Performance-kit D40 for W/V 222, S400d
222-D40-00
Engine type OM 656

BRABUS®

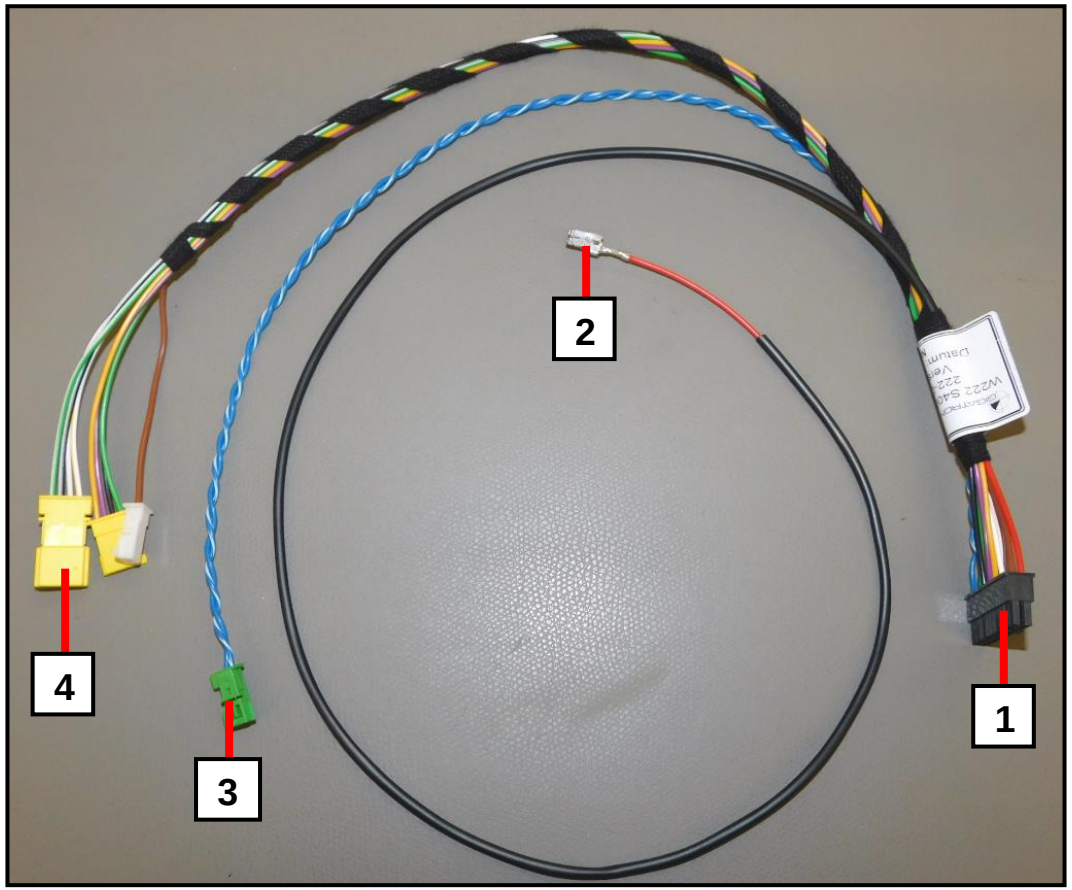
The product described in the instructions was developed, produced and checked considering the necessary safety requirements.
In order to ensure a proper and safe function and to rule out danger for persons and objects, this product must be installed appropriately.
Only trained, qualified staff, having the necessary technical experience and tools, should perform the installation.
Therefore you have to read and completely understand these instructions. Check the content of the parts supplied as detailed next page prior to assembly.

Included in delivery:

1x Control unit PowerXtra	UBS171
1x Wiring harness	222-D40-05-K,
consisting of:	- Interior wire harness
	- Engine bay wire harness
	- 1x MQS plug housing, 4-pole, yellow
	- 1x MQS socket housing, 4-pole, yellow
	- 1x MQS plug housing, 2-pole, white
	- 1x fuse 5A
	- 1x edge protection, 5cm
1x „Brabus“-typing	211-000-14
1x Set „powered by“	000-000-30
1x Type approval	

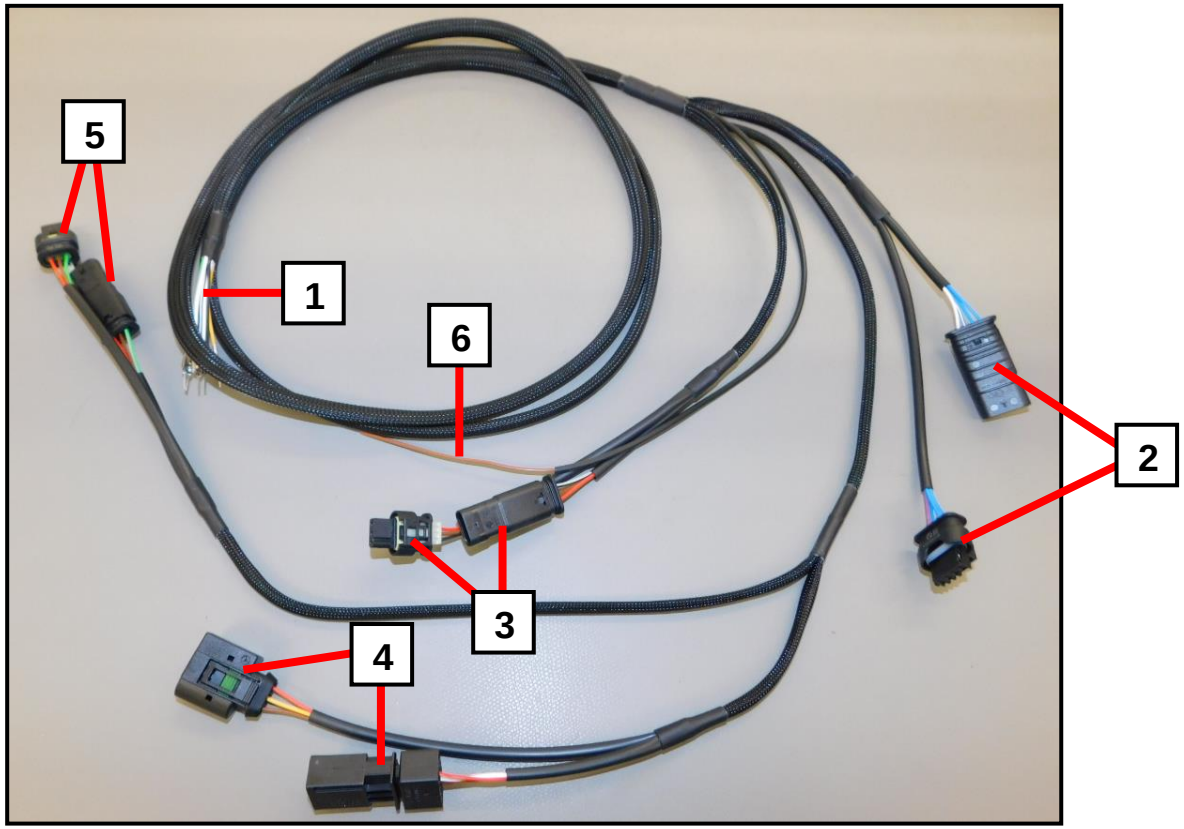
Overview of electrical connections to be established at interior wire harness:

1- PowerXtra-main plug
2- Power supply (red wire to fuse box within right footwell)
3- CAN-connector (to CAN-distributor within passenger footwell)
4- Connections to engine bay wire harness

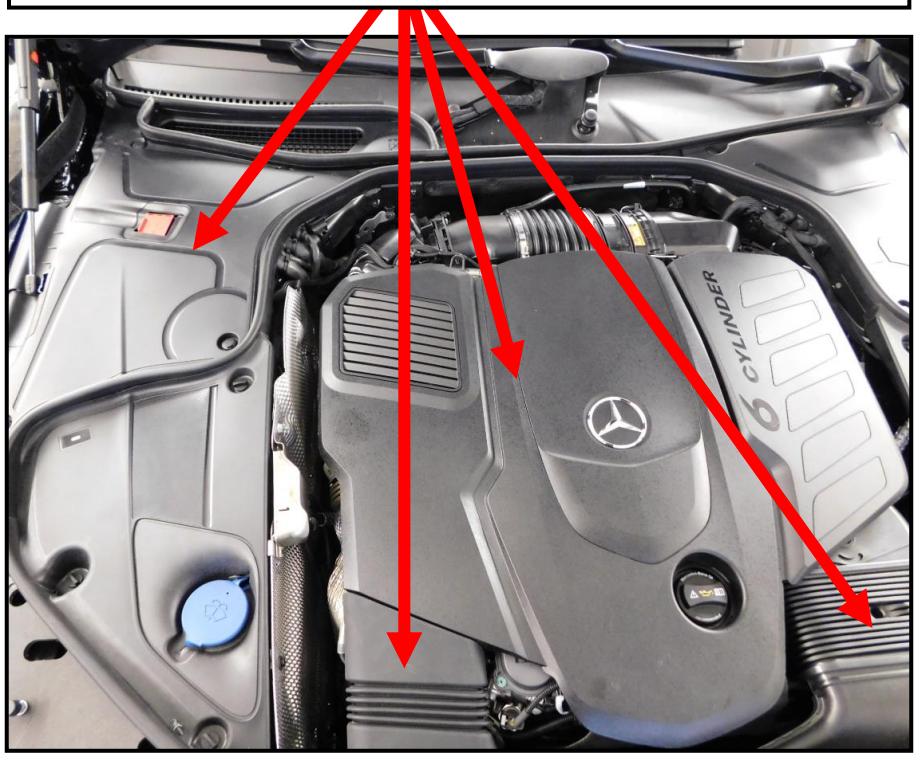


Overview of electrical connections to be established at engine bay wire harness:

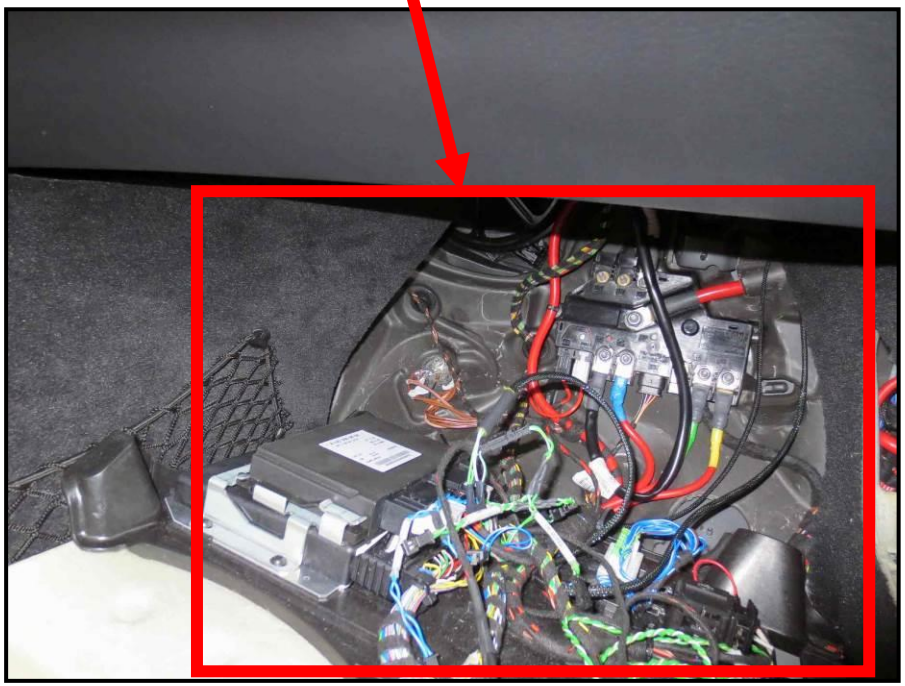
1- Connectors to interior wire harness
2- Adapter plugs for air mass sensor (B2/5)
3- Adapter plugs for charge pressure sensor (B5/1)
4- Adapter plugs for Fuel high pressure sensor (B4/6)
5- Adapter plugs for charge pressure sensor of low pressure circuit (B5/4)
6- Ground wire, to control unit ME (plug 2, wire out of slot 50, wire colors BN/GY),to be soldered
<u>Do not connect to any other ground signal position!</u>



Disassemble engine bay plastic covers, air ducts and passenger side cross strut below plastic cover

