

FORCING OLLs (with last F2L slot)

DISCLAIMER:

Most OLL's are ok.

Hopefully my strategy doesn't interfere with anyone else's

Section 1: The basics.

So first we need to know some basics. Which really just means recognising what case is what. Here are the cases:

Position in pictures: Blue Front, Yellow Top, Orange left.

R U' R' Insert Note: these aren't necessarily possible permutations, but you can use common sense to figure out them



Dot:



L Shape/ Fish/ Square etc:

or

or



or

or



Line:

or



R U R' Insert

Dot: Same as R U' R'



L Shape/Fish/Square etc:

or

or



or



Line:

or

The rest of the easy cases are just mirrors of these.

Section 2: Eliminating dot cases

If you notice the pattern, dot cases have no edges oriented. So the goal here is to orient ONE edge.

Position: Blue front, Yellow Top, Red Right

R U' R' Inserts

When inserting this way, there will always be one edge in an F2L slot

Like this:



Intuitively, move the edge into the top layer, then rotate it out of the way and then put the F2L pair back, then insert.

Or you could do this: $F' U F R U' R$

This way you have a better case.

R U R' Inserts

This is slightly longer, but still manageable. Again, same as $R U' R$ inserts, there will be an edge in an F2L slot:



Intuitively, move the corner out of the way, then bring the misoriented edge into the top layer, do a U^2 , then join the corner with the F2L edge, then insert.

Or just do this: $U' F' U^2 F (U R U' R')$

Section 3: Forcing cross OLLs

What if normal OLLs weren't enough? Here you can force cross OLLs:

First of all, three edges need to be oriented to have a cross OLL. Secondly, this is very circumstantial, although I will try to bring in more cases.

Thirdly, if you notice that you have a dot OLL inserting the last slot, forget about this.

Algorithms will sometimes be underlined to ease memorisation.
R U' R Insert

Algs 1-3 are trash, they are too long.

Worst cases: One edge oriented



1.

R U R² U' R U' R' U² F R F' U'



2.

(U L' U R) (U' R²) (L F R F) L F L' F



3. $(F' U^2 F) (R U R') (U F' U' F) (U' F' U F) (R U' R')$ (This remains unchanged, it will be updated very soon)



4. $(F' U F) (R U' R')$



5. $(F' U^2 F) (R U' R')$

If you have three edges oriented then insert as normal.

The Mirror of this insert ($L' U L$) is just the mirror of these algorithms

4-5 Algorithms are the ones I like most, since they are the shortest

4-5 algs saves around 10 moves moves compared to normal two look oll, while saving around 3 with one look oll.

R U R algs coming soon.