INSTALLATION

All of my comments are in red. I installed on a 2017 Boxster (718).

STHBPE2

Comfort Roof Control Module for

- Porsche Boxster (981)
- Porsche Boxster (718)

v1.0

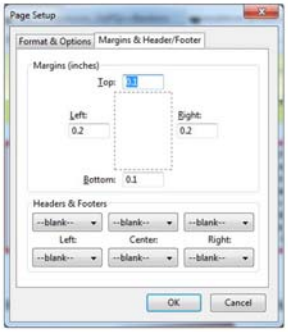
Further information and manuals for all products can be found on our web site

w w w . m o d s 4 c a r s . c o m

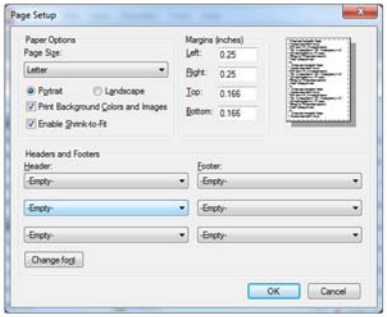
We explicitly point out that all functions of this control unit should be used only while exercising caution and responsibility. We can NOT be held liable for any damage or injury caused by installing or using this product.
PLEASE READ THE COMPLETE MANUAL CAREFULLY BEFORE USING THIS PRODUCT.

Important Information. READ BEFORE INSTALLING!

Firefox



Internet Explorer



PRINTING THIS MANUAL
This manual is designed to produce completely filled pages. In order to get best print results, simply set the borders to minimum settings in the browser's page setup menu and disable headers and footers.

Activate the print preview and if necessary use zoom level 95% or 90% until all pages are shown correctly.

ALL IMAGES CAN BE CLICKED FOR FULL SIZE in the browser.

TROUBLE SHOOTING - NEED TO CONTACT US?
If you run into any problems after installing the module, please go over the manual again in great detail, clicking every photo for full size!
We now have a full **Knowledge Base with Support Ticket system** available online at
www.mods4cars.com/support

If you need to contact us, the best and fastest way to do so is by **opening a support ticket there**

This module comes with our USB Field Upgrade and Configuration Port! We recommend connecting it to a computer BEFORE YOU INSTALL and using our support app "m4cconnect" to do a quick firmware update check. M4cconnect as well as all other information regarding USB update and configuration can be found at www.mods4cars.com/usb. You can even configure and activate your favorite module functions and settings on screen before the module is installed in the car! It is a good idea to permanently install the USB cable with the

module in the car, leaving the computer plug in an easily accessible spot for later use with a Wifi/3G/4G connected laptop.

The green DATA LED signals a correct installation and shows the status of the module.

LED OFF

- Ignition OFF: CAN bus and module are in low-power standby mode. This is normal.
- Ignition ON: Either power connection or CAN bus connection is interrupted. Check the two wire taps for power and ground as well as the CAN connectors. Also make sure the CAN polarity is correct.

LED either dimly lit or flickering erratically

- A dim or flickering LED is an indicator for interrupted or missing POWER or GROUND connections. The module will get some leakage current from the CAN bus which causes the LED to stay dimly lit or flicker erratically. See previous paragraph about wire taps if applicable!

LED permanently ON

- Module is connected to CAN and power, but does not receive the correct data. Recheck all connections thoroughly. A VERY COMMON source of problems is reversed polarity on the CAN wires. Double-check the POLARITY and wire-colors of all connections!

