

A/C Recovery Recycling Recharge Machine

STR-MAX

User & Service Manual



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SAFETY WARNING

- Read this manual carefully and understand all the procedures outlines in this manual before operating the unit. Failure to follow these procedures could result in personal injury or property damage.
- Allow only qualified personnel to operate this unit. The operator must have basic knowledge of airconditioning and refrigeration systems, including potential hazard sassociated with the handling of refrigerants and systems under high pressure.
- Always wear safety goggles and appropriate protective clothing. Avoid contact of liquid refrigerant with the eyes and prolonged skin exposure.
- Pressurized tank contains liquid refrigerant.
- Never fill the refrigerant tank to morethan 80% of its maximum capacity.
- Hoses may contain refrigerant under pressure.
- Make sure to use a properly grounded AC outlet.
- Do not operate the unit with a damaged cord or plug. Extension cords should not be used unless absolutely necessary.
- Disconnect unit from power supply before removing any protective cover.
- Do not expose the unit to wet environment.
- Only use the correct refrigerants.
- Avoid breathing in refrigerant vapors. Use only in well ventilated areas.
- The unit must be transported in a vertical position.
- The refrigerant scale must be fixed in place before transport.

Description of Security labels used on the machines

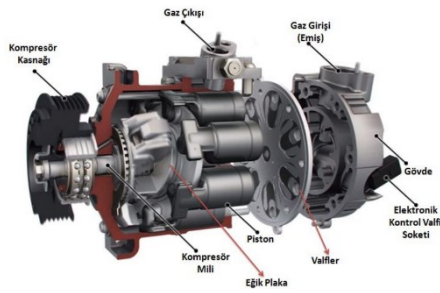
	Be careful.
	Wear safety goggles.
	Grounding protection.
	Risk of electric shock.
	Danger of explosion.
	Read the instructions carefully .

TECHNICAL SPECIFICATION

Model.....	STR-MAX
Refrigerant type.....	R134A / R1234 YF
Power supply	220 V $\pm$ 10% / 50Hz
Display.....	5'' LCD touch screen
Storage tank capacity.....	25 kg (Optional 35kg)
Scale resolution.....	$\pm$ 5 gr
Compressor	1/3 HP 12 cc Hermetic
Vacuum pump.....	10 m ³ /h
Recovery rate.....	450 gr/min maximum
Filter capacity.....	150 kg (stone dryer)
Operating temperature	8°C to 49°C
Low pressure gauge	15 bar
High pressure gauge	30 bar
Hose length	300 cm
Dimensions	55 cm x 115 cm x 55 cm
Weight.....	95 kg

A/C SYSTEM

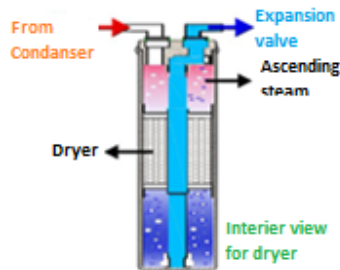
COMPRESSOR: Increases the pressure of the refrigerant. In the mean time, the temperature of the refrigerant also increases.



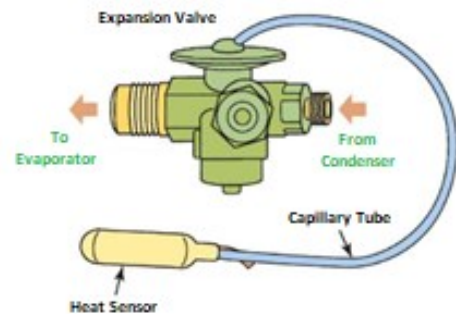
CONDENSER: It is the section where the refrigerant that provides cooling in the cooling systems enters as a gas and gives its heat to the environment and becomes liquid.



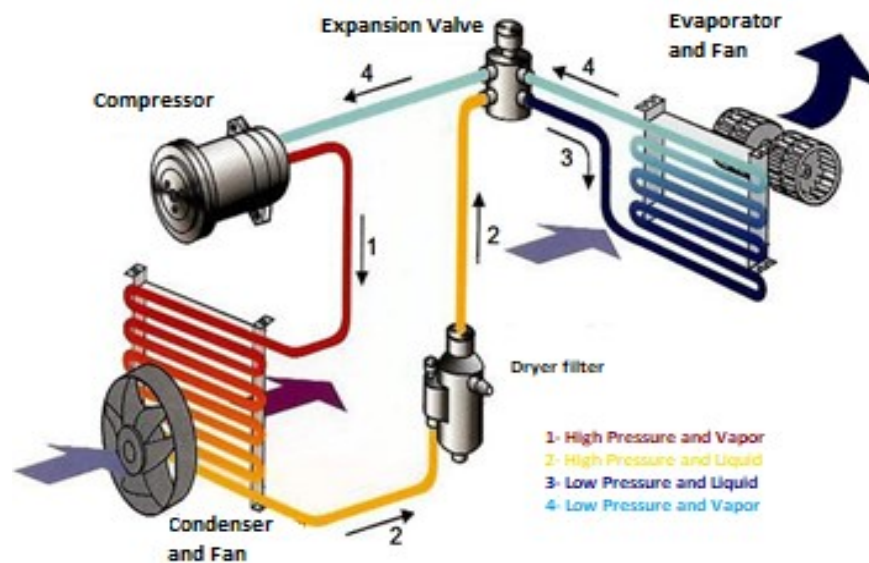
DRYER FILTER: Liquid desiccant coming from the radiator is dehumidified and filtered. System Allows only liquid refrigerant to pass through. It acts as a reservoir for the liquid in the system.

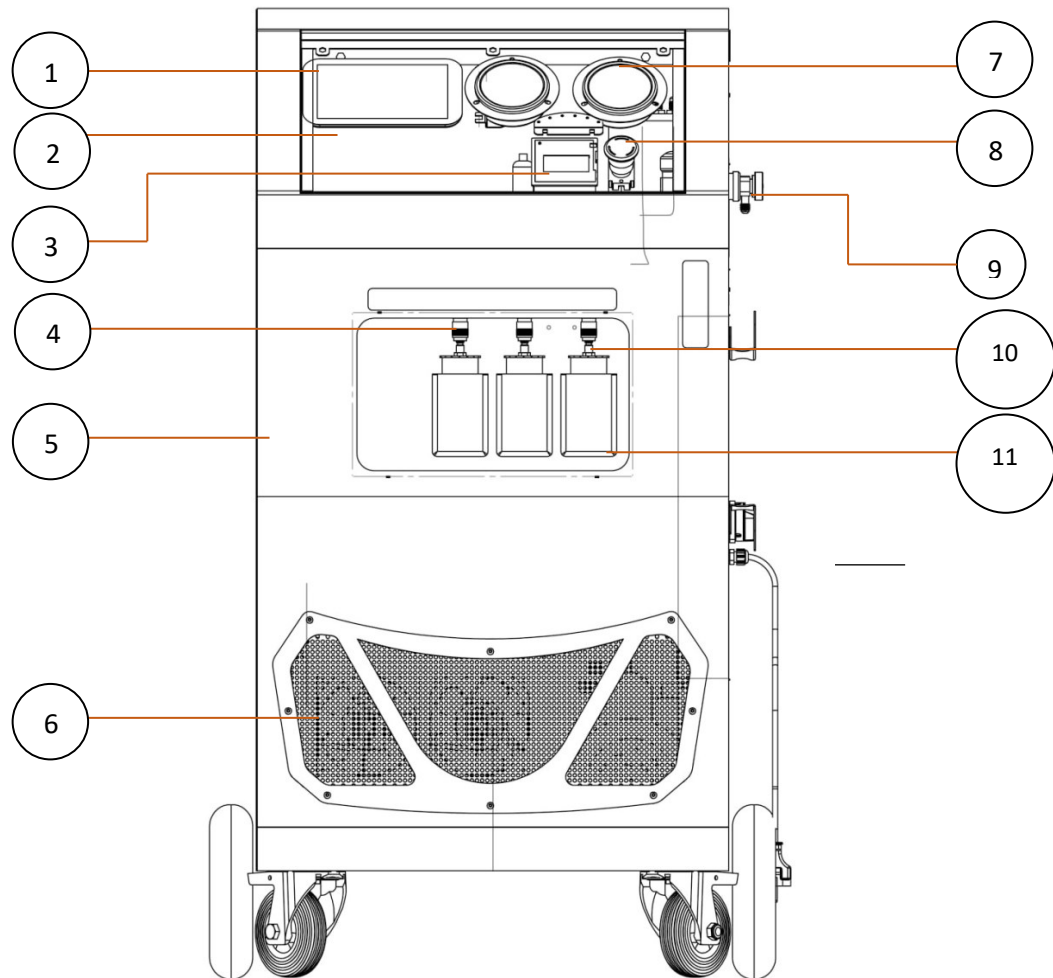


EXPANSION VALVE: It is the element used to reduce the refrigerant pressure to the evaporator pressure.

