SOLFLEX

Acoustic housing

Installation - Manual

HM - Acoustic Housing

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1 Table of contents

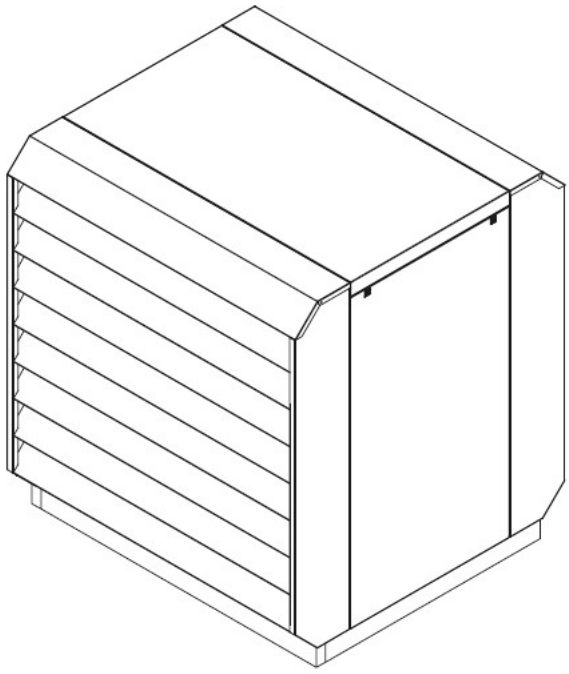
2 General information

Solflex Sonasafe Acoustic enclosures are used for various refrigeration, air conditioning and air conditioning systems Heat pump outdoor equipment produced.

This manual is applicable to the following series of soundproof enclosures:

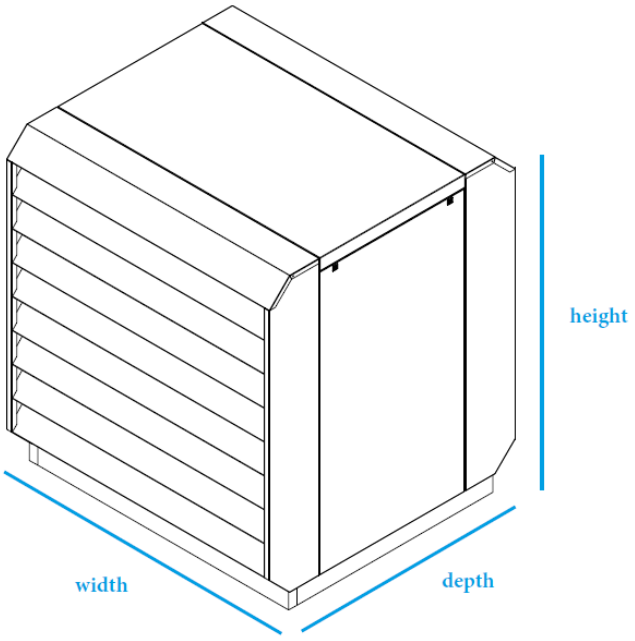
HM* Serie

3 Technical data



Robust acoustic housing with fully detachable construction. All components of the construction are made of galvanized steel. Precise separation of the airflow between the suction and pressure side via an air separation section, which is operated by the installation company by means of a Velcro fastener on the fan side of the external unit. The panels at the top left and right can be used with screw connections removed from the housing for servicing and maintenance work on the external device. The entire design is optimized for operation of the heat pump.

concept	type	material	dimensions [mm]			weight [kg]	Max. device dimension [mm]		
			h	w	d		h	d	d
Suction in the rear, blowout in the front	HM100NP	galvanized steel sheet	1060	1200	1250	123	990	1060	650
	HM200NP		1420	1200	1250	159	1350	1060	650
	HM200NP-l		1420	1400	1400	185	1350	1260	800
	HM200NP-XL		1420	1600	1500	209	1350	1460	900
	HMY200NP		1740	1200	1250	195	1670	1060	650
	HMY200NP-L		1740	1400	1400	227	1670	1260	800
	HMY200NP-XL		1740	1600	1500	255	1670	1460	900



4 Warranty

24 months from delivery.

5 Safety

In the event of improper operation or operation for a purpose other than the intended, there is however a risk of serious or even fatal injury to persons and a risk of damage to the unit and other property.

5.1 Intended use

The unit must only be used as acoustic housing for compatible Heat Pump, Air Conditioning and Refrigeration systems. Any other use is strictly prohibited.

5.2 Safety Constructions

All work about the assembly, installation and commissioning of the unit must be carried out by specially trained technicians.

NOTICE

It is possible to get injured during the mounting because of the metal execution and processing. Please wear gloves.

5.2.1 Risks during unloading and transportation

Risk of serious injury from dislodged loads. Do not stand under suspended loads. Risks from electric power. Risk of electric shock from electrostatic charge of housing: Earth the device.

5.2.2 Gefahren durch elektrische Energie

5.2.3 Risk of damage to property and the enviroment

Serious damage to property from dropping loads; please observe the instructions in section "Delivery of product".

Serious damage to heat exchanger connections, panelling and other mounted components from force impact during moving of unit elements; **always move the unit elements by their base frame.**

Risk of damage to components from heavy impact, e.g. when attempting to dislodge a part with a hammer, etc.: **Components that rest on the foundation must only be moved by shifting.**

5.3 Emergency procedures

5.3.1 Fire fighting

Strictly adhere to all statutory fire safety regulations. The insulation foam has a fire behaviour according norm.

6 Product delivery

Upon delivery, inspect the product for damage caused during transport and ensure the delivery is complete. Record any damage or missing parts on the transport documents. Complaints regarding obvious transport damage or incomplete deliveries cannot be considered if made too late.

On the construction site, protect the unit against dirt, impact and the elements.

6.1 Uploading / transport to location of installation

This unit is shipped in parts on a pallet. For unloading, lift the unit by the pallet. Too short forks can damage the acoustic housing.

⚠CAUTION

Risk of serious injury or damage to property from dropping loads. Observe the safety instructions of the transport equipment and lifting gear.

Do not climb onto the unit.

7 Installation of unit

At the place of installation, it must be possible to provide impeccable service and maintenance and the necessary air intake of the built-in air-conditioning, refrigeration and heat pump units.

