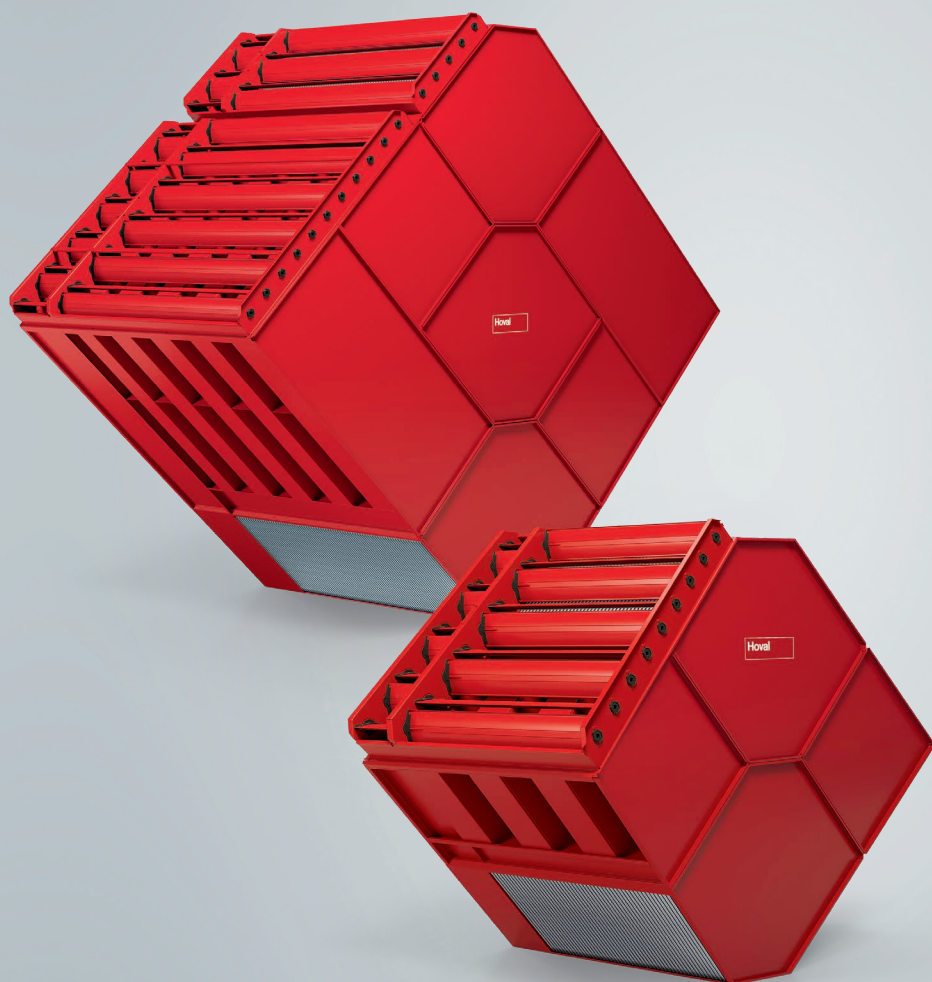


Gotthard plate heat exchanger

Instructions for assembling combi blocks supplied loose (B5)



GVC110-255, B5

GGC110-255, B5

1 Preparation 3

- 1.1 Required tools: 3
- 1.2 Mounting material supplied for Gotthard GVC 3
- 1.3 Mounting material supplied for Gotthard GGC (corrosion-protected design) 3

2 Delivery 4

- 2.1 Disassembling the combi blocks 4

3 Assembly of sizes 110-170 5

- 3.1 Combi block in sizes 110-170 5
- 3.2 Control dampers in sizes 110-170 7
- 3.3 Recirculation damper in sizes 110-170 8

4 Assembly of sizes 195-255 9

- 4.1 Combi block in sizes 195-255 9
- 4.2 Control dampers in size 195. 11
- 4.3 Recirculation damper in size 195. 12
- 4.4 Control dampers in sizes 225-255 13
- 4.5 Recirculation damper in sizes 225-255 15

5 Assembly of the bypass (sizes 170-255) 16

1 Preparation



Caution

Risk of injury from incorrect work. The exchangers may only be installed and maintained by authorised and instructed personnel who are well acquainted with the units and are informed about possible dangers.

These instructions are for operating engineers as well as specialists in building, heating and ventilation technology.

These instructions describe how to assemble combi blocks supplied loose. This facilitates installation into the ventilation unit if space is restricted. The individual components and possibly the dampers and the bypass are then assembled on site. The mounting material is also supplied.

Please also observe the following:

- the instructions for lifting Gotthard plate heat exchangers
- the instructions for installation and maintenance of Gotthard plate heat exchangers

1.1 Required tools:

- Hoisting equipment to lift the components
- Cartridge gun
- Rivet gun
- Electrical screwdriver

1.2 Mounting material supplied for Gotthard GVC

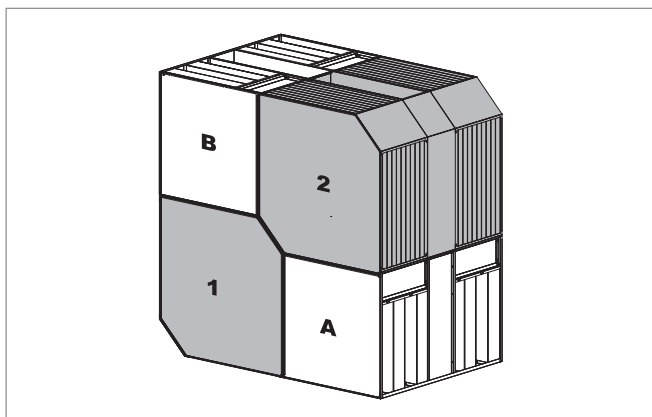
Mat.No.	Designation	Colour coding
232441	Blind rivet 4 x 9.5 Alu	
2038678	Blind rivet 4 x 12 with grooved rivet shaft	
2038736	Self-drilling screw 3.5 x 9.5	
	Sealing compound MS 937 grey	

