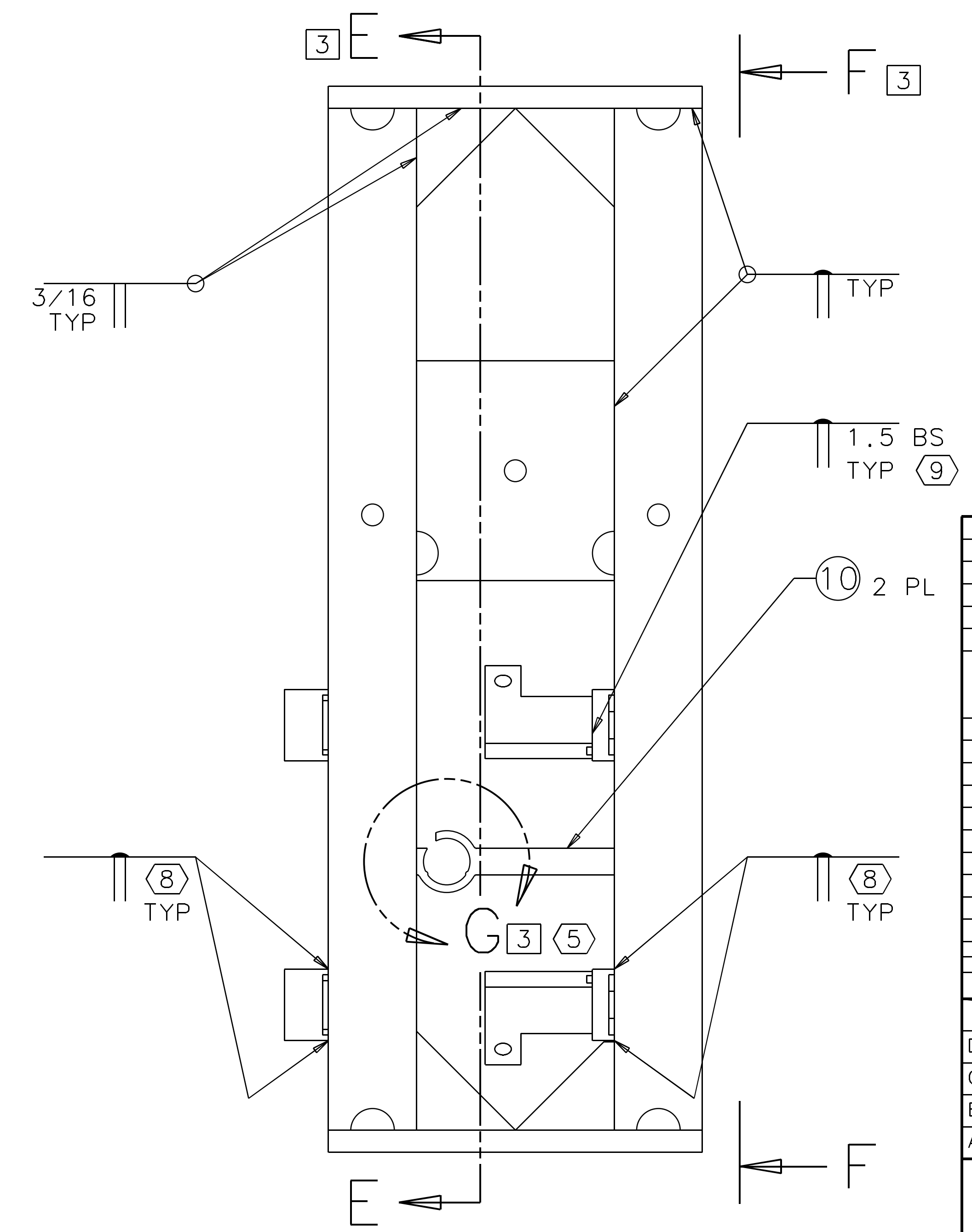
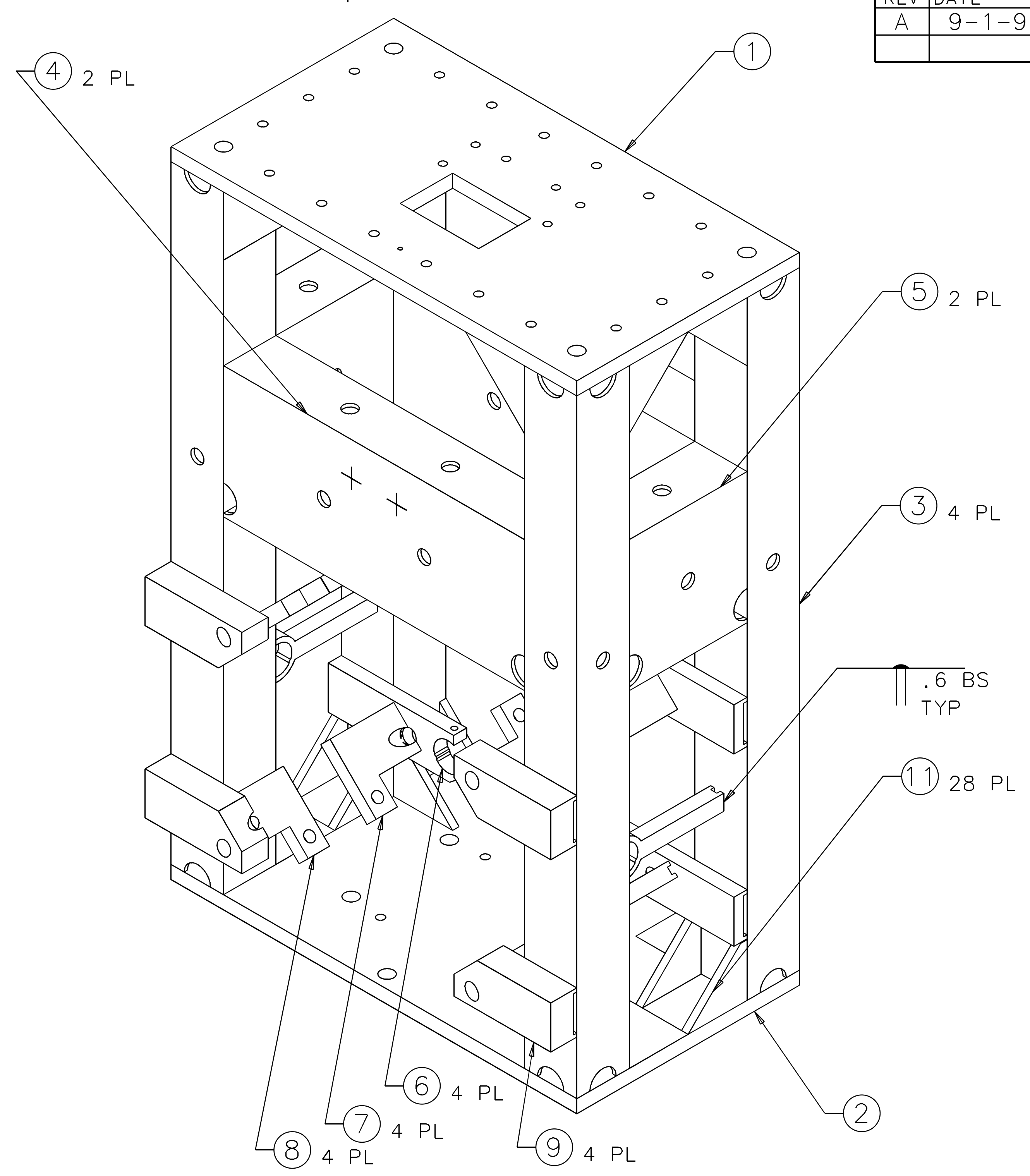
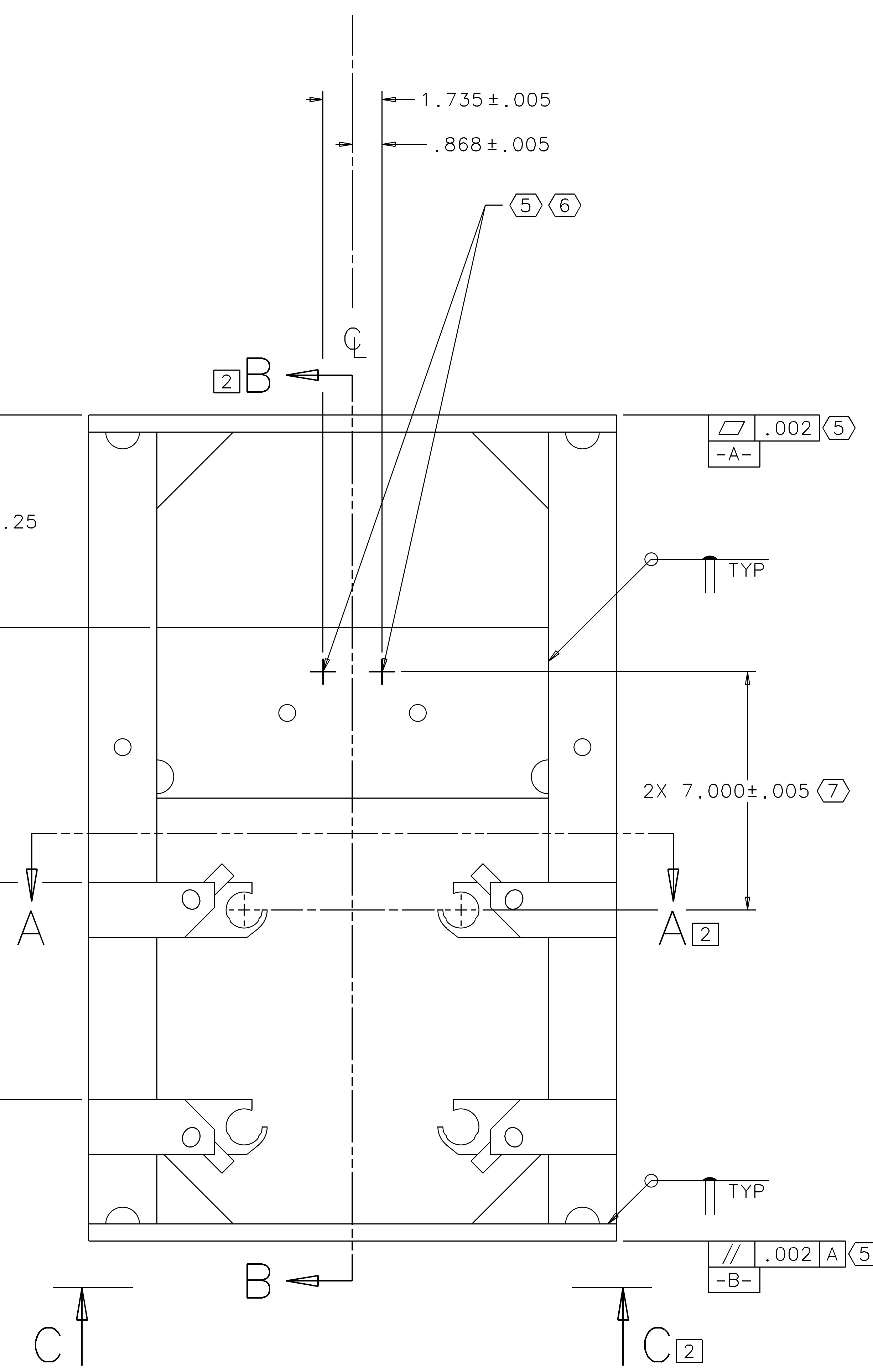
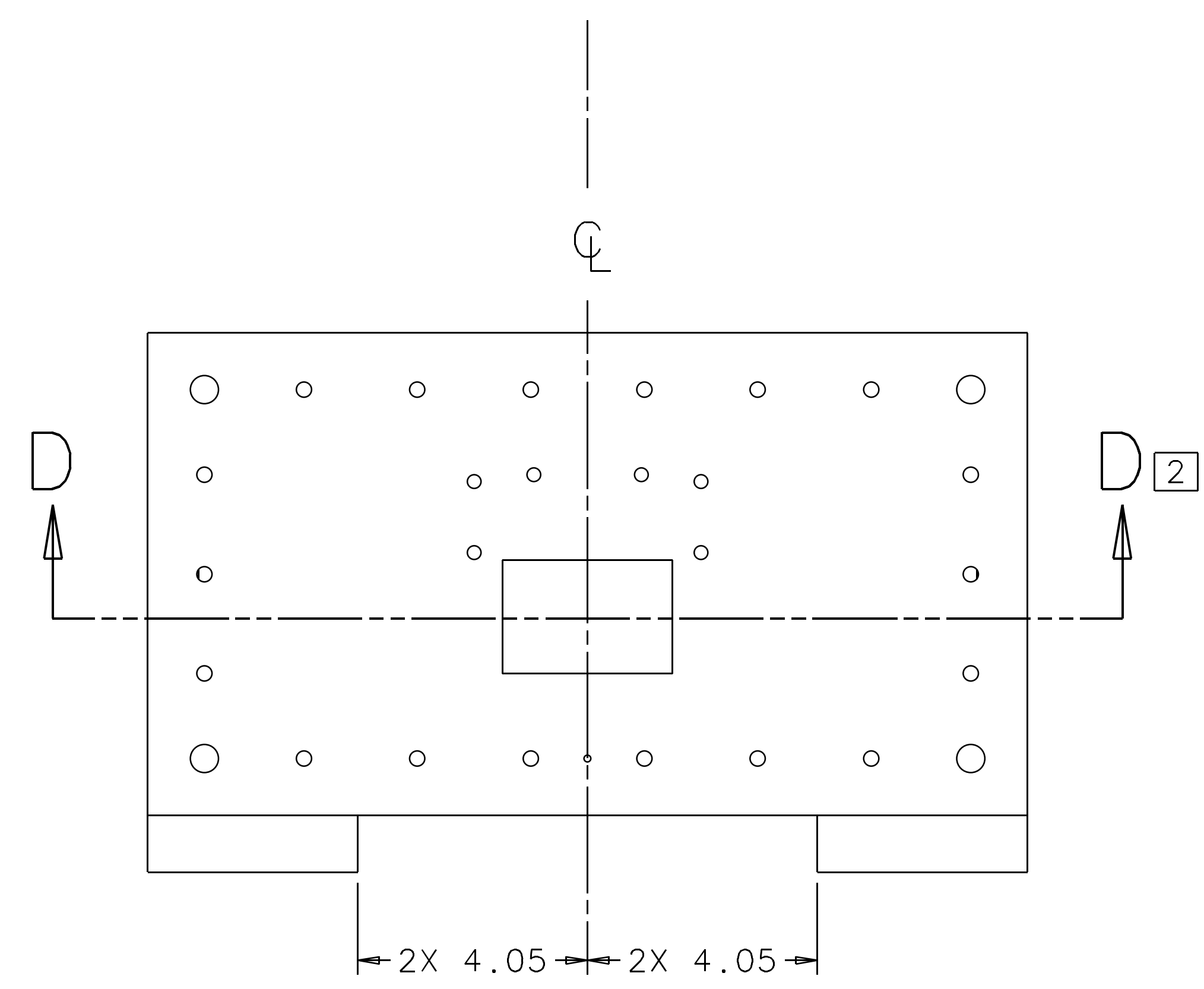


