

## Instruction Manual Gas Conditioner with Condensate Pump



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D 908; Edition 2005-08-31

# Instruction Manual Gas Conditioner with Condensate Pump

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# Instruction Manual Gas Conditioner with Condensate Pump

## 1. Warning

Any use of the MSI Compact-S/D with the optional Gas Conditioner with Peristaltic Pump requires a full understanding and strict adherence to the instructions of this manual and the manual of the MSI Compact-S/D and to national and international standards.

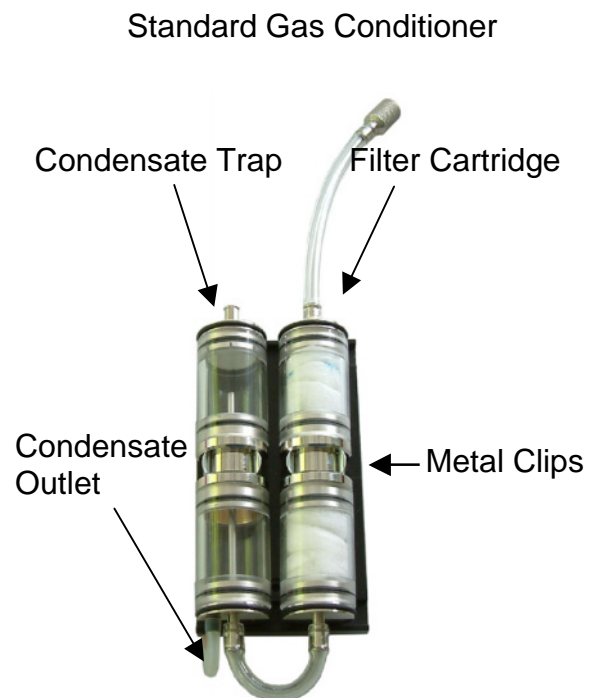
The instrument is only to be used for the purposes specified in there.

## 2. Complete the Gas Conditioner with Peristaltic Pump

First you have to complete the delivered gas conditioner with peristaltic pump with components of the standard gas conditioner of the MSI Compact.

To do this put the standard gas conditioner into the mounting of the MSI Compact.

Remove the tube from the condensate outlet of the bottom plug of the condensate trap and pull the condensate trap and the filter cartridge out of the metal clips.

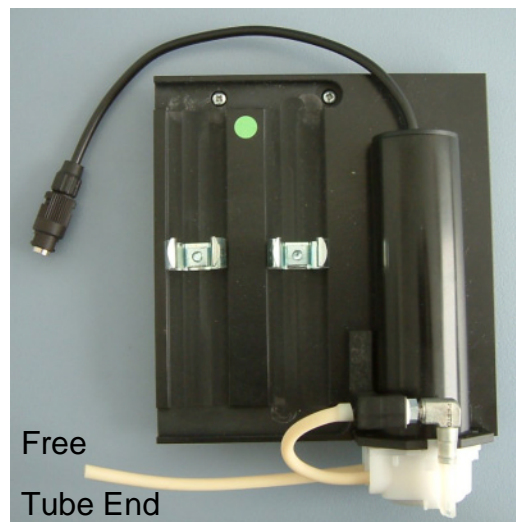


Push the condensate trap and the filter cartridge into the accordant clips of the delivered gas conditioner with peristaltic pump.

Mount the free tube end on the condensate outlet of the bottom plug of the condensate trap.

Now the gas conditioner with peristaltic pump is ready for use.

Delivered Gas Conditioner with Peristaltic Pump



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## 3. Use of the Gas Conditioner with Condensate Pump

Put the gas conditioner with condensate pump into the mounting of the MSI Compact.

Connect the outlet hose of the gas conditioner with the gas inlet marked "Gas" and the plug with the connector "C3" of the MSI Compact.

Put an acid resistant cup beneath the condensate outlet or use a longer condensate outlet tube.

Switch on the MSI Compact and activate the condensate pump (see Instruction Manual MSI Compact-S/D chapter 6.4.3).

The condensate pump will carry at regular intervals condensate from the condensate trap to the outlet. Caution condensate contents acids.

Complete Gas Conditioner with Peristaltic Pump



## 4. Operating of the Condensate Pump

The condensate pump consists of two operating parts. The upper black housing contains a small electric motor with a gearbox. The lower white housing contains the peristaltic pump.

The electric motor is controlled by the MSI Compact and drives the peristaltic pump.

