

AXMINSTER

WORKSHOP

AXMINSTER APF 10 EVOLUTION® POWERED RESPIRATOR



EN 12941

**RESPIRATORY PROTECTION DEVICE -POWERED FILTERING DEVICE INCORPORATING A HELMET OR A HOOD.
CLASS TH1 DEVICE IMPORTANT - This manual must be read and fully understood before any product from the
APF 10 Evolution' Range is used. The manual must be retained for future reference.**

Evolution® is a registered trade mark of JSP Ltd, used under licence by Axminster Tools Ltd.

UNPACKING AND INSPECTION: The following items should all be within the carton:

ITEM	Cap c/w rigid Impact-Liner	PowerCap® Active™ Drive Unit	1mm Polycarbonate Visor	0.35mm Polycarbonate Visor	PowerBox™1 Battery Pack	Airflow Test Unit
PowerCap® Active™ Lite	✓	✓		✓	✓	✓
PowerCap® Active™ IP	✓	✓	✓		✓	✓

Note: PowerCap® Active™ also provides protection to EN 812, the BumpCap standard.

It should be noted that the special liner for this protection forms an integral part of the cap structure. Ensure that the bump cap liner is fitted into the Cap before use.

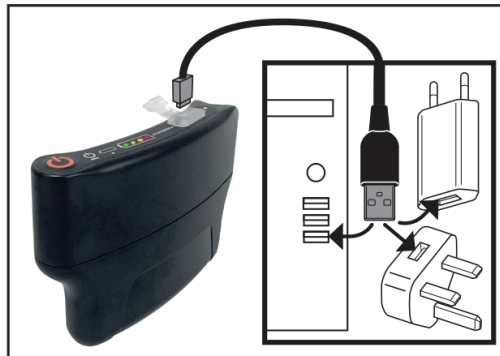
STORAGE: When not in use or during transportation, Powercap® Active™ should be stored in the packaging in which it was supplied. Powercap® Active™ should be stored away from direct sunlight, not in contact with solvents and in such a manner that it cannot be damaged by physical contact with hard surfaces. Storage temperature should be between 5°C and 40°C and relative humidity not greater than 75%. During storage, the power cable should be disconnected from the PowerBox™1 battery pack.

LITHIUM ION POWERBOX™1 BATTERY PACK: When turned on, the Lithium Ion battery has green, amber and red lights on the outside to show the level of charge; green being fully charged.

Charging the batteries: Switch off Powercap® Active™, remove the dust cover, and connect it to a USB charge point using the Micro USB cable provided. A 5-8 hour charge will produce 8 hours of run time from Powercap® Active™. **(PLUG NOT INCLUDED)**

Precautions on charging:

- Avoid charging in direct sunlight or in a vehicle parked under direct sunlight, and make sure to charge only when the ambient temperature is between +5°C and +40°C.
- Before charging, ensure that no dust or other foreign objects attach to the USB plug.
- Do not subject the device to vibrations while charging.
- When your PC is in sleep state, the unit cannot be charged.
- Once charging is complete, ensure that the USB plug is disconnected.
- If the function time is significantly reduced even after proper charging, the rechargeable battery may be nearing the end of its service life.
- Dispose of batteries in accordance with local regulations.



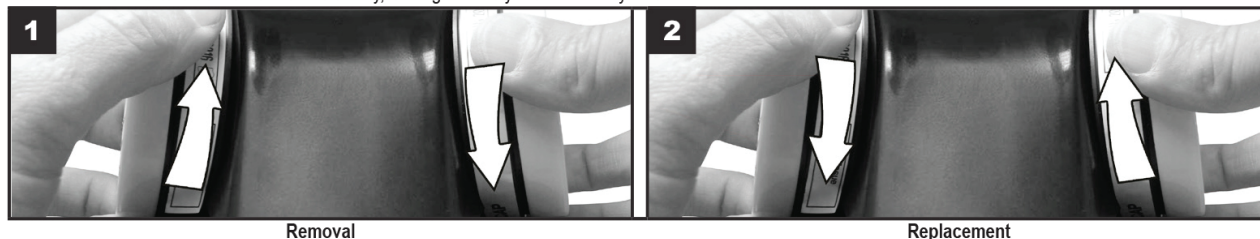
USING THE PowerCap® Active™ Unit: The Powercap® Active™ meets the TH1P requirements of EN12941 this offers protection against fine non-toxic fibres, fumes and dusts. Operating temperature should be between 5°C and 40°C and relative humidity not greater than 75%.

