



Operating instruction SR 200 Airline

General information

The Sundström SR 200 Airline is a breathing apparatus that is supplied with a continuous flow of air and is designed for connection to a compressed air supply in accordance with EN 14594:2005 class 4A/4B.

The unique feature of the SR 200 Airline is the scope it provides for filter back up.

SR 200 can be used in three different configurations.

In application with filters from Sundström in accordance with EN 136:1998.

In application with fan unit SR 500 or SR 700 in accordance with EN 12942:1998 class TM3.

SR 200 Airline is a compressed air full face mask with filter backup.

When selecting equipment for SR 200 Airline some of the factors that should be taken into account are as follows:

- Type of pollutant
- Concentrations
- Work intensity
- Protection requirements in addition to respiratory protective advice.

Risk analysis should be carried by a person who has suitable training and experience in the area.

Instructions for use for SR 200 Airline should be read before use.

2.1 Unpacking SR 200 Airline

2.2 Packing list



Check that the equipment is complete in accordance with the packing list and that no transport damage has occurred.

Packing list:

- Facepiece with breathing hose
- Control valve
- Belt
- Sealing plug
- Sealing cover
- Pre-filter holder
- Flow meter
- Filter adapter
- User instructions

2.3 Functional check

Check before use



Check that the mask is complete, correctly assembled, thoroughly cleaned and undamaged.

Check particularly carefully the inhalation...

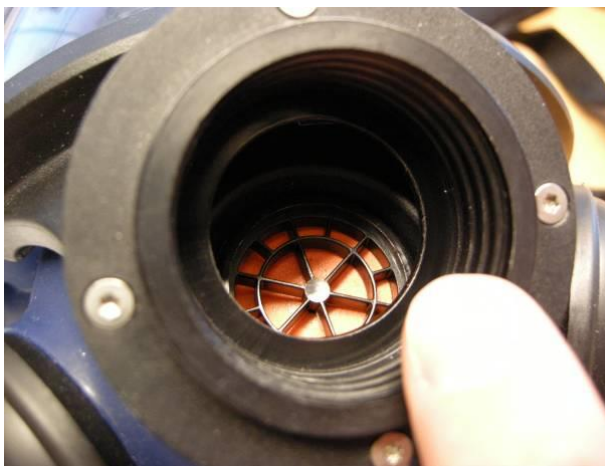


...and exhalation membranes and their seats.

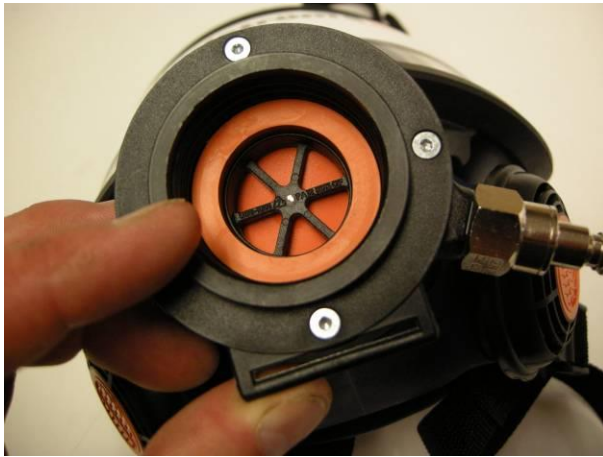


The membranes are consumables and must be replaced if there are any signs of damage or ageing.

The membrane in the air distributor need not be replaced.



Check that the seal surface at the bottom of the filter connection is clean and undamaged.



Check that the seal at the bottom of the filter connection is in good condition.

Check the condition of the head harness.
The head harness is a consumable item and should be replaced if there are any signs of wear or reduced elasticity.



Check that the air flow - measured through the mask - is at least 150 l/min.

Connect the breathing hose of the mask to the control valve.



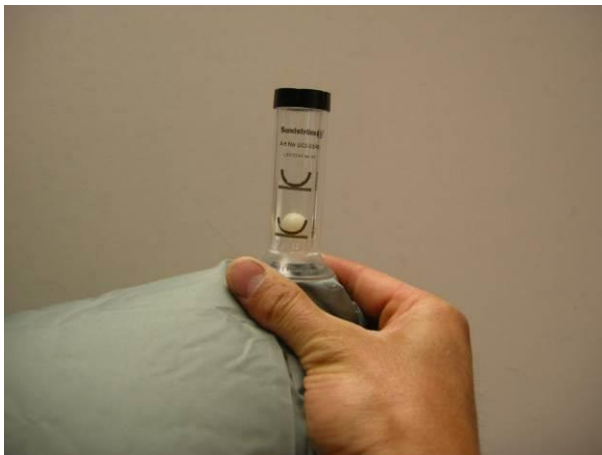
Connect the compressed air supply tube to the control valve.



