

CRAZY ROBOT

PLEASE SCAN THE QR CODE FOR VIEWING MULTI-LANGUAGE INSTRUCTIONS.



FR. Veuillez scanner le code QR pour afficher les instructions multilingues pour ce kit. DE. Bitte scannen den QR-Code, um die mehrsprachige Anleitung für dieses Set anzusehen. NL. Scan de QR-code om de instructies voor deze set in verschillende talen te bekijken. IT. Scansiona il codice QR per visualizzare le istruzioni multi-lingua per questo kit. ES. Escanee el código QR para ver instrucciones en varios idiomas para este kit. JA. QRコードをスキャンして、本キットの多言語説明書をご覧ください。

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

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

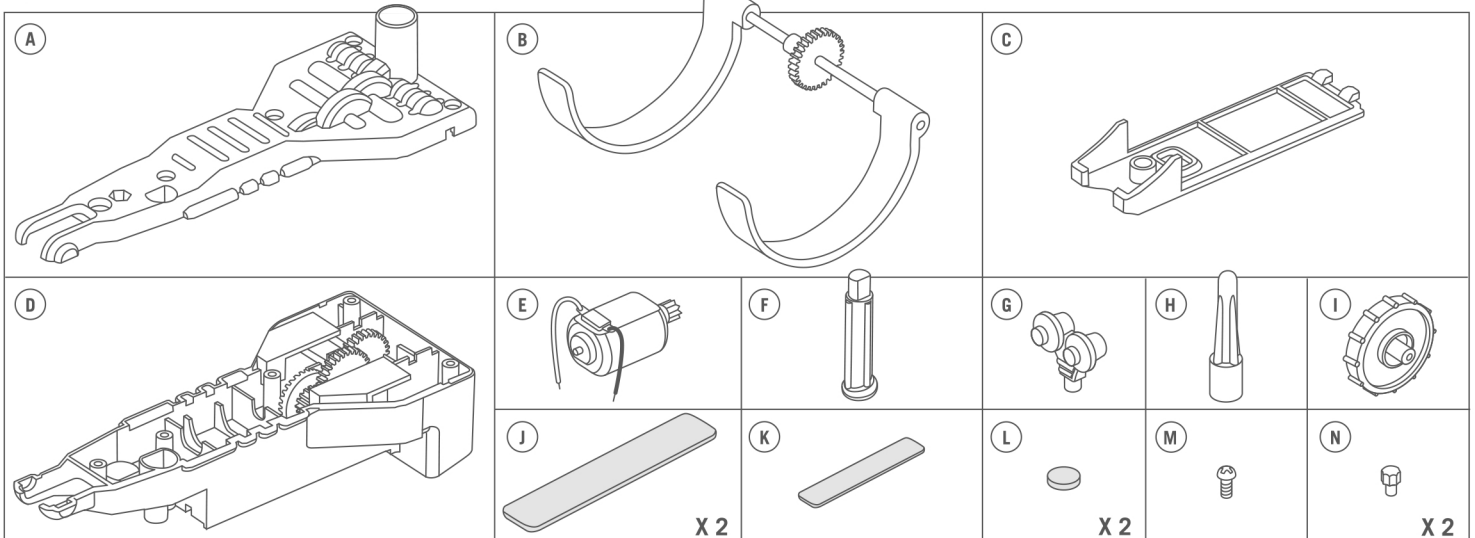
