



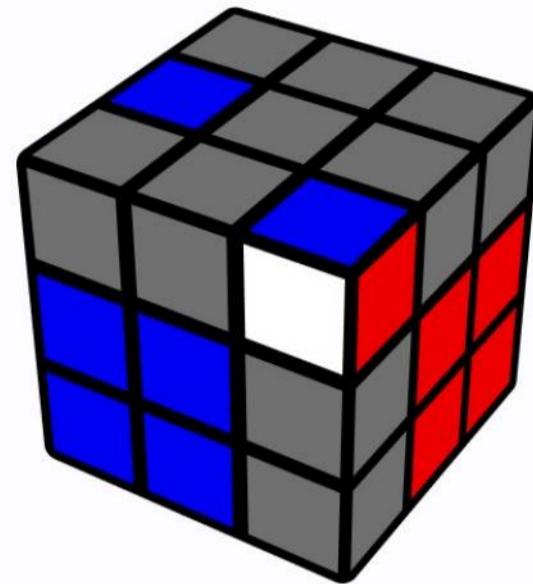
hot!

CFOP PACK

for a more in depth analysis + tricks for each F2L case!

Intuitive F2L

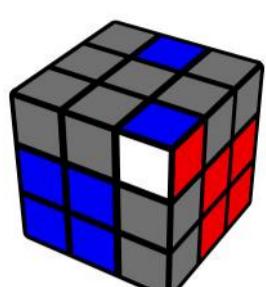
Fundamental CFOP



	Easy Inserts	2
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1 Standard F2L Solutions



Applying intuitive F2L techniques to solve the 41 standard F2L cases in the front.

2

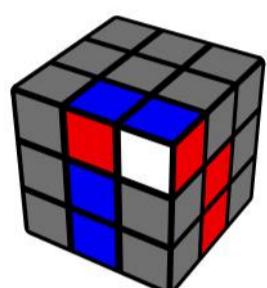


Solving Pairs in the Back

Always rotating to solve pairs in the front is a **bad** habit. This video covers how and when to solve pairs in the back.

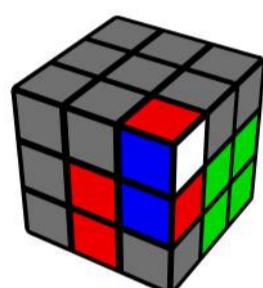
3

Extra Must-Know Solutions



Expanding our F2L knowledge with extra solutions to either save some moves or avoid a rotation.

4

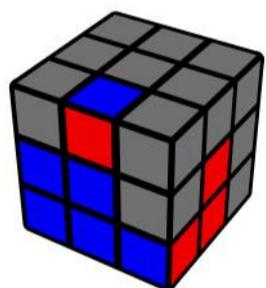


Dealing with Bad Cases

Not all F2L cases fit the 41 standard ones. This video covers how to deal with F2L piece(s) stuck in other slots.

5

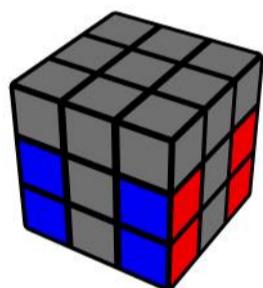
Keyhole Masterclass



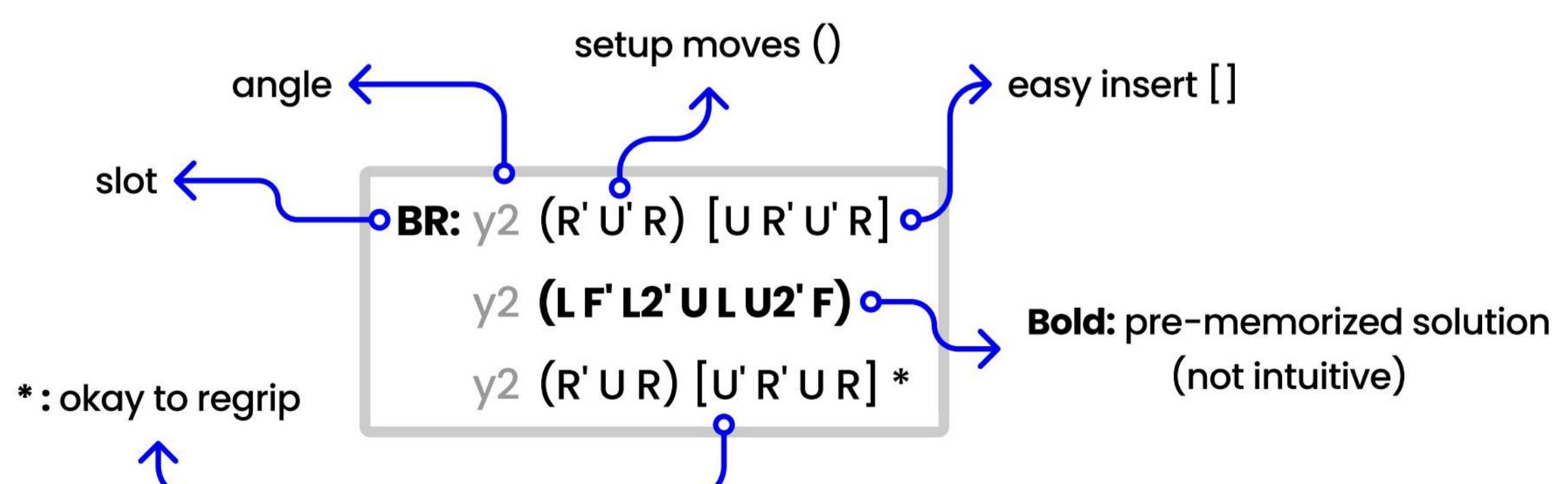
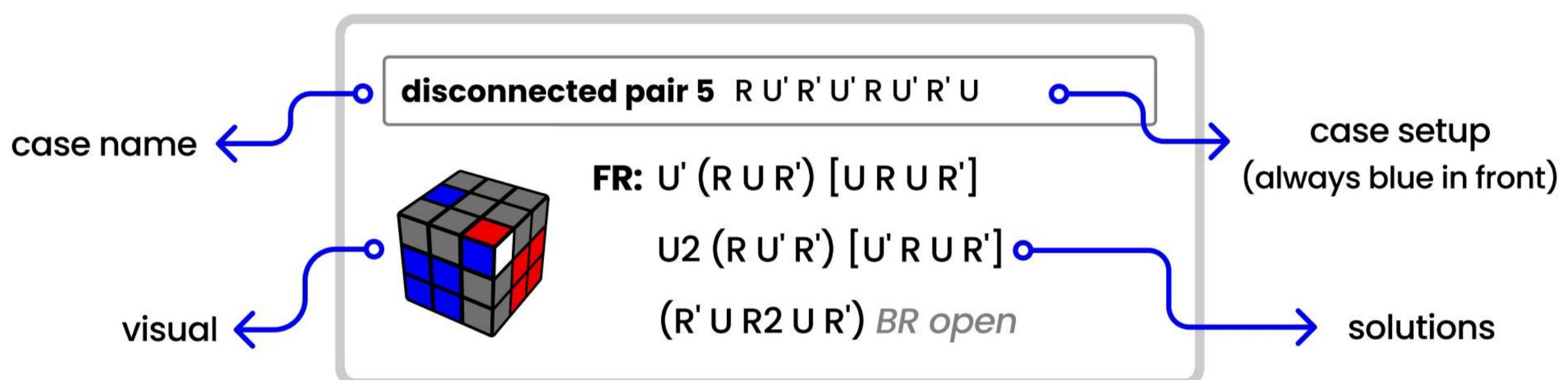
Keyhole is a powerful and intuitive technique to deal with cases where one of the two F2L pieces is already solved.

