



Ariazone 6001 HFO-1234yf (with internal identifier)

Automotive Air-Conditioning Service Station

OPERATOR MANUAL



This equipment has been extensively researched, designed and developed with the prime objective in satisfying the workshop operator and technician in carrying out the most efficient air-conditioning diagnostic and service procedure.

Please follow the proceeding instructions carefully. If there is anything you do not understand fully in the proceeding text or images, please do not hesitate to contact your local distributor or manufacturer.



IMPORTANT: *This manual contains important information pertinent to operator safety, and must accompany the unit, in the case of sale or transfer to another party.*

Manufacturer reserves the right to modify this manual and the unit itself at any time without prior notice

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1. Introduction

Ariazone 6001 – HFO1234yf is a user-friendly tool specifically designed for the automotive air-conditioning technicians to carry out the following functions:

- Testing air-conditioning system
- Refrigerant identification.
- Recover and recycling the refrigerant from air-conditioning system.
- Electronically gauge amount of refrigerant recovered from air-conditioning system.
- Electronically gauge amount of oil removed from air-conditioning system (if any).
- Evacuate air-conditioning system.
- Electronically charge lubricating oil & UV dye by volume into the air-conditioning system.
- Electronically charge refrigerant into the air-conditioning system by weight.
- Electronically displays vent temperature.
- Electronically Flush A/C system (optional).



The unit is suitable for servicing passenger and light commercial vehicles air-conditioning systems

The unit is a microprocessor control system. This provides electronically controlled functions, whilst keeping the operator constantly informed and in full control.

This unit has been designed and build to be long lasting and with high level of reliability including maximum safety for the operator. The operator needs only to be responsible for the correct use and maintenance of the unit, in accordance with the instructions found in this manual.



Environmental information

This product may contain substances that can be hazardous to the environmental or to human health if it's not disposed of properly.

Electrical and electronic equipments should never be disposed of in the usual municipal waste, but must be separately collected for their proper treatment (recycling).

We also recommend that you adopt appropriate measures for environmental protection: recycling of the internal and external packaging of the product, including batteries (if any).

With your help it is possible to protect our planet and improve the quality of life, by preventing potentially hazardous substances being released in to our environment.

2. Important Safety Information's

This unit is simple and reliable in selecting and performing all its functions. Therefore, the user is not exposed to any risk, if the general safety guidelines reported below are followed, in association with proper use and maintenance of the unit (improper use and maintenance will reduce the safety of the unit).

This equipment is to be operated by accredited technician only! Users must have basic knowledge of air-conditioning and refrigeration systems, including potential hazards associated with the handling of refrigerants and systems under high pressure.



Read this user manual carefully before start up, connecting and operating the unit. If you do not understand any section of this manual, please contact your nearest distributor or manufacturer.



Handle refrigerant with care as serious injury may occur. Always **wear appropriate protective safety gloves**.



The contact with refrigerant can cause blindness. Always **wear appropriate protective safety glasses**.

- **Avoid inhalation of the refrigerant.** Use only in well ventilated work areas.



- The power cable may only be connected to a socket with nominal voltage stated on the rating plate, located at the rear of the unit.

- **RISK OF ELECTRICAL SHOCK.** Power lead plug to be connected only to power point with an earth.

- Never operate the equipment with a damaged power lead, replace it immediately. Before removing any protective cover from unit, always unplug power lead from power point.



- **Use only pure R134a** refrigerant with this equipment.

- The unit should not be operated with flammable refrigerants (HC of R1234yf).

- Position the unit on all four wheels, on a flat (horizontal) surface so that proper operation of the scales is guaranteed.

- Do not expose the machine to direct artificial heat or rain.

- Do not tamper with or change safety control devices or their settings.

- When (if) transporting the unit, keep upright and if possible remove refrigerant cylinder from platform.

- Do not cover ventilation openings on chassis cover when the unit is operating.

- Maintenance is to be carried out as per the manufacturer recommendation shown in this manual. Only original parts are to be used for maintenance and repairs. Maintenance of the unit must only be performed by an authorized technician.

- Only non aggressive substances to be used for cleaning of the unit.

3. Technical Specifications

Refrigerant	HFO-1234yf
Refrigerant Identifier	R1234yf, R134, HC, Air (non-condensables), R22
Electronic scale	+/- 5g resolution
Load cell	60kg with 150% overload capacity
Display	5.7" Touch screen
LP and HP gauges	High Clarity Digital Display
Recovery cylinder	12kg
Recovery pump	Danfoss SC12G,
Recovery rate	600 g/min (liquid state)
Vacuum pump	2 stage, 100 l/min
Vacuum	3×10^{-1} Pa
Dimensions	500 mm, 650mm, H-1320 mm (1000mm packed)
Weight	87 kg
Supply voltage	230VAC- 50/60Hz
Power	1800 W
Working conditions	0° to 45 °C ambient temperature, up to 100% humidity, 2000m altitude
Noise level	< 70 dB (A)
Fuse	10 amp/250V (slow blow type)
Measuring instrument	I category (Not to be mixed with II, III, IV category)
Approvals	EN 61010-1 Electric safety, EN 55014-1 EMC-CE

4. Preparing the Machine for Use

Perform the following steps to prepare the unit before the first use.

1. Remove the carton box and styrofoam inserts.

2. Check to ensure that all of the accessory components are with the unit:

- Power lead
- Service hoses with quick couplers
- User's manual
- (Optional) Wireless temperature sensor with USB cable

3. Unscrew two securing M6 bolts situated on each side of the bottom of the platform base.

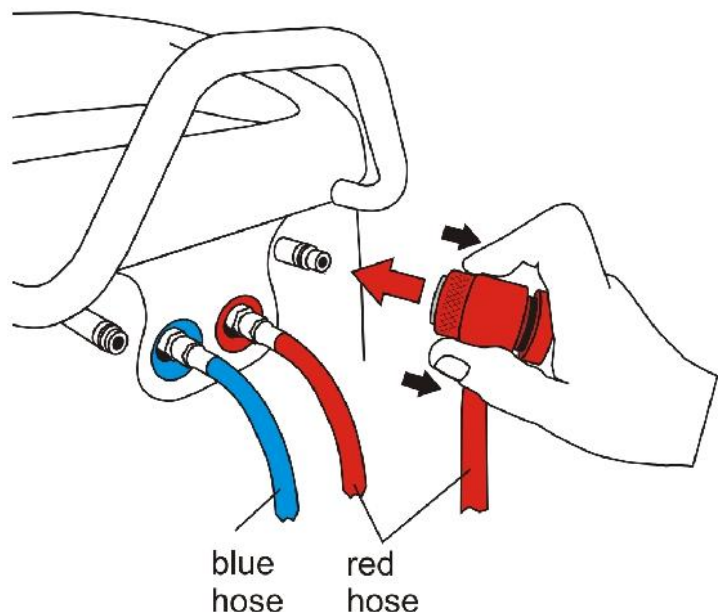
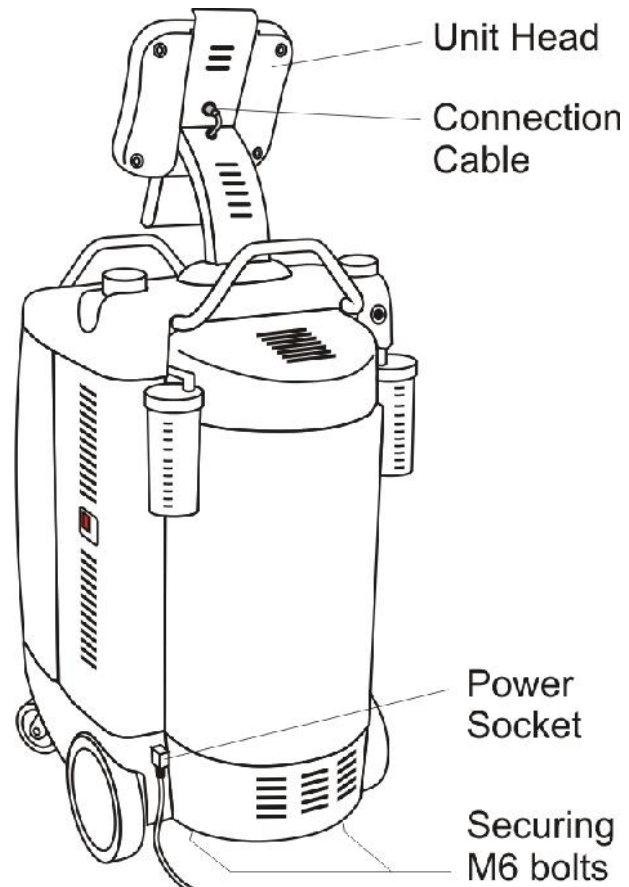
4. Place and secure the unit head, connect the cable (if not).

