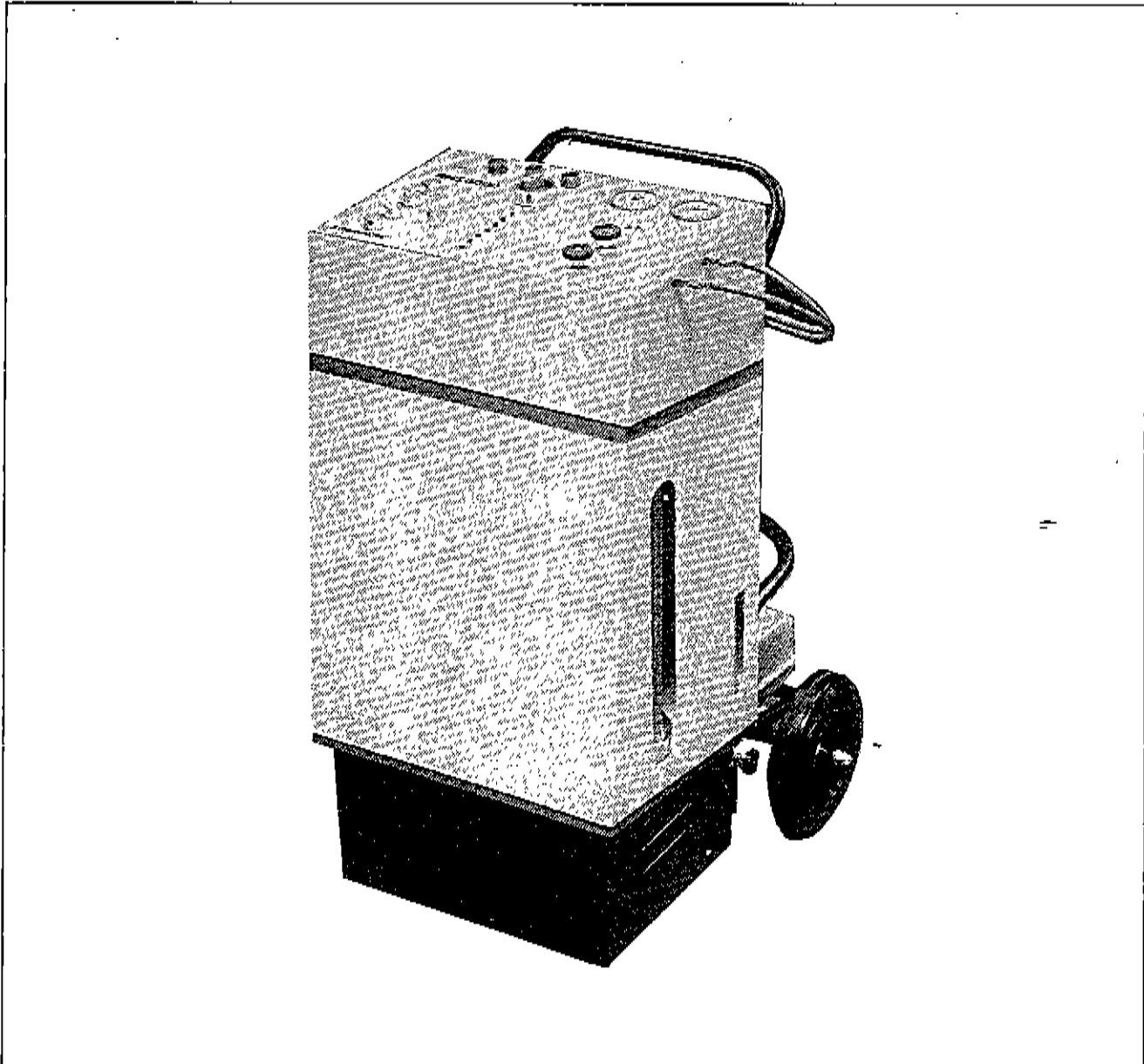


**Automatic reclaim, evacuation and charging station
RHS 3000/R134a**



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APPLICATION

The RHS 3000 is designed to service any car or truck air-conditioner operating with R134a.

RHS 3000 is designed and manufactured to meet specifications better than the SAE J2099-standard using premium components throughout and given proper care, it should provide trouble-free service.

When connected to the air-conditioner it will automatically drain (recover) and reclaim (clean) the refrigerant from the air-conditioner. The cleaned refrigerant can be used for charging the air-conditioner right after a careful evacuation has been made or it can be drained into the external cylinder.

RHS 3000 cleans the refrigerant automatically. It also includes facility for monitoring the amount of oil that might be drained during the process of recovery from the air-conditioner. This amount has to be added before a following charging of refrigerant takes place.

In addition, the station has a vacuum pump and an electronic vacuum gauge. So it is possible to make the whole process of recovery, reclaim, evacuation, leak detection and charging without removing the hoses from the vehicle.

While RHS 3000 is in operation, built-in devices will continually monitor all procedures and secure the automatic process. Furthermore, it includes safety devices that will stop and signal the faulty process, if too high pressures or if overfilling of the internal or external cylinder takes place.

The filtering system is automatic and no frequent exchange of filter material is necessary.

Venting of non-condensable gases (air) is done automatically, minimizing the release of refrigerant.

Before using the RHS 3000 - read the following instructions carefully.

SAFETY PRECAUTIONS

1. Always wear protective goggles when working with refrigerant.
2. Do not allow refrigerant to come into contact with your skin. Its very low boiling point can cause frostbite.
3. Before connecting RHS 3000 to an air-conditioner, make certain that the manual shut-off valves are closed.
4. Before disconnecting RHS 3000, make certain that the process is completed to avoid release of refrigerant from the air-conditioner into the atmosphere.
5. When emptying the reclaimed refrigerant from RHS 3000 into the external cylinder, make certain that the manual shut-off valves on both RHS 3000 and the cylinder are completely closed after this operation.
6. Do not expose RHS 3000 to moisture and do not operate it in wet areas.
7. Disconnect power and compressed air supply before attempting to perform any maintenance on RHS 3000.
8. To reduce the risk of fire: Avoid the use of an extension cord, because the extension cord may be overheated. However, if you have to use an extension cord, it should be one of at least 2.5 mm².
9. Remove external cylinder in case of fire.
10. When draining oil from the suction accumulator, it must be filled into a sealed container, immediately. This is because the oil contains R134a.
11. Please follow the instructions and use gloves and goggles.

