

NOTES CONTINUED:

5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = 12.16 LB [5.52 kg].

7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

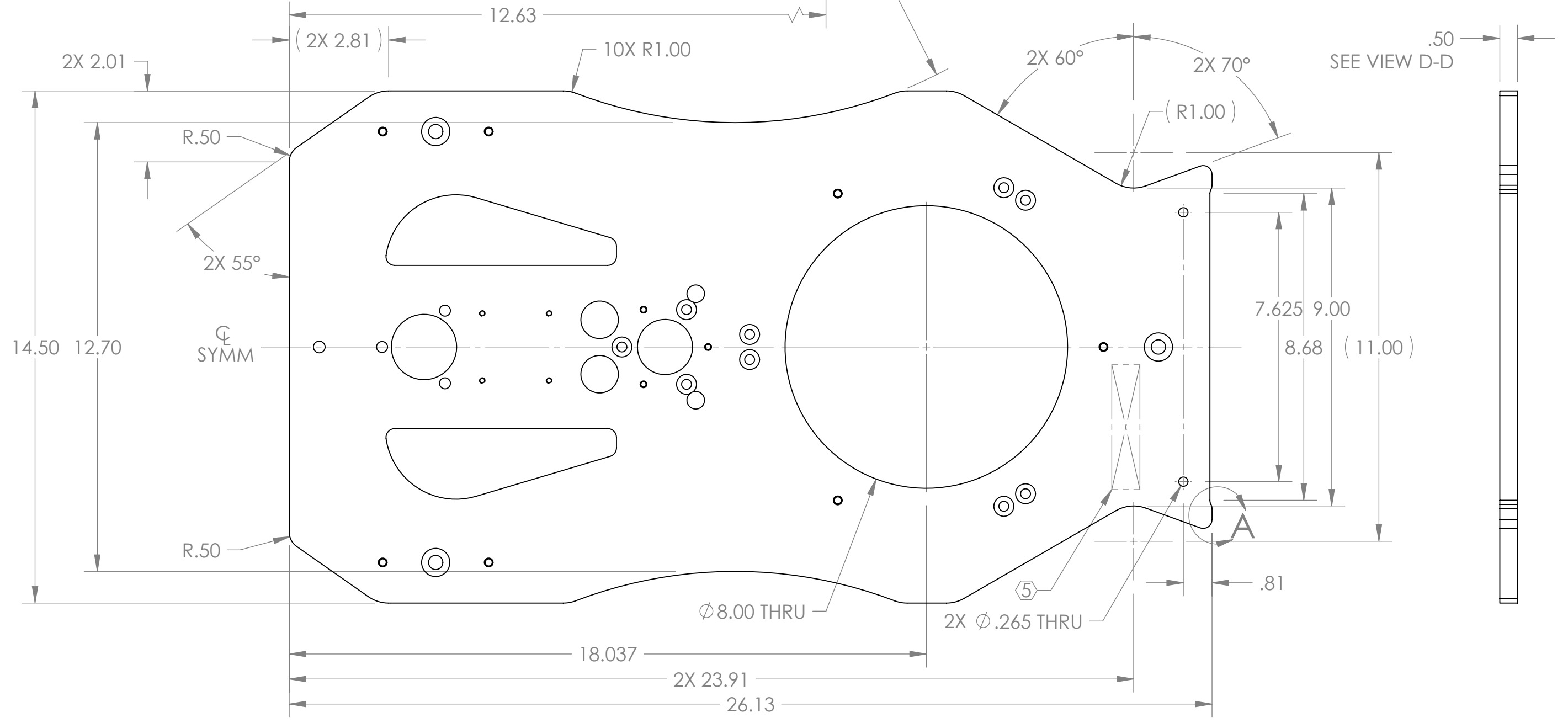
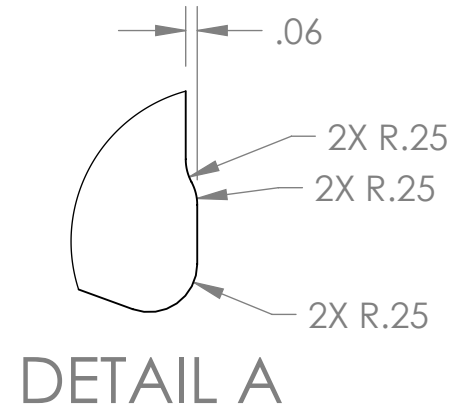
8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

9. NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. IN GENERAL WELD REPAIRS AND PRESS FIT INSERT REPAIRS ARE NEVER ACCEPTABLE. THE MATERIAL SHOULD BE MADE WITH VIRGIN MATERIAL. SPECIAL CIRCUMSTANCES CAN BE REVIEWED IF / WHEN BROUGHT TO THE ATTENTION OF LIGO CONTRACTING OFFICER'S REPRESENTATIVE (COTR) THROUGH A MATERIAL REVIEW BOARD (MRB) PROCESS, REFER TO LIGO-E0900364.