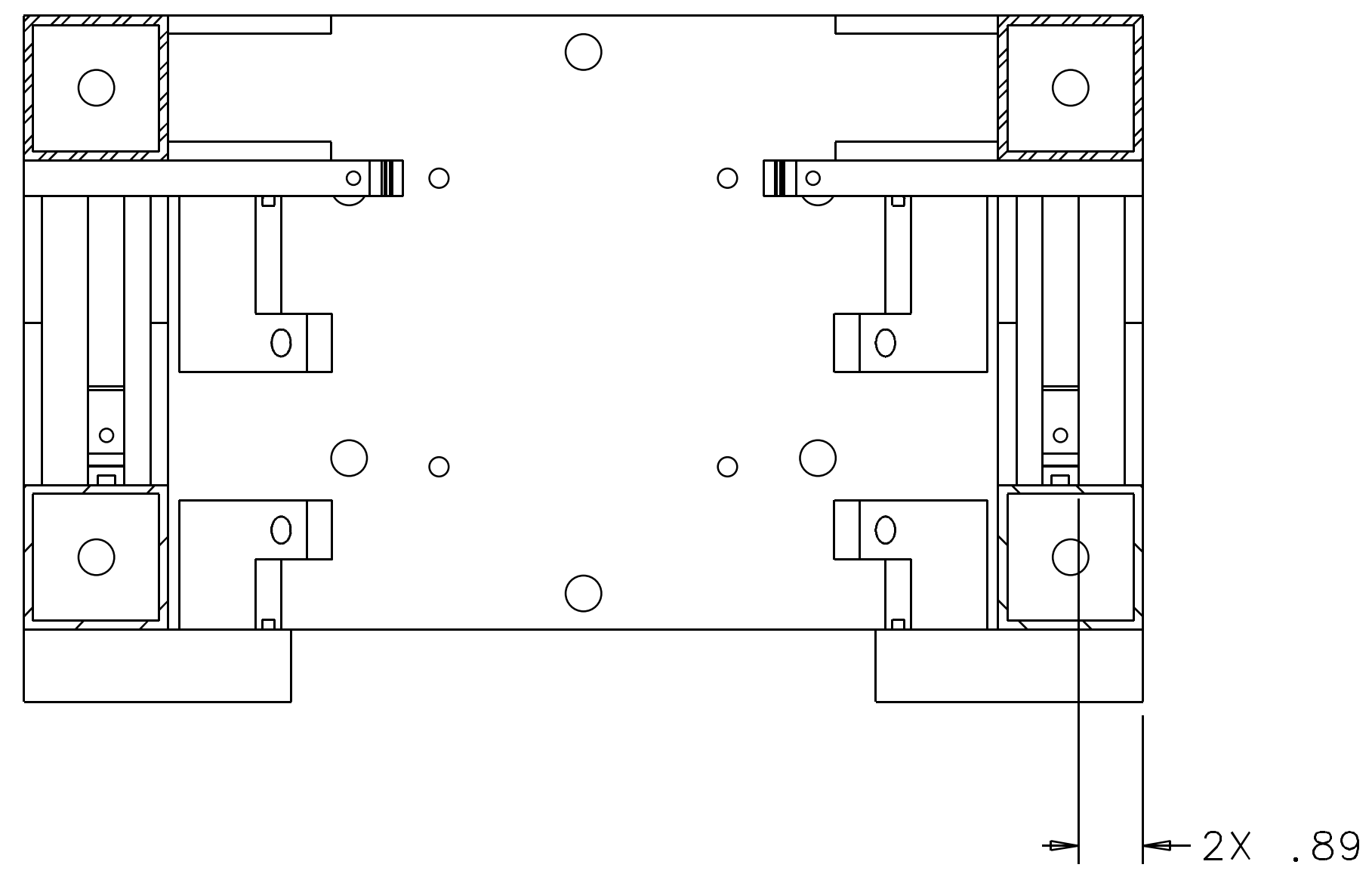
REV	DATE	DRAWN BY	CHECKED	DCC	DCN/DESCRIPTION
A	9-1-98	C. Conley			E980218-00/INITIAL RELEASE



