Fire Service **Equipment**
2015–2016 Catalog

MSA
The Safety Company

WHEN YOU GO IN, WE GO IN WITH YOU.

From us to you: better products and services

As your emergency responder duties expand, as well as your exposure to additional potential hazards, MSA continues to provide more emergency response products that exceed your expectations and requirements. MSA supports firefighters in countless ways, and recognizes your role as the front line of protecting others. We know that standards define what you need in compliant new equipment and upgrades, and we are constantly working on improving the products that you have come to rely on as the best in the industry, to make your job safer and easier. For your protection, you can count on MSA for the most technologically advanced products, as well as for the best support and training assistance.

We are committed to you

After 100 years serving firefighters and rescue teams, MSA's premier focus continues to be the fire service for product innovations, improvements, and service. From our Cairns® Fire Helmets, Evolution® Series Thermal Imaging Cameras and breakthrough Altair Gas Detectors, to the most advanced, user-friendly breathing apparatus we've ever produced, the G1 SCBA, you can rely on MSA to offer the very best in personal protective equipment. Your options in gas detection instruments and fall protection/rescue systems are more numerous and better than ever. And our MSA-U® on-line training tool provides in-depth product training with team-tracking capability that allows 24/7 instruction for your entire squad. MSA is prepared to equip firefighters with the highest level of protection.

Our people set us apart from the competition

MSA's SCBA are manufactured at our award-winning Murrysville, PA facility. Whether your needs include a FireHawk SCBA, an Evolution TIC from our Cranberry PA plant, or a Cairns Helmet made in Jacksonville, North Carolina, you can be sure that each of them has been made with the dedicated care and skill of an MSA associate who's average time on the job of 18 years means consistent quality, time after time.

Assistance is everywhere

Your personalized service starts locally with your trained MSA-authorized distributor and MSA's Fire Service field sales Managers. To locate your nearest MSA Fire Service Distributor, or get an answer to an urgent technical question, our award-winning, dedicated team of customer service professionals is ready to help, as they understand your hazards as well as regulatory compliance. Contact them at 1-877-MSA-FIRE.

http://www.youtube.com/watch?v=PMq-rGR8lyg

When you go in, we go in with you

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Introducing the MSA G1 SCBA: The most comfortable, streamlined, balanced, configurable, and customizable SCBA we've ever produced.

1 **Facepiece is lightweight and compact: no electronics needed**

- Open port design with cross contamination protection
- Comfortable and easy to use, with low breathing resistance on and off air

2 **Control module provides both color LCD and analog displays**

- Display automatically turns on when control module is lifted into viewing position
- Large print makes display easy to read
- Provides more data and functionality than ever before
- No matter which button is pressed, necessary information displays

3 **Improved visibility through buddy lights and reflective material**

- 4 buddy lights located on the backplate
- 2 control module lights
- Regulator light

4 **Heads up display (HUD) shows remaining cylinder pressure in 4 increments via colored LEDs**

- Clear and easy to understand and interpret provided information

5 **Electronic communications are integrated into every unit**

- Loud, clear communication
- Removes inhalation breathing noise

6 **MSA G1 SCBA ergonomics**
- Swiveling, adjustable lumbar pad manages SCBA weight
- Improved comfort, balance, fit

7 **Central power system for all electronics**
- Only **one** power source
- Uses either alkaline or rechargeable battery
- No need for multiple battery sizes
- **Low cost of ownership**

8 **Available in easily-upgradeable threaded or quick-connect cylinder attachment**
- Quick attachment and replacement for return to the fireground

Integrated technology for future expansion
- Bluetooth, RFID, Near Field Communication (NFC), long-range radio

Customizable — Built to meet your specific needs
- Control module and HUD display required information; easily adapt to your existing standard operating procedure
- Wires/hoses can be routed as necessary

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About FACE.

The G1 Facepiece was designed without electronic components, to minimize weight, reduce your stress and fatigue and improve your overall performance level. This design also means that there are no electronic components on the outside of the facepiece that may result in snag and entanglement hazards. What's more, by eliminating costly electronic components, the price is reduced substantially, allowing personal-issue facepieces to be a cost effective measure. As an added bonus, the facepiece is equipped with cross-contamination prevention to reduce the spread of illness when facepieces are shared. But MSA didn't stop there. The MSA G1 SCBA is also equipped with a speaking diaphragm to increase speech clarity while off air.

The new G1 Facepiece is not only lightweight and compact with overall low profile design, it's comfortable and built to last. Taking the preferred design features of the Ultra Elite Facepiece, including wide field of view and comfortable, robust seal geometry, we've taken the MSA G1 SCBA to the next level with an open port to provide low breathing resistance, both on and off air.

The G1 Facepiece can help you to conserve energy for when you need it most.

Be Heard.

Electronic Voice Amplification Shouldn't Be Optional. Every MSA G1 SCBA is equipped with electronic voice amplification because high quality fireground communications shouldn't be optional. With patent-pending design, dual microphones integrated into the regulator eliminate the Darth Vader-like inhalation sound. This unique feature automatically activates and shuts down with the unit. Shoulder strap-mounted speaker module provides loud and clear communications from the regulator microphone while maintaining low profile to aid in reducing snag points. Every MSA G1 SCBA is equipped with this cutting edge technology.

Designed to fit YOUR needs.

Cutting edge technology. The MSA G1 SCBA air mask has been designed to meet and exceed your demands, providing more functionality than ever before. The G1 Control Module has both analog and color digital LCD displays, making certain that your status is available at all times. Auto-start motion control mechanism built into the control module intuitively provides the information you need when you need it. Adding yet another layer to ease of use: no matter which button is pressed, your information displays.

Highly configurable and customizable. The MSA G1 SCBA's user selectable configurations are an industry first: pressure; time remaining calculation; breathing time; temperature (the ability to set your own temperature alarm); and pressure drop (to alert you to leaks, either primary or secondary). What's more, the control module and HUD can be programmed to project information required by your particular specification. But best of all, electronics can be adjusted to the way YOU want. The MSA G1 SCBA provides the ability to configure this device to follow any standard operating procedure, with alarm settings, lights and information provided on the control module. The MSA G1 SCBA…designed for the flexibility you need!

Heads up.

Internal HUD display. No facepiece electronics? It's not only possible, it's here. By placing electronics that power the Heads Up Display within the regulator, MSA has effectively reduced weight, profile, pairing, and cross talk. The HUD is inside the facepiece, so external contaminants cannot block the view of vital information. This new design means that you no longer have to buy HUDs for each facepiece, reducing costs and maintenance. By using revolutionary light pipes, the MSA G1 SCBA heads up display is clear and simple to understand; it's a HUD system made easy!

Always in Demand.

G1 Mask-Mounted Regulator. The G1 Regulator houses easy-to-operate heads up display and communications, yet is the smallest and lightest regulator available. The G1 Regulator has an optional purge cover that can be used to start air flow during emergency situations. The G1 Regulator can also be shut off and removed from the mask with one simple action!

The G1 Regulator is always in DEMAND!

Finally, an SCBA where one size really can fit all.
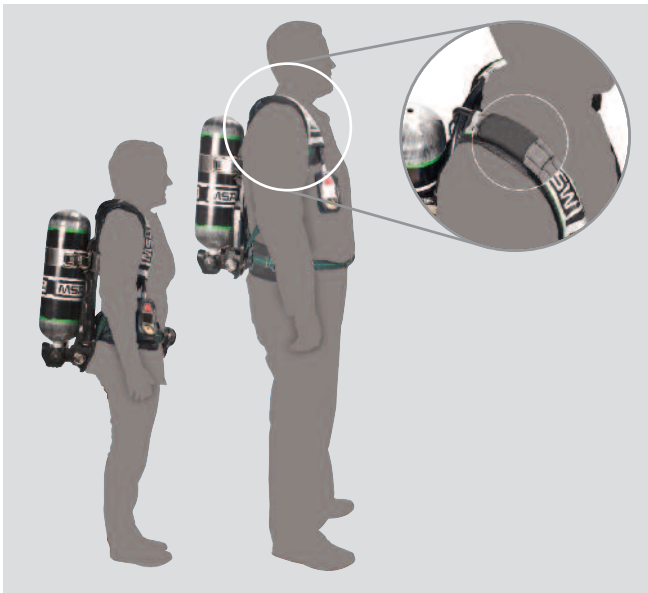
Ergonomics. The MSA G1 SCBA is the only SCBA on the market that offers harness customization to ensure improved comfort, balance and fit. By providing an adjustable lumbar pad, you can have a tailored unit with up/down and pivot capabilities that can actually move with you. Widened, adjustable shoulder straps enhance weight distribution and comfort. Through use of interlocking shoulder straps and strategically placed friction pads, the MSA G1 SCBA provides increased fit and stability while allowing for easy donning and doffing. The G1 Control Module, G1 Regulator and G1 Speaker Module can be configured on either shoulder, easily integrating into any standard operating procedure.

The Power of One.

Central Power System. With only one centralized power source, you can use either alkaline or an industry first rechargeable battery. As the ONLY manufacturer to offer rechargeable batteries, we've taken SCBA protection to a whole new level — finally, an SCBA that doesn't require multiple battery sizes! No need to manage battery types, compartments and change-outs, resulting in lower cost of ownership.

Make a Connection.

Pressure Reducer. Designed to work with quick connect or CGA threaded cylinders, there's a connection to meet your need. Adding to this flexibility are available direct and remote quick-connect attachment options to enable effortless cylinder change-outs. Pressure reducer accessory ports allow for future upgrades, including the high pressure Quick Fill® System. The MSA G1 SCBA is available in both quick-connect and threaded-connection options. With minimal parts, you can easily upgrade from one option to the other! All in all, this unit provides each user with many choices, all of which result in lower cost of ownership.

When Air is Low, Seconds Matter.

Universal Air Connection (UAC). When air is low and you must access the UAC for emergency purposes, seconds matter. That's why MSA invented the patent-pending RIT light to shine a bright white LED on the UAC connection, making it easier to find and connect to a rescue air source. The primary UAC illuminates when End of Service Time Indicator (EOSTI) reaches 35%.

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How to Order SCBA: Get the Exact Model You Need

The MSA Assemble-To-Order System (ATO) will make ordering the right mask fast and easy. Instead of choosing from a handful of complete Air Mask assemblies, you can order a custom-made Air Mask with every option exactly as desired.

Contact MSA Customer Service Center for details.

Assemble-To-Order System for the **MSA G1 SCBA**

A	B	C	D	E	F	G	H	I	J	K
System Pressure	Cylinder Connection	Harness	Cradle Type	Lumbar Type	Regulator Type	Regulator Hose Type	Emergency Breathing Support	Speaker Module	PASS	Battery Type
2　2216 psig 4　4500 psig 5　5500 psig	1　CGA Threaded Direct Connection~ 2　CGA Threaded Remote Connection 3　CGA Quick Connect Direct Connection~ 4　CGA Quick Connect Remote Connection *If 1 or 3 are selected, fabric band must be used.*	0　Standard without Chest Strap 1　Standard with Chest Strap 2　Serviceable Tunnel without Chest Strap 3　Serviceable Tunnel with Chest Strap	M　Metal Band F　Fabric Band~	B　Basic F　Fixed Swiveling Lumbar Pad A　Adjustable Swiveling Lumbar Pad 1　Rescue Belt II 50' Hook 2　Rescue Belt II 50' Carabiner 3　Rescue Belt II 50' FireTech Rope, Hook 4　Rescue Belt II, 50' FireTech Rope, Carabiner	1　Purge cover Left Shoulder † 2　Solid cover Left Shoulder † 3　Purge cover Right Shoulder † 4　Solid cover Right Shoulder †	C　Continuous Q　Quick-Connect	0　None 1　Waist Mounted Quick-Fill~ 2　ExtendAire II 3　Waist Mounted Quick-Fill and ExtendAire II~	L　Left Chest † R　Right Chest †	A　PASS Right Shoulder † B　PASS Left Shoulder † C　PASS Telemetry Right Shoulder † D　PASS Telemetry Left Shoulder †	A　Alkaline B　Rechargeable

QUANTITY

G1FS

† *As worn*
~ *Available Fall 2015*

Assemble-To-Order System for the **MSA G1 SCBA Facepiece**

Application	Size	Material	Nosecup	Head Harness	Neckstrap	Regulator Connection
F Fire	S Small M Medium L Large	1 Hycar	0 None S Small M Medium L Large	0 None 4 4 pt Adjustable 5 5 pt Adjustable R Rubber	0 None C Cloth R Rubber	1 Fixed Push-to-Connect

G1FP | F | | 1 | | | | 1

NOTE: Part number facepieces are also available.

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MSA G1 SCBA Facepieces

Part No.	Type	Size	Nosecup Size	Head Harness	ATO Configuration
10156458	Fire Service	Small	Small	4 pt Adjustable	G1FP-F-S-1-S-4-0-1
10156459	Fire Service	Medium	Medium	4 pt Adjustable	G1FP-F-M-1-M-4-0-1
10156460	Fire Service	Large	Large	4 pt Adjustable	G1FP-F-L-1-L-4-0-1
10156461	Fire Service	Small	Small	Rubber	G1FP-F-S-1-S-R-0-1
10156462	Fire Service	Medium	Medium	Rubber	G1FP-F-M-1-M-R-0-1
10156463	Fire Service	Large	Large	Rubber	G1FP-F-L-1-L-R-0-1

MSA G1 SCBA Accessories

MSA G1 SCBA Facepiece Accessories

Part No.	Description
10144230	Spectacle Kit for G1 Facepiece
10144220-SP	Replacement Cloth Neck Strap
10159699-SP	Replacement Rubber Neck Strap
10144231-SP	APR Adapter
805078	Quick Check III Fit Test Adapter

MSA G1 SCBA Rescue Accessories

Part No.	Description
10156464	ExtendAire® II Kit for G1 SCBA
10156465	Waist Mounted Quick-Fill® for G1 SCBA
10156466-SP	Replacement ExtendAire II Pouch for G1 SCBA
10156467-SP	Replacement Quick-Fill Pouch for G1 SCBA
10156468	3-ft Quick-Fill hose in pouch for G1 SCBA

MSA G1 SCBA Accessories

Part No.	Description
10148740-SP	Replacement Alkaline Battery Pack
10148741-SP	Replacement Rechargeable Battery Pack
10158385	Rechargeable Battery Charging Station
10149701-SP	Quick Connect Adapter for 2216 psig Cylinders
10149702-SP	Quick Connect Adapter for 4500/5500 psig Cylinders
10158389	Retainer Kit for H-30 Carbon (807587) 4500 psig (Type 2 - dovetail)
10158390	Retainer Kit for H-45 LP Carbon (10035644) 4500 psig (Type 3 - dovetail)
10158401	Retainer Kit for L-30 Carbon (807586) 2216 psig (Type 4 - dovetail)
10158401	Retainer Kit for H-45 Carbon (807570) 4500 psig (Type 4 - dovetail)
10158402	Retainer Kit for H-60 Carbon (807588) 4500 psig (Type 5 - dovetail)
10158408	Quick Connect Adapter for Fill Station
10158403	Tool Kit
10083875	RFID
10158407	RFID Reader/Writer

MSA G1 SCBA Accessories

MSA G1 SCBA Facepiece Accessories

Part No.	Description
10144230	Spectacle Kit for G1 Facepiece
10144220-SP	Replacement Cloth Neck Strap
10159699-SP	Replacement Rubber Neck Strap
10144231-SP	APR Adapter
10158384	Fit Test Adapter

MSA G1 SCBA Rescue Accessories

Part No.	Description
10156464	ExtendAire® II Kit for G1 SCBA
10156465	Waist Mounted Quick-Fill® for G1 SCBA
10156466-SP	Replacement ExtendAire II Pouch for G1 SCBA
10156467-SP	Replacement Quick-Fill Pouch for G1 SCBA
10156468	3-ft Quick-Fill hose in pouch for G1 SCBA

MSA G1 SCBA Accessories

Part No.	Description
10148740-SP	Replacement Alkaline Battery Pack
10148741-SP	Replacement Rechargeable Battery Pack
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10158401	Retainer Kit for L-30 Carbon (807586) 2216 psig (Type 4 - dovetail)
10158401	Retainer Kit for H-45 Carbon (807570) 4500 psig (Type 4 - dovetail)
10158402	Retainer Kit for H-60 Carbon (807588) 4500 psig (Type 5 - dovetail)
10158408	Quick Connect Adapter for Fill Station
10158403	Tool Kit
10158409	G1 Flow Test Adapter
10083875	RFID (M7 P/N 10083875)
10158407	RFID Reader/Writer (M7 P/N 10083876)

FireHawk® M7XT Air Mask

- Durability & performance for critical life-safety personnel.
- Compliant to the NFPA 1981 and 1982 2013-edition standards

High-visibility shoulder pads

FireHawk M7XT
carrier and harness
assembly with
side handles
and carabiner
attachment

PR14™ First-Stage Regulator
with only 14 internal parts

Ultra Elite XT Facepiece with high-heat
lens and Kevlar SpeeD-ON® Head Harness

Hi-Viz Luminescent
cylinder band

Wireless FireHawk
M7 I-HUD Receiver

Parachute-style
friction buckles

FireHawk M7XT Control Module
with accelerometer motion
sensor, digital and
mechanical pressure
display time remaining,
and thermal alarm

