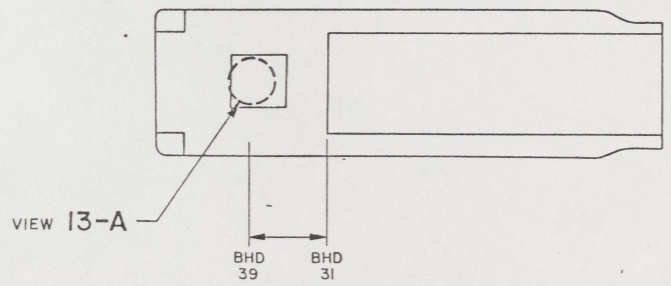


NOTES:

- 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 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, 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.



KEY VIEW 6-A  
SCALE NONE

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

REVISES			STATUS OF REVISIONS		
NO.	DATE	BY	DESCRIPTION	DATE	APPROVED
1	13 MAR 84	RM S	SEE ECP NO. 90HE3207 AND 90HE3208		
2	14 MAR 84	RM S	SEE ECP NO. 90HE3309 AND 90HE3310		

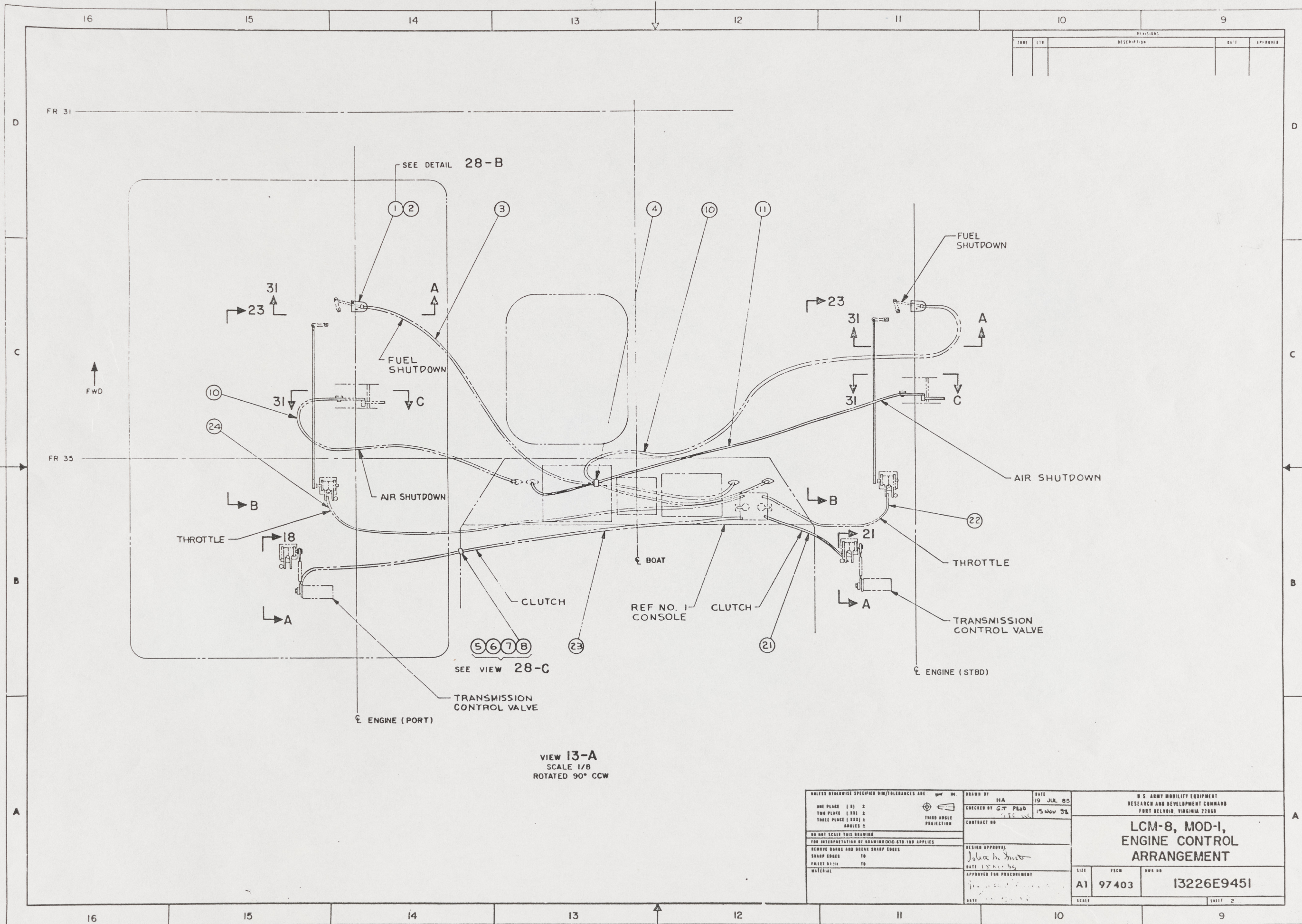
REFERENCE DRAWINGS		
APPLICABLE TO HULL NUMBERS 8540 THRU 8560 AND 8580 THRU 8618		
NO.	DRAWING NO.	TITLE
1	1322619463	LCM-8, MOD-1, CONTROL CONSOLE MODIFICATIONS

