VOLKSWAGEN
AKTIENGESELLSCHAFT


# Betriebsanleitung

**VAS 531 011**

# Operations manual

**VAS 531 011**

# SUMMARY (US)

# VAS 531 011 TECHNICAL MANUAL

This document is **revision 01** of the **VAS 531 011** technical manual.

**Issue Date:** 30/10/2020

Dear Customer,

We would like to thank you for choosing a TEXA product for your workshop.

We are certain that you will get the greatest satisfaction from it and receive a great deal of help in your work.

Please read through the instructions in this manual carefully and keep it for future reference.

Reading and understanding the following manual will help you avoid damage or personal injury caused by improper use of the product to which it refers.

TEXA S.p.A reserves the right to make any changes deemed necessary to improve the manual for any technical or marketing requirement; the company may do so at any time without prior notice.

This product is intended for use by technicians specialized in the automotive field only. Reading and understanding the information in this manual cannot replace adequate specialized training in this field.

The sole purpose of the manual is to illustrate the operation of the product sold. It is not intended to offer technical training of any kind and technicians will therefore carry out any intervention under their own responsibility and will be accountable for any damage or personal injury caused by negligence, carelessness, or inexperience, regardless of the fact that a TEXA S.p.A. tool has been used based on the information in this manual.

Any additions to this manual, useful in describing the new versions of the program and new functions associated to it, may be sent to you through our TEXA technical bulletin service.

This manual should be considered an integral part of the product to which it refers. If it is resold the original buyer is therefore required to forward the manual to the new owner.

Reproduction, whole or in part, of this manual in any form whatsoever without written authorization from the manufacturer is strictly forbidden.

The original manual was written in Italian, every other language is a translation of the original manual.

# 1LEGEND OF THE SYMBOLS USED

The symbols used in the manual are described in this chapter.

| | |
|---|---|
|  | Toxic material hazard |
|  | Explosive material hazard |
|  | Electric shock hazard |
|  | Electromagnetic field hazard |
|  | Flammable material hazard |
|  | Hot surface hazard |
|  | Corrosive substance hazard |
|  | Risk of noise level above 80 dbA |
|  | Moving Parts Risk |
|  | Risk of crushing hands |
|  | Floor level obstacle warning |
|  | Laser beam hazard |
|  | General Risk |
|  | Read instructions |

| | |
|---|---|
| **DANGER** | This is not a safety symbol.<br>It indicates a hazardous situation which, if not avoided, will result in serious permanent injury or death. |
| **WARNING** | This is not a safety symbol.<br>It indicates a hazardous situation which, if not avoided, may result in serious permanent injury or death. |
| **CAUTION** | This is not a safety symbol.<br>It indicates a hazardous situation which, if not avoided, may result in minor injury. |
| ***NOTICE*** | This is not a safety symbol.<br>It indicates a hazardous situation which, if not avoided, may result in material damage. |
| **INFORMATION** | This is not a safety symbol.<br>It indicates important information. |

The technology used for the design and manufacturing control of the service stations for vehicle cooling systems makes them simple, reliable and safe to use.

The personnel in charge of using the service stations are required to follow the general safety rules, use the **VAS 531 011** service stations for their intended use only, and carry out the maintenance as described in this manual.

The manufacturer declines any responsibility deriving from an improper use of this product that is not within its destination of use, of a workspace that is not appropriate or that does not meet the safety regulations and the procedures described here within.

## *2.1 Glossary*

- **Equipment: any VAS 531 011** *service station.*
- **Operator:** *qualified technician, in charge of carrying out service operations on vehicles.*
- **Coolant fluid:** *mixture of water and glycol (ethylene or propylene).*
- **Refill:** *phase in which the fluid is inserted in the cooling system, in the amount indicated by the manufacturer.*
- **Discharge:** *phase in which the fluid contained in the cooling system is drained.*
- **Cooling system:** *system that allows adjusting the temperature in the essential components of a vehicle.*
- **Vacuum:** *phase in which the fluid is drained from a cooling system by means of a pump.*
- **Safety sheet:** *technical document containing the necessary information on physical-chemical and toxicological properties, on hazards for people and the environment, and indications for a correct and safe handling of substances and mixtures.*

## *2.2 General Rules*

**The operator must have carefully read and fully understood all the information and instructions in the technical documents provided with the equipment.**

**If the operator is not able to read this manual, the operating instructions and safety indications must be read and discussed in the operator's native language.**

**⚠ CAUTION**

- *The operator that works on vehicles must have basic qualifications and knowledge of mechanics, automotive engineering, vehicle repair, and of the potential dangers that may arise during the vehicle maintenance operations.*
- *The operator must have fully read and understood the information and the instructions described in the technical documentation provided with the equipment.*
- *The operator must follow all the instructions provided in the technical documents.*
- *The operator must be completely clear-headed and sober and not take drugs nor drink alcohol before or when using the equipment.*
- *The operator is required to wear adequate Personal Protective Equipment (PPE) when using the equipment.*
- *The operator must not leave the equipment unattended during the operating phases, in compliance with the safety measures indicated in this manual.*
- *Should any failure arise, the operator must stop using the equipment immediately and contact the authorized assistance center.*
- *Do not remove or damage the labels/tags and the warnings on the equipment; do not in any case make them illegible.*
- *Do not remove or tamper with any safety devices the equipment is provided with.*
- *If the power cable is damaged, it must be replaced by the manufacturer, its technical assistance service or similar qualified person, so as to prevent any risks.*
- *The operator is prohibited from CARRYING OUT ANY OPERATION NOT EXPRESSLY REQUESTED AND INDICATED.*
- *For repairs, adjustment changes, and any maintenance operation on the equipment, please refer to the authorized assistance center.*

**⚠ WARNING**

- *The equipment can be used by children aged 8 years and above and persons with reduced physical, sensory or mental capabilities, or lack of experience or necessary knowledge, as long as they are supervised or given instructions concerning the safe use of the equipment and understand the hazards involved.*
- *Children must not play with the equipment.*
- *Cleaning and maintenance must not be carried out by children without supervision.*

**⚠ WARNING**

**Using and handling coolant fluids exposes to serious risks for your health.**

**Swallowing and inhaling coolant fluid is harmful to health.**

**If the coolant fluid comes into contact with the eyes, it may cause even serious visual disturbances.**

**For information on hazards, personal protective equipment, first aid measures, and storage, please refer to the safety sheet provided with the coolant fluid.**

**Safety Precautions:**

- *Use the equipment in well-ventilated environments only.*
- *Be very careful while handling the coolant fluid.*
- *Avoid inhaling coolant fluid; use suitable protective equipment, such as masks, when necessary.*
- *Avoid swallowing coolant fluid.*
- *Wear suitable protective equipment, such as safety glasses, masks and gloves, that prevent direct contact with the coolant fluid.*
- *For the mixture of glycol with another fluid (e.g. distilled water) in the correct percentages, please refer to the indications of the vehicle manufacturer.*

**⚠ CAUTION**

**Given the high temperatures reached, physical contact with the coolant fluid may cause serious burns.**

**For information on hazards, personal protective equipment, first aid measures, and storage, please refer to the safety sheet provided with the coolant fluid.**

**Safety Measures:**

- *Wear suitable protective equipment, such as safety glasses, masks and gloves, that prevent direct contact with the coolant fluid.*
- *Operate on the vehicle after a sufficient time that allows the fluid to cool down.*
- *Make sure the hoses are positioned correctly and do not allow any residual fluid to leak.*
- *For the mixture of glycol with another fluid (e.g. distilled water) in the correct percentages, please refer to the indications of the vehicle manufacturer.*

**⚠ WARNING**

**The fluid is easily flammable.**

**Vapors emitted from the combustion of the fluid may generate explosions.**

**For information on hazards, personal protective equipment, first aid measures, and storage, please refer to the safety sheet provided with the coolant fluid.**

**Safety Measures:**

- *For the mixture of glycol with another fluid (e.g. distilled water) in the correct percentages, please refer to the indications of the vehicle manufacturer.*
- *Do not use the equipment close to open flames, sparks or hot surfaces.*

**⚠ CAUTION**

**The equipment has a specific intended use and was designed and manufactured for a specific method of use.**

**Any other use that differs from the ones indicated in this manual expose to the risk of damages and injuries.**

**Safety Measures:**

- *Use the equipment only in compliance with its intended use.*
- *Use the equipment only based on the modes described in this manual.*
- *Do not use hoses, couplers or other accessories that differ from the ones indicated in this manual.*

**DANGER**

**High-voltage current runs inside the equipment.**

**The operator working on the vehicle and the equipment may come into contact with potentially electrically live components.**

**Coming into contact with this voltage exposes to the risk of severe injuries.**

**Damaged equipment and cables may generate electric shock hazards caused by direct or indirect contact.**

**Safety Measures:**

- *Carry out the vehicle maintenance operations with the engine stationary.*
- *Avoid situations that may cause electrical hazards.*
- *The workshop's safety manager must inform and train the operator on the most correct and safe operations to carry out during maintenance.*
- *Place the equipment so that the plug and power switch can be easily reached by the operator.*

**WARNING**

**The current used during the operating phases may generate electromagnetic fields (EMF) near the equipment.**

**Even though of low intensity, these fields may interfere with medical prostheses, such as pacemakers.**

**Safety Measures:**

- *Keep away from the equipment after launching the service procedures.*
- *If you have a medical prosthesis (e.g.: pacemaker), check with your doctor as to the appropriateness of using the equipment or being near it.*

**⚠ CAUTION**

**The service hose and power cable are long enough to operate safely on the equipment and the vehicle.**

**An incorrect use or failure to pay attention to the service hose and power cable may be a hindrance for the operator while moving and using the equipment or servicing the vehicle.**

**Safety Measures:**

- *The service hose and power cable must not be excessively tensioned or bent, tangled or blocked in any way.*

**⚠ WARNING**

**The equipment was designed to be sturdy and stable both while being moved and also during use.**

**However, you must be careful while moving the equipment and the vehicle.**

**Safety Measures:**

- *Do not tilt the equipment in any way.*
- *Do not step on the equipment.*
- *Do not hang loads that may compromise the stability of the equipment, causing it to tip over.*
- *Make sure the equipment is steadily positioned on the ground on its four wheels whenever it does not need to be moved.*
- *Avoid moving it on uneven surfaces.*
- *Move the equipment only using its handles.*
- *Do not enter the vehicle or hang on to it when it is lifted on the vehicle lift.*

**⚠ WARNING**

**The equipment was designed in compliance with the regulations in force, assessing and reducing the risk where present.**

**However, you should operate on the equipment and the vehicle with the utmost care and attention in order to avoid serious damage.**

**If the equipment gets wet or damaged, or comes into contact with liquids, this may cause short circuits, fire, material damage or serious injury.**

**Safety Measures:**

- *Only use the coolant fluid indicated by the vehicle manufacturer.*
- *For the mixture of glycol with another fluid (e.g. distilled water) in the correct percentages, please refer to the indications of the vehicle manufacturer.*
- *Make sure you use the correct coolant fluid for the vehicle you are working on.*
- *Connect the hoses correctly.*
- *Disconnect the hoses with extreme caution as they may contain high-temperature coolant fluid.*
- *It is absolutely forbidden to tamper with the calibration of the safety valves and the control systems.*
- *Do not open or disassemble the equipment unless it is strictly necessary.*
- *Do not expose the equipment to direct sunlight, rain, water jets, and bad weather conditions.*
- *Do not use the equipment if wet or damaged.*
- *Do not leave the equipment connected to the power supply if you do not intend to use it immediately.*
- *Do not use corrosive chemicals, solvents or harsh detergents to clean the equipment.*
- *If needed, follow the emergency shutoff and securing procedure of the equipment.*

**NOTICE**

**The equipment was designed to be used in specific environmental conditions.**

**Using the equipment in environments with temperatures and humidity that differ from those indicated in this manual may impair its effectiveness and efficiency.**

**Safety Measures:**

- *Place the equipment in a dry area.*
- *Do not expose or use the equipment near heat sources.*
- *Place the equipment where it can be properly ventilated.*

## *2.5* Coolant fluid storage

**WARNING**

**The coolant fluid removed from a vehicle must be handled with caution, in order to prevent and reduce the possibility of damaging people and things.**

**For information on hazards, personal protective equipment, first aid measures, and storage, please refer to the safety sheet provided with the coolant fluid.**

**Safety Precautions:**

- *Be very careful while handling the coolant fluid.*
- *Wear suitable protective equipment, such as safety glasses, masks and gloves, that prevent direct contact with the coolant fluid.*
- *For the mixture of glycol with another fluid (e.g. distilled water) in the correct percentages, please refer to the indications of the vehicle manufacturer.*
- *The containers must be marked clearly in order to identify the coolant fluid inside them.*

## *2.6* Equipment Safety Devices

The **VAS 531 011** service stations are equipped with the following safety devices:

- **Emergency button:** *it allows cutting off the power supply from the mains in case of emergency or in order to carry out maintenance operations.*
- **Overpressure valve:** *the sensor inside the valve detects the amount of fluid present; in the event of a fault or malfunction, if the detected quantity is above the maximum limit allowed, the safety valves will close, preventing the coolant fluid from damaging the equipment.*
- **Level switch:** *it allows measuring the level of fluid contained in the tanks.*

**NOTICE**

*Tampering with the above mentioned safety devices is strictly forbidden.*

# 3ENVIRONMENTAL INFORMATION

| | |
|---|---|
|  | Do not dispose of this product with other undifferentiated solid waste.<br>For information on the disposal of this product please see the pamphlet supplied. |

## Simplified EU Declaration of Conformity

| | |
|---|---|
| CE | The manufacturer, TEXA S.p.A., declares that the **VAS 531 011** service station is compliant with the following directives:<br>• *PED 2014/68/UE*<br>• *2006/42/EC*<br>• *LVD 2014/35/UE*<br>• *RoHS 2011/65/EU*<br>• *EMC 2014/30/UE*<br>The full text of the EU declaration of conformity is available by contacting TEXA S.p.A. |

# 5VAS 531 011 SERVICE STATION

The **VAS 531 011** service station is an equipment designed for servicing the vehicle cooling systems.

The systems use a coolant fluid composed of water and glycol in a variable percentage.

The **VAS 531 011** service station is used whenever it is necessary to:

- *drain the fluid from a vehicle cooling system;*
- *recharge the vehicle system with coolant fluid.*


The **VAS 531 011** service station can carry out the following operations in absolute safety and at top-level performance:

- *draining the coolant fluid;*
- *flushing with compressed air to help fluid draining;*
- *checking the hydraulic seal of the system with a pressure test and a vacuum test;*
- *charging the coolant fluid.*

The **VAS 531 011** service station is equipped with two tanks containing 28 liters (**7.396 gal**) each, placed in the rear part.

The tanks are clearly marked with **DRAIN** and **NEW**, to identify them easily.

The **DRAIN** tank is used to collect the coolant fluid drained from the vehicle cooling system.

The **NEW** tank is used to collect the coolant fluid with which the vehicle cooling system will be charged.

For the procedures managed by the **VAS 531 011**, the service hose used is 7 m long.

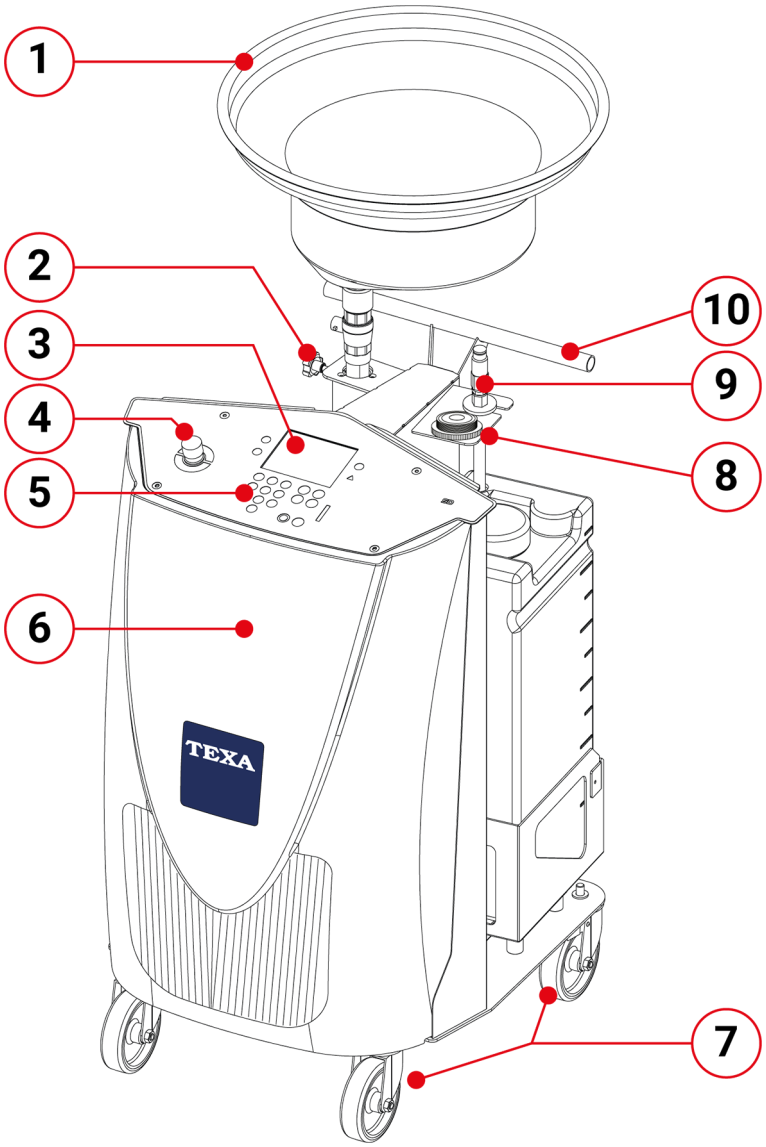
**INFORMATION** *Please refer to the information indicated in this manual for the correct connection and use of the service hose and accessories.*

The **VAS 531 011** service station is equipped with an **SD CARD** that contains the dedicated software.