Ultra Elite XT
Voice Amplifier

High-performance
mechanical
speaking diaphragm

Regulator keeper

Double-pull
Kevlar waist belt

Firehawk® MMR

The Assemble-To-Order System for **FireHawk M7XT Air Mask**

Air Mask Pressure	Carrier/ Harness Assembly	Lumbar Pad/ Rescue Belt	Cylinder	MMR Type	Emergency Breathing System	Ultra Elite XT Facepiece	Nosecup	Head Harness	Electronic Comms	Integrated PASS	Heads-Up Display	Case
L 2216	A Single Pull without chest strap	0 None	0 None	A CBRN Firehawk STC, threaded	0 None	A Hycar Rubber, Small	1 Medium	1 SpeeD-ON Head Harness, less neck strap	A None	A PASS with thermal alarm activated	A M7 HUD	0 None
H 4500	B Single Pull with chest strap	1 Swiveling Lumbar Pad	*2216 psi Cylinders*	B CBRN Firehawk STC, QC	1 Quick-Fill	B Hycar Rubber, Medium	2 Large	2 SpeeD-ON Head Harness, with neck strap	B Communi-cation ready with bracket	B PASS without thermal alarm activated	B M7 I-HUD	1 Hard Case
	C Double Pull without chest strap	A Rescue Belt II w/hook, 50'	1 Aluminum with air	C CBRN Firehawk PTC, threaded	2 Quick-Fill with Hose and Pouch	C Hycar Rubber, Large			C Ultra Elite XT Amp	C PASS, telemetry and thermal alarm		2 Soft Case
	D Double Pull with chest strap	B Rescue Belt II w/carabiner, 50'	2 L-30 carbon wrapped with air	D CBRN Firehawk PTC, QC	3 Quick-Fill ready				D Ultra Elite XT Amp/RI	D PASS, telemetry and without thermal alarm		3 Facepiece Bag, Black, No Case
		C Rescue Belt II w/hook, FireTech rope, 50'	3 Aluminum less air		A ExtendAire II							4 Facepiece Bag, Black, with Hard Case
		D Rescue Belt II w/carabiner, FireTech rope, 50'	4 L-30 carbon-wrapped less air		B ExtendAire II with Quick-Fill							5 Facepiece Bag, Black, with Soft Case
	Options A & B can only be chosen if a rescue belt option is selected		*4500 psi Cylinders*		C ExtendAire II with Quick-Fill and Quick-Fill Transfill Hose/Pouch							
		If choosing a rescue belt, the carrier/ harness assembly must be a single pull (options A or B).	1 H-30 SL, SuperLite Carbon, with air									
			2 H-45S SL, SuperLite Carbon, short, with air									
			3 H-45 SL, SuperLite Carbon with air									
			4 H-60 SL, SuperLite Carbon with air									
			5 H-30 SL, SuperLite Carbon less air									
			6 H-45S SL, SuperLite Carbon, short, less air									
			7 H-45 SL, SuperLite Carbon less air									
			8 H-60 SL, SuperLite Carbon less air									

A-M7XT

NFPA 1981 and 1982-2013 edition compliant

NIOSH 42 CFR Part 84 CBRN certified

QUANTITY

M7XT Communications: Facepiece Assemblies for FireHawk M7XT Air Masks

Firehawk STC Regulator

Firehawk PTC Regulator

Ultra Elite® XT Facepiece

Designed to provide exceptional peripheral and downward vision, the Ultra Elite XT Facepiece features a super-soft facepiece texture for a smooth and comfortable fit. It also resists chemical attack and temperature extremes, and withstands rugged day-to-day use without tearing and ripping. The design of the Ultra Elite XT Facepiece is based on extensive anthropometric studies of the face-length, temple-width and chin-width data from more than 8,000 individuals. The result is a facepiece that provides an improved seal against a wide range of facial contours. To provide a secure, comfortable fit, the facepiece utilizes five adjustable straps with stainless steel, field-replaceable buckles that resist chemical attack. The straps also feature slightly larger adjustment tabs that are easier to grab, even with gloves on.

For slip-on convenience, the Ultra Elite XT Facepiece is equipped with a SpeeD-ON® Facepiece Harness. Made of flame- and heat-resistant Kevlar Fabric, the harness features a hair-net type, five-point suspension that can be easily and securely adjusted at four points.

The NEW Tufflens used on the Ultra Elite XT facepiece is molded from a specially blended plastic, created to withstand the high thermal environments encountered in todays' firefighting and protected with a special super hardcoating that resists scratches.

Firehawk® MMR

The Firehawk second-stage regulator features a unique Slide-To-Connect (STC) attachment system that allows firefighters to hang the regulator on the facepiece in the "ready position," then simply push it into the facepiece when SCBA air is needed. Doffing of the regulator, while wearing gloves, is also easy with two large release buttons that automatically turn-off the flow of air as the regulator is doffed. A dual-swivel feature on the pressure hose provides maximum freedom-of-head movement and the silicone hose material ensures hose flexibility even at very cold temperatures.

In addition to the STC system, MSA also offers a second connection option for the Firehawk Regulator, the Push-to-Connect (PTC). The PTC's Adapter self-centers the Firehawk regulator, and the loud dual sound of the regulator engaging onto the facepiece provides you with confidence that the Firehawk PTC is securely attached to your facepiece—an action that takes just seconds, when seconds count!

Maintenance is also a breeze, considering the Firehawk MMR design requires no tools, adhesives, or sealants, and has approximately 70% fewer parts as compared to other regulators on the market. Additionally, there are no internal adjustments required. Any adjustments to the regulator may be accomplished at a single adjustment point through the outlet port of the regulator.

	Small	Medium	Large	
ULTRA ELITE XT FACEPIECE *for Firehawk STC MMR Regulator*	10149305	10149283	10149327	External HUD Receiver Ready
	10149307	10149285	10149329	External HUD and Communication Ready
ULTRA ELITE XT FACEPIECE *for Firehawk PTC MMR Regulator*	10149306	10149284	10149328	External HUD Receiver Ready
	10149309	10149286	10149330	External HUD and Communication Ready

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SCBA Key Components: Facepiece Assemblies for FireHawk M7XT Air Masks

MSA I-HUD Receiver for FireHawk M7XT Air Mask

Features & Benefits
- Wireless I-HUD Receiver contoured shape fits securely inside Ultra Elite XT facepiece
- Nearly 40% lighter than external M7 HUD Receiver
- Placement inside facepiece eliminates snag point
- Unit automatically awakes and sleeps based upon pairing with SCBA
- Wireless magnetic radio transfers actual SCBA data via IEEE 802.11network
- Enhanced light pattern for safety and security differentiation
- Displays SCBA cylinder pressure in quarter-cylinder increments
- If telemetry-equipped PASS device is used, M7 I-HUD Receiver displays evacuation alarm
- Red "buddy lights" in three locations alert other firefighters to low cylinder pressure, or motion alarm
- Powered by single, disposable CR2 lithium battery
- Low battery condition displays via single LED flash on display's left side; low battery SCBA condition displays as double flash
- TEST function button to verify functionality before use

Durability Testing
- I-HUD Receiver survives two meter drop test when mounted inside Ultra Elite XT Facepiece
- IP67-rated to withstand extreme hot and cold environments
- Vibration testing to NFPA 1981 standards
- Protection against short-time water submersion for thorough facepiece cleaning

Note: I-HUD Receiver is not compatible for use with FireHawk M7 Less PASS SCBA.

I-HUD RECEIVER	10114190	Receiver, M7 I-HUD (for use with Ultra Elite XT Facepieces equipped with Hycar Rubber Nosecups)		
	Small	**Medium**	**Large**	
I-HUD RECEIVER-READY ULTRA ELITE XT FACEPIECE ASSEMBLIES	10149309	10149287	10149331	STANDARD I-HUD RECEIVER-READY
for Firehawk STC MMR Regulator	10149311	10149289	10149310	COMMUNICATION SYSTEM-READY
I-HUD RECEIVER-READY ULTRA ELITE XT FACEPIECE ASSEMBLIES	10149310	10149288	10149332	STANDARD I-HUD RECEIVER-READY
for Firehawk PTC MMR Regulator	10149312	10149290	10149334	COMMUNICATION SYSTEM-READY

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APR Adapter

The Ultra Elite APR Adapter allows users to switch from a positive-pressure facepiece to a negative-pressure air-purifying respirator. The Adapter uses MSA's comprehensive line of air-purifying cartridges; select from Advantage cartridges or our CBA/RCA canisters to protect against a multitude of airborne contaminants.

The APR Adapter is designed for use in non-IDLH environments and is NIOSH-approved. Contact MSA for more information.

	Firehawk MMR STC Version	Firehawk MMR PTC Version	
APR ADAPTERS	10032511	10040052	APR Adapter
	10032927	10040055	APR Adapter Individual Kit
	10032925	10040054	APR Adapter Truck Kit

ACCESSORIES	10037809	Ultra Elite Facepice, Anti-Fog Applique (10/pkg)
	817590	CBA/RCA Canisters (box of 6)
	809858	Replacement Baffle
	813341	Replacement Bayonet Cover
FIT TEST ADAPTER KITS	10107229	APR Fit Test Adapter Kit, Slide-to-Connect
	10107256	APR Fit Test Adapter Kit, Push-to-Connect

Spectacle Kits

SPECTACLE KITS	804638	Ultra Elite Spectacle Kit (side wire support)
	493581	Ultra Elite Spectacle Kit (center support)

Nosecups

NOSECUPS	495188	Nosecup, medium, silicone
for Ultra Elite Facepieces	495189	Nosecup, large, silicone
	10126378	Nosecup, medium, hycar
	10126379	Nosecup, large, hycar

SCBA Key Components: FireHawk M7XT Carrier and Harness Assembly

The one component of any SCBA that has the most impact on firefighter comfort is the carrier and harness assembly. The FireHawk M7XT Carrier and Harness assembly places an emphasis on firefighter comfort while maintaining the robustness and reliability that is expected in the fire service. The carrier comes standard with large side handles and a central attachment point for pulling firefighters to safety in rescue scenarios. The swiveling lumbar pad provides maximum freedom of movement and comfort when crawling or climbing.

The assembly utilizes the proven components from previous generations of air masks such as the tunneled shoulder straps for hose containment, and tri-bar slides for easy removal/installation of the waist belt and shoulder straps. All units are equipped with double-pull waist belts and an optional chest strap is available.

FIREHAWK M7XT CARRIER AND HARNESS ASSEMBLIES	10147448	Low-pressure, with chest strap
	10147449	High-pressure, with chest strap
	10147450	Low-pressure, with chest strap and swiveling lumbar pad
	10147471	High-pressure, with chest strap and swiveling lumbar pad
ACCESSORIES	10083134	Replacement FireHawk M7XT and M7 lumbar pad
	10012167	Chest strap kit

SCBA Key Components: Emergency Egress System/MSA Rescue Belt II System

Rappel to safety with this innovative, quick-release device for emergency egress. Ergonomically contoured, it easily stores rescue rope, hook or carabiner and descender. Ideal for extreme conditions, it features a web management system that also integrates a regulator holder. One belt fits all (up to 310 pounds, including equipment).

Features & Benefits

- Single-handed pouch opening for rapid deployment of hook and descender
- Ergonomically contoured rope lumbar pad for handling ease and comfort
- Durable Ara-Shield construction
- Low-profile steel D-ring for positioning attachment

- 10- and 15-foot end markers
- Termination knot easily releases under load, even with gloved hands
- Quick-release system for SCBA drop in emergency situations
- No special tools or training required

RESCUE BELT II SYSTEM	10119369	with 50-ft aramid/nylon rope and Crosby hook
For FireHawk M7XT and M7 Models	10119370	with 50-ft aramid/nylon rope and carabiner
	10119391	with 50-ft FireTech 32 rope and Crosby hook
	10119392	with 50-ft FireTech 32 rope and carabiner

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SCBA Key Components: Cylinders

SuperLite Carbon Cylinders

Carbon-Wrapped Cylinders
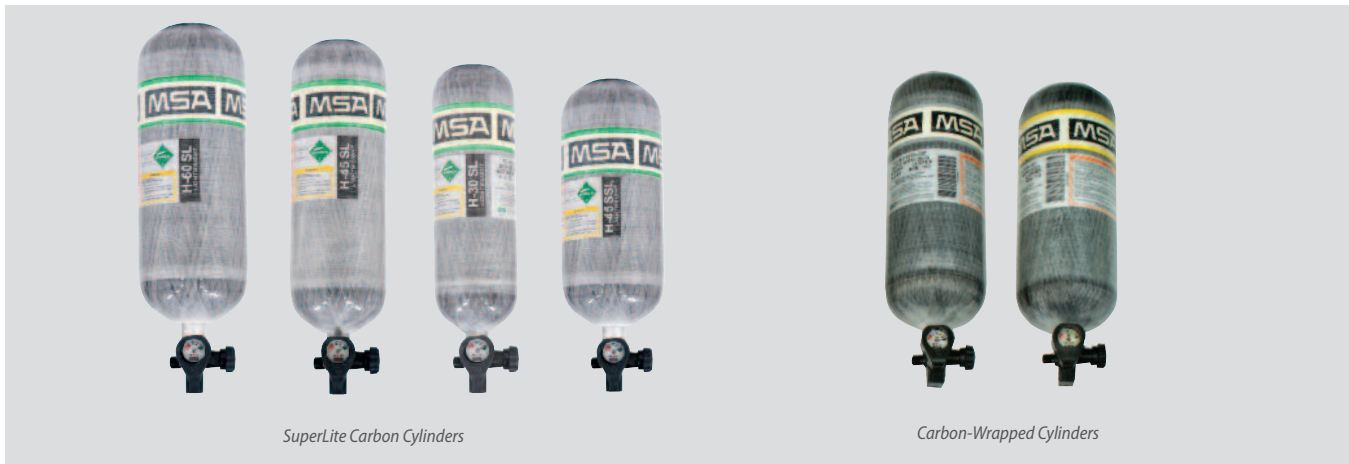
SuperLite Carbon Cylinders (4500 psi)

MSA's SuperLite Carbon Cylinders reduce cylinder weight by up to 12% over traditional carbon cylinders, significantly decreasing your firefighters' SCBA weight burden. Double-drawn, super lightweight cylinder liner combined with optimized carbon-based composite materials reduces cylinder weight while maintaining a high strength-to-weight ratio. Available in four high-pressure (4500 psig) models, SuperLite Carbon cylinders incorporate the same proven technology found in MSA's fully-wound carbon composite Stealth Cylinders.

Carbon-Wrapped Cylinders (2216 / 3000 psi)

MSA's 2216 and 3000 psi Carbon-wrapped Cylinders feature a unique outer-wrap made of lightweight, high-performance carbon fibers, which reduces cylinder weight by two to six pounds when compared to fiberglass-wrapped cylinders and as much as ten pounds when compared to aluminum cylinders.

Part No.	Cylinder Type	NIOSH Service Life	Pressure	Weight**
10127944-SP	H-30 SL, SuperLite Carbon	30-minute	4500 psig	6 lb. 9 oz.
10127945-SP	H-45 SL, SuperLite Carbon	45-minute	4500 psig	8 lb. 8 oz.
10149432-SP	H-45S SL, SuperLite Carbon, Short	45-minute	4500 psig	8 lb. 6 oz.
10127946-SP	H-60 SL, SuperLite Carbon	60-minute	4500 psig	10 lb. 12 oz.
807586-SP	L-30* Carbon-Wrapped	30-minute	2216 psig	8 lb. 0 oz.
816115-SP	L-30+* Carbon-Wrapped	30-minute	3000 psig	9 lb. 8 oz.
469619-SP	Fiberglass Hoop-Wound	30-minute	2216 psig	13 lb. 0 oz.
809872-SP	Aluminum	30-minute	2216 psig	18 lb. 0 oz.

*These cylinders are capable of custom options.
**All weights shown are approximate.

SCBA Key Components: Facepiece Assemblies for FireHawk M7XT Air Masks

Ultra Elite XT Amp / Radio Interface

Ultra Elite XT Amp

Ultra Elite XT Amp with Facepiece Bracket and Microphone

MSA Ultra Elite® XT Communication System for MSA Facepieces

Ultra Elite® XT Communication Systems feature an internally-mounted microphone coupled with a large diameter (50.8mm) amplifier speaker producing optimal voice clarity and volume. Integrating a patented circuit design, the system delivers STI scores (Speech Transmission Index) that exceed the minimums in the NFPA 1981-2013 Edition Standard requirements. Profile mounted on an Ultra Elite XT Facepiece, the system does not block vision or impede the facepiece's fully functional mechanical voice communications. Lapel Mic and PTT radio interfaces can be found on pages 20–21.

ULTRA ELITE XT COMMUNICATIONS	10144673	Ultra Elite XT Amp c/w Facepiece Bracket and Microphone
	10144676	Ultra Elite XT Amp / Radio Interface c/w Facepiece Bracket and Microphone
	10144672	Ultra Elite XT Amp only
	10144675	Ultra Elite XT Amp / Radio Interface only
	10023055	Microphone Kit, with mounting bracket

ClearCommand® Communications System

MSA's ClearCommand Communications System features an internally mounted microphone coupled with a large-diameter (50mm) amplified speaker for optimal clarity and volume. Using a proprietary circuit design, the system delivers more than twice the volume of a facepiece alone. The ClearCommand System doesn't block vision or mechanical communication. The Ultra Elite Facepiece's mechanical speaking diaphragm is still fully functional, even with the system installed. Lapel Mic and PTT radio interfaces can be found on pages 20–21.

