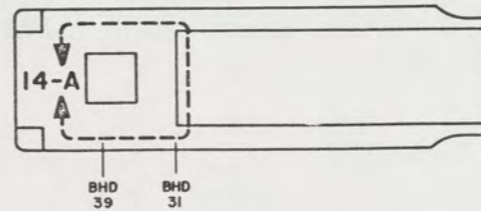


NOTES:

- THIS DRAWING HAS BEEN DEVELOPED FROM SHIPCHECK INFORMATION FOR ACCOMPLISHING THE INSTALLATION OF MODIFIED HYDRAULIC POWER STEERING SYSTEM 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 EXCEPT ITEMS MARKED GFE.
- 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.
- DIMENSIONAL LOCATION OF NEW STEERING SYSTEM RESERVOIR IS NOMINAL. PIPING AND COMPONENTS SHOWN ON SHEET M TO BE REMOVED SHALL BE DIMENSIONALLY DETERMINED BY EXISTING SHIPBOARD CONDITIONS AND NEW LOCATION OF RESERVOIR.
- THREADED MOUNTING HOLES IN PUMP FLANGE, FIND NO. M-1, SHALL BE DRILLED THRU WITH 13/32" DIA DRILL TO PROVIDE CLEARANCE FOR MOUNTING HARDWARE SUPPLIED WITH SHIP'S ENGINES.
-
- ALL THREADED JOINTS SHALL BE ASSEMBLED USING ANTISEIZE TAPE, FIND NO. M-8. ALL JOINTS SHALL BE TESTED FOR TIGHTNESS IN ACCORDANCE WITH LCM-B INSTALLATION INSTRUCTIONS 85-1905-217-1.
- IDENTIFY PIPING SYSTEM IN ACCORDANCE WITH TB43-0144.
- RESERVOIR CAPACITY: 11.8 GAL.
- PIPING SHALL BE SUITABLY SECURED BY PIPE HANGERS TO PREVENT VIBRATION AND PROTECT AGAINST DAMAGE IN ACCORDANCE WITH NAVSHIPS 804-1385781.
- INTERNAL SURFACES OF RESERVOIR SHALL BE TREATED IN ACCORDANCE WITH MIL-P-23236, TYPE I, CLASS 3.
- SECURE HOSES M-2 THRU M-5 USING CLAMPS M-11 OR M-12 AND SCREWS M-13, AS REQUIRED. PLACE WEAR RESISTANT MATERIAL IN AREAS WHERE ABRASION IS ANTICIPATED.
- 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		
NO.	DRAWING NO.	TITLE
1	13226E9467	LCM-8, MOD-1, MODIF TO HYD RES. RAMP/HYD START
2	13226E9464	LCM-8, MOD-1, MISC STRUCTURAL DETAILS
3	516-4510540	LCM-8, MOD-1, STEERING - HYDRAULIC PIPING



