

ACCURACY CHECK AND CALIBRATION PROCEDURE FOR THE ALCOPRO 2000

All electronic breath alcohol-testing instruments should be checked periodically to verify accuracy. AlcoPro 2000 users can perform this procedure themselves with the use of an Equilibrator.

A. ACCURACY CHECK:

The purpose of an accuracy check is to determine if the unit is giving accurate readings. We suggest that accuracy checks be performed at least once a month.

1. Prepare the equilibrator for use by pouring the bottle of premixed equilibrator solution into the equilibrator and allow it to sit at room temperature for at least one hour.
2. Find the "target value" by noting the temperature on the thermometer, and using the chart on the equilibrator to look up the alcohol value of the equilibrator vapor at that temperature.
3. Switch the AlcoPro 2000 to "ON." A green "ON" light will come on, the needle pointer will move to the red zone, and the red "WARN" light will come on.
4. Press and hold the "RESET" button for several seconds until the needle pointer returns to zero and the green "READY" light comes on.
5. Make a firm connection between the outlet tube of the equilibrator and the breath inlet of the AlcoPro 2000.
6. Blow steadily through the inlet tube of the equilibrator for five seconds. Note: Blow with the same forcefulness as you instruct subjects to blow into the instrument.
7. Observe the reading on the AlcoPro 2000. Any reading within +/- 0.02 of the target value of the equilibrator solution is acceptable.

Example, if the equilibrator target value is .08, then any reading from .06 to .10 is acceptable. When the AlcoPro 2000 produces readings that are outside this range the instrument should be calibrated.

B. CALIBRATION ADJUSTMENT:

The purpose of calibration is to adjust the sensitivity of the AlcoPro 2000 for accurate readings. A calibration adjustment should be performed when the results of an accuracy check show that the AlcoPro 2000 is not reading within acceptable accuracy limits.

1. Follow steps 1-6 of the accuracy check procedure.
2. Locate the adjusting screw accessible through the hole on the back of the instrument.
3. Using a small screwdriver, gently turn the screw until the needle pointer indicates the correct target value for the equilibrator. Caution: Only a very small movement of the adjusting screw is necessary to move the needle.
4. Repeat the procedure several times until the AlcoPro 200 indicates the correct target value without the need to adjust it. It is important to blow through the equilibrator with the same force and for the same amount of time (five seconds) each time, and with the same forcefulness as your subjects blow into the instrument when performing a breath test.

GLOSSARY

Accuracy Check: A procedure to see how accurately the AlcoPro 2000 is reading. This procedure is done to determine if the AlcoPro 2000 needs to have a calibration adjustment.

Calibration Adjustment: A procedure, which adjusts the accuracy of the AlcoPro 2000 by turning a screw.

Target Value: The correct alcohol reading for the equilibrator. Find the “target value” by noting the temperature on the thermometer, and using the chart on the equilibrator to look up the alcohol value of the equilibrator vapor at that temperature.

If you have questions, comments, or difficulties calibrating your instrument, please feel free to contact us at 800-227-9890.