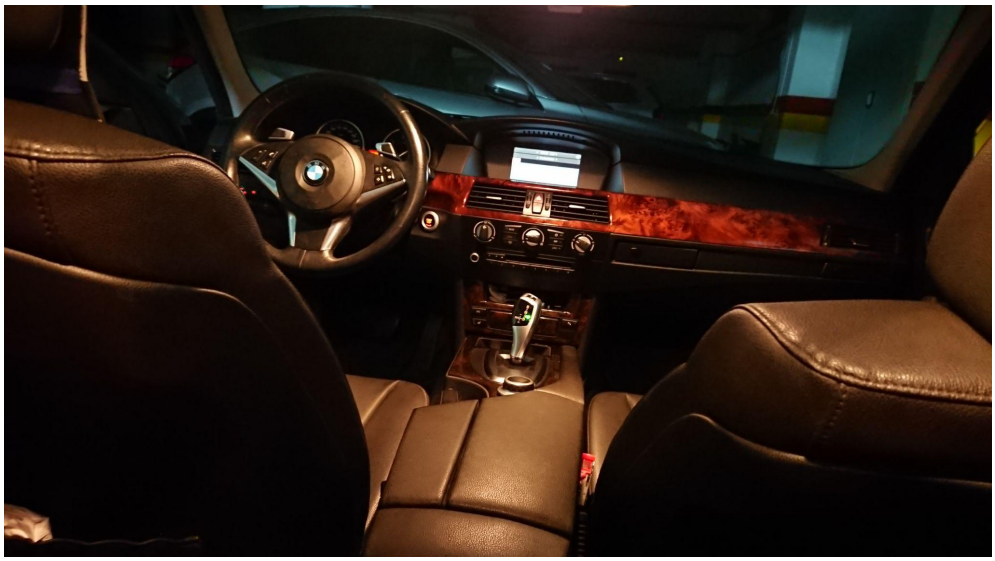
BMW E60 LCI Shifting Paddles Retrofit



In order to retrofit the shifting paddles in a E60 LCI, the steering wheel must be replaced and two wires must be routed from the E-box in the engine bay to the SZL Ecu in the steering switch centre. Finally, coding must be performed on the transmission Ecu (EGS).

In case you have Heated Steering Wheel and/or Lane Departure options. Routing two cables to the E-box may not be needed with some steering wheel harness modifications, not covered here.

Requirements

- BMW E60 LCI with Steptronic transmission (Option S502A)
- BMW E60 Sport (32346774458) or M (32342283939) Steering wheel with retrofitted paddles (Left paddle: 61319115638, Right paddle: 61319116317, Harness: 61316976396) or Individual Sport Steering wheel with paddles (32347963273). If second-hand the steering wheel must be taken from an E6X which was manufactured in September 2005 onwards.

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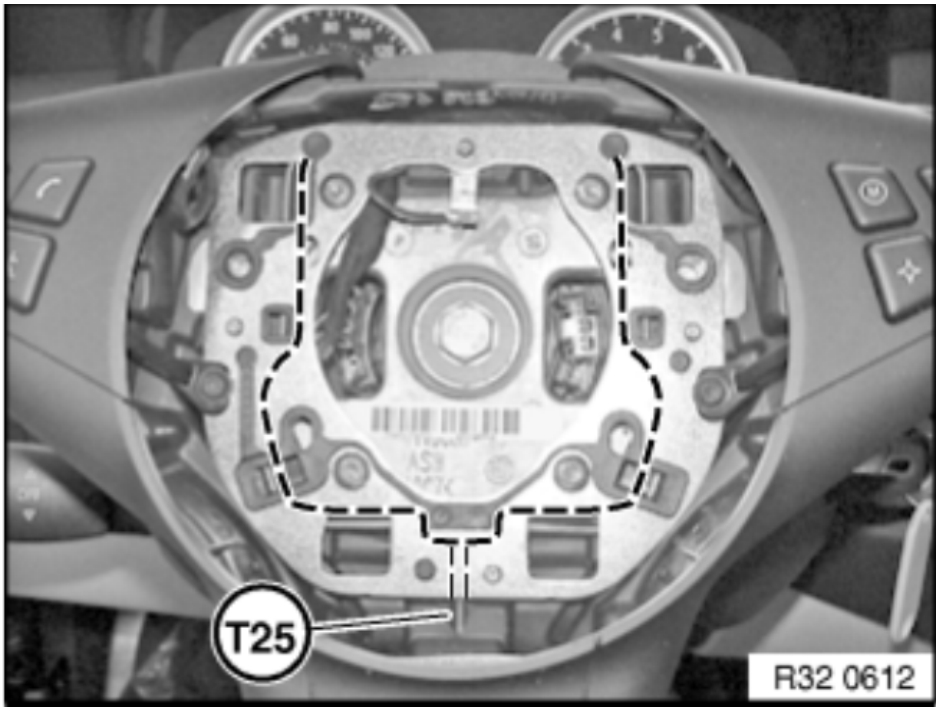
- 5 meters of 0.35mm blue/gray wire.
- 5 meters of 0.35mm yellow/blue wire.
- Adhesive Cloth Fabric Tape Wool Roll Black

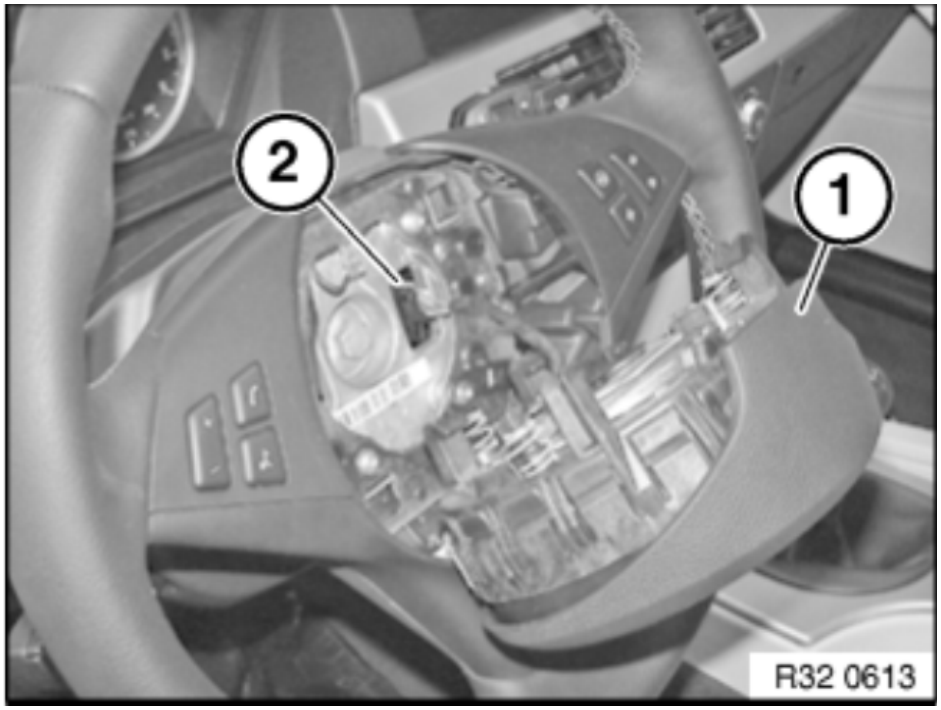
- 2 contact pins (61130005197) for E-box connector.
- 2 contact pins (61130005201) for SZL connector.

