



Installation instructions for your MFD28 in the BMW F1x

Beforehand

Thank you for your purchase of your CANchecked display for the BMW F1x.

During the development of the product, attention was paid to the highest accuracy of fit and quality. The display has been test assembled by several test persons using these installation instructions and continuously improved so that you have no problems with the conversion.



General information

The display is a very sensitive device. One should act with extreme caution here. Any strong pressure on the case or the display itself must be avoided.

CANchecked assumes no liability for this conversion or for damage during the conversion or during operation. The instructions were created to the best of our knowledge and belief.

The conversion time is about 1.5 hours for an experienced mechanic.

To ensure proper function of the display, please make sure that no other third-party device is connected to the car's OBD-Port or Can Bus. The only compatible device we are aware of is the original M-Performance Steering wheel.

Required tools

- Ratchet box with Torx bitset
- Small flat flat-head screwdriver
- 10mm drill bit
- Small file
- Plastic disassembly tool (sold separately)

Preparing the interior

To dismantle the interior, please clip out the interior trim from the passenger side. To do this, it is best to drive a disassembly tool behind the strip and carefully lever it out.

Before the strip can be removed, the connectors on the back must be disconnected. Here are three plugs to disconnect:

The next step is to loosen the nine Torx screws around the duct to separate the ventilation duct from the panel.

Now you can separate the channel from the actual aperture by releasing the circumferential clips from right to left. Please start on the bottom and then loosen the top. Finally, the channel can be pulled out to the rear.

Once you've separated the front panel from the duct, you'll need to remove the fins from the panel and the ventilation duct. These are only clipped and can be carefully levered out with a narrow screwdriver. When you are ready, you can drill 2 holes close together with the 10 mm drill on the left side of the ventilation duct, so that you can then work them out into an elongated hole with the file.

Once you've done that, you can run the CANchecked and the USB cable below the steering wheel towards the air vent and run the two Molex plugs and the USB cable through the hole into the ventilation duct. The Molex and the USB connector are now plugged into the display, the display is clipped into the front bezel and everything is reassembled.

Can Bus connection

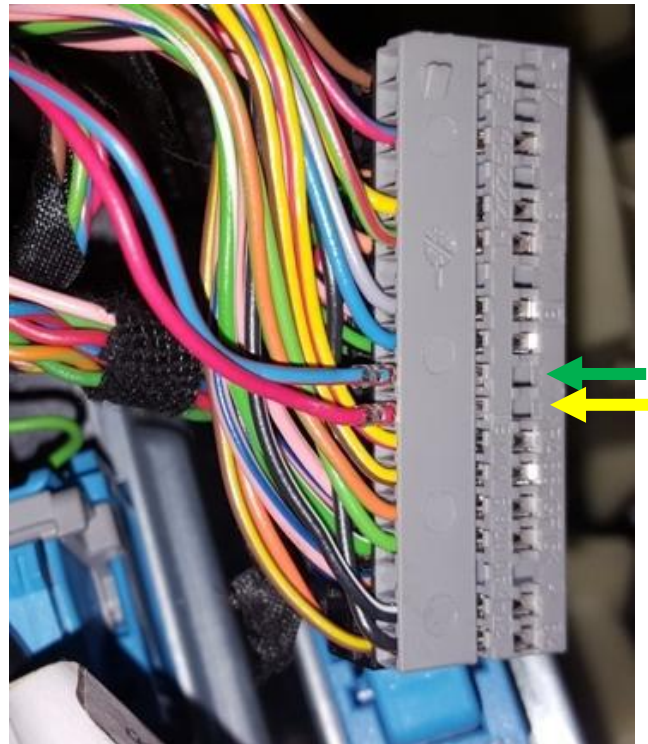
The CAN bus must be connected to the ZGM in the driver's footwell to the left of the steering column. To do this, please use pin 46 Can High (blue/red) and pin 47 Can Low (red) on the black plug (A51*1B). Now pull the grey pin carrier from the side of the black plug, please note the snap-in lug on the black plug housing.

When unpinning, please pay attention to the two-stage locking mechanism, a very narrow flat-head screwdriver is very suitable for unpinning the cables.

The blue/red line is pinned out and pinned into the supplied small mating plug so that blue/red meets green on the CANchecked wiring harness. Now plug the loose green wire of the CANchecked wiring harness into the freed slot 46 on the grey pin carrier.

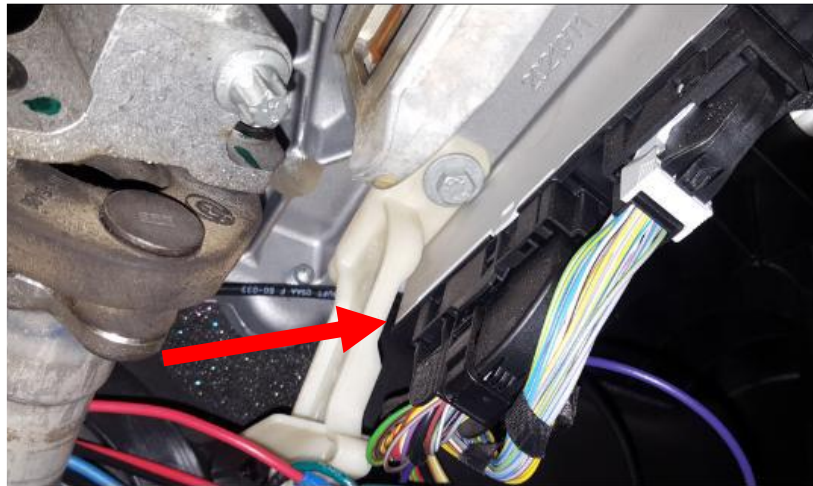
Repeat the same process with the red lead of pin 47. Pin them out and then plug them into the supplied two-pin plug so that it later meets the yellow wire on the CANchecked wiring harness. Insert the loose yellow wire of the CANchecked wiring harness into the freed slot 47 on the grey pin carrier.

