

NOTES:

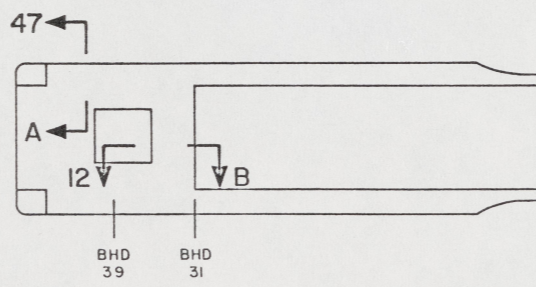
- THIS DRAWING HAS BEEN DEVELOPED FROM SHIPCHECK INFORMATION FOR ACCOMPLISHING THE INSTALLATION OF MISCELLANEOUS STRUCTURAL DETAILS TO LCM-8, MOD-1.
- ALL FABRICATION WELDING AND INSPECTION TO BE IN ACCORDANCE WITH NAVSEA 0900-LP-014-5010, WELD SIZES BASED ON USE OF AWS A5.1, CLASS E7018 ELECTRODES FOR LC STEEL TO LC STEEL.
- EQUIPMENT AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH USCG AND ABS REGULATIONS.
- REPAIR ALL PAINT DAMAGED BY THIS INSTALLATION AND PAINT ALL NEW STEEL IN ACCORDANCE WITH U.S. ARMY TECHNICAL BULLETIN TB43-0144.
- MATERIAL ORDERED ON THIS DRAWING IS NOT INTENDED TO BE RESTRICTIVE. SUBSTITUTION OF EQUAL QUALITY MATERIAL MAY BE MADE.
- SLIGHT DEVIATIONS FROM DIMENSIONS SHOWN ARE PERMISSIBLE TO SUIT ACTUAL CONDITIONS FOUND ABOARD THE VESSEL.
- COMPONENTS SHOWN BY SOLID, HEAVY LINES ARE NEW AND ARE TO BE INSTALLED IN ACCORDANCE WITH THIS DRAWING. PHANTOM LINES INDICATE EXISTING COMPONENTS INSTALLED BY DRAWINGS REFERENCED AS NOTED.
- EXISTING COUPLING BODY, (REF. DODGE NO. PX110) SHALL BE USED FOR NEW ENGINE AND EXISTING RAMP PUMP CONNECTION. BUSHING, FIND NO. 9, SHALL BE USED ON PTO SIDE OF COUPLING TO ACCOMMODATE NEW ENGINE SHAFT DIAMETER.
- SHIMS, FIND NO. 28, MAY BE REQUIRED TO PROPERLY ALIGN CENTER LINES OF RAMP PUMP SHAFT AND PTO SHAFT ON ENGINE. SEE VIEW 1B-A.
- MAXIMUM MISALIGNMENT OF PUMP AND TRANSMISSION P.T.O.:
ANGULAR 4°, PARALLEL 1/8"
- ALTERNATORS USED ON EARLIER BOATS ENGINES SHALL BE SALVAGED AND RE-USED ON NEW BOATS ENGINES. (REF MOTOROLA NO. 85A-3006P)
- REMOVE AND REPLACE EXISTING ALTERNATOR PULLEY WITH NEW PULLEY, FIND NO. 32, USING EXISTING KEY, WASHER AND NUT ON ALTERNATOR SHAFT. PULLEY SHALL BE MOUNTED FLUSH AGAINST ALTERNATOR FAN FACE PLATE.
- BELTS, FIND NO. 29, SHALL BE SPECIFIED AS 2 (TWO) SETS OF MATCHED PAIRS, AND PROPERLY ALIGNED WITH ENGINE CAMSHAFT PULLEY USING SLOTS PROVIDED IN ALTERNATOR MOUNTING BRACKET, VIEW 37-A.
- ALTERNATOR MOUNTING BRACKET, REF VIEW 27-A, SHALL BE ASSEMBLED TO BOATS ENGINES USING EXISTING BOLTS WITH LOCKWASHERS, FIND NO. 20.
- ALL FOUNDATIONS AND BRACKETS SHALL BE TEMPLATED FROM IT'S COMPONENT PRIOR TO FABRICATION. (UNLESS OTHERWISE SHOWN.)
- GRIND SMOOTH ALL SHARP OR JAGGED CORNERS AND EDGES LIABLE TO DAMAGE EQUIPMENT OR INJURE PERSONNEL.
- REMOVE EXISTING RUDDER ANGLE INDICATOR COMPONENTS AND WIRING (EXCEPT SECURING HARDWARE) AND REPLACE WITH FIND NO. 10, 42, 43 AND 47 IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

