

Fields in the vertex	Variational derivative of Lagrangian by fields
$A_\mu \quad W+\nu \quad W-\rho$	$-EE(p_2^\rho g^{\mu\nu} - p_2^\mu g^{\nu\rho} - p_3^\nu g^{\mu\rho} + p_3^\mu g^{\nu\rho} + p_1^\nu g^{\mu\rho} - p_1^\rho g^{\mu\nu})$
$A_\mu \quad W+\nu \quad W-.f$	$i \cdot EE \cdot MW \cdot g^{\mu\nu}$
$A_\mu \quad W+.f \quad W-\nu$	$-i \cdot EE \cdot MW \cdot g^{\mu\nu}$
$A_\mu \quad W+.f \quad W-.f$	$EE(p_3^\mu - p_2^\mu)$
$A.C \quad W+.c \quad W-\mu$	$-EE \cdot p_1^\mu$
$A.C \quad W-.c \quad W+\mu$	$EE \cdot p_1^\mu$
$B_{ap} \quad b_{bq} \quad A_\mu$	$\frac{1}{3}EE\delta_{pq}\gamma_{ac}^\mu \cdot \delta_{cb}$
$B_{ap} \quad b_{bq} \quad G_{\mu r}$	$GG \cdot \lambda_{pq}^r \gamma_{ab}^\mu$
$B_{ap} \quad b_{bq} \quad H$	$-\frac{1}{2} \frac{EE \cdot Mb}{MW \cdot SW} \delta_{pq} \cdot \delta_{ab}$
$B_{ap} \quad b_{bq} \quad Z_\mu$	$\frac{1}{6} \frac{EE}{CW \cdot SW} \delta_{pq} \gamma_{ac}^\mu ((1 + 2CW^2) \cdot \frac{(1-\gamma^5)_{cb}}{2} - 2SW^2 \cdot \frac{(1+\gamma^5)_{cb}}{2})$
$B_{ap} \quad b_{bq} \quad Z.f$	$-\frac{1}{2} \frac{i \cdot EE \cdot Mb}{MW \cdot SW} \delta_{pq} \cdot \gamma_{ab}^5$
$B_{ap} \quad t_{bq} \quad W-\mu$	$-\frac{1}{2} \frac{EE \cdot \sqrt{2}}{SW} \cdot \delta_{pq} \gamma_{ac}^\mu \frac{(1-\gamma^5)_{cb}}{2}$
$B_{ap} \quad t_{bq} \quad W-.f$	$-\frac{1}{2} \frac{i \cdot EE \cdot \sqrt{2}}{MW \cdot SW} \delta_{pq} (Mb \cdot \frac{(1-\gamma^5)_{ab}}{2} - Mtop \cdot \frac{(1+\gamma^5)_{ab}}{2})$
$C_{ap} \quad c_{bq} \quad A_\mu$	$-\frac{2}{3}EE\delta_{pq}\gamma_{ac}^\mu \cdot \delta_{cb}$
$C_{ap} \quad c_{bq} \quad G_{\mu r}$	$GG \cdot \lambda_{pq}^r \gamma_{ab}^\mu$
$C_{ap} \quad c_{bq} \quad H$	$-\frac{1}{2} \frac{EE \cdot Mc}{MW \cdot SW} \delta_{pq} \cdot \delta_{ab}$
$C_{ap} \quad c_{bq} \quad Y$	$gYqq \cdot \delta_{ab} \delta_{pq}$
$C_{ap} \quad c_{bq} \quad Z_\mu$	$\frac{1}{6} \frac{EE}{CW \cdot SW} \delta_{pq} \gamma_{ac}^\mu ((1 - 4CW^2) \cdot \frac{(1-\gamma^5)_{cb}}{2} + 4SW^2 \cdot \frac{(1+\gamma^5)_{cb}}{2})$
$C_{ap} \quad c_{bq} \quad Z.f$	$\frac{1}{2} \frac{i \cdot EE \cdot Mc}{MW \cdot SW} \delta_{pq} \cdot \gamma_{ab}^5$
$C_{ap} \quad s_{bq} \quad W+\mu$	$-\frac{1}{2} \frac{EE \cdot \sqrt{2}}{SW} \cdot \delta_{pq} \gamma_{ac}^\mu \frac{(1-\gamma^5)_{cb}}{2}$
