

**BOSSWELD**

# AIRZONE

**ELECTRONIC WELDING**

**HELMET + PAPR**

**POWERED AIR PURIFYING  
RESPIRATOR SYSTEM**



**INSTRUCTION MANUAL**

## AIRZONE BOX CONTENTS

1. Airzone Auto Darkening Welding Helmet
2. FreFlow Blower unit (with waist strap & battery)
3. Spare Grind Len x 1
4. Spare Outer Len x 1
5. Spare Inner len x 1
6. Hose with cover
7. Battery Charger
8. Shoulder Strap
9. Airflow Indicator
10. Carry Bag



Part Number: 770110

## AIRZONE PAPR FILTER SPECIFICATIONS

<b>Airflow Rate</b>	Manufacturer's minimum design flow rate: 165+lpm (5.8+cfm) Low speed: 170+lpm (6+cfm) High speed: 210+lpm (7.4+cfm)
<b>Fast-charging Battery</b>	Rechargeable Li-ion Battery Duration: 12H low speed, 8H high speed Charge Time: 3 hour
<b>Filter</b>	> 99.997% Efficiency Alarm: Visible, Audible and Vibration
<b>Relative Humidity</b>	Operating R.H.: < 90%, Storage R.H.: < 85%
<b>Weight</b>	1130g (Blower unit + battery)
<b>Warranty</b>	2 Year
<b>Approval</b>	EN 12941 P R SL, AS/NZS 1716, CE, EAC



## AIRZONE PAPR HELMET SPECIFICATIONS


<b>Viewing Area</b>	98 x 44 mm (43cm <sup>2</sup> )
<b>Optical Class</b>	1 / 1 / 1 / 2
<b>Power Supply</b>	Solar
<b>Battery Type</b>	Battery replaceable 1 x CR2450
<b>Sensor Quantity</b>	2
<b>Sensitivity Control</b>	Low~High
<b>Shade Control</b>	3.0 / 9-13
<b>Delay</b>	0.1~1.0 s. (Dark to Light)
<b>Switching Speed</b>	1/16,000 s. (Light to Dark)
<b>UV / IR Protection</b>	up to Shade DIN 16
<b>Warranty</b>	2 Year
<b>Approval</b>	CE, ANSI, CSA, AS/NZS, EAC




Thank you for choosing a **BOSSWELD AIRZONE Electronic Welding Helmet & Powered Air Purifying Respirator System**. In this manual you will find instructions on how to set up your welding helmet along with general welding information safety information and helpful tips. We encourage you to go online to our website for more tips and troubleshooting as well as many welding resources.

## SECTION 1

### **SAFETY PRECAUTIONS READ BEFORE USING**

-  Protect yourself and others from injury –read, follow, and save these important safety precautions and operating instructions.

#### 1-1. **SYMBOL USAGE**

-  **DANGER!**-Indicates a hazardous situation which, if not avoided, will result in death or serious injury. The possible hazards are shown in the adjoining symbols or explained in the text.


**NOTICE**-Indicates statements not related to personal injury.

Indicates special instructions



This group of symbols means Warning! Watch Out! **ELECTRIC SHOCK, MOVING PARTS, and HOT PARTS** hazards. Consult symbols and related instructions below for necessary actions to avoid the hazards.

#### 1-2. **ARC WELDING HAZARDS**

-  The symbols shown below are used throughout this manual to call attention to and identify possible hazards. When you see the symbol, watch out, and follow the related instructions to avoid the hazard. The safety information given below is only a summary of the more complete safety information found in the Safety Standards listed in Section 1-5. Read and follow all Safety Standards.

-  Only qualified persons should install, maintain, and repair this unit.

-  During operation, keep everybody, especially children, away..



#### **ARC RAYS CAN BURN EYES AND SKIN**

Arc rays from the welding process produce intense visible and invisible (Ultraviolet and infrared) rays that can burn eyes and skin. Sparks fly off from the weld.

- Wear a welding helmet fitted with a proper shade of filter to protect your face and eyes when welding or watching. Refer to Lens Shade Selection table in sections 1-3.
- Wear approved safety glasses with side shield under your helmet.
- Use protective screens or barriers to protect others from flash, glare, and sparks; warn others not to watch the arc.
- Wear protective clothing made from durable, flame-resistant material (leather, heavy cotton, and wool) and foot protection.
- Before welding, adjust the auto-darkening lens sensitivity setting to meet the application.
- Stop welding immediately if the auto-darkening lens does not darken when the arc is struck. See the Owner's Manual for more information.



#### **NOISE CAN DAMAGE HEARING**

Noise from some processes or equipment can damage hearing. Wear approved ear protection if noise level is high.



## READ INSTRUCTIONS

- Read and follow all labels and Owner’s Manual carefully before installing, operating, or servicing unit. Read the safety information at the beginning of the manual and in each section.
- Use only genuine replacement parts from the manufacturer.
- Perform maintenance and service according to the Owner’s Manuals, industry standards, and national, state, and local codes.

## SHADE SELECTION

Start with a shade that is too dark to see the weld zone. Then, go to a lighter shade which gives a sufficient view of the weld zone without going below the minimum.

WELDING PROCESS	ARC CURRENT (AMPERES)																							
	1.5	6	10	15	30	40	60	70	100	125	150	175	200	225	250	300	350	400	450	500	600			
SMAW					8			9			10			11			12			13			14	
MAG					8			9			10			11			12			13			14	
TIG					8			9			10			11			12			13				
MIG (Heavy)								9			10			11			12			13			14	
MIG (Light)											10			11			12			13			14	
PAC								9			10		11		12			13						
PAW	4		5		6		7		8		9		10		11		12							
Note	<ul style="list-style-type: none"> <li>★ SMAW-Covered Electrodes</li> <li>★ MAG-Metal Arc Welding</li> <li>★ TIG-Gas Tungsten Arc Welding</li> </ul>										<ul style="list-style-type: none"> <li>★ MIG (Heavy)-MIG with Heavy Metals</li> <li>★ MIG (Light)-MIG with Light Alloys</li> <li>★ PAC-Plasma Jet Cutting</li> <li>★ PAW-Microplasma Arc Welding</li> </ul>													



## FUMES AND GASES CAN BE HAZARDOUS

Welding produces fumes and gases. Breathing these fumes and gases can be hazardous to your health.