REFERENCE DRAWINGS APPLICABLE TO HULL NUMBERS 8510 THRU 8560 AND 8580 THRU 8618		
NO.	DRAWING NO.	TITLE
1	13226E944B	ENGINE FOUNDATIONS
2	13226E9476	POWER LIGHTING/IC SYSTEM
3	145-451093B	LCM-8, MOD-1, ARRGT/DETAILS STEERING GEAR

REFERENCE DRAWINGS APPLICABLE TO HULL NUMBERS 8520 THRU 8539		
NO.	DRAWING NO.	TITLE
1	13226E944B	ENGINE FOUNDATIONS
2	13226E9476	POWER LIGHTING/IC SYSTEM
3	145-2534224	LCM-8, MOD-1, ARRGT/DETAILS STEERING GEAR

SHEETS						STATUS OF REVISIONS		
6	5	4	3	2	1	DESCRIPTION	DATE	APPROVED
A	-	-	-	-	-	SEE ECP NO. 90HE3102 AND 90HE3103	20 NOV 88	RMS

YARD	FIND NO.	QTY	ALLOY	DESCRIPTION	SPECIFICATION	MATERIAL
YARD 47			ALLOY 360	BAR, RD, 1/4" DIA X 27"	ASTM B16	BRASS
YARD 46			MS51967-2	NUT, HEX, 1/4-20 UNC-2B, STEEL, CD PL		
YARD 45			MS27183-10	WASHER, FLAT, 1/4" NOM SIZE, STEEL, CD PL		
YARD 44			MS90725-10	SCREW, HEX HD, 1/4-20 UNC-2A X 1 1/4" L, STEEL, CD PL		
43			ORD ON REF 2	REF UNIVERSAL RUDDER FOLLOW-UP		
GFE 42	37919		530-072	RUDDER STOCK CLAMP (WAGNER)	COML	BRONZE
YARD 41				SHEET, 11 GA (.120), 2 1/2" X 2 1/2"	ASTM A366	STEEL
YARD 40				SHEET, 11 GA (.120), 3" X 9"	ASTM A366	STEEL
YARD 39	89849		3/4" NO. 10	EXP. METAL-RYEX, 10" X 20", STD (RYERSON)	COML	STEEL
YARD 38				PLATE, 10.2 LB	ASTM A36	STEEL
YARD 37				PLATE, 10.2 LB	ASTM A36	STEEL
YARD 36				PLATE, 10.2 LB	ASTM A36	STEEL
YARD 35			MS90725-109	SCREW, HEX HD, 1/2-13 UNC X 1" LG, STEEL, CD PL		
YARD 34			MS27183-17	WASHER, FLAT, 1/2" ID, STEEL, CD PL		
YARD 33			MS90725-124	SCREW, HEX HD, 1/2-13 UNC X 4 1/4" LG, STEEL, CD PL		
YARD 32			GR G12150	BAR, ROUND, 2 3/4 DIA STK	ASTM A108	STEEL
YARD 31			MS90725-62	SCREW, HEX HD, 3/8-16 UNC X 1 1/4" LG, STEEL, CD PL		
YARD 30			MS90725-59	SCREW, HEX HD, 3/8-16 UNC X 7/8" LG, STEEL, CD PL		
YARD 29	24161		A-41 (SEE NOTE 13)	BELT, "V", 1/2" X 42.3 PITCH LGTH (GATES)	COML	RUBBER
YARD 28				BAR, FLAT, 2" X 5 1/4", THICKNESS TO SUIT	ASTM A36	STEEL
YARD 27				SHEET, 11 GA (.120), 3" X 39 1/2"	ASTM A366	STEEL
YARD 26				ANGLE, 1/8 X 1 1/2 X 2" X 1 1/2" LG	ASTM A36	STEEL
YARD 25				SHEET, 11 GA (.120), 2" X 4 7/8"	ASTM A366	STEEL
YARD 24				PLATE, 10.2 LB	ASTM A36	STEEL
YARD 23				PLATE, 10.2 LB	ASTM A36	STEEL
YARD 22			MS51967-8	NUT, HEX, 3/8-16 UNC-2B, STEEL, CD PL		
YARD 21			MS27183-13	WASHER, FLAT, 3/8" ID, STEEL, CD PL		
YARD 20			MS35338-46	WASHER, LOCK, 3/8" NOM SIZE, STEEL, CD PL		
YARD 19				BAR, FLAT, 1/4" X 1"	ASTM A36	STEEL
YARD 18				BAR, FLAT, 1/4" X 2"	ASTM A36	STEEL
YARD 17			MS51967-14	NUT, HEX, 1/2-13 UNC-2B, STEEL, CD PL		
YARD 16			MS35338-48	WASHER, LOCK, 1/2" NOM SIZE, STEEL, CD PL		
YARD 15			MS90725-60	SCREW, HEX HD, 3/8-16 UNC-2A X 1" L, STEEL, CD PL		
YARD 14			MS35338-50	WASHER, LOCK, 5/8" NOM SIZE, STEEL, CD PL		
YARD 13			MS51967-20	NUT, HEX, 5/8-11 UNC-2B, STEEL, CD PL		
YARD 12			MS90725-164	SCREW, HEX HD, 5/8-11 UNC-2A X 2" L, STEEL, CD PL		
YARD 11				BAR, FLAT, 1/4" X 2"	ASTM A36	STEEL
YARD 10				PLATE, 12.76 LB	ASTM A36	STEEL
YARD 9	71956		2517	BUSHING, 1 1/2" BORE W/3/8 X 3/16 KEYWAY (DODGE)	COML	STEEL
YARD 8				BAR, FLAT, 7/8" X 4"	ASTM A36	STEEL
YARD 7				PLATE, 20.4 LB	ASTM A36	STEEL
YARD 6				PLATE, 20.4 LB	ASTM A36	STEEL
YARD 5				BAR, FLAT, 3/8" X 2 1/2"	ASTM A36	STEEL
YARD 4	89849		3/4" NO. 10	EXP METAL-RYEX 10" X 30", STD (RYERSON)	COML	STEEL
YARD 3				STRIP, 1/8" X 1"	ASTM A569	STEEL
YARD 2				STRIP, 1/8" X 1"	ASTM A569	STEEL
YARD 1				PLATE, 10.2 LB	ASTM A36	STEEL

