

Salt Water

FUEL CELL Engine Car KIT



GREEN ENERGY 

4WD 

Assembly & Instruction
Manual

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Salt Water FUELCELL Engine Car KIT



This is a concept of an environmentally and friendly fuel cell engine car kit. The kit will teach children about new forms of clean energy. Be amazed that just by adding a few drops of salt water the car's engine will start to run as if by magic. See how a V8 engine runs. There are other exciting activities to explore.

GREEN ENERGY

All materials used in this kit are environmentally safe and clean, no toxic substances or disposal concerns.

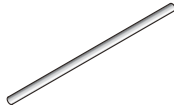
Tools You May Need



Cup



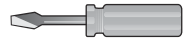
Salt



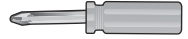
Stick



Diagonal Cutter

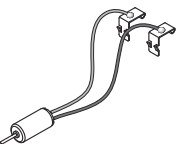

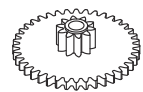


⊖ Screwdriver



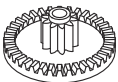

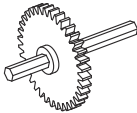
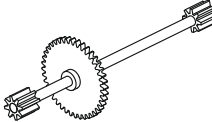
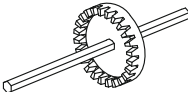

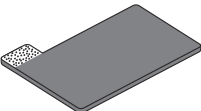
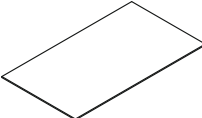
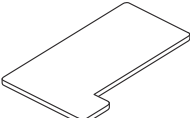
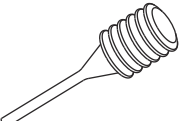
⊕ Screwdriver

Mechanical Parts List

P1	Motor With Connectors	QTY	P2	Pinion Gear (Yellow)	QTY	P3	Gear (Yellow)	QTY
		1			1			1



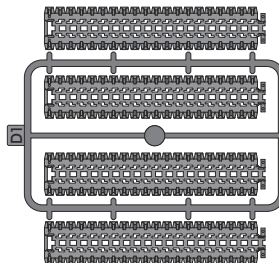
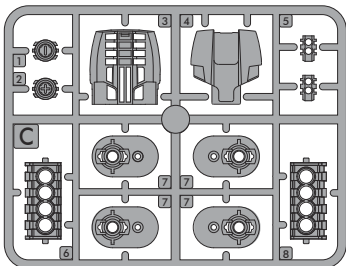
Don't connect the wires to the mains.

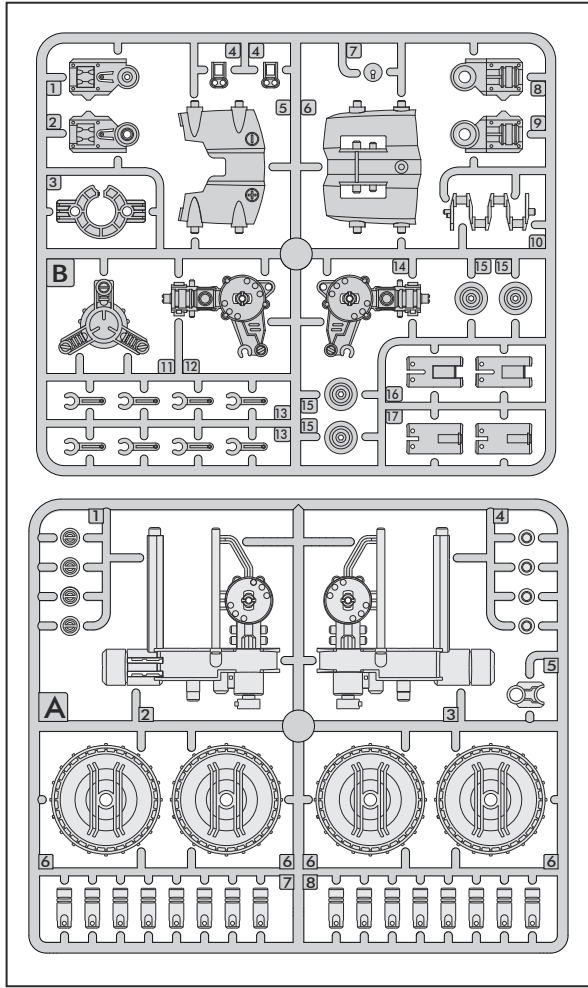
P4 Gear(Red)		QTY	1
P5 Round Shaft		QTY	1
P6 Gear With Shaft		QTY	1
P7 Gear Shaft W/Pinions		QTY	1
P8 Crown Gear With Shaft		QTY	2
P9 Tapping Screw		QTY	1
P10 Air Cathode(Black)		QTY	1
P11 Nonwoven Fabric	 (Spare part: 1pc)	QTY	1
P12 Magnesium Sheet	 (Spare parts: 2pcs)	QTY	1
P13 Plastic Dropper		QTY	1



Plastic Parts

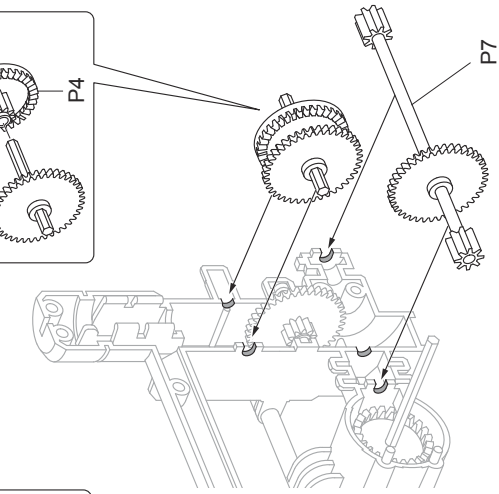
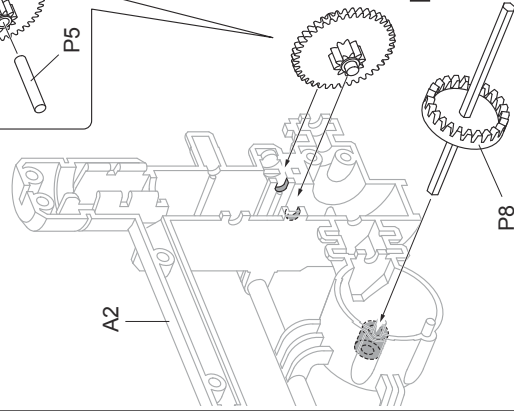
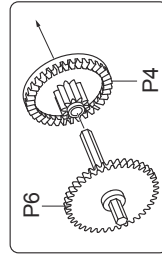
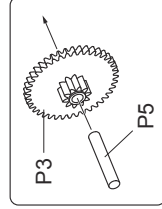
Cut the plastic parts when they are required . Do not cut them in advance.





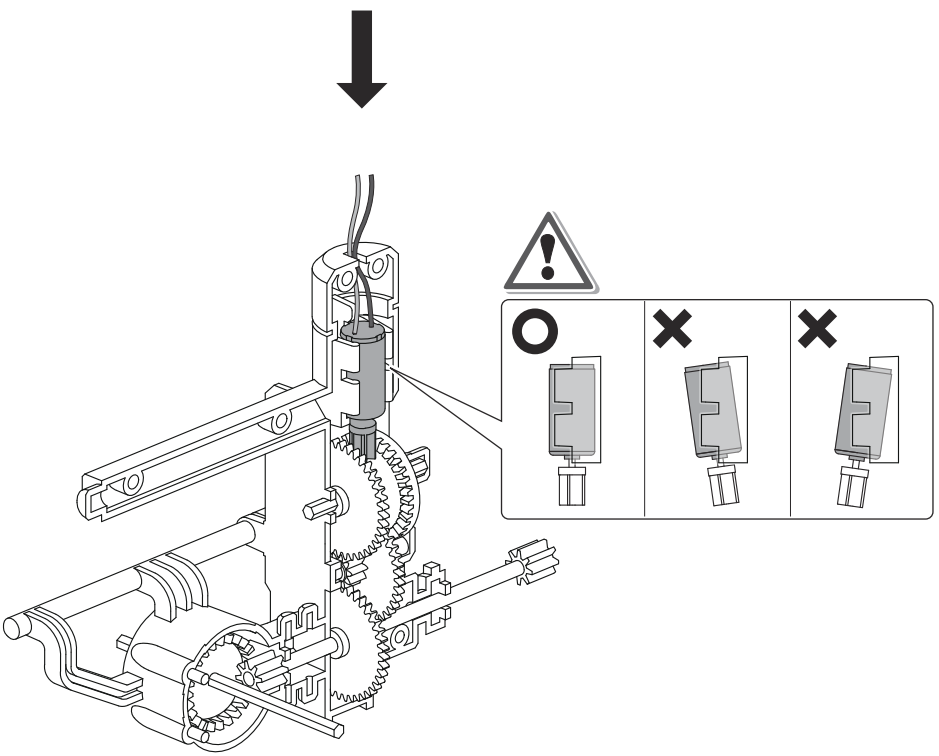
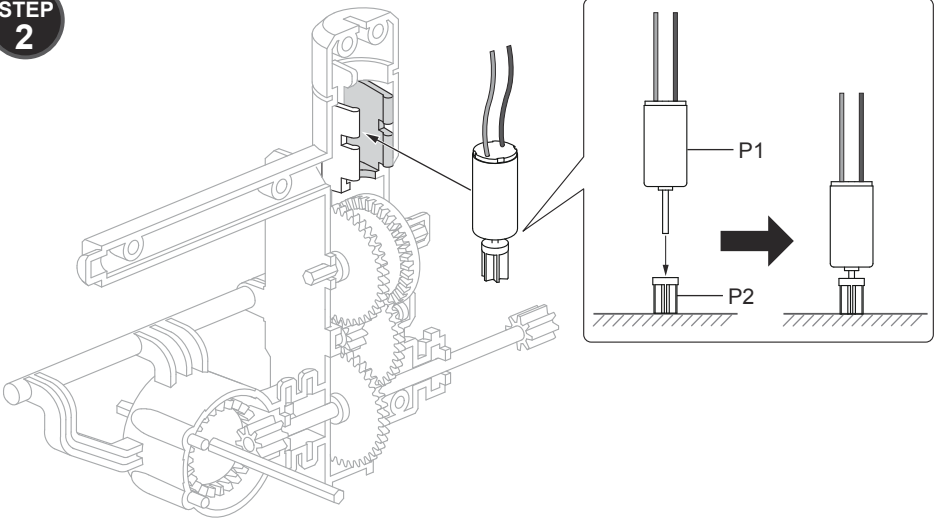
Mechanical Assembly

