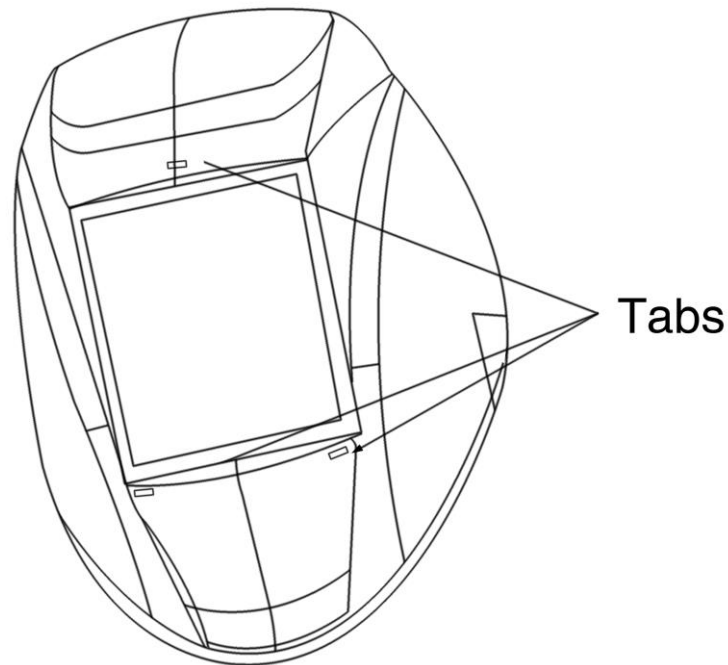


SECTION 5 – REMOVING AND INSTALLING ADF CARTRIDGE

The cartridge is secured to the helmet by a cartridge holder with two tabs at bottom and a tab on top of the holder.



Removing ADF Cartridge: Use one finger to press down the tab and at the same time another finger to push off the retainer on the helmet. Start from the bottom and then the top. Remove the cartridge holder and the cartridge.

Installing ADF Cartridge: Insert the tab on the top to the retainer first, and then press down the bottom of the holder and push back the retainers to click on the tabs at the bottom.

SECTION 8 – INSTALLING MAGNIFYING LENS

Simply insert the magnifying lens from top down as shown in the figure below, and then slide it into the desired position in the retaining brackets.

To prevent lens fogging, install flat side of magnifying lens toward auto-darkening filter.

SECTION 9 – MAINTENANCE

Helmet and Cover Lens: Periodically clean them by using a soft cloth dampened with a mild soap and water solution. Allow to air dry.

ADF Filter: Occasionally clean it with a lint-free tissue or dry soft cloth or eye glass wipes. Do NOT submerge it in water or other solution

SECTION 10 – STORAGE

The helmet and ADF filter shall be stored in dry and well ventilated place. When stored in extremely cold temperature, warm helmet to ambient temperature before welding.

SECTION 11 – TROUBLE SHOOTING

Symptom	Possible Causes	Solution
Filter Not on (for more to see "Staying dark" and "Stay light" below)	Battery contact may not be good, and/or the battery may not be new or fully charged.	Check batteries; Check and clean the battery contact; Check the On button for operation
Filter Not Switching (staying light and not darkening when welding)	1. Obstruction of the light to the sensors by a dirty cover lens	1. Clean and/or replace the cover lens; clean sensors in front of the lens
	2. The angle of the sensor to the light is too big. If the unit is turned away from the arc at an angle of 45 degrees or more, the unit will not switch to dark	2. Position the filter so that the sensors face the arc. The optimum is a direct position in front of the arc.
	3. Airborne contaminants such as smoke prevent the sensors from receiving sufficient light to switch (darken)	3. Ensure there is adequate ventilation in the work area.
Filter Not Switching (staying dark after the arc is extinguished, or no arc is present)	This may be caused by the ambient lighting or sunlight. The sensor is designed not to react to sunlight but once the filter is switched to dark, sunlight may be bright enough to prevent it from switching back to light state again.	Turn the filter unit away from any source of light and/or pass you hand in front of the sensors briefly. Fine tune sensitivity to lower level.
Filter Switching or Flicking	If the filter switches to dark and then turns to light again while there is still an arc, the sensitivity level may not be properly selected or there is some obstruction of light from the arc to the sensors.	1. Increase the sensitivity level; 2. Move the filter closer to the arc (1-2 feet from the arc is optimum)-but not close. 3. Make sure that the filter is pointed directly at the arc, and that the sensors are not blocked from direct exposure to the arc (including not blocked by your arm, welding torch gun or nozzle); 4. Make sure that the cover lens is clean.
Lighter shaded areas at the edge and corner of the filter lens	The auto-darkening filter uses liquid crystal which exhibits an angle of view effect. In the dark state, it is normal for welder to notice slightly lighter shaded areas at the edge and corners of the filter lens. This does not represent any health or safety hazard. The optimum viewing angle of the auto-darkening filter is designed to be perpendicular to the surface of the filter lens.	No corrective action is needed

Symptom	Possible Causes	Solution
Sports in the filter lens. The shape and/or sports may appear to "grow" in the lens	It occurs after the lens has been shut off. The liquid crystal within the filter unit loses its electrical polarity after the electrical current is cut off. The liquid crystal, therefore, "relaxes" and causes the shape/spot to appear. It is a normal condition, and has no impact on the operation of the lens	No corrective action is needed.
Partial light/shading	There appears to be a distinct shade difference in portion of the filter lens and there is no crack in the unit. It may be caused by the leakage of light in the filter unit or reflection of light from light clothing into the helmet or the angle of looking through the lens, or optical illusion caused by "visible light" when wearing bifocals.	1. Make sure the filter unit is properly installed; 2. Wear dark clothing; 3. Make sure the welding helmet is adjusted properly so that the welder is looking straight and directly through the lens; 4. Welder who wears bifocals may notice a lighter shade in the bottom of the filter lens. This is normal and an optical illusion caused by "visible light." No correction is needed for this symptom.
Sections of the filter not going dark, distinctive lines between light and dark areas	The ADF filter may be cracked. The crack can be caused by dropping or hitting the helmet or by welding spatter on the filter.	Stop welding immediately, and replace the filter if cracked.
Short Battery Life	If the batteries last only a few days even when usage is not intense, either the battery is wrong type or the battery contact is not good.	Check the battery, and battery contact. The batteries shall be CR2450 lithium batteries.