



L-320CN Eye Hook



L-320C Eye Hook

**All Crosby L-320 Eye Hoist Hooks incorporate the following features:**

- The most complete line of Eye hoist hooks.
- Available in carbon steel and alloy steel.
- Designed with a 5:1 Design Factor for (Carbon Steel); 4.5:1 Design Factor for 30t - 60t (Alloy Steel).
- Eye hooks are load rated.
- Proper design, careful forging and precision controlled quenched and tempering give maximum strength without excessive weight and bulk.
- Every Crosby Eye Hook is equipped with a latch. Even years after purchase of the original hook, latch assemblies can be added.
- Chemical analysis and tensile tests performed on each PIC to verify chemistry and mechanical properties.
- Type Approval certification in accordance with ABS 2016 Steel Vessel and Guide for Certification of Lifting Appliances 2016 available. Certificates available when requested at time of order and may include additional charges.
- Meets ASME B30.10
- Hoist hooks incorporate two types of strategically placed markings forged into the product which address two (2) **QUIC-CHECK®** features:
- Deformation Indicators and Angle Indicators (see following page for detailed definition)

**The following additional features have been incorporated in the new Crosby L-320N Eye Hoist Hooks. (Sizes 3/4 metric ton Carbon through 22 metric ton Alloy.)**

- Metric Rated at 5:1 Design Factor for (Carbon Steel); 5:1 Design Factor for 1t - 22t (Alloy Steel).
- Can be proof tested to 2 times the Working Load Limit.
- Low profile hook tip
- New integrated latch (S-4320) meets the world-class standard for lifting.
  - Heavy duty stamped latch interlocks with the hook tip.
  - High cycle, long life spring.
  - When secured with proper cotter pin through the hole in the tip of hook, meets the intent of OSHA Rule 1926.1431(g) and 1926.1501(g) for personnel hoisting.

**L-320N / L-320 Eye Hooks**

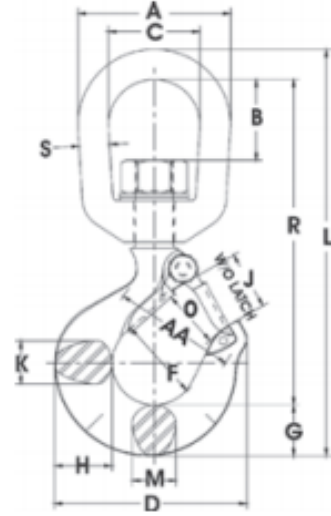
Working Load Limit (t)		Eye Hook Stock No.				Replacement Latch Kits			
Carbon	Alloy	Hook ID Code	Carbon L-320C L-320CN S.C.	Carbon GL-320CN Galv.	Alloy L-320A L-320AN S.C.	Weight Each (lb)	S-4320 Stock No.	PL Stock No.	SS-4055 Stock No.
3/4	1	†D	1022205	1022208	1022380	0.61	1096325	-	-
1	1-1/2	†F	1022216	1022219	1022391	0.89	1096374	-	-
1-1/2	2	†G	1022227	1022230	1022402	1.44	1096421	-	-
2	3	†H	1022238	1022241	1022413	2.07	1096468	-	-
3	5	†I	1022246	1022249	1022424	4.30	1096515	1092000	-
5	7	†J	1022260	1022262	1022435	8.30	1096562	1092001	-
7-1/2	11	†K	1022271	1022274	1022446	15.00	1096609	1092002	-
10	15	†L	1022282	1022285	1022457	20.77	1096657	1092003	-
15	22	†N	1022293	1022296	1022468	39.50	1096704	1092004	-
20	30	O	1022302	-	1022477	60.00	-	1093716	1090161
25	37	P	1023306	-	1023565	105.00	-	1093717	1090189
30	45	S	1023324	-	1023583	148.00	-	1093718	1090189
40	60	T	1023342	-	1023609	228.00	-	1093719	1090205

\*Eye Hooks (3/4 TC - 22TA), Proof load is 2 times Working Load Limit. Eye Hooks (20 TC - 60TA). All carbon hooks-average straightening load (ultimate load) is 5 times Working Load Limit. Alloy eye hooks 1 ton through 22 ton-average straightening load (ultimate load) is 5 times Working Load Limit. Alloy eye hooks 30 tons through 60 tons-average straightening load (ultimate load) is 4.5 times Working Load Limit. † New 320N style hook.



**L-322CN / L-322AN**  
(L-322AN Shown)

- Forged - Quenched and Tempered.
  - Swivel hooks are load rated.
  - Proper design, careful forging, and precision controlled quench and tempering gives maximum strength without excessive weight and bulk.
  - Low profile hook tip designed to utilize Crosby S-4320 or PL-N latch kit. Simply purchase the latch assemblies. Even years after purchase of the original hook, latch assemblies can be added.
  - Hoist hooks incorporate markings forged into the product which address two (2) **QUIC-CHECK®** features:
    - **Deformation Indicators** -- Two strategically placed marks, one just below the shank or eye and the other on the hook tip, which allows for a QUIC-CHECK® measurement to determine if the throat opening has changed, thus indicating abuse or overload.
    - **Angle Indicators** — Indicates the maximum included angle which is allowed between two (2) sling legs in the hook. These indicators also provide the opportunity to approximate other included angles between two sling legs.
  - Type Approval certification in accordance with ABS 2016 Steel Vessel Rules and ABS Guide for Certification of Lifting Appliances 2016 available. Certificates available when requested at time of order and may include additional charges.
- This hook is a positioning device and is not intended to rotate under load



