

MANUAL FOR USE AND MAINTENANCE

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1. Warranty

The device is covered by a 12-months warranty starting from the date of delivery.

The mentioned warranty does not cover the compressor and the vacuum pump, if the Manufacturer assesses that they were used without lubricant or with wrong lubricant.

2. Warnings



This symbol is used to indicate that a no compliance or a misunderstanding of the instructions may cause injuries to people.

In addition to the warnings included in the present manual, it is also recommended to follow the instructions here-below:

- Follow the station during the movement and block it with brake it during the use;
- Do not expose the station at room temperature > 45 °C outdoor use must be strictly limited to the time necessary to carry out all the operations;
- Do not use the device in presence of potentially explosive atmosphere;
- Use the station in rain-protected places.

3. Environmental Notes

NOISE

The Machine presents a Lep,d value of less than 70 dB(A).

If positioned in areas with a noise value of more than 80 dB(A), the employer must form and inform the operator of the risks from exposure to the noise and must take the necessary precautions according to the authorized doctor.

PACKAGING

Do not throw away the packaging, separate it according to the type of material (eg. cardboard, wood, plastic material, etc.) and dispose of them in conformity with the local and national laws in force.

OUT OF ORDER At the end of the Machine's working life:

- Deactivate the Machine, by disconnecting it from the electric power supply and cutting the supply line cable;
- Disassemble the Electronic Panel and the related electronic board-card;
- Disassemble the components, separating the various types.

DISPOSAL

At the end of the Machine's working life, the parts, separated by the type of material, had to be disposed in conformity with the local and national laws in force.

For the electric and electronic devices, called Electrics and electronics Equipments (WEEE), according with EC Directives 2002/95/CE, 2002/96/CE and 2003/108/CE, the Manufacturer specifies:

- NOT dispose of the equipment as municipal waste and separate collection is mandatory;
- Ask the retailer about collection points authorised for regular disposal;
- Stick to the standards for correct waste management, to prevent potential effects on the environment and human health;
- The onside symbol indicates that separate collection of waste electrical and electronic equipment is mandatory for scrapping.



REMOVING OF BATTERIES AND ACCUMULATORS WASTE

In conformity with the European Directive 2006/66/CE, the removing instructions of the battery, lithium type CR2032 contained in the station, are provided below:

- Place the switch of the station in the off position
- Disconnect the station from the power supply
- Remove the back panel by unscrewing the screws
- Remove the round battery from the electronic board

4. General Information

4.1. Scope of the manuale

This manual relates to the use and maintenance of the station for recycling, recovery, vacuum and recharge COUNTRY CLIMA and it provides a detailed guide for the use of the machine and for the periodical maintenance.

In order to operate the machine properly, it is necessary to read this manual carefully.

This device is equipped with safety devices which prevent any potential damage to the operator.

The Manufacturer denies every responsibility for damage resulting from the improper use of the machine or the deactivation of the safety devices by the user.

The instruction manual is an integrant part of the machine and it must be included in the device also in case of sales.

The machine is equipped with a plate indicating model, year of production and serial number. The plate is placed on the side of the station (fig. 1).



Fig. 1 – Serial number plate



WARNINGS: THE DEVICE MUST BE USED ONLY BY SPECIALISTS, WHO MUST BE TRAINED ABOUT FREON SYSTEMS, REFRIGERANT GASES AND POTENTIAL DAMAGE/INJURIES THAT SYSTEMS UNDER PRESSURE MAY CAUSE. THE STATION COUNTRY CLIMA DEVICE IS ABLE TO PERFORM THE PHASES OF RECOVERY, RECYCLING, VACUUM AND RECHARGE OF A/C SYSTEMS OF VEHICLES AND INDUSTRIAL VEHICLES CONTAINING FREON R 134A. THE MANUFACTURER DECLINES EVERY RESPONSIBILITY RESULTING FROM THE IMPROPER USE OF OTHER REFRIGERANTS

4.2. Safety Norms

WHEN WORKING WITH FREON IT IS NECESSARY TO WEAR PROTECTION GLOVES AND PROTECTION GLASSES.

IF POSSIBLE, WORK IN A WELL VENTILATED ROOM IN ORDER TO AVOID ANY POSSIBLE INHALATION OF FREON.

IF FREON COMES INTO CONTACT WITH SKIN BY ACCIDENT, FOLLOW THE INSTRUCTIONS HERE-BELOW:



- 1) DEFREEZE WITH WATER THE INTERESTED PART;
- 2) REMOVE CAREFULLY THE CONTAMINATED CLOTHES;
ATTENTION: CLOTHES MAY ADHERE TO SKIN IN CASE OF FREEZE BURNS;
- 3) CONTACT A DOCTOR.

