23
POWER DISTRIBUTION

At first thought, it would seem the first place to look when a device isn't working would be the fuse. Actually, though, it is seldom necessary to check the fuse, as you can usually determine the condition of a fuse without touching a piece of test equipment, at least in a simple car such as the TR250 or TR6. There are only four fuses in one of these cars, and one of these is a spare. As only three fuses are all that are used to protect the wiring, it stands to reason that more than one device is attached to each fuse. If ***ANY*** device on a particular fuse is working, then there must be power to that fuse. For example, the "purple" fuse (so called because the wires leading from it are purple) feeds the horns, high beam flasher, hazard flasher, and, on the later models, the courtesy lamps. If the horns don't work, try your high beam flasher, check your courtesy lamps, or try your hazard flasher. Only if none of these items work do you need to check the fuse.

OK, suppose you have determined that the fuse is good, and, after trying the detailed testing described elsewhere in this manual, you find that even though the other devices are getting power, the circuit you are working on isn't. Then it's time for power distribution testing to find the reason for no power.

As presented in chapter 2, General Procedures, power distribution in a TR 250/TR6 can be divided into four major groups, identified by the main color of the wires involved. **Figure 1** below illustrates the basic division of power.

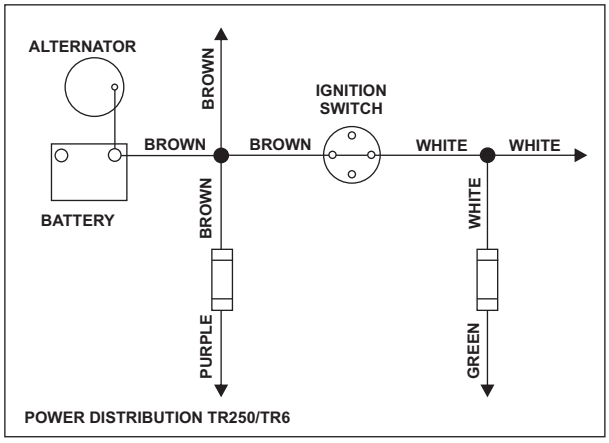


FIGURE 1

In the following figures, I have drawn the representation of the actual routing of the wiring in the cars, according to the color code described above, Brown wire, White wire, Purple wire, and Green wire circuits. If, after you've done the troubleshooting outlined in the appropriate chapter, you've determined that your circuit isn't receiving power, the diagrams can be an aid in determining where the problem might be. Using these diagrams, and the process of elimination, you can narrow down the area of search, possibly eliminating a lot of work ripping into the wiring harness. For example, suppose you find that you have no power to the headlight switch in a TR250, but you do have power to the rest of the car. Looking at Figure 2 below, you see that the power from the alternator/battery (ammeter connection), via a brown/white wire, goes to a bullet connector, where it splits into two paths: one to the headlight switch and one to the ignition switch which powers the remainder of the car.