5. Connect power lead to power socket situated behind the right hand rear wheel, connect power lead plug to suitable power outlet, making sure it has an earth connection.

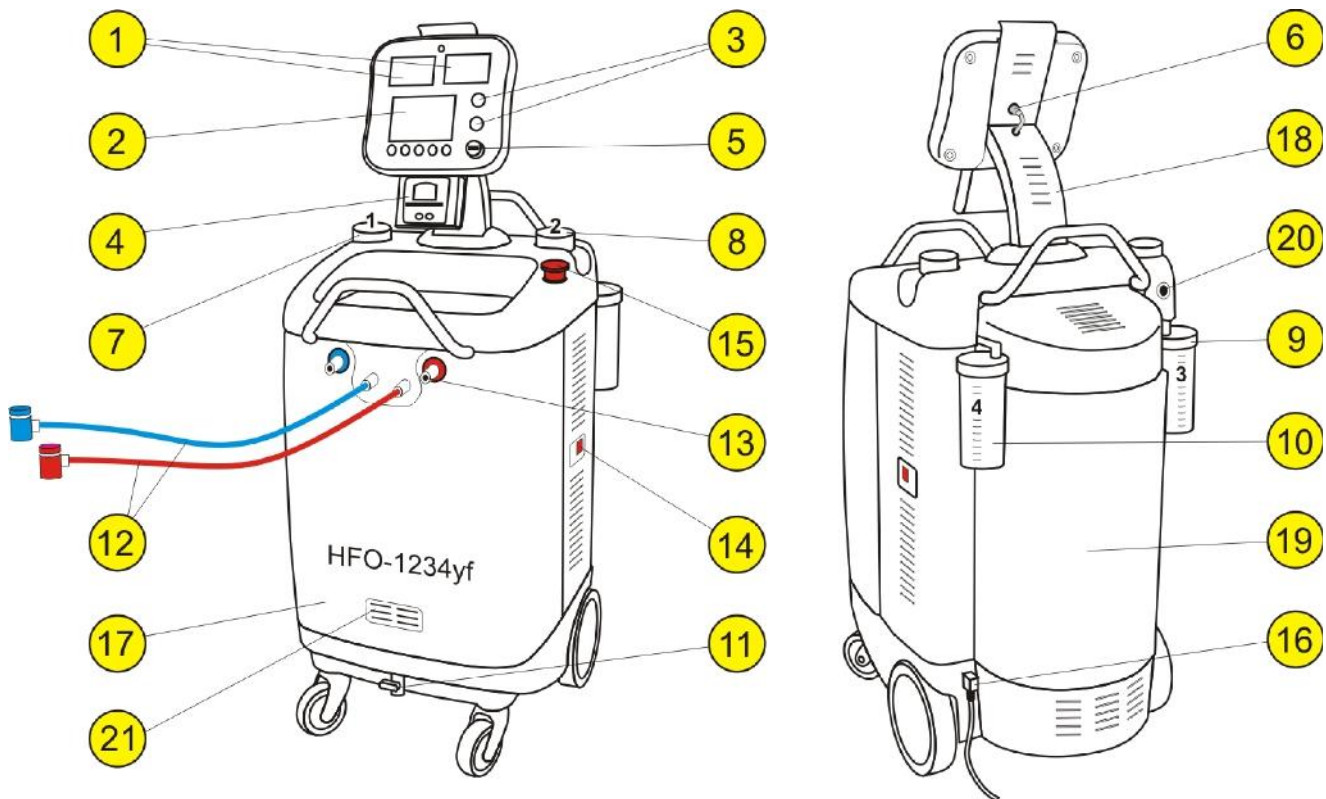
6. Carefully connect suction and discharge (blue & red) service hoses to the front M12 service ports of the machine.

Blue hose front-left, red hose front-right.

Hook up quick couplers to parking brass adapter (pull back bottom knurled section with fingers and carefully press the coupler into the proper adapter).



5. Main Components & Features



Note: No hand valves are incorporated on the unit. A series of electronically controlled valves are incorporated to precisely control the functionality of the machine.

1. LP (Suction) and HP (Discharge) Digital Display - A large 80 mm x 50 mm digital displays shows A/C suction pressures (low and high pressure). Pressure is displayed in Bar & PSI, depended on the user selection.

2. Touch Screen 5.7" and control button – All functions icons are displayed on the LCD touch screen. All functions are selected by touching the appropriate icon on the display. The operator is guided step by step in setting and initiating each selected function.

3. Stop and Start Button - The stop and start button are conveniently located on the front panel to give to the operator complete control of the equipment.

4. Printer - The thermal printer will print all results at the end of each function once completed.

5. USB to WTS charging lead - The USB port is used for downloading software and charging the wireless temperature sensors.

6. Connecting Cable - A user friendly connecting cable is used to connect the head with IO board.

7. New Oil 1 Injection vessel - A large capacity vessel of 300ml is mounted on the left side of the unit to electronically inject the recovered amount of oil back in to air conditioning system, or to select the desired amount of oil to be injected.

- 8. New Oil 2 Injection vessel** - A large capacity vessel of 300ml is mounted on the right side of the unit to electronically inject the oil in to the A/C system.
- 9. New Oil 3 /UV dye Injection vessel (OPTIONAL)** - A large capacity vessel of 250ml is mounted on left rear side of the unit to electronically inject the oil (or UV dye) in to the A/C system.
- 10. New Oil 4 /UV dye Injection vessel (OPTIONAL)** - A large capacity vessel of 250ml is mounted on right rear side of the unit to electronically inject the oil (or UV dye) in to the A/C system.
- 11. Recovered Oil Drain Ball Valve** - The unit incorporates an internal oil vessel which measures and retains oil (if any) that is removed from A/C system during the recovery process. The operator is prompted when the valve should be open to drain the internal vessel, when full.
- 12. Service hoses 2m (Suction & Discharge)** with R1234yf quick connectors used to connect to the vehicle A/C system.
- 13. Service Hoses Storage Ports** - These ports are used to store the suction and discharge service hoses quick couplers to avoid contaminations and damage.
- 14. Main Power Switch**
- 15. Emergency Stop Button**
- 16. Power Inlet Socket** - This socket is used to connect the machine to the power supply via the power lead.
- 17. Front Cover** - The cover is to protect the internal components of the machine.
- 18. Display head “neck”** with adjustable angle for setting optimum working position of display.
- 19. Rear Cylinder Cover** - This cover is used to protect the cylinder.
- 20. Air Purge Button** for releasing of non-condensable (air) build up in the refrigerant cylinder.
- 21. Refrigerant Identifier**

6. Switching ON the Machine



Switch ON the machine power switch.

