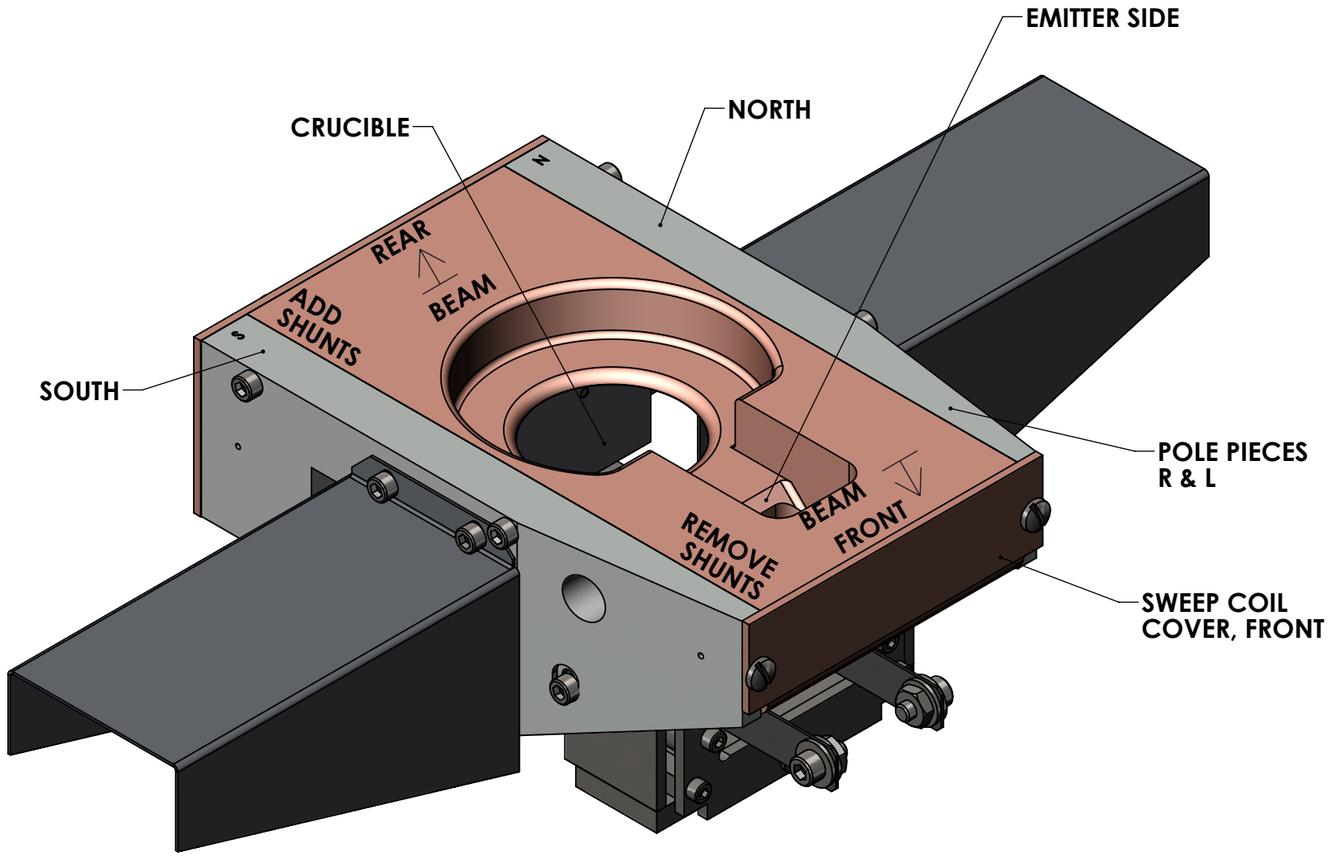

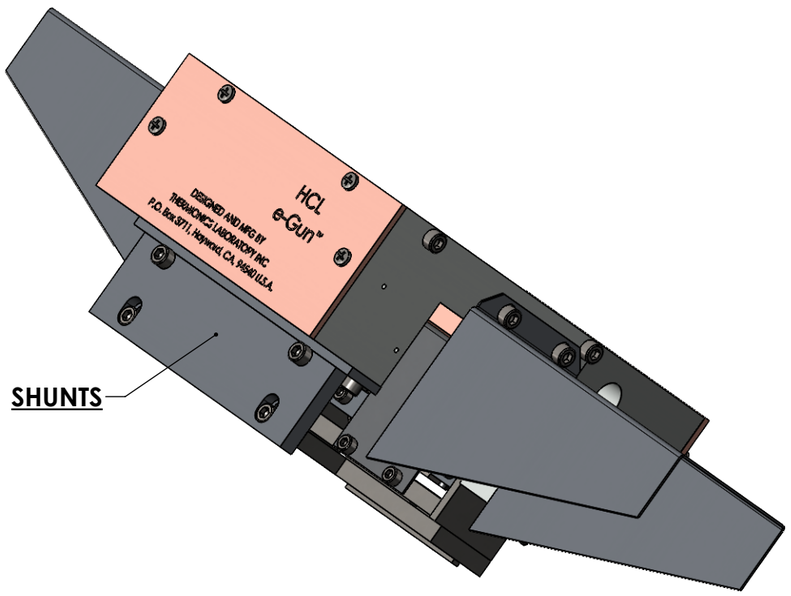

6 kW & 10 kW HCL e-GUN ASSEMBLY SHUNTS ADJUSTMENT

IF BEAM IS AWAY FROM THE CENTER OF THE CRUCIBLE AND IT IS TOWARD THE EMITTER SIDE, IT MEANS THAT THE MAGNETIC IS TOO STRONG. BY ADDING A SHUNT EITHER TOP OR BOTTOM SIDE OF THE SWEEP COIL COVER, IT WILL WEAKEN THE MAGNETIC FIELD AND IT WILL MOVE THE BEAM TOWARD THE CENTER. VERY IMPORTANT THAT THE SHUNTS MUST TOTALLY TOUCH THE RIGHT AND LEFT POLE PIECES FOR THE SHUNTS TO FUNCTION PROPERLY.

REF. WITH ONE SHUNT 112161-XX ADDED.

a) -03 .03" THICK WILL WEAKEN THE MAGNETIC FIELD APPROX. 5 GAUSS. IT WILL MOVE THE BEAM BY ABOUT .05 OF AN INCH.
b) -01 .06" THICK WILL WEAKEN THE MAGNETIC FIELD APPROX. 10 GAUSS. IT WILL MOVE THE BEAM BY ABOUT .10 OF AN INCH.
c) -02 .12 THICK WILL WEAKEN THE MAGNETIC FIELD APPROX. 15 TO 20 GAUSS. IT WILL MOVE THE BEAM BY ABOUT .15 OF AN INCH.

NOTE: ALL SHUNTS ARE NICKEL PLATED AND OF LOW CARBON MATERIAL.

PROPRIETARY AND CONFIDENTIAL
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DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ± N/A
ANGULAR: MACH ± BEND ± .5°
ONE PLACE DECIMAL ±.1
TWO PLACE DECIMAL ±.01
THREE PLACE DECIMAL ±.005
SURFACE FINISH 63 R.M.S.

FINISH:

DO NOT SCALE DRAWING | REVISION

thermionics laboratory inc.
3118 Depot Rd., Hayward Ca. 94545

	NAME	SIGNATURE	DATE		USED ON	NEXT ASSY.
DESIGN/ENG.						GEN. USE
CHK'D						
APPV'D						
MFG						
Q.A				MATERIAL:		

TITLE:
6 kW & 10 kW HCL e-GUN ASSEMBLY, SHUNTS ADJUSTMENT

DWG NO. 113973 | A3

WEIGHT: | SCALE:1:1 | SHEET 1 OF 1