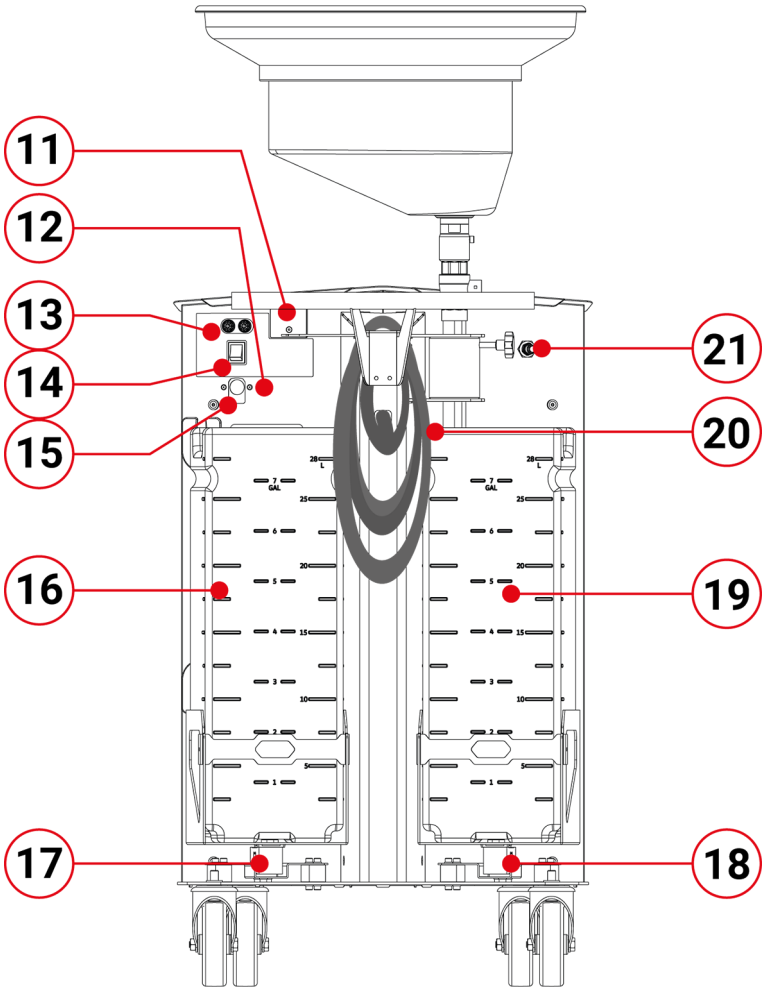
The **SD CARD** allows to automatically store the information of each service carried out.

The software update can be performed through the **SD CARD**.

## *6.1 References*

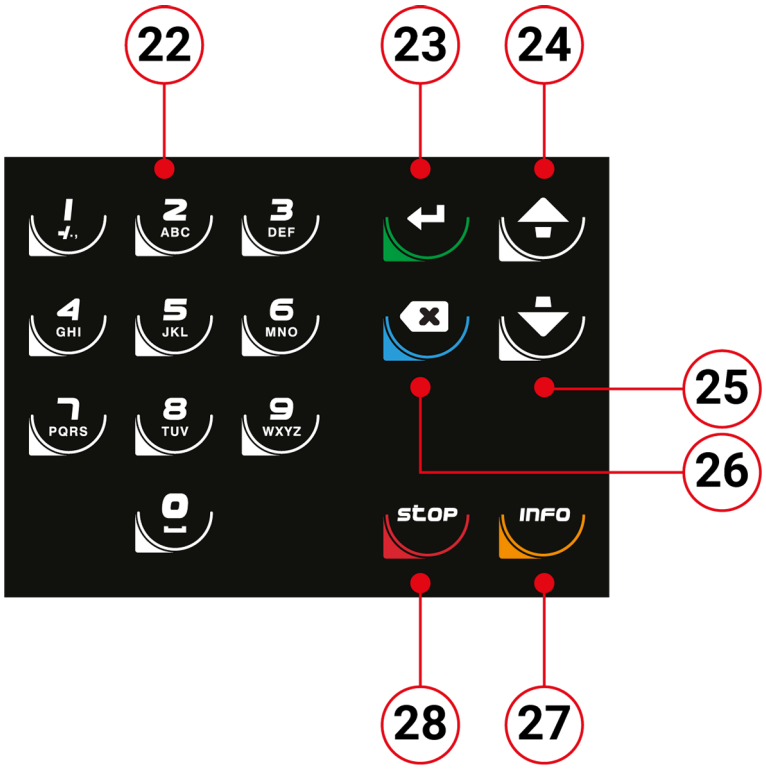



1.Hopper
2.Hopper tightening knob
3.TFT display
4.Emergency button
5.Keyboard
6.**VAS 531 011** station body
7.2 castors with brakes and 2 castors.
8.Coolant fluid expansion tank adapter
9.Service hose extension
10.Handle



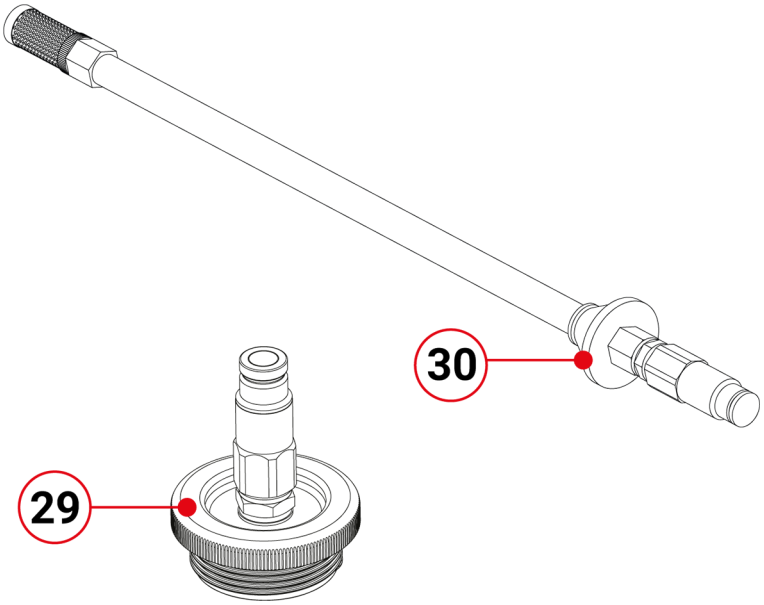

11.SD CARD housing
12.4÷20 mA output to connect equipment and customer's devices
13.Power protection fuses (*)
14.Main switch
15.Power cable connector
16.**NEW** tank
17.**NEW** tank scales
18.**DRAIN** tank scales
19.**DRAIN** tank
20.Service hose
21.Compressed air coupler

(*) The power fuses can only be replaced by the Authorized Assistance Center.




22.Alphanumeric keypad
23.ENTER button
24.UP ARROW button
25.DOWN ARROW button
26.BACK / CANCEL button
27.INFO button
28.STOP button

## *6.2 Accessories*

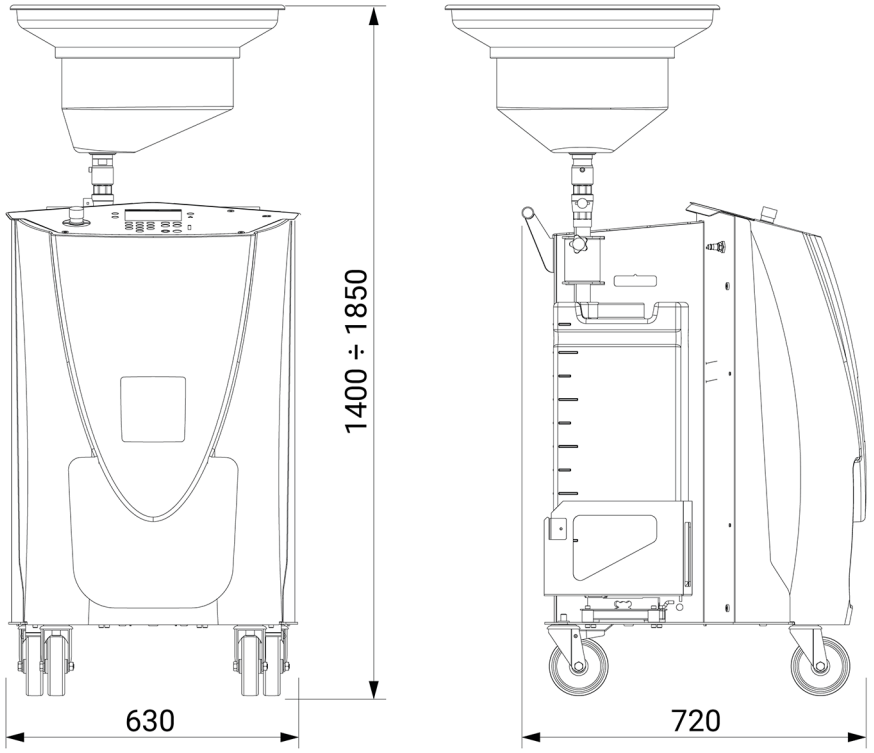
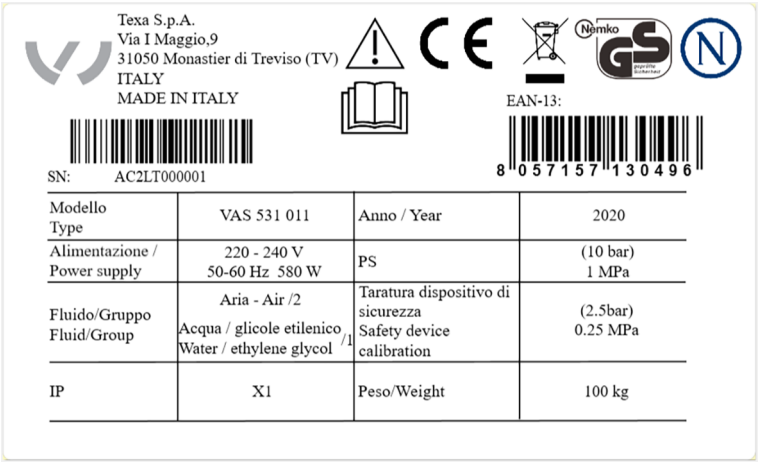



29.Coolant fluid expansion tank adapter

30.Service hose extension

# 7TECHNICAL FEATURES

| | | | |
|---|---|---|---|
| Manufacturer: | TEXA S.p.A. | | |
| Brand: | VAS | | |
| Product name: | **VAS 531 011** | | |
| Fluid / Group | Air / 2 - water/ethylene glycol / 1 | | |
| Power voltage and frequency: | 220 - 240 Vac<br>50-60 Hz | 110 - 120 Vac<br>60 Hz | 100 Vac<br>50-60 Hz |
| 12 Vdc power input: | 4 ÷ 20 mA output | | |
| Consumption: | 580 W | 500 W | 450 W |
| Protection level: | IPX1 | | |
| Protection level of equipment front: | IP4X | | |
| Maximum operating pressure: | (1 MPa) $10*10^5$ pascal | | |
| Safety device calibration | 0.25 MPa | | |
| Ambient temperature sensor resolution: | 1 °C | | |
| Pressure sensor: | 0.4 MPa | | |
| Electronic tank scales resolution: | ± 10g | | |
| Vacuum pump: | 100 l/min double stage | | |
| Memory capacity: | 16 Gb | | |
| Display: | TFT 5.7” | | |
| Service hose length: | 7 m | | |
| Filter elements: | 900 micron | | |

| | |
|---|---|
| Storage temperature: | -20 ÷ 60 °C without fluid |
| Sizes: |  |
| Weight: | 100 kg |
| Directives: | LVD 2014/35/UE<br>EMC 2014/30/UE<br>RoHS 2011/65/EU<br>PED 2014/68/EU<br>MD 2006/42/EC |
| Product standards: | LVD: IEC60335-1; UL60335-1;<br>CSA: C22.2 No. 60335-1;<br>EMC: IEC/EN61000-6-1; IEC/EN 61000-6-4; |
| Data plate (example): |  |

Texa S.p.A.
Via I Maggio,9
31050 Monastier di Treviso (TV)
ITALY
MADE IN ITALY

EAN-13: 8 057157 130496

SN: AC2LT000001

| | | | |
|---|---|---|---|
| Modello<br>Type | VAS 531 011 | Anno / Year | 2020 |
| Alimentazione /<br>Power supply | 220 - 240 V<br>50-60 Hz 580 W | PS | (10 bar)<br>1 MPa |
| Fluido/Gruppo<br>Fluid/Group | Aria - Air /2<br>Acqua / glicole etilenico<br>Water / ethylene glycol /1 | Taratura dispositivo di sicurezza<br>Safety device calibration | (2.5bar)<br>0.25 MPa |
| IP | X1 | Peso/Weight | 100 kg |

| | |
|---|---|
| Operating environment: | FOR INDOOR USE ONLY |

This chapter describes the operations required for preparing the equipment for use.

**⚠ WARNING**

**The installation must be performed only by professionally and technically competent personnel, carefully following the instructions provided in this manual.**

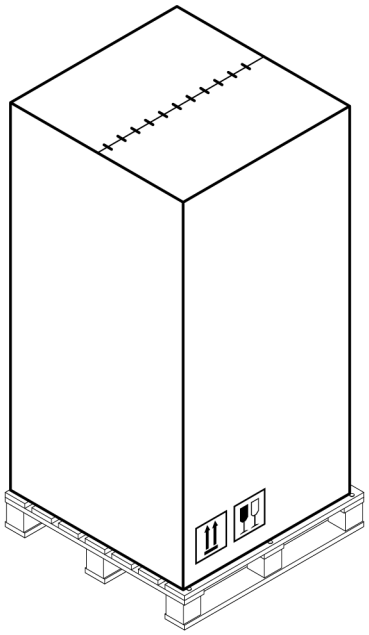
The equipment is provided with the following:

- *adapter for connection to the coolant fluid expansion tank;*
- *service hose extension;*
- *technical manual;*
- *documentation CD;*
- *protective cover for the equipment.*

## ***8.1*** *Unwrapping*

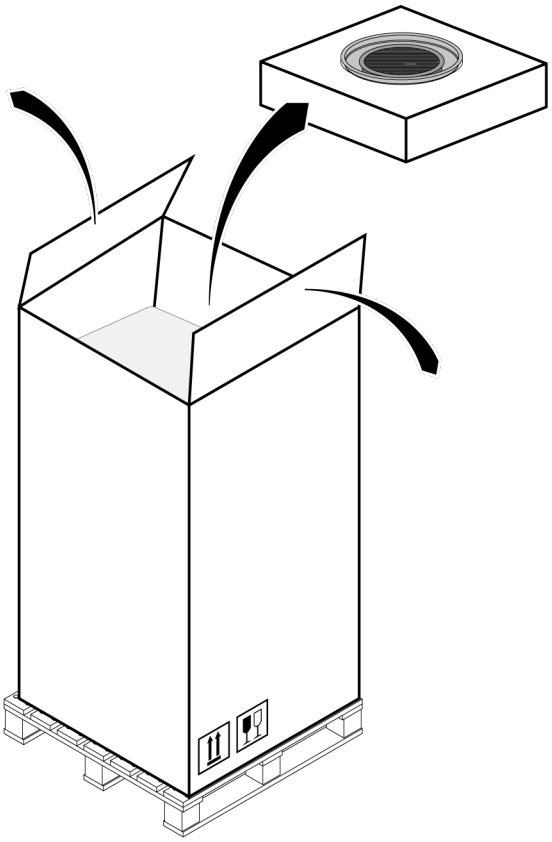
This chapter describes the instructions for unpacking the equipment.

1.Remove the staples.



2.Open the packaging.

3.Remove the accessory box contained in the packaging and place it on a stable surface.

