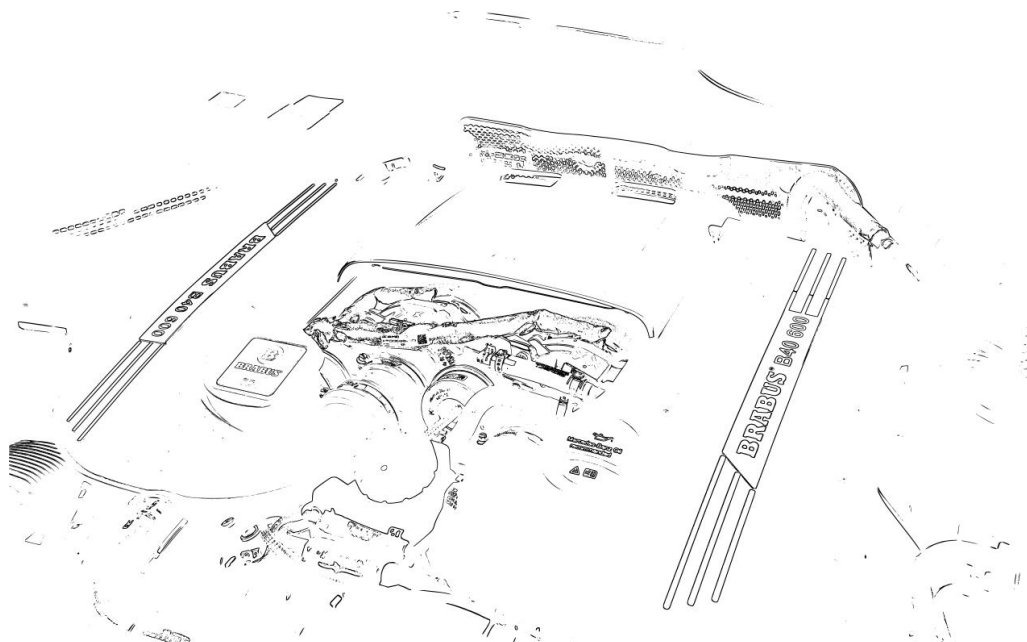




BRABUS®

Performance kit B40S-650 for type W/S/C 205 – C63 AMG



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 make the installation. Therefore you have to read and completely understand these instructions. Before you start please check the content of the supplied parts as detailed below.

Attention:

The assembly of the performance-kit, especially the assembly of the Brabus special - turbochargers, must be performed by an authorized Mercedes-Benz workshop which is equipped with the special tools and diagnosis tools required.

The replacement of the turbochargers is to be performed strictly according to Mercedes-Benz workshop instructions! For adjustment of the wastegate valves please regard to instructions on page 12.

Content of delivery:

Electrical components:

1x PowerXtra control unit	
1x Control unit bracket	000-753-00
1x Wiring harness	205-740-05-K

Mechanical components:

2x Special-turbocharger M177 ATL	177-740-500
1x Heat shield	
1x Assembly material	

Typings and badges:

1x Brass badge 65 mm x 65 mm	000-738-82
2x Alloy bezel „B40-650“	205-B40S-100
1x Typing „Brabus“	211-000-14
1x Set of typings „powered by“	000-000-30

Assembly chronology:

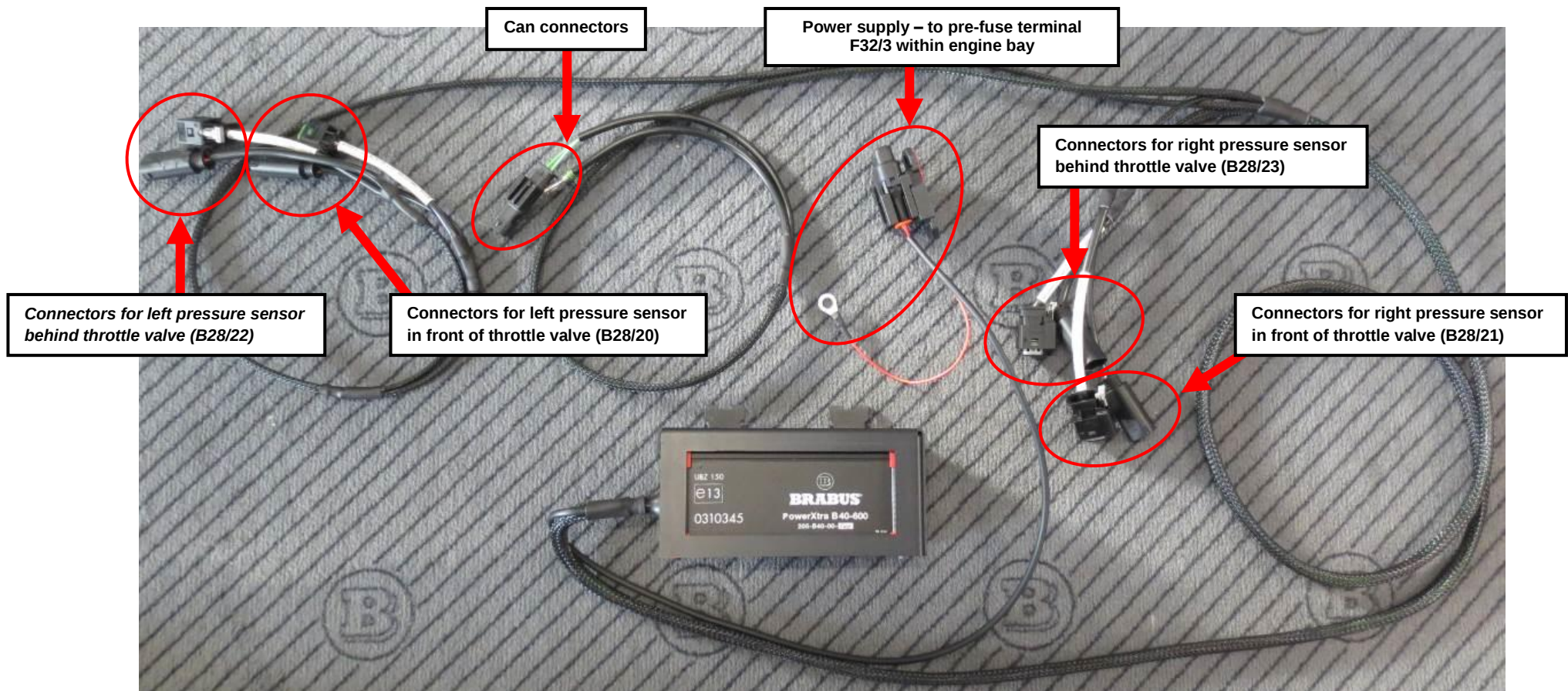
1. Brabus special-turbocharger
2. PowerXtra electronical performance-kit unit
3. Typings and badges (after assembly of airfilters and trim parts)

