

Original BMW Accessories.

Installation Instructions.



Aerodynamic Peripherals Retrofit Kit.

BMW 3 Series Saloon (F30)

BMW M3 (F80)

BMW M4 (F82/F83)

Retrofit kit number

Number	Component designation	Type	Installation time (h)
51 19 2 350 712	Carbon left/right front add-on section	F80/F82/F83	0.25
51 19 2 350 711	Matt black front add-on section	F80/F82/F83	0.50
51 19 2 410 360	Carbon front add-on section	F80/F82/F83	0.50
51 19 2 350 697	Carbon rear diffuser	F80/F82/F83	0.10
51 14 2 350 435	Left/right side skirt film	F80	0.75
51 14 2 350 706	Left/right side skirt film	F82/F83	0.75
51 19 2 350 719	Matt black left side sill add-on	F82/F83	0.50
51 19 2 350 720	Matt black right side sill add-on	F82/F83	0.50
51 71 2 240 832	Carbon rear spoiler	F30/F80	0.75
51 19 2 349 678	Matt black rear spoiler	F30/F80	0.50
51 19 2 350 722	Carbon rear spoiler	F82	0.25
51 19 2 409 319	Coloured ventilated carbon rear spoiler	F30/F80/F82	1.00
51 19 2 450 847	Ventilated carbon rear spoiler	F82	1.00


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

 On the F80, the matt black/carbon front add-on section must only be installed on the car in conjunction with a rear spoiler (see EPC for instructions and part numbers).

On the F82, the ventilated carbon rear spoiler may only be installed on the car in conjunction with the black matt/carbon front add-on section (see EPC for instructions and part numbers).

On the F80/F82/F83, the black matt front add-on section/carbon front add-on section can only be fitted with the left/right carbon front add-on section. ◀

Through the installation of the carbon rear diffuser on vehicles with SA 322 (comfort access), the part-function "Smart Opener" of this SA is no longer available, and can therefore no longer be used.

After the installation of the carbon rear diffuser retrofit set, it must be programmed/coded via the – **Conversions** – path.

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

- 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 affected 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 (left-hand drive) cars; proceed accordingly on RHD (right-hand drive) cars.

Terminology used

Initial installation: the matt black/carbon front add-on section are installed for the first time.

Subsequent installation (e.g. in the event of a repair): the corresponding matt black/carbon front add-on section is re-installed. Or the matt black front add-on section is changed for a carbon front add-on section or vice versa.

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.

Follow the BMW painting instructions (see ISTA/AIR No. 99 00 ...).

Ordering instructions

The material 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

Ventilated carbon rear spoiler for F82	
Recommended special tools	Part number
BOSCH 22 mm diameter diamond hole saw	2608580303
BOSCH Auto Start centring system	2608580529
BOSCH Power Change	2608584844
Recommended special tools	BMW part number
Cars after 02/2015 Long drill bit, 4.2 mm	83 19 2 166 461
Cars after 02/2015 Long drill bit, 6.8 mm	83 19 2 166 462
Cars up to 02/2015 Hand riveter	81 43 9 429 204

Information to be provided to the customer

Matt black front add-on section **F1**, matt black left side sill add-on section **BA** and matt black right side sill add-on section **BB** and matt black rear spoiler (installation instructions No. **01 29 2 296 888**) can be painted in accordance with the customer's wishes.

Once the matt black **F1**/carbon **F2** front add-on section is installed, the ramp angle and floor clearance are reduced.


 Matt black **F1**/carbon **F2** front add-on section reduces the car's floor clearance and reduces the overhang angle at the front. Both must be checked at regular intervals for damage caused by collisions and, in the event of any such damage, replaced by trained specialist personnel. ◀

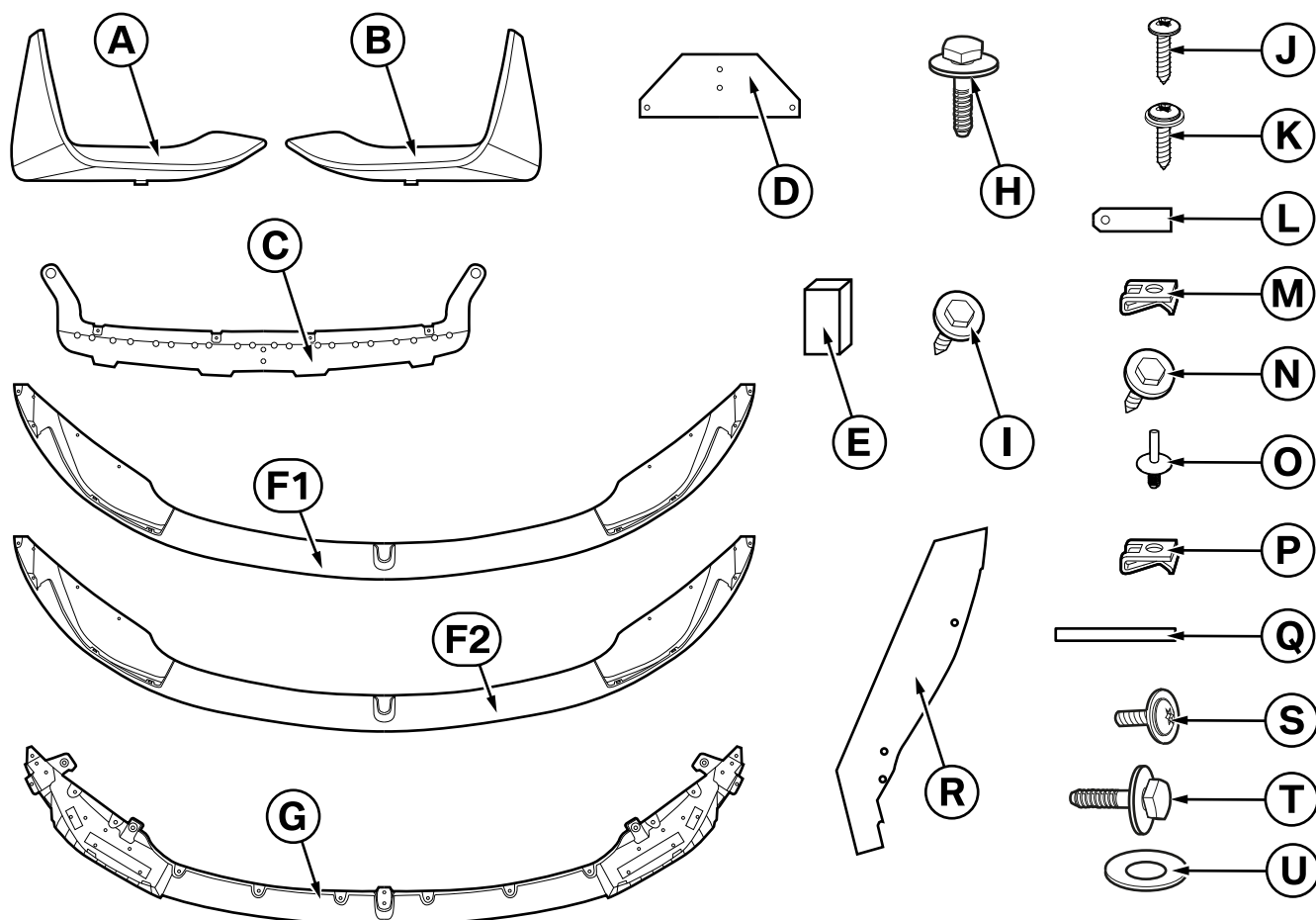
Table of contents

Section	Page
1. Preparatory work	5
2. Parts list for front peripheries	6
3. Carbon rear diffuser parts list	8
4. Matt black F82/F83 side sill add-on section parts list	9
5. F82 carbon rear spoiler parts list	10
6. Ventilated carbon rear spoiler for F82 parts list	11
7. Ventilated carbon rear spoiler for F30/F80 parts list	13
8. Installation of the front peripheries	15
9. Fitting the carbon rear diffuser	25
10. Fitting the left/right side skirt film	26
11. Fitting the matt black F82/F83 side sill add-on section	27
12. Install carbon rear spoiler on F80/black matt rear spoiler on F80	29
13. Fitting the F82 carbon rear spoiler	30
14. Installation of the carbon rear spoiler for F82	32
15. Install the ventilated carbon rear spoiler for F30/F80	40
16. Concluding work and coding	49

1. Preparatory work

The following components must be removed first of all	ISTA/AIR No.
Only when the left/right carbon front add-on section is installed	
Left/right air guide	---
Only when the left/right carbon front add-on section and matt black/carbon front add-on section are installed	
Left/right air guide and front engine shield	---
For installing the ventilated carbon rear spoiler on F30/F80/F82 only	
Interior trim on the boot lid	---

2. Parts list for front peripheries



F82 0124 V

Legend

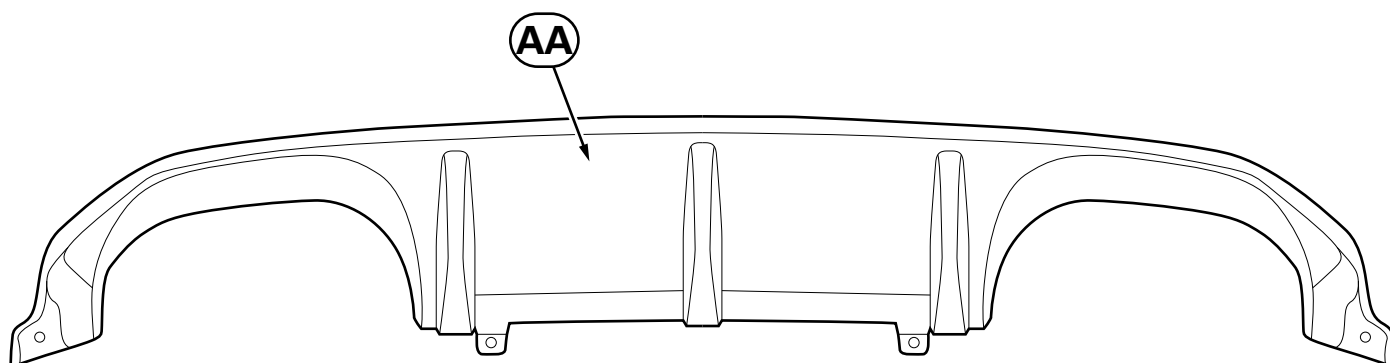
		Matt black front add-on section Quantity in kit 51 19 2 350 711 included	Carbon front add-on section Quantity in kit 51 19 2 410 360 included	Pouch No.
A	Right carbon front add-on section (part of S/N 51 19 2 350 712)	-	-	-
B	Left carbon front add-on section (part of S/N 51 19 2 350 712)	-	-	-
C	Front upper adapter	1	1	-
D	Template	1	1	-
E	Liquid adhesive including primer (not included in the parts kit)	-	-	-
F1	Matt black front add-on section	1	-	-
F2	Carbon front add-on section	-	1	-
G	Front bottom adapter	1	-	-
H	Hexagon screw M5 x 14 incl. washer D15 x 1 (S/N 9 904 269)	2	-	1
I	Hexagon screw incl. washer D22 x 1.6 (S/N 9 126 886)	12	6	2
J	Sheet metal screw 4.8 x 16 (S/N 2 756 133)	2	4	3
K	Sheet metal screw 4.8 x 25 incl. spacer 6 x 12 x 1 (S/N 9 901 222)	4	4	4
L	Plastic plate	4	4	4

2. Parts list for front peripheries

		Matt black front add-on section Quantity in kit 51 19 2 350 711 included	Carbon front add-on section Quantity in kit 51 19 2 410 360 included	Pouch No.
M	C-clip (S/N 7 067 915)	4	4	4
N	Hexagon screw incl. washer D18 x 1.6 (S/N 9 110 670)	4	4	5
O	Folding blind rivet (S/N 7 171 004)	16	2	6
P	C-clip (S/N 6 951 655)	8	8	7
Q	Black adhesive tape (2 x - part of S/N 51 19 2 350 712)	-	-	-
R	Air guide template	1	1	-
S	Oval-headed screw (S/N 9 321 070)	12	6	2
T	Hexagon screw M5 x 20	-	2	1
U	Washer M5 x 15 x 1.2	-	2	1

S/N = Part number

3. Carbon rear diffuser parts list

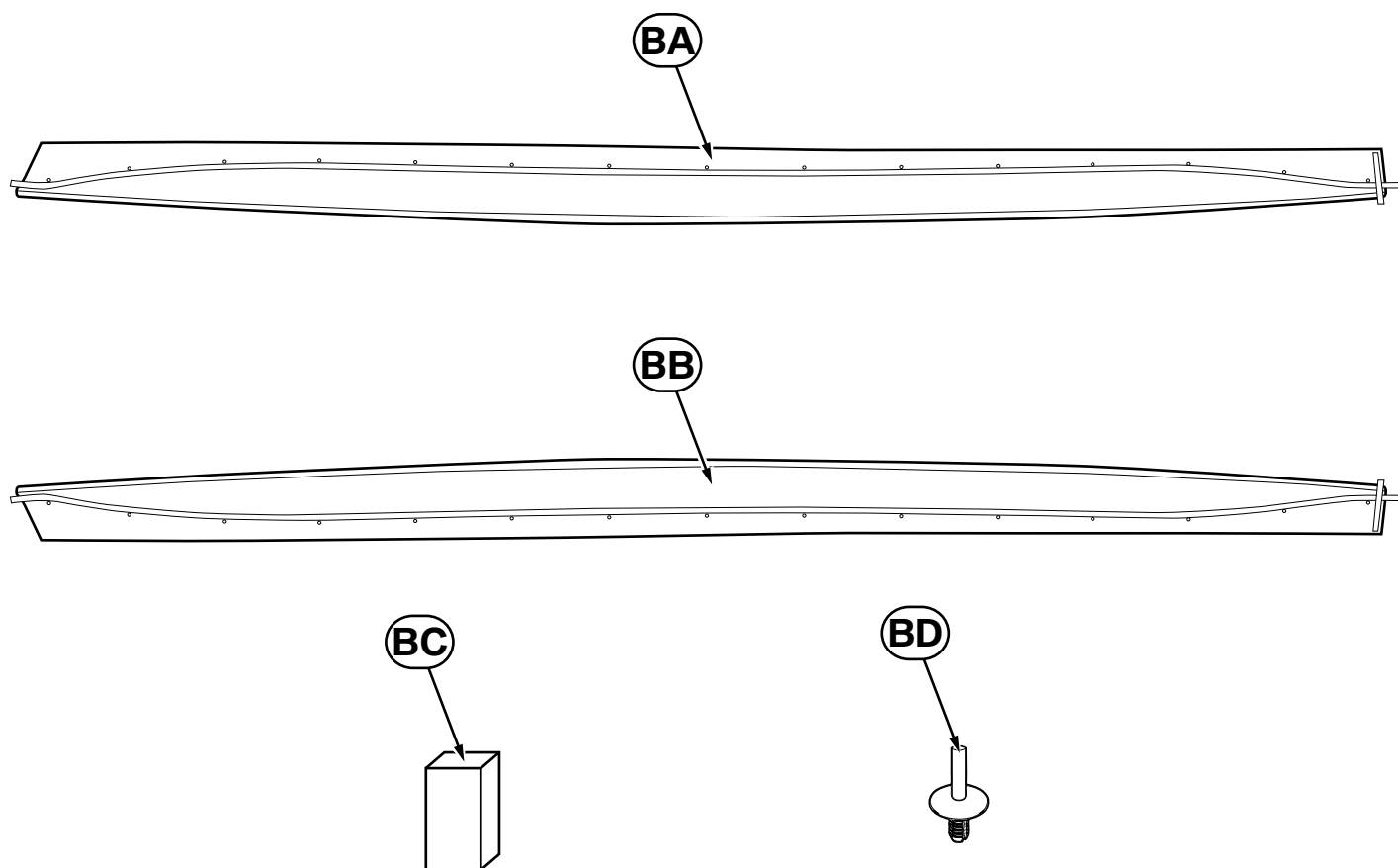


F82 0001 V

Legend

AA Carbon rear diffuser

4. Matt black F82/F83 side sill add-on section parts list

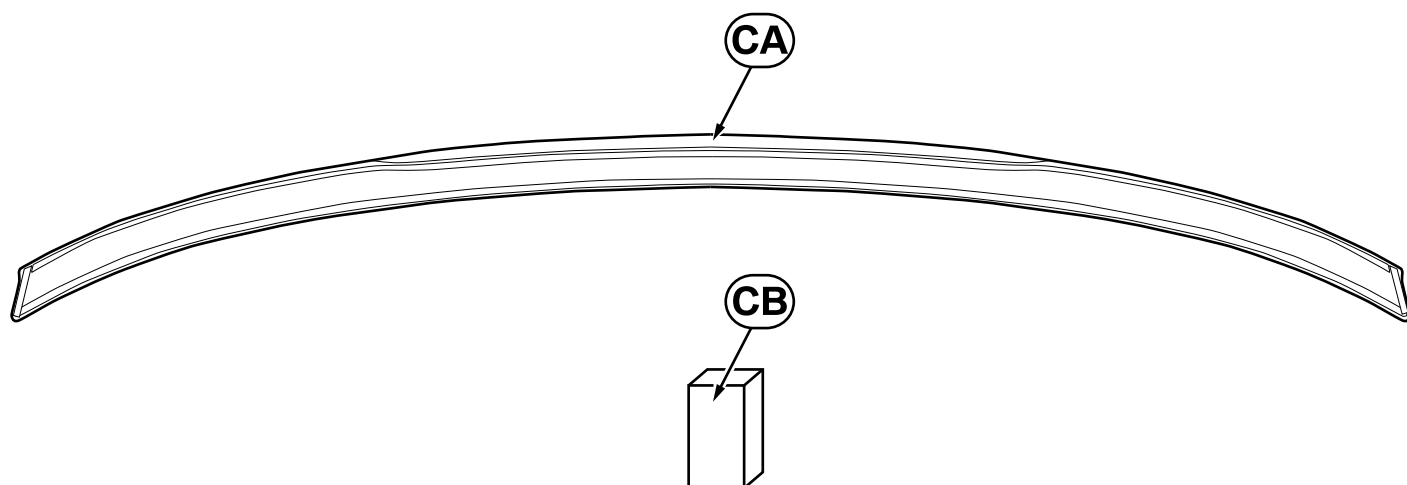


F82 0002 V

Legend

- BA** Matt black right side sill add-on
- BB** Matt black left side sill add-on
- BC** Liquid adhesive (not included in kit, see EPC for details)
- BD** Expanding rivet (15 x per side)

