

# HARKEN®

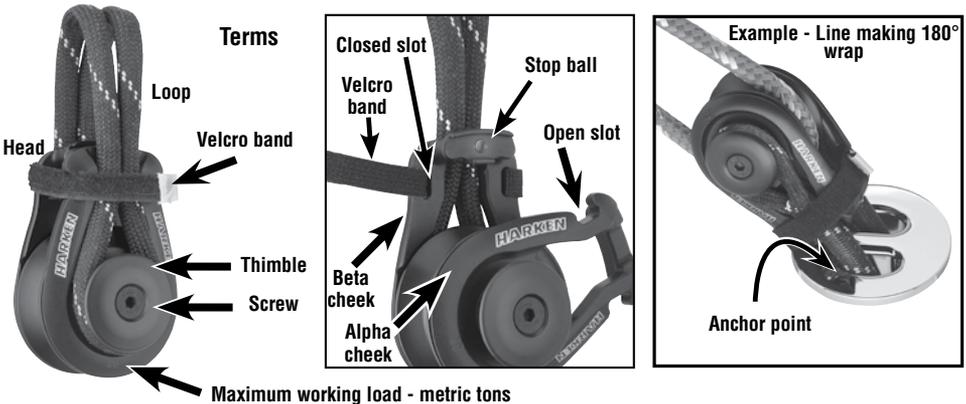
## INSTRUCTIONS

### High-Load Snatch Blocks

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Telephone: (262) 691-3320 • Fax: (262) 701-5780 • Web: [harken.com](http://harken.com) • E-mail: [harken@harken.com](mailto:harken@harken.com)

**⚠ WARNING! Strictly follow all instructions to avoid an accident, damage to your vessel, personal injury, or death. See [www.harken.com/manuals](http://www.harken.com/manuals) for additional safety information.**

**Features** - Sideplates pivot open to make them easy to load onto sheets, perfect for temporary leads, line deflection, and static line functions requiring small adjustments. Loop carries primary load and articulates for a fair lead. Captured Velcro® strap holds block securely closed when sideplates are aligned. Strap has a reflective tab for easier operation with gloves. Harken composite bearing technology (ULC) ensures sheaves turn smoothly and maintain efficiency under extreme loading. Snap-fit Torlon® bearings carry sideloads. Integral headspacer prevents Hard Lube-anodized aluminum sideplates from deflecting and binding.



### Specifications

Part No.	Description	Sheave diameter		Max line Ø		Maximum working load		Breaking load	
		mm	in	mm	in	kg	lb	kg	lb
3299	2.3T HL	38.5	1.5	11	7/16	2300	5069	4600	10138
3300	5T HL	56	2.2	16	5/8	5000	11020	10000	22040
3301	8T HL	75	3	18	3/4	8000	17632	16000	35264
3302	12T HL	101	4	30	13/16	12000	26448	24000	52896
3303	15T HL	125	5	30	13/16	15000	33060	30000	66120

### General Warnings

HL Snatch blocks are supplied by Harken with loops. Loads listed above assume that the standard Harken-supplied loops are used.



**WARNING! Work with a rigger when using alternate spliced loops or fastenings. Knots or incorrect splices weaken block assembly considerably. Use only Harken-supplied replacement loops, or work with a qualified rigging supplier when replacing loops.**



**WARNING! Block loads increase when the line turns at a greater angle. Block loads double when the line turns 180 degrees. See example above. Use block loading factors. Select blocks and application carefully.**

Velcro is a registered trademark of Velcro Industries B.V.I  
Torlon is a registered trademark of Solvay Advanced Polymers L. L. C.

## Always Attach to Thimbles



**WARNING!** Never attach load-bearing lashings or loop to the head of the block. This will drastically weaken block so it will break under low load. Use only Harken supplied loops or equivalent secured to thimbles as directed.



## Attaching Block to Anchor

1. Unwrap the Velcro® band, leaving it secured to the closed slots in the alpha cheek. One end of the loop should be secured to the alpha cheek thimble and pass under the Velcro band.
2. Remove the other end from the thimble on the beta cheek.



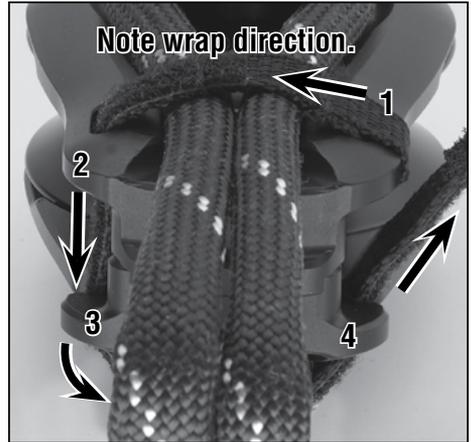
3. Rotate the cheeks to load line on sheave. Close cheeks making sure they align: there will be a clicking sound as the locking ball seats. The 3303 block has a pull pin, not a locking ball.