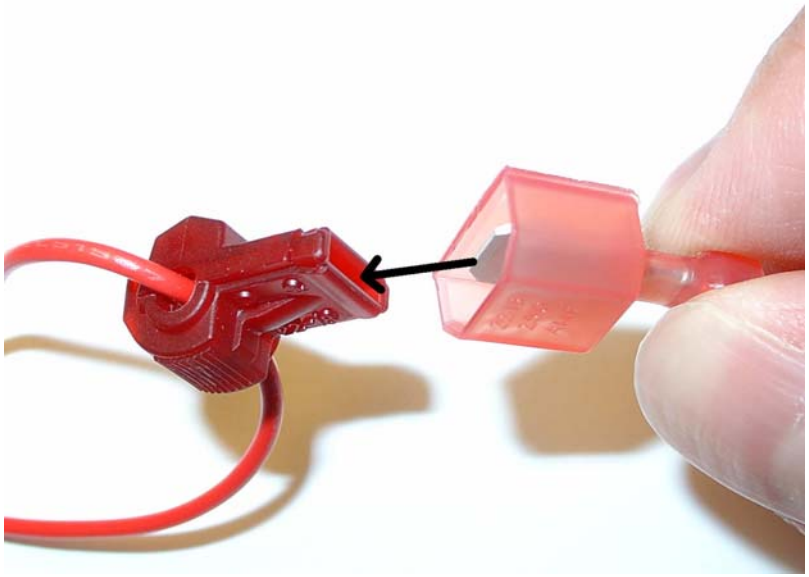
LED blinks

- CAN bus is active, the module is connected correctly and ready for use.

USE OF THE 3M WIRE TAPS

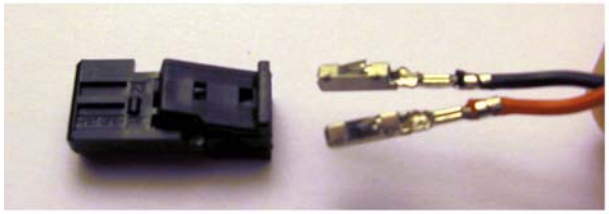
This module is installed using the 3M wire taps very popular with 12V aftermarket industry for their reliability and durability. **The most common problem during installation is a bad contact between the plugs from the supply wires and the wire taps. Please make absolutely sure that the metal blades of the plugs slide into the slots of the t-taps. It happens that the blade "misses" the slot and the connection looks correct, but doesn't make electrical contact!**

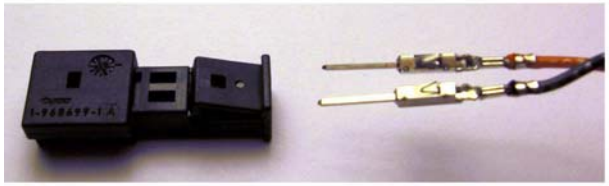
The T-taps come in RED (for thin wires), BLUE (for medium wires) and YELLOW (for thick wires).



To test if you installed the module correctly after all wires are connected, turn the ignition fully on and watch the green LED on the module. IT MUST BLINK (turning on and off constantly) to signal a correct installation. If the LED either does not turn on or stays on permanently, there is a bad contact or a missing connection! See below for a detailed explanation of the InstallAID™ LED.

These T type connectors are pretty good. I am always hesitant to splice into a wire, but these worked very well. A standard plier works very well. When you connect them the cover around the blade should touch the base of the T connector when properly connected.





USE OF TYCO AUTOMOTIVE CONNECTORS
THE PHOTO IS A SAMPLE AND ONLY SHOWS WHERE TO FIND THE NUMBERS AND HOW TO INSERT THE PINS. SOME CARS REQUIRE THE RED AND BLACK WIRES REVERSED! PLEASE FOLLOW THE BELOW STEPS FOR CORRECT WIRE ASSIGNMENTS!!!
The wiring kit for this module uses one or more of the TYCO connectors shown on the left. These are specialty automotive connectors designed for tight and secure electrical connections. In order to avoid reversing polarity, please pay attention to the small numbers embossed in the back of the plugs where the contacts are inserted. In case one of these plugs will need to be removed later, it can be done without any damage to the plastic cap or the crimp contacts. **Please see our Knowledge Base article(s) regarding these plugs** at http://mods4cars.com/support/knowledgebase.php?search=tyco.

