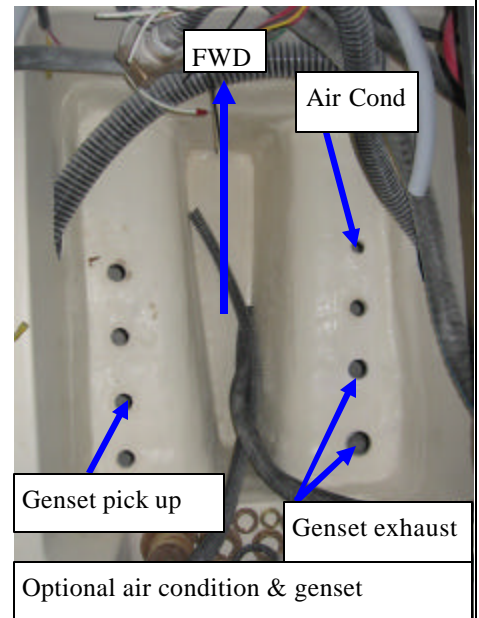
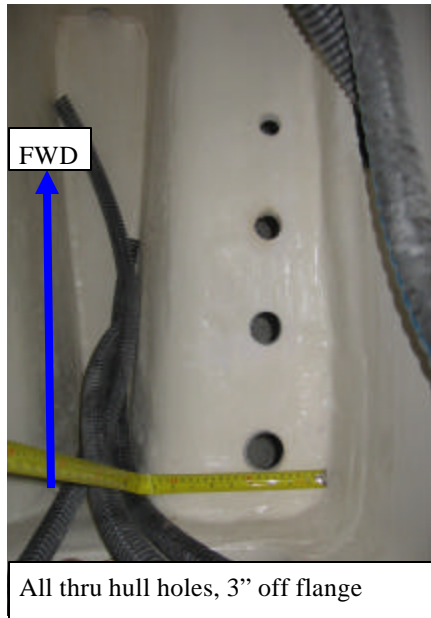
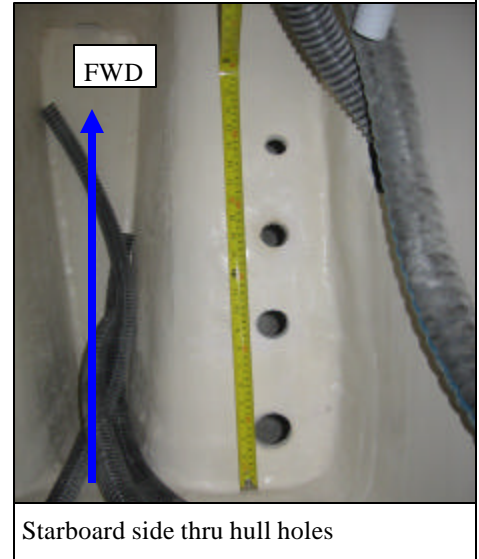
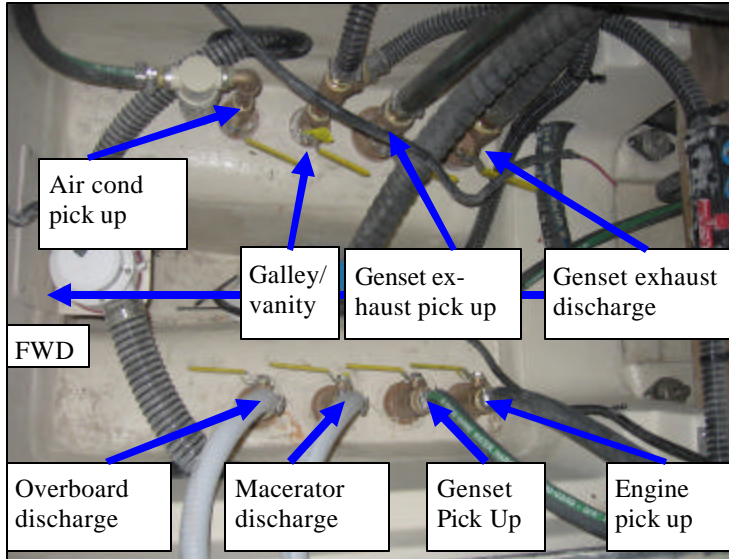


