

XIU 13086

# XIU Mechanical Dragonfly Building Set (Model 13086) Instruction Manual

This manual provides detailed instructions for the assembly, operation, and maintenance of your XIU Mechanical Dragonfly Building Set. Please read carefully before beginning assembly.

## PRODUCT OVERVIEW

The XIU Mechanical Dragonfly Building Set is an 866-piece model combining insect biology with steampunk aesthetics. It features realistic wing flapping effects and a hand-crank base that simulates lifelike swimming motions. The model also includes LED lighting that syncs with mechanical movements, illuminating the body and enhancing its display as a decorative centerpiece. Designed for enthusiasts aged 14 and above, this set teaches principles of mechanics and physics, enhancing spatial reasoning, patience, and problem-solving skills.



Image: Assembled XIU Mechanical Dragonfly Building Set, showcasing its overall design and dimensions.

## SAFETY INFORMATION

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This set contains small parts. Keep away from children under 3 years old to prevent choking hazards. Adult supervision is recommended during assembly for younger builders.

## PACKAGE CONTENTS

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Your XIU Mechanical Dragonfly Building Set includes:

- 866 building pieces
- Instruction Manual
- LED lighting components
- Hand-crank mechanism components
- Display base components

## ASSEMBLY INSTRUCTIONS

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Follow the step-by-step visual guide provided in the included instruction booklet. Each step illustrates the required pieces and their placement.

### General Assembly Tips:

- Organize pieces by type or color before starting to streamline the building process.

- Ensure all connections are firm to maintain structural integrity.
- Refer to the instruction manual for detailed diagrams.

## Key Assembly Stages:

1. **Base Construction:** Begin by assembling the display base and the integrated hand-crank mechanism. This forms the foundation for the dragonfly's movement.
2. **Body Assembly:** Construct the main body of the dragonfly, integrating the internal gear system and LED lighting components.
3. **Wing and Leg Attachment:** Attach the detailed wings and articulated legs to the main body. Ensure the wing mechanism is correctly aligned for proper movement.
4. **Final Details:** Add the head, tail, and any remaining decorative elements. Connect the LED wiring as instructed.



Image: Detailed view of the assembled dragonfly, showing its mechanical components and LED lights.

Video: Official product video demonstrating the assembly and features of the Mechanical Dragonfly.

Video: A seller-provided video showcasing the Loyrathe Mechanical Dragonfly Building Blocks for Adults, which is related to this product.

## OPERATING INSTRUCTIONS

Once assembly is complete, the mechanical dragonfly can be operated manually or with an optional motor (not included).

Manual Operation:

- Locate the hand-crank on the display base.
- Gently turn the hand-crank to activate the wing-flapping mechanism and simulate movement.
- The integrated LED lights will illuminate as the mechanism operates.

Motorized Operation (Optional, Motor Not Included):

- If using an optional motor, follow the motor's specific installation instructions to connect it to the designated points on the display base.
- Activate the motor to observe continuous wing movement and synchronized LED lighting.

MAINTENANCE

- Keep the model clean by gently dusting with a soft, dry cloth.
- Avoid exposing the model to direct sunlight or extreme temperatures to prevent material degradation.
- Store in a stable location to prevent accidental falls or damage.

TROUBLESHOOTING

Common Issues and Solutions:

- **Parts not fitting:** Double-check the instruction manual to ensure the correct pieces are being used and oriented correctly. Apply gentle pressure; do not force pieces.
- **Missing pieces:** If any pieces are missing, contact the manufacturer's customer support for assistance.
- **Mechanism not moving smoothly:** Inspect the gear system for any obstructions or incorrectly placed pieces. Ensure all connections are secure.
- **LED lights not working:** Verify that the LED components are correctly connected and that any required batteries (if applicable) are properly installed and functional.

SPECIFICATIONS

| Feature            | Detail                                                                                                     |
|--------------------|------------------------------------------------------------------------------------------------------------|
| Brand              | XIU                                                                                                        |
| Model Number       | 13086                                                                                                      |
| Product Dimensions | 13 x 9.4 x 14.2 inches                                                                                     |
| Item Weight        | 1.9 pounds                                                                                                 |
| Number of Pieces   | 866                                                                                                        |
| Recommended Age    | 14+ years (Manufacturer recommended age: 6-11 years, but product description targets 14+ for STEM aspects) |

| Feature | Detail |
|---------|--------|
|---------|--------|

|          |                                                                             |
|----------|-----------------------------------------------------------------------------|
| Features | Mechanical wing flapping, hand-crank operation, LED lighting, display stand |
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*Note: The manufacturer's recommended age on the product listing is 6-11 years, however, the product description highlights advanced engineering concepts suitable for STEM enthusiasts aged 14+.*

## WARRANTY AND SUPPORT

For warranty information, replacement parts, or further assistance, please contact XIU customer support through their official channels or the retailer where the product was purchased. Keep your proof of purchase for warranty claims.