STEP 1

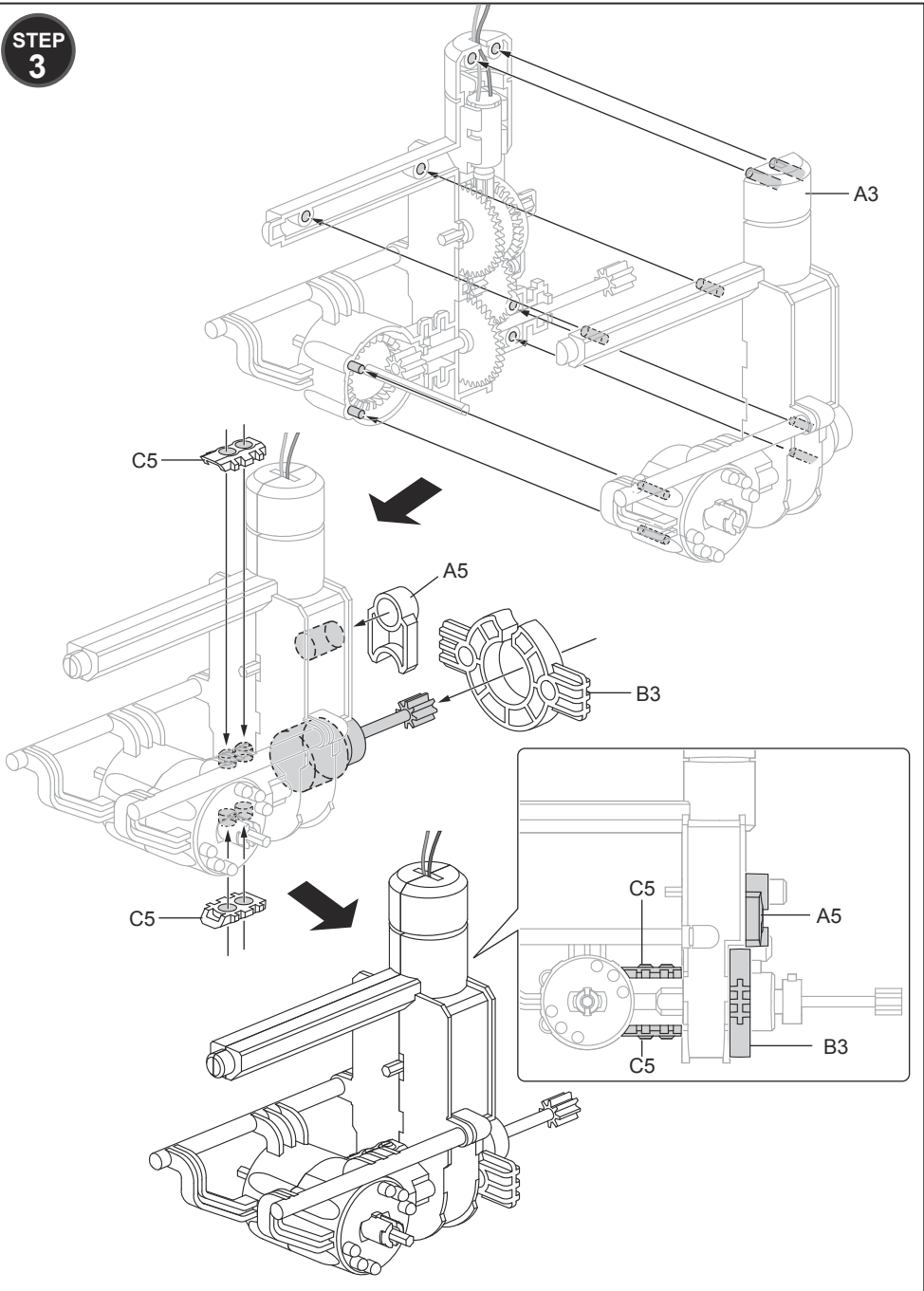


A2

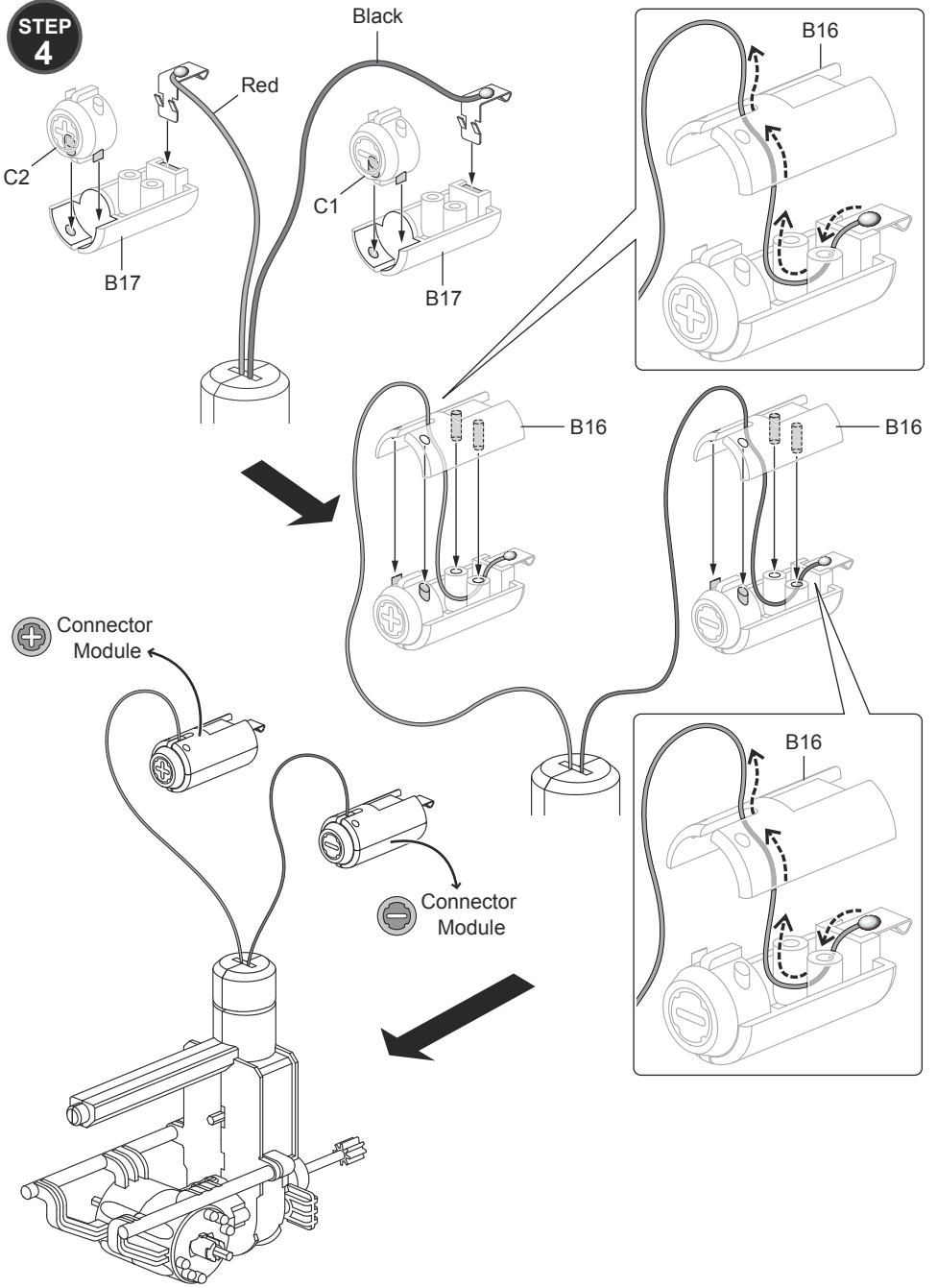
STEP
2



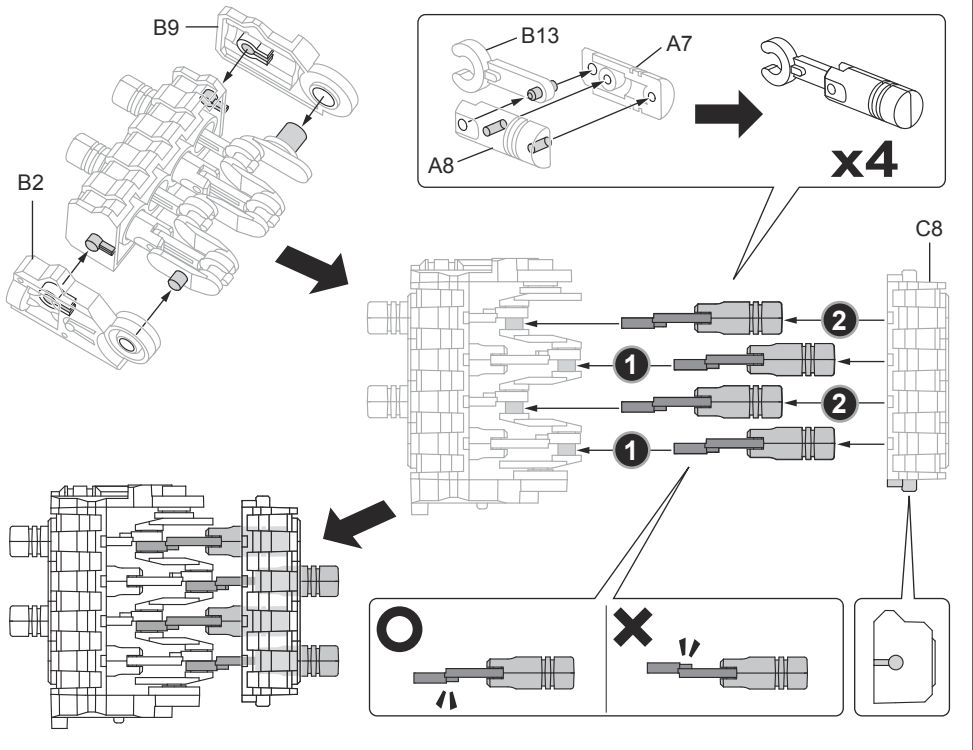
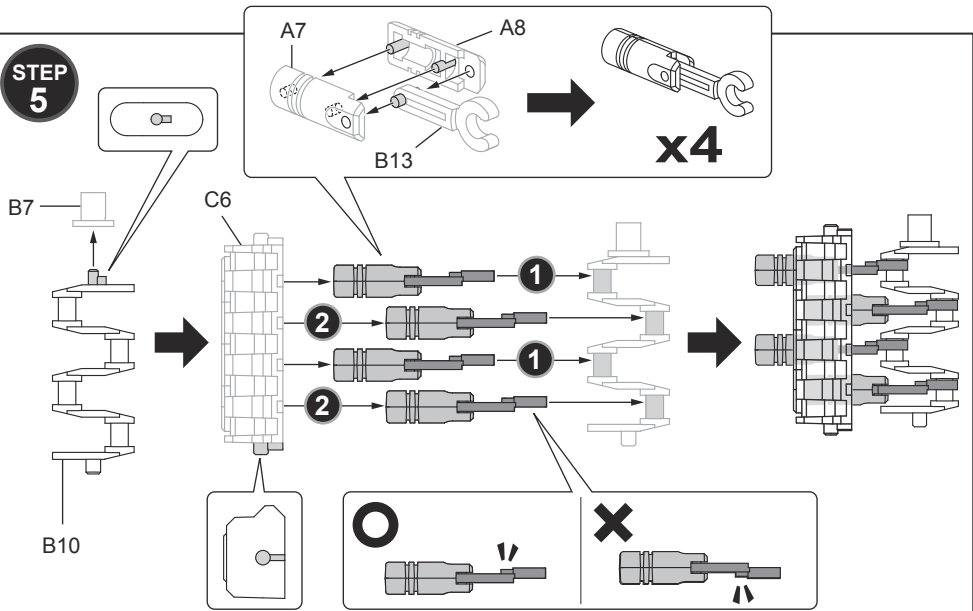
STEP
3



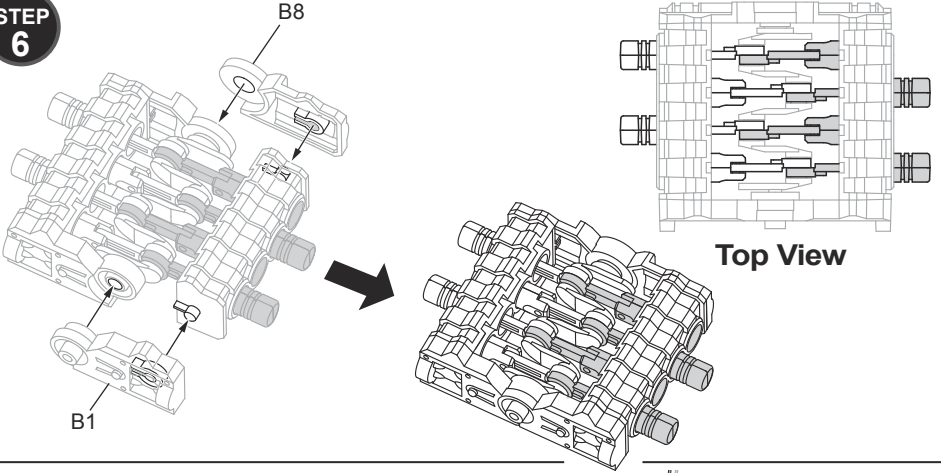
