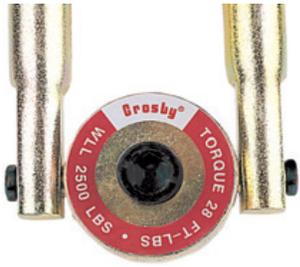
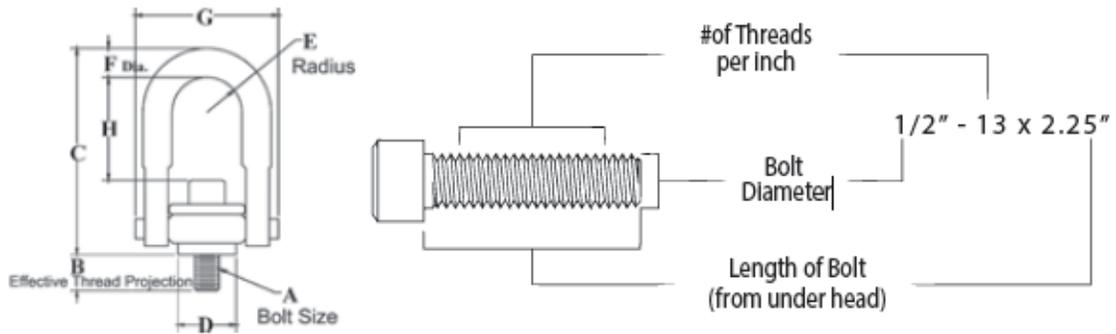


- Top washer has the following features:
 - The Working Load Limit and Recommended Torque value are permanently stamped into each washer.
 - Washer is color coded for easy identification: Red - UNC thread.
- Individually Proof Tested to 2-1/2 times Working Load Limit.
- Bolt specification is an Alloy socket head cap screw to ASTM A 574.
- All threads listed are UNC.
- **BOLT SIZE IDENTIFICATION:** The size of the bolt will be stated as in the drawing above. Illustration shows meaning of each dimension given.
- NOTE: For special applications or alternate bolt lengths available upon request
- Frame 2 and larger are **RFID EQUIPPED**.



HR-125 SWIVEL HOIST RING



HR-125 UNC Threads

Frame Size No.	HR-125 Stock No.	Working Load Limit (lb)*	Torque in (ft * lbf)	Bolt Size A ‡	Effective Thread Projection Length B	Dimensions (in)						Weight Each (lb)
						C	D	Radius E	Diameter F	G	H	
1†	1016887	800	7	5/16 - 18 x 1.50	0.58	2.72	0.97	0.46	0.34	1.87	1.12	0.37
1†	1016898	1000	12	3/8-16 x 1.50	0.58	2.72	0.97	0.46	0.34	1.87	1.05	0.39
2	1016909	2500	28	1/2 - 13 x 2.00	0.70	4.85	1.96	0.87	0.75	3.35	2.29	2.33
2†	1016912	2500	28	1/2 - 13 x 2.50	1.20	4.85	1.96	0.87	0.75	3.35	2.29	2.36
2	1016920	4000	60	5/8 - 11 x 2.00	0.70	4.85	1.96	0.87	0.75	3.35	2.16	2.41
2†	1016924	4000	60	5/8 - 11 x 2.75	1.45	4.85	1.96	0.87	0.75	3.35	2.16	2.47
2	1016931	5000	100	3/4 - 10 x 2.25	0.95	4.85	1.96	0.87	0.75	3.35	2.04	2.52
2†	1016935	5000	100	3/4 - 10 x 2.75	1.45	4.85	1.96	0.87	0.75	3.35	2.04	2.59
3	1016942	7000**	100	3/4 - 10 x 2.75	0.89	6.57	2.96	1.36	0.94	4.87	2.97	6.72
3†	1016946	7000**	100	3/4 - 10 x 3.50	1.64	6.57	2.96	1.36	0.94	4.87	2.97	6.81
3	1016953	8000	160	7/8 - 9 x 2.75	0.89	6.57	2.96	1.36	0.94	4.87	2.84	6.84
3†	1016957	8000	160	7/8 - 9 x 3.50	1.64	6.57	2.96	1.36	0.94	4.87	2.84	6.96
3	1016964	10000	230	1 - 8 x 3.00	1.14	6.57	2.96	1.36	0.94	4.87	2.72	7.09
3†	1016969	10000	230	1 - 8 x 4.00	2.14	6.57	2.96	1.36	0.94	4.87	2.72	7.31
4	1016975	15000	470	1-1/4 - 7 x 4.50	2.21	8.72	3.71	1.75	1.19	6.18	3.93	14.51
5	1016986	24000	800	1-1/2 - 6 x 6.75	3.00	12.55	4.71	2.39	1.75	8.48	5.52	37.73
5	1016997	30000	1100	2 - 4-1/2 x 6.75	3.00	12.55	4.71	2.39	1.75	8.48	5.02	40.69
6	1017001	50000	2100	2-1/2 - 4 x 8.0	4.00	16.88	5.75	3.00	2.25	11.00	8.03	88.00
7	1017005	75000	4300	3 - 4 x 10.5	5.00	19.50	6.45	3.75	2.75	14.16	8.50	166.00
8	1017009	100000	5100	3-1/2 - 4 x 13.0 #	7.00	22.09	7.75	4.00	3.25	15.91	9.28	265.00