1.3 Mounting material supplied for Gotthard GGC (corrosion-protected design)

Mat.No.	Designation	Colour coding
232471	Blind rivet 4 x 8.6 CR	
232466	Blind rivet 4 x 11.8 CR	
2038737	Self-drilling screw 3.5 x 9.5 CR	
	Sealing compound MS 937 grey	

2 Delivery

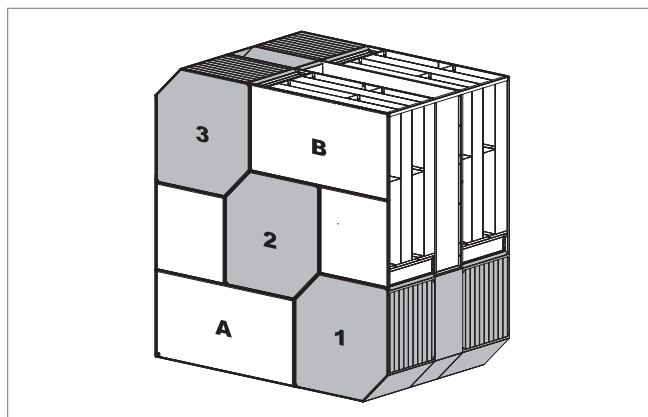
The components are bolted together for safe transport.



1|2 Single exchanger

A|B Air guide

Fig. 1: Components of Gotthard exchangers 110-170



1|2|3 Single exchanger

A|B Air guide

Fig. 2: Components of Gotthard exchangers 195-255

2.1 Disassembling the combi blocks

- Remove the bolt screws from the side wall flanges and separate the individual components.



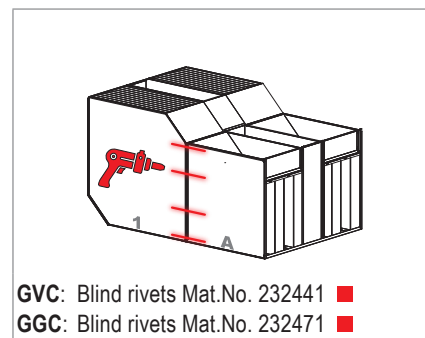
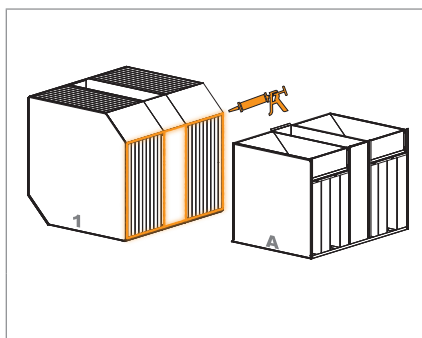
Notice

Do not change the arrangement of the components.
Reassemble the combi block in exactly the same way.

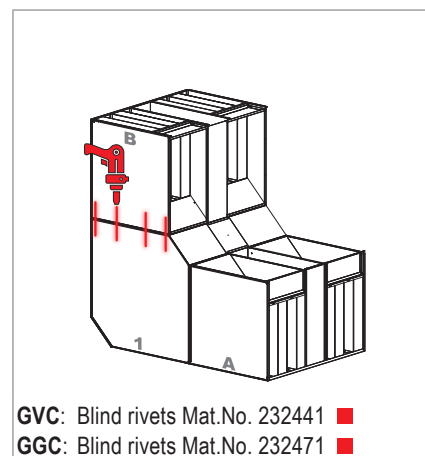
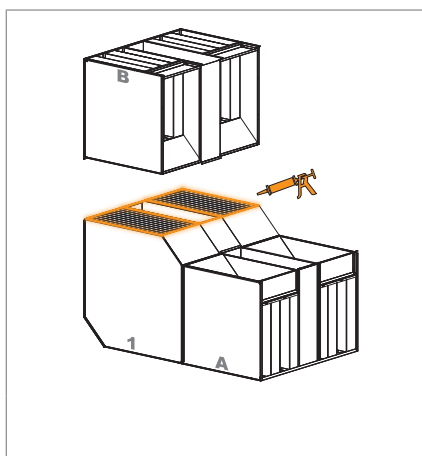
3 Assembly of sizes 110-170

3.1 Combi block in sizes 110-170

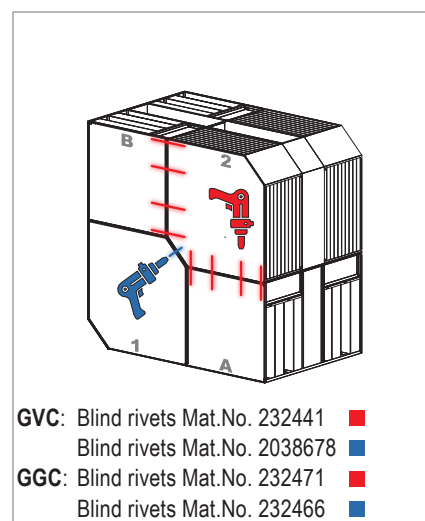
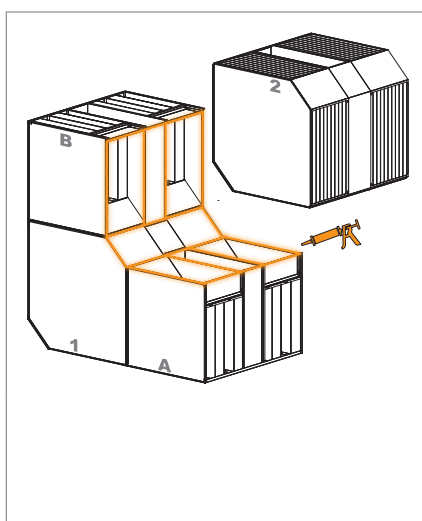
- Prepare the single exchanger 1.
- Apply sealing compound to the side connection edges.
- Move the air guide A into position.
- Rivet the side wall flanges together on both sides of the exchanger.