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F2L Fundamentals

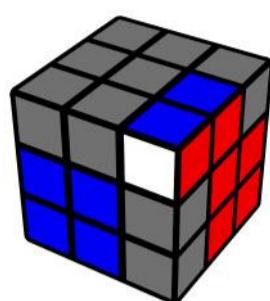


Tying together all intuitive F2L solutions with fundamentals regarding rotations and solutions.



EASY INSERTS (4)

right pair R U R' U'



FR: U (R U' R') / U2 (R U2' R')

(R' F R F') EO

FL: y (F' L F L') / U (F U' F')

BL: y2 U2 (L U2 L') / U (L U' L')

BR: y' U (f R' f')

left pair L' U' L U



FL: U' (L' U L) / U2 (L' U2 L)

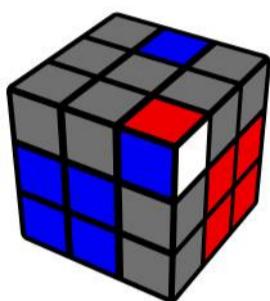
(L F' L' F) EO

FR: y' (F R' F' R) / U' (F' U F)

BR: y2 U2 (R' U2' R) / U' (R' U R)

BL: y U' (f' L f)

right insert R U' R'



FR: (R U R')

FL: y (F U F')

BL: y2 (L U L')

BR: y' (f R f')

left insert L' U L



FL: (L' U' L)

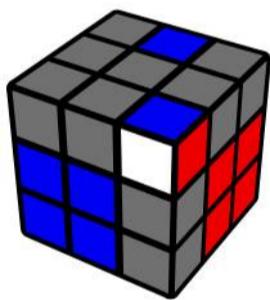
FR: y' (F' U' F)

BR: y2 (R' U' R)

BL: y (f' L' f)

DISCONNECTED PAIRS (10)

disconnected pair 1 R U R' U2 R U' R' U



FR: U' (R U R') [U2 R U' R']

BL: y2 U' (L U L') [U' L U2 L']

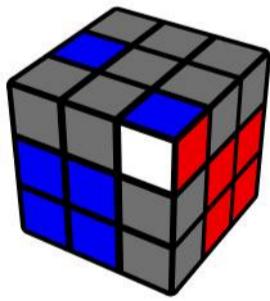
disconnected pair 2 L' U' L U2 L' U L U'



FL: U (L' U' L) [U2' L' U L]

BR: y2 U (R' U' R) [U R' U2' R]

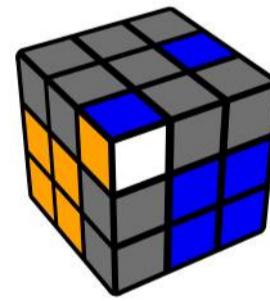
disconnected pair 3 R U R' U2 R U2 R' U



FR: U' (R U2' R') [U2 R U' R']

BL: y2 U' (L U2 L') [U' L U2 L']

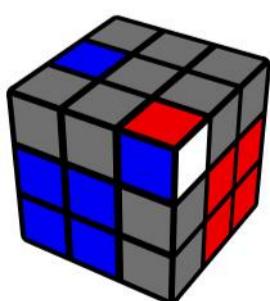
disconnected pair 4 L' U' L U2 L' U2 L U'



FL: U (L' U2 L) [U2' L' U L]

BR: y2 U (R' U2' R) [U R' U2' R]

disconnected pair 5 R U' R' U' R U' R' U



FR: U' (R U R') [U R U R']

