

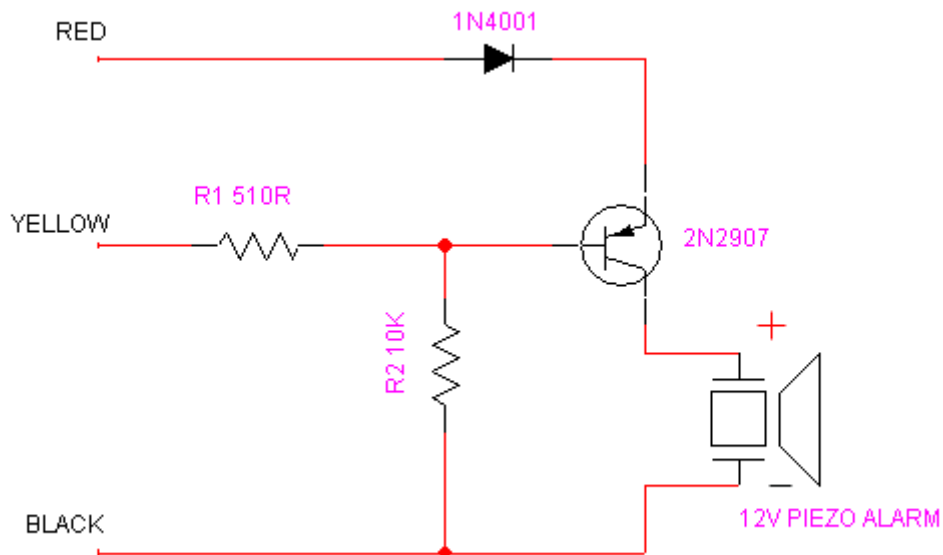
Lights On Alarm Wiring instructions

The following is a set of instructions to build and install a 'Headlight on' warning alarm to help prevent running the battery flat! Basically if you open the door of your van with the headlights on and the ignition switched off the alarm will sound prompting you to turn off the lights. If you turn the ignition on while the door is open and the alarm is sounding it will switch off. If you do not wish the alarm to activate when the passenger door is open there is a mod at the end of the page to stop this from happening. This is a real easy thing to build and install, so please do not be put off by the pictures. If you read through them and follow them carefully then you should have no probs. You can always email me if you get into real difficulty.

Component list

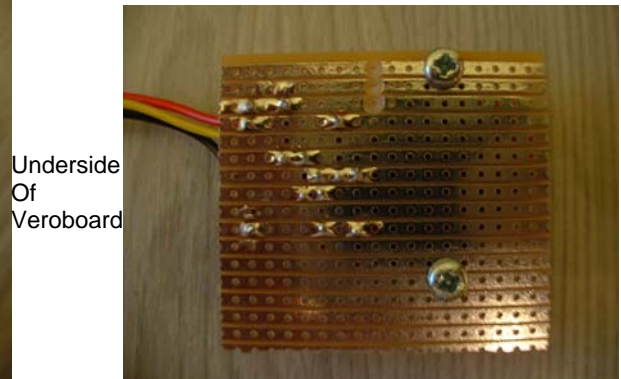
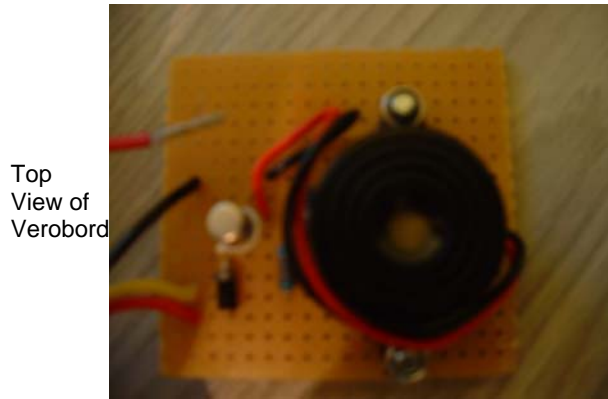
Component Number	Component	Type
1N4001	D1	Diode
210K	R1	Resistor
510R	R2	Resistor
2N2907	T1	PNP Transistor
12V Piezo or Buzzer		
1N4002	Optional (see install instructions)	Diode

Here is the Schematic diagram for the above circuit...