SPECIFICATIONS

Recovery/reclaim system:

Refrigerant	R134a
Recovery (drain) capacity	0.2 to 1 kg liquid/min
Reclaim (cleaning) capacity	4 kg/h (3-5 cars/h)

Compressor:

Nominal voltage	see name plate
Power consumption	see name plate
Nominal amperage	see name plate
Nominal cycles	see name plate
Oil level indicator	incl scale and manual drain
Acid filter drier	exchangeable with 3/8 in flare
Oil separator	incl automatic return
Suction accumulator	2.4 l (2 kg R134a)

Internal cylinder:

Capacity	4.0 kg
Heating element	125 W
Automatic level control	with signal lamp
Safety valve	mechanical
Venting of non-condensable gases	automatic

SPECIFICATIONS

External cylinder: (optional)

Capacity from 15 kg to 25 kg
on request (bottle
max. 80% filled)
The weight is adju-
sted ex works de-
pending on the
bottle to be used

Automatic level control with signal lamp

Vacuum pump two-stage

Pumping speed $3\text{m}^3/\text{h}$ (50 l/min)
Oil capacity 200 cc
Vacuum level to 0.05 mbar

Electronic vacuum gauge 0.2 - 20 mbar
0.15 - 15.0 Torr

In general:

Safety equipment mechanical safety valve
thermostat
low-pressure control
overcharge safety device
fan control
suction regulator
high-pressure control

Indications on control
panel

READY
(white lamp)

RECOVERY
(green lamp)

INTERNAL CYLINDER FULL
(red lamp)

EXTERNAL CYLINDER FULL
(red lamp)

SPECIFICATIONS

In general:

Pushbuttons for each process	RESET/TEST RECOVERY/RECLAIM EVACUATION + VACUUM CHECK CHARGING
Main switch	
Power supply	220 V/50 Hz
Air supply	5-8 barg, 100 l/min
Fuse	10 A
Refrigerant inlet size	1/2 in ACME
Refrigerant outlet size	1/2 in ACME
Weight	115 kg
Dimensions	1030 x 670 x 800 mm
Code No	02575

Technical and design alterations as well as typing errors reserved.

DESCRIPTION

Process description

A pre-check of high and low pressures can be made on the built-in gauges. Reading of the pressure secures that you have refrigerant in the vehicle. The refrigerant from the vehicle can be recovered both in liquid and vapour phase.

In the suction accumulator, located in front of the compressor, the liquid will be stored and will be evaporated before it is sucked through the compressor.

Furthermore, this accumulator separates refrigerant and oil so that oil stays in the lower part of the accumulator, where an oil level indicator shows if and how much oil has been drained from the air-conditioner compressor.

Having passed the suction accumulator the refrigerant passes an acid filter drier.

A suction pressure regulator limits the pressure to 0.5 barg - in order to protect the compressor against a too high suction pressure.

On the high-pressure side of the compressor the refrigerant passes an oil separator, a coarse filter and a drying filter before it is condensed, whereafter it is led into the internal cylinder.

This cylinder is equipped with a safety device, which automatically stops the unit when about 4.0 kg has been reclaimed.

In case of the presence of non-condensable gases these will be accumulated in the top of the internal cylinder resulting in a pressure increase.

Venting of the non-condensable gasses is done automatically.

DESCRIPTION

Process description

The evacuation of the vehicle is made by the built-in vacuum pump, the vacuum level of which is monitored on an electronic vacuum gauge. This ensures a correct evacuation and makes it possible to do a leak detection by blocking the vacuum pump and to check the pressure increase.

After the evacuation, charging can take place from the internal cylinder, which is supplied with a glass tube for indication of R134a on a scale.

Finally, a pressure check can be made on both high and low-pressure side.

The station operates automatically and has five main positions which can be changed by means of the pushbuttons:

- RESET/TEST
- RECOVERY/RECLAIM
- EVACUATION
- VACUUM CHECK
- CHARGING

In position RESET/TEST it is possible to make trouble-shooting and to check whether the air-conditioning system contains R134a at all.

RECOVERY/RECLAIM is done automatically and when the internal cylinder has been filled up to the 4.0 mark, the station stops automatically and the red lamp INTERNAL CYLINDER FULL lights and the internal cylinder must be drained until a small amount of approx 1 kg is left.

If the station stops, owing to overcharged external cylinder, the cylinder has to be replaced, before it is possible to continue the process. After the cylinder has been drained/replaced, the station is reset by pressing the RESET/TEST pushbutton.

DESCRIPTION

Process description

Position EVACUATION starts the vacuum pump that removes moisture and air from the air-conditioning system.

During the evacuation process it is possible to make a vacuum check (leak detection) by pressing the pushbutton marked VACUUM CHECK. The vacuum pump is blocked by a solenoid valve and if there is more moisture in the system - or a leak - the pressure will increase and the electronic vacuum gauge will show this.

CHARGING opens for the charging cylinder and the charging process can be controlled by the manual shut-off valve. Charging can only be done on the high-pressure side of the air-conditioning system.