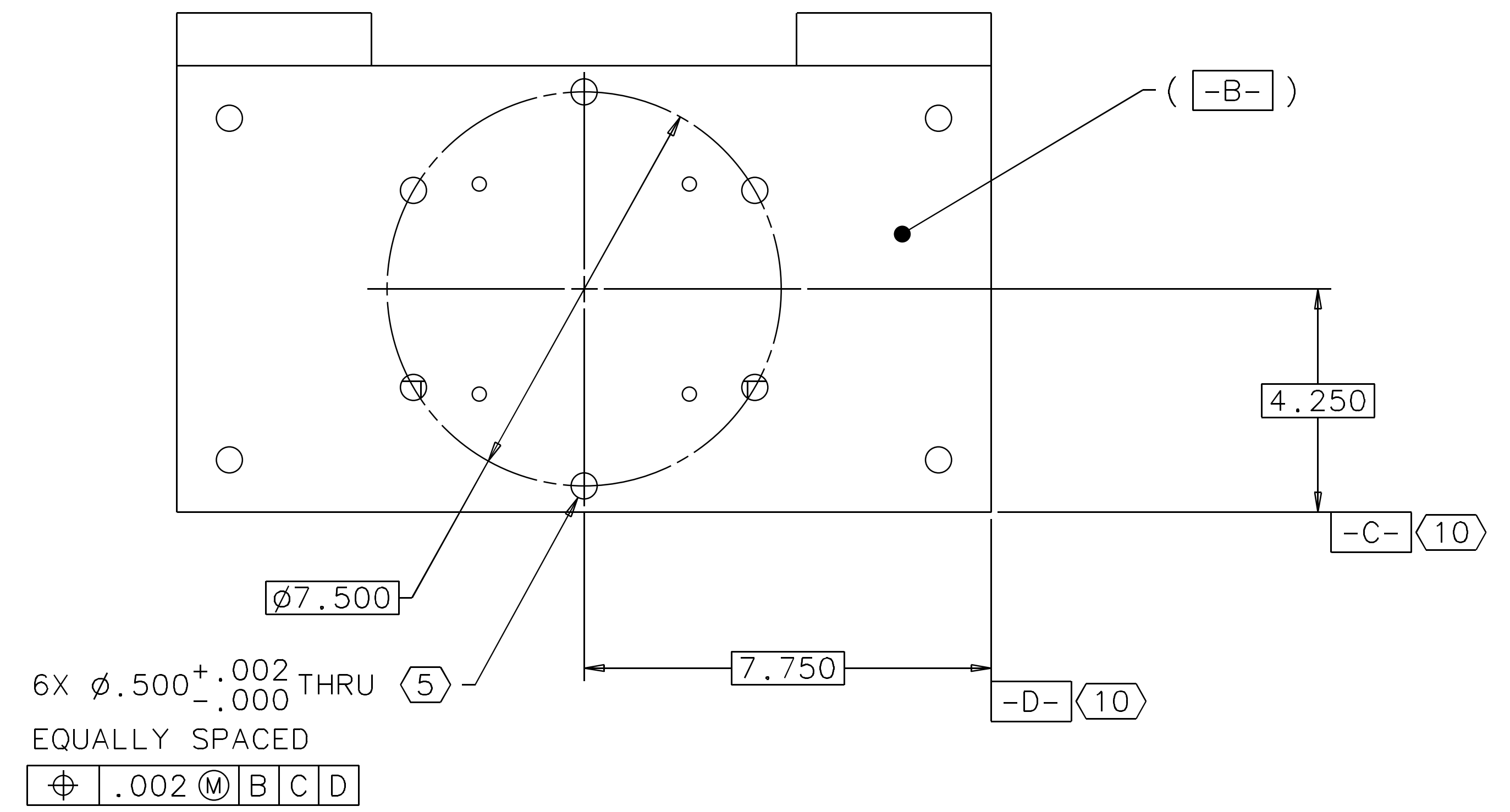
- NOTES: (UNLESS OTHERWISE SPECIFIED)
- INTERPRET DRAWING PER ANSI Y14.5M-1982.
 - BREAK ALL SHARP EDGES.
 - SPECIFICATIONS FOR THE CONSTRUCTION OF THIS ASSEMBLY ARE DETAILED IN THE "LARGE OPTIC SUSPENSION STRUCTURAL FABRICATION SPECIFICATION" (LIGO E970038).
 - WHEREVER APPLICABLE, PARTS AND FEATURES ARE LOCATED RELATIVE TO ITEM 1 (TOP PLATE).
 - NOTED FEATURES TO BE MACHINED AFTER ANNEALING.
 - SIZE OF CROSSHAIR MARKS TO BE APPROXIMATELY AS SHOWN. ETCH OR SCRIBE ON FACE OF STRUCTURE AFTER ANNEALING. MAXIMUM WIDTH .01, MAXIMUM DEPTH .02.
 - APPLY CROSSHAIRS AFTER ANNEALING. SEE VIEW F-F, SHEET 3, FOR LOCATIONS AND MACHINING DETAILS OF FEATURES ON ITEMS 6 (SENSOR/ACTUATOR BRACKET), FROM WHICH CROSSHAIRS ARE VERTICALLY LOCATED.
 - MELT-THROUGH WELD ACROSS ENTIRE FLAT FACE OF ITEM 3 (LEG).
 - APPLYS TO WELDMENT OF ITEM 7 (REAR SAFETY STOP BRACKET) TO ITEM 6 (SENSOR/ACTUATOR BRACKET) AND ITEM 8 (FRONT SAFETY STOP BRACKET) TO ITEM 9 (BRACKET SUPPORT).
 - SIDE FACE OF ITEM 2 (BOTTOM PLATE).
 - REFERENCE TO SIDE FACE OF ITEM 1 (TOP PLATE).
 - TOOLING BALL TO BE MOUNTED ON DRILLING FIXTURE TO NOTED RELATIVE DIMENSIONS.
 - GUSSET THICKNESSES ARE NOT TO SCALE IN DRAWING VIEWS.

