

**BayStar**<sup>™</sup>

**Hydraulic Steering System for  
Outboard powered boats rated  
up to 150HP (Total).**

## INTRODUCTION

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BayStar hydraulic steering is brought to you by the manufacturers of [SeaStar](#)<sup>®</sup>, the most trusted name in pleasure boat steering. BayStar allows you to install all of the safety, reliability and comfort of hydraulic steering onto your boats rated to a MAXIMUM of 150 HP (total). Combine this with the superior [Teleflex Canada](#) design team, rigid ISO quality control and teamed with the finest materials and precision manufacturing—BayStar continues the tradition bringing comfort and safety to boating.

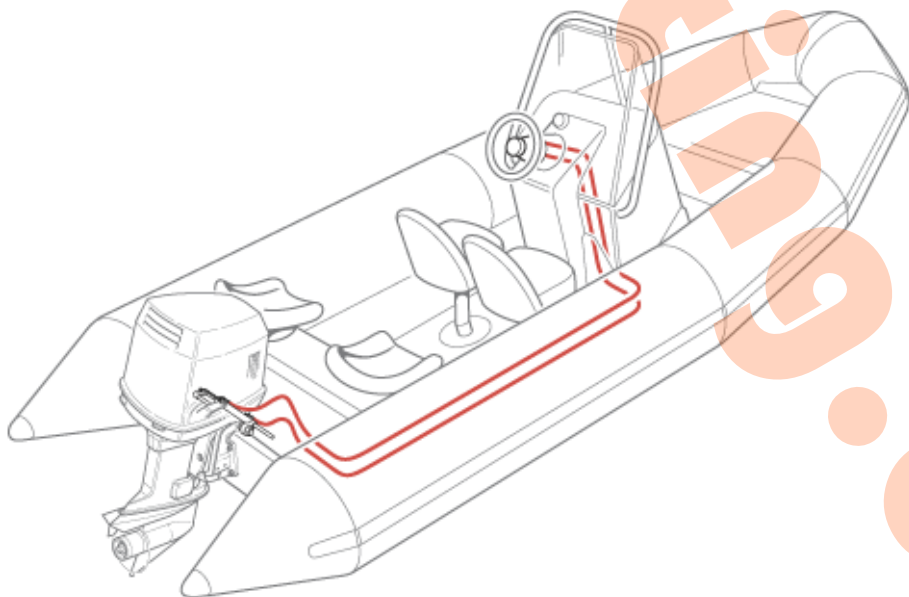
Manufactured in the tradition of the whole [SeaStar](#)<sup>®</sup> family of products—for applications that exceed BayStar's HP rating please purchase one of our [SeaStar](#)<sup>®</sup> products.

## Overview

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With **mechanical** steering you sacrifice a degree of comfort, and traditional hydraulic systems may be more than is needed on lower horsepower engines. The solution is finally here—BayStar!

Built in the tradition of the industry leading hydraulic steering, [SeaStar](#), BayStar brings the same safety and comfort now common on larger outboard powered boats to outboard powered boats with a maximum 150 HP (total) or less.



# BayStar Outboard Compact Cylinder Application Guide

## (Cylinders HC4645H/47H/48H/58H)

MANUFACTURER	YEAR	MODEL	CYLINDER	NOTES
<b>FORCE</b>	1985-DATE	90-150 HP	HC4645H	
<b>HONDA</b>	1992-DATE 1998-DATE 2001-DATE 2003-DATE	30-90 HP 115-130 HP 150 HP BF135 HP	HC4645H HC4647H HC4645H HC4645H	
<b>JOHNSON/ EVINRUDE</b>	1977-1989 1991-DATE 1997-DATE 1997-DATE 1998-DATE	65-150 HP 40-150 HP 115 HP FICHT 75-150 HP FICHT 40-140 HP 4-Stroke	HC4648H HC4645H HC4658H HC4645H HC4658H	4, 5 1, 4
<b>MERCURY/ MARINER</b>	1984-DATE	75-150 HP	HC4645H	
<b>NISSAN</b>	1990-DATE	120-140 HP	HC4645H	
<b>SUZUKI</b>	1986-DATE 1996 ONLY 1987-2002 1990-2000 1998-DATE 2001-DATE	150 HP 115-140 HP 115-140 HP 90-100 HP 40-70 4-Stroke 115-140 HP 4-Stroke	HC4645H N/A HC4645H HC4645H HC4645H HC4658H	1 1 1, 4
<b>TOHATSU</b>	1990-DATE	140-140 HP	HC4645H	
<b>YAMAHA</b>	1998-DATE 1998-DATE 1986-DATE 1997-DATE 2000-DATE	40-50 HP 60 HP 70-90 HP 80-150 HP 4-Stroke 25-60 HP 4-Stroke	HC4645H HC4645H HC4645H HC4645H HC4648H	2 3 1 1
<b>YANMAR</b>	1990-DATE	27-36 HP	HC4645H	

**1.** Requires Spacer kit part # HO5090

**2.** Engine clamp brackets must be cut or ground, and the engine through bolted onto the transom, or interference will occur, restricting engine trim and tilt.

**3.** Steering hook Yamaha Part # 63D-48511-00-4D must be installed

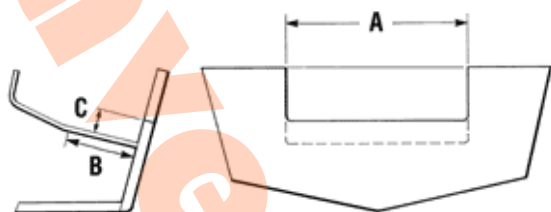
**4.** Cylinder HC4645 may be used in these applications. The pivot plate will need to be flipped before installation. Instructions provided with Owner's Manual.

**5.** Johnson 115 HP 2-Stroke engines, require the pivot plate to be flipped. See Note #4.

**Revision Date:** March 10th 2006

## Motor Well Dimensions Required

CYLINDER MODEL NUMBER	No. OF ENGINES	A	B	C	Minimum Engine Center Distance
HC4645H, HC46475H, HC4648H, HC4658H	1	21" (5343mm)	6" (153mm)	5" (127mm)	N/A
	2	Twin engine applications not available at this time.			



**NOTICE**

- a) Ensure there is no interference between the BayStar cylinder rod and the splashwell boot or engine controls and cables.
- b) Dimensional restrictions also apply to external motor mount brackets.
- c) Ensure dimension 'A' is maintained through full trim/tilt range.
- d) Maximum transom thickness 3" (76mm).
- e) **Engines less than 70HP may require up to an additional 1" (25mm) of splashwell clearance.**

## BayStar Helm

### Part# HH4016

Super low friction helm for smooth comfortable steering.



[\[Dimensions\]](#)

## BayStar Cylinders

### Part# HC4645H, HC4647H, HC4648H and HC4658H

Balanced cylinder, featuring a compact design that fits most splashwells.



[\[Dimensions\]](#)

**Part# HC4600 (No Longer Available. Replacement parts still available)**

Balanced cylinder that fits most splashwells.



[\[Dimensions\]](#)

## BayStar Steering Kit



### Part# HK4200H

BayStar kits come complete with everything needed for an install. The cylinder utilizes the factory outboard engine supplied drag link for simplified installation. For your convenience two lengths of 20' cut to fit tubing are supplied (2 x 20' length).

#### Kit includes:

- BayStar Helm Pump (HH4016) x 1
- BayStar Compact Cylinder (HC4645H) x 1
- BayStar Tubing Kit (HT4420H) x 2
- Hydraulic Steering Fluid (HA5430) x 2
- Filler Kit (HA5438) x 1

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