

# DIY: How to Install M2 Seats in Your E92

## Background

I've had my 2013 E92 328i for 11 years now and loved almost every minute of it. But the seats have never been my favorite, mostly because:

- 1) The lower back curves inward at the bottom forcing me to roll up a towel for back support
- 2) I didn't want to pay \$500 for the heated seat option, so my butt is always chilly in the winter

After sitting in a 4 series a few years back, I realized that I liked those seats a LOT more, so I had been pondering a seat swap. I did some initial research and found many long forum threads and slightly helpful youtube videos, but couldn't find a good step-by-step guide. Despite my trepidation, I recently found a good set of used OG M2 seats and decided to take the leap. Halfway through the install at a low point I almost gave up, but now I'm going to provide this DIY so you can achieve a relatively low-stress seat swap.

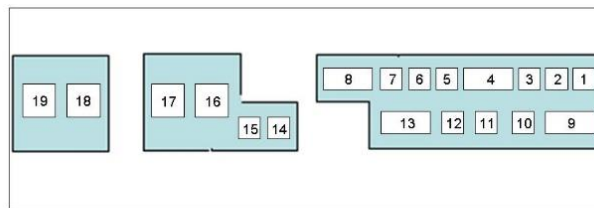


## Applicability

Through the forums I've learned that there are MANY different variations of seat retrofit due to LCI/non-LCI, vehicle options, and seat variations. This guide will be specific to my particular swap. I migrated F87 M2 (OG) seats to a 2013 LCI E92 that had full power seats, but no heat. It does seem that the M2 seats are very similar to F30/F22 seats, so this should be broadly applicable for F series seat swaps. You must have an LCI seat controller for this to work. Without an LCI controller, it's my understanding that at a minimum the passenger seat heater will not work.

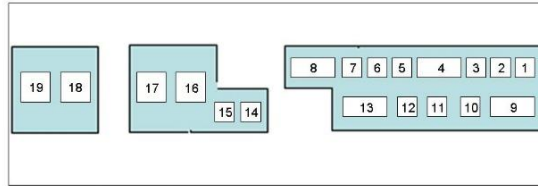
This guide describes the steps that worked for my specific situation. Your mileage may vary. I recommend using your best judgement.

It was really challenging to find good wiring diagrams. These are the 2 best ones I found for the E92 seats:



1	Blue/Purple	PWM-Signal	for heated seats with seat-heating-module (not used with seat-module)
2	Green/Orang	K_CAN_H	data line: used for heated seats with seat-module / memory.function
3	Green	K_CAN_L	data line: used for heated seats with seat-module / memory.function
4	Red	Terminal 30	steady plus: used for seat-module / seat-heating-module
5	Red/Green	Terminal 15	ignition plus: used for heated seats with seat-heating-module (not used with seat-module)
6	Yellow/White	---	not used (leads nowhere)
7	Red/Black	Terminal 30	steady plus: used for lumbar and side-bolsters (for cars since 03/2007)
8	Brown	Terminal 31	ground wire: used for seat-module / seat-heating-module
9	Red/Purple	Terminal 30	steady plus: used for lumbar and side-bolsters (for cars until 03/2007)
10	---	---	not used on drivers side!
11	---	---	not used on drivers side!
12	---	---	not used on drivers side!
13	Brown	Terminal 31	ground wire: used for lumbar and side-bolsters
14	Blue/Purple	belt buckle	used for seat belt buckle control
15	Brown/Black	belt buckle	used for seat belt buckle control (Ground)
16	Yellow/Red	belt fastener	used for seat belt fastener (+)
17	Yellow/Brown	belt fastener	used for seat belt fastener (-)
18	Yellow	airbag	used for side-airbag (+)
19	Brown	airbag	used for side-airbag (-)

Cable colors may be different! Please check them before connecting!



