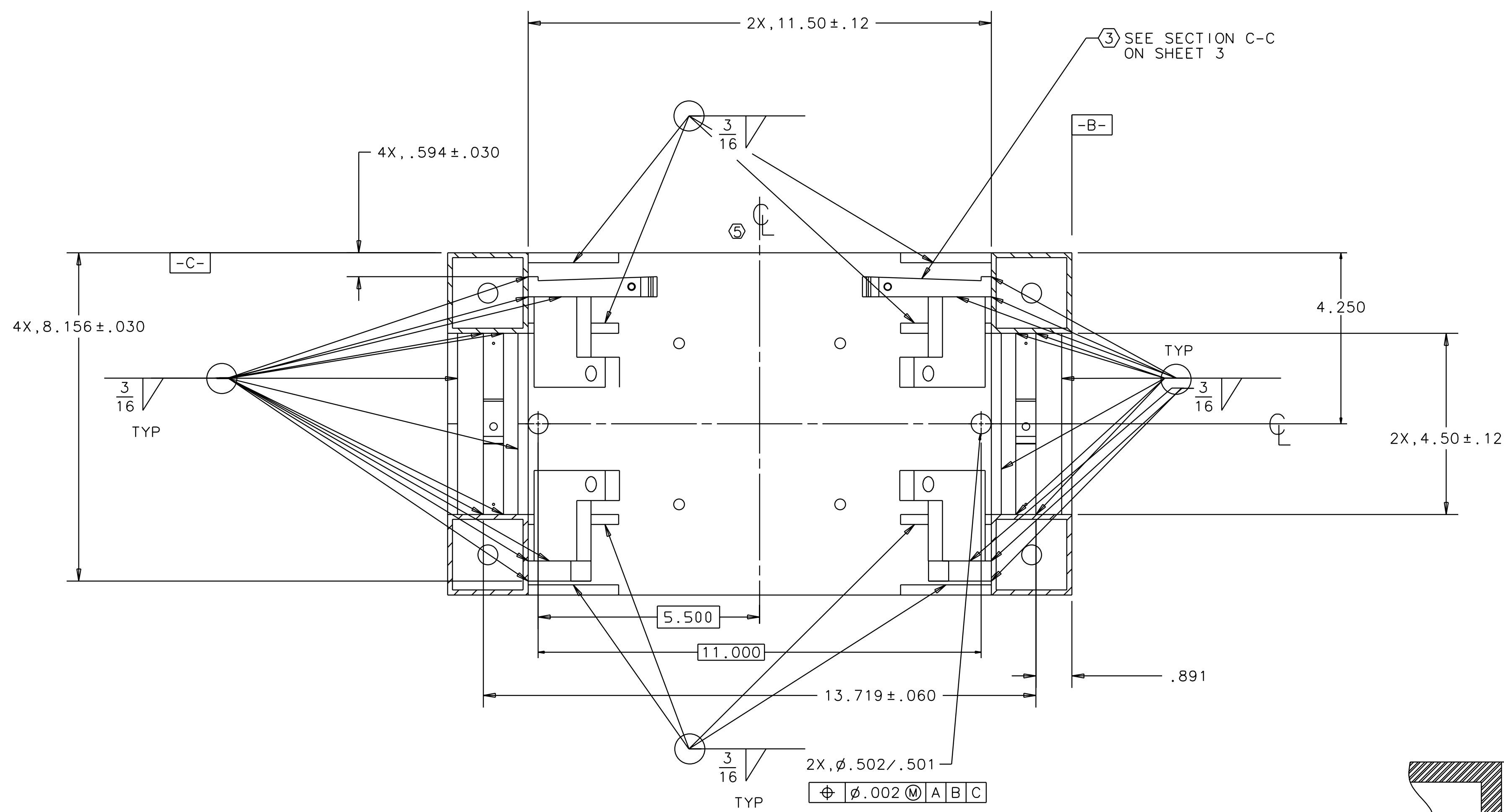


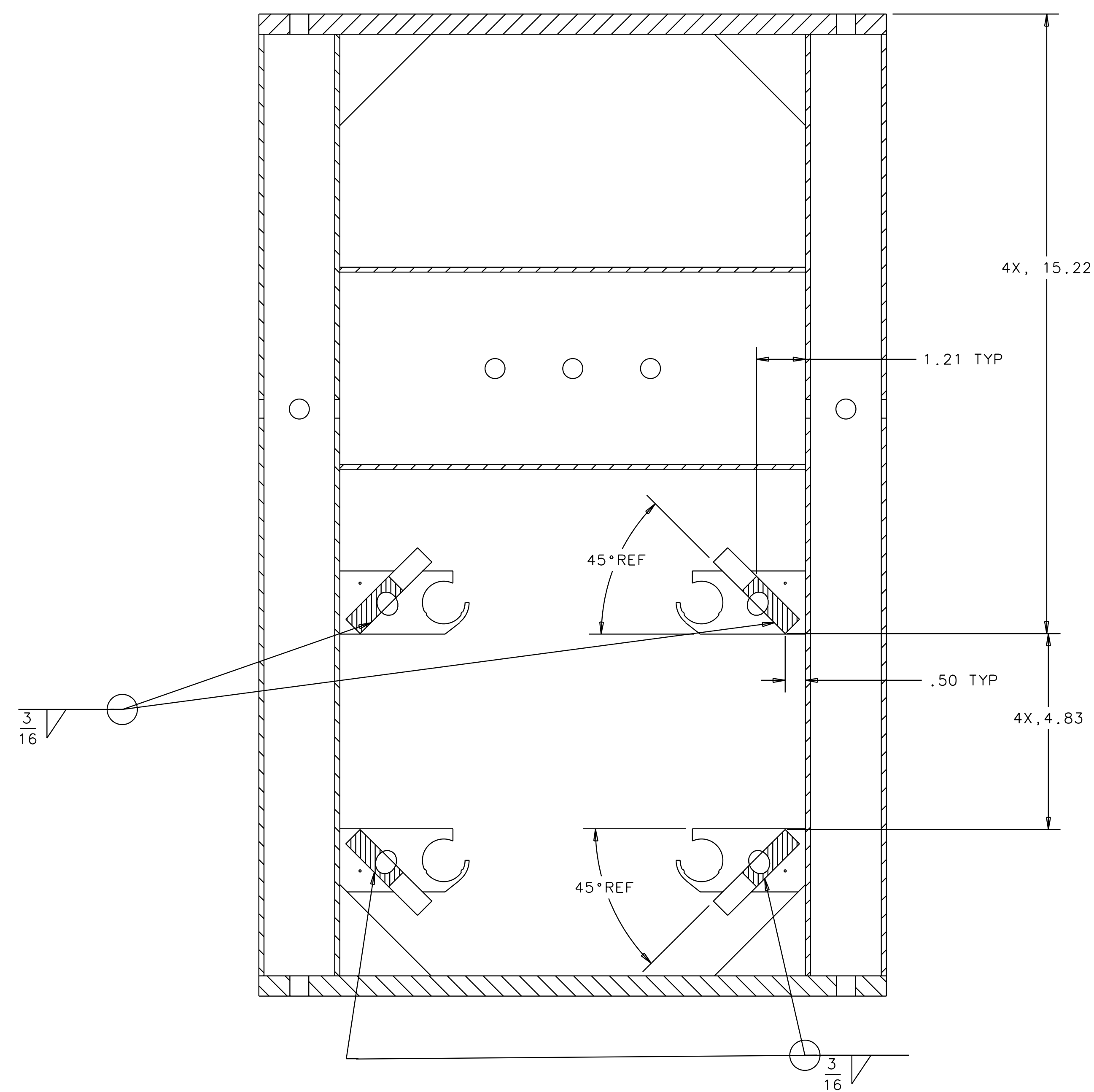
REV	DATE	DRAWN BY	CHECKED	DCC	DCN/DESCRIPTION
A	1/19/98	J.Hazel			E980004/INITIAL RELEASE
B	2/5/98	J.Hazel			E980011/CHANGE TO NOTE 3 CHANGE TO SECTION A-A
C	4/2/98	J.Hazel			E980075/ADD SHEET 4
D	5/17/98	J.Hazel			E980088/ ATTACHED, ID PLACEMENT DEFINITION
E	5/7/98	J.Hazel			E980090/CHANGE CHAMFER STOP DEFINITION
F	7/16/98	J.Romie			E980173/ADD DRAIN HOLES, OPEN TOLERANCES AND CHANGE S/A DIMENSIONS
G	7/31/98	J.Romie			E980201/MOVE CROSSHAIR UP BY 1.000", CHANGE DRAIN HOLE CONFIG. PER DETAILS.
H	2/9/01	J.Romie			E010030/SH1, 2X, 17.788 WAS 2X, 17.661