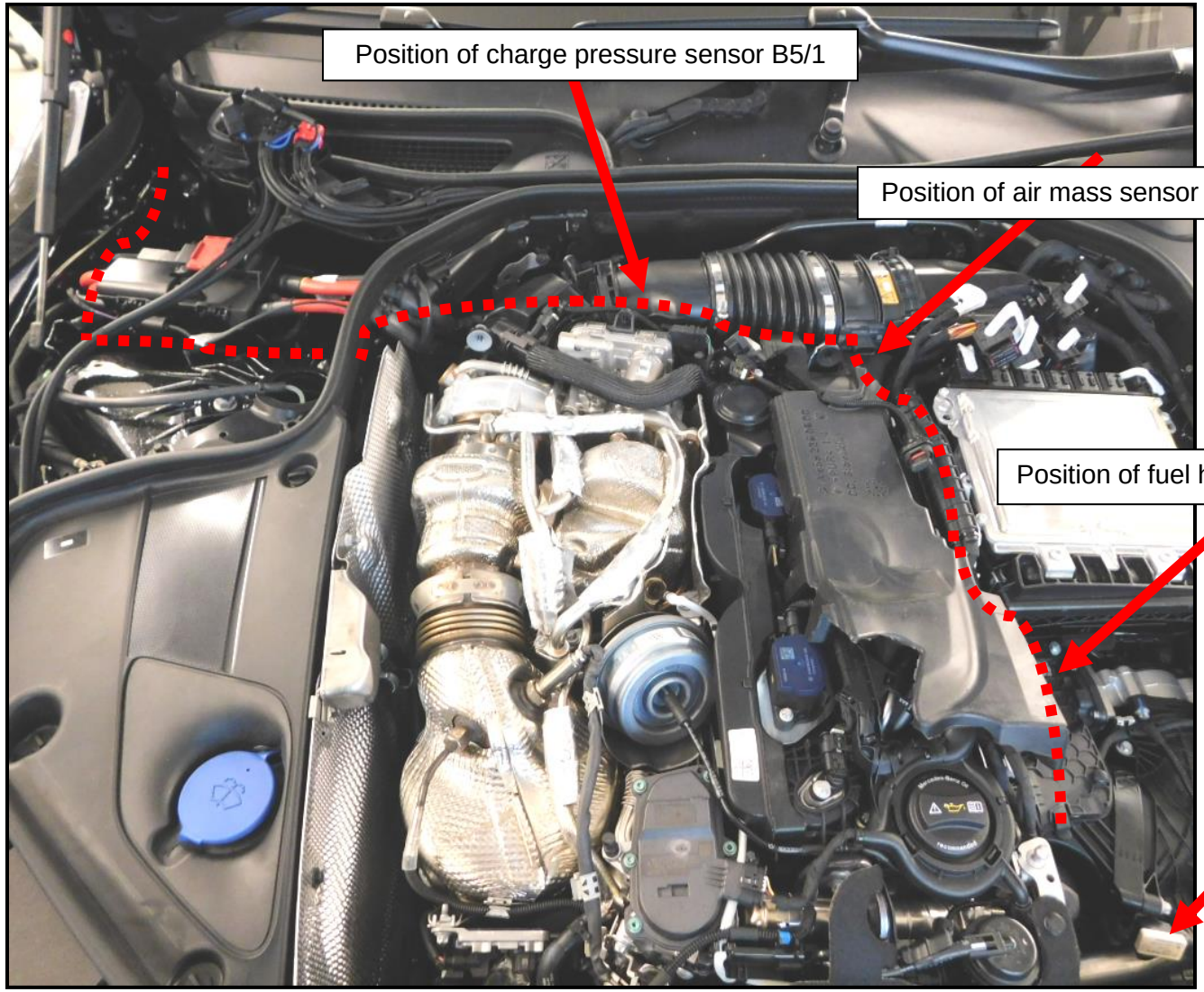


Gain access to main electrics within passenger footwell

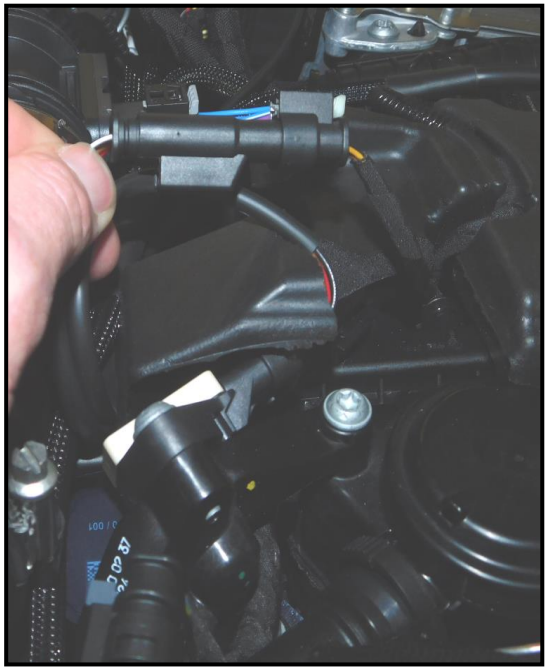


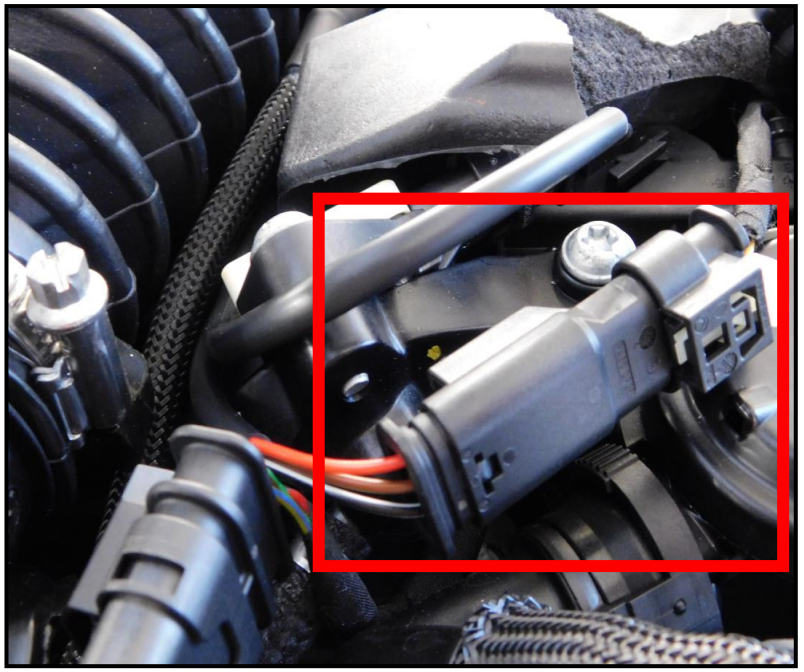
Attention: ***Disconnect ground line of vehicle main battery prior to installation!***

