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The Vehicle



The vehicle is a clean (that is no previous electrical gadgets attached) Vespa GTS 250 i.e. ABS model year 2008.

The Navigator

The navigator is the Garmin zūmo 660



Where (not) to install all the cables?

On some models there is space just in front of the drivers left knee but on the ABS model this is not the case.



The Idea

Do as little irreversible modifications as possible by using the hole where the wind screen is mounted to pass the cables through and stash away the cable connections behind the fuses in the glove compartment



Step 1 – removing the front handlebar cover



- A. Remove wind screen
- B. Remove riding mirrors
- C. Carefully pry off the Piaggio plate
(note the glove as protection)
- D. Remove the screw behind it



- E. Remove the front top screw just below the headlight
- F. Do NOT remove this screw



- G. Remove the two screws on the bottom side to the left and right
- H. Remove the cover



Step 2 – extending the hole

By carefully using a file or knife make a small crater in the front end of the hole where the wind screen passes through the cover. This will allow you to tighten the mechanism while not damaging the cables.

Step 3 – finding a path for the cables



Now as the cable will not easily pass through the interior of the Vespa a bit of help is needed.

A. Using an old cable/wire from the top side



allows you to find a path down to the glove compartment.

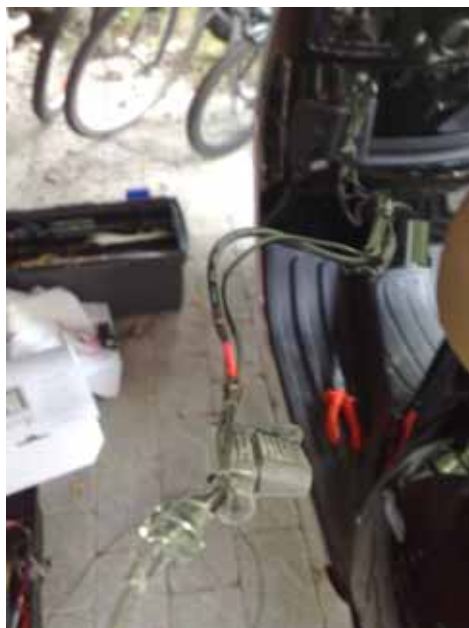
B. Securing the cabling to the old cable



using tape



Will allow you to slowly pull and push the new cabling through the inside dungeons and once through you can remove the tape and the old cable.



Step 4 – power time

As there is no place described in the manual for connection accessories (at least not that I could find) I decided to do it from scratch starting at the battery.

- A. Remove any floor cover
- B. Unscrew the battery cover plate



- C. Now finding a way down through the frame turned up hard and when trying the way up through the frame I got stuck with the old cable so I decided to use my nylon tool with a flexible metal spring in the end (used when installing electrical cabling inside the walls in houses) and this I managed to get through from the bottom



- D. With only the end remaining at the battery side I secured the 12 V cable to the end



E. On the top front side I turned the nylon string back down so it found its way down to the fuses.

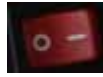


F. Then it was quite easy to pull the 12 V cable through



Step 5 – The switch

As I wanted a switch for the power



I tried it out using a piece of cardboard and then carefully did the same thing in the plastic cover holding the fuses in the glove compartment and finally mounted the switch. The keyword is patience.

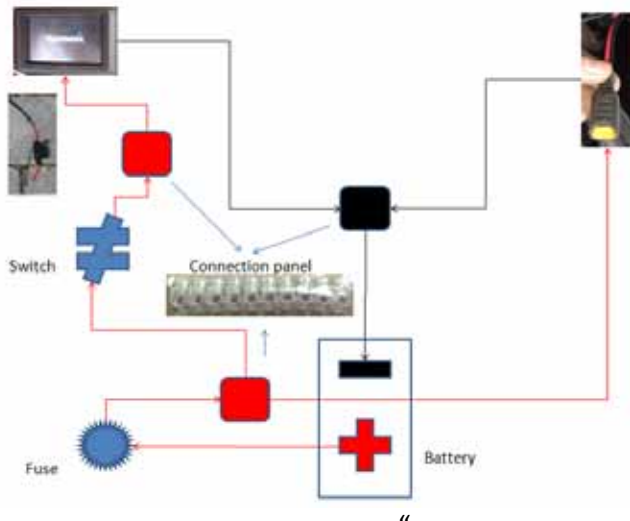
Step 6 – mount the holder for the navigator

Mount the holder for the navigator on the handle bar this must be done now so the cables can be adjusted in length and position in the next coming steps. When doing this you also mount the handle bar cover and wind shield.



Step 7 – Connecting it together

No rocket science, while at it I threw in a connector to battery charger (top right corner)



Connect it all, hide the “birds nest”, fasten the fuse panel and place the cable ends that you may need later inside the glove compartment

Step 8 - connecting the power

A. Adjust the length of you power cable

B. Prepare a fuse with holder



C. Fasten a connector and D. shrink wrap it



E. That goes for all connections



F. Then connect the battery

G. Replace the cover plate and floor cover



Step 9 – Testing

Snap on your navigator and turn the power on



If everything works as expected you can remove the navigator, turn off the power and snap on the protection cover.

