Тестовый прогон: Было:

$$\phi_1(-p)\times\delta_{13}[k_1]\times D_1^A D_{1A}\bar{D}_{2\dot{a}}\bar{D}_2^{\dot{a}}\delta_{12}[p+k_1]\times D_2^B D_{2B}\bar{D}_{3\dot{b}}\bar{D}_3^{\dot{b}}\delta_{23}[p+k_1+k_2]\times\delta_{24}[k_2]\times D_3^C D_{3C}\bar{D}_{4\dot{c}}\bar{D}_4^{\dot{c}}\delta_{34}[p+k_2]\times\bar{\phi}_4(p)$$

Выравниваем индекс у 0-ого слагаемого 2-ого, 3-ого и 5-ого сомножителей (дельта-функций)

$$-\phi_1(-p)\times\delta_{13}[k_1]\times D_1^A D_{1A}\bar{D}_1^{\dot{a}}\bar{D}_{1\dot{a}}\delta_{12}[p+k_1]\times D_2^B D_{2B}\bar{D}_2^{\dot{b}}\bar{D}_{2\dot{b}}\delta_{23}[p+k_1+k_2]\times\delta_{24}[k_2]\times D_3^C D_{3C}\bar{D}_3^{\dot{c}}\bar{D}_{3\dot{c}}\delta_{34}[p+k_2]\times\bar{\phi}_4(p)$$

Опускаем индексы у 0-ого слагаемого

$$-\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times\delta_{13}[k_1]\times D_{1D}D_{1A}\bar{D}_{1\dot{d}}\bar{D}_{1\dot{a}}\delta_{12}[p+k_1]\times D_{2E}D_{2B}\bar{D}_{2\dot{e}}\bar{D}_{2\dot{b}}\delta_{23}[p+k_1+k_2]\times\delta_{24}[k_2]\times D_{3F}D_{3C}\bar{D}_{3\dot{f}}\bar{D}_{3\dot{c}}\delta_{34}[p+k_2]\times\bar{\phi}_4(p)$$

Избавляемся от голых дельта-функций good good nothing$_t o_d$*onothing*$_t o_d o$

$$-\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times D_{1D}D_{1A}\bar{D}_{1\dot{d}}\bar{D}_{1\dot{a}}\delta_{12}[p+k_1]\times D_{2E}D_{2B}\bar{D}_{2\dot{e}}\bar{D}_{2\dot{b}}\delta_{21}[p+k_1+k_2]\times D_{1F}D_{1C}\bar{D}_{1\dot{f}}\bar{D}_{1\dot{c}}\delta_{12}[p+k_2]\times\bar{\phi}_2(p)$$

Скоммутируем производные у 0-ого слагаемого 2-его сомножителя (дельта-функций)

$$-\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times D_{1D}D_{1A}\bar{D}_{1\dot{d}}\bar{D}_{1\dot{a}}\delta_{12}[p+k_1]\times D_{1B}D_{1E}\bar{D}_{1\dot{b}}\bar{D}_{1\dot{e}}\delta_{21}[p+k_1+k_2]\times D_{1F}D_{1C}\bar{D}_{1\dot{f}}\bar{D}_{1\dot{c}}\delta_{12}[p+k_2]\times\bar{\phi}_2(p)+$$

$$+2\sigma^a_{E\dot{b}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times D_{1D}D_{1A}\bar{D}_{1\dot{d}}\bar{D}_{1\dot{a}}\delta_{12}[p+k_1]\times D_{1B}\bar{D}_{1\dot{e}}\delta_{21}[p+k_1+k_2]\times D_{1F}D_{1C}\bar{D}_{1\dot{f}}\bar{D}_{1\dot{c}}\delta_{12}[p+k_2]\times\bar{\phi}_2(p)-$$