REFERENCE DRAWINGS		
APPLICABLE TO HULL NUMBERS 8520 THRU 8539		
NO.	DRAWING NO.	TITLE
1	1322612254	LCM-8, MOD-1, CONTROL CONSOLE MODIFICATIONS

- SEE NOTE 10 AND 14
- SEE NOTE 10 AND 14
- SEE NOTE 10 AND 14
- SEE NOTE 10 AND 14
- SEE NOTE 10 AND 14

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			2		MS90725-65		STEEL
YARD	32			2		SCREW, HEX HD, 3/8"-16 UNC-2A X 1 3/4" L, STEEL, CD PL		STEEL
YARD	31			2		PLATE, 3/16" THK	ASTM A36	STEEL
YARD	30			2		PLATE, 3/16" THK	ASTM A36	STEEL
YARD	29			4		MS51922-17		STEEL
YARD	28			2		TYPE 5		STEEL
YARD	27			2		TUBE, 1/2" OD X 5/16" ID X 4" L	ASTM A513	STEEL
YARD	26	86376		2		A-1585		STEEL
YARD	25	86376		2		CONTROL UNIT, RED KNOB (PANISH)	COML	VARIOUS
YARD	24	86376		4		NO. C2175		VARIOUS
YARD	23	86376		1		ARTICULATOR (PANISH)	COML	VARIOUS
YARD	22	86376		1		NO. B2260		VARIOUS
YARD	21	86376		1		NO. B2260		VARIOUS
YARD	20			1		THROTTLE CABLE, PORT, 13 FT LONG 'C' DIM (PANISH)	COML	VARIOUS
YARD	19	4E057		1		CLUTCH CABLE, PORTS, 15 FT LONG 'C' DIM (PANISH)	COML	VARIOUS
YARD	18			1		THROTTLE CABLE, STBD, 9 FT LONG 'C' DIM (PANISH)	COML	VARIOUS
YARD	17	86376		1		NO. B2260		VARIOUS
YARD	16	86376		1		CLUTCH CABLE, STBD, 12 FT LONG 'C' DIM (PANISH)	COML	VARIOUS
YARD	15			2		TYPE 5		STEEL
YARD	14			4		TUBE, 1/2" OD X 5/16" ID X 20" L	ASTM A513	STEEL
YARD	13	86376		2		SCREW, CAP, SOCKET HD, 7/16"-14 UNC-2A X 1" L (ALL METAL)	COML	CRES
YARD	12			2		FB, 3/8" X 3" STK	ASTM A36	STEEL
YARD	11	86376		4		ARTICULATOR (PANISH)	COML	VARIOUS
YARD	10	86376		4		NO. C2190		VARIOUS
YARD	9	86376		4		C-2926-3		VARIOUS
YARD	8	62789		6		SHUTDOWN CONTROL ENG CONNECTING KIT (PANISH)	COML	VARIOUS
YARD	7			6		MS35338-46		STEEL
YARD	6	85105		6		WASHER, LOCK-SPRING, HELICAL, 3/8" NOM SIZE, STEEL, CD PL		STEEL
YARD	5	85105		6		MS90725-60		STEEL
YARD	4	56501		2		A-1585		VARIOUS
YARD	3	86376		2		CONTROL UNIT, BLACK KNOB (PANISH)	COML	VARIOUS
YARD	2			2		PLATE, 3/16" THK	ASTM A36	STEEL
YARD	1			1		NO. C1332-T		VARIOUS
GFE	11	86376		1		SHUTDOWN CABLE, 10 FT LONG 'C' DIM (PANISH)	COML	VARIOUS
GFE	10	86376		2		NO. C1332-T		VARIOUS
GFE	9	86376		4		NO. C-1586-1582		STEEL
YARD	8	62789		6		QS200-M28S		CRES
YARD	7			6		MIBC510		RUBBER
YARD	6	85105		6		101-017-178		STEEL
YARD	5	85105		6		101-107-282		STEEL
YARD	4	56501		AR		TY-527M		NYLON
YARD	3	86376		1		NO. C1332-T		VARIOUS
YARD	2			6		SHUTDOWN CABLE, 14 FT LONG 'C' DIM (PANISH)	COML	VARIOUS
YARD	1			6		MS90725-6		STEEL
YARD	1			2		SCREW, CAP, HEX HEAD, 1/4"-20 UNC-2A X 3/4" L, CD PL	ASTM A36	STEEL
YARD	1			2		PLATE, 3/16" THK	ASTM A36	STEEL

UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE: .0005 IN.		DRAWN BY: LAM		DATE: 2 AUG 84	
ONE PLACE (X) ±	TWO PLACE (XX) ±	THREE PLACE (XXX) ±	ANGLES ±	THIRD ANGLE PREDOMINANT	
DO NOT SCALE THIS DRAWING					
FOR INTERPRETATION OF DRAWING GO TO THE APPLICABLE					
REMOVE BURLS AND BREAK SHARP EDGES					
SHARP EDGES: TO					
FILLET RADIUS: TO					
MATERIAL: _____					
DESIGN APPROVAL: <i>[Signature]</i>			DATE: 17 MAR 84		
APPROVED FOR PROCUREMENT: <i>[Signature]</i>			DATE: _____		
U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060		CONTRACT NO. _____			
<b>LCM-8, MOD-1, ENGINE CONTROL ARRANGEMENT</b>					
SIZE: A1	FSCM: 97403	DWG NO.: 13226E9451			
SCALE: 1/2		SHEET 1 OF 4			



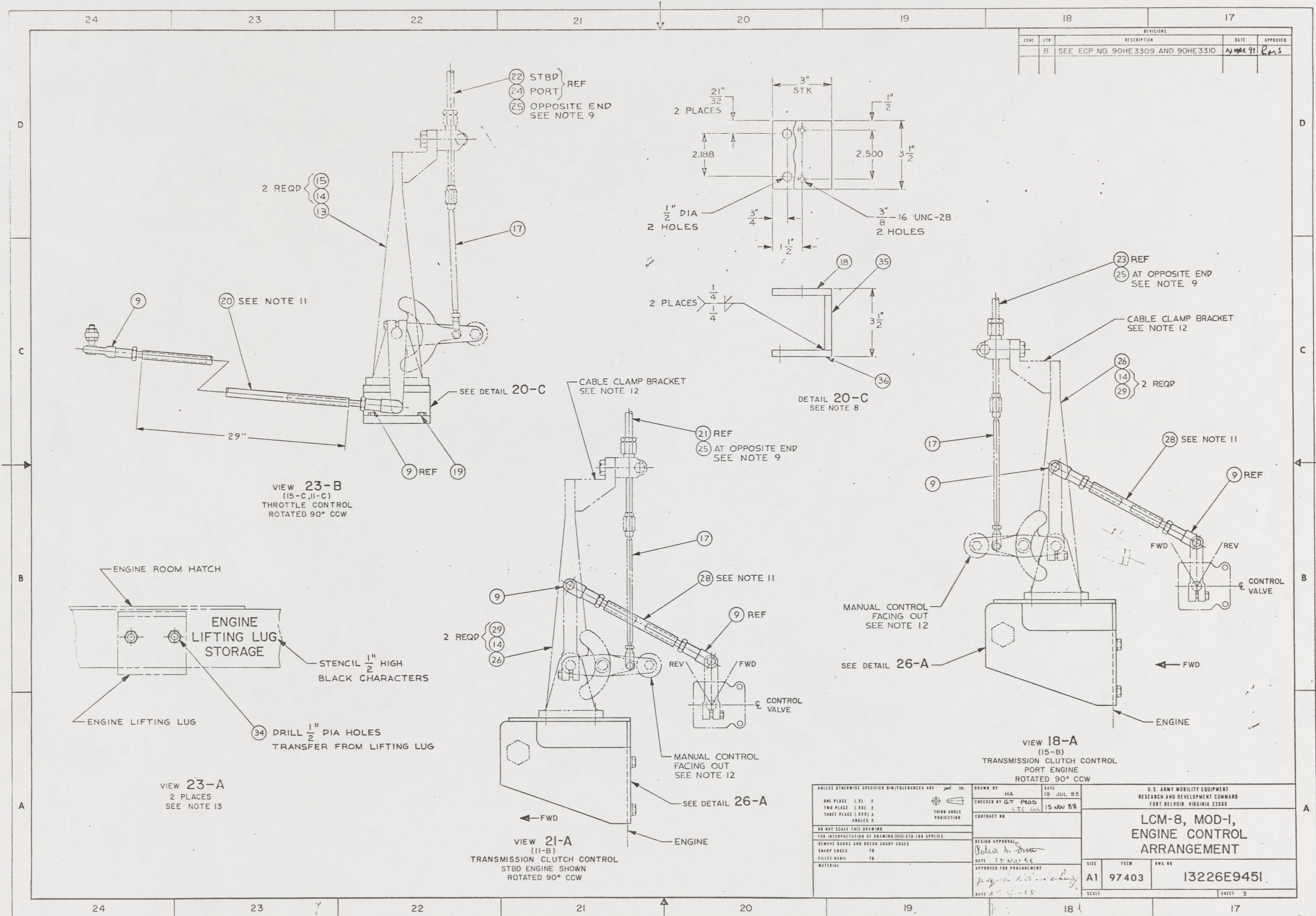
REVISIONS				
NO.	DATE	DESCRIPTION	BY	APPROVED

VIEW 13-A  
SCALE 1/8  
ROTATED 90° CCW

UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE: ONE PLACE (Ø) ± TWO PLACE (Ø) ± THREE PLACE (Ø) ± ANGLES ±		THIRD ANGLE PROJECTION	DESIGNED BY HA	DATE 19 JUL 85	U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060
DO NOT SCALE THIS DRAWING FOR INTERPRETATION OF DRAWING QDD-570-100 APPLIES			CHECKED BY G.T. PLOD	DATE 15 NOV 85	
REMOVE BURRS AND BREAK SHARP EDGES	SHARP EDGES TO		DESIGN APPROVAL <i>John H. Smith</i>	DATE 15 NOV 85	LCM-8, MOD-1, ENGINE CONTROL ARRANGEMENT
FILLET R2.50	TO		APPROVED FOR PROCUREMENT <i>John H. Smith</i>	DATE 15 NOV 85	
MATERIAL			SIZE A1	NSN 97403	QWA NO 13226E9451
				SCALE	SHEET 2

10

59



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
B		SEE ECP NO. 90HE3309 AND 90HE3310	14 MAR 91	ENS

