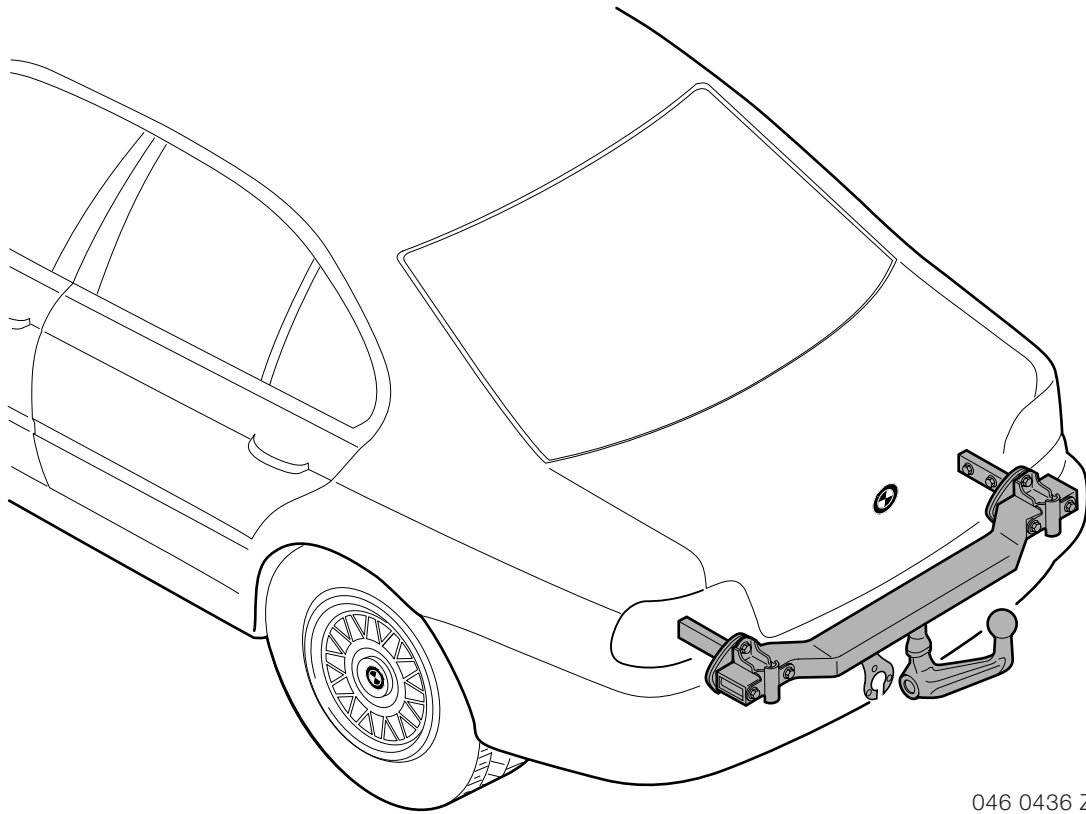




Parts and Accessories Installation Instructions



046 0436 Z

Towing hitch retrofit kit (removable ball head) BMW 3 Series (E46/2/3/4/C)

The installation time is approx. 5 -5.5 hours, but this may vary depending on the condition of the car and the equipment in it.

Retrofit kit No.	71 60 0 004 237
	71 60 0 007 024
	71 60 0 007 026
	71 60 0 142 614
	71 60 0 301 739
	71 60 9 410 800

Contents

Section	Page
Important information.....	3
1. Preparations.....	4
2. Installation and cabling diagram E46/2/4	5
3. Installation and cabling diagram E46/3	6
4. Installation and cabling diagram E46/C	7
5. Towing hitch wiring harness connection overview.....	8
6. To install and connect the towing hitch wiring harness	10
7. To install the towing hitch (E46/2/4/C only)	14
8. To install the towing hitch (E46/3 only)	17
9. To install the towing hitch socket	21
10. To affix the nose weight label and information label	22
11. To install the storage box for the ball head	23
12. Concluding work	24
13. Towing hitch circuit diagram.....	25

Important information

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

If the towing hitch is retrofitted in the Federal Republic of Germany, it must be subjected to an acceptance test pursuant to § 19 of the Road Traffic Act and entered in the vehicle registration document. If the car is or is to be registered outside the Federal Republic of Germany, the appropriate national regulations apply.

Installation information

On cars with the M aerodynamics package (SA 715 and SA 716) the frame and the cover for the bumper trim must also be ordered (see EPC for part numbers).

All work is shown on a LHD model. Some of the connections are on the other side on RHD models.

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

Completely remove the underseal or body sealing compound on the car near the support areas for the towing hitch.

Then treat the bare metal body areas with a primer approved by BMW.

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.

Information on operation

Care and maintenance instructions are set out in the enclosed supplementary owner's manual for the towing hitch.

Required tools and equipment

Philips screwdriver

Flat screwdriver

Ring spanner, 13 mm

Open-ended spanners, 8 mm and 13 mm

Torx wrench Tx50

1/2 inch reversible ratchet

1/2 inch sockets, 10 mm, 13 mm and 16 mm

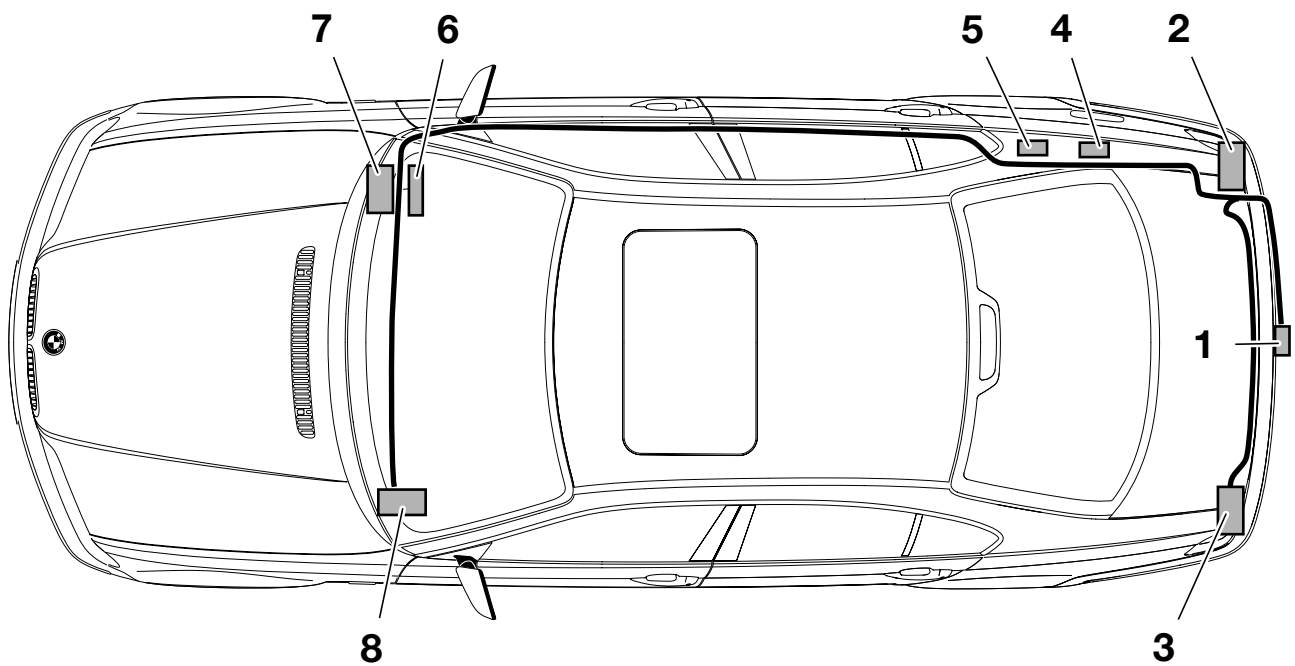
Compass saw / Pneumatic saw

1/2 torque wrench

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:	
Glove compartment	51 17 360
A pillar trim in the right footwell	51 43 075
Left footwell trim	51 45 185
Light switch centre	61 31 033
Front right door sill strip	51 47 000
Rear right door sill trim	51 47 030
B pillar trim at the bottom right	51 43 150
Rear seat bench	52 24 005
Rear seat backrest	52 24 010
Boot trim on the right.	51 47 161
Boot sill trim	51 46 050
Boot trim in front of the spare wheel trough (E46/3 only)	51 47 131
Rear bumper	51 12 000
Rear impact absorbers (no longer required)	51 12 742
Rear right side trim (E46/C only)	51 43 012