Illustration of engine bay wire harness routing:

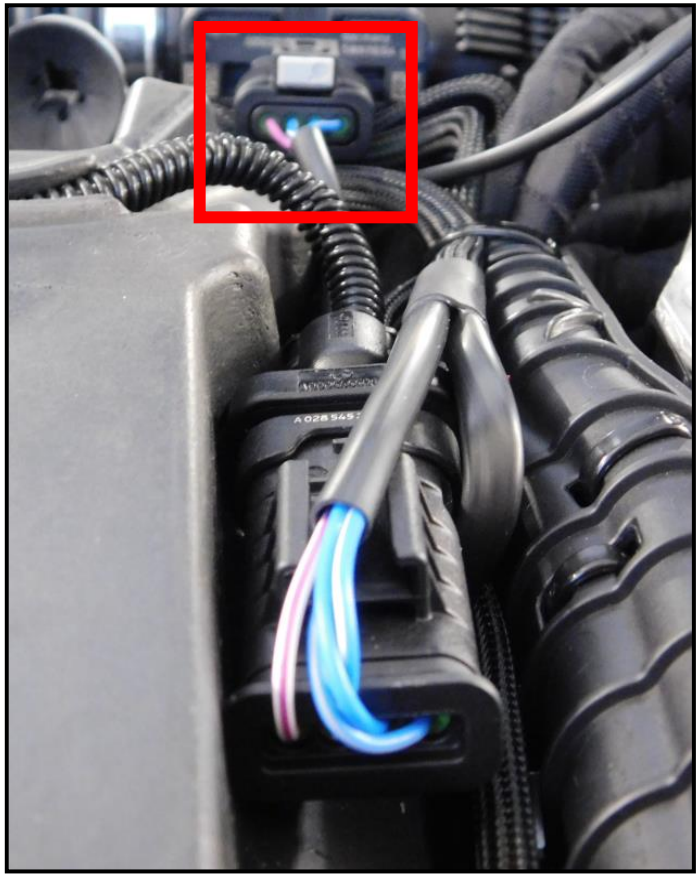


Disconnect plug of charge pressure sensor (B5/1) and connect to Brabus wire harness, connect plug of Brabus wire harness to charge pressure sensor (B5/1)

