BMW Fxx Steering Wheel to Exx Retrofit Adapter

E70/E71 installation manual

Revision 3.31   01/2017

READ THIS INSTALLTION MANUAL CAREFULLY BEFORE YOU START!

It is strongly recommended to perform this installation by using services of installer with appropriate knowledge and experience in automotive electronics. Installation should be performed with disconnected battery due to safety reasons.

2017

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Revision history

Rev 3.3 12/2016 – small improvements in schematic diagram (for adapters with advanced option).

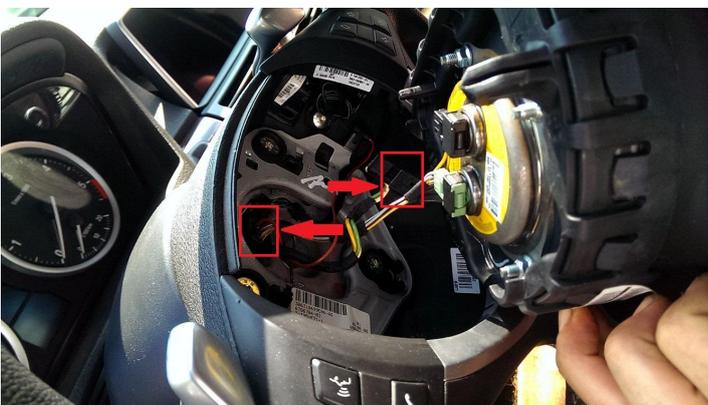Rev 3.31 01/2017 – changed wire color (pin 7 of X1880)

Removing Exx steering wheel

1. Remove airbag – detach mechanical latches (can be done with flat screwdriver)

Unplug connectors

2. Remove the steering wheel

3. Remove plastic covers
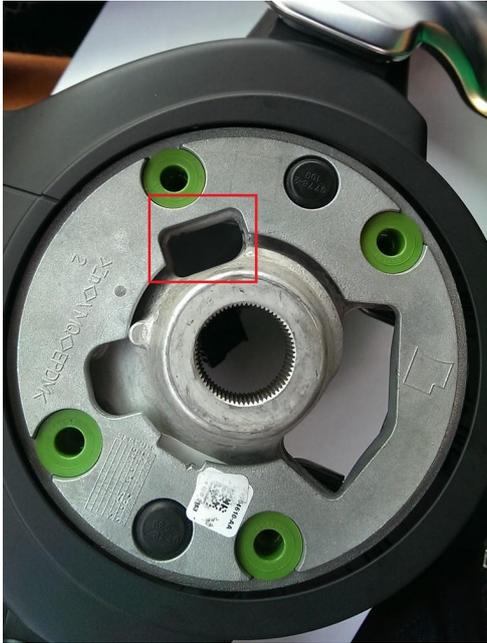
Fixing mechanical incompatibility

Fxx steering wheel mechanically incompatible with Exx SZL. To fix this problem few updates should be performed (additional mechanical parts described below not included in kit).

⚠️ **PLEASE NOTE!**

In this manual installing F10 steering wheel in E71 car is described. Different steering wheels may have different incompatibilities.

