

## GROUP PROFILE

PFK Electronics was established in 1985 and now employs over 400 people. We are the largest supplier of automotive security products in the South African after-market and export to over 25 other countries. We also have subsidiaries in Australia and the United Kingdom.

Although the focus of PFK's innovation deals specifically with the automotive electronic security after-market, we pride ourselves in producing products for some of the largest motor manufacturers (CEM's) in South Africa and overseas.

Accredited to ISO/TS 16949 and ISO 14001, the highest automotive quality standard warrants that PFK has the systems and procedures in place to produce quality products and to ensure that your vehicles are always protected. Targeting specific export markets, PFK products are certified to comply to major international automotive standards such as C-Tick, VICC, VESA, TUV, TNO and Thatcham to mention a few. All products are manufactured at PFK in Durban at the highly automated state of the art SMD production facility that has enabled PFK to be leaders in automotive vehicle security systems.



**SABS**  
ISO/TS 16949  
ISO 14001

To order, or for more information, contact:  
AUTHORISED AUTOWATCH DEALER



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## Alcohol sensitive vehicle Immobilisation



# OPERATING INSTRUCTIONS

A QUALITY PRODUCT BY

**PFK ELECTRONICS**

PFK Electronics (Pty) Limited Reg. No. 1985/000122/07 <http://www.pfk.co.za>



# CONGRATULATIONS!

Your vehicle is protected by an AIBBS, Alcohol Immobiliser Breathyler Blocking System designed to give years of trouble free operation, made with only the highest quality components and using state of the art technology you can be assured that your vehicle has the best electronic protection against drinking and driving available.

## SYSTEM OVERVIEW

The **Autowatch WAB 100**® provides protection from a vehicle being started and driven by an individual whose blood/alcohol content is higher than a pre-determined level.

**Ensure that comprehensive instructions and demonstration on the functions and use of this system is provided by your Service / Installation Centre.**

### SYSTEM COMPONENTS :

#### ● VEHICLE BLOCKING SYSTEM (VBS)

This unit contains a buzzer and is wired into the vehicle's starting circuit. The VBS is not user accessible.

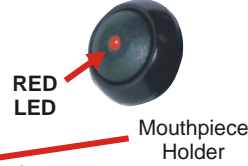
#### ● DRIVER CHANGE/RESET BUTTON WITH LED

Mounted within convenient reach of driver.

#### ● WIRELESS ALCOHOL BREATHALYSER. (WAB)

Hand held

#### DRIVER CHANGE BUTTON



RED LED  
Mouthpiece Holder

Disposable Mouthpiece

#### WAB

Large Button  
Once off  
Emergency Override

Small Button  
On/Off

Charging & Data  
Download  
Socket

Graphics Display  
Displays procedural prompts, error messages and shows the result of the subject's breath test, "PASS" or "FAIL". A battery icon, bottom right, shows the power level and indicates ongoing charging when appropriate.

WAB Serial Number  
The Serial Number is located here and will need to be quoted when contacting your Service Centre.

#### Disposable Mouthpiece

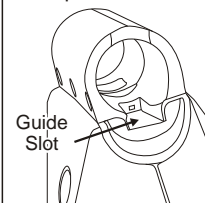
The mouthpiece must be fitted into the mouthpiece holder before use of the instrument for breath testing

Please note that the mouthpiece will only fit into the instrument if orientated correctly. Unwrap mouthpiece from its protective packaging and, with the location key facing downwards, slide the mouthpiece into the opening on the right of the mouthpiece holder (with instrument display facing you and buttons to the top). The location key must fit into the corresponding guide slot in the holder and the mouthpiece pushed in until it will move no further. Failure to correctly locate the mouthpiece may result in the instrument refusing to take a breath sample and therefore you being unable to start your vehicle.

