

# **EASIAIR<sup>20</sup><sub>20</sub>™**

## **Powered Air Kit**

### Instructions For Use



## IMPORTANT

This Instructions For Use (IFU) manual must be read and fully understood before using the **EasiAir 2020 Powered Air Kit**.

It is imperative that these user instructions are strictly followed when using/operating the product(s) in question. Failure to follow these instructions may invalidate any warranty protection that is offered or available to you in respect of the product(s). Please refer to the terms of your purchase contract in respect of the product(s) for the specific details of such warranty cover.

This product is designed to protect your health and wellbeing. Failure to comply with these user instructions may adversely affect your health/wellbeing leading to illness or even death.

The protection level offered in this PAPR system is only as high as the lowest certified component and is subject to national PPE/RPE regulations, eg: blower unit is TH2, filter is TH3. Therefore, the complete system protection level will be TH2.

No recommendation is given as regards to the suitability of this product for your needs. If you have any questions regarding the suitability of this product to your task, please contact an occupational hygienist or call the manufacturer's technical help line for further information. The relevant contact details can be found on the back of this manual.

Please retain this manual with the product for future reference.

This PPE device complies with the following applicable standards:

### European CE Standards

- EN 12941:1998+A1:2003+A2:2008
- EN 166:2001 S

### Australian and New Zealand Standards

- AS/NZS 1716:2012
- AS/NZS 1337

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# 1. INTRODUCTION

The EasiAir 2020 Powered Air Kit circulates clean pressured air around a loose-fitting hood. The belt-mounted blower unit delivers air through a filter, via a hose, into the hooded headpiece. The constant supply of filtered air creates positive pressure inside the headpiece, which prevents external contaminated air from entering the user's breathing zone.

This respirator must be used strictly in accordance with this user instruction manual.

The user must read and understand this instruction manual to be able to use the respiratory protective system correctly. Any questions should be directed to the manufacturer for further information. The relevant contact details can be found on the back of this manual.

# 2. RANGE OF APPLICATIONS

The EasiAir 2020 Powered Air Kit is designed to allow safe breathing in an environment contaminated with airborne pathogens and offers protection from general particulate hazards.

When assembled correctly, properly fitted and equipped with the correct filter, this respiratory device will give a high degree of protection against the inhalation of bacteria and virus particles. For complete protection, the EasiAir 2020 Powered Air Kit should be worn in conjunction with other personal protective equipment (PPE) appropriate for the intended task and environment.

This device is not classified as "Breathing Apparatus" and cannot be used in oxygen depleted atmospheres, or where toxic gases are present.

The EasiAir 2020 Powered Air Kit must not be used in the following conditions:

- Atmospheres that have an oxygen content of less than 19.5%.
- Areas subject to high winds.
- Confined spaces, or unventilated areas.
- Near open flames, sparks or areas with danger of explosion.
- Atmospheres containing unknown respiratory hazards or harmful gases.

# 3. APPROVALS

## CE APPROVALS

The EasiAir 2020 Powered Air Kit has been designed and manufactured to comply with EN 12941:1998+A1:2003 +A2:2008 as a TH2 P R SL (P3 equivalent) respiratory protective device.

BS4275 (Guide to implementing an effective respiratory protective device program), which the user is advised to read, defines such a device as offering an Assigned Protection Factor (APF) of 20. The EasiAir 2020 Powered Air Kit can only provide this level of protection when used with genuine filters provided by the manufacturer marked "EasiAir" and in conjunction with a compatible air hose and either FSM69 impact resistant reusable premium full soft hood (EN 166:2001 S hood) or FSM51 impact resistant single use full soft hood (EN 166:2001 S hood).

The EasiAir 2020 blower unit is manufactured under ISO 9001:2015 Quality System.

EU declaration of conformity present on the website: [www.fullsupportgroup.com/DoC](http://www.fullsupportgroup.com/DoC)

## AS/NZS APPROVALS

The Easiair 2020 PAPR Systems has been designed and manufactured to comply with AS/NZS 1716:2012 PAPR-2.

The PAPR system can only provide this level of protection when used with filters provided by the manufacturer marked “Easiair 2020” and “AS/NZS 1716:2012”.

Genuine Easiair 2020 hoods are certified to EN 166 S in compliance with AS/NZS 1337.

The PAPR Systems are manufactured under ISO 9001:2000 Quality System.

