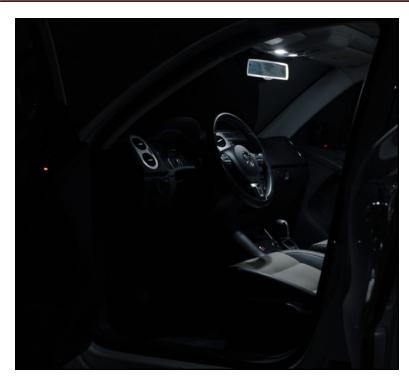


Volkswagen Tiguan 1 & 2 (5N)
Ziza LED Interior Lighting Kit
Installation Instructions - ES4316212

## **Skill Level 1 - Easy**







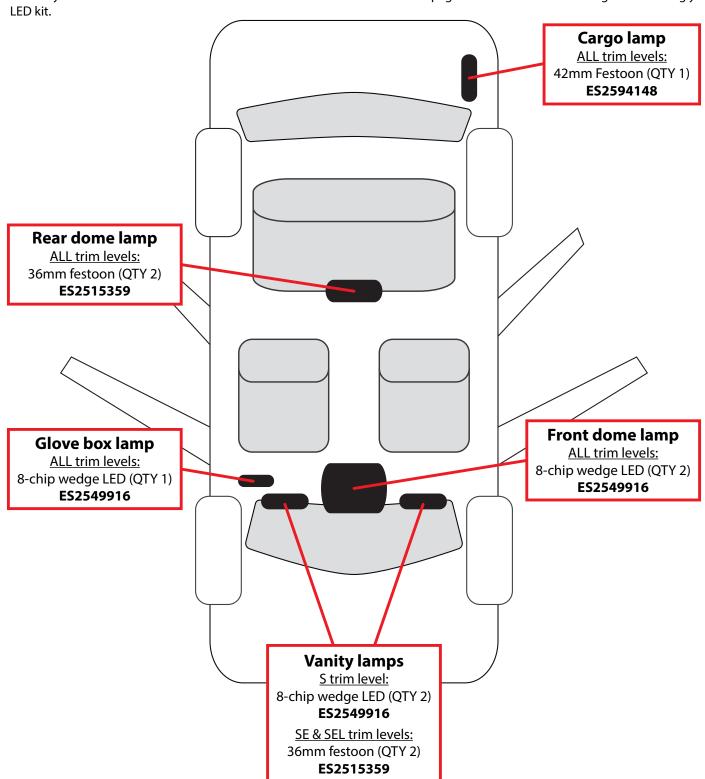




### **Section 1: Introduction**

#### **LED Locations**

This kit is for the Tiguan 1 (2009-2011) and Tiguan 2 (2012-2018). We've created the diagram below to help you determine where each of your new LEDs need to be installed. Please feel free to reference this page as needed while unboxing and installing your LED kit



### **Required Tools:**

Trim Removal Tools Small Straight Pick (<u>ES#517779</u>) (ES#2778980)



### **Section 1: Introduction**

#### What are LEDs?

LEDs are Light Emitting Diodes, solid state devices which 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° in the electrical connector cures this problem.

### **Bulb Types**

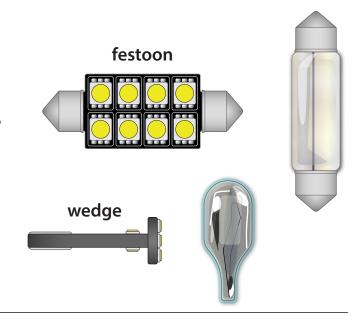
This kit includes two bulb types, classified by their general shape:

#### **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.

#### 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.

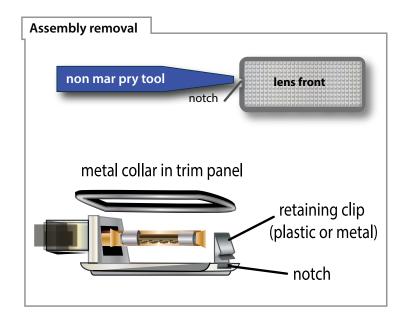


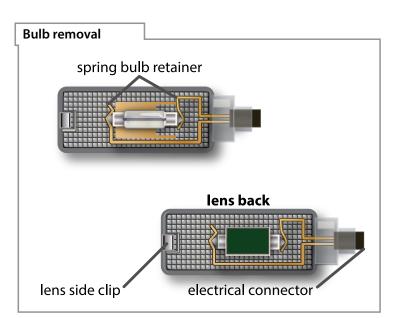
### **General Tips**

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.







## **Section 2: Front Dome Lamp Installation**

#### Step 1

- The front dome light bulbs are accessed by opening up the front dome lamp housing.
- Using a non-marring trim tool, carefully pry the dome lamp cover downward along the front edge to release the clips which secure it into place.
  - Carefully guide the trim tool from one side of the dome lamp cover to the other as shown in the Step 1 Photo on the right.



