

Carrier and Harness: AirHawk II[®] Air Mask

MAINTENANCE AND REPAIR

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MINE SAFETY APPLIANCES COMPANY
CRANBERRY TWP., PENNSYLVANIA, U.S.A. 16066

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Carrier and Harness

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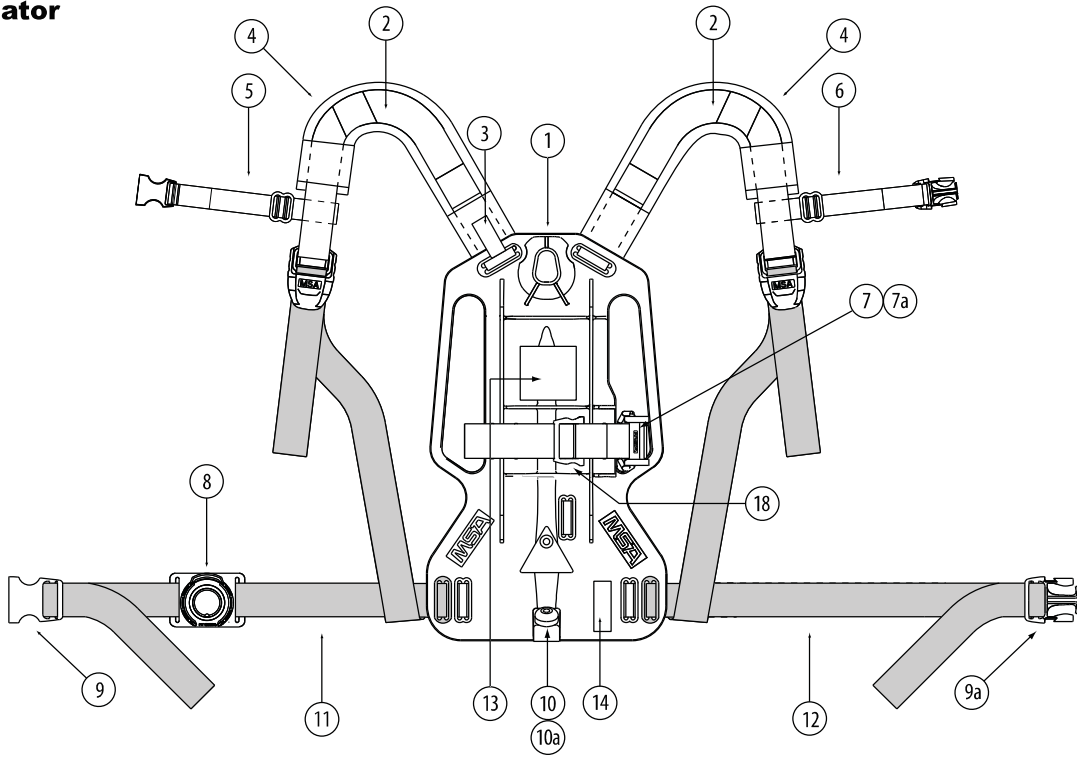
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Item	P/N	Description
1	10046633	AirFrame Carrier
1a	10046843	AirFrame Carrier w/ Nylon cylinder band
	10052817	AirFrame Carrier w/ Kevlar cylinder band
2	10037254	Shoulder Strap (Nylon)
	10037255	Shoulder Strap (Kevlar)
3	10052954	Hose Strap (Nylon)
	10052955	Hose Strap (Kevlar)
4	10037253	Shoulder Pad
5	10037900	Left Chest Strap (Nylon)
	10040422	Left Chest Strap (Kevlar)
6	10037901	Right Chest Strap (Nylon)
	10040421	Right Chest Strap (Kevlar)
7	10050363	Cylinder Band (Nylon)
7a	10053519	Cylinder Band (Kevlar)
8	10025941	Belt Mount
9	10040451	Side Release Buckle (Female)
9a	10040450	Side Release Buckle (Male)
10	66839	Bumper
10a	10048012	Screw
11	10037256	Left Pull Belt (Nylon)
	10037257	Left Pull Belt (Kevlar)
12	10037258	Right Pull Belt (Nylon)
	10037259	Right Pull Belt (Kevlar)
13	10084504	NIOSH Label
14	10042564	Caution Label
15	10011767	Lumbar Pad
16	10047749	Swiveling Lumbar Pad
17	10026809	Support
18	10050366	Slider, Fabric Band, Airframe

