6.1 Derivative of $S^{\mu\nu}$.

Replace in the second term the Christoffel symbol by a derivative of the metric tensor,

$$\nabla_\mu S^\mu_{\ \nu} = \frac{1}{\sqrt{|g|}} \, \partial_\mu(\sqrt{|g|}S^\mu_{\ \nu}) - \frac{1}{2}(\partial_\nu g_{\mu\lambda})S^{\mu\lambda} \,. \tag{150}$$