- Keep your head out of the fumes. Do not breathe the fumes
- If inside, ventilate the area and/or use local forced ventilation at the arc to remove welding fumes and gases.
- If ventilation is poor, wear an approved air-supplied respirator.
- Read and understand the Material Safety Data Sheets and the manufacturer’s instructions for metals, consumables, coatings, cleaners, and degreasers.
- Work in confined space only if it is well ventilated, or while wearing an air-supplied respirator. Always have a trained watch-person nearby. Welding fumes and gases can displace air and lower the oxygen level causing injury or death. Be sure the breathing air is safe.
- Do not weld in locations near degreasing, cleaning, or spraying operations. The heat and rays of the arc can react with vapors to form highly toxic and irritating gases.
- Do not weld on coated metals, such as galvanized, lead, or cadmium plated steel, unless the coating is removed from the weld area, the area is well ventilated, and while wearing an air-supplied respirator. The coatings and any metals containing these elements can give off toxic fumes if welded.

### RESPIRATOR (PAPR) MISUSE CAN BE HAZARDOUS.

Welding produces fumes and gases. Breathing these fumes and gases can be hazardous to your health.

- Read and follow these instructions and the safety labels carefully. The powered air purifying respirator (PAPR) helps protect the user from specific airborne contaminants but must be used correctly to be fully effective. Have an industrial hygienist test the air in your facility to ensure the PAPR provides adequate protection from contaminants in your environment. If you have questions about the respirator, see equipment warning label and consult your Safety Director and a certified Industrial Hygienist.
- Follow all applicable EN/ANSI/CSA/AS&NZS, and other regulatory guidelines pertaining to the use of respirators.
- Do not use the powered air purifying respirator where there is danger of fire or explosion.
- Do not use the powered air purifying respirator in windy conditions or negative pressure inside the hood may draw in contaminants from the outside air.

- Do not use the powered air purifying respirator without a properly installed spark guard cover. Without the spark guard cover, welding sparks may ignite the filter or damage the filters and allow unfiltered air into the helmet.
- The powered air purifying respirator does not supply oxygen. Use the respirator only in atmospheres for which it is EN/ANSI/CSA/AS&NZS approved. Do not use the respirator where oxygen levels are 19.5% or lower, where contaminant levels are unknown or are immediately dangerous to life or health, or where the contaminant levels exceed the respirator specifications.
- Do not enter a hazardous area until you are sure the respirator equipment is correctly assembled, working properly, and properly worn.
- Before each use, inspect the respirator equipment for damage and verify it operates properly, before using the respirator, test air flow to verify it is providing an adequate volume of air.
- Do not use the powered air purifying respirator without all filter components or with the blower turned off hazardous levels of oxygen and carbon dioxide may accumulate in helmet.
- Always wear the powered air purifying respirator when entering a contaminated area. Do not remove the respirator until outside the contaminated area.
- Dangerous contaminants may not smell or be visible. Leave the area immediately if you notice the following:
  - Breathing becomes difficult.
  - You experience dizziness, impaired vision, or eye nose, or mouth irritation.
  - The powered air purifying respirator alarm sounds.
  - The equipment is damaged.
  - Air flow decreases or stops.
  - if you think the equipment is not supplying adequate protection.
  - Do not remove the equipment until you are in a safe area.
- Do not repair, modify, or disassemble the powered air purifying respirator or use with parts or accessories not supplied by the manufacturer. Use only those components that are part of the approved assembly.
- Replace damaged or clogged filters. Do not wash or reuse filters. Do not clean filters by tapping or with compressed air or filter elements may be damaged. Dispose of used filter elements according to local, state, and federal requirements.
- The powered air purifying respirator must be used with the helmet, hood, and filters recommended by the manufacturer to provide a respirator system. See the label on the blower for information on the required equipment.
- Do not use the powered air purifying respirator belt or shoulder straps (if equipped) as a safety harness.
- According to EN 379.

## SECTION 2-1

### **POWERED AIR-PURIFYING RESPIRATOR (PAPR)**

#### **PRODUCTION DESCRIPTION**

This equipment helps protect the user from certain contaminants. All users must read and understand these instructions and be trained in the proper use of this equipment according to all applicable health and safety standards. If you have questions about the type of respiratory equipment required, consult your safety director and an industrial Hygienist.

Do not enter a hazardous area until you are sure the respirator equipment is correctly assembled, working properly and properly worn.

The powered air-purifying respirator (PAPR) filters contaminated air and blows it into the welding helmet hood through a flexible breathing tube. The respirator system generates a positive air pressure to help prevent contaminants from entering the hood. The system must include and/or be used with the equipment listed below:

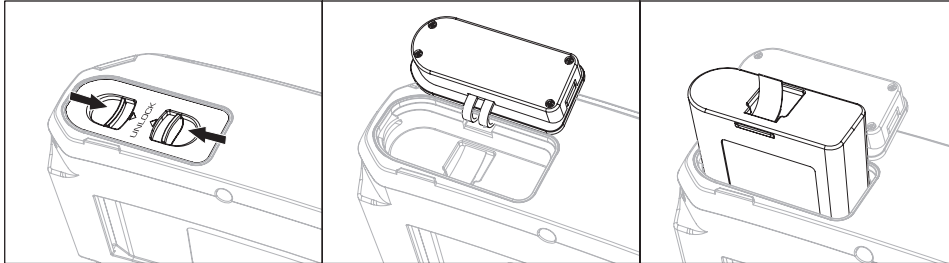
- Helmet or helmet option with auto darkening lens, hood, and headgear system
- Breathing Tube
- Blower assembly with filtration system (spark guard cover, foam prefilter, HEPA filter), and battery level indicator.
- Belt assembly
- Air flow speed (Low and High) indicator
- Battery charger

The respirator equipment operates at temperatures from -5° to 55°C and provides air flow of 170+ LPM (low speed) to 200LPM (high speed) under normal conditions. Battery life is reduced when the unit is used in dirty environment. If the system air flow decreases to an unsafe level, an alarm will sound, the blower vibrates, and the Danger light will flash to warn the users to immediately leave the contaminated area. Use the supplied air flow meter to determine if the unit is supplying adequate amounts of clean air.

## BATTERY

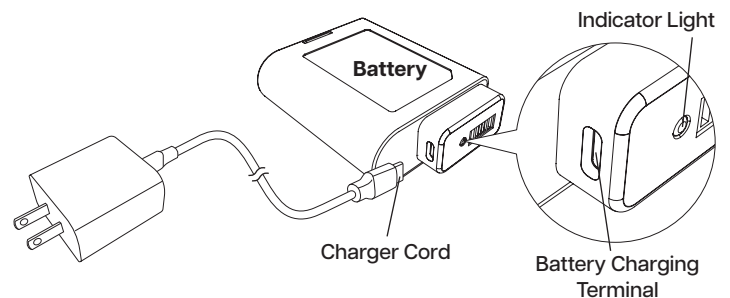
### 1. Installation and Removal of the Battery

- To install the battery: Hold the bottom UNLOCK buttons to release the battery cover from the blower. Grab the pull tab on the battery to remove it from the blower.
- To remove the battery: Insert the charged battery into the holder. Press and hold the UNLOCK buttons while snap-locking the cover.



