

**MODEL 306 STARTUP PROCEDURE**

**Equipment:** Digital multi-meter (DMM)  
**Gas:** High purity grade nitrogen or better  
**Electrolyte:** Type A or Type C electrolyte

**Procedure:**

1. Connect the power cord as follow:  
HOT to terminal TS1-14  
NEUTRAL to terminal TS1-13  
GROUND to terminal TS1-12
  2. Position ON/OFF switch to ON.
  3. Connect DMM across HOT and NEUTRAL. The DMM reads  $40 \pm 10$  ohms (115 VAC),  $160 \pm 30$  ohms (220 VAC).
  4. Connect DMM between HOT and GROUND. The DMM reads infinite.
  5. Fill the reservoir with 1000 cc of distilled water.
  6. Connect the nitrogen to the analyzer's sample inlet.
  7. Close sample flow valve inside the analyzer. Do not over-tighten the valve.
  8. Turn on the nitrogen and adjust the sample flow valve until the ball in flow tube is in the target.
  9. Follow instructions sent with electrolyte kit to mix the electrolyte.
  10. Unpack the cell, remove the cover (the cell is packed with water when it ships from the factory), and dump the water.
  11. Remove the calibrator and wet it with Type A electrolyte. Use a paper towel to wipe the excessive liquid. Replace calibrator.
  12. Pour electrolyte into the cell over the top of screen. Shake the cell a bit and empty the cell. Slowly fill in the electrolyte until the screen in the liquid is approximately 3/32 inch.
  13. Install the cell to the analyzer. Do not connect the cell cable at this time. Let the analyzer purge with nitrogen for 1 hour.
  14. Position range switch to 3.
  15. Connect power cord to power source.
  16. Connect cell cable, red lead to center post and black lead to outer post.
  17. Advance the range as the reading goes below 10% of scale.
  18. Wait until the reading drops below 1 ppm or it stabilizes, if the nitrogen contains some oxygen.
  19. Verify the flow indicator at the target.
  20. Set calibrator pot to 75 ppm.
  21. Position range switch to 100 ppm.
  22. Position calibrator switch to ON.
  23. As the reading starts to increase, wait until the reading stabilizes, and adjust span pot so the analyzer meter reads 75 ppm.
  24. Set calibrator pot to 50 ppm. Wait until the reading stabilizes and the analyzer meter reads  $50 \pm 2$  ppm.
  25. Set calibrator to 25 ppm; analyzer meter reads  $25 \pm 2$  ppm.
- NOTE:** when the sample contains more than 1 ppm oxygen, see manual for correct span adjustment value.
26. Position calibration switch to OFF.
  27. Advance range switch when the reading goes below 10% of scale.