

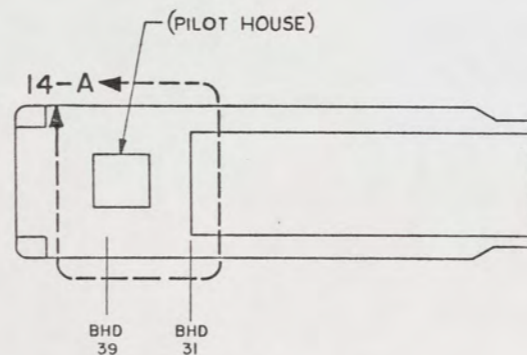
NOTES:

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.
2. TEMPLATE ALL WORK FROM LCM-B AND EQUIPMENT.
3. EQUIPMENT AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH USCG AND ABS REGULATIONS.
4. REPAIR ALL PAINT DAMAGED BY THIS INSTALLATION AND PAINT ALL NEW STEEL IN ACCORDANCE WITH U.S. ARMY TECHNICAL BULLETIN TB43-0144.
5. MATERIAL ORDERED ON THIS DRAWING IS NOT INTENDED TO BE RESTRICTIVE. SUBSTITUTION OF EQUAL QUALITY MATERIAL MAY BE MADE EXCEPT FOR ITEMS MARKED GFE.
6. SLIGHT DEVIATIONS FROM DIMENSIONS SHOWN ARE PERMISSIBLE TO SUIT ACTUAL CONDITIONS FOUND ABOARD THE VESSEL.
7. 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.
8. PROJECTING CORNERS AND EDGES TO BE WELL ROUNDED OR PADDED TO PROTECT PERSONNEL.
9. PIPING SHALL BE SUITABLY SECURED BY PIPE HANGERS TO PREVENT VIBRATION AND PROTECT AGAINST DAMAGE IN ACCORDANCE WITH BUSHIPS 804-1385781.
10. PIPING SYSTEMS SHALL BE THOROUGHLY CLEANED BY FLUSHING WITH THE MEDIUM FOR WHICH THE SYSTEM IS INTENDED.
11. ALL THREADED PIPE JOINTS SHALL BE ASSEMBLED USING ANTISEIZE TAPE, FIND NO. M-10. PIPING SHALL BE TESTED HYDROSTATICALLY AND ALL JOINTS INSPECTED FOR TIGHTNESS IN ACCORDANCE WITH LCM-B INSTALLATION INSTRUCTIONS 55-1905-217-1. TESTS SHALL BE CONDUCTED PRIOR TO PAINTING.
12. REGULATOR, FIND NO. V-1, TO BE FACTORY PRESET AT 1500 PSI RELIEF AND AT 10 GAL/MIN REGULATED FLOW.
13. LOOKING INBOARD, PORT AND STBD ENGINES, HANDLE OF V-2 WILL POINT FORWARD FOR RAMP SYSTEM. FOR BILGE SYSTEM, HANDLE OF V-2 WILL POINT DOWN ON STBD ENGINE AND UP ON PORT ENGINE.
14. PIPES OR HOSES OBSCURED BY FLOOR PLATING OR ENGINE ROOM EQUIPMENT SHALL BE IDENTIFIED BY (COPPER, BRASS, CRES) TAGS IN ACCORDANCE WITH MIL-STD-130. TERMINATIONS AND USE SHALL BE CLEAR.

REFERENCE DRAWINGS APPLICABLE TO HULL NUMBERS 8540 THRU 8560 AND 8580 THRU 8618		
NO.	DRAWING NO.	TITLE
1	13226E9456	LCM-B, MOD-1, MODIFICATION BILGE PIPING SYSTEM
2	13226E9466	LCM-B, MOD-1, MODIFICATIONS TO RAMP HYDRAULIC SYSTEM
3	13226E9461	LCM-B, MOD-1, MODS TO HYD PWR STEERING SYSTEM
4	516-4510941	LCM-B, MOD-1, RAMP HYDRAULIC SYSTEM
5	13226E9467	LCM-B, MOD-1, MODS TO HYDRAULIC RESERVOIR, RAMP/HYDRAULIC START