IN CASE OF ACCIDENTAL CONTACT WITH EYES FOLLOW THE INSTRUCTIONS HERE-BELOW:



- 1) WASH YOUR EYES OUT PROMPTLY WITH PLENTY OF WATER;
- 2) CONTACT A DOCTOR IMMEDIATELY.

IF THE FREON IS SWALLOWED ACCIDENTALLY FOLLOW THE INSTRUCTIONS HERE-BELOW:



- 1) WASH YOUR MOUTH PROPERLY AND DRINK PLENTY OF WATER;
- 2) CONTACT A DOCTOR IMMEDIATELY.

5. Technical Specifications

5.1. Technical Characteristics

Compressor:	Hermetic with the recovered automatic oil
Power:	250 watt
Recovery capacity (liquid phase):	300 gr/min
Vacuum pump:	One-step
Capacity:	70 lt/min
Vacuum grad:	7x10 ²
Vacuum test:	Automatically with alarm sound and message on display
Deposit bottle:	With heater, with two containers and security valve
Capacity of freon:	10.0 Kg
Low and high pressure gauges	Analogue on the front panel
Exactness of scale:	± 5gr
Current Supply:	230V / 50 Hz Double power supply 12V DC only for Country Clima Bipower / Country Clima Bipower Printer
Loudness:	under 70dB (measured with sound level meter class 2 according to standards IEC 651 and IEC 804)
Tube length:	5 mt each
Measurements of the devices:	550 x 450 x h 990 mm
Weight:	80 Kg
24-column printer	Only Printer version
Weight Scale Block	Locking system of the scale for the transport stages

5.2. Keyboard

The main keys of the keyboard are:

- Key **"UP arrow"** **"DOWN arrow"** to move - (1)
- Key **"Enter"** to confirm - (2)
- Key **"C/E"** to cancel or save (depending on the function) - (3)



Fig. 2 - Keyboard

5.3. Standard outfits

- nr.1 Low pressure hose l = 5mt
- nr.1 High pressure hose l = 5 mt
- nr.1 Low pressure quick coupling
- nr.1 High pressure quick coupling
- nr.1 Plastic bottle with 250 gr for new oil filling
- nr.1 Plastic bottles with 250 gr for old oil discharge
- nr.1 Power cord



Fig. 3 – Included Accessories

6. Installation and Safety Devices

6.1. Recommendations for the correct use of the device



BEFORE SWITCHING-ON THE DEVICE PLEASE CHECK IF THERE IS OIL IN THE VACUUM PUMP. IF OIL IS MISSING FILL IT UP UNTIL YOU REACH THE LEVEL WHICH CAN BE SEEN ON THE APPROPRIATE WINDOW. USE MINERAL OIL FOR VACUUM PUMPS TYPE AV68 (ART. AV68I) ONLY.

Remember to lock the balance with the appropriate block (Fig. 4) before the move (on uneven terrain, uneven floors, etc.).

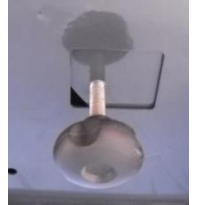


Fig. 4 – Weight scale block

6.2. Installation

The device has to be transported and set-up in vertical position. If you tip up the device, the oil from the vacuum pump and the compressor may exit.

6.3. Preparation of the Station

Unlock the balance before using the station

Before starting the station make sure that the power voltage is the same as the one indicated on the plate placed near the side power socket (Fig 5).

WARNING:



THE STATION MUST BE CONNECTED TO THE ELECTRIC SOCKET, PROTECTED AGAINST INDIRECT CONTACTS, ACCORDING TO THE RULES IN FORCE IN THE COUNTRY OF USE



IT IS ADVISED TO COMPLY CAREFULLY WITH THE HERE ABOVE SECURITY NORMS. THEY ARE PROVIDED TO ENSURE THE PROTECTION OF THE PERSONNEL, WHICH USE THE SYSTEMS AND THE COOLING LIQUID/FREON UNDER PRESSURE



Fig. 5 – Voltage Plate

6.4. Performable Operations

La COUNTRY CLIMA performs the following phases: recovery, recycling, vacuum and charging of air conditioning systems for cars and industrial vehicles, which contain freon R134A.

The producer declines every responsibility deriving from improper use of other Freon types.

6.5. Safety Devices

- Security valve, calibrated at 16 bar for the internal bottle
- Thermal protection for the compressor against overcharge (inside the compressor)
- Electronic alarm for filling over 80% of the capacity and the minimum gas amount, which is necessary to perform the recharge (< 1Kg)
- Alarm of wrong operation in case of attempt to perform the vacuum with the system under pressure
- Control display of the level of oil in the pump
- Electronic pressure sensor for recovery compressor switching off and automatic control of the leaks
- Electro valve for complete automatism of the functions
- Display LCD board with electronic protection
- Protection fuse on the switching-on module
- Automatic bottle heating

7. Station Description

Referring to the following pictures.

