



PRINCESS 72



KROGEN 44



HATTERAS 64

ABT·TRAC®

220 DIGITAL STABILIZERS



The user panel is a touch-screen LCD with large text and graphic keys. All important information is displayed on the Home screen. Low profile and small size (4" x 4.75") allow for easy mounting.

TRAC Digital Stabilizers dramatically improve ride comfort in any sea-state or wave angle. TRAC's 3-term control detects vessel motion and instantly adjusts fin position to counteract roll.

The TRAC exclusive touch-screen LCD user panel is simple and intuitive to operate. With one-touch activation, TRAC automatically adjusts for changes in sea-state, wave angle, and vessel speed.

TRAC's exclusive Fin and Winglet are computer optimized to generate more anti-roll force and less drag than conventional fins.

TRAC actuators feature a unique fail-safe capability that mechanically locks the fins when required. No more lifting floorboards or trips to the bilge to "pin the fins".

TRAC Stabilizers are built for heavy-duty service. Load bearing components are intentionally oversized. Double sealed shaft housings require no maintenance between haulouts. Our unique inboard hull flange mounting system speeds installation and eliminates costly, dry rot prone, wooden blocks.

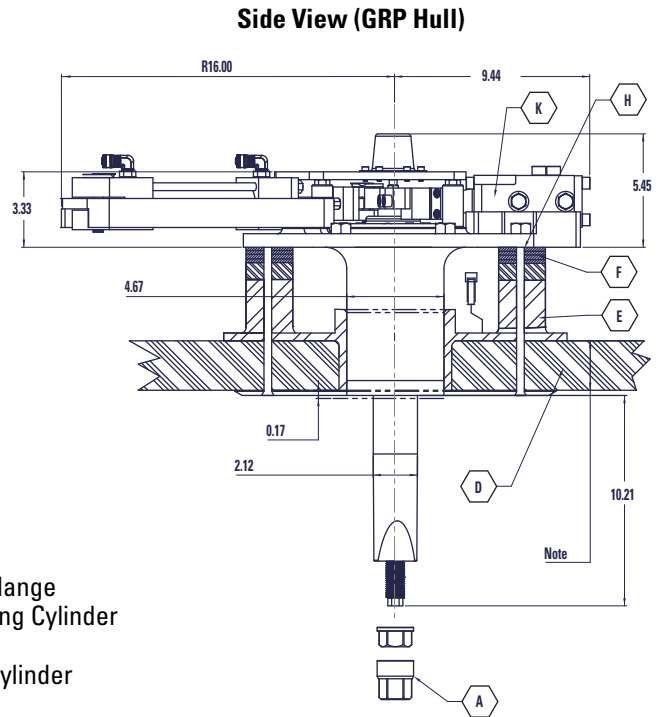
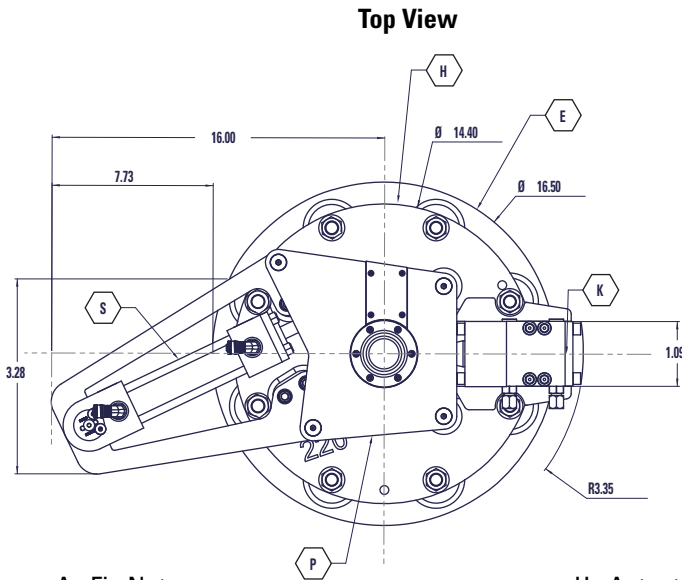
TRAC systems are extensively documented and delivered ready-to-install. Key assemblies are factory tested, and cabling is custom fabricated for every vessel. Expert support is always available from factory technicians and through our global service network.

TRAC Digital Stabilizers are installed as standard equipment by more of the world's top yacht builders than any other brand. For exceptional performance, highest quality, and unmatched support, choose TRAC.

Taking Care Of You Every Step Of The Way.