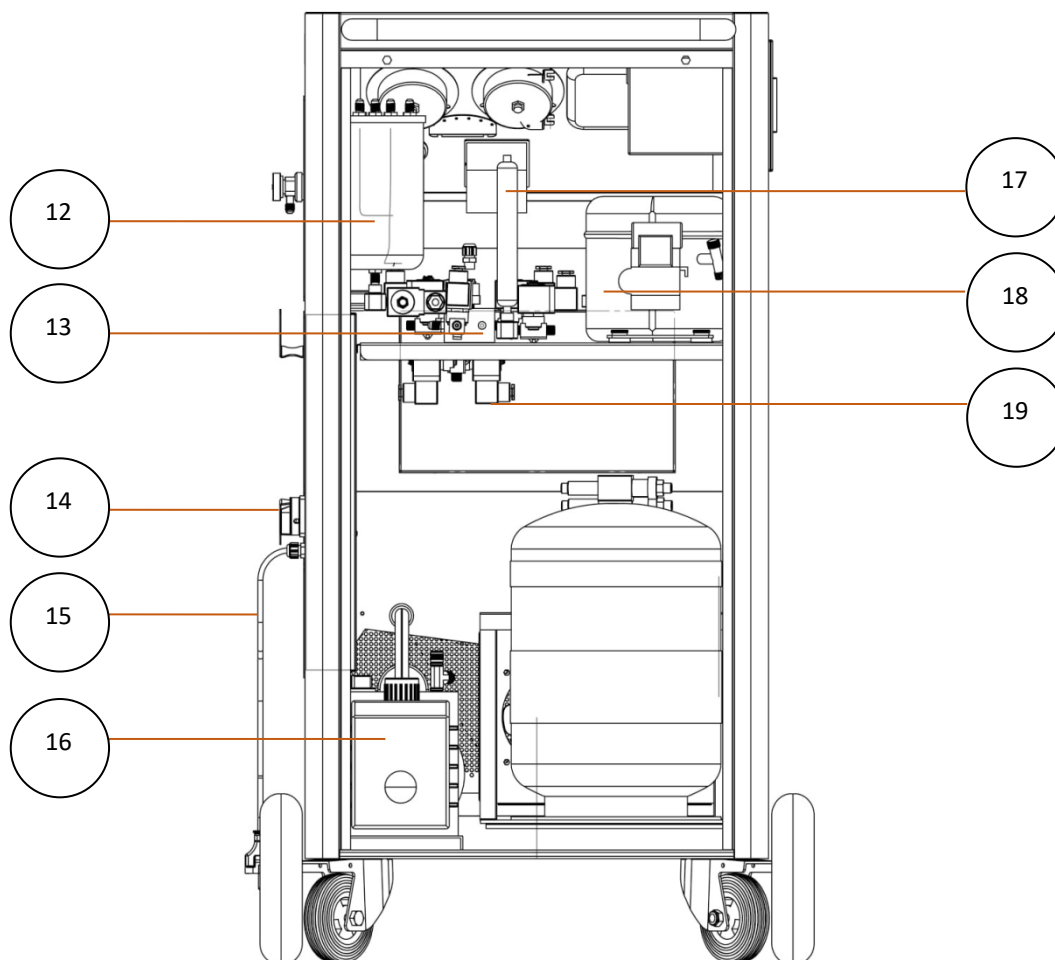


EVAPORATOR: It evaporates cold and low pressure gas, while absorbing the heat inside the vehicle.



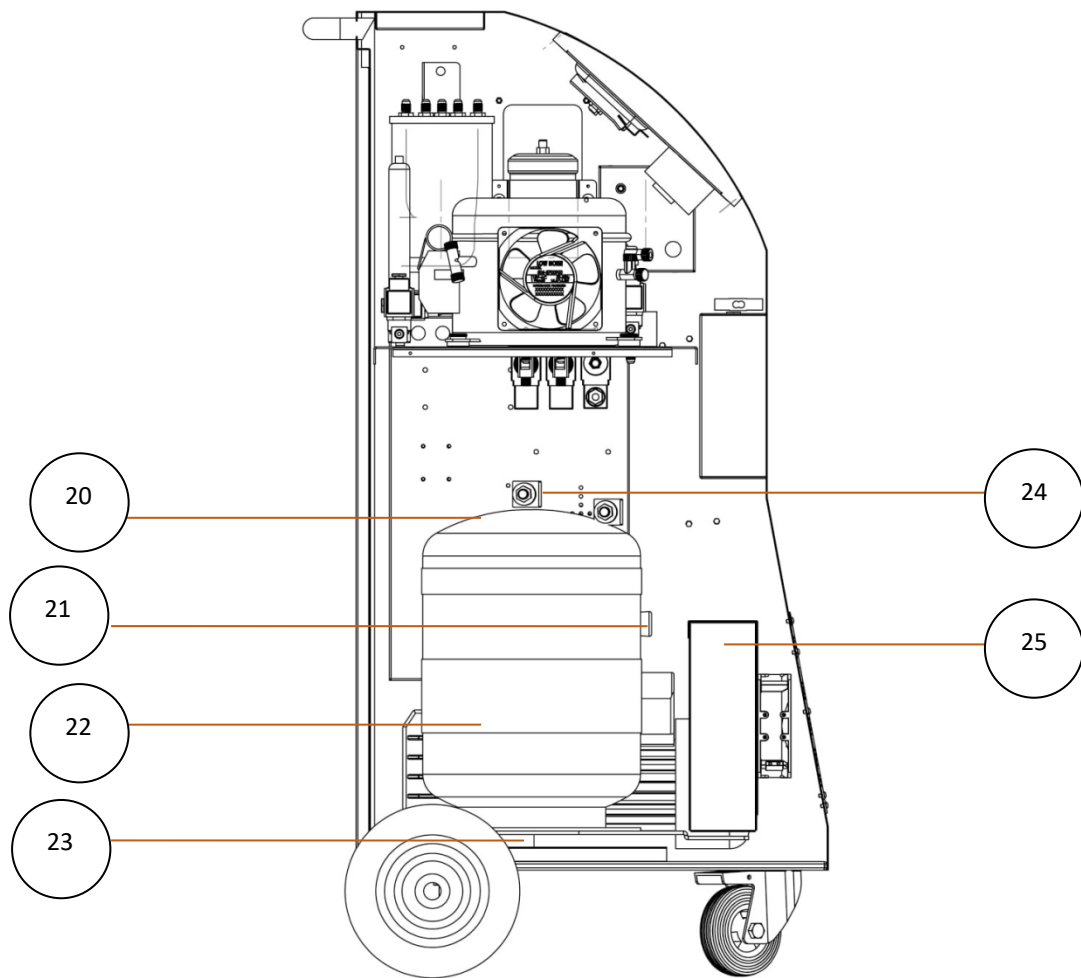


ITEM	DESCRIPTION	STOCK CODE	ITEM	DESCRIPTION	STOCK CODE
1	LCD monitor 5"	ELC-C406	7	L.P. Manometer	ELC-C193
2	Membrane	ELC-C410	8	H.P. Manometer	ELC-C194
3	Thermal printer	ELC-C11	9	Emergency stop	ELC-C47
4	Oil Jack (female)	ELC-C86	10	L.P. quick couple	ELC-C18M
5	Metal case	ELC-C119	11	H.P. quick couple	ELC-C17K
6	Fan	ELC-C07		Oil Jack (male)	ELC-C85
				Oil container	ELC-C52

