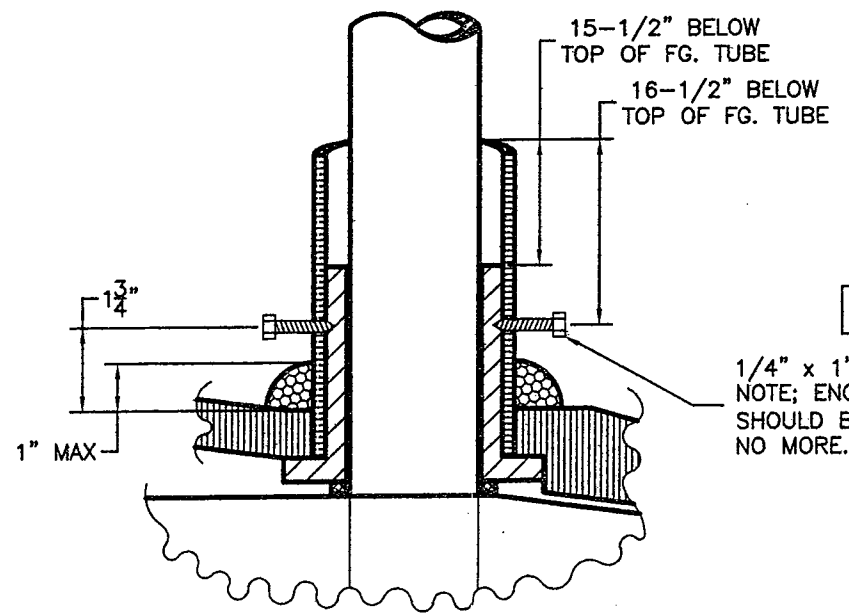
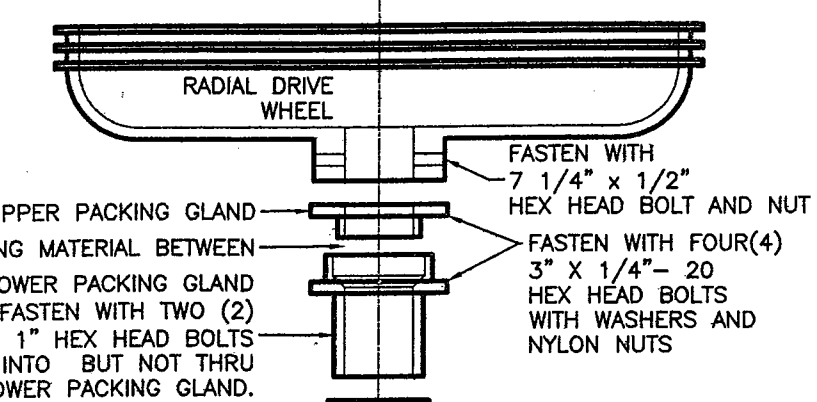
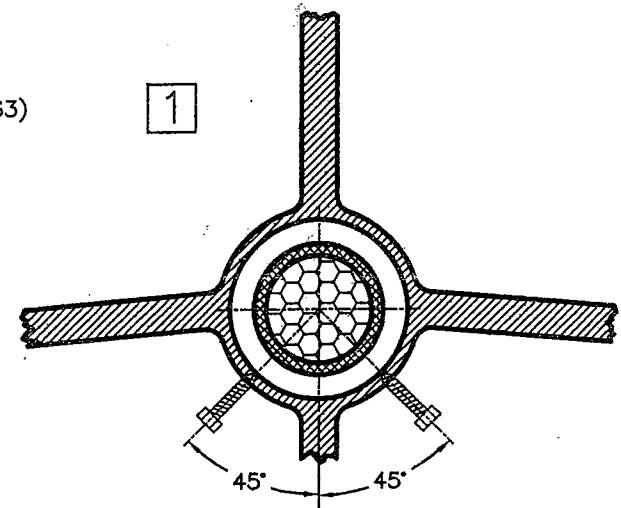
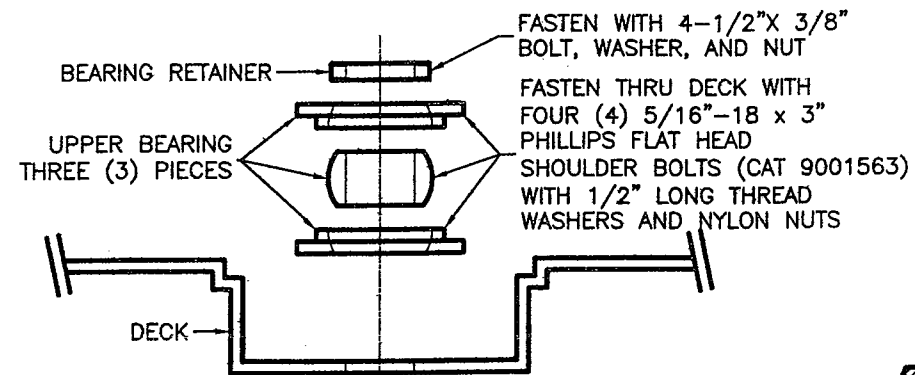
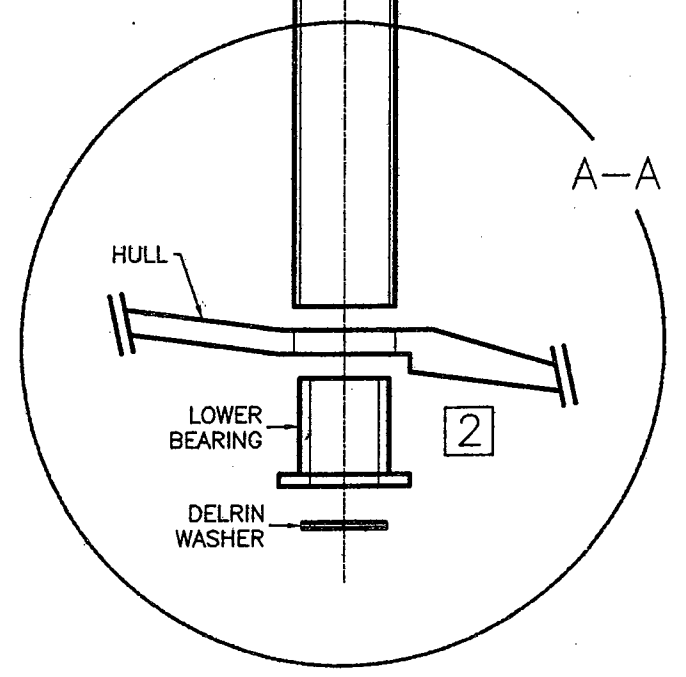


