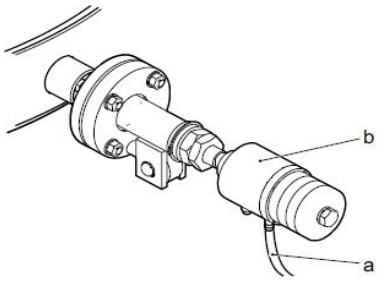
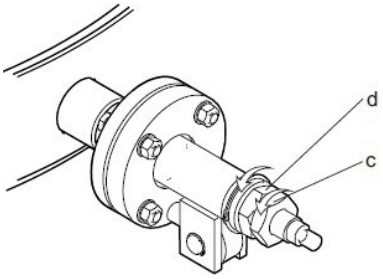
Vibrator system

Disassembling (Old version)

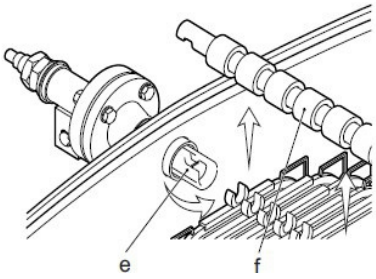
Disassembling



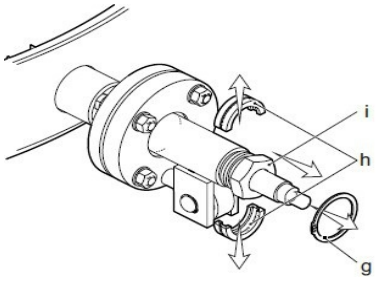
Remove the air supply hose (a) and vibrator (if installed).



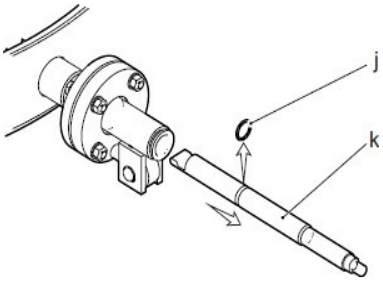
Loosen locknut (c) and closing nut (d).



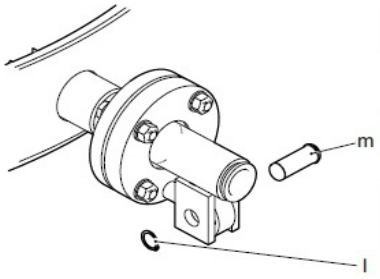
Turn the guide bush so that the opening is facing upwards (e) and left out the vibrator bar (f).



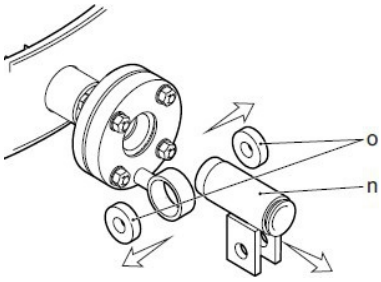
Open and remove the circlip (g).
Remove the clamps (h).
Unscrew and remove closing nut (i).



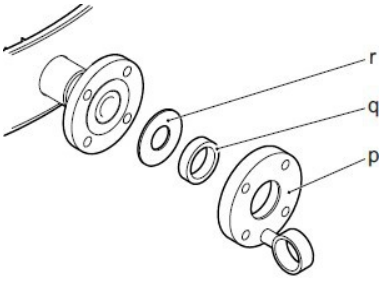
Move the counter rod (k) out of the vibrator body. Remove the seal (j) from the counter rod.



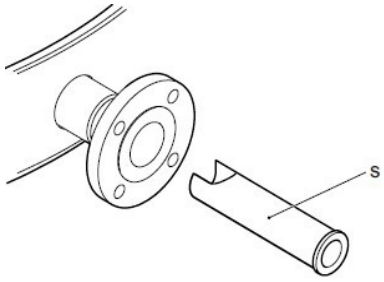
Open and remove the circlip (l) and remove the support pin (m).



