Automatic Tire Inflator

Operation Manual

Content

Preface:

This device has low power consumption, no noise, no pollution, easy operation, stable performance, high accuracy. It can meet satisfaction of various type of tires and it's to be top products select by car repair industrial, car manufacturer, tire shops and 4s shops.

Our tyre air inflator can inflate the Nitrogen also, but doesn't have the function to generate the Nitrogen.

Please read the manual carefully before using, and avoid the damage caused by improperly use, the improper usage is not on the range of warranty. Dangerous situation will be happen due to improperly use. Wrong setting will lead to tire blast, please keep children and non-professional staff out of touching!

This equipment can be only inflated tire and don't use it as other purposes. Any unauthorized modifications and none tire inflation purposes are considered as incorrect operation. Supplier is not responsible for the damage and repair of improperly operation.

一、 Requirements Of Installation

1、 The air produced by compressor need to be filtered through oil and water. The filter must be checked periodically.
2、 The pressure of air compressor must be: 8.00-10kg/cm^2
3、 Plug base must be put on the dry place, air compressor connect with inflator must be within 6 meters.

二、 Technical Parameters

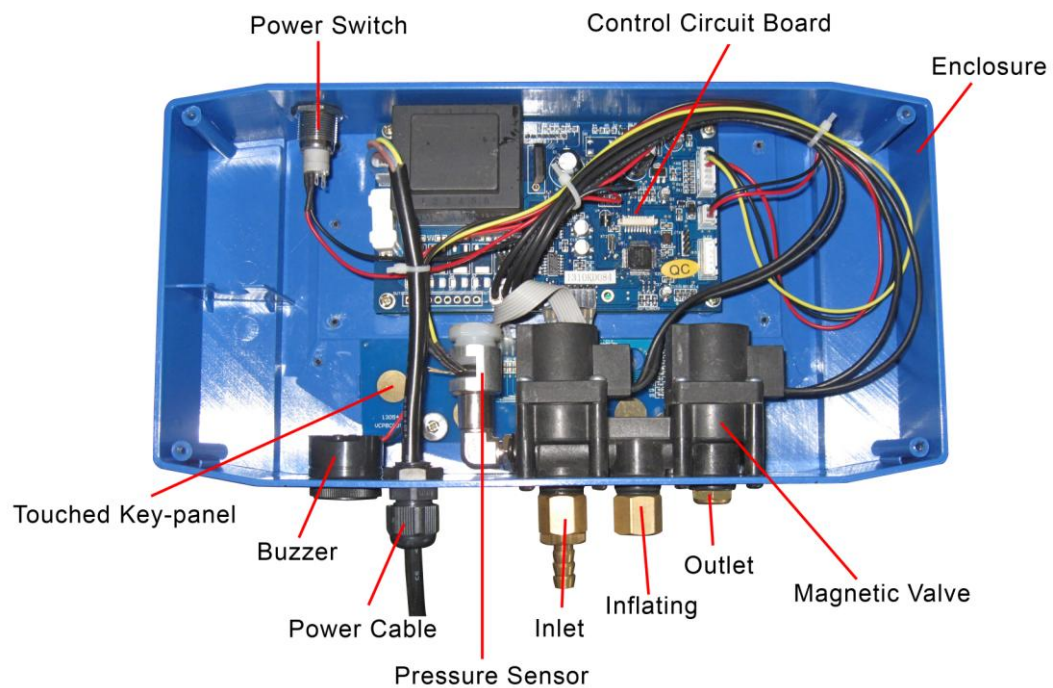## 1、Technical Parameter (**AWS10、AWF13、AWS11、AWF12、ABS15、ABF16**)

1) Power Supply：100-240Vac 50/60Hz
2) Inlet Pressure：8-10kg/cm^2
3) Voltage: 230v 50/60Hz
4) IP Rated：IP54
5) Consumption：Max.18VA
6) Max. Inflating Pressure: 10.0 bar /999 kpa/145 psi
7) Suggested Inlet Pressure of Air Compressor: above setting pressure 44psi, 300kPa , 3bar
8) Pressure Unit: psi, kPa, bar
9) Max. Tolerance: <0.08 bar/ 8 kpa (1.16 psi)
10) Working Temperature: -20℃ to 70℃, -4°F to 158°F
11) Standard Usage: EC magnetic compatible
    （89/336/EEC）Version 93/31/EEC
    EN61000-6-3(2001),EN61000-6-2(1999)
    EN Low Voltage Indication（72/23EEC）BS EN 61010-1

