

# Assembly Instructions M8086-EN

## Spare part Sonic transducer (O/ID T24629-X, T26326-X, T25242-X, T25865-X)

### Purpose

Replacement of Sonic transducer (BB 1, BB 2)

### Precondition



**WARNING!**

**Danger for unauthorized persons!**

Conversion work may only be carried out by specialist staff who have been trained accordingly.

Therefore:

- Keep unauthorized persons away from the work area.



**NOTE!**

*Knowledge of the Instruction Manual is a precondition for carrying out conversion work on the unit.*

### Procedure



**DANGER!**

**Danger to life caused by electric current!**

Touching conductive parts causes a direct danger to life.

Therefore:

- For all work on the electrical system, for maintenance, cleaning or repair work, disconnect from the mains or disconnect all phases of the external power supply and secure them against being switched on again. Check unit is isolated from power supply.





**WARNING!**


**Danger of crushing due to rolling away or tipping**

With an uneven floor or when the castors are not locked, there is a danger that the unit tips over or rolls away causing crushing.

Therefore:

- Only install the unit on an even floor.
- Ensure that the castors are locked.

1. Proceed as follows in order to cool down the unit and empty the mould (mould evacuation):
  - Display menu page **Functions**.
  - Select the function **Cooling** and activate with the  key.
  - If the function **Mould evacuation** is available, select it and activate it with the  key.

→ The activated function is indicated with the  symbol.

  - Units HB-100X\_4 and HB-100/140/160Z\_4 without function **Mould evacuation**: Loosen the drain connection (G) slowly until the unit is depressurized.
2. Main switch off, remove the plug from the mains and empty the unit.
3. Remove the cover from the unit (see Instruction Manual Chapter Maintenance).
4. Loosen the screws in the front panel and hinge it down.

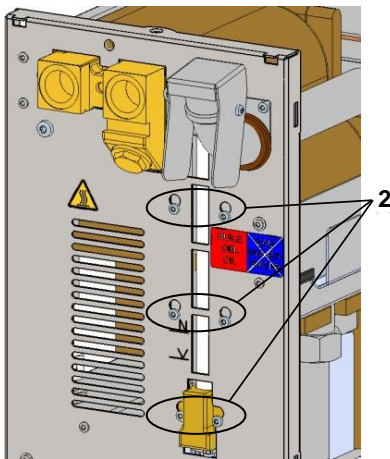


Fig. 1: Removing level indicator

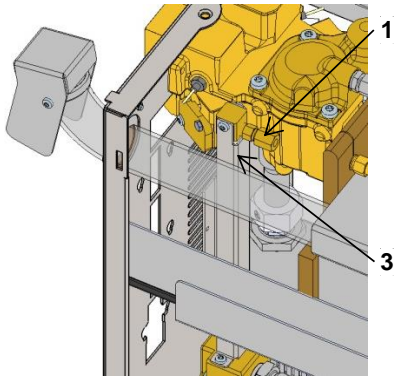


Fig. 2: Pulling out level indicator

### Only on T25865-1 and replacement sonic transducer BB 1

5. To enable accessibility to the transducer (BB 1), the level indicator (10) must be removed. Proceed as follows:

- Undo screws on pipe (Label 1 → Fig. 2).
- Remove 6x screws (Label 2 → Fig. 1).
- Pull out level indicator (Label 3 → Fig. 2) so that accessibility to the transducer (BB 1) is ensured.

6. Proceed as follows in order to remove the sound transducer (BB 1, BB 2):

- Remove the screws and mounting plate of the sound transducer.
- Remove sound transducer.
- Remove O-ring.
- Unplug cable of the sound transducer (BB 1, BB 2) on slot X 53.1 or X 53.2.

7. Proceed as follows to assemble the new sound transducer (BB 1, BB 2)

- Clean installation space of sound transducer, especially groove for O-ring.
- Insert the new O-ring in the groove.
- Fit the sound transducer with the mounting plate and screws carefully.
- Transfer the cable labelling of the old sound transducer to the new sound transducer.
- Insert the sound transducer into the corresponding slot at the X 53.1 or X 53.2.



### NOTICE!

The 2nd sound transducer should be cleaned, if the demounted sound transducer is showing dirt on the side touching the medium.

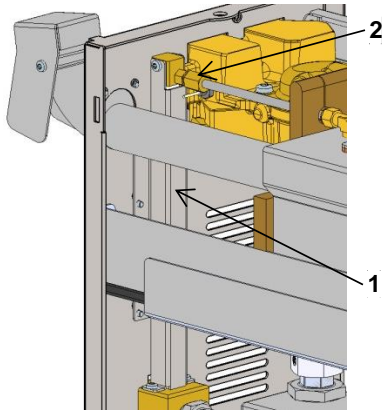


Fig. 3: Mount level indicator

### Only on T25865-1 and replacement sonic transducer BB 1

8. To mount the level indicator, proceed as follows:

- Push in level indicator (10) (Label 1 → Fig. 3).
- Mount 6x screws.
- Tighten screws on pipe (Label 2 → Fig. 3).