FILTERS: The filters provided are high efficiency sub-micron particulate types supplied in pairs. They will filter most particulate matter such as dust, spores, mist and fumes, but like all filters cannot filter out all particulate matter present in the air. They will not filter gases, vapours or toxic substances.

- The duration of filter life will depend mainly on the amount and size of the contamination in the area where they are used, and the time used in that area. Inspect the filters regularly. Ensure that they are located correctly and carefully remove any visible large surface contamination to prolong their life. The filters must not be washed or allowed to get wet. A low airflow reading (red section of indicator) usually indicates that new filters are required.

FITTING AND REPLACING THE FILTERS: Only replace with a pair of genuine replacement filters (at the same time) from JSP Ltd or its distributors.

Simply twist anticlockwise, with filter towards you, and lift away from motor housing (**Image 1**). Replacement is the reverse procedure. Ensure that the filter and motor housing mating faces are clean; do not allow any dust or foreign objects to fall into the motor housing. Push and twist the replacements firmly into place (**Image 2**). Recheck airflow when the new filters have been fitted before use. If the filters are not fitted correctly, filtering efficiency will be severely reduced.



Removal

Replacement

REPLACING THE PRE FILTER PAD: The Powercap® Active™ filter includes a pre filter cover that is situated underneath the grill lid of the filter. There is a removable lid just above the label of the filter, remove this lid, replace the pre filter pad and replace the cover ensuring that it is back in place correctly. Regular replacement of the pre-filter pad will help the air flow of the product. The pre filter pad helps to protect from the larger airborne hazards (>10µm) whilst the actual filter protects from the smaller airborne hazards.

BATTERY AND AIRFLOW CHECK: Powercap® Active™ has a Minimum Design Flow rate of 140 l/min. To check battery charge and airflow the filters must be fitted and the visor removed (**See Image 3**). Removal of visor for airflow check is only relevant to Non-Impact Powercap®.

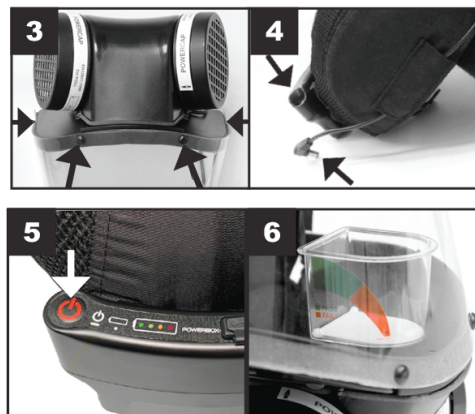
Having removed the visor insert the male connector at the end of the Powercap® Active™ "Power cable" into the female connector on the PowerBox™1 battery compartment (**See Image 4**).

Switch the unit on using the switch located on the PowerBox™1 battery unit (**See Image 5**). Airflow will now commence. It is now necessary to check that the airflow is sufficient, and the following checks should be carried out on a regular basis with the filters fitted and always before use of Powercap® Active™:-

Invert (turn upside down) the Powercap® Active™ and fit the Airflow Indicator supplied over the air outlet inside the rim of the Visor Carrier ensuring a good seal. Avoid placing hands or other possible obstructions over the two filter inlets (**See Image 6**).

Check that the white 'flap' at the bottom of the Airflow Indicator moves freely. The 'flap' indicator within the airflow device should move into the 'green section' which means that there is adequate airflow for PowerCap® Active™ to be used.

In the event of no flow or low flow indicated by a move of the flap into the 'red section', first recheck the battery fitting or charging condition. In the event that there is still no or low airflow, do not use the PowerCap® Active™, but contact JSP Ltd for further advice.



