Volkswagen Cabriolet DIY Guide
Installing Interior LEDs

Instrument Cluster

Tools needed: (does not include tools for removing cluster)

- Test leads (not required, but makes things easier)
- 9V battery (not required, but makes things easier)
- Phillips screwdriver
- Flathead screwdriver (including small, thin one)
- Plastic interior removal tool (optional, but recommended)

Parts needed:

- Three B8.3D LEDs

Source: www.superbrightleds.com

Step 1

Remove the instrument cluster.

Please refer to the following DIY guide: http://cabby-info.com/Files/DashRemoval.pdf .

Step 2

Lay the cluster on a table and remove (twist) the three original bulbs (locations circled).

Step 3

If not removing green film, skip to Step 8. Carefully pull the blue foil off the 4 bulb housing pegs.

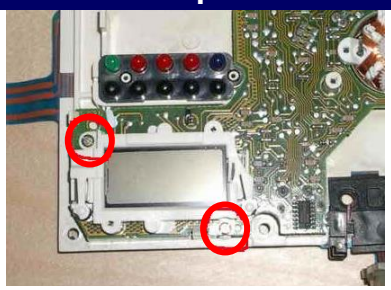
Step 4

Using your fingers or plastic interior removal tool, separate the top of the cluster from the bulb housing to carefully pop out the housing's tabs. (MotoMeter on top; VDO on bottom)

Step 5

Remove the bulb housing from the cluster, remove the green film, clean the housing (if desired), and reinstall the housing onto the cluster. Carefully press the blue foil back onto the housing pegs. **If not removing green clock film, skip to Step 8.**

Step 6

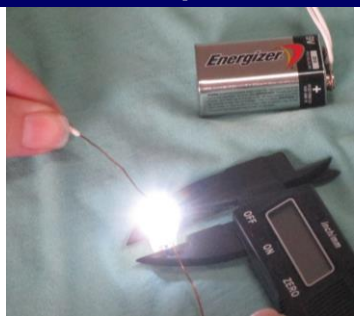


Now, you'll need to remove the screws holding the front and back cluster pieces together so that you can get to the inside. Once you get to the clock & idiot light circuit board, undo the two screws circled. There are another 2 screws under it. To undo them, lift the circuit just enough to get a small screwdriver in at an angle to get them out. You cannot get the board out unless you remove the flexible board completely. They are attached together.

Step 7

Once all 4 screws are out, you can lift the white cover and have access to the LCD screen. The LCD screen is held in place by two rubber pieces. Under the LCD screen you will find the green film that gives that nice green light; remove that film.

Step 8



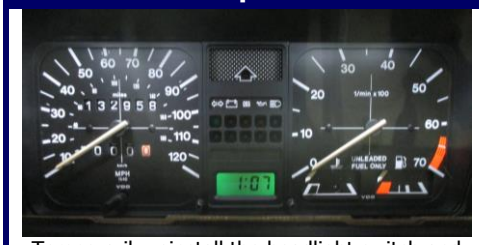
For easier installation, test the LEDs' polarity and functionality: Attach your test leads to a 9V battery & apply power to each LED. If they light up, mark the + contact on the bulb and continue to step 9. If they do not light up, reverse the test leads on the bulb contacts; LED should now light. Mark the + contact on the bulb and continue to step 9.

Step 9

Install (twist) the new LED replacements in the original bulb locations. Polarity for VDO (yellow/red dots): 1) The + side of the cluster LEDs go at the top; 2) The + side of the clock LED goes at the bottom.

If they will not fit into the holes, you may need to bend the 2 metal retaining tabs in towards the bulb.

Step 10



Temporarily reinstall the headlight switch and plug the cluster into its 14-pin connector. Flip the headlight switch on, ensuring the dimmer dial is full-on. If all bulbs light up, turn headlight switch off, remove switch, and reinstall cluster. If bulbs do not light up, remove them, gently pry up the contacts a bit, and reinstall. If they still do not light up, reverse their polarity (twist the bulbs 180°).

Step 11 ~ Optional

While the headlight switch is readily accessible, now is a good time to replace it as well with a #74 LED; see page 3 for further details.

Step 12

If all is good, put the dash back together.