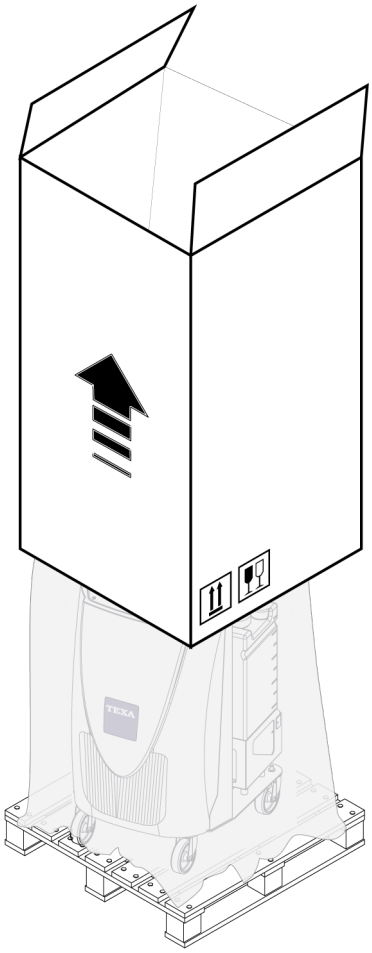


4.Remove the packaging from the equipment.

5.Remove any ties fastening the equipment.

6.Remove the air bubble packaging from the equipment.

7.Remove the equipment from the pallet, being very careful while moving it.

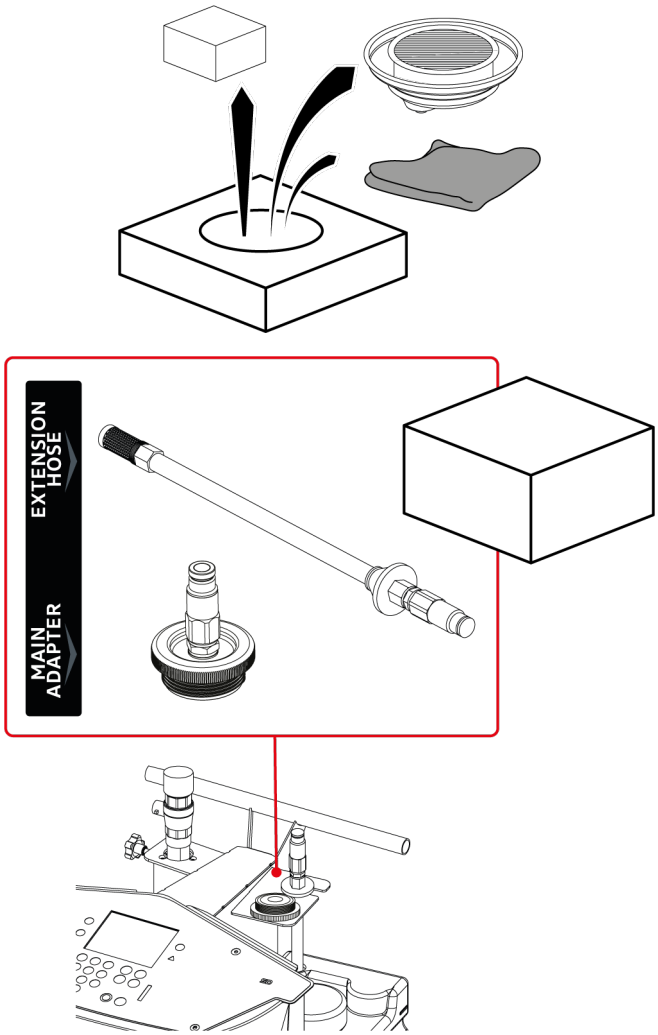


8.Open the accessory box.

9.Position the accessories in the specifically designed housings on the equipment.

10.Remove the protective cover from the packaging and store it.

The cover is provided to protect the equipment when it is not used, to protect it against dust, water, and weather conditions.




**INFORMATION**

*Make sure the equipment is in good conditions and that it has not been tampered with and/or damaged.*

*Make sure no parts are missing.*

*Dispose of the packaging, pallets and plastics properly.*

Proceed with the hopper assembly.

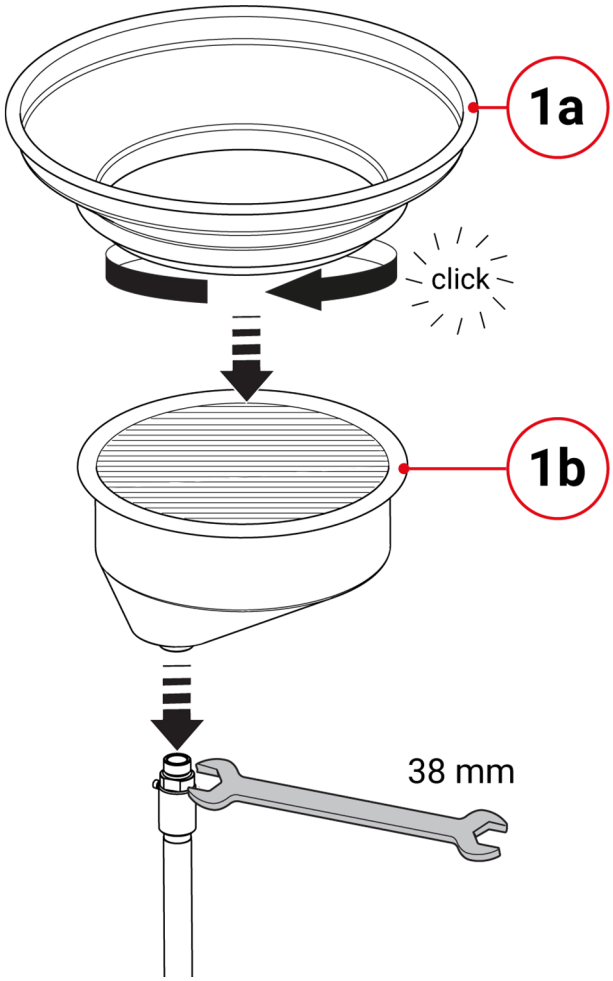
## *8.2 Hopper assembly*

The **VAS 531 011** service station uses an extendable hopper to collect the coolant fluid.

Before use, it must be assembled and fastened to the **VAS 531 011** service station.

Proceed as follows:

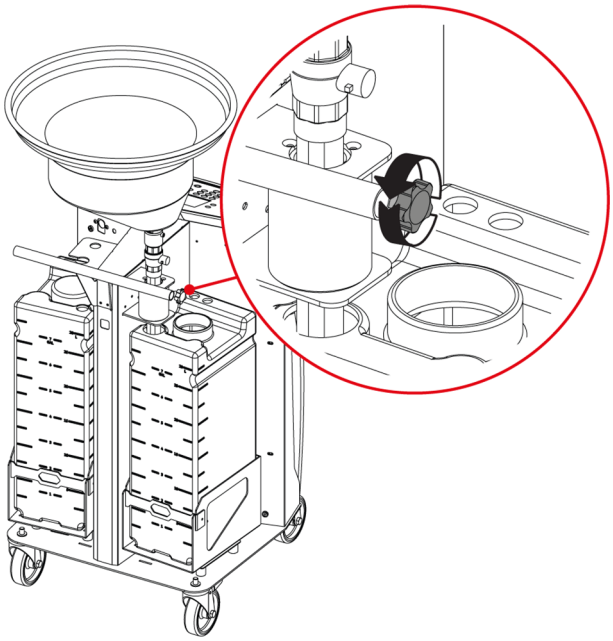
1. *Assemble the hopper's plastic parts [1a] [1b];*
2. *Turn the part [1a] on the funnel-shaped part [1b] until they lock together.*
3. *Assemble the two parts on the rod and tighten the bushing using a 38-mm wrench or a pipe wrench.*



## ***8.3*** *Hopper adjustment*

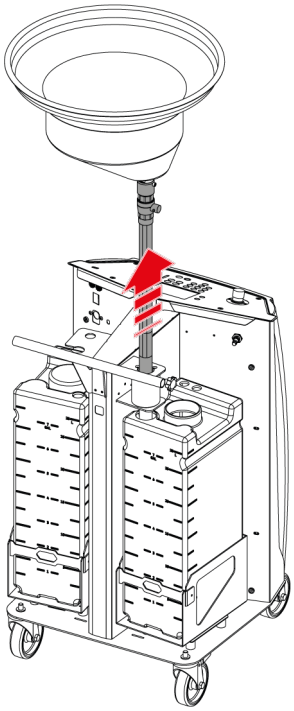
To adjust the hopper's height, proceed as follows:

1.Loosen the tightening knob on the rod.

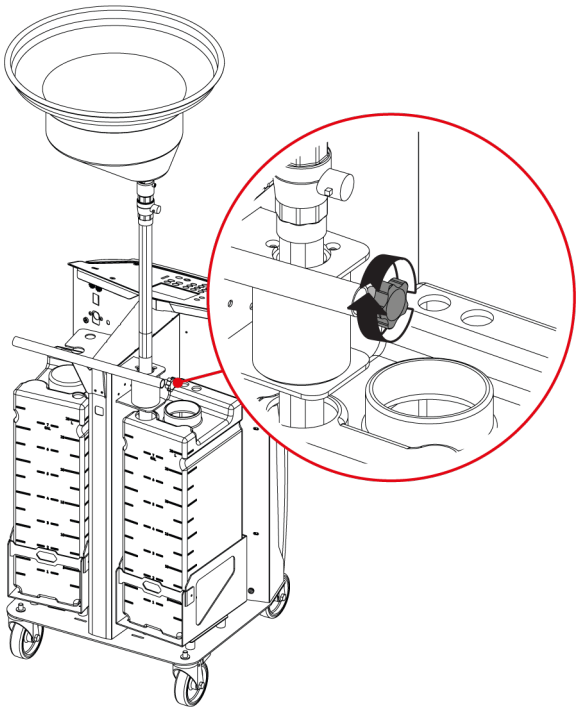


2.Raise and/or lower the hopper to the desired height.

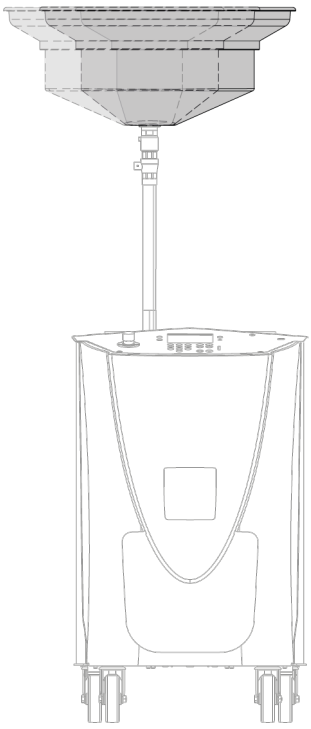
The maximum height that can be reached is 1850 mm.



3.Tighten the tightening knob so as to lock the hopper in the desired position.



The hopper can be rotated, to allow collecting the coolant fluid practically and safely.



**⚠ WARNING**

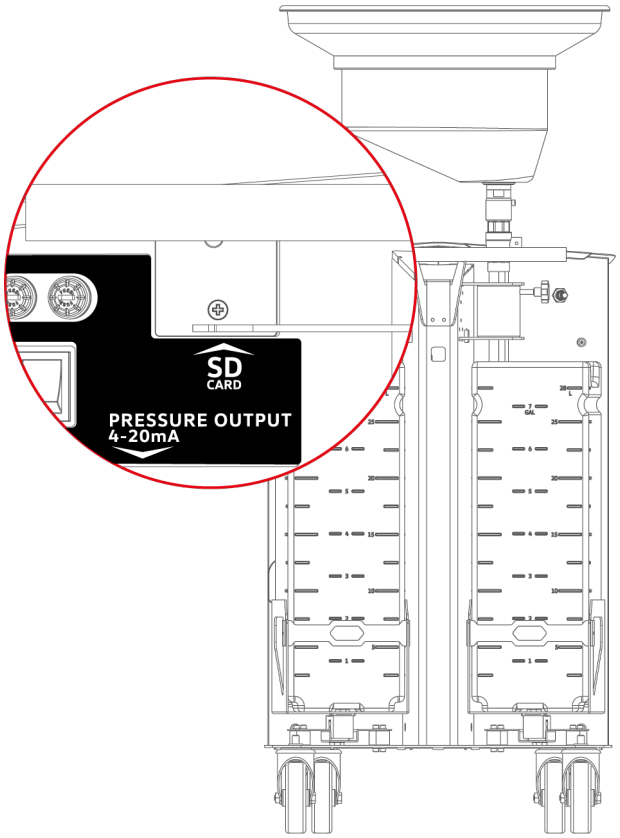
**Make sure the hopper is stable before starting any service.**

**Stability problems or sudden movements of the hopper may cause serious damage to the equipment and consequent spill of coolant fluid during the operating phases.**

## ***8.4*** *SD CARD*

The **SD CARD** contains the software that allows starting the equipment and perform emptying, testing and charging operations on the coolant fluid of a vehicle.

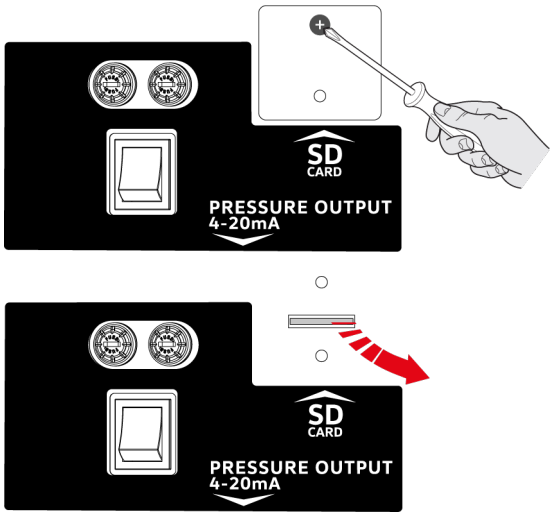
The software allows to automatically store each service carried out.




**NOTICE** *Make sure the SD CARD is inserted into the specific slot before use.*

If necessary, proceed as follows:

1. *Identify the* **SD CARD** *slot.*
2. *Unscrew the two screws fastening the protective cap and remove it.*
3. *Enter the* **SD CARD** *in the slot with the label facing upwards until you hear a soft click.*
4. *Place the protective cap back and screw the two screws.*



**⚠ CAUTION**

**Make sure the protective cap is secured and well closed.**

**The O-ring must be positioned correctly and must not be damaged in order to guarantee the equipment's IP protection level.**

The equipment must be connected to the mains through the specific power cable supplied; respect the applicable voltage and frequency values.

The applicable voltage and frequency values can be found on the tag located near the main switch.

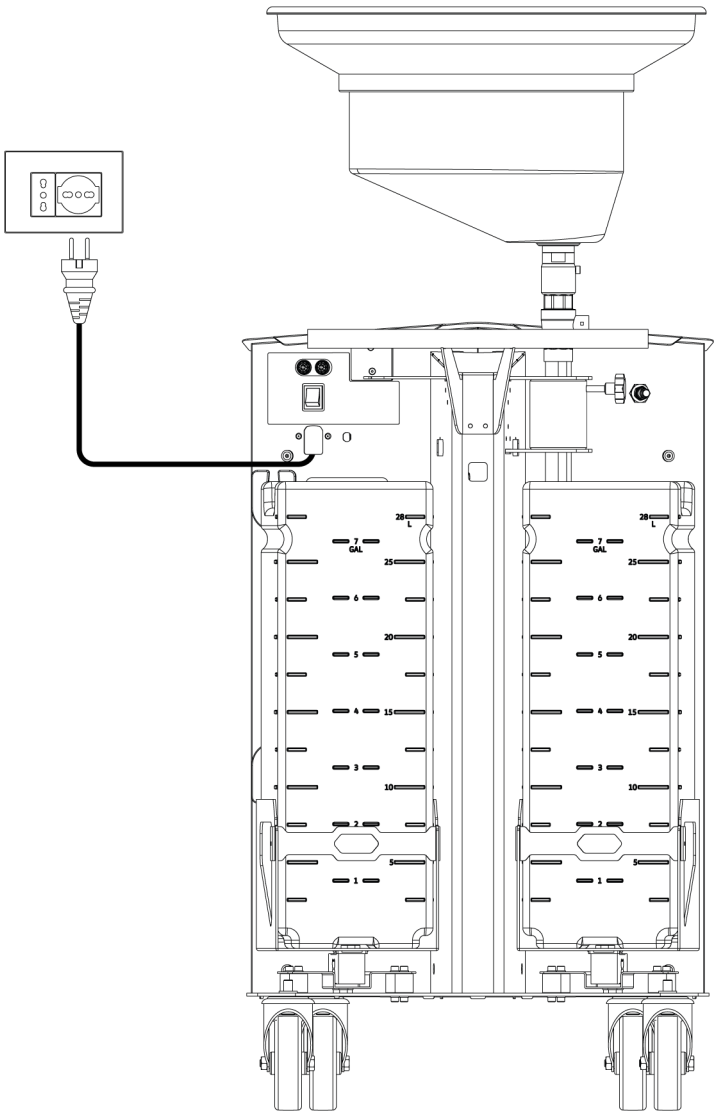
**⚠ WARNING**

**Connect the equipment to a power socket that can be easily accessed when necessary.**

**Make sure the power cable does not prevent the operator's movements, as well as the equipment handling and vehicle maintenance operations.**

Proceed as follows:

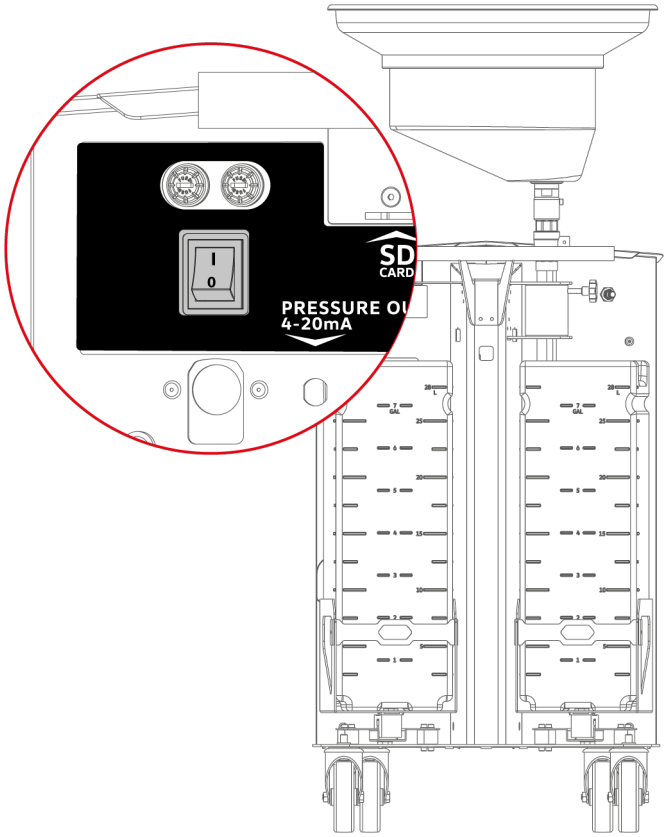
1. *Stand behind the equipment, on the left.*
2. *Unwind the power cable from its housing.*
3. *Connect the power cable to an earthed power socket.*



This chapter describes the operations required in order to start up the equipment.

