

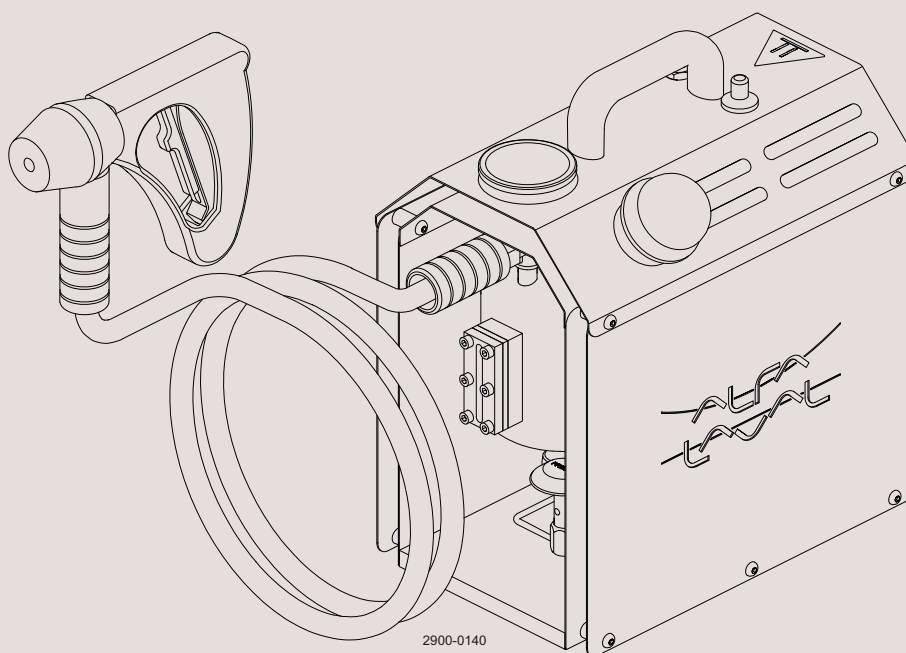


SMART SANITARY PROCESSES

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Instruction Manual

Unique Sampling Valve - Accessories - Steam Generator



ESE02433-EN2

2013-10

Original manual

The information herein is correct at the time of issue but may be subject to change without prior notice

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1 Safety

*Unsafe practices and other important information are emphasised in this manual.
Warnings are emphasised by means of special signs.*

1.1 Important information

Always read the manual before using the Steam Generator!

WARNING

Indicates that special procedures must be followed to avoid serious personal injury.

CAUTION

Indicates that special procedures must be followed to avoid damage to the Steam Generator.

NOTE

Indicates important information to simplify or clarify procedures.

1.2 Warning signs

General warning:



Caustic agents:



All warnings in the manual are summarised on this page.

Pay special attention to the instructions below so that serious personal injury and/or damage to the Steam Generator are avoided.

1.3 Safety precautions

Installation:

Always read the technical data thoroughly. (See chapter 5 Technical data)

Always release compressed air after use.

Never touch moving parts if the actuator is supplied with compressed air.

Never touch the Steam Generator or the pipelines when processing hot liquids or when sterilising.

Never dismantle the Steam Generator while it is under pressure.

Never dismantle the Steam Generator when it is hot.



Operation:

Never dismantle the Steam Generator while it is under pressure.

Never dismantle the Steam Generator when it is hot.

Always read the technical data thoroughly. (See chapter 5 Technical data)

Always release compressed air after use.

Never touch the Steam Generator or the pipelines when processing hot liquids or when sterilising.

Never touch the moving parts if the actuator is supplied with compressed air.

Always rinse well with clean water after cleaning.

Always handle lye and acid with great care.



Maintenance:

Always read the technical data thoroughly. (See chapter 5 Technical data)

Always release compressed air after use.

Never service the Steam Generator when it is hot.

Never service the Steam Generator with the valve and pipelines under pressure.



