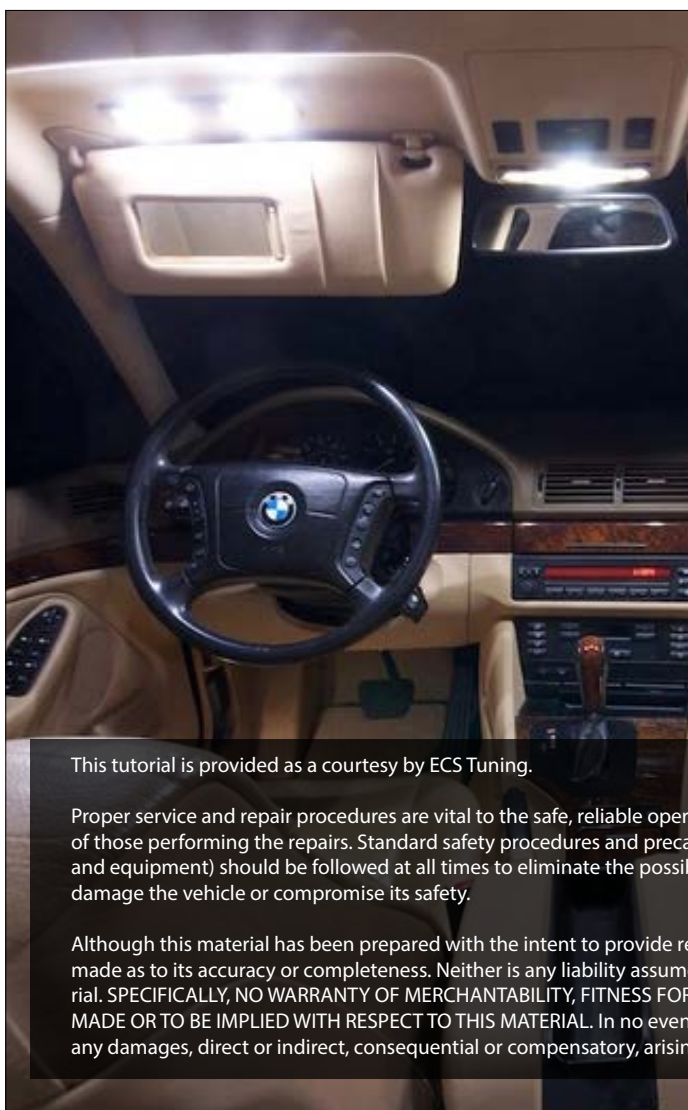




Ziza® Interior Lighting Package Installation Procedures



Part Number [ES2523973](#)

for BMW E39

(5 Series)

(1996-2003)

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Ziza Interior Lighting Package Installation

ES2523973



Fits BMW E39 5-Series

LED Installation Instructions

Interior Lighting Kit for BMW E39
ES2523973



Tools

Trim removal tool – ES517779 (Kit)

Kit Contents

5-chip wedge base white LED (qty 4)
9-chip wedge base white LED (qty 1)
36mm white LED festoon (qty 5)
42 mm white LED festoon (qty 8)

This tutorial explains how to install the LEDs in your Ziza Interior Lighting Kit.



Make the job easier and prevent damage to headliners and other interior trim with **ECS Tuning Trim and Molding Removal Tool Sets: [ES2500877](#) and [ES517779](#).**

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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

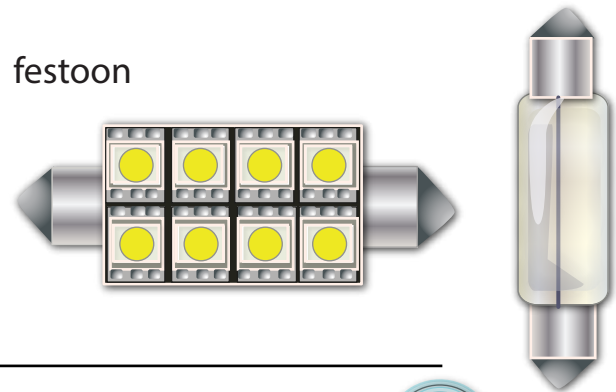
This kit includes three bulb types, classified by their general shape.

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.