QTY	REQD	FSOM NO	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	PARTS LIST	MATERIAL SPECIFICATION	ITEM NO
28				GUSSET, 2.25 x 2.25 x 45°, .12 THK (13)		304 STAINLESS STEEL	11
2		D970557		SIDE SENSOR/ACTUATOR BRACKET			10
4		D970558		BRACKET SUPPORT			9
4		D980373		FRONT SAFETY STOP BRACKET			8
4		D980374		REAR SAFETY STOP BRACKET			7
4		D970559		REAR SENSOR/ACTUATOR BRACKET			6
2		D960506		SIDE STIFFENER			5
2		D960502		FRONT STIFFENER			4
4		D960504		LEG			3
1		D960505		BOTTOM PLATE			2
1		D970556		TOP PLATE			1

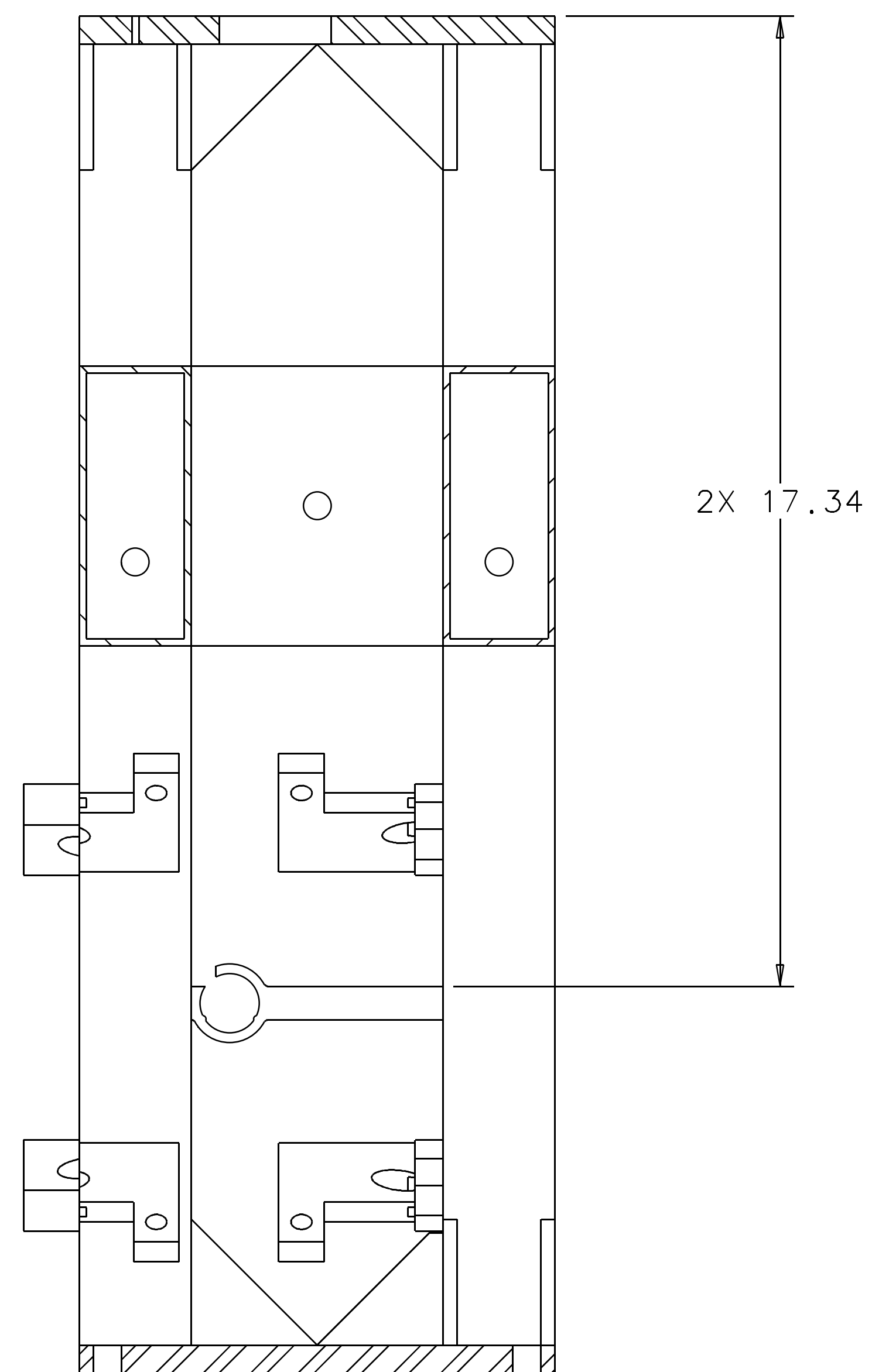
DRWN	C. Conley	DATE	9-1-98	CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	LIGO PROJECT
CHKD					
ENGR				1-Deas CAD file: D970508_A.dwg dcc file: D970508_A.pdf	
APPD				TITLE LARGE OPTIC SUSPENSION 3 STRUCTURE ASSEMBLY (FOLDING MIRROR)	
UNLESS OTHERWISE SPECIFIED: DIMENSION UNITS ARE inches [mm] TOLERANCES ARE: X.xxx: ± 0.01 X.xx: ± 0.03 ANGLES: ± 0.5°				SCALE: NTS	SHEET 1 OF 7
NEXT ASSEMBLY: D970507				SIZE DRAWING NUMBER E	D970508-A-D



