

NOTES:

101. ALL DIMENSIONS ARE IN MILLIMETERS (mm) AND VALUES ARE IN SI UNITS. DIMENSIONS AND VALUES IN BRACKETS ARE U.S. CUSTOMARY UNITS (inch) CONVERTED FROM MILLIMETERS / SI UNITS.

107. INSPECTION / ACCEPTANCE TO BE MEASURED AND RECORDED IN SI UNITS.

109b. ESTIMATED WEIGHT IS 246.9 KG

901. FOR ADDITIONAL INFORMATION, SEE TODB-B MECHANICAL REQUIREMENTS DOCUMENT.

ABBREVIATIONS:

ALS-U = ADVANCE LIGHT SOURCE UPGRADE

ASSY = ASSEMBLY

BTA = BOOSTER-TO-ACCUMULATOR RING TRANSFER LINE

CKT = CIRCUIT

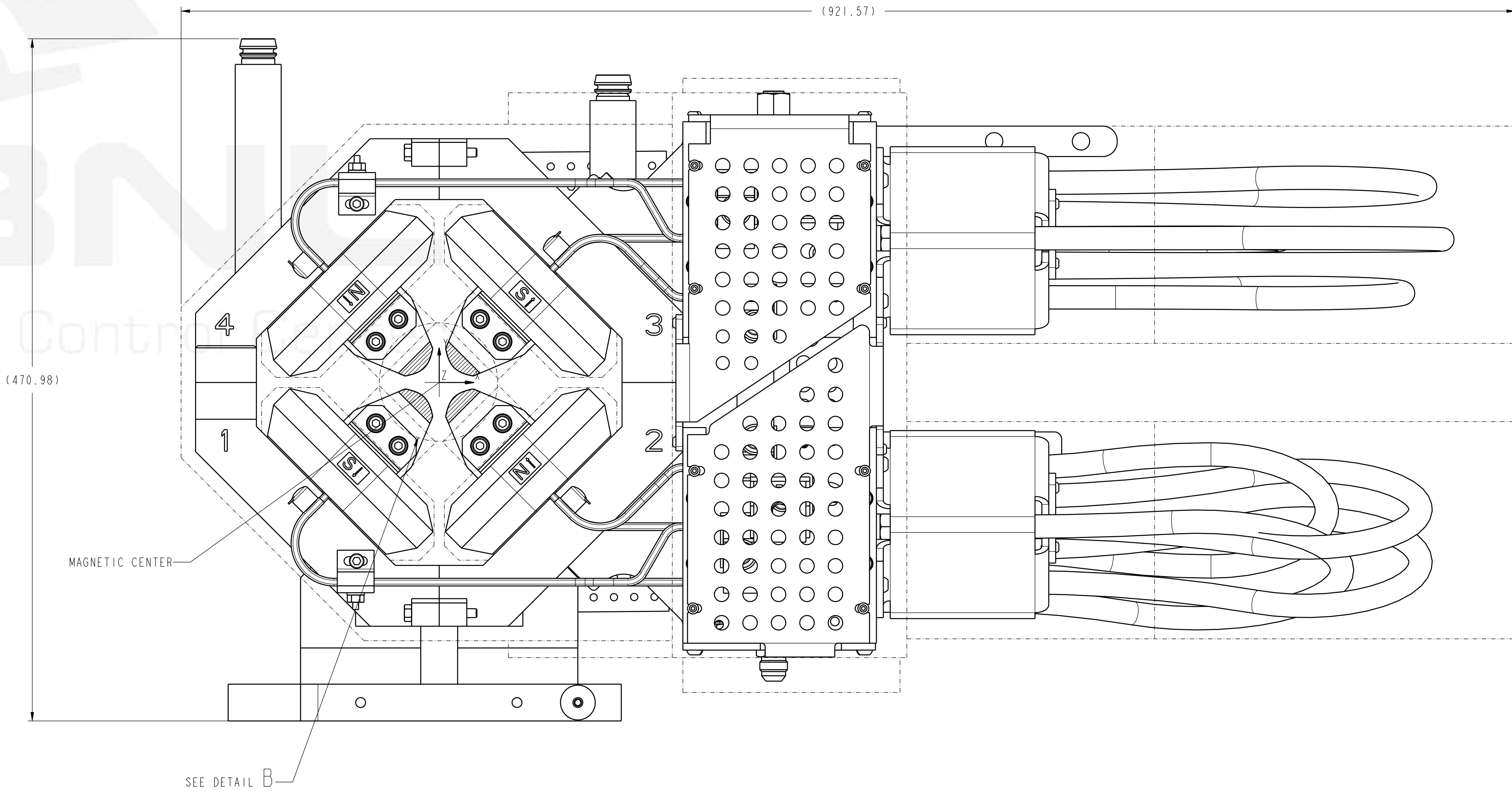