4. Pass the loop around the anchor point and over the beta cheek's thimble.

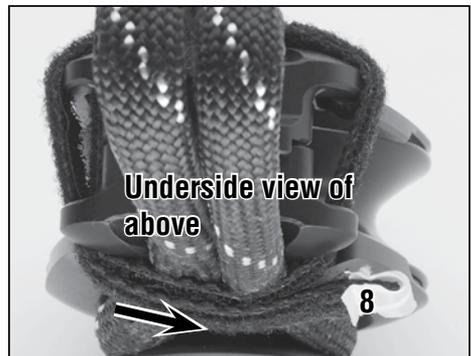
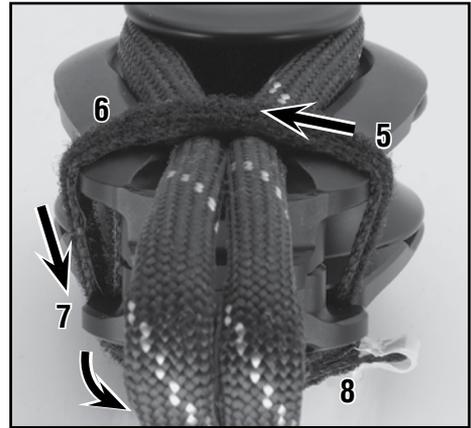
5. Rewrap the Velcro band. Make sure the Velcro band always starts with the sewn deadend passing over the loop and through the closed slot. The wrap direction is counter-clockwise.

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Tolon is a registered trademark of Solvay Advanced Polymers L. L. C.

## Attaching Block (Continued)



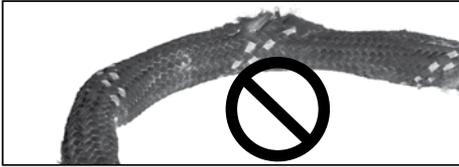
6. Pull the Velcro band tightly as you wrap. Note: there is no need to pass the Velcro band through the closed slot on the band's second pass. Make sure the band is securely seated in the open slots on the beta cheek. Press band in place to secure Velcro, and tuck the reflective band into open slots.



## Inspect Parts Every Time You Sail

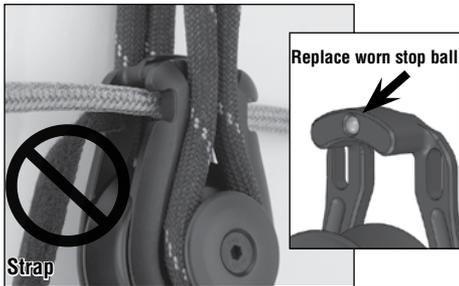
Inspect loop. Replace if there are signs of fatigue, strand separation, wear, or if the colored tracer fades from UV damage.

**! WARNING! Failure to inspect and correct block loop and Velcro can result in block breaking below rated load. Inspect parts each time you sail. If parts are under load during long passages, it is important to inspect them carefully while underway. If in doubt, replace.**

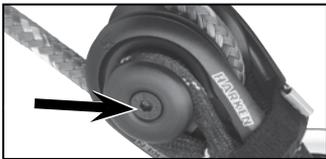


Always check the Velcro® band to make sure it is secure. Replace the band if it loses holding ability. Check and replace stop ball if it becomes worn.

**! WARNING! Make sure Velcro band is correctly wrapped and has good holding properties. If the band does not hold, the sheet can catch the open slots when sail is flogging and accidentally open.**



Inspect screws to make sure they are tight. If loose, remove and use threadlocker to secure.



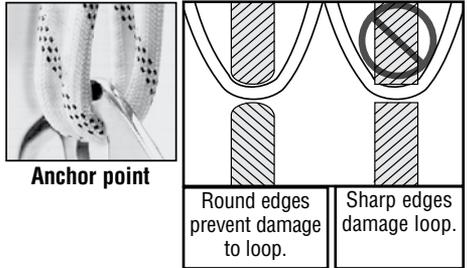
**! WARNING! Inspect fasteners to make sure they are tight and secure with blue Loctite® adhesive or equivalent.**

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Torlon is a registered trademark of Solvay Advanced Polymers L. L. C.  
Loctite is a registered trademark of Henkel AG & Company KGaA.

## Anchor Point Chafing or Cutting

**! WARNING! Loops or lashings running over a sharp edge can cause part to break under load. Attach to fitting with a rounded edge.**

Loops must attach to round bails such as those on padeyes or pins. Sharp edges on many perforated toerails will cut loop, severely weakening it. When loop is attached to a plate, it must be thick enough and have rounded edges to keep loop from being damaged.