Transportation:

Always make sure that all connections are disconnected before attempting to remove the Steam Generator from the installation.

Always drain liquid from the Steam Generator before transportation.

2 Installation

*This instruction manual is part of the delivery. Study the instructions carefully and pay special attention to the warnings!
The items refer to the parts list and service kits section.*

2.1 Unpacking/delivery

Step 1

CAUTION

Alfa Laval cannot be held responsible for incorrect unpacking.

Note: the gas canister is not included.

The gas canister can be purchased from the local hardware store (diameter: Ø110 mm)

Check the delivery for:

1. Steam Generator
2. Instruction manual

Step 2

Remove any possible packing materials from the Steam Generator.

Inspect the Steam Generator for visible transport damage.

Avoid damaging the Steam Generator.

2.2 Recycling information

• Unpacking

- Packing material consists of wood, plastics, cardboard boxes and in some cases metal straps.
- Wood and cardboard boxes can be reused, recycled or used for energy recovery.
- Plastics should be recycled or burnt at a licensed waste incineration plant.
- Metal straps should be sent for material recycling.

• Maintenance

- During maintenance, oil and wearing parts in the machine are replaced.
- All metal parts should be sent for material recycling.
- Worn or defective electronic parts should be sent to a licensed handler for material recycling.
- Oil and all non-metal wearing parts must be dealt with in accordance with local regulations.

• Scrapping

- At the end of use, the equipment should be recycled according to the relevant, local regulations. As well as the equipment itself, any hazardous residues from the process liquid must be considered and dealt with in a proper manner. When in doubt, or in the absence of local regulations, please contact your local Alfa Laval sales company.
-

Study the instructions carefully and pay special attention to the warnings!
Ensure that the Steam Generator operates smoothly.
The items refer to the parts list and service kits section.

3.1 Operation

Step 1



Always read the technical data thoroughly.
 See chapter 5 Technical data

CAUTION

Alfa Laval cannot be held responsible for incorrect operation.



Never touch the Steam Generator or the pipelines when processing hot liquids or when sterilising.

Attention:

Before using the Steam Generator, it is essential that a non-return valve* (N) and a pressure relief valve* (P) are mounted on the sampling valve to ensure proper sterilisation.

