

# Suspension Trauma Safety Step



- ➔ Avoid effects of suspension trauma
- ➔ Compact, lightweight, versatile
- ➔ Multiple attachment point options
- ➔ Fast, easy installation & deployment
- ➔ Attaches to any harness
- ➔ Multiple loop design accommodates all heights and sizes

After a fall, a worker comes to rest supported by a full body harness. In this post-fall suspension position, harness webbing exerts pressure on the body in various areas. In addition, the worker's legs are relatively motionless while awaiting rescue. This combination of webbing pressure and lack of leg motion can lead to orthostatic intolerance, also known as suspension trauma, a result of blood "pooling" in the legs.

Without leg muscle movement and with applied pressure from the harness leg

straps, blood flow back to the heart and other vital organs is restricted. This condition can lead to unconsciousness, and ultimately serious injury or death if proper blood flow is not restored. It is critically important that rescue be undertaken quickly and that workers know how to help avoid this dangerous situation.

The Suspension Trauma Safety Step is designed to help workers in a post-fall suspension position avoid the effects of suspension trauma. The Safety Step

allows workers to relieve pressure by inserting a foot into one of the step loops and then standing up in the harness. The flexing of leg muscles and release of harness leg strap pressure stimulates blood flow, helping to prevent the onset of suspension trauma. Workers can use a single Safety Step or two Safety Steps (one for each leg) to provide additional support, balance, and comfort.



Lightweight web ladder designed to reduce the onset of suspension trauma during post-fall suspension. Loops allow user to flex leg muscles and relieve leg strap pressure while suspended prior to rescue.

**Easy to use:**

1. Open the carrying bag and deploy the Etrier to its full length.



2. Place one foot in a low-hanging loop. Place the other foot in the loop next to the first.



3. Flex, or "pump" the leg muscles frequently while suspended in the harness.



Pumping the large muscles of the leg causes blood to circulate and reduces the potential for suspension trauma.



*Shown with two safety steps in use*



*Shown with safety step connected to the eye of the snaphook on the lanyard*

**Attachment point options**



*Attachment with carabiner*



*Attachment without carabiner*



*Velcro straps help keep safety step pouch snug on harness when not in use*

Description	Safety Step	Carabiner
<b>Material</b>	Nylon	Steel
<b>Finish</b>	N/A	Zinc
<b>Proof Load</b>	N/A	3,600LBF (16KN)
<b>Minimum Breaking Strength</b>	800LBF (3.6KN)	5,000 (22.2KN)
<b>Relevant Dimensions</b>	Length - 6FT (1.8M)	Gate opening - 1.0IN (25MM)
<b>Net Weight</b>	0.1LB (45G)	0.6LB (0.3KG)
Part Numbers	Description	
10063431	Suspension Trauma Safety Step with carabiner	
10063441	Suspension Trauma Safety Step without carabiner	



**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.

ID 2302-25-MC / Dec 2006  
© MSA 2006 Printed in U.S.A.



**Corporate Headquarters**  
P.O. Box 426, Pittsburgh,  
PA 15230 USA  
Phone 412-967-3000  
[www.MSAnet.com](http://www.MSAnet.com)

**U.S. Customer Service Center**  
Phone 1-800-MSA-2222  
Fax 1-800-967-0398

**MSA Canada**  
Phone 416-620-4225  
Fax 416-620-9697

**MSA Mexico**  
Phone 52-55 21 22 5770  
Fax 52-55 5359 4330

**MSA International**  
Phone 412-967-3354  
FAX 412-967-3451