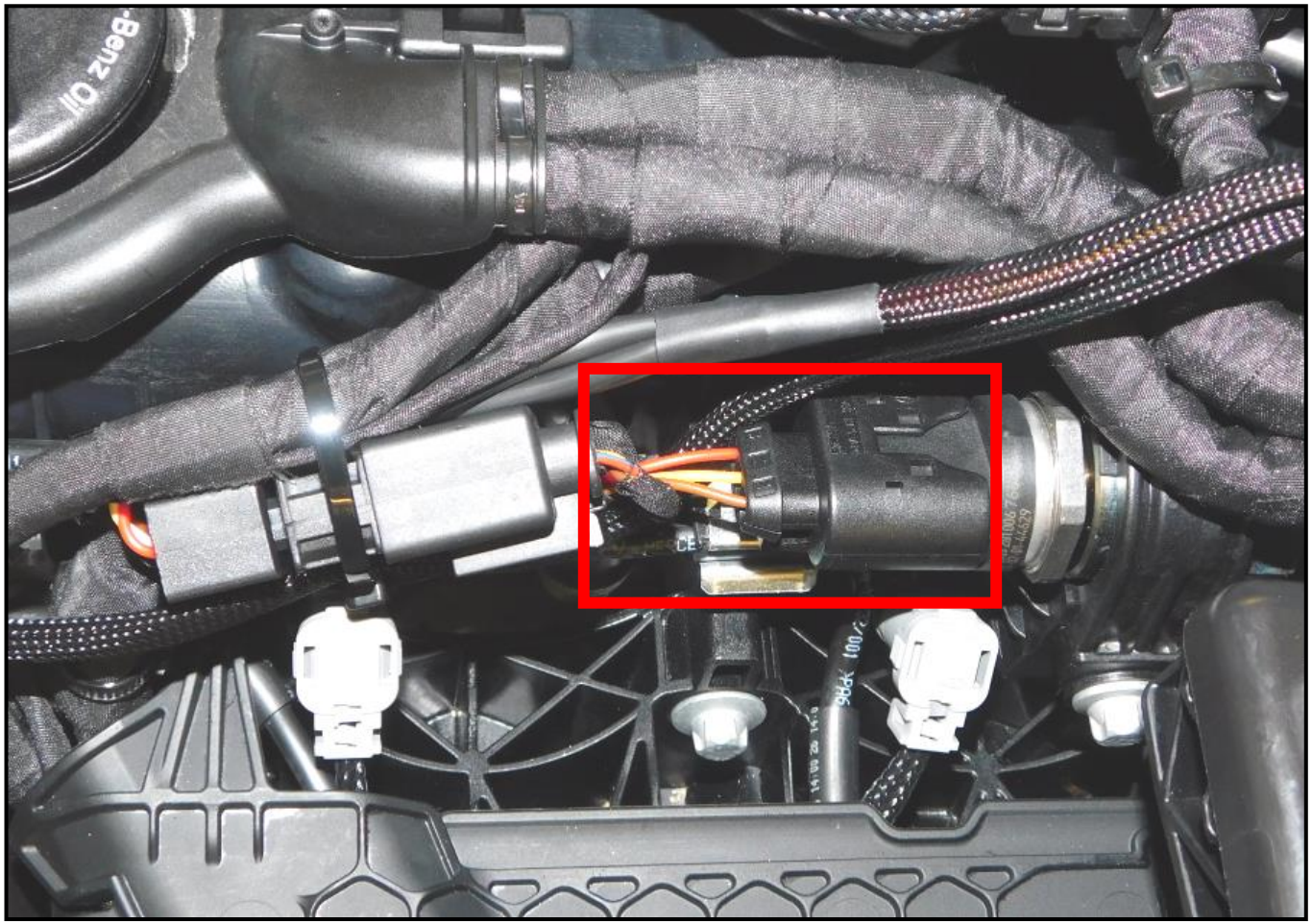




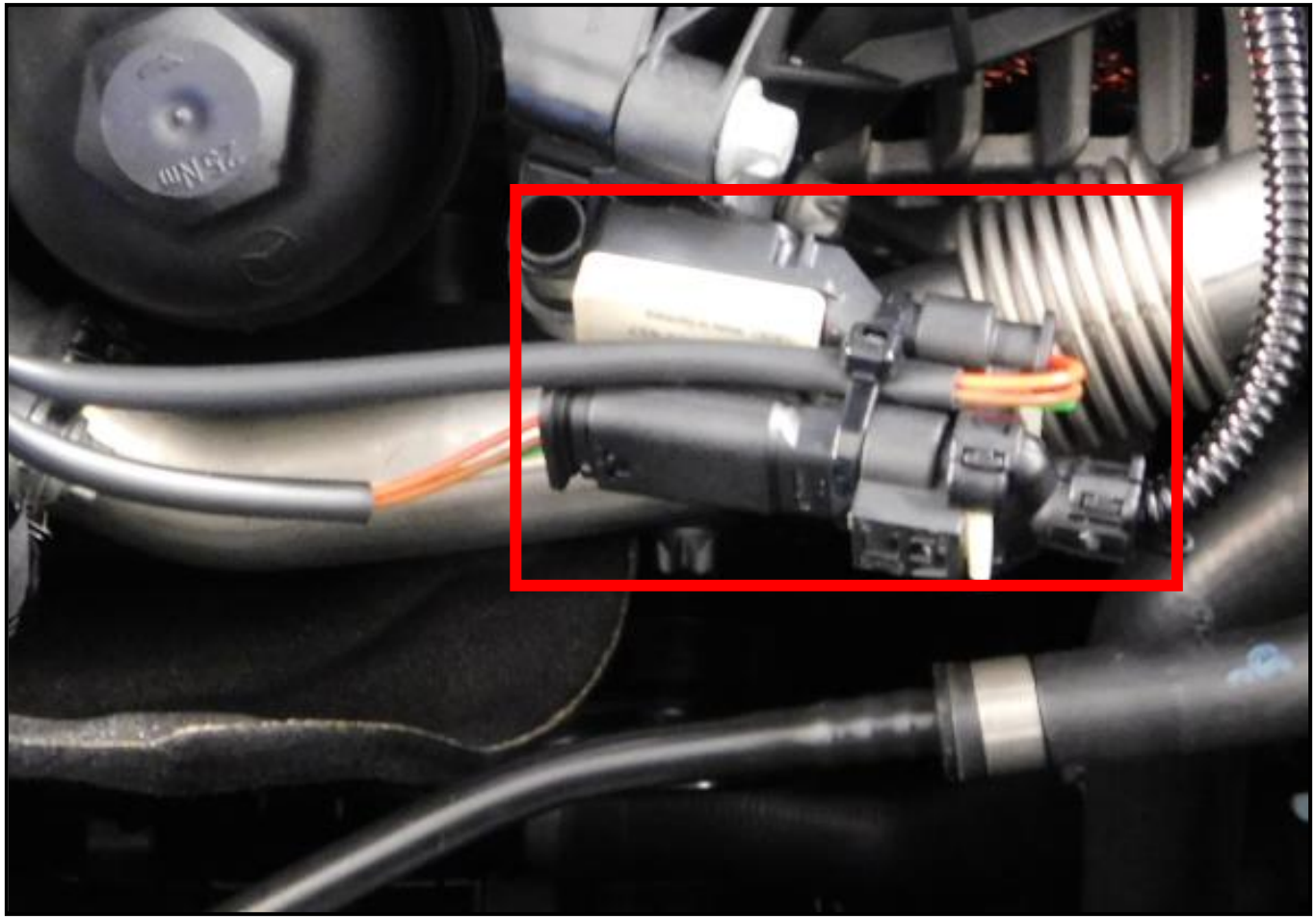
Route wire harness to air mass sensor (B2/5). Connect plug of air mass sensor (B2/5) to Brabus wire harness, connect plug of Brabus wire harness to air mass sensor (B2/5)



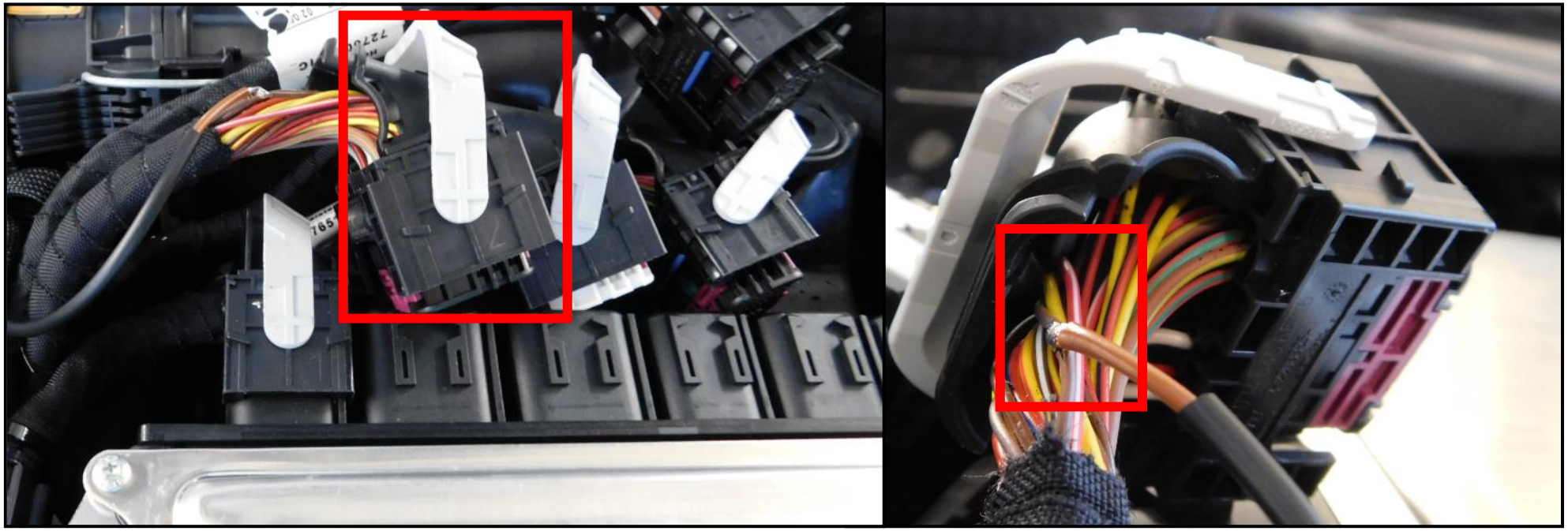
Route Brabus wire harness to fuel high pressure sensor (B4/6). Connect plug of fuel high pressure sensor (B4/6) to Brabus harness, connect plug of Brabus harness to fuel high pressure sensor (B4/6).