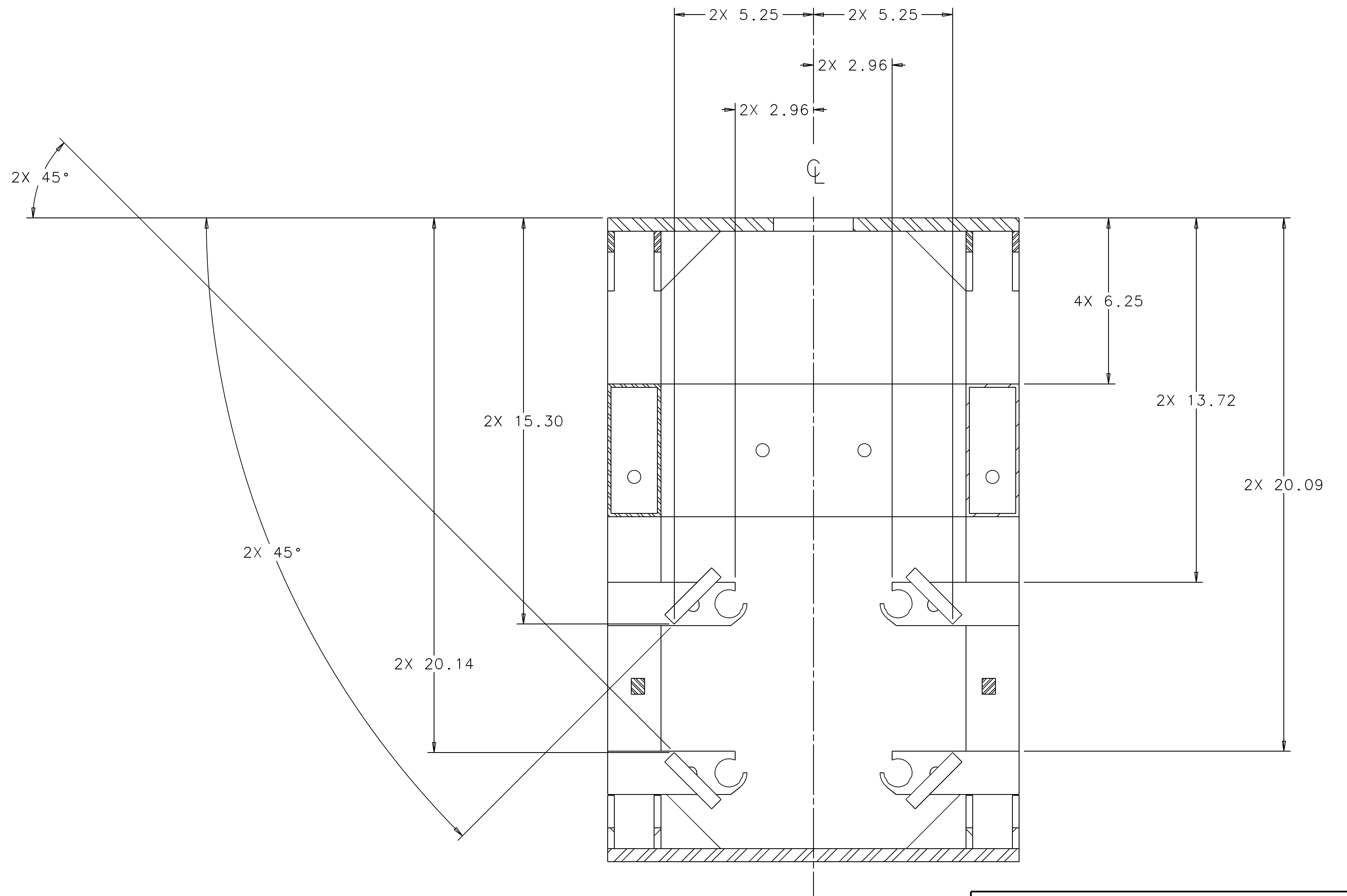
SECTION A-A 1



VIEW C-C 1

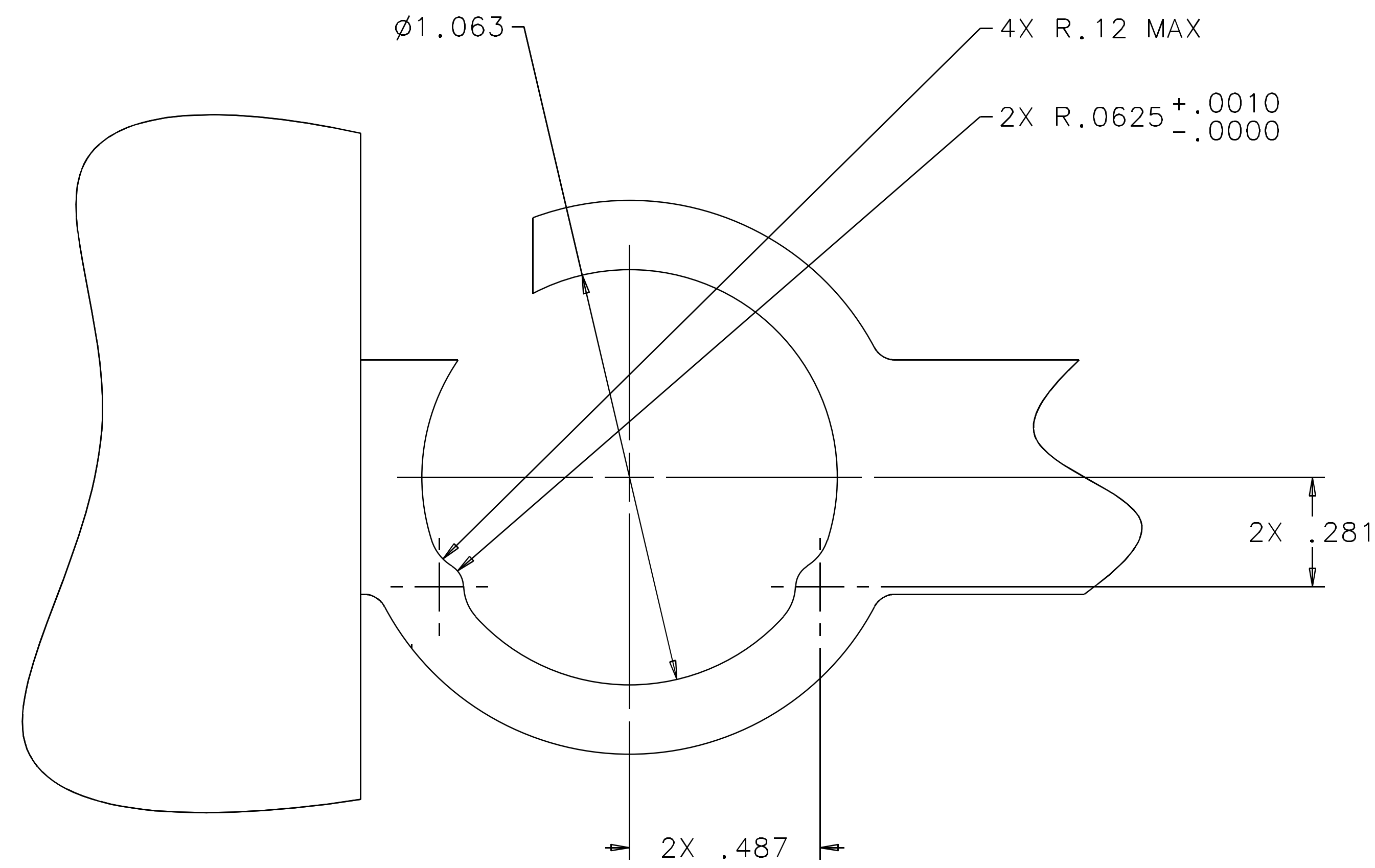


SECTION B-B 1

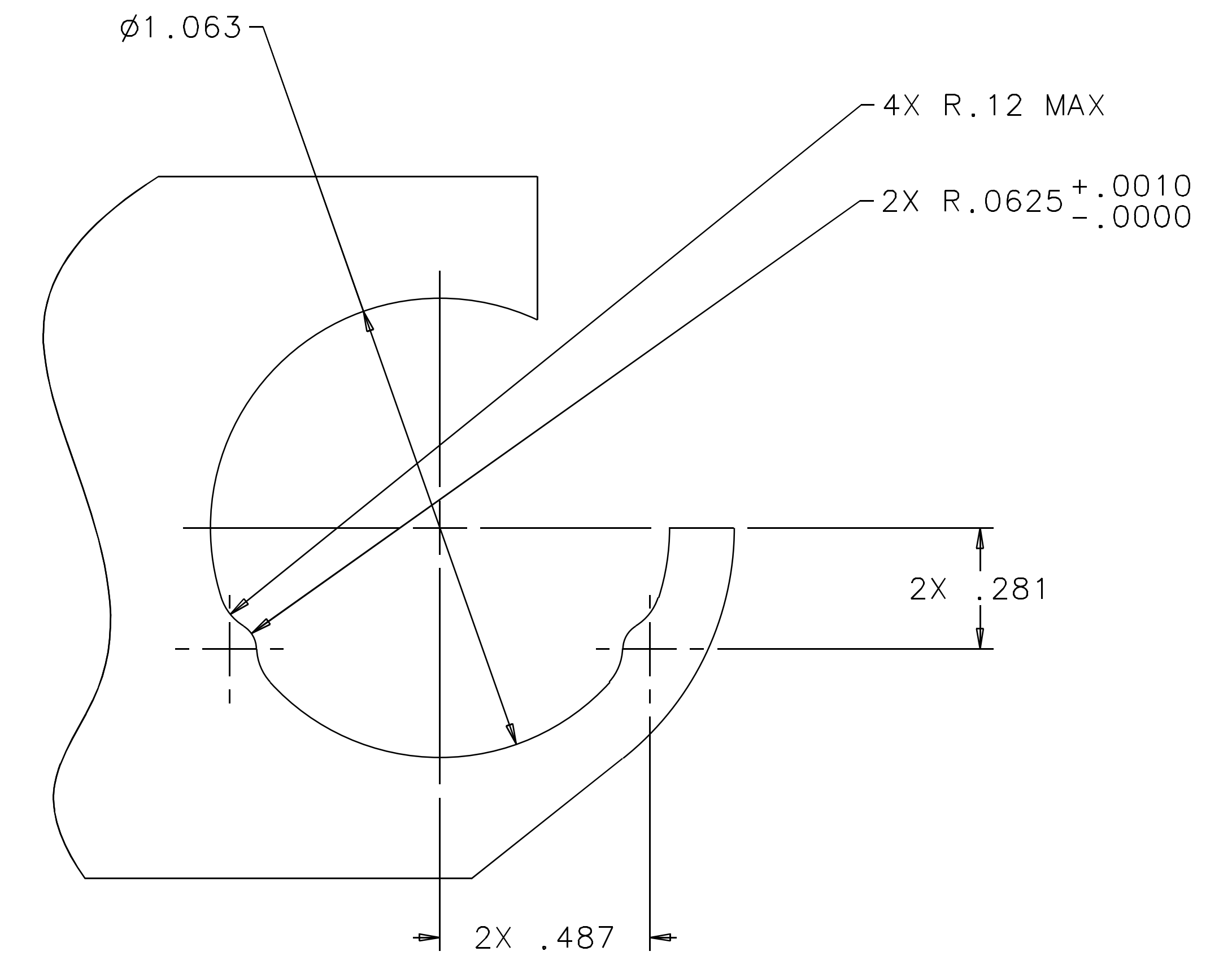


SECTION D-D 1

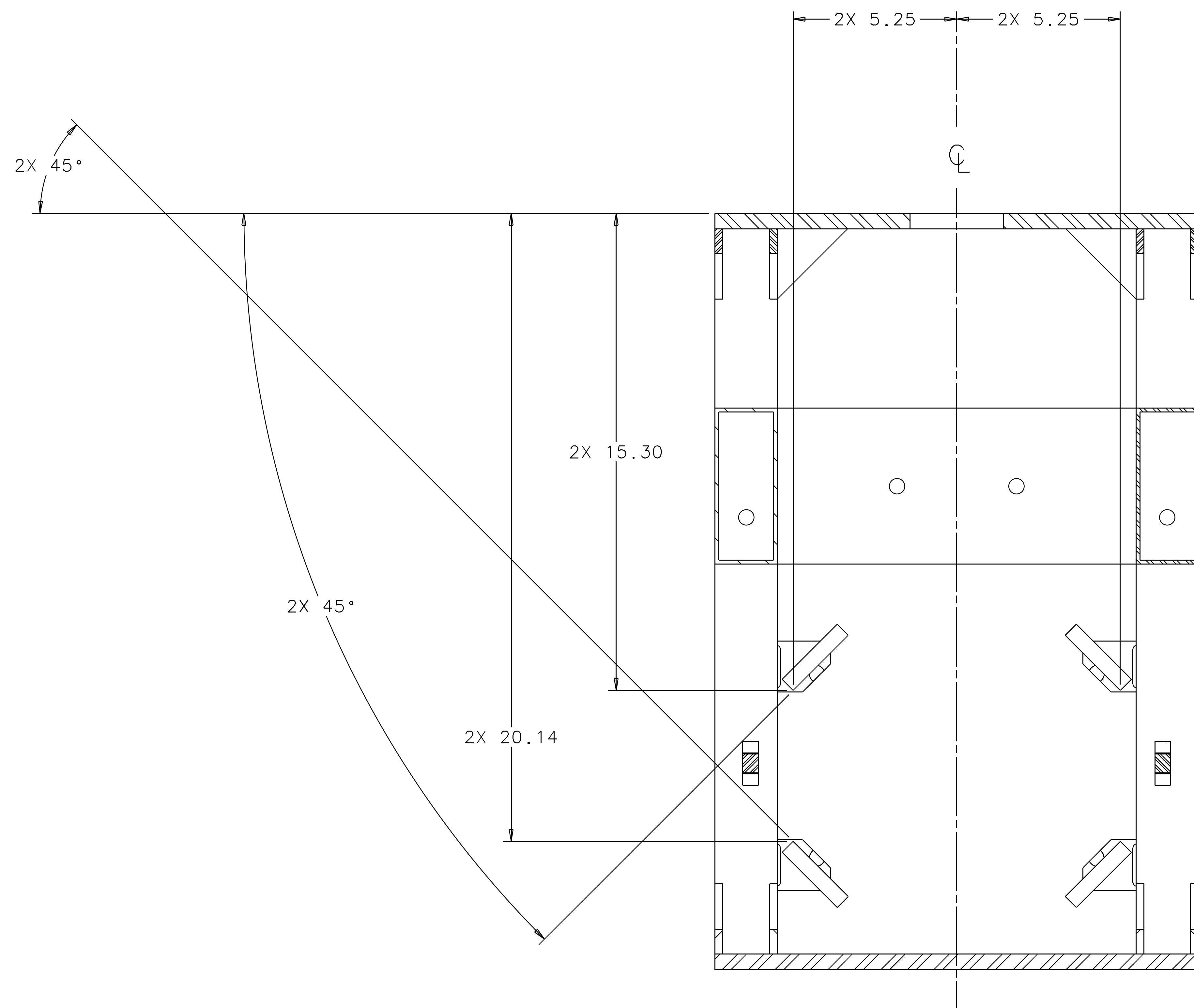
CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		LIGO PROJECT	
LARGE OPTIC SUSPENSION 3 STRUCTURE ASSEMBLY (FOLDING MIRROR)			
SCALE: NTS	SIZE	DRAWING NUMBER	SHEET
E	E	D970508-A-D	2 OF 7



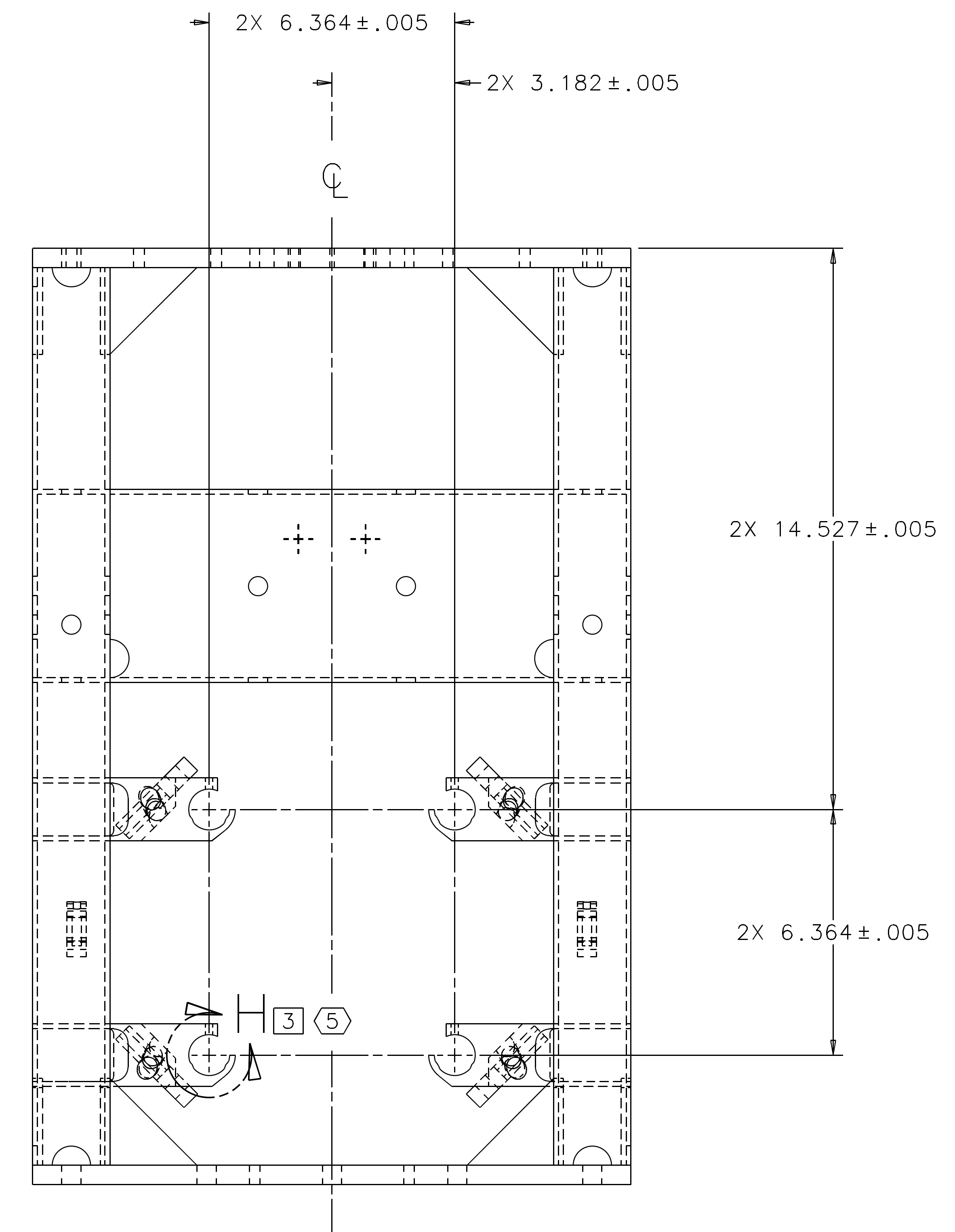
VIEW G 1 5
MACHINED SENSOR/ACTUATOR RECEPTACLE, 2 PL



