

ECS **TUNING™**

Installation Procedures



Ziza Interior Lighting Package Installation ES2539059

for BMW E46 convertible

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LED Installation Instructions

Interior Lighting Kit for BMW E46 convertible
ES2539059

The logo for Ziza performance automotive lighting, featuring the word 'Ziza' in a large, grey, sans-serif font. To the left of the text is a graphic of a starburst or light pattern composed of small dots. Below the main text is a horizontal line with a red dot at the end.

performance automotive lighting

Tools

Trim removal tool – ES517779 (Kit)

Kit Contents

8-chip wedge base white LED (qty 3)

36mm white LED festoon (qty 3)

42mm white LED festoon (qty 2)

The Ziza Premium Interior Lighting package for the BMW E46 convertible adds crisp, white illumination at all interior lighting locations.

The LEDs in the kit are direct fit replacements for the stock incandescent bulbs.

This tutorial explains how to access and replace bulbs all interior light locations.

What are LEDs?

LEDs are Light Emitting Diodes, solid state devices that emit light when connected to electrical current. They have no moving parts or wire filaments to burn out. They emit a whiter light, run cooler, and last longer than the incandescent (filament style bulbs) we are replacing in this tutorial.

Unlike filament bulbs, LEDs are polarity sensitive. They have plus and minus (positive and negative) electrical terminals that must match the polarity of the applied voltage. Installing the bulbs “backwards” in the light bulb sockets (with reversed polarity) will not harm them, but they will not light. Flipping the bulb 180 degrees in the electrical connector cures this problem.

Bulb Types

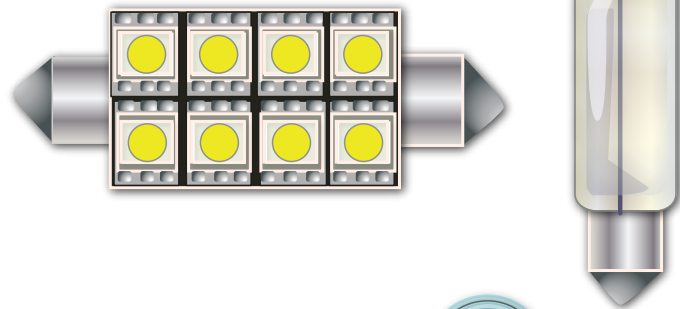
This kit includes two bulb types, classified by their general shape.

FESTOON - Conventional incandescent **festoon** bulbs have a shape and general appearance that is similar to a glass fuse.

Metal caps attached to both ends of a glass tube are sealed to the tube and attached to the bulb filament. End caps mount the bulb in its holder and also conduct electrical current.

LED festoon lights have the same pointed end caps, but are attached to a bank of LEDs instead of a filament tube.

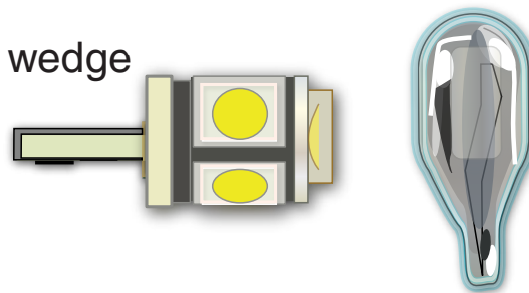
festoon



WEDGE - Wedge style bulbs get their name from the shape of the bulb base. The tapered end of the bulb “wedges” into the bulb socket.

