Super Anchor Safety 2024 Quick Reference

HLL Spring Energy Absorber

No.1065-AS Spring Energy Absorber (E/A)
A mechanical E/A is required for all SAS HLL systems with a maximum length of 240lf. Mfg. with 304ss!, no welds or moving parts. Requires SAS compatible couplers for turnbuckle and HLL cable terminations.

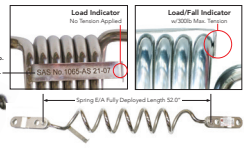
Performance Specifications:
Min. Tensile Strength: 5,000lb
Max. Tensile Strength: 7,500lb
Fall Arrest: 1 person per ea. HLL leg
2 person per ea. HLL length
Fall Restraint: 2 persons ea. HLL leg
4 persons ea. HLL length
Max. User Wt. 310lb. PPE E/A required
Max. Free Fall Exposure: Specified by users PPE energy absorber
Deployment avg. Peak Force: 2,000lb
Min. Deployment: 310lb/6ft= 21.0"
Max. Deployment Length: 52.0"
Max. HLL tension: 300lb
Static Length/Diameter: 7-1/4"x 3-1/4"
Material: 12mm 304ss! rod
Couplers: No.1087-SA/No.1087-SC
E/A Attachment Bolts: 3/8"x1.0 ast

Compliance
OSHA 1926.502
3rd Party engineering by DH Glabe & Assoc.
Report available on request.

Request Unit Pricing

Part No.	pkg. Contents	wt.
1065-AS	1ea Spring E/A	2.7
1065-ASK	1ea No.1065-AS spring E/A 2ea No.1087-SC couplers 2ea 3/8"x1.0" ast bolts w/lock nuts 1ea 5/8"x3.0" ast bolt w/lock nut 1ea 5/8"x2.0" ast bolt w/lock nut	3.7lb

Note: All bolts and lock nuts grade 18-8 ast



Standard Rigging Example
Shown without Intermediate Pass-Thru Anchors

HLL Coil Energy Absorbers

No.1065-AC Coil Energy Absorber (E/A)
The Coil E/A is a non-mechanical energy absorber that is specified for use with SAS temporary HLL systems. Large diameter connector holes are compatible with carabiners, snaphooks and SAS HLL couplers. Coil E/As are not recommended for permanent HLL use.

Specifications
- 5,000lb min. tensile strength
- 304 stainless steel
- Max. deployment length 52.0"
- Min. deployment force 2,500lb w/310lb.lbft free fall
- Deployment length approx. 10.0"
- Wt. 3.5lb

Component Compatibility
- CRA w/No.1090 loop tops
- D-Plate anchor No.1037
- Hinge-Z anchor No.3013-D
- Turnbuckles No.1058/No.1058-S
- Fixed Length HLL No.1336
- Couplers No.1087-SA /No.1087-SB
Note: Not all compatible anchors are specified here. Consult Coil Manual.

Compliance
OSHA 1926.502

Rigging w/No.1037 D-Plate

Request Unit Pricing

Part No.	pkg. Contents	wt.
1065-AC	1ea Coil E/A	3.5lb

Note: Couplers purchased separately include 1/8-dast bolt w/lock nut.

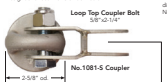
Partially Deployed

Rigging w/No.3013-D Hinge-Z
Fixed Length HLL w/Snaphook

Rigging w/No.1058-S Turnbuckles
w/No.1087-SA Coupler

HLL Loop Top Couplers/Swaging Examples

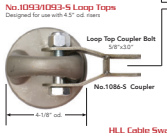
No.1090/1090-S Loop Tops
Designed for use with 3.0" od. risers



Coupler Compatibility
No.1090 and No.1093 loop tops have significant differences in dimension requiring specific coupler sizes to be used in rigging. Note: "S" part number suffix = stainless steel part.

No.1081-S/1086-S Couplers
Are compatible w/3/8" eye thimbles used for standard HLL "B" end rigging.