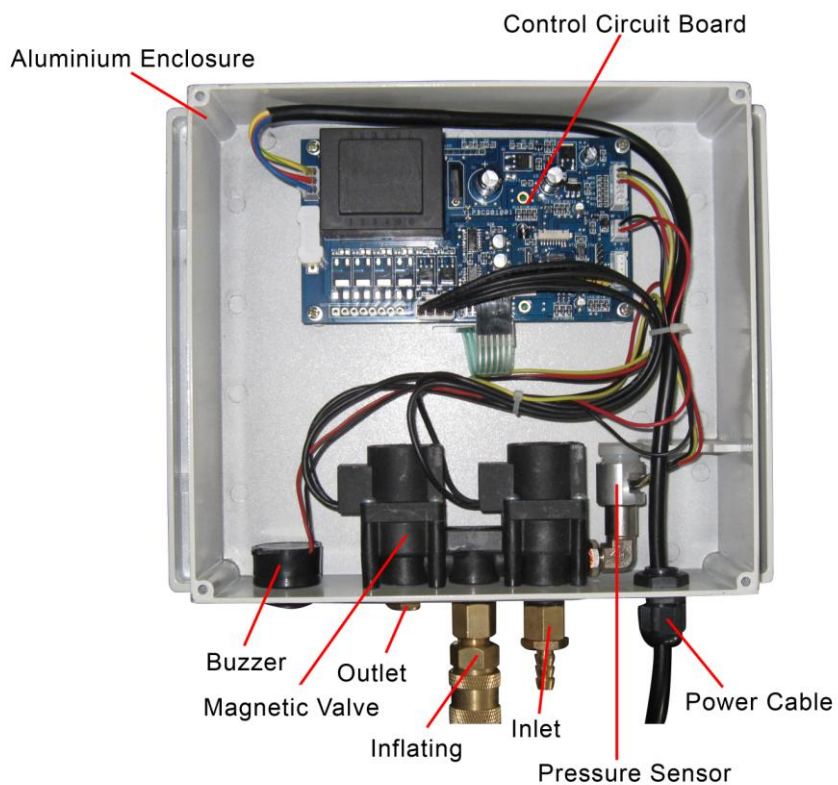## 2、Technical Parameter (**AWS50、AWF52、AWS51、AWF53、ABS54、ABF55**)

