



SUPER ANCHOR SAFETY®

SAS-Max-Force™ Energy Absorbers (E/A's) Instruction/Specification Manual 2025

ENGLISH
VERSION

!WARNING TO USER!

You are required to read and use the Instruction/ Specification manual supplied at the time this device was shipped. Improper use and installation can result in serious injury or death. Follow inspection requirements before each use.

Material Specifications

Tear webbing: Polyester
Cover/Backer: Polyester
Min. Tensile Strength: 5,000lb
Carabiners: Aluminum twist-lock
⊗ Inspection Points.
SAS = Super Anchor Safety

Absorber Compliance:

ANSI-Z359.13 / OSHA 1926.502
Connector Compliance:
ANSI-Z359.12-2009 CSA-Z259.12-11
Gate Strength: 3,600lb (16kN)
*Qualified/Competent Person see
OSHA definition.

Energy Absorber (E/A) Function: When subjected to a fall the E/A's tear webbing shown at Fig.11, will deploy and gradually reduce the fall velocity to a complete stop (fall arrest). The backer webbing acts as a failsafe limiting the deployment length.

WARNING! Exceeding the specified user weight or falling more than 6ft may fail to arrest a fall, resulting in serious injury or death.

Specified Use

Fall arrest, fall restraint or work positioning for one person including tools and equipment. User wt. specified in Table 1.0. E/A's are required to be used with SAS mfg. OSHA and ANSI compliant PPE. Equipment mfg. by others must be ensured for compatibility by a qualified or competent person*. **Maximum free fall 6ft(1.8m).**

Absorber A-End Attachment

Attach absorber A-End snaphook, carabiner or Dee-Loop to a full body harness dorsal D-ring only. See Fig.1. **WARNING! Do not attach E/A's to harness side D-rings or body belts.**

Absorber B-End Attachment

Attach only to fall arresters, integral adjusters or lanyards. **WARNING! Do not attach to class 1 or class 2 SRL's unless specified by SRL instructions.**

Loop Ends are fitted with PVC or web wear pads and are compatible with SAS snaphooks or carabiners.

Carabiners Supplied by User

A/B loop end connectors must comply with current OSHA, ANSI or CSA fall protection standards with 3,600lb gate strengths.

Do not attach 2 connectors together unless compatibility has been ensured by a qualified or competent person*.

Table 1.0 Energy Absorber Specifications

Standard	Webbing Color	User Wt. Range	Avg. Peak Force	Deployment Length
E/A's	Gray	130-310lb	900lb	Max. 48"
6186-HD	Orange	200-340lb	1,300lb	Max. 69"

Table 1.1 E/A Specifications

ANSI	A-End	B-End	Length	wt(oz)
6180	Snaphook	Loop	23"	21
6181		Snaphook	28"	38
6182	Carabiner	D-ring	26"	30
6183/C*		Loop	23"	13
6184/C*		D-ring	26"	19
6186	Snaphook	D-ring	26"	33
6185	Loop	Loop	18"	8
6188	△ Dielectric	SH+D-ring	26"	28

*Captive carabiner factory attached.

Note: Loop ends require user to supply a connector.

△ Dielectric connectors have a min. 9kV dielectric resistance

Note: Service length measured from A-End to B-End

WARNING HAZARD EXPOSURE!

DO NOT CONTACT EQUIPMENT WITH:

- Sharp, abrasive edges or cutting tools.
- Electrical sources or power lines.
- Open flame, high heat or hot asphalt.
- Solvents, caulking, paint or stains.
- DO NOT use for animal tether.