Remove the vibrator sleeve (n) and support rubber (o).
Remove the nuts and bolts which attach the vibrator support..



Remove the support (p) the gasket (q) and the membrane (r).



Remove and inspect the guide bush (s).

Assembling the vibrator

To assemble the vibrator again, reverse the order of disassembling. Can also refer to assembling and mounting datasheet for further detailed instructions .

Note:

The vibrator nuts must be very tight (150Nm)

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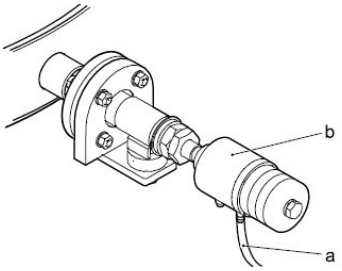
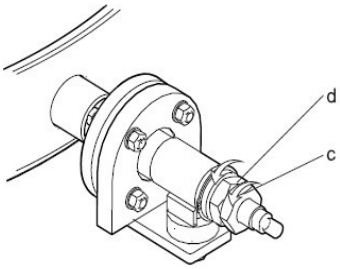
Vibrator system

Disassembling (New version)

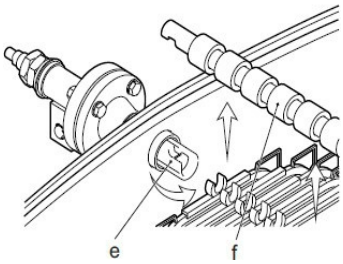
Disassembling



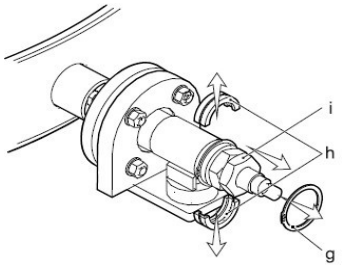
Remove the air supply hose (a) and vibrator (if installed).



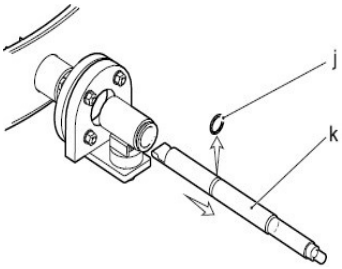
Loosen locknut (c) and closing nut (d).



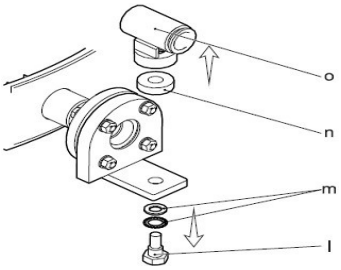
Turn the guide bush so that the opening is facing upwards (e) and left out the vibrator bar (f).



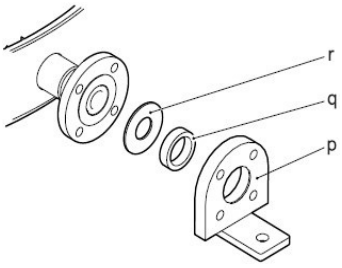
Open and remove the circlip (g).
Remove the clamps (h).
Unscrew and remove closing nut (i).



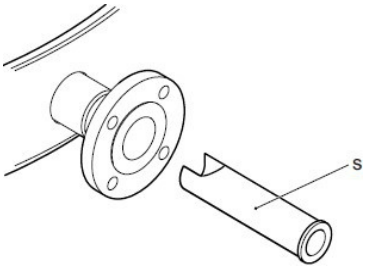
Move the counter rod (k) out of the vibrator body. Remove the seal (j) from the counter rod.



Remove the bolt (l), the washer and spring washer (m), the vibrator sleeve (o) and support (n).
Remove the nuts and bolts which attach the vibrator support.



Remove the support (p) the gasket (q) and the membrane (r).



Remove and inspect the guide bush (s).

Assembling the vibrator

To assemble the vibrator again, reverse the order of disassembling. Can also refer to assembling and mounting datasheet for further detailed instructions .

