Original BMW Parts and Accessories.
Installation Instructions.

M Performance Carbon Exterior Components Retrofit Kit.
BMW M3 (G80)
BMW M4 (G82)

Retrofit kit number

Number	Component designation	Type	Installation time (h)	Installation as described in ISTA/AIR*
51 11 5 A08 FE9	Carbon flicks, right	G80, G82	0.25	-
51 11 5 A08 FF9	Carbon flicks, left	G80, G82	0.25	-
51 19 5 A1B 169	Rear carbon winglet, left	G80	0.15	-
51 19 5 A1B 170	Rear carbon winglet, right	G80	0.15	-
51 19 5 A1B 175	Rear carbon winglet, left	G82	0.15	-
51 19 5 A1B 176	Rear carbon winglet, right	G82	0.15	-
51 19 2 475 168	Carbon front attachment	G80, G82	1.00	-
51 19 2 475 051	Carbon throughflow rear spoiler	G80, G82	4.00	-
51 19 2 473 040	Right carbon skirt insert	G80	-	x
51 19 2 473 041	Left carbon skirt insert	G80	-	x
51 19 2 473 414	Right carbon skirt insert	G82	-	x
51 19 2 473 415	Left carbon skirt insert	G82	-	x
51 13 2 469 620	Front right side panel carbon gill	G80	-	x
51 13 2 469 621	Front left side panel carbon gill	G80	-	x
51 13 2 469 622	Front right side panel carbon gill	G82	-	x
51 13 2 469 623	Front left side panel carbon gill	G82	-	x
51 47 2 472 520	Sill trim, left/right	G80	-	x
51 47 2 472 521	Sill trim, left/right	G82	-	x
51 19 5 A19 8B5	Carbon rear diffuser (For further details, see **Installation instructions 01 29 5 A0D B45**)	G80, G82	-	-

* This installation work is carried out as described in the relevant ISTA/AIR repair instructions and is not shown in these installation instructions.

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

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

The calculation of the total costs for the programming time must be factored into the calculation of retrofitting costs (must not be invoiced under the warranty).

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

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

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

The front attachment must only be installed with the standard gurney flap or throughflow rear spoiler.

If you experience installation or functional problems, restrict troubleshooting to approx. 0.5 hours for mechanical work and 1.0 hours for electrical work.
To avoid unnecessary extra work and/or costs, send an inquiry to the technical parts support team.

Quote the following information:

– VIN,

– retrofit kit part number,

– a detailed description of the problem,

– any work already carried out.

Do not archive the printout of these installation instructions. The current version can be found in the EPC.

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, silicone and grease. These surfaces must be treated with a suitable BMW cleaner or BMW primer (see EPC for details), using 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 installing them.

– All the components and their bonding surfaces must be at room temperature for installation. The ideal relative humidity is 50%. Different values will change the specified times.

– After completing the bonding 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 may only be driven at a speed of vmax < 100 km/h for a period of 24 to 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.

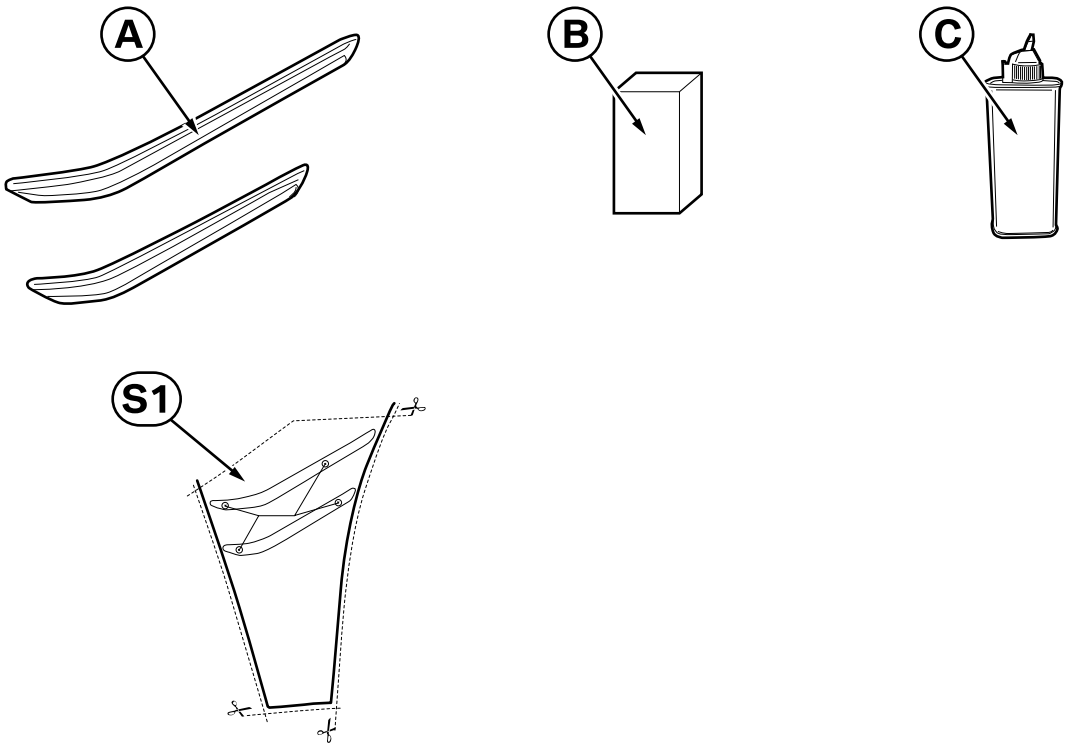
– All illustrations show LHD cars; proceed in the same way on RHD cars.

Special tools required

– Keyhole Ø 30 mm

Table of contents

1. Carbon flicks parts list

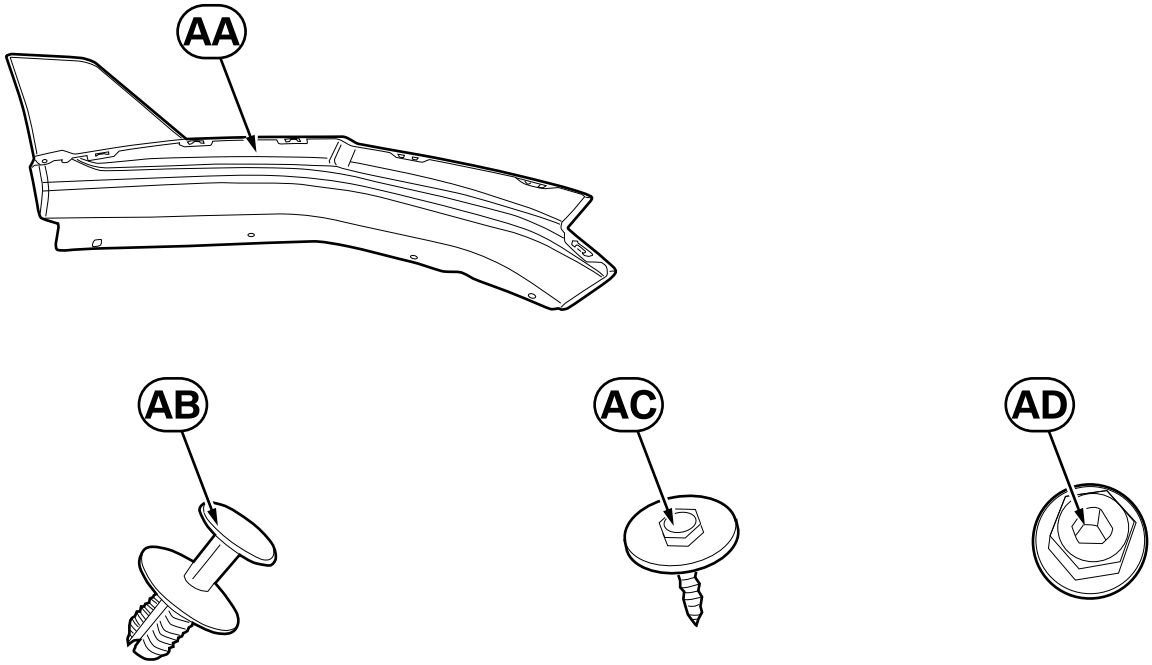


G80 0015 V

Legend

A Carbon flicks, left/right (left side shown)
B Liquid adhesive (included in parts kit No. 83 19 5 A32 6D0)
C Cleaner (included in parts kit No. 83 19 5 A32 6D0)
S1 Template, left/right (left side shown, included in parts kit)

2. Rear carbon winglet parts list

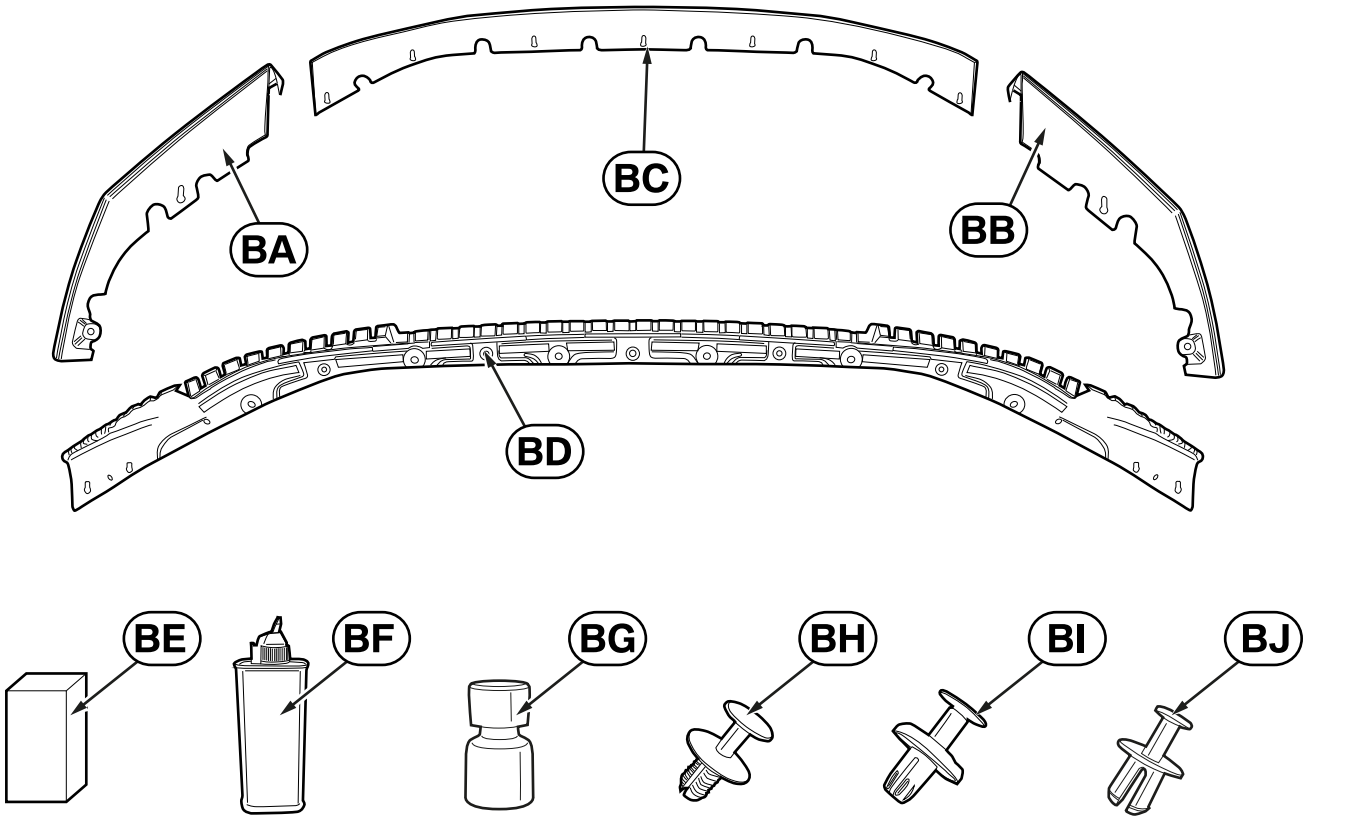


G80 0023 V

Legend

AA Rear carbon winglet, left/right (left side shown)
AB Expanding rivet (2 x, Part No. 16 13 6 753 087)
AC Hexagon screw (2 x, Part No. 07 14 9 126 886)
AD Plastic dome nut with washer (2 x, Part No. 51 16 1 943 122)