U2 (R U' R') [U' R U R']

(R' U R2 U R') BR open

BL: y2 U' (L U L') [U L U L']

y2 U2 (L U' L') [U' L U L']

y2 (L' U L2 U L') BR open

disconnected pair 6 L' U L U L' U L U'



FL: U (L' U' L) [U' L' U' L]

U2 (L' U L) [U L' U' L]

(L U' L2' U' L) BL open

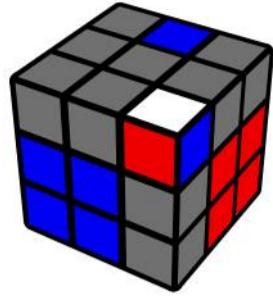
BR: y2 U (R' U' R) [U R' U' R]

y2 U2 (R' U R) [U R' U' R]

y2 (R U' R2' U' R) FR open



disconnected pair 7 R U R' U' R U2 R' U'



FR: U (R U2' R') [U R U' R']

BL: y2 U (L U2 L') [U L U' L'] *

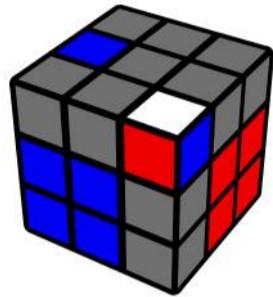
disconnected pair 8 L' U' L U L' U2 L U



FL: U' (L' U2 L) [U' L' U L]

BR: y2 U' (R' U2' R) [U' R' U R] *

disconnected pair 9 R U' R' U2 R U R'



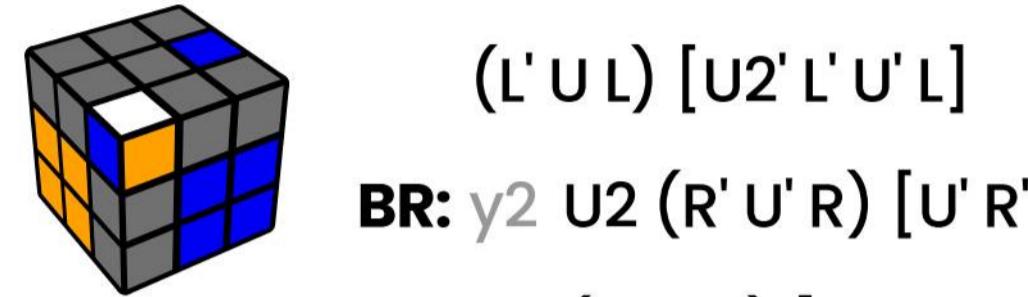
FR: U2 (R U R') [U R U' R']

(R U' R') [U2 R U R']

BL: y2 U2 (L U L') [U L U' L'] *

y2 (L U' L') [U2' L U L']

disconnected pair 10 L' U' L U L' U L U2



FL: U2 (L' U' L) [U' L' U L]

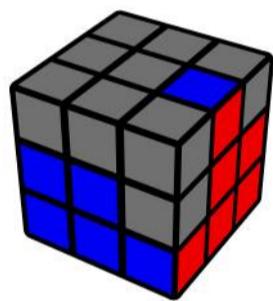
(L' U L) [U2' L' U' L]

BR: y2 U2 (R' U' R) [U' R' U R] *

y2 (R' U R) [U2 R' U' R]

CORNER IN SLOT (6)

corner in slot 1 R U' R' F R' F' R U



[keyhole potential]

FR: U' (R' F R F') [R U R']

FL: y U' (L' U L) [F' L F L']

BL: y2 U' (f' L f) [U L U' L']

y2 (L U' L') (U' L U' L') [U L U L'] *

BR: y' U' (R' U R) [U f R' f']

corner in slot 2 L' U L F' L F L' U'



[keyhole potential]

FL: U (L F' L' F) [L' U' L]

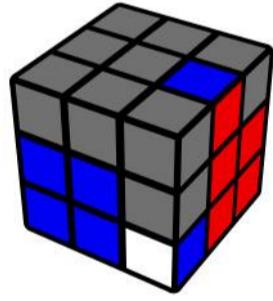
FR: y' U (R U' R') [F R' F' R]

BR: y2 U (f R' f) [U' R' U R]

y2 (R' U R) (U R' U R) [U' R' U' R] *

BL: y U (L U' L') [U' f L f]

corner in slot 3 R U R' U' R U R'



FR: (R U' R') [U R U' R']

BL: y2 (L U' L') [U L U' L'] *

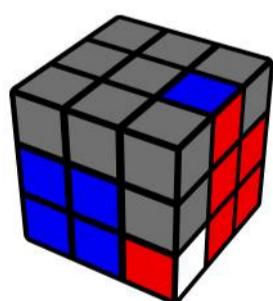
corner in slot 4 L' U' L U L' U' L



FL: (L' U L) [U' L' U L]

BR: y2 (R' U R) [U' R' U R] *

corner in slot 5 R U' R' U R U' R'



FR: (R U R') [U' R U R']

FL: y (L F' L' F) [U L' U' L']

BL: y2 (L U L') [U' L U L']

corner in slot 6 L' U L U' L' U L



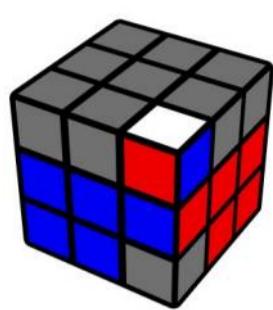
FL: (L' U' L) [U L' U' L]

FR: y' (R' F R F') [U R U' R']

BR: y2 (R' U' R) [U R' U' R]