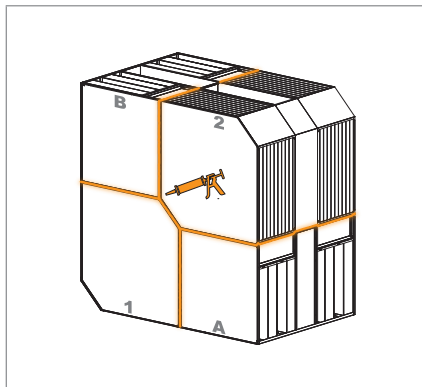
- Apply sealing compound to the upper connection edges on the single exchanger 1.
- Move the air guide B into position.
- Rivet the side wall flanges together on both sides of the exchanger.



- Apply sealing compound to the connection edges on the single exchanger 1 and on the air guides A and B.
- Move the single exchanger 2 into position.
- Rivet the side wall flanges together on both sides of the exchanger.



- Apply sealing compound to the connection edges between the single exchangers and the air guides on all sides.

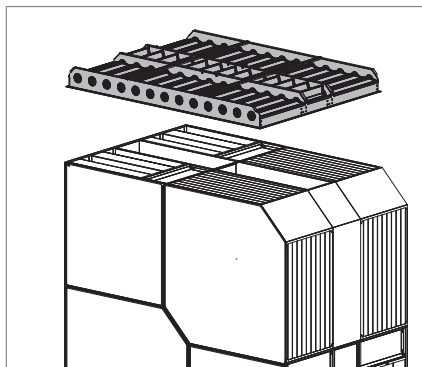


Notice

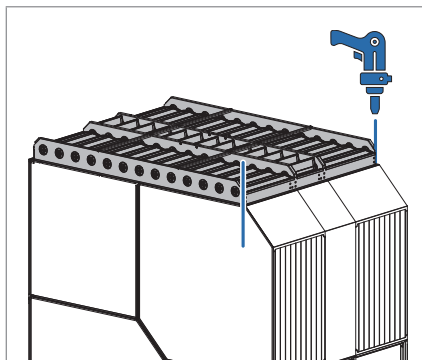
Check the assembly of the combi block.
Ensure that all edges are properly sealed and that all holes are closed.

3.2 Control dampers in sizes 110-170

- Identify the correct position for the control dampers:
 - Place it on the open side of the bypass.
 - With side bypass: Pay attention to the installation position of the exchanger.
- Turn the combi block to the correct position.



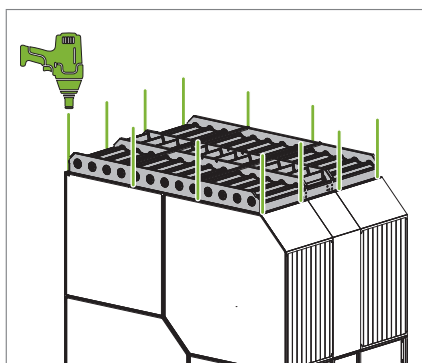
- Move the control dampers into position.
- Rivet the dampers to the flanges of the side walls of the single exchanger.



GVC: Blind rivets Mat.No. 2038678 ■

GGC: Blind rivets Mat.No. 232466 ■

- Mount the control dampers on the combi block using self-drilling screws.



GVC: Self-drilling screws Mat.No. 2038736 ■

GGC: Self-drilling screws Mat.No. 2038737 ■

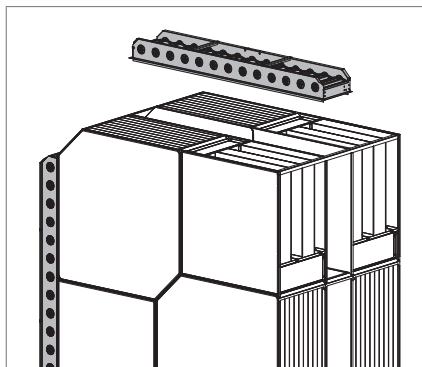


Notice

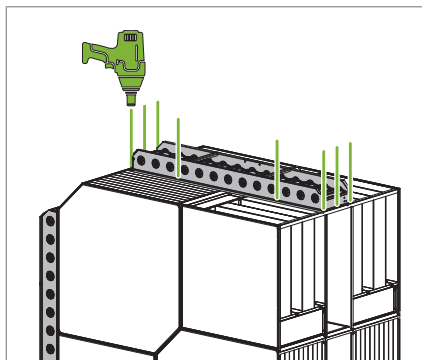
Check the assembly of the control dampers.
Ensure that all holes are closed.

3.3 Recirculation damper in sizes 110-170

- Identify the correct position for the recirculation damper:
 - Place it on the open side of the bypass.
 - With side bypass: Pay attention to the installation position of the exchanger.
- Turn the combi block to the correct position.



- Move the recirculation damper into position.
- Mount the damper on the combi block using self-drilling screws.



GVC: Self-drilling screws Mat.No. 2038736 ■
GGC: Self-drilling screws Mat.No. 2038737 ■



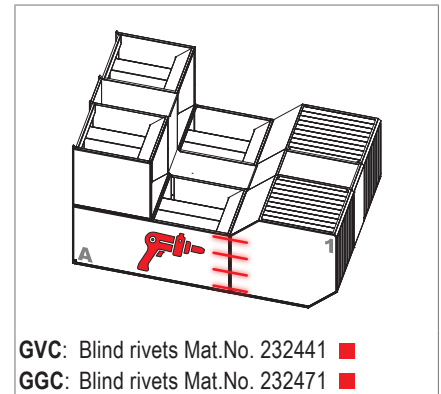
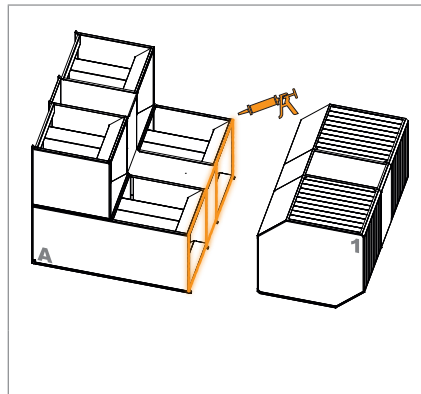
Notice

Check the assembly of the recirculation damper.
Ensure that all holes are closed.

