

Calibration Manual

CA-2000



HDTC
HYUNDAI TRADE CORP.



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1. Calibration Units

– Simulator set

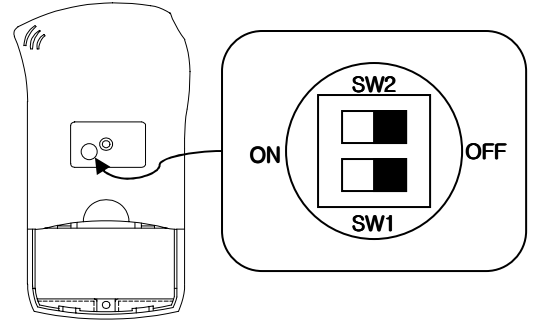
- Simulator (Guth 10-4) 2 sets
- Air pump
- Alcohol
- Micro syringe



2. Calibration

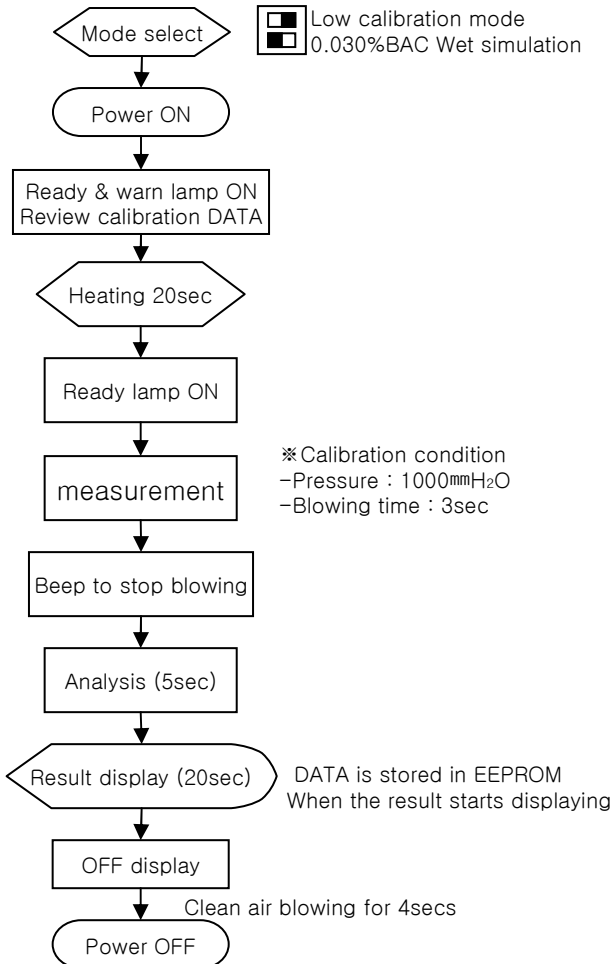
1. Take off the label sticker and select the mode

Division		Mode switch	
		SW1	SW2
Calibration mode	Low	ON	OFF
	High	ON	ON
Measurement mode	Normal	OFF	OFF
	Metrological	OFF	ON

