

Original BMW Parts and Accessories. Installation Instructions.



Interior Rear-View Mirror With Integral Garage Door Opener Retrofit Kit.

BMW 2 Series (F22, F23)

BMW 3 Series (F30, F31, F34, G20)

BMW 4 Series (F32, F33, F36)

BMW X1 Series (F48)

BMW X2 Series (F39)

These installation instructions only apply to the cars listed in the EPC, but are not valid for cars with a separate high beam assistance camera on the foot of the mirror.

Retrofit kit numbers

51 16 2 471 107 Interior rear-view mirror with integral garage door opener

51 16 2 472 237 Interior rear-view mirror with integral garage door opener

Installation time

The installation time is **approx. 0.25 hours**. This may vary depending on the condition of the car and its equipment package.

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 vehicles 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.

If you experience installation or functional problems, restrict troubleshooting to approx. 0.5 hours for mechanical work and 1.0 hour for electrical work.

To avoid unnecessary extra work and/or costs, send an inquiry straight away to the technical parts support team via the Aftersales Assistance Portal (ASAP).

Quote the following information:

- VIN,
- 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 supplied in 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 other text.

Installation information

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

Additional cables/wires that are installed must be secured with cable ties. If the specified PIN chambers are occupied, bridges, double crimps, or twin-lead terminals must be used.

The colours of the cables in the car may differ depending on the year of manufacture and model. In this case refer to the specified PIN chambers.

All illustrations show LHD (left-hand drive) cars; proceed similarly on RHD (right-hand drive) cars.

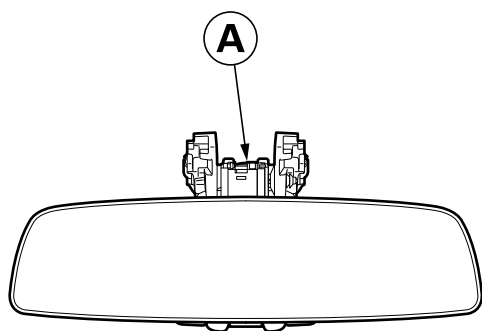
Special tools required

Refer to the relevant ISTA/AIR repair manual for details of the special tool required.

Table of contents

Section	Page
1. Parts list for retrofit kit	4
2. Preparatory work	5
3. Connecting and installing the interior rear-view mirror with integral garage door opener	6
4. Wiring diagram for F22, F23, F30, F31, F32, F33, F34, F36, F39, F48	7
5. Wiring diagram for G20	8
6. Concluding work	9