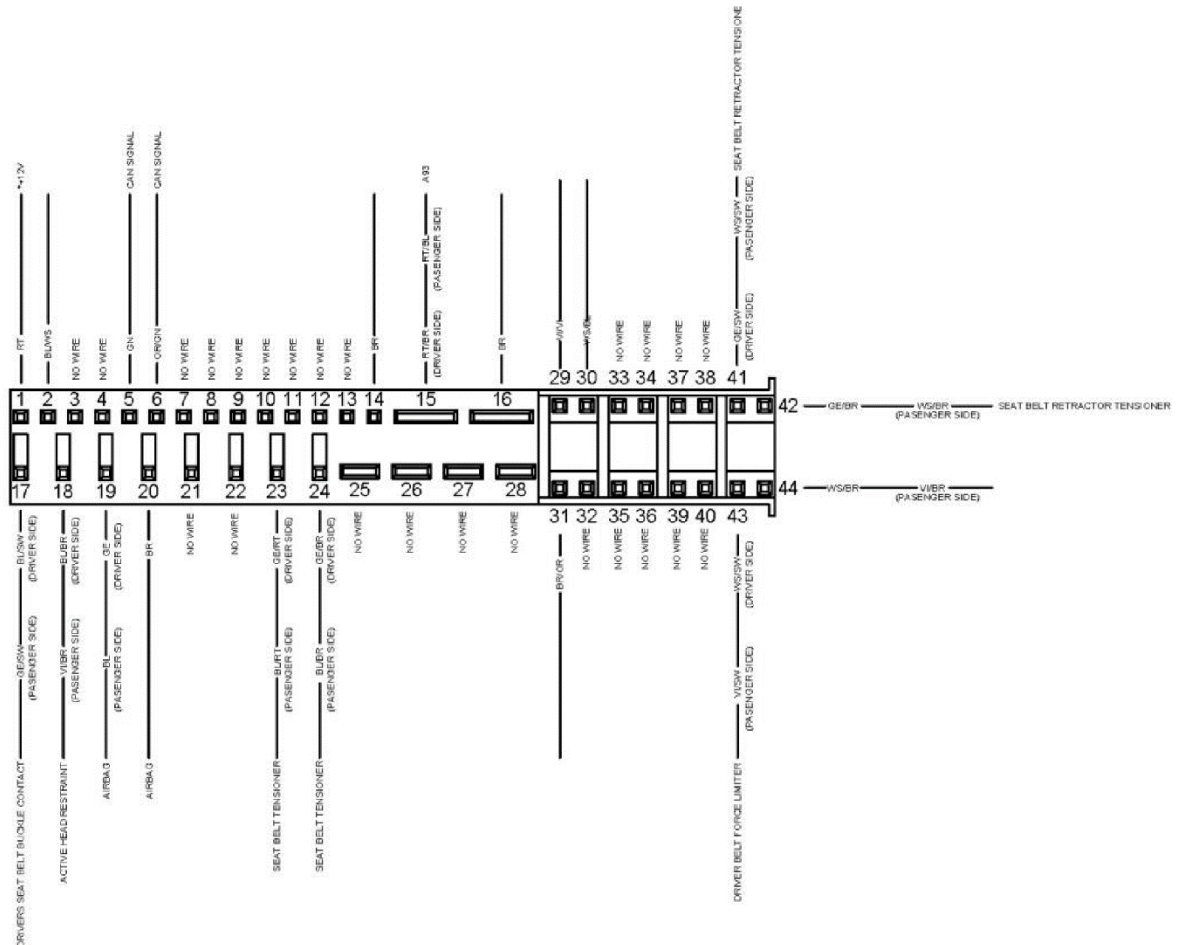
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7	Red/Black	Terminal 30	steady plus: used for lumbar and side-bolsters (for cars since 03/2007)
8	Brown	Terminal 31	ground wire: used for seat-module
9	Red/Purple	Terminal 30	steady plus: used for lumbar and side-bolsters (for cars until 03/2007)
10	Red/Purple	Terminal R	used for seat occupation (passenger only)
11	Red/White	??	used for seat occupation (passenger only)
12	Black/Brown	Ground	function not clear, but its linked to ground
13	Brown	Terminal 31	ground wire: used for lumbar and side-bolsters

14	Blue/Purple	belt buckle	used for seat belt buckle control
15	Brown/Black	belt buckle	used for seat belt buckle control (Ground)
16	Blue/Red	belt fastener	used for seat belt fastener (+)
17	Blue/Brown	belt fastener	used for seat belt fastener (-)

18	Blue	Airbag	used for side-airbag (+)
19	Brown	Airbag	used for side-airbag (-)

Cable colors may be different! Please check them before connecting!

And this was the best one I found for the M2 seat:



## Safety Considerations

The seat is a key safety component in any car. Before making any changes, you should consider the risks of alterations. When swapping an F series seat to an LCI E92, you will lose three existing features:

- Passenger Seat Occupancy Sensor: used to disable the airbag when the seat is empty or occupied by smaller individuals/pets. The occupancy sensor in the F series seat cushion is not readable by the e92 (from what I've read and what I've tried). Not having this feature means that the passenger airbags \*should\* always deploy in a crash. But kids/pets should really be in the back seat anyway. Note: this sensor has no effect on the coupe's seatbelt assist function. The seatbelt will still get handed to you even with this sensor disabled.
- Active Head Restraints: this is a feature that pushes the headrest forward in the event of a crash to prevent whiplash. This feature doesn't exist in F series seats.
- Passenger Seat Position Sensor: this sensor detects how far forward the passenger seat is positioned and adjusts the deployment of the airbag accordingly. This sensor doesn't migrate to the F series seat rail, at least not easily on my car, which was missing the mountain holes. Here is [a guide from someone that it did work for](#).

Each of these missing features will cause an error code to appear after you migrate, but these can be coded out. You'll have to decide for yourself if you are comfortable with the risk of no longer having these features.