Note:

The vibrator nuts must be very tight (150Nm)

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Vibrator system

Maintenance and inspection

Weekly maintenance

1. Examine the vibrator nuts (close nut and lock nut) for tightness.

Caution:
Make sure there is no play in the vibrator nuts. Play will cause bad vibration and quick wear in the vibrator blocks and the spacer rings.

2. Adjust and tighten the nuts if any play occurs.

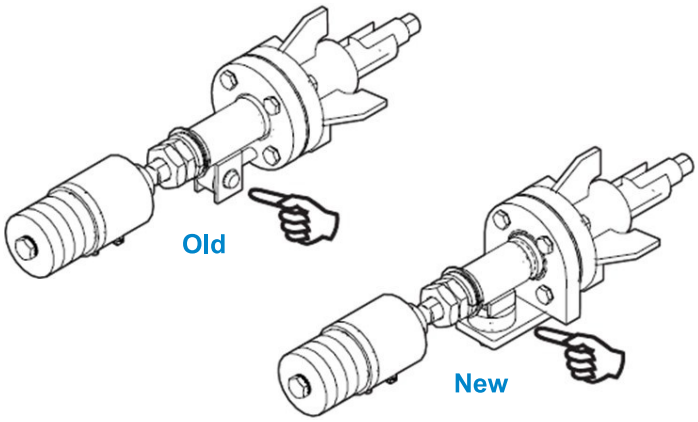
Note:
The vibrator nuts must be very tight (150Nm)

3. Fill the bowl in the lubricators to oil level limit.

Note:
Use the oil as specified in the lubrication list, see section “Assembling and mounting (page 1)”.

4. Examine the support rubbers for wear.

Note:
If the support rubbers are worn or missing the vibration will not be transferred to the filter plates.
Replace the support rubbers if necessary.

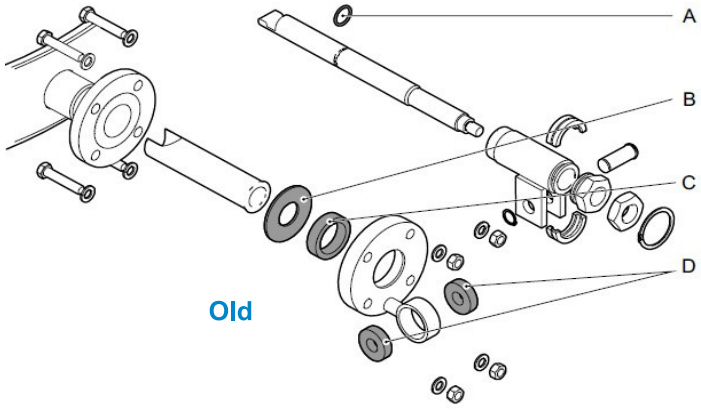


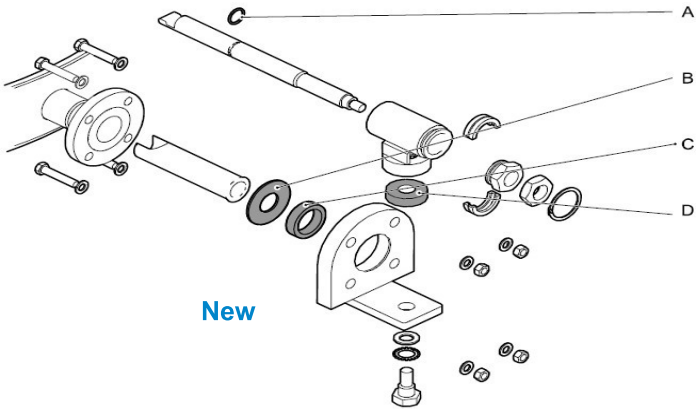
Monthly maintenance

1. Examine connections. Make sure there are no leaks.
2. Examine all gaskets. Make sure there are no leaks.
3. Examine the air hose to the vibrator. Make sure there are no cracks, signs of drying out or other defects.

