

I was looking for something to do and I got to thinking about the wiring looms I've done on a few friends' TDs, I would mention who they are, but I don't want everyone to assume that I goofed up if they hear about a major electrical problem in a fellow club member's car. I also considered the very recent John Twist video on YouTube, *MG Parking Light Circuit* <http://www.youtube.com/watch?v=p2f3zkMzuUY> If you haven't seen it, it's about the MGB that had the clock illumination light fail, taking out the entire instrument wiring harness. Now that's a light bulb with a real sense of purpose! John Twist got the woman back on the road for about \$900, which is good for John, but wouldn't be so good for me. Why does any MG need a clock anyway? Don't we all have them on our cell phones? The clock for my TD is exactly correct twice a day. My cell phone is correct 24/7 as long as I'm in civilization.

I pulled down my instrument panel. I keep mine on a shelf, I know some of you keep yours in your car, but I might be a week or so away from getting my tub from the paint guy, so my instrument panel is on a shelf. I liked Evan Ford's article explaining his work on fusing his TD <http://tseriesmg.blogspot.com/>, but I didn't want to disrupt that much wiring by adding connections for moisture and corrosion to attack. I've also read Barney Gaylord's tech advice on why an MGA is perfectly happy with only two fuses <http://mgaguru.com/mgtech/electric/et200.htm>.

Evidently the MGA continued where the TD and TF left off, including tying four red wires together at the grub screw at the lighting switch. Barney says this is a great idea, since the grub screw is much more reliable than a bullet connector, but he must have a greater appreciation of trying to stuff four tinned wires under a grub screw that was designed for maybe two. And as Evan pointed out, the original wiring did not come in as great of a gauge as the high dollar replacement wiring we all seem to be buying. This fatter, bigger wire makes it even more interesting when trying to stuff four tinned wires under a grub screw built for only two wires. When I received my loom from British Wiring a few years ago (did I mention I once thought I would have my tub back sooner than next week?) I was honestly tempted to install an alternator and a few gee-whiz lights and audio gizmos because the wire as provided is capable of supplying hydroelectric power to a small town. I started stripping insulation and tinning wires and I understood why the wiring loom was so expensive. The greater gauge also explains why we have so much fun pulling it through the firewall, one wire at a time, with a pair of pliers, and have to use grommets that won't fit in the hole with the wire bundle.

The object here was only to protect an expensive wiring loom, not provide redundancy in case one head lamp shorted out, or if the wires in the instrument lighting circuit decided to take out the parking lamps and all the wiring in between. On this car, if one head lamp shorts out it will get very dark, just as it would have without any fusing. The difference is that I'll be able to find the short or open circuit afterwards, and not start my trouble shooting by ordering a new loom.

I removed the one red wire I had already attached to the lighting switch (the other three are still in the main harness, which is also on a shelf) and installed an inline fuse fixture that cost \$1.79 from the hardware store. I added one bullet connector to the junction

between the inline fuse and the red wire in case I break the fixture trying to replace the fuse later when I have a short that takes out the fuse. I could have twisted the wire together, soldered the pair and protected it with a bit of heat shrink tubing. I didn't because I dislike soldering wires while hot solder is dripping in my face as I lay on my back. I figured that I might not always keep my instrument panel on a shelf, and one likes to be prepared. I also created two more double connectors by taking old junked out ones salvaged from my original harness, and used heat shrink tubing as a new insulator, since letting all the smoke out of the original harness destroyed the insulation on the old connectors. I snipped off the previously tinned wires on the main harness and soldered on bullet connectors to them as well. I stuck a 10amp fuse in the holder. I'll connect the main harness wires to the double connectors, resulting in fewer wires that need to be stuffed under grub screws someday. A bit of red paint was applied to reinforce the impression that I installed the fuse holder on purpose, and not by accident.

I did pretty much the same thing with the head lamp circuit, slipping the inline fuse between the main blue wire leaving the lighting switch, before it gets to the dip switch on the dash. I could have easily fused the main and dipped circuits separately, but again, I'm not going for redundancy, just protecting the wires. If I have a headlamp failure at night, I'll either have to enlist the help of AAA and a flatbed, or call for one of those warning persons who used to walk before a motor carriage waving a lantern to alert the horse carriage drivers of the impending menace. The headlamps are fused with a 20amp fuse, since I can only use my halogens on main or dipped, and not both. The max wattage is 60, and on a 12volt circuit that's only 5amps each. But good practice says to double the amperage on a fuse, or you'll get too much practice in replacing the fuse while lying on your back.

