$$\overbrace{\partial_{w\overset{*}{u}x} - \underbrace{w \Join u}\left(\frac{p}{2} - 1 + E\right)}\varphi \in \mathcal{H}^{\perp}$$

$$\mathcal{E}_a^m \curlywedge \overbrace{\partial_{w\overset{*}{u}x} - \underbrace{w \Join u}\left(\frac{p}{2} - 1 + E\right)}\mathcal{E}_b^{m+} = \mathcal{E}_a^m \curlywedge \overbrace{\underbrace{w\overset{*}{u}x}\mathcal{E}_{-b}^{m+} - \left(\frac{p}{2} + m\right)\underbrace{w \Join u}\mathcal{E}_b^{m+}} = 0$$

$$\mathcal{E}_a^m \curlywedge \overbrace{\underbrace{\overbrace{w \Join u}x}\mathcal{E}_{-b}^{m+}} = (m+1)\,\frac{j_{m+1}\varrho_{2m+1}}{\varrho_{2m+2}}\overbrace{w \Join b}^{a}\mathcal{E}_b^m$$

$$t\,w_1 \Join b = t\underbrace{\lambda u} \Join b = \lambda\underbrace{x \Join b} = \overbrace{w \curlywedge u}\,\overbrace{x \curlywedge b}$$

$$w_1 = \lambda u$$

$$\lambda = w \Join u$$

$$\text{LHS} = \mathcal{E}_a^m \curlywedge \underbrace{\overbrace{w \curlywedge u}\,\overbrace{x \curlywedge b}^{x}\mathcal{E}_b^m} = (m+1)\;\mathcal{E}_a^m \curlywedge \underbrace{\overbrace{w \curlywedge u}^{x}\mathcal{E}_b^{m+}} = \text{RHS}$$

$$\mathcal{E}_a^{n+} \curlywedge \overbrace{\underbrace{\overbrace{u \Join w}x}\mathcal{E}_{-b}^{n}} = n\frac{j_{n+1}\varrho_{2n+1}}{\varrho_{2n+2}}\overbrace{a \Join w}^{a}\mathcal{E}_b^n$$

$$\overset{*}{w}_1 \Join b = \underbrace{u\overset{*}{w}u} \Join b = \overbrace{u \Join w}\,\overbrace{u \Join b}$$

$$\text{LHS} = \mathcal{E}_a^{n+} \curlywedge \underbrace{\overbrace{u \Join w}\,\overbrace{x \Join b}^{x}\mathcal{E}_b^{n-}} = n\underbrace{\overbrace{w \Join u}^{x}\mathcal{E}_a^{n+}} \curlywedge \mathcal{E}_b^n = \text{RHS}$$