10. ALL TAPPED HOLES- USE .005 OVERSIZE BOTH DRILL & TAP.

MANUFACTURING PROCESS (DOES NOT PERTAIN TO .0003 T.I.R. COPLANAR REGIONS, SHEET 5):
 PURCHASE 3/4" ALUM. ALLOY 6061-T651 PLATE.
 ROUGH-BLANCHARD GRIND, EQUAL AMOUNTS FROM STOCK FROM EACH SIDE OF ALUM. PLATES.
 COLD STABILIZE PLATES.
 FINISH GRIND BOTH SIDES TO: .535 THICKNESS WITH A FLATNESS OF .002 ACROSS ENTIRE FACE.
 RE-CLAMP, MACHINE & ENGRAVE BALANCE OF PART IN THE FLAT.
 ON TOOLROOM VERTICAL MILL MACHINE, CLAMP PART TO ANGLE PLATE. MACHINE HOLE FOR 5/16-18 OVERSIZE THREAD PER 10 ON (1) END OF EACH PART.
 HAND DEBURR PARTS WITH BURR KNIVES & ROTARY CARBIDE BURRS.
 HAND TAP ALL REQUIRED HOLES, .005 OVERSIZE PER 10.
 INSPECT PARTS. ASSURE A FLATNESS OF .003 OR BETTER OVER FACE 'A' (SEE SHEET 5). SEND MATERIAL CERTS.

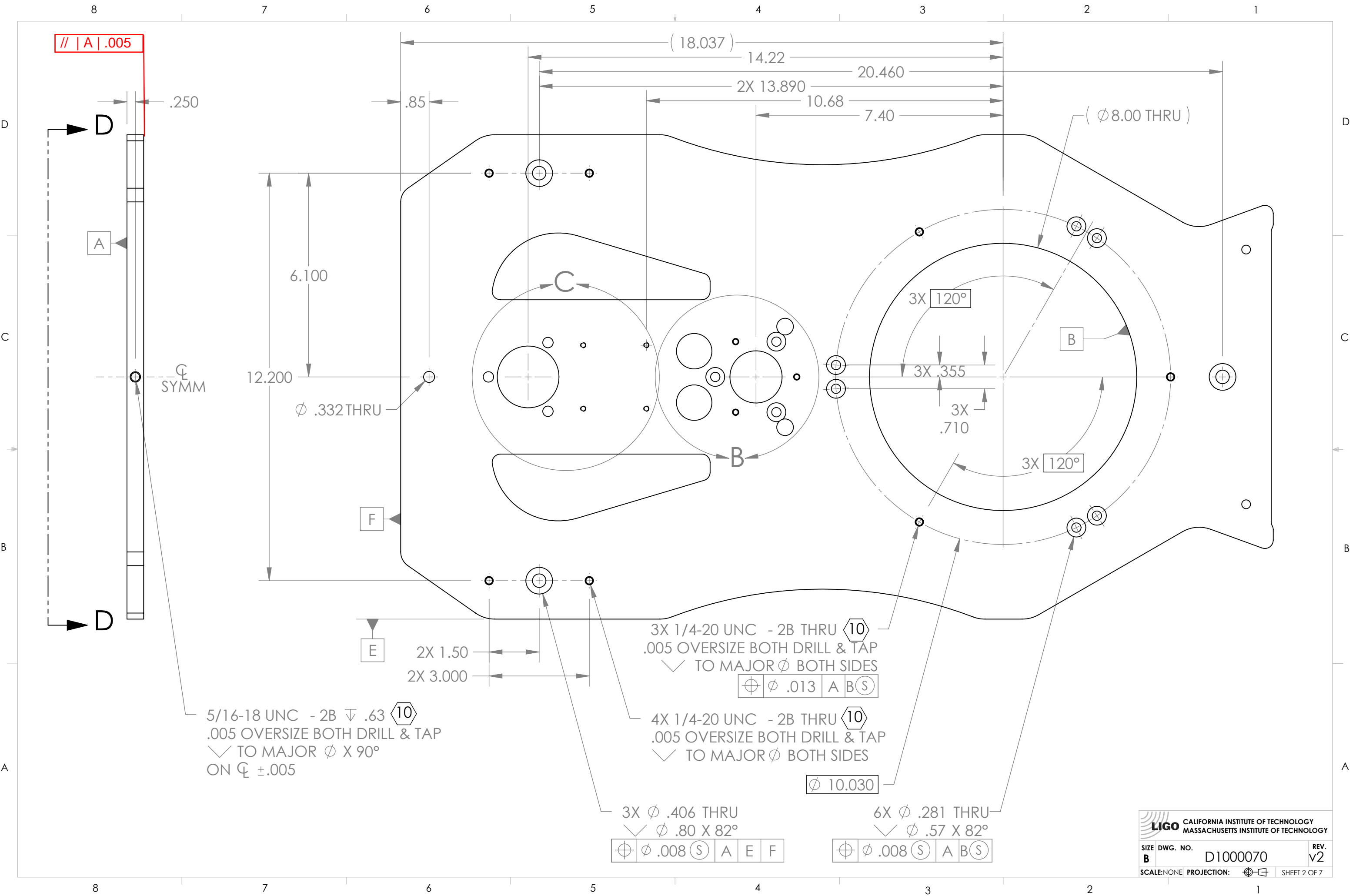
REV.	DATE	DCN #	DRAWING TREE #
v1	08 NOV 2010	E1000365-v1	-
v2	08 MAR 2011	E1100080-v1	-
-	-	-	-