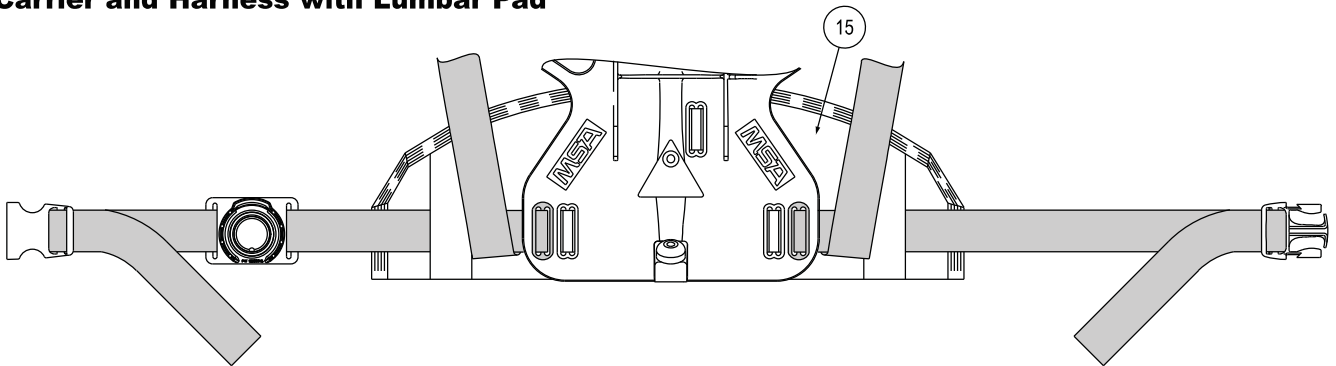
Lumbar Pad Kits		
10055481 (w/ pad)	10047749	Swiveling Lumbar Pad
	10026809	Support
	10047748	Rubber Block
	10048013	Screw
	10047751	Nut
	10055427	Instructions
10055350	10026809	Swiveling Lumbar Pad Support
	10047748	Rubber Block
	10048013	Screw
	10047751	Nut
	10055427	Instructions

