

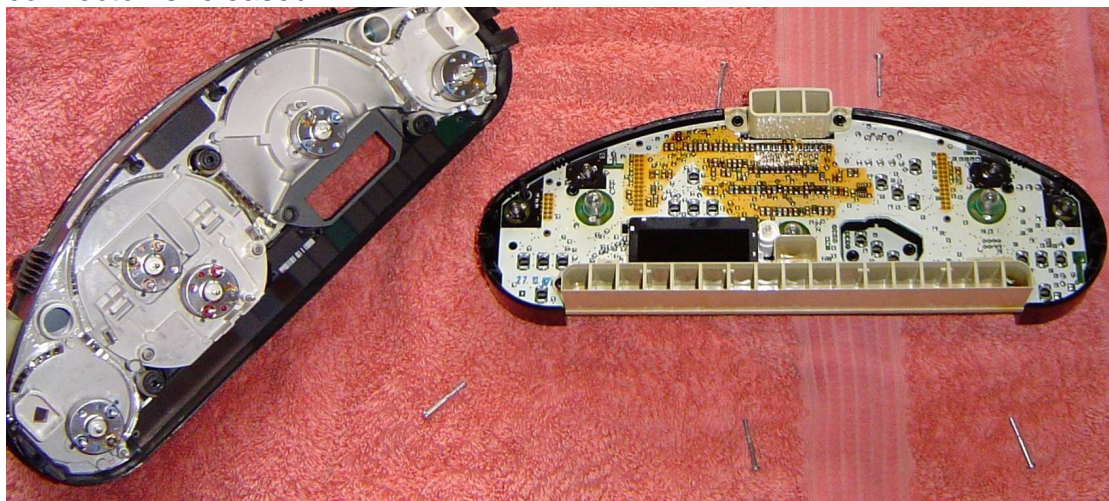


This is the problem – only the top half of the odometer and trip meter is displayed. It is a backlit LCD device but the two bulbs illuminate the odometer and service indicator respectively.

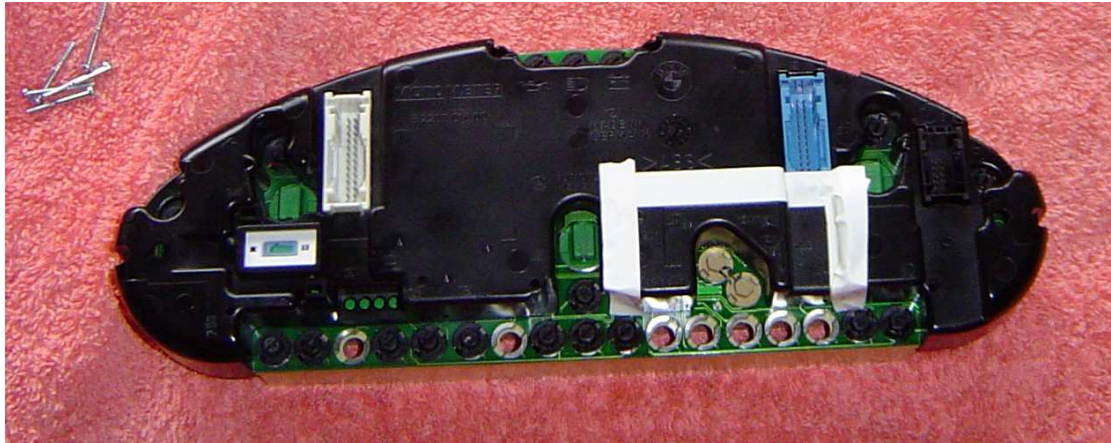
Since only the top half of the odometer is displayed the problem is obviously with the LCD and not the bulbs. Commonly this is an intermittent but annoying problem.

Begin by removing the cluster – the first step is to disconnect the battery, then undo the two torx screws on top of the housing and use a credit card to loosen and wiggle the cluster out of the dash.

As soon as it is clear, reach behind the cluster and undo the three electrical connectors by first depressing the tabs then sliding the retainer up until the connector is released.



Make sure that you face your work surface with a towel to avoid scratching the cluster, then after removing the five torx screws from the back of the rear housing, carefully separate the gauges from the SI board.



Mark out the area of interest – I used white tape and then cut carefully with a piece of hacksaw blade. You could use a Dremel or even a hobby knife heated with a torch for this job.

There is a fair bit of clearance between the cover and the board but I would suggest extreme caution as you cut down the side of the housing toward the board as there are a couple of tracks that run across the board at this point and a slip here could cause big problems.



I worked carefully and completed the cut within about half an hour using a hacksaw blade – my modelling saw would have made life much easier if only I could remember what I did with it.

After removing the cut section carefully dress the edges of the cut area with a small file to remove burrs, then use a small paint brush and low pressure compressed air to clean the debris from the board.



Notice that there are also couple of little gold coloured torx screws which secure the SI LCD to the board. Check that they are snug but do not overtighten them. The idea is to make sure that all the electrical connections are firm, not to cause fractures in the board by overtightening the components.



I used a hot pencil tipped soldering iron to reflow all of the SI board pins, then carefully replaced the cut cover section using 5 minute epoxy. Apply the epoxy carefully to the cut edges of the housing. Then once its back in place use a rag soaked with turpentine to remove the excess.



All that was left was to install the cluster back into the car, reconnect the connectors, battery and re-enter the radio code and it was up and running!

A heck of a lot cheaper than a new or even a used cluster and I didn't have to worry about recoding or it displaying incorrect mileage.