

Original BMW Accessories.

Installation Instructions.



Aerodynamic Peripheries Retrofit Kit.

BMW M2 (F87)

BMW 2 Series Coupé (F22)

Retrofit kit number

Number	Component designation	Type	Installation time (h)
51 19 2 361 666	Carbon rear diffuser	F87	0.30
51 19 2 361 668	Carbon right front add-on section	F87	0.25
51 19 2 365 981	Carbon left front add-on section	F87	0.25
51 19 2 365 984	Carbon right side skirt add-on section	F87	0.25
51 19 2 365 985	Carbon left side skirt add-on section	F87	0.25
51 62 2 334 541	Carbon rear spoiler	F87/F22	0.50

Installation time

Installation time, see table. This may vary depending on the condition of the vehicle and the equipment in it.

The installation time shown does not include any time spent on programming/coding.

The calculation of the total costs for the programming time must be factored into the calculation of retrofitting costs (no invoicing via warranty).

Important information

These installation instructions are primarily designed for use within the BMW dealership organisation and by authorised BMW service companies.

These installation instructions are intended for use by qualified specialist staff trained on BMW vehicles with the relevant expert knowledge.

All work must be completed using the latest BMW repair manuals, wiring diagrams, servicing manuals and work instructions, in a rational order, using the prescribed tools (special tools) and observing current health and safety regulations.

If you experience installation or function problems, restrict troubleshooting to approx. 0.5 hours for mechanical work and 1.0 hour for electrical work.

To avoid unnecessary extra work and/or costs, send an inquiry straight away to the technical parts support team via the Aftersales Assistance Portal (ASAP).

Quote the following information:

- Chassis number,
- Retrofit kit part number,
- A detailed description of the problem,
- And any work already carried out.

Do not archive the hard copy of these installation instructions since daily updates are provided via ASAP!

Pictograms

-  Denotes instructions that draw your attention to dangers.
-  Denotes instructions that draw your attention to special features.
- ◀ Denotes the end of the instruction or other text.

Installation information

- All contact/bonding surfaces on the components being installed must be absolutely dry, clean, and free of wax, silicon and grease. These surfaces must be treated with suitable BMW cleaner or BMW primer (see EPC for details), as set out in the appropriate product application instructions
 - If you use adhesive tape, it must be applied using a contact pressure of between 10 N/cm² and 50 N/cm²
 - Take care not to damage the parts when opening the packaging
 - Check that all the parts fit accurately on the car before fitting them
 - All the components and their bonding surfaces must be at room temperature for installation. The ideal relative humidity is 50%. Different values will change the specified times
 - After completing the gluing and installation work, the car must remain stationary at room temperature for at least 12 hours
 - If adhesives are used the car may be driven after 24 hours, and may be taken through a car wash after 48 hours. The car must not be driven above a speed of v_{\max} 100 km/h for 24-48 hours
 - The installed parts may become loose and fly off the car if you fail to wait for the full reaction time of the primer/adhesive. Danger of accidents.
 - Some of the installation steps are shown only on one side of the car. Proceed in the same way on the other side of the car
 - All pictures show LHD cars; proceed accordingly on RHD cars
 - If the carbon rear diffuser is installed, coding must be carried out
-  If an M Performance rear spoiler is to be installed, any rear spoiler already in place must be removed / dismantled as described in ISTA. ◀

Ordering instructions

The materials such as liquid adhesive, cleaner and activators are assigned to the relevant products in the EPC (see EPC for instructions and part numbers). If the EPC does not explicitly specify the materials, always use cleaner, adhesive and activator from the BMW product range.

Special tools required

None

Information to be provided to the customer

-  Once the M Performance carbon front add-on section has been installed, the ramp angle and floor clearance are reduced. ◀
-  **For F87 cars:** The M Performance carbon front add-on section may only be installed in conjunction with the M Performance rear spoiler (for part number and instructions, see EPC). ◀
-  The M Performance carbon front add-on section reduces the car's floor clearance and reduces the overhang angle at the front. The M Performance carbon front add-on section must be checked at regular intervals for damage caused by collisions and, in the event of any such damage, replaced by trained specialist personnel. ◀
-  With the installation of the M Performance carbon rear diffuser on cars with special equipment SA 322 (comfort access), the "Smart Opener" sub-function of this SA becomes obsolete and therefore can no longer be used. ◀