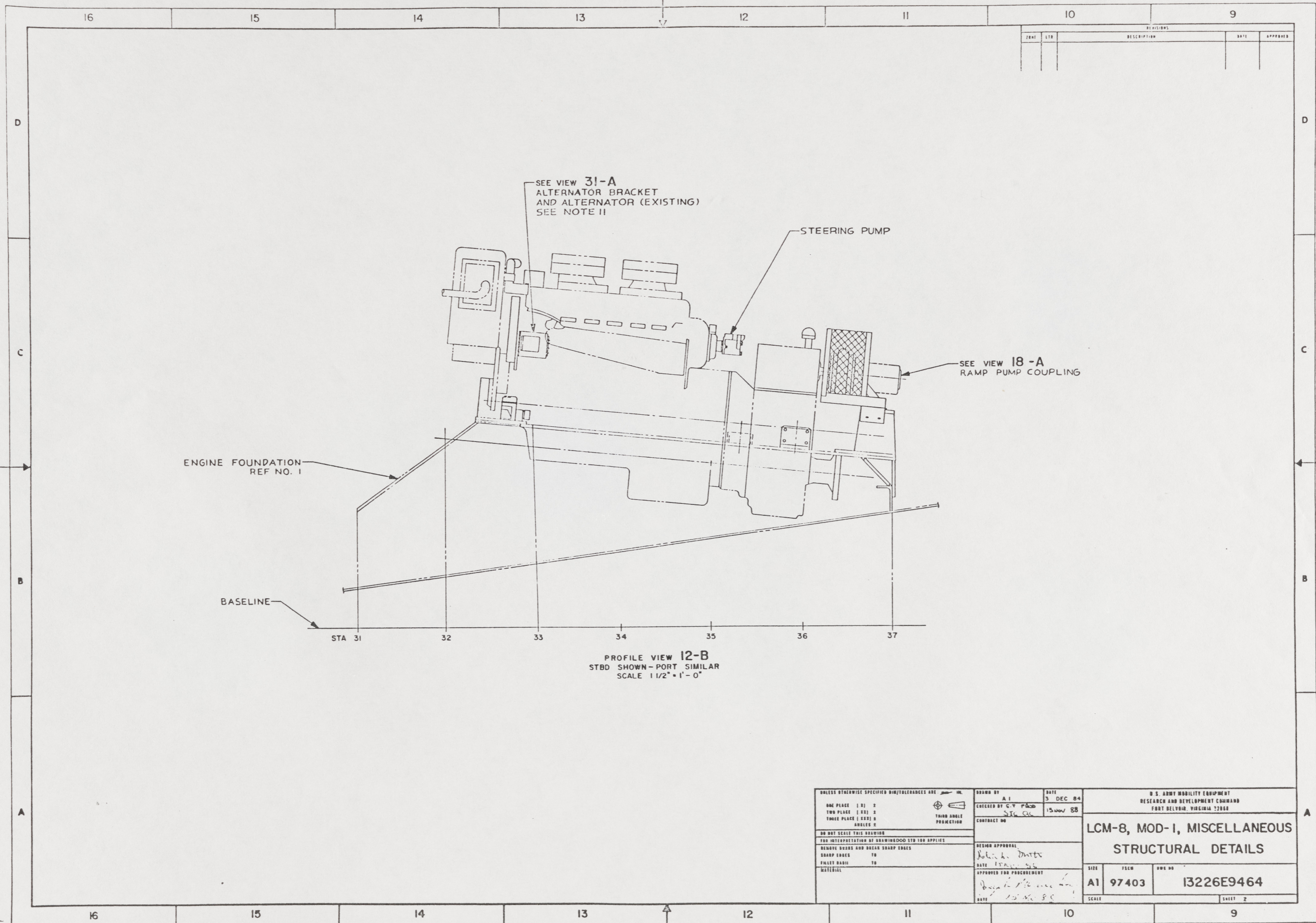


KEY VIEW 5-B
SCALE NONE

THIS DRAWING APPLIES TO HULL NUMBERS 8520 THROUGH 8560 AND 8580 THROUGH 8618 ONLY

<p>UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE IN IN.</p> <p>ONE PLACE (Ø) ±</p> <p>TWO PLACE (XX) ±</p> <p>THREE PLACE (XXX) ±</p> <p>ANGLES ±</p> <p>DO NOT SCALE THIS DRAWING</p> <p>FOR INTERPRETATION OF DRAWING DOD STD 100 APPLIES</p> <p>REMOVE BURRS AND BREAK SHARP EDGES</p> <p>SHARP EDGES 10</p> <p>FILLET RADIUS 10</p> <p>MATERIAL</p>	<p>DRAWN BY: A1</p> <p>CHECKED BY: GT Pico</p> <p>DATE: 30 NOV 84</p> <p>15 NOV 88</p> <p>DESIGN APPROVAL: [Signature]</p> <p>DATE: 15 NOV 88</p> <p>APPROVED FOR PROCUREMENT: [Signature]</p> <p>DATE: [Signature]</p>	<p>U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060</p> <p>LCM-8, MOD-1, MISCELLANEOUS STRUCTURAL DETAILS</p> <p>SIZE: A1</p> <p>FSCM: 97403</p> <p>DWG NO: 13226E9464</p> <p>SCALE: 6" = 1'-0"</p> <p>SHEET 1 OF 6</p>
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56