## ***10.1*** *Switching on*

To start up the equipment, set the main switch in the **I** (ON) position.



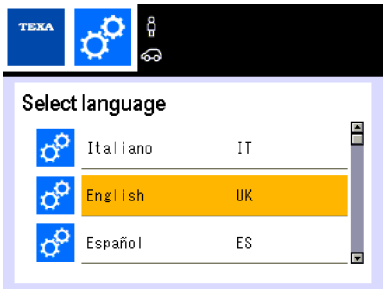

The display will turn on.

## ***10.2*** *Language Setup*

The software in the equipment can be displayed in different languages.
The languages available are stored in the **SD CARD**.
Italian is the default language.

**INFORMATION** *You must set the software's display language.*

This operation must be **carried out when the equipment is started for the first time**.



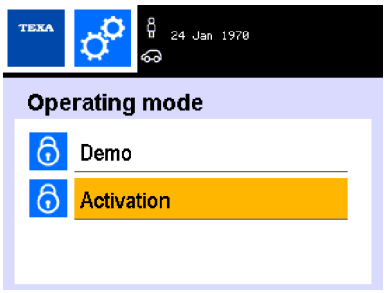

**INFORMATION** *The selected language can be changed at any time, follow the instructions provided in the Settings chapter.*

## *10.3 Activation*

The equipment has a demo mode (**Demo**).

The equipment can be used in **Demo** mode for a **maximum cycle of 15 power on-power offs**.

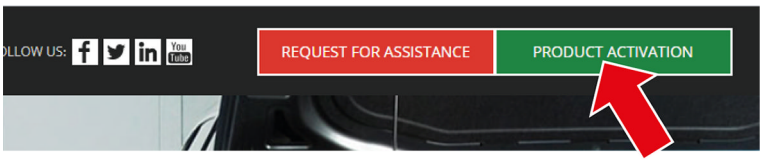
The equipment blocks automatically at the end of the cycle and can no longer be used.




To activate the service station, proceed as follows:

1.Visit the website eFluidVAS.texa.com

2.Press PRODUCT ACTIVATION.




3.Identify the **Serial Number** on the data plate.

The data plate can be found on the rear side of the equipment and on the packaging.

*An example of data plate is indicated in the image.*


4.Fill in the form by entering all the required data.

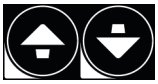
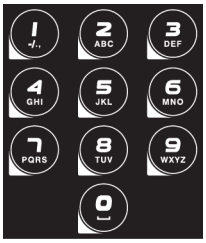
5.Enter the activation countercode provided by TEXA's assistance center in the software.

# 11USER SOFTWARE INSTRUCTIONS

The software used by the **VAS 531 011** stations allows starting all the functions required for the discharging, testing and charging services for coolant fluid in vehicles.

The keypad on the equipment's top panel acts as an operator-machine interface and allows selecting and launching all the functions available, entering specific data for the operation to carry out and, in general, completing all the operations allowed by the software.

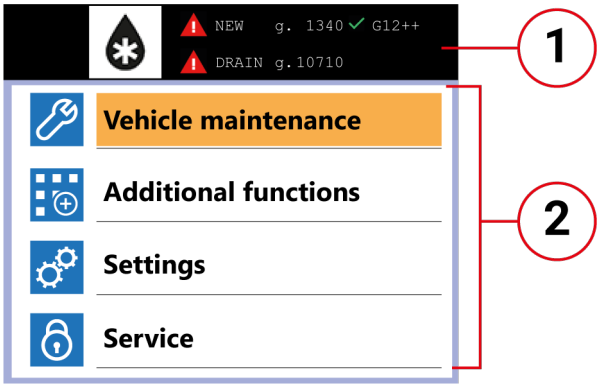
The software provides on-screen indications required in order to carry out the various operations and warns of any errors occurred during the phases.

| Key | Name | Function |
|---|---|---|
|  | ENTER | It allows confirming the selection made. |
|  | DELETE | It allows deleting data that has been entered. |
|   | STOP/BACK/CANCEL | It allows to instantly stop the phase in progress or go back to the previous menu. |
|   | INFO | It allows viewing specific additional information regarding the menu selected. |
|  | UP/DOWN ARROW | It allows scrolling the options in a menu. |
|   | NUMERIC KEYPAD | These keys allow entering the alphanumeric values required to carry out the operating phases and the data related to the customer and the company. |

**WARNING**

**In order to complete the various operations successfully, you must carefully follow the software indications, read and fully understand this manual.**

## *11.1* Display

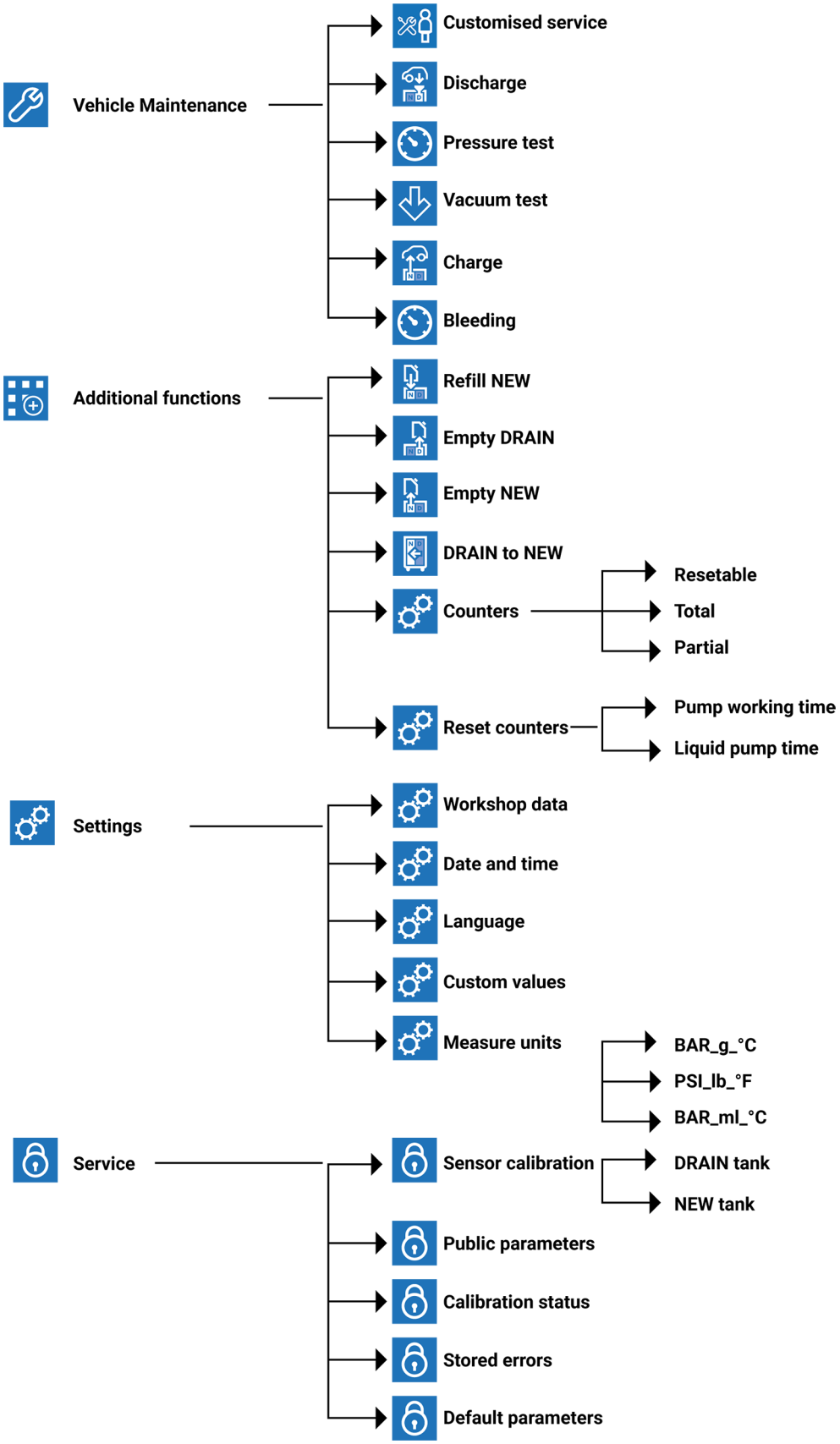



The display shows the following:

1.the tank data (quantity, type of fluid) or customer and vehicle data;

2.the menus and available selections.

## *11.2* Menu




This chapter provides the indications required to prepare a vehicle maintenance.

The service station is used when the following operations are required:

- *emptying the vehicle cooling system;*
- *flushing with compressed air to help the fluid drain from the vehicle cooling system;*
- *checking the hydraulic seal of the system with a pressure test and a vacuum test;*
- *recharging the vehicle system with coolant fluid.*

**⚠ WARNING**

**The operator must have read and fully understood the safety rules.**

**The equipment must be operated only by professionally competent personnel.**

**Be very careful while moving the equipment and the vehicle.**

*Wear suitable Personal Protective Equipment before starting to operate with the equipment.*

## ***12.1*** *Vehicle and equipment preparation*

**WARNING**

**Using and handling coolant fluids may expose to serious risks for your health.**

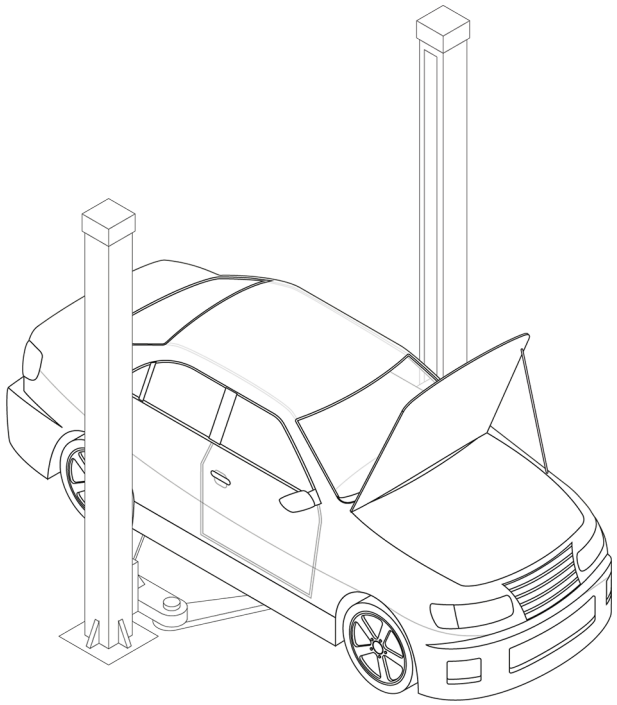
**Swallowing and inhaling coolant fluid is harmful to health.**

**For information on hazards, personal protective equipment, first aid measures, and storage, please refer to the safety sheet provided with the coolant fluid.**

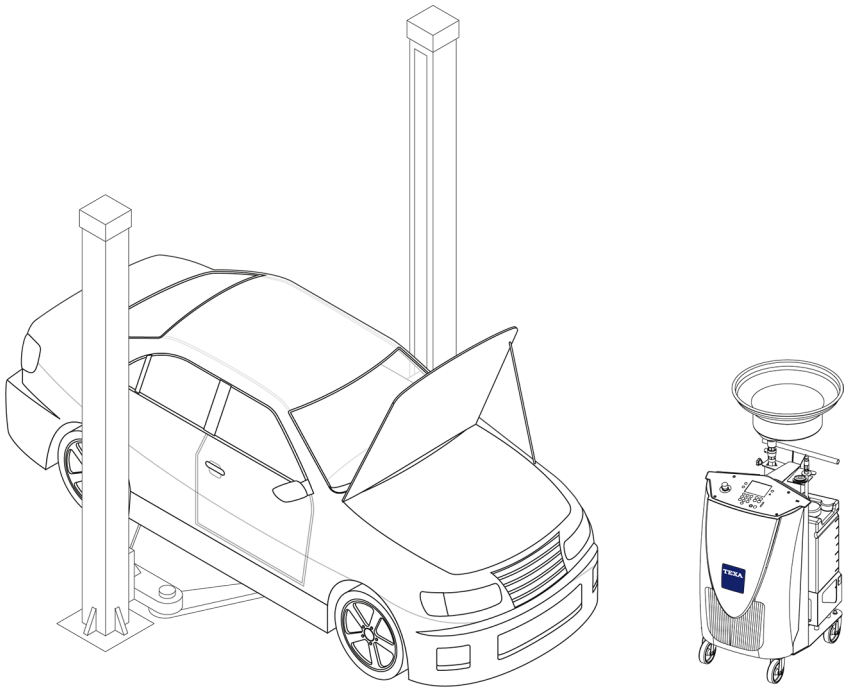
*Wear suitable Personal Protective Equipment before starting to operate with the equipment and on the vehicle.*

Proceed as follows:

1. Place the vehicle on the lift.
2. Open the hood.



3.Place the equipment close to the vehicle, in a position that is comfortable for the operator and does not compromise the maintenance operations.



4.Start the service.

**INFORMATION**

*Follow the indications provided by the software in the display.*

## *12.2 Discharging and flushing procedure*

### *12.2.1 Discharge*

This function allows emptying the vehicle cooling system.

**⚠ WARNING**

**Given the high temperatures reached, physical contact with the coolant fluid may cause serious burns.**

**The fluid is easily flammable.**

**Vapors emitted from the combustion of the fluid may generate explosions.**

**For information on hazards, personal protective equipment, first aid measures, and storage, please refer to the safety sheet provided with the coolant fluid.**

*Wear suitable Personal Protective Equipment before starting to operate with the equipment and on the vehicle.*

***For all the information on the type of coolant fluid, please refer to the manual provided with the vehicle.***

**⚠ CAUTION**

**Make sure there is enough room in the DRAIN tank.**

**The DRAIN tank has a capacity of approximately 28 liters (7.396 gal).**

**Even though the service station has automatic checks, make sure there is enough room in the DRAIN tank.**

**Otherwise, cancel the service and discharge the coolant fluid into specific containers for this purpose.**

**For further information, see the chapter: DRAIN tank emptying procedure of coolant fluid.**

**⚠ CAUTION**

**Before starting the service, charge the NEW tank with suitable coolant fluid.**

**The NEW tank has a capacity of approximately 28 liters (7.396 gal).**

**For further information, see the chapter: NEW tank filling procedure with coolant fluid.**

**⚠ CAUTION**

**The service hose must be never disconnected from the equipment.**

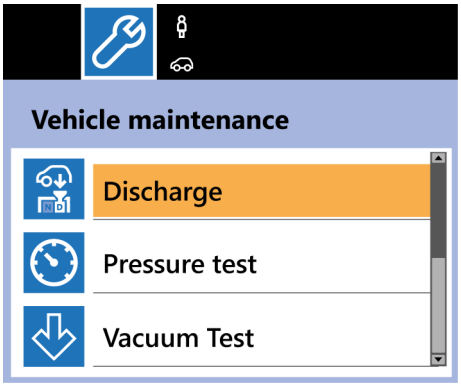
Proceed as follows:

1.Select **VEHICLE MAINTENANCE** from the main menu.

