Comments

Finding a place to install the Navtool device is not an easy task and every installer I ask indicated they would not guaranty that it would work. So on to option # 2

I did the overall install over a period of two days because at almost 70 and not being able to get into the trunk easily leaves some aches and pains.

Everything went pretty smoothly although I did find some issues that I will comment on in this procedure.

Removing rear liner

First of all to make life easier I ordered this tool from amazon and it makes removing the fasteners very easy. It really was well worth the few dollars is cost.



Lisle 35260 Plastic Fastener Remover

http://www.amazon.com/Lisle-35260-Plastic-Fastener-Remover/dp/B0002SRCMO/ref=sr_1_3?ie=UTF8&qid=1399504359&sr=8-3&keywords=fastener+removal+tool%5C

Next remove the tool tray nuts and the plastic fasteners on each side of the tray. You have to lower the jack when you get ready to remove the tool tray.



Now lift out the side pockets and the tool tray



This is a view of the back panel. I put a spare tire kit in my SC430 so it may look slightly different if you are using run flats. Remove all the clips, tie downs, and rubber bumpers.



Camera Install

First I drilled a 3/8 hole from the inside deck into the cutout area underneath the license plate. I used a 3/8 rubber grommet to protect the camera wire as seen in the next pictures.



I slipped some 3/8 inch cable tubing from home depot to protect the camera wire. It matched the OEM tubing and will protect the wire.



I purchased a Metra license plate backup camera that I found online at BestBuy. It was somewhat less klutzy than others that I found. Very stable when mounted and the video quality was acceptable.



Now remove all of the clips and tie downs that that are holding down the deck cover.



Now you can pull the deck cover up and back to remove it.



Navtool Install - (Latest Navtool Unit)

This job would be 100% easier if 12v accessory was available any place other than a cable on the back of the Navigation unit. Unless you are Houdini you are not going to access the connector without removing the bolts holding the unit in place.

First I disconnected the unit on top of the Navigation unit. I was not sure if this needed to be done but it does make access to the Navigation unit easier as it can be move out of the way.



Now you can see the top module unbolted and I was able to sit it on top of the unit behind it when accessing the Navigation unit connectors.

Remove the 2 nuts and 1 bolt holding the Navigation unit in place. There is one nut on the right side and a nut and bolt on the left side.



Here is where it gets dicey and I experienced by first problem. First I removed all the connectors so that I could more easily access the 18 pin connector.

Each connector has a release lever that you need to push down to pull the connector out.

I took a marker pin and labeled the connectors just in case but this probably was not necessary.

Navtools installation document gives you detailed information about the 18 pin connector which may have some misinformation or my problem could just be year related.

There is very little slack in the cables even though I cut the electrical tape binding them together. There is enough to access the connector in some limited fashion if you are like me and too old to get in the trunk area.

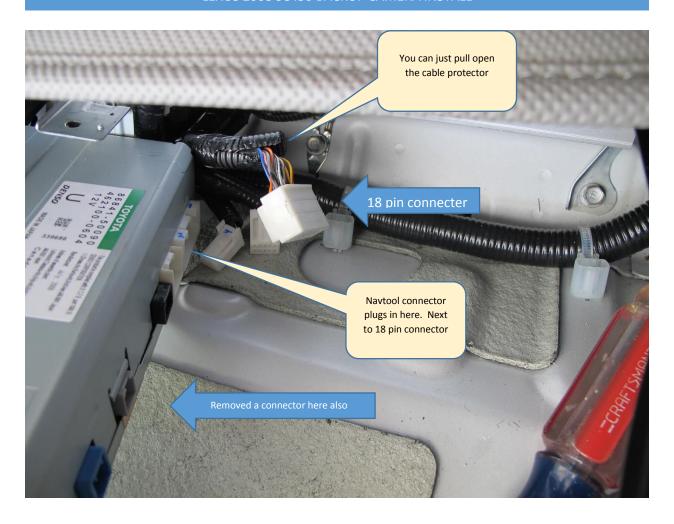
Trying to strip and solder the connector wires for me was impossible so I had pre purchased some P-taps from a company manufacturing Posi-Lock connectors. They are supposed to be vibration proof so I guess time will tell. They did make the wire connections very easy. You can get these on e-bay which is where I purchased mine.

http://easternbeaver.com/Main/Elec Products/Posi-Lock/posi-lock.html

First I tapped the Gray 12 volt accessory line on pin 18. The connectors make it very easy to test the 12v accessory connection, I just started the car and used a low voltage tester to make sure 12v was there.

