

Original BMW Accessories. Installation Instructions.



Trailer Hitch System Retrofit BMW X3 (F 25)

These installation instructions are intended for use only on US cars with SA 8SL (trailer module preparation)

Retrofit kit number

82 71 2 157 704 Trailer Hitch System

Installation time

The installation time is **approx. 3.5 hours**. This may vary depending on the condition of the car and the equipment in it.

The installation time specified does not include the time spent on programming / coding.

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

Important information

These installation instructions are primarily designed for use within the BMW dealership organization and by authorized 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.

In the event of any installation or functional problems, restrict the troubleshooting session to about 0.5 hours for mechanical work or 1 hour for electrical work.

To avoid unnecessary extra work and/or costs, an inquiry is to be sent straight away to the technical parts support via the After Sales Assistance Portal (ASAP).

Quote the following information:

- Chassis 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 made 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 warning text.

Special notes

The "Information for Customers" section at the end of these installation instructions must be given to the customer.

Installation information

Ensure that the cables and/or lines are not kinked or damaged as you install them in the car. Costs arising from this will not be reimbursed by BMW AG.

Additional cables/lines that you install must be secured with cable ties.

If the specified PIN chambers are occupied, bridges, double crimps or twin-lead terminals must be used.

After the installation work, the retrofit must be programmed / coded via the **–Conversions–** path.

Ordering instructions

Control Module holder **G** and hexagon nuts **H** are not included in the retrofit kit and must be ordered separately (for part number and instructions, see EPC).