Examples of lighting schemes:

white LEDs
(green film removed)

White LEDs
(clock film not removed)

red LEDs

green LEDs
(green film removed)

blue LEDs
(not installed in original bulb locations)

UV/blacklight LEDs
(not installed in original bulb locations; needles painted fluorescent orange)

Installing LEDs into the dash switches

Tools needed:
- Varies; see instructions

Parts needed:
- #74 LED(s)

Headlight Switch

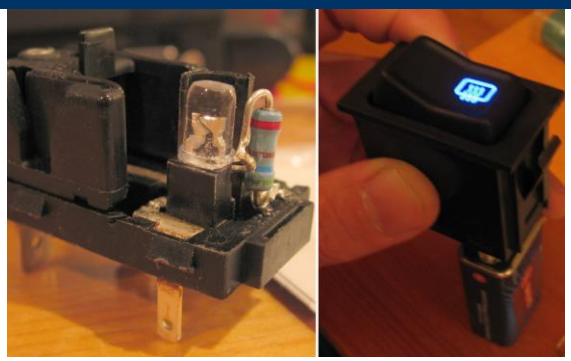
Left: new incandescent; Center: new LED

Remove headlight switch electrical connector. Pull bulb out of connector and replace with #74 LED. Turn ignition key to "on". If LED lights up, installation is complete. If LED fails to light, remove it, turn it 180°, and reinstall; bulb should now light when key is turned to "on".

Emergency Flasher Switch

Remove flasher switch. Twist bulb holder 90° and pull holder out of the switch. This bulb is not a plug-and-play replacement, but is replaceable with some electrical work. You'll use a micro flat-head screwdriver to press in the metal retaining tab (arrow) and push/pull the bulb out of the housing. Remove the bulb from the metal contact. Using a 9V battery and test wires, test the new #74 LED's polarity and make note of which bulb lead is + (positive). This + lead will then be wrapped around the metal contact as the original was. Using a small bit of solder, solder the + lead to the metal contact. Straighten the – (negative) bulb lead (which may need to be shortened), and reinstall the bulb with contact. The metal contact slides into two slots in the housing. Ensure the – (negative) lead is touching its metal contact inside the housing. Reinstall the bulb and holder into the switch.

Rear Defrost Switch



Center Console Gauges

Working on it! More detailed instructions and photos forthcoming.

Tools needed:

- Philips screwdriver
- Identifying tool: silver marking pen, paint pen, nail polish, etc.

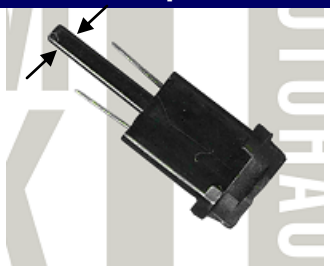
Parts needed:

Ca. 1983 to 1993

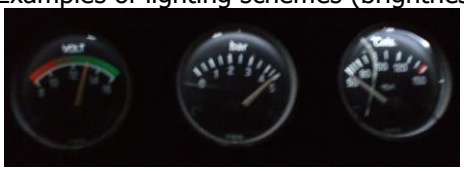
- New bulb sockets from Mk1Autohaus.com
- Three #74 LEDs

1980 to ca. 1983

- Three #BA7S LEDs

Step 1	Step 2	Step 3
 Remove the center console and the three VDO bulb holders. Make note of which wires go to which gauge; brown = ground.	 Install LEDs into new (or original) bulb sockets. 1983+: Using 9V battery and test wires, test each LED's polarity and mark (where arrow is in photo) which side is +.	 Install new bulb sockets & bulbs into the gauges.
Step 4	**Step 5**	**Step 6**
 Install wire(s) onto new bulb sockets. 1983+: power wire goes to side you marked, ground to the other side.	 Turn light switch on. All bulbs should be lit.	 Reinstall center console.

Examples of lighting schemes (brightness varies according to the owner's dimmer switch setting):



white LEDs

blue LEDs
(not installed in original bulb locations)

green LEDs
(center is stock bulb)

Other interior LEDs

Tools needed:

- Phillips screwdriver
- Straight screwdriver

Parts needed:

- License plate: Two BA9S LEDs (your choice in number of LEDs in the bulb)
- Courtesy light: One 4410 LED (your choice in number of LEDs in the bulb)*
- Trunk light: One 4410 LED (your choice in number of LEDs in the bulb)*

Source: www.superbrightleds.com

*Tip: buy one with a minimum of 3 LEDs.

All remaining interior lights are plug-n-play: Remove bulb covers, replace bulbs and reinstall covers.

Examples:

License Plate

stock bulb on the left, LED on the right

Trunk

Courtesy Light

Photo credits: KamzKreationz, Black_cabbie, djoutsider711, invintive, JPX, _IVAN_, and DaveLinger of VWvortex.com. Thanks guys!

* * Remember, **you** are responsible for working on **your** car; Cabby-Info.com, VWvortex.com, VAG, VWoA, or anyone else are not responsible if **anything** goes wrong while **you** are working on, in and under **your** car! Use this information at your own risk!* *