## L-322CN & L-322AN Swivel Hooks

Working Load Limit (t)*		Dimensions (mm)																			
Carbon	Alloy	L-322CN Stock No.	L-322AN Stock No.	Weight Each (lbs)	A	B	C	D	F	G	H	J	K	L	M	O †	R	S	AA	Rep. Latch Stock No.	
3/4	1	1048603	1048807	.75	2.00	.82	1.25	2.86	1.25	.73	.81	.93	.63	5.66	.63	.89	4.55	.38	1.50	1096325	
1	1-1/2	1048612	1048816	1.25	2.50	1.31	1.50	3.15	1.38	.84	.94	.97	.71	6.71	.71	.91	5.37	.50	2.00	1096374	
1-1/2	2	1048621	1048825	2.25	3.00	1.50	1.75	3.59	1.50	1.00	1.16	1.06	.88	7.75	.88	1.00	6.12	.63	2.00	1096421	
2	3	1048630	1048834	2.30	3.00	1.50	1.75	4.00	1.62	1.13	1.31	1.19	.94	8.25	.94	1.09	6.50	.63	2.00	1096468	
3	5	1048639	1048840	4.96	3.50	1.64	2.00	4.84	2.00	1.44	1.63	1.50	1.31	9.69	1.13	1.36	7.50	.75	2.50	1096515	
5	7	1048648	1048859	10.29	4.56	2.29	2.50	6.28	2.50	1.81	2.06	1.78	1.66	12.47	1.44	1.61	9.63	1.00	3.00	1096562	
7-1/2	11	1048657	1048868	19.40	5.00	2.53	2.75	7.54	3.00	2.25	2.63	2.41	1.88	14.75	1.63	2.08	11.37	1.13	4.00	1096609	
10	15	1048666	1048880	23.25	5.62	2.48	3.12	8.34	3.25	2.59	2.94	2.62	2.19	16.40	1.94	2.27	12.25	1.25	4.00	1096657	
15	22	1048675	1048889	47.00	7.10	3.76	4.10	10.34	4.25	3.00	3.50	3.41	2.69	21.34	2.38	3.02	16.71	1.50	5.00	1096704	
-	30	-	-	70.50	7.10	3.76	4.10	13.62	5.00	3.61	4.63	4.00	3.00	23.25	3.00	3.25	18.01	1.50	6.50	1093716	

\* Carbon swivel hooks .75tC-15tC: proof load is 2 times working load limit. Designed with a 5 to 1 safety factor. Alloy swivel hooks 1tA - 30tA : proof load is 2.5 times working load limit. Designed with a 4 to 1 safety factor. Alloy swivel hook 30tA: proof load is 2 times working load limit. Designed with a 4 to 1 design factor. † Dimensions for hooks 3/4t carbon thru 22t alloy are for S-4320 latch kits. Dimensions for hooks 30t alloy are for 4055 latch kit.



Suitable for infrequent, non-continuous rotation under load. Use in corrosive environment requires shank and nut inspection in accordance with ASME B30.10-1.10.4(b)(5)(c).

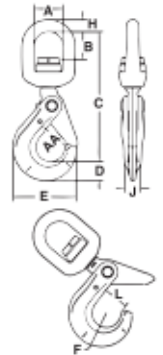
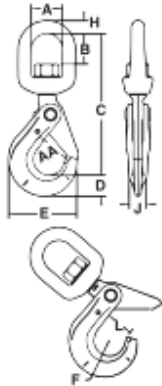


**S-1326 SWIVEL HOOK**

- Forged Alloy Steel - Quenched and Tempered.
- Individually Proof Tested at 2-1/2 times the Chain Working Load Limit with certification
- Recessed trigger design is flush with the hook bod , protecting the trigger from potential damage.
  - Easy to operate with enlarged thumb access.
- Positive Lock Latch is Self-Locking when hook is loaded.
- Rated for both Wire Rope and use with Grade 80/100 Chain or G-411 Standard Th
- G-414 Heavy Thimble or G-411 Standard Thimble should be used with wire rope slings.
- Trigger Repair Kit available (S-4316). Consists of spring, roll pin and trigger.
- S-13326 Swivel Hook utilizes anti-friction bearing design which allows hook to rotate freely under load.
- Fatigue rated.
- The SHUR-LOC® hook, if properly installed and locked, can be used for personnel lifting applications and meets the intent of OSHA Rule 1926.1431(g)(1)(i)(A) and 1926.1501(g)(4)(iv)(B).
- "Look for the Platinum Color – Crosby Grade 100 Alloy Products."