Carrier and Harness

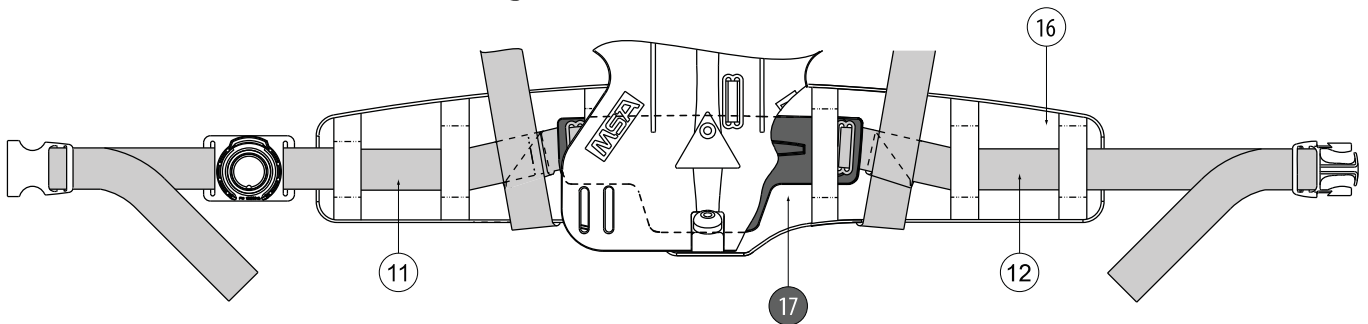
Parts Locator



Carrier and Harness with Lumbar Pad



Carrier and Harness with Swiveling Lumbar Pad

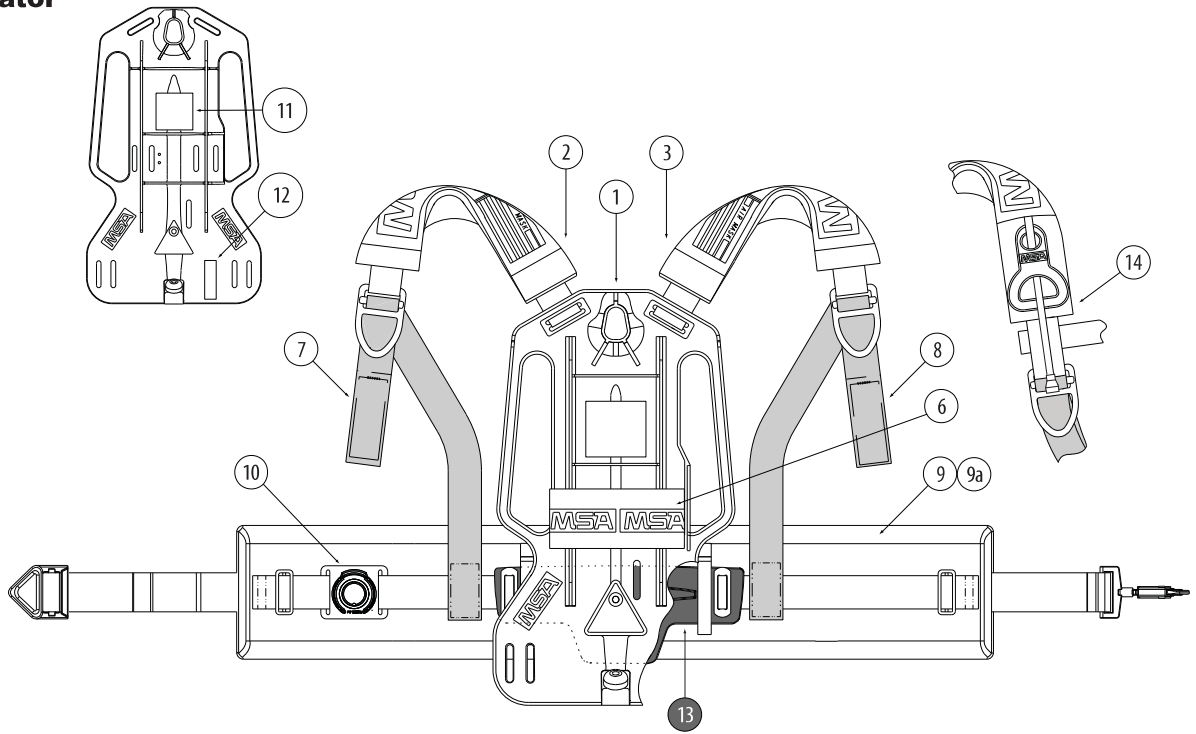


Carrier and Harness

Item	P/N	Description
1a	10046842	AirFrame Carrier with Stainless Steel Band
2	10048173	Left Shoulder Strap
3	818281	Right Shoulder Strap
4	10037900	Right Chest Strap (Nylon)
	10040421	Right Chest Strap (Kevlar)
5	10037901	Left Chest Strap (Nylon)
	10040422	Left Chest Strap (Kevlar)
6	805430	Cylinder Band Label (2216 psig)
	805265	Cylinder Band Label (4500 psig)
7	818378	Left Double Pull Strap
8	818377	Right Double Pull Strap
9	10052766	50' Rescue Belt w/56" Waist Belt
	10071003	50' Rescue Belt w/66" Waist Belt
	10052767	50' Rescue Belt w/76" Waist Belt
9a	10052768	75' Rescue Belt w/56" Waist Belt
	10071004	75' Rescue Belt w/66" Waist Belt
	10052769	75' Rescue Belt w/76" Waist Belt
10	10022245	Belt Mount
11	10084504	NIOSH Label
12	10052564	Non-NFPA Label (see inset)
13	10026809	Support
	10047748	Rubber Block (not shown)
	10048013	Screw (not shown)
	10047751	Nut (not shown)
14	10016029	Tether

Carrier and Harness

Parts Locator



Carrier and Harness

DISASSEMBLY

Removing the Cylinder Band

1. Remove the cylinder. (See **AirHawk II Air Mask Operation and Instructions, P/N 10088650** for instructions)

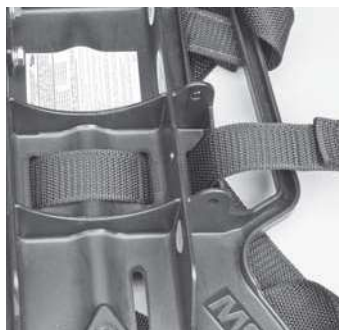
2. Disconnect the strap from the slide.



