Original BMW Accessories. Installation Instructions.



M Performance Aerodynamics Package Retrofit Kit BMW 3 Series Saloon (F30) BMW 3 Series Saloon Long Version China (F35) BMW 3 Series Touring (F31)

Retrofit kit number

A **primed** M Performance Aerodynamics package comprises several retrofit kit numbers, depending on the engine and exhaust type.

| single-sided single-sided twin-sided single-pipe | | Component designation | Installation time (h) | Туре | |
|--|-----------------|-----------------------|--------------------------------------|------|-------------|
| 51 19 2 291 417 | 51 19 2 291 418 | 51 19 2 291 414 | Matt black rear diffuser | 0.25 | F30/F31/F35 |
| | 51 19 2 291 364 | | Matt black front add-on | 1.0 | F30/F31/F35 |
| | 51 19 2 291 404 | | Matt black right side sill add-on | 0.75 | F30/F31 |
| | 51 19 2 291 407 | | Matt black left side sill add-on | 0.75 | F30/F31 |
| | 51 19 2 240 983 | | Left/right side sill foil | 0.75 | F30/F31 |
| | 51 19 2 349 308 | | Left/right side sill foil | 0.75 | F35 |
| | 51 71 2 240 832 | | Carbon rear spoiler | 0.25 | F30/F35 |
| | 51 19 2 349 678 | | Matt black rear spoiler | 0.5 | F30/F35 |
| | 51 19 2 298 300 | | Matt black flow-through rear spoiler | 0.75 | F31 |

Installation time

Installation time see table. This may vary depending on the condition of the car 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 charges may be made through the warranty).

Important information



Information to be provided to the customer: Once the matt black M Performance front add-on is installed, the ramp angle and floor clearance are reduced.

The BMW M Performance matt black front add-on reduces the car's ground clearance and also the overhang angle at the front. The BMW M Performance front add-on must be checked at regular intervals for damage caused by collisions and, in the event of any such damage, be replaced by trained specialist personnel.

The M Performance matt black front add-on may only be installed in conjunction with the M Performance rear spoiler (for part number and instructions see EPC). ◀

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

In any event, the target group for these installation instructions is specialist personnel trained on BMW cars with the appropriate specialist 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:

- Vehicle identification number,
- Retrofit kit part number,
- A detailed description of the problem,
- 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

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 affected components must be at room temperature when they are being installed.

All pictures show LHD cars; proceed accordingly on RHD cars.



The car may be driven after approx. 24 hours and may be taken through a car wash after 48 hours. ◀

Installation instructions for the F31 matt black flow-through rear spoiler

Template **EB** is included with the parts kit for the matt black flow-through rear spoiler. The drilling template on page 30 can optionally be used to install the F31 matt black flow-through rear spoiler. Page 30 must then be printed out in its original size (DIN A4); it must not be scaled. When displaying the PDF in Windows, ensure the following setting is made:

File -> Print -> Page Setup -> Shrink oversized pages: None ◀

Painting instructions

Check that all the parts fit accurately on the car before painting them. Primed parts must be pre-treated accordingly before painting.

To ensure correct painting, the EBA must be provided to the painter.

The BMW painting instructions must be observed (see ISTA No. 99 00 ...).

Ordering instructions

To install the front M Performance matt black front add-on, Betalink must also be ordered (for instructions and part numbers, see EPC).

When the M Performance matt black front add-on is installed in cars of a light colour, a black paint pen is also required.

To install the M Performance matt black rear spoiler, Betalink and Sika Activator 205 must also be ordered (for instructions and part numbers, see EPC).

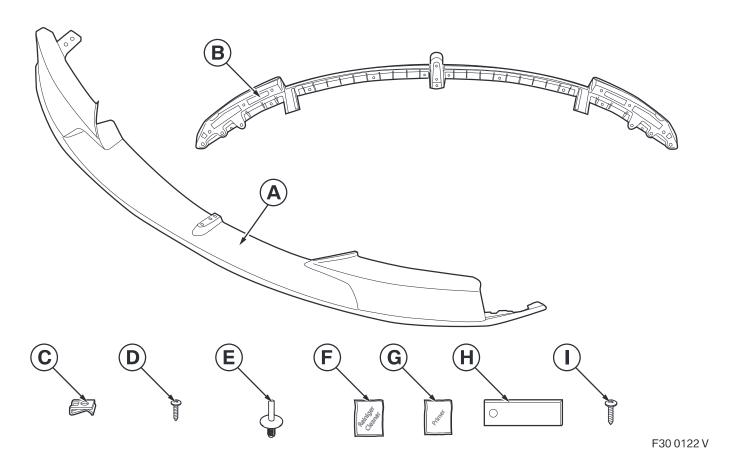
Recommended special tools

None

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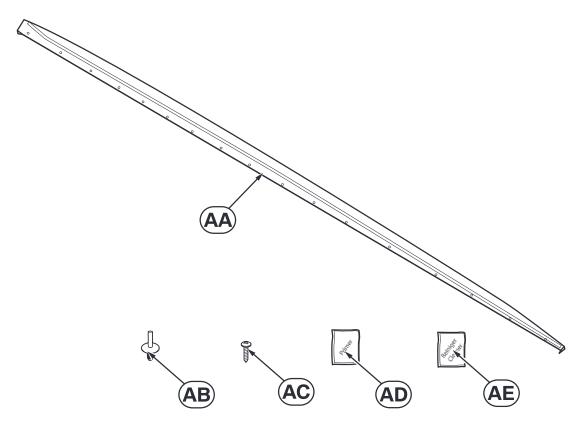
1. M Performance matt black front add-on parts list (F30/F31/F35)



