

# LCH-AC944

## A/C Service Station





## **Safety**

- The machine is designed to be used and repaired by qualified personnel only.
- The machine designed for use in recovering the R12, R134a or R1234yf refrigerant fluid used in the air-conditioning (A/C) systems of motor vehicles. Fill the A/C system with the quantity of refrigerant recommended by the manufacturer.
- Check the vehicle use and maintenance manual for the type of refrigerant fluid used by the A/C system. Do not mix different type of refrigerant otherwise can easily lead to malfunction of the machine.
- Keep away from moving parts and rotating elements such as cooling fans, alternators and heating components, etc to avoid harm.
- Wear protective clothing gloves and goggles.
- As automotive air condition maintenance, the operator must be fully familiar with automotive air conditioning system and operation of the machine. Check whenever the engine is turned off that the ignition key is turned to the full OFF position!
- Do not expose the machine to direct sunlight or rain. Use only in well-ventilated work areas.
- Never exceed 30 ° tilt in transit process upside down is strictly prohibited.
- Do not touch the machine high voltage power supply section, and do not maintain the machine as power on.
- Care of the manual.

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## 1、 Introduction

### 1) Outline

AMC series A/C system maintenance equipment is with the latest design technique which uses the best control principle and the manufacturing process.

AMC-180AN-YF A/C Service Station is intelligent equipment collecting of the A/C recovery, recycling, recharging and other functions in one. It's with the beautiful shape, humanized operation interface, and advanced manufacturing processes to make the A/C maintenance professional and simple.

### 2) Features

- A、 Fully automatic, easy to operate.
- B、 Unique designed to achieve the high recycling rate no matter with the gas or the liquid.
- C、 Easy to operate with the concise operating interface.
- D、 Designed with large size LCD.
- E、 Database.
- F、 Program and database can be updated.
- G、 With printer.

### 3) Specifications

- A、 Working conditions:
  - Ambient temperature: 0~50°C
  - Relative humidity: <85%
- B、 Voltage input: AC220V±10%~50Hz    AC110V±10%~60Hz    AC220V±10%~60Hz  
(Subject to nameplate)
- C、 Compressor: 12.12cm<sup>3</sup>
- D、 Vacuum pump: 7.2m<sup>3</sup>/h, 5Pa
- E、 Load cell for tank: ±10g
- F、 Load cell for oil bottle: ±5g
- G、 Tank: 12L
- H、 New Oil bottle: 250ml
- I、 Used Oil bottle:500ml
- J、 LCD display: 240\*128
- K、 Working pressure: max. 20bar
- L、 HP gauge: -1bar~3.5MPa
- M、 LP gauge: -1bar~1.5MPa
- N、 P gauge: -1bar~3.5MPa

## **2、 Functions**

### **1) Primary functions**

- A、 Automatic recovering/recycling
- B、 Automatic/manual used oil drain
- C、 Automatic vacuum
- D、 Automatic/manual new oil injection
- E、 Automatic recharging with load cell
- F、 Auto mode
- G、 Database

### **2) Subsidiary functions**

- A、 Parameter setting
- B、 Supply refrigerant
- C、 Electric scale calibration
- D、 Maintenance procedures (dry-filter exchange, vacuum pump maintenance)
- E、 Printer checking
- F、 System inquiry
- G、 Equipment info
- H、 Help

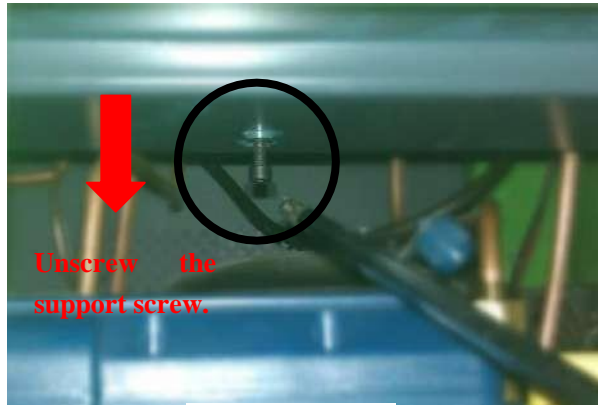
### 3. Operation

#### 1) Parts descriptions



## 2) First use

- A、 Open the back door and unscrew the electronic scale support screw before using the equipment. And also take out all of the Protective filler.