Installation - Steps 1-3

1. Move the left seat (driver's seat on LHD cars) all the way to the front and then lift it all the way up. Electrical seats need to be moved all the way forward AND lifted up as well, there is a switch that will move the seat in a forward/upward direction! Flip the back rest as far forward as it will go. Turn the ignition off. **For extra safety during installation we recommend disconnecting the battery.**

2. Under the seat there is a rectangular service access flap punched into the carpet with breakaway links.

The flap is intended to be opened the first time the control unit under the seat needs to be serviced and makes accessing the area so much easier than having to remove the entire seat, seatbelt, side panels and carpet. **For easier access we recommend unbolting the seat and propping it up in the back (use the cardboard box) by removing the 4 bolts with an 8 point or torx socket.**

I did not have to unbolt the seat. It is a little tight even with moving the seat forward and up, but there is plenty of room.

3. Opening the flap for the first time requires grabbing into one of the openings and the holes and pulling really hard.

A pocket knife can be used to CAREFULLY cut away the links. The die-cuts are in the back, the front and on the left (under the seat rail). There is no cut on the right, so the carpet flap can be rolled over to the right and later

put pack in place. It may be helpful to move the seat all the way back and lift it up while trying to access the front part of the flap. **CAUTION WHEN USING ANY CUTTING TOOL. DO NOT CUT ANY OF THE WIRES BURIED UNDERNEATH.**

Installation - Steps 4-6

4. With the access flap completely opened and rolled over to the right, find underneath the control unit to the left and two brown ground wires to the right.

Securely attach the first wire tap to one of the brown (or brown/white) wires that lead to the chassis ground bolt in the right corner (use combination PLIERS not cutters).
DOUBLE CHECK TO MAKE SURE THIS TAP (and a second one later) is SECURE.

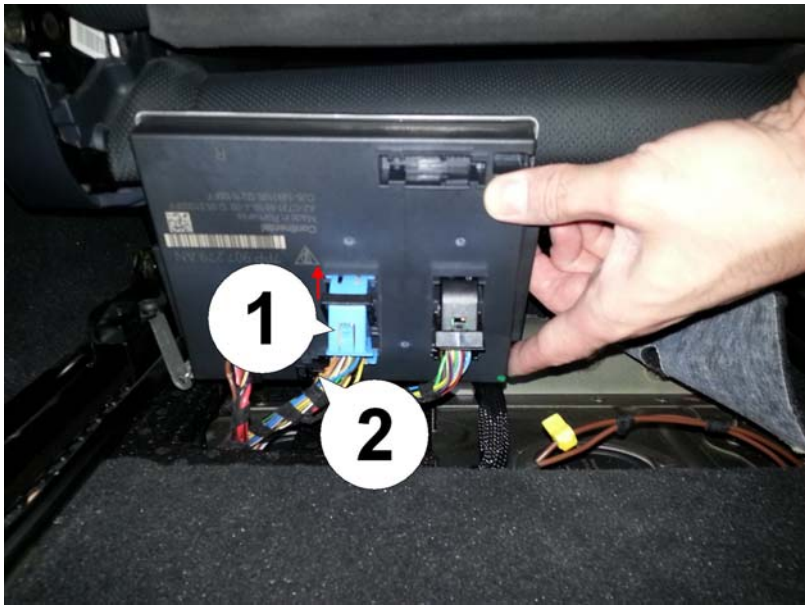
Don't be afraid of these wire taps. They work well and are easy to close with pliers. Just make sure that the wire is in the center of the metal blade inside the tap.

5. The control unit is not bolted down. Rather it is just cradled in an expanded foam carrier.

Carefully remove the control unit from the foam carrier and turn it over to allow access the connectors on the underside.

Take a picture of the orientation of the control unit. When I was putting mine back in the unit was rotated 90 degrees. I looked at the picture that I took and realized that I had to rotate it back.

6. Remove the large BLUE connector (1) first. Push in on the locking tab in the middle, then move the locking lever over in the direction of the arrow. Then remove the small BLACK square plug behind it (2). Squeeze the two locking tabs on both sides in while pulling and wiggling the plug free.

