

# Create<sup>®</sup> 2 Faceplate Mod

This procedure describes how to modify the Create<sup>®</sup> 2 Faceplate to add mounting features and add wire routing holes.

By following these instructions, you will create mounting bosses in the faceplate that you can use to mount your project. In addition, you can drill a hole in the faceplate to uncover the serial port and cut slots in the cover to provide wire routing access to the vacuum bin.

## Instructions

- 1) Remove the vacuum bin from the robot.
- 2) Remove faceplate by pressing down in the center of the robot with one hand and grasping at the rear of the faceplate with the other and pulling up (it requires significant force).
- 3) Print out the [faceplate drill template](#) at 100% scale, fold template in half on the indicated line, cut out per instructions on the template, and attach to the faceplate bottom side.
- 4) Using a center punch, awl, or nail, mark the hole centers for the holes you want to drill.
- 5) Remove the template.
- 6) Clamp the faceplate, bottom side up to a scrap piece of wood so you can see the marks for the holes. This will help make clean holes and avoid drilling holes in your work surface.
- 7) Drill the faceplate:
  - A) Option a: 1/2" (or 13 mm) for serial cable (1 hole)
  - B) Option b: Original Create mounting holes (green on template) • Use 5/32" (or 4 mm) drill for original Create mounting holes (green on template) • Press

### STEM Skills:

- General technical comprehension
- Mechanical Skills

### Experience Level:

Advanced

### Supplies:

- Drill
- Hammer (optional)
- 1/2" (or 13 mm) drill bit. A step drill bit works, too.
- 5/32" (or 4 mm) drill bit
- Clamps (optional)
- 18-8 Stainless Steel Flush-Mount Captive Nut, 4-40 Thread Size, .062" min Panel Thick for example, (Available from McMaster-Carr, Part Number #94674A490), or similar.

### Additional Resources:

- [Create 2 Anatomy](#)
- [Drill Template](#)

the 4-40 flush mount captive nut in from the bottom side of the faceplate. • Strike with a hammer to secure the nuts in place.

- 8) While you have to cover removed, drill any other mounting holes desired. DO NOT drill into the robot itself.
- 9) Remove the clamps from the faceplate and board.
- 10) Press the inserts into the faceplate from the backside so that they protrude out the face of the faceplate.
- 11) Re-install the faceplate on the robot.
- 12) Re-install the vacuum bin in the robot.
- 13) Now you can safely screw your project into the threaded inserts. Make sure the screws are short enough so that they do not bottom out on the robot.