VIEW H 3 5
MACHINED SENSOR/ACTUATOR RECEPTACLE, 4 PL

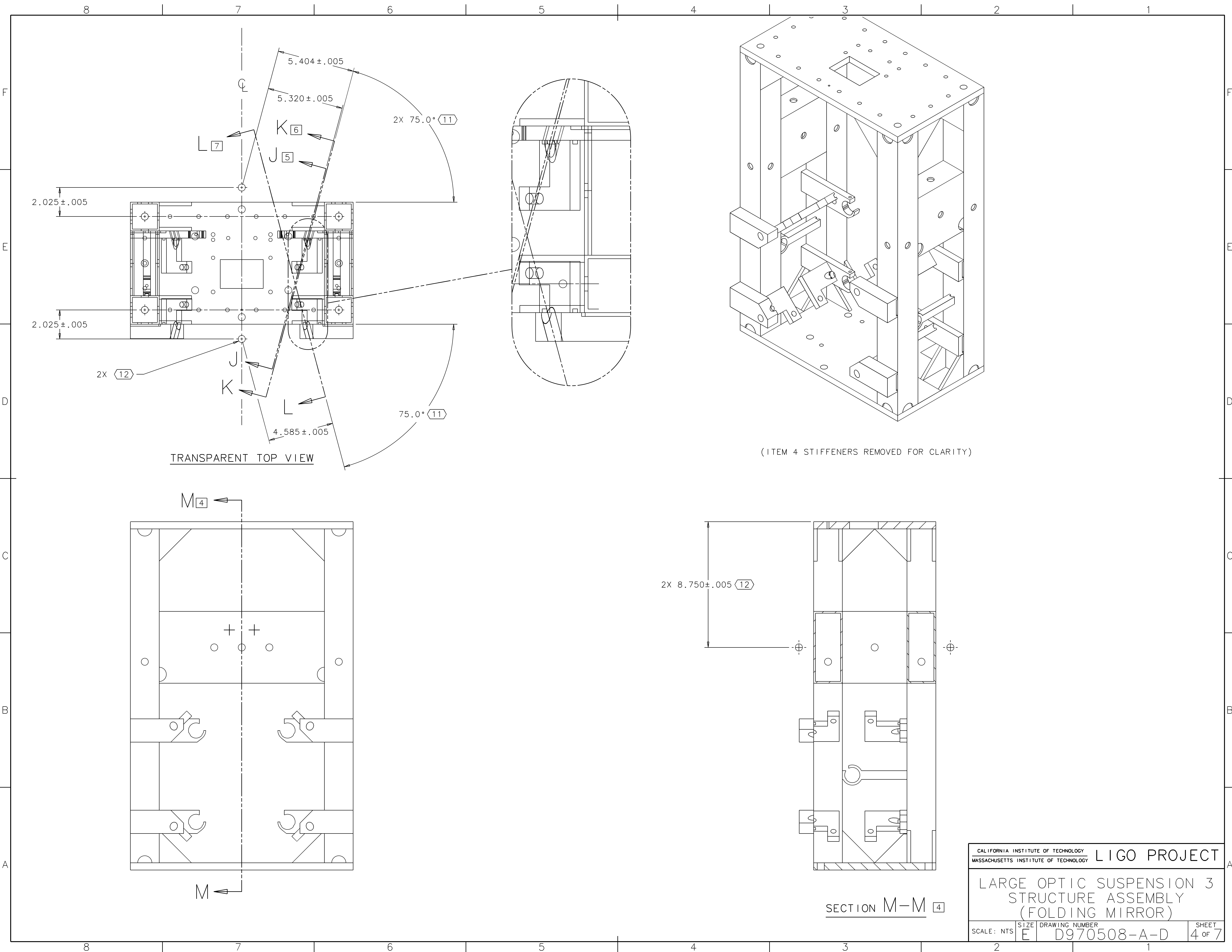


SECTION E-E 1



VIEW F-F 1

CALIFORNIA INSTITUTE OF TECHNOLOGY		LIGO PROJECT	
MASSACHUSETTS INSTITUTE OF TECHNOLOGY			
LARGE OPTIC SUSPENSION 3 STRUCTURE ASSEMBLY (FOLDING MIRROR)			
SCALE: NTS	SIZE	DRAWING NUMBER	SHEET
E		D970508-A-D	3 OF 7

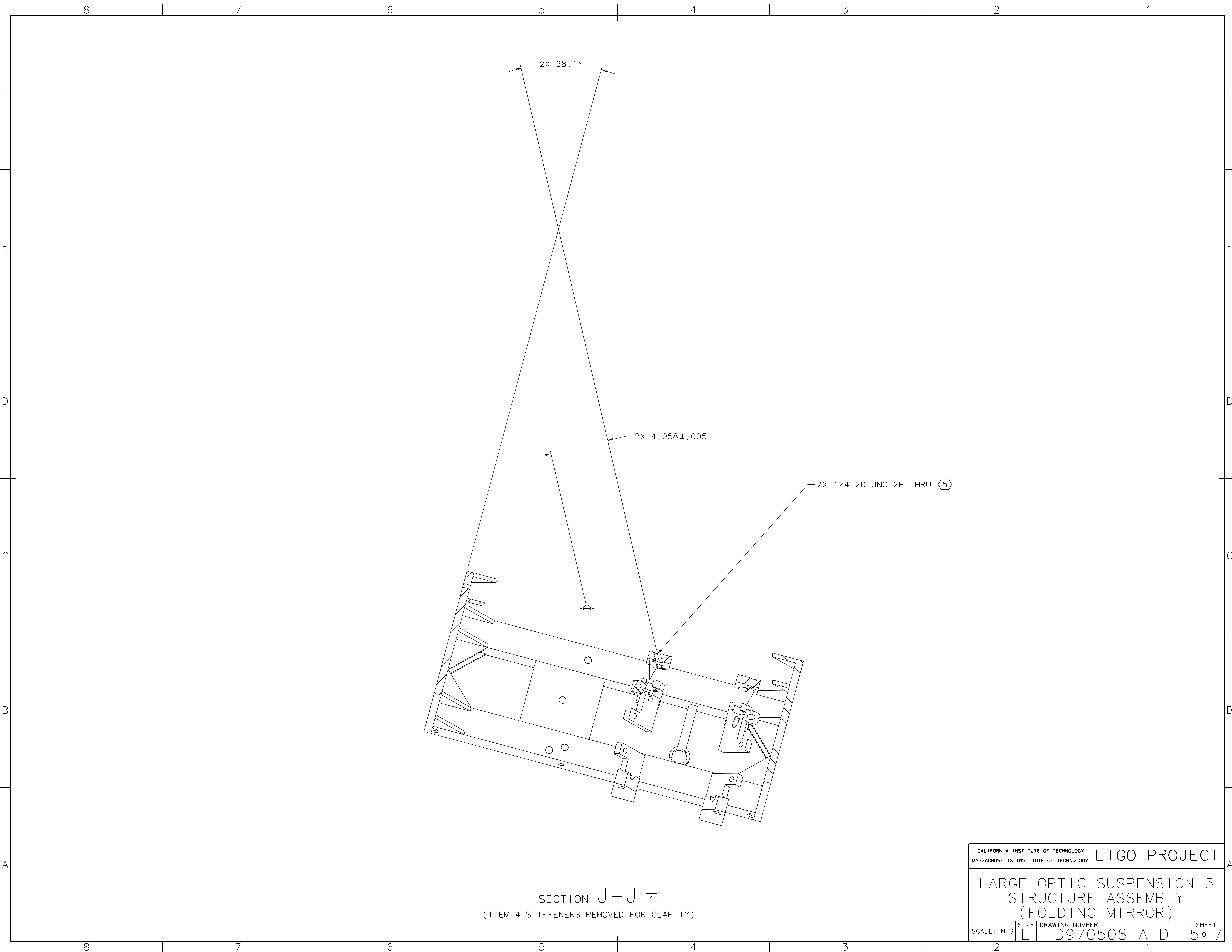


TRANSPARENT TOP VIEW

(ITEM 4 STIFFENERS REMOVED FOR CLARITY)