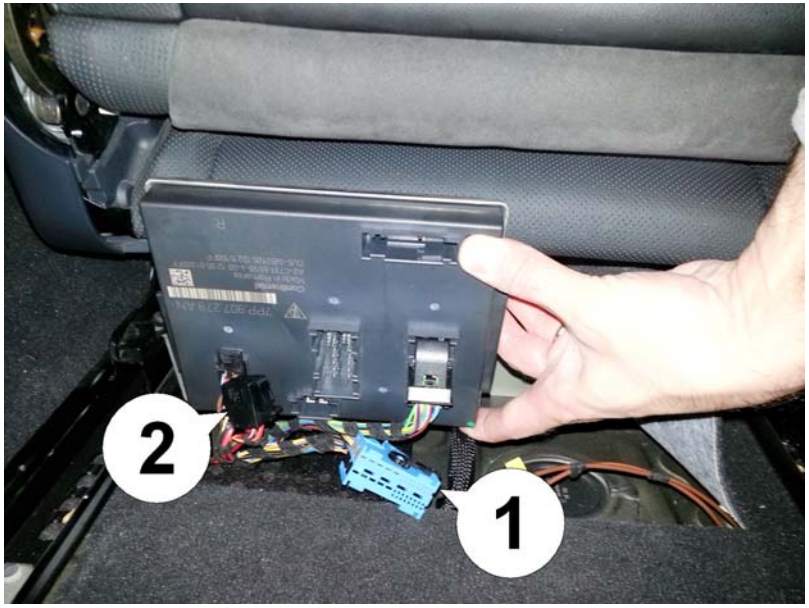


The instructions say to move the black locking lever in the direction of the arrow. I did not notice the red arrow in the picture attached. If you look to the right of #1 you can see the red arrow. Basically the locking lever moves up in the attached picture.

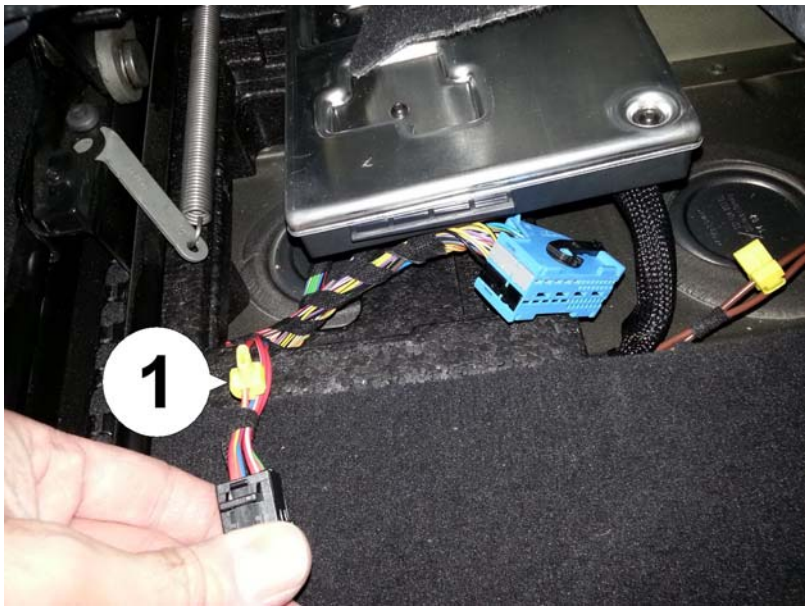
The attached picture is not very good for showing where the small black connector is. It is basically directly behind the wires connected to the blue connectors.

To remove the black connector you really have to wiggle it a lot while pressing on the tabs. Don's be afraid to use the tabs on the side to get some leverage.

Installation - Steps 7-9



7. Here the two disconnected plugs are clearly visible. The large BLUE connector (1) and the small BLACK square connector (2).