2. Installation and cabling diagram E46/2/4

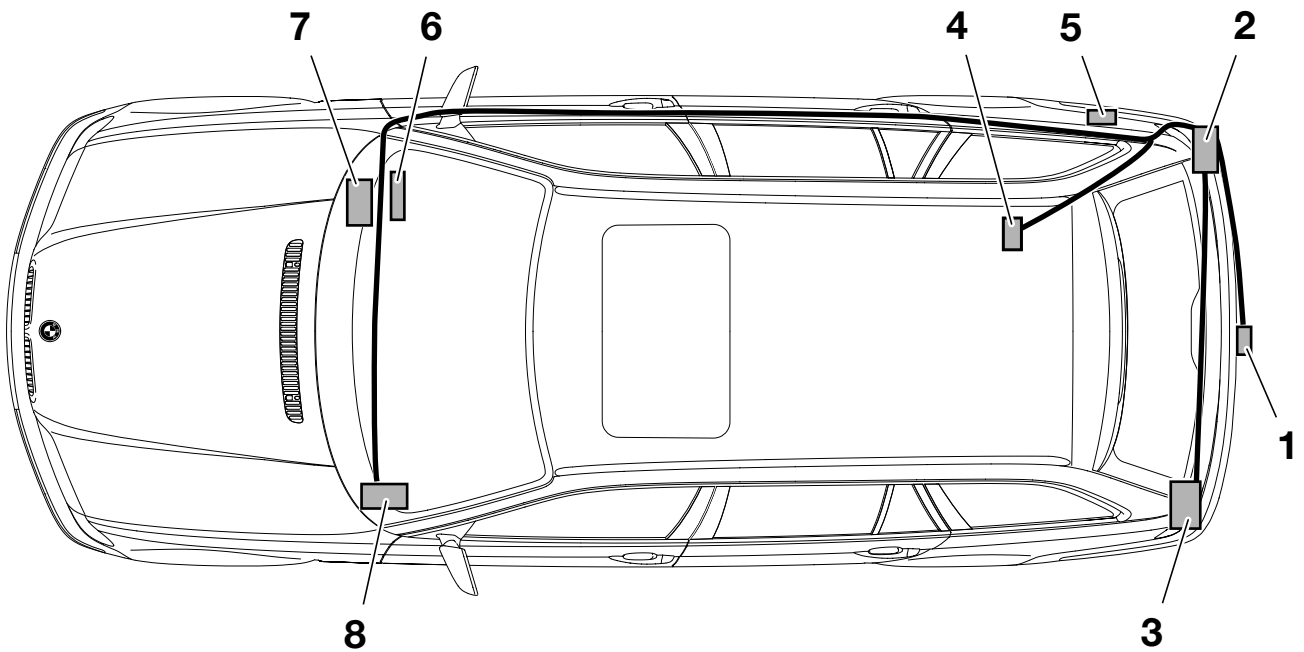


046 0437 Z

Legend

- 1 Towing hitch socket holder
- 2 Right tail light
- 3 Left tail light
- 4 Trailer module
- 5 Earth post X498
- 6 Fuse holder A46
- 7 Positive battery post
- 8 Light switch centre

3. Installation and cabling diagram E46/3

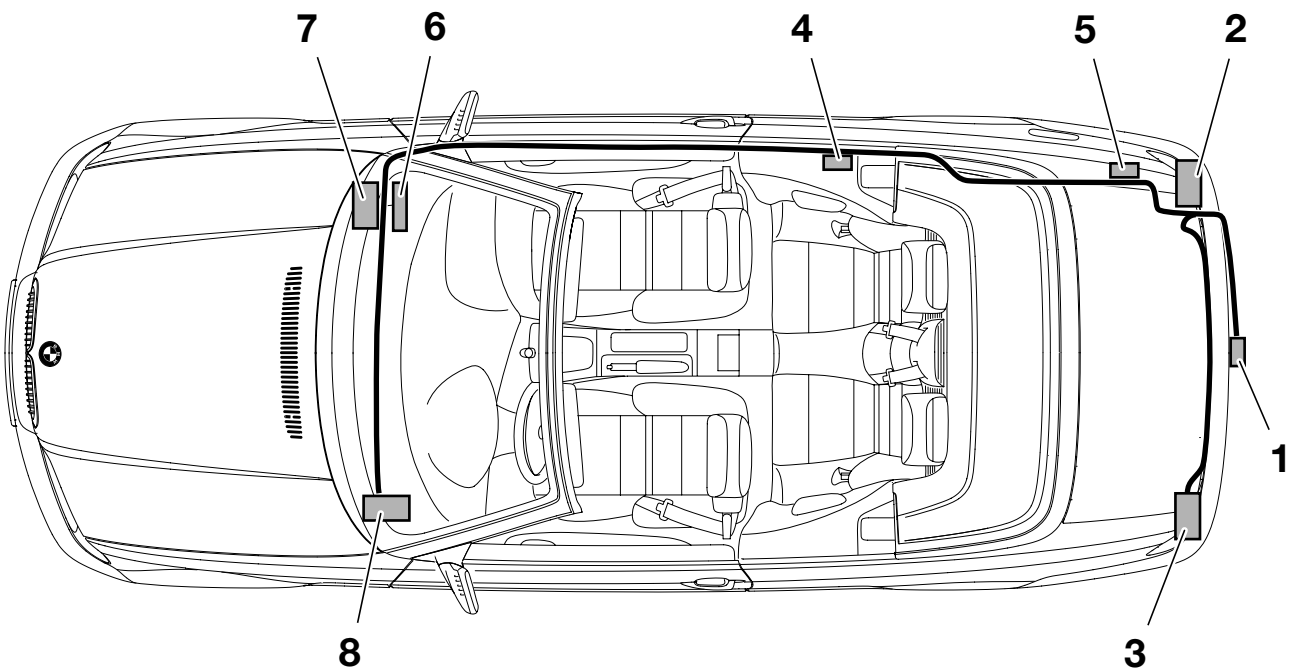


046 0438 Z

Legend

- 1 Towing hitch socket holder
- 2 Right tail light
- 3 Left tail light
- 4 Trailer module
- 5 Earth post X498
- 6 Fuse holder A46
- 7 Positive battery post
- 8 Light switch centre

4. Installation and cabling diagram E46/C

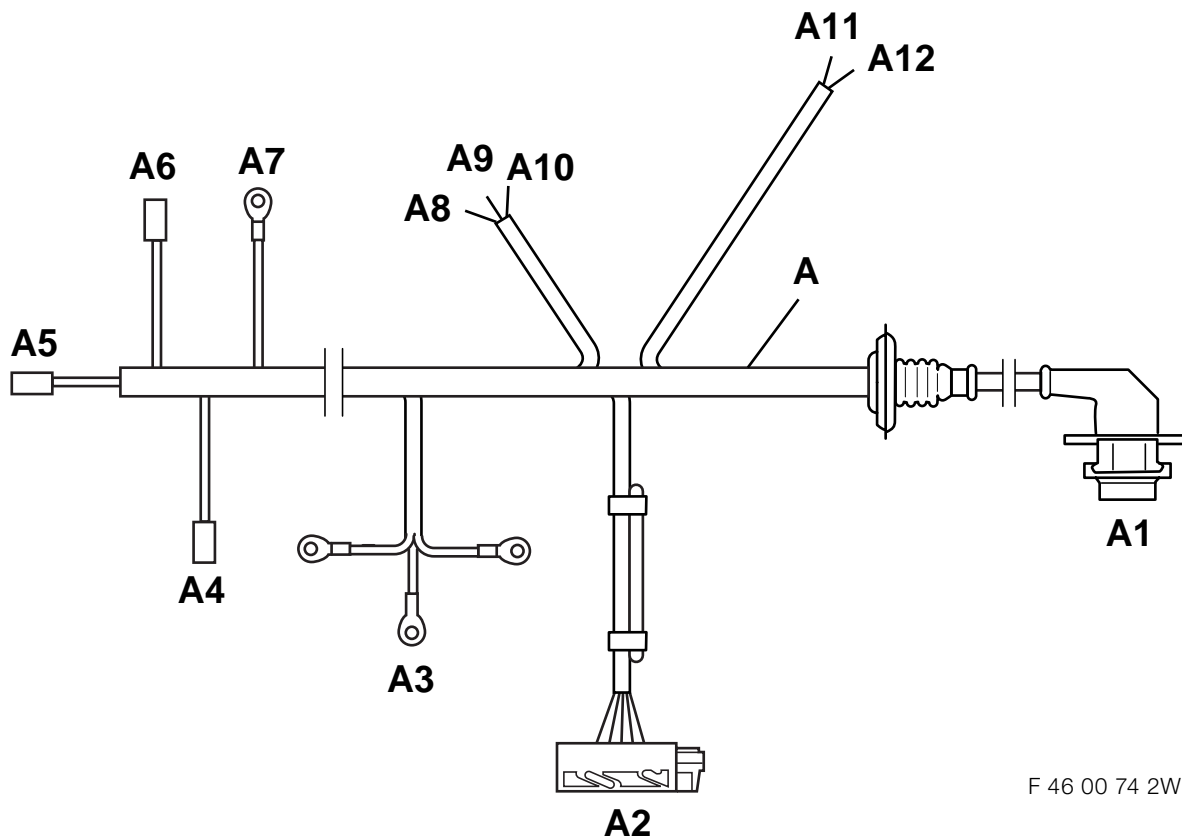


046 0439 Z

Legend

- 1 Towing hitch socket holder
- 2 Right tail light
- 3 Left tail light
- 4 Trailer module
- 5 Earth post X498
- 6 Fuse holder A46
- 7 Positive battery post
- 8 Light switch centre