1) Power Supply: 100-240Vac 50/60Hz
2) Inlet Pressure: 8-16kg/cm2
3) Voltage: 230v 50/60Hz
4) IP Rated: IP54
5) Consumption: Max.18VA
6) Max. Inflating Pressure: 16.0 bar /1600kpa/232 psi
7) Suggested Inlet Pressure of Air Compressor: above setting pressure 44psi, 300kPa , 3bar
8) Pressure Unit：psi, kPa, bar
9) Max. Tolerance: <0.08 bar/ 8 kpa (1.16 psi)
10) Working Temperature: -20℃ to 70℃, -4°F to 158°F
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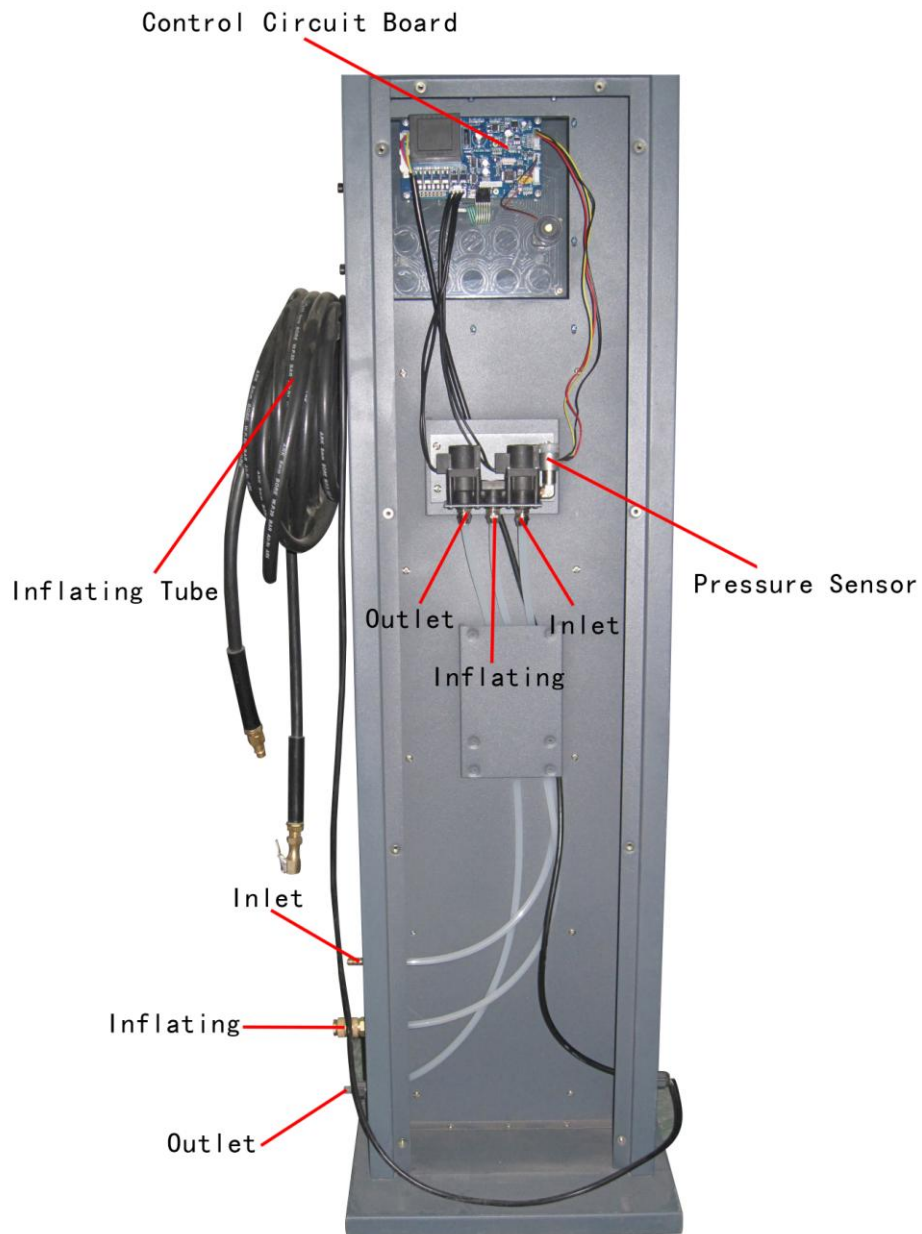
三、 Exploded View Of Air Inflator

1、AWS10、AWF13、AWS50、AWF52

Power Switch　Control Circuit Board　Enclosure

Touched Key-panel

Buzzer

Power Cable

Inlet

Pressure Sensor

Inflating

Outlet

Magnetic Valve

2、AWS11、AWF12、AWS51、AWF53

Aluminium Enclosure　Control Circuit Board

Buzzer

Outlet

Magnetic Valve

Inflating

Inlet

Pressure Sensor

Power Cable

3、ABS15、ABF16、ABS54、ABF55

Control Circuit Board

Inflating Tube

Outlet
Inlet
Inflating
Pressure Sensor

Inlet

Inflating

Outlet

四、 **Preparation Before Operation**

1、Connect power.
2、Connect air compressor.
3、Press turn on button on the panel, LCD screen lighten.
4、Machine can be used now.

五、Buttons And LCD Screen Indications

1、Buttons Indications:

1) AWS10、AWF13、AWS50、AWF52、ABS15、ABF16

turn on button
turn off button

LCD Display

Decrease

Settings

Exit

Start

Increase

2) AWS11、AWF12、AWS51、AWF53、ABS54、ABF55

LCD Display

Decrease

Increase

Exit

Setting

turn on button
start button
turn off button

Operation Instruction

2、LCD Screen Indications

Menu Selection
Nitrogen Source Selection
Inflating
Conditions Display Area
Air Source Selection
Current Pressure
Current Unit
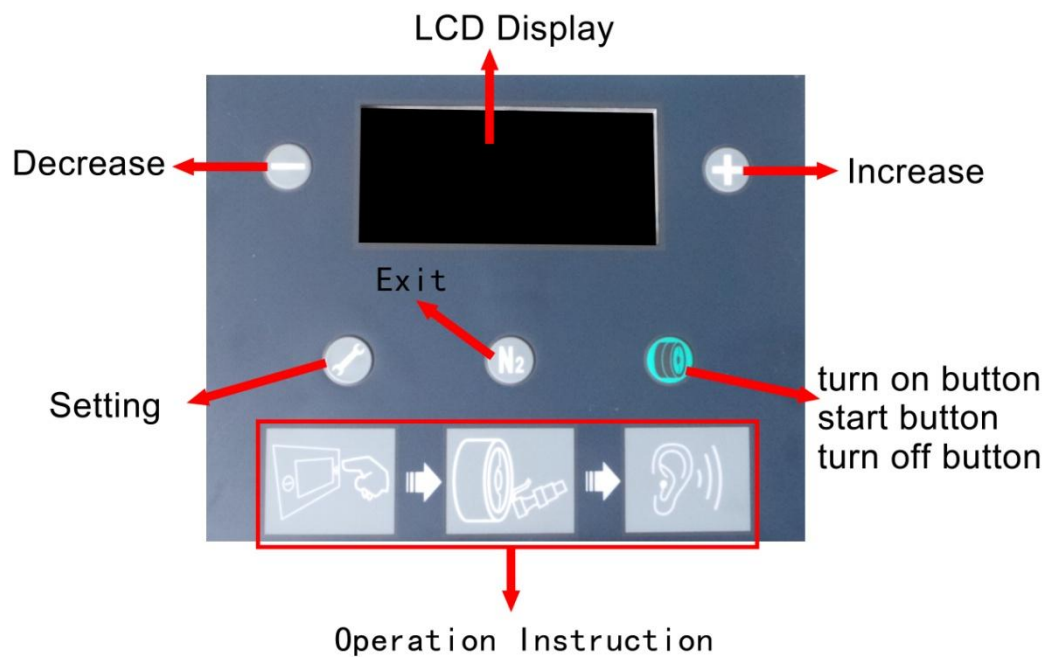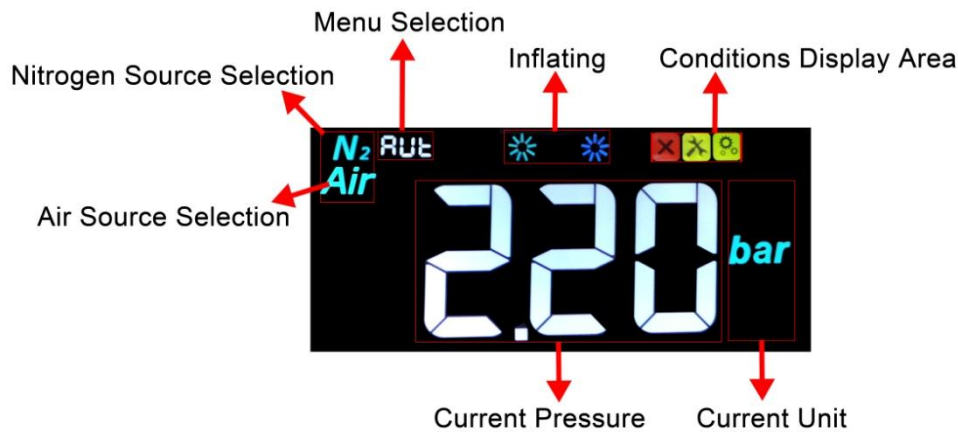
Air	Air Source		OPS	Over-pressure Inflation Setting
N₂	Nitrogen Source		UNI	Unit Selection
❋	Inflating		AUt	Manual/Automatic Selection
❋			SAS	Air Source Selection
✖	Forbid Nitrogen Cleanness		CLr	Nitrogen Cleanness Times Setting
⚒	Settings		HPS	Maximum Inflation Pressure Setting
⚙	Automatic Inflation		LPS	Minimum Inflation Pressure Setting
✋	Manual Inflation		SOU	Voice Setting
psi	psi		dEF	Default Pressure Setting
bar	bar		COU	Inflation Times Setting
kPa	kPa		REC	Factory Settings
Kg/cm²	Kg/cm²			

3、Error Indications

Error Number
Error
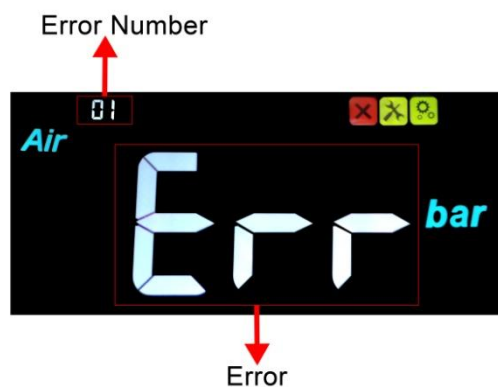
01	Pressure Sensor Fault 1—Can't calibrate to Zero
02	Pressure Sensor Fault 2—Pressure measurement unstable
03	Inflation Pressure Increase Too Slow
04	Inflation Pressure Increase Too Fast
05	Deflation Pressure Decrease Too Fast
06	Deflation Pressure Decrease Too Slow
07	FLASH Memory Fault
08	Pressure Sensor Power Supply Fault

4、Graphical Indications of Operation Steps

 Set inflation pressure

 Connect the inflator chuck with tire's valve

 Inflating finished when hear 3 times "beep".

