

E-flite EFL310013

E-flite Wing Set Apprentice STS EFL310013 Instruction Manual

Model: EFL310013 | Brand: E-flite

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your E-flite Wing Set Apprentice STS EFL310013. This product is a replacement part designed for the Apprentice STS aircraft. Please read this manual thoroughly before proceeding with any steps to ensure safe and correct usage.

2. SAFETY INFORMATION

WARNING:

Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury. This is a sophisticated hobby product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the instructions provided by Horizon Hobby, LLC. The product manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

3. PRODUCT OVERVIEW

The E-flite Wing Set Apprentice STS EFL310013 is a direct replacement wing for the Apprentice STS aircraft. It includes the main wing sections and associated components necessary for installation.



Image: The E-flite Apprentice STS Replacement Wing Set, showing the two main wing sections, various small plastic parts, control rods, and decal sheets.

What's in the Box:

- Wing Set: Apprentice STS

Key Features:

- Direct replacement for Apprentice STS aircraft.
- Designed for precise fit and performance.

4. SETUP AND INSTALLATION

Proper installation of the wing set is crucial for the safe and stable flight of your aircraft. Follow these steps carefully:

1. **Unpacking and Inspection:** Carefully remove all components from the packaging. Inspect the wing sections for any signs of damage during shipping, such as cracks, dents, or tears in the covering. If any damage is

found, contact E-flite support before proceeding.

2. **Remove Old Wing (if applicable):** If replacing an existing wing, carefully detach it from the fuselage. Note the orientation and connection points of any control linkages or wiring.
3. **Wing Attachment:** Align the new wing sections with the fuselage. Ensure the wing spar (if separate) is correctly inserted and the wing is seated firmly against the fuselage. Secure the wing using the designated fasteners (e.g., screws, clips) as per your aircraft's main instruction manual. Ensure the wing is securely attached and does not wobble.
4. **Control Surface Linkage:** If your wing includes ailerons or other control surfaces, connect their linkages to the appropriate servos in the fuselage. Ensure the linkages move freely and are securely fastened. Verify that the control surfaces move in the correct direction relative to your transmitter inputs.
5. **Decal Application:** Apply any included decals to the wing surfaces as desired. For best results, clean the surface thoroughly before application and follow standard decal application techniques (e.g., using water for positioning, smoothing out bubbles).
6. **Pre-Flight Checks:** Before flying, perform a thorough pre-flight check. Verify the wing is securely attached, all control surfaces move freely and correctly, and the aircraft's center of gravity (CG) is within the recommended range as specified in your aircraft's main manual.

5. OPERATING CONSIDERATIONS

While the wing itself does not have operational controls, its proper function is integral to the aircraft's flight performance. Always ensure the following before each flight:

- **Secure Attachment:** Confirm the wing is firmly attached to the fuselage with no looseness.
- **Control Surface Function:** Check that all control surfaces on the wing (e.g., ailerons) move freely and respond correctly to transmitter inputs.
- **No Visible Damage:** Inspect the wing for any new damage, such as cracks, tears, or warping, that may have occurred since the last flight.
- **Center of Gravity (CG):** Re-verify the aircraft's CG, especially after any repairs or component changes, to ensure stable flight characteristics.

6. MAINTENANCE

Regular maintenance will extend the lifespan of your wing set and ensure continued safe operation:

- **Cleaning:** Gently clean the wing surfaces with a soft, damp cloth. Avoid harsh chemicals that could damage the finish or material.
- **Inspection:** Periodically inspect the entire wing for signs of wear, fatigue, or damage. Pay close attention to attachment points, control surface hinges, and the leading/trailing edges.
- **Storage:** Store the wing set in a cool, dry place, away from direct sunlight and extreme temperatures, to prevent warping or material degradation. If detached from the aircraft, store it in a way that prevents bending or pressure on the surfaces.
- **Linkage Check:** Ensure all control linkages connected to the wing's control surfaces remain free of binding and are securely fastened.

7. TROUBLESHOOTING

This section addresses common issues related to the wing set:

- **Wing Not Attaching Securely:**

Possible Cause: Misalignment, obstruction, or incorrect fasteners.

Solution: Re-align the wing with the fuselage. Check for any debris or foreign objects preventing a flush fit. Ensure you are using the correct fasteners and tightening them appropriately as per the aircraft's main manual. Do not overtighten.

- **Control Surfaces Not Moving Correctly:**

Possible Cause: Linkage binding, loose connections, or damaged servo/control horn.

Solution: Inspect all linkages for free movement. Ensure clevises or connectors are securely attached to control horns and servo arms. Check for any damage to the control horn on the wing or the servo itself.

- **Aircraft Flies Erratically After Wing Replacement:**

Possible Cause: Incorrect CG, control surface trim issues, or wing not installed level.

Solution: Re-check the aircraft's Center of Gravity (CG) with the new wing installed. Ensure control surfaces are neutral when the transmitter sticks are centered. Verify the wing is installed level and not twisted.

- **Visible Damage to Wing (e.g., cracks, tears):**

Possible Cause: Impact during flight/landing, improper handling/storage.

Solution: Minor damage to the covering may be repaired with appropriate repair tape or heat shrink film. Structural damage (e.g., cracks in foam or wood) may require professional repair or replacement of the wing section for safety.

8. SPECIFICATIONS

Attribute	Value
Product Dimensions	42 x 17 x 4 inches
Item Weight	13.4 ounces
ASIN	B07VMMSCSJ
Item Model Number	EFL310013
Manufacturer Recommended Age	14 months and up
Manufacturer	E-flite
Country of Origin	China
Date First Available	August 26, 2019

9. WARRANTY AND SUPPORT

For warranty information, technical support, or replacement parts not listed in this manual, please contact E-flite customer service directly. Refer to the official E-flite website or your original aircraft manual for contact details and the most up-to-date support information.

E-flite Official Website: www.horizonhobby.com/e-flite.html