EDGE IN SLOT (6)

edge in slot 1 R U' R' U R U' R' U R U' R'



[keyhole potential]

FR: (U R U' R')*3

FL: y (U' L' U L)*3

BL: y2 (L U L' U')*2 [L U L']

BR: y' (R' U' R U)*2 [R' U' R]

edge in slot 2 R U R' F R' F' R U



FR: U' (R' F R F') [R U' R']

(R U' R') [d R' U R]

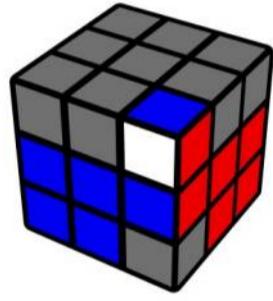
FL: y U (L F' L' F) [L' U L]

y (L' U L) [d' L U' L']

BL: y2 (L U' L') [U f' L f]

BR: y' (R' U R) [U' f R' f]

edge in slot 3 R U R' U2 R U R' U



[keyhole potential]

FR: U' (R U' R') [U2 R U' R']

FL: y U' (L' U' L) [U2 L' U' L]

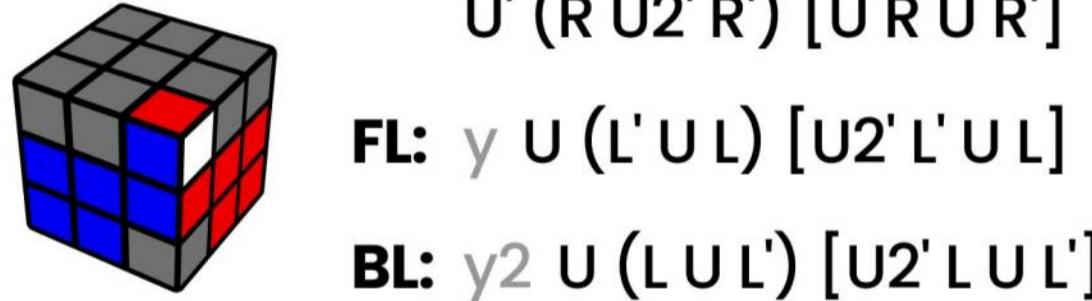
y U (L' U2 L) [U' L' U' L]

BL: y2 U' (L U' L) [U' L U2 L']

BR: y' U' (R' U' R) [U2 R' U' R]

y' U (R' U2' R) [U' R' U' R]

edge in slot 4 R U' R' U2 R U' R' U'



[keyhole potential]

FR: U (R U R') [U2' R U R']

U' (R U2' R') [U R U R']

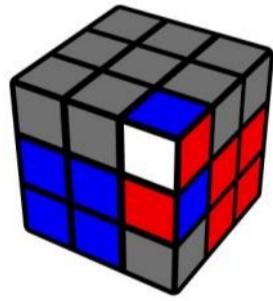
FL: y U (L' U L) [U2' L' U L]

BL: y2 U (L U L) [U2' L U L']

y2 U' (L U2 L) [U L U L']

BR: y' U (R' U R) [U R' U2' R]

edge in slot 5 F' U F U' R U' R' U



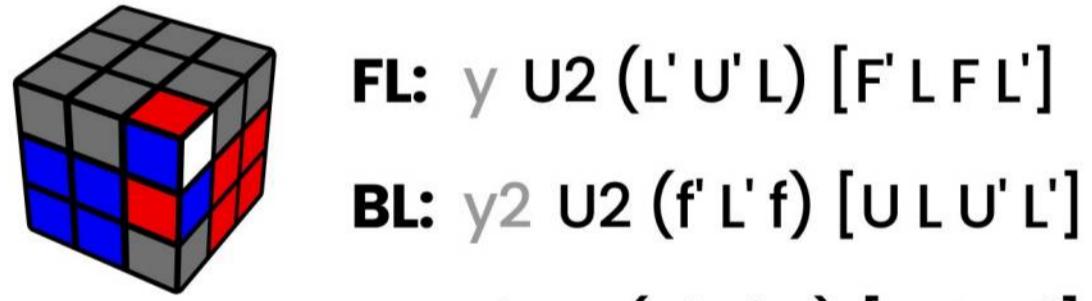
FR: U2 (R U R') [F R' F' R]

FL: y U2 (F U F') [U' L' U L]

BL: y2 U2 (L U L) [U' f' L f]

BR: y' U2 (f R f') [U' R' U R]

edge in slot 6 R U' R' U F' U F U'

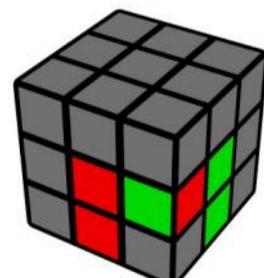


FR: U2 (F' U' F) [U R U' R']

FL: y U2 (L' U' L) [F' L F L']

BL: y2 U2 (f' L' f) [U L U' L']

BR: y' U2 (R' U' R) [U f R f']



Why you shouldn't rotate for stuck edges

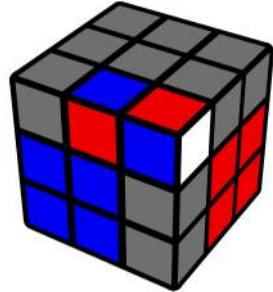
Middle-layer edge orientation stays the same when rotating. So instead of rotating first, we either rotate after the setup or adjust edge orientation using F/f moves.