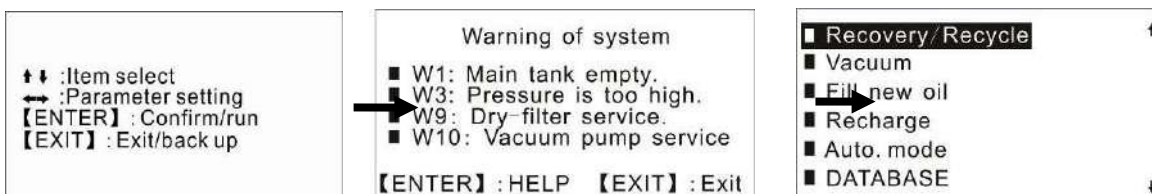
From the back.

- B、 Please supply about 3 kg refrigerant into the tank of equipment so that all of the functions can be run normally. Please refer to the chapter of “Refrigerant supply”.
- C、 Please read this user manual carefully before operating.

## 3) Preparations before Operation

- A、 To check if there has enough refrigerant in the tank. The volume should be 2~3 kg.
- B、 Empty the used oil bottle.
- C、 Check the automotive A/C system. If there has any leakage, it must be repaired firstly to avoid refrigerant leak during recovering process.
- D、 Check if the automotive air-conditioning can run normally.

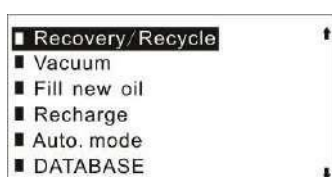
## 4) Power On



Note: the descriptions for keys just be shown 5 times.

## 5) Recovery/Recycling

- A、 By this function, it will recover the refrigerant remained in the A/C system.



- B、 Operations:

C、 If it displays code as F00- during the process, please deal with it according to prompt information.

D、 **Notice: The used oil can be drained out automatically or by manual.**

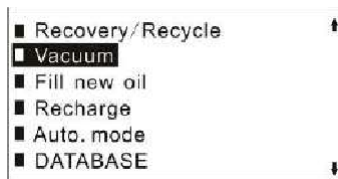
**Note: Press “↑” and “↓” key in recovery function. It will purify the non-condensable gas automatically.**

## 6) Vacuum

A、 By this function, it will clean the water vapor out from the A/C system.

B、 It should be more than 15 minutes. Generally, it needs 15 minutes at least for the air conditioning only with front wind and 20 minutes for with the front and rear wind.

C、 Operations:



D、 If it displays code as F00- during the process, please deal with it according to prompt information.

## 7) New oil adding

A、 Fill new oil into the new oil bottle.

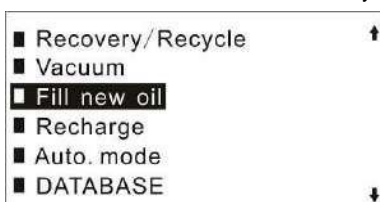
**Note: add new oil more 20ml than the used oil drained out to avoid the air into the air conditioning system.**

**Warning: please do not press the switch of the new oil bottle anytime when the automotive air conditioning system is not in vacuum state, otherwise it have the risk of explosive bottles!**

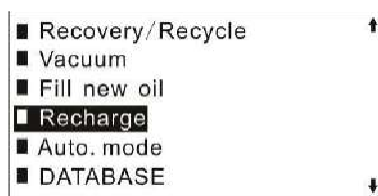
B、 Method 1: Control by manual.

After vacuum, press the switch of the new oil bottle to control the new oil adding.

Method2: Control automatically. After vacuum, operate by following.



## 8) Recharging

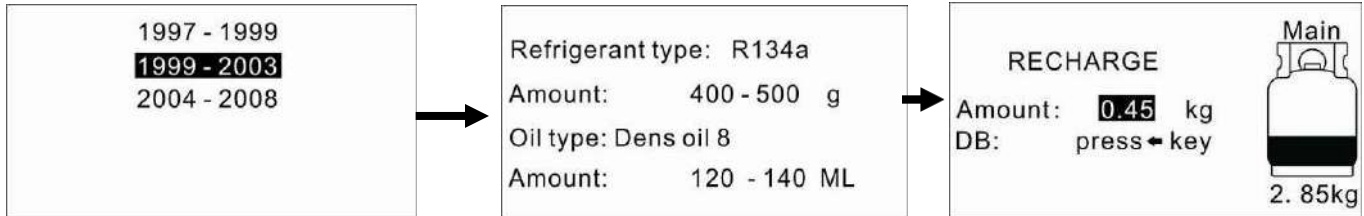


A、 **The recharging amount setting:**

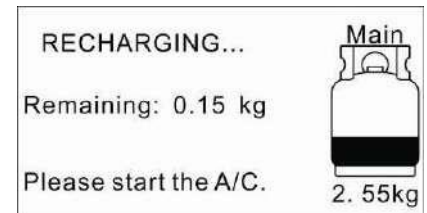
Method 1: Set the amount directly.