1. Parts list for retrofit kit



Legend

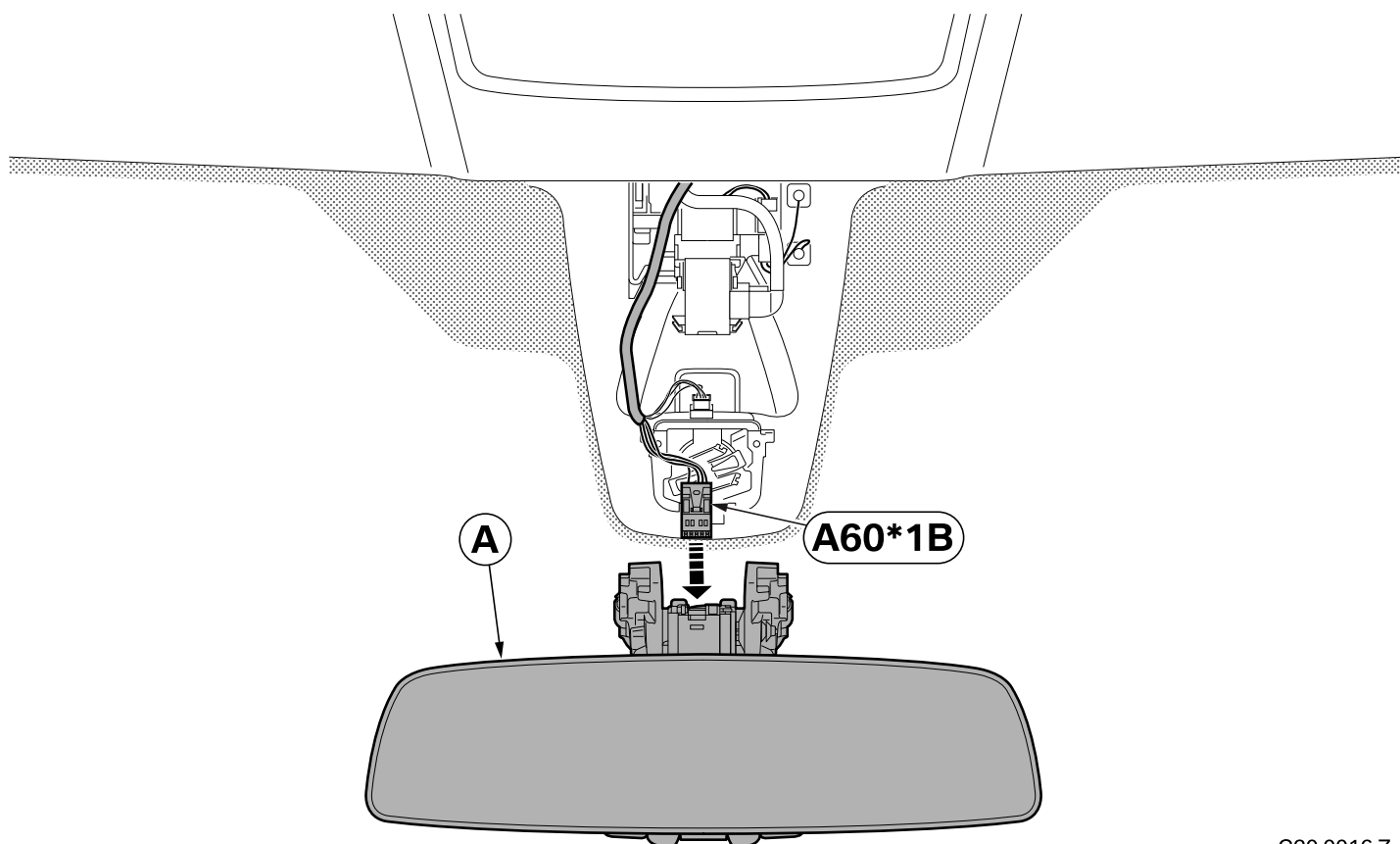
- A** Interior rear-view mirror with integral garage door opener
- B** Owner's manual

G20 0015 Z

2. Preparatory work

	ISTA/AIR No.
Disconnect all negative battery cables	61 20 900
Release and disconnect various plug connections	61 13 ...
Cut, strip and crimp cables	61 11 ...
Open the plug housing and remove the contacts from various connection systems	61 13 ...
Instructions for handling the documents: Repair manual, technical data, tightening torques	00 11 ...
Instructions for handling wiring harnesses and cables	61 00 ...
The following components must be removed first of all	
Interior rear-view mirror	51 16 063

3. Connecting and installing the interior rear-view mirror with integral garage door opener

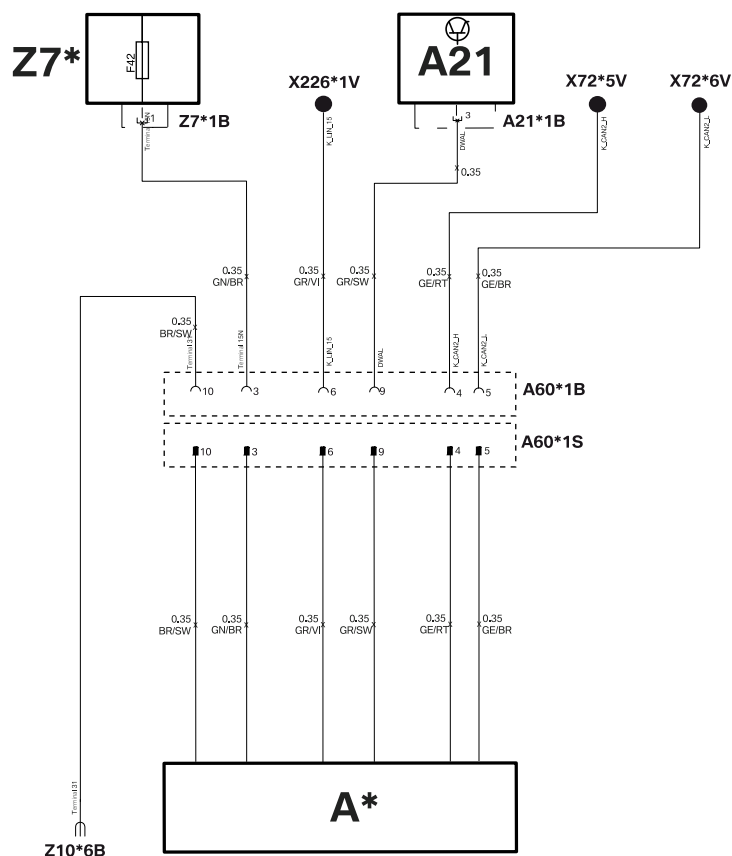


G20 0016 Z

Connect the standard plug **A60*1B** interior rear-view mirror with integral garage door opener **A**.

