the Crosby group®

Crosby RFID))) Equipped Products

"The Mark of Value Added
Intelligent Lifting Hardware"

Installation Instructions to Attach RFID Chips to Selected Crosby Products

Installation Instructions to Attach
RFID Chips to Selected Crosby Product
Table of Contents

Section 1 – RFID Chip Location Table

US Patent #7,825,770   1

Crosby Products - Factory Equipped (As shipped from Crosby Facilities)

Shackles

Product	Size Range	Tag Type	Location	Configuration
209	25t & Larger	TT-1 5/8" Plug	Pin, threaded end	D
210	25t & Larger	TT-1 5/8" Plug	Pin, threaded end	D
213	25t & Larger	TT-1 5/8" Plug	Pin, headed end	E
215	25t & Larger	TT-1 5/8" Plug	Pin, headed end	E
2130	25t & Larger	TT-1 5/8" Plug	Pin, headed end	A & B
2140	All	TT-1 5/8" Plug	Pin, headed end	A & B
2160	30t & Larger	TT-1 5/8" Plug	Pin, headed end	C

Chain & Accessories

Product	Size Range	Tag Type	Location	Configuration
1360	All	TT-4 12mm	Head of hinge pin	F
1361	All	TT-4 12mm	Head of hinge pin	F
1362	All	TT-4 12mm	Head of hinge pin	F

McKissick® Blocks/Overhaul Balls

Product	Size Range	Tag Type	Location	Configuration
RJ Drilling Blocks	All	TT-1 5/8" Plug	Load Plate	M
RP Drill Blocks	All	TT-1 5/8" Plug	Load Plate	M
TU480 - 484	All	TT-1 5/8" Plug	Sheave pin	G
70 Series	All	TT-1 5/8" Plug	Load Plate	M
80 Series	All	TT-1 5/8" Plug	Load Plate	M
380 Series	All	TT-1 5/8" Plug	Load Plate	J
380EZ	All	TT-1 5/8" Plug	Load Plate	J
381SY	All	TT-1 5/8" Plug	Load Plate	J
680 Series	All	TT-1 5/8" Plug	Load Plate	I
750 Series	All	TT-1 5/8" Plug	Sheave pin	K
UB500	All	TT-2 15mm Adhesive	Load Plate	L
UB550	All	TT-2 15mm Adhesive	Load Plate	L
401	All	TT-1 5/8" Plug	Sheave pin	G
402	All	TT-1 5/8" Plug	Sheave pin	G
404	–	TT-1 5/8" Plug	Sheave pin	G
406 All	4-1/2 and Larger	TT-1 5/8" Plug	Sheave pin	G
407	All	TT-1 5/8" Plug	Sheave pin	G
408, 409	All	TT-1 5/8" Plug	Sheave pin	G
416, 417	All	TT-1 5/8" Plug	Sheave pin	G
418, 419	4-1/2 and Larger	TT-1 5/8" Plug	Sheave pin	G
420, 421	All	TT-1 5/8" Plug	Sheave pin	G
422	–	TT-1 5/8" Plug	Sheave pin	G
430, 431	All	TT-1 5/8" Plug	Sheave pin	G
434, 435	All	TT-1 5/8" Plug	Sheave pin	G
491	All	TT-1 5/8" Plug	Sheave pin	H

Crosby® IP Clamps

Product	Size Range	Tag Type	Location	Configuration
IPU10	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IP10	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPNM10	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPHNM10	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPH10	All	TT-2 15mm Adhesive	Clamp body, between plates	N
PHTONNZ	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPHOZ	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPBC	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPHGZ	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPBKZ	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPVUZ	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPBHZ	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPBSNZ	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPTK	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPSTARTEC11	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPDV	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPVK	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPBUZ	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPSBUZ	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPBTO10	All	TT-2 15mm Adhesive	Clamp body, between plates	N
IPSC	All	TT-2 15mm Adhesive	Clamp body, by shackle	N

Crosby® Clamp-Co Clamps

Product	Size Range	Tag Type	Location	Configuration
PIPE GRABS	All	TT-2 15mm Adhesive	Clamp body, between plates	N
BEAM CLAMPS	All	TT-2 15mm Adhesive	Clamp body, between plates	N
BARRIER CLAMPS	All	TT-2 15mm Adhesive	Clamp body, between plates	N
CURB GRABS	All	TT-2 15mm Adhesive	Clamp body, between plates	N