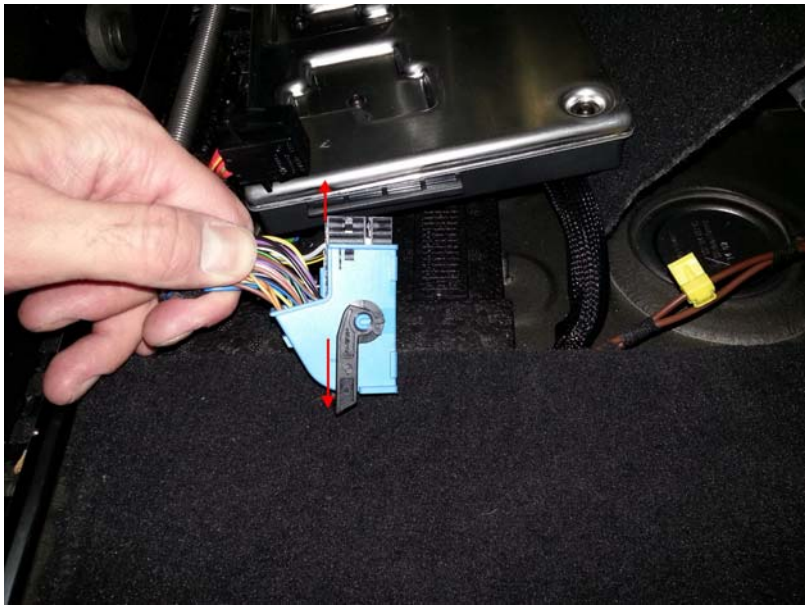
8. Inspect the wires feeding the small BLACK connector and find the red/yellow wire.

Attach the second power tap onto the red/yellow wire as shown.

DOUBLE CHECK TO MAKE SURE THE TAP is SECURE.

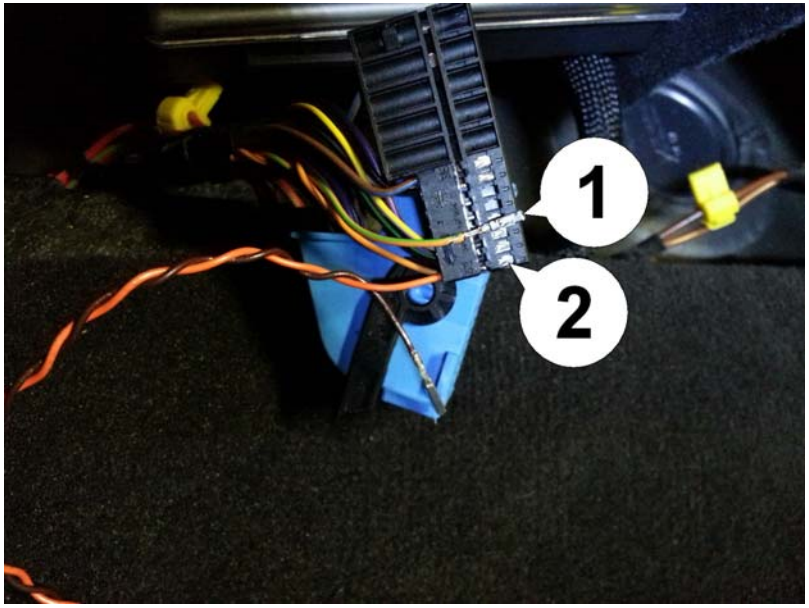
Note that the T connector in this picture is behind the black tape on the wires. If you put it closer to the connector you may have some clearance issues.

9. Use a screwdriver to move the blue plastic so that the black locking tab can get by it, then hold on to the wires as in the picture and slide the black connector out.



