

Ziza® Interior Lighting Package Installation Procedures



Fart Number ES2526355

for BMW E38

7 Series (1995-2001)

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Fits BMW E38 - 7 Series (1995-2001)



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: <u>ES2500877</u> and <u>ES517779</u>.



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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 that 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

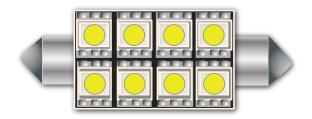
This kit includes two bulb types, classified by their general shape.

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

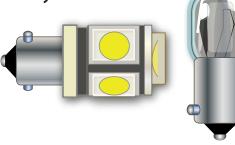




BAYONET - The bayonet base is formed by a metal tube with radial pins on its side that engage holes or tabs in the bulb socket. A central electrical nub contact at the tapered base of the bulb connects the bulb to voltage.

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

bayonet



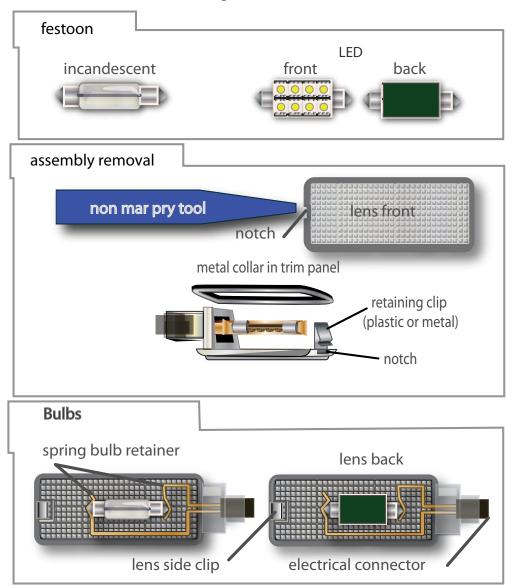
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General Tips

- 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.

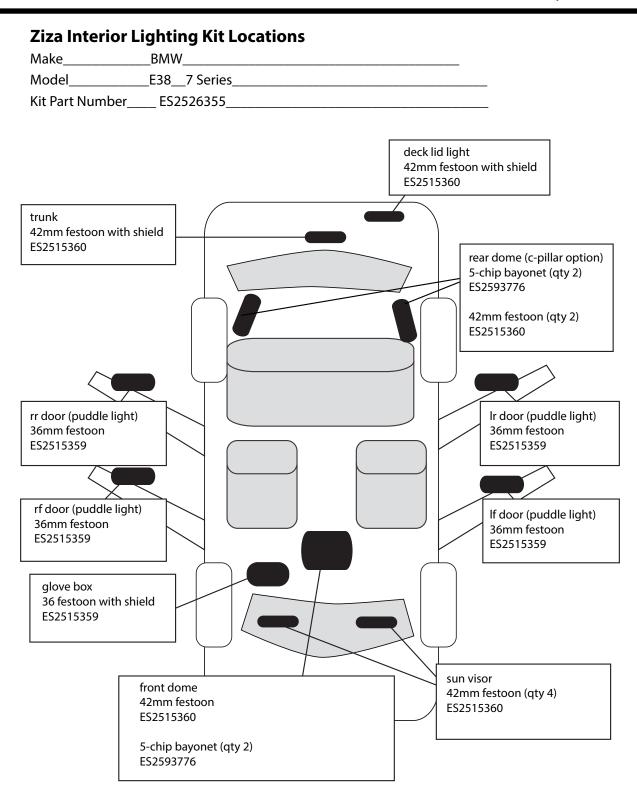


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Front Dome and Vanity Mirror LED Installation



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.



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





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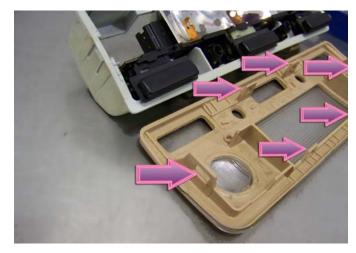
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Front Dome - Step 3

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 4

Hold the dome light assembly as shown, then press against the black plastic bulb holder to pop it from the gray plastic housing.



Front Dome - Step 5

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



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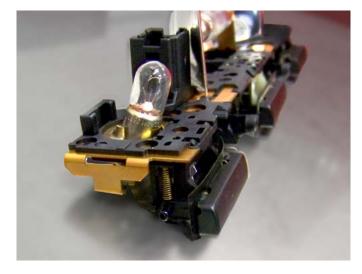


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Front Dome - Step 6

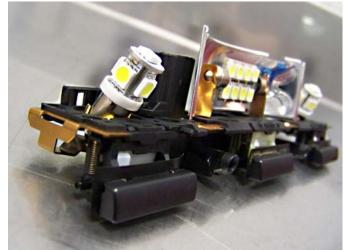
The two bayonet bulbs are installed at an angle in the bulb sockets. This is normal.

The new 5-chip bayonet base LEDs must be installed at the same angle to properly engage the bulb socket electrical contacts.



Front Dome - Step 7

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 three bulb holders.



Front Dome - Step 8

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.

Reinstall the console assembly in the headliner to complete the front dome light LED installation.



