

Working with Existing CAD Files

Goals:

1. Learn how to import an existing CAD file.
2. Learn how to create an Onshape part studio from the existing CAD file.
3. Practice adding the imported part into an assembly.
4. Begin sharing Onshape documents with other collaborators.



Working with Existing CAD Files

Instructions:

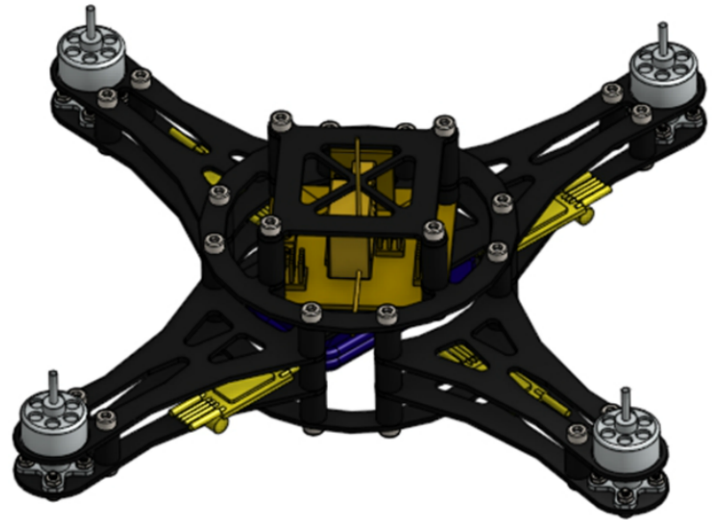
1. Download the part file "Propeller.x_t".
2. Open the Onshape document "[Onshape Instructor Kit - 5.2.2 - Working with Existing CAD Files](#)".
3. Upload the part file "Propeller.x_t" into the Onshape document.
4. Translate the file into an Onshape part studio.



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Instructions:(continued)

5. Create a new assembly.
6. Insert the entire part studio "Quad Body".
7. Mate all of the parts together using a Group mate.
8. Make sure that the part "QRM004 - Bottom Frame Ring" is fixed in space.



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Instructions:(continued)

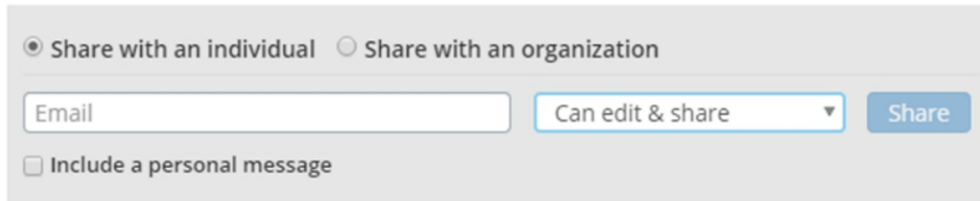
9. Insert four instances of the Propeller.
10. Mate all four propellers onto the motors of the quadcopter.
11. Make sure that the propellers rotate around the motor.



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Instructions:(continued)


12. Share this document with a colleague or friend. Be sure to give them the appropriate editing rights. A personal message can also be included.



The screenshot shows a sharing interface with two radio buttons at the top: "Share with an individual" (selected) and "Share with an organization". Below these is a text input field labeled "Email". To the right of the email field is a dropdown menu currently showing "Can edit & share" with a downward arrow. Further right is a blue button labeled "Share". At the bottom left, there is a checkbox labeled "Include a personal message".

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Assessment:

1. Select the part in the features list.
2. Click on the  icon in the lower right corner of the Onshape interface.

What is the volume of the part (in³)?

