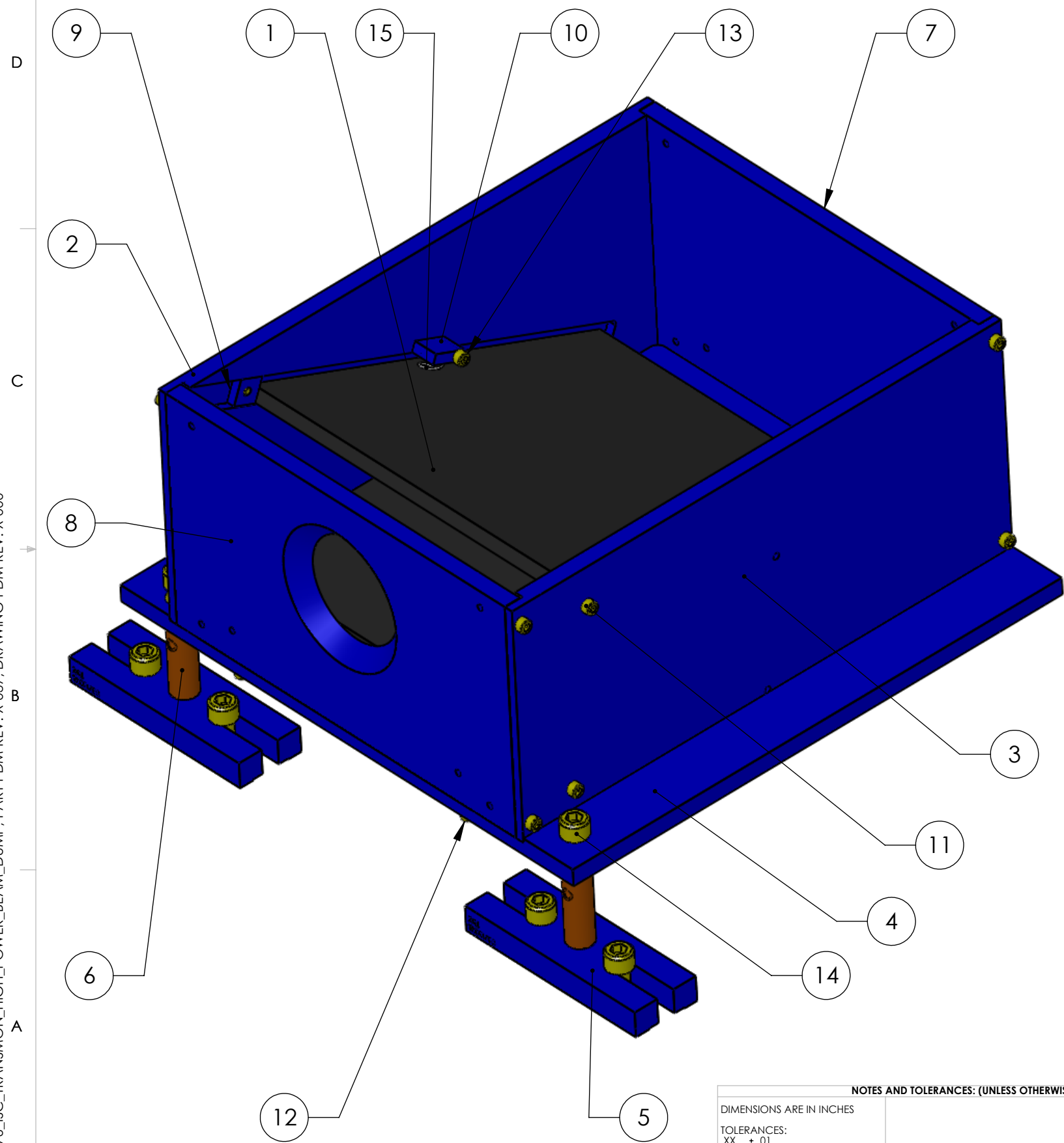


D1001076_ISC_TRANSMON_HIGH_POWER_BEAM_DUMP, PART PDM REV: X-037, DRAWING PDM REV: X-000

REV.	DATE	DCN #	DRAWING TREE #
-	-	-	-
-	-	-	-
-	-	-	-



ITEM NO.	PART NUMBER	QTY.
1	D1001083_ISC_TRANSMON_HIGH_POWER_BEAM_DUMP_SiC	2
2	D1001081_ISC_TRANSMON_HIGH_POWER_BEAM_DUMP_SIDE1	1
3	D1001082_ISC_TRANSMON_HIGH_POWER_BEAM_DUMP_SIDE2	1
4	D1001078_ISC_TRANSMON_HIGH_POWER_BEAM_DUMP_BASE	1
5	D1002059_ISC_Mounting_Base_Double	3
6	D1001077_ISC_TRANSMON_HIGH_POWER_BEAM_DUMP_LEGS	3
7	D1001080_ISC_TRANSMON_HIGH_POWER_BEAM_DUMP_BACK	1
8	D1001079_ISC_TRANSMON_HIGH_POWER_BEAM_DUMP_FRONT	1
