LOOK # 1 Orient the edges

Finished F2L
Look down on U-Layer
3 cases to make a face cross.

Opposite Edges



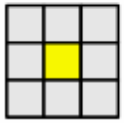
F (R U R' U') F'

Adjacent Edges



f (R U R' U') f'

No Edges



Already have face cross SKIP →

[F (R U R' U') F'] [f (R U R' U') f']

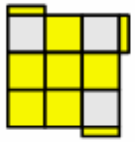
Case 1 + Case 2



LOOK # 2 Orient the corners

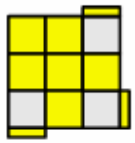
Look at the number of missing corners and orientation to determine the case.
7 cases to finish OLL.

Sune



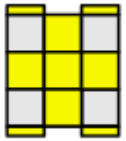
(R U R') U (R U2 R')

Anti-Sune



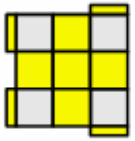
(R' U' R) U' (R' U2 R)

Cross - Symmetric



F (R U R' U') (R U R' U') (R U R' U') F'

Cross - Asymmetric



(R U2) (R2 U' R2 U' R2) (U2 R)

Right Thumb Top

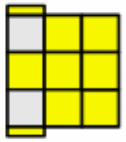
Headlights

Right Thumb Bottom ↓



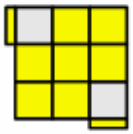
(R2 D) (R' U2) (R D') (R' U2 R')

Chameleon



(r U R' U') (r' F R F')

Diagonal

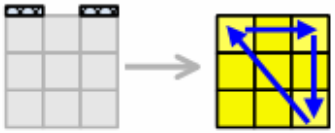


F' (r U R' U') (r' F R)

Find matching color "headlights" and AUF them to the back.

CW Corner Cycle

Have matching headlights



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

E - Perm

Do NOT have matching headlights



Already have 4 sets of headlights? AUF then SKIP →

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

LOOK # 3 Permute the corners

4 cases to finish PLL.

CW Edge Cycle



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

Right Thumb Bottom ↑

CCW Edge Cycle



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

H - Perm



M2 U M2 U2 M2 U M2

Z - Perm



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

LOOK # 4 Permute the edges

Badmephisto's
4 Look Last Layer Algorithms
EE-Cuber 3/13/2009