1. Cover slot with a piece of plastic and fix it with glue.

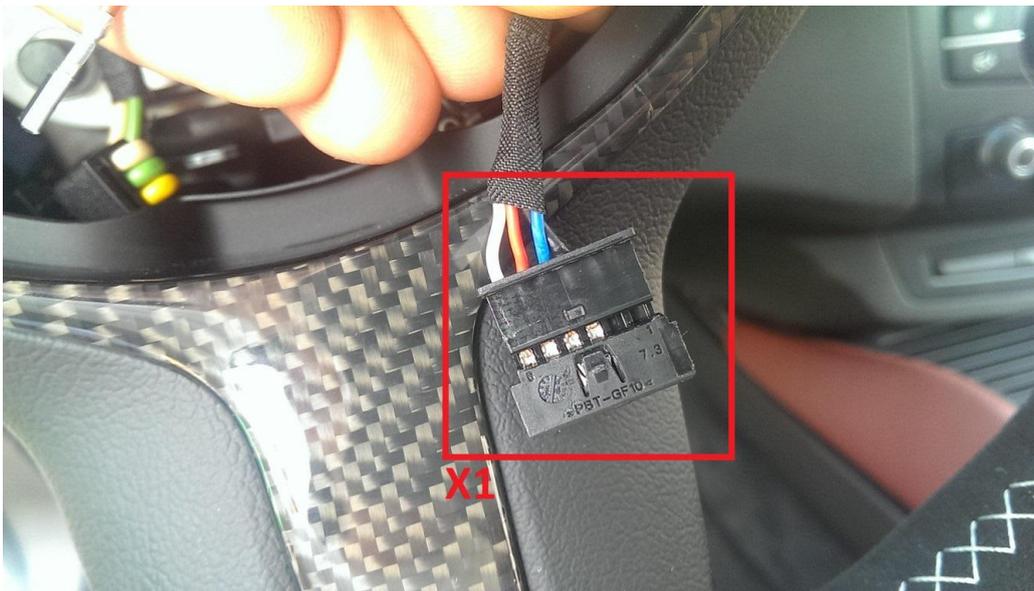2. Drill a hole (red mark on picture below) and screw a bolt

Fixing electrical incompatibility

1. Disassemble steering wheel plug (X1 on the photo) and rearrange its pinout like on the photo below. If steering wheel has pink wire, connect it to the black one (schematic diagram in **appendix A**).
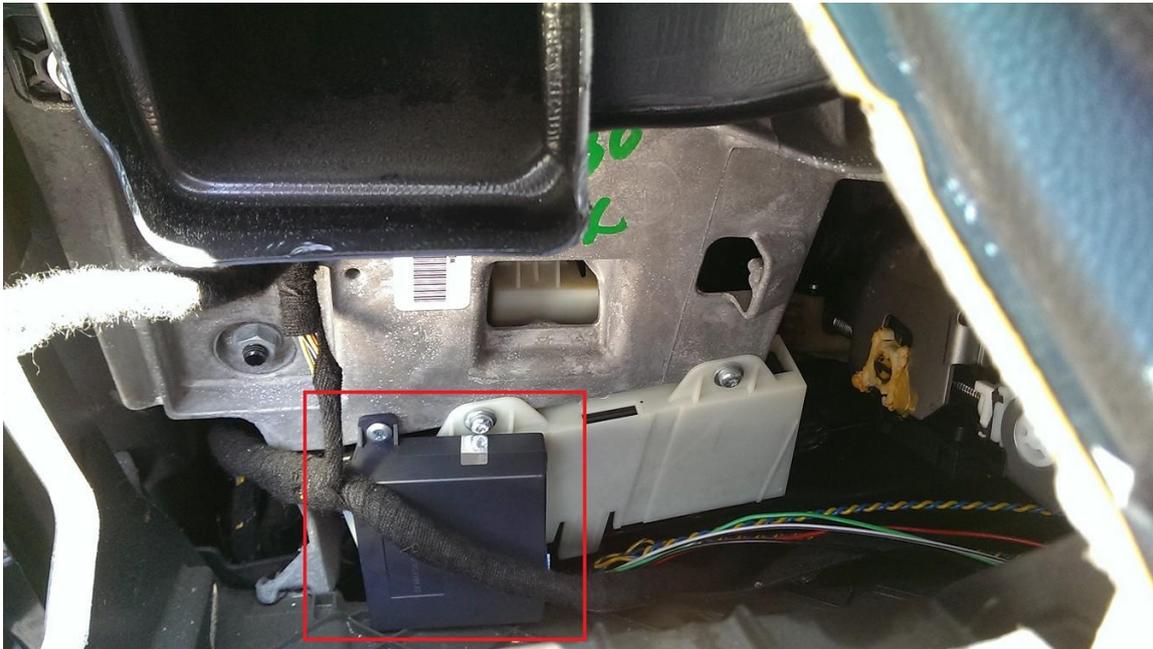
> ⚠️ **PLEASE NOTE!**
>
> In this manual installing F10 steering wheel in E71 car is described. Different steering wheels may have different incompatibilities.