Reference	
Fig. 7a	High and Low pressure couplings
Fig. 7b	Lever for movement
Fig. 7c	USB door for PC connection
Fig. 7d	Polista module with master switch
Fig. 7e	Security valve for internal tank
Fig. 7f	Oil bottle: new (with internal aspiration pipe)
Fig. 7g	Oil bottle: old
Fig. 7h	Vacuum pump and oil level
Fig. 7i	Inverter with clamps for 12V power supply by battery (Bipower version only)
Fig. 7j	Display: data — setting –temperature – gas quantity in the bottle
Fig. 7k	Keyboard
Fig 7l	Printer (printer version only)
Fig 7m	Gauge internal tank
Fig 7n	Analogue Gauge Low Pressure
Fig 7o	Analogue Gauge High Pressure
Fig. 7p	Block Scale lever



Fig. 6 – Station details

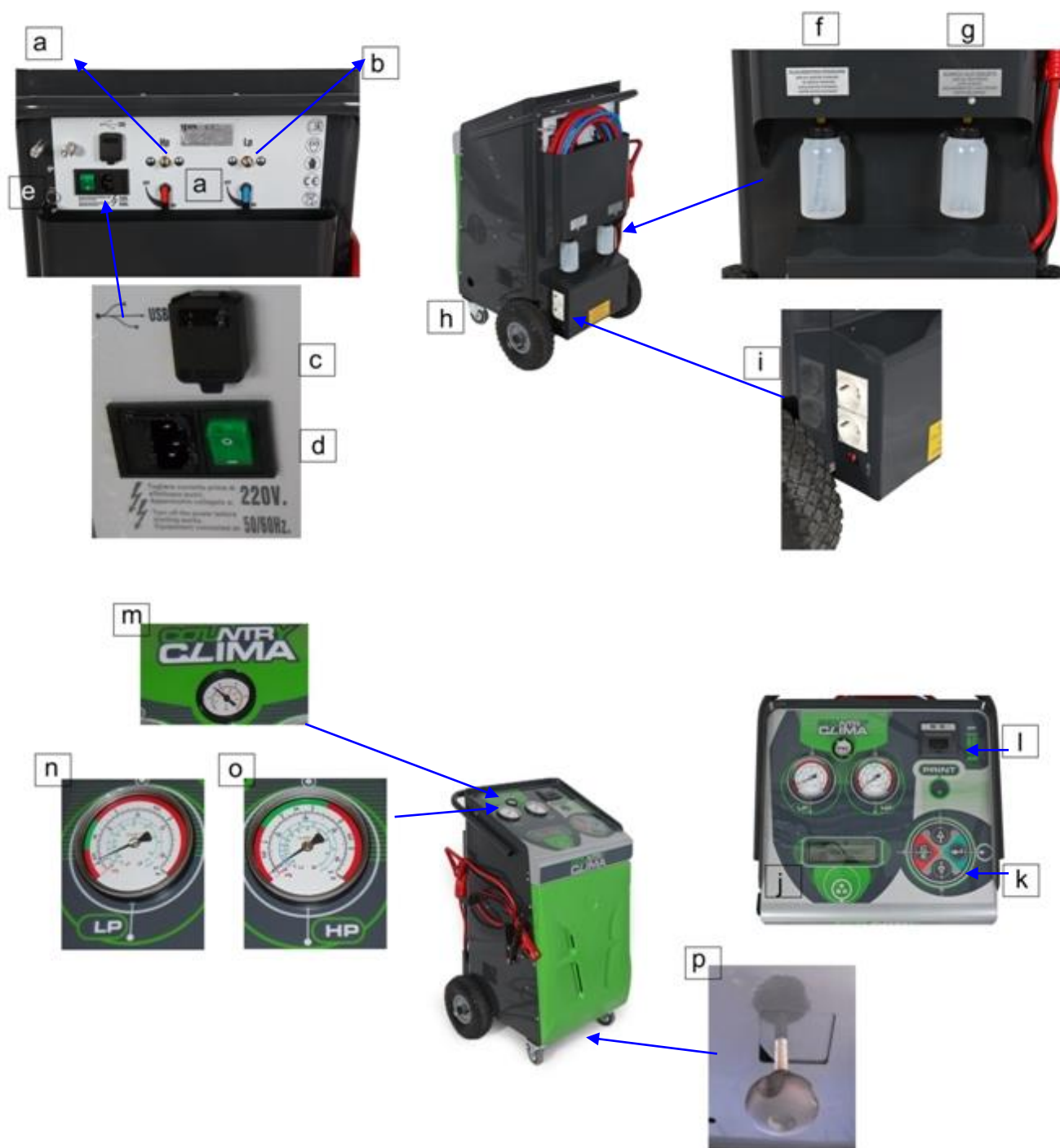


Fig. 7– Station details

7.1. Printer Paper Replacement (Printer Version)



Fig. 8 - Procedures for paper replacement

Follow the procedures showed in the pictures here-above.

