



# USER MANUAL

FOR AUTOMATIC R134a RECOVERY STATION

## RECOVERY



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# 1 INTRODUCTION

## 1.1 Safety instructions

This manual has been prepared to assist you during the use of A/C fluid recovery station and in order to protect your safety.



***Read carefully the safety regulations listed in this manual. No responsibility is accepted in case of wrong use of the device, and in that case any warranty will be nullified.***

Our A/C charging stations are destined to qualified personnel, trained to follow all safety regulations, as well as the technical instructions listed below:

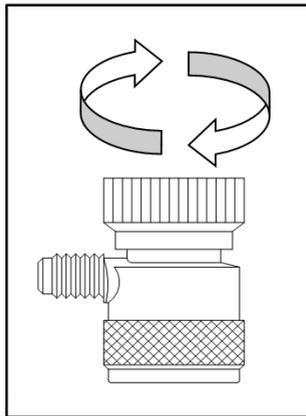
- use all stations in respect of national laws and regulations;
- use protecting gloves and glasses;
- do not inhale gas;
- avoid contact with skin and/or eyes;
- do not smoke nor use free flames during station use;
- use in airy and dry environments only, not in humid ones;
- use original spare parts only;
- do not fill the gas tank more than 75% of its capacity;
- use only certified tanks with safety valves;
- turn off the station while connecting to the car A/C system;
- before connecting the hoses to the vehicle A/C system, verify the quick couplers are closed;

- use refrigerant fluid R134a only;
- disconnect the station from power network during maintenance operations, which must be executed exclusively by qualified and trained personnel;
- never position the station horizontally;
- before starting operations, verify if there is still refrigerant fluid in pressure left in the connection hoses;
- during operations, the connection hoses contain refrigerant fluid in pressure;
- station's or vehicle's pressures or leaks must not be checked with compressed air; in fact, some air-R134a mixtures are combustible at high pressures and can cause fires or explosions with unpredictable damage;
- during recovery operations, do not disperse the refrigerant gas into the environment; in addition to being forbidden by environmental protection regulations, dispersion would prevent the correct detection of leaks;
- during a recovery operation of gas from a vehicle, do not disconnect hoses until the cycle is completed, in order to prevent leaks of refrigerant into the environment;
- disconnect the station if unused for long times;
- for further information on safeguarding the health of the operators, consult the safety standards provided by the refrigerant manufacturers;
- do not modify any element of the station;
- do not change the factory parameters without the assistance of qualified personnel.

## 2 EQUIPMENT

- High pressure tube **RED**
- Low pressure tube **BLUE**
- Power cable 230V
- Quick coupling R134a high pressure **RED**
- Quick coupling R134a low pressure **BLUE**

The **RED** and **BLUE** quick couplings with safety closure have to be opened by rotating as depicted in Figure 1:



**Figure 1**

Note: the gas tank for recovered gas is NOT provided with the station.

