Delphi MT05.2 ECU Diagnostic Cable – FSE 300/450R

Requirements/Tools:

1. VAG KKL Cable – e.g. https://www.amazon.com/gp/product/B00871CJ1W/ref=ppx_od_dt_b_asin_title_s00?ie=UTF8&psc=1
2. J1962 Female OBD Connector – e.g. https://www.amazon.com/gp/product/B06XYP9P91/ref=ppx_yo_dt_b_asin_title_o02_s00?ie=UTF8&psc=1
3. Furukawa FW 090 6-pin Male Connector with pins – e.g. http://www.cycleterminal.com/furukawa-rfw-090.html
4. Multimeter
5. Crimping tool (for connector pins)
6. Wire stripper

Note: You can make this cable without the proper connectors and just using jumper wires to the proper pins from the VAG KKL cable, it works but it's more clunky and more apt to accidentally disconnect. For instance this was my original setup and worked but could come disconnected easily.

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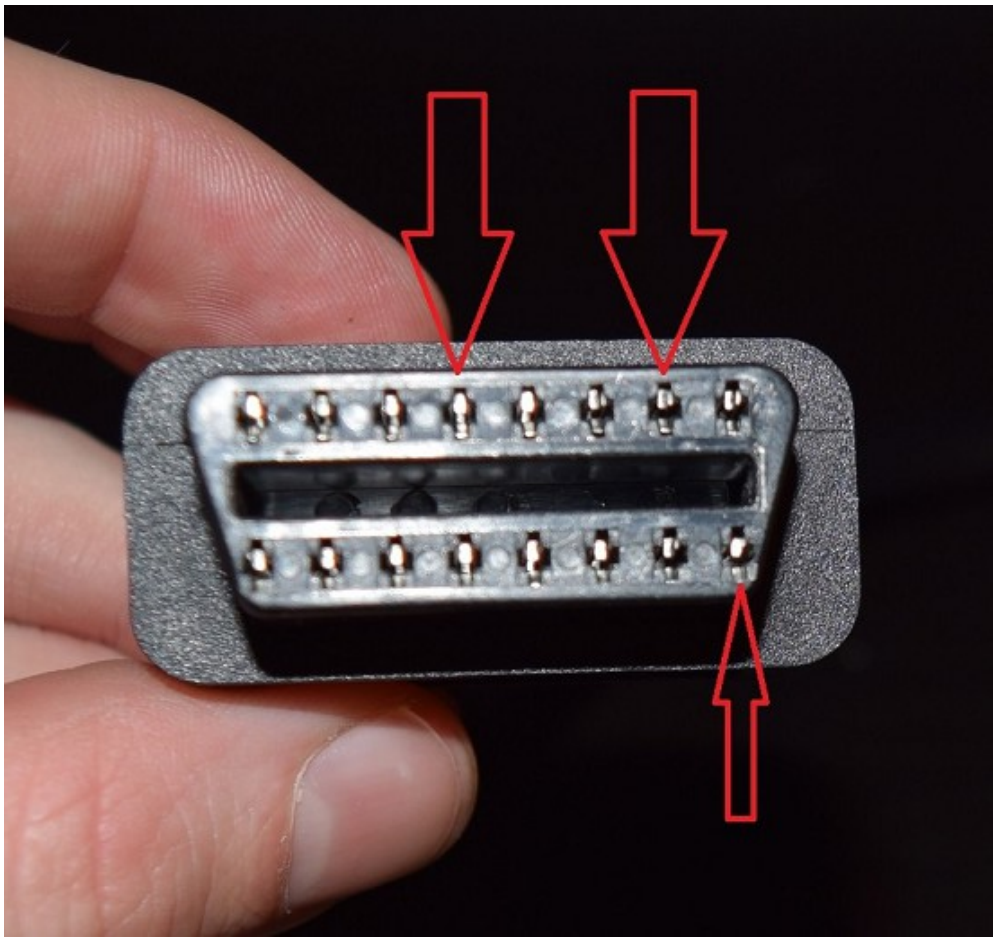
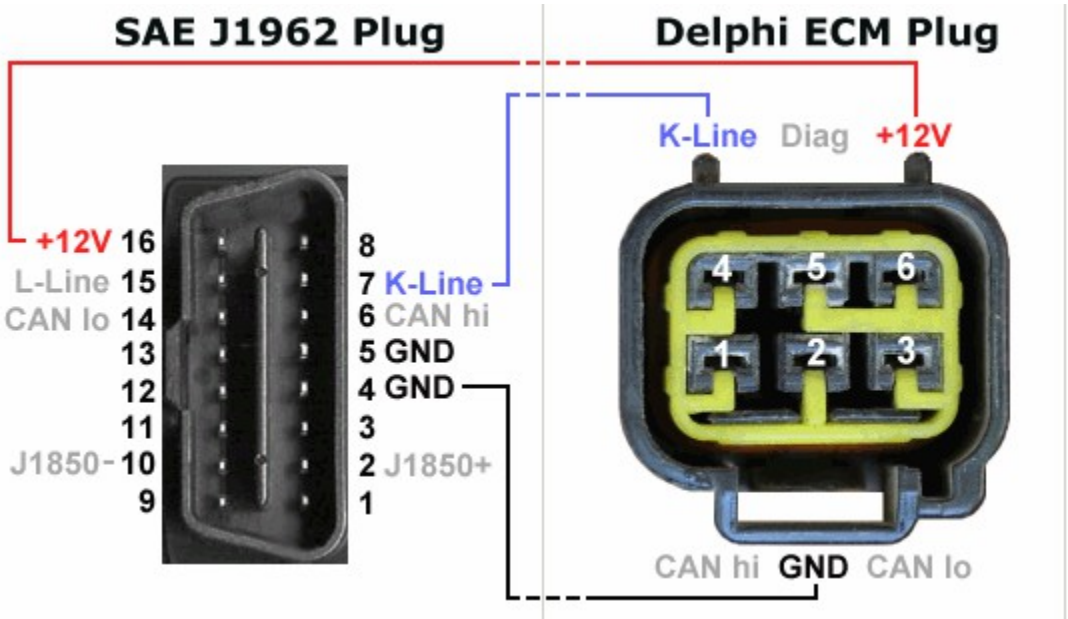
Steps:

1. On the female OBD cable there are 3 pins we care about which are: K-line, +12v and ground. Pins #4, 7 and 16.





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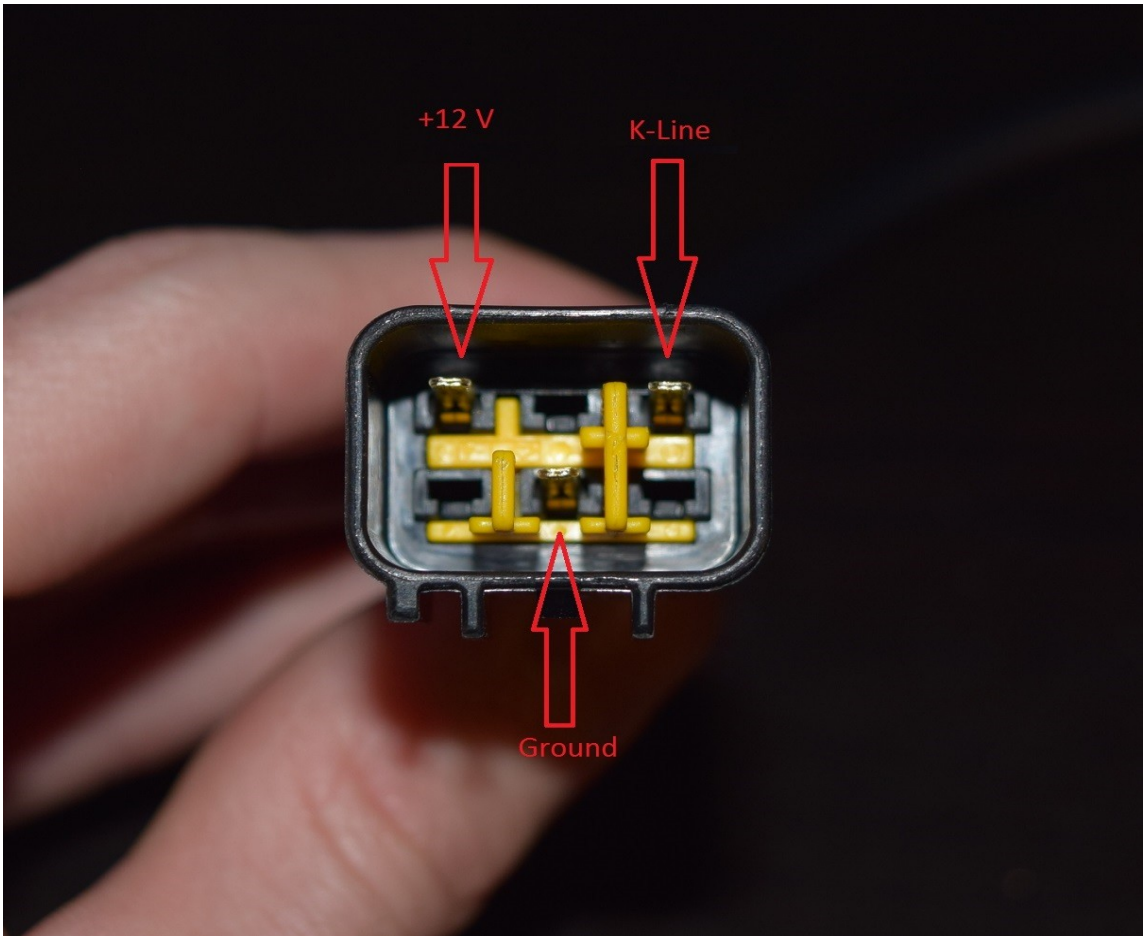
2. Using a multimeter set to connectivity test (causes beeping when connection is made), test each of the 3 pins on the OBD cable to find the color wire it corresponds to. This is somewhat required because no one properly documents their wiring and the cable I got listed the K-line as the black wire but no black wire exists, instead I found that:
    1. Light Blue Wire – Ground
    2. Brown Wire – K-line
    3. Purple Wire – +12V