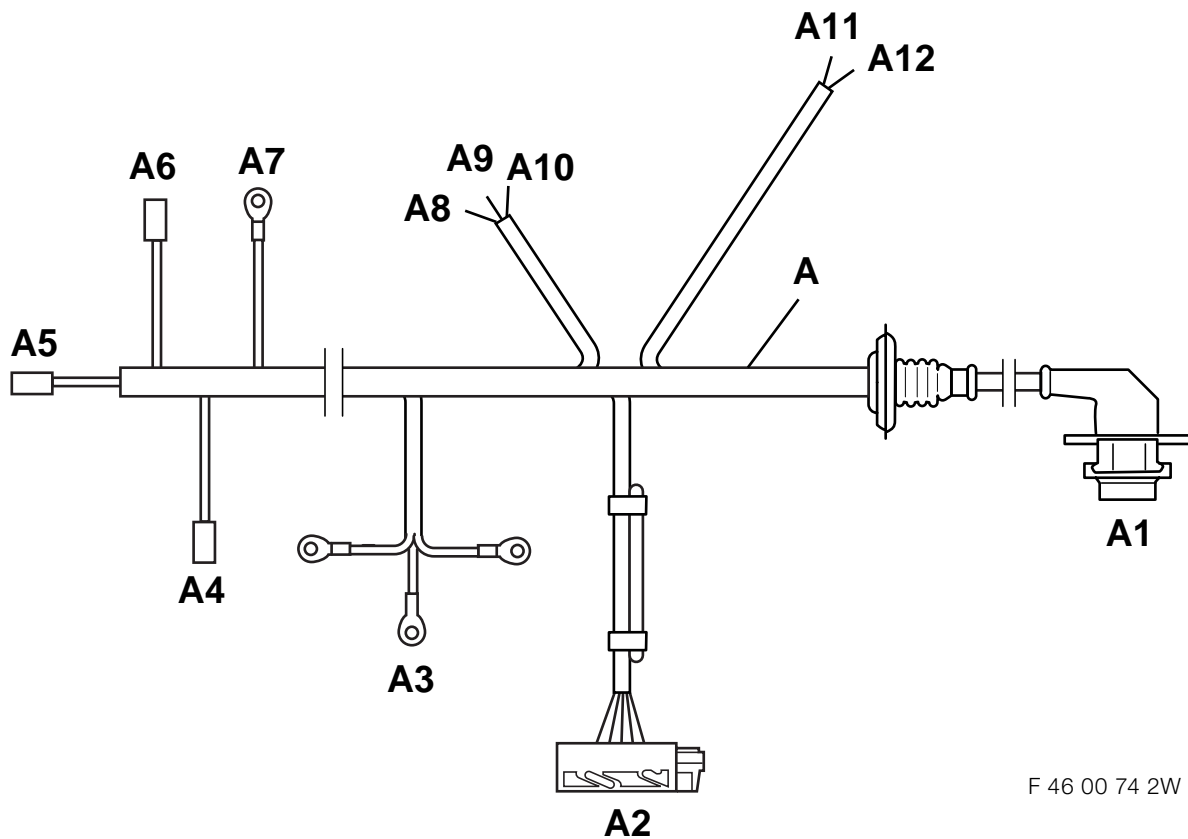
5. Towing hitch wiring harness connection diagram



F 46 00 74 2W

Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
A	Towing hitch wiring harness	---	---	---	---
A1	13-pin black plug	---	---	To the towing hitch socket holder	X630
A2	15-pin black plug	---	---	To the trailer module	X609
A3	Cable eyelets 6 mm	Terminal 31	BR 2,5 mm ²	In the boot on the right on the earth post	X498
A4	Connection contact	Terminal 30	RT/BL 2,5 mm ²	To fuse holder A46	X10015 PIN 7
A5	Connection contact	---	BL/BR/GE 0.35 mm ²	To light switch centre	X12 PIN 9
A6	Connection contact	Reversing light	BL/GE 0.75	To the joint connector box above the fuse holder A46	X428
A7	Cable eyelets 6 mm	Terminal 30	RT/VI 4,0 mm ²	To positive battery post Fuse F107	X9

5. Towing hitch wiring harness connection diagram

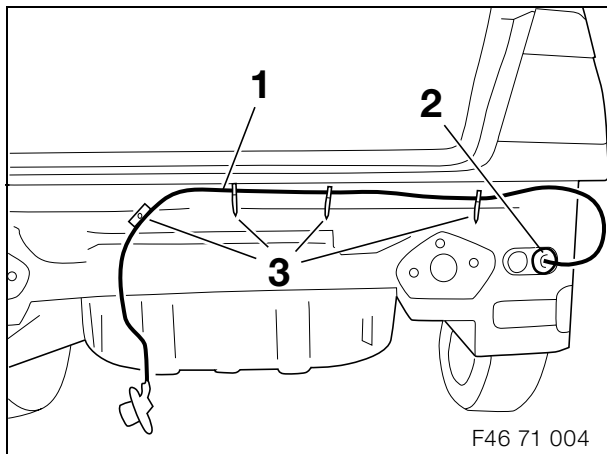


F 46 00 74 2W

Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
A8*	Connection cable	Terminal 58 r	GR/GE 0.5 mm ²	To the plug on the right tail light E46/4 to 09/01 and all E46/2/3/C E46/4 from 09/01	X318 PIN 5 PIN 5
A9*	Connection cable	Terminal 54	SW/BL 0.75 mm ²	To the plug on the right tail light E46/4 to 09/01 and all E46/2/3/C E46/4 from 09/01	X318 PIN 6 PIN 8
A10*	Connection cable	Terminal 49 r	BL/BR 0.75 mm ²	To the plug on the right tail light E46/4 to 09/01 and all E46/2/3/C E46/4 from 09/01	X318 PIN 2 PIN 7
A11*	Connection cable	Terminal 58 l	GR/VI 0.5 mm ²	To the plug on the left tail light E46/4 to 09/01 and all E46/2/3/C E46/4 from 09/01	X319 PIN 2 PIN 8
A12*	Connection cable	Terminal 49 l	BL/GN 0.75 mm ²	To the plug on the left tail light E46/4 to 09/01 and all E46/2/3/C E46/4 from 09/01	X319 PIN 5 PIN 6

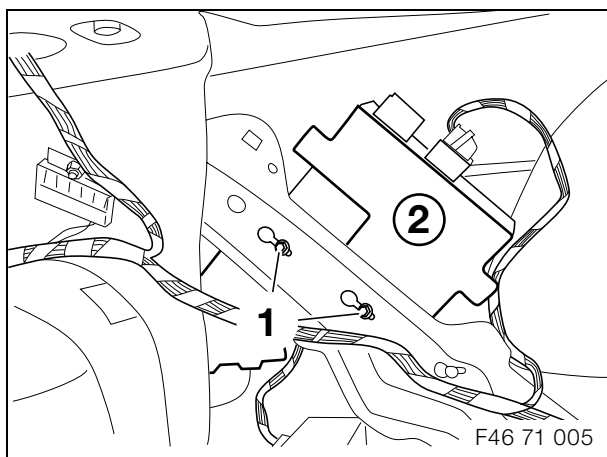
* The connection cables **A8 - A12** are to be connected to the corresponding outfeed cables from plugs **X318** and **X319** using the enclosed insulating-piercing connectors.

6. To install and connect the towing hitch wiring harness



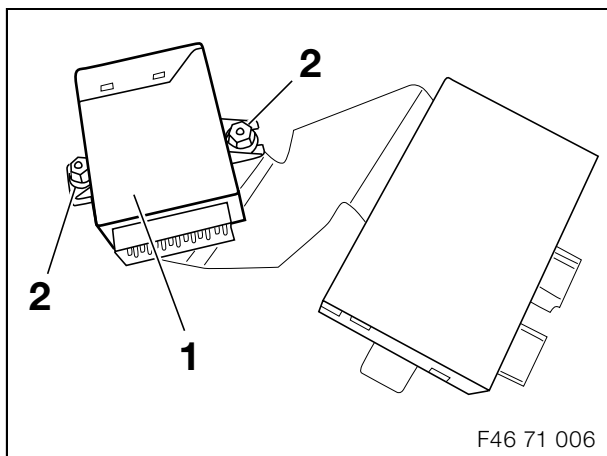
Remove the plastic stopper on the right and thread the wiring harness (1) into the interior.

Insert the rubber grommet and secure the wiring harness (1) to the car using cable holders (3).



E46/2/4 with PDC only (SA 508)

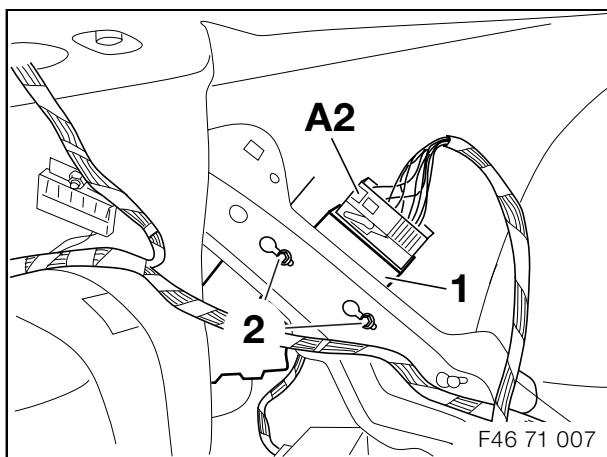
Undo the screws (1) and remove the PDC holders (2).



Secure the trailer module (1) to the PDC holder using two plastic nuts (2).

Install the PDC holder again.

Connect branch **A2** to the trailer module (1).



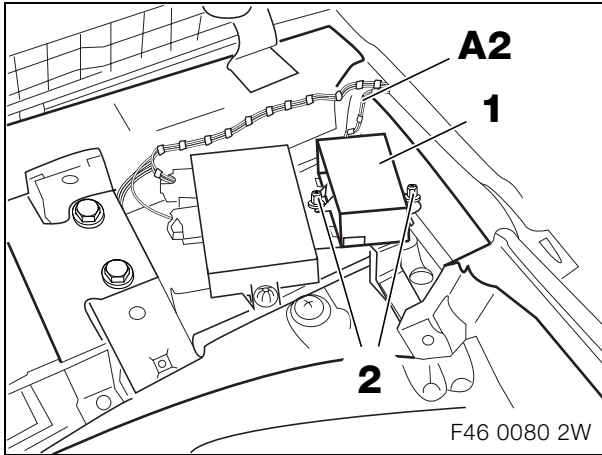
E46/2/4 without PDC only (SA 508)

Push speed nuts on to the trailer module (1).

Secure the trailer module (1) to the body support using self-tapping screws (2).

Connect branch **A2** to the trailer module (1).