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1. Preparatory work

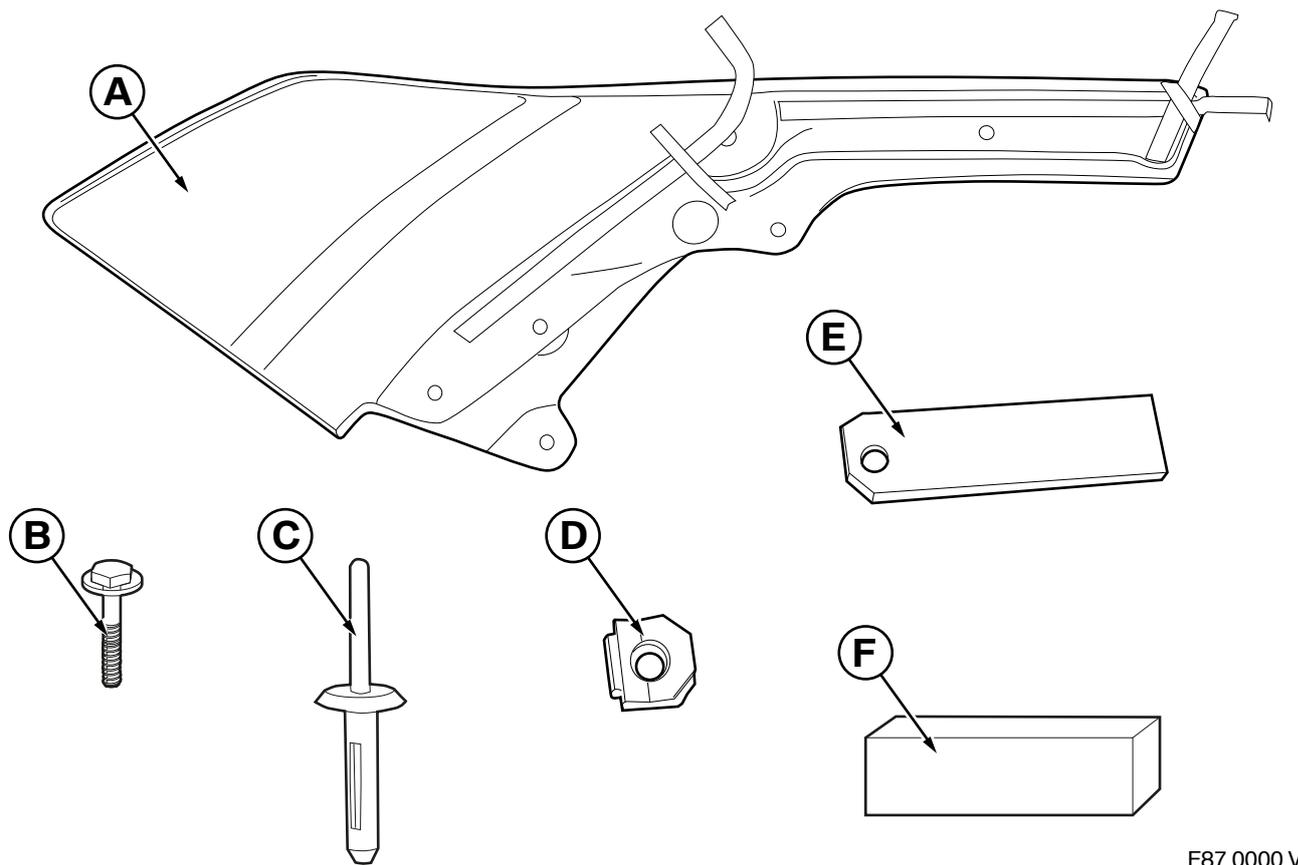
The following components must be removed first of all

ISTA No.

For installation of the carbon AA rear diffuser

Rear bumper as per ISTA

2. M Performance carbon front add-on section left/right parts list (F87)

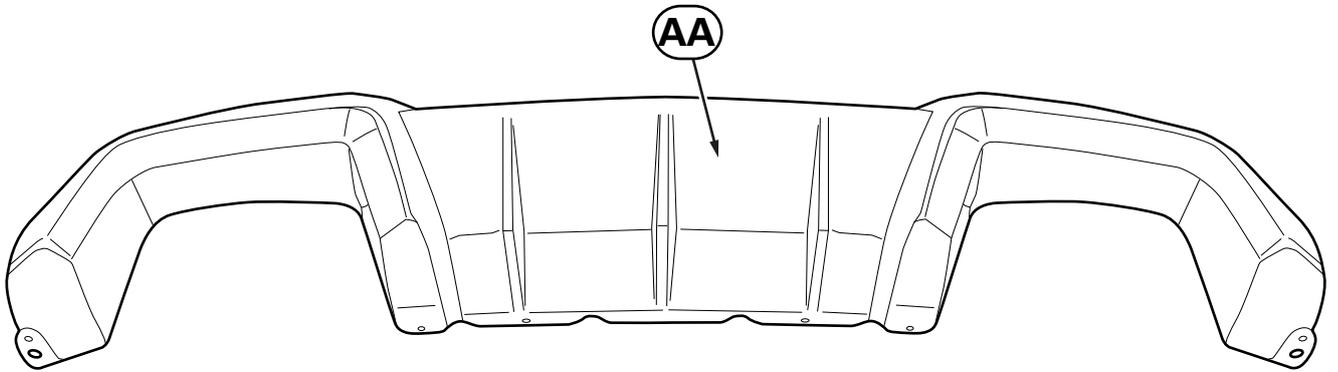


F87 0000 V

Legend

- A** Left carbon front add-on section (1 piece) (right not shown)
- B** Hexagon screw incl. washer (1 x)
- C** Blind rivet (2 x)
- D** C-clip (1 x)
- E** Plastic plates (1 x)
- F** Liquid adhesive (not included in kit, see EPC for details)