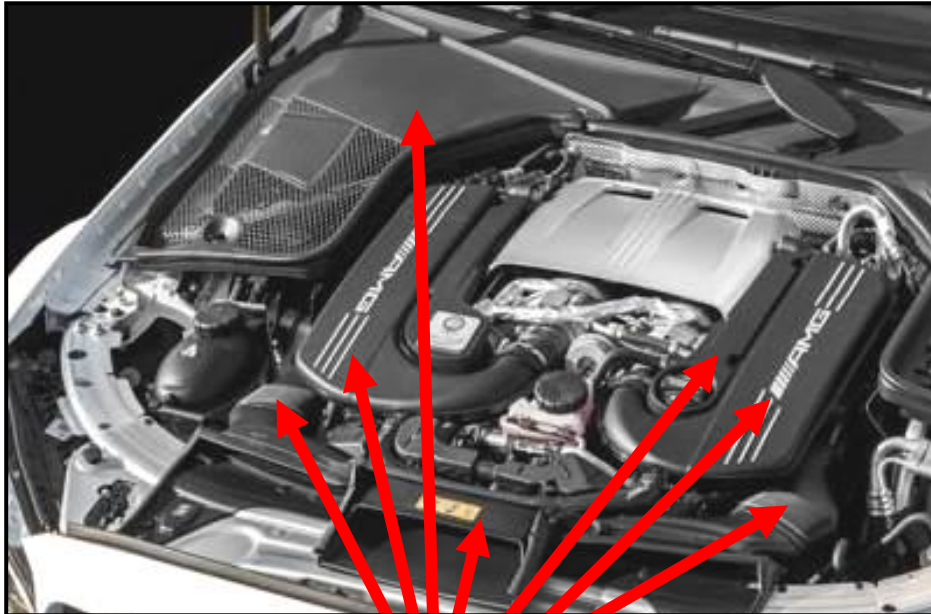


Illustration shows airfilter housings and trims painted signal-red, Mercedes-Benz colour code F568.

Electrical connections overview:

- 1- PowerXtra-main plug
- 2- Power supply (red wire to pre-fuse terminal F32/3 within engine bay)
- 3- CAN- connectors
- 4- Connectors for pressure sensor in front of left throttle valve (B28/20)
- 5- Connectors for pressure sensor in front of right throttle valve (B28/21)
- 6- Connectors for pressure sensor behind left throttle valve (B28/22)
- 7- Connectors for pressure sensor behind right throttle valve (B28/23)