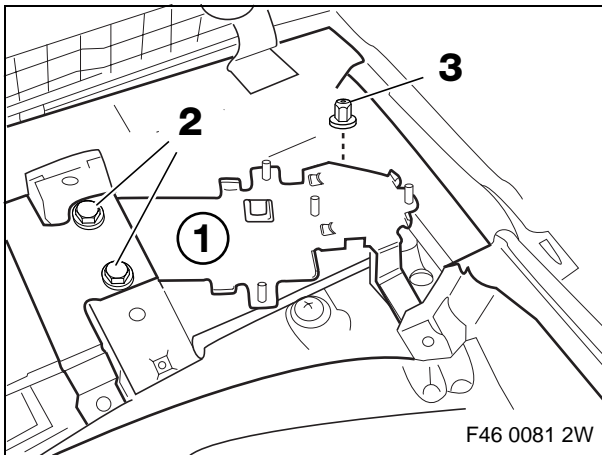
6. To install and connect the towing hitch wiring harness



E46/3 with PDC (SA 508), on-board monitor (SA 602) or navigation system (SA 606/609) only

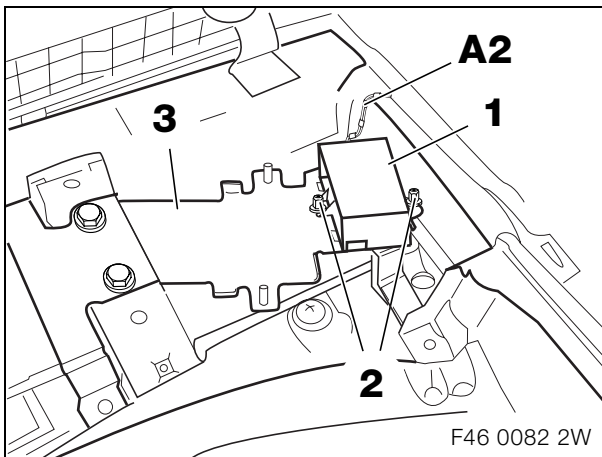
Bolt the trailer module (1) to the video module holder using two plastic nuts (2).

Lay branch **A2** to the trailer module (1) and connect it there.



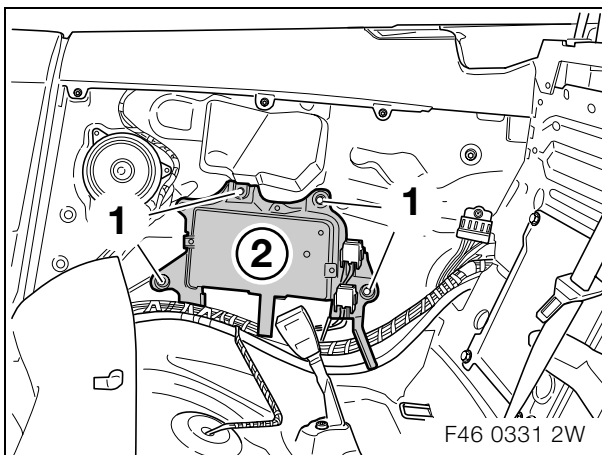
E46/3 without PDC (SA 508), on-board monitor (SA 602) or navigation system (SA 606/609) only

Secure the video module holder (1) with speed nuts, hexagonal screws (2) and plastic nuts (3).



Bolt the trailer module (1) to the video module holder (3) using two plastic nuts (2).

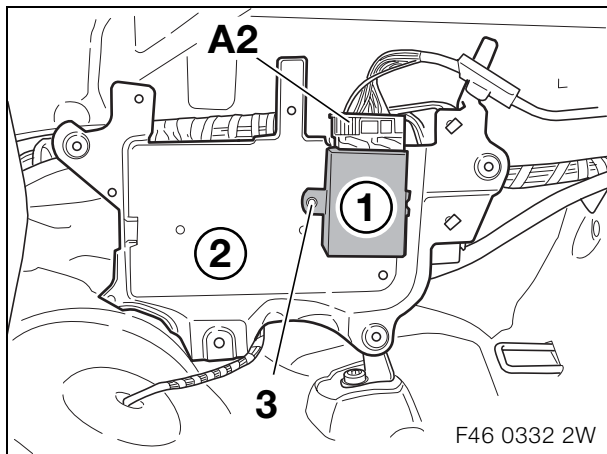
Lay branch **A2** to the trailer module (1) and connect it there.



E46/C only

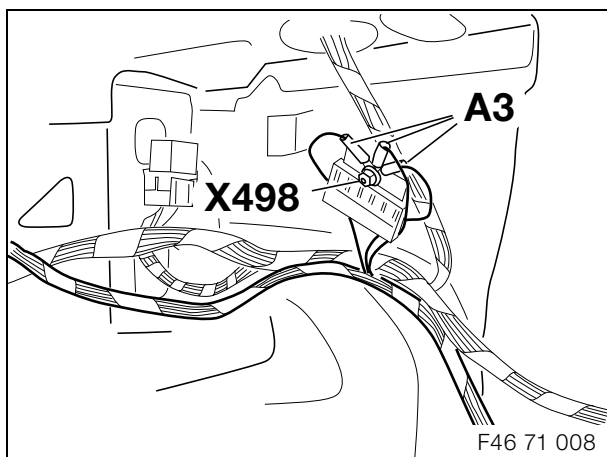
Undo the screws (1) and pull the retaining plate (2) downwards.

6. To install and connect the towing hitch wiring harness



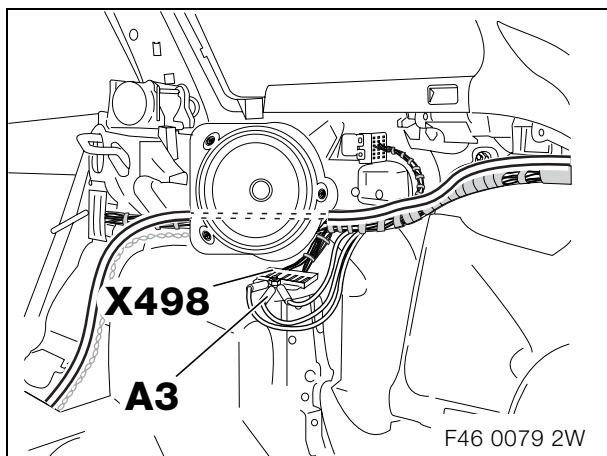
Attach the trailer module (1) to the retaining plate (2) and secure it with two plastic nuts (3).

Connect branch **A2** to the trailer module (1).



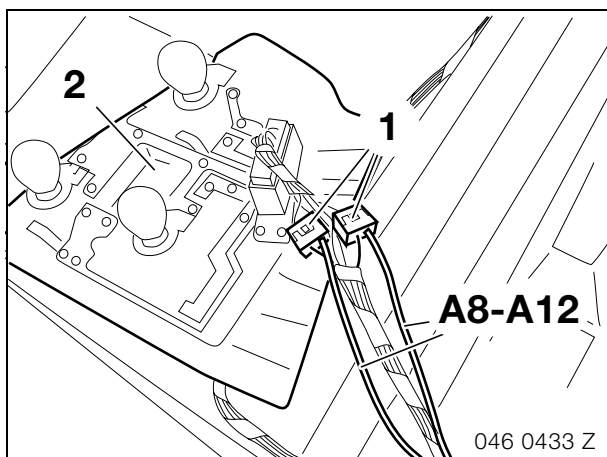
E46/2/4/C only

Connect branch **A3** to earth post **X498**.



E46/3 only

Connect branch **A3** to earth post **X498**.

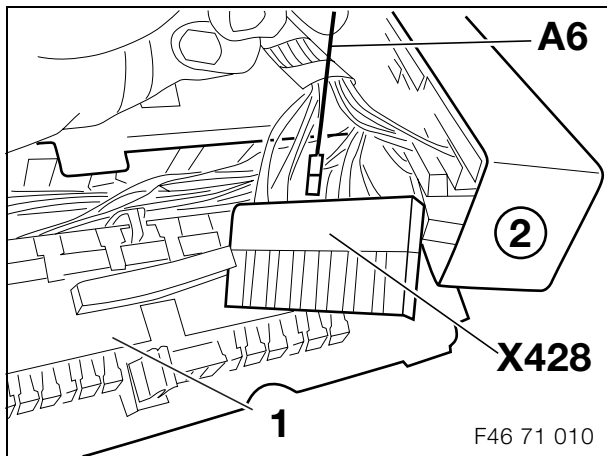


All cars

Connect branches **A8-A12** to the right and left tail lights (2) to the cables of the same colour using insulation-piercing connectors (1).

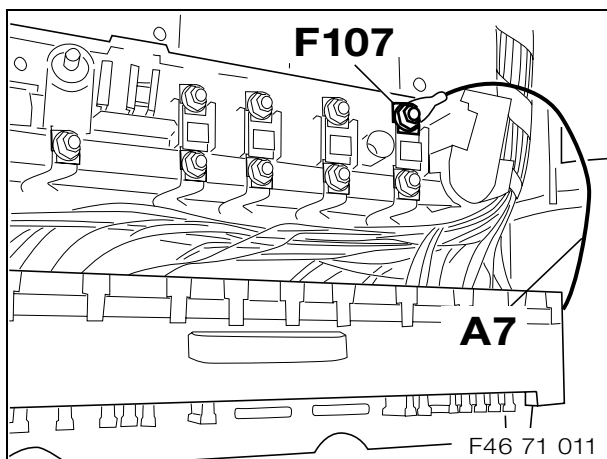
Lay branches **A4-A7** along the standard wiring harness to the glove compartment.

6. To install and connect the towing hitch wiring harness



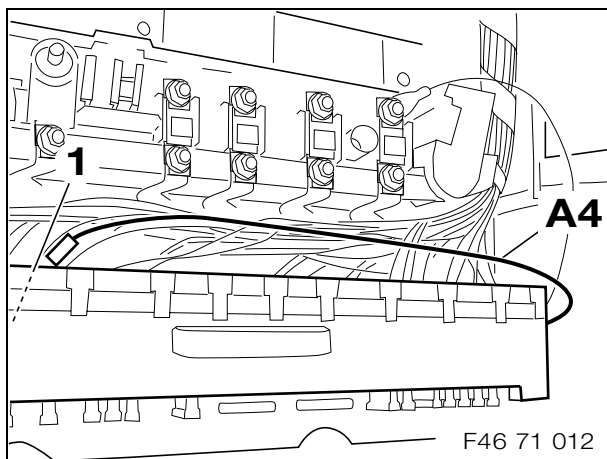
Remove the fuse holder (1) downwards and take off the joint connector box (2).

