

$$\begin{aligned}
& \mathcal{A}_{ia}{}^{c1}{}_b{}^{aa1}{}_{\pi_b}{}^{bb1} \gamma^{\parallel}_{a1b1} \gamma^{\parallel}_{cc1} h_k{}^c{}_n{}_b + \mathcal{A}_{ac1}{}^d{}_b{}^{aa1}{}_{\pi_b}{}^{bb1} \gamma^{\parallel}_{a1b1} \gamma^{\parallel}_{cd} h_k{}^c{}_n{}_b n^{c1}{}_i - \mathcal{A}_{ia}{}^d{}_b{}^{aa1}{}_{\pi_b}{}^{bb1} \gamma^{\parallel}_{a1b1} \gamma^{\parallel}_{c1d} h^{cc1}{}_n{}_b n_c n_k - \\
& \mathcal{A}_{ad}{}^{d1}{}_b{}^{aa1}{}_{\pi_b}{}^{bb1} \gamma^{\parallel}_{a1b1} \gamma^{\parallel}_{c1d1} h^{cc1}{}_n{}_b n_c n^d{}_i n_k + \pi_b{}^{aa1} \gamma^{\parallel}_{a1b1} \gamma^{\parallel}_{bc} h_k{}^b{}_n{}_a \partial^c b_i{}^{b1} + b_i{}^a \gamma^{\parallel}_{ab1} \gamma^{\parallel}_{a1c} h_k{}^{a1}{}_n{}^b \partial^c \pi_b{}^{b1} - \\
& \pi_b{}^{aa1} \gamma^{\parallel}_{a1c} \gamma^{\parallel}_{bc1} h_k{}^b{}_n{}_a n^{b1}{}_i \partial^{c1} b_{b1}{}^c - \pi_b{}^{aa1} \gamma^{\parallel}_{a1c} \gamma^{\parallel}_{b1c1} h^{bb1}{}_n{}_a n_b n_k \partial^{c1} b_i{}^c - b_i{}^a \gamma^{\parallel}_{ac} \gamma^{\parallel}_{bc1} h^{a1b}{}_n{}_a n^{b1}{}_k \partial^{c1} \pi_b{}^{b1}{}^c + \\
& \pi_b{}^{aa1} \gamma^{\parallel}_{a1c1} \gamma^{\parallel}_{b1d} h^{bb1}{}_n{}_a n_b n^c{}_i n_k \partial^d b_c{}^{c1} - b_i{}^a \pi_b{}^{a1b} \gamma^{\parallel}_{ab} \gamma^{\parallel}_{b1d} h_{a1}{}^c h_k{}^{b1}{}_n{}^{c1} \partial^d b_{c1c} + b_i{}^a \pi_b{}^{a1b} \gamma^{\parallel}_{ab} \gamma^{\parallel}_{c1d1} h_{a1}{}^{b1} h^{cc1}{}_n{}_c n^d{}_k \partial^{d1} b_{db1} + \\
& b_i{}^a \pi_b{}^{a1b} \gamma^{\parallel}_{ab} \gamma^{\parallel}_{b1d1} h^{cc1} h_k{}^{b1}{}_n{}_a n_c n^d \partial^{d1} b_{dc1} - b_i{}^a \pi_b{}^{a1b} \gamma^{\parallel}_{ab} \gamma^{\parallel}_{de} h^{b1c} h^{c1d}{}_n{}_a n_{b1} n_{c1} n^{d1}{}_k \partial^e b_{d1c}
\end{aligned}$$