NEW FROM SEASTAR

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

Secondary end gland retention using plate bolts
Stainless steel wear washer
Stainless Steel Rod Ends
Anodized aluminum body
Adjustable 90° stainless steel ORB elbow fittings
Robust wipers and seals

SPECIFICATIONS

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

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

<table>
<thead>
<tr>
<th>CONFIGURATION</th>
<th>CYLINDER</th>
<th>HARDWARE KIT</th>
<th>TIE BAR</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Engine</td>
<td>HC6845S</td>
<td>1 Included</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Twin Engine -</td>
<td>HC6845S</td>
<td>HA6802</td>
<td>1</td>
<td>25.0 - 25.6</td>
</tr>
<tr>
<td>Single Cylinder (STBD)</td>
<td></td>
<td></td>
<td></td>
<td>25.7 - 30.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30.7 - 39.0</td>
</tr>
<tr>
<td>Twin Engine -</td>
<td>HC6845S</td>
<td>HA6804</td>
<td>1</td>
<td>25.0 - 26.5</td>
</tr>
<tr>
<td>Dual Cylinder</td>
<td></td>
<td></td>
<td></td>
<td>26.6 - 29.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>29.4 - 34.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>34.3 - 43.0</td>
</tr>
<tr>
<td>Triple Engine -</td>
<td>HC6845S</td>
<td>HA6806</td>
<td>1</td>
<td>25.0 - 27.9</td>
</tr>
<tr>
<td>Dual Cylinder</td>
<td></td>
<td></td>
<td></td>
<td>28.0 - 36.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quad Engine -</td>
<td>HC6845S</td>
<td>HA6811</td>
<td>1</td>
<td>CONSULT SEASTAR SOLUTIONS TECHNICAL SERVICE</td>
</tr>
<tr>
<td>Dual Cylinder</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quintuplet Engine (Plus)</td>
<td></td>
<td></td>
<td>CONSULT SEASTAR SOLUTIONS TECHNICAL SERVICE</td>
<td>See notes 1,3,4,5</td>
</tr>
</tbody>
</table>

**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**
ENGINE CONFIGURATIONS (See Application Guide)

- Single Engine
  - Single Cylinder
- Twin Engines
  - Twin Cylinders
- Dual Cylinders
- Triple Engines
  - Dual Cylinders
- Anodized aluminum body
- Robust barrel/Shaft/Support Brackets
- Bolt-on stainless steel tie bar plates (reversible)
- Adjustable threaded design
  Maximum stroke indicator

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

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

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 stylish and formed dashes

SPORT PLUS TILT

SEASTAR SYSTEM UPGRADE OPTIONS

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.