

SOLDATECH



TYPE
EWH5F-2/2



**Read this manual carefully before using
the respirator system.**

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Storing the user manual

- Store the user manual near the respirator system in an accessible location.
- Keep the user manual in a dry place.
- Handle the user manual properly to avoid damage.
- The use of the respirator system by individuals unfamiliar with the instructions and procedures outlined in this manual is strictly prohibited.

This user manual is part of the respirator system and must therefore be kept with the system. If the respirator system is transferred to another party, the user manual must be included.

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1. General

Check the following components before using the respirator system:

- **Unit Respirator System:** Ensure that the spark arrester, pre-filter, and particulate filter (gas filter if present) are correctly installed and securely fitted.
- **Breathing Hose:** Verify that the hose is not damaged and is properly connected and locked to both the respirator unit and the main protection component.
- **Battery:** Ensure the battery is fully charged before use (the battery must be charged before first use). Check that the connection to the respirator unit is secure.
- **Airflow Test / Alarm Sound Test:** It is essential to perform both the airflow test and the alarm sound test before using the respirator system. Refer to the testing procedure in the "SELF-CHECK BEFORE EACH USE" section on page 11.

2. Safety instructions

DO NOT USE FOR:

- Applications requiring intrinsic safety (IS).
- Contaminants in the workplace with unknown concentrations or concentrations immediately dangerous to life or health (IDLH).
- Oxygen-deficient environments: With an oxygen concentration below 17%.
- Using the device without complete assembly, as it may pose a life-threatening hazard.
- Use in enclosed spaces or areas with fire or explosion hazards.
- Operating the device with power off, as CO₂ concentration may increase and oxygen levels in the face shield may decrease.
- Workplaces where the device does not supply sufficient airflow (MIN - 165 lpm).
- Workplaces with strong winds, as this can create negative pressure in the main protection component, allowing outside air to enter.
- Using the device in an off state, as this is considered an abnormal situation with little to no respiratory protection.

WARNING:

If an alarm sounds, immediately leave the contaminated area and check the respirator system:

- The hose may be blocked.
- The battery may be nearly depleted.
- The filter may be dirty and needs replacing with a new one.

Leave the contaminated area immediately if any of the following occur:

- There is a problem with any component of the respirator system, such as if the airflow stops or decreases.

- Breathing becomes difficult, you feel dizzy or get a headache, or you detect contaminants by smell or taste.
- Never use the device in areas with excessive contamination.
- Ensure that the connection hose is smooth and not entangled or obstructed by other objects in the environment.
- Do not remove the respirator before you are in a safe environment.

Temperature range

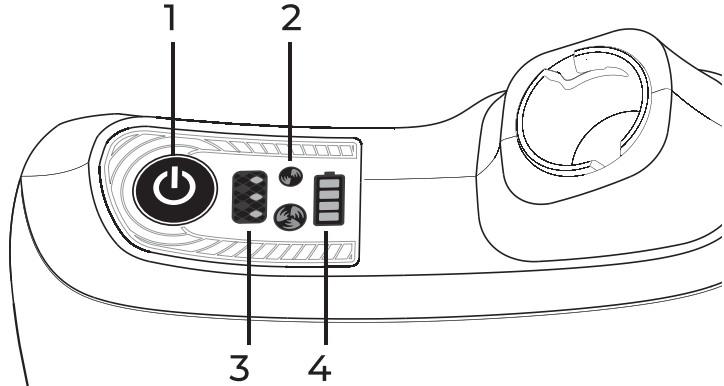
The operating temperature range is between -5°C and 55°C.

3. Use

1. Aan/uit-schakelaar en luchtstroomschakelaar.

- On: Press and hold for 3 seconds.
- Off: Press for a few seconds until the beep stops.

Airflow Switch: Press the button to toggle between 170+ lpm and 210+ lpm.



2. Indicator Lights: Indicate the airflow setting:

Low speed—170 lpm

High speed—210 lpm

3. Warning Lights:

- The more lights that are illuminated, the dirtier the filter.
- When the warning lights flash, replace the filter.

4. Battery Indicator

Shows battery capacity.

AIRFLOW SPEEDS

The Soldatech respirator system features two airflow speeds:

- Low speed—170+ lpm
- High speed—210+ lpm

Toggle the airflow speed by briefly pressing the button. Warning lights indicate filter status. The more warning lights that are on, the dirtier the filter. When the warning lights flash, replace the filter immediately.