No.1093/1093-S Loop Tops
Designed for use with 4.5" od. risers



HLL Cable Swaging Options

3 Clamp On-site Field Swaging
Spacing Approx. 4.0"oc

Cable Clamps
No.1056 Galv. No.1056-S SST

SAS Factory Swaging

Note: Hyd. swaging requires 2 alum. sleeves

8001-CFS On-site Swaging System

HLL Field Swaging System

A SAS exclusive, our 8001-CFS on-site field swage system produces a high strength factory quality swage every time. The M-18 takes less than 30 seconds to crimp an aluminum sleeve, compared to labor intensive hand presses requiring dozens of pump cycles for each swage. Supplied in a Pelican waterproof shipping case with all the equipment required for on-site swaging of HLL end terminations. Available as a rental unit only. Specified for use with No.8002-G or No.8002-S rigging kits.

Specifications
- 16,000lb tensile strength swage*
- Battery powered equipment
- SAS marked crimper dies
- Sleeve press
- Cable puller system
- Instruction manual
*Colorado Metallurgical Services Report available on request

Ordering Information

Part No.	Description	wt.
8001-CFS	HLL Field Swage System	67.5lb

8001-CFS Field Swage System

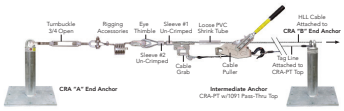
2 Level Pelican Case Equipment Storage

8001-CFS Equipment List

Part No.	No. pcs.	Part Name
8003.1	1	Milwaukee M-18 Crimper
8003.1CD	2	Crimper Dies
8003.18T	2	M-18 Batteries
8001.18C	1	M-18 Battery Charger
8003.2	1	Husky RDC-5724H Cable Cutter
8001.28T	2	Husky Batteries
8003.28C	1	Husky Battery Charger w/12v converter + 120v cord
8003.3	1	Leister Hot-Jet S Heat Gun
8003.4	1	Lugg-All No.500-A Cable Puller w/threaded steel link
8003.4CG	1	R014 3/8" Cable Grab
8003.4TL	1	3/16"x169 Wire Rope Tag Line
8003.5	1	Sleeve Press w/Handle
8003.6	1	Pelican No.0875 Cargo Case w/2 Equipment Shelves
8003.6CL	2	Combination Locks
Weight	67.5lb	

8001-CFS Cable Swage HLL "A" End
Note: All end, intermediate and 4-Way anchors are installed with the HLL cable "B" end swage completed and attached to the "B" end anchor.

- Attach turnbuckle to "A" and anchor
- 3/4 open, and all rigging accessories
- Connect tag line to CRA-PT top loop and cable puller hook
- Feed HLL cable thru 2 sleeves and PVC shrink tube
- Attach cable grab and puller
- Adjust cable puller webbing to remove slack from tag line
- Tighten cable puller until all HLL cable slack is removed
- Crimp sleeve #1 with M-18 press
- Remove cable grab, puller and tag line
- Perform sleeve press operation



8001-CFS Field Swage System

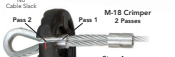
Field Swage Aluminum Sleeves
Aluminum sleeves have several advantages over bolt attached cable clamps.
- 30 sec. M-18 swage cycle per/sleeve
- Avg. 16,000lb tensile strength*
- Streamlined low profile finish
- SAS embossed crimper dies for traceability
- Torquing not required
- *Colorado Metallurgical Services Report available on request

No.8003.5 Sleeve Press
A SAS exclusive design that presses the sleeve tightly against the eye thimble resulting in no cable slack at the eye thimble. Combined with the M-18 hydraulic crimper, HLL end terminations are produced in a fraction of the time compared to hand pump swagers.

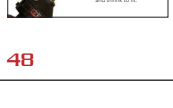
Step 1
Prior to swaging, sleeves and shrink tube are fed onto the HLL cable

Step 2
Attach sleeve press. Tighten adjuster bolt until sleeve #2 is within 3/16" of the eye thimble.

Step 3
With Sleeve #2 in position remove sleeve press and use M-18 to crimp sleeve #2



Step 4
Remove sleeve press and crimp sleeve #2



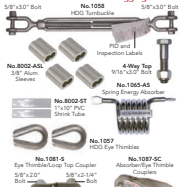
The clear PVC shrink tube included in No.8002 rigging kits, protects against swage oxidation and produces a smooth snag free finish.

