



Dakota Wings Presents



A GPS Interference Protection Shield
for the DJI Phantom 2 Vision+

Introduction

- ▶ This document demonstrates the installation of the Satellite Shield between the GPS module in the DJI Phantom 2 Vision+ (P2V+) aircraft and the lower shell.
- ▶ The user accepts all risks involved with modifying their airframe.
- ▶ Performed correctly, this modification increases the number of detected satellites and reduces satellite acquisition time.

Tools Needed

- ▶ Razor blade or sharp knife.
- ▶ 5/64" Allen wrench*
- ▶ 0 Phillips or 00 Phillips
- ▶ Butter knife
- ▶ Masking or Painters Tape



*A 2mm wrench will also work.

Initial Readings

- ▶ Before performing the modification, put the P2V+ in an area as a test site and note how many satellites are detected.
- ▶ This example shows 3 satellites detected indoors by a window.

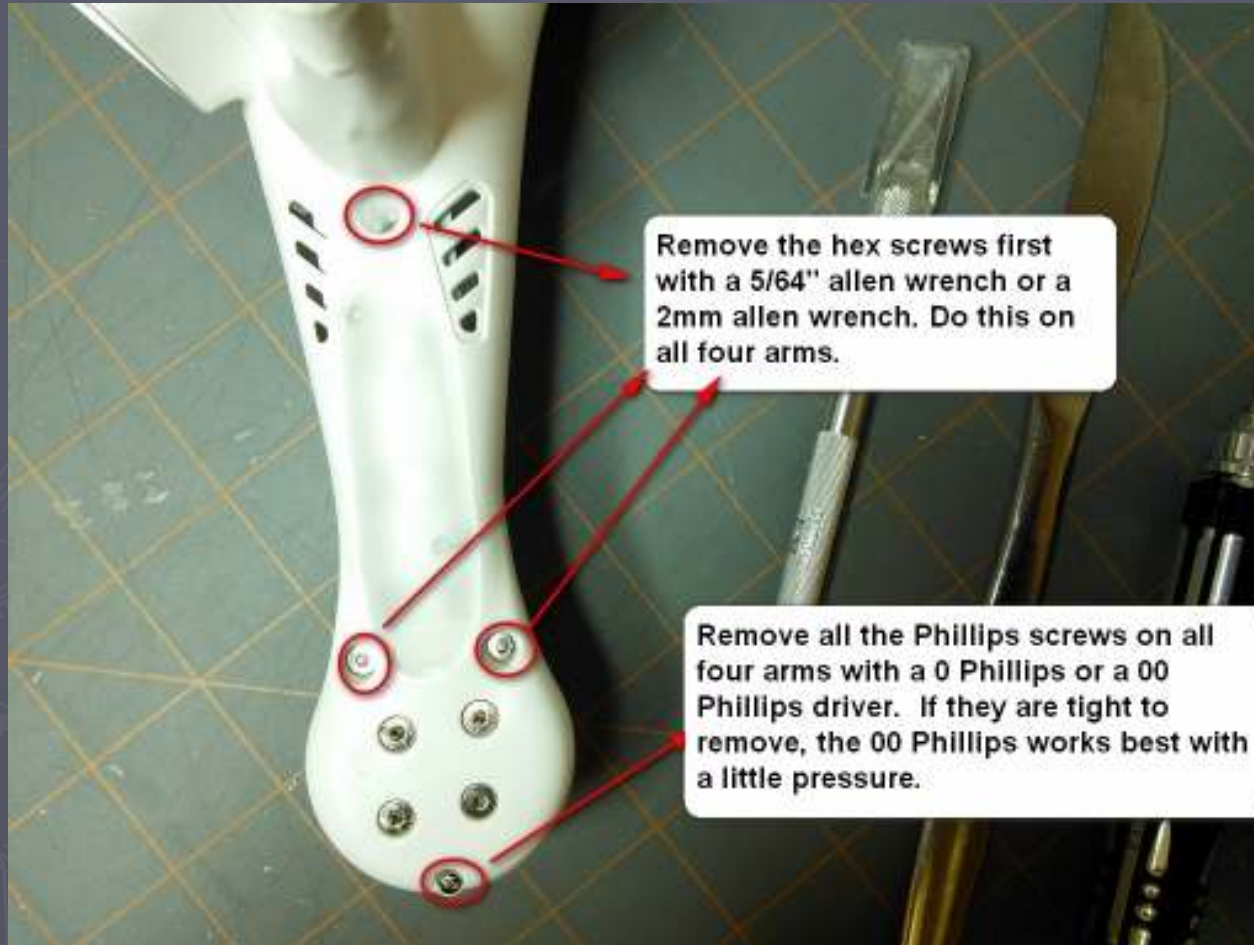


Before You Begin!

- ▶ Use a container for holding screws as they are removed.
- ▶ Ensure the battery is removed before opening the airframe.