When planning the installation site, the guidelines for minimum distances around the air-conditioning, refrigeration and heat pump manufacturer must be respected.

The **acoustic louvre**, on the suction and exhaust sides has a depth of 200mm and the site must enable this to remove to have access to the built-in air conditioning, refrigeration and heat pump equipment.

Important NOTE:

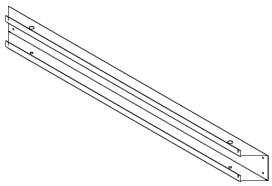
Please always use the required safety work gear during installation. Due to the packaging materials and the production process, personal injury may occur, such as hand injuries.

If the soundproof housing is freely accessible, the necessary measures during assembly should be taken to local conditions to avoid personal injury.

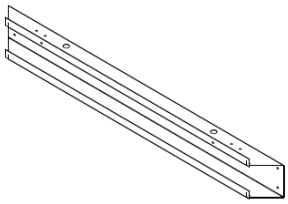
Aluzinc

“The warranty applies to all buildings exposed to normal atmospheric corrosion factors, in other words excluding those subject to permanent spraying with fresh water or salt water; in the case of buildings situated in coastal areas, excluding those exposed to sea spray.”

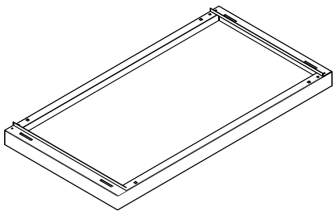
7.1 Assembling



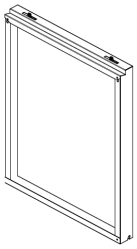
2x
basic framework profile 1
NR. 101



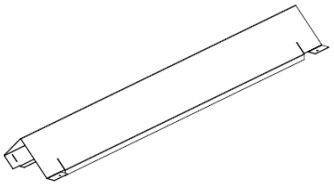
2x
basic framework profile 2
NR. 102



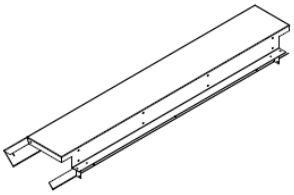
1x
roof panel
NR. 401



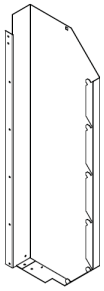
2x
side part
NR. 501



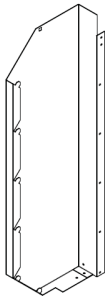
2x
lowest blade
NR. 201



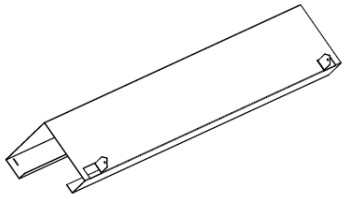
2x
top blade
NR: 203



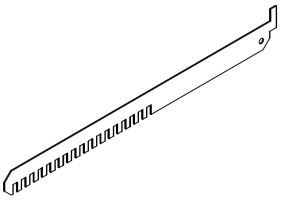
2x
corner piece 1
NR. 601



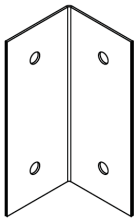
2x
corner piece 2
NR. 602



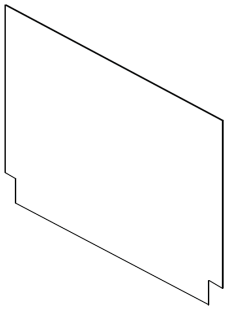
spacer blade