Connect branch **A6** to joint connector **X428**.



Remove the plastic cover from the fuse holder.

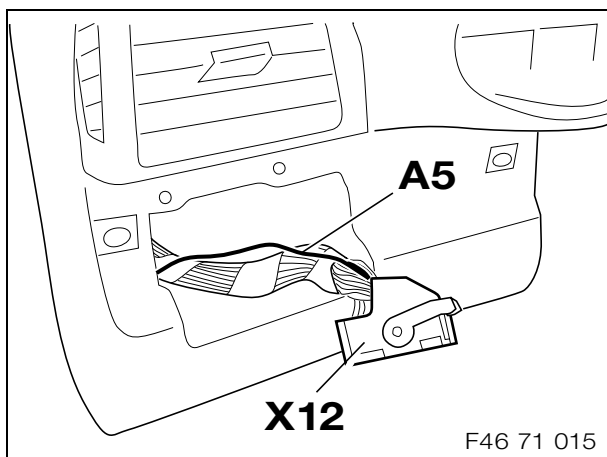
Connect branch **A7** to the battery positive post of fuse **F107**.



Lay branch **A4** to the fuse holder (1).

Connect branch **A4** to PIN 7 of the fuse holder (1)

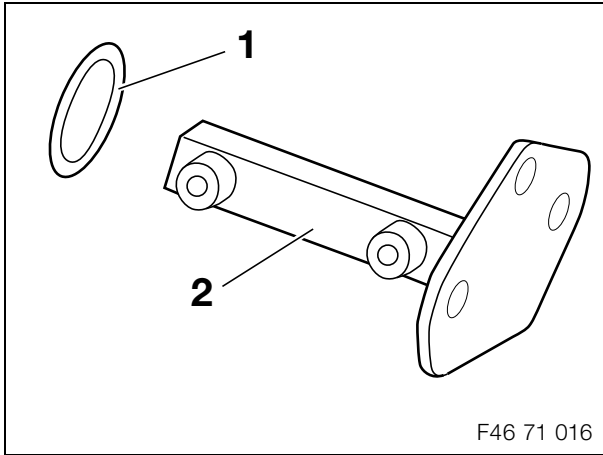
Insert the blade terminal fuse (20 A) into slot No. 44.



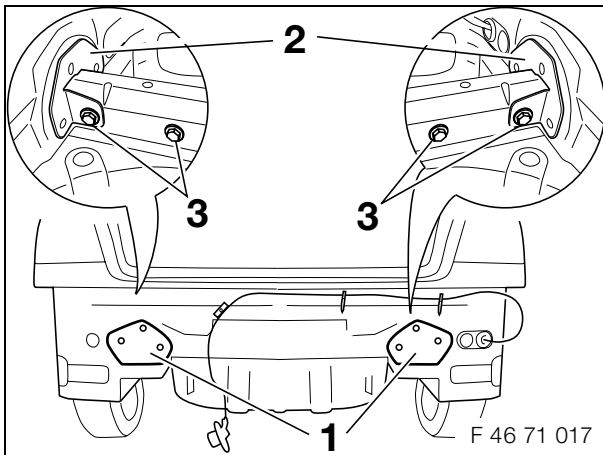
Lay branch **A5** to the installation site of the light switch centre.

Connect branch **A5** to PIN 9 in plug **X12**.

7. To install the towing hitch (E46/2/4/C only)



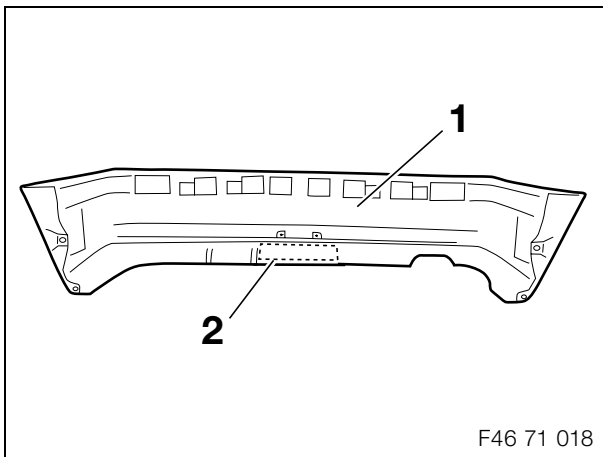
Affix the seal (1) in the centre of the left and right side member (2).



Push the side members (1) into position on both sides of the car.

Position the reinforcement bracket (2) from the boot side as shown.

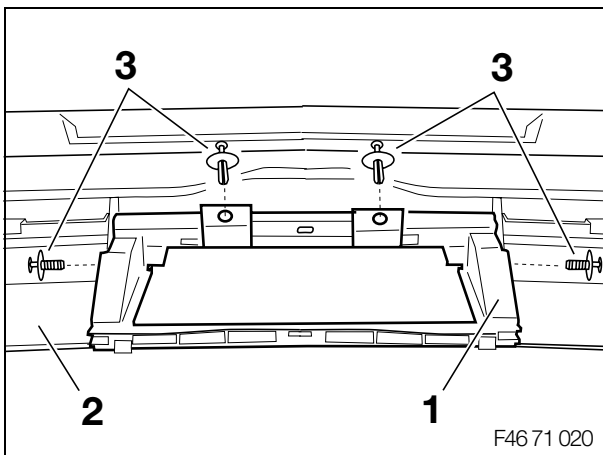
Tighten the hexagonal screws M10 x 30 mm (3) loosely.



E46/2/C to 03/03 and all E46/4 only

Remove the bumper trim (1) from the bumper support.

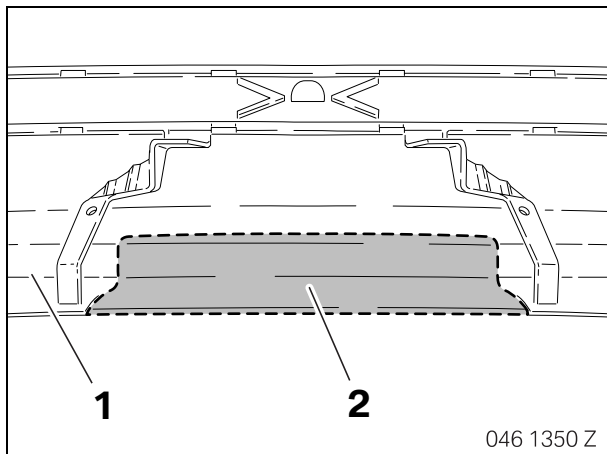
Cut out the bumper trim (1) around the embossed point (2).



E46/2/C to 03/03 and E46/4 to 09/01 only

Fit the frame (1) into the bumper trim (2) and secure it with the enclosed expanding rivets (3).

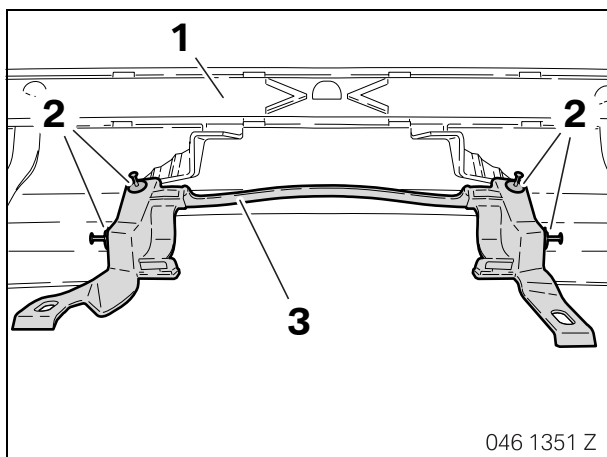
7. To install the towing hitch (E46/2/4/C only)



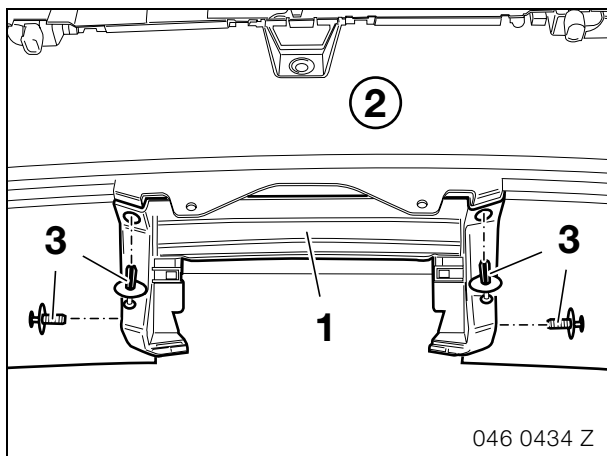
E46/2/4/C after 03/03 only

Remove the bumper trim (1) from the bumper support.

Cut out the bumper trim (1) around the embossed point (2).

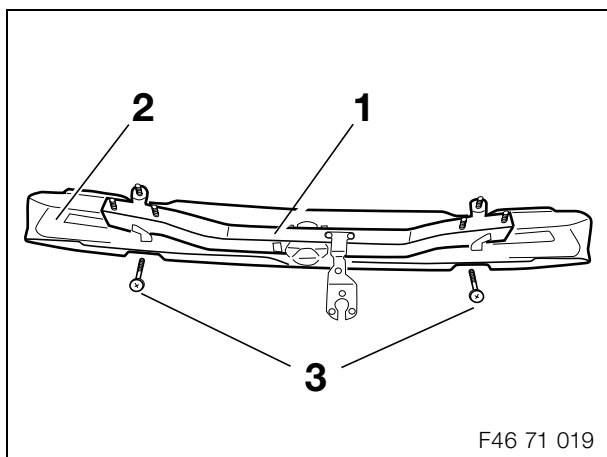


Fit the frame (3) into the bumper trim (1) and secure it with the enclosed expanding rivets (2).