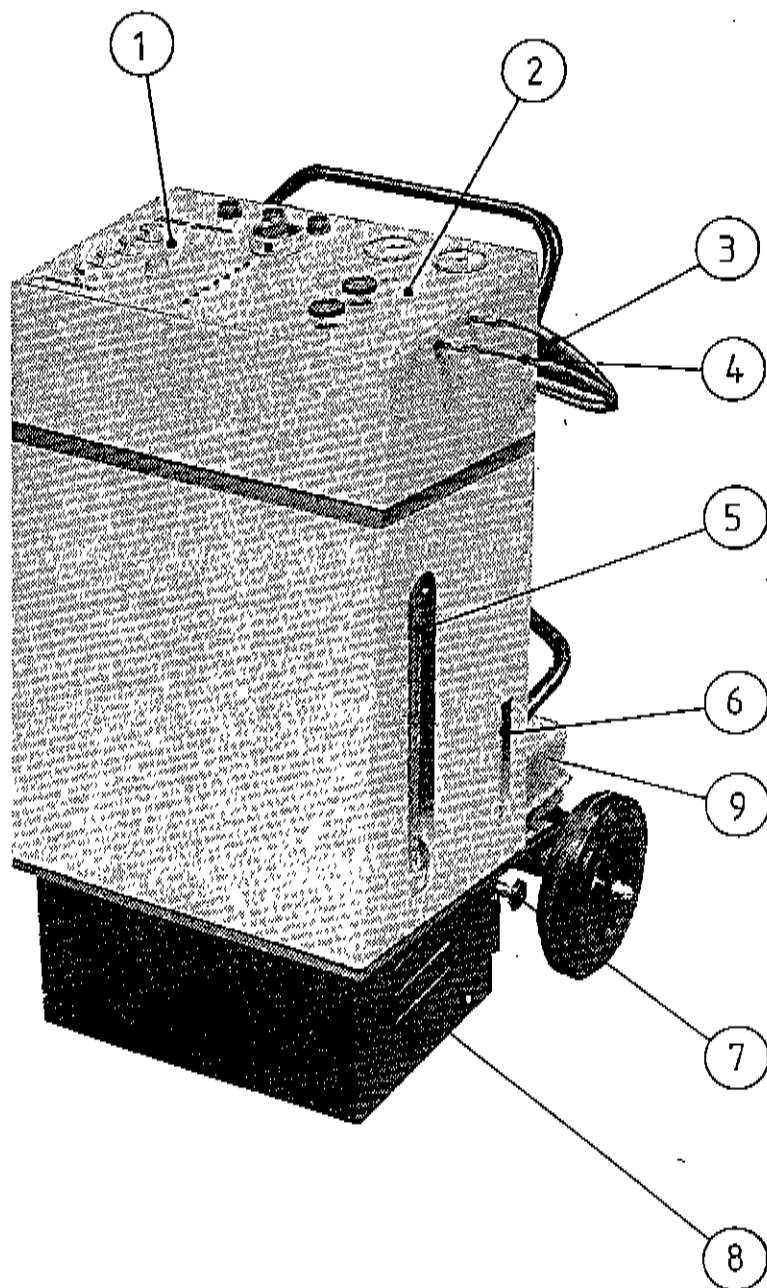
DESCRIPTION

Components

1. **Electrical operator control panel:** including main switch, pushbuttons and control lamps.
2. **Mechanical control panel:** including manual shut-off valves and moisture indicator.
3. **Inlet/outlet, high-pressure side:** connection for hose on the high-pressure side of the air-conditioning unit. Inlet during the recovery process, outlet during the charging of the air-conditioning unit.
4. **Inlet, low-pressure side:** Connection for suction hose of the low-pressure side of the air-conditioning unit.
5. **Glass tube with scale:** that makes it possible to see the amount of refrigerant filled into the internal cylinder. It is also used if you want to charge an air-conditioning system.
6. **Oil level indicator:** for the control of the amount of oil being recovered together with the refrigerant from the vehicle.
7. **Manual shut-off valve:** for draining of the collected oil from the vehicle.
8. **Compressor compartment:** including compressor, fan, condenser and regulator valve - see page 21.
9. **Transformer:** transforms from high voltage (220 V) to low voltage (24 V, 18 V, 8 V), which is used for control of the station.

DESCRIPTION

Components



DESCRIPTION

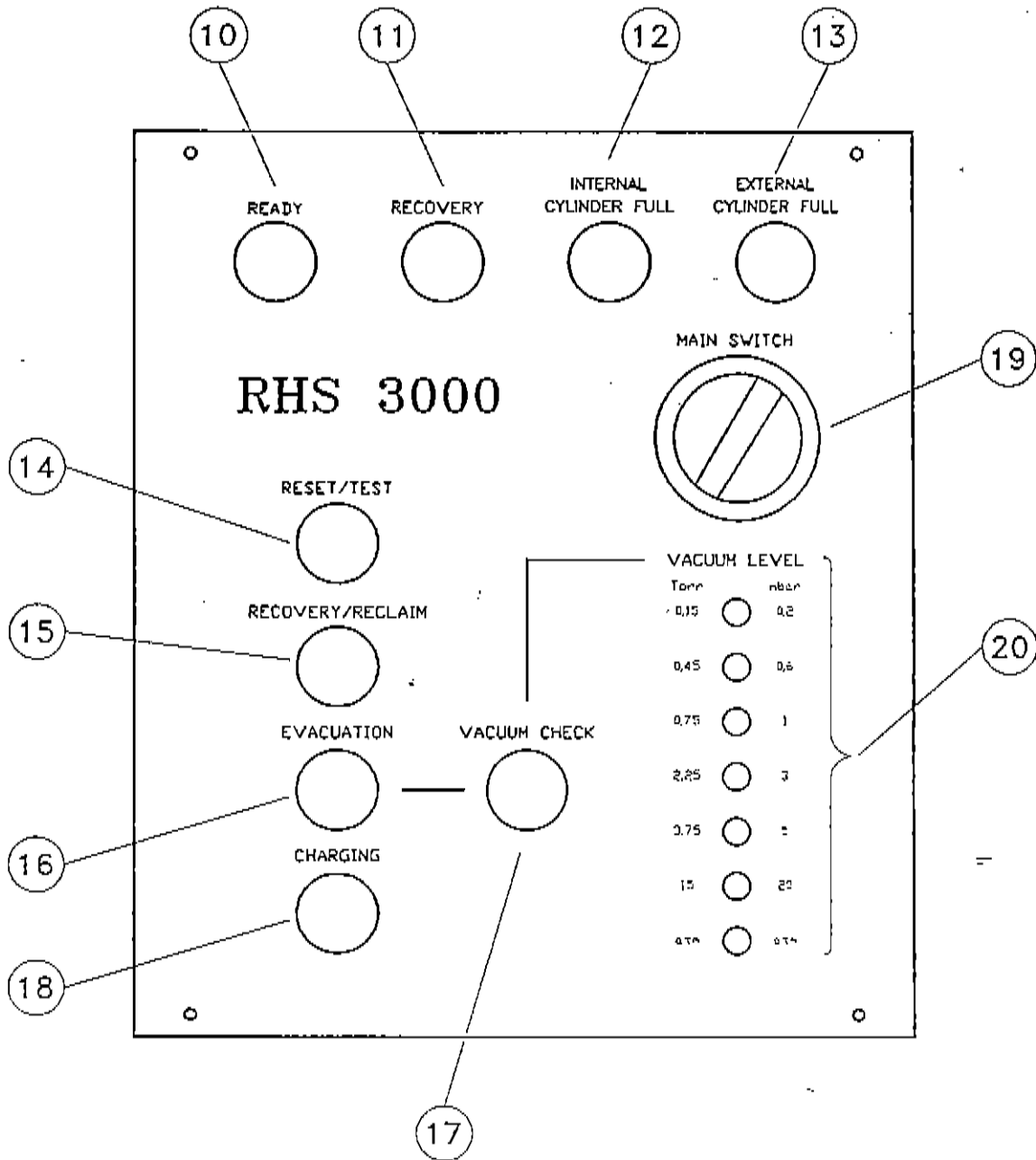
Components

Electrical control panel

10. **READY (white lamp):** indicates power on and fault-free operation of PC-board.
11. **RECOVERY (green lamp):** indicates that the compressor is running and that the pressure is higher than set on the low-pressure control and lower than set on the high-pressure control.
12. **INTERNAL CYLINDER FULL (red lamp):** indicates that the internal cylinder is filled up to the 4.0 kg mark and that the overflow switch is operating - the compressor will stop.
13. **EXTERNAL CYLINDER FULL (red lamp):** indicates that the external cylinder (the bottle) is full (max 80% of its total volume). The scale, on which the external cylinder is placed, disconnects the station and the compressor stops.
14. **RESET/TEST pushbutton:** closes for all in and outlets from the station, so that the high and low-pressure gauges on the mechanical control panel can be used for testing of the air-conditioning system. The pushbutton is also used for resetting of alarms.
15. **RECOVERY/RECLAIM pushbutton:** has to be pressed to actuate the RECOVERY/RECLAIM process.
16. **EVACUATION pushbutton:** is actuated to start the EVACUATION process.
17. **VACUUM CHECK pushbutton:** is actuated to check the vacuum level and to see whether there are leakages in the air-conditioning system.
18. **CHARGING pushbutton:** is actuated to start the CHARGING process.
19. **MAIN SWITCH:** controls the power supply to the station.
20. **Vacuum gauge (LED):** indicates the vacuum level in the air-conditioning system during the evacuation process.

