

Wiring harness retrofit kit for removable towing hitch BMW X5 (E 53) ECE

The installation time is approx. 4 -5 hours, but this may vary depending on the condition of the car and the equipment in it.

Retrofit / Installation kit No. 71 60 0 007 027

71 60 0 017 290 71 60 0 143 470

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Important information

The retrofit kit is for use within the BMW dealership organisation only.

Do not kink or damage the cables during the installation work since otherwise they may cause faults that can later only be identified by extensive additional work. The costs incurred as a result of this will not be reimbursed by BMW.

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

Target group

The target group for these installation instructions is specialist personnel trained on BMW cars with specialist knowledge of vehicle electrical systems.

Work:

All servicing, repair and installation work on BMW cars is completed at your own risk. All work is to be carried out using current BMW

- Repair manuals
- Circuit diagrams

in a rational order using the prescribed tools (special tools) and observing current health and safety regulations.



Do not use so-called "Scotchlock connectors" in any circumstances since they can cause faults in the car's electrical system.

Observe the tightening torque values for screw connections. The required tightening torque values are given in the part information system (TIS). ◀

Coding instructions

On cars after model year 10/2001 the towing hitch retrofit kit must be coded (see also section entitled Coding).

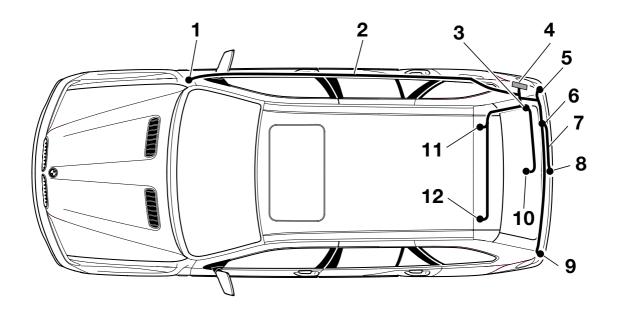
Special tools required

Crimping pliers for AMP contacts
Press-out tool for electric contacts
DIS or MoDiC

1. Preparations

	TIS instruction No.
Conduct a brief test	
Disconnect the negative pole of the battery	12 00
The following components must be removed first of all	
Floor carpet or load floor in the boot	51 47 101
Side trims on the right-hand side of the boot	51 47 161
B pillar trim on the right	51 43 150
Inner sill skirts on the right at the front and rear	51 47 000
Foot trim at the bottom right on the passenger side	

2. Installation and cabling diagram

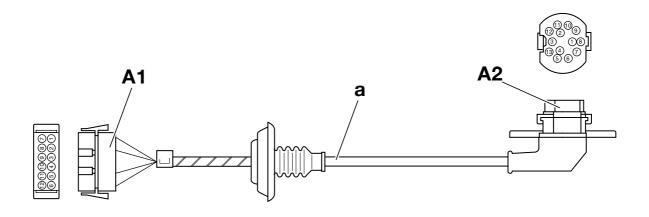


F 53 0018 2W

Legend

- 1 Light module A3
- 2 Wiring harness
- 3 Joint connector terminal 31, X494
- 4 Fuse holder A48
- 5 Right tail light
- 6 Connection plug X393
- 7 Additional wiring harness
- 8 Trailer socket X630
- 9 Left tail light
- 10 Trailer module A6
- 11 Joint connector terminal 31, X498
- 12 Post terminal 30, X1986

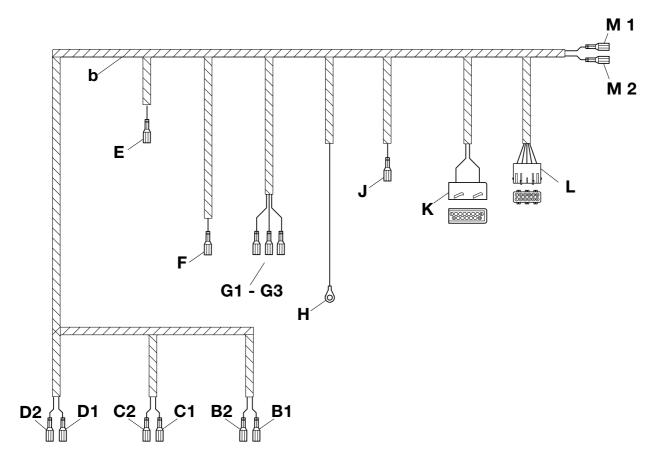
3. Wiring harnesses connection diagram



Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
а	Additional wiring				
	harness * socket				
A1	Black 12-pin			 -	
	socket casing				
A2	13-pin trailer				
	socket				