3. Carbon front attachment parts list

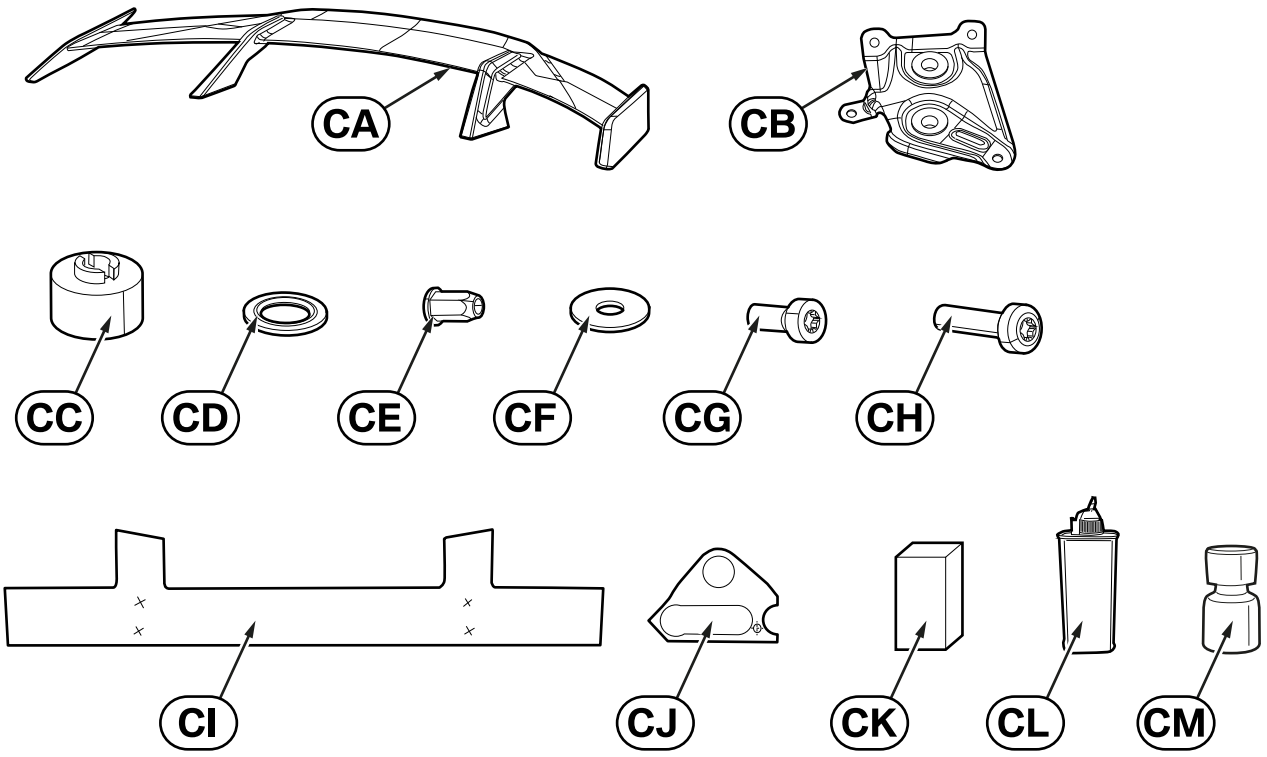


G80 0030 V

Legend

BA Right front attachment
BB Left front attachment
BC Centre front attachment
BD Underbody console
BE Liquid adhesive (included in parts kit No. 83 19 5 A32 6D0)
BF Cleaner (included in parts kit No. 83 19 5 A32 6D0)
BG Primer (included in parts kit No. 83 19 5 A32 6D0)
BH Expanding rivet (2 x, Part No. 51 47 1 911 992)
BI Expanding rivet (2 x, Part No. 07 14 7 401 727)
BJ Expanding rivet (9 x, Part No. 17 11 1 712 963)

4. Adapter kit for carbon rear wing for G80 parts list (Part No. 51 62 5 A1C CB3)

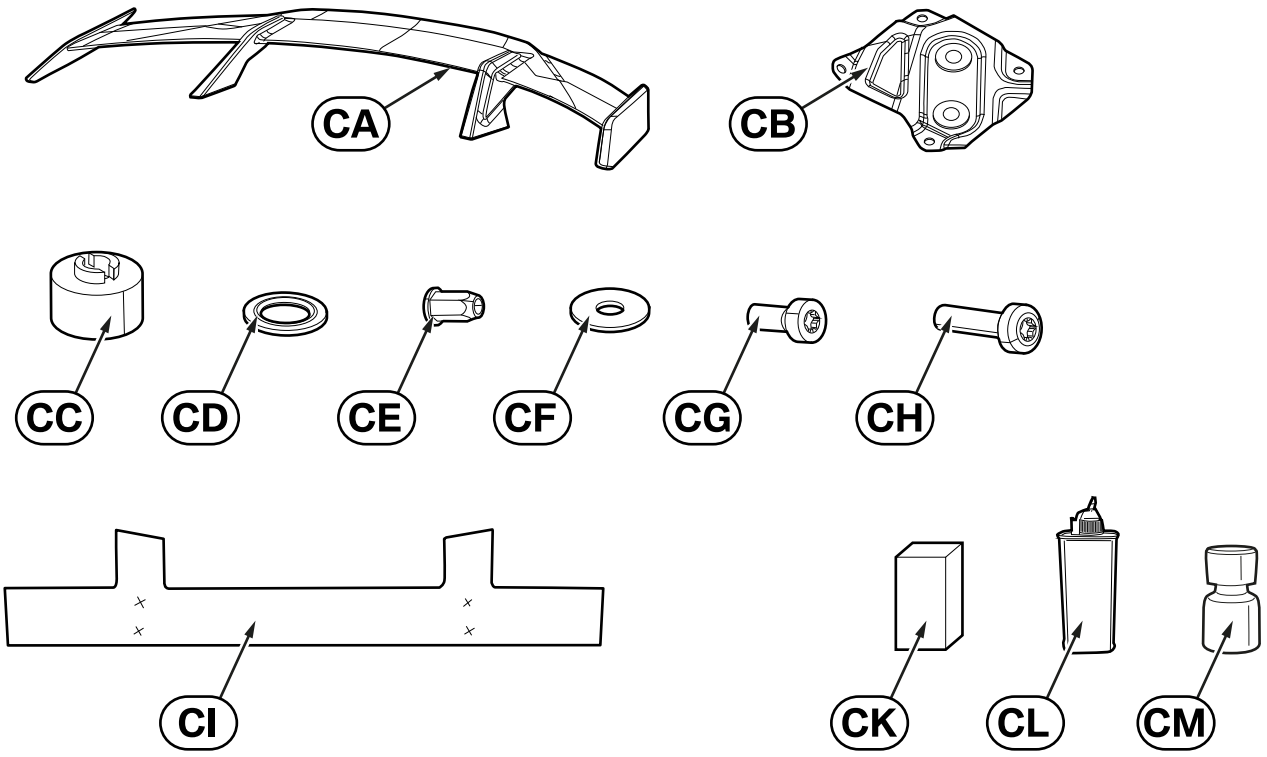


G80 0051 V

Legend

CA Carbon throughflow rear spoiler
CB Holder plate, left/right G80 (2 x, left side shown)
CC Adjustment sleeve (4 x)
CD Sealing ring (4 x, Part No. 64 53 9 284 018)
CE M5 hexagon rivet nut (8 x)
CF Washer (8 x, Part No. 07 11 9 904 214)
CG ISA screw M5x12 (8 x, Part No. 07 12 9 904 849)
CH Pan-head screw M6x25 (4 x, Part No. 07 11 9 907 160)
CI Boot lid spoiler drilling template (included in parts kit)
CJ Drilling template, left/right G80 (2 x, left side shown, included in parts kit)
CK Liquid adhesive (not included in parts kit, Part No. 82 69 9 408 866)
CL Cleaner R2 (not included in parts kit, Part No. 83 19 0 417 324)
CM Primer (not included in parts kit, Part No. 83 19 9 407 777)

5. Adapter kit for carbon rear wing for G82 parts list (Part No. 51 62 5 A1C CB4)



G82 0013 V

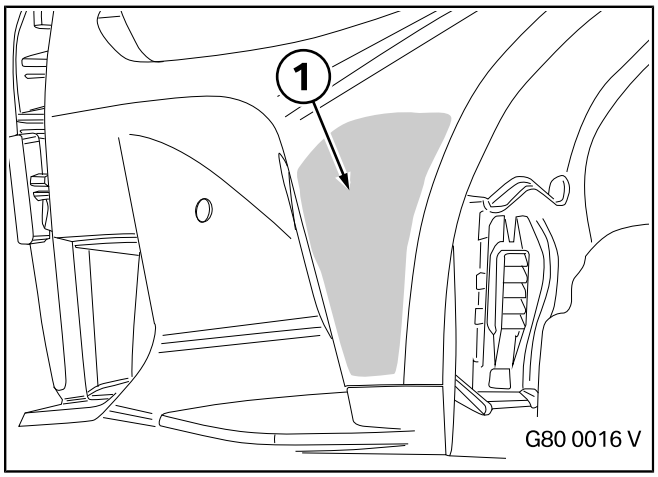
Legend

CA Carbon throughflow rear spoiler
CB Holder plate, left/right G82 (2 x, left side shown)
CC Adjustment sleeve (4 x)
CD Sealing ring (4 x, Part No. 64 53 9 284 018)
CE M5 hexagon rivet nut (8 x)
CF Washer (8 x, Part No. 07 11 9 904 214)
CG ISA screw M5x12 (8 x, Part No. 07 12 9 904 849)
CH Pan-head screw M6x25 (4 x, Part No. 07 11 9 907 160)
CI Boot lid spoiler drilling template (included in parts kit)
CK Liquid adhesive (not included in parts kit, Part No. 82 69 9 408 866)
CL Cleaner R2 (not included in parts kit, Part No. 83 19 0 417 324)
CM Primer (not included in parts kit, Part No. 83 19 9 407 777)

6. Preparatory work

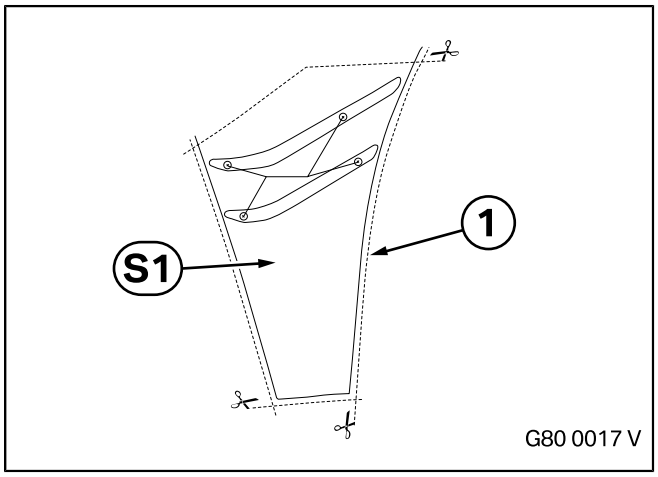
	ISTA/AIR No.
The following components must be removed first of all	
None	---