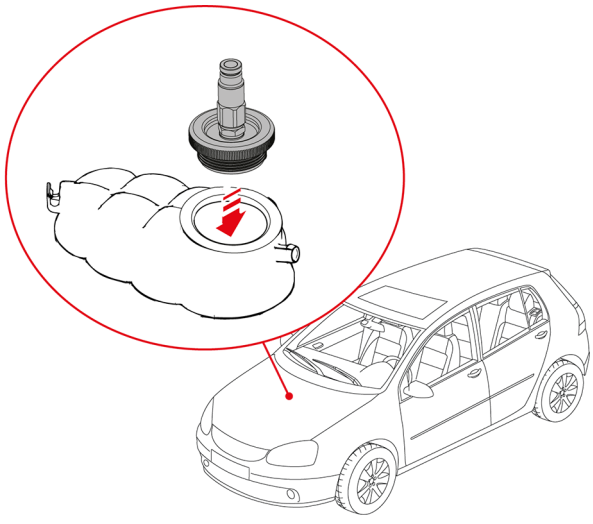
2.Press 

3.Select **DISCHARGE**.

4.Press 




5.Connect the supplied adapter to the coolant fluid expansion tank in the engine compartment.



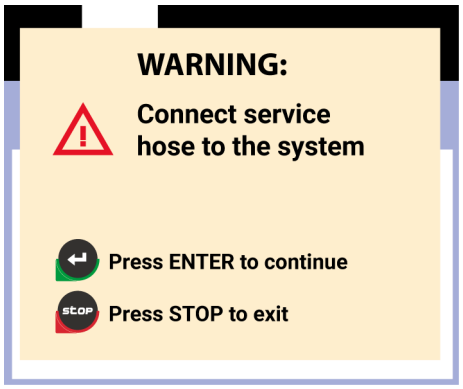
**⚠ WARNING**

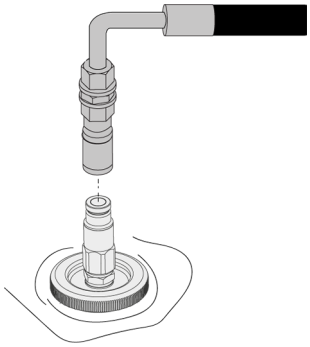
**Be very careful while handling the fluid.**

**The fluid may reach high temperatures that may cause severe burns.**

6.Connect the service hose to the adapter.

7.Press 

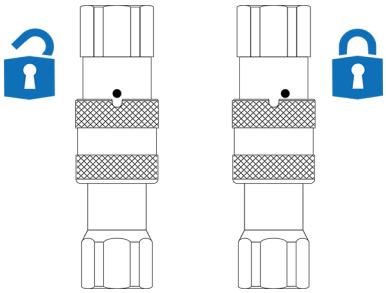


The service hose connector has a safety catch that, when rotated, prevents removing the service hose from the adapter.

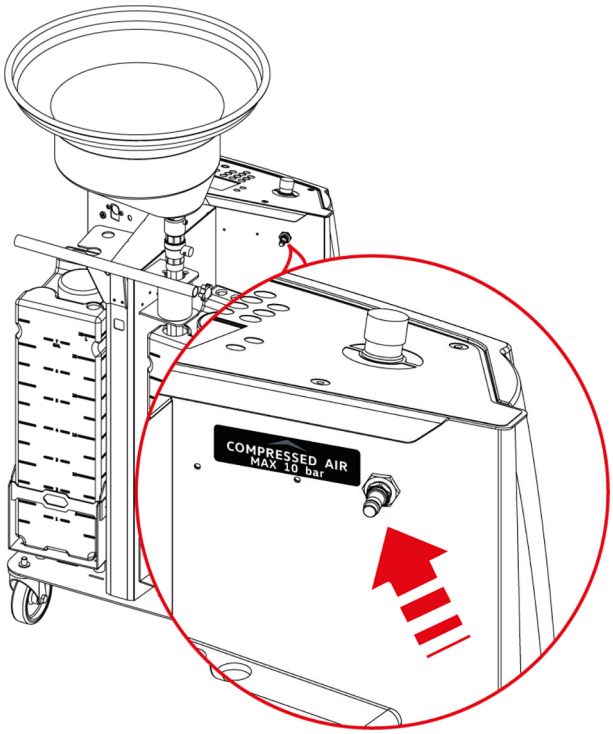
To unlock the safety catch, rotate the connector's ferrule.

The ball must be aligned with its housing.



8.Connect the workshop's compressed air system to the specific coupler on the equipment.

9.Press 





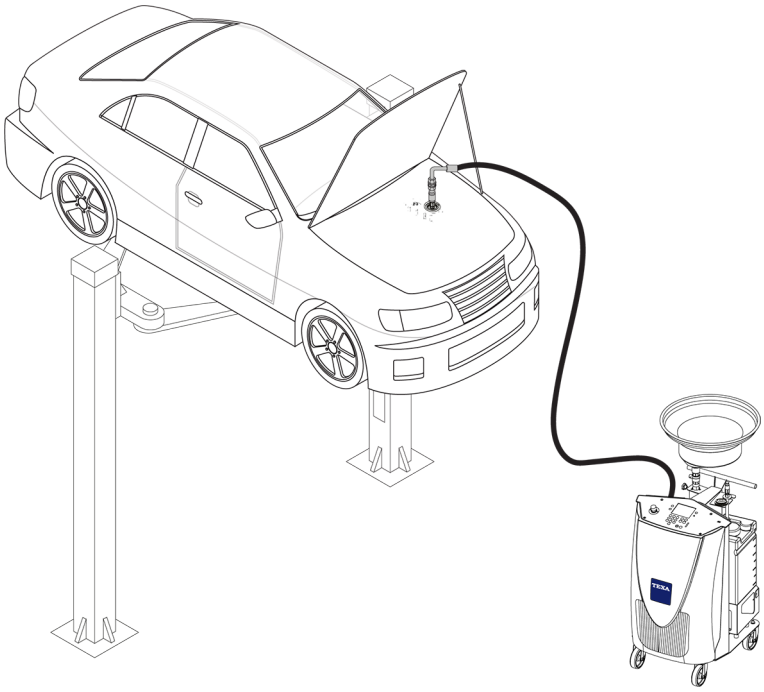
**⚠ WARNING**

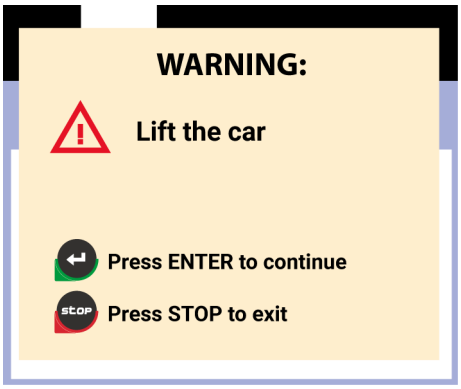
**The compressed air hose must not be excessively tensioned.**

**The hose must not be a hindrance for the operator or for moving the equipment.**

10.Lift the vehicle on the lift in order to work easily and comfortably below it.

11.Press 






**WARNING**

**Be careful while lifting the vehicle.**

**WARNING**

**Be very careful during the operating phases on the vehicle.**

**The fluid may reach high temperatures that may cause severe burns.**

**WARNING**

**The service hose must be free, not excessively bent nor blocked in any way.**

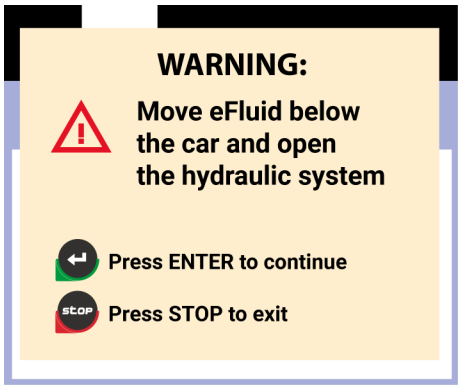
**The service hose must not be a hindrance for the operator or for moving the equipment.**

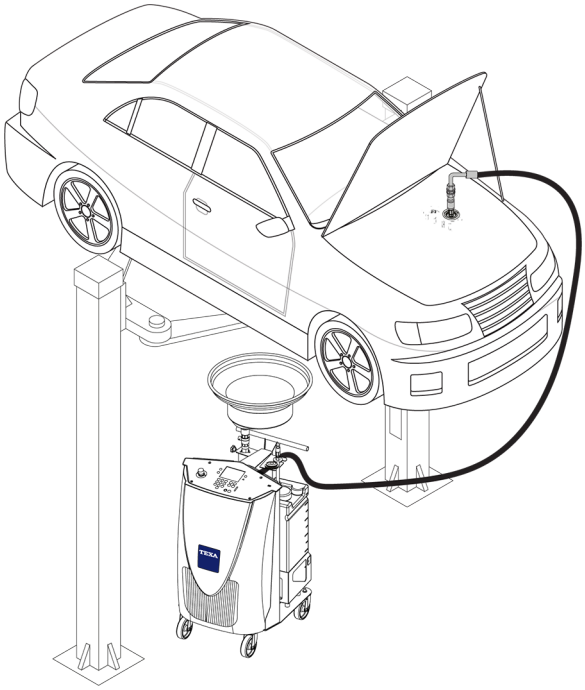
12.Remove the vehicle's lower protective cover (if necessary).

13.Move the equipment under the vehicle.

14.Lift and turn the hopper to a height that guarantees recovering the fluid in total safety.

To adjust the hopper, see the chapter PREPARING FOR USE.



**DANGER**

**Be very careful while operating on the vehicle.**

**Some vehicle parts may be electrically live.**

**WARNING**

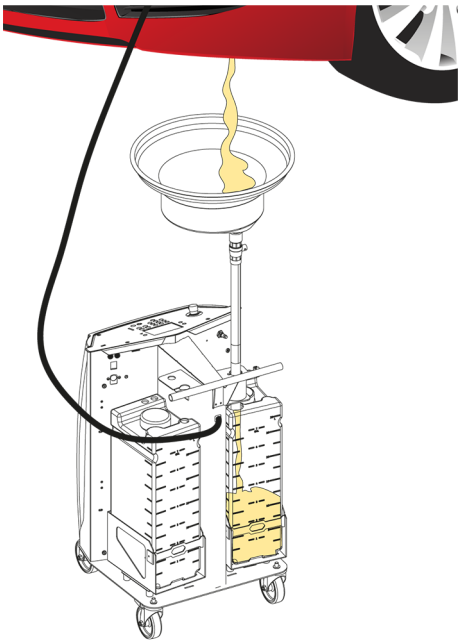
**Make sure the hopper is correctly and securely fastened before opening the cooling system.**

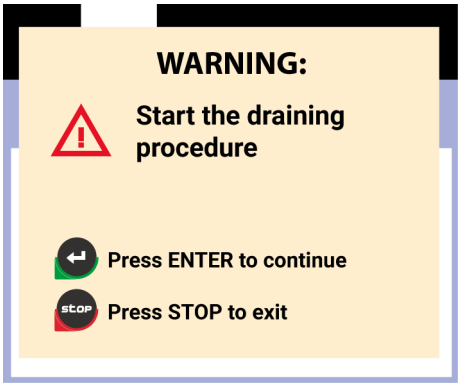
**Uncontrolled and sudden movements of the hopper compromise the operator's safety.**

15.Open the coolant fluid system.

16.Press 

The discharging phase begins.






The display shows the discharging progress.

During this procedure, the fluid flows out by gravity.

**WARNING**

**Visually check that the hopper is not dirty nor clogged in any way.**

**The fluid may reach high temperatures that may cause severe burns.**

The **DISCHARGING** phase can be repeated several times by pressing 

To move on to the **FLUSHING** procedure, press 

The discharging procedure ends automatically when the equipment detects that there is no more fluid to discharge.

**INFORMATION**

*By pressing STOP at any time the procedure ends and the display shows the main menu.*

*12.2.2 Flushing*

The flushing procedure allows discharging more coolant fluid from the system.

**DANGER**

**Avoid operating near power sockets or other electrically live equipment.**

**Any fluid spilled out may come into contact with the electrical parts.**

**WARNING**

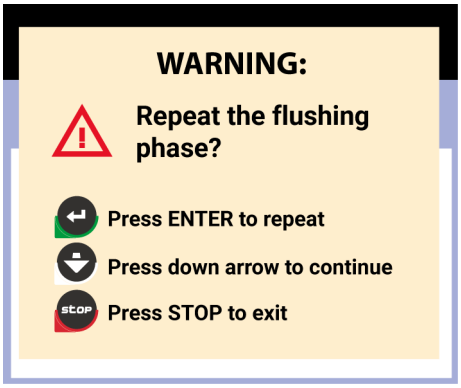
**Check the seal and fastening of the adapter on the coolant fluid expansion tank.**

The flushing procedure requires using compressed air connected to the coupler on the equipment.

To start the procedure, press 

The **FLUSHING** phase can be repeated several times by pressing 

To complete the **DISCHARGING** procedure, press 


When the flushing procedure is complete, the display shows the total value of coolant fluid discharged.

Proceed with the repair or maintenance on the vehicle.

**INFORMATION**

*By pressing STOP at any time the procedure ends and the display shows the main menu.*

## *12.3 Hydraulic seal pressure test*

This function allows running a pressure test procedure on the cooling system in order to check for leaks or damages in the system itself.


**Avoid operating near power sockets or other electrically live equipment.**

**Any fluid spilled out may come into contact with the electrical parts.**

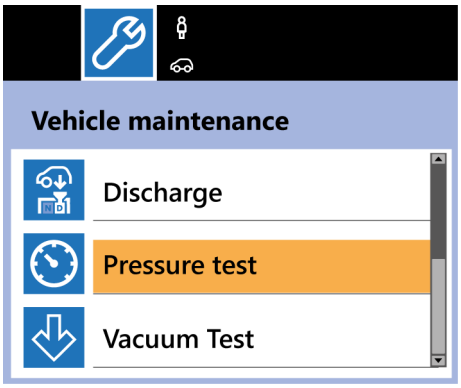
**Check the seal and fastening of the adapter on the coolant fluid expansion tank.**

1.Close the coolant fluid system.

2.Select VEHICLE MAINTENANCE from the main menu.

3.Press 

4.Select **PRESSURE TEST**.

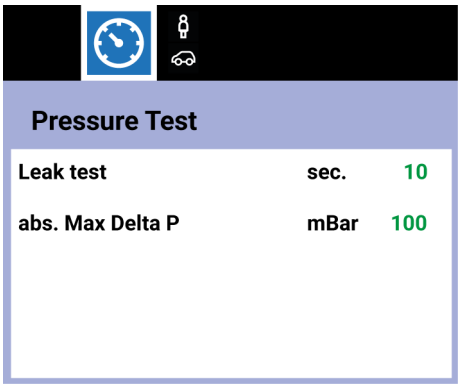



5.Press 

6.Enter the test time using the alphanumeric keypad.

7.Enter the maximum value of pressure difference desired.

Use the arrows  /  to move from a value to another.




8.Press 

The PRESSURE TEST begins.

When the test procedure is complete, the display shows the result, whether positive or negative.

**INFORMATION** *By pressing STOP at any time the procedure ends and the display shows the main menu.*

## ***12.4*** *Hydraulic seal vacuum test*

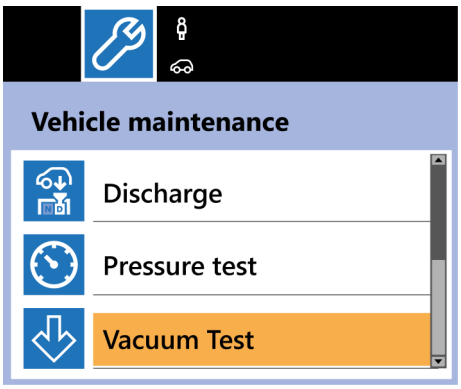
This function allows preparing the system for coolant fluid charging.

1.Select **VEHICLE MAINTENANCE** from the main menu.

2.Press 

3.Select **VACUUM TEST**.

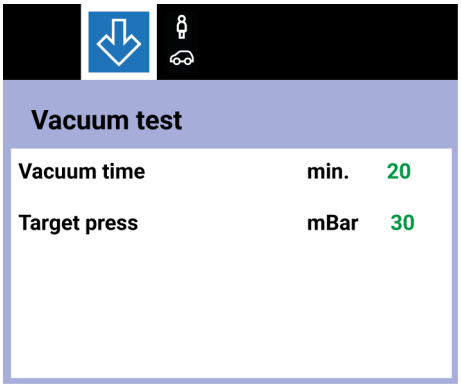
4.Press 




5.Enter the time required to carry out the test based on the system volume, as required by the manufacturer.

6.Enter the maximum pressure increase allowed during the test.

7.Press 

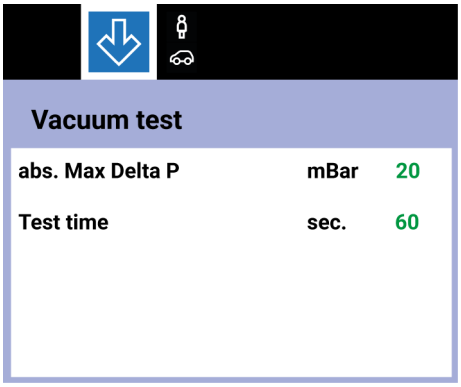



Use the arrows  /  to move from a value to another.