Legend

- A Matt black front add-on
- **B** Adapter
- **C** C clip, 4.8 mm (2 x), part number 6 951 655
- **D** Torx screw, 4.8 x 32 mm (2 x), part number 9 112 637
- **E** Blind rivet, 5.0 x 10.0 mm (22 x), part number 7 002 953
- **F** Cleaning pad
- **G** Primer pad
- **H** Installation plate
- Oval-headed screw TS, 5 x 20 mm (1 x), part number 6 986 938

2. M Performance matt black side sill add-on parts list (F30/F31)



F30 0123 V

Legend

AA Left matt black side sill add-on (right not shown)

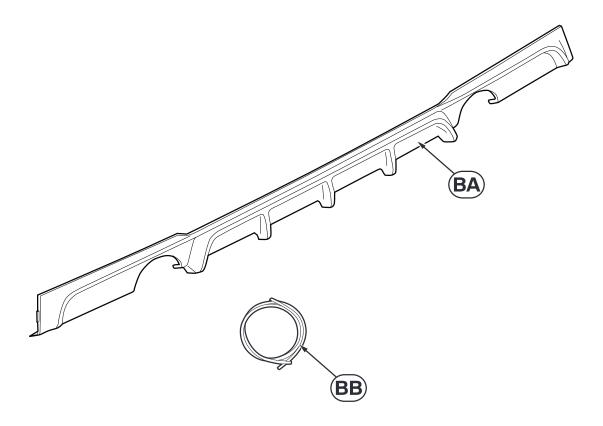
AB Blind rivet, 5.0 x 8.0 mm (17 x per side sill package), part number 7 002 953

AC Oval-headed screw, 4.2 x 14 mm (11 x per side sill package), part number 7 133 553

AD Primer pad

AE Cleaning pad

3. M Performance matt black rear diffuser parts list (F30/F31/F35)



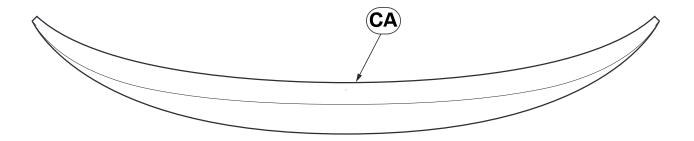
F30 0124 V

Legend

BA Matt black rear diffuser (illustration shows double-sided and single-pipe exhaust system version)

BB Masking string

4. M Performance carbon rear spoiler parts list (F30/F35)

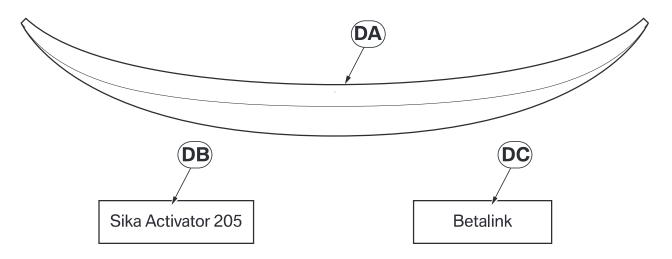


F30 0176 V

Legend

CA Carbon rear spoiler

5. M Performance matt black rear spoiler parts list (F30/F35)



F30 0177 V

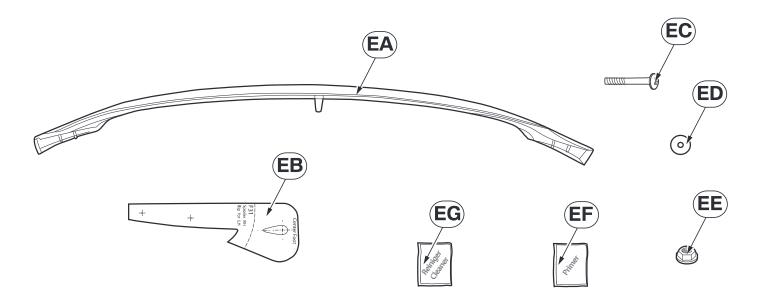
Legend

DA Matt black rear spoiler

DB Sika Activator 205 (not supplied)

DC Betalink (not supplied)

6. M Performance matt black flow-through rear spoiler parts list (F31)



F31 0000 V

Legend

EA Matt black flow-through rear spoiler

EB Template

EC Screw 4.2 x 45 mm S/T

ED Shim M5 x 2 mm

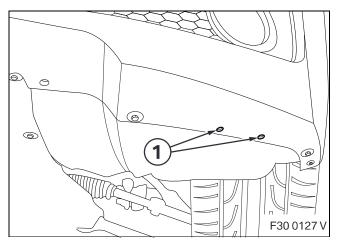
EE Self-locking nut M6 (4 x)