Method 2: Set the amount by the database. Steps as following:



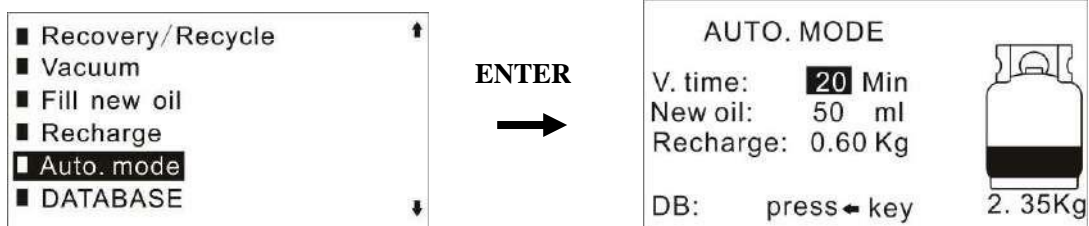


- B、 Note: In the recharging process, if shows the menu, it means that you need to turn on the car air-conditioning to complete the recharging process. Later, you should supply new refrigerant into the tank.



### 9) Auto. Mode

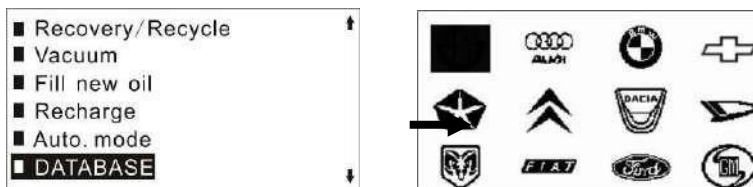
- A. Under this mode, all of the functions can be run full automatically after setting the parameters.  
 B. Before running, must drain out the used oil entirely and fill enough new oil into the new bottle.  
 C. Operations:



- D. If it displays code as F00- during the process, please deal with it according to prompt information.

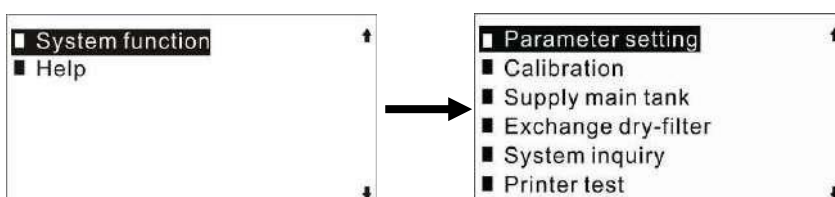
### 10) Database

- A. Here you can read the refrigerant type and filling amount and the refrigerant oil type and filling amount of the automotive.



- B. Operations:

### 11) Subsidiary functions

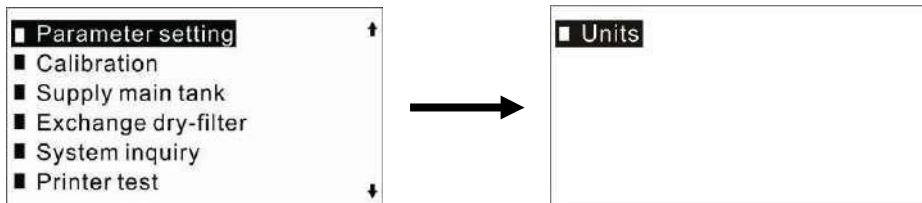


### A- Usage of the Auxiliary Port

#### Recharging from cans

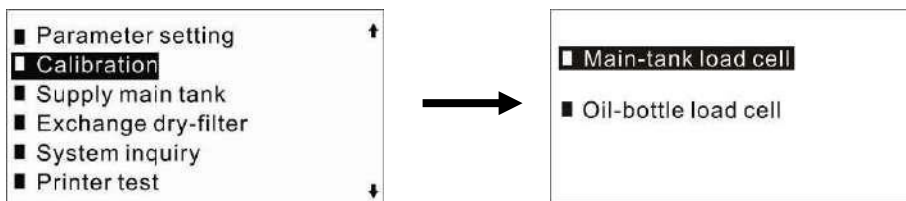
- a) Before vacuum, connect the pipe with the external tank to the auxiliary port.  
**Note: the connector to the auxiliary port must be with thimble. Do not open the valve of external tank during this process.**
- b) Run vacuum function. After little time, stop vacuum.
- c) Open the valve of external tank to recharge the right amount refrigerant into A/C system. And then close the valve of external tank.
- d) After finished, disconnect the pipes and re-back the cap to the auxiliary port.