Steering column trim removal

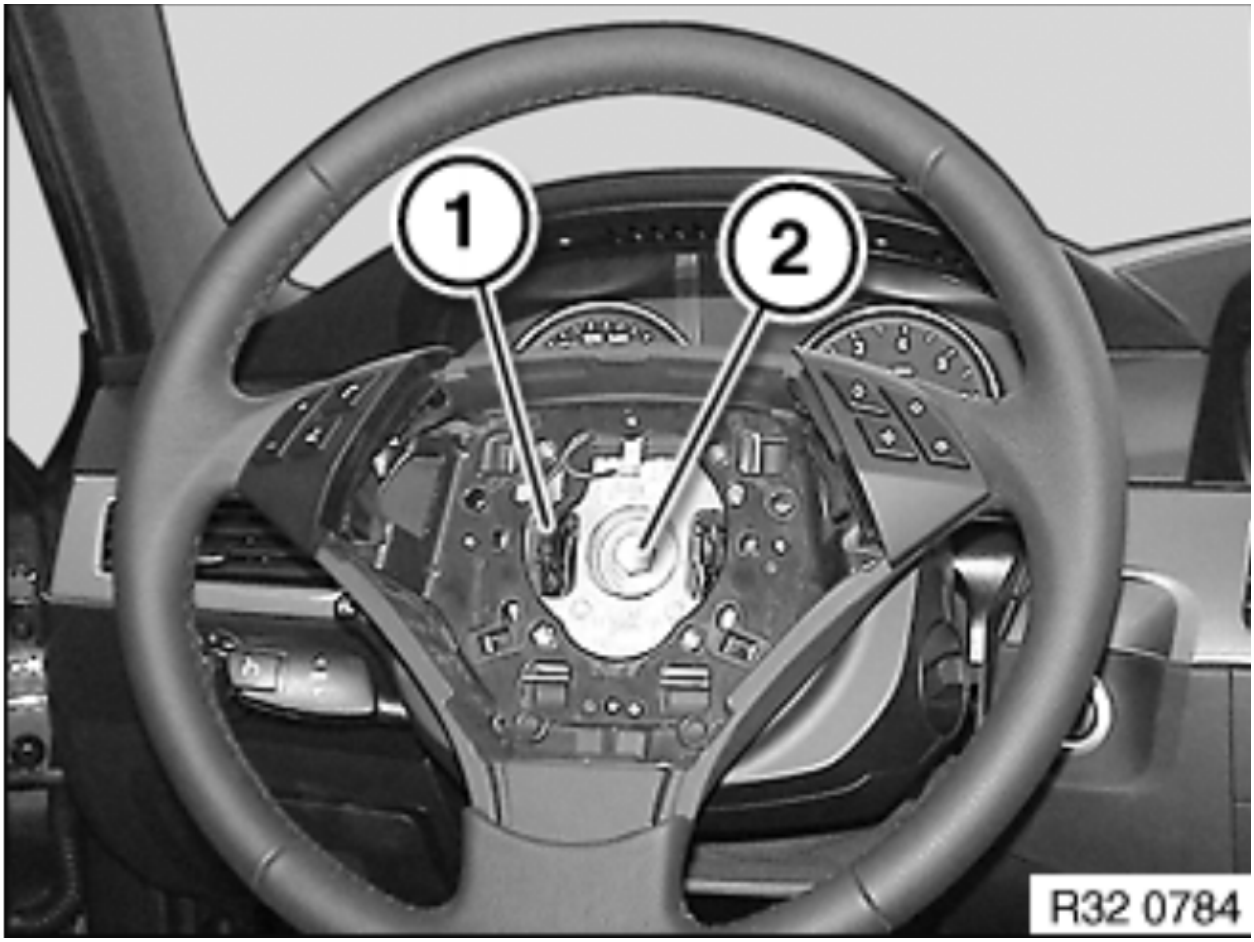
- Disconnect battery negative lead.
- Insert Torx screwdriver (T25) from below into the opening on the rear side of the steering wheel until a spring resistance is felt (approx. 3 cm). Please use thick gloves.
- Increase pressure on the annular spring using Torx screwdriver (T25) until the airbag unit is unlocked on both sides.



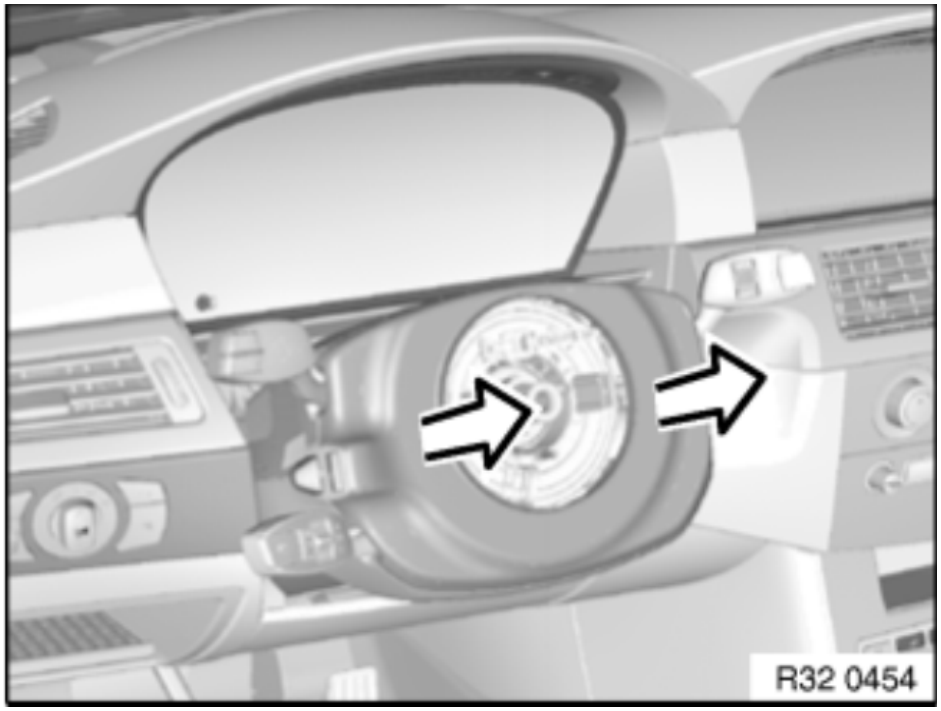
- Tilt airbag unit (1) towards front. And disconnect plug connection (2) and remove airbag unit (1).



