



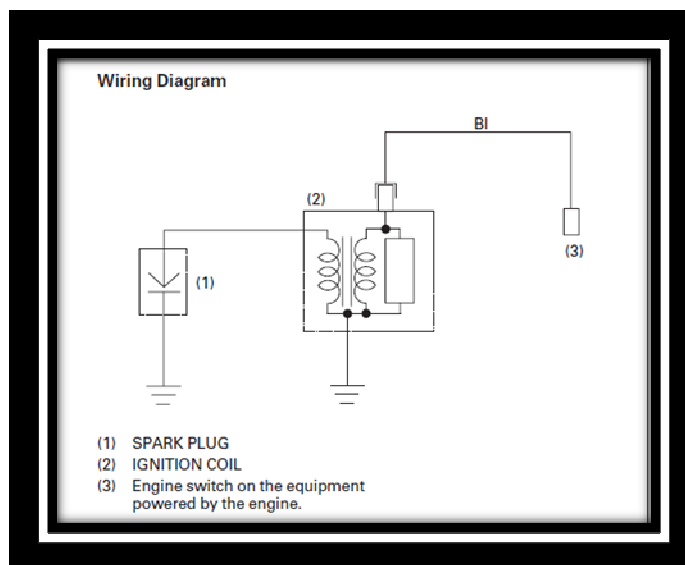
Electronic Circuitry of Panthera

The primary aim of our team was to design a circuitry that satisfies all the rules of Shell Eco Marathon and ensures the safe and easy driving.

CIRCUIT DIAGRAMS.

ENGINE IGNITION

Since we are using the engine with transistor magneto ignition therefore the engine will run because of the following circuitry built in within the engine.



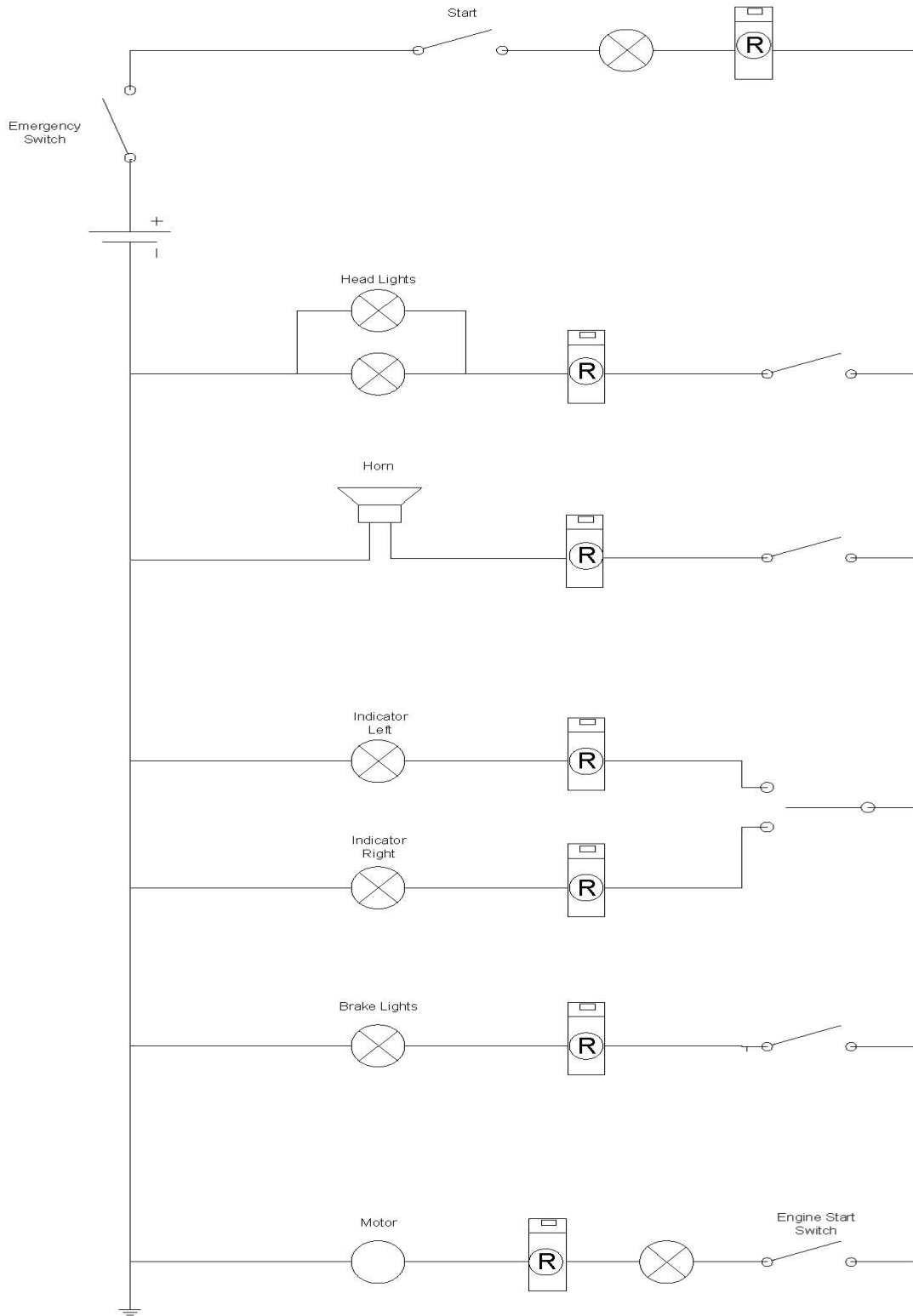
OTHER IMPORTANT SYSTEMS

The other electronic systems of Panthera consists of following major components

1. Head Lights.
2. Horn.
3. Brake Lights.
4. Indicators.
5. Engine starting lights.
6. Emergency shutdown switch.



ELECTRICAL CIRCUITRY





DESCRIPTION.

There are a total of seven relays each controlling different circuits of Panthera. In order to activate any system, the “start” buttons needs to be turned on. This connects the battery to the other circuits of the car and also turns on an indicator in the dashboard that tells the driver that the battery power is available to the circuits in the car. There are separate circuits relating to head lights, horn, turn indicators, and brakes indicators that can be operated once this switch ” start “ is activated. Each of these circuits operates using a switch and a relay. For the turn indicators we are using a three way switch and a cutout system. Turning on the switch “Engine start switch” while the switch “start” is active; starts the starter motor and also turns on the start indicator. For emergency shutdown mechanism; there is a switch outside the vehicles body that disconnects the battery from all the other electronic circuits. The engine will also be shutdown using this switch which will act as a valve that will cut-off the fuel supply to the engine.

This circuitry will do for the minimum requirements of the shell eco marathon however depending upon the time we have; once Panthera is fabricated more electronics may be incorporated to the current system.