ENGINE FOUNDATION
REF NO. 1

BASELINE

SEE VIEW 31-A
ALTERNATOR BRACKET
AND ALTERNATOR (EXISTING)
SEE NOTE II

STEERING PUMP

SEE VIEW 18-A
RAMP PUMP COUPLING

PROFILE VIEW 12-B
STBD SHOWN - PORT SIMILAR
SCALE 1 1/2" = 1' - 0"

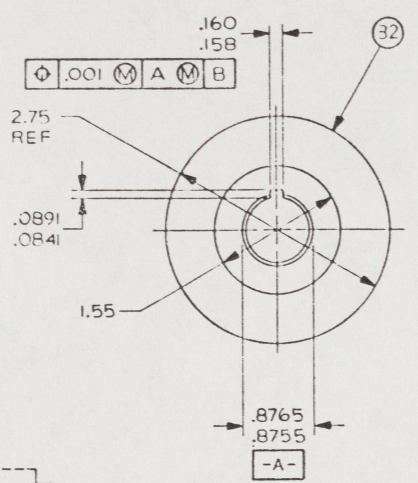
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UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE $\frac{1}{16}$ " - IN.		DRAWN BY A1	DATE 5 DEC 84	U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060	
ONE PLACE (1 D) ±	TWO PLACE (1.00) ±	CHECKED BY C.T. PADD SHE/CU	DATE 15 Nov 83	LCM-8, MOD-1, MISCELLANEOUS STRUCTURAL DETAILS	
THREE PLACE (1.000) ±	FOUR PLACE (1.0000) ±	CONTRACT NO.	DESIGN APPROVAL John L. Dantz	SIZE A1	NSN NO. 97403 13226E9464
DO NOT SCALE THIS DRAWING FOR INTERPRETATION BY DRAWING/DOO LTD 100 APPLIES		SHARP EDGES TO FILLET RADIUS TO	DATE 12 Nov 84	SCALE	SHEET 2
REMOVE BORDERS AND BREAK SHARP EDGES		APPROVED FOR PRODUCTION Dantz	DATE 12 Nov 84		