Crosby® Hoist Rings

Product	Size Range	Tag Type	Location	Configuration
HR125	Frame 2 & Larger (pre-drilled @ Factory)	12mm	Barrel Body	O
HR125	Frame 1 & Larger (Field Installed - Not Pre-drilled @ Factory)	TT-6 Wire Rope Tag	Barrel Body	O
HR125M	Frame 2 & Larger (pre-drilled @ Factory)	12mm	Barrel Body	O
HR125M	Frame 1 & Larger (Field Installed - Not Pre-drilled @ Factory)	TT-6 Wire Rope tag	Barrel Body	O

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Shackles

Product	Size Range	Tag Type	Location	Configuration
209	6-1/2t to 9-1/2t	TT-4 12mm Chip	Pin, Threaded End	B1
209	12t to 25t	TT-1 5/8" Plug	Pin, Threaded End	D
209A	9-1/2 to 15t	TT-4 12mm Chip	Pin, Threaded End	B1
209A	18t to 21t	TT-1 5/8" Plug	Pin, Threaded End	D
210	12t to 25t	TT-1 5/8" Plug	Pin, Headed End	D
213	12t to 25t	TT-1 5/8" Plug	Pin, Headed End	E
215	12t to 25t	TT-1 5/8" Plug	Pin, Headed End	E
2130	2t to 9-1/2t	TT-4 12mm Chip	Pin, Headed End	B1
2130	12t to 25t	TT-1 5/8" Plug	Pin, Headed End	A & B
2150	12t to 25t	TT-1 5/8" Plug	Pin, Headed End	A
2160	18t	TT-1 5/8" Plug	Pin, Headed End	A & B

(Note: In some cases, the "RFID-Equipped" foil sticker may be too large for the mounting location. In these instances, the sticker must be trimmed to fit or omitted).

Section 2 - Installation Instructions

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TT-1 Installation Instructions for RFID Plug (PN 0115462)
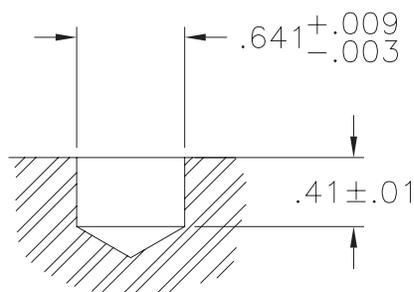## Field Installation on Existing Products

The Crosby Quic-Check RFID system is intended to be used with rigging, lifting and pulling equipment. Crosby allows the attachment of the RFID chip directly onto existing equipment. The chip shall be placed in the same area of the respective product as currently being provided from the factory. For additional information, contact Crosby Engineering at crosbyengr@thecrosbygroup.com, or call-1-800-772-1500.

The installation of the chip/plug consists of drilling a shallow hole to recess the plug, and gently pressing it into place.

Never drill into products used for lifting or pulling unless authorized by the manufacturer

1. Wear safety glasses during drilling and installation.
2. Select the proper location based on the attached RFID Chip Location Table, or as visually determined from respective factory equipped RFID products.
3. Drill a .641 inch (16.3 mm) diameter hole to a depth of .41 inch (10.4 mm) as shown in Figure 1. (Note: Hole depth with tolerance is critical.)
4. Prior to installation, make sure drilled hole and surrounding area is dry, and clean of grease, cutting oil, etc.
5. Gently install plug, open end down, into drilled hole. Note that it might require a mallet to fully install plug. If using a hammer, protect plug with a soft material. Remember that the plug contains an electronic circuit that can be damaged by excessive force or strikes.
6. When properly installed, the top of the plug will be flush with the surface of the product.
7. Place the yellow and black RFID sticker over the plug, centering as best as possible (*sticker may not fit smallest sizes*). Press firmly on the sticker to ensure that the adhesive sticks to the base material. The plug should be visible through the hole in the center of the sticker.
8. Program the installed RFID plug by simply scanning tag utilizing the Crosby Quic-Check Inspection and Identification system, InfoChip QC-Pro, or other RFID software systems utilizing high frequency technology.

Figure 1

$.641^{+.009}_{-.003}$

$.41\pm.01$

TT-2 Installation Instructions for RFID 15 mm Adhesive Tag (Kit PN 0115471)
Field Installation on Existing Products

The Crosby Quic-Check RFID system is intended to be used with rigging, lifting and pulling equipment. Crosby allows the attachment of the RFID chip directly onto existing equipment. The chip shall be placed in the same area of the respective product as currently being provided from the factory. For additional information, contact Crosby Engineering at crosbyengr@thecrosbygroup.com, or call 1-800-772-1500.

The installation of the tag consists of thoroughly cleaning the part, and firmly pressing the adhesive backed chip onto the part.

