



Operating Manual
Gallet F1XF[®]
Helmet for Firefighters

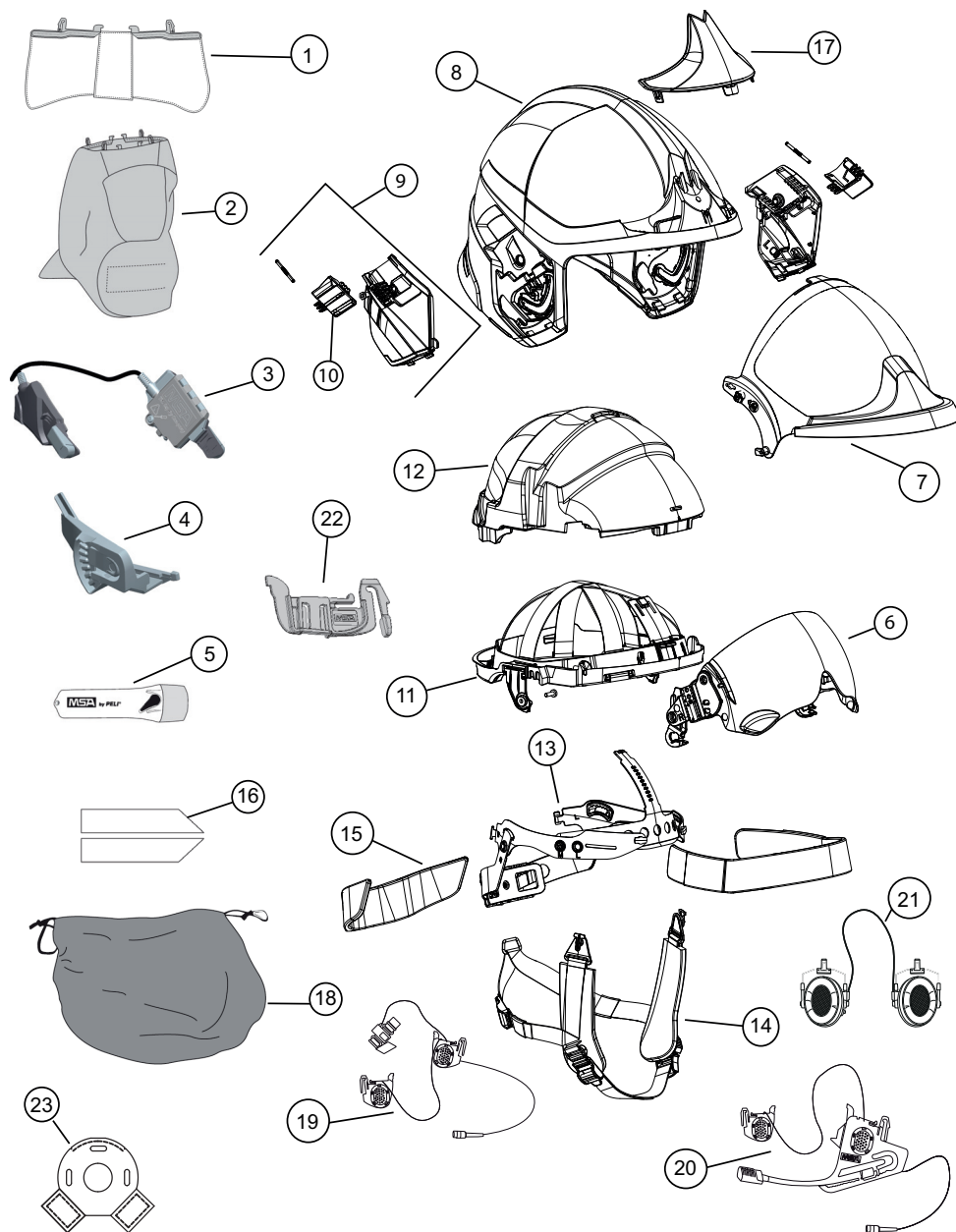


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The Safety Company

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No	Part	Part. No
1a	Aluminized neck curtain F1XF, 3 layers	GA1116F
1b	Nomex neck curtain F1XF	GA1116C
1c	Wool/Nomex neck curtain F1XF	GA1116D
2a	Integral Wool/Nomex neck curtain F1XF (Size Medium/Large)	GA1116B-M GA1116B-L
2b	Integral aramid neck curtain F1XF	GA1116E-M GA1116E-L
3	Lighting module F1XF	GA1484
4	Torch lamp support F1XF (D: right/G: left)	GA1485D GA1485G
5a	Lamp XPS	GA1488
5b	Lamp XP LED	GA1464
5c	Lamp XS zone 0	GA1466
5d	Lamp AS-R	GA1481
6a	Ocular visor kit F1XF, EN14458, clear	GA1087A
6b	Ocular visor kit F1XF, EN14458, tinted	GA1087B
7a	Face shield F1XF, EN14458, clear	GA1086A
7b	Face shield F1XF, EN14458, metalized	GA1086B
8	Shell F1XF, Painted, (Size M: Medium/L: Large)	GA1090-xxM GA1090-xxL (S)
9	Kitfix F1XF	GA1092A
10a	Kitfix F1XF mobile	GA1092B
10b	Kitfix F1XF mobile, PN	GA1092C
11	Suspension F1XF, EN443, (Size M: Medium/L: Large)	GA1094-M GA1094-L (S)
12	Impact liner F1XF, EN443, (Size M: Medium/L: Large)	GA1095-M GA1095-L (S)
13	Ratchet cradle F1XF	GA1098A
14a	Chinstrap F1XF, textile	GA1128A
14b	Chinstrap F1XF, leather	GA1128B
15a	Textile paddings, F1XF	GA1129A
15b	Leather paddings, F1XF	GA1129B
16	Retroreflective stickers F1XF (Size M: Medium/L: Large)	GA1136-xxM GA1136-xxL
17	Front plate F1XF	GA1150-xx
18	Protective bag for helmet	GA1382
19a	Headset Bone Conductive Microphone F1XF	GA010002A3X
19b	Headset Bone Conductive Microphone F1XF 2Is	GA010002A3AX
20a	Headset Boom Microphone F1XF 1Is	GA010002B3X
20b	Headset Boom Microphone F1XF 2Is	GA010002B3AX
21a	Hearing F1XF Protect. Bone Conduct. Micro.	GA010002C3X
21b	Hearing Protection Boom Microphone F1xf	GA010002D3X
21c	Hearing Protection F1XF	GA010002E3X
22	Set of 10 headset interfaces for F1XF	GA1131
23	OSTEO interface for F1XF	GA010007062

For other languages see chapter 6 of the respective manual.

1 Safety Regulations

1.1 Correct Use