bad edge :(



CONNECTED PAIRS (10)

connected pair 1 R' U' R2 U' R2 U2 R



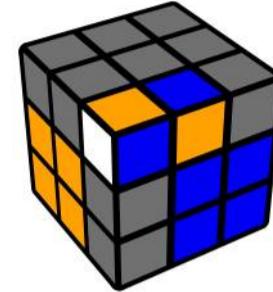
FR: (R U' R') (U R U' R') [U2 R U' R']

(R' U2' R2 U R') *BR open*

BL: y2 (L' U2 L2 U L2' U L]

y2 (L' U2 L2 U L') *FL open*

connected pair 2 L U L2 U L2 U2 L'



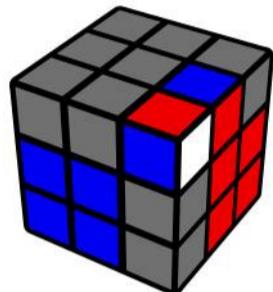
FL: (L' U L) (U' L' U L) [U2' L' U L]

(L U2 L2' U' L) *BL open*

BR: y2 (R U2' R2' U' R2 U' R']

y2 (R U2' R2' U' R] *FR open*

connected pair 3 R U' R' U' R U R' U



FR: U' (R U' R') [U R U R']

BL: y2 U' (L U' L') [U L U L']

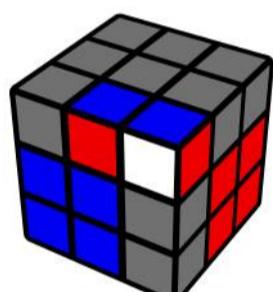
connected pair 4 L' U L U L' U' L U'



FL: U (L' U L) [U' L' U' L]

BR: y2 U (R' U R) [U' R' U' R]

connected pair 5 R U' R' U2 F' U' F



FR: (R U R') (U2 R U' R') [U R U' R']

U' (R' U R) [U' R U R'] *BR open*

FL: (L' U L) [U2' F U F']

BL: y2 U2 (L U L') (U' L U2 L') [U L U L']

y2 (f' L f) [U2' L U L']

y2 U' (L' U L) [U' L U L'] *FL open*

BR: y' (R' U R) [U2 f R f']

connected pair 6 L' U L U2 F U F'



FL: (L' U' L) (U2' L' U L) [U' L' U L]

U (L U' L') [U L' U' L] *BL open*

FR: y' (R U' R') [U2 F' U' F]

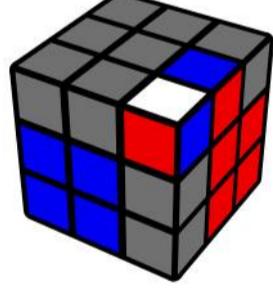
BR: y2 U2 (R' U' R) (U R' U2 R) [U' R' U' R]

y2 (f R' f) [U2 R' U' R]

y2 U (R U' R') [U R' U' R] *FR open*

BL: y (L U' L') [U2' f' L' f']

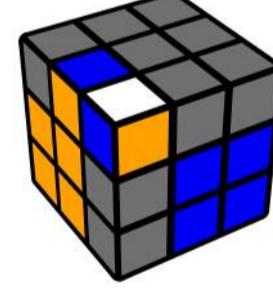
connected pair 7 R U' R' U R U2 R'



FR: (R U2' R') [U' R U R']

BL: y2 (L U2 L') [U' L U L']

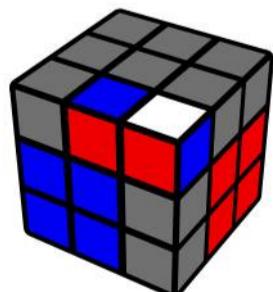
connected pair 8 L' U L U' L' U2 L



FL: (L' U2 L) [U L' U' L]

BR: y2 (R' U2' R) [U R' U' R]

connected pair 9 R U' R' F' U' F R U' R'



[keyhole potential]

FR: U (R U' R') (U' R U' R') [U R U' R']

FL: y U (L' U' L2 F' L' F) [L' U L]

BL: y2 (L U L') (U2' L U L') [U' L U L']

connected pair 10 L' U L F U F' L' U L



[keyhole potential]

FL: U' (L' U L) (U L' U L) [U' L' U L]

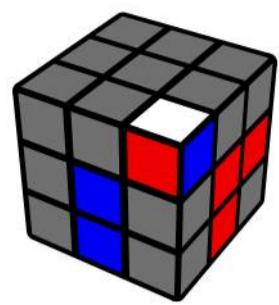
FR: y' U' (R U R2' F R F') [R U' R']

BR: y2 (R' U' R) (U2 R' U' R) [U R' U' R]



EDGE IN WRONG SLOT (18)

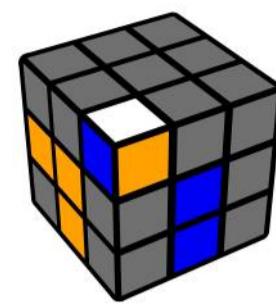
white up 1 R U R2 U' R U



FR: U' (R' U R2 U' R')

BL: y2 U' (L' U L2 U' L')

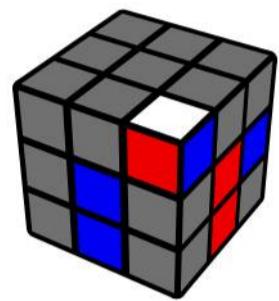
white up 2 L' U' L2 U L' U'



FL: U (L U' L2' U L U')

BR: y2 U (R U' R2' U R)

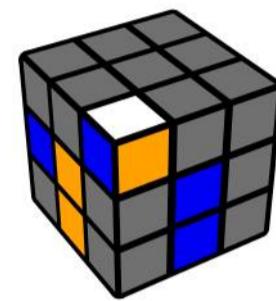
white up 3 S R' S' U R' U' R U2



FL: y (R' F R2 U' R' U2 F')