5. F82 carbon rear spoiler parts list



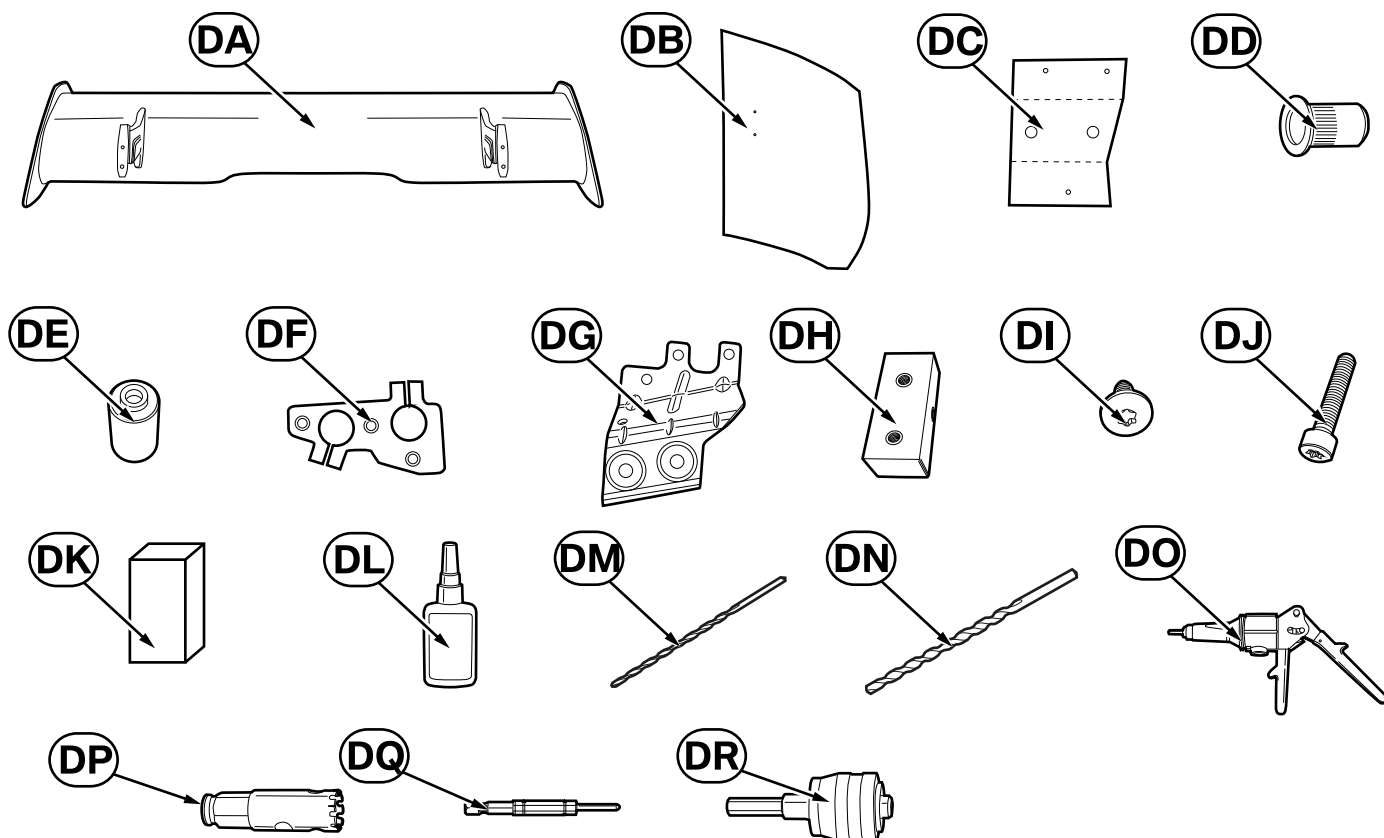
F82 0166 V

Legend

CA Carbon rear spoiler

CB Liquid adhesive (not included in kit, see EPC for details)

6. Ventilated carbon rear spoiler for F82 parts list



F82 0154 V

Legend

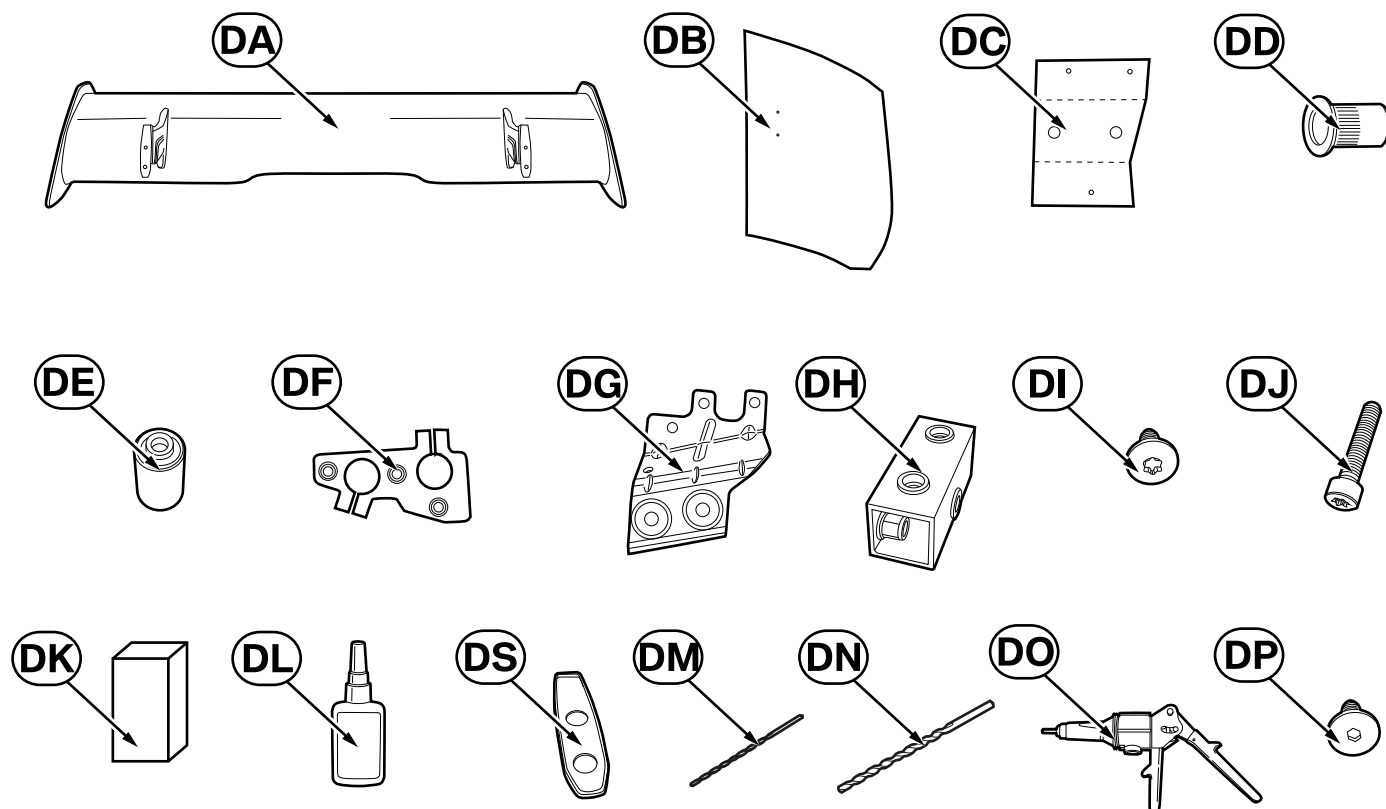
		Required quantity for cars built before 02/2015	Required quantity for cars built after 02/2015	BMW Part number
Kit content 51 62 2 409 319 or 51 19 2 450 847				
DA	Ventilated carbon rear spoiler	1	1	51 62 2 409 318
DB	Template for boot lid	1	1	-
DC	Template for boot lid hinge	-	1	-
DD	Rivet nut M6/2.0x3.5 for boot lid hinge	4	-	-
NOT included in kit 51 62 2 409 319 or 51 19 2 450 847 and must be ordered separately (see EPC for details):				
DE	Locating bushing	4	4	51 62 8 057 650
DF	Left rear wing adapter	1	1	51 62 8 064 457
DF'	Right rear wing adapter	1	1	51 62 8 064 458
DG	Boot lid reinforcement element, left	1	1	51 62 8 064 459
DG'	Boot lid reinforcement element, right	1	1	51 62 8 064 460
DH	Boot lid hinge adapter, left	-	1	51 62 8 068 463
DH'	Boot lid hinge adapter, right	-	1	51 62 8 068 464
DI	Oval-headed screw M6x14	14	20	07 14 6 958 688
DJ	Torx screw M5x25	4	4	07 12 9 900 395
DK	Liquid adhesive	1	1	82 69 9 408 866
DL	Liquid screw lock	1	1	83 19 2 220 991

6. Ventilated carbon rear spoiler for F82 parts list

		Required quantity for cars built before 02/2015	Required quantity for cars built after 02/2015	BMW Part number
NOT included in kit 51 62 2 409 319 and must be ordered separately (see EPC for details):				
DM	Long drill bit, 4.2 mm	-	1	83 19 2 166 461
DN	Long drill bit, 6.8 mm	-	1	83 19 2 166 462
DO	Hand riveter	1	-	81 43 9 429 204

		Required quantity for cars built before 02/2015	Required quantity for cars built after 02/2015	Article number
RECOMMENDATION for special tool is NOT included in kit 51 62 2 409 319 and must be ordered elsewhere:				
DP	BOSCH 22 mm diameter diamond hole saw	1	1	2608580303
DQ	BOSCH Auto Start centring system	1	1	2608580529
DR	BOSCH Power Change	1	1	2608584844

7. Ventilated carbon rear spoiler for F30/F80 parts list



F80 0040 V

Legend

		Required quantity for cars built before 02/2015	Required quantity for cars built after 02/2015	BMW Part number
Kit content 51 62 2 409 319 or 51 19 2 450 847				
DA	Ventilated carbon rear spoiler	1	1	51 62 2 409 318
DB	Template for boot lid	1	1	-
DC	Template for boot lid hinge	-	1	-
DD	Rivet nut M6/2.0x3.5 for boot lid hinge	4	-	-
NOT supplied in kit 51 62 2 409 319 or 51 19 2 450 847 and must be ordered separately (see EPC for details):				
DE	Locating bushing FR (Front Right)	1	1	51 62 2 455 670
	Locating bushing FL (Front Left)	1	1	51 62 2 458 987
	Locating bushing RR (Rear Right)	1	1	51 62 2 458 986
	Locating bushing RL (Rear Left)	1	1	51 62 2 455 671
DF	Left rear wing adapter	1	1	51 62 2 458 595
DF'	Right rear wing adapter	1	1	51 62 2 458 596
DG	Boot lid reinforcement plate, left	1	1	51 62 2 455 669
DG'	Boot lid reinforcement plate, right	1	1	51 62 2 455 668
DH	Boot lid hinge adapter, left	-	1	51 62 2 458 611
DH'	Boot lid hinge adapter, right	-	1	51 62 2 458 612
DI	Torx screw M6x14	4	4	-
DJ	Allen screw M5x25	4	4	07 12 9 900 395

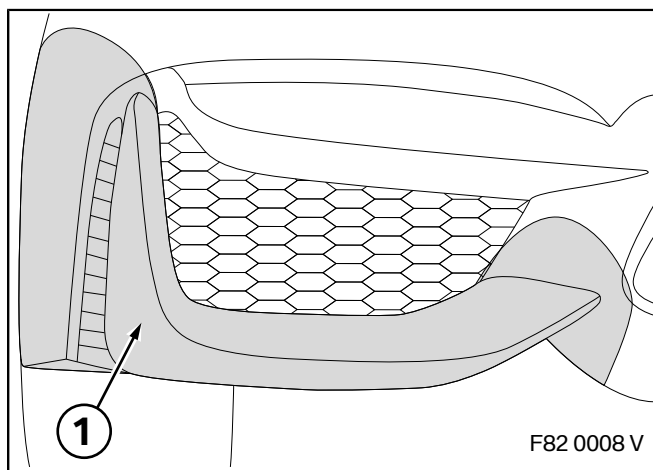
7. Ventilated carbon rear spoiler for F30/F80 parts list

		Required quantity for cars built before 02/2015	Required quantity for cars built after 02/2015	BMW Part number
DK	Liquid adhesive	1	1	82 69 9 408 866
DL	Liquid screw lock	1	1	83 19 2 220 991
DS	Rear spoiler support	2	2	51 62 2 451 779
DP	Oval-headed screw M6x14	10	16	07 14 6 958 688

		Required quantity for cars built before 02/2015	Required quantity for cars built after 02/2015	BMW Part number
NOT included in kit 51 62 2 409 319 and must be ordered separately (see EPC for details):				
DM	Long drill bit, 4.2 mm	-	1	83 19 2 166 461
DN	Long drill bit, 6.8 mm	-	1	83 19 2 166 462
DO	Hand riveter	1	-	81 43 9 429 204

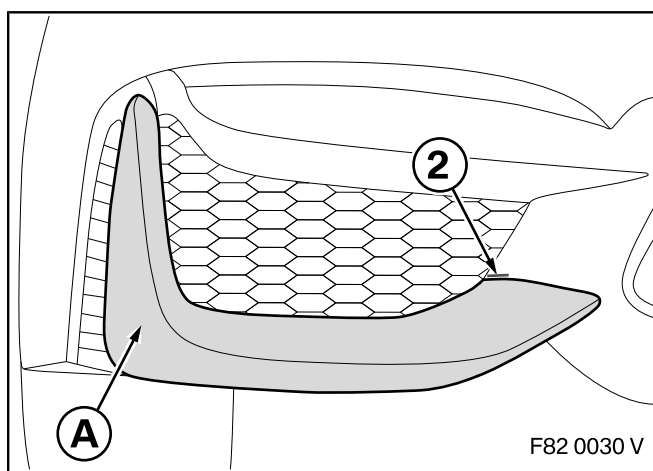
8. Installation of the front peripheries

For all retrofitted peripheries



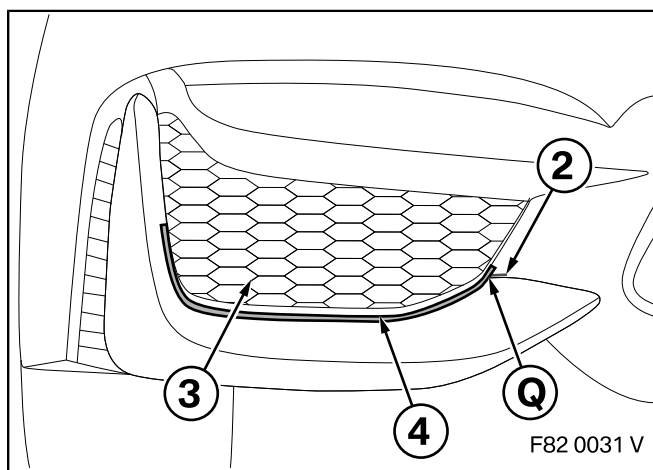
▶ The areas being bonded must be completely dry, clean and free from wax or grease. ◀

Clean the surface (1) of the car with suitable agents.



Position carbon front add-on section **A**, align it and draw a mark on the inside (2).

Remove carbon front add-on section **A**.

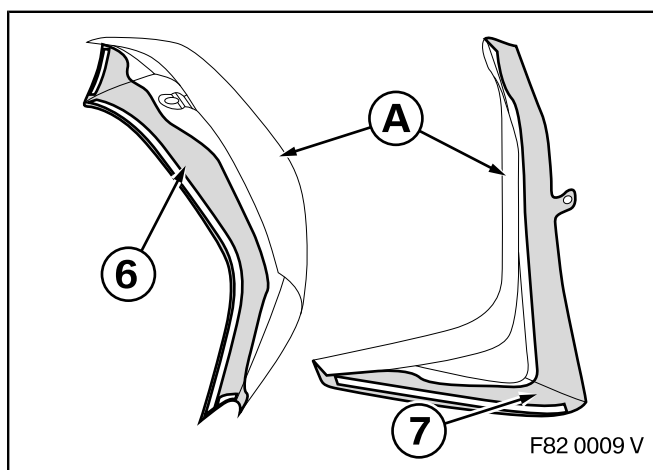


Release the grille (3) from its anchor points and push it inwards.

Place black adhesive tape **Q** over the mark (2) as shown and stick it in place so that a small part of black adhesive tape **Q** can be folded around the edge (4).

Then fold black adhesive tape **Q** around the edge (4) and pull the grille (3) forwards until it engages.

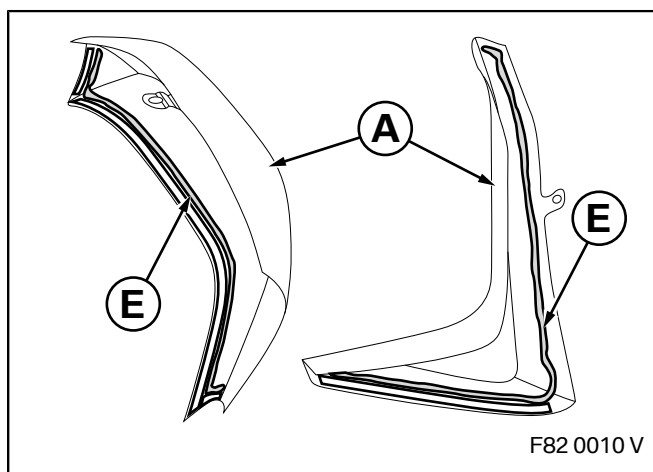
8. Installation of the front peripheries



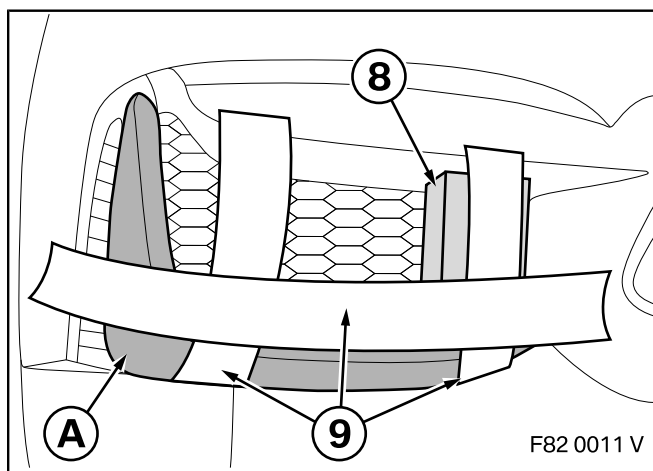
☐ The areas being bonded must be completely dry, clean and free from wax or grease. ◀

When the surfaces (6) and (7) of carbon front add-on section A using suitable agents, clean them and prime them with primer from liquid adhesive E.

☐ Wait for the flash-off time of the primer. ◀



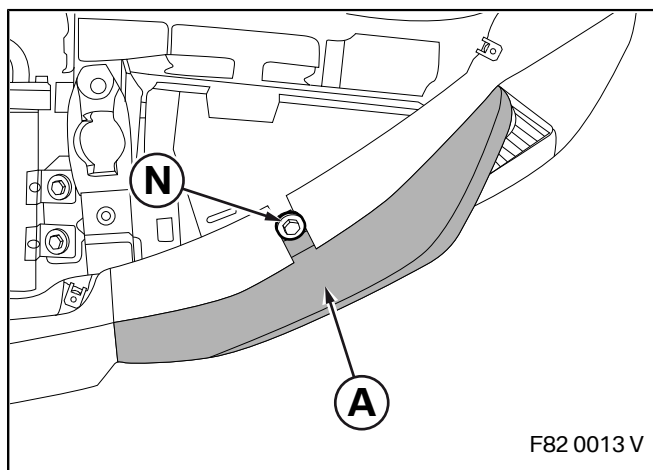
Apply liquid adhesive E as shown on carbon front add-on section A.



☐ Remove any excess liquid adhesive immediately. ◀

Position carbon front add-on section A in place and firmly press it on.

Secure carbon front add-on section A using the foam block (8) or other suitable agents and adhesive strips (9) as shown.

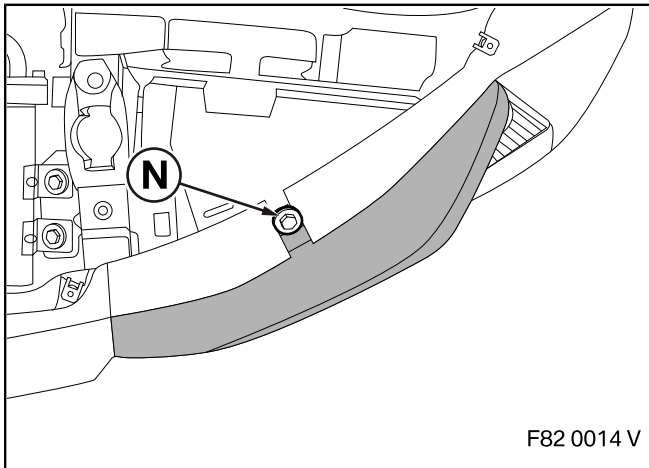


Secure carbon front add-on section A using hexagon screw N.

Remove the adhesive strips (9) and foam block (8) after **30 minutes**.

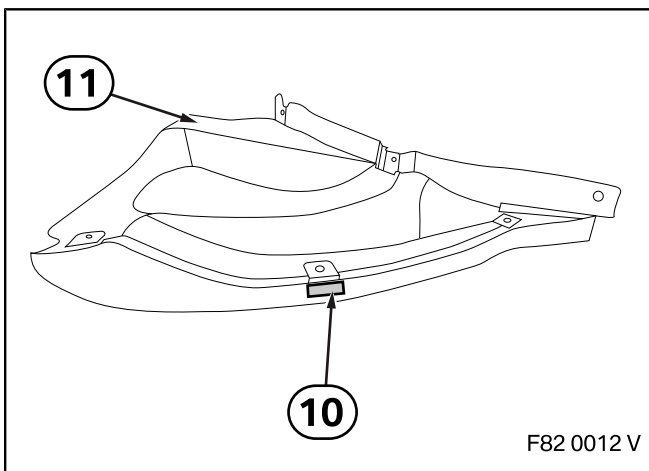
☐ Continue installation only once the adhesive strips have been removed. ◀

8. Installation of the front peripheries



Remove and keep hexagon screw **N** safe.

