How to recovery flash your car in three steps

Step 1:

To complete the first step there are two routes you can take. Choose the one that suits your needs or that you think is the easiest:

- 1. Move wire on pin 8 to pin 12 on the OBDII connector.
- 2. Make an adapter cable.

Both options are described in more detail below.

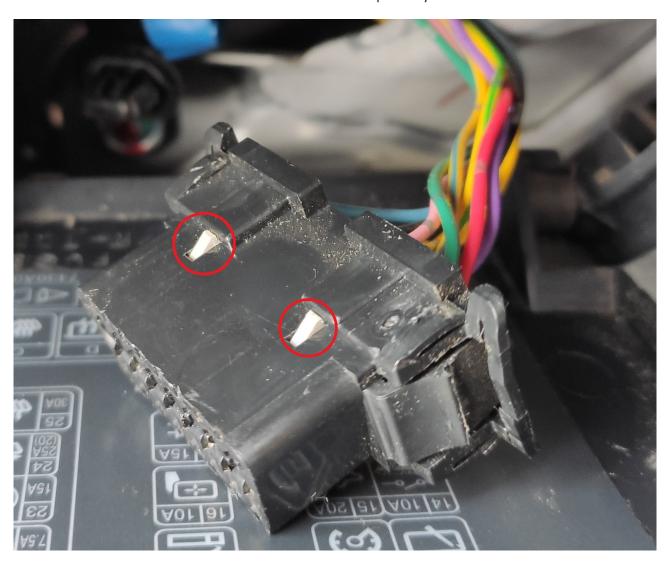
Option 1: move wire on pin 8 to pin 12 on the OBDII connector

Here we are going to move one terminal on the OBDII connector. For ease of access, I removed the OBD connector from its position. This is done by pressing in the side clips of the connector and pushing it up through the hole. Please note this is all done in a LHD car, it may differ for RHD.

I then removed the electrical tape that was tying the OBD wiring loom and the knee-airbag cable together, so I could move the OBD connector through the little hatch that gives you access to the fuses.

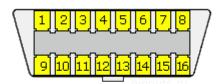


Now we have to remove the little gray tabs that hold the terminals in place. This is achieved by pressing on the little tabs on the front- and backside of the connector respectively.

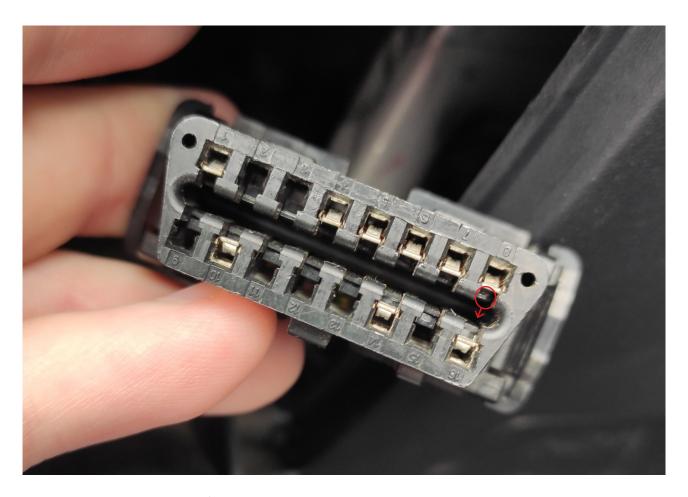


This will allow the plastic parts to be removed by pulling them out towards the wires.

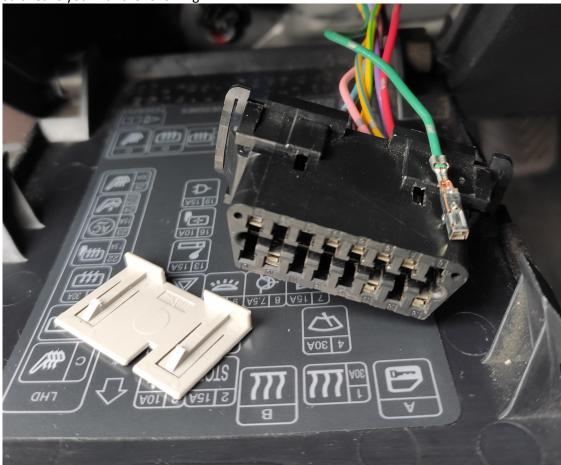
Then we can start to remove the wire that we want to allocate to a different pin, in this case wire number 8.



To remove the terminal from the connector, use a tiny screwdriver to push the little tab on the inside towards the middle of the connector and pull the wire out of the back. The whole wire and terminal should slide out.