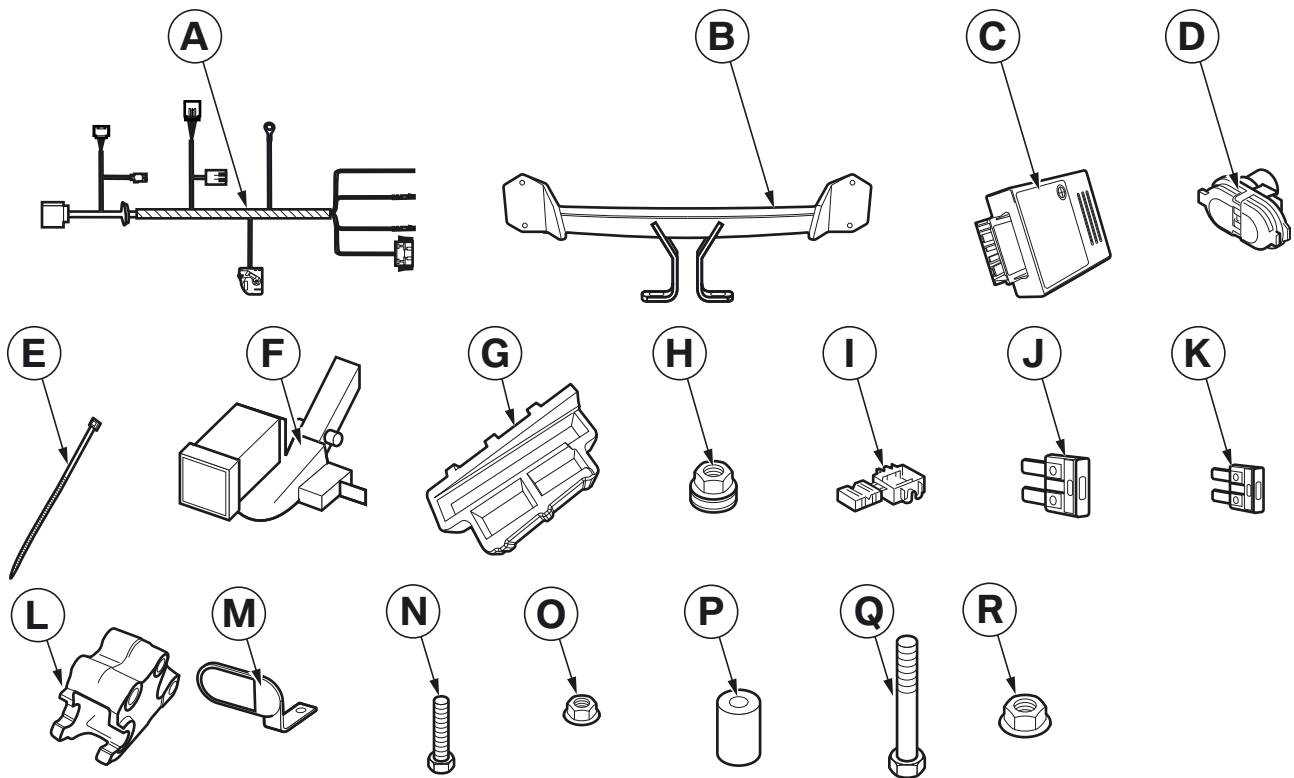
Special tools required

00 9 317, Installation wedges

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1. Parts list



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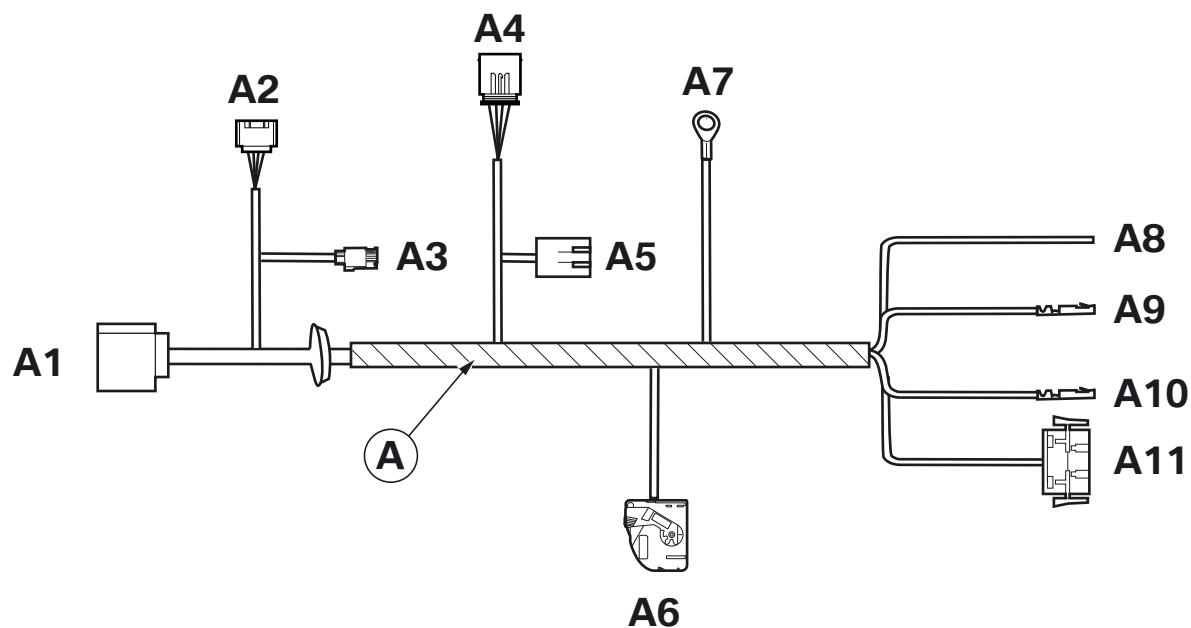
Legend

- A** Retrofit wiring harness
- B** Cross member
- C** Control module
- D** Connector
- E** Cable tie (6 x)
- F** NAS receiver tube
- G** Control unit holder (not supplied in the retrofit kit)
- H** Hexagon nut M12 (4 x, not supplied in the retrofit kit)
- I** Miniature connector (1 x)
- J** 20 A fuse
- K** Mini 20 A fuse
- L** Sleeve
- M** Connector holder
- N** Hexagon screw M6 (2x)
- O** Hexagon nut M6 (2x)
- P** Spacer bushing (2 x)
- Q** Hexagon screw M12 (3 x)
- R** Hexagon nut M12 (3 x)

2. Preparatory work

	ISTA No.
Conduct a brief test	---
Disconnect the negative pole of the battery	61 20 900
The following components must be removed first of all	
Rear fender trim	51 12 156
Guide for rear fender	51 12 825
Support for rear fender trim	51 12 050
Trunk floor trim	51 47 102
Trunk wheel arch trim, right	51 47 161
Unfasten rear right fuse box	---