STEP 4



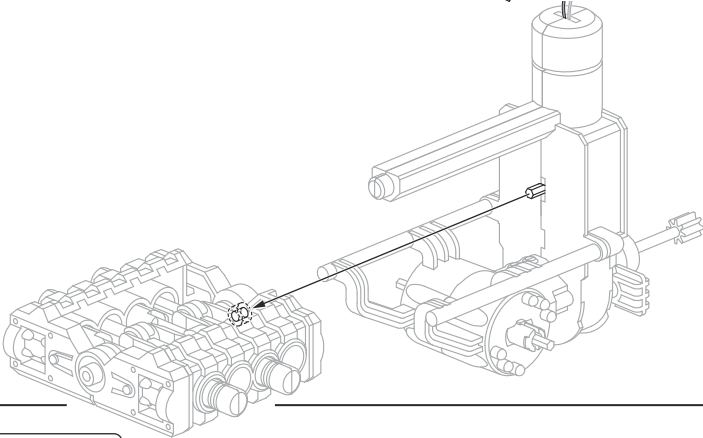
STEP 5



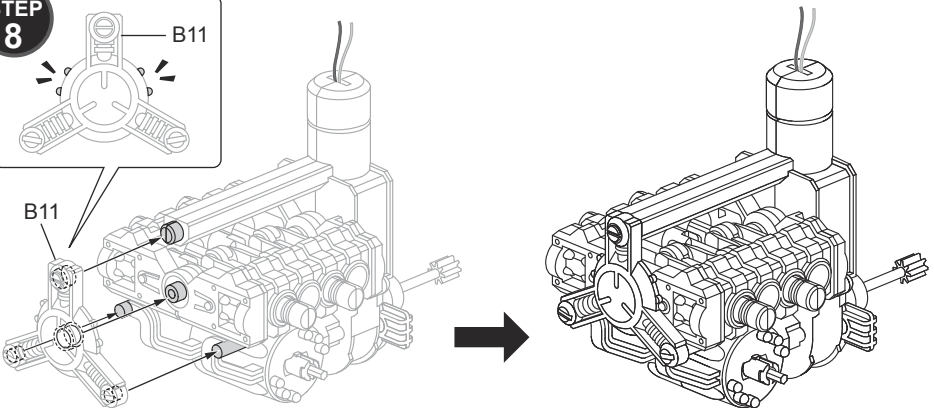
STEP 6



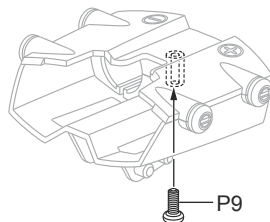
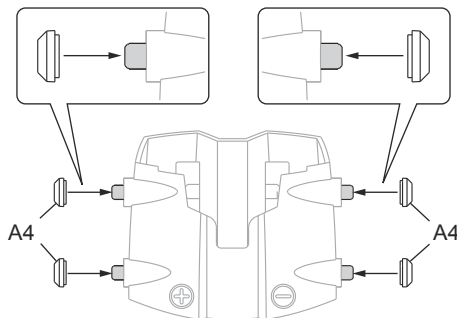
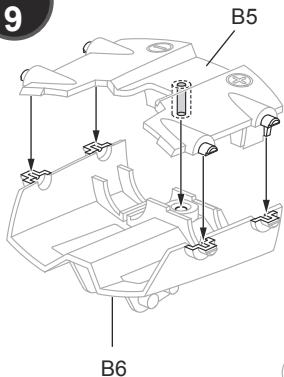
STEP 7