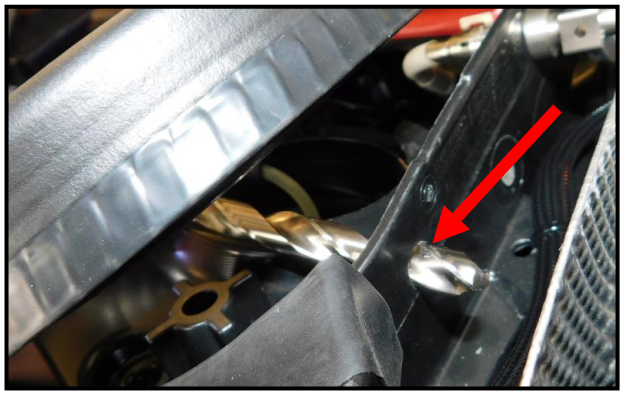
Route Brabus wire harness to charge pressure sensor of low pressure circuit (B5/4). Connect plug of charge pressure sensor of low pressure circuit (B5/4) to Brabus harness, connect plug of Brabus harness to charge pressure sensor of low pressure circuit (B5/4)

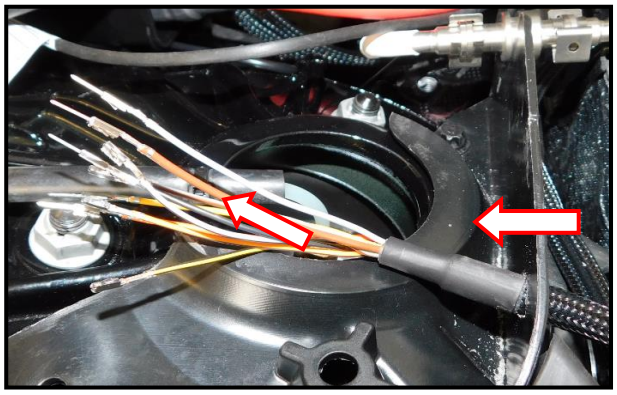


Solder brown wire of Brabus engine bay harness parallel to the wire out of slot 50 of plug 2 (wire colors BN/GY, do not just wrap the wires!). Sufficiently isolate the soldered area. Do not connect the ground wire to any other ground terminal! Pull plug latch back into it's position and re-attach plug 2 to control unit ME.

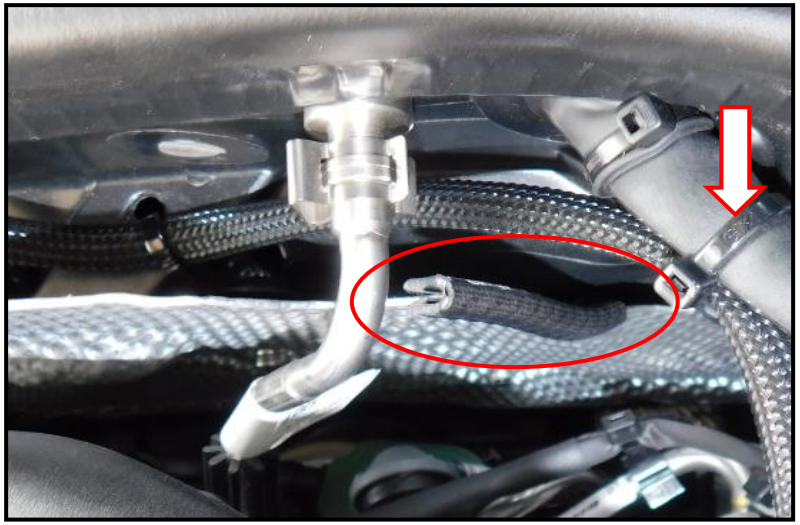


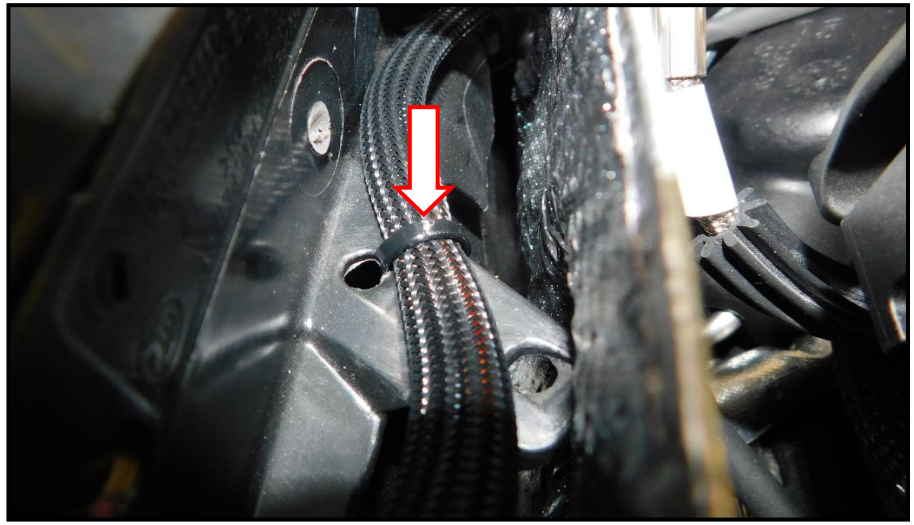
Drill a 10mm-hole into the engine bay right side plastic cover according to images below using a suitable drill. Route Brabus engine bay wire harness through the hole.





