



 **Speedglas™**
Welding Safety

A welder is shown in profile, wearing a dark grey protective suit and a hooded helmet. A black corrugated hose connects the helmet to a grey, cylindrical breathing apparatus worn on their back. The welder is working on a large, rusted metal wheel, and a shower of bright orange sparks is erupting from the point of contact. The background is a dark industrial setting with various tools and equipment.

Care and maintenance for your Welding Protective Equipment

3M Science. Applied to life.™



Why is care and maintenance important?

Welding and grinding creates respirable and inhalable fumes and particles, in addition to hazards from flying hot particles, molten metal, intense ultraviolet, visible and infrared radiation.

To protect yourself, you need to follow the path to protection:

Detect – identify all the hazards and conduct a thorough risk assessment

Select – choose control measures that reduce or eliminate exposure and as required select PPE that is both adequate (the right type and level of protection) and suitable (appropriate for the worker, task and working environment).

Protect – implement an effective PPE program, including training for those who wear but also care for and maintain PPE.

If you don't keep up your maintenance you may get...

Reduced protection
levels

=

Resulting in the additional
cost of replacement

Reduced effective
lifetime of equipment

Correctly selected and used PPE can help protect you from these hazards. But, your PPE needs to be properly looked after, cleaned and stored when not in use so that it can keep protecting you every time it is used. A good care and maintenance program will consider:

- Battery status and charging (if applicable)
- Pre-use checks and regular inspection
- Inspection after use
- When to change filters or other consumables
- Cleaning procedures for reusable items (if applicable)
- Availability of consumables (for example filters) and spare parts (for example batteries)
- Replacement PPE provision
- Training and responsibilities for those involved in conducting care and maintenance
- Storage between use
- Asset tracking and record keeping

To Optimise the effective lifetime of your welding equipment and avoid the additional cost of replacement, regular maintenance is important. Replace all damaged parts immediately to help ensure intended degree of protection.

Below follows a general overview. For detailed instructions and guidance, always follow the user instruction.



Before use

Check the system for damage and replace parts if necessary.

1. **Helmet and headband.** Inspect for cracks or any damaged parts. Replace if needed.
2. **Welding filter.** Check that the sensors are clean. Replace the battery if the low battery indicator flashes or if the indicators do not flash when the buttons are pressed.
3. **Protection plates.** Ensure that your welding filter is equipped with an outer and inner protection plate. To help provide the best possible vision, they should be clean and without scratches.
4. **Magnification.** If you can't see the detail you need, try one of our magnifying lenses, available in x1.0, x1.5, x2.0, x2.5 and x3.0 strengths.
5. **Respiratory helmets: face seal.** If the face seal is damaged, there is a risk that contaminated air will get inside the helmet. Verify it's in place and free from splits and tears.
6. **Respiratory helmets: breathing tube.** Confirm that the tube is undamaged and not leaking any air. To extend the life of the breathing tube, use a tube cover or a heavy-duty breathing tube