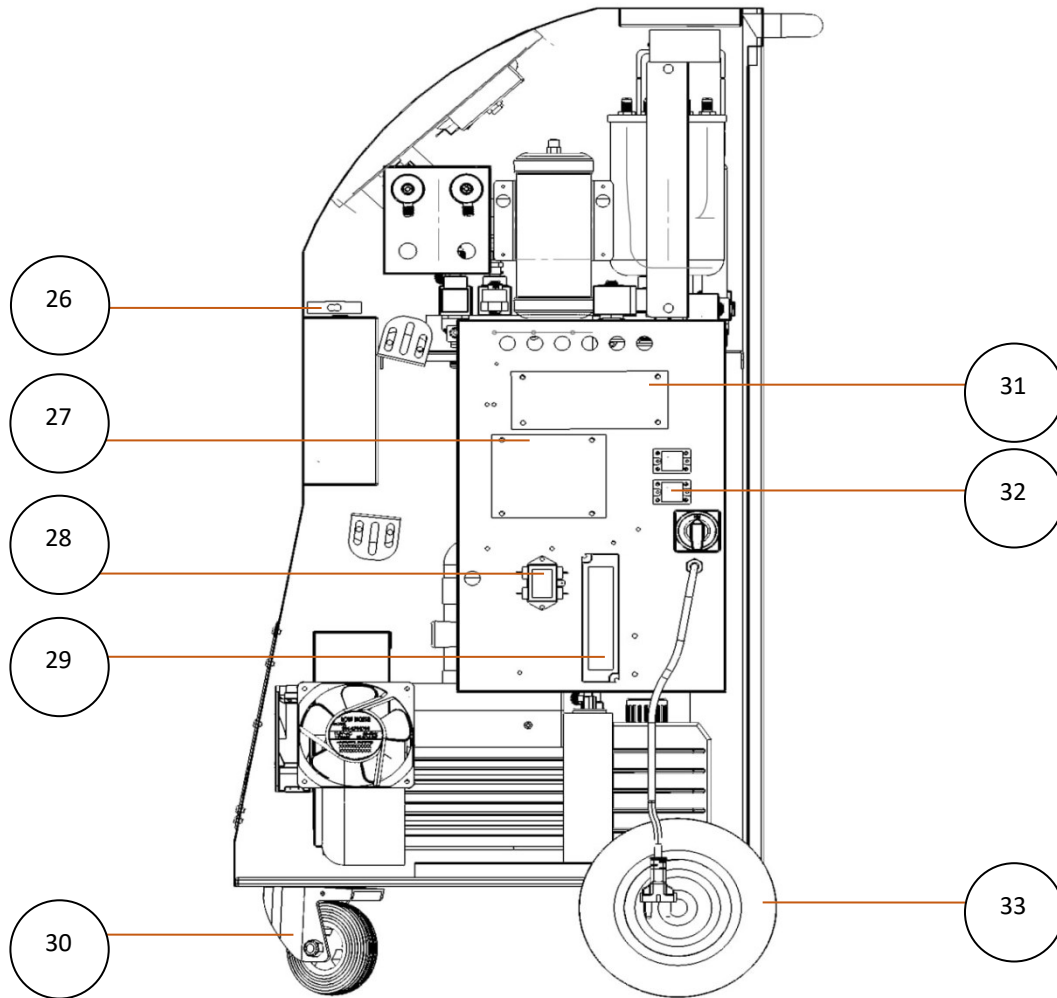


ITEM	DESCRIPTION	STOCK CODE	ITEM	DESCRIPTION	STOCK CODE
12	Oil seperator	ELC-C79	17	Comp. Oil Sep.	ELC-C370
13	Aluminum block	ELC-C360	18	Hermatic Comp.	ELC-C10
14	Pack switch	ELC-C177	19	Solenoid valve- coil	ELC-C264
15	Power cable	ELC-C447		Solenoid valve- core	ELC-S53
16	Vacuum pump	ELC-C389		Solenoid valve- body	ELC-C266

COMPONENTS

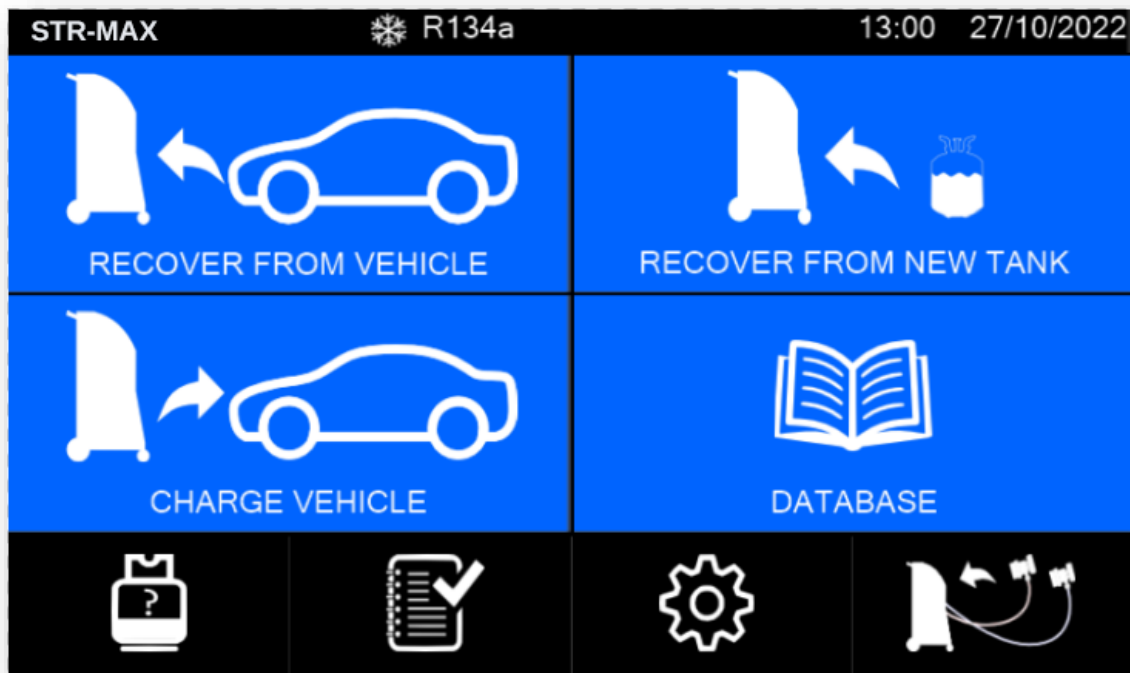


ITEM	DESCRIPTION	STOCK CODE	ITEM	DESCRIPTION	STOCK CODE
20	Tank 25kg.	ELC-C287	23	Load cell 250kg.	ELC-C74
21	Temp. sensor	ELC-C429	24	Tank valve	ELC-C174
22	Heater belt	ELC-S33	25	Condenser	ELC-C149



ITEM	DESCRIPTION	STOCK CODE	ITEM	DESCRIPTION	STOCK CODE
26	Load cell 15 kg.	ELC-C150	30	Wheel (front)	ELC-C50
27	Wi-Fi-PCB4_0	ELC-C432	31	AC- PCB	ELC-C212
28	Emi filter	ELC-C499	32	Solid State Relay	ELC-C91
29	Power supply	ELC-C45	33	Wheel (rear)	ELC-C51

CONTROL PANEL



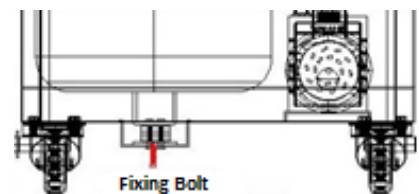
SETUP

Open the box and take out accessories. Box contents:

- ❖ STR-MAX-2 unit.
- ❖ Low Pressure (Blue) and High Pressure (Red) hoses and vehicle adaptors.
- ❖ User manual and warranty certificate.

Before first using:

- Place the unit on a flat surface.
- Connect quick-action coupler valves to the service hoses (DO NOT OVERTIGHTEN).
- Remove aluminum foil from the vacuum pump and install oil filler cap.
- Remove fixing bolt located under the unit.
- Plug the power cable into a grounded power outlet.
- Perform a vacuum calibration (page 22).



WARNING: The scales are calibrated at the factory. There is no need to calibrate again.

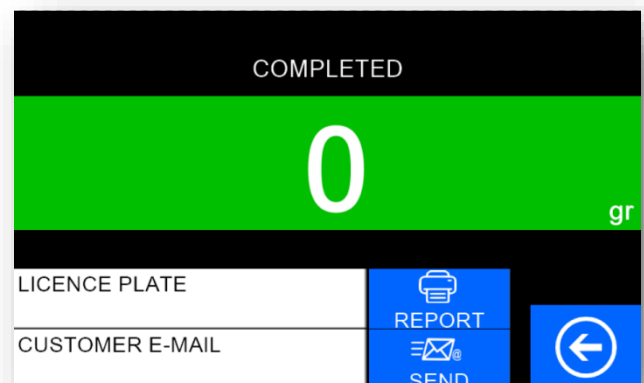
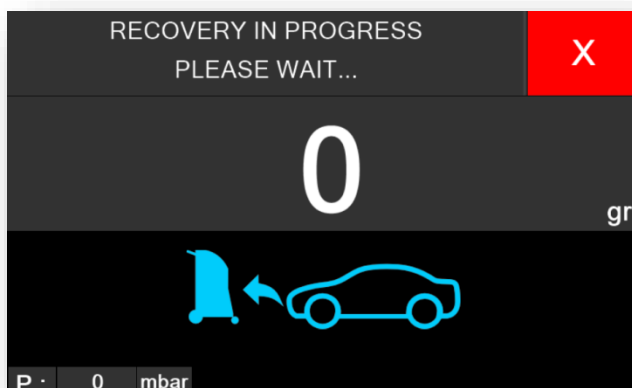
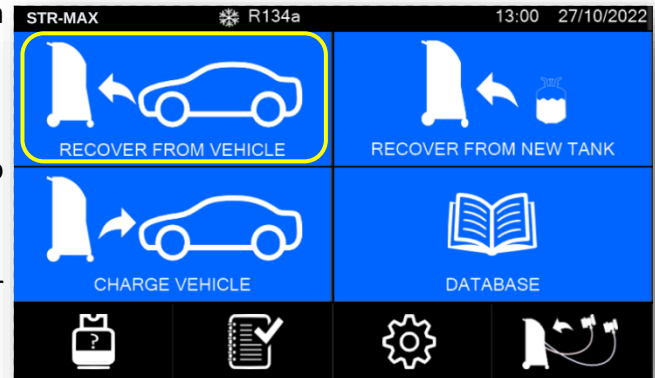


PROCESSES

RECOVER FROM VEHICLE

The device draws gas from the air conditioning system, separates it from oil and particles, trap the passed acid and moisture through by the filter, purifies it and transfers it to its own tank.

