

Megaminx solution – beginner

Step 1 – Build white layer

- build white edge pieces
 - o when edge pieces are reversed:
 - U L' U'
 - U' R U
- build white corner pieces

Step 2 – Build layer 2 edge pieces

- keep white layer on bottom
- keep side between 2 centers directly in front
- position edge piece 1 move away from correct spot
 - o if need to move edge piece to the right:
 - U R U' R' U' L' U L
 - o if need to move edge piece to the left:
 - U' L' U L U R U' R'

Step 8 – Solve star on top layer

- Qi Yi book method (p 52) OR:
- Rollo Cubing video (~38-39 min)
 - o NB. She uses different Sune algorithm
 - o speedsolving.com/wiki/index.php/Sune

Step 9 – Align star - Permutation of star edges (Align all edge pieces correctly)

- Qi Yi book method (p 53) OR:
- Rollo Cubing video (~38-39 min)

Case: (2 non adjacent edge pieces)

correct edge in bottom and other in back right
R U R' U R U'2 R'

Case: only one aligned edge,
place it to the left & repeat algo

Case: two adjacent aligned edges
place one in bottom and one on left & repeat algo

Note: got all five aligned after 3 repetitions

Step 10 - Placing corners in correct locations (not correct orientation)

- ⇒ Rollo Cubing, 41 min
- ⇒ $L' U^2 R U'^2 L U^2 R' U'^2$ (Double algorithm)

Case 1: none of the corners are correct,

- can place the cube in any position (with grey layer on top)
- $L' U^2 R U'^2 L U^2 R' U'^2$
- This should yield one (or more ?) correct corner pieces (colors, not orientation)

Case 2: One correct corner (colors, not orientation)

- Place correct corner in bottom right
- $L' U^2 R U'^2 L U^2 R' U'^2$
- This should yield two (or more ?) correct corner pieces (colors, not orientation)

Case 3: Two correct corners – across from each other (colors, not orientation)

- Place correct corner in bottom right (she switched good pieces)
- $L' U^2 R U'^2 L U^2 R' U'^2$
- Repeat... if changes not seen, can try placing one good corner in bottom left
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Case 4: Two correct corners – adjacent to each other (colors, not orientation)

- Place correct corner in bottom right and other in right back
- $L' U^2 R U'^2 L U^2 R' U'^2$
- Repeat... if changes not seen, can try placing one good corner in bottom left
 - NB. Two cycles yielded 5 correct corners

Step 11 - Build correct corner orientation

- If there's a correct corner, place to bottom left
- Target corner is in bottom right
- Repeat $R' D' R D$ until target corner is correct
- The Rotate top layer CW
- Repeat $R' D' R D$ until target corner is correct

NB: Solved top layer except for one piece

Notes on unsolvable piece:

- speedsolving.com/threads/megaminx-help-one-corner.30855/

- reddit.com/r/Cubers/comments/16j470/i_have_the_megaminx_solved_up_to_this_last_piece/
- math.stackexchange.com/questions/659668/megaminx-parity

References

Qi Yi book (pp 42-52)
youtube.com/watch?v=4IPrItiwXzg