ASSEMBLY AND SPARE PARTS

- Disconnect from the battery or other power sources when replacing filters.
- Install the spark arrester, pre-filter, and particulate filter (gas filter if present) into the filter cover.
- Ensure that the filter material is intact and dry, without tears or other damage before installation.
- Attach the filter cover to the respirator unit by aligning the tabs on the filter cover with the bracket on the respirator unit and turning the cover to secure it.
- Press the filter cover down until it clicks into place.
- Verify that the filter cover is correctly installed.
- To replace the filter, push the latch to release the filter cover and replace the filter as shown in Fig. 1.



PARTICULATE FILTER

- Never use the respirator without the spark arrester, pre-filter, and HE particulate filter (HEPA).
- Always replace the filter if it is damaged or clogged.
- Do not attempt to wash, clean, or reuse dirty filters.
- Store the filter at a temperature between -10°C and 55°C (14°F to 131°F) in a clean environment away from direct light.
- Ensure that you do not confuse markings on a filter related to standards other than EN 12941 with the classification of this device when used with this filter.
- Install the particulate filter according to Fig. 2a.
- The storage duration of new filters in their original packaging is 5 years.

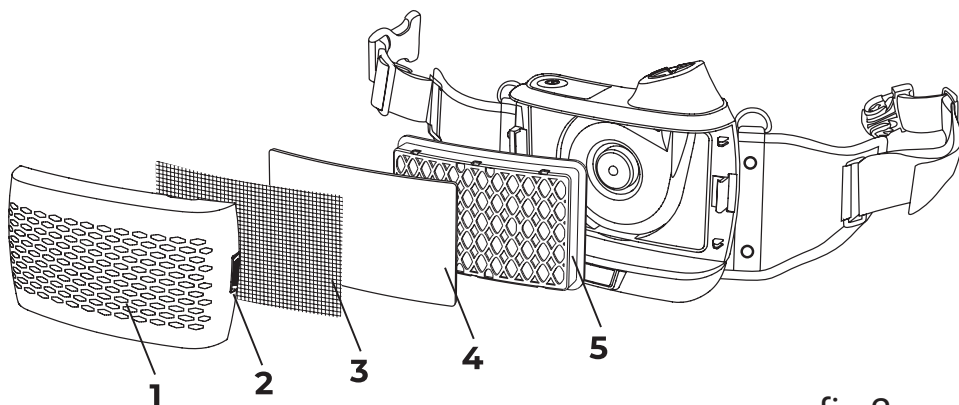


fig.2a

1. Filter Cover
2. Latch
3. Spark Arrester
4. Pre-filter
5. Particulate Filter

GAS FILTER

- This gas filter must always be used with the particulate filter.
- The gas filter provides additional protection against certain gaseous environments. See the table for details.

ART. CODE	COLOR & CODE	PROTECT AGAINST
AFP3WH5F	WHITE P (R SL)	Particulates (R = Reusable, SL = Tested against Sodium Chloride and Paraffin Oil)
ACFIWH5F	BROWN, GREY, YELLOW, GREEN A1B1E1K1	Organic Gases / Inorganic Gases / Sulfur Dioxide, Acid Gases / Ammonia and Organic Ammonia Derivatives

- The particulate and gas filters cannot be cleaned.
- Stop using the filter if you detect an unusual odor and replace the filter as soon as you are in a safe environment.
- Store the filter at a temperature between -10°C and 55°C (14°F to 131°F) in a clean environment away from direct light.
- Install the particulate and gas filters according to Fig. 2b.

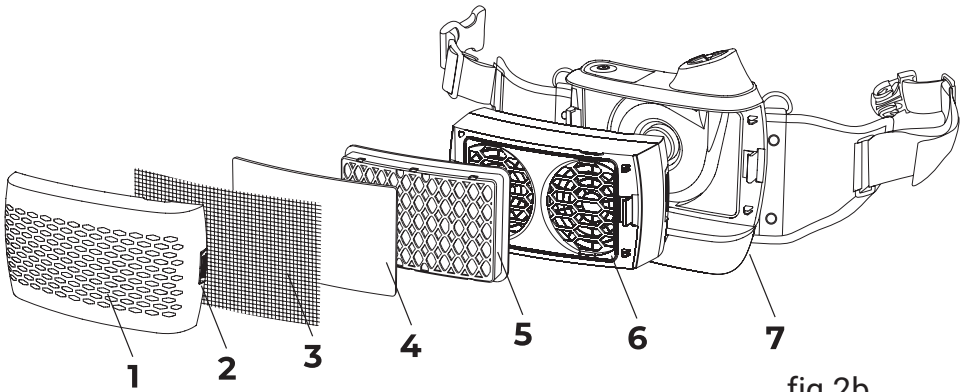


fig.2b

1. Filter Cover
2. Latch
3. Spark Arrester
4. Pre-filter
5. Particulate Filter
6. Gas Filter
7. Extra Battery

CARBON FILTER (OPTIONAL):

The carbon filter helps reduce unpleasant odors during cutting, burning, and welding. Install all filter components according to Fig. 3. The carbon filter must always be used in combination with the particulate filter, pre-filter, and spark arrester. Do not use the carbon filter alone.