$C_{ap} \quad s_{bq} \quad W+.f$	$\frac{1}{2} \frac{i \cdot EE \cdot \sqrt{2}}{MW \cdot SW} \delta_{pq} (Ms \cdot \frac{(1+\gamma^5)_{ab}}{2} - Mc \cdot \frac{(1-\gamma^5)_{ab}}{2})$
$D_{ap} \quad d_{bq} \quad A_\mu$	$\frac{1}{3}EE\delta_{pq}\gamma_{ac}^\mu \cdot \delta_{cb}$
$D_{ap} \quad d_{bq} \quad G_{\mu r}$	$GG \cdot \lambda_{pq}^r \gamma_{ab}^\mu$
$D_{ap} \quad d_{bq} \quad Y$	$gYqq \cdot \delta_{ab} \delta_{pq}$
$D_{ap} \quad d_{bq} \quad Z_\mu$	$\frac{1}{6} \frac{EE}{CW \cdot SW} \delta_{pq} \gamma_{ac}^\mu ((1 + 2CW^2) \cdot \frac{(1-\gamma^5)_{cb}}{2} - 2SW^2 \cdot \frac{(1+\gamma^5)_{cb}}{2})$

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$D_{ap} \quad u_{bq} \quad W_{-\mu}$	$-\frac{1}{2} \frac{EE \cdot \sqrt{2}}{SW} \cdot \delta_{pq} \gamma_{ac}^{\mu} \frac{(1-\gamma^5)_{cb}}{2}$
$E1_a \quad e1_b \quad A_{\mu}$	$EE \gamma_{ac}^{\mu} \cdot \delta_{cb}$
$E1_a \quad e1_b \quad Z_{\mu}$	$-\frac{1}{2} \frac{EE}{CW \cdot SW} \gamma_{ac}^{\mu} ((1 - 2CW^2) \cdot \frac{(1-\gamma^5)_{cb}}{2} + 2SW^2 \cdot \frac{(1+\gamma^5)_{cb}}{2})$
$E1_a \quad n1_b \quad W_{-\mu}$	$-\frac{1}{2} \frac{EE \cdot \sqrt{2}}{SW} \cdot \gamma_{ac}^{\mu} \frac{(1-\gamma^5)_{cb}}{2}$
$E2_a \quad e2_b \quad A_{\mu}$	$EE \gamma_{ac}^{\mu} \cdot \delta_{cb}$
$E2_a \quad e2_b \quad H$	$-\frac{1}{2} \frac{EE \cdot Mm}{MW \cdot SW} \cdot \delta_{ab}$
$E2_a \quad e2_b \quad Z_{\mu}$	$-\frac{1}{2} \frac{EE}{CW \cdot SW} \gamma_{ac}^{\mu} ((1 - 2CW^2) \cdot \frac{(1-\gamma^5)_{cb}}{2} + 2SW^2 \cdot \frac{(1+\gamma^5)_{cb}}{2})$
$E2_a \quad e2_b \quad Z.f$	$-\frac{1}{2} \frac{i \cdot EE \cdot Mm}{MW \cdot SW} \cdot \gamma_{ab}^5$
$E2_a \quad n2_b \quad W_{-\mu}$	$-\frac{1}{2} \frac{EE \cdot \sqrt{2}}{SW} \cdot \gamma_{ac}^{\mu} \frac{(1-\gamma^5)_{cb}}{2}$
$E2_a \quad n2_b \quad W - .f$	$-\frac{1}{2} \frac{i \cdot EE \cdot Mm \cdot \sqrt{2}}{MW \cdot SW} \cdot \frac{(1-\gamma^5)_{ab}}{2}$
$E3_a \quad e3_b \quad A_{\mu}$	$EE \gamma_{ac}^{\mu} \cdot \delta_{cb}$
$E3_a \quad e3_b \quad H$	$-\frac{1}{2} \frac{EE \cdot Mtau}{MW \cdot SW} \cdot \delta_{ab}$
$E3_a \quad e3_b \quad Z_{\mu}$	$-\frac{1}{2} \frac{EE}{CW \cdot SW} \gamma_{ac}^{\mu} ((1 - 2CW^2) \cdot \frac{(1-\gamma^5)_{cb}}{2} + 2SW^2 \cdot \frac{(1+\gamma^5)_{cb}}{2})$
$E3_a \quad e3_b \quad Z.f$	$-\frac{1}{2} \frac{i \cdot EE \cdot Mtau}{MW \cdot SW} \cdot \gamma_{ab}^5$
