LLO MC1 Cabling Guide

3/16/2012

References – Parts List

Cabling for testing:

Description	Drawing Number	Quantity
Quadrapuss Cable	D1000234 – 60”	2
Quadrapuss Cable	D1000234 – 66”	1
Quadrapuss Cable	D1000234 – 78”	1
UHV Compatible Cable Clamp Assy	D0902462	as needed
Ag-Plated SHCS, 1/4–20 x 1	?	as needed
PEEK Cable Ties	111155	as needed

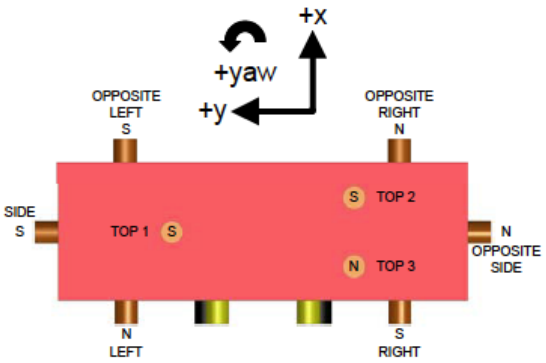
Cabling in chamber:

Description	Drawing Number	Quantity
UHV Compatible Cable Clamp Assy	D0902462	as needed
Ag-Plated SHCS, 1/4–20 x 1.25	?	as needed

References – E1100109-v1

HAM SUSPENSIONS

CONTROLS ARRANGEMENT



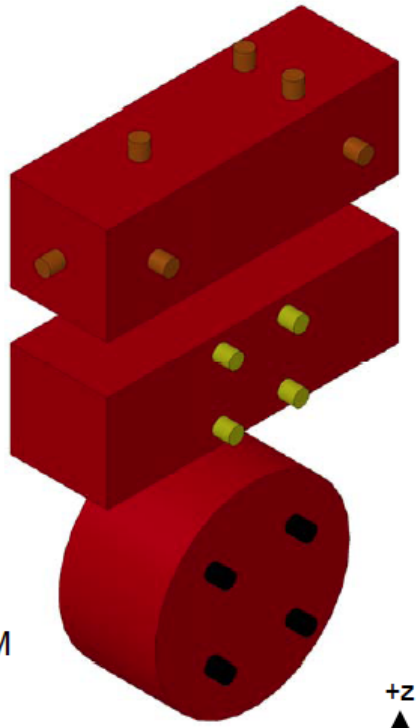
MAGNET KEY

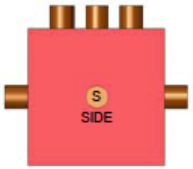
	HLTS	HSTS	OMC SUS
	NdFeB (NEO 35), 10mm X 10mm - BOSEM	NdFeB (NEO 35), 10mm X 5mm - BOSEM	NdFeB (NEO 35), 10mm X 10mm - BOSEM
	SmCo, 0.075" X 0.125" - AOSEM	SmCo, 0.075" X 0.125" - AOSEM	NOT APPLICABLE
	SmCo, 2mm X 0.5mm - AOSEM	SmCo, 2mm X 0.5mm - AOSEM	NOT APPLICABLE

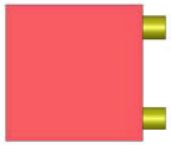
UPPER
(M1)

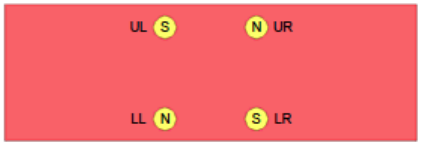
INT.
(M2)

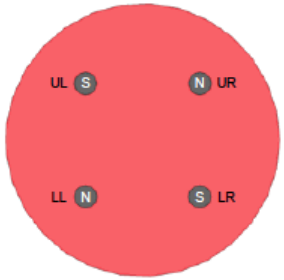
BOTTOM
(M3)