ABT·TRAC®

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- A. Fin Nut
- D. Augmented hull thickness (Note)
- E. Inboard Hull Flange
- F. Hull Flange Spacer
- H. Actuator Flange
- K. Yoke Locking Cylinder
- P. Top Plate
- S. Actuator Cylinder

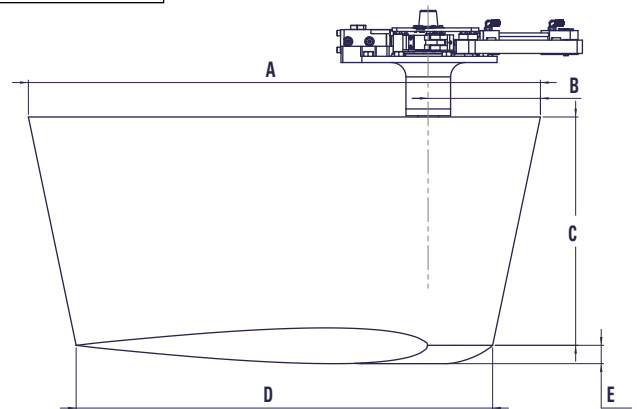
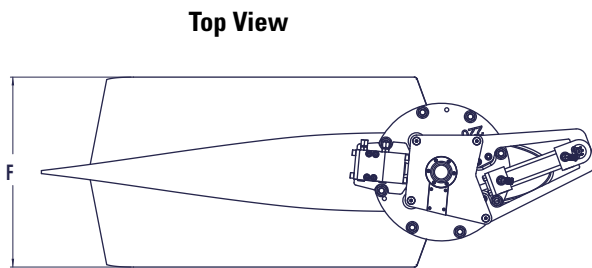
Note:

It is the responsibility of the installer to determine what reinforcement measures should be taken to properly strengthen the hull for withstanding forces that may be encountered if the fin or the fin shaft strikes an immovable object while the vessel is underway. Recommendations made by Arcturus Marine are to be used as starting guidelines only.

FIN	A		B		C		D		E		F	
SIZE	Inch	(cm)	Inch	(cm)	Inch	(cm)	Inch	(cm)	Inch	(cm)	Inch	(cm)
4.5	35.5	(90.2)	8.5	(21.6)	20.8	(52.8)	26.9	(68.3)	1.1	(2.9)	12.1	(30.7)
6.0	41.0	(104.1)	9.8	(24.9)	23.9	(60.7)	31.0	(78.7)	1.3	(3.3)	14.0	(35.6)
6.0x	53.6	(136.1)	11.7	(29.7)	23.9	(60.7)	43.8	(111.3)	1.9	(4.8)	19.8	(50.3)
7.5	45.8	(116.3)	11.0	(27.9)	26.7	(67.8)	34.7	(88.1)	1.5	(3.7)	15.7	(39.9)

Fins designated with an "X" suffix are extended chord fins for use in Stabilization At Rest (STAR[™]) systems.

Side View



Dimensions shown for reference only and are subject to change. Do not use for installation.

Assembly Parts

A. Fin Nut *	L. Locking Cylinder Screw
B. Hull Doubler Plate (Note 2)	M. Yoke Stop Screw
C. Hull Flange Bolt (Note 3)	O. Yoke Clamping Screw
D. Augmented hull thickness (Note 1)	P. Top Plate
E. Inboard Hull Flange (Note 4)	R. Top Plate Screw
F. Hull Flange Spacer (Note 5)	S. Actuator Cylinder
G. Hull Flange Jacking Screw (Note 6)	T. Position Sensor Cover
H. Actuator Flange	U. Sensor Cable Cover
K. Yoke Locking Cylinder	

Assembly Fasteners

Part	Description	Qty	Size # or inch	Install Torque ft-lb / (Nm)	Install with Coating ***
A	Fin Nut *	1	7/8 -14 UNS	220 / (298)	Loctite® 262
C	Hull Flange Bolt	8	5/8 -11	100 / (136)	3M® 5200
G	Flange Jacking Screw	3	3/8 -16	-- / --	--
L	Locking Cylinder Screw	4	3/8 -16	30 / (41)	M
M	Yoke Stop Screw	4	1/4 -20	8.5 / (11.5)	H
O	Yoke Clamping Screw	2	3/8 -16	30 / (41)	H
R	Top Plate Screw ****	6	3/8 -16	14 / (19)	M
T	Sensor Cover Screw	6	10 -32NF	1.0 / (1.4)	--
U	Cable Cover Screw	6	6 -32NF	0.4 / (0.5)	--

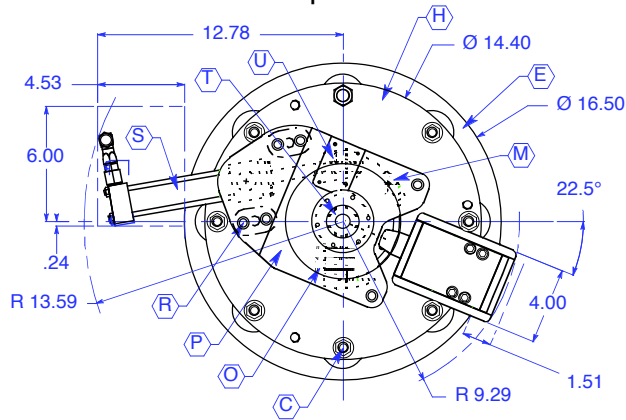
* Nut requires 1.375" Hex Socket.