### 2. Charge the Battery

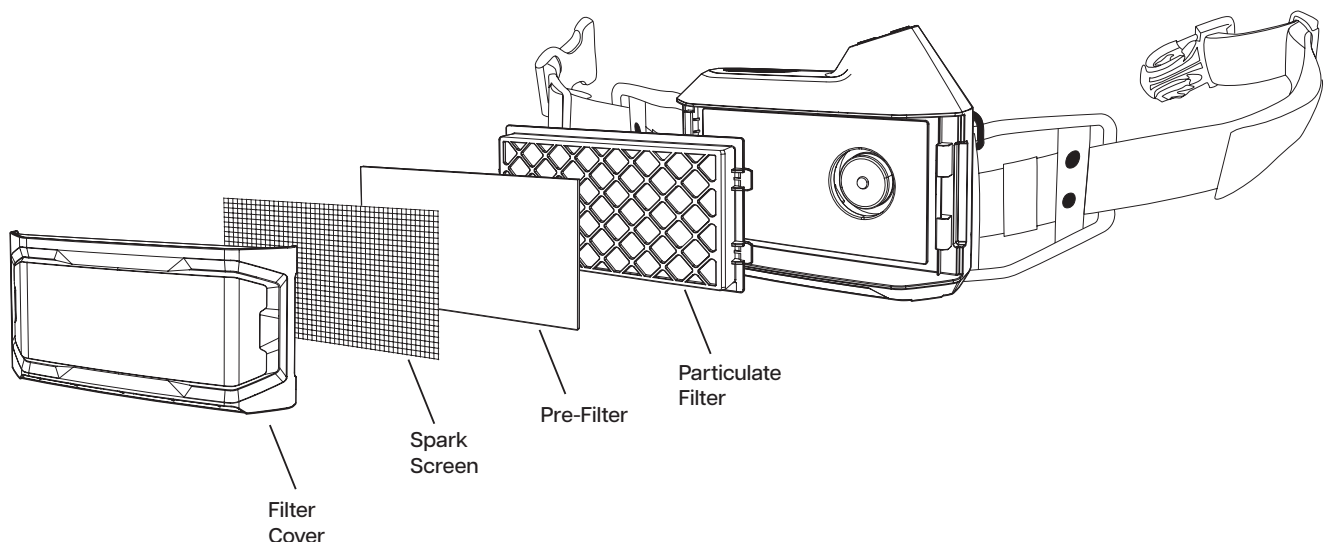
- Place chargers in a cool, well-ventilated location free of particulates, combustible material, other airborne contaminants, and outside of a classified intrinsically safe area.
- When three sections show up, the battery is fully charged.
- Remove the battery pack from blower assembly. Connect the charger cord to the battery terminal. The battery is fully charged when the indicator changes from red to green. Remember to remove the charger after charging.
- Charger type: USB-C
- Charge indicators:
  - Red: charging in process
  - Green: fully charged
  - Flashing red & green repeatedly: battery issues



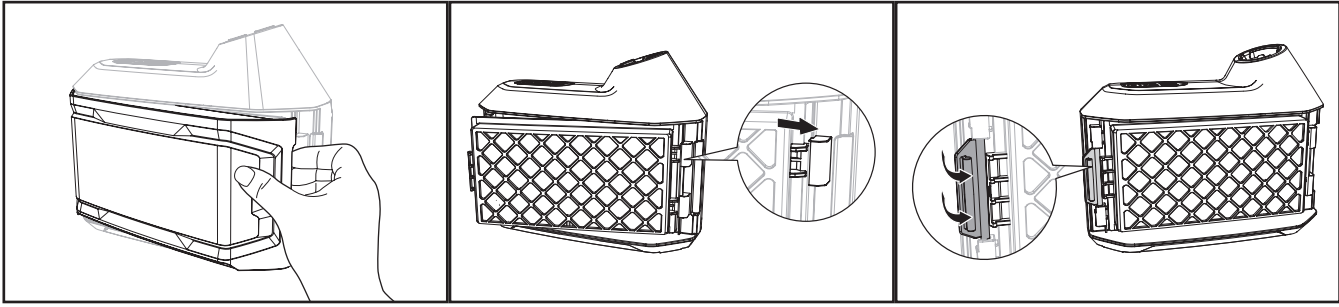
## SPARK SCREEN, PRE-FILTER, PARTICLE FILTER AND COVER

### 1. Install the Filter (Spark Screen, Pre-filter, Particle Filter)

- The power must be turned off when replacing the filters. Install the spark screen, pre-filter, and particle filter in filter cover.
- Before installation, ensure the filter is undamaged and dry with no tears or other damages.



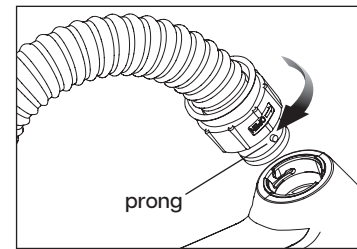
- To remove the blower cover, insert your fingertip into the groove and pull the cover sideways and outward while firmly holding it with your thumb.
- Insert the right tab on the P3 filter into the slot on the blower, and snap-lock the left side to fit the filter cartridge into place. Make sure the filter cover is correctly installed.



## BREATHING TUBE

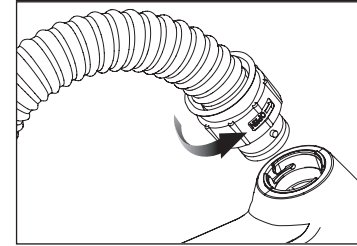
### 1. Assembling

- Insert the two prongs on the breathing tube into the blower unit and headtop receptacle, twist 1/4 turn to the anti - "OPEN" direction to lock into place.

