$$\partial_t \Gamma_k[\phi] = \frac{1}{2} \left(\begin{array}{c} \Diamond \\ \\ \\ \\ \\ \end{array} \right) - \left(\begin{array}{c} \Diamond \\ \\ \\ \end{array} \right) - \left(\begin{array}{c} \Diamond \\ \\ \\ \end{array} \right) + \frac{1}{2} \left(\begin{array}{c} \Diamond \\ \\ \\ \\ \end{array} \right)$$