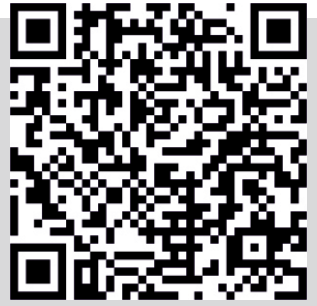


GoCNC.de

„NANO“ CNC router series

એસેમ્બલી સૂચનાઓ Inbouwrichtlijn
Instruksi Majelis 組立説明
Οδηγίες συναρμολόγησης Bunge Maelekezo
pokyny na montáž Instructions de montage
Инструкция по монтажу Szerelési útmutató
montaj Talimatı Istruzioni di montaggio
Instrukcja montażu تعليمات التجميع
Instruções de Montagem Monteringsvejledning
assembly instructions



CNC Router

next3D[®]

NANO



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58675 Hemer
Germany

Tel (49) 2372 554022
Email: info@gocnc.de
www.gocnc.de

GoCNC ist eine bei Deutschem Patent- und Markenamt eingetragene Marke
Urkunde Nr.:30 2012 039 555 Az.:30 2012 039 555.4 /07

Next 3D ist eine bei Deutschem Patent- und Markenamt eingetragenes Markenzeichen
Urkunde Nr.:30 2014 039 555 Az.:30 2014 039 555.4 /07

Herzlichen Glückwunsch zum Erwerb Ihres Bausatzes !

Dieser Baukasten enthält alles was sie zum Aufbau einer GoCNC Portalfräse „Hobby A4/A3“ benötigen. Die Montage lässt sich sehr einfach mit normaler Heimwerkerausrüstung in ein Paar Stunden durchführen.

Lesen Sie vor dem Zusammenbau sorgfältig die Anleitung zuerst einmal zu ende durch. Dies vermittelt einen besseren Überblick bei folgender Arbeit und vermeidet unnötige Fehler. Erst dann beginnen Sie mit dem Zusammenbau.

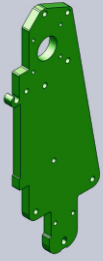
Auf alle von uns gelieferte Einzelteile geben wir zwei Jahre Gewährleistung. Aus rechtlichen Gründen weisen wir darauf hin, dass für evtl. durch den Zusammenbau der Maschine entstehende Schaden an Material oder Personen keine Haftung übernehmen. Wir übernehmen keinerlei Garantie für die von Ihnen zusammengebaute Maschine und haften somit nicht für Ihre Zusammenbauleistung. Für den sichern Betrieb Ihrer Hobby A4 / A3 Maschine sind Sie selbst verantwortlich.

Viel Spaß bei Ihren ersten CNC Versuchen wünscht Ihnen

das GoCNC.de Team!

Sollten Sie Anregungen oder Verbesserungsvorschläge haben, schreiben Sie uns unbedingt eine Email an info@gocnc.de. Wir lassen uns gerne von Ihnen beraten!

1



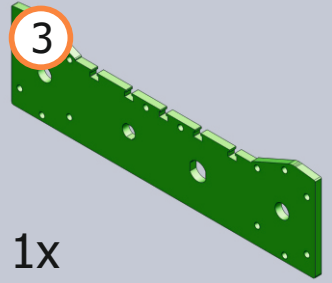
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2



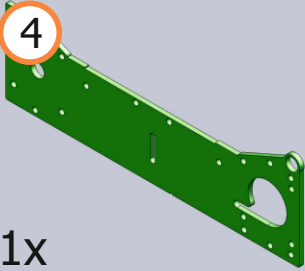
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3



1x

4



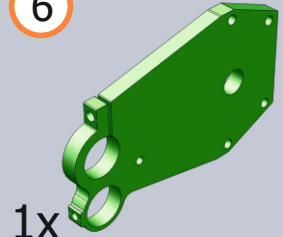
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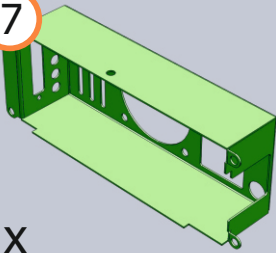
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6



1x

7



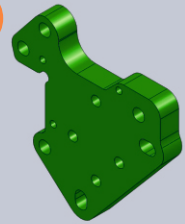
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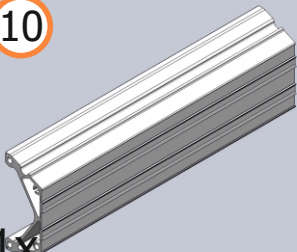
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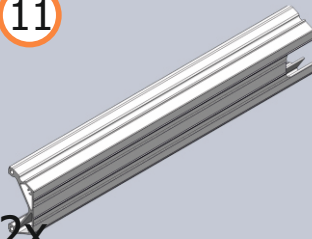
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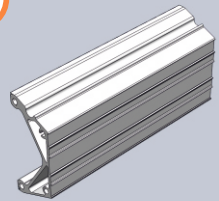
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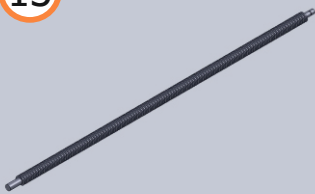
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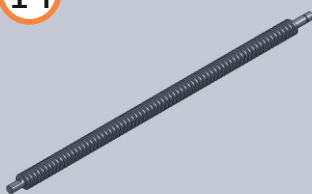
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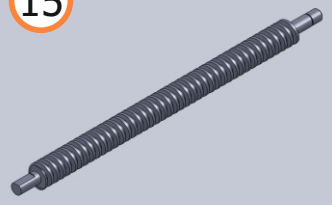
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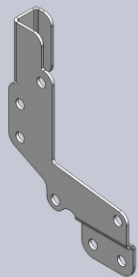
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15



1x

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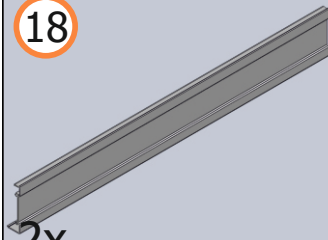
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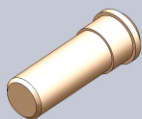
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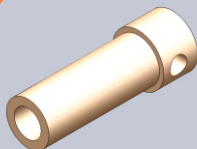
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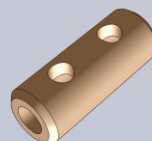
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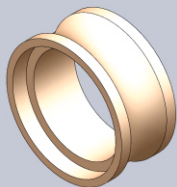
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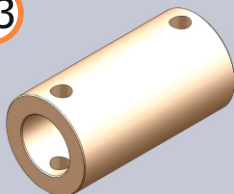
2x

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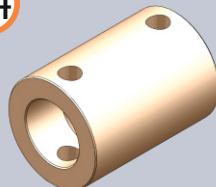
12x

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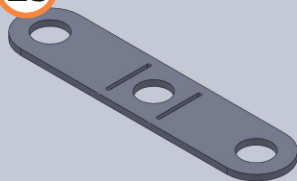
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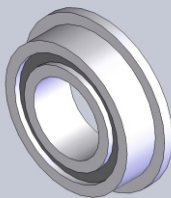
3x

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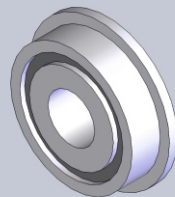
6x

26



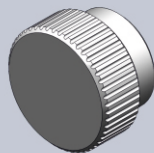
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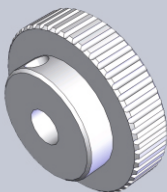
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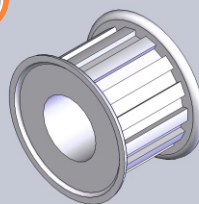
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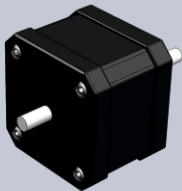
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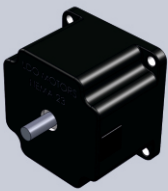
2x

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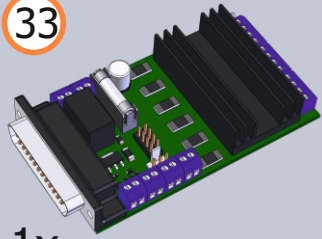
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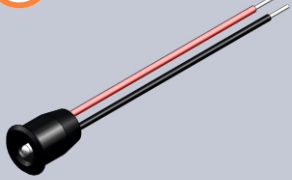
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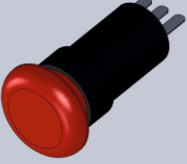
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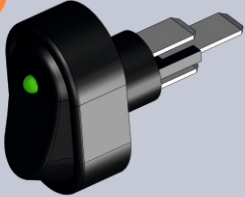
1x

