

USER INSTRUCTION MANUAL

COMPACT **air**

respiratory protection equipment

POWERED AIR PURIFYING RESPIRATOR



**Products Which Improve
Quality, Productivity, Safety, & Performance**



WELDING AND SAFETY PRODUCTS

85 Independence Drive, Taunton, MA 02780

Instruction Manual P/N M-CA-AB Rev D

Definition of Safety Signal Words per ANSI Z 535.4



Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



Do not use this product until you have read and understood this instruction manual which is an essential part of the COMPACT AIR™ PAPR System.

If the equipment is not properly assembled, connected, and used in strict conformance with this instruction manual, contaminated air could be drawn in the system, resulting in exposure, which may lead, to serious bodily injury or loss of life.

Use by unqualified or untrained persons, or use other than in accordance with this instruction manual, is dangerous and could expose you to serious bodily injury or loss of life.

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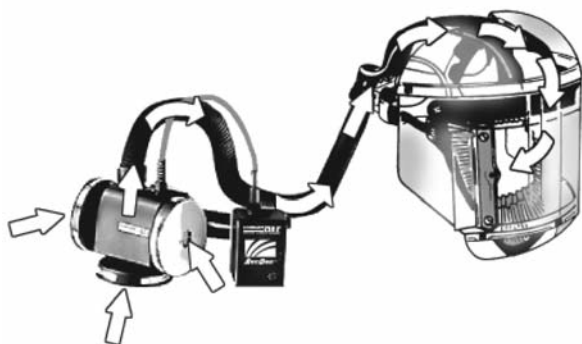
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AIRSHIELD



AIR FLOW DIAGRAM

Typical Applications:

Paint Spraying

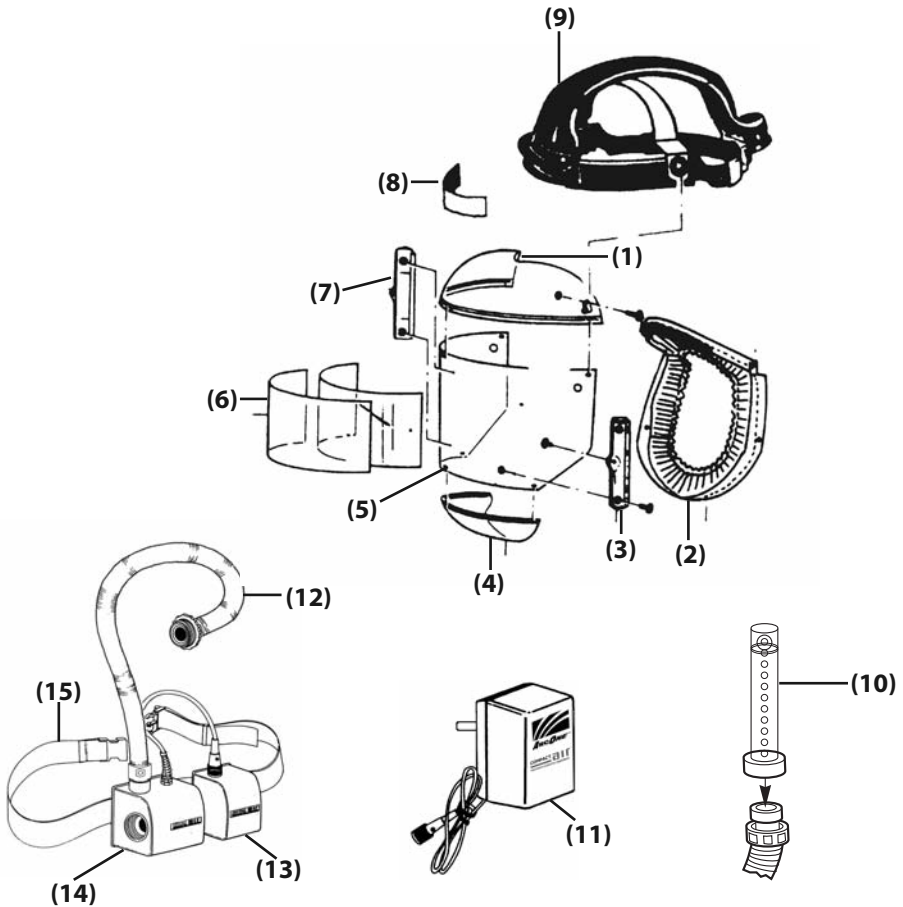
Degreasing

Sanding

Staining

Grinding

Working with Chemicals



Complete ARCONe Compact Air™ PAPR System w/Safety AirShield

- (1) Top Shield
- (2) Face Seal
- (3) Left Clamp for Disposable Splatter Protector
- (4) Bottom Clear Shield
- (5) Front Clear Shield
- (6) Disposable Splatter Protector
- (7) Right Clamp for Disposable Splatter Protector
- (8) Sweatband
- (9) Headgear with Airduct Assembly
- (10) AirFlow Indicator
- (11) Charger
- (12) Breathing Tube
- (13) Battery
- (14) Blower Unit
- (15) Comfort Belt
- (16) (3) Filters/Cartridges (Not Shown)
- (17) Carrying Case (Not Shown)

AIRHOOD



AIR FLOW DIAGRAM

Typical Applications:

Paint Spraying

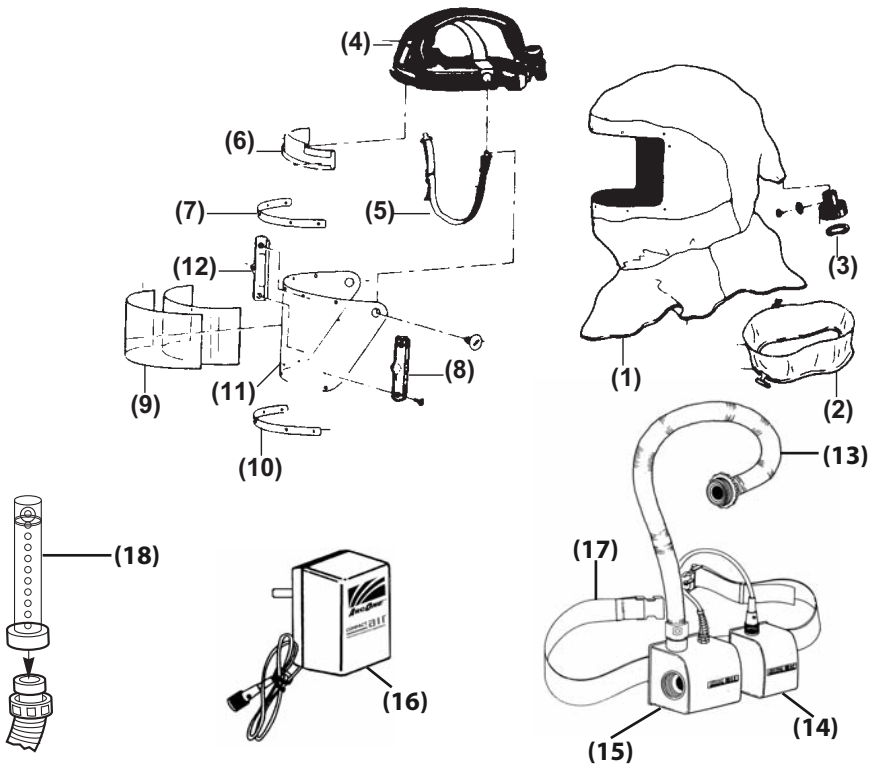
Degreasing

Sanding

Staining

Grinding

Working with Chemicals



Complete ARONE Compact Air™ PAPR System w/Safety AirHood

- (1) Protection Hood
- (2) Neck Collar
- (3) Breathing Tube Connector
- (4) Headgear with Airduct Assembly
- (5) Chin Support
- (6) Sweatband
- (7) Top Metal Strip
- (8) Left Clamp for Disposable Splatter Protector
- (9) Disposable Splatter Protector
- (10) Bottom Metal Strip
- (11) Front Clear Shield
- (12) Right Clamp for Disposable Splatter Protector
- (13) Breathing Tube
- (14) Battery
- (15) Blower Unit
- (16) Charger
- (17) Comfort Belt
- (18) AirFlow Indicator
- (19) (3) Filters/Cartridges (Not Shown)
- (20) Carrying Case (Not Shown)

1.0 General Information

1.1 Introduction

Congratulations! You have purchased the ultimate in comfortable powered air respiratory protection equipment manufactured today. The complete **ARCONE™ Compact Air™ Powered Air Purifying Respirator System** is offered in two distinct headtops: (1) **the AirShield** is designed with a panoramic clear shield for optimum visibility while working. (2) **the Airhood** is designed with a flexible, light weight, polyurethane cape which gives full coverage to the head and shoulders.

The Compact Air Powered Air Purifying Respirator System blows a supply of safe filtered air over the face, creating a protective positive pressure inside the respirator headtop, that keeps out harmful gases, vapors and particulates, which also offers additional comfort when working conditions are hot and humid.

Our goal is to make your demanding job comfortable and safe. **The Compact Air PAPR** is not only engineered for safety and functionality but also for light weight comfort. You can wear the **Compact Air PAPR** system all day with no worry of fatigue or respiratory stress.

To assure your complete satisfaction we ask you read this user and safety instructions thoroughly before using the **ARCONE Compact Air PAPR** respirator system.

1.2 Operating Principles

The Compact Air PAPR system is used in an environment where protection is required against harmful particles, mist, vapors and gases. The **Compact Air blower** in conjunction with the respirator headtop eliminates much of the wasted motion and discomfort associated with environments such as paint spraying, working with chemicals, degreasing and staining, or grinding and sanding. You will receive a constant flow of fresh air, which will allow you to comfortably remain safely in your work environment for a longer period of time.

The Compact Air blower unit supplies an over capacity at a minimum 170 Liters per minute of filtered air to the headtop, and allows the user to breathe without having to overcome the resistance of the filters. Considering that an adult person requires an average of 45 liters of air per minute, the over capacity ensures a slight overpressure and thus a high degree of protection.

The **Compact Air PAPR** system is powered by a rechargeable NiCad battery, which is encased in durable lightweight plastic case. A clip is provided for easy and secure attachment to the adjustable belt. The battery provides protection for an average 8 hour shift. The battery is delivered in the uncharged state; the charging time is a standard overnight charge of 14 hours. (See Section 2.3 Battery Charging).

1.2 Operating Principles Cont.

The Compact Air blower unit should be fitted with filters appropriate to the application and selected by a competent person with a full knowledge of respiratory hazards, and their concentrations that are applicable in the workplace. To ensure adequate protection, it is essential that the blower unit is correctly configured and that the correct filters are used. (See Section 2.2 Filter/Cartridges)



WARNING

If there is any doubt of final determination of respirator applicability and filter selection, it must be made by an onsite safety specialist or industrial hygienist (or contact the National Institute of Occupational Safety and Health).

1.3 Respirator Approvals

The **Compact Air PAPR System** as described in this instruction manual has been approved by the following agencies:

- NIOSH 42 CFR Part 84 (USA)
- CE - EN 146 and EN 12941 (Europe)

1.4 Face Protection Approvals

The **ARCONE** front protection lens as described in this instruction manual has been tested to the following standards:

- ANSI Z87.1 - 1989 (USA)

2.0 System Use and Maintenance

2.1 Preparations for Safe Use

Before using the **Compact Air PAPR System**, you should ensure that all conditions for safe use have been satisfied.

- The space in which the **Compact Air PAPR** system is to be used must contain at least 19.5% oxygen and must not contain any explosive gases or vapors.
- In enclosed spaces where there is a risk of oxygen deficiency, use of the Compact Air system should be avoided.
- Operating temperature range 14° F to 122° F.
- Only trained personnel, who are fully aware of hazard applications, shall determine the type of filter usage in the working environment.
- Check before use that the free flow of air is not obstructed by blocked filters or other causes.
- Check that the correct filter cartridges have been selected.
- Check that the **Compact Air PAPR** system is working properly by means of the flow meter supplied. (See Section 2.4 Air Flow Test)

2.2 Filters/Cartridges

Before connecting the filter to your **Compact Air PAPR** System, read the NIOSH approval labels found enclosed with this manual.

Different types of filter/cartridges must be used according to the nature of the particular hazardous substances to be encountered. (SEE BELOW)

Filter Media:

HE - High Efficiency Particulate Air Filter for Powered, Air Purifying Respirators

Approved for respiratory protection against Particulate Aerosols.

NOTE: HE FILTERS SHOULD NEVER BE WORN FOR PROTECTION AGAINST GASES OR VAPORS. REFER TO SPECIFIC NIOSH FILTER APPROVAL LABELS FOR SPECIFIC INFORMATION ON USAGE AND LIMITATIONS.

HE/OV/CL/HC/SD - Combination Cartridges

Approved for respiratory protection against Chlorine or Hydrogen Chloride or Sulfur Dioxide or Organic Vapors and /or Particulate Aerosols.

NOTE: REFER TO SPECIFIC NIOSH CARTRIDGE APPROVAL LABELS FOR SPECIFIC INFORMATION ON USAGE AND LIMITATIONS.

- Always fit Three (3) identical filter/cartridges to ensure an evenly distributed airflow.
- A different or older type of filter/cartridge may “Break Through” sooner rendering the filter action of the **Compact Air System Totally Ineffective.**
- Used filter/cartridges **CANNOT** be cleaned.
- **ALWAYS** replace filter/cartridges with new ones, if in doubt.

2.2 Filters/Cartridges Cont.



WARNING

DO NOT Overtighten the filter/cartridge. Overtightening could result in distortion or displacement of the seal allowing contaminated air into the system, resulting in serious bodily injury or loss of life.