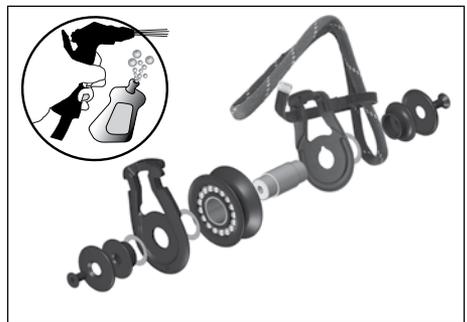
## Short-Term Maintenance

Flush block and attachments frequently with detergent and fresh water. Clean bearings by flushing areas shown while rotating sheave.



## Long-Term Maintenance

Disassemble block. Flush with detergent and fresh water. See assembly on next page.



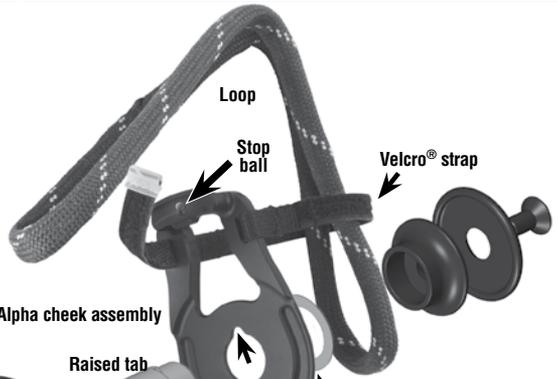
## Assembly and Reorder Parts



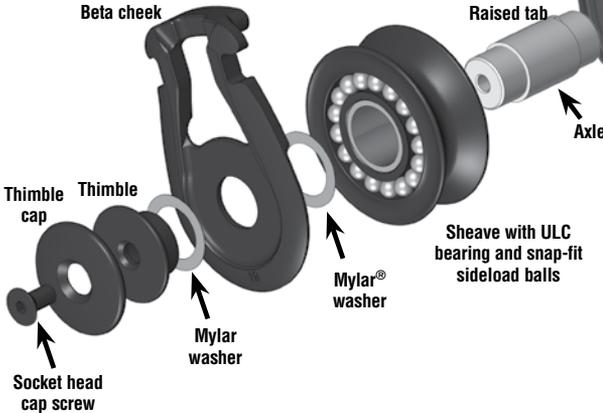
**3299 block is riveted. Components are not replaceable.**



**Alpha cheek Raised tab**  
 Raised tab must match notch



**Alpha cheek assembly**



**Sheave with ULC bearing and snap-fit sideload balls**



**Beta cheek in 3303 with pinstop**

### Replacement part numbers

Block	Fastener FHCS (2)	Size (mm)	Thimble cap (2)	Thimble (2)	Mylar washer (3)	Beta cheek	Sheave with ULC bearing	Torlon® balls	Size (Qty)	Axle	Alpha cheek with band	Stop ball	Loop
3299	The 3299 block is riveted. Components are not replaceable, only loop.												H-77983
3300	HFS1367	6X12	H-71376	H-71375	H-22888A	AL-4110	*	MP-126	1/4" (30)	MS-518	H-77646	MP-117	H-77984
3301	HFS1365	8X16	H-72105	H-72102	H-46227	AL-4112	*	MP-129	5/16" (34)	MS-555	H-77318	MP-117	H-77985
3302	HFS1366	12X20	H-72167	H-72164	H-45007	AL-4114	*	MP-127	3/8" (38)	MS-549	H-77986	MP-117	H-77987
3303	HFS1368	12X25	H-72275	H-72274	H-49195	AL-4116	*	MP-128	1/2" (34)	MS-521	H-77988	**	H-77989

\* Sheaves have pressed-in ULC composite sleeve bearings. Contact Harken

\*\* Beta cheek in 3303 block uses spring loaded pinstop.

## General Maintenance

Harken equipment requires minimal maintenance, but some is required to give the best service and to comply with Harken's limited warranty. It is important to keep equipment clean by frequently flushing with fresh water. In corrosive atmospheres, stainless parts can show discoloration around holes, rivets, and screws.

This discoloration is not serious and can be removed with a fine abrasive. Flush blocks thoroughly with fresh water. Periodically, disassemble the blocks and clean with detergent and fresh water.

**Important: Exposure to some teak cleaners and other caustic solutions can result in discoloration of part and is not covered under the Harken warranty.**

## Warranty

For additional safety, maintenance, and warranty information; [www.harken.com/manuals](http://www.harken.com/manuals) or the Harken catalog.

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