Reduction case V: \( \varepsilon_{ij} = 0 \) and \( f_{j} = 0 \). \([m_{0} \neq 0]\)

In this case, the Passanneto-Veltman formula (1) becomes

\[
\eta_{k} D_{\varepsilon_{0} 0, 0 - 0 1 \cdots 2 2 \cdots 3} = \frac{1}{2} \left[ C_{00122 \cdots 3} \left( \hat{D}_{0} \right) - C_{00122 \cdots 3} \left( \hat{D}_{0} \right) \right]
\]

Put \( \eta_{k} \to \eta_{k+1} \)

\[
\frac{1}{r - r - 1} \quad \text{implies} \quad r = -1.
\]

In this case, the Passanneto-Veltman formula (2) becomes

\[
\frac{1}{2} \left[ \delta_{00122 \cdots 3} \left( \hat{D}_{0} \right) - C_{00122 \cdots 3} \left( \hat{D}_{0} \right) \right]
\]

In this case, the Passanneto-Veltman formula (2) becomes

\[
\frac{1}{2(\eta_{k+1})} \cdot C_{k_{0}0 \cdots 2 2 \cdots 3} \left( \hat{D}_{0} \right) \quad r \geq 1
\]

In this case, the Passanneto-Veltman formula (2) becomes

\[
D_{000122 \cdots 3} = \frac{1}{m_{0}^{2}} \left[ (d + 2(r + 1)) D_{000122 \cdots 3} - C_{000122 \cdots 3} \left( \hat{D}_{0} \right) \right]
\]

Put \( r = 0 \).

In this case, the Passanneto-Veltman formula (2) becomes

\[
D_{000122 \cdots 3} = \frac{1}{m_{0}^{2}} \left[ (4 + 2(r + 1)) D_{000122 \cdots 3} - C_{000122 \cdots 3} \left( \hat{D}_{0} \right) \right]
\]

\[
-2 \epsilon D_{000122 \cdots 3} \left( \hat{D}_{0} \right)
\]