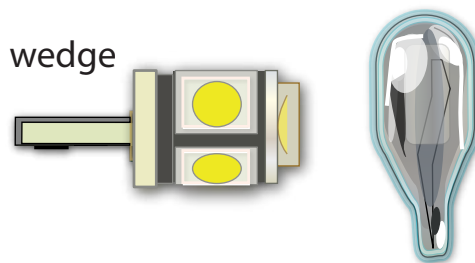
festoon



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.

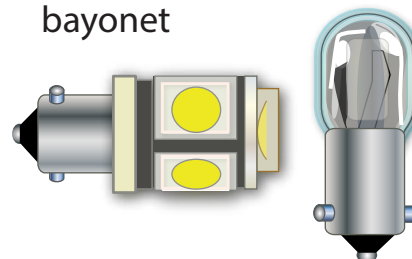
LED wedge lights fit the bulb socket like a filament bulb, but are polarity sensitive.

wedge



BAYONET - The bayonet base is formed by a metal tube with radial pins on its side that engage holes or tabs in the bulb socket. A central electrical nub contact at the tapered base of the bulb connects the bulb to voltage.

bayonet



While these are also polarity sensitive, the socket design automatically orients the bulb, ensuring correct polarity.

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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.

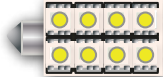
festoon

incandescent

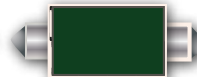


LED

front



back



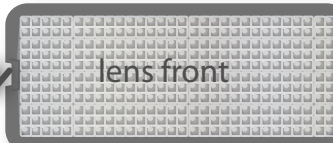
assembly removal

non mar pry tool

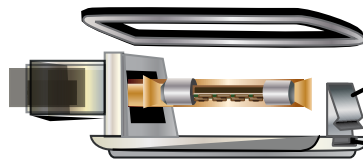


notch

lens front



metal collar in trim panel

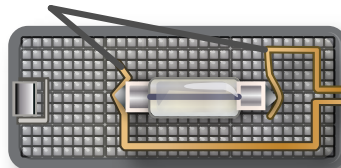


retaining clip
(plastic or metal)

notch

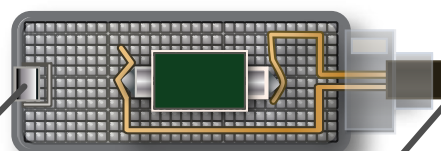
Bulbs

spring bulb retainer



lens side clip

lens back



electrical connector

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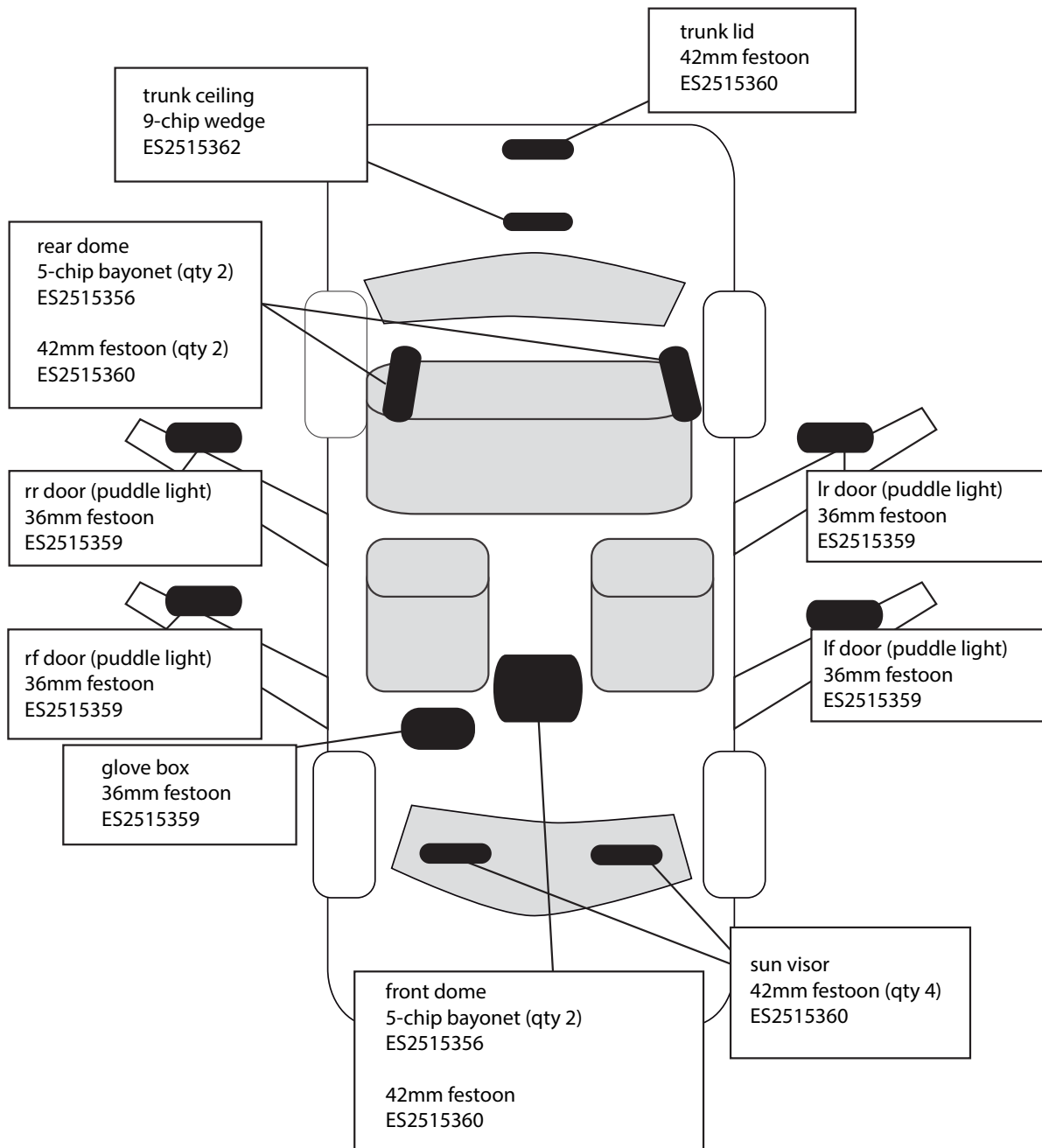
Fits BMW E39 5-Series