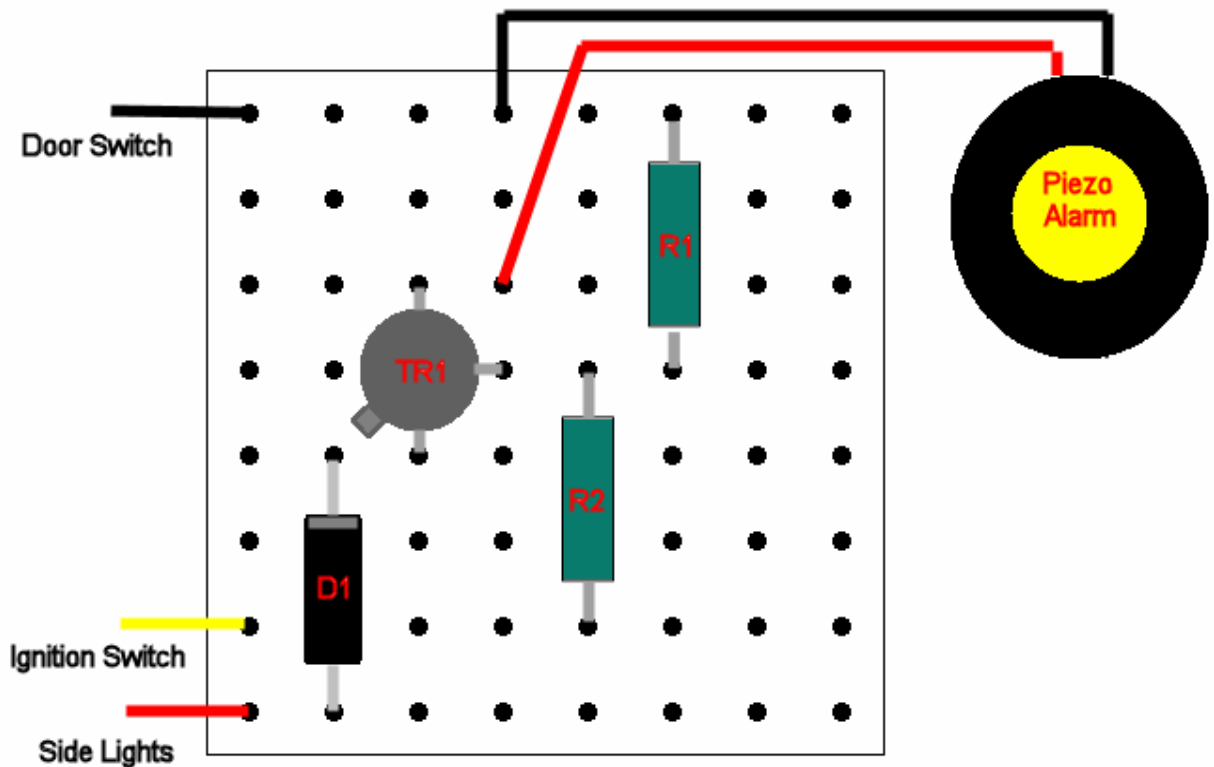
The easiest way to assemble the unit is to use veroboard. Veroboard is made from a non conductive material and on one side has copper tracks. The board has holes drilled through it every couple of mm allowing you to insert the components and solder on the copper side.

Here is a picture of both sides of the completed unit



To make it as simple as possible to assemble I have included the Image below showing where to put the Components. This example has the piezo alarm (speaker) not fitted to the board as the example above. The only difference is the above example requires a larger piece of veroboard to allow the mounting of the speaker.

