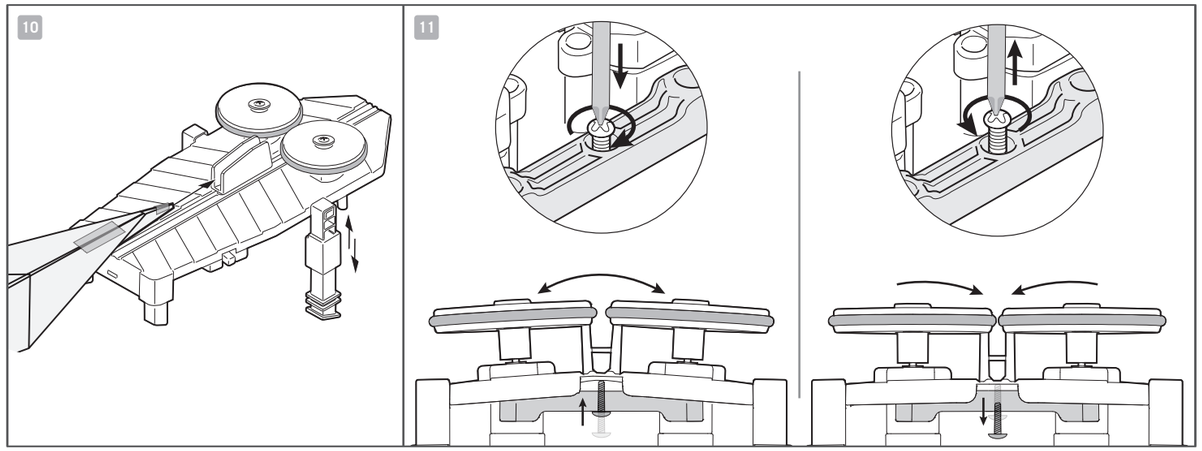

SAFETY WARNING: DO NOT LAUNCH A PLANE WITH A POINTED NOSE AND DO NOT AIM THE LAUNCHER AT ANOTHER PERSON.

10. Operation: Switch on the plane launcher. Place the plane on the plane holder and slowly push the plane into the pulleys. Let go of the plane as soon as the wheels grip it. The plane will be pulled through the wheels and launched at high speed. Watch the plane fly! Note: You can adjust the height of the legs to launch the plane at different angles. If necessary use the adhesive tab (part N) to fix the launcher to the table – this will make the launcher more stable.

11. If you find the wheels are too close to each other, making the motor turn slowly, you can increase the distance between them with the adjustor bar. To do this: screw the adjuster screw in to make the base bend slightly. The distance between the wheels should be about 1 mm.

E. WHAT NEXT?

Try out some different paper plane designs. You might get some ideas from books or the internet. Which designs fly furthest? Which designs stay in the air the longest? Can you make an acrobatic paper plane?

Note: The paper plane must have a vertical fuselage for the launcher to grip. For paper plane designs with a flat base you can attach a separate 'launch strip' with adhesive tape. Design your own paper plane graphics.

F. HOW DOES IT WORK?

The plane launcher uses two rotating wheels. A lot of energy is stored in these wheels when they are spinning. When you slip a paper plane in between, some of the energy is transferred to it and the plane is thrown out at high speed. Ball launchers for tennis and cricket practice work in the same way except the gap between the wheels is much greater.

G. TROUBLESHOOTING

If you are having problems launching planes at high speed, check that gap between the wheels is correct:

1. If you find the wheels are too close you can adjust the gap with the adjustor bar.
2. Don't make the gap between the pulley too large as the wheels will not be able to grip the plane. It may take a few practice launches to get the gap just right.
3. Make sure you allow a few seconds for the wheels to get up to speed before launching a plane.

If your planes don't launch properly:

1. Check that the wires are connected correctly so that the motors are spinning in opposite directions.
2. Check that you are using fresh batteries.
3. Check if the motors are spinning in the correct directions, i.e. when you place the launcher facing out and you look at the motors from the top, the right motor should be spinning clockwise and the left motor should be spinning anticlockwise. If not, refer to step 3 and reconnect the wires following the diagram.

H. FUN FACTS

1. Your plane launcher has been designed to launch paper planes at high speed. With your launcher you can try out different paper plane designs to see which one flies furthest or does the best acrobatics.
2. The plane launcher can throw a paper plane much faster than you can by hand. If you scaled the plane up to, it would be flying faster than a real plane!
3. Paper has been made for over 500 years and is now one of the most common and inexpensive materials. But many trees are needed each year just to supply one family with all the paper it needs.
4. Professional engineers take part in world-wide competitions to design and fly paper. Many engineers claim to have made the perfect plane, but can you do better – and prove it?