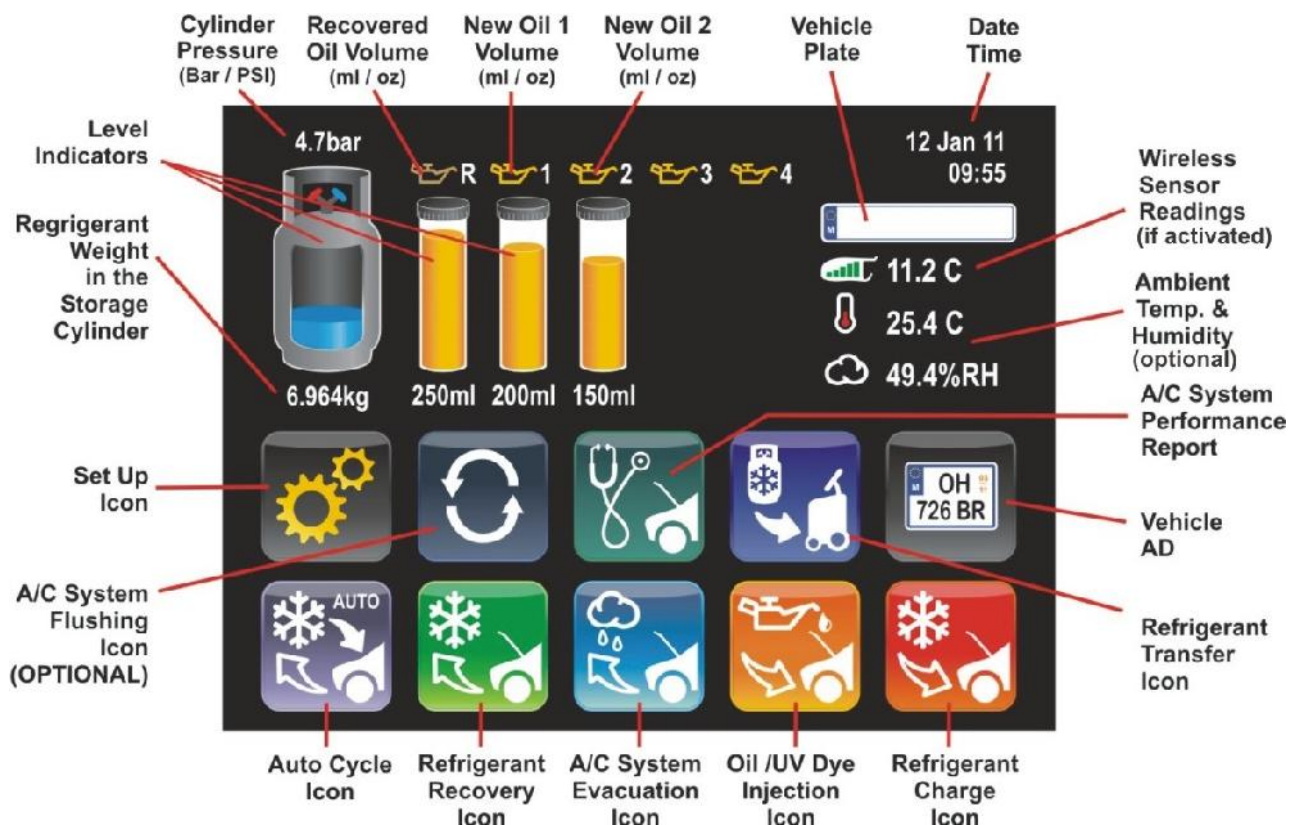
After the welcome menu, the machine will display the number of hours left before the maintenance service is required.



Followed by **self purge and hose evacuation** (if necessary).

This special function will prevent non-condensable (air) to be pushed in to the cylinder, therefore maintaining maximum refrigerant purity.

Once this function is completed, the main menu is displayed on the LCD.



7.1. Key icons and their meaning



Cancel symbol



Confirm



Left arrow, back



Down arrow, scrolling down



Minus (Decrease)



Delete all



Symbols



Unit set up



Advanced settings



Optional functions activation



Refrigerant identifier



Refrigerant Management



Refrigerant Management Reset



Enter



Return, returning to previous menu



Right arrow, scrolling right



Up arrow, scrolling up



Plus (Increase)



Edit



Print the report



Basic settings



Wireless sensors activation



Factory settings



Refrigerant recycling



100 Working hours reset



300 Working hours reset

	Refrigerant transfer function		Set refrigerant weight
	Full transfer (transferring the entire amount of refrigerant from the cylinder)		Change service hose selection
	Recovery function		Full recovery (removing the entire refrigerant from the air-con system)
	Open flow only on discharge - High Pressure service hose		Open flow on both service hoses Low and High Pressure
	Full Automatic Function		Open flow only on suction - Low Pressure service hose
	Change the vacuum time		Change the amount of oil
	Leak detection under vacuum set up		Change the charge weight
	Set the new oil amount		Set the UV Dye amount
	Evacuating, removing air and moisture from within the air-conditioning system		Set time
	New oil and/or UV Dye Injection function		Set amount of oil to be injected in the system
	Refrigerant charge function		Select charge amount from Database
	Select manufacturer of the vehicle		Select vehicle engine
	Select vehicle production year		Vehicle AD

7.2. Warning icons and their meaning



Refrigerant in the a/c system, machine will not start evacuate process. Automatically will start Recovery.



No refrigerant in the a/c system, machine will not start Recovery process.



Refrigerant cylinder on machine is empty.



Refrigerant cylinder on machine is full.



Recovered oil vessel full. Drain the oil from the vessel.



Oil vessel empty. Fill new oil in the vessel.



No refrigerant in the storage cylinder, machine will not start transfer process.



The machine has stopped due to excessive high working pressure.



Leak test under vacuum failed. A/C system leaking or loose connection



Micro leak test under vacuum failed. A/C system is leaking or loose connections.



No enough vacuum in the a/c system.



Oil injection aborted. No vacuum in the A/C system.



Contact your distributor for activation of selected function.



Quick coupler is blocked. Check the connection.



Machine requires 100 working hours service.



Machine requires 300 working hours service.



Updating software.



Updating database.

8. Printer Set Up

The printer is equipped with two keys and green led:

- >> Paper feed
- II on line / off line

The green led shows the state of the printer:

- **Led constantly ON** - Printer in line
- **Led blinking** - Printer not in line or no paper
- **Led off** - Press II. If the problem persists, contact authorized distributor or manufacturer.

