

# FREEFLY

## Replacement Instructions- Astro Service Bulletin SB001

Astro Service Bulletin SB001 Propeller Mount Replacement

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## INTRODUCTION

Per Astro Service Bulletin SB001 Propeller Mount Replacement, this Work Instruction shows how to remove original propeller assemblies and replace them with upgraded production version as well as verify that installation is correct.



### TOOLS:

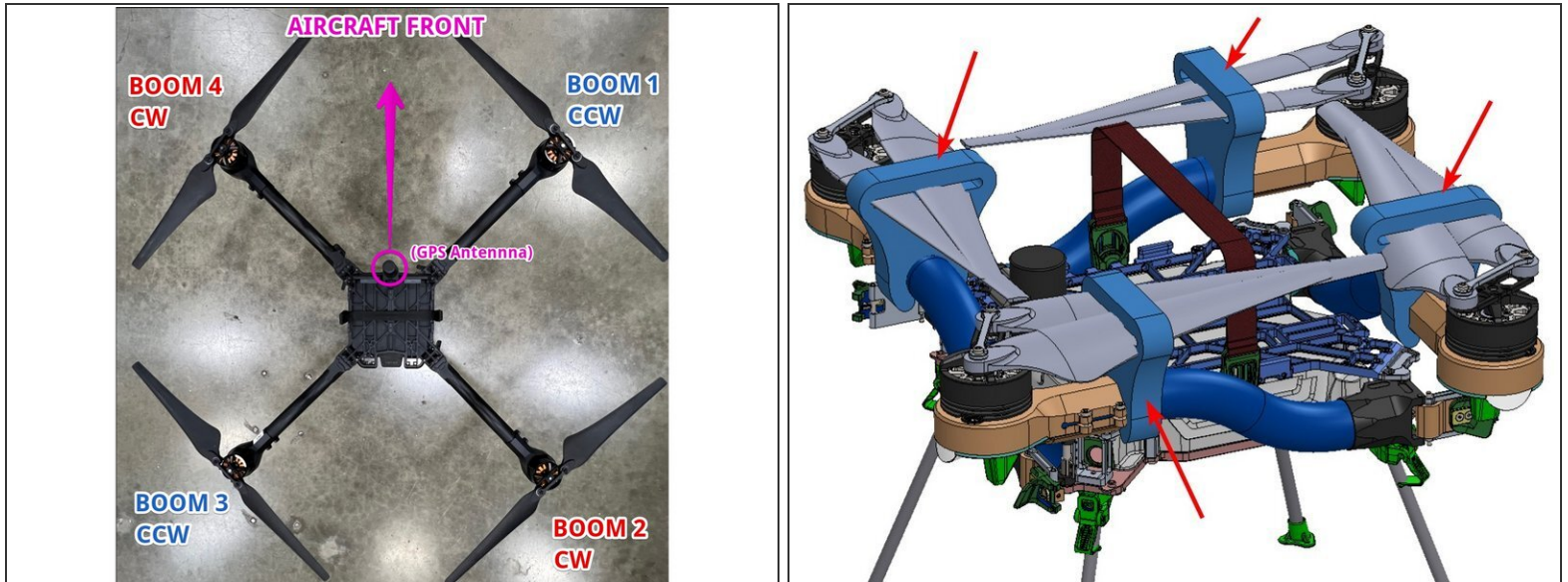
- [2.5mm Hex Driver](#) (1)
- [Loctite 243](#) (1)
- [Masking Tape/Sticky Note](#) (4)
- [Pen/Marker](#) (1)



### PARTS:

- [Astro Replacement Propeller Assembly CCW](#) (2)
- [Astro Replacement Propeller Assembly CW](#) (2)

## Step 1 — Prepare Astro



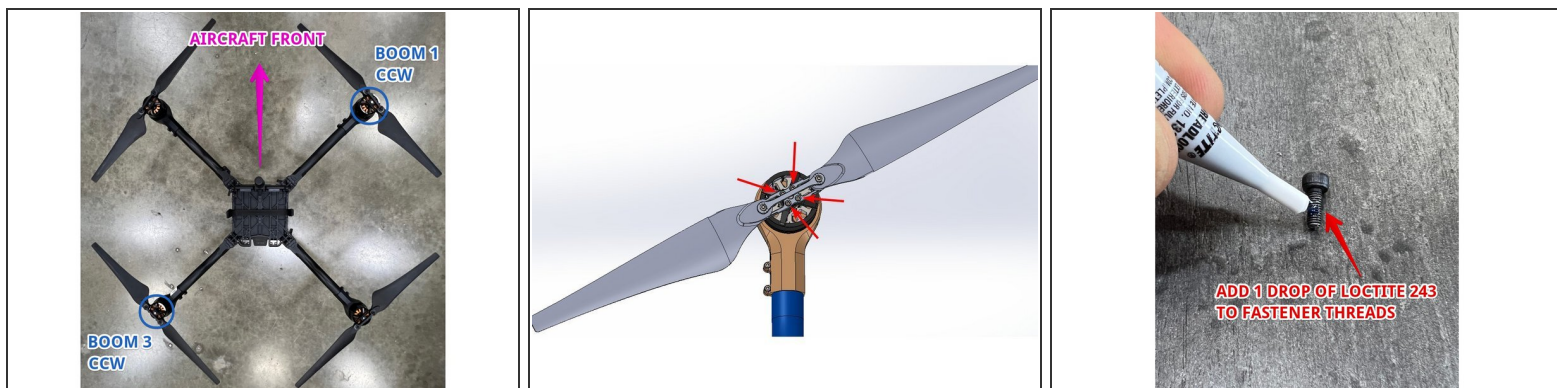
- Get your Astro and unfold the booms
  - ⚠ Identify the front of the Astro- the front has the cylindrical GPS Antenna mount
- Remove the propeller protectors
- Grab sticky notes or tape and a pen and temporarily identify the booms on your Astro 1-4 per picture shown
  - ⚠ Note! Ensure you match the correct orientation of the Astro per the picture (Find the GPS mount to identify aircraft Front)
- The boom numbering labels will help you know which propeller assembly will go on which boom