Only for the "left/right carbon front add-on section"



▶ If, in addition to the left/right carbon front attachment, either the matt black front attachment **F1** or carbon front attachment **F2** is installed, skip this step.

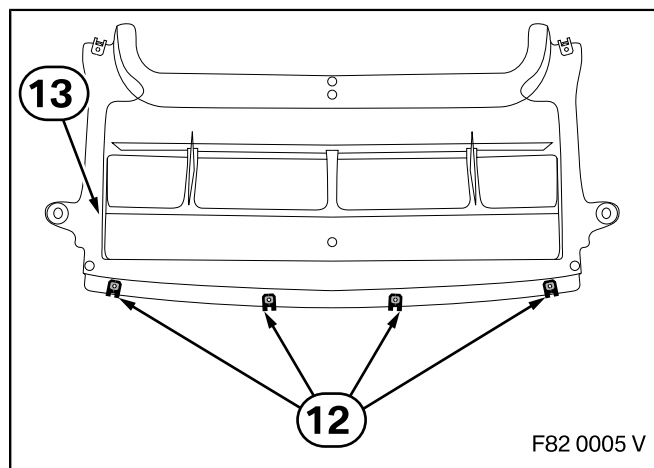
If neither matt black front add-on section **F1** or carbon front add-on section **F2** are installed, then this step is carried out. ◀

In the area (10) of the air guide (11), create a slit for the tab on carbon front add-on section **A** so that carbon front add-on section **A** can be screw-connected to the air guide (11) on the car.

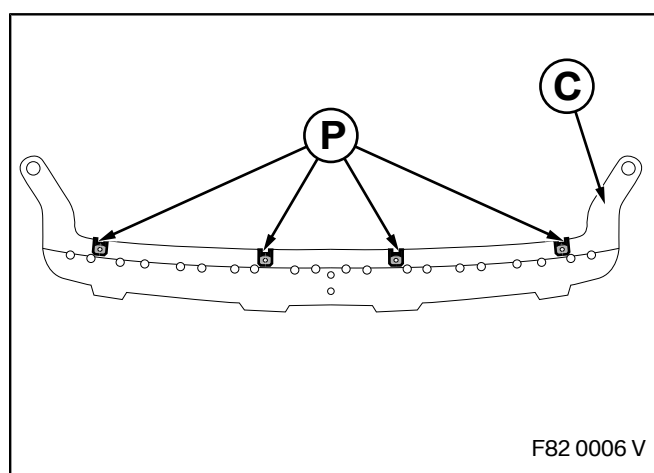
Fit the air guide (11) as described in **ISTA/AIR**.

8. Installation of the front peripheries

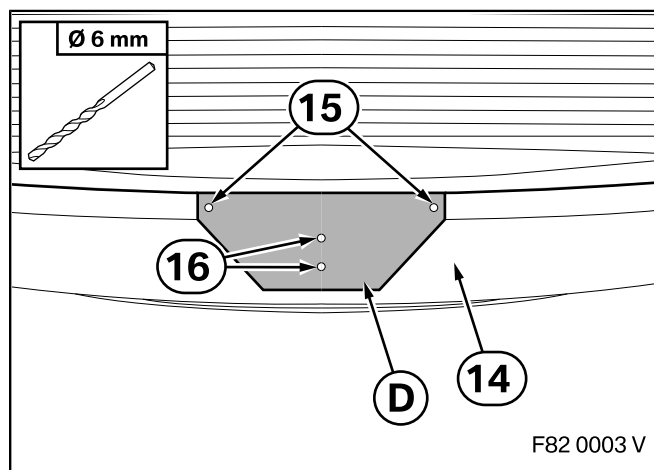
Only for "matt black front add-on section" or "carbon front add-on section"



Remove the C-clips (12) in the engine shield (13).



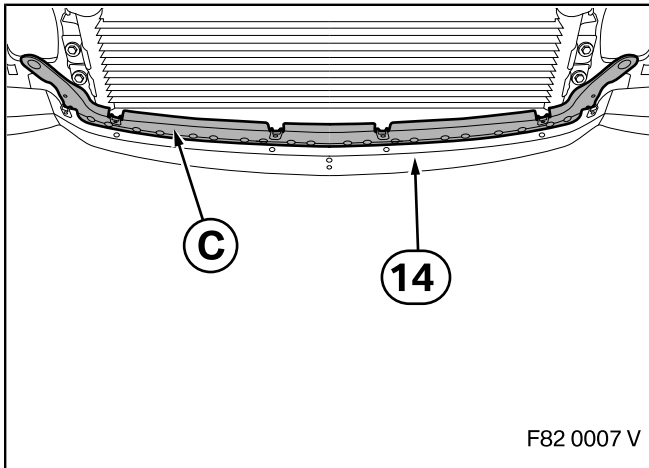
Place C-clips **P** on front upper adapter **C**.



Position template **D** from underneath onto the front apron (14), align with the drill holes (15) and secure in place using suitable materials.

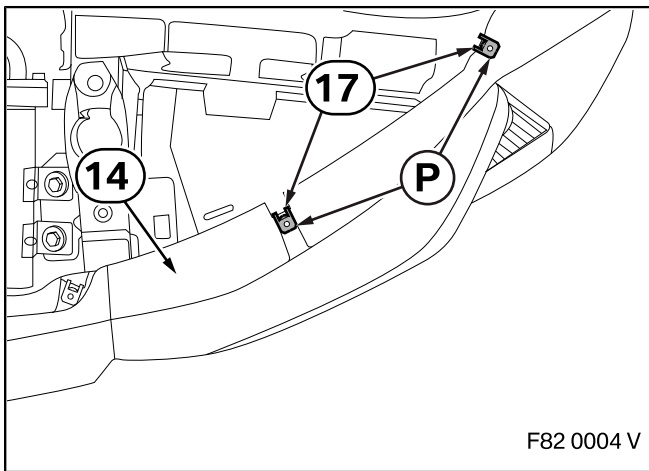
Transfer the drill holes (16) using a **6 mm diameter** drill bit to the front apron (14).

8. Installation of the front peripheries



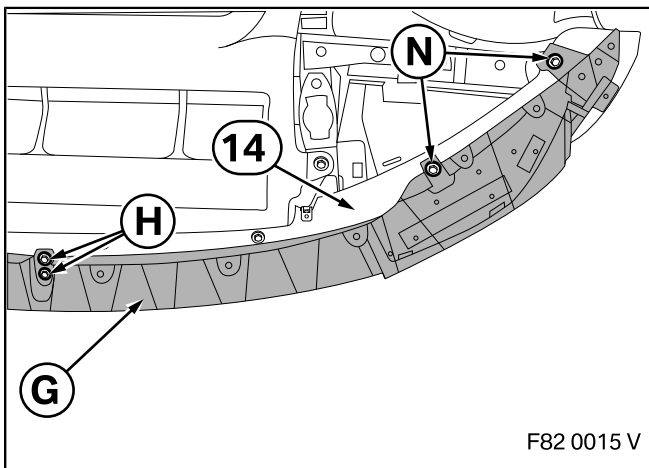
Push front upper adapter **C** under the front apron (14).

Then fit the engine shield as described in **ISTA/AIR**.



Replace the C-clips (17) on the front apron (14) with C-clips **P**.

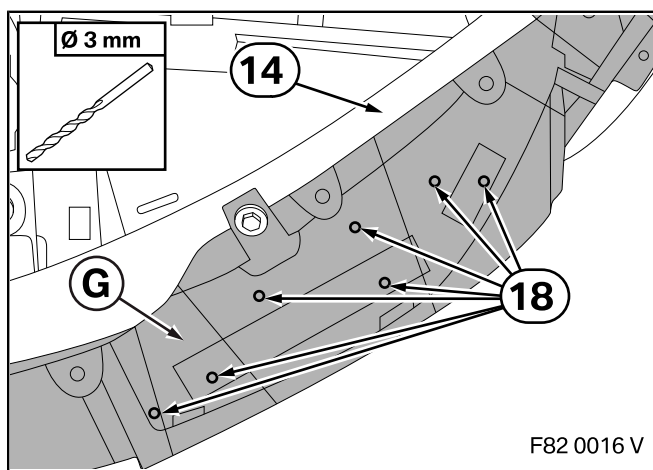
Only for "matt black front add-on section"



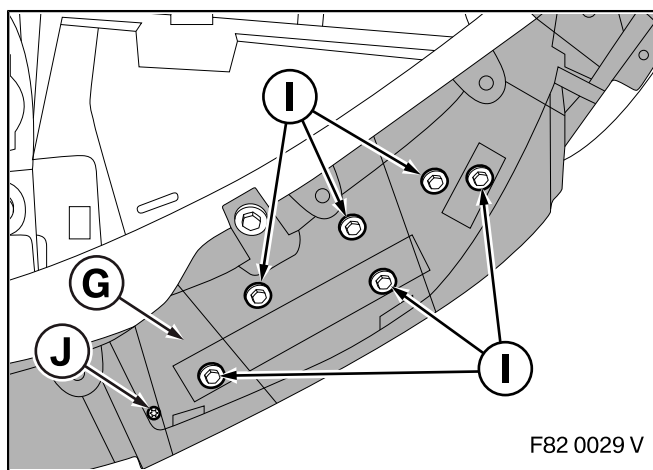
Place front bottom adapter **G** onto the front apron (14) and fit using hexagon screws **H** and hexagon screw **N** until hand-tight.

Tighten hexagon screws **H** and hexagon screws **N**.

8. Installation of the front peripheries



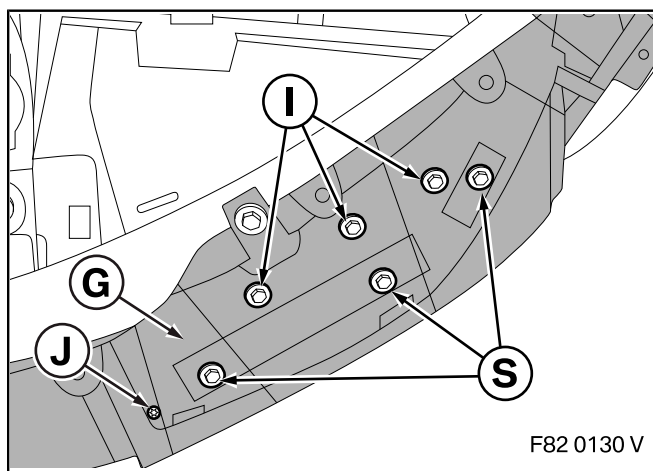
Transfer the drill holes (18) from front bottom adapter **G** using a **3 mm diameter** drill bit to right carbon front add-on section **A** and the front apron (14).



For the initial installation of the matt black front add-on section

Secure front bottom adapter **G** using six hexagon screws **I**.

Secure sheet metal screw **J**.



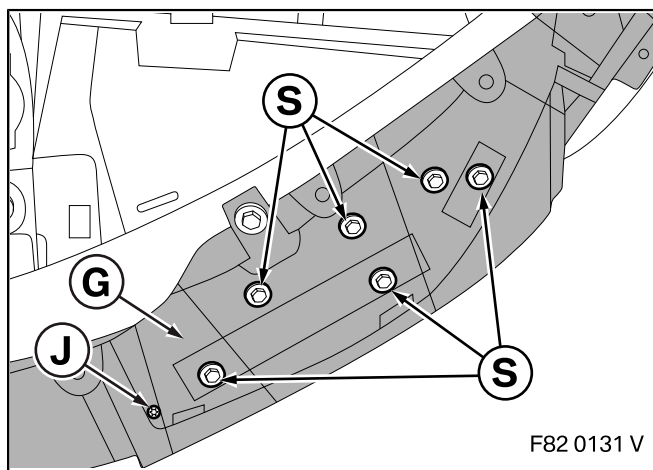
For the subsequent installation of the matt black front add-on section, e.g. if the carbon front add-on section was installed previously

Only at the position of screws **I**

Transfer the drill holes (18) from front bottom adapter **G** using a **3 mm diameter** drill bit to right carbon front add-on section **A** and the front apron (14). ◀

Secure front bottom adapter **G** using three hexagon screws **I** and three oval-headed screws **S**.

Secure sheet metal screw **J**.

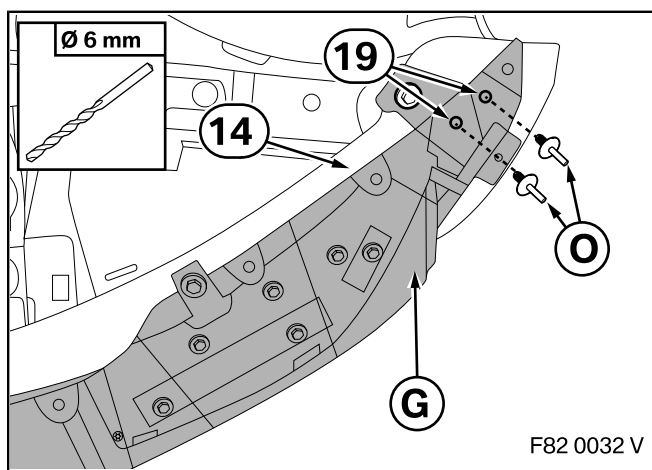


For the subsequent installation of the matt black front add-on section, e.g. in the event of a repair if the matt black front add-on section was installed previously

Secure front bottom adapter **G** using six oval headed screws **S**.

Secure sheet metal screw **J**.

8. Installation of the front peripheries

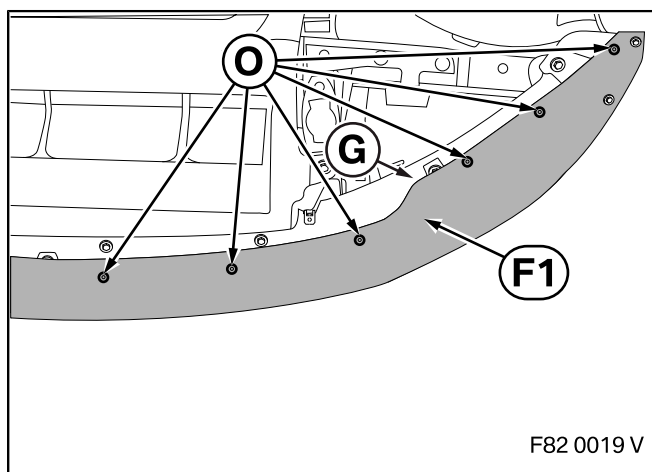


Only for initial installation

Transfer the drill holes (19) from front bottom adapter **G** using a **6 mm diameter** drill bit to the front apron (14).

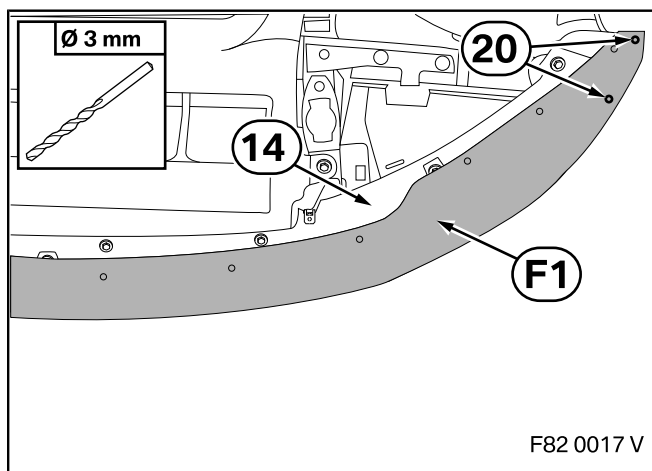
Secure front bottom adapter **G** using folding blind rivets **O**.

For subsequent installations, the drill holes (19) are already present. ◀

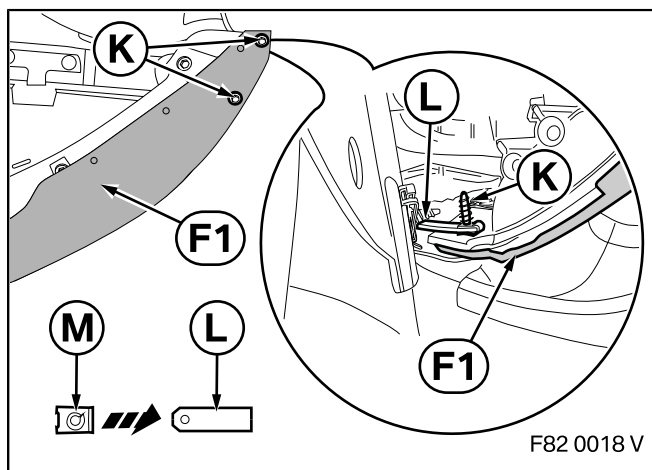


Place matt black front add-on section **F1** onto front bottom adapter **G** on the front apron (14).

Secure matt black front add-on section **F1** using folding blind rivets **O**.



Transfer the drill holes (20) from matt black front add-on section **F1** using a **3 mm diameter** drill bit to the front apron (14).

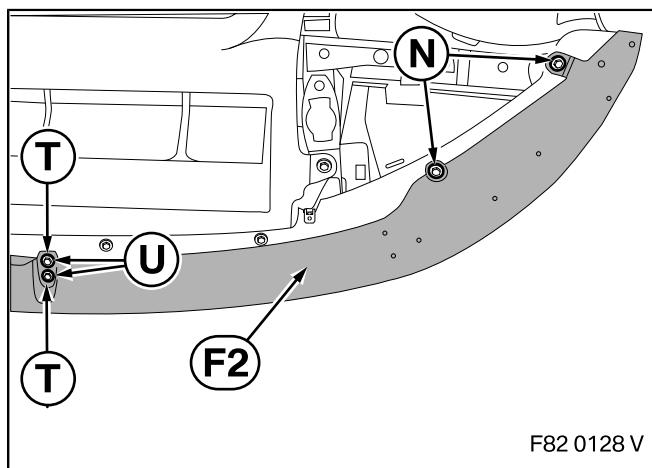


Place C-clips **M** on plastic plates **L**.

Secure matt black front add-on section **F1** using plastic plates **L** and sheet metal screws **K**.

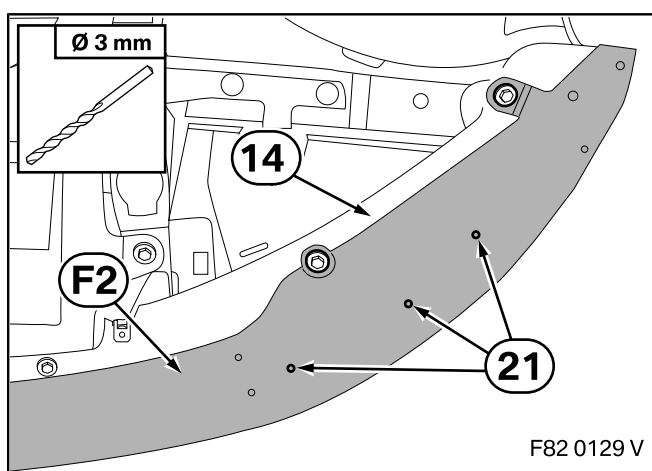
8. Installation of the front peripheries

For "carbon front add-on section" only



Apply carbon front add-on section **F2** and fit until hand-tight and align using hexagon screws **T** with washers **U** and hexagon screws **N**.

Tighten hexagon screws **T** and hexagon screws **N**.

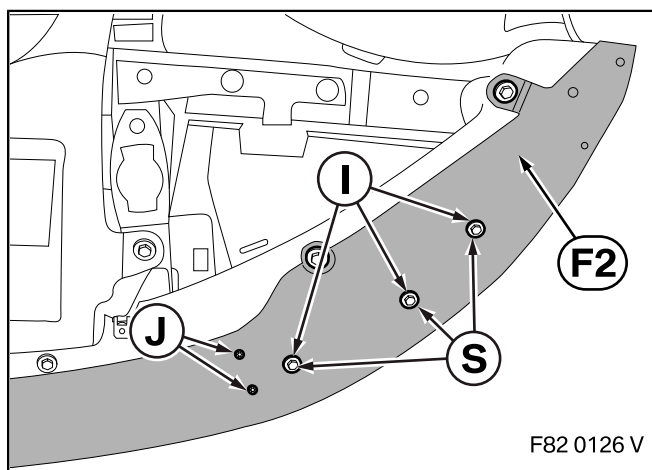


For initial installation

Transfer the drill holes (21) from carbon front add-on section **F2** using a **3 mm diameter** drill bit to right carbon front add-on section **A** and the front apron (14).