- Connect service hoses to the system and open adaptors.
- Select RECOVER FROM VEHICLE.
- CHECKING REFRIGERANT will display.
- If there is gas in the system, the device will start to draw the gas in the air conditioning system.
- The old oil will be drained automatically.
- When the process is finished, COMPLETED will appear on the screen.



ATTENTION: Some of the gas drawn remains in the compressor, hose and cooling channels in the device's internal structure. The amount of remaining gas will vary depending on the ambient temperature and the latest operation.



ATTENTION: If you run the vehicle until it reaches normal operating temperature before the procedure, the gas in the air conditioning system will heat up and the gas extraction process time will shorten.



PROCESSES

CHARGE VEHICLE

It is used to manually fill gas in the air conditioning system.

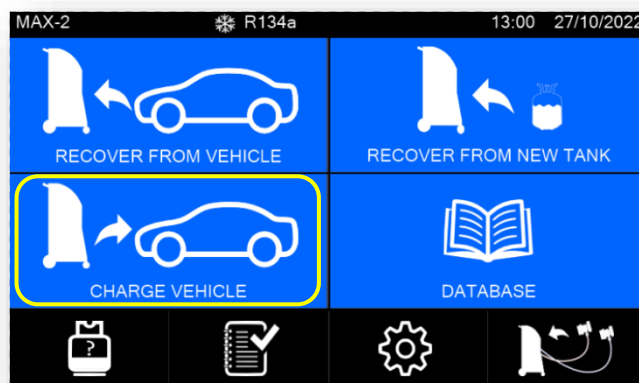
- ❖ Connect the service hoses to the system, turn the adapters on.
- ❖ Press CHARGE SYSTEM button.
 - **VACUUM TIME:** The vacuum time entered to vacuum the air conditioning system.

- **LEAK CONTROL:** The purpose of this process is to check whether the vacuum level is stable or there is a leak.

Our aim is to remove the air, water vapor and other non-condensable gases from the air conditioning system. If there is a leak in the system, the device will warn that there is a LEAK.

NOTE: It is necessary to vacuum the system before the LEAK CONTROL process.

- **REFRIGERANT:** The purpose of this process is to enter the amount of gas we want to charge the system.



CHARGING PORTS IN THE CHARGE SYSTEM MENU



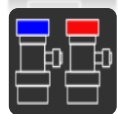
It presses gas to the system first from the High pressure line and then from the Low pressure line.



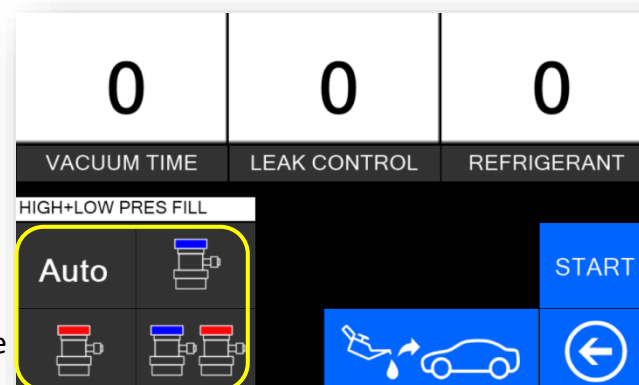
Gas charging is done from the low pressure line. (Compressor suction line).



Gas charging is done from the high pressure line. (Compressor compression line).



It is charging gas from Low pressure and High pressure lines at the same time.



PROCESSES

OIL FILLING

When the oil button is pressed, a new window will appear on the screen.

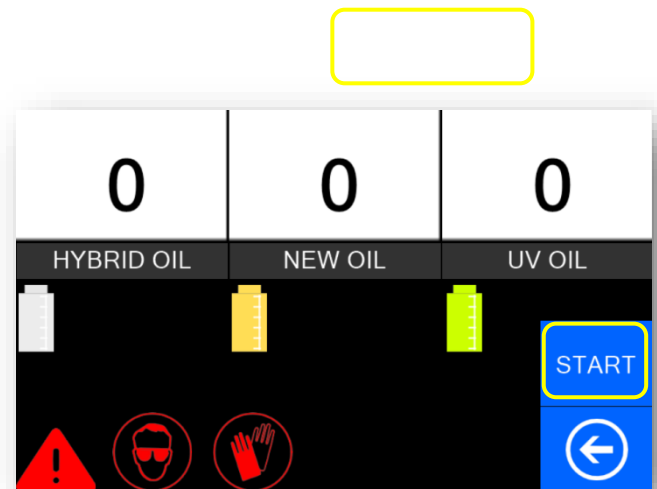
HYBRID OIL: Enter the amount of hybrid oil you want to send to the compressor in hybrid systems.

NEW OIL: Enter the amount of new oil you want to send to the air conditioning compressor.

UV OIL: Enter the amount of leak detection fluid.

NOTE: It is necessary to vacuum before adding oil.

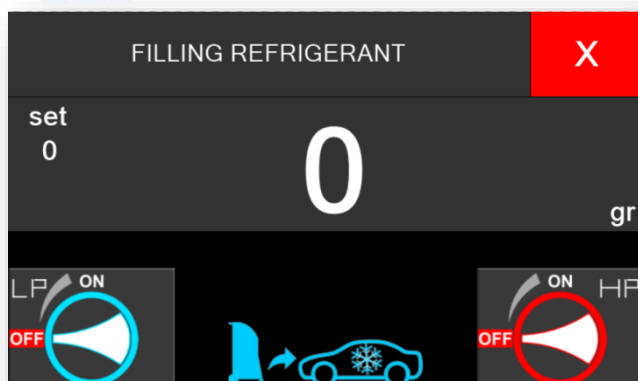
NOTE: To get a better result, you should add (60-70) gr. of gas to the amount that you want to charge. The added amount of gas will be the service hose share.



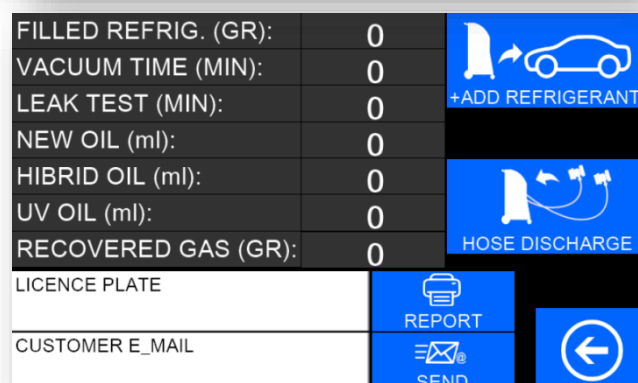
You need to press the START button to start the process and the process starts automatically.



Return to previous screen



While performing the GAS CHARGING process, you can control the gas filling line with the buttons on the screen in the form of a valve.



After the GAS CHARGING operation is completed, a summary of the last operation will appear on the screen.

- **+ADD REFRIGERANT:** When the amount of gas charged to the system is not sufficient, you can add gas by using this button.
- **HOSE DISCHARGE:** After the process is completed, remove the adapters from the system and do this procedure.
- **LICENCE PLATE:** You can write the license plate of the system you are processing on the print out.
- **PRINT REPORT:** You can print out the summary of the last transactions.

