

C31 Propeller Screw Removal Guide

1. Use the Correct Tools

Use the same type of 20-inch long-handle hex tool shown in the service video.

2. Fully Seat the Hex Wrench

Before applying force, ensure the Allen/hex wrench is fully inserted into the screw head.

3. Loosen the Screw Slowly

Apply force gradually. Do not use sudden or excessive force. Slowly increase torque to allow the threadlocker to break down.

4. If the Screw Is Extremely Tight

Heat only the screw using a soldering iron or small heat gun to approximately 150–200°C (302–392°F). Then repeat Step 3 using slow, steady pressure.

5. If the Screw Becomes Stripped

Upper motors: Push the propeller downward so the propeller root presses firmly against the propeller clamp, then slowly remove the screw.

Lower motors: Pull the propeller upward so the propeller root presses firmly against the propeller clamp, then slowly remove the screw.

This method will successfully remove most stripped screws.

6. Reusing or Replacing Screws

After removal, completely clean all old threadlocker. Apply fresh threadlocker only to the last 3–4 threads at the tip of the screw. Reuse the screw only if it is undamaged. Replace any damaged screw with a new one.

7. Correct Tightening

Proper tightening is verified using a force gauge measured 3.1 inches from the propeller center. Required pull force: 4–5 N.

If a force gauge is unavailable:

- The propeller should rotate smoothly without excessive resistance.
- Both propellers should feel consistent.
- There should be no vertical play or wobble.

Important: Always use proper tools and follow approved service procedures to avoid damaging propeller hardware or motor components.