Printer roll specifications,

Paper width: 57-58mm

Max paper thickness: 80 μ

Printer report:



How to open printer cover



How to load the paper



How to close the cover



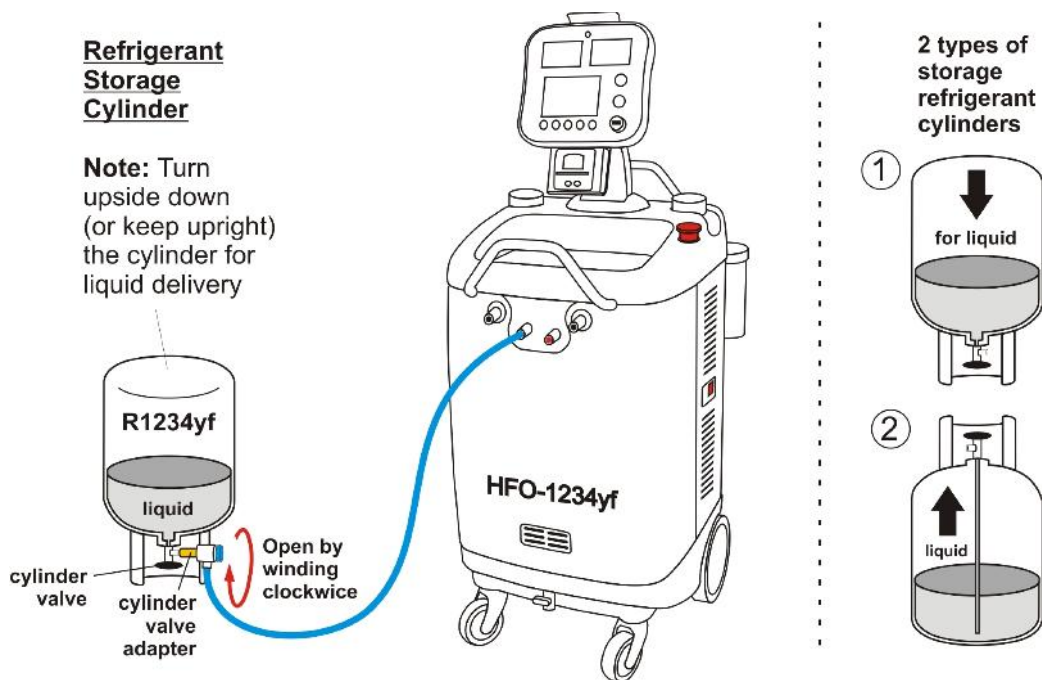
9. Storage Cylinder Filling Procedure (Refrigerant Transfer)



The purpose of the Refrigerant Transfer mode is to transfer new refrigerant from a storage cylinder into the machine cylinder.

Note: The machine refrigerant cylinder which is situated behind the cylinder cover is supplied empty of refrigerant. The cylinder is evacuated by the manufacturer.

Keep the new refrigerant cylinder sitting upright connect the suction (blue) service hose to new refrigerant cylinder **liquid valve** by using the brass adapter provided. Open **liquid valve** on storage cylinder and open suction service hose quick coupling.



Select Transfer function (by touching refrigerant Transfer icon).



The display shows last used selection.



By pressing button switch Identifier icon - ON/OFF.



To change hose selection (only if it's wrong), touch Compressor icon and...



There are 2 options when transferring refrigerant:

1. To select weight to be transferred, touch the Weight icon and by using the keypad select desired...



... amount of refrigerant (in gr) to be transferred into the machine cylinder and touch Confirm icon.



2. To transfer the complete amount of refrigerant from the new refrigerant cylinder in to the machine cylinder,



Finally to start Transfer f-tion touch Confirm icon



If is ON, identifier will enter in calibraton mode.
NOTE: Machine must be in vacuum.



When calibration is finished, display will show again the start screen.

By turning clockwise open the blue (LP) quick coupler and press START button.



If results are good will be printed and the machine will continue with transfer process.



If results are not good will be printed and the machine will abort transfer process. Press STOP button to go back in main screen.



Before transfer process start, the machine will self purge (if required).



During the transfer process the machine will display the amount of refrigerant being recovered.

This process can be paused by pressing Stop button and abort the function totally by pressing the Stop button again or restart the process by pressing the Start button.



Once the machine has reached a vacuum of -0.25 kPa it will enter into recovery pause for duration of 2 minutes to allow for any remaining refrigerant in the cylinder and hoses (if any) to boil off.



If after the 2 min. pause there is no further pressure increase in the A/C system the machine will drain and measure the recovered oil (if any).

The display will show the total amount of refrigerant transferred and oil (if any).

This will be displayed until the stop button is depressed which then machine will display main menu again ready to select another function if required.

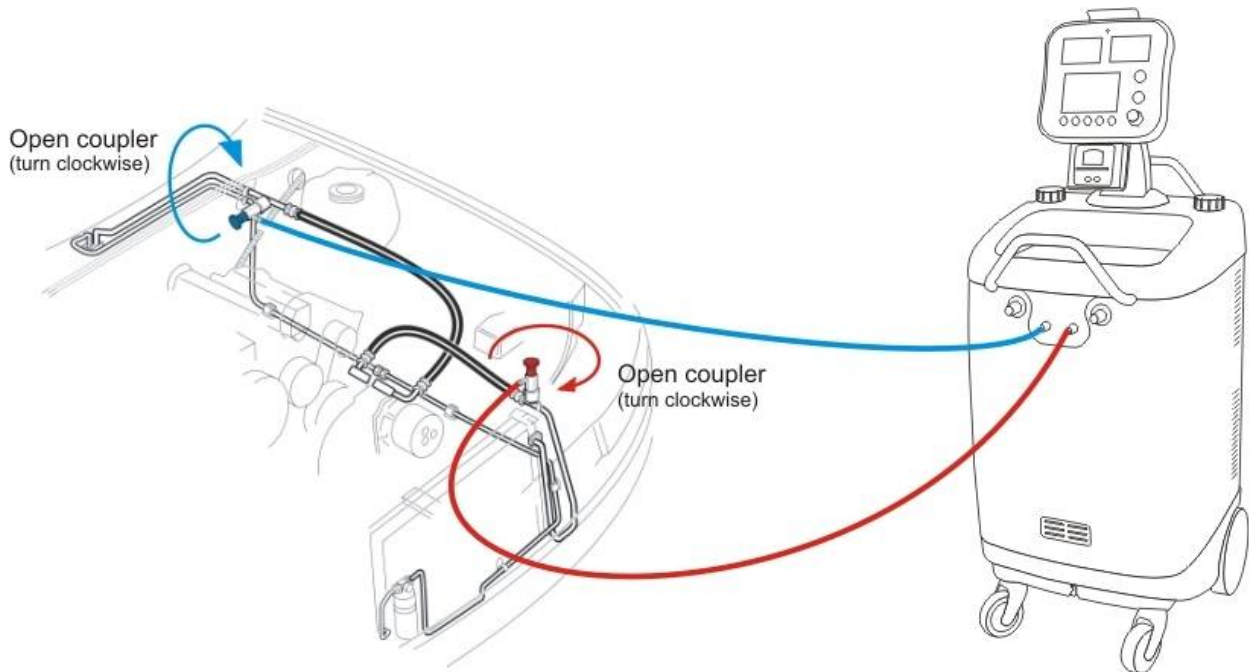


10. Connecting and testing the A/C system

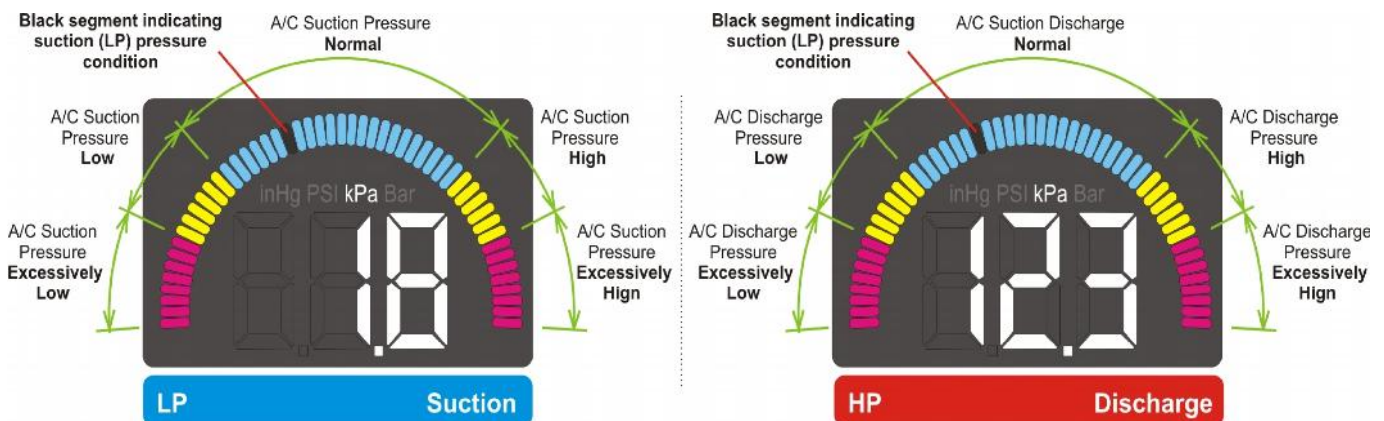
Use the service hose quick couplers to connect the hoses to the A/C system service ports, bearing in mind that **BLUE** must be connected to the low-pressure (**suction**) side and **RED** to high pressure (**discharge**) side.