3. M Performance carbon rear diffuser parts list (F87)

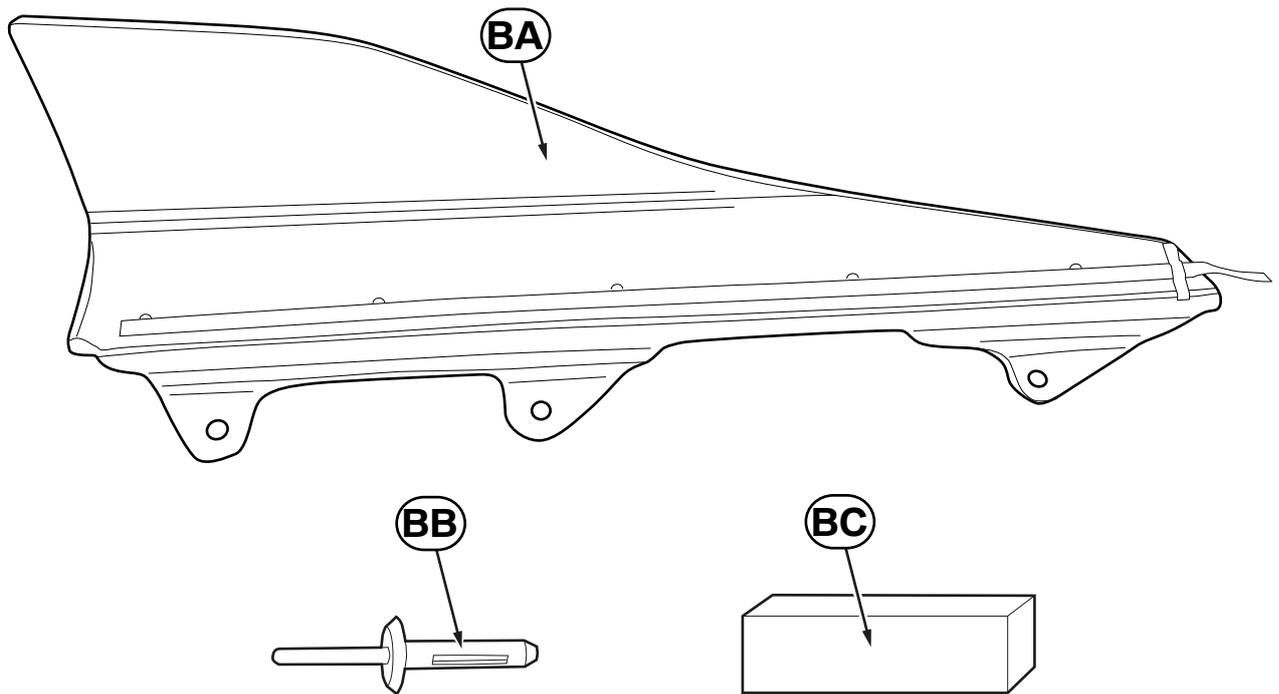


F87 0001 V

Legend

AA Carbon rear diffuser (1 piece)

4. M Performance carbon side skirt add-on section left/right parts list (F87)

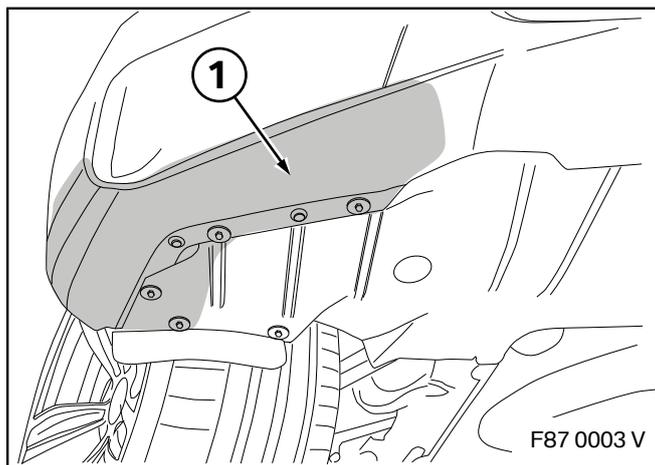


F87 0002 V

Legend

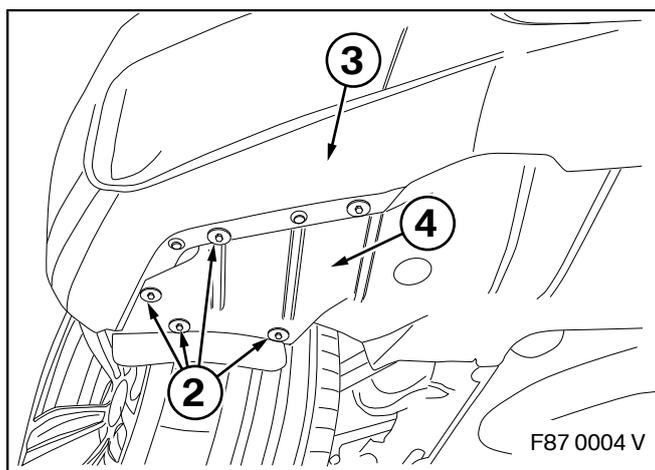
- BA** Left carbon side skirt add-on section (1 x) (right not shown)
- BB** Blind rivet (5 x)
- BC** Liquid adhesive (not included in kit, see EPC for details)

5. Installing the M Performance carbon front add-on section (F87)

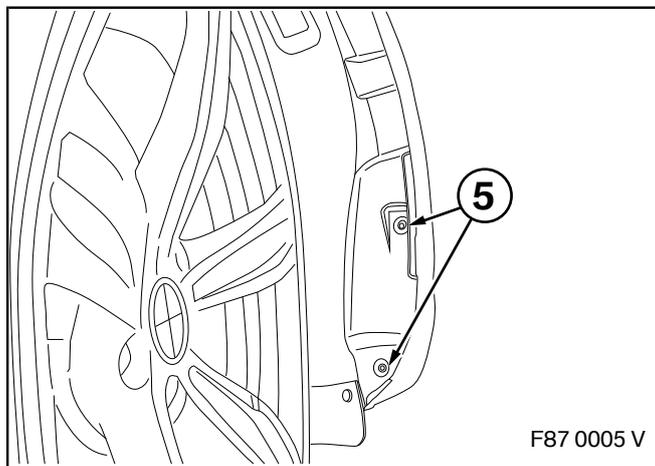


 The areas being bonded must be completely dry, clean and free from wax or grease. ◀

Clean the bonding surface (1) with a suitable agent.

