



# Operating instruction

## SR 700

# General information

The SR 700 is a battery-powered particle filter fan unit that, together with particle filter and head top - hood, visor, welding shield, helmet with visor or full face mask - is included in the Sundström fan-assisted respiratory protective device systems conforming to EN 12941/12942:1998 and to Sundström Powered Air Purifying Respirator (PAPR) system conforming to AS/NZS 1716:2012.

Following face pieces are compatible:

SR 200 Full face mask

SR 520 S/M and M/L Hood

SR 520 S/M Hood

SR 530 Hood

SR 540 Face shield

SR 561 Hood

SR 562 Hood

SR 580 Helmet with Visor

Welding shield together with helmet with visor SR 584/SR 580.

Gold-plated shield together with helmet with visor SR 587/SR 580.

Shield 2/3, EN 3 together with helmet with visor SR 588-1/SR 580.

Shield 2/3, EN 5 together with helmet with visor SR 588-2/SR 580.

SR 590 Welding shield

The SR 700 can be used as an alternative to filter respirators in all situations for which these are recommended.

This applies particularly to work that is hard, warm or of long duration.

When selecting filters and head top, the following are some of the factors that must be taken into account:

- Types of pollutants
- Possible occurrence of explosive atmosphere
- Concentrations
- Work intensity
- Protection requirements in addition to respiratory protective device

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

### 3.1 Unpacking SR 700



Check that the equipment is complete in accordance with the packing list and has not been damaged in transit.

#### Packing list:

- 1. Fan SR 700, bare
- 2. Battery SR 701, 2,2 Ah
- 3. Battery charger SR 713
- 4. Belt PES SR 508
- 5. P3 R Particle filter SR 510, 2x
- 6. Filter adapter
- 7. Pre-filter SR 221, 10x
- 8. Pre-filter holder SR 5153
- 9. Flow meter SR 356
- 10. User instructions
- 11. Cleaning tissue SR 5226

### 3.4 Filter



Read carefully the user instructions accompanying the filters.

#### Particle filter

The fan unit may be used with only particle filters P3 R (PAPR-P3), model number SR 510 with filter adapter or SR 710, which provides protection against all types of particles, both solid and liquid.

#### Note!

- When filters are changed, both filters must be changed at the same time.

#### Pre-filter

The pre-filters SR 221 protect the main filter against excessively fast clogging.

The pre-filter holders also protect the main filters against handling damage.

### 3.5 Assembly Battery



#### Battery

Remove and charge the battery.

The charger carries out charging automatically in three stages.



1. Orange LED.
2. Yellow LED.
3. Green LED.



Check that the gasket round the charge contact in the fan unit is in place and is in good condition.

After charging battery, mount it back into the fan unit.

### 3.5 Mounting Belt



Put the belt halves together by pressing the locking into each other.



The belt is mounted into the fan unit with belt plate pointing upward.



Put the three tongues of the belt plate into the back of the fan unit.

Start putting in the upper tongue and then fold in the rest of them.



All three tongues in place.



Press the three small tongues locking the belt into the fan unit.



Correct mounted belt.



## Breathing Hose



Check that the O-ring at both ends of the hose is ok.



Put hose connection into the fan unit.  
Turn it a quarter of a turn clockwise to lock it.

Check that the hose is firmly secured.

## Particle filters



Two filters must always be used at the same time.

- Check that the gaskets in the filter mounting of the fan unit are in place and are in good condition.



If particle filter SR 510 is used, snap it on the filter adapter without pressing onto the centre of the filter.



Screw the filter into the filter mounting so far that the adapter will be in contact with the gasket.

Then turn it about 1/8 of a turn further in order to ensure a good seal.





Assemble the pre-filters.



Press the pre-filter holders onto the particle filters.



Mounted pre-filter holders onto the filters.

### 3.6 Start/Switch off



Start the fan by pressing the control button once.



The symbols on the display will light up and the sound signal will sound. The fan starts in normal operating status (175 l/min).



Switch between normal and boosted operating status (225 l/min) with the control button.



To switch off the fan unit, keep the control button depressed for about two seconds.

### 3.7 Performance check

#### Check of the minimum flow – MMDF



Check that the fan unit is complete, correctly mounted, thoroughly cleaned and undamaged.

Start the fan unit.



#### **PU breathing hose:**

Place the head-top in the flow meter and grip the lower part of the bag to seal around the breathing hose.

#### **SR 551 Rubber breathing hose:**

Place the head-top in the flow meter and grip the lower part of the bag to seal around the upper attachment of the breathing hose.

#### **Note.**

You must not grip around the rubber hose itself as this would either obstruct the air flow or cause failure to achieve a proper seal.