# 3 USE

## 3.1 Elements of the station

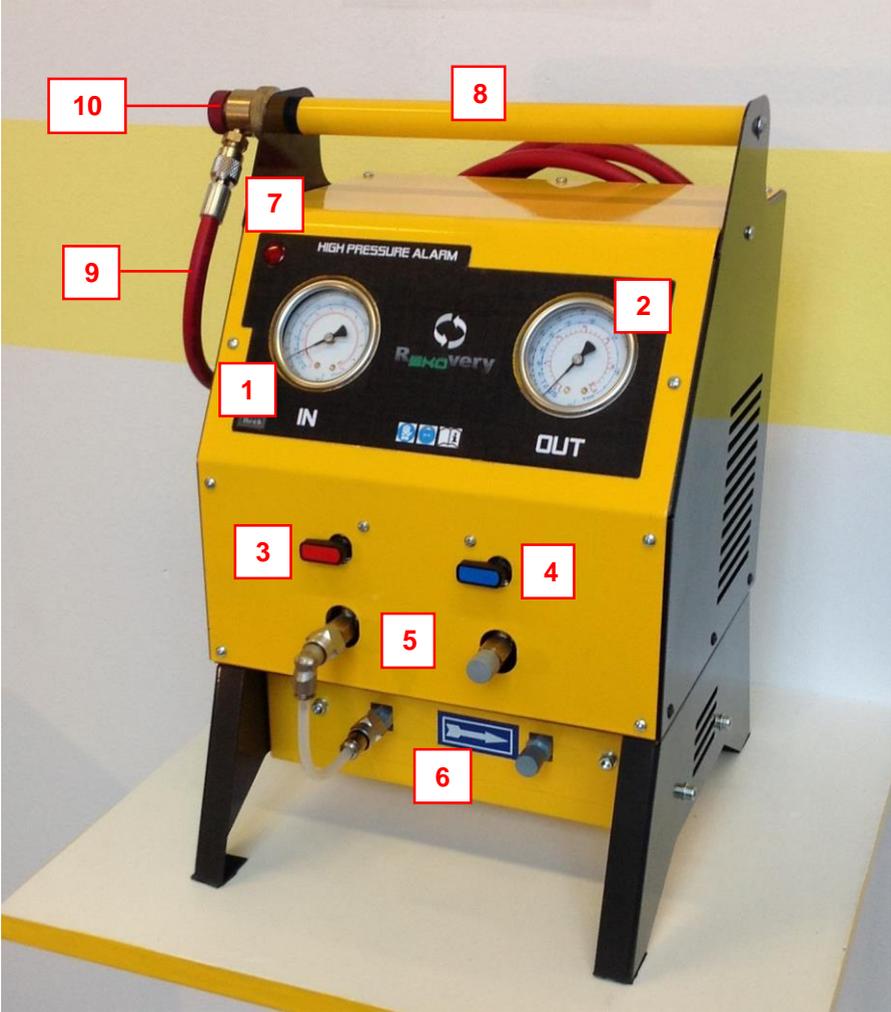


Figure 2 (elements position may vary depending on the station version)

The station includes the following elements (Figure 2):

1 - High pressure gauge IN
2 - High pressure gauge OUT
3 - IN valve
4 - OUT valve
5 - Couplings
6 - Filters group (if present)
7 - Alarm light
8 - Handle
9 - High-pressure hose (red)
10 - High-pressure quick coupling (red)

On the back side (not visible in figure) there are the ON/OFF switch and the power wire.

The low-pressure (blue) hose is provided too.

## 3.2 Recovery cycle execution

1. Clean the vehicle's connectors.
2. Connect the gas storage tank (tank for recovered fluid) to the OUT coupling on the station using the low-pressure hose (blue).
3. Connect the vehicle A/C system to the IN coupling using the high-pressure hose (red) and its quick coupling. If the station has the filters group (as in Figure 2), the connection has to be done into the input coupling of the group itself (as indicated by blue and white arrow).
4. Open the red quick coupling on the vehicle.
5. Verify the IN high-pressure gauge indicates a value between 1 and 8 bar.
6. Open the IN valve (red) slowly.
7. Open the gas tank valve.
8. Open the OUT valve (blue).
9. Verify the OUT gauge indicates a value not exceeding 15 bar.
10. Turn on the station via ON/OFF switch.
11. The station performs the recovery operation.
12. Wait until the station automatically stops.
13. If the operation is not completed because of icing, it restarts automatically once the de-icing is executed.

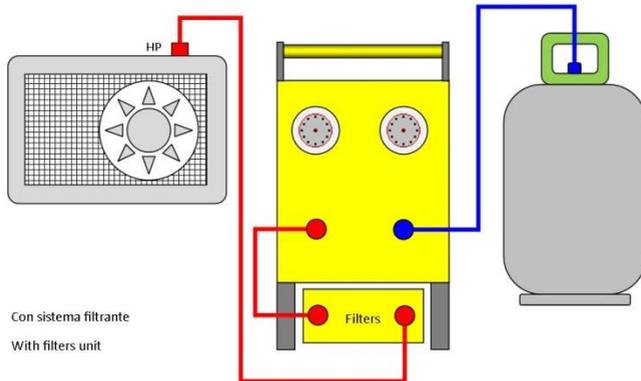
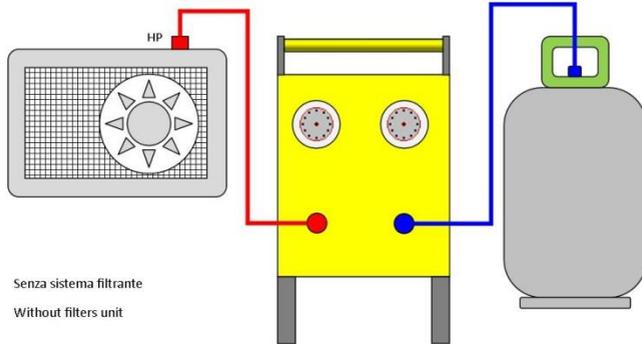
14. Turn off the station only when the IN pressure gauge indicates 0 bar.
15. Close all valves and quick couplings.
16. Disconnect the vehicle.

*Note: the station is equipped with a safety pressure switch which automatically stops the operation and turns on alarm light in case of pressures over 15 bar. The pressure switch automatically unlocks when the pressure lowers below 15 bar.*

*Warning: do not use uncertified gas storage tanks and/or without safety valve. To verify the tank filling level, it is better to use an electronic scale. Do not fill the gas tank over 75% of its capacity.*

Use the scheme in Figure 3 to verify connections between vehicle's A/C system, Recovery station and storage tank, depending on the presence (lower figure) or absence (upper figure) of filters group.