D1000070 TRANSMON_TLE_END_PLATE_PRIMARY_3_TUBE, PART PDM REV: X-114, DRAWING PDM REV: X-045

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 1.0°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		TRANSMON TELE END PLATE PRIMARY 3 TUBE	
MATERIAL 6061-T6 Al		FINISH 63 μinch Ra		SYSTEM ADVANCED LIGO		SUB-SYSTEM AOS	
NEXT ASSY D1003120				DESIGNER K. MAILAND 21 JUN 2010		SIZE DWG. NO. B	
D1000070				DRAFTER C. CONLEY 24 SEP 2010		REV. v2	
APPROVAL K. MAILAND 08 NOV 2010				SCALE: NONE		PROJECTION:	
						SHEET 1 OF 7	

D1000070 TRANSMON_TEL_END_PLATE_PRIMARY_3_TUBE, PART PDM REV: X-114, DRAWING PDM REV: X-045



$|| A | .005$

CL SYMM

5/16-18 UNC - 2B ∇ .63 $\text{\textcircled{10}}$
 .005 OVERSIZE BOTH DRILL & TAP
 \checkmark TO MAJOR ϕ X 90°
 ON CL $\pm .005$

E
 2X 1.50
 2X 3.000

3X ϕ .406 THRU
 \checkmark ϕ .80 X 82°
 $\text{\textcircled{+}} \phi$.008 $\text{\textcircled{S}} | A | E | F$

3X 1/4-20 UNC - 2B THRU $\text{\textcircled{10}}$
 .005 OVERSIZE BOTH DRILL & TAP
 \checkmark TO MAJOR ϕ BOTH SIDES

$\text{\textcircled{+}} \phi$.013 $| A | B | \text{\textcircled{S}}$

4X 1/4-20 UNC - 2B THRU $\text{\textcircled{10}}$
 .005 OVERSIZE BOTH DRILL & TAP
 \checkmark TO MAJOR ϕ BOTH SIDES

