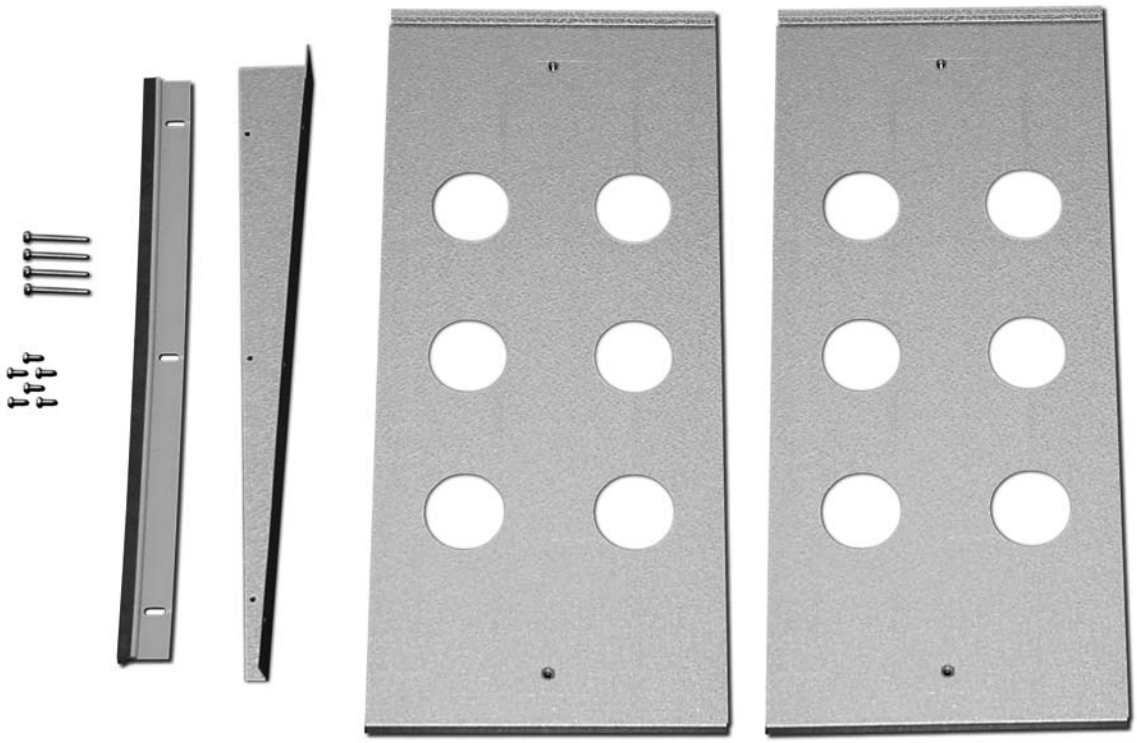
GB



VEX200 Blowout zone and trim damper

Original instructions

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1. Product information

1.1 Application

Function

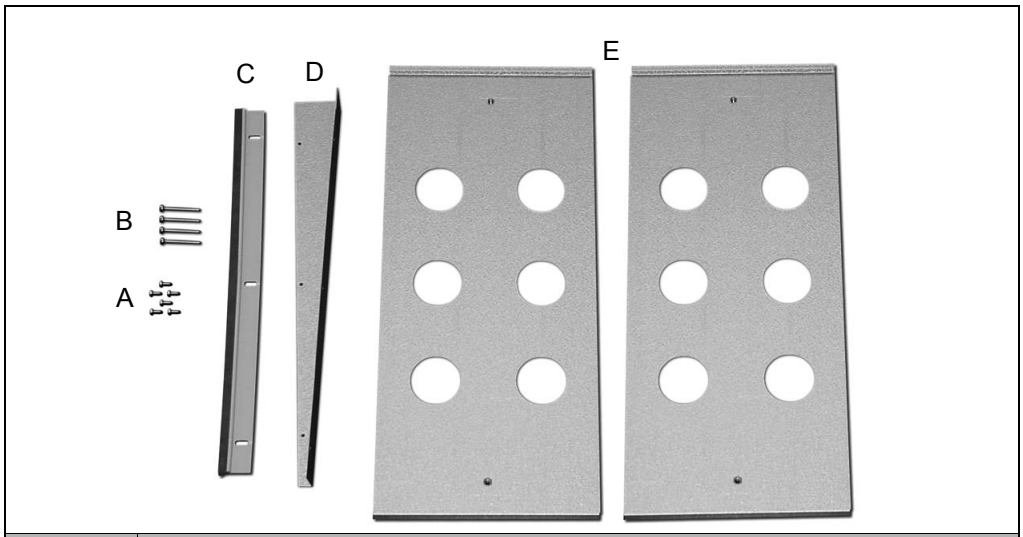
The blowout zone and trim damper are accessories for the VEX200 range that minimise the risk of extract air being mixed with supply air.