*= not included in this package

N: Non-return valve

- Sizes 4 and 10: 9614-1955-01

- Size 25: 9614-1955-04

C: Clamp ring

- Sizes 4 and 10: 211290

- Size 25: 211053

S: Clamp seal

- Sizes 4 and 10: 290273

- Size 25: 9611-99-2012

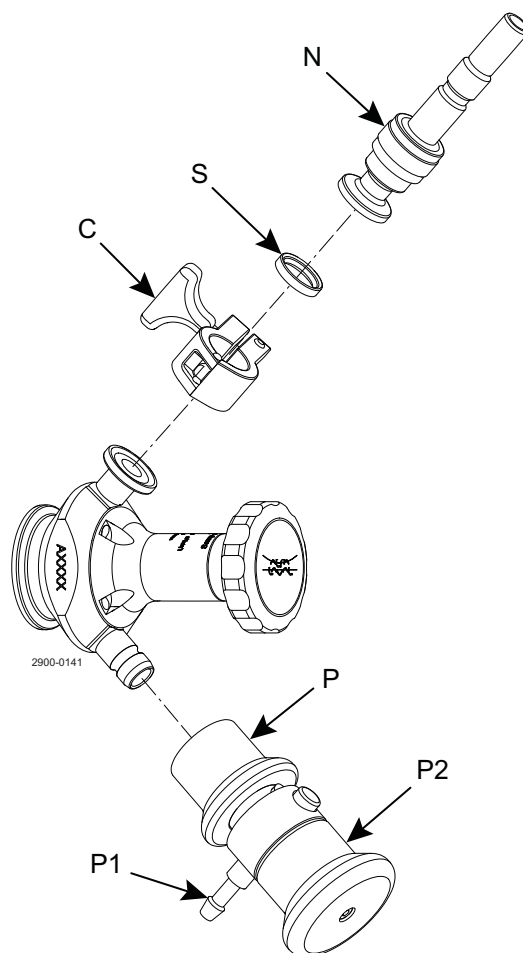
P: Pressure relief valve

- Sizes 4 and 10: 9614-1957-01

- Size 25: 9614-1957-02

P1: Steam outlet

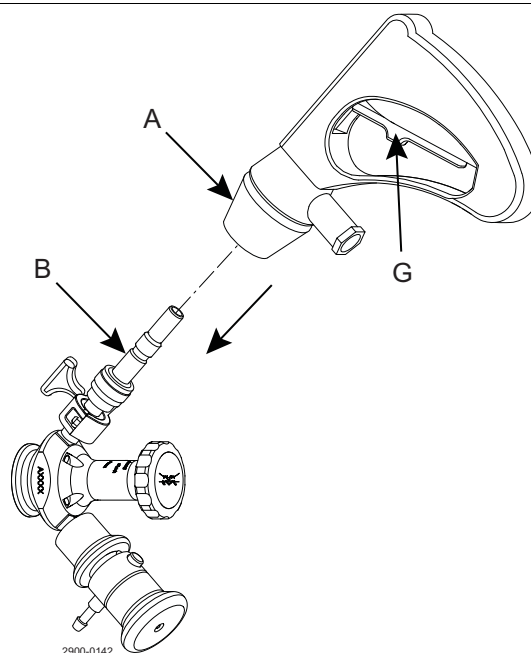
P2: Quick release of steam



Step 2

1. Make sure that the sampling valve is in closed position (single seat) or in steam position (double seat), before steaming
2. Pull the front handle (A) forwards and mount the steam generator pistol on the non-return valve (B).

Note: do not activate the handle (G) yet.



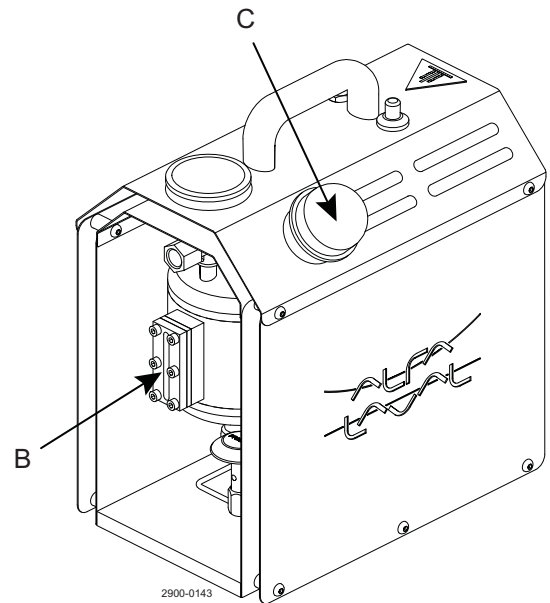
3 Operation

Study the instructions carefully and pay special attention to the warnings!
Ensure that the Steam Generator operates smoothly.
The items refer to the parts list and service kits section.

Step 3

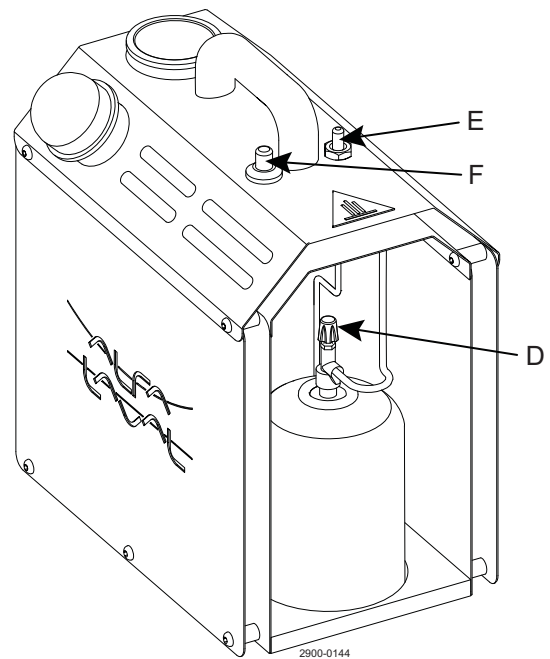
1. Unscrew the tank cap (C) and fill the tank with water (maximum volume is 1L)
2. Mount the tank cap (C) (tighten by hand)

