

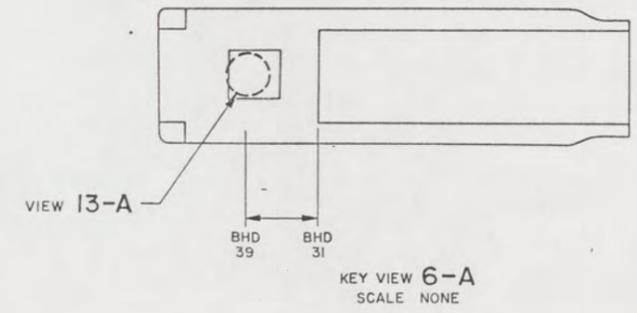
NOTES:

- THIS DRAWING HAS BEEN DEVELOPED FROM SHIPCHECK INFORMATION FOR ACCOMPLISHING THE INSTALLATION OF MODIFICATIONS TO THE ENGINE CONTROL ARRANGEMENT ON LCM-8, MOD-1.
- ALL FABRICATION WELDING AND INSPECTION TO BE IN ACCORDANCE WITH NAVSEA 0000-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, EXCEPT FOR FIND NUMBERS MARKED WITH * WHICH ARE NEW ON GUNDERSON BOAT.
- REMOVE ENGINE LIFTING LUG AT LOCATION SHOWN AND INSTALL DETAIL 20-C USING SCREWS, FIND NO. 19.
- FOR CONNECTIONS TO SHUTDOWN CONTROL HEAD IN PILOT HOUSE, SEE REF 1.
- FIND NUMBERS IDENTIFIED WITH * ARE AVAILABLE FROM EXISTING CONTROL ARRANGEMENT (ON ROHR BOAT ONLY) AND ARE TO BE SALVAGED AND USED IN THIS INSTALLATION.
- CONNECT TUBE, FIND NO. 20 OR 28 TO ROD ENDS, FIND NO. 9, AFTER OBTAINING CORRECT SETTING OF LEVERS. METHOD OF CONNECTION MAY BE WELDING OR PINNING. SHORTEN FIND NO. 9 AT CLUTCH CONTROL AS REQUIRED.
- CONTROL UNIT, FIND NO. 26, CAN BE REVERSED BY SWINGING MANUAL CONTROL ARM 180° AND REVERSING CABLE CLAMP BRACKET.
- STORE ENGINE LIFTING LUG REMOVED PER NOTE 8 AS SHOWN IN VIEW 23-A. SECURE USING EXISTING SCREWS AND NEW NUTS, FIND NO. 34. LOCATION OF LIFTING LUG TO BE AS CLOSE AS POSSIBLE OVER PAD IT WAS REMOVED FROM.
- FOR GUNDERSON BOAT, HULL NUMBERS 8520 THROUGH 8539, FIND NUMBERS IDENTIFIED WITH * SHALL BE FURNISHED BY YARD.

SHEETS		ZONE		STATUS OF REVISIONS		DATE	APPROVED
NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION		
A	SEE ECP NO. 90HE3207 AND 90HE3208	13	MAR 94				RMS
B	SEE ECP NO. 90HE3309 AND 90HE3310	14	MAR 91				RMS

REFERENCE DRAWINGS		
APPLICABLE TO HULL NUMBERS 8540 THRU 8560 AND 8580 THRU 8618		
NO.	DRAWING NO.	TITLE
1	13226E9451	LCM-8, MOD-1, CONTROL CONSOLE MODIFICATIONS

REFERENCE DRAWINGS		
APPLICABLE TO HULL NUMBERS 8520 THRU 8539		
NO.	DRAWING NO.	TITLE
1	13226E9451	LCM-8, MOD-1, CONTROL CONSOLE MODIFICATIONS