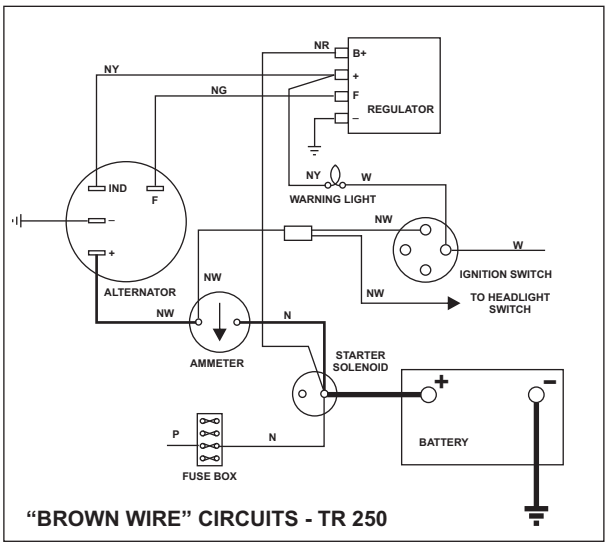


FIGURE 2

If the remainder of the car is getting power, but not the headlights, this bullet connector is the most likely place for the problem to be. It is possible, of course, that the N/W wire from this bullet connector to the headlight switch is broken somewhere, but the odds are that the connector is the problem. Using your voltmeter or test lamp, insert the tip of the test lead into the connector sleeve such that it touches only the bullet for the headlight wire, and not the sleeve itself. If you have power here, then the problem really is a broken wire. If you don't have power, then the bullet isn't making good contact with the sleeve. The bullet will need to be pulled out and both the bullet and the sleeve cleaned with steel wool or fine sandpaper. This same approach can be taken with the other power groups as well. You may find broken wires, especially if the car has been wrecked or abused, but the most common problem is bad connections. Sometimes a good cleaning is all that's required, but in severe cases, the terminals or connectors will have to be replaced.

CAVEAT:

For the most part, the wiring diagrams supplied by Triumph do a pretty good job of depicting the physical wiring connections, but not always. The diagrams may show a bullet/sleeve connection, for example, whereas the actual car may have a splice instead. The factory may have made undocumented changes, or a previous owner may have made modifications, perhaps even replaced a burned out wiring harness with a harness from a different year (or, I may have simply made an error). If your evaluation doesn't seem to make sense, based on the diagrams, you will have to do a physical examination of the wiring to clear up the discrepancy.