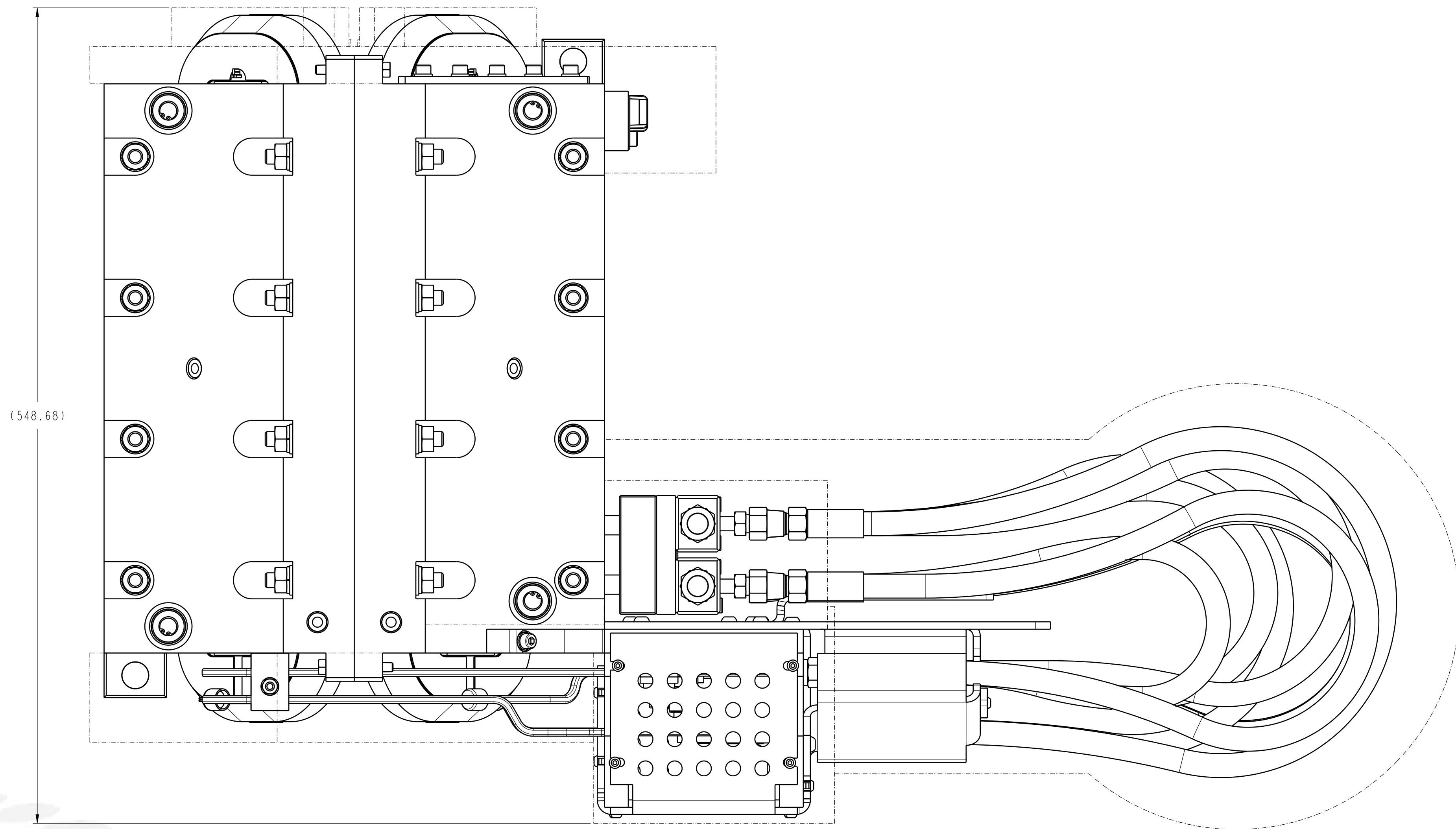
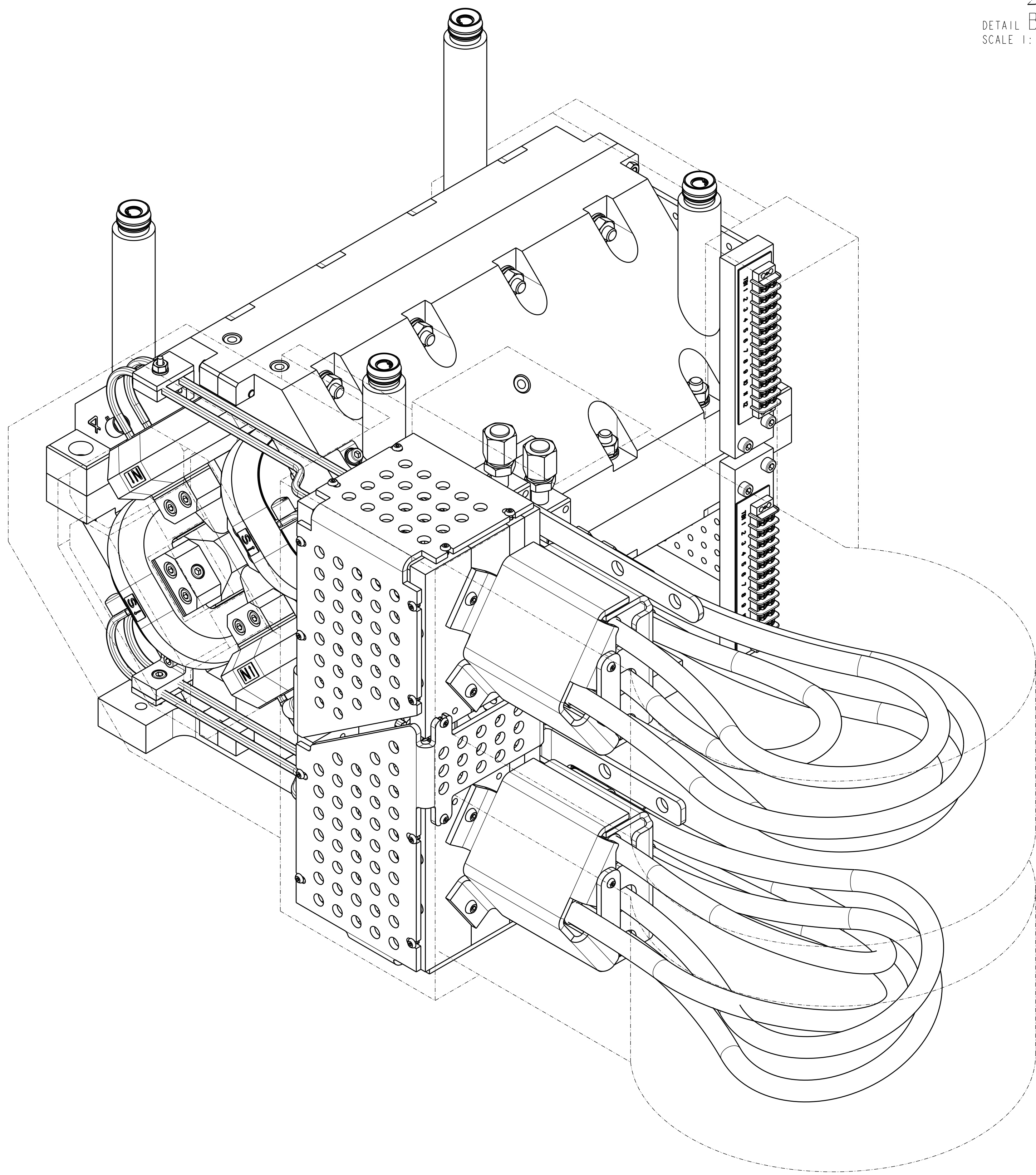
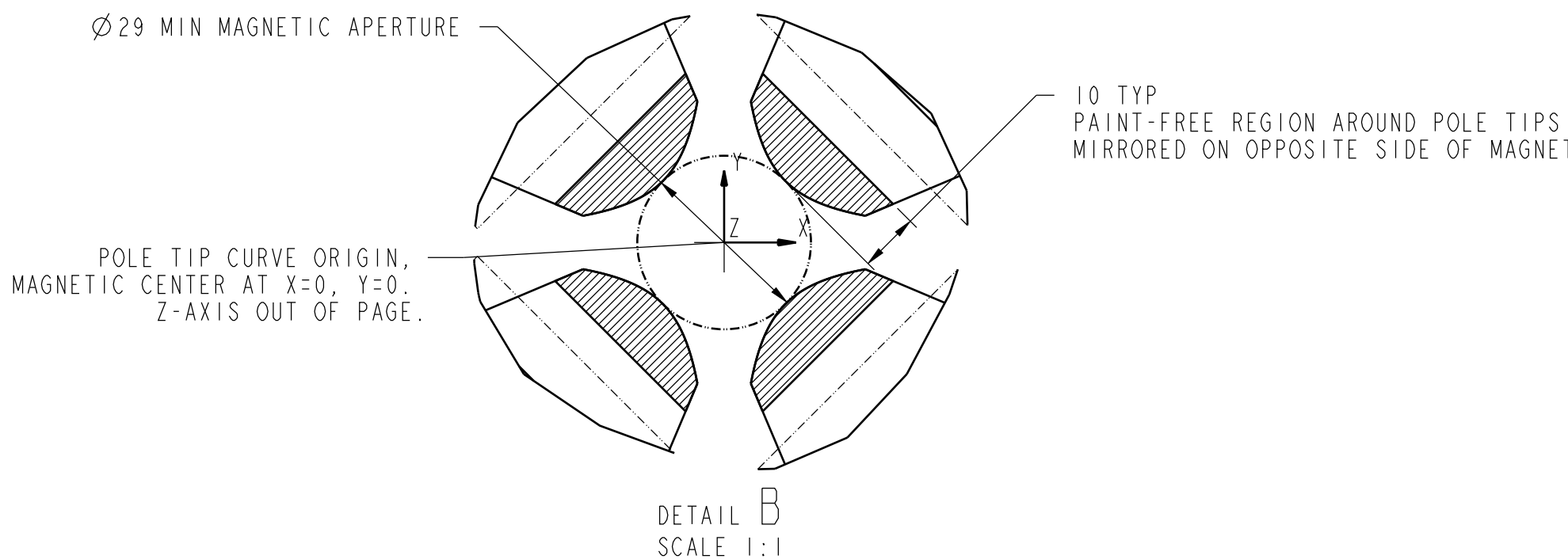
ESD = ENGINEERING SPECIFICATION DOCUMENT

