Table (1^+ / 1^- block, left)

	$\sigma_{1^+}^{\#1}\dagger^{\alpha\beta}$	$\sigma_{1^+}^{\#2}\dagger^{\alpha\beta}$	$\tau_{1^+}^{\#1}\dagger^{\alpha\beta}$	$\sigma_{1^-}^{\#1}\dagger^{\alpha}$	$\sigma_{1^-}^{\#2}\dagger^{\alpha}$	$\tau_{1^-}^{\#1}\dagger^{\alpha}$	$\tau_{1^-}^{\#2}\dagger^{\alpha}$
$\tau_{1^-}^{\#2}{}_\alpha$	0	0	0	$\frac{2ik}{t_1+2k^2t_1}$	$-\frac{i\sqrt2\,(2k^2(r_1+r_5)-t_1)}{(t_1+2k^2t_1)^2}$	0	$-\frac{4k^4(r_1+r_5)+2k^2t_1}{(t_1+2k^2t_1)^2}$
$\tau_{1^-}^{\#1}{}_\alpha$	0	0	0	0	0	0	0
$\sigma_{1^-}^{\#2}{}_\alpha$	0	0	0	$\frac{\sqrt2}{t_1+2k^2t_1}$	$-\frac{2k^2(r_1+r_5)+t_1}{(t_1+2k^2t_1)^2}$	0	$\frac{i\sqrt2\,(2k^2(r_1+r_5)-t_1)}{(t_1+2k^2t_1)^2}$
$\sigma_{1^-}^{\#1}{}_\alpha$	0	0	0	0	$\frac{\sqrt2}{t_1+2k^2t_1}$	0	$-\frac{2ik}{t_1+2k^2t_1}$
$\tau_{1^+}^{\#1}{}_{\alpha\beta}$	$-\frac{i\sqrt2\,k}{t_1+k^2t_1}$	$-\frac{2ik^3(2r_1+r_5)+ikt_1}{(1+k^2)^2t_1^2}$	$-\frac{2k^4(2r_1+r_5)+k^2t_1}{(1+k^2)^2t_1^2}$	0	0	0	0
$\sigma_{1^+}^{\#2}{}_{\alpha\beta}$	$-\frac{\sqrt2}{t_1+k^2t_1}$	$-\frac{2k^2(2r_1+r_5)+t_1}{(1+k^2)^2t_1^2}$	$\frac{i(2k^3(2r_1+r_5)-kt_1)}{(1+k^2)^2t_1^2}$	0	0	0	0
$\sigma_{1^+}^{\#1}{}_{\alpha\beta}$	0	$-\frac{\sqrt2}{t_1+k^2t_1}$	$\frac{i\sqrt2\,k}{t_1+k^2t_1}$	0	0	0	0

Table (2^+ / 2^- sources)

	$\sigma_{2^+}^{\#1}{}_{\alpha\beta}$	$\tau_{2^+}^{\#1}{}_{\alpha\beta}$	$\sigma_{2^-}^{\#1}{}_{\alpha\beta\chi}$
$\sigma_{2^+}^{\#1}\dagger^{\alpha\beta}$	$\frac{2}{(1+2k^2)^2t_1}$	$-\frac{2i\sqrt2\,k}{(1+2k^2)^2t_1}$	0
$\tau_{2^+}^{\#1}\dagger^{\alpha\beta}$	$\frac{2i\sqrt2\,k}{(1+2k^2)^2t_1}$	$\frac{4k^2}{(1+2k^2)^2t_1}$	0
$\sigma_{2^-}^{\#1}\dagger^{\alpha\beta\chi}$	0	0	$\frac{2}{2k^2r_1+t_1}$

Table (0^+ / 0^- ω,f)

	$\omega_{0^+}^{\#1}$	$f_{0^+}^{\#1}$	$f_{0^+}^{\#2}$	$\omega_{0^-}^{\#1}$
$\omega_{0^+}^{\#1}\dagger$	$-t_1$	$i\sqrt2\,kt_1$	0	0
$f_{0^+}^{\#1}\dagger$	$-i\sqrt2\,kt_1$	$-2k^2t_1$	0	0
$f_{0^+}^{\#2}\dagger$	0	0	0	0
$\omega_{0^-}^{\#1}\dagger$	0	0	0	$-t_1$