NO	REVISION	DATE
1	REVISED BOLTS	3/3/01
2	DELETED FLAT HEAD SCREWS IN LOWER BEARING. ADDED LAG SCREWS IN LOWER BEARING.	3/16/01
3	CORRECTED NONCLAMATURE FOR FASTENERS FOR LOWER PACKING GLAND.	10/31/01



DETAIL: A-A



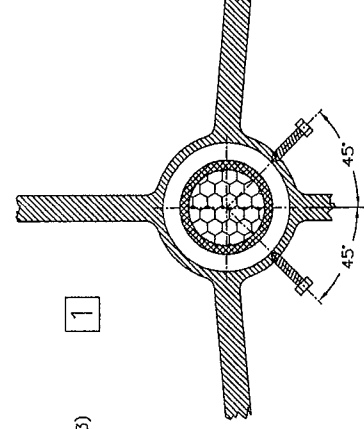
Catalina Yachts

7200 BRYAN DIARY RD.
LARGO, FL. 33777
(727) 544-6681

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DO NOT SCALE DRAWING		BOAT: C310- C380- C400		DRAWING NO: 400-28051-3	
DESIGNED BY:		CHECKED BY:		SCALE: NONE	
DRAWN BY: C.D.		APPROVED BY:		DATE: 5/4/99	
				SIZE: B	SHEET: 1/1

NO	REVISION	DATE
1	REVISED BOLTS	3/3/01
2	DELETED FLAT HEAD SCREWS IN LOWER BEARING. ADDED LAG SCREWS IN LOWER BEARING.	3/16/01
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BEARING RETAINER
 UPPER BEARING
 THREE (3) PIECES
 DECK
 RADIAL DRIVE WHEEL
 FASTEN WITH 4-1/2" x 3/8" BOLT, WASHER, AND NUT
 FASTEN THRU DECK WITH FOUR (4) 5/16"-18 x 3" PHILLIPS FLAT HEAD SHOULDER BOLTS (CAT 9001563) WITH 1/2" LONG THREAD WASHERS AND NYLON NUTS