The tube of the peristaltic pump is situated in a semi-circle along the wall of the pump body. Three rolls rotate around the circle centre (see Fig. 3, Page 5).

The rolls together with the wall of the pump body compress the tube and lock in the condensate between two of the rolls which are just now in the semi-circle.

By rotation of the rolls around the circle centre the locked condensate is squeezed through the tube to the condensate outlet. Thus it is prevented, that ambient air may reach the condensate trap.

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## 5. Maintenance and Service

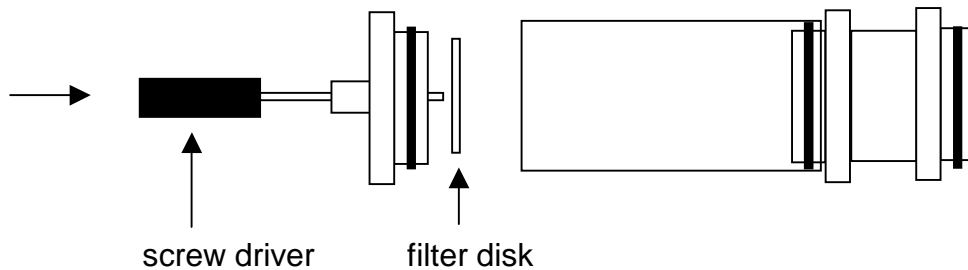
The gas conditioner needs maintenance and service before and after each use, see Instruction Manual MSI Compact S/D too (Chapter 2.2, 3.1 and 10.2).

### 5.1 Cleaning and Maintenance of the Gas Conditioner:

Pull off the tube from the gas inlet of the MSI Compact front plate.

Put an acid resistant cup beneath the condensate outlet. Remove the tube from the condensate outlet of the bottom plug of the condensate trap and let the condensate flow into the cup until the condensate tank is empty. Caution condensate contents acids.

Pull off the tube between condensate trap and the filter cartridge. Take the cartridges out of the clips and pull off the caps. For taking off the filter disks, use a small screw driver or a paper clip etc..



Replace the filters, clean all parts and stick them together again. Check that all o-ring seals are clean.

Push the filter cartridges back into the clips and connect the tube with both cartridges.

Mount the free tube end of the peristaltic pump with the condensate outlet of the bottom plug of the condensate trap.

Now the gas conditioner with peristaltic pump is ready for use again.

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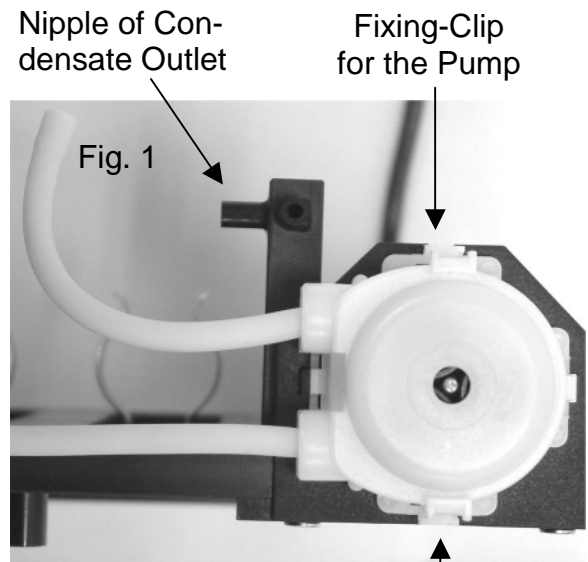
## 5.2 Replacement of the Peristaltic Tube of the Condensate Pump

The mode of operation of the peristaltic pump is the reason for mechanical wear of the tube. Particles in the condensate e.g. may cause damages inside the tube, during the rolls compress the tube. Therefore the tube has to be replaced from time to time.

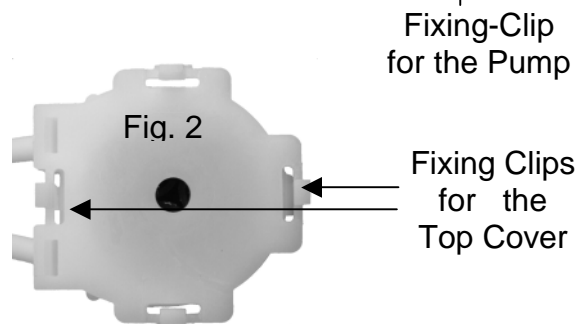
To replace the tube remove the tube from the condensate outlet of the bottom plug of the condensate trap and pull the condensate trap and filter cartridge out of the metal clips (see 5.1).