For subsequent installation

No drill holes are required.



Tighten sheet metal screws **J**.

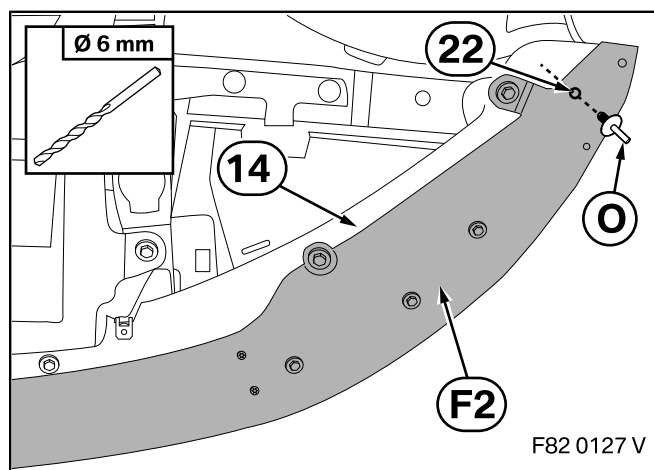
For initial installation

Screw in hexagon screw **I**.

For subsequent installation

Screw in oval headed screws **S**.

8. Installation of the front peripheries

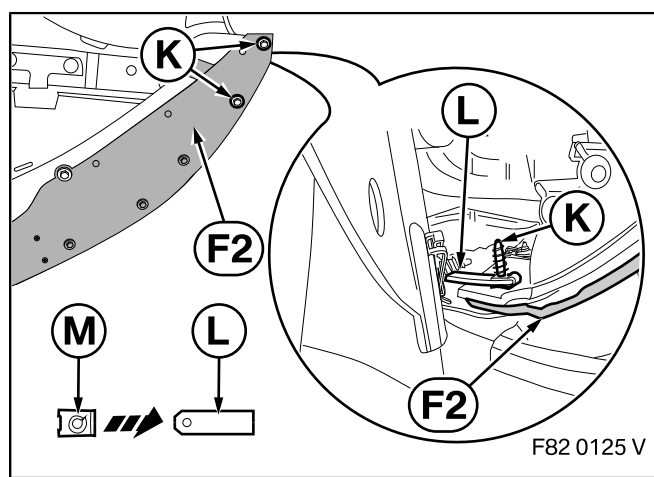


Only for initial installation

Transfer the drill holes (22) from carbon front add-on section **F2** using a **6 mm diameter** drill bit to the front apron (14).

Secure carbon front add-on section **F2** using folding blind rivet **O**.

▶ For subsequent installations, the drill hole (22) is already present. ◀

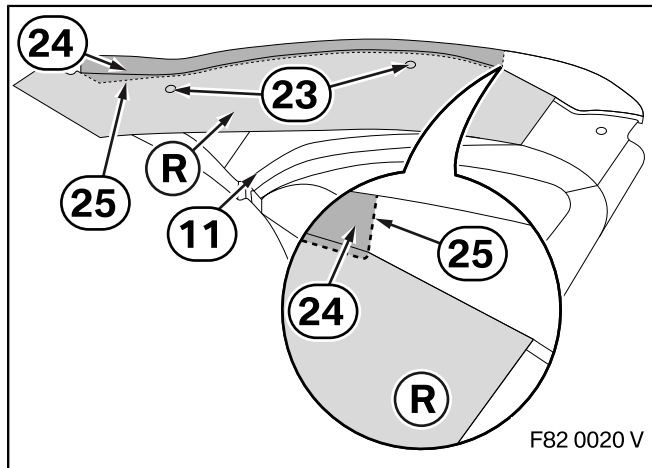


Place C-clips **M** on plastic plates **L**.

Secure carbon front add-on section **F2** using plastic plates **L** and sheet metal screws **K**.

8. Installation of the front peripheries

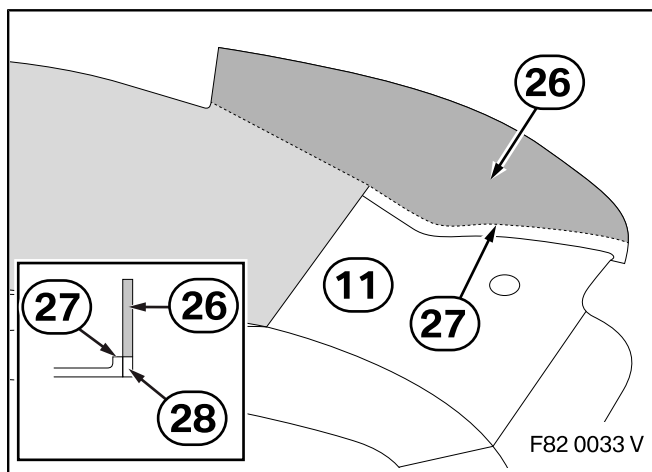
For "matt black front add-on section" and "carbon front add-on section"



Place air guide template **R** on the air guide (11) as shown, align using the drill holes (23) and secure in place using suitable agents.

Mark the area (24) as shown.

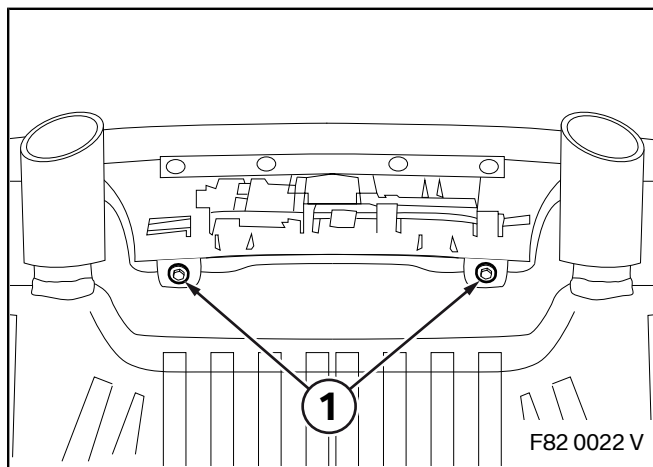
Cut off the area (24) (hard and soft plastic) of the air guide (11) at the line (25) (hard plastic) using suitable tools.



Cut off the area (26) (soft plastic) of the air guide (11) at the edge (27) (hard plastic) using suitable tools so that the area (28) (soft plastic) is preserved.

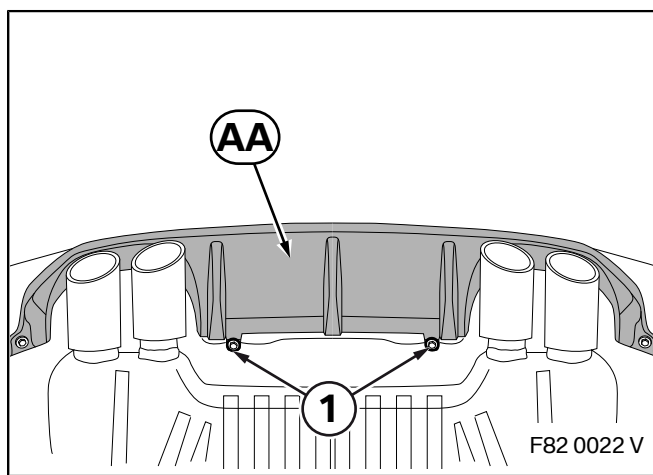
Fit the air guide (11) as described in **ISTA/AIR**.

9. Fitting the carbon rear diffuser



Remove the diffuser as per **ISTA/AIR**.

Then remove the screws (1) and keep them safe.

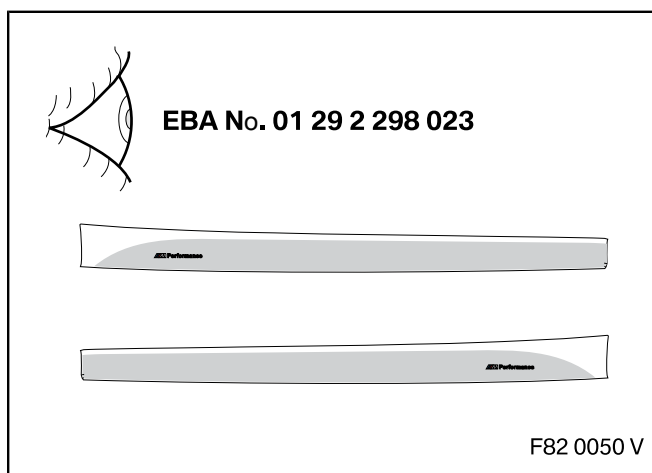


Position carbon rear diffuser **AA** and fit it as per **ISTA/AIR**.

▶ Ensure that the screws (1) are screwed first through carbon rear diffuser **AA** and then through the heat shield into the plastic part. ◀

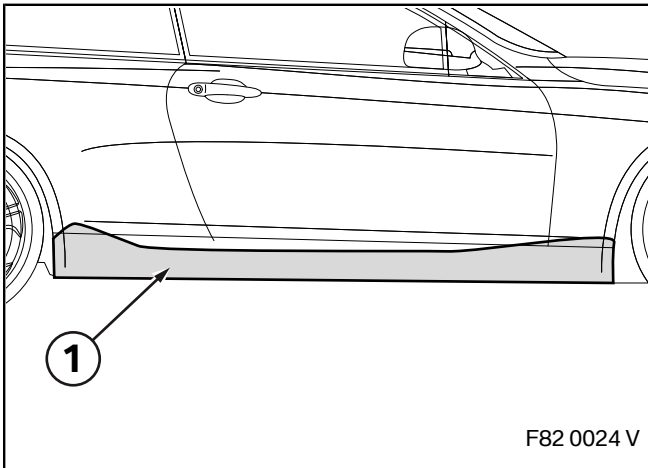
Fit the screws (1).

10. Fitting the left/right side skirt film



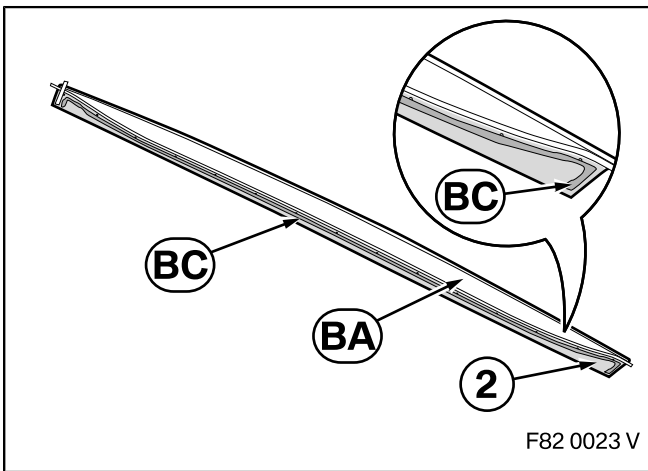
- ▶ Before installing the matt black side sill add-on, the left/right side skirt film must be installed in accordance with the installation instructions bearing part number **01 29 2 298 023**. ◀

11. Fitting the matt black F82/F83 side sill add-on section



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

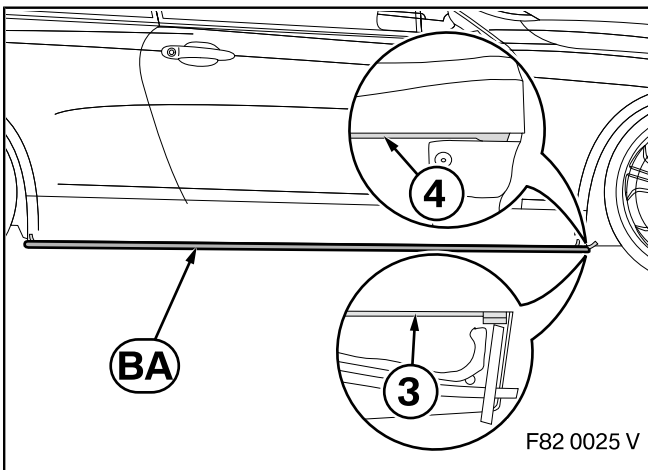
Clean the surface (1) of the car with suitable agents.



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

Clean the surface (2) of matt black side skirt add-on section **BA** with suitable agents.

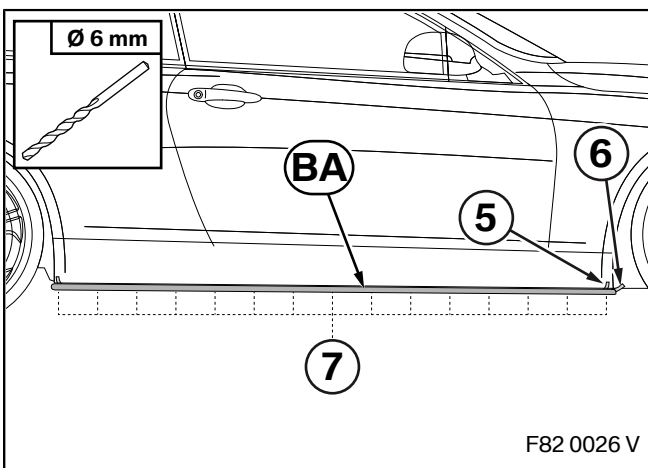
Apply liquid adhesive **BC** as shown to matt black side skirt add-on section **BA**.



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

Position matt black side skirt add-on section **BA** so that the edge (3) of matt black side skirt add-on section **BA** lies behind the edge (4) of the car.

- ▶ Remove any excess liquid adhesive immediately. ◀



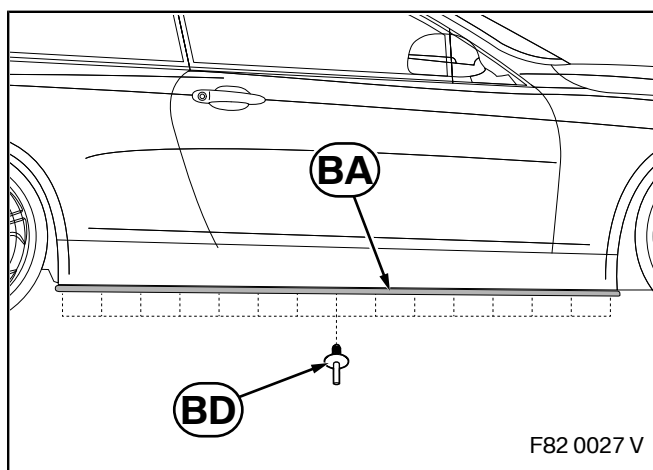
Carefully remove the adhesive strip (5) from front to back and firmly press on matt black side skirt add-on section **BA**.

Carefully remove the adhesive strip (6) from the outside inwards and firmly press on matt black side skirt add-on section **BA**.

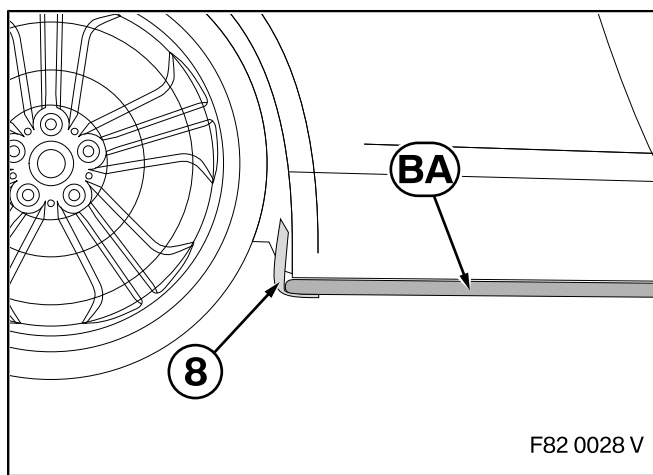
- ▶ When drilling down to the drill depth, take care not to damage parts underneath. ◀

Using a **6 mm** diameter drill bit, transfer the 15 holes (7) from matt black side skirt add-on section **BA** to the side skirt.

11. Fitting the matt black F82/F83 side sill add-on section

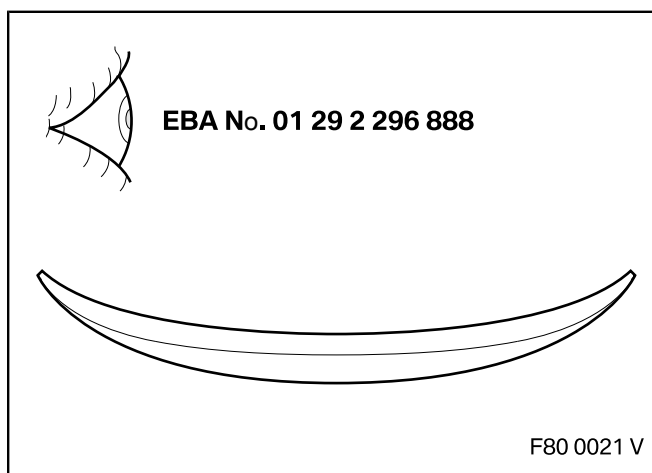



Secure matt black side skirt add-on section **BA** using 15 blind rivets **BD**.



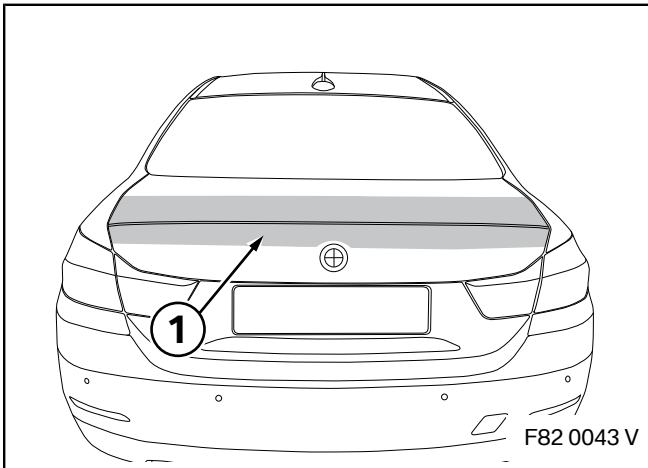
Secure the rear part of matt black side skirt add-on section **BA** as shown using a suitable adhesive strip (8).

12. Install carbon rear spoiler on F80/black matt rear spoiler on F80



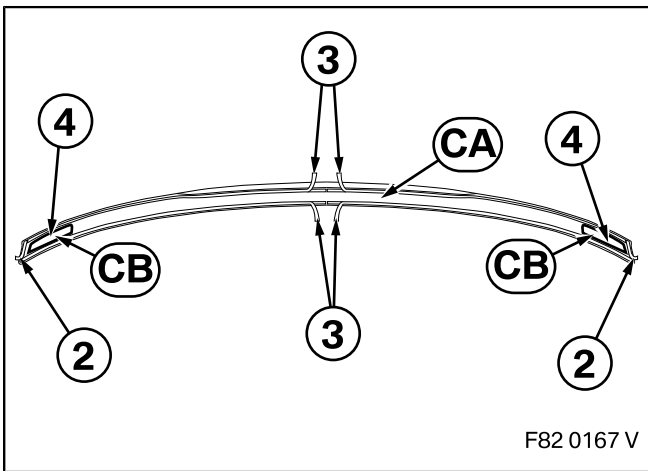
-  Install the carbon rear spoiler on F80/black matt rear spoiler on F80 as described in the installation instructions with part number **01 29 2 296 888**. ◀

13. Fitting the F82 carbon rear spoiler



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

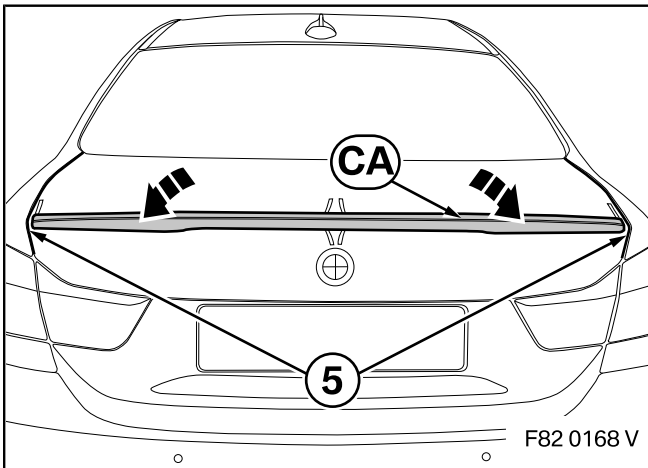
Clean the bonding surface (1) on the car using suitable means.



