

EZ Electric Power Steering Installation Reference For Tesla Roadster

City Racer LLC

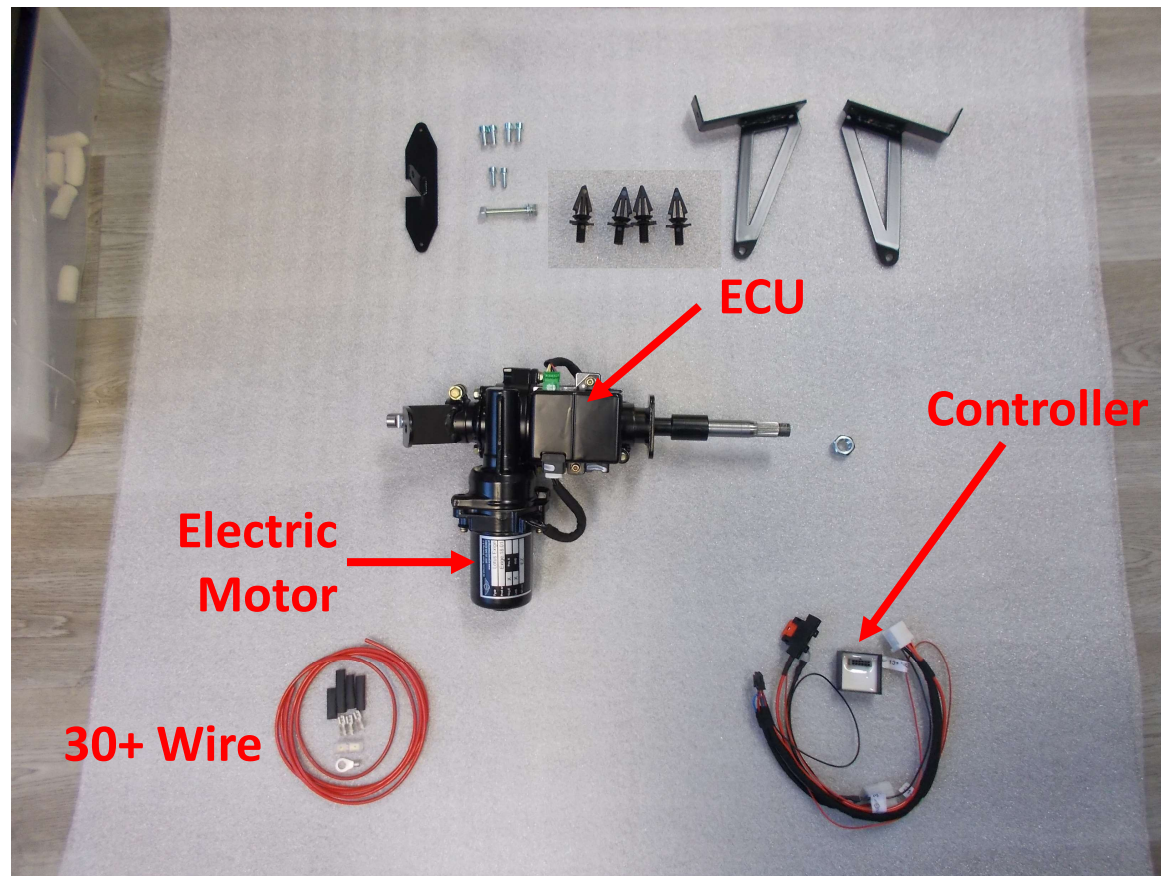
Time Estimate: 15 Hours

Important safety warning:

Before commencing electrical work on a Tesla Roadster, the high voltage system must be disconnected. Please refer to pages 6 and 7 of the accompanied Tesla Roadster Emergency Responder Guide.

Professional installation by a Tesla-capable shop is strongly recommended.

Key components of the EPS kit are shown below. The controller box with colored inlay sends a signal to the ECU that simulates the engine's RPM. It's tied to a potentiometer with a dial knob that enables you to vary the level of assist. The ECU collects signals to control the electric motor, which in turn powers the steering system.



City Racer LLC

There are 3 kinds of wires, labeled as follows:

- Thick red wire is 30+
- Thin red wire is 15+
- Black wire is 31-

You will connect the thick red wire (30+) via the fuse holder directly to the positive terminal of the 12V battery.

Connect the thin red wire (15+) with an ignition switched feed.

Connect the black wire (31-) with a suitable ground.

Fit the potentiometer at a suitable location of your choosing.

When the ignition is switched on, a click should be noticeable. The system is then operative.

After switching off the ignition, it takes approximately 3 seconds before the ECU switches off. When it does a click will be heard.

The kit is used for both the Lotus Elise and Tesla Roadster. The reference photos shown in this document are from an Elise installation, but the process should be similar. A potential difference is with the 12V battery. The Tesla Roadster's 12V battery should be by the right front fender; however, some Tesla Roadsters apparently don't have a 12V battery:

<https://teslamotorsclub.com/tmc/threads/tesla-roadster-2009-12v-battery.80669/>

Please verify before installation. If this is the case, the factory suggests mounting a motorcycle battery (LFP7 12 volt 24,0 Wh Lithium LiFePO4). It can be mounted flat and charged with a 5 amp converter.

Majority of the installation effort is due to partial disassembly of the dashboard.