## 4. CONDITIONS OF USE

The Easiair 2020 Powered Air Kit is for use by trained personnel only. Training should be provided by the manufacturer, a qualified delegate, or a competent individual either in person or online.

Before assembling, visually inspect all components for damage or wear.

Ensure that all components are genuine and assembled according to this IFU manual.

Ensure that the hood and belt are fitted appropriately to the user. The protective factor of the complete system is reduced if the seal of the headpiece is not fitted properly. Only if the headpiece is fitted correctly is the device able to operate effectively.

To avoid dislodging, the blower unit should be worn behind the wearer, in the small of their back.

The device is unlikely to cause allergic reactions to the wearer. However, in the unlikely event of a reaction, the user should immediately leave the contaminated area, remove the unit and seek medical advice.

It is essential that you do **not**:

- Attempt to modify, alter or tamper with any of the components in any way.
- Touch any moving parts of the unit while in operation.
- Allow water or other liquid substances into the device.

### ATTENTION!

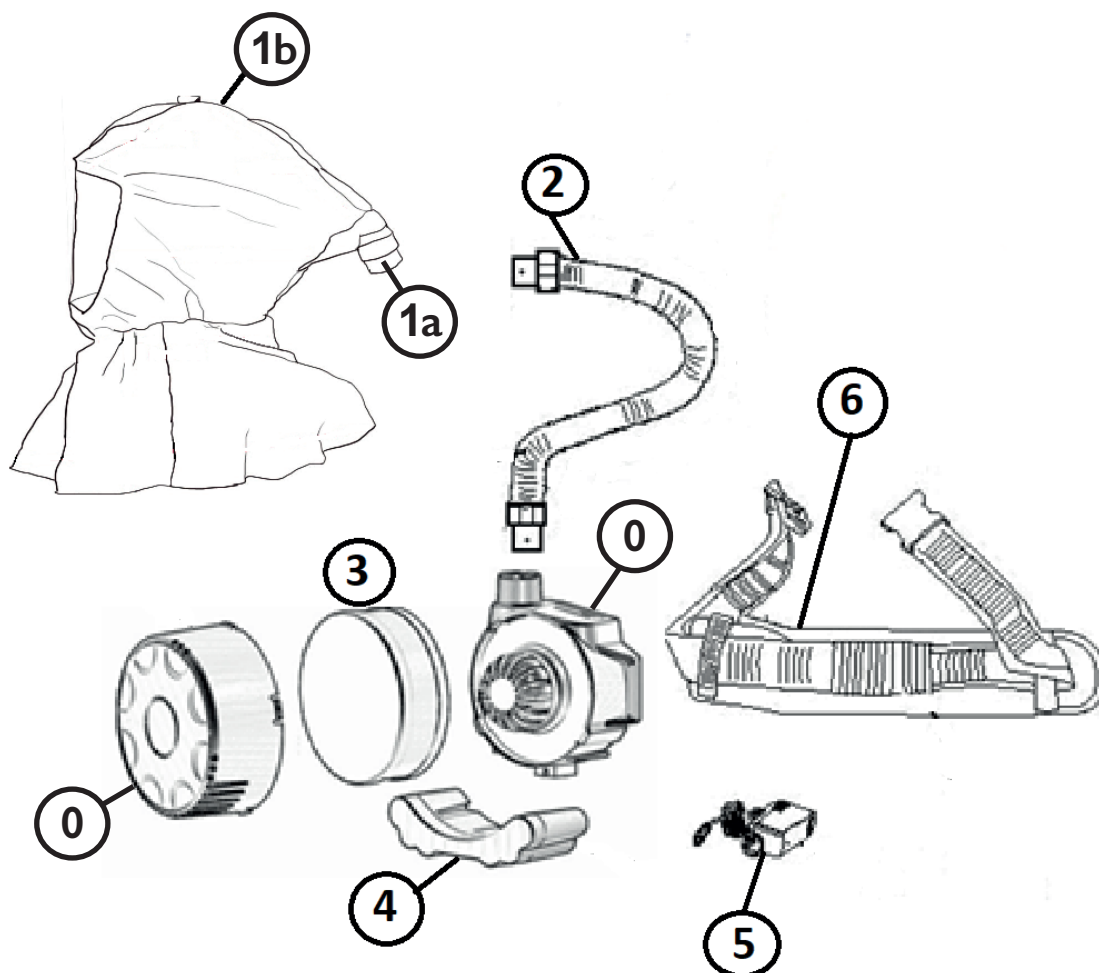
If any of the conditions outlined in this IFU document are not kept or followed, your health may be at risk and your warranty protection in respect of the product(s) will be automatically invalidated.