六、Conventional Operation

1、Turn On, Turn Off:

1) Press the turn on/off button on the top of the air inflator to turn on or turn off the machine. See below photo, it is suitable for model AWS10、AWF13、AWS50、AWF52.

turn on button
turn off button

2) Turn on/off and start to inflate button is the same one, see below photo. It is suitable for model AWS11、AWF12、AWS51、AWF53、ABS54、ABF55. When want to turn off the machine, hold on pressing the button for 2 seconds, the LCD will show "OFF".
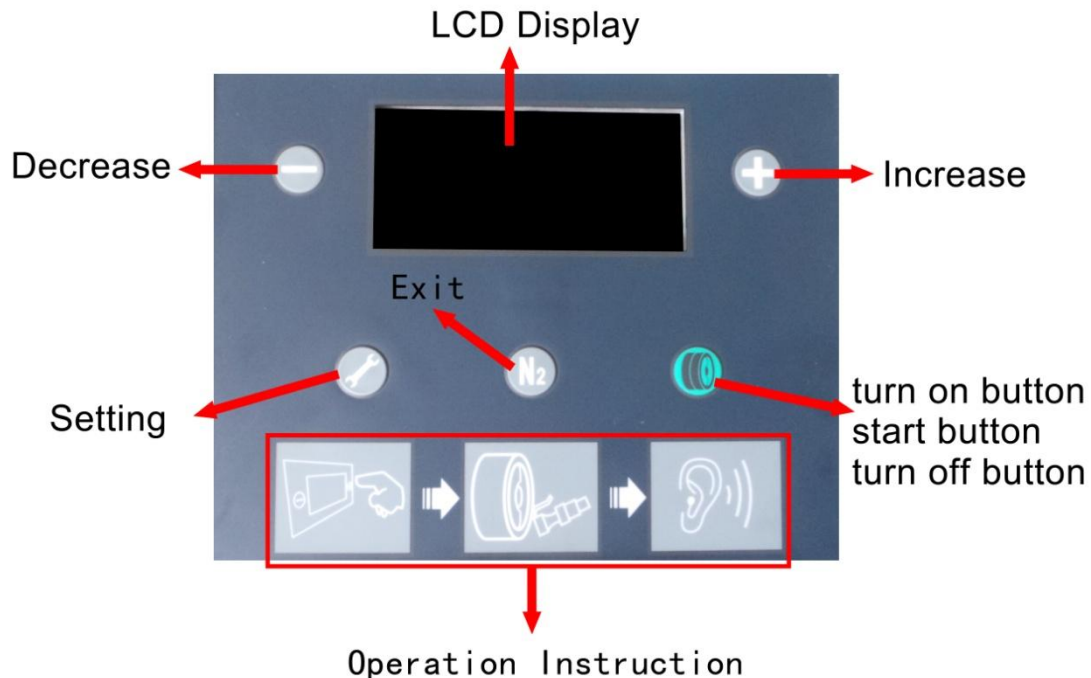
2、Conventional Inflating Procedure:

Set the inflating pressure by press "Decrease" and "Increase" button. Then connect the inflating chuck with cranked tire valve, if the tire pressure is above 0.4bar, it will begin to inflate automatically. While a sound will be noted by buzzer and the current pressure values will be shown on the screen flickeringly means the air inflating finished. Take out the inflating chuck.

If the tire pressure is less than 0.4bar, it need to press "start button" to begin to inflate. While a sound will be noted by buzzer and the current pressure values will be shown on the screen flickeringly means the air inflating finished. Take out the inflating chuck.

3、OPS Procedure:

If the tire is the first time to be inflated, it should choose OPS function. The OPS max. values is 2.0bar. It means if the OPS value set as 1.0bar, and the inflating pressure set as 2.0bar, the machine will inflate to 3.0bar, and then deflate to 2.0bar.

（1） Set OPS value.
（2） Connect tire.
（3） Press "Start Button".
（4） Buzzer alarm when inflating is over.

