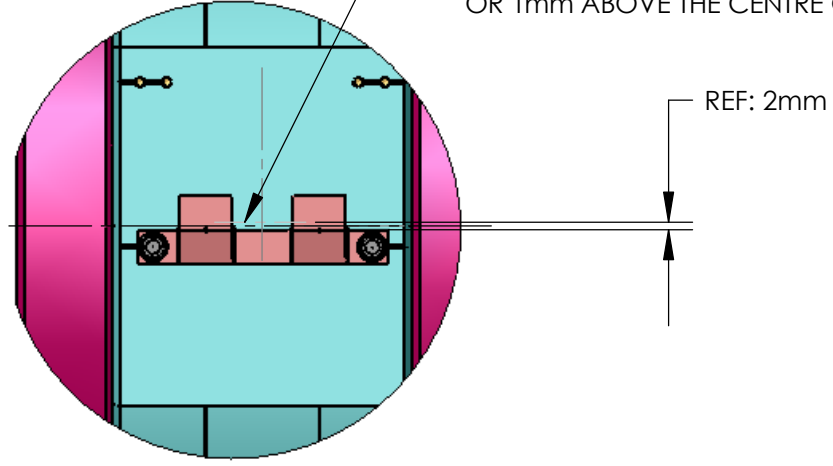
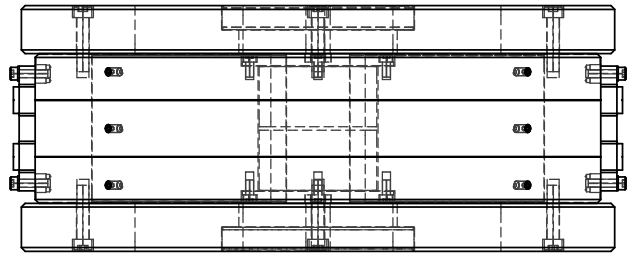


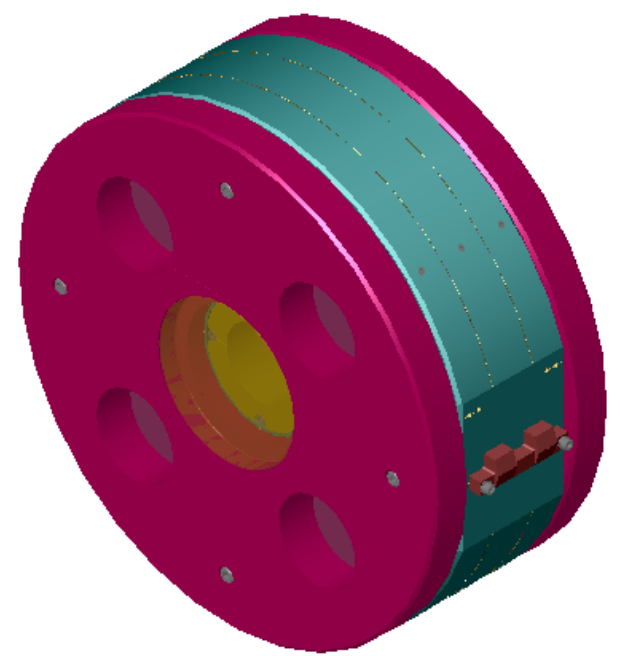
REV.	DATE	DCN #	DRAWING TREE #
A	FEB 17th 2006	E060057-00	E060059-A