7. Carbon flicks installation

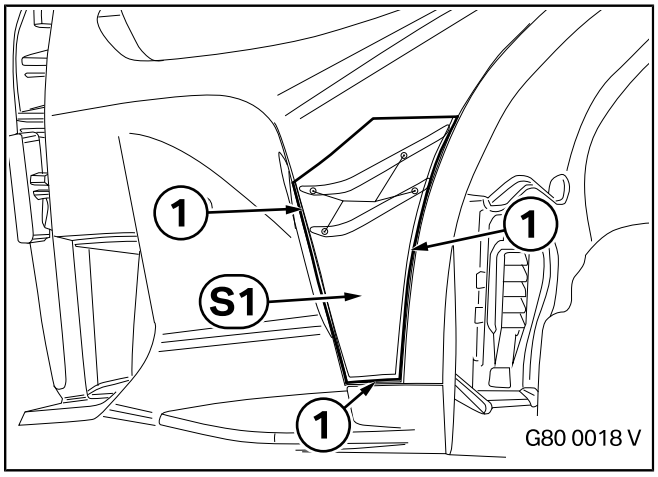


The bonding surface must be completely dry, clean, and free from wax or grease. ◀

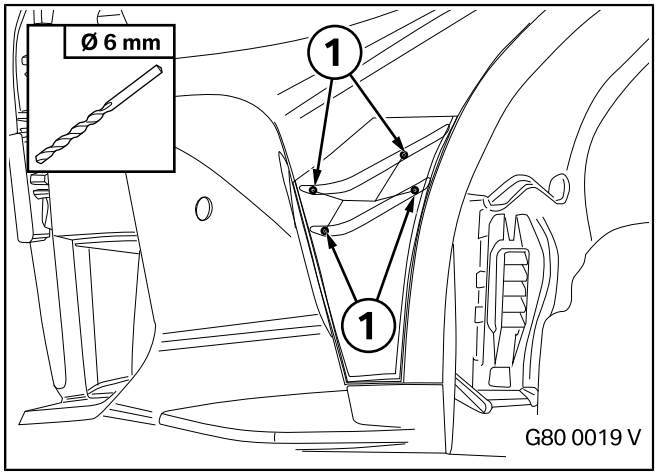
Clean the bonding surface (1) with cleaner **C**.



Cut out the template **S1** at the contour (1).



Affix the template **S1** along the radii (1) the front apron.

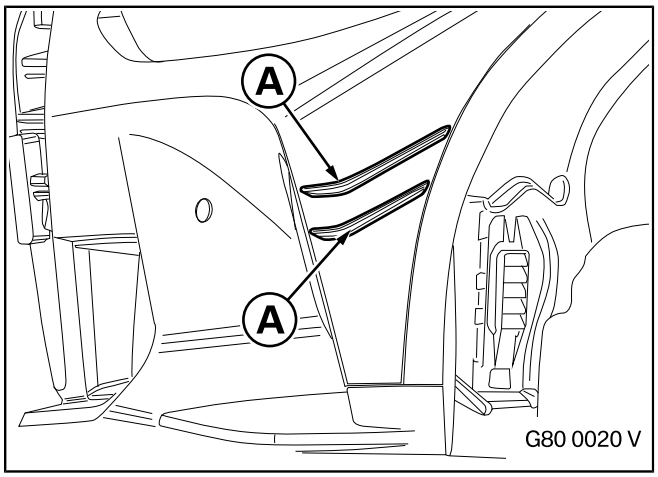


Be careful not to damage the components underneath when drilling holes. ◀

Centrepunch the four marks (1) and then drill them with a **6 mm** bit.

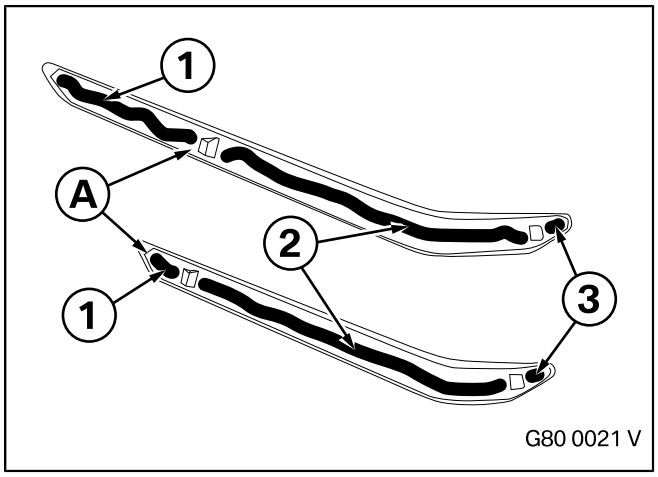
Remove the template **S1** and deburr the holes.

7. Carbon flicks installation



Position the flicks **A** and check their contours. Rework the holes if necessary.

Remove the flicks **A** again.

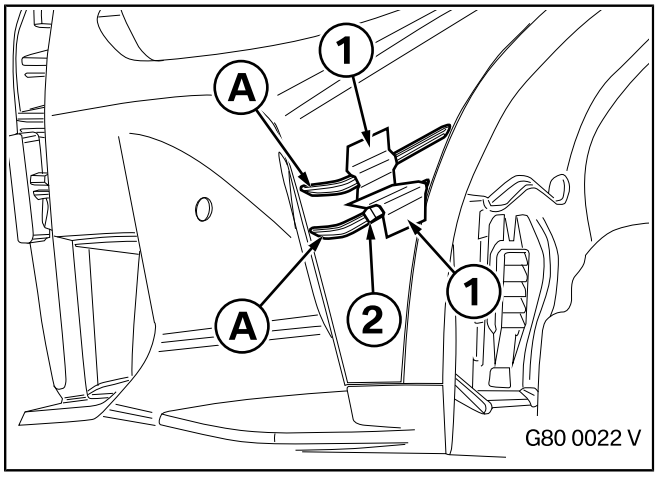


The bonding surfaces must be completely dry, clean, and free from wax or grease. ◀

Abrade the reverse of the flicks **A** using suitable equipment and then clean them with cleaner **C**.

Also please the bonding surface on the surface of the car with cleaner **C**.

Apply a bead of liquid adhesive **B** to the reverse of the flicks **A** on surfaces (1), (2) and (3).

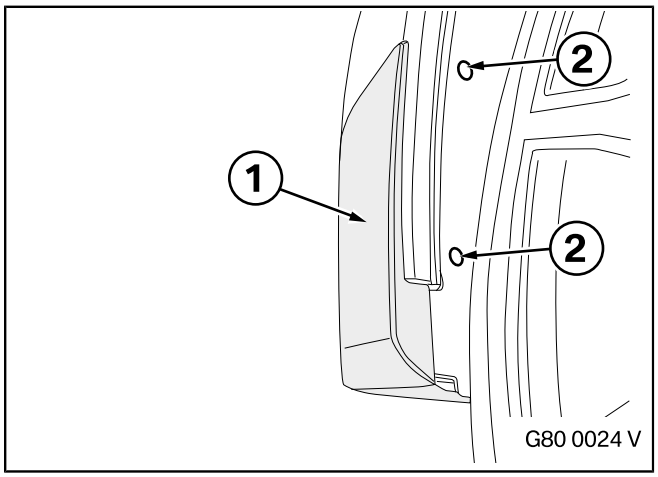


Remove any excess liquid adhesive immediately using suitable equipment. ◀

Position the flicks **A** and press them firmly into place.

Apply pressure to the flicks **A** with adhesive tape (1), if necessary place suitable pieces of foam (2) underneath them and follow the instructions for use on page 2.

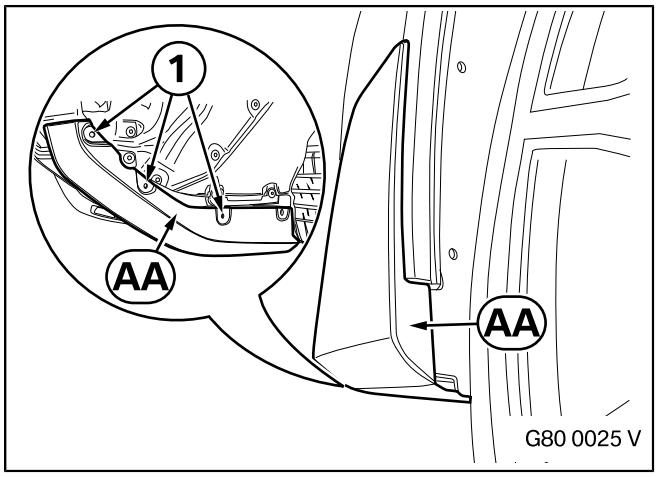
8. Rear carbon winglet installation



The current trim, Part No. **51 12 8 076 450**, must be removed as described in **ISTA/AIR**. Keep the expanding rivets; they will be reused later.

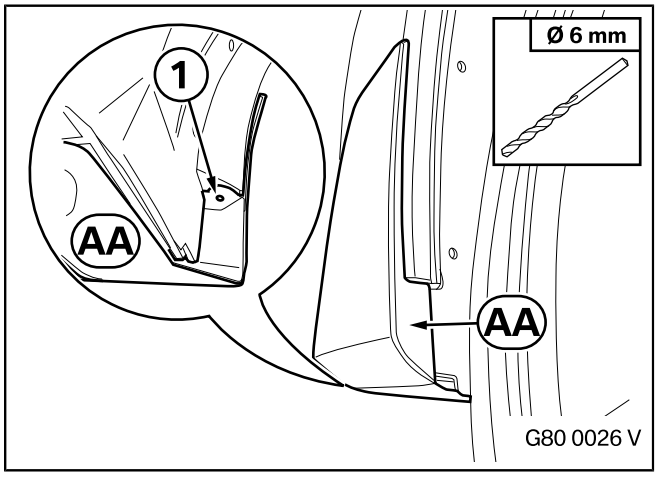
Clean the surface (1) with suitable products. ◀

Remove the bottom two screws (2) in the wheel arch trim and keep them; they will be reused later.



Insert the expanding rivets loosely. Do not press them in fully. ◀

Position the real winglet **AA** on the rear trim from behind, ensure that it engages correctly and secure it on the underside with the three expanding rivets (1) you removed earlier.

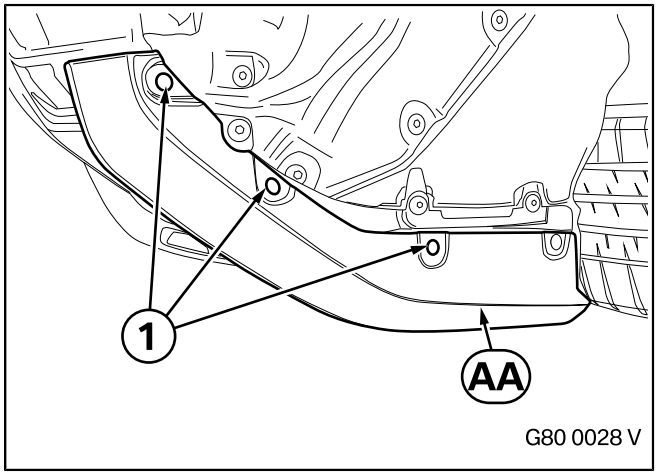


Ensure that there is a uniform gap between the rear winglet **AA** and the bodywork. ◀

Mark the hole (1) from the rear winglet **AA** on the surface using suitable tools.

