

Installing

We'll need these tools: small flat screwdriver, soldering iron, electric tester, wrench with torx bites

1. Take off steering wheel (example: <https://www.drive2.com/l/288230376153213343/>)

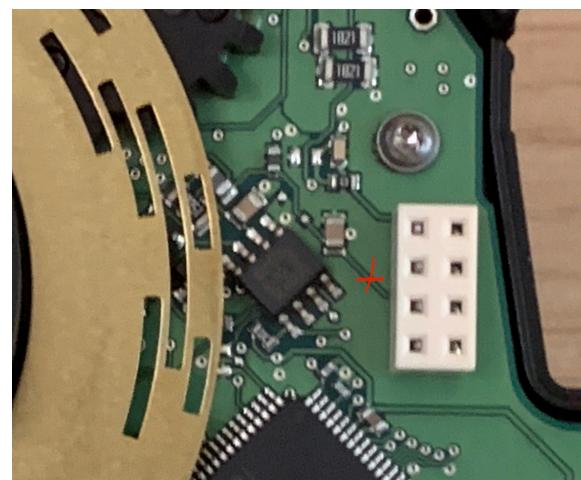
- when disconnecting airbag connector, we may leave battery connected, the airbag will not trigger
- steering wheel bolt requires a force to unscrew, be prepared

2. Take off steering control unit

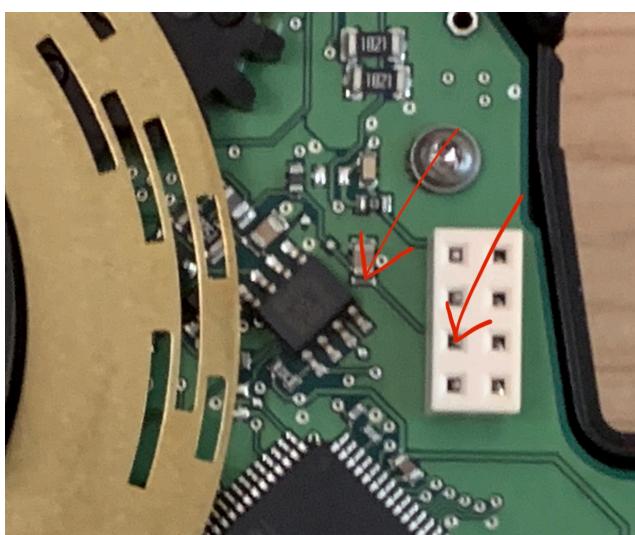
- pretty simple - disconnect all connectors, unscrew couple of bolts...
- don't rotate steering wheel connector - it should remain in the same center position

3. Disassemble steering control unit

- we need to take off plastic body only. To do this, use flat screwdriver to disconnect plastic latches. No need to disassemble rotating steering wheel connector



4. We are interested in a path on the plate highlighted on the images:

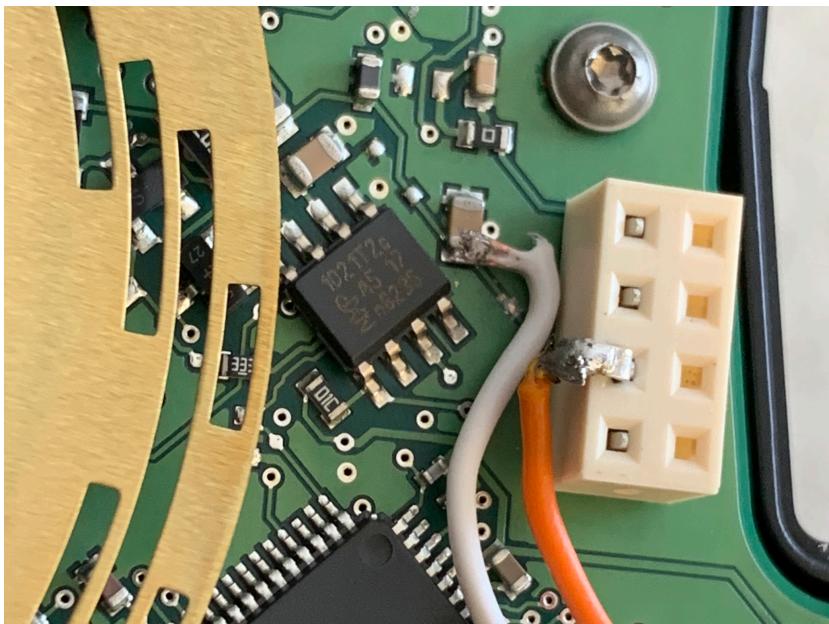


Break the path using a knife, screwdriver or any similar tool.