The user is strongly advised to leave the contaminated area immediately if:

- The warning alarm sounds.
- Breathing becomes difficult.
- Dizziness or distress occurs.
- Any part of the system becomes damaged.
- Airflow into the headpiece decreases or stops.
- Contaminant can be smelled or tasted inside the headpiece.

## 5. UNPACKING

Check that the package is complete and that no part has been damaged due to transport or storage.



### EasiAir 2000 Powered Air Kit

Item No.	Description	Product Code
0	EasiAir 2000 Blower Unit	FSM48
1a	EasiAir 2000 Headgear	FSM52
1b	EasiAir 2000 Reusable Premium Full Soft Hood	FSM69
2	EasiAir 2000 Breathing Hose	FSM46
3	EasiAir 2000 Filter	FSM40
4	EasiAir 2000 Standard Battery	FSM42
5	EasiAir 2000 Battery Charger	FSM44
6	EasiAir 2000 PVC Decon Belt	FSM47

## 6. BEFORE USE

Every time before using the device, you should check that:

- All components are in good condition, with no visible damage (holes, scratches, tears, etc.). Any damaged or worn parts should be replaced before assembling.
- The unit has been assembled correctly according to the following instructions (see 7).
- There is sufficient airflow (see 6.1).
- The battery is charged (see 6.2/3).
- The alarm is working (see 6.4).

If any problems arise during the pre-use checks, please consult chapter 9 of this document.

### 6.1 Testing the airflow

To ensure the EasiAir 2020 Powered Air Kit is working efficiently, an airflow test should be taken.

- Disconnect the air hose from the blower unit.
- Attach the airflow indicator to the blower unit air outlet.
- Switch on the device.
- Holding the unit at eye level in a vertical position, watch to see if the ball reaches the minimum flow rate level.

### 6.2 Charging the battery

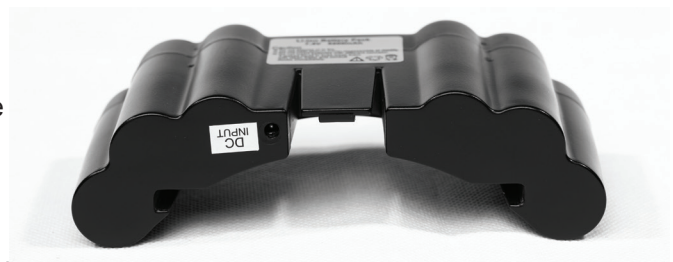
To ensure the EasiAir 2020 Powered Air Kit is working at maximum capacity, it is recommended that a fully charged battery be equipped at the start of a shift.

To charge the battery:

- Plug the supplied charger into a power supply of the correct voltage.
- Plug the other end into the battery inlet located at the backside of the battery. (The battery can be charged whether fitted to or disconnected from the blower unit)
- The charging state is indicated by an LED light located on the plug. When red the battery is charging. When green the battery is charged.

#### **WARNING:**

To prolong the life of the battery, it is advisable to disconnect it from the power supply once fully charged.





## 6.3 Testing the battery

To test the level of an equipped battery:

- Turn on the blower unit.
- If the battery light remains red after 3 seconds it is running low and needs charging.

## 6.4 Testing the alarm

If the Manufacturer's Minimum Design Flow (MMDF) cannot be achieved, the battery is too low, or the filter needs changing, an audible/visual alarm will be triggered. To ensure your EasiAir 2020 Powered Air Kit is working, the alarm should be tested before every use.

- Turn on the device.
- Place the palm of your hand over the air outlet and hold.
- An audible/visual alarm should trigger.
- Turn off the device to reset.



# 7. ASSEMBLY & DONNING

The following instructions should be followed closely in order to maximise the efficiency of your device. If your unit is not assembled or fitted correctly you may not be protected.

## 7.1 Battery

When supplied, your unit's battery may hold a small charge. Before first use, the battery should be run flat and then charged until fully charged. A fully charged battery should last up to 11 hours when in continuous use. From empty, a battery should take 4-6 hours to charge.

Ensure the battery is fully charged before use, using the battery charger provided (see 6.2/3).