LED wedge lights fit the bulb socket like a filament bulb, but are commonly polarity sensitive.

wedge



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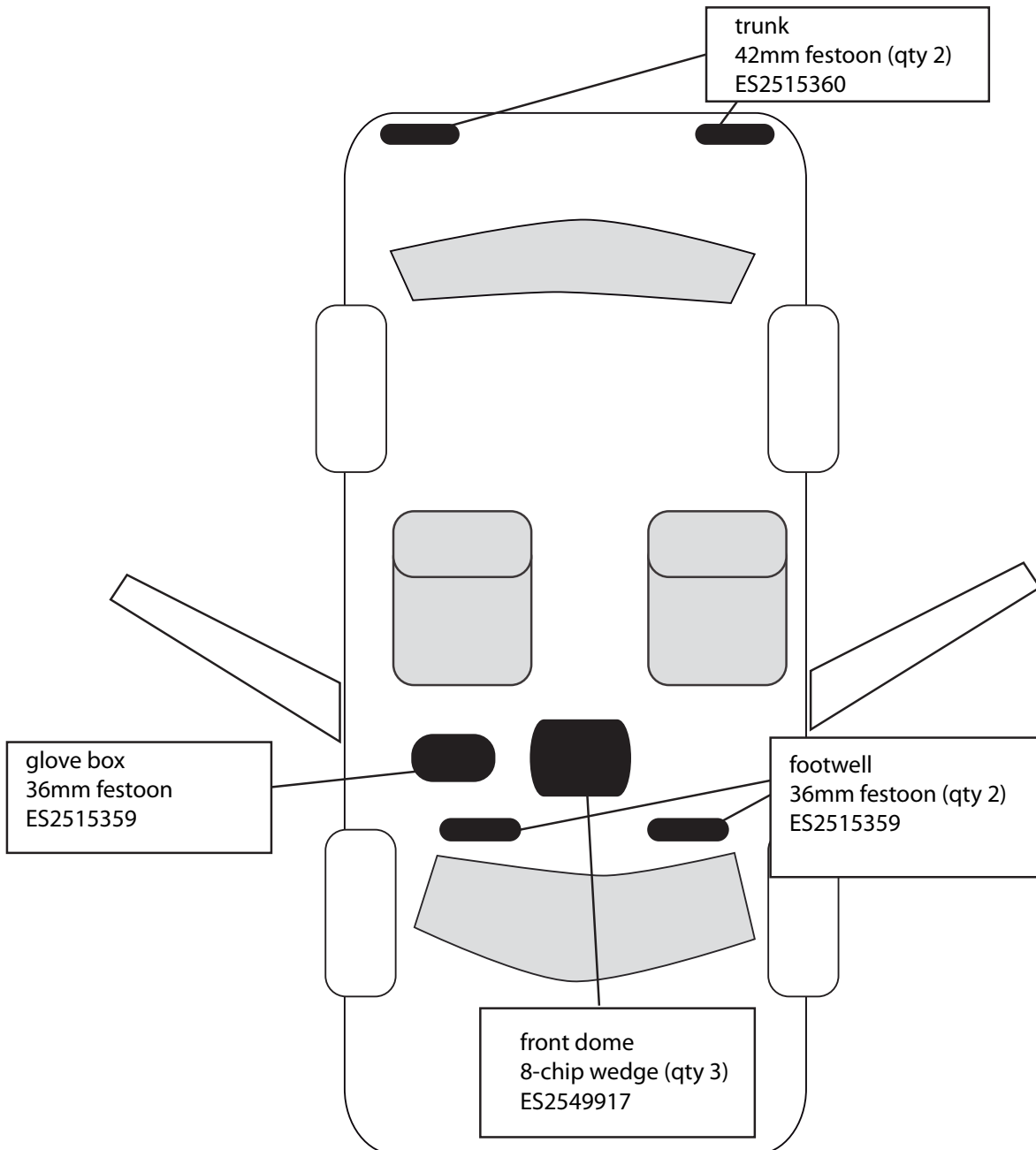
Fits BMW E46 convertible