KEY VIEW 5-A

THIS DRAWING APPLIES TO HULL NUMBERS 8540 THROUGH 8560 AND 8580 THROUGH 8618 ONLY

SHEETS				STATUS OF REVISIONS			
NO.	REV.	DATE	BY	NO.	DESCRIPTION	DATE	APPROVED

YARD	FIND NO.	QTY	DESCRIPTION	UNIT	COMPL.	MATERIAL
YARD M-13	H524625-43	20	SCREW, TAPPING, PAN HD, CR REC, CS, NO. 10 X .50 L			STEEL
YARD M-12	H521333-78	10	CLAMP, LOOP-STEEL, CUSHIONED, 1.125 SIZE			
YARD M-11	H521333-76	10	CLAMP, LOOP-STEEL, CUSHIONED, .875 SIZE			
YARD M-10	85105	101-017-303	STUD, WELD, 1/2-13 UNC-2A X 1 1/4 CPL, W/FERRULE F-239 1/2 (NELSON)		COMPL	STEEL
GFE M-9	02249	FSP 107-1ED1A	FILTER, HYD W/GAGE, 3/4 NPT PORTS, ELEMENT K-22001 (GRESEN)		COMPL	VARIOUS
YARD M-8		AR	TAPE, ANTISEIZE (SEE NOTE 11)			MIL-T-27730
GFE M-7	97403	13226E9477	LCM-8, MOD-1, STEERING HYDRAULIC RESERVOIR			
YARD M-6		H551922-33	NUT, HEX, SLFLNG, 1/2-13 UNC-2B, CD PL			STEEL
YARD M-5	24161	12C1T-12RFJX-168	HOSE ASSEMBLY, 3/4" JIC SWIVEL X 108 L (GATES)		COMPL	VARIOUS
YARD M-4	24161	12C1T-12RFJX-192	HOSE ASSEMBLY, 3/4" JIC SWIVEL X 192 L (GATES)		COMPL	VARIOUS
YARD M-3	24161	DC1T-BRFJX-168	HOSE ASSEMBLY, 1/2" JIC SWIVEL X 168 L (GATES)		COMPL	VARIOUS
YARD M-2	24161	DC1T-BRFJX-192	HOSE ASSEMBLY, 1/2" JIC SWIVEL X 192 L (GATES)		COMPL	VARIOUS
GFE M-1	82983	VTH42-40-18-18-14	PUMP, POWER STEERING (SEE NOTE 9) (VICKERS)		COMPL	VARIOUS
YARD V-1	57661	73-104 (APOLLO)	VALVE, BALL, 3/4 IPS PORTS (CONBRACO)		COMPL	STEEL
YARD F-18	30780	8-FTI-S	CONNECTOR, MALE, 1/2 IPS X 3/4-16 JIC (PARKER)		COMPL	STEEL
YARD F-13	00624	200209T-8-BS	ELBOW, 90°, LONG, 3/4-16 JIC X 3/4-16 "O" RING (AERQUIP)		COMPL	STEEL
YARD F-12	30780	3/4-GG-S	CONNECTOR, PIPE, 3/4 IPS (PARKER)		COMPL	STEEL
YARD F-11	30780	1/2-CD-S	ELBOW, 90°, STREET, 1/2 IPS (PARKER)		COMPL	STEEL
YARD F-10	30780	1/8-DD-S	ELBOW, 90°, FEMALE, 1/8 IPS (PARKER)		COMPL	STEEL
YARD F-9	30780	12-CT-S	ELBOW, 90°, MALE 3/4 IPS X 1 1/16-12 JIC (PARKER)		COMPL	STEEL
YARD F-8	30780	1/2-GG-S	CONNECTOR, PIPE, 1/2 IPS (PARKER)		COMPL	STEEL
YARD F-7	30780	1/2-DD-S	ELBOW, 90°, FEMALE, 1/2 IPS (PARKER)		COMPL	STEEL
YARD F-6	30780	3/4 X 1/2 PTR-S	REDUCER, BUSHING, 3/4 IPS X 1/2 IPS (PARKER)		COMPL	STEEL
YARD F-5	30780	1/2 M40-S	TEE, FEMALE, 1/2 IPS (PARKER)		COMPL	STEEL
YARD F-4	80090	FIG. 2125	UNION, FEMALE, 3000 CL, 1/2 IPS (GRINWELL)		COMPL	STEEL
YARD F-3	30780	12-FTX-S	CONNECTOR, MALE, 3/4 IPS X 1 1/16-12 JIC (PARKER)		COMPL	STEEL
YARD F-2	30780	3/4-DD 45°-S	ELBOW, 45°, FEMALE, 3/4 IPS (PARKER)		COMPL	STEEL
YARD F-1	30780	3/4 DD-S	ELBOW, 90°, FEMALE, 3/4 IPS (PARKER)		COMPL	STEEL
YARD P-5	30780	1/8 FF-S	NIPPLE, PIPE, 1/8 IPS (PARKER)		COMPL	STEEL
YARD P-4	30780	5/4 FF-S	NIPPLE, PIPE, 3/4 IPS (PARKER)		COMPL	STEEL
YARD P-3	30780	1/2 FF-S	NIPPLE, PIPE, 1/2 IPS (PARKER)		COMPL	STEEL
YARD P-2		TYPE S, GR A	PIPE, SCH 40, 3/4 IPS			ASTM A53
YARD P-1		TYPE S, GR A	PIPE, SCH 40, 1/2 IPS			ASTM A53

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
 ONE PLACE (1 X) 1/8" - 1/4"
 TWO PLACE (2 X) 1/16" - 3/16"
 THREE PLACE (3 X) 1/32" - 1/8"
 ANGLES 1/4" - 1/2"

DO NOT SCALE THIS DRAWING.
 FOR INTERPRETATION OF DRAWING GO TO 100 APPLIES.
 REMOVE SHARP AND BREAK SHARP EDGES.
 SHARP EDGES TO -
 FILLET RADIUS TO -
 MATERIAL:

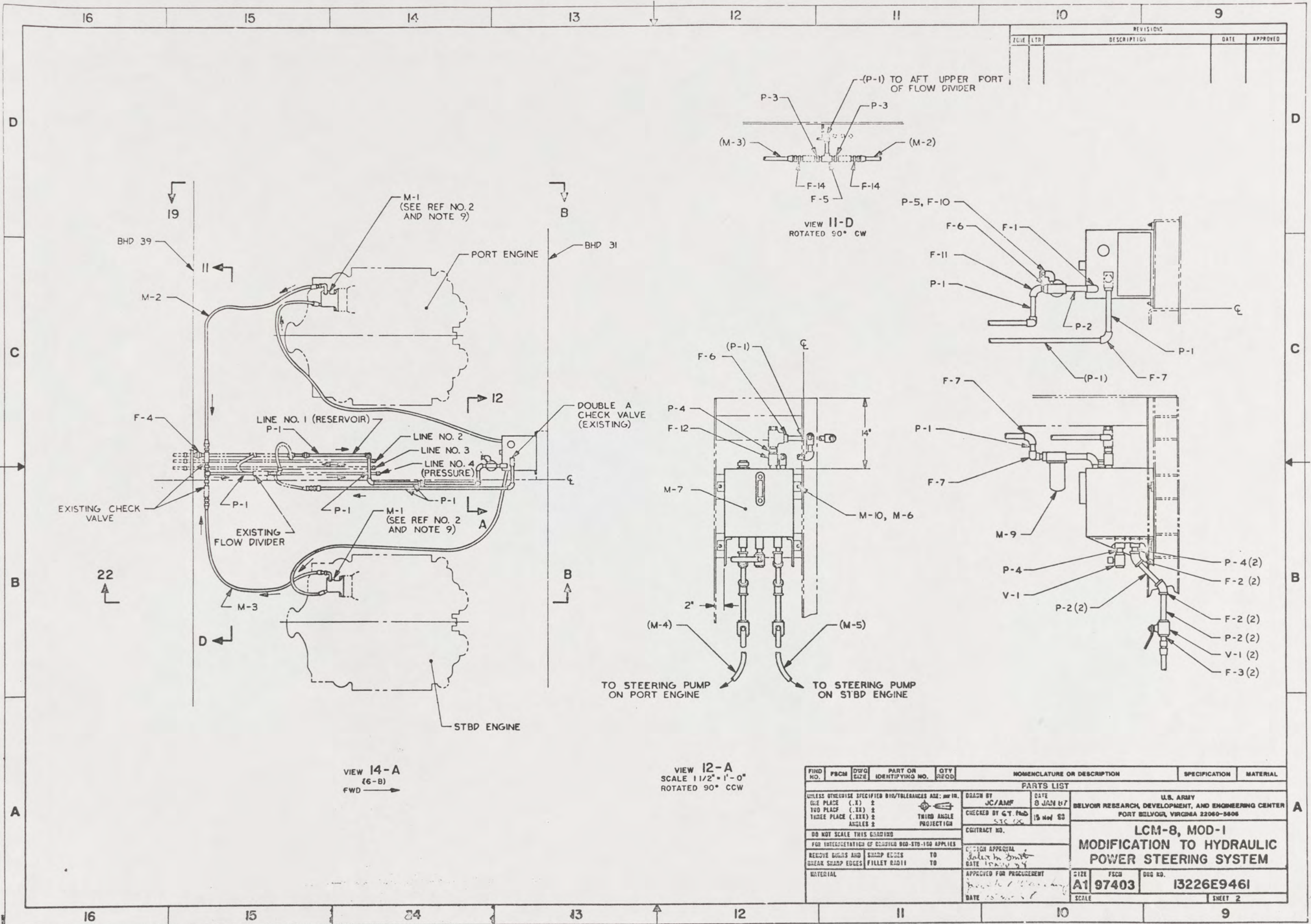
DRAWN BY: SLE
 CHECKED BY: GY MDD, SJC DC
 DATE: 15 NOV 88
 CONTRACT NO:

DESIGN APPROVAL:
 DATE: 12 NOV 88
 APPROVED FOR PROCUREMENT:
 DATE: 15 NOV 88

U.S. ARMY MOBILITY EQUIPMENT
 RESEARCH AND DEVELOPMENT COMMAND
 FORT BELVOIR, VIRGINIA 22060

**LCM-8, MOD-1
 MODIFICATION TO HYDRAULIC
 POWER STEERING SYSTEM**

SHEET NO: A1
 DRAWING NO: 97403
 PART NO: 13226E9461
 SCALE: NONE
 SHEET 1 OF 4



REVISIONS				
NO.	DATE	DESCRIPTION	BY	APPROVED

VIEW 14-A
(6-B)
FWD →

VIEW 12-A
SCALE 1 1/2" = 1'-0"
ROTATED 90° CCW

FIG. NO.	PBCN	DSWG SIZE	PART OR IDENTIFYING NO.	QTY REQD.	NOMENCLATURE OR DESCRIPTION	SPECIFICATION	MATERIAL
PARTS LIST							
UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE: mm 1/16"			DRAWN BY		DATE		
ONE PLACE (.X) 2			JC/AMF		8 JAN 67		
TWO PLACE (.XX) 2			CHECKED BY G.T. P.		15 NOV 68		
THREE PLACE (.XXX) 2			DATE		10 NOV 64		
ANGLES 2			CONTRACT NO.				
DO NOT SCALE THIS DRAWING							
FOR INTERPRETATION OF DRAWING 800-STD-100 APPLIES							
REMOVE BILLS AND BREAK SHARP EDGES			SHARP EDGES TO		DESIGN APPROVAL		
FILLET RADIUS TO			DATE		DATE		
MATERIAL			APPROVED FOR PROCUREMENT		DATE		
					SIZE	FSCN	DWG NO.
					A1	97403	13226E9461
					SCALE	SHEET 2	