NR. 202



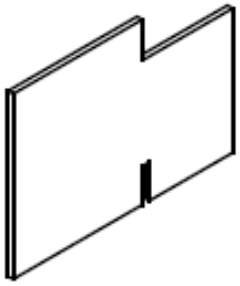
3x
profil
NR. 701



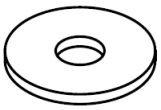
4x
angle section
NR. 801



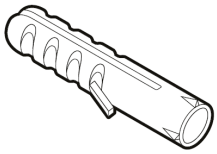
1x
recircultation blade
NR. 301



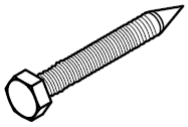
2x
separating part 170x124
NR. 902



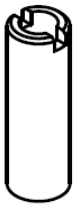
4x
washer 6mm
NR. 901



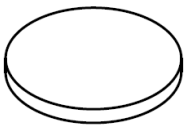
4x
dowel 8x40
NR. 904



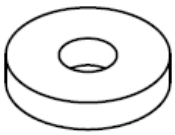
4x
studbolt 6x50
NR. 903



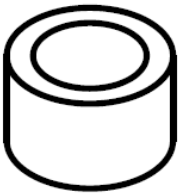
13x
synthetic insert nut 8x25
NR. 906



20x
velcro
NR. 905

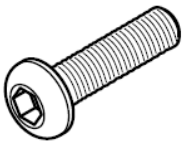


5x
plastic ring 5,3x15x3
NR. 908

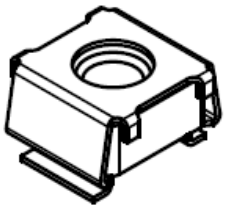


5x
plastic ring 8,2x12x7,5
NR. 907

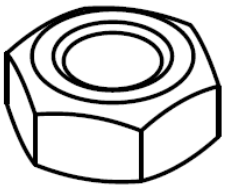
5x
synthetic spacer
19 mm
NR. 909



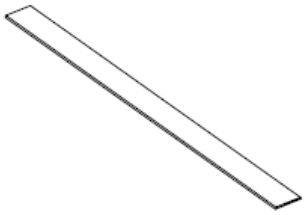
100x
M5x20 zylinder bolt
NR. 910



9x
M5 captive nut
NR. 911

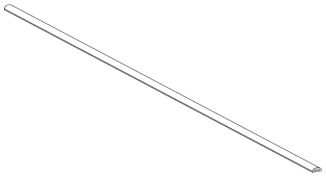


100x
M5 nut
NR. 912



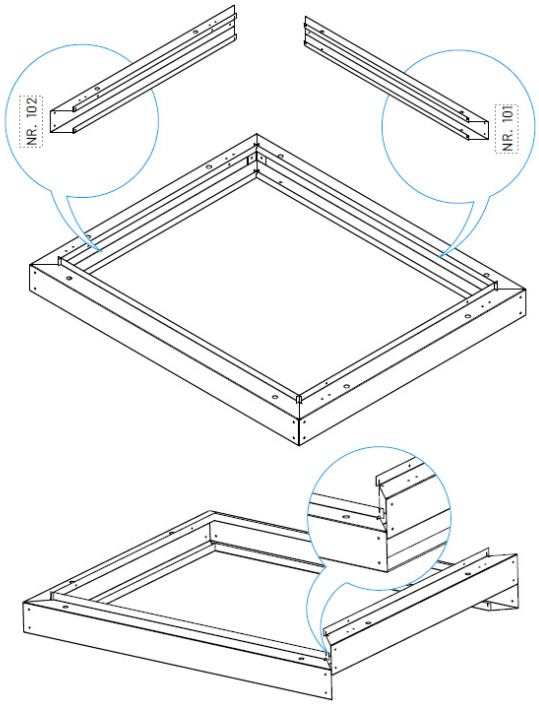
10m
draught strip 20x4 mm
NR. 914

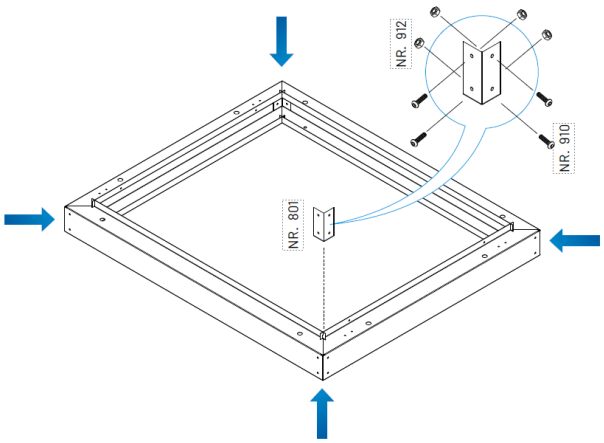
2x
key
NR. 915



16m
rubber D-profil 12x10 mm
NR. 913

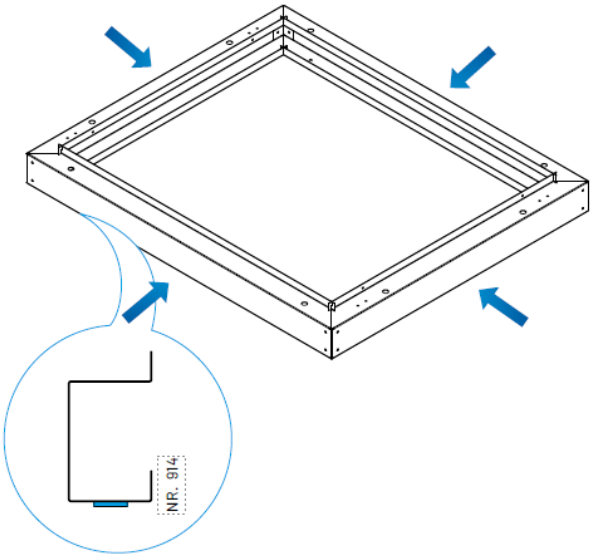
First place the floor frame, which consists of four straight-ground frame profiles (NR. 101 & 102) and four corner angles (No. 801). The profiles have recesses that glide into each other.

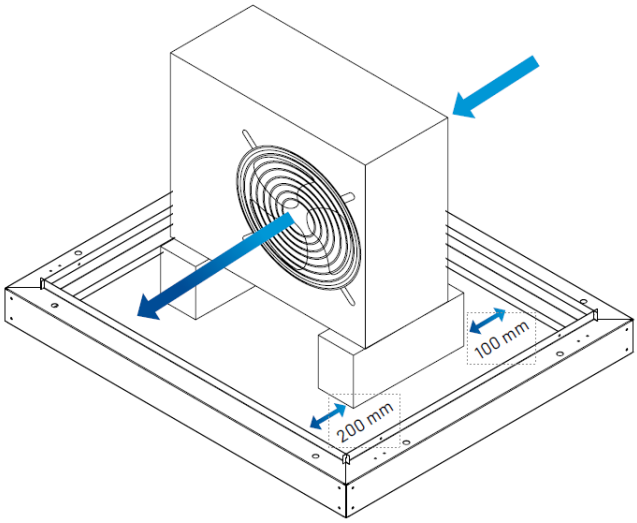




Attach the corner brackets (NO 801) with four M5 screws and nuts (No. 910 & 912). The nuts should be on the inside of the frame.

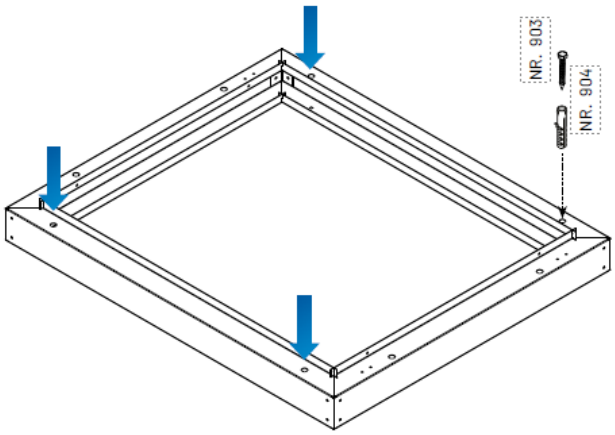
Apply a strip of sealing tape (NR. 914) to the bottom of the entire frame, which is glued in the middle of all four floor frame profiles.