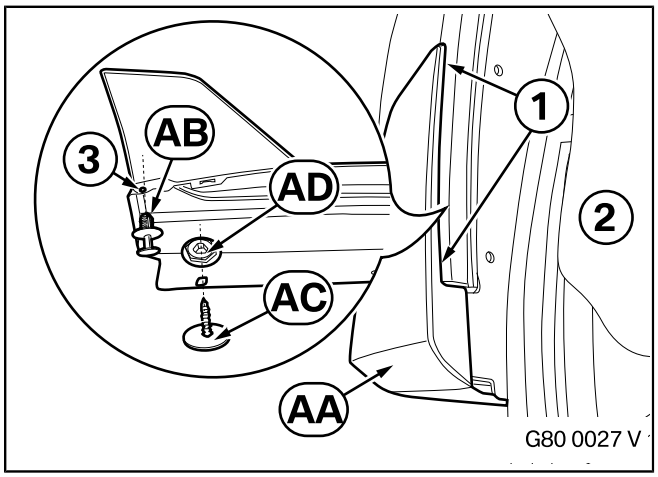
Push the rear winglet **AA** outwards, removing the nearest expanding rivet if necessary.

Drill a hole (1) with a **6 mm diameter** in the wheel arch.



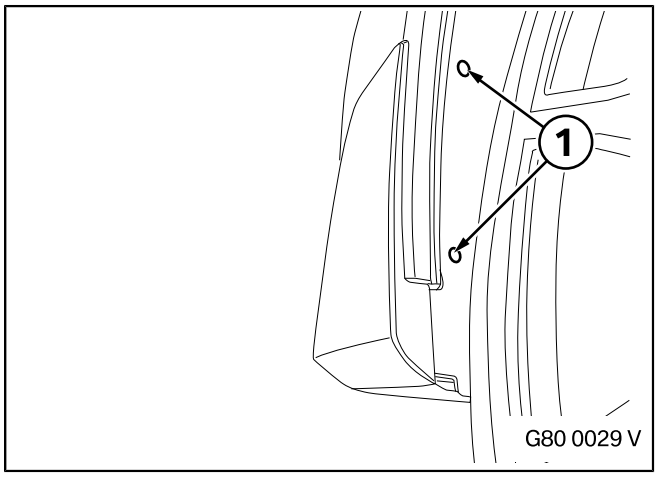
Now press the three existing expanding rivets (1) fully into the rear winglet **AA**.

8. Rear carbon winglet installation



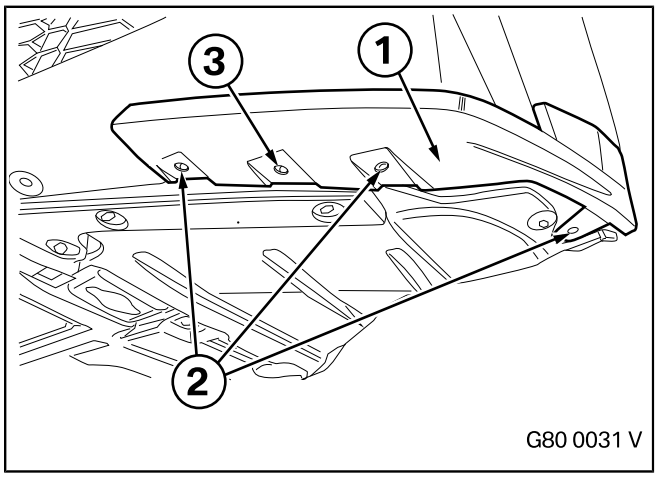
As you tighten the hexagon screw **AC** and the plastic cap nut with washer **AD**, ensure that there is a uniform gap (1) between the winglet and the car. ◀

Bend the wheel arch trim (2) until the plastic cap nut with washer **AD** can be inserted and the hexagon screw **AC** can be tightened from the outside. Press the expanding rivet **AB** from underneath through the hole (3) you drilled earlier and secure it. (For greater clarity, the magnified section shows the rear winglet **AA** without the other car parts.)

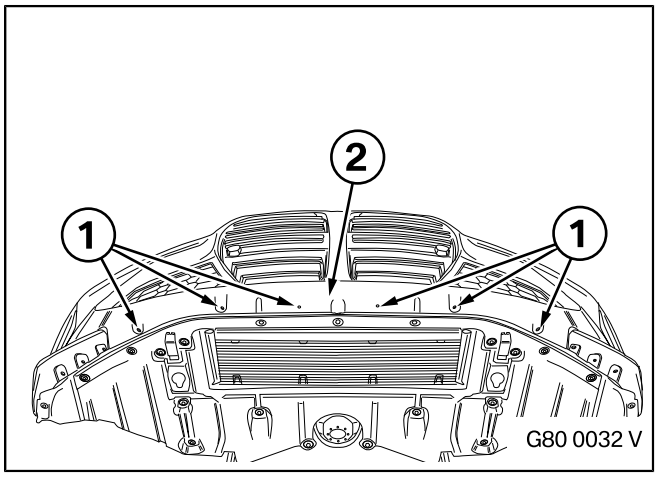


Tighten the existing screws (1) in the wheel arch trim.

9. Carbon front attachment installation



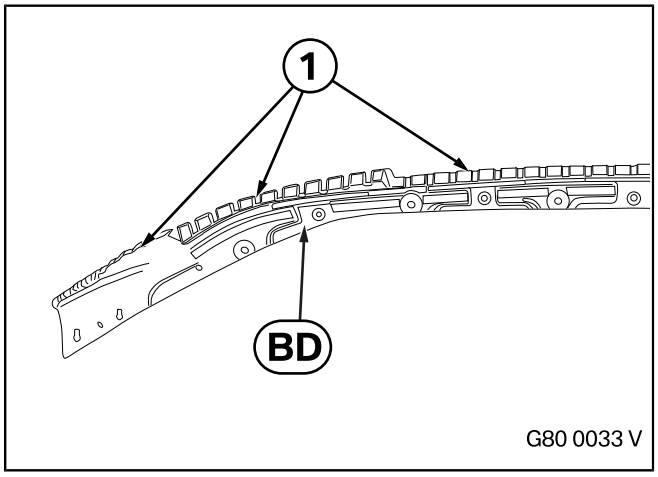
Remove the two side trims (1) as described in **ISTA/AIR**. Keep the expanding rivet (2) and screw (3); they will be reused later.



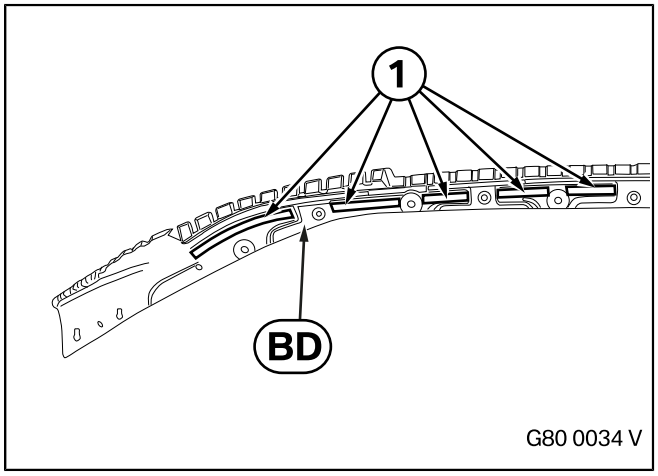
The bonding surfaces must be completely dry, clean, and free from wax or grease. ◀

Remove the screws (1).

Clean the surface (2) with cleaner **BF**.



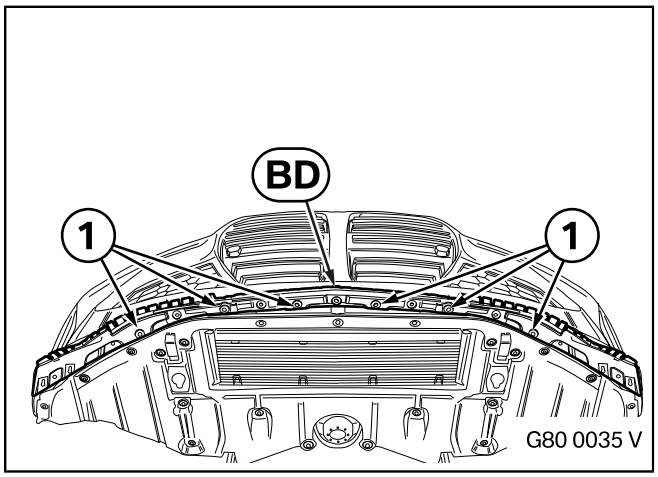
Abrade the surfaces (1) on the top of the underbody console **BD** using suitable tools and clean them with cleaner **BF**.



We recommend that you work quickly as the primer **BG** dries quickly. ◀

Apply the primer **BG** to the backing foils on the adhesive tape (1) on the underbody console **BD**.

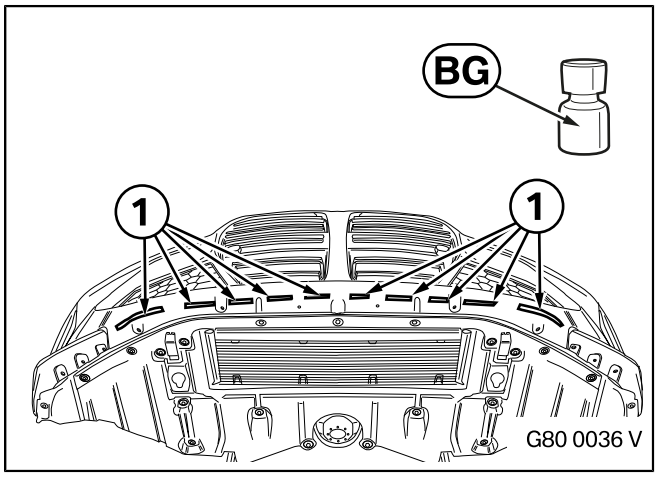
9. Carbon front attachment installation



We recommend that you work quickly as the primer **BG** dries quickly. This step is designed to mark the bonding surfaces which must which must be pretreated with primer **BG**. ◀

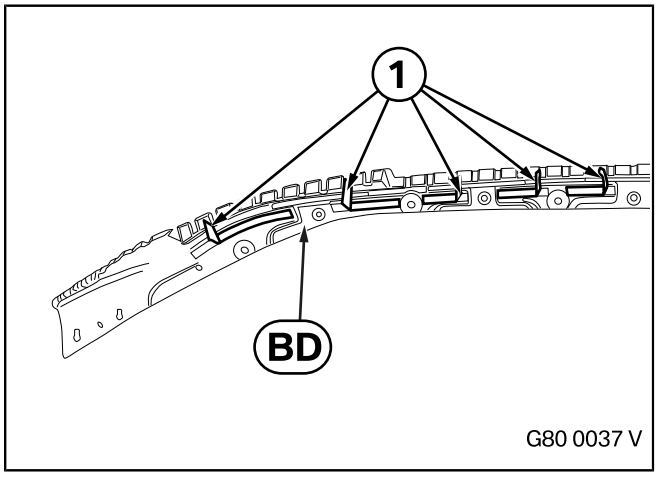
Position the underbody console **BD** on the front apron using the drilled holes (1) and press the coloured adhesive tapes firmly into place to create an impression.

Remove the underbody console **BD** from the front apron.



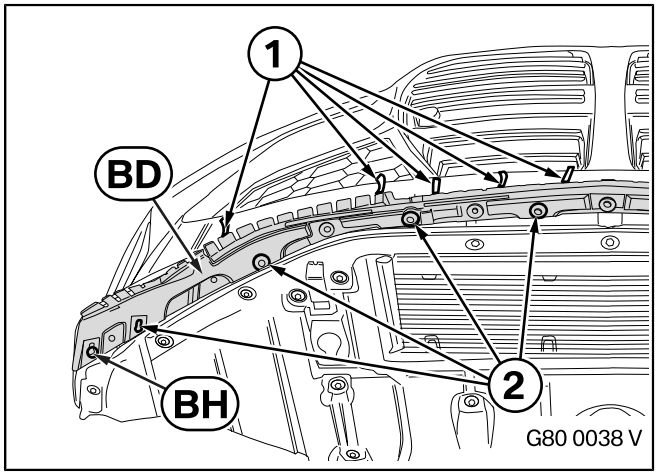
Apply the primer **BG** accurately as otherwise it will cause black discolouration on the front apron. Wait for the full drying time to elapse. ◀

Copy the impressions (1) with primer **BG** as shown on the front apron.



