

Certified Air Mask Repair Education (C.A.R.E.) Manual
PremAire® Cadet Escape
Leak Testing



Order No.: 10105226/01



WARNING!

Read this manual carefully before servicing the device. The device will perform as designed only if it is used and maintained in accordance with the manufacturer's instructions. Otherwise, it could fail to perform as designed and persons who rely on this device for their safety could sustain serious personal injury or death.

Please read and observe the WARNINGS and CAUTIONS inside. For any additional information relative to use or repair, call 1-800-MSA-2222 during regular working hours.



The Safety Company

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1 PremAire Cadet Escape Leak Testing

The respirator must hold system pressure without leaks to provide protection. Leak Testing quickly identifies parts in need of repair or replacement. Leak Test the respirator after reassembly or as part of scheduled maintenance. Use Snoop Leak Detector (P/N 600920).

WARNING!

DO NOT tighten fittings or connectors when the system is pressurized. Close the cylinder valve. Be sure nothing blocks the regulator outlet. Relieve pressure from the system by slowly opening the bypass valve. Failure to follow this warning may cause fittings or connectors to fail, resulting in serious personal injury or death.

1.1 Cylinder Adapter



- (1) Apply leak test solution to the cylinder neck.



- (2) Apply leak test solution to the union between the cylinder adapter and valve body.

If bubbles appear, replace as needed:

O-ring for use with 5 Min. Aluminum Cylinder (P/N 10070679)	68542
O-ring for use with 10 Min. Aluminum/15 Min. Carbon (P/N 10070841)	633550
O-ring for use with 5 Min. Carbon/10 Min. Carbon (P/N 10076080)	633549
Adapter, 5 Min. Carbon/10 Min. Carbon	10070680
Adapter, 5 Minute Aluminum	10070679
Adapter, 10 Min. Aluminum/15 Min. Carbon	10070841
O-ring	10073506

1.2 Fill Port



- (1) Apply leak test solution to the union between the fill port cap and the fill port.

If bubbles appear, replace as needed:

O-ring	10052365
Fill Port Cap	10088636



- (2) Apply leak test solution to the union between the fill port and the valve body.

If bubbles appear, replace as needed:

Fill Port Assembly (Complete)	10060555
O-ring	10073505

1.3 Hose Adapters



(1) Apply leak test solution to the union between the hose adapters and the valve body.

NOTE: Leak test both adapters.

If bubbles appear, replace as needed:

Hose Adapter	805052
O-ring	633776



(2) Apply leak test solution to the hose connections.

If bubbles appear, replace as needed:

O-ring	63198
Second Stage Hose	10073997
Supply Hose	604055

1.4 Regulator Cap



- (1) Apply leak test solution to the union between the regulator cap, seal ring and valve body.

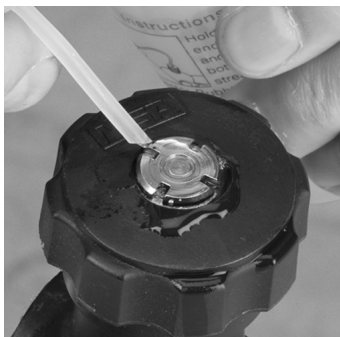
If bubbles appear, replace as needed:

Piston Assembly	10050617
O-ring	10052364
O-ring	10052365
Seal Ring	10052621
Regulator Cap	10050623

1.5 Cylinder Valve Fitting and Knob



- (1) Apply leak test solution to the union between the cylinder valve fitting and the valve body.



- (2) Apply leak test solution to the locknut.

If bubbles appear, replace as needed:

O-ring	10073506
O-ring	10073504
Washer	10073510
Insert	488858

1.6 Relief Valve and Safety Plug



- (1) Apply leak test solution to the union between the relief valve and the valve body.

If bubbles appear, replace as needed:

Pressure Relief Valve Assembly (Complete)	10078801
O-ring	635037
Plug	10070678



- (2) Apply leak test solution to the union between the plug and the valve body.

If bubbles appear, replace as needed:

Burst Disc and Gasket Kit, 2216 psig	10094974
Burst Disc and Gasket Kit, 3000 psig	10094975
Plug	10070678

1.7 Gauge



- (1) Apply leak test solution to the union between gauge bezel and the valve housing.

If bubbles appear, replace as needed:

Gauge Assembly (Complete)	10075662
O-ring	63198
Backup Ring	635278

For local MSA contacts, please visit us at **[MSAsafety.com](https://www.MSA.com)**

*Because every life has a **purpose...***