PROCESSES

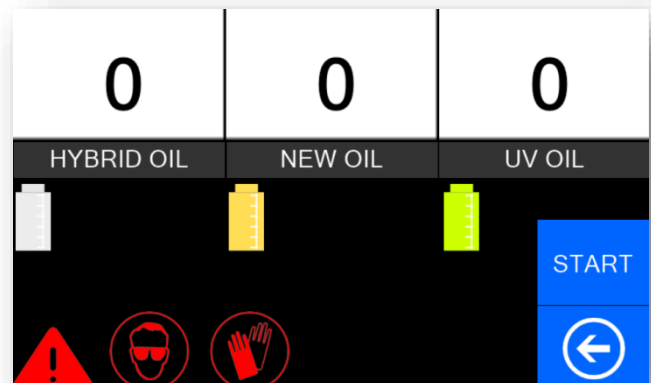
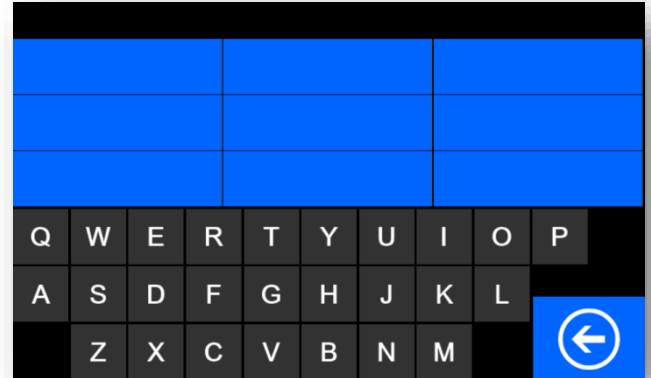
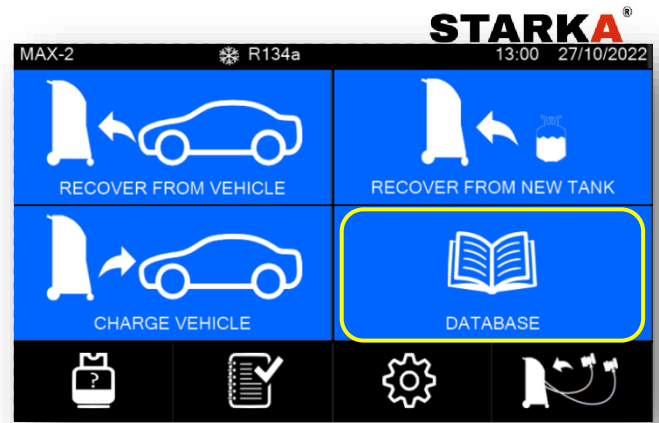
DATABASE

It is used to charge the gas automatically to the air conditioning system. Vacuum time, leak control and gas amount data will be entered automatically.

NOTE: In this process you don't need to add the amount of gas to the hose share. It is automatically registered in the system.

To start the process:

- Press DATA BASE button.
- Select the first letter of the brand name of the system you want to trade.
- Select the model.
- Before the process starts, a screen will be opened to add oil and the amount of oil will be entered as desired.
- Pressing the START button will start the process.



PROCESSES

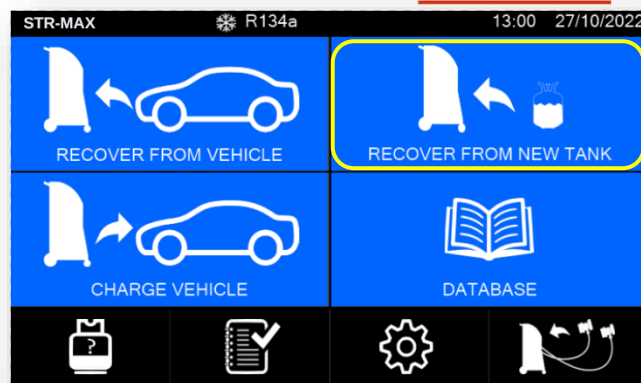
RECOVER FROM NEW TANK

It is for transferring gas from the external tank to the tank in the device.

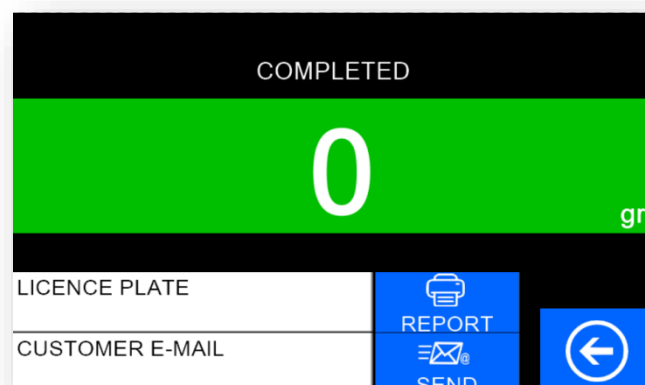
ATTENTION:



- 1- The device tank should not be filled completely. The recommended amount is 80% of the tank capacity.
- 2- To speed up the process, you can convert the external tank upside down.

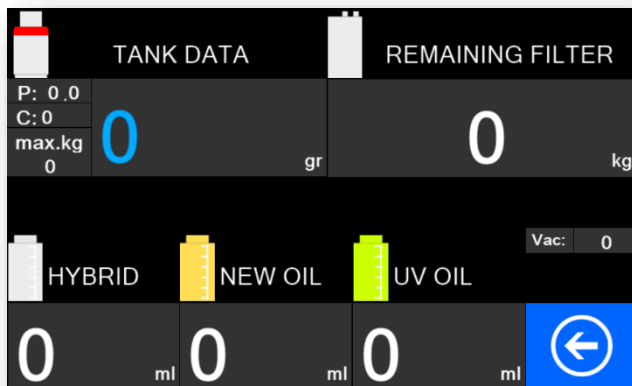


- Connect the blue service hose to the external tank and open the tank valve.
- Connect the adapter to the end of the red hose.
- Enter the amount of gas drawn from the external tank.
- Press the START button to start the process.
- The device will start to draw gas from the external tank.
- The process will end automatically when the device tank is full, the external tank is empty or the set amount is with drawn.



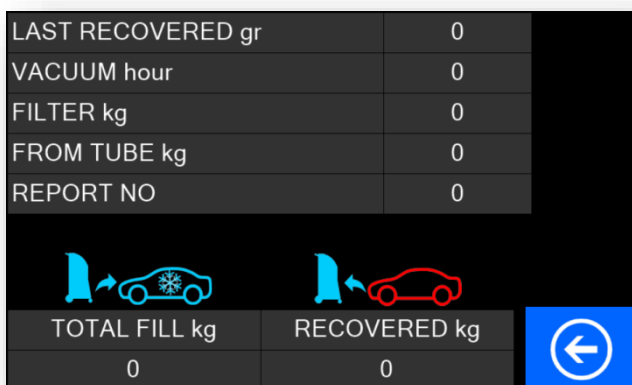
TABS

TABS IN THE MAIN MENU



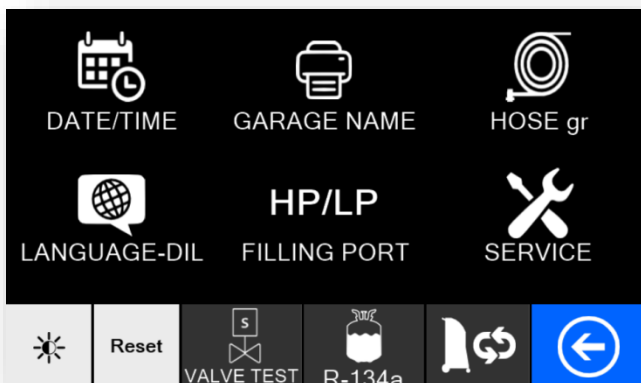
Tank information menu

- P: The pressure value of the gas inside the tank.
- C: Temperature value of the tank.
- MAX.kg: Maximum capacity value of the tank.
- REMAINING FILTER: remaining filter life.
- HYBRID OIL: The amount of hybrid oil in the container.
- NEW OIL: The amount of new oil in the container.
- UV OIL: The amount of UV oil in the container.



Total information of the transactions performed on the device

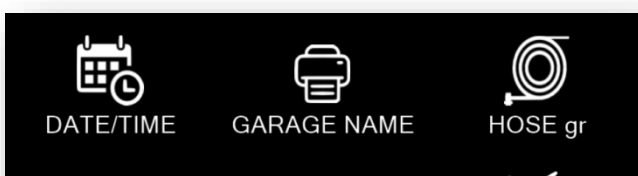
This menu contains the total data of all the operations performed on the device.



Settings and calibrations on the device

In this menu, you can make settings and calibrations on the device.

SETTINGS AND CALIBRATION



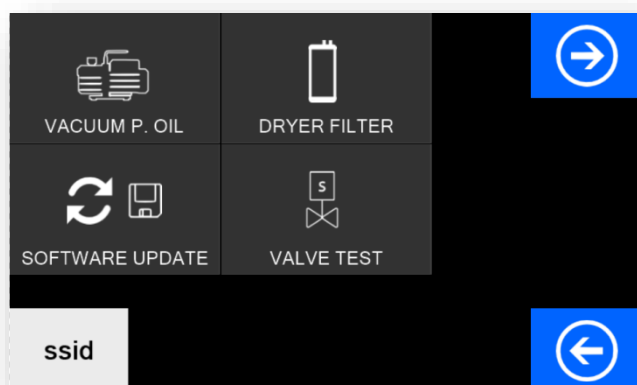
- **DATE/TIME:** To change the date and time of the device.