No.8002-ST PVC Shrink Tube

8001-CFS CRA HLL Rigging Kits

No.8002 rigging kits are required for the 8001-CFS field swage system. Use with anchors mfg. with No.1090/1090-S loop tops. Supplied with 18-8 or+ ast bolts and lock nuts. Order No.1055-N/1055-SN HLL cable and 8001-CFS separately.

No.8002-G Galvanized Rigging Kit



No.8002-S SST Rigging Kit

No.8002-G Galvanized Rigging

Part No.	No.Pcs	Description	Finish
1057	2ea	3/8" Eye Thimble	304/316ast
1058	1ea	3/4"x14" Turnbuckle	HDG
	2ea	5/8"x3.0" Bolt	18-8ast
1065-AS	1ea	Spring Absorber	304ast
1081-S	1ea	Coupler	304ast
	1ea	5/8"x2.0" Bolt	18-8ast
1087-SC	1ea	5/8"x2-1/4" Bolt	18-8ast
	2ea	Absorber Couplers	304ast
	2ea	3/8"x1.0" Bolts	18-8ast
	1ea	3/8"x0.5" Bolt	18-8ast
4-Way Bolt	1ea	9/16"x3.0" Bolt	18-8ast
5010-SM	4ea	HLL O-Rings	Zinc
8002-ASL	4ea	3/8" Fig.8 Sleeves	Alum
8002-ST	2ea	1.0"x10' PVC Tubing	Clear

Request Unit Pricing

Part No.	Contents	pkg/wt.
8002-G	Galvanized Rigging Kit	12lb

No.8002-S Stainless Steel Rigging

Part No.	No.Pcs	Description	Finish
1057-S	2ea	3/8" Eye Thimble	304/316ast
1058-S	1ea	3/4"x14" Turnbuckle	HDG
	2ea	5/8"x3.0" Bolt	18-8ast
1065-AS	1ea	Spring Absorber	304ast
1081-S	1ea	5/8"x2.0" Bolt	18-8ast
	1ea	5/8"x1.0" Bolt	18-8ast
1087-SC	2ea	3/8"x1.0" Bolts	18-8ast
	2ea	5/8"x2.0" Bolt	18-8ast
4-Way Bolt	1ea	9/16"x3.0" Bolt	18-8ast
5010-SM	4ea	HLL O-Rings	Zinc
8002-ASL	4ea	3/8" Fig.8 Sleeves	Alum
8002-ST	2ea	1.0"x10' PVC Tubing	Clear

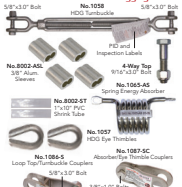
Request Unit Pricing

Part No.	Contents	pkg/wt.
8002-S	SST Rigging Kit	10.3lb

8001-CFS CRO HLL Rigging Kits

No.8002 rigging kits are required for the 8001-CFS field swage system. Use with anchors mfg. with No.1093/1093-S loop tops. Supplied with 18-8 or+ ast bolts and lock nuts. Order No.1055-N/1055-SN HLL cable and 8001-CFS separately.

No.8002-GC Galvanized Rigging Kit



No.8002-SC SST Rigging Kit

No.8002-GC Galvanized Rigging

Part No.	No.Pcs	Description	Finish
1057	2ea	3/8" Eye Thimble	HDG
1058	1ea	3/4"x14" Turnbuckle	HDG
	2ea	5/8"x3.0" Bolt	18-8ast
1065-AS	1ea	Spring Absorber	304ast
1086-S	2ea	Couplers	HDG
	1ea	5/8"x2.0" Bolt	18-8ast
	2ea	5/8"x3.0" Bolt	18-8ast
1087-SC	2ea	Absorber Couplers	304ast
	2ea	3/8"x1.0" Bolts	18-8ast
	1ea	5/8"x2.0" Bolt	18-8ast
4-Way Bolt	1ea	9/16"x3.0" Bolt	18-8ast
5010-SM	4ea	HLL O-Rings	Zinc
8002-ASL	4ea	3/8" Fig.8 Sleeves	Alum
8002-ST	2ea	1.0"x10' PVC Tubing	Clear