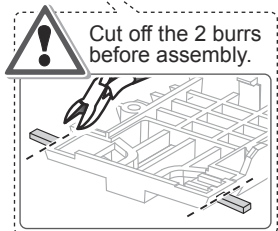
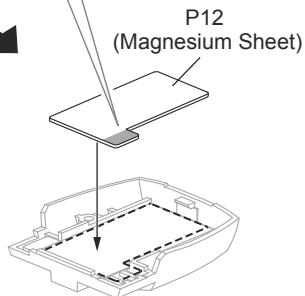
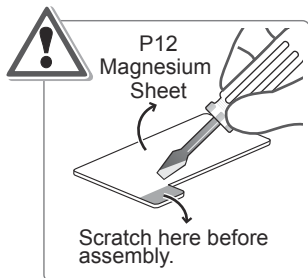
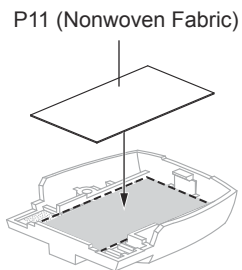
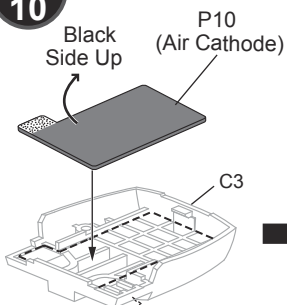
STEP 8



STEP 9

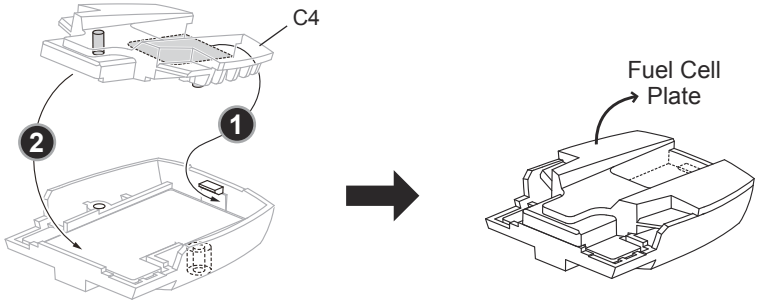


STEP 10

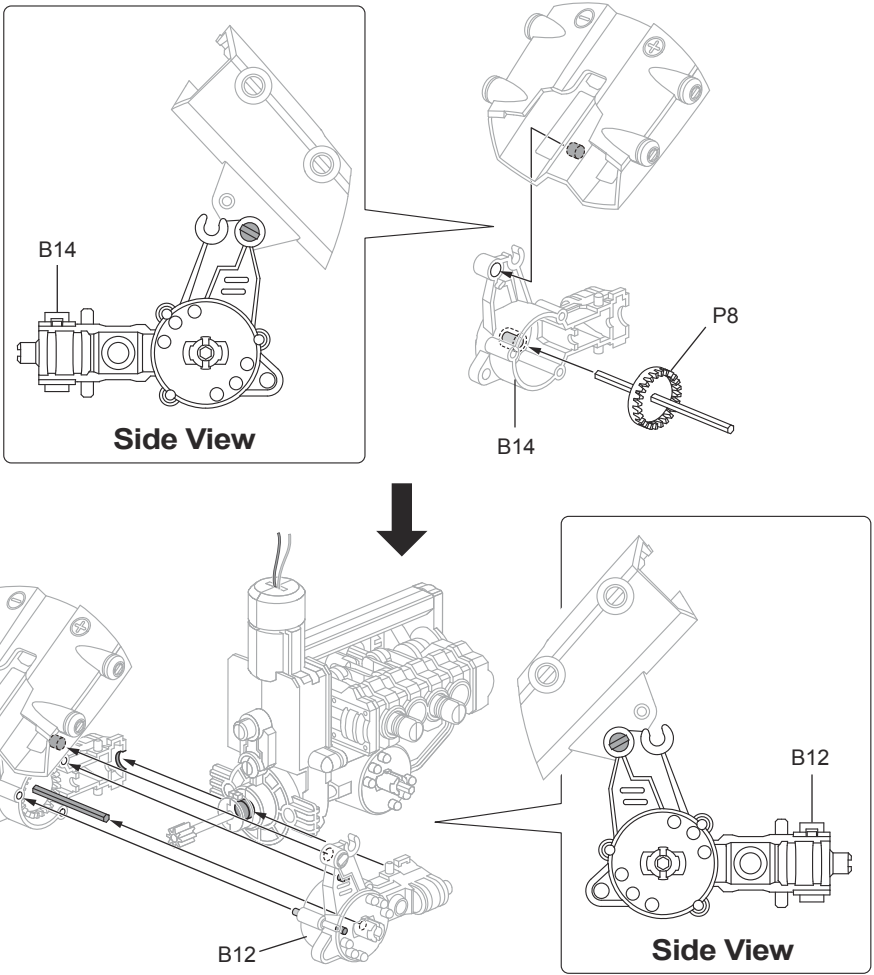


Make sure the P10,P11,P12 placed in correct sequence and position.