35



1x

36



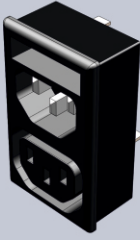
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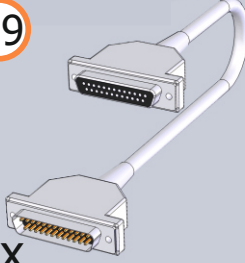
1x

38



1x

39



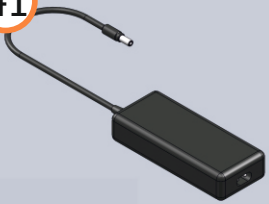
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40



1x

41



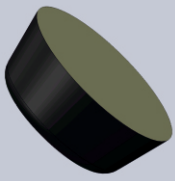
1x

42



3x

43



4x

44



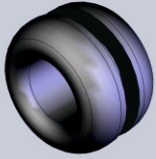
7 mm

45



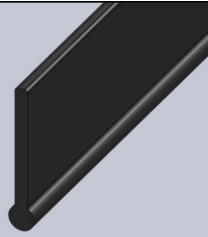
10 mm

46



6x

47



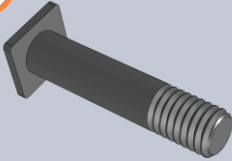
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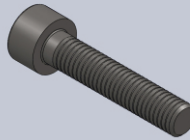
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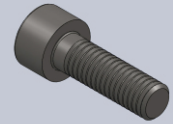
12x M5x24

50



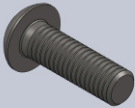
8x M5x20

51



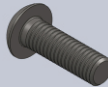
6x M5x14

52



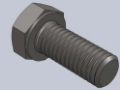
26x M5x16

53



8x M4x10

54



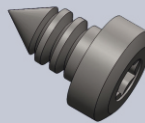
2x M5x16

55



8x M3x8

56



4x 4,3x10

57



9x 2,9x6

58



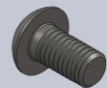
9x 4x4mm

59



4x M5x8mm

60



2x M5x8

61



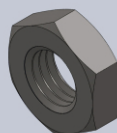
8x M4

62



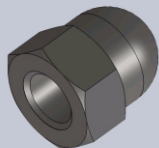
70x M5

63



21x M5

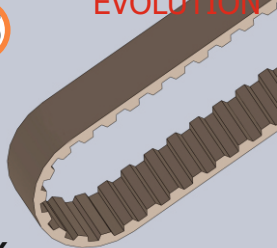
64



3x

65

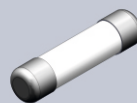
EVOLUTION



1x

66

EVOLUTION

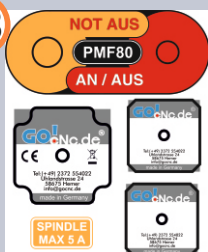


1x

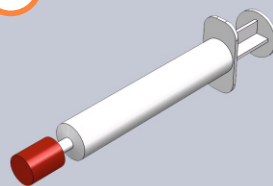
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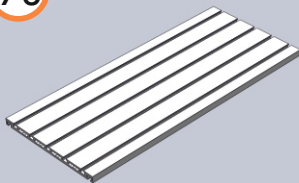
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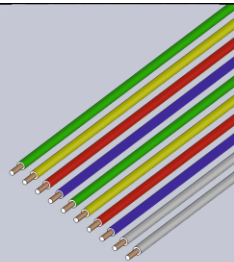
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70



71



72



73

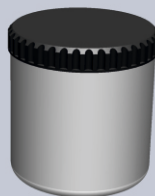


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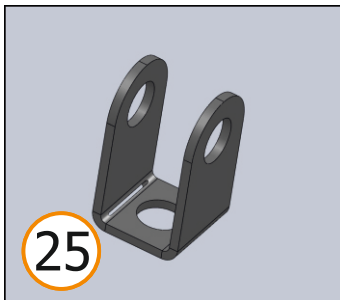
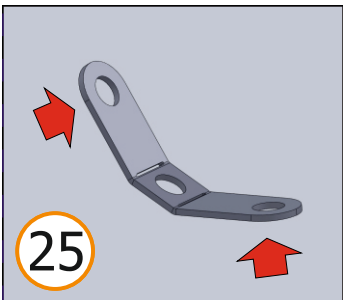
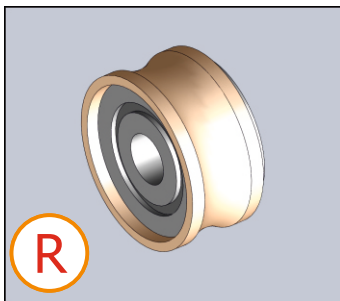
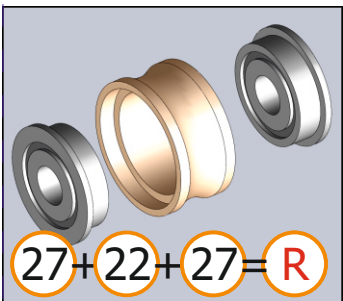
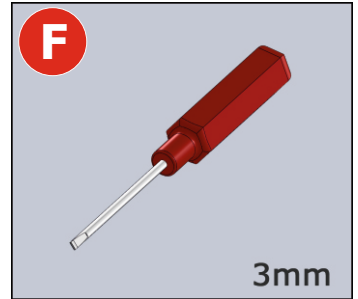
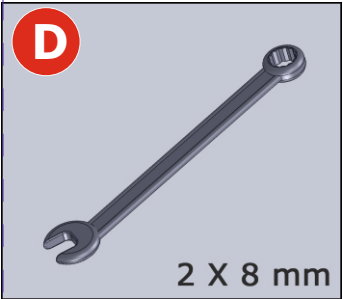
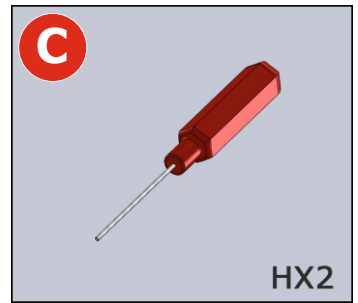
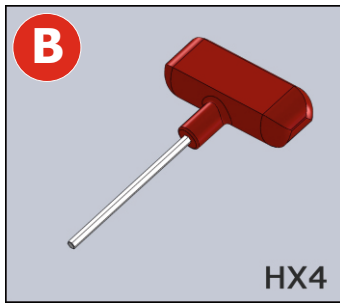
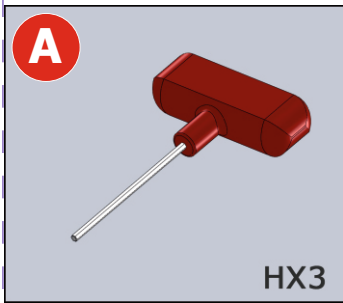