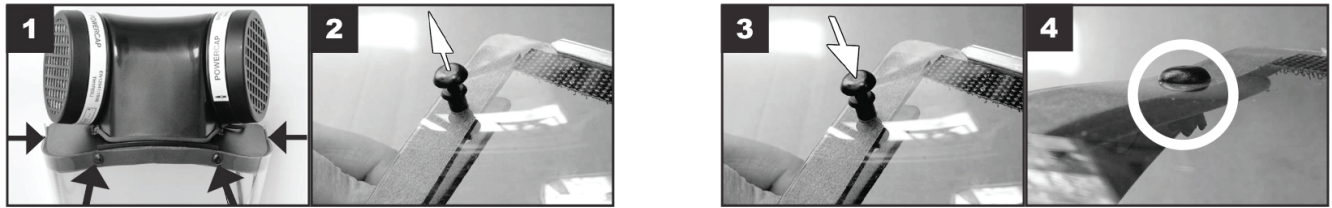
Fitting the visor - PowerCap® Active™ Lite:

1. Remove the old visor by peeling it away from the Velcro® sections on the inside of the brim.

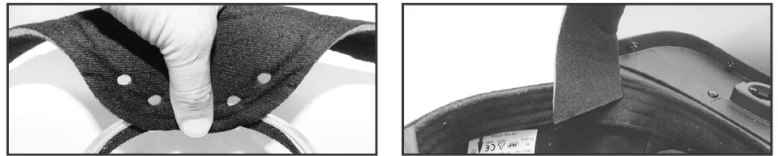
2. Align the Velcro® sections on the visor with the Velcro® sections on the inside of the brim, ensuring that the visor is central. Press the Velcro® sections together making certain that the visor is firm against the underside of the brim.

Removing/fitting the visor - PowerCap® Active™:

- Remove the skirt from the visor, and then remove the visor by first pulling out the central pin of all four push-rivets around the carrier and then removing the outer sleeves (See Images 1 and 2).
- Peel back the protective film from along the top edge of both sides of the new visor. (NOTE: To prevent fingerprints on the visor, leave the rest of the film in place).
- Using the new rivets supplied, attach the left hand side of the visor to the left hand side of the visor carrier. Ensuring the rivet has passed through both sides of the carrier (See Images 3 and 4).
- Repeat the above procedure for all the four rivets around the visor carrier, some manipulation of the visor may be necessary to achieve a tight seal around the upper edge of the visor.
- Finally remove the rest of the protective film and re-attach the foam skirt to the Velcro® strips.

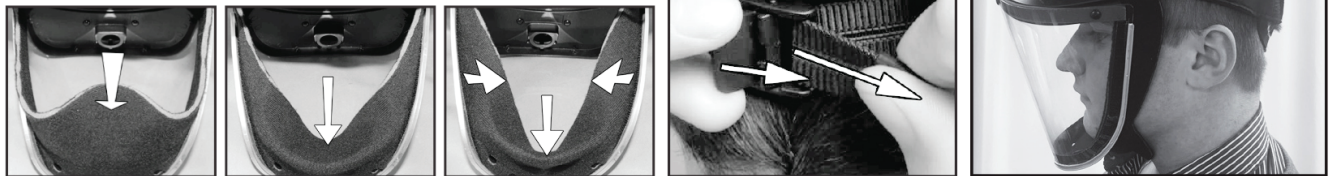


Fitting Faceseal Skirt: The skirt is attached to the side of the visor and tucks inside the edge of the cap. The edge of the skirt should be pressed against the Velcro® strip down the edge of the visor. The skirt should look as shown in the pictures when correctly fitted.



Fitting: With sufficient airflow checked as described and the Power Cable connected to the battery, place Powercap® Active™ on the head. It is important that the edge seals on the side of the visor fit closely to the side of the face. The wearers chin should rest on the lower circular section of the Seal Skirt, bringing the sides of the seal skirt to fold in on itself.

Adjust the sizing band at the rear of the cap for a snug and firm fit on the head.



General Use: The battery pack for the PowerCap® Active™ is designed to be mounted onto the moulded loops stitched onto the rear of the Cap.



PowerBox™1 can easily be removed for charging or replaced with a fully charged unit to allow for extended shift patterns. Slide the PowerBox™1 unit upwards, disengaging from the moulded loops. Remove the Power Cable before removing the battery from the cap.



When not in use the battery should be switched off and/or the plug disconnected to conserve the batteries. Avoid storage of the battery compartment in low temperature conditions, 5°C or lower, as this will have a detrimental effect on the power capacity of the batteries and could lead to "low flow" performance.