X1

Installing BMW Fxx Steering Wheel to Exx Retrofit Adapter

We suggest installing the adapter as shown on the photo. You can install it elsewhere. Make sure it is well mounted and fixed.

Before mounting put the switches on the module in correct position (switches designation in **appendix B**).
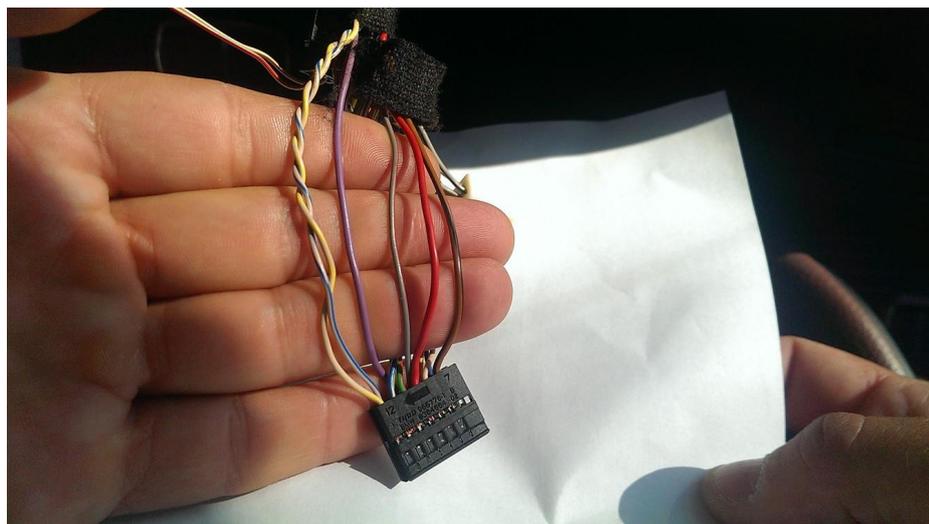
Making change to the SZL wiring

WARNING!