ϕ 10.030

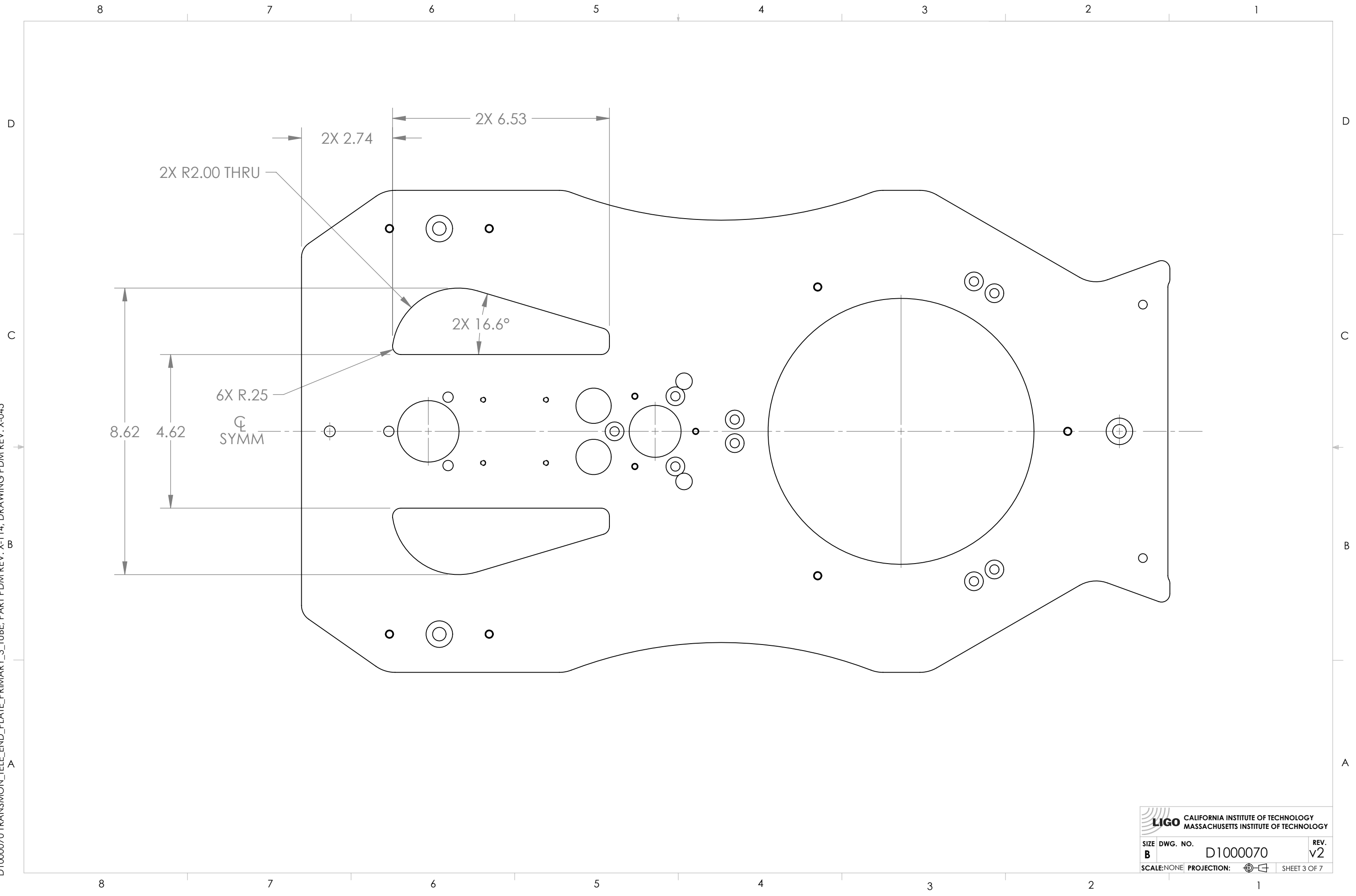
6X ϕ .281 THRU
 \checkmark ϕ .57 X 82°
 $\text{\textcircled{+}} \phi$.008 $\text{\textcircled{S}} | A | B | \text{\textcircled{S}}$

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SIZE DWG. NO. **B** D1000070 REV. v2

SCALE: NONE PROJECTION: $\text{\textcircled{+}} \text{\textcircled{-}}$ SHEET 2 OF 7