**S-13326 SWIVEL HOOK WITH BEARING**



### S-1326 SHUR-LOC® Swivel Hooks

Suitable for infrequent, non-continuous rotation under load

Chain Size							Dimensions (mm)										
(in)	(mm)	Frame Code	Grade 100 Alloy Chain Working Load Limit (lb) 4:1*	Working Load Limit (lb) 5:1*	S-1326 Stock No.	Weight Each (lb)	A	B	C	D	E	F	H	J	L	AA**	
-	6	D	3200	2560	1004304	1.26	1.50	1.32	6.13	0.79	2.60	0.67	0.50	0.63	1.13	1.50	
1/4 - 5/16	7 - 8	G	5700	4560	1004313	2.62	1.75	1.59	7.60	1.10	3.50	0.87	0.63	0.81	1.38	2.00	
3/8	10	H	8800	7040	1004322	4.70	2.00	1.73	8.83	1.17	4.39	1.10	0.75	0.94	1.75	2.50	
1/2	13	I	15000	12000	1004331	8.64	2.50	2.38	11.20	1.67	5.45	1.26	1.00	1.16	2.11	3.00	
5/8	16	-	22600	18000	1004340	17.00	2.75	2.70	12.90	2.05	6.56	1.50	1.13	1.50	2.49	3.50	
3/4	18 - 20	-	35300	28240	1004349	24.00	2.83	2.52	14.10	2.22	7.76	2.01	1.10	2.03	3.52	5.00	
7/8	22	-	42700	34160	1004358	29.00	3.44	3.19	16.40	2.45	8.75	2.26	1.30	2.20	3.83	6.00	

\*Ultimate Load is 4 times the Working Load Limit. \*\* Deformation Indicators.

### S-13326 SHUR-LOC® Swivel Hooks with Bearing

Suitable for frequent rotation under load

Chain Size							Dimensions (mm)									
(in)	(mm)	Frame Code	Grade 100 Alloy Chain Working Load Limit (lb) 4:1*	Working Load Limit (lb) 5:1*	S-13326 Stock No.	Weight Each (lb)	A	B	C	D	E	F	H	J	L	AA**
-	6	D	3200	2560	1004404	1.50	1.50	1.14	6.17	0.79	2.60	0.67	0.50	0.63	1.13	1.50
1/4 - 5/16	7 - 8	G	5700	4560	1004413	3.10	1.75	1.52	7.54	1.10	3.50	0.87	0.63	0.81	1.44	2.00
3/8	10	H	8800	7040	1004422	5.26	2.00	1.61	8.88	1.16	4.35	1.10	0.75	0.94	1.83	2.50
1/2	13	I	15000	12000	1004431	11.22	2.50	2.03	11.11	1.66	5.45	1.26	1.00	1.16	2.19	3.00
5/8	16	-	22600	18000	1004440	17.32	2.75	2.25	12.90	2.05	6.56	1.50	1.13	1.50	2.61	3.50

\*Ultimate Load is 4 times the Working Load Limit. \*\* Deformation Indicators.



Use in corrosive environment requires shank and nut inspection in accordance with ASME B 30.10-1.10.4 (b)(5)(c) 2019. The S-1326 hook is a positioning device and is not intended to rotate under load. For swivel hook designed to rotate under load, use the S-13326.



S-377 BARREL HOOKS

- Forged Carbon Steel - Quenched and Tempered.
- Meets the performance requirements of Federal Specification RR-C-271G, Type V, Class 6, except for those provisions required of the contractor.

### S-377 Barrel Hooks

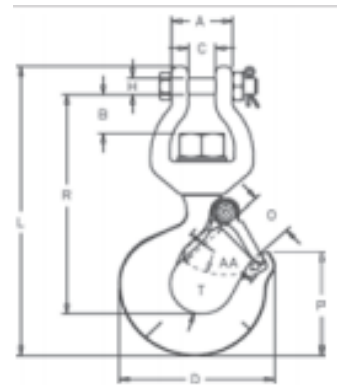
Working Load Limit Per Pair (Tons)*	S-377 Stock No. Per Pair	Weight Each Per Pair (lb)	I.D. of Eye	Dimensions (in)		
				O.D. of Eye	Overall Length	Width of Lip
1	1028248	3.56	1.56	2.81	5.00	2.88

\*Ultimate Load is 4 times the Working Load Limit.



S-3316 REPLACEMENT HOOKS

- Easily attaches to any chain and electric hoist with welded link load chain, roller chain or wire rope with suitable end fitting
- Swivel jaw is forged.
- Suitable for infrequent, non-continuous rotation under load.
- Use in corrosive environment requires shank and nut inspection in accordance with ASME B30.10-1.10.4(b)(5)(c).



### S-3316 Replacement Hooks

Working Load Limit (Tons)*	Frame Code	S-3316 Stock No.	Weight Each (lb)	Dimensions (in)										Replacement Latch Kit Stock No.
				A	B	C	D	H	L	O	P	R	T	
1/2	F	1023029	1.25	1.31	0.76	0.56	3.19	0.38	6.12	0.97	2.25	4.59	0.81	1096374
1	H	1023047	2.61	1.56	1.00	0.69	4.09	0.44	7.69	1.12	2.84	5.81	1.19	1096468

\*Ultimate Load is 5 times the Working Load Limit.