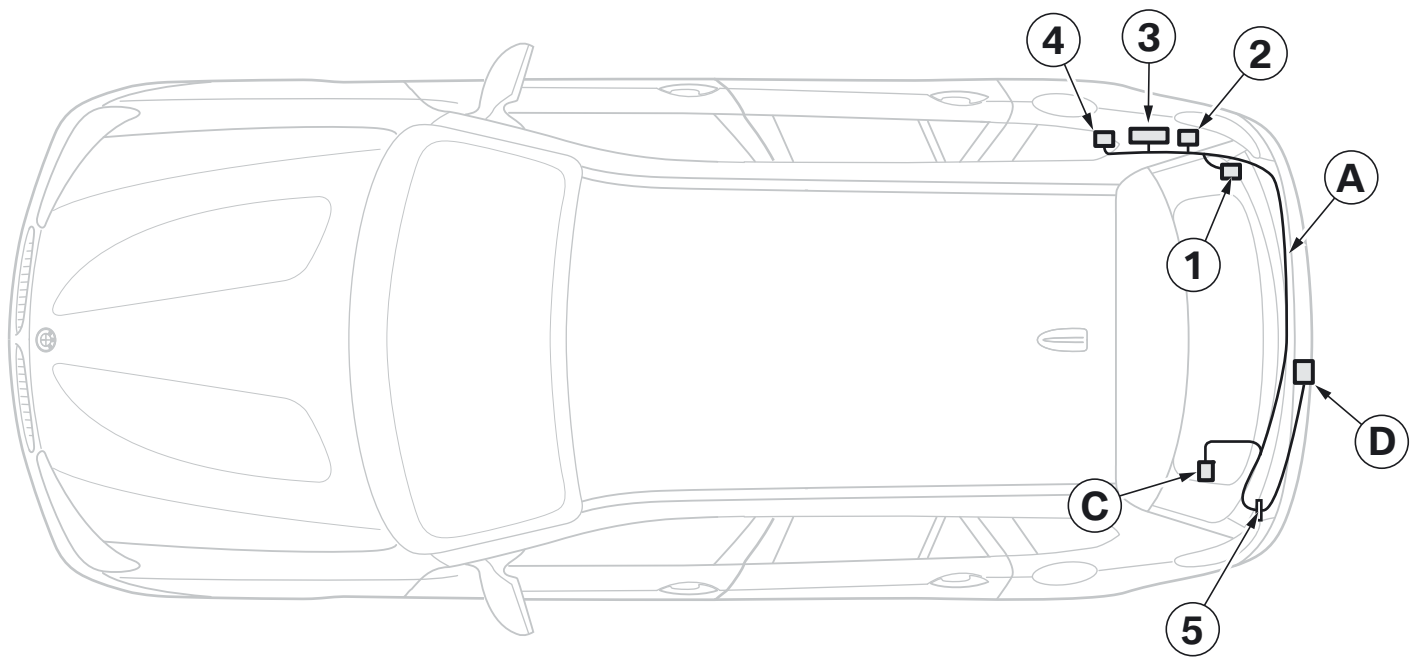
3. Connection diagram



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Item	Designation	Signal	Cable color / Cross-section	Connection location in the car	Abbreviation / Slot
A	Retrofit wiring harness	---	---	---	---
A1	SW 7-pin socket casing	---	---	To socket D	---
A2	SW 6-pin pin housing	---	---	To rear fender tail module plug	X258*1S
A3	SW 2-pin socket casing	---	---	To Comfort Access antenna	E27*1B
A4	SW 6-pin socket casing	---	---	To tail module plug	X258*1B
A5	SW 2-pin pin housing	---	---	To plug E27*1B on the car	E27*1S
A6	SW 20-pin socket casing	---	---	To trailer module C	A36*1B
A7	Ring eyelet M6	Terminal 31	BR 2.50 mm ²	To earth support point, right-hand rear wheel arch	Z10*14B
A8	Cable open	Terminal 49R	BL/BR 0.35 mm ²	With miniature connector I to BL/BR cable on right tail light	E57*1B PIN 2
A9	Flat spring contact	Terminal 30	RT 2.50 mm ²	To rear right fuse box Z2	Z2*1B PIN 1
A10	Flat spring contact	Terminal 30	RT/SW 2.50 mm ²	To rear right fuse box Z2	Z2*5B PIN 2
A11	SW 4-pin socket casing	---	---	To the plug of the trailer module preparation behind the rear right fuse box	X18*1B

4. Installation and cabling diagram



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A Retrofit wiring harness

C Trailer control module

D Connector

1 Right tail light, pick-up terminal 49R on plug **E57*1B**

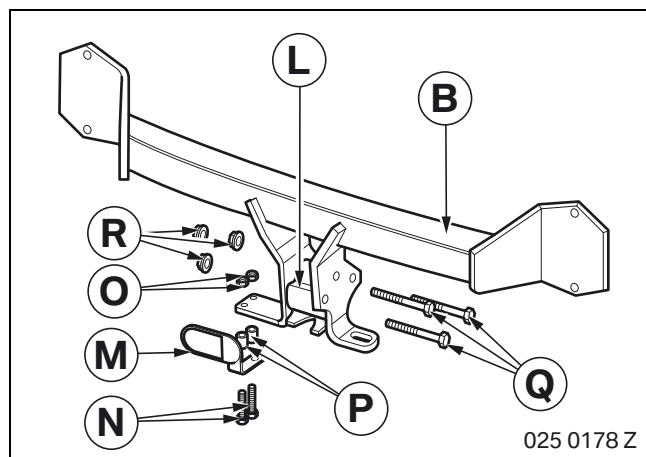
2 Trailer module preparation plug **X18*1B**

