

HARKEN®

INSTRUCTIONS

40 and 50 mm Deck Organizers

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WARNING! Strictly follow all instructions to avoid an accident, damage to your vessel, personal injury or death. See www.harken.com/manuals for additional safety information.

Features



Composite top plate - superior impact and UV resistance



Flared bases on sheaves - lift lines off the deck

Glass-filled nylon sheaves - durable with excellent impact resistance

Proven bearing system - journal bearing system

Stackable - provides additional configurations

Specifications

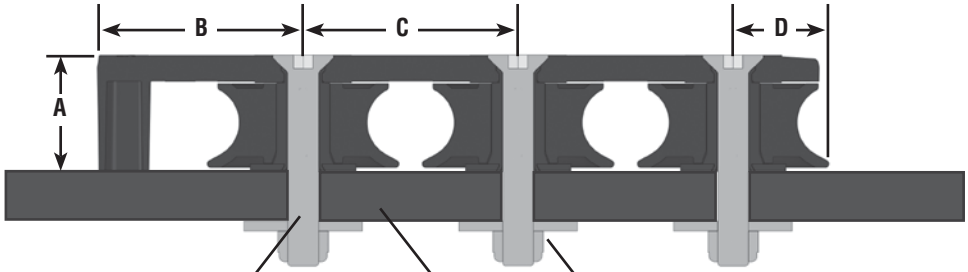
Part No.	Description	Sheave Ø		Length		Height		Max line Ø		Maximum working load/sheave‡	
		mm	in	mm	in	mm	in	mm	in	kg	lb
40 mm		 Mount using 6 mm or 1/4" flathead (FH) fasteners									
9000	2-Sheave	40	1 9/16	104	4 1/16	24	15/16	12	1/2	700	1544
9001	3-Sheave	40	1 9/16	147	5 3/4	24	15/16	12	1/2	700	1544
9002	4-Sheave	40	1 9/16	190	7 15/32	24	15/16	12	1/2	700	1544
9003	5-Sheave	40	1 9/16	233	9 3/16	24	15/16	12	1/2	700	1544
50 mm		 Mount using 8 mm or 5/16" flathead (FH) fasteners									
9005	2-Sheave	50	1 15/16	135	5 5/16	31	1 7/32	16	5/8	1180	2602
9006	3-Sheave	50	1 15/16	191	7 1/2	31	1 7/32	16	5/8	1180	2602
9007	4-Sheave	50	1 15/16	247	9 11/16	31	1 7/32	16	5/8	1180	2602
9008	5-Sheave	50	1 15/16	303	11 15/16	31	1 7/32	16	5/8	1180	2602

‡If double stacked, upper block/organizer is two-thirds of listed MWL and breaking load.

DO NOT use Harken equipment for human suspension unless product is specifically certified and labeled for such.

Planning Installation - Dimensions

Description	A Height		B End to fastener		C Fastener spacing		D Fastener to end	
	mm	in	mm	in	mm	in	mm	in
40 mm	24	.95	40.8	1.61	43.13	1.698	20.0	.79
50 mm	30	1.19	53.7	2.11	56.01	2.205	25.0	.98



Flathead fastener size

40 mm Organizer - 6 mm - 1/4"
50 mm Organizer - 8 mm - 5/16"

Through bolted using large washers and nuts

Solid deck construction

Planning Installation - Deck Strength

Determine if deck is strong enough for mounting the organizer. Make sure all sheaves have fasteners that are through bolted using nuts, large washers or backing plates. Cored decks must have solid inserts such as G-10 plates sized to distribute the load.

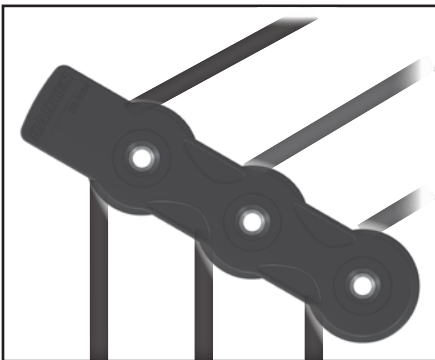
IMPORTANT! When organizers are double stacked, more load is put on the deck due to leverage load of longer screws. Be sure deck construction is strong enough.



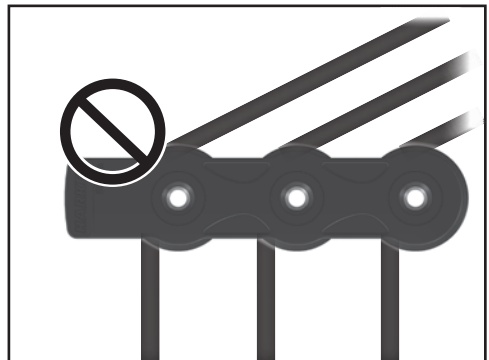
WARNING! You must mount to solid deck construction using specified fasteners in all mounting holes and nuts, washers or backing plates to achieve correct maximum working load to avoid a failure leading to an accident.

Planning Installation - Bisecting Line Angle

Make sure organizer is positioned so it bisects the angle of the lines. If organizer does not bisect angle the maximum working load is reduced.