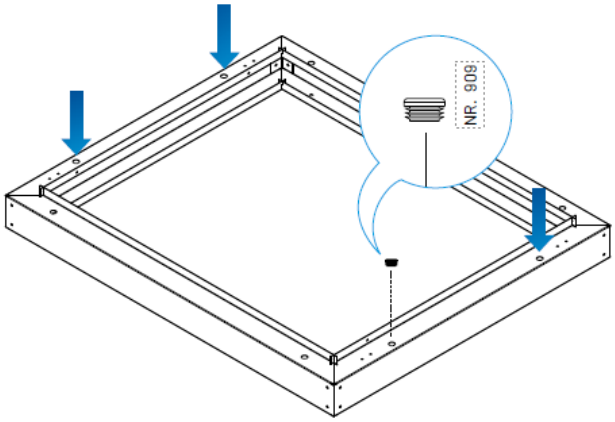


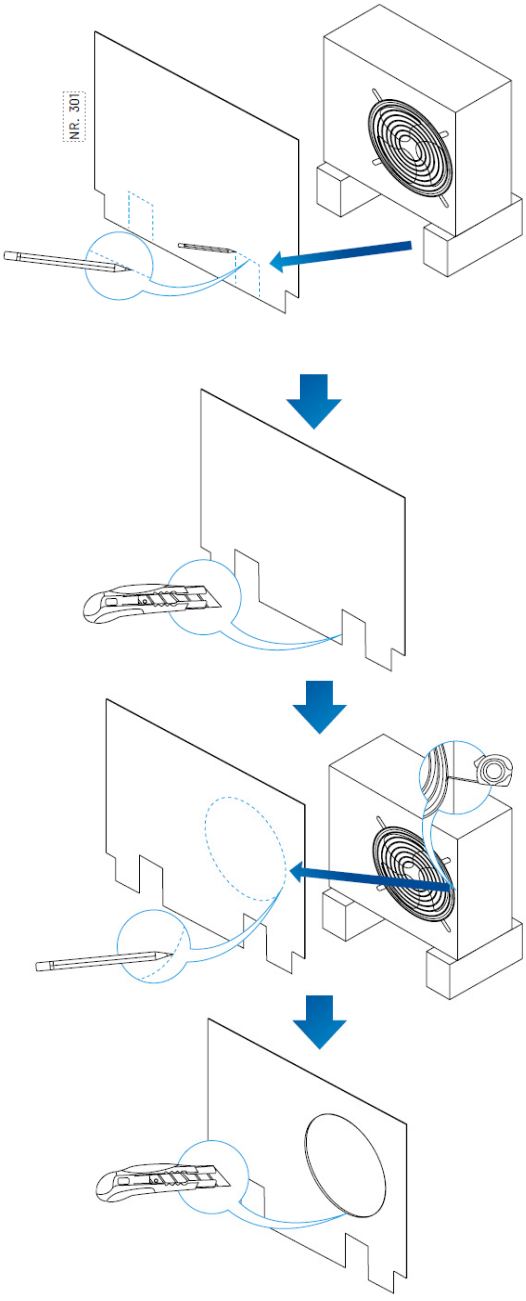
Put the frame on the floor. It is recommended that a minimum distance of 200 mm be maintained between the inside of the frame and the pressure side of the heat pump and a minimum distance of 100 mm be maintained between the suction side and the inside of the frame. If there is enough space, it is advisable to leave more space on the outlet side (ratio of 2/3). Air outlet and 1/3 air inlet). A symmetrical distribution is recommended in the width direction. This also depends on the pipe connection.

Now attach the frame to the bottom with four threaded bolts (NR. 903 plug use (NR. 904) for stony substrates.



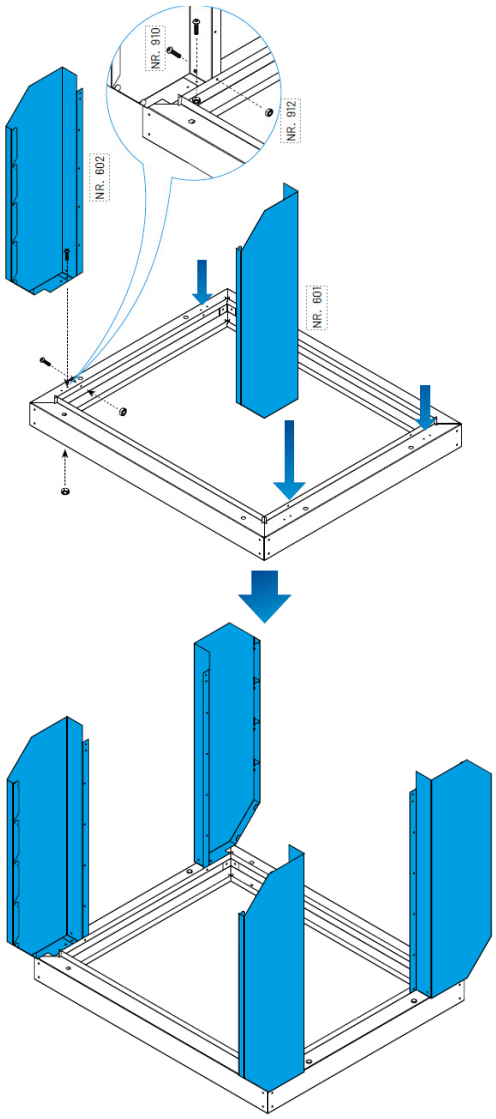
Fill the floor frame with four plastic spacer holders (NR. 909), which are pressed into the holes at the top, where the side parts are later attached.