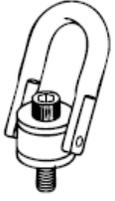
*Ultimate Load is 5 times the Working Load Limit.

** Ultimate Load is 4.5 times the Working Load Limit for 7000# Hoist Ring when tested in 90 degree orientation.

† Long Bolts are designed to be used with soft metal (i.e., aluminum) workpiece. While the long bolts may also be used with ferrous metal (i.e., steel & iron) workpiece, short bolts are designed for ferrous workpieces only.

‡ Bolt specification is an Alloy socket head cap screw to ASTM A 574.

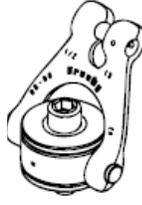
Hex head bolt used on Frame 8 (100,000lb.) Hoist Ring.



HR-125/SS-125
(Red Washer)
HR-125M
SS-125M
(Silver Washer)



HR-1000
(Red Washer)
HR-1000M
(Silver Washer)
HR-1000CT
(Blue Washer)



HR-125C



HR-125W

HOIST RING APPLICATION ASSEMBLY SAFETY

- Use swivel hoist ring only with a ferrous metal (steel, iron) or soft metal (i.e., aluminum) loads (workpiece). Do not leave threaded end of hoist ring in aluminum loads for long time periods due to corrosion.
- For subsea or marine environment applications, use the HR1000CT series Hoist Ring only. After determining the loads on each hoist ring, select the proper size hoist ring using the Working Load Limit ratings in Table 1, 2, 3, 5 and 6 for UNC threads and Table 4 and 7 for Metric threads.
- Drill and tap the workpiece to the correct size to a minimum depth of one-half the threaded shank diameter plus the threaded shank length. See rated load limit and bolt torque requirements imprinted on top of the swivel trunnion (See Table 1 through Table 7).
- Install hoist ring to recommended torque with a torque wrench making sure the bushing flange meets the load (workpiece) surface.
- Never use spacers between bushing flange and mounting surface.
- Always select proper load rated lifting device for use with Swivel Hoist Ring.
- Attach lifting device ensuring free fit to hoist ring bail (lifting ring) (Fig. 1).
- Apply partial load and check proper rotation and alignment. There should be no interference between load (workpiece) and hoist ring bail (Fig. 2).
- Special Note: When a Hoist Ring is installed with a retention nut, the nut must have a full thread engagement and must meet one of the following standards to develop the Working Load Limit (WLL).