Pre-installation Disassembly













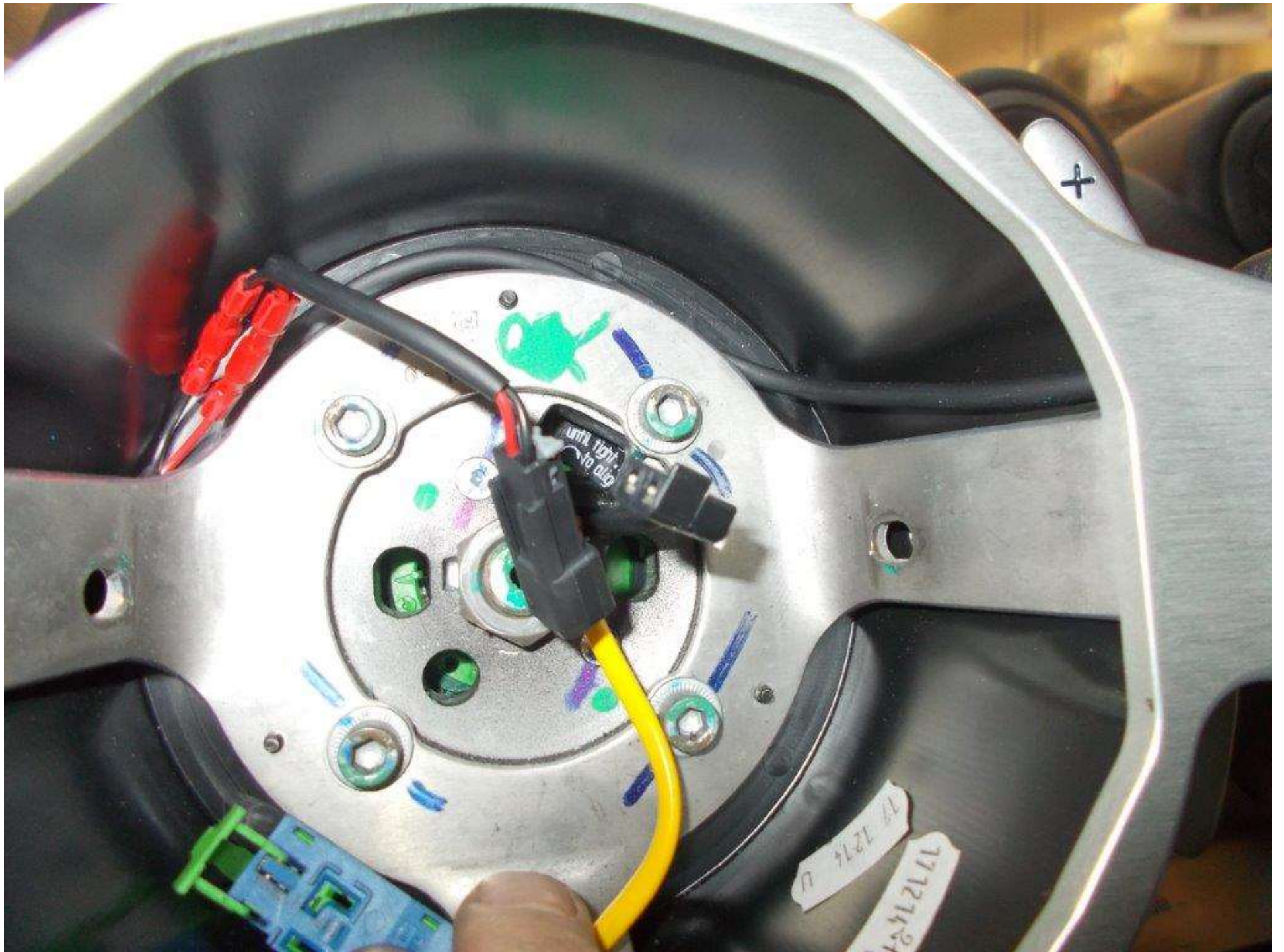




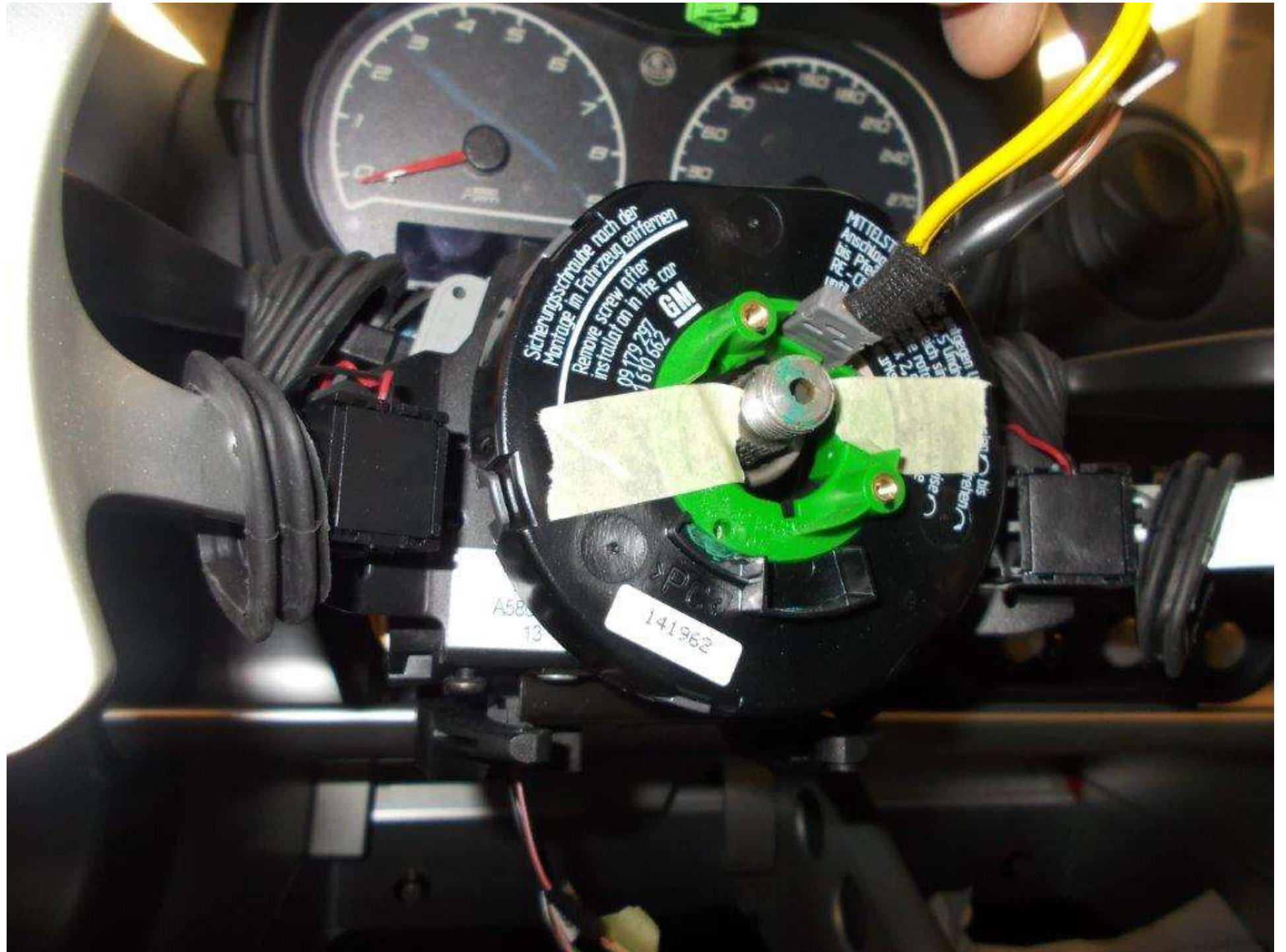






























