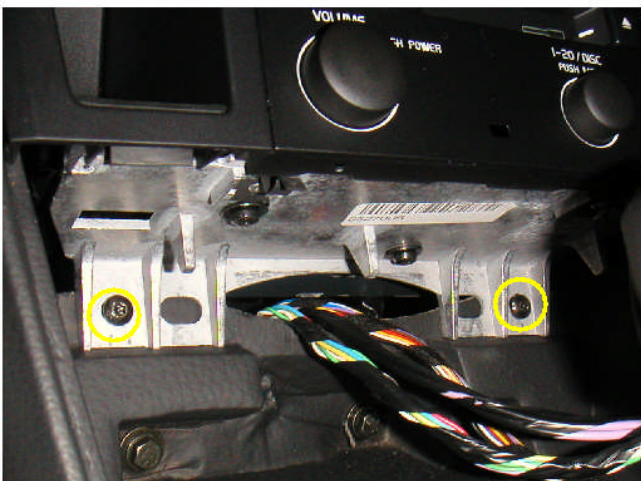
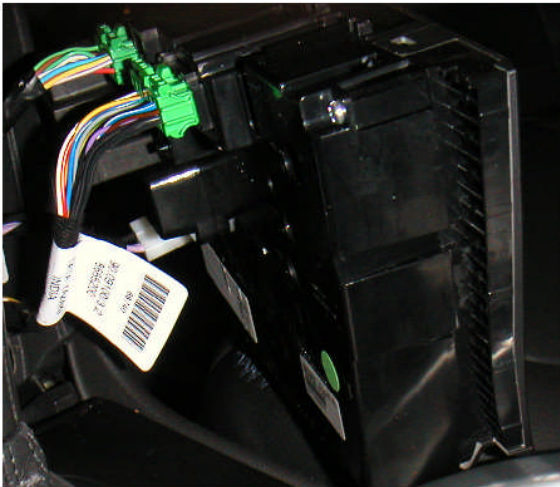




Here is how I installed the USASpec PA11-VOL iPod interface in a 2004 XC70 with a HU-613 Head unit.

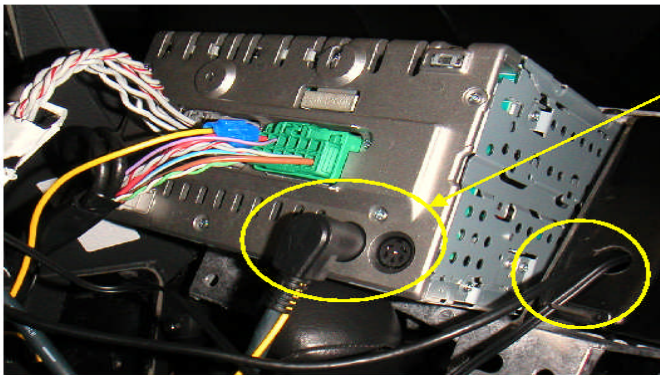
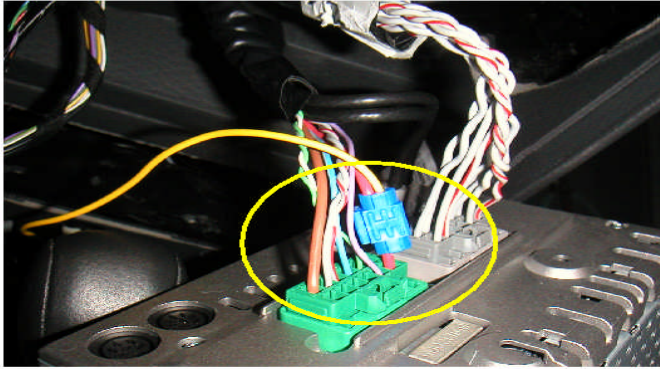
- 1.** Volvo HU-613 Head unit prior to install.
- 2.** I used a burnishing tool to pry off the pen holder.
- 3.** Remove the two torx screws from the bottom of the Climate Control Module.