Important: Before connecting the quick couplers, clean the a/c ports of any foreign material (grease or dust).



Winding the hand wheel quick couplers clockwise will allow the refrigerant to flow through the hoses. Turning hand wheel in opposite direction, the flow will be closed. If there is any refrigerant in the air-conditioning system, the pressure displays will indicate pressure.



The unit digital displays (suction & discharge) are important and important instruments.

The digital displays indicate the working pressure of the suction and the discharge side of the A/C system. The pressures are displayed in Metric or Imperial system depended of the user selection.

The operator should have basic understanding between gauge reading and air-conditioning system normal operating pressures, in order to correctly diagnose any possible system malfunction.

Above the digital displays is a bar graph which gives an estimation of good, fair or bad working pressures of the A/C system. The black segment on the bar graph is related with the working pressure readings. The bar graph colour coding is only indication.

11. Recovery & Recycling Mode



The purpose of the Recovery & Recycling mode is to recover refrigerant from the air conditioning system, which will condense, purify and store the liquid refrigerant in the unit cylinder ready for re-use.

To select Recovery function, touch the Recovery icon.



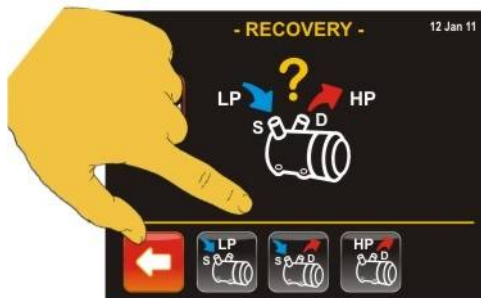
The display shows last used selection (usually operator just confirms 100% selection).
By pressing button switch Identifier icon - ON/OFF.



To change (if needed) service port (hose) selection, touch Compressor icon and...



... select the desired A/C service port or both ports. Recovery process is faster when both suction and discharge ports are selected.



To recovery desired quantity of refrigerant from A/C system, touch Weigh icon and...



... and select the desired amount of refrigerant to be recovered. Touch Enter icon.



When selection is finished touch Confirm icon and ...



If is ON, identifier will enter in calibration mode.
NOTE: Machine must be in vacuum.



When calibration is finished, display will show again the start screen.

... press the start button to start the recovery process



NOTE: Machine will NOT START if there is no pressure in the hoses.
While analyzing, display will show:



If results are good will be printed and the machine will continue with Recovery process.



If results are not good machine will abort Recovery process. Press STOP button to go back in main screen.



Before recovery process starts, the machine will self clean the residual refrigerant inside (if any).



During the recovery process the machine will display the amount of refrigerant being recovered.

Recovery process can be paused by pressing Stop button and abort the function totally by pressing the Stop button again or restart the process by pressing the Start button.



Once the machine has reached a vacuum of -25 kPa it will enter into recovery pause for duration of 2 minutes to allow for any remaining refrigerant in the A/C system (if any) to boil off.

If the pressure in the A/C system increases above 0 kPa the machine will automatically return in to recovery re-run to the remove the rest of the refrigerant which has boiled off in the A/C system.

If recovery re-run is initiated again the machine will pull down to a further vacuum of -30 kPa and then it will pause again for a further 2 minutes.

After the 2 minutes of pause if there is no further pressure increase in the A/C system the machine will drain and measure the recovered oil from recovered refrigerant (if any).



Once the selected function has been completed successfully the display will show the total amount of refrigerant and oil (if any) recovered from the a/c system.

This will be displayed until the stop button is depressed which then machine will display main menu again ready to select another function if required.

Printer will automatically print the report.



12. Evacuation Mode



In the evacuation mode the air and moisture in the air conditioning system is removed and exhausted to the atmosphere. The evacuation mode runs for a predetermined time selected by the operator.

To select the Evacuation mode, touch the Evacuation Icon.



The display shows last used selection. If set up is OK, just press the confirm icon to start the process.



To change time selection, touch the Time Icon.



By using keypad select desired vacuum time and touch Enter icon to confirm.



To change service port (hose) selection, touch Compressor icon and select the desired...



...A/C port. Evacuation process is more efficient when both suction and discharge ports are selected.



To change leak test time under vacuum, touch Leak Test icon.



Touch Leak Test icon you want to select leak test time, or touch X icon to abort the leak test
Note: Micro Leak test is optional function.



13. Oil & UV Dye Injection Mode

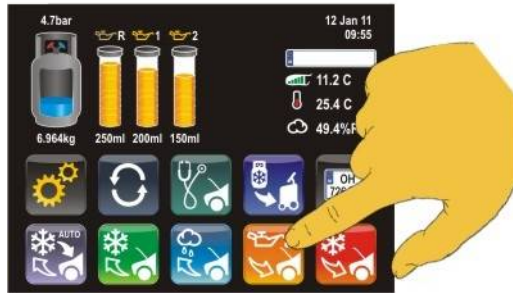


The purpose of this function is to batch a user-defined quantity of refrigerant oil or UV dye

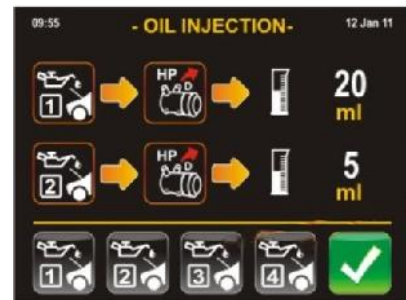


Important: A/C system must be properly evacuated, before new oil or UV dye is injected into.

To select the Oil injection function, touch the Oil injection icon.



The display shows last used selection. If the set up is OK, press the confirm icon to start the process.



Note: If there is no vacuum in the A/C system, this icon will be displayed.



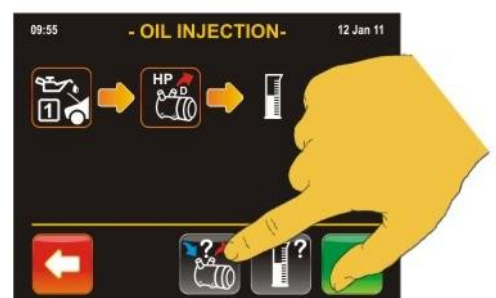
Note: If needed other combination of oil vessels selection then offered, press stop button to reset the previous selection (in this exam. oil 1 & 2)



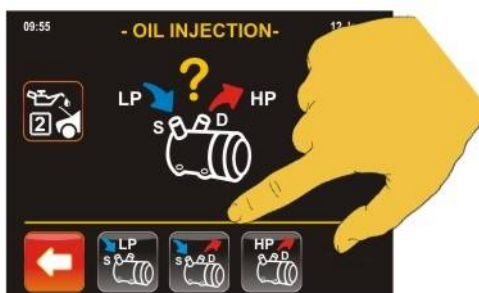
To change the set up, touch the appropriate Oil vessel icon.