BL: y2 U2 (L F' L' F) [L U L']

white up 4 S' L S U' L U L' U2



FR: y' (L F' L2' U L U2' F)

BR: y2 U2 (R' F R F') [R' U' R]

white up 5 R2 u R2 u' R2 U2



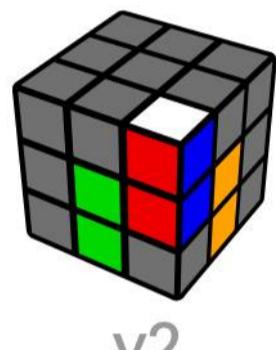
FR: (L U L' U' L U L') [U R U R']

FL: y (R' U' R U R' U' R U) [L' U' L]

BL: y2 U (R U' R' U R U' R') [L U2 L']

BR: y' U' (L' U L U' L' U L) [R' U2' R]

white up 6 F' L U L' F

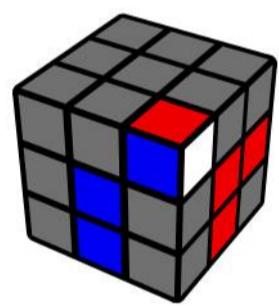


FR: (L U' L') [d' L' U L]

BL: y2 L [F' U F] L'

BR: y' R' [F U' F'] R

white right 1 R U' R2 U R



FR: (R' U' R2 U R')

BL: y2 (L' U' L2 U L')

white left 1 L' U L2 U' L'



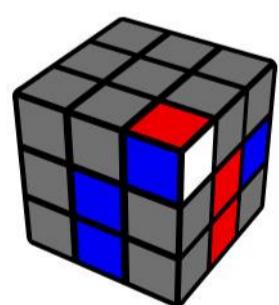
FL: (L U L2' U' L)

BR: y2 (R U R2 U' R)

white right 2 F D R' D' F'

FR: (R' U R) [d' L' U L]

(F D R D' F')



FL: y R [F U F'] R'

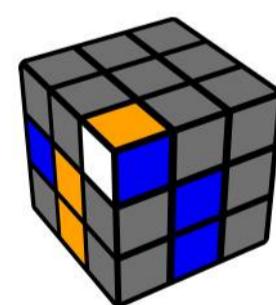
BL: y2 F [L U L'] F'

BR: y' (L U L') [U' f R f]

y' (R u R u' R')

FL: (L' U' L) [d R U' R']

(F' D' L' D F)

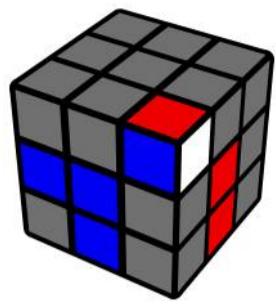


FR: y' L' [F' U' F] L

BR: y2 F' [R' U' R] F

BL: y (R' U' R) [U f' L' f]

y (L' u' L' u L)

white right 3 R U R' L' U L U

FR: U' (L' U' L) [R U' R']

FL: y U2 (L' U' L2 U L2' U' L)

BL: y2 U' (R' U' R) [L U' L']

BR: y' U2 (R' U' R2 U R2' U' R)

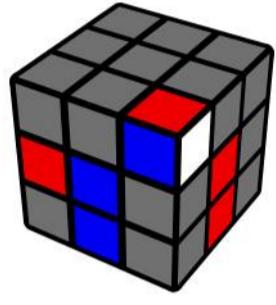
white left 3 L' U' L R U' R' U'

FL: U (R U R') [L' U L]

FR: y' U2 (R U R2' U' R2 U R')

BR: y2 U (L U L') [R' U R]

BL: y U2 (L U L2' U' L2 U L')

white right 4 R U' R' F U2 F'

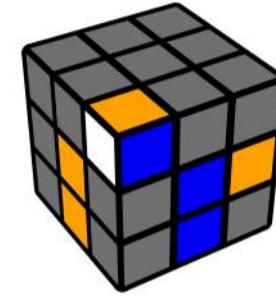
FR: (F U2' F') [R U R']

U2 (L' U L) [y' R' U2' R]

FL: y (L U2 L') [F U F']

BL: y2 U2 (R' U R) [U f' L f]

BR: y' (R U2' R') [f R f]

white left 4 L' U L F' U2 F

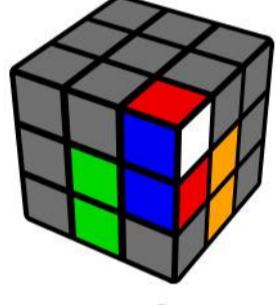
FL: (F' U2' F) [L' U' L]

U2 (R U' R') [y L U2 L']

FR: y' (R' U2' R) [F' U' F]

BR: y2 U2 (L U' L') [U' f R' f']

BL: y (L' U2 L) [f' L' f]

white right 5 R U' R' L U' L' U'

FR: U (L U L') [R U R']

U' (L U2 L') [U' R U R']

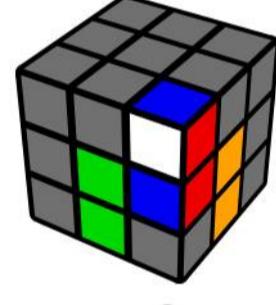
FL: y U (R' U R) [L' U L]

BL: y2 U (R U R') [L U L']

y2

y2 U' (R U2' R') [U' L U L']

BR: y' U (L' U L) [R' U R]

white left 5 R U R' L U L' U

FR: U' (L U' L') [R U' R']