Ziza Interior Lighting Kit Locations

Make _____ BMW _____

Model _____ E46 convertible _____

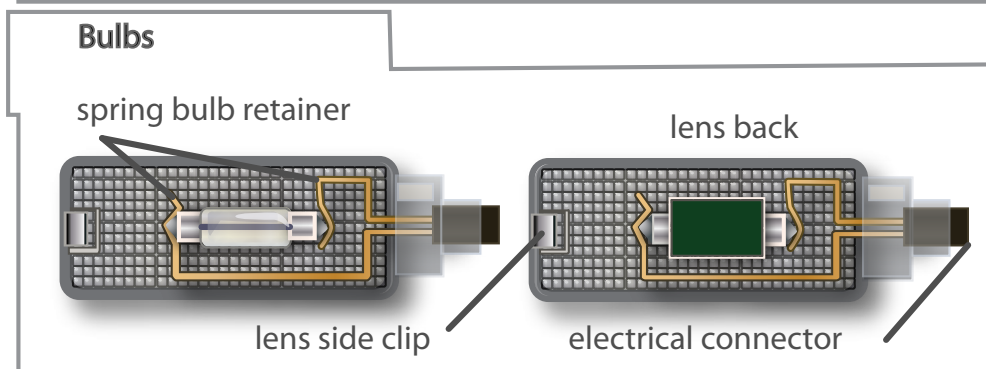
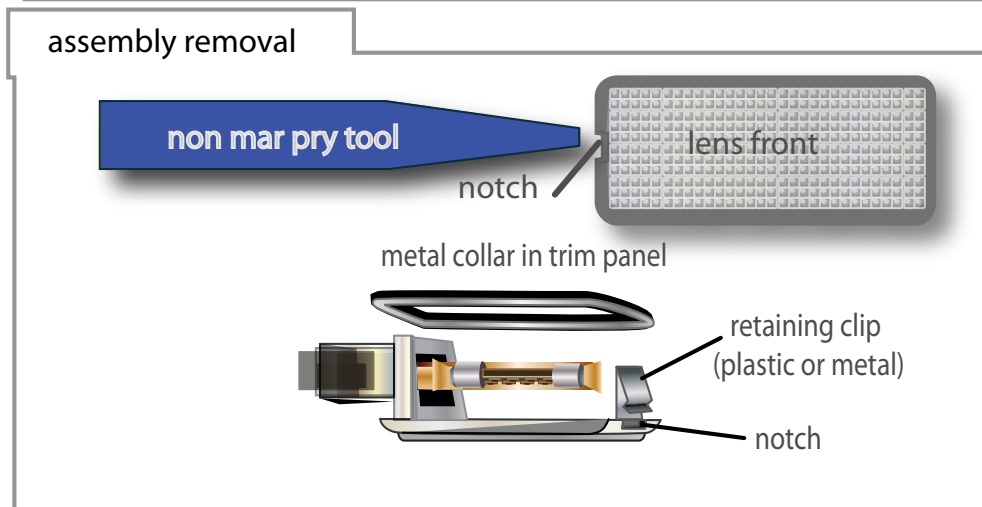
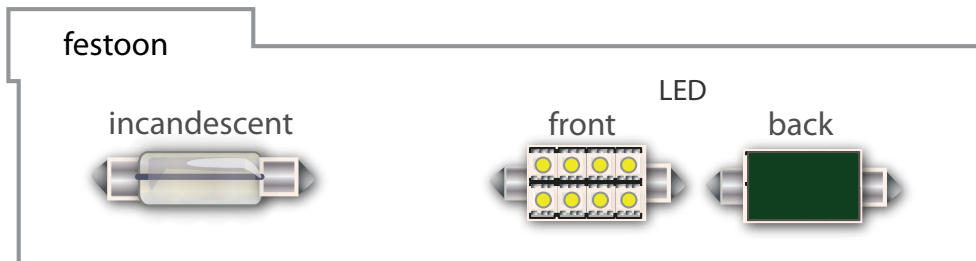
Kit Part Number ___ ES2539059 _____



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General Tips

- When prying down on the assemblies to remove them, pry on the notched end of the lens. Insert the narrow tool tip **between** the lens plastic and any metal collar used to reinforce the lens mounting hole. Push in on the retaining clip first to compress and release it. Then pry down.
- The spring bulb retainer is also the circuit conductor. If necessary, gently bend the metal retainer so it holds the bulb tight. This will help prevent intermittent or flickering LED operation caused by a loose connection.
- Install the bulbs with the LEDs facing toward the lens.