7.2. Display Messages

All messages from the Station are visualized on the LCD display.

Once the Station is switched on the display shows the Freon quantity into the internal bottle.

During the working phases all the error or alarm messages are visualized on the LCD display.

8. Preparation of the Station

For the preparation and the use of the Station, please read the chapter 7.

The transport handle and the two pneumatic tyres allow to move the station easily and according to every needs. In case of transport it is necessary to block the scale turning the appropriate knob on the basement of the station.

Unlock the balance before using the station



Fig. 9- HP/LP Hoses



Fig. 10 - Couplings

1. Connect hoses to the high and low pressure inlets (fig 9)
2. Screw the quick couplings onto the tubes (blue = low pressure, red= high pressure) (fig.10)
3. Insert the plug into the socket and turn on the general switch (fig.7-d) in order to switch-on the station.
4. On the display read the amount of cooling liquid that is available inside the internal bottle.
5. Fill in the new oil container (Hb) with the appropriate synthetic oil for cooling (TYPE RL 100 - optional).

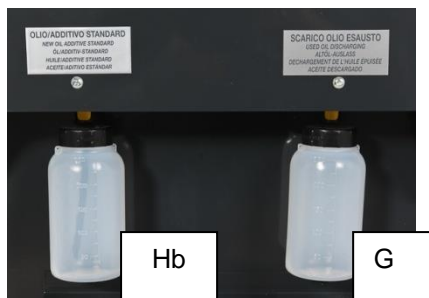


Fig. 11– Plastic bottles for oil: [G] old - [Hb] new



Fig. 12 – Synthetic Oil for refrigerant R134 art 21 CR (optional)

9. Use of the Station

9.1. Internal bottle refill

The amount of Freon, which is present inside the internal bottle, was charged in order to perform the final inspection and the control of the station and it is enough to perform a complete charge. Therefore, it is advisable to charge the necessary gas using an external bottle when switching on the machine.

Suggested total amount of gas: 5-6 kg

To charge the internal bottle of COUNTRY CLIMA connect the red hose (high pressure) to an external bottle (liquid side!). Open the tap of the external tank and select the option “Refill”. Confirm with “enter” key. The display will show the saved amount of gas.

Open the red tap of the station.

With the key “up” and “down” select the amount of gas that you need to refill paying attention to the Freon, which is already inside the internal bottle.

Confirm with “enter” and you will see:

The amount of gas refill/selected/total quantity inside the bottle/refilling gas pressure.

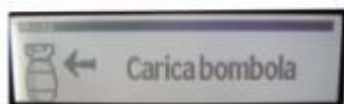
NB: Do not exceed the max capacity of the internal bottle (80% total capacity).

Once the selected quantity is reached, the display shows a message that indicates to close the tap of the external bottle, confirm with “enter”.

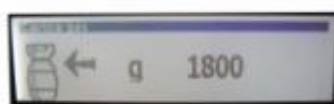
The gas inside the hose and inside the internal circuit of the Station is recovered automatically.

NB: If the selected quantity is not reached, an error message will appear on the display: “Insufficient Gas”.

Note: the machine is equipped with a safety device that checks the gas quantity inside the internal bottle; if you try to perform a recovery with a quantity of gas inside the bottle exceeding the alarm level (>80%) on the display the error message “full bottle” will appear. In this case you can perform vacuum and charge operations only until the quantity of gas inside the bottle is less than 80%



Bottle Refill



THE INTERNAL BOTTLE IS SUPPLIED WITH A MECHANICAL SAFETY VALVE, WHICH OPENS AUTOMATICALLY, WHEN THE PRESSURE RISES OVER 16 BAR. A SECOND VALVE, WHICH CAN BE REACHED MORE EASILY, IS PLACED ON THE LEFT SIDE OF THE STATION

9.2. Pressure Test

To make the pressures test of the AC system close the HP and LP taps of the AC Station, turn on the vehicle engine and switch on the AC system of the vehicle.

Control the pressure values on the LP/HP gauges.

To add gas into the AC system, program the gas quantity manually and open only the LP tap.

To remove gas from the AC system, open only the HP tap and recover.

Exit with the “C/E” key

NB: Never open at the same time the both taps (LP and HP) during the pressure test!

On the display you will see the message “Disconnect Hoses”, than you can proceed as follows:

If you want to recover gas from COUNTRY CLIMA hoses, remove the fittings from the A/C system and press “Enter”, otherwise press “C/E”.