49 Engine Stage

Bilge Thru Hull's Installation (3-27-2006) Rev-A

Main Bilge Thru Hull's Installation:

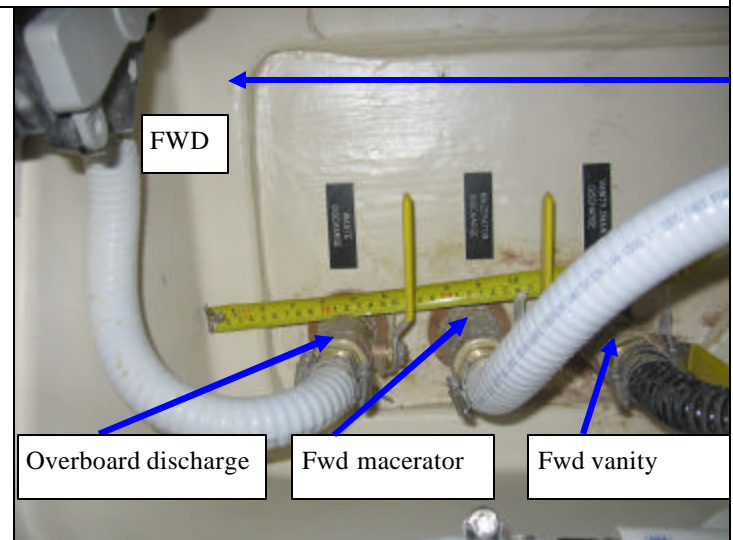
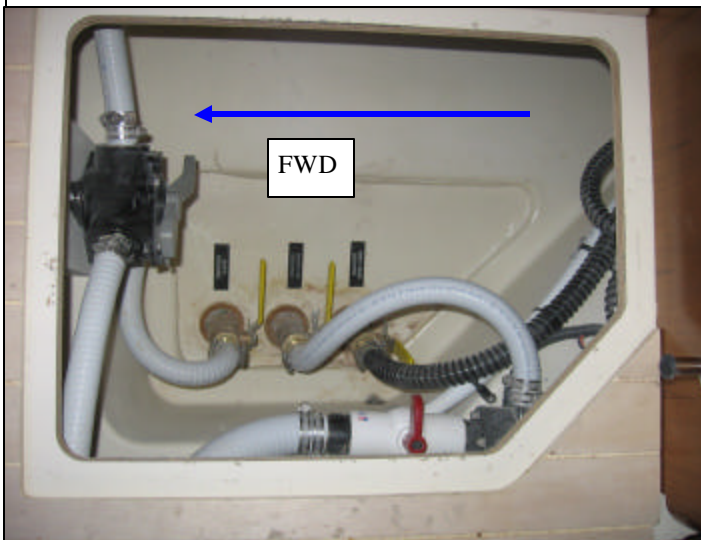
1. The bulge compartment locates fwd of engine bearer, this contains 8 thru hull fittings, ball valves. 4 thru hulls' locate at port side, engine pick up, optional genset pick up, macerator discharge and optional overboard discharge thru hulls. Starboard side contain optional genset exhaust discharge, genset exhaust pick up, galley/ aft vanity discharge and optional air conditioner pick up.
2. Drill port side thru hull holes from aft end, 3' off aft flange fwd and 3" off the compartment port side flange, drill $\phi 1-13/8$ " for engine pick up thru hull fitting.
3. At engine thru hull pick up thru hull's location, measure 5" from drill center and drill $\phi 1-1/8$ " cutout for optional genset pick up thru hull fitting. Then measure another 5" fwd of genset pick up thru hull hole, drill a $\phi 1-3/8$ " thru hull hole for macerator discharge thru hull fitting, and then optional overboard discharge thru hull locate 5" fwd of macerator discharge thru hull hole, drill a $\phi 1-3/8$ " for overboard discharge.
4. For starboard side thru hull holes, start from aft end, same position as port side thru hull holes, 3" fwd of compartment aft flange, and 3" of the compartment starboard side flange.
5. Drill a $\phi 1-7/8$ " optional genset exhaust discharge thru hull hole, then a $\phi 1-5/8$ " optional genset flow pick up thru hull hole at 5" fwd of the exhaust thru hull's, then drill a $\phi 1-3/8$ " thru hull hole for galley/ aft vanity discharge at another 5" fwd of genset thru hull hole.
6. Drill optional air conditioner pick up thru hull hole at 5" fwd of galley discharge thru hull hole.
7. Numbers of those main bilge thru hull holes varies, depends on numbers of options, ensure sure thru hull holes are 5" apart, if no air conditioner or genset are equipped.
8. Clean up all thru hull holes. All thru hull holes need to be sealed using marine sealant 5200.