NB!

Fitting a blowout zone and trim damper will reduce the level of efficiency of the VEX200 range.

Delivery

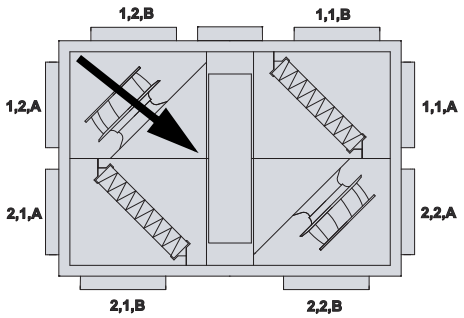
The blowout zone and trim damper consist of the following parts:



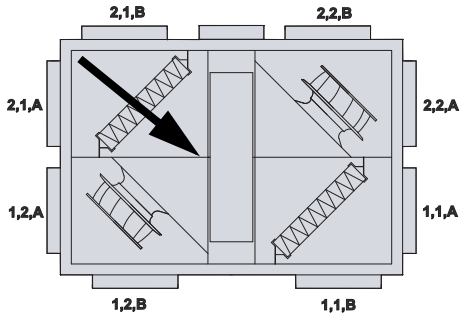
Pos.	Description
A	Screws for fitting the blowout zone and sealing strip
B	Fitting bolts for the trim damper
C	Sealing strip
D	Blowout zone
E	Trim damper

Positioning the parts

The blowout zone must always be installed in the same place, irrespective of whether the VEX200 unit is a Left or Right model, with fan position 1 or 2. (See the pictures below)



Fan position 1.



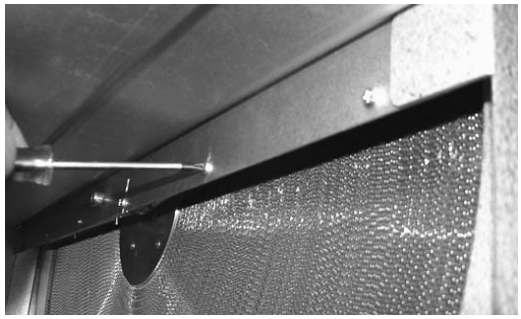
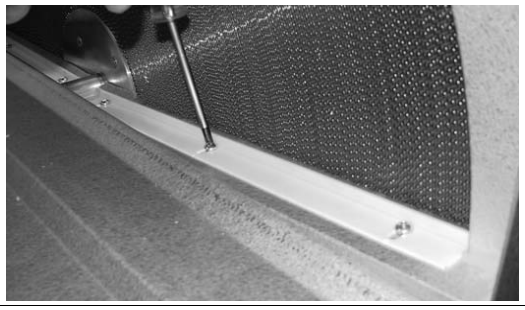
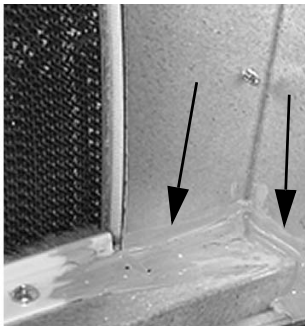
Fan position 2.

The trim damper must be fitted either in the outdoor air intake or the extraction intake depending on the measured pressure conditions. See Section 3.2 commissioning section.