In the following table we list the indicative values of HP and LP depending on the room temperature.

ROOM TEMPERATURE	LOW PRESSURE [BAR]	HIGH PRESSURE [BAR]
°C 15	0,5 – 2,0	7,5 – 13
°C 20	0,5 – 2,5	10 – 16
°C 25	0,5 – 2,5	12 – 18
°C 30	0,5 – 3	12 – 20

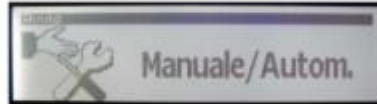
N.B. The “WSC System” function is not available in the version Country CLIMA

9.3. Manual Cycle

Pressing any key from the main page (stand by), it is possible to access to the Manual/Automatic menu, to move press the up and down arrows if needed.

Confirm the “Manual/Autom.” Option with the “enter” key. The following operations can be performed:

- Recovery
- Vacuum
- Leak Test
- New oil injection
- Gas Charging



NOTE: Additive Function not present.

Note

- to perform the vacuum it is necessary that the a/c system does not contain gas;
- To perform the oil injection and the gas recharge it is necessary that the system is vacuumed (perform the vacuum before);

9.3.1 Gas charging for a pressured system:

See paragraph number 9.2

9.3.2 Menu “Manual/Autom”

Recovery Function:

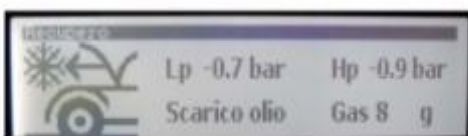
Move (using arrow keys) on the icon “R” and press “Enter”. The Station will recover the gas from the vehicle system.



Recovery will stop automatically once the vehicle a/c system is completely free from Freon (pressures lower than 0.2 bar). The recovery procedure can be stopped whenever is needed just pressing “C/E” key.

The recovery will stop automatically when the a/c system is empty (with no gas inside pressure < 0,2bar). You can stop the recovery phase anytime by pressing the key “C/E”.

Once the “Recovery” is finished, the Station will start the Oil Drain phase. The vacuum pump is activated in this phase.



Oil Drain

At the end of the oil discharge phase (or if the recovery phase is interrupted), on the display the message “print report?” will appear. Pressing “enter” it is possible to print out the latest operation (only Printer version), if you do not need to print it, press “C/E”.



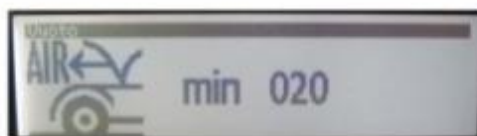
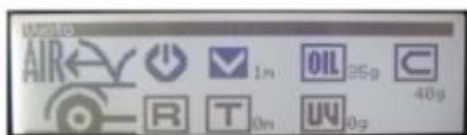
Print Report ?

Pressing "R" with empty system, the display will show the message "Empty Circuit!". Press "C/E" to exit.

Country CLIMA is equipped with the MULTIPASS system that optimizes the recovery phase during winter period. (chapter "Multipass").

Vacuum and Vacuum test function:

Move with arrows on the "V" icon

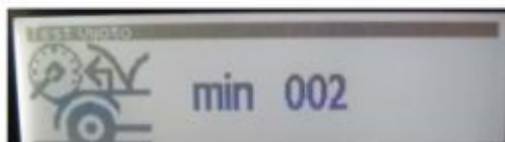
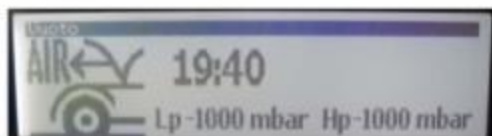


Press "Enter" to visualize the set vacuum time.

Set with the arrows key the needed vacuum time (recommended min time: 20 min)

To confirm the vacuum time and to start the vacuum phase, press the ENTER key.

If you want to confirm the vacuum time without starting the vacuum phase press the "C/E" key



Following the same procedure also the leak test is available.

If it is set a vacuum time > 0, the vacuum test is performed automatically. At the end of the programmed time, if no leaks are found into the A/C system, on the display the message "Print Report" is displayed (printer version only)

If there is a leak, the message "System Leaks!" will appear.

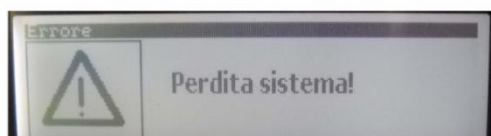
(only if previously programmed vacuum test);

In this case use special kit (leak detector lamp) (optional) to localize the leaks.

Press "C/E" to exit.

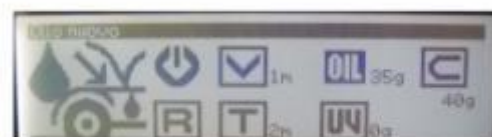
Note: In order to make the vacuum phase it is necessary that the AC system pressure is zero.