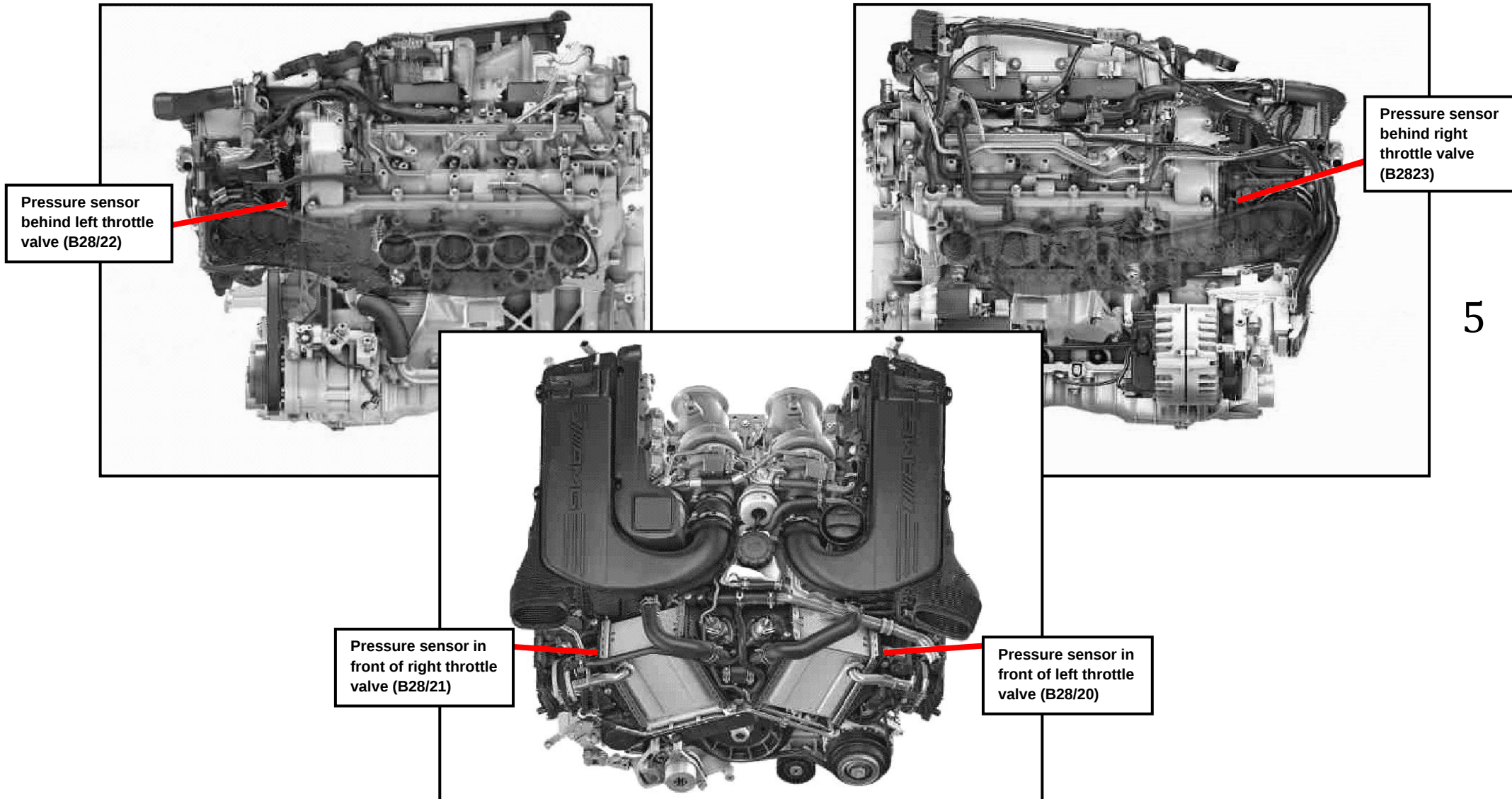


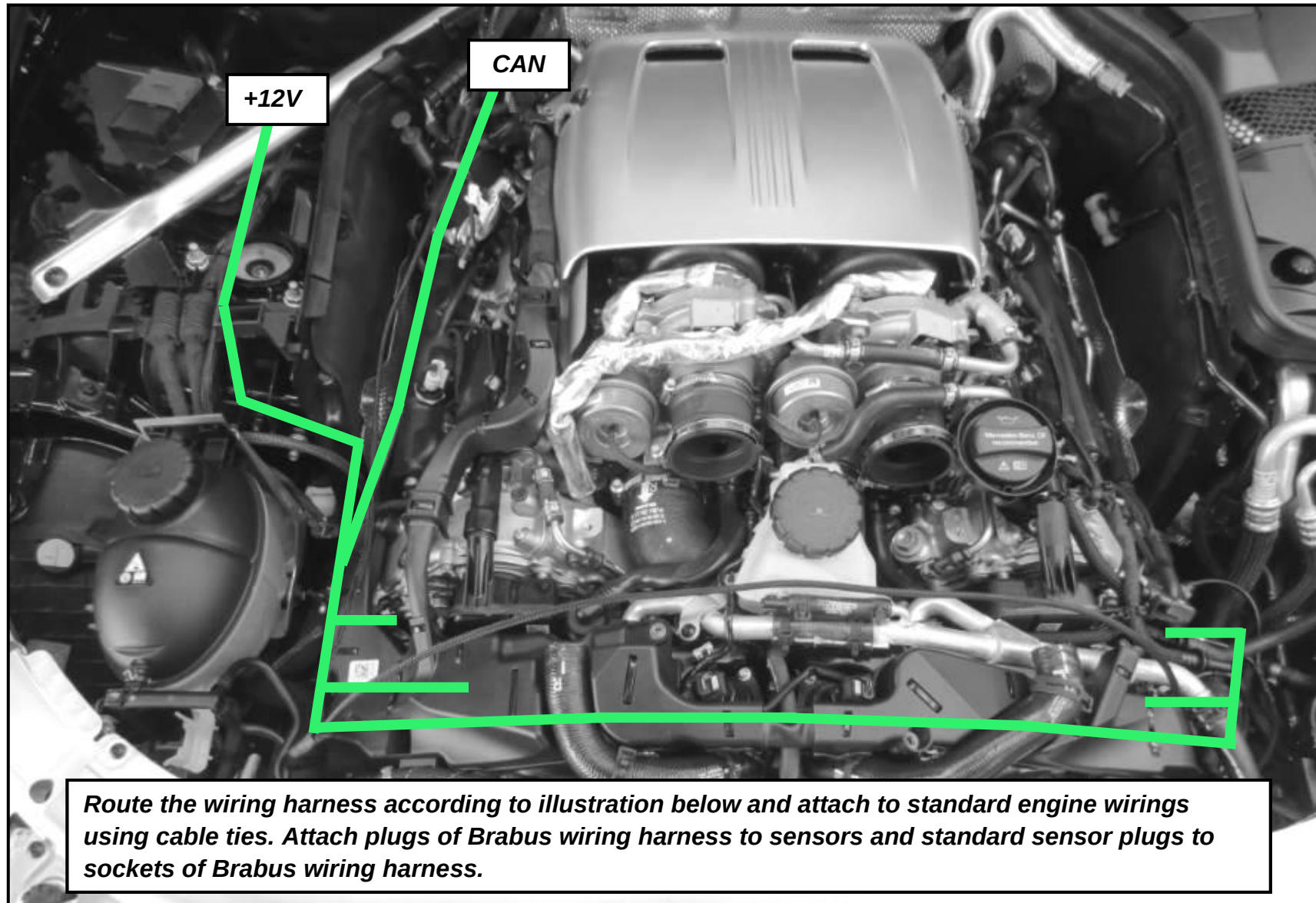
Remove plastic trims shown and both airfilters according to Mercedes-Benz workshop instructions.

