

INSTRUCTIONS

Gizmos - Through-Deck Bushings and Padeye Kits

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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.

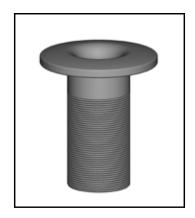
Gizmos

Through-deck bushings are designed to protect decks and lines from chafing. They are easy to install and provide several rigging solutions.



Single-sided bushings

Single-sided through-deck bushings are designed to protect decks and lines from chafing using any through-deck application. Single bushing are less structural then doubles and are used when line is entering at smaller angles and leading fairly straight inside.



Double-sided bushings

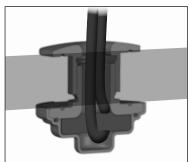
Double bushings are more structural than single sided and can handle non-fair leads or loading on both sides of the deck. They thread into themselves from the top and bottom of the deck. Double-sided through-deck bushings are perfect for installing soft-attach loops to protect line from wear and also to separate line.



Padeve kits

Padeye kits include a cross pin, waterproof cap and O-ring and convert a double-sided bushing into a through-deck, watertight padeye that can be loaded in any direction in relation to the cross pin. The cross pin attaches the rope/loop and the cap snaps onto the bottom of the double-sided bushing to keep water out.





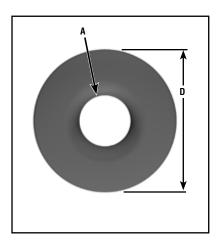
Gizmo Single Through-Deck Bushings

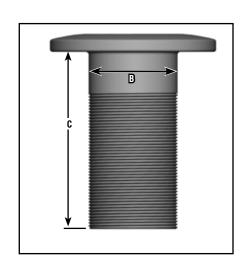
Single bushings are an easy to install bushing for lower loads and or relatively fair leads.

Be sure to factor block loading verses angle of deflection. Greater angles load the fairlead more and a double may be more suitable.

Specifications

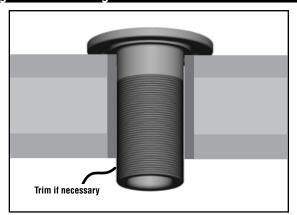
		A - Hole Diameter		B - Max shaft diameter*		Dr	ill size	C - Sha	ft length	D - Flange diameter	
Size	Part No.	mm	in	mm	in	mm	in	mm	in	mm	in
6	9060	5.94	.234	9.2	0.362	10	X or 13/32	20	0.787	19	0.75
8	9061	7.94	.313	12.2	0.480	13	1/2	30	1.181	25	0.98
10	9062	10.08	.397	15.2	0.599	16	5/8	30	1.181	28	1.10
12	9063	11.91	.469	17.2	0.677	18	23/32	30	1.181	31	1.22
14	9064	14.29	.563	21.2	0.835	22	7/8	30	1.181	41	1.61





Installing Single Through-Deck Bushings

Consult chart above to check fit and determine drill size. Take necessary steps to reinforce and seal cored decks using a suitable compression tube. You can trim single sided bushings however you will lose the radius edge and anodizing. Use a hack saw to trim if necessary.



Put a large bead of polysulfide type sealant in the underside corner of the upper part of bushing. The texture on the outside is used to provide adhesion grip; it is not a load bearing thread. For permanent installations, coat the side of the bushing with adhesive. Push bushing into place and clean up excess sealant around flange.



Sealant

Coat texture with adhesive for permanent installations

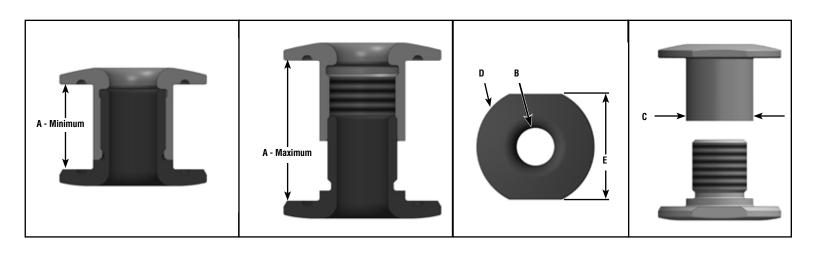
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Gizmo Double Through-Deck Bushings

Deck thickness range

Refer to the chart below and choose the correct double bushing based upon deck thickness.

