Change diaphragm

**WARNING**
- Retrofit kits set must be installed by trained and authorised personnel!
- Always take suitable precautions when using hazardous chemicals!
- Ensure that the equipment is de-pressurised!

- Empty the liquid end (turn the unit upside down and let the feed chemical run out, rinse with a suitable material: rinse the liquid end thoroughly after use with hazardous materials!).
- When Pump is running set the stroke length to 0 % (the drive axis is then set).
- Switch off the Pump.
- Unscrew the hydraulic connectors from the discharge and suction side.
- Remove the screws (1).
- Loosen the liquid end (2) and the top plate (4) from the pump housing (6) (loosen only!).
- Hold the housing (6) in one hand and with the other, clamp the diaphragm (3) between the liquid end (2) and the top plate (4); release the diaphragm (3) from the drive spindle with a light anticlockwise turn of the liquid end (2) and top plate (4).
- Unscrew the diaphragm (3) completely from the drive spindle.
- Remove the top plate (4) from the housing (6).
- Check the condition of the safety diaphragm (5) and replace if necessary.
- Push the safety diaphragm (5) onto the drive axle until the outer edge lies flat on the pump housing (6) – no further!
- Screw the new diaphragm (3) carefully up to the stop on the drive axis – this must be exact to ensure correct metering!
- Unscrew the diaphragm (3) once more.
- Position the top plate (4) on the pump housing (6).

**IMPORTANT**
- The leakage hole must point downwards when the pump is fully assembled
- Position the top plate (4) correctly on the pump housing (6). Do not distort the top plate on the pump housing, otherwise the safety diaphragm (5) will not fit.

- Lay the diaphragm (3) into the top plate (4).
- Hold the top plate (4) and screw the diaphragm (3) in a clockwise direction until it is firmly in position (you will feel the resistance of the return spring).

**IMPORTANT**
- Do not over tighten the diaphragm (3) (particularly on type 1601).
- The top plate (4) must remain in position to prevent the safety diaphragm (5) from distorting.

- Set the stroke length to 100 %
- Place the liquid end (2) with the screws (1) on the diaphragm (3) and the top plate (4) (the priming connector must point downwards once the pump is fully assembled).
- Screw on screws (1) lightly and tighten (starting torque, see below).

**NOTE**
- Check the screw torques after 24 hours in operation
- For PP liquid ends check the screw torques again after three months.

Screw torques: 4.5 to 5 Nm

Subject to technical changes.