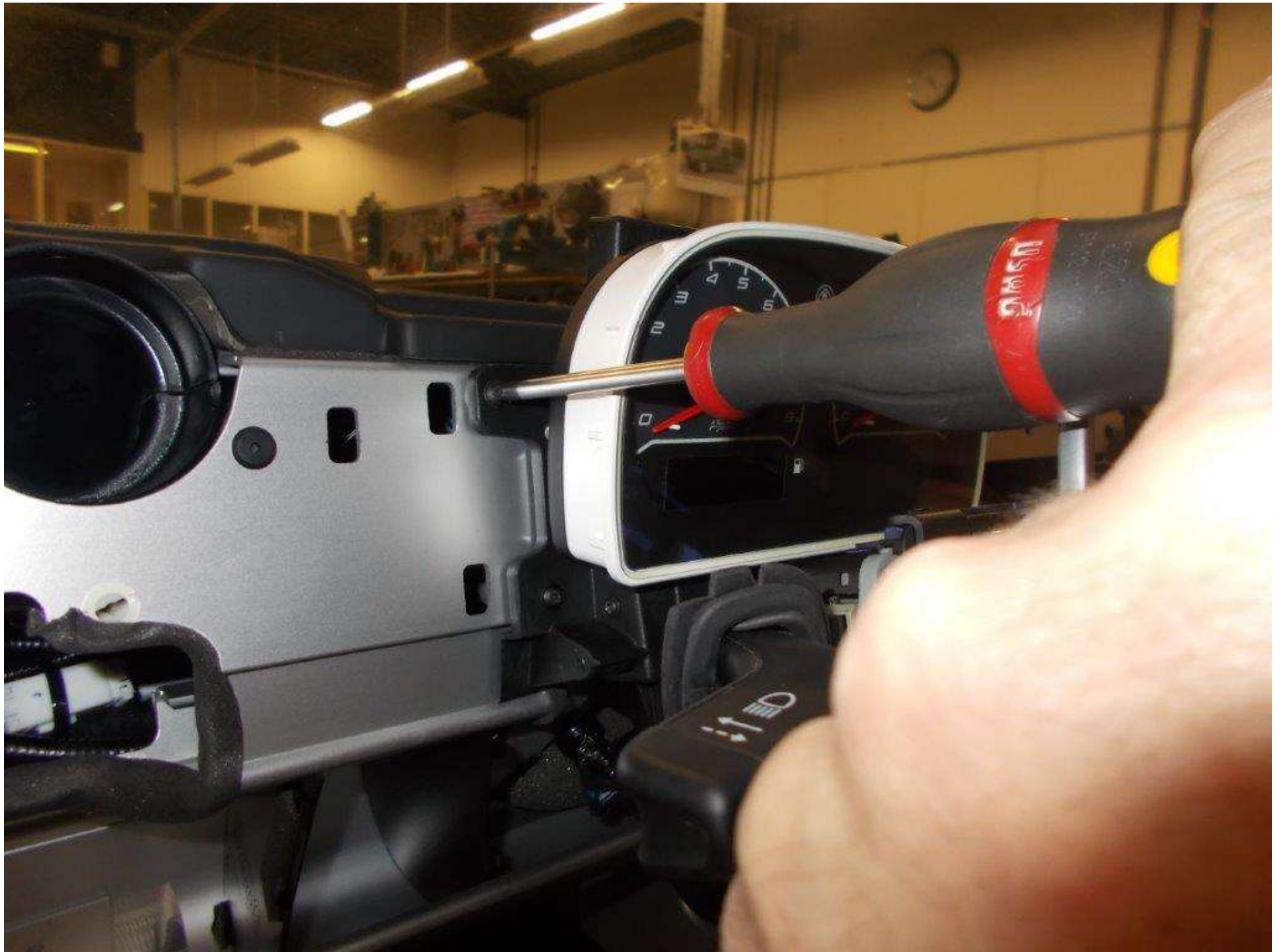














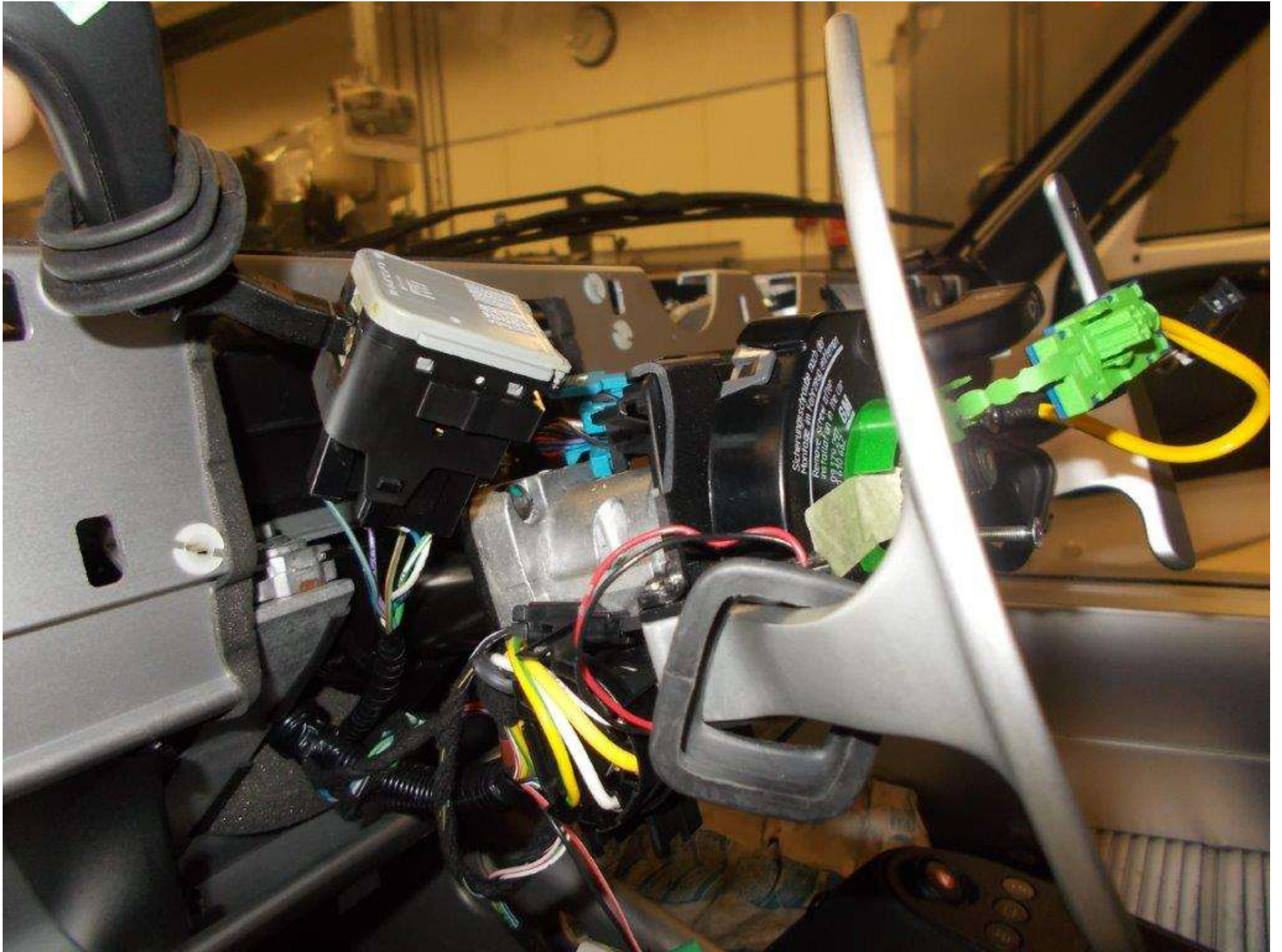


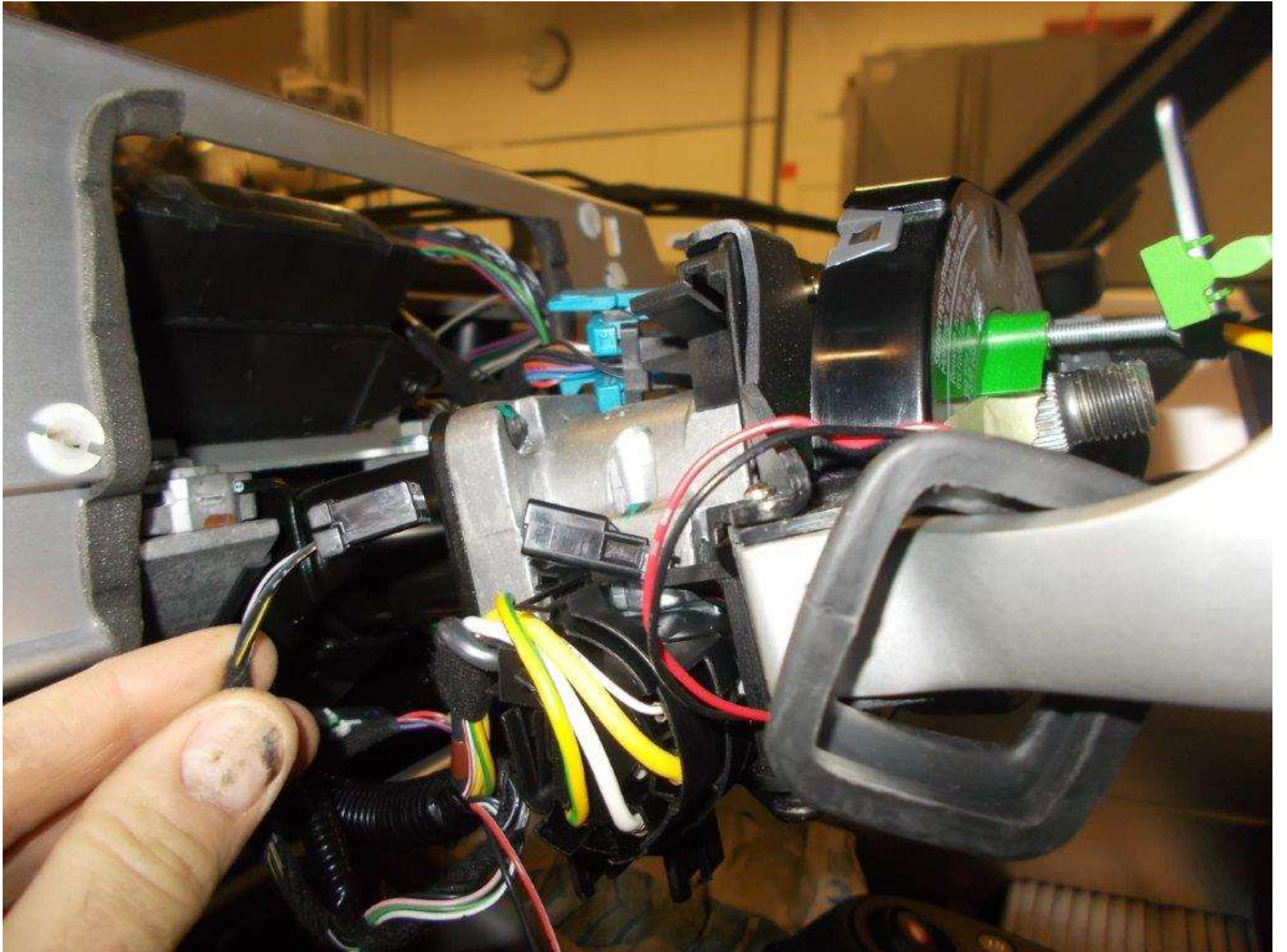






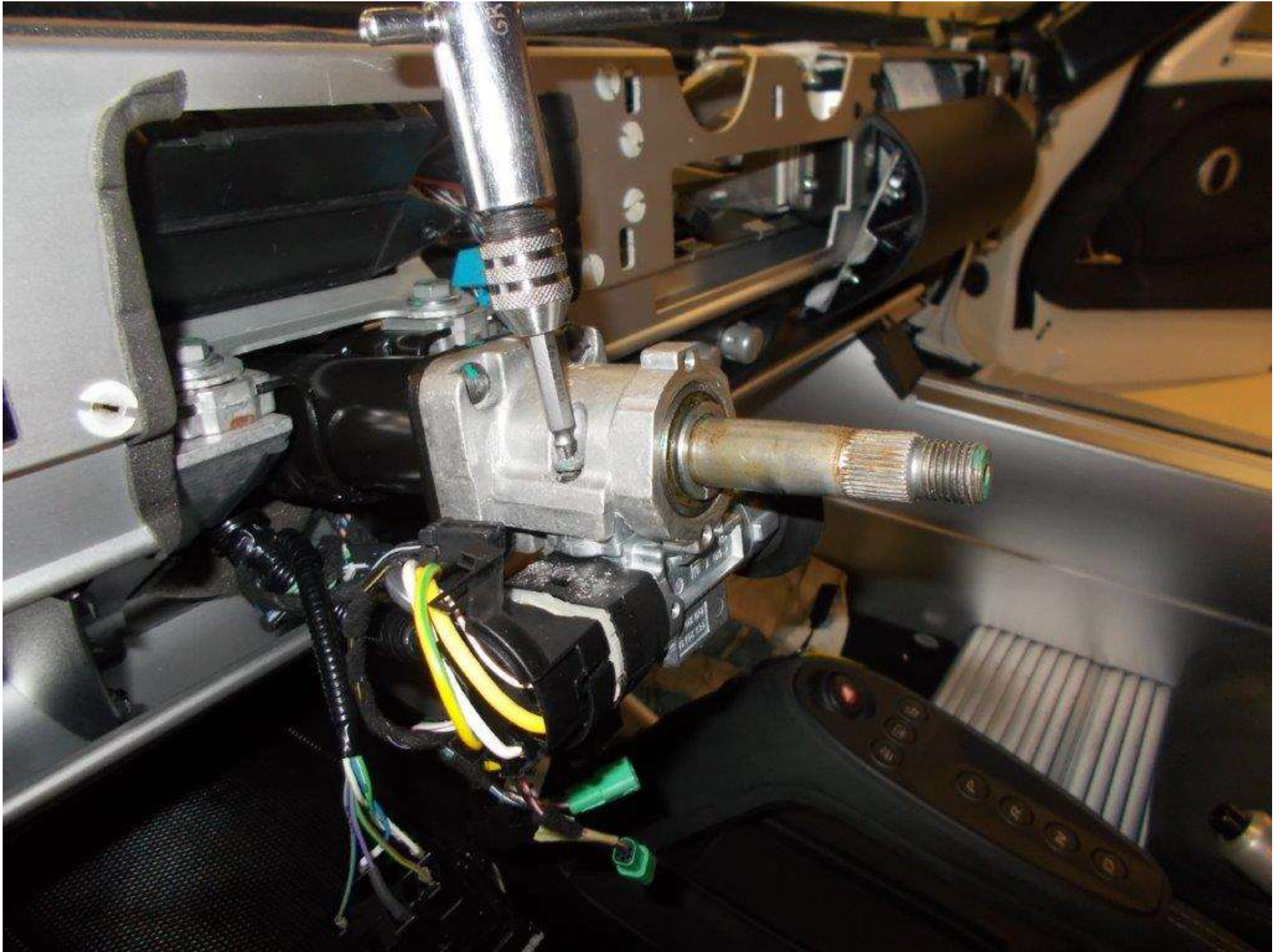