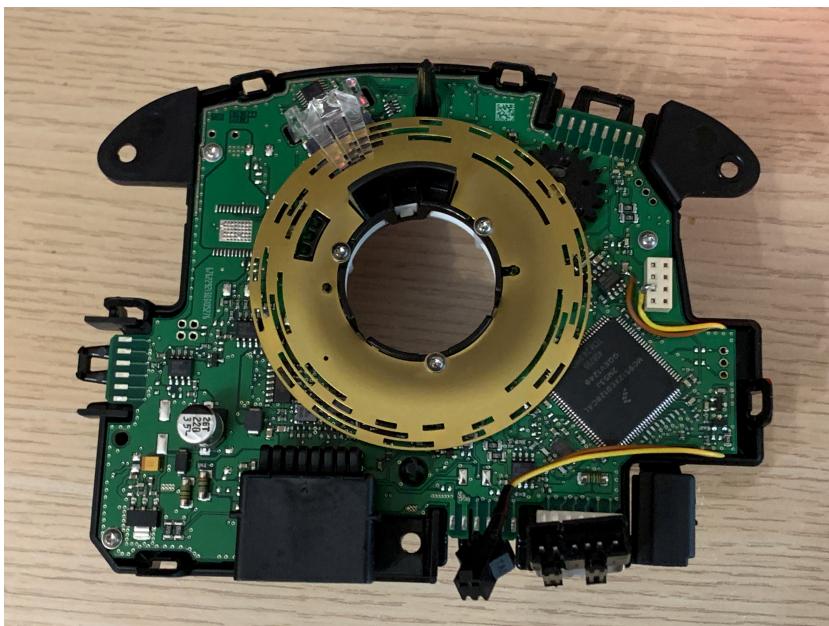
In result we should break contact from the capacitor on the left side to the pin on the right, as marked on the image. Check it with tester: should be no contact between the capacitor and the pin, as well as between them and ground. **Pay attention on this moment because it caused issues on practice**

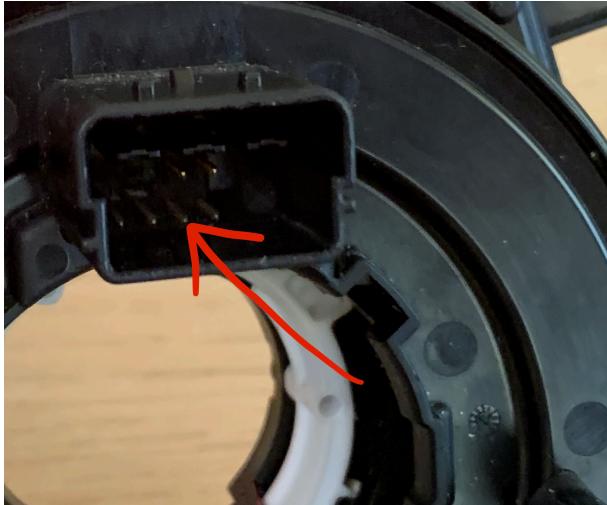
5. Solder 2-contact wire which comes with the adapter

We have a "hook" soldered to one end of the wire - install it into the white pin as shown on the picture. Solder other wire to the capacitor. The result should be as displayed:



Move the wire behind the plate to prevent it from mechanical damage in the future - so, if we pull the 2-pin connector too hard, we'll not tear apart the soldering point or the pin hook. Place 2-pin connector near the 6-pin connector on the plate and close the plastic body.





Before we install the steering control unit back in the car, check the contact which just inserted into the white pin, because it also happened that this moment caused issues on practice. Using a tester check contact between the steering wheel connector (highlighted with arrow on the image) and the wire which we just installed. If there is no contact it means that our "hook" in the pin needs to be re-inserted

6. Install steering control unit back into the car

Connect the adapter 6-pins wire in place of cruise control connector (located near the yellow one) and 2-pin wire.



It makes sense to connect the adapter to steering control unit on the table and then install this altogether into the car, so we do it in comfort space.

The adapter fits well under the steering wheel column. The tape prevents the adapter from mechanical and electric contact with the steel body:



Install the adapter carefully without brute force, as far as it may cause damage to the wires or soldering points.

7. Install MQB steering wheel and check if everything works well

In conclusion here are symptoms of some potential issues if installation process went wrong:

When the car is on the adapter should light on with red LED. If the LED is off it means bad contact on the 6-pins connector (power supply is on this wire). In this case the adapter isn't operating at all.

We can do a general diagnostics with a tester:

- second wire on the 6-pins connector is 12V power, third wire is ground, other wires change its voltage depending on cruise control buttons pressed. **When checking the wires, be accurate to not contact neighbour pins because in that case the steering control unit may brake!**

- 2-pin wire is for LIN bus, voltage there should be 10-11V

If needed we can return to factory functionality of the steering control unit by connecting pins 2-pin connector which each other (so we return contact which we broke on the plate). In this case the old steering wheel will be working with the factory cruise control handle.