

Step 7: Adding the Flexible Flaps to the Shroud

In this step, you will be adding the flexible flaps onto the end of your vacuum shroud. These flaps fit against the tire to maximize vacuum suction and prevent dirt from being flung on the user. They can be made of many different thin, flexible materials, but we recommend using the foam sheet linked in the supplies section. They are duct taped on so that they can be changed out after getting dirty over time.

Materials

Foam Sheet or Other Flexible Material

Duct Tape

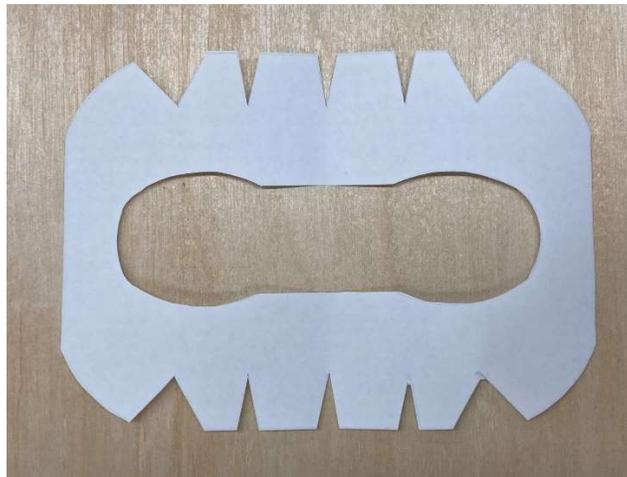
Scotch Tape (optional)

Cut Bristle Attachment from Step 2

3D Printed Vacuum Shroud

Tools

Scissors



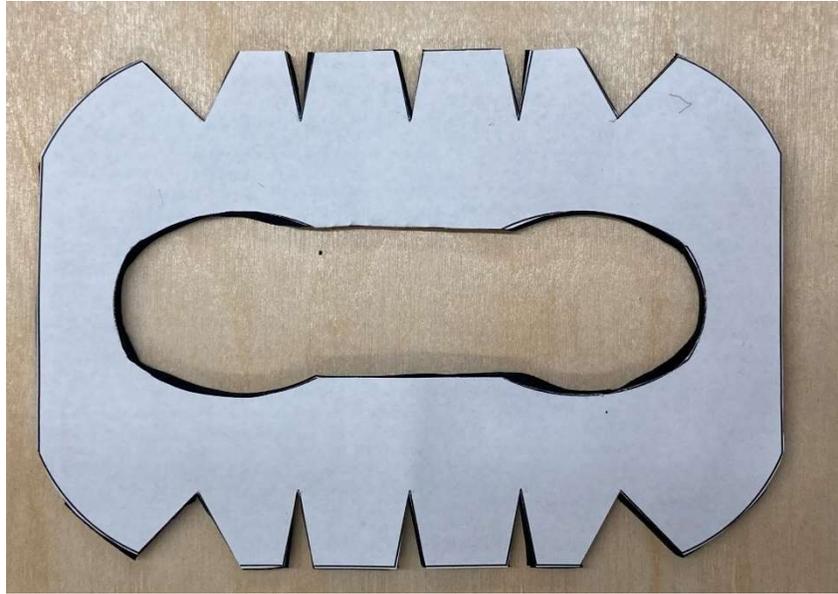
1. Print the **Flexible Flaps Guide.pdf**, making sure to select "Actual Size" instead of "Fit to Printable Area". Use scissors to cut along the outside black line.
2. Cut the inside shape out. These flaps are designed for 1 3/8" tires, so if you have larger tires, cut slightly outside the center shape. If you have smaller tires, cut slightly inside the center shape.



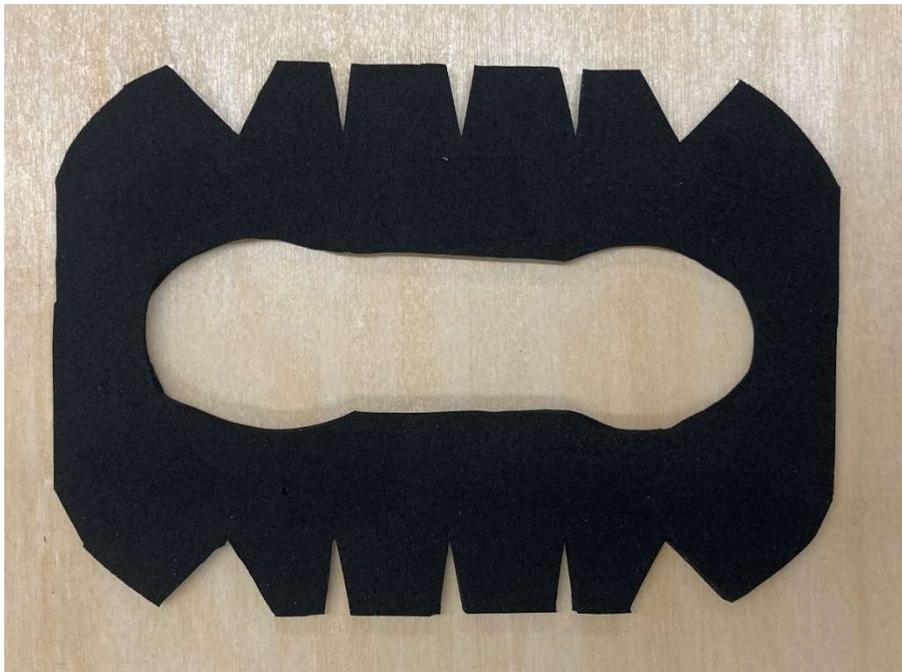
3. Place rolled-over pieces of scotch tape on one side of the cut-out guide.



4. Cut a piece of foam slightly larger than the guide and adhere the guide to the foam.



5. Cut along the edges of the paper to form the same shape out of the foam sheet.



6. Detach the paper.



7. Insert the Bristle Attachment from Step 2 into the Vacuum Shroud that you printed. The end of the Bristles should point to the large tire opening.



8. Place the foam cutout over the large opening, centering it with the tire cutout.



9. Use duct tape to secure the short ends of the foam cutout.



10. Use small pieces of duct tape to tape down the center two flaps on each of the long sides of the foam cutout. Make sure there is a 1-inch gap between them.



11. Use small pieces of duct tape to secure the rest of the foam cutout down.



12. Use longer pieces of duct tape around the outer edge to ensure a secure connection and a vacuum seal.