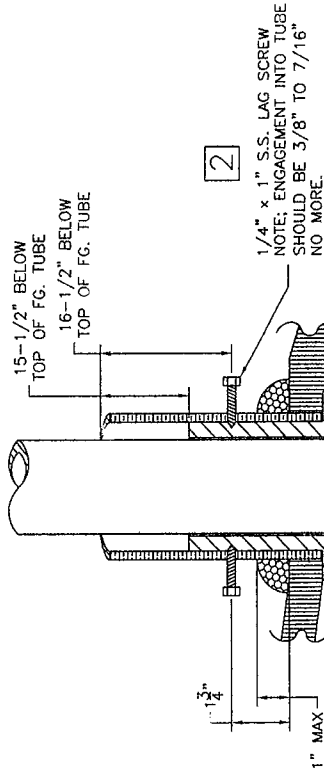


1

UPPER PACKING GLAND
 PACKING MATERIAL BETWEEN
 LOWER PACKING GLAND
 FASTEN WITH TWO (2) 1/4"-20 x 1" HEX HEAD BOLTS BUT NOT THRU LOWER PACKING GLAND.
 FASTEN WITH 7 1/4" x 1/2" HEX HEAD BOLT AND NUT
 FASTEN WITH FOUR(4) 3" x 1/4"-20 HEX HEAD BOLTS WITH WASHERS AND NYLON NUTS

3

THRU F.R.P. TUBE AND INTO LOWER PACKING GLAND.



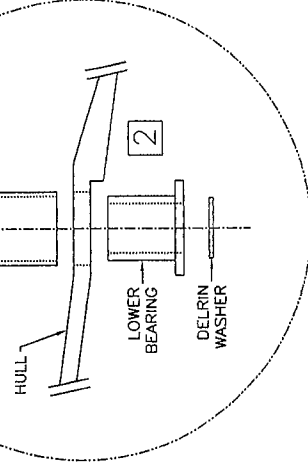
2

1/4" x 1" S.S. LAG SCREW
 NOTE: ENGAGEMENT INTO TUBE SHOULD BE 3/8" TO 7/16" NO MORE.

APPLY 3M 4200 SEALANT TO RUDDER BEARING AND INSERT INTO FIBERGLASS TUBE.

DETAIL: A-A

1 1/2"
 1" MAX



A-A

2

HULL
 LOWER BEARING
 DELRIN WASHER

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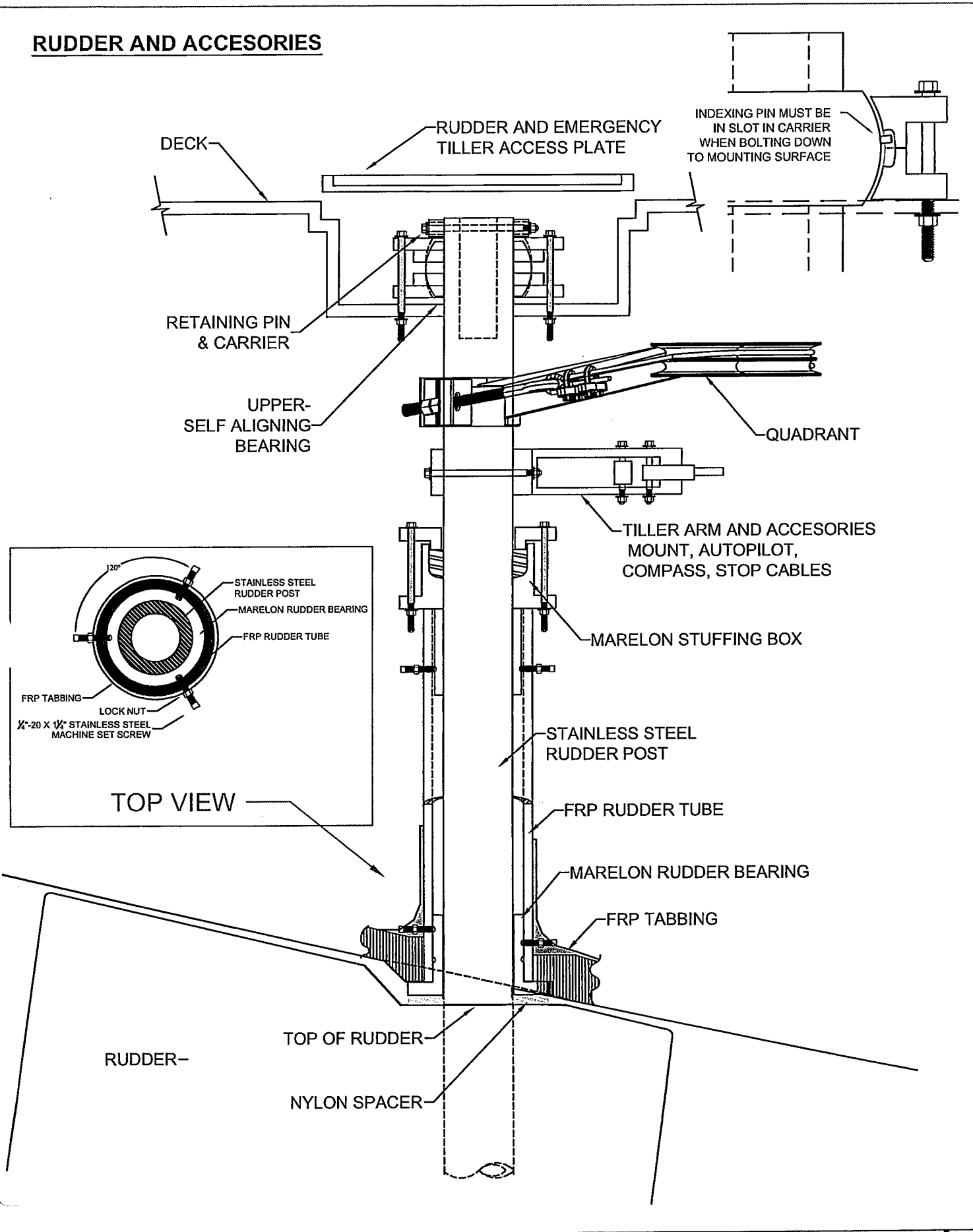
7200 BRYAN DAIRY RD.
 JASCO, FL. 33777
 (727)544-6881