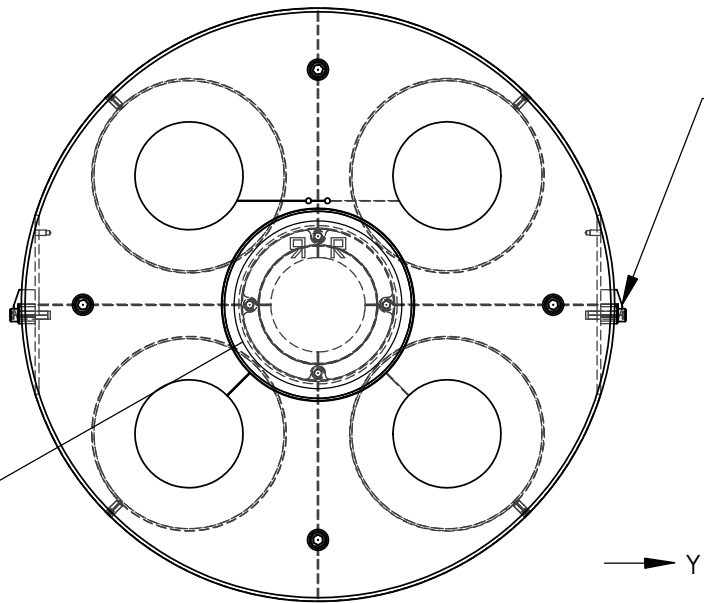
DETAIL B
SCALE 1 : 2

REFERENCE: - THE FLEXURE POINT FOR AN $\varnothing .018"$ WIRE IS 2 mm FROM WHERE THE WIRE IS CLAMPED / BREAKS AWAY FROM THE MASS. THIS CORRESPONDS TO A "d" VALUE OF 1 mm OR 1mm ABOVE THE CENTRE OF MASS.

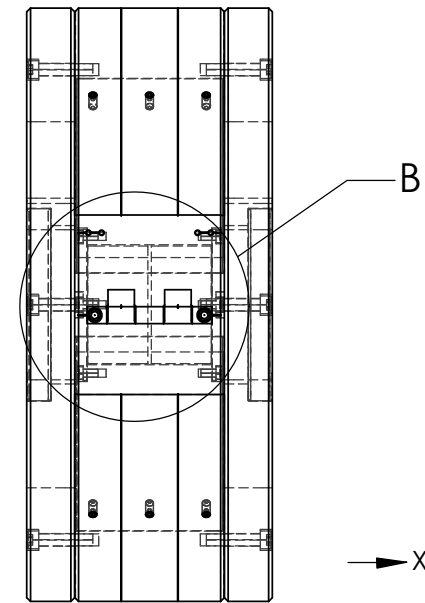
REF: 2mm



REF: Mass = 38.402 9 (kg)

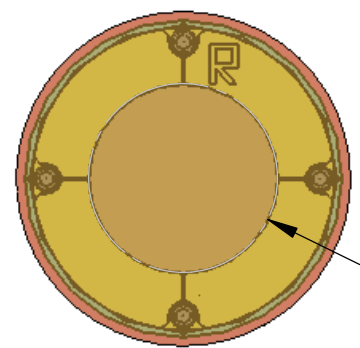


REFERENCE: - THE DISTANCE TO THE POSITION OF THE BREAK OFF OF THE WIRE, IN the "Y-direction" IS GREATER THAN THE RADIUS OF THE MASS BY A ~mm.



B

X



DETAIL A
SCALE 1 : 2

REF: $\varnothing 0.05$
THRU HOLE
REQUIREMENT $\varnothing .75"$ MIN
FOR CAVITY TESTS

