## 2012 Mazda 3 12 VDC Power Access

Last year I bought a new Mazda3, the first new car I have bought in years. The idea was to drive this car a couple of years and then pass it on to our daughter, the last one in the nest. This meant that any radio installation would have to be completely reversible so she wouldn't be driving a geekmobile.

So, I set about finding a way to get power directly from the battery, through the firewall and into the cabin. I think every vehicle in which I have installed a radio has had a nice, big grommet on the passenger side through which at least one wiring harness made its way to the engine. So, a couple of wires could be snaked from the battery through this grommet and to the mobile radio. However, the Mazda is different. This grommet is on the Driver's side and I could see no easy access to it.

Fortunately there is an alternative which is ideal. This car is an automatic (why an automatic? Daughter, get it?). There is a plastic plug near the brake peddle that is directly behind the battery box. According to the following website, this hole is where the clutch would be if the car were a 5 speed (and my daughter had been more successful in learning to drive our Jeep Wrangler): <a href="http://mazda3revolution.com/forums/2010-12-mazda-3-discussion/10943-hole-through-firewall-wires-battery.html">http://mazda3revolution.com/forums/2010-12-mazda-3-discussion/10943-hole-through-firewall-wires-battery.html</a>



Figure 1

Figure 1 shows the plastic plug after drilling a small, pilot hole. Figure 2 shows this pilot hole from the engine compartment. The latter shot shows the top, back section of the battery box and the pilot hole is just visible as the out-of-focus white spot near the left end of the notch in the battery box.

Next, the pilot hole was enlarged to 5/8 in. (Figure 3). I used this size hole so a female, two-pin, Cinch-Jones socket could be used as the 12-vdc receptacle. Also, the



Figure 2

hole had to accommodate two, 10-ga wires. This size wire may be the largest that can be squeezed through the components behind the battery box.



Figure 3

It is a pretty simple matter to snake a stiff wire or coat hanger from the battery box, through the hole and into the cab. Then, the two 10 ga power wires can be attached to the stiff wire and pulled into the engine compartment. Behind the battery box, there

are components on either side of the hole. So, it will take some twisting and turning to pull the wire to the battery box.

Once the wires are pulled to the battery box, simply connect them to the appropriate terminals using some sort of heavy duty lugs. There is plenty of room for the wire to exit the battery box.



Figure 4

Figure 4 shows the socket after installation and mated with a two-pin male plug. I am a pretty big fan of the Cinch-Jones, two-pin plugs and sockets. For 12 vdc, I have used them for installations drawing up to 20 amps with no problems.

The next step of course is to add an antenna and fire the rig up. The antenna is the tricky part without geeking up the car. In my experience the absolute best place for an antenna is in the middle of the roof. If that location is compared to any other, there is a world of difference. And I have found the worst place for an antenna is on the bumper. In my old Jeep Cherokees, I thought nothing of drilling a hole in the roof over the dome light. Of course that Geek City approach wouldn't work with the Mazda; besides, it has a sunroof. So, the next best option was a trunk-lip mount and a hamstick. Actually, on 20 meters that works pretty well.