4. Removal of the Climate Control Module is a challenge. I slid the burnishing tool up the right side until it released a bit, then I did the same on the left side. Once both sides were loose, I grabbed the edges and pulled the unit out as straight as possible. It was a challenge, but it came out.

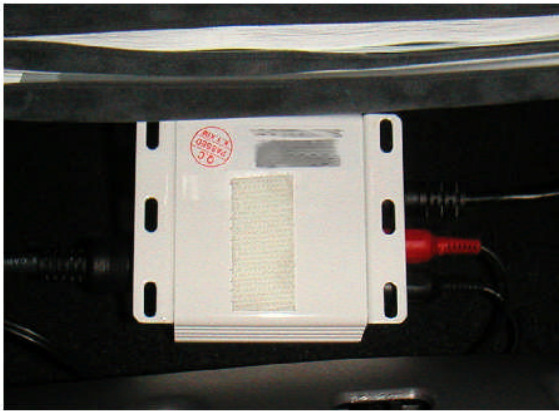
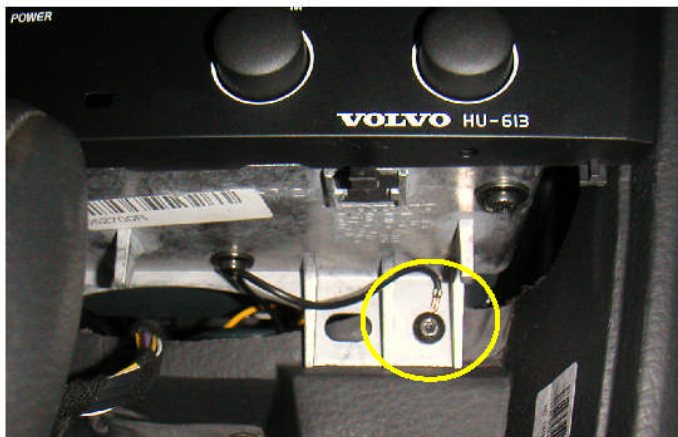
5. This is the CCM removed. Do not disconnect any wires! Just carefully move the unit out of the way, the wires are long enough.

6. Remove the two torx screws holding in the head unit. Remove the Head unit, being careful not to disconnect any wires.



7. I made a trip to Radio Shack and bought a package of Tap-In Squeeze Connectors (64-3052), only one is needed. Attach the yellow wire from CAS- VO5i to the big red wire on the back of the head unit, and crimp tightly.

8. This is the back of the head unit showing DIN connector attached to the CD changer input. I'm not sure what the other DIN jack is for, but my guess is it's for a MD Changer (I've never actually seen one). I drilled a hole in the back of the cubbyhole to allow the iPod cable and a standard 1/8" to run through, more on this later



9. I reinstalled the Head unit and attached the CAS-VO5i ground wire to one of the torx screws.
10. I routed all the wires through the glove box and attached to the PA11-VOL as per the USA Spec instructions.
11. I applied a sticky back piece of Velcro to the bottom side of the unit. I applied the other piece of Velcro to the back side of the glove box and attached the PA11-VOL as

shown. I tied all the loose wires together with a couple of zip ties. At this point I tested everything, just to be sure. All was working, so I reinstalled the CCM and the pen holder.



12. This picture shows the two cables routed through the hole drilled in the cubbyhole. The wires run behind the Head unit to the PA11-VOL. One is the iPod dock connector, and the other is a standard 1/8" stereo plug that connects to the AUX inputs.

13. This is my homemade iPod cradle. It looks ridiculous but it works quite well. It's origins are a prescription cough syrup bottle and another pill bottle with a piece of Velcro attached. Another piece of Velcro is adhered to the inside of the cubbyhole.



14. This is the finished install. As you can see, the Head unit recognizes the iPod as a CD Changer. I set both DIP switches on the PA11-VOL to off, so I can use the 1/8" AUX wire (which is coiled up behind the cradle) and use the iPod in Direct mode. The PA11-VOL makes for a much cleaner install while providing much better sound quality than a cassette adapter or an FM modulator