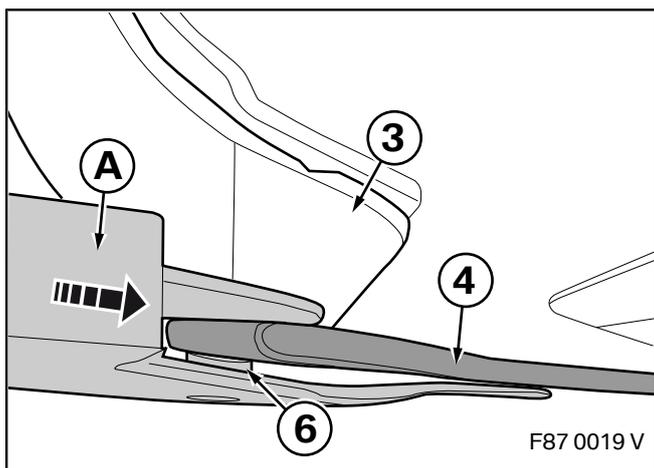


Release the four screws (2) from the front apron (3) and underbody trim (4). They will be reused.



Remove the two screws (5) from the wheel arch. The screws will be reused.

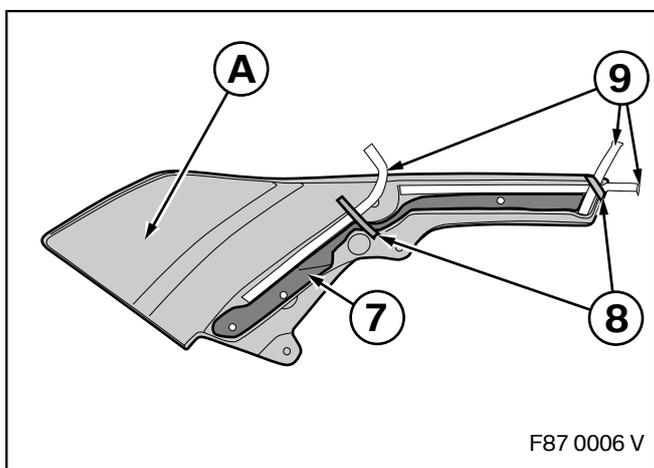
5. Installing the M Performance carbon front add-on section (F87)



- ▶ We recommend checking the fit of carbon front add-on section **A** on the car before applying the liquid adhesive and removing the adhesive backing films. During the later final assembly with liquid adhesive, sufficient space must be left between the front apron (3) and the top of carbon front add-on section **A**. ◀

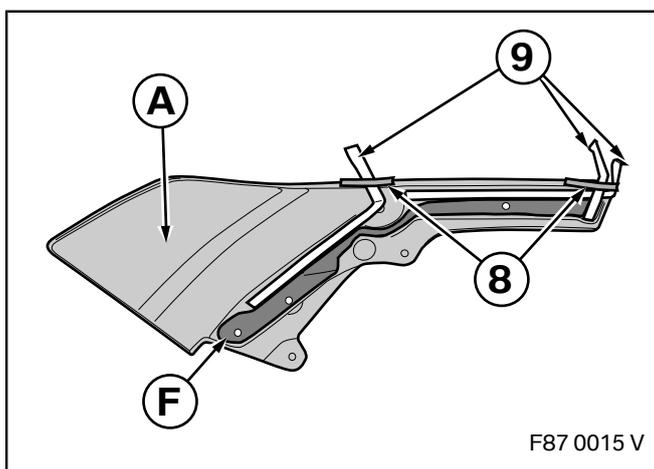
Push the underbody trim (4) away from the front apron (3). Push carbon front add-on section **A** onto the underbody trim (4) by pushing the underbody trim (4) into the space between the top and bottom of carbon front add-on section **A**. As you do so, position the drill hole of the spacer plate (6) so that it matches the drill hole (not shown) of the underbody trim (4).

Then remove carbon front add-on section **A** again.



Sand and clean the surface (7) on the inside of carbon front add-on section **A** using suitable tools. The fixing strips (8) are used to secure the adhesive backing films (9) during transport.

- ▶ Wait for the flash-off time. ◀

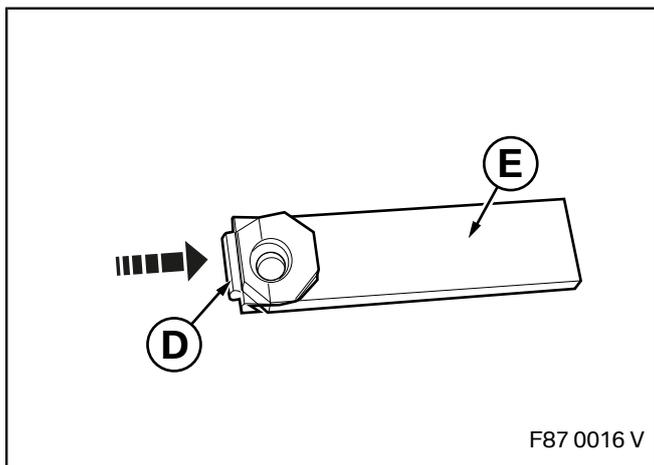


Remove the fixing strips (8) and fold the ends of the adhesive backing films (9) on the adhesive strips outwards so that small tabs are formed. Then push the tabs firmly with the fixing strips (8).

