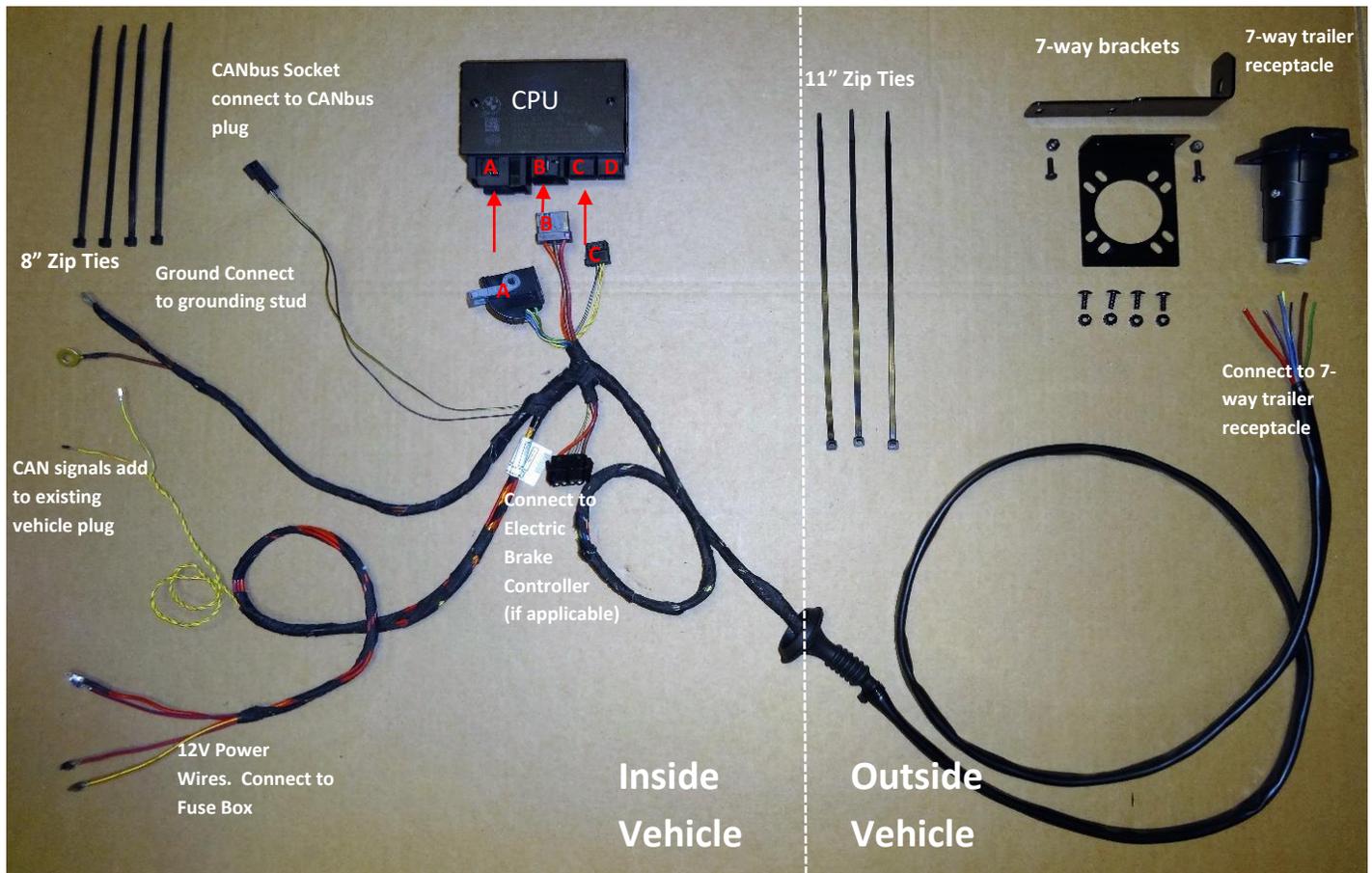




Active Wiring Installation Instructions
BMW X5 and X5M [F15/F85] 2014 – Current
BMW X6 and X6M [F16/F86] 2015 - Current
(all engines/suspension pkgs/trimlines)



