

BayStar™

OUTBOARD STEERING

BayStar™ hydraulic steering is brought to you by the manufacturers of SeaStar®, 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 up to **MAX. 150HP (Total)**. Combine this with the superior Teleflex Canada Limited Partnership 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.

The BayStar steering system consists of a super low friction helm for smooth comfortable steering, a balanced cylinder—featuring a compact design that fits most splashwells. For your convenience two lengths of 20' cut to fit tubing are supplied (2 x 20' length), two bottles of hydraulic steering fluid, and one fill tube for easy fill and purge.

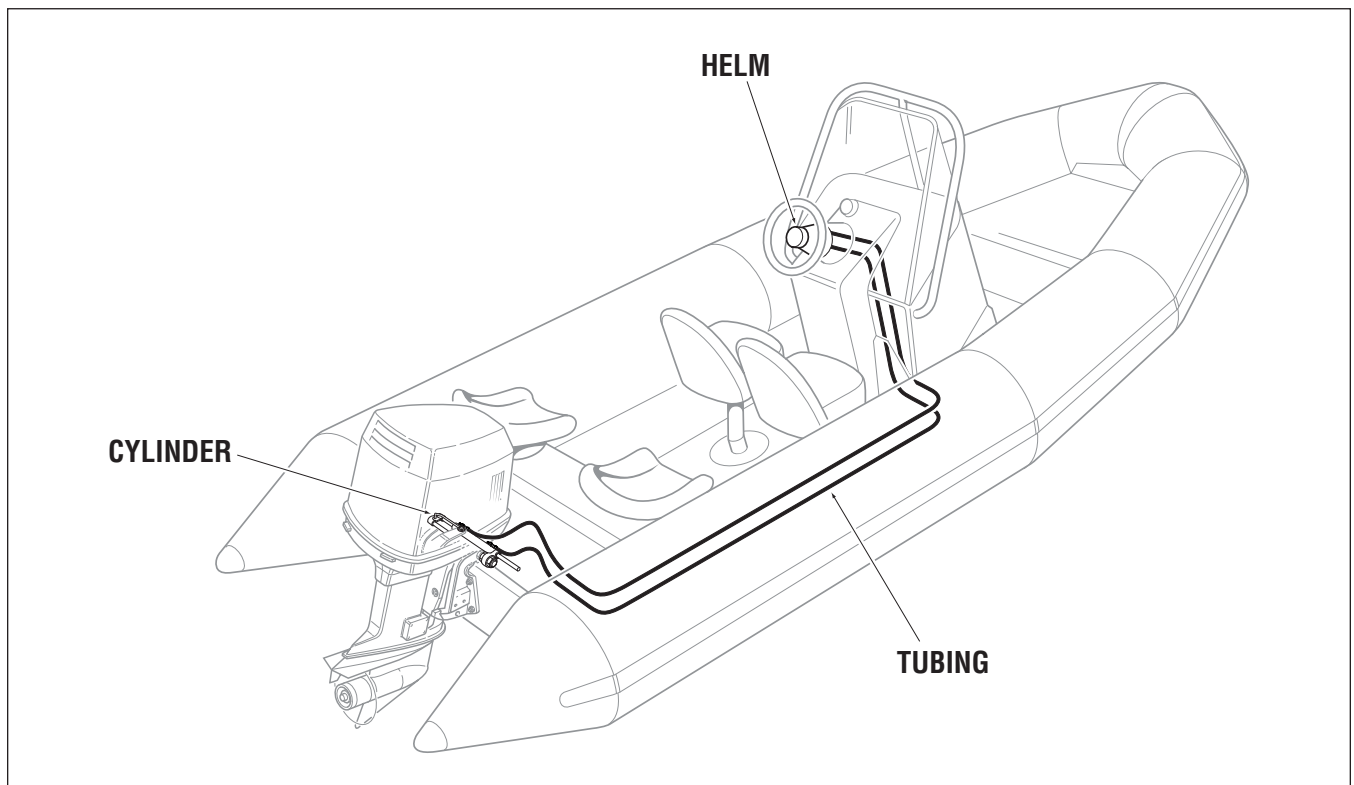
⚠ CAUTION

BayStar is **ONLY** applicable for single station steering.