DESCRIPTION

Components



ELECTRICAL CONTROL PANEL

RHS 3000

DESCRIPTION

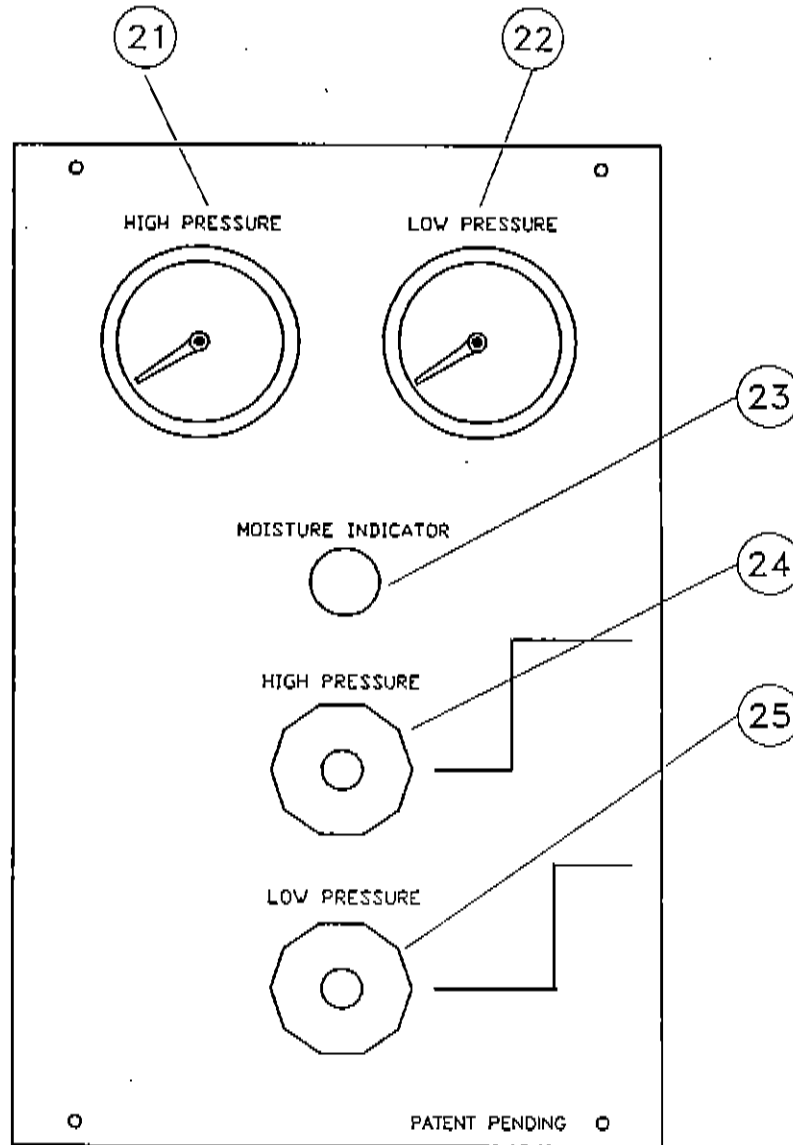
Components

Mechanical control panel

21. **Low-pressure gauge:** shows the low pressure during the RESET/TEST process on the air-conditioning system.
22. **High-pressure gauge:** shows the high pressure during the RESET/TEST process on the air-conditioning system.
23. **Moisture indicator:** rough indicator for moisture content.
24. **Outlet, manual shut-off valve:** that controls the recharge of the vehicle.
25. **Inlet, manual shut-off valve:** that controls the flow of refrigerant from the vehicle.

DESCRIPTION

Components



MECHANICAL CONTROL PANEL

RHS 3000

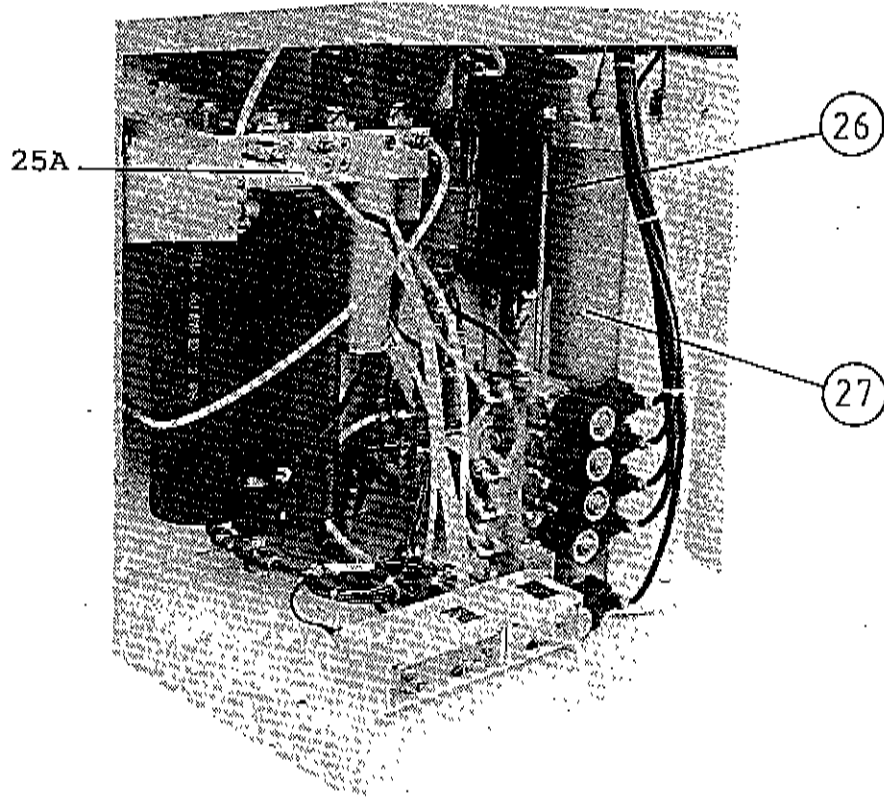
DESCRIPTION

Components

- 25A **Dryer block:** contains oil separator, coarse filter and drying filters.
- 26. **Acid filter dryer:** protects the internal compressor and limits the amount of acid being filled into the internal cylinder.
- 27. **Internal cylinder:** for storage of reclaimed refrigerants - 4.0 kg.

