



# PremAire® Cadet Escape *RESPONDER* with Escape Cylinder

Combination Supplied-Air Respirator



## PremAire Cadet Escape Responder

The PremAire Cadet Escape Responder with Escape Cylinder is versatile, comfortable, and affordable. A streamlined new design offers a first-stage regulator and cylinder valve within one assembly, creating a very small size and profile that is less likely to snag when working in tight places. Low-profile escape cylinders can be worn on the right or left hip. The Ultra Elite® Responder Pressure-Demand Facepiece with APR conversion capability offers choice of sizes and nose cups.

The PremAire Cadet Supplied-Air Responder with Escape Cylinder is a cost-effective respiratory protection solution for many industrial applications. For ordering ease and flexibility, this system is sold as a part-numbered kit. The PremAire Cadet Supplied-Air Responder with Escape Cylinder is NIOSH-approved as a combination supplied-air respirator and self-contained breathing apparatus.



### Features and Benefits

- New one-piece first-stage regulator and cylinder valve
- Combination cylinder valve and first stage pressure reducer
- Very small size and profile
- Regulator uses many MSA FireHawk SCBA parts
- Regulator body protects cylinder gauge; no need for rubber gauge guard, reduces size!
- Choice of cylinder hip placement allows workers freedom and versatility
- Two harness materials:
  - Standard nylon, ideal for chemical resistance
  - Kevlar, ideal in high heat environments or within areas with spark potential
- Two attachments keep cylinder secure on belt
- Sturdy metal cylinder support bands
- Nylon or Kevlar cylinder bags available for carbon fiber cylinders
- Shoulder support strap incorporates hose keeper; regulator hose stays in place close to body, reduces chance of snagging
- Bracket/holder for second stage pressure regulator



# PREMAIRE CADET ESCAPE RESPONDER



## PremAire Cadet Escape Respirator Kits

P/N	Description
10113607	PremAire Cadet Escape Respirator, 10-minute carbon cylinder, Kevlar harness with shoulder strap, metal cylinder carrier, less facepiece.

## Ultra Elite® FireHawk® M7 Responder® HUD Facepieces

### Facepiece with ClearCommand® System Bracket

Size	Standard	w/ UID*
Small	10093927	10094029
Medium	10093926	10094028
Large	10093928	10094030

### Facepiece without ClearCommand System Bracket

Small	10093924	10093930
Medium	10093923	10093929
Large	10093925	10093931

## Spare / Replacement M7 HUD

FireHawk M7 Responder HUD	10093911
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\* Unique Identifier marking



## Approvals

The PremAire Cadet Escape Respirator is approved by the National Institute for Occupational Safety and Health (NIOSH) as an Open-Circuit, Pressure-Demand, Escape, Self-Contained Breathing Apparatus or Combination, Open-Circuit, Pressure-Demand, Escape, Self-Contained Breathing Apparatus and Type C, Supplied-Air Respirator (TC-13F-585, 586, 587 and 588). The respirator is approved for use at temperatures above -25°F. The compressed-air container shall be fully charged with air meeting the requirements of CGA C-7.1 Grade D or higher quality. When supplied with respirable air through an air supply hose; the air supply pressure range shall be 70-90 psig, the hose length shall be 8-300 feet, and the air supply shall meet the requirements of CGA C-7.1 Grade D or higher quality.

## Ordering information

The PremAire Cadet Escape Respirator is sold through MSA's Assemble-To-Order (ATO) System or as part-numbered kits. These kits include a basic PremAire Cadet Escape Respirator with cylinder and regulator. Users may choose from the facepiece styles listed. See supplied-air system quick-disconnects chart on page 5 to order male plugs (use column 3 only), and female socket assemblies (use column 6 only) for the PremAire Cadet Escape Respirator. **These quick-disconnects must be ordered separately.**

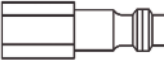
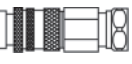