8.Enter the maximum value of pressure difference desired.

9.Enter the time required to carry out the test procedure.

10.Press 




Use the arrows  /  to move from a value to another.

The VACUUM TEST procedure begins.

When the test procedure is complete, the display shows the result, whether positive or negative.

**INFORMATION**

*By pressing STOP at any time the procedure ends and the display shows the main menu.*

## *12.5 Coolant fluid charging*

This function allows charging the vehicle cooling system with coolant fluid using the vacuum created by the VACUUM TEST.

**⚠ CAUTION**

**Before starting the service, make sure there is enough coolant fluid in the NEW tank to complete the procedure.**

**For further information, see the chapter: NEW tank filling procedure with coolant fluid.**

**⚠ WARNING**

**Only use the coolant fluid indicated by the vehicle manufacturer.**

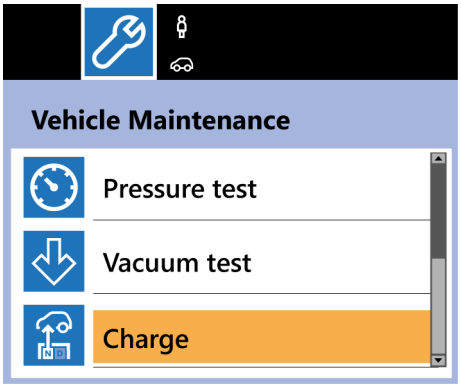
**The fluid is easily flammable.**

**Vapors emitted from the combustion of the fluid may generate explosions.**

**For information on hazards, personal protective equipment, first aid measures, and storage, please refer to the safety sheet provided with the coolant fluid.**

1.Select **VEHICLE MAINTENANCE** from the main menu.

2.Press 

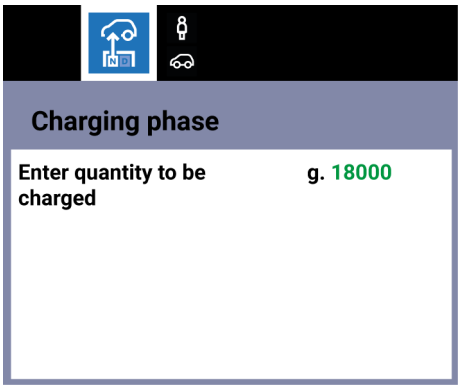



3.Select **SYSTEM CHARGE**.

4.Press 

5.Enter the amount of fluid that must be charged.

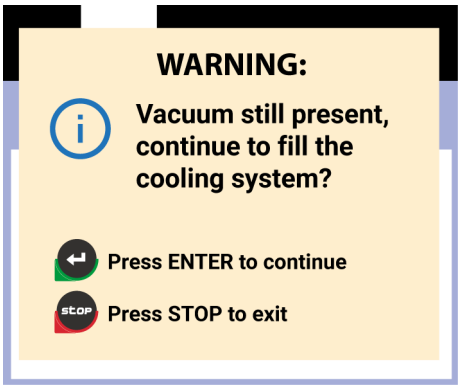
The display shows the maximum quantity that can be charged.




6.Press 

Once the charging procedure is complete, the service station detects and evaluates if more fluid can be charged.

If so, the operator can choose whether to charge more fluid or end the procedure.




To charge more fluid, press 

To complete the charging procedure, press 


When the charging procedure is complete, the display shows the amount of fluid charged.

Once the charging procedure is complete, the service station automatically starts cleaning the hoses.

**Follow the indications on screen and do not stop the procedure.**

**INFORMATION** *By pressing STOP at any time the procedure ends and the display shows the main menu.*

## *12.6 System bleeding procedure*

This function allows eliminating any air bubbles that may have been generated during the charging procedure.

The procedure is only used in combination with the specific software procedure in the customer's diagnostic tool.

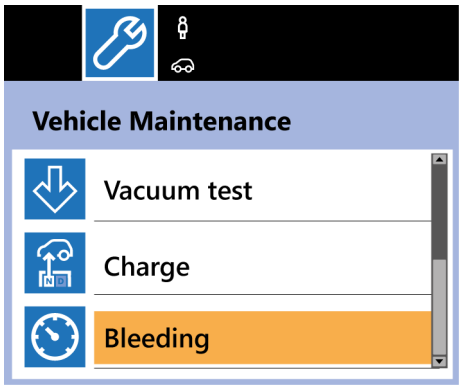
**The procedure is launched automatically at the end of the coolant fluid charging in the vehicle system if the CUSTOMIZED SERVICE is selected.**

If the procedure is selected individually, proceed as follows:

1.Select **VEHICLE MAINTENANCE** from the main menu.

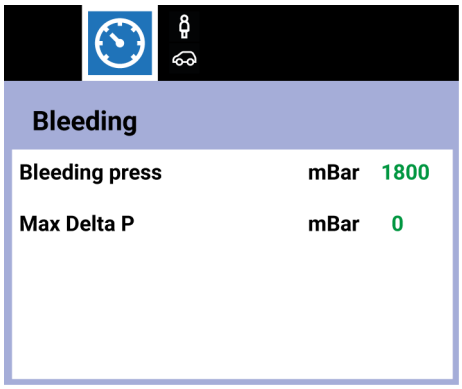
2.Press 

3.Select **SYSTEM BLEEDING**.




4.Enter the test pressure.

5.Press 

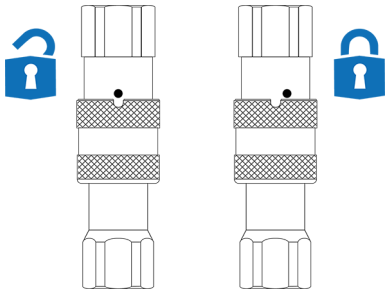



The procedure begins.

The time required to eliminate the bubbles from the system depends on the type of vehicle.

Press  to complete the procedure.

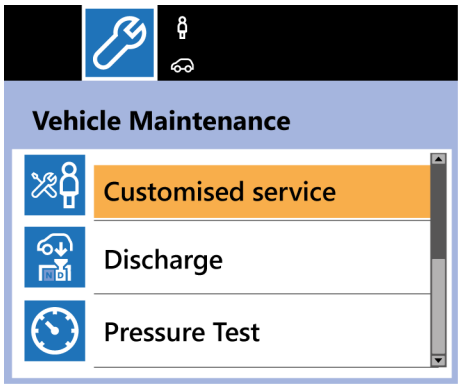
**⚠ CAUTION** **Make sure the service hose connector is not blocked and therefore preventing the hose removal from the adapter.**



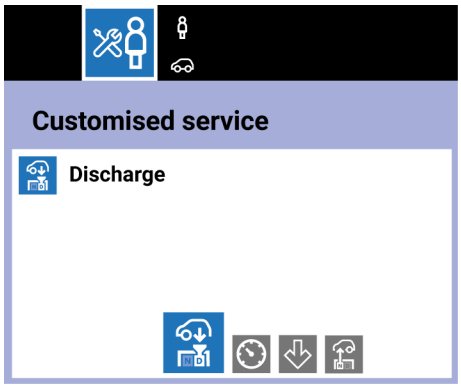
**INFORMATION** *By pressing STOP at any time the procedure ends and the display shows the main menu.*

## *12.7 Customized Service*

This function allows setting a complete maintenance service.




The procedures are the same as the ones described in the previous paragraphs.




| Icon | Name | Description |
|---|---|---|
| | System discharge | It allows discharging the coolant fluid from the vehicle system. |
| | Pressure test | It allows running a test procedure on the cooling system in order to check for leaks or damages in the system. |
| | Vacuum test | It allows preparing the vehicle cooling system for coolant fluid charging. |
| | System charge | It allows charging the vehicle cooling system with coolant fluid using the vacuum created by the vacuum test. |

In order to program a customized service, you must specify the time, mode and amount of fluid for each of the procedures you intend to carry out.

At the end of the programming, press  to start the cycle.

For each procedure, the following is required:

1. *To confirm that you wish to carry out the procedure, press*  *.*
2. *To skip the procedure and move on to the next one, press*  *.*

# 13ADDITIONAL FUNCTIONS

This menu allows accessing the additional functions in the equipment, such as:

- *coolant fluid filling into the* **NEW** *tank;*
- *coolant fluid emptying from the* **DRAIN** *tank;*
- *coolant fluid emptying from the* **NEW** *tank;*
- *coolant fluid transfer from the* **DRAIN** *tank to the* **NEW** *tank;*
- *counters reading;*
- *counters reset.*

**WARNING**

**The operator must have read and fully understood the Safety Rules.**

**The equipment must be operated only by professionally competent personnel.**

**Be very careful while moving the equipment and the vehicle.**

*Wear suitable Personal Protective Equipment before starting to operate with the equipment.*

**WARNING**

**Using and handling coolant fluids exposes to serious risks for your health.**

**For information on hazards, personal protective equipment, first aid measures, and storage, please refer to the safety sheet provided with the coolant fluid.**

*Wear suitable Personal Protective Equipment before starting to operate with the equipment and on the vehicle.*

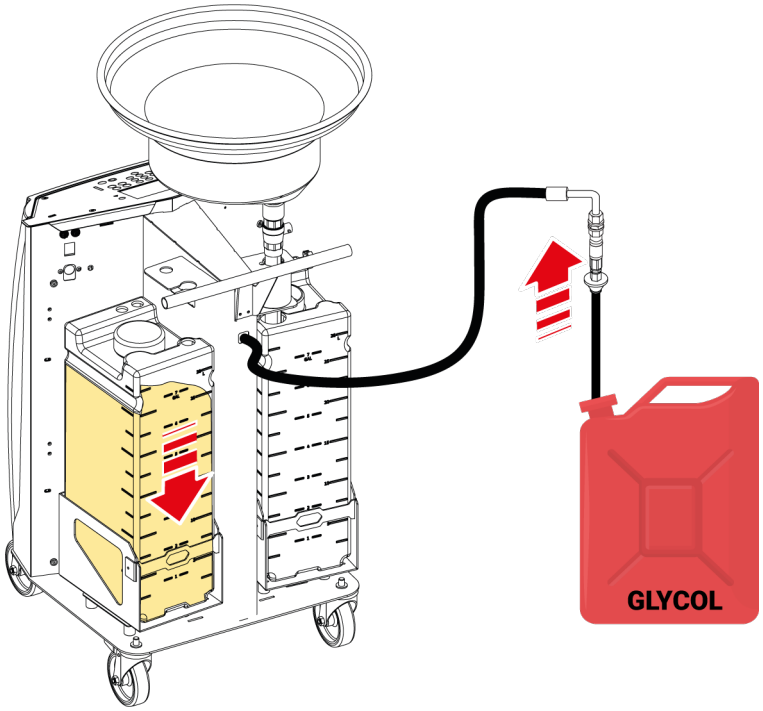
**INFORMATION**

*Follow the indications provided by the software in the display.*

## ***13.1** NEW tank filling procedure with coolant fluid*

This function allows charging the coolant fluid from its container into the **NEW** tank.

Each tank has a capacity of approximately 28 liters (**7,396 gal**).




**⚠ WARNING** **Only use the coolant fluid indicated by the vehicle manufacturer.**

***For the type of coolant fluid to use, please refer to the user manual provided with the vehicle.***

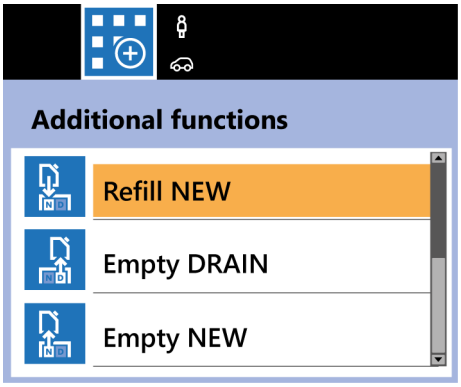
Proceed as follows:

1.Select **ADDITIONAL FUNCTIONS** from the main menu.

2.Press ↵

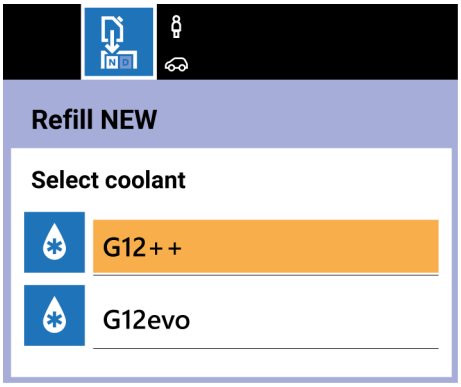
3.Select **REFILL NEW**.

4.Press ↵



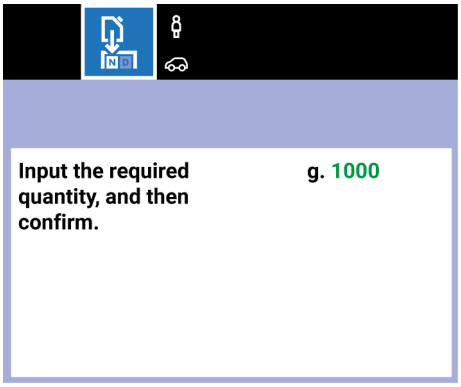
5.Select the type of fluid that must be used.

6.Press 



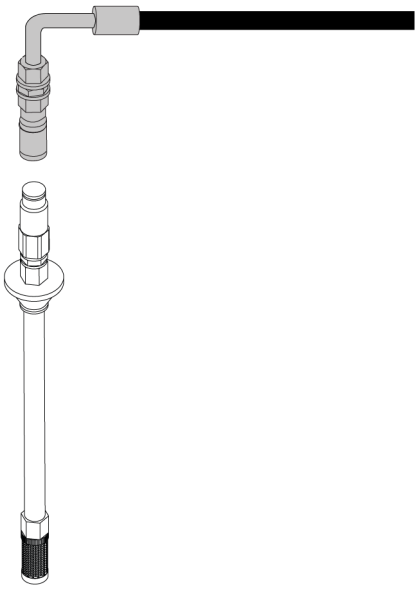

7.Enter the amount of fluid that must be charged, using the alphanumeric keypad.

8.Press 




9.Connect the supplied extension to the service hose.

10.Press 

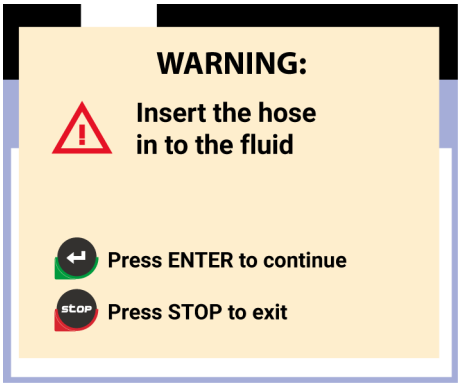


11.Insert the service hose into the coolant fluid container.

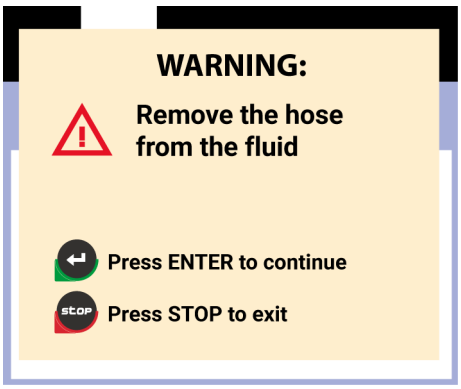

12.Press 

The charging phase begins.

The display shows the amount of fluid being charged.




13.Pull out the service hose from the fluid container when requested to.




14.Press 

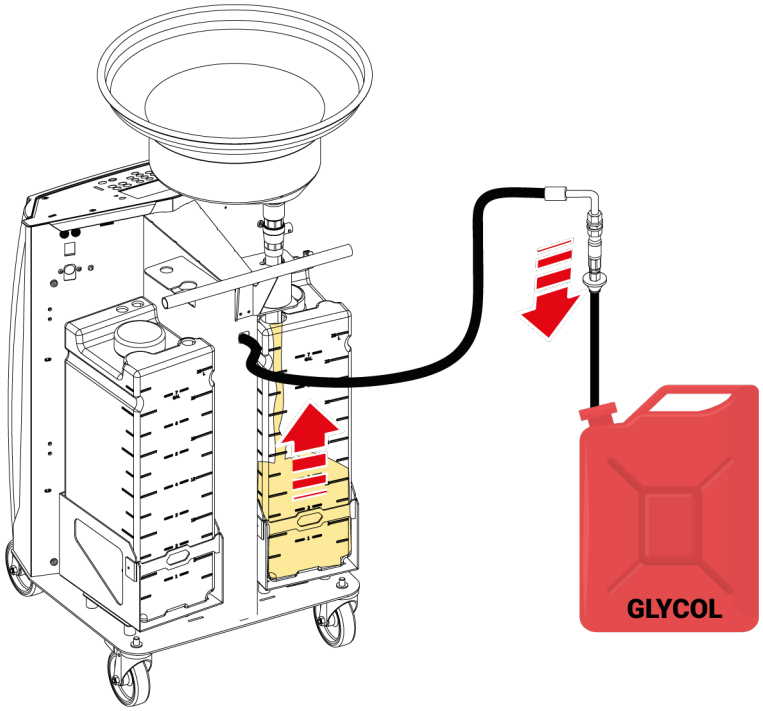
Wait for the procedure to end.