DESCRIPTION

Components



FRONT VIEW
WITHOUT COVER

OPERATIONAL INSTRUCTIONS

How to prepare RHS 3000 for use

- Check the station of transport damages. If you find any, please contact the supplier immediately.
- Check that the supply voltage corresponds to the values stated on the name plate.
- Check that the refrigerant type for which the station is applicable corresponds to the type stated on the name plate.

OPERATIONAL INSTRUCTIONS

How to prepare RHS 3000 for use

- Connect the station to 1 x 240 V/50 Hz + earth.

Please note that the oil filter is mounted (fig 1).

- Connect the station to compressed air (fig 1). The compressed air is ordinary workshop compressed air without oiling. The pressure must be between 5 and 8 barg.

When dismantling compressed air, air will blow inside the station. This is not to be taken as a leak, it has to be that way and it indicates that the drying process works.

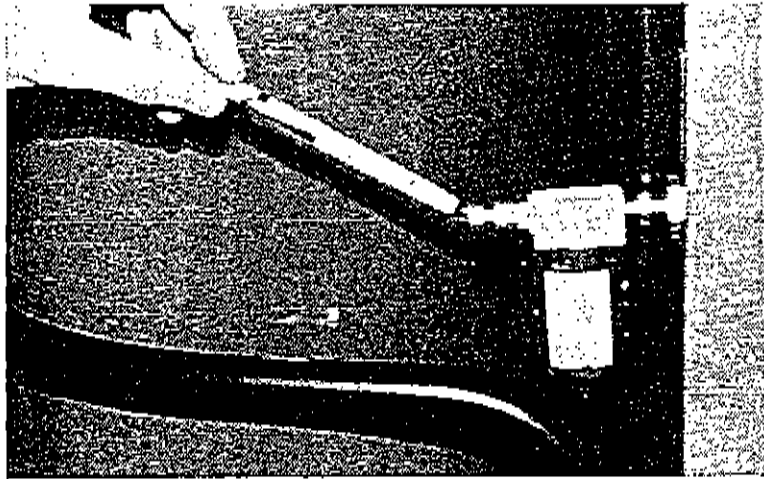


Fig 1

- Mount the blue hose on the low-pressure side and the red hose on the high-pressure side.
- The oil level must be checked on the vacuum pump placed on the rear of the station. The oil level must be in the middle of the sight glass. If not, vacuum oil must be supplied. See 'Regular control and service'.

OPERATIONAL INSTRUCTIONS

How to prepare RHS 3000 for use

- Check oil level in suction accumulator. If there is oil in the oil glass, it must be emptied by means of the valve (pos 6 page 11).
- You have to make sure that the set of hoses is mounted correctly on the high and low-pressure side and that the two valves are closed.
- Make sure that the internal cylinder is charged with the correct amount of refrigerant to be able to fill the air-conditioning system. This is done by mounting a bottle with hose on the suction side and opening the valve on the bottle on the vapour side.

REMEMBER that when charging from a bottle into the station you have to charge from the vapour side. Otherwise (charging from the liquid side) it would not take long before the suction side was filled with liquid. Thus you would risk a liquid hammer in the compressor.

Set the MAIN SWITCH to ON. Select the RECOVERY process on the front panel. Now the valve on the bottle is to be opened (vapour state) and the station is operating.

OPERATIONAL INSTRUCTIONS

How to prepare RHS 3000 for use

When the amount of liquid required (approx 2 kg) has been reached, the valve on the bottle must close and you have to wait until the compressor of the station stops. The green light in the lamp RECOVERY extinguishes. Then the inlet valve is to be closed and the bottle incl hose can be dismantled.

- Mount the hoses on the high and low-pressure side of the air-conditioning system to be emptied.
- Make sure that all manual shut-off valves are closed tightly before starting the process.

OPERATIONAL INSTRUCTIONS

Using the RRS 3000

NOTE!

The recovery and reclaim station has a built-in suction accumulator of 2.4 l in order to ensure correct function. Thus the station only accepts a certain amount of refrigerant R134a in liquid form.

But when draining several cars in one row without the green lamp (Recovery) extinguishing once or at the draining of large units, containing more than 2 kg refrigerant - overcharging of refrigerant in liquid form might occur, which will cause damage to the station. - Therefore the following precautions must be taken:

1. The inlet side of the recovery station should always be connected to the vapour stub on the air-conditioning system.
2. If this is not possible, it will be necessary to check that the system does not contain more than 2.4 l refrigerant.
3. The station must always be drained so that the lamp RECOVERY extinguishes before connection to the next air-conditioning system.

OPERATIONAL INSTRUCTIONS

Using the RHS 3000

RESET/TEST

- Close the manual shut-off valves (pos 24 and 25, page 15).

- Turn the MAIN SWITCH (pos 19 page 13) to ON and the white lamp is lit. The station will automatically start the RESET/TEST process and now you can see whether the high and low-pressure side ist OK in the air-conditioning system to be serviced. This is done by starting the air-conditioning system and reading the pressure on the high and low- pressure gauge on the mechanical control panel.

OPERATIONAL INSTRUCTIONS

Using the RHS 3000

RECOVERY/RECLAIM

- Open the two manual shut-off valves (pos 24+25 page 15) on the mechanical control panel.
- Press the RECOVERY/RECLAIM (pos 15 page 13) button and the station will automatically drain the air-conditioning system.
- The green lamp RECOVERY (pos 11 page 13) indicates that the compressor is on. If it is off and stays off, the air-conditioning system is emptied within approx 10-20 minutes - dependent on temperature and amount.
- When the air-conditioning system has been emptied, the two manual shut-off valves have to be closed again, then the oil level must be checked, as oil has disappeared from the system (pos 6 page 11).
- Refill the same amount of oil onto the air-conditioning system which has disappeared from the system before recharging.
- The green lamp RECOVERY will flash in quite long intervals between the starts. At intervals of 5 minutes or more between each start of the compressor, it means that the air-conditioning unit in the car has been emptied.
- There is a built-in safety device in the internal cylinder. This safety device disconnects the compressor when the internal cylinder has been filled to 80% which means that it contains approx 4.0 kg refrigerant.

OPERATIONAL INSTRUCTIONS

Using the RHS 3000

RECOVERY/RECLAIM

This is indicated by means of a red lamp (pos 12 page 13). The compressor stops.

See "Draining of the internal cylinder" page 28.

- To be able to continue the process, the station is reset on the RESET/TEST button (pos 14 page 13).