1. Select the proper location based on the attached RFID Chip Location Table, or as visually determined from respective factory equipped RFID products.
2. Thoroughly dry the area, and remove any grease, cutting oil, etc.
3. Remove adhesive backing and install tag by firmly pressing the tag against the cleaned area.
4. Place the yellow and black RFID sticker on the surface of the product in a visible area in the vicinity of the chip. Press firmly on the sticker to ensure that the adhesive sticks to the base material.
5. Program the installed RFID plug by simply scanning tag utilizing the Crosby Quic-Check Inspection and Identification system, InfoChip QC-Pro, or other RFID software systems utilizing high frequency technology.

TT-4 Installation Instructions for RFID 12 mm Tag (Kit PN 0115480)
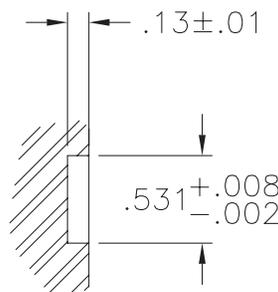## Field Installation on Existing Products and Other Equipment

When Cavity is Being Sealed with Sealant or Adhesive. The Crosby Quic-Check RFID system is intended to be used with rigging, lifting and pulling equipment. Crosby allows the attachment of the RFID chip directly onto existing equipment. The chip shall be placed in the same area of the respective product as currently being provided from the factory. For additional information, contact Crosby Engineering at crosbyengr@thecrosbygroup.com, or call-1-800-772-1500.

The installation of the chip/plug consists of drilling a shallow hole to recess the tag, placing tag in drilled hole, and covering the tag with suitable sealant or adhesive.

Never drill into products used for lifting or pulling unless authorized by the manufacturer.

1. Wear safety glasses during drilling and installation.
2. Select the proper location based on the attached RFID Chip Location Table, or as visually determined from respective factory equipped RFID products, or as authorized by the manufacturer.
3. Drill/mill a .500" (12.7 mm) diameter flat bottom hole to a depth of .13" (3.3 mm) as shown in Figure 2. (Note: Hole depth with tolerance is critical.)
4. Prior to installation, make sure drilled hole and surrounding area is dry, and clean of grease, cutting oil, etc.
5. Place tag in cavity with ferrite backing facing bottom of hole, pressing firmly. When properly installed, the top of the tag will be slightly recessed below the surface of the product.
6. Apply sealant or epoxy over the chip, taking care to not exceed .05" (1.3 mm) thickness on top of chip. Crosby currently uses (for chain sling and wire rope tags) Dynax 621 series multi-cure adhesive or equivalent, which requires a UV light source for accelerated curing.
7. Place the yellow and black RFID sticker over the tag, centering as best as possible. Press firmly on the sticker to ensure that the adhesive sticks to the base material. The tag should be visible through the hole in the center of the sticker.
8. Program the installed RFID plug by simply scanning tag utilizing the Crosby Quic-Check Inspection and Identification system, InfoChip QC-Pro, or other RFID software systems utilizing high frequency technology.

Figure 2

.13±.01

$.531^{+.008}_{-.002}$

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TT-5 Installation Instructions for RFID Chain Tag (PN 115369 or 115353) Field Installation on Existing Products

#115369 RFID Chain Tag   **#115353 RFID Chain Tag**

The Crosby Quic-Check RFID system is intended to be used with rigging, lifting and pulling equipment. The Crosby RFID Chain Tag allows attachment to chain slings and other rigging products without the need for product modification. The installation of the tag consists of inserting the eye of the tag through a connection of the sling (such as a connecting link). For additional information, contact Crosby Engineering at crosbyengr@thecrosbygroup.com, or call-1-800-772-1500.

1. Stamp sling information on the chain sling tag. Remember that the tag contains an electronic circuit that can be damaged by excessive force or strikes.
2. Select a location on the sling to avoid binding of the tag during usage.
3. Program the installed RFID plug by simply scanning tag utilizing the Crosby Quic-Check Inspection and Identification system, InfoChip QC-Pro, or other RFID software systems utilizing high frequency technology.

TT-6 Installation Instructions for RFID Wire Rope Tag (PN 115350)
Field Installation on Existing Products

The Crosby Quic-Check RFID system is intended to be used with rigging, lifting and pulling equipment. The Crosby RFID Wire Rope Tag allows attachment to wire rope slings and other rigging products without the need for product modification. The tag is equipped with a .22 inch (5.6 mm) diameter hole to allow attachment to product utilizing a small diameter cable. For additional information, contact Crosby Engineering at crosbyengr@thecrosbygroup.com, or call-1-800-772-1500.