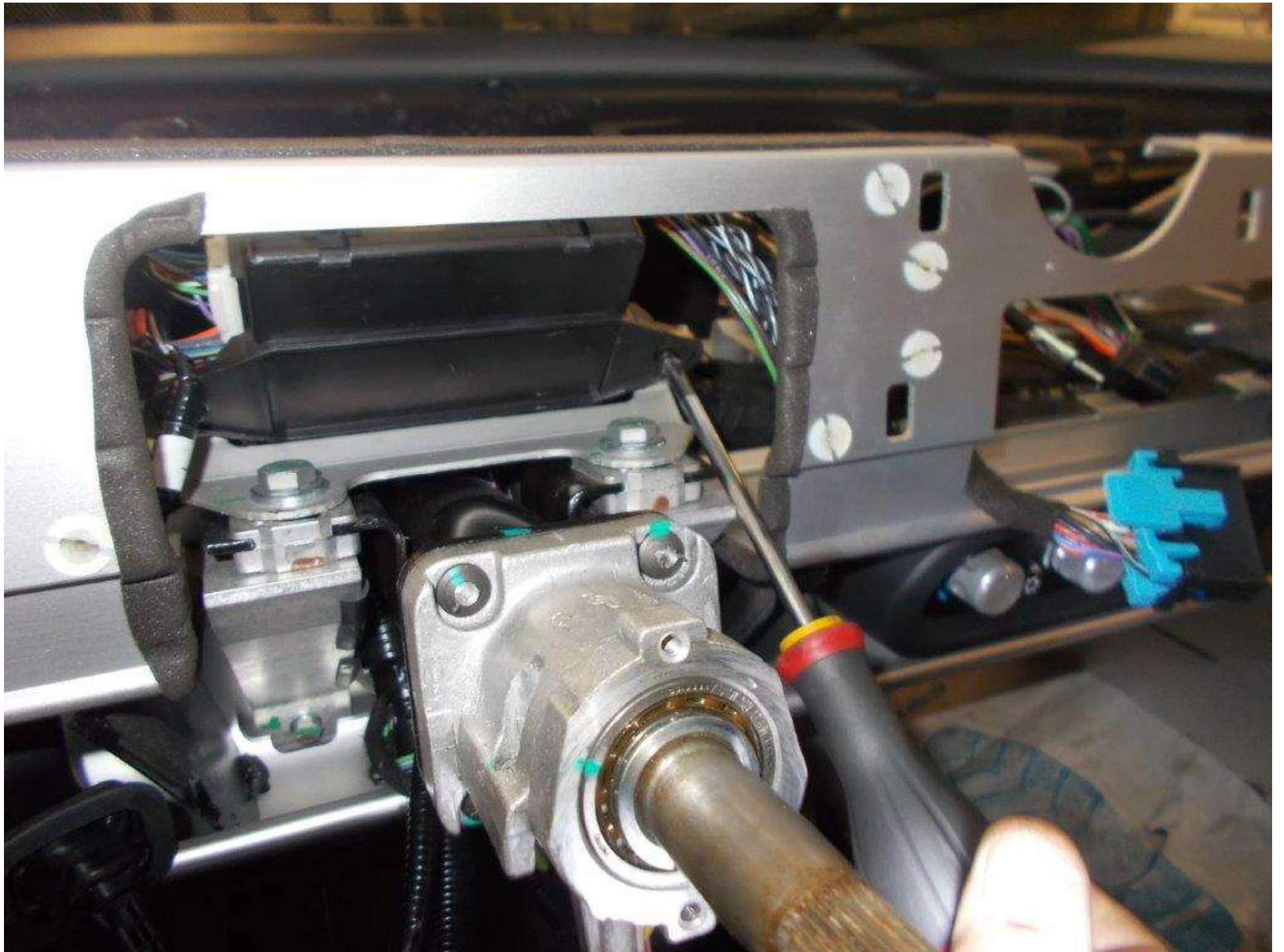


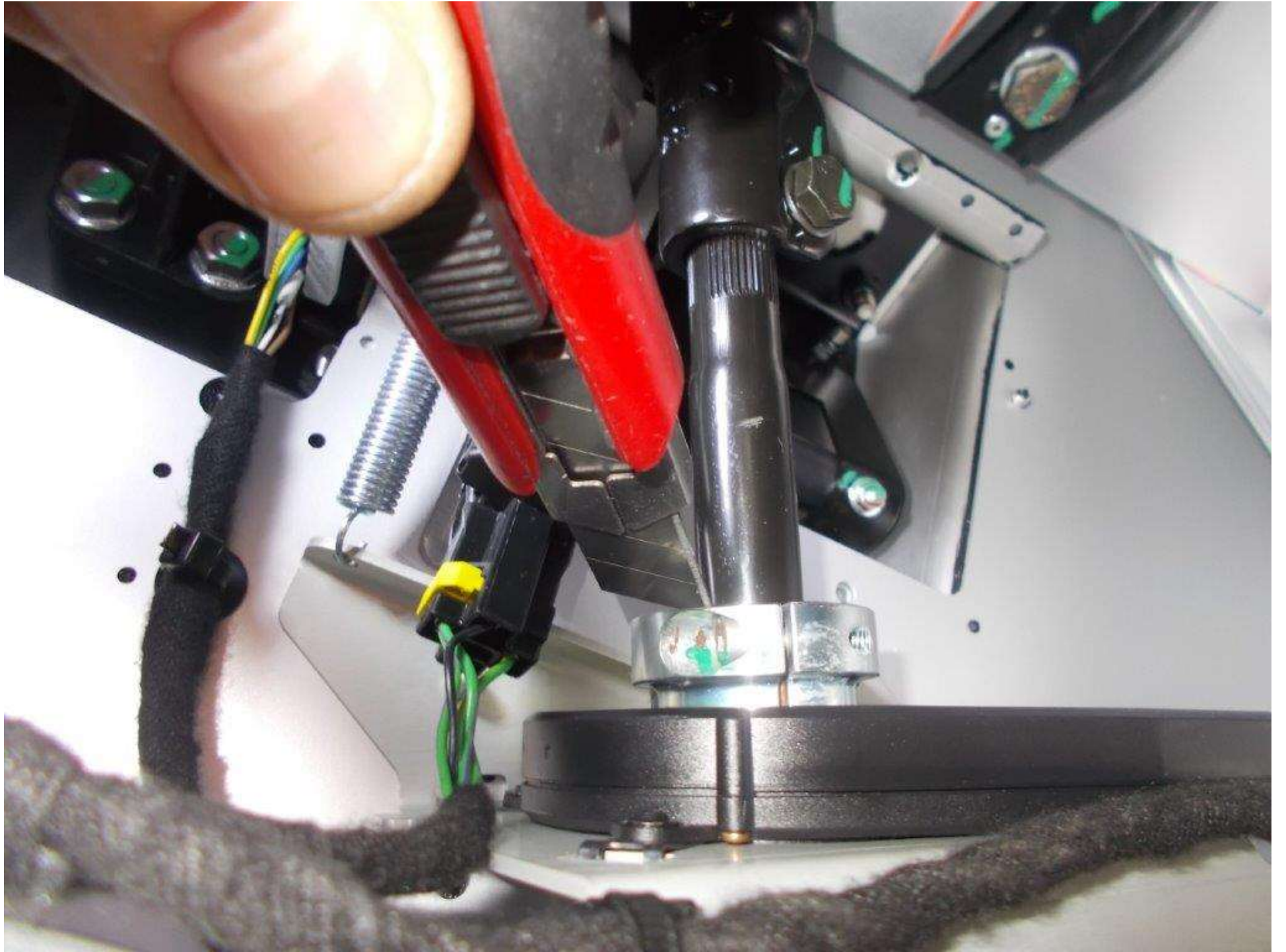






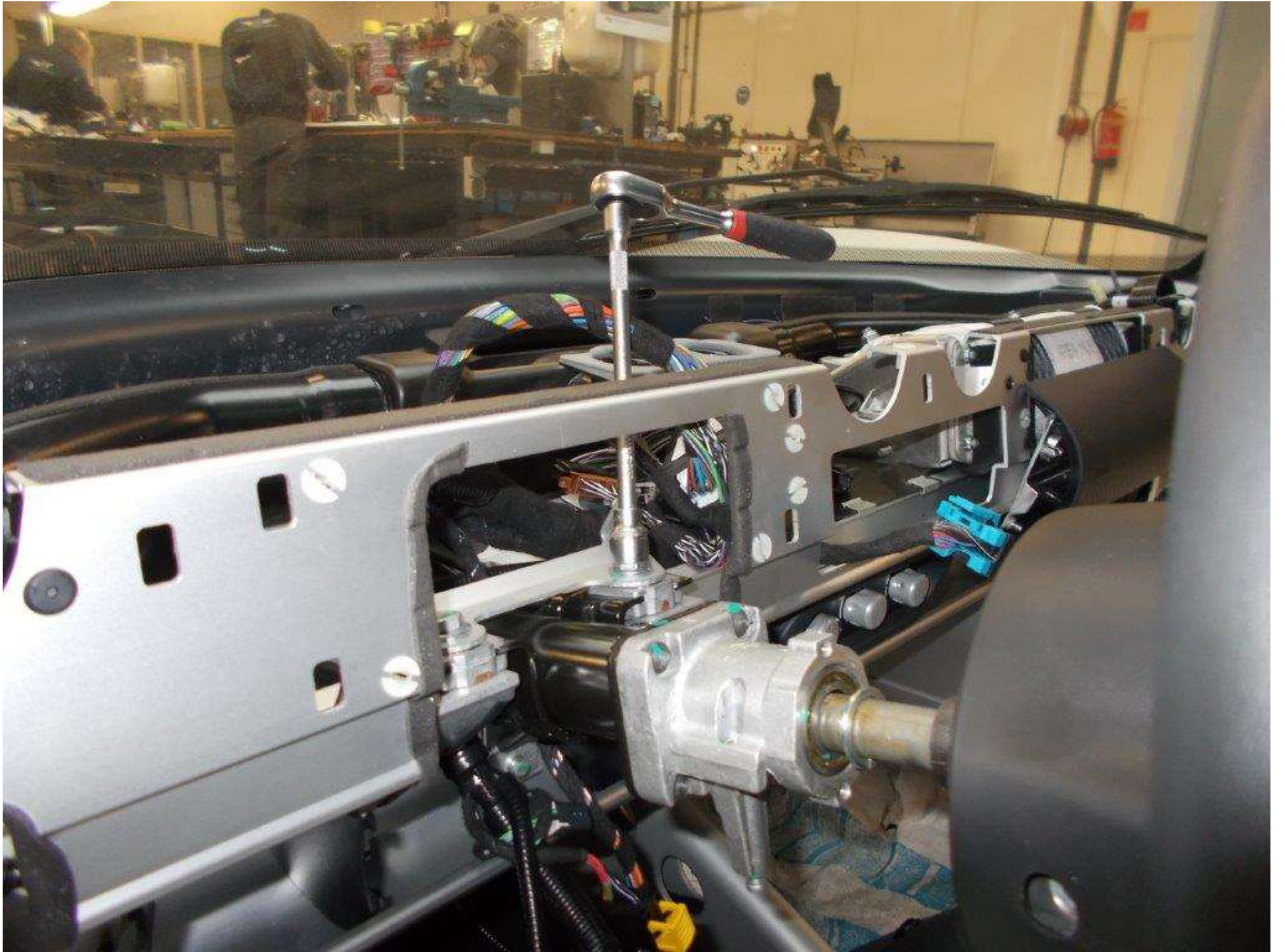


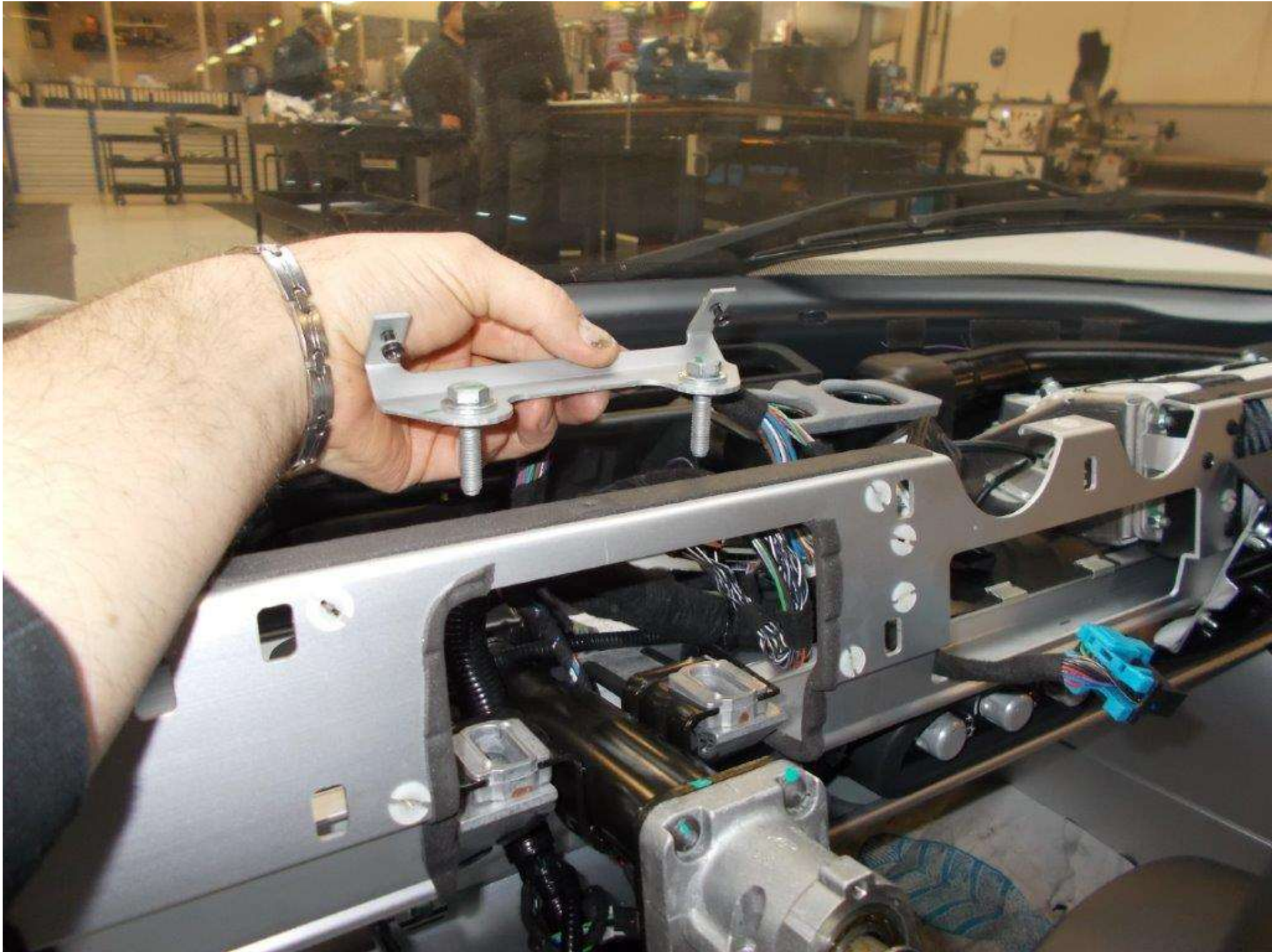