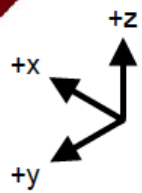


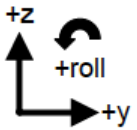


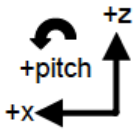


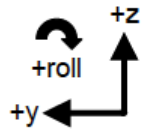




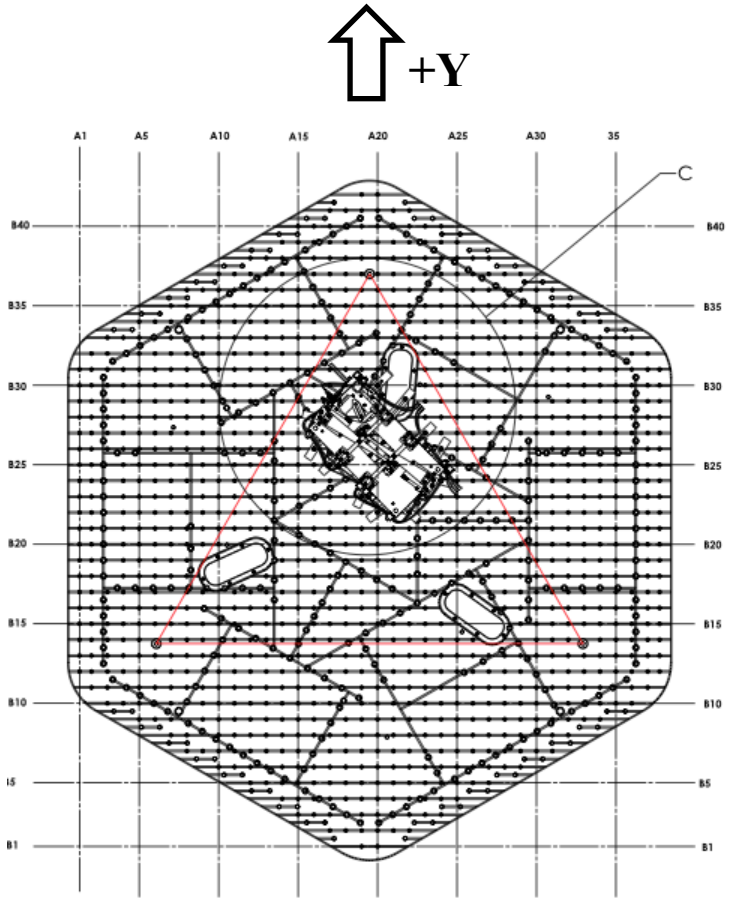




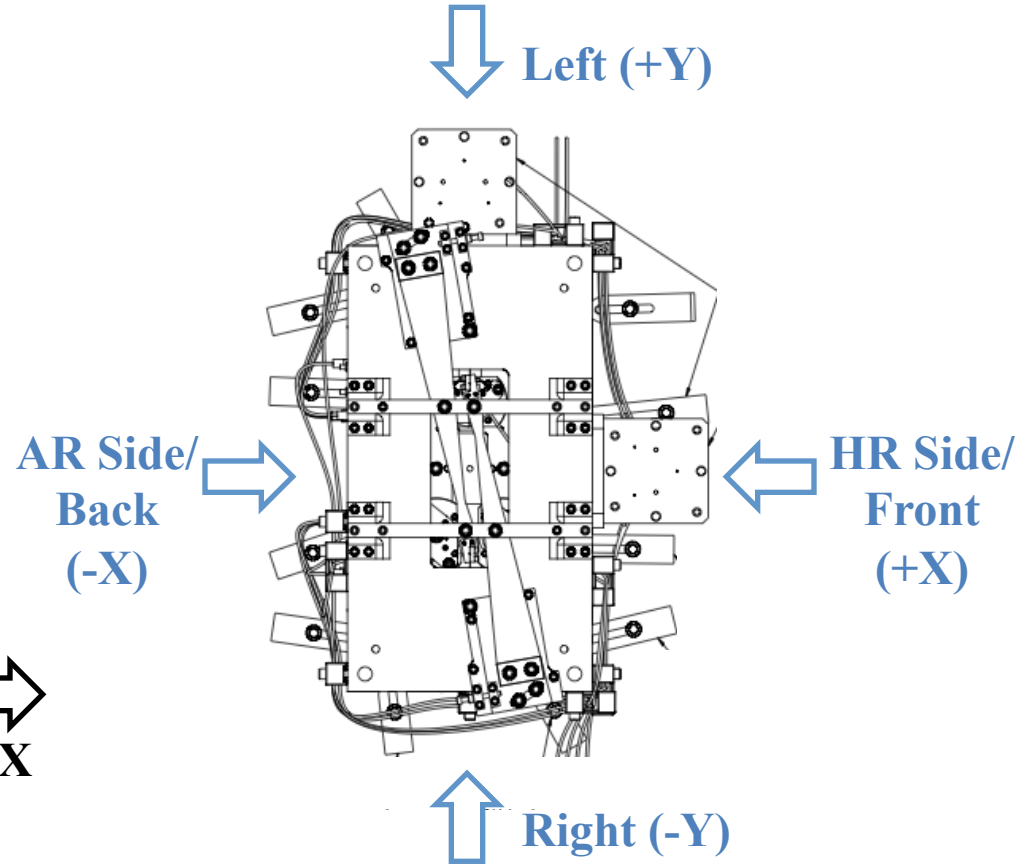




References – Naming Conventions

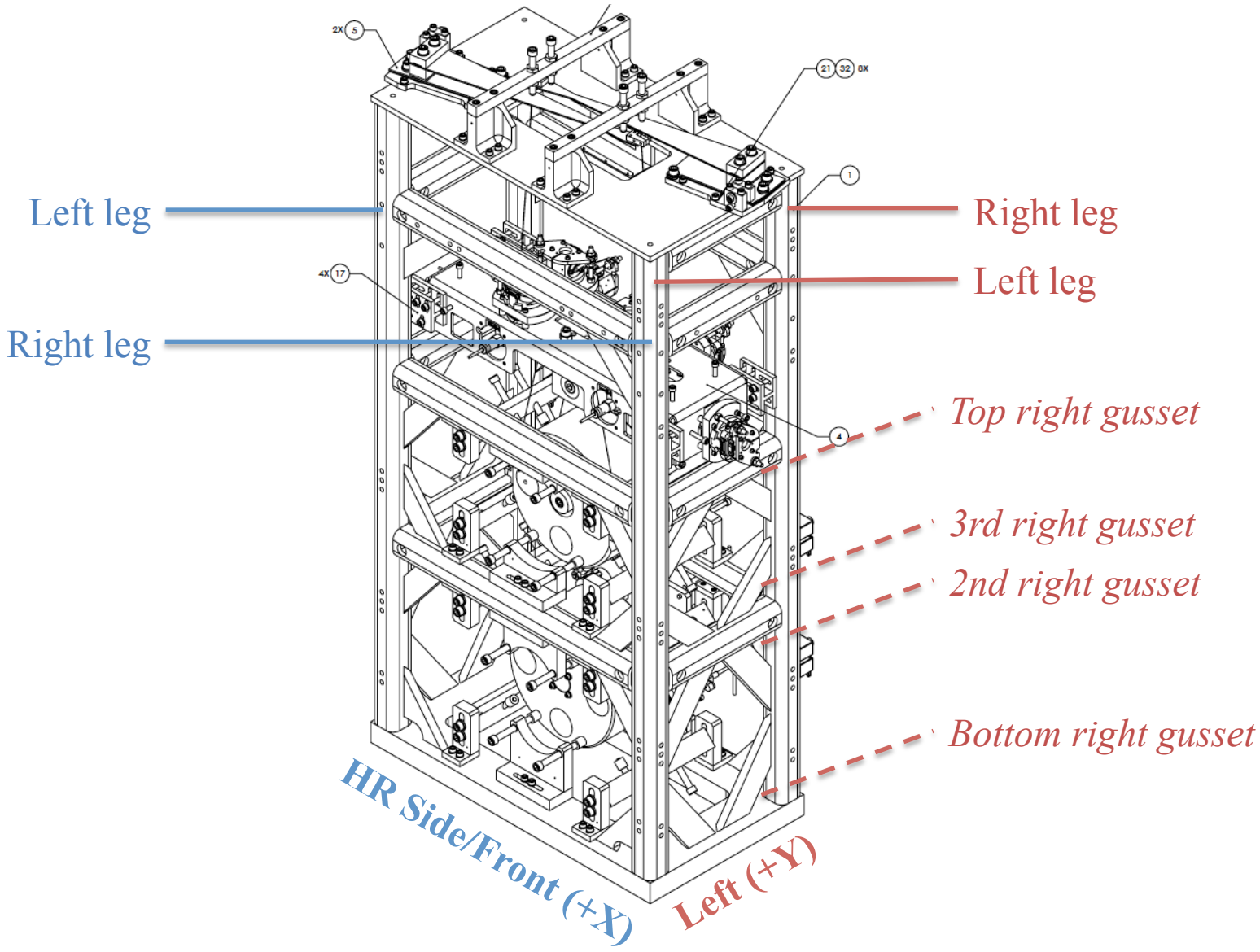


HAM2



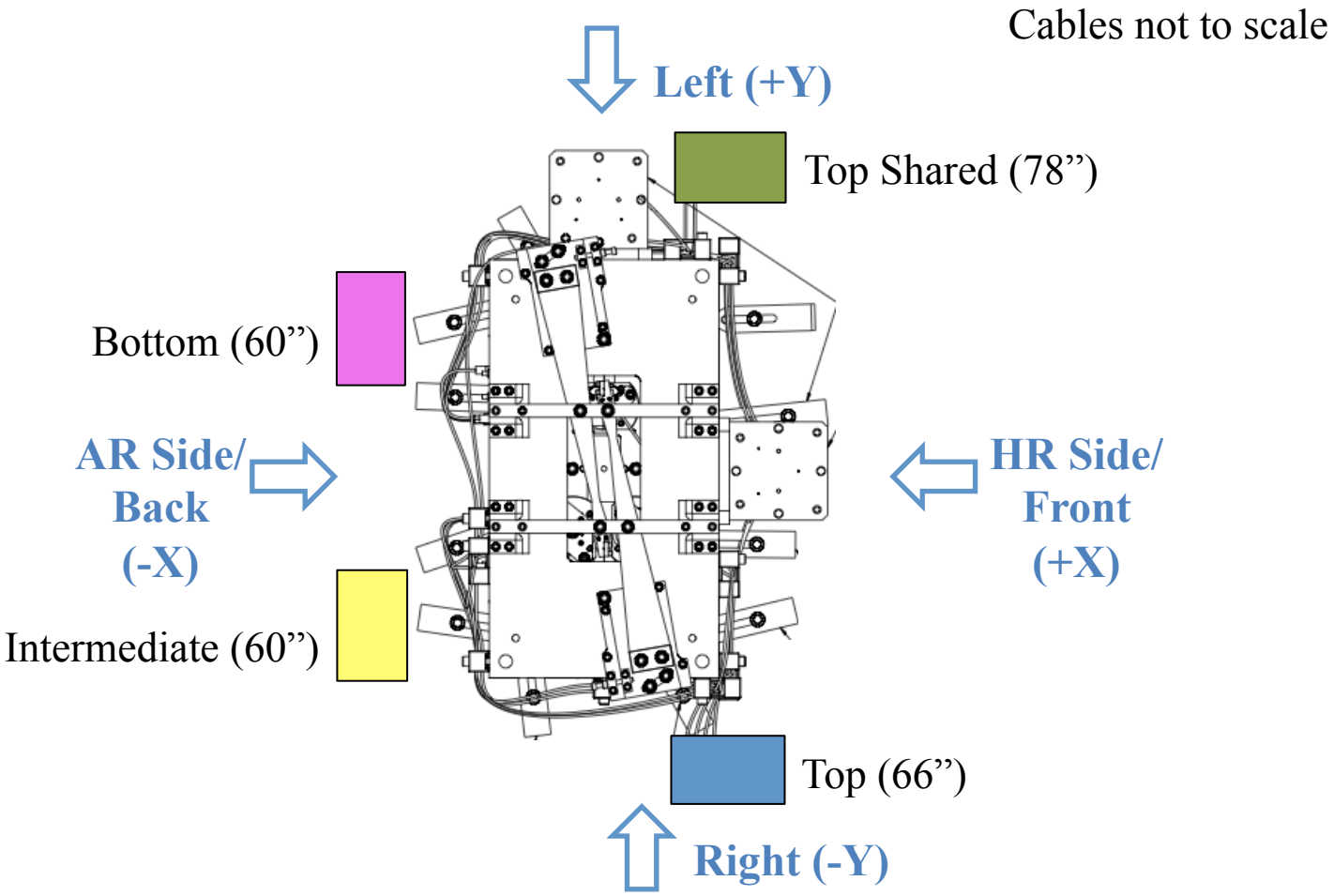
MC1

References – Naming Conventions

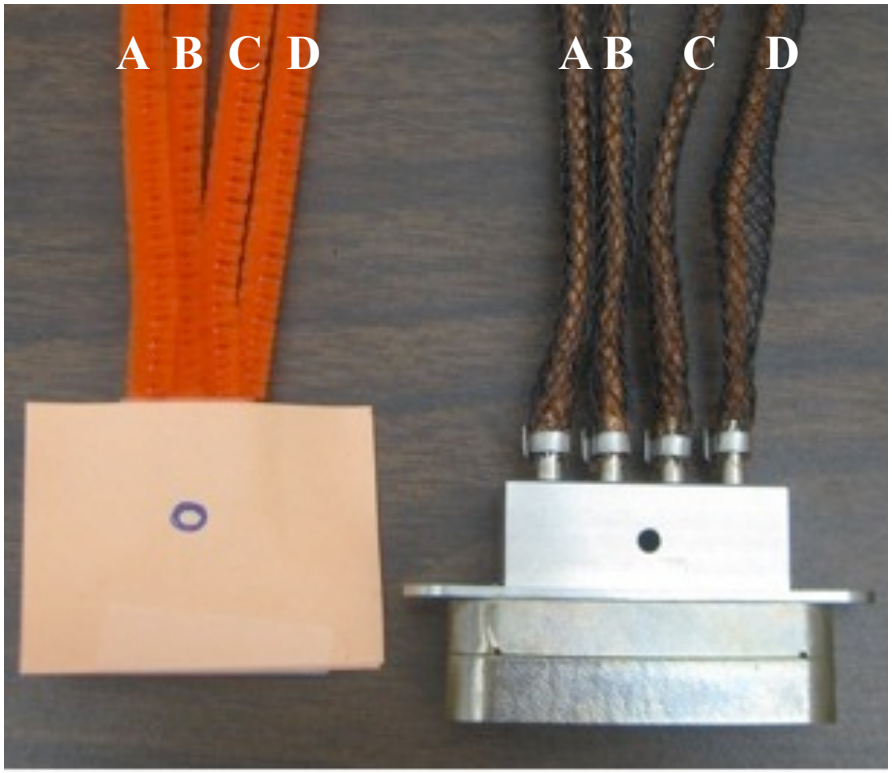


References – Cable Placement

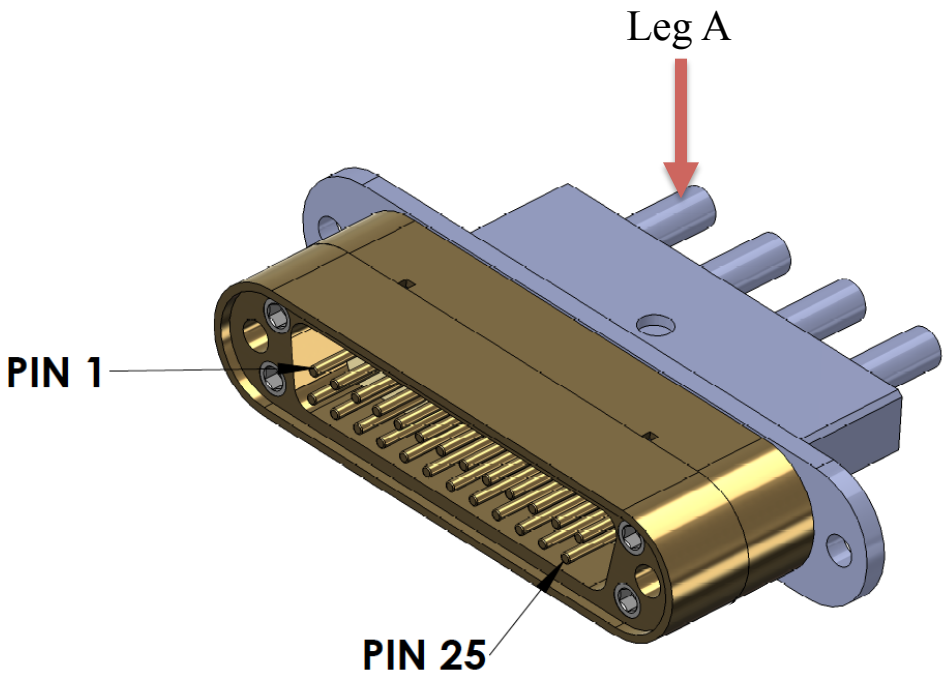
- Recommendation: clamp DB25 connector to the table before cabling in positions shown.