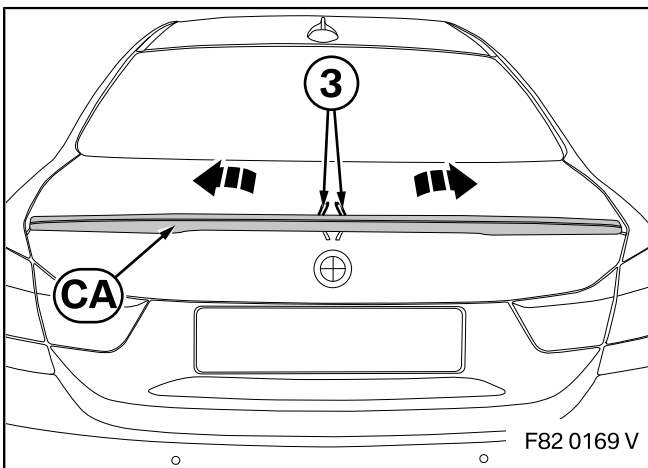
Remove the adhesive backing film on the left and right just enough to form small tabs (2).

Cut the adhesive backing film on carbon rear spoiler **CA** in the middle and remove it just enough to form small tabs (3).

Sand the area (4) between the adhesive strips using suitable tools and clean it. Then apply liquid adhesive **CB** as shown.

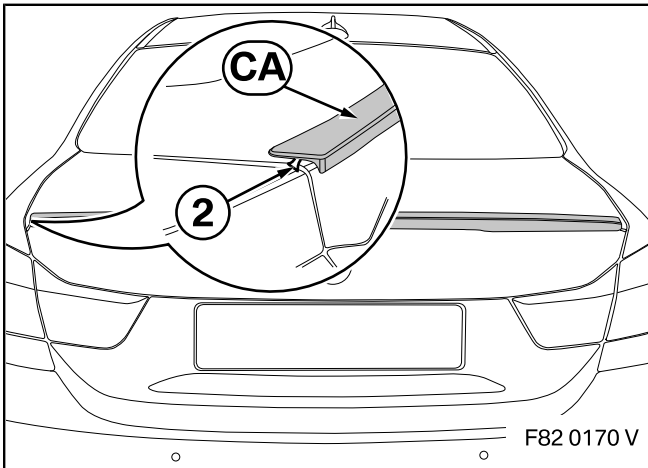


Place carbon rear spoiler **CA** on the edge (5) of the boot lid and centre it.

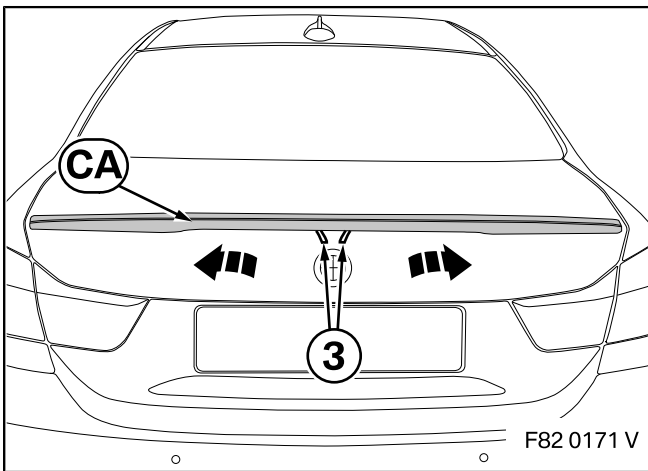


Remove the upper adhesive backing films (3) from carbon rear spoiler **CA** starting from the middle.

13. Fitting the F82 carbon rear spoiler



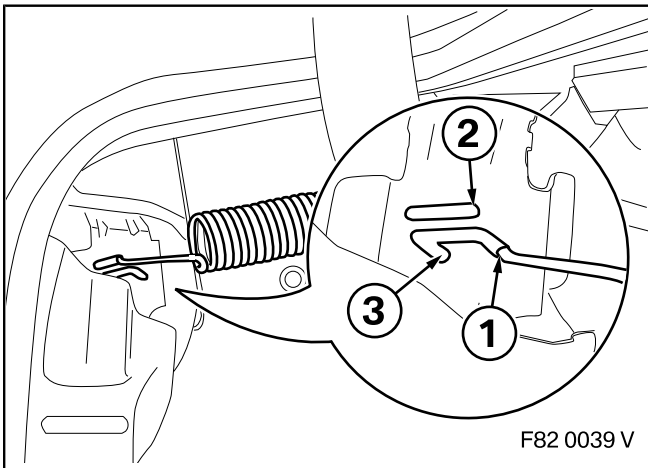
Remove the side adhesive backing films (2) from carbon rear spoiler **CA**.



Remove the lower adhesive backing films (3) from carbon rear spoiler **CA** starting from the middle.

Press carbon rear spoiler **CA** firmly and repeatedly onto the boot lid.

▶ Remove any excess liquid adhesive immediately. ◀

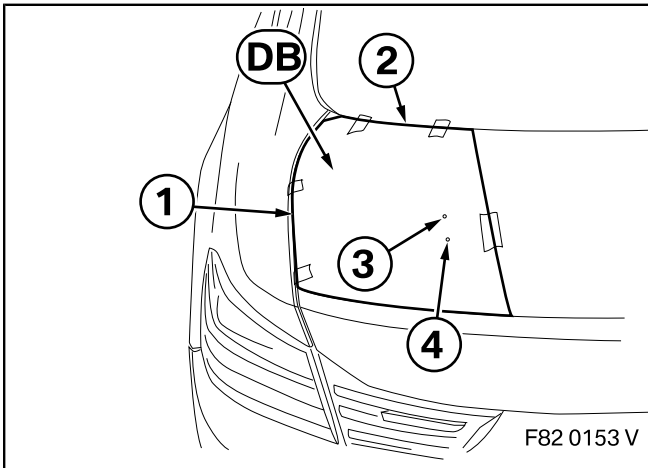


▶ Positions (1), (2) and (3) are provided for the tailgate's tension spring.

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

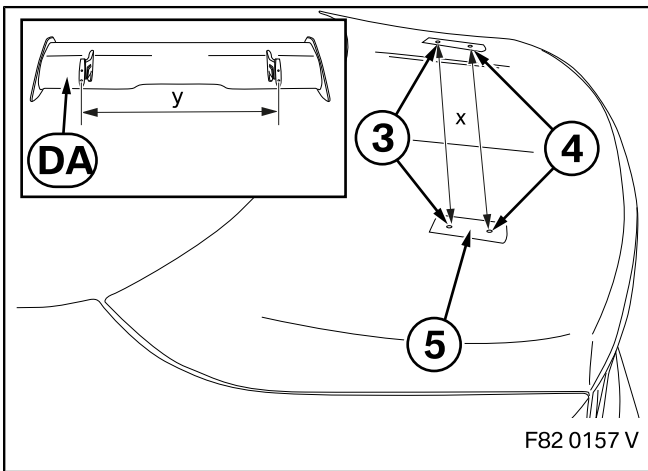
▶ After repositioning the tension springs, check that the boot lid is able to open properly and adjust the position of the tension springs accordingly if necessary.

14. Installation of the carbon rear spoiler for F82



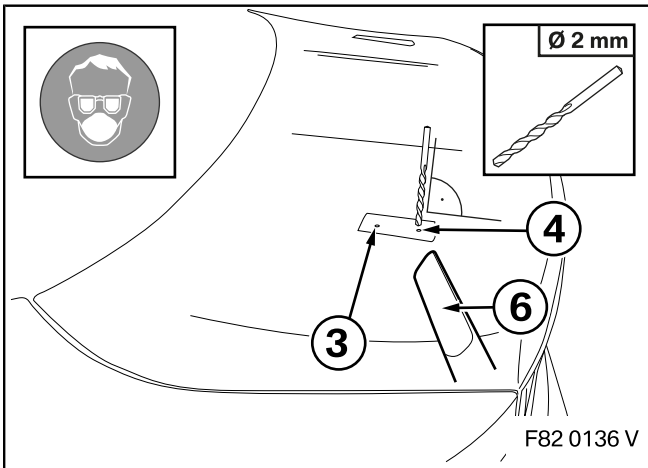
Place the template for the boot lid **DB** flush on the edge (1) and (2) of the boot lid, secure it with adhesive tape if necessary and transfer the two marks (3) and (4) to the boot lid using suitable means.

Remove the template for the boot lid **DB** and use it on the opposite side of the car.



Compare **distance x** between marks (3) and (4) with **distance y** from the ventilated carbon rear spoiler **DA**. **Distance x** must be identical to **distance y**. If not, correct **distance x** if necessary.

Affix adhesive tape (5) to protect the surface.

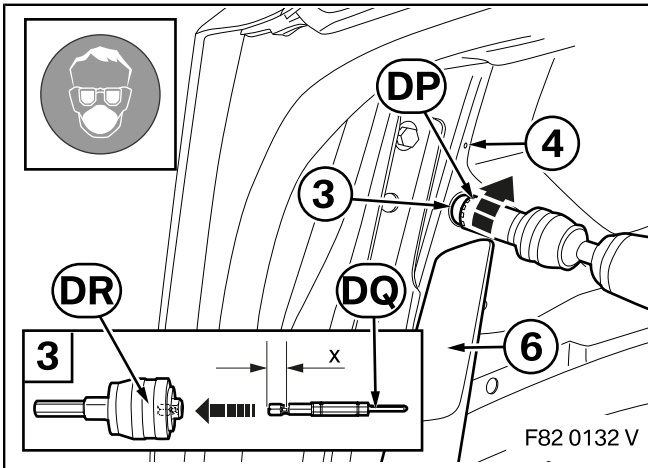


! Wear eye protection and breathing apparatus. ◀

▶ Place the drill perpendicular to the surface of the boot lid. Extract the chips during drilling using a suitable extractor (6). ◀

Drill the holes (3) and (4) with a **2 mm** bit.

14. Installation of the carbon rear spoiler for F82



⚠ Wear eye protection and breathing apparatus. ◀

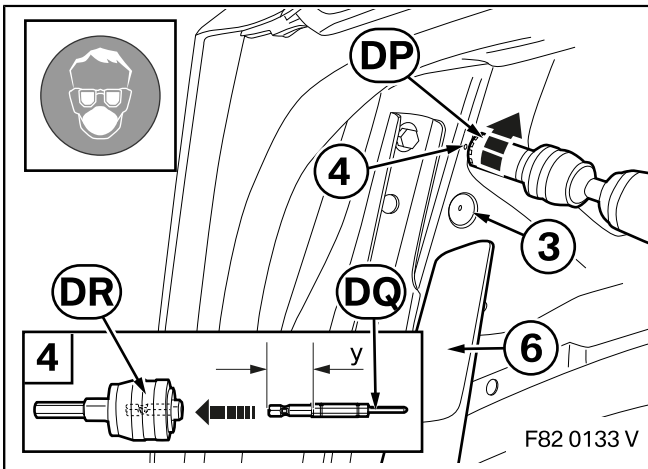
◻ We recommend components **DP**, **DQ** and **DR** in the parts list.

Insert the Auto Start centring system **DQ** up to **position x** in the Power Change **DR**, then connect the diameter hole saw **DP**.

Only drill through the internal shell of the boot lid.

Extract the chips during drilling using a suitable extractor (6). ◀

With the boot lid open, expand the bottom hole (3) using the diameter hole saw **DP** to $\varnothing = 22 \text{ mm}$.



⚠ Wear eye protection and breathing apparatus. ◀

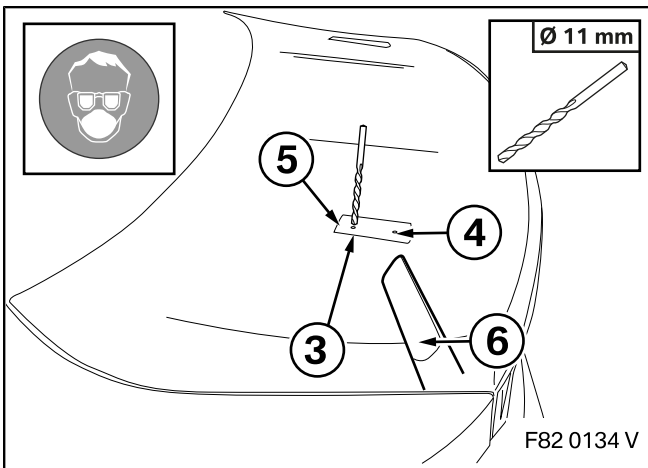
◻ We recommend components **DP**, **DQ** and **DR** in the parts list.

Insert the Auto Start centring system **DQ** up to **position y** in the Power Change **DR**, then connect the diameter hole saw **DP**.

Only drill through the internal shell of the boot lid.

Extract the chips during drilling using a suitable extractor (6). ◀

With the boot lid open, expand the top hole (4) using the diameter hole saw **DP** to $\varnothing = 22 \text{ mm}$.

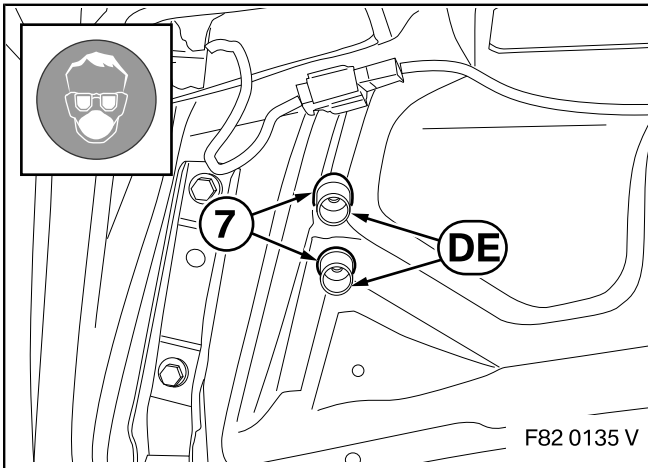


⚠ Wear eye protection and breathing apparatus. ◀

◻ Drill the holes at high speed and with a sharp drill bit. Extract the chips during drilling using a suitable extractor (6). ◀

Drill the holes (3) and (4) with an **11 mm** bit. Then remove the adhesive tape (5).

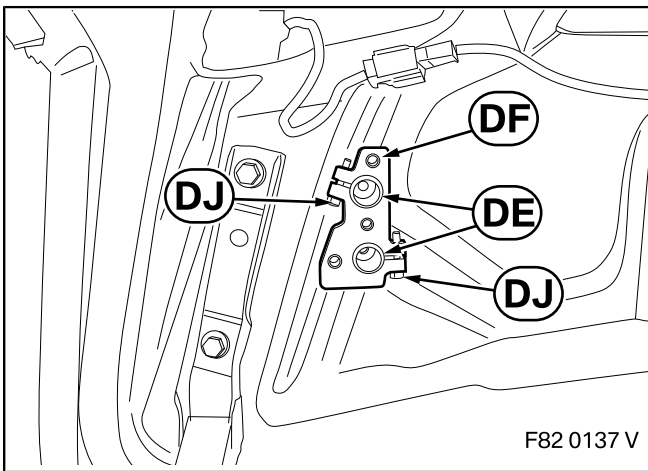
14. Installation of the carbon rear spoiler for F82



⚠ Wear eye protection and breathing apparatus. ◀

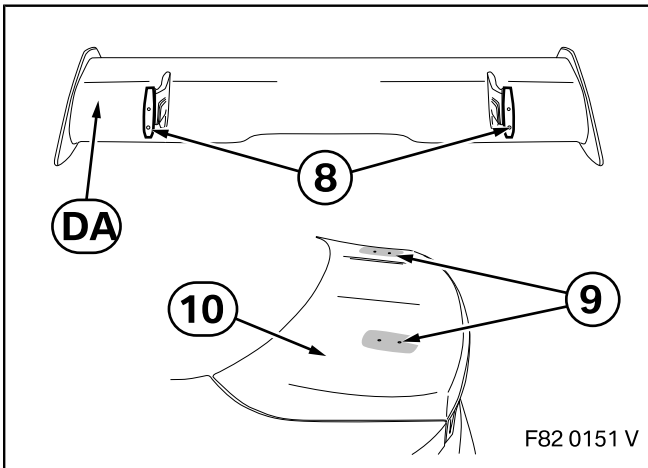
◻ If the holes (7) require refinishing, only drill the internal shell of the boot lid. ◀

Insert locating bushings **DE** into the holes (7) from the inside. If necessary enlarge the holes (7) on the internal shell of the boot lid until the locating bushings **DE** are secure.



Insert Torx screws **DJ** into rear wing adapter **DF** loosely. Place rear wing adapter **DF** on the two locating bushings **DE** and check that they move easily, in other words the rear wing adapter **DF** must not jam on the two locating bushings **DE**. Repeat the previous step if necessary.

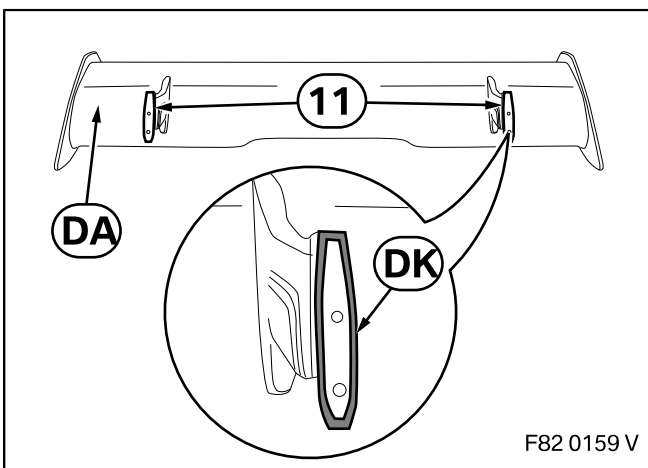
Then remove the rear wing adapter **DF**.



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

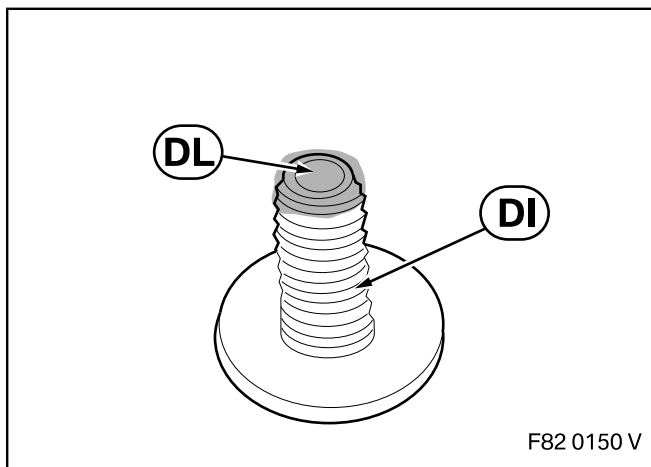
Remove the backing film (8) from the ventilated carbon rear spoiler **DA**.

Clean the bonding surfaces (9) on the boot lid (10) using suitable means.

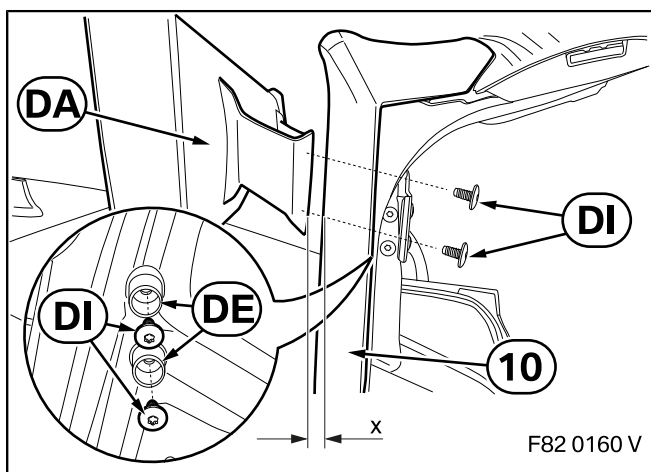


Apply a thin bead of liquid adhesive **DK** to the area shown in grey (11) on the ventilated carbon rear spoiler **DA**.