A. SAFETY MESSAGES

1. Adult supervision and assistance 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

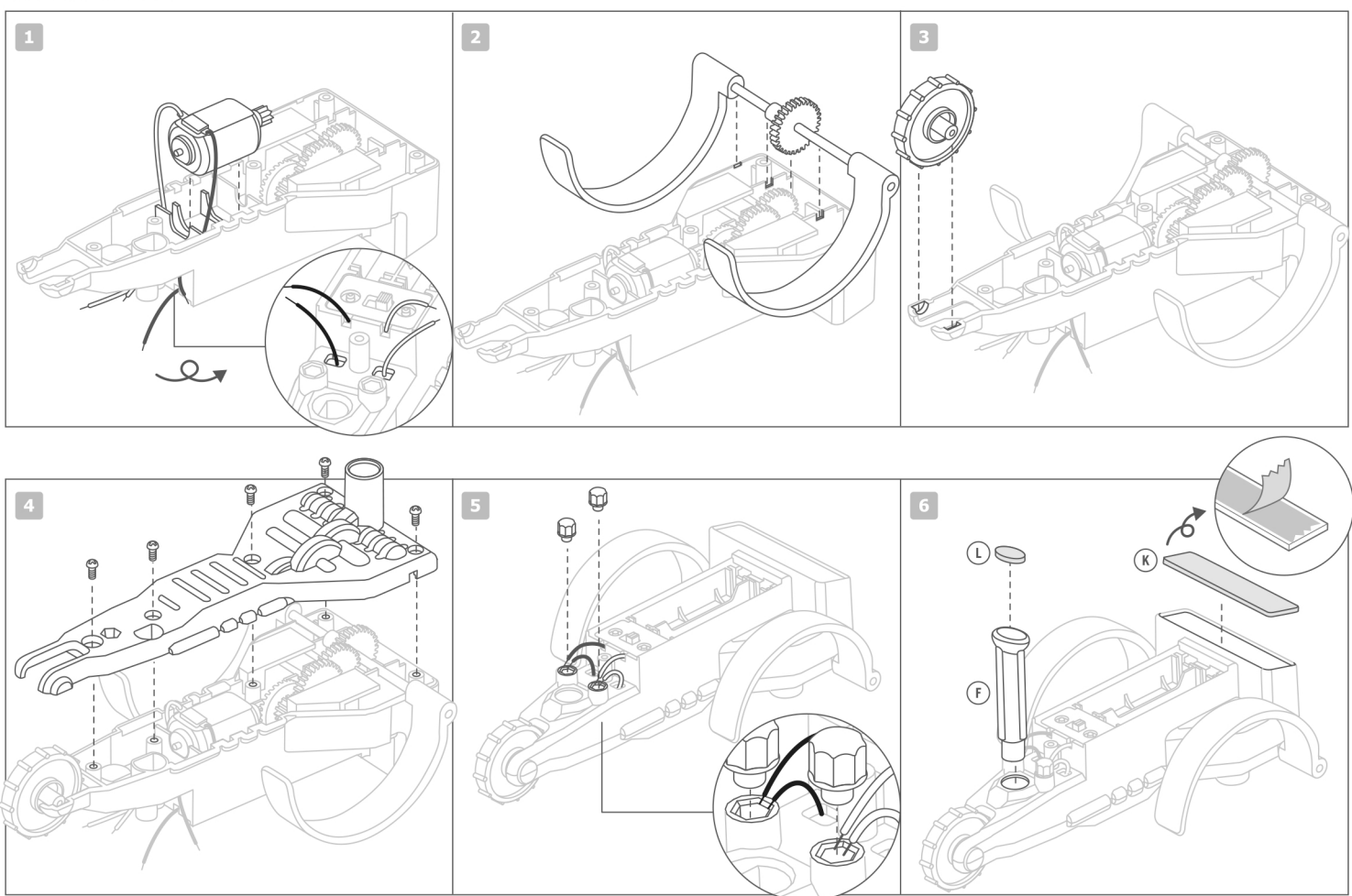
1. Requires two 1.5V AAA batteries (not included). 2. For best results always use fresh batteries. 3. Make sure you insert the batteries with the correct polarities. 4. Remove the batteries from the kit when not in use. 5. Replace exhausted batteries straight away to avoid possible damage to the kit. 6. Rechargeable batteries must be removed from the kit before recharging. 7. Rechargeable batteries should be recharged under adult supervision. 8. Make sure that 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.