2. Fitting the blowout zone

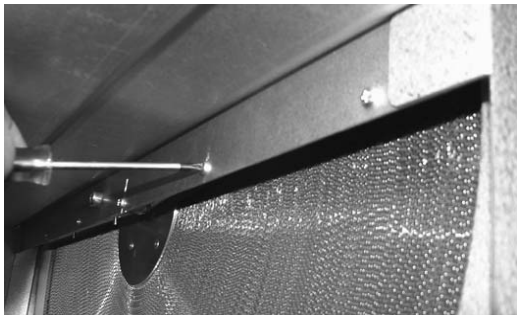
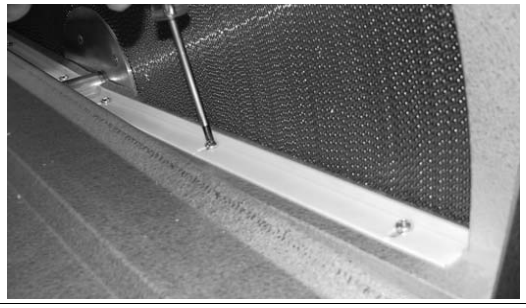
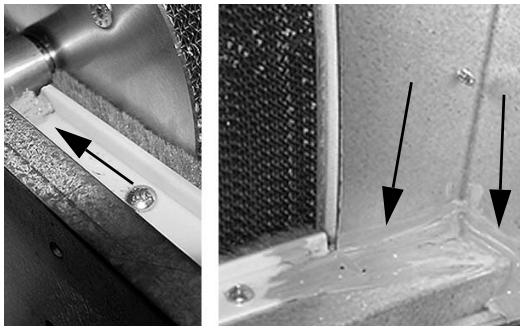
2.1 VEX240/VEX250, fan position 1

Warning **Do not open the service doors before the supply voltage has been disconnected at the isolation switch.**

	Remove motor cable – make a note of the cable positions in the terminal block Remove the frequency converter by removing the screws and pulling the box out
	Remove the bracket with the sealing strip closest to the service door. Then install the blowout zone in the same place.
	Use screws to fit the sealing strip to the blowout zone. Before finally tightening the screws, adjust the sealing strip so that the brushes touch the rotating heat exchanger. (If you are in any doubt about the correct distance, check the facing sealing strip).
 	To seal the blowout zone, apply sealant to the rotor shaft and around the door as shown in the picture.
	Fit the box with the frequency converter and secure with screws. Re-attach the motor cable wires and motor cable. You have now installed the blowout zone.

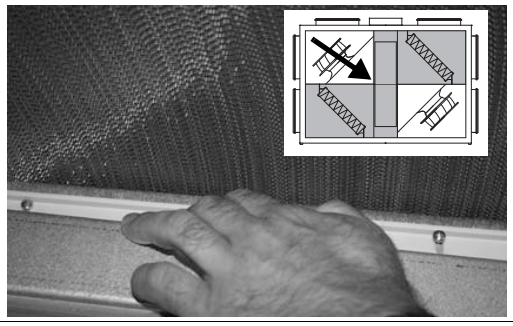
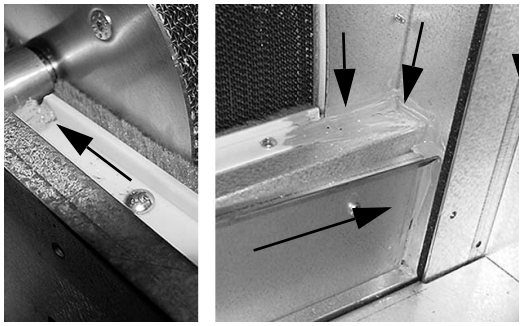
2.2 VEX240/VEX250, fan position 2

Warning **Do not open the service doors before the supply voltage has been disconnected at the isolation switch.**

	Remove motor cable – make a note of the cable positions in the terminal block Remove the frequency converter by removing the screws and pulling the box out
	Remove the bracket with the sealing strip closest to the service door. Then install the blowout zone in the same place.
	Use screws to fit the sealing strip to the blowout zone. Before finally tightening the screws, adjust the sealing strip so that the brushes touch the rotating heat exchanger. (If you are in any doubt about the correct distance check the facing sealing strip).
	To seal the blowout zone, apply sealant to the rotor shaft and around the door as shown in the picture.
	Fit the box with the frequency converter and secure with screws. Re-attach the motor cable wires and motor cable. The purge sector fitting is complete.