SEE NOTE 10 AND 14

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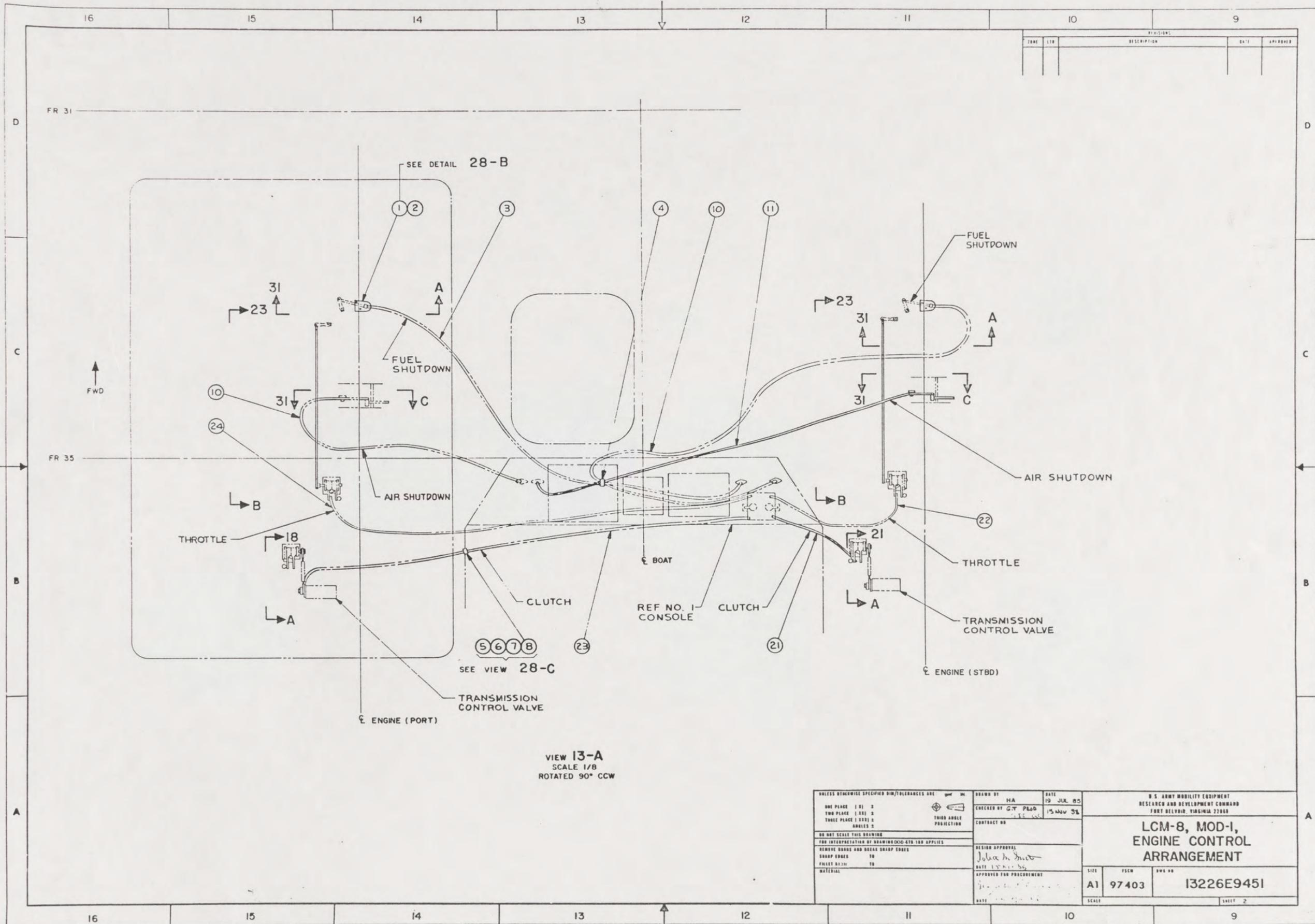
SEE NOTE 10 AND 14