FL: y U' (R' U' R) [L' U' L]

y U (R' U2' R) [U L' U' L]

BL: y2 U' (R U' R) [L U' L']

y2

BR: y' U' (L' U' L) [R' U' R]

y' U (L' U2 L) [U R' U' R]

white right 6 F' L U L' U' F U2

FR: U2 (F' U L U' L' F)

FL: y U (R' U' R) [U F U F']

y U2 (R' F U F' R)

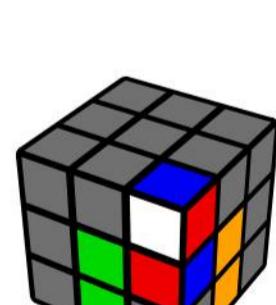
BL: y2 U (F' U' F) [U L U L']

y2

y2 U2 (F' L U L' F)

BR: y' U (L' U' L) [d L U L']

y' U2 (L' B U B' L)

white left 6 L F' U F L' U2

FR: U' (L U L') [d' L' U' L]

U2 (L F' U' F L')

FL: y U' (f R f) [U' L' U' L]

y U2 (F U' R' U R F')

BL: y2 U' (R U R) [d' R' U' R]

y2

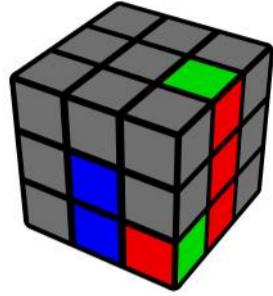
y2 U2 (R B' U' B R')

BR: y' U' (F U F) [U' R' U' R]

y' U2 (F R' U' R F')

CORNER IN WRONG SLOT (18)

white down 1 R' U2 R U' R U R' U2



BR: U2 (R U' R') [U R' U2' R]
(R U2' R') [U R' U' R]
FL: y2 U2 (L U' L') [U2 L' U L]
y2 (L U2 L') [U L' U' L]

white down 2 L U2 L' U L' U' L U2



FL: (R' U2' R) (U R' U R)
FL: (R' U2' R) (U R' U R)
BR: y2 (R' U2' R) (U R' U R)
BR: y2 (R' U2' R) (U R' U R)

white down 3 L' U' L R U R' U2



FL: U2 (R U' R') [L' U L]
BR: y2 U2 (L U L') [R' U' R]

white down 4 R U R' L' U' L U2



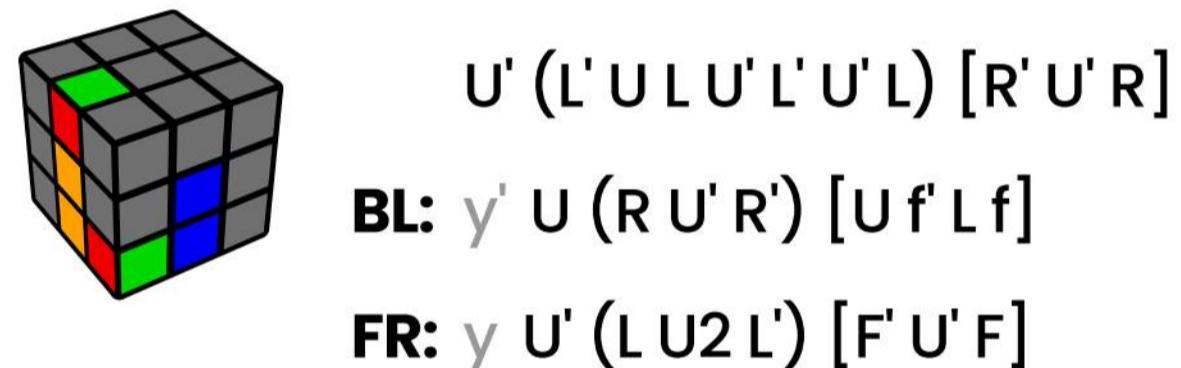
FR: y' U2 (L' U L) [R U' R']
BL: y2 U2 (R' U' R) [L U L']

white down 5 F' L U' L' U2 F U



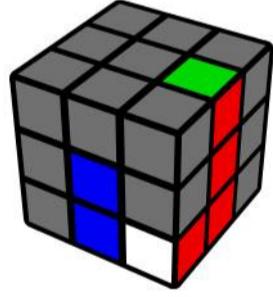
BL: U' (F' U F) [L U2 L']
U (R U' R' U R U R') [L U L']
BR: y U' (L' U L) [U' f R' f']
FL: y' U (R' U2' R) [F U F']

white down 6 F R' U R U2 F' U'



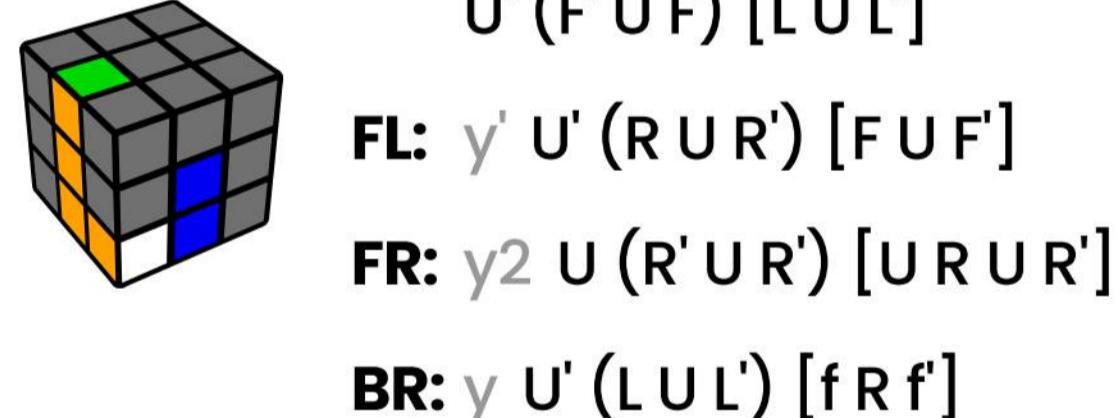
BR: U (F U' F') [R' U2 R]
U' (L' U L U' L' U' L) [R' U' R]
BL: y' U (R U' R') [U f' L f]
FR: y U' (L U2 L') [F' U' F]

