SUCTION DEVICE

SMAF

MODEL YX980D

USER MANUAL

READ THIS MANUAL BEFORE USE.

ELECTRIC SUCTION DEVICE Model YX 980D

Operation Manual

GENERAL

The Electric Suction Device Model YX 980D offers high suction and high flow with double piston cylinders. These quickly build a powerful suction, and it is especially used for surgical operations where large amounts of fluids
They must be suctioned quickly. They are not designed for use in case of existing flammable and/or explosive gases.
The unit must operate continuously for 30 minutes with intermittent load. Its duration ratio can reach over 50%.
Electrical requirement: Class I and Type B equipment.

STRUCTURAL CHARACTERISTICS AND OPERATIONAL PRINCIPLE (Fig. 1)

A light insulation source in oil with a high flow, double piston cylinder applied to the Electric Suction Device Model YX 980D whose pumps are free of maintenance and corrective service is simple.

Providing a very high efficiency flow and efficient suction generation
The necessary suction is available in a matter of seconds, less oil
There will be in the suction and without the need for maintenance.

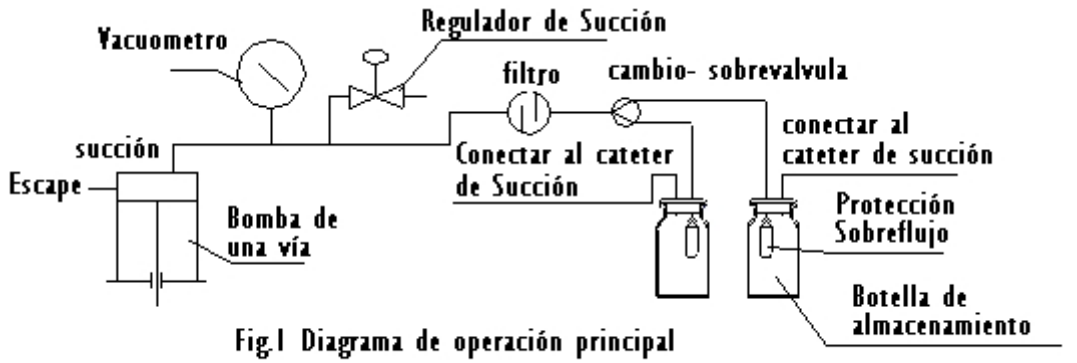


Fig.1 Diagrama de operación principal

The level of suction required is controlled by a flow regulator and is shown in the manometer.

The overflow protection device prevents liquids or solid particles in the inlet tubes and intermediate tubes, the bacterial filter for simple use
It can eliminate microbial contamination.

Two transparent graduated jars of 4000 ml made of polycarbonate (PC)
They can be autoclaved.

The Flow selector allows you to quickly choose a specific jar.
The washing of the cap is used for the placement of the catheter before or after the operation
The comfortable stainless steel handle makes it easy to handle;
The accessories of the suction device are a pedal and a power cable that allow displacement and movement.

SPECIFICATIONS

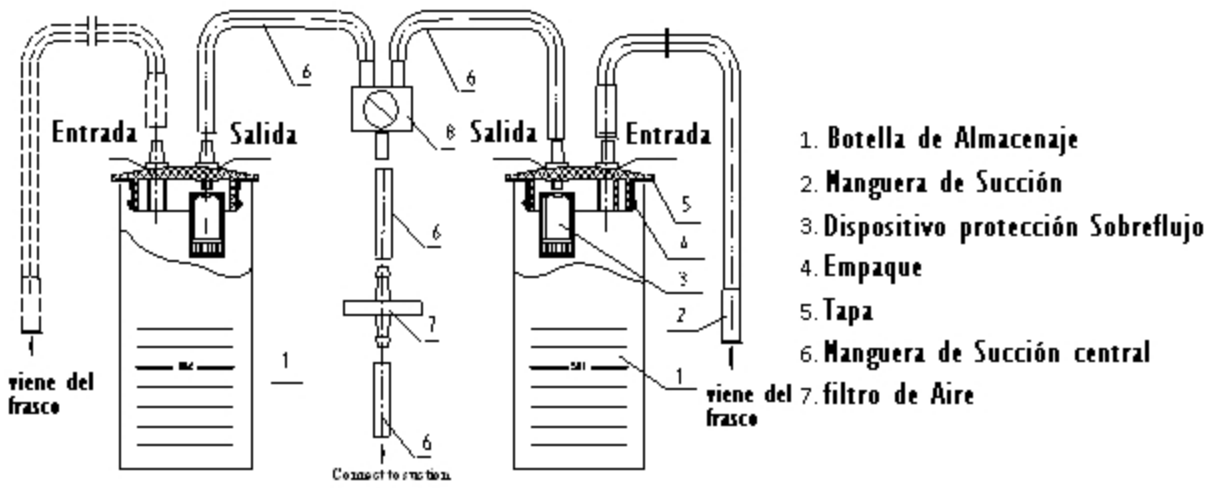
Specification / Model	YX980D
Dim (mm)	380 x 270 x 890
Red (kg)	25.5
Storage Bottle (mL)	8000
Flow rate (L/min)	≥80
Input power (VA)	280
Fuses for main cable	RF1Ø5 x 20/1.5 A
Fuse for transformer	RF1Ø5 x 20/0.7 A
Max. Suction (mmHg)	≥680
Adjustable suction range	150 mmHg~Max. Suction
Power supply	~ 220V±10%, 50 Hz

UNPACKING

Unpack to inspect the exterior of the product before assembly and adjustment. Check the accessories according to the packing list. Please contact with the manufacturer or supplier on time if there is any problem.