The F1XF helmet - hereafter called helmet - is a safety helmet for the head intended for firefighters operations, such as fire fighting in buildings and other structures, rescue interventions and other typical tasks of fire brigades.

The helmet is designed for use with SCBA full face masks.



WARNING!

The safety intended to be provided by the helmet can only be ensured when it is properly assembled and correctly fitted, removable parts shall not be worn separately.



WARNING!

This helmet is not suitable as a motorcycle helmet.

It is imperative that this operating manual be read and observed when using the product. In particular, the safety instructions, as well as the information for the use and operation of the product, must be carefully read and observed. Furthermore, the national regulations applicable in the user's country must be taken into account for safe use.

Alternative use, or use outside this specification will be considered as non-compliance. This also applies especially to unauthorized alterations to the product and to commissioning work that has not been carried out by MSA or authorized persons.

1.2 Liability Information

MSA accepts no liability in cases where the product has been used inappropriately or not as intended. The selection and use of the product are the exclusive responsibility of the individual operator.

Product liability claims, warranties also as guarantees made by MSA with respect to the product are voided, if it is not used, serviced or maintained in accordance with the instructions in this manual.



DANGER!

Before use the product operability must be verified. The product must not be used if the function test is unsuccessful, it is damaged, a competent servicing/maintenance has not been made, genuine MSA spare parts have not been used.

2 Description

The helmet provides protection of head and face against shocks, sharp objects, splatters of solid, liquid, corrosive, chemical products (sulphuric acid, sodium hydroxide, p-xylene, butan-1-ol, n-heptane...), molten metals, radiating heat, flames, electric current.

In situations where the conditions exceed those described in the specifications mentioned above, the protection of the user is not guaranteed.