Table (0^+ / 0^- σ,τ)

	$\sigma_{0^+}^{\#1}$	$\tau_{0^+}^{\#1}$	$\tau_{0^+}^{\#2}$	$\sigma_{0^-}^{\#1}$
$\sigma_{0^+}^{\#1}\dagger$	$-\frac{1}{(1+2k^2)^2t_1}$	$\frac{i\sqrt2\,k}{(1+2k^2)^2t_1}$	0	0
$\tau_{0^+}^{\#1}\dagger$	$-\frac{i\sqrt2\,k}{(1+2k^2)^2t_1}$	$-\frac{2k^2}{(1+2k^2)^2t_1}$	0	0
$\tau_{0^+}^{\#2}\dagger$	0	0	0	0
$\sigma_{0^-}^{\#1}\dagger$	0	0	0	$-\frac{1}{t_1}$

Table (2^+ / 2^- ω,f)

	$\omega_{2^+}^{\#1}{}_{\alpha\beta}$	$f_{2^+}^{\#1}{}_{\alpha\beta}$	$\omega_{2^-}^{\#1}{}_{\alpha\beta\chi}$
$\omega_{2^+}^{\#1}\dagger^{\alpha\beta}$	$\frac{t_1}{2}$	$-\frac{ikt_1}{\sqrt2}$	0
$f_{2^+}^{\#1}\dagger^{\alpha\beta}$	$\frac{ikt_1}{\sqrt2}$	k^2t_1	0
$\omega_{2^-}^{\#1}\dagger^{\alpha\beta\chi}$	0	0	$k^2r_1+\frac{t_1}{2}$

Table (1^+ / 1^- ω,f, right)

	$\omega_{1^+}^{\#1}\dagger^{\alpha\beta}$	$\omega_{1^+}^{\#2}\dagger^{\alpha\beta}$	$f_{1^+}^{\#1}\dagger^{\alpha\beta}$	$\omega_{1^-}^{\#1}\dagger^{\alpha}$	$\omega_{1^-}^{\#2}\dagger^{\alpha}$	$f_{1^-}^{\#1}\dagger^{\alpha}$	$f_{1^-}^{\#2}\dagger^{\alpha}$
$f_{1^-}^{\#2}{}_\alpha$	0	0	0	ikt_1	0	0	0
$f_{1^-}^{\#1}{}_\alpha$	0	0	0	0	0	0	0
$\omega_{1^-}^{\#2}{}_\alpha$	0	0	0	$\frac{t_1}{\sqrt2}$	0	0	0
$\omega_{1^-}^{\#1}{}_\alpha$	0	0	0	$k^2(r_1+r_5)-\frac{t_1}{2}$	$\frac{t_1}{\sqrt2}$	0	$-ikt_1$
$f_{1^+}^{\#1}{}_{\alpha\beta}$	$-\frac{ikt_1}{\sqrt2}$	0	0	0	0	0	0
$\omega_{1^+}^{\#2}{}_{\alpha\beta}$	$-\frac{t_1}{\sqrt2}$	0	0	0	0	0	0
$\omega_{1^+}^{\#1}{}_{\alpha\beta}$	$k^2(2r_1+r_5)-\frac{t_1}{2}$	$-\frac{t_1}{\sqrt2}$	$\frac{ikt_1}{\sqrt2}$	0	0	0	0