## Step 2 — Remove Counter Clockwise (CCW) Propeller Assemblies



- Identify the labeled Boom 1 (CCW) and Boom 3 (CCW) - These will be removed and replaced first.
- Use the 2.5mm hex driver provided in the Astro Case to remove the 4 fasteners holding the propeller mount to the motor
- ⚠ **Remove each of the propeller assemblies from Boom 1 and Boom 3 ONLY**
- DISCARD THESE OLD ASSEMBLIES - The machined components may not be used
  - This includes props, machined metal propeller mounts, and 4x screws that attach the assembly to the motor.

## Step 3 — Install Counter Clockwise (CCW) Propeller Assemblies



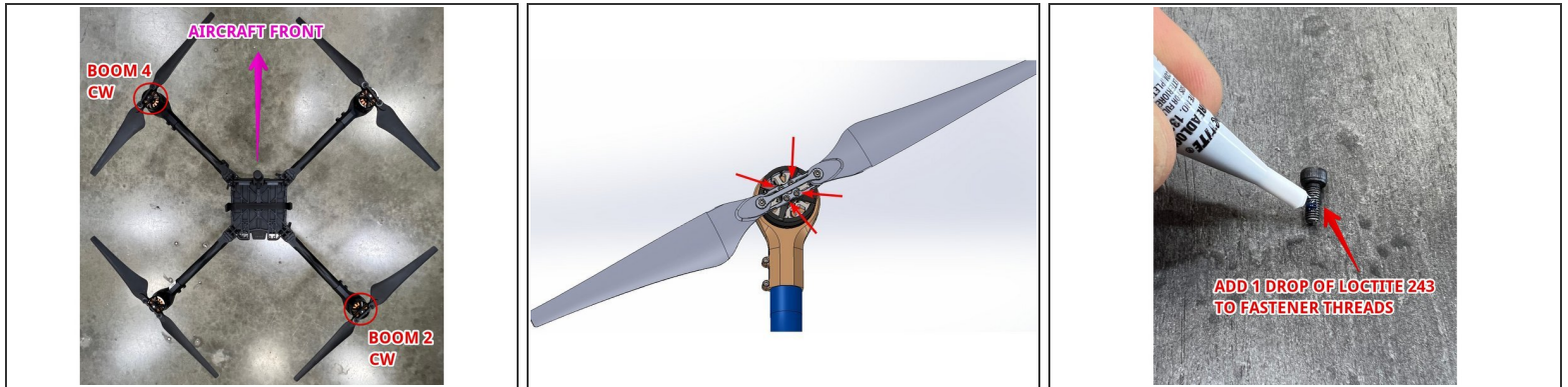
- Use the new 4x included Bolt M3x8 SHCS Bolts to attach the Propeller Mount Assembly to Boom 1 (CCW) and Boom 3 (CCW)
  - ⚠ Use Loctite 243 threadlocker. Use the included bottle to apply a drop to each fastener threads before installation
  - ⚠ Use the hand driver to tighten the bolts tight to a Torque of 1.5 NM. Ensure that you do not strip out the bolt/motor mount but these screws must be tight.
- Install the following Counter Clockwise (CCW) Assemblies on Boom 1 and Boom 3 on the following two booms
  - ⚠ These Assemblies are color coded BLUE with label and marked for the boom numbers
    - **Boom 1:** 870-00637 Assembly Prop F45 21inch **CCW**
    - **Boom 3:** 870-00637 Assembly Prop F45 21inch **CCW**

## Step 4 — Remove Clockwise Propellers



- Identify the labeled Boom 2 (CW) and Boom 4 (CW) - These will be removed and replaced first.
- Use the 2.5mm hex driver provided in the Astro Case to remove the 4 fasteners holding the propeller mount to the motor
- ⚠ **Remove only the propeller assembly from Boom 2 and Boom 4**
- DISCARD THESE OLD ASSEMBLIES - The machined components may not be used
  - This includes props, machined metal propeller mounts, and 4x screws that attach the assembly to the motor.

## Step 5 — Install new Clockwise (CW) Propeller Assemblies



- Use 4x included Bolt M3x8 SHCS Bolts to attach the Propeller Mount Assembly to the motor on Boom 2 (CW) and Boom 4 (CW)
  - ⚠ Use Loctite 243 threadlocker. Use the included bottle to apply a drop to each fastener threads before installation
  - ⚠ Use the hand driver to tighten the bolts tight to a Torque of 1.5 NM. Ensure that you do not strip out the bolt/motor mount but these screws must be tight.
- Perform on the following two booms
  - ⚠ These Assemblies are color coded RED with label and marked for the boom numbers
    - **Boom 2:** 870-00636 Assembly Prop F45 21inch **CW**
    - **Boom 4:** 870-00636 Assembly Prop F45 21inch **CW**

## Step 6 — Quality Verification



- Inspect each boom (Booms 1-4) for the following items:
  - Validate that the propeller assembly number on the label matches the boom number and direction
  - Verify that the molded prop direction (CCW or CW) matches the diagram shown
  - Verify that there are 4 bolts installed into the motor and that they are fully torqued with loctite
- Remove the assembly label tags that came with each of the propeller assemblies. Also, remove the tape boom labels.
  - Discard these labels
- You are ready to fly!!