A-378 SORTING HOOKS

- Forged Alloy Steel Quenched and Tempered.
- Deep straight throat permits efficient handling of flat plates or large cylindrical shapes.

### A-378 Sorting Hooks

Working Load Limit at tip of Hook (Tons)*	Working Load Limit at bottom of Hook (Tons)*	A-378 Stock No	Style	Weight Each (lb)	I.D. of Eye	Dimensions (in)			Radius at bottom of Hook
						Overall Length	Opening at top of Hook		
2	7-1/2	1028024	No Handle	6.42	1.38	9.69	2.81		0.625
2	7-1/2	1028033	With Handle	6.42	1.38	9.69	2.81		0.625

\*Ultimate Load is 4 times the Working Load Limit.







**S-320 Series**



**S-319 Series**



**S-322 Series  
Positioning Only**



**S-3322B Series**

### **WARNING**

- Loads may disengage from hook if proper procedures are not followed.
- A falling load may cause serious injury or death.
- See OSHA Rule 1926.1431(g)(1)(i)(A) and 1926.1501(g)(4)(iv)(B) for personnel hoisting by cranes and derricks, and OSHA Directive CPL 2-1.36 - Interim Inspection Procedures During Communication Tower Construction Activities. A Crosby 319, 320 or 322 hook with a PL latch attached and secured with a bolt, nut and cotter pin (or toggle pin) may be used for lifting personnel. A Crosby 319N, 320N or 322N hook with an S-4320 latch attached and secured with cotter pin or bolt, nut and pin; or a PL-N latch attached and secured with toggle pin may be used for lifting personnel. A hook with a Crosby SS-4055 latch attached shall NOT be used for personnel lifting.
- See OSHA Directive CPL 2-1.36 - Crosby does not recommend the placement of lanyards directly into the positive locking Crosby hook when hoisting personnel. Crosby requires that all suspension systems (vertical lifelines / lanyard) shall be gathered at the positive locked load hook by use of a master link, or a bolt-type shackle secured with cotter pin.
- Threads or Split-Nut may corrode and/or strip and drop the load.
- Remove securement nut to inspect or to replace S-322 and S-3319 bearing washers (2).
- Hook must always support the load. The load must never be supported by the latch.
- Never apply more force than the hook's assigned Working Load Limit (WLL) rating.
- Read and understand these instructions before using hook.

**QUIC-CHECK®** Hoist hooks incorporate markings forged into the product which address two (2) QUIC-CHECK® features:  
**Deformation Indicators** - Two strategically placed marks, one just below the shank or eye and the other on the hook tip, which allows for a

**QUIC-CHECK®** measurement to determine if the throat opening has changed, thus indicating abuse or overload.

**To check**, use a measuring device (i.e., tape measure) to measure the distance between the marks. The marks should align to either an inch or half-inch increment on the measuring device. If the measurement does not meet criteria, the hook should be inspected further for possible damage.

**Angle Indicators** - Indicates the maximum included angle which is allowed between two (2) sling legs in the hook. These indicators also provide the opportunity to approximate other included angles between two sling legs.

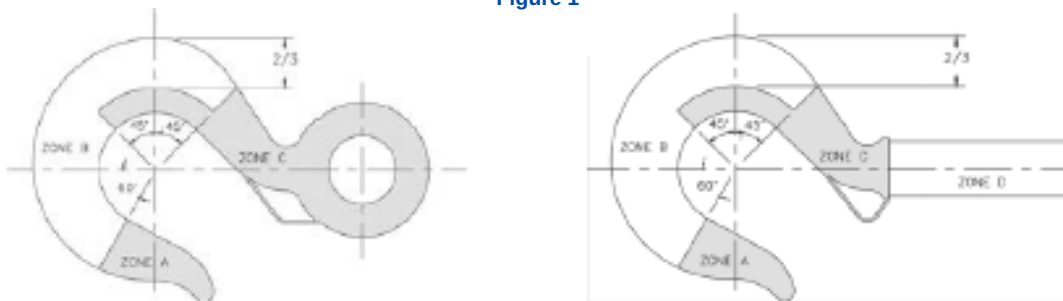
### **IMPORTANT SAFETY INFORMATION – READ AND FOLLOW**

- A visual periodic inspection for cracks, nicks, wear, gouges and deformation as part of a comprehensive documented inspection program, should be conducted by trained personnel in compliance with the schedule in ANSI B30.10.
- For hooks used in frequent load cycles or pulsating loads, the hook and threads should be periodically inspected by Magnetic Particle or Dye Penetrant. (Note: Some disassembly may be required.)
- Never use a hook whose throat opening has been increased, or whose tip has been bent more than 10 degrees out of plane from the hook body, or is in any other way distorted or bent. Note: A latch will not work properly on a hook with a bent or worn tip.
- Never use a hook that is worn beyond the limits shown in Figure 1.
- Remove from service any hook with a crack, nick, or gouge. Hooks with a nick or gouge shall be repaired by grinding lengthwise, following the contour of the hook, provided that the reduced dimension is within the limits shown in Figure 1. Contact Crosby Engineering to evaluate any crack.
- Remove from service any hook which has threads corroded more than 20% of the nut engagement length.
- Never repair, alter, rework, or reshape a hook by welding, heating, burning, or bending.
- Never side load, back load, or tip load a hook. (Side loading, back loading and tip loading are conditions that damage and reduce the capacity of the hook). (See Figure 2.)
- Eye hooks, shank hooks and swivel hooks are designed to be used with wire rope or chain. Efficiency of assembly may be reduced when used with synthetic material.
- Do not swivel the S-322 or S-3319 swivel hooks while supporting a load. These hooks are distinguishable by hex nuts and flat washers.