Lagrangian density

$-t_1\,\omega_i{}^{\alpha l}\,\omega_{\kappa\alpha}{}^{\kappa}-t_1\,\omega_i{}^{\kappa\lambda}\,\omega_{\kappa\lambda}{}^{l}+f^{\alpha\beta}\,\tau_{\alpha\beta}+\omega^{\alpha\beta\chi}\,\sigma_{\alpha\beta\chi}-r_5\,\partial_l\omega^{\kappa\lambda}{}_\kappa\,\partial^l\omega_\lambda{}^\alpha{}_\alpha-$
$\frac{2}{3}r_1\,\partial^\beta\omega^{\theta\alpha}{}_\kappa\,\partial_\theta\omega_{\alpha\beta}{}^\kappa-\frac{2}{3}r_1\,\partial_\theta\omega_{\alpha\beta}{}^\kappa\,\partial_\kappa\omega^{\theta\alpha\beta}-$
$r_5\,\partial_\alpha\omega_\lambda{}^\alpha{}_\theta\,\partial_\kappa\omega^{\theta\kappa\lambda}+r_5\,\partial_\theta\omega_\lambda{}^\alpha{}_\alpha\,\partial_\kappa\omega^{\kappa\lambda\theta}+2r_5\,\partial_\theta\omega_\lambda{}^\alpha{}_\alpha\,\partial_\kappa\omega^{\kappa\lambda\theta}-$
$\frac{1}{2}t_1\,\partial^\alpha f_{\theta\kappa}\,\partial^\kappa f_\alpha{}^\theta-\frac{1}{2}t_1\,\partial^\alpha f_{\kappa\theta}\,\partial^\kappa f^l{}_\alpha+t_1\,\omega_{\kappa\alpha}{}^\alpha\,\partial^\kappa f^l{}_l+$
$t_1\,\omega_{\kappa\lambda}{}^\lambda\,\partial^\kappa f^l{}_l+2t_1\,\partial^\alpha f_{\kappa\alpha}\,\partial^\kappa f^l{}_l-t_1\,\partial_\kappa f^\lambda{}_\lambda\,\partial^\kappa f^l{}_l+2t_1\,\omega_{l\kappa\theta}\,\partial^\kappa f^{l\theta}-$
$t_1\,\omega_{l\alpha}{}^\alpha\,\partial_\kappa f^l{}_\kappa+\frac{1}{2}t_1\,\partial^\alpha f^\lambda{}_\kappa\,\partial^\kappa f_{\lambda\alpha}+$
$\frac{1}{2}t_1\,\partial_\kappa f^\lambda{}_\theta\,\partial^\kappa f_\lambda{}^\theta-t_1\,\partial^\alpha f_{\lambda\kappa}\,\partial^\kappa f_{\lambda\kappa}+\frac{2}{3}r_1\,\partial_\kappa\omega^{\alpha\beta\theta}\,\partial^\kappa\omega_{\alpha\beta\theta}-\frac{2}{3}r_1\,\partial_\kappa\omega^{\theta\alpha\beta}\,\partial^\kappa\omega_{\alpha\beta\theta}+$
$\frac{2}{3}r_1\,\partial^\beta\omega_l{}^{\alpha\lambda}\,\partial_\lambda\omega_{\alpha\beta}{}^l-\frac{8}{3}r_1\,\partial^\beta\omega_l{}^{\lambda\alpha}\,\partial_\lambda\omega_{\alpha\beta}{}^l+r_5\,\partial_\alpha\omega_\lambda{}^\alpha{}_\theta\,\partial^\lambda\omega^{\theta\kappa}{}_\kappa-r_5\,\partial_\theta\omega_\lambda{}^\alpha{}_\alpha\,\partial^\lambda\omega^{\theta\kappa}{}_\kappa$

Source constraints

SO(3) irreps	#
$\tau_{0^+}^{\#2}==0$	1
$\tau_{0^+}^{\#1}-2ik\,\sigma_{0^+}^{\#1}==0$	1
$\tau_{1^-}^{\#2\,\alpha}+2ik\,\sigma_{1^-}^{\#2\,\alpha}==0$	3
$\tau_{1^-}^{\#1\,\alpha}==0$	3
$\tau_{1^+}^{\#1\,\alpha\beta}+ik\,\sigma_{1^+}^{\#2\,\alpha\beta}==0$	3
$\tau_{2^+}^{\#1\,\alpha\beta}-2ik\,\sigma_{2^+}^{\#1\,\alpha\beta}==0$	5
Total #:	16

Massive particle

Pole residue:	$-\frac{1}{r_1}>0$
Polarisations:	5
Square mass:	$-\frac{t_1}{2r_1}>0$
Spin:	2
Parity:	Odd

$J^P=2^-$, k^μ

(No massless particles)

$r_1<0\ \&\&\ t_1>0$