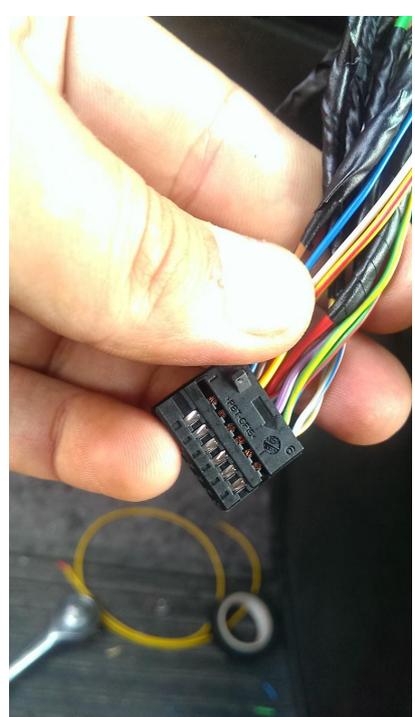Make sure that the battery is disconnected before making any change in the wiring. All electrical connections should be made and isolated reliably.
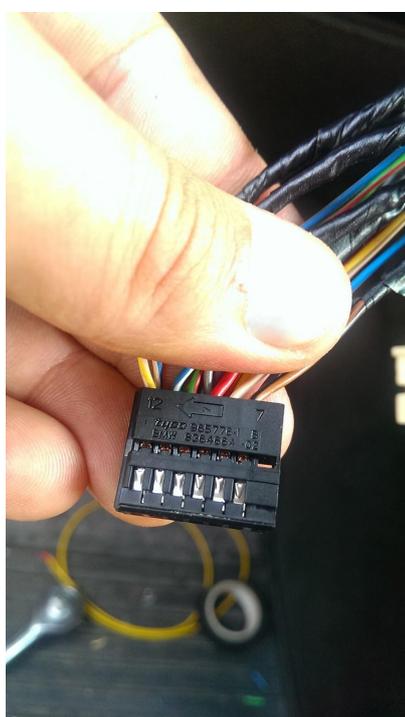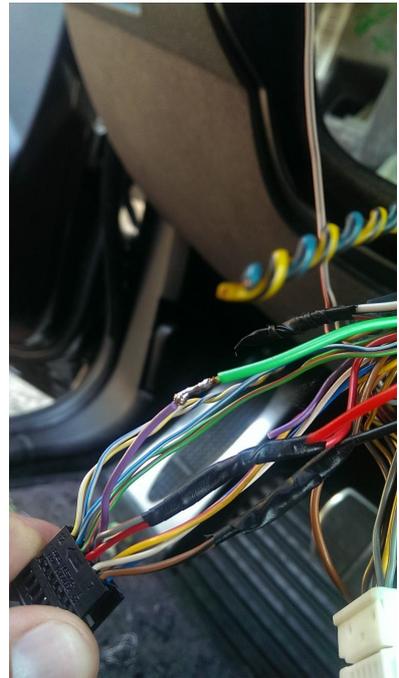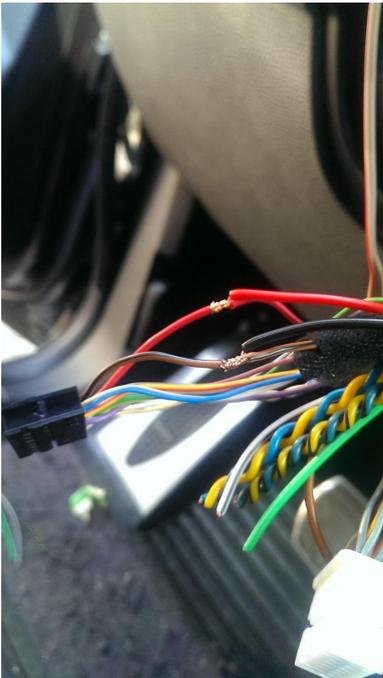
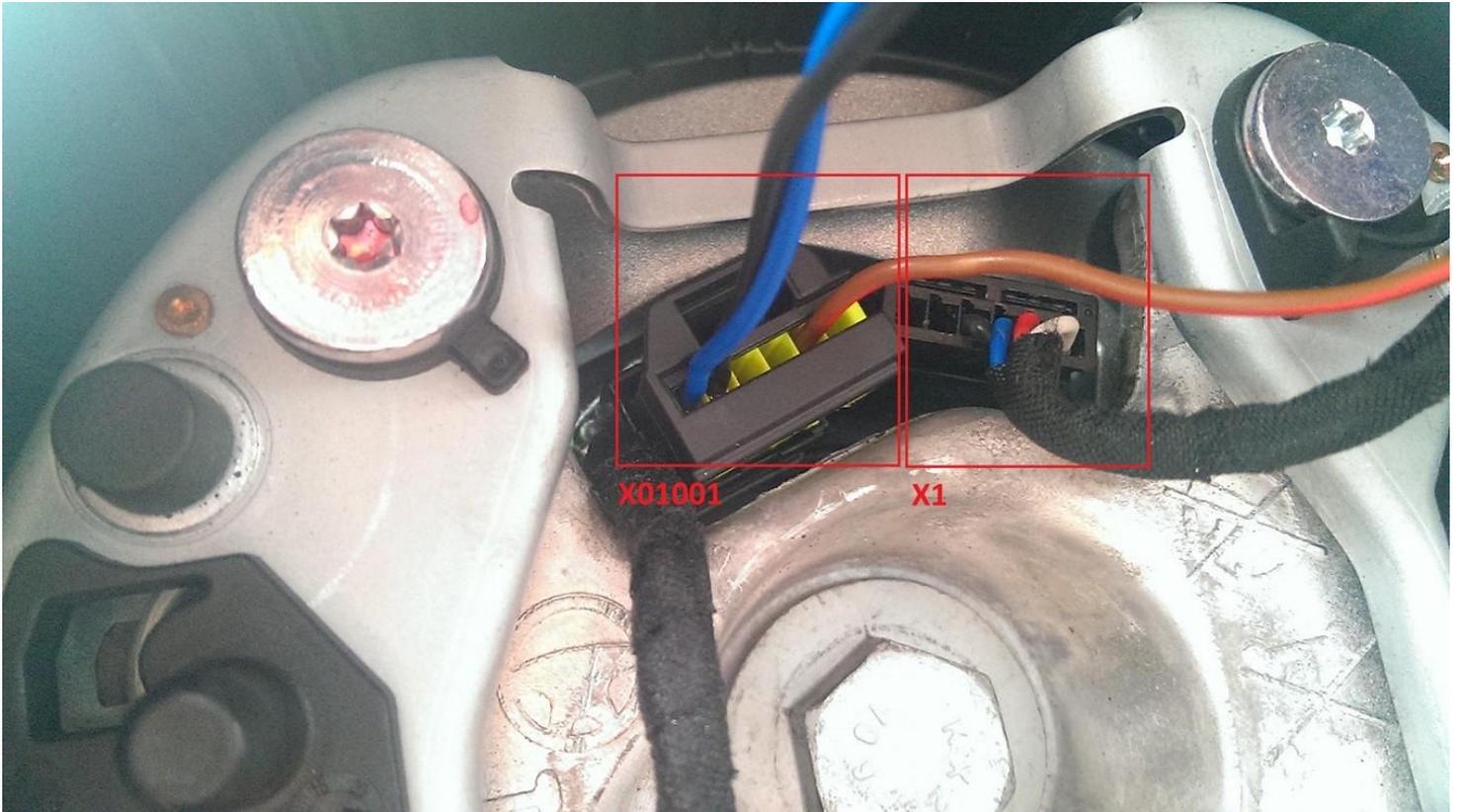

