# Electric and electronic section

**SAFETY KIT** electronic part consists of an alcohol tester and an emergency flashlight. The alcohol tester provides indication on the blood alcohol concentration (BAC) and must be used as a self prevention tool. The result provided by the alcohol tester **must not** be considered as the only way to evaluate your physical condition, certify possible alcohol intoxication and determine the ability of driving a car, operating machinery or performing dangerous activities.

Every person reacts differently to the consumption of alcohol. Personal alcohol breath testers are designed for informational purposes! Results are only an indication of your blood alcohol concentration and are not legally accepted.

The producer of **SAFETY KIT** disclaims any responsibility for any use of its product except that of getting a simple indication of your alcohol level. If you have any doubts about your ability to drive safely DO NOT DRIVE! *Alcohol-impaired driving is an offencel* Drinking and driving is forbidden and extremely dangerous; symptoms of alcohol intoxication include drowiness, slowed reaction time, poor judgement of speed and distances, impaired vision and hearing, poor cordination, false sense of confidence.

#### **Technical features**

High sensitivity alcohol vapour sensor TGS2620 Figaro Control System: MCU (PIC16F819) Unit of Measurement: BAC - Blood Alcohol Concentration 3 Led indications Green: value included between 0 and 0,2 % BAC Yellow: value included between 0,2 and 0,5 % BAC Red: value above 0,5% BAC Batteries: 2x CR2450 (3V) Preset Alert level: 0,5% BAC Warm-up time: 120 seconds Response time: 10 seconds The alert level is set at 0,5%0 BAC, the maximum level allowed by the Italian law

# Preparation

SAFETY KIT is provided with two batteries. To operate it, pull out the plastic tag. Before replacing the batteries, check the polarity and insert the batteries as indicated to avoid any damages to the device (see drawing in the compartment).

#### Precautions

In order to achieve accurate results in the long period:

- 1. Do not blow smoke or gas into or around the capsule, as this may alter the test result and damage the device.
- 2. Keep the device out of liquids or extreme temperatures.
- 3. Wait at least ten minutes after drinking before testing.

# Operation

SAFETY KIT has two buttons:

S1 (black) activates the flashlight

S2 (red) activates the alcohol tester

If the two buttons are pressed together, none of the sections will be activated.

# Flashlight

To activate the flashlight press S1 for about half a second. The flashlight will switch off automatically after two minutes. To reactivate it, press S1 again. To use the flashlight in the blinking emergency mode, press S1 for more than one second. To turn off the blinking mode or turn off the flashlight manually, press S1.

# Alcohol tester

To activate the alcohol tester press S2 for about half a second

The warm up process takes about 120 seconds. A short "beep" sound will indicate that the unit is ready to detect the alcohol level.

Blow in the unit for about 10 seconds. Stop blowing when you hear a "beep" tone.

When the reading is complete, a led light will show your Blood Alcohol Concentration Range (BAC) for ten seconds.

Green: value included between 0 and 0,2 % BAC

Yellow: value included between 0,2 and 0,5 % BAC

Red: value above 0,5% BAC and alert sound for 5 seconds

Each operation ends with the green led light on for 2 seconds.

If you want to start a new test, press S2 again and repeat the above operations.

# Mechanical section

#### Glass breaker tip

**SAFETY KIT** is provided with a metallic tip made of tempered stainless steel for a higher shock resistance. For a more effective usage in case of emergency, hit the glass window with the tip perpendicular to the glass plane.

# Seat belt cutter

**SAFETY KIT** is provided with a double steel blade to cut through the safety belts if the automatic release mechanism is blocked. In order to achieve a sharp and rapid cut, use the blades with an oblique angle (45° approx.) to the belt profile.

# Notes

To avoid serious damages to **SAFETY KIT**, do not hit or drop it. After any usage, store it safely in a dry place, out of extreme temperatures.

Do not clean SAFETY KIT with solvents or gas-releasing substances, as the test results might be altered. The device has a low-battery indicator. The procedure to control the state of the battery charge is activated by pressing S1 or S2 rapidly. If the battery charge is low, the yellow led will blink for 6 times. Remove the batteries before long time storage.

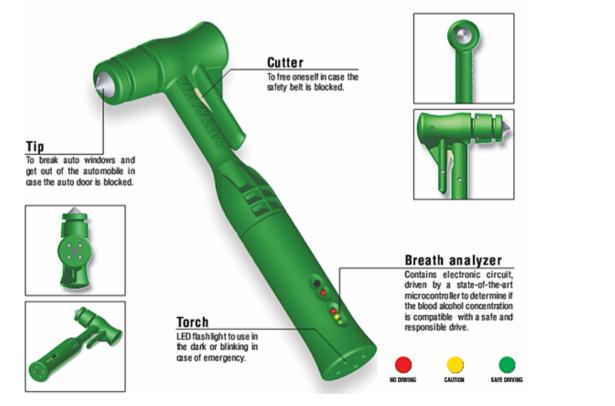
# Notes for the disposal of the product valid in the European Union

The product must be disposed of properly in the collection depots. The product must not be disposed of in the environment as it may be harmful. Batteries must be removed before disposing of the product. Batteries must be disposed of separately because they contain highly toxic substances. It is strictly prohibited to dispose of the product as a urban waste.





SAFETY KIT is conceived, designed and produced by START BUSINESS JA. A multitask safety device with an alcohol tester driven by a microcontroller. Simple and surprising, it displays LED indicator lights for three different test levels indicating the amount of alcohol in your bloodstream.



# USER MANUAL SAFETY KIT



START BUSINESS JA Registered Office via Ozanam, 27 - 24126 Bergamo (BG) Italy - ☎+39 035 319416 - 副 +39 035 319416 ௴ info@startbusiness-ja.it ☆ www.startbusiness-ja.it