



LOAD HUGGER BASICS

Lift-All Load Hugger cargo control and load securement products offer the van and flatbed operator a wide variety of options to meet U.S. DOT, FMCSA (Federal Motor Carrier Safety Administration), and CVSA (Commercial Vehicle Safety Alliance) requirements.*

Features and Benefits

- Meets all U.S. DOT, FMCSA, and CVSA regulations.
- Low stretch polyester webbing allows for more secure cargo control.
- All hooks and chain assemblies equal or exceed webbing strength.
- Webbing is soft and comes in varying widths; will not damage expensive cargo.
- Large selection; choose the capacity that's right for the load carried.
- Lightweight and easy to handle.
- Large selection of end fastenings, winches, and ratchets make choosing and using the correct assembly easy.
- Custom lengths available.

Inspection Criteria

Remove from service if any of the following are visible:

- Cuts, holes, surface abrasion or crushed areas.
- Burns or chemical damage.
- Separation of load carrying stitch pattern.
- Hardware, fittings or tensioning devices which are broken, bent, twisted, cracked, or have nicks and gouges.
- Knotted webbing.
- Splices or other makeshift repairs.
- The loop ends are damaged.

See illustrations of damaged webbing on pages 34 & 35; damaged chain and hooks on pages 106 and 107.

Environmental Considerations

- Synthetic webbing severely degrades at temperatures above 200°F.
- Prolonged exposure to ultraviolet light adversely affects synthetic webbing. Tiedown straps become bleached and stiff when exposed to sunlight or arc welding.
- Many acids, alkalis, and chemicals have an adverse effect on nylon and polyester. See chart on page 16.

Safe Operating Practices

- Inspect tiedown straps and all hardware when the load is first being secured.
- Re-tighten tiedowns periodically during use.
- Never use *Load Huggers* for anything other than securing cargo. Do not use for lifting loads or towing vehicles.
- The load should be securely blocked and stabilized before tensioning the straps.
- Never exceed rated capacities.
- Use caution when tossing straps and chain anchor assemblies over a load.
- Check installation of portable winches. The ratchet pawl must be at the top of the toothed wheel and bolts tight against the rub rail.
- Weld-on winches should not be cracked.
- Corner protectors or sling protection must be used to protect *Load Huggers* from edges and abrasion.
- All hardware must be in line with the direction of pull to achieve full strength.

Definitions

Working Load Limit (WLL): The maximum load that may be applied to an assembly or component in straight tension.

Ultimate Strength: The load at which an assembly or component will fail in testing.

Department of Transportation Regulations 393.102(b) uses the Ultimate Breaking Strength to calculate the number of tiedown assemblies required to secure a load.

Lift-All publishes Ultimate Strength for this purpose only. For safety, we recommend that only Working Load Limits are used for your calculations.



WARNING

Always protect tiedowns from being cut by corners and edges.

*CVSA (Commercial Vehicle Safety Alliance) www.cvsa.org

WEB SELECTION

Two **styles** of webbing are available for our 2" through 4" ratchet assemblies and winch straps:
Standard Yellow and **Hi-Vis Tuff-Edge**

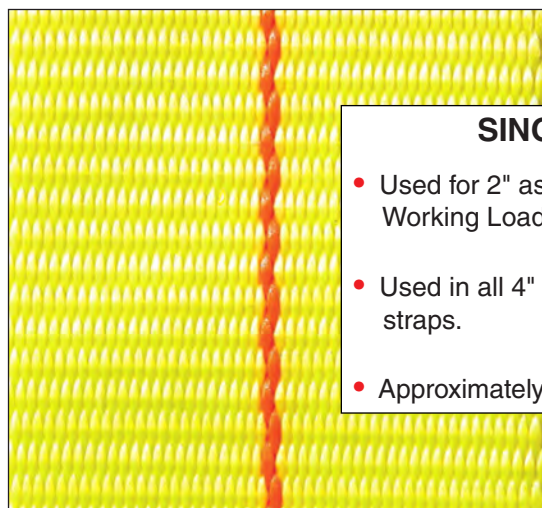
Two strength classes are available for 2" assemblies:
Single Stripe and **Double Stripe**

STANDARD TIEDOWN WEBBING

This polyester webbing offers exceptional value for everyday use.