Hardware Supplied

- BMW F15 Active Wiring Harness Kit
- (2) 7-way brackets and hardware
- (4) 8" Zip ties
- (3) 11" Zip ties
- 7-way trailer receptacle

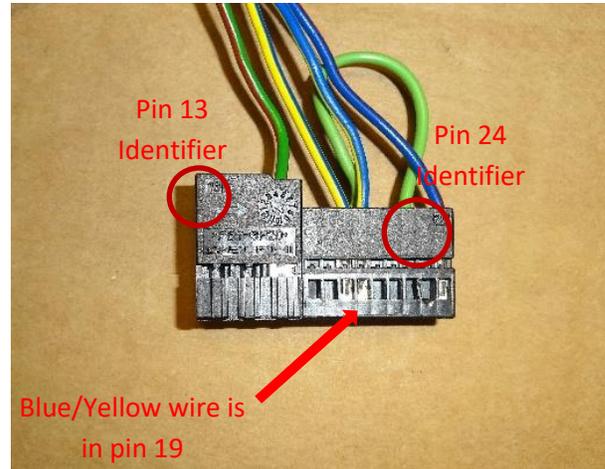
Tools Required

- Small flat-blade screwdriver
- T30 torx driver
- 10mm socket
- Phillips screwdriver

Components, Procedures, and Locations

1. Familiarize yourself with the harness and the controller, and take note of the following:
 - Socket "D" on the controller will not be used.
 - Unless you are installing a brake controller, the 4-pin plug on the harness will not be used.

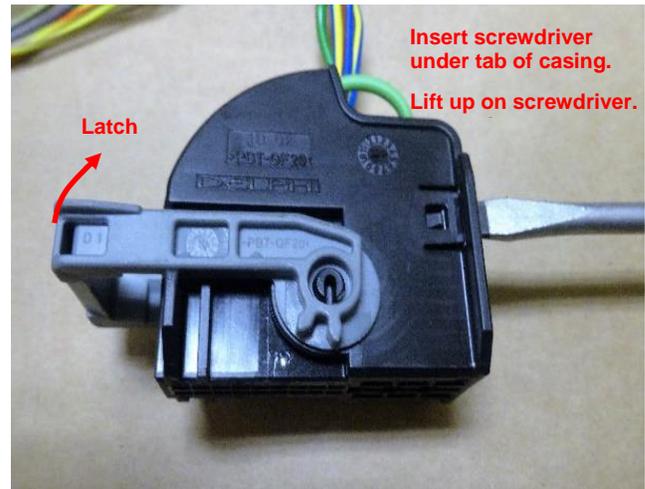
Ensure that you can identify by number the individual pin locations on a plug (see photo). You will be adding wires into the topside of a plug at specific, numbered locations.



2. To access connectors inside casings, insert a small screwdriver between the casing and the plug, lifting the tab of the casing and prying the plug back out (see photo). The housing for this specific 24 pin connector (A), found on this hitch harness, can remain on the connector.

You will need to separate a casing from its plug inside the vehicle wiring area, using this technique.

Also familiarize yourself with the latching mechanism on the casing. You will need to latch and unlatch these connectors inside the vehicle wiring area.

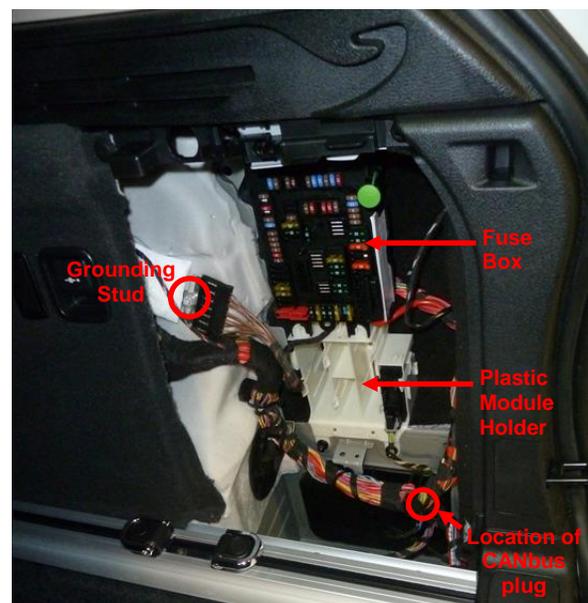


3. Gain access to the wiring area in the vehicle, located in the cargo area on the passenger's side.

Remove the plastic storage bin (if vehicle is so equipped.) Then remove the side trim panel.