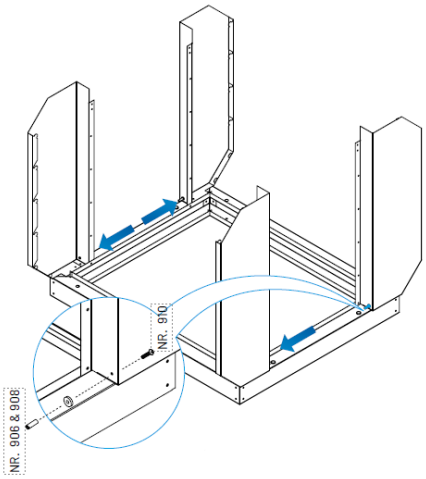




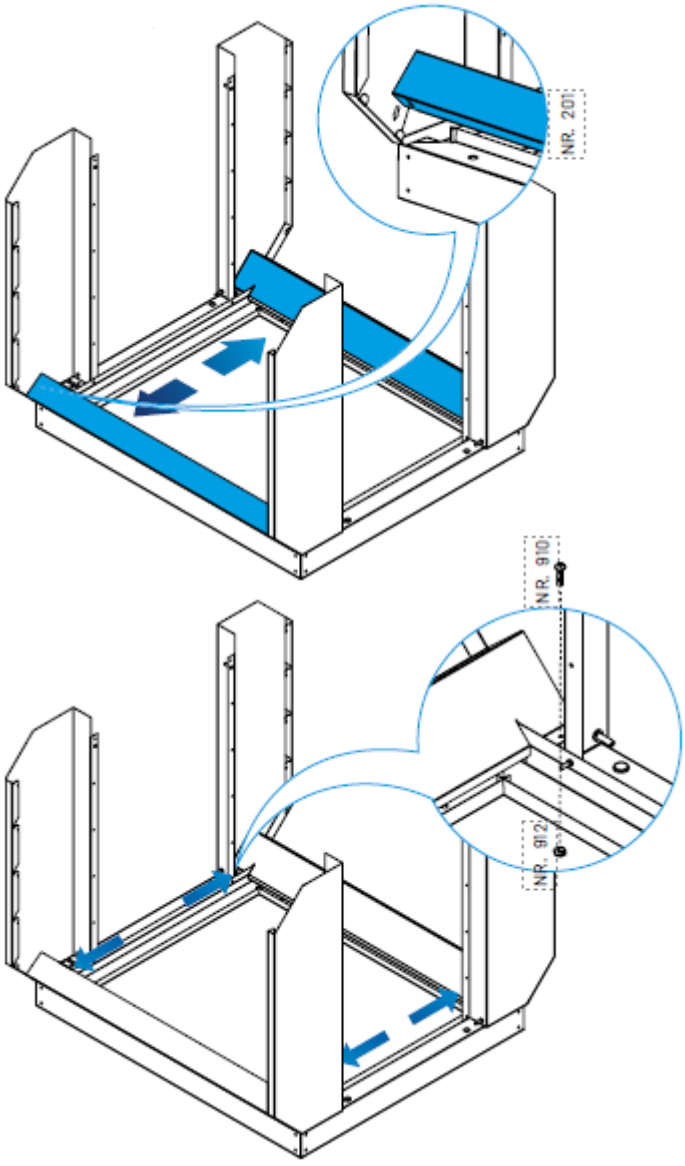
Now the recirculation plate (NR. 301) will be made to measure. Use a tape measure, a pencil and a Stanley knife. Start by marking the cut-outs for the heat pump track. The plate must reach down to the ground to avoid recirculation. Then mark the opening of the fan of the heat pump. Cut out the notches with a Stanley knife. The recirculation plate does not need to be mounted yet.

Now place the four corner pieces (NR. 601 & 602). These are attached to the base frame with two M5 screws and nuts (NR. 910 & 912) per corner piece, see enclosures.



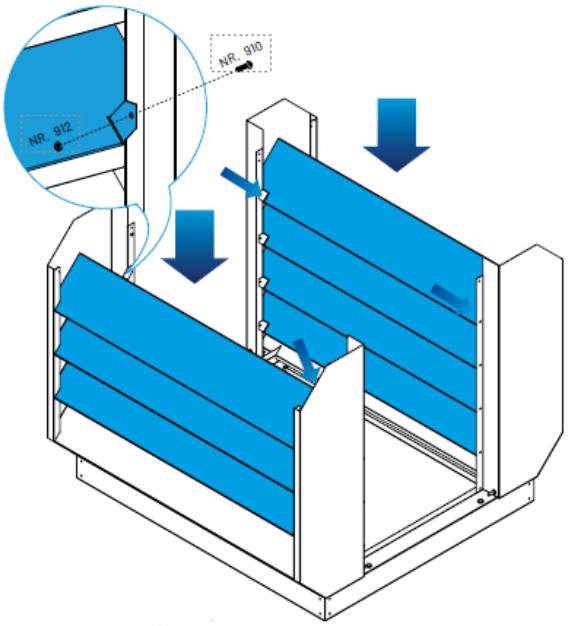


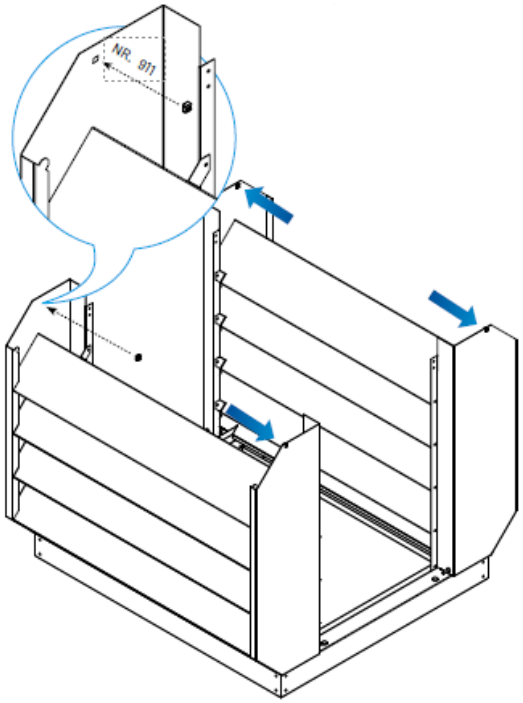
Fit the four corner pieces at the bottom with the plastic threaded sleeve with M5 pin and plastic washer (NR. 906. 910 & 908).



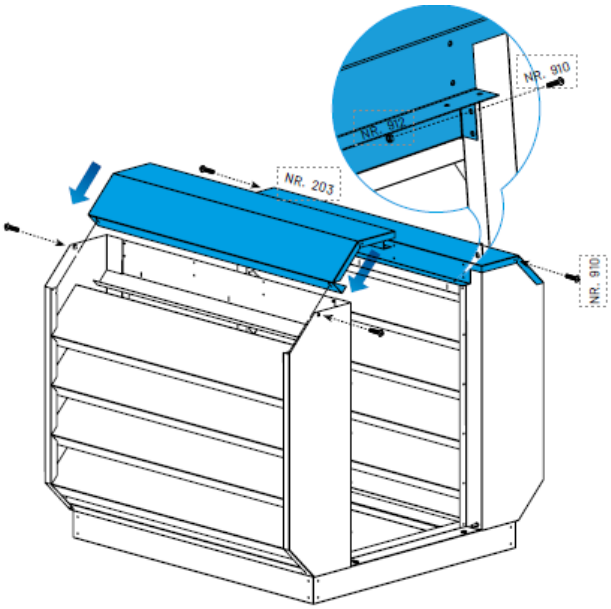
The lower lamella (NR. 201) can now be tilted and fixed in between. The moulding is fixed at each end with an M5 screw and a nut (No. 910 and 912).