EF Primer pad

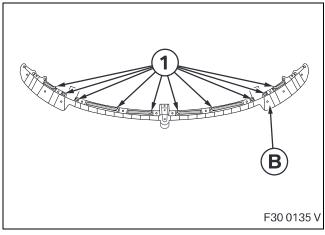
EG Cleaning pad

7. Preparatory work

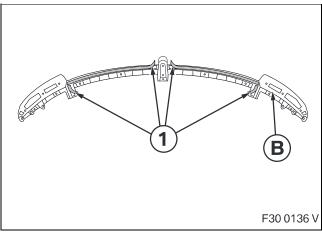
| The following components must be removed first of all only for the M Performance matt black rear diffuser retrofit kit | ISTA No. |
|---|-----------|
| Lower rear bumper trim (keep the screws and rivets, they will be required again for later installation) | |
| The following components must be removed first of all only for the M Performance matt black flow-through rear spoiler (F31) | |
| Third brake light | 51 71 412 |



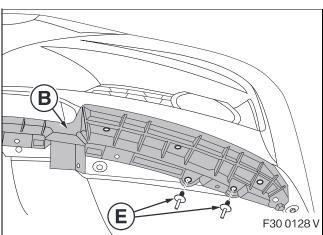
Remove the rivets (1) on the left and right-hand side.



On the front of adapter **B**, fold the protective film (1) on the adhesive strips outwards at the ends.

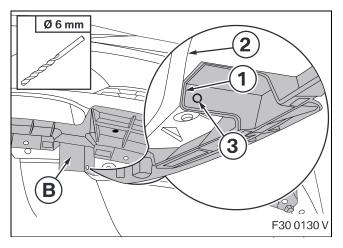


On the back of adapter ${\bf B}$, fold the protective film (1) on the adhesive strips outwards at the ends.



Secure adapter **B** using blind rivets **E**.

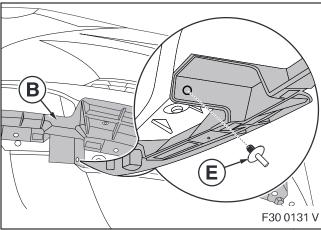
Then carry out the same step on the right-hand side. ◀



When drilling, note the maximum drilling depth. ◀

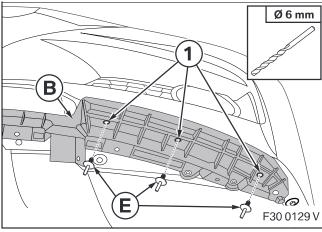
Press adapter **B** upwards flush onto the front apron. Then hold the edge (1) of adapter **B** flush with the edge (2) of the front apron and drill a hole (3) using a **6 mm diameter** drill bit.

Then carry out the same step on the right-hand side. ◀



Secure adapter **B** using blind rivet **E**.

Then carry out the same step on the right-hand side. ◀

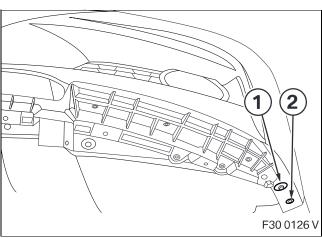


When drilling, note the maximum drilling depth. ◀

Drill through the front apron at the drill holes (1) using a **6 mm diameter** drill bit.

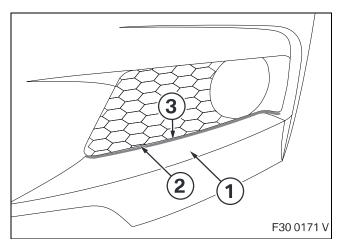
Then secure adapter **B** using blind rivets **E**.

Then carry out the same step on the right-hand side. ◀



Remove the screw (1) and rivet (2).

Then carry out the same step on the right-hand side. ◀

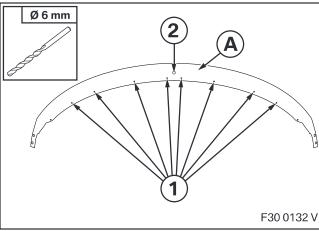


Only for cars in a light colour

Using a black paint pen, draw a line around 2-3 mm thick (3) on the front apron (1) along the air inlet cover (2).



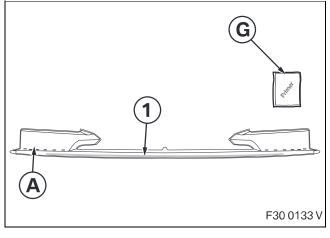
Then carry out the same step on the right-hand side. ◀



For all cars

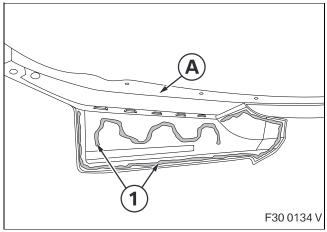
Drill matt black front add-on **A** at the eight pre-drawn drill hole points (1) using a **6 mm diameter** drill bit.