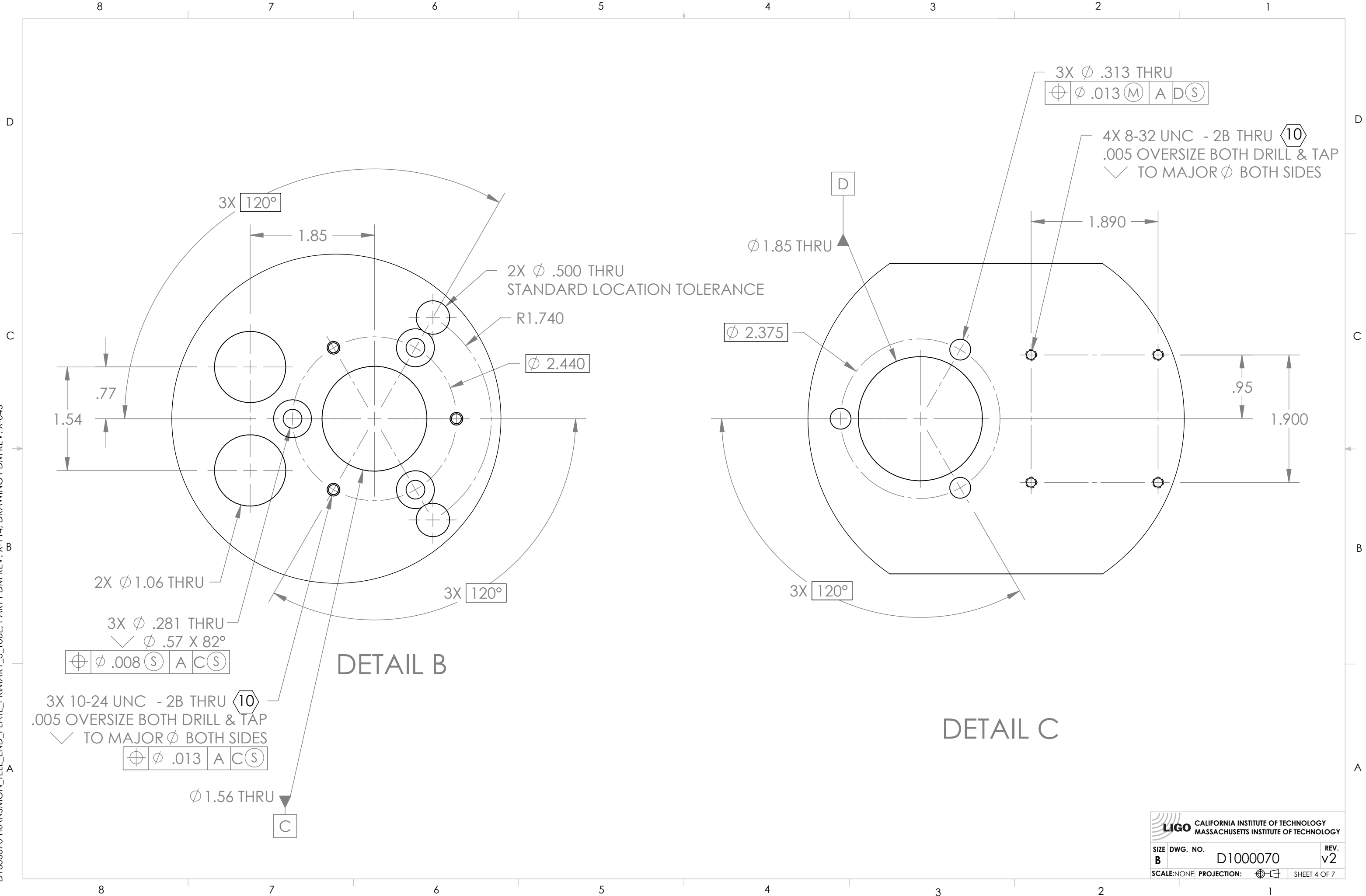
D1000070 TRANSMON_TEL_END_PLATE_PRIMARY_3_TUBE, PART PDM REV: X-114, DRAWING PDM REV: X-045



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SIZE	DWG. NO.	REV.
B	D1000070	v2
SCALE: NONE	PROJECTION:	SHEET 3 OF 7