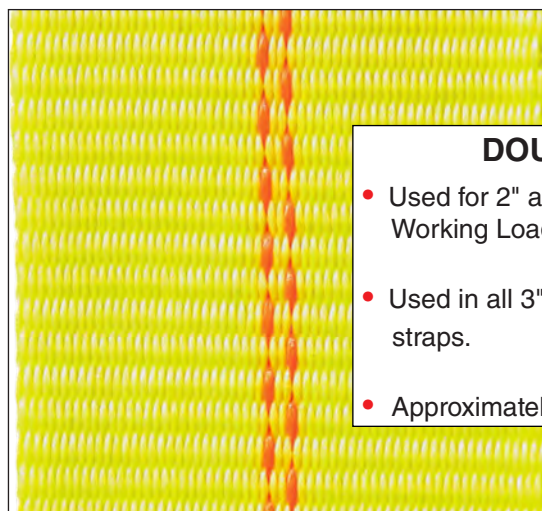
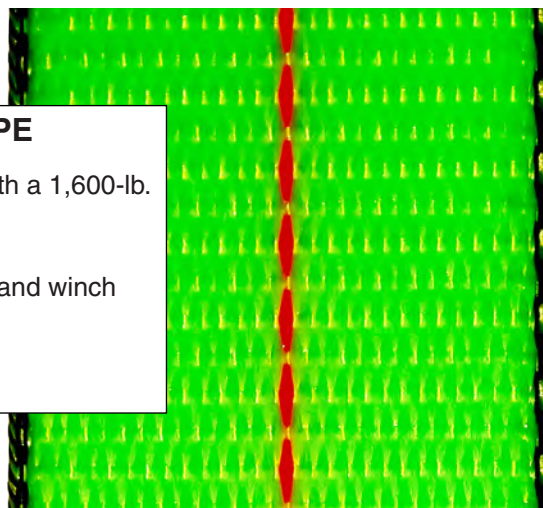
HI-VIS TUFF-EDGE WEBBING

The brightness of our polyester **Hi-Vis Tuff-Edge** webbing allows for increased visibility on the roadside. Special black polymer edge yarns provide 32% better edge cut resistance for longer assembly life.



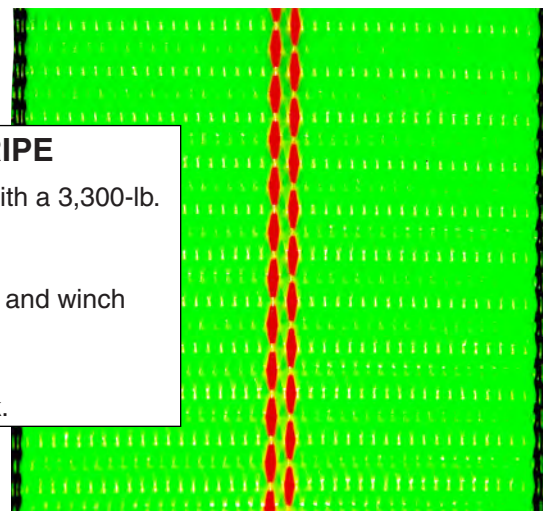
SINGLE STRIPE

- Used for 2" assemblies with a 1,600-lb. Working Load Limit.
- Used in all 4" assemblies and winch straps.
- Approximately 1/32" thick.



DOUBLE STRIPE

- Used for 2" assemblies with a 3,300-lb. Working Load Limit.
- Used in all 3" assemblies and winch straps.
- Approximately 3/64" thick.



RATCHET ASSEMBLIES

Type A Assemblies

One-piece assemblies for use without end fittings.
Length measured from ratchet mandrel to end of webbing.