*** M = Medium strength thread lock compound; H = High Strength thread lock compound.

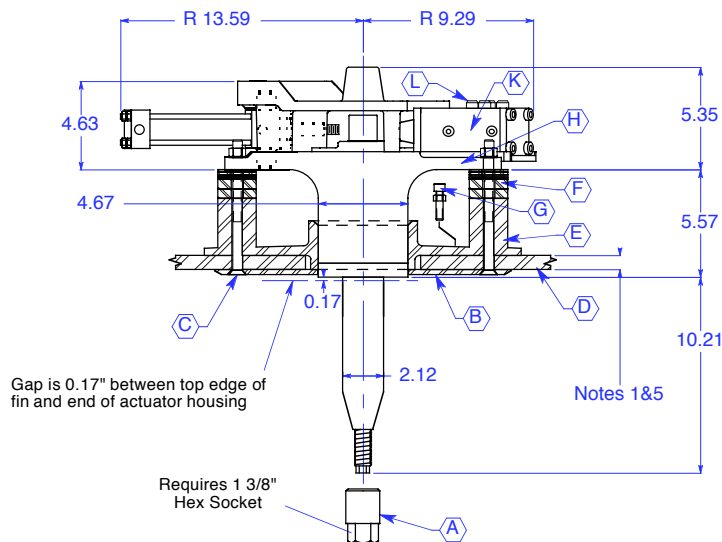
Install torques shown here require coating on threads and also, as lubricant, under bolt head or nut, whichever is turned.

**** One 0.5" dowel pin at each of two main top plate legs.

Top View



Side View



NOTES:

- It is the responsibility of the installer to determine what reinforcement measures should be taken to properly strengthen the hull for withstanding forces that may be encountered if the fin or the fin shaft strikes an immovable object while the vessel is under way. Recommendations made by American Bow Thruster are to be used as starting guidelines only. American Bow Thruster is NOT a naval architecture firm and is NOT qualified to advise on structural matters. American Bow Thruster strongly recommends that you seek the advice of a naval architect familiar with your make of vessel.
- The Hull Doubler Plate is a retainer surface for assembly fasteners and sealants. The Hull Doubler Plate should NOT be considered to provide structural hull reinforcement.
- Hull Flange bolts will through-bolt the Hull Doubler Plate, Inboard Hull Flange & Actuator Flange.
- Inboard Hull Flange with eight integral riser columns and adjustable spacer stacks.
- The range of hull thickness that can be accommodated by standard actuator equipment is 0.75" minimum to 2.25" maximum. See the TRAC Stabilizer Installation Manual for additional details concerning this thickness range.
- Hull Flange Jacking Screws are used during installation and removed after final flange bedding.
- Actuator specifications and dimensions are subject to change without prior notice. Do not use this print for final installation without contacting the factory for certified dimensions.



American Bow Thruster
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DRAWN RJP

CHECKED

ISSUED 4/7/2005

REVISED 4/4/2006

DRAWING AS220FHv5

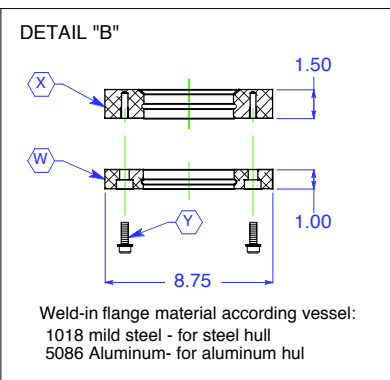
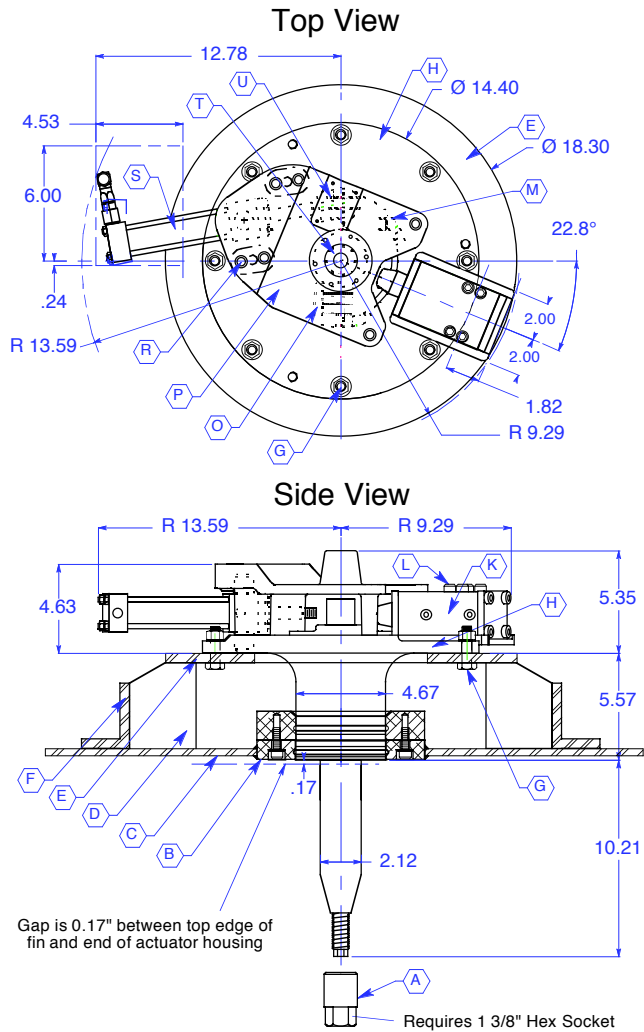
TRAC Stabilizer Specification Sheet