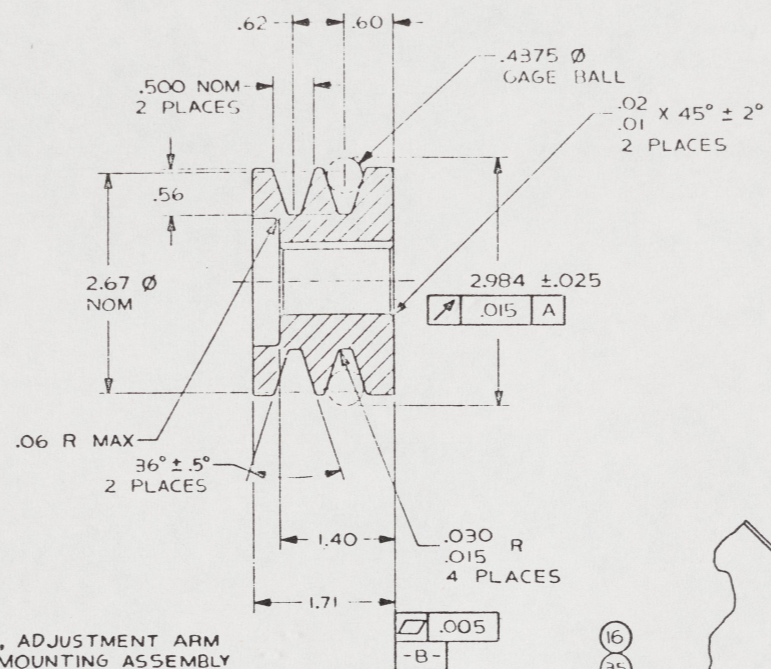
32 31 30 29 28 27 26 25

REVISIONS			
NO.	DATE	DESCRIPTION	BY

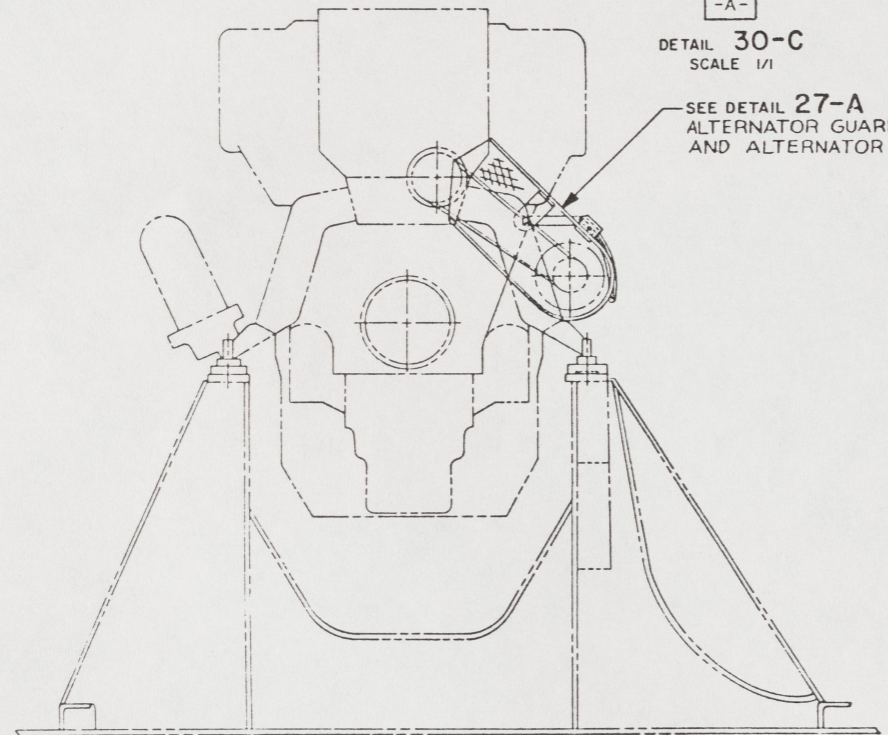
- NOTES
1. SURFACE FINISH 125 RMS ALL OVER.
 2. CADMIUM PLATE IN ACCORDANCE WITH QQ P-416 CL 2, TY III
 3. DIMENSIONS APPLY AFTER PLATING.
 4. TOLERANCES UNLESS SHOWN OTHERWISE ±.03.



