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› Goolsky Dancing Wings Hobby S0801 Balsa Wood RC Airplane 1.2M Piper Cub J-3 Remote Control Aircraft KIT Version DIY Flying Model

Goolsky S0801

Goolsky Dancing Wings Hobby S0801 Balsa Wood RC Airplane Instruction Manual

Model: S0801 | Brand: Goolsky

1. INTRODUCTION

The Goolsky Dancing Wings Hobby S0801 Balsa Wood RC Airplane is a KIT version designed for enthusiasts who enjoy the process of building their own remote control aircraft. This semi-scale Piper Cub J-3 model offers a rewarding construction experience and is an excellent choice for both experienced modelers and relatively new pilots looking to delve into traditional kit building. The kit provides the primary wooden structure, requiring additional components for flight. This manual provides detailed instructions for the assembly, operation, and maintenance of your S0801 RC airplane kit. Please read all instructions carefully before beginning assembly.

2. ASSEMBLY INSTRUCTIONS

This is a KIT version, meaning it requires assembly of the balsa wood components and installation of the power system and electronics. Patience and manual dexterity are essential for a successful build.

2.1. Components Overview

The kit includes precision laser-cut balsa wood parts for the airframe, along with basic hardware such as landing gear, control rods, and control arms. The following components are **not included** in the kit and must be purchased separately:

- **Electric Motor:** 2212-2216 900-1100KV
- **ESC (Electronic Speed Controller):** 20-30A
- **Servos:** 9g * 4pcs
- **Propeller:** 8-10 inch
- **Battery (BATT):** 3S 2200-2800mAh
- **Radio System:** More than 4CH (Channel)
- **Covering Film:** Film Pack (required to cover the balsa wood structure)
- **Adhesives:** Balsa cement, CA glue (super glue), epoxy, or wood glue.

2.2. Pre-Assembly Checklist

- Unpack all components and verify against the parts list (if provided with the kit).
- Ensure you have a clean, well-lit workspace.
- Gather all necessary tools: hobby knife, sandpaper, clamps, ruler, building board, pins, and appropriate adhesives.
- Review the included plans and instructions thoroughly before starting. Note that some steps may require interpretation or prior modeling experience.

2.3. Step-by-Step Assembly

1. Fuselage Assembly:

Begin by assembling the fuselage structure. The new wooden structure includes bulkheads and optimized interlock positions for more convenient assembly. Ensure all joints are square and securely glued.

2. Wing Assembly:

Assemble the wing sections. The kit features an 1180mm wingspan for good stability. Pay attention to optimizing the shape of the wingtip. A carbon fiber dihedral piece should be sandwiched between the two plywood pieces for joining the wings; this is crucial for wing integrity and flight characteristics.

The wing fixing method has been adjusted for more convenient and firmer installation. Ensure the wing sections are aligned correctly before permanent bonding.

3. Tail Assembly:

Assemble the horizontal and vertical stabilizers. Ensure they are perfectly aligned with the fuselage for proper flight performance.

4. Landing Gear Installation:

Install the landing gear. Securely attach the wheels to the struts. Ensure the landing gear is robustly mounted to withstand landings.

5. Control Surface Installation:

Attach the ailerons, elevator, and rudder to their respective surfaces using the provided paper hinges or other suitable hinging methods. Ensure free movement and proper alignment.

6. Power System and Electronics Installation:

Install the motor, ESC, servos, and receiver according to their respective manuals. Route wiring neatly and securely. Ensure the magnetic hatch under the motor area is properly aligned and secured. Mark the magnets before gluing them to ensure correct polarity.

7. Propeller Installation:

Attach the propeller to the motor shaft. Ensure it is balanced and securely fastened.

8. Covering:

Once the balsa structure is complete and all electronics are installed, cover the entire airframe with the chosen covering film. This step is crucial for structural integrity, aerodynamics, and aesthetics.



Image: The Goolsky Dancing Wings Hobby S0801 Balsa Wood RC Airplane kit fully assembled, showcasing its balsa wood frame structure before covering. The image highlights the wings, fuselage, tail, and landing gear.

