

MSA Cairns®
The Safety Company

Cairns® 1836 Fire Helmet



WHEN YOU GO IN, WE GO IN WITH YOU.



Cairns® 1836 Fire Helmet

Blending tradition and technology, the MSA Cairns 1836 Traditional Fire Helmet is designed to enhance comfort while making helmet cleanings and inspections faster and easier. Cairns has been proudly manufacturing fire helmets since 1836 and when it comes to head protection, more first responders trust MSA Cairns brand fire helmets than any other.¹ The Cairns 1836 Fire Helmet is the latest innovation in traditional fire helmets from the brand that has been pioneering quality head protection for generations.

Key Features & Benefits

DESIGNED FOR EASY CLEANING

Can be taken apart in minutes for easy inspection and cleaning.

LIGHTWEIGHT & LOW RIDE HEIGHT

One of the lightest and lowest ride height helmets on the market.

NEW ANCHOR BASE

Patent-pending Slide-Lok system means no specific tool is needed to assemble and disassemble the helmet.

ARTICULATING DEFENDER® VISOR

Designed to stow neatly in the fire helmet, new Defender® Visor snaps into place and can be deployed by simply pulling down on the lens.

LARGE D-RING & CLAMP

Design makes storage and hanging of accountability tags easy. The clamp securely fastens the edge trim to the helmet shell.

NEW LEATHER FRONTS & HOLDER DESIGNS

New 5.5" front and holder design option with five new front style choices, customizable with department identification.

QUICK-CONNECT SOFT GOODS & EARLAPS

Few hook and loop fasteners offer excellent durability while quick-connect system enhances ease of attaching or detaching for cleaning.

LASER ENGRAVED LABELING & RFID TAG

Improved helmet label durability and built-in RFID tag enable integration with FireGrid™, simplifying asset management.

Accessories & Offerings



Cushion Liner

- Standard option made with TenCate Tecasafe® Plus TechT4™ material
- Genuine leather option available



Earlaps

- Yellow Nomex
- Black Nomex
- PBI/Kevlar



Eye Protection

- **New!** Articulating, Integrated Defender® Visor (available in Clear or Amber Tuffshield)
- NFPA Bourkes
- 4" Clear or Amber Tuffshield Faceshield
- ESS Goggles



Colors

- **Unpainted Matte Finish:** White, Red, Black, Yellow
- **Painted High-Luster Finish:** White, Red, Black, Yellow, Blue, Green, Orange, Pink



Front Holders

- **Sizes:** 5.5" and 6"
- **Styles:** Silkscreened Maltese Cross, Silkscreened Eagle, Carved Eagle
- Side Accountability Brackets



Leather Front Styles

- **Sizes:** 5.5", 6"
- New Front styles for 5.5"
- **FRT:** 105, 106, 107, and 108
- **PST:** 109 (frame & insert)

Features & Benefits

1 Low Ride Height

- Low ride height helps provide excellent comfort and balance.
- Shell design with low ride height merges tradition and innovation with the durability Cairns users are accustomed to.

2 Newly Designed Anchor Base System

- Patent-pending Slide-Lok system allows for easy disassembly and reassembly for cleaning and inspections.
- **First of its kind on the market!** No specific tool needed for disassembly and reassembly.

3 Large D-Ring & Clamp

- Large D-ring for easy storage or hanging accountability tags.
- Large clamp design grips edge trim securely and aids in preventing displacement.

4 New Front Holders

- New 5.5" options available, or carry on the tradition with 6" front holder options.

5 New Leather Front Styles

- Five new 5.5" style choices added, customizable with department identification.

6 Proven Shell Release System (SRS)

- This unique design feature enables the energy-absorption system to be released from the helmet shell when impacted from below the brim, leaving the energy-absorption assembly on the wearer's head for continued thermal and impact protection.
- With the SRS, if your helmet comes off due to extenuating circumstances, such as a fall through a floor or roof, the impact cap is designed to separate from the helmet shell, but remains on your head.