$$-2\sigma^a_{B\dot{b}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times D_{1D}D_{1A}\bar{D}_{1\dot{d}}\bar{D}_{1\dot{a}}\delta_{12}[p+k_1]\times D_{1E}\bar{D}_{1\dot{e}}\delta_{21}[p+k_1+k_2]\times D_{1F}D_{1C}\bar{D}_{1\dot{f}}\bar{D}_{1\dot{c}}\delta_{12}[p+k_2]\times\bar{\phi}_2(p)-$$

$$-2\sigma^a_{E\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times D_{1D}D_{1A}\bar{D}_{1\dot{d}}\bar{D}_{1\dot{a}}\delta_{12}[p+k_1]\times D_{1B}\bar{D}_{1\dot{b}}\delta_{21}[p+k_1+k_2]\times D_{1F}D_{1C}\bar{D}_{1\dot{f}}\bar{D}_{1\dot{c}}\delta_{12}[p+k_2]\times\bar{\phi}_2(p)+$$

$$+4\sigma^b_{B\dot{b}}(p+k_1+k_2)_b\sigma^a_{E\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times D_{1D}D_{1A}\bar{D}_{1\dot{d}}\bar{D}_{1\dot{a}}\delta_{12}[p+k_1]\times\delta_{21}[p+k_1+k_2]\times D_{1F}D_{1C}\bar{D}_{1\dot{f}}\bar{D}_{1\dot{c}}\delta_{12}[p+k_2]\times\bar{\phi}_2(p)+$$

$$+2\sigma^a_{B\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times D_{1D}D_{1A}\bar{D}_{1\dot{d}}\bar{D}_{1\dot{a}}\delta_{12}[p+k_1]\times D_{1E}\bar{D}_{1\dot{b}}\delta_{21}[p+k_1+k_2]\times D_{1F}D_{1C}\bar{D}_{1\dot{f}}\bar{D}_{1\dot{c}}\delta_{12}[p+k_2]\times\bar{\phi}_2(p)-$$

$$-4\sigma^b_{E\dot{b}}(p+k_1+k_2)_b\sigma^a_{B\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times D_{1D}D_{1A}\bar{D}_{1\dot{d}}\bar{D}_{1\dot{a}}\delta_{12}[p+k_1]\times\delta_{21}[p+k_1+k_2]\times D_{1F}D_{1C}\bar{D}_{1\dot{f}}\bar{D}_{1\dot{c}}\delta_{12}[p+k_2]\times\bar{\phi}_2(p)$$

Запускаем ЦИКЛ WORKOUT-ов дельта-функций:

$$-16\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{e},\dot{b}}\epsilon_{B,E}\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\bar{D}_{1\dot{a}}\bar{D}_{1\dot{d}}D_{1A}D_{1D}\phi_1(-p)\times\bar{\phi}_1(p)-$$

$$-32\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{a},\dot{d}}\epsilon_{D,A}\sigma^a_{E\dot{b}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\bar{D}_{1\dot{e}}D_{1B}\phi_1(-p)\times\bar{\phi}_1(p)+$$

$$+32\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{a},\dot{d}}\epsilon_{D,A}\sigma^a_{B\dot{b}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\bar{D}_{1\dot{e}}D_{1E}\phi_1(-p)\times\bar{\phi}_1(p)+$$

$$+32\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{a},\dot{d}}\epsilon_{D,A}\sigma^a_{E\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\bar{D}_{1\dot{b}}D_{1B}\phi_1(-p)\times\bar{\phi}_1(p)+$$

$$+64\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{a},\dot{d}}\epsilon_{D,A}\sigma^b_{B\dot{b}}(p+k_1+k_2)_b\sigma^a_{E\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times\bar{\phi}_1(p)-$$

$$- 32\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{a},\dot{d}}\epsilon_{D,A}\sigma^{a}_{B\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\bar{D}_{1\dot{b}}D_{1E}\phi_1(-p)\times\bar{\phi}_1(p) -$$

$$- 64\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{a},\dot{d}}\epsilon_{D,A}\sigma^{b}_{E\dot{b}}(p+k_1+k_2)_b\sigma^{a}_{B\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times\bar{\phi}_1(p)$$