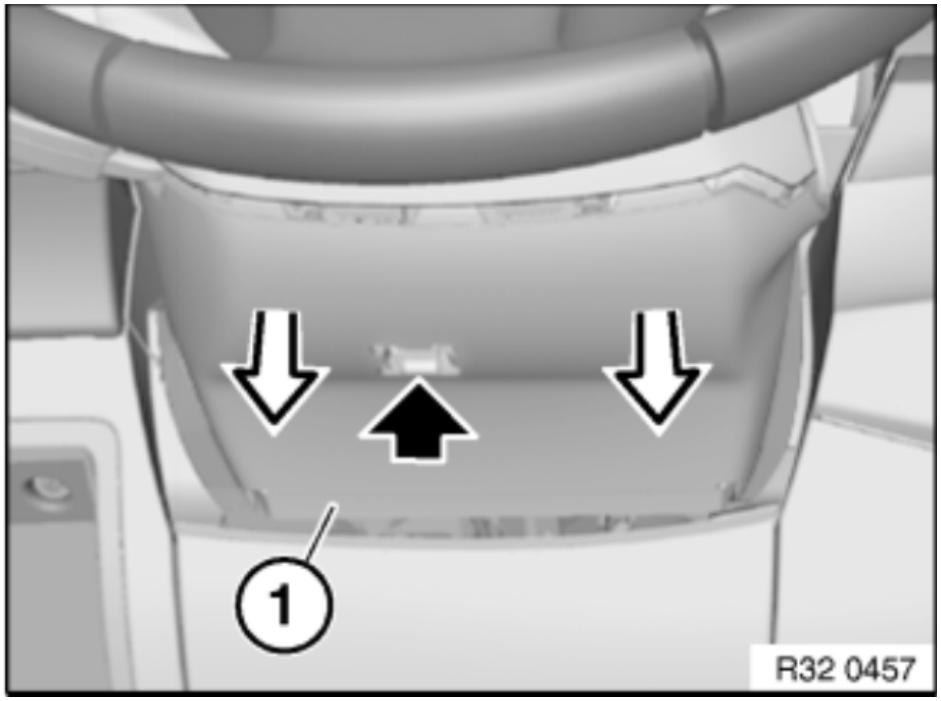
- Move wheels/steering wheel into straight-ahead position.
- Disconnect plug connection (1).
- Release screw (2) and remove steering wheel. The 15mm screw is tightened to 62.5nm and requires some good force to get released. The use of an impact electric torque wrench might be necessary. E.g: Bosch 18V GDX18V180.

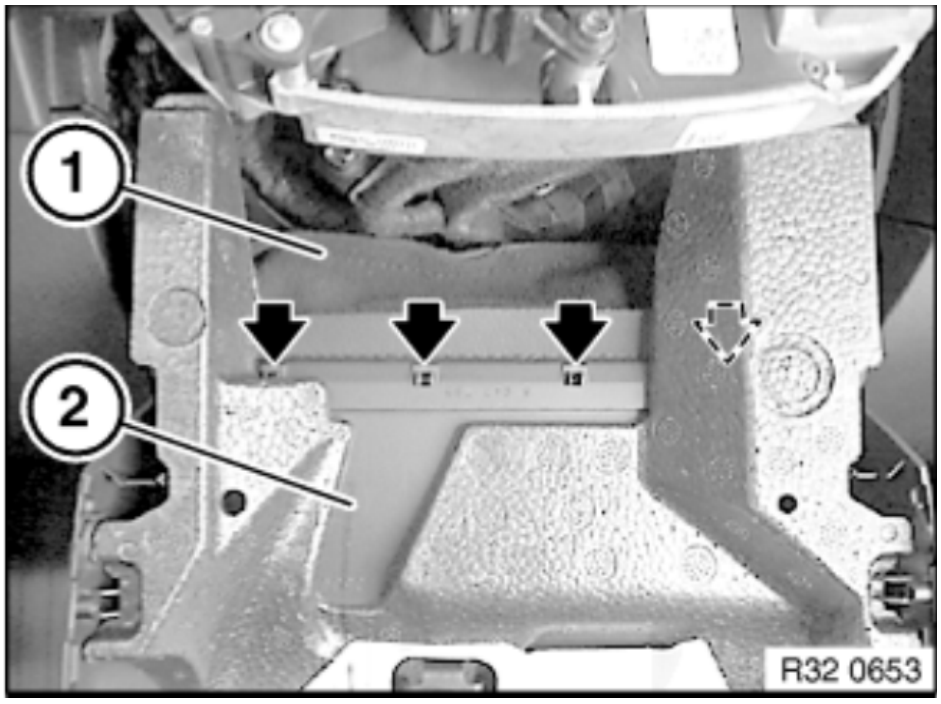


- Remove the front section of the steering column trim.