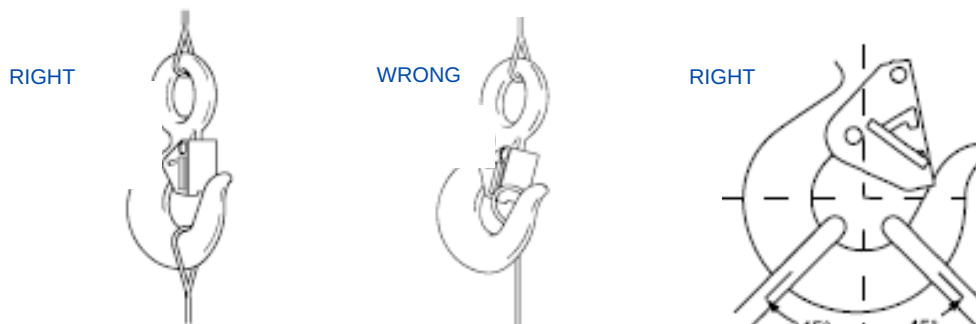
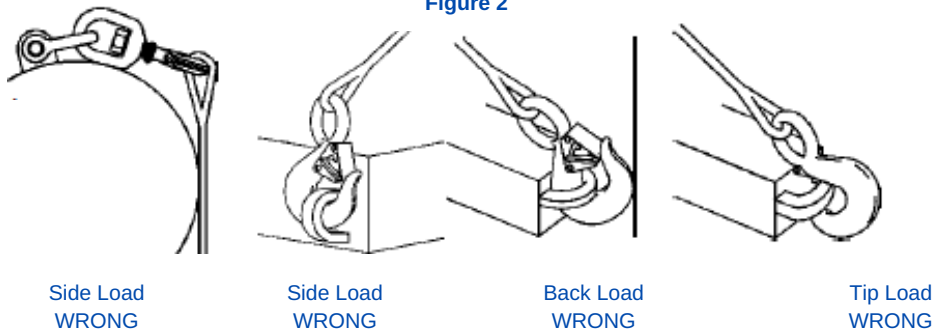
- The S-3322 swivel hook is designed to rotate under load. The S-3322 is distinguishable from the S-322 by use of a round nut designed to shield bearing.
- The frequency of bearing lubrication on the S-3322 depends upon frequency and period of product use as well as environmental conditions, which are contingent upon the user's good judgement.
- The use of a latch may be mandatory by regulations or safety codes; e.g., OSHA, MSHA, ANSI/ASME B30, Insurance, etc.. (Note: When using latches, see instructions in "Understanding: The Crosby Group Warnings" for further information.)
- Always make sure the hook supports the load. (See Figure 3). The latch must never support the load (See Figure 4).
- When placing two (2) sling legs in hook, make sure the angle from the vertical to the outermost leg is not greater than 45 degrees, and the included angle between the legs does not exceed 90 degrees\* (See Figure 5).
- Reference Crosby's Hoist Hook Warning and Application Information for basic machining and minimum thread size.
- See ANSI/ASME B30.10 "Hooks" for additional information.

**Figure 1**



ZONE A: REPAIR NOT REQUIRED  
ZONE B: 10% OF ORIGINAL DIMENSION  
ZONE C: 5% OF ORIGINAL DIMENSION  
ZONE D: SEE MINIMUM THREAD SIZE CHART

**Figure 2**



**Figure 3**

**Figure 4**

**Figure 5**

\* For two legged slings with angles greater than 90 degrees, use an intermediate link such as a master link or bolt type shackle to collect the legs of the slings. The intermediate link can be placed over the hook to provide an in-line load on the hook. This approach must also be used when using slings with three or more legs.



**REMOVAL OF SPLIT-NUT ASSEMBLY  
(REFERENCE FIGURE A):**

- Remove vinyl cover.
- Remove spring retaining ring.
- Slide steel keeper ring off split nuts Removal of keeper ring will allow split nut halves to fall from hook shank).
- Remove split nut halves.