Enlarge the drawn-on drill hole (2) using a suitable tool to a diameter of **15 mm**.



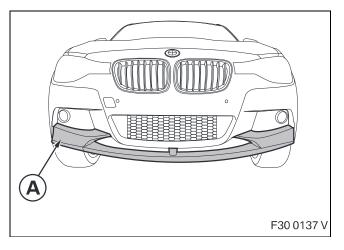
Only prime the bonding surfaces that come into contact with the adhesive strip of adapter **B**.

Prime the inside of matt black front add-on **A** at the points indicated (1) using primer pad **G**.



Apply Betalink (1) at the points indicated on the inside of matt black front add-on **A**.

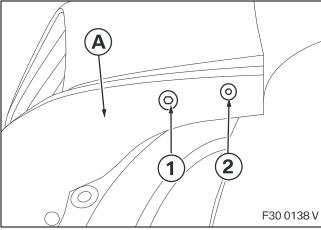
Then carry out the same step on the right-hand side. ◀



The bonding surfaces must be completely clean, dry and free from grease.

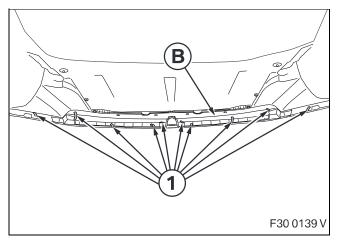
Matt black front add-on **A** must audibly engage. ◀

Place matt black front add-on **A** on the front apron of the car, align it, press it into place and allow it to engage.

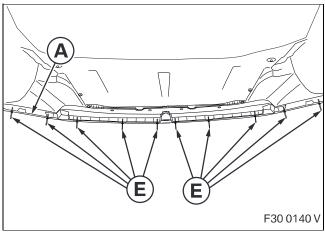


Tighten or insert the existing screw (1) and rivet (2) on the outer side of matt black front add-on **A**.

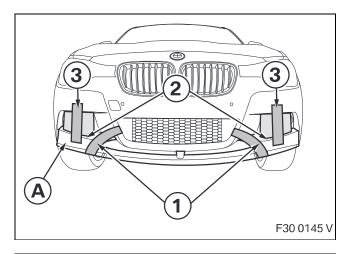
Then carry out the same step on the right-hand side. ◀

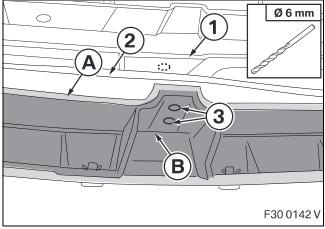


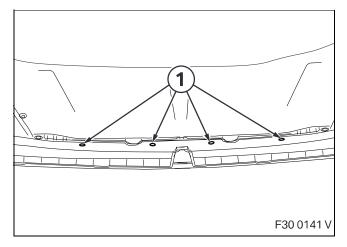
Remove the protective films (1) from adapter **B**.

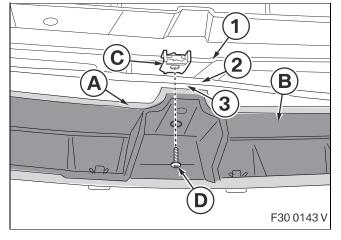


Secure matt black front add-on **A** from underneath using ten blind rivets **E**.



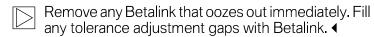






Secure matt black front add-on **A** using suitable adhesive strips (1) to the front apron.

A large surface area of pressure must then be generated on the internal surfaces (2) of matt black front add-on **A** using suitable means. These means must be secured in place using suitable adhesive strips (3).



Allow matt black front add-on **A** to remain in this position for 2 hours. Then release the adhesive strips.

When drilling, note the maximum drilling depth. The level (1) must also be drilled through. ◀

Press matt black front add-on $\bf A$ upwards, aligning the contours of the front apron (2) and matt black front add-on $\bf A$ with each other as you do so.

Then drill two holes (3) with a **6 mm diameter** drill bit from underneath through matt black front add-on **A** to through the level (1).

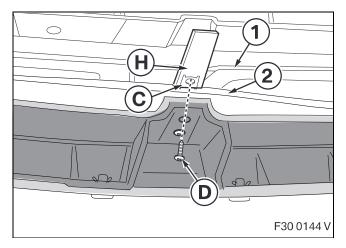
Remove the four expanding rivets (1).

Position C clip **C** on the edge of the level (1).

Pull matt black front add-on **A** slightly downwards and apply Betalink in area (3) between the front apron (2) and matt black front add-on **A**.

Screw Torx screw **D** through adapter **B** into C-clip **C**.

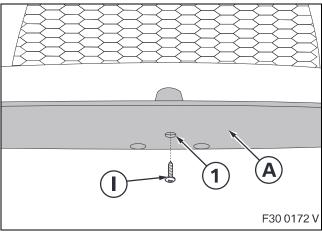
igwedge Remove any Betalink that oozes out immediately. lacktree



Slide C-clip C onto installation plate H.

