



INSTRUCTION MANUAL

EXTENSION SAMPLING ROD

FOR EXCLUSIVE USE WITH MODEL AP-20, AP-20S and 400B

MODEL SR-200R

NEVER FAIL TO READ THIS INSTRUCTION MANUAL FOR CORRECT USE

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Foreword

Thank you very much for purchasing MODEL SR-200R Extension Sampling Rod.

This product has been designed to measure gas concentration in the place which is danger to enter due to possible existence of poisoning gas, narrow for worker to enter, impossible to enter, etc.

Before use, never fail to read this instruction manual, those of related gas detector tube and Gas Aspirating Pump (Model AP-20, AP-20S and 400B) carefully for correct use.

Ensure that this instruction manual is stored in a convenient location to enable referable at all times.

If you have any questions regarding this instruction manual, please contact our distributor.

Range of warranty

- ① The period of warranty for this product is one year from the date of shipment.
- ② Defects caused by faults in manufacturing within the period of warranty will be replaced (except articles for consumption) or repaired free of charge.
- ③ Contact our distributor if any defect occurred within the period of warranty.
- ④ Invoices will be issued for the actual expenses of repairs or replacement parts even within the period of warranty in the following cases :
 - * Faults caused by purpose of application or methods of usage other than stipulated in this manual.
 - * Faults caused by the device having taken apart, remodelled or repaired by people other than the distributor.
 - * Faults caused by disasters or accidents unable to avoid by manufacturer.
 - * Replacement of articles for consumption.
- ⑤ It is the sole responsibility of the user of this equipment to ensure that the equipment is operated, maintained, and repaired in strict accordance with these instructions and the instructions provided with Model AP-20 AP-20S and 400B Gas Aspirating Pump, and that detector tubes are not used which are either beyond their expiration date or have a colour change different to that stated in the Performance specifications.

The Manufacturer and Manufacturer's Distributors shall not be otherwise liable for any incorrect measurement or any damages, whether damages result from negligence or otherwise.

Safety precautions

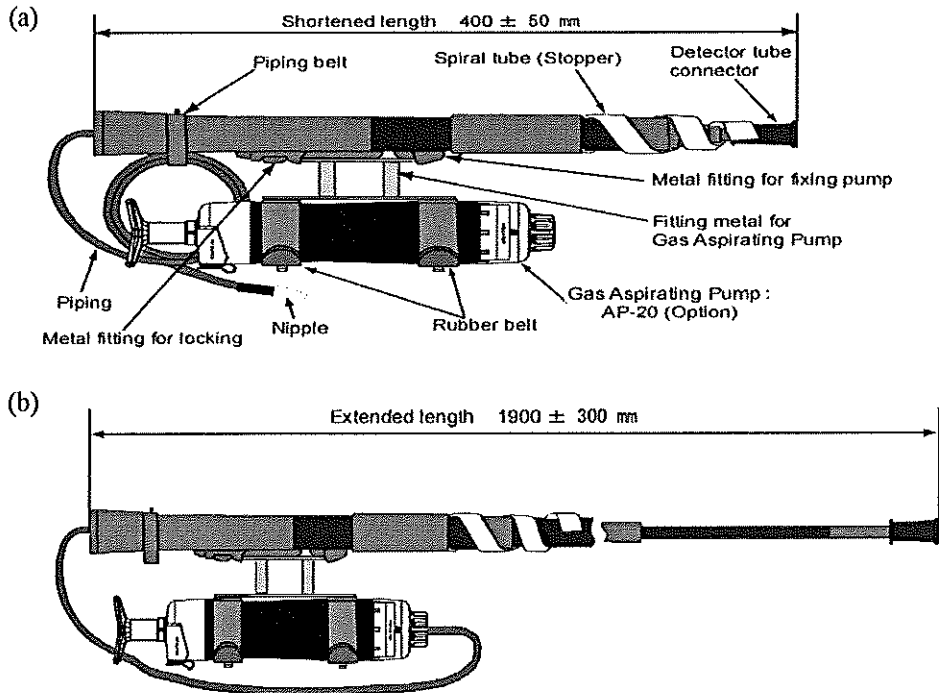
In order to use this product correctly, or to prevent injury to you / other people or damage to property, read this manual after complete understanding of the contents stipulated in the following column.

Failure to observe the contents of the item or mistaken use may result in injury or damage to property.

Caution

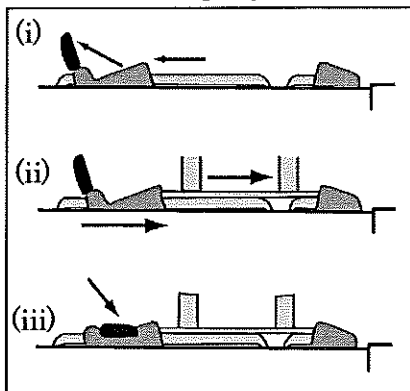
- ① A leaking Gas Aspirating Pump and Extension Sampling Rod may cause lower readings or no response at all. Always conduct the check before use.
- ② Do not swing Extension Sampling Rod excessively, because the tube connector at the top of Extension Sampling Rod may often be broken. Especially, never swing excessively Extension Sampling Rod with connecting detector tube. It is because a tube may come out from Detector tube connector.
- ③ In case of using Extension Sampling Rod into manhole, culvert, etc., pay attention not to draw water which may stay at the bottom.
- ④ When using Extension Sampling Rod, pay full attention not to make holes or splits on Piping. Refer to Item 1. Configuration & Names of Each Part, (b). If they are found on Piping, there is a fear of giving influence to performance of the product.