Next I tapped the Reverse wire pin 14 (yellow/red) and here was my first issue. I had my wife start the car and put it into revers but did not have any voltage coming thru the P-tap. Finally I removed the P-tap and took my 12v low voltage tester directly to the wire but still had nothing when the car was put into reverse.

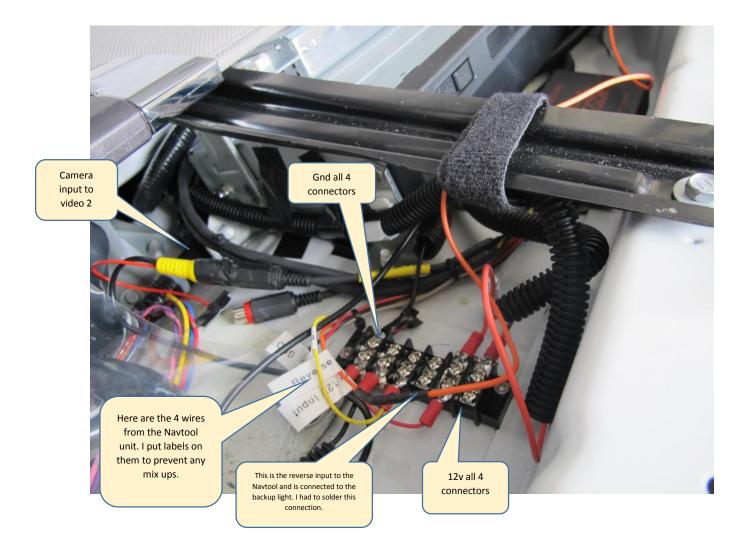
I didn't worry about this too much as I felt uncomfortable tapping this connector anyway and figured I could just use the backup light. Possibly it will work for you but I think tapping the reverse lights is a safer way to go.

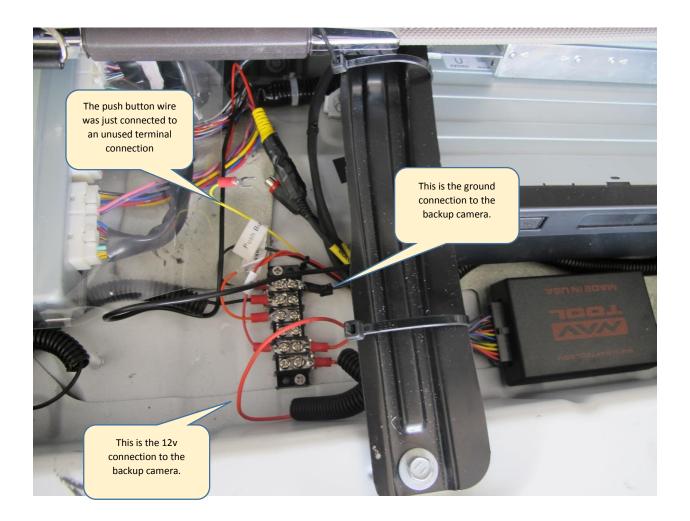


I used this bolt for ground and put a nylon lock nut on top of the original.



I used a terminal strip I purchase at radio shack to distribute 12v and ground. Originally I put the reverse connection there also but this got me into issue #2 which still puzzles me. I'll cover this later. Anyway this was easier than multiple splices and will make it easier to trouble shoot in the future.