DO NOT use BayStar on smaller HP outboard engines that use wing nut type transom mount clamping screws.

NOTICE

Tilt Helm #HH4015 is available separately. Currently not available in kit form.

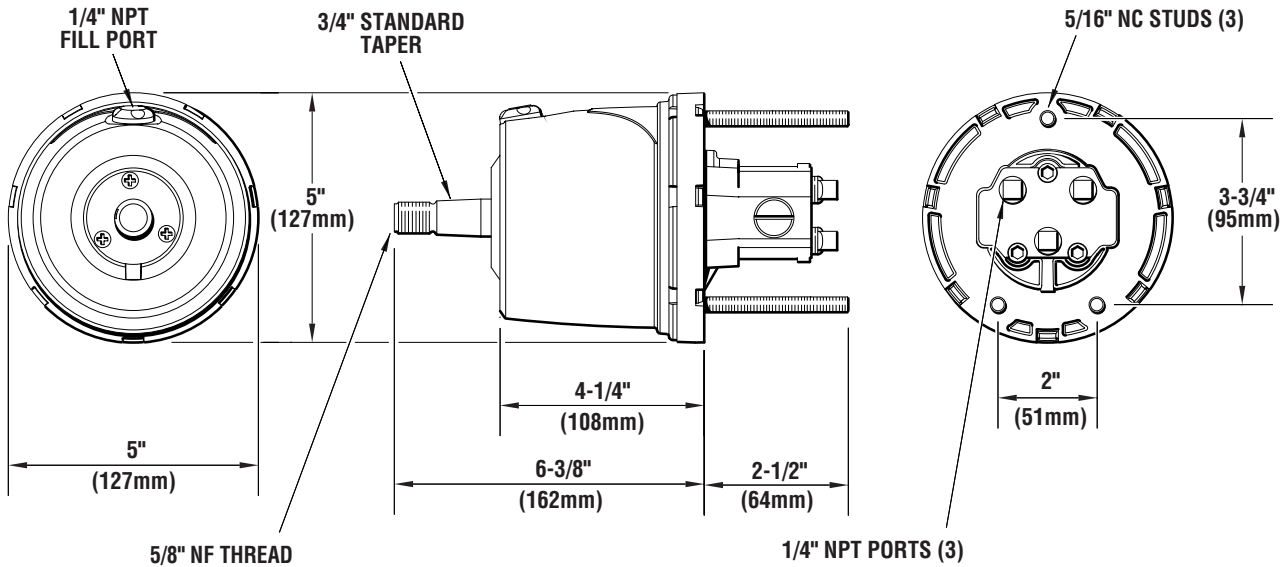


Typical BayStar Installation

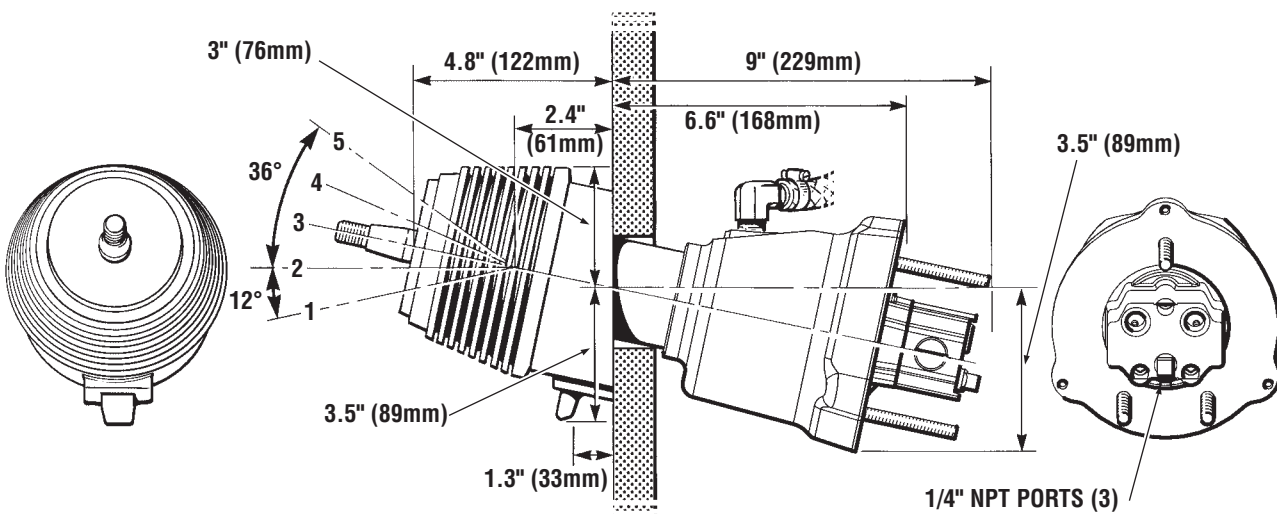
Three easy steps to select your BayStar System:

- 1) Check helm dimension. Both the Standard and Tilt helms require a 3" (76mm) cut-out hole in the dash.

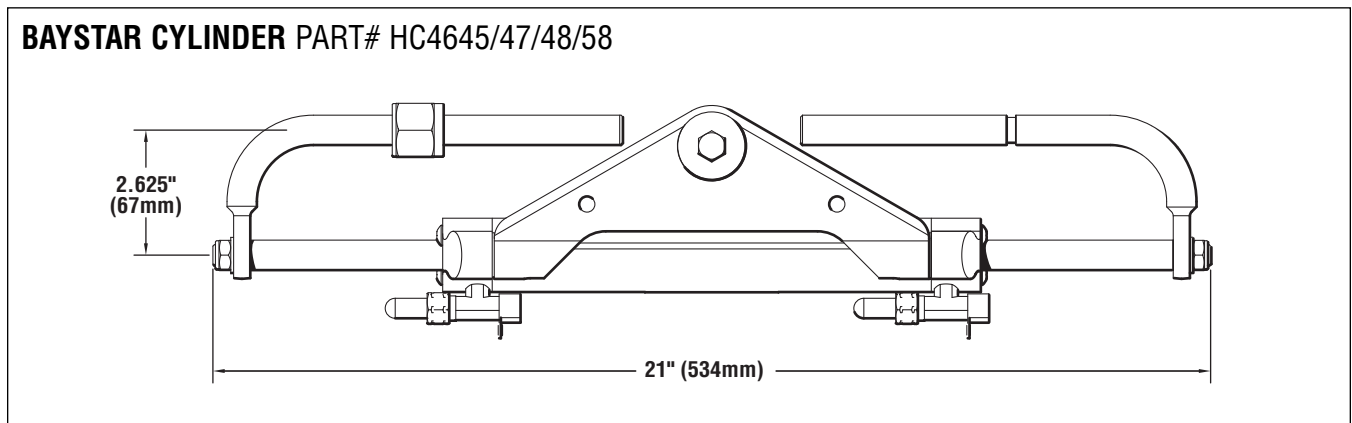
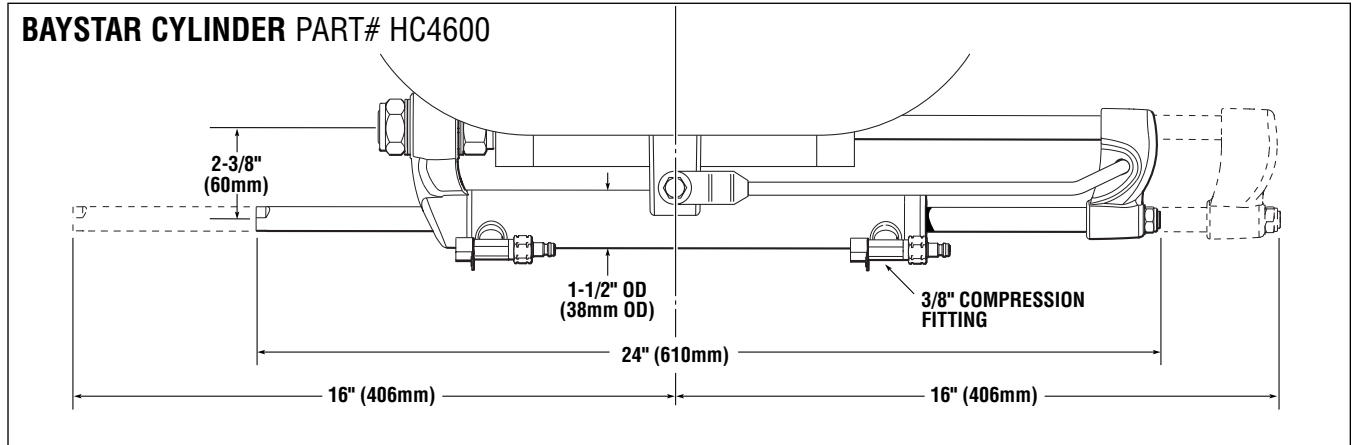
STANDARD HELM PART# HH4016