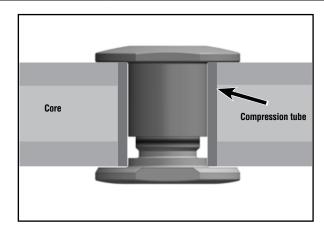
Specifications																
		Min	A - De Max	ck thickness Min	Max	 B - I	inie	C -	Max	Dri	II size	D - F	lange	E-	Maxi	
			mux		mux	diameter		outer shaft diameter*		D1111 3120		diameter		Wrench flats	working load	
Size	Part No.	mm	mm	in	in	mm	in	mm	in	mm	in	mm	in	mm	kg	lb
	9070.0608	6	8	0.236	0.315	- 5.94	0.234	13.2	0.520	14	9/16	25	0.98	22		•
6	9070.0810	8	10	0.315	0.394											
	9070.1013	10	13	0.394	0.512											
	9071.0810	8	10	0.315	0.394	- - 7.94 -	0.313	15.2	0.599	16	5/8	28	1.11	25		
0 -	9071.1013	10	13	0.394	0.512											
8 -	9071.1318	13	18	0.512	0.709											
	9071.1828	18	28	0.709	1.102											
	9072.1013	10	13	0.394	0.512	- - 10.08 -	0.397	17.2	0.677	18	23/32	31	1.23	28	700	1540
10 -	9072.1318	13	18	0.512	0.709											
10	9072.1828	18	28	0.709	1.102											
	9072.2848	28	48	1.102	1.890											
	9073.1013	10	13	0.394	0.512	- - 11.91 -	0.469	21.2	0.835	22	7/8	41	1.61	36	1500	3300
12 -	9073.1318	13	18	0.512	0.709											
12 -	9073.1828	18	28	0.709	1.102											
	9073.2848	28	48	1.102	1.890											
	9074.1013	10	13	0.394	0.512	- - 14.29 -	0.563	24.2	0.952	25	31/32	44	1.88	44	2300	5060
14 -	9074.1318	13	18	0.512	0.709											
14	9074.1828	18	28	0.709	1.102										2300	
	9074.2848	28	48	1.102	1.890											
16	9075.1013	10	13	0.394	0.512	- - 15.88 -	0.625		1.032		1 1/32	48	_	48	3400	7480
	9075.1318	13	18	0.512	0.709			26.2		27			1.98			
	9075.1828	18	28	0.709	1.102											
	9075.2848	28	48	1.102	1.890											
Largest diameter with anodizing and upper end of machining tolerance.																



Installing Double Thru-Deck Bushings

Deck strength, cored decks

Take necessary steps to reinforce and seal cored decks using a suitable compression tube.



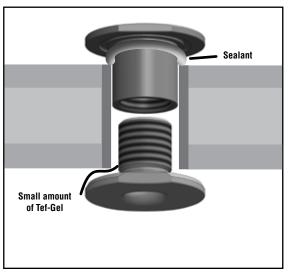
Installing double bushing

Put a large bead of polysulfide type sealant in the underside corner of the upper part of bushing.

Use a small amount of Tef-Gel or grease to help screw parts together.

Screw parts together until snug. Important! Do not overtighten.

Clean up excess sealant around flange.