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YARD	FIND NO.	FSCM	DWG SIZE	PART OR IDENTIFYING NO	QTY REQD	NOMENCLATURE OR DESCRIPTION	SPECIFICATION	MATERIAL
YARD	36			2		FB 3/8" X 3 1/2" STK	ASTM A36	STEEL
YARD	35			2		FB 3/8" X 3" STK	ASTM A36	STEEL
YARD	34	4E057		4		NUT, HEX, SLFLKG, 7/16"-14 UNC-2B, STEEL, CD PL (ALL METAL)	COML	CRES
YARD	33		MS90725-65	2		SCREW, HEX HD, 3/8-16 UNC-2A X 1 3/4" L, STEEL, CD PL		STEEL
YARD	32			2		PLATE, 3/16" THK	ASTM A36	STEEL
YARD	31			2		PLATE, 3/16" THK	ASTM A36	STEEL
YARD	30			2		PLATE, 3/16" THK	ASTM A36	STEEL
YARD	29		MS51922-17	4		NUT, HEX, SLFLKG, 3/8"-16 UNC-2B, STEEL, CD PL		STEEL
YARD	28		TYPE 5	2		TUBE, 1/2" OD X 5/16" ID X 4" L	ASTM A513	STEEL
YARD	27			2		BAR, RD, 3/4" DIA X 1" L	ASTM A36	STEEL
	* 26	86376		2		A-1585 CONTROL UNIT, RED KNOB (PANISH)	COML	VARIOUS
	* 25	86376		4		ARTICULATOR (PANISH)	COML	VARIOUS
	* 24	86376		1		NO. B2260 THROTTLE CABLE, PORT, 13 FT LONG 'C' DIM (PANISH)	COML	VARIOUS
	* 23	86376		1		NO. B2260 CLUTCH CABLE, PORTS, 15 FT LONG 'C' DIM (PANISH)	COML	VARIOUS
	* 22	86376		1		NO. B2260 THROTTLE CABLE, STBD, 9 FT LONG 'C' DIM (PANISH)	COML	VARIOUS
GFE	21	86376		1		NO. B2260 CLUTCH CABLE, STBD, 12 FT LONG 'C' DIM (PANISH)	COML	VARIOUS
YARD	20		TYPE 5	2		TUBE, 1/2" OD X 5/16" ID X 20" L	ASTM A513	STEEL
YARD	19	4E057		4		SCREW, CAP, SOCKET HD, 7/16"-14 UNC-2A X 1" L (ALL METAL)	COML	CRES
YARD	18			2		FB, 3/8" X 3" STK	ASTM A36	STEEL
	* 17	86376		4		NO. C2190 ARTICULATOR (PANISH)	COML	VARIOUS
	* 16	86376		4		C-2926-3 SHUTDOWN CONTROL ENG CONNECTING KIT (PANISH)	COML	VARIOUS
YARD	15		MS35338-46	6		WASHER, LOCK-SPRING, HELICAL, 3/8" NOM SIZE, STEEL, CD PL		STEEL
YARD	14		MS90725-60	8		SCREW, HEX HD, 3/8"-16 UNC-2A X 1" L, STEEL, CD PL		STEEL
	* 13	86376		2		A-1585 CONTROL UNIT, BLACK KNOB (PANISH)	COML	VARIOUS
YARD	12			2		PLATE, 3/16" THK	ASTM A36	STEEL
GFE	11	86376		1		NO. C1332-T SHUTDOWN CABLE, 10 FT LONG 'C' DIM (PANISH)	COML	VARIOUS
	* 10	86376		2		NO. C1332-T SHUTDOWN CABLE, 11 FT LONG 'C' DIM (PANISH)	COML	VARIOUS
GFE	9	86376		4		NO. C-1586-1582 CONNECTING ROD KIT (PANISH)	COML	STEEL
YARD	8	62789		6		QS200-M285 CLAMP, HOSE (BREEZE)	COML	CRES
YARD	7		M1BC510	6		SUPPORT LINING, 1/8" X 1" X AR L	ASTM D2000	RUBBER
YARD	6	85105		6		101-017-178 STUDS, 3/8" X 1" CPL (NELSON)	COML	STEEL
YARD	5	85105		6		101-107-282 CABLE HANGER TEE BAR (NELSON)	COML	STEEL
YARD	4	56501		AR		TY-527M PLASTIC TIE STRAP (THOMAS AND BETTS)	COML	NYLON
	* 3	86376		1		NO. C1332-T SHUTDOWN CABLE, 14 FT LONG 'C' DIM (PANISH)	COML	VARIOUS
YARD	2		MS90725-6	6		SCREW, CAP, HEX HEAD, 1/4"-20 UNC-2A X 3/4" L, CD PL		STEEL
YARD	1			2		PLATE, 3/16" THK	ASTM A36	STEEL

