

FITTING INSTRUCTIONS FOR SUBARU BRZ /TOYOTA GT86 STEERING WHEEL SPACER 2016-onwards VERSION, WITH STEERING WHEEL BUTTONS

Warnings:

- 1) Park the car with the straight wheels before installation, because the spline does not have any marker (made as extra wide teeth like other car brands) that allow the coupling in one way only.
- 2) Disconnect the battery before installation. This will avoid warning lights on after the procedure.
- 3) **Be carefull while handling the harness which come out from the clockspring assembly: never pull it**, and pay attention about **no pulling it accidentally**, you can damage the clockspring assembly, and/or hear an annoying “click” while rotating the steering wheel at the end of the job, which requires to re-do the whole procedure only for pushing back the wires towards the clockspring assembly.

INSTALLATION PROCEDURE - There are many tutorials on the internet / youtube, about how to remove the airbag and the steering wheel, I resume here the steps required, but it's much easier after looking a video. You can search, for example, “Subaru BRZ 2017 steering wheel removal”.

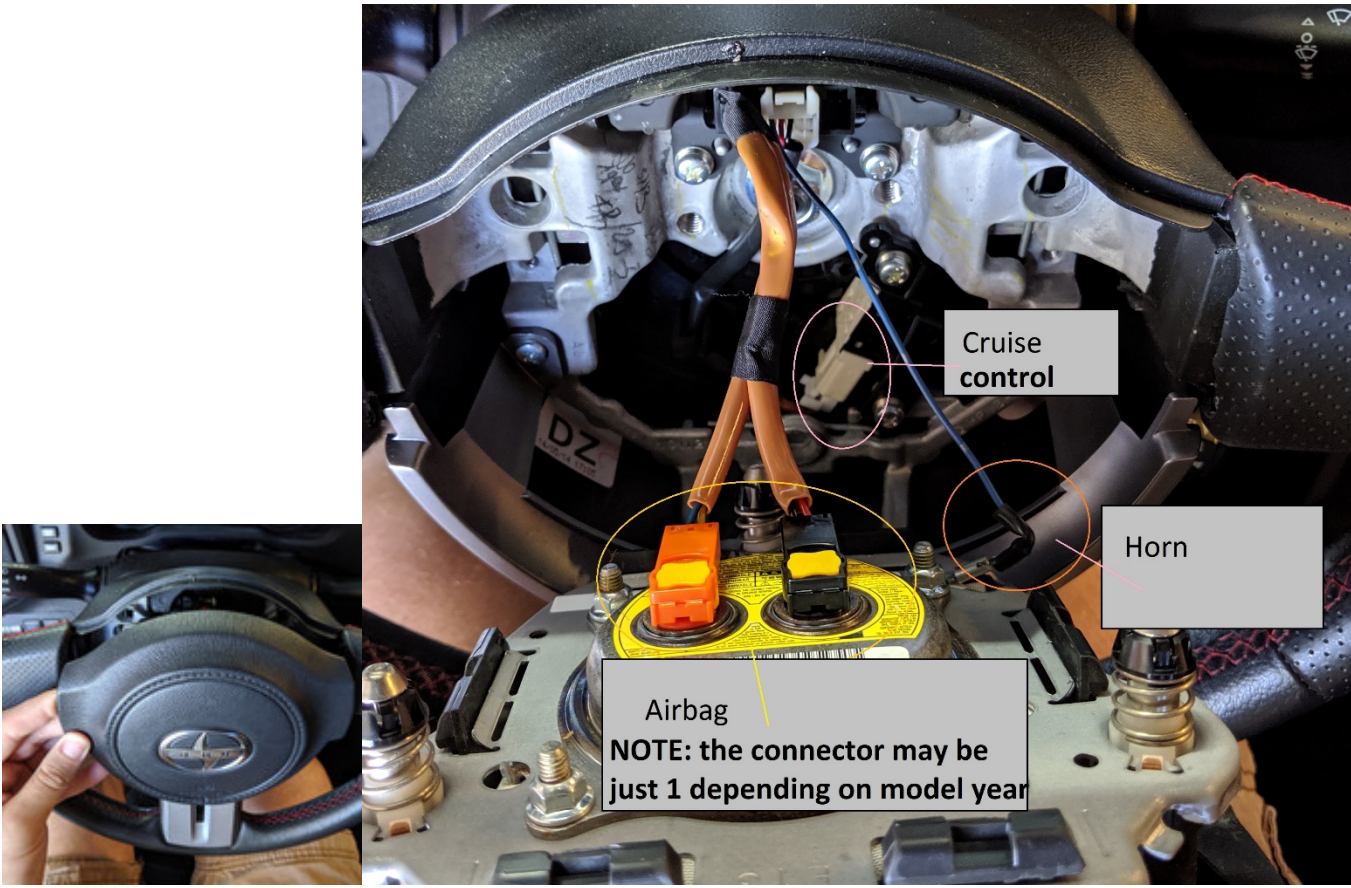
- 1) Pull out the airbag unit from the steering wheel: use a flat or a torx screwdriver and push the 3 pin springs behind each spoke. You can see the springs from 3 square windows which you must open in the plastic rear cover of the wheel, by removing the dedicated plates.



This is how the springs look after you remove the airbag, to help understand how to unclip them.