Install the interior rear-view mirror with integral garage door opener **A** as described in ISTA/AIR, repair manual 51 16 063.

4. Wiring diagram for F22, F23, F30, F31, F32, F33, F34, F36, F39, F48



G20 0017 Z

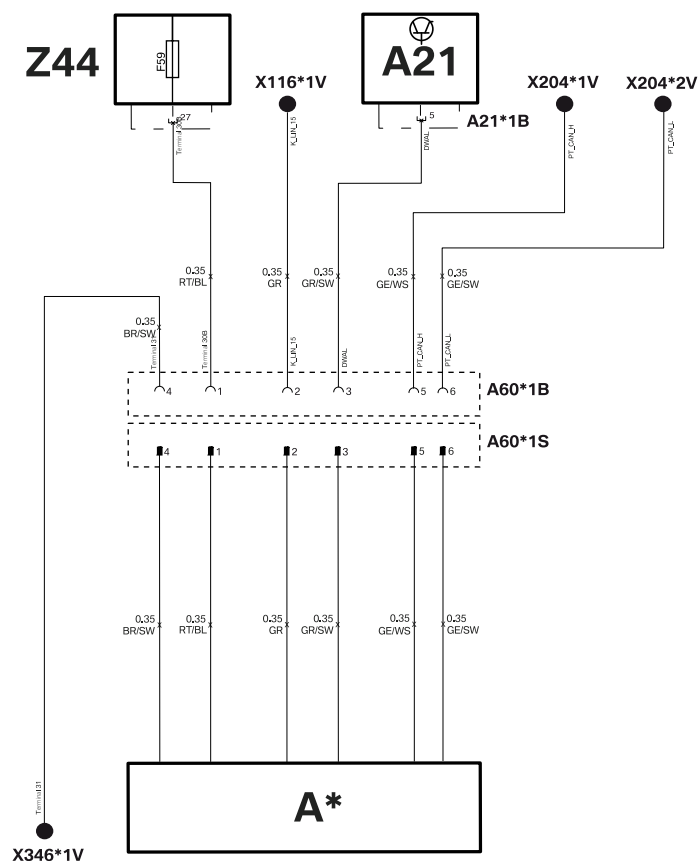
Legend

A*	Interior rear-view mirror with integral garage door opener
A60*1S	SW 10-pin plug housing
A60*1B	SW 10-pin socket housing
A21	Roof function centre
A21*1B	SW 16-pin socket housing
X72*5V	Connection K_CAN2_H
X72*6V	Connection K_CAN2_L
X226*1V	Connection K_LIN_15
Z7	Front right power distributor
Z7*1B	SW 16-pin socket housing

Cable colours

BL	Blue	GR	Grey	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

5. Wiring diagram for G20



G20 0018 Z

Legend

- A*** Interior rear-view mirror with integral garage door opener
- A60*1S** VI 6-pin plug housing
- A60*1B** VI 6-pin socket housing
- A21** Roof function centre
- A21*1B** SW 16-pin socket housing
- X204*1V** Connection PT_CAN_H
- X204*2V** Connection PT_CAN_L
- X116*1V** Connection K_LIN_15
- X346*1V** Ground support point
- Z44** Front right power distributor

Cable colours

BL	Blue	GR	Grey	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

6. Concluding work

The retrofit system does not require programming/coding.

- Connect the battery
- Carry out a vehicle test using the ISTA system and note or work through any entered errors in the memory



The following error entries are saved during the retrofit work and can be ignored:

- Error location: 14224677 0xD90D25 - Inside rear view mirror: Wrong variant assembled
 - Error location: 14224685 0xD90D2D - UGDO: Not expected LIN-Slave ◀
- Allow the car to go fully to sleep and then return it to full function. Only then will the functions of the interior rear-view mirror with integral garage door opener be available in full
- Conduct a function test
- Re-assemble the car
- Give the customer the operating instructions **B**