D1000070 TRANSMON_TELE_END_PLATE_PRIMARY_3_TUBE, PART PDM REV: X-114, DRAWING PDM REV: X-045



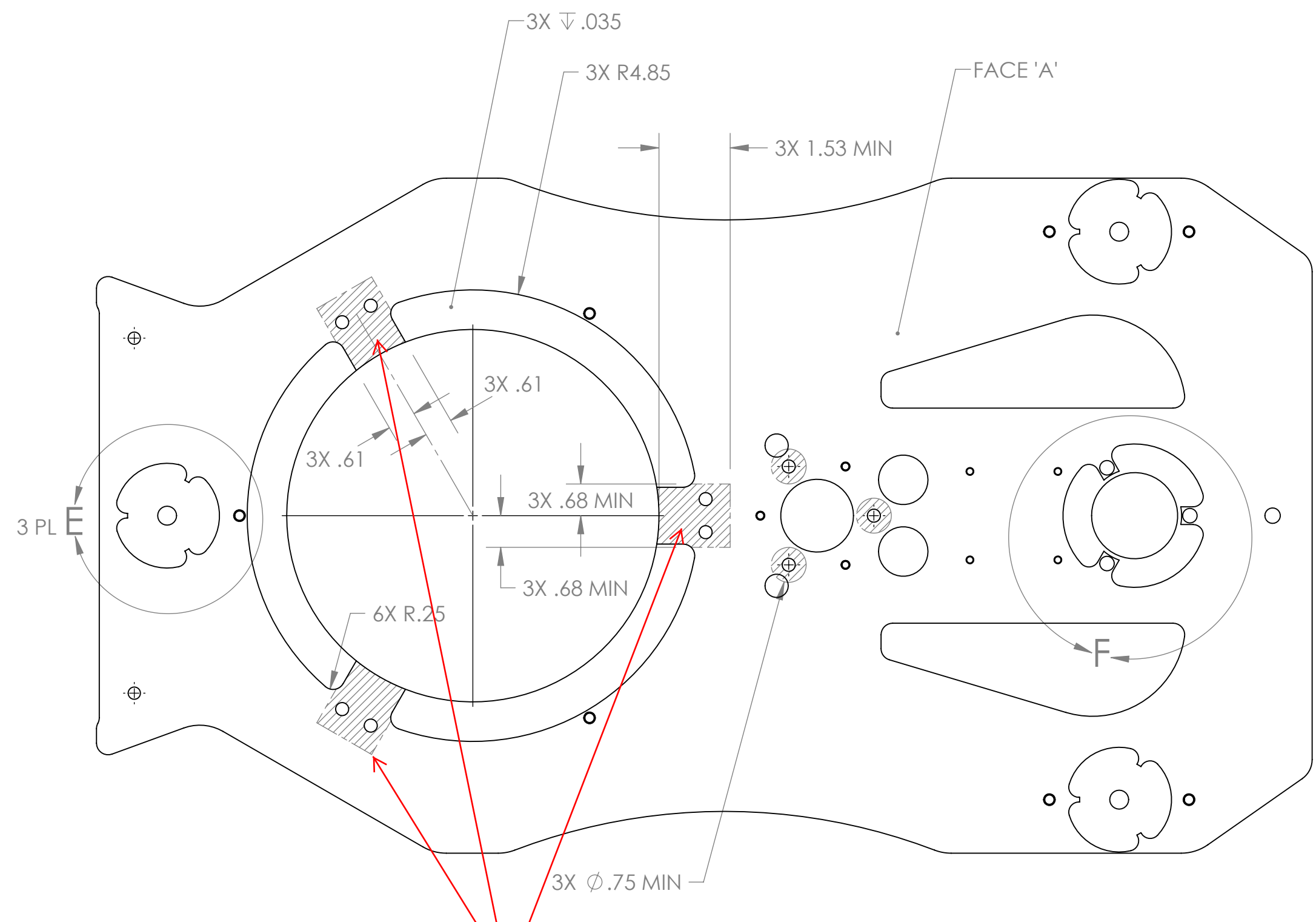
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SIZE	DWG. NO.	REV.
B	D1000070	v2
SCALE: NONE	PROJECTION:	SHEET 4 OF 7