References – Quadrapuss Orientation



Model and actual quadrapuss



D1000234 drawing

Cabling for Testing

Top Shared Cable

1. Lay out top shared quadrapuss (D1000234 78”).

Newer quadrapusses will have their legs individually coiled before wrap, bag, and tag.

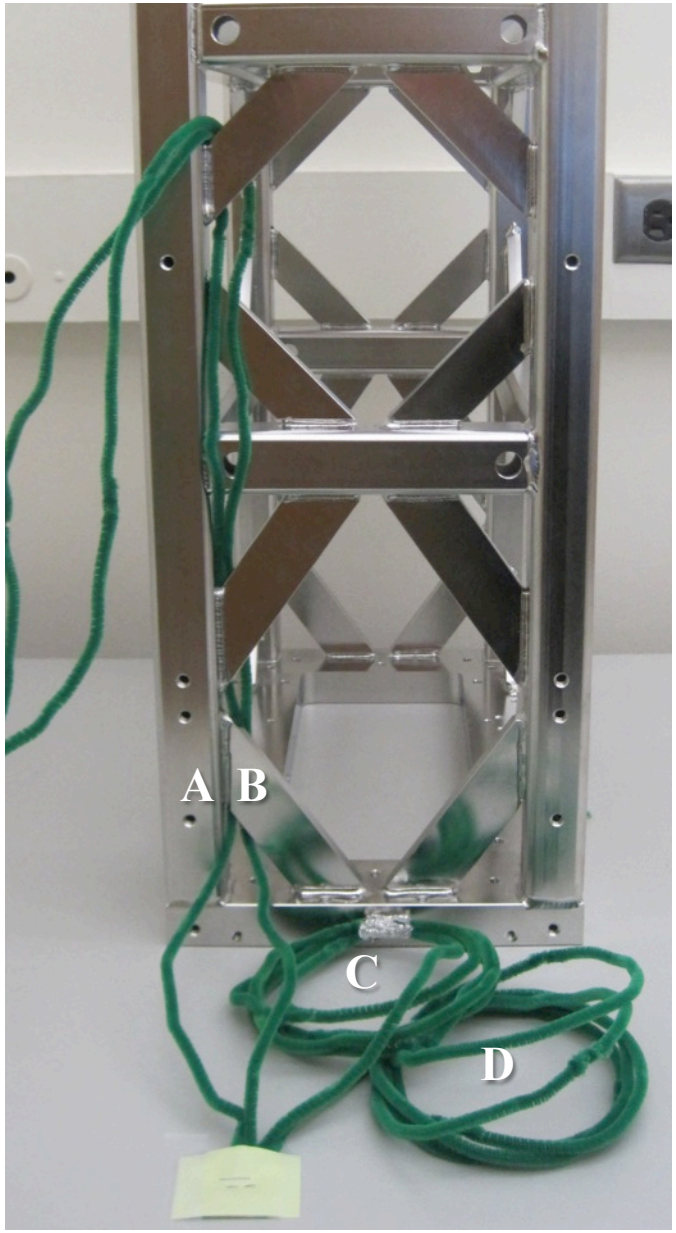
Green = Top Shared

Left (+Y)

Top Shared Cable

2. Lace legs A and B into the bottom left gusset, and out through the 2nd left gusset.

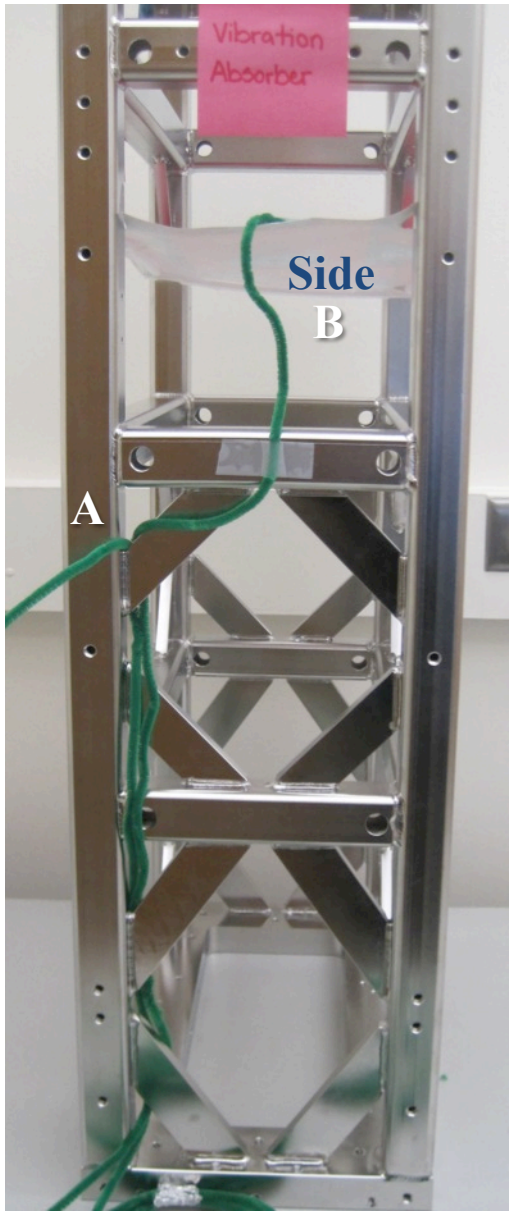
3. Wrap A and B over the bottom tube toward the SUS near M2, and lace out of the top left gusset.



Left (+Y)

Top Shared Cable

4. Connect B to the Side BOSEM. Gently pull taut by drawing excess length back toward the DB25 connector.

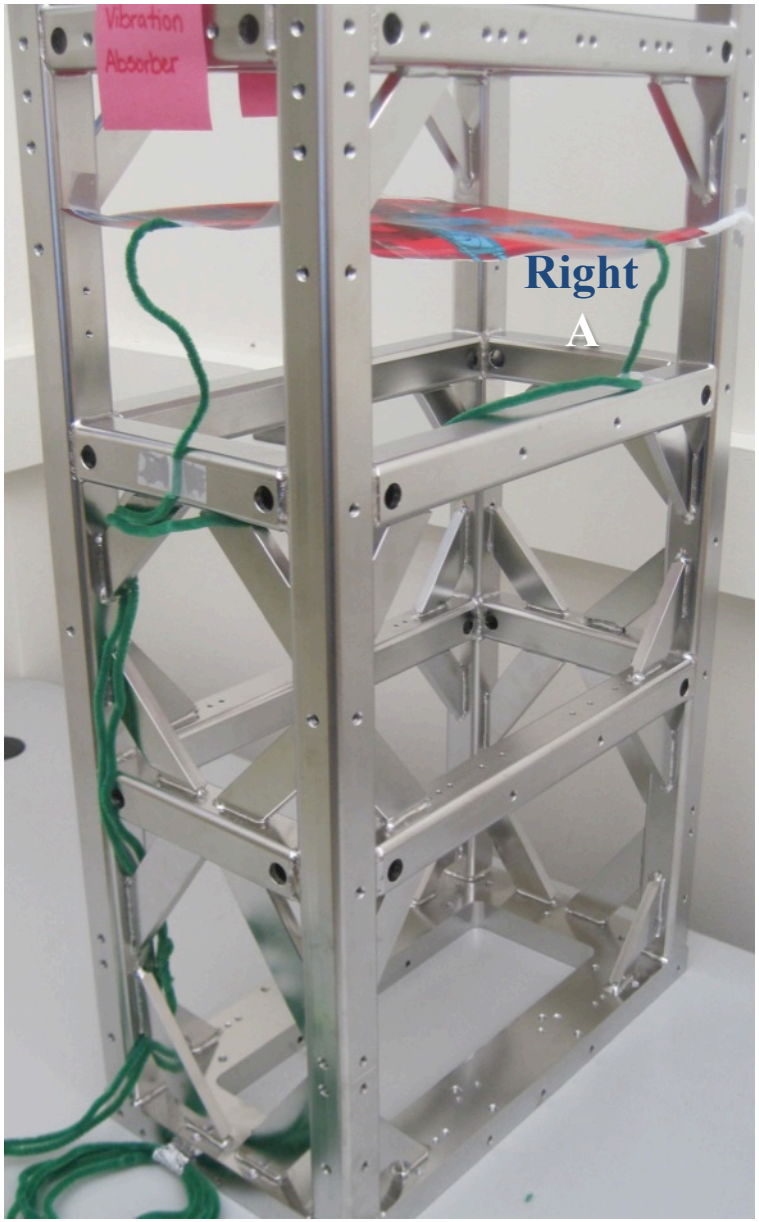


Left (+Y)

Top Shared Cable

5. On the **Left Side (+Y)**, lace A into the top right gusset and out of the **AR/Back Side (-X)** near M1.

6. Connect A to the Right BOSEM. Pull taut.



Iso Left (+Y) – Back (-X)