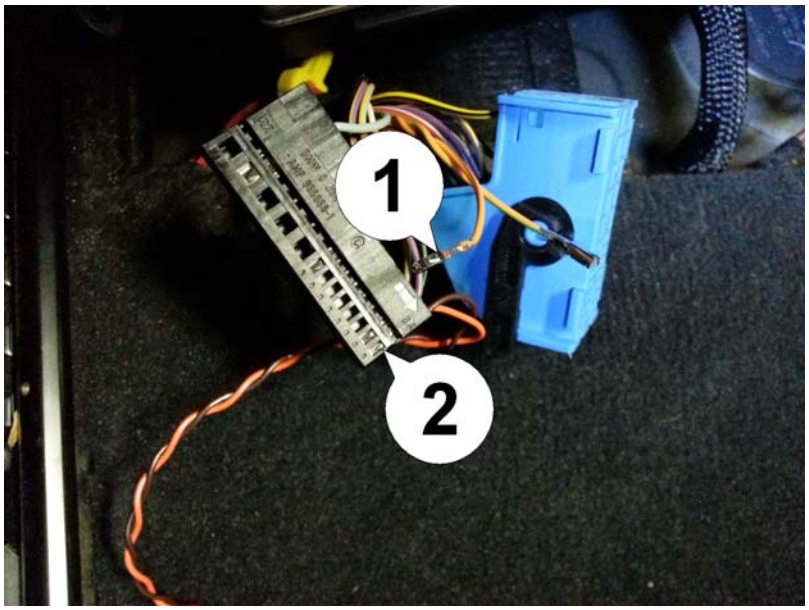
I did not really understand instruction #9, but there is a small black locking tab. You can see it towards the top left corner of the Blue connector in the picture to the left. Press that in with a small screw driver and then the black wiring block inside can be removed.

Installation - Steps 9-12



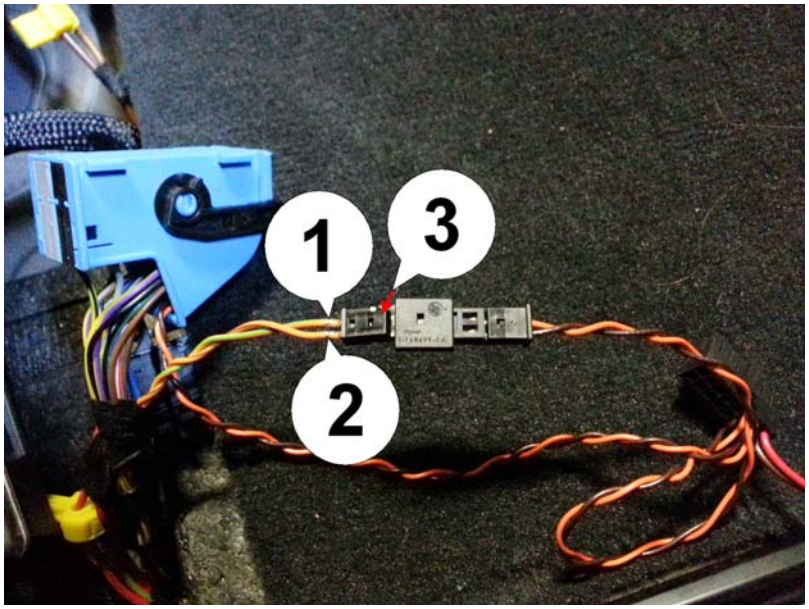
10. From the large BLACK connector of Step 9, remove the small crimp contact from slot # 42 which is attached to the orange/green wire (1). NOTE: Push the small metal spring in with a paper clip or small jewelers screw driver while GENTLY pulling on the wire. It may get caught in the small slot on the way out. If so, push the tab down again through the small opening. NEVER USE FORCE! Replace (1) with the orange wire (2) from the module wiring harness.

I was nervous about this step. I used a small flat blade screw driver to put a little pressure on the crimp contact. I was not sure exactly where to press, but if you look at the arrow in #2 it is pointing exactly where to press. I used the screw driver to help push the connector out. If you look at one of the connectors there is a small "V", that is what locks in the crimp contact.
Please note that some of the colors on the wires can look the same. Triple check that you are using the correct wire.