Fold the flaps at the ends of the interlocking flaps out of the door. Now insert the intermediate strips (NR. 202) by tilting them one after the other so that they fall into the corner pieces. Then secure each slat at the ends with an M5 screw and nut (NR. 910 & 912) in the corner piece, see enclosures.

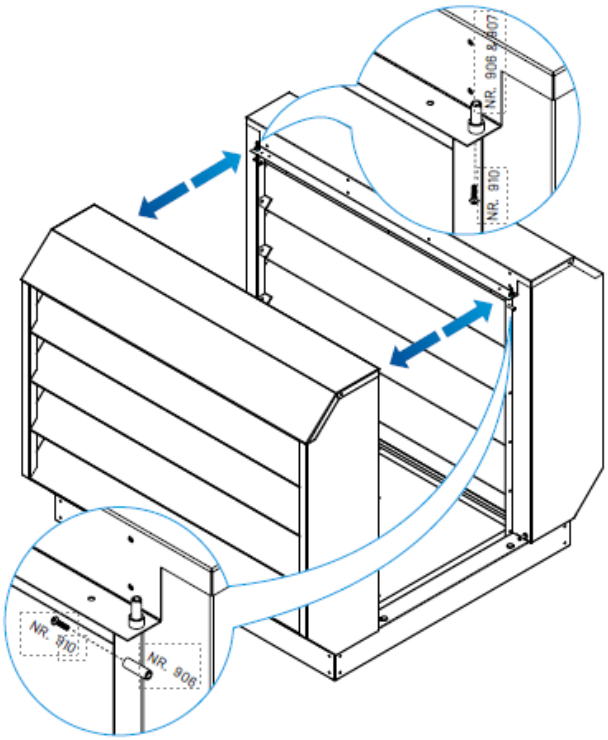




Before the upper slat can be placed, a special cage nut (NR. 911) must be clicked from the inside into the corner piece. Push in the cage nut with the help of the spring system and release it after inserting it into the hole.

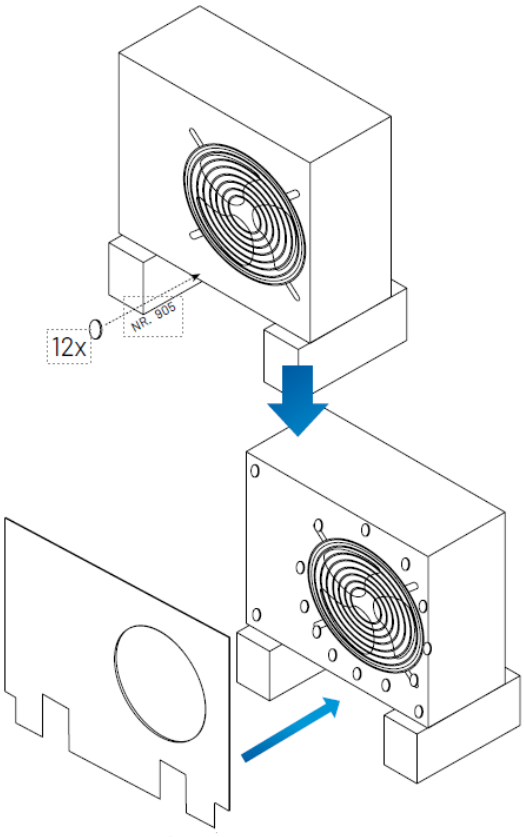


Then insert the upper lamella (No. 203) and screw it to each outside corner with an M5 screw (No. 910) that fits into the cage nut (No. 911). Attach the upper lamella to the corner pieces with an M5 screw and a nut (NR. 910 & 912), see insert.



Place a threaded socket with screw (No. 906 and 910) perpendicular to the inner corners of the upper knife. Slide of the plastic containers (No. 907) the threaded bushing (No. 906). Then insert a threaded jack with screw (NR. 906 & 910) horizontally, see insert.

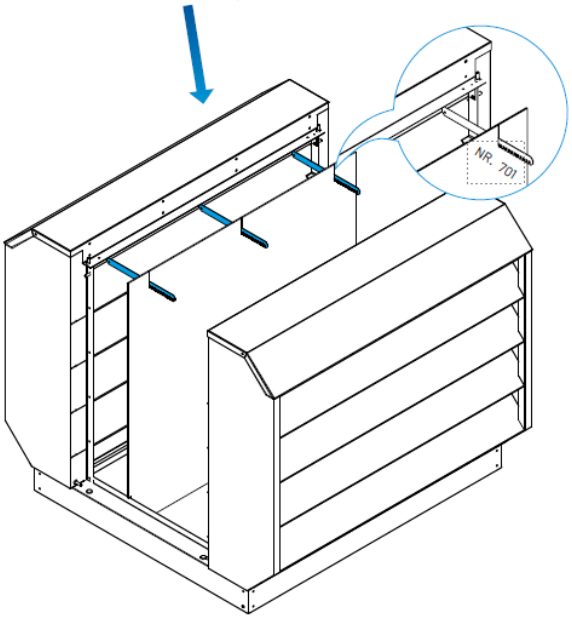
Now mount the recirculation plate (No. 301). Place twelve self-adhesive Velcro loops (No. 905) on the heat pump housing. Do this around the fan opening and in the corners of the heat pump housing. Remove the adhesive from the Velcro loops and press the recirculation plate against the housing.

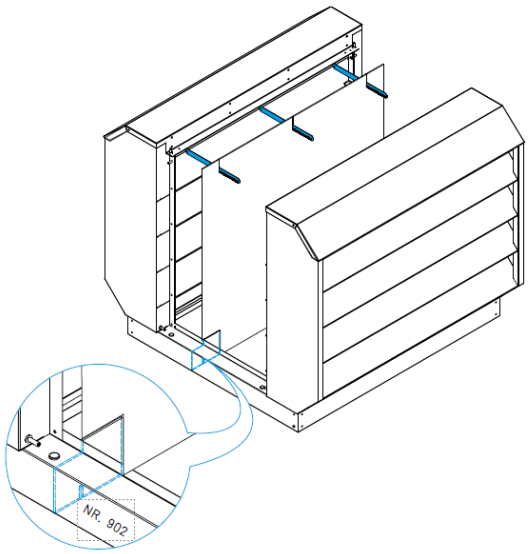


At the top of the base frame are three jagged profiles (NR. 701), which are pressed into the return plate to keep it in place.