3 Rear right fuse box, plug **Z2*1B, Z2*5B**

4 Earth support point **Z10*14B**

5 Rubber grommet

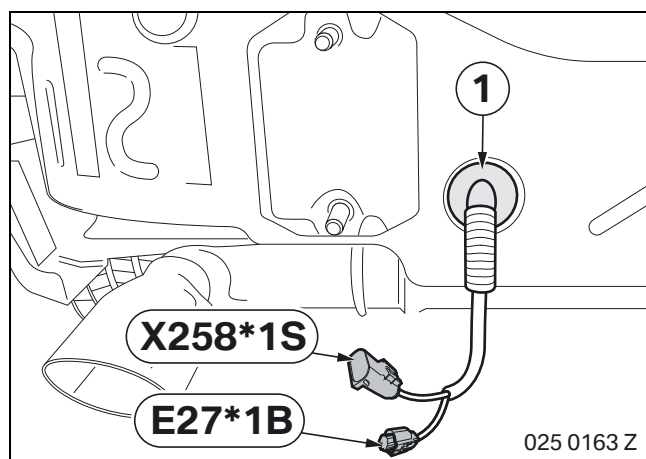
5. Installing the trailer hitch system



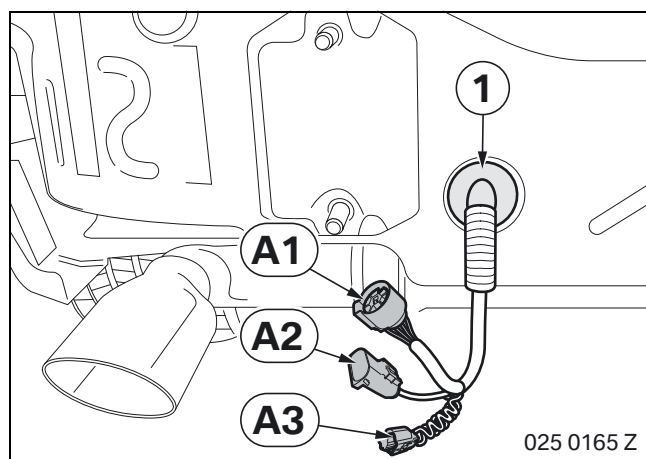
▶ Note the tightening torque value: 120 Nm. ◀

Assemble the rear carrier system as follows:

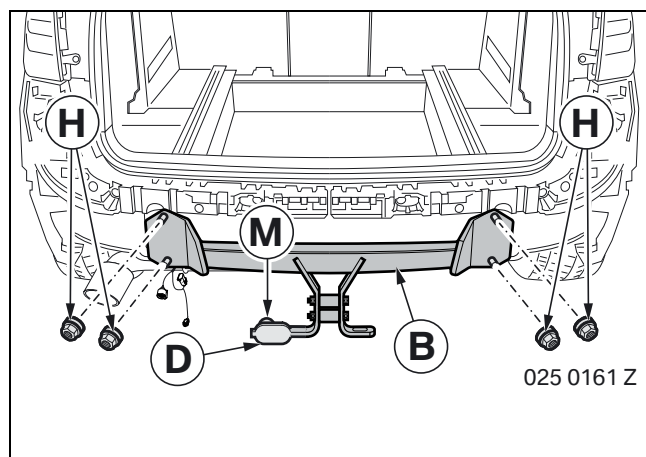
- Screw sleeve **L** using hexagon screws **Q** and hexagon nuts **R** to cross member **B**
- Screw socket holder **M** using hexagon screws **N**, spacer bushes **P** and hexagon nuts **O** to transverse pipe **B**



Remove the rubber grommet (1) and route plug **X258*1S**, SW 6-pin pin housing, and **E27*1B**, SW 2-pin socket casing, through the existing hole into the trunk.



Route branches **A1-A3** from the interior through the hole and place the rubber grommet (1) in the hole and make it water-tight.