Insert installation plate **H** between level (1) and front apron (2) with the sheet metal nut first, align C-clip **C** on the second drill hole and screw in Torx screw **D**.

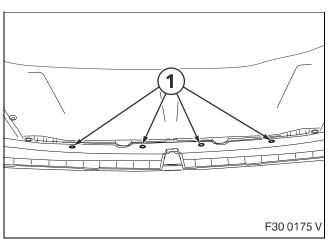
Then tighten both Torx screws **D**.



Screw oval-headed screw I through the drill hole (1) in the centre of matt black front add-on A.

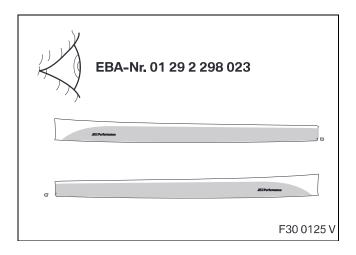


Remove any Betalink that oozes out immediately. ◀



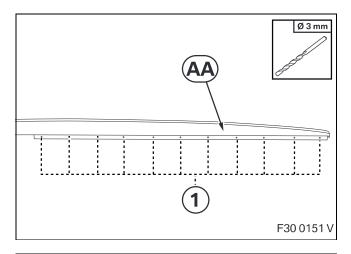
Reinsert the four expanding rivets (1).

9. Installing the M Performance side sill foil (F30/F31/F35)

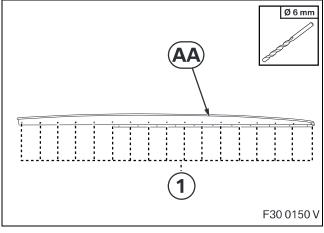


Before installing the M Performance Aerodynamics left/right matt black side sill add-on, the M Performance left/right side sill foils must be installed in accordance with the installation instructions bearing part number 01 29 2 298 023. ◀

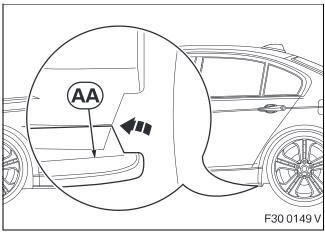
10. Installing the M Performance matt black side sill add-on (F30/F31)



Carefully drill the narrow surface of the side sill at the 11 drill holes (1) on left side matt black sill add-on **AA** using a **3 mm diameter** drill bit.

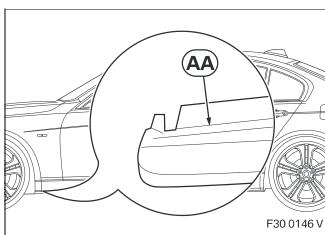


Carefully drill the side sill at the 17 drill holes (1) on left matt black side sill add-on **AA** using a **6 mm diameter** drill bit.



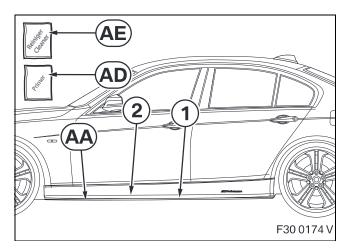
The bonding surfaces must be completely clean, dry and free from grease. ◀

Hook left matt black side sill add-on **AA** at the rear on the side sill, push it forwards and align it.



Secure left matt black side sill add-on **AA** at the front to the side sill.

10. Installing the M Performance matt black side sill add-on (F30/F31)

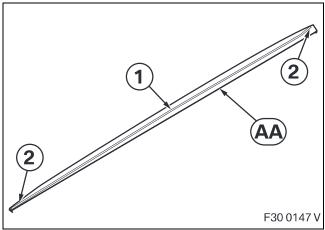


Press left matt black side sill add-on **AA** upwards and using a suitable tool draw a line (1) at the upper edge of left matt black side sill add-on **AA** on the side sill.

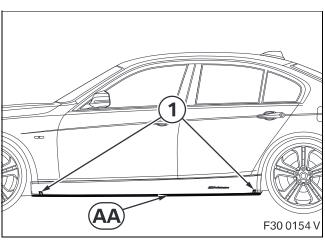
Stick on masking tape (2) above and along the drawn-on line (1).

Remove left matt black side sill add-on AA.

Clean the bonding surface below the masking tape (2) with cleaner **AE** and prime with primer pad **AD**.

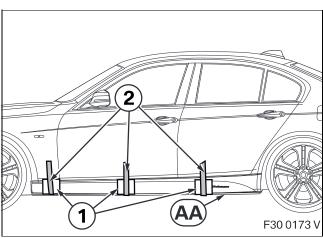


Remove the backing film of the adhesive strip (1) at the ends (2) of left matt black side sill add-on **AA** and fold outwards at an angle of 90°.



Allow left matt black side sill add-on **AA** to engage in the rear side sill and align it forwards.