VIEW 23-B  
(15-C, 11-C)  
THROTTLE CONTROL  
ROTATED 90° CCW

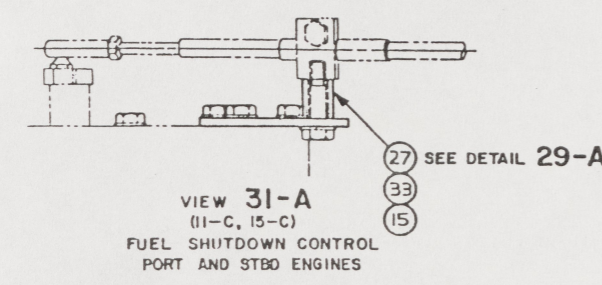
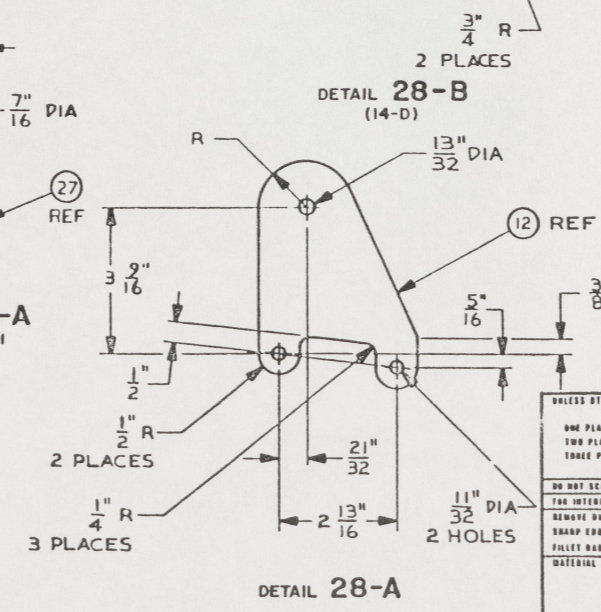
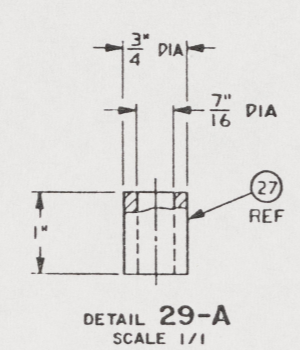
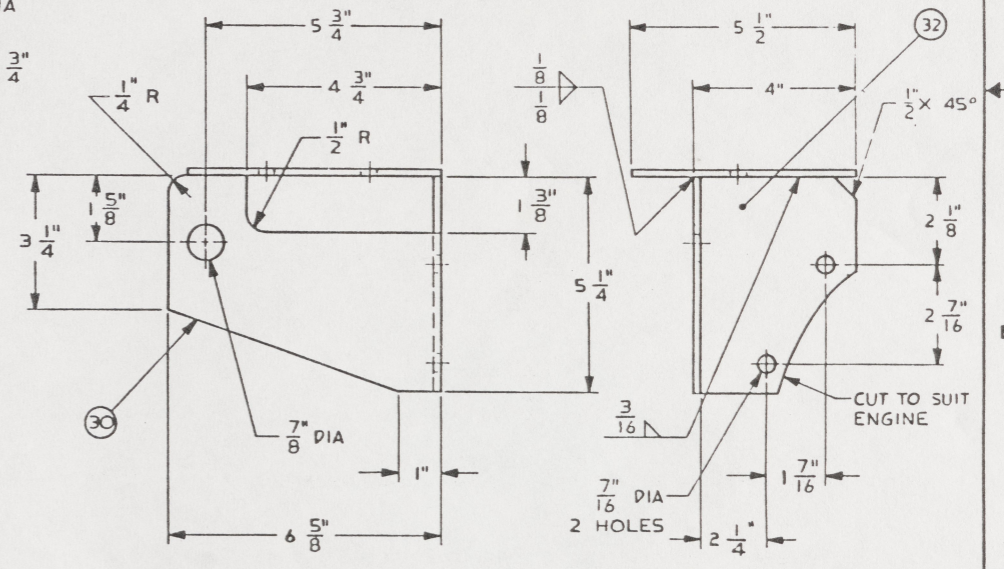