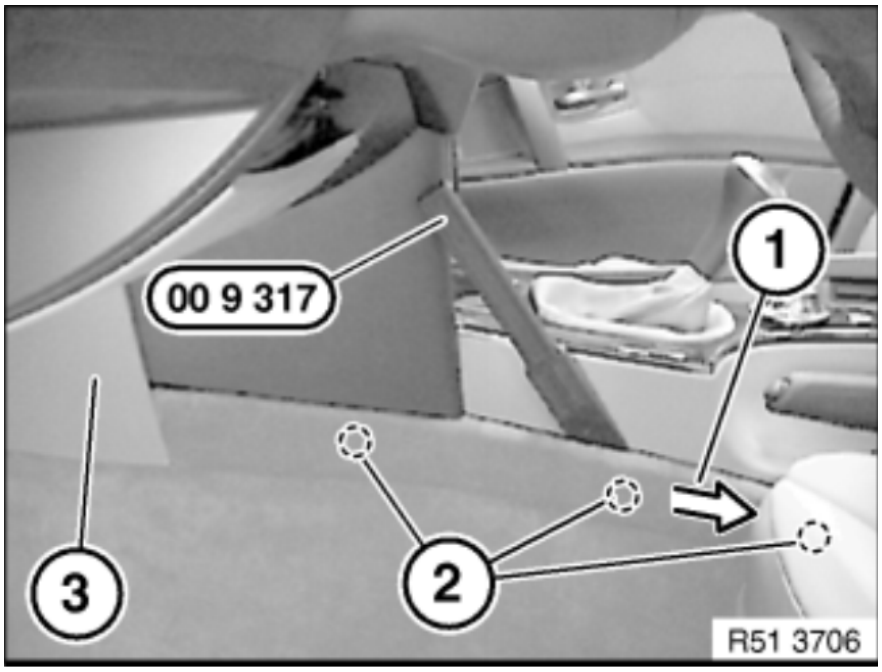


- Remove the lower section of the steering column trim by releasing screw/rivet (1).

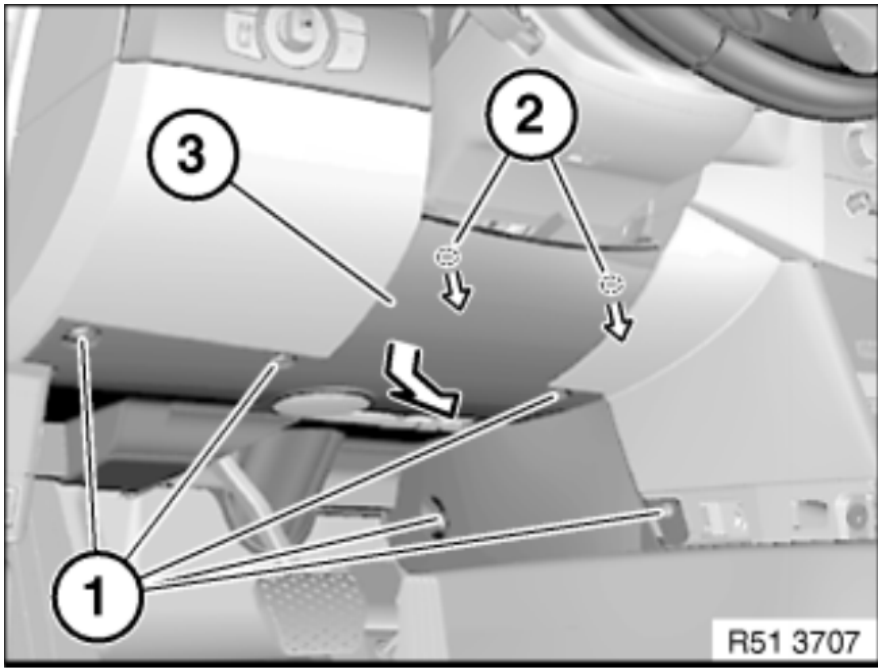




- Move driver's seat completely towards rear.
- Drive bottom trim (1) towards rear with BMW special tool 00 9 317 and remove.



- Release screws (1).

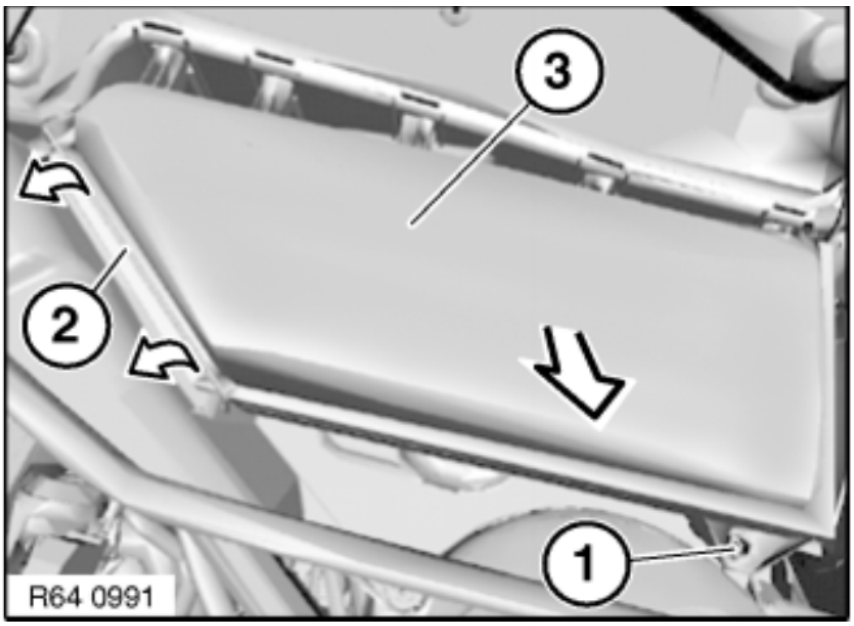


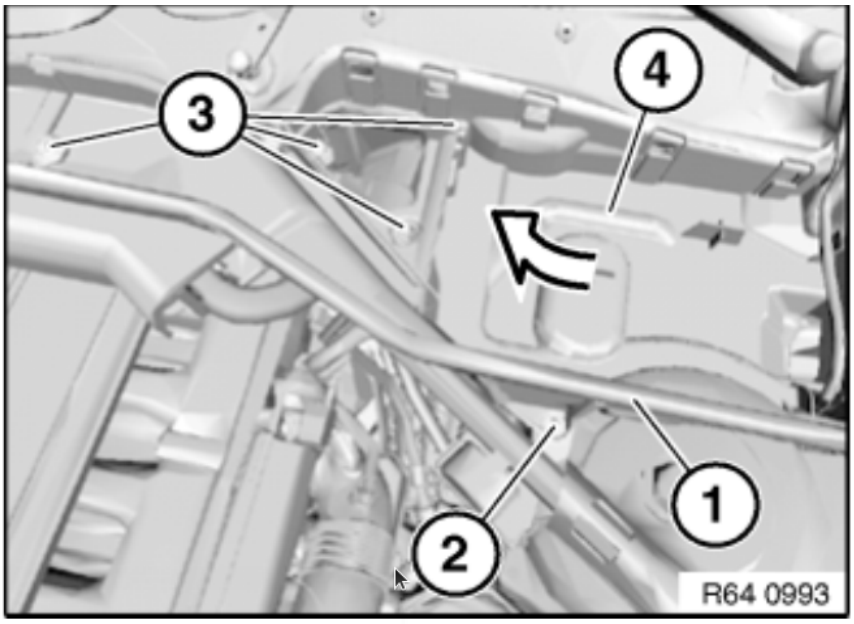
- Unclip trim for pedal assembly (3) at retaining points (2) in direction of the arrow.
- Pull back trim for pedal assembly (3).
- Disconnect associated plug connections and remove trim for pedal assembly (3).