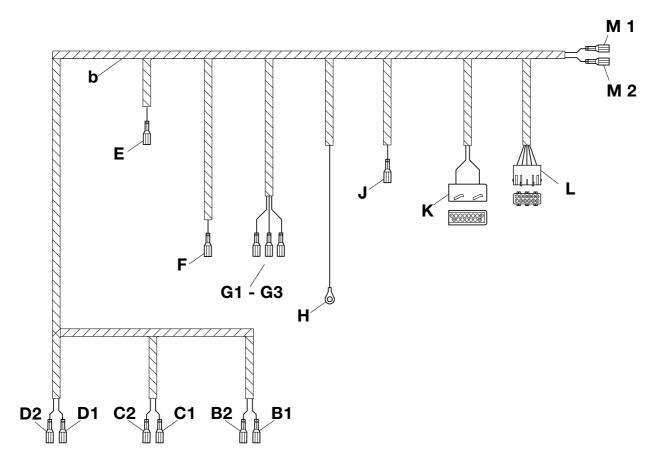
 $^{^{\}star}$ The installation of the additional wiring harness ${\bf a}$ is described in the installation instructions "Removable towing hitch retrofit kit".

3. Wiring harnesses connection diagram

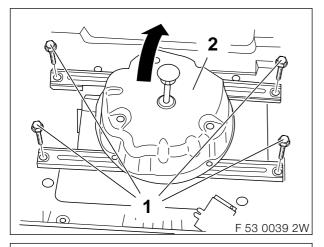


Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
b	Additional wiring harness				
B1	1-pin plug	Terminal 49 RR	BL/BR, 0.75 mm ²	On light module A3, white 15-pin socket casing	X38, PIN 12
B2	1-pin plug	Terminal 54 R	SW/BL, 0.75 mm ²	On light module A3, white 15-pin socket casing	X38, PIN 14
C1	1-pin plug	Terminal 58 RR	GR/VI, 0.50 mm ²	On light module A3, black 15-pin socket casing	X12, PIN 2
C2	1-pin plug	Terminal 49 RL	BL/GN, 0.75 mm ²	On light module A3, black 15-pin socket casing	X12, PIN 8
D1	1-pin plug	Terminal 58 RR	GR/WS, 0.50 mm ²	On light module A3, black 54-pin socket casing	X10117, PIN 17
D2	1-pin plug	Trailer module light module	BL/GR/GE, 0.35 mm ²	On light module A3, black 54-pin socket casing	X10117, PIN 35
Е	1-pin plug	Earth	BR, 2.5 mm ²	In the boot on the right, next to fuse holder A48	X494
F	1-pin plug	Terminal 30	RT/BL, 2.5 mm ²	To fuse holder A48 in the boot	X10017, fuse slot F78
G1	1-pin plug	Terminal 54 R	SW/BL, 0.75 mm ²	To the right tail light E17	X318, PIN 2
G2	1-pin plug	Terminal 49 RR	BL/BR, 0.75 mm ²	To the right tail light E17	X318, PIN 3
G3	1-pin plug	Terminal 58 RR	GR/WS, 0.75 mm ²	To the right tail light E17	X318, PIN 4
Н	Terminal lug A5	Terminal 30	RT, 4.0 mm ²	To distributor A48, terminal 30	X1986, (50A)
J	1-pin plug	Earth	BR, 2.5 mm ²	In the spare wheel trough	X498
K	Black 15-pin socket casing			To the trailer module A6	X609

3. Wiring harnesses connection diagram

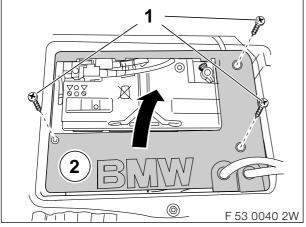


Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
L	Black 12-pin plug contact casing			To the closing plate in the boot	X393
M1	1-pin plug	Terminal 58 RL	GR/VI, 0.50 mm ²	To the left tail light E16	X319, PIN 3
M2	1-pin plug	Terminal 49 RL	BL/GN, 0.50 mm ²	To the left tail light E16	X319, PIN 4

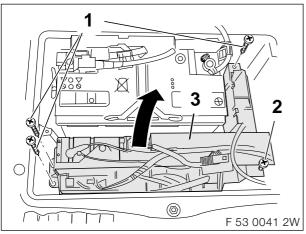


D not kink the air lines.
 ■

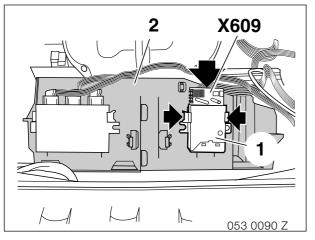
Remove the screws (1) and swing the air supply system (2) to the side.



