

## AP PURIFIER START

Rev. 12/11/06

1. **Switch on** power -- at disconnect on wall. Alarm will sound, Push "Silence."
2. **Stop** purge of GN<sub>2</sub> by closing supply valve. Lower left rear side. (near Flowmeter)
3. **Open "Purifier In"** and "**Purifier Output**" valves on gas board.
4. **Set** valves **R 635** to 1/3-turn open,  
**R 656** to 1/8-turn open  
**R 636** to 3/4-turn open.
5. **Switch** to *manual* solenoid valves **SV 608** and **SV 642** (both on same switch).
6. **Close** valves **V 629** on back of unit and the manual valve T'ed with the solenoid valve.
7. Make sure **SV606** is closed (light is off) before proceeding.
8. **Set PCV 621** to 40 psi.
9. **Switch** to *manual* **SV 610 & vacuum pump** (both on same switch).
10. **Wait** one hour.
11. **Switch** back to *auto* **SV 608** and **SV 642**.
12. **Switch** back to *auto* **SV 610 & vacuum pump**.
13. **Set System Timer** to 70% (clockwise).
14. **Switch** to *manual* **SV 616** and **SV 617**.
15. **Open LN<sub>2</sub> supply valve** line on top of purifier.
16. **Watch** temperature at **TI 638**.
17. **Push Start** button, when temperature drops below 150K (~1 hour). Do not leave unattended.
18. **Switch** back to *auto* **SV 616** and **SV 617**.
19. **Start** warming heater on lower plumbing, right side by plugging in the temperature controller (set to ~200F).
20. **Set up** purity monitor.
21. **Wait** for **System Timer** to reach zero (45 minutes from *start*).
22. At **System Timer** = 0%, Purifier will automatically start. ( If loud continuous farts are heard from **V629** solenoid valve, push "**Stop**", Wait a few seconds and push "**Start**." Repeat as necessary until there is no continuous farting.)
23. Wait for **PI 631** => Pure Bank Pressure.
24. **Check** purity. Must be "0" or less.
25. **Open V 620** as much as 1/2-turn.
26. **Set PCV 621** to 90 psig.
27. **Check** that all switches are on *auto*.
28. **Observe** that **PCV 645** does not frost. Increase temperature of heater if there is frost (But don't get carried away). Or decrease **V620**.