

FITTING INSTRUCTIONS FOR BMW E90 E92 E87 E82 STEERING WHEEL SPACER

- 1) the spacer kit comes pre-assembled, you don't need to unscrew the allen bolts that hold the aluminum and steel parts together.
- 2) Do the whole procedure **disconnecting the battery first**, to avoid airbag warning lights turn on after the assembling.
- 3) **Park the car with straight wheels before start.**
- 4) **Handle all the harnesses with care**, especially while disconnecting and re-connecting the plugs. Be careful not to pull, even accidentally the harnesses from the connector on the rotating contact. Look for secure lock clips on any connector, you can lift them with a little flat screwdriver. Otherwise you can hear an annoying "click" while rotating the steering wheel after the installation, which will require you to re-open it for fixing.

EXTRACTING THE STEERING WHEEL

There are many tutorials on the internet / youtube, I resume here the steps required, but it's much easier after looking a video, typing "BMW E92 steering wheel removal" for example

- 1) Pull out the airbag unit from the steering wheel. Depending on the car, the airbag is locked on the steering wheel thanks to 2 or 3 clip springs. Usually they're behind the spokes of the steering wheel, at 3/6/9 o'clock. To unlock the clamp springs, inserting a flat screwdriver in the holes at the sides of the steering wheel, behind the spokes. The springs are no more than 1" (2,5 cm) deeper than the hole. Grinding a bit the screwdriver in the middle of the flatness point, making a kind of "C" will help you finding the clamp springs and pushing them. Spend some time to find every single spring, when you feel the elastic resistance of the spring, you can keep it pushed and the corresponding side of the airbag unit will pop out.
- 2) Unplug all the connectors you see, starting from the one (or two, depend on the model year of the car) on the airbag. Don't just pull hard before unlocking the secure lock on the connector. You just need a little flat screwdriver, or even your nail. Store the airbag in a safe place during installation, far away from people AND CHILDREN, for example in the back seat of your car. You can even leave the pending wires connected to the airbag, just unplug the wires themselves on the clockspring assembly side.
- 3) Unscrew the main bolt in the center of the steering wheel, and pull out the steering wheel BEFORE REMOVING THE SCREW! Leave the screw in for a turn or two. This is because, after years, the steering wheel (aluminium made) and the shaft, might have made a kind of "glued-effect" together and this may result in hard extraction steering wheel, which can hit your face and damage the harness.
- 4) When you're sure that the steering wheel slides on the shaft, you can remove the big central screw and the steering wheel itself, and make all wires and connectors go out from the slot just above the centre of the steering wheel itself.
- 5) At this point, you need, to extend the wires because they're too short to be easily reconnected. On the clockspring, there are 2 connectors with 6 pin inside. Insert the connectors of the wires supplied in the kit, in the pins, paying attention not to bend the pins.

FITTING THE SPACER

- 6) The steering wheel spacer must be insert in the shaft, making the connectors on the clockspring assembly go through the corresponding slot in the spacer. Same thing for the wires.
- 7) From now on, fit back the steering wheel in the same way you would do if the spacer would be not present. The spacer replicates the car's shaft. Insert the steering wheel in the male splined spacer's shaft; tight the longer supplied bolt; store the OEM bolt somewhere you remember in case of future need. Re-connect the connectors (to the supplied extensions, insert the pins of the extensions in the corresponding holes in the steering wheel wires).
At last, put the airbag back in place paying attention that no wire is pressed by the airbag unit itself. First pre-align the airbag unit in the housing in the steering wheel, then push it inside until you hear all the springs make the click. You should apply a slightly bigger force than when you press the horn. When the airbag is installed properly, you're going to press the horn with the same feel as before the steering wheel was installed.
- 8) Re-connect the battery.

END.