B = Sight glass for water level



Step 4

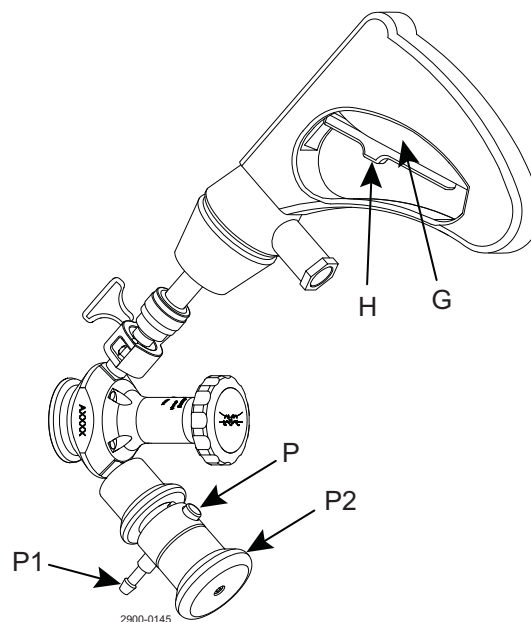
1. Open the gas valve (D).
2. Press and hold the safety valve (E) while pressing the ignition switch (F). Release the safety valve (E) 5 seconds after the flame is initiated.
3. Wait until the tank pressure reaches 3 bars.



Study the instructions carefully and pay special attention to the warnings!
Ensure that the Steam Generator operates smoothly.
The items refer to the parts list and service kits section.

Step 5

1. Activate the gun by pulling the inner handle (G). Slide the pawl (H) forwards to ensure that handle can hold it's self.
2. Steam the sampling valve for 2 minutes.
NB: make sure that steam is present at the steam outlet (P1) on the pressure relief valve (P) doing the 2-minutes steaming.
3. Shut the gun off by sliding back the pawl (H).

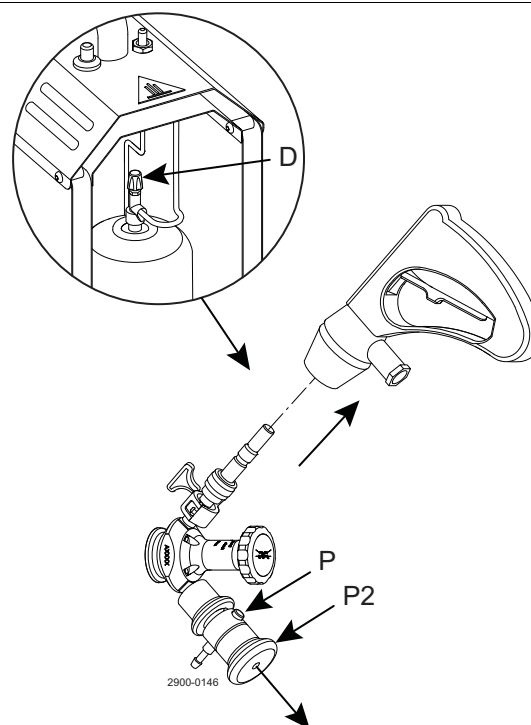


Step 6

1. Turn off the gas valve (D).
2. Release the enclosed steam by pulling the handle (P2) on the Pressure relief valve (P).
3. Remove the gun from the non-return valve. The sampling valve is now sterilised and ready to take a representative sample.

