

TOURNAMENT SERIES CYLINDERS AND ADJUSTABLE TIE BAR

SEASTAR™



THE ART OF STEERING



**SEASTAR
SOLUTIONS®**

TOURNAMENT SERIES CYLINDERS AND ADJUSTABLE TIE BAR

Extreme heavy duty cylinders and tie bars designed for primarily high performance multiple engine applications. Also available for single engine applications.



FEATURES

- Suitable for use with all SeaStar Helms & SeaStar Power Assist
- Heavy duty universal cylinder
- Bolt on stainless steel tie bar plates, also reversible (patent pending)
- Robust design with heavy duty support brackets, barrel, shaft & seals
- Superior corrosion resistance
- New pivot plate design provides smooth articulation and a sealed joint (patent pending)
- Heavy duty adjustable tie bar (patent pending)
- Equipped with stainless steel adjustable o-ring sealed elbow fittings which can be easily orientated in any direction.

TOURNAMENT SERIES CYLINDERS

Stainless steel wear washer

Secondary end gland retention using plate bolts

Robust wipers and seals

Adjustable 90° stainless steel ORB elbow fittings

Stainless Steel Rod Ends

ADJUSTABLE TIE BAR

Anodized aluminum body

SPECIFICATIONS

ORDER INFORMATION	PART NO.
Outboard Tournament Series Cylinder, Front Mount	HC6845
Outboard Tournament Series Cylinder, Front Mount, c/w Single Engine Hardware Kit	HC6845S
Tournament Series Tie Bar, Small	HO6820
Tournament Series Tie Bar, Medium	HO6821
Tournament Series Tie Bar, Large	HO6822
Tournament Series Tie Bar, X-Large	HO6823
Tournament Series Hardware Kit Twin Engine, Single Cylinder STBD	HA6802
Tournament Series Hardware Kit Twin Engine, Dual Cylinder	HA6804
Tournament Series Hardware Kit Triple Engine, Dual Cylinder	HA6806
Tournament Series Hardware Kit Quad Engine, Dual Cylinder	HA6811
ORB Tee Fitting Kit	HF6005

Important Information:

Each configuration requires a hardware kit and tie bar kit(s), with the exception of the single engine configuration.

TOURNAMENT SERIES APPLICATION GUIDE ALL ENGINE MAKES - 200+ HP

APPLICATION GUIDE

CONFIGURATION	CYLINDER		HARDWARE KIT		TIE BAR				NOTES
	PART NO.	QTY.	PART NO.	QTY.	PART NO.	QTY.	CENTER TO CENTER DISTANCE (IN.)	CENTER TO CENTER DISTANCE (MM)	
Single Engine	HC6845S	1	Included			N/A	N/A	N/A	See notes 1
Twin Engine - Single Cylinder (STBD)	HC6845	1	HA6802	1	HO6821 HO6822 HO6823	1	25.0 - 25.6 25.7 - 30.6 30.7 - 39.0	635 - 650 653 - 777 780 - 991	See notes 1,3,4,5 HA6802 Drive Bracket Availability - TBD
Twin Engine - Dual Cylinder	HC6845	2	HA6804	1	HO6820 HO6821 HO6822 HO6823	1	25.0 - 26.5 26.6 - 29.3 29.4 - 34.2 34.3 - 43.0	635 - 673 676 - 744 747 - 869 871 - 1092	See notes 1,3,4,5
Triple Engine - Dual Cylinder	HC6845	2	HA6806	1	HO6822 HO6823	2	25.0 - 27.9 28.0 - 36.0	635 - 709 711 - 914	Maximum drop: ≤ 3 inches (76mm) See notes 1 thru 5
Quad Engine - Dual Cylinder	HC6845	2	HA6811	1	CONSULT SEASTAR SOLUTIONS TECHNICAL SERVICE				See notes 1,3,4,5
Quintuplet Engine (Plus)	CONSULT SEASTAR SOLUTIONS TECHNICAL SERVICE								See notes 1,3,4,5