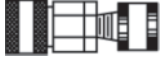









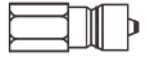








### PremAire Cadet Escape Responder ATO

Type	Carrier & Harness Type	Pad Option	Escape Cylinder	MMR Regulator	Facepiece	Nosecup	Head Harness	Quick-Disconnect	Case
PC	PremAire Cadet Escape	1 Nylon, strap carrier, standard	0 None	E FireHawk Push-To-Connect Responder Regulator	A None	0 None	0 None	0 None	0 None
		2 Kevlar, strap carrier, standard	1 Shoulder		P Ultra Elite, Hycar, Responder, small	1 Ultra Elite, medium	1 Rubber	A Snap-Tite, aluminum	1 Hard plastic case
					Q Ultra Elite, Hycar, Responder, medium	2 Ultra Elite, large	2 Speed-ON Net	B Snap-Tite, stainless steel	
					R Ultra Elite, Hycar, Responder, large			C Snap-Tite, brass	
					S Ultra Elite, Hycar, Responder, small, communication ready			D Hansen, stainless steel	
					T Ultra Elite, Hycar, Responder, medium, communication ready			E Hansen, brass	
					U Ultra Elite, Hycar, Responder, large, communication ready			F Foster, steel	
								G Foster, stainless steel	
								H Foster, brass	
								J Snap-Tite, locking, aluminum	
								K Snap-Tite, locking, stainless steel	
								M Snap-Tite, locking, brass	
								N Foster, locking, stainless steel	
								P Cejn, locking	

## Quick-Disconnect Assemblies

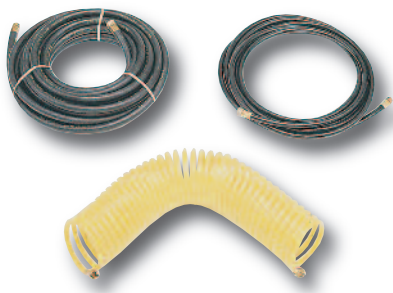
Quick-disconnect assemblies for PremAire Cadet Escape Responders, shown below, can be used with PremAire Cadet Respirators. Quick-disconnects are required to connect air-supply hoses to the PremAire Cadet Respirator manifold and to the air source.

Locking quick-disconnects easily connect by pushing the plug and socket together. To separate, the plug and socket must first be pushed together, and then the sleeve retracted from the plug.

Locking Types		Non-Locking Types			
<b>CEJN — Chrome (CR)</b>		<b>SNAP-TITE — Aluminum (AL) Brass (BR) Stainless Steel (SST)</b>			
↓ 1/4" NPT Female	3/4" – 16 NF ↓	1/4" NPT Female ↓	3/4" – 16 NF ↓	1/4" NPT Female ↓	↓ 1/4" NPT
					
479026 Plug for (C) Quick-Disconnect Assembly	476956 (C) Socket	66274 Plug for (AL) Quick-Disconnect Assembly 630307 Plug for (BR) Quick-Disconnect Assembly 629672 Plug for (SST) Quick-Disconnect Assembly	455019 (AL) Socket Assembly 471777 (BR) Socket Assembly 471778 (SST) Socket Assembly	66272 (AL) Socket 630305 (BR) Socket 629673 (SST) Socket	69541 Air Supply Hose Connector*
<b>SNAP-TITE — Aluminum (AL)</b>		<b>FOSTER — Steel (S) Stainless Steel (SST)</b>			
↓ 1/4" NPT Female	3/4" – 16 NF ↓	1/4" NPT Female ↓	3/4" – 16 NF ↓	1/4" NPT Female ↓	↓ 1/4" NPT
					
479027 Plug for (AL) Quick-Disconnect Assembly	479032 (AL) Socket	55716 Plug for (S) Quick-Disconnect Assembly 636460 Plug for (SST) Quick-Disconnect Assembly	467044 (S) Socket Assembly 801016 (SST) Socket Assembly	628770 (S) Socket 636459 (SST) Socket	69541 Air Supply Hose Connector*
<b>HANSEN — Brass (BR)</b>		<b>Non-Locking Types — with check valve in plug</b>			
1/4" NPT Female ↓		1/4" NPT Female ↓	3/4" – 16 NF ↓	1/4" NPT Female ↓	↓ 1/4" NPT
					
630313 Plug for (BR) Quick-Disconnect Assembly		629981 Plug for (BR) Quick-Disconnect Assembly	470194 (BR) Socket Assembly	629980 (BR) Socket	69541 Air Supply Hose Connector
<b>HANSEN — Stainless Steel (SST)</b>					
1/4" NPT Female ↓		1/4" NPT Female ↓	3/4" – 16 NF ↓	1/4" NPT Female ↓	↓ 1/4" NPT
					
628208 Plug for (SST) Quick-Disconnect Assembly		471779 (SST) Socket Assembly	628768 (SST) Socket		808360 SS Air Supply Hose Connector

\* All SST Fittings have SST Union P/N 808360





## Approved Air-Supply Hose

PremAire Cadet Escape Responder Respirators can be used with a wide range of MSA air-supply hose that can be interconnected up to a maximum length of 300 feet. A maximum of 12 sections of air-supply hose may be used in making up the maximum 300 feet working length of hose. Each section of coiled hose is considered to be 50 feet in length (maximum 6 sections). MSA air-supply hoses have various temperature limitations.

