

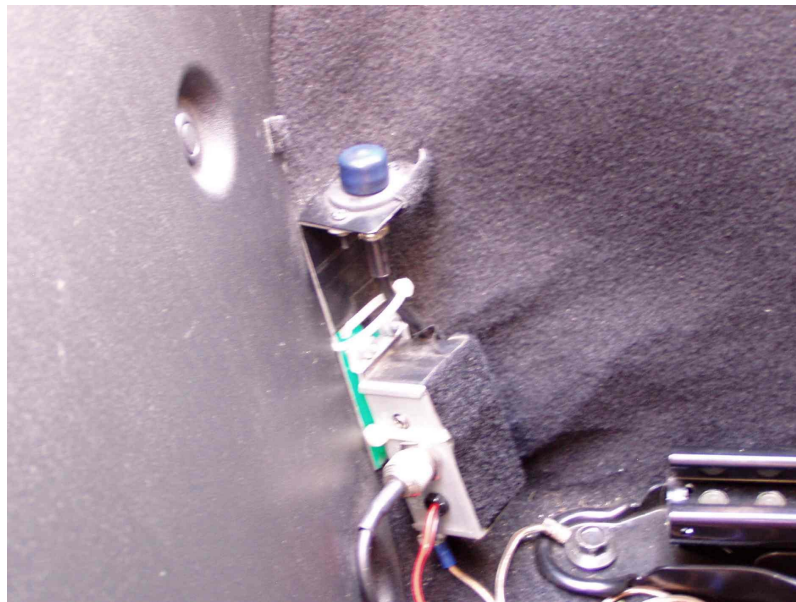
December 2010

Miata CB Radio Installation Tips

Last month I wrote about the Cobra C75-WXST CB radio and stated that Amazon.com and Buyreliant.com were 2 places it could be found on the internet. I also wrote about the Jeff Anderson Antenna Splitter, which you could buy thru Jeff in Florida. His home number in Florida is 1-850-650-2153, but his "Preferred" contact is by e-mail. His e-mail address is: jeffanderson@miata.net.

Here are some generic installation tips. If you need some tips specific to your model car, please contact me and I will help as best as I can. There are 4 main things to consider when installing the CB Radio set up. One is Location, others are Electrical Power, proper Grounding, and Antenna Installation. I will start with "Location".

The place with the most extra room seems to be low behind the passenger's seat out of the way. I actually attached my aluminum box from the Cobra "C75" to the carpeting behind the seat with heavy duty Velcro. I put the "Hook" side of the Velcro on the box, and pushed it onto the carpet. You can see in the attached picture that I also fabricated a small bracket to hold the microphone pigtail making it easier for me to hook up the "Mic" when I am ready to use the CB. This is also a good location as far as the antenna and electrical power connections.



It is normally the best for CB radio use to get the 12v power right from the battery. This helps to limit the electrical interference from accessories in the car. Wherever you hook into for electrical power, put a fuse close to that connection in case the wire could ever rub thru. A short could cause a fire. The 1st 2 series of Miatas have the battery in the trunk (The NA and NB). It is easy to run a wire to the trunk from the location behind the seat to hook right onto the battery. The 2006 and newer (NC) Miatas have the battery under the hood which is harder to get to. The easiest way to get to the battery up front is to push a wire along side of the

hood release cable where it goes thru the firewall on the driver's side. But this is not an easy task. The easiest is to remove the center console and tap into the cigarette lighter socket wiring. This is protected by a 20 amp fuse so there is no problem using this connection. I did mine this way.

Grounding of the CB radio equipment is VERY important for proper reception and optimum transmitting range. A CB radio needs a "Ground Plane" to work properly. The radio signal is transmitted straight away from the side of the antenna. The car body acts as "guide" to help the signal go straight away from the antenna, not up or down. (Not the exact scientific explanation). So the more places and the better you ground the installation, the better it will work. The minimum grounding would be to fasten a wire to the aluminum box and attach the other end to a bolt that holds the seat frame to the body. A second ground wire can be run to the mount in the trunk where the antenna bolts to the car body. I did this on my Miata also.

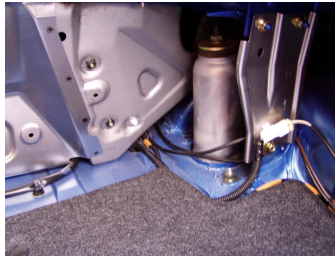
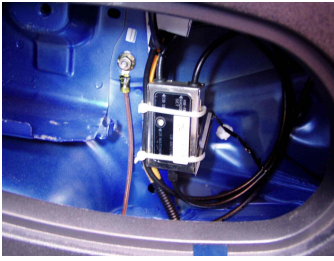
If you use a magnet mount antenna, you can feed the wire front from the trunk. You would leave the antenna in the trunk, and get the antenna out when you want to use it. Since the "Anderson Splitter" works so well, a lot of us are using it. The splitter is set up by Jeff Anderson to match the OEM antenna in the car, so you must tell him what year Miata you have and if it is a fixed or retractable antenna. Mount the splitter box where it can be easily accessed from inside the trunk. I attached mine to the brace where the wheel jack is mounted. The splitter can be fine tuned for the CB installation you have using a "Standing Wave meter", so making it accessible is a plus. The wire from your car radio, and the CB cable hook "into" the splitter, and the "out" wire from the splitter connects into the antenna itself, Installation is that easy! One item to note is that the 2006 and newer OEM antenna is just too short for CB use. The parts stores (Advance Auto, Pep Boys) sell a replacement antenna mast for around \$10. When using the CB just unscrew the OEM antenna and screw in the replacement mast you bought. I keep my replacement mast in the trunk, and just switch them before a club drive.

So now the question is how do you get from the passenger compartment to the trunk? Work from the passenger's side of the car and look at the plastic interior panels. You will see small



round "push clips" holding them into place. They are a larger outer ring and a smaller center flat spot. Put your finger nails around the smaller center flat part and pull it outward. It will pop out about a quarter of an inch or so and then the whole push clip will come out. Remove the panel at the door opening and the one behind the seat. This is the same on all series of Miatas.

Now go into the trunk and locate the same kind of push clips holding the trunk interior panels in place. You want to remove the panel on the passenger's side of the trunk, and any panels blocking access to the antenna mount. Looking back along the inside of the car from the passenger seat you will find a channel or passageway from the passenger compartment to the trunk. Feed any wiring you have thru this area. The passageway for the NC is a little smaller, but it is there. You can see the other attached pictures of how I mounted my splitter and where the channel is for the wiring.



For those who have the Powered Retractable Hard Top, be prepared for a tougher time getting the wire back thru to the trunk as the side passageway is blocked by the hard top well. About in the middle of the car trunk there is a small passageway under the hard top well, and it comes out at the small trap door behind the passenger' seat. "Fish" a stiff piece of wire thru there first, then attach any wiring to it and pull it thru. It is not easy, but doable.

Feel free to ask if you have any questions.