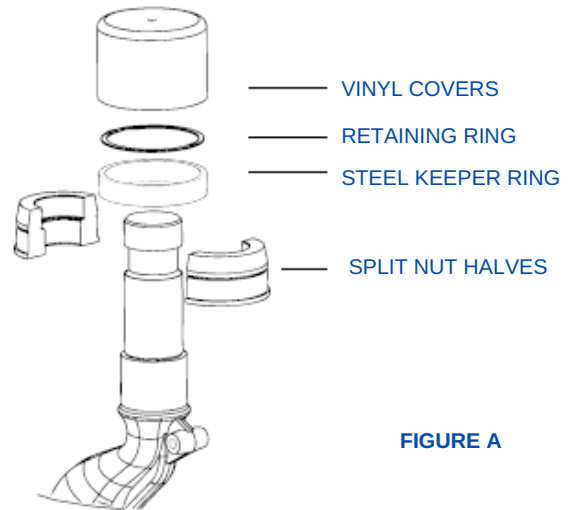
**INSPECTION OF SPLIT NUT ASSEMBLY AND HOOK SHANK  
INTERFACE AREA (REFERENCE FIGURE B):**

- Inspect hook shank and split nut for signs of deformation on and adjacent to the load bearing surfaces.
- Inspect outside corner of hook shank load bearing surface to verify the corner is sharp.
- Verify retaining ring groove will allow proper seating of the retaining ring.
- Inspect retaining ring for corrosion or deformation. Remove from service any retaining ring that has excessive corrosion or is deformed.
- Use fine grit emery or crocus cloth to remove any corrosion from machined hook shank and split nut assembly.
- Follow inspection recommendations listed in this document under IMPORTANT SAFETY INFORMATION.
- If corrosion is present on the nut / shank interface area and deterioration or degradation of the metal components is evident, further inspection is required.
- The use of a feeler gauge is required to properly measure the maximum allowable gap width between the split nut inside diameters and shank outside diameters.
- With one split nut half seated against the hook shank, push the nut to one side and measure the maximum gaps as shown in Figure B. The hook should be measured in four places, 90-degrees apart.
- Repeat above inspection procedure with other half of split nut.
- Remove from service any hook and split nut assembly that exhibits a gap greater than 0.030".

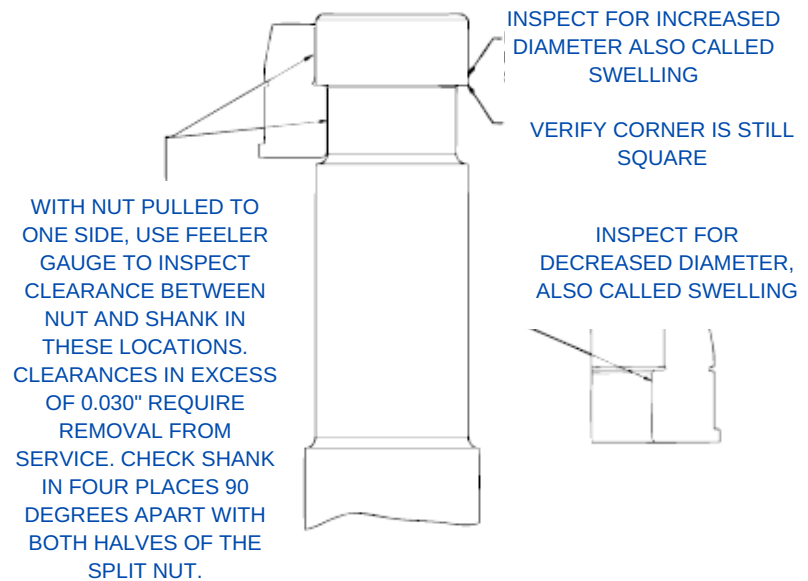
**INSTALLATION OF SPLIT NUT ASSEMBLY  
(REFERENCE FIGURE A):**

- Coat hook shank and inside of split nut with an anti-seize compound or heavy grease.
- Install split nut halves onto shank. The flanged bottom of the split nut should be closest to the hook shoulder.
- Slide steel keeper ring over split nut halves. Verify the split nut halves properly seat against the load bearing surface of the hook shank and the steel keeper ring seats against the flange of the split nut.
- Install retaining ring onto split nut halves. Verify the retaining ring seats properly in the retaining ring groove on the outside diameter of the split nut assembly.

- Install vinyl cover over split nut and hook shank assembly.
- Verify all fasteners are correctly installed.
- Always use Genuine Crosby replacement parts.



**FIGURE A**

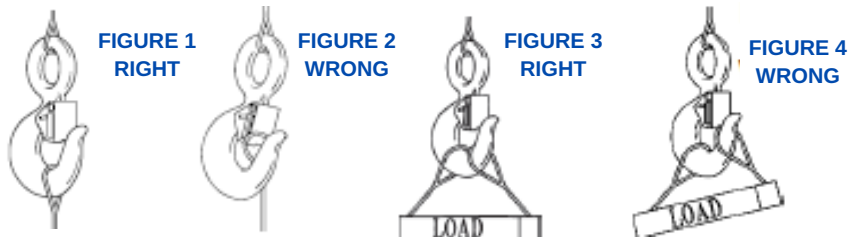


**FIGURE B**



**IMPORTANT SAFETY INFORMATION - READ & FOLLOW**

- Always inspect hook and latch before using.
- Never use a latch that is distorted or bent.
- Always make sure spring will force the latch against the tip of the hook.
- Always make sure hook supports the load. The latch must never support the load. (See Figure 1 & 2)
- When placing two (2) sling legs in hooks, make sure the angle between the legs is less than 90° and if the hook or load is tilted, nothing bears against the bottom of this latch. (See Figures 3 & 4)
- Latches are intended to retain loose sling or devices under slack conditions.
- Latches are not intended to be an anti-fouling device.