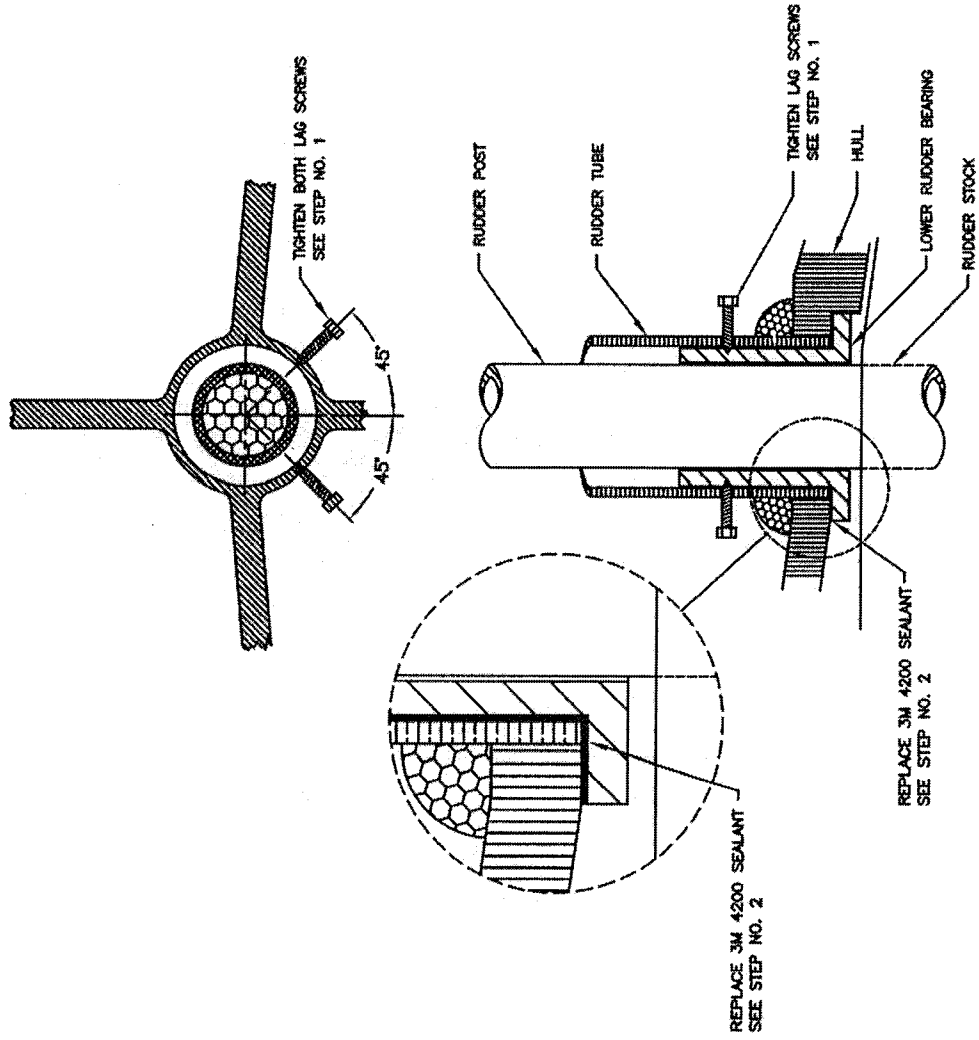
SCALE: NONE
 DATE: _____
 APPROVED BY: _____
 FILE: _____
 DRAWN BY: GTB