Note:

the tank cap cannot be opened until all the pressure in the tank has been released.



3 Operation

Study the instructions carefully and pay special attention to the warnings!
Ensure that the Steam Generator operates smoothly.
The items refer to the parts list and service kits section.

3.2 Troubleshooting

NOTE!

Study the maintenance instructions carefully before replacing worn parts.

Problem	Cause	Remedy
Gas cannot be ignited	The gas valve is closed The gas container is empty	Open the gas valve Replace the gas container
The steam pressure cannot exceed 1 bar	The pistol handle is open and not mounted on the sampling valve The gas valve is not fully open The gas container is almost empty	Mount the pistol handle on the sampling valve Open the gas valve fully Replace the gas container

3.3 Recommended cleaning

Step 1

The Steam Generator can be cleaned using warm water.
We recommend that the water container on the steam generator is emptied after use.

Maintain the Steam Generator regularly.

Study the instructions carefully and pay special attention to the warnings!

Check the Steam Generator for smooth operation after service.

4.1 General maintenance

Maintenance	Action
Planned maintenance	Regular inspection for leakage and smooth operation
	Keep a record of the Steam Generator
	Use the statistics for inspection planning

Recommended spare parts

Service kits (see section 6 Parts list and service kit)

5 Technical data

*It is important to observe the technical data during installation, operation and maintenance.
Inform personnel about the technical data.*

5.1 Technical data



Attention!

Never touch the Steam Generator or the pipelines when processing hot liquids or when sterilising.

Never service the Steam Generator when it is hot.

Danger of burns!

