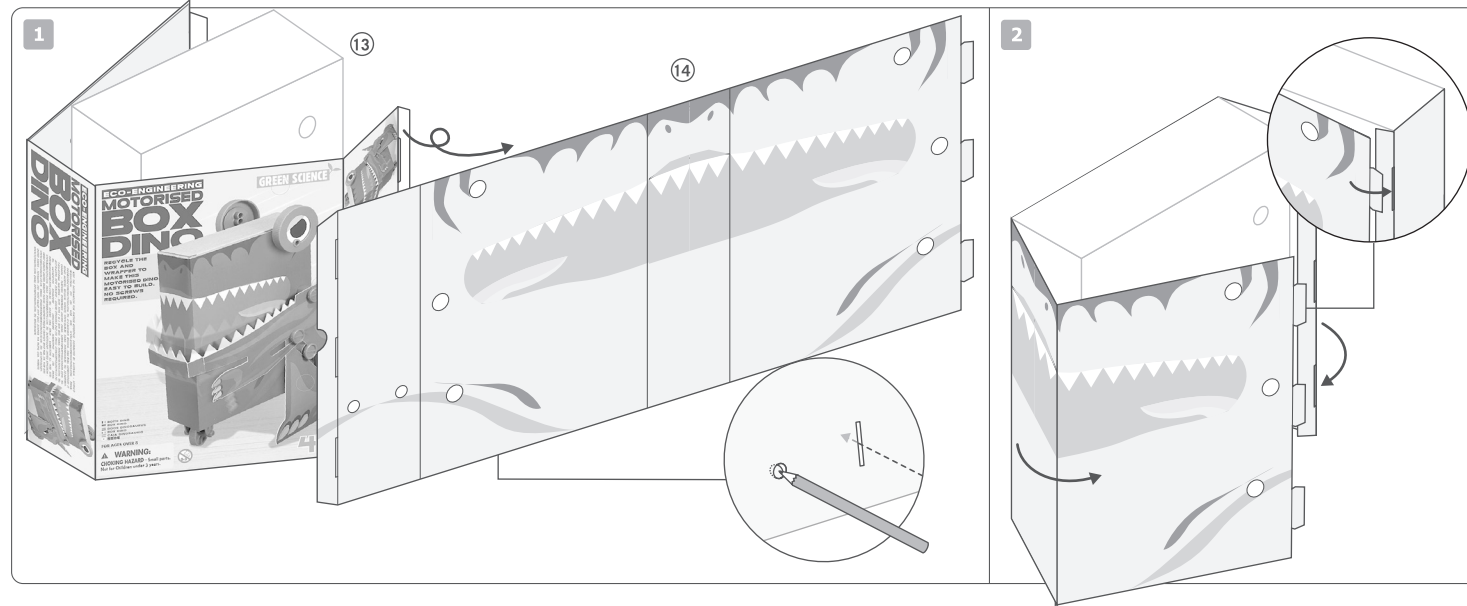
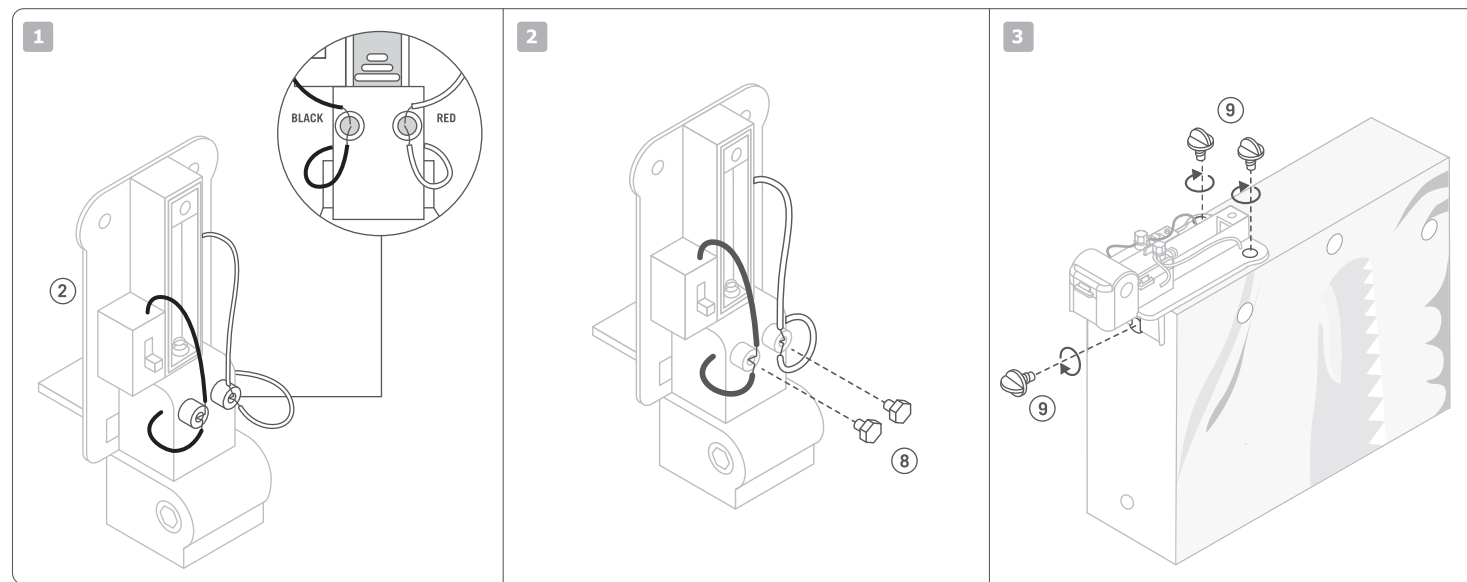