You should also be aware that there is no way to test that other key safety features (e.g. airbags) will still be functional after the swap. Most guides operate off the assumption that swapping similarly colored wires will result in similar operation, but this is not guaranteed.

So use your best judgement, and decide what level of risk you're comfortable with.

## Basic Overview of the Install Process

- 1) Remove passenger seat
- 2) Configure M2 passenger seat for installation
  - a. Swap E92 seat belt receptacle over to the new seat
  - b. Swap E92 seat controller over to the new seat
  - c. Take pictures, then disassemble the E92 and M2 seat connectors, and create a wire migration map
  - d. Swap the E92 main connector over to the M2 seat connecting 5 wires in the right slots
  - e. Re-assemble the M2 seat connectors
- 3) Install M2 passenger seat into E92
  - a. Test basic controls
  - b. Turn on car and see what errors show up
  - c. Use Bimmergeeks ProTool to code out the three errors (occupancy, head restraints, seat position)
- 4) Repeat steps 1-3 for driver seat
- 5) Enable Heated Seats

- a. Swap in HVAC controller panel
- b. Add seat heat to vehicle order with BimmerGeeks ProTool
- c. Test heated seats

With this approach you will have to code the car a few separate times, but I think it's helpful to break up the install into modular sections to make troubleshooting easier.

To get a good idea of what the whole process will look like (but not with the level of detail that my DIY provides), check out these helpful videos:

- a. [Installing BMW F-series seats in E-series \(M2 in E92 335i\)](#)
- b. [BMW E92 M3 Seat Upgrade - \\*\\* Fitting BMW M4 Seats \\*\\*](#)
- c. [HOW TO INSTALL M2 M3 M4 SEATS IN A E9X: WIRING EXPLANATION](#)

### Parts & Tools

- 1) F series seats \$500-1000
- 2) E92 HVAC Control Panel with Heat \$30-60
  - a. [#64119292267](#)
  - b. You just need the controller, not the surrounding panel
  - c. Look for a controller that isn't scratched and doesn't have worn fan buttons
- 3) Bimmergeek ProTool [Master License](#) \$160
- 4) [Samsung Galaxy 8.7" Tab A7 Lite](#) (if you don't already have an Android device) \$100
- 5) [K+CAN OBDII Cable](#) \$28
- 6) [USB-A to USB-C Adapter](#) \$9
- 7) [Trim removal kit](#) with wide/flat tool \$11
- 8) Ratchet
- 9) T50 torx bit
- 10) 10mm socket
- 11) Metal pick set
- 12) Small zip ties
- 13) Needle-nose pliers
- 14) Torque wrench

### Install Step 1: Remove Passenger Seat

Loosen the four T50 bolts holding the seat rails to the floor. You will need to move the seat back and forth during this time, but once you have the bolts loose, go ahead and disconnect the battery. It's my understanding that this will prevent additional errors.

Be careful not to close your trunk with the battery disconnected as it can be VERY difficult to get it to re-open. I like to put a towel across the trunk latch while the battery is disconnected just to be safe.

Once the battery is disconnected, you can disconnect the seat cable coming from the floor under the seat. This will include the main yellow plug, plus the small white and small black connectors. The small connectors just need to be pinched to open.



Once the connectors are free, you can remove the seat. I recommend putting towels on the door sill and B pillar, so you don't scratch anything. I'd guess the seat weighs about 50lbs, so you might want a friend to help. This is a good time to vacuum out your floorboard.



## Install Step 2: Migrate Hardware and Wiring

To make life easier, I'd recommend putting both the new seat and old seat on a table side-by-side. This will make it easier to compare wiring and give you better visibility. Start taking lots of pictures before you disconnect things so you know what goes where. You can't have enough pictures.



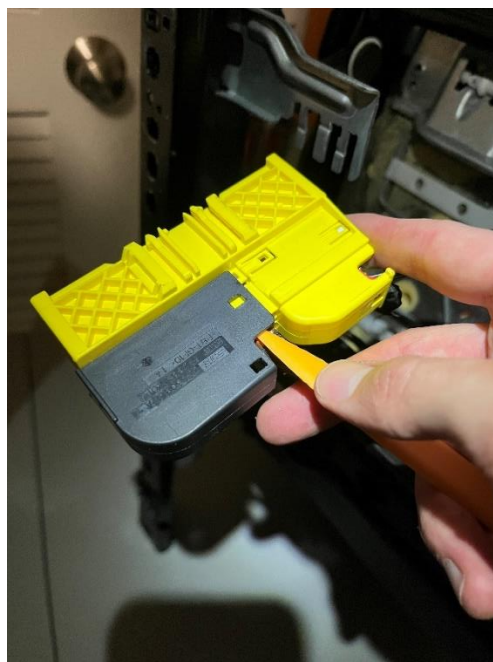
Starting with the M2 seat, remove the seat controller (white box) from its clips under the seat cushion. The side clip is the best place to start. On the back side of the controller, you will find 6 connectors. Go ahead and remove these by flipping down the collars on the big ones and pinching the smaller connectors.