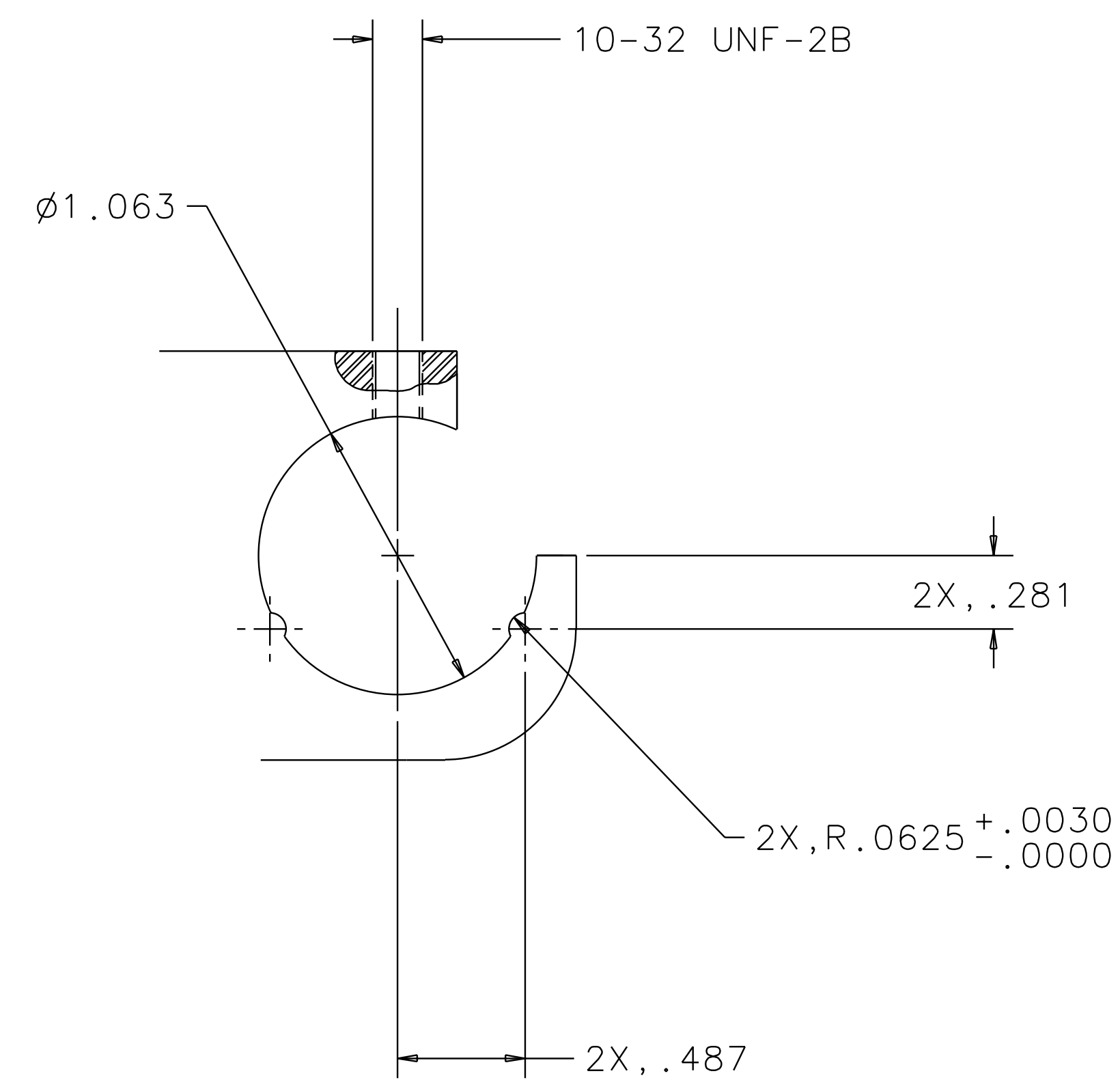
SECTION A-A



SECTION C-C
FLY CUT DEFINED
IN NOTE ③



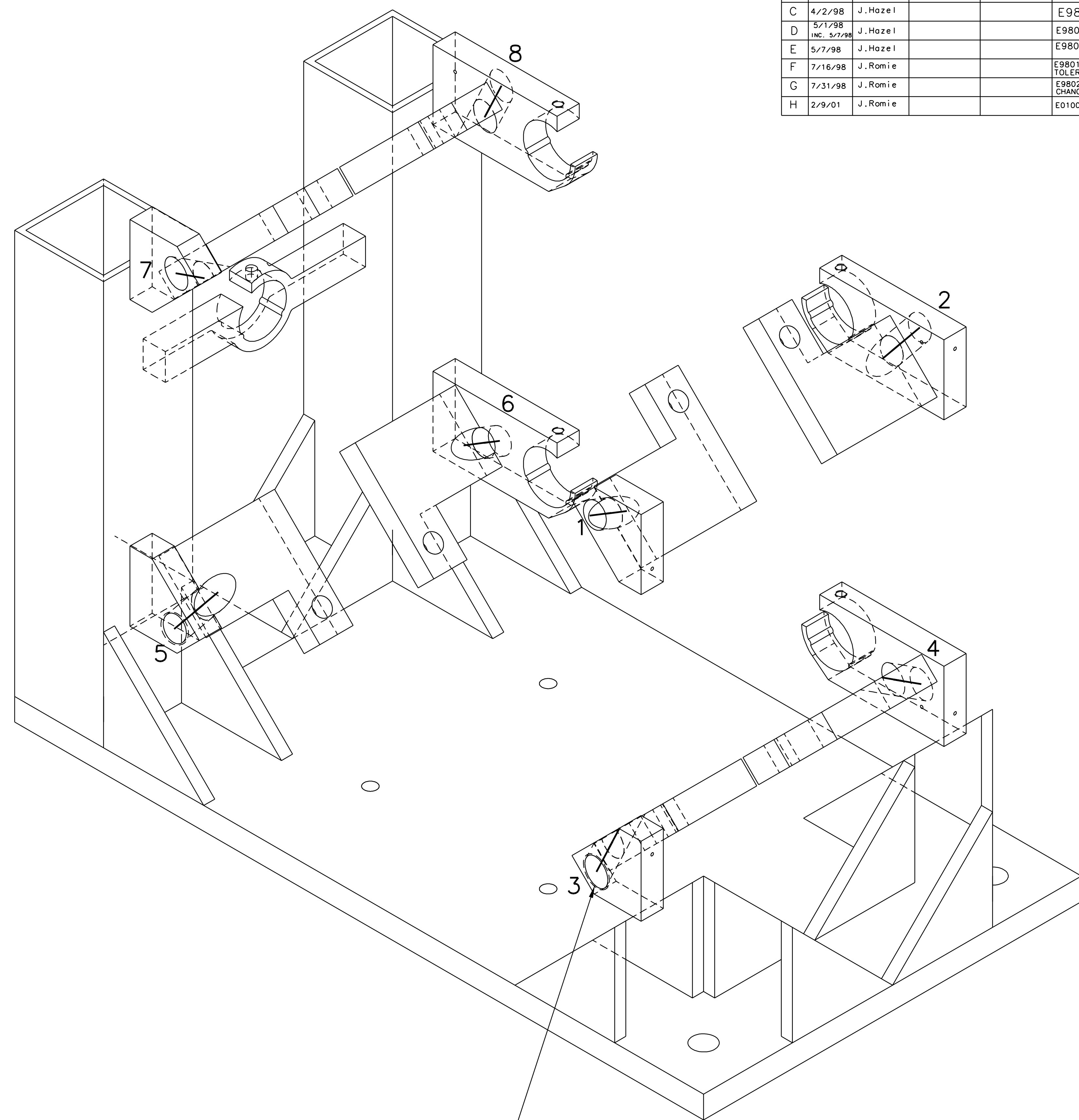
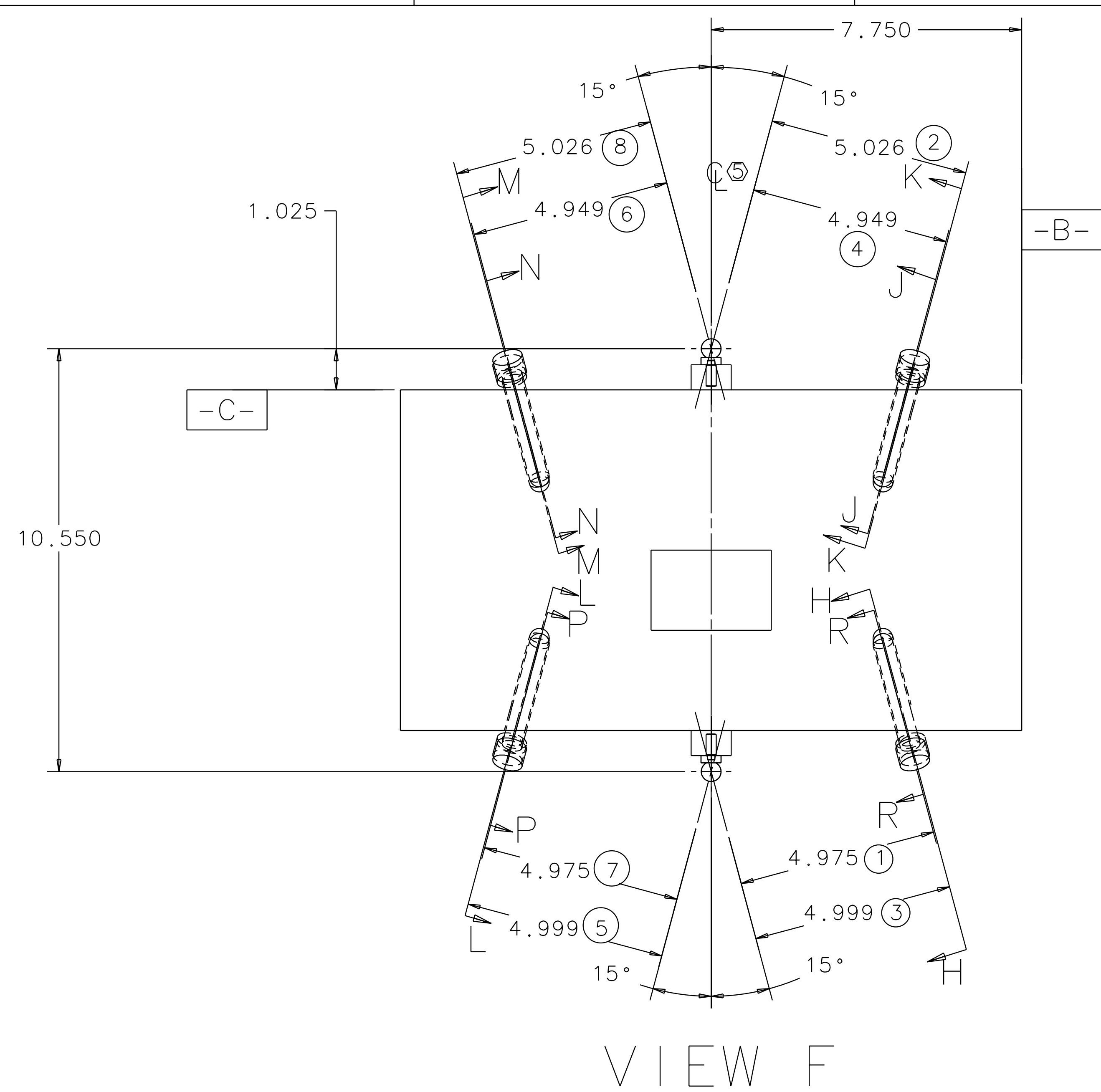
SECTION B-B



VIEW D ②
SCALE 4/1
TYPICAL 6 PLACES

QTY REQ	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ITEM NO.
		APPROVALS	DATE	
		J. Hazel	1/98	
		CHECKED		
LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY				
TITLE RECYCLING MIRROR LOS STRUCTURE ASSEMBLY				
NEXT ASSEMBLY D970564, D970577				
FILE LOCATION home/dcc/docs/D970551.pdf				
MATERIAL FINISH				
SIZE E				
SCALE 1/2				
SHEET 2 OF 6				