CLEARCOMMAND SYSTEM KITS	10024074	Amplifier Kit, complete with microphone
	10051290	Amplifier Radio Interface Kit, w/ microphone, less PTT
	10023055	Microphone Kit, with mounting bracket

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Radio Interface Kits for XT Amp and Clear Command Communications

Brand	Radio Model	LM	PTT
BENDIX-KING	DPH-5102X, EPH, EPI, EPU,EPV, GPH, LPH, LPI, LPU, LPX, MPH	10042938	10045707
E.F. JOHNSON	5850, 5855, 5860, 5861, 5862, FM-5852, LX-2442/2443, ZX-2452/2453	10042942	10045711
	5100 series (511x, 5133, 514x, 518x)	10091194	10055501
	VIKING CL-500/5870/5876/5877/8560/8561/8565/8566/8570/8571/ 8587/8591, CH-HM91	10042943	10045712
GE ERICSSON	Jaguar 700P/700PI, P700IP/7150/7170, HT-7150S/7170T, HA8VSX	10068237	10070362
	500P, KPC	10042933	10045702
	Monogram	10042934	10045703
	GF (PACUDX), MPA, MPD, MTL, PAPST5, TPX	10042932	10045701
ICOM	IC-F14	10093301	
	IC-2A/2AT/2AE, ICH-2/6/12/16, ICU-2/6/12/16, IC-F11/F11S/F21/F21BR/ F21S/F3033S	10042944	10045713
	IC-F30/30LT/40/40LT	10042946	10045715
	IC-F30GS/F30GT/F40GS/40GT	10058090	10067523
	IC-F50/F60/F70, M88, 4161	10072223	10064623
	Side connector IC-F3GS/F3GT/F4G-2/F4GT/F12/F12S/F22/F22S		10045714
	Top Load IC-F3S/F4S/F10/F20	10042945	10045714
KENWOOD	TK-190/280/290/290K/380/390/480/481/2140/2180/3140/3180/5210/5220, NX200/300/300K	10042941	10045710
	TK-208/220/240/248/250/260/270/270G/272/308/320/340/350/353/ 360/370/372/373G/430/2100-2/2160/ 2170/2200/2202/2302/2312/ 3101K/3160/3170/3173/3200/3202/3212/3360, TH-21/25A/41/45/75/ 91A/2102/ 3102, DEMITOSS 9 (JAPAN), FREETALK LINE	10042939	10045708
KYODO	KG-209	10093729	10093730
MACOM/HARRIS	P5100/5130/7100/7150/7200	10068237	10070362
	P5300/5400/7300, XG-25/75	10126347	10128997
MAXON	PL-1145/2245/5161/5164		10061404
	SP-2000 Series, SP-2550/2850, SL-70W	10042947	10045716
	SP-5000 Series, CP-0500 Series	10042948	10045717
MIDLAND	70-145/148/154/245/254	10042951	10045720
	70-153	10042949	10045718
	70-165/166/265/266	10042950	10045719
	70-195/295	10042952	10045721

Continued on next page

Radio Interface Kits for XT Amp and Clear Command Communications

Continued from previous page

Brand	Radio Model	LM	PTT
MOTOROLA	GP-900, HT-1000, JEDI, JT-1000, MT-1500/2000, MTS-2000, MTX, MTX-838/ 839/2000/8000/9000 Transcrypt Stealth, PR1500, PTX-1200/3600, XTS-1500/ 2250/2500/3000/3500/5000/5000R	10042903	10045662
	APX-5000/6000/7000, DGP-6150+, XPR-6500/6550/6580/7350/7380/7550/7580	10092733	10108643
	270, 280, FR-50/60, 289/5100/5200/5300/5320/5400/5410/5420/5600/5620/ 5700/5720/5800/5820/6200/6210/ 6220/6250/6300/6310/6320/6400/7200, Talk About	10061629	10061630
	AXU-4100, CP-100, SP-10/21		10059441
	EX-500/560/600	10053716	10057505
	EXPO, HT-10, RADIUS P10/50	10042924	10045693
	GP-350	10042930	10045699
	GP-350 (QD)	10042931	10045700
	HT-50/90/440, RADIUS P100	10042925	10045694
	GP-328/329/338/339/340/360/680, HT-750/1250/1550/1550-XLS, MTX-850/ 850-LS/950/4550/ 8250/8250-LS/ 9250, PR-860, PRO 5150/7150/7350/7550/ 9150, PTX-700/760/780	10042922	10045691
	GP-328 (QD), HT-750 (QD)/1250 (QD), PRO 5150 (QD)	10042923	10045692
	MT-500	10042928	10045697
	MX-300/310/320/340/350/360	10042927	10045696
	AP-73, CLS Series, CP-150/200/300, CT-150/185/250/250LS/450/450LS, EP-450, GP-63/68/88/ 300/308/2000, GTX, GTX-8250, LTS-2000, MAG ONE A-8, MTX-638, P110/1225, MU-21CV/21CZ, PR-400, PRO 2150/3150, SP-10/ 21/50, SPIRIT-111, SPIRIT-Pro, SU-21C, XTN Series, XTV-2100, XU-2100, XV-1100, XZ-1100	10042905	10045664
	VISAR	10042926	10045695
RELM/SMARTCOM	Minicom 3200, MPS, MPU-08B/32, MPV-08/32, WHS150	10042953	10045722
RITRON/JOBCOM	JBX-151, JMX-100/400 Series, RTX-150/450, SST Series	10042954	10045723
STANDARD	HX-240U/V	10042935	10045704
	HX-320	10042936	10045705
	HX-381/482/580T/581T/582T/585T/587T	10042937	10045706
TEKK	T-20/40/50/60	10042955	10045724
UNIDEN	SPH Series, SPU Series	10042956	10045725
	SPS-310T/320TS	10042957	10045726
VERTEX	VX-2R/160/180/210/417/420/424/427/454	10058088	10073293
YAESU-VERTEX	FT-11R/41R/416/816, FTH-2005/2008/2009/7005/7008/7009	10042958	10045727
	FT-76	10042962	10045779
	FTH-2070	10042960	10045729
	F-10/40/50, FT-50R, VX-10/300, VX-400, VXF Series	10042959	10045728
	VX-500/510	10042961	10045730
	VX-600/600U/600UB/600V/600VB/800/900	10058089	10061244

ClearCommand Helmet Communication System

Helmet Mic with Lapel Mic

Helmet Mic with Stand-Alone PTT

- Virtually eliminates high ambient noise levels via bone-conduction voice transmitter
- Maintains transmission quality through facepiece head harness, hood and liner
- Is intrinsically safe for use in hazardous environments
- Easily snaps onto the fire helmet ratchet
- Quickly transfers from one helmet to another without tools
- Configures for use over either ear
- Connects to MSA lapel microphone and PTT
- Includes flannel pad for cushioning

HELMET MICROPHONE ASSEMBLY	10042902	Helmet Microphone Assembly (includes Custom-Fitted Flannel Headband Liner)

Parts and Accessories for ClearCommand Communication Systems

PARTS AND ACCESSORIES	10046087	Dust Cover
	10046123	Guard Ring, Tall
	10046122	Guard Ring, Short
	10046120	Belt Clip Assembly
	10046121	O-ring, Single-Pin Connector
	10045778	Flannel Head Band Liner

MSA Accountability System
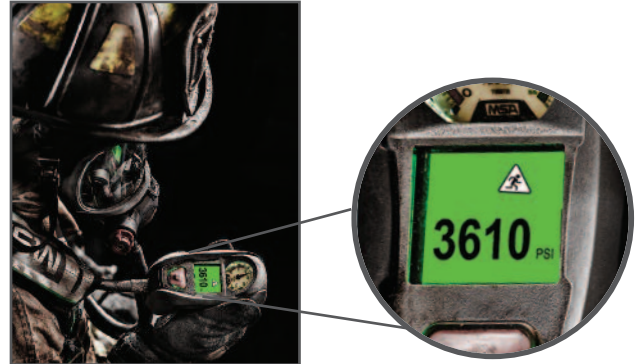
A new way to monitor vital information

- Each MSA base station can monitor up to 50 firefighters, and you can use multiple base stations on a single computer.
- The MSA G1 or FireHawk M7XT/M7 Air Mask with telemetry transmits to incident command the firefighter's name, team assignment, cylinder pressure, service-time remaining, PASS alarms (motion or manual), thermal alarms, battery status, radio connectivity, and evacuation acknowledgement.

A fireground management system

- Personalized ID tags for each firefighter tell incident command exactly who is on scene.
- An integrated PAR (personnel accountability report) timer helps manage radio calls to each team.
- Incident command can manually add firefighters who are not wearing an SCBA or mutual aid firefighters, so all personnel can be accounted for.

Intuitive and easy to use

- Assign firefighters to teams by clicking on a firefighter's icon and dragging it to another team.
- A volume of critical information is available at a glance of the screen, due to the large number of firefighters that can be displayed and the pictorial format of the information.
- Receive both audible and visual indications of critical events such as PASS alarms or low-pressure alarms.

A two-way evacuation feature

- An individual firefighter, a team of firefighters, or all firefighters can be evacuated with the click of a button.
- When incident command transmits the alarm through the MSA G1 or FireHawk M7XT/M7 Air Mask, they'll know the firefighter received it, because the unit automatically sends a confirmation message to the base station.
- Firefighters will hear the evacuation alarm on their own personal PASS device. Also, visual indications in the HUD and an icon on the control module will alert the firefighter that it is time to evacuate.
- By simply pressing a button on the control module, a firefighter can send a manual confirmation to acknowledge that they have received and understand the critically important evacuation message.
- Although certain concrete and steel commercial structures can challenge any radio signal, MSA's Accountability System coverage with radio technology provides highly reliable performance for a 1-mile line-of-sight range.
- Due to the spread-spectrum design, it does not interfere with other high-band radio frequency equipment.
- For additional safety, both base station and firefighter modules have an icon message to inform users if a firefighter falls out of radio signal range, so that alternate accountability measures, such as voice contact with teammates, can be taken.

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ACCOUNTABILITY SYSTEM BASE STATION KITS	10072240	Accountability Base Station Kit (includes software, **magnetic antenna kit,** USB cable, wall-mount cable, and 8-24 volt power cable)
for MSA G1 SCBA and FireHawk M7XT/M7 SCBA	10098767	Accountability Base Station Kit (includes software, **fixed antenna kit**, USB cable, wall-mount cable, and 8-24 volt power cable)
ACCOUNTABILITY SYSTEM	10083876	G1/M7XT/M7 Control Module Reader / G1/M7XT/M7 ID tag writer
for MSA G1 SCBA and FireHawk M7XT/M7 SCBA	10083875	G1/M7XT/M7 ID tags
	10075756	Antenna kit with magnetic base
	10098766	Antenna kit with fixed base
	10063880	USB cable
	10049410	8-24 volt, power cable
	10047342	Wall-mount power cable

Emergency Breathing Systems

The Quick-Fill® System

The Quick-Fill System lets MSA air mask users refill and transfill air cylinders while the SCBA is worn, without removing the air cylinder—even in IDLH atmospheres. Use this MSA option to:

- Fill an SCBA cylinder from a mobile compressor or cascade system in less than a minute.
- Transfill between two cylinders, providing an Emergency Breathing System.
- Extend the air supply over longer durations, using a remote compressed-air source.

Air masks compliant to recent NFPA standards have the Quick-Fill URC fitting located at the Audi-Larm warning device. A Quick-Fill hose with a quick-disconnect connects the air source to the adapter for air transfer. See Bulletin 0105-92-MC for a Quick-Fill Systems Q&A.

QUICK-FILL SYSTEM REPLACEMENT PARTS For MSA G1 SCBA	10156467	Replacement Quick-Fill Pouch **for MSA G1 SCBA**
	10156468	3 ft Quick-Fill hose in pouch **for MSA G1 SCBA**
	10156465	Waist Mounted Quick-Fill **for MSA G1 SCBA**
QUICK-FILL SYSTEM REPLACEMENT PARTS For M7XT and M7 SCBA	10111642	Quick-Fill Hose Kit in Pouch, 3-ft emergency transfill hose
	485331	Emergency transfill hose, less Kevlar pouch
	10111404	Replacement Pouch for Quick-Fill or ExtendAire II
	485391	Male stainless steel quick-disconnect with SAE-10 thread, complete with dust cover (also for use as a fitting for customized refilling systems)
	485392	Female quick-disconnect with SAE-4 thread, complete with dust cover

	25 ft	12 ft	10 ft	8 ft	6 ft	3 ft	
QUICK-FILL HOSES	485332	802690	802689	802688	802687	485331	FQD x FQD
	487907	802677	802675	802673	802671	492796	FQD x CGA-347 Outlet
	487909	802685	802683	802681	802679	487427	FQD x CGA-347 CN
	487906	802704	802703	802702	802701	802705	FQD x SAE-4
	487908	802678	802676	802674	802672	492797	FQD x CGA-346 Outlet
	487910	802686	802684	802682	802680	487428	FQD x CGA-346 CN

25-ft lengths are stocked; other "custom lengths" are available on a special material basis. All SAE Fittings are for high-pressure service. Female quick-disconnect fittings have dust covers.

The ExtendAire™ System

The ExtendAire II System upgrade

The ExtendAire™ I and II Systems

The ExtendAire System can be used as both an emergency breathing system and a dual-purpose device for MMR SCBA to allow firefighters to quickly and easily connect to an air-line.

The ExtendAire II offers an integrated rescue hose into the PR14 First-Stage Regulator with both a male and female quick-connect fitting.

THE EXTENDAIRE I AND II SYSTEMS	10156464	ExtendAire II Kit **for MSA G1 SCBA**
	10156466	Replacement ExtendAire II Pouch **for MSA G1 SCBA**
	812958	ExtendAire Air-line Hose with foster plug
	812973	40" Rescue Hose
	10031798	ExtendAire Upgrade Kit for Threaded Firehawk MMR
	10031797	ExtendAire Upgrade Kit for Quick-Connect Firehawk MMR
	10105883**	ExtendAire II Upgrade Kit for PR14 Regulator

***Note:** the ExtendAire I system is not approved on the FireHawk M7XT Air Mask*

RescueAire™ II Portable Air-Supply System

The RescueAire II Portable Air-Supply System is designed to meet the needs of Rapid Intervention Teams (RITs). The system consists of a lightweight Carbon-Wrapped cylinder, Quick-Fill emergency breathing system, ExtendAire™ emergency breathing system, and an MMR regulator, supported by a flame- and heat-resistant harness. The RescueAire II is a complete system that can provide emergency breathing air for most any victim and is available in both low-pressure (2216 psig) and high-pressure (4500 psig) versions.

RESCUEAIRE II PORTABLE AIR-SUPPLY SYSTEM Low-pressure (2216 psig)	10161141	RescueAire II, **G1**, less cylinder
	10100096	RescueAire II, Firehawk **Responder** MMR and L-30 cylinder
	10041196	RescueAire II, Firehawk **STC** MMR and L-30 cylinder
	10041230	RescueAire II, Firehawk **PTC** MMR and L-30 cylinder
	10161143	RescueAire II, **G1**, less cylinder
	10100095	RescueAire II, Firehawk **Responder** MMR, less cylinder
	10041198	RescueAire II, Firehawk **STC** MMR, less cylinder
	10041232	RescueAire II, Firehawk **PTC** MMR, less cylinder
RESCUEAIRE II PORTABLE AIR-SUPPLY SYSTEM High-pressure (4500 psig)	10161130	RescueAire II, **G1**, with cylinder
	10100097	RescueAire II, Firehawk **Responder** MMR and H-60 cylinder
	10041195	RescueAire II, Firehawk **STC** MMR and H-60SL cylinder
	10041199	RescueAire II, Firehawk **PTC** MMR and H-60SL cylinder
	10161142	RescueAire II, **G1**, less cylinder
	10100094	RescueAire II, Firehawk **Responder** MMR, less cylinder
	10041197	RescueAire II, Firehawk **STC** MMR, less cylinder
	10041231	RescueAire II, Firehawk **PTC** MMR, less cylinder

Technical Rescue Cart

Cart Weight and Dimensions
Size: 35" H x 21" W x 15" D

Unit Weight: 54.5 pounds without cylinders

The Technical Rescue Cart is a steel cart with a color-designated control panel that allows one side of the panel to be used for primary respirator breathing air and one side for tool/secondary air requirements.

Two 1-hour cylinders are used to provide air for respirators. High-pressure cascade (fire truck) cylinder air is used to operate pneumatic tools.

Features

Breathing-Air Segment includes:
- Two-wheeled, poly-coated steel cart, two sets of double-cylinder straps, air-line hose rack and adjustable pull handle
- Low-pressure cylinder bell alarm
- Four-outlet manifold—available with four outlet fitting options

Tooling-Air Segment includes:
- CGA-347 fitting to attach to an auxiliary remote high-pressure air source
- Low-pressure pneumatic alarm whistle
- Four-outlet manifold with quick-disconnects

The Technical Rescue Cart is sold without air cylinders. The following MSA cylinders can be used with the cart:

- 60-minute, H-60SL carbon-wrapped cylinder, PN 10127946-SP
- 45-minute, H-45SL carbon-wrapped cylinder, PN 10127945-SP
- 30-minute, H-30SL carbon-wrapped cylinder, PN 10127944-SP
- 45-minute, H-45S SL SuperLite Carbon Cylinder, Short, PN 10149432-SP

See p. 18 for cylinder ordering information. 60-minute cylinders will provide maximum air supply.

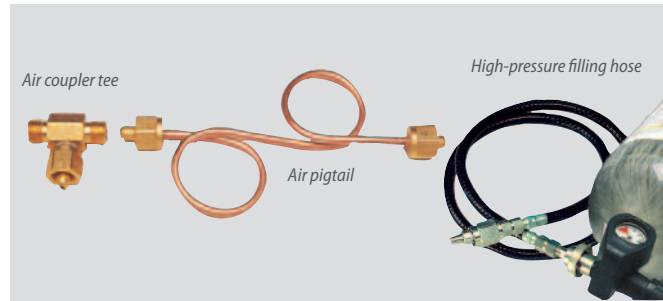| TECHNICAL RESCUE CART	10107535	Technical Rescue Cart equipped with **union** adapters
	10107818	Technical Rescue Cart equipped with **Snap-Tite Aluminum** Quick-Disconnects
	10107820	Technical Rescue Cart equipped with **Foster Steel** Quick-Disconnects
	10107819	Technical Rescue Cart equipped with **Hansen Brass** Quick-Disconnects

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Cleaning Accessories

CLEANING ACCESSORIES	10009971	MSA Confidence® Plus Germicidal Cleaner, 32 oz. bottle
	697383	Box of 100 individually wrapped towelettes, 7-1/4" x 5"
	697382	Canister with 220 towelettes, 4-1/4" x 6"
	10022871	"The Big Ones," Box of 50 individually wrapped towelettes, 8" x 11"

Other SCBA Accessories

Air coupler tee

High-pressure filling hose

Air pigtail

ACCESSORIES FOR FILLING LOW-PRESSURE CYLINDERS	68846	Air Outlet Connection, complete w/ Gauge
	68850	Air Coupler Tee
	68851	Air Pigtail
	476156	Low-Pressure Air-Filling Hose, 5 feet long
HIGH-PRESSURE FILLING HOSE	476105	High-Pressure Filling Hose Assembly (High-pressure filling hose provides a convenient means to connect and charge high-pressure air into a high-pressure 4500 psig cylinder)

Field Maintenance and Repair

MSA offers a complete program for maintenance and repair of MSA air masks. The program is supported with personalized training tailored to customers' needs and taught in the field by MSA-authorized personnel.