9	D1001089_ISC_TRANSMON_HIGH_POWER_BEAM_DUMP_FRONT_STOP	4
10	D1100701_ISC_High-Power_Beam_Dump_SiC_Spring_Stop	4
11	_____SST SOCKET HEAD CAP SCREW #4-40 UNC-2A X 0.25 LONG	4
12	_____SST SOCKET HEAD CAP SCREW #4-40 UNC-2A X 0.375 LONG	16
13	_____SST SOCKET HEAD CAP SCREW #4-40 UNC-2A X 0.5 LONG	4
14	_____SST SOCKET HEAD CAP SCREW 0.25-20 UNC-2A X 0.75 LONG	12
15	McMaster_9435K5_Compression_Spring_0.30_OD_0.50_LONG	4

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES

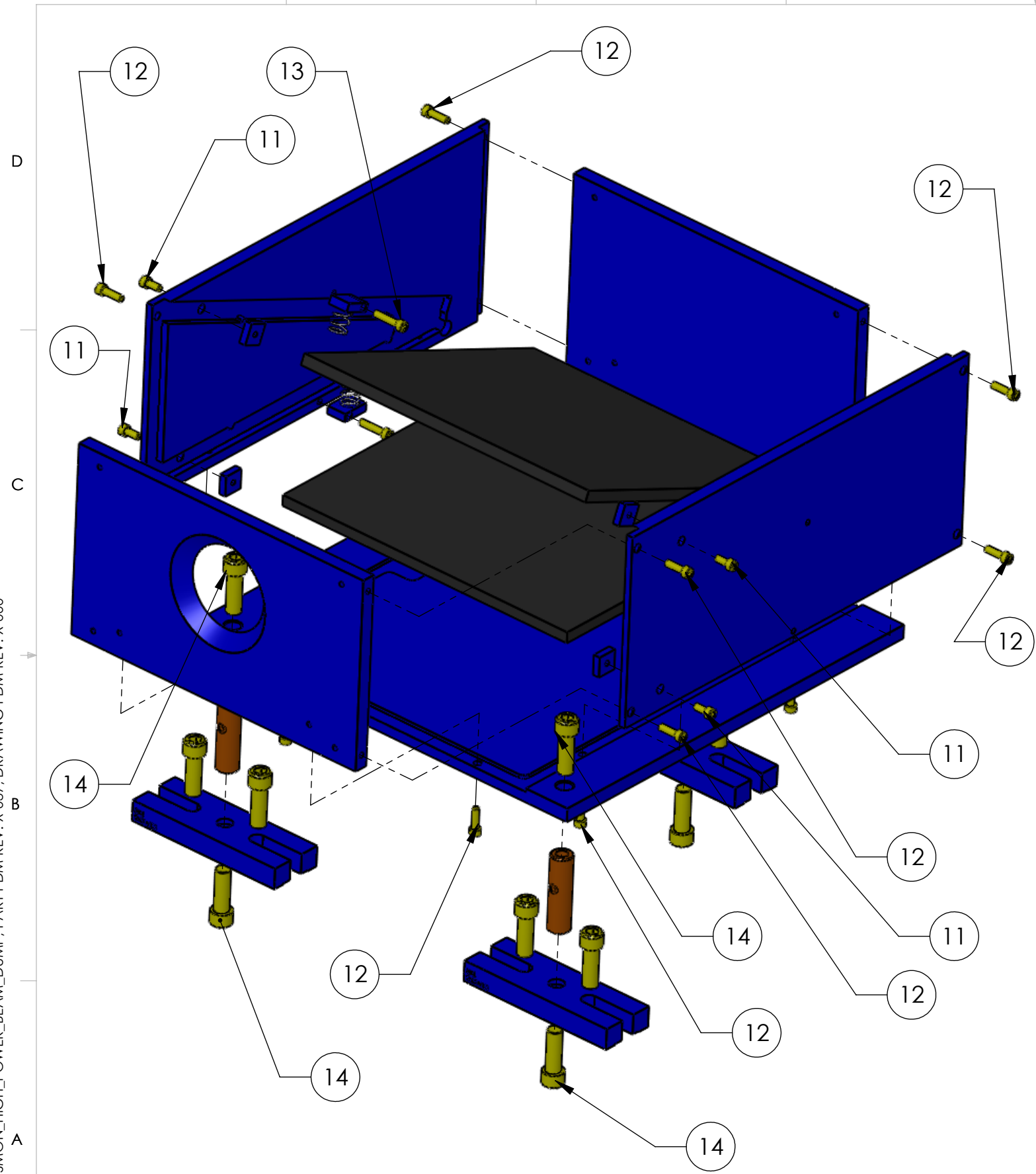
TOLERANCES:
 .XX ± .01
 .XXX ± .005
 ANGULAR ± 0.5°