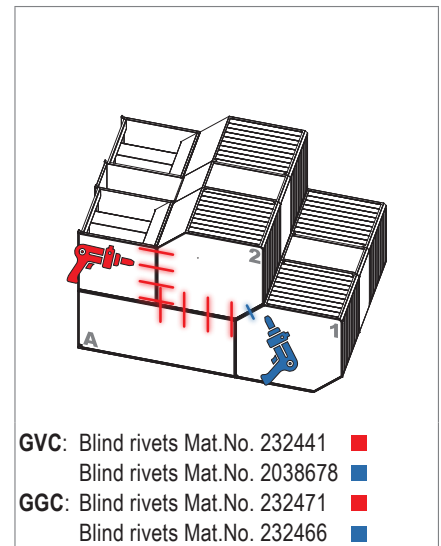
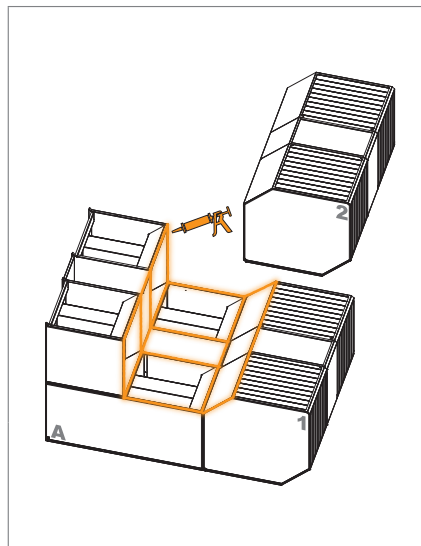
4 Assembly of sizes 195-255

4.1 Combi block in sizes 195-255

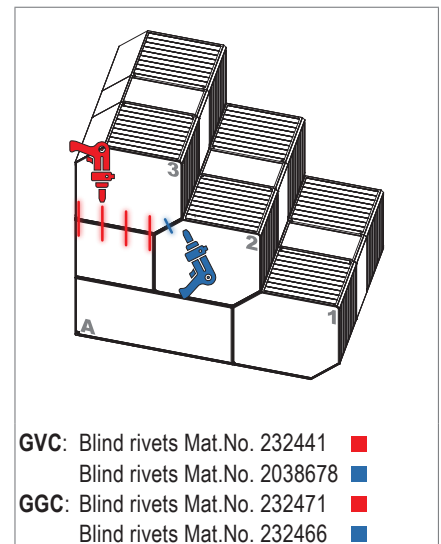
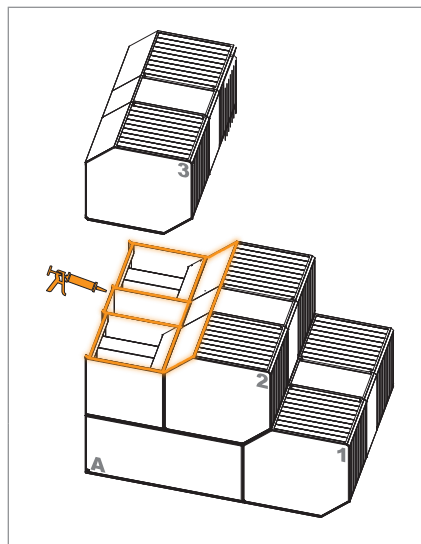
- Prepare the air guide A.
- Apply sealing compound to the side connection edges.
- Move the single exchanger 1 into position.
- Rivet the side wall flanges together on both sides of the exchanger.



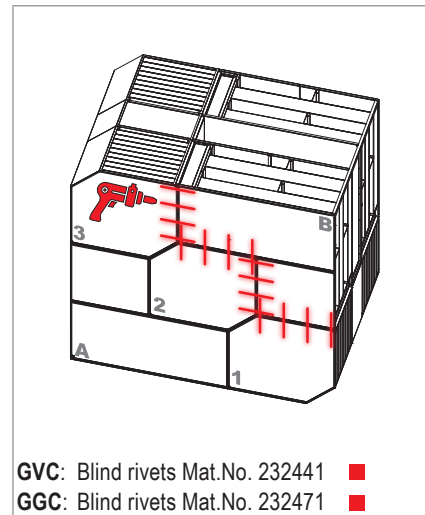
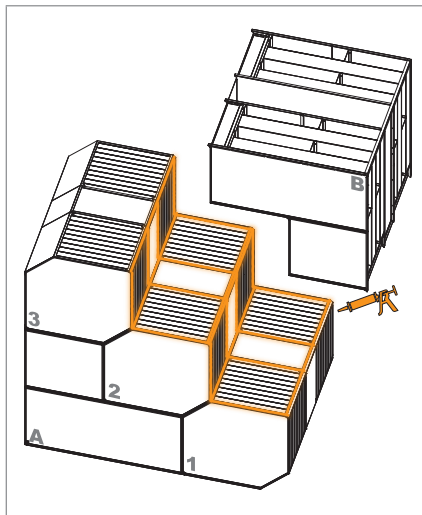
- Apply sealing compound to the connection edges on the air guide A and on the single exchanger 1.
- Move the single exchanger 2 into position.
- Rivet the side wall flanges together on both sides of the exchanger.