$E3_a \quad n3_b \quad W_{-\mu}$	$-\frac{1}{2} \frac{EE \cdot \sqrt{2}}{SW} \cdot \gamma_{ac}^{\mu} \frac{(1-\gamma^5)_{cb}}{2}$
$E3_a \quad n3_b \quad W - .f$	$-\frac{1}{2} \frac{i \cdot EE \cdot Mtau \cdot \sqrt{2}}{MW \cdot SW} \cdot \frac{(1-\gamma^5)_{ab}}{2}$
$F_a \quad n1_b \quad H$	$gFhnu \cdot \delta_{ab}$
$F_a \quad n2_b \quad H$	$gFhnu \cdot \delta_{ab}$
$F_a \quad n3_b \quad H$	$gFhnu \cdot \delta_{ab}$
$G_{\mu p} \quad G_{\nu q} \quad G_{\rho r}$	$GG f_{pqr} (p_3^{\nu} g^{\mu\rho} - p_3^{\mu} g^{\nu\rho} + p_1^{\rho} g^{\mu\nu} - p_1^{\nu} g^{\mu\rho} - p_2^{\rho} g^{\mu\nu} + p_2^{\mu} g^{\nu\rho})$
$G_{\mu p} \quad G_{\nu q} \quad Y$	$-4 \frac{g_Y g g}{M_Y} \delta_{pq} (p_1^{\rho} p_2^{\rho} g^{\mu\nu} - p_1^{\nu} p_2^{\mu})$
$G.C_p \quad G.C_q \quad G_{\mu r}$	$GG \cdot p_2^{\mu} f_{pqr}$
$H \quad H \quad H$	$-\frac{3}{2} \frac{EE \cdot MH^2}{MW \cdot SW}$
$H \quad W_{+\mu} \quad W_{-\nu}$	$\frac{EE \cdot MW}{SW} \cdot g^{\mu\nu}$
$H \quad W_{+\mu} \quad W - .f$	$\frac{1}{2} \frac{i \cdot EE}{SW} (p_3^{\mu} - p_1^{\mu})$

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$H \quad W + .f \quad W -_{\mu}$	$-\frac{1}{2} \frac{i \cdot EE}{SW} (p_1^{\mu} - p_2^{\mu})$
$H \quad W + .f \quad W - .f$	$-\frac{1}{2} \frac{EE \cdot MH^2}{MW \cdot SW}$
$H \quad Z_{\mu} \quad Z_{\nu}$	$\frac{EE \cdot MW}{CW^2 \cdot SW} \cdot g^{\mu\nu}$
$H \quad Z_{\mu} \quad Z.f$	$-\frac{1}{2} \frac{i \cdot EE}{CW \cdot SW} (p_1^{\mu} - p_3^{\mu})$
$H \quad Z.f \quad Z.f$	$-\frac{1}{2} \frac{EE \cdot MH^2}{MW \cdot SW}$
$N1_a \quad e1_b \quad W +_{\mu}$	$-\frac{1}{2} \frac{EE \cdot \sqrt{2}}{SW} \cdot \gamma_{ac}^{\mu} \frac{(1-\gamma^5)_{cb}}{2}$
$N1_a \quad f_b \quad H$	$gFhnu \cdot \delta_{ab}$
$N1_a \quad n1_b \quad Z_{\mu}$	$-\frac{1}{2} \frac{EE}{CW \cdot SW} \cdot \gamma_{ac}^{\mu} \frac{(1-\gamma^5)_{cb}}{2}$
$N2_a \quad e2_b \quad W +_{\mu}$	$-\frac{1}{2} \frac{EE \cdot \sqrt{2}}{SW} \cdot \gamma_{ac}^{\mu} \frac{(1-\gamma^5)_{cb}}{2}$
$N2_a \quad e2_b \quad W + .f$	$\frac{1}{2} \frac{i \cdot EE \cdot Mm \cdot \sqrt{2}}{MW \cdot SW} \cdot \frac{(1+\gamma^5)_{ab}}{2}$
$N2_a \quad f_b \quad H$	$gFhnu \cdot \delta_{ab}$
$N2_a \quad n2_b \quad Z_{\mu}$	$-\frac{1}{2} \frac{EE}{CW \cdot SW} \cdot \gamma_{ac}^{\mu} \frac{(1-\gamma^5)_{cb}}{2}$