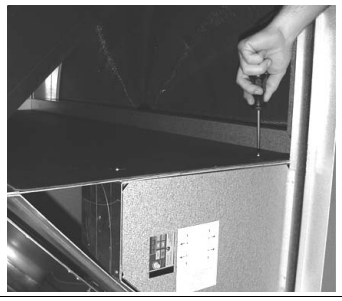
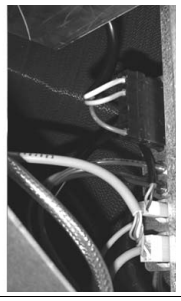
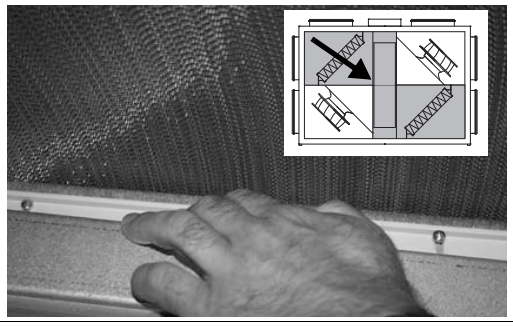
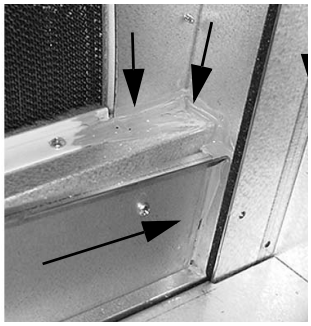
2.3 VEX260/VEX270/280, fan position 1

Warning **Do not open the service doors before the supply voltage has been disconnected at the isolation switch.**

	To dismantle the frequency converter, remove the screws and pull out the box. Disconnect the two power plugs by the frequency converter.
	Remove the bracket with the sealing strip closest to the service door.
	Use screws to fit the sealing strip to the blowout zone. Wait until the blowout zone is fitted by the rotor, and the distance between the rotor and brushes is adjusted correctly before finally tightening the sealing strip.
	The blowout zone is placed in from the top cover against the rotor and is secured from the bottom cover. Before fully-tightening, adjust the sealing strip via the oblong screw holes, so the brushes touch the rotary heat exchanger. (If you are in any doubt about the correct distance, check the facing sealing strip).
	To seal the blowout zone, apply sealant to the rotor shaft and around the door as shown in the picture. Reconnect the two power plugs, refit the frequency converter and use screws to secure it in place. You have now installed the blowout zone.

2.4 VEX260/VEX270/280, fan position 2

Warning **Do not open the service doors before the supply voltage has been disconnected at the isolation switch.**

 	To dismantle the frequency converter, remove the screws and pull out the box. Disconnect the two power plugs by the frequency converter.
	Remove the bracket with the sealing strip closest to the service door.
	Use screws to fit the sealing strip to the blowout zone. Wait until the blowout zone is fitted at the rotor and the distance between the rotor and brushes is adjusted correctly, before finally tightening the sealing strip.
	The blowout zone is placed in from the top cover against the rotor and is secured from the bottom cover. Before fully-tightening, adjust the sealing strip via the oblong screw holes, so the brushes touch the rotary heat exchanger. (If you are in any doubt about the correct distance, check the facing sealing strip).
 	To seal the blowout zone, apply sealant to the rotor shaft and around the door as shown in the picture. Reconnect the two power plugs, refit the frequency converter and use screws to secure it in place. You have now installed the blowout zone.

3. Commissioning of the blowout zone

Warning

When operating the unit with "on-demand" control, there is a risk that the effect of the blowout zone may be limited on account of the fluctuating pressure. Therefore, the pressure conditions should be examined in more detail.

