

## PHASE II – Running the wires for the back-up signal and display to the trunk

13. Pull the trim piece near the driver's side tail light outward, in the direction of the red arrow.



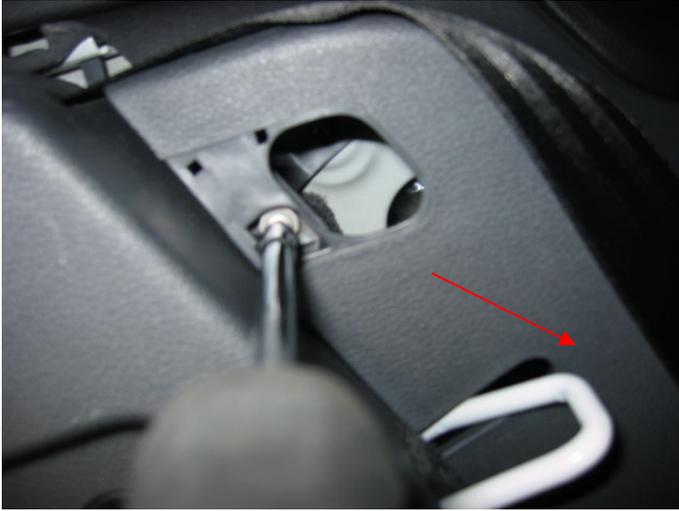
14. Use a T-20 driver to remove the screw that's behind the panel in Step #13.



15. Remove the panel arrowed to below.



16. Use a T-20 driver to remove the screw behind the panel in Step #15. Pull the panel outward as arrowed below.



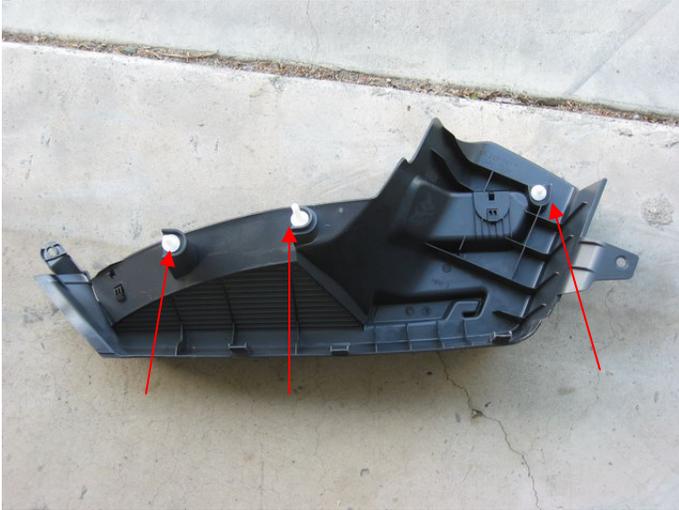
17. Use a T-20 driver to remove the screw arrowed to below.



18. Pull the panel outward in the direction of the arrows to remove it. Also, see Step 18.



19. Here is the pic of the panel removed in Step #18. Arrowed to are the 3 plastic retaining posts that hold the panel piece on, in addition to the screws that were removed in Steps #14 & 17.



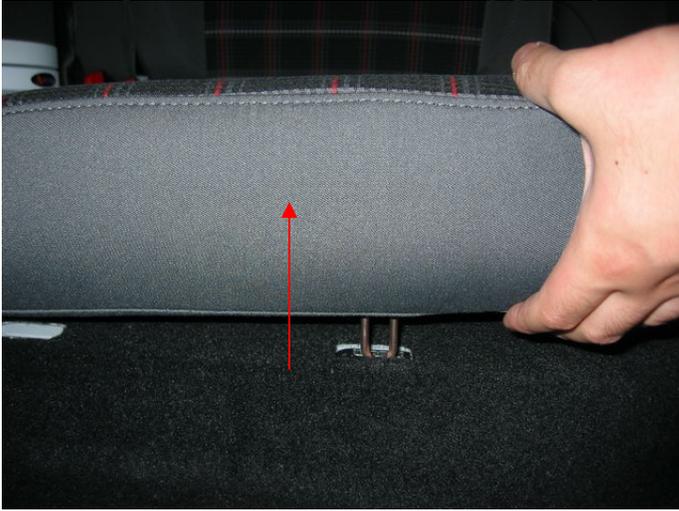
20. Using something dull, pry the door foot panel upwards to start unclipping the door foot panel. Be careful not to damage the panel. Remove all the clips along the door. There are about 5 or so clips (I don't remember exactly)