Top Cable

7. Lay out top quadrapuss (D1000234 66”).

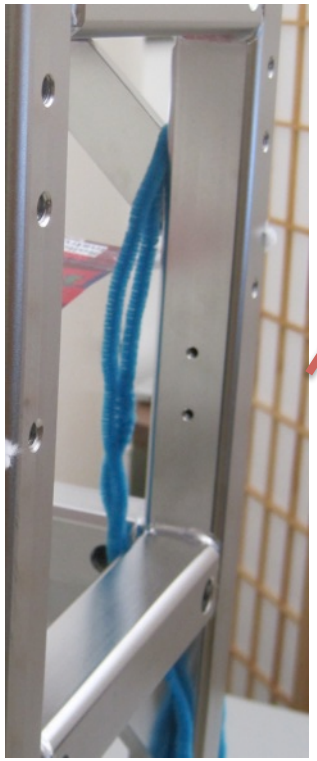
Blue = Top

Right (-Y)

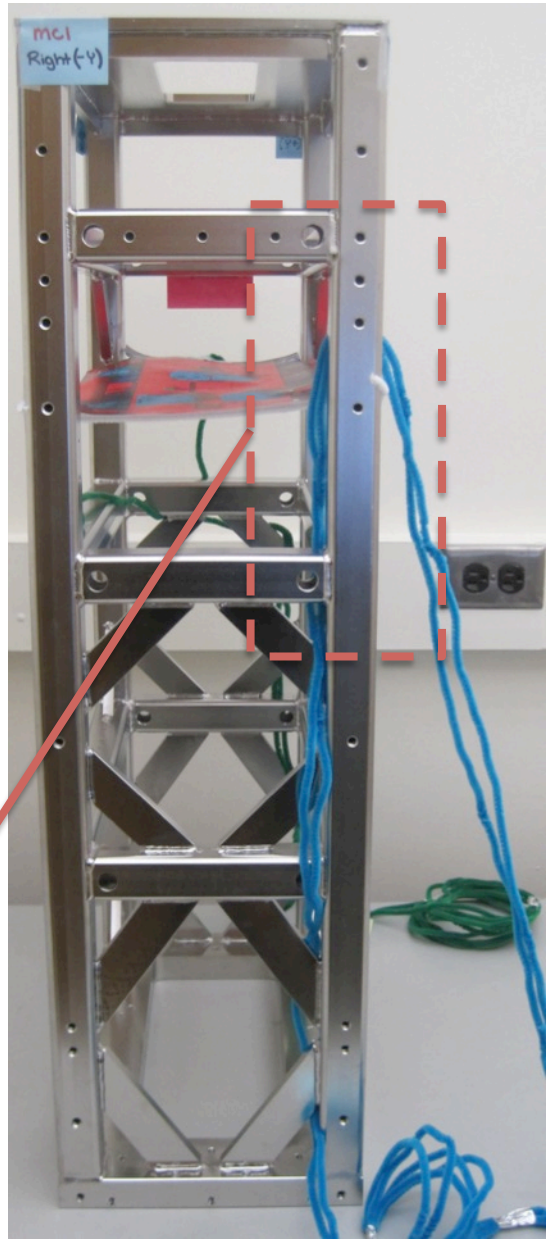
Top Cable

8. Lace A and B into the bottom right gusset, and out of the 2nd right gusset.

9. Lace A and B into the top right gusset, and out of the **AR Side/Back (-X)** using the top left gusset.



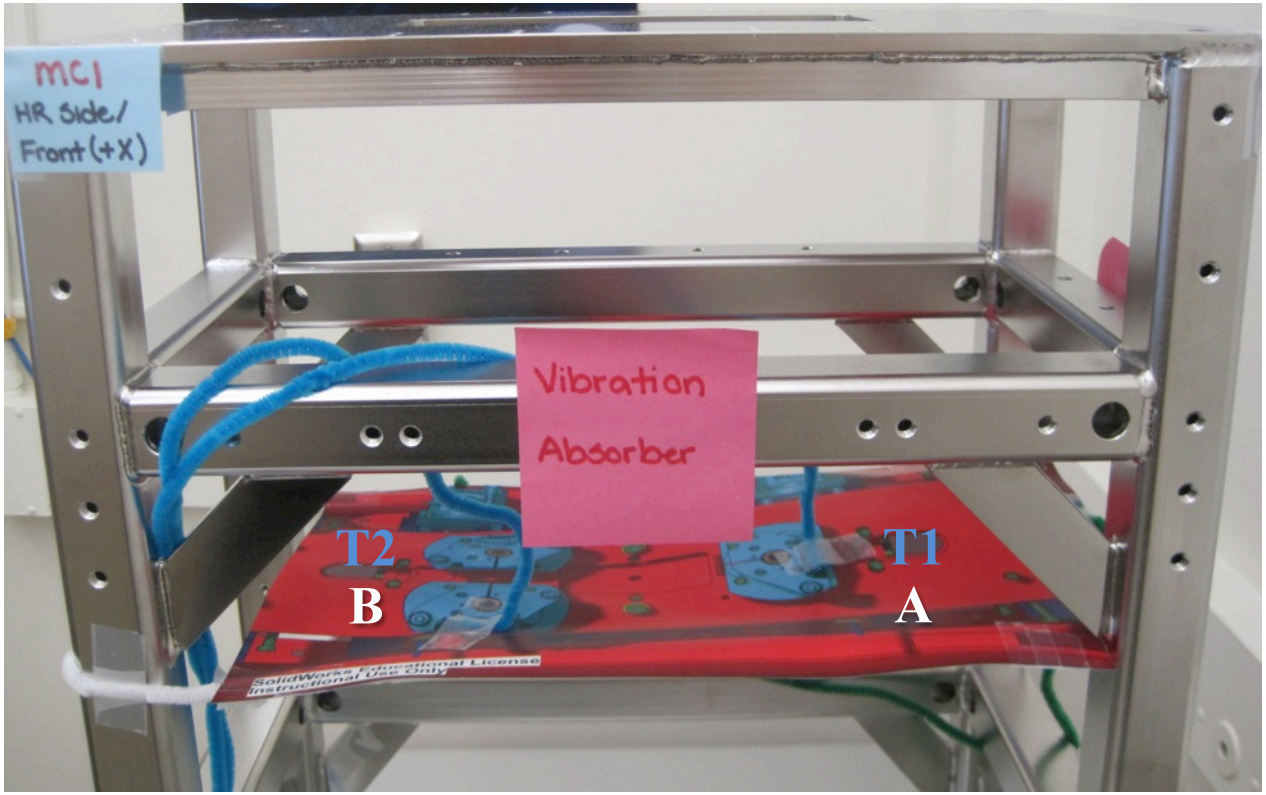
Inside View



Right (-Y)

Top Cable

10. Wrap A over top tube and connect to T1 BOSEM. Pull taut.
11. Wrap B over top tube and connect to T2 BOSEM. Pull taut.

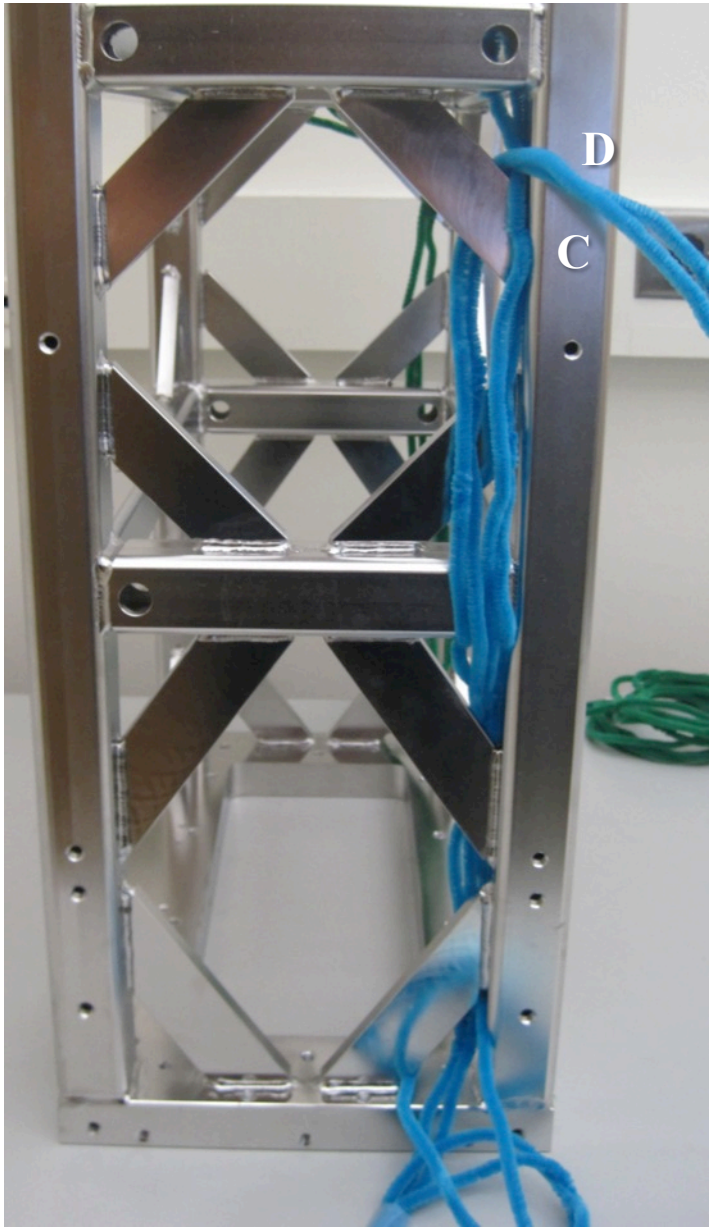


AR Side/Back (-X)