七、 **System Parameter Settings:**

When air inflator does not inflate, press setting button " ⬤ ",　the air inflator display "-----". Then press " ⊕ ", " ⊖ "," ⊕ " buttons enter setting item. Press ⬤ to exit.

1、 **Setting Items:**

F01： Pressure unit settings:
Selectable: psi,　bar,　kPa,　kg/㎡.
0：bar，
1：psi，
2：kpa，
3：kg/㎡

F02:　OPS pressure settings：
F03:　Default pressure when turn on: set the default target pressure of turn on.
F04:　Max. inflating pressure setting: Max. inflating pressure is 12bar.
F05:　Min. inflating pressure setting: Min. inflating pressure is 0.5bar.
F06: Manual/automatical mode setting: 0 is manually mode, 1 is automatically mode.
F07:　Buzzer setting:　0 means close buzzer, 1 means open buzzer.
F08:　Air source mode setting: 0 is air source mode, 1 is nitrogen source mode.
F09:　Nitrogen cleanness times setting: 0-5 means the cleanness times.
F10:　Inflating times query: check the equipment inflating times.
F11:　Restore factory setting: restore all setting items to factory setting status.

2、 **Pressure Unit Setting:**

1） Enter setting mode.

2） Press ⊕ or ⊖ until the LCD screen display **"F01".**

3） Press ⬤ to confirm.

4） Press ⊕ or ⊖ to adjust the number on the LCD screen.
(0：**bar**，1：**psi**，2：**kpa**，3：**kg/㎡**)

5） Press ⬤ to save and exit the setting mode.

3、OPS Pressure Setting:

Max. OPS pressure is 2.0 bar, default pressure set as 0.
1) Enter setting mode.
2) Press ⊕ or ⊖ until the LCD screen display **"F02".**
3) Press 🔘 to confirm.
4) Press ⊕ or ⊖ to adjust values, the range is 0--2.0bar.
5) Press 🔘 to save and exit the setting mode.

4、Default Pressure Of Turn on Setting:

Default pressure of turn on means the common inflating pressure displayed when turn on the machine.
1）Enter setting mode.
2）Press ⊕ or ⊖ until the LCD screen display "**F03**".
3）Press 🔘 to confirm.

4）Press ➕ or ➖ to adjust the pressure values that operator always use.

5）Press 🛞 to save and exit the setting mode.

5、Max. Inflating Pressure Setting:

To ensure safe inflating, the operator can set a max. inflating pressure values, thus to avoid to inflate the inappropriate pressure due to misoperation.

1）Enter setting mode.

2）Press ➕ or ➖ until the LCD screen display **"F04".**

3）Press 🛞 to confirm.

4） Press ➕ or ➖ to adjust the max. pressure values that operator need. The max. inflating pressure is 12bar.

5）Press 🛞 to save and exit the setting mode.
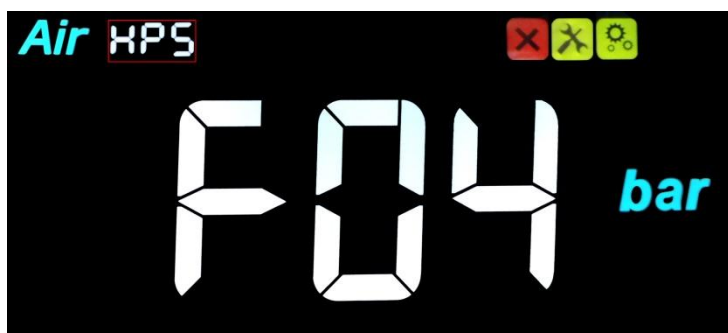
6、Min. Inflating Pressure Setting:

Min. inflating pressure means to set the pressure that allow the machine can begin to inflate automatically when start. The min. pressure is 0.4bar.

1）Enter setting mode.

2）Press ➕ or ➖ until the LCD screen display **"F05".**

3）Press ⊚ to confirm.

4）Press ⊕ or ⊖ to adjust the min. pressure values that operator need.

5）Press ⊚ to save and exit the setting mode.

7、Manual/Automatic Mode Setting:

Operator can set the tire inflating mode is manually or automatically.
1）Enter setting mode.

2）Press ⊕ or ⊖ until LCD screen display **"F06".**

3）Press ⊚ to confirm.

4）Press ⊕ or ⊖ to adjust the number. 0 is manual mode, 1 is automatical mode.

5）Press ⊚ to save and exit the setting mode.