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

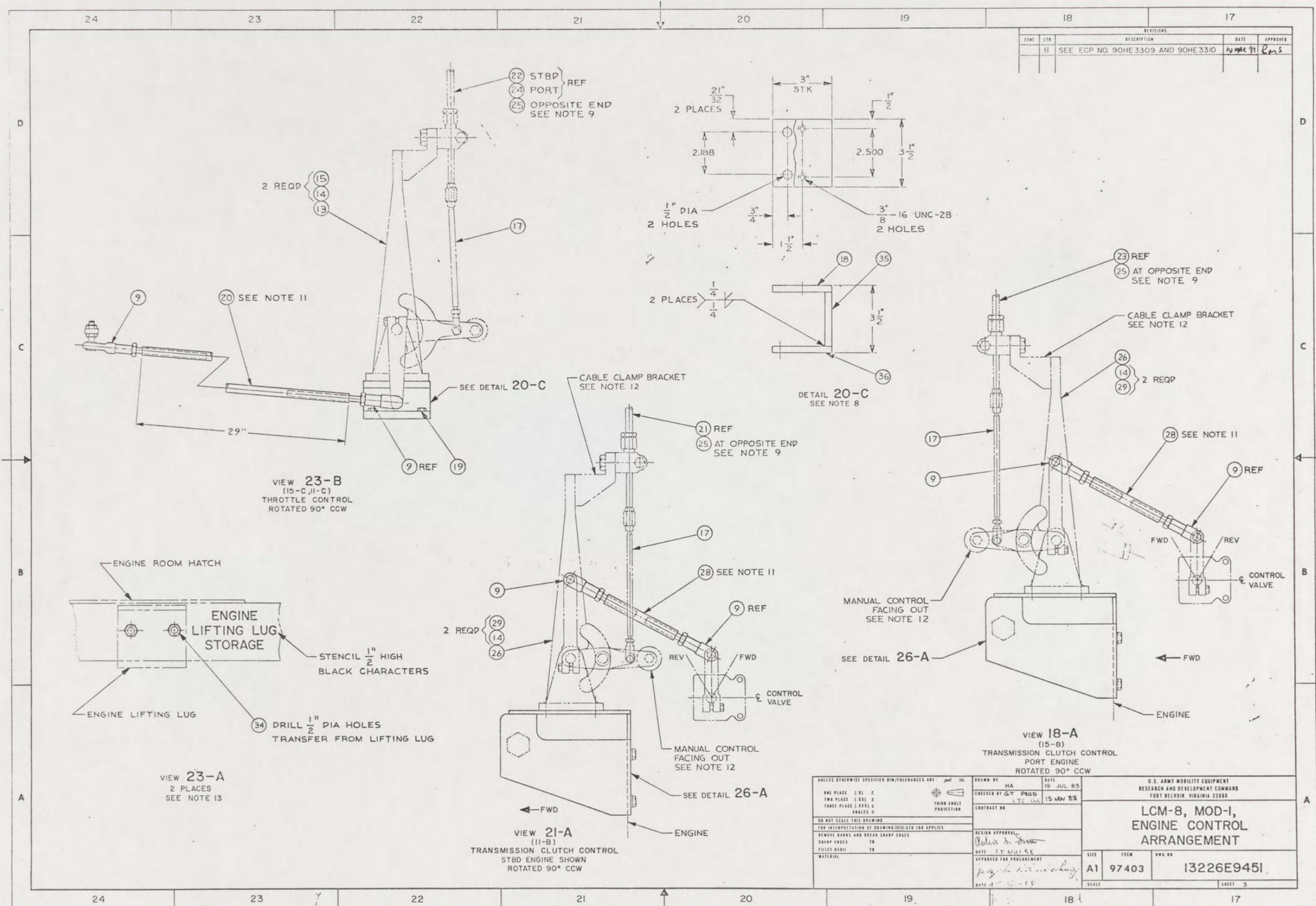
UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE: $\frac{1}{16}$ IN.		DRAWN BY: LAM		DATE: 2 AUG 84	
ONE PLACE (X1) ±		CHECKED BY: [Signature]		CONTRACT NO:	
TWO PLACE (XX) ±		DESIGN APPROVAL: [Signature]		U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060	
THREE PLACE (XXX) ±		DATE: 17 MAR 85		LCM-8, MOD-1, ENGINE CONTROL ARRANGEMENT	
ANGLES: 0		APPROVED FOR PROCUREMENT: [Signature]		SIZE: A1	
DO NOT SCALE THIS DRAWING FOR INTERPRETATION OF DRAWING DIMENSIONS THIS APPLIES		DATE: [Signature]		FSCM: 97403	
REMOVE BORES AND BREAK SHARP EDGES		DATE: [Signature]		DWG NO: 13226E9451	
SHARP EDGES: FR		DATE: [Signature]		SCALE: 1/2	
FILLET RADIUS: FR		DATE: [Signature]		SHEET 1 OF 4	
MATERIAL: _____		DATE: [Signature]			