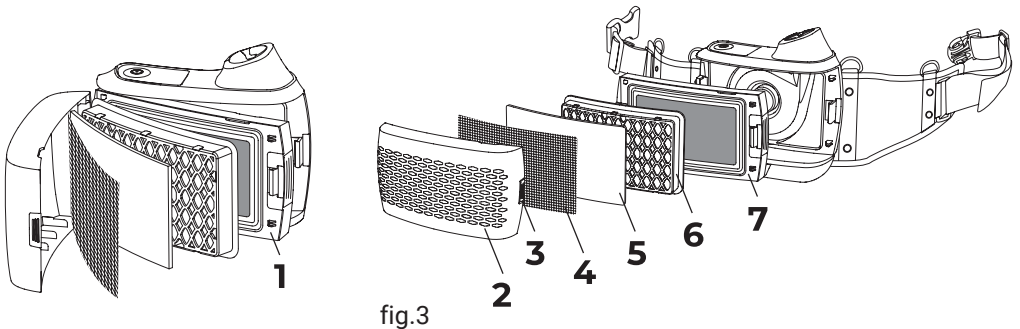


fig.3

1. Carbon Filter
2. Filter Cover
3. Latch
4. Spark Arrester
5. Pre-filter
6. Particulate Filter
7. Carbon Filter

REPLACING THE CARBON FILTER

Replace the carbon filter by pressing out the worn carbon filter at the vertical edges, closest to the frame edge, and then work the entire carbon filter out of the mount as shown below (see Fig. 4a). Install a new carbon filter by pressing it into the mount (see Fig. 4b).

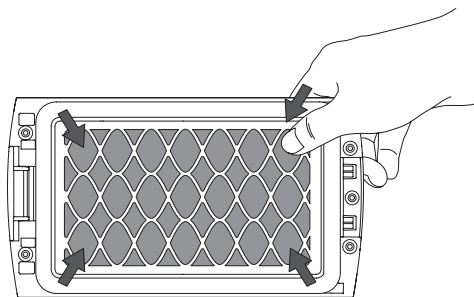


Fig. 4a

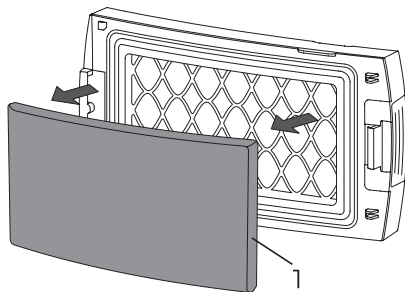


Fig. 4b

BATTERY

NOTE! Remove the battery from the device before charging it.

- The battery must be charged in a location that is electrically safe.
- Charging times for different battery types vary. Actual charging time depends on the remaining battery capacity.
- Check the charger voltage (AC 110V~220V).
- Remove the battery from the device before charging.
- Battery life may vary depending on usage.
- The battery is divided into fast charger standard battery and fast charger extra battery.
- Battery life differs depending on the type of battery used with different filter components.
- Choose the appropriate battery based on the situation.
It is recommended to use the fast charger extra battery with the gas filter.

DISASSEMBLING THE BATTERY

- Press the button and remove the battery according to the direction shown in Fig. 5a / 5b / 5c.
- Disconnect the battery from the device.

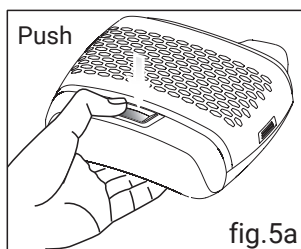


fig.5a

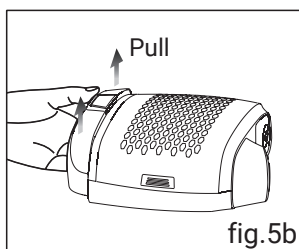


fig.5b

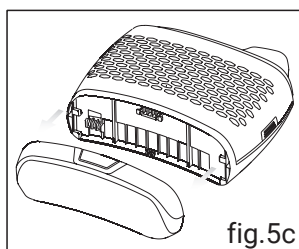


fig.5c

ASSEMBLING THE BATTERY

Place the battery into the blower housing and press until you hear a “click” sound (see Fig. 6a / 6b).