Access to E-box in engine bay

The E-box is in the passenger side (Engine bay) under the cabin filter trim.

- Open the engine hood and remove the passenger cabin filter trim.





This should give you access to the E-box.

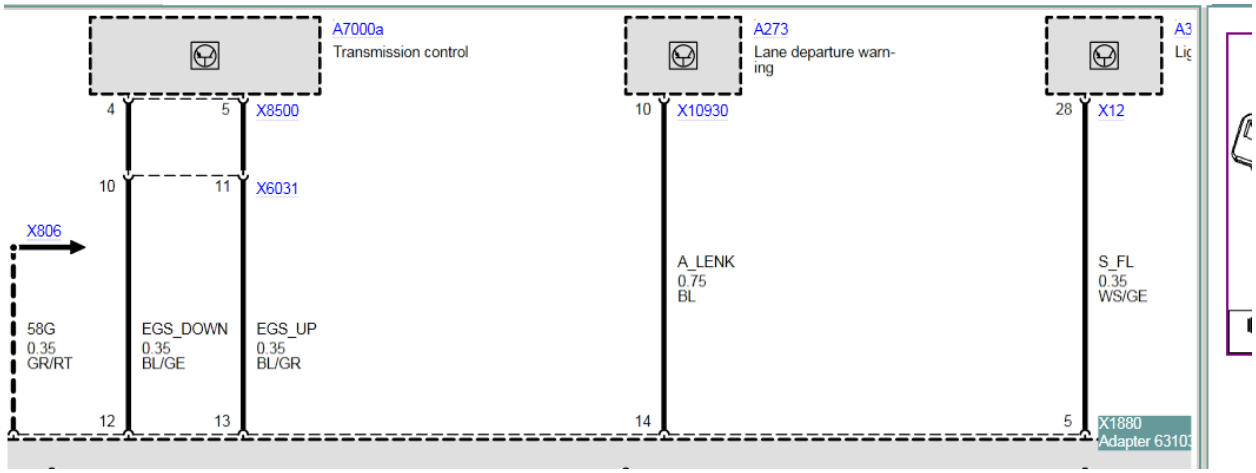
- Unscrew the E-box 6 nuts and slide the lock to the unlocked position (right back of the E-box), then remove the E-box cover slowly.

Access to Brake booster well in engine bay

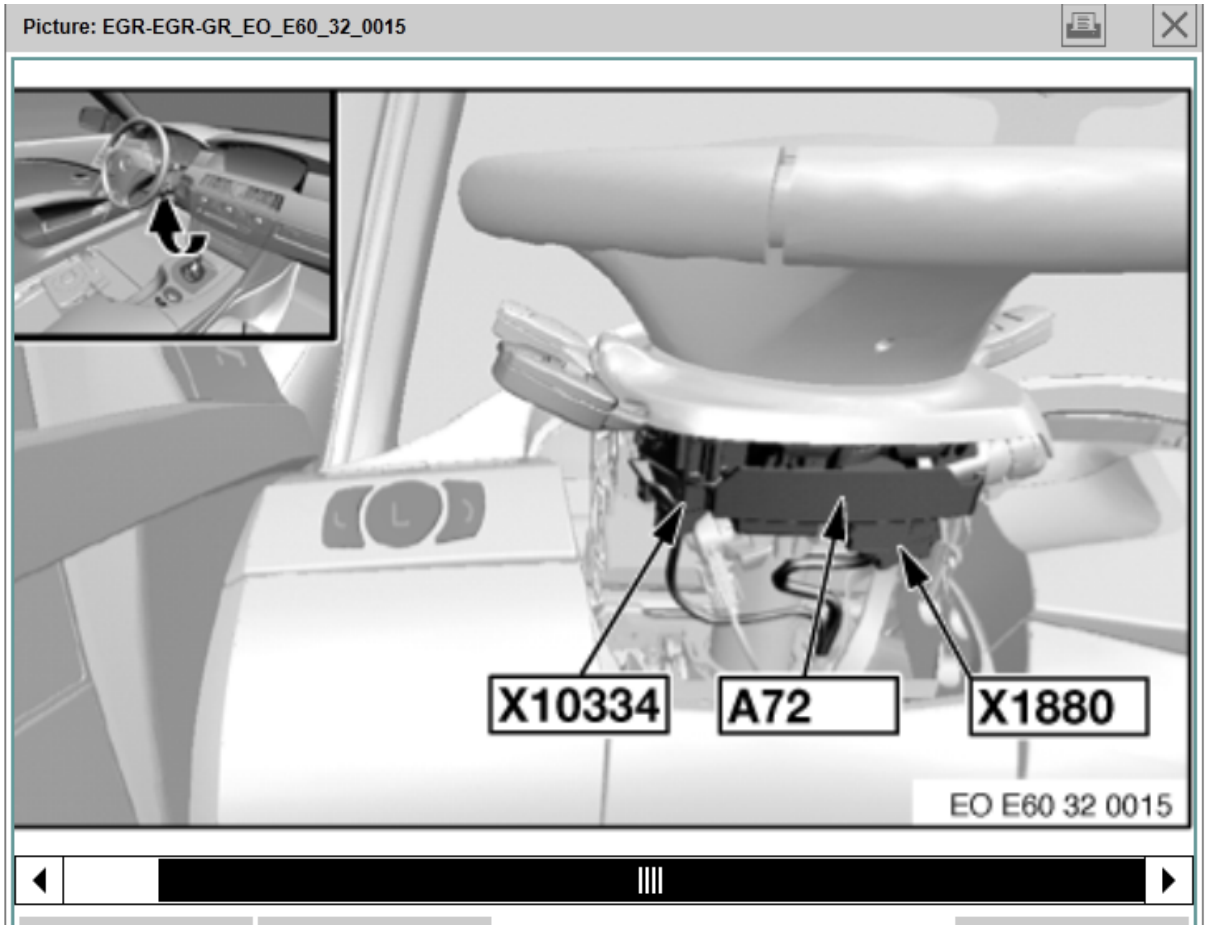
- Remove the driver cabin filter trim to have access to the wiring harness grommet.

