# "Piping scale cleaner" instruction manual

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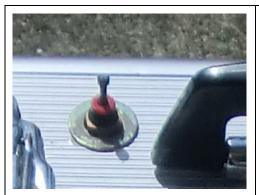
## When using the air pulse generation unit alone



the air pulse generation unit

- 1. There is a method to stir the fluid in the tank by periodically releasing air bubbles from the bottom. This method is different from the horizontal stirring method using an emperor, and vertical stirring is possible.
- 2. When you want to remove rust on a water supply pipe such as a water pipe, you can do it by emitting an air pulse into the water. Rust comes out of the faucet with water and air pulses.

#### Initial state of air pulse generation unit



plug is connected.



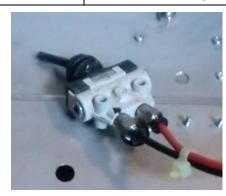
Air pulse tubing port Φ12



Set the regulator to 0.3-0.7Mpa.



Emission cycle setter

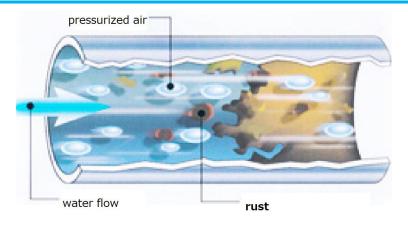


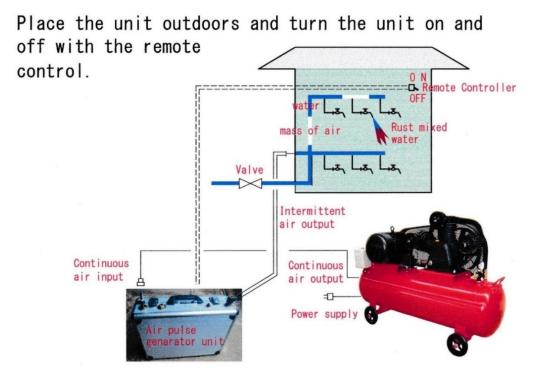
Turn the switch to the blue side (OFF).

Please do the following before applying air pressure to the rightmost air supply port of the air pulse generation unit. Check if it is as shown in the figure on the previous page. After checking, apply as high an air pressure as possible to the air supply port with an air pressure of 0.3-0.7Mpa. Turn the switch to the blue side (ON). The air pulse is automatically discharged from the intermittent bubble outlet on the leftmost side of the air pulse generation unit. If you want to change the pulse generation cycle, turn the screw of the emission cycle setter clockwise (longer) or counterclockwise (shorter). By replacing the red-blue tube with a longer one, you can remotely control the external air pulse generator from the room.

#### important point

For example, assume that the water pressure in the water pipe is 0.7Mpa. An air pressure of 0.5Mpa is applied to the air supply port. In this case, no air pulse will come out from the intermittent bubble outlet. This is because the air pulse pressure is lower than the water pressure in the water pipe. Then what should I do? The answer is to reduce the water pressure in the water pipe. It can also be done by adjusting the water supply valve. It is better to set it to 0.1Mpa or less.





# When using the fluid supply unit alone



the fluid supply unit

Maximum pump flow rate 9 LPM. The wetted material is Teflon and polypropylene.

Comes with a suction strainer.

Put a tube on it to the bottom  $\Phi 8$  port.

Please connect tube via a valve on the central Φ4 port.

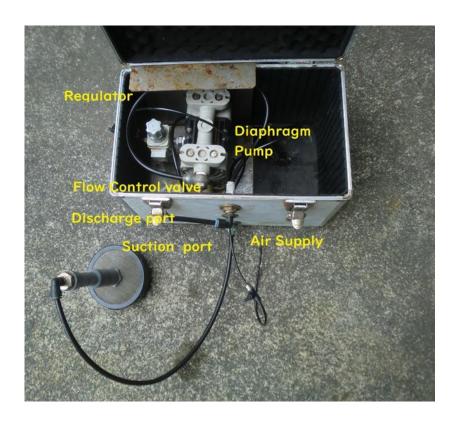
Connect the valve to the compressor. Connect the tube to the uppermost  $\Phi 8$  port please. This is the discharge port.



Pump regulator 0.3-0.7Mpa Set to the highest pressure



Pump outlet flow controller To set the flow as appropriate



### When using both

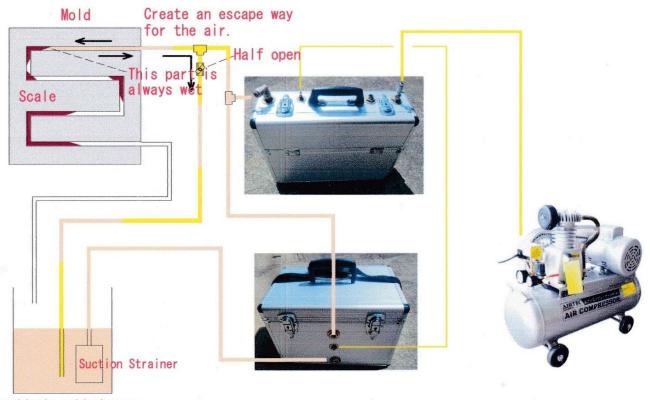




the air pulse generation unit

the fluid supply unit

Completely closed piping is restored with hydrochloric acid cleaner.



Hydrochloric acid cleaner

As shown in the figure, the acidic cleaner will always moisten the scale.

At the same time, the pulsed air collides with the scale at high pressure and returns to the bucket through the half-open valve.

Keeping the valve closed will reduce the amount of acid cleaner that moistens.



### Acid cleaner



Dynamic descaler is acidic. Neutral cleaning agents are also available.

We will sell the required amount in small portions from 4L according to the customer's request.

important point

Make the supply air pressure as high as possible.

(For example 0.5Mpa)

But, it is important to set the pump regulator higher than that.

(For example 0.7Mpa)

Keep the pressure of the wash as low as possible.

(For example 0.05Mpa)

#### Worp

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