To change service port (hose) selection, touch Compressor icon and select the desired...



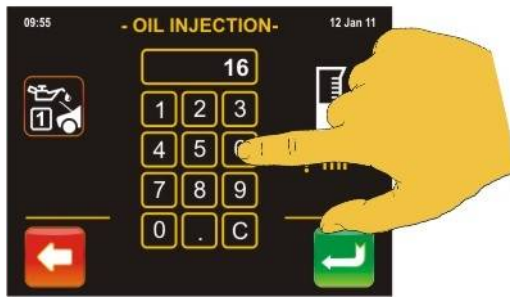
A/C service port. For oil injection HP discharge (D) line is recommended.



To change oil quantity, touch Volume icon



By using the keypad select oil volume (ml) and touch Enter icon to confirm.



When the desired selection has been made, touch Confirm icon.



Press Start button to start the oil injection function.



Oil injection in progress display.



Once the selected function has been completed successfully this screen will be displayed. This will be displayed until the stop button is depressed which then machine will display main menu again ready to select another function if required.

Printer will automatically print the report.



14. Refrigerant Charge Mode



The purpose of the refrigerant charge mode is to batch a user-defined weight amount of refrigerant into the air-conditioning system.



Important: A/C system is always must be properly evacuated and leak tested, before refrigerant is charged

To select Charge function, touch the refrigerant Charge icon.



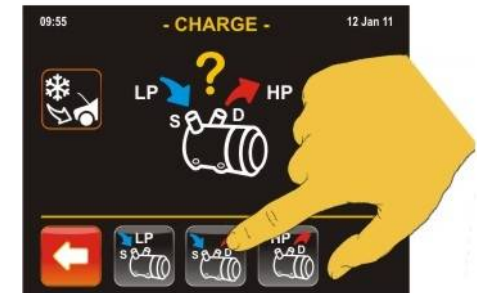
The display shows last used selection. If set up is OK, just press the confirm icon to start the process.



To change service port (hose) selection (if needed), touch Compressor icon and...



... select the desired A/C service port (or both) for refrigerant charge.



To change the amount of refrigerant to be charged, touch Weight icon for manual selection.



By using the keypad select the desired amount of refrigerant and touch Enter icon.



Charge amount selection can be also done from database by touching the Car icon.



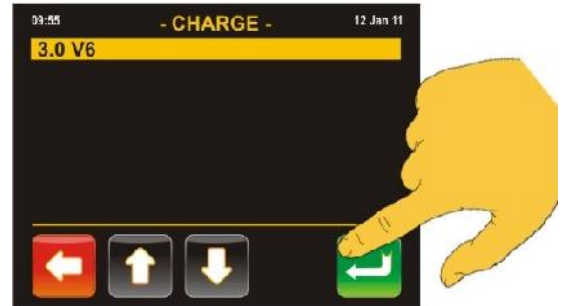
By using up and down arrow icon select the vehicle manufacturer and touch Enter icon.



Select the vehicle model and touch Enter icon.



Select the vehicle engine and touch Enter icon.



Select the vehicle production year and touch Enter icon.



When the desired selection has been made, touch Confirm icon.



Touch Enter icon to confirm selection.



Press Start button to start the charge function.



Refrigerant charge in progress display.

While charge process is ON, if needed operator can change the service port (hose) selection by pressing one of the Compressor icons below.



Once the charging function has been completed successfully, this screen will be displayed. This will be displayed until the stop button is depressed which then machine will display main menu again ready to select another function if required.

Printer will automatically print the report.



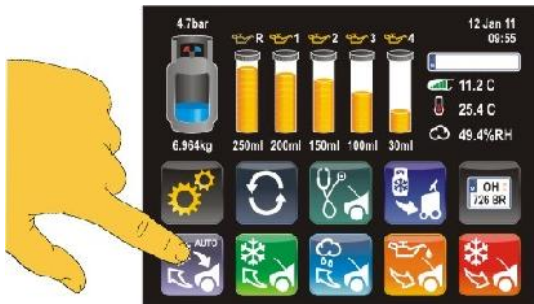
15. Auto Mode Function



The unit incorporates a Fully Auto function, where the operator simply sets the parameters and the machine will perform and complete all operations automatically without any further intervention from the operator.

Each operation is recorded and printed at the completion of the full cycle. If any fault is detected during the fully auto cycle the unit will warn the operator.

To set the fully auto mode, touch the AUTO icon.



The display shows last selection made. If agree with the current settings, just touch Confirm icon.



All settings can be changed in few steps. To change evacuation time touch the Vacuum icon.



To change the vacuum time, touch Time icon. To change leak time touch Leak Test icon.



To change the oil volume settings touch Oil Set Up icon.



Touch Oil icon to change new oil quantity to be injected in system and/or UV Dye icon for UV dye.



Touch the Oil icon for oil vessel set up, X icon to turn off the function, or Volume icon to change..



... oil volume. Simply by using the keypad select new volume and touch enter icon.



To change charge amount, touch the refrigerant Charging icon.



To set the refrigerant weight touch the Weight icon, or refrigerant charge weight can be selected by using database by touching the Car icon. See Charge Function (page 24).



Select the desired A/C service port (or both). Full automatic function should be done with both suction and discharge ports open.



When the desired selection has been made, touch Confirm icon.



Note:
Refrigerant Identifier ON / OFF is defined in Recovery mode.

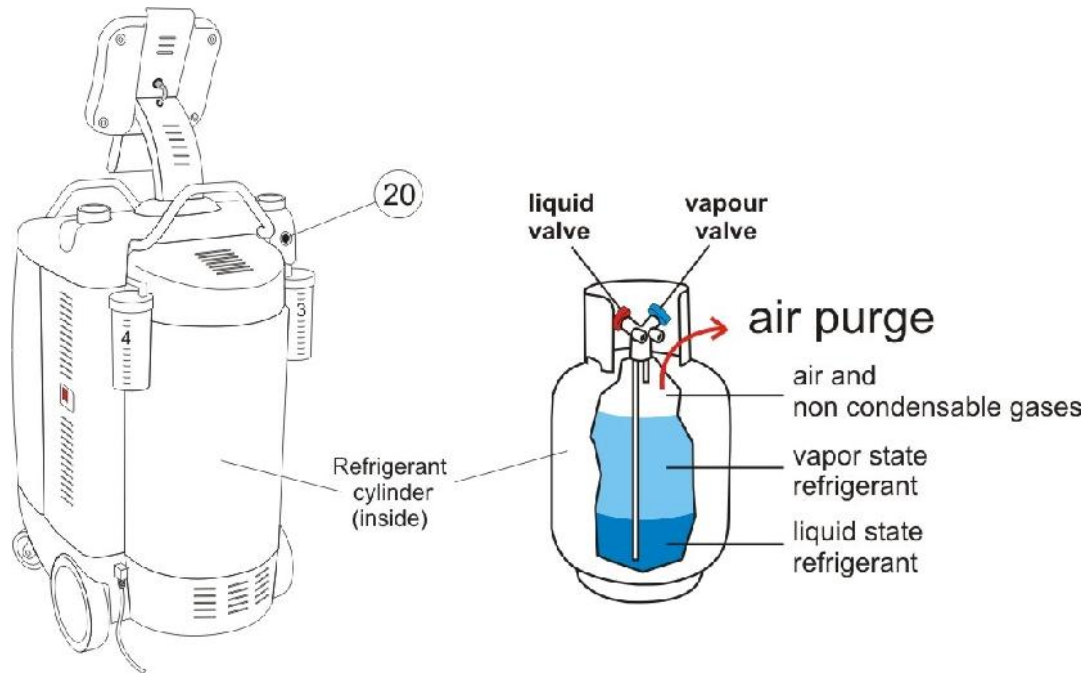
Press Start button to start the function. Check if the both quick couplers are fitted (flow open).