$N3_a \quad e3_b \quad W +_{\mu}$	$-\frac{1}{2} \frac{EE \cdot \sqrt{2}}{SW} \cdot \gamma_{ac}^{\mu} \frac{(1-\gamma^5)_{cb}}{2}$
$N3_a \quad e3_b \quad W + .f$	$\frac{1}{2} \frac{i \cdot EE \cdot Mtau \cdot \sqrt{2}}{MW \cdot SW} \cdot \frac{(1+\gamma^5)_{ab}}{2}$
$N3_a \quad f_b \quad H$	$gFhnu \cdot \delta_{ab}$
$N3_a \quad n3_b \quad Z_{\mu}$	$-\frac{1}{2} \frac{EE}{CW \cdot SW} \cdot \gamma_{ac}^{\mu} \frac{(1-\gamma^5)_{cb}}{2}$
$S_{ap} \quad c_{bq} \quad W -_{\mu}$	$-\frac{1}{2} \frac{EE \cdot \sqrt{2}}{SW} \cdot \delta_{pq} \gamma_{ac}^{\mu} \frac{(1-\gamma^5)_{cb}}{2}$
$S_{ap} \quad c_{bq} \quad W - .f$	$-\frac{1}{2} \frac{i \cdot EE \cdot \sqrt{2}}{MW \cdot SW} \delta_{pq} (Ms \cdot \frac{(1-\gamma^5)_{ab}}{2} - Mc \cdot \frac{(1+\gamma^5)_{ab}}{2})$
$S_{ap} \quad s_{bq} \quad A_{\mu}$	$\frac{1}{3} EE \delta_{pq} \gamma_{ac}^{\mu} \cdot \delta_{cb}$
$S_{ap} \quad s_{bq} \quad G_{\mu r}$	$GG \cdot \lambda_{pq}^r \gamma_{ab}^{\mu}$
$S_{ap} \quad s_{bq} \quad H$	$-\frac{1}{2} \frac{EE \cdot Ms}{MW \cdot SW} \delta_{pq} \cdot \delta_{ab}$
$S_{ap} \quad s_{bq} \quad Y$	$gYqq \cdot \delta_{ab} \delta_{pq}$
$S_{ap} \quad s_{bq} \quad Z_{\mu}$	$\frac{1}{6} \frac{EE}{CW \cdot SW} \delta_{pq} \gamma_{ac}^{\mu} ((1 + 2CW^2) \cdot \frac{(1-\gamma^5)_{cb}}{2} - 2SW^2 \cdot \frac{(1+\gamma^5)_{cb}}{2})$
$S_{ap} \quad s_{bq} \quad Z.f$	$-\frac{1}{2} \frac{i \cdot EE \cdot Ms}{MW \cdot SW} \delta_{pq} \cdot \gamma_{ab}^5$
$T_{ap} \quad b_{bq} \quad W +_{\mu}$	$-\frac{1}{2} \frac{EE \cdot \sqrt{2}}{SW} \cdot \delta_{pq} \gamma_{ac}^{\mu} \frac{(1-\gamma^5)_{cb}}{2}$

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$T_{ap} \quad b_{bq} \quad W + .f$	$\frac{1}{2} \frac{i \cdot EE \cdot \sqrt{2}}{MW \cdot SW} \delta_{pq} (Mb \cdot \frac{(1+\gamma^5)_{ab}}{2} - Mtop \cdot \frac{(1-\gamma^5)_{ab}}{2})$
$T_{ap} \quad t_{bq} \quad A_\mu$	$-\frac{2}{3} EE \delta_{pq} \gamma_{ac}^\mu \cdot \delta_{cb}$
$T_{ap} \quad t_{bq} \quad G_{\mu r}$	$GG \cdot \lambda_{pq}^r \gamma_{ab}^\mu$
$T_{ap} \quad t_{bq} \quad H$	$-\frac{1}{2} \frac{EE \cdot Mtop}{MW \cdot SW} \delta_{pq} \cdot \delta_{ab}$
$T_{ap} \quad t_{bq} \quad Z_\mu$	$\frac{1}{6} \frac{EE}{CW \cdot SW} \delta_{pq} \gamma_{ac}^\mu ((1 - 4CW^2) \cdot \frac{(1-\gamma^5)_{cb}}{2} + 4SW^2 \cdot \frac{(1+\gamma^5)_{cb}}{2})$