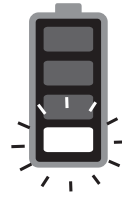
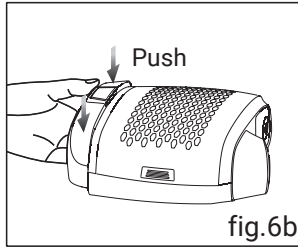
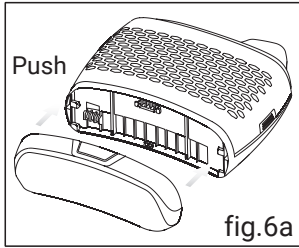


fig.7a

Battery Type	Charging time	Filter Type	Airflow rate	Battery life
Standard battery fast charger	1 hour	Particulate filter	170+lpm 210+lpm	9 hour 5-6 hour
		Particulate filter + Gas filter	170+lpm 210+lpm	Not recommended
Fast charger extra battery	2 hour	Particulate filter	170+lpm 210+lpm	15 hour 9 hour
		Particulate filter + Gas filter	170+lpm 210+lpm	11 hour 7.5 hour

CHARGING THE BATTERY

NOTE! Remove the battery from the device before charging.

- If only one section remains (see Fig. 7a), beeps and vibrations will occur to remind the user to charge the battery. The beep frequency is every 30 seconds and the vibrations every 2 minutes. After about 15 minutes of warnings, the battery indicator will flash, indicating there is up to 15 minutes left before the blower stops (low airflow speed 170+ lpm).
- Remove the battery pack from the respirator system. Connect the charger (2) to the battery (1) (see Fig. 7b).
- When the indicator light (3) on the charger changes from red to green (see Fig. 7c), do not stop charging immediately. Continue charging the battery for an additional 0.5 hours.

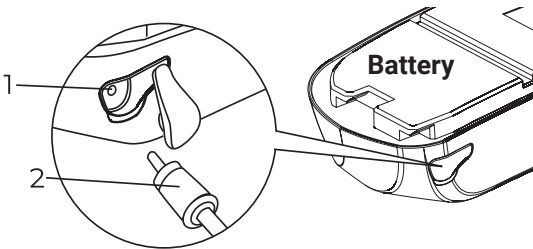


Fig. 7b

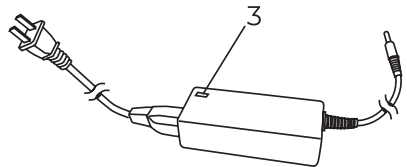


Fig. 7c

USING THE BATTERY

- Do not store the PAPR unit with power on inside the packaging. It is better to remove the battery from the device before placing it in storage.
- Do not store the PAPR unit in a car during hot summer months.
- Do not dispose of the PAPR unit.
- Do not place the PAPR unit on equipment that generates electrical heat.
- Do not use a different battery charger.
- Battery storage temperature: -10°C to 55°C , R.H. < 85%
- Recommended battery charging temperature: 0°C to 40°C

BREATHING HOSE

Assembly

Insert the two pins of the breathing hose into the respirator system and the connection of the main protection (see Fig. 8). Twist a quarter turn in the opposite direction of "OPEN" to secure it (see Fig. 9a).

Disassembly

Rotate a quarter turn to the "OPEN" position and then pull the pins out from the end (see Fig. 9b).