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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

ELECTRIC PLANE LAUNCHER

PLEASE SCAN THE QR CODE TO VIEW MULTI-LANGUAGE INSTRUCTIONS

FR. Veuillez scanner le code QR pour afficher les instructions multilingues pour ce kit. **DE.** Bitte scanne 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。

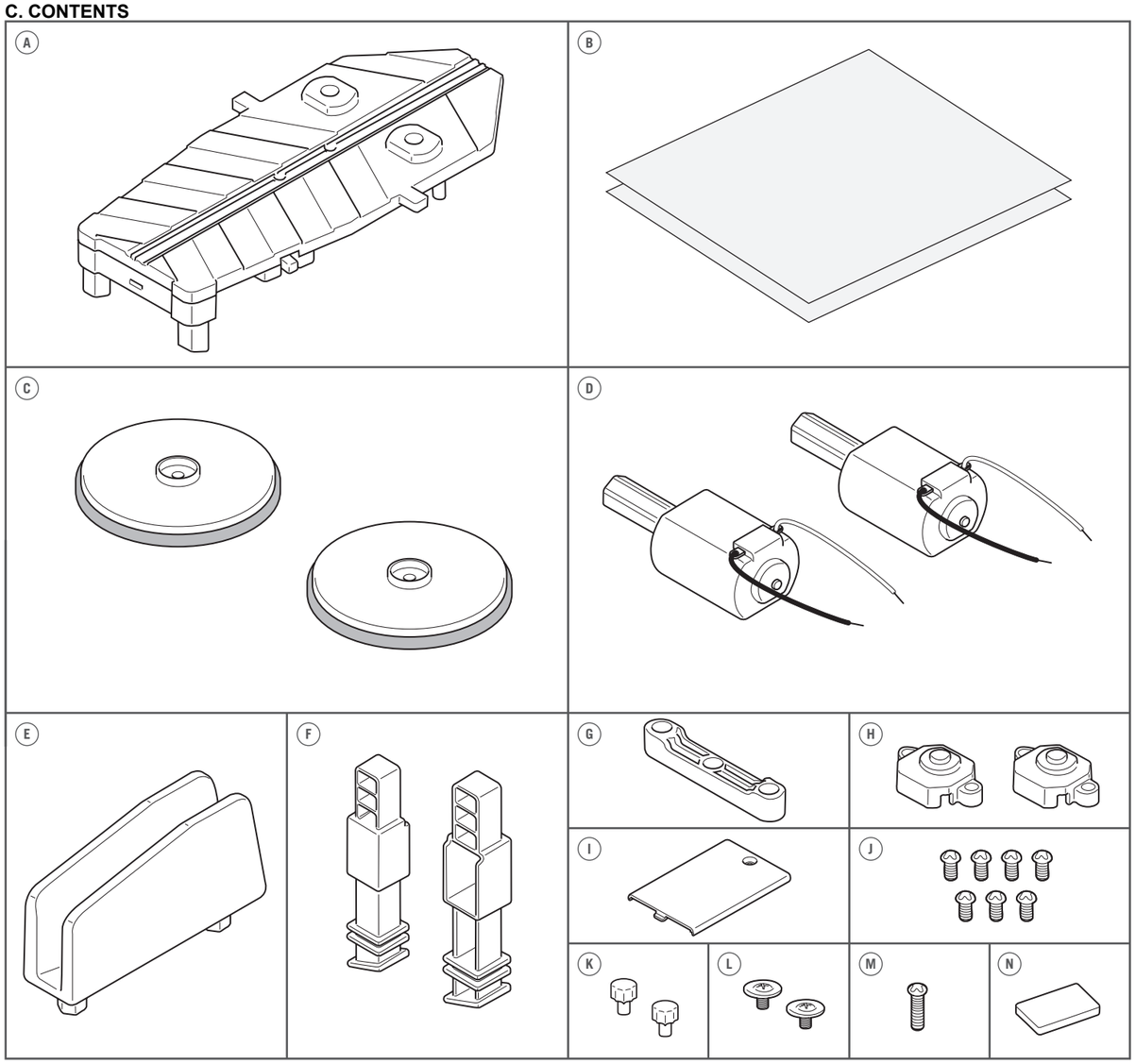
A. SAFETY MESSAGES

1. This is not a toy. This is an educational aid product designed to demonstrate some scientific concepts taught in the school curriculum. Assembly and use should be carried out and supervised by adults or by children aged over 14. Read through the instructions before use. Misuse of contents may cause safety hazards. 2. To prevent possible short circuits, never touch the contacts inside the battery case. 3. For safety, do not launch planes with sharp, pointed noses from the electric plane launcher. 4. Do not aim at eyes or face. Do not discharge an object other than recommended. 5. Do not touch the wheels while they are rotating in high speed. 6. Do not allow your clothes or hair to get close to the wheels.