Ensure that you can locate and identify all components shown in the photo.

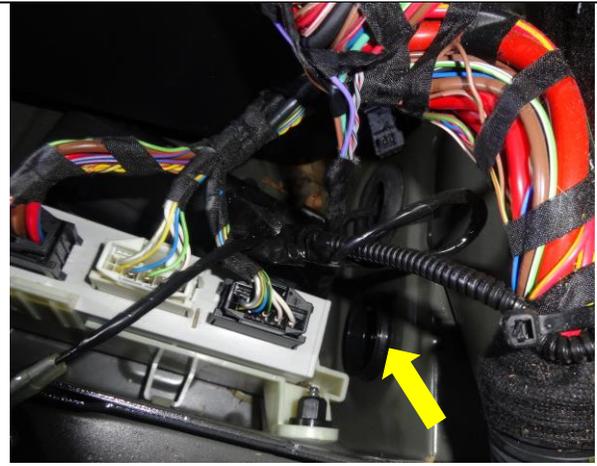
Un-tape the CANbus plug from the vehicle's wiring harness. You will find the CANbus plug taped tightly to the harness around the junction of the largest wire bundles (see photo.)



4. Locate the two pass-through holes in the chassis, in the passenger rear compartment below the fuse box. The inner hole should have a solid rubber plug (see photo.)

Remove the rubber plug. Then feed harness through the hole to the outside of the vehicle.

Properly seat the grommet of the harness into the chassis hole.



External Wiring

5. Feed the end of the harness between the hitch beam and the vehicle, and then through the circular bracket for the 7-way round trailer receptacle.

Connect the output wires to the 7-way connector. Remove 2x screws from receptacle housing to access the terminals; Screw wires into place as described below:

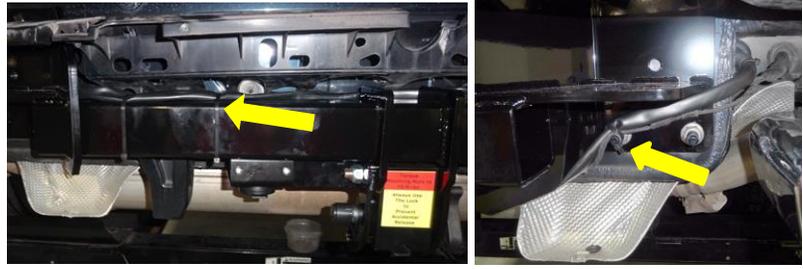


7-Way Receptacle Wiring Connection

<u>Function</u>	<u>Harness</u>	<u>7-Way</u>
Left turn/Brake	Red	5-Red
Right turn/Brake	Brown	6-Brown
Marker/Tail	Green	3-Green
Ground	White	1-White
12V	Black	4-Black
Surge	Blue/Yellow	7-Center
Electric Brake Controller Signal	Blue	2-Blue

Install the 7-way trailer receptacle into its bracket (with the hinge toward the front of the vehicle.)

