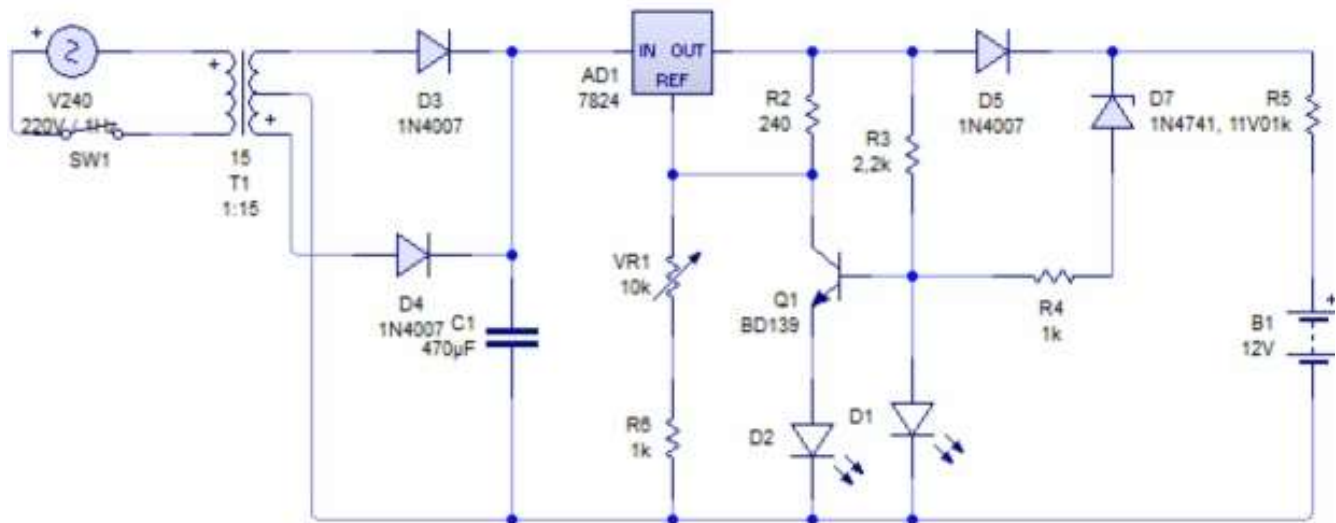


re-charging battery circuit



This is a re-charging circuit for any batteries in automatically way by using a voltage regulator.

Here there are two section:

The first: power supply

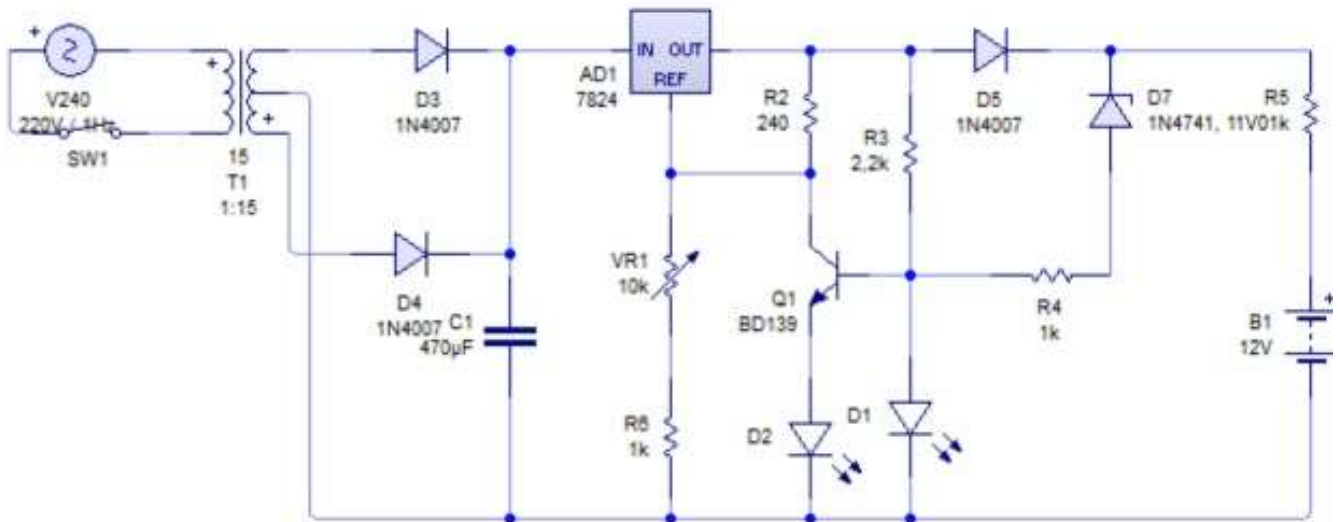
The second: the situation of the battery re-charge by comparing it stream isolating or stream arrived, and this depending on battery condition.