NB! **The entire system must be fully adjusted before you start adjusting the trim damper.**

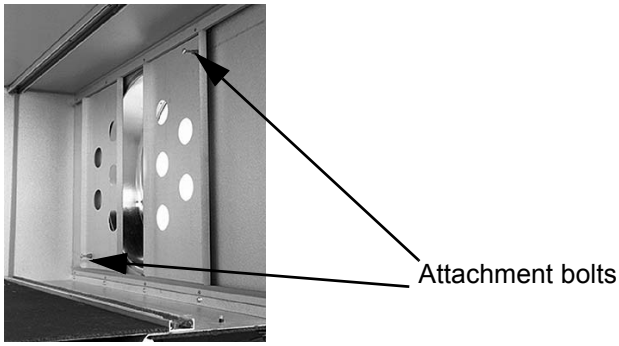
3.1 Fitting and adjusting the trim damper.

Function and application

The trim damper is used to adjust the pressure ratio between the supply and extraction sides to allow the blowout zone to function appropriately.
NB! Only use the trim damper if the measured pressure ratio indicates that its use is required.

Fitting the trim damper

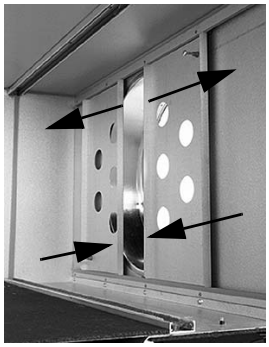
Fit the trim damper either in the extraction side or the supply air side, depending on the measured pressure ratio, see the blowout zone commissioning section.



Trin	Handling
1	Stop the unit and open the service doors.
2	Remove the filter, if any, to facilitate access.
3	Slide the trim damper into the fittings above and below the air intake, as shown in the picture. Please note that the fold must face inwards.
4	Fit the attachment bolts to the trim damper and tighten them against the cabinet.
5	Replace the filter and close the service doors.

Adjusting the trim damper

After fitting the trim damper, you will have to adjust it to ensure that you establish the correct pressure ratio.