1. Select a location on the sling to avoid binding of the tag during usage.
2. When using with Crosby S-505 and S-506 sleeves, Crosby recommends the following maximum attachment cable diameters:

Swage Sleeve Size	Cable Diameter
≤ 1" (25.4 mm)	1/16" (1.6 mm)
> 1" (25.4 mm)	1/8" (3.2 mm)

3. Program the installed RFID plug by simply scanning tag utilizing the Crosby Quic-Check Inspection and Identification system, InfoChip QC-Pro, or other RFID software systems utilizing high frequency technology.

Section 3 - RFID Location for Configuration

Configuration A - 2130 and 2140 Shackle Bolts, 1-1/4" – 3" Size

RFID Tag Location: On head end of bolt, centered.
RFID Chip Kit Used: PN 115462 5/8" Plug
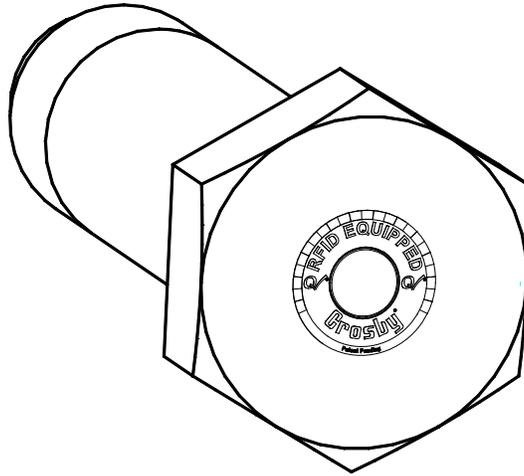
Configuration B - 2130 and 2140 Shackle Bolts, 3-1/2" – 7" Size

RFID Tag Location: On head end of bolt, at mid-distance between eyebolt and edge, measured perpendicular to eyebolt.
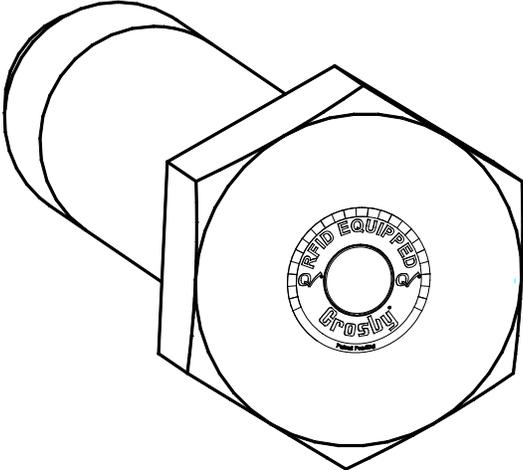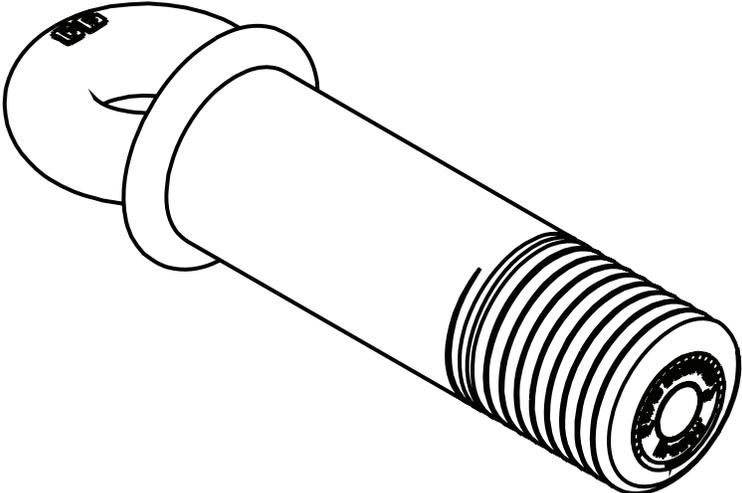RFID Chip Kit Used: PN 115462 5/8" Plug
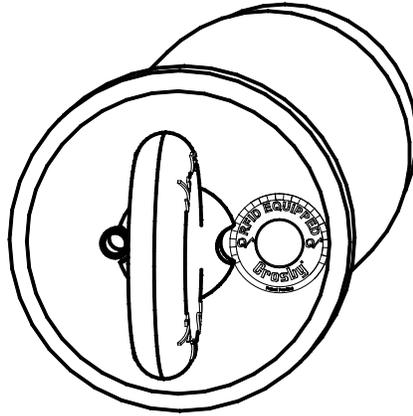
Configuration B1 - 2130 Shackle Bolts, 1/2" – 1-1/8" Size

RFID Tag Location: On head end of bolt, centered.
RFID Chip Kit Used: PN 115480 12mm Adhesive Chip Plug

Configuration B1 – 209 & 210 Shackle Screw Pins 1-3/4" - 2-1/2"