When the filling procedure is complete, the display shows the total value of coolant fluid charged.

**INFORMATION** *By pressing STOP at any time the procedure ends and the display shows the main menu.*

## ***13.2*** *DRAIN tank emptying procedure of coolant fluid*

This procedure allows emptying the coolant fluid that was discharged in the **DRAIN** tank into a container for disposal or recovery.

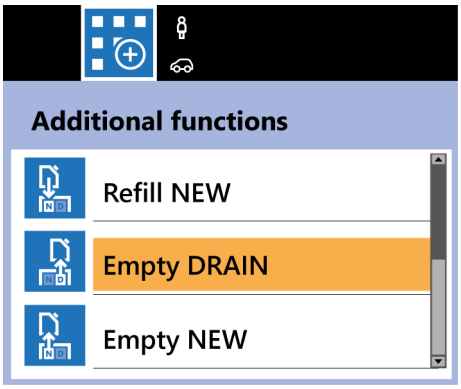



1.Select **ADDITIONAL FUNCTIONS** from the main menu.

2.Press 

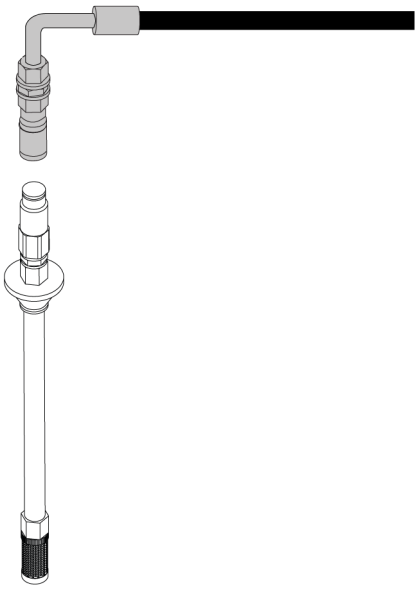
3.Select EMPTY **DRAIN**.

4.Press 



5.Connect the supplied extension to the service hose.

6.Press 

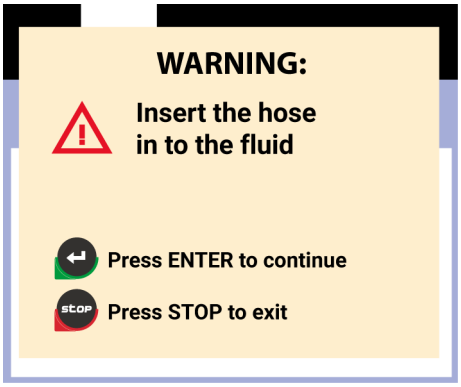


7.Insert the service hose into the coolant fluid container for disposal or recovery.


8.Press 

The emptying procedure begins.

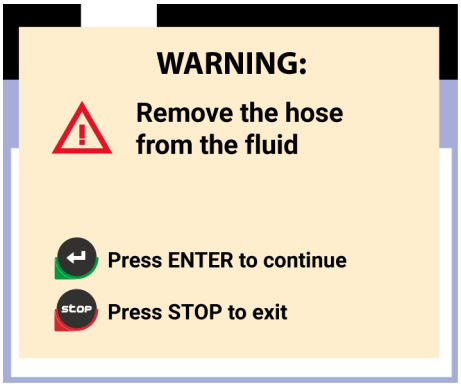
The display shows the amount of fluid being discharged.




9.Pull out the service hose from the fluid container when requested to.

10.Press 

Wait for the procedure to end.



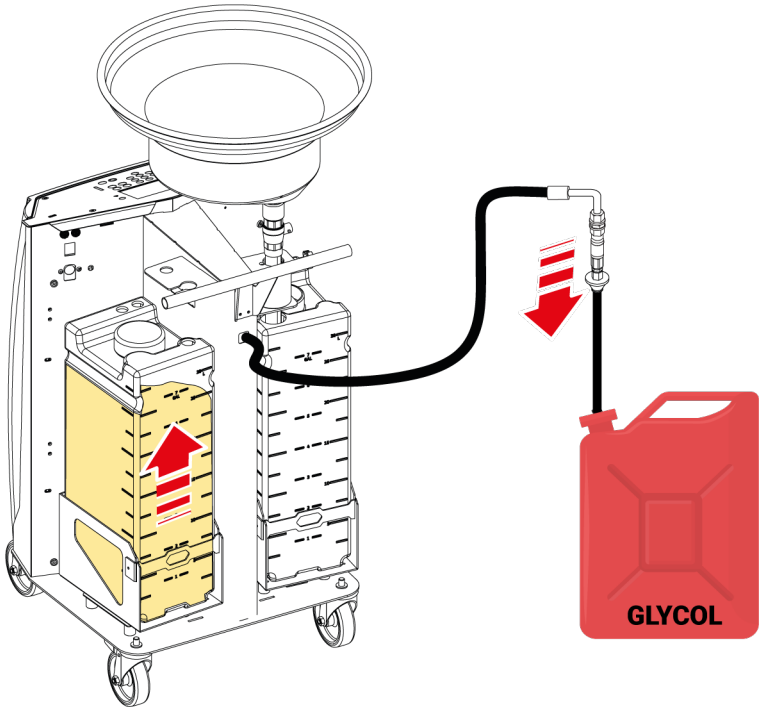

When the emptying procedure is complete, the display shows the total value of coolant fluid discharged.

**INFORMATION**

*By pressing STOP at any time the procedure ends and the display shows the main menu.*

## ***13.3*** *NEW tank emptying procedure of coolant fluid*

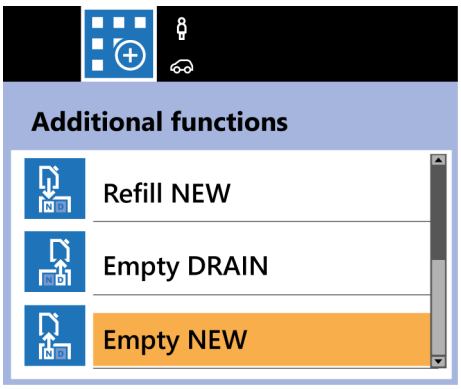
This function allows emptying the coolant fluid from the **NEW** tank into a container for recovery.




1.Select **ADDITIONAL FUNCTIONS** from the main menu.

2.Press 

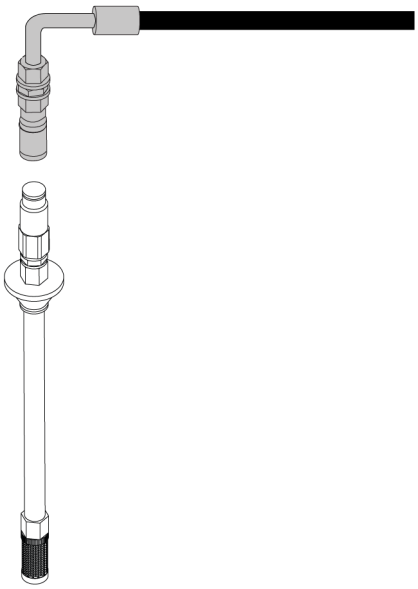
3.Select EMPTY **NEW**.




4.Press 

5.Connect the supplied extension to the service hose.

6.Press 

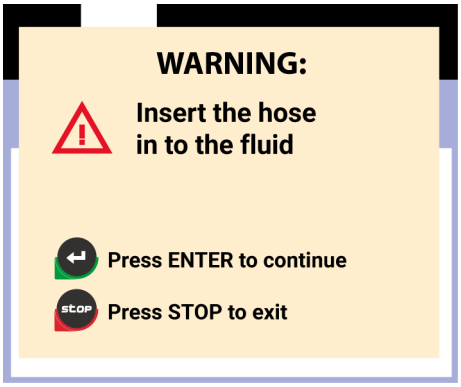


7.Insert the service hose into the coolant fluid container for disposal or recovery.


8.Press 

The emptying procedure begins.

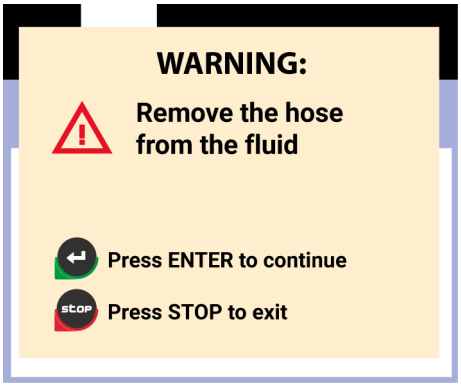
The display shows the amount of fluid being discharged.




9.Pull out the service hose from the fluid container when requested to.

10.Press 

Wait for the procedure to end.

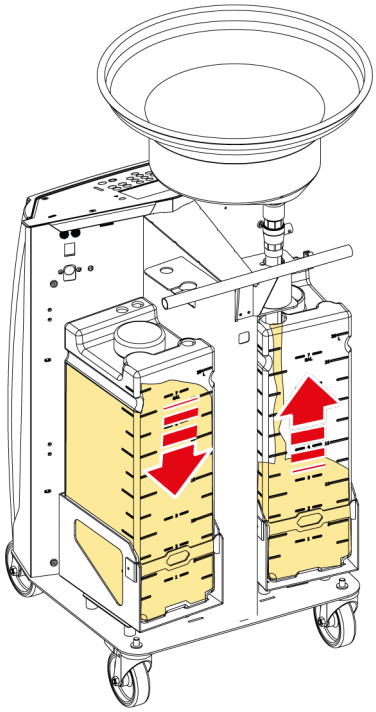



When the emptying procedure is complete, the display shows the total value of coolant fluid discharged.

**INFORMATION** *By pressing STOP at any time the procedure ends and the display shows the main menu.*

## ***13.4*** *Coolant fluid transfer procedure from the DRAIN tank to the NEW tank*

This function allows recovering the coolant fluid discharged from the vehicle into the **DRAIN** tank, transfer it into the **NEW** tank and reuse it for the vehicle maintenance procedure.

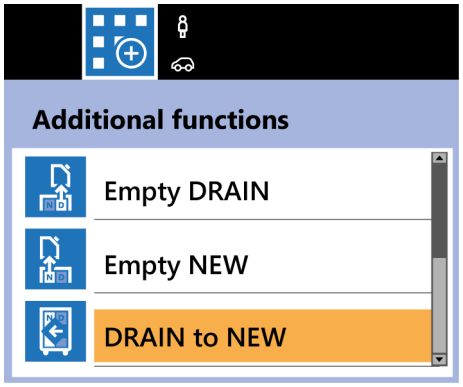


1.Select **ADDITIONAL FUNCTIONS** from the main menu.

2.Press 

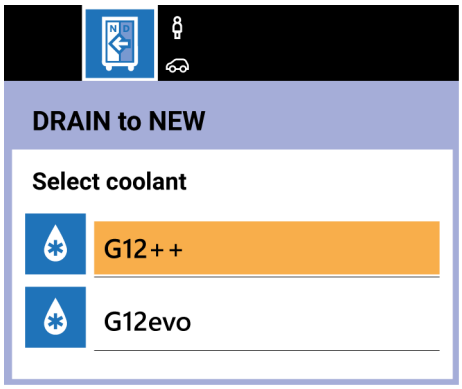
3.Select **DRAIN** to **NEW**

4.Press 



5.Select the type of fluid.

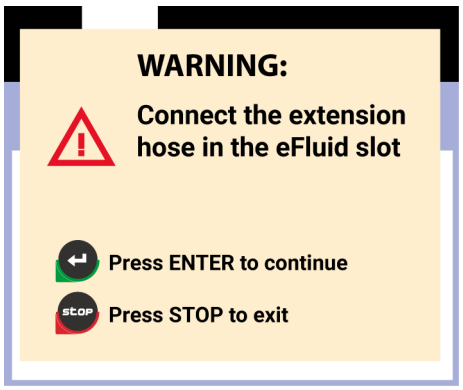
6.Press 




7.Connect the service hose to the supplied extension and insert the latter into the **NEW** tank.

8.Press 

The transfer procedure begins.




When the transfer procedure is complete, the display shows the total value of coolant fluid transferred from the **DRAIN** tank to the **NEW** tank.

**INFORMATION** *By pressing STOP at any time the procedure ends and the display shows the main menu.*

## *13.5 Counters*

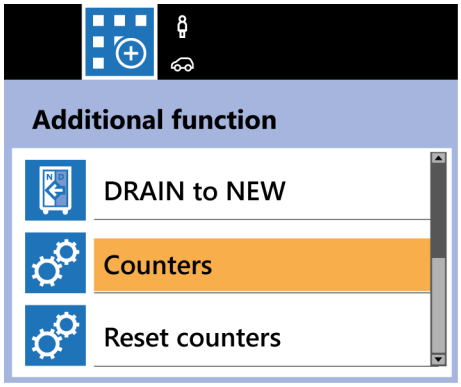
This menu displays the data related to the counters.

1.Select **ADDITIONAL FUNCTIONS** from the main menu.

2.Press 

3.Select **COUNTERS**

4.Press 




Three types of counters are available:

| COUNTERS | DESCRIPTION |
|---|---|
| **Resettable** | This type of counters reports the values from the last reset made through the SERVICE menu functions. |
| **Total** | This type of counters reports the values from the beginning of the equipment life. |
| **Partial** | This type of counters reports the values divided by day / week / month / year and has a statistical function. |

**INFORMATION** *The TOTAL and PARTIAL counters cannot be reset.*

## ***13.6*** *Counters reset*

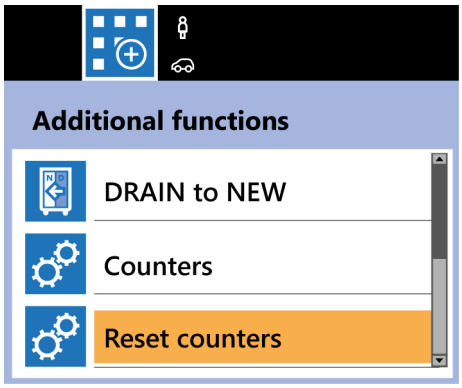
This functions allows resetting the data related to the RESETTABLE counters.

To reset the counters, proceed as follows:

1.Select **ADDITIONAL FUNCTIONS** from the main menu.

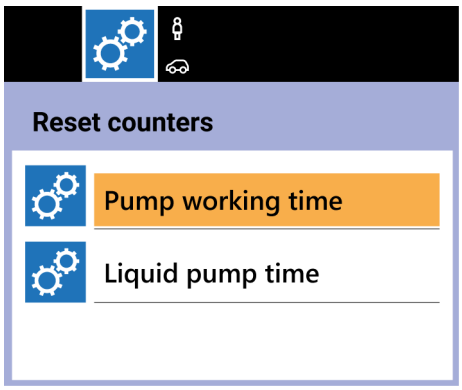
2.Press 

3.Select **RESET COUNTERS**




4.Press 

5.Select the desired function.




6.To confirm the deletion, press 

7.To cancel the deletion, press 

This menu allows accessing the following setting functions:

- *workshop data;*
- *date and time;*
- *language;*
- *customized items;*
- *units of measurement.*

## ***14.1*** *Workshop data*

This function allows entering the data related to the workshop.

The data entered with this function will be printed on the header of each service report.

It is possible to enter up to 5 rows of text.

Proceed as follows:

1.Enter the requested data, browsing the fields using  and  .

2.Press 

Repeat the operations for each row of text you want to enter.

## ***14.2*** *Date and time*

This function allows setting the date and time.

Proceed as follows:

1.Enter the requested data, browsing the fields using  and  .

2.Confirm by pressing 

## ***14.3*** *Language*

This function allows setting the display language of the software.

Proceed as follows:

1.Select the desired language, browsing the fields using  and  .

2.Confirm the selection by pressing  .

## ***14.4*** *Customized items*

This function allows entering the data related to the vehicle, customer, services carried out, which will appear in the header on each service report.

It is possible to enter up to 4 rows of text.
Proceed as follows:

1.Enter the requested data, browsing the fields using  and  .

2.Confirm by pressing 

## ***14.5*** *Units of measurement*

This menu allows selecting the desired unit of measurement, choosing among:

- *BAR - g - °C;*
- *PSI - Lb - °F;*
- *BAR - ml - °C.*

Proceed as follows:
1.Select the desired unit of measurement.

2.Press  .

This menu allows accessing the equipment service functions.

To access this menu you must have the password.

The number and the items displayed in this screen depend on the password used.

The password reserved for the operator is **1236**.

The items that cannot be accessed with this password are reserved for the authorized assistance center or the retailer.

The items that can be accessed using the password reserved for the operator are the following:

- *sensor calibration;*
- *public parameters;*
- *calibration status;*
- *stored errors;*
- *default parameters.*

Use the arrows  /  to move between an item and another.

## *15.1 Sensor calibration*

This function allows accessing the sensor calibration menu.

