Original BMW Accessories.
Installation Instructions.

Trailer Hitch System Retrofit
BMW X3 (F25)

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.

 IDM 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

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

<table>
<thead>
<tr>
<th>Conduct a brief test</th>
<th>ISTA No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disconnect the negative pole of the battery</td>
<td>61 20 900</td>
</tr>
</tbody>
</table>

The following components must be removed first of all

<table>
<thead>
<tr>
<th>Component</th>
<th>ISTA No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rear fender trim</td>
<td>51 12 156</td>
</tr>
<tr>
<td>Guide for rear fender</td>
<td>51 12 825</td>
</tr>
<tr>
<td>Support for rear fender trim</td>
<td>51 12 050</td>
</tr>
<tr>
<td>Trunk floor trim</td>
<td>51 47 102</td>
</tr>
<tr>
<td>Trunk wheel arch trim, right</td>
<td>51 47 161</td>
</tr>
<tr>
<td>Unfasten rear right fuse box</td>
<td>---</td>
</tr>
</tbody>
</table>
## 3. Connection diagram

![Diagram of connection points](image)

<table>
<thead>
<tr>
<th>Item</th>
<th>Designation</th>
<th>Signal</th>
<th>Cable color / Cross-section</th>
<th>Connection location in the car</th>
<th>Abbreviation / Slot</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Retrofit wiring harness</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>A1</td>
<td>SW 7-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>To socket D</td>
<td>X258*1S</td>
</tr>
<tr>
<td>A2</td>
<td>SW 6-pin pin housing</td>
<td>---</td>
<td>---</td>
<td>To rear fender tail module plug</td>
<td>E27*1S</td>
</tr>
<tr>
<td>A3</td>
<td>SW 2-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>To Comfort Access antenna</td>
<td>E27*1B</td>
</tr>
<tr>
<td>A4</td>
<td>SW 6-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>To tail module plug</td>
<td>X258*1B</td>
</tr>
<tr>
<td>A5</td>
<td>SW 2-pin pin housing</td>
<td>---</td>
<td>---</td>
<td>To plug E27*1B on the car</td>
<td>E27*1S</td>
</tr>
<tr>
<td>A6</td>
<td>SW 20-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>To trailer module C</td>
<td>A36*1B</td>
</tr>
<tr>
<td>A7</td>
<td>Ring eyelet M6</td>
<td>Terminal 31</td>
<td>BR 2.50 mm²</td>
<td>To earth support point, right-hand rear wheel arch</td>
<td>Z10*14B</td>
</tr>
<tr>
<td>A8</td>
<td>Cable open</td>
<td>Terminal 49R</td>
<td>BL/BR 0.35 mm²</td>
<td>With miniature connector I to BL/BR cable on right tail light</td>
<td>E57*1B PIN 2</td>
</tr>
<tr>
<td>A9</td>
<td>Flat spring contact</td>
<td>Terminal 30</td>
<td>RT 2.50 mm²</td>
<td>To rear right fuse box Z2</td>
<td>Z2*1B PIN 1</td>
</tr>
<tr>
<td>A10</td>
<td>Flat spring contact</td>
<td>Terminal 30</td>
<td>RT/SW 2.50 mm²</td>
<td>To rear right fuse box Z2</td>
<td>Z2*5B PIN 2</td>
</tr>
<tr>
<td>A11</td>
<td>SW 4-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>To the plug of the trailer module preparation behind the rear right fuse box</td>
<td>X18*1B</td>
</tr>
</tbody>
</table>
4. Installation and cabling diagram

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

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
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 ¾ 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.
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

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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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