EVACUATION

- Open the two manual shut-off valves on the mechanical control panel.
- Press the EVACUATION button (pos 16 page 13) and the station will automatically evacuate the air-conditioning system.

Note: Only press the EVACUATION button if the RECOVERY/RECLAIM process has finished as the vacuum pump may not be under overpressure.

- The VACUUM CHECK button (pos 17 page 13) is used to check when the correct vacuum level has been reached and whether there are leaks in the air-conditioning system. This is seen on the vacuum gauge.

Actuate the VACUUM CHECK button. If no more than 2 LEDs extinguish within the test period the air-conditioning system is tight.

- When the correct vacuum level has been reached the process can be continued.

OPERATIONAL INSTRUCTIONS

Using the RHS 3000

Charging the air-conditioning system:

- Check in the car instruction manual, and see how much refrigerant must be charged onto the air-conditioning system of the car.
- Close the manual shut-off valves completely (pos 24 and 25 page 15).
- Press the process button CHARGING (pos 18 page 11).
- First you have to read the refrigerant amount on the scale of the internal cylinder. Secondly, the marking of the required amount has to be set (fig 2) and the manual shut-off valve (pos 24 page 15) is opened. When the correct charging amount has been reached (please note that small amounts do not take long), the manual shut-off valve is closed again.
- When the outlet valve (pos 24) has been closed, you have to wait another 30 seconds before the hoses can be dismantled. This is done to make sure that the refrigerant gets into the air-conditioning system.
- After dismantling the hose from the air-conditioning system, the manual shut-off valve (pos 24 page 15) is opened, the RECOVERY/RECLAIM button (pos 15 page 13) is actuated and you must wait until the RECOVERY lamp extinguishes. The hoses are now drained of refrigerant. Close the manual shut-off valve again.

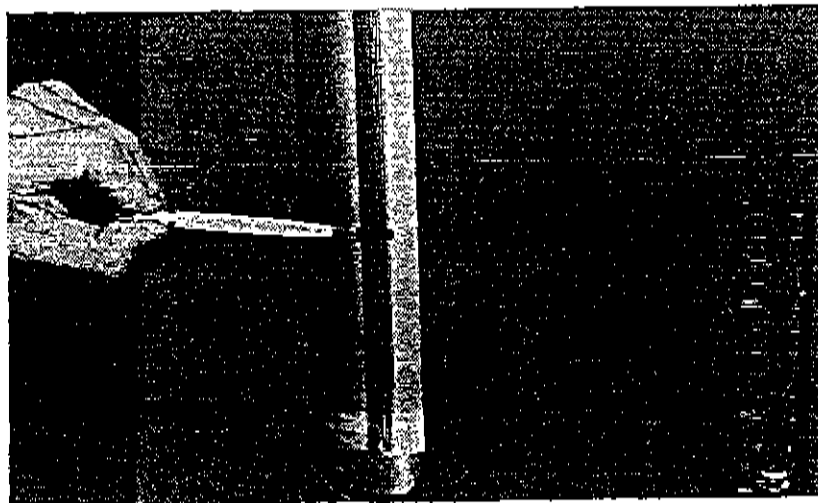


Fig 2

OPERATIONAL INSTRUCTIONS

Using the RHS 3000

Draining of the internal cylinder:

- Mount the hose from the high-pressure side on the station. Open the high-pressure valve and the valve on the bottle (vapour state). Press the CHARGING button (pos 18 page 13) and the station will drain the internal cylinder into the external cylinder (bottle).
- When the draining is finished (leave approx. 1.5 kg in the internal cylinder) the valve on the external cylinder (bottle) must be closed and the pushbutton RECOVERY/RECLAIM is actuated. The station will automatically drain the hose.

OPERATIONAL INSTRUCTIONS

Regular control and service:

To guarantee RHS 3000 all components used for maintenance and servicing must be identical to the service set specified for the station on page 35.

To ensure trouble-free operation maintain the RHS 3000 according to the following schedule:

Regularly:

Filling of oil - vacuum pump:

- Disconnect the station from the power supply so that it does not start during filling of oil.
- Dismantle the charging cap (fig 3) and charge vacuum oil (slowly). At the same time watch the oil level in the sight glass. Max. level at the top of the circle on the sight glass.

OPERATIONAL INSTRUCTIONS

Regular control and service:



Fig 3

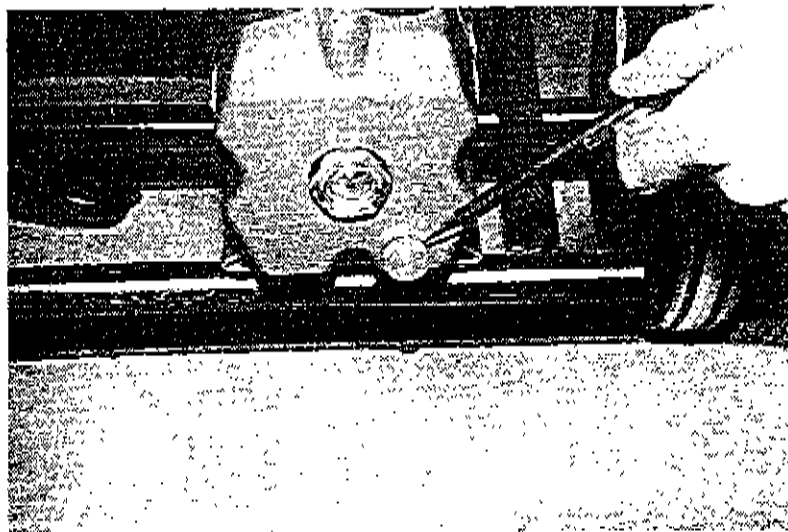


Fig 4

OPERATIONAL INSTRUCTIONS

Regular control and service

Every 100 working hours

Change: Acid filter
 Check: Oil level in compressor

Every 200 working hours

Change: Oil in vacuum pump

Every 500 working hours

Change: Refrigerant filter material
 Air filter material
 Oil filter cartridge

NOTE: Before changing any of these filters - make sure that the complete station has been emptied of refrigerant as much as possible.

After that - use the following procedure:

- Remove front cover.

Change of acid filter drier:

- Replace the existing filter by loosening the two 3/8 in flare nuts (pos 26 page 18).