3. Unlace the strap from the buckle.



4. Pass the strap backwards through the slots.



Removing the Cylinder Stop

1. Use a Phillips screwdriver to unscrew the bumper screw.



Removing the Chest Strap

1. Unlace the strap from the slide buckle.



2. Pass the end through shoulder strap tunnel.



Removing the Right Shoulder Strap

Single Hose

1. Remove the second stage regulator. (See **AirHawk II Air Mask Second Stage Regulator, MAINTENANCE AND REPAIR 10104241** for instructions)

2. Disconnect the intermediate pressure hose from the PR14 First Stage Regulator.



3. Pull the hose through the strap.

Carrier and Harness

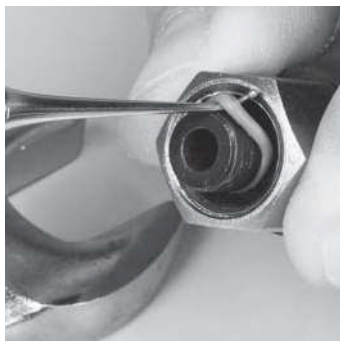
Threaded or Quick-Connect Hose

1. Disconnect the second stage regulator hose from the intermediate pressure hose.

- a. Use a two 11/16" wrenches to unscrew threaded hose connections.



- b. Remove and discard the o-ring from threaded connectors.



Threaded or Quick-Connect Hose with ExtendAire® System

Threaded

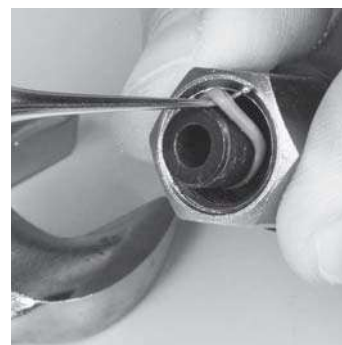
1. Secure the ExtendAire manifold in a vise.

Note: Use protective sleeves on the jaws of the vise.

2. Use an 11/16" wrench to unscrew the ExtendAire manifold from threaded hoses.



- a. Remove and discard the o-ring from threaded connectors.



- b. Pull the first stage intermediate pressure hose sections through the shoulder strap.

Quick-Connect

1. Disconnect the Quick-Connect fitting.



2. Pull the first stage intermediate pressure hose section through the shoulder strap.



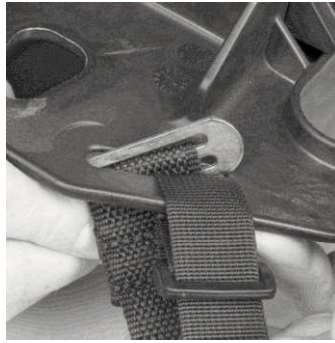
3. Pull the hose through the strap.

4. Remove the pull-strap from the friction buckle.



Carrier and Harness

5. Remove the shoulder strap by angling the tri-bar slide through the slot.



Removing the Left Shoulder Strap

1. Disconnect the high-pressure hose from the PR14 First Stage Regulator.
 - a. Remove the PR14 First Stage Regulator. (See **AirHawk II Air Mask PR14 First Stage Regulator MAINTENANCE AND REPAIR, P/N 10104220** for instructions)

- b. Disconnect the high-pressure hose.



- c. Pull the hose through the hose strap.



- d. Pull the hose through the shoulder strap.



- e. Remove the shoulder strap by angling the tri-bar slide through the slot.

Removing the Optional Shoulder Pads

1. Remove the intermediate pressure hose and right shoulder strap. (See **Removing the Right Shoulder Strap** for instructions)
2. Remove the high pressure hose and left shoulder strap. (See **Removing the Left Shoulder Strap** for instructions)



3. Pull the shoulder straps through the shoulder pads.

Removing the Waist Belts

1. Remove the waist pull belts from the back plate by angling the tri-bar through the slots.

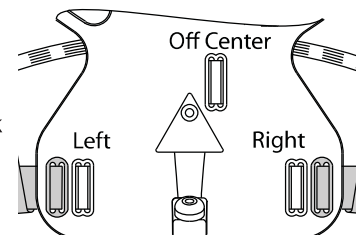


2. Push the free end of the pull belt through the friction buckle.



Removing the Lumbar Pad

Note: Three tri-bars hold the lumbar pad to the back plate: left, right and, off center.