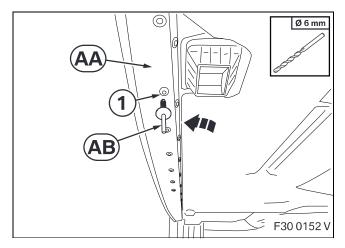
Remove the backing film (1) from the adhesive strip and press left matt black side sill add-on **AA** on.

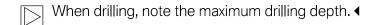


In order to avoid damage caused by adhesive strips, the M Performance side sill foil must be protected with suitable materials (1). ◀

Secure left matt black side sill add-on **AA** as shown using suitable adhesive strips (2).

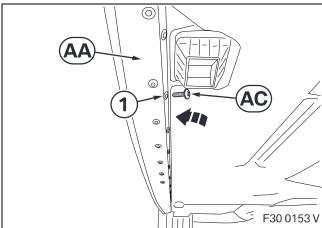
10. Installing the M Performance matt black side sill add-on (F30/F31)



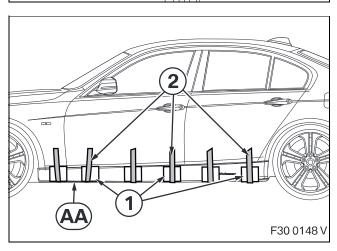


Using the pre-drilled holes (1) in left matt black side sill add-on **AA**, drill through the side sill with a **6 mm diameter** drill bit.

Insert the 11 blind rivets **AB** and secure.



Screw oval-headed screws **AC** into the pre-drilled holes (1) on left matt black side sill add-on **AA**.

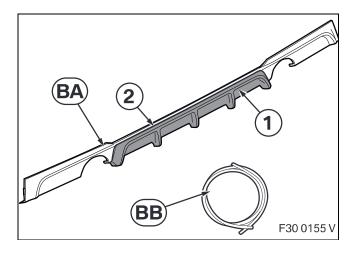


In order to avoid damage caused by adhesive strips, the M Performance side sill foil must be protected with suitable materials (1). ◀

Secure left matt black side sill add-on **AA** as shown using further adhesive strips (2).

After around 30 minutes, carefully remove the adhesive strips (2) from left matt black side sill add-on **AA** from the bottom to the top.

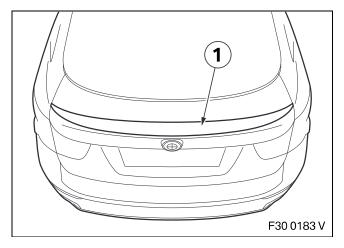
11. Installing the M Performance matt black rear diffuser (F30/F31/F35)

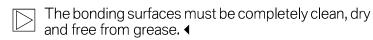


Paint the unmasked areas in the colour of the car. ◀
Before painting, mask the marked areas (1) of matt black rear diffuser **BA** using masking tape and masking string **BB** and using the gap (2) provided.

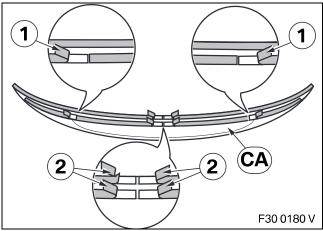
Fit matt black rear diffuser **BA** as per ISTA No. 51 12

12. Installing the M Performance carbon rear spoiler (F30/F35)



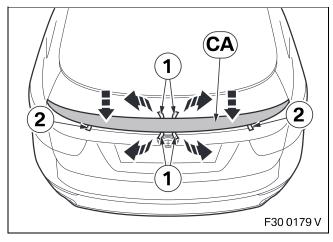


Clean the bonding surface (1) on the car with a suitable cleaning agent to ensure it is free from grease.



Pull off the adhesive backing film (1) on the left and right of carbon rear spoiler **CA** just enough to form small tabs.

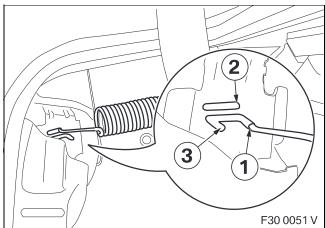
Cut the adhesive backing film (2) on carbon rear spoiler **CA** in the middle and remove it just enough to form small tabs.



Position carbon rear spoiler **CA** on the edge of the tailgate, average it out and then pull adhesive backing films (1) from the centre outwards in stages.

Then pull the adhesive backing films (2) from the inside outwards.

Press Carbon rear spoiler **A firmly** and **repeatedly** onto the tailgate. ◀



Positions (1), (2) and (3) are provided for the tail gate's tension spring. ◀

Move the tail gate's tension spring to **position (2)**.

After repositioning the tension springs, check that the tailgate is able to open properly and adjust the position of the tension springs accordingly if necessary.

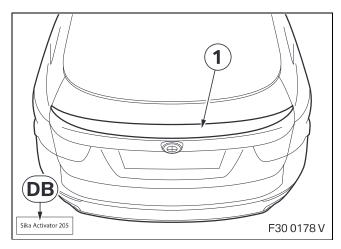
13. Installing the M Performance matt black rear spoiler (F30/F35)

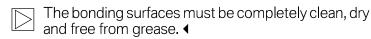
Painting instructions

Check that all the parts fit accurately on the car before painting them. Primed parts must be pre-treated accordingly before painting.