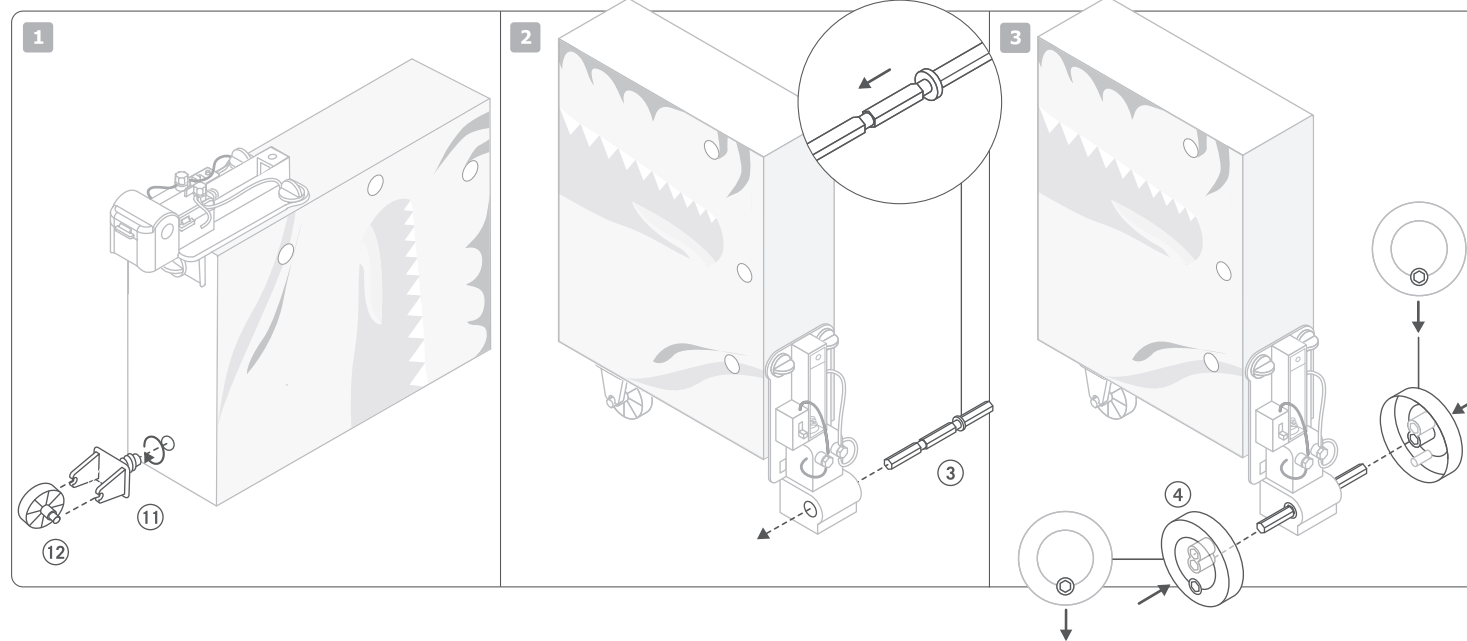
D. ASSEMBLE THE BOX BODY



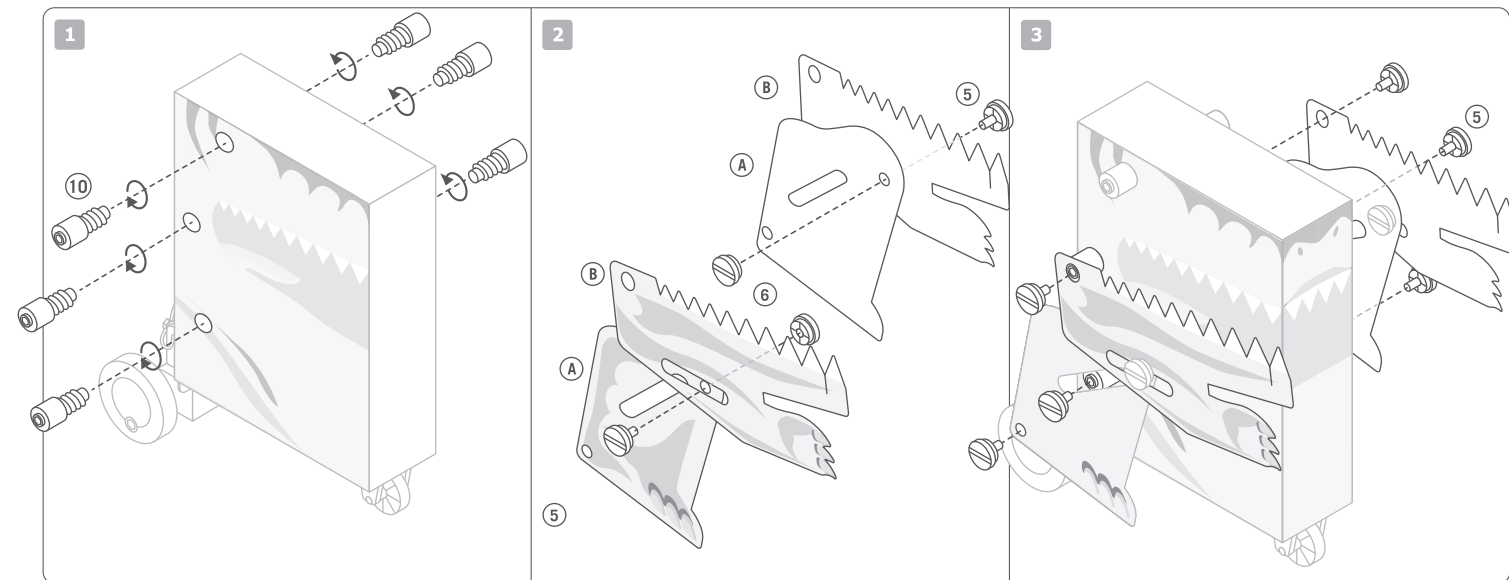
E. ASSEMBLE THE BODY MECHANISM



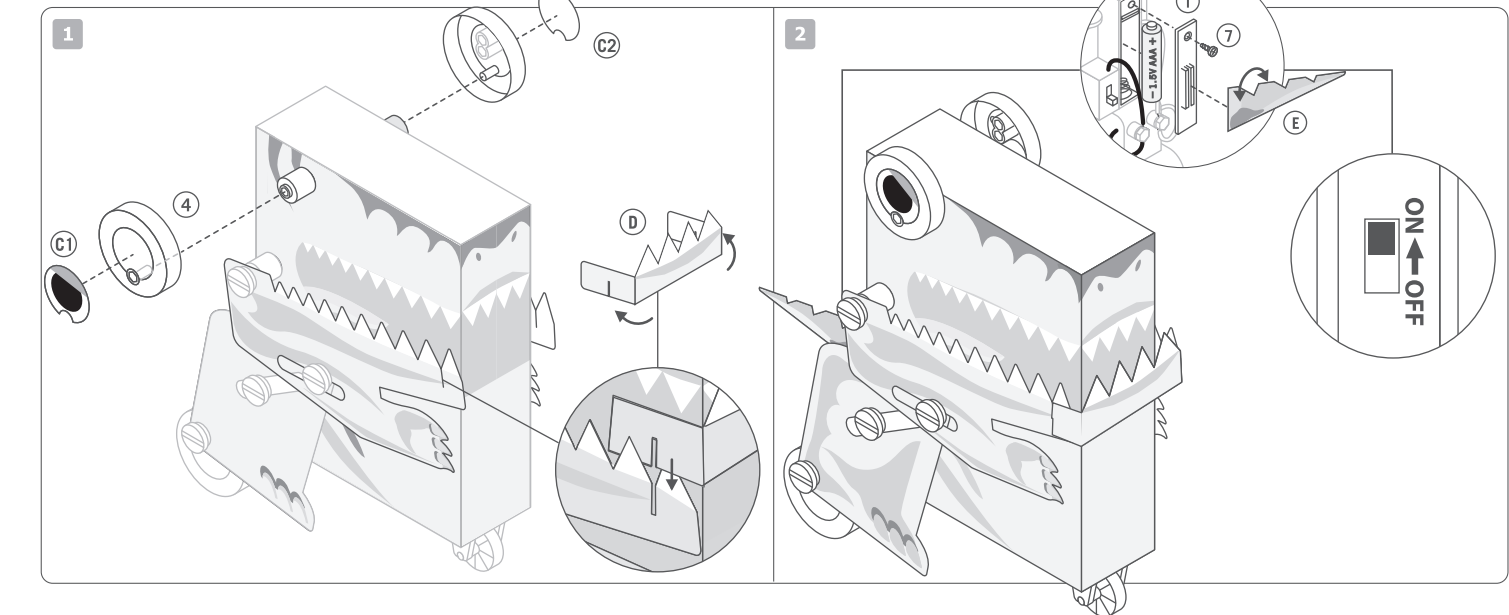
F. ASSEMBLE THE WHEELS



G. ASSEMBLE THE ARMS & LEGS



H. FINAL ASSEMBLY



I. OPERATION

1. Check that all the mechanical parts are fitted correctly.
2. Fit the battery according to the instructions and switch the Dino on.
3. Your Dino will move forward with a fun walking action moving its jaw up and down.

J. TROUBLE SHOOTING

1. If the Dino slows down or stops then switch it off immediately and check that all parts of the mechanism are fitted properly.
2. Check that the large wheels are fitted as shown in the instructions. Please refer to section F.
3. Check that all the fixings are fitted tightly into the box.
4. Check that all the pegs are fitted correctly so the arms and jaw can move freely.