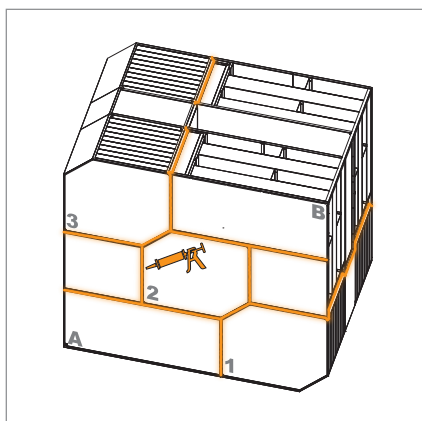
- Apply sealing compound to the connection edges on the air guide A and on the single exchanger 2.
- Move the single exchanger 3 into position.
- Rivet the side wall flanges together on both sides of the exchanger.



- Apply sealing compound to the connection edges on the single exchangers 1, 2 and 3.
- Move the air guide B into position.
- Rivet the side wall flanges together on both sides of the exchanger.



- Apply sealing compound to the connection edges between the single exchangers and the air guides on all sides.

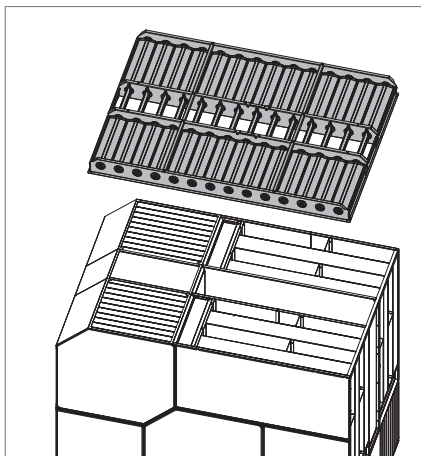


Notice

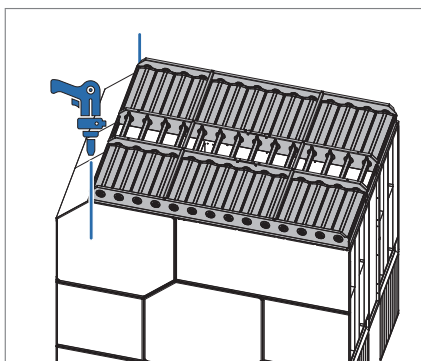
Check the assembly of the combi block.
Ensure that all edges are properly sealed and that all holes are closed.

4.2 Control dampers in size 195

- Identify the correct position for the control dampers:
 - Place it on the open side of the bypass.
 - With side bypass: Pay attention to the installation position of the exchanger.
- Turn the combi block to the correct position.



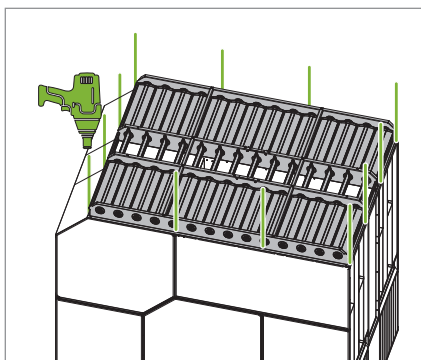
- Move the control dampers into position.
- Rivet the dampers to the flanges of the side walls of the single exchanger.



GVC: Blind rivets Mat.No. 2038678 ■

GGC: Blind rivets Mat.No. 232466 ■

- Mount the control dampers on the combi block using self-drilling screws.



GVC: Self-drilling screws Mat.No. 2038736 ■

GGC: Self-drilling screws Mat.No. 2038737 ■

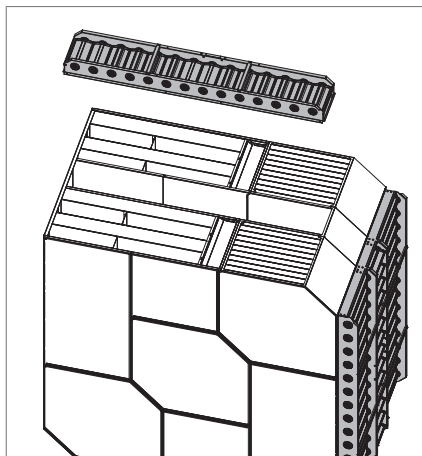


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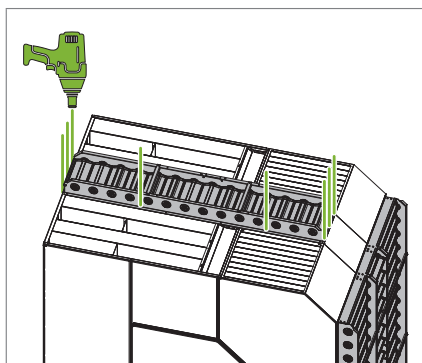
Check the assembly of the control dampers.
Ensure that all holes are closed.

4.3 Recirculation damper in size 195

- Identify the correct position for the recirculation damper:
 - Place it on the open side of the bypass.
 - With side bypass: Pay attention to the installation position of the exchanger.
- Turn the combi block to the correct position.



- Move the recirculation damper into position.
- Mount the damper on the combi block using self-drilling screws.



GVC: Self-drilling screws Mat.No. 2038736 ■
GGC: Self-drilling screws Mat.No. 2038737 ■

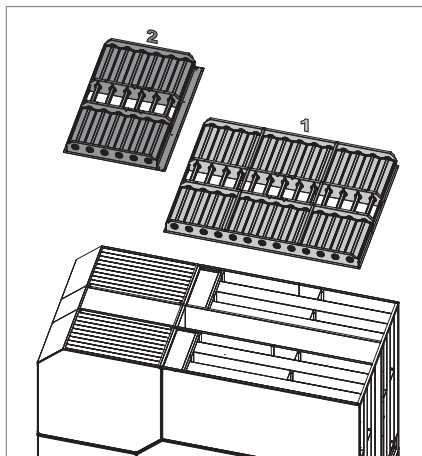


Notice

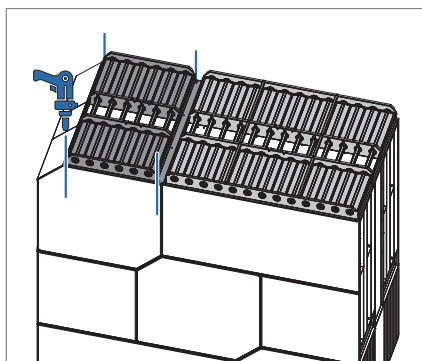
Check the assembly of the recirculation damper.
Ensure that all holes are closed.