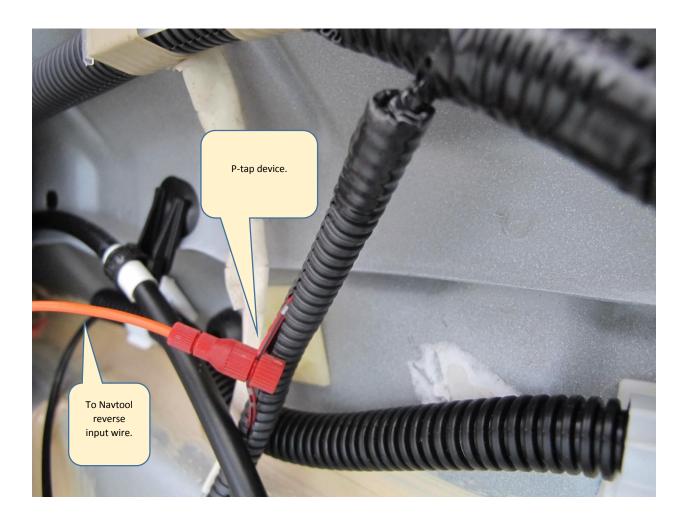




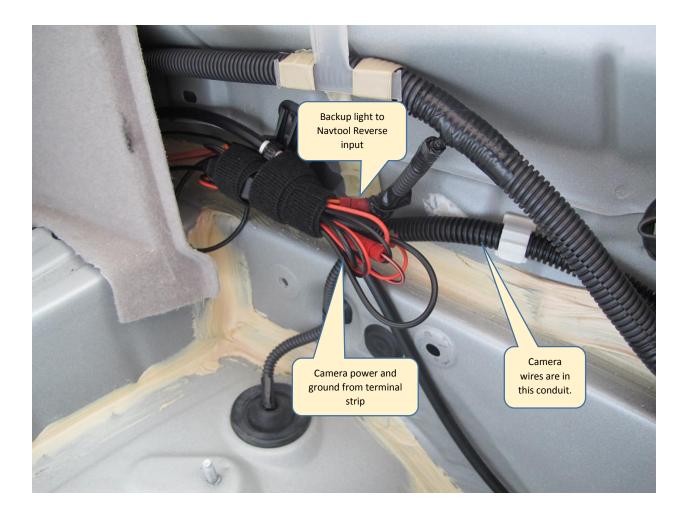
Navtool positioned with Velcro that had double sided tape. This should also provide some cushioning for the unit.



Here is my tap to the backup light on the passenger's side. You can just pry open the cable conduit and pull the wire out. Once taped I just pushed it back in and used some electrical tape to make sure it was secure. I then tested that I had 12v here when the car was put into reverse.

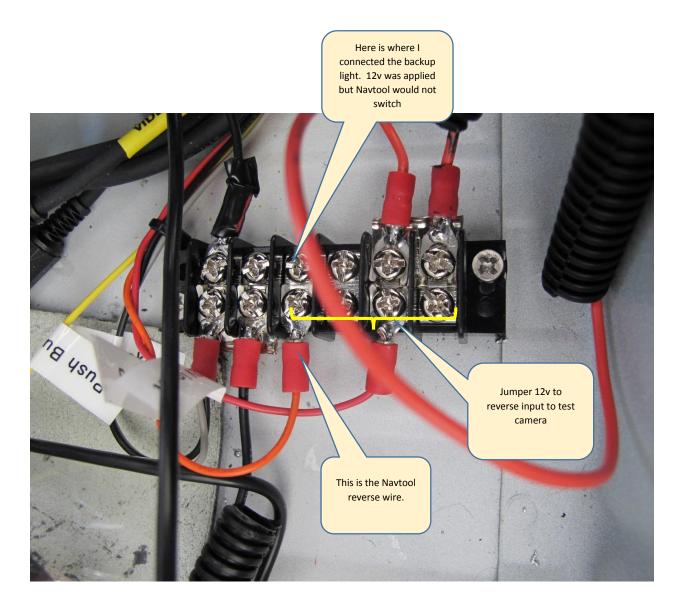


Here is a picture of the backup lights and the camera 12v and ground connections.



Here is issue # 2 discussed so that you won't make the same mistake. I connected the backup light wire as indicated below but when the car was put into reverse the Navtool would not switch video inputs. I measured 12 volts with a multi meter so I knew the voltage was there. When I jumped 12 v from the connector to the reverse input then the Navtool was showing the camera working.

I finally found out that if I connected the backup light directly to the Navtool reverse wire then everything would work. The only think that makes sense is that the backup light was not providing enough current to the Navtool input thru the connector.



Finally everything is working so I started putting everything back together. If you do not want the backup markers you can simply cut one loopback wire one the camera cable to disable it.