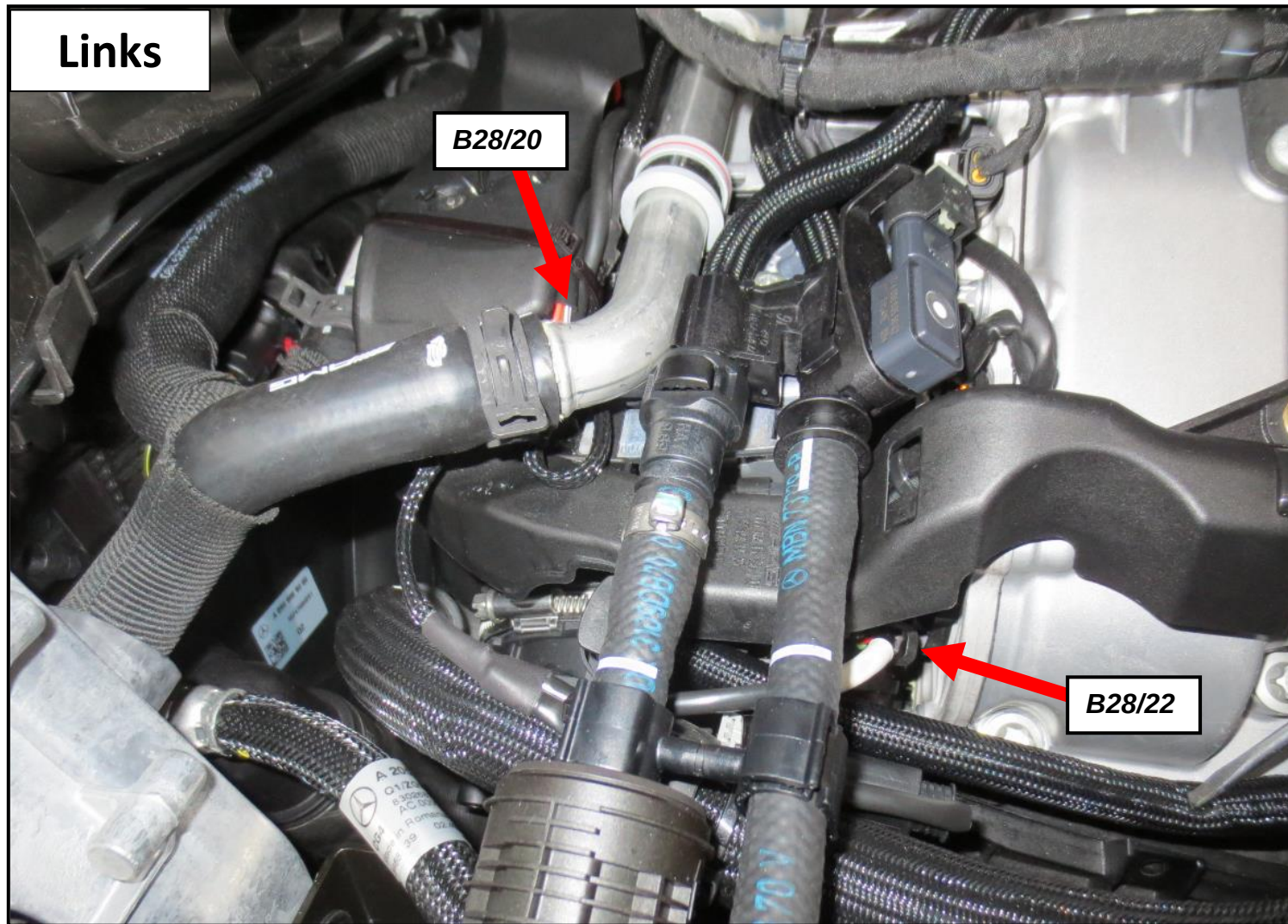


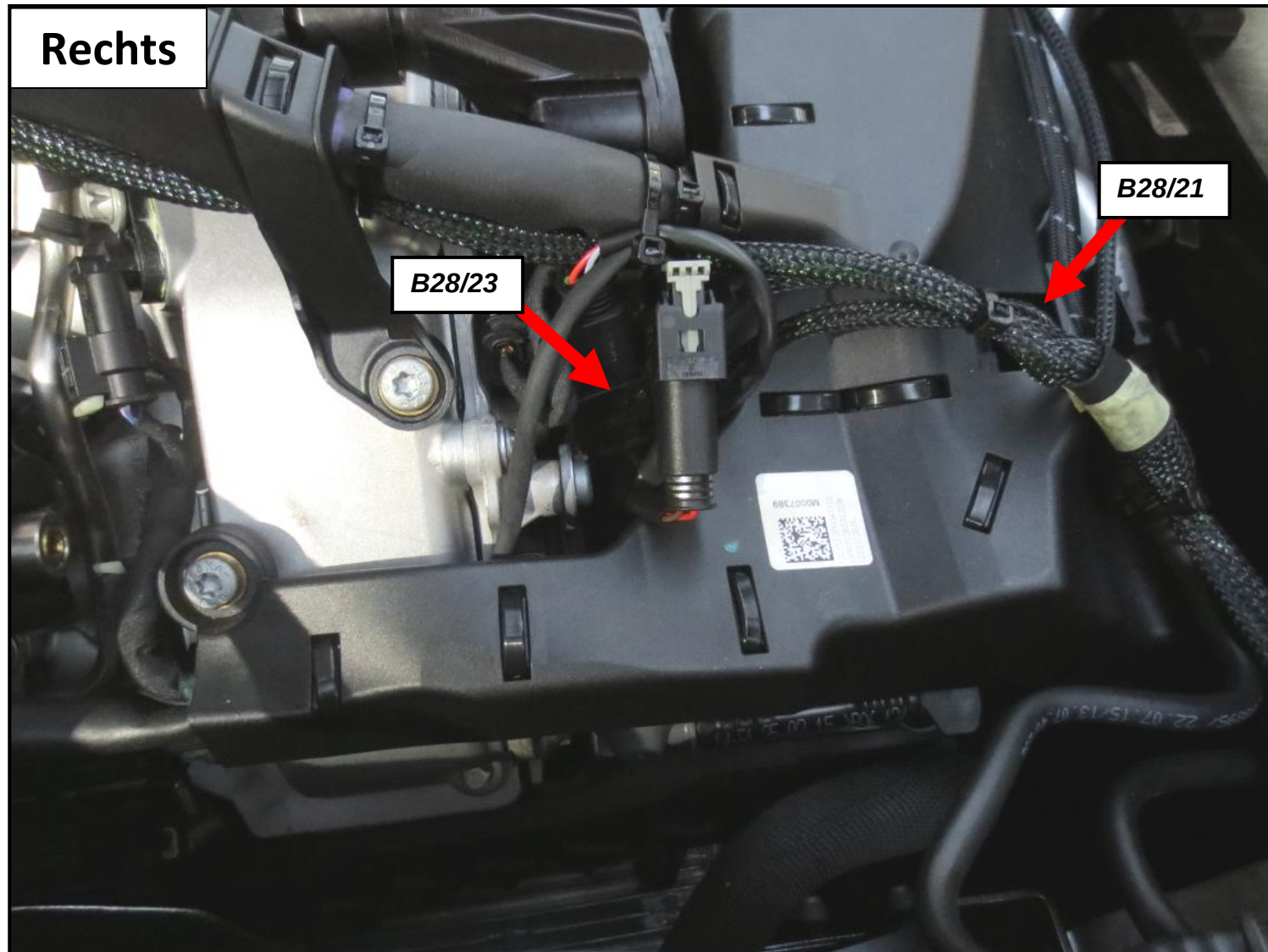
Attention: *The standard sensors the Brabus wiring harness needs to be connected to are difficult to access. It may help to remove further plastic trims in order to be able to connect the wiring harness to the sensors.*