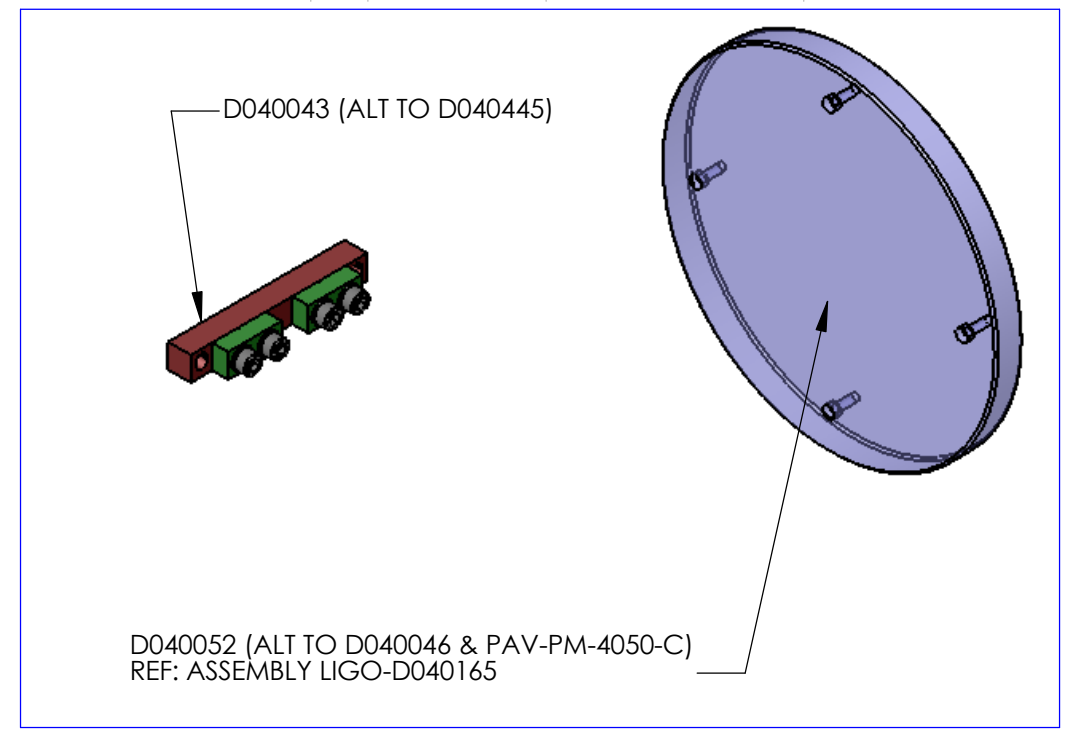
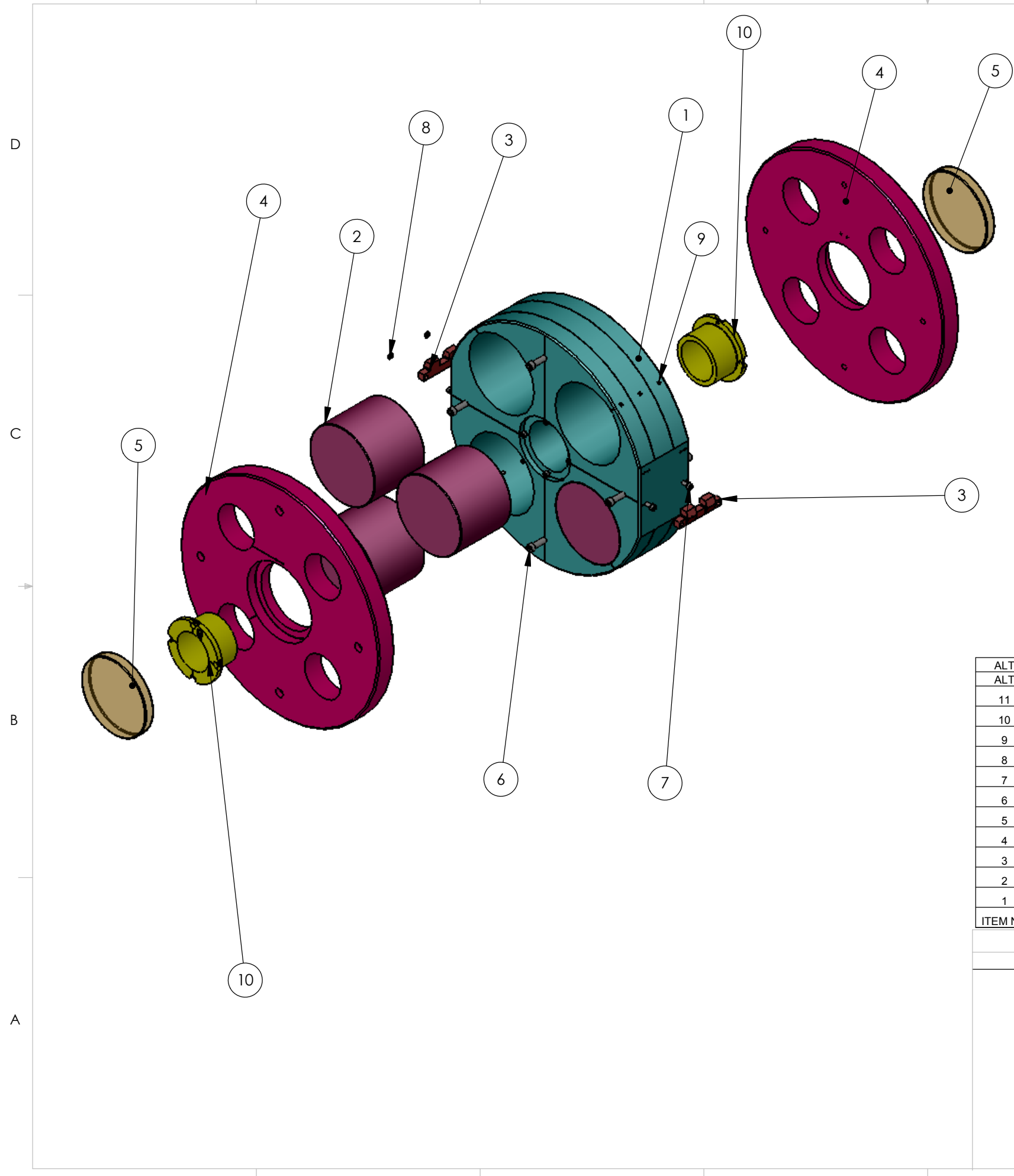
NOTES: (UNLESS OTHERWISE SPECIFIED)