Reduce negative pressure

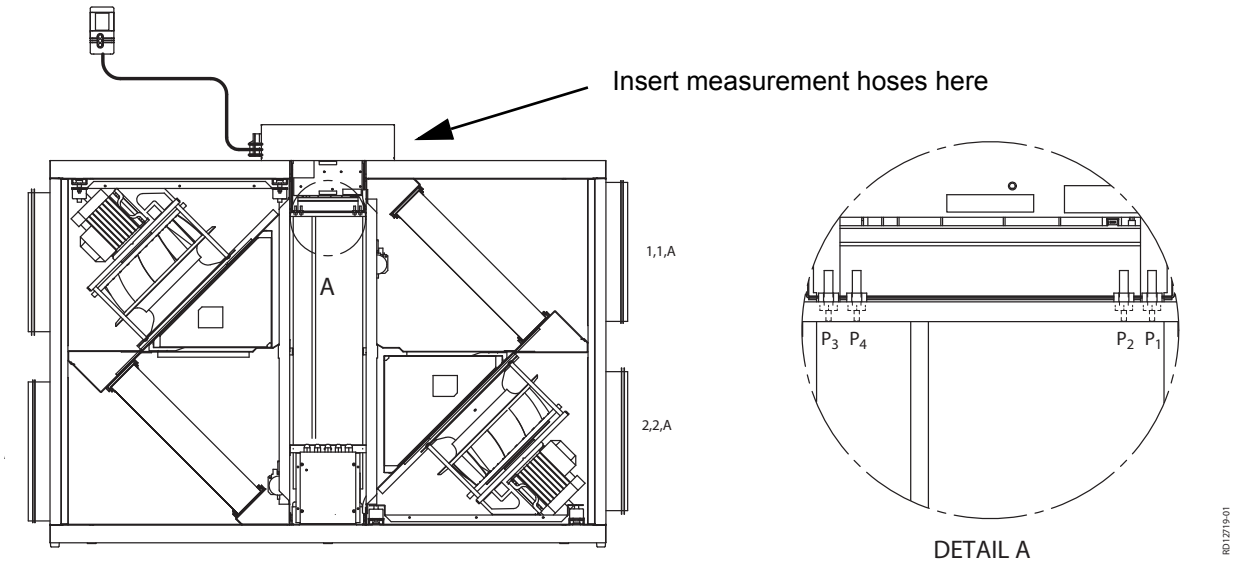
Increase negative pressure

Trin	Handling
1	Start the unit and measure the driving pressure through the blowout zone and the pressure balance over the rotor packing. For further details see the blowout zone commissioning section. For the unit to be commissioned correctly, both pressure values must be greater than the optimal values (stated in the blowout zone commissioning section).
2	If necessary, adjust the trim-damper until the pressure balances are equal to the optimal values (one of the pressure balance values may be greater than the optimal value).
3	Adjust the filter monitors to complete the process.

3.2 Commissioning

3.2.1 VEX240/VEX250

Commissioning A measurement socket is used to commission the VEX240/VEX250 (see positioning in the illustration below)

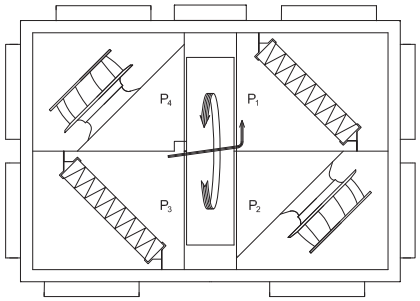


Steps (1-6)	Action
1	Disconnect power at the isolation switch and then open the service doors
2	Feed the measuring hoses in the side of the connection box, as shown in the drawing above.
3	Connect the hoses to the measurement sockets. The position of the measurement sockets is shown in the drawing above (Detail A) Note that negative pressure is measured all of the measurement sockets.
4	Close the service doors and start the unit.

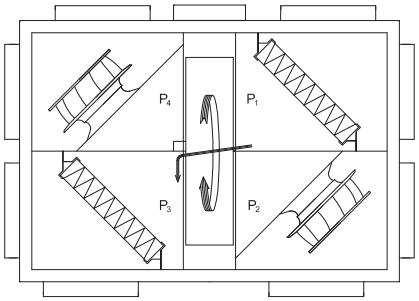
5 Measure the two pressures inside the VEX using the measuring sockets. The optimal balances are:

- 150 Pa driving pressure through the blowout zone
- 20 Pa for the pressure balance over the rotor packing

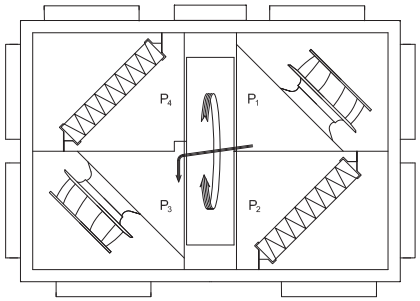
Measurement sockets for respective VEX models are shown below:



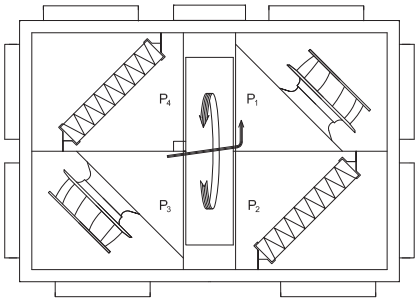
Fan placement 1 Right
P_3-P_1>150Pa
P_2-P_1> 20Pa



Fan placement 1 Left
P_1-P_3>150Pa
P_4-P_3> 20Pa



Fan placement 2 Right
P_1-P_3>150Pa
P_1-P_2> 20Pa



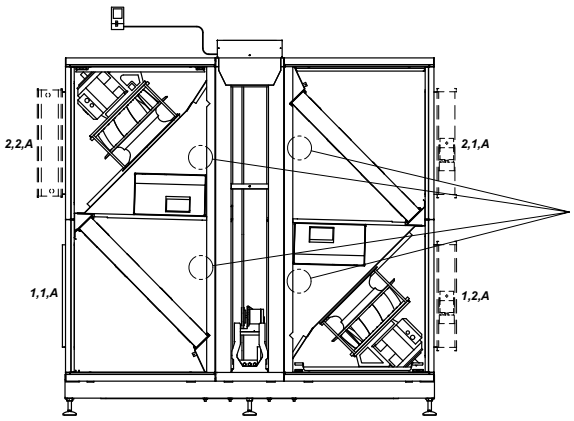
Fan placement 2 Left
P_3-P_1>150Pa
P_3-P_4> 20Pa