7 Quick-Connect Soft Goods & Earlaps

- Design of soft goods makes them easy to remove and clean, helping firefighters align with NFPA 1851 guidelines.
- Design uses few hook and loop fasteners for soft goods durability.
- Pre-made holes fit right into suspension.
- Headband and cushion liner designed to help reduce pressure points during prolonged wear, based on customer feedback
- Earlaps quickly connect through series of four quick-connect fasteners, aiding in preventing bunching of earlaps.

Lightweight Design

- One of the lightest helmets on the market, weighing in at only 3.35 lb. / 53.6 oz. (1.52 kg)*.



8 New Articulating Defender® Visor

- Retractable and articulating eyewear system stows neatly, cleanly, and securely inside the helmet.
- Easy removal for cleaning and replacement—requires no tools.

9 Redesigned Soft Goods Utilize TenCate Tecasafe® Plus TechT4™ Material

- “TechT4™ feels just like a t-shirt while offering lightweight, comfortable FR protection where you need it most—next to skin.”
- “Integrated wicking COOLDERM TECHNOLOGY offers enhanced moisture management to promote body temperature regulation and breathability.”
- “The base component of the multi-layer FR system, Tech T4™ offers comfort with no-melt / no-drip next-to-skin protection.”
- From TenCate Website: <https://us.tencatefabrics.com/techt4-mil>

New Expanded & Pivoting Ratchet & Adjustment Arms

- Redesign offers adjustable fit for diverse head sizes, hairstyles, and headwear.
- Allows for more comfortable fit while wearing facepiece and hood.
- Easy adjustment (*front and rear*) and customization for your head size/shape.

New Laser Etching for Labels

- Removes possibility of labels wearing out and/or falling out of helmet.

Adaptable to a Wide Variety of Head Sizes

- New design capable of accommodating 95% of firefighters based on NIOSH anthropometric data and testing.
- Accommodates a 5 $\frac{3}{8}$ –8 $\frac{3}{8}$ hat size.
- Ratchet and dome design allow adjustments for a large range of head sizes.

42% Reduction in Parts

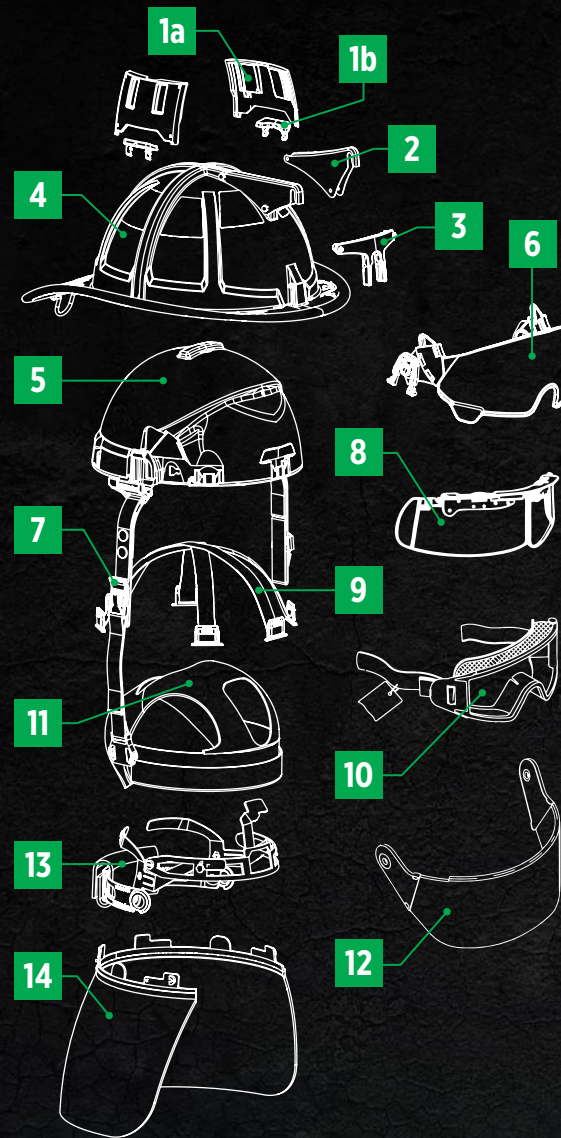
- Compared to Cairns 1010/1044 Fire Helmets.
- Helps with ease of disassembly, resulting in fewer parts and easier repair and maintenance.