1. ASTM A-563
(A) Grade D Hex Thick
(B) Grade DH Standard Hex

2. SAE Grade 8 — Standard Hex

HOIST RING INSPECTION/MAINTENANCE

- Always inspect hoist ring before use.
- Regularly inspect hoist ring parts (Fig.3).
- Never use hoist ring that shows signs of corrosion, wear or damage.
- Never use hoist ring if bail is bent or elongated.
- Always be sure threads on shank and receiving hole are clean, not damaged, and fit properly.
- Always check with torque wrench before using an already installed hoist ring.
- Always make sure there are no spacers (washers) used between bushing flange and the mounting surface. Remove any spacers (washers) and retorqued before use.
- Always ensure free movement of bail. The bail should pivot 180 degrees and swivel 360 degrees (Fig. 4).
- Prior to loading, ensure free movement of bail. The bail should pivot 180 degrees and swivel 360 degrees (Fig. 4).

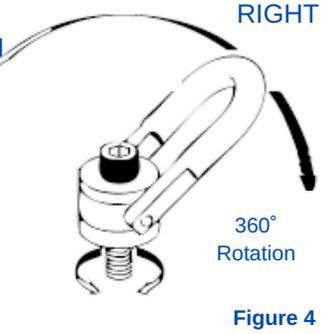
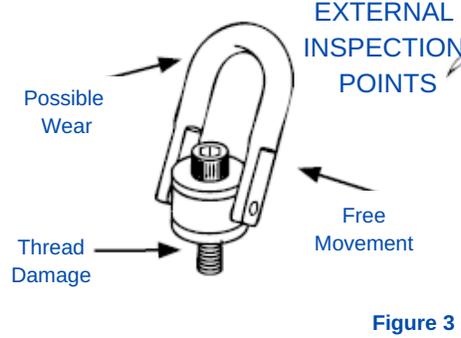
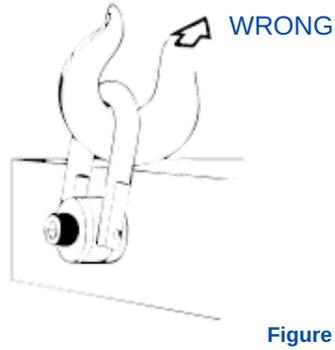
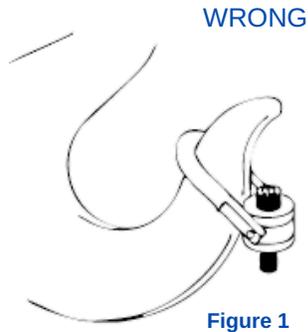
GENERAL WARNINGS

- Loads may slip or fall if proper Hoist Ring assembly and lifting procedures are not used.
- A falling load may cause serious injury or death.
- Install hoist ring bolt to torque requirements listed in tables 1, 2, 3, 4, 5, 6 & 7 for the HR125, HR-1000, HR125C, HR-1000CT, HR-125M, HR-1000M and HR125W, SS-125 and SS-125M respectively.
- Web sling HR-125W spool bolt must be securely tightened in place. The jam nut must then be securely tightened onto the connecting bolt, see Table 5, last column.
- Read, understand and follow all instructions and chart information.
- Do not use with damaged slings, chain, or webbing. For inspection criteria see ASME B30.9.
- Use only genuine Crosby parts as replacements.
- HR-125C chain connecting pin must be properly secured with the locking pin into the clevis ear.
- Before use tighten bolt first, then tighten nut (HR-125W).



OPERATING SAFETY

- Never exceed the capacity of the swivel hoist ring, see Tables 1, 2, 3, 5 and 6 for UNC threads and Tables 4 and 7 for Metric threads. (See next page for tables.)
- When using lifting slings of two or more legs, make sure the forces in the legs are calculated using the angle from the horizontal sling angle to the leg and select the proper size swivel hoist ring to allow for the angular forces.



