$$\boldsymbol{\mu}^{(k+1)} \leftarrow \boldsymbol{\mu}^{(k)} + \alpha^{(k)} \left(\sum_{i=1}^{N} \hat{f}(\mathbf{z}_i) \boldsymbol{z}_i - \boldsymbol{\mu}^{(k)} \right) ,$$

$$\boldsymbol{s}^{(k+1)} \leftarrow \hat{\boldsymbol{s}}^{(k)} + \frac{\alpha^{(k)}}{2} L(\mathbb{I}_n \otimes S^{(k)}) L^\top (LNL^\top)^{-1} L(\mathbb{I}_n \otimes S^{(k)^\top}) L^\top \cdot \text{vech} \left(S^{-\top} \left(\sum_{i=1}^{N} \hat{f}(\mathbf{z}_i) \boldsymbol{u}_i \boldsymbol{u}_i^\top - \mathbb{I}_n \right) \right) .$$