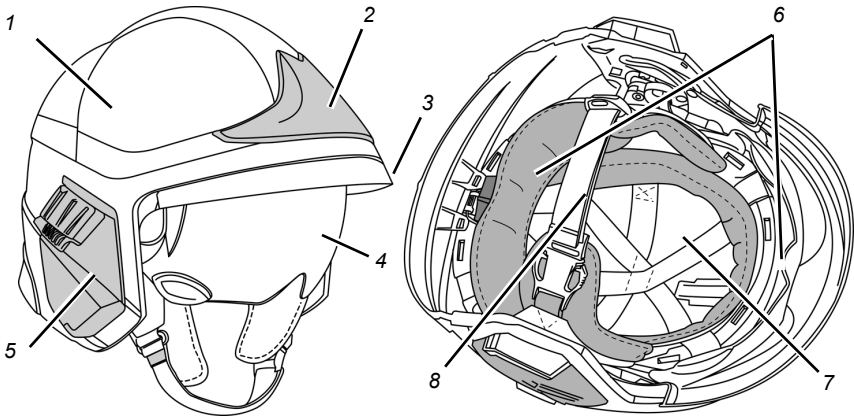
Face Shield

The clear or gold coated face shield protects against various risks likely to arise during firefighting interventions, ambulance and emergency services, except respiratory and smoke and gas / vapour emission risks. The face shield resists the splatter of chemical products identical to those of the helmet mentioned above.

Description

2.1 Overview

The helmet consists of the following components:



- | | | | |
|---|--------------|---|-----------------------------------|
| 1 | Shell | 5 | Kitfix mask adaptor |
| 2 | Front plate | 6 | Inner ring with headband assembly |
| 3 | Face shield | 7 | Impact liner |
| 4 | Ocular visor | 8 | Chin strap |

2.2 Technical Data

Helmet sizes	<ul style="list-style-type: none">• Medium (M) for head sizes from 52 cm to 62 cm (20.5 inches to 24.4 inches)• Large (L) for head sizes from 57 cm to 65 cm (22.4 inches to 25.6 inches)
Weight (Helmet with face shield, no options)	<ul style="list-style-type: none">• M: 1450 ± 30 g• L: 1580 ± 30 g <p>Weight changes when options are fitted on the helmet. Check manuals for options for their exact weights.</p>
Options	<ul style="list-style-type: none">• Neck curtain (4 types)• Integrated lighting module• Lamp bracket to fit a helmet mounted flashlight• Ocular visor• Communication headset• Hearing protection with or without communication <p>Detailed information regarding the lighting module and the communication headset can be found in the separate user manual for these devices.</p>
Warranty	<ul style="list-style-type: none">• Helmet2 years, parts and labour from the date of purchase• Options2 years, parts and labour from the date of purchase
Legal warranty	<p>For defects and hidden defects according to the conditions stipulated in articles 1641 and pursuant to the Civil Code (in France).</p> <p>Different national regulations may apply.</p>



2.3 Certifications/Approvals/Technical Specifications

The helmet meets the (EU) 2016/425 regulation and is certified according to EN 443:2008, EN 16471:2014 and EN 16473:2014. Module D surveillance by: APAVE (0082), 8 rue Jean-Jacques Vernazza, CS 60193, 13322 Marseille Cedex 16, France.

Standards and Directives for Helmet

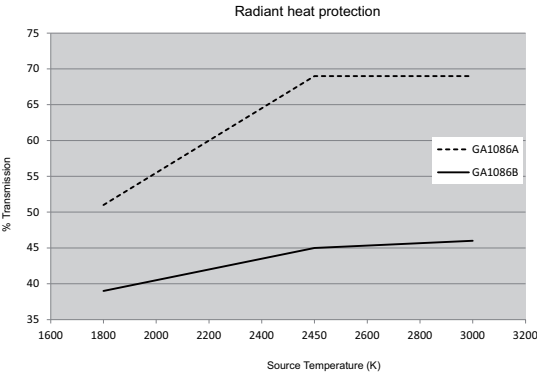
Certification agencies	Helmet	INSPEC International Ltd. (0194), 56 Leslie Hough Way, Salford, Greater Manchester, M6 6AJ, United Kingdom BG BAU, DGUV Test (0299), Prüf- und Zertifizierungsstelle FB PSA, Zwengenberger Straße 68, 42781 Haan, Germany
Standards and directives:	(EU) 2016/425	Personal protection equipment regulation
	EN 443:2008	"Helmets for firefighting in buildings and other structures" by INSPEC International Ltd. (0194).
	EN 16471:2014	"Helmets for wildland fire fighting" by BG BAU (0299).
	EN 16473:2014	"Helmets for technical rescue" by BG BAU (0299).
Depending on the individual helmet configuration, optional EN 443:2008 requirements may be marked on the helmet, as explained below:		
Type B	Indicates the protection zone assured by the helmet (area 1a -1b).	
Type B3b	Indicates the extended protection zone assured by the helmet (area 1a-1b and 3b)	
E2	Indicates the electrical insulation of the damp helmet.	
E3	Indicates a non-conductive surface of the shell.	
*** / **	Indicates protection at low temperature down to -30°C/ -20°C	
C	Indicates a resistance to liquid chemical products. (sulphuric acid, sodium hydroxide, p-xylene, butan-1-ol, n-heptane)	
Marking (Wheelmark):	Meets 2014/90/EU Marine Equipment Directive (MED)	