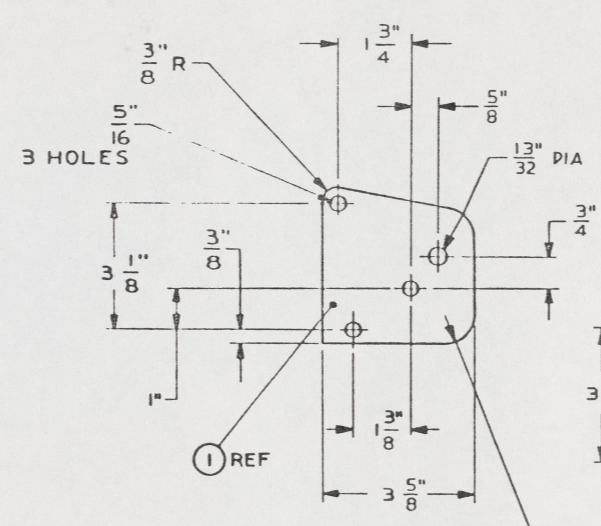
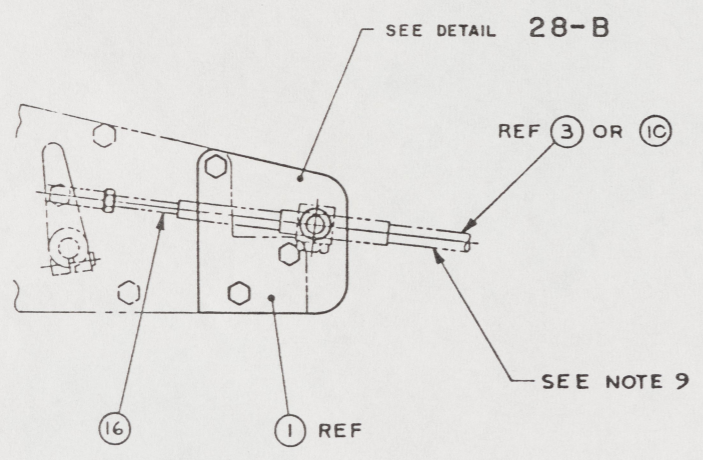
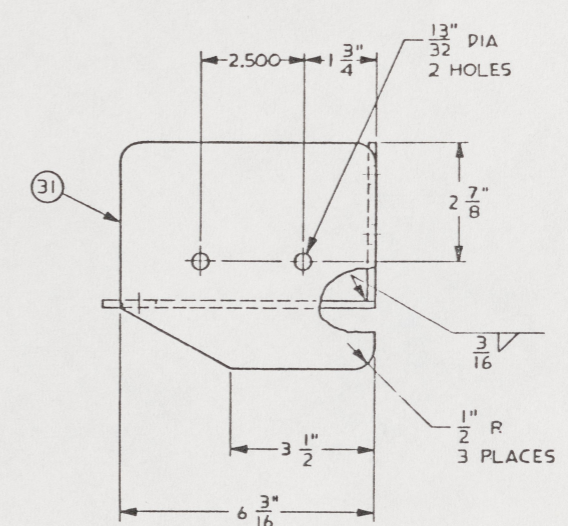
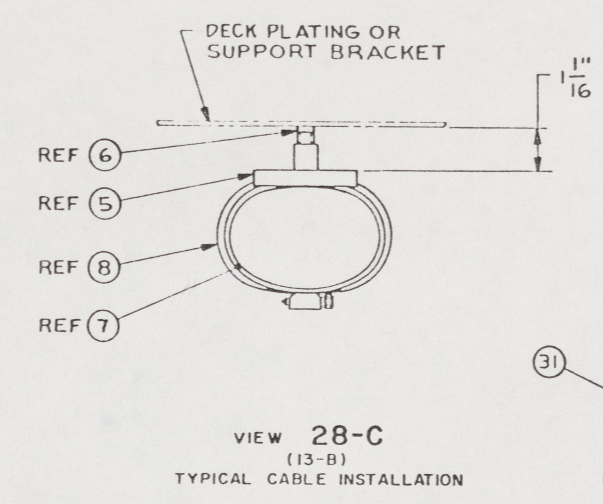
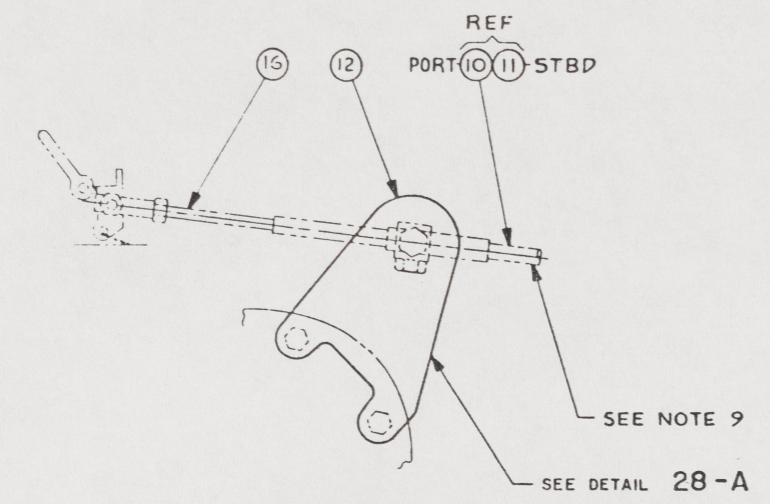
VIEW 23-A  
2 PLACES  
SEE NOTE 13