LBNL = LAWRENCE BERKELEY NATIONAL LABORATORY

LCW = LOW-CONDUCTIVITY WATER

TQDB-B = DE-FOCUSING QUADRUPOLE TYPE B, CONFIGURATION B

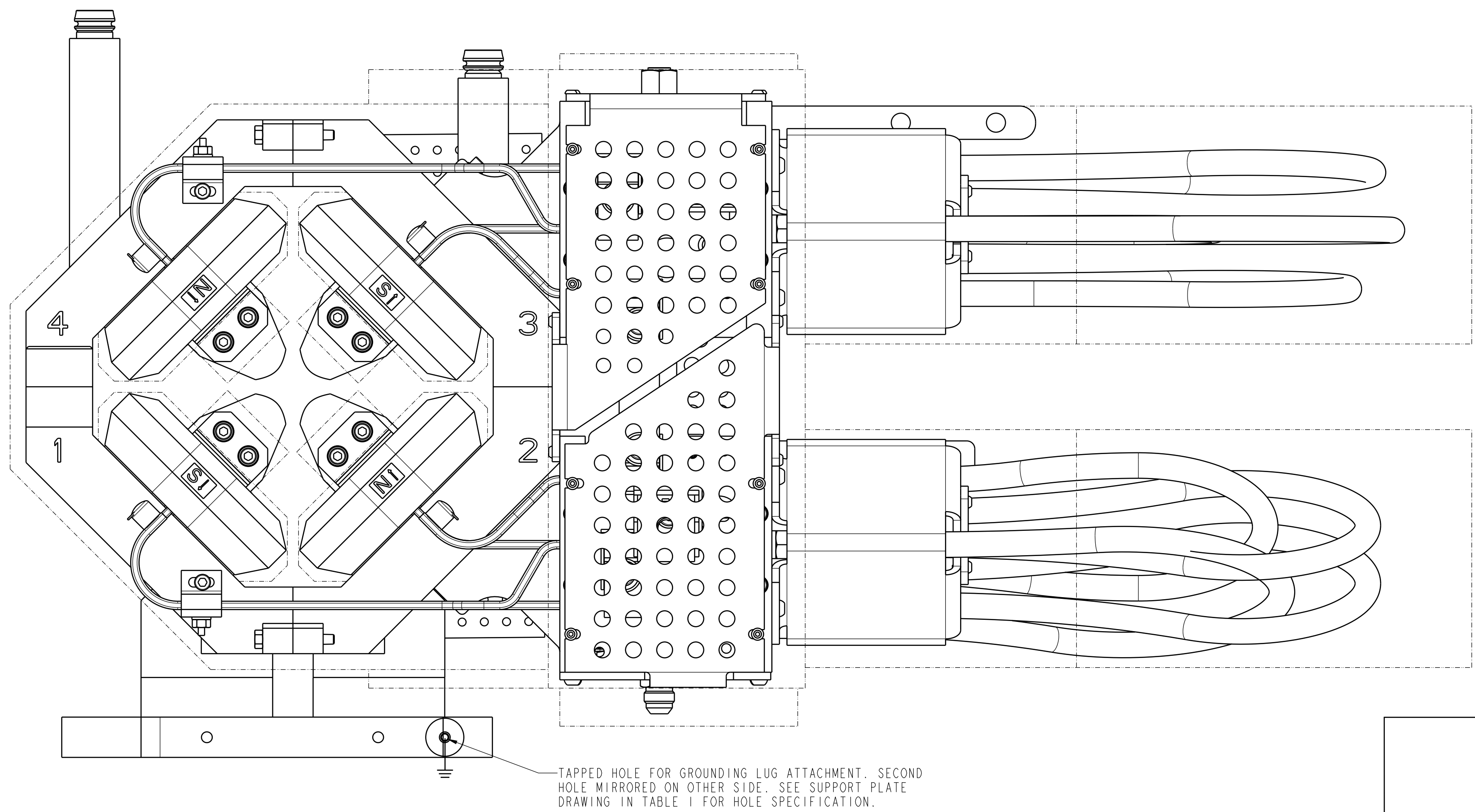
TQDB-B MASTER DRAWING



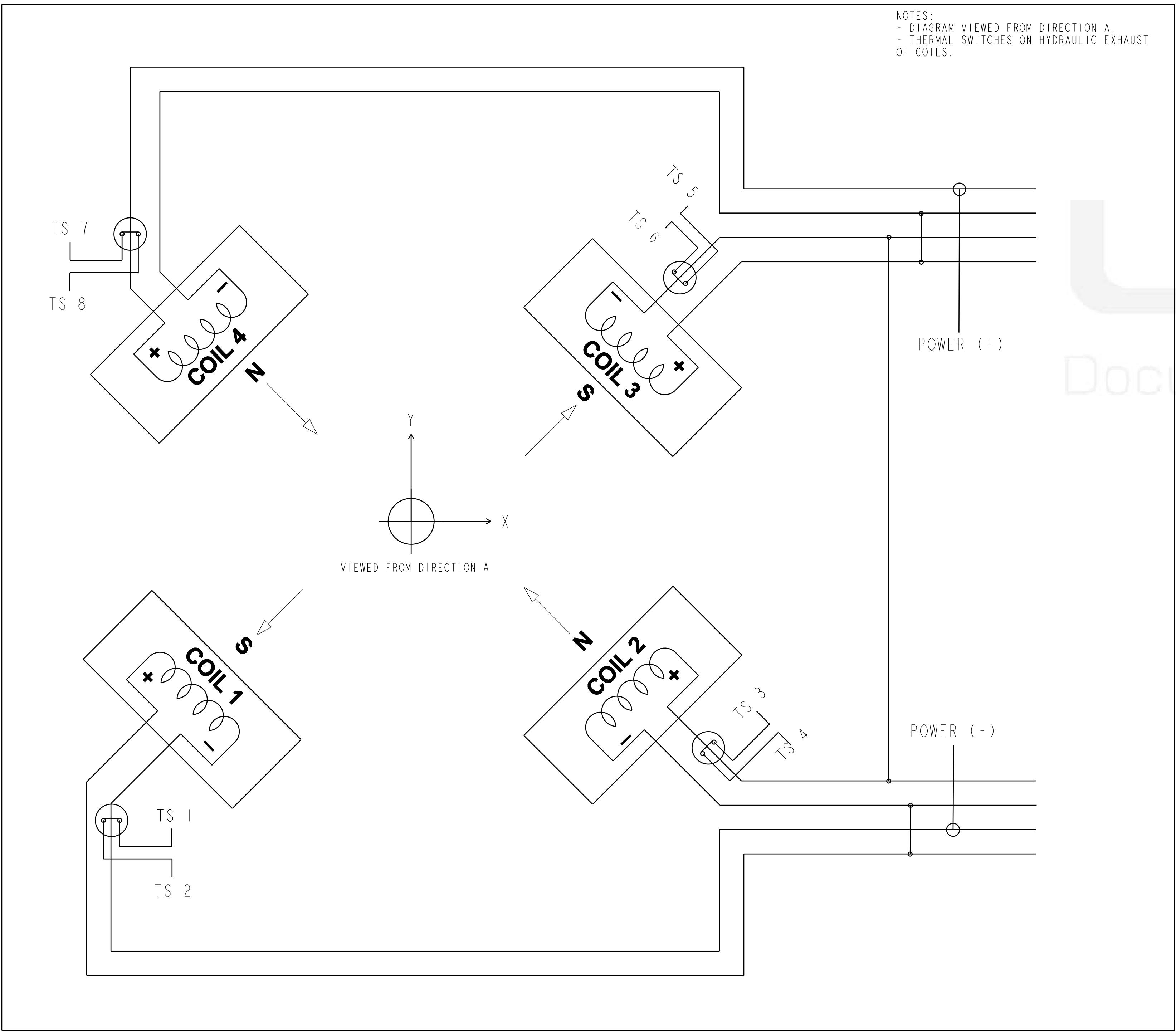
TQDB-B DRAWING TREE	
DRAWING DESCRIPTION	DRAWING NUMBER
BTA QUAD COMMON FAMILY SPACECLAIM INTERFACE DRAWING	AL-1405-0939
YOKE PRE-ASSY, TQFB/TQDB-B	AL-1424-1531
BASEPLATE, TQFB/TQDB-B	AL-1424-1529

CHANGE DESCRIPTION (SEE LBNL PDM FOR REV HISTORY)		UNLESS OTHERWISE SPECIFIED		PROJECT NAME		ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY UNIVERSITY OF CALIFORNIA	
BASELINE RELEASE		ESTIMATED MASS 246.863 KG		ADVANCED LIGHT SOURCE		ALS-U - BOOSTER TO ACCUMULATOR TRANSFER LINE	
AUTHOR Saezari, Sultan		TOLERANCE X: ±0.1, Y: ±0.1, Z: ±0.05		DRAWING REF DOC EG-1000-0923		MAGNETS - GENERAL	