8、Buzzer Status Setting:

Operator can set buzzer alarm function.
1）Enter setting mode.

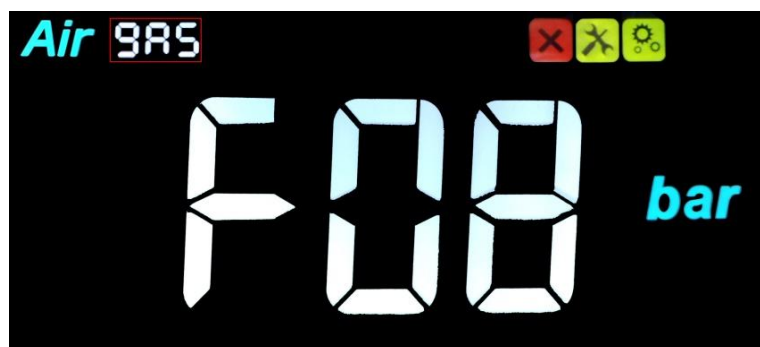2）Press ⊕ or ⊖ until LCD screen display "**F07".**.

3）Press ⬤ to confirm.

4）Press ⊕ or ⊖ to adjust values. 0：close buzzer. 1：open buzzer.

5）Press ⬤ to save and exit the setting mode.

9、Air Source Mode Setting:

Our tire inflator can choose different air source to inflate the tire, normally choose air and nitrogen.

1）Enter setting mode.

2）Press ⊕ or ⊖ until LCD screen display "F08".

3）Press ⬤ to confirm.

4）Press ⊕ or ⊖ to adjust values. 0: air source mode. 1: nitrogen source mode.

5）Press ⬤ to save and exit the setting mode.

10、Nitrogen Cleanness Times Setting:

Our air inflator can connect nitrogen source to inflate, and also has nitrogen cleanness function that guarantee the maximum nitrogen purity in the tire. The default cleanness time is 0. When the cleanness time set as 0, it

means equipment doesn't launch cleanness function. Cleanness times can set from 0-5 times.

1）Enter setting mode.

2）Press ⊕ or ⊖ until LCD screen display "**F09**".

3）Press 🛞 to confirm.

4）Press ⊕ or ⊖ to adjust cleanness times. The times from 0 to 5.

5）Press 🛞 to save and exit the setting mode.

11、Inflating Times Query:

Our air inflator can save tire inflating times. Operator can query the total inflating times from this function. And the inflating times will not clear to 0 due to restore to factory setting.

1）Enter setting mode.

2）Press ⊕ or ⊖ until LCD screen display "**F10**".

3）Press 🛞 to confirm.

4）Screen display the inflating times.

5）Press (N₂) to exit setting mode.

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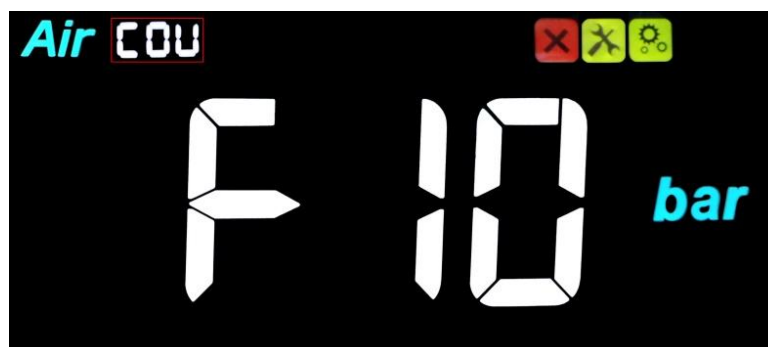
12、**Restore factory setting:**

Restore all the setting items to factory status.

1）Enter setting mode.

2）Press ⊕ or ⊖ until LCD screen display "**F11**".

3）Press 🛞 to confirm.

4）Press （N₂） to exit the setting mode.