Routing of cables

Wires must be routed as per this diagram:

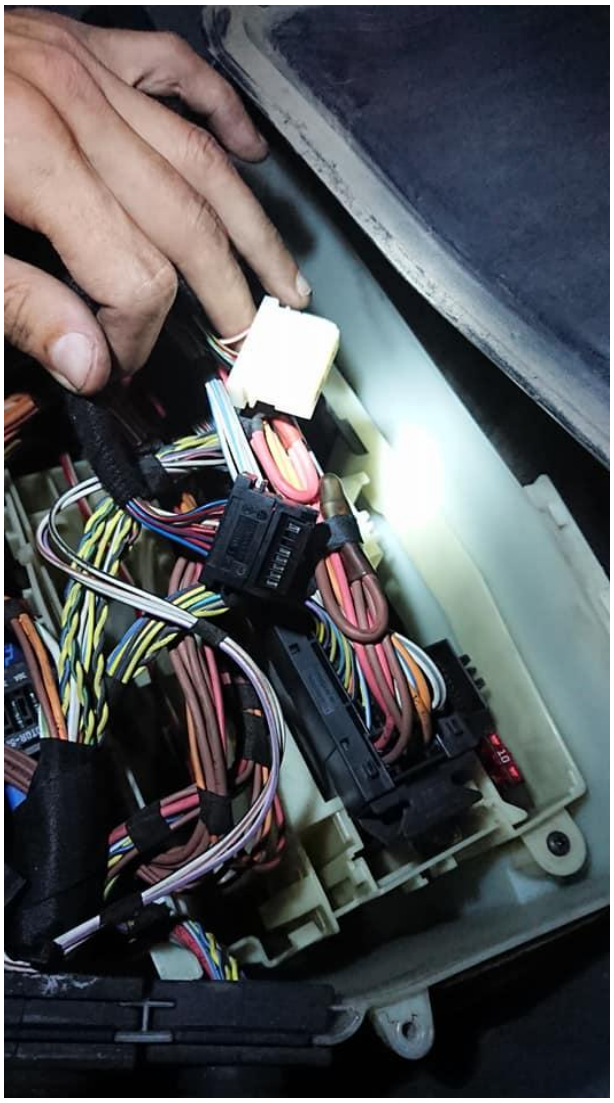


The connector X6031 is linked to the transmission EGS Ecu, while the connector X1880 is linked to the Steering Switch centre SZL Ecu.

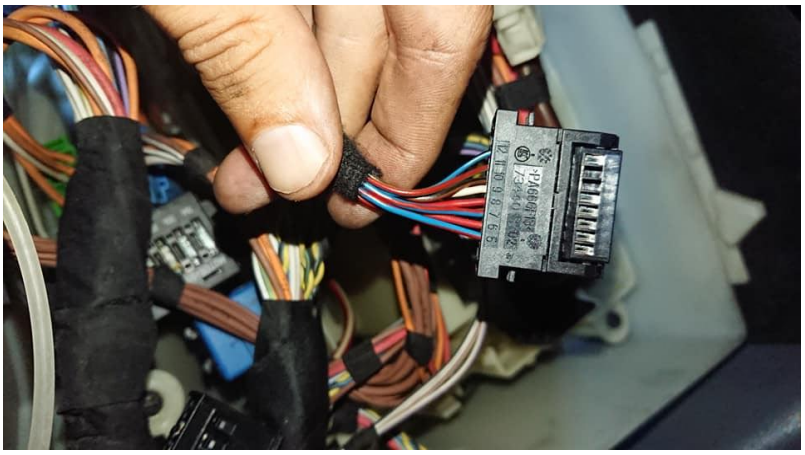


- Unplug the X6031 connector from the E-box and connect pin sockets 10 and 11 using the

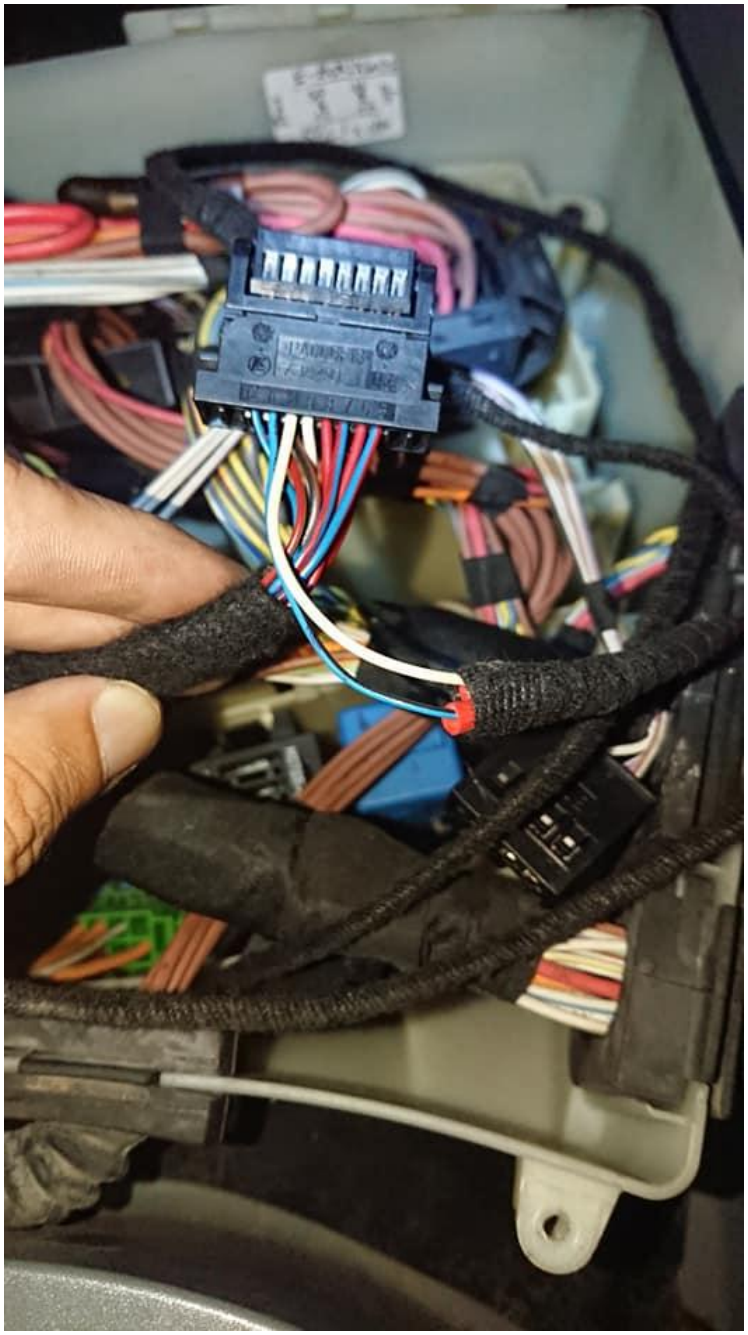
0.35mm bicolor wires with pin contacts. (You can use up to 0.75mm cables and if you do not find bi-colored cables, you can use red and a white cables for example).