Turn the control valve knob anti-clockwise as far as it will go, in order to throttle the air flow rate to a minimum.



Place the facepiece in the bag and grip the opening of the bag so that it seals around the breathing hose.



Grip the flow meter with the other hand and hold it so that it points vertically up from the bag.

• Read the position of the ball in the tube. It should float level with or just above the marking on the tube.

If the flow rate is below the minimum value, check that

- The flow meter is vertical.
- The float can move freely.
- The air supply is not restricted by kinks or other restrictions in the hoses.

2.4 Putting the equipment on Belt with control valve



Put the belt on and adjust the length.

Arrange the control valve in a way that allows easy adjustment of the flow rate and a strict watch over the breathing hose, i. e. it must not be placed on the back of the waist.

Filter



During work in atmospheres containing both particulates and gases/vapours (such as spray painting) the particulate filter and chemical cartridge should be combined.



Press the filter/cartridge together so that the arrows on the particulate filter point towards the chemical cartridge.



Fit the filter/combined filter in the face piece so that the arrows on the filter points towards the user's face.

Carefully check that the edge of the filter is in the internal groove of the filter mounting all round.



Pre-filter prevents premature clogging of the main filter. The pre-filter holder prevents damage to the main filter.

N.B. The pre-filter is a pre-filter only, and cannot be used as a substitute for particulate filter.



Turn the filters into the face piece. Screw until the thread reaches the seal at the bottom of the filter connection, then another 45 degrees.

Face piece – Tightness check



Check the fit of the mask if you intend to use a back-up filter:

- Blank off the filter by using the sealing cover.



- Hold the face piece firmly in place, raw a deep breath and hold your breath for ten seconds.
- If the fit is good, the mask will be pressed against your face.
- Leakage may occur in cases such as if you wear a beard or sideboards or if your face is unshaven or deeply wrinkled, if you wear glasses, or if the exhalation valves are defective or dirty.

Putting the equipment on



Unroll the compressed air hose and make sure that it is not twisted.

Connect the hose to the control valve inlet.

The mask is now being supplied with air and you can put it on.

Then adjust the harness so that the face piece is held firmly but comfortably in place.

See the user instructions for the mask you are using.



Connect the breathing hose to the control valve outlet.

Mask - Fitting



Remove any hood, glasses or ear protection from head.

Slacken the four elastic straps by moving the strap holders forward, at the same time pulling the straps.



Slacken the upper two inelastic straps by opening the buckles.



Move the head harness upwards, place your chin in the face piece chin support and pull the head harness over your head.



Tension the elastic straps in pairs by pulling the free strap ends towards rear.



Adjust the fit of the mask on your face, so that it fits firmly but comfortably.

Adjust the lengths of the upper pair of straps and fix by means of the buckles.

Perform a fit check

Airflow - rate



Use the control valve knob to set the air flow rate to suit your current work intensity.

In the fully closed position (turn the knob anti-clockwise), the flow is about 150 l/min, and in the fully open position (turn the knob clockwise), it is about 320 l/min.

2.5 Taking the facepiece off When using backup-filter



Remove sealing cover if fitted.



Disconnect the compressed air hose from the control valve.

Leave the polluted work area and take the equipment off.



Slacken the four elastic straps in pairs by moving the strap holders forward.



Pull head harness forward over your head and remove the mask.

When using the sealing plug



Leave the polluted work area and then take the equipment off.

Slacken the four elastic straps in pairs by moving the strap holders forward.



Pull head harness forward over your head and remove the mask.

Releasing the compressed air tube / breathing hose



Both couplings are of safety type and are released in two stages.

Push the coupling towards the nipple.



Pull the locking ring back.

Cleaning



Sundström cleaning tissues (SR 5226) which clean and disinfect are recommended for daily care. If the mask is heavily soiled, use a warm (up to 40 °C), mild soap solution and a soft brush, followed by rinsing with clean water and drying in air at room temperature.



Proceed as follows:

Remove the adapter/filter.
Remove the covers for the exhalation valves and remove the membranes (two)



Remove the inhalation membranes (three)



Remove the head harness.

If necessary, remove the visor.

Clean as described above. Critical areas are the exhalation membranes and the valve seats which must have clean and undamaged contact surfaces.

Inspect all parts and replace with new parts if necessary.

Leave the mask to dry, and then assemble it.

Carry out leakage testing

N.B. Never use solvent for cleaning

4.2 Storage



Store the equipment in Sundström storage box SR 344 in temperature from -20 °C to +40 °C.