If during the vacuum phase, the Station detects a leak, some warning beep will warn the operator.



System leaks!

Oil charge function:



Move with arrow keys on “Oil” or “UV” icons if you want to charge new oil.

Pressing “Enter” on the selected phase, the quantity of oil (in grams) to be charge will be visualized.

note:

- To confirm the set quantity and charge the oil press the key “Enter”.
- If you want to confirm the programmed quantity without charging the oil press the key “C/E” (setting of the automatic cycle);

NB: To charge the oil the installation must be vacuumed (make the vacuum of the a/c installation before);

If it is charged a different quantity of oil/gas from the programmed one, adjust it following the information in chapter Set/up – Oil setting.

Gas charge function:

Make sure that the in the internal bottle there is enough gas before proceeding.

Move with arrow keys on “C” icon.

Pressing enter “Enter” the display will visualize the quantity of the saved quantity of gas.

Set with arrow keys the quantity of gas to be charged into the a/c system.

Note:

- To confirm the programmed quantity and charge the gas press the key Enter.
- If you want to confirm the programmed quantity without charging the oil press the key “C/E” (setting of the automatic cycle);

At the end of the charge the display will visualize the message “Disconnect hoses” and it is possible to proceed in two different ways as follows:

- *To recover the gas in the hoses of Country CLIMA, disconnect the quick couplings from the a/c installation and press “Enter”,*
- Otherwise press “C/E”, the display will visualize the message “Print Report”.

Confirming with “Enter” the latest operation will be printed out (only the Printer version). Press the key “C/E” if you do not need the printing.



Print Report ?

9.4. Pressure Test with WSC system

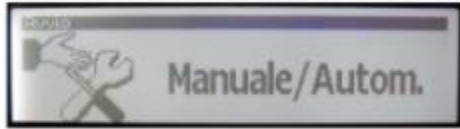
N.B. The “WSC System” function is not available in the version Country CLIMA

9.5. Automatic

Make sure that in the internal bottle there is enough gas before proceeding.

Pressing any keys on the main menu (stand by), you reach the menu "Manual/Automatic";

Confirming the selection "Manual/Automatic" with the key "Enter" it is possible to make the whole cycle automatically.



To change the visualized parameters follow the instructions in the chapter "Manual/Autom".

After changing the parameters, move with arrow keys on "Start" icon and confirm with "Enter".

The whole cycle will be performed automatically.

At the end of the charge the display will visualize the message "Disconnect hoses" and it is possible to proceed in two different ways as follows:

- *To recover the gas in the hoses of Country CLIMA, disconnect the quick couplings from the a/c installation and press "Enter",*

- Otherwise press "C/E", the display will visualize the message "Print Report".

Confirming with "Enter" the latest operation will be printed out. Press the key "C/E" if you do not need the printing.

To make the pressure test, select the function "WSC pressure test" from the menu and confirm with Enter.

NB: If there are some leaks in the installation, the display will visualize the message "System leak".

(only if the pressure test was set previously);

NB: Before the charging phase, if the quantity of gas inside the bottle is less than 1Kg, the display will visualize the message "insufficient gas".

NB: The message is not visualized before starting the charging phase!

NOTE: Additive Function not present.

9.6. Database

Make sure that in the internal bottle there is enough gas before proceeding.

To select the database press the key "ENTER" after selecting "DATA BASE" from the menu:

Use the arrow keys to look for the desired brand and confirm the selection with "enter".

Select the desired vehicle confirming with "enter"; Use the arrow keys to look for the version of the selected model.

Pressing the key "enter", all the parameters of the selected vehicle will be visualized. Select "start" to perform the whole automatic cycle. To change the visualized parameters temporarily follows the indication in the chapter "Manual/Autom".

At the end of the charge the display will visualize the message "Disconnect hoses" and it is possible to proceed in two different ways as follows:

- *To recover the gas in the hoses of Country CLIMA, disconnect the quick couplings from the a/c installation and press "Enter",*

- Otherwise press "C/E", the display will visualize the message "Print Report".

Confirming with "Enter" the latest operation will be printed out. Press the key "C/E" if you do not need the printing.

To make the pressure test follow the procedures described in the “pressure test”.

NB: Before the charging phase, if the quantity of gas inside the bottle is less than 1Kg, the display will visualize the message “insufficient gas”.

NB: The message does not appear before the charging!

NOTE: Additive Function not present.

9.7. Utilities

The menu “Utilities” includes the following functions:

- FLOODING WASHING*
- RECYCLING WASHING*
- INTERNAL CLEANING
- NITROGEN TEST*
- PRINTING (Printer version)
- PRINT TOTAL (Printer version)

*NB. The marked functions can be used only with the special accessories available on request.