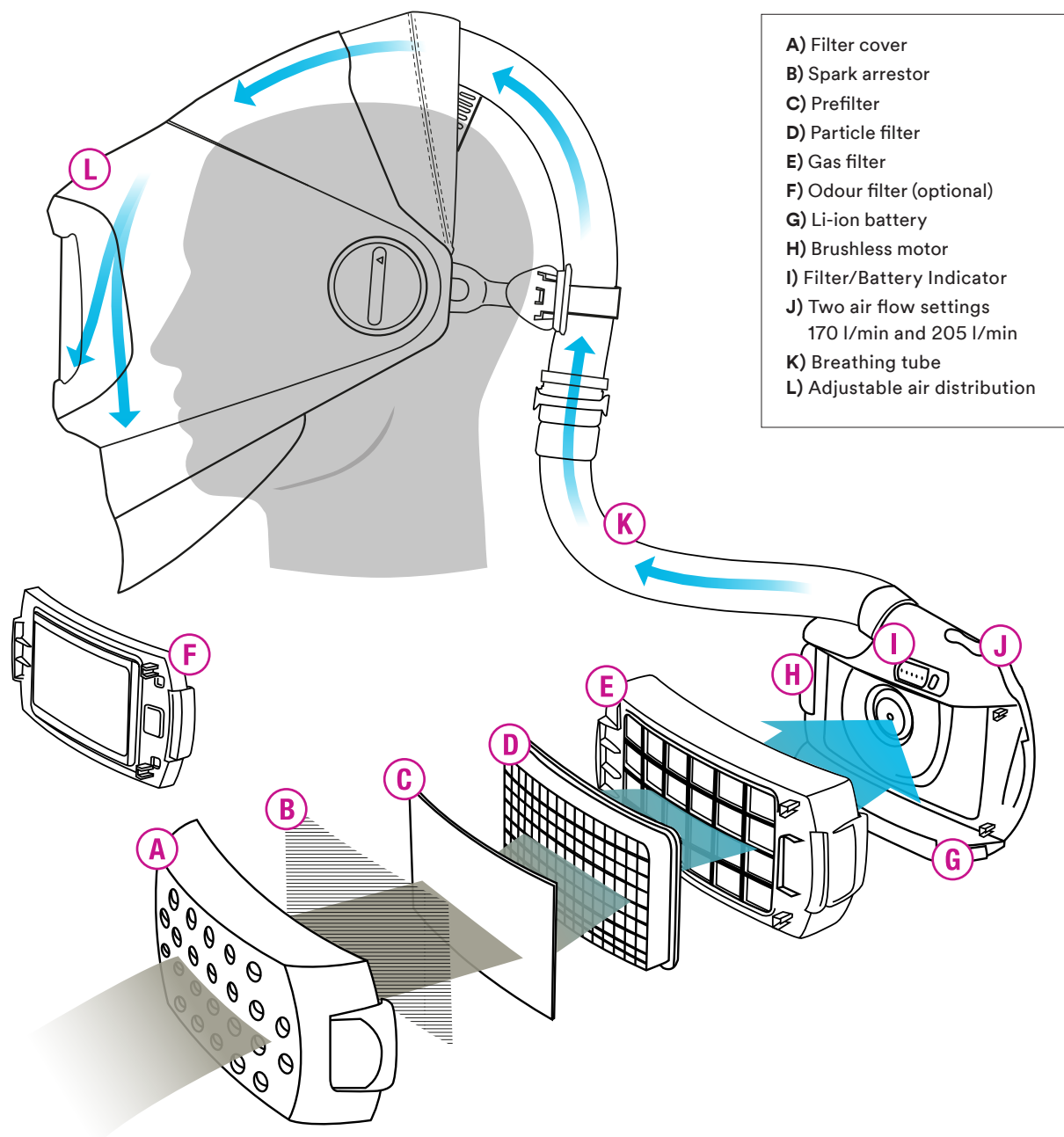
After use

1. **Clean the helmet.** Wipe with a moist tissue or cloth, both inside and outside the helmet. If you suspect that the inside of the breathing tube is dirty, it must be changed. DO NOT rinse, immerse in water, or clean with solvents.
2. **Face seal and sweatband.** Remove for additional cleaning as needed and replace if they have splits or tears or whenever they become unhygienic.
3. **Protection plates and visor plate.** Clean with a soft cloth and replace if any pits or scratches occur.
4. **Breathing tube.** Replace if damaged, deformed or leaking any air.
5. **Storage.** Store the helmet in a dry, clean area away from direct sunlight, high temperatures and solvents. Ideally use the bag that comes with the helmet or similar.