Carrier and Harness

1. Remove the lumbar pad by angling the tri-bars through the back plate.



Removing the Swiveling Lumbar Pad or Rescue Belt

1. Remove the swiveling lumbar pad or rescue belt by angling the tri-bar through the backplate.



2. Remove the waist belts and pull straps.



3. Slide the retention loop off the support.



Removing the Swiveling Lumbar Pad Support

1. Remove the swiveling lumbar pad or rescue belt. (See **Removing the Swiveling Lumbar Pad or Rescue Belt** for instructions)

2. Use a 5/32" hex wrench to remove the screw.



3. Remove the nut from the support.

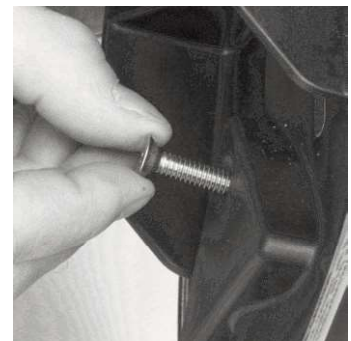


4. Remove the lumbar pad support.



5. Remove the rubber block.

6. Remove the screw.



REASSEMBLY

Installing the Lumbar Pad
Lumbar Pad 10011767

Carrier and Harness

1. Angle the tri-bars through the slots.

Note: Three tri-bars hold the lumbar pad to the back plate: one left, one right and, one off center.



Installing the Swiveling Lumbar Pad Support

Swiveling Lumbar Pad Support	10026809
Rubber Block	10047748
Screw	10048013
Nut	10047751

1. Insert the triangular block to the support.



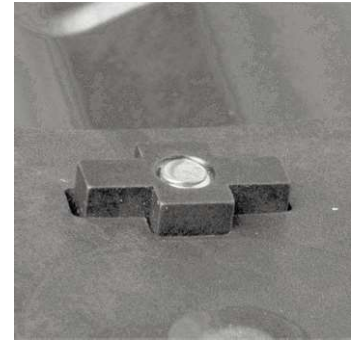
2. Place the nut into the opening on the support.



3. Position the block, support, and nut on the back plate.



4. Insert the screw and use a 3/8" hex wrench to tighten the screw until it is flush with the nut.



Installing the Swiveling Lumbar Pad or Rescue Belt

Swiveling Lumbar Pad	10047749
50' Rescue Belt, (Standard, 56")	10052766
50' Rescue Belt, (Mid-size, 66")	10071003
50' Rescue Belt, (Long, 76")	10052767
75' Rescue Belt, (Standard, 56")	10052769
75' Rescue Belt, (Mid-size, 66")	10071003
75' Rescue Belt, (Long, 76")	10071004

1. Attach the swiveling lumbar pad or rescue belt by angling the tri bar through the back plate.



2. Attach the swiveling lumbar pad/rescue belt to the support.



Installing the Swiveling Lumbar Pad with Double Pull Waist Belts

Left Double Pull Strap	818378
Right Double Pull Strap	818377

Carrier and Harness

1. Install the swiveling lumbar pad (See **Installing the Swiveling Lumbar Pad or Rescue Belt** for instructions)



2. Feed the waist belt through the retention loops.

3. Attach the waist belts and pull straps by angling the tri-bars through the support.



4. Lace the free end of the pull-belt through the friction buckle.



5. Pass the belt over the bar and back through the buckle.



Installing the Swiveling Lumbar Pad with the Waist Belt

Left Pull Belt (Nylon)	10037256
Left Pull Belt (Kevlar)	10037257
Right Pull Belt (Nylon)	10037258
Right Pull Belt (Kevlar)	10037259
Side Release Buckle (Male)	10040450
Side Release Buckle (Female)	10040451

1. Install the swiveling lumbar pad (See **Installing the Swiveling Lumbar Pad or Rescue Belt** for instructions)
2. Attach the waist pull belts to the shoulder straps. (See **Installing the Right Shoulder Strap** and **Installing the Left Shoulder Strap** for instructions)

Installing Side Release Buckle(s)

1. From back to front, lace the free end of the waist belt through the buckle.



2. Pass the strap over the bar and back through the buckle.



Installing the Hose Strap

1. Install the hose strap by passing it through the back plate slot.

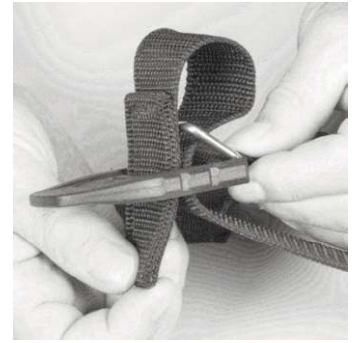


Carrier and Harness

2. Pass the end of the hose strap all the way through the buckle.



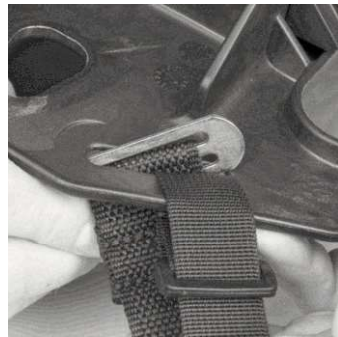
4. Pass the strap over the bar and back through the buckle.