REV	DATE	DRAWN BY	CHECKED	DCC	DCN/DESCRIPTION
A	1/19/98	J.Hazel			E980004/INITIAL RELEASE
B	2/5/98	J.Hazel			E980011/CHANGE TO NOTE 3 CHANGE TO SECTION A-A
C	4/2/98	J.Hazel			E980075/ADD SHEET 4
D	5/17/98	J.Hazel			E980088/ ATTACHED, ID PLACEMENT DEFINITION
E	5/7/98	J.Hazel			E980090/CHANGE CHAMFER STOP DEFINITION
F	7/16/98	J.Romie			E980173/ADD DRAIN HOLES, OPEN TOLERANCES AND CHANGE S/A DIMENSIONS
G	7/31/98	J.Romie			E980201/MOVE CROSSHAIR UP BY 1.000 CHANGE DRAIN HOLE CONFIG. PER DETAILS
H	2/9/01	J.Romie			E010030/SHT. 2X, 17.788 WAS 2X, 17.661



CHAMFER STOPS
8X, $\frac{1}{2}$ -13 UNC-2B

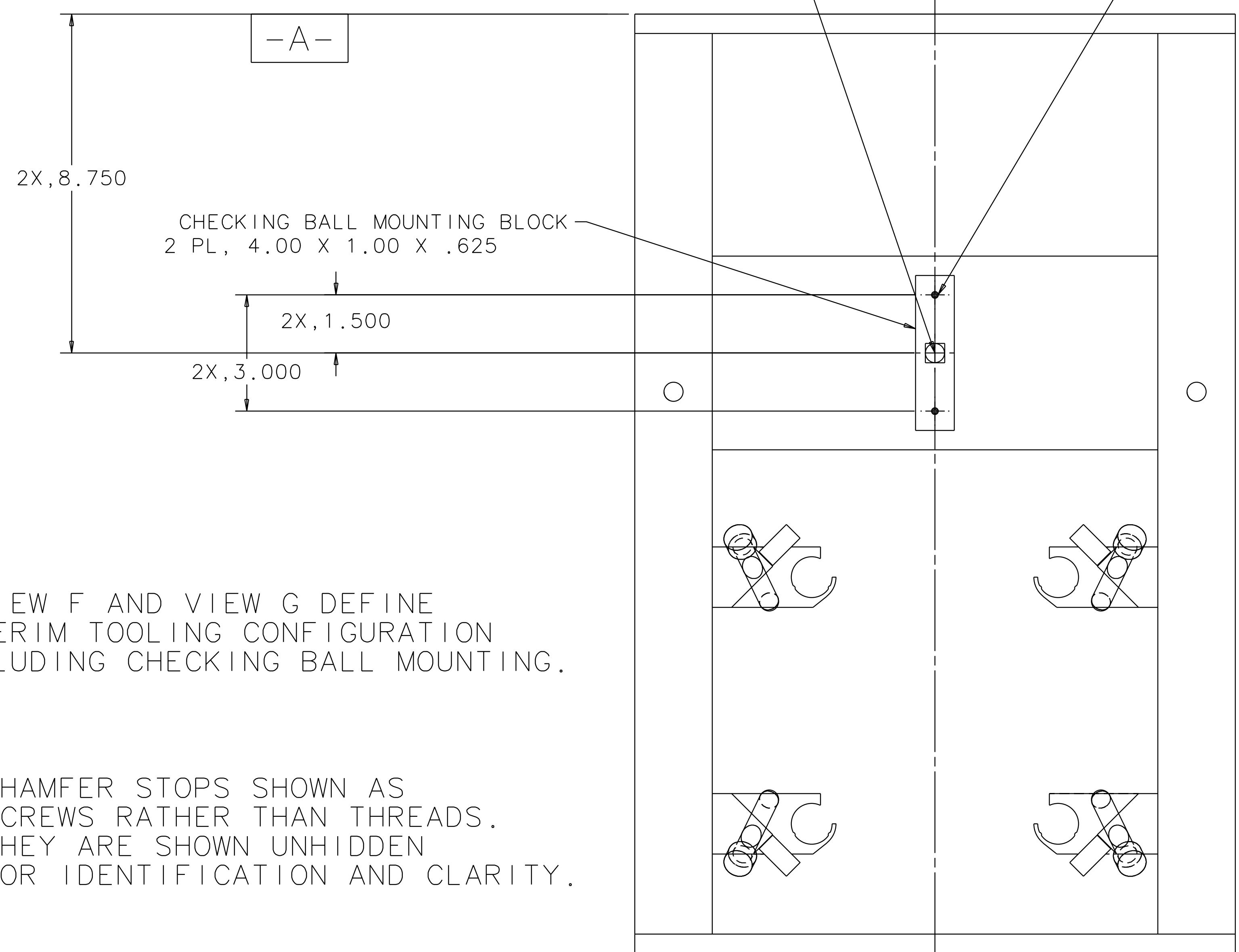
VIEW E

ISO VIEW OF STRUCTURE
WITHOUT: RIGHT LEGS, TOP PORTION OF LEFT LEGS,
RIGHT LOS BRACKET, SENSOR/ACTUATOR, SIDE
TOP PLATE AND STIFFENERS.

CHAMFER STOP CENTERLINES
HIGHLIGHTED AND NUMBERED.

2 PL. CHECKING BALL, JERGENS P/N 29013

4X, #4-40 SCREW
MATCH DRILL TO
STIFFENER IN
STRUCTURE



VIEW F AND VIEW G DEFINE
INTERIM TOOLING CONFIGURATION
INCLUDING CHECKING BALL MOUNTING.

CHAMFER STOPS SHOWN AS
SCREWS RATHER THAN THREADS.
THEY ARE SHOWN UNHIDDEN
FOR IDENTIFICATION AND CLARITY.

VIEW G

QTY	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ITEM NO.
		PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				
TOLERANCES ARE:				
FRACTIONS DECIMALS ANGLES				
: 0.XX ± 0.03				
: 0.XXX ± 0.005				
DO NOT SCALE DRAWING				
APPROVALS		DATE	LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
DRAWN J. Hazel		1/98	TITLE RECYCLING MIRROR LOS STRUCTURE ASSEMBLY	
CHECKED			SIZE E	
NEXT ASSEMBLY D970564, D970577		MATERIAL		REV H
FILE LOCATION home/dcc/docs/D970551.pdf		FINISH		SCALE 1/2
			D970551	
			SHEET 3 OF 6	