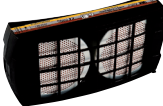




Maintain your 3M™ Adflo™ Powered Air Purifying Respirator (PAPR)

Since its launch, the 3M™ Adflo™ PAPR has become one of the most popular PAPR's in the world. The Adflo PAPR is specifically designed to meet your welding needs. By using the Adflo PAPR, you get both protection and comfort all day long.

- With the right type of filter, the Adflo PAPR effectively protects against both particles and gases and vapours – all in one system
- Selectively replace either the particle or the gas & vapour filter as needed: you don't need to change both filters at the same time. Note that a particle filter must be used at all times.
- The Li-Ion batteries are available in two versions, standard and heavy-duty (for longer operation time). Make sure you handle and charge the battery according to user instruction for best performance.



Replacement table 3M™ Adflo™ Powered Air Purifying Respirator

PART		Typically replaced	Comment
	A Filter cover	If damaged	To Hold and protect the filters
	B Spark arrestor	When needed	Replace deformed or damaged to protect the particle filter from sparks and spatter
	C Pre-filter	When needed, at least weekly.	Regular replacement of the prefilter extends the life of the particle filter, saving money while also increasing the battery run-time
	D Particle filter	When needed, at least every month	Replace when particle filter indicator becomes red. Otherwise, replace whenever the battery operating time becomes too short, or when the low airflow alarm is triggered by a fully loaded filter.
	E Gas filter	According to predetermined employer change-out schedule	Smell and taste is not recommended as a measure for determining when to change gas filters.
	F Odour filter	Change when unpleasant smell occur	Odour filter is not necessary when a gas and vapour filter is used
	G Adflo Battery	When needed	Replace if the battery is no longer taking charge to an acceptable level
	H Battery charger	If damaged	Replace if any parts are damaged
	I Breathing tube	If damaged or contaminated	Use a breathing tube cover to extend the life time or a rubber breathing tube for use in heavy duty environments

① What is listed above are basic needs. For detailed instructions and guidance, always follow the user instruction.

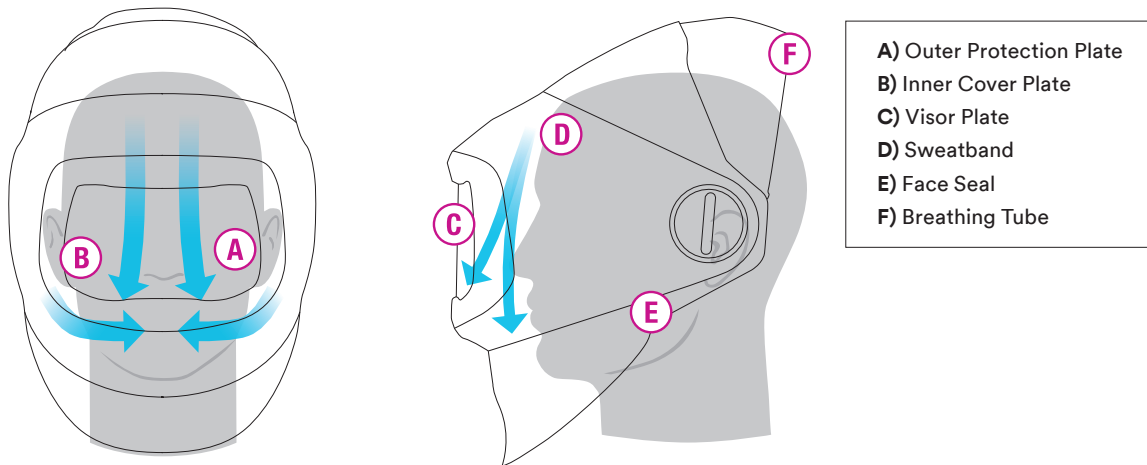
Maintain your 3M™ Speedglas™ Heavy Duty Welding Helmet G5-01







Based on extensive input from welders working at high amperages that need to grind frequently, the 3M™ Speedglas™ Heavy-Duty Welding Helmet G5-01 is created to be adaptable to an individual's needs and situation.