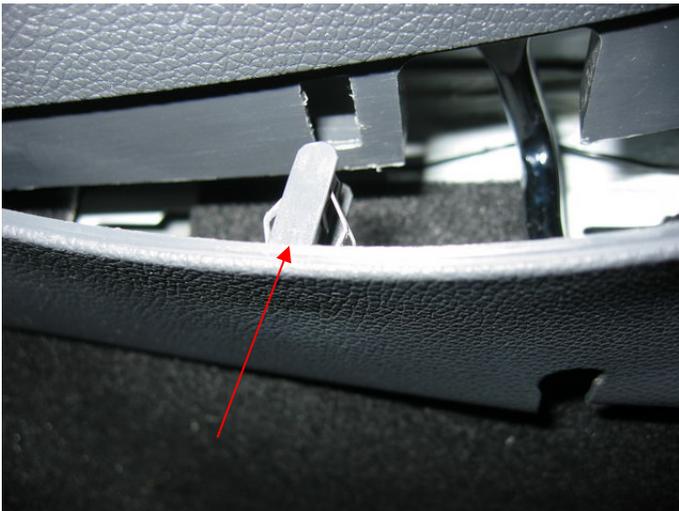
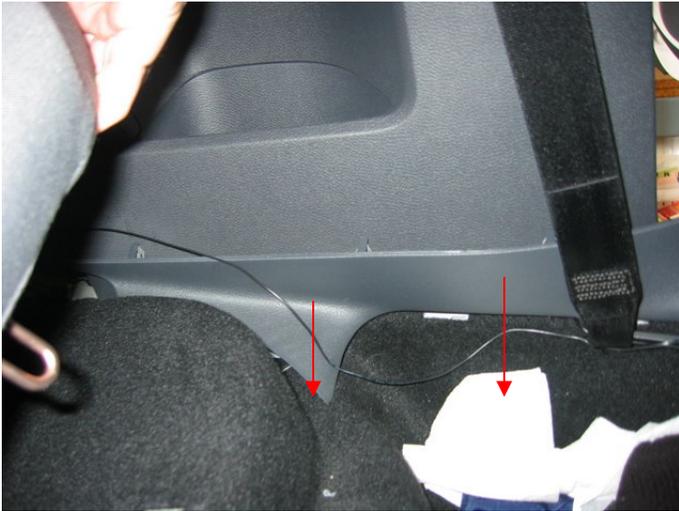
21. Here is a pic under part the panel that shows the clip.



22. Lift up the rear driver's side seat by pulling the seat cushion upwards. The seats do not have to be removed.



23. Pull the second half of the panel by pulling it outward, holding the seat cushion up with one hand (first part was unclipped in Steps # 20 & 21). At this point, the whole trim piece can be removed and set aside. The second pic shows what the tab looks like after it has been removed. I believe there where 3 tabs, but not 100% sure.



24. Determine where to put the display module. I temporarily put it on the dash, and ran the wires down the driver's side.

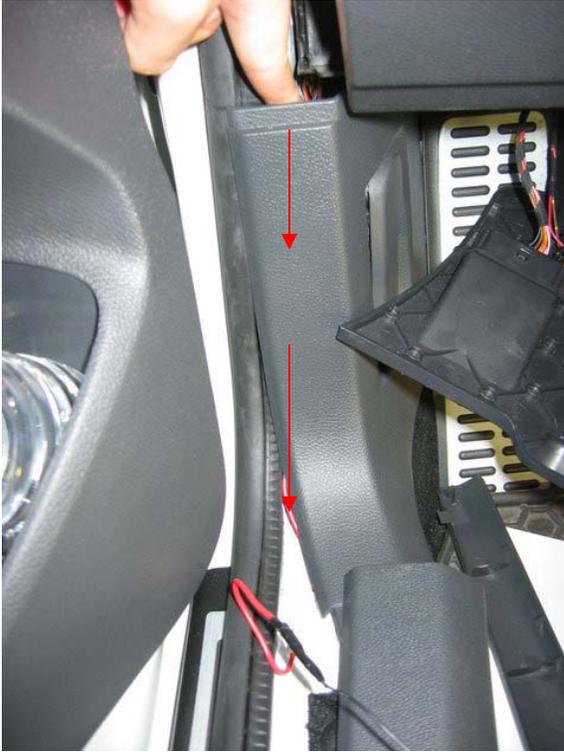


25. Remove the fuse box panel, and the small panel behind the fuse box panel on the driver's side. Pic shown below (left) is of the panels removed. Make sure to route the wire behind the dash area as shown on the pic to the right so that the wire doesn't get squished.