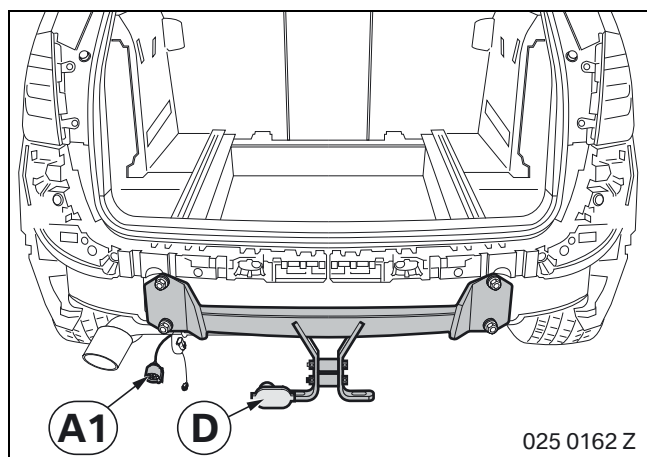


▶ Note the tightening torque value: 108 Nm. ◀

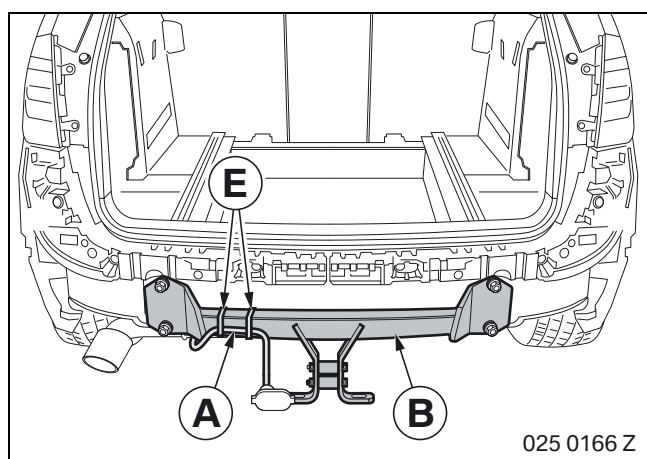
Screw transverse pipe **B** into position using hexagon nuts **H**.

Clip socket **D** onto socket holder **M**.

5. Installing the trailer hitch system

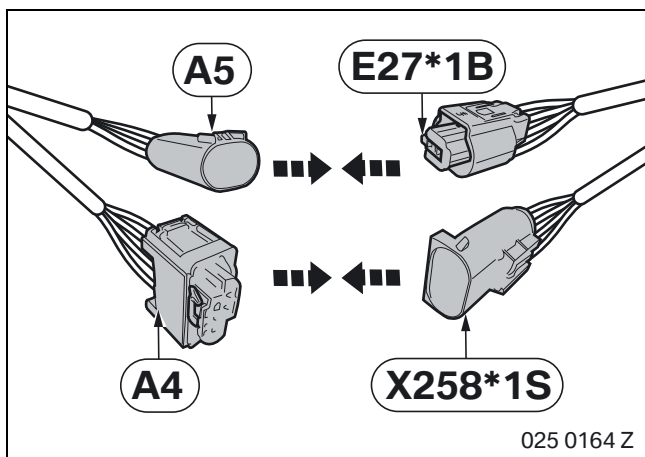


Connect branch **A1**, SW 7-pin socket casing, to socket **D**.

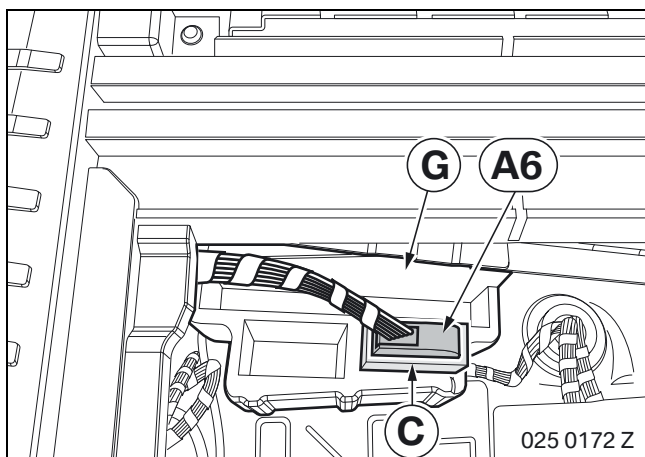


Secure retrofit wiring harness **A** using cable tie **E** to transverse pipe **B**.

6. Installing and connecting the retrofit wiring harness



Connect car plug **X258*1S**, SW 6-pin pin housing and plug **E27*1B**, SW 2-pin socket casing, to branches **A4** and **A5**.

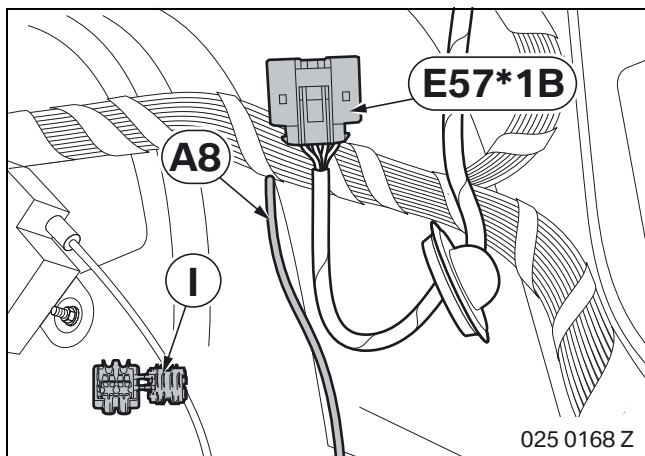


▶ If a new control module holder **G** is required, the battery needs to be temporary relocated. ◀