Now the seat controller should be totally free. Go ahead and remove the E92 seat controller using the same process and transfer it over to the M2 seat. All these connectors are plug-and-play and don't need to be modified in any way, so you can just hook them right up on your M2 seat. To keep things simple, plug these connectors back in now before you start disconnecting other stuff on the yellow connector housing. Progress!



Next, disassemble the yellow connector housing on each seat. This is the most important time to take lots of pictures throughout the process. Within the yellow connectors there are multiple smaller connectors. You will need to cut the zip-tie and then you can gently spread the small yellow clips on the end of the connector, while pushing the grey connector to the side. It will pop out with very little force. We will be re-pinning most of these wires shortly, but don't de-pin any wires yet.





Once the yellow connectors are split apart on both cars, go ahead and remove the seat belt buckle/tensioner from the side of the E92 seat. This is another T50 bolt. Transfer the E92 seat belt receptacle to the M2 seat, and torque the bolt to 42NM (this is important from a safety standpoint). The wiring attached to the seat belt is for the pre-tensioner. Thankfully you don't have to make any changes to this wiring for it to fit right into the E92 yellow connector housing.

Small Grey Side Airbag Connector: Next we need to move the side airbag connector from the E92 seat to the M2. On the E92 seat, this is a grey connector with a yellow wire and a brown wire. On the M2 seat it's a blue connector with the same color wires. We're going to swap these connectors so that the grey connector is on the M2 seat.

Initial configuration of the connector blocks:

E92

- Pin 18: yellow
- Pin 19: brown

M2

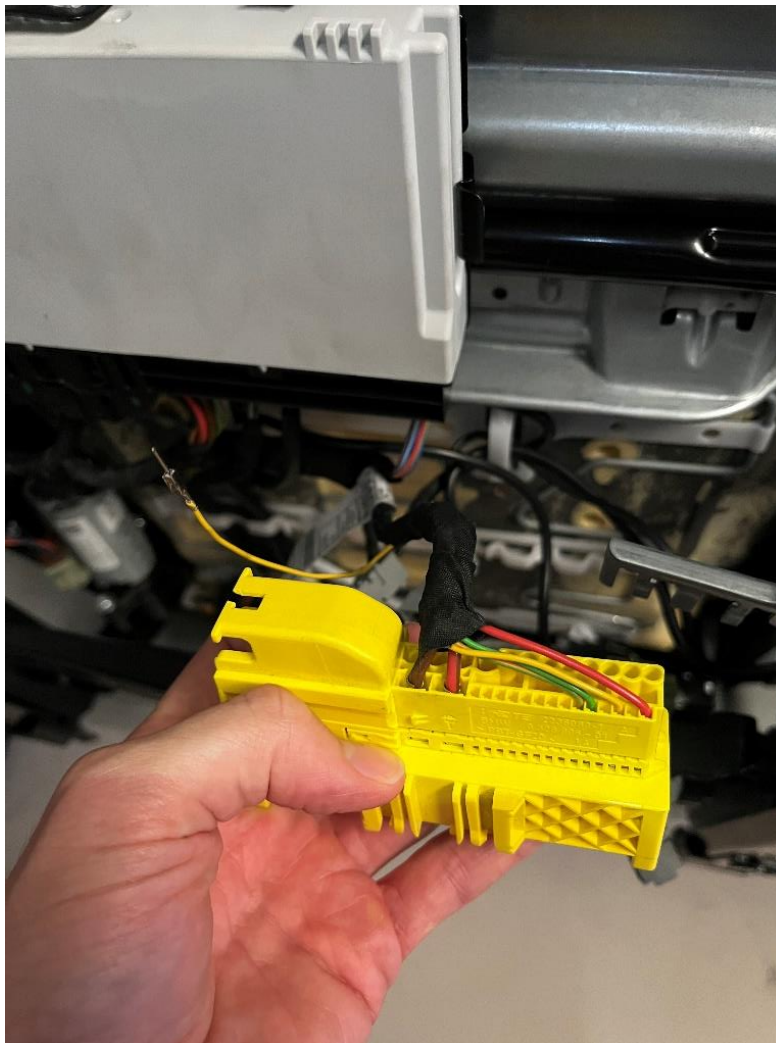
- Pin 39: yellow
- Pin 40: brown

To depin a wire, push the wire in slightly, depress the silver tab with a pick (gently so you don't bend it permanently), and then gently pull the wire out. It won't take much force, and if you use too much you could pull the pin off the wire. So keep gently pressing the tab and pulling the wire until it releases. Go ahead swap the grey and blue connectors.

Small Black Occupancy Sensor Connector: You won't be connecting the small black connector (with red, white, and brown wires) on the M2 seat. This is the occupancy sensor, which isn't compatible with the E92. You can tie it back to the seat frame.