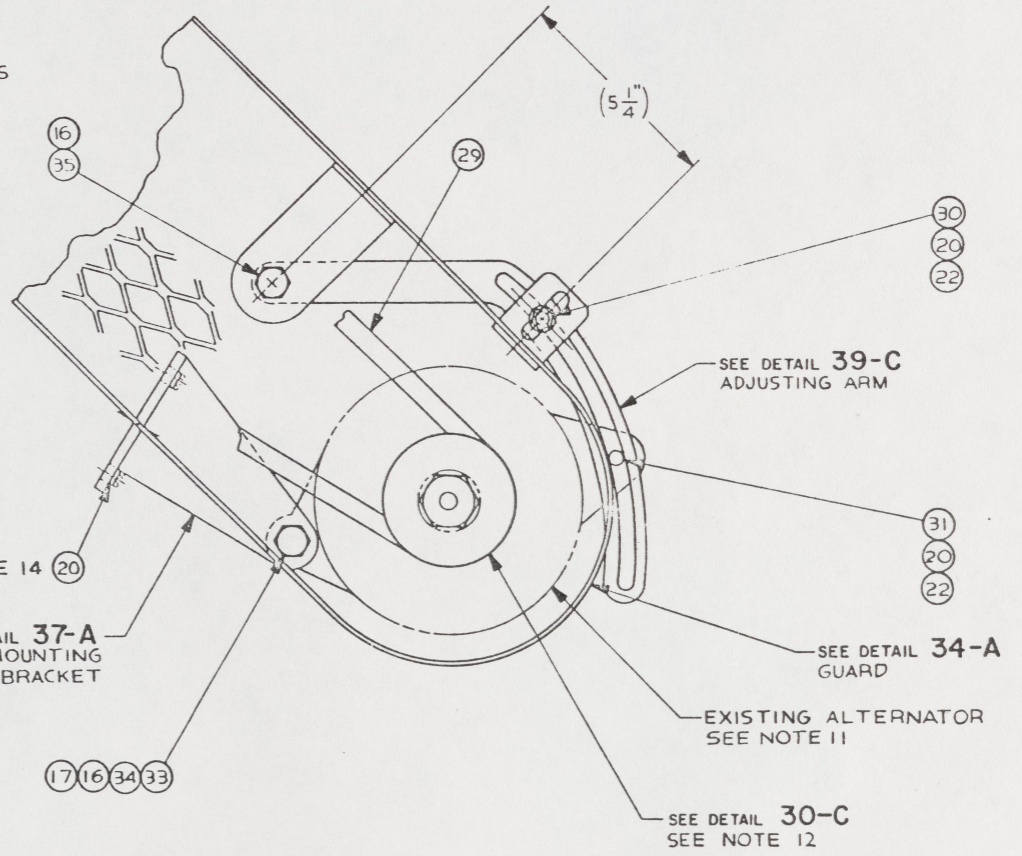
DETAIL 30-C
SCALE 1/1



DETAIL 27-A
SCALE 1/1



VIEW 31-A
(13-D)
ALTERNATOR GUARD ASSEMBLY
SCALE 1 1/2" = 1'-0"



VIEW 27-A
ALTERNATOR MOUNTING ASSEMBLY

59

32 31 30 29 28 27 26 25

UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE IN IN.		DESIGNED BY HMB	DATE 10 JAN 85	D S ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060	
ONE PLACE (1.0)	±	ENGINEERED BY G.T. MUD	DATE 15 NOV 86	LCM-8, MOD-1, MISCELLANEOUS STRUCTURAL DETAILS	
TWO PLACE (0.01)	±	CONTRACT NO.			
THREE PLACE (0.001)	±	DESIGN APPROVAL <i>John H. Dantz</i>		SIZE A1	NSN NO 97403
FOUR PLACE (0.0001)	±	DATE 17 DEC 85		NSN NO 13226E9464	
FIVE PLACE (0.00001)	±	APPROVED FOR PROCUREMENT <i>[Signature]</i>		SCALE	SHEET 4
SIX PLACE (0.000001)	±	MATERIAL			