Positions of standard sensors the Brabus harness gets connected to

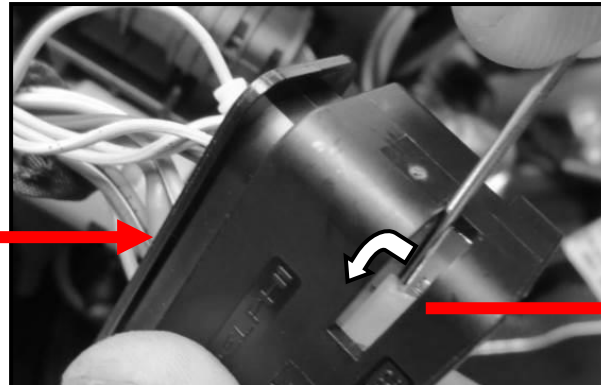
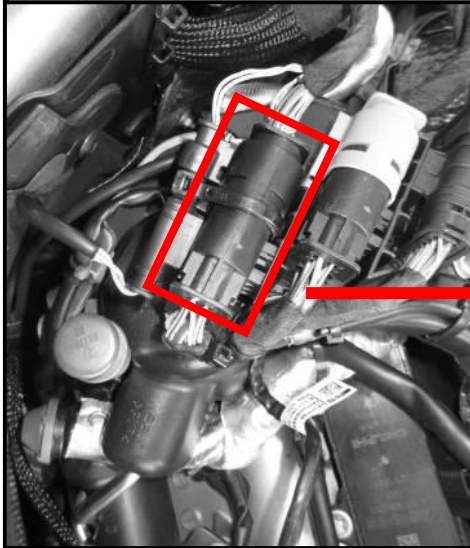








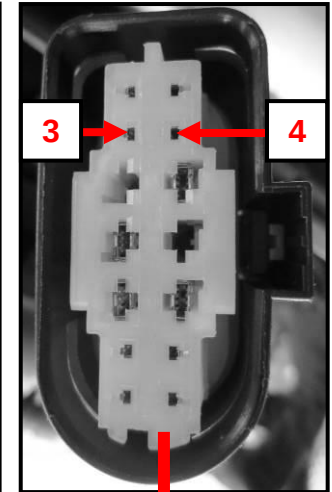
Disconnect plug shown



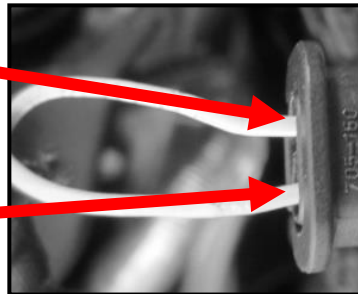
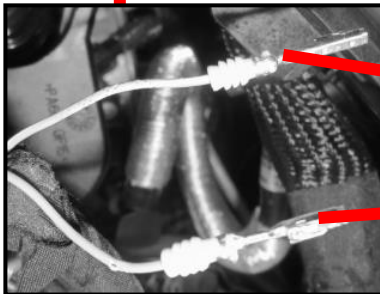
Release lockings on both sides of plug using suitable tool



Release wires out of slots 3 & 4 (CAN high and low) using suitable tool

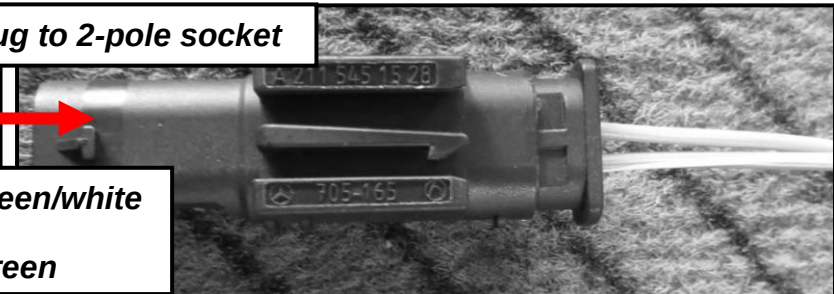


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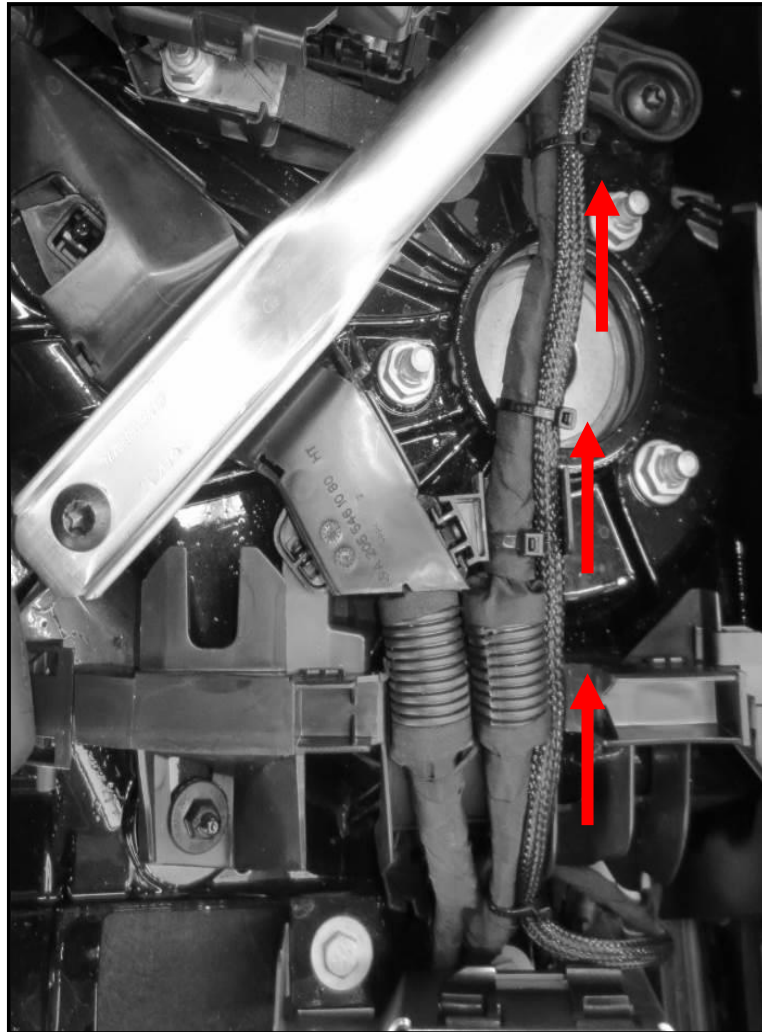
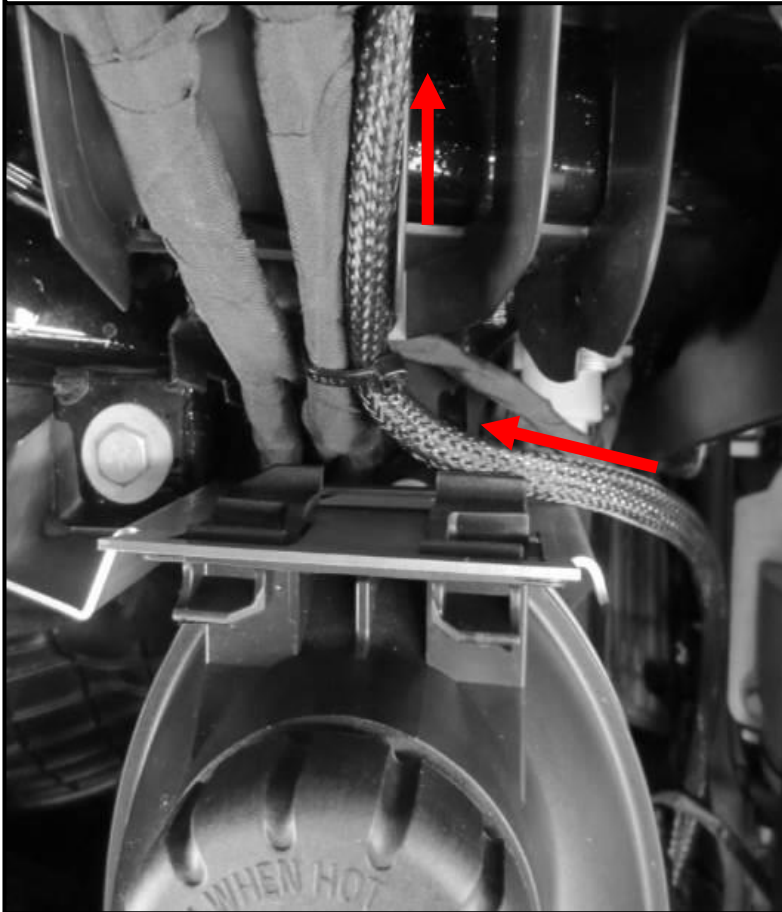
Connect 2-pole plug to 2-pole socket