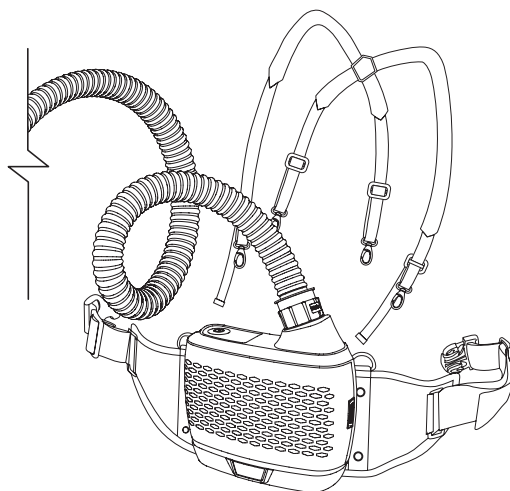


fig.8

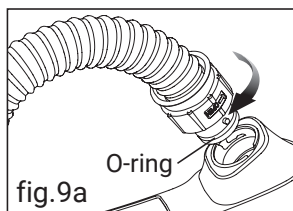


fig.9a

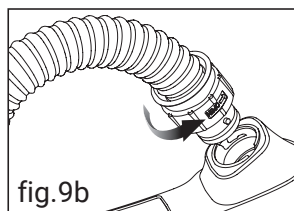
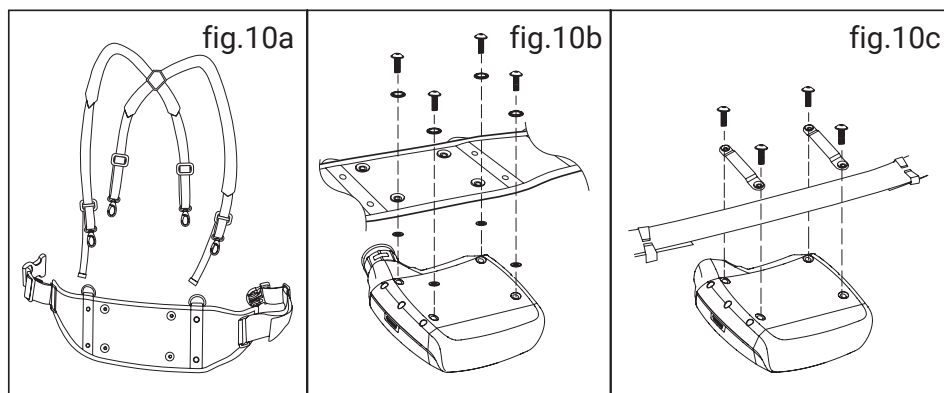


fig.9b

SHOULDER STRAP & BELT PADDING

Attach the hooks to the belt (see Fig. 10a).

Connect the shoulder strap to the blower unit by tightening the screws (see Fig. 10b/10c).



AIRFLOW CONTROL

- Two indicator lights on the display (see Fig. 11a): Low speed - 170 lpm; High speed - 210 lpm.
- When the PAPR is turned on, the default setting is low-speed airflow.
- Change the airflow by pressing the button briefly (see Fig. 11b).

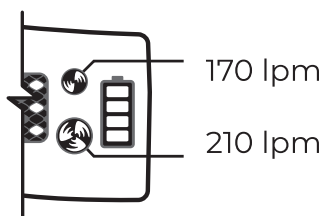


fig.11a

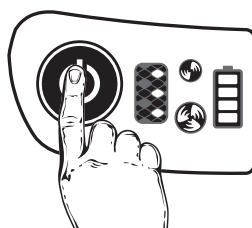


fig.11b

SELF-CHECK BEFORE EACH USE

After turning on the unit, check the alarm sound warning function by blocking the air outlet as shown in Fig. 12. The warning signal on the panel should flash with a sound, and the blower unit should vibrate (approximately 15 to 30 seconds after the outlet is blocked). The product is operating correctly if the warning functions perform as described. (Ensure the filter is installed and the battery is fully charged before conducting this test.)

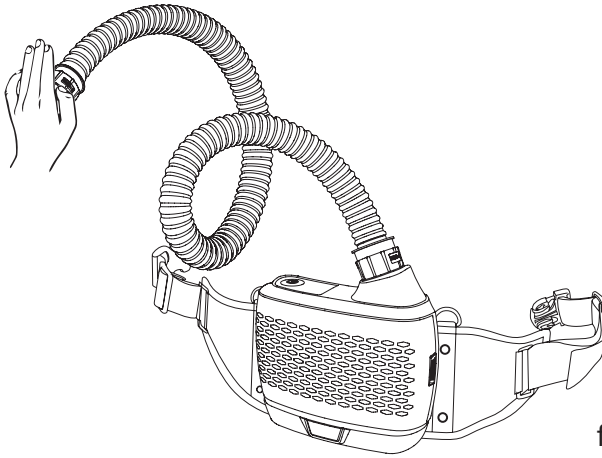


fig.12

AIRFLOW SPEED TEST

- Always perform an airflow test before using the blower unit.
- Ensure all components are fully assembled before conducting the test.
- Attach the end of the hose to the bottom of the airflow indicator and start the unit. Keep the airflow indicator upright (see Fig. 13).
- If the ball in the tube in low-speed mode floats above the limit line, it is functioning normally.
- If the ball does not float above the limit line, refer to troubleshooting.