The unit will perform all tasks in one automatic cycle and will print reports at the end of each single operation.

16. Cylinder Air Purge

Once a week before using machine, check if there is non-condensable (air) build up in the refrigerant cylinder.



First, measure the ambient temperature. Then read the cylinder pressure on front display and compare it with the temperature pressure chart, affixed to the machine.

If the cylinder pressure is higher than the pressure/temperature chart, there are non-condensable gases (air) in the unit cylinder.

Press air purge button to purge the non-condensable gases (air) from the cylinder and bring back the pressure to the recommended chart values.



When air purging is possible to release HFO 1234yf, which is mildly flammable refrigerant. Service technicians should not smoke or have any open flame present while air purging the cylinder.



Important: After recovery process it is normal that cylinder pressure is higher than the pressure/temperature chart shows. Always read the cylinder pressure first thing in the morning before operating the machine.

Example: Ambient temp. 20 °C, the cylinder pressure should be 4.9 bar.

Ambient Temperature (C°)	Cylinder gauge readings (Bar)	Ambient Temperature (C°)	Cylinder gauge readings (Bar)
6	2.84	30	6.82
8	3.09	32	7.26
10	3.36	34	7.71
12	3.64	36	8.18
14	3.94	38	8.66
16	4.25	40	9.17
18	4.57	42	9.70
20	4.90	44	10.24
22	5.26	46	10.81
24	5.62	48	11.40
26	6.01	50	12.01
28	6.41	52	12.62

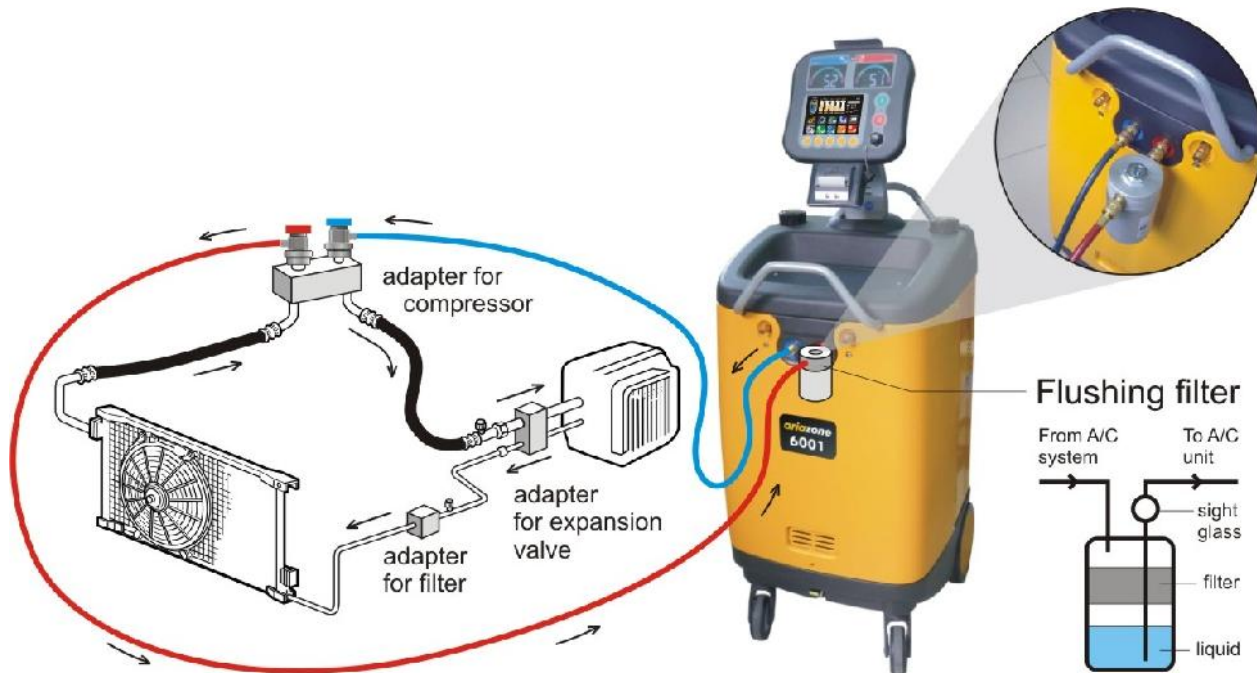
17. A/C Flushing Mode (OPTIONAL)



The purpose of the A/C flushing mode is to clean the A/C system inside from dirt and particles. A/C system is cleaned by flushing it with liquid refrigerant with high flow rate and against the normal flow direction.



Important: The flushing procedure should only be performed when the compressor has been disconnected from the A/C system including orifice tube or expansion valve. Special external filtration kit **MUST** be fitted on discharge (red) service hose port.



After the connecting has been made, follow next procedure for flushing the A/C system.

Before start Flushing A/C system must be evacuated for minimum 15 minutes and leak tested.

Select the Evacuation mode.



The display shows last used selection.



For time selection, touch the Time Icon.



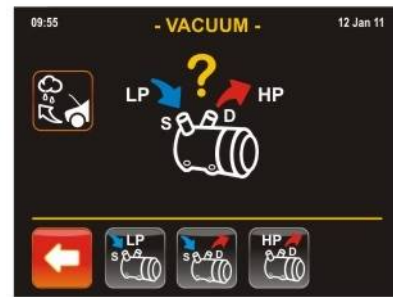
Select min. 15 minutes vacuum time.



Touch Compressor icon.



and select both a/c ports (middle icon)



Touch Leak Test icon.



Select min.3 minutes leak test under vacuum and touch Enter icon to confirm



When the above selections have been made, touch Confirm icon.



and Press Start button to start the evacuation function.



Once the evacuation function has been completed successfully, this screen will be displayed. This will be displayed until the stop button is depressed which then machine will display main menu again ready to select another function if required.

Printer will automatically print the report.



To select the flushing mode touch the flush icon



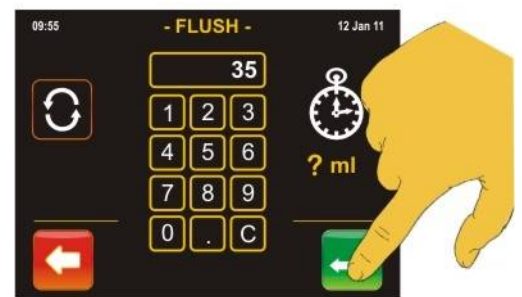
To activate Flushing function contact your distributor.



When function activated and external filtration kit is fitted, touch the time icon to select the flushing time (minimum time is 30 minutes).



By using the keypad, select flushing time and touch Enter icon to confirm.



Touch the confirm icon and press the Start button to start the process.



The selected function will now be performed automatically.



The refrigerant which is used to flush the A/C system is purified and return at the cylinder to be used again.

Once the Flushing function has been completed successfully, this screen will be displayed. This will be displayed until the stop button is depressed which then machine will display main menu again ready to select another function if required.

Printer will automatically print the report.



