

# HEAVY DUTY RATCHET BINDERS

FOR USE WITH GRADE 80 AND/OR GRADE 100 CHAIN

**WORKING LOAD LIMIT: 5,400 TO 16,000 LBS.**

## General Benefits & Features of CM Heavy-Duty Tie-Downs

- Meets FMCSA, CVSA tie-down requirements
- Made from high quality alloy steel
- Made in USA
- Cannot be used for overhead lifting
- Lighter weight than most transport binder chains
- Does not degrade in ultra-violet light
- Permanent identification on chain and attachments
- Design factor 4:1



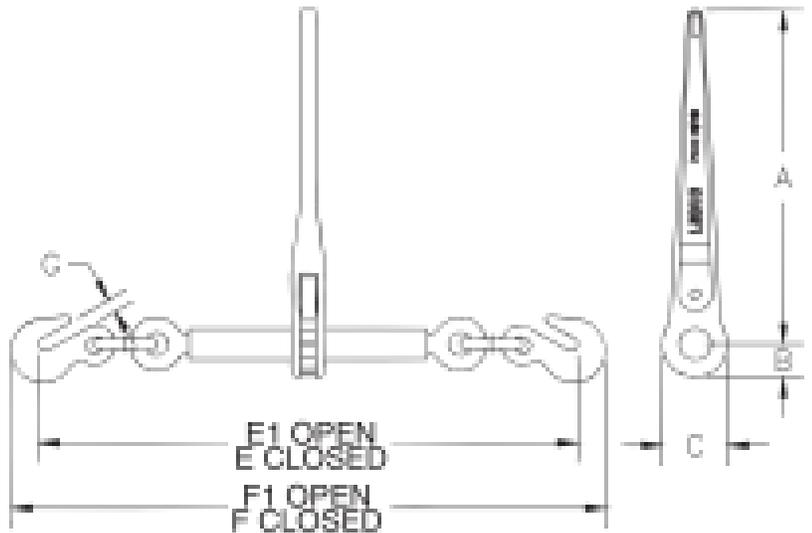
With Chain Size (in.)	Use With Chain Grade	Working Load Limit (lbs.)	Product Code	End Fittings	Take Up (in.)	Weight (lbs.)
5/16	80	5,400	48365	Hook & Hook	8	12
3/8	80	7,100	48360	Hook & Hook	8	13
3/8	80 or 100	9,200	48366	Hook & Hook	8	13
1/2	80	13,000	48367	Hook & Hook	8	16
1/2	80 or 100	15,000	48358	Hook & Hook	8	16
1/2	80 or 100	16,000	48387	Hook & Hook	8	16

Design factor 3:1 or higher

- Upgraded for use with Grades 70, 80 and 100 Chain.
- Utilizes standard Crosby A-323 Alloy Eye Grab Hooks.
- New design “one piece” forged handle.
- Continuous take-up feature provides finite adjustment to tie down load.
- One piece assembly, no bolts or nuts to loosen.
- Ratchet spring is rust proofed.
- All load bearing or holding parts forged.
- Easy operating positive ratchet.
- Binders shown with Proof Loads have been individually proof tested to values shown, prior to shipment.
- Meets or exceeds requirements of US DOT FMCSA Part 393 Subpart I.



**L-140  
Ratchet Type  
Load Binder**



**L-140 Standard Ratchet Type Load Binders**

(Meets or exceeds requirements of US DOT FMCSA Part 393 Subpart I.)