Pull off the second end of the peristaltic tube from the Nipple of the Condensate outlet (Fig. 1).

Push both fixing clips for the pump together (see Fig. 1) and pull off the peristaltic pump from the axle of the electric motor unit.

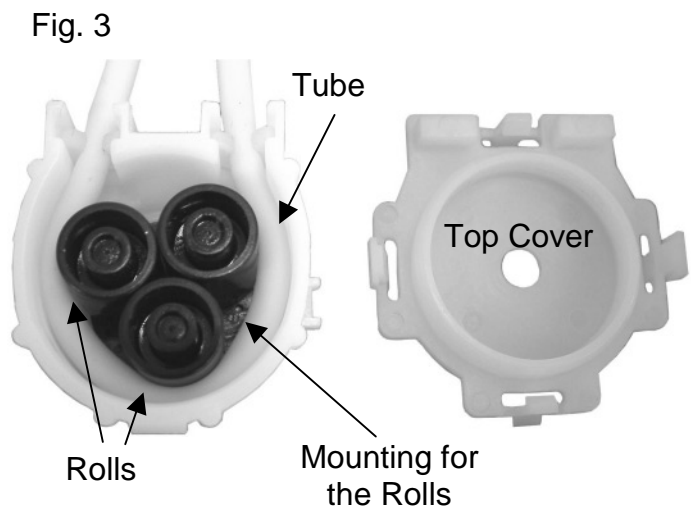


After pushing the other both fixing clips together (see Fig. 2) you may remove the top cover of the peristaltic pump



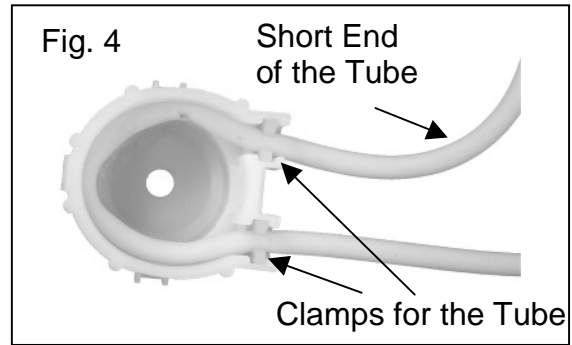
In Fig. 3 you see all function units of the peristaltic pump.

Take carefully the peristaltic tube out of the pumps housing or remove first the mounting with the rolls and then the tube (see Fig. 4).

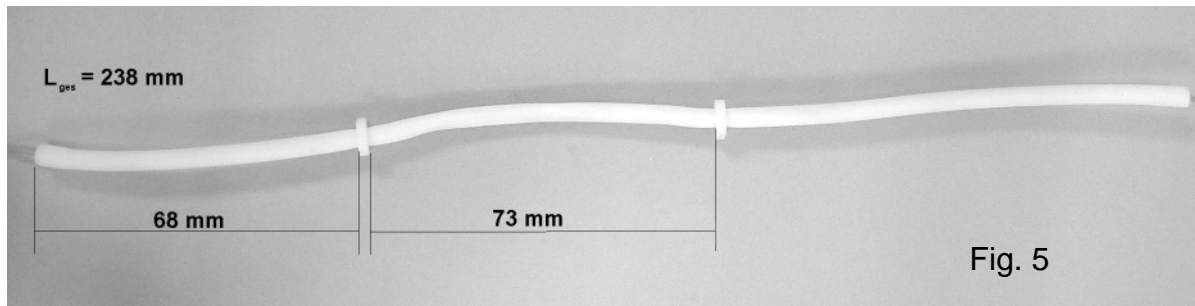


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In Fig. 4 you see the tube guide in the housing of the peristaltic pump. The tube is fixed by two clamps.



Take off the two clamps from the old tube and push them on the new one like it is shown in figure 5. Set the new tube into the pump housing like it is shown in Fig 4.



When the mounting with the rolls and the tube are placed in the pump housing like shown in figure 3, push according to figure 2 the top cover on the pump housing until the fixing clips snap in.

Slide the axle of the electric motor unit from the site of the top cover through the gap between the rolls. Push according to figure 1 the peristaltic pump on the electric motor unit until the fixing clips snap in.

Now you may mount the end of the short peristaltic tube over the nipple of the condensate outlet (see Fig.1).

Complete the gas conditioner according chapter 2.

### 5.3 Consumables

Consumables -Set 2	5600411
Peristaltic Tube	5630320