49 Engine Stage V Berth Bilge Thru Hull's Installation

V Berth Bilge Thru Hull's Installation:

1. There are 3 thru hull holes in fwd vanity pan compartment, fwd vanity discharge, fwd macerator discharge and optional overboard discharge thru hull holes.
2. Start from the compartment's fwd thru hull hole, this is optional overboard discharge thru hull fitting's location, measure 4-1/2" aft of compartment's fwd face and 5" off pan stringer face, at this location drill $\phi 1-3/8$ " cutout. At same position, measure 4-1/2" aft of overboard discharge thru hull hole, drill $\phi 1-3/8$ " cutout for fwd macerator discharge thru hull fitting.
3. Measure another 4-1/2" aft of fwd macerator discharge thru hull hole, drill $\phi 1-3/8$ " cutout for fwd vanity discharge thru hull fitting.
4. Clean up all thru hull holes. All thru hull holes need to be sealed using marine sealant 5200. and in this compartment, all ball valve handles facing afterward, and when ball valve opens, handles point upward.
5. Put label at outboard side of these thru hull fittings, start from fwd, overboard discharge, fwd macerator discharge and fwd vanity discharge.

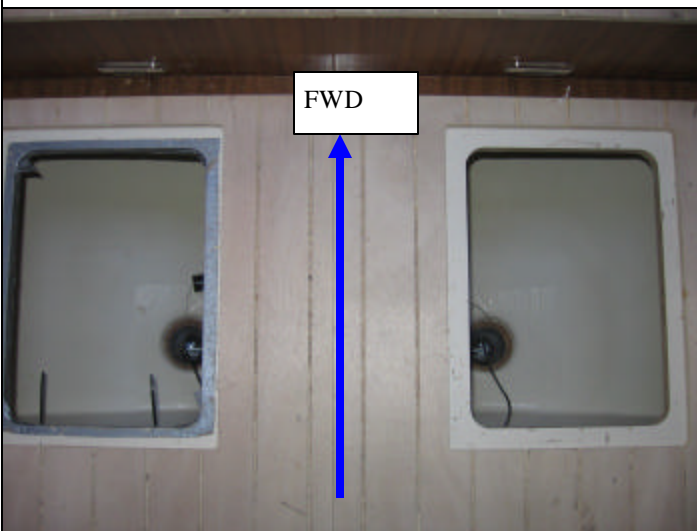
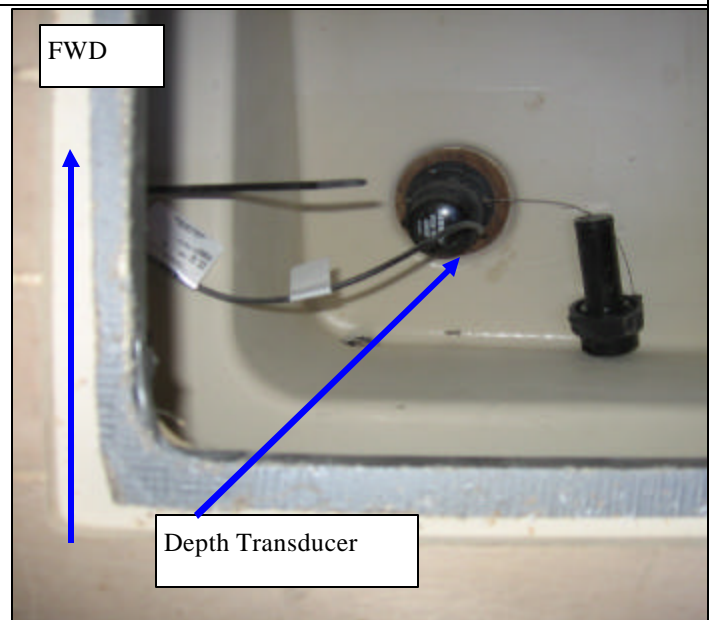
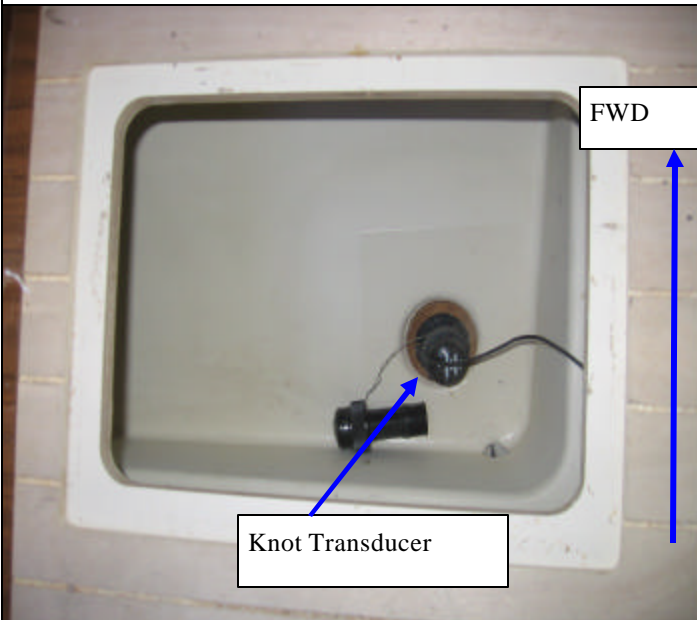