4.4 Control dampers in sizes 225-255

- Identify the correct position for the control dampers:
 - Place it on the open side of the bypass.
 - With side bypass: Pay attention to the installation position of the exchanger.
- Turn the combi block to the correct position.



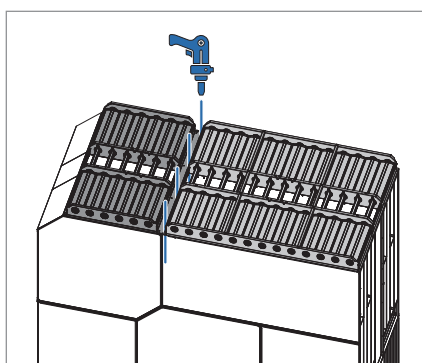
- Move the control dampers into position.
- Rivet part 2 of the control dampers to the flanges of the side walls of the single exchanger.



GVC: Blind rivets Mat.No. 2038678 ■

GGC: Blind rivets Mat.No. 232466 ■

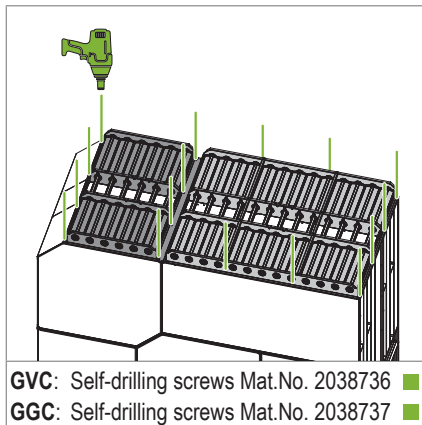
- Rivet part 2 of the control dampers to part 1 of the control dampers.



GVC: Blind rivets Mat.No. 2038678 ■

GGC: Blind rivets Mat.No. 232466 ■

- Mount the control dampers on the combi block using self-drilling screws.

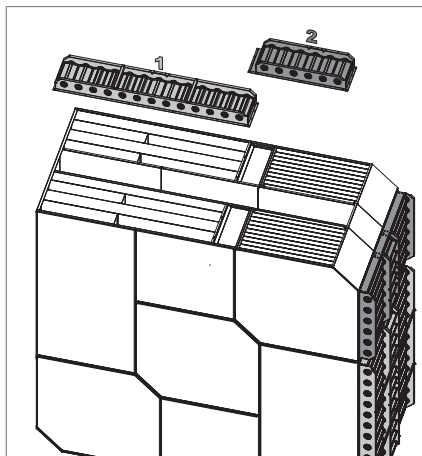


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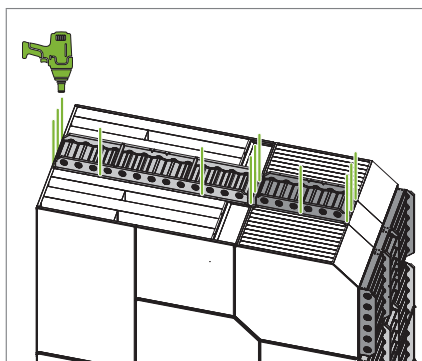
Check the assembly of the control dampers.
Ensure that all holes are closed.

4.5 Recirculation damper in sizes 225-255

- Identify the correct position for the recirculation damper:
 - Place it on the open side of the bypass.
 - With side bypass: Pay attention to the installation position of the exchanger.
- Turn the combi block to the correct position.



- Move the recirculation damper into position.
- Mount the damper on the combi block using self-drilling screws.



GVC: Self-drilling screws Mat.No. 2038736 ■
GGC: Self-drilling screws Mat.No. 2038737 ■

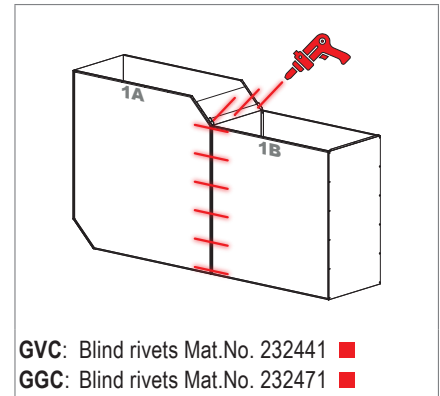
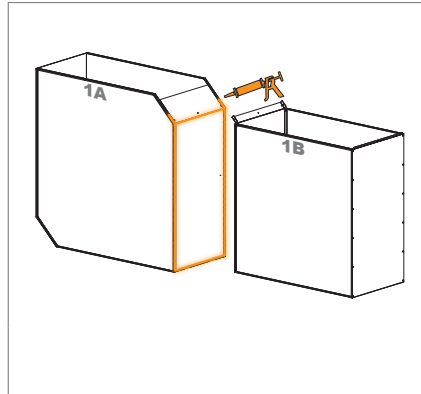


Notice

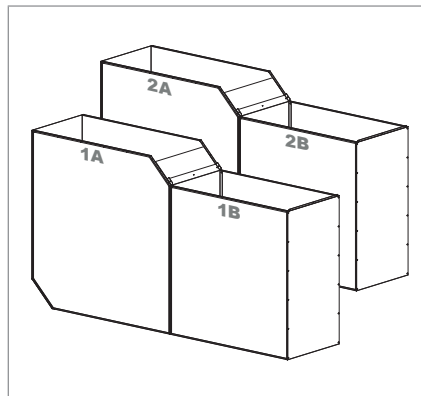
Check the assembly of the recirculation damper.
Ensure that all holes are closed.

