The Best F2L Algorithms for Every Case

Compiled by Jack of JCB ShortFilms   Images from Algdb.net

Format

Preferred Algorithm
Alternate Algorithms

Each algorithm given, in my opinion, is the best one for each of 41 possible F2L cases.

Case #1

U R U'R
 R' F R F'
 Note that the second way
  can be used for edge control.

Case #2

y U' L' U L
 F R' F' R
 r U R' U' M

Case #3

y L' U' L or **y' R' U' R** (back right insert)
F' U' F
U M R U' R' U M'

Case #4

R U R'

Case #5

U' R U R' U2 R U' R'
 U' R U R' U' R U2 R'

Case #6

y' U' R U' R U2' R' U R
 U' r U' R' U R U r'

Case #7

U' R U2 R' U2 R U' R'
 M' U' M U2 r U' r'

Case #8

y' U R' U2 R U2 R' U R

Case #9

y' U R' U' R U' R' U' R
 F R U R' U' F' R U' R'

Case #10

U2 R U' R' U' R U R'
 U' R U R' U R U R

Case #11

U' R U₂' R' U F' U' F
U' R U₂' R' U y' R' U' R

Case #12

R U' R' U R U' R' U₂ R U' R'
R' U₂ R₂ U R₂ U R

Case #13

y' U R' U R U' R' U' R
M' U' R U R' U' R U₂ r'

Case #14

U' R U' R' U R U R'
R U' R' U R U₂ R' U₂ R U' R'

Case #15

R U R' U₂ R U' R' U R U' R'
R B L U' L' B' R'

Case #16

x' R₂ U' R' U R' x R U' R'
U F R U R' U' F' U R U' R'
U M' U R U' r' U' R U R'

Case #17

R U₂ R' U' R U R'

Case #18

R' F R F' R U' R' U R U' R'
y' R' U2 R U R' U' R

Case #19

U R U₂ R' U R U' R'
U R U₂ R₂ F R F'

Case #20

U' R U' R₂' F R F' R U' R'
y' U' R' U₂ R U' R' U R

Case #21

R U' R' U₂ R U R'
U₂ R U R₂ F R F'
U₂ R U R' U R U' R'

Case #22

y' R' U R U₂ R' U' R
y' U₂ R' U' R U' R' U R

Case #23

R U R' U₂ R U R' U' R U R'
U₂ R U R' U' R U' R' U₂ R U' R'

Case #24

U' R U R₂' F R F' R U' R'
F U R U' R' F' R U' R'

Case #25

U' F' R U R' U' R' F R
R' F' R U R U' R' F

Case #26

U R U' R' U' F' U F
U R U' R' U' y L' U L

Case #27

R U' R' U R U' R'

Case #28

R U' R' U' R' F R F' R U' R'
y' R' U R U' R' U R

Case #29

M' U R U' r' U R U' R'
y' R' U' R U R' U' R

Case #30

R U R' U' R U R'

Case #31

U' R' F R F' R U' R'

Case #32

U R U R' U' R U₂ R' U R U' R'
R U R' U' R U R' U' R U R'

Case #33

U' R U R' U₂ R U' R'

Case #34

U R U R' U₂ R U R'
U' R U₂' R' U R U R'

Case #35

U' R U R' U y' R' U' R
U M' U R U' r' R U' R'

Case #36

U₂ R' F R F' U₂ R U R'
U F' U' F U' R U R'

Case #37

R' F R F' R U' R' U R U' R' U2 R U' R'
R2 U2 F R2 F' U2 R' U R'

Case #38

R U' R' U' R U R' U2 R U' R'
R U R' U' R U2 R' U' R U R'

Case #39

R U R' U2 R U' R' U R U R'
R U' R' U R U2 R' U R U' R'

Case #40

R U' R' F R U R' U' F' R U' R'
r U' r' U2 r U r' R U R'

Case #41

R U R' U' R U' R' U2 y' R' U' R
R U' M' U' r' U2 r U r'