4.3 Maintenance schedule

	Before use	After use	Annually
Visual inspection	•	•	•
Functional check	•		•
Cleaning		•	
Disinfection		• ¹	•
Membrane change			•
Head harness change			•

1) If the equipment is not for your personal use

The schedule shows the minimum requirements on maintenance routines, so that you will be certain that the equipment will be in usable condition.

4.4.2 To change the visor



The visor is mounted in a groove running around the visor opening of the outer mask and is held in place by one upper and one lower frame half.

Use 2.5 mm Allen key to remove the two screws holding the frame halves together.

Carefully remove the upper frame half.



Carefully prise the top part of the mask off the visor, and remove the visor from the lower groove.



Take this opportunity to clean the groove, if necessary.



Markings are made to show the centres of the visor, frame halves and mask.

Press the new visor into the groove, making sure that the centre markings are in line.

To make assembly easier, coat the slot with a soap solution or similar liquid.



Carefully prise the top half of the face piece over the visor and make sure that the visor is in the groove in the mask.



Prise the upper frame half, making sure the centre markings are in line.



Fit the screws and tighten them alternately until the two halves of the frame are firmly in contact.

Carry out leakage testing.

4.4.3 To change the inhalation membranes (three)



One membrane is in the centre of the inner mask on a fixed dowel.

Prise off the membrane and fit a new membrane.



Two membranes are fitted, i.e. one on each inside of the inner mask. The dowels for these membranes are removable and should be changed whenever the membrane is changed.

Prise off the membrane and dowels.

Prise the new membranes onto the new dowels.

The membrane should rest on the larger flange, i.e. thread the dowel with the membrane from the inside of the face piece through the valve seat, with the smaller flange first.

4.4.4 To change the exhalation membranes (two).



The exhalation membranes are mounted on a fixed dowel on the inside of the valve covers on each side of the outer mask.

The covers should be changed whenever the membranes are changed.

Snap the valve covers off the valve seats.



Prise off the membranes.



Press the new membranes onto the dowels. Carefully check that the membranes are in contact with the valve seats all round.

Press the valve covers into place. A clicking sound indicates that the cover has snapped into place.

Carry out leakage testing.

4.4.5 To change the head harness



The head harness can be ordered as a spare part only as a complete harness.

Snap the (six) strap holders of the head harness of the mask strap mountings.

Check that straps are not twisted and fit the new head harness.

Mounting of peel-offs SR 343 / SR 353 for PC-visor.



Remove the seal on the 2 adhesives.

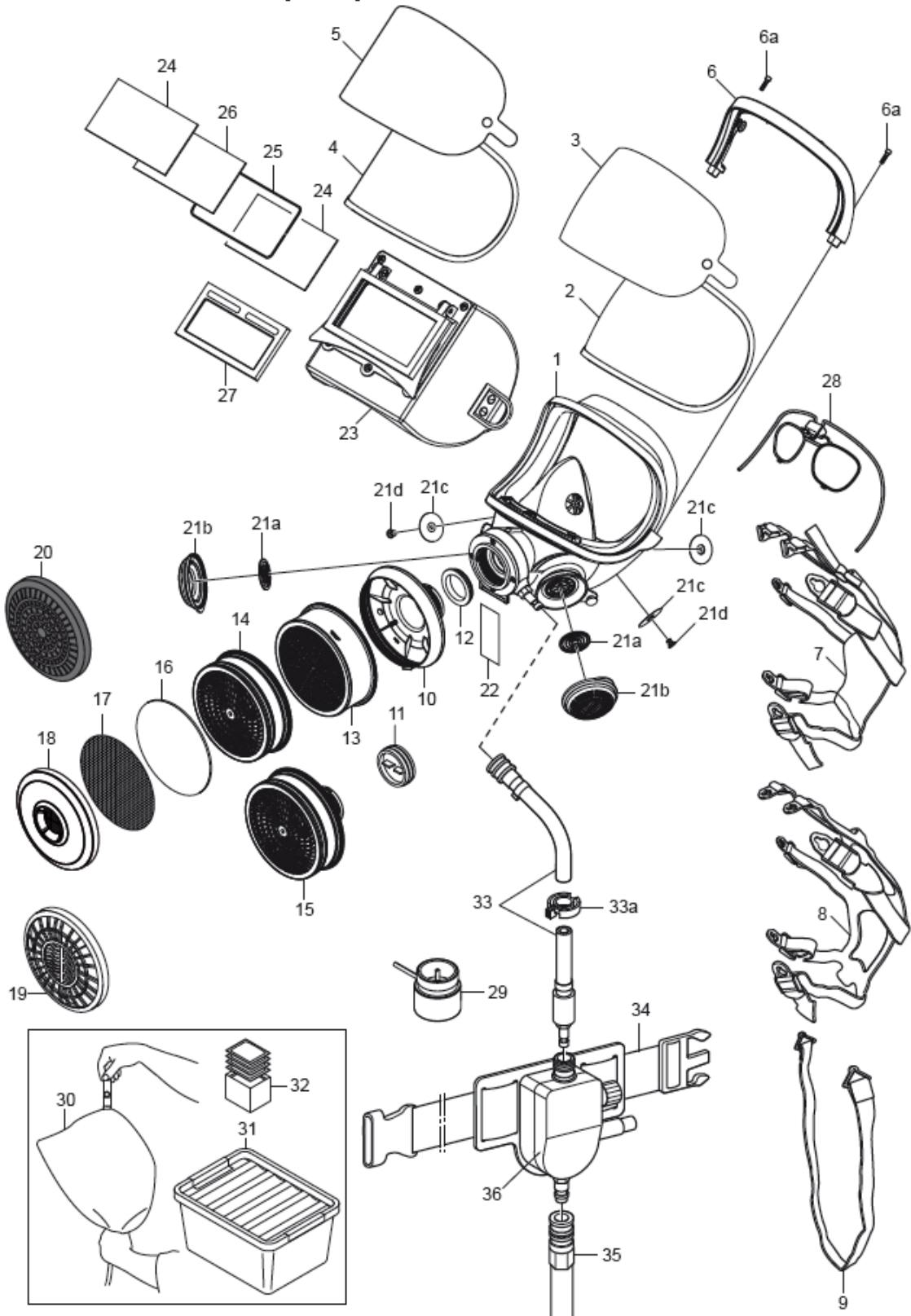
Attach one at a time.

