

At MSA, **"When you go in...We go in with you"** is more than just words, it's what drives us. Everything we do is done with your safety and comfort in mind. When we create our products, we're guided by a single question: How do we meet and exceed our customers' safety needs? In answer, we solicited feedback from firefighters across the nation, we listened closely and we incorporated those ideas to produce the most advanced, intelligent user-friendly self-contained breathing apparatus (SCBA) available today.

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



# **Our Commitment to the Fire Service**

MSA's long-standing commitment to the fire service began nearly 100 years ago. Our continuous goal has been to provide dependable, high-quality personal protective equipment, instruments and service to help to ensure a safe return home. MSA's extensive knowledge and expertise has helped to harness new technologies to produce exceptional protective equipment. The MSA G1 SCBA offers integrated and enhanced solutions to exceed your needs today as well as years into the future.

"MSA has taken all of the firefighters' concerns and addressed them in the MSA G1 SCBA." – TB, Firefighter







## A Timeline of Innovation

**1917:** MSA enters breathing apparatus market with Gibbs & Mcaa closed-circuit apparatus for rescue & firefighting.

**1936:** First firefighting breathing apparatus – MSA Lightweight Half-Hour OBA.

**1954:** Bureau of Mines approved Demand Air Mask for air or oxygen.

**1967:** MSA introduces Belt-Mounted Regulator SCBA, Model 401.

1980: Ultralite fully-wrapped cylinder launched.

**1983:** Custom 4500<sup>®</sup> Air Mask - MSA's first high pressure SCBA.

**1985:** Nomex SCBA shoulder straps introduced; all Nomex Flame & Heat Resistant (FHR) SCBA harness.

**1987:** First breathing apparatus to meet NFPA 1981 Edition fire service standards – Ultralight II & Custom

requirement on all NFPA SCBA in 2002. ClearCom<sup>™</sup>

4500 II. Revolutionary Quick-Fill® System allows firefighters to replenish air supply; becomes

**RI** Communications System integrates facepiece





1992: FireFly<sup>®</sup> PASS System.

1994: Ultra Elite® Facepiece launched.

**1999:** MMR Xtreme<sup>®</sup> SCBA offers new levels of performance. Vulcan Carrier & Harness is first composite-molded SCBA back frame. DragonFly<sup>®</sup> PASS is offered in stand-alone or integrated versions.

2000: Integrated Control Module (ICM).

**2002:** FireHawk<sup>®</sup> Air Mask, first unit certified to new NFPA 1981, 2002 Edition standard that includes CBRN component and Quick-Fill System.

**2007:** FireHawk M7 - First SCBA compliant to NFPA 1981 & 1982, 2007 Edition.

2013: FireHawk M7XT Air Mask. 2014: MSA G1 SCBA.





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# The MSA G1 SCBA stands out from the crowd.

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### 1. G1 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

# MSA G1 SCBA Components

### 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 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 display 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 and vital displayed relayed 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!



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# MSA G1 SCBA Components

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### Always in Demand.

G1 Mask-Mounted Regulator. The G1 Regulator houses easy-tooperate 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.



### 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%.







### 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 quickconnect 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 guick-connect and threadedconnection 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.



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### The Quick-Fill System



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

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

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

### MSA G1 SCBA Accessories

Part Number	
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 Cylind
10158389	Retainer Kit for H-30 Carbon (807587) 4500 psig
10158390	Retainer Kit for H-45 LP Carbon (10035644) 4500
10158401	Retainer Kit for L-30 Carbon (807586) 2216 psig (
10158401	Retainer Kit for H-45 Carbon (807570) 4500 psig
10158402	Retainer Kit for H-60 Carbon (807588) 4500 psig
10158408	Quick Connect Adapter for Fill Station
10158403	Tool Kit
10083875	RFID
10158407	RFID Reader/Writer

### Ordering Information

QUICK-FILL SYSTEM	10156464	ExtendAire II Kit for MSA G1 SCBA
REPLACEMENT PARTS	10156465	Waist Mounted Quick-Fill for MSA G1 SCBA
	10156466-SP	Replacement ExtendAire II Pouch for MSA G1 SCBA
	10156467-SP	Replacement Quick-Fill Pouch for MSA G1 SCBA
	10156468	3 ft Quick-Fill hose in pouch for MSA G1 SCBA

	25 ft	12 ft	10 ft	8 ft	6 ft	3 ft	
QUICK-FILL	485332	802690	802689	802688	802687	485331	FQD x FQD
HOSES	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 special material basis. All SAE fittings are for high-pressure service. Female quick-disconnect fittings have dust covers.

### Spectacle Kit for G1 Facepiece

We have taken the old and outdated spectacle kits of the past and thrown them in the trash. Working with TriSpec, MSA has designed a modern and sophisticated option, providing both clear sight and style.

Part Number	Description
10144230	Spectacle Kit for G1 Facepiece





# Description Descr

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### MSA G1 SCBA Cylinders for Remote Connection

Cylinder Pressure	Cylinder Duration	Connection Type	Air	Less Air
2216 psig	30 min	Remote	10156422-SP	10156431-SP
4500 psig	30 min	Remote	10156423-SP	10156432-SP
4500 psig	45 min LP*	Remote	10156424-SP	10156433-SP
4500 psig	45 min	Remote	10156425-SP	10156434-SP
4500 psig	60 min	Remote	10156426-SP	10156435-SP

PLEASE NOTE: Quick Connect Cylinder Adapter must be ordered for each cylinder separately.