- Remove the screw caps from each of the filter/cartridges and retain them in a safe place for later use. Ensure that the filter/cartridge threads are clean.
- Check to make sure that there is a rubber O-Ring inserted into each inlet before screwing the filter loosely into each of the three inlets. When all three filters are in place, hand tighten them so that an airtight seal is achieved between the neck of each of the filter/cartridge and the threaded sockets of the blower unit.
- A plastic plug (depending on the type of filter/cartridge used) is supplied with each filter/cartridge. Ensure that the plug is removed before using the system. (See Figure 1) Keep the plugs in a safe place for later use.

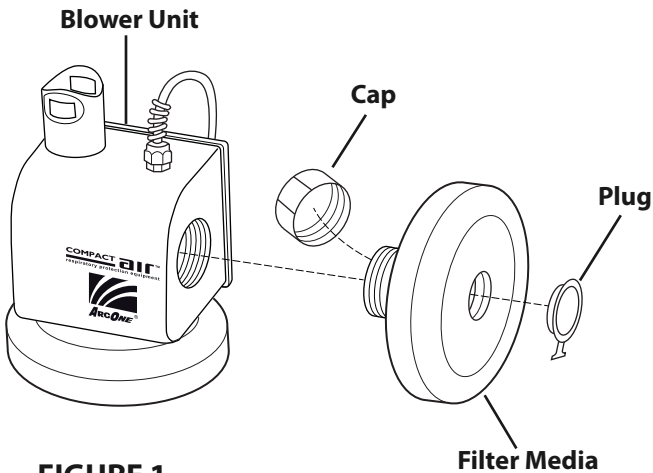


FIGURE 1

Filter Media

2.3 Battery Charging

Battery Models with Fuse (Fig.2)

1. Discharge the **Battery** (if not discharged):
 - A) Connect **Battery** to blower unit.
 - B) Press the **On/Off Button Switch** to turn on the **Battery**.
 - C) Wait until blower fan stops.
2. Connect the **Battery** to the **Charger** by plugging the **Charger Lead** into the top of the Battery. Gently twist the connector clockwise to lock into place.
3. Unscrew the Fuse Cap and ensure the fuse is present and the fuse link inside the fuse is not broken. Replace if the fuse link is broken.
4. Plug the **Charger** into 110-120 Volts AC outlet.
5. Charge the **Battery** for 14 hours, only.

Attention

Do not charge the Battery for more than 14 hours; doing so will damage the battery. Partial discharge and recharge will shorten battery life.

Attention

Partial discharge and recharge will shorten Battery life.

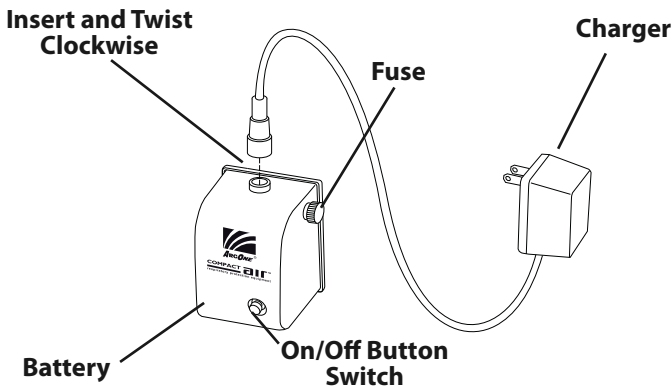
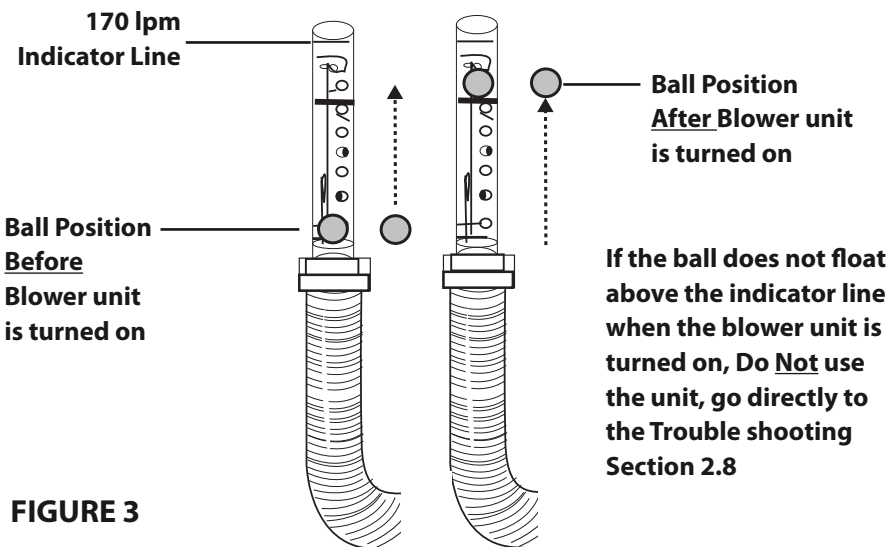


FIGURE 2
(Model No. CA-BAT-01)

2.4 Air Flow Test

In order to assure that the **Compact Air PAPR** is operating properly the following **Operational Inspection** should be performed with the provided flow indicator.

- If any components are missing or damaged, replace them prior to using the **Compact Air PAPR** system. Ensure that the filter/cartridges are fitted properly into the blower unit.
- Confirm that the battery is fully charged (See Section 2.3), the power lead from the blower unit is plugged into the battery, and the plastic plug has been removed from all the filters. Check the blower unit and filter airflow as follows:
- At the end of the breathing tube, (the end that connects to the back of the headtop), insert the base of the airflow indicator vertically into the breathing tube.
- Turn the battery **ON** and ensure that the ball floats above the minimum level of the indicator line. (170 lpm or 6 cfm)
- **NOTE:** If the airflow indicator float test fails, install new filters/cartridges and dispose of the inefficient filter cartridges in accordance with state, local and federal ordinances. If the problem still exists, refer the trouble shooting section for additional suggestions. (See Section 2.7)
- After confirming adequate airflow, you will be ready to attach the **Compact Air PAPR** system to the headtop assembly. (See Section 2.5 or 2.6)

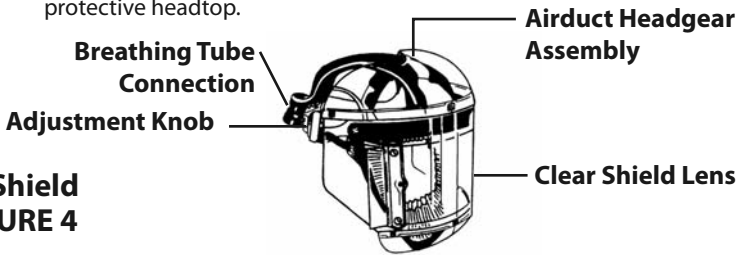


2.5 AirShield Assembly

2.5.1 AirShield Breathing Tube and Airduct Headgear

Your **ARCONE** AirShield comes completely assembled. Before connecting the breathing tube to the AirShield see Figure 4.

- Connect the breathing tube to the back of the AirShield, make sure that the rubber O-Ring on the outside of the breathing tube is not damaged or deteriorated.
- The headgear is easily adjusted by means of a knob located in the back. Push in and turn clockwise. All adjustments can be performed as you wear your protective headtop.