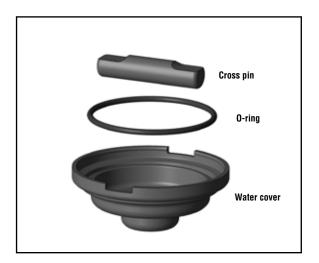


Gizmo Padeye Kit

Padeye kit applications

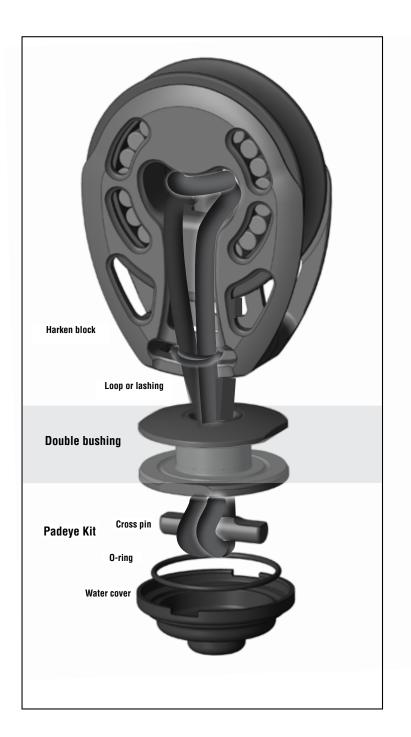
Refer to the chart below and choose the correct kit to fit the Harken double bushing. Use loops or lashings to create a soft padeye. Consult Harken block instructions to correctly attach loop or lashing to block.

	Compatable Harken blocks							
Padeye kit part No. Descriptions		Fly block	Black Magic Loop Block	V Block	High load snatch block	Kg	Lb	
9072.PADEYE	10 mm padeye kit	2173				700	1540	
9073.PADEYE	12 mm padeye kit		3214	3366AL		1500	3300	
9074.PADEYE	14 mm padeye kit		3230		3299	2300	5060	
9075.PADEYE	16 mm padeye kit		3245	3295AL, 3367AL		3400	7480	



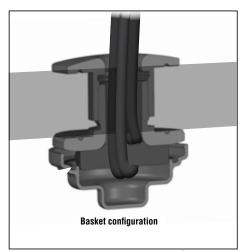


Block attached to soft loop attached to Gizmo padeye kit.

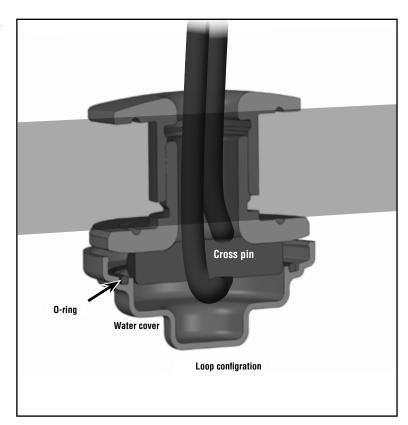


Installing Padeye Kit

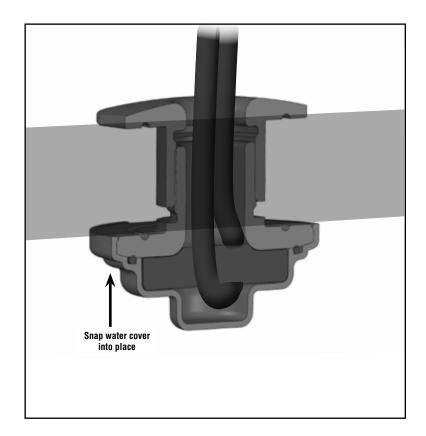
Capture lashing or loop to the cross pin as shown. Insert the $\mbox{O-ring}$ into the water cover.



Either loop or basket configuration is OK provided the loop can handle the load configuration.



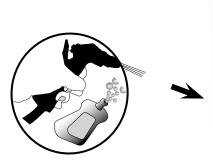
Snap the water cover onto the bottom of the double-sided bushing.



Maintenance

Cleaning and inspection

Harken equipment is designed for minimal maintenance. However, some upkeep is required to give the best service and comply with the Harken limited warranty. Keep your equipment clean and free-running by frequently flushing with fresh water.



Periodically clean with mild detergent and water solution. Spin sheaves to distribute soap solution evenly.

Flush with 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.

Periodically lower cap using a screwdriver in one of the cutouts to pry the cap off. Clean and inspect cross pin and loop or lashing for wear and replace as necessary.



Refer to specific block or loop manual for specific maintenance instructions.



Warranty

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