Fig.1
No.6181 E/A

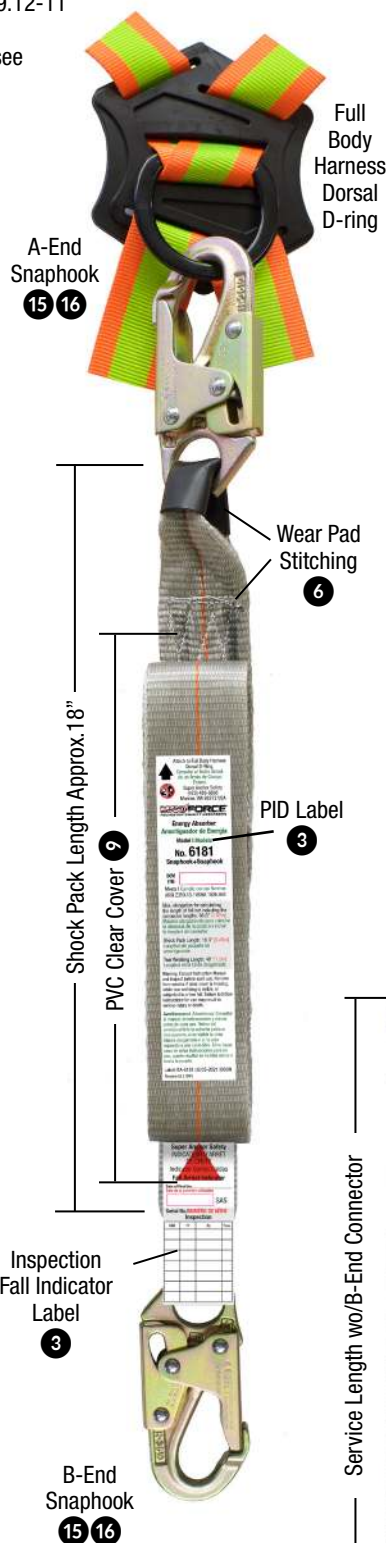


Fig.2
Factory Attached A/B-End Connectors



Fig. 3
Loop Ends Special Application



No. 6195-Z

Ultra-Lite
No. 6191-Z

No. 3004

Fig. 7
Lifeline Attachment

Direction arrows must point to the anchorage point of the lifeline.

FA
11 12
Direction Arrows
IA

No. 4083
Maxima™
Lifeline

No. 4015-Z Fall Arrestor

No. 4015-M
Integral Adjuster

Snaphooks/Carabiner Function Tests

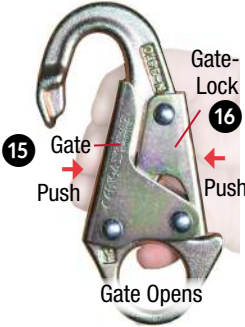
Lock gates are designed to remain closed during use. Perform **Table 3.0** function tests before each use.

Fig.8a Snaphook



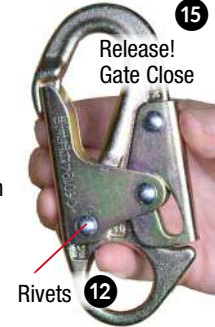
Gate Locked

Fig.8b



Unlock Gate

Fig.8c



Gate Open



Fig.9a



Fig.9b



Fig.9c

Fall Arrester Function Tests

The cam foot is activated when force is applied to the connector ring. Move position by pulling or pushing the **FA** up or down on the lifeline.

Fig.10a

FA Orientation on Lifeline

Direction arrow points toward anchorage end.

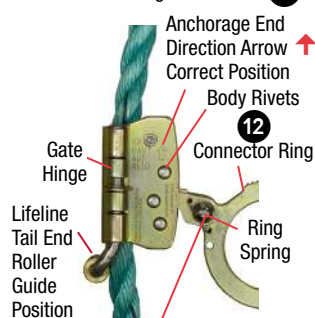


Fig.10b

Removing FA From Lifeline

Gate must remain in locked position during use.

