

DiamondBack Airboat'RX Function Description

Product No: H2552

Product name: SWAMP BLASTER™ Airboat

Customer: Mattel

Ver: US

The DiamondBack Airboat requires 9.6v batteries for full function operating Left / Right steering Forward / Back. It is composed of the following parts.

1.Voltage Regulator.

Comprise a NPN transistor Q2, zener diode D1, ON / OFF switch and its associated components.

2.RF receiver.

Comprise a transistor Q1, coil L2 and its associated components.

3.RF receiver Amplifier.

Use SPRC206A's (U1) two inverter amplifiers, the two inverters' gain depend on the external resistor and capacitor.

4.Decoder.

Comprise SPR206A and its associated components, the SPR206A decodes the serial bit-stream data and interprets the information as output data to control the motor driver 1 and driver 2.

5.Driver 1.

Forward / Back motor driver, comprise transistor Q9, Q12, relay RL1, RL2 and its associated components.

6.Driver 2.

Left / Right motor driver, comprise transistor Q3, Q8 and its associated components.

7.Protection.

Comprise Q13 and its associated components, turn off the motor driver circuit when the batteries' voltage lower than 6V.