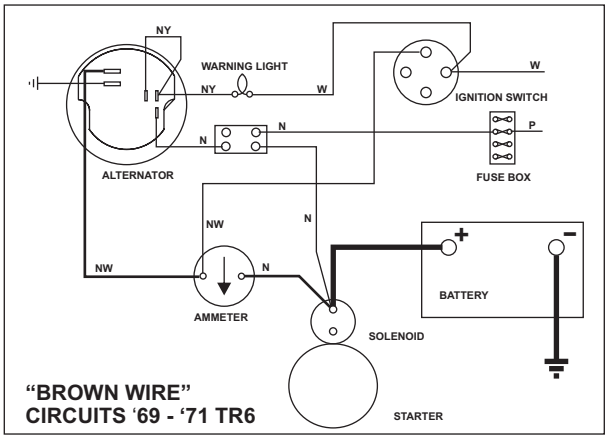


FIGURE 3

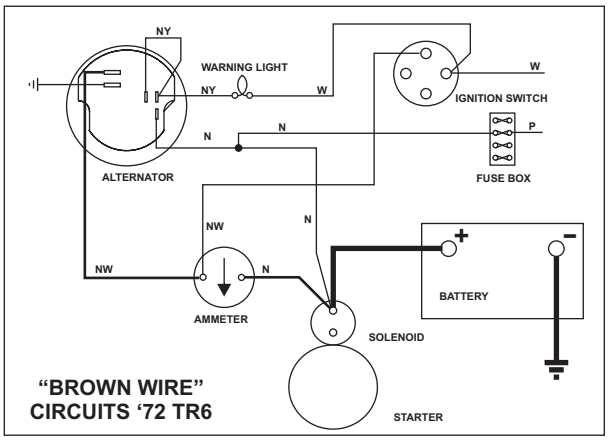


FIGURE 4

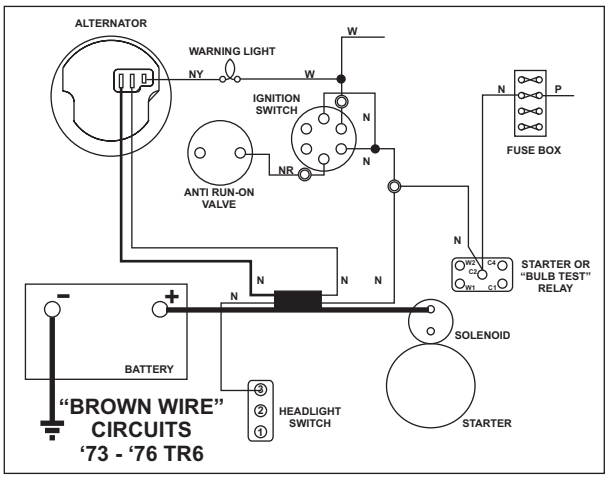


FIGURE 5

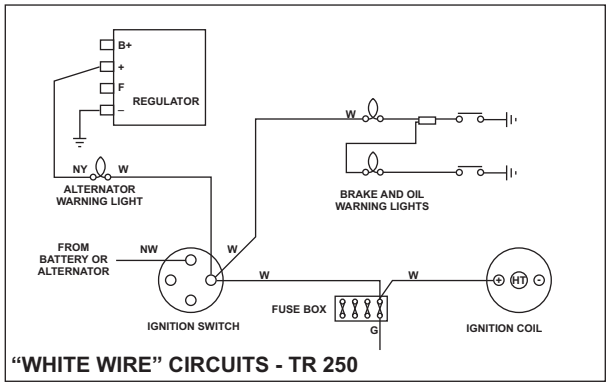


FIGURE 6

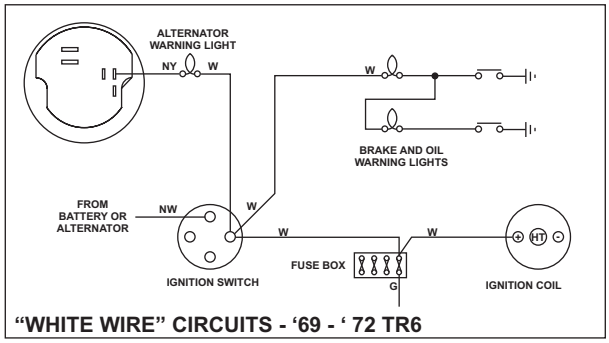


FIGURE 7

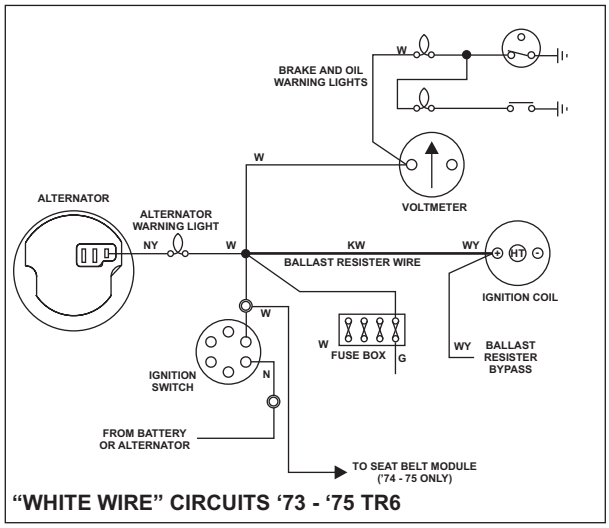


FIGURE 8