1

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4

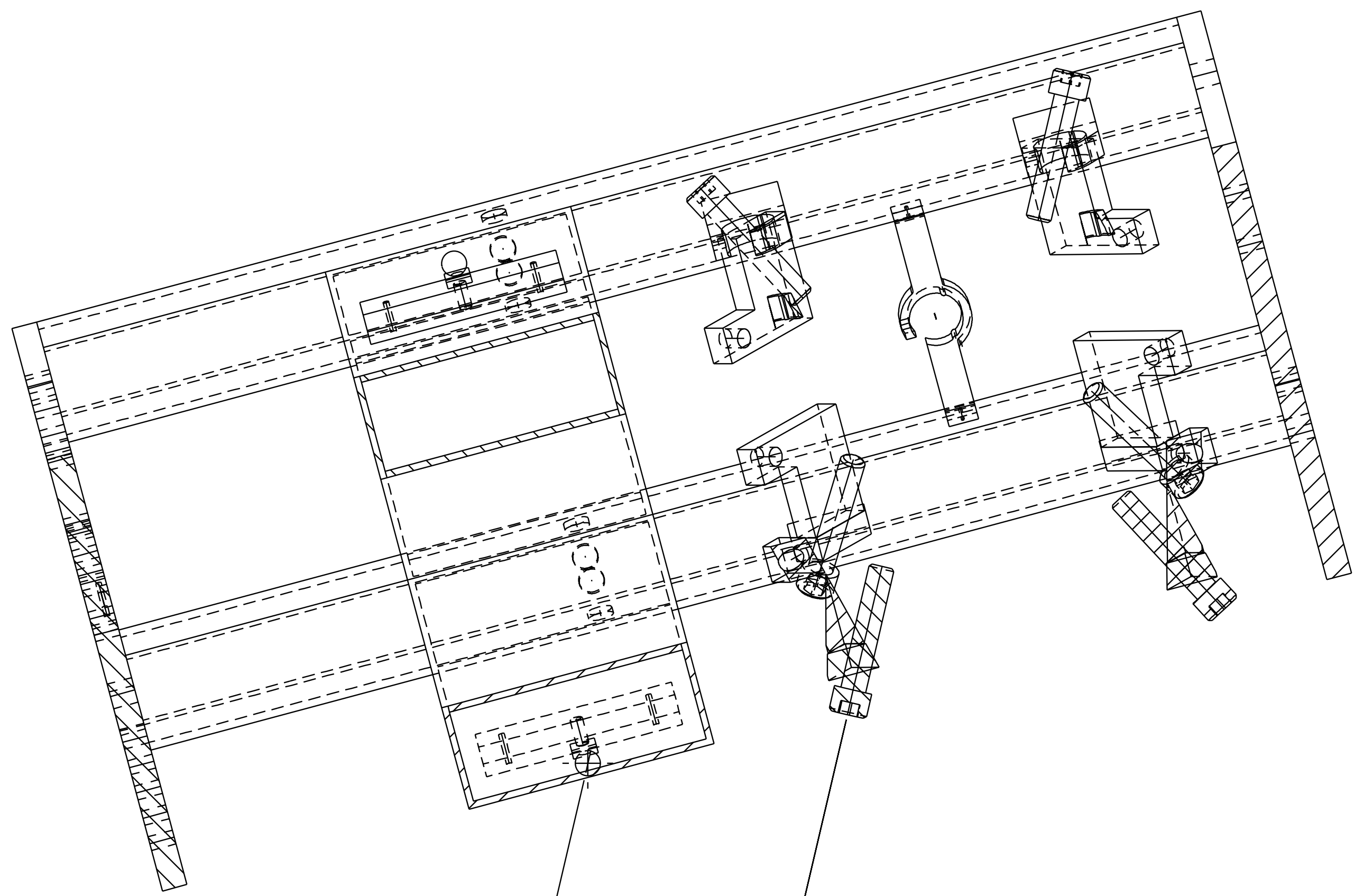
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6

7

8

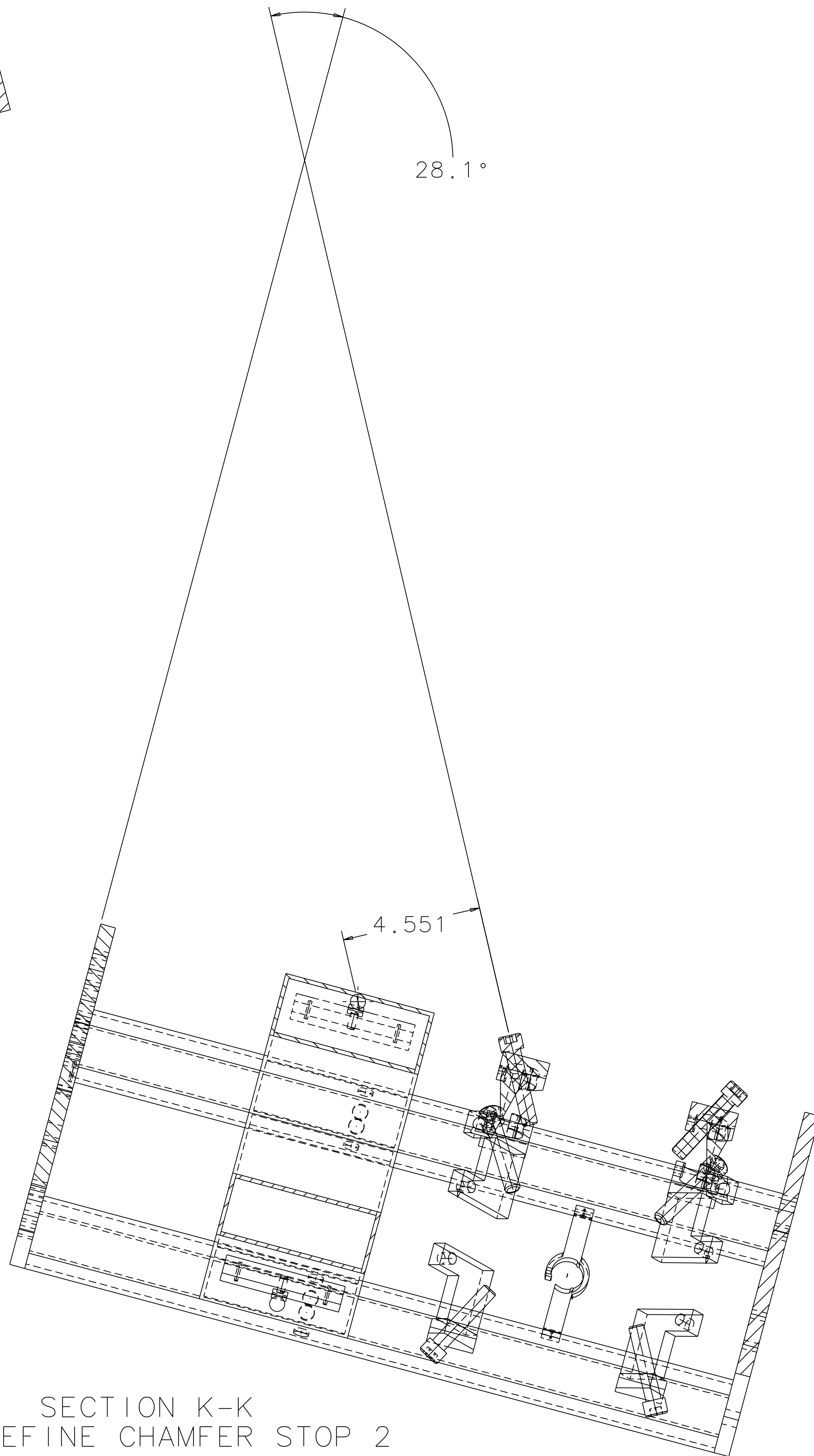
REV	DATE	DRAWN BY	CHECKED	DCC	DCN/DESCRIPTION
A	1/19/98	J.Hazel			E980004/INITIAL RELEASE
B	2/5/98	J.Hazel			E980011/CHANGE TO NOTE 3 CHANGE TO SECTION A-A
C	4/2/98	J.Hazel			E980075/ADD SHEET 4
D	5/17/98	J.Hazel			E980088/ ATTACHED, ID PLACEMENT
E	5/7/98	J.Hazel			E980090/CHANGE CHAMFER STOP DEFINITION
F	7/16/98	J.Ronie			E980173/ADD DRAIN HOLES, OPEN TOLERANCES AND CHANGE S/A DIMENSIONS
G	7/31/98	J.Ronie			E980201/MOVE CROSSHAIR UP BY 1.000", CHANGE DRAIN HOLE CONFIG. PER DETAILS
H	2/9/01	J.Ronie			E010030/SH1, 2X, 17.788 WAS 2X, 17.661