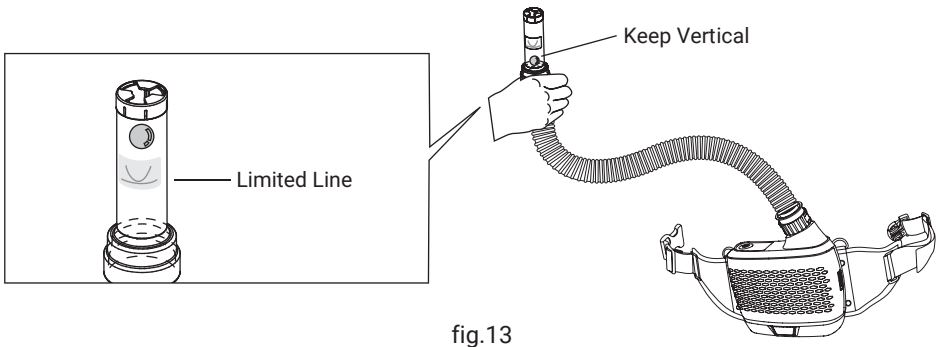


fig.13

4. Maintenance

Respiratory device components should be cleaned, inspected, and prepared for the next use after each use. Use a soft cloth dampened with mild soapy water for wiping. Ensure no water enters the device.

CLEANING

- **Blower unit and battery:** Clean the outer surfaces of the blower unit and the battery pack with a soft cloth dampened with a solution of water and a mild, pH-neutral cleaning agent. Ensure no water enters the device. Do not use solvents or abrasive cleaners. Ensure that the electrical contacts of the motor/fan and battery pack are completely dry before reassembling.
- **Hose:** Wiping the exterior is insufficient. Clean the outside of the hose and the hose connection with a soft cloth dampened with water and a cleaning solution. Optional hose covers can also be used to facilitate cleaning. Ensure the hose is completely dry before using or storing it. The hose should not be submerged in cleaning liquids and should be replaced if it becomes wet.
- **Filter:** Open the filter cover and inspect all filters and the spark arrestor. The particle filter, gas filter, and pre-filter cannot be cleaned. The spark arrestor can be cleaned with a clean, soft cloth dampened with a solution of water and a mild, pH-neutral cleaning agent. Dry the spark arrestor thoroughly with a clean cloth. Replace the pre-filter and the particle filter if they are extremely dirty, wet, or damaged. Do not attempt to remove contamination with compressed air, as this will void the warranty. If the spark arrestor cannot be cleaned or is damaged, replace it with a new spark arrestor.

STORAGE OF BLOWER UNIT AND BATTERY

The blower unit is not intrinsically safe. Keep it away from flammable or explosive environments. Store it in a clean, dry, and cool place with the filter.

STORAGE OF THE BLOWER UNIT

Store at a temperature between -10°C and 55°C (14°F to 131°F), in a clean environment without direct sunlight.

To maximize battery life:

Disconnect the charger once the battery is fully charged.
Remove the battery from the blower unit during extended storage.
Store at -10°C to 55°C and a relative humidity of <85%.