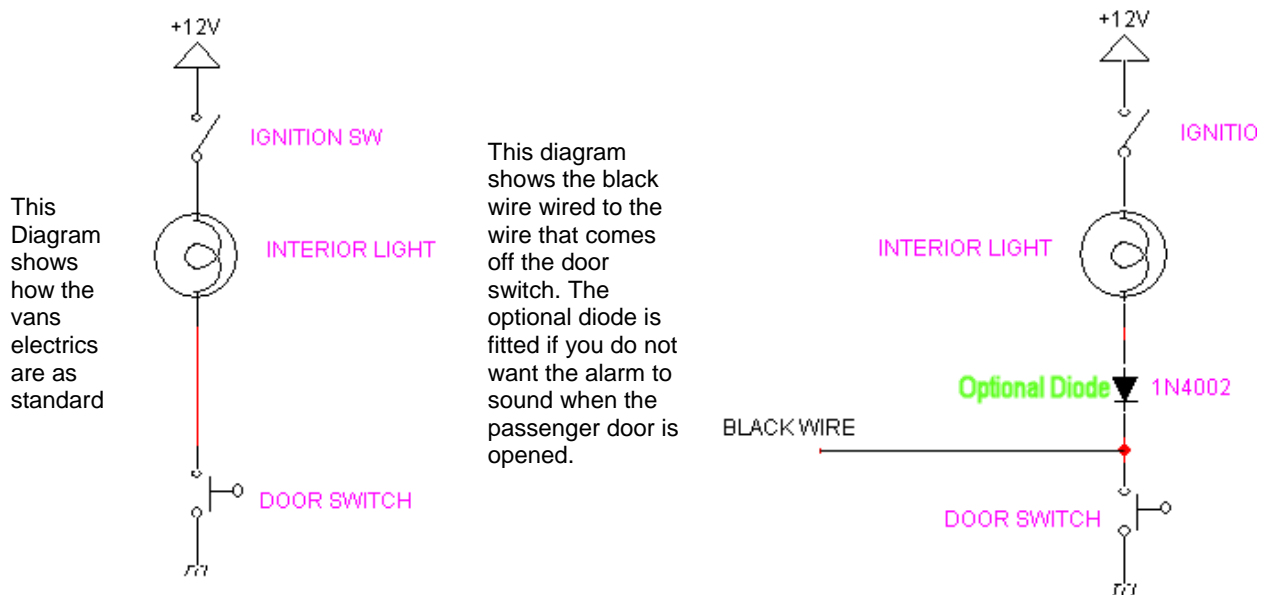
As you can see the Circuit is very simple and should only take 10Mins to build if you soldering techniques are average. This shows the top side of the Veroboard (non copper side). Following this layout, no cuts to the copper tracks are required.



Once the Circuit has been assembled it need to be tested. The easiest way to do this is to get a 9v or a 12v battery if you have one hand and perform the following tests.

Connect the door switch (black) to the earth(-) of the battery this simulates the door being open. Connect the Side Light (Red) to the possitive (+) this simulates the Headlights being on and the alarm should sound. Then connect the Ignition (Yellow) to the (+) simulating the ignition being on, the alarm should stop. Remove the yellow lead and the alarm should sound, then remove the red lead, alarm should stop. Fit the Red lead to + again and remove Black, alarm should stop. If all these work then every thing is working as it should and you are ready to fit.

This diagrams below shows how the Circuit is fitted to the Van.



The Yellow wire can be connected to several different places as long as this connection is only live when the ignition is on. I.e. Ignition fuse (check Van wiring schematic), Car stereo if it is wired so that it only comes on when the ignition is switched on.

The Red wire can be connected to the side lights fuse or dash board lights fuse. This should only be live when lights are switched on.

Hope you have success with, I have one fitted to my early T4 and had one on my 81' Bay and I'm sure it's saved me many a time. Any questions please email me at the address found on my web site.

'Vdubs' or the 'Circuit' designer cannot be held responsible for any damage caused by the building, installing or usage of this circuit. You follow these instructions at your own risk.