14. Installation of the carbon rear spoiler for F82

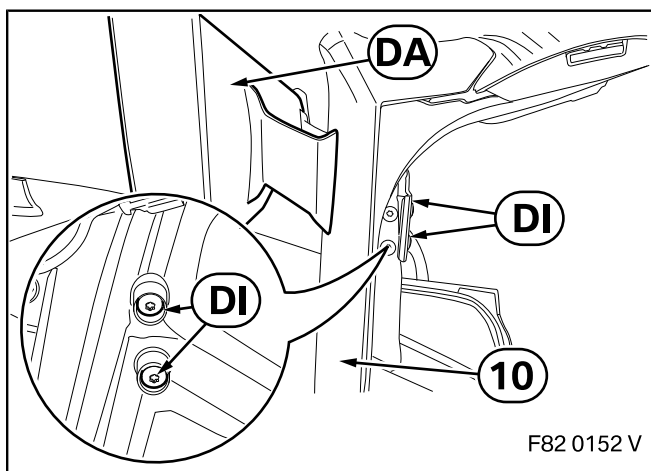


Wet the tips of four oval-headed screws **DI** with liquid screw lock **DL**.



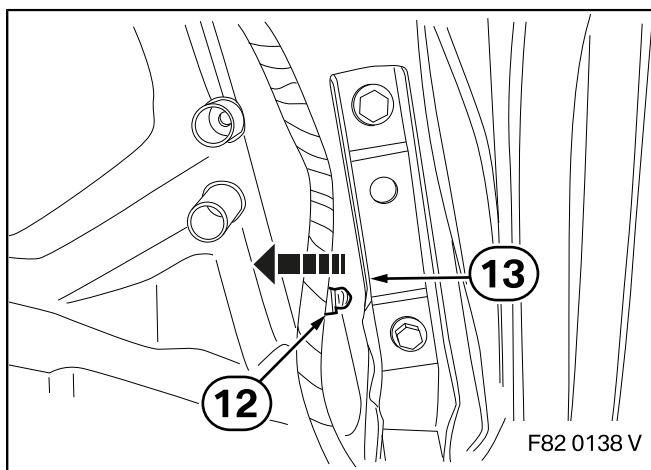
Do not place the feet of the carbon rear spoiler **DA** coated with liquid adhesive **DK** on the surface of the boot lid (10) yet. ◀

Screw in all four of the oval-headed screws **DI** with liquid screw lock **DL** by two turns each.



Place ventilated carbon rear spoiler **DA** on the boot lid (10) and secure it with the oval-headed screws **DI** using a torque of **6 Nm**.

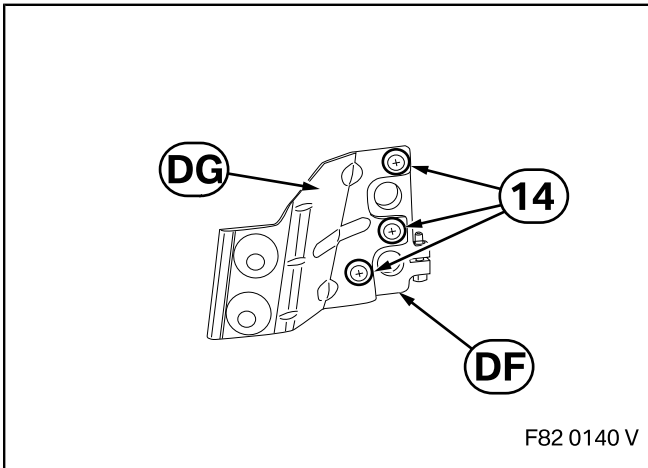
Remove any excess liquid adhesive **DK** immediately. ◀



For the right-hand side of the car (the figure shows the hinges on cars built after 02/2015)

Remove the bung (12) in the wiring harness using suitable tools from the boot lid hinge (13).

14. Installation of the carbon rear spoiler for F82



For both sides of the car

► The procedures for the left and right sides of the car are identical. The components differ slightly in geometry. You should therefore check the final number of the components when installing them. Even end numbers are the components for the right. Odd end numbers other components for the left. ◀

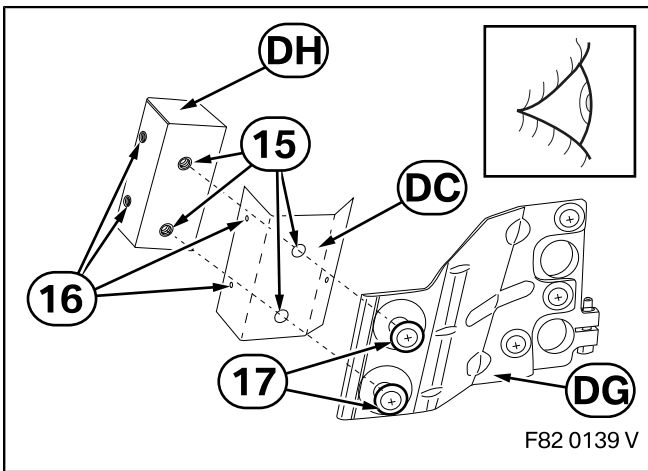
Place the boot lid reinforcement plate **DG** on the rear wing adapter **DF** and secure it with three standard M6 screws (14) so that there is minimal clearance between the two components.

Cars built after 02/2015 only

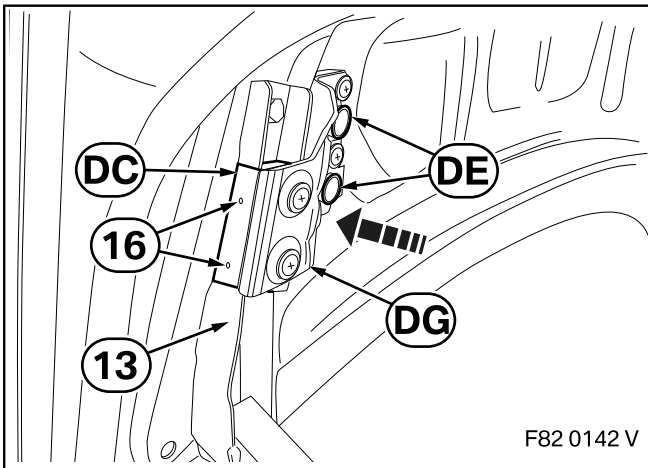
► Use standard M6 screws for this process. ◀

Fold the template for the boot lid hinge **DC** at the perforation and then place it on the boot lid hinge adapter **DH** so that the holes (15) and (16) line up perfectly.

Place them together under the boot lid reinforcement plate **DG** so that the two holes (16) point outwards. Secure the boot lid reinforcement plate **DG** in the holes (15) using standard M6 screws (17).



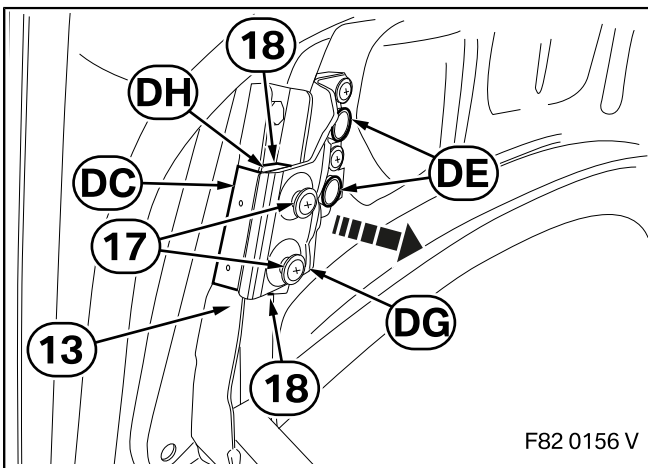
Slide the boot lid reinforcement plate **DG** onto the locating bushings **DE** ensuring that the template for the boot lid hinge **DC** is on the outside of the boot lid hinge (13). Transfer the marks (16) to the boot lid hinge (13) using a suitable tool.



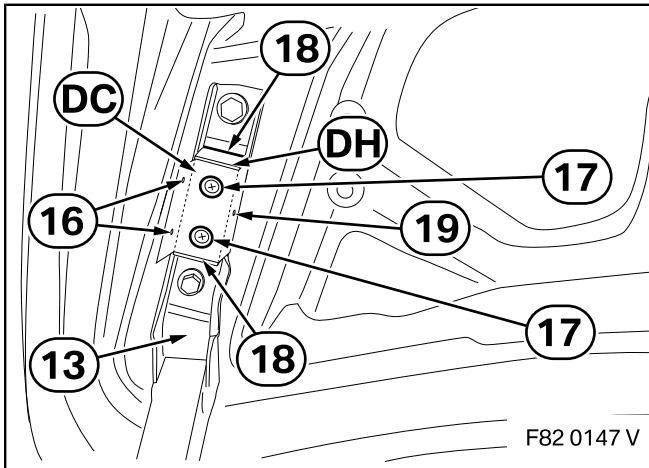
Make a mark (18) at the top and bottom of the boot lid hinge adapter **DH** on the boot lid hinge (13).

Then remove the boot lid reinforcement plate **DG** from the locating bushings **DE**.

Undo the M6 screws (17) and remove the boot lid hinge adapter **DH** from the boot lid reinforcement plate **DG**.

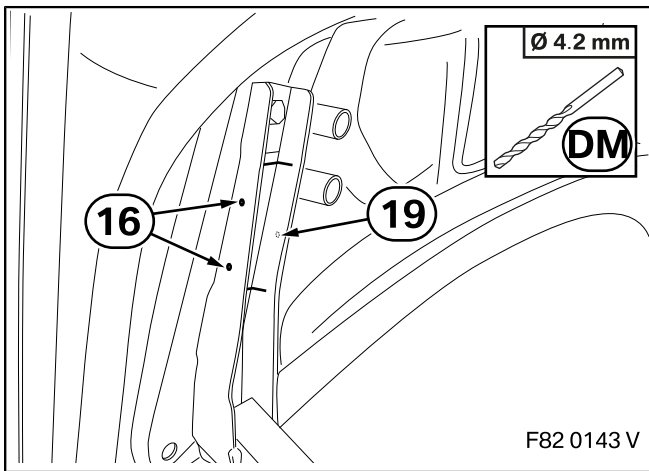


14. Installation of the carbon rear spoiler for F82



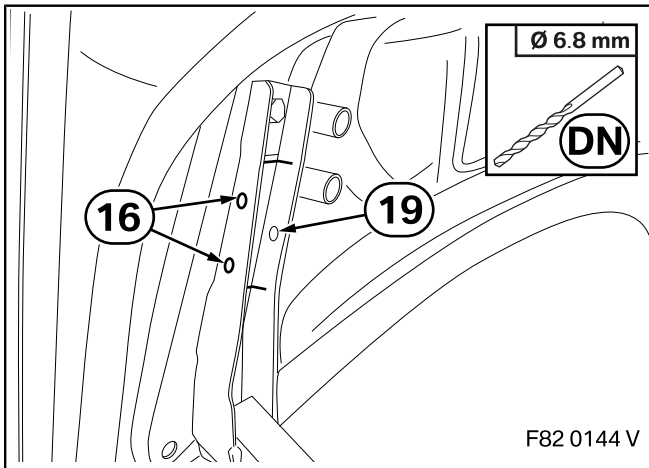
Secure the template for the boot lid hinge **DC** on the boot lid hinge adapter **DH** using standard M6 screws (17) and position it to line up with the marks (18). Check the marks (16) and then transfer the mark (19) to the boot lid hinge (13) using suitable means.

Then undo the M6 screws (17) and remove the template for the boot lid hinge **DC**.



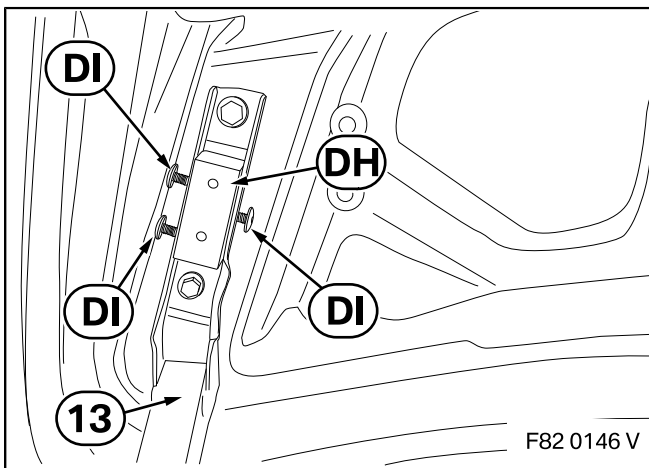
Use drill bit **DM**, part number **83 19 2 166 461**. ◀

Predrill the holes (16) and (19) with an **4.2 mm** bit.



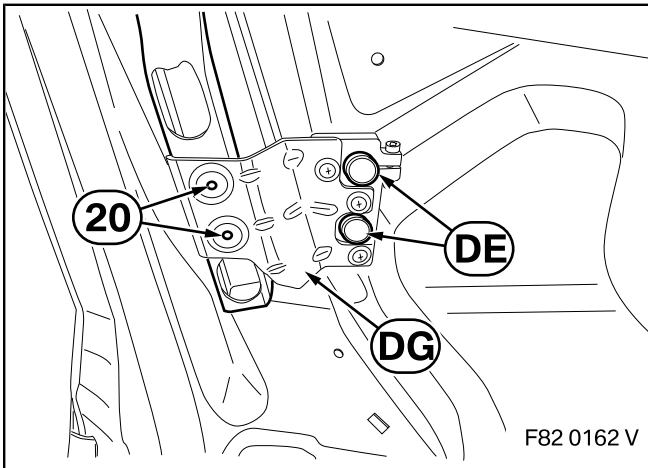
Use drill bit **DN**, part number **83 19 2 166 462**. Check the drilling pattern with the boot lid hinge adapter **DH** (not shown). ◀

Drill the holes (16) and (19) with a **6.8 mm** bit. If the drilling pattern does not fit precisely, enlarge the holes (16) and (19) in stages of 0.5 mm. Then deburr the holes (16) and (19) and treat them with corrosion protection.



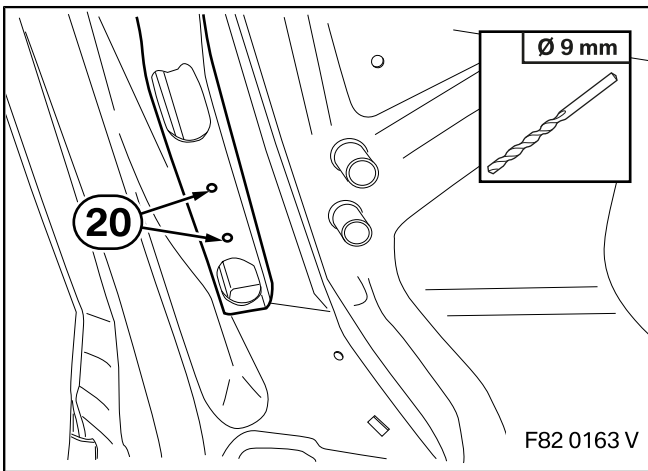
Secure the boot lid hinge adapter **DH** to the boot lid hinge (13) using the oval-headed screws **DI** and a torque of **6 Nm**.

14. Installation of the carbon rear spoiler for F82

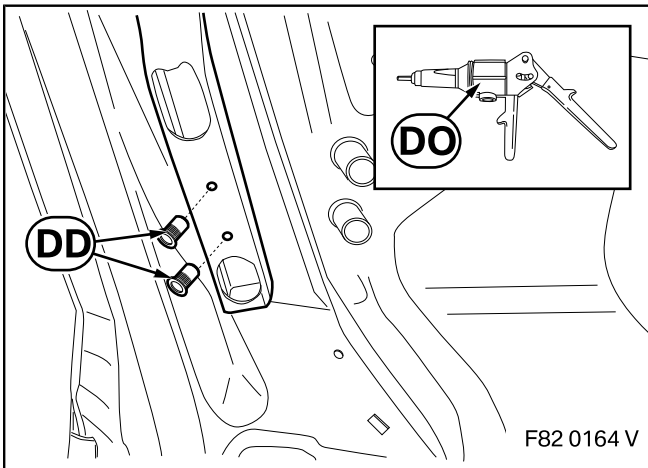


Cars built before 02/2015 only

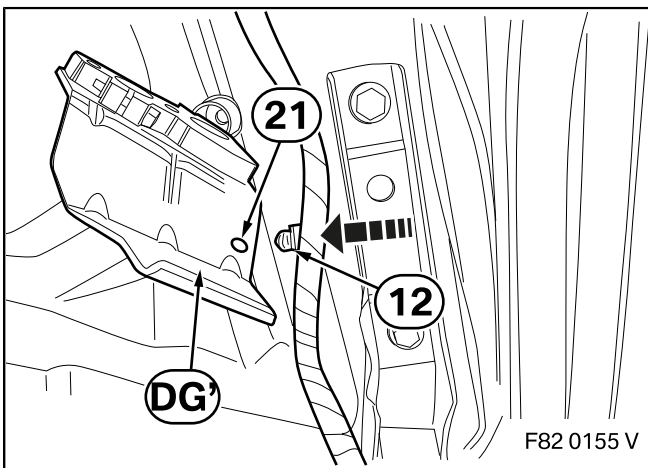
Place the boot lid reinforcement plate **DG** onto the locating bushings **DE**. Transfer the marks (20) using a suitable tool. Remove the boot lid reinforcement plate **DG**.



Drill two holes (20) with a diameter of **9 mm**. Then deburr the holes (20) and treat them with corrosion protection.



Pressing rivet nuts **DD** using a suitable tool. Rivet the rivet nuts **DD** using hand riveter **DO** following the instruction manual.

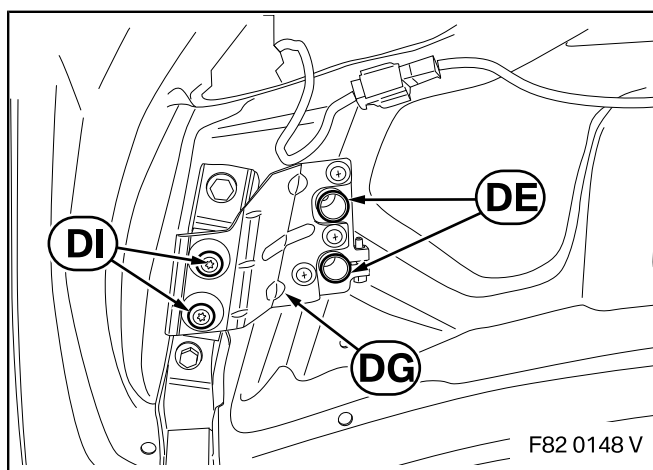


For all cars - right-hand side of the car

(The figures show hinges on cars built after 02/2015)

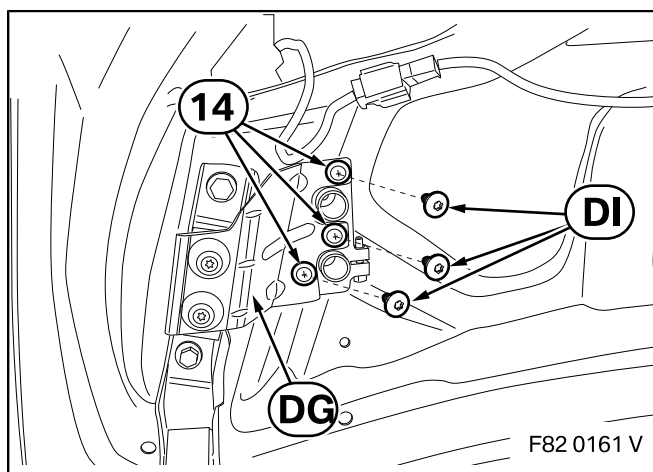
Place the bung (12) for the wiring harness into the hole (21) in the boot lid reinforcement plate **DG'** from the inside.

14. Installation of the carbon rear spoiler for F82

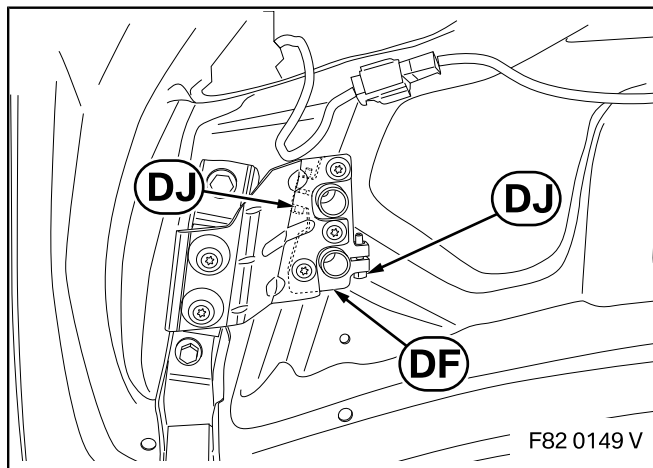


For all cars - both sides of the car

Place the boot lid reinforcement plate **DG** on the locating bushings **DE** and secure it with two oval-headed screws **DI** using a torque of **6 Nm**.