REFERENCE DRAWINGS APPLICABLE TO HULL NUMBERS 8520 THRU 8539		
NO.	DRAWING NO.	TITLE
1	13229E2253	LCM-B, MOD-1, MODIFICATION BILGE PIPING SYSTEM
2	13226E9466	LCM-B, MOD-1, MODIFICATIONS TO RAMP HYDRAULIC SYSTEM
3	13229E2251	LCM-B, MOD-1, MODS TO HYD PWR STEERING SYSTEM
4	516-2534229	LCM-B, MOD-1, RAMP HYDRAULIC SYSTEM
5	13226E9467	LCM-B, MOD-1, MODS TO HYDRAULIC RESERVOIR, RAMP/HYDRAULIC START

STATUS OF REVISIONS				
SH	2	ZONE	LET	DESCRIPTION
-	-	-	A	SEE ECP NO. 90HE3102 AND 90HE3103
				DATE
				APPROVED



KEY PLAN 6-B
SCALE NONE

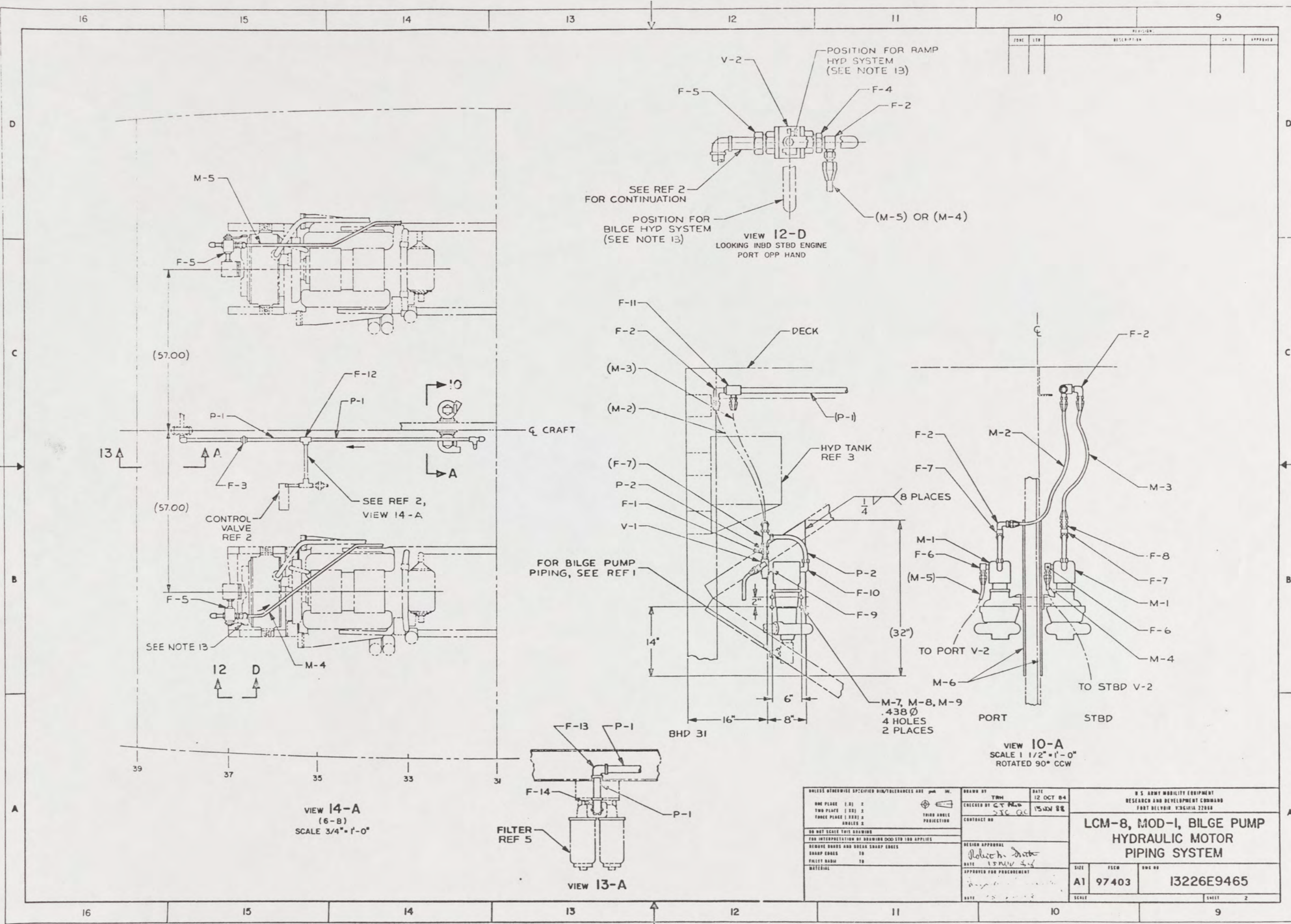
THIS DRAWING APPLIES TO HULL NUMBERS 8520 THROUGH 8560 AND 8580 THROUGH 8618 ONLY