3. OPERATION GUIDE

3.1. Pre-Flight Checks

- Ensure the battery is fully charged and securely installed.
- Verify all control surfaces (ailerons, elevator, rudder) move freely and in the correct direction in response to transmitter inputs.
- Check all linkages and connections for security.
- Perform a range check of your radio system.
- Confirm the propeller is securely attached and free from damage.
- Check the center of gravity (CG) according to the plans. Proper CG is critical for stable flight.

3.2. Flight Controls

Familiarize yourself with the basic controls of your RC airplane:

- **Throttle:** Controls motor speed and thrust.
- **Ailerons:** Control roll (banking) of the aircraft.
- **Elevator:** Controls pitch (nose up/down) of the aircraft.
- **Rudder:** Controls yaw (nose left/right) of the aircraft.

3.3. First Flight Tips

- Choose a large, open area free from obstacles, people, and power lines.
- Fly on a calm day with minimal wind, especially for initial flights.
- Consider having an experienced RC pilot assist you with your first flights.
- Start with gentle control inputs. The J-3 is known for its stable flight characteristics, making it suitable for new players to improve flying skills.

- Always maintain visual contact with your aircraft.

4. MAINTENANCE

Regular maintenance will ensure the longevity and safe operation of your RC airplane.

- **Post-Flight Inspection:** After each flight, inspect the airframe for any damage, loose connections, or signs of wear. Check the propeller for nicks or cracks.
- **Cleaning:** Keep the aircraft clean. Remove any dirt, grass, or debris from the airframe and moving parts.
- **Component Check:** Periodically check all screws, linkages, and control horns for tightness. Ensure servos operate smoothly and quietly.
- **Battery Care:** Follow the manufacturer's instructions for charging, discharging, and storing your flight battery.
- **Storage:** Store the airplane in a cool, dry place, away from direct sunlight and extreme temperatures.

5. TROUBLESHOOTING

This section addresses common issues you might encounter during assembly or operation.

Problem	Possible Cause	Solution
Assembly instructions are vague.	Kit instructions may assume prior modeling experience.	Refer to online build logs or videos for similar models. Take your time and dry-fit parts before gluing. Experienced modelers should have no problem.
Wing plan does not perfectly match laser-cut pieces.	Minor discrepancies in manufacturing or design revisions.	Adjust parts slightly as needed. Focus on achieving the correct airfoil and overall wing shape.
Hardware (e.g., grommets, nuts) does not fit well.	Variations in supplied hardware or material tolerances.	Use appropriate tools for installation. If parts are too loose, use a small amount of adhesive to secure them (avoiding threads). If too tight, gently ream holes.
Control surfaces do not move freely.	Hinges are stiff or binding; linkages are obstructed.	Ensure hinges are properly installed and flexible. Check for any parts rubbing against linkages and adjust as necessary.
Aircraft is difficult to control in flight.	Incorrect Center of Gravity (CG); control throws are too large/small; trim issues.	Verify CG according to plans. Adjust control surface throws on your transmitter. Trim the aircraft during flight to achieve stable, level flight.

6. TECHNICAL SPECIFICATIONS

Feature	Detail
Item Name	Balsa Wood Electric Airplane Kit
Material	Balsa Wood
Wingspan	1180mm
Fuselage Length	780mm
Suggested Motor	2212-2216 900-1100KV
Suggested ESC	20-30A
Suggested Servos	9g * 4pcs
Suggested Propeller	8-10 inch
Suggested Battery	3S 2200-2800mAh
Suggested Radio	More than 4CH
Package Dimensions	60 x 15 x 8 cm (23.62 x 5.91 x 3.15 inches)
Item Weight (Kit)	875g (1.67 pounds)

7. SUPPORT AND WARRANTY

7.1. Customer Support

For any issues or questions regarding your Goolsky Dancing Wings Hobby S0801 kit, please contact the seller or Goolsky customer service directly. They are committed to providing support and assistance.

You can visit the Goolsky Store on Amazon for more information:[Goolsky Store](#)

7.2. Warranty Information

Specific warranty details for the Goolsky Dancing Wings Hobby S0801 kit are typically provided at the point of purchase or within the product packaging. Please retain your proof of purchase for any warranty claims. The manufacturer offers an after-sales service guarantee for any problems encountered.