49 Engine Stage

Depth & Knot Transducer Thru Hull's Installation

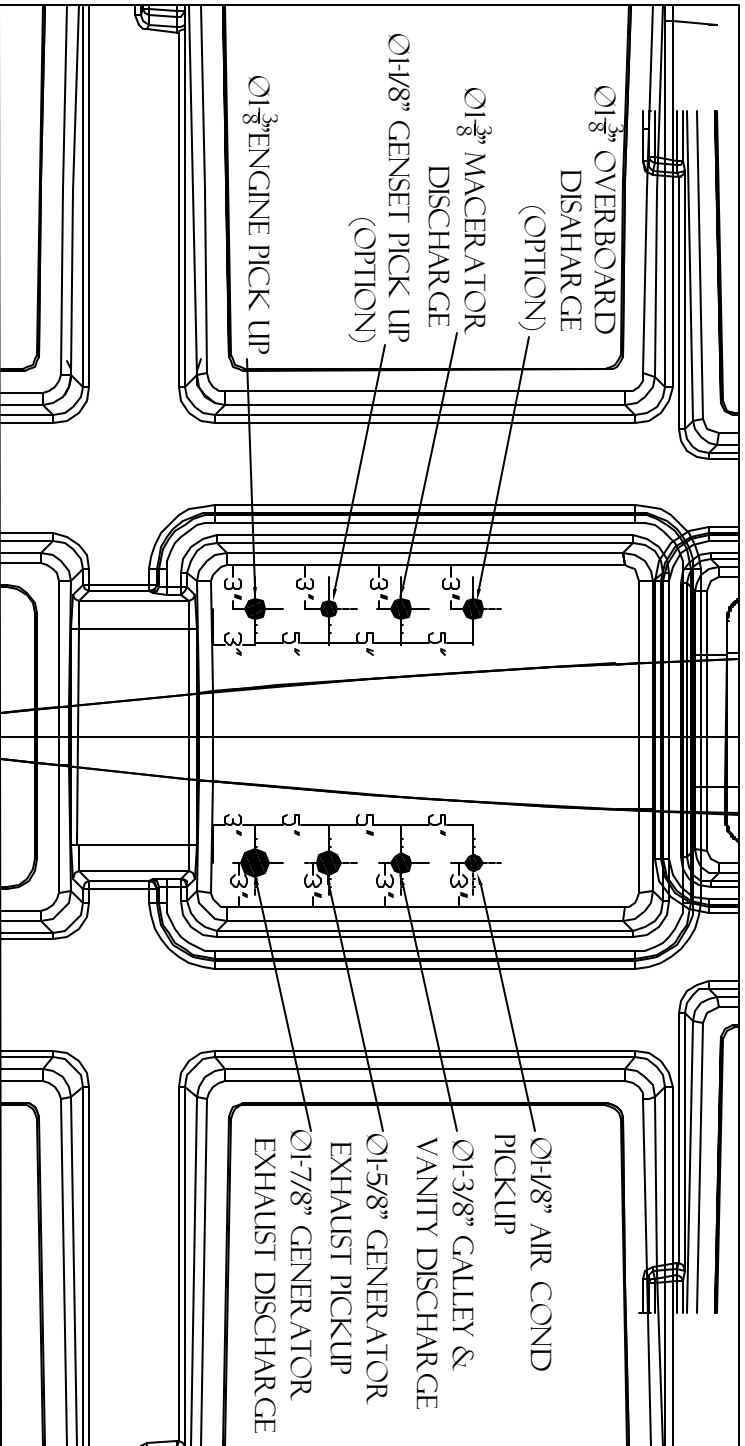
Depth & Knot Transducer Thru Hull Installation:

1. Use pan locator holes as depth and knot transducer thru hull holes location, knot transducer will be installed port side and depth transducer will be installed at starboard side.
2. Drill \varnothing 2-1/8" size holes for transducers echo sender unit, clean up thru hull holes, then apply marine sealant 5200 and install designated wood doughnuts, conduit all wires.