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Front Vanity - Step 1

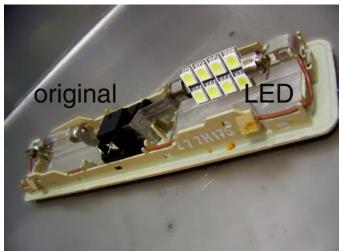
Pull down the sun visors to reveal the vanity mirror lights.

Use the trim tool to pry on the long edge to remove the light assembly from the headliner.



Front Vanity - Step 2

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



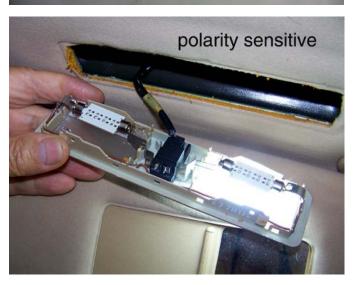
Front Vanity - Step 3

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.



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Rear Dome Light LEDs



Rear Dome Lights - Step 1

The E38 has dual rear lamps located in the C-pillars.

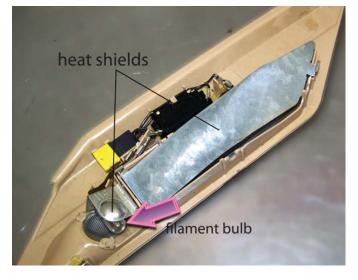
Pry down on the light assemblies with a trim removal tool to compress the metal spring clips. Remove the light from the headliner.

Note: You may find it easier to unplug the electrical connector and take the entire light assembly to a clean, well-lighted work surface.



Rear Dome Lights - Step 2

There are two bulbs in the rear dome light assembly: A bayonet style glass filament bulb (arrow) and a festoon bulb, covered in this image by a large gray metal heat shield.



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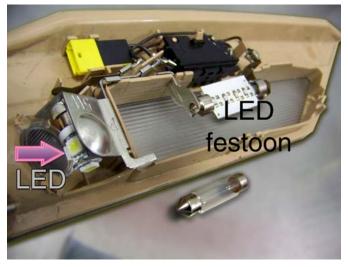


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Rear Dome Lights - Step 3

Replace the bayonet and festoon glass bulbs with a bayonet base 5-chip LED and a festoon style LED array.

The festoon LED light chips should face the lens. The array is polarity sensitive; if it does not work when initially installed, flip it end-for-end to get it working.



Rear Dome Lights - Step 4

Reinstall the heat shield over the festoon LED array.



Rear Dome Lights - Step 5

Snap the rear dome light assembly back in place until the spring clips engage to secure the light.

Repeat the process at the opposite C-pillar to complete the rear dome light installation.



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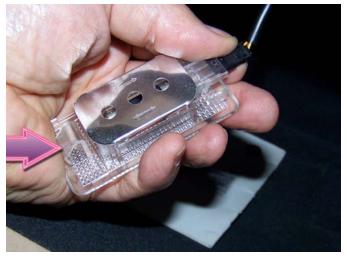
Glove Box Puddle Lamps Trunk



Glove Box - Step 1

Use the trim tool to pry the glove box assembly from the roof of the glove box liner.

Insert the tip of the tool in the notched end of the lens so you can compress the plastic spring clip (arrow) as you pull down.



Glove Box - Step 2

Slide the heat shield off to expose the glass filament light.

Caution: The thin metal shield is sharp enough to cut your fingers, so work carefully.

Install a 36mm festoon LED array in place of the glass bulb. Light chips should face toward the lens. The festoon arrays are polarity sensitive. If the LED array does not light when it is installed and tested, flip it end-for-end to get it working.

Replace the heat shield, and reinstall the light in the glove box.



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Puddle Lamps - Step 1

The E38 has puddle lamps in all four doors. The lenses are canted slightly to double as footwell lights when the doors are closed.

All four lights use the same 36mm festoon style bulbs.



Puddle Lamps - Step 2

Use the trim tool to pry at the notched end of the puddle lamp lenses.

Pry each lens down to remove it.

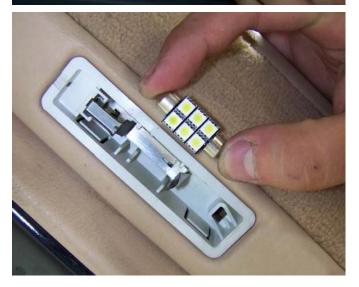


Puddle Lamps - Step 3

Replace each of the original glass festoon bulbs with a 36mm festoon LED array. The LED light chips should face downward.

The LED arrays are polarity sensitive. If they do not work when initially installed, flip them end-for-end to get them working.

Repeat this process at all four puddle lamp locations.



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Trunk - Step 1

There are two trunk lights: One in the trunk, the other in the trunk lid.

Both use the same 42mm festoon base bulb.

Use the trim tool to pry out both of the light assemblies, using the same technique used in the glove box.



Trunk - Step 2

Slide off the heat shield and replace the original glass bulbs with 42mm LED festoon arrays. Light chips should face toward the lens. Flip the LED arrays end-for-end if they do not work when initially installed.

Replace the metal shields and reinstall the light assemblies to complete the trunk light LED installation.





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.

This concludes the installation of the Ziza Interior Light Kit.