Type B Assemblies

Two-piece assemblies with one piece attached to the ratchet, and the other end is adjustable. Numerous end fittings are available to handle any requirements. (See following pages).

Series 1,000

- **1" Wide Polyester Webbing**
- Ultimate strength: 2,100-lbs. *
- Working Load Limit: 700-lbs. *



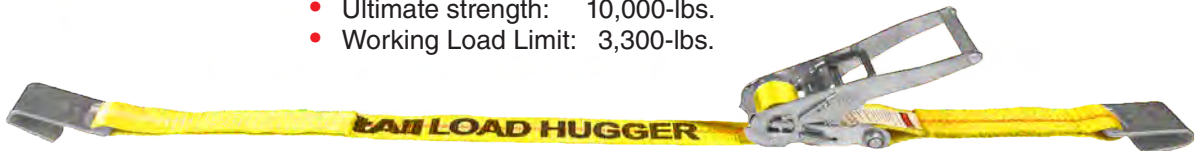
Series 5,000

- **2" Wide Polyester Webbing**
- Ultimate strength: 5,000-lbs.
- Working Load Limit: 1,600-lbs.



Series 10,000

- **2" Wide Polyester Webbing**
- Ultimate strength: 10,000-lbs.
- Working Load Limit: 3,300-lbs.



Series 15,000

- **3" or 4" Wide Polyester Webbing**
- Ultimate strength: 15,000-lbs.
- Working Load Limit: 5,000-lbs.

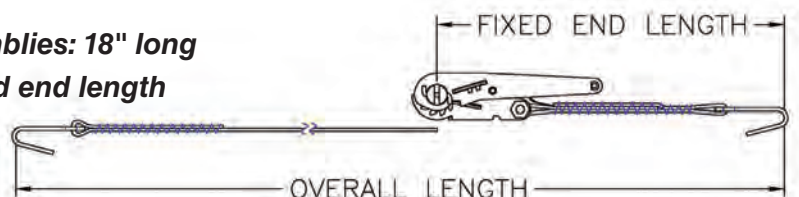


Type B Measurement - FIXED END

2" Wide Assemblies: 16" long

1" Wide, 3" Wide, and 4" Wide Assemblies: 18" long

Note: Chain Anchor adds 14" to fixed end length



* Series 1,000 Exception: Series 1,000 Ratchet Assembly with Flat Hooks, Ultimate Strength is 1,000-lbs. and Working Load Limit is 330-lbs.







1" TIEDOWN ASSEMBLIES



1" Cam Buckle



1" Ratchet

Series 1,000				
WEB WIDTH & TYPE	1" Wide Polyester			
BUCKLE	RATCHET		CAM	
ULTIMATE STRENGTH*	2,100 lbs.		1,000 lbs.	
WORKING LOAD LIMIT	700 lbs.		330 lbs.	
	Buckle	Part No. 10' Length**	Part No. 15' Length**	Weight (lbs.)
Flat Hook** 	Ratchet	60102	6A102	1.1
	Cam	60110	6A110	.7
Stamped Snap Hook 	Ratchet	60104	6A104	1.5
	Cam	60113	6A113	1.0
U-Hook 	Ratchet	60101	6A101	1.1
	Cam	60109	6A109	.7
Hook & Keeper 	Ratchet	60105	6A105	1.5
	Cam	60114	6A114	1.1
Open Hook** 	Ratchet PE Hook	60103	6A103	1.7
	Ratchet ZP Hook	60106	6A106	1.6
	Cam PE Hook	60111	6A111	1.3
	Cam ZP Hook	60112	6A112	1.2
PE Coated (shown) Zinc Plated (Optional)				
Type A (Endless) 	Ratchet	60107	6A107	.9
	Cam	60108	6A108	.5

* Ultimate strength of assembly when new.