3. On the ends of your 3 wires, crimp on the connectors, make sure you put the 'waterproof boot' on first before crimping. These are crimped on the wire and again on the waterproof seal:

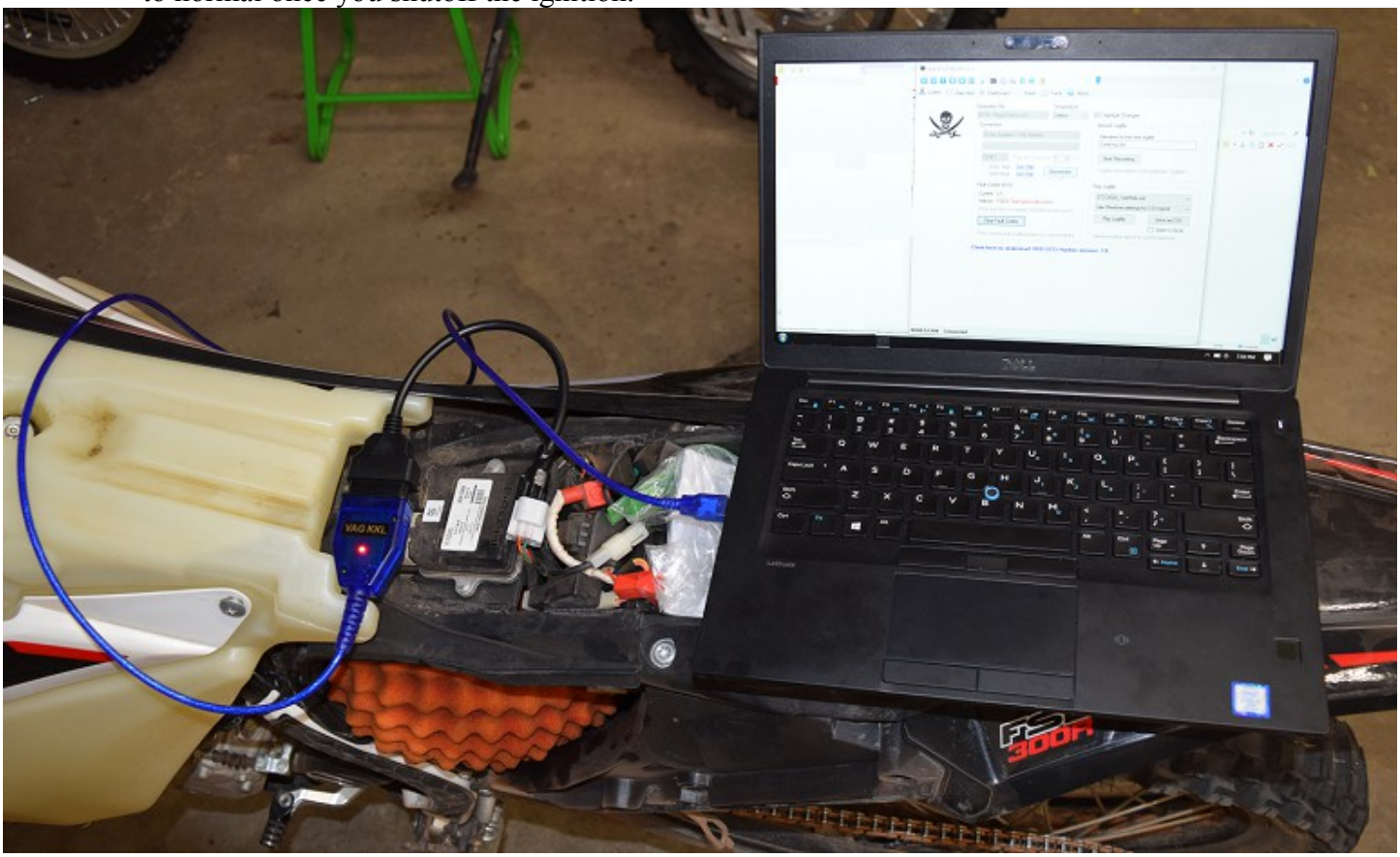
4. Push the pins into the main connector and then use the yellow piece to finish holding them in place. Should look like this at the end.



5. Now you have an OBD->FW090 connector. You can wrap some tape/shrink wrap around the end wires to protect things better.

6. Connect your new OBD->FW090 cable to the VAG KKL cable.

7. You now have a diagnostic cable that will work with the Delphi MT05.2 ECU. Final step is to download the only software known to work with this ECU and run it.
    1. https://netcult.ch/elmue/HUD%20ECU%20Hacker/
    2. I would HIGHLY RECOMMEND downloading a copy of this now even if you don't plan to use this because this is the type of software that...can go missing in a few years.
    3. You CAN make tuning changes via this software but no changes are persistent, they will all go back to normal once you shutoff the ignition.



Notes:

- Yes there are other possible ways to connect to the ECU using other adapters listed on the HUD ECU website but those are unverified. May work or you may waste $40 on an adapter.
- I did not write/make the HUD ECU Hacker program, everything I know is from using it and the website.

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