User maintenance covers procedures necessary to conduct general cleaning, inspection, and limited maintenance in accordance with the Occupational Safety and Health Administration (OSHA), National Fire Protection Association (NFPA), and the American National Standards Institute (ANSI) standards.

C.A.R.E. Certified Air Mask Repair Education covers all maintenance for both low- and high-pressure SCBA. Air Mask inspection and maintenance can be performed by MSA or a factory-authorized service center. Or, individuals can obtain training for C.A.R.E certification from MSA. By having a C.A.R.E-certified technician on staff, fire departments and other facilities with a large number of Air Masks can perform all inspection and maintenance in-house.

- All repairs and maintenance can be done in the field.
- A selection of overhaul kits, spare parts, and tool kits is available.
- Users may conduct periodic performance testing using an authorized MSA regulator tester.

The World Class Air Mask Maintenance Training Program

Certified
AirMask
Repair MSA
Education

Riot Control and CBRN Gas Masks

Protect firefighters from a variety of respiratory hazards with the same line of CBRN and riot control gas masks used by military and law enforcement personnel around the world. Featuring flexible lenses, wider field of view, permeation-resistant construction and built-in speaking diaphragms, these masks provide protection with a comfortable fit and superior visibility. Available in a variety of styles and configurations.

- Provides respiratory protection against military warfare, civil unrest and CBRN threats
- High-performance, custom-fit comfort in a variety of military- and riot-style masks

- Attracts, regains and neutralizes contaminants
- Flexible lens with a wider field of view for superior visibility

- Easy on/off and adjustment
- Choose from a variety of styles including total head protection

CBRN and Riot Control Gas Masks

	Small	Medium	Large	
MILLENNIUM® CBRN/ RIOT CONTROL GAS MASK	10051286	10051287	10051288	Millennium Gas Mask, with nosecup, drinking tube, and clear polycarbonate outsert *Order either Riot Control or CBRN canisters separately.*
ADVANTAGE® 1000 RIOT CONTROL GAS MASK	813860	813859	813861	Advantage 1000 Riot Control Mask, complete with canister, nosecup, and identification tag
ULTRA ELITE CBRN GAS MASK	10052776	10052781	10052778	Ultra Elite CBRN Gas Mask, with rubber head harness
	10052780	10052779	10052777	Ultra Elite CBRN Gas Mask, with SpeeD-ON Head Harness *Order CBRN canisters separately.*

Millennium® Gas Mask (for use with CBRN or RIot Control canisters)

Gas Mask Canisters and Accessories

RIOT CONTROL CANISTERS	818264	Millennium RC canisters, box of 6
	817590	Advantage 1000 RC canisters, box of 6
CBRN CANISTER	10046570	MSA CBRN canister, for Millennium and Ultra Elite Facepieces
LENS OUTSERT *For Millennium Facepiece*	10008907	Polycarbonate lens outsert, clear, small
	10008906	Polycarbonate lens outsert, clear, medium/large
	10008909	Polycarbonate lens outsert, tinted, small
	10008908	Polycarbonate lens outsert, tinted, medium/large
LENS OUTSERT *For Advantage 1000 Facepiece*	806463	Polycarbonate lens outsert, clear, small
	806462	Polycarbonate lens outsert, clear, medium/large
	806465	Polycarbonate lens outsert, tinted, small
	806464	Polycarbonate lens outsert, tinted, medium/large
ESP® II COMMUNICATION SYSTEM *For Millennium and Advantage 1000 Facepieces*	10026265	ESP II Communications System (1-piece, self-contained, electronic speech projection device) less battery
OTHER ACCESSORIES *For Millennium and Advantage 1000 Facepieces*	10034184	Gas Mask Pouch, Military Style
	817040	Black Nylon Bag
	816137	Advantage 1000/Millennium Spectacle Kit

Advantage 1000 Riot Control Gas Mask

Ultra Elite CBRN Gas Mask

Responder® Powered Air-Purifying Respirator

With its industry-leading motor-blower and constantly filtered airflow, the belt-mounted Responder CBRN PAPR is ideal for first responders, military, and special ops personnel who require non-IDLH respiratory protection for up to 8 hours. The unit offers a choice of two MSA gas mask CBRN facepieces and three proprietary cartridges designed for CBRN, particulate and poisonous gases or vapors. The unit's constant airflow helps a user stay physically alert and focused, while also preventing fogging in the facepiece. Batteries can be "hot-swapped," and the blower's EMI shield ensures there is no interference with radio communications.

- Respirator provides constant filtered airflow, which reduces fatigue and prevents facepiece fogging
- Long-life unit provides non-IDLH respiratory protection for up to 8 hours
- Compatible with MSA Millennium and Ultra Elite facepieces

Responder PAPR Complete Systems

You must choose Responder PAPR Kit, facepiece, and cartridge for complete system.

RESPONDER PAPR KITS *less facepiece and cartridge*	B-60141-030	Responder CBRN PAPR Kit with 30" Breathing Tube, LiSO2 Battery
	B-60141-036	Responder CBRN PAPR Kit with 36" Breathing Tube, LiSO2 Battery
	B-60170-030	Responder CBRN PAPR Kit with 30" Breathing Tube, NiMH Battery
	B-60170-036	Responder CBRN PAPR Kit with 36" Breathing Tube, NiMH Battery

	Small	Medium	Large	
GAS MASK FACEPIECES *with head harness, less cartridge*	10051286	10051287	10051288	Millennium Facepiece, hycar, with 6-point elastic head harness
	10052776	10052781	10052778	Ultra Elite Facepiece, hycar, with rubber head harness
	10052780	10052779	10052777	Ultra Elite Facepiece, hycar, with SpeeD-ON Head Harness

CARTRIDGES	10046570	CBRN Canister, each
	496081	OptiFilter XL cartridge, 6 pack
	10072237	PAPR GME Multigas HE cartridge, each
ACCESSORIES FOR RESPONDER PAPR	B-20040-001	NiMH Rechargeable Kit (2 NiMH Batteries, Charger & Cap)
	S-20036	NiMH Rechargeable Battery Pack
	B-20090-001	NiMH Rapid Battery Charger
	M-20020	LiSO2 Mission Battery
	B-30060-001	NiMH Rechargeable Battery Cap Assembly
	S-30019	Web Belt Assembly
	B-10079-001	PAPR Carrying Case

Applications

- Fire scene overhaul
- Chemical spills
- CBRN incidents

Millennium Facepiece

Ultra Elite Facepiece

Safe Escape® CBRN Respirator

The Safe Escape Hood from MSA gives you the protection you need to escape from a terrorist situation safely, quickly and easily—whether you work in a high-profile office environment, for a government agency or embassy, or as a law enforcement officer or first responder. Manufactured with a high-performance laminate material, the hood is designed to provide the latest in head and neck coverage with respiratory protection against CBRN agents.

Features and Benefts

- Convenient respirator guards against chemical, biological, radiological or nuclear hazards
- Unit features self-adjusting cradle-type head straps
- Wide field of view provides excellent visibility and reduces claustrophobia
- High-stretch rubber neck seal ensures tight fit
- Nosecup reduces lens fogging
- Guards against: HD vapor, GB, ammonia, cyanogen chloride, cyclohexane, formaldehyde, hydrogen cyanide, hydrogen sulfide, nitrogen dioxide, phosgene, phosphine, sulfur dioxide

SAFE ESCAPE RESPIRATORS in Hextreme Case	10073702	Safe Escape Respirator, standard, universal size
	10073923	Safe Escape Respirator, tactical version, universal size
	10073703	Safe Escape Respirator, trainer version, universal size
ACCESSORIES	10066681	Safe Escape Respirator sizing kit
	10068310	Optional carrying straps and harness kit
	10068013	DVD training video for Safe Escape Respirator

Note: The only difference between the standard and tactical versions is the outside labeling on Hextreme Case.

Hextreme Case

S-CAP™ Fire Escape Hood

Most victims of fire are not injured by heat or flames but rather by smoke and gases, especially carbon monoxide. The S-CAP Fire Escape Hood is simple to don and use and is effective within seconds, using a filter designed for a minimum rated service time of 15 minutes.

- Filters out CO and smoke
- Universal size
- Easily fitted with quick donning
- Minimal training required
- EN 403:2004 approved
- Highly visible yellow hood

- Adjustable head harness on the outside of the hood, with cotton neck seal for easy donning
- Wide field of view lens
- Heat-resistant against brief flame contact and elevated temperatures

Wall Box

S-CAP FIRE ESCAPE HOOD	10064644	S-CAP in carton
	10064645	S-CAP in wall box

MSA Respirator Fit Test Compliance

29 CFR Part 1910.134

Ultra Elite Respirator

Advantage 1000 Respirator/Millennium® Respirator

MSA RESPIRATOR FIT TEST KITS		
	697287	Saccharin Qualitative Fit Test Kit
	697444	Bitrex Qualitative Fit Test Kit
	697285	Replacement (Saccharin) Sensitivity Test
	697445	Solution, 55 ml bottle (Bitrex)
	697286	Replacement Fit-Test (Saccharin) Solution, 55 ml bottle
	697446	Replacement Fit-Test (Bitrex) Solution, 55 ml bottle

MSA RESPIRATOR FIT TEST KITS		
	697447	#1 Sensitivity Nebulizer
	697459	#2 Fit-Test Nebulizer
	697448	Test Hood (Same for Both)
	697325	"Using the Qualitative (Saccharin) Fit Test Kit" video
	697449	"Using the Qualitative (Bitrex) Fit-Test Kit" video
	801628	Banana Oil Qualitative Fit Test Kit

Fit Test Compliance Reference Guide

Respirator Description	Class	Material	APF	OSHA Acceptable Fit Test Methods	Required Fit Factor Quantitative	MSA Fit Test Adapter Required	Cartridge Type	Probed Facepiece P/N (if applicable)	Controlled Negative Pressure (OHD) Quan Fit Test Adapter
Ultra-Elite	Full-Face Negative Pressure	Silicone	50	Qualitative or Quantitative*	500	Quik Chek III Adapter #805078	N/A	S (813211), M (813209), L (813213)	OHD P/N 9513-0210
Ultra-Elite	Full-Face Negative Pressure	Hycar	50	Qualitative or Quantitative*	500	Quik Chek III Adapter #805078	N/A	S (813210), M (813218), L (813212)	OHD P/N 9513-0210
Ultra-Elite for use with ¼ turn quick disconnect	Full-Face Negative Pressure	Hycar or Silicone	50	Qualitative or Quantitative*	500	Quik Chek IV Adapter #817446	N/A	N/A	OHD P/N 9513-0210
Millennium Facepiece	Full-Face Negative Pressure	Hycar	50	Qualitative or Quantitative*	500 2000±	Quik Chek III Adapter #805078	Threaded	Probe Assembly (10006227)	OHD P/N 9513-0130
Ultra Elite Pressure-Demand	Full-Face Positive Pressure	Silicone	10,000 SCBA 1000 Air-Line	Qualitative or Quantitative	500†	APR Fit Test Adapter Kit, Slide Version #10107229 (10032511 APR adapter only) APR Fit Test Adapter Kit, Push-to-Connect #10107256 (10040052 APR adapter only) Quik Chek Adapter Kit, Firehawk #10044576‡	Bayonet	Negative Pressure S (813211), M (813209), L (813213)	OHD P/N 9513-0380
Ultra Elite Pressure-Demand	Full-Face Positive Pressure	Hycar	10,000 SCBA 1000 Air-Line	Qualitative or Quantitative	500†	APR Fit Test Adapter Kit, Slide Version #10107229 APR Fit Test Adapter Kit, Push-to-Connect #10107256 Quik Chek Adapter Kit, Firehawk #10044576‡	Bayonet	Negative Pressure - S (813210), M (813218), L (813212)	OHD P/N 9513-0210
Ultra Elite Respirator	Full-Face Positive / Negative Pressure	Hycar	10,000 SCBA 50 APR	Qualitative or Quantitative	500† SCBA 2000± APR	Responder Fit Test Kit #10082555	Threaded	N/A	N/A

* If only qualitative fit test is performed on a full-face negative pressure respirator, then an APF of only 10 can be assigned. If a quantitative fit test is performed, the APF is 50.
† For quantitative fit testing of pressure-demand facepiece, the facepiece must be tested in a negative pressure mode which requires a minimum fit factor of 500.
± MSA recommends a fit factor of 2000 if the application is a CBRN environment.
‡ The Quik-Chek Adapter allows quantitative fit tests to be performed on a pressure demand Ultra Elite Firehawk facepiece by only trained and qualified personnel. Special probed facepieces are not required.

Great Reasons to Choose MSA Cairns Helmets

We've been proudly manufacturing fire helmets since 1836. And to this day when it comes to head protection, more first responders trust MSA Cairns brand fire helmets than any other. Here are just a few reasons why:

1 **Shell Release System (SRS)**

The MSA Cairns Shell Release System (SRS), offered in our most popular fire helmets, protects from impact and heat—even when your helmet is dislodged from your head.

With the SRS, if your helmet comes off because you fell through a floor or roof, the impact cap separates from the helmet shell, *but remains on your head*, leaving your head better protected from additional impact, projectiles and heat. Without SRS, all you've got is a Nomex hood.

2 **Retractable MSA Cairns Defender® Visor**

North America's first (and still the best) NFPA 1971 and ANSI/ISEA Z87.1 impact-rated, integral visor. The Defender Visor was designed with firefighters in mind. The entire lens visor stows when not in use (so it can't be lost), and can be deployed the instant it's needed – even with a gloved hand. Replacement of the lens does not require special tools or disassembly of the helmet. All of these benefits make the Defender Visor the best-selling firefighting eye protection in the market.

3 **Best In Class**

In a recent survey of firefighters across the nation[1], the majority listed MSA Cairns brand as "best in class."[1] When you consider the combined effectiveness of our SRS, crumple-zone front holder, impact cap, and suspension—our fire helmets offer the most complete package on the market.

4 **With MSA Cairns, You Get *More* than You Pay For: 10-Year Warranty**

We know, as do firefighters, that MSA Cairns Helmets are the most durable products on the market. We back up that claim with a 10-year lifetime warranty that the product will be be free from defects in materials and/or faulty workmanship[2]. When you factor in the quality, ease of maintenance and unique safety features found **ONLY** in MSA Cairns Helmets, it's easy to see why firefighters are loyal to the MSA Cairns brand.

5 **Same Day Shipping on Our Most Popular Items**

When you can't afford to wait another day, MSA offers our most popular Cairns products in our Stock-Order-Ship (SOS) program. For these products, if your order is entered by 2:30 PM (EST), the product ships the same day from our warehouse in Pittsburgh, PA. Look for the SOS symbol (SOS) beside products in the program. Remember, too, you can always order customized Cairns Fire Helmets through Assemble-to-Order (ATO). ATO forms are on every fire helmet page on www.MSASafety.com

For more complete information on Cairns Fire and Rescue Helmets, see Bulletin 3600-01-MC.