Contact your dealer to receive further information about prices and availability of the kits.

9.7.1 Flooding Washing

Attention: To make the flooding washing of the a/c installation it is necessary to ask your dealer for the specific kit 01.000.96.

With the flushing kit by Spin it is possible to wash a/c installations without dismounting any parts from the installation or with the dismounted compressor.

At the end of the washing it is possible to print the performed operation.

NB: The instructions are included in the kit.

9.7.2 Recycling washing

This function is not available in the version Country CLIMA

9.7.3 Internal cleaning

The station can make a self-cleaning of the internal circuit. This function is ideal also for the treatment of the gas contained in the internal bottle.

To make the internal cleaning, close the LP and HP taps, press “enter” after selecting “Internal Cleaning” from the menu Utilities.

The cleaning will stop automatically after 90 seconds.

9.7.4 Nitrogen Test

The nitrogen test allows checking the sealing of the a/c installation under pressure.

To make the test it is necessary to ask your dealer for the specific kit.

NB: The instructions are included in the kit.

9.8. Printing (Only the Printer version)

The printing function allows printing the latest performed operation.

Select "print" from the menu "Utilities" and confirm with enter.

9.8.1 Print Total (only the Printer version)

Country CLIMA comply with new European provisions concerning the storage of recovered and charged gas and oil in a/c systems. Selecting from the menu Utilities the function "Print Total" it is possible to have a complete report of the gas and the oil from the date of beginning (reset counters) to the date of the printing. The data can be also visualized with the function "info" in the main menu.

9.9. Setup

The Setup menu enables the user to change some settings of "Country CLIMA".

9.9.1 Date – Hour

Confirming the selection with the key enter it is possible to change date and hour. Use the arrow keys to change the underlined data and press enter to confirm. Confirming the minutes you exit from the phase of adjustment of date/hour. Press the key C/E to exit.

9.9.2 Language

Use this function to select the desired language.

9.9.3 Calibration test

The calibration test allows checking the conditions of the load cell of the gas/oil (if present) scale.

9.9.4 LCD Settings

It allows adjusting the back light and the contrast of the display. Use the arrow keys to change the displayed values. Use the key enter to move between "backlight and contrast".

Press the key C/E to save the visualized value and exit.

9.9.5 File transfer

The function file transfer allows updating the database of Country CLIMA.

9.9.6 Oil setting

Use the function "oil setting" to adjust the quantity of charged oil depending on the viscosity and temperature.

The default value is 100 for oil. If it is charged more oil than the programmed quantity, reduce the default value using the down arrow key. On the other hand if it is charged less oil than the programmed quantity, increase the value using the up arrow key.

Use the arrow keys to change the underlined values and the enter key to confirm.

Press the key C/E to confirm and exit.

9.9.7 Hose setting

This function is not available in the version Country CLIMA

NB: To set hose pressure (LP and HP) open or close the low pressure or high pressure taps.

9.9.8 Hose Length Setting

The software of Country CLIMA allows to choose automatically the length of the hoses between following possibilities: 0, 1 e 2.

Select 1 as default value, if using the standard hoses (5 m);

Select 0, if using the 3 m hoses

Select 2 (+ 280g). if using the 9 m hoses

Press C/E to confirm.

9.9.9 MULTIPASS Settings

This function is not available in the version Country CLIMA!!

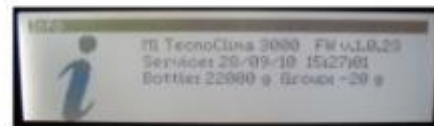
9.10. Info

In the menu *Info* there is useful information about Country CLIMA. Confirming with enter a page with the data here-below will be displayed:

Version FW – Date and hour of Service – Internal tank capacity– Group compensation

Pressing the down arrow key the following parameters will be visualized:

Total performed charges –
Total recovered gas –
Total charged gas –
SRV (recovered grams of gas) after service reset –
Quantity of charged oil –
minutes of functioning of vacuum pump.



9.11. Heating of the internal bottle

The heating of the bottle, with the resulting rise in pressure, makes easier the charge of freon into the A/C systems during the cool seasons of the year. The heating switches on automatically.

10. Ordinary maintenance

TO MAINTAIN THE STATION WITH FULL EFFICIENCY IT IS NECESSARY TO PERFORM REGULAR MAINTENANCE.

THE MANUFACTURER DECLINES ANY RESPONSIBILITIES FOR THE WARRANTY IN CASE OF NO COMPLIANCE WITH THE MAINTENANCE PROCEDURES.

ALL MAINTENANCE OPERATIONS HAVE TO BE PERFORMED AFTER DISCONNECTING THE STATION FROM THE POWER SUPPLY.