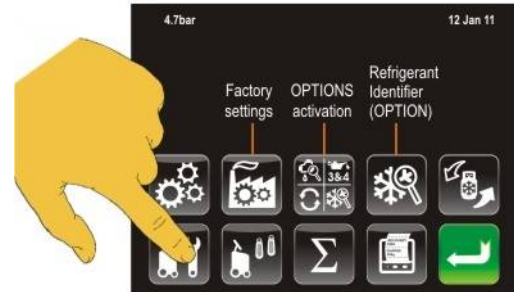
18. Settings & Optional Functions

18.1. Main Unit Set Up

To enter into the Set Up Mode, touch the main Settings icon.



Touch the unit Set Up icon (left bottom).



The display will show the unit Set Up main screen.



With Up and Down keys select the desired function followed by touching the Edit button to make the desired changes. Once the selection has been made, touch the Enter button to lock in the change.

1. Language Selection

2. Date Setting

3. Time Setting

4. Key Tone - Switching On and OFF the key tone

5. Contrast - Adjusting screen clarity

6. Pressure - Selecting Metric or Imperial system (kPa or PSI)

7. Weight - Selecting Metric or Imperial system (kg or lb)

8. Heater - Switching ON and OFF the automatic heating of the storage cylinder

9. Micro Vacuum Leak Test (OPTIONAL) - Switching ON and OFF the leak warning under vacuum

10. Vacuum Leak Test – Adjusting sensitivity

11. Auto Print - Switching the printer ON and OFF

12. Oil 3 & 4 (OPTIONAL) - Activating oil vessel 3 & 4

13. Hose Pre-Charge - Setting the service hose pre-charge value

14. Workshop – Workshop details on printing report ON or OFF.

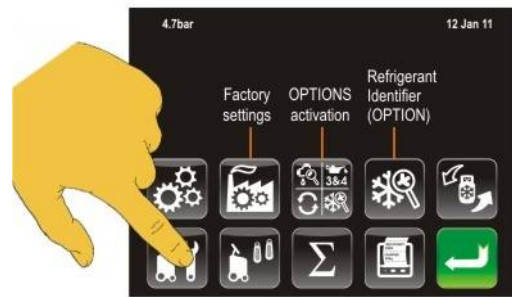
18.2. How to set the workshop data on print report?



Enter into the Set Up Mode by touching the main Settings icon.



Touch the unit Set Up icon (left bottom).



With arrows keys UP and DOWN select WORKSHOP and press Edit icon.



With (+) and/or (-) keys set the workshop to be ON. Press Enter key.



By Using keyboard display, write 1st row of the workshop data and press arrow Down key.



Now you can write 2nd row of the workshop data. Unit allows maximum 5 rows x 20 letters.



Small letters and symbols



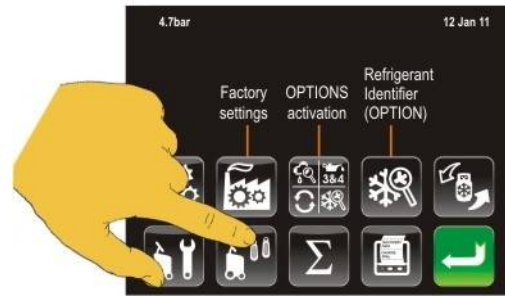
Delete all

18.3. Wireless Temperature Sensors Set Up (Optional)

Enter into the Set Up Mode.



Touch the Wireless Sensor icon.



Press and hold the wireless temp sensor button until the sensor data appears on the display.



The sensor is still not set. Touch Sensor type icon to select appropriate sensor.



By using the Up or Down icons selects the appropriate sensor and touch enter icon. Vent sensor is standard, other 4 are OPTIONAL.



The appropriate sensor will now be displayed, press Enter icon to confirm. Perform the same steps for other sensors settings.



State	Colours	Description
Normal	[Green]	Normal indication: bound to ARP and battery ok.
Not Bound	[Orange]	Not bound to any ARP.
No signal	[Orange, Green]	Bound but not receiving signal from ARP.
Battery Low	[Red]	Battery low.
Charging	[Orange, Red]	Battery is charging.
Charged	[Green]	Battery is fully charged (when charger plugged in).
Charge Fault	[Red]	Charger voltage too high (> 6.0V).
Button pressed	[Green]	Button is pressed. LED on (not flashing).
Ready to Power off	[Red]	Button held for 2s. Ready to power off.
Force Unbind	[Red]	Button held for 15s. Ready to unbind sensor from ARP.
Internal Fault	[Red]	# flashes indicates error (see table below).

The ARP Wireless Temp Sensor has a single bi-colour LED. The Table above outlines the meaning of each indication sequence. If the wireless temp sensor is not communicating with the ARP for a period of 20 minutes it will automatically switch it self off to preserve the battery energy.

18.4. Refrigerant Management, Operation History and Working Hours Reset

Touch the main Set Up icon.



Touch the Sum icon.



The display will show the cycle operation history. The operator can read total recovered refrigerant and/or oil weight, total charge weight and total refrigerant transfer.

Touch CLEAR OFF icon to clear previous history (all cycles will be set back to 0).

After the machine has been completely serviced according to manufacturer's specifications, reset the filter replacement interval on new 99 working hours.

Touch 100 working hour icon, enter PIN code (4 numbers) and press Confirm icon.

	Cycles	Reset	Manuf.
CHARGE	14	0.37	0.37
TRANSFER	0	0.00	0.00
RECOVER	11	0.37	0.37
OIL INJECT	0	0.00	0.00
DYE INJECT	0		
VACUUM	10	SERVICE 100	98.00
FLUSH	2	SERVICE 300	298.00
LEAK TEST	2		
RECYCLE	1	TOTAL HOURS	2.00
AUTO	4		

Below the table are five icons: 100 working hours reset code, 300 working hours reset code, Clear all (sigma symbol), Print a report (printer icon), and Confirm (green arrow icon).

18.5. Refrigerant Recycling



The purpose of the Refrigerant Recycling mode is to purify the refrigerant from other recovery cylinder which has not been attached to this machine.

Remove the cylinder cover. Turn off the cylinder valves and cylinder hose ball valves (red and blue). Carefully disconnect the hoses from cylinder (wear protective glasses and gloves). Take off the original machine storage cylinder and place recovery cylinder which needs the refrigerant to be recycled. Connect the hoses to the recovery cylinder (making sure that blue hose is connected on vapour and red on liquid cylinder valves), open ball valves and cylinder valves.

Touch the main Set Up icon.



Touch refrigerant recycling icon to select the function.



Touch the time icon to select the flushing time.



By using the keypad, select recycling time and touch Enter icon to confirm.



Touch the confirm icon.



Press the Start button to start the process.



The selected function will now be performed automatically. After the completion of this function remove the recovery cylinder and refit the standard machine storage cylinder.



Notes:

EC DECLARATION OF CONFORMITY

The company: **Ariazone International - Europe**

Hereby declares that the product:

Ariazone 6001 HFO 1234yf - Automotive A/C Service Station

Meets all requirements of European Directives:
2006/95/EC (ex 73/23/EEC) Low Voltage Directive
2004/108/EC Electromagnetic Compatibility
98/37/EC Machine Directive

and subsequent amendments entered in force to the date of declaration.
The following standards and technical specifications, conforming to EEC Harmonized Regulations were applied:

EN 61010-1:2001 with cross references: EN 60227, EN 60245, EN 60309:2003;
EN 60799, EN 60804, EN 60825-1

EN 55014-1; EN ISO 12100-1; EN ISO 12100-2;
EN ISO 12100-1:2003; EN ISO 12100-2:2003

The producer also declares that equipment confirms Directives and Standards when used according to manufacturer specifications.

Date and place of issuing:

Ohrid, _____

Serial No: _____

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