#### Step 2

- Be sure that the bulbs have had time to cool down, then remove them (not shown).
- Install the 8-chip T10 wedge or 6-chip 36mm festoon bulbs (arrows in the Step 2 photo).
- Check to see if the bulbs light up when you set the dome light switch to 'on'.
- If an LED doesn't turn on:
  - Remove the LED from the housing
  - Rotate it 180°
  - Reinstall the LED and retest
  - The LED should now illuminate



#### Step 3

• Reinstall the front dome lamp cover (Step 3 photo).

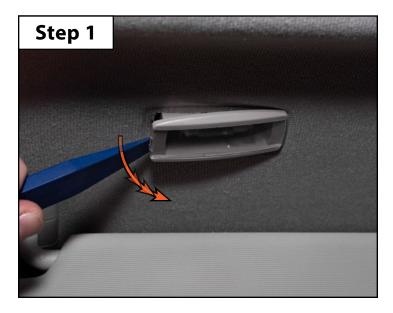




### **Section 3: Vanity Lamp Installation**

#### Step 1

- The vanity light bulbs are located in the housings inside the headliner above the sun visors.
- Slide your non-marring trim tool into the notch in the side of the housing (see <u>Page 3</u>), release the spring clip and gently pry the housing out of the headliner (**Step** 1 photo).
- Be sure that the bulb has had time to cool down, then remove it from the housing (not shown).



#### Step 2

- Install the 6-chip 36mm festoon bulb.
- Check to see if the bulb lights up when you slide the vanity mirror open (Step 2 photo).
- If the LED doesn't turn on:
  - Remove the LED from the housing
  - Rotate it 180°
  - Reinstall the LED and retest
  - The LED should now illuminate

**NOTE:** Due to differences in manufacturing, you may find that your LED fits loosely between the electrical contacts inside the lamp housing. If you run into this situation, you can easily bend the tabs inward by hand (1-2mm should be sufficient).



- Reinstall the vanity lamp housing (**Step 3 photo**).
- Repeat this procedure on the other vanity lamp.





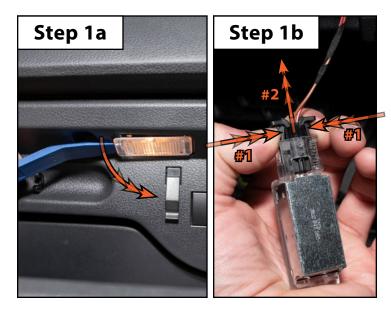
## **Section 4: Glove Box Lamp Installation**

#### Step 1a

- Open the glove box and locate the lamp housing inside.
- Slide your non-marring trim tool into the notch in the side of the housing (see Page 3), release the spring clip and gently pry the housing out of the glove box (Step 1a photo).

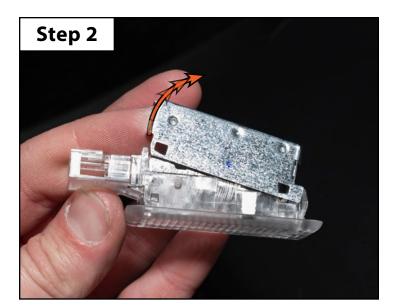
### Step 1b

 Disconnect the electrical connector by squeezing the tabs inward and pulling the connector free out of the housing (Step 1b photo).



#### Step 2

 Remove the backing plate from the rear dome lamp housing (Step 2 photo).



- Be sure that the bulb has had time to cool down, then remove it from the housing (not shown).
- Install the 8-chip T10 wedge bulb (Step 3 photo).

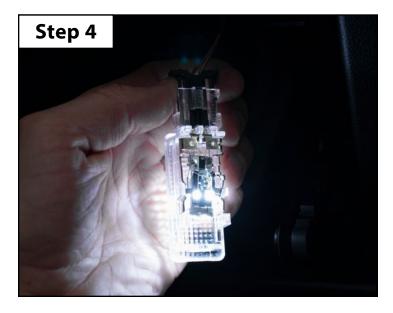




# **Section 4: Glove Box Lamp Installation**

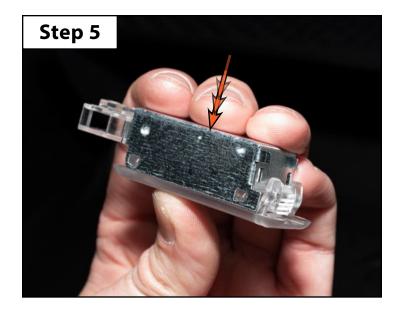
#### Step 4

- Reconnect the glove box lamp electrical connector and check to see if the bulb lights up (Step 4 photo).
- If the LED doesn't turn on:
  - Remove the bulb
  - Rotate it 180°
  - Reinstall the bulb and retest
  - The LED should now illuminate



#### Step 5

- Disconnect the glove box lamp electrical connector.
  - This is to avoid grounding out the housing while installing the backing plate.
- Reinstall the backing plate onto the rear dome lamp housing (**Step 5 photo**).



#### Step 6

Reconnect the glove box lamp electrical connector.
 Reinstall the housing into the glove box (Step 6 photo).