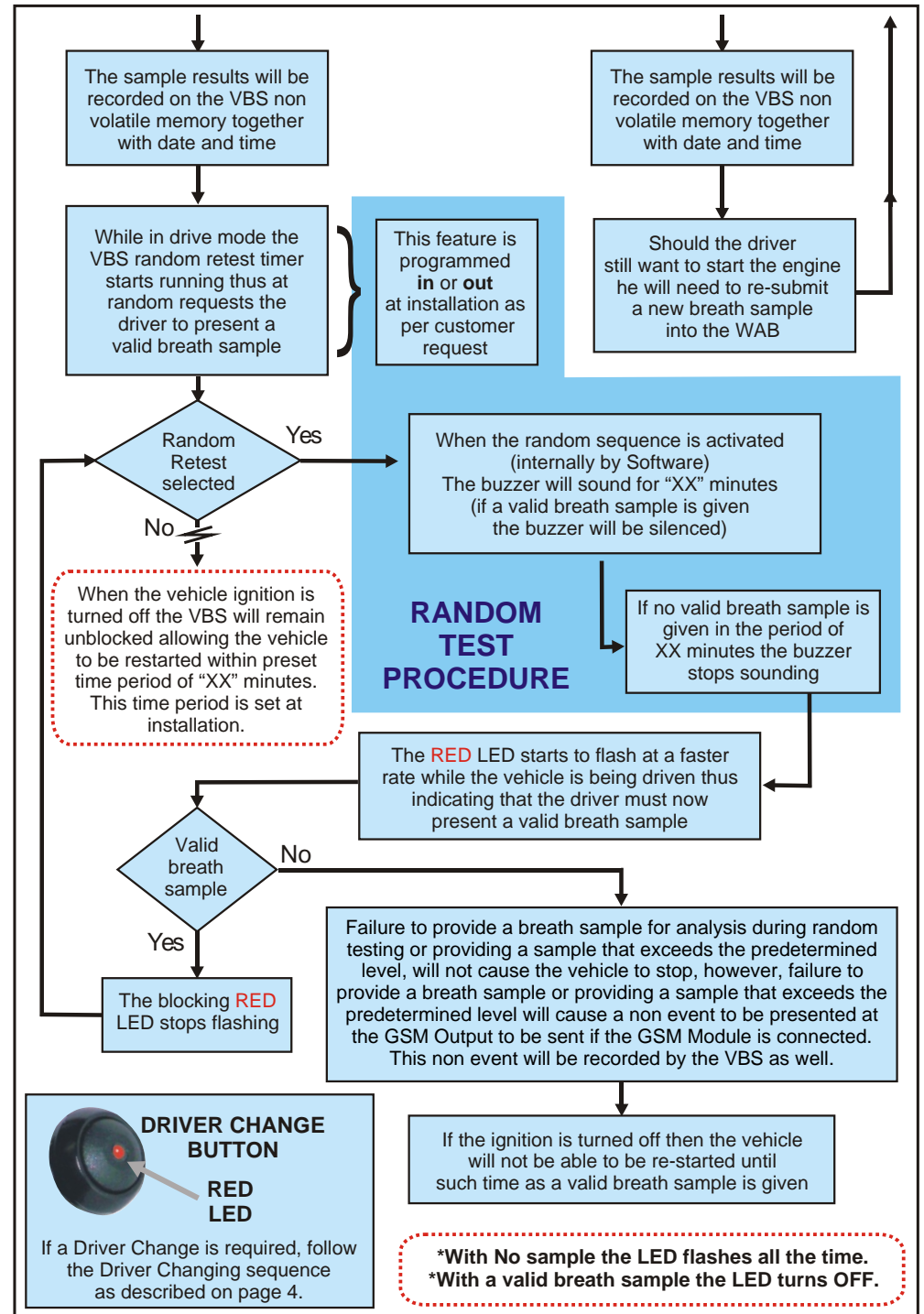
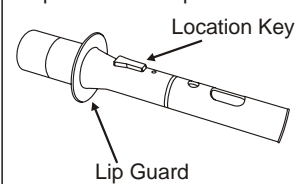
The mouthpieces are disposable, manufactured under hygienic conditions and supplied in individual wrappers.