6 For the unit to be commissioned correctly, both pressure values must be greater than the optimal values:

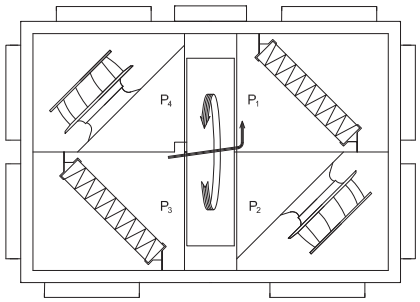
If	**If this is the case, the trim damper: …**
Both pressure balances are greater than the optimum values	must be fitted in the outdoor air spigot
one or both pressure balances are lower than the optimal values	must be fitted in the extract air spigot
Both pressure values are equal to the optimal balance values, or one pressure balance is greater (while the other remains equal to the optimum value) **NB** **Normally, one of the balancing pressures will be greater than the optimal value.**	must not be fitted

3.2.2 VEX260/VEX270/VEX280

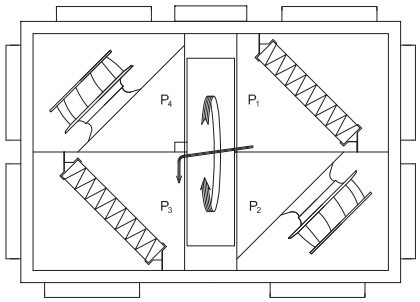
Commissioning A measurement socket is used to commission the VEX260/VEX270/VEX280 (see positioning in the illustration below).



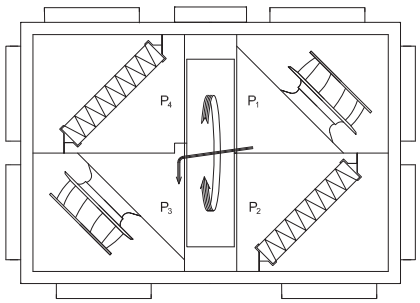
Steps (1-5)	Action
1	Detach the centre door
2	Connect hoses to the measurement sockets positioned on walls on the rotor side (see illustration above). Note that negative pressure is measured on all measurement sockets.
3	Close the service doors and start the unit.
4	Measure the two pressures inside the VEX using the measuring sockets. The optimal balance is: • 150 Pa driving pressure through the blowout zone • 20 Pa for the pressure balance over the top of the rotor packing • Sockets for respective VEX models are shown below:



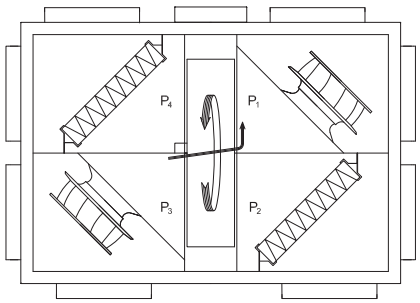
Fan placement 1 Right
P_3-P_1>150Pa
P_2-P_1> 20Pa



Fan placement 1 Left
P_1-P_3>150Pa
P_4-P_3> 20Pa



Fan placement 2 Right
P_1-P_3>150Pa
P_1-P_2> 20Pa



Fan placement 2 Left
P_3-P_1>150Pa
P_3-P_4> 20Pa

5	Both pressure values must be greater than the optimal values, for the unit to be commissioned correctly:

If	**If this is the case, the trim damper …**
both pressure balances are greater than the optimum values	must be fitted in the outdoor air spigot
one or both pressure balances are lower than the optimal values	must be fitted in the extract air spigot
both pressure balances are equal to the optimal values, or one pressure value is greater is larger (while the other remains equal to the optimum value) **NB** **Normally, one of the balancing pressures will be greater than the optimal value.**	must not be fitted

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