## Repairing an XJS instrument cluster

I am not going to go into removing the cluster from the car as this is covered in the ROM page 88-1. If you don't have a ROM buy one now, they are available from JDHT on CD they also show up on eBay.

For most work you will not need to split cluster but just incase there are 7 screws that hold the front on 2 at the top 3 at the bottom and one each side shown in the first photo below.

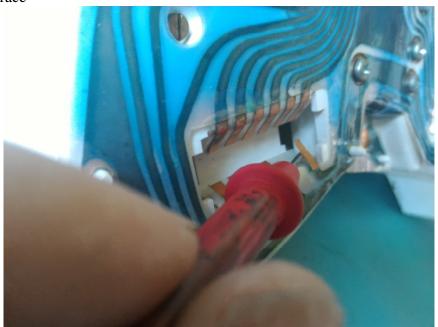




Most problems with intermittent or poor functioning gauges will be caused by the 2 main connectors. It is not uncommon for the traces to detach from the backing causing poor connection. Another common problem is corrosion probably caused by a leaking windscreen at some time in the cars life.



## Detached trace



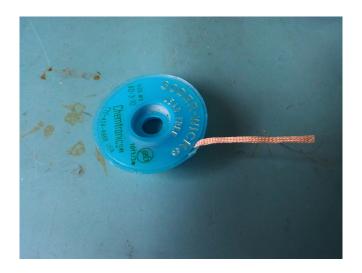
These detached traces can be glued back on to the plastic with superglue. When gluing use the superglue sparingly, push and hold the trace down with a jewelers screwdriver.

Try not to get the glue on the top of the trace, if you do don't despair. When the glue is dry use fine (at least 600) wet & dry paper and lightly sand the copper trace until the glue is gone.



A problem I came across was a broken trace on the top RH (looking from the front) Globe. I repaired this using a bit of solder wick. This is a repair I did 5 years ago and it's still going strong. You could also solder a couple of bits of wire, as long as it touches the globe carrier it should work. Any damaged traces can be repaired with wire as long as it is insulated.



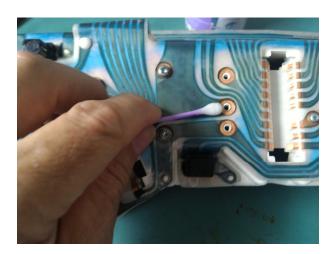


All of the gauges are held in by screws which touch the trace and copper PCB of the gauge. The photo below is the oil pressure gauge with the screw removed you can see the light and a couple of marks where the screw touches the gauge PCB, not a good design IMHO.



Remove all of the screws (you can do this one at a time) and clean the trace with a pencil eraser if they are very dirty, then run over them with Isopropyl Alcohol on a cotton bud. If they look clean then you can skip the eraser and just clean with IPA and cotton bud.





In the photo below I have marked all of the grounds on the connectors with a black marker, you can also see the steel plate that holds the T5 warning globes in, this steel plate is also a ground. My instrument cluster has no additional grounds all I did was repair the connectors and traces 5 years ago and the instrument cluster has worked fine since.

If you do want to run an additional ground to the chassis I would suggest running it from the steel plate. Drill a hole in it and add a separate wire, I would not attach it to the existing terminals.

