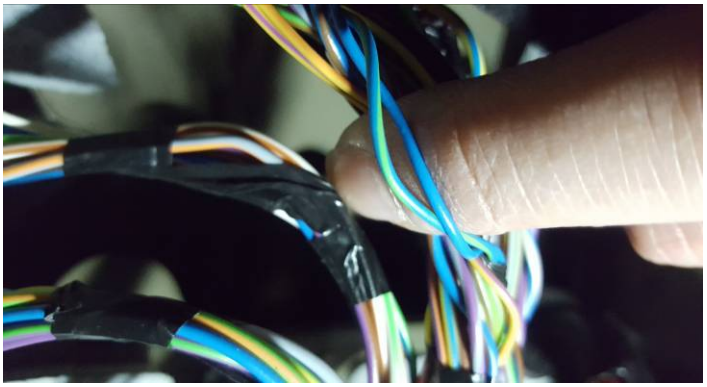
Here using the example of the green line with BN / BU.





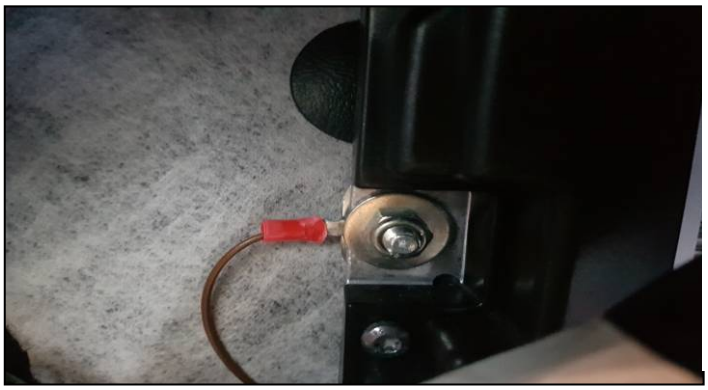
Step 5)
When all sensor lines are connected, connect the purple line to the existing VT / OG according to the circuit diagram.

This line is not cut, our purple line is clamped on it in parallel.



Step 6)
When all sensors are connected, you can also connect the Can-Bus lines in parallel to the existing ones as specified in the circuit diagram.

Blue = Orange/Black
Blue/Green = Orange/Brown



Step 7)
Connect the ground line to a suitable ground point.



Step 8)
Measure which fuse a terminal 30 (permanent +) carries and connect it using the enclosed fuse holder.



RangeRover Sport models, for example, can use backup location F56.

Please measure beforehand.



An example for the Range Rover Velar would be backup location 4.

Please measure yourself here too.



Range Rover Velar with fuse holder.