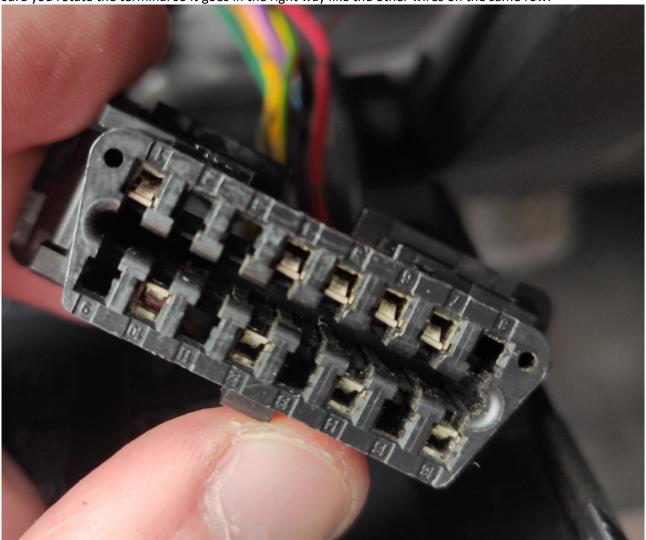


This should leave you with the following:



The gray plastic piece on the left is what prevented the wires from being removed.

Now we can insert the wire that we pulled from 8 into the slot of 12. This should slide in pretty easily. Make sure you rotate the terminal so it goes in the right way like the other wires on the same row.



All done! Now we can reinsert the gray plastic tabs and put the OBD connector back in its original position. On to step 2!

Option 2: make an adapter cable

If you have an OBDII extension cord or something similar, you can fabricate an adapter cable. By doing so you don't have to move the pins around on the cars OBD connector.

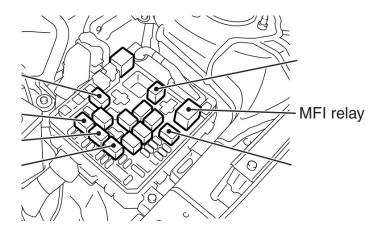
Rewire the cable so that pin 8 of the male plug you connect to the car now points to pin 12 of the female end of your extension cord. To recap; pin 12 of your OpenPort 2.0 should get its signal from pin 8 of your cars OBDII connector.

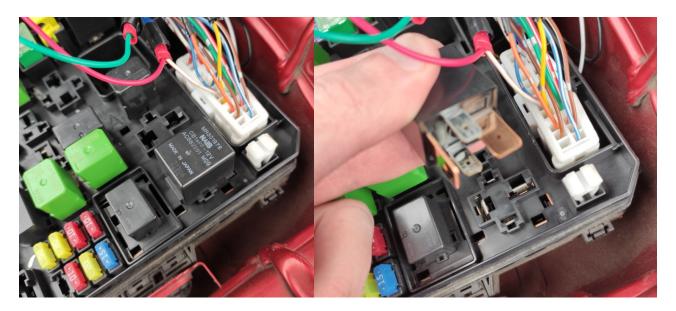
OBDII male plug	OBDII female socket	Function
	(car)	
1		
2		
3		
4	4	GND
5		
6		

7	7	K-Line
8	12	Flash write init (crossed over from pin 8 to pin 12)
9		
10		
11		
12		
13		
14		
15		
16	16	Battery +V

Step 2:

Now the wiring is taken care of we can move on to step 2. Open the hood of your car and remove the MFI relay from the relay box. The MFI relay can also be referred to as the Engine Control relay in the service manual.

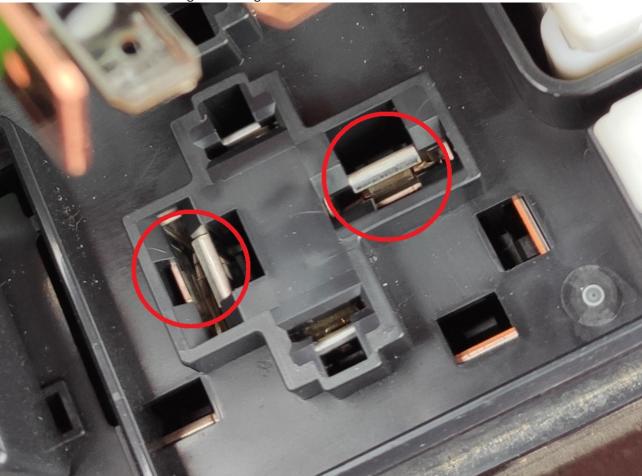




Now we need to bridge the contact connections using a suitable jumper wire. For example:



Connect these two terminals together using the wire:



You are now ready perform the recovery flash!

Step 3:

Connect your OpenPort 2.0 to the OBDII port and open the last known stable ROM in EcuFlash. Do not turn the key on, just have it nearby. Now click 'Recovery write using OEM bootloader' in EcuFlash.



It should start flashing the ROM to the ECU. Once that is done, remove the jumper wire from the relay box, and put the relay back.

Now get back in your car and flash the ROM once more, but in the usual way. So switch car key to the 'On' position and flash your ROM using EcuFlash.

All done!