The BMW painting instructions must be observed (see ISTA No. 99 00 ...).

Retrofit kit 51 19 2 349 678 is supplied painted matt black. The rear spoiler can be fitted directly the way it is or painted in accordance with the customer's wishes before installation.

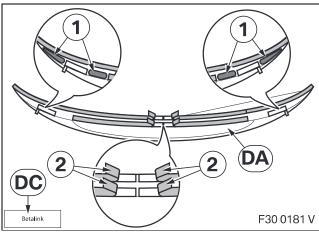




Clean the bonding surface (1) on the car with a suitable cleaning agent to ensure it is free from grease.

Note the ventilation time and other instructions for use that come with Sika Activator 205 **DB**. Only treat the bonding surface (1) with Sika Activator 205 **DB**. ◀

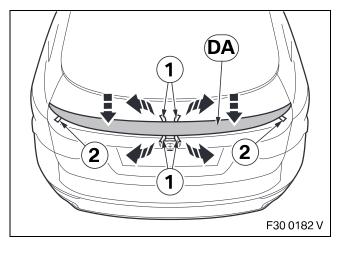
Then apply Sika Activator 205 **DB** to the bonding surface (1).



Sand and clean the surfaces (1) with suitable agents.

Apply Betalink **DC** to the surfaces (1) of matt black rear spoiler **DA**.

Cut the adhesive backing film on matt black rear spoiler **DA** in the middle and remove it just enough to form small tabs (2).



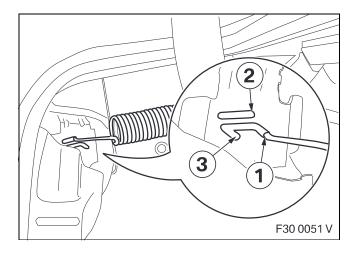
Position matt black rear spoiler **DA** on the edge of the tail gate, average it out and then pull adhesive backing films (1) from the centre outwards in stages.

Then remove the adhesive backing films (2) from the outside inwards, using the grab tabs.

Press matt black rear spoiler **DA firmly** and **repeatedly** onto the tail gate and remove any Betalink that escapes immediately.

Do not open the tail gate for **6 hours** and note the installation instructions on page 2. ◀

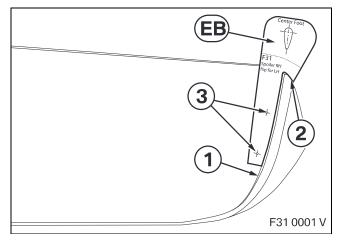
13. Installing the M Performance matt black rear spoiler (F30/F35)

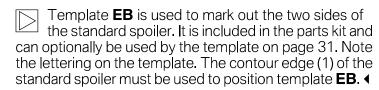


| Positions (1), (2) and (3) are provided for the tail gate's tension spring. ◀ |
|---|
| gate's tension spring. ◀ |

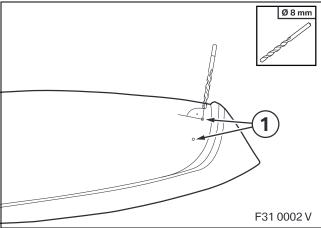
Move the tail gate's tension spring to **position (3)**.

After repositioning the tension springs, check that the tailgate is able to open properly and adjust the position of the tension springs accordingly if necessary.





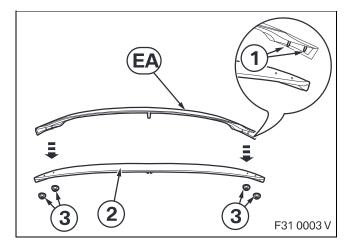
Position template **EB** on the contour edge (1) of the standard spoiler and note the outline (2) of template **EB**. Mark the holes (3) on the standard spoiler using a suitable tool. Remove template **EB** and repeat the process on the opposite side.



Ensure that the drill hole is made perpendicularly to the surface.

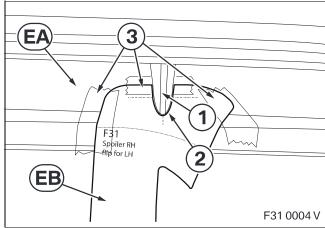
Drill the two markings (1) using an **8 mm** diameter drill bit and deburr.

Repeat the process on the opposite side.

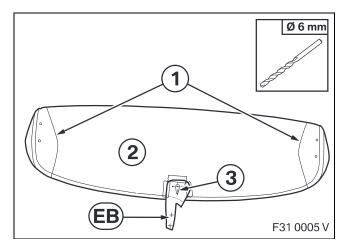


Remove the protective caps on the four threaded bolts (1). Do not use the nuts included in the parts kit since these are self-locking. •

Place matt black flow-through rear spoiler **EA** on the standard spoiler (2), average out and tighten until hand-tight using conventional M6 nuts (3).