- **GARAGE DATA:** The user company or service name is entered.
- **HOSE gr.:** hose share gas amount is entered. It should be adjusted according to the length of the hose.
- **LANGUAGE-DİL:** Turkish and English languages are registered on the device.
- **FILLING PORT:** gas filling line is selected.
- **SERVICE:** leads to the calibration menu of the device. For detailed information see (page 18).
- **RESET:** By clicking this button, you can restart without touching the emergency stop or on-off switch.
-  This button is used to control the screen brightness.
-  A/C FLUSHING: This operation is used to flush the vehicle air-conditioning system. (page 18)

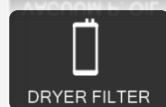
NOTE: To enter the SERVICE page, get the password from the manufacturer company.



You can enter the calibration page by clicking the SERVICE button.



Changing the vacuum pump oil.
For details go to page 23.



Filter replacement.
For details go to page 23.



By establishing a connection on the Internet, new software versions of your device will be found in this section.



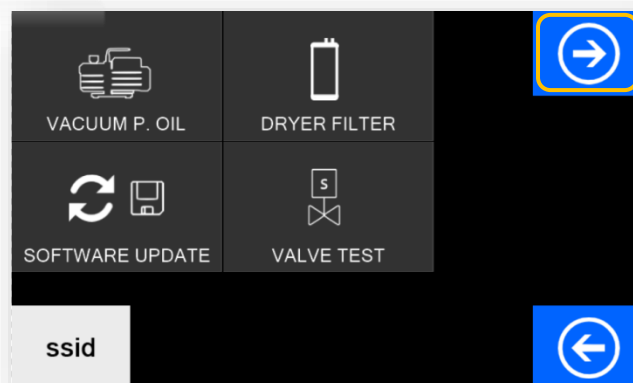
In this menu, you can perform durability tests of all valves, motors and fans in the device.



Enter the WiFi username and password for your location.



You can go to the Calibration page by pressing this button.



SETTINGS AND CALIBRATION

Air evacuation

In this process, the air causing excess pressure in the device tank is evacuated. Due to a leak in the hoses or the vehicle air conditioning system, the device can fill the tank with air with gas. When the sensors detect air in the tank, they will automatically purge air. Processing time may vary depending on the amount of air in the tank.



A/C Flushing (Applies to all vehicle, oil and cooler types). This process is done to get rid of and clean the vehicle air conditioning system from burrs and other unwanted objects. When this process is completed, the drier filter and expansion valve of the vehicle should be removed.

REFRIGERANT: The amount of gas entered for flushing the vehicle air conditioning system.

FLUSHING TIME: The time entered for flushing the vehicle air conditioning system.

SETTINGS AND CALIBRATION

WEIGHT CALIBRATION

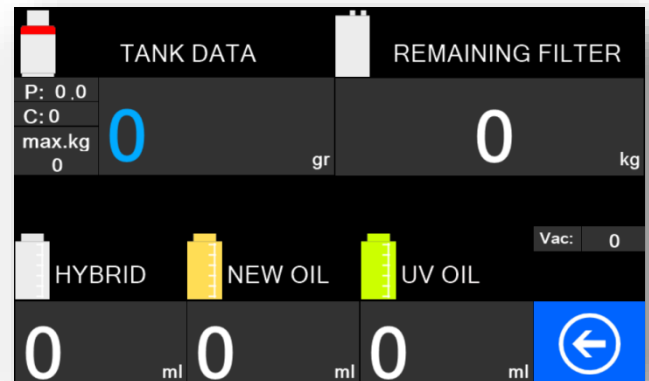
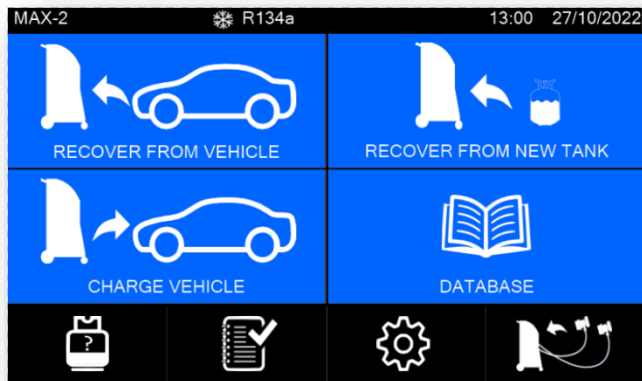
Weight calibration is done according with the standards of EURAMET Calibration Guide No. 18.
Version 4.0

Weight calibration must be done in cases where the scale of the gas filling device measures incorrectly: ^{e c h}

1. Scale Control

For the scale control;

- provide a Turkak-approved 2000 g test mass.
- Unscrew the back cover of the device and remove the cover.
- Connect the power cable of the device to the power outlet.
- Turn the On-Off switch to 1 position and turn on the device.
- Press  button in the lower left corner of the main menu.



TANK INFORMATION: this section contains the value of the scale.

Put the test weight on the own gas tank which is inside the device, wait for the value on the screen to stabilize. The change should be as much as the weight placed on the own gas tank (+/- 5 gr). When tolerance values are not detected, you need to do weight calibration.

2. Calibration process

2.1 Performing the calibration process by emptying the gas in the tank:

Close the valves of the gas tank,

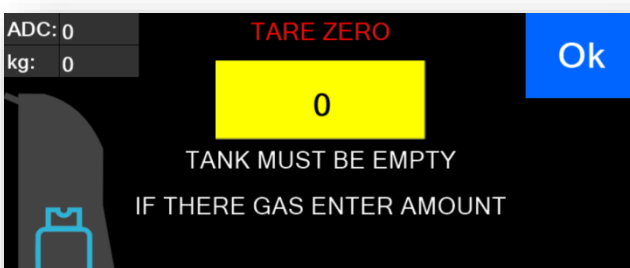
Unscrew the blue and red hoses connected to the gas tank using the appropriate wrench,

By using these hoses you must transfer all the gases from the device to an external tank,

After making sure that the gas tank is completely empty, in the main menu, first press  button and then press  button. Enter "14538" in the password section of the service menu.

After that tap the  icon to access the calibrations menu. In this menu,  tap the weight calibration icon.

SETTINGS AND CALIBRATION



When you reach the **image 1** on the screen, write 0 inside the yellow zone and press  button to complete tare zero process

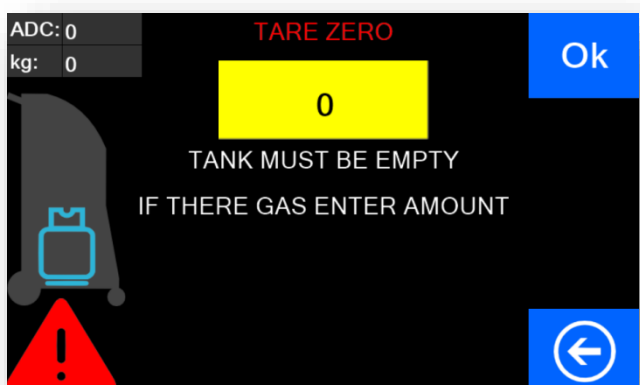
IMAGE 1



After the tare reset, the side menu will be displayed. While in this menu place the test weight on the gas tank. In the yellow zone enter value of the test weight, which is the "2000"gr. and tap **Ok** button. Wait for the calibration to be completed by the device. After the confirmation tone, return to the main menu. Tap  main menu for checking. If you see the test weight on the screen with a tolerance of 2000 gr +/-5, means calibration setting is successfully done.

To complete the calibration, take off the test weight on the gas tank, tighten the red and blue hoses in own place, and turn the valves to the open position.

2.2 Performing the calibration process when there is gas in the tank



While in the main menu, tap the  icon and then the  icon. Enter "14538" to Password section in the service menu and tap the **Ok** icon, then tap the  go to the calibrations menu. In this menu, tap on the weight calibration icon  In yellow zone on the screen Enter the amount of gas found in the gas tank and tap the **Ok** icon.

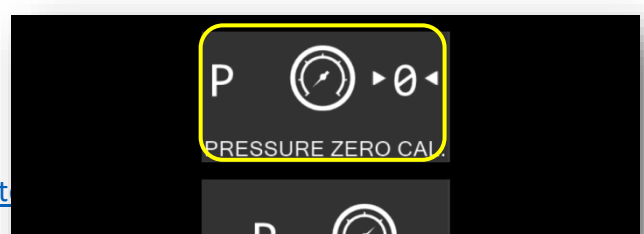
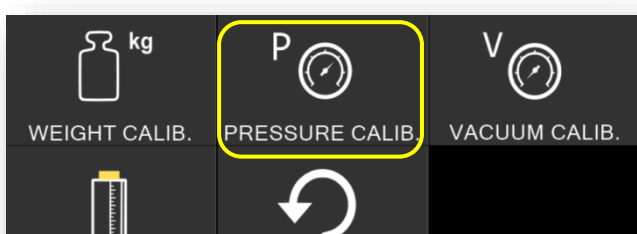


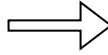
After this process, the side menu will be displayed. While in this menu place the test weight on the gas tank. Enter the number "2000", which is the value of the test weight, in the yellow zone and tap the **Ok** button.