Built-in RFID Allows for Integration into FireGrid™ Ecosystem

Benefits of FireGrid Integration include:

- **Lifecycle Management:** Monitor and better prepare for your next gear purchase and needs based on PPE retirements and serviceability.
- **Operating Efficiencies:** Keep track of gear, personnel assignments, and cleanings—all in one, secure location.
- **Standards Compliance:** Maintain compliance with NFPA 1851 by recording required advanced inspection and cleanings.

Detail View



KEY

- | | |
|--|-----------------------------|
| 1a Accountability Brackets (optional) | 7 Chinstrap |
| 1b Anchor Base | 8 NFPA Bourkes |
| 2 Front Holder (5.5" or 6" option) | 9 Suspension |
| 3 Front Bracket | 10 Goggles |
| 4 Shell | 11 Cushion Liner |
| 5 Impact Cap | 12 4" Faceshield |
| 6 Defender® Visor | 13 Headband Assembly |
| | 14 Earlaps |

Ordering Information

Cairns 1836 Fire Helmet

P/N	Color	Eye Protection	Cushion Liner	Earlaps	Front Holder	Chinstrap	Trim Type	Trim Color
10247314	Black	Defender Clear	Standard	Yellow Nomex	6" Silkscreened Eagle	2-pt Standard	Reflexite	Lime Yellow
10247315	Black	Defender Clear	Standard	Black Nomex	6" Carved Eagle	2-pt Standard	Reflexite	Lime Yellow
10247316	Black	Defender Clear	Leather	PBI/Kevlar	6" Carved Eagle	2-pt Standard	Reflexite	Lime Yellow
10247317	Black	Defender Amber	Standard	Black Nomex	6" Silkscreened Maltese Cross	2-pt Standard	Reflexite	Lime Yellow
10247318	Black	NFPA Bourkes	Standard	Black Nomex	6" Silkscreened Maltese Cross	2-pt Standard	Reflexite	Lime Yellow
10247319	Black	NFPA Bourkes	Standard	Black Nomex	6" Carved Eagle	2-pt Standard	Reflexite	Lime Yellow
10247320	Black	Defender Clear	Standard	Yellow Nomex	6" Carved Eagle	2-pt Standard	Reflexite	Lime Yellow
10247331	Black	Defender Clear	Standard	Black Nomex	6" Carved Eagle	2-pt Standard	Scotchlite	Lime Yellow
10247332	Yellow	Defender Clear	Standard	Yellow Nomex	6" Silkscreened Eagle	2-pt Standard	Reflexite	Lime Yellow
10247333	Yellow	Defender Clear	Standard	Black Nomex	6" Carved Eagle	2-pt Standard	Reflexite	Lime Yellow
10247334	Red	Defender Clear	Standard	Black Nomex	6" Carved Eagle	2-pt Standard	Reflexite	Lime Yellow
10247335	Red	Defender Clear	Standard	Yellow Nomex	6" Silkscreened Eagle	2-pt Standard	Reflexite	Lime Yellow
10247336	White	Defender Clear	Standard	Yellow Nomex	6" Silkscreened Eagle	2-pt Standard	Reflexite	Lime Yellow
10247337	White	Defender Clear	Leather	PBI/Kevlar	6" Carved Eagle	2-pt Standard	Reflexite	Lime Yellow