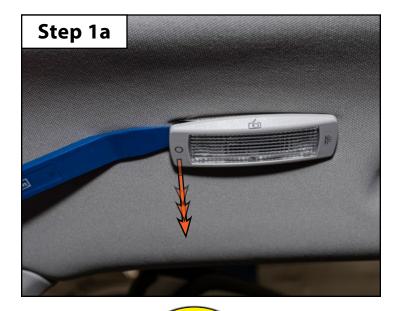




# **Section 5: Rear Dome Lamp Installation**

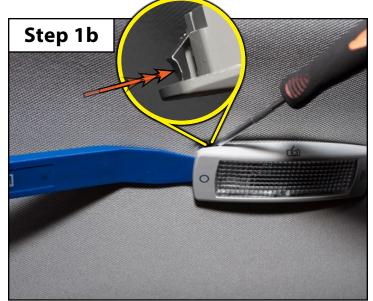
#### Step 1a

- The rear dome lamp housing is slightly recessed into the headliner, this makes it rather tricky to access that metal retaining clip we talked about on Page 3. Don't worry though, we've got a trick or two up our sleeve and we'll show you how to get this lamp out safely.
- To begin we need to gently pry downward on the side of the housing which is marked with an "O" (Step 1a Photo) with a non-marring trim tool.
- It will only separate from the headliner by a few millimeters, but that's all we need. Continue to **Step 1b** below.

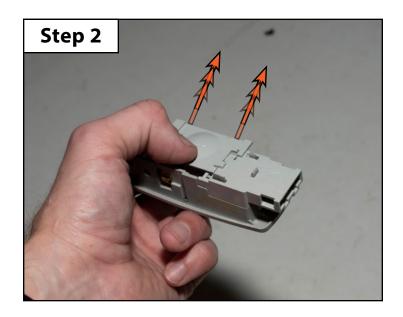


#### Step 1b

- Use your non-marring tool to hold the rear dome lamp while you slide a small screwdriver or hose pick between the housing and the headliner (Step 1b Photo).
- Use that small screwdriver or pick to compress the metal clip on the housing (YELLOW) inset photo), then the housing should swing freely out of the headliner.
- If you don't compress this clip there is a very good chance you will damage your headliner while removing the dome lamp.



- Remove the backing plate from the rear dome lamp housing.
- Be sure that the incandescent bulb has had time to cool down, then remove it from the housing (not shown).

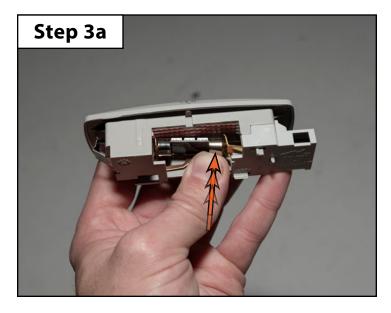




## **Section 5: Rear Dome Lamp Installation**

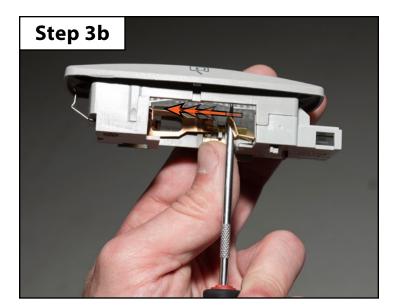
#### Step 3a

- Install the 6-chip 36mm festoon bulb.
- Check to see if the bulb lights up when you set the dome light switch to 'on'.
- If the LED doesn't turn on:
  - Remove the LED from the housing
  - Rotate it 180°
  - Reinstall the LED and retest
  - The LED should now illuminate

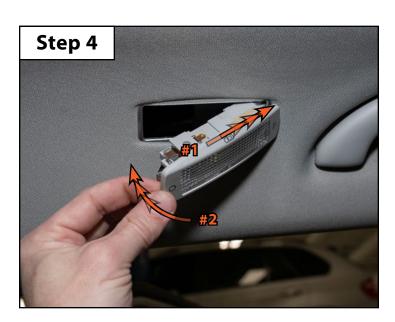


#### Step 3b

**NOTE:** Due to differences in manufacturing, you may find that your LED fits loosely between the electrical contacts inside the lamp housing. If you run into this situation you can use a small pick to bend the tab inward (1-2mm should be sufficient).



- Reinstall the backing plate onto the rear dome lamp housing (not shown).
- Reinstall the rear dome lamp housing into the headliner.
- Repeat this procedure on the other rear dome lamp.





## **Section 6: Cargo Lamp Installation**

#### Step 1

• Slide your non-marring trim tool into the notch in the side of the housing (see Page 3), release the spring clip and gently pry the housing out of the panel (Step 1 photo).



#### Step 2

- Be sure that the bulb has had time to cool down, then remove it from the housing (not shown).
- Install the 8-chip 42mm festoon bulb (Step 2 photo).
- Reconnect the trunk lamp electrical connector and check to see if the bulb lights up.
- If the LED doesn't turn on:
  - Remove the bulb
  - Rotate it 180°
  - Reinstall the bulb and retest
  - The LED should now illuminate



#### Step 3

Reinstall the cargo lamp housing (Step 3 photo).