Top Cable

12. Lace C and D into the bottom right gusset and out of the 2nd right gusset.

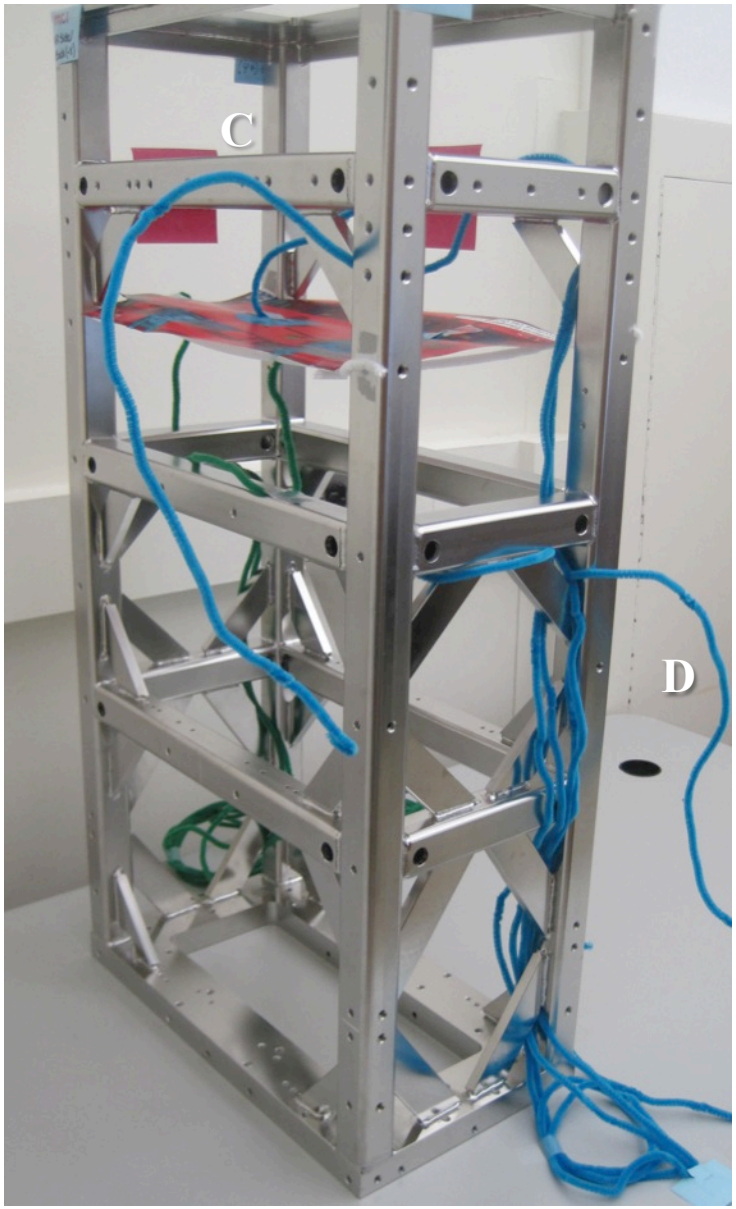
13. Wrap C and D over the bottom tube towards the SUS near M2, and lace out of the top right gusset.



Right (-Y)

Top Cable

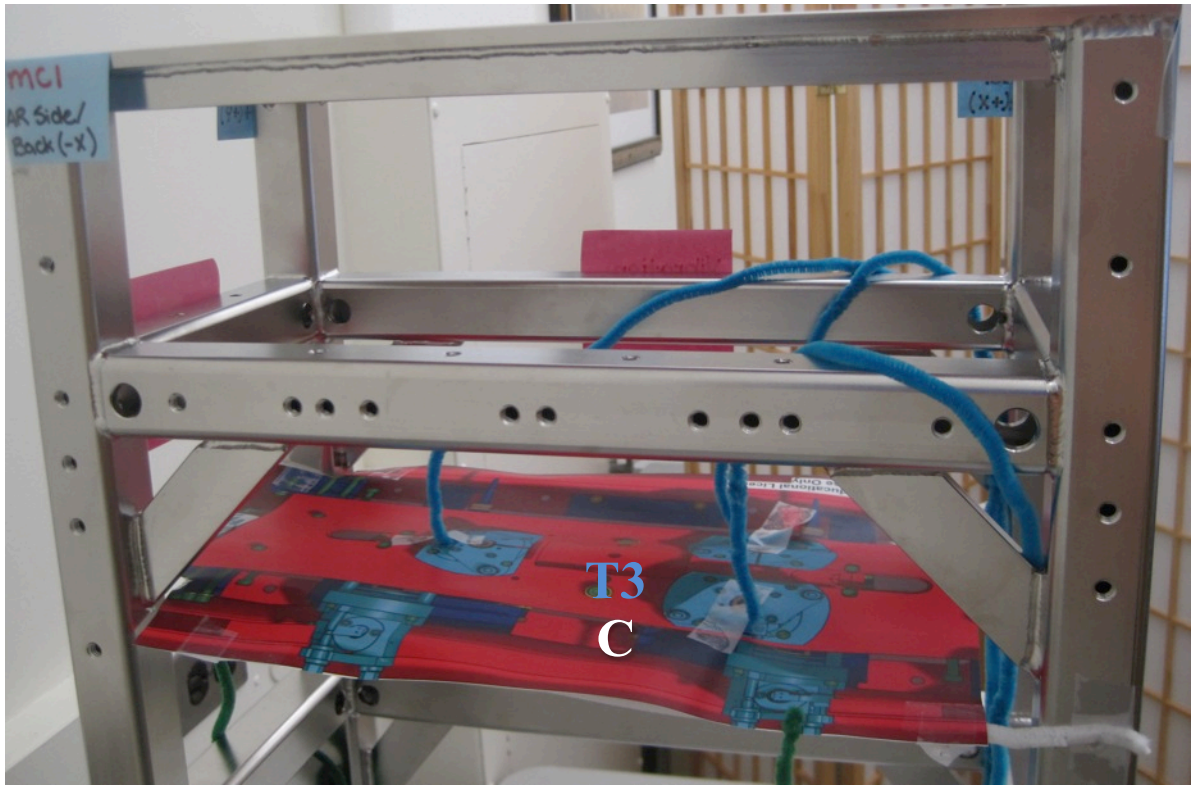
14. On the **Right Side (-Y)**, lace C into the top left gusset and out of the **Back (-X)** using the top right gusset.



Iso Back (-X) – Right (-Y)

Top Cable

15. Wrap C over the top tube and connect to T3 BOSEM. Pull taut.



AR Side/Back (-X)

Top Cable

16. On the **Right Side (-Y)**, lace D into the top left gusset and out of the **Back (-X)** near M1.

17. Connect D to the Left BOSEM. Pull taut.

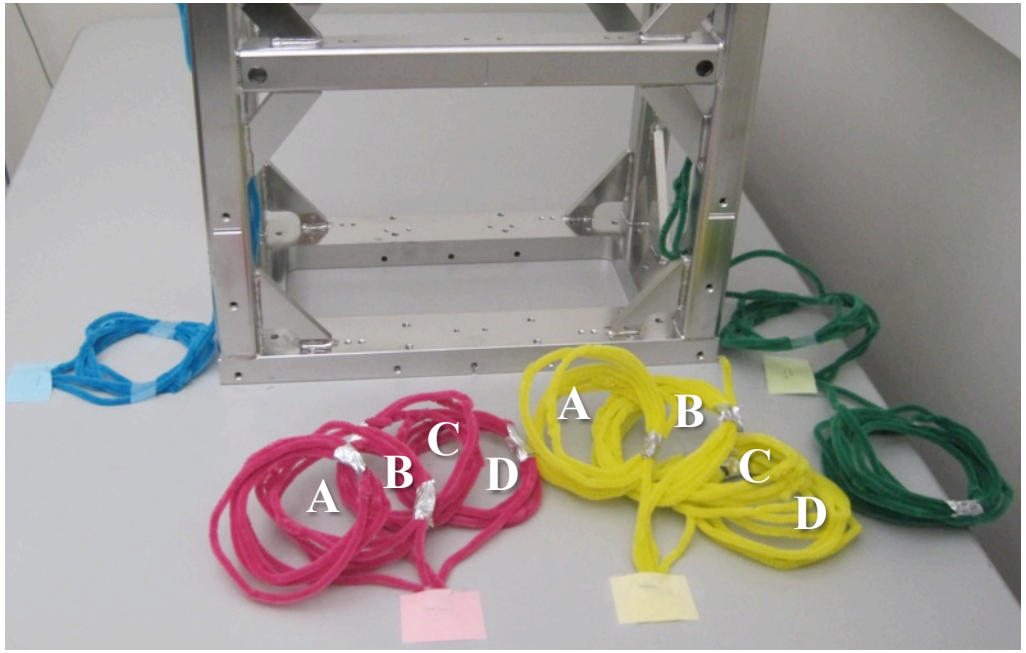
Iso Back (-X) – Right (-Y)

Bottom & Intermediate Cables

18. Lay out bottom (60”) and intermediate (60”) cables.

    Pink = Bottom

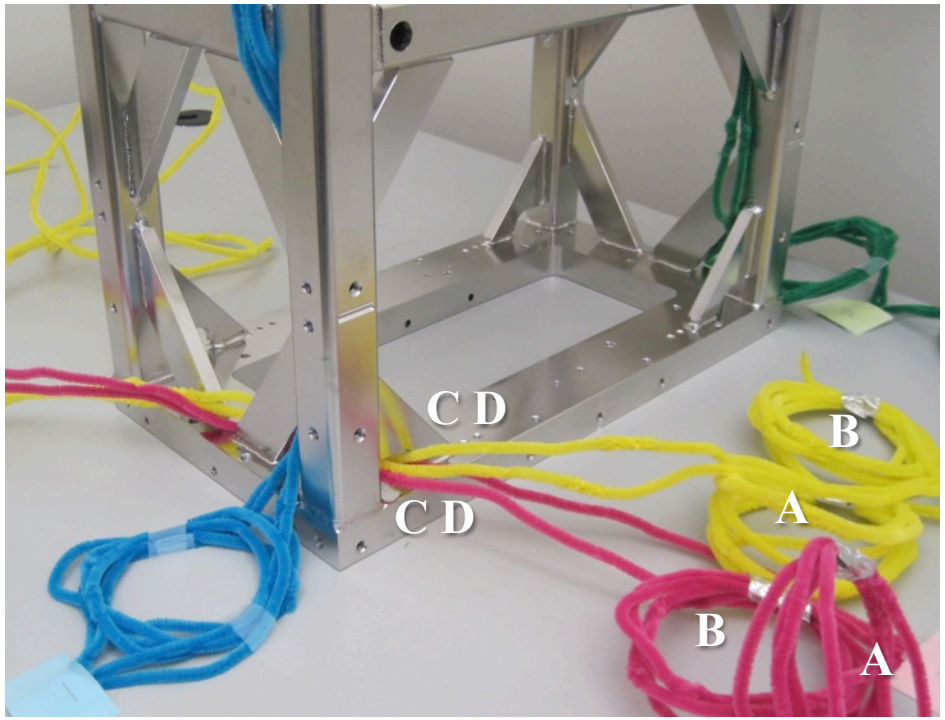
    Yellow = Intermediate



HR Side/Front (-X)