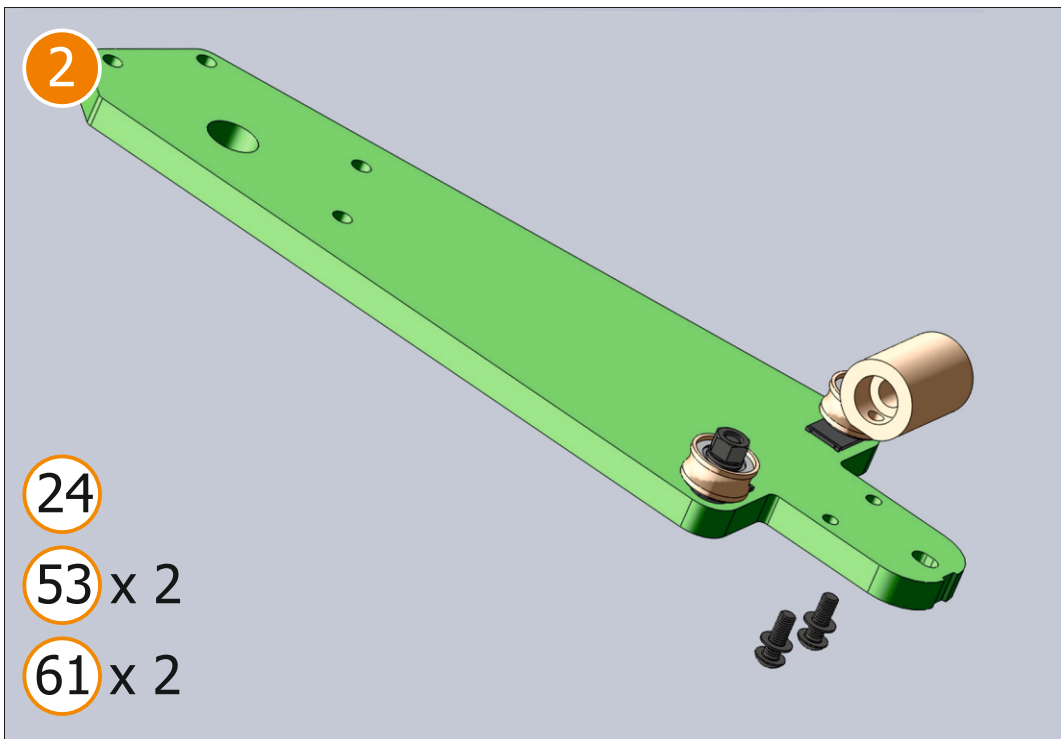
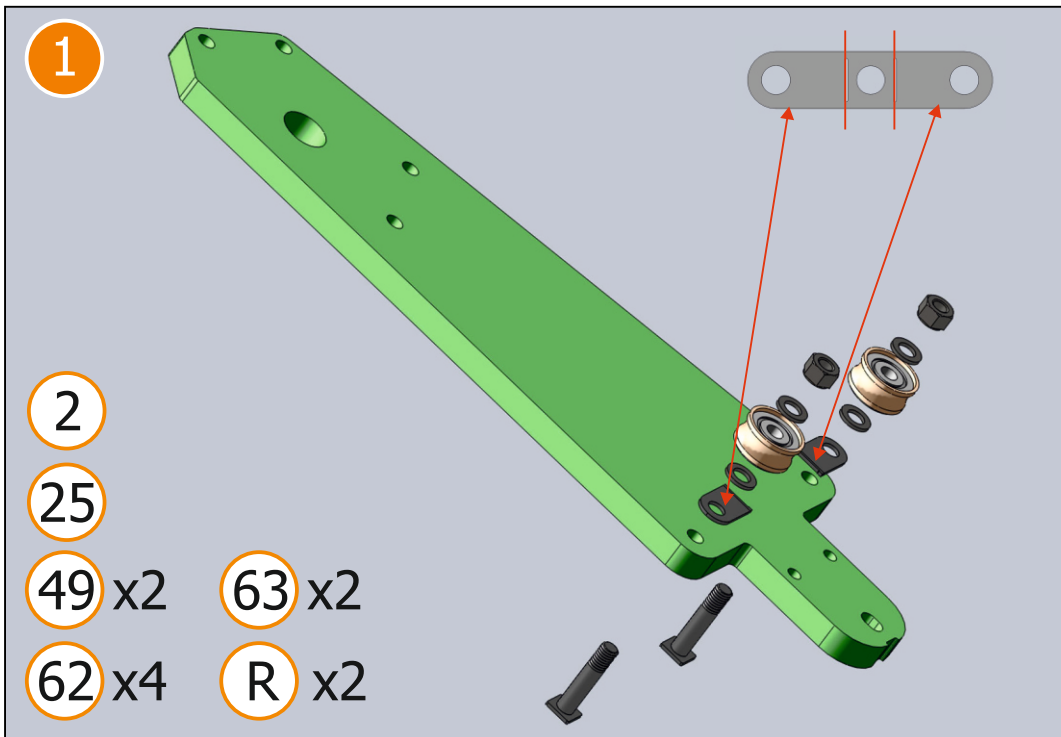
PRECISION OIL