八、**Error Messages**

E01. Can't calibrate to 0: please check if inflating connector is connected with tire when machine start up. If yes, please remove the connector and re-start. Otherwise, it could be sensor fault or pipe is blocked.
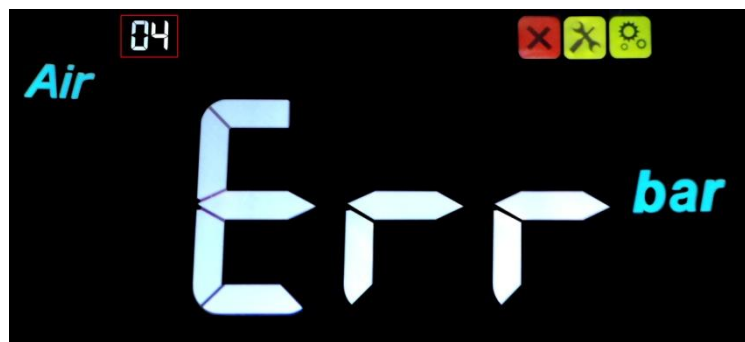

E02. Inflating pressure sensor fault: please contact professional service person.
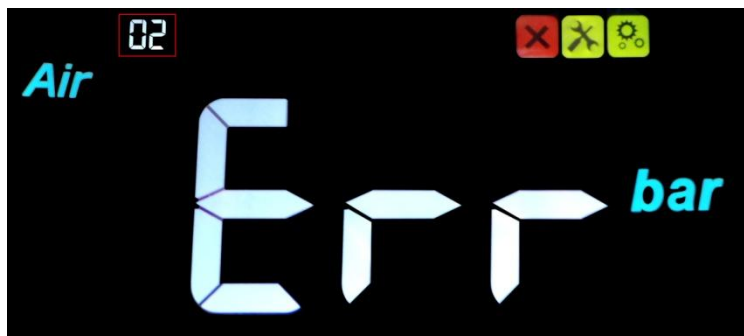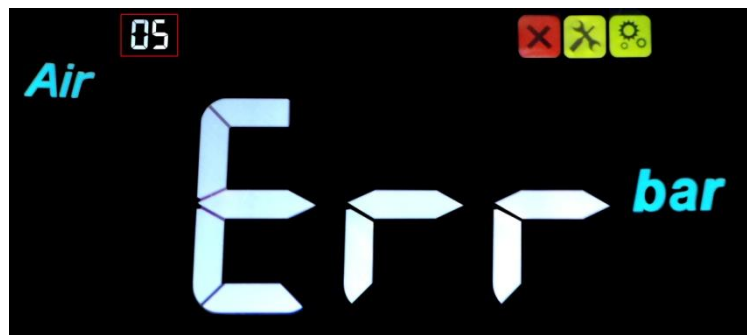
E03. Inflating pressure increase too slow: Please check compressor output system or damage of pipe and check if the output pressure is too low or pipe connection is correct.
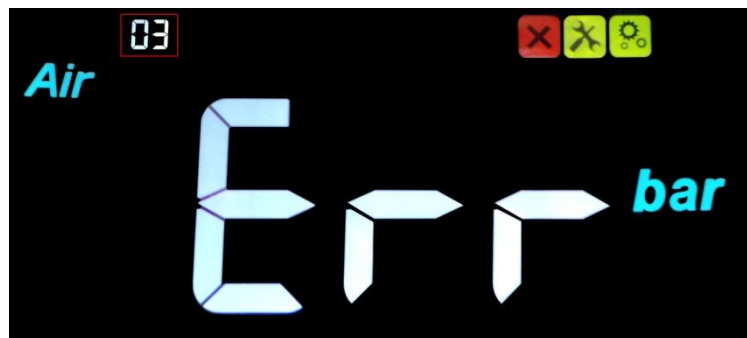
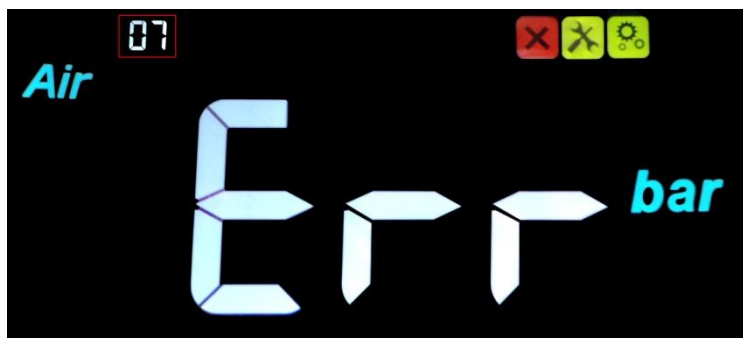**E04. Inflating pressure increase too fast**: please check if pipe is blocked.

E05. Inflating pressure decrease too fast: please check pipe connection.

E06. Inflating pressure decrease too slow: please check pipe connection.

E07. Store FLASH fault: main control board damaged, please contact professional service person.

E08. Pressure sensor power fault: main control board damaged, please contact professional service person.