Bottom & Intermediate Cables

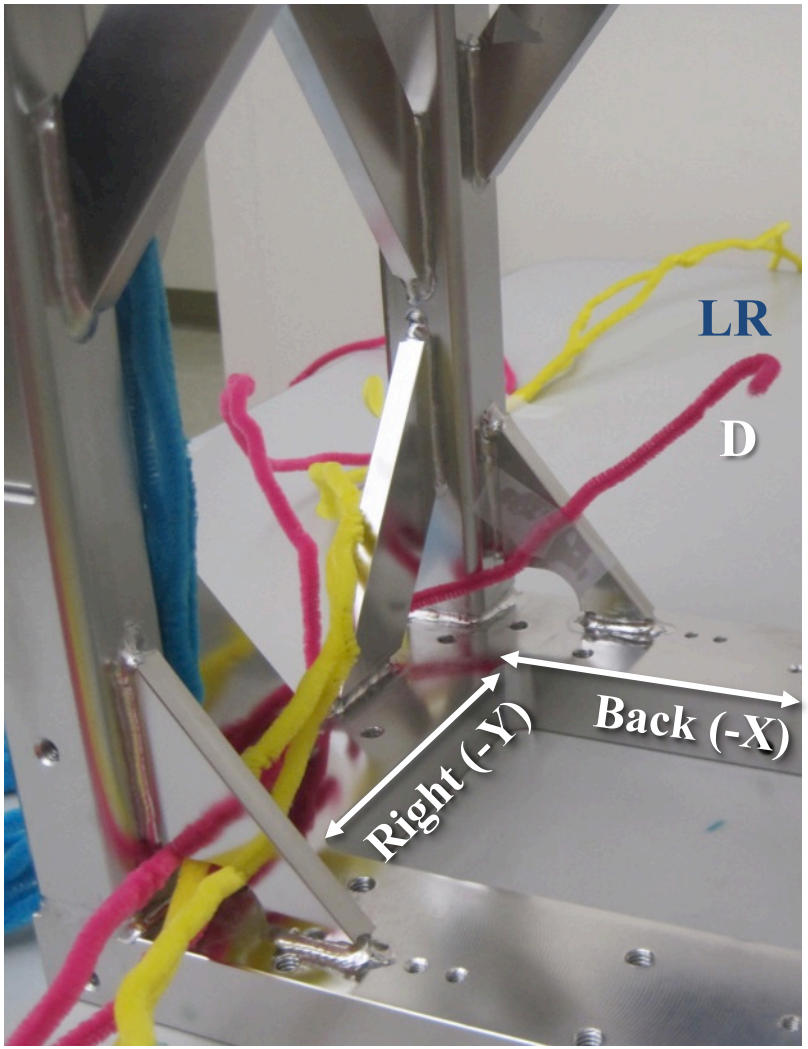
19. On the **Front Side (+X)**, lace C and D from both the bottom and intermediate cables into the bottom left gusset, and out of the **Right Side (-Y)** near M3.



Iso Front (+X) – Right (-Y)

Bottom Cable

20. On the **Right (-Y)**, lace D into the bottom left gusset, and connect to the Lower Right AOSEM. Pull taut.

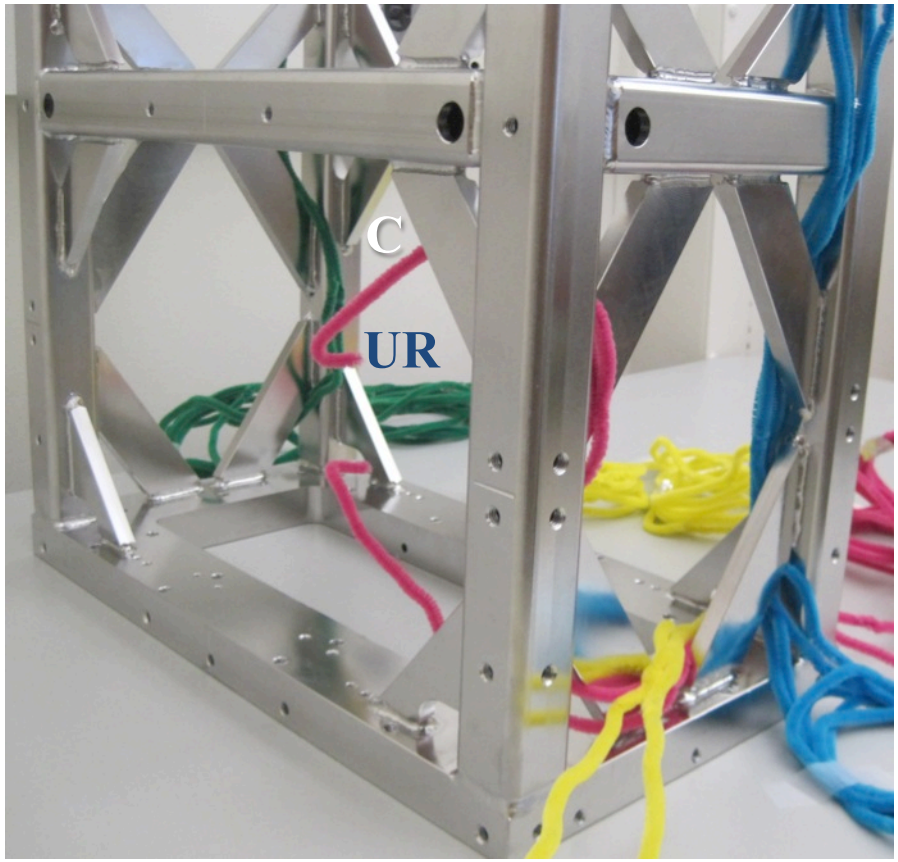


Inside View

Bottom Cable

21. On the **Right (-Y)**, lace C into the bottom left gusset, and out of the SUS near M3.

22. On the **Right (-Y)**, lace C into the 2nd left gusset, and connect to the Upper Right AOSEM. Pull taut.

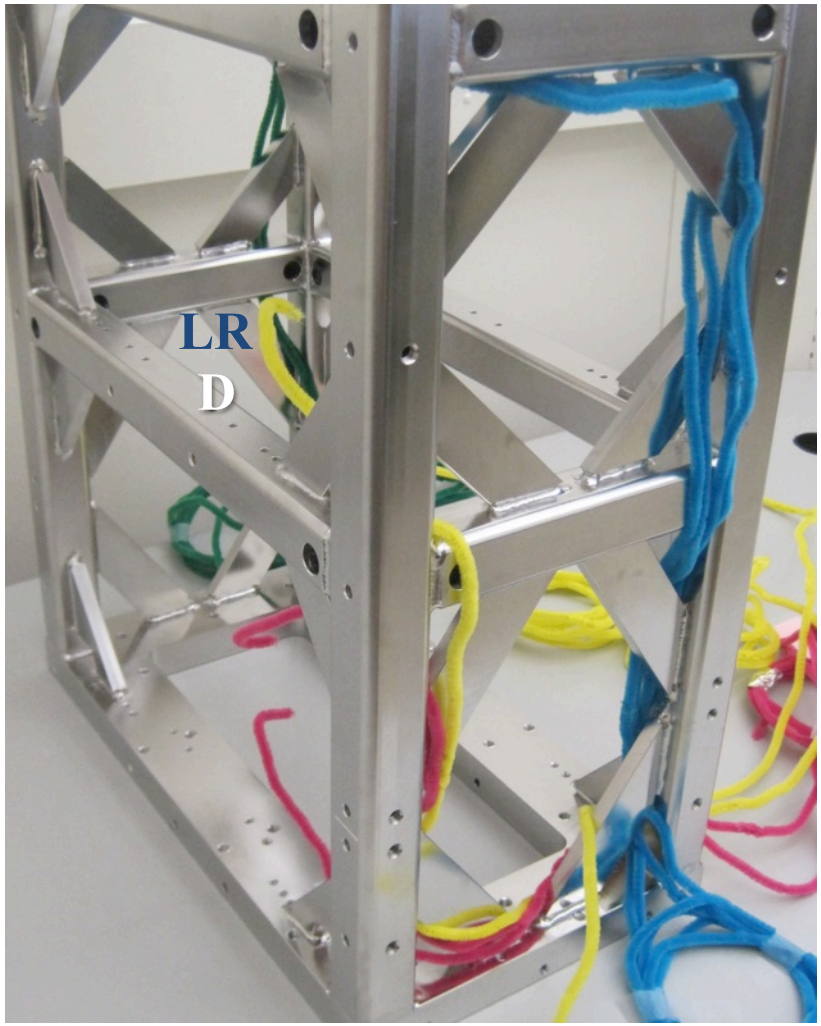


Iso Back (-X) – Right (-Y)

Intermediate Cable

23. On the **Right (-Y)**, lace D into the bottom left gusset, and out of the SUS near M3.

24. On the **Right (-Y)**, lace D into the 3rd left gusset, and connect to the Lower Right AOSEM. Pull taut.



Iso Back (-X) – Right (-Y)