Then, run the sensor wire in the panel area down to the hood release panel as shown by the arrows.



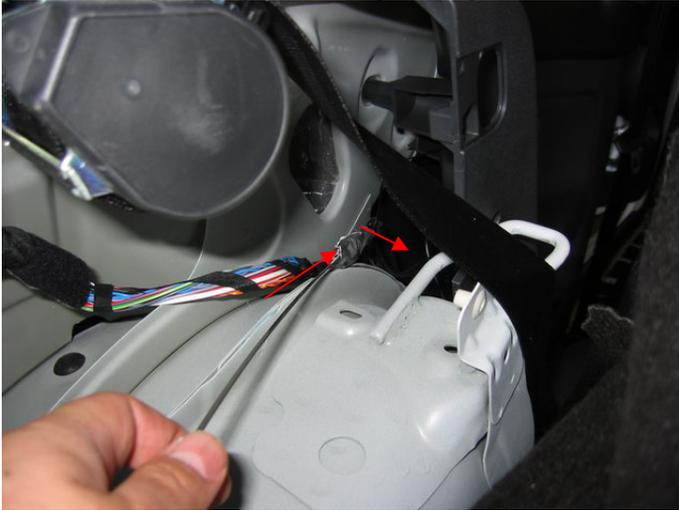
26. Push the hood release panel outward, and feed the wire through the panel, in the direction of the arrows.



27. You can either run the wires for both the back-up signal wire and the display harness along the door sill area as shown below, or run it in the carpeted area right next to the door sill area. Run the wires in the direction of the arrows, using duct tape to hold down the wires. Make sure the wires don't get pinched in between the door sill panel and the retaining clips. The red oval shows where I put my fuse.



28. Run the snake down the side of the rear driver's side panel, under where the seat belt is. The snake should go in the direction as shown by the arrows, and will come out on the other side near the rear driver's side seat as shown in the pic to the right. If you don't get it right the first time, keep trying to feed the snake. It took me a few tries.



29. Tie the display wires and back-up light signal wire on the snake (left) and duct tape it real well (right)



30. Pull the snake out, from the other side, and it should come out near the left picture on Step #28.

### **PHASE III – Installing the sensors into the bumper - NOW COMES THE FUN PART!**

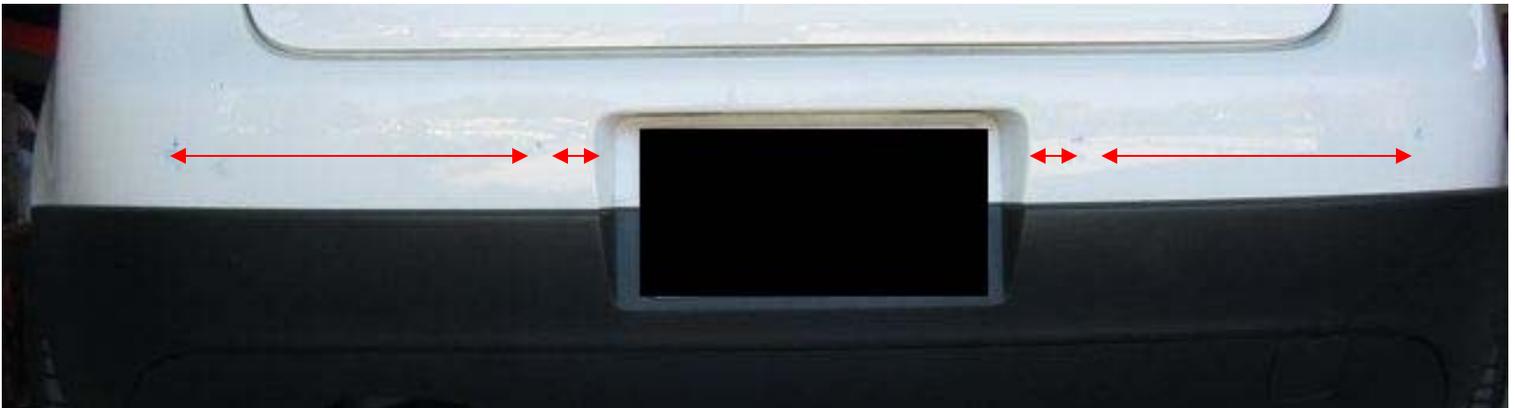
31. Mark where you want to drill the holes (horizontally and vertically). Mine was approximately 22" A.F.F., but this really depends on your drop. You want to make sure that the sensors are installed at least 22" A.F.F. Dimensions below are measured center to center. Note: Please refer to the instructions in your sensor kit for position location, as it may be different from what I used. Make sure to drill on a level part of the bumper.

