$$\begin{pmatrix} \Delta_k(A_2) \\ * & * & * & * \\ 0 & * & * & * \\ 0 & 0 & * & * & * \\ 0 & 0 & * & * & * \\ 0 & 0 & * & * & * \\ 0 & 0 & * & * & * \\ \Omega_{k+1}(A_2) \end{pmatrix}$$