

PremAire® Cadet Escape Respirator: Carrier and Harness

MAINTENANCE AND REPAIR

For More Information, call 1-800-MSA-2222 or Visit Our Website at www.MSAnet.com



**MINE SAFETY APPLIANCES COMPANY
PITTSBURGH, PENNSYLVANIA, U.S.A. 15230**

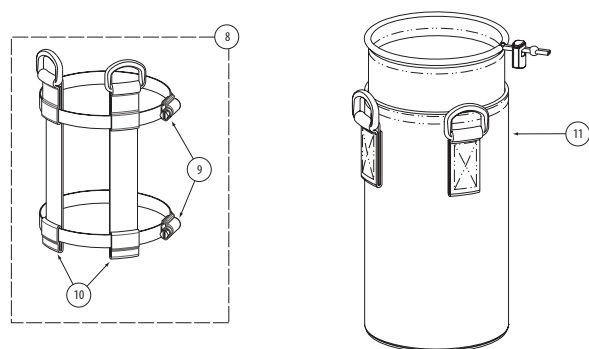
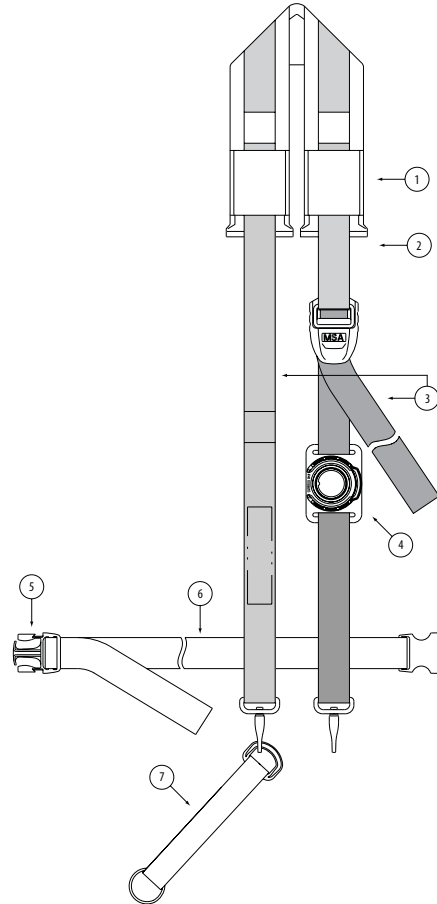
CARRIER AND HARNESS

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Carrier and Harness Parts List

Item	Part Number	Description
1	10037253	Optional Shoulder Pad (Kevlar only)
2	10071047	Nylon Shoulder Strap
	10071048	Kevlar Shoulder Strap
3	10071049	Nylon Pull Strap
	10071050	Kevlar Pull Strap
4	10022245	Belt Mount
5	10040450	Side Buckle (male only)
6	10071091	Nylon Waist Strap
	10071093	Kevlar Waist Strap
	10071092	Nylon Waist Strap (large)
	10071094	Kevlar Waist Strap (large)
7	10073512	Nylon Hose Strap
	10073513	Kevlar Hose Strap
Strap Carrier (Complete)		
8	10073516	Nylon Strap Carrier
	10073517	Kevlar Strap Carrier
9	10062798	Clamp (2 required)
10	10071095	Strap, Nylon (2 required)
	10071096	Strap, Kevlar (2 required)
11	10061349	Nylon Bag Carrier for 5 minute carbon cylinder
	10061353	Kevlar Bag Carrier for 5 minute carbon cylinder
	10061350	Nylon Bag Carrier for 10 minute carbon cylinder
	10061354	Kevlar Bag Carrier for 10 minute carbon cylinder
	10078802	Nylon Bag Carrier for 15 minute carbon cylinder
	10078803	Kevlar Bag Carrier for 15 minute carbon cylinder



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DISASSEMBLY

Hoses

1. If necessary, use an 11/16" wrench to disconnect the supply hose.



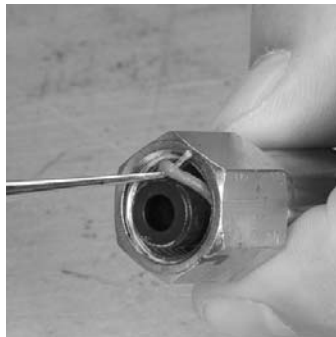
2. If necessary, use an 11/16" wrench to disconnect the second stage regulator hose.



Strap Carrier

1. Use the o-ring removal tool to remove the o-rings. Discard the o-rings.

Note: Be careful not to scratch the o-ring groove.



2. Remove the ring from the split ring.



3. Disconnect the hose strap.



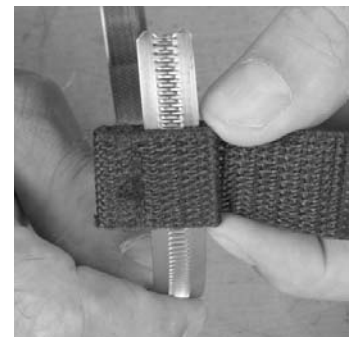
4. Disconnect the cylinder carrier from the shoulder strap and pull strap.