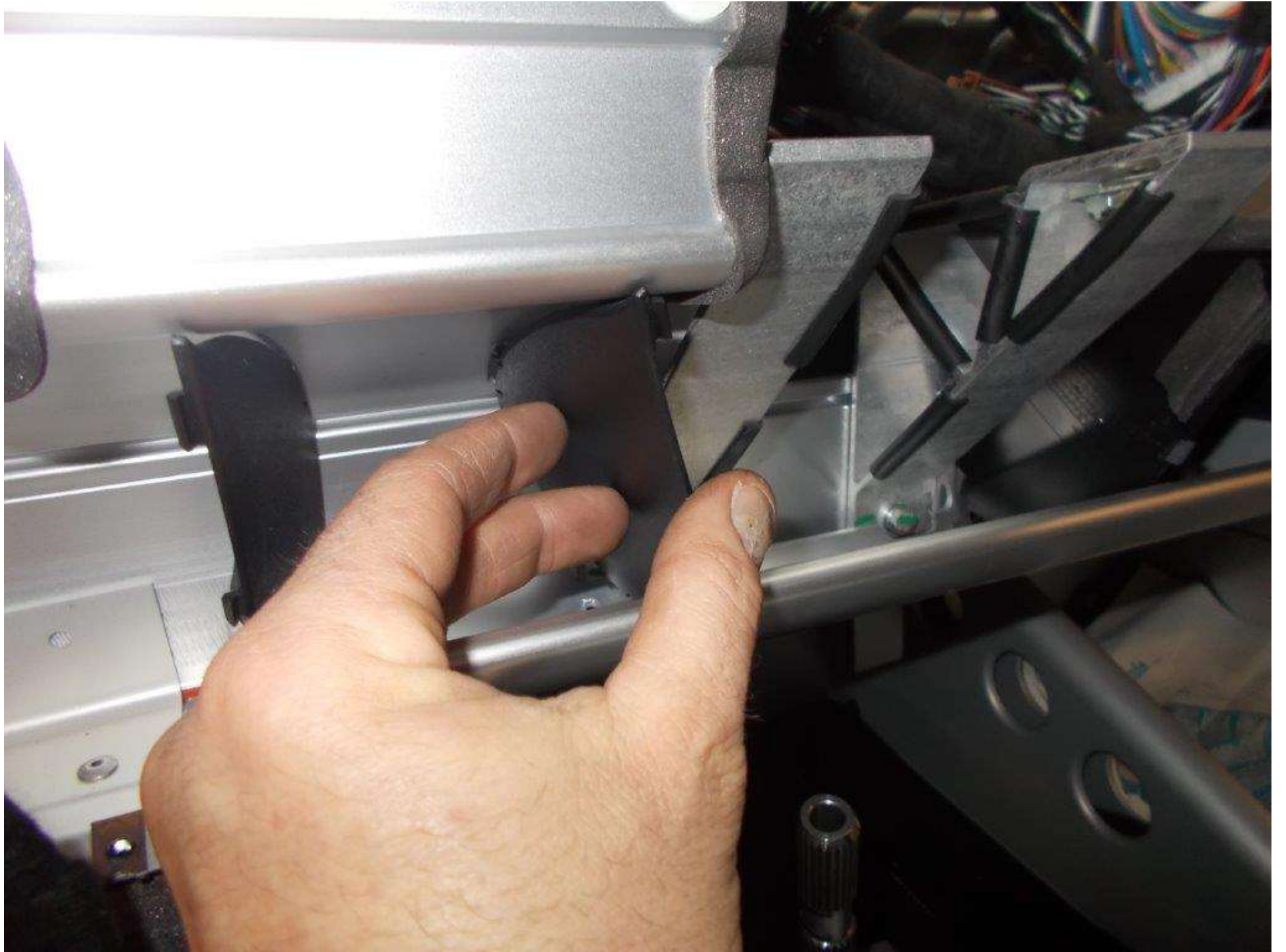






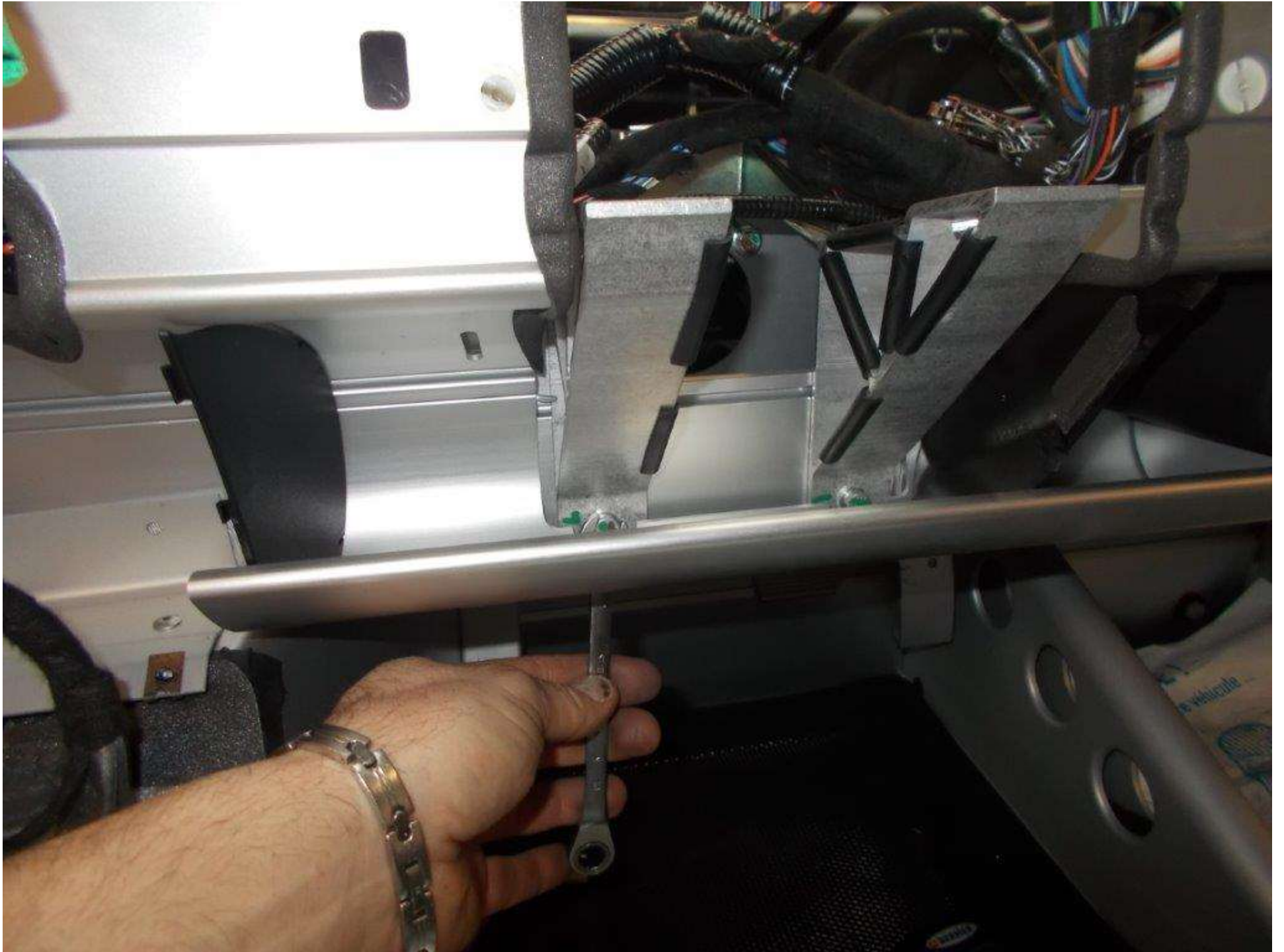


















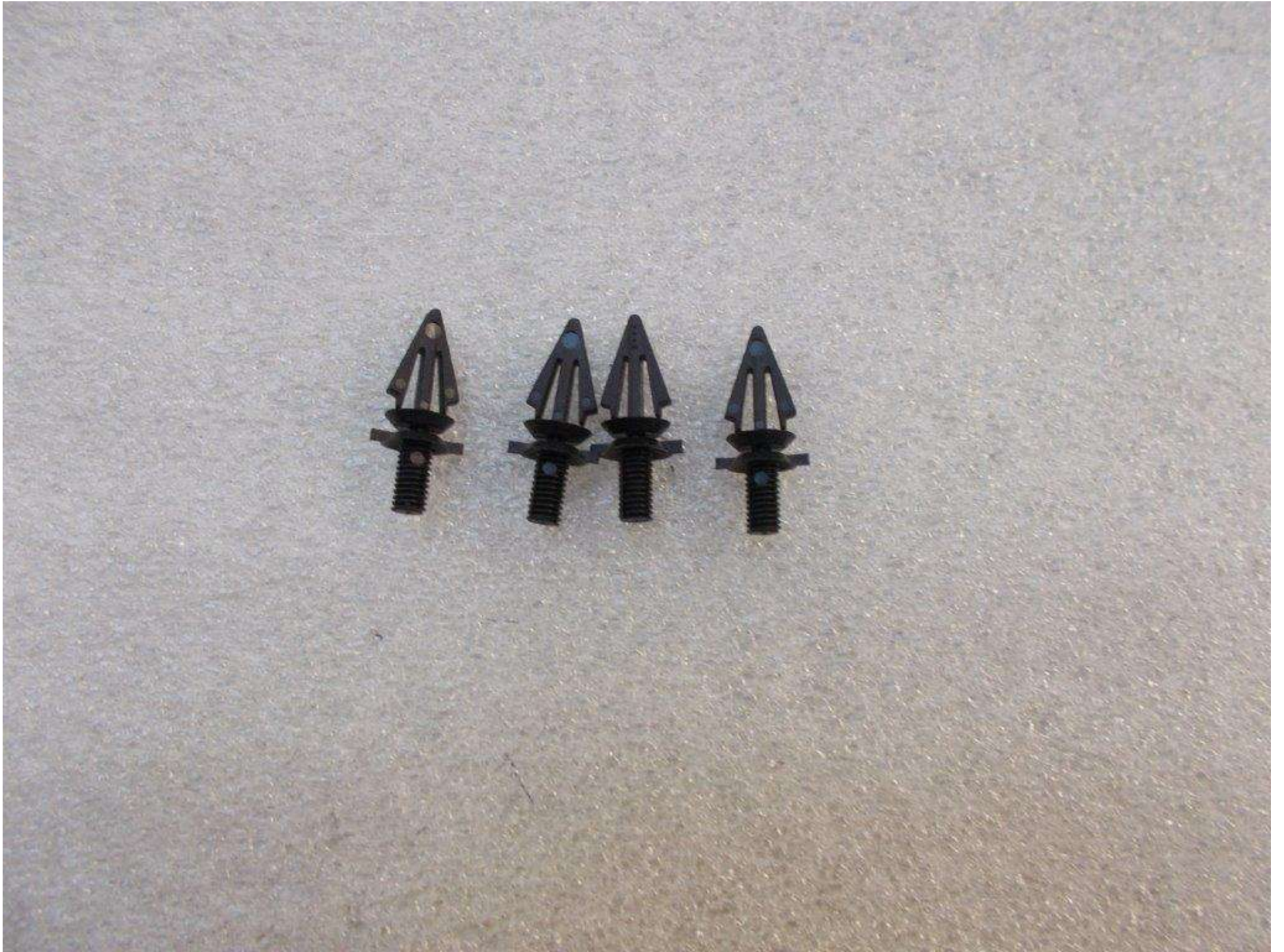