Swapping the main wiring connector: Now for the tricky part. We need to remove the wires from the large black connector on the E92 seat, so we can transfer it over the M2 seat and insert the M2 wires into the same spots the E92 wires were plugged into. There are 6 wires on the M2 yellow connector

- Pin16: Brown (large) - ground
- Pin15: Red/brown (large) - positive
- Pin6: Green/orange – data line
- Pin5: Green – data line
- Pin1: Red/black – positive?



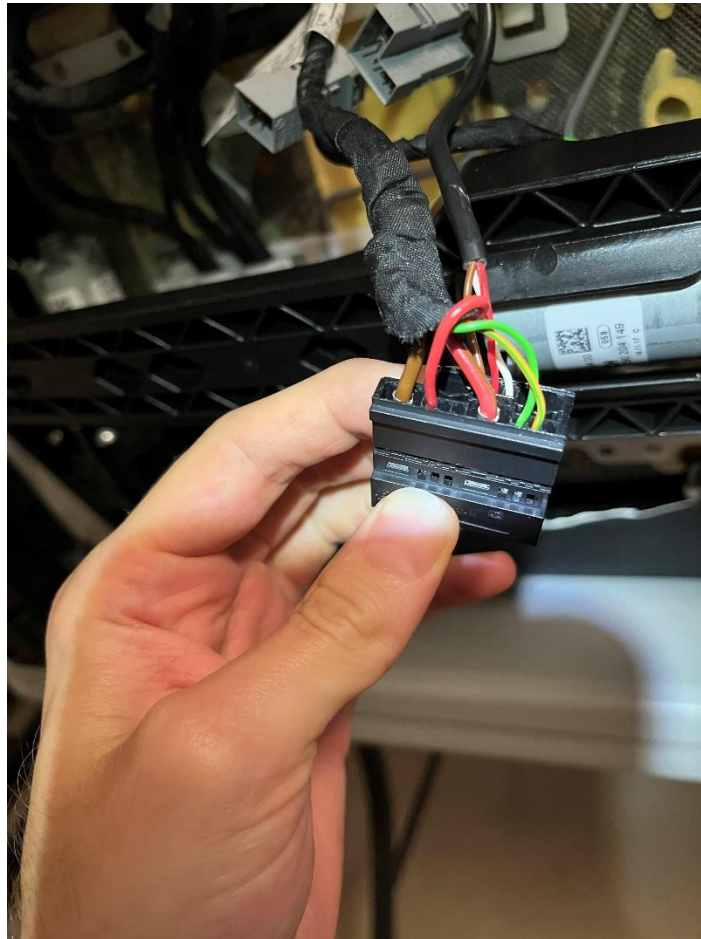
Note that on the passenger seat there is also another single yellow wire on Pin3 that ends with a small grey connector. This is just a loop right back to the harness coming from the floor; function unknown and we won't be migrating this. You can pull the single wire completely out of the wire bundle and discard it. Be sure you're removing the yellow wire in pin3 though. There's the other yellow wire for the side airbags in pin39 (see above) that we're keeping.

Now you need to figure out where the corresponding wires are on the E92 large black connector. Note that there will be other wires on the E92 connector, but we don't care about them because there aren't corresponding wires on the M2 seat. Here are the E92 wires we do care about though:

- Pin8: Brown (large) - ground
- Pin7: Red/black - positive?
- Pin4: Red/brown(large) - positive
- Pin3: Green – data line
- Pin2: Green/orange – data line



Once you've got your wire migration plan written down (I highly recommend this), start removing the wires from the black E92 connector, and then put the M2 wires into the right spots. It should end up looking like this:



Sidenote: Pins 10-12 on the E92 black connector are used for seat occupancy, and I tried connecting the three M2 occupancy sensor wires (from the small black connector) to these pins. You can see the wires from my attempt on the back row in the pic above, but the car still didn't detect the sensor. Most folks seem to just leave the M2 small black occupancy sensor tied back and unused. If you're curious, the wire pattern I tried (that didn't work) was:

- Pin12: Brown (from occupancy sensor)
- Pin11: Red (from occupancy sensor)
- Pin10: White (from occupancy sensor)

Once you've got everything re-pinned, you're ready to re-assemble the 3 connector blocks (grey airbag, grey seatbelt, large black main one) into the big yellow connector housing. Slide the blocks in from the side and they'll snap in. Use a small zip tie to secure the wires to the top corner of the yellow connector housing. When you're done, it'll look like this:



Tidy up your wires under the seat. Ensure everything is plugged back in at this point.