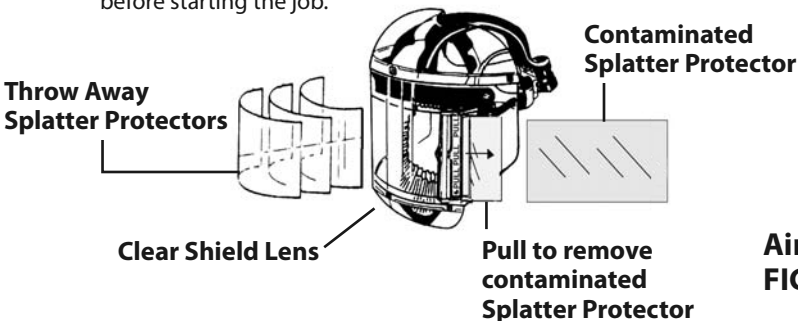
**AirShield
FIGURE 4**

2.5.2 AirShield Splatter Protection Window Replacement

The three (3) throw away splatter protectors are designed to fit against the clear shield lens to protect the lens from damage or splashes during use. Remove the splatter protector when it becomes contaminated.

(See Figure 5)

- Pull on the contaminated splatter protector by pulling it in the direction that is marked "PULL" on the clamp.
- Always remove a contaminated splatter protector as soon as possible.
- Ensure that there is always a splatter protector attached to the clear shield lens before starting the job.



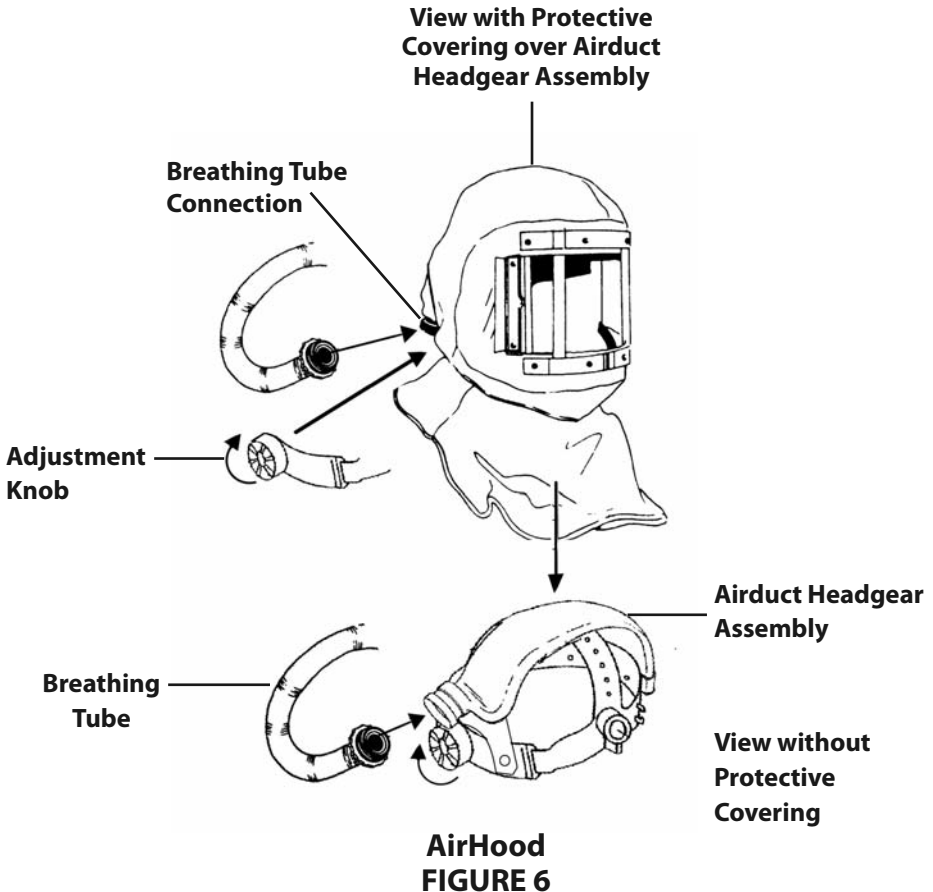
**AirShield
FIGURE 5**

2.6 AirHood Assembly

2.6.1 AirHood Breathing Tube and Airduct Headgear

Your **ARCONE** AirHood comes completely assembled. Before connecting the breathing tube to the hood see Figure 6.

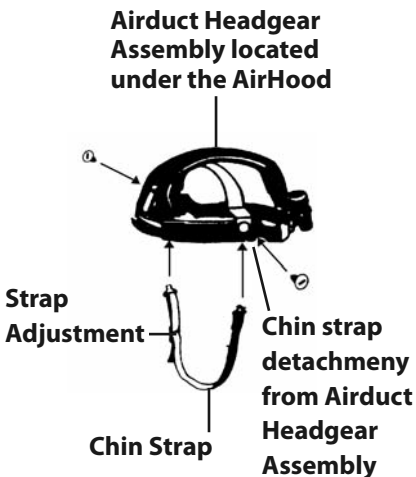
- Connect the breathing tube to the airduct on the back of the hood, make sure the rubber O-Ring on the outside of the breathing tube is not damaged or deteriorated.
- The headgear is easily adjusted by means of a knob located in the back, you can locate the adjustment knob by feeling through the protective hood. Push in and turn clockwise. All adjustments can be performed as you wear your hood.



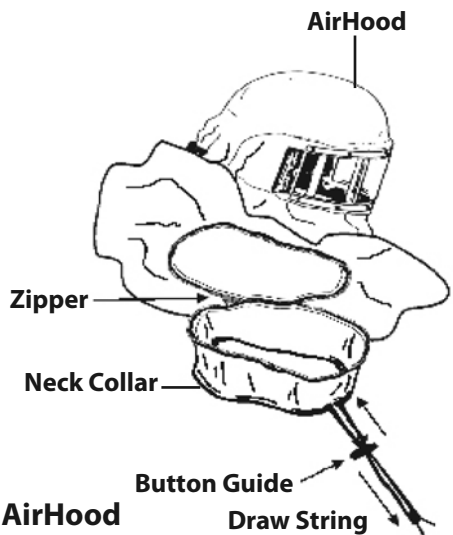
2.6.2 AirHood Chin Strap and Neck Collar

The hood is equipped with an adjustable chin strap which prevents the hood from detaching from the head when working in a forward leaning position. The chin strap is adjustable. (See Figure 7a)

- Make adjustments on both sides of the chin strap accordingly.
- Ensure the chin strap is secured under the chin and fits comfortably under the chin.
NOTE: The exchangeable neck collar functions in conjunction with the hood system. When the hood neck collar is closed it ensures a protective over pressure around the entire head. The neck collar is adjustable. (See Figure 7b)
- Ensure the neck collar is zipped completely around the hood.
- Make adjustments by using the draw string provided around the bottom of the neck collar.
- Grab onto the button guide, push in on the button and slide the guide toward the neck, at the same time pull the draw string away from you. Adjust the neck collar close to the neck to obtain sufficient air in the hood.
- **DO NOT** pull too tight as to obstruct neck movement or breathing.



