

ENVIRONICS TECHNICAL BULLETIN #106

S9100 OZONE RE-CALIBRATION PROCEDURE

NOTES:

- System should be on for at least 45 minutes before proceeding.
- This procedure assumes factory adjusted gain and zero.
- This procedure is for systems which contain the pressure control package.
- This process must be done following the MFC and ozone generator flow calibration processes, if necessary.

STEPS:

1. Verify factory ozone calibration, in FLOW mode, to your standard. If the system verifies to your certification specifications, stop. If not, continue to step #2.
2. Enter the CALIBRATION mode.
3. Press OZONE.
4. Press INIT ALL, YES.
5. Set the calibration pressure to 24.7 PSIG.
6. Press SAVE DATA, YES, EXIT, EXIT, EXIT.
7. Press the 5 key followed by the password - (left arrow, right arrow, 0, +/-). Make sure the ozone adjust pressure gauge is off, EXIT. If the system has older software, press the 7 key followed by the same password. This sequence by itself turns on or off the pressure correction function. Status of the pressure correction can be seen in the first screen of the calibration mode.
8. Enter the FLOW mode and set MF1 flow equal to the intended diluent flow for ozone calibration. Zero the flow for all other MFC'S.
9. Enter the MAX O3 concentration which you will be using.
10. Press the START/UPDATE key.
11. Allow for the overshoot and the stabilization time before accepting the reading from your ambient ozone monitor. This reading should be greater than the targeted concentration by no more than 10%. If not, the electronic gain adjustment will be required, call the factory and ask for technical support or reference THE ELECTRONIC GAIN AND ZERO ADJUSTMENT PROCEDURE.
12. Record the monitor's reading for that given command.
13. Repeat step 12 for up to 10 more points (concentrating more points around an area of interest will give better control in that area).
14. While the system is still running, record the pressure from the ozone generator pressure field for entry into the calibration table.
15. Press STOP, EXIT, CALIBRATE MODE, OZONE.
16. Enter all the target ozone points and total flow for each point.
17. Enter the true concentrations as seen on your analyzer and the same total flow rate as in the target total flow column.
18. Change the calibration pressure to the pressure recorded in step 14.
19. Press SAVE DATA, YES, EXIT, EXIT.
20. Perform the key sequence in step 7 and turn pressure correction ON.
21. Repeat steps 8 to 13 to verify calibration. If specific points are not within the allowable tolerance, repeat steps 15 to 19 only updating the true ozone column for the points which were out of tolerance.
22. Re-verify.

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