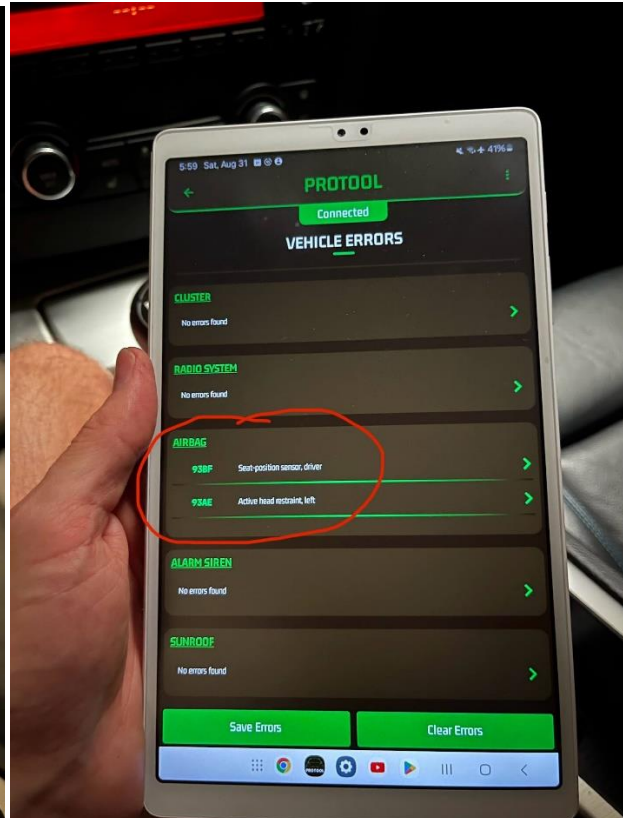
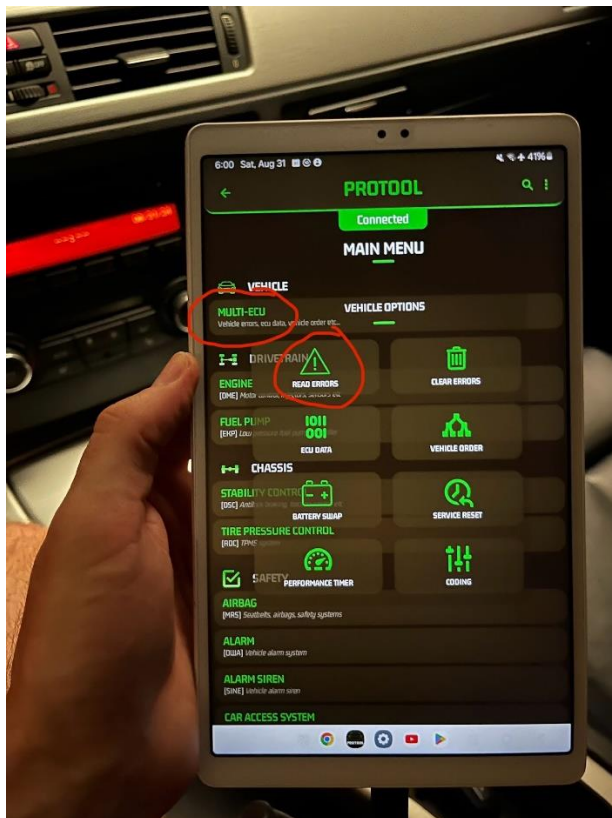
### Install Step 3: Reinstall the Seat, Test, and Code Out Errors

Go ahead and put your seat back into the car and connect the harness from the floor back into the yellow connector and slide the grey slider to lock it into place. You won't be connecting the small white and small black connectors because these are no longer used (active head restraint, seat position sensor). But you can put them back in their cable holders so they don't slide around.

Now, you can reconnect your battery and test the basic seat controls. If everything is good, go ahead and bolt the seat down to the floor with the four T50 bolts to 42NM with a torque wrench. Remember that seats are a safety component, so torquing these bolts properly is important.

Now we'll turn on the car and code out the errors from the missing sensors. Go ahead and hook up BimmerGeeks ProTool to your OBDII port using your K+CAN cable. Turn on the car into accessory mode, and you'll quickly see an airbag warning light on the dash. You'll need to make coding changes in a few places. Be sure your car is on a battery tender or has a full battery charge so you don't brick your ECU from an unexpected loss of power. Also be sure to back up your ECU config before coding in case you need to revert.

First go to **Multi-ECU > Read Errors**. You'll see the 2-3 errors under the airbag section (and maybe others for other sections if you had errors in the past that weren't cleared):



Next go to **Airbag > Coding > Edit Coding > Expert > Equipment Flags** to find and disable the following:

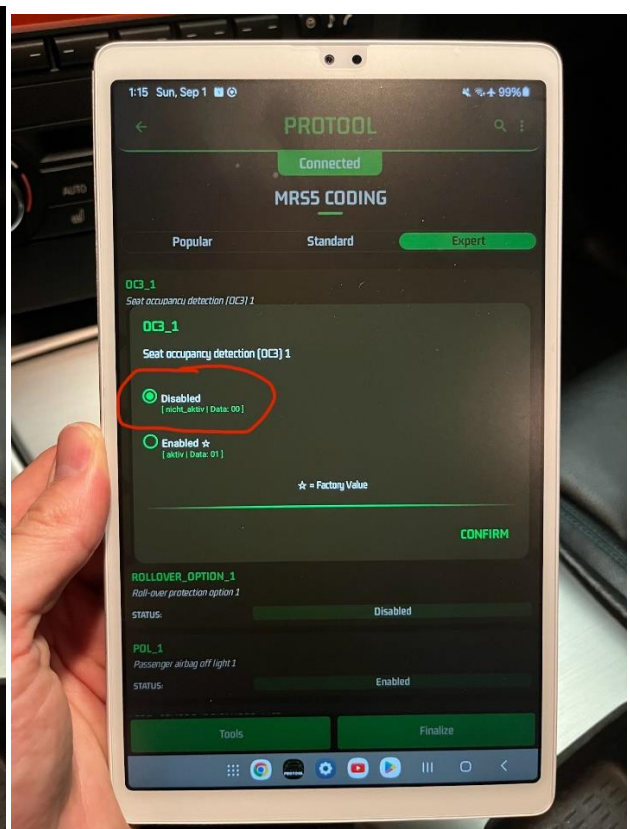
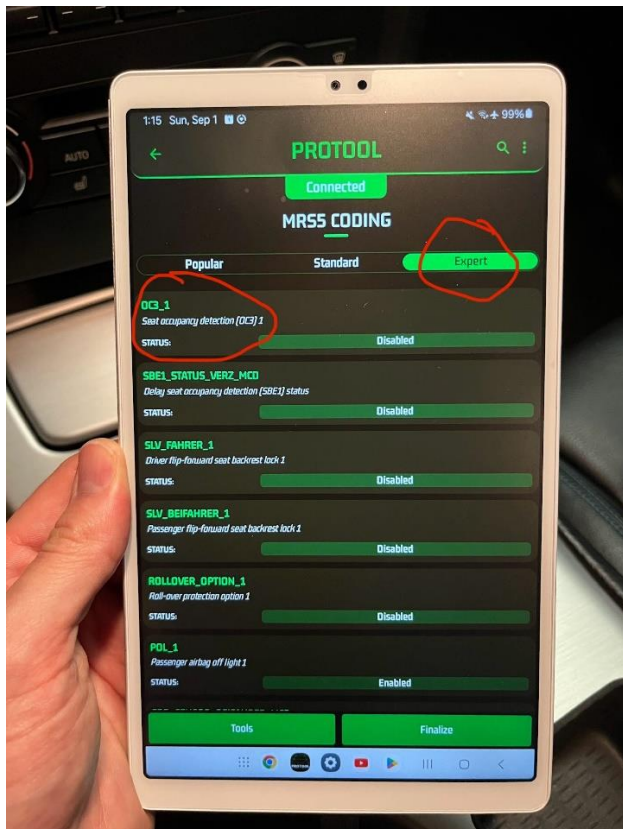
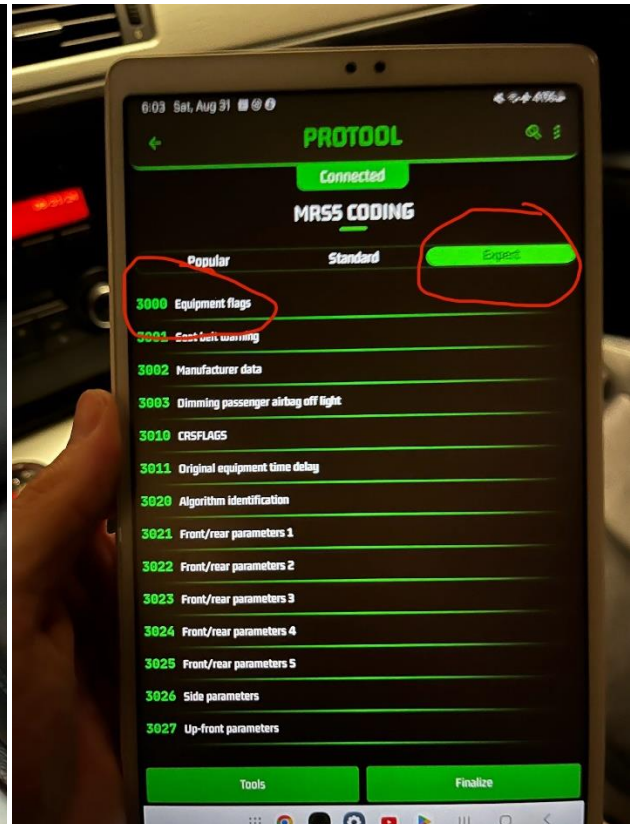
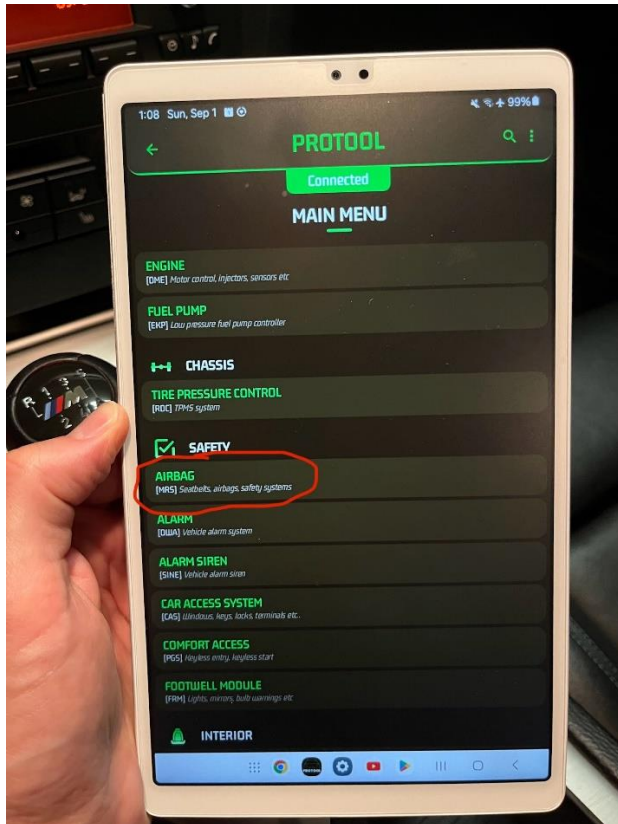
- For Passenger Seat:
  - “Right Headrest”
  - “Seat Occupancy Detection (OC3) 1”
  - “Passenger Seat Position Sensor”
- For Driver Seat (later after you install this seat):
  - “Left Headrest”
  - “Driver Seat Position Sensor”