D1000070 TRANSMON_TLE_END_PLATE_PRIMARY_3_TUBE, PART PDM REV: X-114, DRAWING PDM REV: X-045

8 7 6 5 4 3 2 1

D
C
B
A



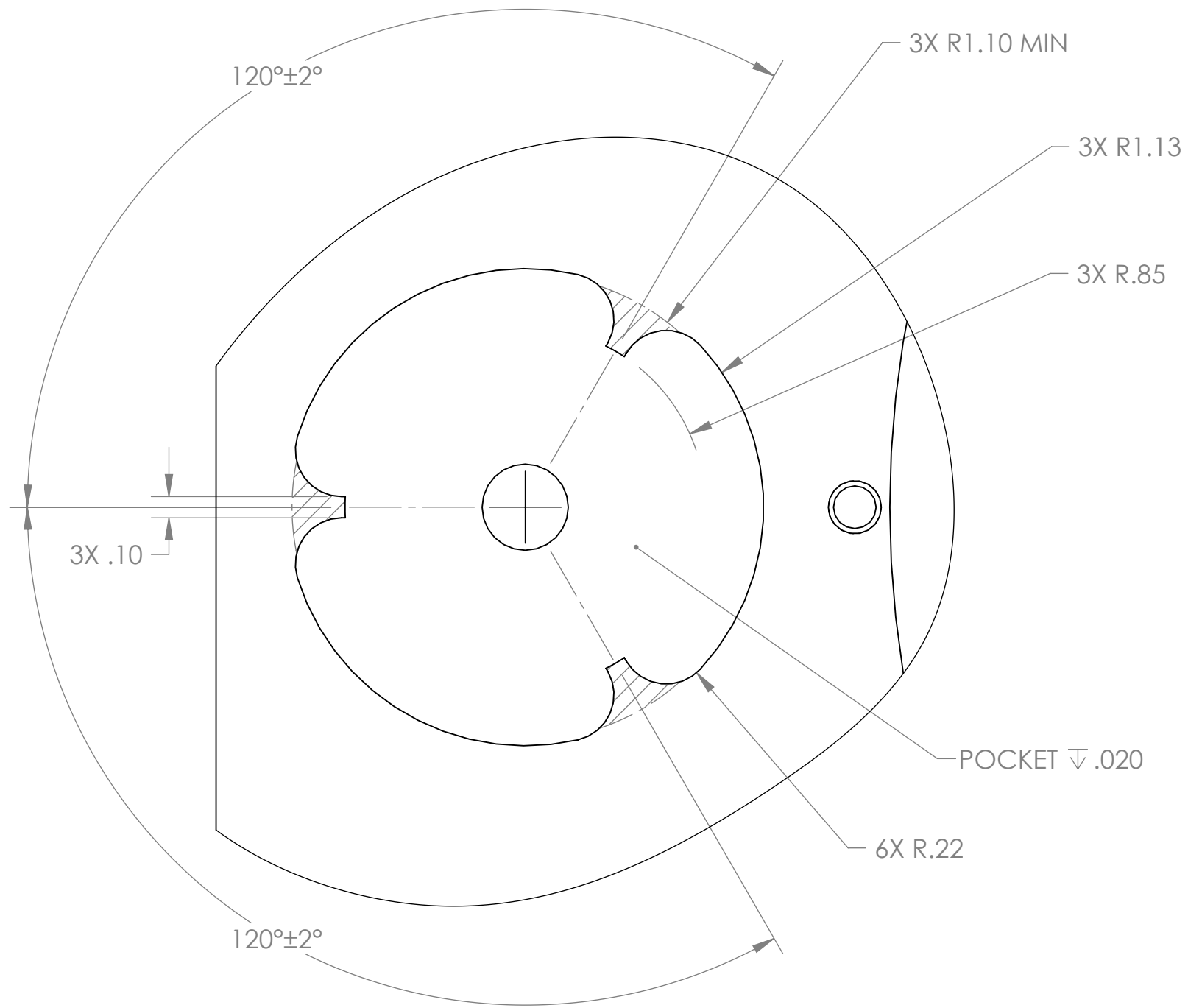
VIEW D-D

ALL HATCHED AREAS INCLUDING 12 AREAS ON FEATURES .002 TIR COPLANAR 3 PLACES AS SHOWN.

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SIZE B	DWG. NO. D1000070	REV. v2
SCALE: NONE	PROJECTION:	SHEET 5 OF 7