TILT HELM PART# HH4015



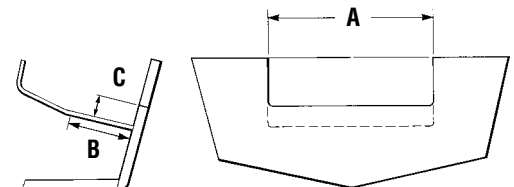
- 2) Check the BayStar cylinder dimensions through the full trim/tilt range of the engine. **IS THE SPLASHWELL WIDE ENOUGH?** The HC4600 BayStar cylinder requires 32" (813mm) splashwell width, and the HC4645/47/48/58 cylinder requires 21" (534mm).



- 3) Is there enough room in the splashwell for full engine tilt? Find the dimensions (A, B & C) of your splashwell. Check them against the minimum splashwell dimensions for full engine tilt for your engine and cylinder.

MOTOR WELL DIMENSIONS required for BayStar front mount outboard steering systems

CYLINDER MODEL NO.	# OF ENGINES	A	B	C	MIN. ENGINE CENTER DISTANCE
HC4600	1	32" (813mm)	5" (127mm)	4" (102mm)	N/A
	2	Twin engine applications not available at this time			
HC4645/47/48/58	1	21" (534mm)	6" (153mm)	5" (127mm)	N/A
	2	Twin engine applications not available at this time			



NOTES:

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

**BayStar Steering Kits
PID# HK4200 & HK4230**



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) with HK4200 and two lengths of 30' cut to fit tubing are supplied (2 x 30' length) with HK4230.

BayStar Steering Kit (HK4200)

includes:

- BayStar Helm Pump (HH4016)
- BayStar Cylinder (HC4600)
- BayStar 20' Tubing Kit (HT4420)
- 2 Bottles of hydraulic steering fluid (HA5430)
- Filler Kit (HA5438)

BayStar Steering Kit (HK4230)

includes:

- BayStar Helm Pump (HH4016)
- BayStar Cylinder (HC4600)
- BayStar 30' Tubing Kit (HT4430)
- 2 Bottles of hydraulic steering fluid (HA5430)
- Filler Kit (HA5438)

NOTICE

HC4600 BayStar Standard Cylinder is a universal cylinder, however, ensure it will fit your splashwell as per page 1-3. If the splashwell measurements limit the engine to BayStar Compact Steering Cylinders HC4645, HC4647, or HC4658, please view the application chart on page 1-5 to determine which cylinder is to be used for your engine. BayStar Compact Cylinders are NOT available in kit form, all parts MUST be ordered separately.