Remove the primer **BG** from the surfaces of the adhesive tapes using cleaner **BF**. ◀

Remove the ends of the backing foils (1) on the adhesive tape before positioning the underbody console **BD** and bend them outwards.



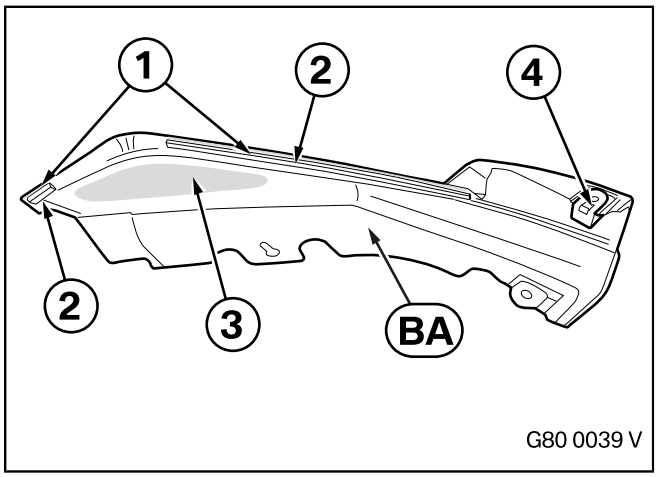
Ensure that the protective foils (1) are visible. ◀

Position the underbody console **BD** on the front apron, pressing it gently from inside to outside. Remove backing foils before you tighten the screws. Tighten the existing screws (2).

Press in the outside expanding rivet **BH** on the underbody console **BD**.

Repeatedly press the underbody console **BD** firmly into place to bond it to the front apron.

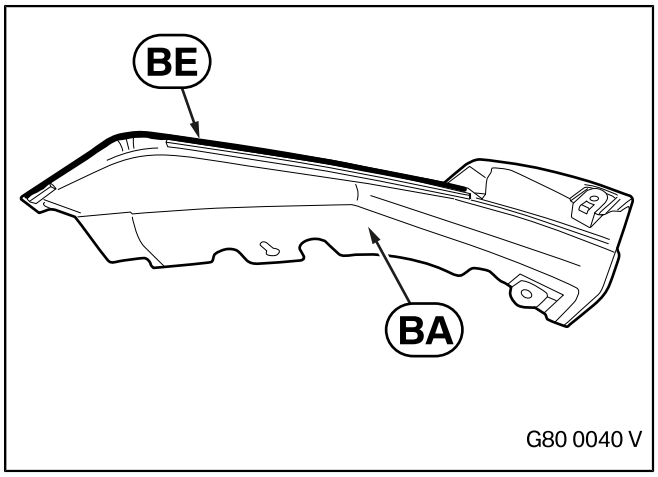
9. Carbon front attachment installation



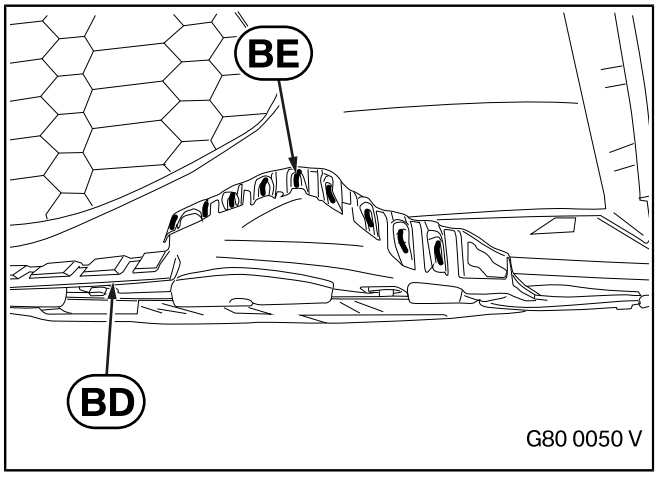
Abrade the narrow surface (1) above the adhesive tapes (2) on the inside of the right front attachment **BA** using suitable tools.

Also abrade the large surface (3) using suitable tools.

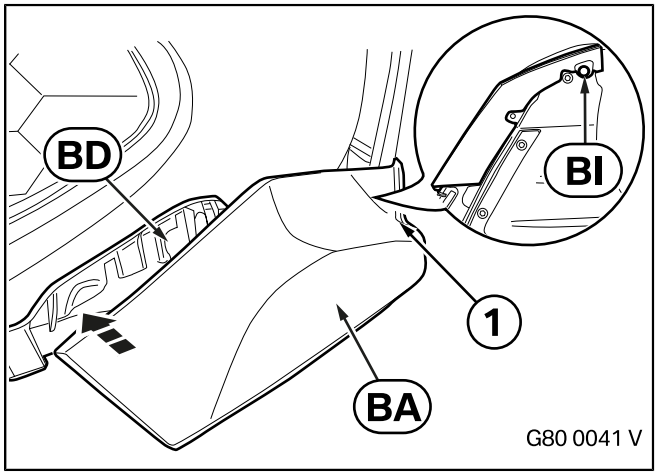
Use the C clip (4) from the removed corner and clip it into position.



Apply a bead of the liquid adhesive **BE**, see black line in the figure at the top edge.

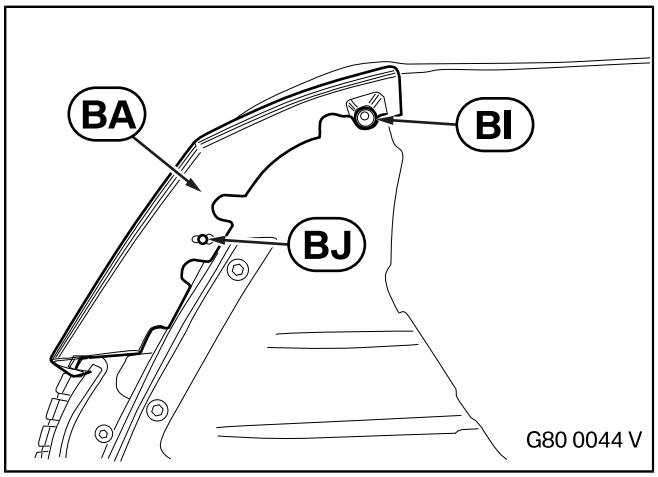


Apply the liquid adhesive **BE** to the surface of the underbody console **BD**.



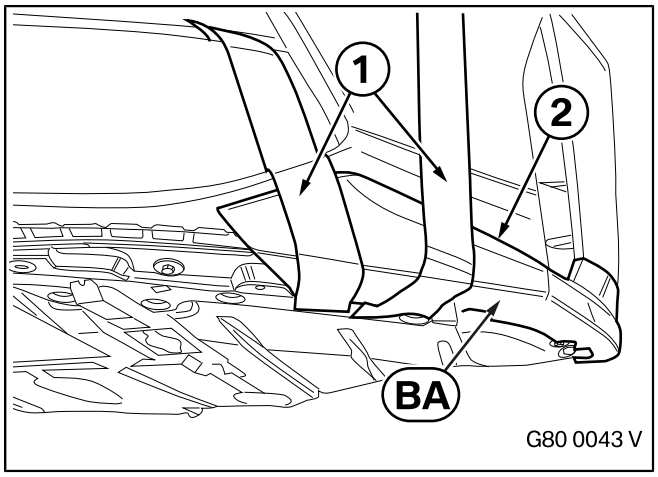
Position the right front attachment **BA** on the outside around the wheel arch (1) on the front apron and insert the expanding rivet **BI** at the rear without initially creating any adhesive contact. Now turn the right front attachment **BA** to the front on the apron and glue it to the underbody console **BD** and front apron.

9. Carbon front attachment installation



Press the expanding rivet **BI** into the right front attachment **BA**.

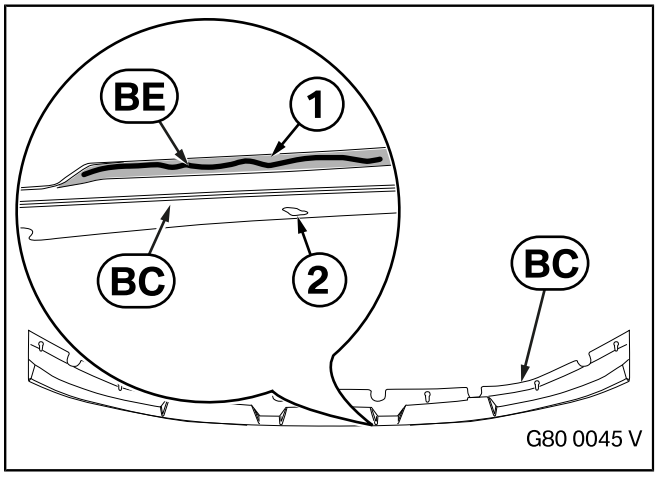
Press the expanding rivet **BJ** into the position shown so that it will act as a positioning guide for the side part.



Remove any excess liquid adhesive immediately using suitable equipment. ◀

Secure the right front attachment **BA** using suitable adhesive tape (1) and pads, ensuring that the gap (2) between the front apron and right front attachment **BA** is uniform.

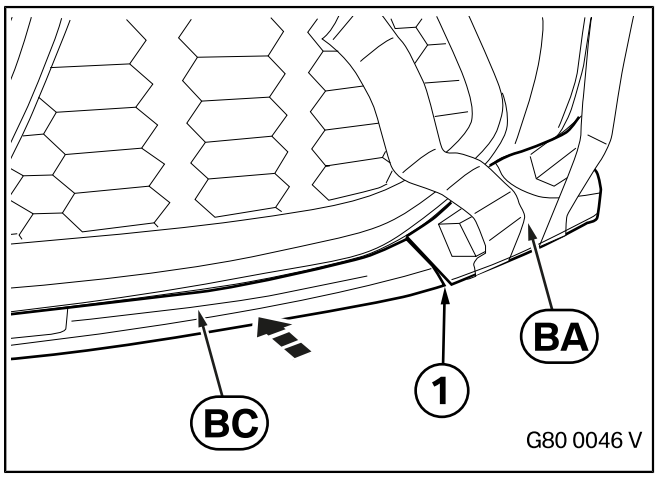
Repeat these steps to install the left front attachment **BB**.



Abrade the internal surface (1) against the holes (2) in the centre front attachment **BC** over the full width of the component on the external edge using suitable tools and clean it with cleaner **BF**.

Wait for the full drying time to elapse. ◀

Then apply a bead of liquid adhesive **BE** to the cleaned surface (1) of the centre front attachment **BC**.

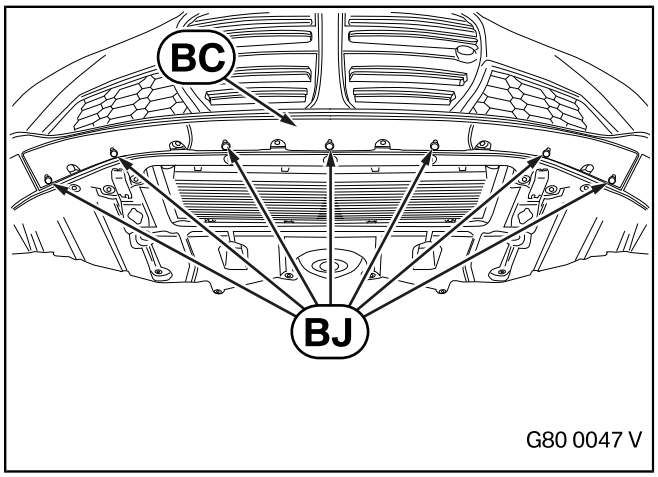


Install the centre front attachment **BC** in the middle between the two side parts. To do this, push the component from above onto the underbody console to prevent the liquid adhesive smearing (slide it downwards along the front apron).