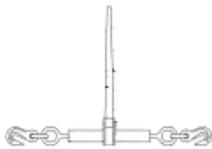
Model	Stock No.	Min-Max Chain Size (in)	Working Load Limit (lbs)*	Proof Load (lbs)	Weight Each (lbs)	Handle Length (in)	Barrel Length (in)	Take Up (in)	Dimensions (in)							
									A	B	C	E	E1	F	F1	G
R-7**	1048404	5/16-3/8	8800	17600	12.11	14	10	8	14	1.38	2.75	22.94	30.94	25.13	33.13	0.5
R-A**	1048422	3/8-1/2	15000	30000	14.7	14	10	8	14	1.38	2.75	25.25	33.25	27.63	35.63	0.63
R-C***	1048440	1/2-5/8	16000	32000	14.55	14	10	8	14	1.38	2.75	26.38	34.38	29.44	37.44	0.72

\* Ultimate Load is 3 times the Working Load Limit. \*\* Matches the Working Load Limit of Grade 100 chain for both sizes. \*\*\* Matches the Working Load Limit of Grade 100 chain for 1/2" size.



**GENERAL WARNINGS**

- Failure to use this load binder properly may result in serious injury or even death to you or others.
- Do not operate load binder while standing on the load.
- Move handle with caution. It may whip – Keep body clear.
- Keep yourself out of the path of the moving handle and any loose chain laying on the handle.
- You must be familiar with state and federal regulations regarding size and number of chain systems required for securing loads on trucks.
- Always consider the safety of nearby workers as well as yourself when using load binder.
- While under tension, load binder must not bear against an object, as this will cause side load.
- Do not throw these instructions away. Keep them close at hand and share them with any others who use this load binder.
- Do not use handle extender – see instructions.
- Do not attempt to close or open the binder with more than one person.



**Ratchet Type**



**Lever Snubbing Type**



**Lever Type**



**Lever Walking Type**

**Mechanical Advantage**

Lever Type Binder = 25 : 1  
Ratchet Type Binder = 50 : 1

**Lever Type:**

2500 (100 lbs. x 25) lbs. of force

**Ratchet Type:**

5000 (100 lbs. x 50) lbs. of force

**Example:** 100 pounds of effort applied to the binder results in the following force on the binder.

**INSTRUCTIONS - LEVER TYPE LOAD BINDERS**

- Hook load binder to chain so you can operate it while standing on the ground. Position load binder so its handle can be pulled downward to tighten chain (see photo). Be aware of ice, snow, rain, oil, etc. that can affect your footing. Make certain your footing is secure.
- The Crosby Group LLC specifically recommends AGAINST the use of a handle extender (cheater pipe). If sufficient leverage cannot be obtained using the lever type load binder by itself, a ratchet type binder should be used.
- If the above recommendation is disregarded and a cheater pipe is used, it must closely fit the handle and must slide down the handle until the handle projections are contacted. The pipe should be secured to the handle, for example, by a pin, so that the pipe cannot fly off the handle if you loose control and let go. The increased leverage, by using a cheater pipe, can cause deformation and failure of the chain and load binder.
- During and after tightening chain, check load binder handle position. Be sure it is in the locked position and that its bottom side touches the chain link.
- Chain tension may decrease due to load shifting during transport. To be sure the load binder remains in proper position: Secure handle to chain by wrapping the loose end of chain around the handle and the tight chain, or tie handle to chain with soft wire.
- When releasing load binder, remember there is a great deal of energy in the stretched chain. This will cause the load binder handle to move very quickly with great force when it is unlatched. Move handle with caution. It may whip – Keep body clear.
- Never use a cheater pipe or handle extender to release handle. Use a steel bar and pry under the handle and stay out of the path of handle as it moves upward.
- If you release the handle by hand, use an open hand under the handle and push upward. Do not close your hand around the handle. Always keep yourself out of the path of the moving handle.

**INSTRUCTIONS - RATCHET LOAD BINDERS**

- Position ratchet binder so it can be operated from the ground.
- Make sure your footing is secure.

**MAINTENANCE OF ALL LOAD BINDERS**

- Routinely check load binders for wear, bending, cracks, nicks, or gouges. If bending or cracks are present - Do not use load binder.
- Routinely lubricate pivot and swivel points of Lever Binders, and pawl part and screw threads of Ratchet Binders to extend product life and reduce friction wear.