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[1]*Fire helmet brand assessment study conducted by an outside research firm for MSA.*
[2]*10-year warranty applies to MSA Cairns helmets manufactured on or after January 1, 2015. For MSA Cairns Fire Helmet Warranty details, please see www.MSAsafety.com.*

N5A New Yorker & N6A Houston

For Structural Firefighting

- The Original Handcrafted Leather Firefighting Helmets
- Hat sizes: Medium (6⅜ to 7½) and Large (7⅝ to 8⅜)

*N5A New Yorker
(shown with Bourkes & Goggles)*

*N6A Houston
(shown with Tuffshield)*

Differences

N5A NEW YORKER	N6A HOUSTON
• Meets US-OSHA 1910.156 • No Lexan dome	• Meets NFPA 1971 • Lexan dome for additional penetration protection

Features & Benefits

FEATURES	BENEFITS
Leather Shell	Uses only 100% top-grain high-quality steerhide impregnated with a natural resin system, unlike other "leather" helmets that use faux leather, glued leather patchwork, or leather stretched over a plastic helmet shell
Crumple-zone Front Holder	Absorbs impact forces to help protect your head, neck and spine from injury
Impact Cap	Provides thermal and impact protection
Comfort Pad Kit	Creates a customized fit unlike any other helmet
Aluminum-core Edge Trim	Helps the brim retain its shape
Embossed Helmet Brim	Oak vine pattern ties the helmet to 175+ years of Cairns fire helmet design tradition
D-ring Helmet Hanger	Fits on large hooks and resists bending
Nomex Chinstrap	Enhances safety, performance and fit thanks to quick-release buckles, postman's slide, and Velcro stowage system

http://www.youtube.com/watch?v=aojC36TkqzY
How It's Made: MSA Cairns Leather Fire Helmets

Cairns Leather Helmets

Ordering Selection Matrix

A	B	C	D	E	F	G	H	I
Model	**Color**	**Size**	**Eye Protection**	**Earlaps**	**Front Holder**	**Chinstrap**	**Trim Type**	**Trim Color**
1 N6A Houston	1 Black	1 Medium	0 None *	1 Leather/Sateen Liner w/Jumbo Nomex Yellow Earlap	1 6" Carved Brass Eagle	0 None (Presentation Helmets onlly)	0 None *	1 Lime/Yellow (standard)
2 N6A Houston w/Bourkes *	2 Red	2 Large	1 4"Tuffshield	2 Leather/Sateen Liner w/Jumbo PBI/Kevlar Earlap	4 6" Carved Brass Beaver	1 Nomex w/ Quick-Release	2 Reflexite (Standard)	2 White * (Reflexite Only)
3 N5A New Yorker *	3 Blue	3 One Size (G101 onlly)	2 Cairns ESS Goggles *	3 Leather/Sateen Liner w/Jumbo Nomex Black Earlap	5 6" Carved Brass Dragon	2 Nomex w/ Quick-Release & Postman's Slide	3 Scotchlite	3 Red/Orange *
4 N5A New Yorker w/Bourkes *	4 White		4 ESS Innerzone 3 Goggles	4 Liner Cushion (G5A, G64 only)	6 Mini Bronze Carved Eagle (G101 only)			4 Red/Orange Triple Trim (Scotchlite Only)
5 G5SA Presentation*	5 Yellow		5 ESS Innerzone 2 Goggles w/ low profile clips *	5 Liner Cushion (G101 only)	7 8" Bronze Carved High Eagle (G5A, G64 only)			5 Lime/Yellow Triple Trim (Scotchlite Only)
6 G64 Presentation*	6 Orange		6 ESS Innerzone 1 Goggles					
7 G101 Mini Presentation*	7 Natural *		9 ESS Innerzone 2 Goggles w/side clips					
	8 Green							

B-LTH- | | | | | | | | |

PART NUMBER

*   *Not NFPA 1971 compliant*

1010 & 1044

For Structural & Proximity Firefighting

Most popular Cairns fire helmet models:
- 1010: painted high-luster finish
- 1044: unpainted matte finish

Certified to NFPA 1971
- Certified for proximity firefighting (with bonnet, shroud and gold-coated faceshield)

880 Tradition™

For Structural Firefighting

- Lightest, lowest profile traditional helmet
- Fits smallest head sizes of any Cairns helmet
- Certified to NFPA 1971
- Matte finish
- Hat sizes: $5\frac{5}{8}$ to $7\frac{5}{8}$

Features & Benefits

FEATURES	BENEFITS
Through-color Fiberglass Composite Shell*	Maintains its color even after taking a beating on the fireground
Impact Cap	Provides superior thermal and impact protection
Shell Release System	Retain your impact cap and earlaps if your helmet shell is torn away during a fall or structural collapse
Defender Visor Retractable Eye Protection *(1010 & 1044 Helmets only)*	Deploys easily when you need it, stores securely inside your helmet shell when you don't
Crumple-zone Front Holder	Absorbs impact forces to help protect your head, neck and spine from injury
Adjustable Ratchet Height	Allows for a comfortable, secure fit thanks to three ratchet height positions
Adjustable Headband Height	Ensures a perfect fit between your helmet and SCBA mask
Embossed Helmet Brim	Oak vine pattern ties the helmet to over 175 years of Cairns helmet design tradition
D-ring Helmet Hanger	Fits on large hooks and resists bending
Nomex Chinstrap	Enhances safety, performance and fit thanks to quick-release buckles, postman's slide, and Velcro stowage system

http://www.youtube.com/watch?v=Z9m_IosA4ag
TESTIMONIAL — FALL RIVER, MA

* Through color is present on blue, red, white and yellow. All others are painted over a white shell.

Cairns Traditional Helmets

Ordering Selection Matrix

A	B	C	D	E	F	G	H	I	K
Model	**Color**	**Eye/Face Protection**	**Headband Liners**	**Earlaps**	**Front Holder**	**Chinstrap**	**Trim Type**	**Trim Color**	**Accessory Type**
1 1010	1 Black	0 None *	1 Economy Flannel	1 Yellow Nomex	0 None	1 Nomex w/Quick Release	0 None *	1 Lime/Yellow (standard)	0 None
2 1010 w/Bourkes	2 Red	1 4" Tuffshield	2 Standard Flannel	2 Yellow Nomex w/Underchin Extension	1 6" Carved Brass Eagle	2 Nomex w/Quick Release & Postman's Slide	2 Reflexite (standard)	2 White * (Reflexite only)	A Low-Profile Goggle (10029699)
5 880 Tradition	3 Blue ◆	2 Cairns ESS Goggles	3 Deluxe Leather w/Crown Pad	3 PBI/Kevlar	2 6" Silk Screened Eagle		3 Scotchlite	3 Red/Orange *	B Low-Profile Hardware only
6 880 Tradition w/Bourkes	4 White	4 ESS Innerzone 3 Goggles		4 PBI/Kevlar w/Underchin Extension	3 6" Silk Screened Maltese Cross			4 Blue * (Reflexite only)	C ESS Goggle (S550)
7 1044	5 Yellow	5 ESS Innerzone 2 Goggles		5 Bloodborne Pathogen Resistant	4 5" Silk Screened Eagle †			5 Red/Orange Triple Trim (Scotchlite only)	
8 1044 w/Bourkes	6 Orange ◆	6 ESS Innerzone 1 Goggles		9 CFR Aluminized Bonnet w/PBI/Kevlar Shroud & Nomex Earlap ‡§	5 5" Silk Screened Maltese Cross †			6 Lime/Yellow Triple Trim (Scotchlite only)	
9 1010 w/Defender Visor ■	7 Green ‡◆	8 6" Gold-Coated Faceshield *		A Black Nomex	6 6" Carved Brass Beaver ‡				
A 1010 Defender w/Bourkes ■		9 Faceshield for 880 w/5" front holder		B Black Nomex w/Underchin Extension ‡	7 6" Carved Brass Dragon ‡				
B 1044 w/Defender Visor ■		B Defender Visor, Clear ■							
C 1044 Defender w/Bourkes ■		C Defender Visor, Amber Tuffshield ■							
D 1010 Defender w/Faceshield ■									
E 1044 Defender w/Faceshield ■									

C-TRD- _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

PART NUMBER

■ *Must specify Defender Visor in both "Model" and "Eye/Face Protection" selections*
◆ *Not available on 1044*
‡ *Not available on 880 Tradition*
† *Available on 880 Tradition only*
* *Not NFPA 1971 compliant*
§ *Not NFPA-1971 compliant when used with a Front Holder*

http://www.youtube.com/watch?v=aXYqQOM_Vog
Testimonial — Pittsburgh, PA

660C Metro & Invader 664

For Structural & Proximity Firefighting

- Most popular modern helmet models
- Sleek, low-profile design:
  - 660C: painted high-luster finish
  - 664: unpainted matte finish
- Certified to NFPA 1971

- Certified for proximity firefighting (with bonnet, shroud, and gold-coated faceshield)
- Hat sizes: 6⅜ to 8⅜

Structural 360S

For Structural Firefighting

- Light-weight, low-profile design
- Certified to NFPA 1971
- Gloss finish
- Hat sizes: 6⅜ to 8⅜

Features & Benefits

FEATURES	BENEFITS
Through-color Fiberglass Composite Shell* *(660C Metro & Invader 664 Helmets only)*	Maintains its color even after taking a beating on the fireground
Through-color Thermoplastic Shell *(Structural 360S Helmet only)*	Maintains its color even after taking a beating on the fireground
Impact Cap	Provides superior thermal and impact protection
Shell Release System *(660C Metro & Invader 664 Helmets only)*	Retain your impact cap and earlaps if your helmet shell is torn away during a fall or structural collapse
Defender Visor Retractable Eye Protection *(660C Metro & Invader 664 Helmets only)*	Deploys easily when you need it, stores securely inside your helmet shell when you don't
Adjustable Ratchet Height	Allows for a comfortable, secure fit thanks to its 3 ratchet height positions
Adjustable Headband Height	Ensures a perfect fit between your helmet and SCBA mask
D-ring Helmet Hanger	Fits on large hooks and resists bending
Nomex Chinstrap	Enhances safety, performance and fit thanks to quick-release buckles, postman's slide, and Velcro stowage system

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* Through color is present on blue, red, white and yellow. All others are painted over a white shell.

Commando HP3

For Structural Firefighting & USAR

- Sleek, low profile design
- Same shell as 660C with back watershed trimmed off
- Lightest fiberglass helmet
- Painted high-luster finish
- Certified to NFPA 1971 & 1951
- Hat sizes: 6⅜ to 8⅜

Rescue 360R

For Structural Firefighting & USAR

- Lightest, lowest profile structural firefighting helmet
- Same shell as 360S with back watershed trimmed off
- Certified to NFPA 1971 & 1951
- Hat sizes: 6⅜ to 8⅜

Rescue 360R-13

For USAR

- Lightest, lowest profile Cairns fire helmet
- Same shell as 360S with back watershed trimmed off
- Certified to NFPA 1951 for USAR
- Hat sizes: 6⅜ to 8⅜

Features & Benefits

FEATURES	BENEFITS
Through-color Fiberglass Composite Shell* *(Commando HP3 & Rescue 360R-13 Helmets only)*	Maintains its color even after taking a beating on the fireground
Through-color Thermoplastic Shell *(Rescue 360R Helmet only)*	Maintains its color even after taking a beating on the fireground
Impact Cap *(Commando HP3 & Rescue 360R Helmets only)*	Provides superior thermal and impact protection
Defender Visor Retractable Eye Protection *(Commando HP3 Helmet only)*	Deploys easily when you need it, stores securely inside your helmet shell when you don't
Adjustable Ratchet Height	Allows for a comfortable, secure fit thanks to its 3 ratchet height positions
Adjustable Headband Height	Ensures a perfect fit between your helmet and SCBA mask
D-ring Helmet Hanger	Fits on large hooks and resists bending
Nomex Chinstrap *(2- or 3-point)*	Enhances safety, performance and fit thanks to quick-release buckles, postman's slide, and Velcro stowage system

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* Through color is present on blue, red, white and yellow. All others are painted over a white shell.

Cairns Modern Fire & Rescue Helmets

Ordering Selection Matrix

A	B	C	D	E	F	G	H	I	J
Model	**Color**	**Eye/Face Protection**	**Headband Liners**	**Earlap**	**Chinstrap**	**Trim Type**	**Trim Color ▼**	**Trim Shape**	**Accessory Bracket**
2 660C Metro	1 Black	0 None *	1 Economy Flannel	0 None *	1 Nomex w/Quick Release	0 None *	1 Lime/Yellow (standard)	1 Tetrabar	0 None
5 Commando HP3 ✪	2 Red	1 4" Tuffshield	2 Standard Flannel	1 Yellow Nomex	2 Nomex w/Quick Release & Postman's Slide	2 Reflexite (Standard)	2 Red/Orange *	2 Bar	9 Frontpiece Bracket
6 Structural 360S	3 Blue ‡	2 Cairns ESS Goggles	3 Deluxe Leather w/Crown Pad	2 Yellow Nomex w/Underchin Extension	3 3" longer Nomex w/ Quick Release & Postman's Slide (360S only)	3 Scotchlite	3 Blue * (Reflexite only)	3 Diamond	
A Invader 664	4 White	4 ESS Innerzone 3 Goggles		3 PBI/Kevlar	4 Nomex w/Postman's Slide (360S only)		4 White *	4 Triple Trim (Scotchlite only)	
B Rescue 360R ✪	5 Yellow	5 ESS Innerzone 2 Goggles		4 PBI/Kevlar w/Underchin Extension	6 6" longer Nomex w/ Postman's Slide (360S/R/R-13 and non-Defender 660C/664 only)				
C Rescue 360R-13 ★	6 Orange ‡	6 ESS Innerzone 1 Goggles		5 Bloodborne Pathogen Resistant	7 3-point w/Quick Release ◆				
D 660C Metro Defender ■	7 Green † ‡	7 4" Standard Faceshield ▲		8 Black Nomex w/Underchin Extension **					
E Invader 664 Defender ■		8 6" Standard Faceshield †		9 CFR Aluminized Bonnet/PBI/Kevlar Shroud & Nomex Earlap ●					
G Commando HP3 Defender ■ ✪		9 4" Gold-Coated Faceshield ●		A Black Nomex					
		A 6" Gold-Coated Faceshield ●							
		B ESS Striketeam XTO Goggle ★ ◆							
		C Defender Visor, Clear ■							
		D Defender Visor, Amber Tuffshield ■							

C-MOD- ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

PART NUMBER

✪ *Also compliant to NFPA 1951*
★ *NFPA 1951 compliant only*
■ *Must specify Defender Visor in both "Model" & "Eye/Face Protection" selections*
‡ *Not available on Invader 664*
† *Not available on 360S/R/R-13*
* *Not NFPA 1971 compliant*
▲ *Not available on 360R/R-13*
● *Non-Defender 660C/664 only*
◆ *360/R/R-13 and HP3 only*
** *Not available for helmets with Defender Visor*
▼ *Not all trim colors are available in all trim types and shapes*

Cairns Helmets Ordering Information

All of the items listed below are stocked on the SOS (⊚) program. You can also order customized Cairns Fire Helmets through Assemble-to-Order (ATO). ATO forms are on every fire helmet page on www.MSASafety.com

Part No.	Model	Color	Features
1010DSR	Cairns 1010	Red	with Clear Defender Visor, Yellow Nomex Earlap, Chinstrap with Postman's Slide and Lime Yellow Reflexite Trim
1010DSY	Cairns 1010	Yellow	with Clear Defender Visor, Yellow Nomex Earlap, Chinstrap with Postman's Slide and Lime Yellow Reflexite Trim
1010DSB	Cairns 1010	Black	with Clear Defender Visor, Yellow Nomex Earlap, Chinstrap with Postman's Slide and Lime Yellow Reflexite Trim
1044DSR	Cairns 1044	Red	with Clear Defender Visor, Yellow Nomex Earlap, Chinstrap with Postman's Slide and Lime Yellow Reflexite Trim
1044DSY	Cairns 1044	Yellow	with Clear Defender Visor, Yellow Nomex Earlap, Chinstrap with Postman's Slide and Lime Yellow Reflexite Trim
1044DSB	Cairns 1044	Black	with Clear Defender Visor, Yellow Nomex Earlap, Chinstrap with Postman's Slide and Lime Yellow Reflexite Trim
660DSR	660C Metro	Red	with Clear Defender Visor, Yellow Nomex Earlap, Chinstrap with Postman's Slide and Lime Yellow Reflexite Trim
660DSY	660C Metro	Yellow	with Clear Defender Visor, Yellow Nomex Earlap, Chinstrap with Postman's Slide and Lime Yellow Reflexite Trim
660DSB	660C Metro	Black	with Clear Defender Visor, Yellow Nomex Earlap, Chinstrap with Postman's Slide and Lime Yellow Reflexite Trim
664DSR	Invader 664	Red	with Clear Defender Visor, Yellow Nomex Earlap, Chinstrap with Postman's Slide and Lime Yellow Reflexite Trim
664DSY	Invader 664	Yellow	with Clear Defender Visor, Yellow Nomex Earlap, Chinstrap with Postman's Slide and Lime Yellow Reflexite Trim
664DSB	Invader 664	Black	with Clear Defender Visor, Yellow Nomex Earlap, Chinstrap with Postman's Slide and Lime Yellow Reflexite Trim

Front Pieces

Design your own at www.msanet.com/fronts, and call 1-877-MSA-FIRE to order!

• Over 27 million possible configurations

• Reinforced with high-temperature, shrink-resistant backing

• Sewn with high-temperature, fire-retardant Nomex thread

• Configure your own front at www.msanet.com/fronts. Part of a tested/compliant configuration according to NFPA 1971.

[1]For MSA Cairns Fire Helmet Warranty details, go to www.MSASafety.com and click on the "Product Literature" tab located on indiviual helmet pages.

Select Replacement Parts

P/N	Description	Cairns 1010 & 1044	660C Metro & Invader 664	Commando HP3
DEFENDER VISOR				
(SOS) 10077117	Clear Lens	■	■	■
(SOS) 10077118	Amber Tuffshield Lens	■	■	■
SOFT GOODS KITS				
(SOS) 10160548	**Soft Goods Kit:** Standard Liner, Yellow Nomex Ear Lap, Velcro Tabs, Mesh Laundering Bag[1]	■	■	■
(SOS) 10160549	**Soft Goods Kit:** Standard Liner, Black Nomex Ear Lap, Velcro Tabs, Mesh Laundering Bag[1]	■	■	■
EARLAPS				
L655XP	Yellow Nomex Earlap	■	■	■
L655AP	Yellow Nomex Earlap w/Under Chin Extension	■	■	■
L655GP	Black Nomex Earlap	■	■	■
10124742	Black Nomex Earlap w/Under Chin Extension	■	■	■
L955P	PBI/Kevlar Earlap	■	■	■
L955AP	PBI/Kevlar Earlap w/Under Chin Extension	■	■	■
L945P	PBI/Kevlar Bloodborne Pathogen Resistant Earlap	■	■	■

Sightgard® Safety Glasses

Material:	Polycarbonate
Rating:	Impact (Z87+)
Standards:	ANSI/ISEA Z87.1-2010
	CSA Z94.3 (as noted)
	NFPA-1500: 2013
Certification:	Third-party by Intertek

SIGHTGARD SAFETY GLASSES		Model	Part No.	Product Specifics
	TRY IT!	Arctic	697514	• Frameless and lightweight • Among our most popular models! • Tuff Stuff Anti-scratch Coating • Full side coverage
	TRY IT!	Arctic	697515	• Popular, lightweight model • Full side coverage • Anti-scratch coating
		Arctic Elite	10059671	• Indoor/outdoor mirror allows workers to go from bright to low light conditions • Rubber tipped temples and nosebridge for comfortable, yet secure fit • Anti-fog coating
	TRY IT!	OvrG™ II	10118475	• Clear lenses • For use over small-to-medium Rx glasses • Squared-off, stylish look • Maximum UV protection • 30% lighter weight than standard visitor specs

The "Try It" sample program offers some of the most popular MSA Head, Eye, Face and Hearing Protection products—including Sightgard eyewear—completely FREE of charge! The (TRY IT!) **tells you which products are in the program.**

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¹ *CSA International certified models are denoted with a* (CSA) *symbol*

Applications

- **Size Up**

Ideal for locating the seat of any fire and for pinpointing and isolating hidden fires, as well as for location of heat accumulation areas and possible ventilation points.