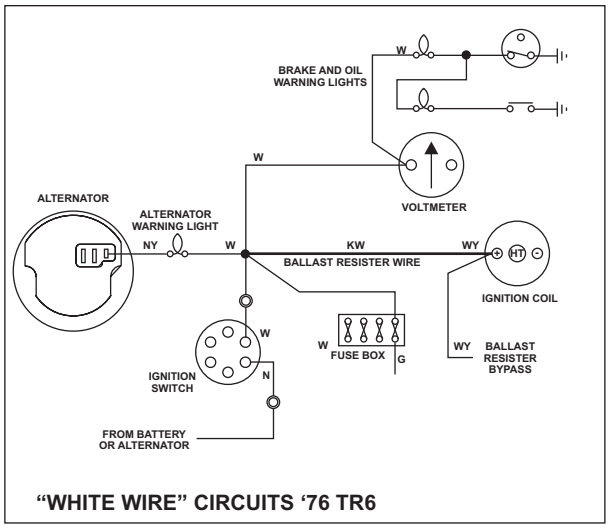


FIGURE 9

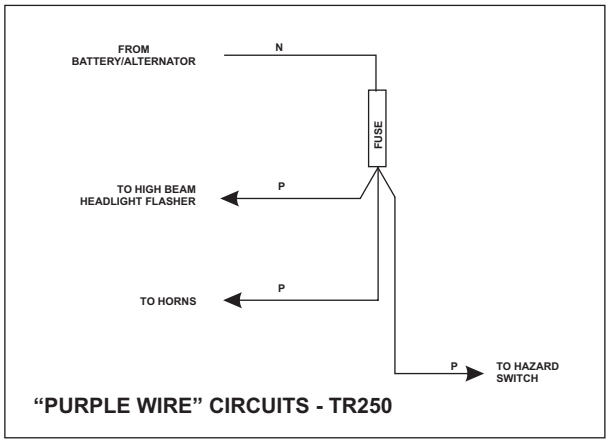


FIGURE 10

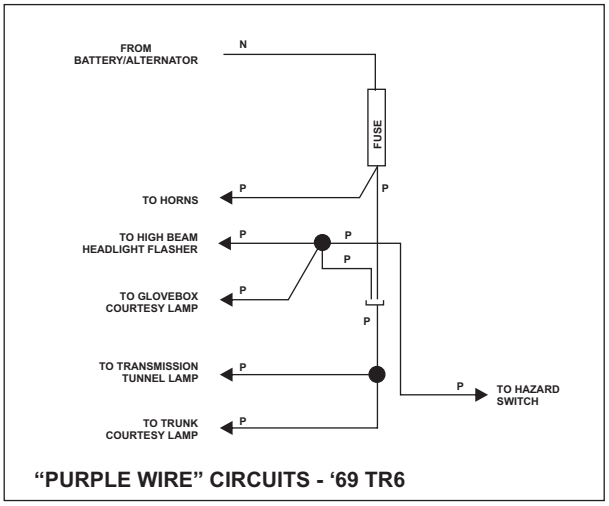


FIGURE 11

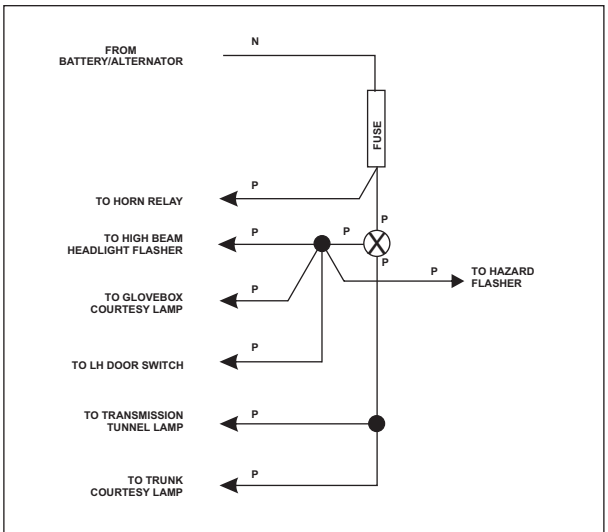


FIGURE 12

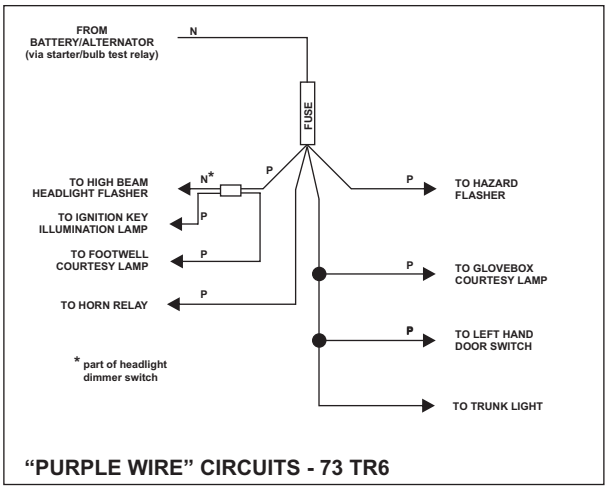


FIGURE 13

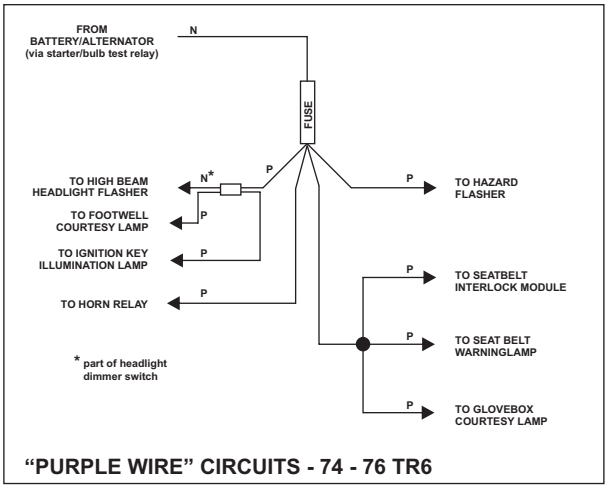
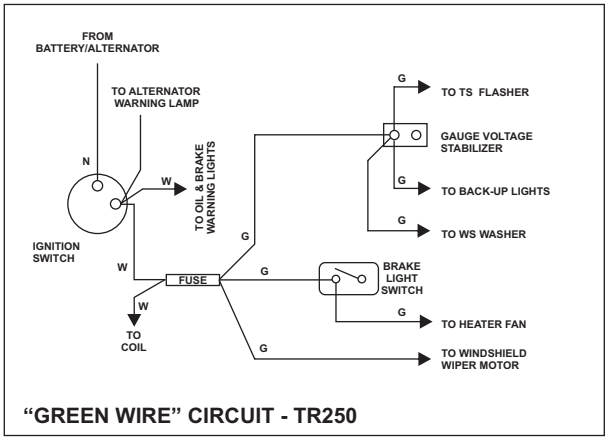