Cairns 1836 Spare Parts & Accessories

P/N	Description
10228565	Front Bracket Kit
10238753	Leather Soft Goods Replacement Kit
10238755	Standard Soft Goods Replacement Kit
10238787	Headband Assy System Replacement Kit
10238825	6 point Suspension System Replacement Kit
10238966	Earlap Replacement Kit - Yellow Nomex
10239008	Earlap Replacement Kit - Black Nomex
10239125	Earlap Replacement Kit - PBI
10239130	Carved Eagle Front Holder Replacement Kit, Brass, 6 in.
10239132	Carved Eagle Front Holder Replacement Kit, Brass, 5.5 in.
10239133	Silkscreened Eagle Front Holder Replacement Kit, Brass, 6 in.
10239135	Silkscreened Eagle Front Holder Replacement Kit, Brass, 5.5 in.
10246604	Silkscreened Maltese Cross Front Holder Replacement Kit, Brass, 5.5 in.
10246603	Silkscreened Maltese Cross Front Holder Replacement Kit, Brass, 6 in.
10239137	Anchor Release Replacement Kit
10239139	Impact Cap Anchor Release and Lock Replacement Kit
10239142	External Faceshield Replacement Kit
10238890	External Faceshield Replacement Hardware
10239188	Defender Visor Replacement Kit, Clear
10239192	Defender Visor Replacement Kit, Tuffshield
10239194	Accountability Bracket Kit
10239195	Edge Trim & Helmet Hanger Replacement Kit, Black
10239204	Edge Trim & Helmet Hanger Replacement Kit, White

Removable/Washable Chinstraps

P/N	Description
10204155	2 pt (20.5" long, standard length)
10207044	2 pt (28" long)
10226184	2pt (shorter center, 27.5" long)
10225399	Extended Postman Chinstrap with Leather Protector
10204160	4 pt (20.5" long)

Goggles

P/N	Description
S549P	ESS Innerzone 2 Goggle with Low-Profile Hardware Kit
10153029	ESS Innerzone 2 Goggle with Side-Mount Hardware Kit
10032882	ESS Innerzone 3 Goggle

Bourkes Lenses

P/N	Description
10186311	NFPA-compliant Bourkes Lens and Hardware Kit

Reflective Trim

P/N	Description
RP20YP	Reflexite, Lime/Yellow, 20 per sheet
ST20R	Scotchlite, Red/Orange, individual
SP20YP	Scotchlite, Lime/Yellow, 20 per sheet
10062656	Scotchlite, Lime/Yellow with silver center bar, 8 per sheet
10062655	Scotchlite, Red/Orange with silver center bar, 8 per sheet

Technical Specifications

SHELL DIMENSIONS	15.3" length, 11.8" width, and a crown depth of 5.78"
HEAD SIZE ACCOMMODATION	5 $\frac{3}{8}$ " – 8 $\frac{3}{8}$ "
WEIGHT	53.6 oz. (1.5 kg)* – 63.0 oz. (1.8 kg) (weight may vary depending on helmet configuration)
COLORS	<ul style="list-style-type: none"> • White • Red • Black • Yellow • Blue (painted only) • Orange (painted only) • Green (painted only) • Pink (painted only)
FINISHES	<ul style="list-style-type: none"> • Unpainted Matte • Painted High-Luster
SHELL	Fiberglass composite, consisting of a high-temperature, flame and chip-resistant "through-colored" thermoset resin, reinforced with 1-inch and 2-inch chopped fiberglass, compression-molded to form a one-piece shell
IMPACT LINER	Impact-resistant polymer liner covered by a semi-rigid open cell, high temperature, energy absorbing urethane foam
CHINSTRAP	<ul style="list-style-type: none"> • Spun-Nomex webbing • High-temperature, durable thermoplastic Quick-Release (QR) • Cast zinc postman slide buckle
SOFT GOODS (cushion liner)	<ul style="list-style-type: none"> • Manufactured with TenCate Tecasafe® Plus TechT4™ (standard comfort) • Genuine leather (option)
EARLAPS	<ul style="list-style-type: none"> • Nomex (yellow and black options available) • PBI/Kevlar
APPROVALS	NFPA 1971-2018, Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting All eye/face protection ANSI/ISEA Z87.1 and NFPA 1971-2018, Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting
WARRANTY	MSA warrants MSA Cairns® Fire Helmets to be free from defects in materials and/or faulty workmanship for a period of ten (10) years from the date of manufacture by MSA.

All textile components of the Cairns 1836 Fire Helmet meet Berry Compliance requirements. Product of the US.

* Includes all components with the exception of the leather front.

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice. MSA is a registered trademark of MSA Technology, LLC in the US, Europe, and other Countries. For all other trademarks visit <https://us.msasafety.com/Trademarks>.

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