Advance
Advance+
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1 PREFACE

The machine has been designed and built to ensure long lasting, high-level operating reliability with maximum safety for user.

This operating manual is part of the machine.

Read carefully before use.

- The user is responsible for the proper use of the machine in accordance with the instructions found in this operating manual.
- The manufacturer cannot be held responsible for damage to persons, animals and/or objects due to improper use different to that illustrated in this instruction manual.
- The manufacturer reserves the right to make technical and aesthetic alterations to the machine without prior notification.

The purpose of this operating manual is:

- To supply the user with all the information needed to use the machine starting from purchase on through to the disposal of this same machine.
- To ensure maximum support for the personnel assigned to the use and the maintenance of the machine.

For any special needs or requests for technical assistance or spare parts, please contact the manufacturer.

This document may contain printing mistakes.

2 SYMBOLS

![Safety Alert Symbol]

This safety alert symbol indicates that this message involves personal safety. Works danger, warning and caution indicate degree of hazard. Death, personal injury and/or property damage may occur unless instructions are followed carefully.

![Warning Symbol]

You are not ready to operate this machine if you have not read and understood the following safety items. Read this entire OPERATING MANUAL.
3 FORESEEN USE

The machine is designed solely for use in automobile air-conditioning system maintenance. This Service station may only be used with the refrigerant R134a and Silco UV Dye.

It's forbidden to use the machine for disposal process!

4 SAFETY

The user is obliged to follow the “General safety rules”, to use the machine in according to the “intended use” and the instructions of this operating manual.

Therefore, the user is not exposed to any risk if the general safety rules reported below are followed with proper use and maintenance of the machine.

4.1 Glossary of Terms

- **Machine**: The machine relative to this operating manual.
- **Refrigerant**: Fluid reported on the identification label.
- **A/C system**: Air-conditioning system in the vehicle.
- **External tank**: New Refrigerant used to fill the internal vessel.
- **Internal vessel**: Refrigerant storage tank inside the station.
- **Process**: Execution of an individual function (e.g. Recovery).
- **Cycle**: Execution of more processes.

- **Recovery**: The recovery of refrigerant in any condition and its storage in a container outside the A/C system, without necessarily undergoing analysis or treatment of any kind.
- **Recycling**: A reduction of the contaminating substances in used refrigerants through oil separation, the recovery of incondensable and their single or multiple passage through elements that enable a reduction in humidity, acidity and particles.
- **Evacuation**: Phase in which incondensable and moisture are evacuated from an A/C system solely by means of a vacuum pump.
- **Oil charge**: Introduction of oil inside an A/C system for the purpose of maintaining the amount of oil specified by the manufacturer.
- **UV dye charge**: Introduction of UV dye inside an A/C system in order to detect possible leaks by means of a UV lamp.
- **Refrigerant charge**: Phase during which refrigerant is introduced into an A/C system in the amount specified by the manufacturer.
4.2 General safety rules

- This machine is intended for use by QUALIFIED PERSONNEL only. Such users must have a knowledge of the basics of refrigeration, refrigeration system, refrigerants and the potential hazards that machine under high pressure can cause.
- DO NOT modify the safety devices
- DO NOT use external tanks or other storage tanks that have not been type-approved or that lack safety valves.
- DO NOT use the machine near open flames and hot surfaces. At high temperatures, the refrigerant decomposes, releasing toxic and chemical substances that are hazardous for users and the environment.
- It’s obliged to supervise the machine at all times.
- It’s obliged to use only the refrigerant indicated on the identification label. Mixtures with other types of refrigerant will seriously damage the cooling and refrigeration system, as well as the machine.
- It’s obliged to use goggles and gloves - contact with the refrigerant can cause blindness and other physical injury to the user.
- Avoid inhalation of vapours from the refrigerants and contact of the refrigerant with skin.
- Avoid to leave power supplied to the machine unless the machine is going to be used immediately. Cut off the electrical power supply prior to long intervals in which the machine will not be used.
- Attention: Ensure that all valves are closed before making connections between the machine and an A/C system or an external tank.
- Attention: Ensure that the process has been completed and that all valves are closed before disconnecting the machine.
- Attention: All of the flexible hoses may contain refrigerant under high pressure.
- Attention: The machine and A/C system in vehicles containing refrigerant should not be tested with compressed air. Some mixtures of air and refrigerant have proven to be combustible at high pressure levels. These mixtures are potentially hazardous and there is a risk of fire and explosions that can cause damage to property and personal injury. Additional medical and safety information can be obtained from the manufacturers of the oils and refrigerants.

