

# Which Switch Fix is Which?

## Dodgy Switch Fix

BY KEVIN BLUME, 6-PACK

Recently, I've noticed that my high/low headlamp switch on my late TR6 was acting a little, shall we say "uncertain". I believe our British friends would say it was "a bit dodgy". It did not want to hold the high headlamp setting, unless I kept pressure on the switch and it just felt like it was gummed up. I figured the contacts were probably corroded, so I decided to end my aggravation and clean it up. I will leave the removal process from the steering column up to you since it is fairly straightforward.

First, a couple of suggestions. To ward off the wrath of the Prince of Darkness, it's a good idea to disconnect the battery prior to removing the switch. Second, the switch has several small internal parts that will want to roll off the table, so it's also good to work over an old towel or rag. Another word of

caution, do not listen to your testosterone and put the switch in a vise. Remember, we're dealing

with Messrs. Murphy and Lucas here and too much pressure may crack or distort the casing.

Photo 1 shows the switch after removal and ready for disassembly. Note that this switch has two main functions, a high/low headlamp setting and the "flash to pass" setting. To accomplish this, the switch has a hinged two-part housing that must be taken apart.

The outer casing is held to the inner casing by a steel pin and a small spring that attaches to the plastic contacts plate.



In photo 2, you will see that I used a 1/16" drill bit as a punch to remove the pin. There is also a second shorter pin that holds the lever to the casing and it is removed using the same method. The flash to pass contact tab needs to be bent slightly out of the way, to separate the casings. This will also expose it for cleaning later on.



In photo 3, you can see the outer casing, the small spring and the two pins. By removing the shorter pin, it will allow you to slide the lever forward to expose the copper contacts. This is where you will be happy you're working over the towel, as there is a spring loaded ball and small insulator that may fall out of the lever head. I did not remove the

lever completely since I only needed to expose the contacts for cleaning and I did not want to crack or break the plastic handle at the end of the lever.



Photo 4 shows all the parts exposed. The goal is to clean all six circular copper contacts and the copper "shoe" that rides over four of them. To do this, I used a moist paste of "Bar Keepers Friend" on the end of a Q-tip swab and some very fine sandpaper.

The last two contacts to clean are the "flash to pass" contacts that are on a 90 degree copper tab connected to the outer casing and the main contact plate. Prior to re-assembly, place a very small amount of dielectric grease on all the contacts, the copper "shoe" and the little ball to minimize future corrosion and provide a smooth operation of the switch.

Reassembly is just the reverse of the above and don't forget to bend the "flash to pass" copper tab back to a 90 degree angle so it will be in alignment with its mating contact.

You should now have a switch with a more positive feel and less resistance to current flow. Bring on those night time rides! **RAGTOP**

## Early Dip Switch Conversion

BY TODD BULLOCK, 6-PACK

Since I have big feet and an early year TR6, I have always had a problem with switching from low beams to high beams. I have to turn my foot inward and hit the foot switch with the side of my foot while avoiding the clutch. I have devised a way to convert the hi-beam flash to a hi/lo switch. This method does not cut any wires or prevent restoring back to stock.

To make this conversion you need a latching relay, one that toggles from one setting to the other and stays until the next input. I used a Napa Echlin AR284, a relay used for VW's and others that use a momentary switch to change the headlights. The internal diagram is in the picture. The contacts are rated at 30/40 amps and will safely operate stock headlights. It does not prevent the use of aftermarket power headlight relays. You will also need some 16-18 gauge wire, ring lug, bullet connectors, covered connector tubes, female spade connectors and a piggyback spade connector. As with most electrical projects, disconnect the battery ground while moving wires around.

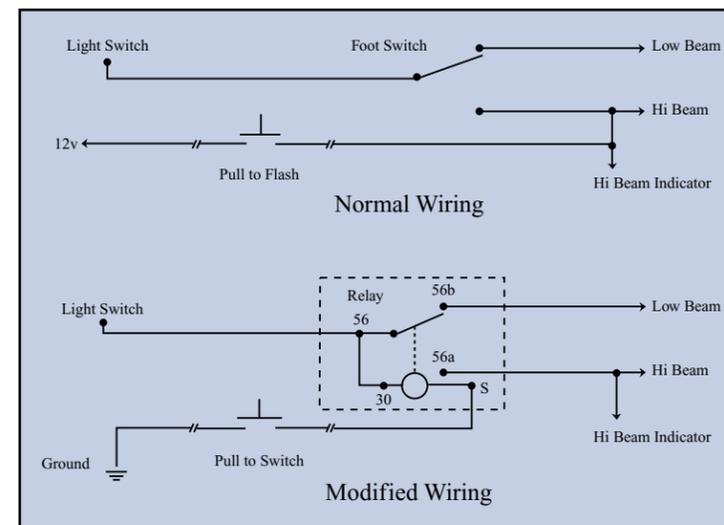
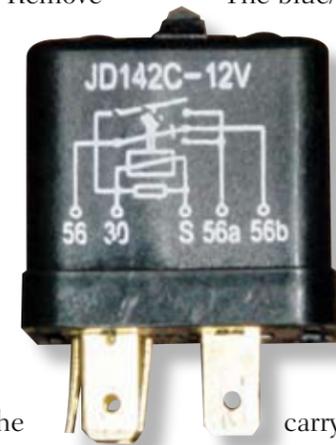
First you need to find the headlight switch wires behind the dash, I found

it easier with the speedo and tach out. Locate the brown wire from the switch that is connected to the purple power wire. Remove the brown wire bullet from the connector tube leaving the insulated tube over the 12 volt purple bullet to keep it from shorting. Connect the brown wire to ground through a connector tube with a bullet and lug. Next, find the blue/white wire from the switch that connects to the three way connector for the high beam indicator. Disconnect this wire, leaving the others connected, and run a jumper from the wire to the area beside the foot pedals. Use a bullet type insulated connector tube, as this wire will

have 12 volts on it.

Pull the wires from the foot dip switch and mount them to the relay.

The blue/red goes to 56b and blue/white goes to 56a. The solid blue attaches to 56 using a piggyback spade connector. The other spade of the piggyback is for a jumper to connector 30 on the relay. Make sure the main wire is connected to 56 as the jumper is only carrying a light current to activate the relay. The jumper from the switch is connected to S on the relay. Insure that all connections are insulated from each other and to any metal the relay is up against. I have tucked the relay up beside the pedal box and zip tied it to the wiring harness there.



These instructions are made for my 1972 TR6 and should work with all early years. The headlights should now come on with normal hand switch operation and the hi/lo can be changed by pulling back on the lever. If all works well, you can remove the foot pedal and mount a dead pedal to rest your foot on! **RAGTOP**