MATERIAL N/A FINISH N/A μinch

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME TRANSMON HIGH POWER BEAM DUMP	
SYSTEM ADVANCED LIGO	SUB-SYSTEM ISC	DESIGNER J. FISHER	DATE 15 JUN 2010
DRAFTER J. FISHER	DATE 4 AUG 2010	SIZE B	DWG. NO. D1001076
CHECKER APPROVAL	SCALE 2:3	PROJECTION	REV. v5
SHEET 1 OF 2			SHEET 1 OF 2

D1001076_ISC_TRANSMON_HIGH_POWER_BEAM_DUMP, PART PDM REV: X-037, DRAWING PDM REV: X-000

REV.	DATE	DCN #	DRAWING TREE #



Assembly Procedure

- Screw a lower spring retainer (#10) into each side plate (#2 & #3), using one #4-40 screw (#13).
- Screw the side plates (#2 & #3) into the bottom plate (#4), using four #4-40 screws (#12). Each side plate is screwed onto the bottom plate using two screws, inserted through the bottom of the bottom plate.
- Insertion of lower silicon carbide plate (#1).
Inspect the first silicon carbide plate (#1). If either surface is more visibly scratched than the other, orient that surface to the outside of the dump. Place two coil springs (#15) into the spring retainers attached to the side plates. Insert the silicon carbide plate (#1) into the assembly, guiding it into the horizontal slots of the side plates. When the plate approaches the coil springs, compress the coil springs with a straight edge or equivalent, and slide the plate past the coil springs (this may require another pair of hands).
- Insertion of upper silicon carbide plate (#1).
Inspect plate as above for surface quality. Insert the silicon carbide plate into the assembly, guiding it into the angled slots of the side plates.
- Installation of upper spring retainers. Insert two coil springs (#15) into the remaining two spring retainers (#10). Screw these two sub-assemblies into the side plates using #4-40 screws (#13), compressing the coil springs so that they push down on the upper silicon carbide plate.
- Install SiC plate stops. Screw the four plate stops (#9) into the side plates, two on each side, at the front of the SiC plates, using #4-40 screws (#11).
- Install front and rear plates. Screw back plate (#7) and the front plate (#8) into the assembly, using four #4-40 screws (#12) for each plate.
- Installation of legs.
If the unit is going to be stored for later installation, stop at this point and wrap the assembly and remaining leg parts. This is to avoid potential damage to the macor legs, which are somewhat fragile. If the unit is ready to install, assemble the legs as follows:
 - Screw the macor posts (#6) into the bases (#5; single-sided bases may be used if preferred) using 1/4-20 screws (#14). Do not overtighten these screws; use only light hand torque.
 - Screw these leg assemblies to the dump using 1/4-20 screws (#14). Do not overtighten these screws; use only light hand torque.

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES

TOLERANCES:
 .XX ± .01
 .XXX ± .005
 ANGULAR ± 0.5°

MATERIAL	N/A	FINISH	N/A μinch
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CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME TRANSMON HIGH POWER BEAM DUMP	
SYSTEM ADVANCED LIGO	SUB-SYSTEM ISC	DESIGNER J. FISHER	DATE 15 JUN 2010
DRAFTER J. FISHER	CHECKER J. FISHER	DATE 4 AUG 2010	SIZE DWG. NO. B D1001076
APPROVAL	REV. v5	SCALE: 2:3	PROJECTION:
		SHEET 2 OF 2	