Standards and Directives for Visors


Certification agency	Face shield:	INSPEC International Ltd. (0194), 56 Leslie Hough Way, Salford, Greater Manchester, M6 6AJ, United Kingdom
	Ocular visor	BG BAU, DGUV Test (0299), Prüf- und Zertifizierungsstelle FB PSA, Zwengenberger Straße 68, 42781 Haan, Germany
Standards and directives:	(EU) 2016/425	Personal protection equipment regulation
	EN 14458:2004	Personal eye equipment
(+) or (=)	Conforms to the additional requirements of firefighters or general use	
	Visor type: Eye guard	
	Visor type : Face guard	
-30 °C; 120 °C	Extremes of temperature to which the visor has been tested (-30 °C & +120 °C)	
Ω	Complies with the electrical properties	
A	Resistance to high energy impact 190 ms-1	
T	Resistance to medium energy impact at extremes of temperatures	
AT	Resistance to high energy impact (190ms-1) at extremes of temperature	
K	Resistance to abrasion according EN 168: 2001, clause 15	
N	Resistance to fogging	
2C-2.5 and 2C-1.2	UV filtering according to EN170:2002 for metalized and clear face shield	
2-1.2 and 5-3.1	UV filtering according to EN170:2002 for clear and tinted ocular	

Adjusting the Helmet

The Declaration of Conformity can be found under the following link: <https://MSAsafety.com/DoC>.



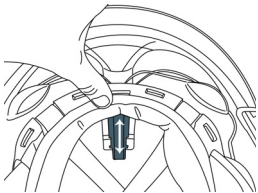
The protection against radiating heat ensured by the face shields varies with the temperature of the heat source, see figure above. It is recommended to only use the face shield when the face shield can reduce the heat exposure to the wearer's eyes to less than 100W/m2.

**WARNING!**

When fitted with another item of personal protective equipment or with an accessory, (other than as supplied by the helmet manufacturer for use with this helmet) a helmet marked as complying with EN 443 might no longer satisfy all clauses of the standard. Refer to information supplied by the helmet manufacturer.

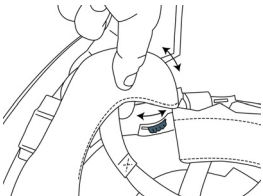
3 Adjusting the Helmet

3.1 Before Donning



- (1) Choose helmet size M or L (see Technical Data) according to your head size.
- (2) Adjust front headband by sliding it up or down.
- (3) Position front headband inside the helmet to avoid contact between headband and mask.

- (4) Adjust rear headband by rotating to optimise fit on back of the head.

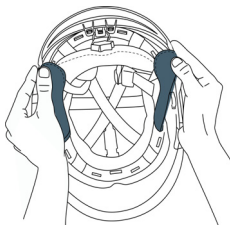




- (5) Adjust wearing height with the Velcro fasteners on the two rear suspension straps.

3.2 Donning

The following adjustments have to be carried out when the helmet is donned.



- (1) Position the chin strap as shown before donning the helmet.

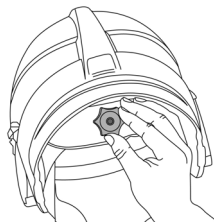
- (2) Adjust head size:

Turn knob clockwise to tighten the ratchet headband.

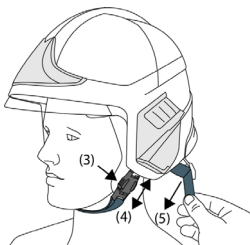
Turn knob anticlockwise to loosen the ratchet headband.

