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LED Turn Signal Bulbs w/ OEM Flasher Relay

The OEM flasher relay in the left rear of the relay box under the back of the gas tank looks like this:



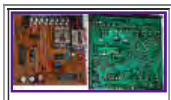
Early - Green Housing

OR



Late - Black Housing

Despite the different colored housings, they are the same part (61311459224) and are interchangeable. Although they operate exactly the same, the circuitry inside them is slightly different. Click the thumbnails below to see the details.



Green



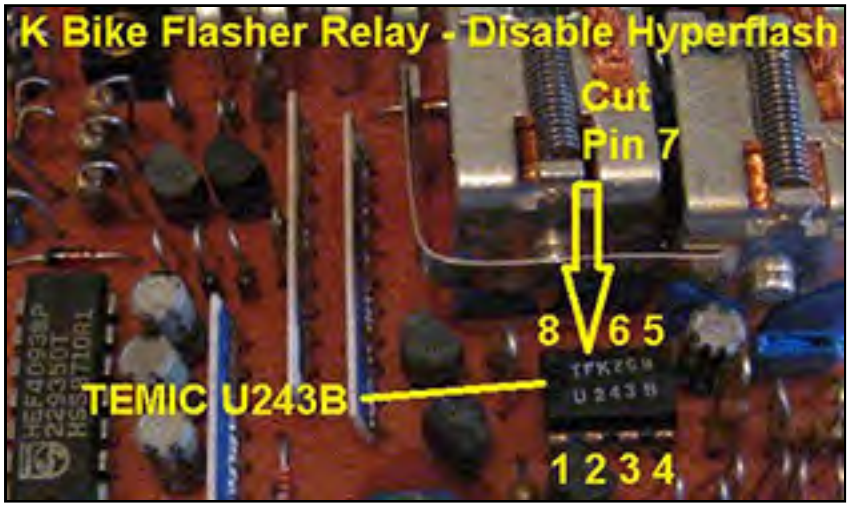
Black

Typical of many automotive flasher relays, they have a built-in safety feature commonly referred to as "hyperflash." This occurs when your flasher relay senses that one of your turn signal bulbs has gone out and lets you know that by flashing your turn signal at roughly twice its normal speed. I'll skip the details but this is why replacing your turn signal bulbs with LEDs will cause hyperflash to occur.

However, you can disable the hyperflash feature of a K bike flasher relay by removing the circuit board from the housing and performing a very simple modification.

Short version:

Green Flasher Relay

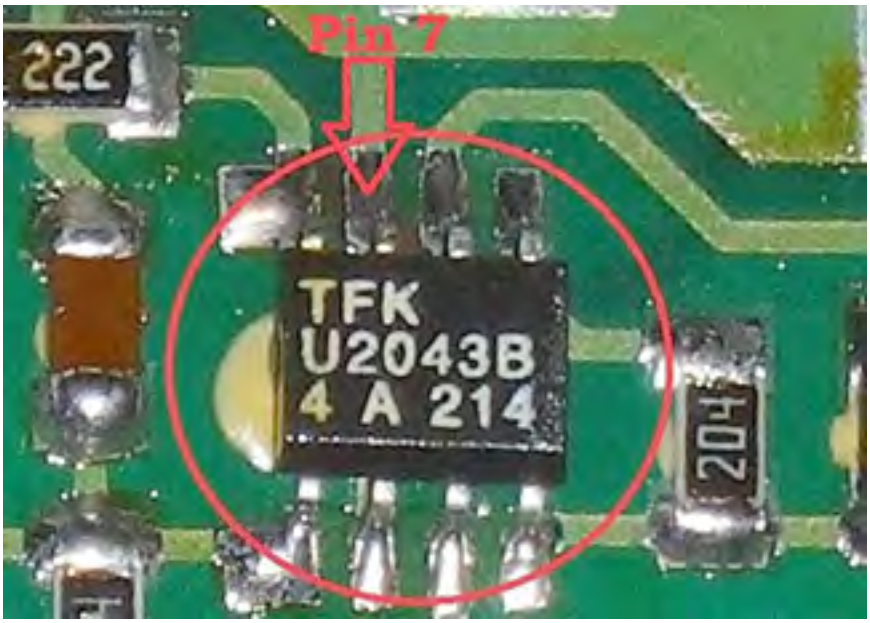


How I did it: For the green flasher relay I first pushed the U243B chip towards the 1-4 pins to make 5-8 more exposed. Then I used a small screwdriver to pry Pin 7 up out of

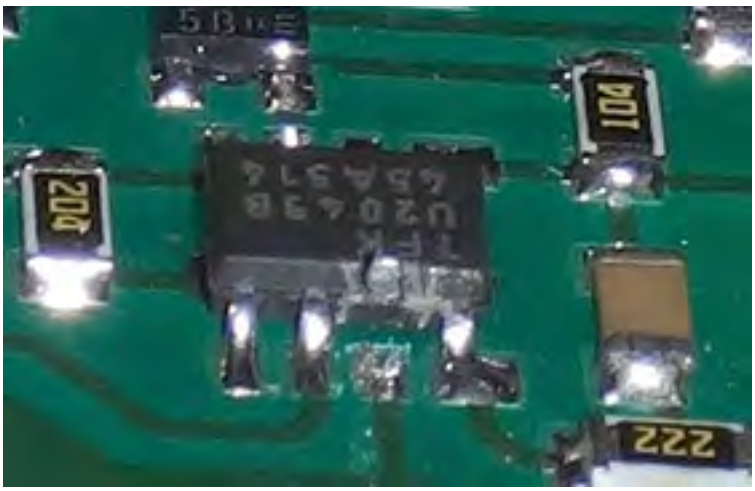
the circuit board and bend it out. I then used some small diagonal cutters to cut off Pin 7.



Black Flasher Relay



How I did it: For the black flasher relay I used the tip of a pushpin to break Pin 7 and bend it up and out of the way.

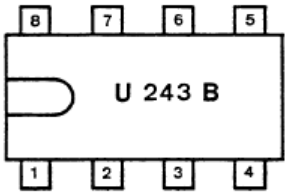


Alternatively, you could flip the flasher relay over and cut the trace that goes to Pin 7.

Long version:

The 8-pin U243B and U2043B chips made by TEMIC are "Warning or Car-Direction Indicator" chips. This is the chip in your flasher relay that controls the hyperflash

feature. Cutting Pin 7 disables the hyperflash so that it will not be triggered by the use of LED turn signal bulbs.



Here are the spec sheets for them: U243B.Specs.pdf U2043.Specs.pdf You'll notice that both list Pin 7 as the "Lamp failure detection" pin.

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TFK
U243B
4 A 940
HEF40106BP
639760T
HSS8940P4