ASSEMBLY AND ADJUSTMENT

1. Connect the duct Fig. 2



Note: The air filter inlet marked FLUID SIDE must be connected to the *separator connector of the flow selector valve.*

2. Connect the main cables

When connecting the unit to the power supply, the power lamp lights up.

Warning: The main cable plug of the unit acts as a device for
main cable blocking. The plug of the main cables must have outlets for reliable land.

3. Check the duct

Turn the pressure regulator knob firmly clockwise,
tap the entry with your finger or bend the hose and hold it with your finger.

Turn on the unit with the hand or foot switch, the readings displayed on the isolation counter must quickly increase to more than 680 mmHg; leave the free entry and the readings must return to less than 150 mmHg corresponding to the condition indicating that the duct is connected properly.

4. Suction Adjustment

Turn on the unit with the inlet covered, and adjust the pressure regulator, the readings shown on the isolation counter must vary between 150 mmHg and 680 mmHg. The The required level of isolation in the clinic can be controlled by adjusting the regulator.

Note: Turn the isolation regulator clockwise for a increase in suction.

5. Inspect and examine the overflow protection device

Open the bottle cap with the overflow protection device; clean it.
valve inlet and even the rubber valve which must be connected to the float satisfactorily. Check for any folds or breakage or other defects. The float It should move flexibly without any obstruction.

Hold the lid, let the float touch the water level
vertically, the float must rise with the float guide while moving the lid slowly down.

Press the lid firmly, connect the suction hose to the inlet of the storage bottle, and put the equipment to work with the regulator tightened in clockwise.

Submerge the suction hose in a container of clear water, or suck liquid into the storage bottle simulating the conditions of its normal use until the the overflow protection device shutoff mechanism is activated while that the suction stops automatically. A different application in the suction should result in a variety at the final level of the liquid.

Loosen the isolation regulator, turn off the unit switch, then open the cover from the bottle and emptied the storage bottle. When I tightly fixed the cap once more, the float must be located at the end of the safety frame with the opening of the valve inlet.

Corresponding to the aforementioned condition, prove that the device of overflow protection is effective.

Note 1: Two possible causes in the follow-up will lead to the level of the liquid *keep going up even though the shutdown mechanism of the excessive protection has been activated. 1- the self-isolation resided in the storage bottle. 2- The entry of the valve has not been completely sealed. In the first case, the liquid level should not*

Raise more, when the suction hose removed from the liquid is reinserted. In the
In the second case, the liquid level must continue to rise. Special attention should be paid
attention to this case: When the storage bottle is about to fill up, move it away
suction hose of the liquid immediately, turn off the unit and find the reason
due to which the overflow protection device has lost effectiveness.
Note 2: Suction ends when the shutdown mechanism of the device
Overflow protection is activated. But the float is probably sucked in by the
valve entry through the insulation inside the intermediate tube. Under this condition,
Loosen the isolation regulator or turn off the equipment to remove the insulation inside.
From the intermediate tube, make sure that the float falls by gravity. Do not lower the float.
by force to protect it against the separation of the rubber valve.
Note 3: Do not open the bottle cap until the insulation has been released.
turn off the unit.
Note 4: Do not operate the equipment without having assembled the overload protection device.
flow and the safe protection tube.

Stop working

When the adjustment and operation are finished, turn off the unit, and then pull the plug from the outlet.
main to cut off the electricity supply.

OPERATION AND MAINTENANCE

Operation

Inspect the device according to the assembly and adjustment procedure. Ensure that its performance is satisfactory. Then connect the suction hose disinfected and the abdominal suction cannula for your operation.

During the operating period, the required level of insulation may be controlled by adjusting the pressure regulator. Turn on the hand or foot switch. for requirement and observe the liquid level in the storage bottle.

Under normal conditions, the collected liquid should not enter the auxiliary suction bottle. When the liquid level in the first storage bottle rises to capacity established, stop operating, empty and clean the storage bottle, and then continue with the suction.

The second storage bottle acting as an auxiliary suction bottle prevents that the liquid enters the pump. If the collected volume is greater for a period of time and the liquid has to enter the second bottle, empty the bottle in time before it activate the overflow protection device.

If the liquid level continues to rise even when the protection device is activated. about flow, solve the problem referring to 'Inspect and examine the **"overflow protection device".**

Note: The vacuum must be operated by a professional doctor in accordance with the instructions of medical science and the instruction in the operation manual strictly.

If you have any questions regarding the operation, please contact provider or the manufacturer.