**GENERAL WARNINGS**

- Loads may disengage from hook if proper procedures are not followed.
- A falling load may cause serious injury or death.
- See OSHA Rule 1926.1431(g)(1)(i)(A) and 1926.1501(g)(4)(iv)(B) for personnel hoisting for cranes and derricks. Only a Crosby or McKissick hook with a PL Latch attached and secured with bolt, nut and cotter (or Crosby Toggle Pin) or a Crosby hook with a S-4320 Latch attached and secured with a cotter pin, or a Crosby SHUR-LOC® hook in the locked position may be used for any personnel hoisting. A hook with a Crosby SS-4055 latch attached shall NOT be used for personnel lifting.
- Hook must always support the load. The load must never be supported by the latch.
- DO NOT use this latch in applications requiring nonsparking.
- Read and understand these instructions before using hook and latch.





**S-1316A**



**S-1317**



**S-1318A**



**S-1326A**



**S-13326A**



**S-13326AH**



**S-1316AH**

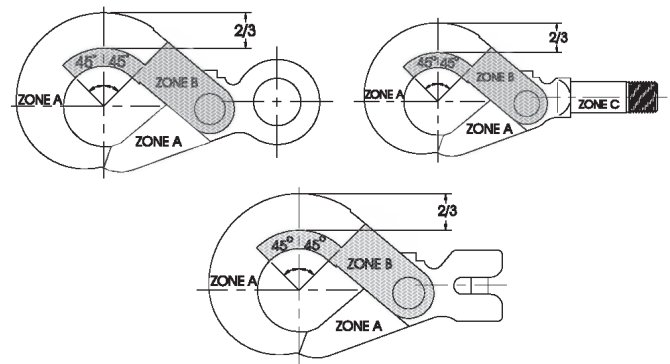
### IMPORTANT SAFETY INFORMATION - READ & FOLLOW

- A visual periodic inspection for cracks, nicks, wear, gouges and deformation as part of a comprehensive documented inspection program, should be conducted by trained personnel in compliance with the schedule in ANSI B30.10.
- For hooks used in frequent load cycles, pulsating loads, or severe duty as defined by ASME B30.10, the hook and threads should be periodically inspected by Magnetic Particle or Dye Penetrant. (Note: Some disassembly may be required.)
- Never use a hook whose throat opening has been increased 5%, not to exceed 1/4" (6mm), or shows any visible apparent bend or twist from the plane of the unbent hook, or is in any other way distorted or bent. NOTE: A latch will not work properly on a hook with a bent or worn tip.
- Never use a hook that is worn beyond the limits shown in Figure 1.
- Remove from service any hook with a crack, nick, or gouge. Hooks with a nick, or gouge shall be repaired by grinding lengthwise, following the contour of the hook, provided that the reduced dimension is within the limits shown in Figure 1. Contact Crosby Engineering to evaluate any crack.
- Never repair, alter, rework, or reshape a hook by welding, heating, burning, or bending.
- Never side load, back load or tip load a hook. Side loading, back loading and tip loading are conditions that damage and reduce the capacity of the hook. (See Figure 2)
- S-1326A can be used for limited rotations under load, (infrequent, noncontinuous).
- Efficiency of synthetic sling material may be reduced when used in eye or bowl of hook.
- Always make sure the hook supports the load. (See Figure 3).
- Do not use hook tip for lifting (See Figure 4).

### WARNINGS

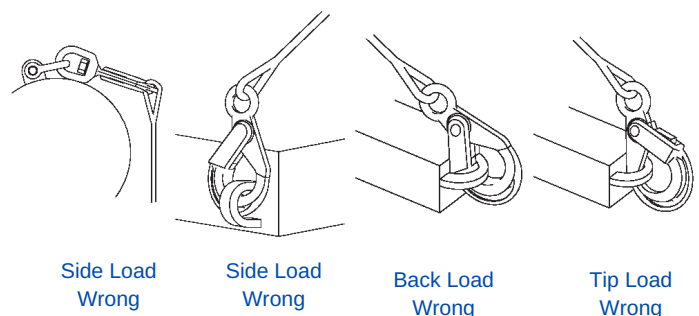
- Loads may disengage from hook if proper procedures are not followed.
- A falling load may cause serious injury or death.
- Positive locking latch will unlock when trigger is depressed. Never use hook unless hook and latch are fully closed and locked.
- Keep body parts clear of pinch point between hook tip and hook latch when closing.
- Keep hand(s) from between throat of hook and sling or other device.
- Do not use hook tip for lifting.
- Do not use hook handle for lifting.
- Shank threads may corrode and/or strip and drop the load.
- Remove securement nut to inspect threads for corrosion or to replace S-1326A bearing washers (2) and or S-13326 thrust bearing.
- Never apply more force than the hook's assigned Working Load Limit (WLL) rating.
- See OSHA Rule 1926.1431(g)(1)(i)(A) and 1926.1501(g)(4)(iv)(B) for personnel hoisting by cranes or derricks. A Crosby 1318A, 1326A, 13326, 1316A, or 1317A hook may be used for lifting personnel.
- Use only genuine Crosby parts as replacements.
- Read and understand these instructions before using hook.