7. Secure harness with provided wire ties.

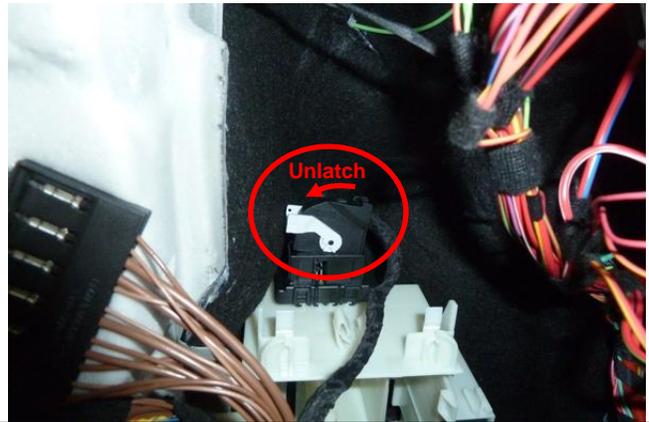


Internal Wiring

8. Unscrew the fuse box using a T30 torx driver.

Pull the fuse box aside to reveal a 26-pin connector located behind the fuse box. You will find it attached to the top of the white plastic module holder. (see photo)

Unlatch and unplug this 26-pin connector. (Do not unclip the socket from the plastic module holder; just unlatch and unplug the connector.)



9. Remove the casing from the 26-pin connector. See steps 1 & 2 for procedure. Note that the connector is a different number of pins in the procedure.

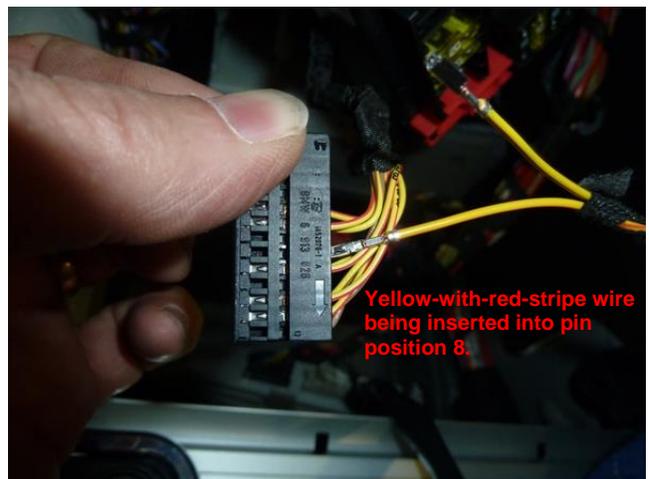
Then add the two CAN wires of the harness (the two small-gauge, yellow wires) to the 26-pin connector as follows:

- (1) Insert the Yellow/red wire into position 8.
- (2) Insert the Yellow/brown wire into position 21.

The wires should click permanently into place. They cannot be pulled out once properly seated.

Replace the casing back onto the 26-pin connector.

Plug the 26-pin connector back in, where it was originally, and latch it.



10. Turn the fuse box around to access the back.

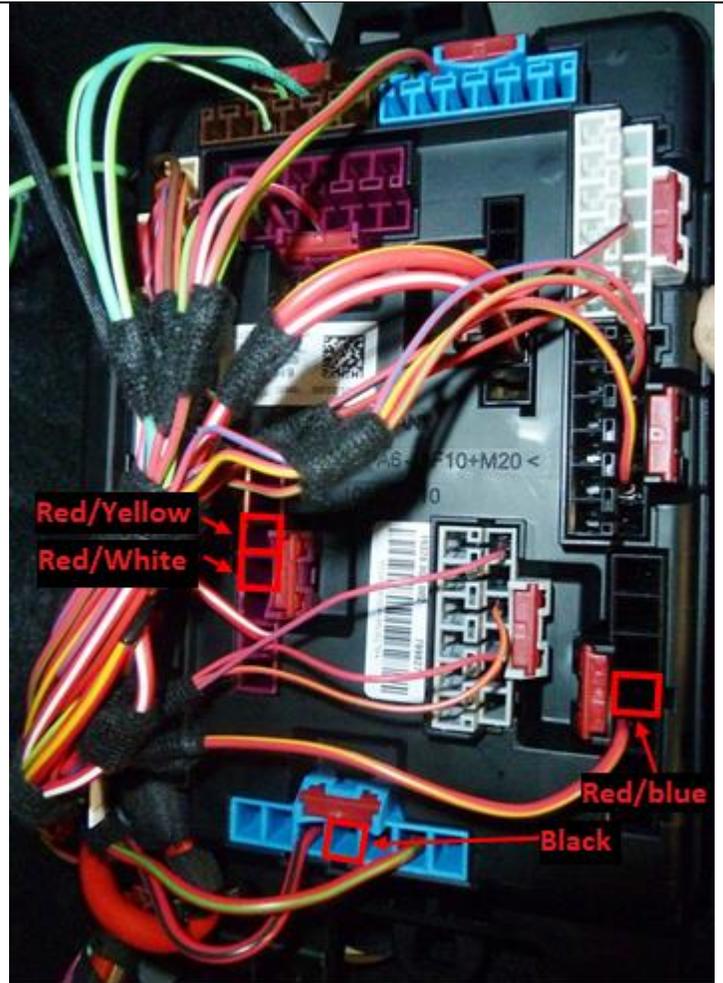
Carefully identify each of the four red power wires of the harness. The colors are:

- Solid Black
- Red/Blue
- Red/Yellow
- Red/White

Click each of these four power wires into the back of the fuse box as follows:

- (1) The **Red/Blue** wire – into the 4th (center) position of the black slots running vertically along the lower-right edge of the fuse box.
- (2) The solid **Black** wire -- into the 4th (center) position of the blue slots running horizontally along the bottom edge.
- (3) The **Red/White** wire – into the 4th (center) position of the purple slots running vertically on the left side.
- (4) The **Red/Yellow** wire – immediately above the Red/white wire in the same purple slots.

Turn the fuse box back around to its original position, and screw back into place with T30 torx. Make sure all fuses are fully seated after insertion of the (4) power wires.

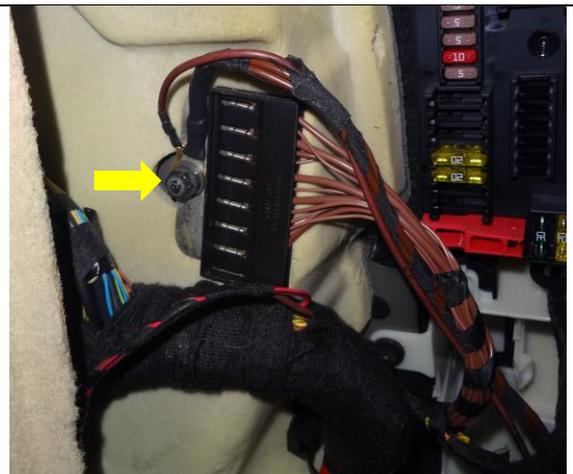


11. Locate the factory CANbus plug on the vehicle and connect it to the CANbus socket on the hitch harness.

[see photo in step 3 for location of vehicle plug]

12. Attach ground wires of the hitch harness to the vehicle grounding stud.

Requires 10mm socket.



13. Connect the cluster of 3 plugs on the hitch harness to the Controller at sockets "A", "B", and "C".
(Socket "D" is not used.)

Snap the Controller into an available slot in the vehicle's white plastic module holder, below the fuse box.

14. Using the wire ties provided, secure all slack in the hitch wiring harness to the vehicle harness in a manner to prevent any rattling.

Replace the side trim panel, and replace the plastic storage bin if vehicle is so equipped.

15. Start the vehicle. The dash may or may not display a "Trailer Lamp Malfunction" warning until the vehicle is programmed to accept the hitch module. See the Troubleshooting Guide on the following page for more info.

TROUBLESHOOTING:

If the dash displays “Trailer lamp malfunction” upon starting the vehicle, then the vehicle is recognizing the harness controller but not yet communicating with it properly.

To remedy this, turn off the vehicle and do the following:

1. Disconnect then firmly reconnect the 2-pin CANbus connector (step 8 above). The vehicle will re-try communications with the harness controller, and this may resolve the problem.
2. If the problem persists, the controller itself will need to be reset. Fortunately, the vehicle automatically resets the controller every time it awakes the controller from “sleep mode.”

To put the controller into battery-saving “sleep mode” and then awaken it:

- Lock the vehicle;
- Move the key fob and any cell phone that is paired with the vehicle at least 50 feet away from the vehicle;
- Wait 1 hour;
- Unlock and start the vehicle.