Ziza Interior Lighting Kit Locations

Make _____ BMW _____

Model _____ 5 Series _____ E39 _____ (1996-2003) _____

Kit Part Number _____ ES523973 _____



Ziza Interior Lighting Package Installation

ES2523973



Fits BMW E39 5-Series

Front and Rear Dome and Vanity LED Installation



Front Dome - Step 1

Using a non-marring trim removal tool, pry down on the rear of the light assembly located in the front dome light console. Use the tool to compress the spring clips (arrows) as you pry down to remove the light housing.

To make bulb replacement easier, we suggest that you unplug the electrical connector and take the light assembly to a clean, well lighted work surface.



Front Dome - Step 2

This photo of the light assembly shows the location of the spring retainer clips. These are the clips that we compressed in the previous step to release the light from the dome light console.



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Fits BMW E39 5-Series

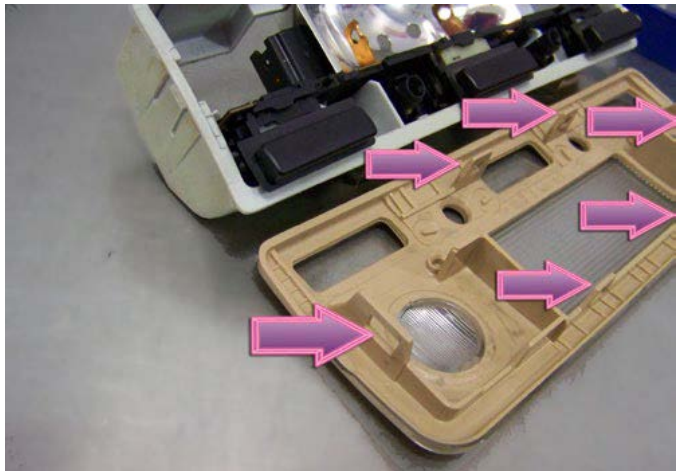
Front Dome - Step 3

Using the non-marring trim removal tool, gently pry the plastic tabs that secure the front trim bezel to the gray plastic outer housing.



