

Re-using the Toyota Engine-Relay/Fuse Box (with the EFI/Lights/Horn relays etc)

By Bruce Window

It is possible to use this nicely engineered relay and fuse box in your Clubman with a bit of care and hobby style metal and plastic work. The problem with the box as it comes out of the front-cut is that it has been designed to have a multitude of cables plugged into its under-side. The pins of the sockets underneath the fuse box are cross-connected to each other in apparently haphazard manner by several layers of metal circuitry. It is simpler to scrap all of these layers of "printed circuit" and make the relay sockets and the fuse sockets directly connectable by home-made blade terminals directly under each pin of each socket. This will allow point to point wiring of each relay or fuse with connections being made by ordinary crimp-style spade terminals.

To do this you need to remove the bottom layer of molded plastic of the relay/fuse box (the layer which has the socket outlines) and progressively lift off each layer of silvered metal circuitry until you end up with a lot of double-ended sockets which slip in/out of the molded relay or fuse sockets.

Try to keep these double-ended sockets in their respective locations in the molded cavities and don't lose any during disassembly.

The idea is to re-use these double-ended sockets such that the original end goes back into the molded cavity and the free end will have a home-made blade terminal (double ended blade) inserted into its other end..

You can make these blades out of 18 gauge brass sheet and cut them to match the width of the socket (mostly 6mm). The length will depend on how you do the next step.

To retain these socket/blade combinations in place, you will have to manufacture an insulating plastic retaining plate which will have appropriate slots cut out for each blade of each relay or each fuse so that the blades protrude well through the plate and will permit an ordinary spade terminal at the end of a wire to be pressed onto the blade. The slots have to be a fairly close fit to the blades so that the blade-socket combination cannot slip through.

The plastic retaining plate has to press down firmly on the double-ended sockets to retain them in their proper positions.

To keep it in place, you will have to attach it to the body of the relay/fuse box by some means. A few carefully placed and insulated self-tapping screws may be all that is needed.

The end result should be a relay/fuse box, which is good-looking, reliable, and easy to configure and makes use of those high quality Toyota relays from your half-cut. Good luck..... Bruce