E46/4 from 09/01 only

Fit the frame (1) into the bumper trim (2) and secure it with the enclosed expanding rivets (3).

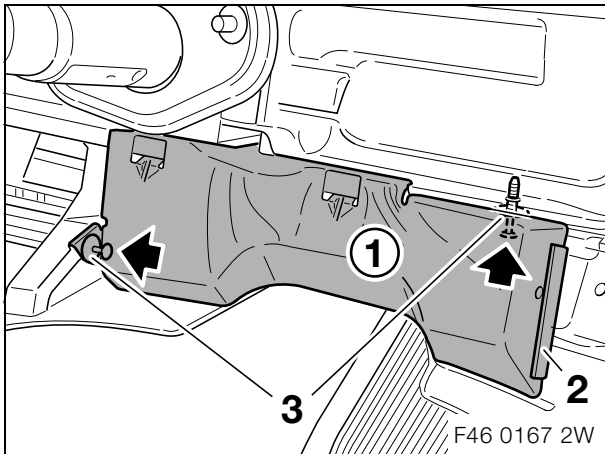


All E46/2/4/C

Place the towing hitch (1) into the bumper support (2) and tighten the screws with a torque of 41 Nm.

Assemble the support (2) and bumper trim.

7. To install the towing hitch (E46/2/4/C only)

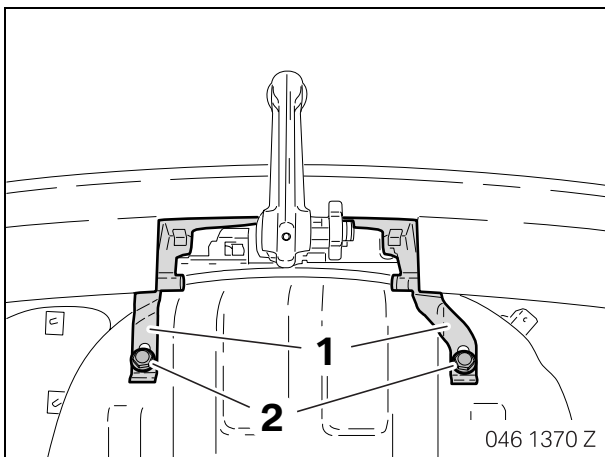


Fit the heat shield (1) into the bumper trim in the cut-out of the exhaust tail pipes and secure it with expanding rivets (3).

Place the edge guard (2) on the heat shield (1).

Align the bumper on the car. Tighten the screws and nuts in the following order

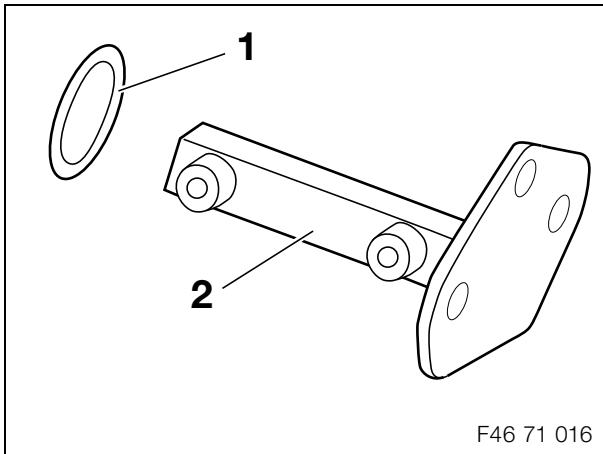
- Hexagonal nuts M10 with washers
Torque 59 Nm
- Hexagonal screw M10 x 30 mm
Torque 59 Nm



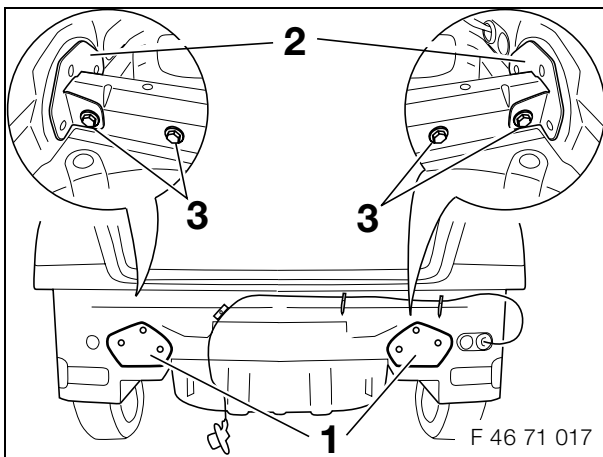
E46/2/4/C after 03/03 only

Secure the frame (1) using plastic nuts (2).

8. To install the towing hitch (E46/3 only)



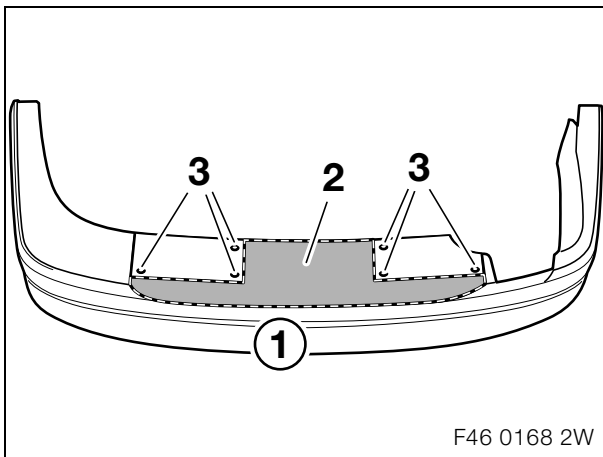
Affix the seal (1) in the centre of the left and right side member (2).



Push the side members (1) into position on both sides of the car.

Position the reinforcement bracket (2) from the boot side as shown.

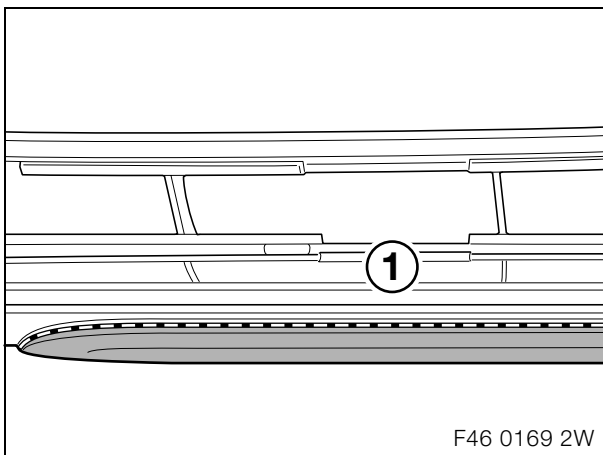
Tighten the hexagonal screws M10 x 30 mm (3) loosely.



Cut out the template (2) and affix it to the bumper trim (1).

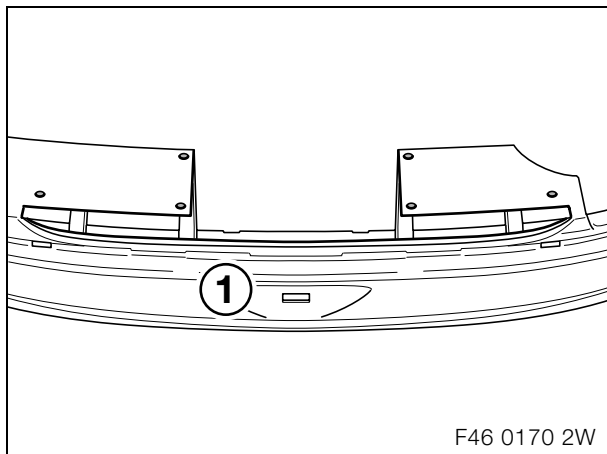
Saw out the bumper trim along the dotted line.

Mark the holes (3) using the template (2) and drill them with 6.5 mm drill bit.

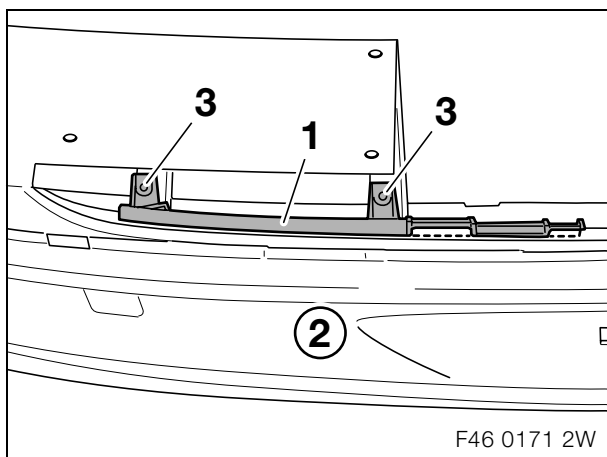


Turn over the bumper trim (1) and cut it out along the dotted line.

8. To install the towing hitch (E46/3 only)

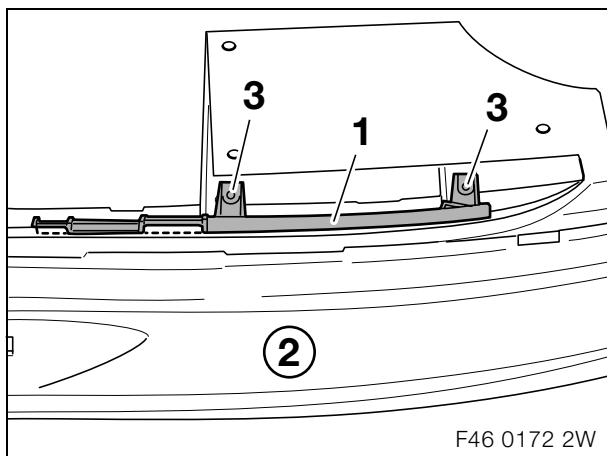


The figure shows the bumper trim (1) after completing all the sawing work.