- (3) Check that the helmet is correctly adjusted:

The helmet should not fall off when the head is leaning forward and the chin strap is unfastened.



The chin strap is equipped with 3 adjustment points to allow quick and simple adjustment while the helmet is on the head.



- (1) Maximally loosen the 3 adjustment points.
- (2) Place helmet on head. Make sure that it is well positioned.
- (3) Close the buckle of the chin strap.
- (4) Tighten the chin strap.
- (5) Tighten the two rear adjustment straps until a tight but still comfortable fit is achieved.



The wearing angle shown here is indicative.

It may vary slightly depending on user's head size and shape.



WARNING!

The helmet only meets the retention requirements of EN 443:2008 when the chin strap provided by the helmet manufacturer is worn and adjusted according to the instructions.

3.3

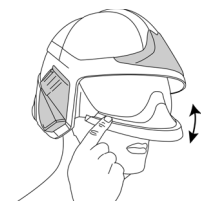
Visors



WARNING!

- ▶ Visors worn over non-designated corrective frames may transmit impacts which may damage the corrective eyewear thus creating a hazard to the user.
- ▶ Service life of visors is depending on the conditions of use.
- ▶ Any face shield that has been scratched, dropped or damaged must be replaced.
- ▶ The visor type "Face guard" will provide protection to the eyes and substantial areas of the face.
- ▶ Performances of the visor are obtained only in use position (low position). Visors should be in standby position (stored under the helmet shell) during the use of a breathing apparatus (SCBA).
- ▶ Equipment not marked with "T" should only be used at non-extreme ambient temperatures.
- ▶ Ensure that you are using an EN443 helmet with a visor marked "+" for structural firefighting.
- ▶ Materials that come in contact with the wearer's skin could cause allergic reactions in susceptible individuals.

Face Shield



Ocular Visor (optional)

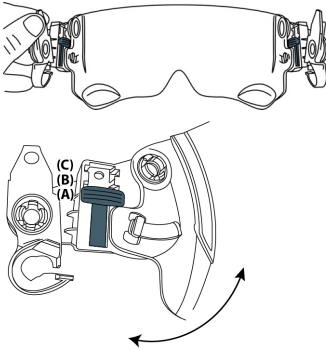
- (1) Position by pulling it completely up or down.



- (1) Position by pulling it up or down.
- (2) Tilt the ocular visor towards the face for an optimal fit.

The ocular visor can be adjusted to optimize the distance between visor and face.

- (1) Don helmet and pull down ocular visor.



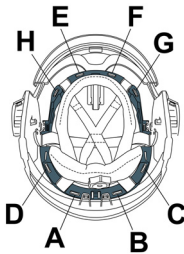
- (2) Unclip and clip the yellow stopper in positions (A), (B) or (C) to optimize fit of the ocular visor on the face.

4 Attaching the Accessories

4.1 Neck Curtains

2 types of neck curtain can be installed:

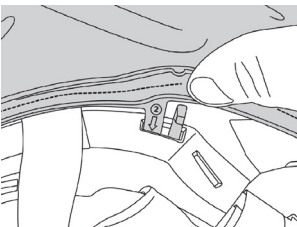
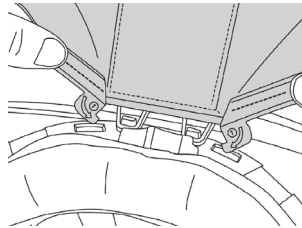
- Neck curtain for rear protection
- Integral neck curtain



The helmet has 8 slots for installing the neck curtain:

- 4 at the rear for the rear neck curtain (A, B, C, D).
- 4 more at the front for the integral neck curtain (E, F, G, H)

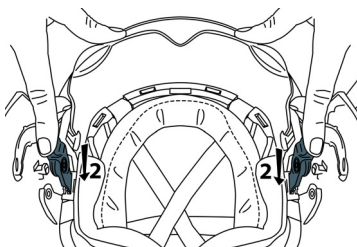
- (1) Place the neck curtain upside down above the helmet.
- (2) Insert the 2 clips marked ❶ in the central slots.



- (3) Push the 2 pressure clips ❷ till locking.
- For the integral neck curtain, repeat the operation for the 4 front attachment points.