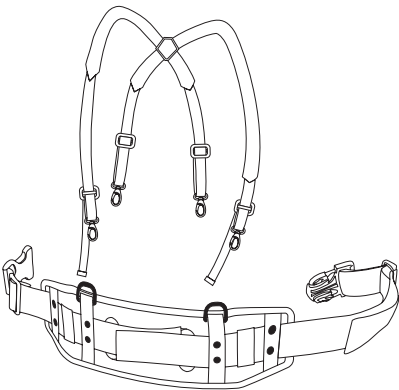


### 2. Disassembling

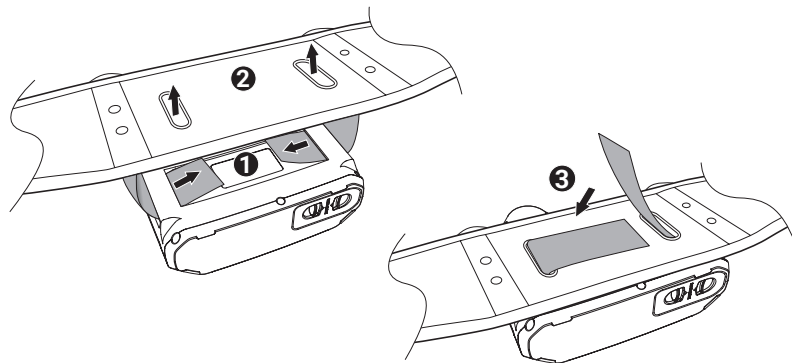
- Twist 1/4 to the "OPEN" direction and then take the prongs out from the end.



## SHOULDER STRAP & BELT CUSHION

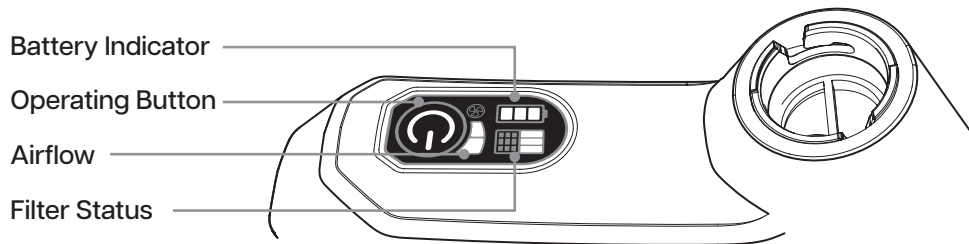


- Connect the hooks at the end of the shoulder straps to the D-rings on the belt cushion.



- Tuck the hook-and-loop fastener strips inside the narrow slots on both sides of the blower.
- Push the strips through the corresponding slots on the belt cushion.
- Align the hook and loop strips, then press them firmly together to ensure a secure closure. Verify that the fastener is fully closed for the desired result.

# OPERATING INSTRUCTIONS



### 1. Power On

- Press and hold for 3 seconds.

### 2. Power Off

- Press and hold for few seconds until beeping sounds finish.

### 3. Select Airflow

- Press the button to switch between 170+lpm and 210+lpm.



normal speed – 170+lpm



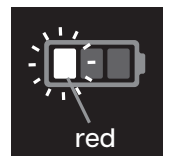
high speed – 210+lpm



### Low Battery Alarm

When the last battery indicator bar turns red, accompanied by beeping sounds and vibrations, it's a reminder to immediately stop work and charge the battery.

The beeping sounds will happen every 30 seconds, and vibrations will occur every 2 minutes. Leave the work area within 30 minutes after the warning is triggered and charge the battery.

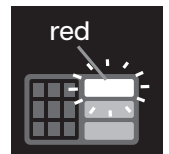


### 1. Filter Loading Alarm

If the filter becomes severely clogged and requires immediate replacement, the filter loading indicator will flash red, accompanied by vibrations and beeping sounds. Please immediately exit the contaminated environment and check the status.

### 2. Airflow Alarm

If the indicator flashes green, accompanied by audible alarms and vibrations, it signals an airflow issue caused by a squished breathing tube or a clogged air outlet. In such cases, leave the contaminated area immediately, conduct a thorough product inspection, and re-enter only when the airflow returns to normal.



## INSPECTION

### 1. Blower Assembly

Make sure the spark screen, pre-filter and particle filter are properly installed and securely latched.

### 2. Breathing Tube

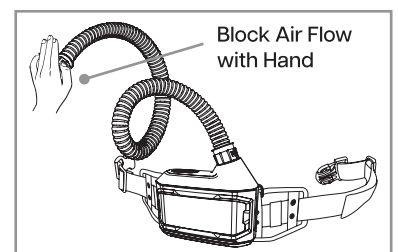
Ensure the breathing tube is undamaged and securely attached to both the blower unit and the headtop.

### 3. Battery

Make sure the battery is fully charged before each use (battery needs to be charged before the first use). Ensure the battery is securely connected to the blower unit.

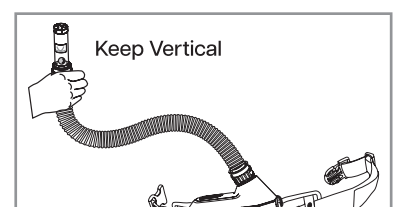
### 4. Alarm Sound Check

It is necessary to perform both the airflow rate test and the alarm sound check before use. After turning on the product, check the audible alarm function by blocking the air outlet as shown in the diagram above. The warning signal on the panel should flash with a sound and blower vibration (approximately 15 to 30 seconds after the outlet is blocked). Ensure the filter is installed, and the battery is fully charged before conducting this test. The product is working correctly if the warning functions follow the process above.



### 5. Airflow Rate Test

Make sure all the components are fully assembled before testing. Connect the end of hose to the bottom of airflow indicator and then start the button. Keep the airflow indicator vertical. If the ball inside the pipe floating above the limited line in low speed mode, it proves normal function. If the ball cannot float up to limited line, please refer to the TROUBLE-SHOOTING section on page16.



## Helmet Adjustments

### 1. Adjusting the Headgear Tightness

- To adjust the headgear's top for a proper fit, push the small button through the current slot, slide it to the desired slot, and snap the small button into place (**A**).
- Adjust the headgear by turning the adjusting wheel (**B**) to match your head circumference.
- Once you've put on the helmet, move your head to ensure it sits securely and stably.