Removing Screws



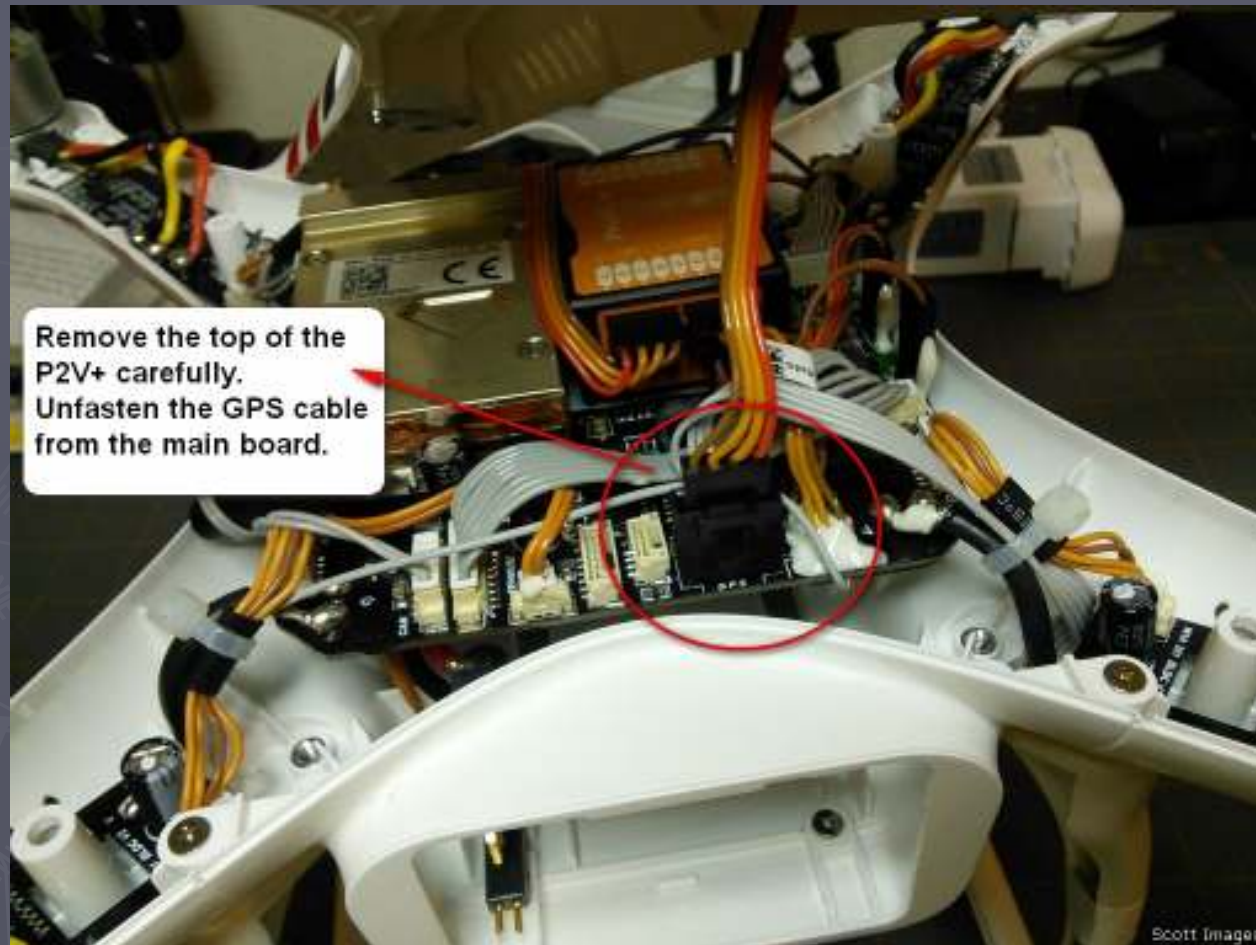
Removing the Decals



Remove the decals or use a sharp knife or razor blade to slit them where they come together with the bottom shell.

Scott Images

Removing the Top Shell



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Relocating the GPS Cable

- ▶ A butter knife can be used to lift one-half of the existing protection shield.



Moving the Cable

- This example shows the original shield folded in half.



Routing the Cable

- Carefully route the cable under the shielding and replace the existing shielding over the cable.



Prepping the Satellite Shield

- ▶ Make sure the inside of shell is clean and free of dirt and contaminants to provide better contact for the Satellite Shield.
- ▶ Remove the backing from the Satellite Shield.



Locating Shield on Shell

- ▶ Position the Satellite Shield on the P2V+ so it is even and centered on all sides.
- ▶ Start in the middle of the Satellite Shield and press it into place toward the outside edges.



Locating Shield on Shell cont'd.

- ▶ Continue pressing foil in place until it is completely installed. Make sure that the air vents do not get covered. Cutouts are in the Satellite Shield to make sure the vents remain clear.