5. Use the slot head screwdriver bit or 9/32" socket to unscrew the clamps.



5. Pass the clamps through the carrier straps.



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Harness

1. Unweave the waist strap from the male buckle.



2. Remove the belt mount.



3. Pass the waist strap through the shoulder strap and pull strap.



4. Remove the waist strap from the pull strap.



5. Unweave the pull strap from the friction buckle.



6. Remove the second stage hose from the shoulder strap.



7. If present, remove the shoulder pad.



REASSEMBLY

Note: The following procedures reassemble the respirator for use with the cylinder mounted on the right hip. See **PremAire® Cadet Escape 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, Operation and Instructions (P/N 10063148)** for instructions on converting to left-hip mounting.

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Harness

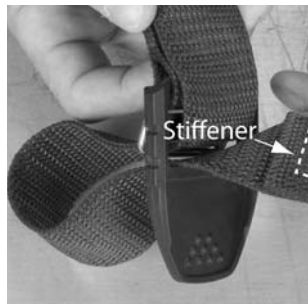
Nylon Shoulder Strap	10071047
Kevlar Shoulder Strap	10071048
Nylon Pull Strap	10071049
Kevlar Pull Strap	10071050
Belt Mount	10022245
Side Buckle (Male only)	10040450
Nylon Waist Strap	10071091
Kevlar Waist Strap	10071093
Nylon Waist Strap (Large)	10071092
Kevlar Waist Strap (Large)	10071094

1. Pass the shoulder strap through the optional shoulder pad.



2. Weave the pull strap through the friction buckle.
 - a. Pass the pull strap from back to front through the buckle.
 - b. Pass the strap over the bar and from front to back through the buckle.

Note: Make sure the stiffener is properly oriented.



3. Pass the waist strap through the shoulder strap.

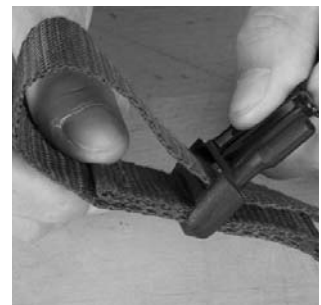
Note: Make sure the stiffener is properly oriented.



4. Install the belt mount to the pull strap.



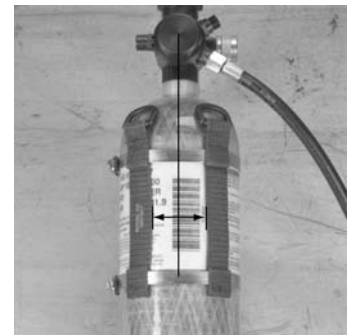
5. Weave the waist strap through the male buckle.



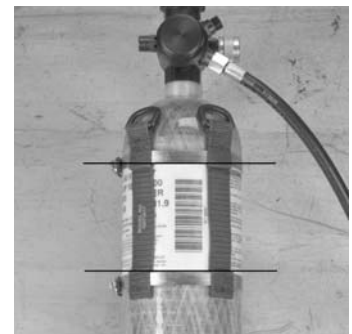
Strap Carrier

Nylon Strap Carrier	10073516
Kevlar Strap Carrier	10073517
Nylon Hose Strap	10073512
Kevlar Hose Strap	10073513

1. Position the straps equal distances to the left and right of the centerline.



- a. Position the clamps at the edges of the label.



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- b. Use a slot head screwdriver bit or 9/32" socket and inch-pound torque wrench to tighten to 35 ± 10 in.lbs.



- 2. Attach the carrier to the shoulder strap and pull strap.



- 3. Attach the hose strap to the shoulder strap.



- 4. Attach the hose strap to the ring.



- 5. If necessary, reconnect the supply and second stage regulator hoses.

Bag Carrier

- Nylon Bag Carrier for 5 minute carbon cylinder 10061349
- Kevlar Bag Carrier for 5 minute carbon cylinder 10061353
- Nylon Bag Carrier for 10 minute carbon cylinder 10061350
- Kevlar Bag Carrier for 10 minute carbon cylinder 10061354
- Nylon Bag Carrier for 15 minute carbon cylinder 10078802
- Kevlar Bag Carrier for 15 minute carbon cylinder 10078803

- 1. Attach the carrier to the shoulder strap and pull strap.

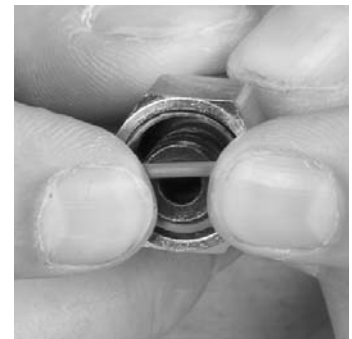


- 2. Attach the hose strap.

Hoses

- 1. Replace the o-rings.
 - a. Apply a small amount of Christo-Lube to a new o-ring.

- b. Carefully stretch the new o-ring onto the hose.



- c. Use the o-ring removal tool to slide the o-ring into the groove.



Note: Be careful not to scratch the o-ring groove.

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- d. If necessary, use an 11/16" crowfoot and inch-pound torque wrench to connect the supply hose and tighten to 125 +/- 25 in.lbs.
2. If necessary, use an 11/16" crowfoot and inch-pound torque wrench to connect the second stage regulator hose and tighten to 125 +/- 25 in.lbs.