*Blue/white → Green/white
Blue → Green*

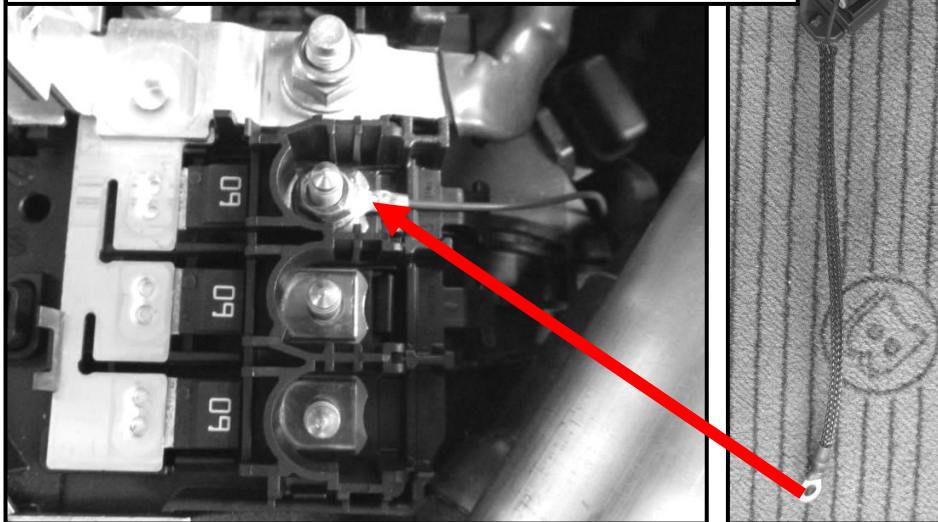


Attach the grey-black wire of the Brabus harness to slot 3 and the grey wire to slot 4 of the standard plug. Close plug lockings and re-attach main plug to socket. Secure connection using cable tie.

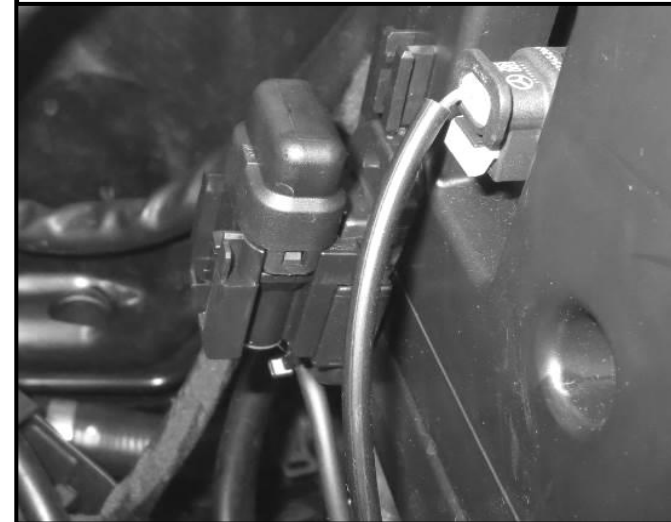
Route wiring harness to pre-fuse terminal F32/3 within engine bay. Fixate using cable ties.



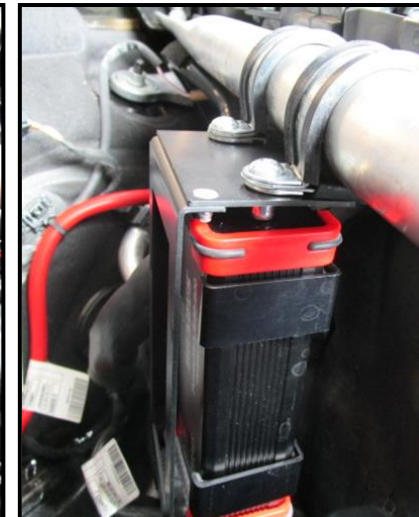
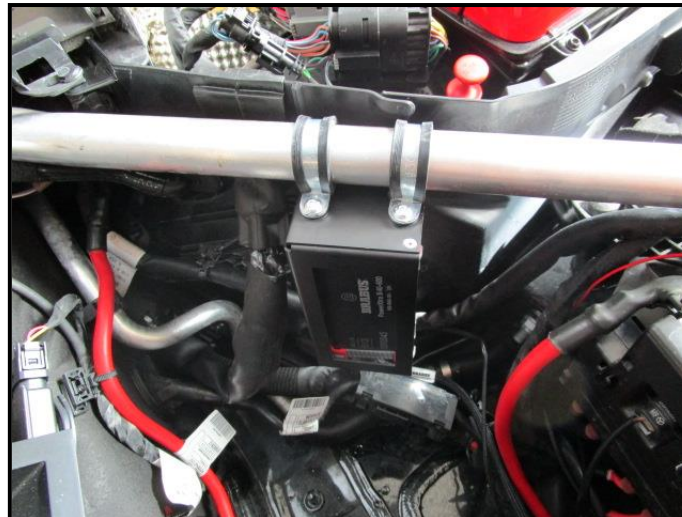
Bolt power supply ring lug to power supply terminal of pre-fuse unit shown.