Optional real time video broadcast directly from operations scene to incident command control assists firefighters in making strategic decisions and increasing fireground safety.

- **Search/Rescue**

Search for victims and downed firefighters, locate missing/injured persons, search for suspects, or quickly scan areas for heat signatures using available six color palettes.

- **Operations**

Monitor building conditions to help avoid collapse, aid in decision-making process of placing firefighters on scene to find fire extensions.

- **Overhaul**

Search for remaining hot spots and areas of building instability. User-selectable color palettes support code inspections and maintenance.

- **Fire Extension Location**

- **Water Rescue**

- **HazMat**

- **Scene Investigation**

Fire scene investigation (arson suspicion) as well as scene investigation involving electrical or ventilation issues

- **Liquid Storage Evaluation**

http://www.youtube.com/watch?v=FV1b9NrirPQ
TESTIMONIAL — PONTIAC, MI

Evolution® 6000 Basic TIC

Provides easy to use TIC performance – a simplified fireground tool.

- Economical, durable value to fit your station's budget
- Save on repair costs with rugged, waterproof and shock-resistant product design
- 320X240 high definition image quality offers excellent resolution
- Standard flashlight provides extra visibility for firefighter proximity to enhance safety and situational awareness
- Laser pointer precisely indicates hot spots and other areas of interest to allow others to take fast, specific action
- Patented dual-handle design, for easy handoff on the fireground
- Three carabiner attachment points offer flexibility in attaching camera to firefighter
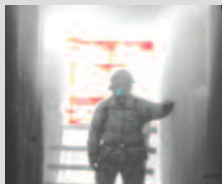
Colorized basic image

Three carabiner attachment points

Patented dual-handle design

Field-replaceable germanium lens

Flashlight

Laser Pointer

Evolution 6000 Plus TIC

Adds additional tools to aid and improve fireground safety and decision making.

- 2X/4X zoom gets a closer look at areas of interest
- Six user-selectable color palettes provide flexibility to view thermal images
- Compass allows for faster rescues and improved situational awareness by displaying letters or icon for directional information
- Optional integrated video transmitter enables remote monitoring for improved decision making and situational awareness
- Optional integrated range finder offers more usable information to enable faster, more precise action from 16 to 210 feet away (replaces flashlight option)
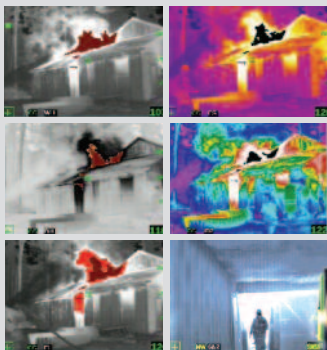

Six color palettes

2X/4X zoom
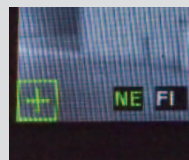
Compass

Laser range finder

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Evolution 6000 Xtreme TIC

Provides same standard and optional features as EVOLUTION 6000 Plus TIC. Xtreme model adds:

• Integrated picture and video capture save action to camera's internal hard drive

• Download pictures and video to your desktop

• Use pictures and video for training, after-action review and documentation

Camera Configuration Application

Video capture

Picture capture
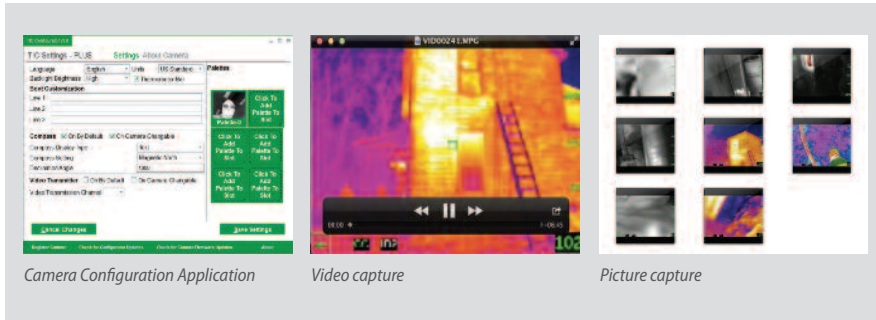
Evolution 6000 TIC Model Comparison

	EVOLUTION 6000 TIC	EVOLUTION 6000 Plus TIC	EVOLUTION 6000 Xtreme TIC
HIGH DEFINITION 320X240 THERMAL IMAGING CORE	●	●	●
LASER POINTER	●	●	●
LED FLASHLIGHT*	●	●	●
THREE CARABINER ATTACHMENT POINTS	●	●	●
FIELD-REPLACEABLE GERMANIUM LENS	●	●	●
PATENTED DUAL-HANDLE DESIGN	●	●	●
SIX COLOR PALETTES		●	●
2X/4X ZOOM		●	●
COMPASS		●	●
OPTIONAL INTEGRATED VIDEO TRANSMITTER		●	●
OPTIONAL RANGE FINDER		●	●
INTEGRATED PICTURE CAPTURE			●
INTEGRATED VIDEO CAPTURE			●

* Not available with range finder option

Evolution 6000 TIC Technical Specifications

CONSTRUCTION	Flame retardant (material passes NFPA direct flame exposure test) IP67 [withstands immersion to 3 ft (1 meter)]
APPROXIMATE DIMENSIONS	7.3" x 4.8" x 11.6" (LxWxH) (185 mm x 122 mm x 295 mm)
SENSOR	Uncooled VOX microbolometer
ARRAY SIZE	320X240
WEIGHT	2.65 lbs (1.2 kg)
POWER SOURCE	Rechargeable lithium-ion battery
OPERATING TIME	3.5 hours at nominal 72°F (22°C)
FIELD OF VIEW	48° H; 37° V
RANGE FINDER	Maximum range 210 ft (70 m)
INTRINSICALLY SAFE	Nonincendive equipment (UL Class 1, Div 2)

APPROVALS	Designed to meet NFPA 1801
NET EQUIVALENT TEMPERATURE DIFFERENCE	High Sensitivity 40 mK (0.040°C) (typical), 78 mK (0.078°C) (max) Low Sensitivity 234 mK (0.234°C)
TEMPERATURE MEASUREMENT	± 18 °F (10 °C) or ±10 %, whichever is greater
IMAGE STORAGE (6000X ONLY)	Number of images stored, 1000 minimum Format – JPG
VIDEO STORAGE (6000X ONLY)	Length – 4-hour minimum Format – MPEG 4
ENVIRONMENTAL AMBIENT TEMPERATURE AND OPERATING TIME	176º F (80ºC) > 30 minutes 248º F (120ºC) > 20 minutes 500º F (260ºC) > 6 minutes -22º F (-30ºC) > 40 minutes -40º F (-40ºC) > 25 minutes

Ordering Information

Model	Temperature units	Part number	With range finder option	With video transmitter option	With range finder and video transmitter options
EVOLUTION 6000 Basic TIC	Fahrenheit	10145938			
	Celsius	10145939			
EVOLUTION 6000 Plus TIC	Fahrenheit	10145940	10145951	10145952	10145953
	Celsius	10145954	1014595	10145955	10145957
EVOLUTION 6000 Xtreme TIC	Fahrenheit	10145958	10145959	10145960	10145961
	Celsius	10145962	10145963	10145964	10145965

EVOLUTION 6000 CHARGING KITS	
10145750	EVOLUTION 6000 TIC Station Kit (includes carrying case, 2 rechargeable batteries, multi-use charger (North America), retractable lanyard, and carabiner)
10145771	EVOLUTION 6000 TIC Vehicle Kit (includes 2 rechargeable batteries, vehicle charger, retractable lanyard, and carabiner)

VIDEO TRANSMISSION RECEIVING SYSTEMS	
10048134	Mini Receiver Kit (frequency: 2327 / 2390 MHz)
10119319	Deluxe Receiver Kit (frequency: 2327 / 2390 MHz)

For other frequencies, please contact MSA Customer Service 1-877-MSA-FIRE.

ACCESSORIES	
10145859	Multi-use charger (12V) kit
10148136	Vehicle mounted charger system
10147390	Vehicle mounting bracket
10145749	Reflective label ID kit (includes 3 sets of reflective ID labels)
10120606-SP	Lithium-ion battery
10145748	Tripod adapter
10040005	Carabiner
10127441-SP	Plastic carrying case
10040226	Retractable lanyard
10039515	Shoulder strap
10039516	Wrist strap
10148391-SP	Protective display covers (3 per package)

Evolution 5800 TIC

MSA's Evolution 5800 TIC offers state-of-the-art imagery with a high-resolution-format, microbolometer-based infrared sensor. Our Image Detail Enhancement (IDE) software enhances the camera's imagery so that it matches the total dynamic range of the original image, and makes image detail visible to you, even in scenes with extreme-temperature dynamics. This enhanced imagery is combined with five user-selectable palettes, to give firefighters a customized image that maximizes the scene information you need for your plan of attack, even in low-temperature-contrast environments.

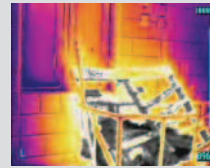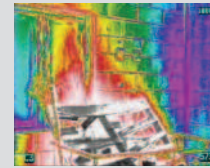| Features	Benefits
USER SELECTABLE PALETTES	Maximizes scene information, providing greater image detail
IMAGE DETAIL ENHANCEMENT	Enhances camera imagery in low-contrast-temperature environments
INSTANT ON	Camera starts in 2 seconds or less
HIGH SENSE IMAGERY	Best High Sense imagery 2 to 4 times longer than competitive cameras
320 X 240 FOCAL PLANE ARRAY	Increased number of pixels for improved picture quality
2X DIGITAL ZOOM	Magnifies image, providing more detail
HEAT SEEKER PLUS	Only MSA offers color pixelization in High and Low Sense modes

White Hot Imagery *Black Hot Imagery* *Fire and Ice Imagery* *Fusion Imagery* *Rainbow Imagery*

Ordering Information

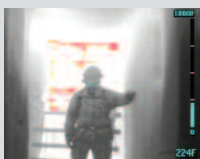|	Fahrenheit	Celsius	
EVOLUTION 5800 TIC	10097333	10097334	Evolution 5800 complete with user-selectable palettes, 2X Digital Zoom, Heat Seeker, Quick Temp and User's instruction manual

Evolution 5200HD^2 TIC

The Evolution 5200HD^2 TIC is a multipurpose firefighting tool, designed for search-and-rescue as well as structural firefighting. MSA's first high-resolution TIC provides superior images in Low and High Sense modes from the VOx microbolometer that incorporates a 320 x 240 focal plane array sensor, generating over 76,000 pixels of image detail in both Low and High Sense modes.

Features	Benefits
HEAT SEEKER PLUS	Only MSA offers color pixelization in Low and High Sense modes
INSTANT ON	Camera starts in 2 seconds or less
320 X 240 FOCAL PLANE ARRAY	Increased number of pixels for improved picture quality
2X DIGITAL ZOOM (OPTIONAL)	Magnifies image, providing more detail
QUICK TEMP	Numerical temperature readout of the scene
HIGH SENSE IMAGERY	Best-in-class imagery, 2 to 4 times longer than competitive cameras

High Sense image detail *Low Sense imagery on the display of an E5200HD^2 TIC* *Same picture with 2X Digital Zoom activated showing Low-Sense imagery on the display of an E5200HD^2 TIC*

Ordering Information

	Fahrenheit	Celsius	
EVOLUTION 5200HD^2 TIC	10097247	10097248	Evolution 5200HD^2 complete with Heat Seeker, Quick Temp and User's instruction manual, less 2X Zoom
	10097249	10097250	Evolution 5200HD^2 complete with 2X Zoom, Heat Seeker, Quick Temp and User's instruction manual

Evolution 5200 TIC

The Evolution 5200 TIC represents MSA's traditional model of thermal imaging camera, the classic choice of hundreds of fire departments in the US and globally for years. Now proven over time, the Evolution 5200 model was designed for use during structural firefighting. The large 55° field of view provides firefighters with the information needed to make fast and safe decisions.

Features	Benefits
INSTANT ON	Camera starts in 2 seconds or less
160 X 120 FOCAL PLANE ARRAY	High resolution imagery with the power of 19,000 pixels
HEAT SEEKER PLUS	Identifies the hottest objects in both Low and High Sense
QUICK TEMP	Numerical temperature readout of the scene
HIGH SENSE IMAGERY	Best-in-class imagery, 2 to 4 times longer than competitive cameras

*Evolution 5200 in the High Sense mode* *Evolution 5200 in the Low Sense mode*

Ordering Information

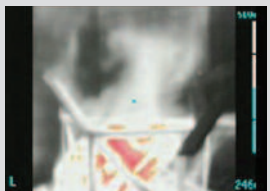|	Fahrenheit	Celsius	
EVOLUTION 5200 TIC	10097245	10097246	Evolution 5200 complete with Heat Seeker, Quick Temp and User's instruction manual

Evolution 5600 TIC

The Evolution 5600 TIC delivers reliable thermal imaging performance in a value-driven design for firefighters everywhere. This versatile TIC provides detailed images from the vanadium oxide microbolometer sensor and a 120 x 120 focal plane array with over 15,000 pixels and a 45° field of view.

Features	Benefits
HEAT SEEKER PLUS	Only MSA offers color pixelization in Low and High Sense modes
QUICK TEMP	Numerical temperature readout of the scene
INSTANT ON	Camera starts in 2 seconds or less
120 X 120 FOCAL PLANE ARRAY	High performance VOx infrared sensor
HIGH SENSE IMAGERY	Best High Sense imagery; 2 to 4 times longer than competitive cameras

High Sense image detail with Heat Seeker enhancing the heat source with red isotherm
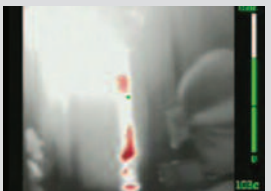
Low Sense image detail with Heat Seeker enhancing the heat source with a red isotherm

Ordering Information

	Fahrenheit	Celsius	
EVOLUTION 5600 TIC	10097331	10097332	Evolution 5600 complete with Heat Seeker, Quick Temp and User's instruction manual

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Evolution 5000 Series Thermal Imaging Kits

Fire Station TIC Kit

This kit contains all of the components and accessories that a fire department needs to put their MSA Evolution Thermal Imaging Camera into service. The Fire Station Kit consists of two (2) rechargeable Lithium-Ion Batteries, Single-Unit AC Charger, Retractable Lanyard, Carabiner, Instruction CD and a hard plastic carrying case.

Vehicle TIC Kit

This kit contains all of the components and accessories that a fire department needs to install their MSA Evolution Thermal Imaging Camera into service on a fire truck. The Vehicle Kit consists of two (2) rechargeable Lithium-Ion Batteries, Universal Truck Charger, Retractable Lanyard, Carabiner, and Instruction CD.

EVOLUTION 5000 SERIES THERMAL IMAGING KITS	10096887	Fire Station TIC Kit
	10096886	Vehicle TIC Kit

Thermal Imaging Camera Accessories

VIDEO TRANSMISSION AND RECORDING SYSTEMS	10050375	Deluxe Receiver Kit
	10047573	Evolution Video Transmitter
	10071750	Evolution Video Capture Kit
ACCESSORIES	10041100	Single-Unit Charger
	10067565	Universal Truck Charger
	10067707	Non-Charging Universal Truck Bracket
	10062184	Reflective Label ID Kit
	10039603	Sun Shroud
	10038970	Disposable Display Covers
	10038412	Lithium Ion Battery
	10040229	Tripod Adapter
	10040005	Carabiner
	10040223	Plastic Carrying Case
	10040226	Retractable Lanyard
	10039515	Shoulder Strap
	10039516	Wrist Strap

MSA Gas Detectors for YOUR Fire Service Applications

Emergency response crews face two basic challenges when entering dangerous environments:

• Is the air acceptable for normal, unprotected breathing?

• Is the air safe from potential explosions?

Portable gas detection equipment can help emergency response crews to meet these challenges. Gas detection needs are expanding. Increasingly, fire departments respond to situations where hazardous substances may be present and proper detection equipment is necessary. MSA provides equipment to meet almost any gas detection need.

Confined Space Entry

Emergency response teams may be called upon to perform services or rescues in confined spaces. While often industrial in nature, a confined space is typically defined as any enclosed area not meant for human habitation, such as a sewer or storm drain. MSA's multigas detectors can help to ensure that confined space atmospheres are safe for worker entry.

Overhaul

During overhaul operations, you can never be certain of conditions within damaged structures. MSA Single and Multigas Detectors can indicate the need to use respiratory protection.

Hydrogen Cyanide (HCN) Risks

Hydrogen Cyanide (HCN) detection has increasingly become a key part of firefighting respiratory programs and SOPs as the awareness of HCN exposures becomes known and studied. Materials such as insulation, furniture carpets, appliances and plastics can generate HCN when burning as can many items made of natural materials.

In addition to the smoke generated during active fires, the continued presence of heat and smoldering materials during overhaul can generate dangerous levels of HCN. This has prompted many departments to adjust their respiratory SOPs to minimize firefighter exposure to HCN. The use of HCN monitors during overhaul can provide the critical information needed to support those decisions and further protect firefighters.