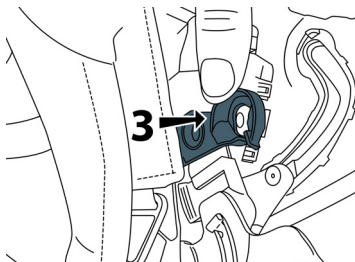
Attaching the Accessories

4.2 Ocular Visor

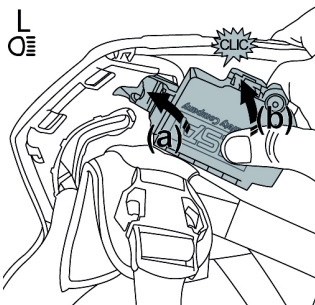


- (1) Place the ocular visor upside down above the helmet.
- (2) Insert the 2 clips simultaneously into the dedicated slots.

- (3) Lock the ocular visor module by fixing it on the shell plot (right and left).

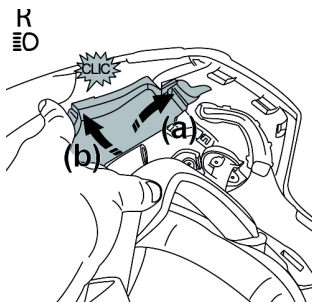


4.3 Lighting Module

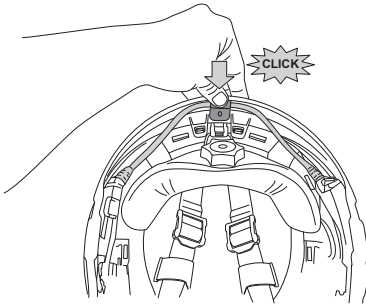


- (1) Place the helmet upside down with the face shield towards you.
- (2) Insert the left box (L) of the F1XF Lightning module into the space provided on the left side of the helmet and clip into place.

- (3) Follow the same procedure for the right box (R).



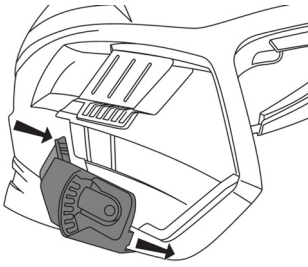
When the lighting module and F1XF boom microphone are both installed inside the helmet, always disassemble the lightning module first, then the boom microphone.



- (4) Ensure that the cable is placed in the indicated area.

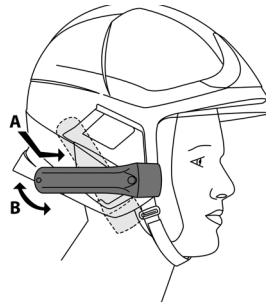
See the Lighting module user instruction delivered with the product for details on operation.

4.4 Lamp Bracket and Lamp



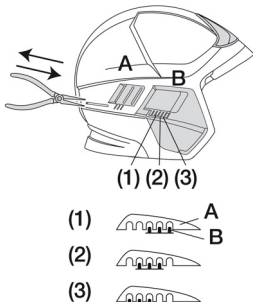
- (1) Slide the lamp bracket along the shell shape.

- (2) Insert the lamp into the lamp bracket from the rear open side (A).
- (3) Rotate, then press forward to secure the attachment (B).
- (4) Tilt the lamp up and down into the required position.
- (5) To remove the lamp, slightly press it towards the helmet while sliding it to the rear open side (A) of the lamp bracket.



4.5 Mask Adapter (Kitfix)

Attach a mask using the "Kitfix" connector kits A.



To adjust mask tightness on helmet:

- (1) Use a pair of pliers to remove the pin.
- (2) Adjust the Kitfix to position (1) (2) or (3) (according to desired mask tightness).
- (3) Use the pin to lock the Kitfix in place (push it in completely).
- (4) Test mask seal after attaching the mask if necessary.

5 Maintenance and Cleaning

The length of the useable life of this helmet will be affected by the type(s) of material used in its construction and the environments in which the helmet is used and stored. Recommendations on this topic should be sought from the manufacturer.



WARNING!

Do not apply paint, stickers, cleaning products with a hydrocarbon base or solvents to the helmet or visors to prevent damaging the materials of your helmet.



Do not drop the helmet.

Prevent the helmet from impacts which could damage the shields (cracks/scratches).



The parts in contact with skin have to be inspected regularly for cracks or wear that could cause discomfort. Changing those parts regularly will maintain user comfort level.