The sensors that can be calibrated are the following:

- *the* **DRAIN** *scale sensor;*
- *the* **NEW** *scale sensor.*

**Follow the indications that appear on the display.**

**INFORMATION**

The proper operation of the **DRAIN** and **NEW** tank scales must be checked at least once a year.

## *15.2 Public parameters*

This function allows accessing the equipment's public parameters.

The public parameters are useful to know the operating status of the equipment.

**INFORMATION**

*Modify the parameter values ONLY if indicated to do so by the authorized assistance center.*

***NOTICE***

*Entering inappropriate values may compromise the proper operation of the equipment.*

Use the arrows  /  to move from a parameter to another.

To select a parameter, press  .

## ***15.3*** *Calibration status*

This function allows displaying the status of the equipment's calibrations.

If necessary, give the code that appears in the display to the authorized assistance center.

## ***15.4*** *Stored errors*

This function allows viewing the errors the service station stored.

Use the arrows  /  to move from an error to another.

To select an error, press  .

## ***15.5*** *Default parameters*

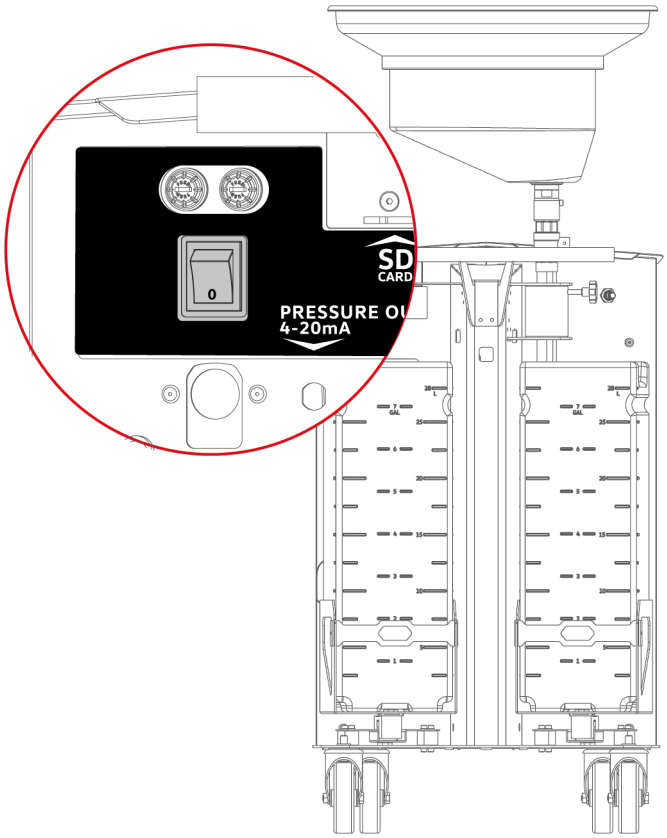
This function allows resetting all the parameters to their original factory values.

To reset the parameters to their factory values, press  .

This chapter describes the operations required in order to stop the equipment.

## *16.1 Normal Shutdown*

To stop the equipment, set the main switch to the **O** (OFF) position.




**⚠ WARNING**

**Do not turn off the equipment during any procedure.**

**A sudden shutdown may damage the equipment and/or cause software malfunctions.**

**Wait for each procedure to end before switching the main switch to the O (OFF) position.**

## ***16.2*** *Stopping the Equipment for Long Periods*

Should you intend shutting down the equipment for a long period of time, follow the instructions below.

Proceed as follows:

1.Disconnect the equipment from the power mains.

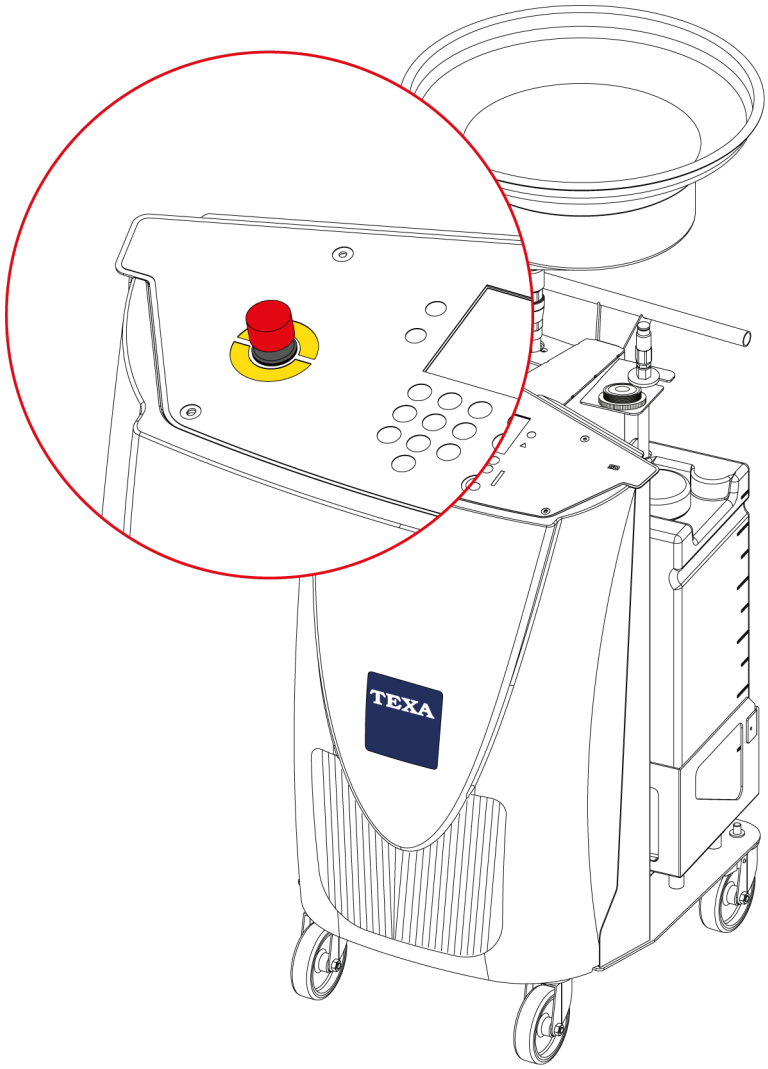
2.Place the provided cover over the equipment.

3.Store the equipment in a safe place, not exposed to outside weather conditions.

## ***16.3*** *Emergency stop*

In case of failure or emergency, the service procedures can be stopped by operating the emergency button.

The emergency button is a safety device that guarantees the equipment stops operating in the shortest possible time.




To reset the button, turn it clockwise until it returns to the initial emergency position.

**⚠ WARNING** **Operate the emergency button only if extremely necessary.**

This chapter describes the operations needed to update the equipment's operating system.

Periodically check for new updates of the equipment's operating system on the website **eFluidVAS.texa.com**.

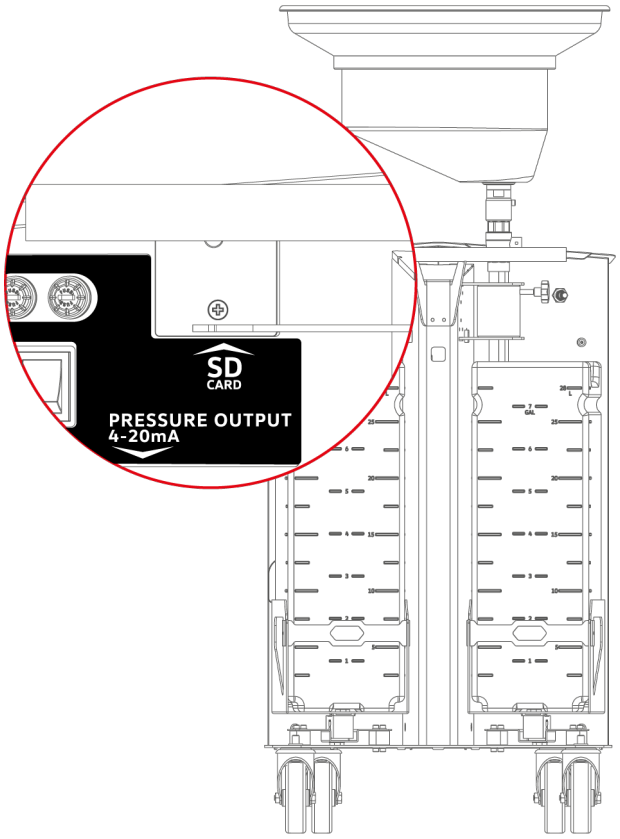
The equipment must be updated through the **SD CARD**.

**INFORMATION** *You must have a PC with a USB port and an active Internet connection available.*

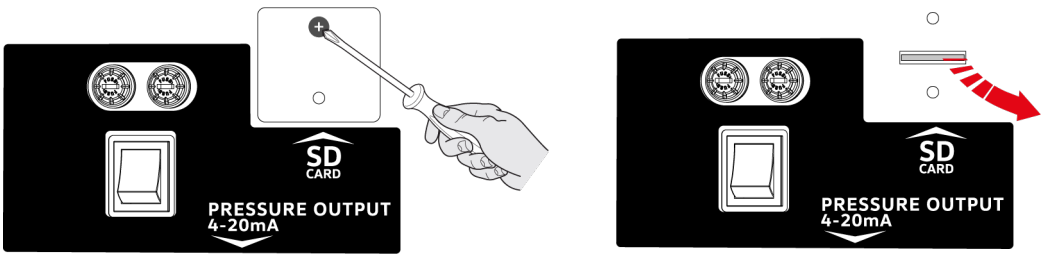
Proceed as follows:

1.Turn off the equipment.

2.Locate the **SD CARD** slot.




3.Unscrew the two screws from the protective cap and remove it.

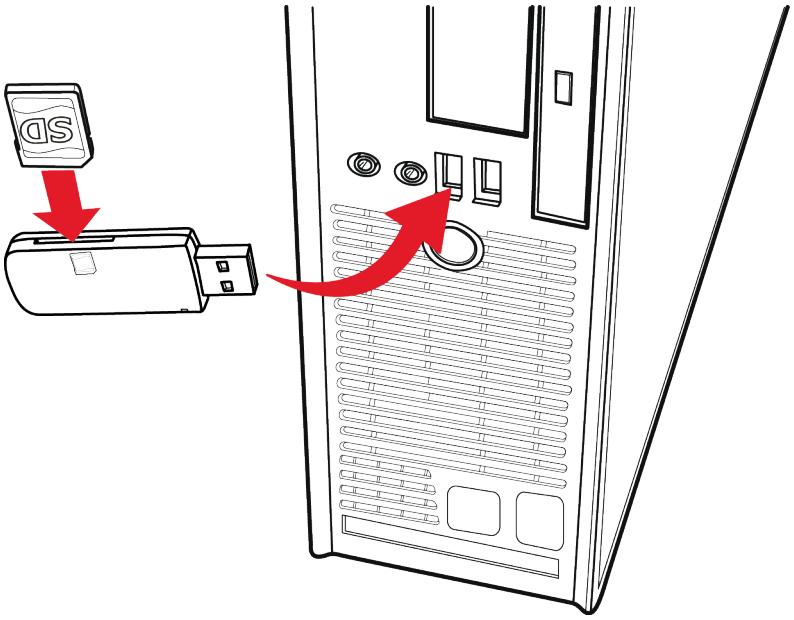



4.Gently press on the **SD CARD** to unlock it.

5.Remove the **SD CARD**.

6.Insert the **SD CARD** into the **SD CARD READER**.

7.Connect the **SD CARD READER** to a PC.



8.Copy the update into the **SD CARD**.

9.Remove the **SD CARD** from the **SD CARDREADER**.

10.Insert the **SD CARD** into the specific slot on the equipment.

**⚠ CAUTION**

**Make sure the protective cap is secured and well closed.**

**The O-ring must be positioned correctly and must not be damaged in order to guarantee the equipment's IP protection level.**

11.Place the protective cap back onto the slot and screw the screws, being careful to tighten them correctly.

12. Turn on the equipment.

The update starts automatically.

**INFORMATION**

*During the update, the display remains off.*

13.Wait for the update to complete.

14.Once the update is complete, the software will restart automatically.

This chapter describes the maintenance operations required for the equipment.

**CAUTION**

**For any maintenance operation, contact the authorized assistance center.**

**Any maintenance operation on the equipment must be carried out only by authorized personnel.**

**Cleaning and maintenance must not be carried out by children without supervision.**

**INFORMATION**

**Only use original spare parts.**

## *18.1 Ordinary Maintenance*

Scheduled maintenance is made up of a series of operations that must be carried out periodically.

Specific messages will appear on the equipment's display each time a maintenance operation has expired and needs to be carried out.

The parts for which the equipment will signal the maintenance are the following:

- *vacuum pump (oil replacement);*
- *liquid pump's rubber impeller.*

**INFORMATION**

We recommend checking the wear and saturation of the filters in the **DRAIN** and **NEW** tanks.

*Wear and saturation of these filters is not visually indicated in the equipment's display.*

## *18.2 Periodical Checks*

In order to guarantee a correct operation of the equipment we recommend checking the parts that are the most subject to wear on a regular basis.

**Any replacement and/or repair that may be required must be carried out by the personnel of the authorized assistance center.**

| **Parts subject to wear** | **Check** |
|---|---|
| **Service hose and external hoses** | Make sure there are no cuts, scratches or bulges. |
| **Fluid expansion tank adapter** | Check the seal O-ring. |
| **Tanks** | Make sure they are clear and not damaged. |

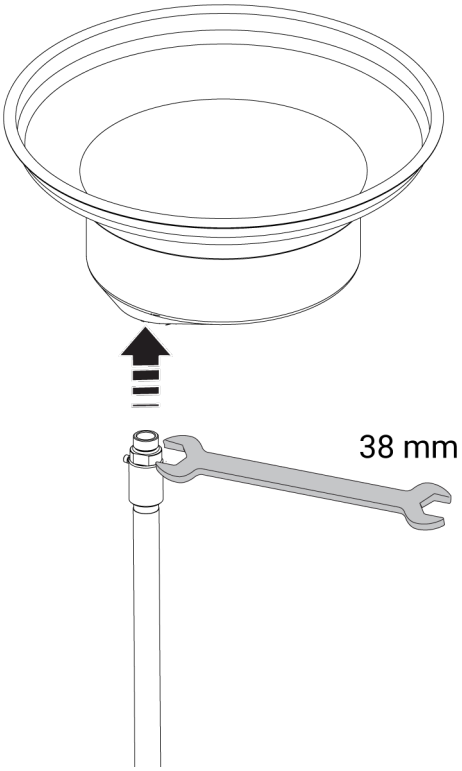
| | |
|---|---|
| **Hopper** | Make sure the grid is not dirty or clogged.<br>Check the tightening of the screws. |
| **Wheels** | Make sure the brakes are working properly. |
| **Power cable** | Make sure there are no cuts, scratches or burns. |

### *18.2.1 Hopper cleaning*

Clean the hopper with water or a moist cloth if it is dirty and the grid is blocked by fluid residues.

Proceed as follows:

1. Unscrew the bushing on the rod using a 38-mm wrench or a pipe wrench.
2. Remove the hopper.
3. Clean the hopper with water or a moist cloth.
4. Dry thoroughly.
5. Mount the hopper back onto the rod and tighten the bushing.




## ***18.3*** *Periodical Safety Checks*

In order to guarantee the correct operation of the equipment, carry out periodical checks on the safety devices.

Any checks on the overpressure valve and level switch must be carried out by the Authorized Assistance Center.

Make sure the emergency button is working properly.

**INFORMATION** *For information on equipment maintenance and spare parts, contact the authorized assistance center.*

**⚠ CAUTION** **The power protection fuses can only be replaced by the authorized assistance center.**

# 19TROUBLESHOOTING

For any technical issue, please refer to your Authorized Assistance Center and/or to your distributor/retailer.

Below you will find a list of simple instructions that customers can carry out on their own.

| PROBLEM | POSSIBLE CAUSE | POSSIBLE SOLUTION |
|---|---|---|
| The equipment does not turn on. | The power cable is not properly connected. | Connect the cable properly. |
| | Main switch off. | Turn on the main switch. |
| | The power fuse is blown. | Contact the Authorized Assistance Center. |
| | Equipment fault. | Contact the Authorized Assistance Center. |
| The equipment turns on but does not carry out any procedure. | The filters in the DRAIN and NEW tanks are dirty or worn out. | Contact the Authorized Assistance Center. |
| | Check for any errors in the display. | Follow the indications in the display.<br>If the problem persists, contact the Authorized Assistance Center. |
| The fluid cannot properly drain from the hopper. | The hopper is clogged. | Thoroughly clean the hopper.<br>For further information see the MAINTENANCE chapter. |

# 20LEGAL NOTICES

**TEXA S.p.A.**

Via 1 Maggio, 9 - 31050 Monastier di Treviso - ITALY

Tax Code - Company Register of Treviso ID No. - VAT No.: 02413550266

Single-shareholder company subject to the direction and coordination activities of Opera Holding S.p.A.

Paid-up share capital 1,000,000 € - R.E.A. (Economic Administrative Index) No. 208102

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For information on the legal notices, please refer to the **International Warranty Booklet** provided with the product.

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