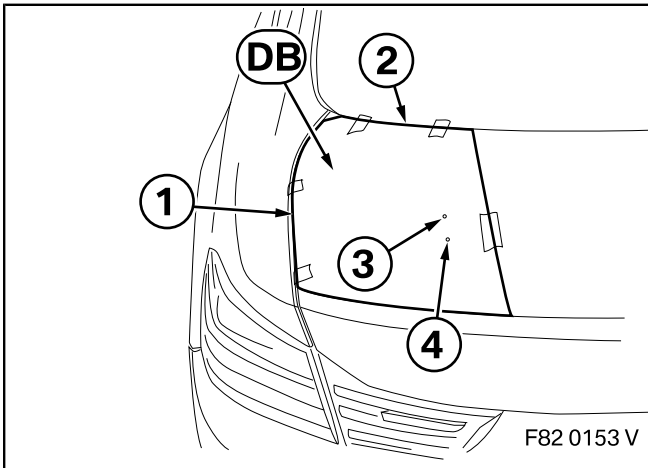


Replace the three M6 screws (14) with the oval-headed screws **DI** and tighten them with a torque of **6 Nm**.



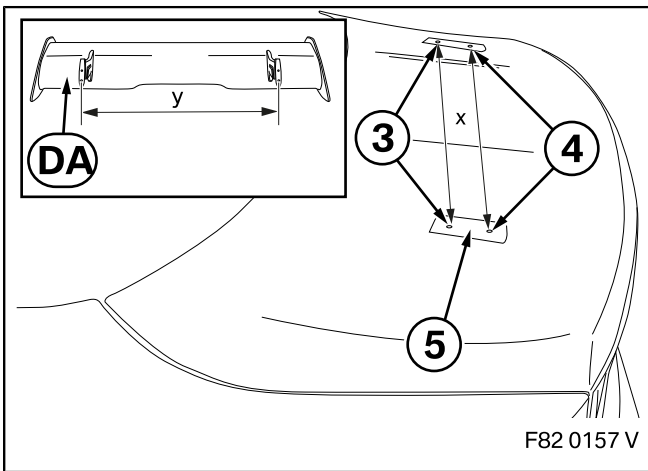
Tighten the two Torx screws **DJ** in the rear wing adapter **DF** with a torque of **6 Nm**.

15. Install the ventilated carbon rear spoiler for F30/F80



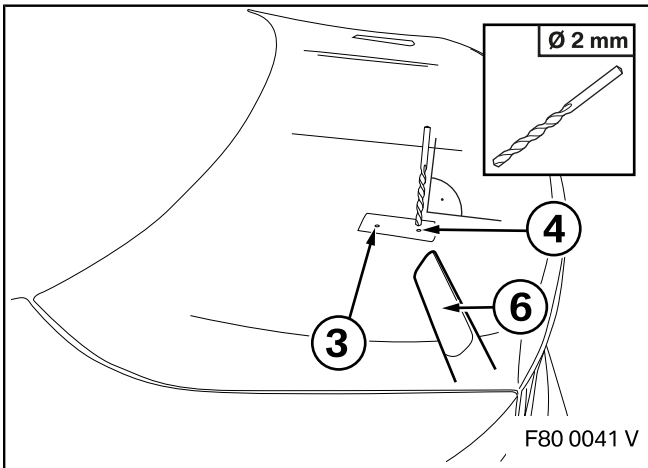
Place the template for the boot lid **DB** flush on the edge (1) and (2) of the boot lid, secure it with adhesive tape if necessary and transfer the two marks (3) and (4) to the boot lid using a suitable tool.

Remove the template for the boot lid **DB** and use it on the opposite side of the car.



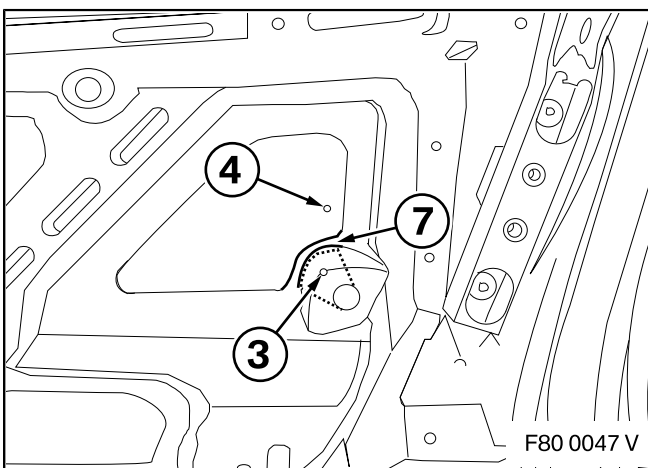
Compare **distance x** between marks (3) and (4) with **distance y** from the ventilated carbon rear spoiler **DA**. **Distance x** must be identical to **distance y**. If not, correct **distance x** if necessary.

Affix adhesive tape (5) to protect the surface.



Place the drill perpendicular to the surface of the boot lid. Extract the chips during drilling using a suitable extractor (6). ◀

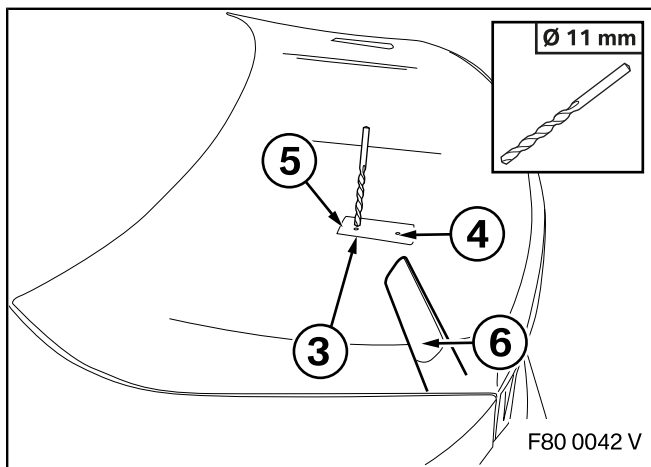
Drill the holes (3) and (4) with a **2 mm** bit.



The web (7) must remain accessible.
The exterior surface of the boot lid must not be damaged. ◀

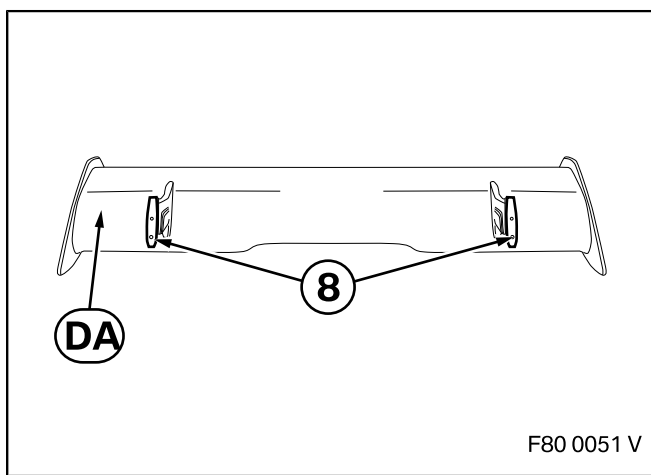
Holes (3) and (4) can be seen on the inside of the boot lid. For hole (3) the internal sheet on the inside of the boot lid must be removed using suitable tools as shown.

15. Install the ventilated carbon rear spoiler for F30/F80



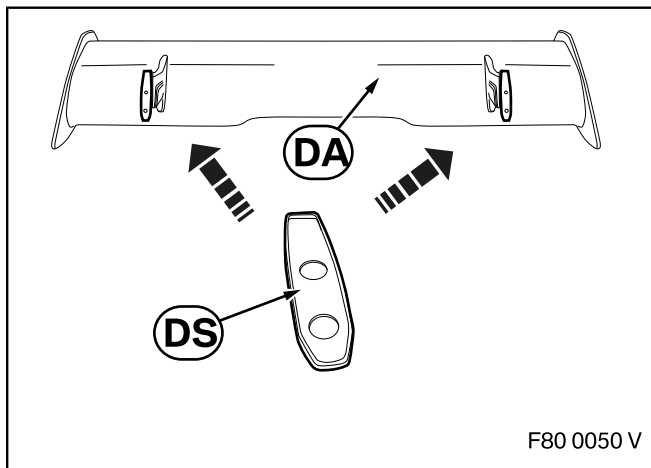
▶ Drill the holes at high speed and with a sharp drill bit. Extract the chips during drilling using a suitable extractor (6). ◀

Drill the holes (3) and (4) with an **11 mm** bit. Then remove the adhesive tape (5).

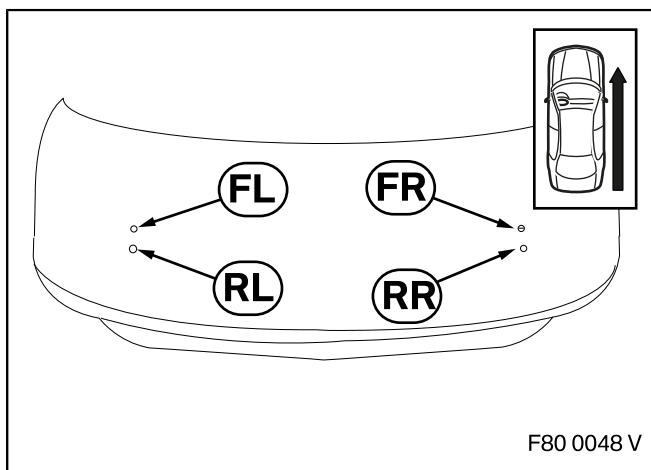


▶ The areas being bonded must be completely dry, clean and free from wax or grease. ◀

Remove the backing film and adhesive tape (8) from the ventilated carbon rear spoiler **DA**.



Place the rear spoiler support **DS** on the feet of the ventilated carbon rear spoiler **DA**.



The following abbreviations apply to the designation of the locating bushings **DE**:

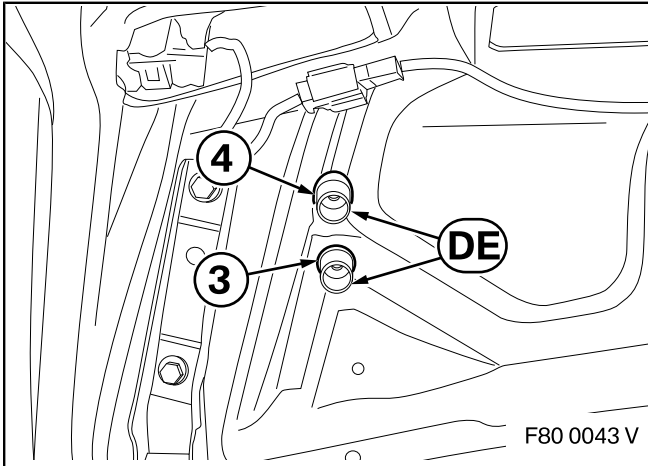
FL = Front Left

FR = Front Right

RL = Rear Left

RR = Rear Right

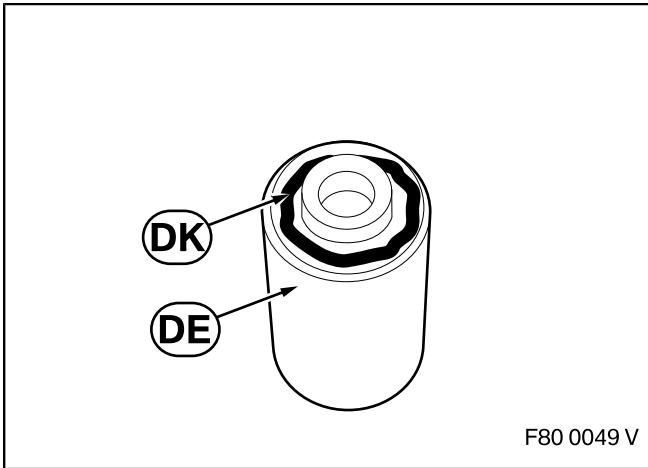
15. Install the ventilated carbon rear spoiler for F30/F80



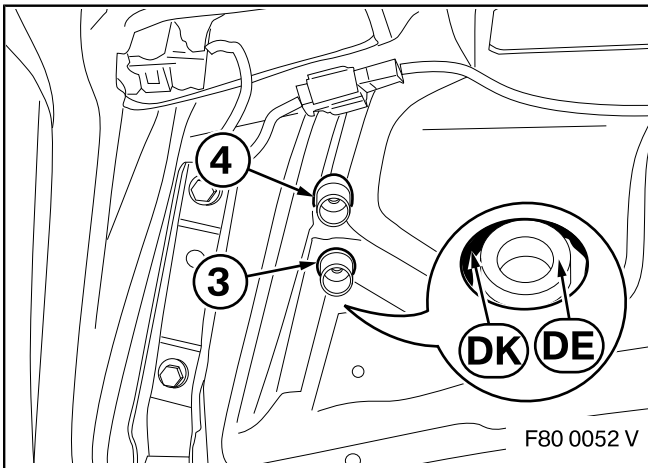
☐ If the holes (3) or (4) require refinishing, only drill the internal shell of the boot lid. ◀

Insert the locating bushings **DE** into the holes (3) and (4) from the inside. If necessary enlarge the holes (3) and (4) on the internal shell of the boot lid until the locating bushings **DE** are secure.

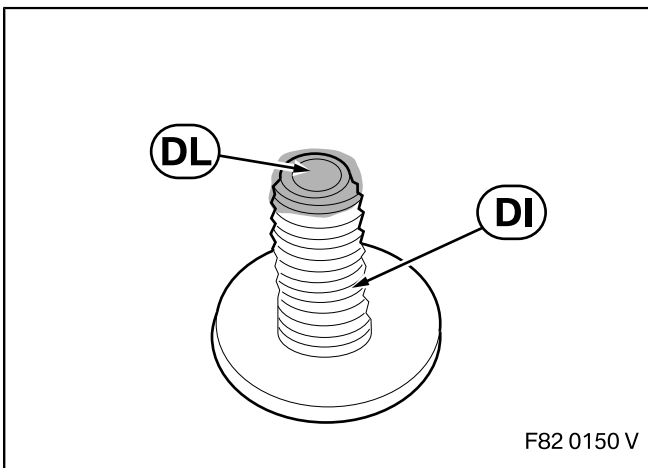
Then remove the locating bushings **DE** again.



Apply the liquid adhesive **DK** into the recess in the locating bushings **DE** as shown.

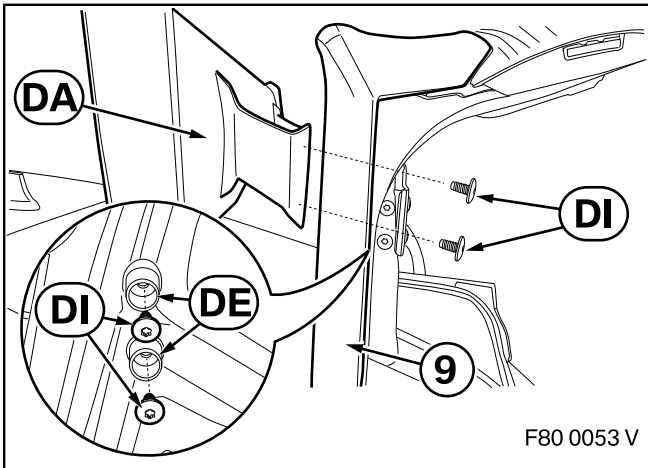


Insert the locating bushings **DE** into the holes (3) and (4) from the inside following the markings embossed on them. Smooth the liquid adhesive **DK** on the outside of the boot lid to a bead using suitable tools. Remove any excess liquid adhesive **DK** immediately.



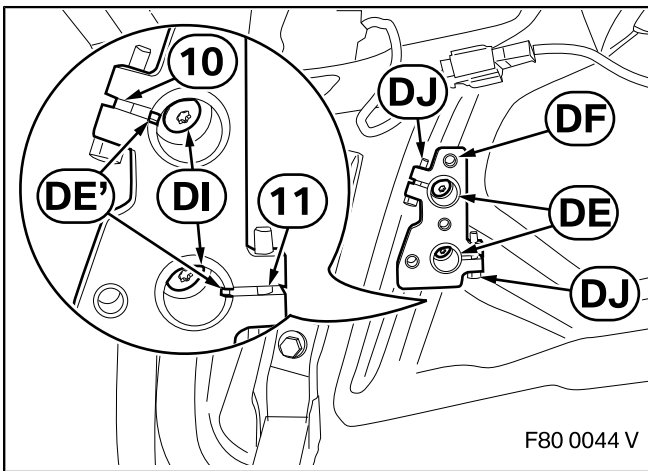
Wet the tips of the four Torx screws **DI** with liquid screw lock **DL**.

15. Install the ventilated carbon rear spoiler for F30/F80



Remove any excess liquid adhesive **DK** immediately. ◀

Place the ventilated carbon rear spoiler **DA** on the boot lid (9) and secure it loosely with the Torx screws **DI** so that the locating bushings **DE** can still be turned.



Align the wide groove **DE'** to the screw securing gap (10) and (11) on the rear wing adapter **DF**. ◀

Place rear wing adapter **DF** on the two locating bushings **DE** and check that it moves easily, in other words the rear wing adapter **DF** must not jam on the two locating bushings **DE**. Repeat the previous step if necessary.

Align the wide groove **DE'** to the screw securing gap (10) and (11) on the rear wing adapter **DF**.

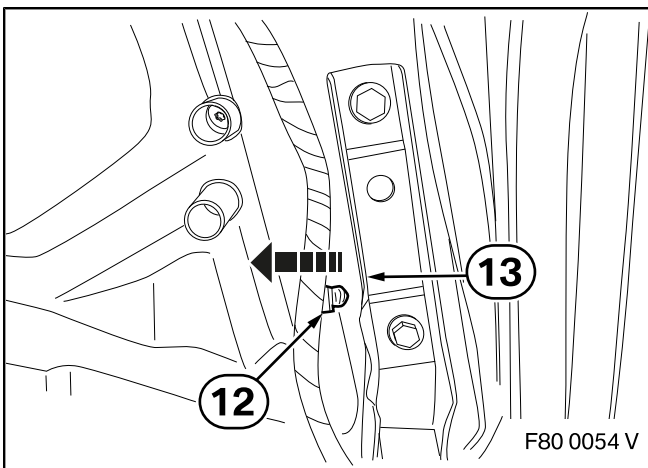
Secure the Allen screws **DJ** into rear wing adapter **DF** using a torque of **6 Nm**.

Then secure the Torx screws **DI** into rear wing adapter **DF** using a torque of **6 Nm**.

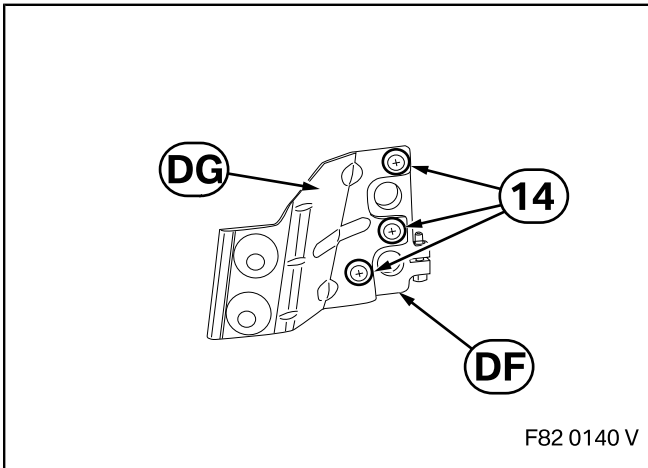
Then undo the Allen screws **DJ** slightly so that the rear wing adapter **DF** can be removed.

For the right-hand side of the car (the figure shows the hinges on cars built after 02/2015)

Remove the bung (12) in the wiring harness using suitable tools from the boot lid hinge (13).