**AirHood
Figure 7a**



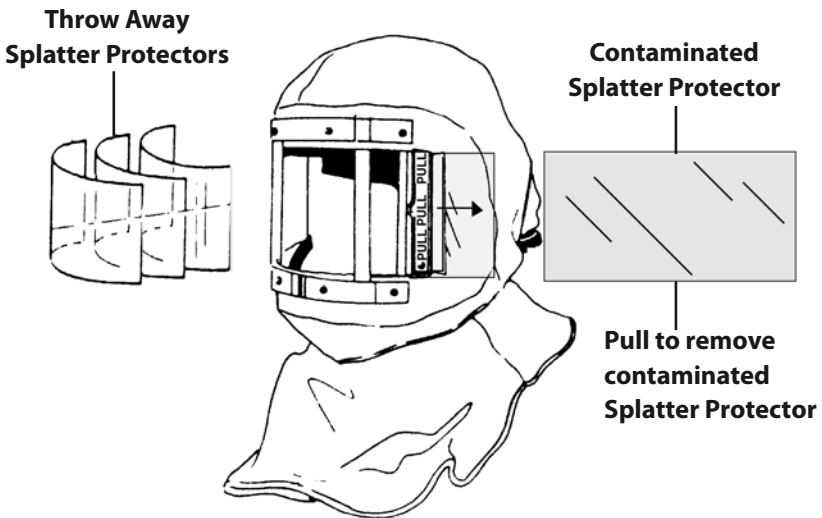
**AirHood
Figure 7b**

2.6.3 Splatter Protector Window

The three (3) throw away splatter protectors are fitted against the clear shield lens to protect the shield lens from damage or splashes during use. Remove the splatter protector when it becomes contaminated.

(See Figure 8)

- Pull on the contaminated splatter protector by pulling it in the direction that is marked “**PULL**” on the clamp.
- Always remove a contaminated splatter protector as soon as possible.
- Ensure that there is always a splatter protector attached to the clear shield lens before starting the job.



**AirHood
Figure 8**

2.7 Pre-Operational Inspection and Donning

To ensure safe use of the Compact Air PAPR before use it is required that the preoperational inspection is performed.

For the AirShield:

- Check the AirShield for any cracks, holes, wear or tears.
- Check that the Face Seal is properly installed and in good condition with no holes, runs, or tears.
- Check the visibility of the shield lens and make sure there is a splatter protector in place before use.
- Check the breathing tube for any holes or leaks.
- With the breathing tube connected to the headtop assembly, turn on the blower unit and confirm the airflow through the system and into the headtop assembly respirator breathing zone.
- Secure the Blower Unit and Battery to your body using the waistbelt.
- Don the Headtop Assembly to your head fitting the face seal under the chin and around the face. The face seal can be worn either in front of, or behind the ears.
- The headgear has both crown (height) and circumference adjustments. Adjust crown height via the pin/hole adjustment on the top strap of the headgear. The circumference is easily adjusted by means of a knob located at the back, this adjustment can be performed as you wear the AirShield respirator.



WARNING

Failure to properly connect the Breathing Tube to the HeadTop Assembly and to confirm airflow through the system to the Breathing Zone could lead to contaminant exposure resulting in serious bodily injury or loss of life.

2.7 Pre-Operational Inspection and Donning cont.

For the AirHood:

- Check the AirHood for any holes, wear or tears.
- Check the elasticity of the chin strap to make sure it is in good condition.
- Check the visibility of the shield lens and make sure there is a splatter protector in place before use.
- Check the breathing tube for any holes or leaks.
- Check that the Neck Collar is properly installed and in good condition with no holes, or tears and the zipper is working.
- Check the draw string is in good condition and working properly.
- With the breathing tube connected to the headtop assembly, turn on the blower unit and confirm the airflow through the system and into the headtop assembly respirator breathing zone.
- Secure the Blower Unit and Battery to your body using the waistbelt.
- Don the Headtop Assembly to your head adjusting the chin strap under the chin.
- Ensure the neck collar is fitted evenly around the base of the neck.
- The headgear has both crown (height) and circumference adjustments. Adjust crown height via the pin/hole adjustment on the top strap of the headgear. The circumference is easily adjusted by means of a knob located at the back, this adjustment can be performed as you wear you AirHood respirator.



WARNING

Failure to properly connect the Breathing Tube to the Head Top Assembly and to confirm airflow through the system to the Breathing Zone could lead to contaminant exposure resulting in serious bodily injury or loss of life.

2.8 Trouble Shooting Guide

IN THE EVENT THE AIRFLOW OVER THE FACE REDUCES OR FAILS ENTIRELY, LEAVE THE WORK AREA IMMEDIATELY.

Blower Unit Fails to Supply Air:

- Battery is discharged
- Switch is in "OFF" position
- Switch is defective
- Power lead or plug connection is defective
- Motor bearings are defective
- Plugs not removed from cartridges

Blower Unit Supplies Insufficient Air:

- Battery insufficiently charged
- Filter cartridge blocked
- Breathing Tube blocked or leaking
- Blockage or leakage in airduct assembly
- Not all plugs removed from filters/cartridges

Battery Fails to Charge:

- Defective fuse
- Power lead or plug connection defective
- Defective charger
- Battery is defective or worn out



WARNING

If, at any time during operation, you detect an odor or taste of gas or vapor, or if you feel eye or throat irritation, you must leave the contaminated environment immediately, and go back to the Trouble Shooting Guide. If necessary, replace all filters/cartridges as instructed in Section 2.2. Failure to go back to the Trouble Shooting Guide if the user detects an odor or taste of gas or vapor or feels eye throat irritation could lead to contaminant exposure resulting in serious bodily injury or loss of life.

2.9 Maintenance and Storage

2.9.1 Cleaning

- The external surfaces of the **Compact Air PAPR** system and the battery pack should be cleaned with a soft dampened cloth in a solution of clean water and mild detergent. Abrasive cleaners should never be used. During cleaning, ensure that no water is allowed to enter into the blower unit or battery pack, this could damage the blower units internal parts. The unit should never be immersed in any type of liquid.
- Detach the breathing tube from the blower unit and headtop assembly, wipe the connection sites. Check the breathing tube for any holes or splitting. When in doubt, replace the breathing tube. **NEVER** patch the breathing tube.
- Detach the face seal from the AirShield assembly before cleaning. Hand wash in a solution of clean water and mild detergent. During cleaning ensure that the face seal has not lost its elasticity and there are no tears or holes. Allow the face seal to air dry before attaching it back into the AirShield Assembly.
- Detach (unzip) the neck collar from the **AirHood** assembly before cleaning. Hand wash in a solution of clean water and mild detergent. During cleaning make sure that the neck collar's draw string is not worn or broken. Make sure there are no tears or holes in the neck collar. When in doubt, replace the neck collar. Allow the neck collar to air dry before attaching it back into the AirHood Assembly.
- The headtops can be wiped down with a mild solution of clean water and mild detergent, never use abrasive cleaners. During cleaning check the headtop for any cracks, wear, or tears. When in doubt, replace the headtop. Allow the headtop to air dry before use.