RFID Tag Location: On threaded end of screw pin, centered.
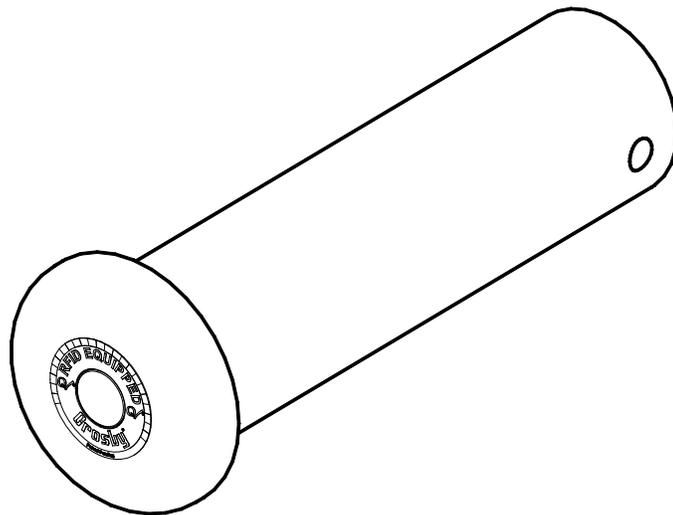RFID Chip Kit Used: PN 115480 12mm Adhesive Chip Plug

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Configuration C – 2160 Shackle Bolts, 30 – 1550 tonne Capacity

RFID Tag Location: On head end of bolt, at mid-distance between center of pin and edge, measured perpendicular to handle.
RFID Chip Kit Used: PN 115462 5/8" Plug
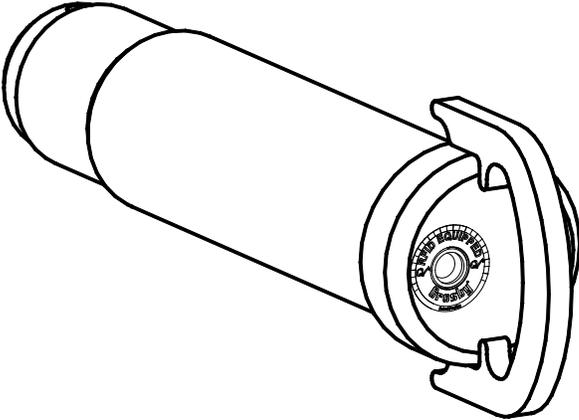
Configuration D – 209 & 210 Shackle Screw Pins 1-3/4" - 2-1/2"

RFID Tag Location: On threaded end of screw pin, centered.
RFID Chip Kit Used: PN 115462 5/8" Plug
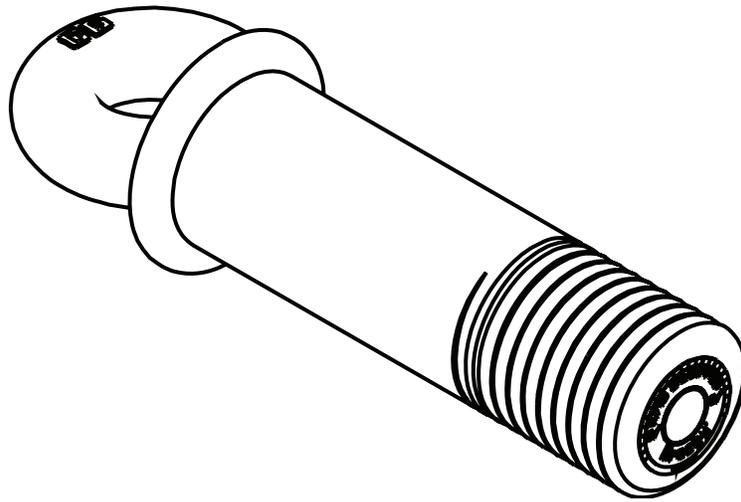
Configuration E – 213 & 215 Shackle Round Pins 1-3/4" – 2"

RFID Tag Location: On head end of pin, centered.
RFID Chip Kit Used: PN 115462 5/8" Plug

Configuration F – 1360, 1361 and 1362 Eliminator Hinge Pins

RFID Tag Location: On head end of pin, centered.
RFID Chip Kit Used: PN 115480 12 mm Chip
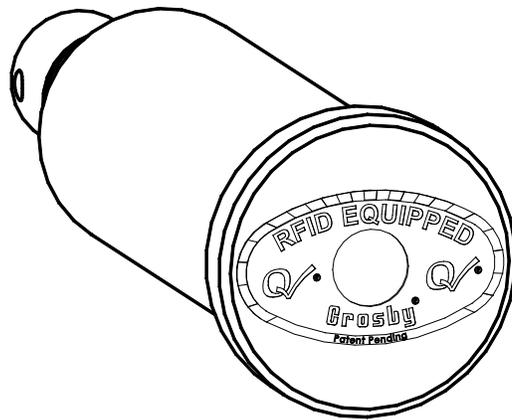
Configuration G – McKissick® Snatch Block Center Pins 4-1/2" & Larger

