# **Manual for Milking Machine**

## How to connect diagram:



#### Read this instruction manual before using

Dear customers! Thanks very much for choosing our portable-type milking machine. Before using this milking machine, please read this instruction manual carefully, and to operate, maintenance this machine appropriately. Then in such way, you can protect the health of your cow breast, and improve the quality of milk sanitation, and extend the using time of this machine.

## Attention point:

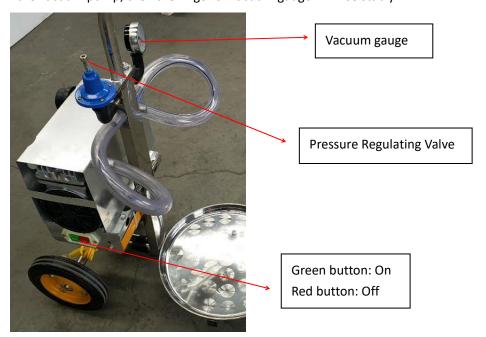
Before using this equipment, you must know the performance of it and the safety points you should pay attention.

- 1. The voltage of power of the equipment using should be according with the requirement of the equipment. The power should have reliable earthing protection line and other safety protection measurement. If you use the three phase vacuum pump, please pay attention to the turning direction of motor.
- 2. The daily maintenance and disassembling and cleaning in certain period should be according to regulation of instruction manual. Using suitable tools to install or disassemble the equipment to avoid damage.
  - If the equipment has the faults that cannot solved by maintenance, please contact

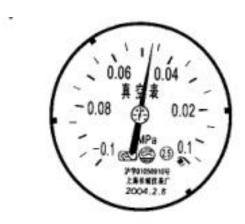
our company or the service position in your place, we will guide you to solve the technical problem.

# The correct method and order of milking:

- 1. Milking operation method
- (1) Turn on the power of milking machine, turn off the vacuum switch of vacuum tank, and start the vacuum pump, then the finger of vacuum gauge will rise stably.



(2) adjust "pressure regulating valve" at clockwise, vacuum press become big, adjust "pressure regulating valve" at anti-clockwise, vacuum pressure become small. Adjust the vacuum pump to normal vacuum degree position(47kpa), turn on the switch of vacuum pump, then you can start to milk.



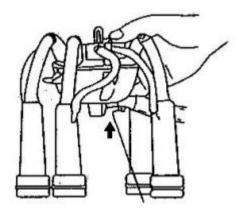
#### 2. the order of milking

- (1) the preparation of milking
- a. clean the breast and teat of cow, then make it dry. You had better clean the teat with the water with biocide.
- b. before cover the milk cup, you should milk by hand 2-3 times. Then put the teat in the special cup to observe if the teat is normal.
- c. clean and make the breast and teat of cow dry. After confirm the teat is normal, you should cover the claw in 1 minute.

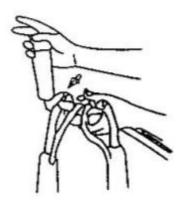


#### (2) The method of covering milk cup

a. First hold the claw horizontal, and make the 4 pieces of milking lining liner fall naturally. Then the milking lining liner can close the 4 mouths of claws with the gravitation of stainless steel cup. Hold the claw horizontal, put the claw under the breast of cow and open the switch of claw by the forefinger of the hand which should always hold the claw horizontal. (If the claw is declining, it will make the milking lining liner in the declining side air escape to influence the normal performance of milking machine.)

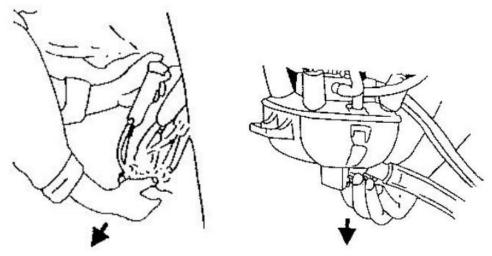


b. Hold the head of milk cup with the thumb, third finger and last finger of the other hand, and leave forefinger and middle finger to guide the teat put into the milking lining liner. Make the stainless steel cup upright, before doing it, you should disassemble the rubber pipe of bottom of milking lining liner to make sure the stainless steel cup will not air escape when put it upright, then cover the milking lining liner on the teat quickly. ( if the cow has one teat, which cannot milk, you should use the special rubber teat cap in the mouth of milk cup to avoid air escape.)

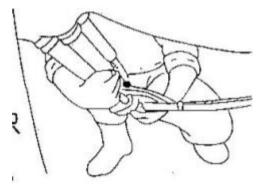


# (3) milking process

a. The time of milking of each cow is different, and usually, it costs 3-5 minutes to milk. When see the four teats are almost finished milking, hold the claw with one hand, and pull the claw ahead, so that it can make the milk left in the area of back breast clean. Pull the claw ahead again, if you find there is no milk left, you can take the cup off.



- 1) the method of taking the cup off
- a. When the four teats are finished milking, you should take the cup off at once. When taking it off, you should pull the switch of claw down, and close the vacuum.
- b. One hand to close the vacuum switch of claw, and the other hand to hold the four milk cups pull out declining.



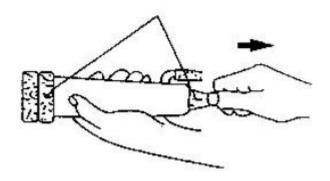
Note: 1. please don't milk after finishing milking, or the breast of cow will have sickness.

3. You cannot pull down the claw upright, or the rest vacuum of claw will damage the teat. You should pull declining, so that the air of teat will escape to reduce the vacuum of claw, then hold down naturally.