4.759

28.1°

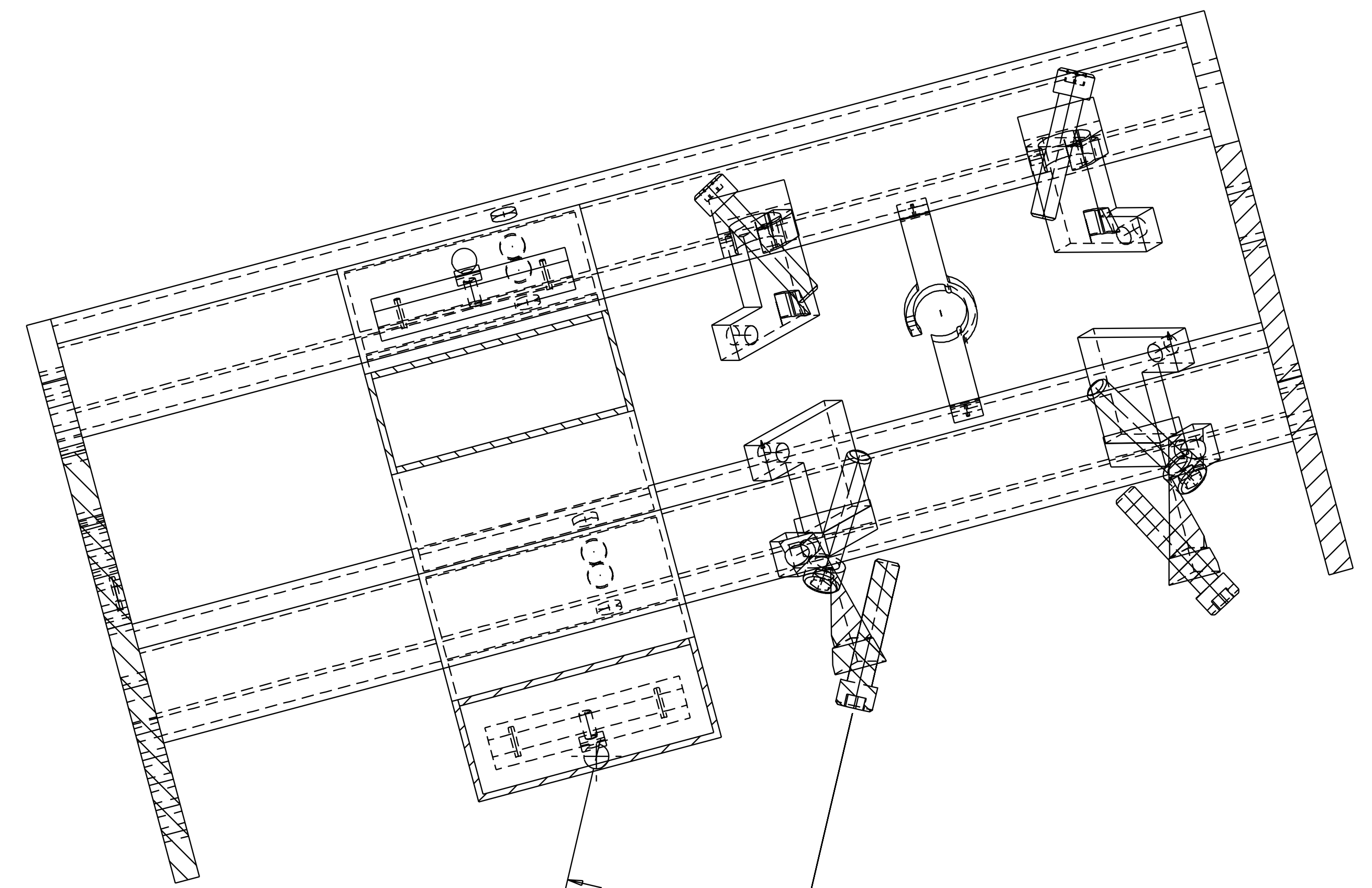
SECTION R-R
DEFINE CHAMFER STOP 1



4.551

28.1°

SECTION K-K
DEFINE CHAMFER STOP 2



4.758

28.1°

SECTION H-H
DEFINE CHAMFER STOP 3

QTY	REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ITEM NO.
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES					
TOLERANCES ARE:					
FRACTIONS	DECIMALS	ANGLES			
±	±0.005	±0.5°			
0.XX	±0.03				
0.XXX	±0.005				
DO NOT SCALE DRAWING					
NEXT ASSEMBLY		APPROVALS		DATE	
D970564, D970577		J. Hazel		1/98	
FILE LOCATION		CHECKED			
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MATERIAL		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY		MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
FINISH		TITLE		REV	
		RECYCLING MIRROR LOS		H	
		STRUCTURE ASSEMBLY			
		SIZE		D970551	
		SCALE		1/2	
		SHEET		4 OF 6	