2. Air filter replacement

If it contains foam or is obstructed by dirt, the air filter diaphragms must be change its color from light to deep. Later it will lead to the suction force in the entry reducing until disappearing, but the reading shown on the counter of isolation must increase to more than 300 mmHg. Under this condition, replace the filter by air as provided by the manufacturer.

Note 1: That the mechanism for shutting off the overcurrent protection device is active or if the tube has been blocked will also cause the suction force to reduce or disappear as well as the increase in insulation (see item 2 in problems)

Note 2: The air filter must be destroyed when it is replaced.

3. Replacement for fuses

When the fuses mounted on the back of the unit need to be replaced, align the fuse holder guide with a screwdriver and turn it against the watch hands to remove the cover, then inspect or replace the fuses.

The fuse transformer inside the unit must be inspected or replaced. for professionals.

4. Maintenance

Before stopping the operation, sucking a little clear water will be good for cleaning. the suction tube.

After stopping the operation, empty the storage bottle, remove dirt inside. from the storage bottle with a soft brush or cloth and then rinse them including the overflow protection device and the suction tube.

It is recommended to immerse the storage bottle and caps, as well as the tube of suction to a disinfectant solution (refer to your instructions) for one hour.

Metal suction catheters can be maintained in steam for 20 minutes. from 134±4ºC for sterilization.

The outside of the unit can be cleaned with a disinfected cloth that should be squeezed to prevent liquid from entering the cracks of the unit.

Note: When operating the unit at another time, the over protection device The flow and the suction tube must be connected correctly according to Fig. 2.

5. Meanings of safety symbols

Symbol	Meaning	Symbol	Meaning
~	Alternating Current	⏚	Ground Take
	Team Type B	⚠	Attention! Look for the documents

PROBLEM SOLVING

Item	Fault	Cause	Solution	Observations
1	Max. insulation <680 mmHg	Escape in the bottle entry bottle and press the cap of storage. 2) The regulator of loose insulation.	Clean the entrance of the strongly. Screw it regulator.	An uneven lid it can result in a escape. Replace the cover if necessary.

		Escape in the pipe connection.	3) Connect the tubes correctly.	3) Replace tubes broken suction.
2	Value of isolation≥300mechanism mmHg, but the suction force at the entrance of the tubes obviously reducing or disappearing.	It is activated of equipment shutdown of protection. 2) Suction tubes blocked. Air filter blocked.	I loosened the regulator for I emptied the bottle remove the insulation in the from storage to tubes then tighten it. time. 2) Dredge and rinse or replace blocked pipe. 3) Replace the filter with the supplied by the manufacturer.	the entrance of filter marked with a green dot.
3	Supply of energy is this normal, but the unit does not work.	Contact failure between the plug and the take. 2) The fuses are they are melting.	1) Replace and repair the take. 2) Replace the fuses rotors.	
4	Connecting to the main cables, the fuse is blown immediately.	Electrical failure. Transmission defective. Obstruction of bomb and increase of current.	1) Examine the circuit for solve the problem. Fix or replace the transmission. 3) Inspect the pump and the engine.	Examination or repair for professionals (see Fig. 3 Diagram of circuit)
5	Sucked liquid in the stream of the escape pump	The mechanism of team shutdown of protection loses effectiveness.	Repair or replace the protective equipment defective.	Use the bottle of storage inside of its capacity established.

Note: It is recommended that the pump should be disassembled or repaired by professionals. If It is necessary, please contact the manufacturer.

ENVIRONMENTAL CONDITIONS IN NORMAL USE

5 ~ 40ºC
Relative humidity: ≤ 80%
• Atmospheric Pressure: 860 ~ 1060 hPa

AMBIENT CONDITIONS IN TRANSPORT OR STORAGE

-40 ~ 55ºC
≤ 95%
Atmospheric Pressure: 500 ~ 1060 hPa
Note: Packed vacuum cleaners must be kept indoors without any corrosive gas and properly ventilated.

SERVICE

Any of our products are committed to free repair or replacement within a year from the day of purchase, if the unit is packaged,

stored and operated according to the rules recommended by the manufacturer not works normally.

The list of parts for the circuit diagram and other technical information are available. according to the suggestion by technically qualified personnel.

ACCESSORIES

Fuses for main cable	RF1Ø5 x 20/2.5 A	2 PCs
Fuse for transformer	RF1Ø5 x 20/0.5 A	1PC
Abdominal suction cannula		1PC
Suction hose		1PC
Air filter		2PCs

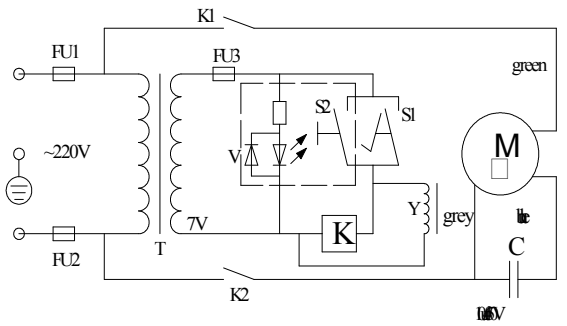


Fig 3. Circuit Diagram

Before the products are placed on the market, they must have been examined according to the Q/CYFM1 standards, and that are met all requirements demanded by the manufacturer.