$T_{ap} \quad t_{bq} \quad Z.f$	$\frac{1}{2} \frac{i \cdot EE \cdot Mtop}{MW \cdot SW} \delta_{pq} \cdot \gamma_{ab}^5$
$U_{ap} \quad d_{bq} \quad W +_\mu$	$-\frac{1}{2} \frac{EE \cdot \sqrt{2}}{SW} \cdot \delta_{pq} \gamma_{ac}^\mu \frac{(1-\gamma^5)_{cb}}{2}$
$U_{ap} \quad u_{bq} \quad A_\mu$	$-\frac{2}{3} EE \delta_{pq} \gamma_{ac}^\mu \cdot \delta_{cb}$
$U_{ap} \quad u_{bq} \quad G_{\mu r}$	$GG \cdot \lambda_{pq}^r \gamma_{ab}^\mu$
$U_{ap} \quad u_{bq} \quad Y$	$gY qq \cdot \delta_{ab} \delta_{pq}$
$U_{ap} \quad u_{bq} \quad Z_\mu$	$\frac{1}{6} \frac{EE}{CW \cdot SW} \delta_{pq} \gamma_{ac}^\mu ((1 - 4CW^2) \cdot \frac{(1-\gamma^5)_{cb}}{2} + 4SW^2 \cdot \frac{(1+\gamma^5)_{cb}}{2})$
$W +_\mu \quad W -_\nu \quad Z_\rho$	$-\frac{CW \cdot EE}{SW} (p_1^\nu g^{\mu\rho} - p_1^\rho g^{\mu\nu} - p_2^\mu g^{\nu\rho} + p_2^\rho g^{\mu\nu} + p_3^\mu g^{\nu\rho} - p_3^\nu g^{\mu\rho})$
$W +_\mu \quad W - .f \quad Z_\nu$	$-\frac{i \cdot EE \cdot MW \cdot SW}{CW} \cdot g^{\mu\nu}$
$W +_\mu \quad W - .f \quad Z.f$	$-\frac{1}{2} \frac{EE}{SW} (p_2^\mu - p_3^\mu)$
$W + .C \quad A.c \quad W -_\mu$	$EE \cdot p_1^\mu$
$W + .C \quad A.c \quad W - .f$	$-i \cdot EE \cdot MW$
$W + .C \quad W - .c \quad A_\mu$	$-EE \cdot p_1^\mu$
$W + .C \quad W - .c \quad H$	$-\frac{1}{2} \frac{EE \cdot MW}{SW}$
$W + .C \quad W - .c \quad Z_\mu$	$-\frac{CW \cdot EE}{SW} \cdot p_1^\mu$
$W + .C \quad W - .c \quad Z.f$	$\frac{1}{2} \frac{i \cdot EE \cdot MW}{SW}$
$W + .C \quad Z.c \quad W -_\mu$	$\frac{CW \cdot EE}{SW} \cdot p_1^\mu$
$W + .C \quad Z.c \quad W - .f$	$\frac{1}{2} \frac{i \cdot (1-2CW^2) \cdot EE \cdot MW}{CW \cdot SW}$
$W + .f \quad W -_\mu \quad Z_\nu$	$\frac{i \cdot EE \cdot MW \cdot SW}{CW} \cdot g^{\mu\nu}$
$W + .f \quad W -_\mu \quad Z.f$	$-\frac{1}{2} \frac{EE}{SW} (p_3^\mu - p_1^\mu)$
$W + .f \quad W - .f \quad Z_\mu$	$-\frac{1}{2} \frac{(1-2CW^2) \cdot EE}{CW \cdot SW} (p_2^\mu - p_1^\mu)$

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$W - .C \quad A.c \quad W +_\mu$	$-EE \cdot p_1^\mu$
$W - .C \quad A.c \quad W + .f$	$i \cdot EE \cdot MW$
$W - .C \quad W + .c \quad A_\mu$	$EE \cdot p_1^\mu$
$W - .C \quad W + .c \quad H$	$-\frac{1}{2} \frac{EE \cdot MW}{SW}$
$W - .C \quad W + .c \quad Z_\mu$	$\frac{CW \cdot EE}{SW} \cdot p_1^\mu$
