



# Installation and Operation Instructions BMW Z4 E89 Roadster Comfort Module

## Before installation:

Please read these instructions carefully and take your time with the installation. Performing the installation improperly can cause damage to the module or to electronic components in your vehicle. Claims cannot be asserted for consequences which arise out of disregard for these installation instructions. If you are not confident in doing the installation yourself, please obtain the services of a vehicle specialist.

	<b>Attention: Installation of this module may be grounds to invalidate your vehicle's homologation (general type certification) and/or its manufacturer's warranty. Do not operate the convertible top without the presence of another person – there is no entanglement protection. The installation and operation of the module is at your own risk.</b>
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	<b>Attention: When visiting workshop it is recommended to remove the module, because the manufacturer's warranty could be affected.</b>
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## Functional description:

The module only uses functions which were originally built into the vehicle. All data relevant to convertible top control (e.g. limit switches, window position, speed) will be continuously monitored. All OEM safety functions (under / over voltage cut-off, thermal protection, etc.) remain intact.

## The module's functional scope and operation:

- **Tap function for the top's switch:**

Now you need only to tap (>2s) with your finger on the convertible top switch, then the top will automatically open or close. This automatic operation can be interrupted at any time by simply tapping on the switch again in the opposite direction. When the top switch is tapped again in the same direction while the roof moves, the windows will stay open at the end of the roof movement. You can start the top's operation, pull out the ignition key, get out of the car and lock it – the top will continue to automatically close or open without the ignition.

- **Operating the top while driving (up to a speed of 50 km/h maximum):**

Up to a pre-programmed speed (though not greater than 50 km/h), you can operate the top while driving.

- **Threshold speed adjustment:**

Press the central switch for the window lifts in the drivers door in direction "close" for >4s (windows must be closed) and the current speed will be set as new threshold limit. An acoustic signal will be sounded as confirmation that the new speed has been set. The maximum threshold speed is 50Km/h. The default programmed speed is 50Km/h for a new module.

- **Operating the top per OEM remote control:**

Press the Open switch on the remote control >3s and the top will open automatically. Closing the top works in the same way except that the Close button on the remote control is used. When the switch is pressed again in the same direction while the roof moves, the windows will stay open at the end of the roof movement. As a safety precaution, opening the top can be terminated with the Close button or closing the top can be terminated with the Open button.

You can start the top's operation, start the engine and drive away while the top is still moving – it will continue the movement until it's opened/closed completely.

- **Operating the windows per OEM remote control:**

Press the close switch on the remote control 1..2s and the windows will close automatically. As a safety precaution, closing the windows can be terminated with the open button. The windows will close automatically when the top is open and the car will be locked out of safety reasons.

- **automatic unlock when engine is turned off:**

The car will be unlocked automatically when the engine is stopped.

- **Battery Safe Function:**

The module will go to power down mode automatically when it is not needed. It will then consume less than 0,2mA – that means that the battery will not be discharged by the module.

- **Service mode for technical vehicle inspections and diagnostic purposes:**

You can change the mode from normal mode to service mode (and back...) in the same way as speed limit is set, except that here the car is standing still. An acoustic signal will confirm the change of the mode. In service mode the module behaves like it would never have been installed. You even won't find it with the BMW service tester.

### Installation of the module:

close the top, pull out the key and open the trunk. Remove the cover over the battery in the middle of the trunk.