Запускаем ЦИКЛ WORKOUT-ов полей:

$$64\sigma^{b}_{A\dot{a}}(-p)_b\sigma^{a}_{D\dot{d}}(-p)_a\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{e},\dot{b}}\epsilon_{B,E}\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times\bar{\phi}_1(p) -$$

$$- 64\sigma^{b}_{D\dot{a}}(-p)_b\sigma^{a}_{A\dot{d}}(-p)_a\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{e},\dot{b}}\epsilon_{B,E}\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times\bar{\phi}_1(p) +$$

$$+ 64\sigma^{b}_{B\dot{e}}(-p)_b\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{a},\dot{d}}\epsilon_{D,A}\sigma^{a}_{E\dot{b}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times\bar{\phi}_1(p) -$$

$$- 64\sigma^{b}_{E\dot{e}}(-p)_b\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{a},\dot{d}}\epsilon_{D,A}\sigma^{a}_{B\dot{b}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times\bar{\phi}_1(p) -$$

$$- 64\sigma^{b}_{B\dot{b}}(-p)_b\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{a},\dot{d}}\epsilon_{D,A}\sigma^{a}_{E\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times\bar{\phi}_1(p) +$$

$$+ 64\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{a},\dot{d}}\epsilon_{D,A}\sigma^{b}_{B\dot{b}}(p+k_1+k_2)_b\sigma^{a}_{E\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times\bar{\phi}_1(p) +$$

$$+ 64\sigma^{b}_{E\dot{b}}(-p)_b\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{a},\dot{d}}\epsilon_{D,A}\sigma^{a}_{B\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times\bar{\phi}_1(p) -$$

$$- 64\epsilon_{\dot{c},\dot{f}}\epsilon_{F,C}\epsilon_{\dot{a},\dot{d}}\epsilon_{D,A}\sigma^{b}_{E\dot{b}}(p+k_1+k_2)_b\sigma^{a}_{B\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{c},\dot{f}}\epsilon^{C,F}\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times\bar{\phi}_1(p)$$

Свернем все индексы (эпсилоны с верхними и нижними, а также кронекеры):

$$1024\sigma^{b}_{A\dot{a}}(-p)_b\sigma^{a}_{D\dot{d}}(-p)_a\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times\bar{\phi}_1(p) -$$

$$- 1024\sigma^{b}_{D\dot{a}}(-p)_b\sigma^{a}_{A\dot{d}}(-p)_a\epsilon^{\dot{a},\dot{d}}\epsilon^{A,D}\phi_1(-p)\times\bar{\phi}_1(p) +$$

$$+ 1024\sigma^{b}_{B\dot{e}}(-p)_b\sigma^{a}_{E\dot{b}}(p+k_1+k_2)_a\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\phi_1(-p)\times\bar{\phi}_1(p) -$$

$$- 1024\sigma^{b}_{E\dot{e}}(-p)_b\sigma^{a}_{B\dot{b}}(p+k_1+k_2)_a\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\phi_1(-p)\times\bar{\phi}_1(p) -$$

$$- 1024\sigma^{b}_{B\dot{b}}(-p)_b\sigma^{a}_{E\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\phi_1(-p)\times\bar{\phi}_1(p) +$$

$$+ 1024\sigma^{b}_{B\dot{b}}(p+k_1+k_2)_b\sigma^{a}_{E\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\phi_1(-p)\times\bar{\phi}_1(p) +$$

$$+ 1024\sigma^{b}_{E\dot{b}}(-p)_b\sigma^{a}_{B\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\phi_1(-p)\times\bar{\phi}_1(p) -$$

$$- 1024\sigma^{b}_{E\dot{b}}(p+k_1+k_2)_b\sigma^{a}_{B\dot{e}}(p+k_1+k_2)_a\epsilon^{\dot{b},\dot{e}}\epsilon^{B,E}\phi_1(-p)\times\bar{\phi}_1(p)$$