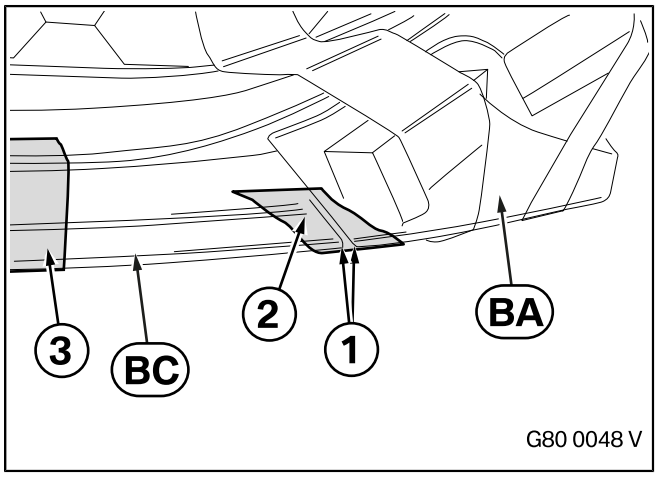
Ensure that the gap (1) on both sides is the same size of around **2 mm**. To do this, use spacers with a thickness of around **2 mm** whilst the liquid adhesive is dry (for example a coin or washer).

Remove any excess liquid adhesive immediately using suitable equipment. ◀

9. Carbon front attachment installation

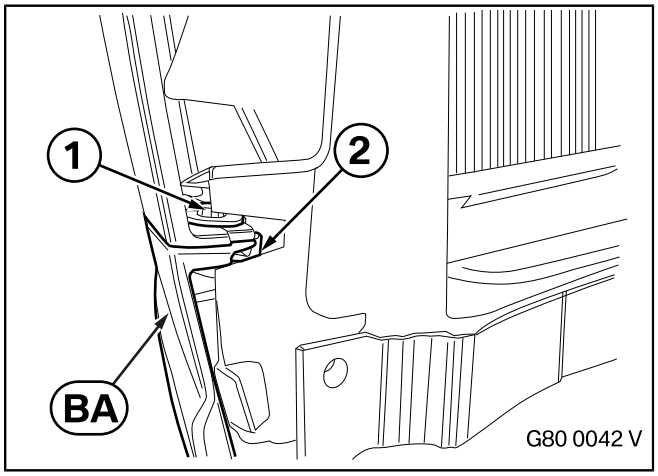


Insert the expanding rivets **BJ** into the oval holes in the centre front attachment **BC** as far as possible to the rear of the oval holes and press them firmly into place.



Position the centre front attachment **BC** in the middle between the two front attachments **BA** and **BB** so that there is a uniform gap on the left and right (1) and the surfaces fit together to create a smooth finish. Secure the spacer and the gap using suitable adhesive tape (2).

Then press the centre front attachment **BC** with more adhesive tape (3) against the front apron, if necessary place suitable pieces of foam underneath it and follow the instructions for use on page 2.



After around 24 hours, as soon as the liquid adhesive is dry, remove the adhesive tape and spacer and carry out the following step.

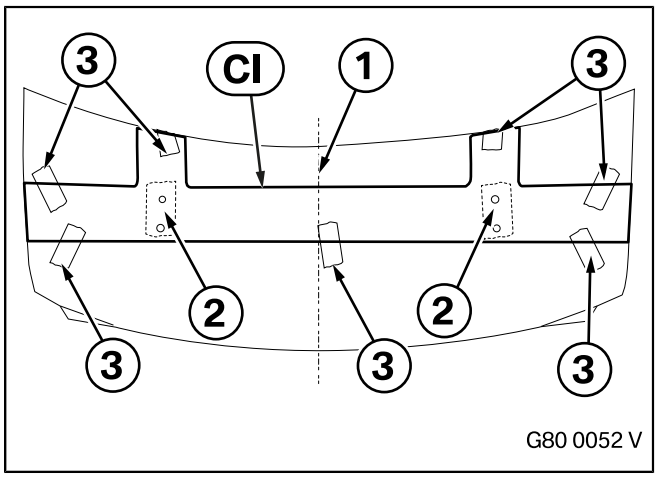
Undo the three screws on the wheel arch trim and push the wheel arch trim out of the way to gain access to the screw connection. ◀

Tighten the hexagon screw (1) from the top through the front apron into the reused C clip (2) on the right front attachment **BA**.

10. Carbon throughflow rear spoiler installation

The installation work is shown on a G80 car. The installation is identical on a G82 car. Differences in the various steps are explicitly described. ◂

First of all, the internal trim on the boot lid must be removed. Spread a sheet to collect any chippings. No chippings may be allowed to fall into the boot lid, if possible remove the boot lid to complete the work.



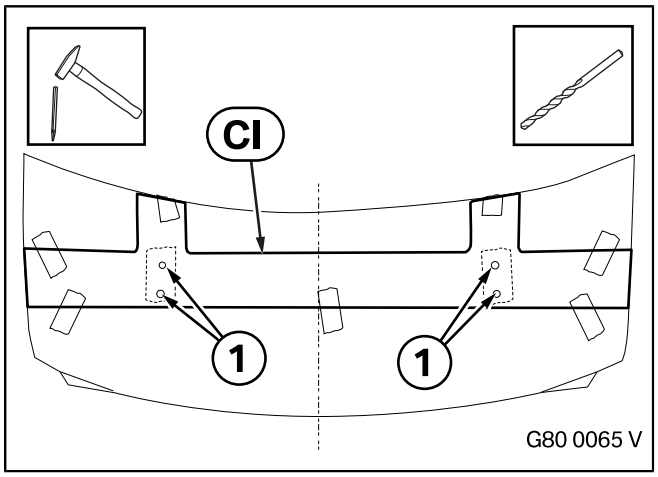
The bonding surface must be completely clean, dry and free from wax or grease. ◂

Measure the centre of the boot lid (1) from the left to the right side of the car and mark it with a water-soluble pen.

Affix adhesive tape (2) to the boot lid (1) around the drilling positions shown in the drilling template for the boot lid spoiler **CI**.

Position the drilling template for the boot lid spoiler **CI** in the centre and secure it with adhesive tape (3).

Carry out control measurements and make sure the positions are symmetrical. ◂

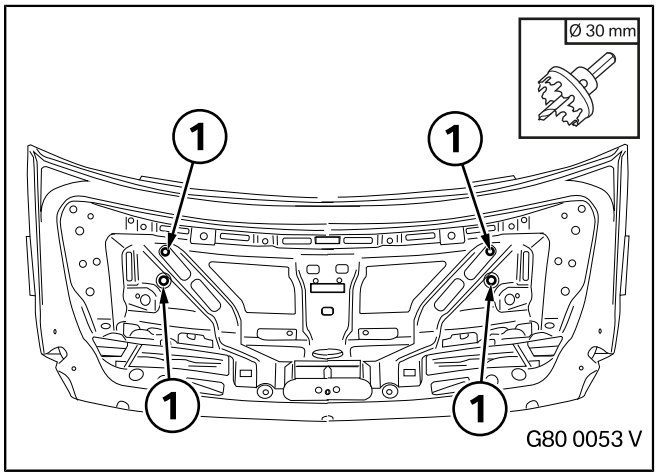


Centrepunch the four marked holes (1) on the drilling template **CI**.

Predrill the holes (1) with a **3 mm** drill bit perpendicular to the external skin.

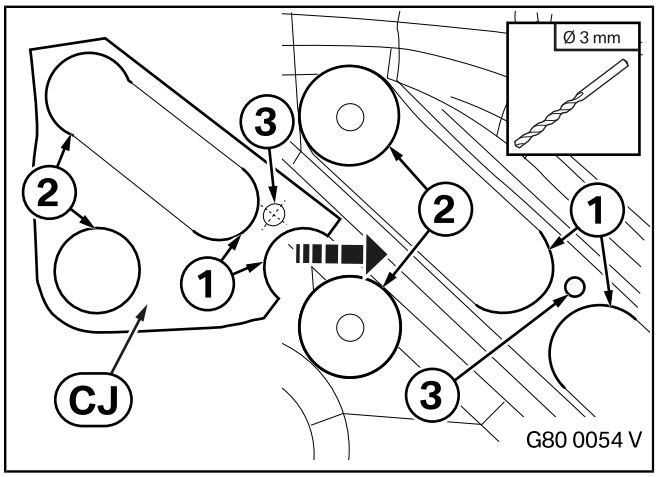
Then drill them with a **6 mm** drill bit through the external and internal metal of the boot lid extracting the chippings as you do so.

Remove all the chippings which are still on the boot lid and remove the drilling template **CI** and adhesive tapes.



Do not drill through the external skin. ◂

Carefully expand the four drill holes (1) in the internal metal of the boot lid using a keyhole saw to a diameter of **30 mm** and deburr them.

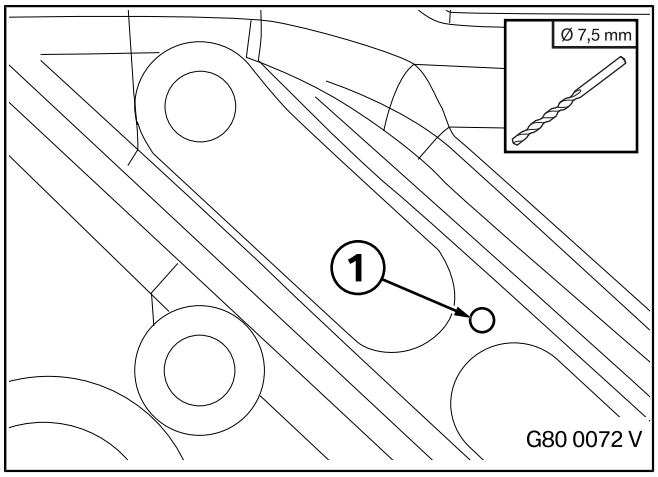


For G80 cars only

Position and secure the drilling templates for the holder plates **CJ** at the cut-outs on the left and right (1). The holes (2) which have just been enlarged to Ø 30 mm on the drilling templates for the holder plates **CJ** to indicate their correct positions.

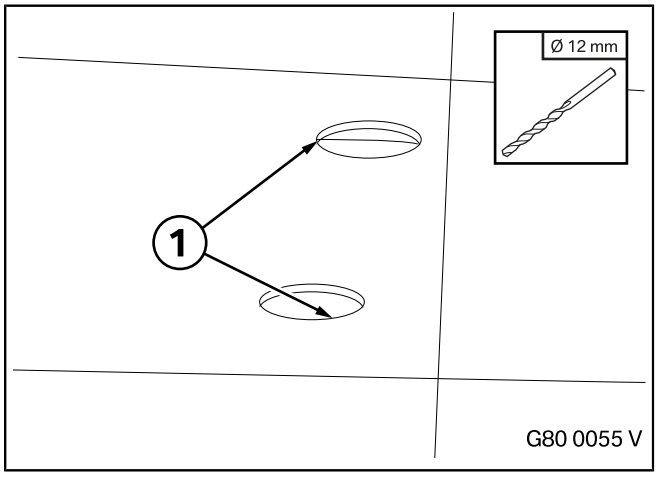
Centrepunch the drilling position (3) shown on the template.

Predrill the hole (3) with a **Ø = 3 mm** bit. Remove the drilling templates for the holder plates **CJ**.