### 2. Adjusting the Distance Between the Filter and the Face

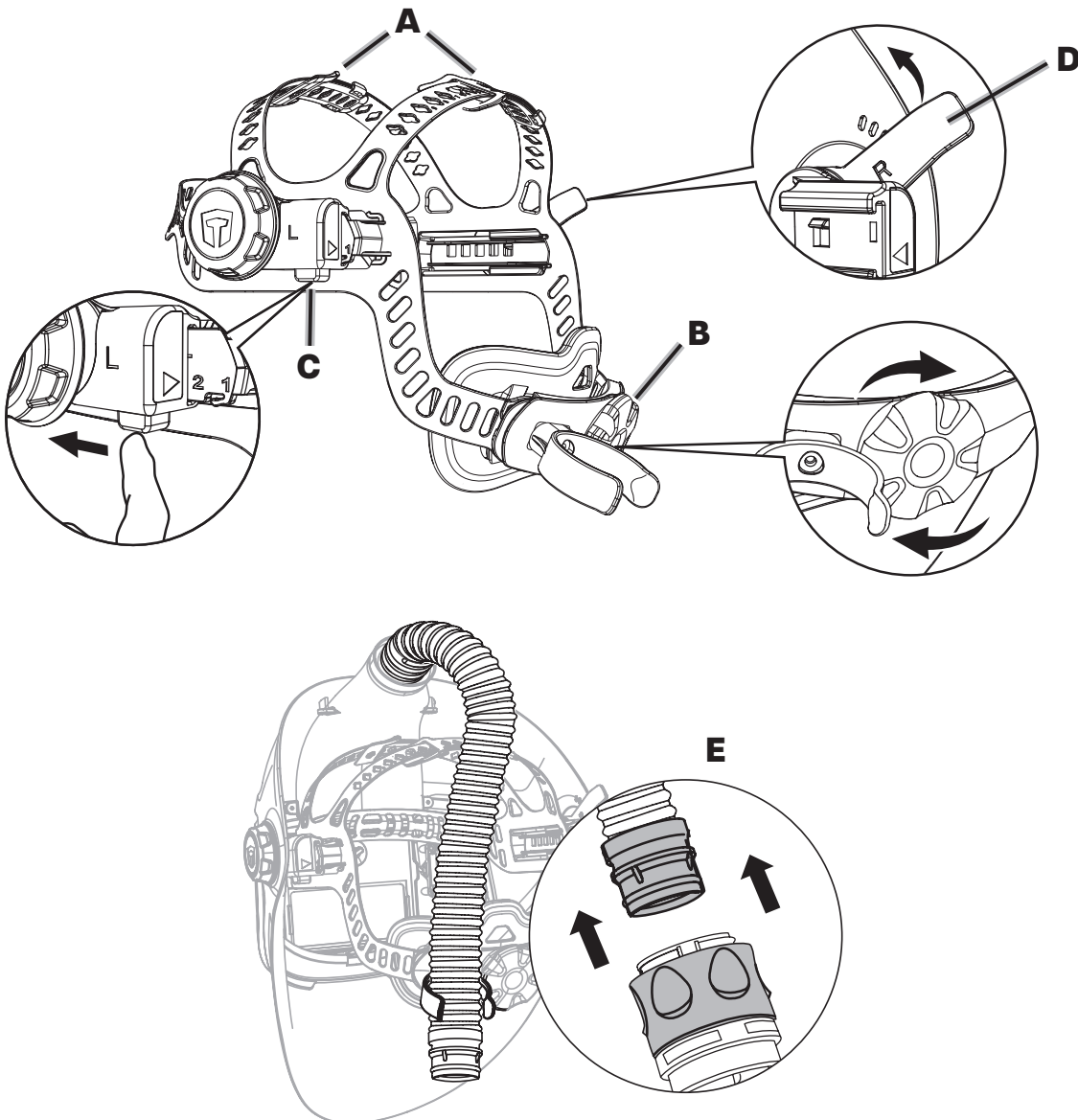
- Press down and hold the buttons on both sides (**C**) so the headgear can be slide back and forth.
- Release the buttons to snap the pins into slots. Make sure the distance between the lens to
- both eyes are the same.

### 3. Adjusting the Viewing Angle

- Loosen the right block nut.
- Adjust the viewing angle with the pins on the angle limitation washer.
- Snap the pin into the desired slot on the right boot screw (**D**).
- Re-tighten the right block nut.

### 4. Connect Hose to Helmet

- Pull the head of hose to connect it to protruding connector of TM32-V helmet, and then release the head of hose to complete the fixing (**E**).



## Preparations Before Use

### 1. Low Battery Indicator

The batteries should be installed/replaced when the low battery indicator flashes.

### 2. Test

Short-press the TEST button to preview shade selection before working.

When released then viewing window will automatically return to the light state (Shade 3).

## Auto-darkening Filter Function

### 1. Shade

The following areas are preset:

– Weld mode: Darkening states 9 to 13

### 2. Sensitivity

The sensitivity of the sensor can be adjusted to accommodate a variety of welding methods and workplace conditions.

As a simple rule, for optimum performance, it is recommended to set sensitivity to the maximum at the beginning and then gradually reduce it, until the filter reacts only to the welding light flash and without annoying spurious triggering due to ambient light conditions (direct sun, intensive artificial light, neighbouring welder's arcs etc.).

### 3. Delay

When welding ceases, the viewing window automatically changes from dark back to light but with a preset delay to compensate for any bright afterglow on the workpiece. The delay time / response can be set to "S" (short: 0.1 sec.) or "L" (long: 1.0 sec.) as you require using the infinitely dial knob on the back of the auto darkening filter. It is recommended to use a shorter delay with tack welding applications and a longer delay with applications using higher currents. Longer delays can also be used for low current TIG welding, and TIG/MIG/MAG pulse.

### 4. Grind Mode

This mode is intended for grinding or other non-welding activities. When the auto-darkening filter is locked in the light state (shade 3) the LED under the symbol will flash every 3 seconds to alert the user. The filter must be changed to an appropriate shade before arc welding.

### 5. Mix Mode

This mode is applicable for tack welding and high-current welding. It helps reduce eye fatigue caused by abrupt changes in shade.

#### **The MIX mode consists of 3 periods:**

1. The delay from the dark state to intermediate shade number;
2. Shade gradient phase;
3. The delay from the intermediate shade number to light state.

A lower delay is recommended for quick tack welding, while a higher delay works better for high-current welding.

## Auto-darkening Filter Adjustments

### 1. Selecting Shade Level

Check the Shade Guide Table on the page 14 to determine the proper dark shade setting for your application. Turn the shade control knob to the shade number required.

### 2. Setting Sensitivity

Use the infinitely dial knob on the back of the auto-darkening filter to set the desired setting.