Used On: Snatch Blocks, Center Pins, 401, 402, 407, 408/409, 416/417, 420/421, 422, 430/431, 434/435, All Sizes. 406, and 418/419, 4 ½" and larger. TU-480/484, All Sizes.
RFID Tag Location: On head end of pin, centered.
RFID Chip Kit Used: PN 115462 5/8" Plug

Configuration H – McKissick® M-491 Block Center Pins

RFID Tag Location: On head end of pin, off center (diametrically opposed to lubrication zerk).
RFID Chip Kit Used: PN 115462 5/8" Plug

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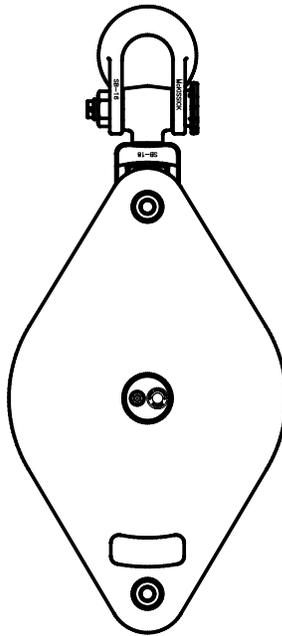
Configuration I - McKissick® 680 Construction Blocks—Main Load Bolt

Used On: Construction Blocks, 680 Series, Main Load Bolt, All Sizes.
RFID Tag Location: On main load bolt, on welded end, centered.
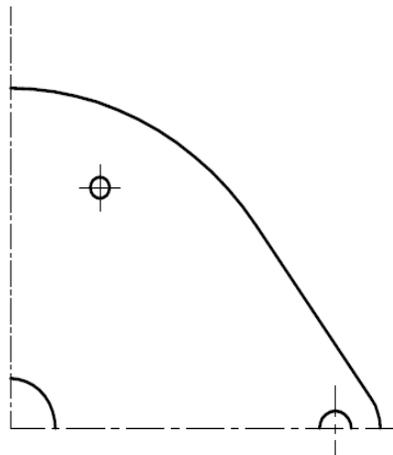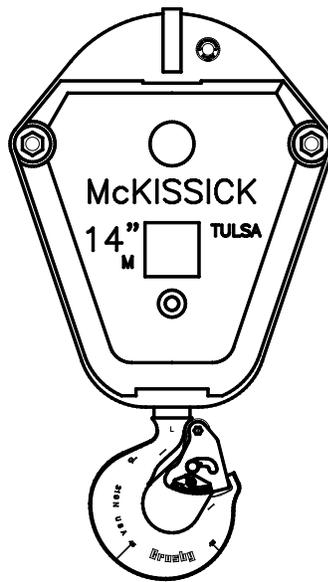RFID Chip Kit Used: PN 115462 5/8" Plug
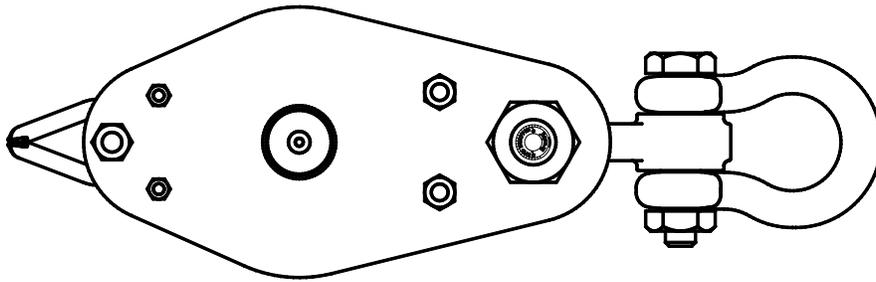
Configuration J – McKissick® 380 & Easy Reeve Crane Blocks