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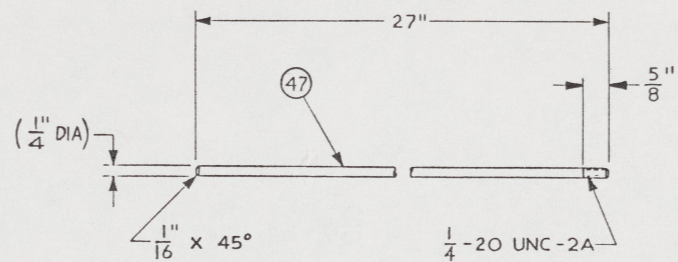
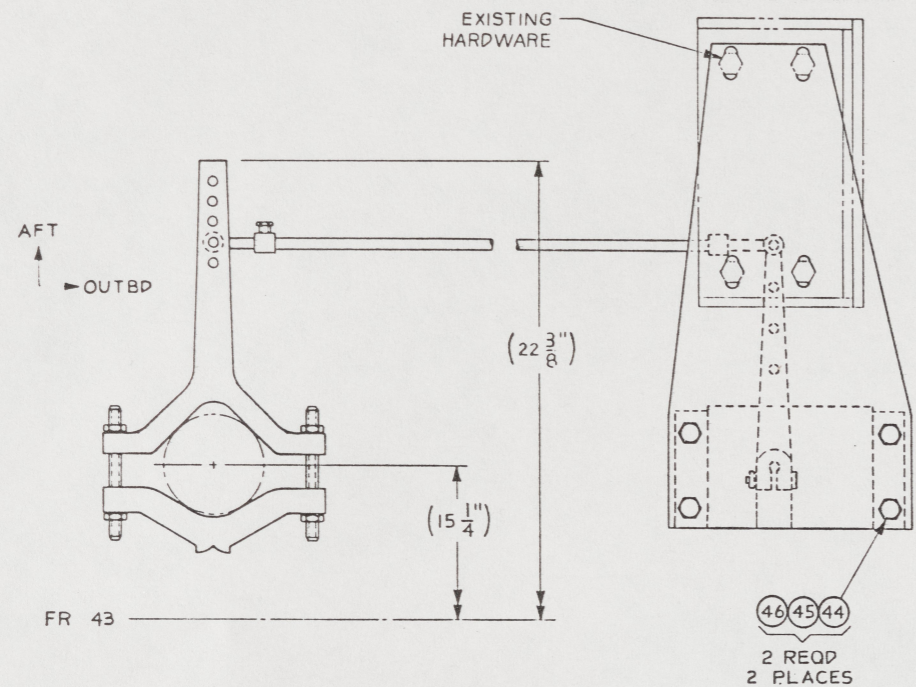
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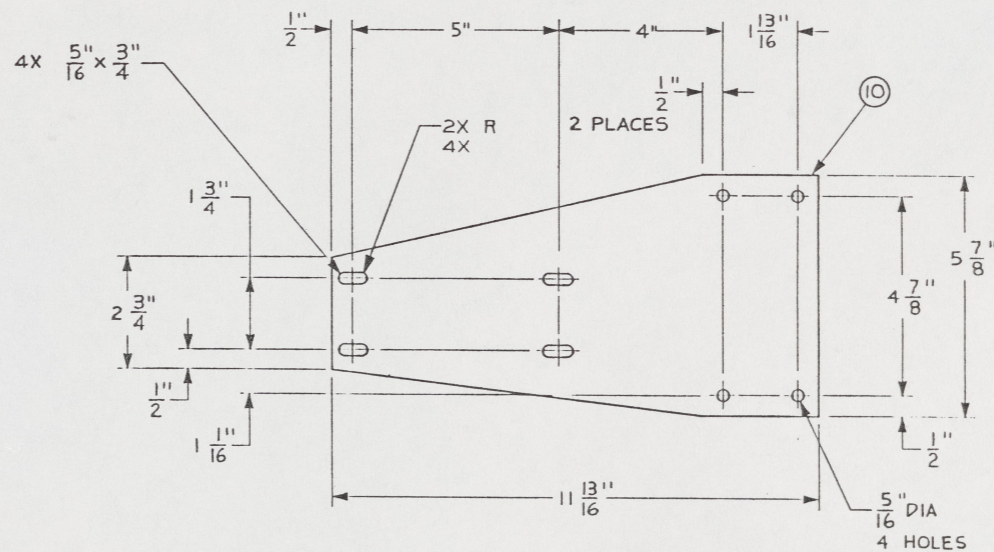
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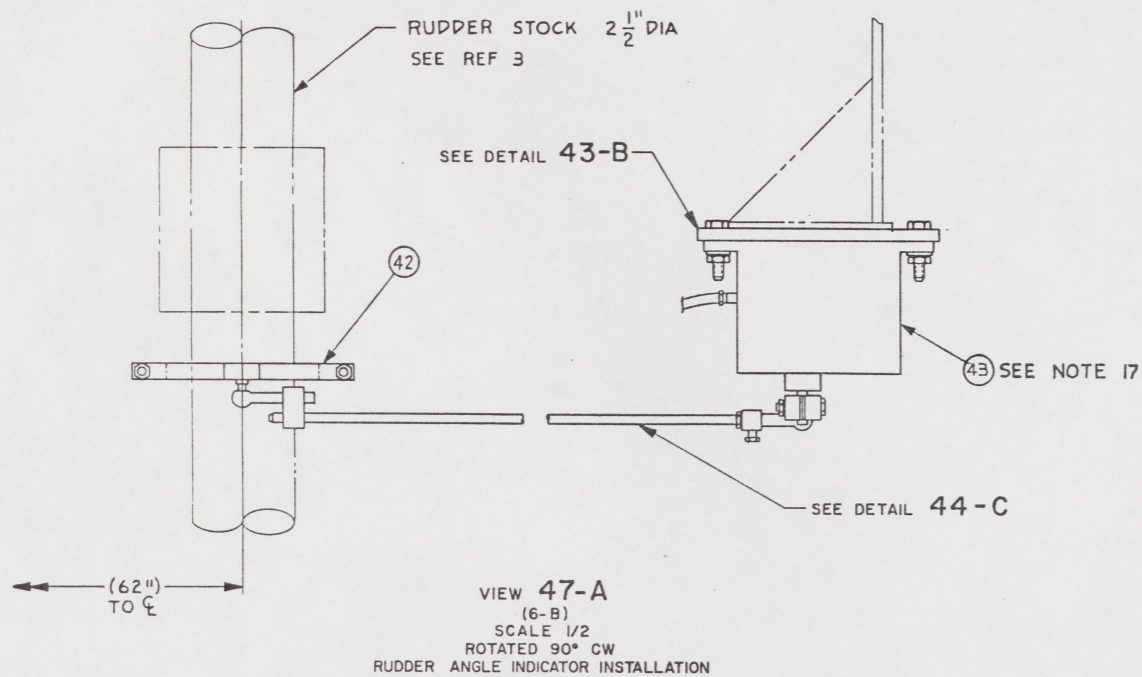
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	SEE ECP NO. 90HE3102 AND 90HE3103	20 MAR 88	[Signature]