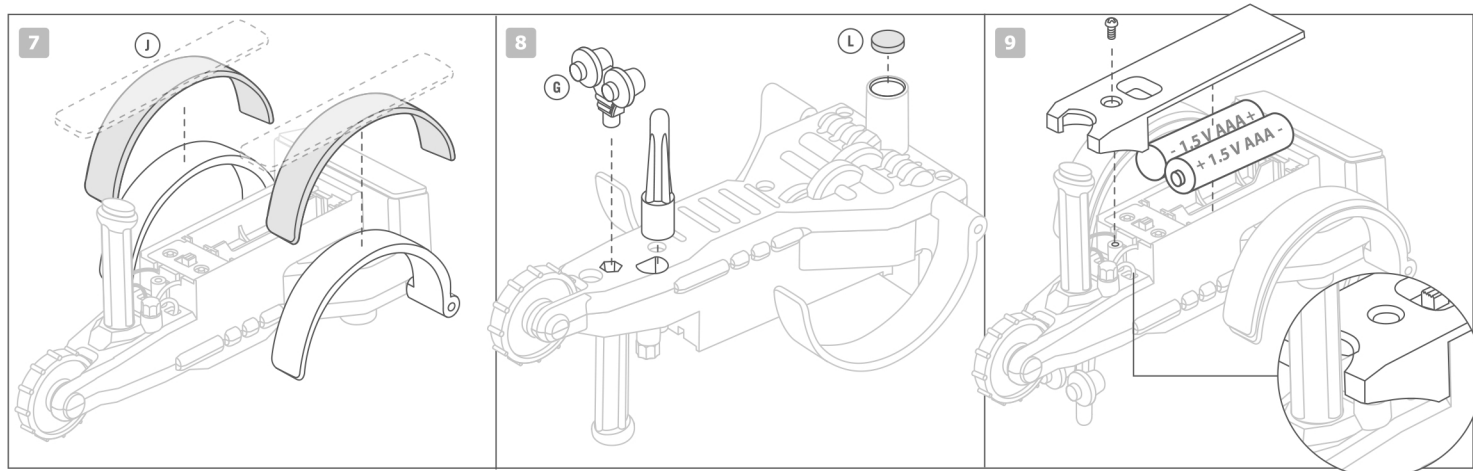
C. CONTENTS



Part A: Gearbox cover x 1, Part B: Axle with legs x 1, Part C: Battery cover x 1, Part D: Robot body x 1, Part E: Motor x 1, Part F: Leg x 1, Part G: Eyes x 1, Part H: Peg x 1, Part I: Wheel x 1, Part J: Long foam strip x 2, Part K: Short foam strip x 1, Part L: Foam pad x 2, Part M: Screws, Part N: Terminal cap x 2. Also required, but not included in the kit: a small crosshead screwdriver, 2 x 1.5V AAA batteries.

