

Dash panel earth issues XJ-S:

This is the “fix” I executed on my '85 XJ-S to sort instrument readings that were way off the mark. It was/is an earthing issue via the printed circuit board, from old age, and bad contacts with all those screws securing all the components as designed.

You will require:

Cleaning solvent (metho)

Small internal star washers to suit about 3mm diam screws. I actually forget the diam, as I have many selections of these things and just grab what I want at that moment.

Fine wet/dry paper (1000 grit is OK).

Lemon juice.

Soft toothbrush.

Removal is quite simple.

Remove the plastic joiner at 12 o'clock (single screw), and the 2 side plastic finishers (1 screw each side), and wiggle them out of the binnacle.

Pop the 2 “triangle” corner pieces out at the top corner of the binnacle, and undo the 2 screws found in the sockets.

CAREFULLY work the binnacle out of the aperture, and it will require some wiggling. I usually have the steering wheel fully extended, and a rag covering the top column plastic cowl (scratch that and you will smile NOT).

As it wiggles out of the hole, reach in and unplug the 2 multi pin connectors, OR, remove the dash under cover and reach UP and unplug them, your car, your choice.

Once out, up to the bench, and with a decent rag (I use an old Doona), upturn the unit, and you will observe many screws with

small washers under the heads at various points on that printed circuit panel. These are both power supply and earth links to all the instruments and the globes.

Remove these screws 1 at a time and clean the area, and refit with those small “internal star washers” you purchased earlier, or go and get them if you forgot.

Take careful note of the area where those multi pin plugs connect, as I have had many with those areas actually “green” with growth. Use the toothbrush and lemon juice to give the area on the board a good clean, and the plug itself. Finish the task with metho to remove the lemon juice residue.

This will take time, so be prepared. Look at the 2 plugs and identify the earth wire (BLACK), and its related position on the board where it connects. Using a digital meter set on Ohms, connect one probe to that contact, and probe around the board to establish “direct” earth screws, and there will be quite a few.

Make up a new earth wire (about ½ metre long) and attach one end under one of these screws, the other end can go to any convenient DECENT point on the body up in the dash area that the panel came out of. There is an 8mm bolt just to the right on mine that I used. I then use a male/female connector to make that wire a 2 piece, so removal at a later date is made easier.

Once done reassemble the unit back into the car, connecting the earth wire you made as you go, and the 2 lower sockets. I don't use contact grease or anything else on those plugs, just dry connect.

Test your handy work. I bet all the gauges now read a lot closer to reality than previously.

This is a verbal work up, as I did not take snaps way back then, but one day if I ever have the instruments out I will update this with appropriate photos.