Intermediate Cable

25. On the **Right (-Y)**, lace C into the bottom left gusset, and out of the SUS near M3.

26. Lace C into the 3rd left gusset, and out of the SUS near M2.

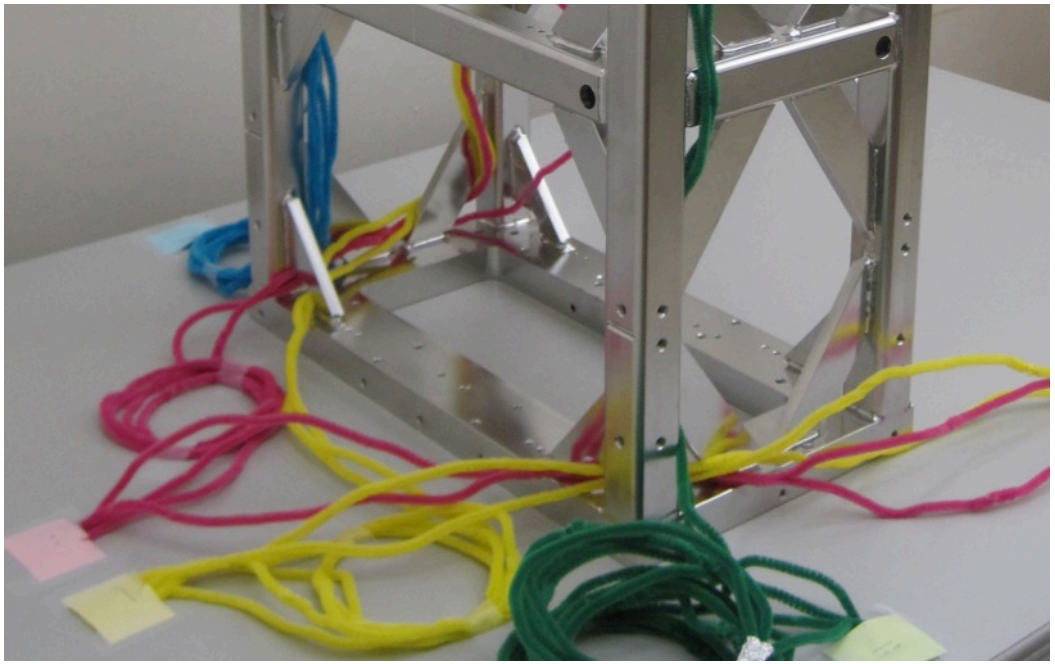
27. Lace C into the top left gusset, and connect to the Upper Right AOSEM. Pull taut.

Right (-Y)

Iso Back (-X) – Right (-Y)

Bottom & Intermediate Cable

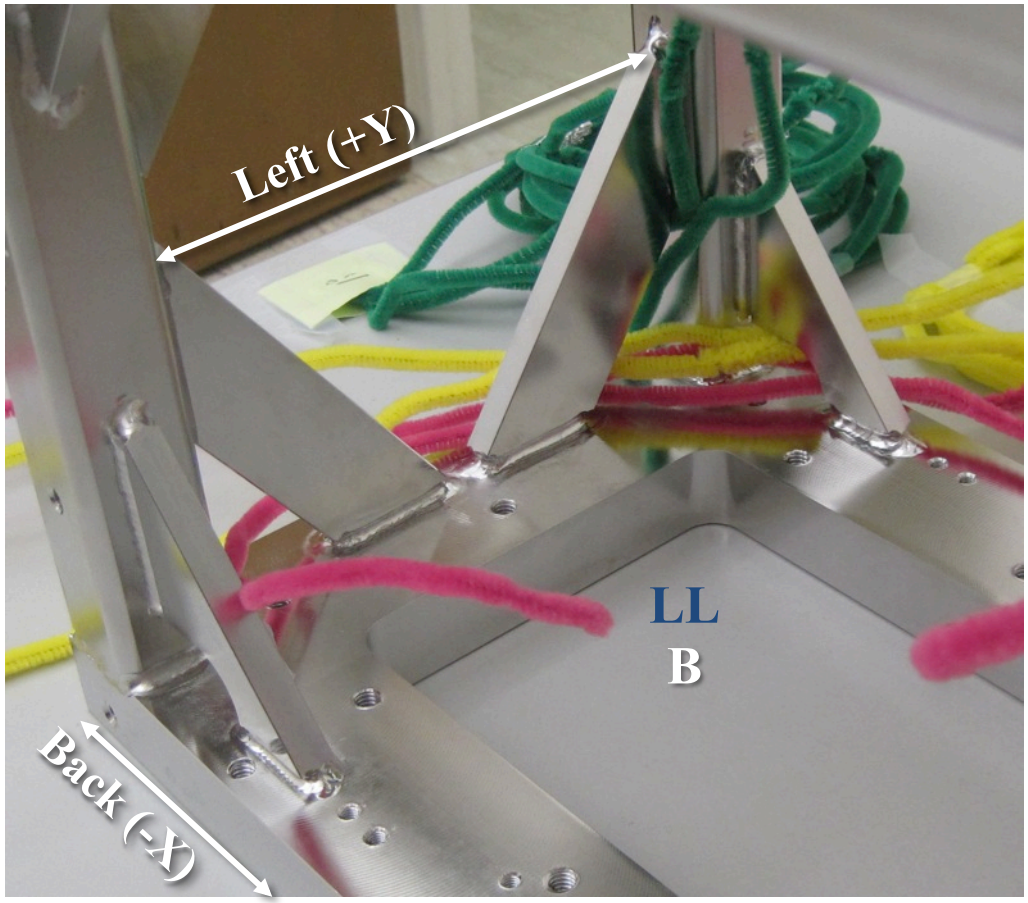
28. Lace A and B from the bottom and intermediate cables into bottom right gusset on the **Front Side (+X)**, and out of the bottom left gusset on the **Left Side (+Y)**.



Iso Front (+X) – Left (+Y)