$W - .C \quad W + .c \quad Z.f$	$-\frac{1}{2} \frac{i \cdot EE \cdot MW}{SW}$
$W - .C \quad Z.c \quad W +_\mu$	$-\frac{CW \cdot EE}{SW} \cdot p_1^\mu$
$W - .C \quad Z.c \quad W + .f$	$-\frac{1}{2} \frac{i \cdot (1-2CW^2) \cdot EE \cdot MW}{CW \cdot SW}$
$Z.C \quad W + .c \quad W -_\mu$	$-\frac{CW \cdot EE}{SW} \cdot p_1^\mu$
$Z.C \quad W + .c \quad W - .f$	$\frac{1}{2} \frac{i \cdot EE \cdot MW}{CW \cdot SW}$
$Z.C \quad W - .c \quad W +_\mu$	$\frac{CW \cdot EE}{SW} \cdot p_1^\mu$
$Z.C \quad W - .c \quad W + .f$	$-\frac{1}{2} \frac{i \cdot EE \cdot MW}{CW \cdot SW}$
$Z.C \quad Z.c \quad H$	$-\frac{1}{2} \frac{EE \cdot MW}{CW^2 \cdot SW}$
$A_\mu \quad A_\nu \quad W +_\rho \quad W -_\sigma$	$-EE^2(2g^{\mu\nu}g^{\rho\sigma} - g^{\mu\rho}g^{\nu\sigma} - g^{\mu\sigma}g^{\nu\rho})$
$A_\mu \quad A_\nu \quad W + .f \quad W - .f$	$2EE^2 \cdot g^{\mu\nu}$
$A_\mu \quad H \quad W +_\nu \quad W - .f$	$\frac{1}{2} \frac{i \cdot EE^2}{SW} \cdot g^{\mu\nu}$
$A_\mu \quad H \quad W + .f \quad W -_\nu$	$-\frac{1}{2} \frac{i \cdot EE^2}{SW} \cdot g^{\mu\nu}$
$A_\mu \quad W +_\nu \quad W -_\rho \quad Z_\sigma$	$-\frac{CW \cdot EE^2}{SW}(2g^{\mu\sigma}g^{\nu\rho} - g^{\mu\nu}g^{\rho\sigma} - g^{\mu\rho}g^{\nu\sigma})$
$A_\mu \quad W +_\nu \quad W - .f \quad Z.f$	$-\frac{1}{2} \frac{EE^2}{SW} \cdot g^{\mu\nu}$
$A_\mu \quad W + .f \quad W -_\nu \quad Z.f$	$-\frac{1}{2} \frac{EE^2}{SW} \cdot g^{\mu\nu}$
$A_\mu \quad W + .f \quad W - .f \quad Z_\nu$	$-\frac{(1-2CW^2) \cdot EE^2}{CW \cdot SW} \cdot g^{\mu\nu}$
$G_{\mu p} \quad G_{\nu q} \quad G_{\rho r} \quad G_{\sigma s}$	$GG^2(g^{\mu\rho}g^{\nu\sigma}f_{pqt}f_{rst} - g^{\mu\sigma}g^{\nu\rho}f_{pqt}f_{rst} + g^{\mu\nu}g^{\rho\sigma}f_{prt}f_{qst} - g^{\mu\sigma}g^{\nu\rho}f_{prt}f_{qst} + g^{\mu\nu}g^{\rho\sigma}f_{pst}f_{qrt} - g^{\mu\rho}g^{\nu\sigma}f_{pst}f_{qrt})$
$G_{\mu p} \quad G_{\nu q} \quad G_{\rho r} \quad Y$	$-4 \frac{GG \cdot gYgg}{MY} f_{pqr}(p_3^\nu g^{\mu\rho} - p_3^\mu g^{\nu\rho} + p_1^\rho g^{\mu\nu} - p_1^\nu g^{\mu\rho} - p_2^\rho g^{\mu\nu} + p_2^\mu g^{\nu\rho})$
$H \quad H \quad H \quad H$	$-\frac{3}{4} \frac{EE^2 \cdot MH^2}{MW^2 \cdot SW^2}$

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$H \quad H \quad W_{+\mu} \quad W_{-\nu}$	$\frac{1}{2} \frac{EE^2}{SW^2} \cdot g^{\mu\nu}$