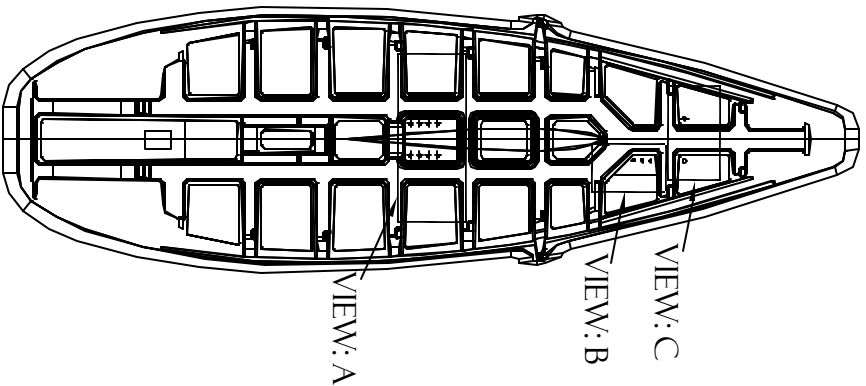


H49 BILGE THRU HULL LOCATION

SYMBL	REVISIONS	DATE	ENG
A	49 #101 BILGE THRU HULL LOCATION	3/21/2006	



VIEW: A



H U N T I E R 49

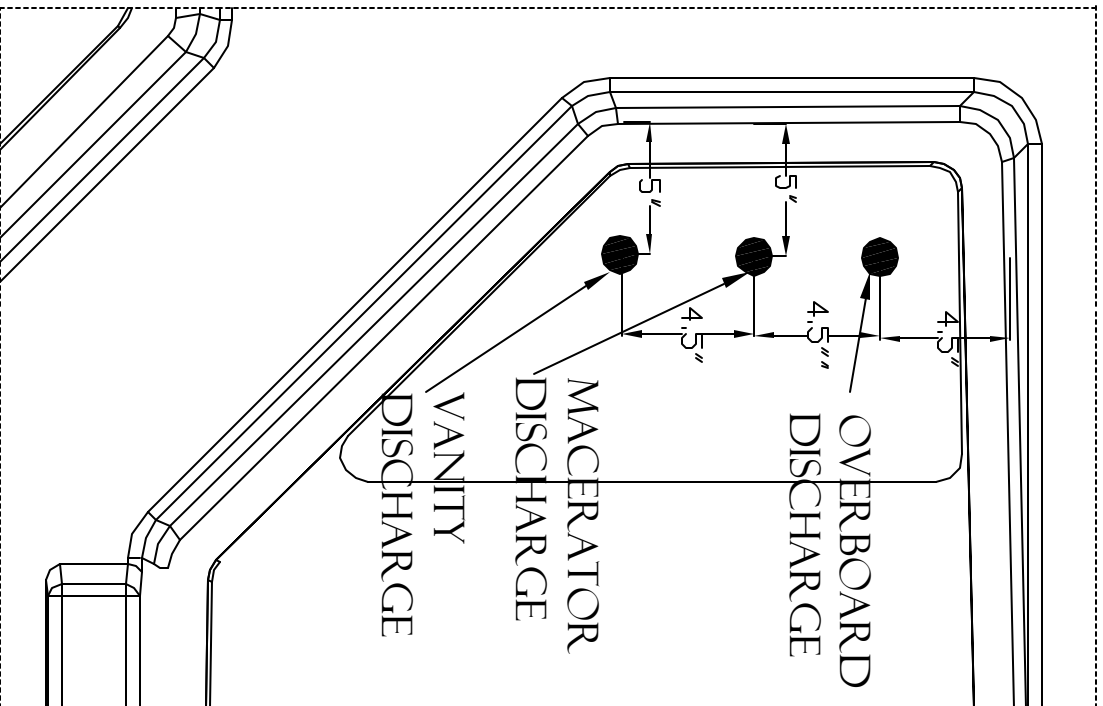
BRANDING TITLE

BILGE THRU HULL LOCATION

SCALE	DATE	REVISION	DRAWN & ENGINE STAGE (0 to 25)
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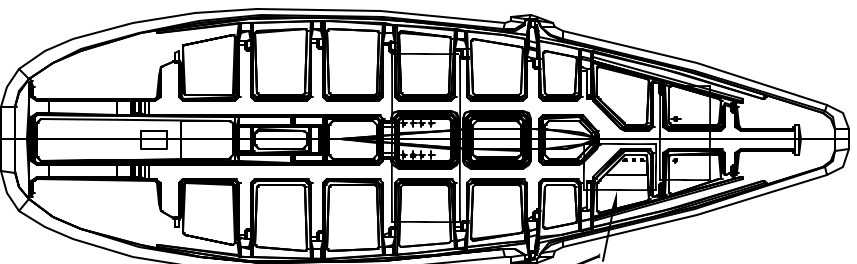
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H49 V BERTH BILGE THRU HULL LOCATION



VIEW: B

SYMBOL	REVISIONS	DATE	ENG
A	49 #01 V BERTH BILGE THRU HULL LOCATION	3/21/2005	



VIEW: B



H U N T E R 49

PROPRIETARY INFORMATION THIS DRAWING CONTAINS INFORMATION FOR VARIOUS PATENTS. MAKE REVISIONS AND PROMPTLY RETURN.

