

Hovercraft B/C Electronics Requirements

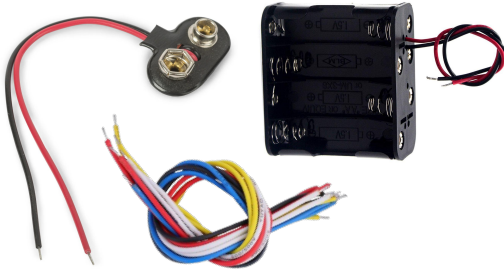
2026-2027 Season

Notes

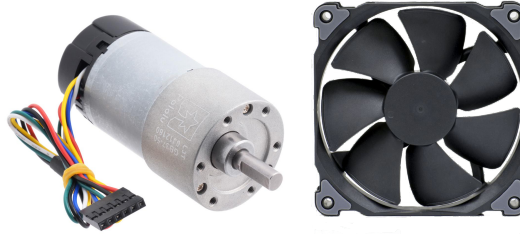
- Rule 3b contains a white list of allowed electronics
 - That means if a component is not explicitly allowed, then it is automatically disallowed
 - This list only governs electronic components, not other materials used in the device
- Rule 3f contains additional requirements for batteries and switches
 - Multiple requirements may be relevant to any given design decision you make, so be sure to consider the rules holistically
- Rule 2b allows teams to bring tools, including electronic tools
 - Electronics used as a tool rather than as part of the hovercraft (i.e. multimeters, calculators) are excluded from the restrictions listed above
- Always check the power rating on your electronics
 - Just because the rules allow a certain power source does not mean your circuit can handle it

Allowed Electronic Components

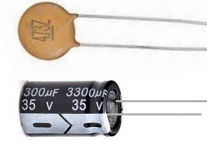
Wires & Connectors



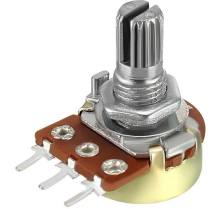
Up to Two Motors



Capacitors



Potentiometers



Rheostats



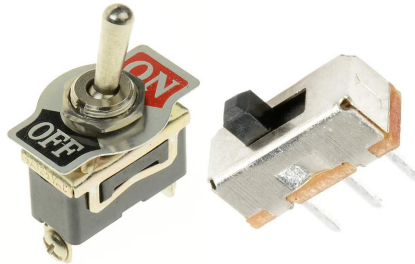
Resistors



Batteries
(no lithium or lead)



Mechanical Switches

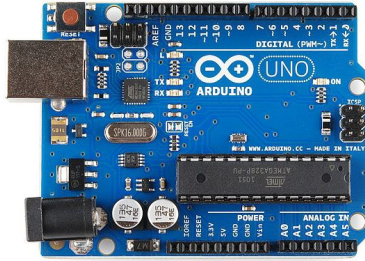


Relays



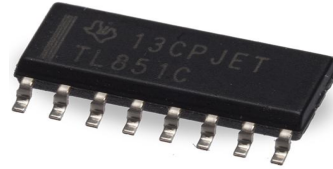
Examples of Disallowed Components

Microcontrollers



Integrated Circuit Chips

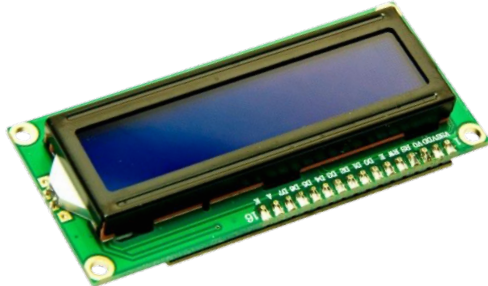
(unless they are an integrated, manufactured part of a commercial motor)



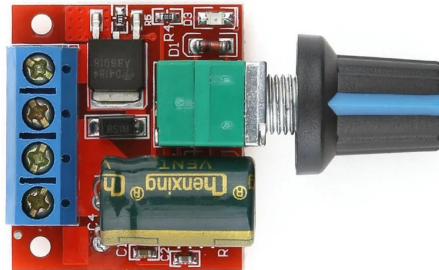
Lithium or Lead Batteries



Display Screens



Pulse Width Modulation Controllers



Diodes



LEDs



Lasers



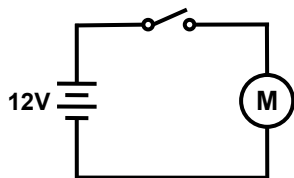
Transistors



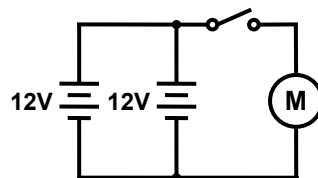
*These are just examples, not an exhaustive list.

Example Circuits

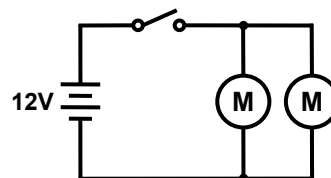
✓ Allowed



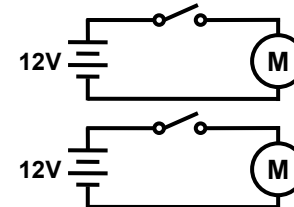
✓ Allowed



✓ Allowed

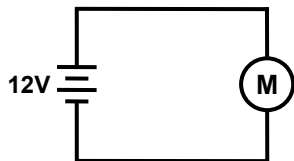


✓ Allowed



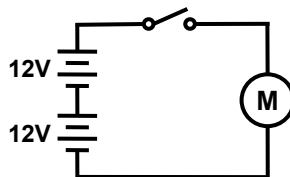
✗ Not Allowed

must have a switch



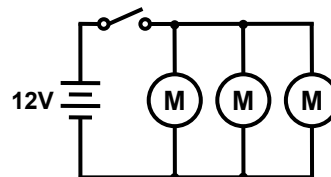
✗ Not Allowed

cannot exceed 12V



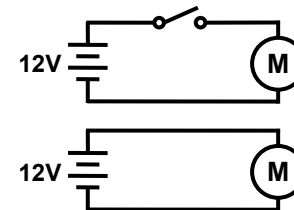
✗ Not Allowed

no more than two motors



✗ Not Allowed

no unswitched motors



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