WARNING

When cleaning, protect against inhalation of hazardous substances that could be released during cleaning. Failure to prevent protection from such hazardous substances could lead to contaminant exposure resulting in serious injury or loss of life.



WARNING

Do not allow water to enter into the blower unit or the battery pack. Failure to prevent water from entering into the blower unit or battery pack could cause the product to fail, leading to contaminant exposure resulting in serious bodily injury or loss of life. Any filter/ cartridge, which has been directly exposed to water, must be disposed of in accordance with local, state and federal ordinances.

Do not clean any part of the system with gasoline, organic-based solvents or chlorinated degreasing fluids (such as trichloroethylene). Failure to prevent cleaning with any of these substances could lead to contaminant exposure and/or product failure resulting in serious injury or loss of life.

2.9.2 Inspection

- After cleaning the system, inspect the individual parts and ensure that all components and connection sites are clean and in good condition.
- If the system will not be used again for several days, the filters/cartridges must be removed and disposed of in accordance with local, state and federal ordinances.
- If the system will be used the following day, the filters/cartridges may remain on the blower unit with covers/plugs securing exposed openings.
- Examine the parts of the system and replace any damaged components before using the system again.
- After cleaning and inspecting the system, allow all components to dry away from sunlight and direct heat.

2.9.3 Maintenance Record Keeping

All components should be checked daily when used regularly. Regardless of usage, each unit requires a documented monthly inspection of all aspects relating to safety. A trained and competent person with full knowledge of respiratory equipment should carry this out. Records should be maintained throughout the life of the equipment. Regulatory Guidance can be found in the following documents: **OSHA 29 CFR 1910 Part 134 and ANSI Z88.2.**



WARNING

Do Not Allow contaminants to enter into the breathing tube or unit. Failure to prevent contaminants from entering into the breathing tube or unit could lead to contaminant exposure resulting in serious bodily injury or loss of life. Consult your local safety professional in the event contaminant entry in the breathing tube of the blower unit is suspected.

2.9.4 Storage

- Before storing the **Compact Air PAPR** system, it should be thoroughly dry.
- **Do Not Keep** used filters/cartridges in the same enclosed storage space as new filters/cartridges.
- Store the system in a clean area, away from moisture, heat and direct sunlight.
- Storage temperatures should not exceed 120°F

3.1 Blower Unit Replacement

Note: The blower unit, battery, and battery charger are not user serviceable. Maintenance or replacement of parts should only be performed by **ARCONE**, who has the necessary test equipment to ensure that all repairs are completed safely and recertified.



CAUTION

The Blower Unit and Battery is supplied as a seal-tested unit. Any attempt to open or repair the unit will result in the termination of the limited warranty contained in Section 4.1.

3.2 Fuse Replacement

To replace the fuse of batteries with a fuse, which is located on the right side of the battery case and contained within the fuse cap holder, unscrew the cap holder for access to the fuse. Pull the fuse cap holder and its fuse from the case. Replace the fuse with a 1.6 amp fuse, and screw the fuse holder back into the battery.

(See Figure 9)

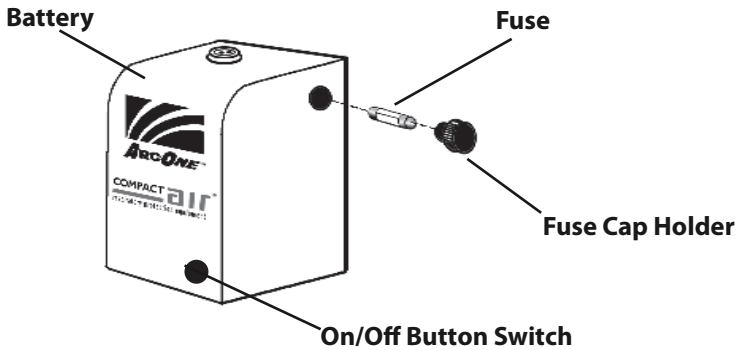
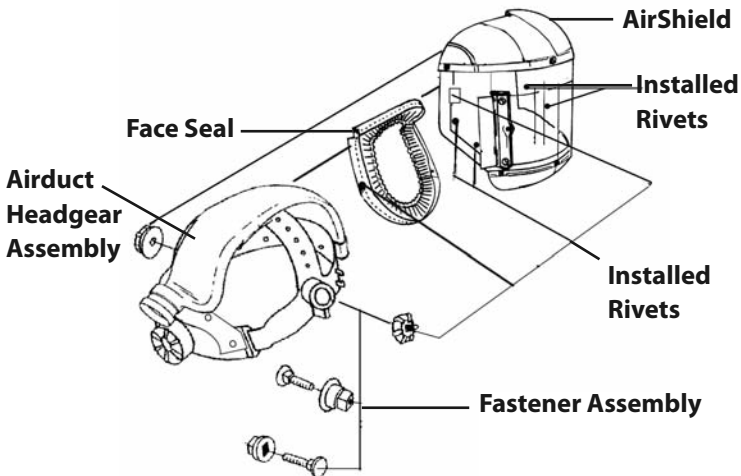


FIGURE 9

3.4 AirShield Replacement Parts

3.4.1 Face Seal Replacement

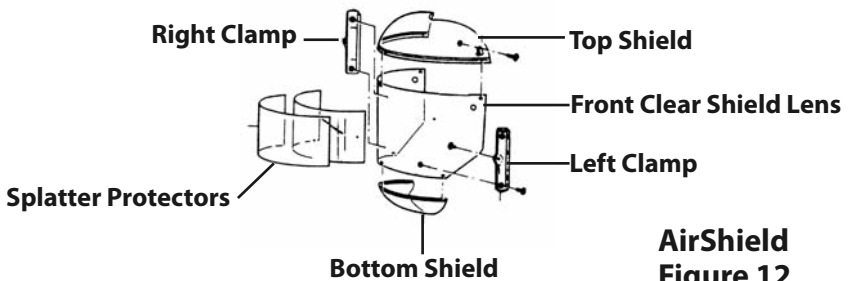
- Remove the Airduct Headgear Assembly by unscrewing the thumbnuts on both sides of the shield. Be sure to retain all hardware.
- There are (4) four rivets installed in the shield, two on each side. Starting at the inside of the shield pull the face seal up from all four rivets, this releases the face seal from the shield.
- Install the face seal by lining up the holes in the plastic portion of the face seal with the (4) four rivets installed in the shield. Line up each hole over each rivet and push the holes into the rivets.
- Line up the airduct headgear with the square cut out in the face seal with the inside of the helmet, while you screw the parts back in place.
(See Figure 11)



