

FITTING INSTRUCTIONS FOR BMW E36 E46 STEERING WHEEL SPACER

- 1) the spacer kit comes pre-assembled, you don't need to unscrew the 6 bolts.
- 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 connecting the plugs. Be careful not to pull, even accidentally the harnesses from the connector on the rotating contact/steering angle sensor. 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.

- 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 torx screws or 2 clip springs. Unscrew the bolts (usually they're behind the spokes of steering wheel), or unlock the 2 clamp springs inserting a flat screwdriver in the 2 holes at the sides of the steering wheel, behind the spokes indeed. 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.
- 2) Unplug all the connectors you see, starting from the one (or two, depend on the model year of the car) on the airbag. 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 may need, depending on the car, to extend the airbag or steering wheel commands wires because they're too short to be easily reconnected.
E36: no need to extend the wires; some car's owner reported the need to cut and extend the 1 blue wire.
E46: All cars, extend the 4 pin steering commands wire using the supplied harness. SMG/SSG cars, extend the paddleshifters wires too, using the 2 pin supplied harness.

FITTING THE SPACER

Note: the spacer is multi-fitment, it has a shaped slot and holes designed in a way that the same product can be fitted both on BMW and models.

- 6) **E36** the clockspring assembly must be removed from the steering wheel (unscrew 3 little bolts) and re-fitted on the back of the steering wheel spacer through the same 3 little screws, making the wires run across the slot inside the steering wheel spacer. Then, insert the spacer in the car's shaft.
E46 the steering wheel spacer must be insert in the shaft, making the 2 pins on the clockspring assembly go through the corresponding holes in the spacer (1 hole is "open", and it is a part of the slot in the top side). Same thing for the connectors: make the OEM harness slide inside the spacer's slot.
- 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 torx bolt somewhere you remember in case of future need; re-connect the connectors; put the airbag back in place paying attention that no wire is pressed by the airbag unit itself and re-connect the battery. Pay attention, while re-connecting the connectors, that the corresponding harness are not stretched.
- 8) Re-connect the battery.

END.