$$\begin{cases} [M_{FF}]\underline{\ddot{x}}_F + [C_{FF}]\underline{\dot{x}}_F + [K_{FF}]\underline{x}_F = \underline{Q}_F - \left([M_{FC}]\underline{\ddot{x}}_C + [C_{FC}]\underline{\dot{x}}_C + [K_{FC}]\underline{x}_C\right) = \underline{Q}_F + \underline{Q}_{FC} \\ [M_{CF}]\underline{\ddot{x}}_F + [M_{CC}]\underline{\ddot{x}}_C + [C_{CF}]\underline{\dot{x}}_F + [C_{CC}]\underline{\dot{x}}_C + [K_{CF}]\underline{x}_F + [K_{CC}]\underline{x}_C = \underline{Q}_C \end{cases}$$