Above is the black X6031 connector unplugged.
Pin sockets 10 and 11 are empty.



Before pinning the connector with the new wires, there is a pin holder that must be carefully raised from the sides in order to allow pins to settle in their sockets.
Once done, you should end up with something like the following picture:



- Replug the connector and start routing the wires along the wire harness from one of the E-box rubber grommets aside the hood damper then along the wire harness that goes to the windscreen water jet units until the grommet aside the brake booster: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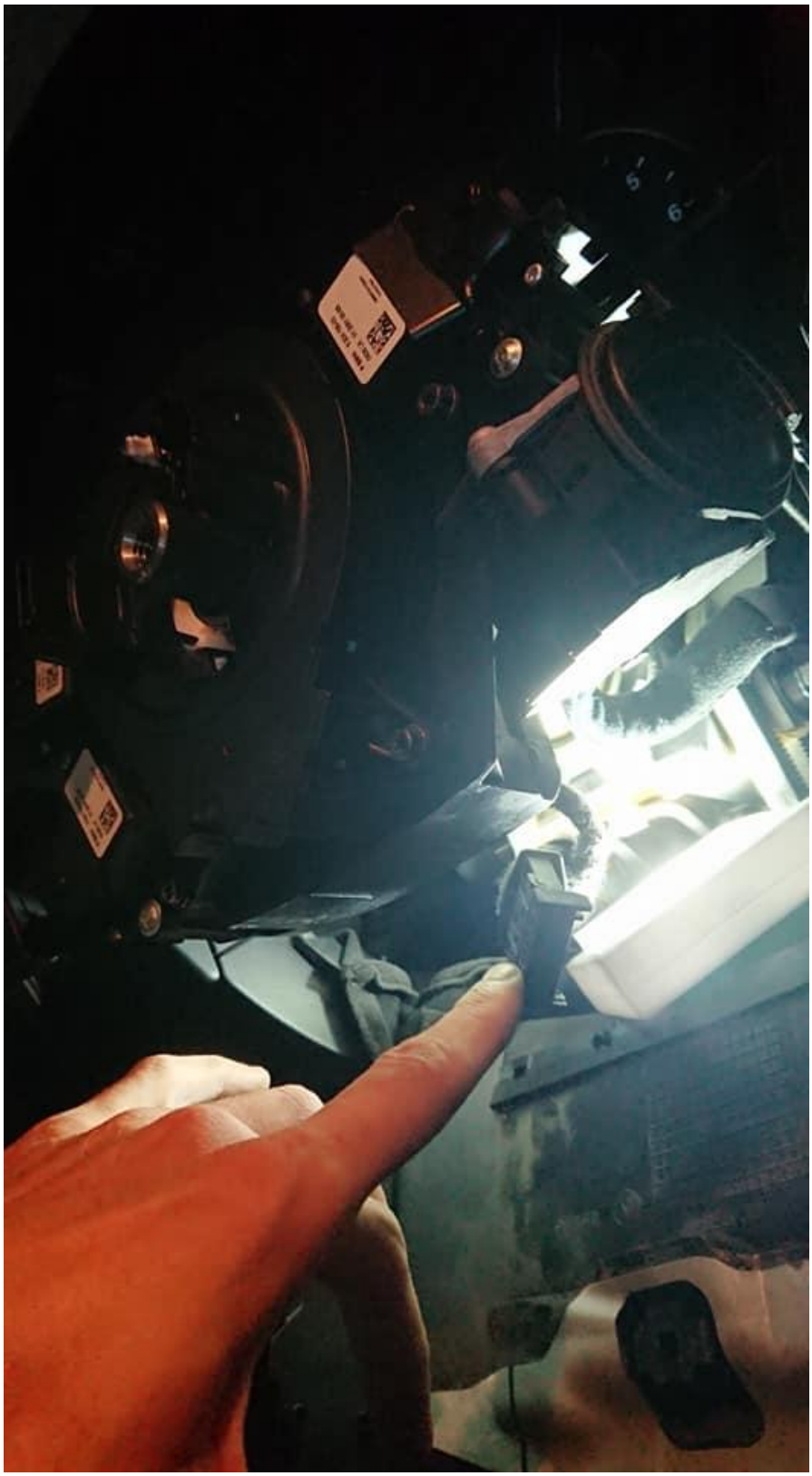
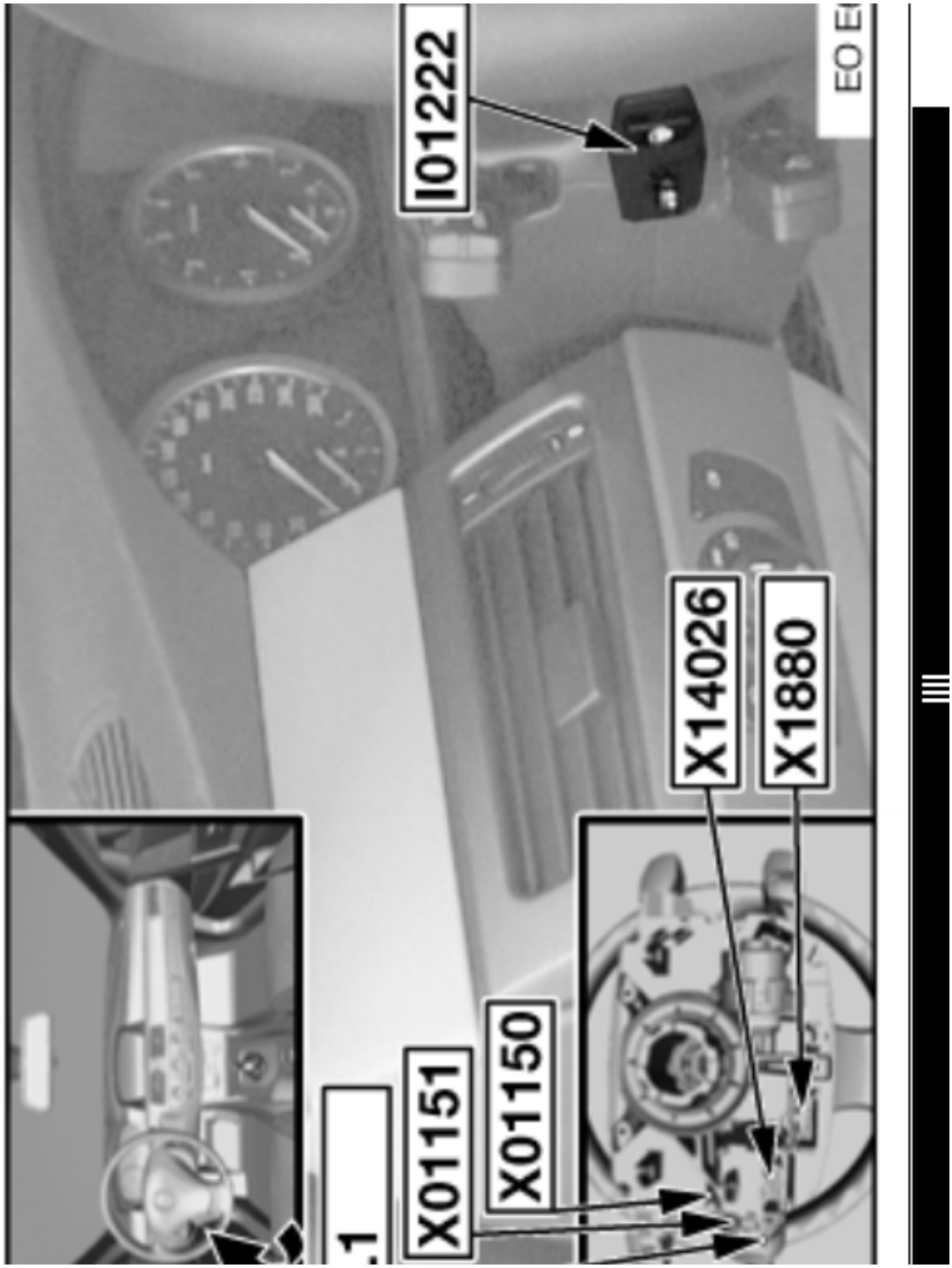
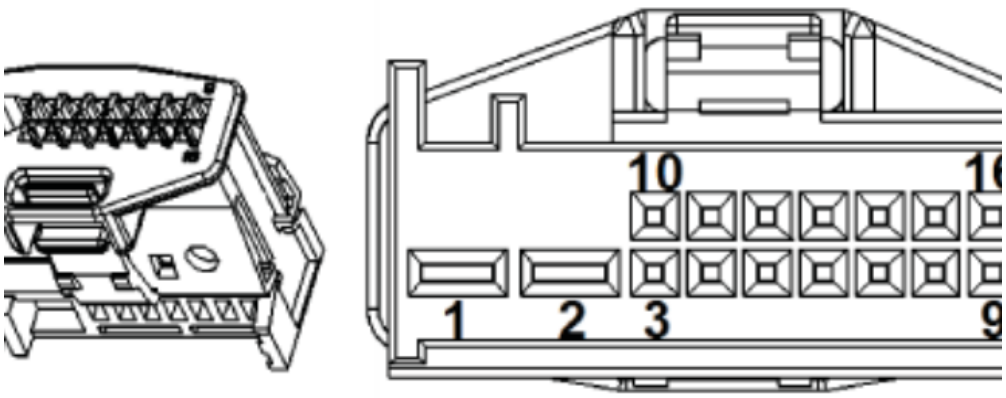
The grommet must be slightly opened (pierced) using a tiny screwdriver or a knife. Once inserted the wires should end up in the cabin foot well (Above the foot rest):