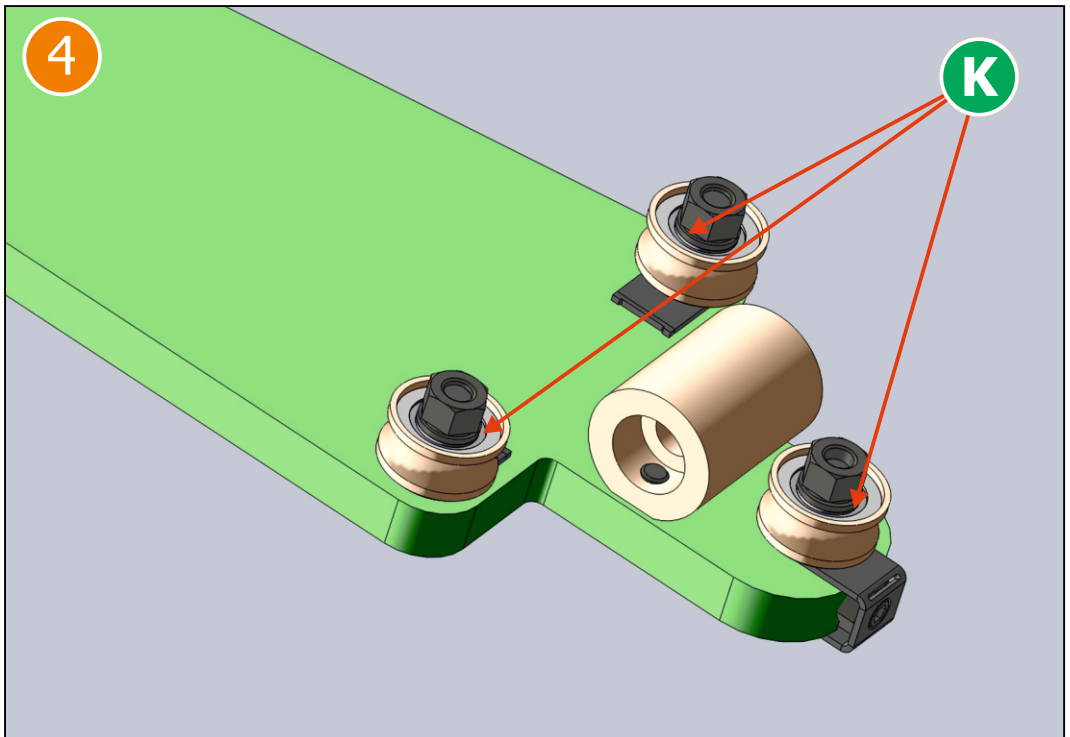
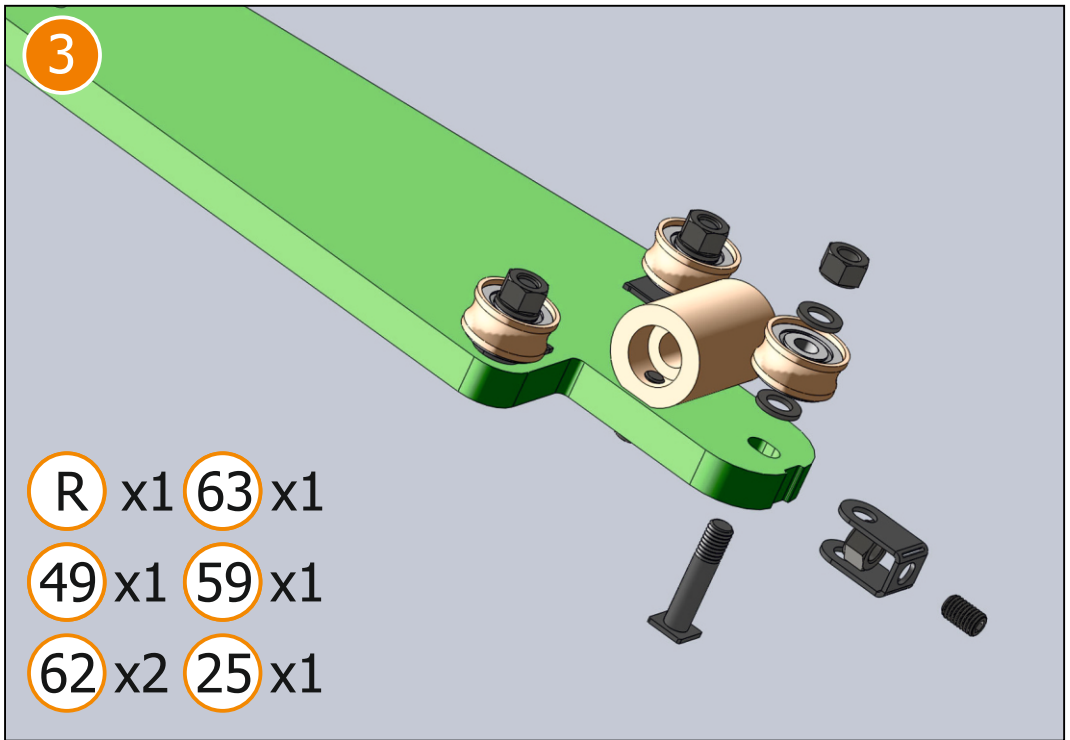
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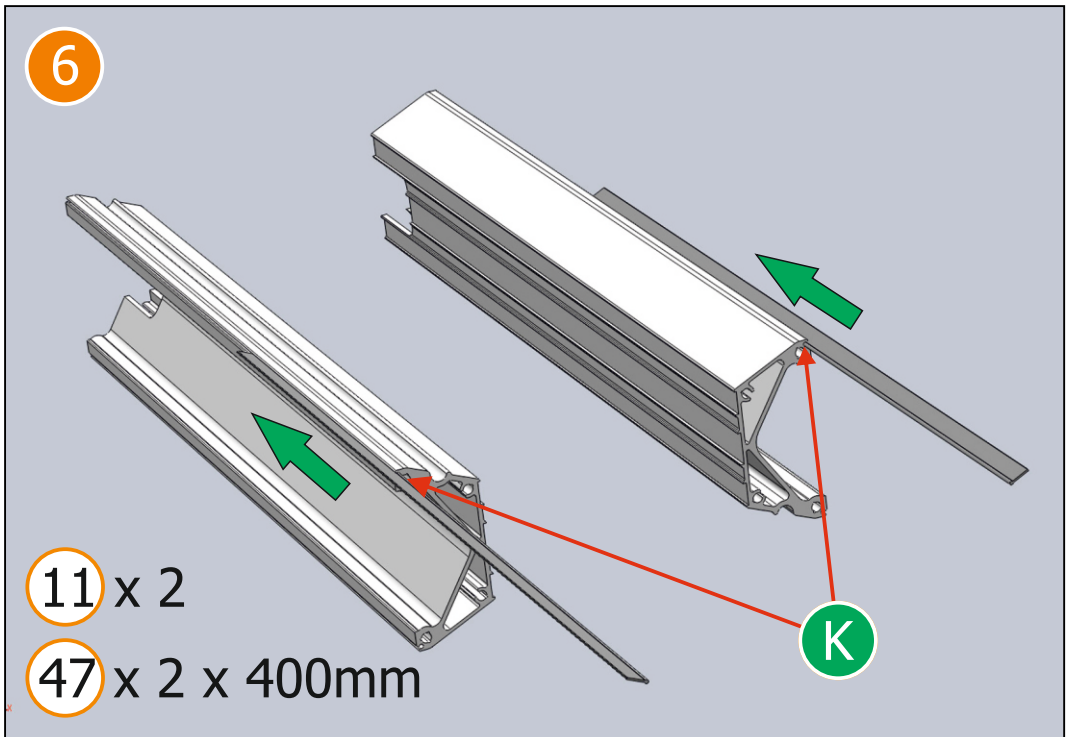
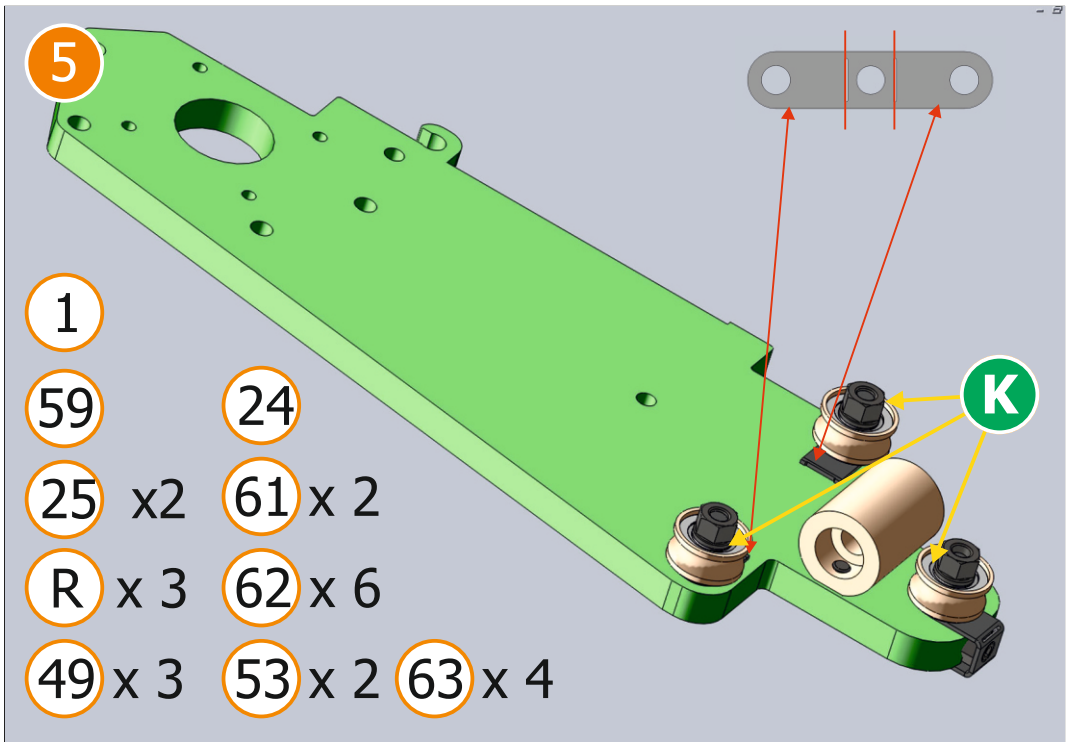


