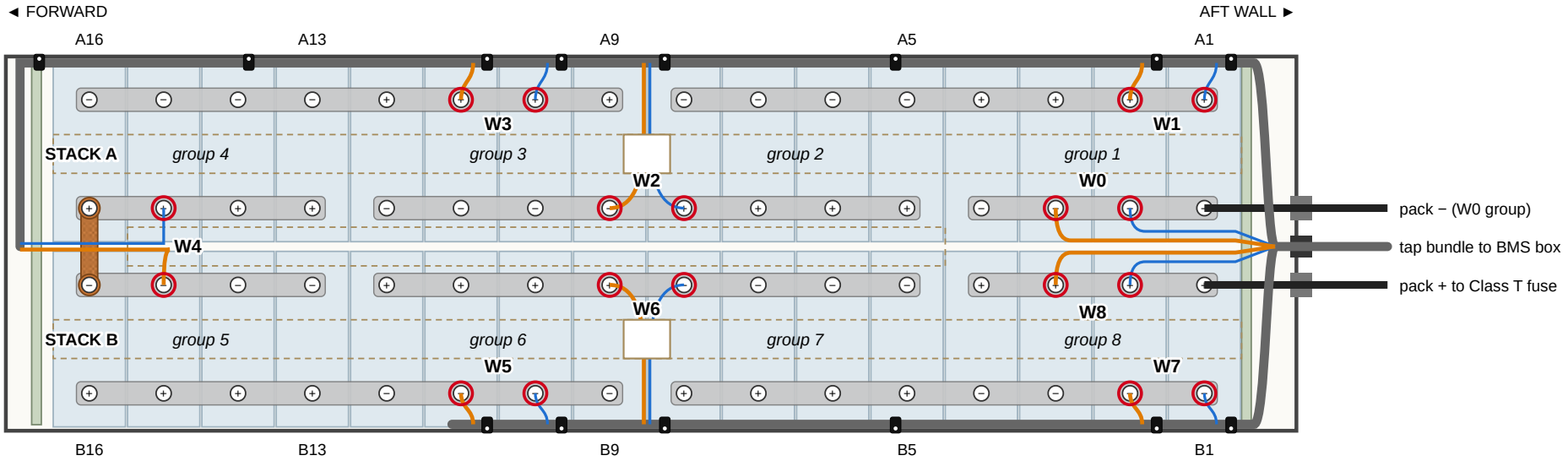
Battery box: where the tap wires go (top view)

Each joint gets two wires on two different posts: **blue = SBMS0 (22 AWG, the 12-core cable)**, **orange = balancer (18 AWG, the 10-core cable)**. Red ring = where a ring lands. Gray bars = busbars (every post on one bar is the same joint). Cells counted from the aft end: A1 to A16, B1 to B16.



Copper braid at the forward end (A16 to B16, inner posts) = the jumper between stacks: one of the copper braid links. Black bands on the gray branches = nylon cable clamps. Dashed boxes = the lid battens. The center batten stops short at both ends to leave room for the W0, W4 and W8 wires.

Joint	Row of posts	Blue (SBMS0) on	Orange (balancer) on	From aft plate
W0 pack −	Stack A, inner	A2	A3	about 4 to 7 in
W1	Stack A, outer	A1	A2	about 1 to 4 in
W2	Stack A, inner	A8	A9	about 22 to 25 in
W3	Stack A, outer	A10	A11	about 27 to 30 in
W4	Center, both inner rows	A15	B15	about 42 in (around the forward end)
W5	Stack B, outer	B10	B11	about 27 to 30 in
W6	Stack B, inner	B8	B9	about 22 to 25 in
W7	Stack B, outer	B1	B2	about 1 to 4 in
W8 pack +	Stack B, inner	B2	B3	about 4 to 7 in

- **Main cables** take A1 and B1 on the inner rows; the taps for W0 and W8 go on the next posts, one ring per stud.
- **Nylon cable clamps** (black bands) hold each branch to its long wall, just above the cell tops: short wood screws, no longer than 1/2 in, dipped in epoxy. A clamp wherever a wire leaves the branch, never more than 18 in apart. Never tie anything to the cells. The stack A branch runs the full length of its wall, so W4 can go around the forward end.
- **No wire crosses a busbar.** W2 and W6 cross the outer row in the one gap between bars (between cells 8 and 9), then pass a 3/8 in notch in that stack's lid batten (white box). W4 comes around the forward end, over the forward plate, and down the center.
- Every ring: 30 AWG fuse link at the ring, small S-bend of slack, label both ends. Keep off busbars, stud tops and each cell's vent (midway between its two posts).
- Check before plugging in: each neighbor pair (W0 to W1, W1 to W2 ...) reads about 3.3 V on both colors; W0 to W8 about 26 V.
- **The jumper between stacks** is one of the copper braid links (M6 holes), across the center gap at the forward end (Mike, 2026-10-09). If it comes bare, sleeve the braid in heat shrink, lugs left clear. The center padding strip is notched where it crosses.