4.3 Guidelines for handling refrigerants

4.3.1 Precautions for Refrigerant Storage
The refrigerant to be removed from a system must be handled carefully in order to prevent or minimize the possibilities of different refrigerants mixing. The tank used for storing refrigerants must be assigned to specific refrigerants to avoid different refrigerants mixing.

4.3.2 Recycling Capacity
The recycling machine’s filter system should be replaced regularly in order to maintain the efficiency of the recycling machine.

4.3.3 General notions
Before re-introducing refrigerant into the system, the system itself must be evacuated and cleaned. In order to be sure that the system is free of contaminating agents before introducing the refrigerant, all the procedures described in this instruction manual must be followed.
Clean and maintain the machine regularly, especially when highly contaminated refrigerant is used: it is extremely important that contamination from the previous operation is not transferred to subsequent operations.
4.4 Safety devices

The machine is equipped with the safety devices required from the European Directives:

- Electric safety switch.
- Safety valve

DO NOT MODIFY THE SAFETY DEVICES!

4.5 Not condensable gases discharge

A not condensable gas discharge valve is installed to consent the evacuation of the not condensable-gasses in the internal vessel.

The not condensable gas discharge valve could generate noises.

Never approach the not condensable gas discharge valves! Danger of pressurized gas discharge

4.6 The working environment

- The machine must be used in open environment or in places equipped with good ventilation (at least 4 changes of air per hour).
- The machine has been designed for use at a maximum altitude of 1000 m above sea level, within a temperature range of +5 and +40°C and with a maximum humidity of 50% at +40°C.
- Operate in sufficiently light conditions.
5 USE OF THE SERVICE STATION

5.1 Unpacking and checking of components

Remove the machine packaging and ensure that the following parts are present:

- This operating manual.
- Adaptor 1/4SAE F-FAE J639 HP
- Adapter gasket
- Bottle 250 cc.
- EC/PED documentation
5.2 Service station description

- Printer
- Top cover
- Keyboard
- Rear wheel
- Main switch
- Tool pocket
- Cord and operation manual pocket
- LP Gauge
- HP Gauge
- LP Coupler
- HP Coupler
- LP Hose
- HP Hose
- Hoses pocket
- Front cover
- Vacuum pump oil level
- Front wheel with brake
- Drained oil bottle 500 cc
- UV Dye bottle 100 cc
- New oil bottle 250 cc
## Technical features | Service Station Advance/Advance+
---|---
**Power supply** | 230V+/-10% 50Hz
**Operating temperature range** | 5/40°C
**Refrigerant** | R134a
**Internal vessel capacity (kg)** | 20
**Maximum pressure (PS)** | 19 bar
**Compressor** | 1/3 HP
**Recovery rate (liquid)** | 490 g/min'
**Not condensable gas discharge** | Automatic
**Main drier filter** | Type 300/660 cc
**Fan** | 172 mm
**Oil discharge** | Automatic
**Bottle capacity** | 500 cc
**Weight scale** | 60 kg
**Accuracy (+/-)** | 2 g
**Vacuum pump** | 100 lt/min
**Final pressure (mb abs)** | 0,05
**Electronic vacuum meter** | YES
**Oil charge** | Automatic
**Bottle capacity** | 250 cc
**UV tracer charge** | Automatic
**Bottle capacity** | 100 cc
**Refrigerant charge** | Automatic
**Service hoses compensation** | Automatic
**Flushing program** | YES

## Configuration | Service Station Advance/Advance+
---|---
**Display** | 4 x 20 crt
**Keyboard / Encoder** | YES
**Car Data base (32 Mb )** | YES
**Printer** | Build on
**Gauges (pulse free)** | D 80 mm
**Service couplings** | Parker SAE J639
**Service hoses (SAE J2196)** | 2,5 m GY
**Pocket tools** | YES
5.3 Machine handling

In spite of the fact that the heaviest components have been assembled on the base in order to lower the centre of gravity, it has not been possible to eliminate the risk of overturning completely.

The machine is moved on the four wheels.

On roughly ground, the machine must be moved by tilting it and balancing the weight on the two rear wheels.

5.4 Preparation for use

At the purpose to protect the weighting system the scale is blocked by two screws.

In order to activate the machine, please refer to Chap. 9.