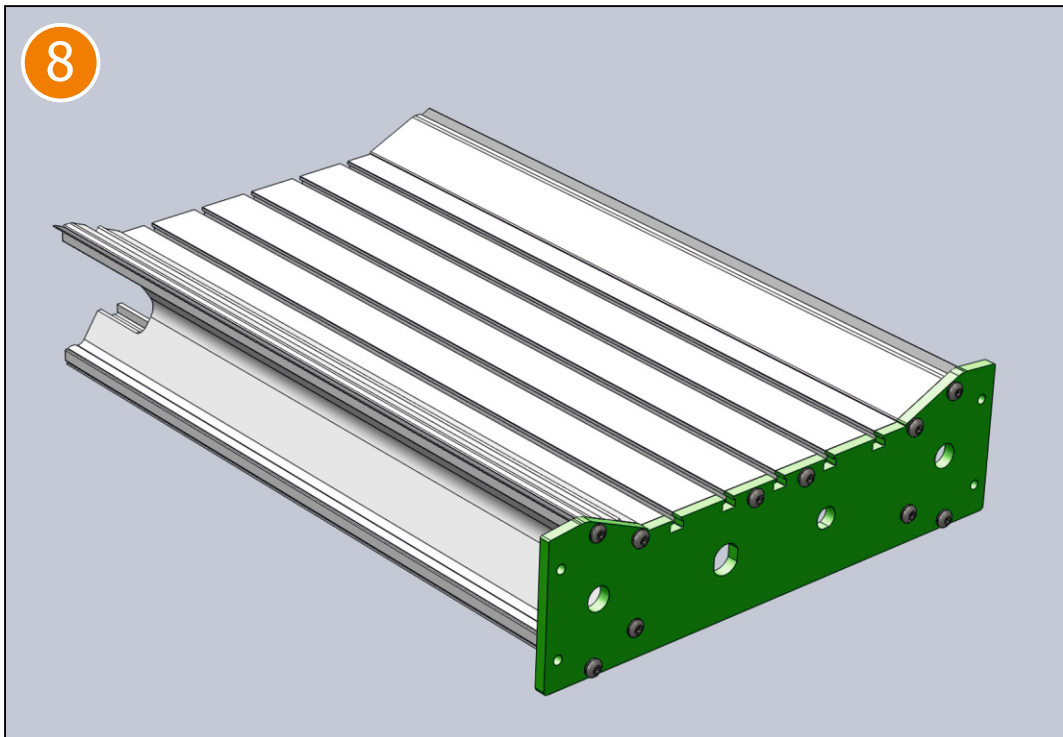
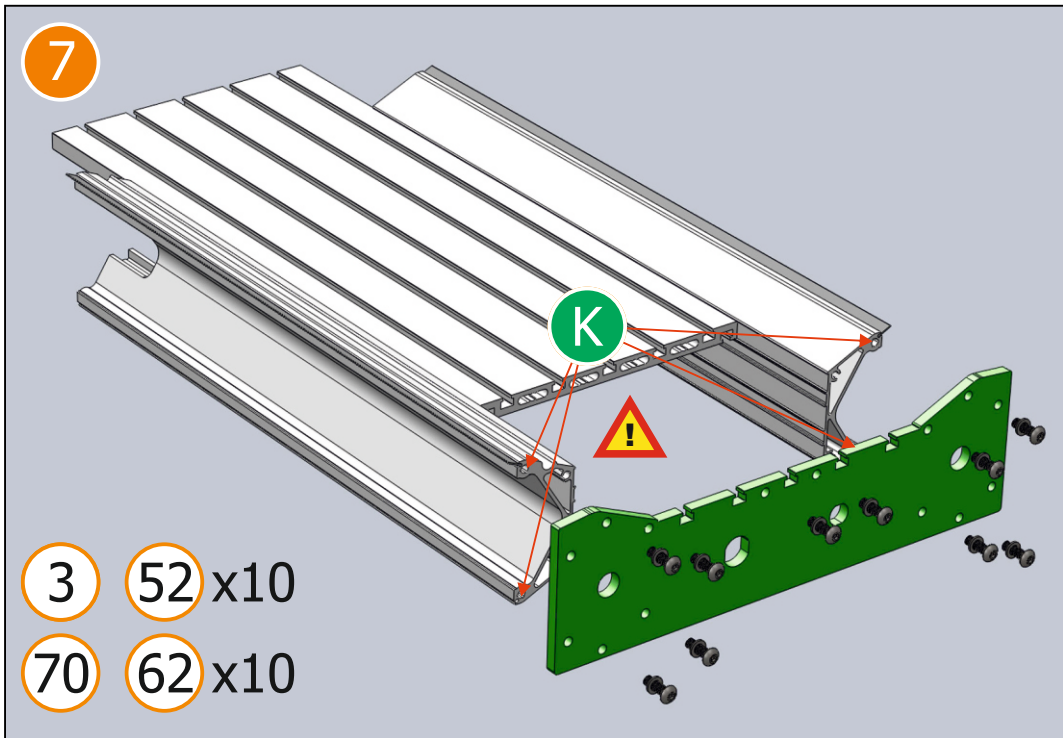
LUBRICATING OIL