After the confirmation tone, return to the main menu. Tap  main menu for checking. If you see the test weight on the screen with a tolerance of 2000 gr +/-5, means calibration setting is successfully done.

SETTINGS AND CALIBRATION

PRESSURE RESET



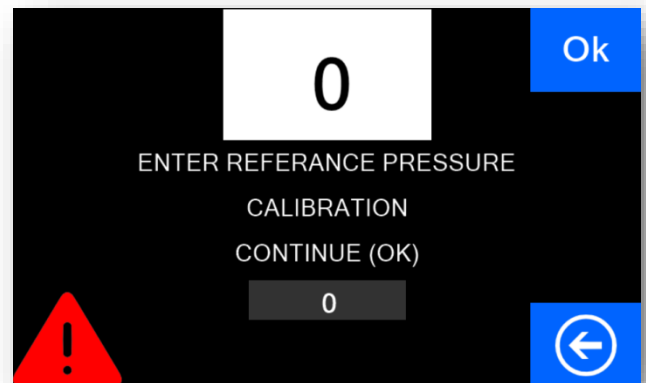
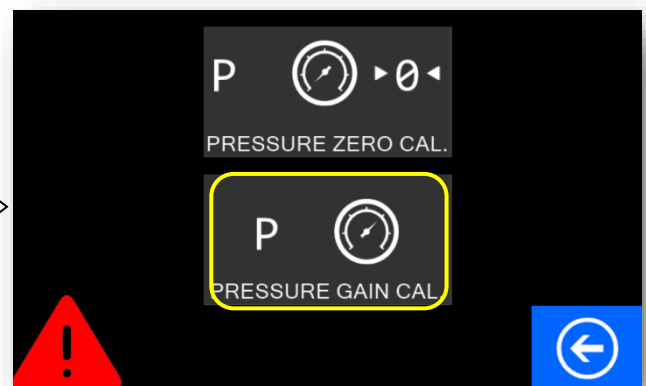
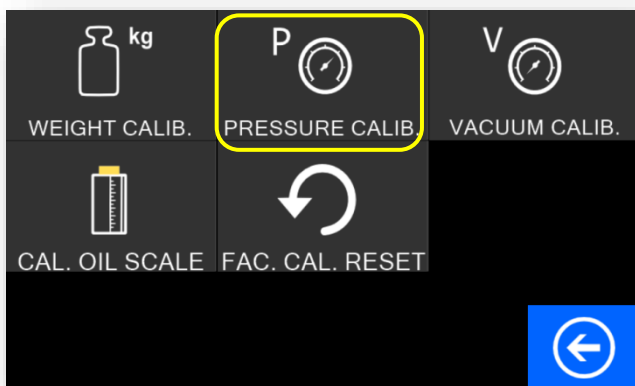


Pressure reset process:

- Firstly, there should be no gas in the device.¹
- Press the pressure calibration button.
- Press the OK button.
- When the process is over, **COMPLETED** will be written.

1. If there is gas inside the device, close the red valve on the tank and remove red hose from tank After the processes below connect hose and open red valve

PRESSURE CALIBRATION



Pressure calibration process:

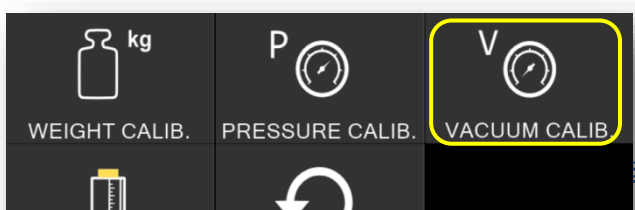
- Connect adapters to service hoses.
- Press 500 grams of gas into the hoses from the charge vehicle menu.
- Note the value on the pressure gauge.
- Press PRESSURE GAIN CAL. button.
- Write the value you noted in the white square.
- Press OK button.
- When the process is over, COMPLETED will be written.

NOTE: 1. WE RECOMMENDED TO CALIBRATE WEIGHT EVERY 3 MONTH

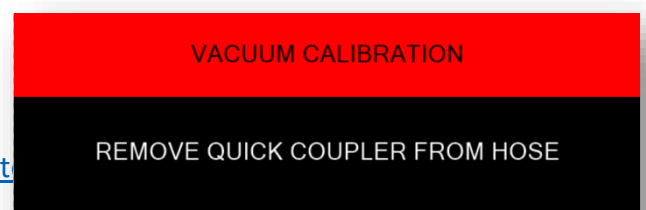
2. WHEN APART RELATED TO THE SCALE IS CHANGED

SETTINGS AND CALIBRATION

VACUUM CALIBRATION

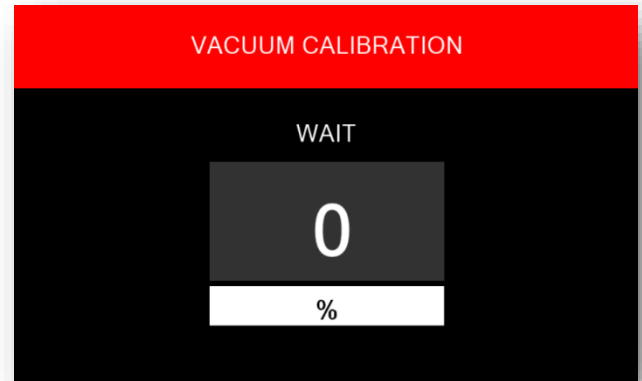


starkaaut

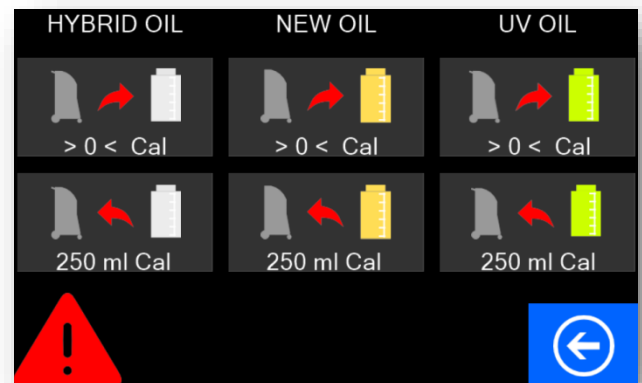
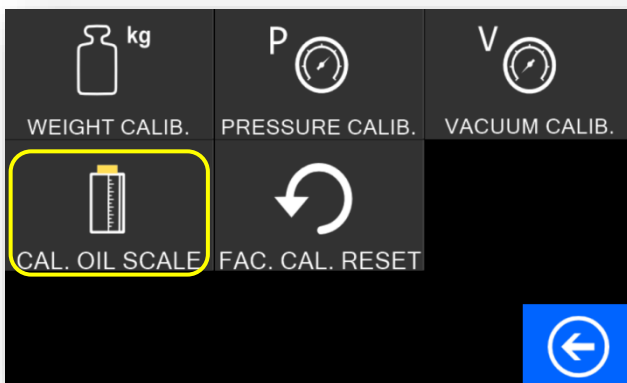


Vacuum calibration process:

- Remove adapters from service hoses.
- Press the OK button and wait.
- Connect adapters to service hoses.
- Press the OK button and wait for the vacuum pump to finish the process.
- When the process is over, COMPLETED will be written.



OIL CALIBRATION



Oil calibration process:

- Press CAL.OIL SCALE button.
- Remove oil container, to reset Press **> 0 < Cal** button.
- Fill the containers with 250 milli liters of oil.
- Insert the filled oil container to the right place, press **250ml Cal** button and wait for beep sound.
- You can apply this process for HYBRID OIL, NEW OIL and UV OIL.

NOTE: The UV oil container must be filled with UV liquid, otherwise the correct result will not be obtained.

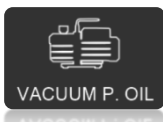
MAINTENANCE

Compressor maintenance

It is done to reinforcement the oil that is lost from the compressor. Should be done after every 3 filter changes.

- Remove the new oil container and fill with 70 ml of oil in it and do not insert it into the appliance.^{c h}
- Connect adapters to the service hose.
- Fill 100 grams of gas into the hoses from the CHARGE VEHICLE menu.
- Enter the RECOVER FROM VEHICLE process, when the pressure gauge show zero, disconnect the hose from the Dryer filter to the compressor and immerse it in the removed new oil container.
- After completely absorbing the oil, replace the hose and new oil container.

Vacuum pump oil change



In order that the vacuum pump to work effectively, the oil must be changed at regular intervals. The use of oil that has lost its properties causes irreversible damage to mechanical components. Vacuum pump oil should be changed in the following cases.