1. Unplug X1880 and disassemble it.

Make change to the wiring (schematic diagram in **appendix A**).

Connect red wire form adapter to red wire from X1880. Connect black wire from the adapter to brown/black wire from X1880. Cut gray/red wire from X1880, part that goes to X1880 connect to the red wires, part that goes to car connect to the white/black wire from adapter. Cut violet wire from X1880, part that goes to X1880 connect to green/white wire from the adapter. Cut white/yellow and white/blue wire from X1880. White/yellow and white/blue that goes to X1880 connect to yellow and blue wires from adapter respectively. Connect white/yellow and white/blue that goes to cat to the yellow/black and blue/black wires from the adapter respectively. Isolate all the connections. Assemble X1880 connector.

Installing Fxx steering wheel

After installing steering wheel and fixing it mechanically, plug connectors into sockets. Brown/red wire from the steering wheel (horn) should be in the place where the old horn signal wire was.

Using the adapter

After installation adapter is ready to use, no additional configuration is needed.

You can switch the functions of **volume +**, **volume –** keys and track change roll.

It can be done by pressing and holding **volume +** and **volume –** keys for 6-7 seconds. Backlight on the steering wheel will blink when mode is changed. Configuration will be retained after switching ignition off.

Mode 1 (default) :

+ key – next track	roll up – increase volume
- key – previous track	roll down – decrease volume

Mode 2:

+ key – increase volume	roll up – next track
- key – decrease volume	roll down – previous track

Option SA 5AD Lane deviation warning support

For cars with option 5AD there is a special version of adapter is available (advanced option) – for full support of **Lane Deviation Warning** (steering wheel must have vibration motor).