B. USE OF BATTERIES:

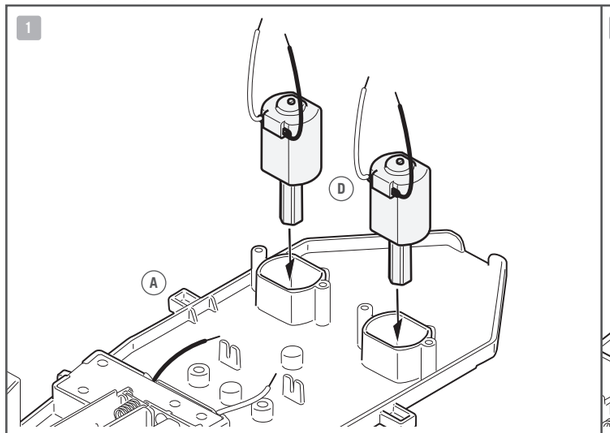
1. Requires three 1.5V AAA batteries (not included). 2. For best results always use fresh batteries. 3. Make sure you insert the batteries with the correct polarities. 4. Remove the batteries from the kit when not in use. 5. Replace exhausted batteries straight away to avoid possible damage to the kit.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

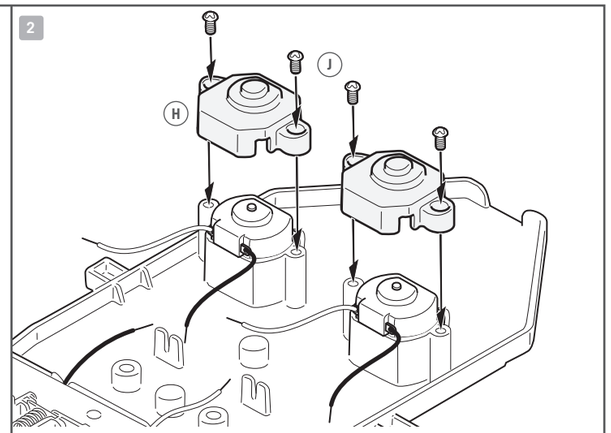
C. CONTENTS

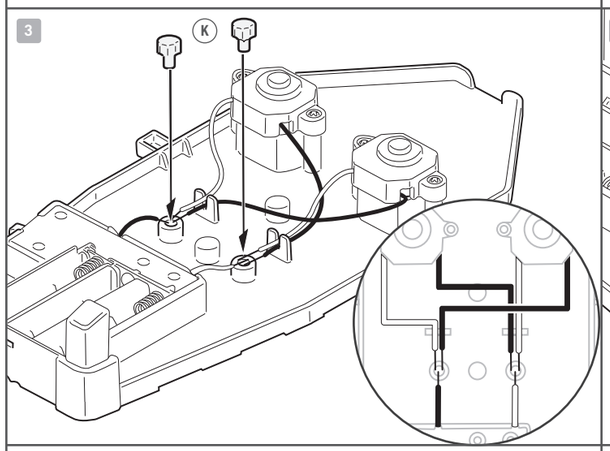


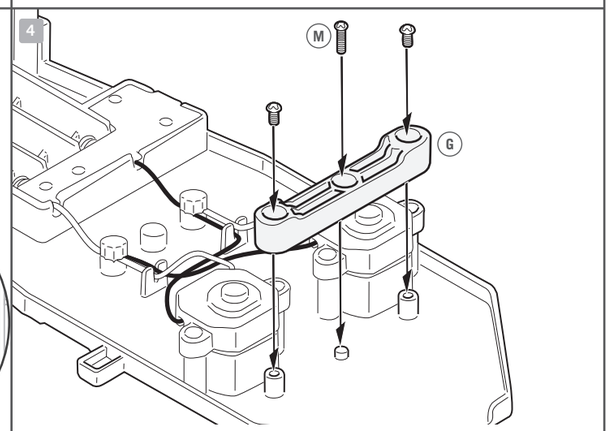
Part A: Base, Part B: Plain templates for folding the paper planes x 2, Part C: Pulley wheels x 2, Part D: Motors x 2, Part E: Plane holder, Part F: Legs x 2, Part G: Adjuster bar, Part H: Motor covers x 2, Part I: Battery cover, Part J: Screws x 7, Part K: Terminal caps x 2, Part L: Washer screws x 2, Part M: Adjuster screw, Part N: Adhesive tab. Also required but not included in the kit: 3 x 1.5V AAA batteries, a small crosshead screwdriver and adhesive tape.