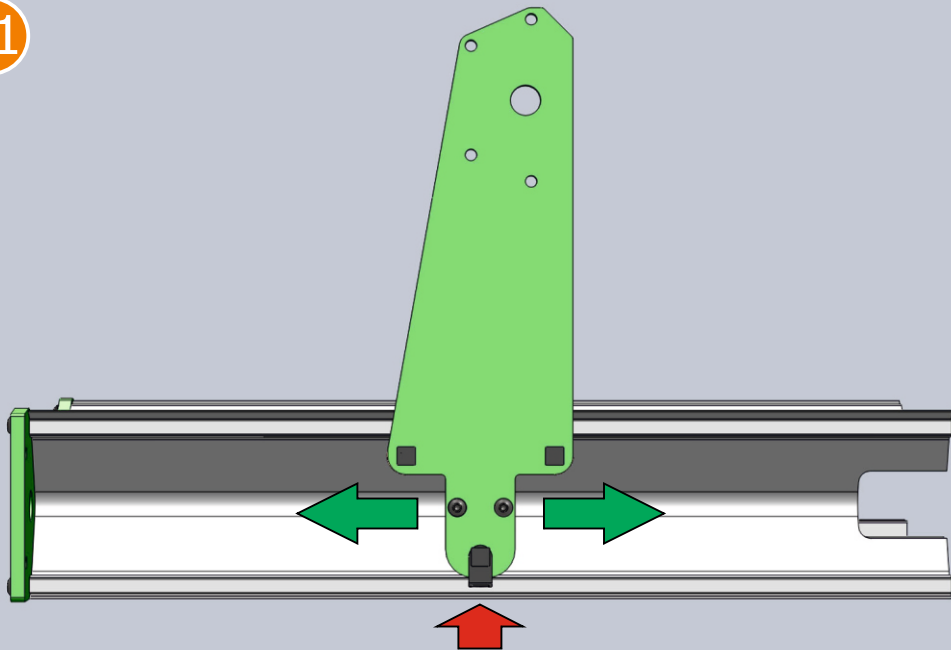




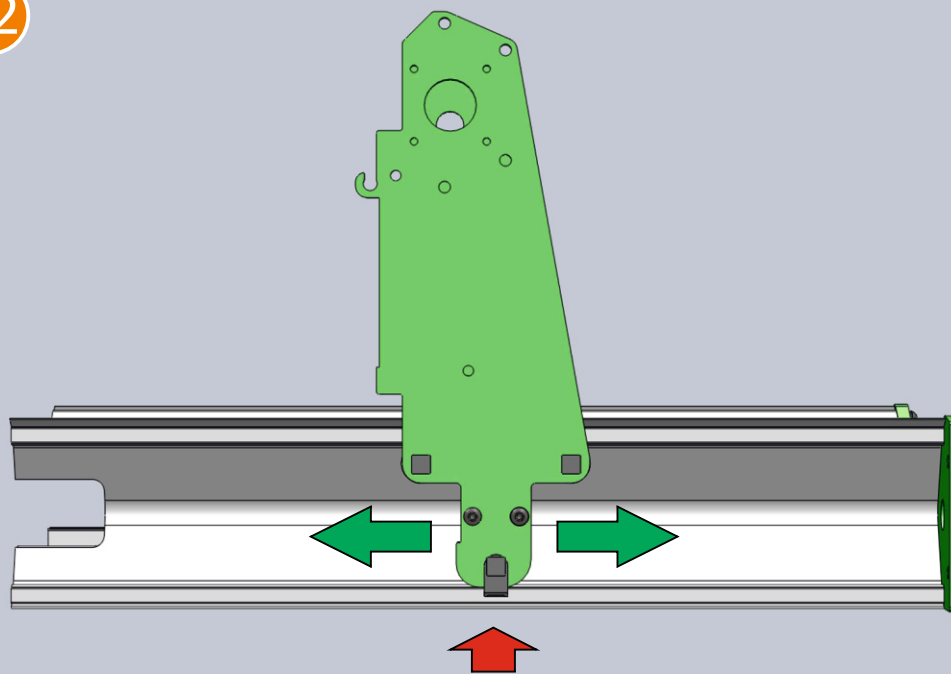




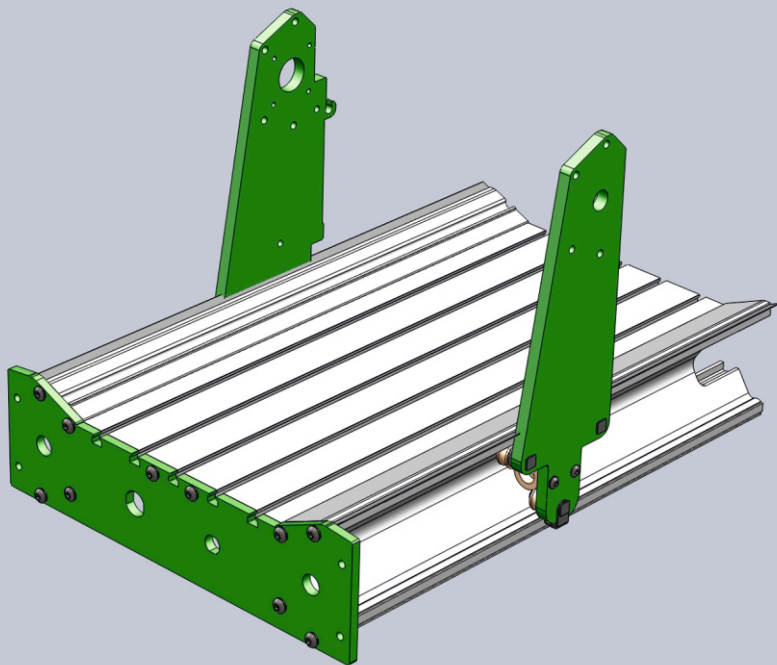
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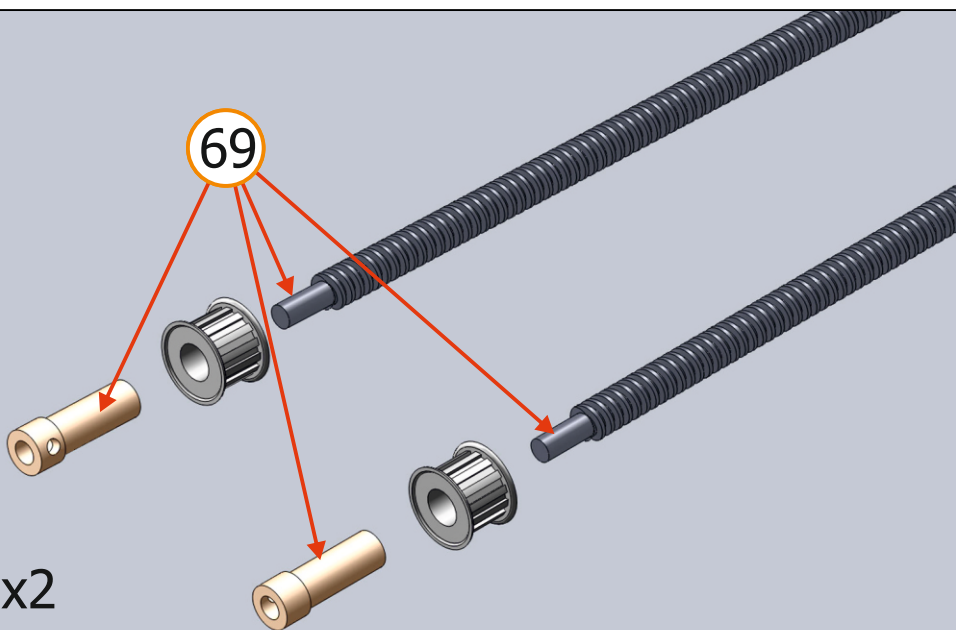
12



13



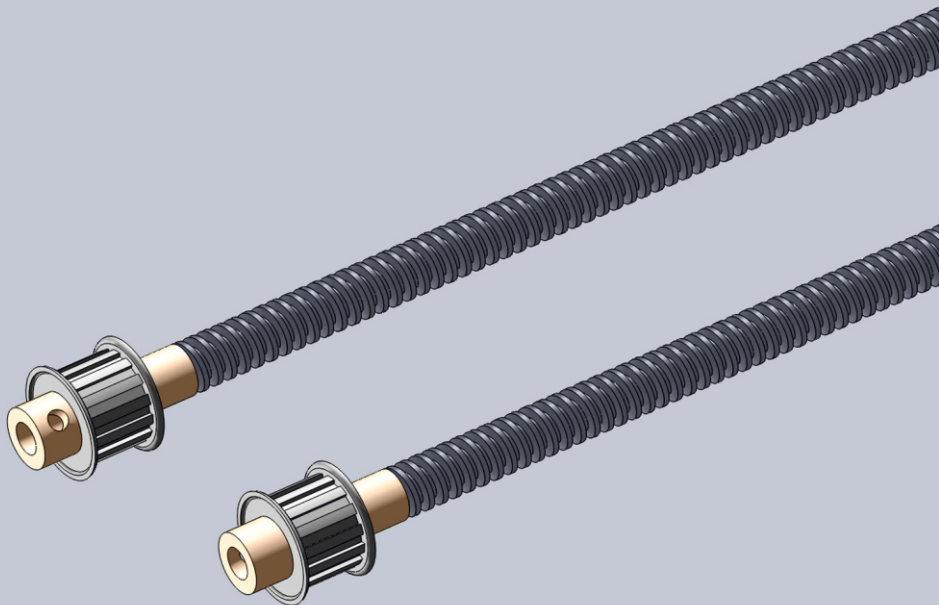
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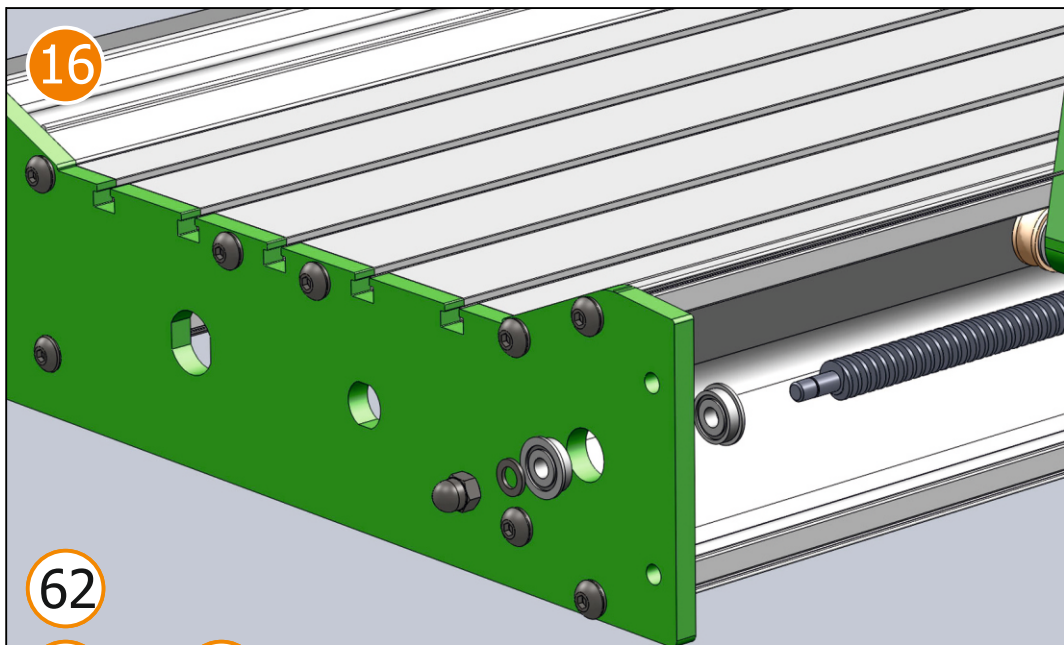
13 x2