Mute function

Mute function is available (pressing on the roll) when installing NBT HU with **CarSystems Exx NBT Retrofit Adapter**. It can be switched with jumper switch.
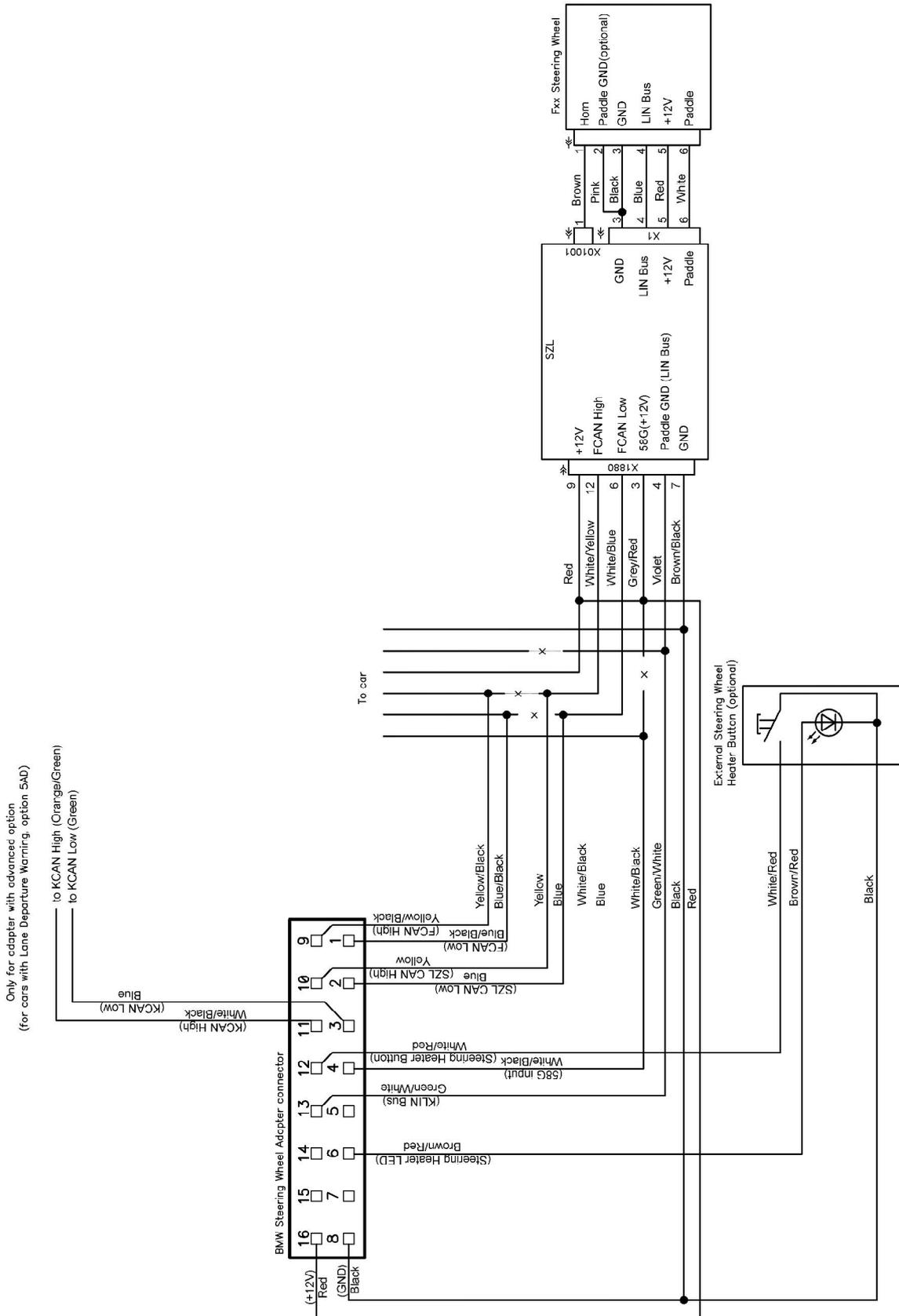
Mdrive key additional function

It is possible to assign Mdrive key an additional function (key "8" on front panel of HU). This option available only when installing NBT HU with **CarSystems Exx NBT Retrofit Adapter**. It can be switched with jumper switch.

Vibro acknowledgment for heater

Vibration acknowledgment of a steering wheel heater on/off (one vibration pulse when switch on and two when switch off) can be switched with jumper switch.

Appendix A

Schematic diagram

Appendix B

Switches designation

	1	2	3	4	5	6	7	8
ON	**Mode** key function1	IBUS car	Mute function on**	Mdrive key additional function on**	Vibro acknowledgment for heater	SZL coding enable	Active cruise control support on	RFU*
OFF	**Mode** key function2	CAN car	Mute function off**	Mdrive key additional function off**	Vibro acknowledgment for heater	SZL coding disable		

* - reserved for future use

** - only in conjunction with CarSystems Exx NBT Retrofit

Notes