14"

2"

2"

14"



32. Double and triple check Step 31. Step back about 10 feet and take a look, and make absolutely sure that that's where you want to place the sensors.

33. Remove the bumper. Follow the rear bumper DIY.

34. After removing the bumper, slowly start drilling a pilot hole using a small bit, say 1/8" or so, but just do a tiny bit. Then, remove the drill and check the location of the hole to make absolutely sure that that's exactly where you want the hole (right). Continue drilling the pilot hole all the way through the bumper.



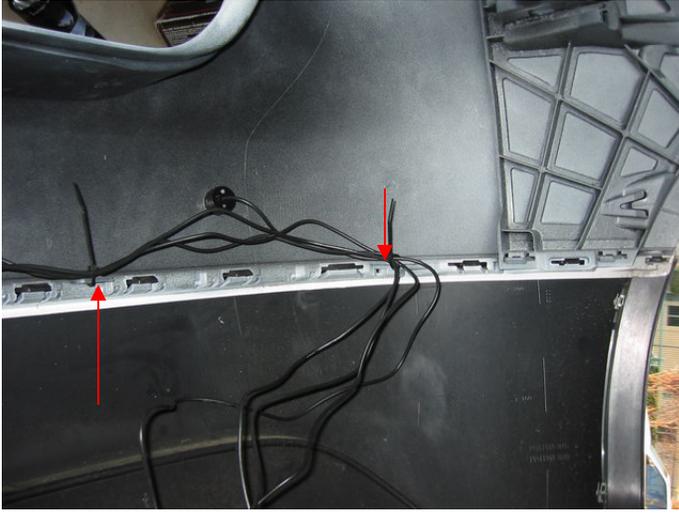
35. Use the hole saw (was provided with the back-up sensor kit in my case) and drill the hole. Make sure to debur the hole, and also redrill the hole again to make sure that enough plastic was removed.



36. Repeat Steps 34 & 35 for the remaining holes.

37. Determine which sensor goes where. The kit should show which sensor is supposed to go where. My kit was labeled as A-D, with A being on the far driver's side, going right to B, then C, and D was on the far passenger's side. Insert the sensor in the correct slot, pushing the wire in first, and then pushing the sensor in. **BE SURE TO NOTE THE CORRECT ORIENTATION OF THE SENSORS, WHICH SHOULD BE SHOWN IN THE KIT INSTRUCTIONS.**

38. Route the wires along the inside of the bumper, using the license plate light slots if possible to hold the wires. I also drilled some holes in the tabs and used zip ties to hold the wires. I routed the wires to the driver's side.



39. Move the bumper close enough to run the wires through the driver's side vent. Insert the wires through the driver's side vent, which is behind the bumper area, on the side of the car.



40. Pull the wires up through the driver's side rear well (behind the brake light area).



41. Re-attach the bumper following the rear bumper removal diy, making sure not to pinch any of the sensor wires.

## PHASE IV – Final connections

42. Remove the ground wire in the driver's side well area under the seat belt with a 10mm socket (left). Solder the ground wire from the kit to the car's ground wire (right) and re-attach the ground wire on the car.