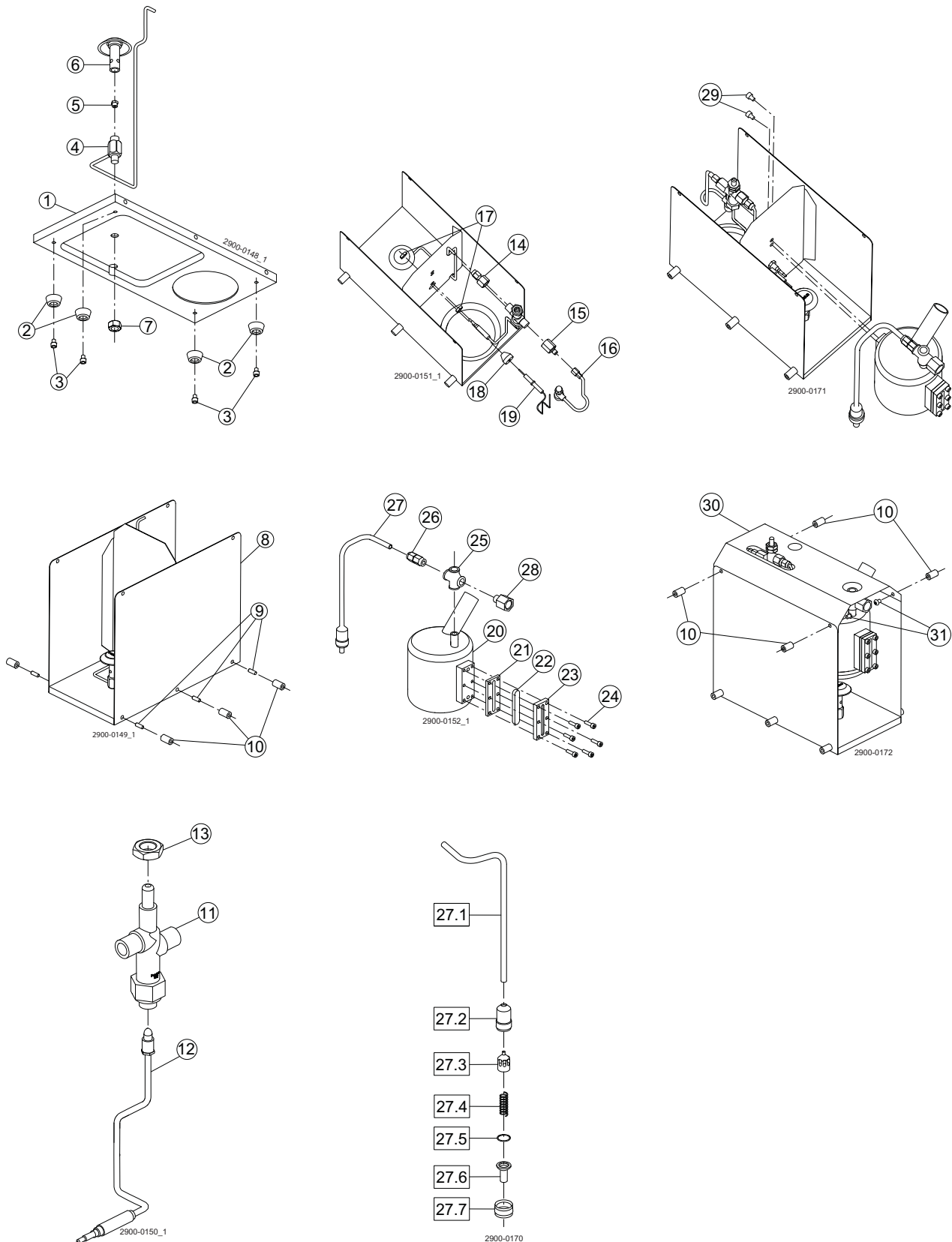


Technical data		
Max. working pressure	350 kPa (3.5 bar)	
Max. working temperature	130 °C	
Weight	12 kg	
Capacity		
Tank volume	1.1 L	
Total steam time (full tank, 2 bar)	15 mins.	
Steam time for sterilisation (2 bar)	2 mins.	
Start-up time (full tank)	10-12 mins.	
Materials		
Water container and pipes	1.4404 (316L)	
Steam hose	Inside: NBR food grade	Outside: NBR/PVC
Pistol handle	Brass	
Other parts	PA 6.6 30% GF, aluminium, copper	
Spare parts		
Spare parts	See section 6 Parts list and service kit	