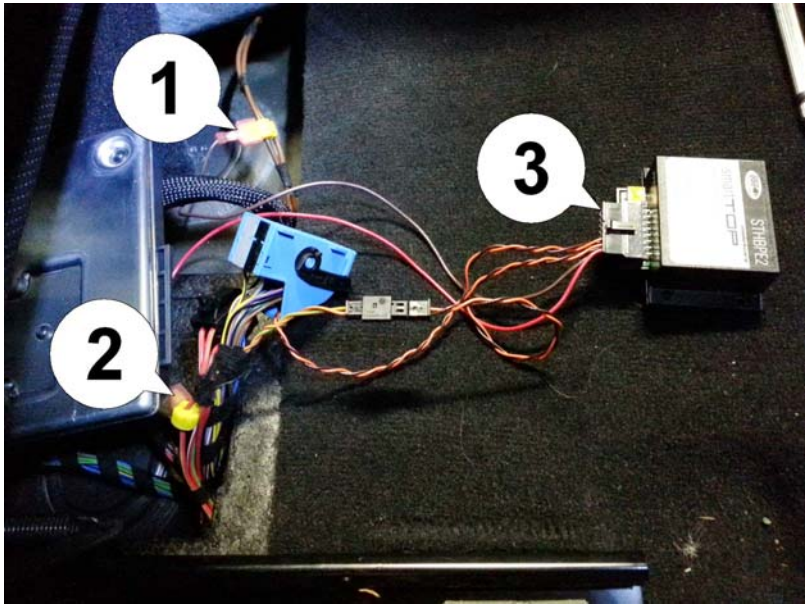
11. Turn the large BLACK internal connector over and remove crimp contact from slot # 34. which is attached to the orange/brown wire (1). Replace (1) with the brown wire (2) from the module wiring harness. USE CAUTION AND CHECK TO MAKE SURE THE CONTACTS ARE CORRECTLY IN PLACE AND SECURE. Reverse the actions of step 9 by re-inserting the large BLACK internal connector into the BLUE connector.

12. Now insert the two original contacts just removed in step 10 and 11 into the small supplied connector. There are small numbers embossed on the entry side: Insert orange/green in slot (1) and orange/brown in slot (2). Push the locking tab (3) in firmly before connecting this smaller (female) plug with the larger (male) one on the wiring harness and make sure orange/green meets orange and orange/brown meets brown as shown in the photo. CLICK THE PHOTO FOR FULL SIZE.



It was not very clear what direction to insert the crimp contacts, but they should lock in securely.

