Removing and Installing EPROMs in the ECU

Tools needed: 10mm socket, either deep or with a short extension Phillips screwdriver Soldering iron for electronics – 15-30w or so with a fine tip De-soldering tool or solder braid

Prep:

Disconnect the negative lead of the battery.

Procedure:

The ECU is located in the passenger side footwell under the carpeting. To get at it, you'll need to remove the passenger side door sill and the kick plate. Pull back the carpet and you'll see the cover plate over the ECU.

The cover plate is held in place with two 10mm nuts at the top and two 10mm bolts at the bottom. Remove all four of these and remove the cover plate. Slide it out carefully as it has sharp edges that can scratch your interior.

This is what you're looking for now – the ECU. There may be another silver box on the left of it, this is the ABS controller – leave it in place.



Remove the three harnesses connected to the ECU. They have locking tabs on them, just push down on the top and pull the connector out. The ECU is held in with 4 10mm nuts, one at each corner. Remove them and then remove the ECU.

Remove the four phillips screws on the top cover of the ECU (the cover with the numbers on it) and pull the cover off.

You should now be looking at this:



This is the backside of the digital board and where we'll be making our changes. Remove the 6 phillips screws around the edge and gently fold out the board.



We need to remove IC604 and IC605 (the two chips with the stick on labels at the top centre of the above picture). The board will also be silk screened with IC604 and IC605.



Once you've located the chips, flip the board over and desolder them from the board. Take your time. Desolder and remove jumper J600 as well (at the top right of in the picture above). Save the jumper as we'll need it later.

Here's a few links to pages with info/pics on soldering/desoldering techniques: <u>http://www.epemag.wimborne.co.uk/solderpix.htm</u> <u>http://www.aaroncake.net/electronics/desolder.htm</u>

Key point is take your time.

Solder the jumper into the J601 position. Solder in the new chip or socket if you bought one into the IC605 location. **Do not install any chips in the IC604 location**. Pay careful attention to the orientation of the chip, the notch must be on the left like the other chips on the board. If you put it in backwards it will blow up and it won't even be spectacular.



Sockets and new chip installed



Close-up showing jumper and orientation of chip

Check your work and fold the board back in. The rest is just the reverse of above Don't forget to re-connect the negative lead of the battery.

Going back to stock

If you want to go back to stock, remove the new chip from the socket and re-install the old chips. Remember to get them in the right locations: IC604 should be labeled 079753-0384 IC605 should be labeled 079753-0374

Move the jumper back to the J600 position and re-assemble the unit.