

13. Flip the switch to the "ON" position to connect the circuit inside the robot.
14. Watch your smart Snail Robot slide away! Try to Insert the medium peg (K) into the round joint's outer hole will create a longer crawling movement or insert it into the inner hole will create a shorter crawling movement.

F. TROUBLESHOOTING

• Check if the hinges were inserted in the correct direction during steps 4 and 5. • Add cooking oil or lubricant to the gears inside the gearbox if the robot isn't moving smoothly. • Check if the pegs securing the connection between the front and back body are pressed in firmly to create smooth movement. • Check if the red/black wires are fixed properly into the side and end slots inside the front body. • Check if the red/black wires are connected and secured properly by the peg. And make sure the black and red wires are only connected to like colors. • Make sure the wires do not get caught between any of the moving parts. • Make sure the batteries are inserted in the correct direction.

F. HOW IT WORKS

The gearbox and joint mechanism you constructed comes to life by transforming an electrical current into kinetic energy. In this case the current comes from the batteries which always have a positive and a negative pole. At the positive pole, there are very few electrons, while there are a lot of electrons at the negative pole. If the positive and negative poles are connected by turning the switch on, electrons move to correct the imbalance, creating an electrical current. The circular joint at the top of the Snail's front body uses that energy to create the cool crawling motion that is just like a real snail would move!

G. FUN FACTS

• The largest living sea snail species is the Syrinx aruanus whose shell can reach 90 cm (35 in) in length and the snail can weigh up to 18 kg (40lbs)! You don't find those in every garden! • Common garden snails have a top speed of 45 m (50 yards) per hour, making the snail one of the slowest creatures on Earth. • Snails carry their homes on their backs! So at the first sign of danger they can retreat into their homes to protect themselves. • Deep inside Earth, huge electrical currents are generated from the spin of the Earth's iron core. These electrical currents create a magnetic field that extends well beyond the surface of the Earth and into outer space! • We are constantly using electricity in our bodies. Every time we move a muscle, it's the result of an electrical signal being sent from our brain to our muscles telling them to move. We have an incredibly complex system of nerves throughout our bodies that use electrical signals to control everything we do.

SNAIL ROBOT

PLEASE SCAN THE QR CODE TO VIEW MULTI-LANGUAGE INSTRUCTIONS

⚠ WARNING:
CHOKING HAZARD - Small parts.
Not for children under 3 years.

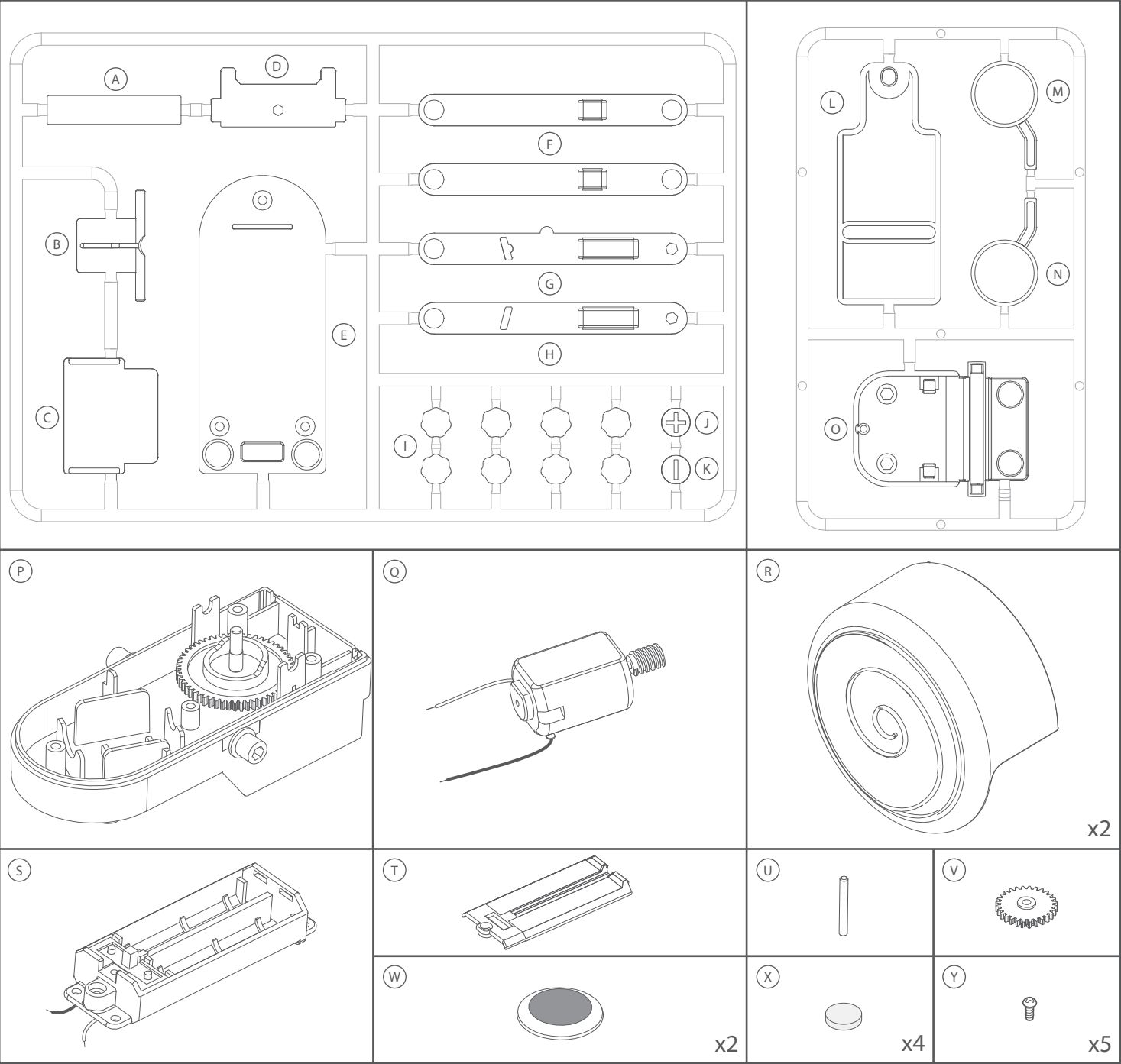
TO PARENTS: PLEASE READ THROUGH THESE INSTRUCTIONS BEFORE PROVIDING GUIDANCE TO YOUR CHILDREN.

