

DISCO ABS FAULT





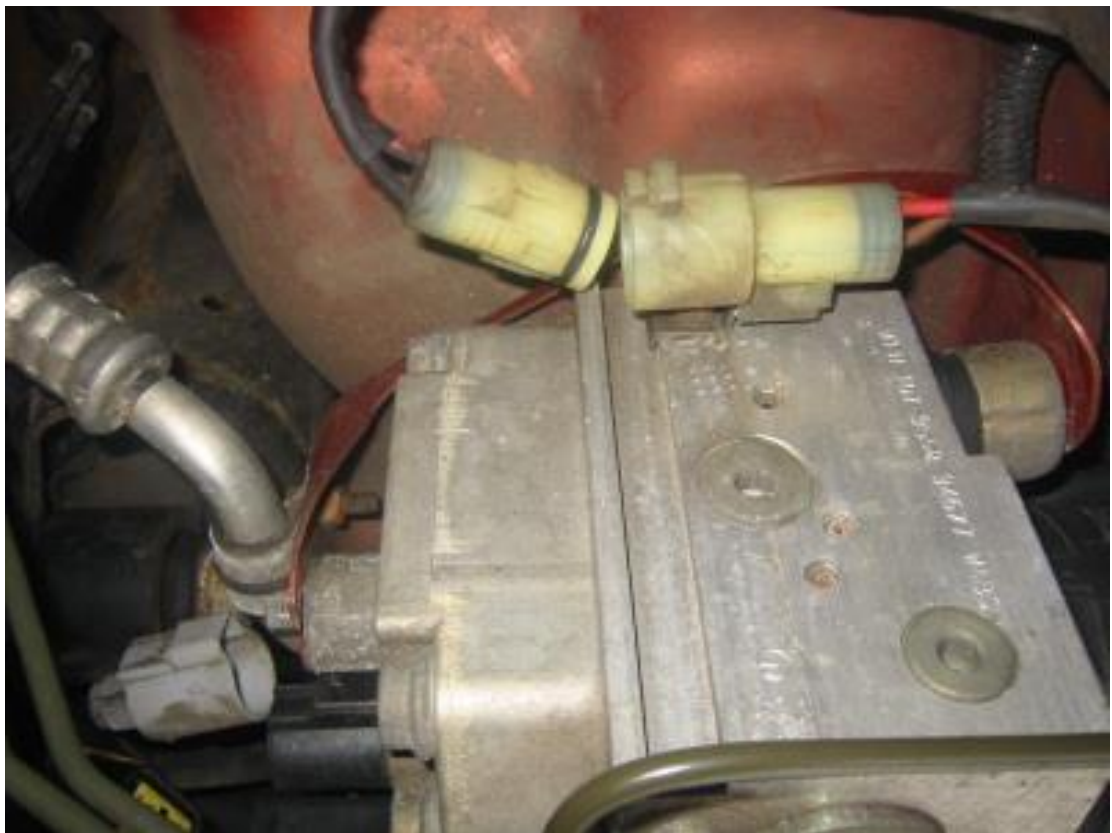


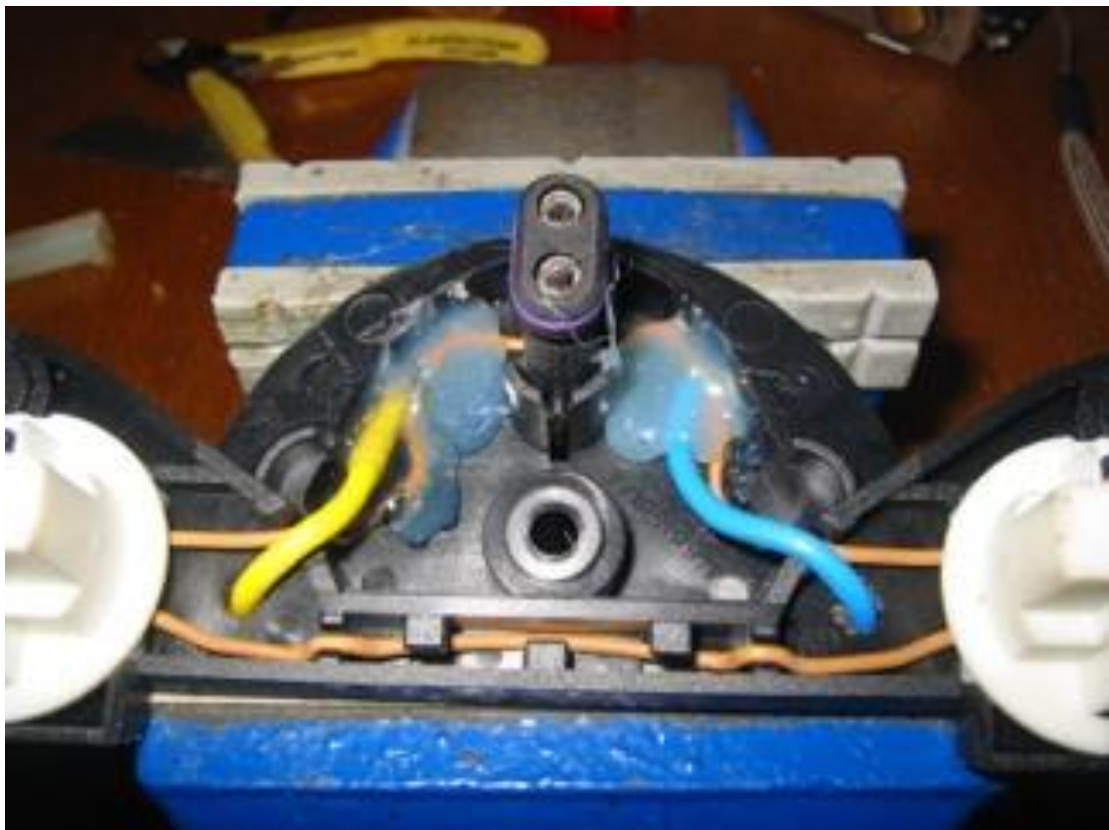
Since I bought my 1999 Land Rover Discovery 2 TD5 I have had an intermittent fault with the ABS system. Occasionally the ABS, traction control and hill descent warning lights would illuminate for no apparent reason, these three lights have become affectionately known by Discovery owners as the 'Three Amigos'.

There is an existing bulletin from Land Rover that indicated that the fault may lie with the shuttle valve switch module. I purchased one of these new modules from Land Rover for approximately £50.

Further research revealed that the fault could also be a bad electrical connection inside the ABS module. It is possible to by-pass this bad connection by adding a couple of wires externally to the shuttle valve switch module.







I started the job by unclipping all the ABS pipes from the clips on the firewall.

The clips that separated the three pipes in the photo below were removed.

The photos below show the 3 nuts that were removed to undo the abs unit from the mounting bracket.

This photo shows two of the connectors unplugged and one of the mounting nuts removed.

The third connector unplugged.

Once the three nuts were removed, the rubber mounts were taken off and kept safe.

The new shuttle valve switch module and one of its mounting screws being removed using an allen key.

To gain access to the shuttle valve switch module, the abs unit has to be lifted a small amount. This was done carefully so that the abs pipes were not damaged.

I used a piece of wood to support the unit while I was removing and installing the shuttle valve switch module.

The old switch module. A little grubby, but upon testing with my multimeter, it did appear to be working OK.



Rather than fit the new shuttle valve switch module, then find that the problem was the internal connections in the ABS unit, I decided to perform the modification to bypass the possibly faulty internal connections.

As can be seen in these photos, I passed a couple of wires through some holes in the module and connected them to the existing wires that go to the connector. I then covered the joints in hot melt glue to insulate them and hold them in place.

The module was then fitted to the abs unit. I removed some of the insulation on the green/yellow wire going to the ABS multi-plug and soldered the blue wire to it. The yellow wire was connected to a suitable earth connection near the abs module.

The repair has been in place for well over a year now and the fault has not reoccurred.