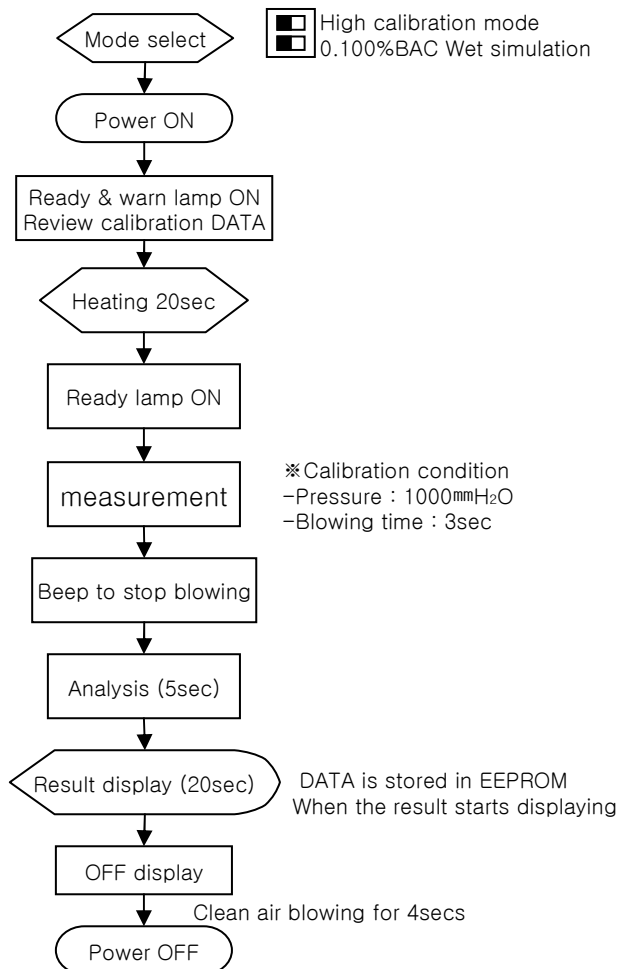


2. Calibrate low concentration and high concentration

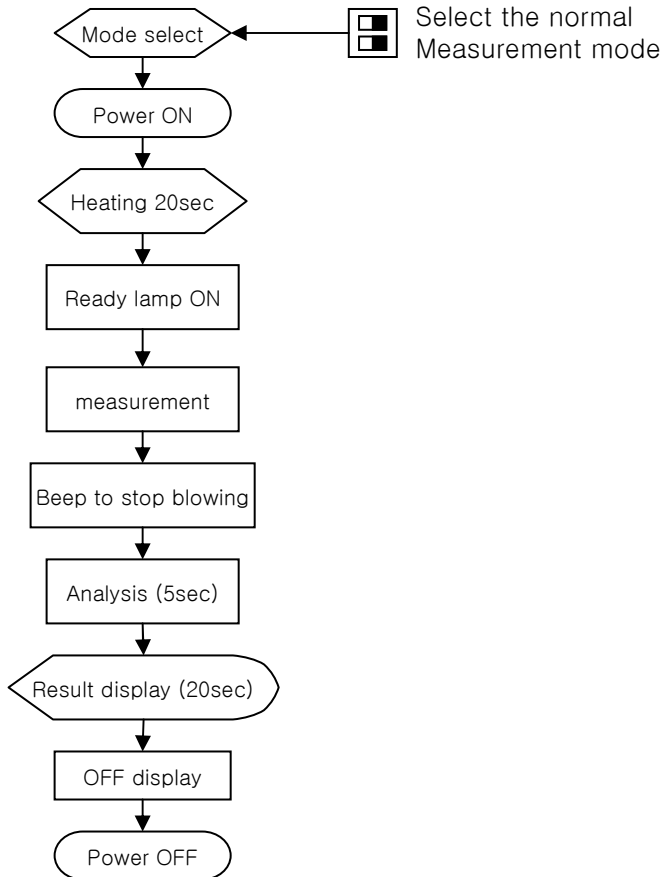
Low concentration calibration



High concentration calibration



3. Measurement



4. Warning

- i) Battery low lamp is on below 6.9Volt
- ii) Mode selection after that power OFF
- iii) 0.03%BAC solution : 220 micro liter pure alcohol / 500ml water
0.10%BAC solution : 840 micro liter pure alcohol / 500ml water
- iv) Concentration of alcohol solution is adjustable to your calibration condition.

3. Re-Calibration Procedure

Low concentration calibration kit : called as “A kit”

High concentration calibration kit : called as “B kit”

. Setting instrument

- a. Take Guth 10-4(Low concentration calibration kit, High concentration calibration kit) out of Re- calibration kit bag.
- b. Separate A & B kits.

. Put edible water

- a. Put edible water (500ml) in mass cylinder.
- b. Put edible water in a bottle which is separated from A & B kits.

. Heating

- a. Assemble again A & B kits as the former condition.
- b. Turn green switch of both of A kit and B kit on. (Heating time : 20sec)

. Inject alcohol

- a. Put the pure alcohol in the syringe as below indication.

**** N.B. : A kit – 0.03%BAC solution : 200 micro liter pure alcohol / 500ml water**

B kit – 0.10%BAC solution : 820 micro liter pure alcohol / 500ml water

- b. Separate again A & B kits.
- c. Inject pure alcohol by micro syringe in A & B kits.
- d. Assemble again A & B kits as the former condition.

. Mixing (alcohol)

- a. Inject air for 5~10 sec in air hole (A & B kits).

9. Calibration. (B kit)

- a. Connect CA2000 to B kit.
- b. Inject air to CA2000.
- c. Both of Ready and Warning lamp will be flickering(3.0sec) and will show numeric result.

***** N.B. : This numeric result is not important. So, you can ignore that.**

- d. Power off.

10. Measurement mode

- a. Select the normal measurement mode(refer to the manual).
- b. Put air to CA2000 approx 1~2 sec for cleaning.
- c. Power on.

11. Test

- a. Test CA2000(A & B kits).
- b. If the result show 0.03 at A kit & 0.10 at B kit, the CA2000 is recalibrated perfectly.
- c. Power off.

12. Finishing

- a. Put the new sticker.
- b. Arrange all of instruments.