5. Check that the battery is fresh and fitted according to the instructions.
6. Check that the wires are fitted correctly with the ends of the wires in contact with the metal terminals and secured with the pegs.
7. If your Dino moves backwards, rewire the motor wires according to the instructions. Please refer to section E.

K. FUN FACTS

When you switch on your Box Dino you make a 'circuit', which connects the battery to the electric motor inside the gearbox housing. Electrical energy flows from the battery to the motor, which converts this energy into a rotating mechanical force. The rotating force of the motor axle turns at a very high speed but with little power and on its own would not be able to move the Dino. Inside the gearbox housing, the motor turns a series of gears which slow the speed and increase the power of the motor's mechanical force making it more useful. Most common machines use a gearbox to change the power and speed of a force in this way.

The Dino's main axle turns. The two large wheels and the legs of the Dino are connected to the wheels with two pegs. The pegs are fitted to the outer edge of the wheels and as the wheels rotate the pegs go up and down moving the legs. The pegs allow the wheels to act like a 'cams' because a rotating force is converted into an up and down force.

The moving legs are connected to the Dino's jaw with a peg so that the up and down force of the legs is transferred to the jaw. This type of mechanism is called a 'linkage'. The jaw is fixed to the body with a peg which acts like a 'pivot' and allows the jaw to rotate in a limited way. Cams, linkages and pivots are important mechanisms and are found in many machines.

