	Case	Algs
A1		R2' F2 (R2' bR' R2) F2' (R2' bR R')
A1'		(R bR' R2) F2 (R2' bR R2) F2' R2
A2		bR' R' U L U' R' U L' U' R2 bR
A2'		bR' R2' U L U' R U L' U' R bR
E1		y2 (R U R' U) (R' U' R F') (R U R' U') (R' F R2 U') (R2' U R U') (R- U' R' U L U' R U) xy' (R bR R' F R bR' R' F')
E2		y2 R2 U R' U' y (R U R' U') (R U R' U') (R U R') y' R U' R2' (the one handed E perm)
E3		(y') L' (R U2 R' U') (R U R' U') (R U R' U') R U' R' L (Setup to RU COLL L-case)
Q		(y2') R2 U2 R2' U R2 U' R2' U R2 U' R2' U R2 U2 R2'
Q'		R2 U2' R2' U' R2 U R2' U' R2 U R2' U' R2 U2' R2'
Q2		(R2' U2' R2 U' R2' U2' R2) (R U R' U') (R' F) (R2 U') (R' U' R U) (R' F')
Q2'		(R2 U2 R2' U R2 U2 R2') U (R U R' U') (R' F) (R2 U') (R' U' R U) (R' F') U
Ο		(R2' U' R2 F2 R2' F2') U' (F2 R2 F2' R2' U2 R2)
O'		(R2' U2' R2 F2 R2' F2') U (F2 R2 F2' R2' U R2)
O2		(R2 U2' R2' F2' U' F2) U' (R2 U' R2' F2' U2' F2)
O2'		(F2' U2 F2 R2 U R2') U (F2' U F2 R2 U2 R2')