** Non-standard lengths available

*** Exception: Series 1,000 Ratchet Assembly with Flat Hooks, WLL is 330-lbs. and Ultimate Strength is 1,000-lbs.

POPULAR



1" X 15' Ratchet Tiedown
Assembly: 16-pc. Display Box
6A103B

Both assemblies have
PE coated open hooks.

Our 1" X 12' Retractable
Ratchet Tiedown Assembly
in a convenient 2-Pack.

60203

RETRACTABLE



RATCHET ASSEMBLIES

		Series 5,000			Series 10,000		
WEB WIDTH & TYPE		2" Wide Polyester			2" Wide Polyester		
ULTIMATE STRENGTH*		5,000 lbs.			10,000 lbs.		
WORKING LOAD LIMIT		1,600 lbs.			3,300 lbs.		
	Length**	Standard Part No.	Tuff-Edge Part No.	Weight (lbs.)	Standard Part No.	Tuff-Edge Part No.	Weight (lbs.)
Flat Hook 	27'	60501	TE60501	4.6	61001	TE61001	5.8
	30'	60502	TE60502	4.8	61002	TE61002	6.0
Stamped Triangle 	27'	60503	TE60503	4.2	61003	TE61003	5.2
	30'	60504	TE60504	4.4	61004	TE61004	5.4
Stamped Snap Hook 	27'	60505	TE60505	4.6	61005	TE61005	6.2
	30'	60506	TE60506	4.8	61006	TE61006	6.4
Twisted Snap Hook 	27'	60507	TE60507	5.2	61007	TE61007	5.6
	30'	60508	TE60508	5.4	61008	TE61008	5.8
Forged Snap Hook 	27'	60509	TE60509	5.8	61009	TE61009	6.4
	30'	60510	TE60510	6.0	61010	TE61010	6.6
D-Ring 	27'	60511	TE60511	4.2	n/a	n/a	n/a
	30'	60512	TE60512	4.4	n/a	n/a	n/a
U-Hook 	27'	60513	TE60513	4.6	26422	TE26422	5.8
	30'	60514	TE60514	4.8	26423	TE26423	6.0
Hook & Keeper 	27'	60515	TE60515	4.8	n/a	n/a	n/a
	30'	60516	TE60516	5.0	n/a	n/a	n/a
Chain Anchor Assembly 	27'	n/a	n/a	n/a	61013	TE61013	13.0
	30'	n/a	n/a	n/a	61014	TE61014	13.2
Type A (Endless) 	27'	60517	TE60517	3.8	61011	TE61011	4.4
	30'	60518	TE60518	4.0	61012	TE61012	4.6

* Ultimate strength of assembly when new.

** Non-standard lengths available










WARNING

Always protect Tiedowns from being cut by corners and edges.

Note: Since end terminations vary proportionally with size, check with Lift-All if critical dimensions are required. Non-standard lengths available upon request.



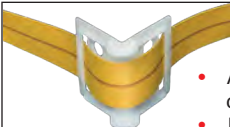
RATCHET ASSEMBLIES

		SERIES 15,000					
WEB WIDTH & TYPE		3" Wide Polyester			4" Wide Polyester		
ULTIMATE STRENGTH*		15,000 lbs.			15,000 lbs.		
WORKING LOAD LIMIT		5,000 lbs.			5,000 lbs.		
	Length**	Standard Part No.	Tuff-Edge Part No.	Wt. (lbs.)	Standard Part No.	Tuff-Edge Part No.	Wt. (lbs.)
Flat Hook 	27'	20482	TE20482	12.8	26424	TE26424	13.6
	30'	20483	TE20483	13.2	26425	TE26425	14.0
Forged Triangle 	27'	20484	TE20484	14.0	26430	TE26430	14.8
	30'	20485	TE20485	14.4	26431	TE26431	15.2
Chain Grab Hook 	27'	20486	TE20486	13.4	26426	TE26426	14.2
	30'	20487	TE20487	13.8	26427	TE26427	14.6
Chain Anchor Assembly 	27'	20488	TE20488	16.8	26432	TE26432	17.6
	30'	20489	TE20489	17.2	26433	TE26433	18.0
U-Hook 	27'	20494	TE20494	13.0	26436	TE26436	13.8
	30'	20495	TE20495	13.2	26437	TE26437	14.2
7-in. Sewn Eye 	27'	20490	TE20490	11.0	26428	TE26428	11.8
	30'	20491	TE20491	11.4	26429	TE26429	12.2
Type A (Endless) 	27'	20492	TE20492	10.6	26434	TE26434	11.4
	30'	20493	TE20493	11.0	26435	TE26435	11.8