To do this, first tilt the knurled profiles in the upper bar to the place of the three slots in the bar. Then press the jagged profiles into the sheet or cut the sheet with a Stanley knife.

The protruding parts of the prong profiles can be bent by hand so that they no longer protrude.

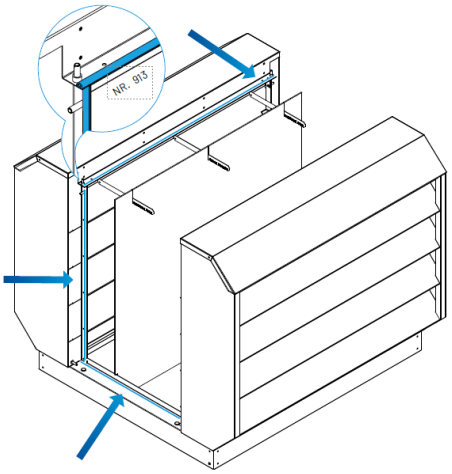


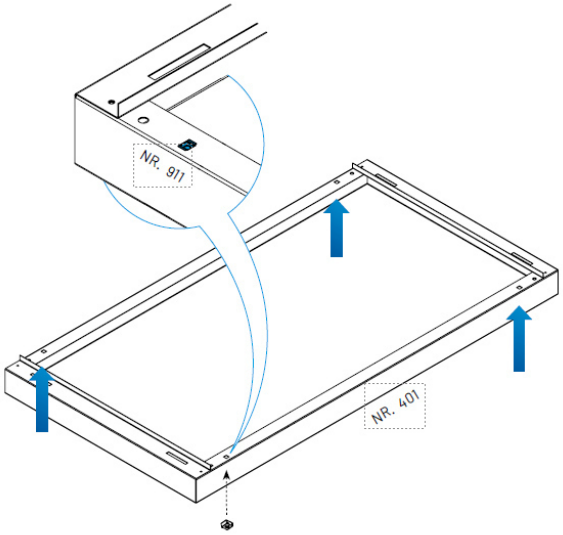


The two small spacers (No. 902) can then be tilted in the base frame and attached to the plate with three to four Velcro fasteners (No. 905).

Now coat the edges (see picture) with the self-adhesive rubber-D-profile (NR. 913) . Before applying, make the steel plate dry and free of grease so that the adhesion is good.

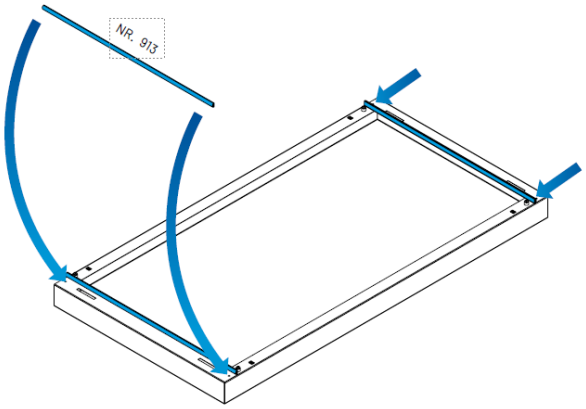
Mount the rubber-D-profile at the edge of the plate (see insert). The rubber profile can be cut to the right length with scissors.

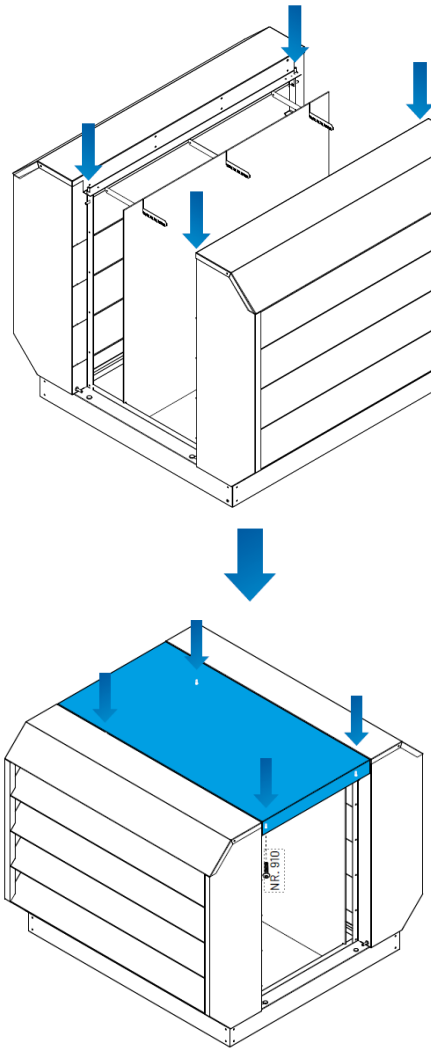




Place the roof plate (No. 401) 1) on the inside of the four cage nuts (No. 911). The cage nuts must be clicked into the roof panel.

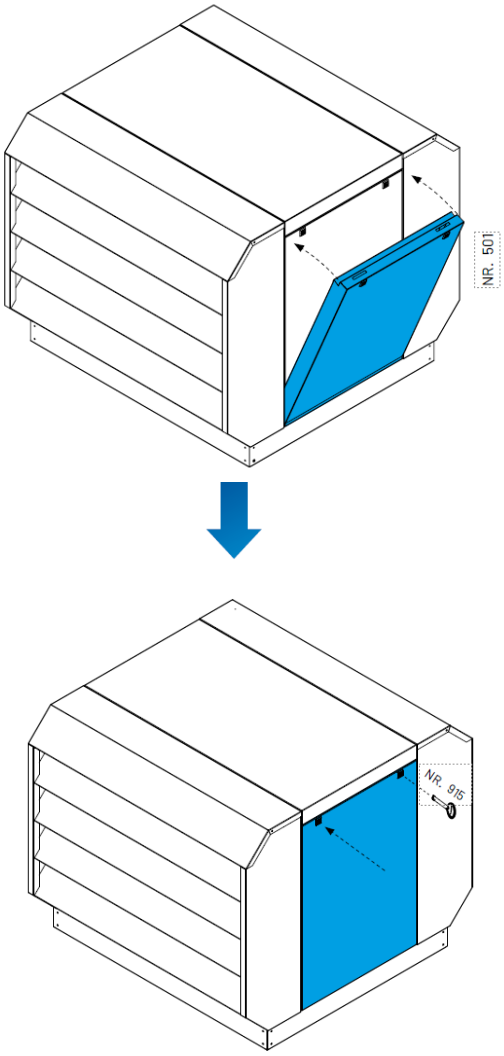
Mount the rubber D-profile (NR. 913) on the inside of the roof panel (NR. 401). Apply it to the outside of the raised edge on the short sides of the roof panel.