1. Configuration & Names of Each Part



2. Prior to use

- (1) Attach Fitting metal for Gas Aspirating Pump to Metal fitting for fixing pump of Extension Sampling Rod.



- (2) Attach Gas Aspirating Pump to Fitting metal for Gas Aspirating Pump. Fix it securely with Rubber belt (Attached accessory).
- (3) Insert Nipple attached on the top of Piping into Rubber tube connector of Gas Aspirating Pump. Refer to Item 1. Configuration & Names of Each part, (b).

3. How to use Extension Sampling Rod

- **How to extend rods**

Remove Piping belt, and extend a bundle of Piping. Hold Spiral tube attached on the top of Extension Sampling Rod. Then, pull out the rod from a narrow part of the rod by the other hand, and fix it at every step.

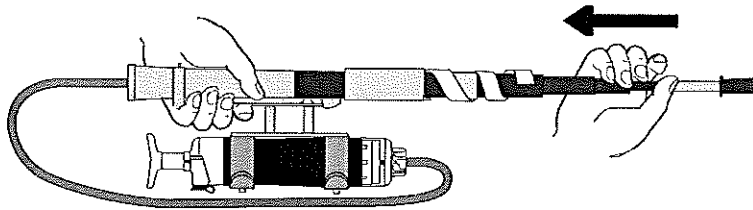
▲ Caution

If pulling out the rod without holding Spiral tube, there is a fear of giving breakage. Therefore never fail to pull out the rod with holding Spiral tube.

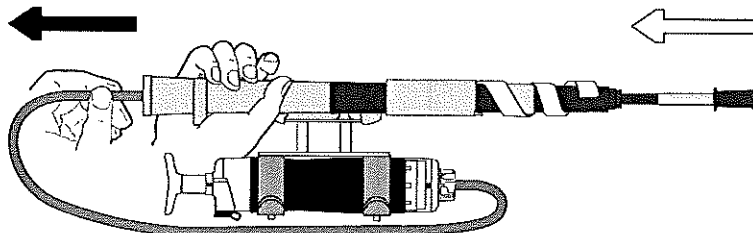
Furthermore, in case of pulling out all rods fully, it is easy to extend them if the top of Spiral tube is removed. However, in case of pulling out rods by 2 to 4 steps only, Spiral tube plays the part of stopper. So it is recommended to pull out rods without removing the top of Spiral tube.

- **How to shorten rods**

1) Store in rods from thick part in order.



2) If rods stop, please pull Piping softly as shown in below figure. Then, rods will be stored.



▲ Caution

- Do not pull Piping strongly. It causes breakage of Piping.
- If shortening rods by pushing strongly, that may often result in breakage of Piping.

4. Leakage Test

※ Carry out the leakage test in the state that Gas Aspirating Pump is connected to Extension Sampling Rod.

- ① Insert a sealed and unbroken detector tube into Detector tube connector of Extension Sampling Rod.
- ② Align the guide marks on the shaft and stopper of Gas Aspirating Pump.
- ③ Pull the handle of Gas Aspirating Pump to a full stroke and wait for 1 minute.
- ④ Unlock the handle and allow it to return slowly into the pump with holding the cylinder and handle securely.

 **Caution**

Handle will tend to snap back into the pump quickly.

- ⑤ If the handle returns completely to the original position, the performance is satisfactory. If the handle does not return completely to the original position, carry out the leakage test once again after pushing back Piston Shaft by hand completely.

If the handle of Gas Aspirating Pump does not return completely to the original position in spite of carrying out the second leakage test, carry out leakage test with Gas Aspirating Pump only by separating from Extension Sampling Rod.

※ Carry out leakage test according to the procedure “CHECKING PRIOR TO USE” in Instruction Manual of each Gas Aspirating Pump.

If Gas Aspirating Pump itself is not air-leaked, there is a possibility of leakage from Extension Sampling Rod.

In that case, please contact our distributor for repair of Extension Sampling Rod.

5. How to sample gas

- ① Break both ends of the detector tube.
- ② Insert the detector tube securely into Detector tube connector on the top of Extension Sampling Rod (Arrow mark shall point to Extension Sampling Rod).
- ③ Align the guide marks on the handle and stopper of Gas Aspirating Pump, and pull the handle to the locked position.
※ Gas sampling time and volume depend on gas detector tube, so read an instruction manual of each detector tube.

Caution

If pulling the handle with holding Extension Sampling Rod, there is a fear of Gas Aspirating Pump is coming off, or breakage of Rubber belt.

Never fail to hold main body of Gas Aspirating Pump when pulling the handle.

- ④ On completion of sampling, disconnect the detector tube from Extension Sampling Rod, and read the concentration according to instruction manuals of Gas Aspirating Pump and detector tube.

6. Others

When abnormality is found in the instrument, do not repair it at your side and contact our distributor.

Disposal of product

This product (Model SR-200R) must be treated as industrial waste for disposal purposes. Used tubes should be disposed carefully according to relevant regulations, if any.