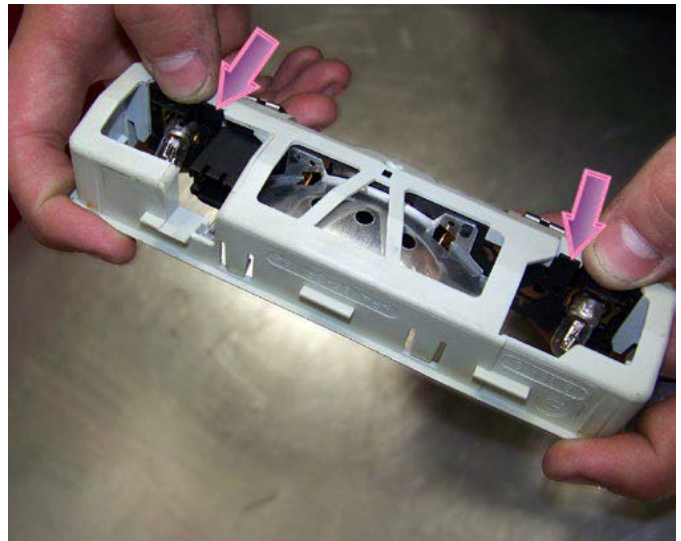
Front Dome - Step 4

Note: The trim bezel is attached to the housing by several plastic clips (arrows). Pry carefully to release all the clips without breaking them.



Front Dome - Step 5

Hold the dome light assembly as shown, then press against the black plastic bulb holder tabs (arrows) to release them; pop the bulb assembly from the gray plastic housing.



Ziza Interior Lighting Package Installation

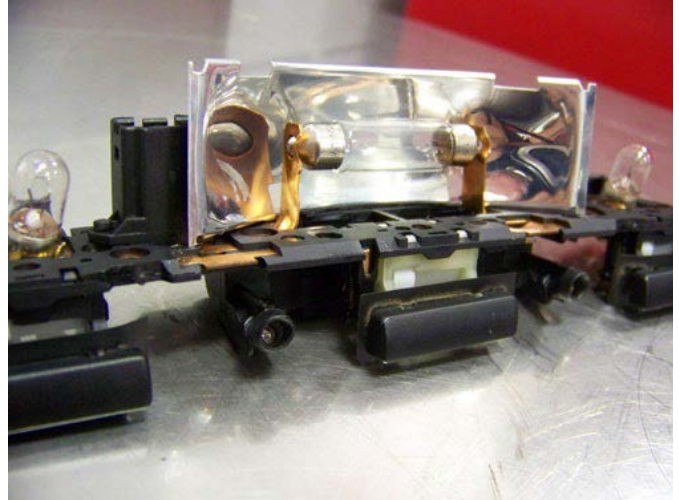
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Front Dome - Step 6

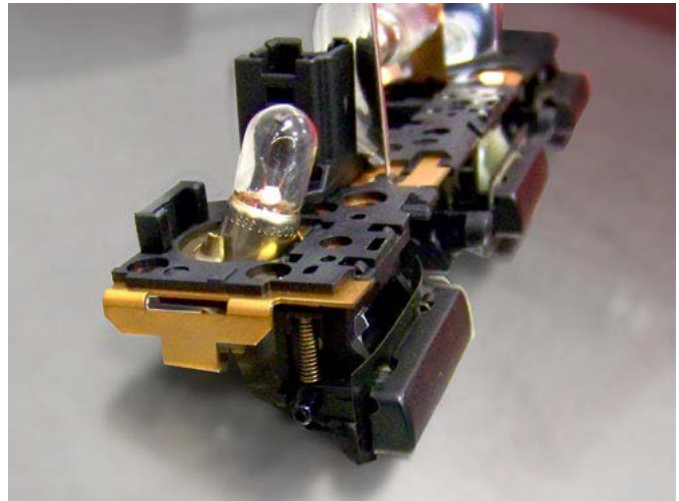
The bulb assembly holds a single festoon and two bayonet base filament bulbs.



Front Dome - Step 7

Note that the two bayonet filament bulbs are installed at an angle in the bulb sockets. This is normal.

