$$\begin{split} \frac{1i\langle 2|1+3|5|^4}{\langle 12\rangle\langle 23\rangle[45|[56]\langle 1|2+3|4]\langle 3|1+2|6]s_{123}} + \\ & (123456 \to \overline{234561}) + \\ & (123456 \to 345612) \end{split}$$

$$\frac{1i[13]^4\langle 46\rangle^4}{[12][23]\langle 45\rangle\langle 56\rangle\langle 4]^2+3|1\rangle\langle 6|1+2|3|s_{123}}+\\ \frac{1i[15]^4\langle 24\rangle^4}{[16]\langle 23\rangle\langle 34\rangle|56\rangle\langle 2|1+6|5\rangle\langle 4|2+3|1]s_{234}}+\\ \frac{-1i\langle 26\rangle^4|35\rangle^4}{\langle 12\rangle\langle 16\rangle|34\rangle|45\rangle\langle 2|1+6|5\rangle\langle 6|1+2|3|s_{345}}$$

$$\frac{1i\langle 2|1+3|5|^4}{\langle 12\rangle\langle 23\rangle[45][56]\langle 1|2+3|4]\langle 3|1+2|6]s_{123}}+\\ \frac{1i\langle 6|2+4|3|^4}{\langle 16\rangle[23][34]\langle 56\rangle\langle 1|2+3|4]\langle 5|1+6|2]s_{234}}+\\ \frac{-1i\langle 4|3+5|1|^4}{[12][16]\langle 34\rangle\langle 45\rangle\langle 3|1+2|6]\langle 5|1+6|2]s_{345}}$$