**We recommend that a new mouthpiece is used for each test**

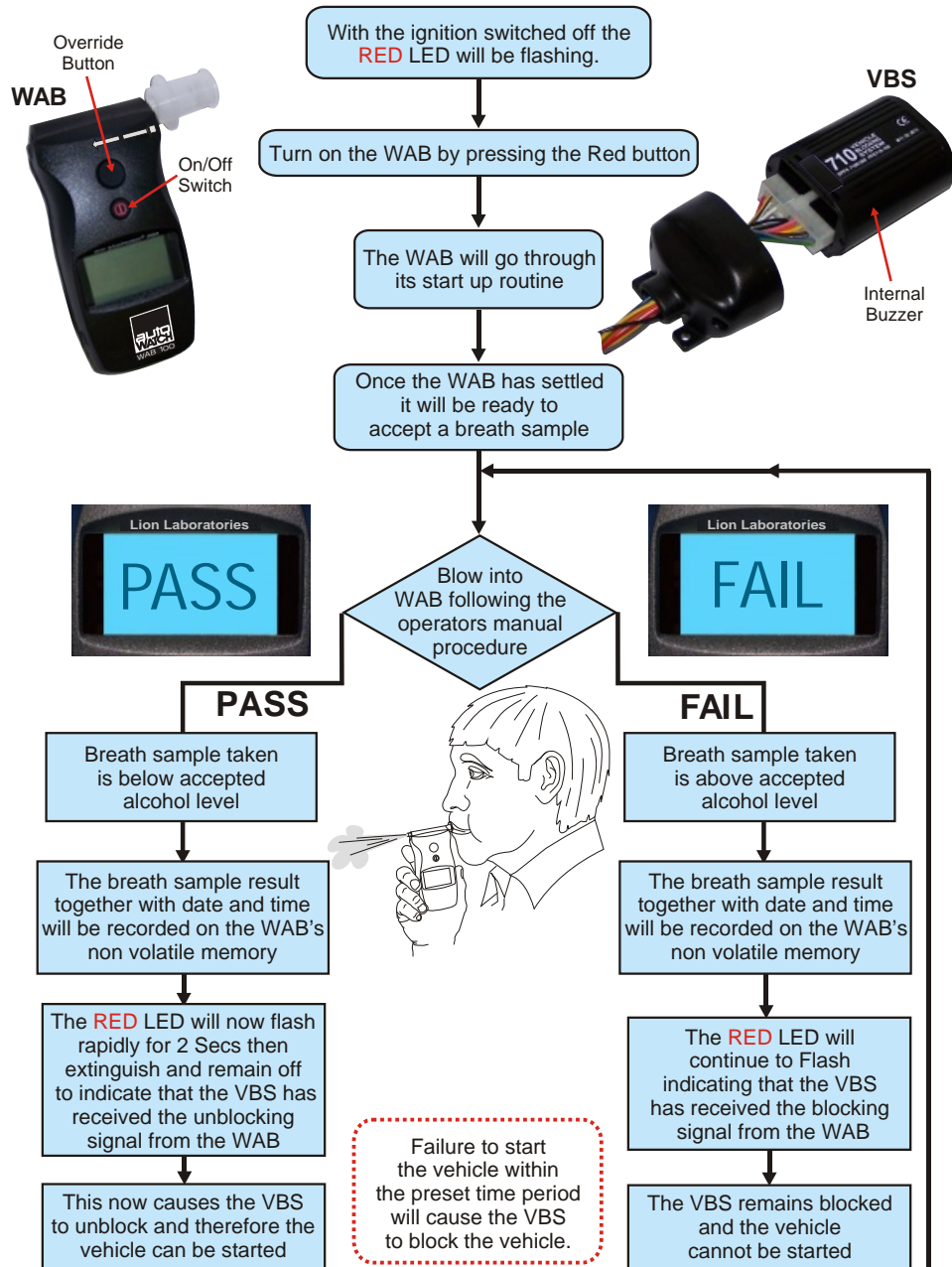
#### Mouthpiece Holder



#### Disposable Mouthpiece



## ALCOHOL INTERLOCK OPERATING PROCEDURE FLOW CHART



### Breath Test Procedure

#### Before providing a sample

1. Your Autowatch WAB 100<sup>®</sup> reacts very specifically to the presence of alcohol in the breath. However, it can be affected by, for example, use of mouthwash or the application of perfume and aftershave immediately before taking your sample. All of these products contain alcohol and their presence may elevate the results determined by the instrument.
2. Similarly, elevated results can occur if you have consumed alcohol up to 20 minutes before providing a sample. This is because your mouth may still contain residual alcohol from the last drink.
3. Smoking within up to two minutes of providing a sample may also produce erroneous results.

#### WAB Switch-on

To switch on, press and release the Small Button. A confirming beep will sound, followed by a series of screens showing:

- Autowatch
- Instrument temperature
- Date
- Please Wait
- Instrument Serial Number
- Time
- Next scheduled service date

Meanwhile, the WAB automatically checks its operating parameters. When the WAB is ready to take a sample a further single beep will sound, followed by the message:



**We strongly recommend that you take the WAB with you when you leave the vehicle. This will then not only act as an additional security system for your vehicle, but will also help to prevent the WAB from being exposed to temperature extremes.**

### PROVIDING A BREATH SAMPLE

Take a deep breath, seal your lips around the wide end of the mouthpiece and blow into it with moderate force. The instrument will detect your breath flow and will emit a continuous tone as long as you are blowing correctly. Once sufficient breath has been blown the tone will stop and a double click will be heard followed by two rapid beeps. Once you have heard the two beeps then stop blowing.