8 7 6 5 4 3 2 1

D1000070 TRANSMON_TELE_END_PLATE_PRIMARY_3_TUBE, PART PDM REV: X-114, DRAWING PDM REV: X-045

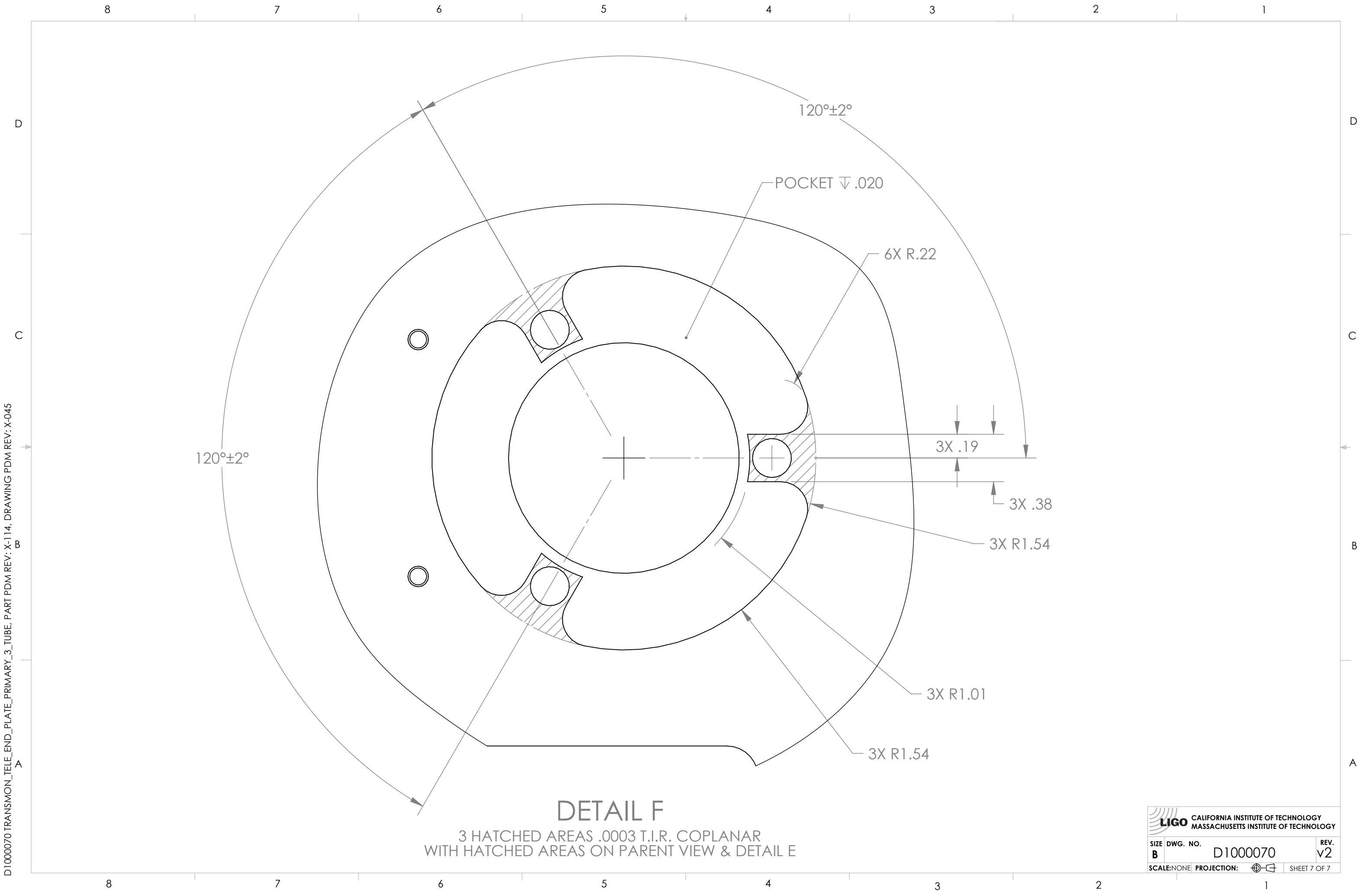


DETAIL E

3 PLACES
 9 HATCHED AREAS .0003 T.I.R. COPLANAR
 WITH HATCHED AREAS ON PARENT VIEW & DETAIL F

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SIZE B	DWG. NO. D1000070	REV. v2
SCALE: NONE	PROJECTION: 	SHEET 6 OF 7

D1000070 TRANSMON_TEL_END_PLATE_PRIMARY_3_TUBE, PART PDM REV: X-114, DRAWING PDM REV: X-045



DETAIL F

3 HATCHED AREAS .0003 T.I.R. COPLANAR WITH HATCHED AREAS ON PARENT VIEW & DETAIL E

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SIZE	DWG. NO.	REV.
B	D1000070	v2
SCALE: NONE	PROJECTION:	SHEET 7 OF 7