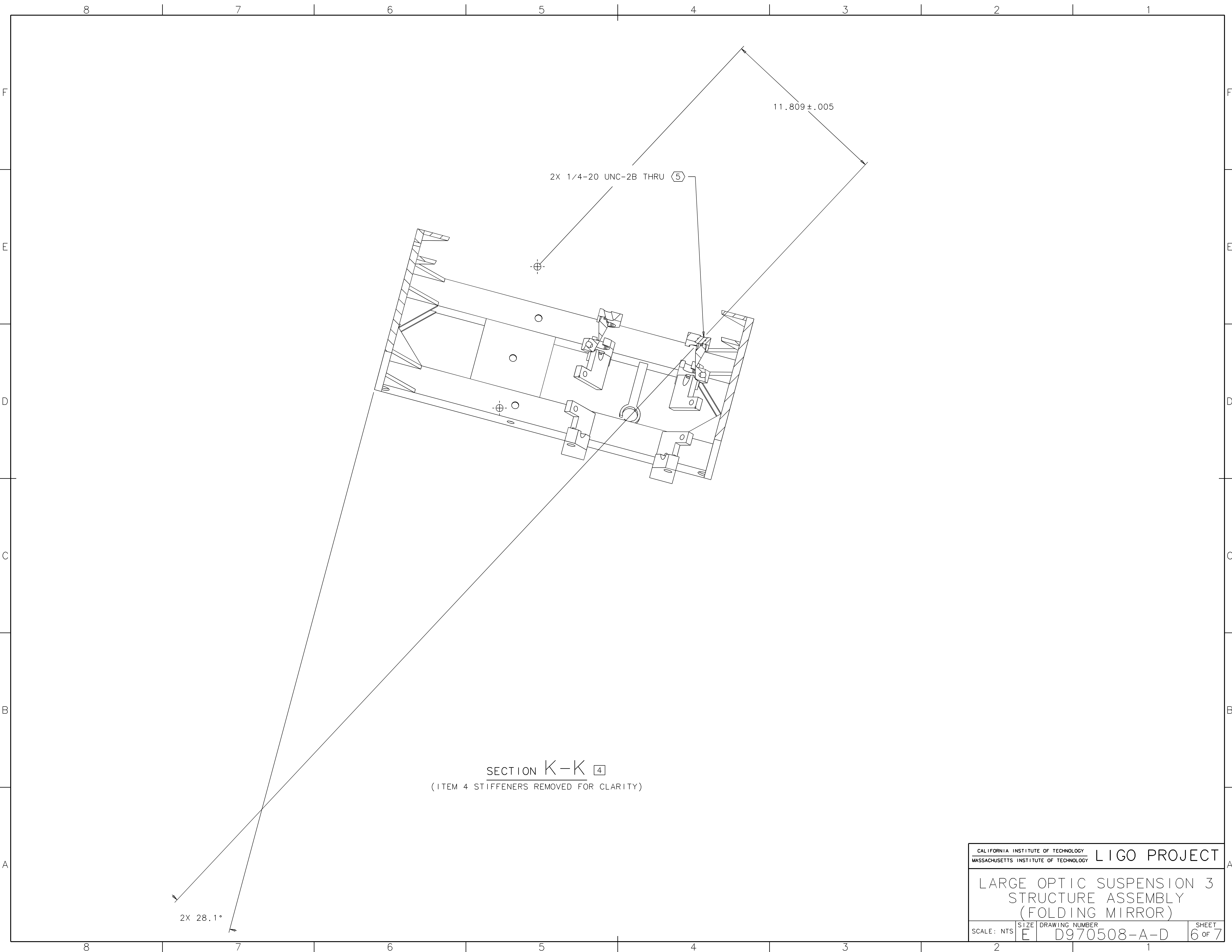
SECTION M-M (4)

CALIFORNIA INSTITUTE OF TECHNOLOGY		LIGO PROJECT	
MASSACHUSETTS INSTITUTE OF TECHNOLOGY			
LARGE OPTIC SUSPENSION 3 STRUCTURE ASSEMBLY (FOLDING MIRROR)			
SCALE: NTS	SIZE	DRAWING NUMBER	SHEET
E		D970508-A-D	4 of 7



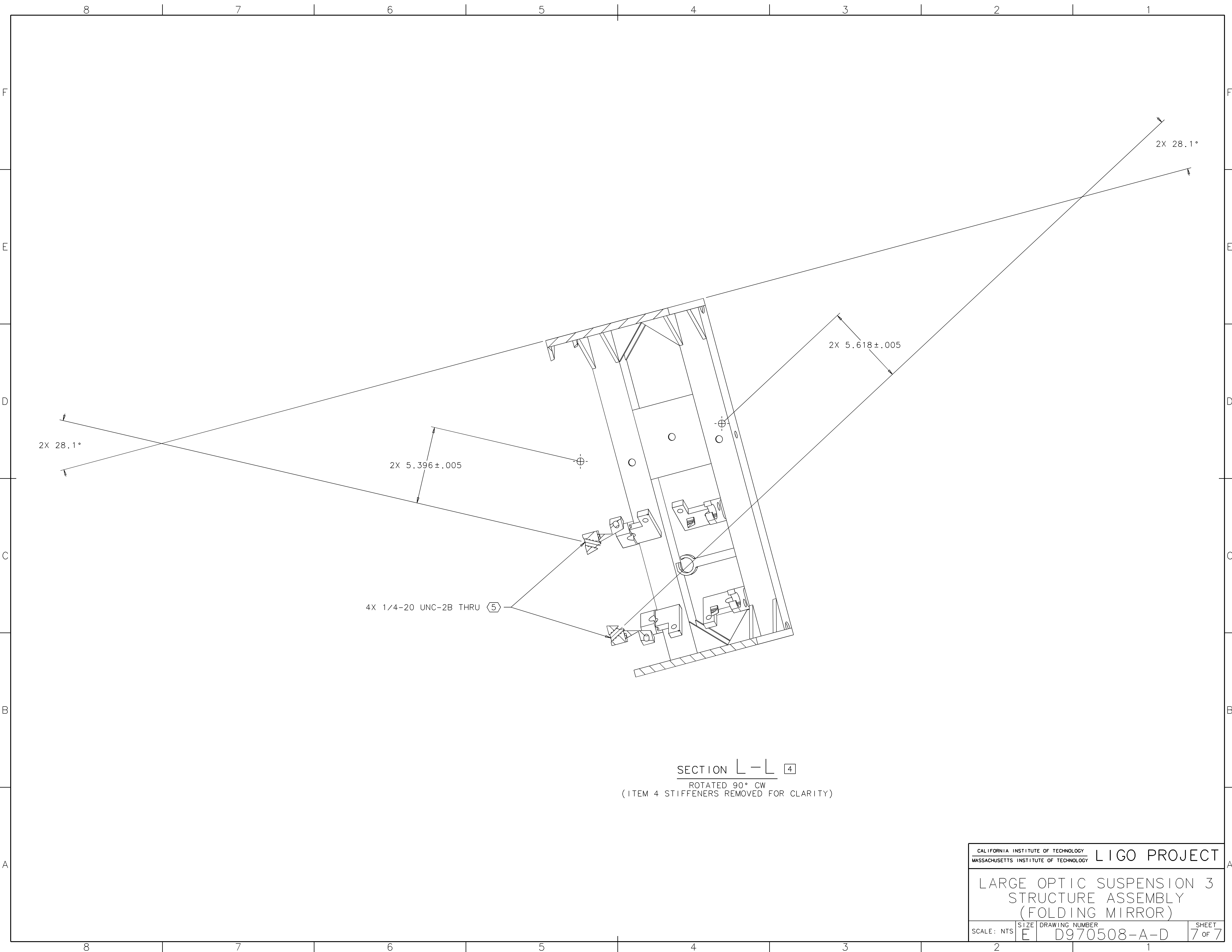
SECTION J-J 4
 (ITEM 4 STIFFENERS REMOVED FOR CLARITY)

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		LIGO PROJECT	
LARGE OPTIC SUSPENSION 3 STRUCTURE ASSEMBLY (FOLDING MIRROR)			
SCALE: NTS	SIZE	DRAWING NUMBER	SHEET
	E	D970508-A-D	5 of 7



SECTION K-K 4
 (ITEM 4 STIFFENERS REMOVED FOR CLARITY)

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		LIGO PROJECT	
LARGE OPTIC SUSPENSION 3 STRUCTURE ASSEMBLY (FOLDING MIRROR)			
SCALE: NTS	SIZE	DRAWING NUMBER	SHEET
2	E	D970508-A-D	6 OF 7



2X 28.1°

2X 28.1°

2X 5.396 ± .005

2X 5.618 ± .005

4X 1/4-20 UNC-2B THRU (5)

SECTION L-L (4)
 ROTATED 90° CW
 (ITEM 4 STIFFENERS REMOVED FOR CLARITY)

CALIFORNIA INSTITUTE OF TECHNOLOGY		LIGO PROJECT	
MASSACHUSETTS INSTITUTE OF TECHNOLOGY			
LARGE OPTIC SUSPENSION 3 STRUCTURE ASSEMBLY (FOLDING MIRROR)			
SCALE: NTS	SIZE	DRAWING NUMBER	SHEET
	E	D970508-A-D	7 of 7