Installing the Right Shoulder Strap

Hose Strap (Nylon)	10052954
Hose Strap (Kevlar)	10052955
Shoulder Strap	818381

1. Install the shoulder strap by angling the tri-bar through the slot.



2. Fully extend the shoulder straps and pull belts. Make sure the straps and belts are not twisted.



3. Lace the free end of the pull-strap through the friction buckle.



Single Hose

1. Connect the intermediate pressure hose to the PR14 First Stage Regulator. (See **AirHawk II Air Mask PR14 First Stage Regulator MAINTENANCE AND REPAIR, P/N 10104220** for instructions)
2. Reinstall the PR14 First Stage Regulator. (See **AirHawk II Air Mask PR14 First Stage Regulator MAINTENANCE AND REPAIR, P/N 10104220** for instructions)

Threaded Connectors

O-Ring	634669
Christo- Lube	604070

1. Install new o-rings into threaded connections.
 - a. Apply a small amount of Christo Lube to the new o-ring.

- b. Install the o-ring.



2. Reconnect the intermediate-pressure hose.

- a. Use an inch-pound torque wrench with 11/16" crowfoot to tighten the connector to 75 ± 5 in lbs.



Carrier and Harness

Quick-Connect

1. Install the dust cover to the PR14 intermediate pressure hose.
2. Reconnect the intermediate-pressure hose.

Threaded or Quick-Connect Hose with ExtendAire System

1. Reconnect the intermediate-pressure hose.
 - a. Install new o-rings into threaded connections. (See **Installing the Right Shoulder Strap: Threaded Connectors** for instructions)
 - b. Secure the ExtendAire manifold in a vice.

Note: Use protective sleeves on the jaws of the vise.

1. Use an inch-pound torque wrench with 11/16" crowfoot to tighten the connector to 125 ± 5 in lbs.



Installing the Tether

Tether 10016029

1. Install the tether.

Note: If using the optional chest strap, install the tether above the chest strap.

- a. Pass the friction buckle through the tether's large opening.



Installing the Left Shoulder Strap

Left Shoulder Strap (Nylon) 10037254
Left Shoulder Strap (Kevlar) 10037255

1. Install the shoulder strap by angling the tri-bar through the slot.



2. Install the tether. (See **Installing the Tether** for instructions)



3. Fully extend the shoulder straps and pull belts. Make sure the straps and belts are not twisted.

4. Lace the free end of the pull-strap through the friction buckle.



5. Pass the strap over the bar and back through the buckle.



Carrier and Harness

Using the Hose Strap

1. Pass the intermediate and high pressure hoses through the hose strap.



Installing the Shoulder Pads Installing the Chest Strap

Chest Strap Kit 10012167

1. Lay the ends under the shoulder straps.



2. Pass the ends through the tunnels in the strap.



3. Lace the strap over the bar and down through the slide buckle.



Installing the Cylinder Stop

Bumper 66839
Screw 10048012

1. Use an inch pound torque wrench and Phillips head to tighten the bumper screw to 9 in lbs.



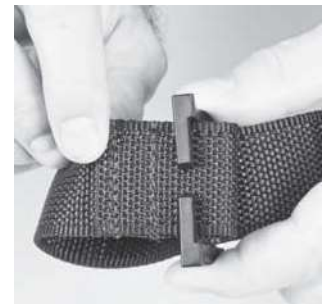
Installing the Cylinder Band

Cylinder Band (Nylon) 10050363
Cylinder Band (Kevlar) 10053519

1. Weave the strap through the back plate.



2. Lace the strap through the slide.



3. Lace the strap through the buckle.



Carrier and Harness

4. Reconnect the slide.
5. Install a cylinder and adjust the strap. (See **AirHawk II Air Mask Operation and Instructions, P/N 10088650** for instructions)