Grip the flow meter tube with the other hand so that the tube points vertically upwards from the bag.



Read the position of the ball in the tube. This should hover at a level with or slightly above the upper marking on the tube, (175 l/min).

**If minimum flow is not achieved, check that**

- the flow meter is held upright,
- the ball moves freely,
- the bag seals well around the hose.

### 3.6 Operation/performance

#### Checking the alarms



**The equipment is designed to provide a warning if the air flow is obstructed.**

Provoke an air flow stoppage by gripping the top part of the bag or by shutting off the flow meter outlet.



The fan unit should then initiate alarms by sound and light signals.



If the air is again allowed to flow, the alarm signals will automatically cease after 10-15 seconds.

Turn of the fan unit and pick out the face piece from the flow meter bag.

If minimum flow is not achieved or the alarm signal doesn't work the fan unit must not be used.





If the battery capacity is lower than 5 %

- A sound signal will be repeated twice at intervals of two seconds.
- The yellow battery symbol of the display will flash.

The battery symbol will flash continuously, whereas the other signals are repeated at intervals of 30 seconds until about one minute remains before the battery would be fully discharged.

The sound signal then changes to an intermittent signal.

**Action:** Immediately interrupt the work, leave the area and change/charge the battery.

### 3.8 Putting the Equipment on



Take the fan unit on and adjust the belt so that the fan unit is firmly and comfortably secured at the back of your waist.

Start the fan.

Put the head top on.





Note that when a full face mask SR 200 is used, the hose should run along your waist and up along the chest.



Make sure that the breathing hose runs along your back and is not twisted.

### 3.9 Taking the Equipment off

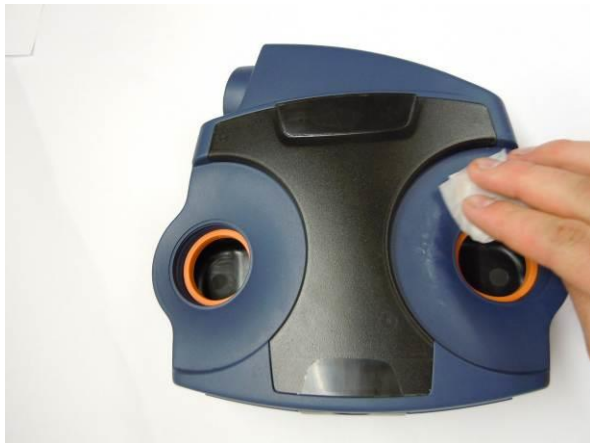


Leave the polluted area before taking the equipment off.

- Take off the head top.
- Switch off the fan.
- Release the belt and remove the fan unit.

After use, the equipment must be cleaned and inspected.

### 4.1 Cleaning/Disinfection



Sundström cleaning tissue SR 5226 that clean and disinfect are recommended for daily care.



If the equipment is more heavily fouled, use a soft brush or sponge moistened with a solution of water and dishwashing detergent or the like.

Rinse the equipment and leave it to dry.

**N.B. Never use a solvent for cleaning.**



After cleaning, store the equipment in a dry and clean place at room temperature.

Avoid exposing it to direct sunlight.

The flow meter can be turned inside out and can be used as a storage bag for the head top.

### 4.3 Maintenance schedule

	Before use	After use	Annually
Visual inspection	•	•	
Performance check	•		•
Cleaning		•	
Change of fan gaskets			•

The schedule below represents the minimum requirements for maintenance routines in order to ensure that the equipment will always be in functional condition.

### 4.4.1 To change the particle filters



Bear in mind that both filters must be changed at the same time.

- Unscrew the filters.



Release the filter holders.



- Remove the filter adapter from SR 510



Change the pre-filters in its holders.  
Clean as necessary.



Fit new filters.



### 4.4.1 To change gaskets



Screw out the filters.

- The gasket has a groove all round and is fitted on a flange below the threads in the filter mounting.
- Remove the old gasket.



Fit the new gasket onto the flange. Check that the gasket is in place all round.

### Wash plugs



When showering or cleaning after for example sanitary work, we recommend using special wash plugs.





Turn in the threaded plugs into the filter inlet.