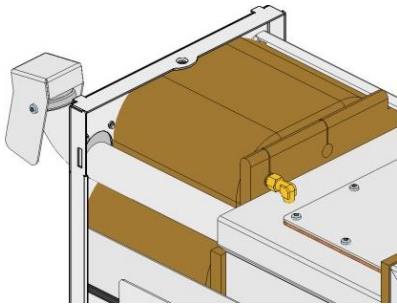


Fig. 4: Fitting insulation on 200T2

### Only on oil units

9. Fit insulation as shown in Fig. 4 or Fig. 5.

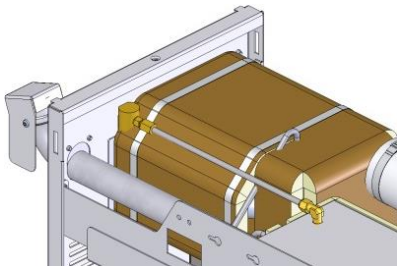



Fig. 5: Fitting insulation on 250T3

10. Close and secure the front panel.

11. Reconnect mains plug and switch on main switch.

12. Press the  key to switch on the unit and check it for leaks.

|                                   |                       |                    |
|-----------------------------------|-----------------------|--------------------|
| Service ▶ Calibrating ▶ Flow rate |                       |                    |
| Tolerance pump condition          |                       | 30 %               |
| Flow rate internal offset         | 0.0                   | 1/min              |
| Flow rate internal ascent corr.   | 0.0                   | %                  |
| Flow rate internal filter         | 10                    | s                  |
| Flow rate calibration             |                       | OFF                |
|                                   |                       |                    |
| 1                                 | Main line<br>Pressure | 28.2 °C<br>0.0 bar |
|                                   |                       | Ready to operate   |

Fig. 6: Calibrating the flow rate

|                                   |                       |                    |
|-----------------------------------|-----------------------|--------------------|
| Service ▶ Calibrating ▶ Flow rate |                       |                    |
| Tolerance pump condition          |                       | 30 %               |
| Flow rate internal offset         | 0.0                   | 1/min              |
| Flow rate internal ascent corr.   | 0.0                   | %                  |
| Flow rate internal filter         | 10                    | s                  |
| Flow rate calibration             |                       | ON                 |
|                                   |                       |                    |
| 1                                 | Main line<br>Pressure | 28.2 °C<br>0.0 bar |
|                                   |                       | Ready to operate   |



Fig. 7: Calibrating the flow rate

### 13. Flow rate calibration

#### (Software versions prior to SW51-1 0849B)

- Operate unit in regular mode at 40 °C for at least 10 minutes.
- Set **Flow rate internal offset** parameter in **Service \ Calibrating \ Flow rate** internally to "5 L/min".
- Close shut-off valve between main or return line and wait for 1 minute.
- Note current **Flow rate**.
- Set **Flow rate internal offset** according to the following calculation:  
→ New **Flow rate internal offset** = 5 – current **Flow rate**
- Open shut-off valve.

#### (From software version SW51-1 0849B onwards)

- Operate unit in regular mode at 40 °C for at least 10 minutes.
- **Only for water units:**  
If available, set **Pressure relief with unit OFF** parameter in **Setting \ Miscellaneous** to "OFF".
- Switch off unit using  button and wait at least 10 seconds.
- Set **Flow rate calibration** parameter in **Service \ Calibrating \ Flow rate** internally to "ON".  
→ The flow rate is calibrated automatically.
- **Only for water units:**  
If available, set **Pressure relief with unit OFF** parameter in **Setting \ Miscellaneous** to "ON".
- Switch on the unit using the  key.

### 14. Check flow rate calibration:

- After calibration, run the unit for at least 5 minutes at 40 °C in normal mode.
- Close shut-off valve between feed and return lines.
- Flow rate switches to 0 L/min and alarm indication ‚Flow rate zero’ is given.



**NOTE!**

The alarm message ‚Flow rate zero’ is delayed in time.

- If this is not the case, repeat the flow rate calibration.




**ATTENTION!**

**Risk of incorrect calibration!**

False calibrations can lead to faults with the unit.

Therefore:

- Check the calibrations.

15. Switch the unit off by press the  key.

16. Main switch off.

17. Close the unit correctly again.

## Parts list

| Pos | Description                                 | O/ID     | O/ID     |          |          |          |          |          |          |
|-----|---|----------|----------|----------|----------|----------|----------|----------|----------|
|     |   |          | T24629-1 | T24629-2 | T26326-1 | T26326-3 | T25242-2 | T25865-1 | T25865-3 |
|     |   |          | Pcs      | Pcs      | Pcs      | Pcs      | Pcs      | Pcs      | Pcs      |
| 01  | Sonic transducer water up to 160 °C, 1 m    | T27045-1 | 1        | -        | -        | -        | -        | -        | -        |
| 02  | Sonic transducer water up to 160 °C, 1,45 m | T27045-3 | -        | 1        | -        | -        | -        | -        | -        |
| 03  | Sonic transducer water up to 180 °C, 1 m    | T26310-1 | -        | -        | 1        | -        | -        | -        | -        |
| 04  | Sonic transducer water up to 180 °C, 1,45 m | T26310-3 | -        | -        | -        | 1        | -        | -        | -        |
| 05  | Sonic transducer oil up to 200 °C, 1 m      | T26328-1 | -        | -        | -        | -        | 1        | -        | -        |
| 06  | Sonic transducer oil up to 200 °C, 1 m      | T26082-1 | -        | -        | -        | -        | -        | 1        | -        |
| 07  | Sonic transducer oil up to 250 °C, 1,45 m   | T26082-3 | -        | -        | -        | -        | -        | -        | 1        |
| 08  | Socket 27x14x9 PEEK                         | T26080   | -        | -        | -        | -        | -        | 1        | 1        |
| 09  | O-Ring FPM 17x2 mm                          | T23523   | -        | -        | -        | -        | 1        | -        | -        |
| 10  | O-Ring FFKM 17x2 mm                         | T25429   | 1        | 1        | 1        | 1        | -        | 2        | 2        |
| 11  | Assembly instructions German                | M8086-DE | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| 12  | Assembly instructions English               | M8086-EN | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| 13  | Assembly instructions French                | M8086-FR | 1        | 1        | 1        | 1        | 1        | 1        | 1        |