### B- Parameter setting



### C- Calibration of load cell

When the load cell is not precise, it needs to be calibrated.

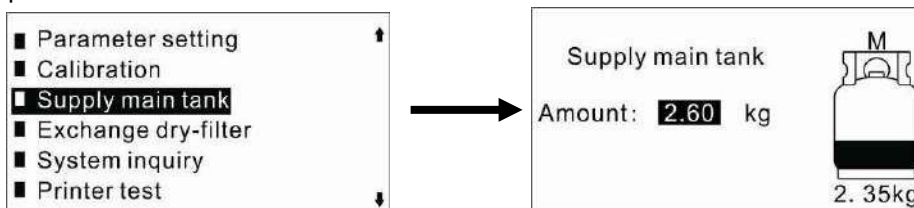


### D- Refrigerant supply

- A、 Connect the port of fresh refrigerant tank to the LP port of equipment. Block the HP port of equipment with a cap or HP coupler.

**Note: it should connect to the liquid port of fresh refrigerant tank. If has no liquid port, please invert the fresh refrigerant tank.**

- B、 Operations:



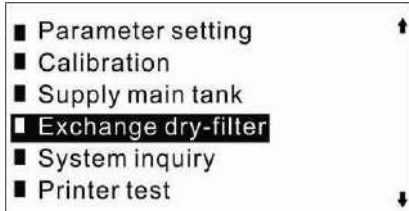
Note:

Amount of supplying: Setting the supplying amount according to the in the tank. Suggestion: supplying amount = (4.5~5)-amount remained.

When finished, please close the valve of the refrigerant tank and run the recovery function.

### E-Exchange dry filter

- A、 The dry filter must be exchange when it reaches the life time. There will give a message.
- B、 If not exchange the dry-filter timely, it will not be able to run the recovery and supplying functions.
- C、 Operations:



Please read the ID of the dry-filter at the label. Which is the value followed by letter SN.

Please attention the mounting direction of the dry-filter.

### F-Change vacuum pump oil

A、 When the pump oil became cream or the unit displays maintenance message, the vacuum pump oil must be changed.

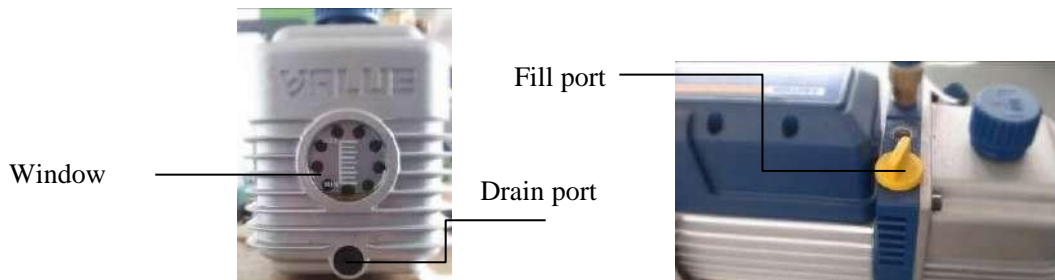
B、 If not change the pump oil, the vacuum function will not be able to run.

C、 Steps:

Step1: open the back cover.

Step2: Unscrew the block of the drain port to drain entirely out the old oil. Then re-back the block to the drain port.

Step3: Unscrew the cap of the fill port and then fill the new oil slowly into the vacuum pump until the oil level reach at the center site. Then re-back the cap to the fill port.



**Note: the new vacuum pump oil cannot be filled too much into the vacuum pump otherwise it will spray out when working.**

Step4: Re-back the cover.

### G-System inquiry

Here you can check the working status of the machine.

### H-Printer Test

Check the printer if ok.

### I-Equipment info

You can check the machine's information.

## 12) Help

Here you can check all of the help messages.