HCN is a colorless gas with a bitter, almond like odor. HCN is considered to be IDLH at 50 ppm per NIOSH. HCN can enter the body through the absorption, inhalation and ingestion. Symptoms of HCN exposure can include nausea, dizziness, vomiting and breathing difficulty. These symptoms can appear immediately. The long term effects of repeat exposure continue to be studied. MSA ALTAIR Pro and ALTAIR 5X instruments can help firefighters detect threats from HCN.

Carbon Monoxide (CO) Risks

CO is a colorless, odorless gas that is considered toxic at 35PPM with a NIOSH IDLH at 1200 ppm. Symptoms of exposure can include headache, nausea, dizziness, confusion and shortness of breath. Since CO is often the byproduct of incomplete combustion, it can be a threat during overhaul or in many home calls.

Home Calls

Fire departments often respond to calls concerning CO (carbon monoxide) home alarms. MSA ALTAIR® 2X, ALTAIR 4X and ALTAIR 5X Gas Detectors can detect the presence of CO upon arrival at call sites and determine if the premises are safe for habitation. These units can even be used to locate the gas source (often garages or leaky furnace vents). Fire departments may also respond to natural gas leaks or suspicious odors and must be able to measure concentrations of several gases simultaneously.

HazMat

Fire departments and HazMat teams at times must detect and identify hazardous compounds and other VOCs at spills and other emergency situations. With the ability to detect hundreds of volatile organic compounds, the ALTAIR 5X PID Multigas Detector is the ideal instrument for HazMat applications.

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ALTAIR® 2X Gas Detector

Introducing the ALTAIR 2X Gas Detector from MSA; the first one or two gas detector that incorporates industry-leading XCell® Sensor Technology to deliver unparalleled performance while drastically minimizing total cost of ownership, increasing durability and delivering enhanced worker safety, compliance and traceability.

The ALTAIR 2X is also the first portable gas detector to introduce revolutionary XCell Pulse Technology for gas-less bump testing. Based on proven science and advanced patented sensor capabilities.

DETECTOR TYPE (LOW, HIGH ALARM IN PPM)	CHARCOAL	GLOW-IN-THE-DARK
ALTAIR 2X Single Gas Detector		
CO (25, 100)	10153986	10154185
CO-H_2 (25, 100)	10154074	10154186
CO-HC (25, 100)	10154075	10154187
ALTAIR 2XT Two-Tox Gas Detector		
CO/H_2S (CO: 25, 100; H_2S: 10, 15)	10154040	10154181
CO-H_2/H_2S (CO: 25, 100; H_2S: 10, 15)	10154071	10154182
CO/H_2S-LC (CO: 25, 100; H_2S: 5, 10)	10154072	10154183
CO/NO_2 (CO: 25, 100; NO_2: 2.5, 5)	10154073	10154184
ALTAIR 2XP – with XCell Pulse Technology —Coming Soon !		
H_2S-Pulse (10, 15)	10153984	10154188

Built Tough

Like all MSA detectors, ALTAIR 2X is built for durability and designed for the work that is being completed.

• Withstands extreme impacts with rugged polycarbonate housing and passes 25-foot drop test
• IP 67-rated ALTAIR 2X is both dust-tight and water-tight
• Minimal RF interference
• Full three-year warranty supports the entire instrument, including the sensors

ALTAIR Pro HCN Single-Gas Detectors

Ease of Use

ALTAIR Pro HCN Gas Detectors combine user flexibility and functional simplicity. Units use an easily replaceable, commercially available battery and one button operation.

Distinctive Alarm System

Triple alarm system's piercing audible alarm averages 95 dB @ 1 foot and is designed not to be confused with other sounds. Visual alarm features dual bright top LED to be seen from all angles. Internal vibrating alarm is standard with all units.

ALTAIR PRO HCN SINGLE-GAS DETECTOR					
Instrument Type	P/N	Low Alarm	High Alarm	STEL	TWA
HYDROGEN CYANIDE (HCN)	10076729	4.7 PPM	10 PPM	10 PPM	4.7 PPM

ACCESSORIES	
	Description
711072	Cal Gas - 10 ppm HCN - 34 Liter
655051	Replacement HCN sensor
467895	Flow Control Regulator
602294	Tubing
10150609	Cal Gas - 60PPM CO - 116 Liter

ALTAIR PRO HCN Fire Single-Gas Detector

Built-In IR Communication (Event and Data-Logging)

ALTAIR Pro HCN Gas Detectors provide standard data logging, automatically recording the 50 latest events while simultaneously recording peak readings every three minutes.

Durability

Thick rubberized housing withstands accidental drops and other impacts. 10' drop test and IP67-rated for water-and-dust resistance.

ALTAIR 5X Multigas Detectors

Powered by Performance

ALTAIR 5X Multigas Detectors provide industry-leading sensor technology with MSA XCell Sensors, offering typical life of more than double the industry average. MSA's proprietary Application-Specific Integrated Circuit (ASIC) design miniaturizes sensor controlling electronics, offering superior stability, accuracy and repeatability.

Saving seconds on response time can mean saving lives. MSA XCell Sensors enable faster response and span calibration times to save on calibration gas and maintenance costs. ALTAIR 5X Multigas Detectors can also be equipped with MSA IR sensors for many gases and ranges, including CO_2.

Flexibility to Meet Your Needs

MSA's ALTAIR 5X Multigas Detectors are available with high-resolution color or monochrome LCD display with multilingual capabilities; MSA's Logo Express® Service can customize your color display. Easily configurable detectors with interchangeable plug-and-play MSA XCell Sensor slots can monitor up to six gases simultaneously. Optional glow-in-the-dark instrument housing is available for IR sensor-equipped units. Lithium-ion battery lasts for 20 hours for multiple shift use; alkaline battery pack is also available. ALTAIR 5X Multigas Detector is fully compatible with the MSA GALAXY® GX2 Automated Test System and MSA Link Software.

ALTAIR 5X Multigas Detector

ALTAIR 5X DETECTOR KITS – *monochrome display, integral pump, 10-ft sampling line, and 1-ft probe*		
Approvals		**Configuration**
U.S.	CANADA	
10116926	10115120	LEL, O_2, CO, H_2S
10160201		LEL, O_2, CO, H_2S, HCN

ALTAIR 5X DETECTOR DELUXE KITS – *color display, integral pump, 10-ft sampling line, and 1-ft probe*		
Approvals		**Configuration**
U.S.	CANADA	
10116928	10115142	LEL, O_2, CO, H_2S
10160193		LEL, O_2, CO, H_2S, HCN
10165446		LEL, O_2, CO, H_2S, PID

ACCESSORIES	
	Description
10042621	Sample Probe
10040665	10' Sample Line
801582	Water Stop Filter, 10-pack
10045035	58 Liter Quad Gas - LEL-O2-CO-H2S
10095774	Vehicle Charger
10034391	Demand Regulator Kit

SENSOR OPTIONS AND SPECIFICATIONS		
Gas Type	**Range**	**Resolution**
COMBUSTIBLE	0-100%	LEL 1% LEL
OXYGEN	0-30% VOL	0.1% VOL
CARBON MONOXIDE	0-1999 PPM	1 PPM
HYDROGEN SULFIDE	0-200 PPM	1 PPM
SULFUR DIOXODE	0-20 PPM	0.1 PPM
CHLORINE	0-10 PPM	0.1 PPM
AMMONIA	0-100 PPM	1 PPM
NITROGEN DIOXIDE	0-20 PPM	0.5 PPM
CHLORINE DIOXIDE	0-1 PPM	0.01 PPM
PHOSPHINE	0-5 PPM	0.1 PPM
HYDROGEN CYANIDE	0-30 PPM	0.1 PPM
CARBON DIOXIDE	0-10% VOL	0.01% VOL
BUTANE	0-25% VOL	0.1% VOL
METHANE	0-100% VOL	1% VOL
PROPANE	0-100% VOL	1% VOL

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ALTAIR 4X Multigas Detectors

ALTAIR 4X Multigas Detectors are driven by advanced portable gas detector technology. Design breakthroughs improve performance and ensure that ALTAIR 4X Detectors outlast the competition.

- Full three-year warranty
- Four-year sensor life
- Lower cost of ownership
- IP67-rated
- End-of-sensor-life warning
- 24-hour run time
- Withstands 20-ft drop
- Fast, high-performing MSA XCell Sensors

ALTAIR 4X Multigas Detector – charcoal (left) and phosphorescent (right)

ALTAIR 4X DETECTOR *with North American approval, quick-start card, data logging, charger, calibration cap and tubing, CD manual. MotionAlert™ feature is now standard on all detectors.*

	Description
10107602	ALTAIR 4X Multigas Detector (LEL, O_2, CO, H_2S), charcoal
10110443	ALTAIR 4X Multigas Detector (LEL, O_2, CO), charcoal
10110444	ALTAIR 4X Multigas Detector (LEL, O_2), charcoal
10107603	ALTAIR 4X Multigas Detector (LEL, O_2, CO, H_2S), phosphorescent
10110445	ALTAIR 4X Multigas Detector (LEL, O_2, CO), phosphorescent
10110446	ALTAIR 4X Multigas Detector (LEL, O_2), phosphorescent

ACCESSORIES

	Description
10152669	ALTAIR Pump Probe with charger
10153104	25' Sample Line for Pump Probe
10082834	JetEye IR Adapter with USB connector
10045035	58 Liter Quad Gas - LEL-O_2-CO-H_2S
467895	Flow Control Regulator
10095774	Vehicle Charger

SENSOR SPECIFICATIONS

Gas Type	Range	Resolution
LEL	0-100%	1%
O_2	0-30% VOL	0.1% VOL
CO	0-1999 PPM	1 PPM
H_2S	0-200 PPM	1 PPM

MSA XCell® Technology

MSA revolutionizes sensor technology with design breakthroughs for superior performance that saves you money.

- Sensor response and clear times in less than 15 seconds
- Bump test in less than 15 seconds
- Span calibration time of 60 seconds
- Greater signal stability and repeatability within changing or extreme environmental conditions
- Two-tox CO/H_2S sensor with virtually no cross-channel interference
- Sensor digital output reduces susceptibility to RF interference
- Reliable, extended-life XCell Sensors offer typical life greater than four years
- Laser-welded sensor housings eliminate opportunities for leaks
- Combustible sensor proprietary operating mode improves poison resistance
- End-of-sensor-life warning gives advanced notice to user, reducing service outages

Volatile Organic Compound (VOC) Detection

VOC detection is critical in HAZMAT, Arson Investigations, and several applications emerging in the Fire Service. Advanced Photoionization (PID) Detectors are becoming required tools for the fire service for VOC applications.

The ALTAIR 5X Detector with advanced PID (photoionization) sensor options sets the gas detection bar even higher to meet evolving and diverse needs for VOC detection. The unmatched durability of the ALTAIR 5X with advanced XCell Sensor technology is now combined with PID to provide a complete platform for users around the world. What's more, PID instrument data can now seamlessly integrate into MSA's proven fleet management infrastructure.

INTRODUCING! ALTAIR 5X PID

ALTAIR 5X PID Mulitgas Detector

The Sirius PID Multigas Detector provides one-package solutions: incredible performance, maximum simplicity and durable design.

Sirius Multigas Detector

ALTAIR 5X PID DETECTORS

	Part No.	Configuration
INSTRUMENT ONLY KIT	10165445	COLOR DISPLAY (LEL, O_2, CO, H_2S, PID)
DELUXE KIT W/ 10-FT SAMPLING LINE AND 1-FT PROBE	10165446	COLOR DISPLAY (LEL, O_2, CO, H_2S, PID)

SIRIUS MULTIGAS DETECTOR KITS (LEL)		10.6 eV	LEL	O_2	CO	H_2S	Li Ion	Alka Bat	10-ft Line	1-ft Probe	Ret Line	Bl Boot	Cor Jac	Cal Kit	Data Log	Blk Cas	Std Cap
DELUXE LEL 4-GAS LITHIUM ION PID	10051141	■	■	■	■	■	■		■	■	■	■	■	■		■	■
DELUXE LEL 3-GAS H2S LITHIUM ION PID	10051142	■	■			■	■		■	■	■	■	■	■		■	■
DELUXE LEL 3-GAS CO LITHIUM ION PID	10051143	■	■	■	■		■		■	■	■	■	■	■		■	■
DELUXE LEL 4-GAS LITHIUM ION PID DATALOG	10051144	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■
DELUXE LEL 4-GAS LITHIUM ION PID LESS BOOT/JACKET	10051117	■	■	■	■	■	■		■	■	■	■			■	■	■
ECONOMY LEL 4-GAS ALKALINE PID	10051151	■	■	■	■	■		■									■
ECONOMY LEL 3-GAS H2S ALKALINE PID	10051152	■	■	■		■		■									■
ECONOMY LEL 3-GAS CO ALKALINE PID	10051153	■	■	■	■			■									■
ECONOMY LEL 4-GAS LITHIUM ION PID	10051154	■	■	■	■	■											■

The Importance of Calibration and Bump Testing

It is vital to firefighter safety that portable gas detectors are maintained and calibrated properly. All sensors can eventually expire due to loss of sensitivity, slowed response time or both. Because of this, performance of a daily bump test is best practice because it is the only method by which the entire system: instrument, sensors, flow path, power source, alarms, and all electronics can be checked to ensure that it is functioning properly. That's why most manufacturer instructions recommend a daily bump test each day, prior to operation of gas detectors.

Sensor drift

All electrochemical sensors will eventually lose sensitivity over time with exposure to work conditions. Calibration is used to compensate for the loss of sensitivity and adjust the readings to the new sensitivity output level.

Drift is the amount that sensor output changes over time. All sensors experience drift. Once the sensitivity becomes too low, it becomes more difficult to assess exact differences in gas concentrations. Sensors typically have a fixed sensitivity limit assigned by the detector; once that limit is reached, they will not pass calibration.
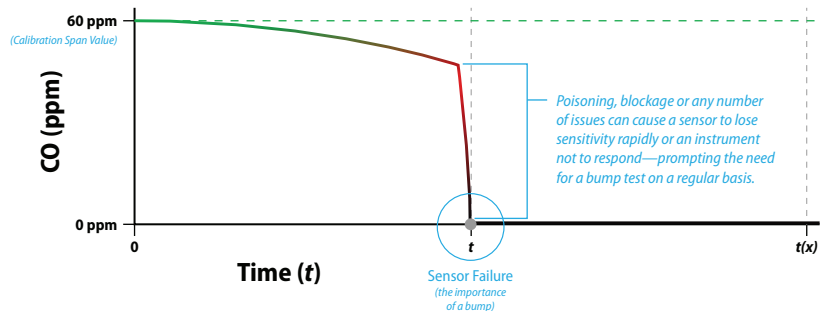
What is a Calibration?

Calibration is an adjustment of the sensor(s) output to match the known traceable calibration gas concentration. Full calibration ensures maximum accuracy of the instrument. Environmental conditions such as over-exposures, introduction of poisons, heavy impacts, or other extreme environmental changes can cause sensors to become less accurate. Calibration allows the instrument to manage these changes in sensitivity.

Sensor drift over time or changes to environmental conditions can change sensor output— requiring the need for calibration.
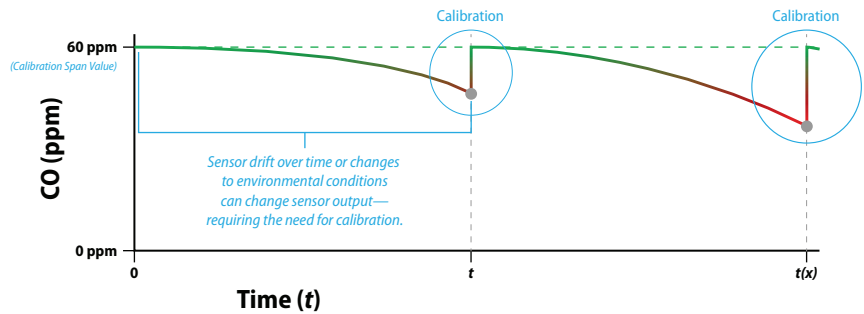
What is a Bump Test?

Bump tests are meant to verify that the sensors and the alarms function properly and that the sensors respond within acceptable margins. Gases or vapors must be able to reach the sensor. Bump tests confirm that gas flow paths to the sensor on the detector are clear and the sensor(s) are functioning from a qualitative standpoint. Bump testing will alert users if a gas inlet has become blocked, even if the blockage is not visible. The bump test, however, is not meant to adjust the device's accuracy.

Poisoning, blockage or any number of issues can cause a sensor to lose sensitivity rapidly or an instrument not to respond—prompting the need for a bump test on a regular basis.

GALAXY GX2 Automated Test System

Simplicity counts with the MSA GALAXY GX2 Automated Test System for advanced safety management and effortless operation, by providing simple, intelligent testing and calibration of MSA ALTAIR and ALTAIR PRO Single-Gas Detectors and ALTAIR 4X and ALTAIR 5X Multigas Detectors. Easy-to-use automated test stand offers high performance as either stand-alone unit or integrated portable detector management system, enabling total data access and control of the MSA ALTAIR family Gas Detector fleet. New MSA Link Pro Software for proactive safety management; gas exposure email alerts, direct data input, live filtering, test and exposure queries, collecting and printing reports.