Gate Locking Parts

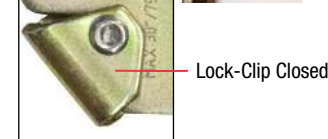
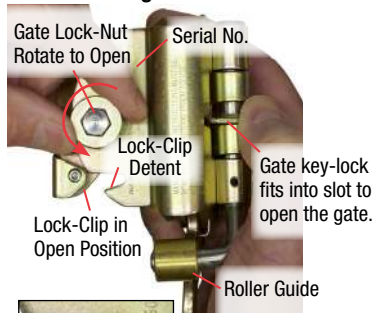


Fig.10c

FA interior must be free and clean of any debris or contamination.

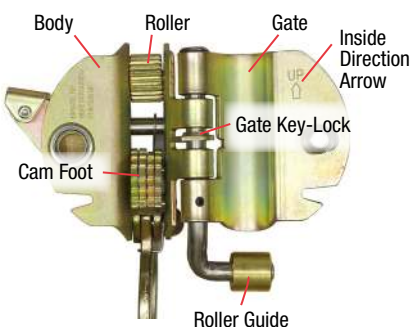


Fig.10d

Cam Foot Lock Function Test

Hold connector ring and pull lifeline from opposite end. Lifeline should not move.

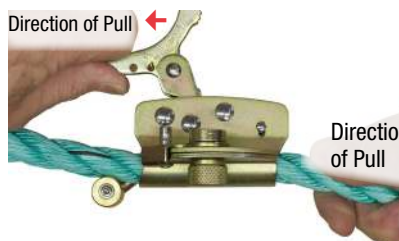


Fig.10e

Mobility Test

Hold connector ring down. Pull lifeline in opposite direction. Lifeline should move freely.



Table 3.0 Remove from service if any test fails.

Fig.	Test Type	Function	Pass ☒	Fail ☐
8a-9a	Gate-lock	Push against gate only	Won't open	Opens
8b	Gate-open	Push gate-lock and gate at the same time	Opens	Won't open
8c	Gate-close	Release gate and gate-lock at same time	Snaps shut	Won't close and lock
9b-9-c*	Unlock gate	Rotate twist-lock	Gate opens	Won't open
9a*	Gate close	Release twist-lock	Snaps shut	Won't close

* Test for all model twist-lock carabiners.

Absorber Storage/Maintenance/Service Life

Store in a clean dry area. DO NOT expose to cleaning agents or chemicals **DO NOT** repair or modify absorbers in any way. **WARNING! Synthetic fibers are damaged by mildew, extreme temperatures, extended exposure to UV, water submergence and vermin.** **Service Life:** Determined by frequency of use, environmental conditions and normal wear. It is recommended to replace equipment after 3-5 years of service. **Disposal of Equipment:** PPE removed from service must be disposed of in a way that will prevent further use.

Inspect Components Before Each Use!

Inspect and perform function tests for all components prior to each use. Inspection points, black circles **X** are intended as guidelines only. Employers/PPE equipment owners are required to draft their own inspection outline. SAS requires Δ annual inspections by a competent person with the date entered on the absorber inspection label. See Fig.12.

Δ Greater frequency of inspections may be specified by the equipment owner.

Remove equipment from service if any of the following conditions are present:

X = Inspection points **ACTION REQUIRED:** ☐=Remove ☒=Repair

- 1 Subjected to a free fall or other force.
- 2 Obvious damage to any component.
- 3 Warning labels missing or not legible.
- 4 No annual inspection.
- 5 Fails inspection/function tests.
- 6 Webbing/stitches cut or abraded.

Energy Absorber

- 7 Fall indicator label is visible or missing. ☐
- 8 Tear webbing is deployed. ☐
- 9 Absorber clear cover is missing or damaged. ☐
- 10 Wear pads are missing or worn thru to backer webbing. ☐

Fall Arresters/Integral Adjusters

- 11 Arrow position is upside down. ☒
- 12 Body or cam foot is bent, twisted or missing rivets. ☐
- 13 Won't hold static position on lifeline. ☐
- 14 FA is locked onto lifeline or won't move position easily. **Clean lifeline and retest. If no change:** ☐

Snaphook/Carabiner/D-ring

- 15 Gate is bent or won't close. ☐
- 16 Gate locking device is damaged. ☐
- 17 Carabiner won't lock or close. ☐
- 18 D-ring is bent, cut, gouged or cracked. ☐

Zinc plated connectors corrode easily when exposed to salt air and do not require removal from service provided they pass inspections. Severe corrosion should be inspected by a competent person to determine if removal from service is required.