Then, using a **7.5 mm with a depth stop, drill through the internal skin of the boot lid**, extracting the chippings as you do so. Deburr the holes (1) on the underside of the boot lid.

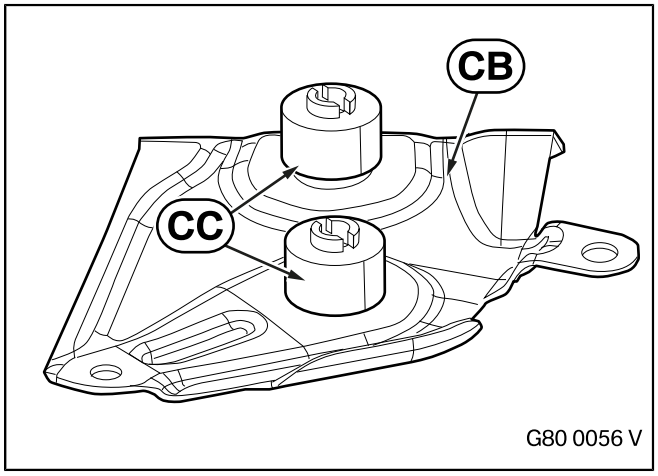
Remove adhesive residue from the work through the cover strip between the external and internal skin. Remove all the chippings.



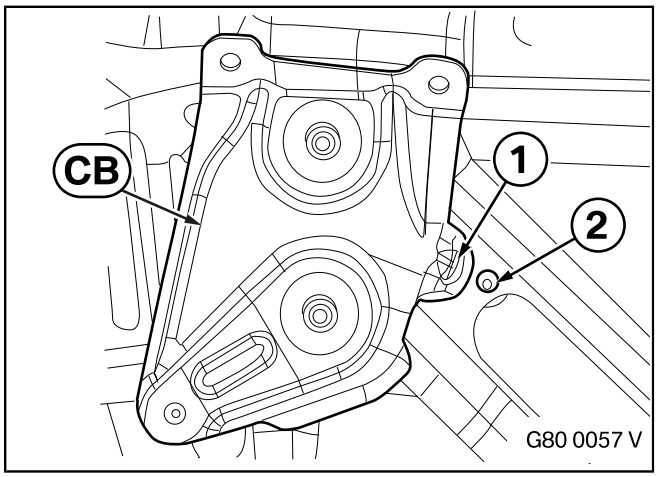
For all cars

Enlarged the hole (1) on the external skin of the boot lid to **Ø = 12 mm** .

Deburr the edges. Seal the edges with a touch-up stick and leave it to dry for the time stated in the instructions for use.

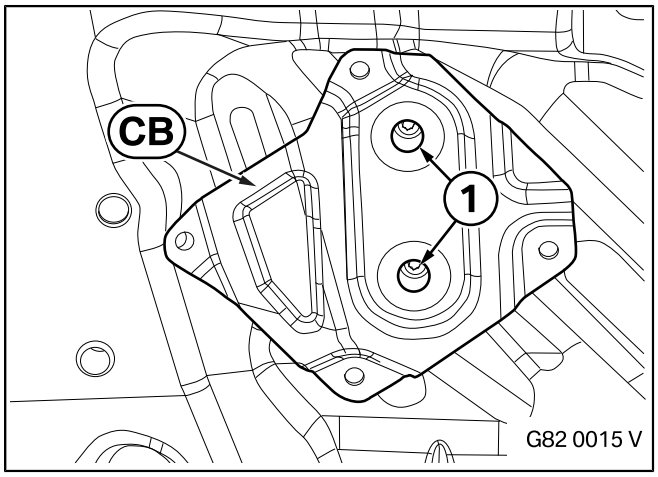


Screw the adjusting sleeves **CC** fully onto the holder plates **CB**.



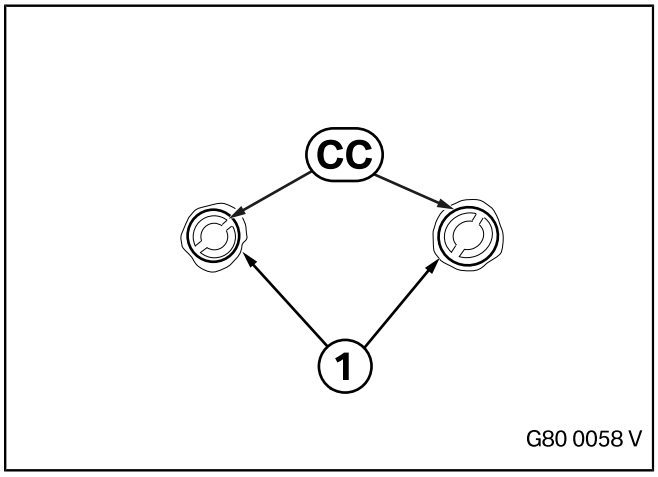
For G80 cars only

Insert the lugs (1) on the holder plates **CB** behind the cut-outs at the drilled holes (2).



For G82 cars only

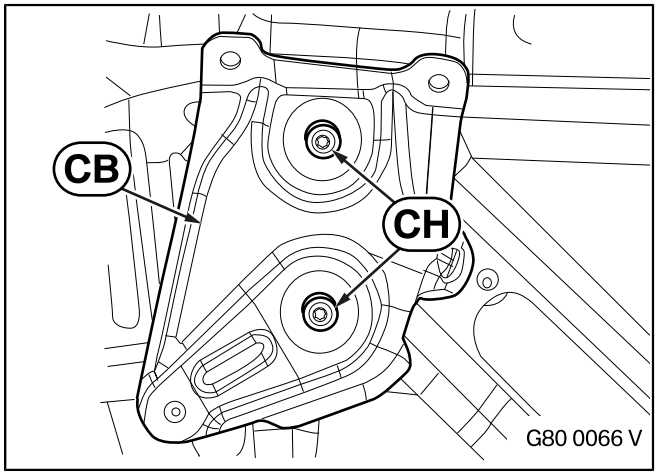
Position the holder plates **CB** at the drilled holes (1) on the inside of the boot lid.



For all cars

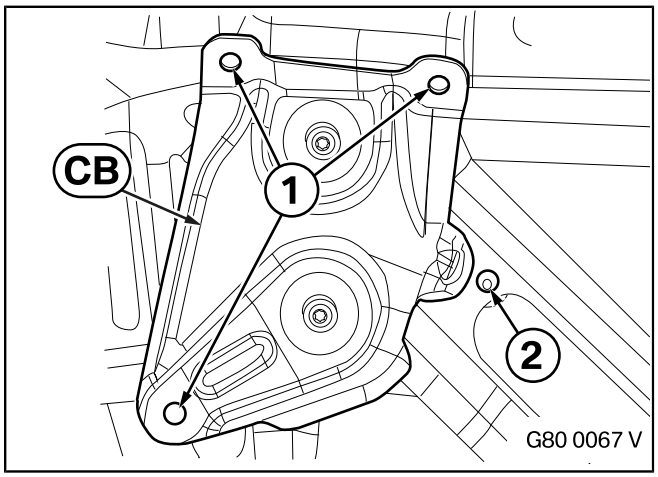
The heads on the adjustment sleeves **CC** must be flush with the external skin (1) of the rear spoiler. ◀

Adjust the adjustment sleeves **CC** on the outside using a flat screwdriver with a blade width of 10 mm until the head of the adjustment sleeve **CC** is flush with the external skin (1) the rear spoiler.



This installation step must be carried out by three people. ◀

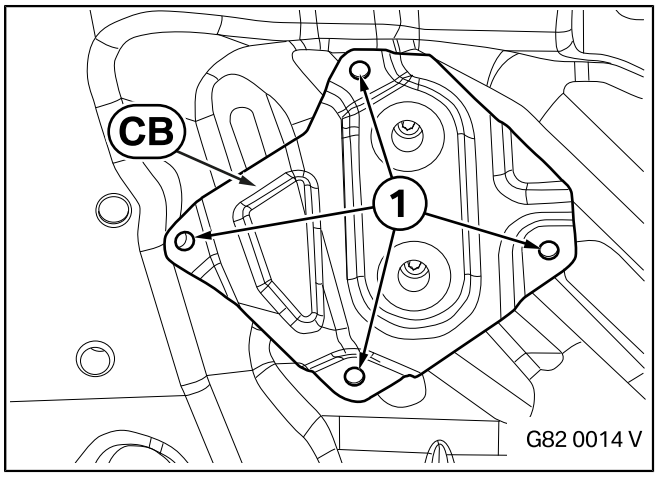
Position the boot lid and rear spoiler **CA** from the outside with two people and from the inside secure the holder plates **CB** to the boot lid using the four screws M6x25 **CH**.



For G80 cars only

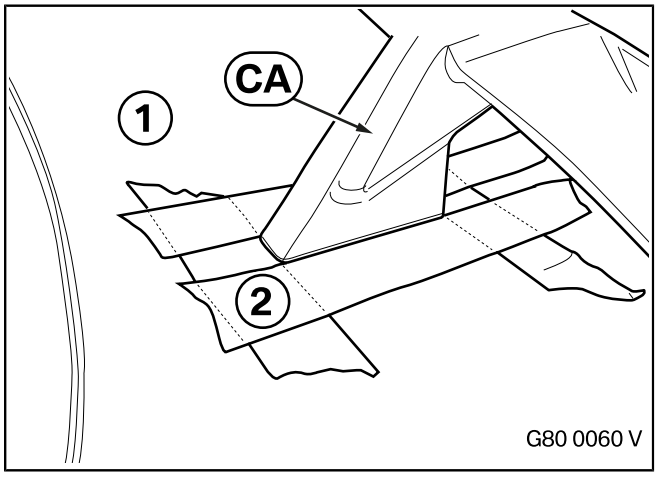
Mark the **six** holes (1) through the holes in the holder plates **CB** on the boot lid using suitable equipment.

Check the drilling positions of the marked holes (2).



For G82 cars only

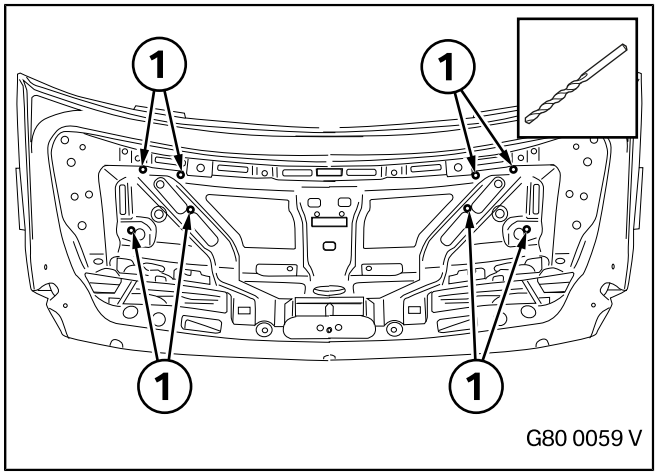
Mark the **eight** holes (1) through the holes in the holder plates **CB** on the boot lid using suitable equipment.



For all cars

Mask the boot lid (1) using suitable adhesive tape (2) around the fixings for the boot lid spoiler **CA**. Position the adhesive tape (2) so that it is around **1 mm** from the boot lid spoiler **CA**.

Remove the holder plates **CB** and boot lid spoiler **CA** by undoing the screws **CH**.