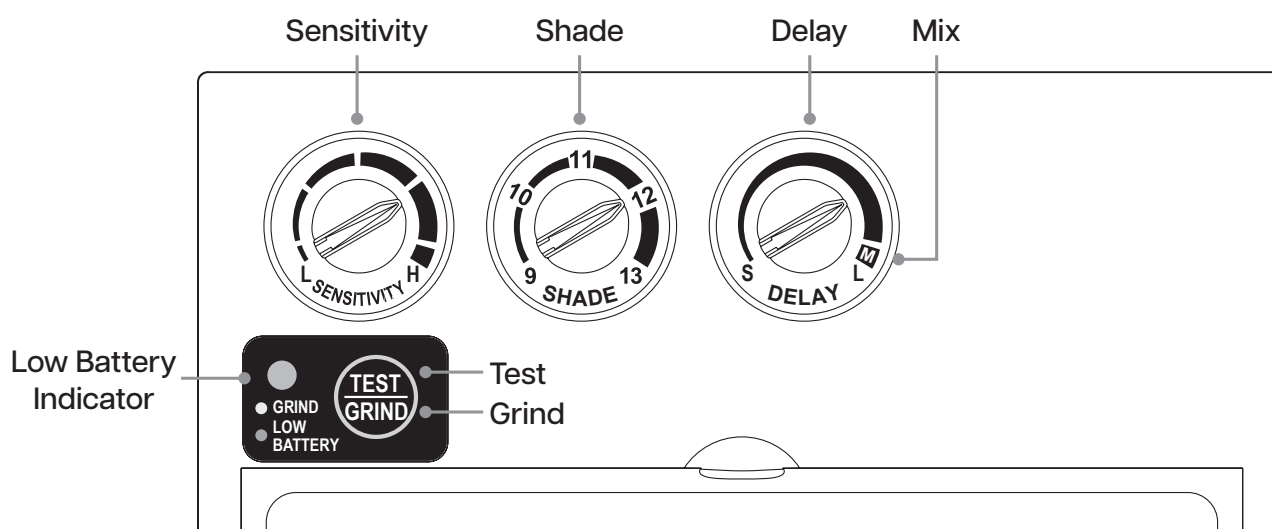
### 3. Selecting Delay Time

Use the infinitely dial knob on the back of the auto-darkening filter to set the desired setting.

### 4. Switching Mode

**GRIND** There are 2 ways to approach the GRIND mode. You can either lift the movable visor up to use the grinding visor, or you can long-press the TEST/GRIND button for 2 seconds to switch the filter to the GRIND mode.

**MIX** Rotate the DELAY knob to 'M' .

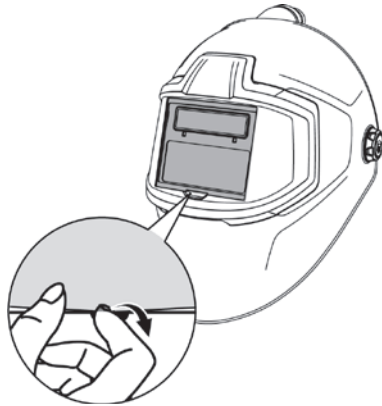


- ⚠ If the auto-darkening filter does not function as described above, do not use and immediately contact your supervisor.
- ⚠ The auto-darkening filter may not turn dark if the sensors are blocked or the welding arc is totally shielded. Flashing light sources (e.g. safety strobe lights) can trigger the auto-darkening filter making it flash when no welding is occurring. This interference can occur from long distances and/or from reflected light. Welding areas must be shielded from such interference.
- ⚠ The auto-darkening filter will automatically turn off after a period of inactivity.

# HELMET MAINTENANCE

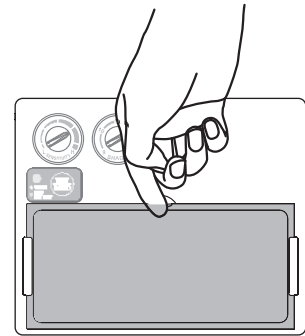
## 1. Replacing Front Cover Lens

Replace the outside cover lens if it is damaged. Place your fingernail in recess below filter view window and flex lens upwards until it releases from edges of filter view window.



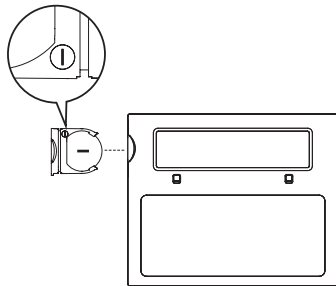
## 2. Replacing Inside Cover Lens

Replace the inside cover lens if it is damaged. Place your fingernail in recess above the filter view window and flex lens upwards until it releases from edges of filter view window.



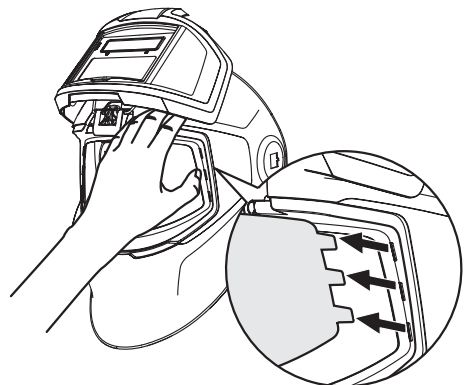
## 3. Replacing Batteries

Slide the battery holder out of the auto darkening filter (remove the used battery when replacing battery), put 1 new CR2450 battery inside the battery holder, and put the battery holder back into the auto darkening filter. Please make sure the anode and cathode of the battery are installed correctly.



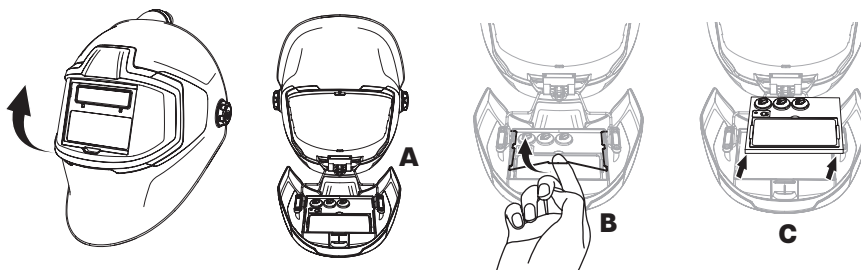
## 4. Replacing the Grinding Visor

- Flip the lid to the top.
- Press the grinding visor from both sides to release it.
- Insert a new grinding visor shield.
- Close the flip lid.