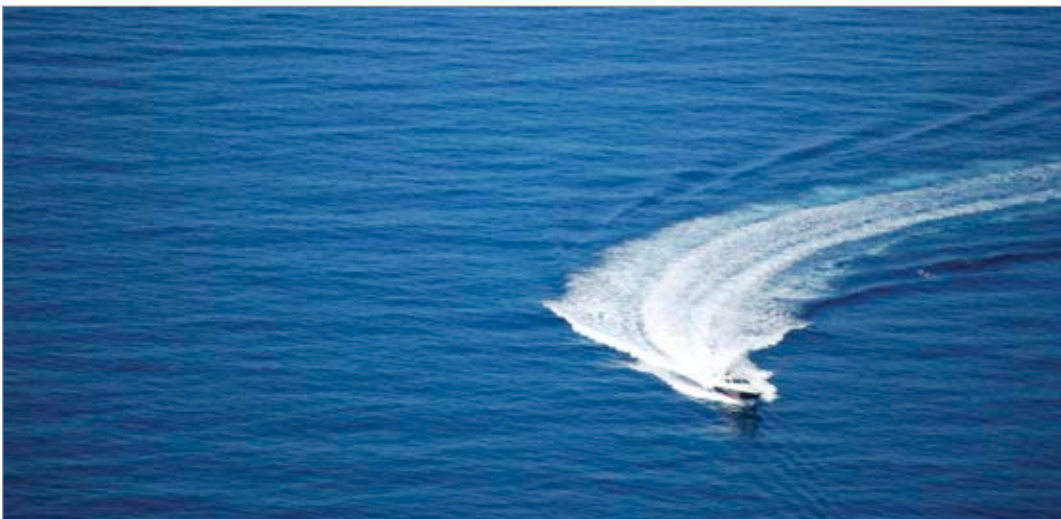
Important Information:

Each configuration requires a hardware kit and tie bar kit(s), with the exception of the single engine configuration.

GENERAL INSTALLATION NOTES FOR CHART ABOVE

- 1) Installation may vary according to the following factors: engine mounting height, transom thickness, use of transom savers, tiller bolt hole location, engine tilt range, and engine size.
- 2) For center engine drops greater than 3 inches (76mm), please consult SeaStar Solutions Technical Service.
- 3) Tie bar length may vary depending on toe in/toe out setup. To allow for toe, add or subtract from your nominal engine center to center distance.
- 4) Based on recommended engine manufacturer minimum center to center distances. Deviating from these recommendations may require stroke limiting cylinders and/or engine tilt limiting, please consult SeaStar Solutions Technical Service.
- 5) Cylinder's must be plumbed in parallel only, no series connections. Only exception is if cylinders are utilizing a liquid tie bar.

SUPERIOR FEEL ON THE WATER





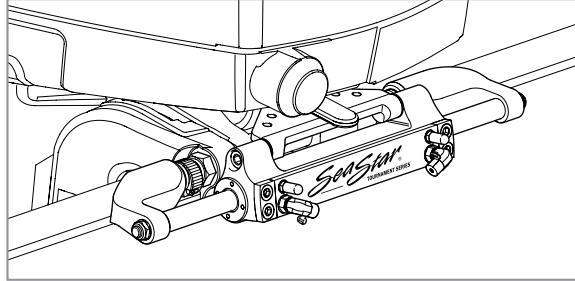
Bolt-on stainless steel tie bar plates (reversible)



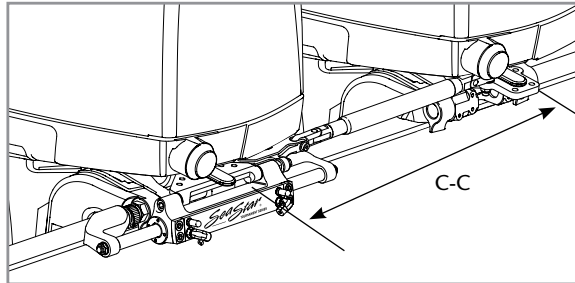
Robust barrel/Shaft/
Support Brackets

Adjustable threaded design
Maximum stroke indicator

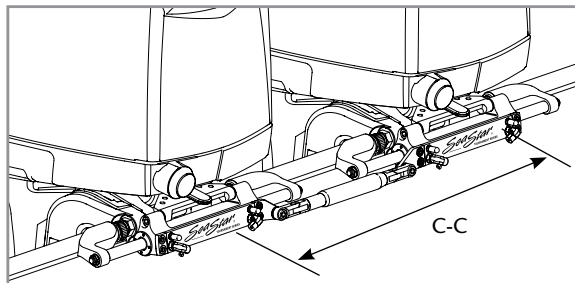
ENGINE CONFIGURATIONS (See Application Guide)



