$$H_{144} = \begin{bmatrix} 2\,h - 6\,\mu + 2\,U & 0 & -\mathbf{i}\,\sqrt{6}\,t \\ 0 & 2\,h - 6\,\mu + 2\,U & \frac{3\,t}{2} + \frac{\mathbf{i}}{2}\,\sqrt{3}\,t \\ \mathbf{i}\,\sqrt{6}\,t & \frac{3\,t}{2} - \frac{\mathbf{i}}{2}\,\sqrt{3}\,t & 2\,h - 6\,\mu + 2\,U \end{bmatrix}$$