Connect Brabus engine bay wire harness at suitable positions using cable ties, make sure for safe and tension-free routing. Attach edge protection to the area of the heat shield shown.





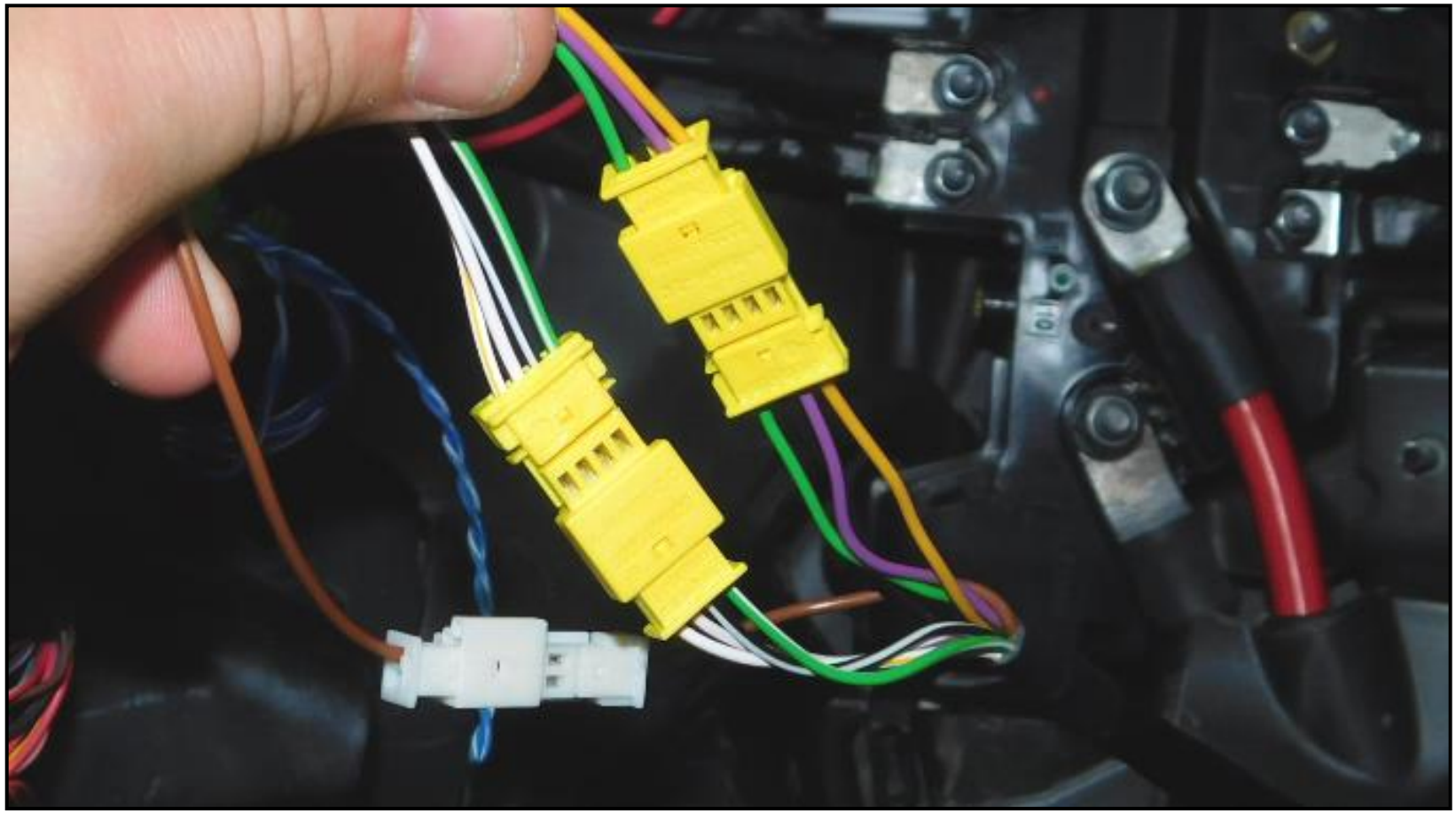
Route Brabus harness upon pressure hose of right Airmatic suspension strut to the interior duct grommet. Fixate wiring harness using cable ties.

Carefully cut rubber grommet shown and route the Brabus engine bay wire harness through into the vehicle. Do not perform the cut too long in order to avoid water infiltration.

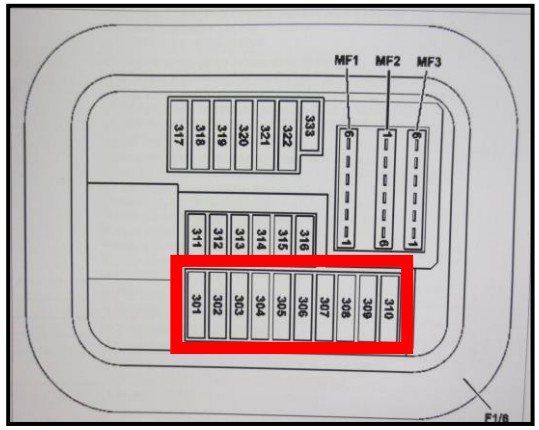
We recommend to seal the grommet by using PU-adhesive.