Press it in place with thumb.

Up to 3 peel-offs is recommended.

SR 200 Airline

Spare parts / Accessories



No.	Description	Ordering No.
1.	SR 200 Airline PC-visor without control valve assembly and breathing hose	R03-1006
	SR 200 Airline Glass visor without control valve assembly and breathing hose	R03-1008
2.	PC-visor SR 366 (polycarbonate)	R01-1201
3.	Peel-offs SR 343 for PC-visor	T01-1204
4.	Glass visor SR 365 (laminated glass)	T01-1203
5.	Peel-offs SR 353 for glass visor	T01-1205
6.	Upper frame half	R01-1202
6a.	Screw x2	-
7.	Head harness, fabric	R01-1203
8.	Head harness, rubber SR 340	T01-1215
9.	Carrier strap	R01-1206
10.	Filter adapter SR 280-3	H09-0212
11.	Sealing plug	R03-1005
12.	Seal	R01-1205
13.	Gas filter (SR 217 A1, SR 218 A2, SR 315 ABE1, SR 294 ABE2, SR 297 ABEK1, SR 298 AX, SR 215 K1, SR 295 K2, SR 299-2 ABEK-Hg-P3)	-
14.	Particle filter SR 510 P3 R	H02-1312
15.	Particle filter med with standard thread Rd 40x1/7" SR 610 P3 R	H02-1412
16.	Pre-filter SR 221	H02-0312
17.	Steel net disc SR 336	T01-2001
18.	Pre-filter holder	R01-0605
19.	Pre-filter holder SR 5153	R01-0604
20.	Sealing cover SR 367	R03-1406
21.	Set of membranes	R01-1204
21a.	Exhalation x2	-
21b.	Valve covers x2	-
21c.	Inhalation x3	-
21d.	Dowels x2	-
22.	Name label SR 368	R09-0101
23.	Welding cassette SR 84	T01-1212
24.	Protective lens	R03-0507
25.	Retaining clip	R03-0518
26.	Welding lens EN 10 60x110	R03-0510
	Welding lens EN 11 60x110	R03-0511
	Welding lens EN 12 60x110	R03-0512
27.	Automatic welding lens SR 364	T03-0501
28.	Spectacle frame SR 341	T01-1201
29.	Test adapter SR 370	T01-1206
30.	Flow meter	R03-0346
31.	Storage box SR 344	T01-1214
32.	Cleaning tissue SR 5226. 50/ask.	H09-0401
33.	Breathing hose, Airline	R03-1003
33a.	Retaining clip	-
34.	Belt	R03-1510
35.	Plastic hose (PVC/Polyester) SR 358, 5/10/15/20/25/30 m	-
	Rubber hose (EPDM/Polyester) SR 359, 5/10/15/20/25/30 m	-
	Spiral hose (PU) SR 360, 2/4/6/8 m	-
36.	Control valve SR 350 excl. belt	R03-1001