6 Parts list and service kit

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6.1 Steam generator



6 Parts list and service kit

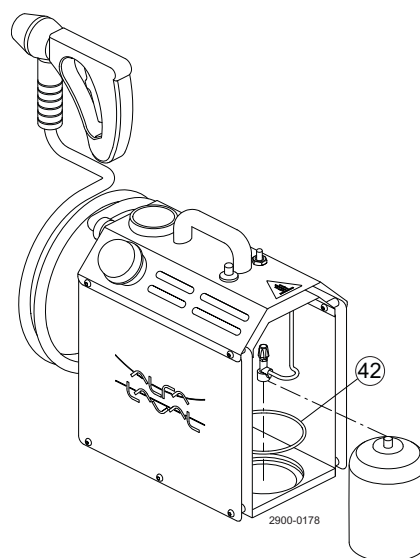
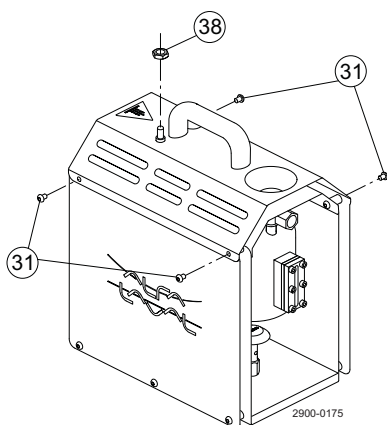
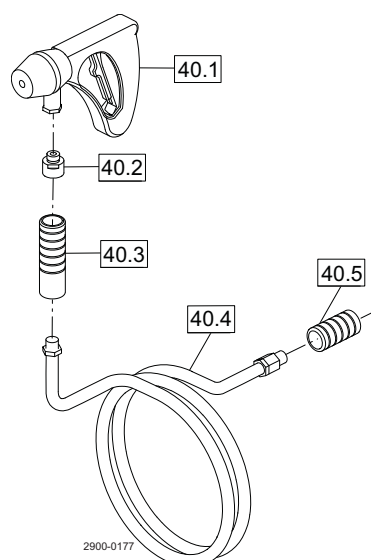
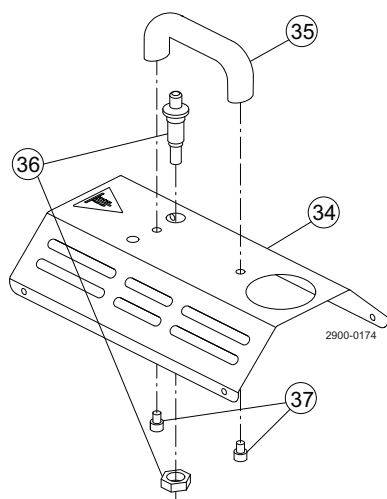
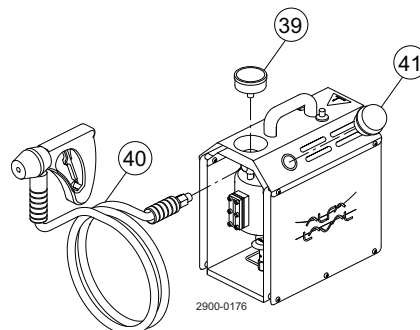
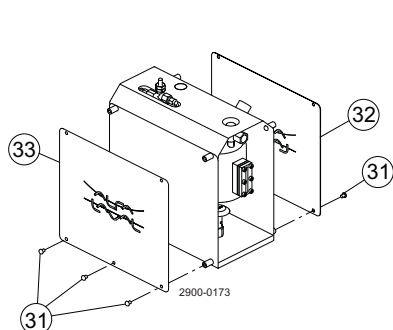
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Parts list

Pos.	Qty	Denomination
1	1	Base plate
2	4	Rubber bumpers
3	4	Screw
4	1	Gas bracket
5	1	Jet nozzle
6	1	Gas burner
7	1	Nut
8	1	Heat shield assembly
9	6	Screw
10	10	Distance piece
11	1	Flame failure valve
12	1	Thermocouple
13	1	Nut
14	1	Adaptor
15	1	Adaptor
16	1	Gas regulator
17	2	Nut
18	1	Cable glands
19	1	Spark electrode
20	1	Vessel assembly
21	1	Gasket
22	1	Sight glass
23	1	Frame for glass
24	6	Screw
25	1	Cross fitting
26	1	Adaptor
27	1	Pressure relief valve assembly
27.1	1	- Pipe
27.2	1	- Valve housing
27.3	1	- Plug
27.4	1	- Spring
27.5	1	- O-ring
27.6	1	- Pipe end
27.7	1	- Nut
28	1	Hose connection
29	2	Screw
30	1	Heat shield top
31	14	Screw

6 Parts list and service kit

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6 Parts list and service kit

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Parts list

Pos.	Qty	Denomination
31	14	Screw
32	1	Plate
33	1	Plate
34	1	Top plate
35	1	Handle
36	1	Ingiter
37	2	Screw
38	1	Nut
39	1	Manometer
40	1	Hose assembly
40.1	1	- Handle
40.2	1	- Hose connection
40.3	1	- Cover
40.4	1	- Steam hose
40.5	1	- Cover
41	1	Safety cap
42	1	O-ring
43	1	Sticker

How to contact Alfa Laval

Contact details for all countries are continually updated on our website.

Please visit www.alfalaval.com to access the information directly.

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