DETAIL 44-C
SCALE 1/2



DETAIL 43-B
SCALE 1/2



VIEW 47-A
(6-B)
SCALE 1/2
ROTATED 90° CW
RUDDER ANGLE INDICATOR INSTALLATION

FIND NO.	CAGE	DWG SIZE	PART OR IDENTIFYING NO.	QTY REQD	NOMENCLATURE OR DESCRIPTION	SPECIFICATION	MATERIAL
PARTS LIST							
UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE: \pm 0.01 IN.					DRAWN BY RGS/HA DATE 11 JUN 87		
ONE PLACE (.X) \pm					CHECKED BY G.T. Pardo DATE 15 MAR 88		
TWO PLACE (.XX) \pm					CONTRACT NO.		
THREE PLACE (.XXX) \pm					DESIGN APPROVAL [Signature] DATE 13 MAR 88		
ANGLES \pm					APPROVED FOR PROCUREMENT [Signature] DATE 15 MAR 88		
THIRD ANGLE PROJECTION					U.S. ARMY BELVOIR RESEARCH, DEVELOPMENT, AND ENGINEERING CENTER FORT BELVOIR, VIRGINIA 22060-5606		
DO NOT SCALE THIS DRAWING					LCM-8, MOD-I, MISCELLANEOUS STRUCTURAL DETAILS		
FOR INTERPRETATION OF DRAWING DDD-STD-100 APPLIES					SIZE A1 CAGE 97403 DWG NO. 13226E9464		
REMOVE BURRS AND SHARP EDGES TO					SCALE SHEET 6		
BREAK SHARP EDGES FILLET RADII TO							
MATERIAL							

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