Every 4/6 months maintenance

1. Disassemble the vibrator unit.
2. Clean the vibrator unit for wear.
3. Replace all worn parts. High wear occurs because:
   - the lubrication is not sufficient.
   - of aggressive fluids.
   - of a very high or low ambient temperature.
4. Replace all parts listed below:
   A. Vibrator O-ring.
   B. Vibrator membrane.
   C. Gasket.
   D. Support rubbers.
5. Lubricate the inside of the guide bush.





Vibrator system

Example of not tightening vibrator properly

Not touching



The vibrator works but vibration is moving the filter body and not transferring to leaves.

Cause	Action
Vibrator is touching filter body.	Reposition the vibrator guide bush so that it does not make contact with the body of the filter.

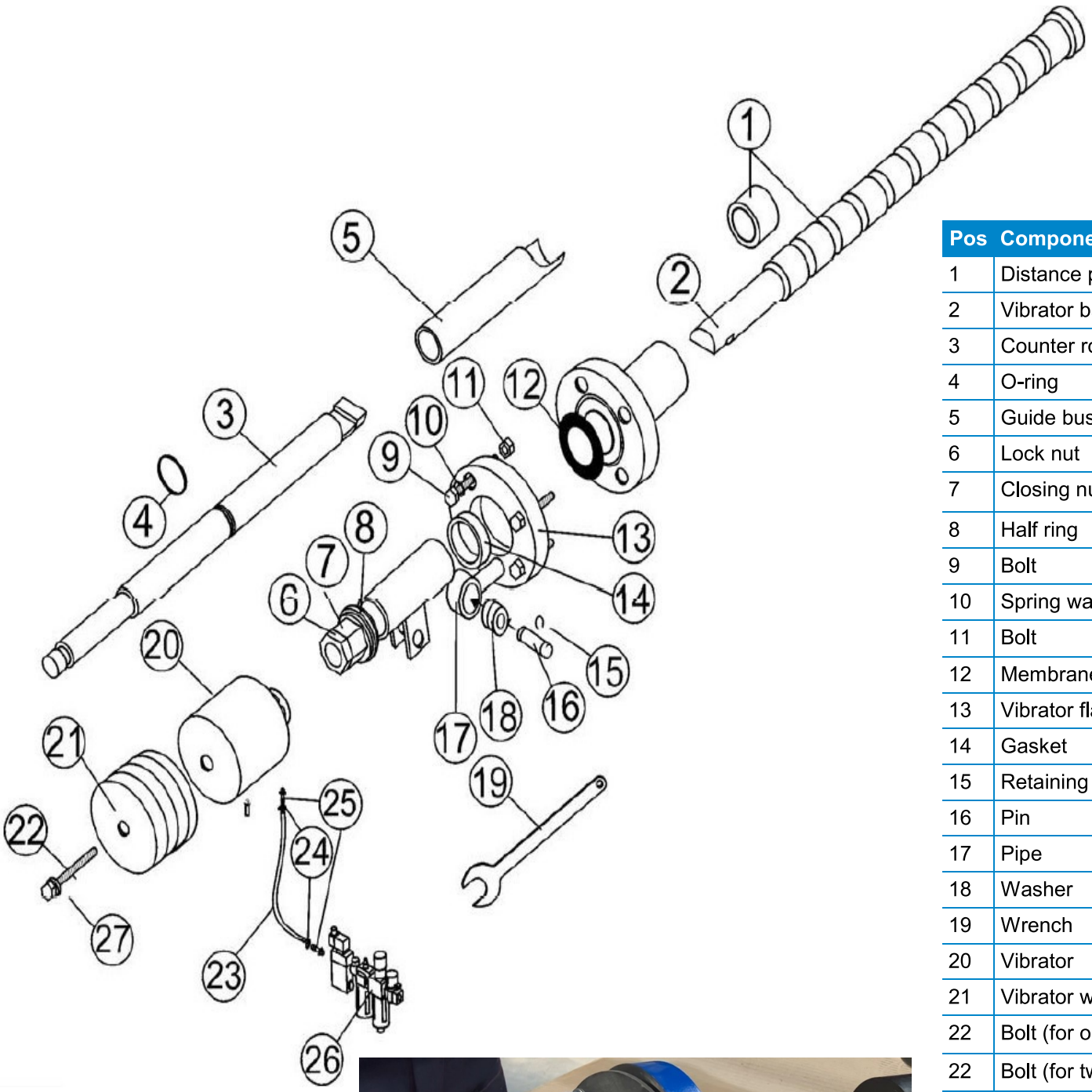


Touching

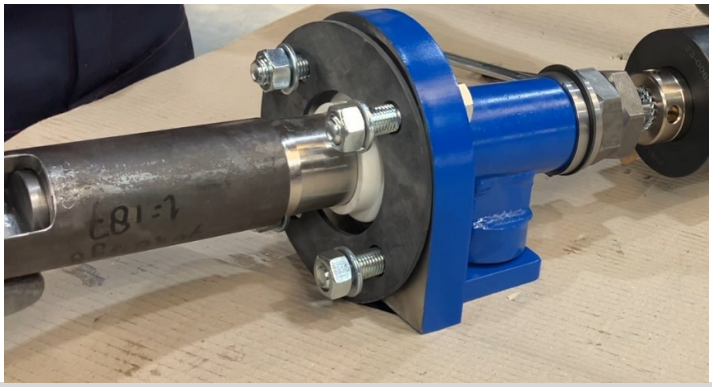


Vibrator system

Overview vibrator



Pos	Component
1	Distance piece
2	Vibrator bar
3	Counter rod
4	O-ring
5	Guide bush
6	Lock nut
7	Closing nut
8	Half ring
9	Bolt
10	Spring washer
11	Bolt
12	Membrane
13	Vibrator flange
14	Gasket
15	Retaining ring
16	Pin
17	Pipe
18	Washer
19	Wrench
20	Vibrator
21	Vibrator weight
22	Bolt (for one weight)
22	Bolt (for twee weights)
22	Bolt (for three weights)
22	Bolt (for four weights)
23	Air hose
24	Hose fitting
25	Hose clamp
26	Air supply unit
27	Spring washer



Vibrator system

Trouble shooting

The vibrator does not start

Cause	Action
No air pressure.	Make sure that the pressure of air system is correct. Make sure that all manually operated valves to the air control unit and vibrator are open.
Pressure of air control unit set too low.	Set the operation pressure at ± 6bar.
The filter of air control unit is dirty.	Clean the filter.
