```
-1/4\langle 1|4|3-5|1\rangle\langle 1|3|4|5|2](s_{12}-3m_h^2+8m_t^2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \langle 12 \rangle \Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}
(\langle 1|3|4|5|1] - \langle 2|3|4|5|2] \rangle \langle 2|3|4|5|2] \langle 1|3|4|1\rangle \langle -1/4(s_{12} - 3m_h^2 + 8m_t^2) - 1/8(s_{14} - s_{15} - 2s_{12} + 2s_{34} - 2m_h^2)) + (\langle 1|3|4|5|1] - \langle 2|3|4|5|2] \rangle \langle 2|3|4|5|2\rangle \langle 2|3|4|2\rangle \langle 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \langle 12 \rangle \langle 2|3|4|5|1] \Delta_{12|3|4|5}
                                                         (\langle 1|\mathbf{3}|\mathbf{4}|\mathbf{5}|1] - \langle 2|\mathbf{3}|\mathbf{4}|\mathbf{5}|2])\langle 1|\mathbf{3}|\mathbf{4}|\mathbf{5}|1]\langle 1|\mathbf{5}|\mathbf{4}|1\rangle (-1/4(s_{12} - 3m_h^2 + 8m_t^2) - 1/8(s_{14} - 2s_{15} - 2s_{12} + 2s_{34})) \\ + 2(s_{15} - 2s_{15} - 2s_{12} + 2s_{34})) \\ + 3(s_{15} - 2s_{15} - 2s_{15} - 2s_{12} + 2s_{34})) \\ + 3(s_{15} - 2s_{15} - 2s_{15}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \langle 12 \rangle \langle 2|3|4|5|1] \Delta_{12|3|4|5}
     (\langle 1|\mathbf{3}|\mathbf{4}|\mathbf{5}|1] - \langle 2|\mathbf{3}|\mathbf{4}|\mathbf{5}|2])\langle 1|\mathbf{3}|\mathbf{4}|\mathbf{5}|2]\langle 1|\mathbf{3}|\mathbf{5}|2\rangle\langle -1/8(m_h^2 - 3s_{12} + 2s_{14} - 2s_{23} - s_{24}) - 1/4(s_{12} - 3m_h^2 + 8m_t^2)) \perp \\ + 2(s_{12} - 3m_h^2 + 8m_t^2)) + 2(s_{12} - 3m_h^2 + 8m_t^2) + 2(s_{12} - 3m_h^2 + 8m_h^2) + 2(s_{12} - 3m_h^2 + 3m_h^2 + 8m_h^2) + 2(s_{12} - 3m_h^2 + 3m_h^2 + 3m_h^2) + 2(s_{12} - 3m_h^2 +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \langle 12 \rangle \langle 2|3|4|5|1] \Delta_{12|3|4|5}
                                                                                                       (\langle 1|3|4|5|1] - \langle 2|3|4|5|2])\langle 1|3|4|5|2](3/16\langle 1|3|1]^2 + 3/16\langle 1|4|1]^2 + 1/8\mathrm{tr}(3|4)\langle 2|3|2] + 1/16\langle 2|3|2]^2) + 1/16\langle 2|3|2 + 1/16\langle 2|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (2|3|4|5|1]\Delta_{12|3|4|5}
                                                                                                                                                                                                                                                                                                                                                                                                                (\langle 1|\mathbf{3}|\mathbf{4}|\mathbf{5}|1] - \langle 2|\mathbf{3}|\mathbf{4}|\mathbf{5}|2])(-1/8\langle 1|\mathbf{3}|2]\langle 1|\mathbf{3}|\mathbf{5}|1\rangle + 1/4\langle 1|\mathbf{4}|2]\langle 1|\mathbf{3}|\mathbf{4}|1\rangle) - (\langle 1|\mathbf{3}|\mathbf{4}|\mathbf{5}|1\rangle - \langle 2|\mathbf{3}|\mathbf{4}|\mathbf{5}|2])(-1/8\langle 1|\mathbf{3}|2]\langle 1|\mathbf{3}|\mathbf{5}|1\rangle + 1/4\langle 1|\mathbf{4}|2]\langle 1|\mathbf{3}|\mathbf{4}|1\rangle) - (\langle 1|\mathbf{3}|\mathbf{4}|\mathbf{5}|1\rangle - \langle 2|\mathbf{3}|\mathbf{4}|\mathbf{5}|2])(-1/8\langle 1|\mathbf{3}|2]\langle 1|\mathbf{3}|\mathbf{5}|1\rangle + 1/4\langle 1|\mathbf{4}|2]\langle 1|\mathbf{3}|\mathbf{4}|1\rangle) - (\langle 1|\mathbf{3}|\mathbf{4}|\mathbf{5}|1\rangle - \langle 2|\mathbf{3}|\mathbf{4}|\mathbf{5}|2])(-1/8\langle 1|\mathbf{3}|2)\langle 1|\mathbf{3}|\mathbf{5}|1\rangle + 1/4\langle 1|\mathbf{4}|2]\langle 1|\mathbf{3}|\mathbf{4}|1\rangle) - (\langle 1|\mathbf{3}|\mathbf{4}|\mathbf{5}|1\rangle - \langle 1|\mathbf{3}|\mathbf{5}|1\rangle - \langle 1|\mathbf{3}|1\rangle - \langle 1|\mathbf{3}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \langle 12 \rangle \Delta_{12|3|4|5}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -1/4\langle 1|4|2]\langle 1\underline{|4|1}](\langle 1|3|4|5|1]-\langle 2|3|4|5|2])\langle 1|3|4|5|1]_{\perp}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \sqrt{2|3|4|5|1}\Delta_{12|3|4|5}
```

$$(12345 \rightarrow \overline{21\mathbf{543}})$$

 $\langle 12 \rangle \langle 2|3|4|5|1]\Delta_{12|3|4|5}$