The correct method of installation rubber milking lining liner.

Put the milking lining liner in stainless steel milk cup. Please pay attention to the arrows in the

head of milking lining liner and the part of connecting the pipe, and they should be in same line. When pulling the milking lining liner in the stainless steel cup, please don't distort is, but pull it straightly. After installation, please examine the two arrows are in the same line.



## The difference between milking by machine and milking by hand

- improve the sanitation of milk milking by machine: absorb the milk directly in disinfectant seal milk barrel to avoid pollution.
  - Milking by hand: to shoot the milk in the milk barrel in air, and the milk will be polluted by dust in the cow or air
- 2. improve the efficiency of milking

milking by machine: It will cost 3-4 minute to milk by machine

It will cost 10-15 minute to milk by hand

- It will save 2/3 time to milk by machine instead of milking by hand.
- 3. improve the output

According to several years of using milking machine, it proves that to milk by machine instead of hand can improve 5% output.

Reasons: 1 milking by machine can milk four teats in 1 time, and the rhythm of pulsator style and strength are unified, so that it can make the cow adjustable to it. And it is good for the growth of cow to improve the output.

3. When milking by hand, because the strength and rhythm of milker are not unified, and he only can milk two teats in one time, the cow will not feel satisfied, and it will influence the normal growth of the cow, then the output of milk will reduce.

#### Cleaning method:

After finishing the milking, you must start to clean.

After finishing the milking, if you don't clean the milking equipment at once, the bacilli will propagate quickly.

## The using of cleaning agent

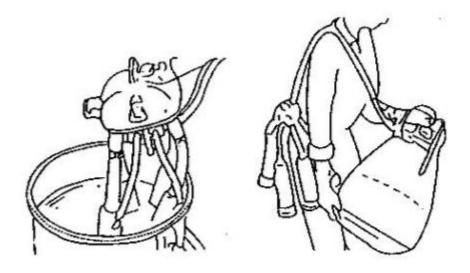
The component of the milk is complicated. Therefore, you should use the special cleaning agent to clean the milking machine, and it also will not damage the rubber part of milking machine.

Type of cleaning agent	Main function	The effective temperature	The thickness of cleaning
		of cleaning agent	agent
Alkalescence cleaning	Milk fatiness	Above 40 ℃	0.1%
agent	Milk protein velum		
Acidity cleaning agent	Mineral substance	Above 40 ℃	0.1%

The temperature and thickness requirement in the form above is the requirement of the special cleaning agent of our company offer. It means if the temperature is lower than we require, the cleaning agent cannot be effective

The cleaning order (daily cleaning)

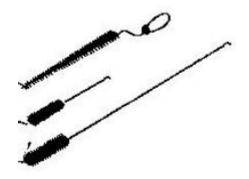
- 1. clean the claw, milk pipe, and milk barrel by water.
- 2. cleaning preparation: use a big pot with full water, put and claw in the pot, turn on the vacuum pump, and absorb the water into milk barrel from claw. Turn off the vacuum switch of vacuum tank, open the cover of milk barrel, then pour the water.
- 3. circulation cleaning of cleaning agent: Pour the cleaning agent with correct thickness to about  $70^{\circ}\mathrm{C}$  water and homogenize, put the claw in the pot, open the vacuum switch to absorb the hot cleaning agent into milk barrel. After absorption, pour the cleaning agent back to the pot, then circulate the absorption until the temperature fall to  $40^{\circ}\mathrm{C}$ .
- 4. clean with normal temperature water 2-3 times, absorb the water from claw into milk barrel, and clean the cleaning agent in the equipment.
- 5. pour the water, make it dry, and put the milking equipment in clean and airlessness place for the next use.
- 6. Normally, the alkalescence and acidity cleaning agent is used circular. 3 days alkalescence, then 1 day acidity cleaning agent.



# Disassemble cleaning (Cleaning at fixed period)

After using the milking machine two weeks, you must have a disassemble cleaning. When disassemble cleaning, our cleaning tools must be used.

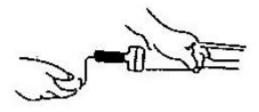
# Special cleaning tools



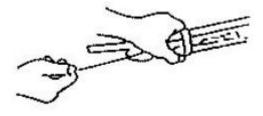
Milking lining liner brush

Claw brush

Long milk pipe brush

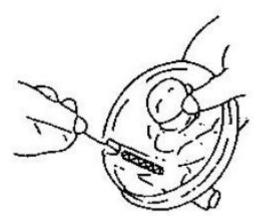


cleaning of milking lining liner



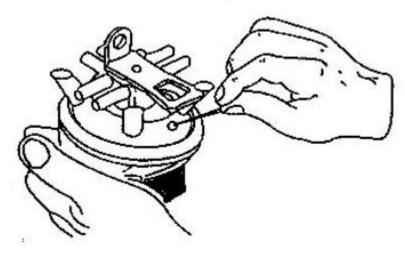
cleaning of long milking pipe

Disassemble the claw, use the special brush with cleaning agent to clean the parts again and again, until the surface of parts is clean.



The cleaning of inside part of claw

At the bottom of claw, there is a pothook has a little hole. The function of the little hole is to make the milk flow into milk barrel swimmingly. Therefore it is very important to keep the hole work.. We have the little needle for cleaning the little hole. (cannot instead of little steel core)



Note: When disassemble cleaning, you should use the special cleaning tools, or it may damage the parts of milking machine.