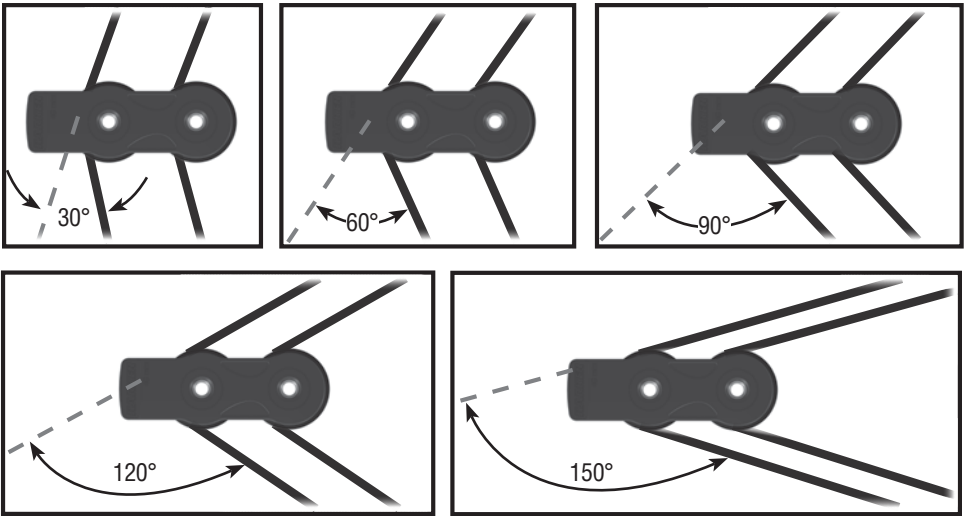
Correct



Incorrect

Planning Installation - Sheave Loading vs Angle of Deflection

Load on sheave increases when line turns at a greater angle. As the turning angle approaches 180°, the load on the sheave almost doubles. See examples and chart below. Select organizers and choose mounting locations carefully.



Angle of deflection	Load factor	Angle of deflection	Load factor	Angle of deflection	Load factor
30°	52%	90°	141%	150°	193%
45°	76%	105°	159%	160°	197%
60°	100%	120°	173%	180°	200%
75°	122%	135°	185%	—	—

Planning Installation - Stacking Organizers

When organizers are double stacked, fasteners are longer and provide less strength. The upper sheaves have two thirds (2/3) the maximum working load of the lower sheaves. Use lower loaded lines in upper sheave or select larger, stronger organizers. Do not triple stack organizers.

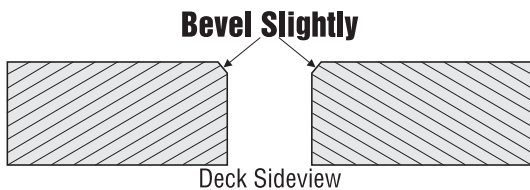
Double stacked maximum working load	40 mm organizer		50 mm organizer	
	kg	lb	kg	mm
Upper sheaves	466	1029	787	1734
Lower sheaves	700	1544	1180	2602

Installation

Drill holes to install organizer:

Organizer	Screw size	Drill size for clearance hole
40 mm	6 mm	6.25 mm
	1/4"	17/64"
50 mm	8 mm	8.25 mm
	5/16"	21/64"

Tip: Put slight bevel at top of hole to allow sealant to mass around upper part of hole.

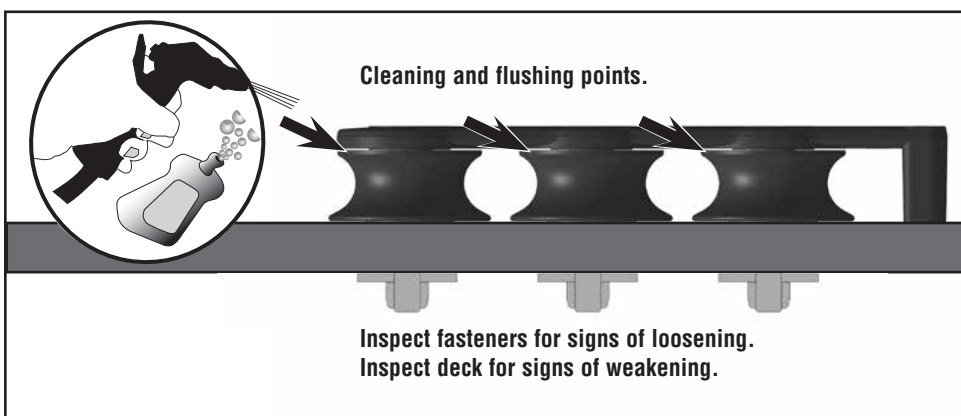


Install organizer using sealant in holes.

Maintenance and Inspection

Periodically inspect organizers and fasteners for wear, corrosion, and loosening. Tighten or replace as necessary. The organizer does not come apart. Replace the organizer if one of the sheaves is worn or does not function.

Frequently flush with fresh water. Periodically clean areas shown below with mild detergent and water solution. Flush with fresh water. Avoid exposure to teak cleaner and other caustic solutions.



Warranty

For additional safety, maintenance, and warranty information see www.harken.com/manuals or the Harken catalog.