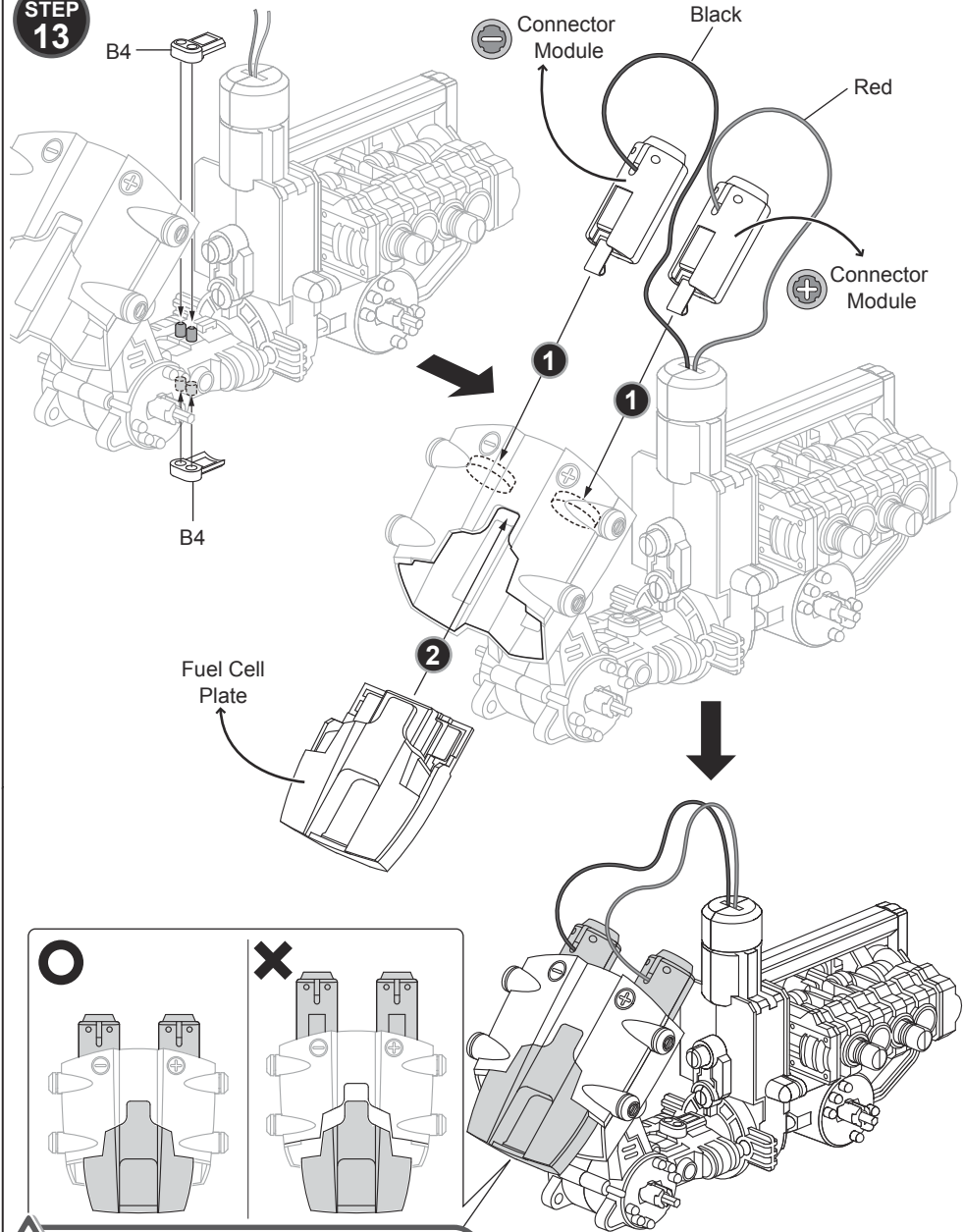
STEP 11



STEP 12

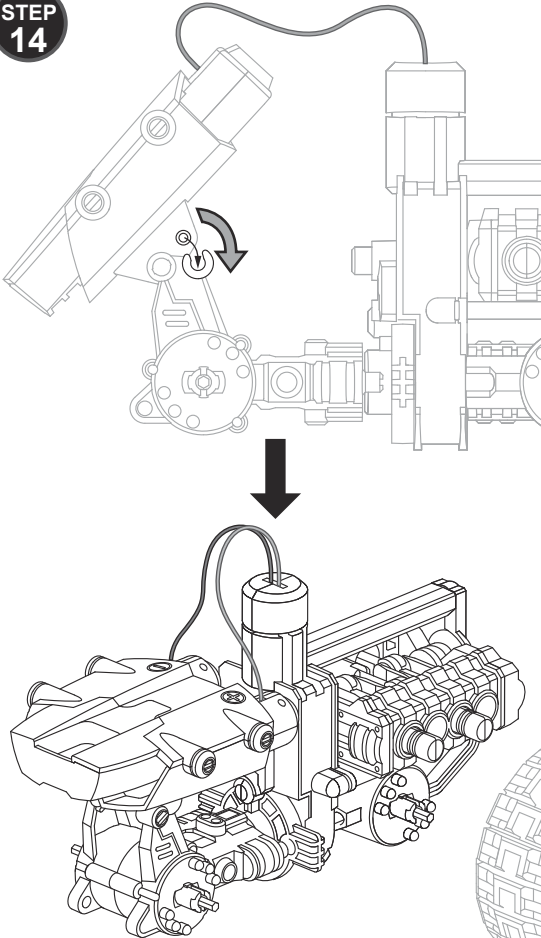


STEP 13

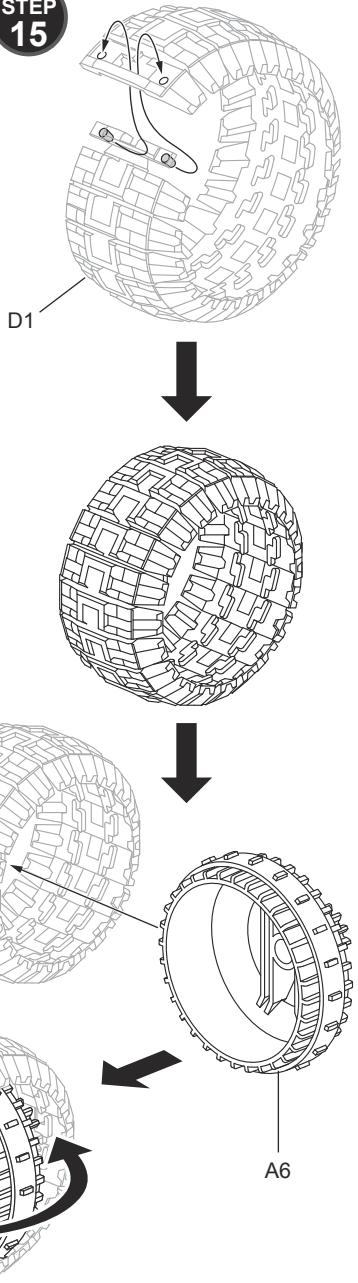


 **Be sure to insert fuel cell plate and connector module to the end.**

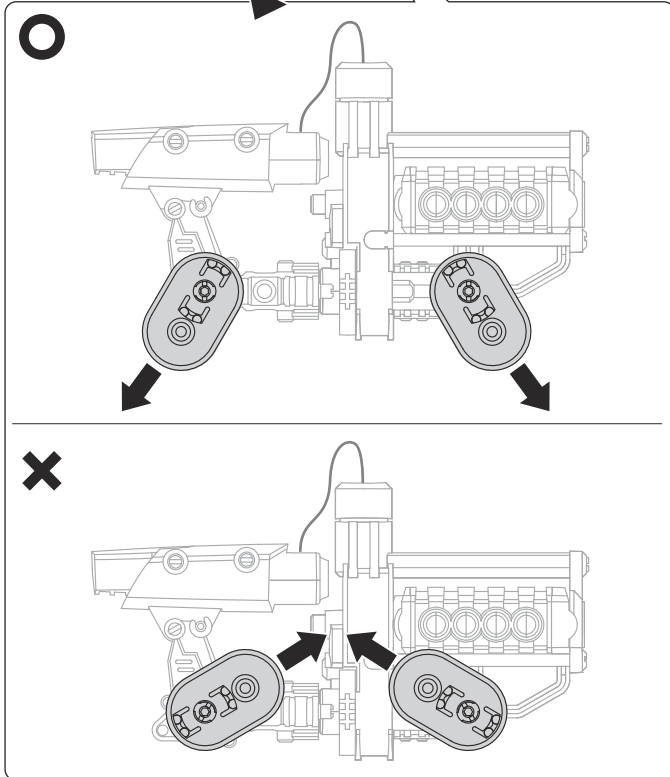
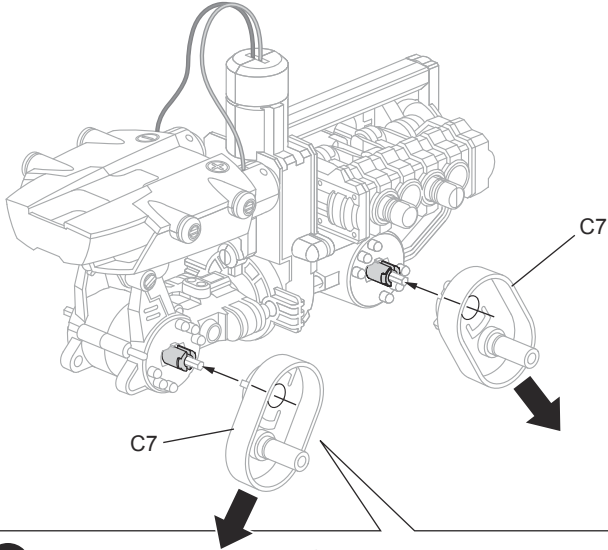
STEP 14