Working Load Limit* 5:1 (lbs)	Hoist Ring Bolt Torque Ft Lbs †	Table 1 HR-125		HR-1000	
		Bolt Size ‡ (in)	Effective Thread Projection Length (in)	Bolt Size ‡ (in)	Effective Thread Projection Length (in)
800 ††	7	5/16 - 18 x 1.50	0.58	5/16 - 18 x 1.50	0.52
1000 ††	12	3/8 - 16 x 1.50	0.58	3/8 - 16 x 1.50	0.52
2500	28	1/2 - 13 x 2.00	0.70	1/2 - 13 x 2.25	0.69
2500 ††	28	1/2 - 13 x 2.50	1.20	1/2 - 13 x 2.75	1.19
4000	60	5/8 - 11 x 2.00	0.70	5/8 - 11 x 2.25	0.69
4000 ††	60	5/8 - 11 x 2.75	1.45	5/8 - 11 x 3.00	1.44
5000	100	3/4 - 10 x 2.25	0.95	3/4 - 10 x 2.50	0.94
5000 ††	100	3/4 - 10 x 2.75	1.45	3/4 - 10 x 3.00	1.44
7000 Ω	100	3/4 - 10 x 2.75	0.89	3/4 - 10 x 3.00	0.85
7000 †† Ω	100	3/4 - 10 x 3.50	1.64	3/4 - 10 x 3.50	1.35
8000	160	7/8 - 9 x 2.75	0.89	7/8 - 9 x 3.00	0.85
8000 ††	160	7/8 - 9 x 3.50	1.64	7/8 - 9 x 3.50	1.35
10000	230	1 - 8 x 3.00	1.14	1 - 8 x 3.50	1.35
10000 ††	230	1 - 8 x 4.00	2.14	1 - 8 x 4.50	2.35
15000	470	1-1/4 - 7 x 4.50	2.21	1-1/4 - 7 x 5.00	2.09
24000	800	1-1/2 - 6 x 6.75	2.97	1-1/2 - 6 x 5.50	2.59
30000	1100	2 - 4-1/2 x 6.75	2.97	-	-
50000	2100	2-1/2 - 4 x 8.00	4.00	-	-
75000	4300	3 - 4 x 10.50	5.00	-	-
100000	5100	3-1/2 - 4 x 13.00	7.00	-	-

* Ultimate load is 5 times the Working Load Limit. Individually proof tested to 2-1/2 times the Working Load Limit.

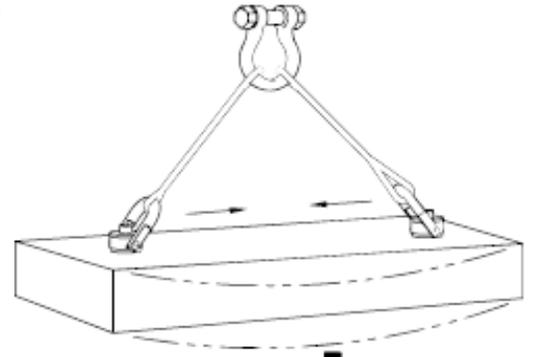
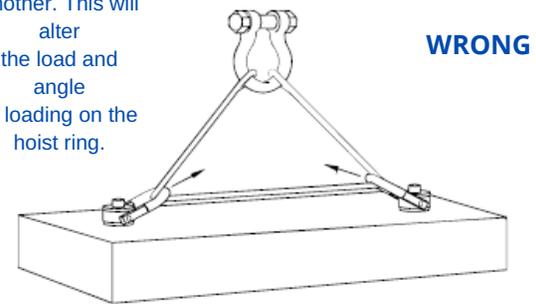
†† Long bolts are designed to be used with soft metal (i.e., aluminum) workpiece. While the long bolts may also be used with ferrous metal (i.e., steel & iron) workpieces, short bolts are designed for ferrous workpieces only.

‡ Bolt specification is a Alloy socket head cap screw to ASTM A574. All threads are UNC.

Ω Ultimate Load is 4.5 times Working Load Limit for 7000# Hoist Ring when Tested in 90° orientation. All sizes are individually proof tested to 2-1/2 times the Working Load Limit.

*, †, ††, ‡ (See footnote at bottom of Table 5).

Do not reeve slings **WRONG** from one bail to another. This will alter the load and angle of loading on the hoist ring.



After slings have been properly attached to the hoist ring, apply force slowly. Watch the load and be prepared to stop applying force if the load starts buckling.

Buckling may occur if the load is not stiff enough to resist the compressive forces which result from the angular loading.