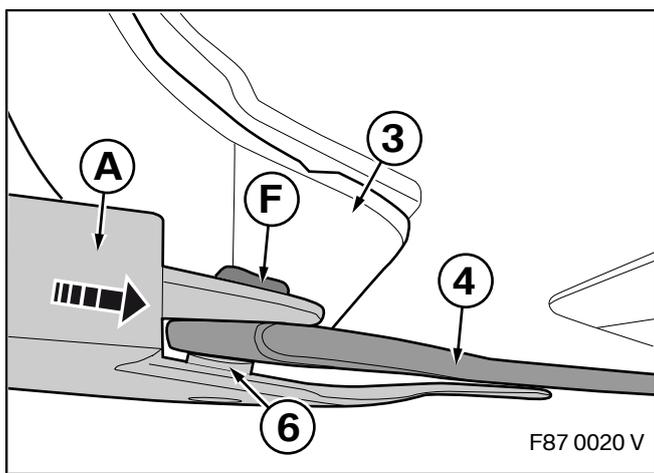
- ▶ The adhesive strips also act as a leak barrier for the liquid adhesive **F**. ◀

Apply a thin layer of liquid adhesive **F** to the previously sanded areas.

5. Installing the M Performance carbon front add-on section (F87)

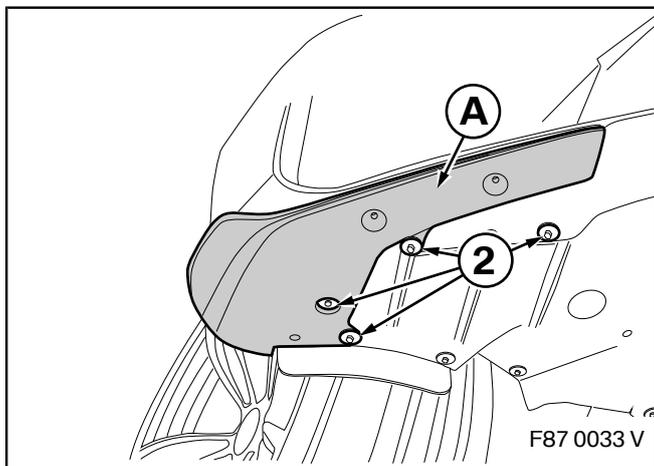


Attach C-clip **D** to plastic plate **E** as shown.



▶ The liquid adhesive **F** must not touch the front apron (3) when carbon front add-on section **A** is pushed onto the underbody trim (4). ◀

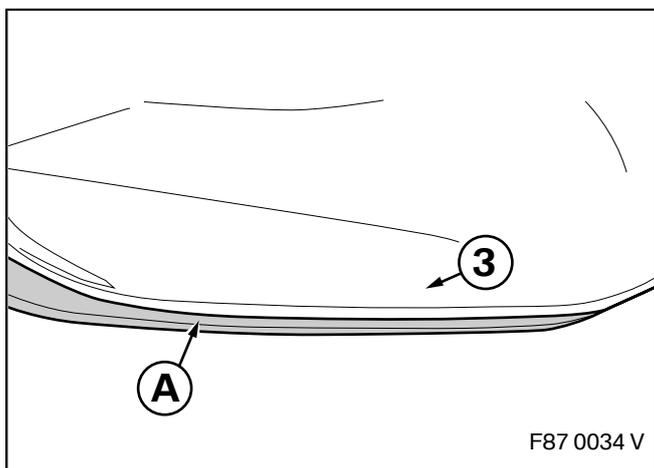
Push the underbody trim (4) away from the front apron (3). Push carbon front add-on section **A** onto the underbody trim (4) by pushing the underbody trim (4) into the space between the top and bottom of carbon front add-on section **A**. As you do so, position the drill hole of the spacer plate (6) so that it matches the drill hole (not shown) of the underbody trim (4).



▶ Ensure that all tabs on the adhesive backing film are visible. ◀

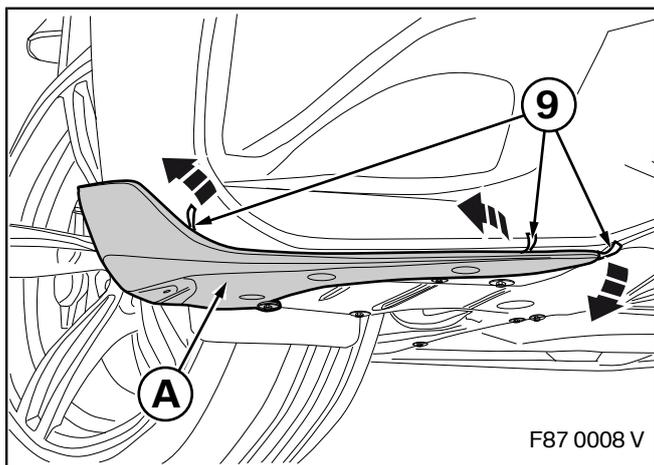
Push carbon front add-on section **A** onto the car and ensure that the drill holes line up. Tighten the existing screws (2) by hand.