Then you can push the gray pin carrier back into the black connector housing and plug the connector back into the ZGM.



Power supply connection

12V and ground must be connected to the CAS in the driver's footwell to the right of the steering column. To do this, please use pin 12 ground (brown/black) on the black plug (A16*1B) and pin 14 terminal 15 (green, white). Now pull the black pin carrier from the side of the black connector, please note the locking lug on the black connector housing.

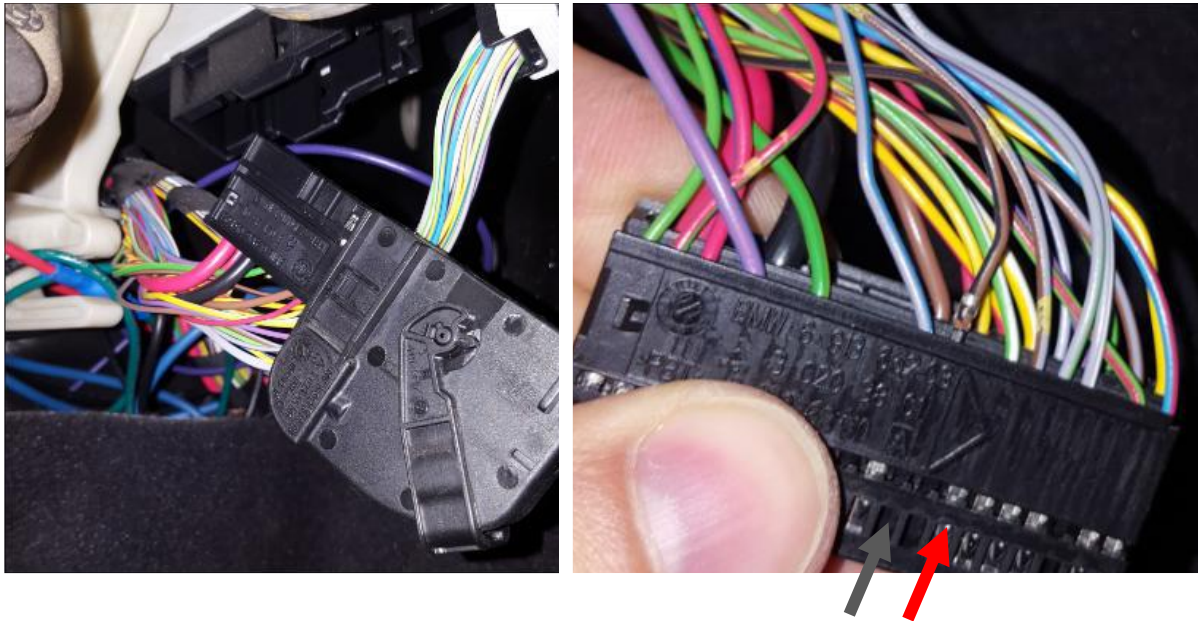


When unpinning, please pay attention to the two-stage locking mechanism, a very narrow flat-head screwdriver is very suitable for unpinning the cables.

The brown/black line is pinned out and pinned into the supplied small mating plug so that brown/black meets black on the CANchecked wiring harness. Now plug the loose black wire of the CANchecked wiring harness into the freed slot 12 on the black pin carrier.

Repeat the same process with the green and white line of pin 14. Pin them out and then plug them into the supplied two-pin connector so that it later meets the red wire on the CANchecked wiring harness. Plug the loose red wire of the CANchecked wiring harness into the freed slot 14 on the black pin carrier.

Then you can slide the black pin carrier back into the black connector housing and plug the connector back into the CAS.



Now all you have to do is connect the USB and the CANchecked wiring harness to your display, clip in the cover and check the display for function. If this is given, you can complete the vehicle and you're done.

USB tip: Some customers have routed their USB cable downwards next to the OBD2 port and attached it to the plastic flap with a double-sided Velcro strap. If you let the cable sag a bit, the Velcro strap will keep it hidden at the top, and for connection, you can detach it from the Velcro to connect it to the laptop.

Concluding

We hope you have as much fun with your CANchecked display as we do. If you have any questions, you are welcome to contact us via the ticket system (<https://www.canchecked.de/ticket>) and discuss your concerns with us.

We have also created a group for the community on Facebook, where you can exchange ideas with other users and find the solution to one or the other question:

<https://www.facebook.com/groups/CANchecked/>