The main voltage is connecting with boundary 230 volt and 50 gigahertz to supply the power, and

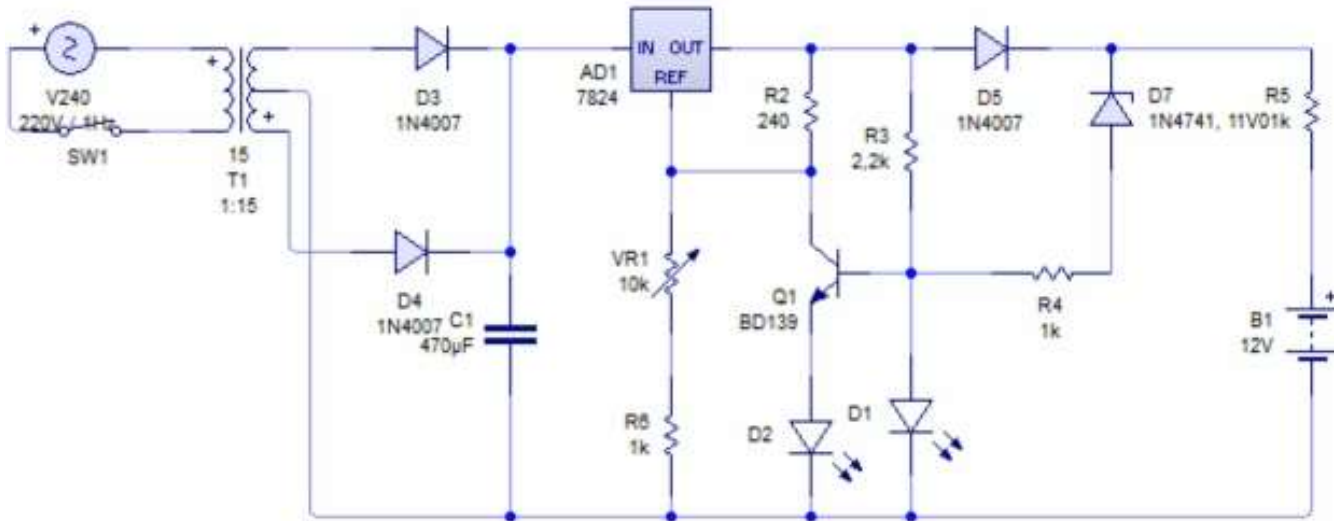
Accomplish to low the voltage to 15 volts approximately by transformer electric which is lower the voltage.

Where is connect the D3 and D4 diodes to transform the AC current to DC current, this operation is the Current correction or electric voltage.

The capacitor (470 microfarads) here for refining pulse.



The voltage here is not regulator so we will applying a rectified voltage or DC current not regulation to a regulation voltage called LM317 it is between 1.2 volt to 37 volt also the current flow from it max is 1.5 Ampere. To control the value of the regulation volte, which came out from the LM317 to re-charge the battery depending on magnitude of using to voltage, for that the potentiometer resistance between 10 K ohm, which connect with LM317. This voltage will moving through D5 diode too the resistor R5 bounders 100ohm and half k watt to augmentation the charge of battery, in the same time. The current will emptying to flow through R3 (2.2 ohm) which lighting the green LED, hint to the operation of re-charge still charge, and the battery still expend amount of power to store. About the D5 diode it is for a voiding the emptying battery, if the augmentation of the main circuit will stopping.



when the battery charge full the current will grows to the Zener diode completely, and the conductivity in reflected align, to work as an electric conductive then will flow through it. These flows currently will arrive through Zener diode to transistor NPN, which the current flows to resistance R2 to the red diode, which means the battery is full.

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