5.5 Turning on and switching off

Turning on: Move the main switch to the ON position (I)

Switching off: Move the main switch to the OFF position (O)

DO NOT shut down the station by disconnecting the power cord!

5.6 Stillstand for longer periods

The machine should be positioned in a safe area, disconnected from the power supply and protected from excessive temperatures and humidity.

5.7 Disposal

At the end of the machine's lifetime deliver it to a disposal centre.

5.8 Recycled material disposal

The lubricants extracted from A/C system must be delivered to used oil collection centre!
6 START-UP

6.1 Keyboard description

Refer to the following drawing:

Press the Power Switch (I) to turn on the equipment.

Display (Stand-by)

Change the lines by the menu “Company name” (See Chap. 6.2.2)

6.1.1 Printer

Paper: L 58 mm
Diameter: D 40 mm

Paper feed ---
A) Before a process:
Max 20 characters (Plate nr., Chassis nr., etc.)

B) At the end of a process
Press “START” key for printing.
Press “STOP” key to end.

6.1.2 Program selection
Press “I” key to check the quantity of available refrigerant.
Press “I” key to come back in stand-by.
Press “E” key to select a process

Turn "ENCODER" to select the required program.
The symbol “O” shows the position.

The following programs are available:

Basic menu
Service
Vessel charge
Basic settings
Date - Time
Company name
A/C pressure test
A/C flushing
Change of oil type
Scale reset
Maintenance

Full service data base

Smart service

Full service

Advanced program
6.2 SETTINGS

6.2.1 Date – Time

Turn "ENCODER" to select Basic menu. Press “E” key to confirm.
Turn "ENCODER" to select Date-Time. Press “E” key to confirm.

Turn “ENCODER” to modify the blinking value
Press “E” key to confirm
The next value blinking.
When the data are right, press “START” key to confirm.

6.2.2 Company name

Turn "ENCODER" to select Basic menu.
Press “E” key to confirm.
Turn "ENCODER" to select Company name
Press “E” key to confirm

5 lines are available:

The following setting is an example:
Company name (Workshop)
Address (Road, etc..)
City
Phone
Fax

NOTE: All five lines are reported on the ticket, otherwise the line 1 and 3 on the display (in Stand-by).

Turn "ENCODER" to select the character. Press “E” key to confirm.
The character is reported on the first line (left).
If required, press “C” key to delete.
It is possible to move in the line by UP/DOWN
Turn "ENCODER" to select the next character. Press “E” key to confirm.
The character is reported on the first line.
Press “START” key to confirm the setting.
The display shown the following line.
Press “STOP” when the 5 lines are set.
6.2.3 Personal settings

The procedure allows to pre-set some basic settings for automatic programs.

Turn "ENCODER" to select Basic menu. Press "E" key to confirm.

Turn "ENCODER" to select Personal setting. Press "E" key to confirm.

1 - Recovered refrigerant quantity and oil are reported on the print-out
0 - The data are not reported.

Turn "ENCODER" to select 1 or 0. Then press "E" key to confirm.

The default value is applied in:
Full service database  Full service  Smart service

Turn “ENCODER” to set. Press “E” key to confirm.

Refrigerant residual check
min. 2

The default value is applied in:
Full service database  Full service  Smart service

Turn “ENCODER” to set. Press “E” key to confirm.

Leak test
min. 2

The default value is applied in:
Full service database  Full service  Smart service

Turn “ENCODER” to set. Press “E” key to confirm.

PAG Oil cc. 8

The default value is applied in:
Full service database  Full service  Smart service

Turn “ENCODER” to set. Press “E” key to confirm.

UV Dye min cc. 5

NOTE: Set “0” to by-pass the process!

MIN. Qt. = 5 cc!!!

1 Printer build on
0 Printer off line or not installed.

Turn “ENCODER” to select 1 or 0. Press “E” key to confirm.

OPTIONAL
PRINT 1

MIN. Qt. = 5 cc!!!
Turn “ENCODER” to select language.
Press “E” key to confirm

SN: Serial number, 361363: Production index (ex).
Press “STOP” key to exit.

English

SN000000  361363
6.3 First time use and vessel charge

The equipment contain not enough refrigerant to run.  
The available quantity could be negative (i.e.: -500 g.) 
It is necessary to put new refrigerant into the internal vessel before the use.

Turn "ENCODER" to select Basic menu. Press “E” key to confirm.
Turn "ENCODER" to select Vessel charge. Press “E” key to confirm.