Fitting the EPS System













THIS AREA MUST BE KEPT CLEARLY VISIBLE TO THE DRIVER

04/2016



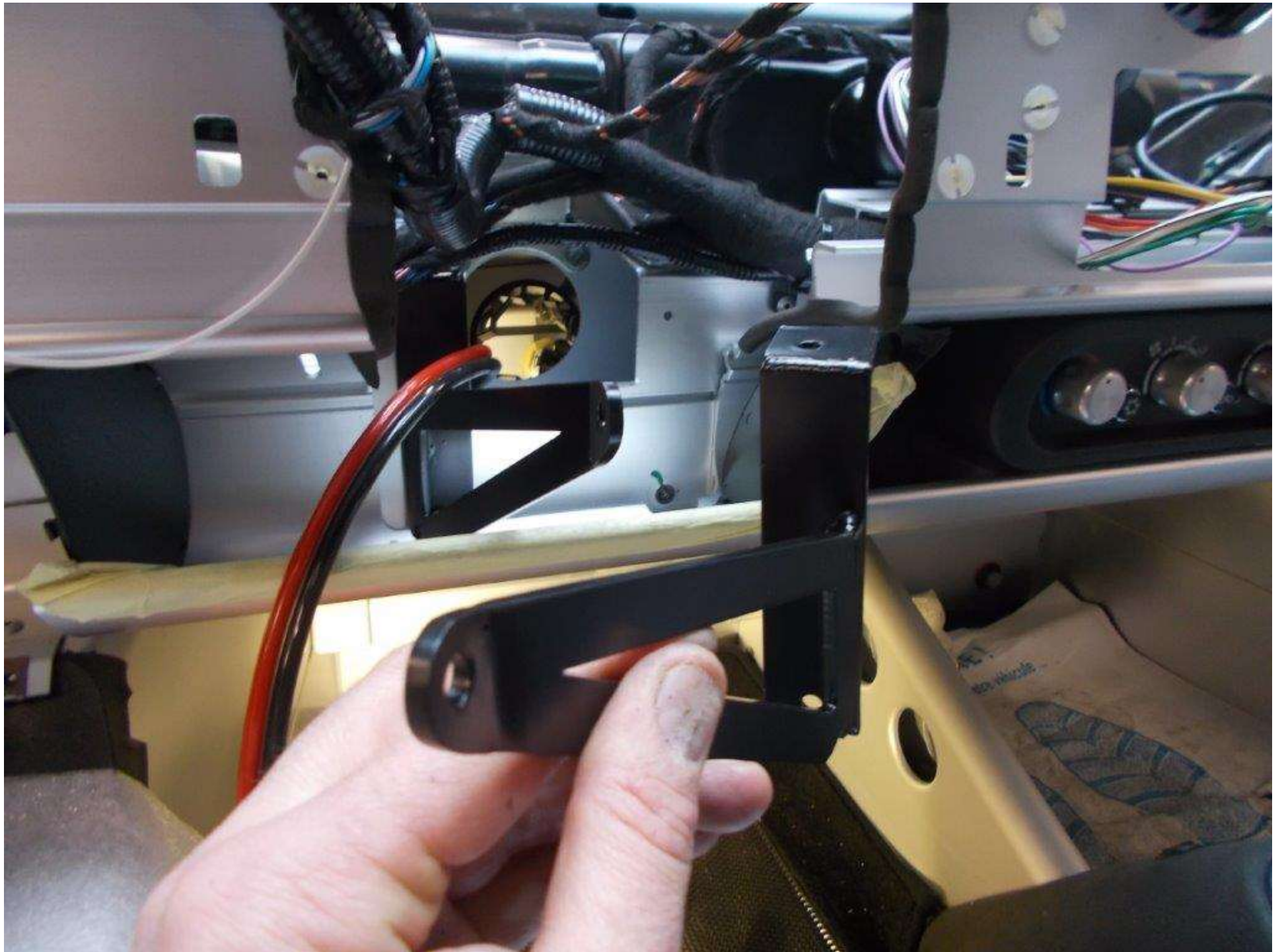


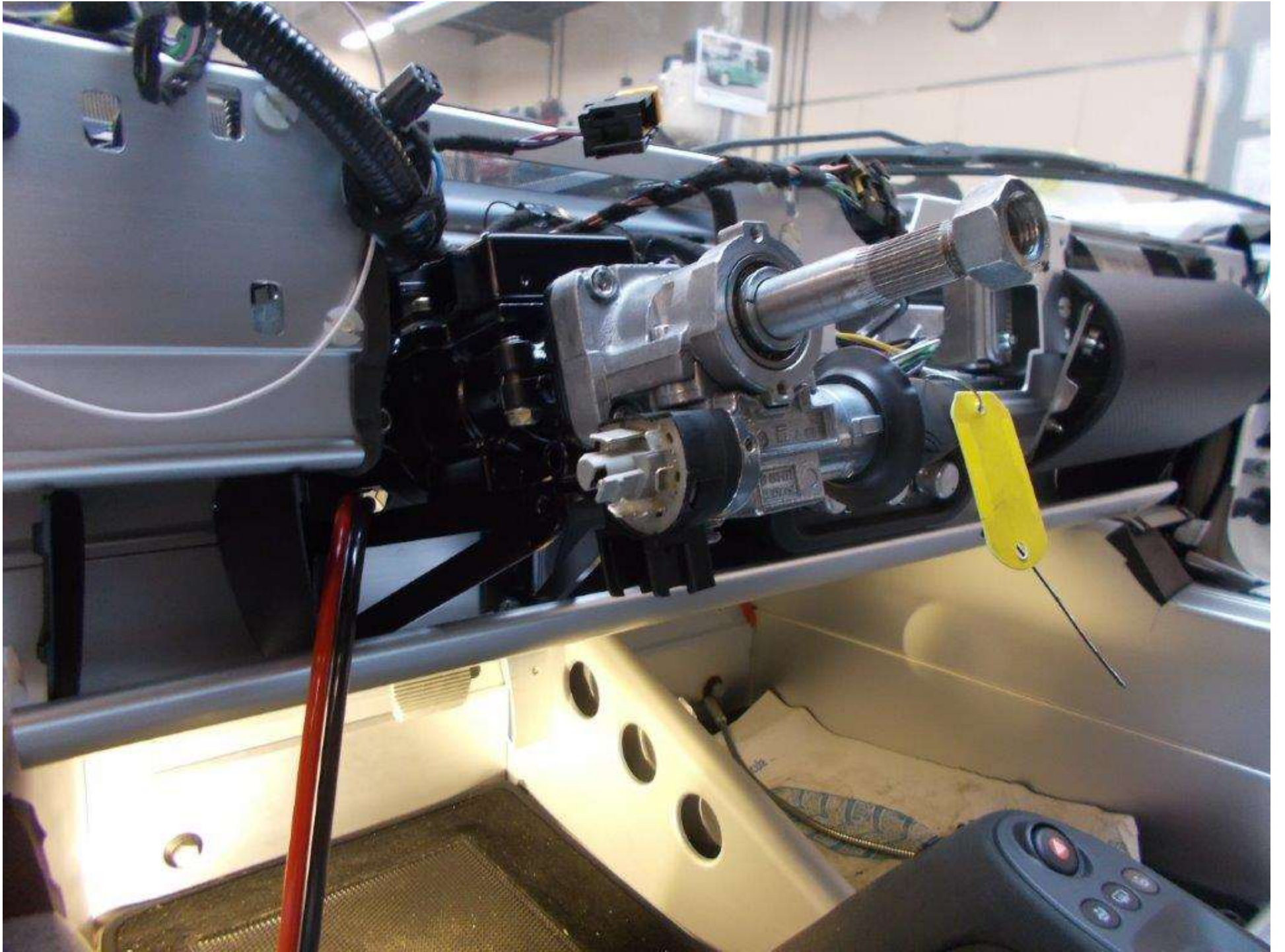