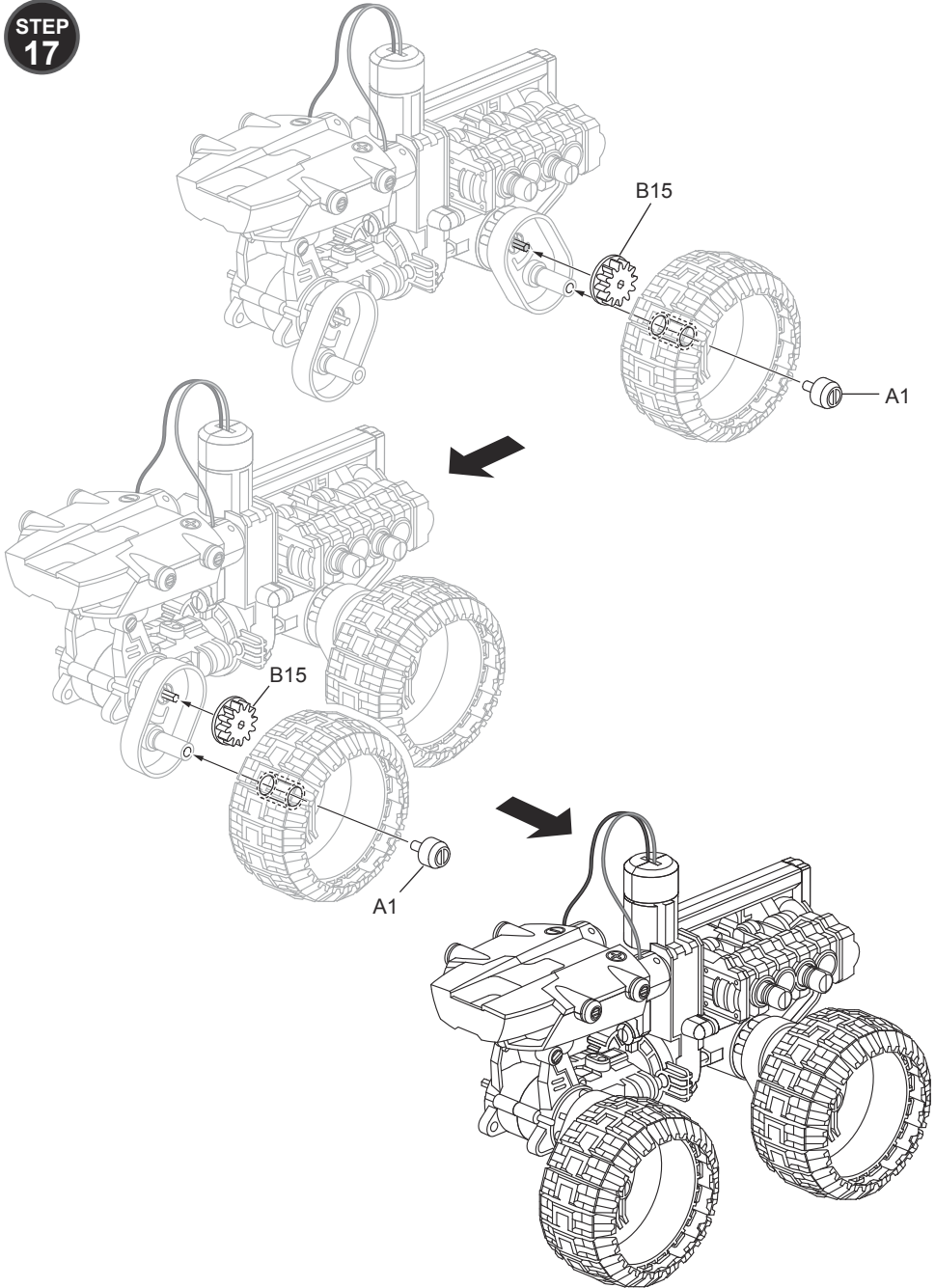
STEP 15



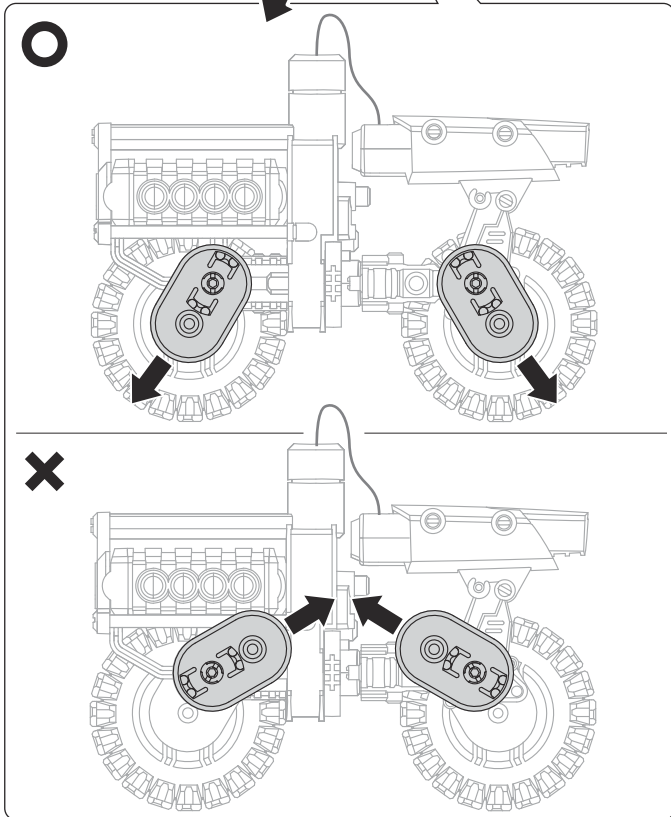
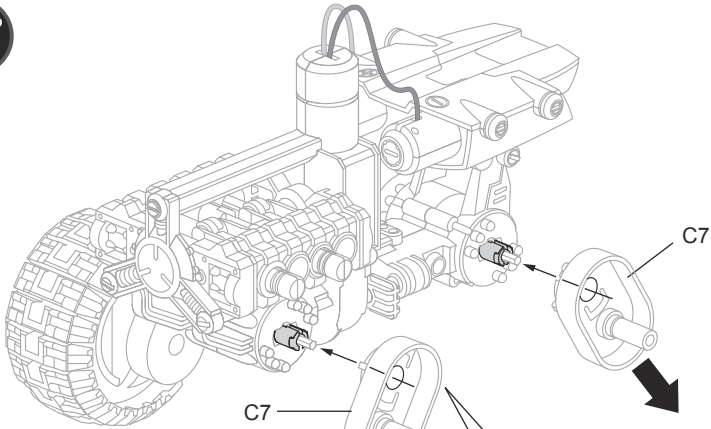
**STEP
16**



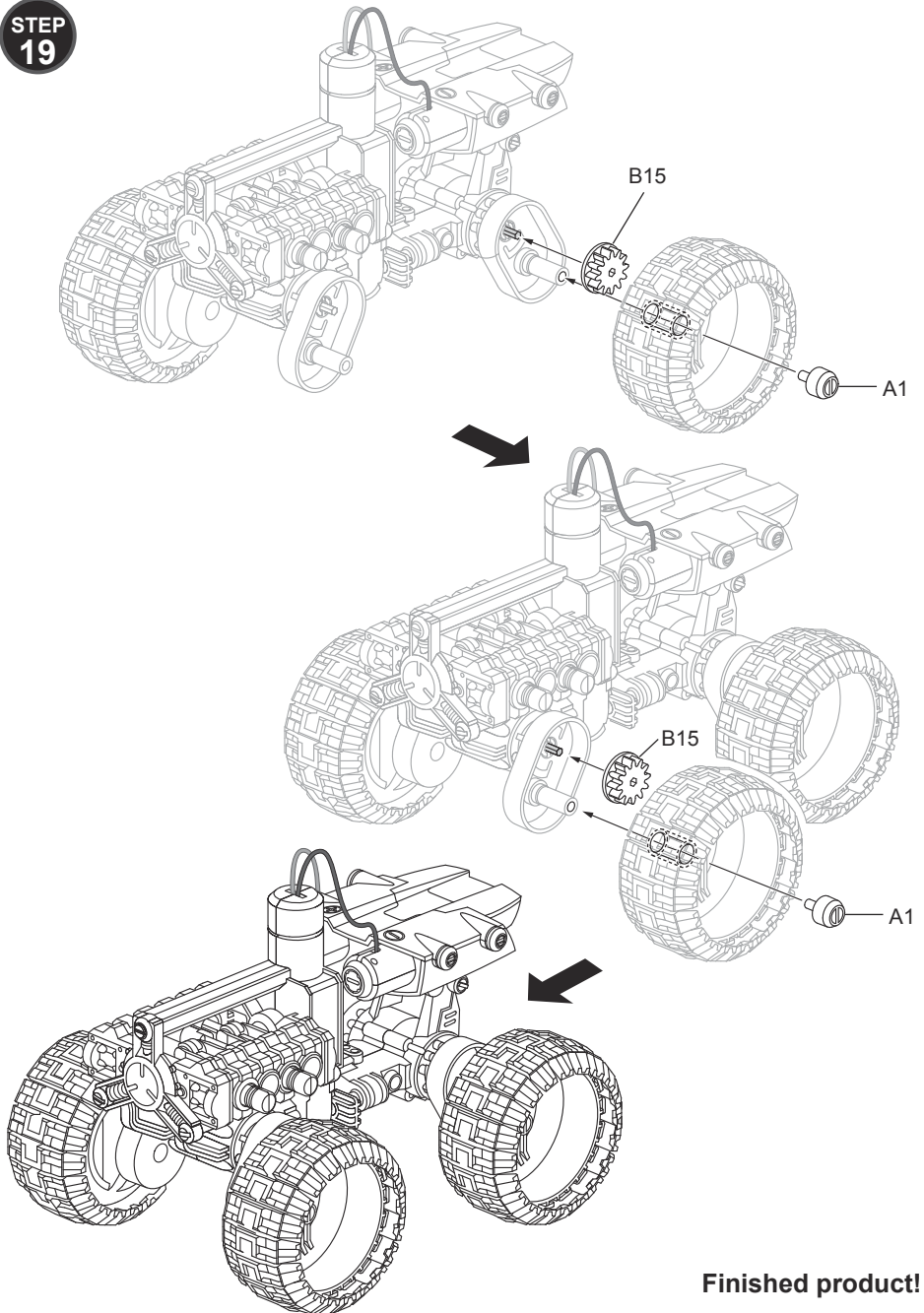
**STEP
17**



**STEP
18**



**STEP
19**



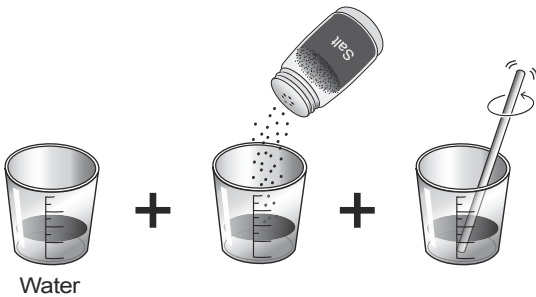
How It Works

- After a period of time the salt water will be exhausted (about 15 minutes), the car will begin to get slower or stop. Add a few more drops of salt water to start it again (as in fig 3)
- Each Magnesium sheet can work for 4 hours continuously, then it will become fragmented. Replace the sheet with a new one to energize the car. The kit includes 3 refills.
- All materials used in this kit are environmentally safe and clean, no toxic substances or disposal concerns.