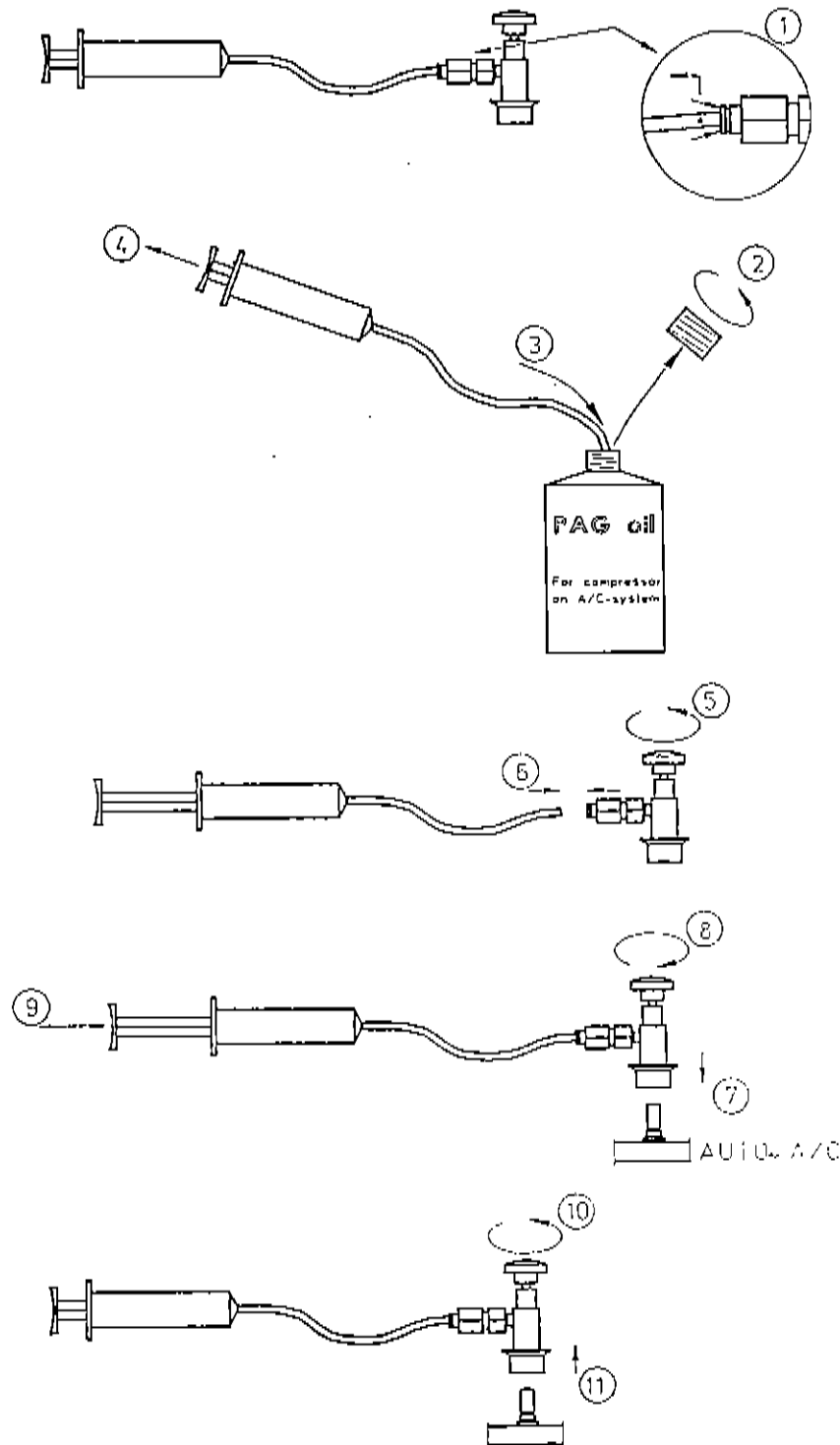
Check oil - compressor:

- Check the oil level of the compressor. Max. level in the middle of the sight glass, min. at the lower part of the sight glass. If the level is below minimum, replenish (Fig 5+6).

(5mm = 100 ml oil) - When replenishing only fill till the level is just visible at the lower part of the sight glass.

FILLING OF PAG-OIL ON A/C-SYSTEM

FILLING OF PAG-OIL ON A/C-SYSTEM



652-400001A-00

OPERATIONAL INSTRUCTIONS

Regular control and service

Change of oil - vacuum pump:

- To be done at service or when the station is not able to evacuate the air-conditioning systems properly.
- Place a container below the draining screw. The vacuum pump contains approx 200 cc.
- Dismantle the draining screw (fig 4) and then dismantle the charging cap (fig 3).
- When all the oil has been drained the draining screw is to be remounted. Then vacuum oil is to be supplied as described in the section for filling of oil into vacuum pump.

Change of oil filter and drying medium

- The oil filter (fig 7), drying medium refrigerant (fig 8), drying medium air (fig 9) have to be changed every 500 hours.
- At the change of the oil filter and drying medium refrigerant you have to calculate with a minor refrigerant release.
- Change of oil filter is done by unscrewing the rod shaped bolts (fig 10) and exchanging the drying medium and gaskets.
- Change of drying refrigerant and drying air medium is done the same way.
- Service kit is available at your supplier.
- When replacing the filters the nut has to be tightened with a torque of 15 Nm.
- When changing filter materials - replace all seals in the filter manifold, to make certain that no leaks will occur after the change.
- Replace the cover again