white left 1 R' U R U R U R' U



BR: U' (R U' R' U') [R' U' R]
U (F U' F') [R' U' R]
FR: y U (L' U' L) [F' U' F]
FL: y2 U' (L U' L) [U' L' U' L]
BL: y' U (R' U' R) [f' L' f]

white right 1 L U' L' U' L' U' L U'



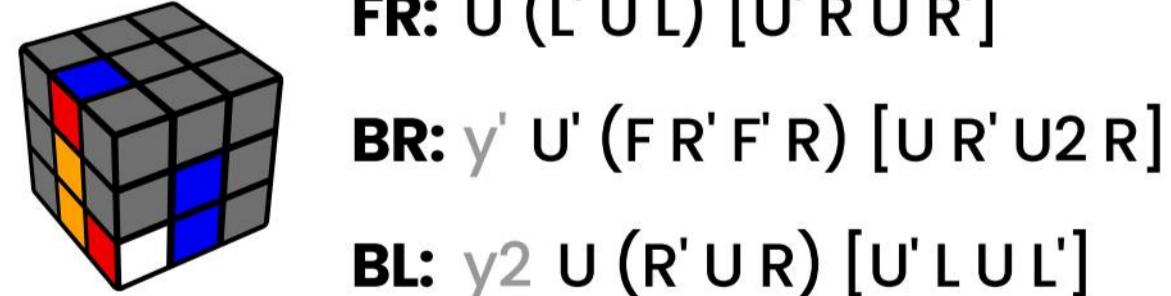
BL: U (L' U L) [U L U L']
U' (F' U F) [L U L']
FL: y' U' (R U R') [F U F']
FR: y2 U (R' U R') [U R U R']
BR: y U' (L U L') [f R f]

white left 2 L' U L U' R U R' U



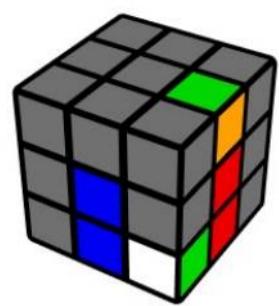
FL: U' (R U' R') [U L' U' L]
BL: y U (F' L F L') [U' L U2 L']
BR: y2 U' (L U' L) [U R' U' R]

white right 2 R U' R' U L' U' L U'



FR: U (L' U L) [U' R U R']
BR: y' U' (F R' F' R) [U R' U2 R]
BL: y2 U (R' U R) [U' L U L']

white left 3 L U2 L' R U R'



BL: (R U' R') [L U2 L']

BR: y (L' U' L) [f R' f']

FR: y2 (L U' L') [R U2' R']

FL: y' (R' U' R) [F U' F']

white right 3 R' U2 R L' U' L



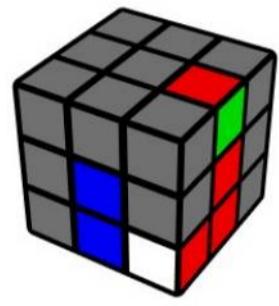
BR: (L' U L) [R' U2 R]

BL: y' (R U R') [f' L f]

FL: y2 (R' U R) [L' U2 L]

FR: y (L U L') [F' U F]

white left 4 S R S'



BR: (R U' R') [f R' f']

(S R' S')

FR: y (L' U' L) [U R U' R']

FL: y2 (S' L' S)

BL: y' (R' U' R) [U L U' L']

white right 4 S' L' S



(S' L S)

FL: y' (R U R') [U' L' U L]

FR: y2 (S R S')

BR: y2 (L U L') [U' R' U R]

white left 5 L F' L' F U' R U R'



BL: y (L' U' L2 U2 L')

FR: y' (R' U' R2 U2' R')

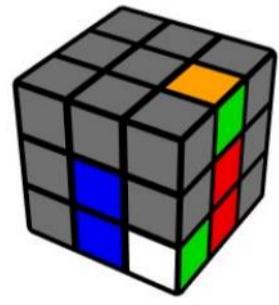
white right 5 R' F R F' U L' U' L



BR: y' (R U R2' U2' R)

BL: y2 (L U L2' U2' L)

white left 6 L U2 L' F R' F' R U'



BL: U (R' F R F') [L U2 L']

BR: y U2 (L' U2 L) [R' U' R]

y U (L' U' L) [U' R' U' R]

FL: y' U2 (R' U2' R) [L' U' L]

y' U (R' U' R) [U' L' U' L]

white right 6 R' U2 R F' L F L' U



BR: U' (L F' L' F) [R' U2' R]

BL: y' U2 (R U2' R') [L U L']

y' U' (R U R') [U L U L']

FR: y U2 (L U2 L') [R U R']

y U' (L U L') [U R U R']

So what's next..?



F2L solved!

If you want to go beyond the basics, the **CFOP Pack** is where things get serious. Covering advanced tricks and optimizations used by the world's best cubers for not just F2L, but every step of CFOP. If you're aiming for the next level, *this is it.*

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