▶ Remove any excess liquid adhesive immediately. ◀



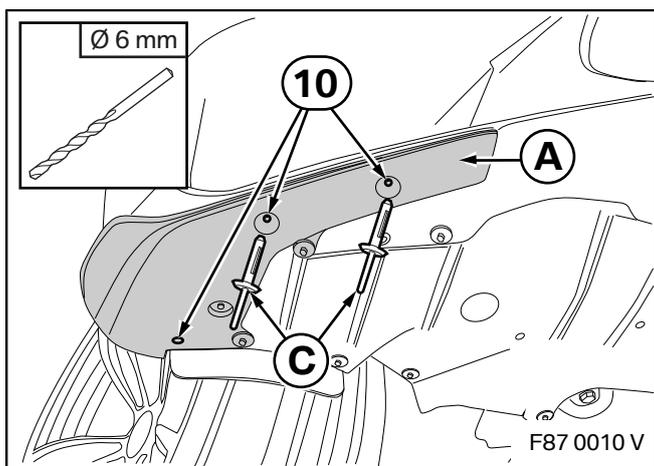
Check from above that the contour of carbon front add-on section **A** runs parallel to the contour of the front apron (3).

5. Installing the M Performance carbon front add-on section (F87)



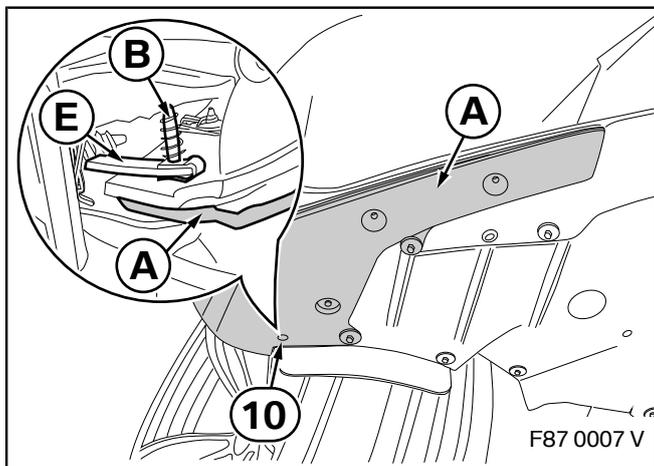
Remove the protective films (9) and press front add-on **A repeatedly** and **firmly** onto the car.

Tighten the screws (2) previously tightened by hand (not shown) completely.

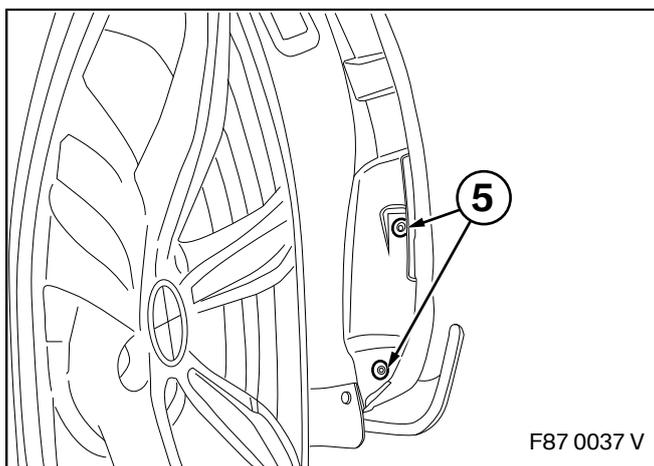


Drill three holes (10) through the front apron with a **diameter = 6 mm**.

Secure carbon front add-on section **A** at the front with the two blind rivets **C**.

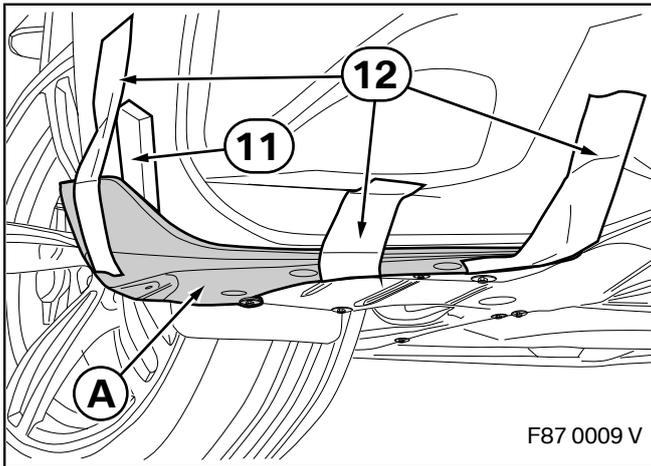


Insert screw **B** through the borehole (10) in carbon front add-on section **A** from underneath and connect it from inside to the plastic plate **E**.



Secure the screws (5) that were removed previously.

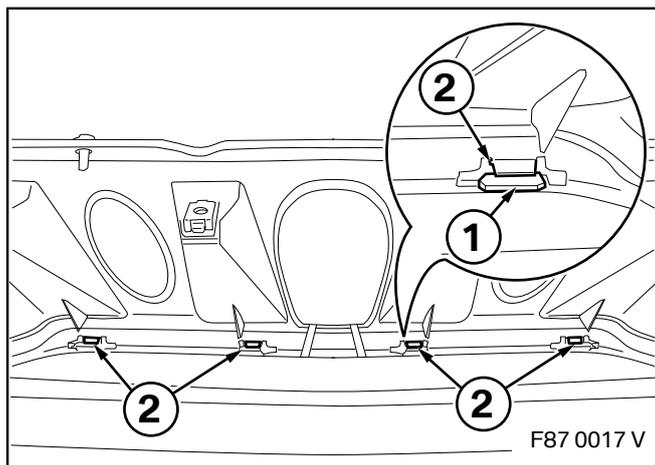
5. Installing the M Performance carbon front add-on section (F87)



Clamp a suitable spacer (11) between carbon front add-on section **A** and the front apron, then secure carbon front add-on section **A** to the car using suitable adhesive tape (12).

