To replace one of the AC Transformer power supplies on the ANKOM TDF Dietary Fiber Analyzer, follow the steps below.

**NOTE:** This applies to the TDF109 Power Supply A, 220v; TDF110 Power Supply B, 220v; TDF114 Power Supply A, 110v; TDF115 Power Supply B, 110v.

1. Turn off the instrument and unplug the power cord. Unscrew the 10 screws on the stainless steel back panel and remove. Set aside the panel and screws for reattachment later.

2. Unscrew the 7 screws on the stainless steel top panel and remove. Set screws and panel aside for reattachment later.

3. Inside the electrical enclosure, identify the two black transformers as pictured to the right. The picture is the view from the rear of the instrument. In this view Power Supply B (PSB) is on the left and Power Supply A (PSA) is on the right. If you are installing on a 220v instrument, confirm that PSA (TDF109) or PSB (TDF110) is labeled 220v or if installing on a 110v instrument confirm that PSA (TDF114) or PSB (TDF115) is labeled 110v. The output voltage on PSA and PSB is different and these are **not** interchangeable. For the power supply being replaced, pull up on and remove the two green connectors on the top of the power supply—identified by the red arrows.
4. Use a screwdriver to pull back on the chrome tab at the bottom of the power supply to be replaced. While pulling back on the tab, tilt the power supply so that it is detached from the DIN rail underneath it. You will now be able to pull the power supply out of its position. Install the new power supply latching it onto the DIN rail from the front of the instrument and snapping it down toward the back. It will lock onto the DIN rail.

5. Replace the 4-pin connector. This one is more likely to cause power supply problems because through it flows the output DC voltage. Take note of the order of the black and white wires. Use a small flat-head screw driver to loosen the wires and dispose of the old 4-pin green connector. Reattach the four wires being certain no stray wire strands stick out of the hole that the wire is inserted into. After tightening the screw, tug on each wire to be sure it is firmly attached.

6. Reconnect the 3-pin and 4-pin green connectors into the top of the power supply. Without touching anything in the electrical enclosure, plug the instrument in and briefly turn the power back on to the instrument. Confirm that the green LED lights up. Now turn the power back off to the instrument.
7. Replace the top and back panels to the electrical enclosure, securing with the 17 screws from steps 1 and 2.

8. If Power Supply B was replaced (either TDF110 or TDF115, 220v or 110v), perform the following test. If Power Supply A was replaced, skip to step 11.

9. Go to Diagnostics and select Heater Test. Have a timer handy. Press Paddle Heater Power Enable. Now turn on each of the Paddles 1 - 6 and immediately start the timer. They should reach 50˚C in 2 minutes to 2 minutes 45 seconds. When the test is finished, press the Paddle Heater Power Enable button to turn all of the paddles off.

10. With this test completed the instrument may be returned to service.

FOR QC OF POWER SUPPLY A (TDF109 or TDF114) PROCEED TO STEP 11.
11. If Power Supply A was replaced (either TDF109 or TDF114, 220v or 110v), perform the following test.

12. Go to Diagnostics and select Motor Test.

13. Press GO and confirm that the pump motor is turning. If the water supply is connected and the waste valve is open it should begin pumping water to waste.

14. With this test completed the instrument may be returned to service.