Used On: Crane Blocks, 380 and EZ-Reeve, Side Plates, All Sizes.
RFID Tag Location: On side plate, on nameplate side, above center pin, within 45 degree angle (from vertical centerline).
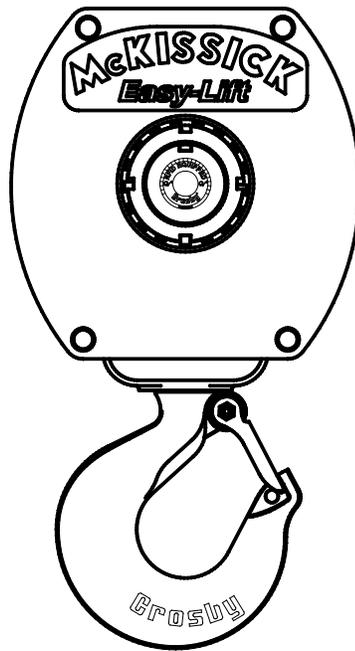RFID Chip Kit Used: PN 115462 5/8" Plug

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Configuration K – McKissick® 750 Bridge Crane Blocks

Used On: Bridge Crane Blocks, 750 Series, Side Plates, all sizes.
RFID Tag Location: On end of center pin, on nameplate side, centered.
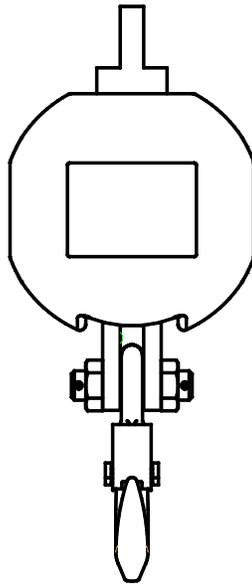RFID Chip Kit Used: PN 115462 5/8" Plug

Configuration L – McKissick® Overhaul Balls

Used On: Overhaul Balls, Lower load plates, all sizes.
RFID Tag Location: Between lower load plates, above hook.
RFID Chip Kit Used: PN 115471, 15 mm Adhesive Chip
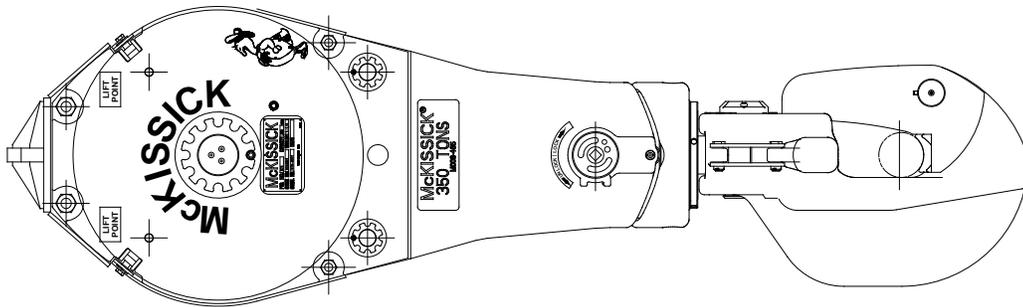
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Configuration M - McKissick® Oilfield Blocks

Used On: Oilfield Blocks, outer plates, all sizes.
RFID Tag Location: Right side of nameplate.
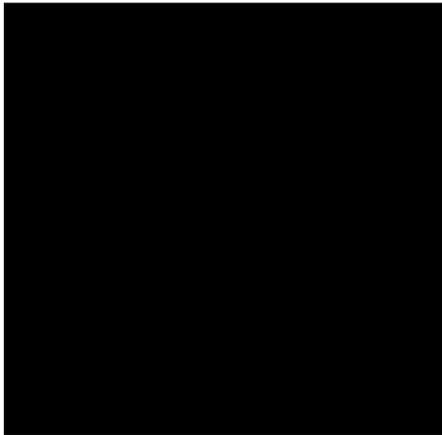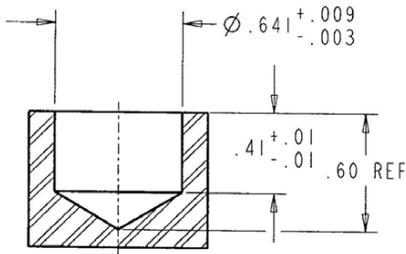RFID Chip Kit Used: PN 115462 5/8" Plug

Configuration N – Crosby® Lifting Clamps

Used On: Plate Clamps, Beam Clamps, and Pipe Clamps, all sizes.
RFID Tag Location: On structural member between plates, or protected exterior location.
RFID Chip Kit Used: PN 115471, 15 mm Adhesive Chip

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Configuration O – Crosby® Hoist Rings

Used On: Hoist Rings, HR-125, Frame 2 and larger sizes. HR-125M, all sizes.
RFID Tag Location: Although the product is shipped from the factory with a 12 mm Adhesive Chip, for field installation, it is recommended to use the RFID Wire Rope Sling Tag (PN 115350).
RFID Chip Kit Used: PN 115480, 12 mm Adhesive Chip from factory. For field installation, attach RFID Wire Rope Sling Tag from Kit PN 115350