Quick Connect Cylinder Adapter part numbers for: 2216 PSI = 10149701-SP; 4500/5500 PSI = 10149702-SP. \* Low Profile version of the 45 min, 4500 psig cylinder

MSA G1 SCBA Cylinders for Direct Connection

Cylinder Pressure	Cylinder Duration	Connection Type	Air	Less Air
2216 psig	30 min	Direct	10156440-SP	10156449-SP
4500 psig	30 min	Direct	10156441-SP	10156450-SP
4500 psig	45 min LP*	Direct	10156442-SP	10156451-SP
4500 psig	45 min	Direct	10156443-SP	10156452-SP
4500 psig	60 min	Direct	10156444-SP	10156453-SP

PLEASE NOTE: Quick Connect Cylinder Adapter must be ordered for each cylinder separately.

*Quick Connect Cylinder Adapter part numbers for: 2216 PSI = 10149701-SP; 4500/5500 PSI = 10149702-SP.* 

\* Low Profile version of the 45 min, 4500 psig cylinder

### MSA G1 SCBA Cylinders for 5500 psig system

Cylinder Pressure	Cylinder Duration	Connection Type	Air	Less Air
5500 psig	30 min	Remote	10156427-SP	10156436-SP
5500 psig	45 min	Remote	10156428-SP	10156437-SP
5500 psig	60 min	Remote	10156429-SP	10156438-SP
5500 psig	75 min	Remote	10156430-SP	10156439-SP
5500 psig	30 min	Direct	10156445-SP	10156454-SP
5500 psig	45 min	Direct	10156446-SP	10156455-SP
5500 psig	60 min	Direct	10156447-SP	10156456-SP
5500 psig	75 min	Direct	10156448-SP	10156457-SP

PLEASE NOTE: Quick Connect Cylinder Adapter must be ordered for each cylinder separately. *Quick Connect Cylinder Adapter part numbers for: 2216 PSI = 10149701-SP; 4500/5500 PSI = 10149702-SP.* 

### MSA G1 SCBA Facepieces

Part Number	Туре	Size	Size Nosecup Size		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 Facepiece Accessories

Part Number	
10144230	Spectacle Kit for G1 Facepiece
10144220-SP	Replacement Cloth Neck Strap
10159699-SP	Replacement Rubber Neck Strap
10144231-SP	Filter Adapter Assembly
805078	QuikChek Adapter

### Assemble-To-Order System for MSA G1 SCBA Facepiece





### Description

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# MSA G1 SCBA Assemble-To-Order-System

A	В	C	D	E	F	G	Н	L	К	L
System Pressure	Cylinder Connection	Harness	Cradle Type	Lumbar Type	Regulator Type	Regulator Hose Type	Emergency Breathing Support	Speaker Module	PASS	Battery Type
<ul> <li>2 2216 psig</li> <li>4 4500 psig</li> <li>5 5000 psig~</li> </ul>	<ol> <li>CGA Threaded Direct Connection~</li> <li>CGA Threaded Remote Connection</li> <li>CGA Quick Connect Direct Connection~</li> <li>CGA Quick Connect Remote Connection</li> </ol>	<ol> <li>Standard without Chest Strap</li> <li>Standard with Chest Strap</li> <li>Serviceable Tunnel without Chest Strap</li> <li>Serviceable Tunnel with Chest Strap</li> </ol>	M Metal Band F Fabric Band~	<ul> <li>B Basic</li> <li>F Fixed Swiveling Lumbar Pad</li> <li>A Adjustable Swiveling Lumbar Pad</li> <li>1 Rescue Belt II 50' Hook~</li> <li>2 Rescue Belt II 50' Carabiner~</li> <li>3 Rescue Belt II 50' FireTech Rope, Hook~</li> <li>4 Rescue Belt II, 50' FireTech Rope, Carabiner~</li> </ul>	<ol> <li>Purge cover Left Shoulder †</li> <li>Solid cover Left Shoulder †</li> </ol>	C Continuous Q Quick-Connect	<ul> <li>0 None</li> <li>1 Waist Mounted Quick-Fill~</li> <li>2 ExtendAire II~</li> <li>3 Waist Mounted Quick-Fill and ExtendAire II~</li> </ul>	L Left Chest †	<ul> <li>A PASS Right Shoulder †</li> <li>B PASS Left Shoulder †</li> <li>C PASS Telemetry Right Shoulder †</li> <li>D PASS Telemetry Left Shoulder †</li> </ul>	A Alkaline R Rechargeable~

QUANTITY

† As worn

~ Available Fall 2015





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# MSA—**The Safety Company**

Our business is safety. We've been the world's leading manufacturer of high-quality safety products since 1914. MSA products may be simple to use and maintain, but they're also highly-sophisticated devices and protective gear — the result of countless R&D hours, relentless testing, and an unwavering commitment to quality that saves lives and protects thousands of men and women each and every day. Many of our most popular products integrate multiple combinations of electronics, mechanical systems, and advanced materials to ensure that users around the world remain protected in even the most hazardous of situations.

### 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.

Note: This bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.

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