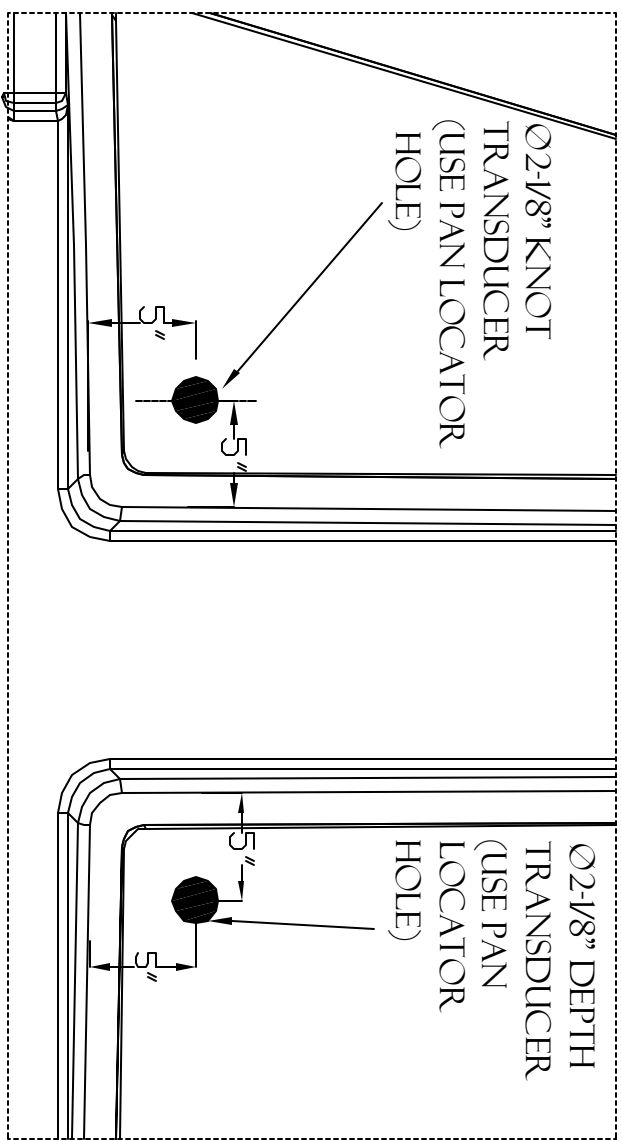
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BILGE THRU HULL LOCATION

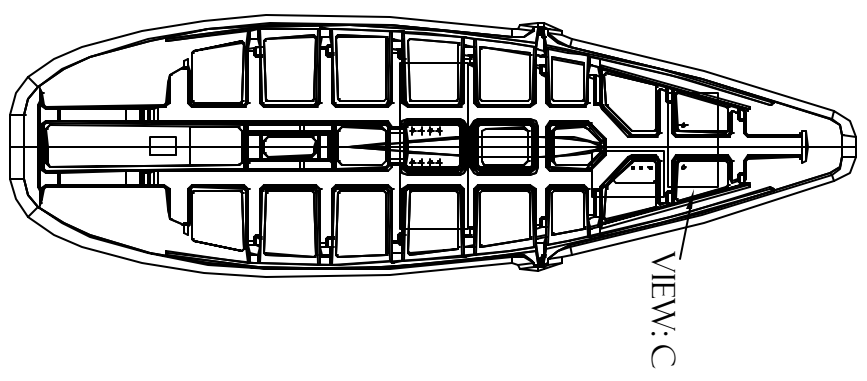
DESIGNER	DATE	REVISION	SHEET	OF
MH	3/21/2006		2	1
SCALE	NUMBER PART NO.	REVISION	PART #	
N/A	222	222	49 ENGINE STAGE (NO 28)	

SYMBOL	REVISIONS	DATE	ENG
A	49 #101 TRANSDUCER THRU HULL LOCATION	3/21/2006	

H49 BILGE TRANSDUCER THRU HULL LOCATION



VIEW: C



HUNTER 49

BILGE THRU HULL LOCATION

DESIGNER	DATE	DRAWN & CHECKED	SHEET	OF
MM	3/21/2006	MM	1	1
SCALE				
N/A				

REFER TO THE BILGE TRANSDUCER INFORMATION FOR HUNTER. MAKE CERTAIN THE HULL LOCATION HAS PROPERLY BEEN