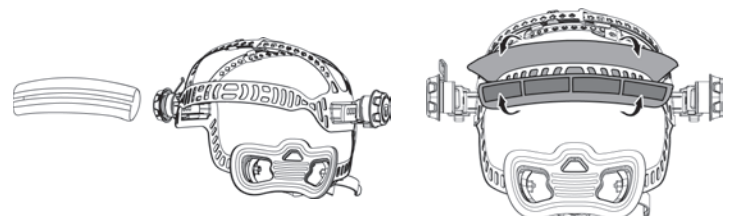
## 5. Replacing the Auto-darkening Filter

- Open the flip lid containing the auto-darkening filter.
- Place the helmet with the inner side facing you (A).
- Use your forefinger to push up the retaining clip in the middle to release it from the groove (B).
- Remove the filter cartridge (C). To replace, follow the reverse steps.



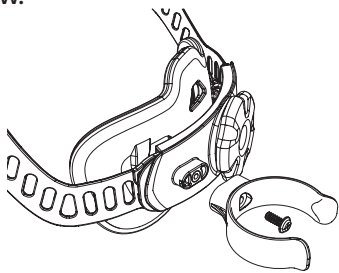
## 6. Changing the Sweatband

- Remove sweatband and padding from the hook-and-loop strap.
- Place a new sweatband around the front headgear, then close the hook-and-loop fastener.
- Attach new padding to the hook-and-loop strap on the back of the headgear.



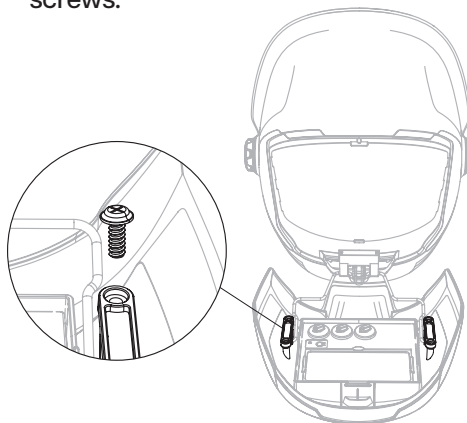
### 7. Replacing the Clamp

- Unscrew the middle screw at the back of the headgear to remove the clamp.
- Replace it with a new clamp and tighten the screw.



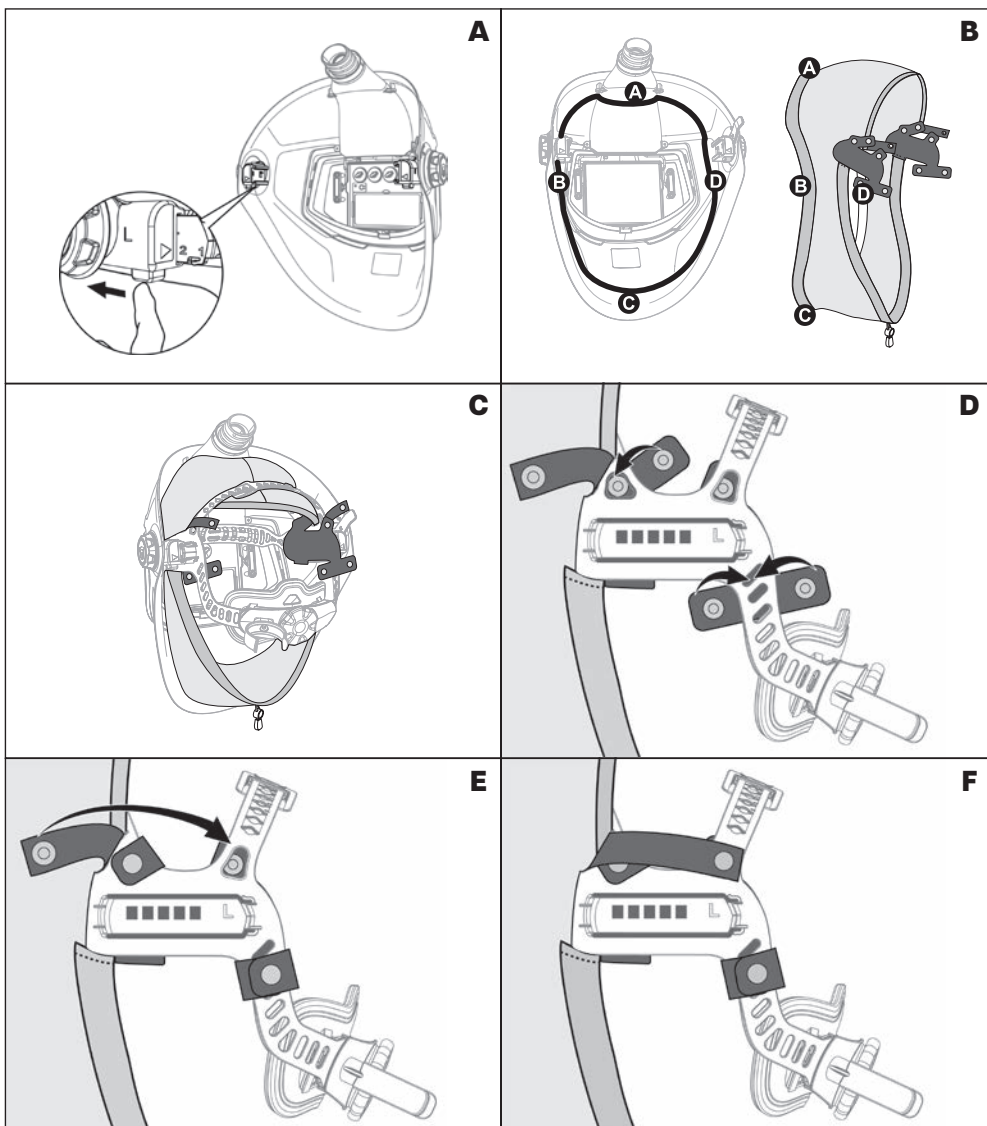
### 8. Replacing the Flip Lid

- Open the flip lid.
- Remove the flip lid by unscrewing the 4 screws on both inner sides.
- Replace it with a new flip lid and tighten the screws.



### 9. Replacing the Face Seal

- The face seal can be used to facilitate cleaning after disassembling from the shell, but it must be replaced if it is damaged.
- Press the small button on cantilevered components and push the headgear in the direction of arrow to separate headgear from the helmet (A).
- In accordance with the order of A-D in the figure, align the face seal with the velcro inside the helmet shell and make sure the face seal is closely attached to helmet shell (B).
- Then press the small button on cantilevered components to install the headgear to the helmet (C).
- Fasten the side snaps in the specified order and positions (D/E).
- The correct final configuration is depicted (F).