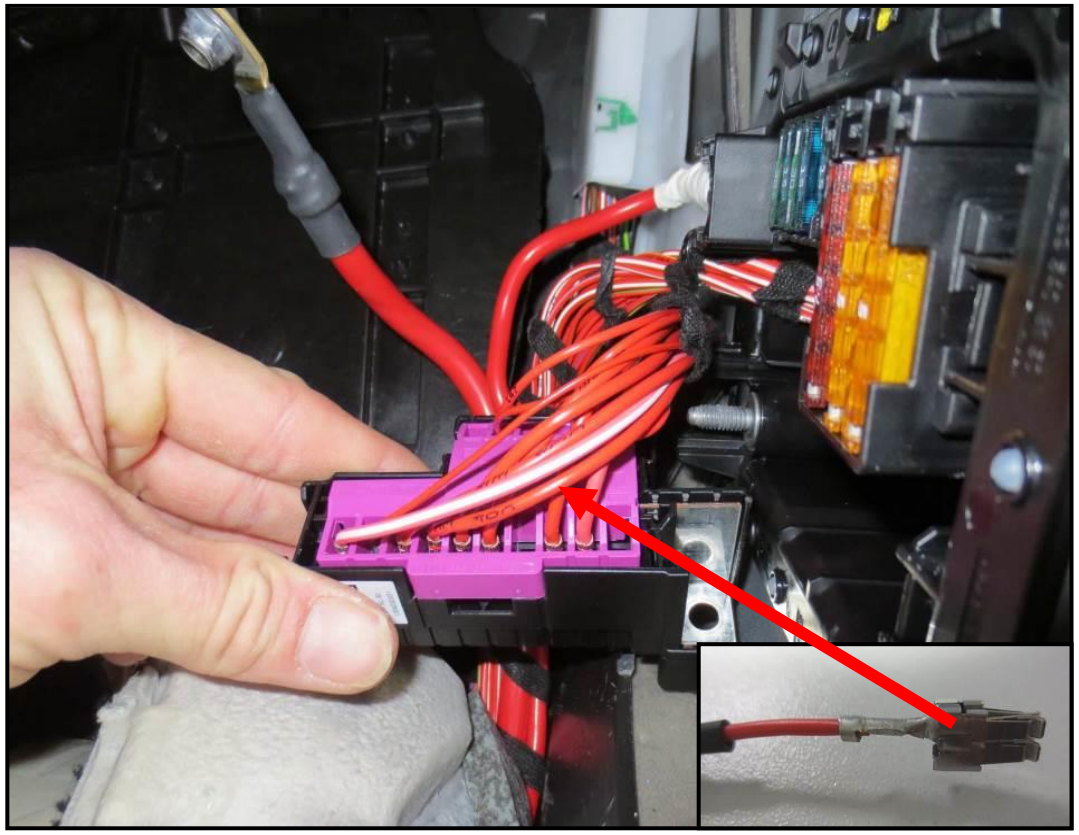
Connect ground and pressure sensor wires of Brabus engine bay wire to Brabus interior wire harness using 2-& 4-pole MQS plugs supplied (color equally).

Make sure for proper latching of the pins and that the wires have been connected color equally. Lock the plugs, connect plugs and sockets.

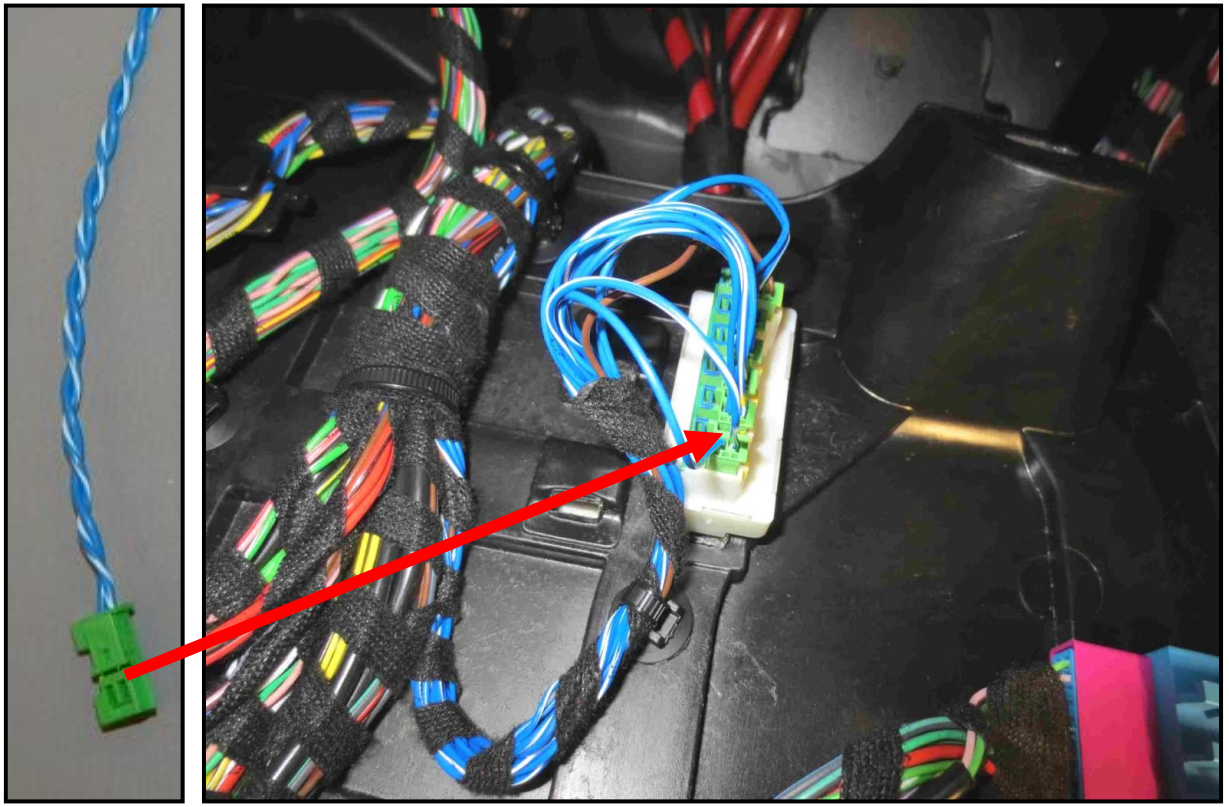


Disconnect power supply wire at terminal shown and release the fuse port on the right side within footwell. Attach power supply wire of Brabus harness to one free slot of power supply panel shown. Attach 5Amp fuse to fuse port.





Attach 2-pole CAN-plug of Brabus interior wire harness to a free port of CAN-distributor shown. In case that all slots are used already solder the CAN wires to the wires out of one standard plug and properly isolate the soldering areas.



Connect Brabus interior wire harness to PowerXtra control unit and fixate it on top of the Airmatic control unit using Velcro tape supplied.

Re-attach all removed cover parts and make sure all electrical connections were securely made, all wires were routed securely and tension-free and that the wires are protected against damages. Re-connect the ground wire to the vehicle main battery.

Check the fault store and delete faults which may have occurred during installation. Perform a test-drive.