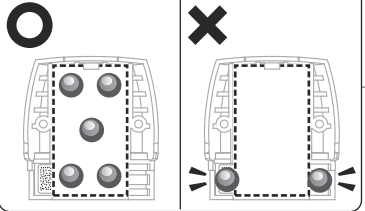


Please pay full attention to the below mentioned before use!

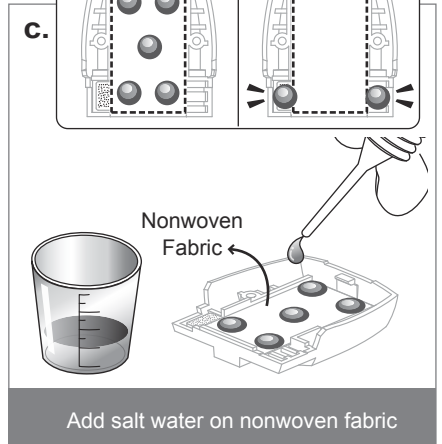
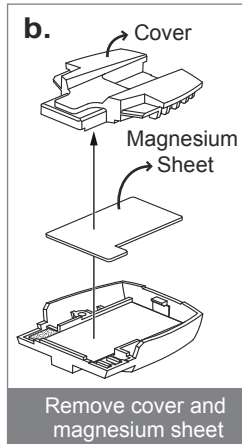
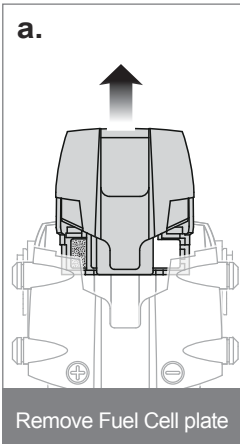
- 1 How to make salt water solution:** Add salt to tap water or distilled water at ratio of **1(salt) : 5(water)**. Any percentage ratio from 20% to 99% salt water is workable although the 20% will be the most efficient.

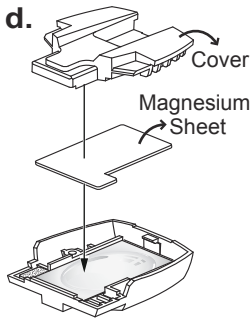


Do not add salt water outside nonwoven fabric as shown below.

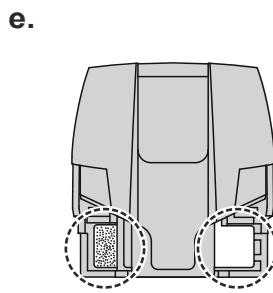


- 2 How to fill the engine car with salt water:**

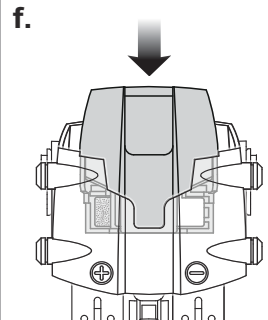




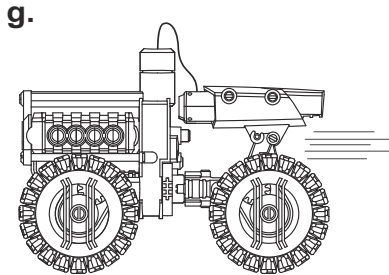
Reassemble cover and magnesium sheet



Make sure the polarity of the connector dry without salt water

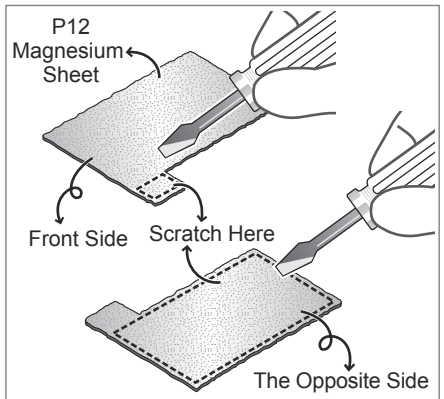
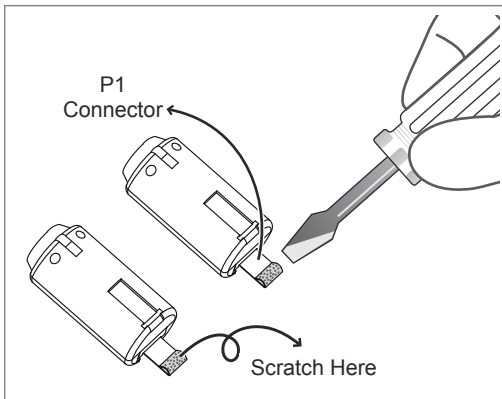


Insert Fuel Cell plate

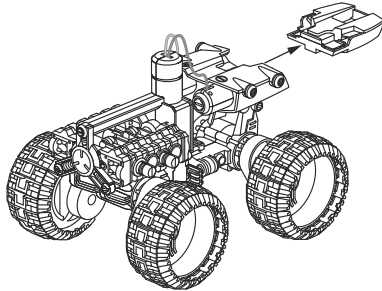


Run your car now

3 How to refill the salt water : When the engine car starts getting slower or stops, reapply a few drops of salt water with the applicator into the position as shown **2 C**. And scratch oxide from the battery connectors and also magnesium sheet by slotted screwdriver before reuse. See below figures:

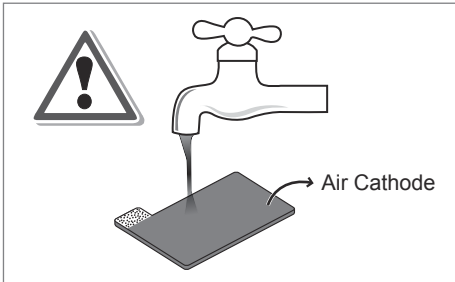


4 How to stop the car : Remove Fuel Cell plate to stop your car as shown below:



5 How to maintain Fuel Cell plate : It is necessary to clean Fuel Cell plate every time when not in use.

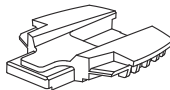
5-1 Gently rinse air cathode under tap water, don't hand rub the surface to ensure the quality of air cathode.



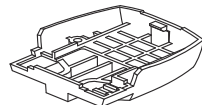
5-2 Flush the parts shown below and hand rub the surface. Make sure that there is no salt residue. Dry all parts separately.



1.Nonwoven Fabric

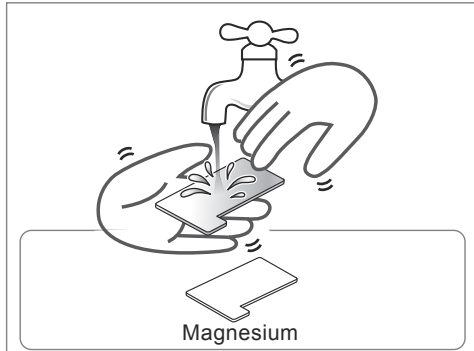


2.Cover

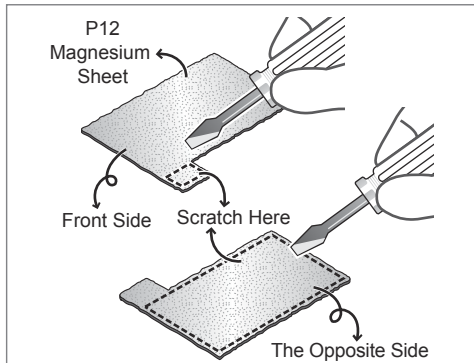


3.Bottom Base

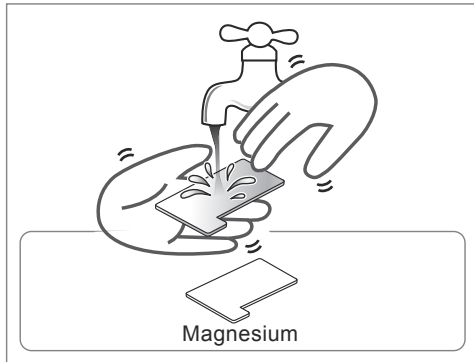
5-3 Flush and scratch the oxidization of the magnesium sheet as shown below:



Gently rinse magnesium sheet



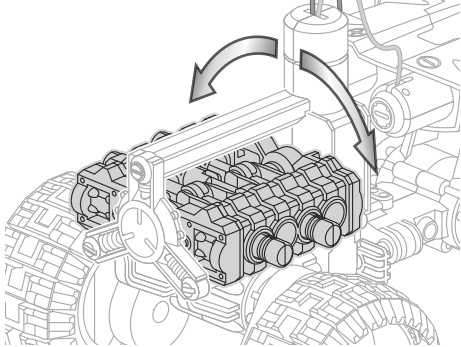
Scratch the oxidization of the magnesium sheet



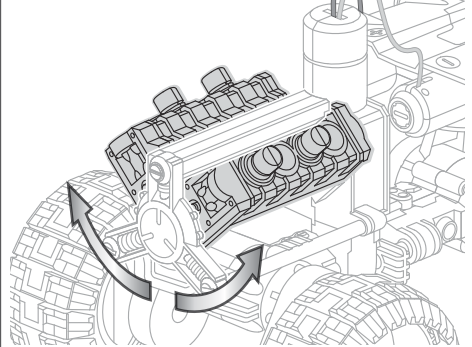
Gently rinse magnesium sheet and dry it

How To Play

<1> Transform from Flat engine to V engine.