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Positioning Cable

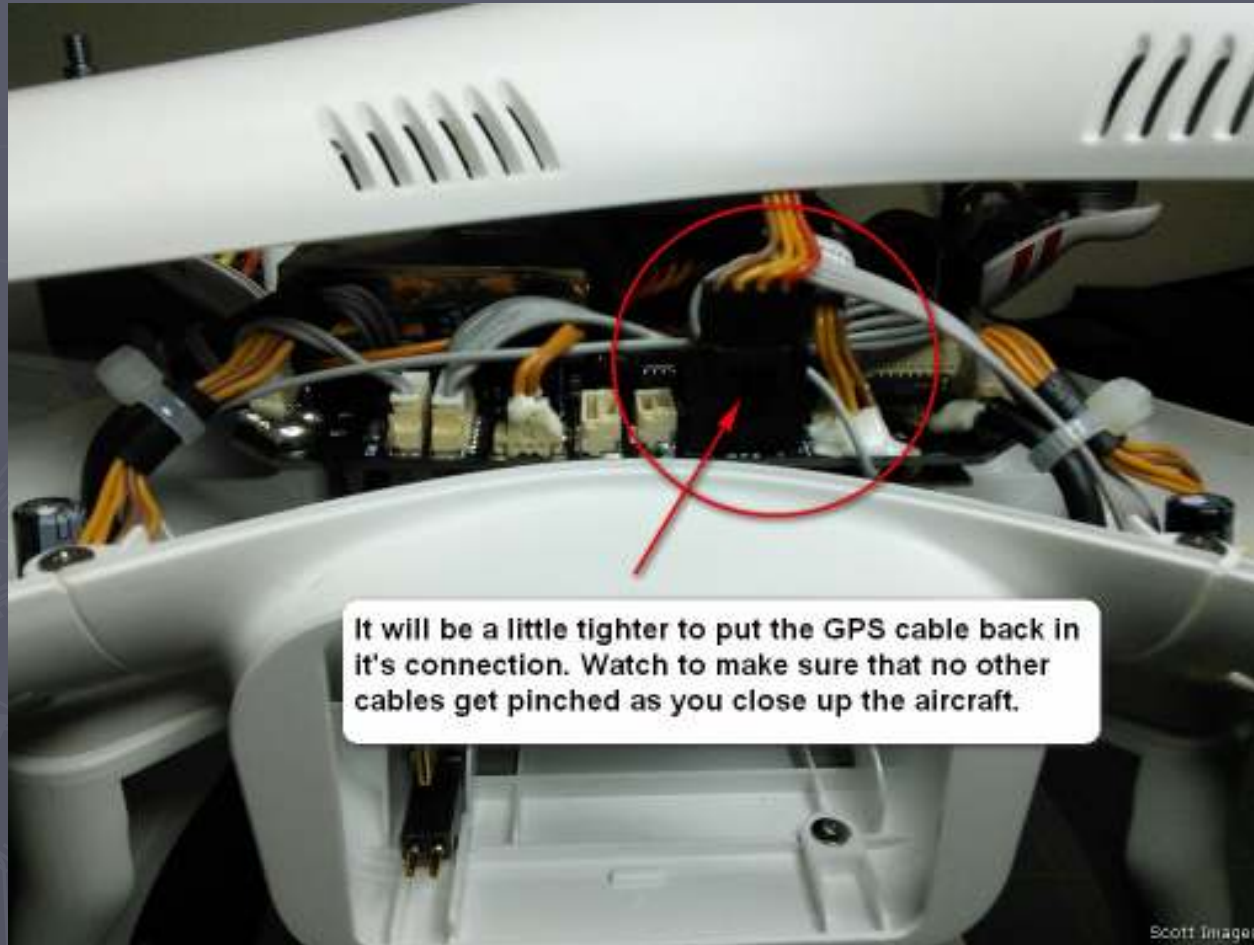
- ▶ Move cable through the slit in the foil. Use one of the tabs to seal off the rest of the slit.
- ▶ There are three more tabs to apply to the other slits to seal off the remainder of the Satellite Shield.



Shield Installed!!!



Reconnect the GPS Cable



It will be a little tighter to put the GPS cable back in its connection. Watch to make sure that no other cables get pinched as you close up the aircraft.

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Replacing the Screws

- Tip: Use painters tape to hold the top and bottom shells together until all the screws get reinserted.



Almost Done!



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Let's Test it Out!



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A Strong 6 Satellites Inside the House!!!



- Now that everything is complete, as with any modification you should calibrate the P2V+ before taking to the skies again.

That's All Folks!

- ▶ Interested in increasing the performance of ***your*** GPS Satellite reception? Satellite Shields are only \$14.95 with free shipping in the Continental United States.
- ▶ Contact us for more info!

dakotawings99@gmail.com