Picture 1: passengers side: remove three plastic rivets



Picture 2: pull out plastic pin to remove plastic rivet



Picture 3: remove cover, pull in the arrow's direction



Picture 4: passengers side: remove three plastic rivets



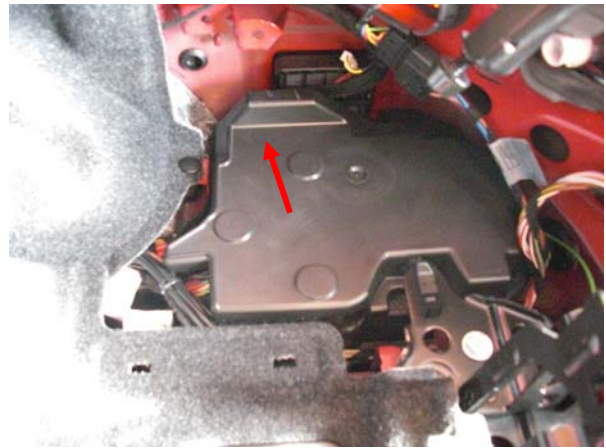
Picture 5: remove two plastic rivets



Picture 6: open the roof and stop it in this position, then turn ignition off



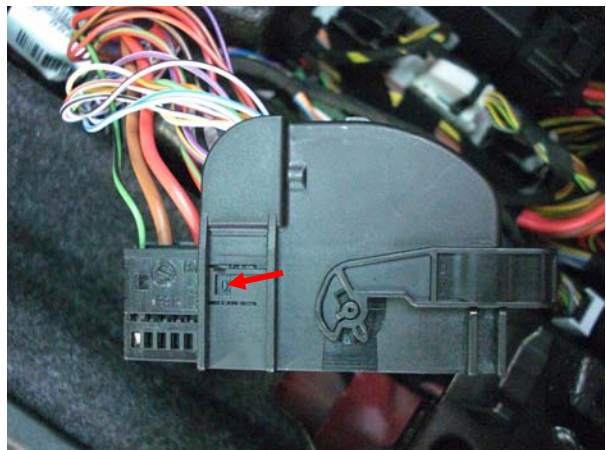
Picture 7: pull out cover 1, then cover 2



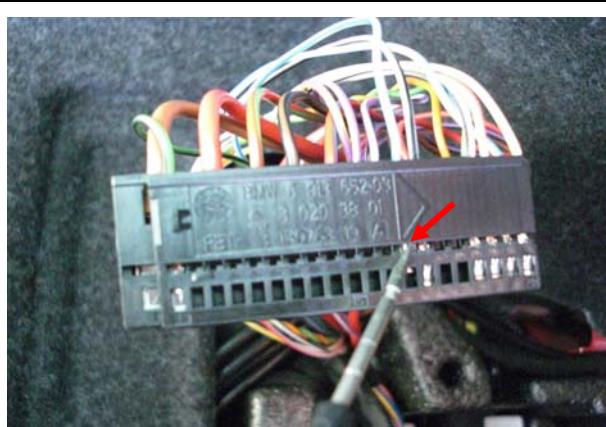
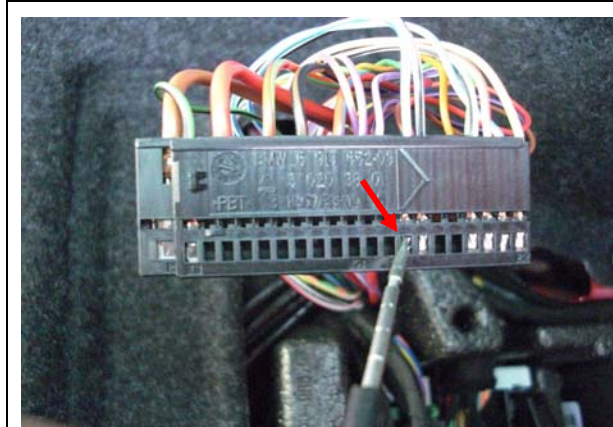
Picture 8: pull out cover



Picture 9: remove connector: pull down latch (1), then turn strap to the right (2).



Picture 10: remove the cover of the connector, use a screwdriver to unlock the cover (at arrow's position)



Picture 11/12: pull out the grey/blue (grey with blue stripe, Pin 13) and grey/black (grey with black stripe, Pin 14) wire. Push down the latch using a small flat screwdriver, pull out the wire a bit (left picture), then push down the latch again and pull out the wire completely (right picture).

Remove the wires green (Pin 41) and orange/green (Pin 40). You will find these wires in the other part of the connector.

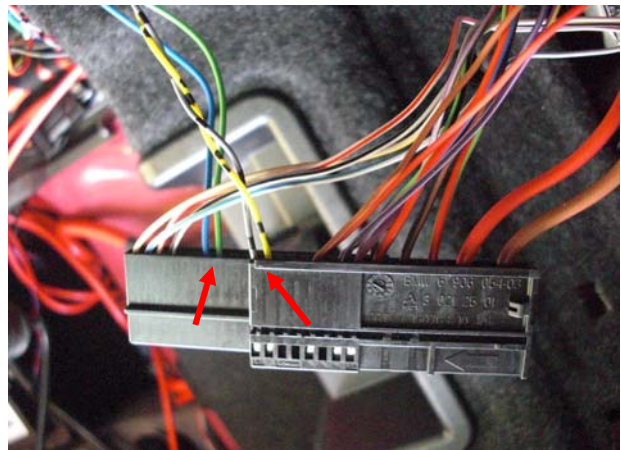


Picture 13: plug the removed wires into the 2-pole connector housings:

2-pole connector 1: orange/green -> Pin 1  
green -> Pin 2

2-pole connector 2: grey/blue -> Pin 1  
grey/black -> Pin 2

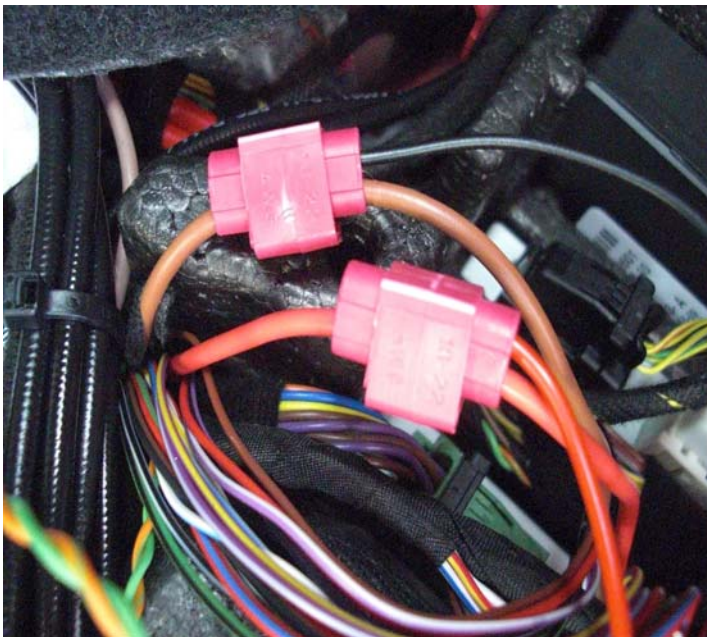
The both 2-pole connectors must be plugged to the module: connect the wire pairs green and orange/green to red/black and grey/black. The wire pairs grey/blue and grey/black will be connected to green und blue. Take care that the blue wire will lead to the grey/black wire and the red/black wire leads to the orange/green wire.



Picture 14: plug the 4 wires with crimp contacts on it into the connector on the places where the other wires were removed:

Pin 13: green  
Pin 14: blue  
Pin 40: yellow/black  
Pin 41: grey/black

Be sure that the crimp contacts are inserted correctly, they must snap hearable.



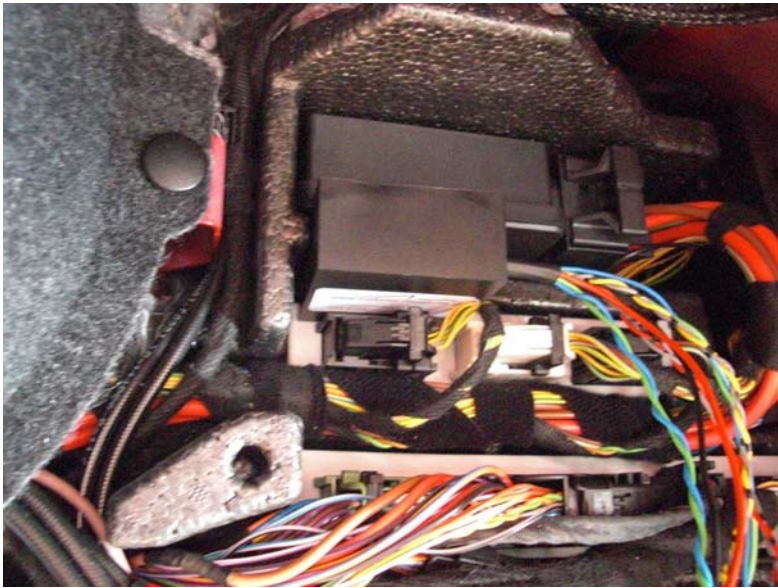
Picture 15:

power connection of the module:

Connect the both wires red and black of the module using the red crimp connectors:

Module	Car
black (GND)	brown 2.5mm <sup>2</sup> (Pin 21)
red (+12V)	red 2.5mm <sup>2</sup> (Pin 22)

To achieve optimized crimp connection: strip the black and red wire about 2cm, bend it so that the wire diameter is doubled before crimping it. Use a combination pliers to push the metal bar down.



Picture 16: stow away the module at this place

**Test the module:**

turn the ignition on, operate the top by the switch inside the car – release the switch when the top starts to move, it should continue until the top-movement is completet. After testing assemble everything in the reverse order.

**Troubleshooting:**

if an error message appears, please check if the module is connected to power (picture 15) and if the connection of the other wires is good (picture 11...14).