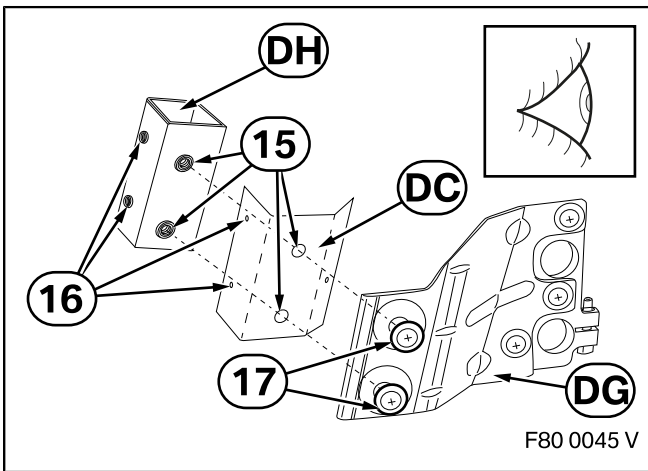
15. Install the ventilated carbon rear spoiler for F30/F80



For both sides of the car

▶ The procedures for the left and right sides of the car are identical. The components differ slightly in geometry. You should therefore check the final number of the components when installing them. Even end numbers are the components for the right. Odd end numbers other components for the left. ◀

Place the boot lid reinforcement plate **DG** on the rear wing adapter **DF** and secure it with three standard M6 screws (14) so that there is minimal clearance between the two components.

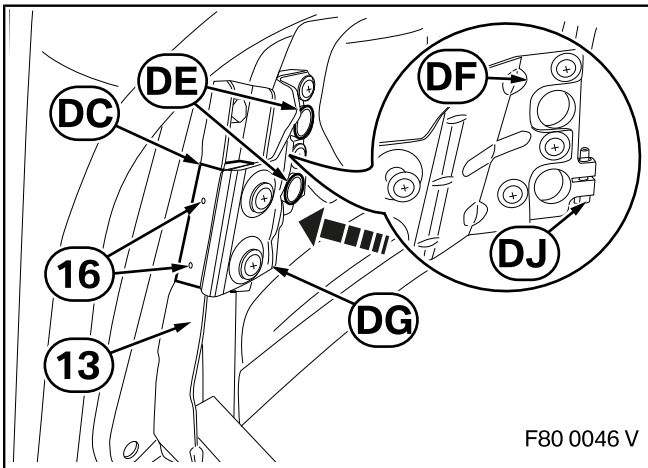


Cars built after 02/2015 only

▶ Use standard M6 screws for this process. ◀

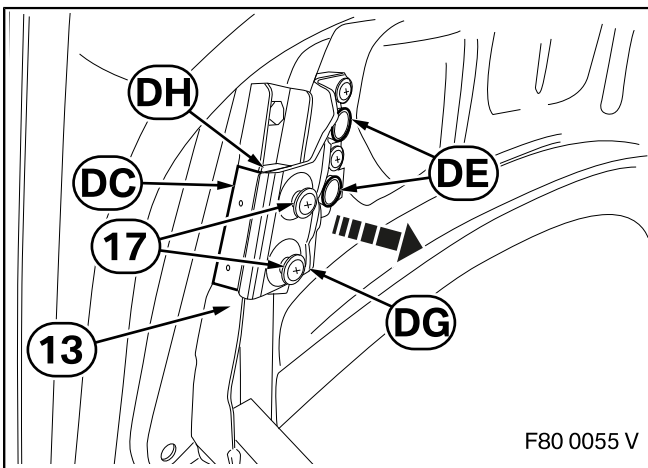
Fold the template for the boot lid hinge **DC** at the perforation and then place it on the boot lid hinge adapter **DH** so that the holes (15) and (16) line up perfectly.

Place them together under the boot lid reinforcement plate **DG** so that the two holes (16) point outwards. Secure the boot lid reinforcement plate **DG** in the holes (15) using standard M6 screws (17).



▶ Tighten the Allen screws **DJ** in the rear wing adapter **DF** loosely so that the complete component can be moved using the locating bushings **DE**. ◀

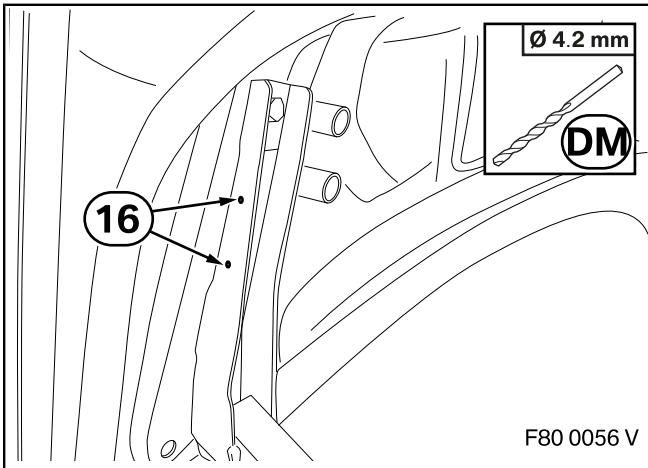
Slide the rear wing adapter **DF** onto the locating bushings **DE** ensuring that the template for the boot lid hinge **DC** is on the outside of the boot lid hinge (13). Transfer the marks (16) to the boot lid hinge (13) using a suitable tool.



Remove the rear wing adapter **DF** from the locating bushings **DE**.

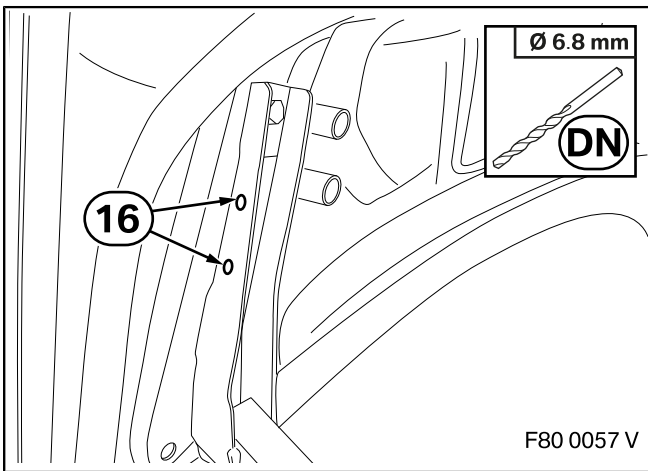
Undo the M6 screws (17) and remove the boot lid hinge adapter **DH** from the boot lid reinforcement plate **DG**.

15. Install the ventilated carbon rear spoiler for F30/F80



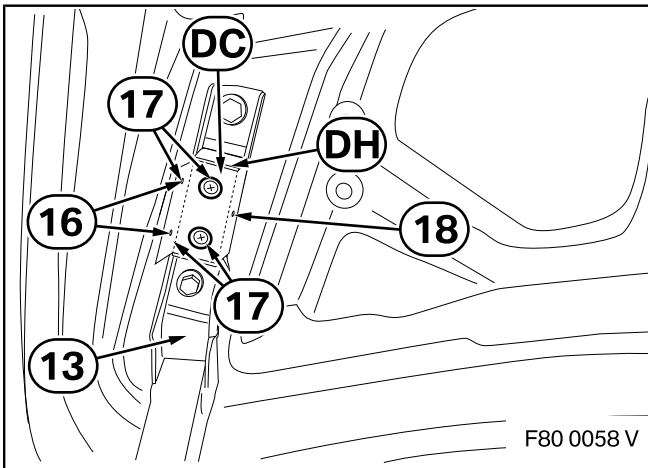
Use drill bit **DM**, part number **83 19 2 166 461**. ◀

Predrill the holes (16) with a **4.2 mm** bit.



Use drill bit **DN**, part number **83 19 2 166 462**. ◀

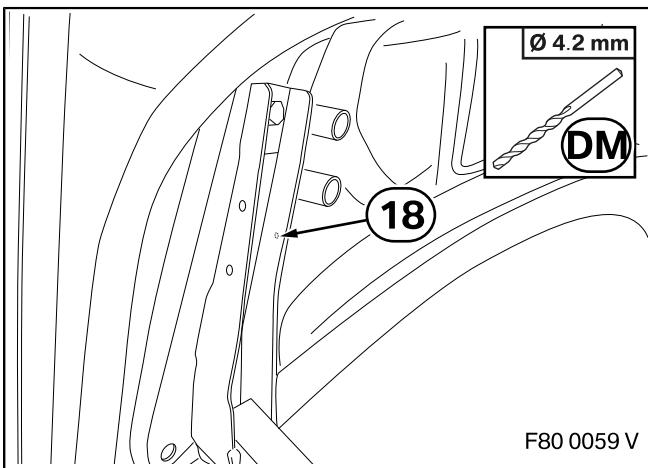
Enlarge the holes (16) to a diameter of **6.8 mm**, then deburr them and treat them with corrosion protection.



Secure the template for the boot lid hinge **DC** on the boot lid hinge adapter **DH** using standard M6 screws (17). Bend the side of the template with the two holes upwards and secure the M6 screws (17) below the template in the hole (16).

Transfer the mark (18) to the boot lid hinge (13) using a suitable tool.

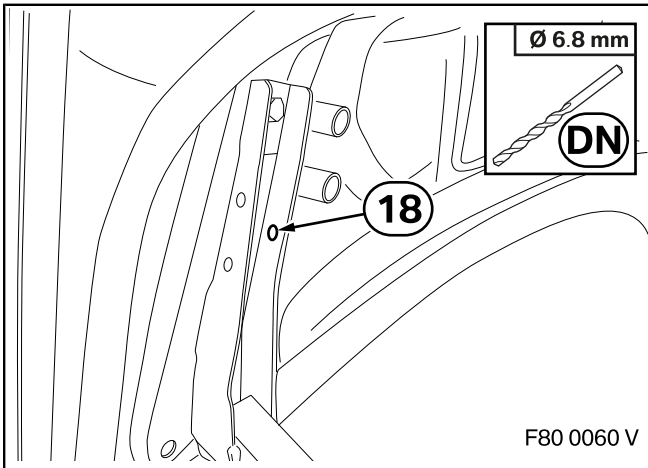
Then undo the M6 screws (17) and remove the template for the boot lid hinge **DC**.



Use drill bit **DM**, part number **83 19 2 166 461**. ◀

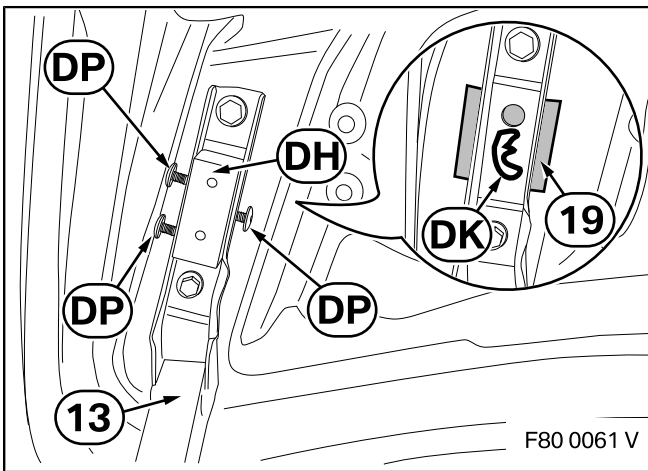
Predrill the holes (18) with a **4.2 mm** bit.

15. Install the ventilated carbon rear spoiler for F30/F80



Use drill bit **DN**, part number **83 19 2 166 462**. ◀

Enlarge the holes (18) to a diameter of **6.8 mm**, then deburr them and treat them with corrosion protection.



Wet the tips of the oval-headed screws **DF'** with liquid screw lock **DL**.

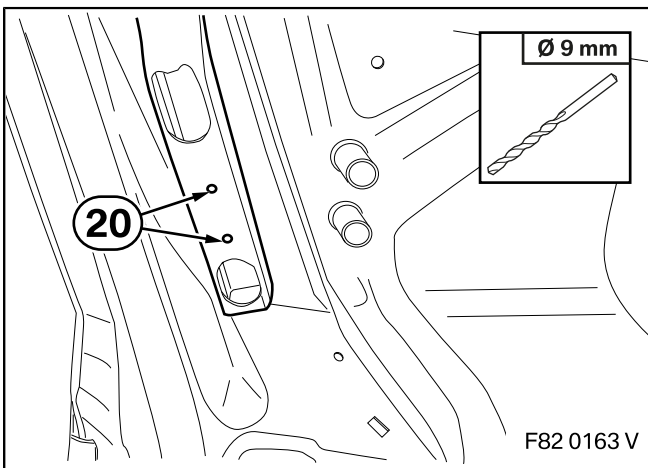
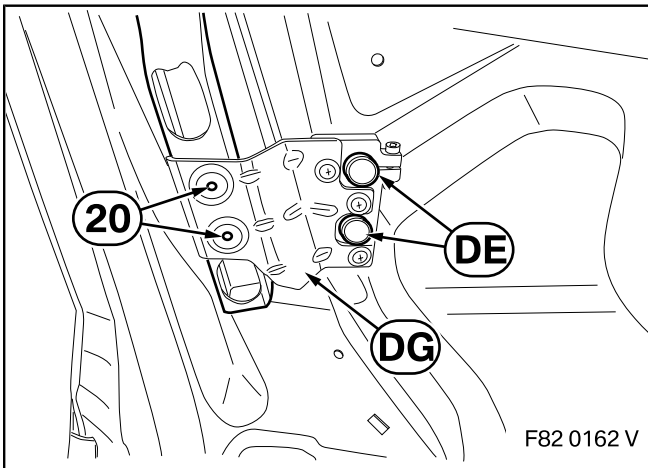
Remove any excess liquid adhesive **DK** immediately. ◀

Slide a suitable piece of paper (19) between the boot lid and the boot lid hinge (13) for protection. Apply liquid adhesive **DK** to the inside of the boot lid hinge (13) in the position shown.

Secure the boot lid hinge adapter **DH** to the boot lid hinge (13) using the oval-headed screws **DP** and a torque of **6 Nm**.

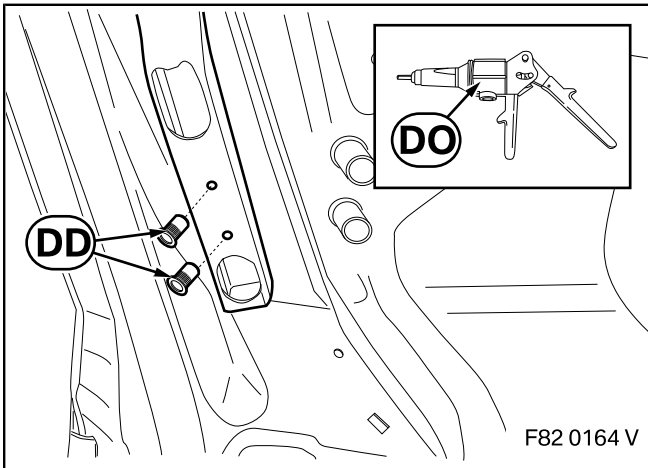
Cars built before 02/2015 only

Place the boot lid reinforcement plate **DG** onto the locating bushings **DE**. Transfer the marks (20) using a suitable tool. Remove the boot lid reinforcement plate **DG**.

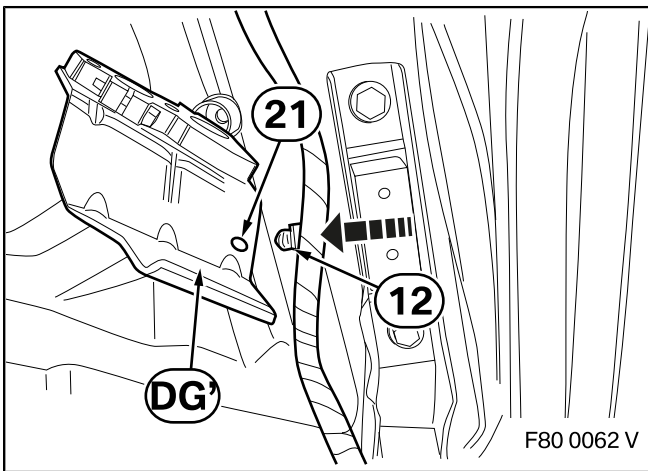


Drill two holes (20) with a diameter of **9 mm**. Then deburr the holes (20) and treat them with corrosion protection.

15. Install the ventilated carbon rear spoiler for F30/F80



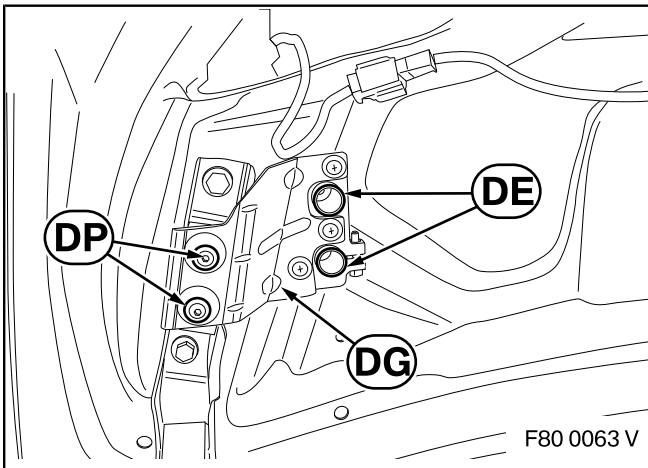
Pressing rivet nuts **DD** using a suitable tool. Rivet the rivet nuts **DD** using hand riveter **DO** following the instruction manual.



For all cars - right-hand side of the car

(The figures show hinges on cars built after 02/2015)

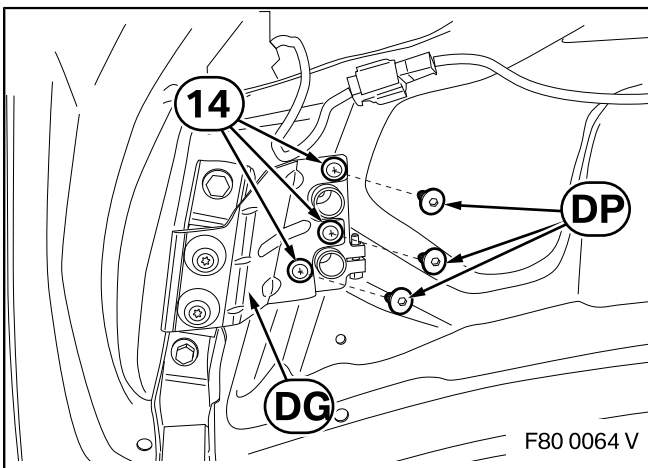
Place the bung (12) for the wiring harness into the hole (21) in the boot lid reinforcement plate **DG'** from the inside.



For all cars - both sides of the car

Wet the tips of the oval-headed screws **DP'** with liquid screw lock **DL**. ◀

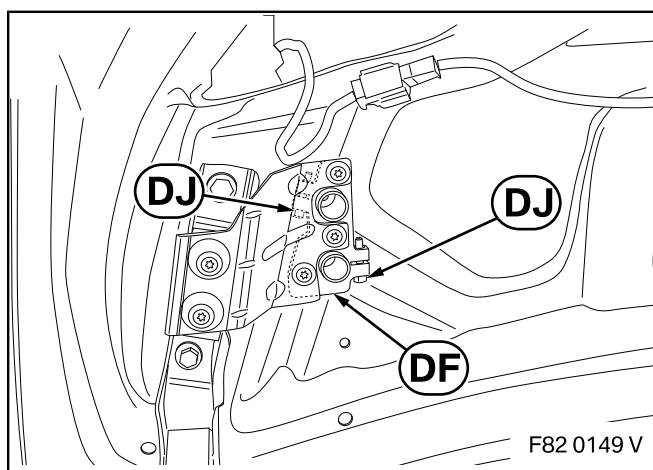
Place the boot lid reinforcement plate **DG** onto the locating bushings **DE** and secure it with two oval-headed screws **DP** using a torque of **6 Nm**.



Wet the tips of the oval-headed screws **DP** with liquid screw lock **DL**. ◀

Replace the three M6 screws (14) with the oval-headed screws **DP** one at a time and tighten them with a torque of **6 Nm**.

15. Install the ventilated carbon rear spoiler for F30/F80



▶ Wet the tips of the Allen screws **DJ** with liquid screw lock **DL**. ◀

Tighten the two Allen screws **DJ** in the rear wing adapter **DF** with a torque of **6 Nm**.

16. Concluding work and coding

The retrofit system is relevant to programming/coding only if the carbon rear diffuser retrofit set is installed.

- Connect the battery
- Connect the battery charger to the car
- Connect the car to the ISTA workshop system
- Call up the ISTA/P car programming facility
- If using ISTA/P, please note 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 in a logical manner
- Give the customer the customer information