

42 Draft Designs

LED Installation & Troubleshooting

Before You Begin!

- Read all instructions BEFORE installing any LEDs
- LEDs have polarity. If your LED does not light when first installed remove, rotate 180° and re-install.
- Always unplug the light you're working on before removing the stock light bulb and installing an LED. VW interior lights are fragile internally and easy to short. A slip of the hand will cause a fuse to blow.

VW mk4 Lamp Removal

Front Dome Light

The front dome light is made up of 3 individual lights covered by a single lens. The center light uses a 42mm fuse style LED. The outer map lights use one 194 wedge style LED per light. Before removing the lens, set the switch to the OFF position. To remove the lens, simply pull down on the front edge. It hinges from the rear inside the sunroof switch housing. If you cannot pop the lens loose with your fingers, use a thin, clean screwdriver and be gentle! Remove the center bulb by pushing to the side then pulling downward on the opposite side. Install the new fuse style LED in the same manner, one side at a time. Remove each map light bulb by pulling downwards gently. Install the 194 LED by pushing the LED into the socket. You may need to work up close when installing the new LEDs. The sockets are positioned at a slight angle and are a tight fit. With all three LEDs installed, use the switch to test them. Re-install the lens.

Rear Dome Lights

The rear dome lights use one 39mm fuse style LED per light. Removing these lights is tricky – they are held in tight. Take a look at each light. There will be a door open symbol on one side, and an O on the other. To remove the light, you need to slide the light towards the 'door open' side and release the clip which holds the light in place. The light will not want to slide very far, so push hard and pull down about 1/8" to see the metal clip on the O side. Use a thin, clean flat-head screwdriver to release the clip. Typically, the clip will need to be pushed towards the light in order to release the light from the headliner.

Unplug the light before removing or installing the LED!

Replacing the bulb without unplugging the light can and will cause a fuse to blow. To remove the bulb and install the LED, remove the plastic cover on the back of the light. Remove the bulb by pushing to the side and pulling the bulb out. Install the new LED in the same manner, one side at a time. Plug the light back in and test the LED by turning the light on. Replace the plastic cover and re-install the light.

Sun Visor Lights

The sun visor lights are very similar to the rear dome lights. They use one 39mm fuse style LED per light, and are also held in by a clip. The clip that holds these lights in is located on the side with the thin notch. To remove, slide the light to the side opposite the notch, and release the clip on the notched side. Before removing or installing the LED, unplug the light. Replacing the bulb without unplugging the light can and will cause a fuse to blow. To remove the bulb and install the LED, remove the plastic cover on the back of the light. Remove the bulb by pushing to the side and pulling the bulb out. Install the new LED in the same manner, one side at a time. Plug the light back in and test the LED by turning the light on. Replace the plastic cover and re-install the light.

Door Indicator Lights

The door indicator lights are tricky to install. They are held in place by two plastic clips on either side. Though some people have been able to pry these lights out of the door panel, we do not recommend it. We recommend removing the door panel to access these lights. Please reference a door panel removal how-to or service manual for your specific vehicle. To remove the light from the door panel, simply depress the plastic clips on the sides using your fingers. Before removing or installing the LED, unplug the light. Replacing the bulb without unplugging the light can and will cause a fuse to blow. To remove the bulb and install the LED, remove the plastic cover on the back of the light. Remove the bulb by pushing to the side and pulling the bulb out. Install the new LED in the same manner, one side at a time. Plug the light back in and test the LED by turning the light on. Replace the plastic cover. Re-install the light and the door panel.

More Information on Back

Trunk Light

The trunk light holds one 194 LED. To remove the trunk light, find the thin notch on one side. You will need to push towards the opposite side and use a thin screwdriver in the notch to pop the light out of the carpet. Before removing or installing the LED, unplug the light. Replacing the bulb without unplugging the light can and will cause a fuse to blow. Plug the light back in and test the LED by turning the light on. Re-install the light.

Aiming Fuse Style LEDs

Our fuse style LEDs are directional by design. The body of the LED is able to rotate in the light where installed. In order to get the brightest illumination possible the LED should be pointed directly at the lens of the light in which it is installed. In larger lights you may be able to further point the LED at areas inside the vehicle.

Connection Issues

LEDs have polarity. If your LED does not light when first installed, remove, rotate 180° and re-install. If your 194 wedge style LED does not light after installing in both directions you will need to better the connection. The leads on the LED typically sit like this:

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To better align the leads with the contacts in the light, spread the leads like this:

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Testing an LED

If your LED is still not lighting it may be the light base. Before contacting 42 please test the LED on a known 12v source. To do this, use some alligator clips or test leads to connect the LED directly to a 12v source such as the battery. Test the LED in both orientations to rule out polarity. Be careful when testing an LED – use common sense!

Trickle Voltage

When all the interior lights in a VW are replaced with LEDs it is common for the LEDs to illuminate very faint when all lights are turned off. There is a trickle of voltage in the system when all lights are turned off. Because LEDs require such little voltage to light they will remain very faintly lit in some vehicles. Not enough current is drawn to affect battery life.

Venting the License Plate Lights

The license plate lights in the mk4 GTI and New Beetle are completely sealed. License plate lights are constantly lit even with the headlights off. This is by far the harshest environment for the fuse style LEDs. These lights **MUST** be vented in order for the LEDs to last. To vent these lights, remove and unplug the lights. The entire top of the housing must be vented in order for the LEDs to shed their heat. To do this simply cut or drill out the top of the plastic enclosure. If this is not done the LEDs will only last 1-6 months depending on the relative temperature of your area. Jetta license plate lights are completely vented and do not suffer from this heat issue.