Display (2 sec)

WARNING! 
Verify Oil and UV quantity in the bottles.

NOTE: The message is always shown before processes. 
It does not mean something is wrong, it is only a reminder to check the quantity of Oil and UV Dye in bottles.

Connect HP hose to the external tank. 
Open the valve liquid side.

Connect the RED hose to a new tank of refrigerant. 
If available, open the liquid tank valve (RED). 
If no, turn the tank up-side-down.

Set the quantity.

g////////

Press “START” key to confirm

Process start.

Start in process

Vessel charge in process. 
Pressure mb. 
Refrigerant g. //////
**MESSAGE:** If the equipment senses a pressure lower than the minimum value for the process.

- Replace the external tank, then press “START” key to confirm
- Press “STOP” key to complete the process.

Process completed.

Close the tank valve and disconnect the red hose from the tank.
Press “START” key to confirm.

Press “STOP” key to end.
Equipment with printer: See Chap. 6.1.1

Verify:
- Ext. Tank empty?
- Tank valve closed?

Vessel charge end.
Close the external tank valve.

Refrigerant recovery from the service hoses.

Vessel charge end.

g. ////
7 PROGRAMMES

7.1 Full service

Press “E” key to select.
Press “E” key to confirm!

Turn "ENCODER" to set the amount of refrigerant to be charged into the A/C system.
Minimum: 50 g.
Press “E” key to confirm!

Turn "ENCODER" to set the port to be used for charging
(usually HP)
HP PORT
LP PORT
HP & LP port simultaneously
Press “E” key to confirm!

Press “START” key to start the complete service process.

The service station performs all the processes:

- Recovery, residual refrigerant check, draining of used oil
- Evacuation, Leak test
- Fresh Oil charge
- UV Dye charge
- Refrigerant charge.

NOTE: During the evacuation time, quantity of recovered refrigerant and oil could be checked by pressing the “I” key.

Processes end.

Perform the A/C system pressure test
Press “STOP” key to confirm.
Follow the instructions.

Disconnect the HP/LP service hoses from the A/C system!

Press “START” key to confirm.

Refrigerant recovery from the service hoses.

At the end all the process values are reported on the display.

Recovery
Refrigerant g. ///
Oil cc ///

Vacuum
mb ///

Press “STOP” key to end.
Press “START” key to print.
Then press “STOP” key to end.

A/C system charge
Quantity g ///
7.2 Full service database

Press “E” key to select. 

Press “E” key to confirm. 

The memory contains the data of the main cars and trucks on the market. 

Press “E” key to select. 

Press “E” key to confirm. 

Turn “ENCODER” to select the brand 
Press “E” key to confirm. 

Volkswagen 

Beetle 

Turn “ENCODER” to select the car 
Press “E” key to confirm. 

Volkswagen 

Beetle 

1998÷2008 

Turn “ENCODER” to select the version of the same car. 
Press “E” key to confirm. 

Volkswagen 

Beetle 

ISO 46 

g. 725 

Refrigerant capacity and oil viscosity are shown. 
For more information, press “I” key. 

Oil type or original code 
Total oil inside the A/C system 

G052 154 A2 
PAG 46 ml. 135 

Press “START” key to confirm. 

From this point on the programme continues as “Full service”.
7.3 Smart service

Press “E” key to select.

The program is similar to “Full service”.

If the service station recognizes there was no significant leakage (therefore no moisture) in a system some processes will be by-passed and some sped up. This way valuable time, energy and general costs will be saved. For an average passenger car the complete service will be done in less than 10 minutes.
7.4 Advanced programme

Press “E” key to select.

Press “E” key to confirm.

Turn "ENCODER" to select the program or more programs.
The following selections are available:

- Recovery
- Evacuation
- A/C system charge
- Recovery / Vacuum
- Recovery / A/C system charge
- Vacuum / A/C system charge
- Recovery / Vacuum / A/C system charge

Press “E” key to confirm.

7.4.1 Process settings

**Recovery**

Turn "ENCODER" to set the value.
- Minimum: 1 min.
- Maximum: 12 min.

Press “E” key to confirm.

**Evacuation**

Turn "ENCODER" to set the vacuum time.
- Minimum: 0 min. (no time)
- Maximum: 999 min.

Press “E” key to confirm.

Turn "ENCODER" to set the leak test time.
- Minimum: 0 min. (process excluded)
- Maximum: 60 min.

Press “E” key to confirm.
**A/C system charge**

A) In case of evacuation selected.