**Ensure that your Service/Fitment Centre fully demonstrates the correct blowing technique of the WAB.**

**NOTE** The WAB is equipped with highly sophisticated methods of detecting sample tampering. Any attempt to start your vehicle without providing an unadulterated human breath sample will be logged within the system and you may be required to explain your actions at a later date.

## OPERATING INSTRUCTIONS

Before starting the vehicle the RED LED on the Driver Change Button will be flashing indicating that the vehicle is blocked by the VBS (Vehicle Blocking System).

It is recommended that the VBS immobiliser is unblocked **prior** to turning on the vehicle ignition.

To achieve this, follow the procedure below:

Switch the WAB ON, when the display shows "Fit Mouthpiece, Take Sample" provide a breath sample as described on page 2.

The WAB display will then show "Sample Taken" followed by "Analysing"

After a few seconds your breath sample will have been analysed and, if the breath alcohol level is below the pre-set limit, then "Pass" will appear on the WAB display and a coded signal will be sent immediately to the VBS in order to unblock the Blocking System. The RED LED will flash rapidly and extinguish confirming that the Blocking System has been unblocked \*This status will be recorded by the VBS & the WAB with date and time.

You may now start your vehicle. (*\*The specific time period in which you have to start your vehicle is programmed by the service/fitment centre and can be set to 5, 10, 20 or 30 minutes.*)

Before driving off, you may wish to switch off your WAB by pressing and holding the small button until the WAB shuts down. Alternatively, the WAB will automatically shut down after a short period of time if no further samples are provided.

### IF THE VBS FAILS TO UN-BLOCK (Invalid breath sample)

1. If the WAB displays "Fail" then it has detected alcohol in the breath at a level in excess of the preset limit. If you have observed the points shown in the "Before Providing a Sample" section of these instructions, then you have a breath alcohol level above the pre-set limit. The RED LED will flash rapidly, and the Blocking System will remain blocked, the RED LED will continue flashing and the vehicle will not start. This status will be recorded by the VBS & the WAB with date and time.