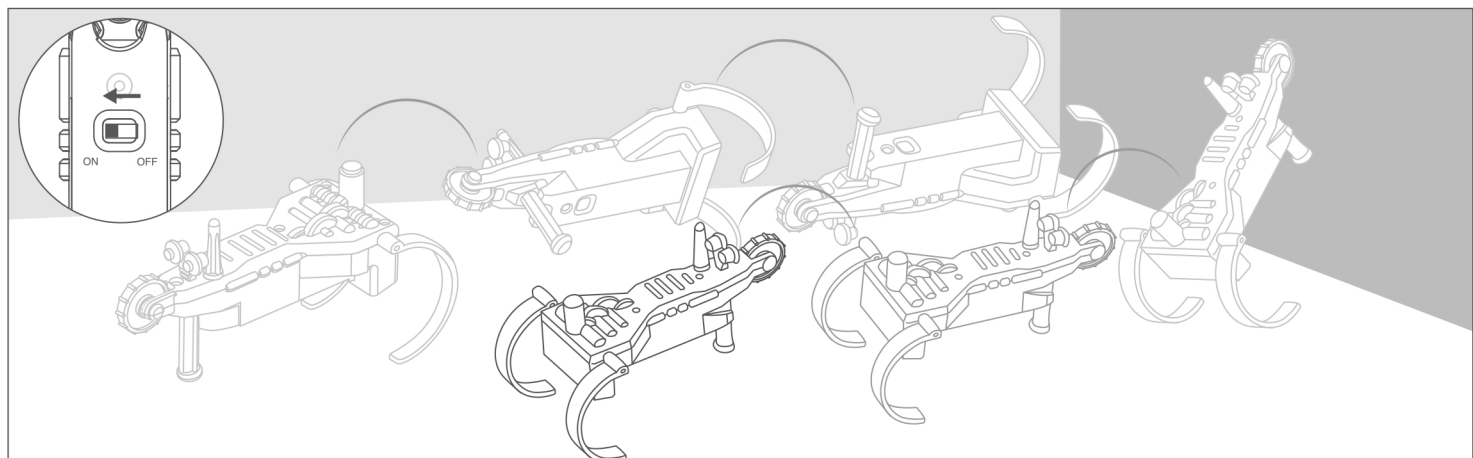
D. ASSEMBLY





1. Slot the motor into the gearbox with the wire connections at the top, and thread the wires through the two holes in the body.
2. Place the robot body on a tabletop in the position shown in the diagram. Slot the axle with legs into the gearbox, making sure the legs are curved upwards and towards you as in the diagram. The gear on the axle must interlock with the small gear on the axle in the gearbox.
3. Slot the wheel into place at the narrow end of the body, and make sure that it spins freely.
4. Carefully put the gearbox cover on the body. Make sure that the wheel still turns freely and secure the cover with five screws.
5. Turn the robot over. Put the bare ends of the black wire from the motor and the black wire from the battery compartment into one of the terminals. Push in a terminal cap to secure the wires in place. Repeat with the red wire from the motor and the red wire from the battery case in the other terminal.
6. Remove the backing from the short foam strip and apply to the end of the body. Push the leg into its slot and apply a foam pad to the end of the leg after removing the backing.
7. Remove the backing from the two long foam strips and carefully apply them to the outsides of the legs.
8. Turn the robot over again. Push the peg and eyes into their slots near the wheel. Remove the backing from a foam pad and apply it at the back of the body.
9. Insert two 1.5V AAA batteries into the battery compartment, with the flat end of the battery against the coiled spring inside the compartment. Put on the battery cover and secure it with a screw. Make sure that all the wires are tucked inside the battery cover and check if the wires are correctly connected. Congratulations! Your robot is ready to go crazy!

E. OPERATION



Place the robot on the floor with the legs facing down. Slide the switch to the ON position. The legs will jump round and the robot will move forwards in a series of crazy leaps! When the robot hits a wall ... flip ... roll ... and it's off again in the opposite direction!

F. HOW IT WORKS

- The system of gears in the gearbox reduces the speed of movement between the motor and the axle that the feet are attached to. This makes the feet turn much more slowly than the motor.
- The curved legs push against the floor, which moves the robot along in a series of jumps.
- When the wheel hits a wall, the push from the legs lifts the wheel up the wall. The robot topples over backwards, and the peg makes it roll over. Now it can travel forwards again.

G. FUN FACTS

- Crazy Robot is a type of walking robot. Each time the legs spin round, it takes a step forwards.
- Walking robots like Crazy Robot can walk across rough terrain and over objects that would stop a wheeled or tracked robot.
- Researchers at the University of Pennsylvania in the USA have built a robot called Rhex. It has six rotating legs like Crazy Robot. It can walk up steps and jump by spinning all its legs in unison.
- Many robots can automatically turn round like Crazy Robot when they hit an obstacle. They often detect objects in their paths using proximity sensors that detect solid objects close by.
- Robots such as robot vacuum cleaners turn round when they hit objects to avoid getting stuck in corners. Robot lawn mowers detect the edge of a lawn so that they can turn round cut a new strip of grass.
- Robots can make maps of rooms by recording where they bump into objects such as walls and furniture. Then they can turn and avoid objects without bumping into them.

H. QUESTIONS & COMMENTS

We value you as a customer and your satisfaction with this product is important to us. If you have comments or questions, or you find any part of this kit missing or defective, please do not hesitate to contact our distributor in your country. You will find the address printed on the package. You are also welcome to contact our Marketing Support Team: Email: infodesk@4m-ind.com, Fax (852) 25911566, Tel: (852) 28936241, Web site: WWW.4M-IND.COM