## Weekend Workshop - Key Fob Repair & Overhall

## by Matthew Allen (05/03)

With regard to the remote key fob problems, in my experience most of the key fobs can be repaired.

The most common remote is the one which has one single cr2032 battery mounted on the printed circuit board (pcb), this one suffers from several problems. First prise apart the case using the slot provided usually near to the keyring attachment, then gently remove pcb which is held in place by 2 plastic hooks, remove battery and test, a good one should read about 3.4 volts, if it is 3 volts or less replace it, also test new batteries as I have had new 'faulty' batteries in the past. check the 3 connections on the battery holder assembly, theses are usually dry jointed or cracked, resolder all 3 making sure you press down on the battery holder gently so the battery has a tight fit when finished. Check also the battery connections on the other side of the pcb as the connections are double sided.

Next check the 2 switches which are sometimes loose or dry jointed, resolder as required, sometimes the switches have fallen apart, these are not available as a spare but as a substitute I use the small pcb mounted switches found on the front panels of scrap video recorders such as stop/rewind etc., although in my job these are easy to come by, you could try your local repair shop (ask for a scrap VCR or just the front panel). These switches are usually what we call through hole mounted as apposed to the switches in the remote which are surface mounted, but if you just bend the pins underneath the switch when removed you can then usually solder them on to the board.

Then check a small silver tube device (possibly a filter) mounted on the back corner near to the battery, this has 2 connections and sometimes one of theses has broken, if it can't be soldered back on then you need to get hold of a scrap remote (maybe from a local rover garage) and remove this part and replace it on your remote. Also check a small silver round component mounted on the same side as the battery usually marked as "rfm 12....." etc, this is usually dry jointed. Check over the board generally for drys or cracks, replace battery and case and re-try. It is also worth noting that a modified outer case is available which has bigger rubber keys, also the older ones tended to go sticky and affect the operation.

Another type of remote has two cr2016 batteries mounted together on the inside of the back casing, the most common problem with these is again the battery connections, there are 2 small prongs which connect to the a underside of the battery, its worth gently bending these upwards to give a better connection, also check the small single prong which connects between the other side of the battery and the pcb, once again gently bend this upwards to give a better connection. It is also worth checking the 2 silver connection points on the underside of the pcb where the batteries connect, these get corroded and need cleaning or as I do, apply a small amount of solder to give a thicker surface to allow better battery connection when put back together. Check also the 2 switches as these can become dry jointed. The old Rover 800 has a remote with one switch but four small watch type batteries, check all four batteries as I have had three cells ok but one faulty! Also check again battery terminals and connections, and also it is quite common for the single switch to become dry jointed, this is quite awkward to get at but gently prise apart the plastic switch holder and remove switch and holder. As always check battery power and if in doubt replace with good quality such as Panasonic not something which costs 50p on the market!

Some cars have resetting procedures once the battery has been removed this should be in your owners manual or if not check at your garage. I hope this helps as it may save you a lot of money,