## Collegamenti unità Unit connections



**Figure 3 - Scheme of connections between vehicle's A/C system, Recovery station and storage tank (without and with filters group)**

## 4 SERVICE

### 4.1 Dehydrator filter replacement (if present)

Recommended interval for filter replacement is 200 cycles.

We recommend to execute the maintenance at authorized centers.

Check and clear the filters inside the IN couplings.

## 5 TROUBLESHOOTING

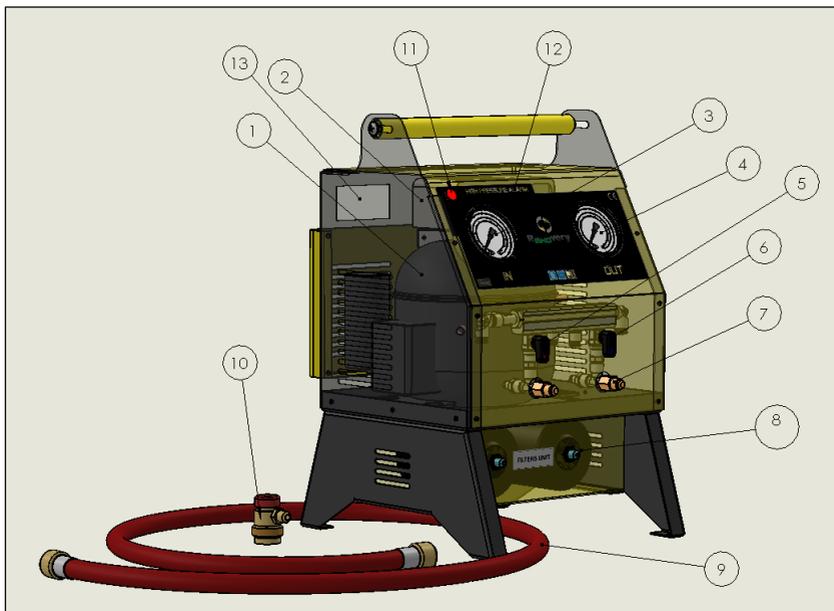
PROBLEMA	RIMEDIO
The station doesn't work, the switch is not illuminated.	1
The recovery phase does not begin.	2
The recovery phase does not stop.	3
No gas is recovered.	4

### ELENCO DEI RIMEDI

1. Check main fuse (the one mounted in feeding socket)
2. Check the input pressure is over 0 bar.  
Replace the pressure switch \*.
3. Check the input pressure is 0 bar.  
Replace the pressure switch \*.
4. Check the valves are open.  
Replace the compressor \*.

\* = call assistance service

## 6 SPARE PARTS



**Figure 4**

- 1) Compressor
- 2) Pressure switch
- 3) High pressure gauge (IN)
- 4) High pressure gauge (OUT)
- 5) IN valve
- 6) OUT valve
- 7) Couplings
- 8) Filters
- 9) Connection hoses (red and blue)
- 10) High pressure quick coupling (red)
- 11) Alarm light
- 12) Front panel
- 13) Power socket with fuses

# 7 CONFORMITY DECLARATION



Dichiarazione di Conformità  
EC Declaration of Conformity



Itech di Moro Giampaolo  
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dichiariamo sotto la nostra esclusiva responsabilità che il prodotto  
declare under our exclusive responsibility that the product

<i>Device for handling air</i>	<i>with serial number</i>
--------------------------------	---------------------------

alla quale questa dichiarazione si riferisce, risponde alle seguenti Direttive applicabili  
to which this declaration relates, complies with the following applicable Directives

2006/42/WE	Machinery Directive
2006/95/WE	Low Voltage Directive
2004/108/WE	Electromagnetic Compatibility Directive

Per la conformità alle suddette direttive sono state seguite, in modo totale o parziale, le seguenti Norme Armonizzate:  
In order to comply with the abovementioned directives, were followed, wholly or partly, the following Harmonized Regulations:

EN ISO 12100:2012P	Safety of machinery – General principles for design – Risk assessment and risk reduction
EN 6014-1:2012P	Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus – Part 1: Emission
EN 61000-6-3:2008/A1:2012P	Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard environments: residential, commercial and light-industrial
EN 61000-6-2:2008P	Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity for industrial environments
EN 60847-1:2010/A1:2011E	Switchgear and control Voltage – Part 1: Generality
EN 60204-1:2010P	Safety of machinery – Electrical equipment of machines – Part 1: General Requirements

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