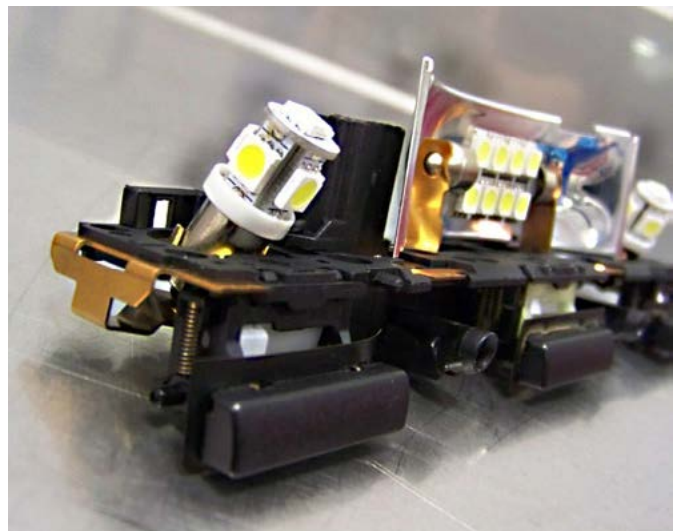
The new 5-chip bayonet base LEDs must be installed at the same angle or they will not work.



Front Dome - Step 8

This photo shows how the new LED is installed at the same angle as the glass bulb it replaces.

Install both bayonet LEDs and a 42mm festoon LED array in the center bulb holder.



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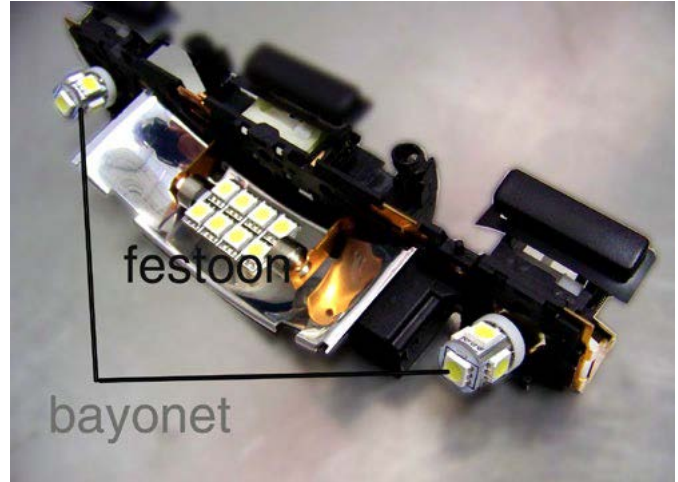
Fits BMW E39 5-Series

Front Dome - Step 9

Install the festoon with the light chips facing upward, away from the curved reflector, as shown.

The festoon array is polarity sensitive. If it does not light when initially installed, flip it end-for-end to get it working.

When all bulbs are installed, reassemble the bulb holder in the housing and test bulb operation.



Front Dome - Step 10

Reconnect and reinstall the console assembly in the headliner to complete the front dome light LED installation.



Vanity Mirror Lights - Step 1

Pull down the sun visors to expose the vanity mirror lights.

Pry on the front edge of the vanity light with your fingers or a trim removal tool to remove the light assembly from the headliner.



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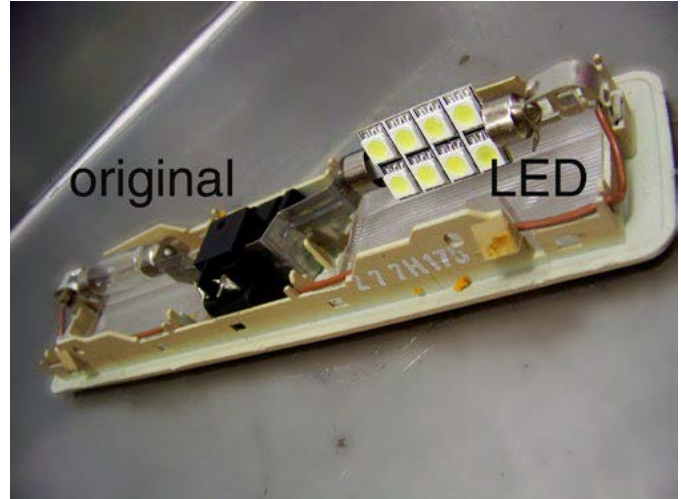
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Vanity Mirror Lights - Step 2

Replace the two original glass bulbs with 42mm festoon LED arrays. Our photo shows both old and new bulbs for comparison.