Bottom Cable

29. Lace B into the bottom right gusset on the **Left (+Y)**, and connect to the Lower Left AOSEM. Pull taut.

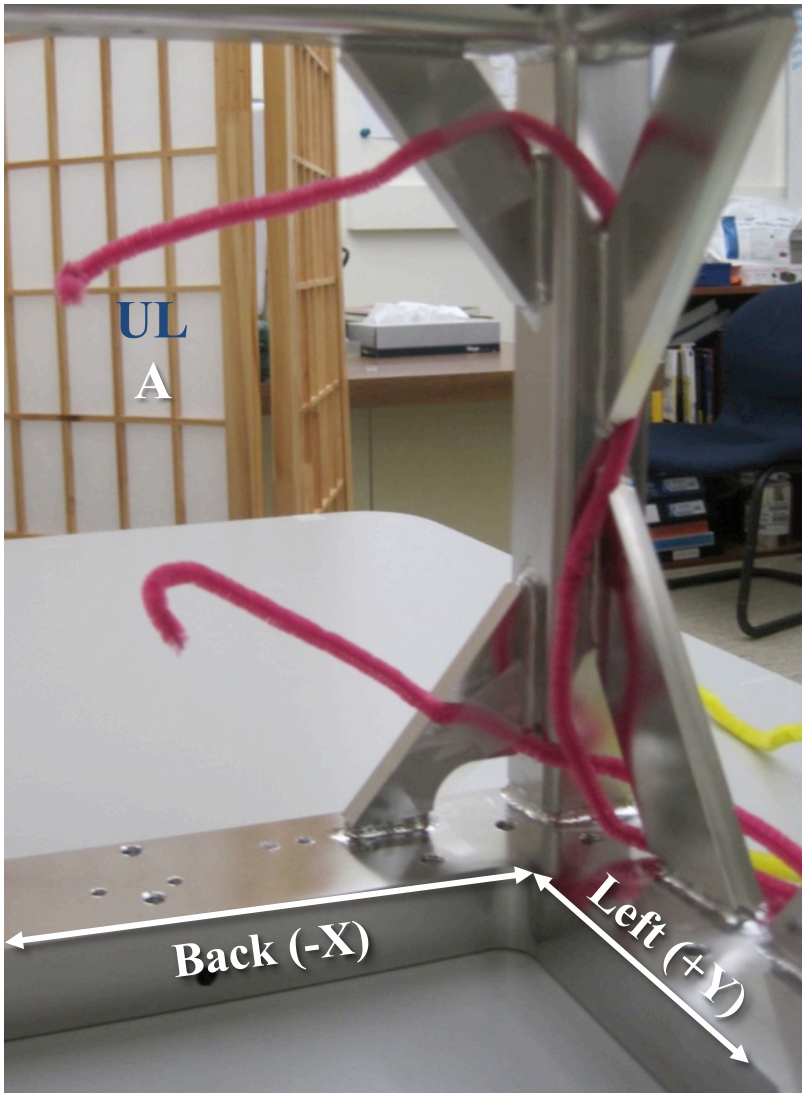


Inside View

Bottom Cable

30. On the **Left (+Y)**, lace A into the bottom right gusset and out of the SUS near M3.

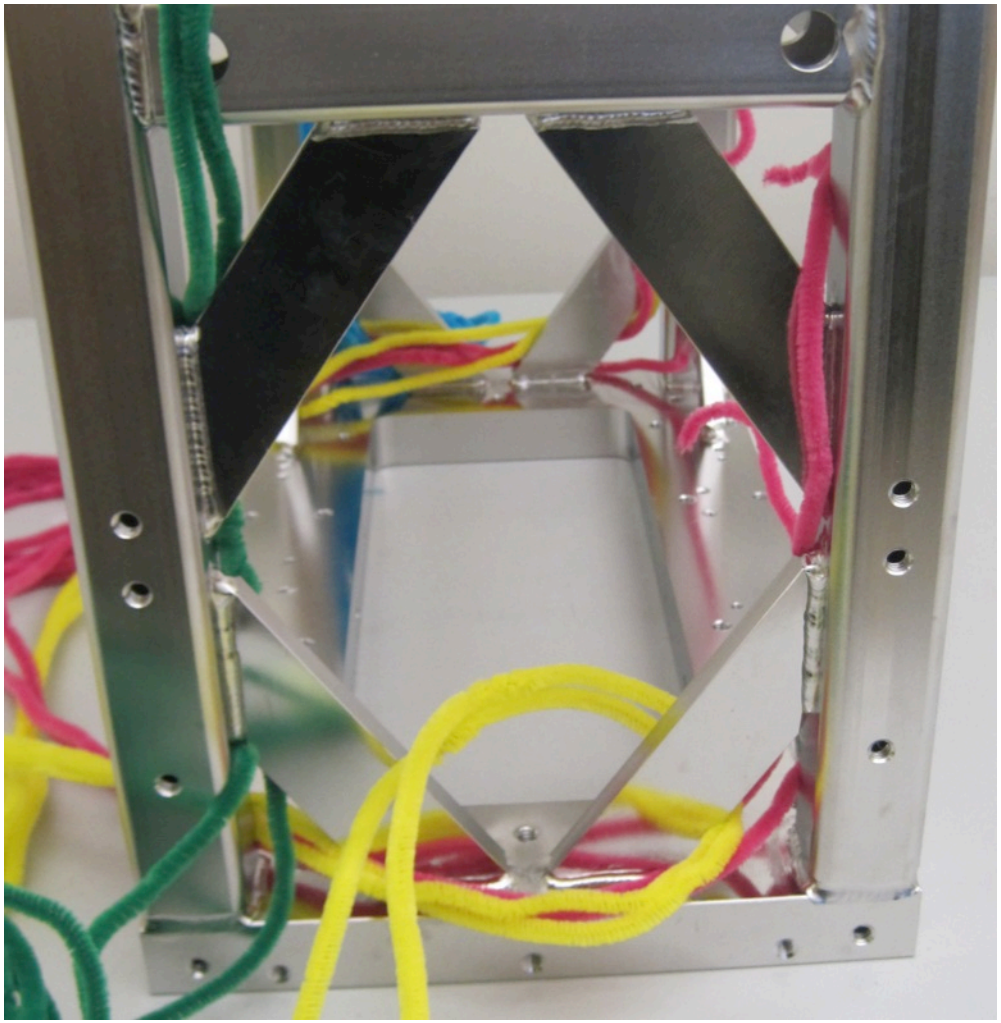
31. Lace A into the second right gusset, and connect to the Upper Left AOSEM. Pull taut.



Inside View

Intermediate Cable

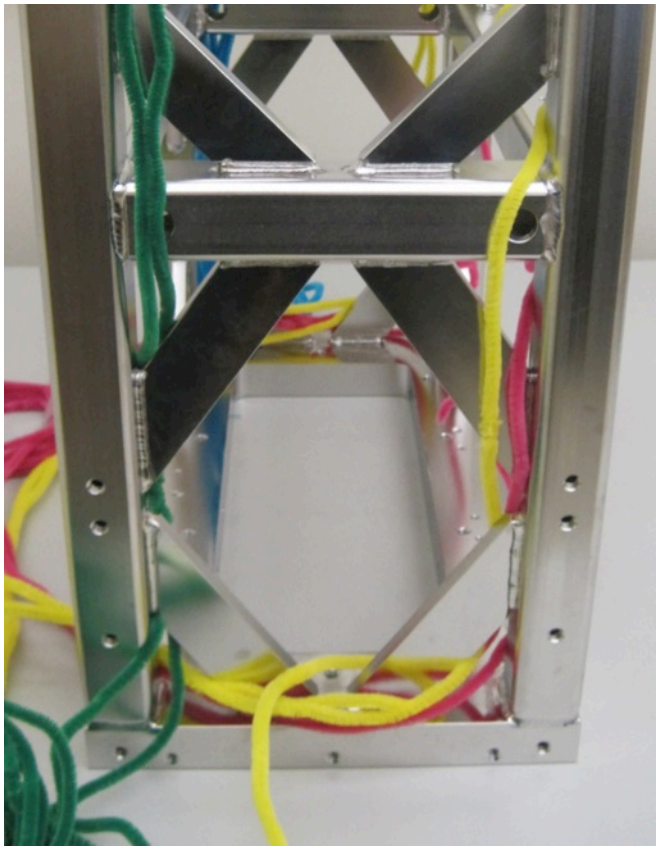
32. Lace A and B into the bottom right gusset and out of the SUS near M3.



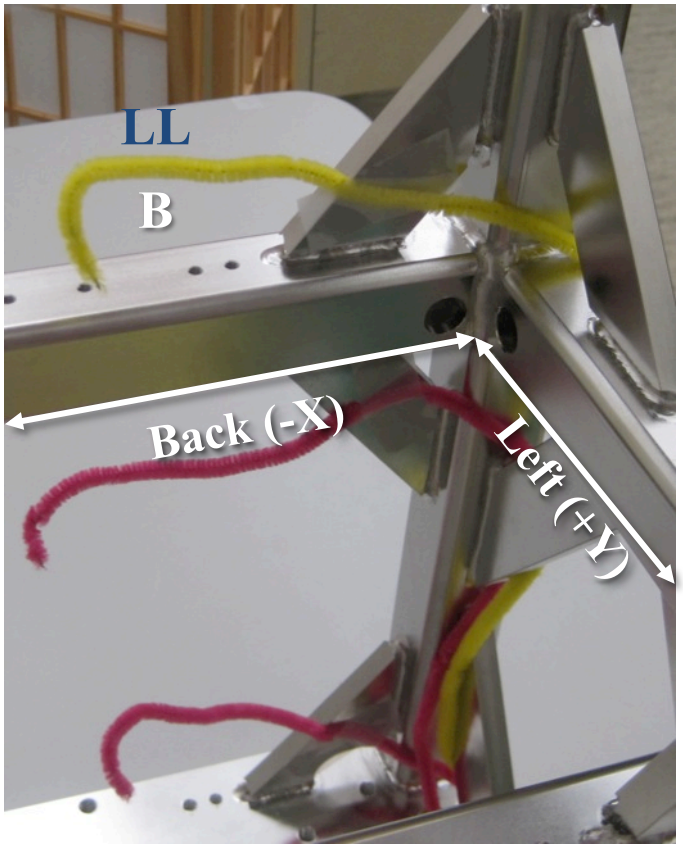
Left (+Y)

Intermediate Cable

33. Lace B into the 3rd right, and connect to the Lower Left AOSEM. Pull taut.



Left (+Y)

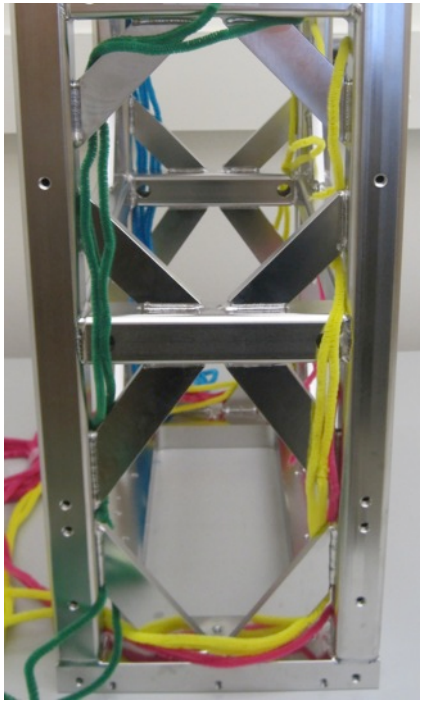


Inside View

Intermediate Cable

32. Lace A into the 3rd right gusset, and out of the SUS near M2.

33. Lace A into the top right gusset, and connect to the Upper Left AOSEM. Pull taut.



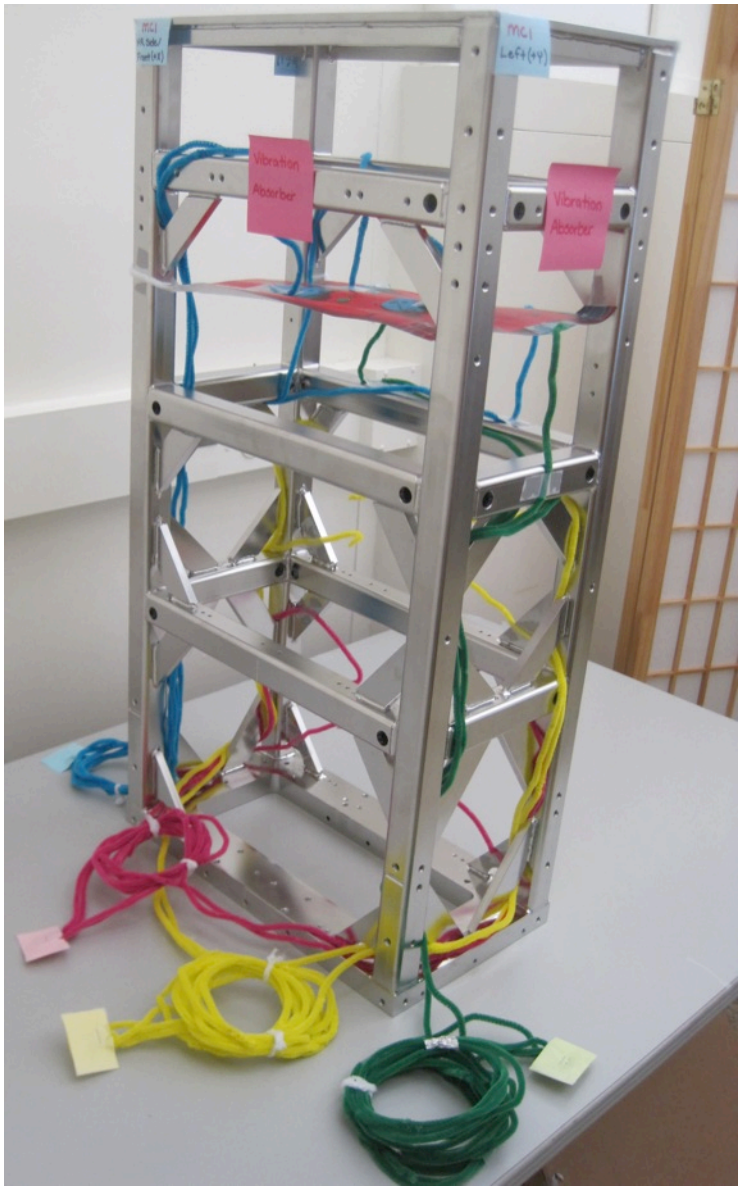
Left (+Y)

Iso Left (+Y) – Back (-X)

Cabling for Transportation with Lifting Brackets

All Cables

Coil cables near the base of the SUS. Use wire to hold the bundled cables.



Left (+Y)