When the airbag unit is in your hands, unplug the connectors in the back of it. Don't pull'em out with force, they all have a secure plastic clip, unlock them first lifting with a screwdriver.





Pull out the horn wire, it may require some force.



- 2) Lay the airbag unit far from working area and children.
- 3) Unlock the central nut, **without removing it yet**: the steering wheel can be hard to pull out in some case, and sudden unlock may result in hurt yourself by throwing the steering wheel on your teeth, also, pulling it out too fast may damage the pending harnesses. An extractor may be necessary. It fits in the 2 M8 holes close to the central nut and with a central screw you will be able to unlock the steering wheel from the column. If you don't have a puller, you can give some radial punches to the steering wheel, or try to pull it 1 hand per time left and right.



- 4) When you're sure the steering wheel don't require force to come out (it slides on the steering column, just stopped from the nut), disconnect the 2 white connectors on the clockspring (one is for the steering wheel buttons, the other is for the paddleshifters - if you have them) and remove the nut. Pull out gently the steering wheel and store both the nut and steering wheel somewhere, for example, the passenger seat.
- 5) Now you can install the spacer. Because it comes pre-assembled, you should disassemble it first, unscrewing the 6 bolts.

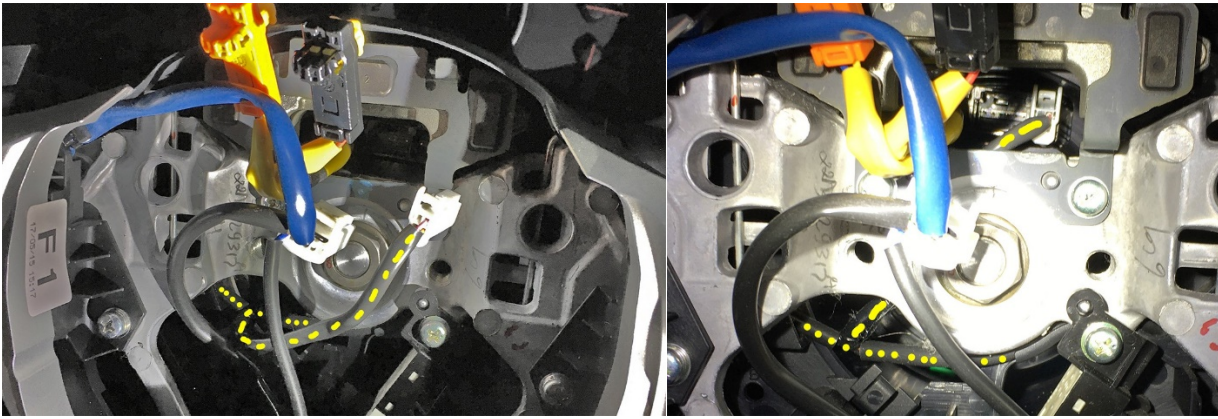


- 6) Fit the aluminum side of the steering wheel spacer on the steering column, keeping the orientation of the slots horizontal. The little slot must stay up as it is on the steering wheel. The airbag wire must go across the slot in the spacer. Tight the central OEM nut what was holding the steering wheel on the column at the same torque of **30 ft-lb / 40 Nm**
- 7) Fit the male splined steel side of the spacer on the aluminium side, tightening the bolts at 10 Nm. Use Loctite. The steel shaft has a marker or an inscription "this side up" that must face the sky, otherwise you will have off-center steering wheel at the end of the procedure.



- 8) Insert the provided harness for the steering wheel commands in the central connector of the clockspring assembly. It has a single way to get in and makes a reassuring "click" when is in. You will connect the other side to the OEM connector which comes from the steering wheel in a second moment.

If you have the paddleshifters, you must re-route the wires connected to the little white connector to gain the required extra length to easily clamp it to its housing in the clockspring assembly.



- 9) Fit the steering wheel back in place and while you make steering wheel get closer to the spacer, connect the remaining connector(s). Then insert the steering wheel in the shaft. The airbag wires must go through the central square slot, in line with the corresponding slot in the steering wheel spacer. Tight the central nut at **30 ft-lb / 40 Nm**
- 10) Reconnecting the airbag: first connect the horn to the airbag unit, then the airbag wire. The airbag wire(s) is (are) long enough to be reconnected without being cut and extend, but there is not much room to reconnect the connector(s). You should pre-align the airbag unit on the steering wheel, slightly detached from the steering wheel itself (2 cm, 1" or less), then you must use 2 fingers to pre-align the connector(s) in it's socket (respect the alignment: the connector has 1 orientation only), then press the connector in, and when it is in press the secure clip. You will hear a "click" in all these 2 steps. This is going to be more a tactile than a visual job. Take your time and patience before doing it: it's simple, but tricky.

NOTE: some customers had report that the airbag wires are too short to be reconnected, in this case, the only solution is cut and extend them. You can simply extend the wires by using a similar type of wire. We suggest to buy used airbag wires on the internet, to ensure their thickness is correct. Pay attention to cut and extend the wires one by one, because if you cut all the wires (2 or 4), you may swap them during reconnection, and this may affect the airbag functionality.

Picture of extended wires.



Push the airbag in the steering wheel assembly, making the engagement of the 3 springs which you have touched at the begin. It's a bit more than pressing the horn.

Again, have a look on youtube tutorials about steering wheel installation, to clear doubts and see how is it done.

- 11)Reconnect the battery. **END.**