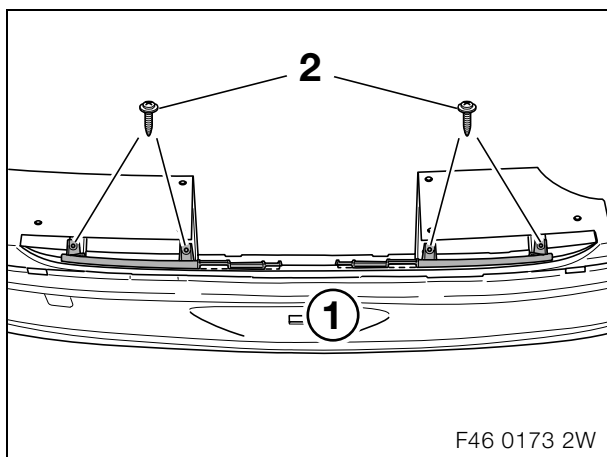
Insert the right diffuser holder (1) on the bumper trim (2).

Mark the holes (3) on the bumper trim (2) and drill them with a 5 mm drill bit.



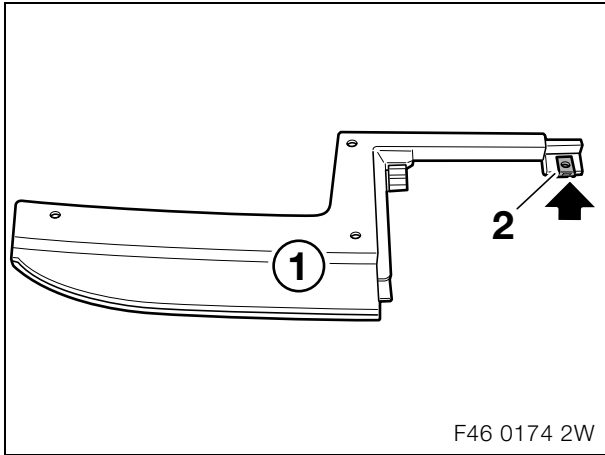
Insert the left diffuser holder (1) on the bumper trim (2).

Mark the holes (3) on the bumper trim (2) and drill them with a 5 mm drill bit.

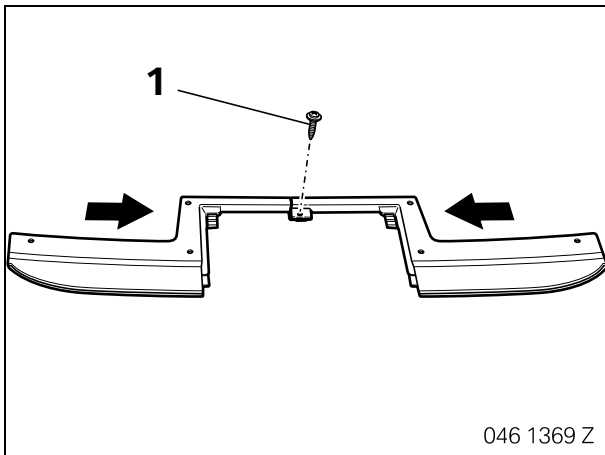


Insert the diffuser holders into the bumper trim (1) and secure them with hexagonal self-tapping screws (2) and speed nuts.

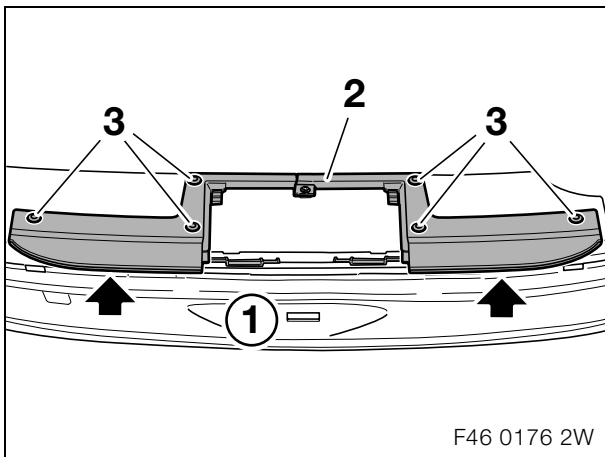
8. To install the towing hitch (E46/3 only)



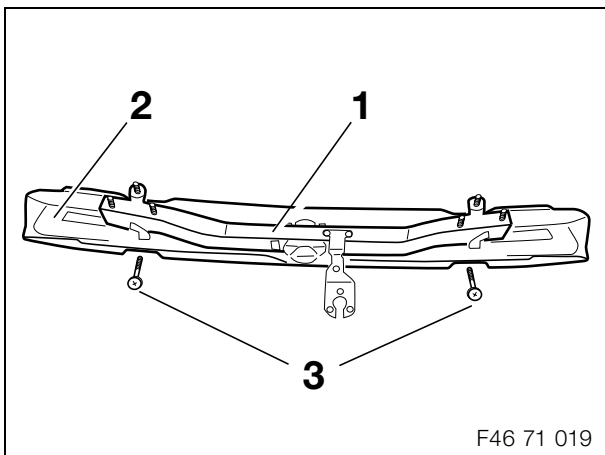
Place speed nuts (2) on the right diffuser (1).



Place the right and left diffusers on top of each other and connect them with a hexagonal self-tapping screw (1).



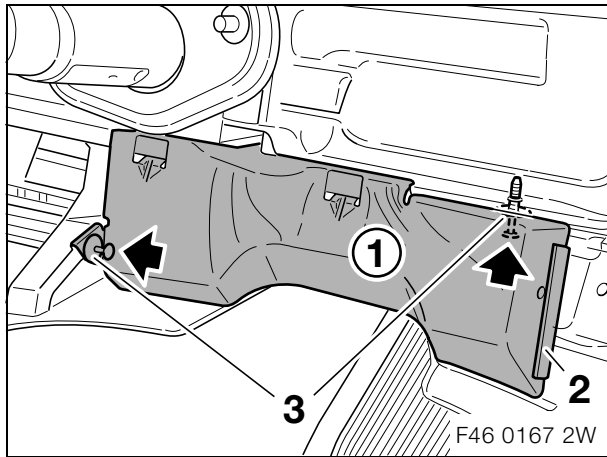
Place the diffusers (2) on to the bumper trim (1) and secure them to the bumper trim (1) with expanding rivets (3).



Place the towing hitch (1) into the bumper support (2) and tighten the screws with a torque of 41 Nm.

Assemble the support (2) and bumper trim.

8. To install the towing hitch (E46/3 only)



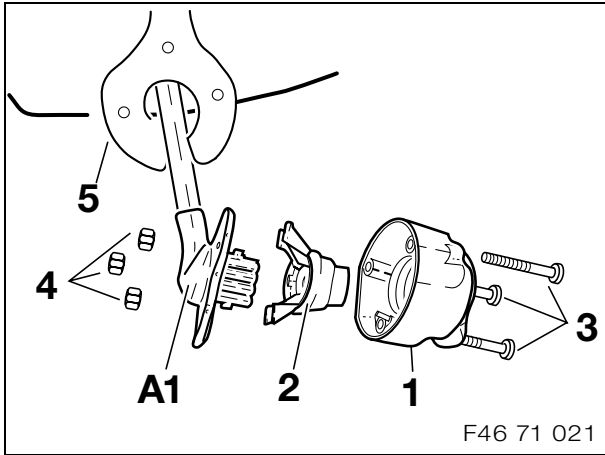
Fit the heat shield (1) into the bumper trim in the cut-out of the exhaust tail pipes and secure it with expanding rivets (3).

Place the edge guard (2) on the heat shield (1).

Align the bumper on the car. Tighten the screws and nuts in the following order

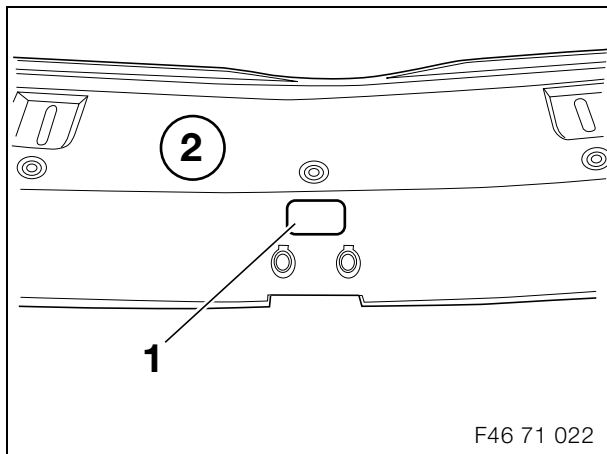
- Hexagonal nuts M10 with washers
Torque 59 Nm
- Hexagonal screw M10 x 30 mm
Torque 59 Nm

9. To install the trailer socket

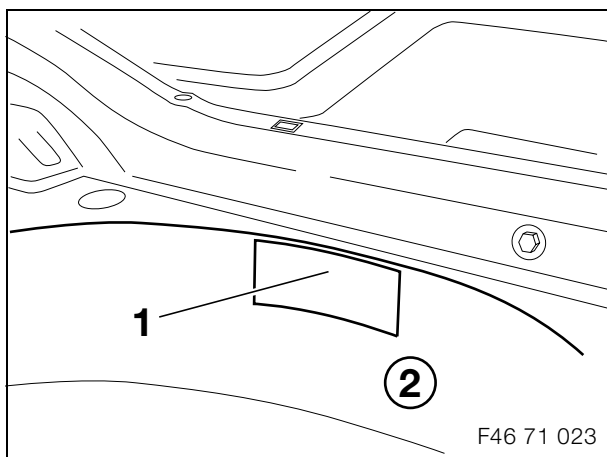


Place the trailer socket (1) and intermediate section (2) to the trailer plug **A1** and secure it to the towing hitch (5) with Philips screws (3) and nuts (4).