CHECKED BY mmorden		FRACTIONS: 1/16, 1/32, 1/64		DRAWING UNITS mm-kg-s		TQDB-B MAGNET ASSY	
CHECKED AT Apr 16 2021 10:58:48 AM PDT		ANGLES: ±1°		SCALE 1:2		CATEGORY CODE AL7210	
RELEASED BY CASwenson		MACH. SURFS: 3.2um ✓ or better		THIRD ANGLE		LIFECYCLE STATE Released	
RELEASED AT Apr 21 2021 9:51:20 AM PDT		REFERENCE - THREADS ARE CLASS G or H - BREAK EDGES 0.5 MAX, ON MACHINED WORK - REMOVE BUBBLES, WELD SPLATTER & LOOSE SCALE		SHEET SIZE E		ITEM NUMBER AL-1424-4278	
THIS DRAWING IS THE PROPERTY OF ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY (LBNL) AND ANYTHING PRODUCED FROM THESE DRAWINGS IS SUBJECT TO LBNL'S INTELLECTUAL PROPERTY RIGHTS. THIS DRAWING IS LOANED ON A CONFIDENTIAL BASIS SUBJECT TO RETURN ON DEMAND AND NOTHING HEREIN MAY BE REPRODUCED, USED OR DISCLOSED IN ANY MANNER OR PART WITHOUT PRIOR WRITTEN PERMISSION OF LBNL.		SHEET 1 OF 2		REV 1		REV 1	