To remove the battery:

- Take the blower unit in both hands, with the rear side facing you.
- Open the battery latch upwards with your thumb.
- Slide the battery forward to disconnect from the unit.

To attach the battery:

- Ensure the battery is the correct way around in relation to the blower unit.
- Slide the battery along the guide rails.
- You should hear an audible 'click' as the battery locks into place.





## 7.2 Filters

The Easiair 2020 Powered Air Kit is only compatible with genuine Easiair filters supplied by Full Support Healthcare Ltd. Using any other filters will invalidate your warranty and could be a serious risk to your health.

Easiair filters have a storage life of 5 years from production if stored in accordance with the manufacturer's instructions (see section 10). Once open, it is recommended that a filter be disposed of and changed every 6 months, or once soiled/clogged – whichever comes sooner.

It is essential that the filter type used is suitable for the hazardous environment you will be working in. Please consult with your Health & Safety Manager or an occupational hygienist if you are unsure.

Filters must be regularly checked (see section 6) and replaced as required. Filters may NOT be cleaned or washed and should be stored in their original packaging or a blower unit to avoid contamination.

### Fitting a new filter.

- Align the filter with the aperture of the unit and push into position.
- Place the blower unit casing on top of the filter, aligning the location slots with the indicator arrows.
- Push together and rotate clockwise until it 'snaps' into place.

### Removing a soiled filter

- Twist the filter cover anti-clockwise approximately 25mm until it reaches its stopping point and lift off.
- Whilst wearing gloves, carefully remove the filter from the unit and dispose.
- Soiled filters should be disposed of according to your organisation's policy for biological hazardous waste.

## 7.3 Belt

The Easiair 2020 Powered Air Kit comes with a wipe-clean PVC adjustable belt.

- Attach the blower unit onto the belt by passing the inner belt strap through the loops at the back of the device.
- Put the belt around your waist with the blower unit to the back and fasten the two belt ends together.
- Tighten/loosen to fit securely around your waist.



### WARNING!

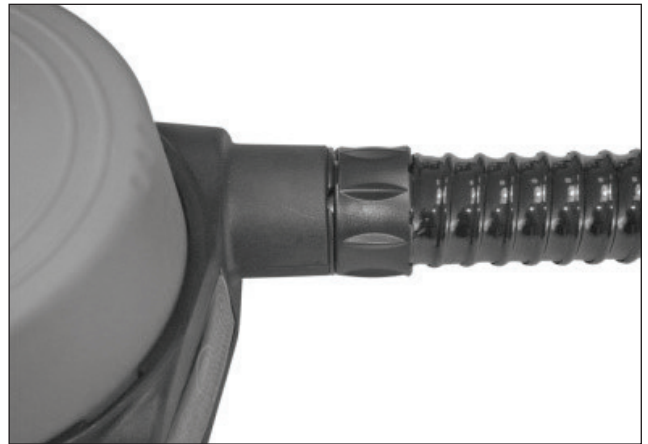
It is essential that the classification markings of your filter match those of your device.  
The Easiair 2020 Powered Air Kit is only compatible with genuine Easiair filters.

## 7.4 Hose

The Easiair 2020 air hose can be used either way round to avoid user error.

Disposable hose covers are available to speed up the cleaning process.

- Sheathe the hose in an Easiair hose cover (if using).
- Align the pins of the hose bayonet connector (on either end) with the slots in the air outlet of the blower unit.
- Push together and twist in a clockwise direction until it 'clicks into place'.
- Repeat this process with the air inlet on the headpiece to connect the hood.
- To remove, twist anti-clockwise and pull away from the unit/hood.
- Dispose of the hose cover (if used).



## 7.5 Power

The Easiair 2020 blower unit has an adjustable flow rate of either 180 l/min or 220 l/min. The microprocessor inside the unit will automatically regulate the motor speed to the desired amount and compensate for any the state of the battery and any filter clogging.

If the microprocessor cannot maintain the appropriate airflow, the unit will alarm. Please see section 6.4 for more information.

- Hold Down the central power button on the control panel to turn ON/OFF the device.
- Adjust the airflow rate to comfort by pressing the central power button once on the control panel.

## 7.6 Hood

The Easiair 2020 Powered Air Kit comes with a headgear system and detachable impact resistant hood.

The Easiair 2020 hood is fully adjustable for head sizes between 535-600mm in circumference. Disposable comfort bands are available to order, and should be fitted to the internal suspension cradle before donning (if used).