Request Unit Pricing

Part No.	Contents	pkg/wt.
8002-GC	Galvanized Rigging Kit	12lb

No.8002-SC Stainless Steel Rigging

Part No.	No.Pcs	Description	Finish
1057-S	2ea	3/8" Eye Thimble	304/316ast
1058-S	1ea	3/4"x14" Turnbuckle	316ast
	2ea	5/8"x3.0" Bolt	18-8ast
1065-AS	1ea	Spring Absorber	304ast
1086-S	2ea	Couplers	316ast
	1ea	5/8"x2.0" Bolt	18-8ast
	2ea	5/8"x3.0" Bolt	18-8ast
1087-SC	2ea	Absorber Couplers	304ast
	2ea	3/8"x1.0" Bolts	18-8ast
	1ea	5/8"x2.0" Bolt	18-8ast
4-Way Bolt	1ea	9/16"x3.0" Bolt	18-8ast
5010-SM	4ea	HLL O-Rings	2ea
8002-ASL	4ea	3/8" Fig.8 Sleeves	Alum
8002-ST	2ea	1.0"x10' PVC Tubing	Clear

Request Unit Pricing

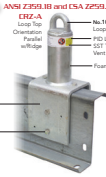
Part No.	Contents	pkg/wt.
8002-SC	SST Rigging Kit	10.3lb

CRZ Loop Top Anchors

3.0"od. CRZ Z-Purlin/Wood Beam Anchors
CRZ anchors fit the most common size Z-Purlins used in steel and commercial building structures. Custom mfg. is available for any size wood beam. The bolt through attachment provides a very strong connection point. Specified for single person PPE, horizontal lifeline systems (HLL) and window washing. Pre-drilled wood blocking is sized to fit all standard Z-Purlins.

ANSI Z359.18 and CSA Z259.15 Certification

CRZ-A



CRZ-B

Specifications
- Min. tensile strength 5,000lb
- No.1090 C235 and 1090-S 316ast loop tops tensile strength rating of 10,000lb
- Hot dip galvanized (HDG), 304ast or 316ast
- 18-8ast attachment bolts
- Foam filled riser
- Loop top: A36 orientation for HLL systems
- 3rd party engineering by DH Glabe & Assoc. *Report available on request*

Accessories
- Pre-drilled **No.2049** wood purlin blocking
- Master Flash **No.2050**

Compliance
Custom mfg. contact SAS sales team
- Custom riser heights part **No.1126-X**
- Custom wood beam part **No.1127-X**
- Custom CRZ 4-Way part **No.1126-4X**
Note: Min. riser height 12.0"

ANSI Z359.18-17 Type A/T*
CSA Z259.15-22 Type A/T*
Window Washing: ANSI/WICA 1-14.1
OSHA 1926.502
**Request Internet CRA Lab Report*

CRZ-4-12

Request Unit Pricing

Riser Height	Part Name	Part No.	Material Type	Loop Top No.	Loop Top Type	Anchor wt.	Riser ▲Sch
6	CRZ-6A	1126-6A	▲HDG	1090	Q235	15lb	40 0.203 3.0"od.
		1126-6AS	▲304ast	1090-S	316ast		
	CRZ-6B	1126-6B	▲HDG	1090	Q235		
		1126-6BS	▲304ast	1090-S	316ast		
12	CRZ-12A	1126-12A	▲HDG	1090	Q235	18lb	
		1126-12AS	▲304ast	1090-S	316ast		
	CRZ-12B	1126-12B	▲HDG	1090	Q235		
		1126-12BS	▲304ast	1090-S	316ast		
	▲CRZ-4-12	1126-4-12S	▲HDG	▲4-Way Top			
		1126-4-12S	▲304ast				

■ Standard Design Custom mfg. ▲ Nominal Dimension.
□ Order 4-Way top separately. ▲ Stock Part.
Note 1: Max proof load 2,500lb
Note 2: Z-Purlin standard models max. top flange width 3-3/4" w/min. purlin web depth 6.0".
Note 3: CRZ-4 min.12"riser ht. required for base flashing.

Custom Wood Beam Sizes
No.1127-X CRZ

QR-Pg. V

Contact Sales Team@ www.superanchor.com 1-855-301-4575
Paul@superanchor.com Todd@superanchor.com Jay@superanchor.com Cassie@superanchor.com