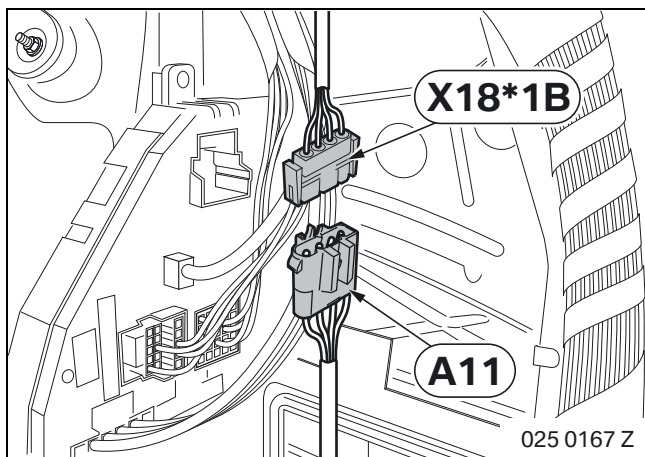
Place control module holder **G** in the rear left trunk.

Place control module **C** in equipment holder **G**.

Connect branch **A6**, SW 20-pin socket casing, to control module **C**.

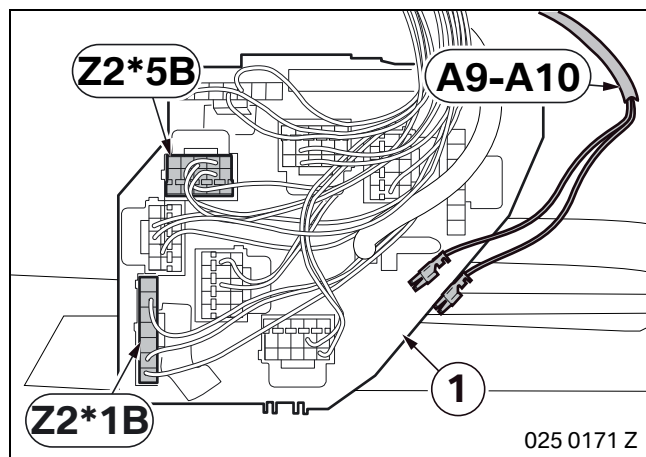



Connect branch **A8** using miniature connector **I**, to the BL/BR cable of the same color from plug **E57*1B** PIN 2 of the right tail light.



Connect branch **A11** to the tied-back plug of trailer module preparation **X18*1B**, SW 4-pin socket casing.

6. Installing and connecting the retrofit wiring harness

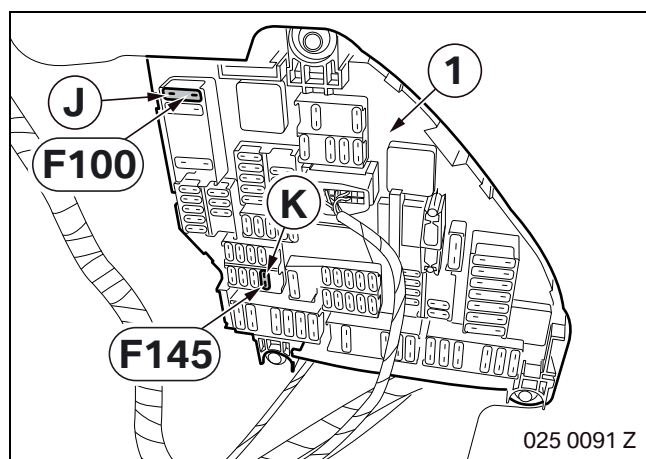


 Fuses can fall out when plugs are connected to the fuse holder (1). Ensure that all the fuses are replaced in their correct position. ◀

Route branches **A9-A10** to the rear right fuse box and connect as follows:

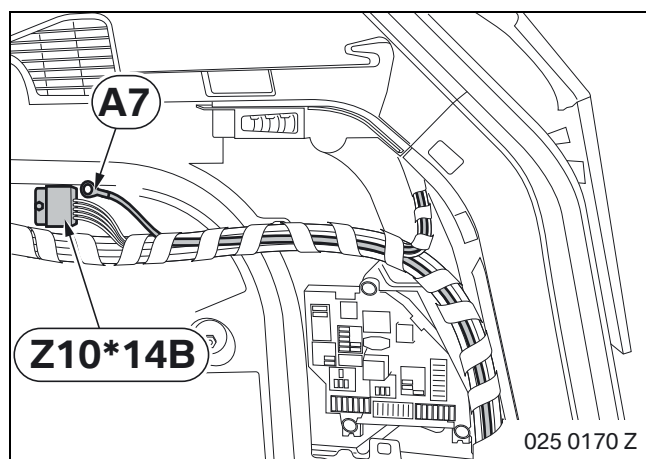
- Branch **A9**, RT cable, to PIN 1 of plug **Z2*1B**, SW 7-pin socket casing
- Branch **A10**, RT/SW cable, to PIN 2 of plug **Z2*5B**, NT 10+5-pin socket casing

Connect all plugs to the fuse holder (1).