VIEW 13-A
SCALE 1/8
ROTATED 90° CCW

UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE		DRAWN BY	DATE	U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060
ONE PLACE () ±	TWO PLACE () ±	HA	19 JUL 65	
THREE PLACE () ±	FOUR PLACE () ±	CHECKED BY G.T. PLAD	15 NOV 58	LCM-8, MOD-1, ENGINE CONTROL ARRANGEMENT
ANGLES °		CONTRACT NO.		
DO NOT SCALE THIS DRAWING		DESIGN APPROVAL		SIZE A1 97403
FOR INTERPRETATION OF DRAWING QQQ 470 100 APPLIES		DATE 15 JUL 65		
REMOVE BURRS AND BREAK SHARP EDGES		APPROVED FOR PROCUREMENT		SCALE SHEET 2
SHARP EDGES TO		DATE 15 JUL 65		
FILLET R2.50 TO		DATE 15 JUL 65		13226E9451
MATERIAL		DATE 15 JUL 65		

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REVISIONS		DATE	APPROVED
ZONE	LTN		
B	SEE ECP NO. 90HE3309 AND 90HE3310	14 JUL 85	Pen S

UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE: \pm IN.		DRAWN BY: HA		DATE: 19 JUL 85		U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060	
ONE PLACE (1.0)	±	CHECKED BY: GY PEOB		DATE: 15 NOV 85		LCM-8, MOD-I, ENGINE CONTROL ARRANGEMENT	
TWO PLACE (1.00)	±	CONTRACT NO.					
THREE PLACE (1.000)	±	THIRD ANGLE PROJECTION		DESIGN APPROVAL: <i>John H. Dru</i>		SIZE: 15CM	
DO NOT SCALE THIS DRAWING		FOR INTERPRETATION OF DRAWING QDD-STD FOR APPLIES		DATE: 15 MAR 86		DWG NO: 13226E9451	
REMOVE BURRS AND BREAK SHARP EDGES		APPROVED FOR PROCUREMENT: <i>John H. Dru</i>		DATE: 15 MAR 86		SCALE: 1:1	
SHARP EDGES TO		MATERIAL:		DATE: 15 MAR 86		SHEET 3	
FILLET RADIUS TO							