TRAC® 220

Actuator Assembly Parts & Dimensions - Fiberglass Hull Installation

DIMENSIONS: ALL DIMENSIONS ARE INCHES UNLESS OTHERWISE NOTED.

SCALE: NOT TO SCALE



Assembly Parts

- | | | |
|--------------------------------------|---------------------------|--------------------------|
| A. Fin Nut * | H. Actuator Flange | S. Actuator Cylinder |
| B. Hull Flange Assembly (Note 2) | K. Yoke Locking Cylinder | T. Position Sensor Cover |
| C. Augmented hull thickness (Note 1) | L. Locking Cylinder Screw | U. Sensor Cable Cover |
| D. Platform Gusset (Note 3) | M. Yoke Stop Screw | W. Weld-in Hull Flange |
| E. Platform Flange (Note 3) | O. Yoke Clamping Screw | X. Bolt-on Hull Flange |
| F. Hull Framing (Note 3) | P. Top Plate | Y. Hull Flange Screw |
| G. Actuator Flange Bolt (Note 4) | R. Top Plate Screw | |

Assembly Fasteners

Part	Description	Qty	Size # or inch	Install Torque ft-lb / (Nm)	Install with Coating ***
A	Fin Nut *	1	7/8 -14 UNS *	220 / (298)	Loctite® 262
G	Actuator Flange Bolt	8	5/8 -11	140 / (190)	M
L	Locking Cylinder Screw	4	3/8 -16	30 / (41)	M
M	Yoke Stop Screw	4	1/4 -20	8.5 / (11.5)	H
O	Yoke Clamping Screw	2	3/8 -16	30 / (41)	H
R	Top Plate Screw ****	6	3/8 -16	14 / (19)	M
T	Sensor Cover Screw	6	10 -32NF	1.0 / (1.4)	--
U	Cable Cover Screw	6	6 -32NF	0.4 / (0.5)	--
Y	Hull Flange Screw	8	3/8 -16	14 / (19)	M

* Nut requires 1.375" Hex Socket
 *** M = Medium strength thread lock compound; H = High Strength thread lock compound. Install torques shown here require coating on threads and also, as lubricant, under bolt head or nut, whichever is turned.
 **** One 0.5" dowel pin at each of two main top plate legs

NOTES:

- It is the responsibility of the installer to determine what reinforcement measures should be taken to properly strengthen the hull for withstanding forces that may be encountered if the fin or the fin shaft strikes an immovable object while the vessel is under way. Recommendations made by American Bow Thruster are to be used as starting guidelines only. American Bow Thruster is NOT a naval architecture firm and is NOT qualified to advise on structural matters. American Bow Thruster strongly recommends that you seek the advice of a naval architect familiar with your make of vessel.
- See inset "Detail B" for Hull Flange Assembly details.
- The Platform Flange with its integrated gussets, hull framing and stringers, are provided by the customer according to the naval architect's specifications. Consult the TRAC Stabilizer Installation Manual for recommended and required details applicable to the platform flange.
- Actuator Flange Bolts are provided by the customer according to the thickness of the platform flange. Fasteners should include grade 8 bolts with nuts and flat washers.
- Actuator specifications and dimensions are subject to change without prior notice. Do not use this print for final installation without contacting the factory for certified dimensions.



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DRAWN	RJP	TRAC ® 220 Actuator Assembly Parts & Dimensions - Metal Hull Installation
CHECKED		
ISSUED	4/12/2005	
REVISED	4/4/2006	
DRAWING	AS220MHV5	
DIMENSIONS: ALL DIMENSIONS ARE INCHES UNLESS OTHERWISE NOTED.		SCALE: NOT TO SCALE