* Ultimate strength of assembly when new.

** Non-standard lengths available

Part No.	SLIDING SLEEVES FOR LOAD HUGGERS (Specify length when ordering)
60117	1-1/2" Flat Sliding Sleeve for 1" Load Hugger
60118	2-1/2" Flat Sliding Sleeve for 2" Load Hugger
60119	3-1/4" Flat Sliding Sleeve for 3" Load Hugger
60120	4-1/2" Flat Sliding Sleeve for 4" Load Hugger
RATCHET PROTECTOR	
1RP	1" Ratchet Protector
2RP	2" Ratchet Protector
3RP	3" Ratchet Protector
4RP	4" Ratchet Protector
CORNER GUARD	
CG	Corner Guard

 <p>Sliding Sleeve</p> <ul style="list-style-type: none"> • Double-walled Tubular Product • Protects Load Hugger webbing from abrasion and helps resist cutting 	
 <p>Ratchet Protector</p> <ul style="list-style-type: none"> • A sewn fabric pad protects surface finish of cargo and ratchet mechanism 	
 <p>Corner Guard</p> <ul style="list-style-type: none"> • A movable, rust-proof copolymer corner guard • Protects from sharp edges • Tough enough for chain or webbing 	

WINCH STRAPS & WINCHES

Series 12,000 Load Huggers 3" & 4" Wide Polyester Winch Straps

- Load Hugger Winch Straps are designed for winches on flat bed trucks and trailers.
- Sling protection and corner protectors extend life of Load Huggers.
- Ultimate strength 15,000 lbs.
- Working load limit 5,000 lbs.
- Standard assemblies in 27' or 30' lengths.
- To order a non-standard strap, specify width, length, and end fitting.

Winches must be properly installed with ratchet pawl on top of toothed wheel to help prevent accidental disengagement.



Standard Winch #61222

For 3" & 4" Load Hugger Winch Straps
7.8-lbs.



Portable Winch #61221

For 3" & 4" Load Hugger Winch Straps
8.8-lbs.



36" Winch Bar #61223

For use with both 61221 and 61222 above
4.8-lbs.



EZ Winch Handle #61230

For use with both 61221 and 61222 above
1.2-lbs.



EZ Spool #61231

For use with both 61221 and 61222 above
2.5-lbs.

* Non-standard lengths available

Web Width (in.)	Length* (ft.)	Standard Part No.	Tuff-Edge Part No.	Assembly Weight (lbs.)
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Flat Hook

4	27	61201	TE61201	4.0
4	30	61202	TE61202	4.6
3	27	61203	TE61203	4.4
3	30	61204	TE61204	4.8



Forged Triangle

4	27	61205	TE61205	4.4
4	30	61206	TE61206	5.0
3	27	61207	TE61207	4.8
3	30	61208	TE61208	5.2



Grab Hook

4	27	61209	TE61209	4.2
4	30	61210	TE61210	4.8
3	27	61211	TE61211	4.6
3	30	61212	TE61212	5.0



Chain Anchor

4	27	61213	TE61213	6.0
4	30	61214	TE61214	6.6
3	27	61215	TE61215	6.4
3	30	61216	TE61216	6.8



7" Sewn Eye

4	27	61217	TE61217	3.0
4	30	61218	TE61218	3.6
3	27	61219	TE61219	3.4
3	30	61220	TE61220	3.8



U-Hook

4	27	61225	TE61225	4.2
4	30	61226	TE61226	4.8
3	27	61227	TE61227	4.6
3	30	61228	TE61228	5.0

E-TRACK & VAN INTERIOR ASSEMBLIES

ULTIMATE ASSEMBLY STRENGTH	
Cam Buckle	2,500 lbs.
Ratchet Buckle	3,000 lbs.

