

Replacement Fan Procedure

Purpose: How to remove and replace a fan on the Plant Producer Hydroponics unit

This document gives instructions on changing a fan that is not working.

Prerequisites

- Phillips screwdriver with a good tip
- Step stool or step ladder may be needed for the top shelf
- Small straight-slot screwdriver
- Sponge or cotton cloth

Steps to perform:

1. Determine which fan needs to be removed and replaced by holding your palm under each fan port to feel if it is moving air:
2. Turn the power off by pressing the switch down to the "O" position (the switch is located at the top-left rear of the unit).



Remove fan for the middle shelf:

1. Remove the corner pieces on all four corners above the top grow shelf by pressing into one side of the corner piece (using your fingers or a straight-slot screwdriver) and squeezing the corner piece, then pulling it out.



2. Remove the grow cup tray from the top grow shelf by removing all grow cups from the tray, lifting the grow cup tray and angling it approximately 45-degrees, then sliding it out from one end.



3. Remove water from the lower tray assembly of the top shelf. Use a sponge or a cotton cloth towel, starting from the fill tube and push the water down the tray to the drain spout hole. Wring out the sponge or cloth after each pass. Repeat until the tray is dry.



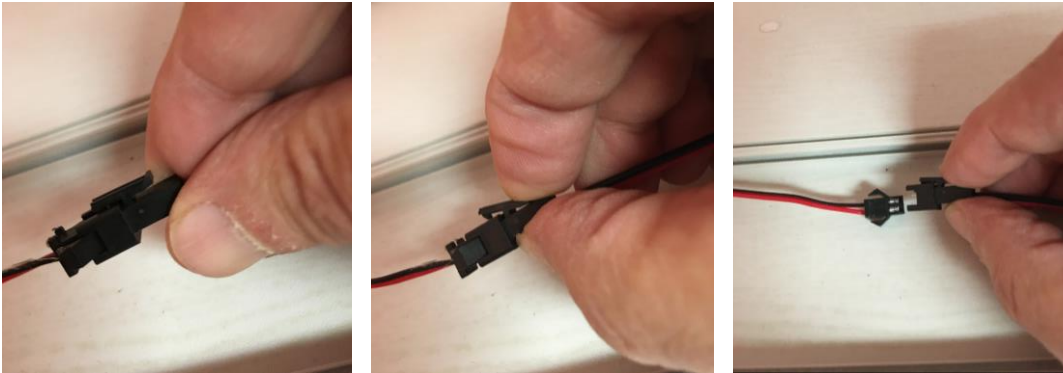
4. Move the fill tube out of the way by grabbing it and moving it outside of the top shelf. Remove the drain tube by removing the drain corner cover from below the shelf, grasping the drain tube and pulling it down (the drain is in the opposite corner from fill tube and has a hole in the bottom of it).



5. Remove the lower tray assembly of the top grow shelf. Grasp the edges or raised portion of the tray, lift and rotate the tray to approximately 45-degrees, then slide the tray out from the shelf to expose the lighting wires and fans.

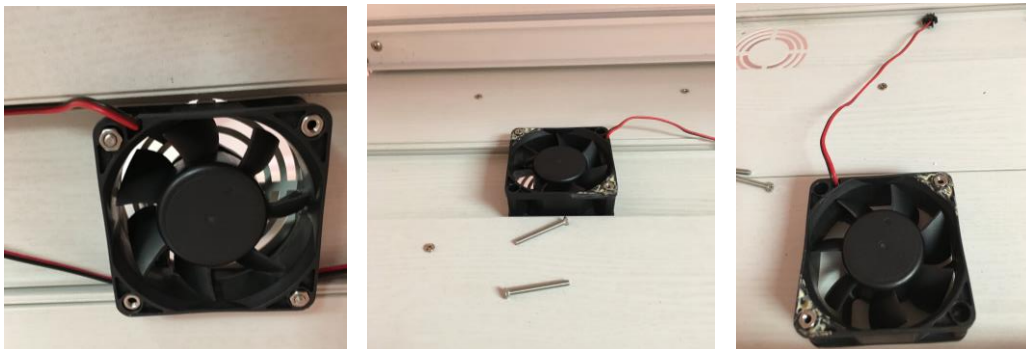


6. Identify the non-working fan. Follow the wires from the non-working fan and disconnect the connector, using both hands, by pushing down on the tab pulling the connector out at the same time.



7. Use a Phillips screwdriver to unscrew the screws from underneath the shelf. The fan itself will retain the nut. Slide the fan out by pulling straight up.

NOTE: Go to step 1 of **Install Replacement Fan** to complete the installation process



Remove the fan from the top shelf:

1. Remove the top cover to expose the electronics of the unit by removing the two Philips screws, one on each end. Use a step stool or step ladder to see the top of the unit.