42

24

23

22

21

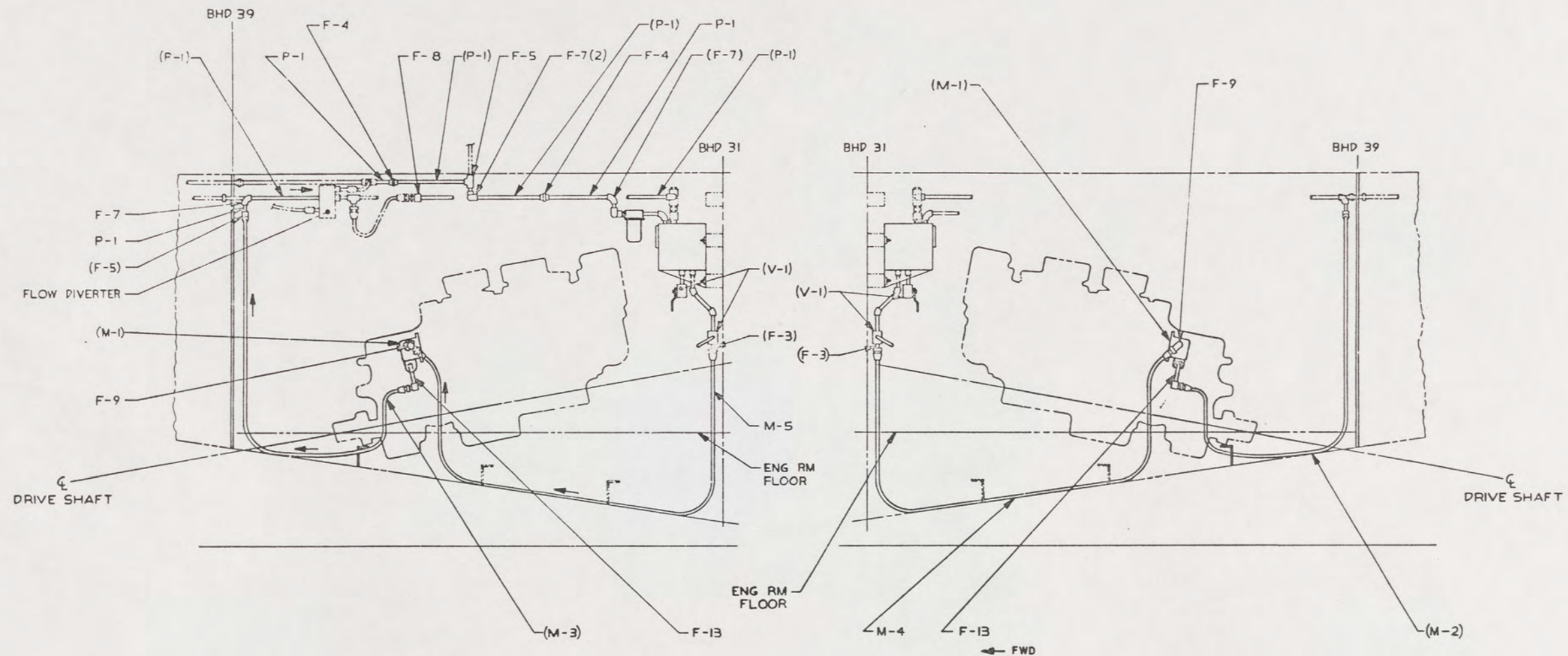
20

19

18

17

REVISIONS			DATE	APPROVED
NO.	BY	DESCRIPTION		



VIEW 22-B
(16-B)
STBD LOOKING INBOARD
FWD →

VIEW 19-B
(16-D)
PORT LOOKING INBOARD
ROTATED 180°

43

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DIM PLACES (1, 2) 3 DIM PLACES (1, 2, 3) 4 DIM PLACES (1, 2, 3) 4 DIMENSIONS 5		DRAWN BY SLE CHECKED BY G.T. P... DATE 7 JAN 85	U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060
DO NOT SCALE THIS DRAWING FOR INTERPRETATION OF DIMENSIONS SEE DIMENSIONS AND TOLERANCES		DESIGN APPROVAL DATE 15 JAN 85 APPROVED FOR PROCUREMENT	LCM-8, MOD-1 MODIFICATION TO HYDRAULIC POWER STEERING SYSTEM
REMOVE BURRS AND DEBURR SHARP EDGES CHAMF CORNERS TO RADIUS 1/16"	DATE 15 JAN 85	SIZE A1	PROJ 97403
NATIONAL	DATE	SCALE	DWG NO 13226E9461

24

23

22

21

20

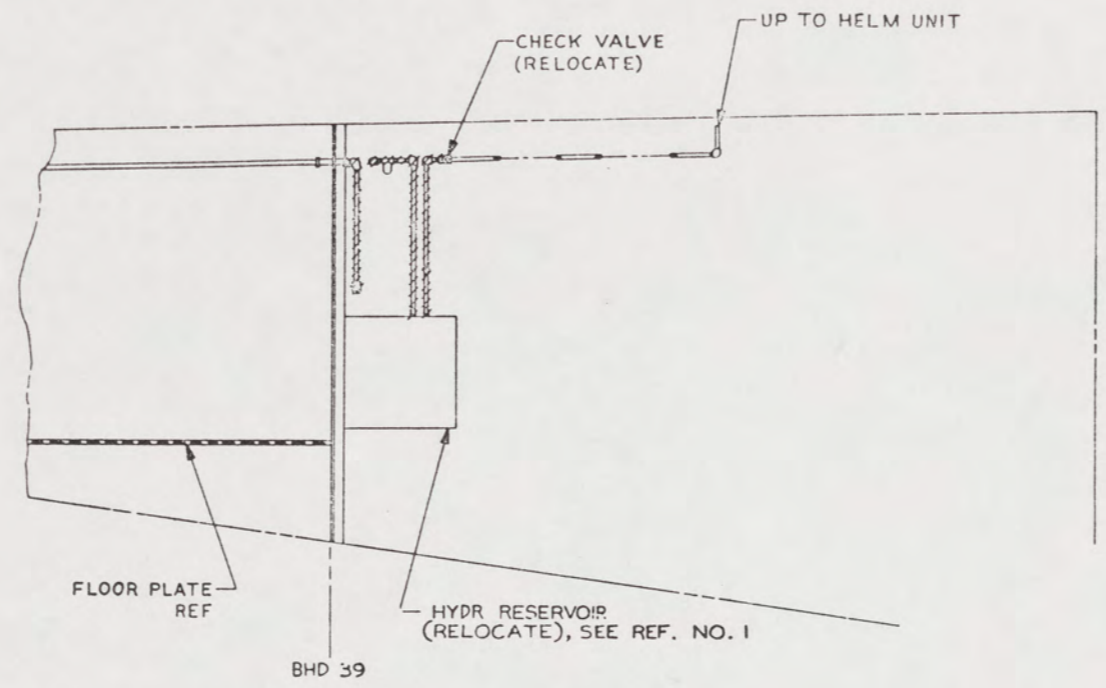
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18