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Dome Light LED Installation



Front Dome - Step 1

Insert a non-marring trim removal in the gap between the front dome light console and surrounding trim bezel.

Push up and in with the tip of the tool to compress the spring clips holding the dome light console in place.

Drop the assembly down.



Front Dome - Step 2

To give you a better idea where the clips are located, here is the console being removed from the headliner.

The clips are made of spring metal and compress easily.



Ziza Interior Lighting Package Installation

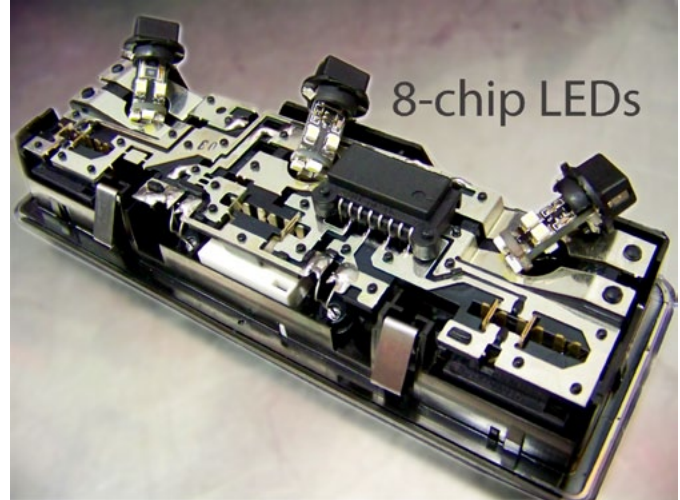
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Front Dome - Step 3

The front dome light assembly has three wedge style bulb holders.



Front Dome - Step 4

Replace the old filament bulbs in each wedge base bulb holder with an 8-chip LED.

The LEDs are polarity sensitive. If they do not work when initially installed, their polarity is reversed. Remove the bulb holders and rotate them 180 degrees.

When all LEDs are installed and working, snap the console back in place in the headliner.



Glove Box - Step 1

Use the non-marring trim removal tool to pry down the glove box light assembly.

Pry on the side away from the black plastic switch button.



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Glove Box - Step 2

Remove the old filament style festoon and replace it with a 36mm festoon LED array. Install it with the LED chips facing the lens, as shown.

The LED array is polarity sensitive. If it does not light when first installed, flip the array end-for-end, and retest.

Snap the assembly back into the glove box.



Footwell Lights - Step 1

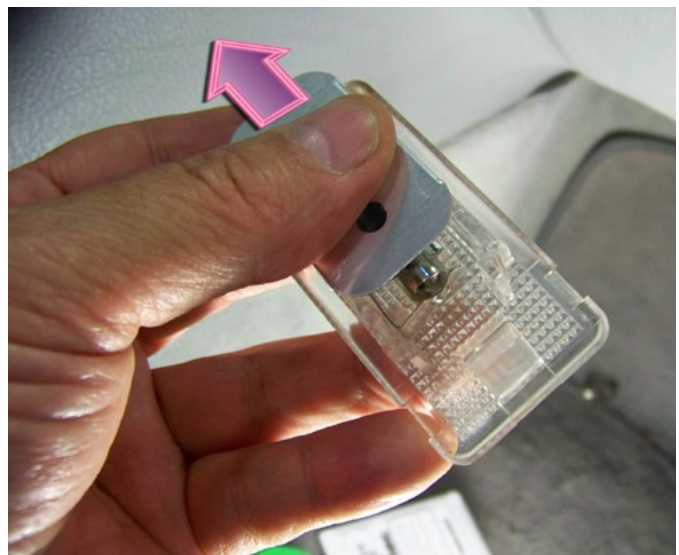
Footwell lights are located in the underdash panels, above the front footwells. Pry them down using the trim removal tool.