2. Remove the fan by following **steps 6-7 of the middle shelf instructions**.

Remove the fan from the bottom shelf:

1. Remove the middle shelf corner covers, grow cup tray and water following **steps 1-3 of the middle shelf instructions**.
2. Remove the fill tube by grasping it and pulling down. Remove the drain tube from below the shelf by grasping it and pulling down (the drain is in the opposite corner from fill tube and has a hole in the bottom of it).



Fill tube removal



Drain tube

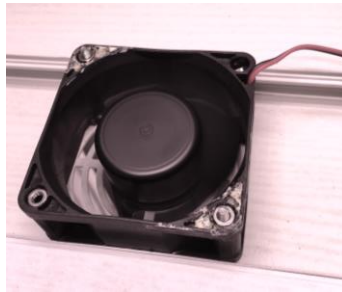
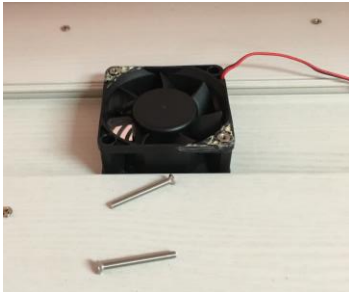


Drain tube disconnected

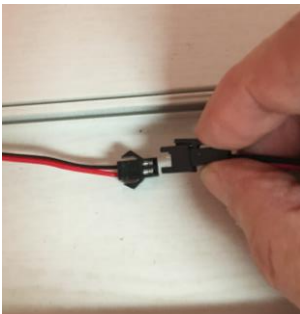
3. Remove the fan by following steps 6-7 of the middle shelf instructions.

Install replacement fan for all shelves:

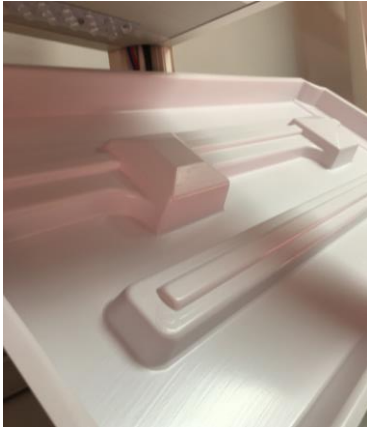
1. Unpackage the replacement fan.
2. Slide the replacement fan into place and look for screw alignment. Push the Phillips screw in from the bottom and start each one before tightening all screws.



3. Push the connector back together. Using two hands, align the connector and push back together, ensure the tab seats. Pull on connectors lightly to ensure they are connected



4. If the fan is on the **top shelf**, go to **step 9**. If the fan is on the **middle or bottom shelf** it is time to reinstall the tray. Insert the bottom of the tray assembling (the part that holds the water) by holding it at approximately a 45-degree angle and sliding it in from the side, then press it flat into place.



5. Reattach the fill tube to the shelf above by pushing the tube into place. Reattach the drain tube below the shelf by pushing the tube into place. The shelf may need to be held down when pressing the tubes into place.



6. Reinstall the grow cup tray by holding the tray at approximately a 45-degree angle and inserting it from the side. Place the grow cup tray on top of the bottom tray that holds water and press it into place.



7. Reinstall the corner covers by placing one edge into the groove of the corner and snapping the other end into place.



8. Power the unit on. Inspect the fans to make sure they are working. Inspect for leaks from the drain and fill tubes. Open the reservoir doors and inspect in the corners for leaks. If the lights are working and there are no leaks the replacement is finished.
9. Top shelf: turn on power and ensure the fans are working, then replace the top cover and tighten the two Phillips screws.



Troubleshooting tips:

If the fan is not working after reinstalling, disassemble again to get at the connector by following the above steps. Ensure the connector is connected properly and tight. Also inspect that the wires are tight to it by pulling on them and ensuring that they do not pull out. Also note if the grow lights are off, the fans are off. Ensure the lights are on, turn on manually and check the fans. If that does not work contact Product Support.

This completes the fan replacement.

Additional care tips:

1. Ensure the reservoir is filled with water/nutrients, check level daily if possible.
2. Add water regularly to prevent water levels from dropping too low, allow water to sit 24 hours before being added to allow chlorine to leach out.
3. Unit will beep once every 50 minutes when the water level drops too low.
4. Unit will consume more water as the plants get larger.
5. Check the nutrient levels periodically and the plants themselves systematically by keeping records or journaling to obtain optimal growth (suggest 2-4 times a week).

For additional assistance and video tutorials visit our website: <http://www.realityworks.com/knowledge-base/>