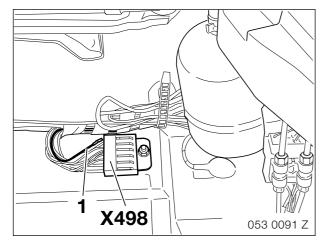
Remove the screws (1) take out the cover (2).



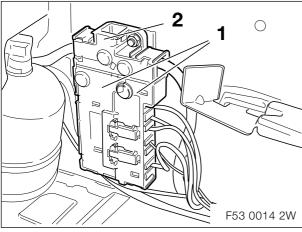
Remove the screws (1) take out the screw (2). Pull the retaining plate (3) upwards.



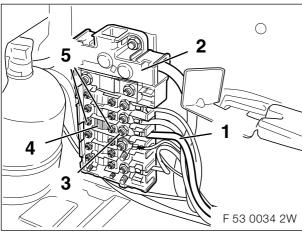
Clip the trailer module (1) into the retaining plate (2) and connect branch ${\bf K}$, plug ${\bf X609}$.



Lay branches ${\bf H}$ and ${\bf J}$ along the standard wiring harness towards terminal 30 post ${\bf X1986}$. Connect branch ${\bf J}$ (1), brown cable to the joint connector ${\bf X498}$.



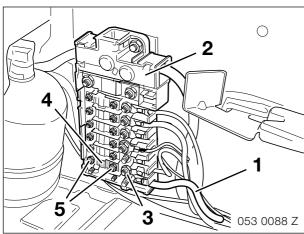
Remove cover (1 and 2).



Cars up to 10/2001 only

Connect branch **H** (1), red cable using a collar nut (3) to terminal 30 post **X1986** (2), fuse slot **F205** (item 5).

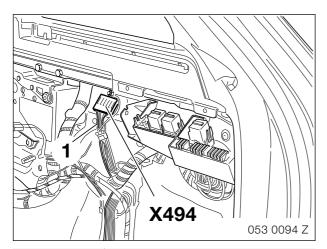
Insert a 50 A fuse (4) with collar nuts (5).



Cars after 10/2001 only

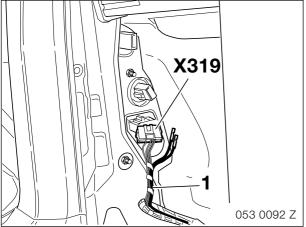
Connect branch **H** (1), red cable using a collar nut (3) to terminal 30 post **X1986** (2), fuse slot **F201** (item 1).

Insert a 50 A fuse (4) with collar nuts (5).



Lay the wiring harness along the standard wiring harness to the right.

Connect branch **E** (1), brown cable to the joint connector **X494**.



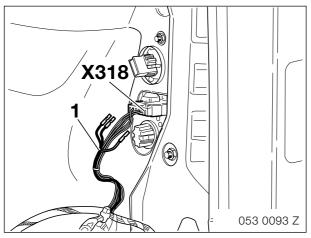
Lay branches **M1** and **M2** along the rear closing plate to left tail light.

Release plug **X319**.

Disconnect the connections from PIN 3, grey/violet cable, and PIN 4, blue/green cable, on plug **X319**, insulate them and tie them back on the wiring harness.

Connect branch **M1**, grey/violet cable, to plug **X319** in PIN 3.

Connect branch **M2**, blue/green cable, to plug **X319** in PIN 4.



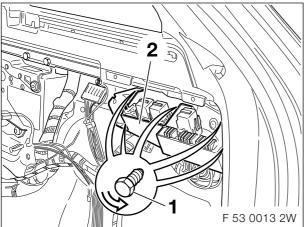
Lay branches **G1**, **G2** and **G3** (1) to the right tail light.

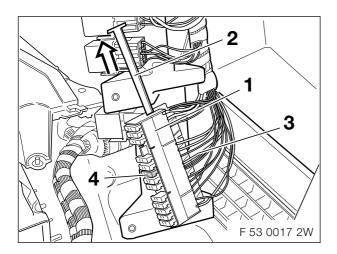
Release plug X318.

Disconnect the connections from PIN 2, black/ blue cable, PIN 3, blue/brown cable, and PIN 4, grey/white cable, on plug **X318**, insulate them and tie them back on the wiring harness.



Remove the screws (1) and swing the fuse box (2) to the side.

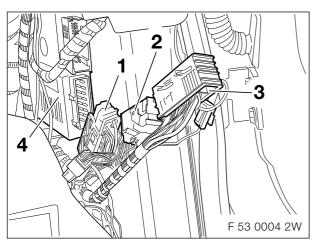




Lay branch \mathbf{F} (3), red/blue cable, to the fuse box. Take out fuse holder (1) and push out the interlock (2).