Evolution
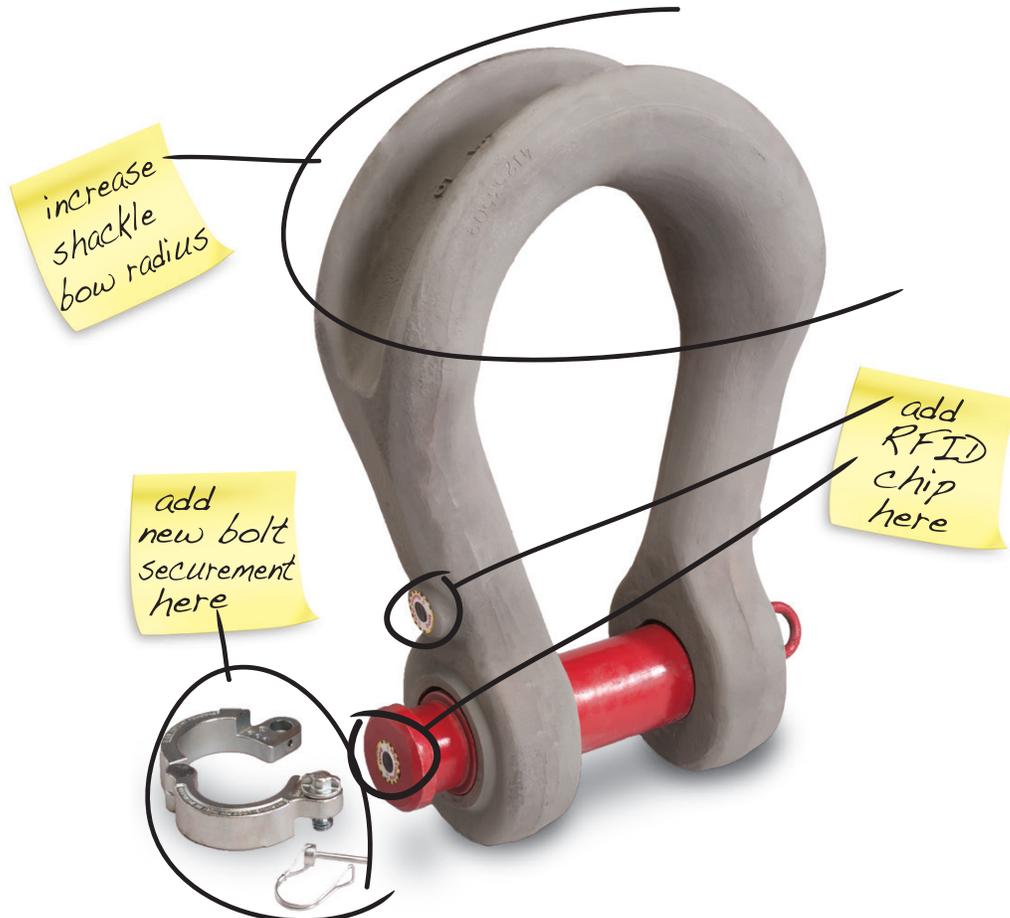
At Crosby, we make our lifting and rigging products to meet real life challenges. If a customer has a need, we supply the solution.

It is this kind of thinking that makes Crosby a leader in every product category where we provide a solution. As a leader, we are expected to meet the challenges of the industry . . . to be the innovator. That is why we strive to make products that exceed the minimum requirements. Like the addition of RFID intelligent chips for field inspection and the patented Crosby Easy-Loc® bolt retention system for easy bolt removal. We are proud of what we do. We live to meet your needs, and that is why our rigging and lifting solutions truly are **REAL LIFE SOLUTIONS.**

Be a part of Crosby's tradition of innovation and new product development. Send us your challenges by scanning the QR code below or going to **www.thecrosbygroup.com/reallifesolutions.**

Real Life Solutions

the Crosby group®

At Crosby, we have a tradition of inviting innovation and new product ideas.

US Patent #7,825,770

For more information, Contact:

theCrosbygroup®

USA
2801 Dawson Rd.
Tulsa, OK 74110
(918) 834-4611
Fax: (918)832-0940
crosbygroup@thecrosbygroup.com

CANADA
145 Heart Lake Road
Brampton, Ontario L6W 3K3
(905) 451-9261
Fax: (877) 260-5106
sales@crosby.ca

EUROPE
Industriepark Zone B n°26
2220 Heist-op-den-berg
Belgium
(+32) (0) 15 75 71 25
Fax: (+32) (0) 15 75 37 64
sales@crosbyeurope.com

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