Once done, the cable should be routed above the steering column assembly along the light control module harness and then to the SZL connector X1880:







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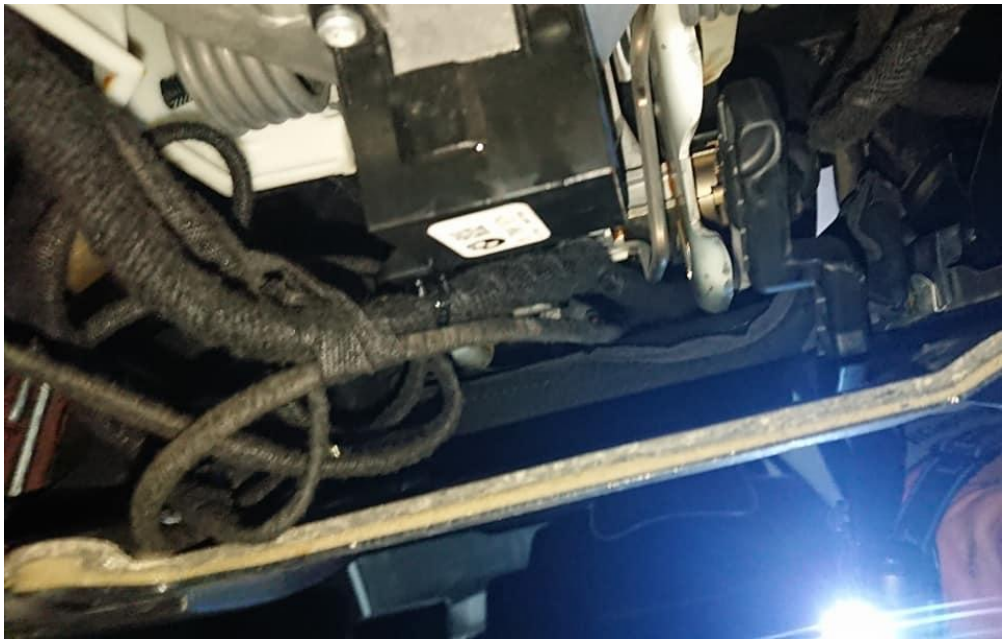

Coding

The paddles will not be operational unless the transmission EGS Ecu is encoded to support paddles. In order to do that, a coding software like NCSExpert can be used to turn PADDLES on by switching from value WERT_00 to value WERT_01.