Footwell Lights - Step 2

Slide the heat shield off the light assembly.

Careful: The shield edges may be sharp. If the shields won't slide easily with finger pressure, use the trim tool to slide them off.



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Footwell - Step 3

Replace the original filament bulb with a 36mm festoon array. The light chips should be installed facing the lens.

The LED array is polarity sensitive. If it does not light when first installed, flip the array end-for-end, and retest.

Slide the shield back in place on the assembly and reinstall the light.

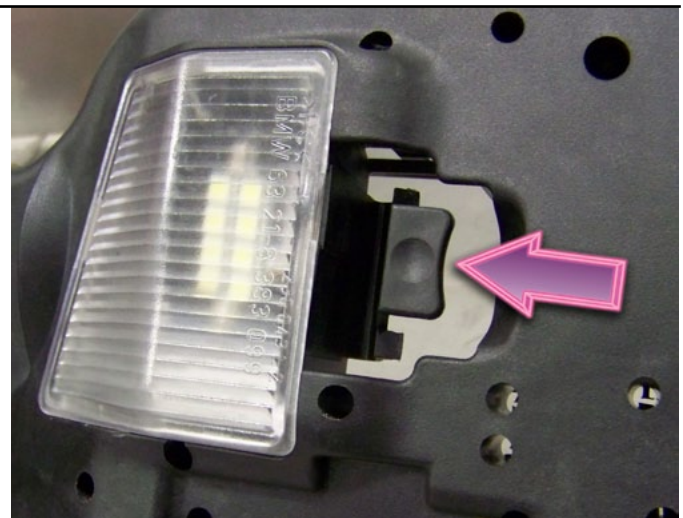
Repeat the process at the opposite footwell light.



Trunk Step 1

The trunk lights are built into the tail light assemblies.

To remove the assembly, push the plastic tab (arrow) to release the entire assembly. Then drop the assembly down.



Trunk Step 2

Use your trim removal tool to pry the lens off the assembly.



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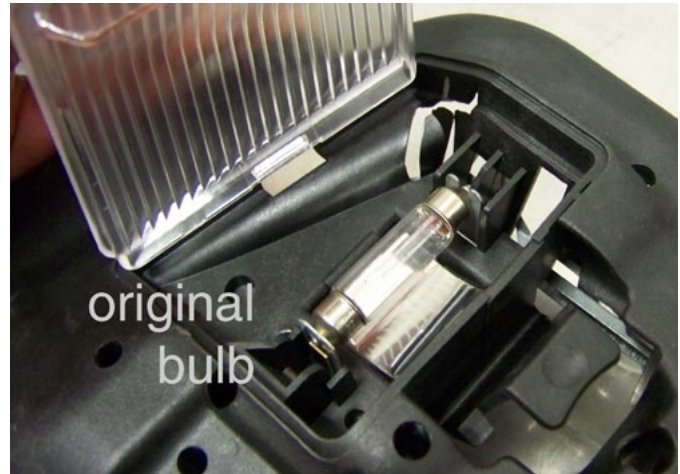
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Trunk Step 3

Pry the old festoon bulb from the holder...



Trunk Step 4

Install a new 42mm festoon in its place.

The festoon arrays are polarity sensitive. If the LEDs do not work when initially installed, the polarity is reversed. Flip it end-for-end and reinstall it in the holder.



Trunk Step 5

Snap the tail light assembly back in place. Repeat the process at the opposite side light assembly to complete the trunk light installation.



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Prevent damage to interior panels, the headliner, and trim.
Use a plastic, non-marring trim removal tool.
Two complete kits are available.

This concludes the installation of the Ziza Interior Light Kit.