AS 413.5
K 213
LIT V. 149
ST
LIT
ST A. 59



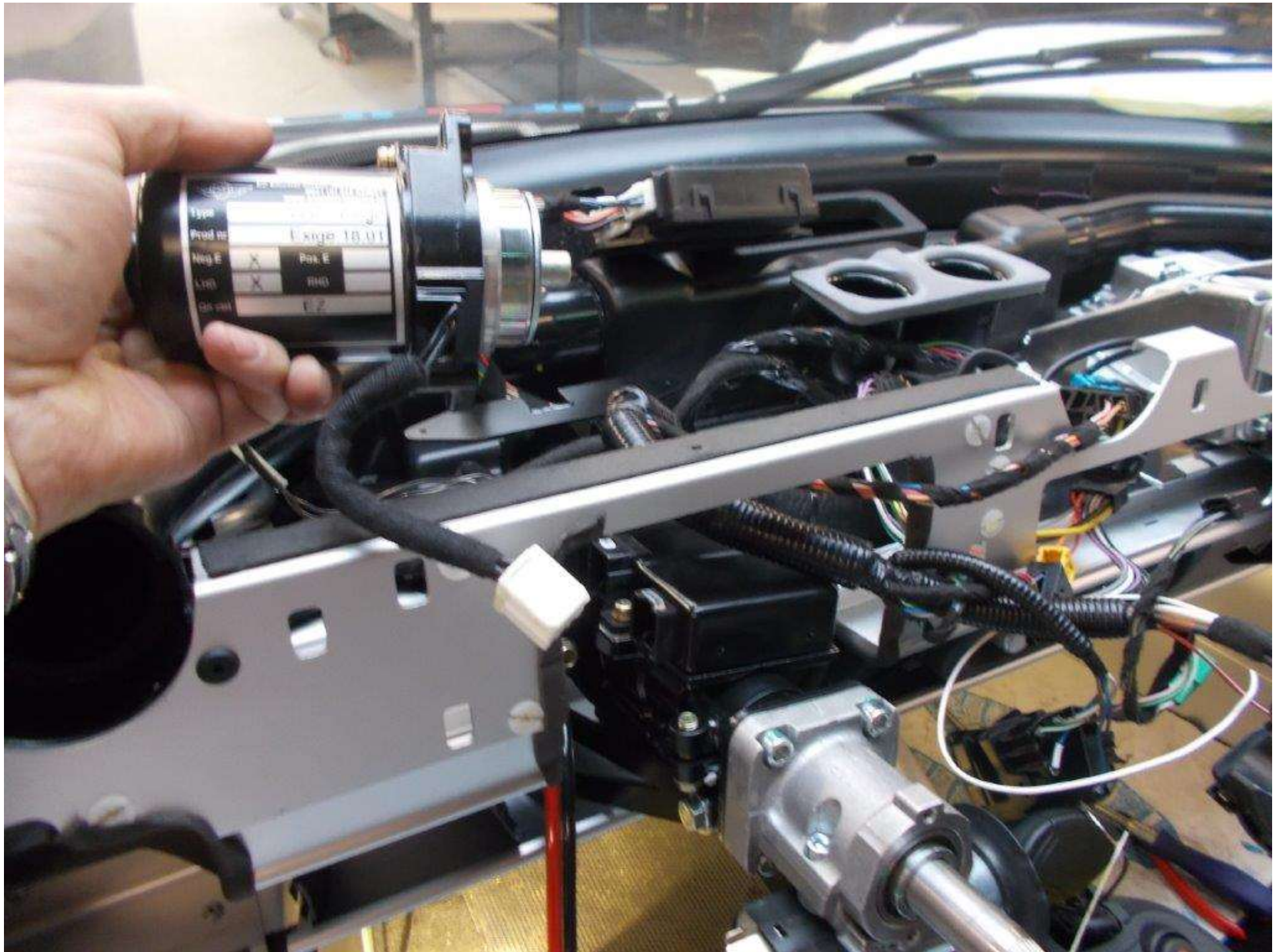
AS 4135
K 213
WITV. 144
ST
WIT A. 59
ST



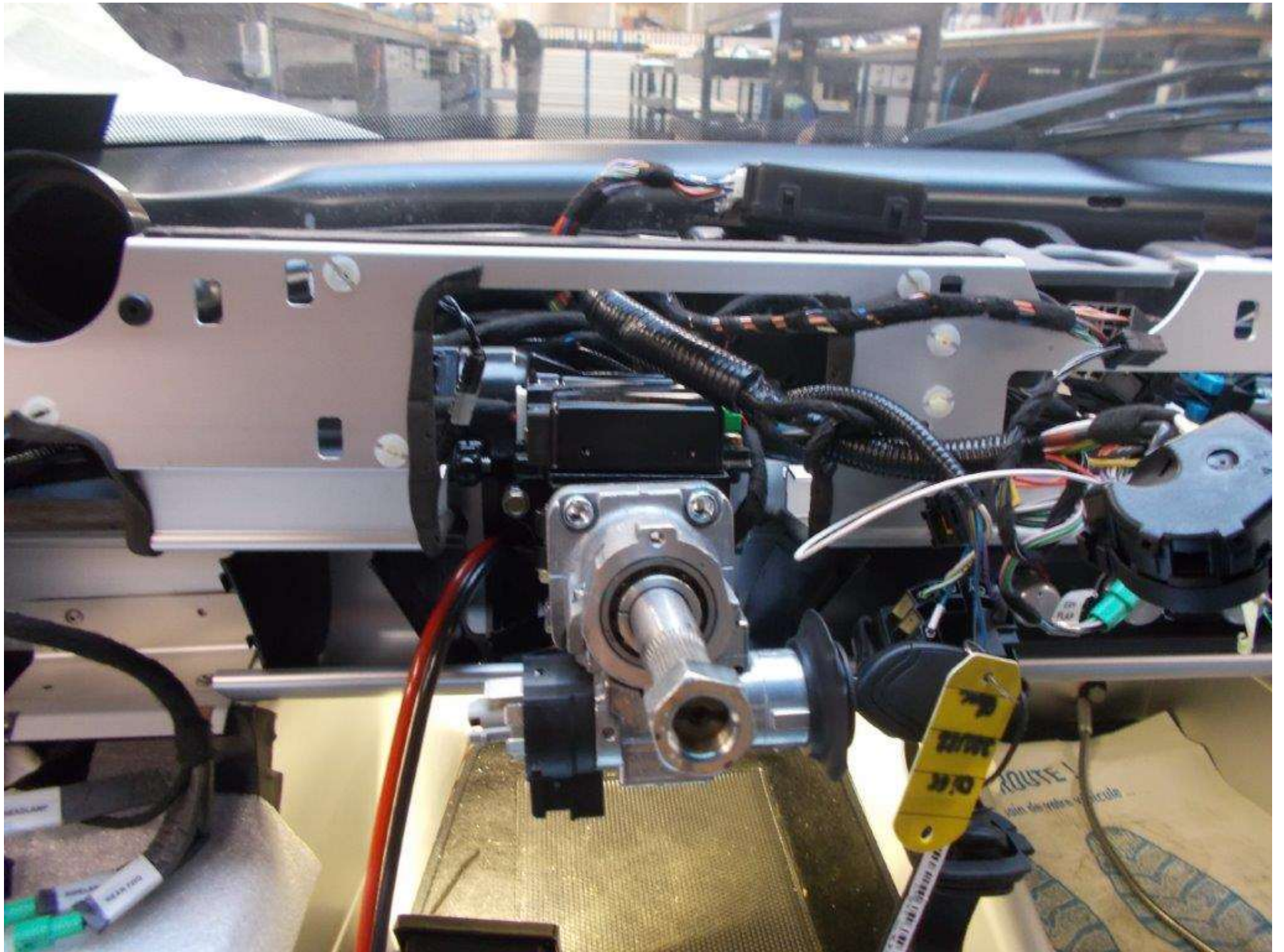