PARTS REPLACEMENT, CLEANING AND DAILY USE: Under normal conditions and assuming regular maintenance, the PowerCap® Active™ motor unit should last for 2 - 3 year. Replacements for all parts are available (contact JSP Ltd for advice); some parts may require the unit to be returned. Always check the airflow level before use, using the airflow indicator provided. Prior to use of the PowerCap® Active™, the user must check all components and satisfy themselves that it is suitable for use, if any parts need replacing follow instructions below.

Cleaning the Cap and Housing:

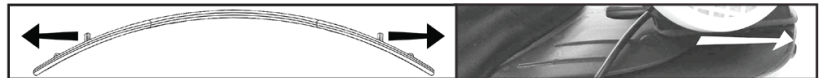
The Motor/Filter housing should be cleaned only with a lightly dampened cloth and mildest detergent. Care must be exercised to avoid any liquids entering the motor/fan assembly or damaging/wetting the inside of the filters.

Changing / Washing the Cap:

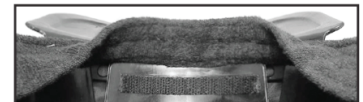
The Cap can easily be removed from the Drive-Unit whilst preserving all other parts. Unplug the PowerBox™1 from the Power cable. Remove PowerBox™1 from its moulded loops. Feed the Power cable through the channel at the side of the Cap.



Carefully spread both up-stands on the upper surface of the Visor-Carrier apart until they release the Drive Unit & Visor assembly.



When the PowerBox™1, Drive Unit & Visor assembly has been removed, remove the Cap's Impact Liner by unfolding the towelling sweatband. The Cap can be machine washed at 40°C. If the Cap requires replacing, do so using only a genuine replacement supplied from JSP Ltd or its distributors. During re-assembly, ensure that the impact Liner will rest between the rear of the rigid peak and the wearers head and will be covered by the towelling sweatband.



To replace the Drive Unit & Visor assembly, reverse the above process, ensuring that neither the Power cable nor the Seal Skirt is trapped between the Drive Unit and Cap Peak - The Power cable stays above the peak. The Seal Skirt ends go below the peak. Ensure that the Drive Unit & Visor assembly has firmly located into the recess in the Cap peak and that the locking hooks on the Cap Peak have securely fastened onto the Drive-Unit hooks.

Changing the Faceseal Skirt:

Peel the skirt away from the Velcro® around the periphery of the visor. To attach the new skirt to the cap, reverse the above process, starting with, and working outwards from the centre of the Visor and the Skirt.



SAFETY PRECAUTIONS:

- Powercap® Active™ should only be used in situations where EN 12941:TH1 and EN 812 apply.
- Powercap® Active™ does not provide protection against the effects of falling or thrown objects, or moving suspended loads.
- Powercap® Active™ should not be used instead of an Industrial Safety Helmet as specified in EN 397.
- The instructions inside Powercap® Active™ should be read and understood as well as these instructions before use.

WARNINGS!

- **THIS APPARATUS MUST NOT BE WORN WITH THE BLOWER UNIT SWITCHED OFF.**
- **WHEN SWITCHED OFF A RAPID BUILD UP OF CARBON DIOXIDE AND DEPLETION OF OXYGEN MAY OCCUR.**
- **WHEN SWITCHED OFF NO RESPIRATORY PROTECTION IS PROVIDED.**
- **THE APPARATUS SHOULD NOT BE USED IN EXPLOSIVE OR OXYGEN DEFICIENT ATMOSPHERES**
- **AT HIGH WORK RATES THE PRESSURE IN THE DEVICE MAY BECOME NEGATIVE AT PEAK INHALATION FLOW.**
- **USING THE APPARATUS IN HIGH WIND VELOCITIES MAY AFFECT FILTERING EFFICIENCY.**

Powercap® Active™ is not designed for use in atmospheres that are immediately hazardous to user hygiene or health, have less than 19.5% oxygen content, contain gases or toxic substances, or unknown compositions.

