

Volvo P1 Alarm Module Battery Hack

Stan Krol 8-14-2017

The alarm module in the Volvo P1 cars, and likely other models, tend to trigger randomly after they age. There may be other causes but often it is a result of the internal NiMh rechargeable battery failing. Unfortunately, the alarm module is not designed for battery replacement. The fix is normally to replace the alarm module. The MSRP for the module is \$229 for part number 30659894 Siren S40, V50; W/ LEVEL SENSOR or 30659892 Siren Alarm W/ O LEVEL SENSOR, but can be found for \$182. This may be rather steep in price for most. A search of the internet will yield results showing hacks which replace the internal rechargeable battery pack with an external battery pack. This is acceptable and economical, however, I was able to find a battery that, with a little modification, will fit cleanly inside the alarm module housing.

The alarm module is located inside the cowl on the passenger side (on left hand drive vehicles). The module is attached to a metal mounting bracket.



Remove the metal bracket.



The alarm module housing is constructed of two pieces which are glued together. They can be separated using a screwdriver to pry them apart.



You can see the multi-cell battery module in green shrink wrap. It is a Varta 4.8V 240mAh battery pack.

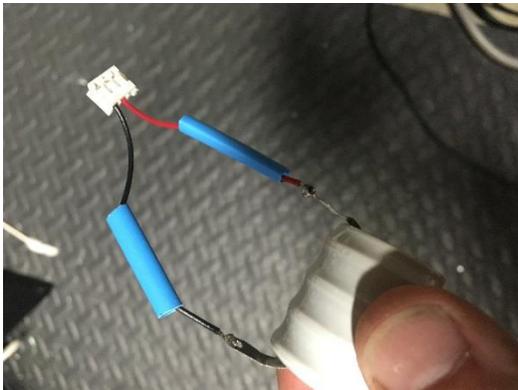


I was able to find a 4-cell NiH2 battery pack with similar specs. The important spec is the voltage. The amp-hour (AH) rating should be the same or greater than the original.

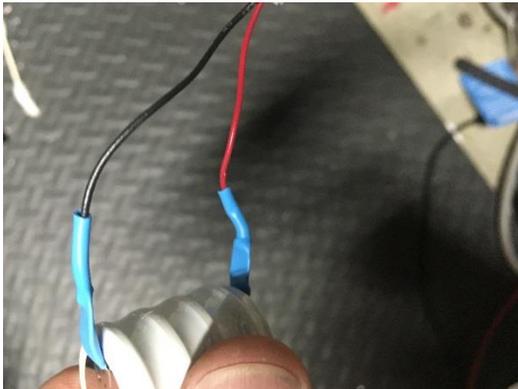




In this case, the replacement battery has solder tabs and the old wire harness needs to be transferred to the new battery. Clip the harness off the old battery and solder it to the new battery.



Also, should insulate the tabs with heat shrink tubing to prevent shorting



To get the other half of the housing to fit, there are a few ribs that need to be removed to accommodate the replacement battery.



Hot glue the replacement battery into place.



Glue the two halves of the alarm module together.



Reattach the mounting bracket and install in car.

