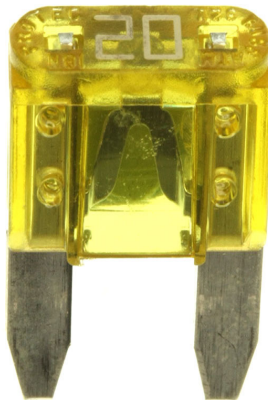


Fuse Holder Conversion

If an intermittent electrical connection is keeping you from enjoying your bike, then you might not have to look any further than your old fuse holder. Classic tubular fuse holders are a major source of electrical system headaches that could be very easily avoided. Here are the problem areas:

- Tubular fuses are not easy to find these days since all the cars swapped over to the color coded “flat pack” fuses long, long ago. If you have trouble finding a glass tubular fuse in-town, then they’re probably impossible to find on the road, should you blow one 50 miles from home.
- The spring force against the ends of the fuse is not always enough to overcome the resistance found in the oxidation of the solder within the tubular fuse holders. Therefore, the tubular fuse holders are often the source of poor electrical connections. This can lead to hard-to-diagnose and intermittent electrical issues, such as poorly charged batteries.
- The method Lucas and others use to secure the old-style fuse holder to the harness allows for physical damage. Any tension on the wires into the holder works directly against the terminals of the holder. This ends up breaking the individual strands of wire, often leaving 4 or less strands to do the job designed for all 15 strands.



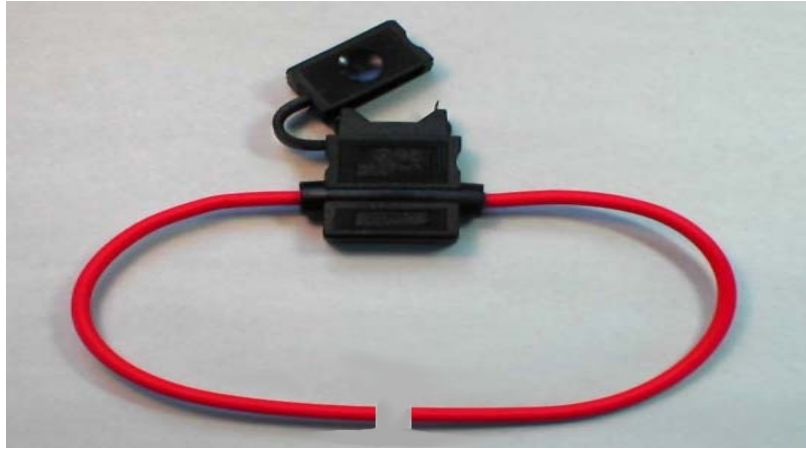
The modern “blade” or “flat-pack” automotive fuse

For the above good reasons, I highly suggest converting to a modern, automotive-type “flat-pack” fuse and fuse holder. Automobiles have used these fuses since the 1970's and replacements are easy to find. Their electrical connections are not dependent upon spring pressure, and there is no solder joint to oxidize or corrode. Best of all, the housings of the fuse holder are molded onto the wires providing strain relief and full weather protection.

You can easily find modern, weather-proof fuse holders by going to NAPA (Item#: BK 7511093, Price: \$5.69), or your local auto parts store. These come in 2 sizes: standard and mini, and either size will work equally good. Be sure to also buy a pack of the matching size 15A or 20A fuses to fit your new fuse holder. These are color-coded in yellow for easy identification.

The installation is best done by crimping a 1/4" dia ring lug to each end of the supplied RED wires on the fuse holder. You'll want to connect this new fuse holder between the battery positive (+)

terminal and the center stud of the black, finned Lucas rectifier. If you have converted your bike to Single Point Ground (see GABMA article “Proper Grounding”), then the connections would be made between the battery positive (+) terminal and the rectifier base bolt, or single point ground.



A modern weather-protected “blade-type” fuse holder is perfect for motorcycles

Although a fuse provides equal electrical protection on either side of the battery in theory, in practice there are very real and highly significant differences. A fuse on the “ground” side of the battery (usually the + Positive side) gives your best protection against all shorts, especially the ones caused by metal seat pans, metallic seat stay cables, or tools bouncing out of the tool tray and onto the battery terminals. So there are very big differences in the “real world”.

By eliminating the tubular glass fuse and tubular fuse holder, the owner eliminates a multitude of documented electrical connection issues, and will have a much easier time maintaining a charged battery. A properly connected battery will in-turn eliminate numerous ignition and weak headlamp issues, and hopefully contribute to your greater enjoyment of these fine motorcycles.

Hope this helps!
RF Whatley
Rodi British Bikes