- You must ensure the device is switched on and working before attempting to don the hood
- Do NOT remove the white plastic 'arms' attached to the side of your headgear. These are integral for attaching/detaching replacement hoods.

## 7.6.1 Attaching the hood

- Locate the two holes at the back of the hood and slip the headgear's air intake through the larger top hole and the hood circumference adjuster through the smaller bottom hole.
- Locate the clear plastic tabs inside the hood either side of the visor, and the white plastic 'arms' either side of the headgear. Slide the clear plastic tab into the grip of the white plastic arm.
- Attach disposable comfort bands (if used).

## 7.6.2 Donning the hood

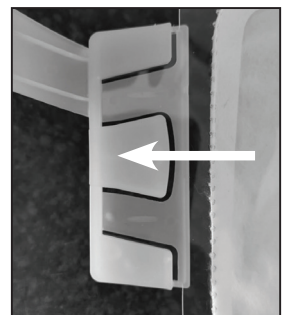
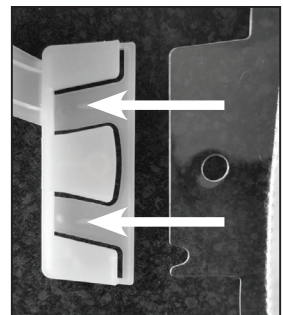
- Ensure device is switched on.
- Loosen the hood circumference adjuster clasp on the rear of the hood.
- Don the assembled headgear/hood and adjust the cape, unrolling the shroud over any other PPE worn.
- Tighten the hood circumference adjuster clasp until comfortable and secure.

## 7.6.3 Doffing the hood

- Loosen the hood circumference adjuster clasp on the rear of the hood.
- Pull over your head using the loop on top of the hood.
- Turn off the device.

## 7.6.4 Detaching the hood

- Unclip the hood from the headgear by gently lifting the central tabs of the white plastic 'arms' and sliding the clear plastic tabs away.
- Stretch the hood material over the air intake and hood circumference adjuster and remove.
- Detach disposable comfort bands (if used).



# 8. CLEANING & MAINTENANCE

This guide should be used in conjunction with your organisation's Health & Safety policy. Suitable PPE should be worn during the decontamination procedure, depending on the substances used and your Health & Safety policies.

It is recommended that the blower unit, belt, filter housing, hose and headpiece be cleaned after each use to reduce the risk of cross-contamination. Filters cannot be cleaned and should be disposed of in accordance with your organisation's policies, once soiled/clogged or after 6 months – whichever comes sooner (see 7.2).

Do not soak or submerge during cleaning.

### Before cleaning:

- Doff the equipment.
- Ensure suitable PPE is equipped.
- Visually inspect all components for damage and fatigue.

**WARNING:**

**If any components are cracked, torn or damaged, they should be replaced immediately. Failure to do so may negatively affect the performance and protection of the respirator, potentially resulting in user ill-health or even death.**

**Surface dirt – Neutral detergent**

For surface dirt, the EasiAir 2020 Powered Air Kit can be wiped down with a soft cloth dampened with a neutral detergent solution.

- Detach the belt and headpiece, and dispose of hose cover (if used) – leaving the hose still attached to the blower unit.
- Wipe down the headpiece – working your way from inside to out.
- Wipe down the belt.
- Wipe down the blower unit with hose.
- Remove the battery and wipe down the battery and battery cavity.
- Rinse all components and leave to air dry before reassembling.

**Deep clean – Chlorine wipes/Chlorine solution**

To decontaminate, the EasiAir 2020 Powered Air Kit can be wiped down with Chlorine wipes or a soft cloth dampened with a disinfectant solution (eg: a 0.5% chlorine solution or a solution containing 5000 ppm available chlorine) with a 1 minute contact time.

- Detach the belt and headpiece, and dispose of hose cover (if used) – leaving the hose still attached to the blower unit.
- Wipe down the headpiece – working your way from inside to out.
- Wipe down the belt.
- Wipe down the blower unit with hose.
- Remove the battery and wipe down the battery and battery cavity.
- Rinse all components and leave to air dry before reassembling.

Single use disposable hoods are also available:

**Order code FSM51** (pack of 10 hoods).

## Maintenance

You should inspect your equipment regularly and keep records, to ensure continued optimal use. The following table can be used to track maintenance of your device.