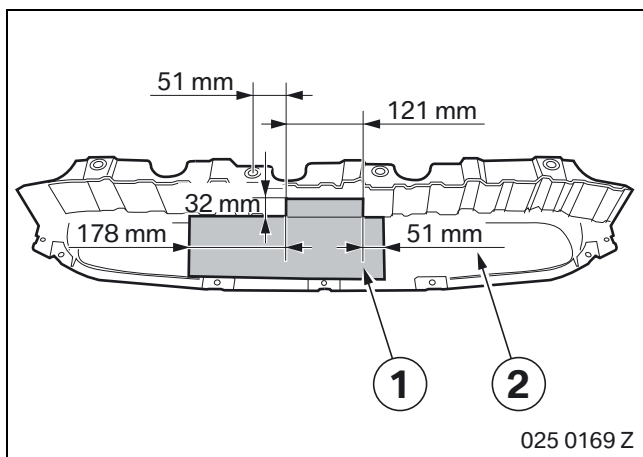
Place fuse **K** into slot **F145** of the rear right fuse box (1).

Place fuse **J** into slot **F100** of the rear right fuse box (1).



Screw branch **A7** to earth support point **Z10*14B** in the rear right wheel arch.

7. Fender trim cut-out



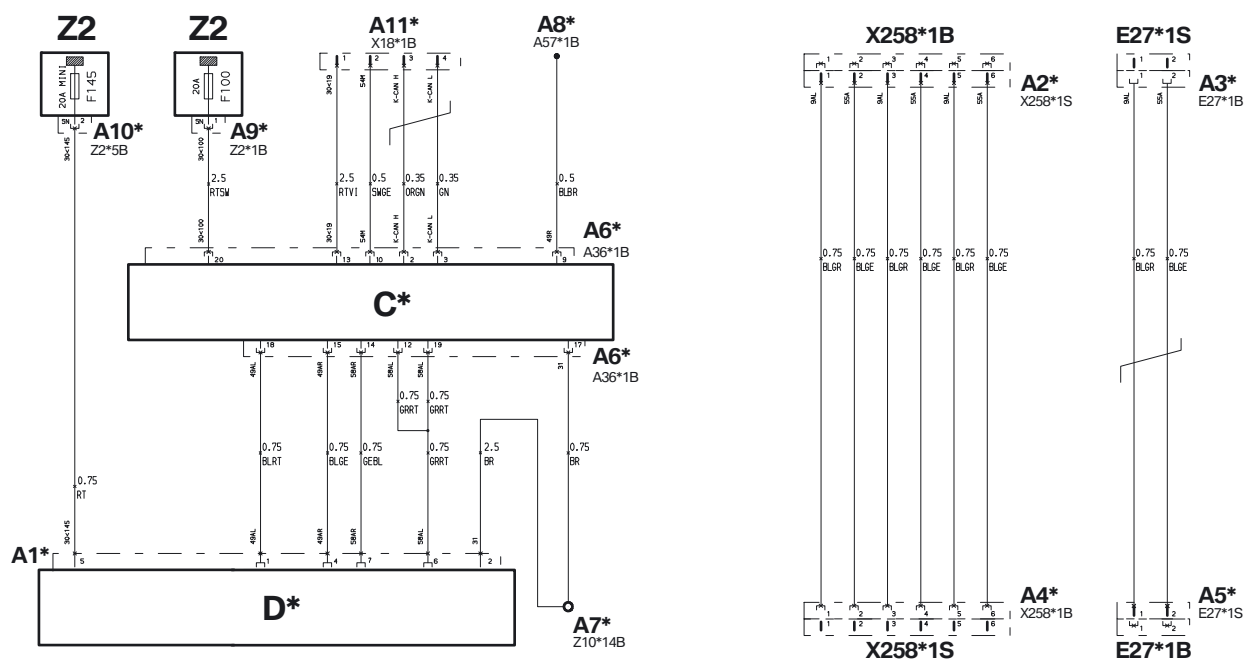
Cut out the section (1) in the center of the rear cover (2) as shown.

8. Concluding work and coding

The retrofit system requires programming / coding.

- Connect the battery
- Carry out a vehicle test using the ISTA system and note or work through any entered error memory.
- Change in the ISTA/P car programming
- Select the "Removable trailer tow hitch" retrofit via the – **Conversion** – path and work through the created action plan
- If using ISTA/P, please note the instructions in the ISTA/P application documentation

9. Wiring diagram



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Legend

- A1*** SW 7-pin socket casing, to socket **D**
- A2*** SW 6-pin pin housing, to plug **X258*1B**
- A3*** SW 2-pin socket casing, to plug **E27*1S** of the Comfort Access antenna
- A4*** SW 6-pin socket casing, to plug **X258*1S**
- A5*** SW 2-pin pin housing, to plug **E27*1B** of the Comfort Access antenna
- A6** SW 20-pin socket casing, to trailer module **C***
- A7** Ring eyelet M6, to earth support point, rear right wheel arch **Z10*14B**
- A8*** Cable open, with miniature connector **I*** to the same-color cable on right tail light, plug **E57*1B**
- A9*** Connect socket contact to plug **Z2*1B** of rear right fuse box **Z2**
- A10*** Connect socket contact to plug **Z2*5B** of rear right fuse box **Z2**
- A11*** SW 4-pin socket casing to plug **X18*1B**