To maximize helmet lifetime:

- Store the helmet in a proper storage bag and/or in a closed cabinet to avoid extended exposure to cold, humidity, exhaust fumes, etc.
- Clean the helmet (shell and internal components) after use before storing.

Checks After Each Use

After each use, check every part of the helmet and especially all the fixing points:

- Correct anchor points used
- No evident wear
- No fractures or cracks

Check that the helmet fit is always correct.

Maintenance by a Trained Maintenance Specialist

Only trained people should perform the regular maintenance.



WARNING!

Replace any damaged parts only with original MSA parts, as only these original parts are authorized and ensure the performance of the helmet.

Helmet absorbs the energy of a blow by partial destruction of, or damage to, the helmet. Even though such damage may not be readily apparent, any helmet subjected to a severe impact should be replaced.

Periodically, perform a complete check of the helmet with detailed inspection of each critical component. MSA provides upon request a Service and Maintenance manual which details conformity criteria for all safety components of the helmet and parts replacement procedures.

MSA recommends that this complete control is performed at least every two (2) years, more regularly in case of intensive use (every year for instance), or each time the helmet has been exposed to very severe conditions (mechanical impact, very high temperature, direct flame contact, contact with pouring metal or chemicals). In cases where frequency of use is very low and none of the mentioned exposures and damages are recorded, an inspection should be performed at least every 4 years. Local regulations may apply.




WARNING!

In case of visible damage identified during the daily check (before or after use), such as impacts, significant scratches, coating removal on the shell or visors, melted parts, broken parts, torn straps or paddings, missing components, non-operational moving parts (such as visors or ratchet), etc., the helmet should be taken to the trained maintenance technician or an MSA approved maintenance center for complete control processing.



WARNING!

Components that are particularly critical to the safety of the product, such as suspension, shell and impact liner, are marked with .

Treat such parts with special attention and care during inspection and assembly.

5.1 Cleaning



WARNING!

- ▶ Do not use solvent-based products (acetone, alcohol etc.) or softeners.
- ▶ Do not use abrasive materials.
- ▶ The helmet must be completely dried before returning to service (max. drying temperature 40°C).

Plastic Components, Face Shield and Ocular Visor

- Use soapy water and a soft cloth.

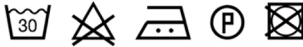
Soft Goods (Chin Strap, Rear and Front Padding)

- (1) Remove the textile or leather components (fastened with Velcro).
- (2) Clean it as follows:
 - a) Textile chin strap + textile headband liner: 30°C with a mild detergent.
 - b) Leather chin strap + leather headband liner: Use soapy water and a lint-free soft cloth.

Neck Curtains

Neck curtains made of Nomex, wool:

- Cleaning at 30°C with a mild detergent



Integral Aramid neck curtain:

- Cleaning at 60°C with a mild detergent.



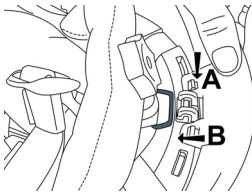
Aluminized neck curtain:

- Manual cleaning at 30°C with soapy water, using a sponge.

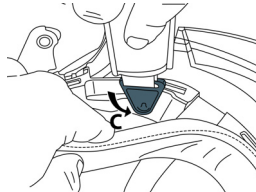
See the Cleaning and Care Guidelines by using the following link:

<https://msa.webdamdb.com/bp/#/folder/1777763/98866226>

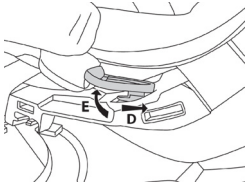
Chin Strap Disassembly before Cleaning



- (1) Unlock metallic trapezoid (chin strap 3rd point) from the hook by pushing it.

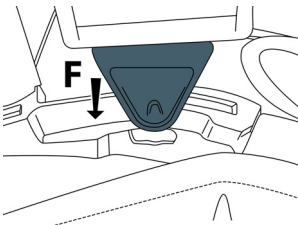


- (2) Rotate the clips on right and left side of the chin strap 90 degrees towards the rear of the helmet.

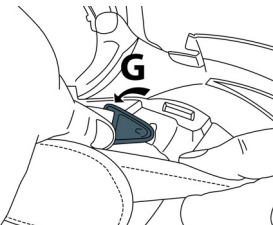


- (3) Push each clip forward and raise it on the back.

