

## BMW K75/K100 Altitude Switch With Indicator Lamp

The K75/K100 L-Jetronic control unit does not sense the ambient air pressure and adjust the mixture for the reduced air pressure at higher altitudes. Instead K75s and K100s have what's commonly referred to as an altitude plug. When you ride above 4,000 feet in altitude you insert the plug which tells the L-Jetronic to adjust the mixture. (For some unknown reason BMW only put this feature on US/North America K bikes.)

The connector for the altitude plug can be found along the frame rail above the back of the throttle bodies. The middle picture below shows the connector with the factory black protective cap installed. Sometimes it's hidden behind the frame so you may have to dig to find it. The picture on the right is the altitude plug. (Part # 61131459504)



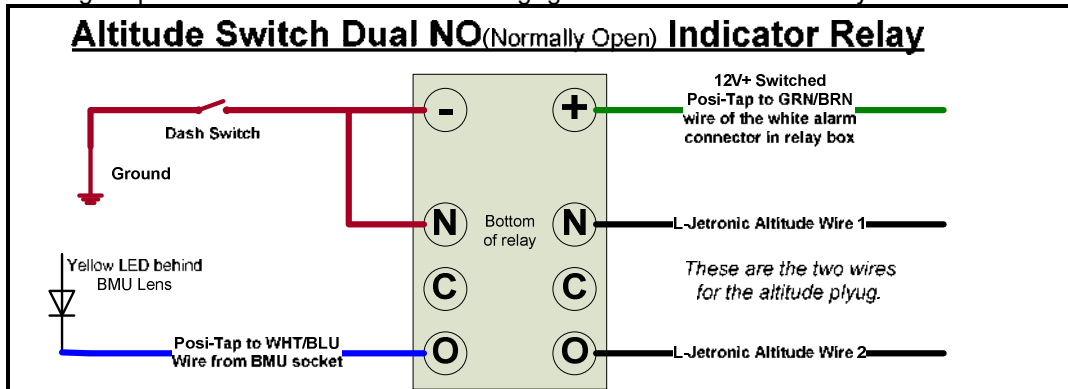
Instead of stopping and getting off to insert/remove the altitude plug, many K owners install a dash switch (using a hazard switch) since all that the plug is is a wire loop. Here's how I installed an altitude switch with an indicator light in the instrument cluster.

On this K75 I have LED brake and tail lights. The BMU doesn't "like" LEDs and the BMU indicator light in the instrument cluster would always be illuminated. I therefore removed the K pin from the BMU to keep that light from always being on.



I decided to repurpose the BMU indicator light in the cluster to indicate when my altitude switch is engaged. However, when riding at night with the altitude switch engaged I do not want a bright red light showing. Using a **yellow** LED bulb for the BMU bulb in the cluster makes it so that it just glows a little and isn't overly bright at night.

In order to light up the LED when the switch is engaged I use a small 12V relay.



When wired as shown above the switch closes two circuits when the switch is turned on: one that illuminates the LED in the cluster and one that completes the altitude plug circuit.

Instructions on how to make the relay can be found at <http://www.kbikeparts.com/classickbikes.com/ckb.tech/0.ckb.tech.files/wprelays/wp.relay.htm>