5 Assembly of the bypass (sizes 170-255)

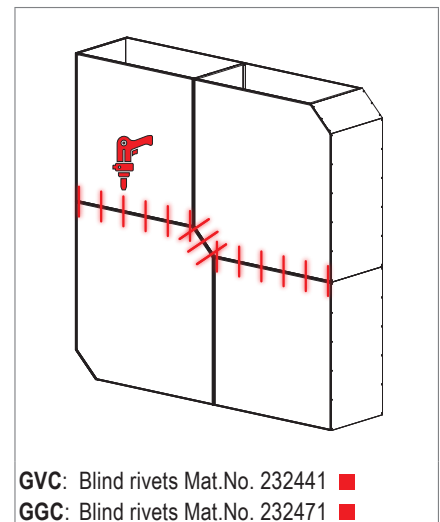
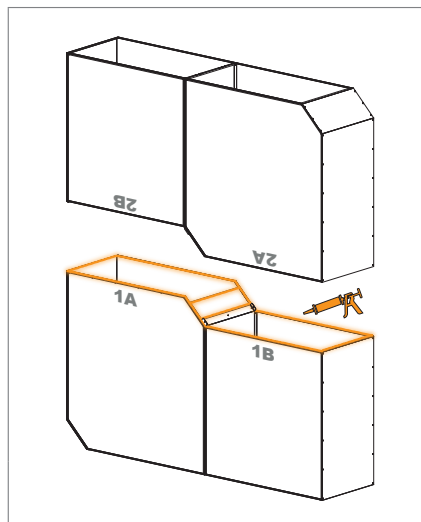
- Prepare the part 1A.
- Apply sealing compound to the side connection edges.
- Move the part 1B into position.
- Rivet the side wall flanges together on both sides of the bypass.
- Rivet the stabiliser plate of part 1B to part 1A.



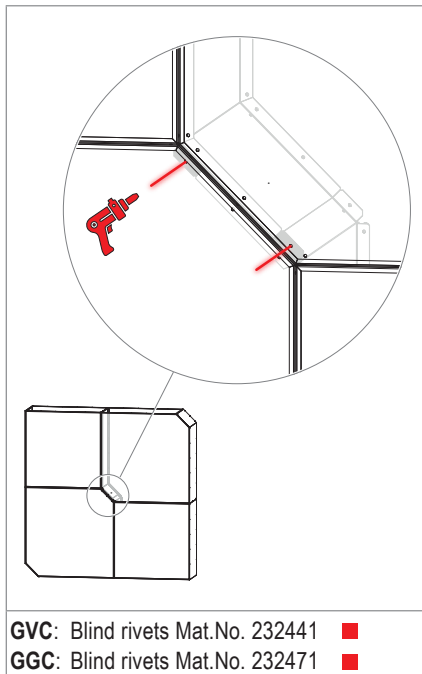
- Assemble parts 2A and 2B in the same way.



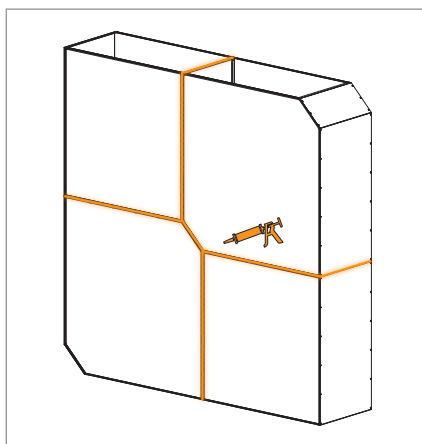
- Apply sealing compound to the upper connection edges on the parts 1A and 1B.
- Move the parts 2A and 2B into position.
- Rivet the side wall flanges together on both sides of the bypass.



- Rivet the side walls to the inner stabiliser plates on both sides of the bypass.