Fig.11

A-End
E/A Back SidePVC or
Webbing
Wear Pad
10Box Stitches
6White
Tear
Webbing
Deployed.Tear
Webbing
CenterSurplus tear
webbing
length varies
depending
on the
force of the
free fall.Backer
Webbing
6

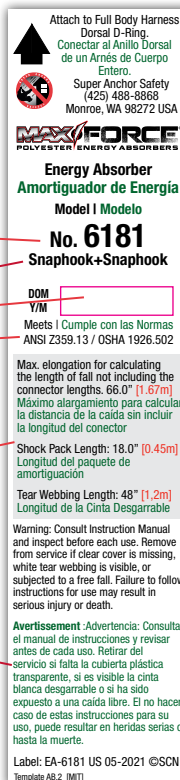
B-End

Fig.12

Serviceable Condition.
Backer webbing covers
the fall indicator
WARNING.Red warning
arrow is
visible.User enters
date of
first use.
MM-YYYY
Serial No.Record annual
inspections.Fig.13
Fall Indicator**WARNING is visible.
Absorber is deployed.
DO NOT USE!
REMOVE FROM
SERVICE!**

8

Factory Attached E/A Warning and Instruction Labels

Primary Labels
Standard E/AModel No. **No. 6181**
A/B-End Fittings **Snaphook+Snaphook**
Date of mfg. **DOM**
Compliance **Meets I Cumples con las Normas ANSI Z359.13 / OSHA 1926.502**Deployment Lengths
Shock Pack Length: 18.0" [0.45m]
Tear Webbing Length: 48" [1.2m]ANSI
Z359.13
Label
3

Instructions

Box
Stitches
6Wear Pad
10

Rope Grab Model

Rope Grab
Instructions

Absorber Deployment

When subjected to a fall, the absorber tear webbing will rip in half and gradually come to a full stop (Fall Arrest). The length of the deployment will vary depending on the free fall distance and the user's weight. As show at Fig.11 an E/A subjected to a free fall will partially deploy as evidenced by surplus tear webbing.

Warning! In the event that a free fall exceeds the E/A's performance specifications, the backer webbing will engage fully arresting the fall and limiting the tear webbing maximum deployment to approx. 48". If the maximum fall arrest force (MAF) is greater than 5,000lb, the backer webbing or stitching may fail resulting in serious injury or death. For that reason it is critical that a workers PPE, which includes the lifeline and rope grab, are adjusted to limit free falls to 6ft or less.

Fall Indicator

When subjected to a fall or other force, the fall indicator "Warning" label shown at Fig.13 will be visible, requiring that the absorber be removed from service. In the normal service condition the "Warning" is covered by the backer webbing held in place by the PVC cover.

Inspection: The visible section of the label displays the serial number and a space to enter the date of **First Use** (MM-YYYY) which is required prior to use.

Product ID Labels (PID)

Primary labels placed on the front of the E/A shock pack, specify the absorber model No., A/B-End fittings, date of mfg., performance specifications and a warning to consult instructions prior to use. E/A's mfg. with Fall Arresters or Integral Adjusters, have an additional warning at the lower half of the label. The E/A back side will display the ANSI Z359.13 label.

DO NOT USE absorbers if any labels are missing.

ANSI Z359.13
LabelFig.14
No.6179 E/A Cover

Accessory cover attaches with hook and loop and is removable for inspection. Use in work areas where the E/A is exposed to abrasive surfaces. Fits all standard and Ultra-Lite E/A's

15" Length Polyester