▶ Note the painting instructions on page 2. ◀

6. Installing the M Performance carbon rear diffuser (F87)

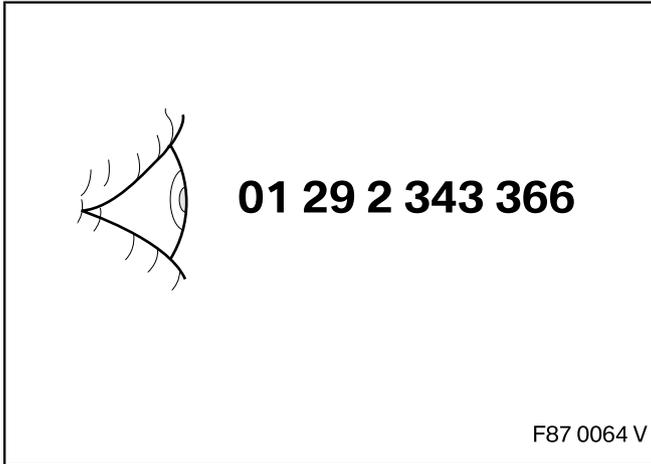


Removal of the standard rear diffuser insert as per **ISTA**.

- ▶ Care must be taken to ensure that the locking hook (1) on the carbon rear diffuser **AA** engages correctly in the catch. The securing catch (2) must rest on the locking hook (1). ◀

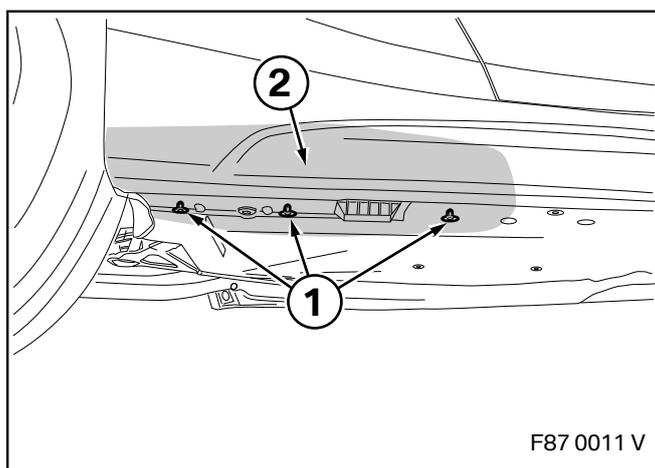
Only then fit rear diffuser **AA** and then the rear apron as described in **ISTA**.

7. Installing the M Performance carbon rear spoiler (F87/F22)



-  Install the M Performance carbon rear spoiler as described in the installation instructions bearing part number **01 29 2 343 366**. ◀

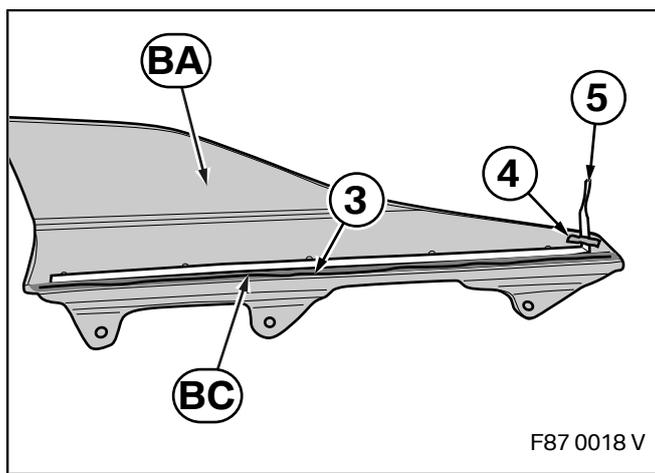
8. Installing the M Performance carbon side skirt add-on section (F87)



☐ The areas being bonded must be completely dry, clean and free from wax or grease. ◀

Remove the securing pins (1) and keep them safe. They will be reused later.

Clean the surface (2) with suitable agents.



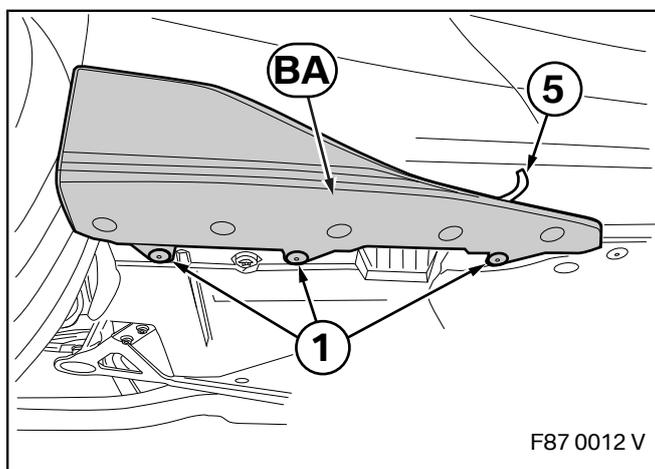
Sand and clean the surface (3) with suitable agents.

☐ Wait for the flash-off time. ◀

Remove the fixing strips (4) from carbon side skirt add on section **BA** and fold the ends of the adhesive backing film (5) on the adhesive strip outwards so that a small tab forms. Then push the tab firmly with the fixing strip (4).

☐ The adhesive strip also acts as a leak barrier for the liquid adhesive **BC**. ◀

Apply liquid adhesive **BC** as shown to the sanded surface.