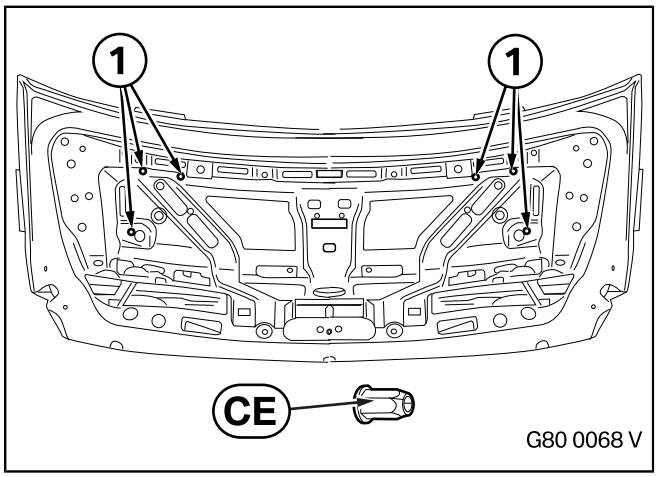
The internal skin may bend. ◀

Carefully centrepunch the holes (1).

Predrill the holes with a **3 mm** drill bit, using a **depth stop** to prevent penetrating the external skin.

Enlarge the marked holes (1) with a **8 mm** drill bit. You should again use a **depth stop** to prevent penetrating the external skin.

Deburr and seal all the holes (1). Allow the sealant to dry as specified in the instructions for use.

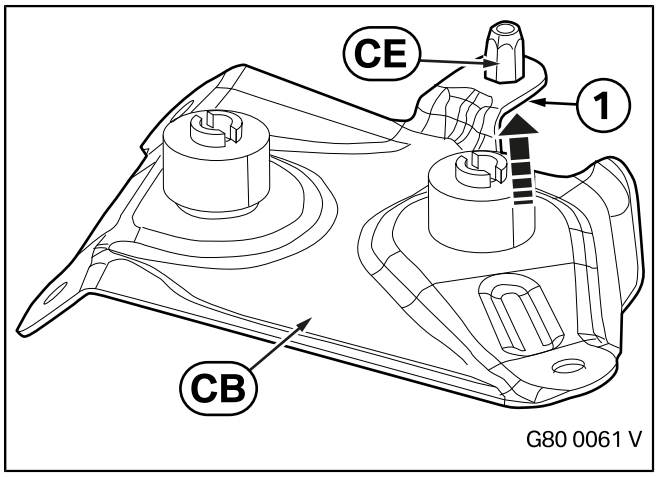


For G80 cars only

Rivet the M5 rivet nuts **CE** into the **six** holes (1) on the boot lid internal skin using rivet nut pliers for M5 threads.

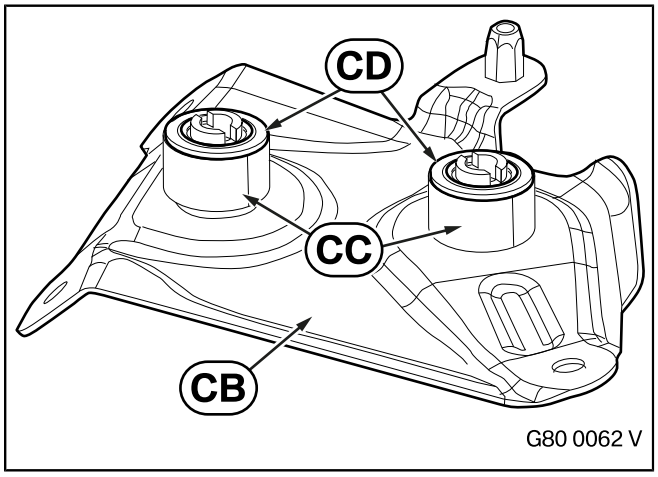
For G82 cars only

Rivet the M5 rivet nuts **CE** into the **eight** holes (1) on the boot lid internal skin using rivet nut pliers for M5 threads. **The next step is not necessary**.



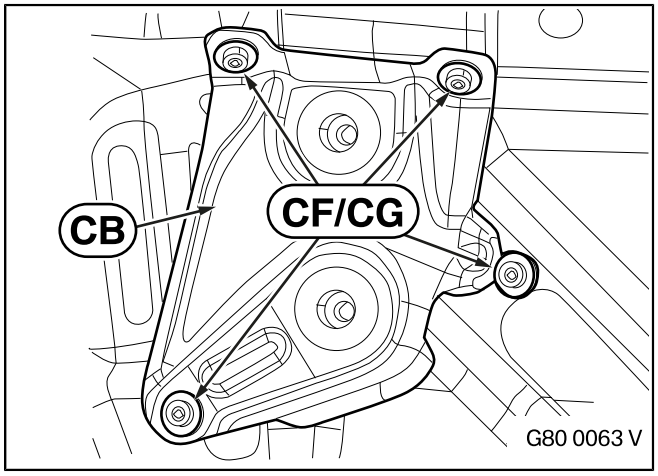
For G80 cars only

On each holder plate **CB** , insert a rivet nut **CE** in the projecting lug (1) from underneath and rivet it into position using rivet nut pliers for M5 threads.



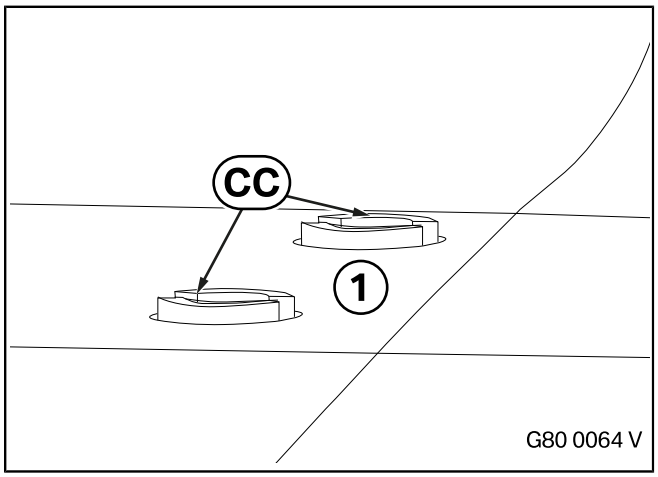
For all cars

Pull the sealing rings **CD** onto the adjustment sleeves **CC** which are installed on the holder plates **CB**.



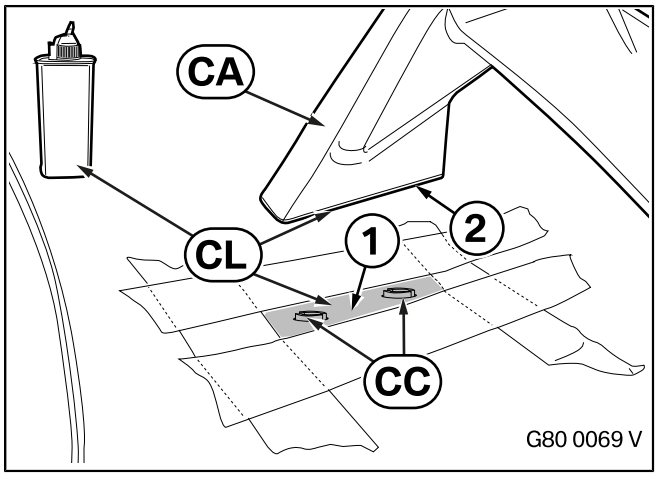
Secure the holder plates **CB** to the boot lid using four M5x16 screws **CG** and four washers **CF** on each side of the car.

The tightening torque for the screws **CG** is **6 Nm**.



Adjust the adjustment sleeves **CC** from outside. Unscrew them until the heads are above the external skin of the boot lid and the external skin of the boot lid (1) is moved upwards slightly by the sealing rings **CD**.

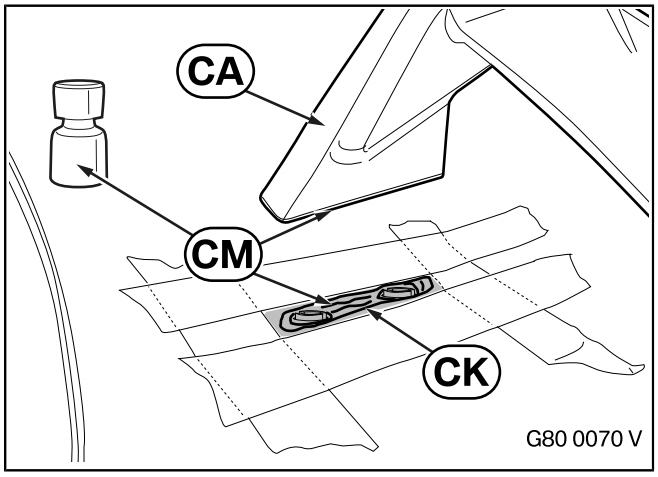
As you unscrew them, ensure that you do not damage the boot lid. ◀



Abrade the surface (1) the boot lid and the surface (2) the boot lid spoiler **CA** using suitable equipment, but do not abrade the heads of the adjustment sleeves **CC**.

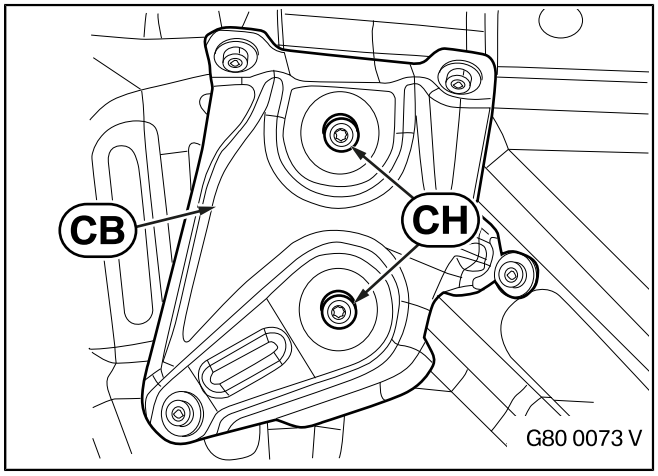
Then clean both surfaces (1) and (2) with cleaner **CL**.

Wait for the drying time of the cleaner.



Apply the primer **CM** to both surfaces. Wait until the drying time has elapsed.

Apply two beads of the liquid adhesive **CK** around the prepared surfaces of the boot lid external skin and several more to the inside area of the surface. Apply generous quantities around the holes.

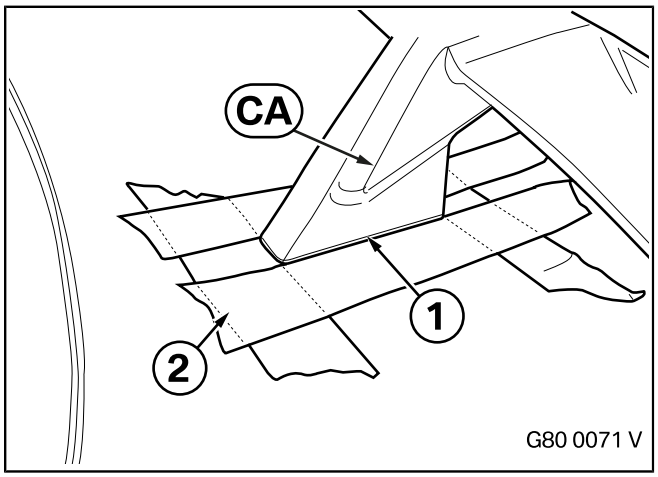


Install the boot lid spoiler **CA** with two people positioning it from the outside and one person tightening the screws for the boot lid spoiler **CA** from the inside. ◀

Position the boot lid spoiler **CA** on the boot lid with two people. Secure the M6x25 screws **CH** from the inside.

The tightening torque for the screws **CH** is **10 Nm**.

10. Carbon throughflow rear spoiler installation



Remove excess liquid adhesive immediately using suitable equipment and dab the joint (1) with suitable equipment (for example cotton buds).

Remove the adhesive tapes (2) on the boot lid.

Then fit the interior trim.

Leave the car to stand for **24 hours** follow the **instructions on page 2**.

11. Concluding work and coding

The retrofit system does **not** require programming/coding.

– None