

Installation instructions

BMW 3 E90/91 - ZKW Bi-xenon headlight

Introduction

Parts

- · 2x Aharon E46-r projectors
- · 2x Custom designed brackets
- · Small bag with hardware and D1S bulb holders

Tools needed

- Torx 20 screwdriver / bit
- · Hex / Allen 6 bit
- · Phillips head screwdriver
- Coffee and a good mood

Remove the original projector







It is quite hard to remove the projector through the back of the headlight but possible ... If needed, the projector can be dismantled a bit and can be removed in parts.

!! Make sure you keep the torx screws, these are re-used!!

Modify the new projector

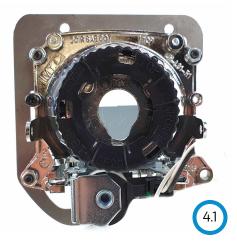






The cut-off plate of the new projectors is a bit too wide to fit the headlight frame. It needs to be trimmed about 3 mm per side.

Important Make sure the cut-off plate / shield is wide enough to hit the small black adjustment screw.







Mount the bracket onto the Aharon E46-r projector the same as shown in pictures 4.1 and 4.2

Make sure the bracket is mounted between the top two lens holders and the reflector.

Use the supplied hardware as follows: (4.3)

- m4x12machine screw
- Bracket
- Aharon projector
- M4 nut

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Mounting the new projector





In order to mount the bracket inside the headlight you need to use the supplied M4 rings (4 per side) and the original Torx screws. Easiest method is to retain the rings with a little piece of tape.



See next page for more steps...



It can be a bit difficult to get the projector and bracket inside the headlight but it's doable:)





The tape can be removed after the screws are screwed onto the frame of the headlight.





The supplied screw can be used to secure the bracket at the bottom.

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Connect the solenoid cable



Connect the solenoid wiring. The solenoid is activated with a 12v signal to the white wire of the projector. Use the supplied scotch locks, or solder the wires.

- Red wire from the headlight connects to white on the Aharon E46-r projector.
- Black wire from the headlight connects to black on the Aharon E46-r projector.

Mount the D1S bulb holder



Mount the D1S bulb holder onto the Aharon E46-r projector using the small 3 screws supplied with the holder.

BOTTOM OF PROJECTOR (SOLENOID)

Almost done :)

Mount the D1S bulb into the new Aharon E46-r projector, connect the ignitor to the D1S xenon bulb and close the headlights with the original caps.

Mount the headlights into your car and enjoy your lights again! :)