SUPPLIER	FIND NO.	FSCM	OWG SIZE	PART OR IDENTIFYING NO.	QTY REQD.	NOMENCLATURE OR DESCRIPTION	SPECIFICATION	MATERIAL
GFE	V-2	98991		1 1/2-DH46YBSEVI	2	DIRECTIONAL BALL VALVE, 1 1/2" (WORCESTER)	COHL	
GFE	V-1	96259		2FAB6-R 12T-12T-12T 25 S	2	BYPASS FLOW REGULATOR, 3/4" (FLUID CONTROLS)	COHL	(SLE NOTE 12)
YARD	M-10			SIZE II	AR	TAPE, ANTISEIZE (SEE NOTE 11)	MIL-T-27730	
YARD	M-9			MS51922-17	8	NUT, HEX, SLFLNG, 3/8 16 UNC-28		STEEL
YARD	M-8			MS27183-14	8	WASHER, .406 1D X .812 OD X .065 THK		STEEL
YARD	M-7			MS90725-62	8	SCREW, CAP, HEX HD, 3/8-16 UNC 2A X 1 1/4" L		STEEL
YARD	M-6				8	PLATE, 3/8" THICK X 8" X 32"	ASTM A36	STEEL
YARD	M-5	24161		12C1T-12RFJX-20H	1	HOSE ASSY, 3/4" SIZE, W/SAE 37° SWIVEL, FEM, 220" L (GATES)	COHL	
YARD	M-4	24161		12C1T-12RFJX-20H	1	HOSE ASSY, 3/4" SIZE, W/SAE 37° SWIVEL, FEM, 20H" L (GATES)	COHL	
YARD	M-3	24161		12C1T-12RFJX-36	1	HOSE ASSY, 3/4" SIZE, W/SAE 37° SWIVEL, FEM, 36" L (GATES)	COHL	
YARD	M-2	24161		12C1T-12RFJX-42	1	HOSE ASSY, 3/4" SIZE, W/SAE 37° SWIVEL, FEM, 42" L (GATES)	COHL	
GFE	M-1	76122		NO. 27805	2	2 1/2" X 2" PUMP W/HYD MOTOR (HP PUMPS)	COHL	VARIOUS
YARD	F-14				1	ELBOW, 90°, STREET, 1 1/4" NPS, THREADED, CL 150	ANSI B16.3	MI
YARD	F-13				1	ELBOW, 90°, 1 1/4" NPS, THREADED, CL 150	ANSI B16.3	MI
YARD	F-12				1	TEE, 1 1/4" NPS, THREADED, CL 150	ANSI B16.3	MI
YARD	F-11				1	TEE, 1 1/4" X 3/4" X 3/4" NPS, THREADED, CL 150	ANSI B16.3	MI
YARD	F-10	30780		12C5BU-S	2	ELBOW, STRAIGHT THREAD, W/O-RING, FLARELESS, 3/4" (P.H.)	COHL	STEEL
YARD	F-9	30780		12F5OF50-S	2	UNION, STRAIGHT THREAD, W/O-RING, 3/4" (P.H.)	COHL	STEEL
YARD	F-8	30780		12FTX-S	1	CONNECTOR, MALE, 37° FLARED, 3/4" SIZE (P.H.)	COHL	STEEL
YARD	F-7	30780		12HBU-S	2	TEE, 3/4" TUBE X 3/4" IPS FEMALE ON RUN (P.H.)	COHL	STEEL
YARD	F-6	30780		12C5OX-S	2	ELBOW, 90°, STRAIGHT THREAD, W/O-RING, 37° FLARE, 3/4" (P.H.)	COHL	STEEL
YARD	F-5	98660		PF101-24-20	4	1 1/2" TO 1 1/4" REDUCER BUSHING (FLODAR)	COHL	STEEL
YARD	F-4	98660		PF101-24-12	2	1 1/2" TO 3/4" REDUCER BUSHING (FLODAR)	COHL	STEEL
YARD	F-3				1	1 1/4" UNION, THREADED, CL 150	ANSI B16.39	MI
YARD	F-2	30780		12CTX-S	5	ELBOW, 90°, MALE, 37° FLARED, 3/4" SIZE X 3/4 IPS (P.H.)	COHL	STEEL
YARD	F-1	30780		12F8BU-S	2	CONNECTOR, STRAIGHT THREAD, W/O-RING, FLARELESS, 3/4" (P.H.)	COHL	STEEL
YARD	P-2				AR	TUBING, 3/4" OD X .040 WALL	SAE J525	STEEL
YARD	P-1				AR	PIPE, 1 1/4" BLACK, SEAMLESS, SCHED 40	ASTM A53	STEEL

UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE IN:		DRAWN BY TRH	DATE 11 OCT 84
ONE PLACE ()	±	CHECKED BY G.T. PASB	DATE 15 NOV 88
TWO PLACE ()	±	CONTRACT NO.	
THREE PLACE ()	±	THIRD ANGLE PROJECTION	
ANGLES	±	DESIGN APPROVAL	
DO NOT SCALE THIS DRAWING			
THE INTERPRETATION OF DIMENSIONS SHOWN ON THIS DRAWING SHALL BE IN ACCORDANCE WITH THE FOLLOWING:			
SHARP EDGES AND BREAK SHARP EDGES			
SHARP EDGES --- TO ---			
FILLET RADIUS --- TO ---			
MATERIAL			
APPROVED FOR PROCUREMENT		DATE	
DATE		DATE	

U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060			
LCM-8, MOD-1, BILGE PUMP HYDRAULIC MOTOR PIPING SYSTEM			
SIZE	ISCM	OWG NO.	
A1	97403	13226E9465	
SCALE 3"=1'-0"		SHEET 1 OF 2	

62



NO	DATE	DESCRIPTION	BY	APPROVED

UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE IN IN.	DRAWN BY	DATE	U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, COLORADO 80205
ONE PLACE (0.01) ±	TRM	12 OCT 64	
TWO PLACE (0.02) ±	CHECKED BY	15 NOV 64	LCM-8, MOD-1, BILGE PUMP HYDRAULIC MOTOR PIPING SYSTEM
THREE PLACE (0.003) ±	STC GC		
FOUR PLACE (0.0005) ±	CONTRACT NO.		SIZE A1
ANGLES 2			
DO NOT SCALE THIS DRAWING	DESIGN APPROVAL		PSCN 97403
FOR INTERPRETATION OF DIMENSIONS DOD STD 100 APPLIES	DATE		
SHARP CORNERS TO	APPROVED FOR PROCUREMENT		DWG NO 13226E9465
FILLET RADIUS TO	DATE		
MATERIAL			SCALE
			SHEET 2

63