**AirShield
Figure 11**

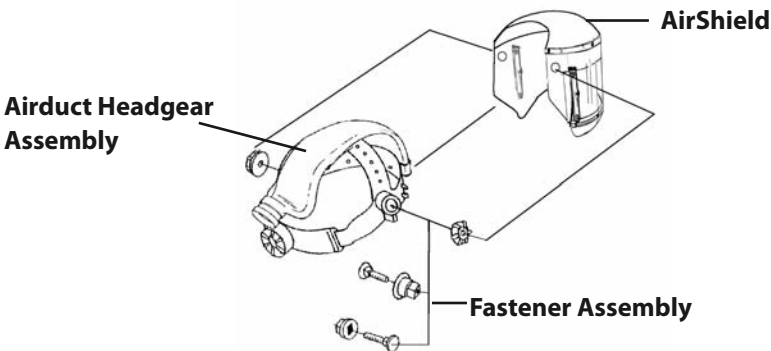
3.4.2 AirShield Face Shield Replacement

- Remove the front shield by detaching the headgear and face seal from the front shield. Be sure to retain all hardware.
- There are three sections of the face shield, **(1) Top Shield**, remove carefully by pulling away the top shield from the front shield, **(2) Bottom Shield**, remove carefully by pulling away the bottom shield from the front shield, **(3) Front Shield**, remove the right and left clamp by unscrewing each side. (See Figure 12)



3.4.3 AirShield Airduct Headgear Assembly Replacement

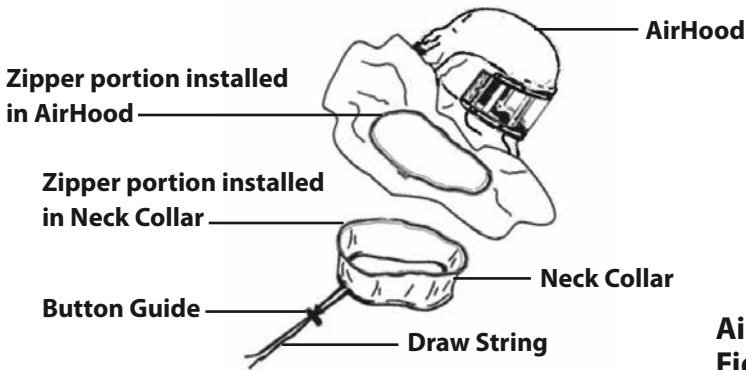
- Remove the airduct headgear assembly by unscrewing the thumbnuts on both sides of the shield. Be sure to retain all hardware.
- Install the new airduct headgear assembly. (See Figure 13)



3.5 AirHood Replacement Parts

3.5.1 AirHood Neck Collar

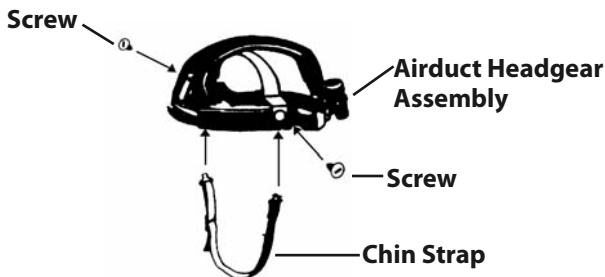
- Remove the neck collar by unzipping it from the hood. Install the new neck collar by zipping it into the other half of the zipper which has been installed permanently into the hood.
- Install the new neck collar assembly. (See Figure 14)



**AirHood
Figure 14**

3.5.2 AirHood Chin Strap Replacement

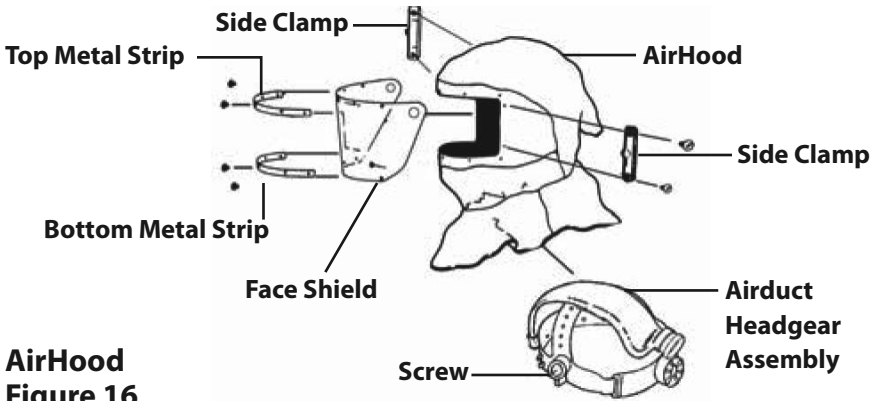
- Remove the chin strap by unscrewing both sides of the airduct headgear assembly.
- Be sure to retain all hardware.
- Install the new chin strap. (See Figure 15)



**AirHood
Figure 15**

3.5.3 AirHood Face Shield Replacement

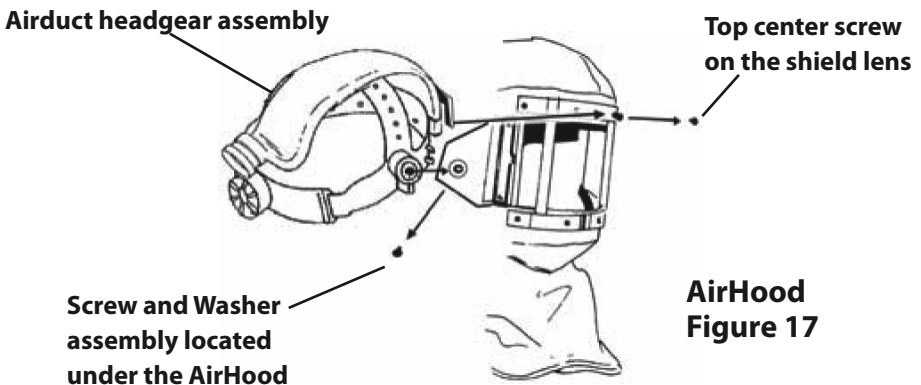
- Remove the face shield by unscrewing both sides of the airduct headgear assembly and unscrewing both clamps for the spatter protector and the top and bottom metal strips. Be sure to retain all hardware.
- Install the new face shield. (See Figure 16)



**AirHood
Figure 16**

3.5.4 AirHood Airduct Headgear Assembly Replacement

- Turn the hood upside down to remove the screws and washers on both sides of the airduct headgear assembly.
- Remove the top center screw of the clear shield lens. Be sure to retain all hardware.
- Install the new airduct headgear assembly. (See Figure 17)



**AirHood
Figure 17**

4.0 CUSTOMER INFORMATION

4.1 Warranty

ARCONE warrants the complete **Compact Air** PAPR System(s) for one (1) year from the date of purchase against all manufacturing defects resulting from materials or workmanship. Proof of purchase establishing the sale date of the respirator system must be provided, should a warranty claim be submitted. The purchaser's only remedy under this limited warranty shall be limited to **ARCONE's** sole option to repair, replace or refund (not to exceed the purchase price). This limited warranty is void in the case of unauthorized modification, tampering, and damage due to misuse, abuse, inadequate maintenance or improper storage. This limited warranty is not transferable from the original purchaser to a secondary owner. **ARCONE** shall in no event be liable or responsible for the use or misuse of this product. This limited warranty is exclusive and is in lieu of any other warranty implied, either oral or written. Please read the instruction manual carefully to avoid certain situations which may void this limited warranty.