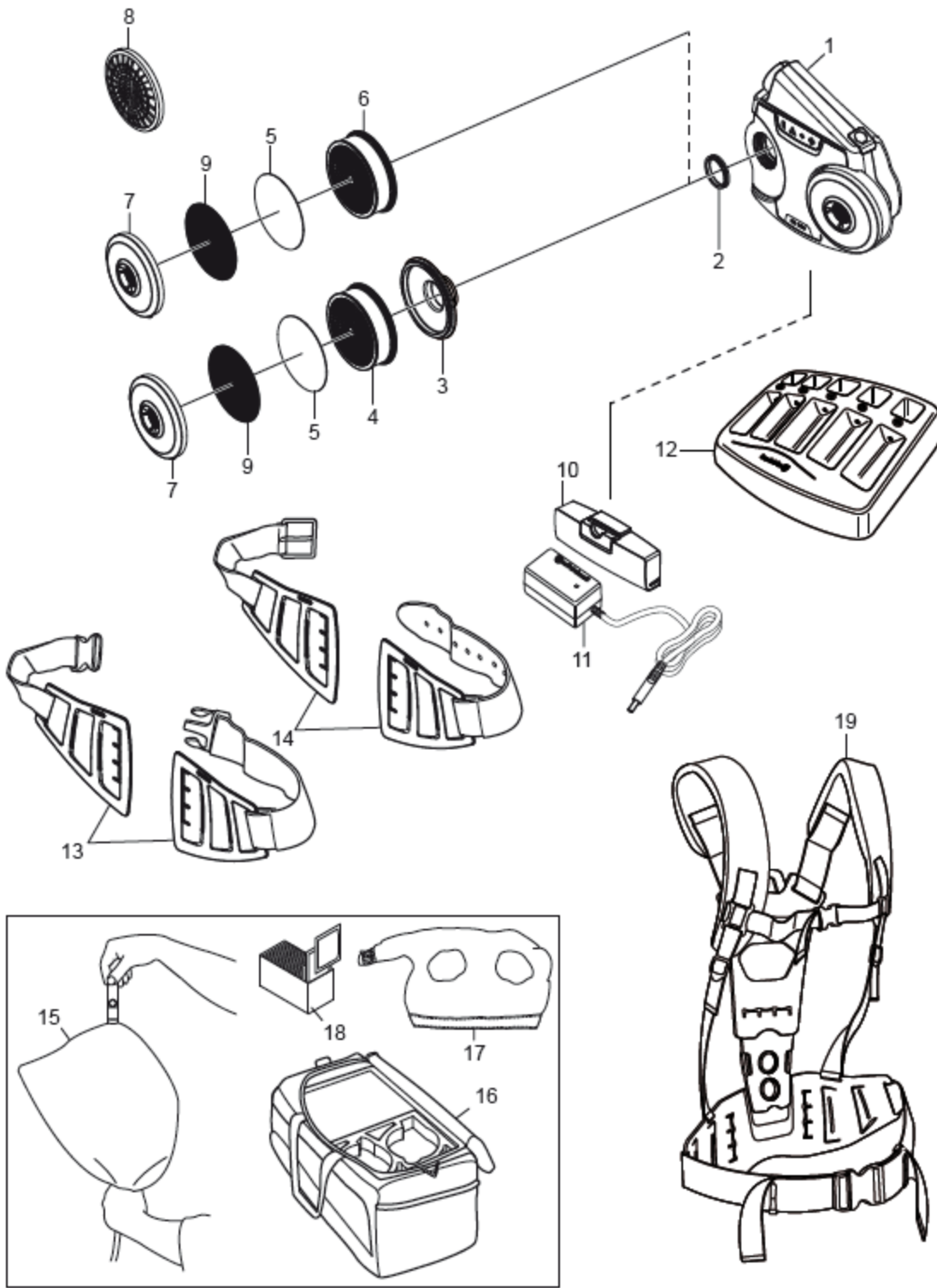
Assemble the third plug with gasket into the air outlet of the fan unit.



All three plugs in place.

# SR 700

## Spare parts / Accessories



No.	Description	Ordering No.
1.	Fan unit SR 700, bare	R06-0710
2.	Gasket	R06-0107
3.	Filter adapter SR 711	R06-0701
4.	Particle filter P3 R, SR 510	H02-1312
5.	Pre-filter SR 221	H02-0312
6.	Particle filter P3 R, SR 710	H02-1512
7.	Pre-filter holder	R01-0605
8.	Pre-filter holder SR 5153	R01-0604
9.	Steel net disc SR 336	T01-2001
10.	Standard battery SR 701, 2,2 Ah	R06-0708
11.	Battery charger SR 713	R06-0706
12.	Charger stand SR 506	T06-0108
	Charger and chargerstand SR 516	T06-0111
13.	Belt SR 508	R06-0101
	Rubber belt SR 504	T06-0104
14.	Leather belt SR 503	T06-0103
15.	Flow meter SR 356	R03-0346
16.	Storage bag SR 505	T06-0102
17.	Splash cover SR 514	T06-0114
18.	Cleaning wipes 50/box	H09-0401
19.	Harness 552	T06-0116