VIEW 21-A  
(11-B)  
TRANSMISSION CLUTCH CONTROL  
STBD ENGINE SHOWN  
ROTATED 90° CCW

VIEW 18-A  
(15-B)  
TRANSMISSION CLUTCH CONTROL  
PORT ENGINE  
ROTATED 90° CCW

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.X) ±	THIRD ANGLE PROJECTION	CHECKED BY: GT	PROD: STE	DATE: 15 NOV 85	LCM-8, MOD-I, ENGINE CONTROL ARRANGEMENT		
TWO PLACE (1.XX) ±		CONTRACT NO:					
THREE PLACE (1.XXX) ±		DESIGN APPROVAL: <i>John H. Dru</i>		DATE: 15 MAR 86	SIZE: 15CM	DWG NO: 13226E9451	SHEET 3
ANGLES ±		APPROVED FOR PROCUREMENT: <i>James H. ...</i>		DATE: 10-1-88	SCALE:		

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED



UNLESS OTHERWISE SPECIFIED DIM/TOLERANCES ARE: $\pm$ 0.005 IN.		DRAWN BY: MA	DATE: 19 JUL 85	U.S. ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT COMMAND FORT BELVOIR, VIRGINIA 22060
ONE PLACE (1.0)	± 0.005	CHECKED BY: GY P. 100	DATE: 15 NOV 88	
TWO PLACE (0.01)	± 0.002	THIRD ANGLE PROJECTION	CONTRACT NO.	LCM-8, MOD-1, ENGINE CONTROL ARRANGEMENT
THREE PLACE (0.001)	± 0.001	DESIGN APPROVAL: Date: 12 Nov 88	APPROVED FOR PROCUREMENT:	
FOUR PLACE (0.0001)	± 0.0001	DATE: 12 Nov 88	DATE: 12 Nov 88	
DO NOT SCALE THIS DRAWING		FOR INTERPRETATION OF DRAWING DOUBTS 100 APPLIES		SIZE: A1
REMOVE SQUARE AND ROUNDED SHARP EDGES		SHARP EDGES TO FULL RADIUS		
MATERIAL:		DATE: 12 Nov 88		FIG# 97403
				DWG# 13226E9451
				SCALE: SHEET 4

12