5. Specifications

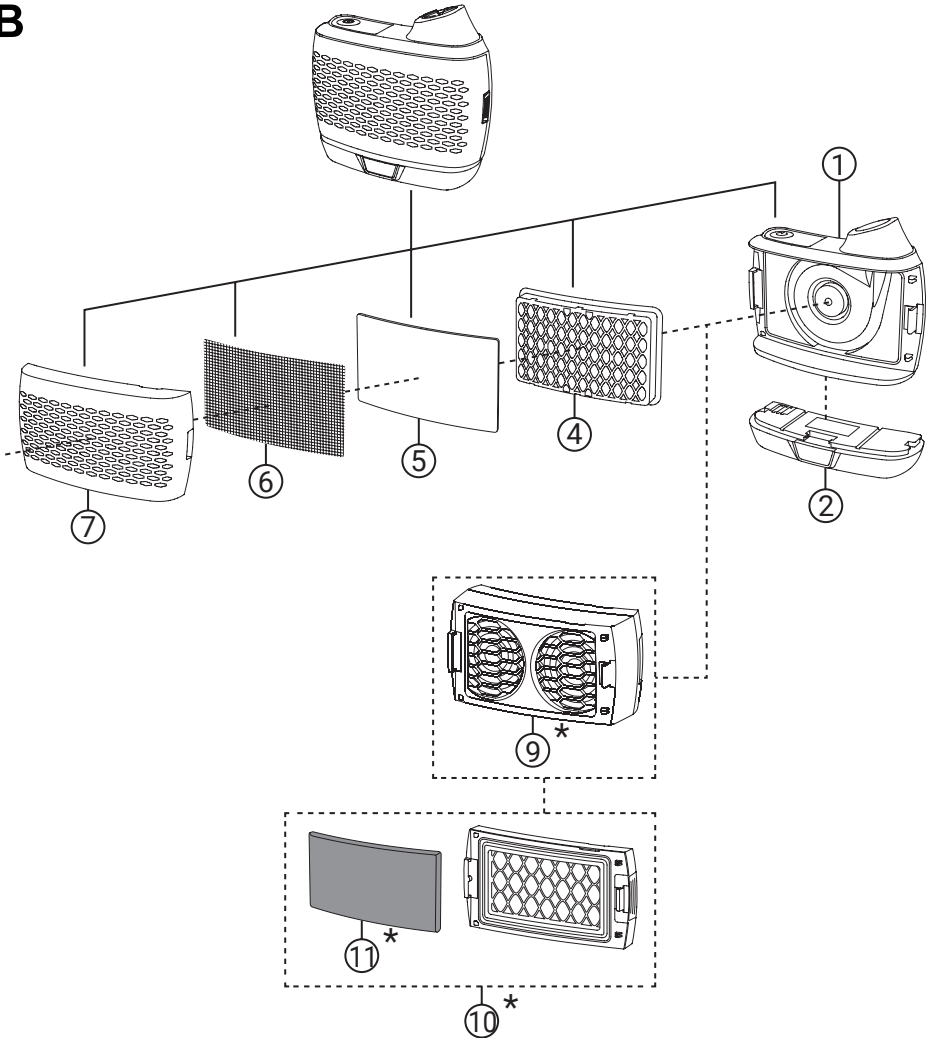
Minimum Design Airflow:	165+ lpm (5.8+ cfm)
Airflow Settings:	Low speed: 170 lpm (6 cfm) High speed: 210 lpm (7.4 cfm)
Battery Type:	Rechargeable Li-ion battery
Battery Life:	9 hours on low speed (170 lpm) 5-6 hours on high speed (210 lpm)
Battery Charging Time:	1 hour
Battery Lifespan:	≥ 500 charge cycles
Filtration Efficiency:	99.997%
Alarm Signals:	Visible, audible, and vibrating
Shelf Life:	Unopened filter: 5 years from manufacture (see filter label) Installed filter: Must be stored properly according to instructions. For an installed filter that has not yet been used, it is recommended not to store it for more than one year.
Operating Temperature:	-5°C to 55°C (23°F to 131°F)
Storage Temperature:	-10°C to 55°C (14°F to 131°F)
Relative Humidity (R.H.):	Operating R.H.: < 90% Storage R.H.: < 85%
Weight:	1020 g (Blower unit + fast-charging standard battery)
Approval:	EN12941 (For classifications, see the label on the head covering) AS/NZS1716: 2012 (For classifications, see the label on the particulate filter) EAC

6. Solutions

Problems	Causes	Troubleshooting
No airflow from the fan	Blower not ON	Press and hold the ON button.
	Battery not powering up	Charge the battery.
	Battery not installed correctly	Check the battery and reinstall it.
	Hose blocked/air leakage	Inspect and remove any obstruction.
Airflow test fails	Hose may be clogged/air leaking	Check the hose condition.
	Dirty filter needs replacing	Replace with a new filter.
Battery life is too short, even when fully charged	Faulty battery	Replace with a new battery.
	Incorrect charging	Fully charge the battery.
	Blocked filter	Replace the filter.
	Damaged charger	Replace the charger.
Increased noise level	Filter is clogged	Replace the filter and pre-filter as needed.
Warning indicator ON, fan vibrates, and alarm beeps	Hose is clogged/air leakage	Check the hose for clogs before use.
	Filter installed without removing packaging	Ensure the packaging has been removed.
Sensing the smell of incoming air	Damaged filter	Check the filter status and replace if necessary.
	Hose with leakage issue	Verify how the hose is installed and its condition.
	Incomplete filter component	Check both filters and install them properly.

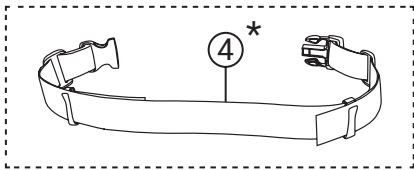
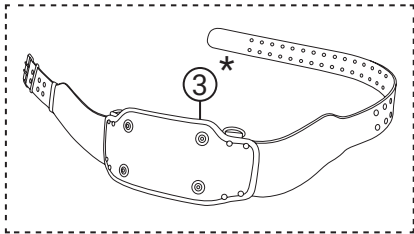
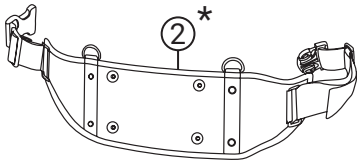
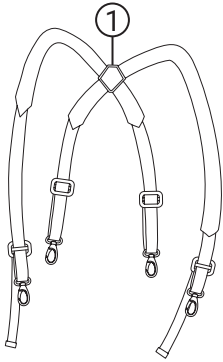
7. Parts