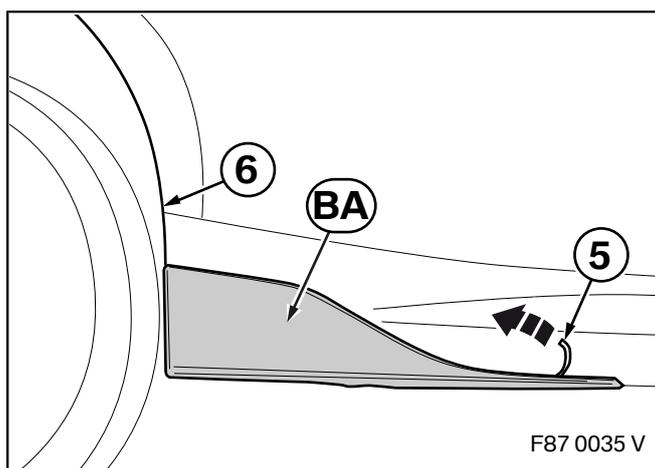


☐ Ensure that the tab (5) of the adhesive backing film is visible. ◀

Press carbon side skirt add-on section **BA** onto the car.

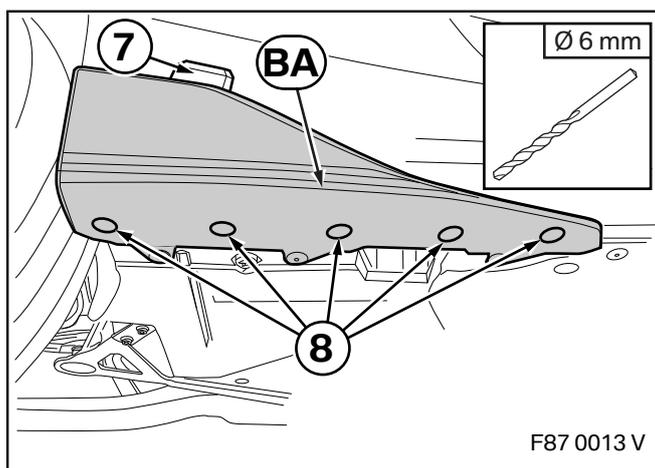
Push in the existing fastening pins (1).

☐ Remove any excess liquid adhesive immediately. ◀

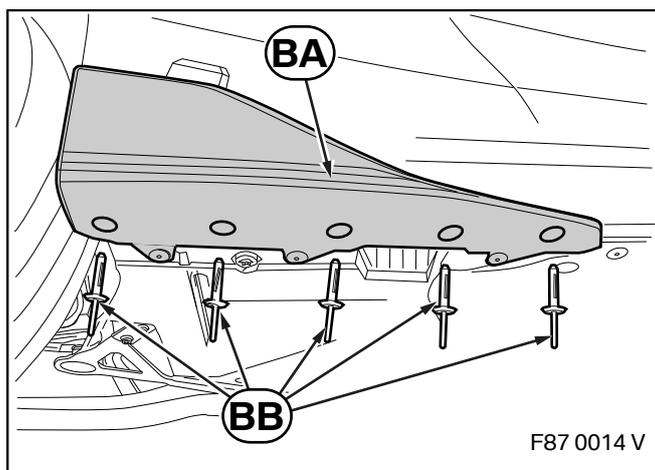


Align carbon side skirt at-on section **BA** with the wheel arch contour (6). Pull the adhesive backing film (5) outwards in the direction of the arrow and press carbon side skirt add-on section **BA repeatedly and firmly** into position.

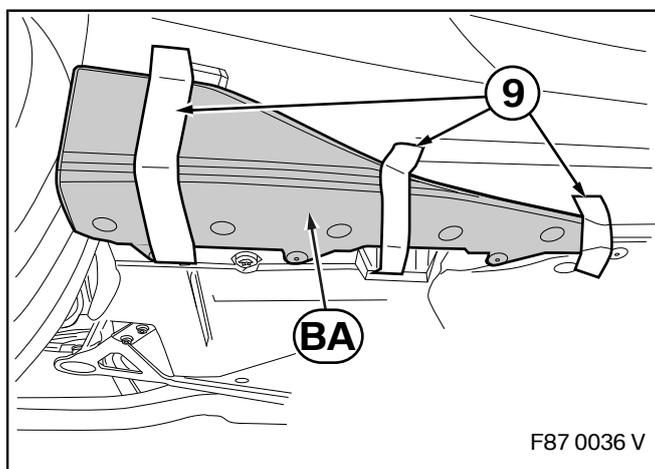
8. Installing the M Performance carbon side skirt add-on section (F87)



Clamp a suitable spacer (7) between carbon side skirt add-on section **BA** and the car. Drill five holes (8) from underneath with a **diameter of 6 mm**.



Fit the five blind rivets **BB** into the boreholes in carbon side skirt add-on section **BA**.



Secure carbon side skirt add-on section **BA** using suitable adhesive tape (9).

 Note the painting instructions on page 2. ◀

9. Concluding work and coding

- The retrofit system is relevant to programming/coding only if the carbon rear diffuser is installed.
- ISTA P-version K-word: DSMO
- Connect the battery
- Connect the battery charger to the car
- Connect the car to the ISTA workshop system
- Open the ISTA/P car programming facility
- When using ISTA/P, please refer to the instructions provided in the ISTA/P application documentation
- Retrofit K-word: Select "DSMO" via the – Conversions – path and work through the created action plan
- If necessary, carry out a car test using the ISTA system and note or work through any entered error memory
- Conduct a function test
- Re-assemble the car appropriately
- Give the customer the customer information