1

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3

4

5

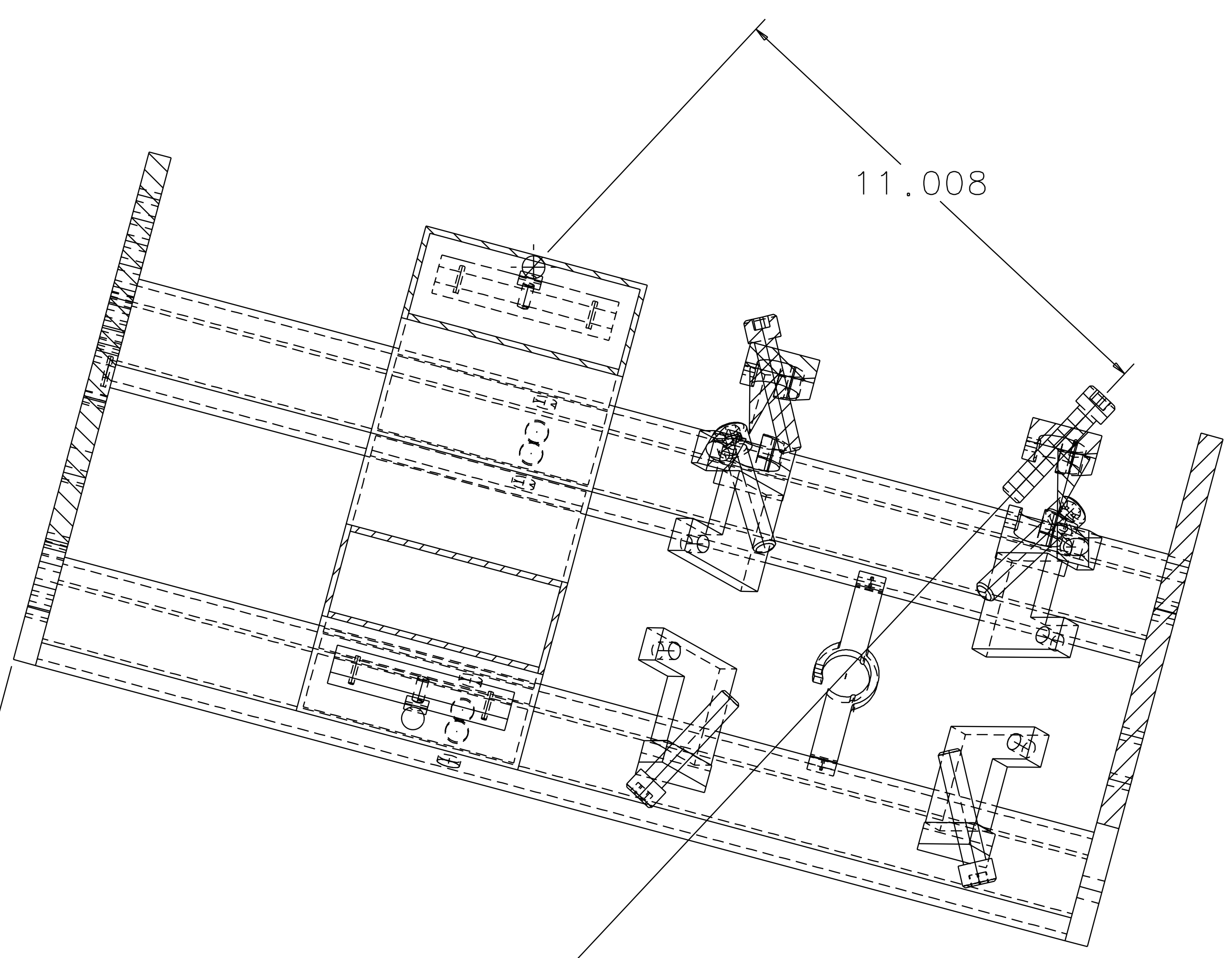
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7

8

1 2 3 4 5 6 7 8

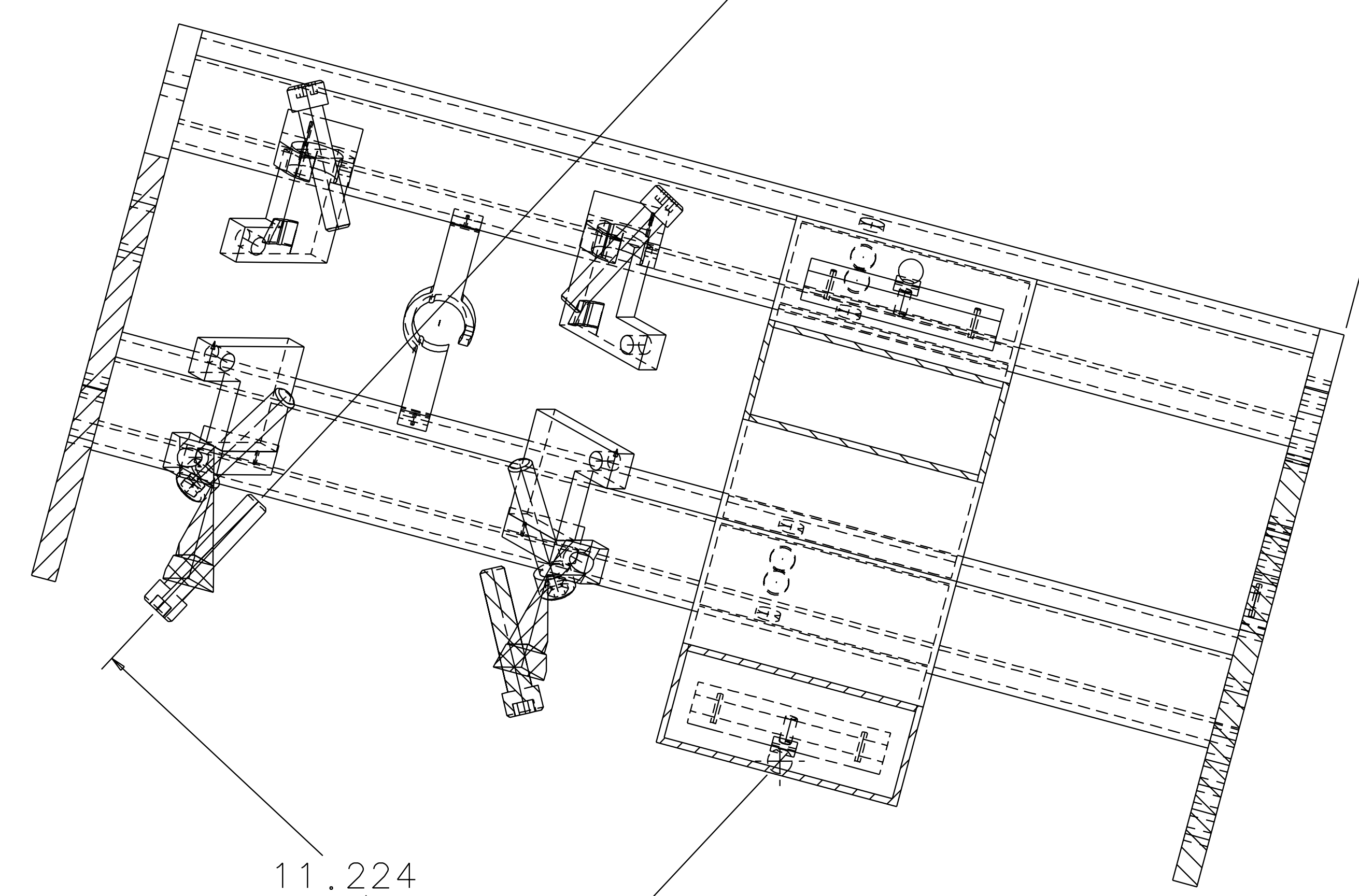
REV	DATE	DRAWN BY	CHECKED	DCC	DCN/DESCRIPTION
A	1/19/98	J.Hazel			E980004/INITIAL RELEASE
B	2/5/98	J.Hazel			E980011/CHANGE TO NOTE 3 CHANGE TO SECTION A-A
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D	5/17/98	J.Hazel			E980088/ ATTACHED, ID PLACEMENT
E	5/7/98	J.Hazel			E980090/CHANGE CHAMFER STOP DEFINITION
F	7/16/98	J. Romie			E980173/ADD DRAIN HOLES, OPEN TOLERANCES AND CHANGE S/A DIMENSIONS
G	7/31/98	J. Romie			E980201/MOVE CROSSHAIR UP BY 1.000", CHANGE DRAIN HOLE CONFIG. PER DETAILS.
H	2/9/01	J. Romie			E010030/SH1, 2x, 17.788 WAS 2x, 17.661