OPERATIONAL INSTRUCTIONS

Regular control and service



Fig 5

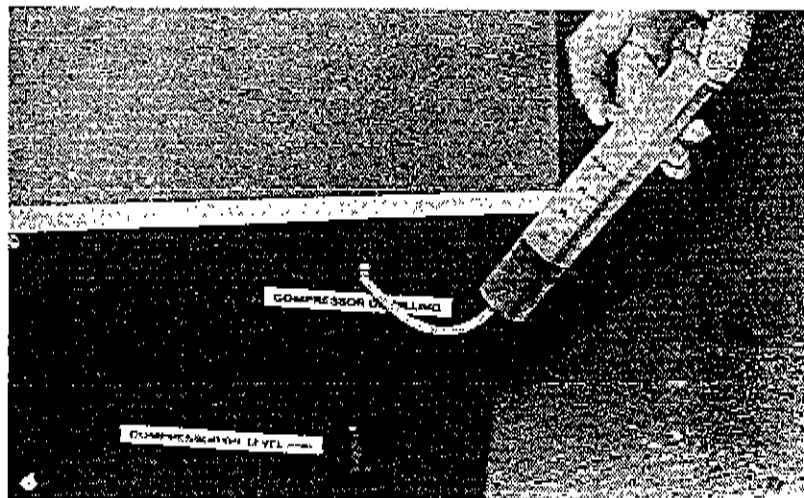


Fig 6

OPERATIONAL INSTRUCTIONS

Regular control and service

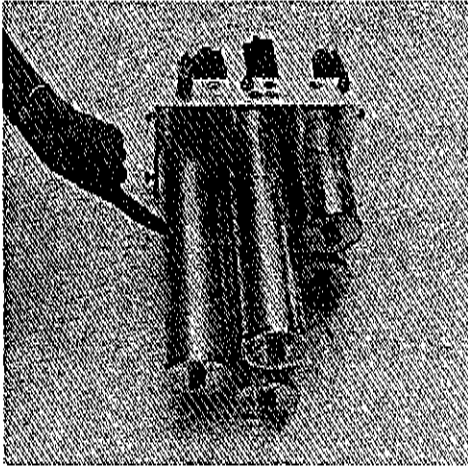


Fig 7

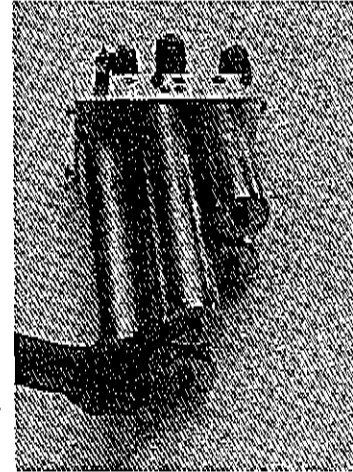


Fig 8

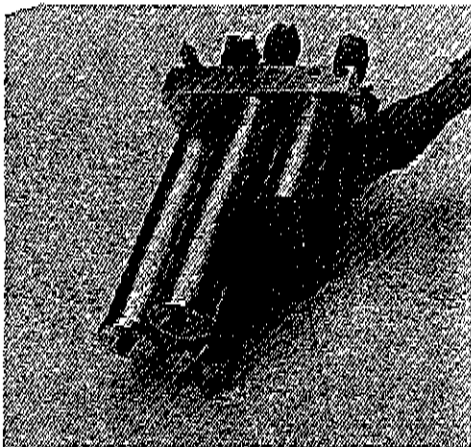


Fig 9

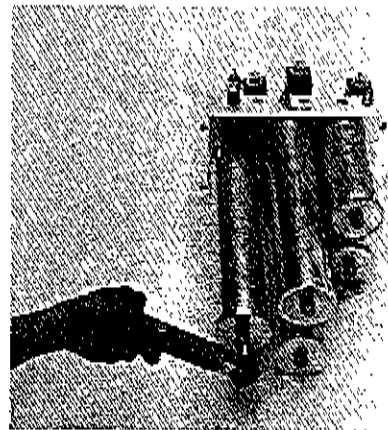


Fig 10

SERVICE KIT - no: 652-000004A (RHS 3000/R134a)

consists of:

Qty	Description	Code no
1	acid filter	069-2910127
1/4 l	compressor oil PAG	290-0001240
1 kg	molecular sieves - R134a	069-3559594
0.6 kg	molecular sieves - air	069-3559512
10	gaskets - $\phi 60.5/\phi 54.5$	650-100057A
5	gaskets - nylon	065-0213232
1/4 l	oil for vacuum pump	290-0001272
1	air filter	069-4570547
1	syringe	290-5390168

Alterations reserved

TRUBLE SHOOTING - RHS 3000

FUNCTION	FAULT	POSSIBLE FAULT	ELIMINATION OF FAULT
<ul style="list-style-type: none"> - Actuate the main switch 	<ul style="list-style-type: none"> - No light in the READY lamp 	<ul style="list-style-type: none"> - No power supply - Blown fuse - Blown bulb 	<ul style="list-style-type: none"> - Contact electrician - Change the fuse (placed in the ei-box) - Change bulb
<ul style="list-style-type: none"> - Connect RHS 3000 to the air-conditioning system to be emptied 	<ul style="list-style-type: none"> - No light in the RECOVERY lamp, but the compressor is actuated - No light in the RECOVERY lamp, and the compressor does not work 	<ul style="list-style-type: none"> - Blown bulb - Check that the air-conditioning system is under pressure - Check that the check valve on the hose is OK - Check that the inlet valve is open 	<ul style="list-style-type: none"> - Change bulb - The air-conditioning system is empty - If not - contact your supplier - If not - open the inlet valve
<ul style="list-style-type: none"> - Draining of the A/C-system 	<ul style="list-style-type: none"> - The compressor works, but the A/C-system is not emptied, and no liquid gets into the internal cylinder - The compressor starts and stops in intervals of few seconds, although the low pressure side is under pressure - Indication of CYLINDER FULL although it is not full - The station stops, and the internal cylinder is full, but the lamp "cylinder full" does not light. - The station works and the internal cylinder is full, but the station does not stop on "cylinder full". 	<ul style="list-style-type: none"> - Valve fault in the compressor - Fault on high pressure side - Short circuited level control - Bulb blown - Fault on level control - Relay fault 	<ul style="list-style-type: none"> - Contact your supplier - Contact your supplier - Contact your supplier - Change bulb - Contact your supplier - Contact your supplier

	<ul style="list-style-type: none"> - Compressor does not stop and the low pressure is under 0.9 bar abs - The station blows off non-condensable gases, constantly - The station blows off refrigerant at the air outlet on the drying block all the time 	<ul style="list-style-type: none"> - Relay fault - Fault on low pressure control (KP15) - Fault on pressure control - Fault on level control, so that the cylinder is full and blows off liquid refrigerant - Fault on check valve on drying block 	<ul style="list-style-type: none"> - Contact your supplier - Contact your supplier - Contact your supplier - Contact your supplier - Contact your supplier
<ul style="list-style-type: none"> - Draining of internal cylinder 	<ul style="list-style-type: none"> - The cylinder is not drained of liquid 	<ul style="list-style-type: none"> - The outlet valve on the station is closed - The valve on the bottle is closed - Bottle is overcharged - Pressure equalization in internal cylinder and bottle 	<ul style="list-style-type: none"> - Open the valve - Open the valve on the bottle - Check the weight of the bottle, and if overcharged, it must be drained so that it is only filled to 80% - Close the outlet valve and wait until the station has built up a larger pressure in the internal cylinder
<ul style="list-style-type: none"> - Push button EVACUATION actuated 	<ul style="list-style-type: none"> - The vacuum pump does not start - No current on the pressure gauge - No vacuum in the air-conditioning system 	<ul style="list-style-type: none"> - Fault on vacuum pump - PC-board - faulty - PC-board - faulty - PC-board - faulty 	<ul style="list-style-type: none"> - Contact your supplier - Contact your supplier - Contact your supplier - Contact your supplier
<ul style="list-style-type: none"> - Charging of the air-conditioning System 	<ul style="list-style-type: none"> - The compressor runs although the switch is in position CHARGING 	<ul style="list-style-type: none"> - Low and high pressure valves closed 	<ul style="list-style-type: none"> - Open the valves
<ul style="list-style-type: none"> - Actuation of push buttons 	<ul style="list-style-type: none"> - No light in the push buttons 	<ul style="list-style-type: none"> - Relay fault - Fault on switch - Blown bulb - PC-board - faulty 	<ul style="list-style-type: none"> - Contact your supplier - Contact your supplier - Change bulb - Contact your supplier