B



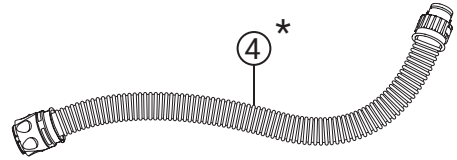
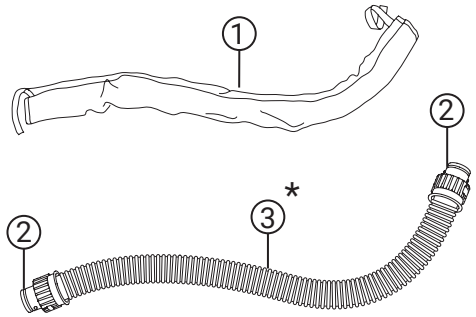
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|----|-----------|--------------------------------|----|----------|-----------------------|
| B1 | PEWH5F-B1 | Ventilation unit | B9 | ACF1WH5F | Gas filter (A1B1E1K1) |
| B2 | B1WH5F | Fast-charging battery | | | Gas filter (A2) |
| B4 | AFP3WH5F | Particulate filter (HE filter) | | | Gas filter (A1) |
| B5 | PF10WH5F | Pre-filter | | | |
| B6 | SS10WH5F | Spark arrestor | | | |
| B7 | PEWH5F-B7 | Filter cover | | | |

C

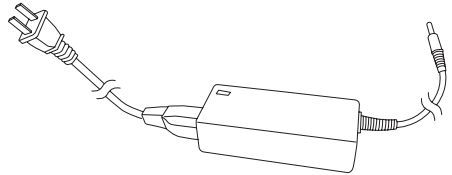


- C1 PEWH5F-C1 Shoulder strap
- C2 PEWH5F-C2 Belt cushion
- C3 PEWH5F-C3 Leather belt cushion
- C4 PEWH5F-C4 Belt
- D1 PEWH5F-D1 Hose cover
- D2 PEWH5F-D2 O-ring

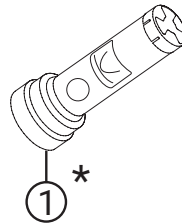
D



E



F



- D3 PEWH5F-D3 Hose (+ O-ring)
- D4 PEWH5F-D4 Quick coupling (+ O-ring)
- E PCBC1WH5F Fast charger
- F1 AI1WH5F Airflow indicator

8. Warranty

1. The guarantee takes effect on the date indicated on the purchase invoice and is valid for 12 months.
2. The guarantee is not transferable without a written statement of consent from Your supplier.
3. No warranty claims can be made without the purchase invoice.
4. Warranty is only applicable if the product is used according to the instructions provided and only for the purpose for which it was designed.
5. No modifications may be made to the product.
6. The guarantee does not apply in case of improper use.
7. Any shipping costs are not covered by the warranty provision.
8. Repairs should only be carried out by Your supplier. Any repair(s) carried out by third parties will invalidate the warranty claim.
9. Repairs during the warranty period will not extend the validity. However, a three-month warranty on the repair will be issued should the regular warranty period expire.
10. Any maintenance work to be carried out, described in the user manual, should be carried out in good time.
11. For warranty, please contact only the point of sale where you purchased the article.

EG-verklaring van overeenstemming - Declaration of conformity – EG- Konformitätserklärung - Declaration de conformite - Dichiarazion di conformita- Declaracion de conformidad

Wij, We, Wir, Nous, Noi, La empresa,

Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Nederland,

verklaren geheel onder eigen verantwoordelijkheid dat het product

declare under our sole responsibility that the product

erklären in alleiniger Verantwortung, dass das Produkt

déclarons sous notre seule responsabilité que le produit

dichiariamo sotto la nostra responsabilità che il prodotto

declaramos bajo nuestra exclusiva responsabilidad que el producto

Type Model Type Type Tipo Tipo	Beschrijving Description Beschreibung Description Descrizione Descripción	Merk Brand Marke Marque Marca Marca
EWH5F-2/2	Versluchtsysteem Respirator system	Soldatech

Waarop deze verklaring betrekking heeft, in overeenstemming zijn met de volgende normen:

To which this declaration relates is in conformity with the following document:

Auf welches sich diese Erklärung bezieht, den folgenden Normen entspricht:

Auquel se réfère cette déclaration est conforme à le document suivant:

A cui si riferisce dichiarazione, corrisponde ai seguenti documenti:

Al que se refiere la presente declaración, corresponde a los siguientes documentos:

Europese Verordening, European Regulation, Europäische Verordnung, Règlement Européen, Reglamento Europeo, Reglamento Europeo:

NEN-EN 12941

Nederland, Maasbracht, 26-07-2024

Directeur Valkenpower

Serialnummer
Serial number:



Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Nederland