## CLEANING

- Clean the welding helmet with mild soap and lukewarm water.
- Use mild disinfection solution to disinfect the protector. Do not use solvents.
- Clean the auto-darkening filter with a clean, lint-free tissue or cloth.
- Do not immerse auto-darkening filters in water or spray directly with liquids.

The respirator components must be cleaned, inspected and prepared for next use after each use. Use soft cloth dipped in mild soap water for wiping. Be careful for the water NOT to get inside the body.

### 1. Blower Unit and Battery Pack

- Clean the outer surfaces of the PAPR and battery pack with a soft cloth dampened in a solution of water and mild, pH neutral detergent. Be careful for the water NOT to get inside the body. Do not use solvents or abrasive cleaners. Make sure the electrical contacts of the motor/blower and battery pack are dry before assembling.

### 2. Breathing Tube

- Wiping the exterior is insufficient. Clean the hose surface and the connection part of the breathing tube with a soft cloth dipped in water and detergent solution. Ensure the breathing tube is completely dry before using or storing. They cannot be immersed in liquids for cleaning and must be replaced if wet.

### 3. Filter

- Open the filter cover and inspect all the filters and spark screen. The particle filter and pre-filter cannot be cleaned. The spark screen can be cleaned using a clean, soft cloth dipped in a solution of water and a mild pH neutral detergent. Completely dry the spark screen with a clean cloth. Replace the pre-filter and particle filter if excessively dirty, wet or damaged. Do not attempt to remove contamination using a compressed air line as this will automatically invalidate the warranty. If the spark screen cannot be cleaned or is damaged, replace with a new spark screen.

## STORAGE

Store the welding visor fully assembled in a place that is dry and free of dirt. Protect from direct sunlight and thermal radiation. Take out the batteries if storing for extended periods.

The BOSSWELD FreFlow R1 PAPR system is not intrinsically safe. Keep away from flammable or explosive atmosphere. Store the product in a clean, dry and cool place.

**1. Blower:** Store the PAPR system at a temperature range between -10°C to 55°C (14°F to 131°F), in a clean environment without direct light.

**2. Battery:** To help maximize battery service life: Disconnect the charger after a full charge has been received. Battery should be removed from the PAPR system if it is going to be stored for an extended period. Store the battery at -10°C to 55°C (14°F to 131°F), R.H. <85%, to get maximize battery service life.

## SPARES PART

PART NO.	DESCRIPTION
<b>770120</b>	Bossweld Airzone helmet outside cover lens (5pcs) (106311)
<b>770121</b>	Bossweld Airzone helmet inside cover lens (2pcs) (106321)
<b>770122</b>	Bossweld Airzone helmet grinding lens (2pcs) (106322)
<b>770125</b>	Bossweld Airzone helmet Lens replen Pack (770120/121/124)
<b>770123</b>	Bossweld Airzone helmet face seal (106371)
<b>770124</b>	Bossweld Airzone helmet sweatband (106343)
<b>770130</b>	Bossweld Airzone PAPR spark screen (202204)
<b>770131</b>	Bossweld Airzone PAPR pre filter (202202)
<b>770132</b>	Bossweld Airzone PAPR particle filter (P3 filter) (202202)
<b>770135</b>	Bossweld Airzone PAPR filter replen pack (770130/131/132)
<b>770133</b>	Bossweld Airzone PAPR fast charging standard battery (202302)

## TROUBLE-SHOOTING GUIDE

FAULT	CAUSE	REMEDY
No airflow from the blower	Blower not ON	Long press the ON button
	Battery no power	Charge the battery
	Battery not installed properly	Check and reassemble the battery
	Tube blocked/air leakage	Check and clear the obstruction
Airflow test failed	Hose may get blocked/ air leakage	Check the tube status
	Dirty filter	Replace the filter
Insufficient battery life	Battery fault	Replace the battery
	Inadequate charging	Fully charge battery
	Filter is clogged	Replace the filter
	Damaged charger	Replace the charger
Increased noise level	Filter is getting clogged	Replace the filter and pre-filter as required
Warning indicator ON, blower vibrates and alarm sound bleeping	Tube gets blocked/air leakage	Check if tube/anywhere gets blocked before use.
	Filter assembled without removing the package	Check if the package is removed
You smell or taste contaminants	Damaged filter	Check the filter status and replace the filter if needed
	Hose with leakage problem	Examine the tube assembly
	Absence of essential filter component	Identify the missing filter and install the appropriate one
The auto-darkening filter flickers or does not auto-darken	Low battery level	Replace the batteries
	The outside cover lens is dirty	Replace the outside cover lens
	Dirty arc sensors	Clean the arc sensors
	Low welding current	Use a higher sensitivity setting
Darkening is uneven	The distance between eyes and auto-darkening filter is different for each eye	Check the headgear settings
The response time is too long	The ambient temperature is too low	Use only within the specified temperature range (above -10 °C or 14 °F)
Poor vision quality	The outside cover lens is dirty or scratched	Clean or replace the outside cover lens
	The wrong shade number was selected	Select the right shade number
	The protective film has not been removed	Remove the protective film
Welding helmet slips	Incorrect headgear settings	Adjust the headgear

# WARRANTY

FOR SERVICE SUPPORT PLEASE CALL (02) 8761 6500

IN ORDER TO MAKE A CLAIM UNDER WARRANTY YOU MUST RETURN THE PRODUCT TO THE ORIGINAL PLACE OF PURCHASE ALONG WITH YOUR PURCHASE RECEIPT.

FAULTY GOODS SHOULD BE RETURNED IN THEIR ORIGINAL PACKAGING ALONG WITH ANY SUPPLIED ACCESSORIES.

## 2 YEAR WARRANTY

Your product is guaranteed against manufacturing workmanship or defect for a period of 12 months from the original date of purchase. This warranty covers manufacturing defects in materials, workmanship and finish under normal use. If a product is found to be defective we reserve the right to repair or replace at our sole discretion.

No responsibility will be taken for products lost, damaged or mislaid whilst in transit.

To the extent permitted by law this warranty does not cover any indirect or consequential losses and our total liability, if any, shall be limited to the amount paid for the product by you to the retailer.

The benefits provided under this warranty are in addition to other rights and remedies which are available to you under Australian law.

## WARRANTY EXCLUSIONS

**The following actions will result in the warranty being void:**

- Damage, faults or defects arising from misuse, abuse accidents or alterations
- Failure to perform maintenance or maintain good working condition.
- If the any modifications are made.
- Fair wear and tear.

**This warranty is given by Dynaweld Industrial Supplies Pty Ltd**

**Ph.1300 899 710**

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