- Protection against radiation, sparks and spatter, from a high-coverage welding helmet design that also offers expanded coverage options
- Designed for heavy-duty, high-amperage welding and grinding, the G5-01 welding helmet connects to the 3M™ Adflo™ Powered Air Respirator to provide TH3-rated respiratory protection. The robust Adflo respirator provides all of the features you would expect in a

premium system, including easy-to-use functionality. For conditions where supplied air is required we can offer the 3M™ Versaflo™ Series Regulators.

- View your work with 3M™ Speedglas™ Natural Colour Technology – now available with variable colour option in the dark state.
- No compromises on comfort! Individualize your helmet comfort with different accessory configurations, while you use the new helmet controls to adjust the respiratory airflow to your preferences



System	Component	Typically replaced	Notes
	A. Outer Protection Plate	Once a week	Replace anytime the plate becomes deeply pitted, scratched or too dirty to clean with a soft cloth or lens paper
	B. Inner Cover Plate	Once a month	Regularly clean with a soft cloth and replace if any pits or scratches occur
	C. Visor Plate	Every two weeks	Replace more often if visibility is reduced
	D. Sweatband	Once a month	Replace more often if sweatband becomes unhygienic
	E. Face Seal	If damaged, split or torn	Replace earlier in really dirty environments or whenever the seal becomes unhygienic
	F. Breathing Tube	If damaged, deformed or leaking any air	To extend the life of breathing tube, use a tube cover or heavy-duty rubber breathing tube



For more information regarding spares and consumables for your 3M™ Speedglas™ Welding Equipment, refer to the 3M™ Speedglas™ Consumables Guide by scanning the QR Code or speak to a 3M representative.



**Learn more about product maintenance
from Speedglas YouTube channel!**



Scan the QR code or visit
youtube.com/3MSpeedglas

Do you, as a welder, know what's in your air?

Follow the path to protection

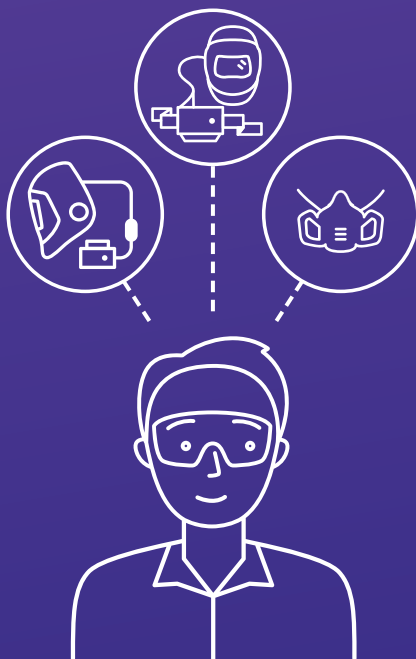


1. Detect

We believe welders deserve to feel safe and comfortable during their workday.

Clean air is critical to employee safety, but you won't know if you have appropriate protection without monitoring and understanding what's in your air.

Different welding methods and environments requires different levels of protection – let us help you on the path to safety



2. Select

Establishing a thorough respiratory protection program requires both selecting the correct respirators and a plan to change out your gas/vapor cartridges.

Selecting the welding PPE include various parameters such as protection, comfort and performance. Each situation and welding environment have their unique challenges

It doesn't matter how good your protective equipment is if nobody uses it. We make helmets that are comfortable, good-looking, and promote welders' performance.



3. Protect

Risk remains constant. You'll need a consistent program that can also adapt to new challenges, and we want to help you establish one.

We've developed tools and guidelines to help you maintain your equipment and make the most out of it.



3M Welding Centre of Excellence
SE-78521 Gagnef, Sweden

www.speedglas.com
www.3M.com

3M, Speedglas and Adflo are trademarks of 3M Company, used under license in Canada.

© 3M 2021. All rights reserved.