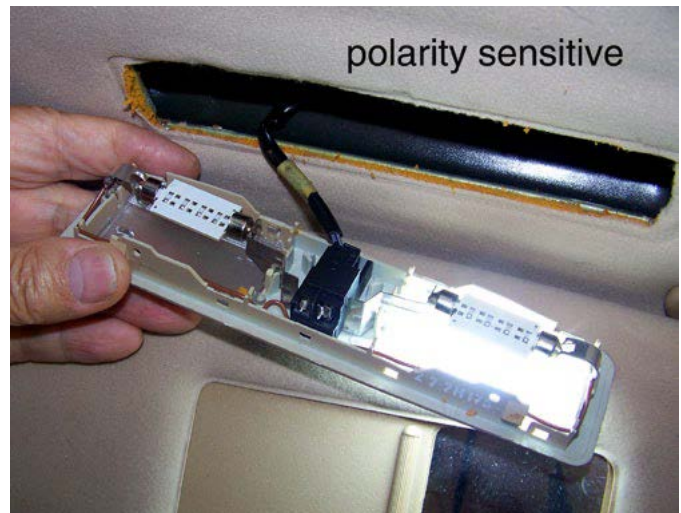
Vanity Mirror Lights - Step 3

Install the LEDs with the light chips facing toward the lenses.

Note: The arrays are polarity sensitive. If either does not work when first installed, flip it end-for-end to get it working.

When both arrays are working, snap the vanity lights back into the headliner.

Repeat this process at the opposite vanity light to complete the vanity light LED installation.



Glove Box

Pry down the glove box light assembly.

Slide the metal heat shield off the back of the assembly. Careful: the metal is thin and may be sharp.

Replace the glass festoon with a 36mm festoon array. Reinstall the light assembly in the glove box.

The LED array is polarity sensitive. If it does not work when initially installed, flip it end-for-end in the bulb holder to get it working.



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Fits BMW E39 5-Series

Rear Dome, Puddle, and Trunk LED Installations



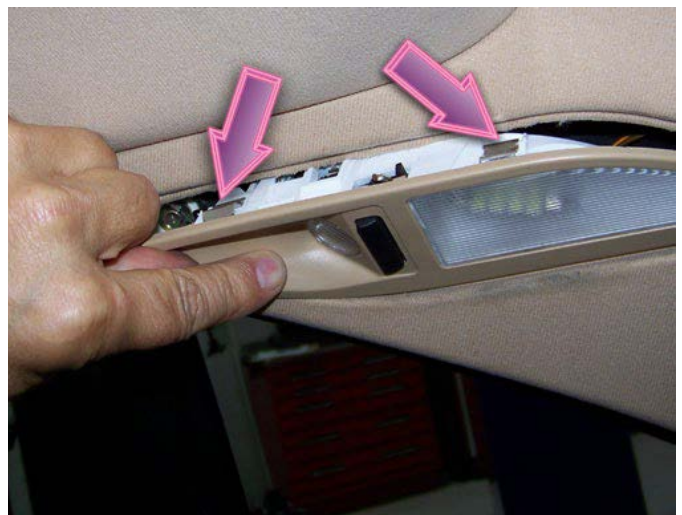
Rear Dome Light - Step 1

There are two rear dome lights, one in each C-pillar.

Insert the tip of a trim removal tool at the top edge of the light in the areas shown by our arrows.

Push in to compress the metal retainer clips as you pry down.

Remove the assembly from the headliner.



Rear Dome Light - Step 2

Flip the assembly over and carefully press against the plastic latch tabs that secure the green circuit board to the light housing (arrows).

Lift the circuit board off the housing.



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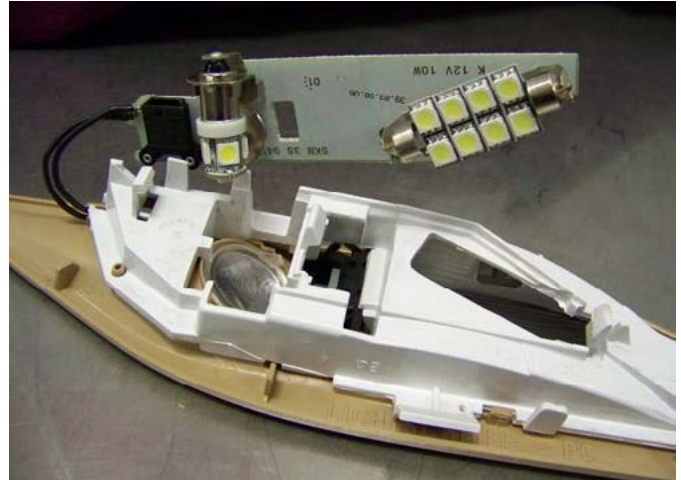
Fits BMW E39 5-Series

Rear Dome Light - Step 3

Install one bayonet and one 42mm festoon LED in place of the original glass filament bulbs.