BayStar Outboard Compact Application Guide

(BayStar Compact Cylinders HC4645/47/48/58)



MFG	YEAR	MODEL	CYLINDER	NOTES
FORCE	1985-DATE	90-150 HP	HC4645	
HONDA	1992-DATE	30-90 HP	HC4645	
	1998-DATE	115-130 HP	HC4647	
	2001-DATE	150 HP	HC4645	
	2003-DATE	BF135 HP	HC4645	
JOHNSON/ EVINRUDE	1977-1989	65-150 HP	HC4648	
	1991-DATE	40-150 HP	HC4645	
	1997-DATE	115 HP FICHT	HC4658	4
	1997-DATE	75-150 HP FICHT	HC4645	
	1998-DATE	40-140 HP 4-Stroke	HC4658	1, 4
MERCURY/ MARINER	1984-DATE	75-150 HP	HC4645	
NISSAN	1990-DATE	120-140 HP	HC4645	
SUZUKI	1986-DATE	150 HP	HC4645	
	1996 ONLY	115-140 HP	N/A	
	1987-2002	115-140 HP	HC4645	1
	1990-2000	90-100 HP	HC4645	
	1998-DATE	40-70 4-Stroke	HC4645	1
	2001-DATE	115-140 HP 4-Stroke	HC4658	1, 4
TOHATSU	1990-DATE	140-140 HP	HC4645	
YAMAHA	1998-DATE	40-50 HP	HC4645	2
	1998-DATE	60 HP	HC4645	3
	1986-DATE	70-90 HP	HC4645	1
	1997-DATE	80-150 HP 4-Stroke	HC4645	
	2000-DATE	40 & 60 HP 4-Stroke	HC4648	1
YANMAR	1990-DATE	27-36 HP	HC4645	

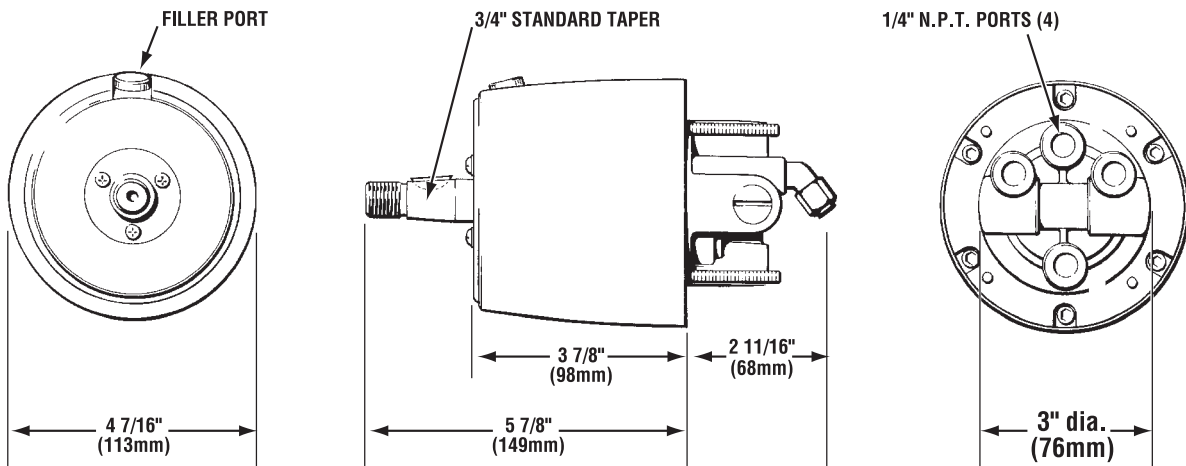
- Requires Spacer kit part # HO5090
- Engine clamp brackets must be cut or ground, and the engine through bolted onto the transom, or interference will occur, restricting engine trim and tilt.
- Steering hook Yamaha Part # 63D-48511-00-4D must be installed
- Cylinder HC4645 may be used in these applications. The pivot plate will need to be flipped before installation. Instructions provided with Owner's Manual.

REVISION DATE: SEPT. 17TH 2004

BayStar Plus

With the success of BayStar comes BayStar Plus. BayStar Plus provides enhanced steering ease over standard BayStar systems, and provides increased efficiencies and lighter steering at the wheel. As its predecessor, BayStar Plus is for boats rated to 150 HP total (some high horsepower performance 150 engines are exempt, i.e. Mercury 150 Optimax). Available in both standard mount and tilt helm versions BayStar Plus adds even more comfort to your bay style boat.

BAYSTAR PLUS HELM PART# HH4514



BAYSTAR PLUS TILT HELM PART# HH4513