10. To affix the nose weight label and information label

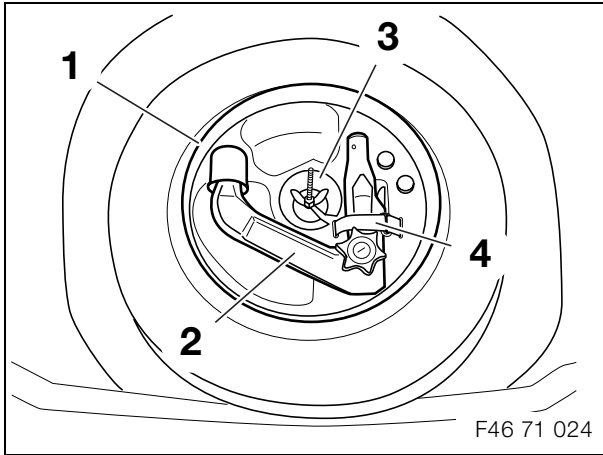


Affix the nose weight label (1) to the boot sill trim (2).



Affix the label (1) with instructions for use in the spare wheel trough (2).

11. To install the storage box for the ball head



Place the polystyrene mounting (1) for the ball head (2) in the spare wheel trough and secure it with the metal holder (3).



The ball head (2) must always be secured with the Velcro fastening (4). ◀

12. Concluding work

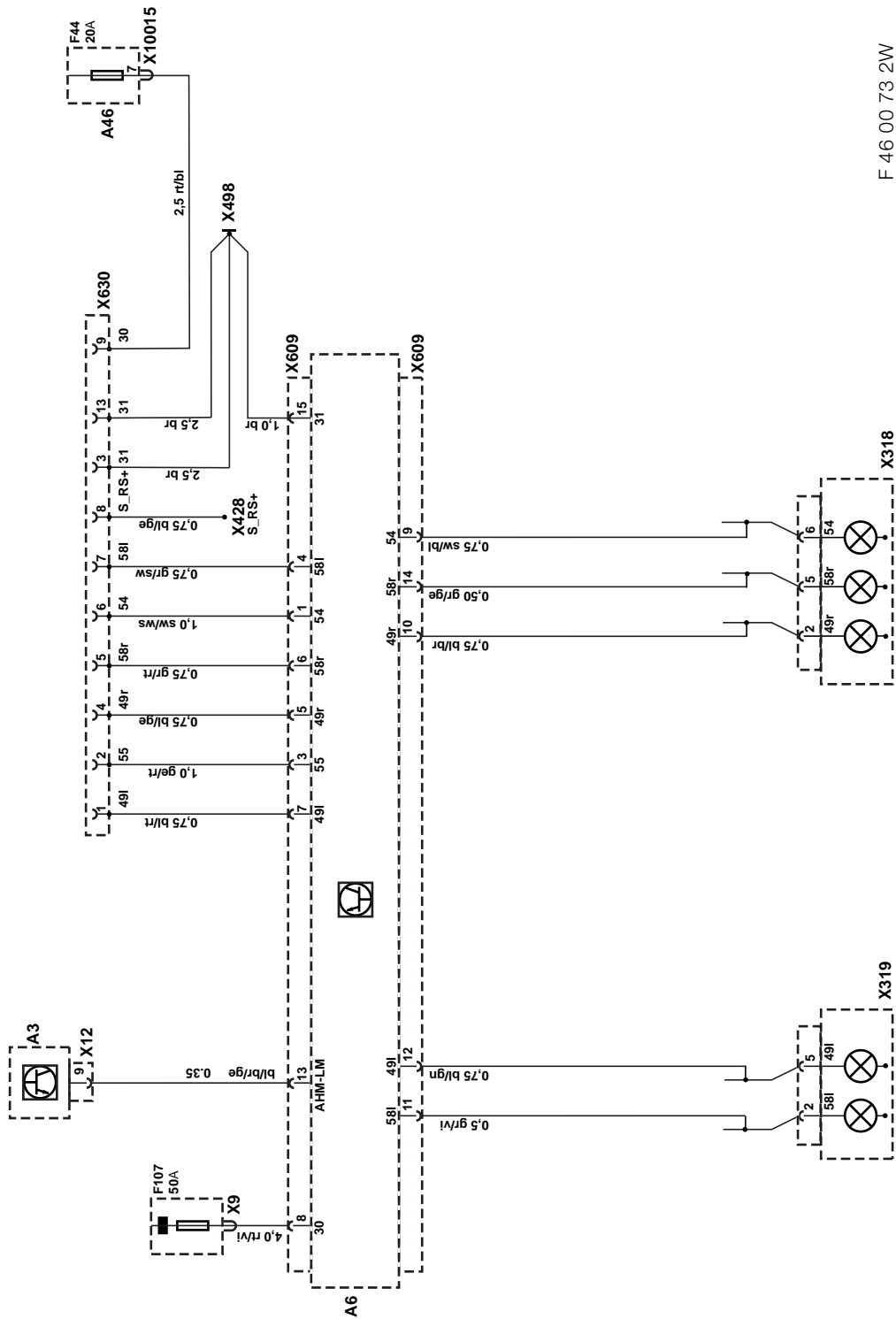
- Fit the ball head as set out in the enclosed instructions for use and ensure that the head moves easily and is secure.
- Connect the negative pole of the battery.
- Check the light signals on the trailer socket.
- Assemble the car again following the instructions to dismantle it in reverse order.
- Conduct a brief test.



This towing hitch retrofit kit does not require coding. ◀

13. Towing hitch circuit diagram

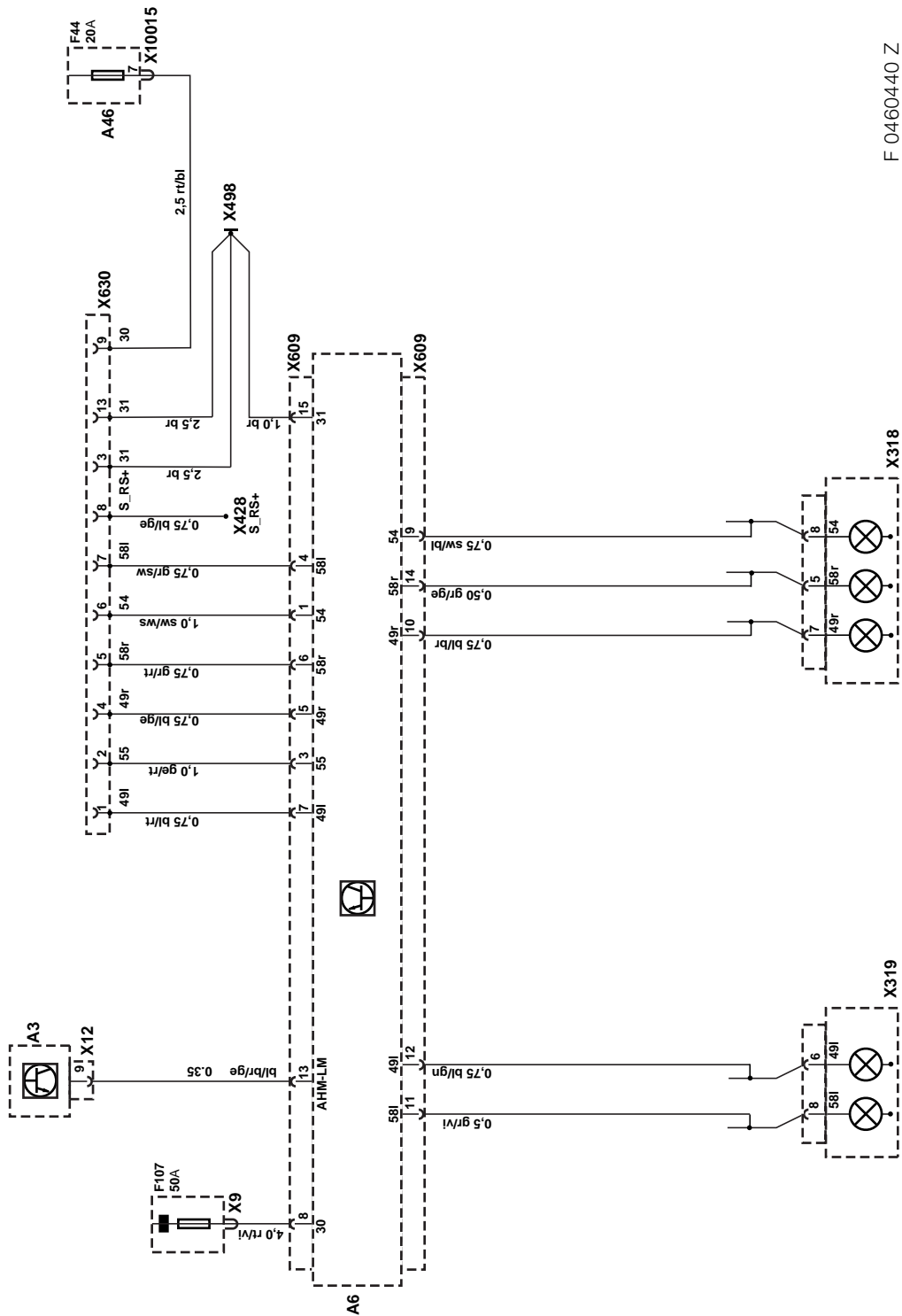
E46/4 to 09/01 and all E46/2/3/C only



F 46 00 73 2W

13. Towing hitch circuit diagram

E46/4 from 09/01 only



F 0460440 Z

13. Towing hitch circuit diagram

Legend

A3	Light switch centre
A6	Trailer module
A46	Fuse holder
X9	Terminal 30
X12	Light switch centre
X428	Reversing signal connector
X498	Terminal 31 connector
X609	Trailer module
X630	13-pin trailer socket
X318	Right tail light
X319	Left tail light
X10015	Fuse holder I A46

Cable colours

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