4.2 Warranty Registration Card

ARCONE provides you with a Warranty Registration Card, please fill out the warranty card as soon as you unpack the product. Please note that the warranty card is for the complete respirator system.

4.3 Customer Service and Return

PLEASE DO NOT CONTACT THE DISTRIBUTOR OR RETAILER FROM WHOM YOU PURCHASED THE RESPIRATOR.

1. Contact **ARCONE** Customer Service (800-223-4685) for a Service Tag Number.
2. Send the respirator, freight prepaid, directly to the **ARCONE** Service Center, 85 Independence Drive, Taunton, MA 02780. Reference your assigned Service Tag Number on the outside of the package and on all accompanying paperwork.
3. Provide a brief description of the problem. Provide return shipping information. Complete information will help to expedite the process.
4. Before returning the respirator, decontaminate and clean it to remove any hazardous materials which may have settled on the respirator during use. Laws and/or regulations prohibit the shipment of hazardous or contaminated materials.
RESPIRATOR(S) SUSPECTED TO BE CONTAMINATED WILL BE PROFESSIONALLY DISCARDED AT THE CUSTOMER'S EXPENSE.
5. Visa, MasterCard, or checks are the only forms of payment accepted. In the case of credit cards include credit card number, expiration date, the full name as it appears on the credit card, and your signature as authorization for the total repair amount.
6. All warranty repairs are covered for the balance of the original warranty period.
7. All non-warranty repairs carry a 90-day, limited warranty.

CALL
ARCONE Service Center,
(800-223-4685)
MONDAY - FRIDAY
8:00 A.M. - 5:00 P.M. E.S.T.

Or

Visit Our Website
www.arc1weldsafe.com

4.4 Replacement Parts and Accessories

When ordering replacement parts or accessories, use the part numbers and descriptions listed below. Failure to use only **COMPACT AIR PAPR** parts and accessories will void the **NIOSH Approval** and **ARCONE's** warranty and may expose the user to the risk of serious bodily injury or loss of life. **ARCONE** is not responsible for system performance if other than **COMPACT AIR PAPR** parts are used to repair or refurbish the equipment.

4.4.1 Replacement Filter Cartridges:

Part No.	Description
CA-680-P3	HE HEPA Filter
CA-AEP3	HE/OV/CL/HC/SD Cartridge

4.4.2 Blower Unit System Replacement Parts:

Part No.	Description
CA-BLU-01-2	Blower Unit
CA-SER-01	Seal Rings for Blower Unit (3 per)
CA-BAT-01	Battery (4.8V) with fuse
CA-FUS-01	Fuse
CA-FUH-01	Fuse Holder
CA-AFI-01	Air Flow Indicator for Breathing Tube
CA-WBT-01	Waistbelt
CA-BTC-01-2	Breathing Tube with Quick Disconnect
CA-CAC-02	Carrying Case
CA-BCH-01	Charger

Note: NIOSH Approval covers complete respirator systems only, as configured from approved components as referenced on the NIOSH approval label for this system(s).

4.4.3 AirShield Assembly:

Part No.	Description
CA-SHL-JA	Shield, Front Clear Shield Lens
CA-CST-JA	Clear Shield Top
CA-CSB-JA	Clear Shield Bottom
CA-COL-JA	Face Collar
CA-HGA-01	Ratchet Headgear Air Duct Assembly
CA-HGS-01	Headgear Sweatband
CA-SPL-JAB	Disposable Spatter Protection Windows (100)
CA-HDW-JAB	Hardware-Left and Right Clamps

4.4.4 AirHood Assembly:

Part No.	Description
CA-SHL-JB	Shield, Front Clear Shield
CA-ARH-JB	Polyurethane Hood
CA-CHS-JB	Chin Support
CA-COL-JB	Neck Collar
CA-HGA-02	Ratchet Headgear Air Duct Assembly
CA-HGS-01	Headgear Sweatband
CA-SPL-JAB	Disposable Splatter Protection Windows (100)
CA-HDW-JAB	Hardware-Left and Right Clamps (1 set)
CA-HDW-JB	Hardware-Top and Bottom Metal Strips (1 set)

4.5 Technical Specifications

Compact Air PAPR System

Blower Unit

Type:	One-stage centrifugal
Rotor Speed:	10,000 rpm/min
Rotor:	Balanced
Air Supply:	6 cubic feet (170 liters) per /min
Case:	Impact-proof ABS
Filter Cartridge:	3 x EN 148 threaded connection
Hose Length:	29.5 in/750 mm
Hose Diameter (int):	.87 in/22 mm
Hose Connection:	Bayonet Connection
Weight:	1.4 lbs. (.62 kg.)
Dimensions:	L- 105 mm x W-85 mm x 100 mm
Color:	Black/Yellow

Battery

Type:	NiCad (CA-BAT-01) rechargeable
Voltage:	4.8 Volt
Fuse:	1.6 Amp
Operating Time:	8 hour shift from fully charged battery
Charging Time:	Standard Overnight Charge (14 hours)
Charging Cycles:	500 Times
Housing:	Impact-proof ABS
Weight:	1.5 lbs. (.7kg.)
Dimensions:	L- 4" x W - 3.1" x H - 2.8" L- 100 mm x W - 80 mm x 70 mm

Charger

Type:	DC Rectifier
Primary Voltage:	120 V/60Hz
Secondary Voltage:	5.8 VDC
Output Current:	570mA
Weight:	.5 lb (.23 kg.)
Dimensions:	L- 2.7" x W- 2.2" x H- 1.6" L- 96mm x W- 55 mm x 40 mm
Color:	Black
Approvals:	UL/CSA

4.5 Technical Specifications Cont.

AirShield Assembly

Type:	AirShield Material - Cellulose Acetate Face Collar Material - Cotton/ Rubber Elastic
Weight:	1.4 lb./635g.
Color:	Clear
Approvals:	ANSI Z87.1-American National Standard for eye & face protection

AirHood Assembly

Type:	Hood Material - Knitted Nylon/Polyurethane Visor Material - Cellulose Acetate Neck Collar - Cotton Chin Strap - rubber/cotton
Weight:	1.5 lb./680g.
Color:	Orange
Approvals:	ANSI Z87.1-American National Standard for eye & face protection

Note: NIOSH Approval covers complete respirator systems only, as configured from approved components as referenced on the NIOSH approval label for this system(s).

CALL
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(800-223-4685)
MONDAY - FRIDAY
8:00 A.M. - 5:00 P.M. E.S.T.

Or

Visit Our Website
www.arc1weldsafe.com



A Division of A.C.E. International Company, Incorporated

85 Independence Drive, Taunton, MA 02780

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