- DO NOT use Powercap® Active™ in an explosive atmosphere.
- DO NOT expose Powercap® Active™ to flames or sparks.
- DO NOT use Powercap® Active™ in confined spaces or areas of poor ventilation.
- DO NOT alter or modify the product in any way.
- DO NOT touch any moving part.
- DO NOT allow water or other liquids to enter the inside of the motor housing or battery compartment.

PowerCap® Active™ Lite: The visor is of lightweight construction and does not provide a high degree of eye protection. In situations where there is any risk to the eyes from projectiles (for example when strimming) approved type Safety Spectacles must also be worn in the normal way "within Powercap® Active™", i.e. Behind the visor. The Powercap® Active™ airflow will help to prevent "fogging" of both the Spectacles and the Visor.

PowerCap® Active™ IP : The visor is manufactured of Polycarbonate and has been tested according to EN166, the standard for Personal eye-protection.

As required by European Health and Safety requirements, the user is advised that when in contact with the wearers skin, the unit may cause allergic reactions to susceptible individuals. If this is the case the wearer should leave the hazard area, remove the unit and seek doctor's advice.

WARRANTY:

JSP Ltd warrants to its customers of PowerCap® Active™ that the device will be free from defects in materials and mechanical or electrical defects for a period of 24 months from date of purchase in accordance with EU Directive 1999/44/EEC.

This warranty is subject to: • PowerCap® Active™ being used solely for the purpose for which it is intended. • PowerCap® Active™ not being subject to misuse, damage, modification or repair. • The user must register the product to enact this guarantee.

To register the product, visit www.jspwarranty.com

JSP Ltd will replace defective parts as required at no charge. JSP Ltd's liability will not exceed the value of the original sales receipt for the device. In the event of valid claims under this warranty JSP Ltd will not be liable for loss of use of any of its products or for any incidental, indirect or consequential cost, expenses or damages incurred or claimed by the purchaser or any other user. No other terms are implied by this warranty but a purchaser's statutory rights are not affected. To make a claim under this warranty, please contact the retailer from which the PowerCap® Active™ was purchased.

BATTERY INFORMATION:

PowerBox™1

MODEL No. PCA-02

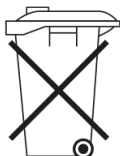
Battery Type: Li-ion

Capacity: 4000mAh, 3.7V, 14.8Wh

Battery Designation: 1LXP10/34/50-2

Input: Micro USB 5VDC, 1.0A

Output: 4.2VDC, 3.4A



Battery packs should be disposed of under local disposal regulations.
Batteries should not be disposed of in general waste bins.

MARKINGS:

	Manufacturers Trademark		Regulation 2016/425 on personal protective equipment, as amended to apply in GB
	Indicates that product manufacture meets international performance and quality management standards		Conformity to Regulation (EU) 2016/425
	Dispose of in accordance with local legislation		Requires twin filters.
	Some of the components of the device can be recycled		Date of manufacture
	Storage temperature and humidity ranges		Use by date
	See instructions for use. If the instructions for use recommendations are not adhered to, the protection afforded by the device may be severely impaired.		
EN12941:----	European standard for powered filtering respiratory devices and its year of publication	A#:----	Amendment to EN12941 and its year of publication
TH1	Indicates a 90% efficiency with an NPF 10	P SL R	A reusable solid and liquid particulate aerosol filter
EN812: ----	The European Standard number for Industrial Bump Caps and its year of publication		
53-63 cm	The size range of the helmet, head circumference		
EN166: ----	European standard for protective eyewear and its year of publication		
1	Optical quality (high)	3	Liquid Droplets
		B	Protection against medium energy impact against high speed particles



The packaging is suitable for recycling.
Please dispose of it in a responsible manner.



EU Countries Only

Do not dispose of electric tools together with household waste material.
By law they must be collected and recycled separately.



The Kitemark shows that the respirator is manufactured to a high degree of quality and regularly tested by BSI to ensure its continued high performance. For the consumer the Kitemark means quality and reliability, for procurement personnel it offers a real opportunity to demonstrate best practice, reduce risk and liability as well as achieve greater value for money.



Manufactured by JSP Ltd – Europe's leading independent manufacturer of "above the neck" Personal Protective Equipment (PPE) and acknowledged leader in industrial head protection.

RPMR-004-007



Axminster Tools, Axminster Devon EX13 5PH

axminstertools.com