**Serial Number:**

**Date Commissioned:**

	Maintenance required?	Date of Action	Fit for use?	Name and Signature
Cleanliness			Yes / No	
Scratches			Yes / No	
Valve/Diaphragm			Yes / No	
Seal			Yes / No	
Filter check			Yes / No	
Visor/hood			Yes / No	
Belt			Yes / No	
Battery capacity			Yes / No	
Airflow test			Yes / No	
Alarm test			Yes / No	

## 9. FAULT FINDING

Please see section 6.1-6.4 for fault testing. If a fault warning occurs whilst using your EasiAir 2020 Powered Air Kit, please exit the contaminated area immediately and consult the table below:

Fault	Probable reason	Recommendation
The blower unit does not work at all.	Entirely discharged battery (verify if the blower unit works with another charged battery).	Charge the battery (if problem persists, change the battery).
	Faulty motor, circuit board or connector.	Contact your supplier.
Low airflow.	Blocked air hose or airduct.	Check and remove blockage.
	Leakage.	Check all seals, connectors and the air hose. Make sure that air cannot leak through holes or tears.
	Battery is not charged enough.	Charge the battery (if problem persists, change the battery).
	Blocked filter.	Change the filter.
Short operating time.	Clogged filter.	Change the filters.
	Battery is not charged properly.	Charge the battery (if problem persists, check the battery).
Battery cannot be charged.	Battery contact is damaged.	Check the battery contact.
	Charger is faulty.	Contact your supplier.
Battery cannot be charged sufficiently.	Battery is worn out.	Install a new battery.

## 10. STORAGE

When not in use, all components should be stored in the container provided. Your EasiAir 2020 Powered Air Kit should be stored out of direct sunlight, not in contact with solvents or liquids, and away from heavy items. Do not store outside the temperature range of +0°C to +40°C or above humidity levels of 75%RH.

### WARNING!

EasiAir filters have a shelf life of 5 years from date of manufacture.

## 11. TECHNICAL DATA

The Easiar 2020 Powered Air Kit is a light-weight, easy to use powered air purifying respirator kit. It comes with a reusable particulate filter, affording reliable protection against viruses, particulates and aerosols.

Approvals	EN 12941:1998 +A1:2003 +A2:2008 EN 166:2001 S Hood AS/NZS 1716:2012 PAPR-P2 AS/NZS 1337
Airflow	180 l/min 220 l/min
Battery	Rechargeable Li-ion 7.4V/5200mAh
Operating time	11 hours (at 180 l/min)
Filter Type	CE: P R SL (P3 equivalent) AS/NZS: PAPR-P2
Charging time	Approx. 4-6 hours
Weight	960g (blower unit with filter)
Alarm	Optical alarm (flashing LED lights) Acoustic alarm (>96 dBA)
Assigned Protection Factor	20 APF
Optimal operating temperature	0°C to +40°C
Belt length	Up to 125cm
Hood circumference	535mm - 600mm

## 12. WARRANTY

Your Easiar 2020 blower unit is guaranteed for a period of 12 months from the date of purchase, against mechanical or electrical defects. Your Easiar 2020 battery is guaranteed for a period of on 12 months from the date of purchase.

Full Support Healthcare Ltd undertake to exchange or repair, without charge, any part found to be defective within this period. This guarantee does not affect your legal rights, does not cover normal wear and tear, and is subject to the device having:

- been used solely for its intended purpose by a trained individual, following the instructions as outlined in this document.
- not been subject to misuse, modification, accident or repair.

**For further information, please contact the manufacturer.**



## 13. ACCESSORIES

DESCRIPTION	CODE
EasiAir 2020 Powered Air Purifying Respirator Kit	FSM39
EasiAir 2020 Filter (x6)	FSM40
EasiAir 2020 Standard Battery	FSM42
EasiAir 2020 Battery Charger	FSM44
EasiAir 2020 Sweatband (Pack of 2)	FSM45
EasiAir 2020 Breathing Hose	FSM46
EasiAir 2020 PVC Decon Belt	FSM47
EasiAir 2020 Blower Unit	FSM48
EasiAir 2020 Disposable Hose Cover (x50)	FSM50
EasiAir 2020 Single Use Full Soft Hood (x10)	FSM51
EasiAir 2020 Headgear with Airduct	FSM52
EasiAir 2020 Reusable Premium Full Soft Hood	FSM69



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