ALCOLOCK™ L OEM

ALCOHOL INTERLOCK

Calibration manual

Alcohol gas standard

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CAUTION!

- It is recommended calibration be done indoors, in a service facility, by maintenance code or using an ACS download station
- This calibration guide is intended for use by trained technicians only

⚠ COMPRESSED GAS SAFETY

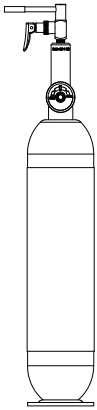
- Damaged or broken valves can turn a canister into an unguided missile. Attach the valve in a safe location
- Calibration should be performed indoors, in a service facility, where the gas standard cylinder can be properly stored
- Transportation and storage of compressed gases in vehicles is dangerous and should be avoided
- Examine the canister and valve for any damage, and the expiration date on the label
- Observe all cautions and safety warnings found on the canister
- Never remove or alter canister labels
- Never modify the delivery tube in any way
- Always remove the valve and install the protective cap on cylinders when not in use
- Store cylinders in a cool, well ventilated area away from sources of heat

EQUIPMENT

- 130 PPM (0.05%BAC) alcohol gas standard, ACS #95-000425 or 260 PPM (0.10%BAC) alcohol gas standard, ACS #95-000436
- Regulator valve assembly, ACS #79-005546
- V3 download station, ACS #79-006111
- V3/L OEM download station adapter, ACS #79-009115

CYLINDER SETUP

Remove the protective cap and screw the regulator valve to the canister. Continue to the next section.



CALIBRATING A HANDSET

Calibration is possible either with a download station or by maintenance code (without a download station).

Do **A** or **B**.

A. WITH A DOWNLOAD STATION

1. Connect the download station to a power source.
2. Disconnect the handset from the ECU.
3. Connect the download station to the handset with a coiled cable and V3/L OEM adapter.
   The handset automatically powers on.
4. Press the *left* button on the handset to select **Cal**.
   The current handset date and time are displayed.
5. In the **Date/Time** screen, press **OK** to confirm - the **SELECT TYPE** menu is displayed.

NOTE: If a tachograph is installed, the date and time cannot be changed.

6. Choose **Dry Gas** and press **OK**. The **SELECT UNITS** menu is displayed.
7. Select BrAC and press **OK**. The **SELECT DIGITS** menu is displayed.
8. Select 2 digits and press **OK**. The **SELECT VALUE** menu is displayed.

Skip the next section and read: “Calibrating a handset (continued).”

B. BY MAINTENANCE CODE (NO DOWNLOAD STATION)

NOTE: The handset must be connected to the ECU.

1. Power the handset on by holding down any navigation button.
2. Access the menu screen by pressing and holding the *left* button.

NOTE: Where available, press and hold the right navigation button to exit a current screen / menu.

3. Press **Next** to scroll to **System Maintenance**, and press **Select**.
4. Input the daily System Maintenance Code (obtained from ITE). To do so:
   - Press **[+] / [-]** repeatedly to increment / decrement a digit.
   - Press **Next** to move the cursor to the next digit.
5. With the code entered, press **Next** to move the cursor to **OK**, and press **Select**.
6. In the service menu, press **Next** to go to **Calibrate**, and press **Select**.
7. In the **Date / Time** screen, do **I** or **II**:
   I. If the date and time are correct, press **OK** – the **SELECT TYPE** menu is displayed.
   II. If the date or time is incorrect, change as follows:

NOTE: If a tachograph is installed, the date and time cannot be changed.

   a. Press **Set** to enter the **Set Clock** screen.
   b. Press **[+] / [-]** repeatedly to increment / decrement a digit.
   c. Press **Select** to move the cursor to the next field.

NOTE: Press and hold the left button anytime to cancel time set and to return to the Date / Time screen.

d. With the time adjusted, keep pressing **Next** until **Set** is displayed, and press **Set**.

e. Press **OK**. The **SELECT TYPE** menu is displayed.

8. Choose **Dry Gas** and press **OK**. The **SELECT UNITS** menu is displayed.

8. Select BrAC and press **OK**. The **SELECT DIGITS** menu is displayed.

9. Select 2 digits and press **OK**. The **SELECT VALUE** menu is displayed.

Read the next section.

CALIBRATING A HANDSET (CONTINUED)

1. The **SELECT VALUE** menu contains the gas standard concentration options. Verify your canister label, select the appropriate **PPM** value, and press **OK**. This enters the **Altitude** menu.

Altitude is preset to 0 (meters).

2. Determine the altitude of your exact location.

NOTE:

- ***Find exact altitude online***
- ***Altitude may vary within general region or city; always use exact value***

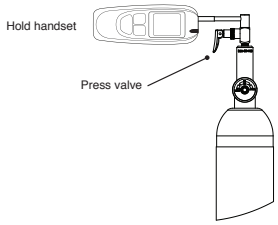
3. If your altitude is:

- 100 m or lower – leave at 0 m. Press **OK**.
- 101 m or higher – press [+] to adjust value (increases by increments of 200 m). Round to the nearest increment (see table at back). Press **Accept**.

4. A **Wait** message is displayed followed by a 2 minute warm-up. The handset is ready for calibration when the **TURN ON GAS** message is displayed.

5. Insert the delivery tube from the regulator valve into the mouthpiece port. Keep hold of the handset as the delivery tube is rigid.

6. Press the valve down to release the gas while keeping hold of the handset (see figure).



A **Blowing** message is displayed and the handset emits a tone.

7. Continue holding the valve down until the handset tone stops, even after the handset clicks.

   An **Analyzing** message is displayed followed by a **Wait** message and 0:45 second countdown. The handset is ready for the second sample when the **TURN ON GAS** message is displayed.

   Depending on the sensor calibration drift, up to 4 samples may be required.

   If only 2 tests are required, a **Verification OK** message is displayed when the calibration is complete.

   If 3 or 4 tests are required, a **Calibration OK** message is displayed when calibration is complete.

8. Do **I** or **II**:

   I. For calibration with download station, disconnect the handset from the download station and connect back to the ECU.

   II. For calibration without download station, press the *right* button to finish (there is also the option to retry by pressing the *left* button).

CALIBRATION IS COMPLETE

The L OEM handset returns to ready state and **Blow for 5 seconds** is displayed.

NOTE: If the calibration fails on numerous attempts, the sensor may need replacement. Contact an authorized service provider for return instructions.

TROUBLESHOOTING

In the event of a calibration failure, first check the common causes of errors:

- Plastic tubing has been overused or has condensation present
- The alcohol gas standard value chosen does not match the gas being used, or the value has been incorrectly entered in the **Select Value** menu
- The alcohol gas standard is expired
- All connections to and from the gas valve are not secured properly
- The value entered in **Altitude** menu is incorrect

ALTITUDE REFERENCE TABLE

The altitude adjustment is in increments of 200 meters. Round the altitude up or down to the closest value as follows:

IF ALTITUDE IS	THEN SET TO
0 - 100 m	0
101 - 300 m	200
301 - 500 m	400
501 - 700 m	600
701 - 900 m	800
901 - 1100 m	1000
1101 - 1300 m	1200
1301 - 1500 m	1400

ACS
ALCOHOL COUNTERMEASURE SYSTEMS

CAM-ENG-60-000567-A