A. SAFETY MESSAGES

1) Adult assistance and supervision are required at all times. 2) This kit is intended for children over 8 years of age. 3) This kit and its finished product contain small parts which may cause choking if misused. Keep away from children under 3 years old. 4) To prevent possible short circuits, never touch the contacts inside the battery case with any metal objects. 5) Only install batteries after you have assembled the product. Adult supervision is required.

B. USE OF BATTERIES

1) Requires two 1.5 V AAA batteries (not included). 2) For best results, always use fresh batteries. 3) Make sure you insert the batteries with the correct polarity. 4) Remove the batteries from the kit when not in use. 5) Replace exhausted batteries straight away to avoid possible damage to the kit. 6) Rechargeable batteries must be removed from the kit before recharging. 7) Rechargeable batteries must be recharged under adult supervision. 8) Make sure the supply terminals in the battery case are not short circuited. 9) Do not attempt to recharge non-rechargeable batteries. 10) Do not mix old and new batteries. 11) Do not mix alkaline, standard (carbon-zinc), or rechargeable batteries.

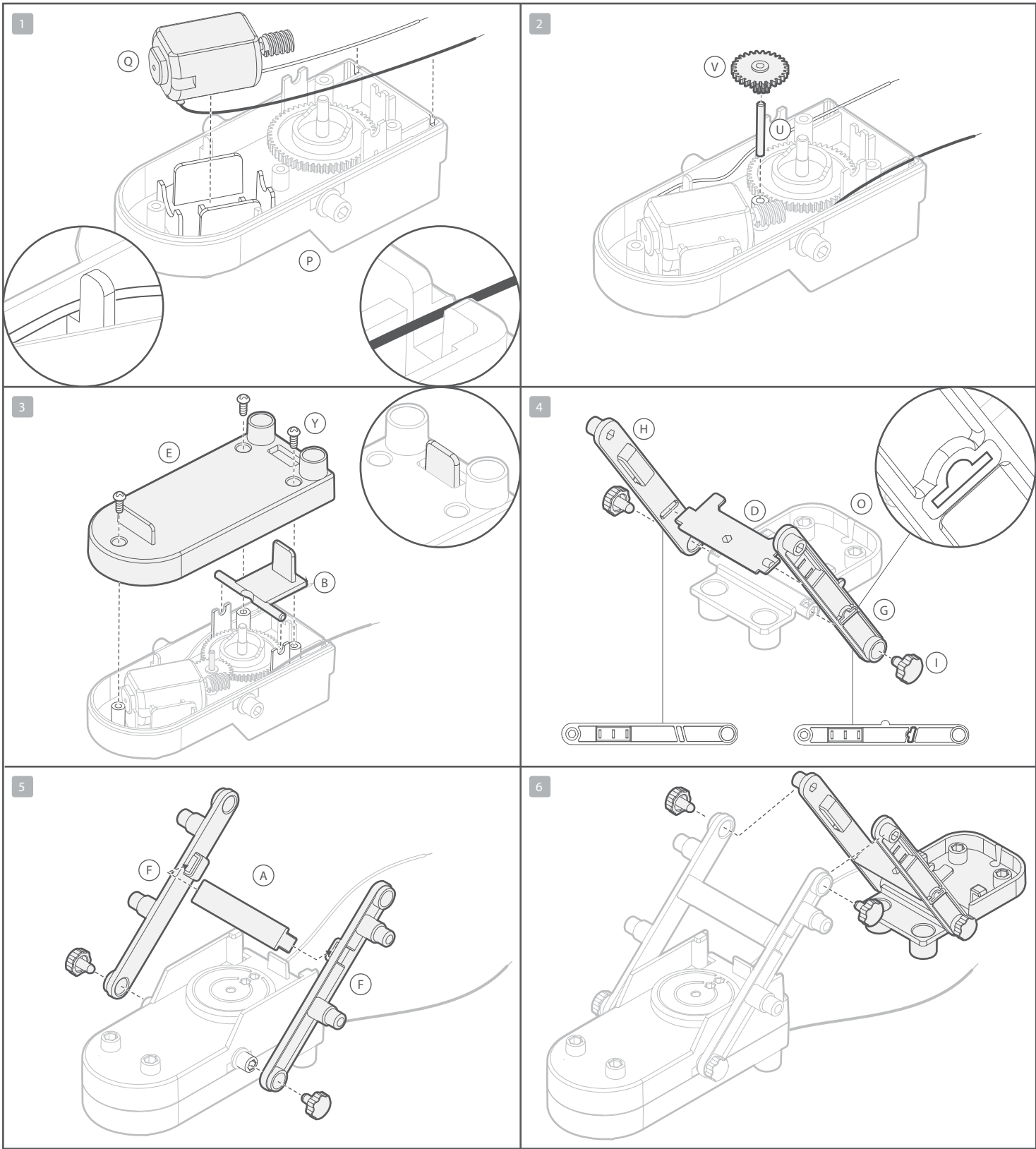


C. CONTENTS

Part; A: Front hinge connector, B: Gear joint holder, C: Battery case holder, D: Back hinge connector, E: Front body base, F: Front hinge x 2, G: Left back hinge, H: Right back hinge, I: Short peg x 8, J: Long peg, K: Medium peg, L: Movement joint, M: Left eye, N: Right eye, O: Back body base, P: Front body top, Q: Motor, R: Shell x 2, S: Battery case, T: Battery case cover, U: Gear axle, V: Small gear, W: Googly eyes x 2, X: Foam foot x 4, Y: Small screw x 5. Also required but not included in this kit: a small crosshead screwdriver, 2 x 1.5V AAA batteries.