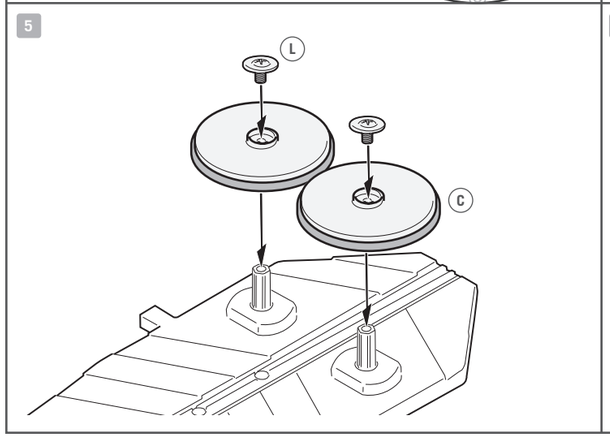
D. INSTRUCTIONS

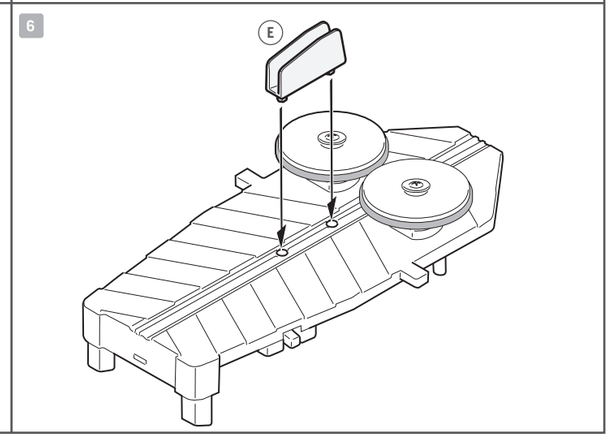




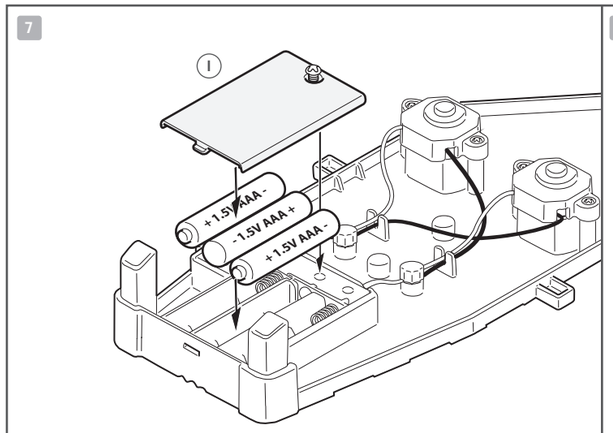


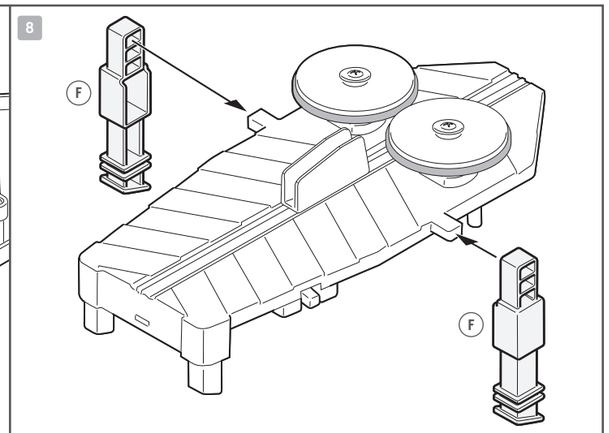


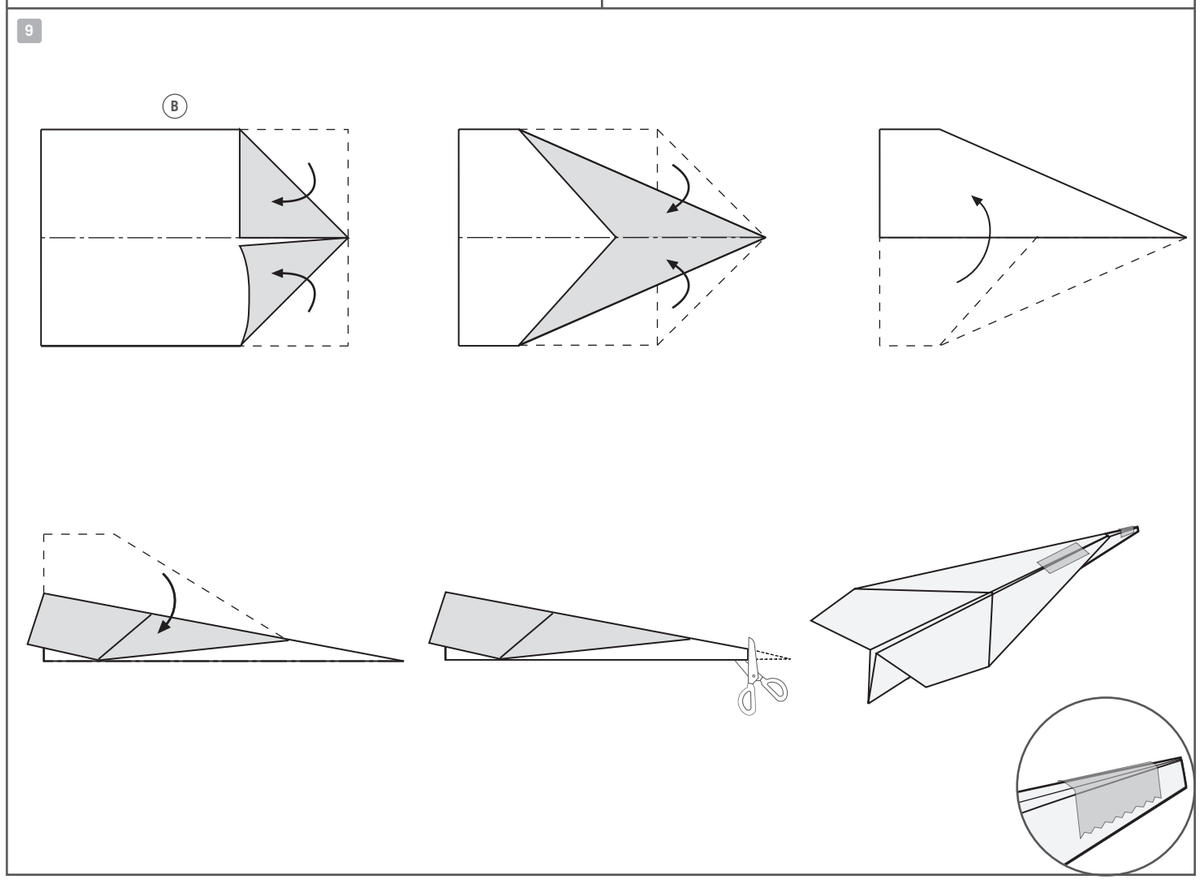




1. Insert the two motors (part D) into the underside of the base (part A).
2. Install the two motor covers (part H) and secure them with 4 screws (part J).
3. Insert the ends of the wires from the motors and the battery case into the terminals, following the diagram as shown. Secure the wires in place with terminal caps (part K). Please strictly follow the diagram, as if the wires are not connected in the correct way the motors will not spin in the correct directions, meaning that planes cannot be launched.
4. Insert the adjuster bar (part G) and secure it with two screws. Also screw the adjuster screw (part M) into the adjuster bar. (Instructions for adjusting the screw are in step 11.)
5. Push the two pulley wheels (part C) onto the motor spindles and secure them with two washer screws (part L).
6. Insert the plane holder (part E) into the base.







7. Insert the batteries as shown. Add the battery cover (part I) and secure it with a screw.
8. Add the two legs (part F), one on each side of the base.
9. Folding the paper plane:
   Fold two corners of a sheet of paper as shown.
   Fold again to make an arrow shape.
   Fold the sheet in half along its length.
   Fold each side down to make the wings.
   Cut the sharp front off.
   Fold the wings out. Add adhesive tape on the front and back to hold the sides of the plane together.