- After each 30 hours of operating or every filter change
- When the oil becomes dark or cloudy.

Oil change process:

- Provide an empty container to collect the old oil.
- Disconnect the device from power.
- Remove the oil filler cap.
- Remove the drain plug.
- Wait for draining old oil.
- Replace the drain plug.
- Fill the new oil to half level using the filler cap.
- Replace the oil fill cap.
- Turn on the device from the power switch.
- Press VACUUM P. OIL button to clear the warning.



Filter replacement

The refrigerant passes to the device tank through the drier filter and remains clean and moisture-free. In order for the device to work properly, the filter must be changed at regular intervals. Using of an expired filter leaves the device out of warranty. Life of each filter of **STR-MAX** model is 150 kg. After the device has filtered 150 kg of refrigerant, it will start to warn the user at every turning on the device. Order a new filter.

- Open the filter cover on the side of the device.
- Replace the filter with a new one and put the cover back on.
- Turn on the device.
-  Select FILTER.
- Select OK to reset it.



TROUBLESHOOTING

■ Not able to fill

1. Check the Weight calibration and Weight tare setting. (Page 19)
2. Make sure the low pressure valve (blue valve) on the tank is open.
3. Check if there is gas in the tank.

4. Perform valve test. (To do this, please contact the manufacturer.)

■ Do not vacuuming

1. Check the pressure gauges while vacuuming. (it must under zero.)
2. If the unit is not vacuuming, check the high and low pressure solenoids, hoses, fittings, gauges and other related for leakage.
3. If there is no drop in pressure hours and the display says insufficient vacuum, enter the Service Menu and verify the vacuum calibration. (Page 22)



■ Vacuum pump not working

1. Check the on / off button on the pump.
2. Check the proper power supply, circuit breaker and electrical connectors for damage or corrosion. Modify or repair as needed.
3. Connect the unit power cable directly to the power supply. Do not use extension cables.
4. Control 220 Volts from the power card on the connector. If voltage is present, check the cable connection between the electronic card and the vacuum pump. Repair as needed.

■ Compressor not Working

1. Check the proper power supply, circuit breaker and electrical connectors for damage or corrosion.
2. Connect the unit directly to a known good source of power. Do not use extension cables.
3. Check the compressor 220V.
 - If there is no voltage for the operating components of the compressor, proceed to the next step.
 - If voltage is present at the compressor, replace the compressor thermal protector and start the relay assembly. If the compressor is running, confirm that the compressor amp has been pulled. If the compressor does not start and / or the rotor amps are locked, replace the compressor.

TROUBLESHOOTING

■ Compressor Test Procedures

1. Disconnect the pressure line connection.
2. Disconnect the suction line connection.
3. Connect the high pressure service hose on the device to the pressure line you have disconnected from the compressor.

4. Start the compressor from the valve test menu and stop the high pressure gauge at around 20 bar^h and check that the high pressure gauge should not fall.
5. If the high pressure gauge falls, you need to change the compressor.



■ Do not Scale the load cell

1. Check the load cell socket.
2. Any object under or around the tank must not touch the tank.
3. Reset the Scale calibration.
4. If the above steps do not solve the problem, the load cell or card needs to be changed

■ Grounding Issues

- Grounding should be checked first, due to low grounding; all measures in the electronic components and assemblies of the unit become useless.
- Grounding equipment manufactured for two reasons.
 - Firstly security. In order to meet safety requirements, all of the conductive surfaces to which the equipment is exposed must be within the safe touch voltage range of less than 30 Volts. If the conditions are met, increased voltage can cause life-threatening electrical shock.
 - The second reason is the process in which the chassis and casing extensions are connected to the ground. The situation will then provide a conductor to ground for electrical signals and protect internal electronics from electric fields. If the ground is open or has high resistance, the electrical noise will not be short-circuited to ground and will be propagated to the unit.

TROUBLESHOOTING

■ Power Problems

- The power applied to the unit must be a constant, low impedance source. It should be +10% or -10% of the long-term balanced symbolic voltage. The limits for a 220-volt line are between 198V and 242V. The unit will not operate above or below the voltage limits. However, if the voltage

falls below these limits or rises (if it rises too high), problems may arise. The life spans of components can be significantly shortened.

- Impedance controls the ability to provide a constant voltage with a varying line load. When you indicate that the mains voltage with the unit is off and the voltage with the unit is on, a technician can determine the impedance of the mains unit to the power transformer. If there is more than 5% change, there is too much resistance in the line or the load is too big. The solution is a reserved line.
- The line cable must be wired correctly. That is, the terminals at the right should be high, neutral and ground connections in the right places. A ground circuit tester can be used to test the cabling.
- Voltage change at the beginning of each service call, a ground may be removed or control the voltage applied to the unit structure, such as cables can be replaced.

WARRANTY

WARRANTY TERMS

1. Warranty period is (...) years and commences on the delivery date of the product.
2. The entire product except the hoses and the adapters is warranted by our company.
3. The warranty certificates without the sales date written by the seller/dealer and stamp and signature are invalid.

4. If the product becomes defective within the warranty period, the time elapsed during repair is added to the warranty period. The repair period of the product is maximum 30 (thirty) working days. This period starts as of the date the defect of the product is notified to the service station, or if a service station is not available, to any one of the product's seller, distributor, agency, representative, importer or manufacturer. If defect of the product is not remedied within 15 working days, the manufacturer and importer must allocate another industrial product with similar functions to the use of the consumer until repair of product is completed. National, legal and religious holidays and weekends are not considered as working days.
5. If the product becomes defective within its warranty period due to faults of material and workmanship or assembly, its repair shall be performed without demanding any charges as a cost of workmanship or replaced part, or by any other means.
6. Malfunctions taking place due to the use that is other than the ones stated in the operating manual of the product will not be covered under the scope of the warranty.
7. The warranty will expire automatically whenever one of the following occurs: failure to perform maintenance; **use of non-original spare parts, non recommended oils and/or gases**; use of expired filters; use of unsuitable refrigerants and/or lubricants; damage caused by shocks, fires, or other accidental events.
8. The manufacturer declines any and all responsibility for damage to vehicles on which recovery/recycling and recharging are performed if said damage is the result of unskillful handling by the operator or of failure to observe the basic safety rules set forth in the instruction manual.
9. This warranty does not cover damage arising during transportation. The product for which repair under guarantee is requested must be shipped to the manufacturer under the customer's exclusive responsibility.
10. The manufacturer shall not be responsible for any additional costs associated with a product failure including, but not limited to, loss of work time, loss of refrigerant, cross-contamination of refrigerant, and unauthorized shipping and/or labor charges.
11. For the problems that may arise concerning the certificate of warranty, you may refer to the General Directorate for the Protection of Consumers and Competition of the Ministry of Industry and Trade.
12. Even though the consumer uses its right of repair, if;
 - * As of the delivery date of the product to the consumer, within one year, provided that the determined warranty period is valid; the same failure recurs more than twice, or different failures occur more than four times, or total of different failures within the determined warranty period is more than six, and also if these failures prevent benefiting from the product continuously;
 - * The required maximum repair period is exceeded;
 - * It is determined that the defect cannot be remedied with a report prepared by the service station of the company, and if a service station is not available, by any one of the product's seller, distributor, agency, representative, importer or manufacturer, respectively; the consumer may request the replacement of the product free of charge or return of the cost or a discount in the cost at the rate of defect.

WARRANTY

WARRANTY CERTIFICATE

MANUFACTURING COMPANY

TITLE **ELCİ ELEKTRONİK KLİMA SANAYİ VE TİCARET LTD. ŞTİ.**

ADDRESS İVEDİK ORGANİZE İNDUSRIAL REGION WOOD WORKING SITES
1354. STREET. 1357. Qr.NO: 30 YENİMAHALLE / ANKARA / TÜRKİYE

TELEPHONE +90 312 395 53 53 (PBX)

FAX +90 312 395 18 86

PRODUCT

TYPE REFRIGERANT RECOVERY RECYCLE RECHARGE MACHINE

BRAND STARKA

MODEL STR-MAX

SERIAL NUMBER

PLACE AND DATE OF DELIVERY

WARRANTY PERIOD

MAXIMUM REPAIR PERIOD 30 WORKING DAYS

DEALER OR DISTRIBUTOR COMPANY

TITLE

ADDRESS

TELEPHONE

FAX

INVOICE DATE AND NUMBER

SUGGESTION

GASES AND OILS RECOMMENDED BY THE MANUFACTURER;

Refrigerant:

- Tazetti
- Fine
- Solkane
- Edge
- Arkema
- Honey well
- Chemours

Compressor oils:

- ELCi POE oil (special oil for hybrid and electric vehicles)
- ELCi Air condition oil PAO 68
- ELCi PAG 46 Air condition oil (1234yf)

Vacuum pump oil:

- ELCi vacuum pump oil
- VALUE vacuum pump oil