THE OPERATIONS THAT ARE NOT INCLUDED IN THE ORDINARY MAINTENANCE PROCEDURES MUST BE CARRIED OUT BY SPECIALIZED AND TRAINED TECHNICIANS.

Periodically (depending on the use), replace the dehydrating filter and the oil of the pump, clean the oil discharge filter.

In any case, after 130Kg of recovered gas, on the display the message of maintenance appears – make the maintenance of the station.

10.1. Pump oil

Replace the pump oil every **100/150 hours** of functioning or at least every **1 year** even if the station is not always used.

It is highly recommended to replace the oil also when the presence of polluting substances can make the oil dirty, in this case the mechanical parts of the pump may be seriously damaged. Use only mineral oil for vacuum pumps type **AV68I**. The amount is approx. **300 gr**.

10.1.1 Oil refill

Fill in the new oil from the cap "B", until you reach the level indicated by the appropriate indicator "C".

10.1.2 Pump oil replacement

Discharge the oil from cap "A".

Fill IN the new oil from cap "B", until you reach the level indicated by the appropriate indicator "C".

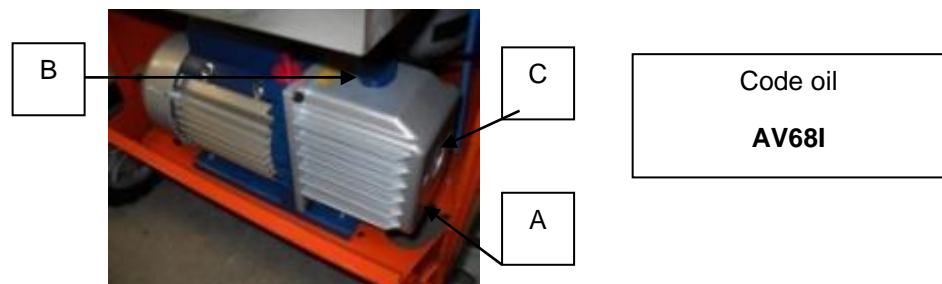


Fig. 13 – Pump Example and its parts

ATTENTION

DO NOT DISPOSE OF THE OIL AS A NORMAL WASTE BUT AS A SPECIAL WASTE ACCORDING TO THE LAW IN FORCE .

10.1.3 Replacement of the dehydrating filter

Replace the dehydrating filter every **130kg of recovered gas** or at least every **2 years** even if the station is not always used.

- Remove the rear panel from the station.
- Unscrew the filter slowly and carefully.
- Install the new filter (according to the direction).



Fig. 14 – Filter

11. Kit Bipower

(Only for Country Clima Bipower and Country Clima Bipower Printer)

To use the bipower kit connect the power cord 220V to the inverter and turn on the appropriate switches. Connect the cables to a 12 V battery to run the station. For the use follow the above-mentioned instructions.

12. Information on RESIDUAL RISKS



RESIDUAL RISKS ARE THOSE POTENTIAL DANGERS REMAINING ALTHOUGH PROTECTION MEASURES AND COMPLEMENTARY PROTECTION ACTIONS WERE TAKEN DURING THE DESIGN OF THE MACHINE AND THEY ARE:

1) ROLL-OVER OF THE MACHINE

If the operator does not fulfil the obligation, indicated in the manual, to accompany the machine during movements and to insert the brake of the machine while using it, the operator may suffer severe crush injuries due to the roll-over of the machine.

2) SPATTER LOSS OF GAS FREON

If the operator does not fulfil the obligation, indicated in the manual, about the correct connection of the machine to the vehicle to close the taps of the bottle during extraordinary maintenance operations and to wear protection glasses and gloves, the operator may suffer injuries due to the spatter of gas freon.

3) GASHING

If the operator does not fulfil the obligation, indicated in the manual, to disconnect the power supply before working in the inside of the machine, the operator may suffer injuries due to the contact with the wings of the electro-fan.

4) SUFFOCATION DUE TO GAS FREON

If the operator does not fulfil the obligation, indicated in the manual, about the correct connection of the machine to the vehicle, to close the taps of the bottle during extraordinary maintenance operations, to use the machine in a ventilated area and to perform the correct maintenance of the machine, the operator may suffer injuries due to the inhalation of gas freon.

5) DIRECT CONTACT WITH HIGH VOLTAGE PARTS

If the operator does not fulfil the obligation, indicated in the manual, to disconnect the power supply before working in the inside of the machine, the operator may suffer injuries due to the direct contact with high-voltage parts.

6) INDIRECT CONTACT

If the machine is connected to a socket that is not protected against indirect contacts in compliance with the norms in force in the country of use, as indicated in the manual, those people who come into indirect contact with high-voltage parts may suffer injuries.