Notes:

1. If you try to update the driver seat settings before you’ve installed that seat, you’ll get errors.
2. Some guides mistakenly advise you to disable the side airbags below: I’m certain you DO NOT want to do that 😊
  - a. `SIDEBAG_LINKS_1` -Side Airbag (left)
  - b. `SIDEBAG_RECHTS_1` -Side Airbag (right)

Once you have coded these settings, click “Finalize” and ProTool will walk you through the steps to apply the changes. This will include cycling the vehicle power. Afterwards, go back to Multi-ECU > Read Errors and confirm that all the errors are gone.

Here are some screenshots from coding out the passenger seat occupancy sensor:





#### **Step 4: Repeat Steps 1-3 for the Driver Seat**

The process for the driver seat is almost identical to the process for the passenger seat. The only difference is that the driver seat doesn't have the black occupancy sensor connector or the random yellow wire. Even though the driver seat has memory functions, they are still controlled through the same wiring as the passenger seat.

#### **Step 5: Enable Seat Heaters**

If your car didn't have seat heaters before, then you will need to swap in your new HVAC controller that you purchased. The HVAC controller has a surrounding faceplate that you don't want to break (it's \$60+). Using a wide, flat trim removal tool from the kit I referenced above, I was able to gently pry along the side of the faceplate. Both the faceplate and the controller popped out together.



Simply disconnect the cable from the back of the controller. Then work on migrating the faceplate to your new controller. There are 4 clips, 2 on the top and 2 on the bottom (see screenshot below). These are very easy to break, so gently use a trim removal tool to pop the clips.



Once you have the faceplate separated, attach it to your new controller, connect the cable to the back, and push it back into your dash.

Now you just need to update your Vehicle Order with ProTool so that your car will know that it has all the hardware for heated seats. These are the steps:

1. Open Protool.
2. Select "Multi ECU"
3. Select "Vehicle Order"
4. Select "Edit"
5. Select "Base"
6. Scroll down and select option 494.
7. Select "Actions" then "Save"
8. It will prompt you to select CAS, FRM. Select "Both"
9. It will then save, then prompt you to save this change to 2 other modules. Once you approve that change, ProTool will code each of the modules, which will take a couple minutes.

Once the coding is done, go test out your new seat heaters!

## Conclusion

At this point, hopefully everything is working well for you! If your car/seat combination was different than mine, you might have to do some troubleshooting. Feel free to drop questions here and I can give you my opinion, but I'm no expert. I'm just some guy who waded through this whole process and managed to get my stuff working! Hopefully my information is helpful for other folks working through their own installs.

Here were some of the best resources I found. If you run into trouble, I'd start looking here:

2. The original giant thread:  
<https://www.e90post.com/forums/showthread.php?t=480313>
3. F30 with a detailed pin guide:  
<https://f30.bimmerpost.com/forums/showthread.php?t=2030220>
4. [Raif's thread](#)
5. Moving an E series seat to an F series: <https://www.babybmw.net/threads/retrofit-e-series-seats-to-f-series-cars.86535/>
6. Long thread on getting heated seats to work for non-LCI cars:  
<https://www.e90post.com/forums/showthread.php?t=192819>

Oh, and if you want to sell your spare F series seat controllers, seat belt tensioners, and HVAC controller, they are worth \$400+ on Ebay. That might cover most of the cost of your new seats!