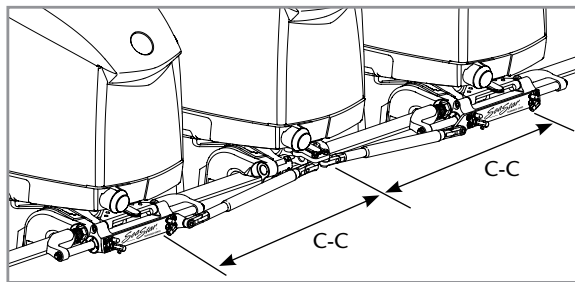
Single Engine
Single Cylinder



Twin Engines
Single Cylinder



Twin Engines
Dual Cylinders



Triple Engines
Dual Cylinders

C-C = Center to
Center distance



SEASTAR SYSTEM UPGRADE OPTIONS

SEASTAR POWER ASSIST

Today's high horsepower engines are much heavier and are producing more propeller torque than ever before. Naturally this additional weight and torque has an effect on the boat's steering when these loads are transferred to the wheel. Unacceptable levels of steering load can increase driver fatigue and discomfort. The SeaStar Power Assist virtually eliminates all steering loads and provides modern boaters the same level of steering comfort and control found in cars. Even in the most extreme applications, the boat will be more comfortable to steer. The SeaStar Power Assist allows the boat to be driven safely and easily by the whole family.

FEATURES

- Dramatically reduces steering effort
- Wall or Floor mount
- Easy to install
- OEM or retro-fit
- Compatible with power purge system
- Simple add-on to an existing SeaStar steering system (from 1.4 to 2.4 SeaStar helms)
- OEM or retro-fit
- Compatible with power purge system
- Return to manual in failure mode
- Suitable for use with autopilots
- 12V or 24V operation
- Wiring harness included
- Ignition protected (SAE J-1171)
- ABYC, CE, NMMA, ISO 10592 Approved

PA1200-2



STAINLESS STEEL BULKHEAD HOSE KITS

SeaStar Single Stainless Steel Bulkhead Hose Kit (2 hoses): HO86XX

SeaStar Single Stainless Steel Pro Bulkhead Hose Kit (2 hoses): HO87XX

SeaStar Double Stainless Steel Bulkhead Hose Kit (2 hoses): HO88XX

SeaStar Double Stainless Steel Pro Bulkhead Hose Kit (2 hoses): HO89XX

Refer to www.seastarsolutions.com for additional system options.

TILT STEERING

The ultimate in Tilt Steering Technology. SeaStar Tilt Steering delivers unsurpassed performance and flexibility making it the perfect system for all possible applications and boat types.



CLASSIC TILT



SPORT PLUS TILT

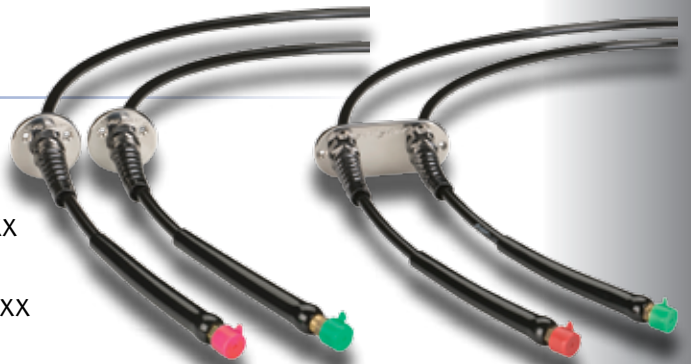
FEATURES

- Preloaded dual taper bearings ensure minimal excess free play
- Smooth operation and feel
- Shaft seals prevent water ingress
- 48 degrees of tilt articulation
- 5 positive lock positions
- Up to three style options
- Compact footprint
- Maintenance free
- Fits most styled and formed dashes



SPORT TILT

HELM DESCRIPTION	HELM PART NO.
SEASTAR 1.4 - CLASSIC TILT*	HH6544
SEASTAR 1.7 - SPORT TILT*	HH6191
SEASTAR 1.7 - CLASSIC TILT*	HH6191
SEASTAR 1.7 - SPORT PLUS TILT*	HH6491
SEASTAR 2.0 - SPORT TILT*	HH6545
SEASTAR 2.0 - CLASSIC TILT*	HH6543
SEASTAR 2.0 - SPORT PLUS TILT*	HH6445
SEASTAR 2.4 - SPORT TILT*	HH6192
SEASTAR 2.4 - CLASSIC TILT*	HH6542
SEASTAR 2.4 - SPORT PLUS TILT*	HH6492



SINGLE BULKHEAD
HOSE KIT HO86_ _

DOUBLE BULKHEAD
HOSE KIT HO88_ _



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