- C*** Trailer module
- D*** Socket

Cable colors

BL	Blue	GR	Gray	RT	Red
BO	Bordeaux	L-GN	Light green	SW	Black
BR	Brown	NT	Natural	TR	Transparent
GE	Yellow	OR	Orange	VI	Violet
GN	Green	RO	Pink	WS	White

10. Information for the customer

BMW X3 Trailer Hitch Guidelines and Cautions

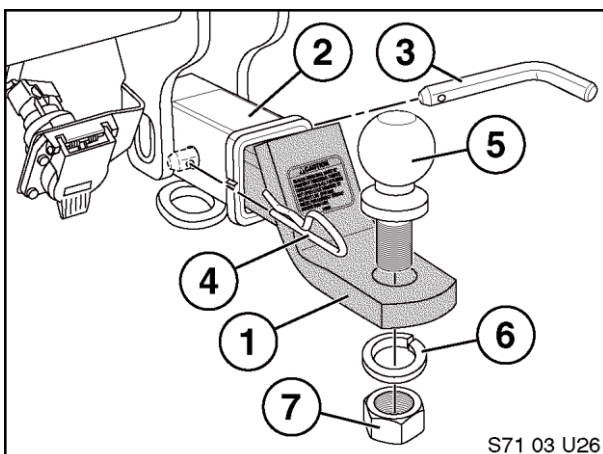
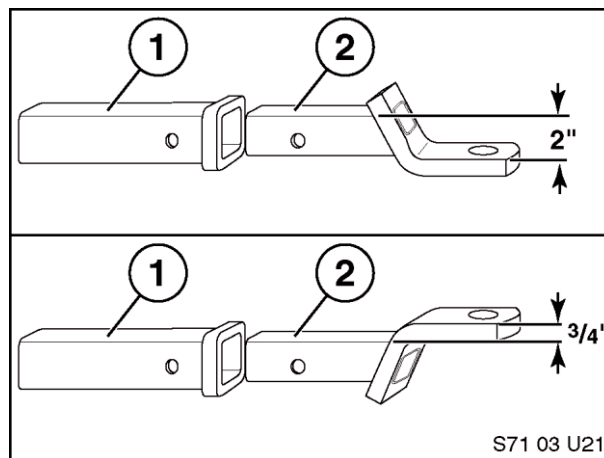
These Guideline Sheets should be left in the vehicle (for customer reference) after installation of the Trailer Hitch

The BMW X3 Trailer Hitch is rated **Class 2** (gross trailer weight 3500 lbs., maximum tongue weight 350 Lbs.). Never exceed these specifications. This rating is based on a standard equipped vehicle with driver. Additional passengers and/or cargo will reduce maximum vehicle/trailer ratings.

Do not exceed gross vehicle weight or front/rear axel weights as specified in the vehicles Owners Manual and displayed on the Safety Certification Label located on the drivers door jam.

Do not use weight distribution equipment.

Use only the BMW X3 Ball Mount available from BMW centers with a maximum 2-inch Drop or $\frac{3}{4}$ inch rise. Reference Illustration S71 03 U21.



Install trailer ball (5) to ball mount (1) with lock washer (6) and nut (7).

Important: Torque nut 250 foot lbs. (340Nm).

Reference information and warnings on ball mount label.

Install ball mount assembly (1) into trailer hitch receiver tube (2) by aligning holes in mount and tube and inserting pin (3) and clip (4) as illustrated.

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BMW X3 Trailer Hitch Guidelines and Cautions

These Guideline Sheets should be left in the vehicle (for customer reference) after installation of the Trailer Hitch

Before attaching, loading, or towing a trailer please read the brochure available on line at the NHTSA Web Site www.nhtsa.gov or available by calling the DOT Auto Safety Hotline at 888-327-4236): TOWING A TRAILER – Being Equipped for Safety, NHTSA Publication DOT HS 809 433, April 2002.

Check all connections (mechanical and electrical) before and during the towing of a trailer.

Check the function of all vehicle lights and the lights on the trailer before and during the towing of a trailer.

Do not cut, weld, drill or modify the trailer hitch.

Do not modify any wiring or electrical components.

BMW NA does not supply or have an approved electrical brake controller for your Trailer Hitch.

For trailers with LED lighting, in order to prevent the battery from draining over a long period of time, you should disconnect the wire harness that connects the trailer to the vehicle when the vehicle is not in use.

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