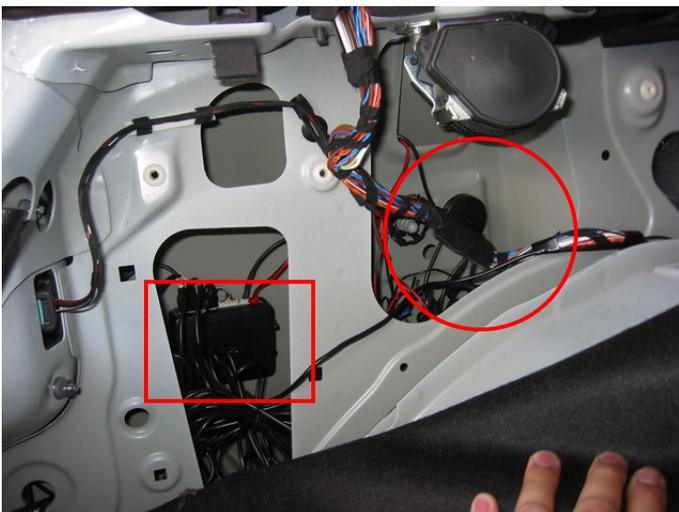


43. Connect the back-up light power wire from Step #8 and the ground wire from Step #41 into the power harness for the back-up sensor kit, using either the soldering iron, or some butt connectors. My harness was simply two wires, so fairly straight forward.

44. Place Velcro or some adhesive on the back of the control unit and speaker.



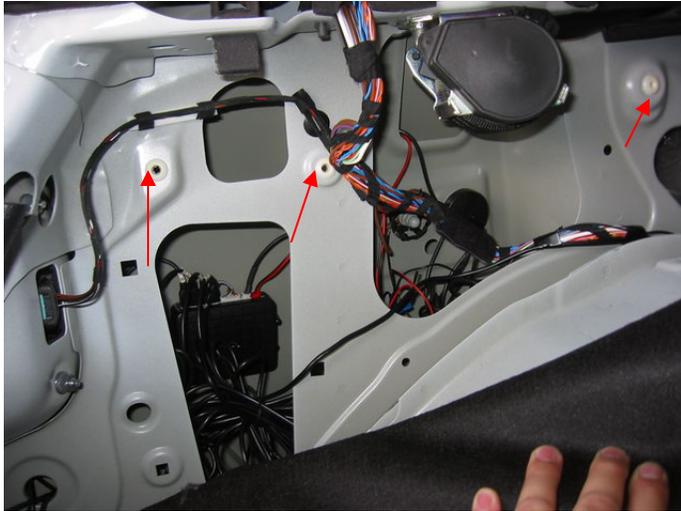
45. Determine where to place the control unit (red rectangle) and speaker (red circle). A sample location is shown below.



46. Feel around the crevices of the well area – there are usually openings connecting them. Where possible, route the wires through the openings. Attach the power, speaker, display, and sensor harnesses as per the locations shown in the back-up kit's manual. A sample of what a connected control unit looks like is shown in Step #44.

### **PHASE V – Re-installing the panels**

47. Re-install the panel in Step #19. Pay attention to the 3 retention posts arrowed to in Step #19. They need to be inserted into the slots arrowed to below. Install the screws removed in Steps #14 & 17. Be sure to reinstall the cloth piece that goes over the seat belt retractor, if you previously removed it.



48. Put the panel in Step #16 back on, and put the screw on. Put the small cover piece from Step #15 back on.

49. Put the hood release panel in Step #9 back into place.

49. Put on the panel long panel that goes from the floor on the front edge of the door to the rear of the passenger's side rear seat in Steps # 20-23. Note: Be sure that the clips do not pinch any of the wires. Make sure that all the clips are in place, if not, use pliers to pull the clips from the frame, and put them back on the panel BEFORE installing the panel.

50. Put on the fuse box panel and the panel behind the fuse cover in Step #25.

51. Put on the driver's side kick panel in Step #3 using two T-20 screws.

52. Push the panel in Step #13 back into place.

**THAT'S IT!!! YOU'RE DONE! BE SURE TO TEST OUT THE PARKTRONIC SYSTEM TO SEE HOW ACCURATE IT IS. AS ALWAYS, PARKTRONIC IS ONLY MEANT AS A PARKING AID, AND YOU SHOULD ALWAYS USE COMMON SENSE AND GOOD JUDGEMENT WHEN USING THIS SYSTEM.**