Test LED operation and flip the festoon end-for-end if it does not illuminate when initially tested.

Snap the circuit board with bulbs back into the housing.



Rear Dome Light - Step 4

Snap the housing back into the headliner and repeat the process at the opposite C-pillar to complete the rear dome LED installation.



Puddle Lamps - Step 1

There is one puddle lamp in each door bottom.

Pry at the notched end of each puddle lamp assembly to remove it.



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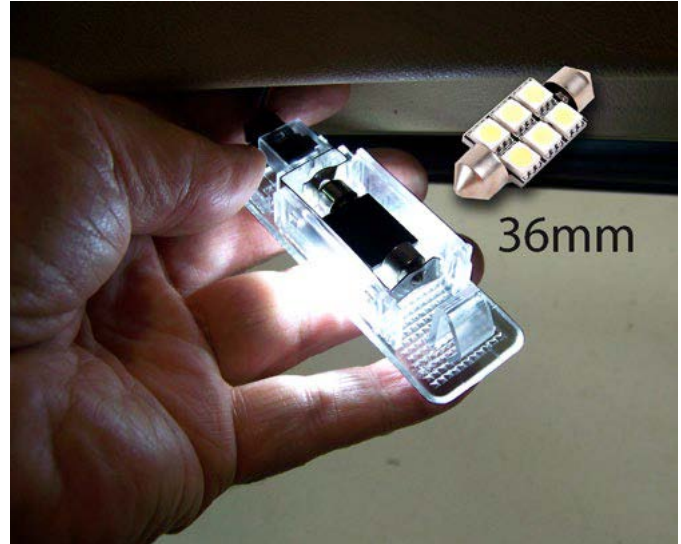
Fits BMW E39 5-Series

Puddle Lamps - Step 2

Replace each glass festoon bulb with a 36mm festoon LED array.

The LED arrays are polarity sensitive. If any LED array does not work when initially installed, flip it end-for-end to get it working.

Repeat this process to install new 36mm LEDs at each of the four door puddle lamp locations.

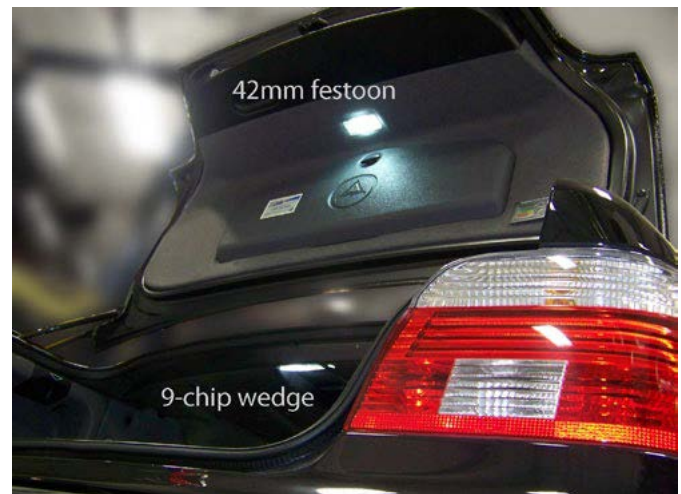


Trunk Lights - Step 1

Trunk illumination is provided by two lights: one located in the trunk lid, and a second in the top of the trunk opening.

Two different bulb types are used.

The deck lid light takes a 42mm festoon; the trunk ceiling light requires a 9-chip wedge base LED array.



Trunk Lights - Step 2

Pry at the notched end of the light assembly in the trunk lid to remove it.

Slide the metal heat shield out of the way; replace the original glass festoon bulb with a 42mm LED array. The light chips should face toward the lens.

If the LED array does not light when initially installed, flip it end-for-end to get it working.

Replace the heat shield, and pop the assembly back into the trunk lid liner.



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Trunk Lights - Step 3

Pry at the notched end of the light assembly in the trunk ceiling. Remove it.

Slide the metal heat shield out of the way; replace the original glass wedge base bulb with a 9-chip wedge base LED array.

If the LED array does not light when initially installed, remove and rotate it 180 degrees in the wedge bulb socket.

Replace the heat shield, and pop the assembly back in place in the trunk ceiling.



This concludes the installation of the Ziza Interior Light Kit.



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