Turn "ENCODER" to set the oil value.
NOTE: The value is added to the quantity drained.
Minimum: 0 g.
Maximum: 150 g.

Press “E” key to confirm.

Turn "ENCODER" to set the UV tracer value.
Minimum: 0 g. (process excluded)
Maximum: 50 g.

Press “E” key to confirm.

Turn "ENCODER" to set the refrigerant amount.
Minimum: 50 g.

Press “E” key to confirm.

B) In case of vacuum not selected.

C) In case of A/C system charge

Turn "ENCODER" to set (normally HP)
Press “E” key to confirm.

Press “START” key to confirm

The equipment performs all the process selected.
7.5 A/C Flushing

In order to thoroughly clean the A/C system, the unit performs a washing process of A/C’s interior with refrigerant R134a.
The following components:
- compressor
- receiver drier
- expansion valve/orifice tube
must be removed. Instead connection adapters should be installed in order to close the circuit. See the picture beneath.

RSH – Red service hose
BCH – Blue hose
S – Compressor inlet
LPP – LP service port
RD – Receiver Drier
EVP - Evaporator

BSH – Blue service hose
D – Compressor outlet
CMP – Compressor
HPP – High pressure service port
EXD – Expansion device

Flushing kit Flush II
Pr. Nr.: 99.120
A/C Flushing

«««««O»»»»

Confirm by “START”

Flushes reqd.:

1

CAR DATA:

v
234567890 ABCDEFGHI

Confirm by “START”

Flushing in process
Please wait!

>>>>

Flushing completed.

Oil cc. //
7.6 Oil type change

In case of specific applications (i.e. hybrid cars that require special POE oil) the A/C system should be charged with the completely different type of oil than usual PAG. In this case the Service station must be purged internally in order to prevent mixing of the new oil with residues of the previous one.

For performing of the process additional kit under Prod. Nr. 99.137 is needed. Kit consists of the special oil bottle and an adapter that should be installed between the service quick couplers. See the picture beneath:

![Kit A/C Hybrid Cars, Prod. Nr.: 99.137](image)

Turn "ENCODER" to select Basic menu. Press “E” key to confirm.

Press “E” key to select.

Follow the instructions on the screen:
Press “E” key to confirm.

Install the adapter between the HP and LP service coupler, confirm by START:

The Service station will automatically clean all the oil paths inside the unit, so the filling of the pure new oil will be guaranteed.
The whole process will take about 3 minutes.
Press the “Stop” key to finish and return
to the Main menu.

7.7 A/C PRESSURE TEST

In order to check the A/C system pressures, perform the following instructions:

Turn “ENCODER” to select Basic menu.
Press “E” key to confirm.
Press “E” key to confirm.
Check the A/C system pressure.
At the end press “X” key.

Disconnect the service hoses with the A/C system OFF!
Press “START” key to confirm.
Wait the end.

Internal flushing
End!

A/C pressure test

Verify the A/C system pressure.

Disconnect the HP Service hose (red)
from the A/C system

Refrigerant recovery from the service hoses
8 MAINTENANCE

Turn "ENCODER" to select Basic menu.
Press “E” key to confirm.
Press “E” key to select.

Possible selections:
Operation history
Next service
Counter reset (password required)

Press “E” key to confirm.

8.1 Operation history

The machine has a memory to record refrigerant usage monthly for the previous twelve months. Beyond this period it will overwrite the data for the month in question.

<table>
<thead>
<tr>
<th>Date</th>
<th>Refrigerant recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/2014</td>
<td>134a recovered, Kg.</td>
</tr>
<tr>
<td></td>
<td>10.0</td>
</tr>
</tbody>
</table>

Turn "ENCODER" to select the following counters:

Refrigerant recovered from A/C system
Refrigerant recovered from external tank
Refrigerant filled to A/C system

The display shows in sequence all the months and the total per year.

<table>
<thead>
<tr>
<th>Date</th>
<th>Refrigerant recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/2014</td>
<td>134a recovered, Kg.</td>
</tr>
<tr>
<td></td>
<td>210</td>
</tr>
</tbody>
</table>

Press “START” to print the report

8.2 Next service

By this menu is possible to check the next service required.

Filter replacement within /// Kg.
of R134a recovered
Part. Nr.: 07.500

Turn "ENCODER":

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8.3 Counter reset – password required!

