Corner

Permutation 1. CW Corner 3-Cycle



x [(R' U R') D2] [(R U' R') D2] R2

2. E-Perm



x' [(R U' R') D (R U R')] u2 [(R' U R) D (R' U' R)]

Edge

Permutation 1. CW Edge 3-Cycle



R2 U (R U R' U') (R' U') (R' U R')

2. CCW Edge 3-Cycle



[R U'] [R U] [R U'] R' U' R2

3. H-Perm



M2 U M2 U2 M2 U M2

4. Z-Perm



M2 U M2 U M' U2 M2 U2 M' U2