The roof panel (No. 401) can now be placed. When installing, make sure that the holes in the corners of the roof panel are located exactly above the four threaded bushes. The roof plate is secured with four M5 screws (No. 910). These are screwed into the cage nut from below.

Insert the two side panels (NR. 501) by first lifting them into the bottom of the recess. Then push it and lock it by tightening the two bolts in each plate with the supplied key (NR. 915). Keep this key as it is needed for maintenance and inspection of the system by opening the locks on the side panels.



8 Maintenance and serive

8.1 General

For maintenance and service work on the refrigeration, air-conditioning or heat pump unit, the necessary panels can be easily removed from the acoustic housing.

Cleaning and maintenance of the acoustic housing:

- Remove other dirt with a dampcloth; if necessary, use grease- or oil-dissolving detergents(concentrated neutral detergentwith pH between 8 and 9).
- Treat galvanized parts with preservation spray.
- Regularly lubricate moving parts such as panel locks with alubrication spray.
- Regularly treat seals.
- Repair any damage to the coating, including areas that show signs of corrosion, with repair paint.
- Clean the unit thoroughly to remove all construction dust and other dirt.
- Prior to shipping, each unit is carefully inspected at our factory.

8.2 Silencer

The sound insulation material of the silencers should be checked for dust during major maintenance work and if necessary, cleaned with a vacuum cleaner.

If necessary, the silencers must be checked for free passage, as this is necessary for perfect air circulation and the function of the installed refrigeration air conditioning or heat pump unit.

8.3 Grounding

Depending on the local regulations and position, we recomment to carry out a grounding or lightning protection.

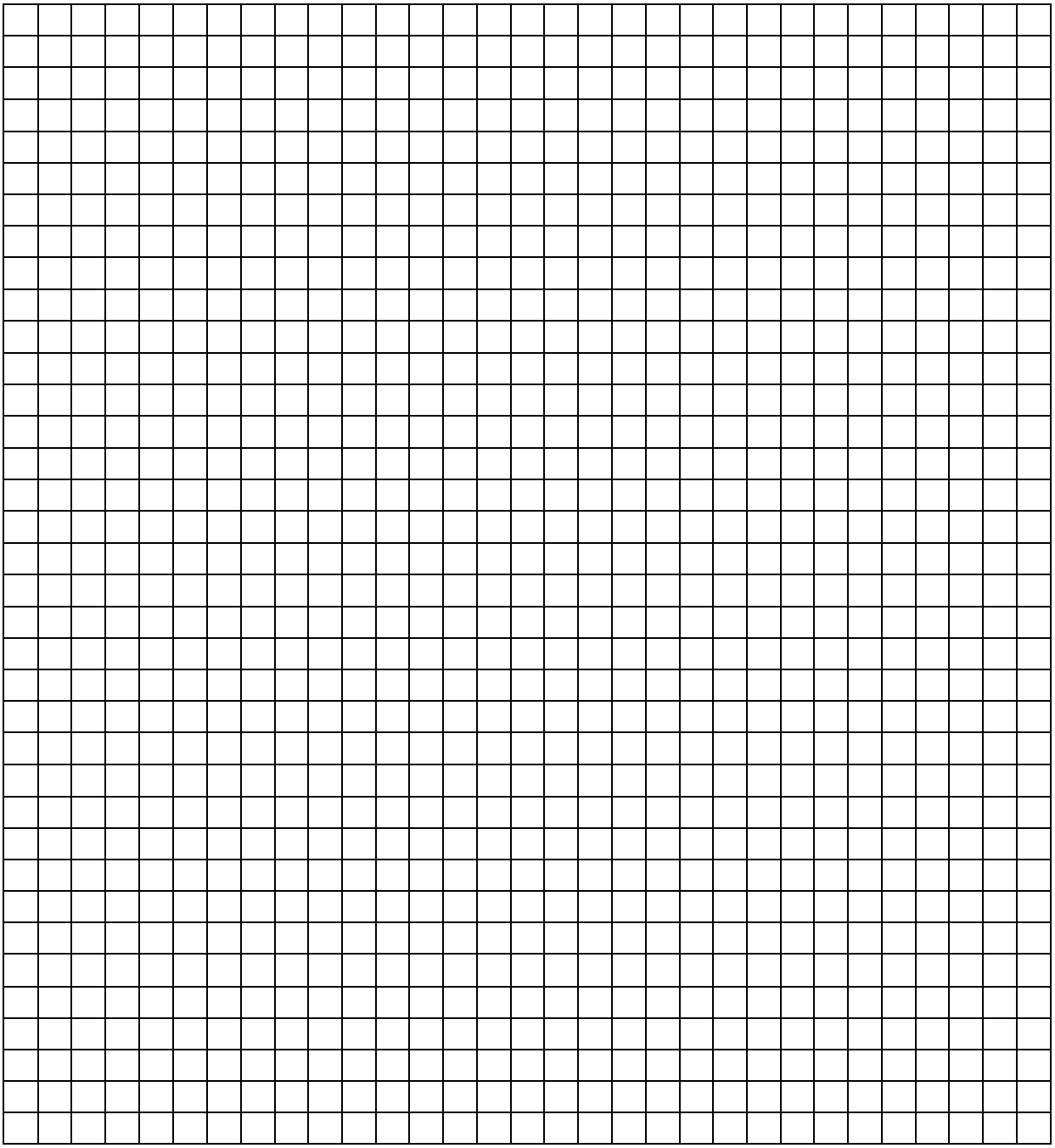
8.4 Test run

After working on the acoustic housing, the person responsible must ensure that no person is in the acoustic housing before it is put into operation again.

8.5 Removal and disposal

Metal parts and plastic parts are to be recycled, per applicable regulations.

notes



Do you have anymore questions?

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