- DO NOT SCALE FROM DRAWING.
- REFERENCE TECHNICAL NOTE LIGO-T040013
- PHYSICAL PROPERTIES (MUST BE UPDATED MANUALLY IF CHANGE IS MADE)
ASSUMING DENSITY (kg/m³) of 7900 for "303/304 SSTL", 2510 for "BK7 & 2700 FOR "6061-16-Al"
Mass = 38.402 kilograms
Center of mass: (meters)
X = 0.000, Y = 0.000, Z = 0.000
Moments of inertia: (kg*m²) Taken at the output coordinate system.
I_{xx} = 0.463, I_{yy} = 0.273, I_{zz} = 0.271
- AS SHOWN ON SHEET 2 OF 2 REFERENCE ASSEMBLY LIGO-D040165 FOR ALTERNATIVE ARRANGEMENT FOR THE REACTION TEST MASS WITH THE CORNING PYREX GLASS FACE PLATES.
- AS MENTIONED ON SHEET 2 OF 2 IT IS POSSIBLE TO REPLACE LIGO-D040045 WITH ASSEMBLY LIGO-D040043.

PARTS LIST		
DIMENSIONS ARE IN INCHES		
TOLERANCES: .XX -- .XXX --		
ANGULAR --		
MATERIAL --		
FINISH --		
DRAWN	CIT / MPL	30JAN04
CHECKED	JHR / MPL	15 Sept 2004
APPROVED		

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY IGR, GLASGOW UNIVERSITY GEO 600 GROUP	
SYSTEM	ADVANCED LIGO
SUB-SYSTEM	SUS
NEXT ASSY	ETM C_PTYPE
PART NAME REACTION MASS ASSEMBLY	
SIZE DWG. NO.	D040161
REV.	A
SCALE: NTS	PROJECTION:
SHEET 1 OF 2	

REV.	DATE	DCN #	DRAWING TREE #
A	FEB 17th 2006	E060057-00	E060059-A



ALT	REQ.	SPARE	TOT.	PART NUMBER	DESCRIPTION	MATERIAL
	2	1	3	D040052	C PTYPE TEST MASS FACE, CORNING GLASS (ALT TO D040046 & PAV-PM-4050-C)	PYREX 7740
	2	2	4	D040043	WIRE BREAK OFF ASSEMBLY (ALT TO D040445)	303/304 SSSL
11	8	8	16		SST VENTED SOCKET HEAD CAP SCREW #8-32 UNC-3A X 0.3125 LONG	Ag 300 SST
10	2	2	4	D040422	REACTION TEST MASS BUNG INSERT	6061-T6-AI
9	12	12	24		SST SOCKET SET SCREW #8-32 X 0.375 LONG	300 SSSL
8	4	4	8		FLAT WASHERS NAS 620-C8 (OR EQUIV.)	300 SSSL
7	4	4	8		SST VENTED SOCKET HEAD CAP SCREW #8-32 UNC-3A X 0.625 LONG	Ag 300 SST
6	8	8	16		SST VENTED SOCKET HEAD CAP SCREW 0.25-20 UNC-3A X 1.125 LONG	Ag 300 SST
5	2	2	4	PAV-PM-	MIRROR, CVI LASER, NM, USA, 87123 (PAV-PM-4050-C)	BK7
4	2	2	4	D040046	FACE PLATE, MAIN BODY	6061-T6-AI
3	2	2	4	D040445	WIRE BREAK OFF	303/304 SSSL
2	4	4	8	D040037	INSERTS, MAIN BODY	303/304 SSSL
1	1	1	2	D040164	MAIN BODY REACTION TEST MASS	6061-T6-AI
ITEM NO	REQ.	SPARE	TOT.	PART NUMBER	DESCRIPTION	MATERIAL

PARTS LIST

NOTES: (UNLESS OTHERWISE SPECIFIED)

FOR NOTES PLEASE REFERENCE SHEET 1 OF 2		DIMENSIONS ARE IN INCHES		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY IGR, GLASGOW UNIVERSITY GEO 600 GROUP
		TOLERANCES: .XX -- .XXX -- ANGULAR -- MATERIAL -- FINISH --		
		DRAWN REF SHEET 1 of 2 CHECKED JHR / MPL 15 Sept 2004 APPROVED		PART NAME REACTION MASS ASSEMBLY SIZE DWG. NO. B D040161 SCALE: NTS PROJECTION: SHEET 2 OF 2
				REV. A