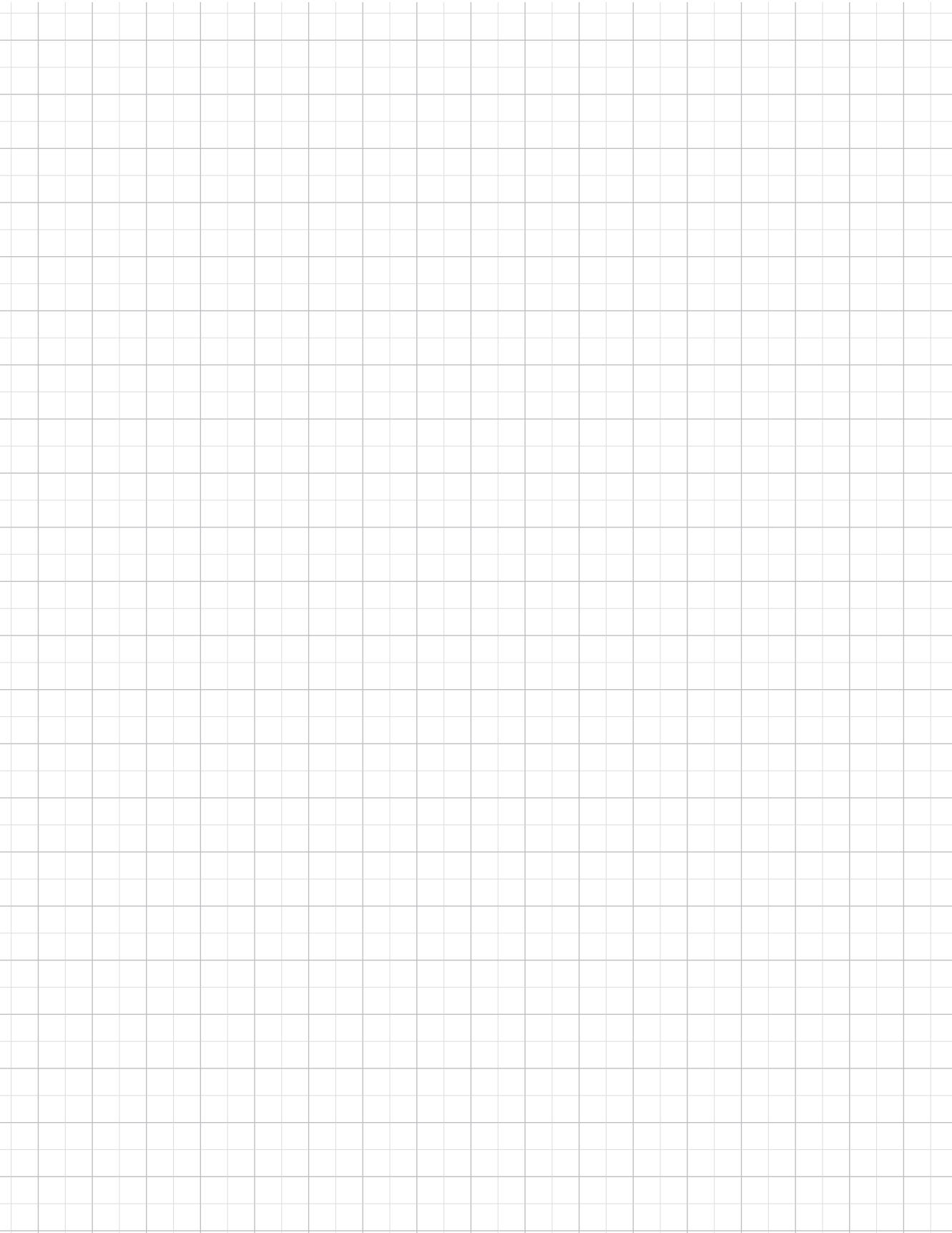
- Apply sealing compound to the connection edges between the individual parts on all sides.

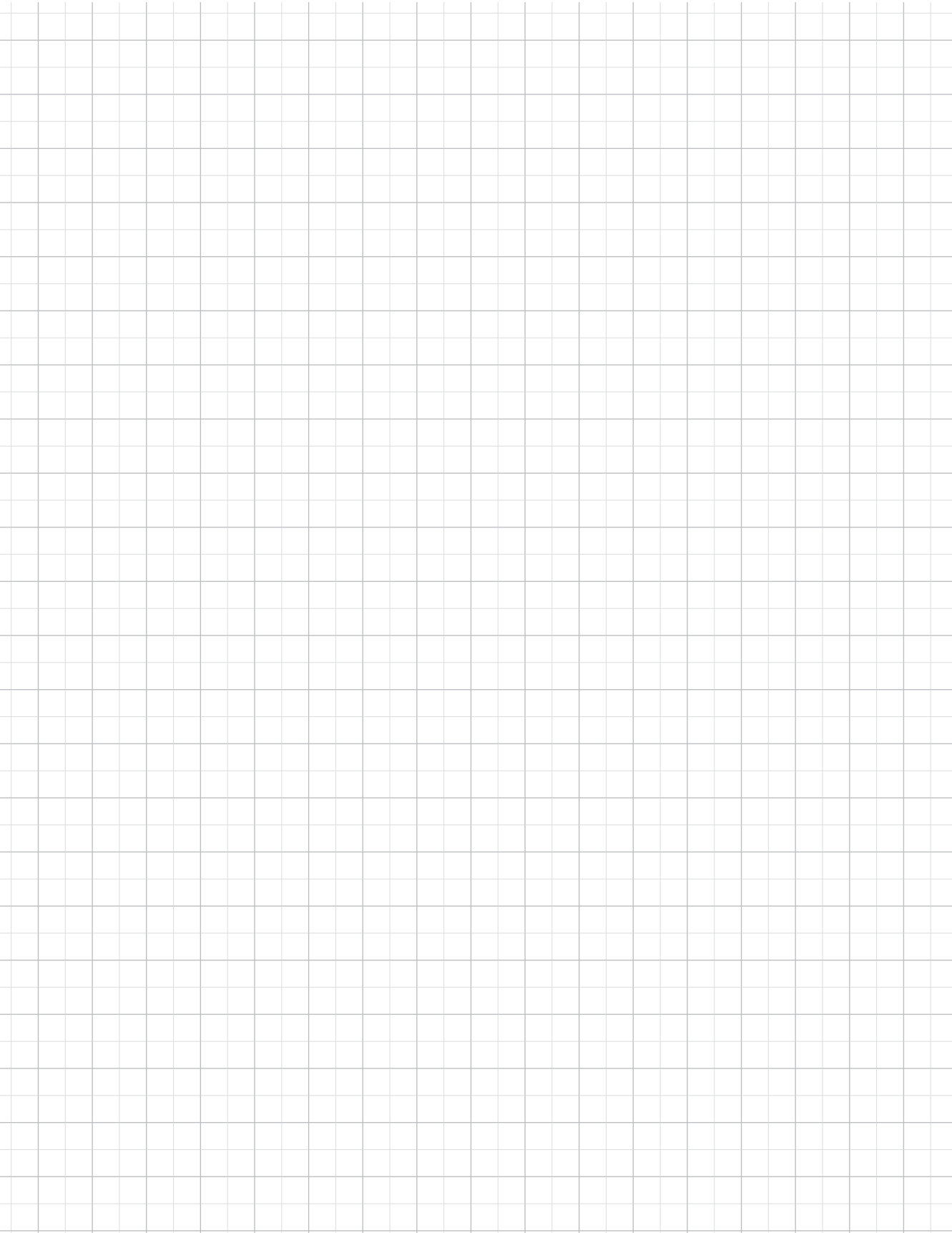


Notice

Check the assembly of the bypass.

Ensure that all edges are properly sealed and that all holes are closed.





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