

Installation, sectorised rotary heat exchanger

1. General

The following tools are required:

Combination spanner 17, 19 and 24 mm

Hex wrench 8 and 10 mm

Pop rivet gun and drill 4.1 mm

Drill 13 mm

Folding rule or the like

Possible plastic hammer and large screwdriver

2. Installation

1. Ensure the ventilation unit stands straight and is in plumb.
2. Dismantle the heat exchanger's drive motor, control unit, brace plate and cable rails. Mark the pressure hoses
3. Guide the heat exchanger's drive belt over the left or right frame (alternatively separate and weld the belts later).
4. Fit the hub in the frame. The hub must be centred and run freely. Assemble the new plates for the brush strips, (distance to the heat exchanger is adjusted later).



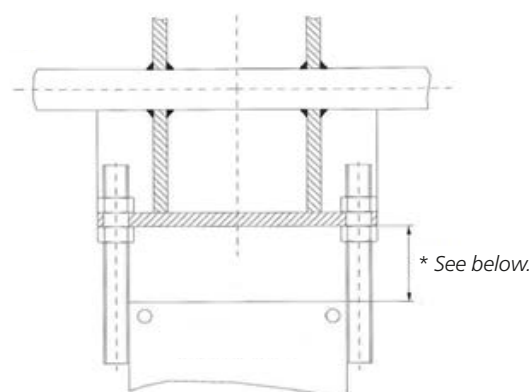
5. Fit the nuts on the threaded rods.

Screw the nuts, these should rest against the outside of the hub, on the threaded rods to the measurements set out below:

Four to six sections, 35 mm.

Eight sections, 58 mm.

The measurements are approximate measurements. If the nuts are screwed on further, space will be limited to fit all sections. Measurement between the frame plate's upper edge and the top of the nut.

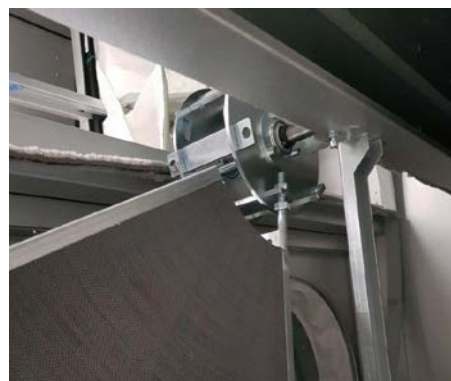


Spokes

- * Approx. 35 mm (4 – 6 heat exchanger sections)
- Approx. 58 mm (8 heat exchanger sections)

6. Install the heat exchanger sections marked 1-2.

Place a batten or the like under the heat exchanger section to raise it up level with the hub. The batten also helps to secure the heat exchanger section. Screw on the nuts on the inside of the hub by hand.



7. Perform the same steps as set out in items 5 and 6 with the heat exchanger sections marked 3-4. Fit using the previous section as a support.



8. Fit the bolts in the frame plates. Do not tighten the bolts too tight. It should be possible to adjust the heat exchanger sideways.

9. Continue to install the heat exchanger sections in number sequence until they cover the whole intermediate plane. Adjust the brush strips on both sides of the heat exchanger from the filter side in the ventilation unit. (To avoid dismantling the fans and adjusting later). Remember the heat exchanger must be secured.



Warning

Large risk of crush injury against the intermediate plane.

If the last section does not fit, lift up the adjacent sections by adjusting them up with the nuts in the hub. Now rotate the heat exchanger and "follow-up" with the nuts until the sections mate tightly against each other.



10. When all the heat exchanger sections are in place and there is no air gap between these, commissioning of the heat exchanger sections can commence.

All heat exchanger sections must have the same final measurement between the top edge of the frame plate and the hub. Tighten a nut a little at a time on opposite sides of the heat exchanger, i.e. section for section. When the heat exchanger sections are trimmed to the final measurement, a "rustling sound" occurs when the heat exchanger foil is pressed together.

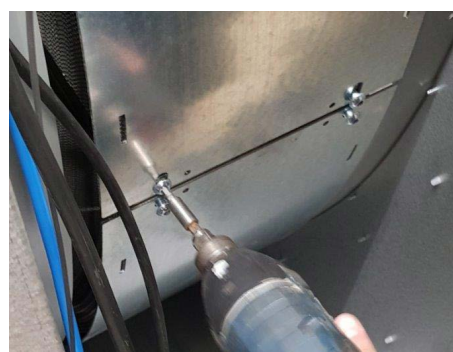
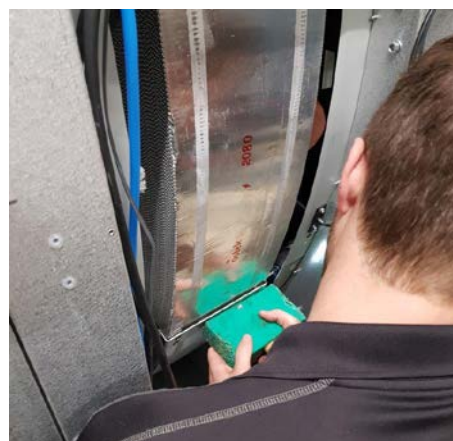
NOTE! Re-tighten all sections, otherwise there is a risk of deep skewing occurring.

11. Once all the heat exchanger sections are adjusted to the same final measurement, check that they are in line.

The heat exchanger sections may need to be adjusted laterally. If so, knock a screwdriver in between the sections. Carefully pry with a screwdriver at the same time as the sections are corrected laterally. When all sections are aligned, tighten the bolts at the top edge of the frame plates and the lock nuts on the threaded rods.

12. Fit the drill template so that it covers the spokes on both sides of the heat exchanger. Drill an approx. 10 mm deep hole in the heat exchanger section with a 13 mm drill.

Hit the shell ring with a plastic hammer until it lies against the section. Hold down the shell ring when the pop-rivet holes in the heat exchanger's spokes are drilled. Fit one shell ring at a time. When all shell rings are fitted, fit the heat exchanger shell. Use a clamping tool to clamp together the shell.

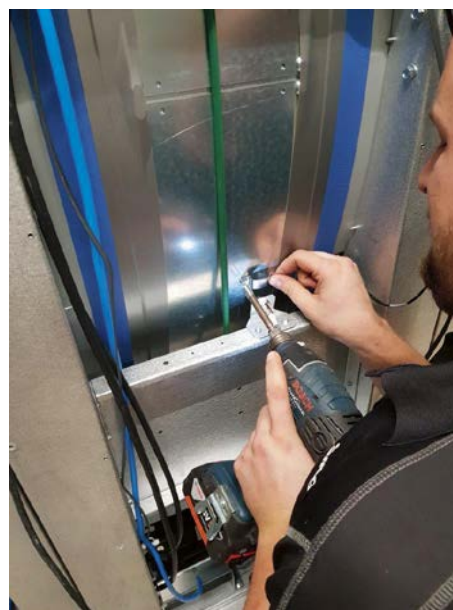


13. When the shell is mounted, the heat exchanger is adjusted to the right angle. Fit the galon seals and pull over the drive belt from the frame or weld the drive belts.

Refit the heat exchanger motor, control unit, brace plate and cable rails.

Fit the clamps for the heat exchanger indication.

NOTE! Two pieces in series.



14. Fit the cover plates for the hub hole centred, with pop rivets or self-tapping screws.

NOTE! For ventilation unit sizes with the pressure roller running against the heat exchanger, fit the heavy-duty cover plate with **pop rivets** on the pressure wheel side. Seal with soft joints around the axle hole and where the axle meets the brush strip plates.