### Air-Supply Hose

Material	Hose Coupling	100ft	50ft	25ft	15ft	8ft
Neoprene	Brass	—	455022	455021	455020	481071
Neoprene	Stainless Steel	—	481080	481079	481078	481077
PVC	Brass	484225	471513	471512	471511	481051
PVC	Stainless Steel	—	481060	481059	481058	481057
Coiled Nylon	Brass	—	474043*	491515*	491514*	491513*

\* Recommended usable length, 4-25 ft.

### Air-Supply Hose Temperature Ranges

#### Neoprene

-25° to 212°F

#### PVC

32° to 120°F

#### Nylon

0° to 160°F

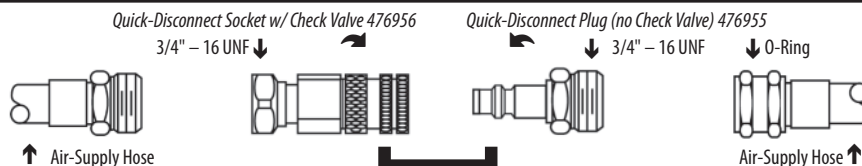
## Interconnecting Air-Supply Hoses

**Typical Threaded Connector Method. Screw the ends of the air supply hose together.**



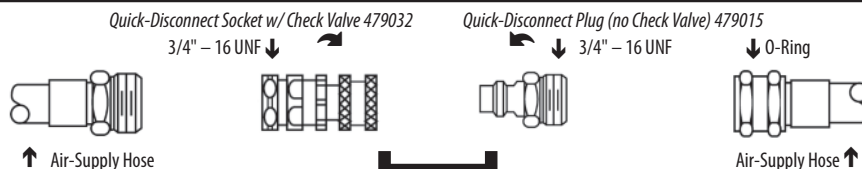
This typical threaded connector method can be used to interconnect sections of approved air-supply hose to the PremAire System.

**CEJN - Chrome. Uses optional locking-type quick-disconnects to connect sections of air supply hose.**



Socket and Plug Assembly 479009

**SNAP-TITE — Aluminum. Uses optional locking-type quick-disconnects to connect sections of air supply hose.**



Socket and Plug Assembly 479010

## Technical Rescue Cart



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 one-hour cylinders are used to provide air for respirators. High-pressure cascade (fire truck) cylinder air is used to operate pneumatic tools. Standard features of the Technical Rescue Cart make it a unique and very versatile air cart for the fire service and HazMat industries.



### 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 for auxiliary remote high-pressure air source attachment
- Low-pressure pneumatic alarm whistle
- Four-outlet manifold with quick-disconnects

### Applications

Chemical/petrochemical

Hazardous materials

Confined space entry

Firefighting

## 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 sold without air cylinders. MSA cylinders listed below can be used with the cart. 60-minute cylinder will provide maximum air supply.

P/N	Description
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

P/N	Description
807588	60-minute, H-60 carbon-wrapped cylinder
807570	45-minute, H-45 carbon-wrapped cylinder
807587	30-minute, H-30 carbon-wrapped cylinder

## Technical Rescue Cart Components

- 1 Nylon cylinder strap
- 2 Pull pin for hose bracket
- 3 Pull pin for handle
- 4 CGA 347 nut, hand-tightening
- 5 Breathing air low-pressure alarm bell
- 6 Auxiliary low-pressure whistle
- 7 Breathing air cylinder pressure gauge
- 8 Tool air pressure gauge
- 9 Breathing air pressure regulator
- 10 Tool air high-pressure regulator
- 11 Respirator fittings
- 12 Tool fittings
- 13 Tool air low-pressure regulator
- 14 Low-pressure accessory air tool



**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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