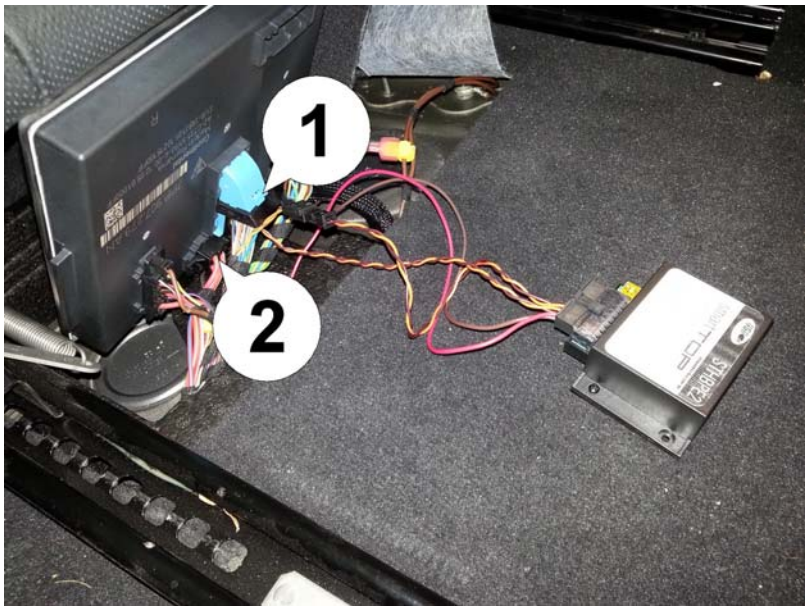
Installation - Steps 13-15



13. **DISREGARD the LED or clicking sound when working with DISCONNECTED BATTERY. Instead, test everything at the very end after reconnecting the battery.** Connect the brown ground wire (1) first, then connect the red +12V power wire (2). Run them UNDER the OEM seat cable for a neather installation. Make sure the metal tabs slide all the way into the slots of the power taps in order to make proper contact. Connect the module (3) and watch the green LED on the module. It should light up briefly to indicate that the module is getting power and is now ready.
SEE THE PARAGRAPH ABOUT THE WIRE TAPS AND SPADE CONNECTORS at the beginning of the manual as this is the most common source for problems if the plugs are not inserted correctly!

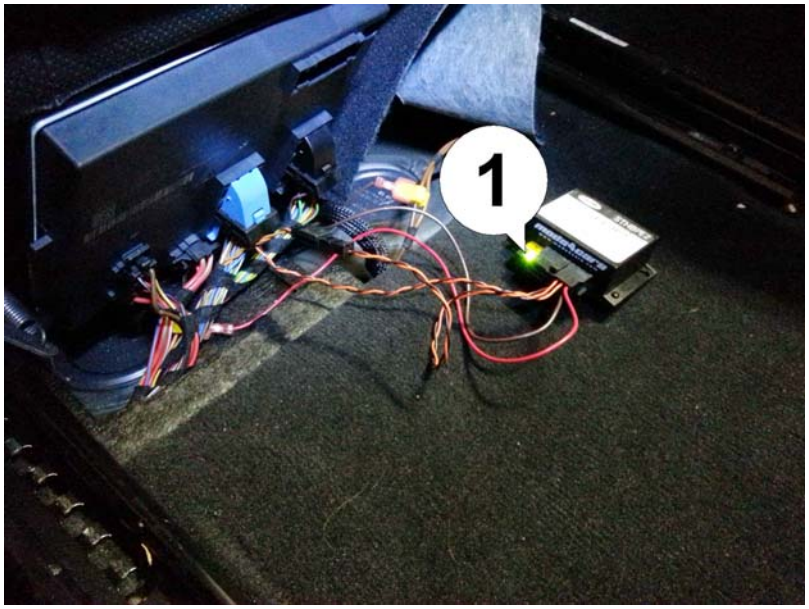
I did not disconnect my battery when doing this install and did not have any issues.

Again, the spade connectors should slide all the way down to the base of the T connector when properly attached. I used the floor to get some leverage to get the spade to go all the way into the T connector.



14. Reattach the large BLUE connector (1) and the small BLACK square plug (2) to the control unit. There should be one or several audible clicks, the green LED on the module might turn back on. This is normal.

15. After everything is connected, tap the unlock button on the remote once. The green LED on the module should now blink to indicate data traffic and signal a successful installation.
STOP if the GREEN LED light does not blink here and recheck all previous steps!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Installation - Step 16

16. Use the supplied velcro sticker to attach the module, then insert the control unit back into the foam bracket. Carefully stuff the wiring harnesses back into the voids underneatch, then replace the carpet flap by sliding the left side under the seat rail until it looks as if it never was opened.

Done.

Now configure the module according to our Operation and Programming manual. IMPORTANT: If the battery was disconnected during install and a steering angle sensor error is shown, turn the wheel all the way to the left, the right and back to the center and drive a short distance. The error will disappear then.

The velcro sticker is pretty lame. I suggest using a piece of Styrofoam and a zip tie just to make sure the module does not rattle around.

I preprogrammed my module using my computer before starting the installation. It is easier than using the steering wheel stalks to program. There is a separate programming PDF from Mods4cars.

Total install time was about 90 minutes including programming the module and having fun testing the remote operation.

I could probably do it in under 1 hour now that I have some experience with it. Good luck and enjoy it if you decide to install. Below is a link to the Mods4cars website.

http://www.mods4cars.com/sms/db/smarttop/?r=aHR0cDovL3d3dy5tb2RzNGNhcnMuY29tL2luZGV4LnBocA==&