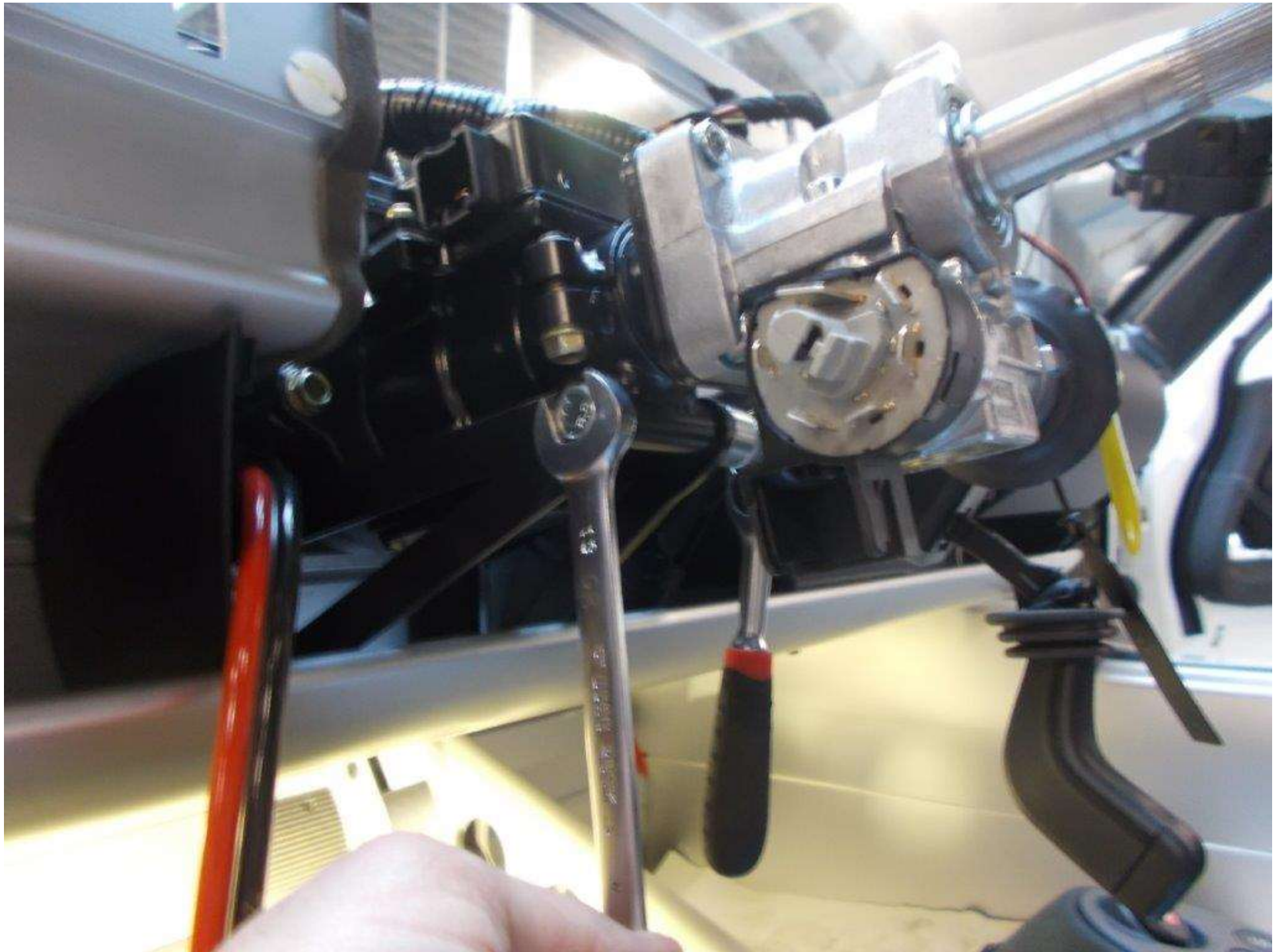
















LOTUS
SWITCH
E117M0008F
45071489-20
5/20/01 16 JCT

Lotus Exige
Exige 1001

X	Pos. E
X	RHD
	EZ