Connect branch **F** (3), red/blue cable, to fuse slot **F78**.

Insert the 20 A fuse (4) into slot **F78**.



Lay branches **B**, **C** and **D** along the right sill skirt to the front to light module A3 (4).

Disconnect and release the plugs (1, 2 and 3). Disconnect the connections from PIN 12, blue/brown cable, and PIN 14, black/blue cable, on plug **X38**, insulate them and tie them back on the wiring harness.

Connect branch **B1**, blue/brown cable, to PIN 12 and branch **B2**, black/blue cable, to PIN 14.

Disconnect the connections from PIN 2, grey/violet cable, and PIN 8, blue/green cable, on the black 15-pin plug **X12**, insulate them and tie them back.

Connect branch **C1**, grey/violet cable, to PIN 2 and branch **C2**, blue/green cable, to PIN 8. Disconnect the connection from PIN 17, grey/white cable, on the black 54-pin plug **X10117**, insulate it and tie it back. Connect branch **D1**, grey/white cable, to PIN 17 and branch **D2**, blue/brown/yellow cable, to PIN 35.

5. Coding / Concluding work

- Secure all plug connections again.
- Assemble the car following the instructions to dismantle it in reverse order.
- Conduct a brief test

Vehicles up to 10/2001

No coding is required.

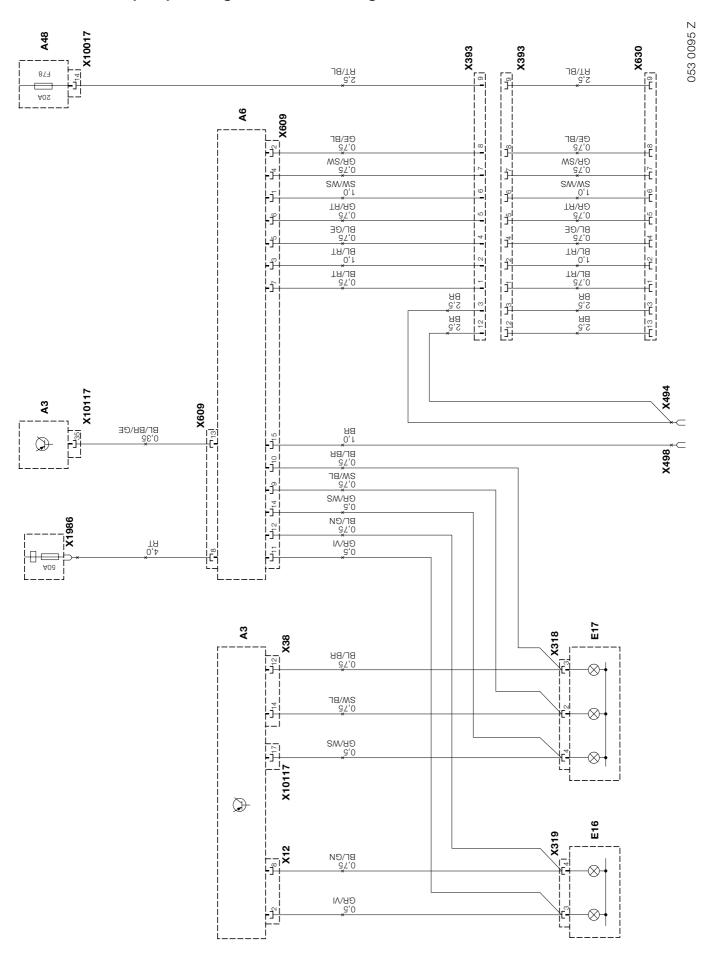
Vehicles after 10/2001

The towing hitch retrofit kit must be coded using the retrofit path.

During the coding process a sticker stating that the trailer stabilisation control coding has been completed must be printed out. Affix this sticker into the service manual.

- Check the light signals on the trailer socket.

6. BMW X5 (E53) towing hitch circuit diagram



6. BMW X5 (E53) towing hitch circuit diagram

Legend

Light module Trailer module Fuse box
Left tail light Right tail light
Light module, 15-pin black plug Light module, 15-pin white plug Right tail light Left tail light Connection plug, 12-pin black plug Joint connector terminal 31 Joint connector terminal 31 Trailer module, 15-pin black plug Trailer socket Terminal 30 distributor
Fuse holder A48 Light module, 54-pin black plug

Cable colours

RT	red
SW	black
GN	green
BR	brown
GE	yellow
BL	blue
OR	orange
VI	violet
GR	grey
WS	white