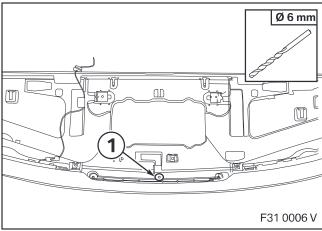
Clamp template **EB** between the central lug (1) of matt black flow-through rear spoiler **EA** and the standard spoiler and align with the outline (2) until it covers the outline of the central lug (1). Then secure in place with adhesive strips (3).



Transfer the outline (1) of matt black flow-through rear spoiler **EA** (for greater clarity, not shown here) to the standard spoiler (2) using suitable tools.

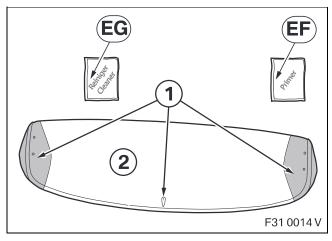
Loosen the nuts (see graphic F31 0003 V) and remove matt black flow-through rear spoiler **EA** from the standard spoiler (2).

Transfer a marking at position (3) onto the standard spoiler (2). Remove template **EB**. Drill a hole of **6 mm** diameter through the entire standard spoiler (2) and deburr the hole.



The following drill hole must only be drilled through the inner shell. ◀

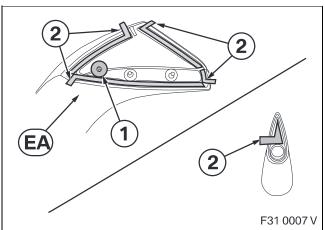
Enlarge the **6 mm** drill hole (1) on the inner shell using suitable tools to a diameter of **around 15 mm** and deburr.



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

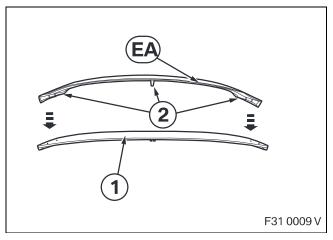
Clean the bonding surfaces (1) of the standard spoiler (2) using cleaning pad **EG** and then prime with primer pad **EF**.

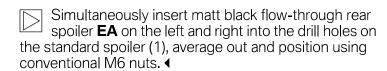
Note the ventilation time of 5 minutes. ◀



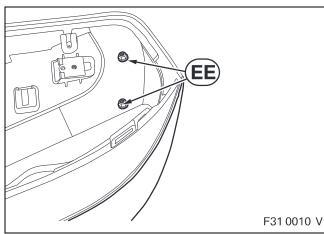
Remove the protective film (1) on both sides.

Ensure that the tabs (2) on matt black flow-through rear spoiler **EA** point outwards when it is placed in position. ◀

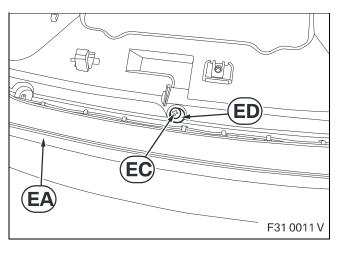




Pull all adhesive backing films (2) on matt black flow-through rear spoiler **EA** outwards and press matt black flow-through rear spoiler **EA firmly** and **repeatedly** onto the standard spoiler (1).

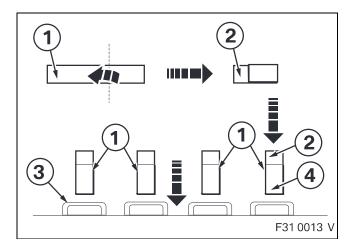


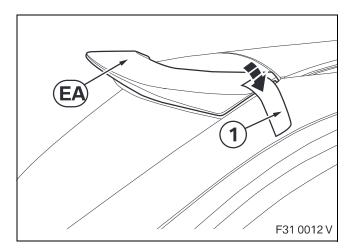
Replace the conventional nuts with self-tapping nuts **EE** from the parts kit and tighten on both sides to **4 Nm**.



Dip the tip of screw **EC** into liquid adhesive (e.g. Betalink). ◀

Insert screw **EC** and shim **ED** from underneath into matt black flow-through rear spoiler **EA** and tighten to **2.5** Nm.





Fit the third brake light as per **ISTA**. Then fit the standard spoiler to the car as per **ISTA 51 71 412**. To prevent rubber seals from getting trapped in the edge of the standard spoiler, prepare adhesive tape to pull them out. •

Cut four equal-sized strips of adhesive tape (1) or masking tape. Wrap the adhesive tape (1) eccentrically so that the two bonding surfaces stick together and still leave one bonding surface (2) free.

Stick the adhesive strips with the bonding surface (2) onto the plate at the level of the four tabs (3) so that the nonadhesive area (4) is trapped below the tabs (3).

Fit the standard spoiler. As soon as the tabs (3) engage in the guide, remove the four adhesive strips (1).

Secure matt black flow-through rear spoiler **EA** on both sides using adhesive strips (1).

Do not remove the adhesive strips for **around 30 minutes.** ◀

15. Concluding work and coding

The retrofit system does not require coding.

- Conduct a brief test
- Conduct a function test
- Re-assemble the car in a logical manner

100 mm