Change the filter and/or the vacuum pump oil BEFORE reset!
Use only genuine spare parts or their equivalent!
The use of replacement parts which are not of equivalent quality may damage the machine!

The machine has a memory to record refrigerant usage monthly for the previous twelve months. Beyond this period it will overwrite the data for the month in question.

Select counter.
R134a recovered

By this menu is possible to reset the counter relative to the filter.

Select counter.
Vacuum time

By this menu is possible to reset the counter relative to the vacuum pump oil.

Press “E” key to confirm.

Counter reset.
Confirm by “C”
min.  ///

Press “C” key to confirm.

Counter reset.
Confirm again!
8.3.1 Filter replacement

It’s obliged to use goggles and gloves!
Contact with the refrigerant can cause blindness and other physical injury to the user!

At the purpose to reduce the internal pressure, before dismount the filter, start a recovery process!

Disconnect the plug from the supply!

Dismount the front cover.
By two wrenches unscrew the filter’s nuts.
Avoid torques on copper pipes!

Disposal in according to local directives!

Dismount the two o-rings from the copper pipes.
Lubricating and positioning correctly the new o-rings
Assembly the new filter. The flow arrow must be on the bottom direction!

Screw the filter’s nuts.
Assembly again the front cover.
8.3.2 Vacuum pump oil replacement

Disconnect the plug from the supply!
It's obliged to use gloves!

The oil extracted must be delivered to used oil collection centre!

Dismount the front cover.
Unscrew the oil discharge cap and wait for the total oil exit.
Screw oil discharge cap and unscrew the muffler.
Fill the new oil. The correct pump's oil level is around half level-spy.
Screw the muffler.

Assembly again the front cover.
9 SCALE RESET

At the purpose to compensate the scale deviation, perform the following instructions:

Disconnect the equipment from the power source!

Dismount the fixing screws from the top cover.
Dismount the top cover. Pay attention to the connections!
By a tool tighten the two pins (screws) to the “safety position”

The two red cones must not touch the bracket

For safety reasons, place the top cover in the original position!
Connect the equipment to a power source!

Turn "ENCODER" to select Basic menu.
Press “E” key to confirm.

Press “E” key to confirm.

Press “START” key to confirm the safety position.
In case of mistake:
Scale reset
««««««O»
Unload weight scale through the screws.
(safety position)
Anomaly!
Weight scale A3
Follow the instruction right and perform again the procedure!
At the end, unscrew the pins to the “working position”

The working position is match when is impossible to unscrew the pins. Assembly again all parts.
## 10 ANOMALY MESSAGES

<table>
<thead>
<tr>
<th>Anomaly Message</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale blocked (See Chap.. 9) or faulty</td>
<td>Error! Scale A1</td>
</tr>
<tr>
<td>Recovery process anomaly or compressor faulty.</td>
<td>Error! Recovery C1</td>
</tr>
<tr>
<td>High pressure switch in function. Wait 20/30 min. If the message appears again, please contact our Service” department.</td>
<td>Error! Overpressure in recovery process!</td>
</tr>
<tr>
<td>Maximum refrigerant quantity allowed! Reduce the refrigerant quantity in the internal vessel.</td>
<td>Vessel full! Please wait!</td>
</tr>
<tr>
<td>After few minutes the minimum value is not match. Possible causes: defective A/C system, etc…</td>
<td>Insufficient vacuum value! Continue? mb. ///</td>
</tr>
<tr>
<td>The vacuum value is not enough to guarantee the process. Possible causes: leakage in A/C system, air in the bottles … Press “START” to bypass and continue with refrigerant charging process.</td>
<td>Insufficient vacuum For oil/UV charge! START to bypass</td>
</tr>
<tr>
<td>The refrigerant quantity is lower then minimum quantity required. Perform “Internal vessel charge”.</td>
<td>Insufficient refrigerant. Charge the vessel.</td>
</tr>
</tbody>
</table>
Maintenance will expire soon. Order the parts required (See Chap. 8)

Order filter drier for next service.
Part. Nr.: 07.500

Order vac. pump oil for next service.
Part. Nr.: 8020

This machine is delivered in "DEMO" mode. After 5x switch ON/OFF the display shows the following:

0*****

By the "ENCODER" enter the SERIAL NUMBER! (6 digits reported on the "Identification label" on the back)

The count down of the 4 months DEMO MODE starts from that moment. After the expiry date the display shows the following:

UNLOCK CODE 0*****

By the "ENCODER" enter the unlock code which can be given to you from your supplier.