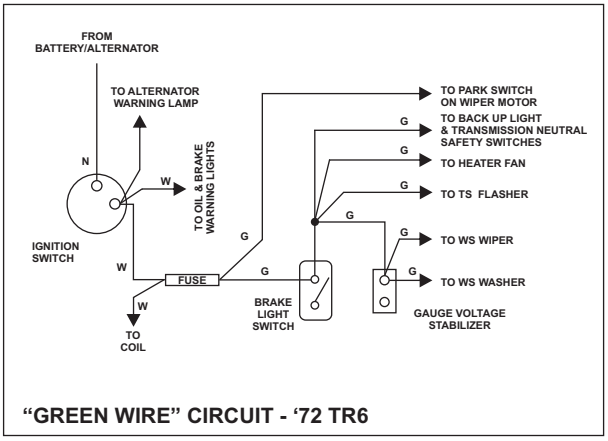


FIGURE 14



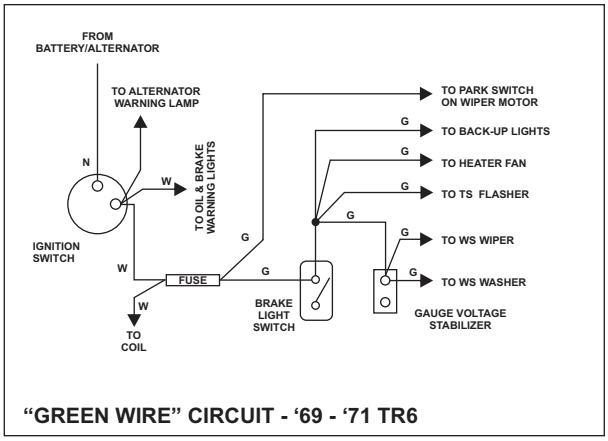
"GREEN WIRE" CIRCUIT - TR250

FIGURE 15



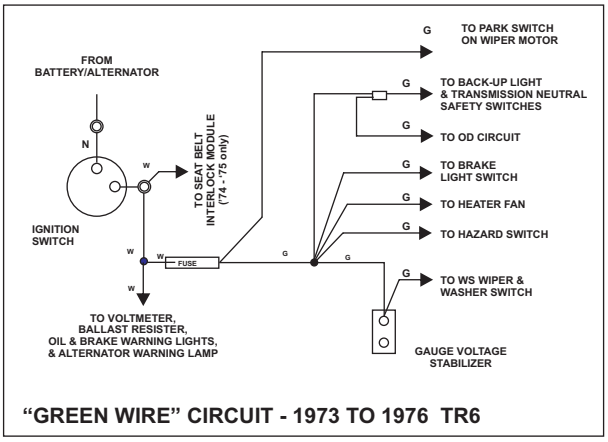
"GREEN WIRE" CIRCUIT - '72 TR6

FIGURE 17



"GREEN WIRE" CIRCUIT - '69 - '71 TR6

FIGURE 16



"GREEN WIRE" CIRCUIT - 1973 TO 1976 TR6

FIGURE 18