**FIGURE 1**



ZONE A: 10% OF ORIGINAL DIMENSION  
ZONE B: 5% OF ORIGINAL DIMENSION  
ZONE C: SEE MINIMUM THREAD SIZE CHART

**FIGURE 2**



Side Load  
Wrong

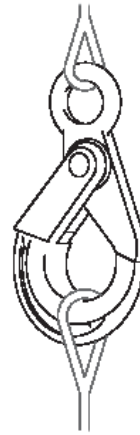
Side Load  
Wrong

Back Load  
Wrong

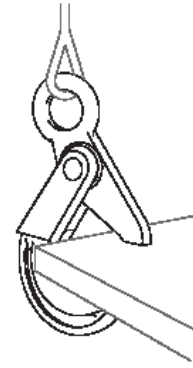
Tip Load  
Wrong



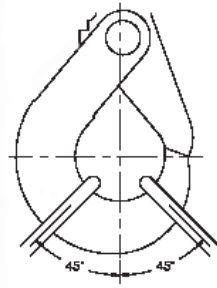
- When placing two (2) sling legs in hook, make sure the angle from vertical to the leg nearest the hook tip is not greater than 45 degrees, and the included angle between the legs does not exceed 90 degrees\* (See Figure 5).
- See ANSI/ASME B30.10 "Hooks" for additional information.  
\* For two legged slings with angles greater than 90°, use an intermediate link such as a master link or bolt type shackle to collect the legs of the slings. The intermediate link can then be placed over the hook to provide an in-line load on the hook. This approach must also be used when using slings with three or more legs.
- See ANSI/ASME B30.10 "Hooks" for additional information.
- The hook handle of the 1316AH is for manipulation only and not intended to carry a load.



**RIGHT**  
**FIGURE 3**



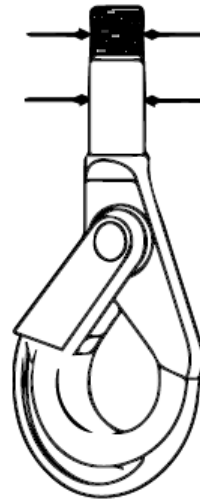
**WRONG**  
**FIGURE 4**



**RIGHT**  
**FIGURE 5**

**IMPORTANT BASIC MACHINING & THREAD INFORMATION:  
READ & FOLLOW**

- Wrong thread and/or shank size can cause stripping and loss of load.
- The maximum diameter is the largest diameter, after cleanup, that could be expected after allowing for straightness, pits, etc.
- All threads must be Class 2 or better.
- The minimum thread length engaged in the nut should not be less than one (1) thread diameter.
- Hook shanks are not intended to be swaged on wire rope or rod.
- Hook shanks are not intended to be drilled (length of shank) and internally threaded.
- Crosby cannot assume responsibility for, (A) the quality of machining, (B) the type of application, or (C) the means of attachment to the power source or load.
- Consult the Crosby Hook Identification & Working Load Limit Chart (See below) for the minimum thread size for assigned Working Load Limits (WLL).†
- Remove from service any Hook which has threads corroded more than 20% of the nut engaged length.



Minimum Thread Size

Maximum Shank Diameter

**Crosby Hook Identification & Working Load Limit Chart†**

S-1316A & S-1317A Only Grade 100 Chain			S-1318A, S-1326A				S-1318A Only††			
Chain Size		Working Load Limit (lbs)** 4:1	Grade 100 Chain		Working Load Limit (lbs)** 4:1	Wire Rope XXIP Mechanical Splice		Maximum Shank Diameter		Minimum Thread Size (in)
(in)	(mm)		(in)	(mm)		Wire Rope Size (in)	Working Load Limit (lbs)*5:1	(in)	(mm)	
-	6	3200	-	6	3200	5/16	2200	.72	18	5/8 - 11 UNC
1/4	7	4300	1/4	7 - 8	4300	7/16	4200	.94	24	5/8 - 11 UNC
5/16	8	5700	5/16	8	5700	7/16	4200	.94	24	3/4 - 10 UNC
3/8	10	8800	3/8	10	8800	1/2	5600	1.06	27	3/4 - 10 UNC
1/2	13	15000	1/2	13	15000	5/8	8600	1.19	30	1-1/8 - 7 UNC
5/8	16	22600	5/8	16	22600	7/8	16600	1.38	35	1-3/8 - 6 UNC
3/4	18/20	35300	3/4	18 - 20	35300	1	22000	-	-	-
7/8	22	42700	7/8	22	42700	1-1/8	26500	-	-	-
1	26	59700	1	26	59700	1-1/4	32500	-	-	-

\* Ultimate Load is 5 times the Working Load Limit based on XXIP Wire Rope. \*\* Ultimate Load is 4 times the Working Load Limit based on Grade 100 Chain.

† Working Load Limit - The maximum mass of force which the product is authorized to support in general service when the pull is applied in-line, unless noted otherwise, with respect to the centerline of the product. This term is used interchangeably with the following terms: 1. WLL, 2. Rated Load Value, 3. SWL, 4. Safe Working Load, 5. Resultant Safe Working Load.