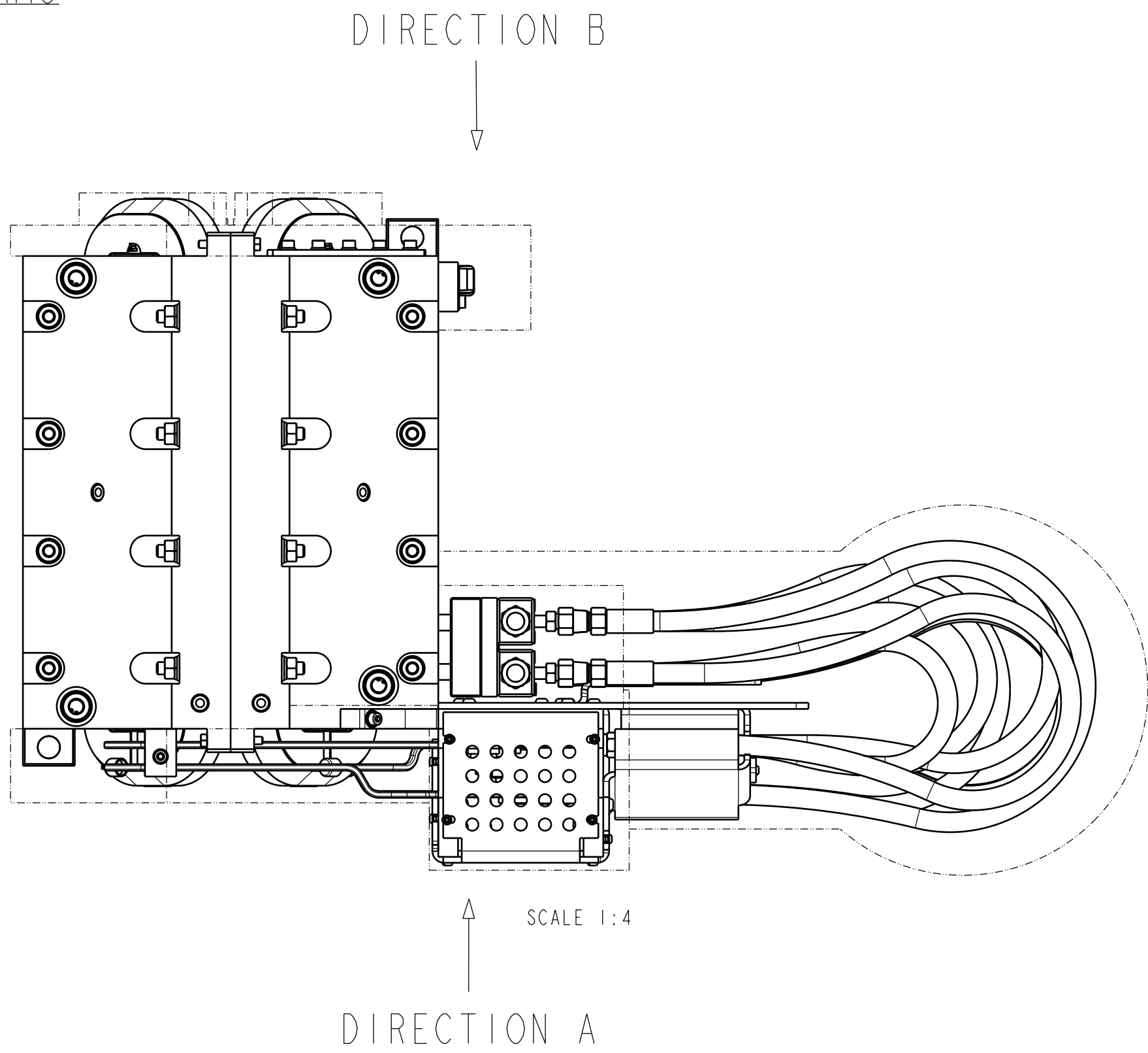
ELECTRICAL CIRCUIT DIAGRAMS



MAIN COIL ELECTRIC CIRCUIT CONNECTION DIAGRAM



NOTES:
- DIAGRAM VIEWED FROM DIRECTION A.
- THERMAL SWITCHES ON HYDRAULIC EXHAUST OF COILS.



CORRECTOR COIL AND THERMAL SWITCH ELECTRICAL CIRCUIT CONNECTION DIAGRAM

