

# HARKEN®

## INSTALLATION SHEET

### ESP Double Sheave End Controls

Midrange: 1620 Fits Track: 1618

Big Boat: 6088 Fits Track: 3156

1251 East Wisconsin Avenue • Pewaukee, WI 53072 U.S.A.

Telephone: (262) 691-3320 • Fax: (262) 691-3008

Web: www.harken.com • Email: harken@harken.com

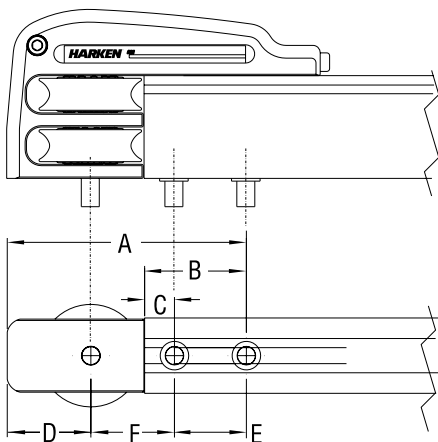
### IMPORTANT

Use for high beam traveler installations where control lines are led along cabintop to cleats or clutches.

Do not use with 1849 track risers or with other elevated systems.

If traveler control line angles down too much it will rub on the bottom aluminum plate.

Traveler must be located so there is a flat area at each end to allow room for bolt hole placement (see A below):



End Control	A	B	C	D	E	F
1620 MR	88mm	32.6mm	10.6mm	33mm	22mm	32mm
6088 BB	133mm	56.6mm	16.6mm	46.5mm	40mm	46.5mm

### Traveler Location/Hole Spacing

ESP Control Part No.	Track Size	High Beam Track Part No.	Mounting Bolts (Not Included)	Optional Backing Plate Part No.
1620	Midrange	1618	8mm*	H-32316A
6088	Big Boat	3156	10mm*	H-32557A

\*US imperial equivalent size will not fit

**Special Track Required**—Track ends must be anodized. We recommend special-ordering Harken track cut-to-length with end control mounting holes drilled.

**Use Long Traveler Cars**—System works best with longer cars where car traveler control blocks are supported and do not overhang car. Blocks on shorter cars bend downwards. Harken is working on control blocks for shorter cars.

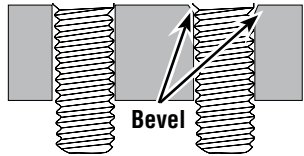
### Recommended Traveler Cars

Midrange: 11625/1641 Big Boat: 3165/3161

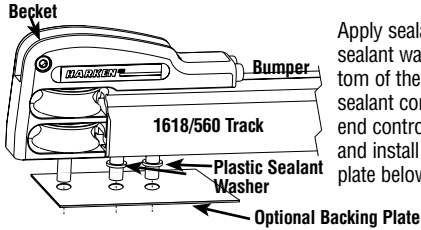
**Backing Plates**—Order drilled backing plates from Harken to match control end or use large washers. See “Replacement Parts” on reverse side.

## Installation—Drill Holes for Track and End Controls

Follow instructions packaged with the 1618 or 3156 track, noting fastener spacing and track spanning instructions. Refer to drawing on the other side and drill deck holes for end controls. Bevel the top of the hole to allow sealant to mass in this area.



## Installing Plastic Sealant Washer



Apply sealant to hole. Install supplied plastic sealant washer between the deck and the bottom of the track. This washer is used to keep sealant contained in the hole. Slip bolts into end control capturing sheaves and spacers and install using large washers or backing plate below nuts.

## Replacement Parts

	Midrange 1620	Big Boat 6088	
Qty/Set	Part No.	Part No.	
(4)	H-27352A	H-27353A	ESP Sheave
(4)	H-31991A	H-32567A	Sleeve for Sheave
(4)	H-32512A	H-32569A	Sealant Washer—CB Track
(4)	—	HCP374	Sealant Washer—560 Track
(4)	H-35566A	H-37498A	Bumper
(2)	H-32315A	H-32137A	Becket Spacer
(2)	HFS974	HFS333	Socket Head Cap Screw
(2)	H-32316A	H-32557A	Backing Plate (Optional)

### Maintenance

Harken equipment is designed for minimal maintenance, but some maintenance is required to give the best service and to comply with the Harken limited warranty.

In general, the most important aspect of maintenance is to keep your equipment clean by frequently flushing with fresh water.

In corrosive atmospheres, stainless parts may show discoloration around holes, rivets and screws. This is not serious and may be removed with a fine abrasive.

### Car/Track

Keep traveler cars clean by frequently flushing with fresh water. Periodically clean cars by squirting a detergent/water solution into the car's center openings. Roll the car back and forth to distribute evenly and then flush bearings with fresh water. This maintenance is very important, particularly when the cars haven't been in use.

Do not use spray lubricants because ball bearings may skid instead of roll. If you use a light machine oil such as 3-in-1, use only a single drop in each ball race. Too much oil attracts dirt.

Clean track with detergent and water.

Frequently inspect shackles and control block fittings for signs of fatigue. Make sure every installation includes Harken track end stops. Arrange control tackle so cars do not hit end stops under load.

### Warranty

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