

## from the Morgan Oasis Garage

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Friends,

I've made bus bars on my car using the old bronze pads that were under the mainspring. It pleases me to re-use real Morgan parts in a new way. If these bronze pieces are used as ground or "earthing" bars they will prevent problems that seem to be rampant on our dear old Moggies. I speak of problems of systems not working cuz there ain't no ground.

One car I remember particularly was a 4/4 whose owner brought me a new wiring harness from the factory in Malvern Link. I identified each and every wire and marked both ends of every wire. When it was all installed I turned on the key and tried the lights. Nothing! No tail, no brake, no headlamps, no signal lamps.

On nothing more than a hunch I tried adding a ground wire to the right headlamp. Viola, light. Of course I had connected the original black ground wire to that headlamp.

The black wire disappeared into the harness and there were no unconnected black (or any other color) wires.

The same was true of the high beam warning lamp. It was connected correctly at the dip switch, then went into the harness and there was the correct color wire on the lamp when the wire came out of the harness. But no blue light at the dash. This is a very simple circuit and I simply made another blue wire that went between the correct terminals. And I then had a working warning lamp. The lesson I learned from this is DO NOT trust a "factory" wire harness.

Another thing I do not trust is the flimsy ground connectors that are the original equipment on a Morgan. Here is where the old bronze pads come in. I saw little bus bars out of the bronze pads, drill and tap them and put one back alongside the spare on the rearmost cross member, and one on each side up front on the wings of the front subframe. Each one up front takes a ground wire from the headlamp, side lamp, turn signal, and if there are driving or fog lamps then these are also grounded on the bronze bus bars. The biggest bus bar on the back grounds the fuel tank and all the rear lamps.

These bus bars are a much more substantial method of assuring operating electrics. There is of course another bar behind the dash where I ground all the instruments, lights, switches. You must understand none of the electrics will operate without a

good ground. This is only one way to assure a better ground than the ORIGINAL stuff from dear old Blighty. It is not necessary to use the old bronze pad from the steering damper. Any piece of brass will do. Steel will work as well, brass is used universally for this ground work so that's my choice. I must caution you to make a good ground from the bus bar to the chassis. A bit of electrical grease will make the job "bulletproof".

Cuthbert

