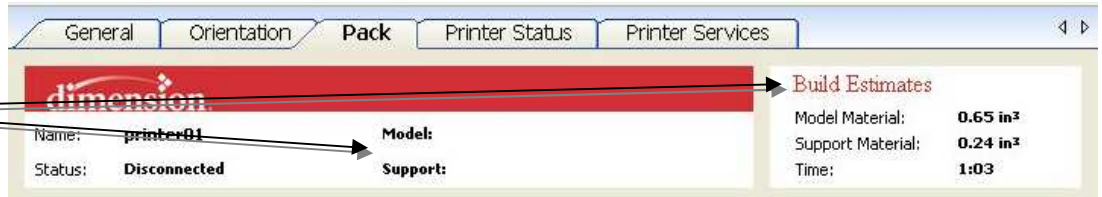


## 3D Printer Advanced Topics: Refilling Material Cartridges

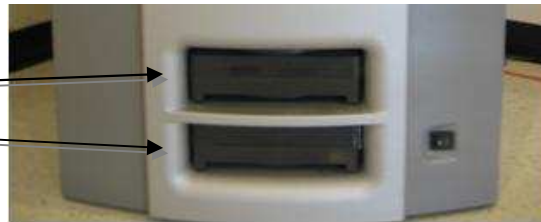
There are two indicators of when the cartridge needs to be replaced. The first is on the printer itself. The display of remaining model and support material will flash if there is not enough left to finish the print job. The second is in the software, where current model and support levels are shown (when the printer is connected). If either of these numbers is less than the build estimates, the corresponding material will need to be replaced at some point during the print job. Wait until the printer runs out of the material before replacing the cartridges.



To get new cartridges, contact Russ Porter or IEW.

To replace a cartridge, press the “load material” button on the printer. It will ask you which cartridges you will be removing; confirm with “yes” or “no” to both the model and support prompts. Push until it clicks to release the specified cartridges and then remove them. Pull all remaining material out with it (this will be several feet).

The model material cartridge is on top, and the support material cartridge is on bottom.



To prepare a new cartridge, make sure there is about ½ inch material sticking out of the cartridge. Cut the tip at approximately a 45° angle to make it pointed. **Note: Be careful not to let the material go all the way into the cartridge. If this happens, the material cannot be retrieved.** Insert the new cartridge by pushing it into the corresponding slot until it clicks, then press the “load material” button again (only press the “load material” button after both new cartridges are inserted if you are replacing both). The printer will purge a little material out of the head into the junk canister and ask you to confirm if material did in fact come out (the head is located at the back-top-right corner of the compartment). If you could not see it, or material did not actually come out, select “no”, and then select “purge again”. If it still does not successfully purge after a few tries, contact Russ Porter or IEW. If it does successfully purge, select “yes”, and then empty the junk canister. If you are replacing both cartridges, you will go through this purge process twice (once for each material). If a print job was interrupted, select “resume” to continue printing.