The automatic valve to the vibrator is not working. (Automatic installations only).	Make sure that the valve is clean. Make sure that there is sufficient voltage on the coil.
The manual valve for the vibrator control is not opened sufficiently quickly. Manually operated installations only).	Open the valve faster.
The piston of the vibrator can not move freely.	Make sure the piston and cylinder of the vibrator are smooth and clean. Make them smooth with fine abrasive paper. Adjust the lubrication unit. (1-2 drops of oil per minute).
Vibrator vent is blocked.	Clean the vent.

The performance of the vibrator is decreasing

Cause	Action
Bad lubrication.	Check oil level and oil quality in the air supply unit.
The air pressure is too low.	Increase the air pressure.
The vibrator is dirty.	Clean the vibrator internally.
The vibrator is worn.	Change or repair the vibrator.
Vibrator bolts and/or nuts on the vibrator rod are loose.	Tighten the bolts or nuts.

The vibrator is rattling

Cause	Action
The vibrator bolts are loose.	Tighten the bolts.
The nuts on the vibrator rod are loose.	Tighten the nut and lock it with the lock nut.

The vibrator works but vibration is not transferred to filter leaves

Cause	Action
The support rubbers of the vibrator are worn or missing.	Replace the support rubbers.
Vibrator is touching filter body.	Check page 5 for example and solution.

The vibrator wears out quickly

Cause	Action
The lubrication is not sufficient.	Check oil level and oil quality in the air supply unit.
Fluids in the environment cause corrosion.	Protect the vibrator against the environment.
Very high or low ambient temperature.	Make sure that the vibrator does not become too cold or too warm.