30 x2 20 x2

15

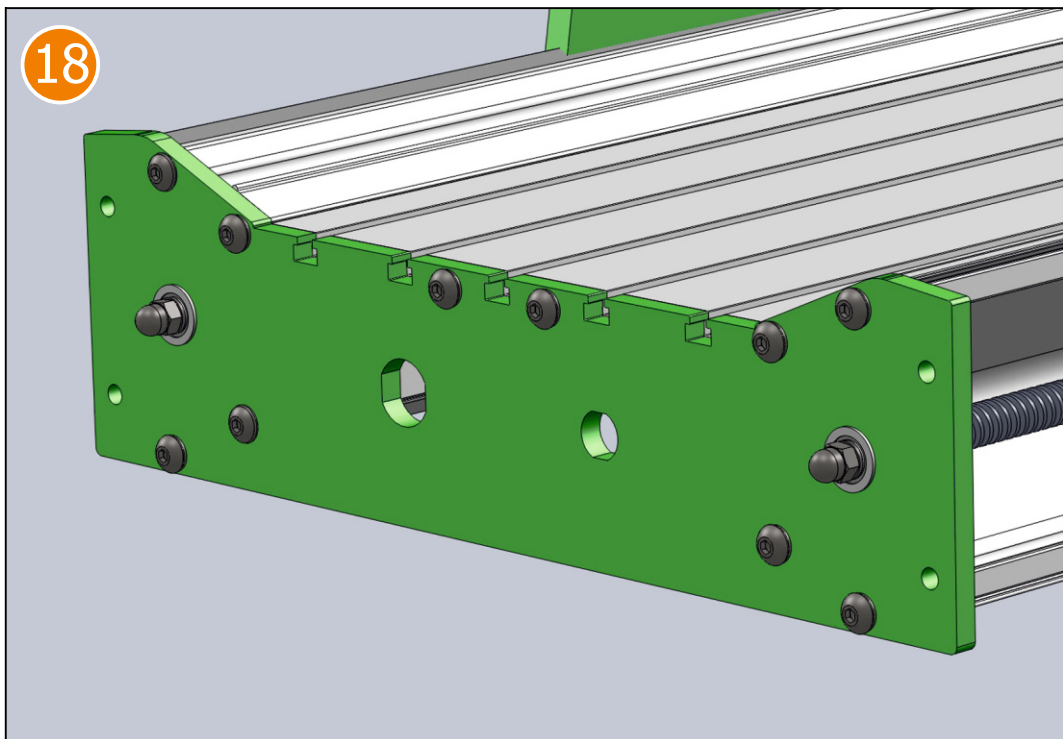
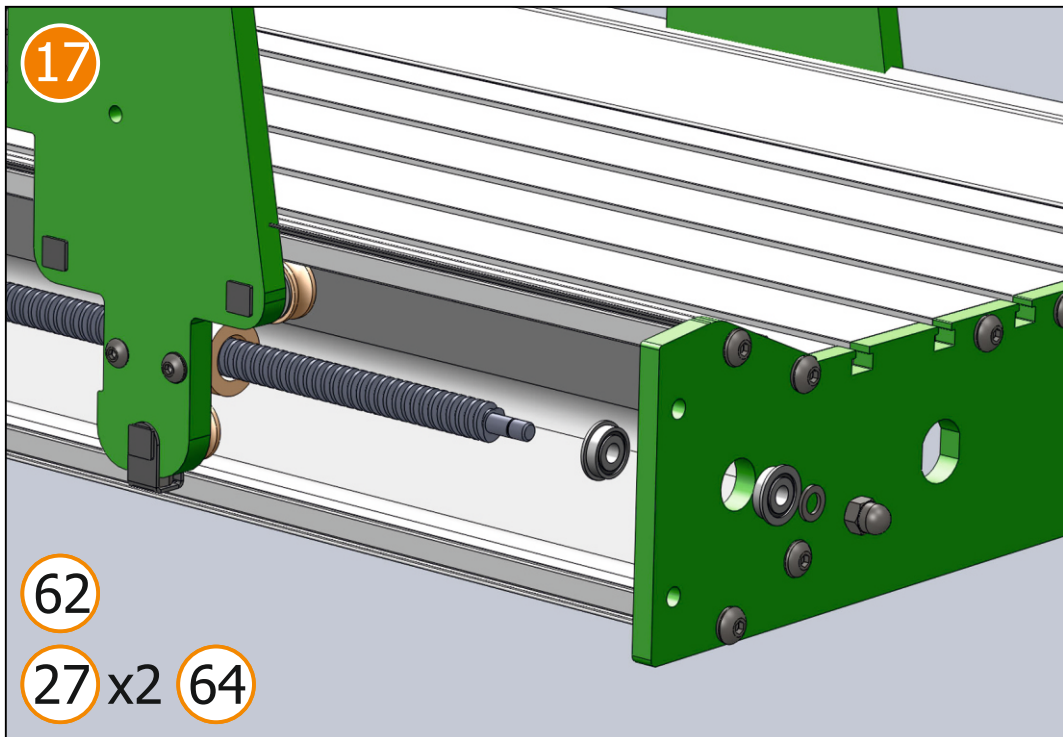