WORKING LOAD LIMIT	
Cam Buckle	800 lbs.
Ratchet Buckle	1,000 lbs.

STANDARD E-TRACK ASSEMBLIES	Standard Part No.	Tuff-Edge* Part No.	Wt. (lbs.)
2" X 12' Cam Buckle/Spring E-Track Fittings - Yellow	60805	TE60805	1.6
2" X 16' Cam Buckle/Spring E-Track Fittings - Gray	60806	TE60806	1.7
2" X 20' Cam Buckle/Spring E-Track Fittings - Blue	60807	TE60807	1.8
2" X 12' Ratchet/Spring E-Track Fittings - Yellow	60808	TE60808	2.0
2" X 16' Ratchet/Spring E-Track Fittings - Gray	60809	TE60809	2.1
2" X 20' Ratchet/Spring E-Track Fittings - Blue	60810	TE60810	2.2

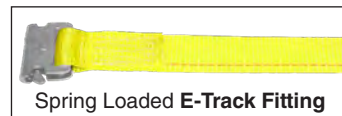
* Tuff-Edge web is yellow for all lengths.

- Standard Fixed End is 48"
- Spring-loaded E-Track, 3-piece E-Track, or any of the end fittings listed in Series 5,000 Load Huggers may be attached.
- E-Track only works with E-Track fittings.

To order a non-standard interior van restraint assemblies specify:

- Overall length.
- Fixed Length.
- Cam Buckle or Ratchet Buckle.

NOTE: Van interior restraint assemblies are only as strong as the anchor or track to which they are attached.



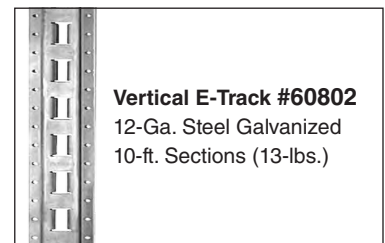
Tie-Off Strap #TOS



Logistic Strap Storage Bag
Part #60820



Horizontal E-Track #60801
12-Ga. Steel Galvanized
10-ft. Sections (17-lbs.)

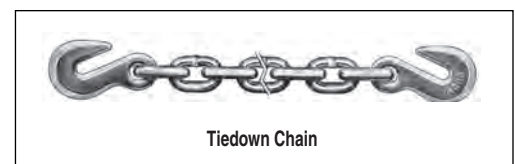


Vertical E-Track #60802
12-Ga. Steel Galvanized
10-ft. Sections (13-lbs.)

Note: E-Track can be cut into lengths suitable for UPS shipments.

TIEDOWN CHAIN & LOAD BINDERS

Tiedown Chain Grab Hook Each End	WLL (lbs.)	Domestic Part No.	Import Part No.	Weight (lbs.)
5/16" X 20' Welded G-70 Gold Dichromate	4,700	16001	—	21.2
3/8" X 20' Welded G-43 Self-Colored	5,400	16002	—	28.1
5/16" X 20' Clevis G-70 Gold Dichromate	4,700	16005	—	21.1
3/8" X 20' Clevis G-43 Self-Colored	5,400	16006	—	29.0
3/8" X 20' Clevis G-70 Gold Dichromate	6,600	16006G7	—	31.1
Load Binders	WLL (lbs.)	Domestic Part No.	Import Part No.	Weight (lbs.)
5/16" - 3/8" Lever Style	6,600	16004	16004I	8.0
5/16" - 3/8" Ratchet Style	6,600	16003	16003I	12.0



Tiedown Chain



Load Binders

Lever Style

Ratchet Style