Parts of a Combat Robot

**Armor/Body:** This protects a robot from damage. It can be aluminum, steel, titanium, polycarbonate, or special alloys and metals. ($0-$2000)

**Batteries:** The heart of a robot. These supply the power to all the systems. They are usually 24 or 36 volt NiCad, NiMH, SLA or Lilon cells. ($40-$500)

**Transmitter:** This is what you use to remotely operate your robot, they come in many styles, and are also used for R/C planes and cars. ($60-$500 - not shown)

**Radio Receiver:** Takes the signal from the transmitter, and turns it into a pulse width modulated (PWM) signal that the speed controller can use. ($20-$100)

**Speed Controllers:** A complex electrical device that bridges the receiver, batteries, and motors. It converts the PWM signal from the receiver and feeds the motor the corresponding power from the battery packs. ($50-$700)

**DC Motors:** These make the robots and their weapons (e.g., spinners) move. They can be salvaged from junkyards or bought from specialty shops. ($0-$1000)

**Gearbox:** These enclosed gears increase the motors torque (force) and make the robot easier to manage and significantly more powerful. ($20-$300)

**Pneumatic Ram:** The output from a pneumatic system. These can be used for a flipper, a hammer, a ram, or other similar weapons. ($50-$150)

**GearMotors:** Motors and gearboxes that come as a single part. ($0-$700)

http://ComBots.net

**Sprockets, Pulleys and Bearings:** Used for both spinning weapons and drive-trains. Bearings hold axles in place to spin weapons or gears. Sprockets are toothed discs with chains like you'd find on a bicycle. ($0-$50)

**Chain/Belt:** Chains and belts can be used for both spinning weapons and to connect wheels to gearboxes or other wheels. ($0-$100)

**Wheels:** These take the power from the gears to make your robot go and come in hundreds of materials and diameters and can be found anywhere. ($0-$100)

**Spinning Bar:** A typical high-energy weapon. These are mounted horizontally as shown or vertically. They can also be discs, or entire shells. ($0-$300)

**Flipping Arm:** One of the many kinds of weapons you could have. Flippers get under the robot and throw them into the air. ($0-$100)

**Air Tank/Pneumatic Regulator:** Air tanks are used in Pneumatic systems, usually canisters from paint-ball CO2 weapons or fire extinguishers. ($0-$200). Regulators ensure the tanks proper pressure. ($75)