$H \quad H \quad W_{+ \cdot f} \quad W_{- \cdot f}$	$-\frac{1}{4} \frac{EE^2 \cdot MH^2}{MW^2 \cdot SW^2}$
$H \quad H \quad Z_\mu \quad Z_\nu$	$\frac{1}{2} \frac{EE^2}{CW^2 \cdot SW^2} \cdot g^{\mu\nu}$
$H \quad H \quad Z_{\cdot f} \quad Z_{\cdot f}$	$-\frac{1}{4} \frac{EE^2 \cdot MH^2}{MW^2 \cdot SW^2}$
$H \quad W_{+\mu} \quad W_{- \cdot f} \quad Z_\nu$	$-\frac{1}{2} \frac{i \cdot EE^2}{CW} \cdot g^{\mu\nu}$
$H \quad W_{+ \cdot f} \quad W_{-\mu} \quad Z_\nu$	$\frac{1}{2} \frac{i \cdot EE^2}{CW} \cdot g^{\mu\nu}$
$W_{+\mu} \quad W_{+\nu} \quad W_{-\rho} \quad W_{-\sigma}$	$\frac{EE^2}{SW^2} (2g^{\mu\nu}g^{\rho\sigma} - g^{\mu\sigma}g^{\nu\rho} - g^{\mu\rho}g^{\nu\sigma})$
$W_{+\mu} \quad W_{+ \cdot f} \quad W_{-\nu} \quad W_{- \cdot f}$	$\frac{1}{2} \frac{EE^2}{SW^2} \cdot g^{\mu\nu}$
$W_{+\mu} \quad W_{-\nu} \quad Z_\rho \quad Z_\sigma$	$-\frac{CW^2 \cdot EE^2}{SW^2} (2g^{\mu\nu}g^{\rho\sigma} - g^{\mu\rho}g^{\nu\sigma} - g^{\mu\sigma}g^{\nu\rho})$
$W_{+\mu} \quad W_{-\nu} \quad Z_{\cdot f} \quad Z_{\cdot f}$	$\frac{1}{2} \frac{EE^2}{SW^2} \cdot g^{\mu\nu}$
$W_{+\mu} \quad W_{- \cdot f} \quad Z_\nu \quad Z_{\cdot f}$	$\frac{1}{2} \frac{EE^2}{CW} \cdot g^{\mu\nu}$
$W_{+ \cdot f} \quad W_{+ \cdot f} \quad W_{- \cdot f} \quad W_{- \cdot f}$	$-\frac{1}{2} \frac{EE^2 \cdot MH^2}{MW^2 \cdot SW^2}$
$W_{+ \cdot f} \quad W_{-\mu} \quad Z_\nu \quad Z_{\cdot f}$	$\frac{1}{2} \frac{EE^2}{CW} \cdot g^{\mu\nu}$
$W_{+ \cdot f} \quad W_{- \cdot f} \quad Z_\mu \quad Z_\nu$	$\frac{1}{2} \frac{(1-2CW^2)^2 \cdot EE^2}{CW^2 \cdot SW^2} \cdot g^{\mu\nu}$
$W_{+ \cdot f} \quad W_{- \cdot f} \quad Z_{\cdot f} \quad Z_{\cdot f}$	$-\frac{1}{4} \frac{EE^2 \cdot MH^2}{MW^2 \cdot SW^2}$
$Z_\mu \quad Z_\nu \quad Z_{\cdot f} \quad Z_{\cdot f}$	$\frac{1}{2} \frac{EE^2}{CW^2 \cdot SW^2} \cdot g^{\mu\nu}$
$Z_{\cdot f} \quad Z_{\cdot f} \quad Z_{\cdot f} \quad Z_{\cdot f}$	$-\frac{3}{4} \frac{EE^2 \cdot MH^2}{MW^2 \cdot SW^2}$
$G_{\mu p} \quad G_{\nu q} \quad G_{\rho r} \quad G_{\sigma s} \quad Y$	$-4 \frac{GG^2 \cdot gYgg}{MY} (g^{\mu\rho}g^{\nu\sigma}f_{pqt}f_{rst} - g^{\mu\sigma}g^{\nu\rho}f_{pqt}f_{rst} + g^{\mu\nu}g^{\rho\sigma}f_{prt}f_{qst} - g^{\mu\sigma}g^{\nu\rho}f_{prt}f_{qst} + g^{\mu\nu}g^{\rho\sigma}f_{pst}f_{qrt} - g^{\mu\rho}g^{\nu\sigma}f_{pst}f_{qrt})$