Attach fuse supplied to fuse bracket (F32/3). Bond fuse terminal to pre-fuse terminal housing.

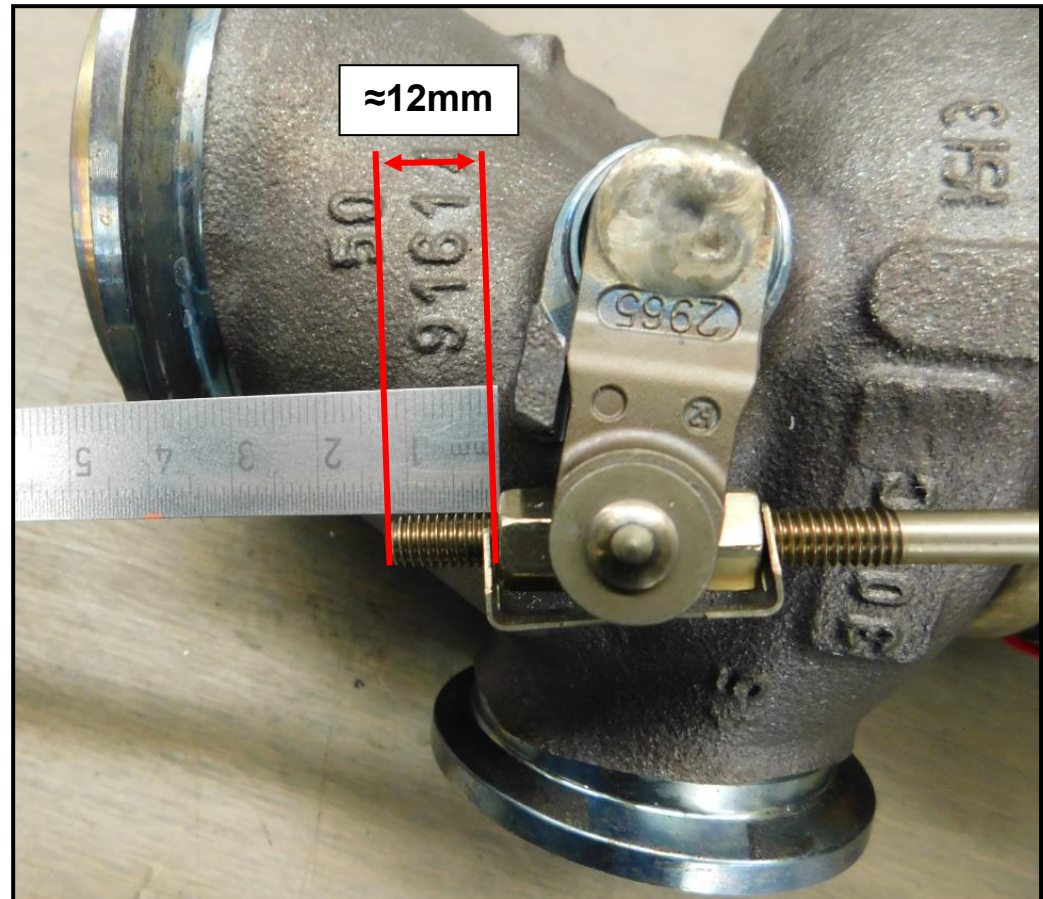


Fixate control unit to right cross strut within engine bay according to images



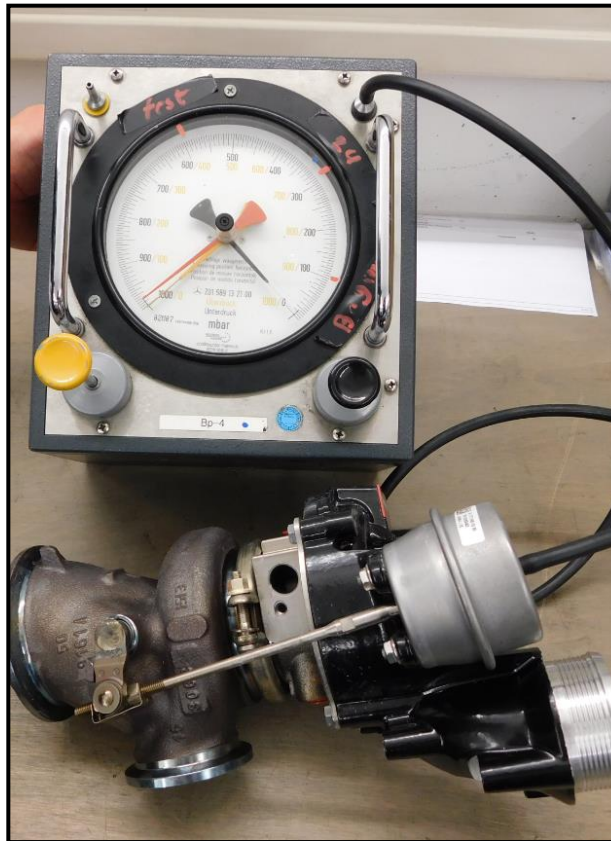
Wastegate valve adjustment:

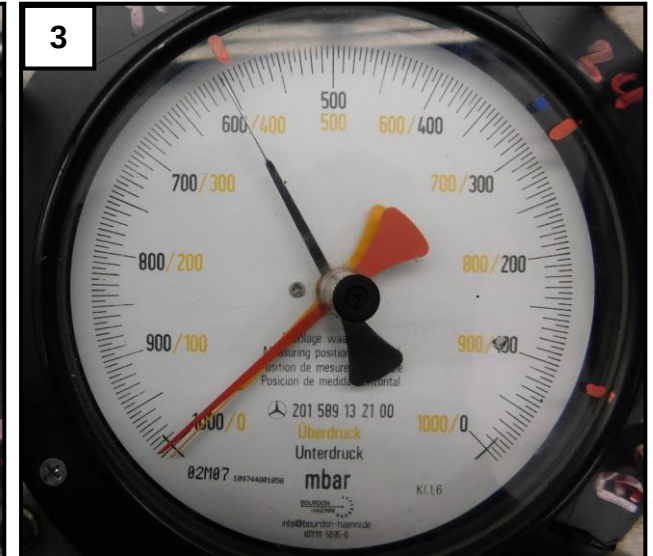
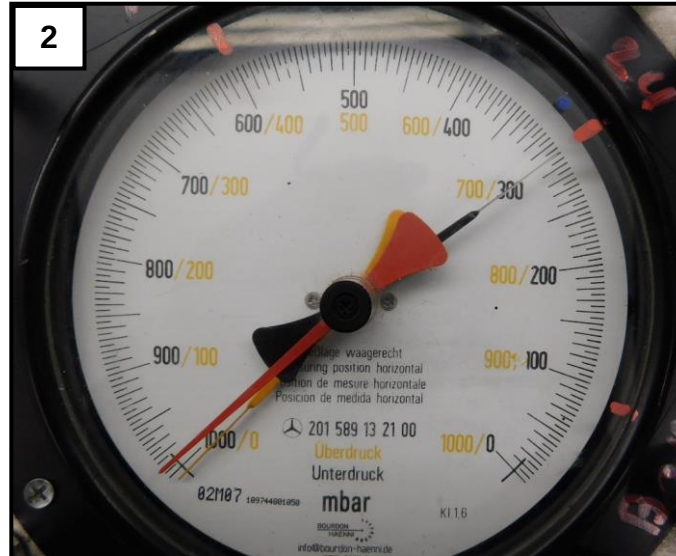
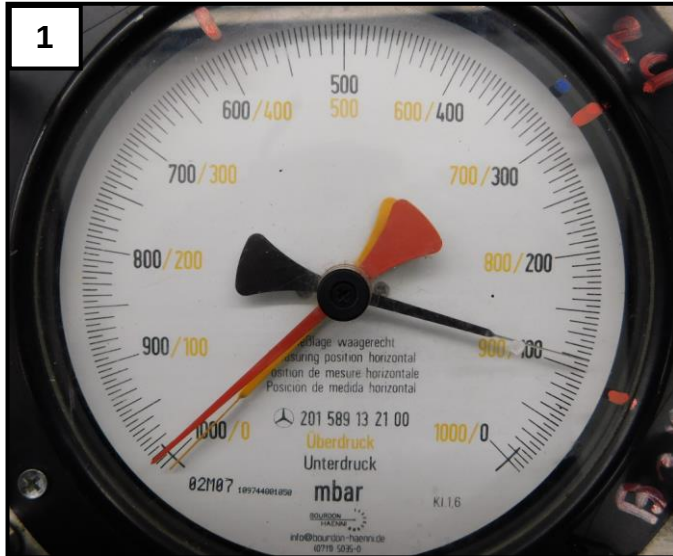
Assemble the wastegate valves and their rods and pre-adjust the rod according to illustration below. The threaded rod must protrude approximately 12mm. After pre-adjustment carefully re-attach the locking springs!



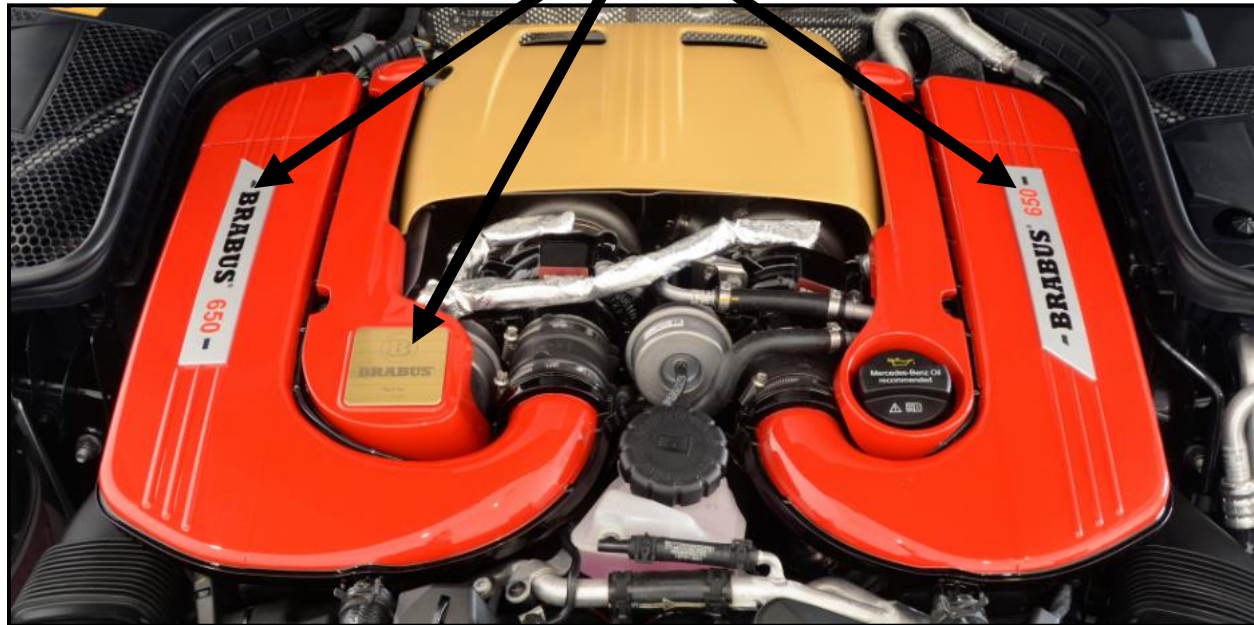
Apply pressure to the wastegate valves in three steps and check the wastegate valve position:

- $\approx 100\text{mb}$ (1,45psi) – Valve starts to move
- $\approx 300\text{mb}$ (4,35psi) – Valve nearly closed but still can be slightly moved
- $\approx 600\text{mb}$ (8,7psi) – Valve firmly closed





Remove AMG-badge and adhesive residues. Clean and degrease bonding areas of the engine plastic cover. Bond the Brabus badge and the Brabus typings to the engine plastic cover using adhesive supplied. Fixate the parts using appropriate adhesive tape until the adhesive is finally hardened.



Re-assemble air filters and plastic trims, check wiring harness for proper routing. Check fault store of control unit ME and delete faults which may have occurred during installation. Start the engine and perform a test-drive.

PowerXtra is ready to run after installation, there are no further adaptations/ adjustments to be performed.