SECTION J-J
DEFINE CHAMFER STOP 4

28.1°

28.1°



SECTION L-L
DEFINE CHAMFER STOP 5

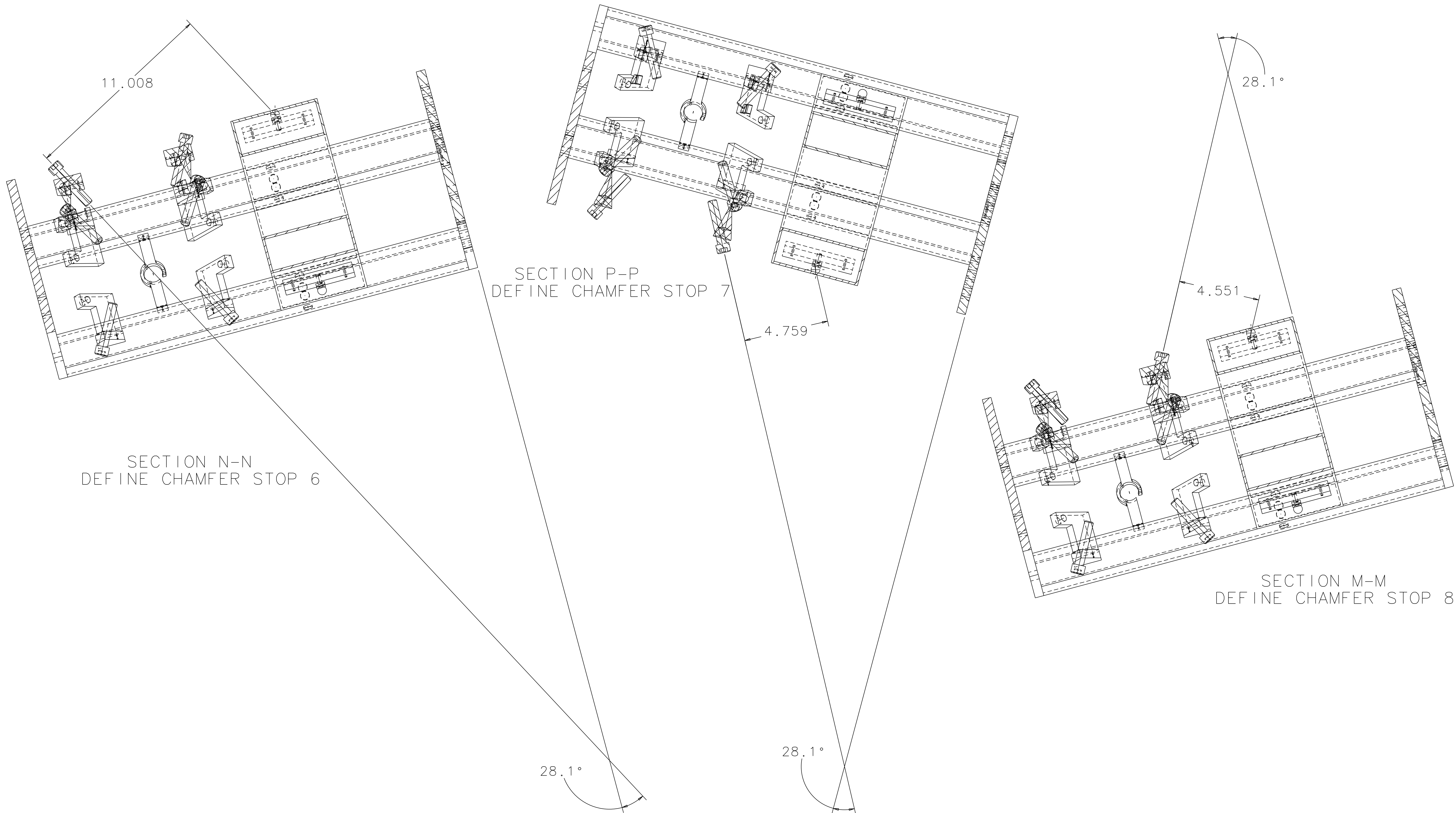
11.224

1 2 3 4 5 6 7 8

QTY	REQ	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ITEM NO.
<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES : : : 0.5°</p> <p>0.XX=+0.03 0.XXX=±0.005 DO NOT SCALE DRAWING</p>					
APPROVALS			DATE	LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
DRAWN J. Hazel			1/98	TITLE RECYCLING MIRROR LOS STRUCTURE ASSEMBLY	
CHECKED				SIZE E	
NEXT ASSEMBLY D970564, D970577			MATERIAL		REV H
FILE LOCATION home/dcc/docs/D970551.pdf			FINISH		SCALE 1/2
				SHEET 5 OF 6	

1 2 3 4 5 6 7 8

REV	DATE	DRAWN BY	CHECKED	DCC	DCN/DESCRIPTION
A	1/19/98	J. Hazel			E980004/INITIAL RELEASE
B	2/5/98	J. Hazel			E980011/CHANGE TO NOTE 3 CHANGE TO SECTION A-A
C	4/2/98	J. Hazel			E980075/ADD SHEET 4
D	5/17/98	J. Hazel			E980088/ ATTACHED, ID PLACEMENT DEFINITION
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G	7/31/98	J. Romie			E980201/MOVE CROSSHAIR UP BY 1.000", CHANGE DRAIN HOLE CONFIG. PER DETAILS
H	2/9/01	J. Romie			E010030/SH1, 2x, 17.788 WAS 2x, 17.661



1 2 3 4 5 6 7 8

QTY	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ITEM NO.
PARTS LIST				
<small>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES</small> : 0.XX+0.03 : 0.5° 0.XXX+0.005 DO NOT SCALE DRAWING				
APPROVALS DRAWN J. Hazel CHECKED		DATE 1/98	LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
NEXT ASSEMBLY D970564, D970577		TITLE RECYCLING MIRROR LOS STRUCTURE ASSEMBLY		REV H
FILE LOCATION home/dcc/docs/D970551.pdf		MATERIAL FINISH		SIZE E
		SCALE 1/2		SHEET 6 OF 6