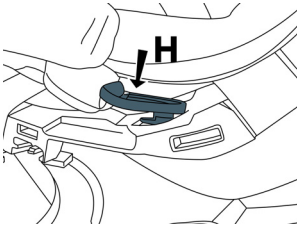
Chin Strap Assembly after Cleaning



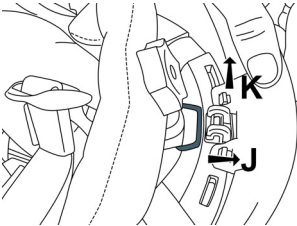
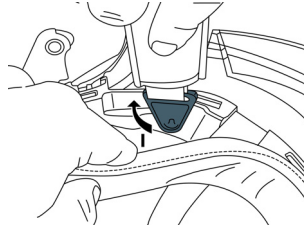
- (1) Insert both clips into the slots vertically.



- (2) Rotate clips 90 degrees towards the rear and push them in.



- (3) Rotate the clips 90 degrees forward into the wearing position.



Attachment of the 3rd point (at the back)

- (4) Insert the metallic trapezoid and lock it in the hook by pulling it vertically.

5.2 Transport

Helmet with Visor(s)

Store the visor(s) inside the helmet (out of use position), store the helmet in a MSA Gallet protective bag (GA1382).

Visor as Spare Part

The visors have to be kept in their plastic bags until they are mounted on the helmet.

5.3 Discard

The helmet must be treated as ordinary industrial waste/non-hazardous waste according to local regulations. For further information contact MSA.

6 Spare Parts, Accessories and Options

No	Part	Part. No	
1a	Aluminized neck curtain F1XF, 3 layers	GA1116F	
1b	Nomex neck curtain F1XF	GA1116C	
1c	Wool/Nomex neck curtain F1XF	GA1116D	
2a	Integral Wool/Nomex neck curtain F1XF (Size Medium/Large)	GA1116B-M	GA1116B-L
2b	Integral aramid neck curtain F1XF	GA1116E-M	GA1116E-L
3	Lighting module F1XF	GA1484	
4	Torch lamp support F1XF (D: right/G: left)	GA1485D	GA1485G
5a	Lamp XPS	GA1488	
5b	Lamp XP LED	GA1464	
5c	Lamp XS zone 0	GA1466	
5d	Lamp AS-R	GA1481	
6a	Ocular visor kit F1XF, EN14458, clear	GA1087A	
6b	Ocular visor kit F1XF, EN14458, tinted	GA1087B	
7a	Face shield F1XF, EN14458, clear	GA1086A	
7b	Face shield F1XF, EN14458, metalized	GA1086B	
8	Shell F1XF, Painted, (Size M: Medium/L: Large)	GA1090-xxM	GA1090-xxL (S)
9	Kitfix F1XF	GA1092A	
10a	Kitfix F1XF mobile	GA1092B	
10b	Kitfix F1XF mobile, PN	GA1092C	
11	Suspension F1XF, EN443, (Size M: Medium/L: Large)	GA1094-M	GA1094-L (S)
12	Impact liner F1XF, EN443, (Size M: Medium/L: Large)	GA1095-M	GA1095-L (S)
13	Ratchet cradle F1XF	GA1098A	
14a	Chinstrap F1XF, textile	GA1128A	
14b	Chinstrap F1XF, leather	GA1128B	
15a	Textile paddings, F1XF	GA1129A	
15b	Leather paddings, F1XF	GA1129B	
16	Retroreflective stickers F1XF (Size M: Medium/L: Large)	GA1136-xxM	GA1136-xxL
17	Front plate F1XF	GA1150-xx	
18	Protective bag for helmet	GA1382	
19a	Headset Bone Conductive Microphone F1XF	GA010002A3X	
19b	Headset Bone Conductive Microphone F1XF 2ls	GA010002A3AX	
20a	Headset Boom Microphone F1XF 1ls	GA010002B3X	
20b	Headset Boom Microphone F1XF 2ls	GA010002B3AX	
21a	Hearing F1XF Protect.Bone Conduct.Micro.	GA010002C3X	
21b	Hearing Protection Boom Microphone F1XF	GA010002D3X	
21c	Hearing Protection F1XF	GA010002E3X	
22	Set of 10 headset interfaces for F1XF	GA1131	
23	OSTEO interface for F1XF	GA010007062	



For illustrations of parts see fold-out page.