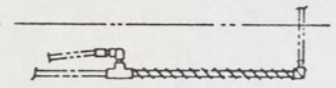
17

32 31 30 29 28 27 26 25

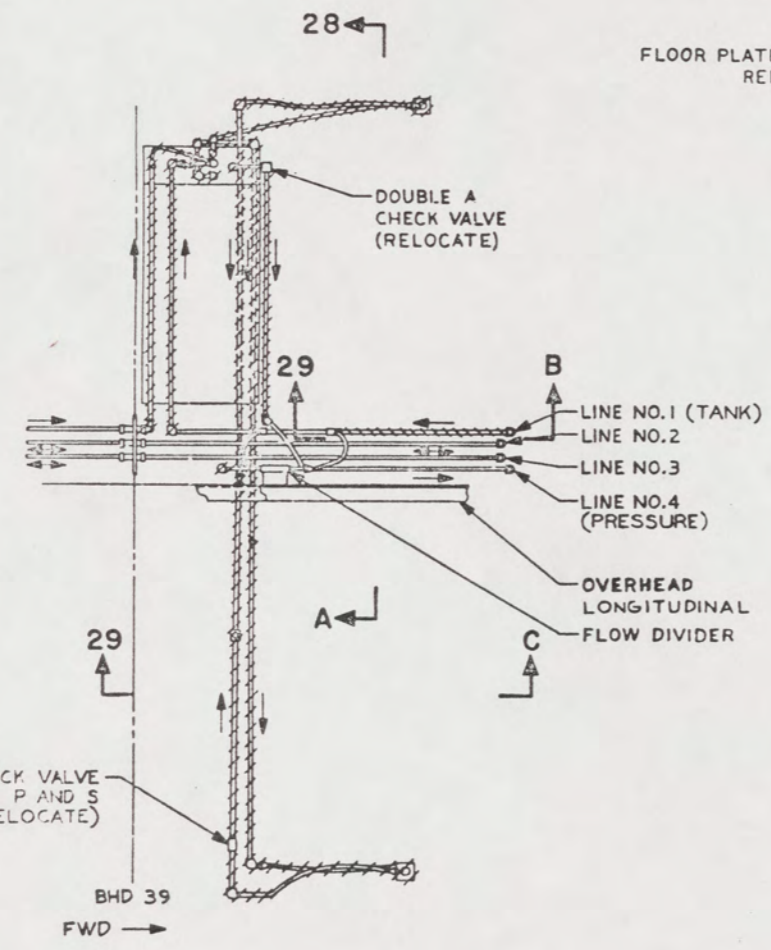
REVISIONS				
NO.	DATE	DESCRIPTION	BY	APP'D



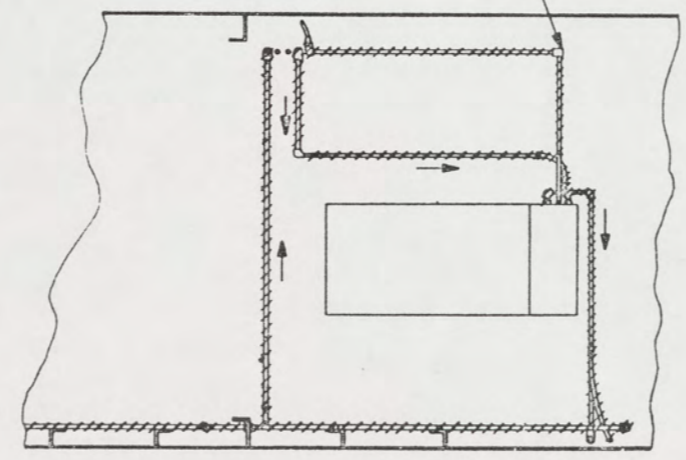
VIEW 29-C



VIEW 29-B



VIEW 31-A
PRESENT HYDRAULIC SYSTEM
REMOVE ITEMS SHOWN IN CROSSHATCH



VIEW 28-A
ROTATED 90° CW

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ONE PLACE (1.0) ± TWO PLACES (1.00) ± THREE PLACES (1.000) ± ANGLES ±		DRAWN BY: SLE CHECKED BY: C.F. Pugh DATE: 15 NOV 58 CONTRACT NO:	U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060
DO NOT SCALE THIS DRAWING FOR INTERPRETATION OF DIMENSIONS GO TO THE PART SHARP EDGES AND SQUARE CORNERS TO BE SHARP EDGES SHARP EDGES TO FILLET RADIUS TO MATERIAL		DESIGN APPROVAL: <i>John H. Dwyer</i> DATE: 15 NOV 58 APPROVER FOR PROCUREMENT: <i>Joseph H. ...</i> DATE: 15 NOV 58	LCM-8, MOD-1 MODIFICATION TO HYDRAULIC POWER STEERING SYSTEM
SIZE: A1	PLCN: 97403	QWG NO: 13226E9461	SCALE: SHEET 4

32 31 30 29 28 27 26 25

44