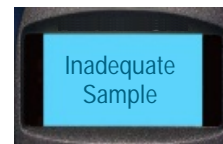
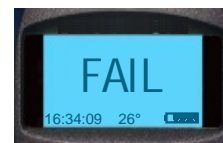
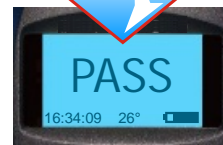
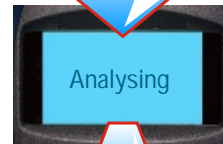
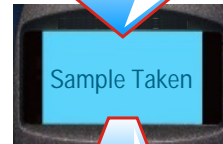
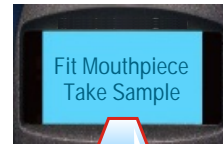
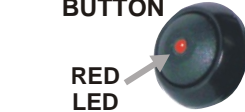
You should wait for 30 minutes and then provide a further sample, by which time your body may have metabolised the alcohol and reduced the level below the preset limit.

2. If the WAB displays "Inadequate Sample" then one or more of the following could be the cause of the problem.

- Incorrectly positioned mouthpiece
- Insufficient length of blow (Volume)
- Incorrect force of blow (Too hard or too soft)

### DRIVER CHANGE BUTTON

RED LED



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## RANDOM "ON THE ROAD" TESTING

Should the "Random Testing" option be selected at installation, while the vehicle is on route, the VBS buzzer will sound as a request for a new breath sample. (This will be randomly repeated at any stage of the journey)

1. Switch the WAB ON, when the display shows "Fit Mouthpiece, Take Sample" follow the same procedure to provide a breath sample as described on page 2.
2. The WAB analyses the breath sample as before and the VBS records the result.

*Should no breath sample be supplied within a preset period, the buzzer will stop and the RED LED will start to flash at a faster rate continuously until a valid sample is presented.*

**NOTE : Failure to provide a breath sample for analysis during random testing or providing a sample that exceeds the predetermined level, will not cause the vehicle to stop, however, failure to provide a breath sample or providing a sample that exceeds the predetermined level will cause a non event to be presented at the GSM output to be sent if the GSM module is connected.**

## DRIVER CHANGING

Should a new driver be required to take over driving responsibilities, the following procedure needs to be followed:

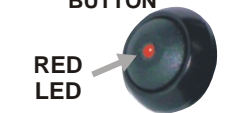
1. As the new driver takes over, the reset button must be pressed.
2. The VBS buzzer will sound to request a new breath sample.
3. Switch the WAB ON, when the display shows "Fit Mouthpiece, Take Sample" follow the same procedure to provide a breath sample as described on page 2.
4. The WAB analyses the breath sample as usual, the VBS records the result and the random test timer is reset.

*Should no breath sample be supplied within a preset time period, the buzzer will stop and the RED LED will start to flash at a faster rate continuously until a valid sample is presented.*

**NOTE : Failure to provide a breath sample for analysis during driver changing or providing a sample that exceeds the predetermined level will cause the vehicle to remain blocked, moreover, will result in a non event being presented at the GSM output to be sent if the GSM module is connected.**

### DRIVER CHANGE BUTTON

RED LED



## BASIC MAINTENANCE

### Battery Charging

The battery is re-charged via the socket on the left side of the instrument. When necessary, insert the connector from your 12V charger into the socket and insert the other end into the cigarette lighter in your vehicle. If switched on while charging the battery condition indicator will cycle from full to empty whilst the battery is still being actively charged.

### Downloading Recorded Results

The WAB keeps a backup of all recorded results which can be accessed by using Download software and the USB cable direct to a PC. This facility will need to be requested from your Service/Installation Centre.

### Cleaning the WAB

If and when required, simply wipe over with a lightly dampened cloth.

**NOTE: Please do not use chemical solvents, abrasives or excess water as these could damage the case material, and possibly the internal sensors.**

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