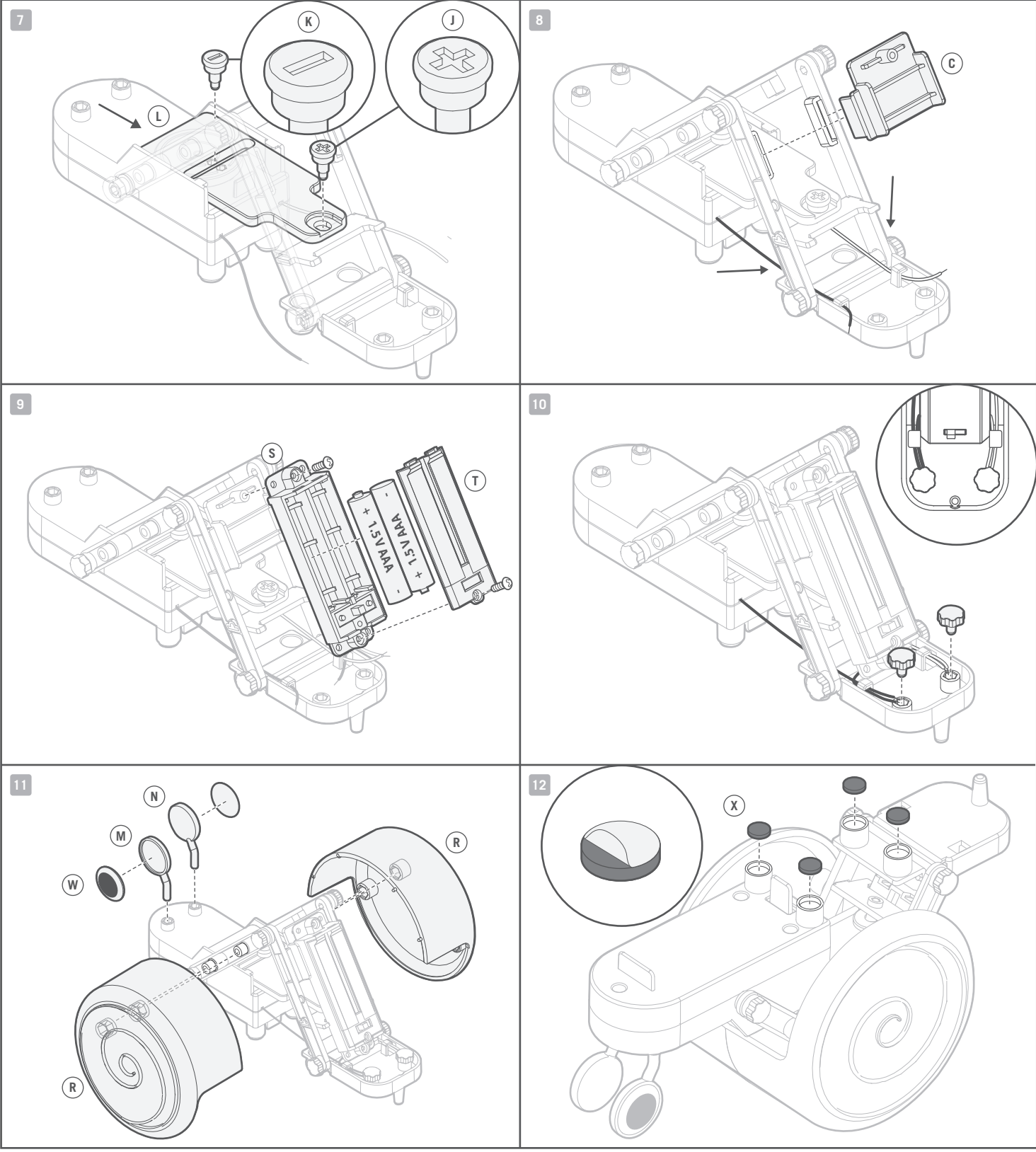
QUESTION AND COMMENTS

We treasure you as a customer and your satisfaction with this product is important to us. In case you have any comments or questions, or you find any parts of this kit missing or defective, please do not hesitate to contact our distributor in your country, whose address is printed on the package. You are also welcome to contact our marketing support team at Email: infodesk@4M-IND.com, Fax (852) 25911566, Tel (852) 28936241, Web site: WWW.4M-IND.COM



D. ASSEMBLY

1. Insert the motor (Q) into the slots inside the front body top (P) as shown. Insert the wires into the small side and end slots so the front body base, secured in step 3, does not cut the wire.
2. Insert the gear axle (U) into the hole beside the main gear. Then place the small gear (V) on top with the flat side facing up.
3. Fit the gear joint holder's (B) joints into the raised slots on either side of the main gear as shown. Cover the gears and motor with the front body base (E) and secure it in place with three small screws (Y). Make sure the vertical flap of the movement joint holder slides through the square hole at the back of the front body base.
4. Attach the left back hinge (G) (the hinge with a small notch at the side to differentiate) to the left side of the back body base (O) with a short peg (I). Attach the right back hinge (H) to the right side of the back body base with another short peg. Then insert the back hinge connector (D) into the two slanted slots with the flat side facing up.
5. Flip the front body over and attach the two front hinges (F) to the front body top with two short pegs as shown. The two protruding joints on each front hinge should face outwards. Finally, insert the front hinge connector (A) into the slots on the inside of each front hinge.
6. Connect the front hinges to the back hinges with two short pegs.



7. Slide the movement joint (L) underneath the clips at the back edge of the front body as shown. Push a long peg (J - with " + " embossed) through the movement joint's round hole and the back hinge connector. Then insert the medium peg (K - with " - " embossed) through the movement joint's long slot and into the hole of the front body's round joint.
8. Insert the battery case holder (C) into the slots on the back hinges with the round screw hole facing upwards. Slide the front body's black and red wires underneath the battery case and movement joint connector to prepare for step 10.
9. Make sure the robot is in off mode before inserting the 2 x 1.5V AAA batteries into the battery case (S) and secure the battery case cover (T) over top. Secure the battery case to the battery case holder afterwards as shown.
10. Insert the black wires into the back body's left metal hole and secure them in place with a short peg. Repeat this process with the red wires in the other metal hole.
11. Attach one of the shells (R) to the two joints on the left front hinge. Repeat with the other shell on the right side and then join the shells together with the small holes/joints at the top of the shell edges. Stick the googly eyes (W) onto the left/right eyes (M & N) and insert them into the holes on the top of the front body as shown.
12. Peel off the plastic film on each foam foot (X) before sticking them onto the feet at the bottom of the front and back body. Your robot is now complete!