TITLE: RUDDER BEARING ASSEMBLY
 SHEET: 1/1

BOAT: CATALINA 350
 DRAWING NUMBER: 28051-3

RUDDER AND ACCESORIES





INSTRUCTIONS FOR TIGHTENING THE LOWER RUDDER BEARING:
 THE LOWER BEARING IS SECURED IN PLACE BY 3M 4200 ADHESIVE APPLIED TO THE OUTSIDE OF THE BEARING AND THE INSIDE OF THE FIBERGLASS RUDDER TUBE AND PREVENTED FROM ROTATING BY (2) S.S. LAG SCREWS THROUGH THE FIBERGLASS RUDDER TUBE AND ENGAGING INTO THE BEARING WALL.

1.) IF THE BEARING IS LOOSE, BUT NOT SEPERATED FROM THE INSIDE OF THE FIBERGLASS TUBE, THE BEARING CAN BE SECURED TO PREVENT MOVEMENT BY TIGHTING THE LAG SCREWS INSIDE THE BOAT AT THE BOTTOM OF THE TUBE. WHEN TIGHTENING THE LAG SCREWS THEY SHOULD BE REMOVED AND NEW 3M 4200 SEALANT APPLIED TO THE THREADS.

2.) IF THE BEARING IS LOOSE AND CAN ROTATE INSIDE THE TUBE IT WILL BE NECESSARY TO APPLY A NEW COAT OF 3M 4200 TO THE OUTSIDE OF THE BEARING. THIS WILL REQUIRE LOWERING THE RUDDER ENOUGH TO SLIDE THE BEARING DOWN THE RUDDER POST 3"-4" AND APPLYING FRESH 3M 4200 AND INSERTING THE LOWER BEARING INTO THE POST.

SECTION AT RUDDER POST

Catalina Yachts
 7200 BRYAN DARY NO.
 LANDO, FL 33777
 (727)644-6881

DATE	APPROVED BY	DESIGNED BY	ISSUED
NONE		J.S.M	
DATE	REV	DESCRIPTION	ISSUED
2/24/10	RB-1	LOWER RUDDER BEARING REFASTENING	1/1
CATALINA 309 - 470			

Notes on Rudder and Bearing installation:

1. Aft bulkhead should be securely methacrylated to deck and hull to stiffen cockpit sole and rudder bearing landing.
 2. When fitting the rudder, make sure the rudder is jacked up hard against the delrin washer. After the pin is fit and the jack is released this will result in approximately 1/16" play in the rudder and prevent the rudder slamming up and down in the boat.
 3. When installing the lower bearing use plenty of sealant on the entire bearing, not just the mounting flange.
 4. When installing the bearing, bed and install the upper and lower bearings, insert the rudder and let the sealant entirely cure for at least a day before adding the set screws.
 5. When adding the set screws, add just two to the lower bearing at 120 degrees separation, not at 180 degrees. This will prevent the bearing from floating on the tips of the screws and coming loose.
 6. When mounting the stuffing box be sure to let the sealant cure completely before adding set screws. Again, use just two screws separated by 120 degrees. Bolt on the upper portion of the stuffing box using hex head machine screws, washers and nyloc locking nuts.
 7. Before tightening the stuffing box, ensure that the packing material is trimmed on a 45 degree angle and overlaps.(See drawing)
 8. When mounting the upper self-aligning bearing be sure that the indexing pin is entered into the slot on the carrier. This will prevent the bearing from rotating with the rudder and causing friction and binding. Mount with hex head screws and nyloc locking nuts.
-