- Color touch screen for ease of setup and viewing
- Extremely simple to use; testing starts automatically without touching a single button
- Simultaneous testing of up to ten instruments
- GALAXY GX2 System is optimized for use with MSA's XCell Sensors; provides up to 50% cost of ownership reduction
- At-a-glance indicators include low calibration gas volume, expiration warnings and test stand status
- MSA Link Pro Software provides proactive safety management, dashboard overview and total record-keeping
- 18 languages available for test stand and MSA Link Pro Software that simplifies usage and reduces training

GALAXY GX2 SYSTEM TEST STAND				
	1 valve (for use with 1 calibration gas cylinder)		4 valve (for use with 1-4 calibration gas cylinders)	
	*Charging**	*No-charging*	*Charging**	*No-charging*
ALTAIR / ALTAIR PRO SINGLE-GAS DETECTOR	—	10128644	—	10128643
ALTAIR 4/4X MULTIGAS DETECTOR	10128630	10128642	10128629	10128641
ALTAIR 5/5X MULTIGAS DETECTOR	10128626	10128628	10128625	10128627

CALIBRATION CYLINDERS AND ACCESSORIES	
10034391	Cl_2/NH_3/ClO_2 Demand Regulator Kit
10050985	Kit, case with Gas Miser® Regulator, demand flow RP (includes tubing and fitting, less gas)
10041225	Calibration tubing with quick-disconnect fitting
10045035	58L Quad Gas Cylinder, 60 ppm C0, 20 ppm H_2S, 15% O_2, 1.45% CH_4
10048280	34l Quad Gas Cylinder, 60 ppm C0, 20 ppm H_2S, 15% O_2, 1.45% CH_4
10048789	34l Cylinder, 60 ppm CO,15% O_2, 1.45% CH_4
711068	34l Econo-Cal® Cylinder, 10 ppm NO_2,air balance

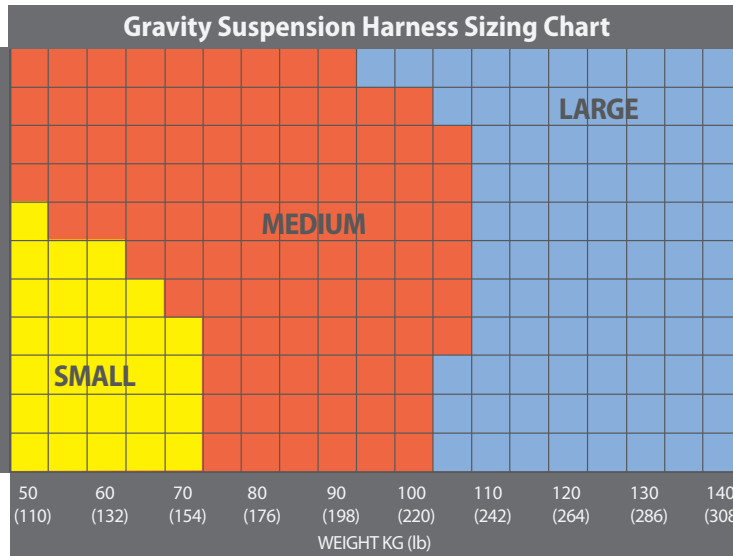| ACCESSORIES	
10127422	ALTAIR 4/4X Detector Multi-unit Charger
10127427	ALTAIR 5/5X Detector Multi-unit Charger
10105756	Electronic Cylinder Holder
10125135	Standard Cylinder Holder
10034391	Demand Regulator Kit
10127111	Memory Card

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COMING 2015

Gravity Suspension Harness

The Gravity Suspension harness provides unparalleled comfort for all applications that require extended periods of time in a fall protection harness. The features and benefits of this new family of harnesses from MSA are designed to reduce fatigue and allow users to perform their duties better and in more comfort. Models are designed for very easy donning, one hand adjustment at all adjusters, and modern styling.

- 8 adjustment points for perfect sizing and fit
- Fold-back hip D-rings that allow users to reduce possible snag hazards
- Gravity Suspension versions available with comfort shoulder padding
- Tool loops with internal rigid supports to make connection of tools easier
- Tool loops on leg straps provide more tool-holding options, and may be cut off if not needed
- All versions include waist and leg padding to improve suspension comfort
- Quick adjusting buckles allow one-hand tightening and loosening
- Elastic web keepers provide flexibility to manage excess webbing
- D-rings available at Ventral (waist), Sternal, Hip and Back locations
- Waist pad with dual-layer construction to reduce pressure during suspension
- Fall arrest-rated Sternal and Back D-Ring
- Carabiner with 3,600 lb. (16kN) gate strength
- Bayonet-style buckles available with locking engagement window to confirm secure connection
- Bayonet buckles with undercut engagement, which prevents both tabs from disconnection while under tension
- Aluminum D-Ring hardware

- CSA Z259.10

ANSI Approval Pending

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Gravity Suspension Harness Sizing Chart

HEIGHT m (ft)		
2	(6' 6")	
1.95	(6' 4")	LARGE
1.9	(6' 2")	
1.85	(6' 0")	
1.8	(5' 10")	MEDIUM
1.75	(5' 8")	
1.7	(5' 6")	
1.65	(5" 4')	
1.6	(5' 2")	SMALL
1.55	(5' 0")	
1.5	(4' 10")	

WEIGHT KG (lb): 50 (110), 60 (132), 70 (154), 80 (176), 90 (198), 100 (220), 110 (242), 120 (264), 130 (286), 140 (308)

PART NO.	Aluminum D-Ring Configuration	Size		Leg Buckle Type	Padding	Web Color		Standards	
	Back, Hips, Sternal & Ventral	Medium	Large	Quick-Connect	Shoulder, Leg & Lumbar	Green	Black	ANSI Z359.11	CSA Z259.10
10150454	■	■		■	■	■			■
10150455	■		■	■	■	■			■
10150457	■	■		■	■		■		■
10150458	■		■	■	■		■		■

Rescue Equipment: Components

SuretyMan Rescue Eight, Steel Part No. SRSF5045
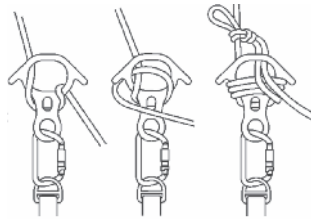
Locking off the Rescue Eight

SuretyMan Rescue Eight

- Designed for rope diameters from 7/16" (11 mm) to 5/8" (16 mm)
- Available in aluminum or steel
- Strength 6,720 lb. (30 kN)
- Weight 1.5 lb. (675 g)
- Designed for the fire service, rescue, and tactical operations

Stealth Rigging Plate Part No. SRSPR5990

Stretcher Rigging Plate Part No. SRSPR5980

SuretyMan Rigging Plates

Stealth Rigging Plate: Anchor on the point and the wings will rotate toward the load for a straighter line of pull. Material: aluminum. Weight: .46 lb. (250g). Strength: 11,000 lb. (48 kN). Color: Teal

Stretcher Rigging Plate: Designed to unclutter and organize litter rigging points, reducing the chance of error. Material: aluminum. Weight: .74 lb. (330g). Strength: 12,200 lb. (54 kN). Color: Teal
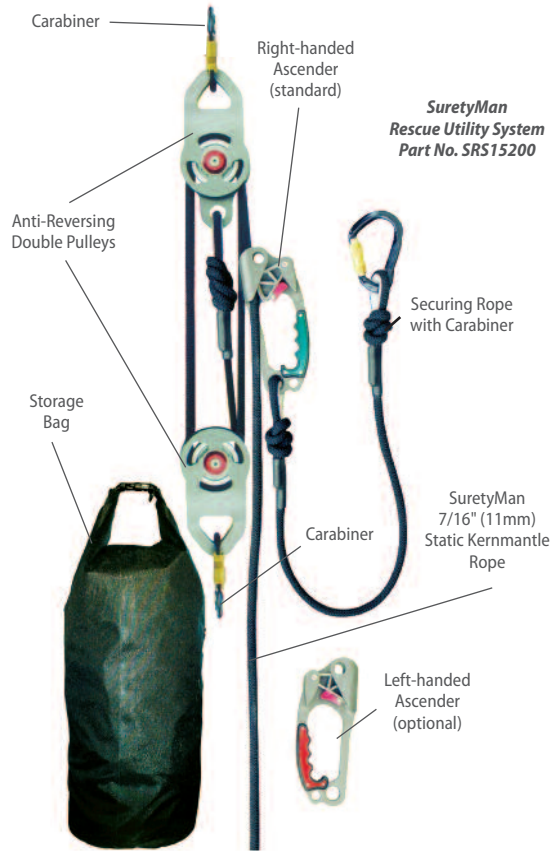

Carabiner Part No. SRCC641

SuretyMan Carabiner

- Traditional large "D" design
- Carbon steel, zinc-plated
- Developed for fire and rescue communities
- Strength 12,364 lbs (55 kN)
- Manual locking
- Weight 11 oz (311g)
- Certified to meet NFPA 1993-1995, Class "G"
- Gate opening 1.2" (32mm)

RESCUE COMPONENTS	SRSF5077	SuretyMan Rescue Eight, aluminum
	SRSPR5990	SuretyMan Stealth Rigging Plate, aluminum, teal
	SRSPR5980	SuretyMan Stretcher Rigging Plate, aluminum, teal
	SRCC641	Carabiner, 1.2" (32mm) gate, steel, NFPA

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SuretyMan Rescue Utility System

Carabiner

Right-handed Ascender (standard)

SuretyMan Rescue Utility System Part No. SRS15200

Anti-Reversing Double Pulleys

Storage Bag

Securing Rope with Carabiner

Carabiner

SuretyMan 7/16" (11mm) Static Kernmantle Rope

Left-handed Ascender (optional)

The SuretyMan Rescue Utility System is primarily used for raising and lowering people or equipment in rescue and confined space applications. Pulleys are equipped with a built-in anti-reversing lock. Offers rapid deployment, is virtually maintenance free, and is rated for two-person load.

- Compact and lightweight with a standard system weight of 17 pounds (7.7 kg)
- Rated capacity of 600 pounds (272 kg) for personnel and materials
- Offers a standard rope length of 200 feet (66m) with a maximum rope length of 800 feet (267m)

NOTE: Due to 4:1 mechanical advantage, user should order system with 4 times the rope necessary for the application. For example, a 50' application requires 200' of rope.

SURETYMAN RESCUE UTILITY SYSTEM	SRS15200	SuretyMan Rescue Utility System, 200' (61m) length
	SRS15300	SuretyMan Rescue Utility System, 300' (91.4m) length
	SRS15400	SuretyMan Rescue Utility System, 400' (122m) length
	10093608	SuretyMan Rescue Utility System, 500' (152.4m) length
	10033360	SuretyMan Rescue Utility System, 600' (182.9m) length
	10101135	SuretyMan Rescue Utility System, 800' (272m) length
	10037101	Left-hand ascender with securing rope
	10035698	Right-hand ascender with securing rope

Confined Space/Head First Extraction System

Pair of Ankle Harnesses (C) P/N SRS3103

Adjustable Victim Strap (B) P/N SRS3101

Carabiners (D) P/N SRCA883

Storage Bag (E) P/N SRB430105

Adjustable Lifting Strap (A) P/N SRS3102

Confined Space/Head First Extraction System Part No. SRS3100

Strength: 5,000 lb. (22 kN)   Weight Approx: 2 lb. (0.9 kg)
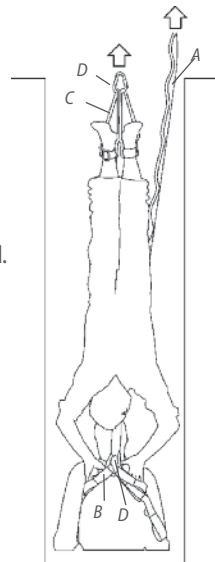
A specialized rescue product designed for extreme cases in which a rescuer needs to be lowered head-first into a confined space to perform a rescue. The Confined Space/ Head First Extraction System (HFES) allows the rescuer to be lowered comfortably into a confined space head first, harness the victim, and raise both victim and rescuer out of a confined space. Consists of an adjustable lifting strap (A), an adjustable victim strap (B), one pair of ankle harnesses (C), two carabiners (D), and a storage bag (E). This compact system can be used with any confined space retrieval equipment such as tripods and davits.
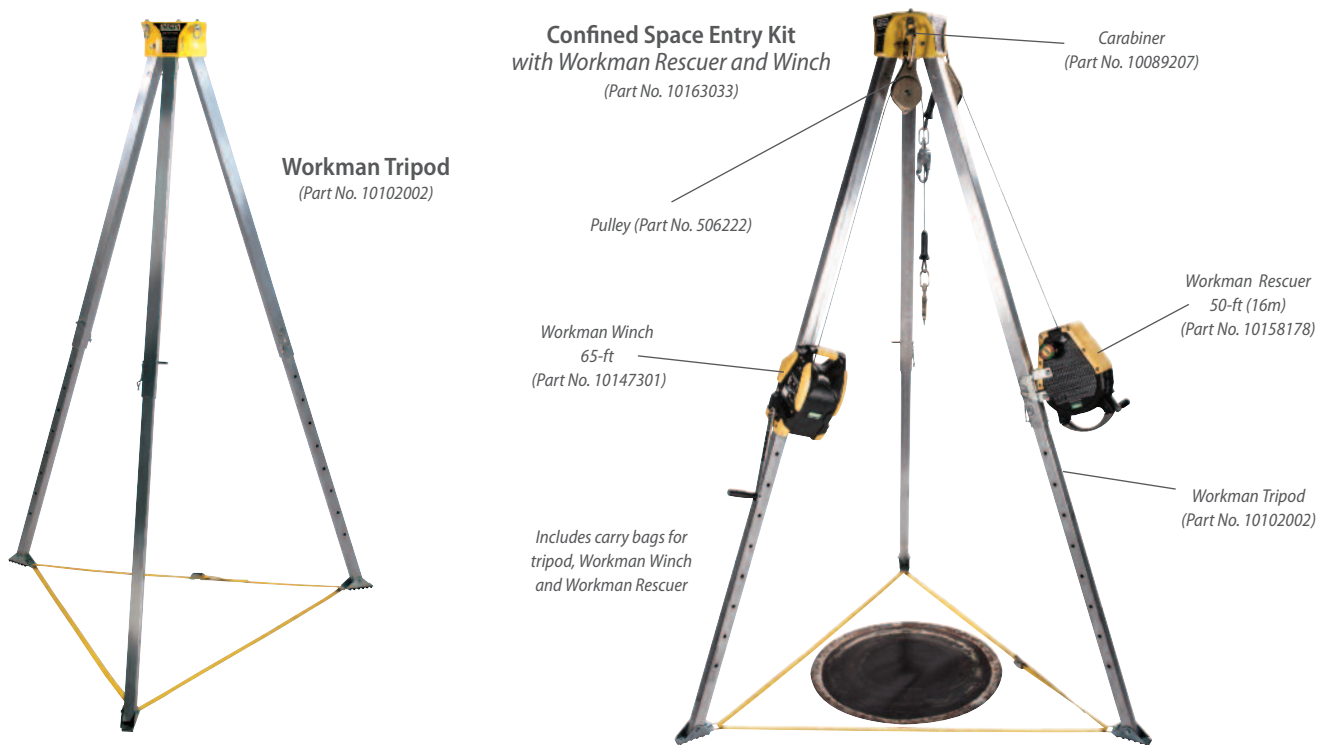
- Leaves both hands free for the rescuer to assist in the retrieval of another person
- Small, lightweight system

Pair of Rescue Wristlets Part No. 507002

CONFINED SPACE/ HEAD FIRST EXTRACTION SYSTEM	SRS3100	Confined Space/ Head First Extraction System
ACCESSORIES	SRS3103	Rescue Anklets
	507002	Rescue Wristlets

Workman Tripod and Workman Confined Space Entry Kits

Workman Tripod
(Part No. 10102002)

Confined Space Entry Kit
with Workman Rescuer and Winch
(Part No. 10163033)

Carabiner
(Part No. 10089207)

Pulley (Part No. 506222)

Workman Rescuer
50-ft (16m)
(Part No. 10158178)

Workman Winch
65-ft
(Part No. 10147301)

Workman Tripod
(Part No. 10102002)

Includes carry bags for tripod, Workman Winch and Workman Rescuer

MSA Tripods make confined space entry with vertical descent easy. The Workman Tripod features internal leg-locking mechanism, maximum height indicator on the tripod legs, cut-resistant leg pin retention chains, recessed product labels, reduced weight and integral carrying strap. The Workman Tripod can be set up and dismantled without the use of tools.

• Automatic hinge lock legs with incremental adjustment
• Skid resistant feet

Complete confined space entry kits for multiple confined space applications. Features three tripod kits and two folding davit kits with a single part number for simplified ordering.

• Allow for non-entry rescue of a confined space entrant
• Great portability of entire tripod kit
• Lift and lower materials and personnel via the hoist while having the ability to use an SRL

Workman Confined Space Entry Kits

	Stainless Steel Kit Components					Standards		
PART NO.	8' Tripod	50' Workman Rescuer	65' Workman Winch	Pulleys	Carabiners	ANSI Z359.14	CSA Z259.2.2	OSHA
10163033	■	■	■	2	2	■		■
10163034	■	■		1	1	■		■

Replacement Parts and Accessories

10105612	Leg base support strap
10089207	Carabiner
506222	Pulley
10105656	Tripod duffel bag

MSA—**The Safety Company**

At MSA, our business is safety. We've been the world's leading manufacturer of high-quality fire/rescue and safety products since 1914, providing sophisticated, life saving devices and protective gear — the result of countless R&D hours, relentless testing, and an unwavering commitment to quality that saves lives and protects those men and women who protect us each and every day. Our core product focus emphasizes Self-Contained Breathing Apparatus (SCBA), including the revolutionary MSA G1 SCBA and respiratory protective equipment, Cairns® head, eye, face, hearing and communications protection, fall protection and rescue products, ALTAIR® portable gas detection instruments and Galaxy Test Systems, and Evolution® Thermal Imaging Cameras (TIC). When You Go In, We Go In With You. For more information, visit **www.MSAfire.com** *or call* **1-877-MSA-FIRE**.

Our **Mission**

MSA's mission is to see to it that men and women may work in safety and that they, their families, and their communities may live in health throughout the world.