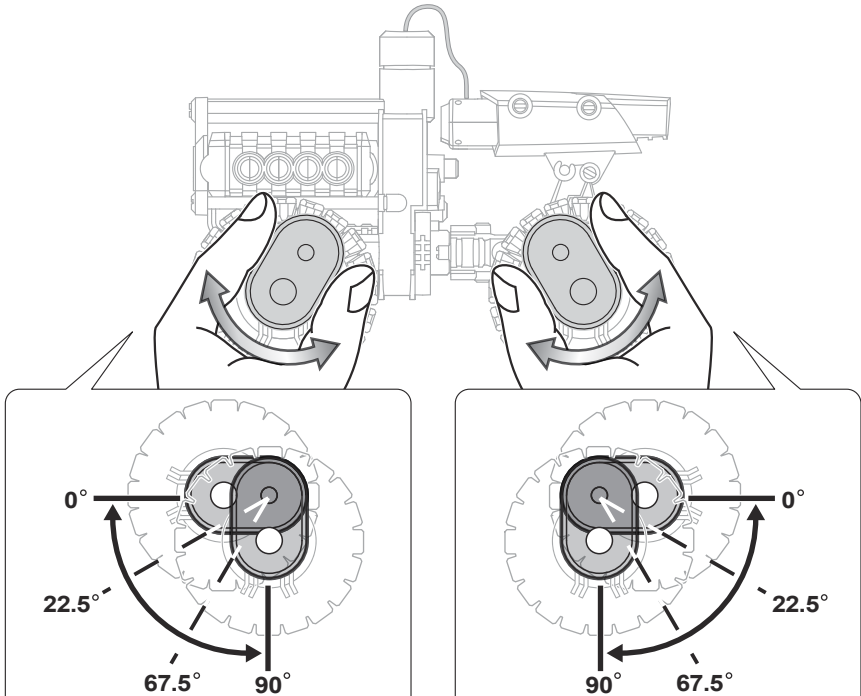


FLAT engine



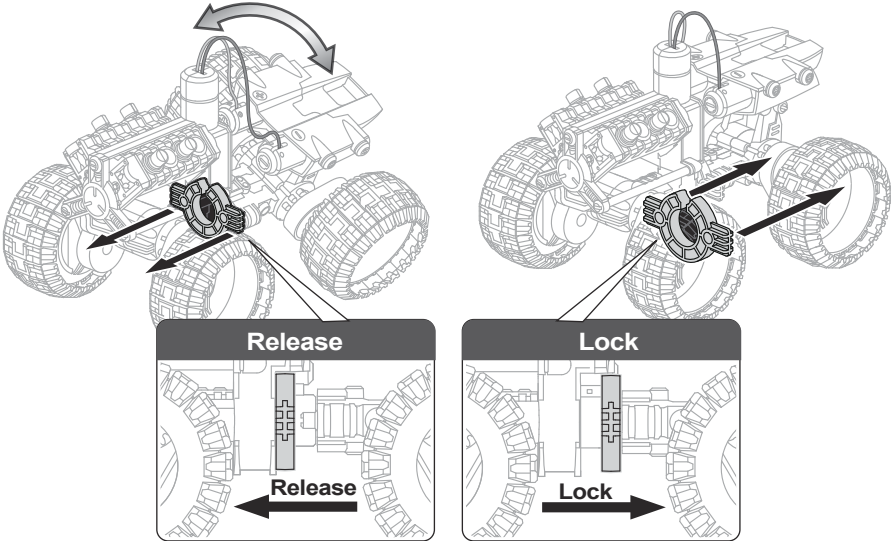
V engine

<2> Adjust height of the wheels.

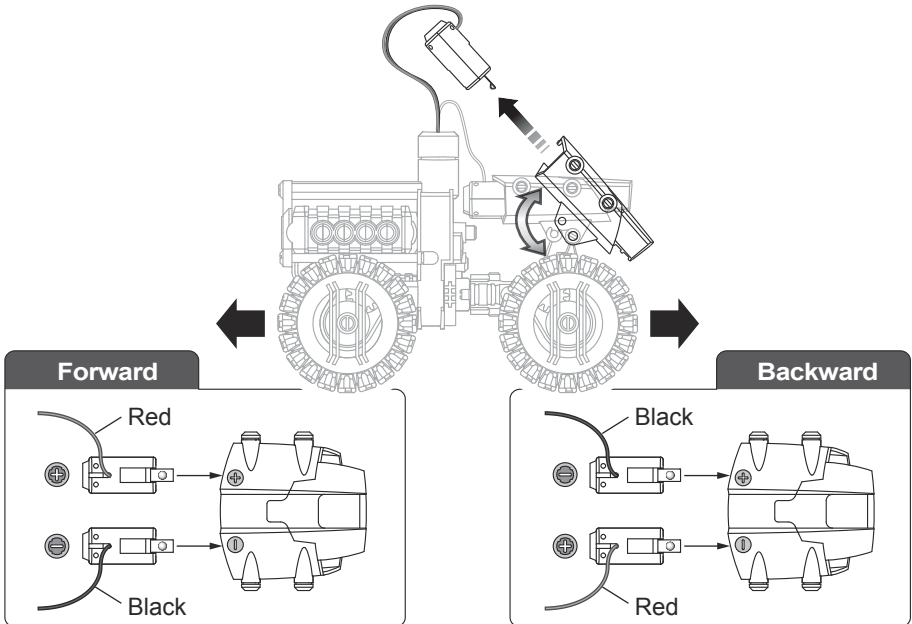


Note: Do not set the front wheels to '0' degree when the engine is in flat type, they may interfere with each other.

<3> Lock or release the car body.



<4> Run the car forward or backward.



Trouble Shooting

Check the steps below if car doesn't move after adding salt water.

- 1 Make sure motor and gears are installed in right position.
- 2 Make sure each connector must be set in right position (Ref: **STEP 4**)
- 3 Make sure Fuel Cell plate and connector module are inserted entirely. (Ref: **STEP 13**)
- 4 Replace a new magnesium sheet if it is eroded as shown below.



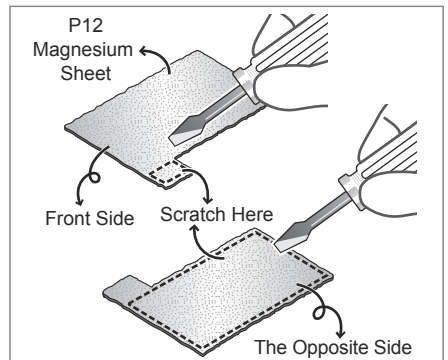
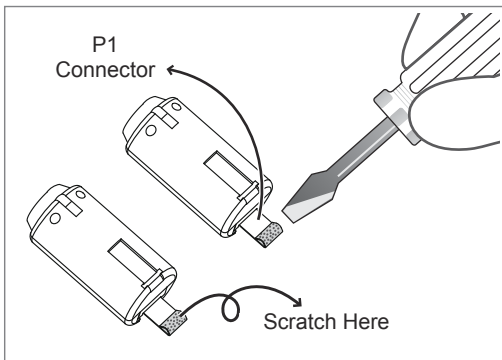
(New)



(Need to replace)



- 5 Make sure that the Fuel Cell plate is placed in the correct sequence and position: air cathode — nonwoven fabric — magnesium sheet. (Ref: **STEP 10**)
- 6 Make sure the air cathode black side is facing up. (Ref: **STEP 10**)
- 7 Nonwoven fabric is also used to isolate air cathode and magnesium sheet, make sure the 2 parts do not come into contact each other or it may cause short circuit. (Ref: **STEP 10**)
- 8 **Important** : If the fabric is totally dry, disassemble the Fuel Cell plate and add salt water as per figure **2 C**. Do not add salt water outside nonwoven fabric .
- 9 Make sure the polarity of the connector dry without salt water. (Ref: **2 e**)
- 10 **Important** : Salt water will easily cause oxidization, scratch oxide from the battery connectors and also magnesium sheet by slotted screwdriver before reuse.
See below figures:





 **WARNING :**
CHOKING HAZARD
Small parts
Not for children under
3 years



435007521A