16



62

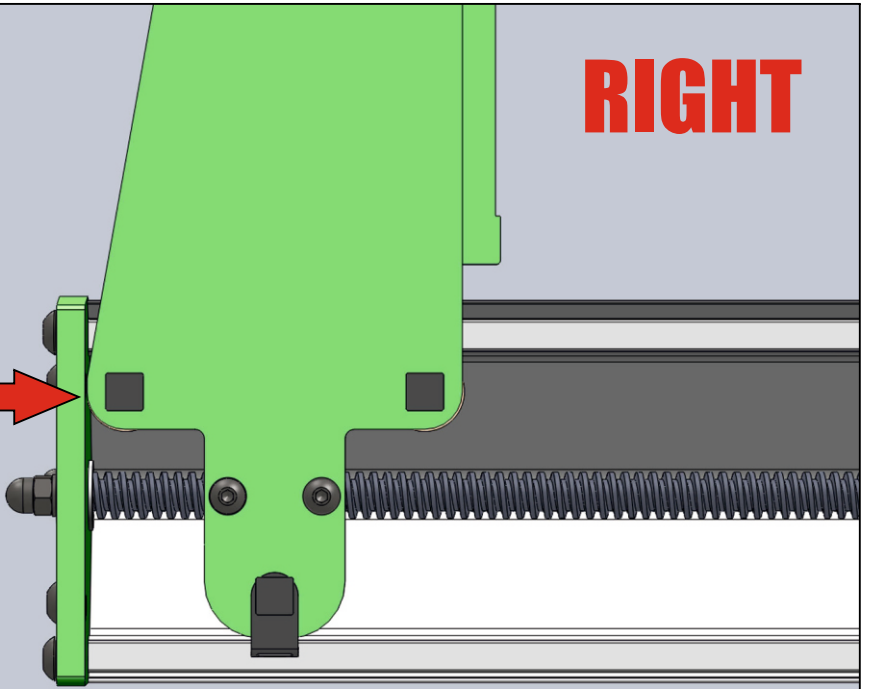
27 x2 64



19

RIGHT

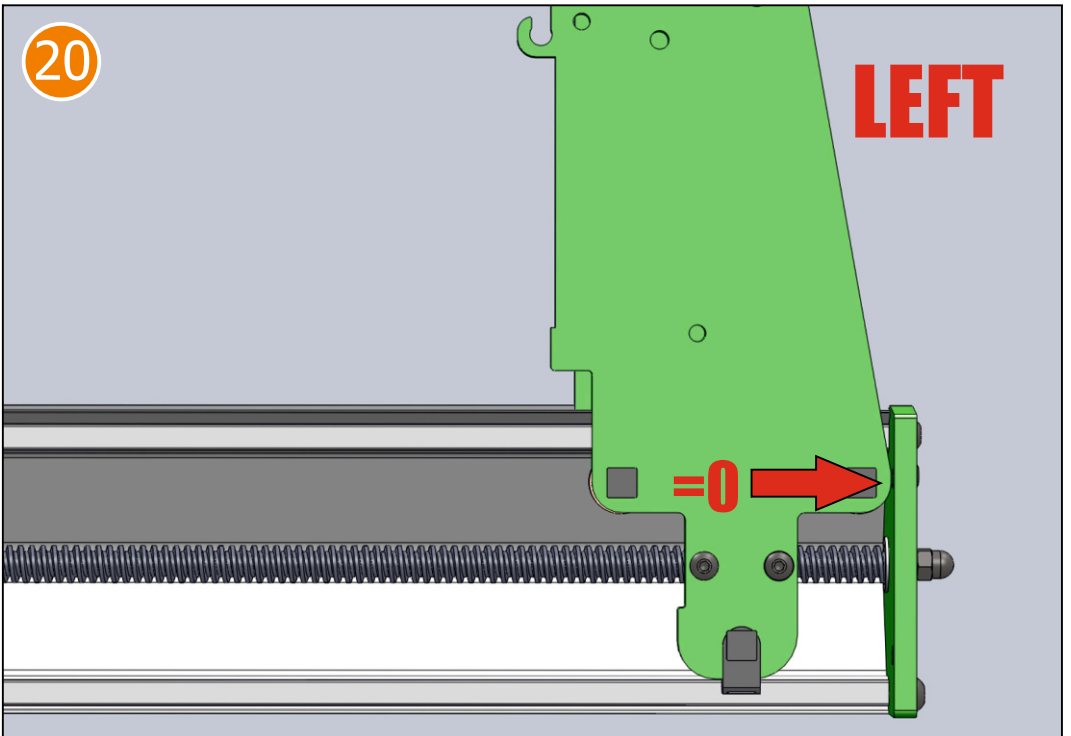
=0 →



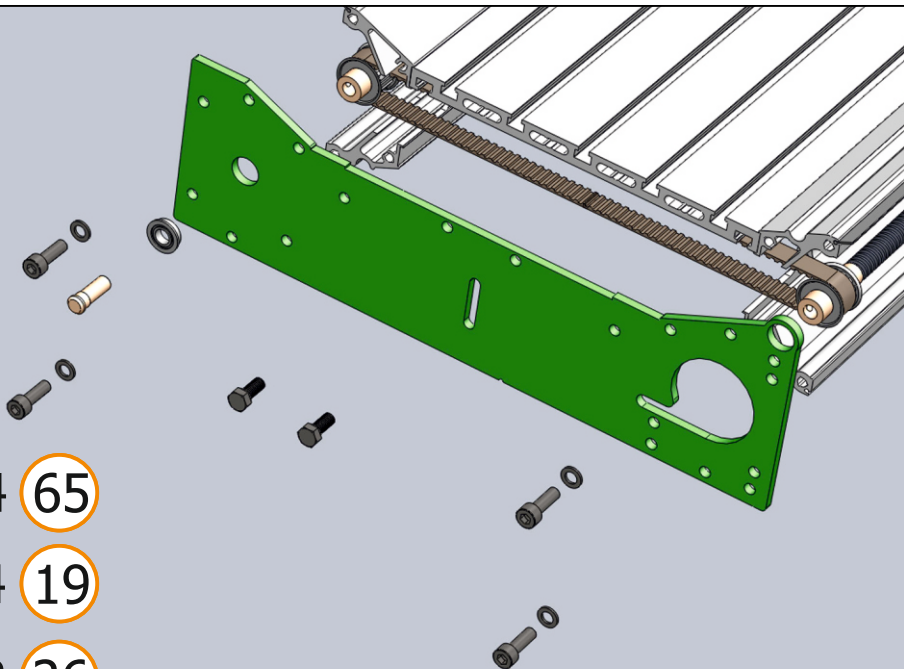
20

LEFT

=0 →



21

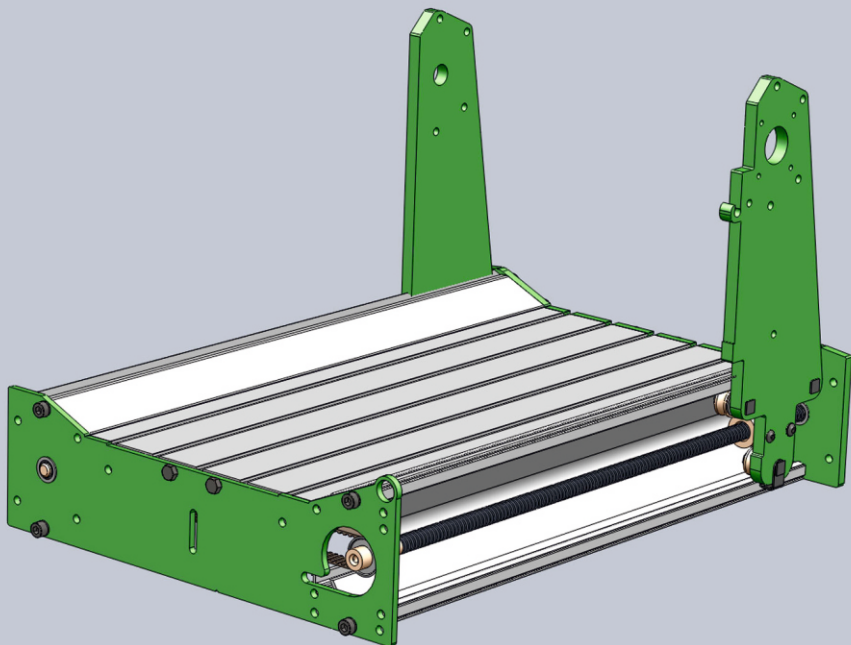


51 x4 65

62 x4 19

54 x2 26

22

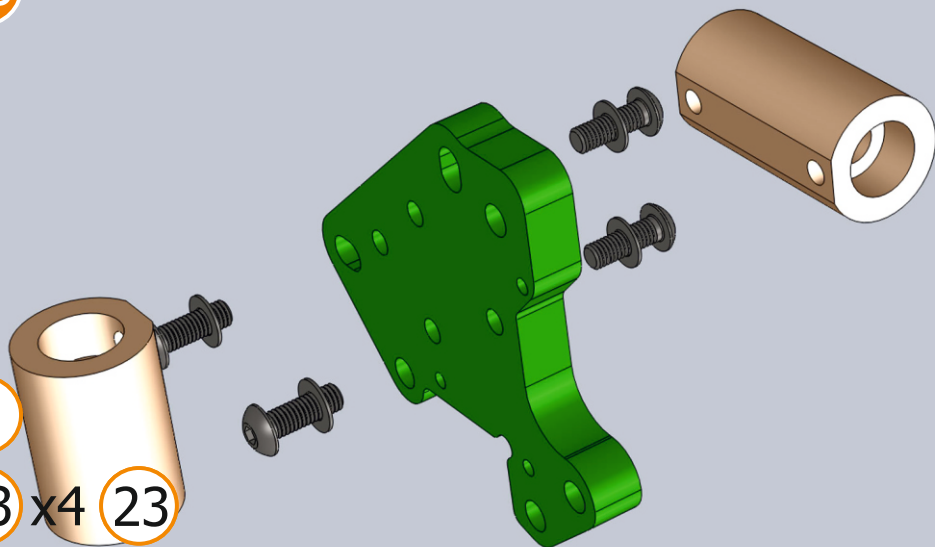


23

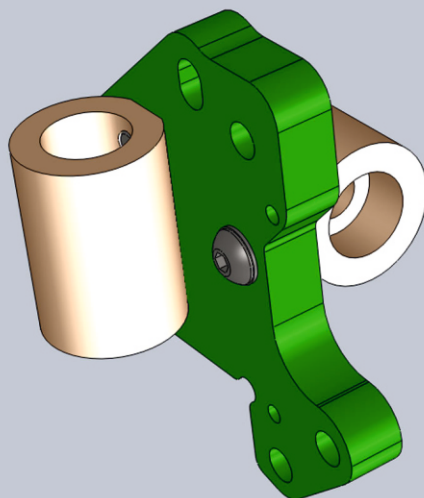
9

53 x4 23

61 x4 24



24



25

25

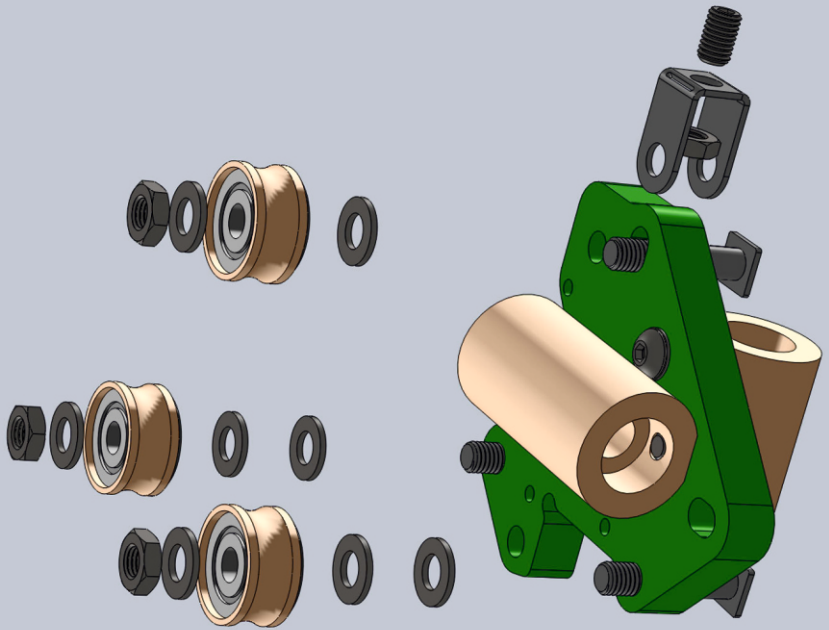
59

49 x3

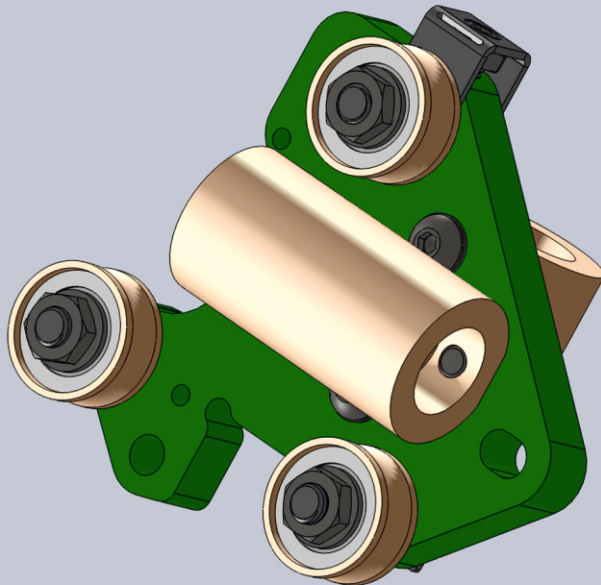
63 x4

62 x9

R x3



26



27

25

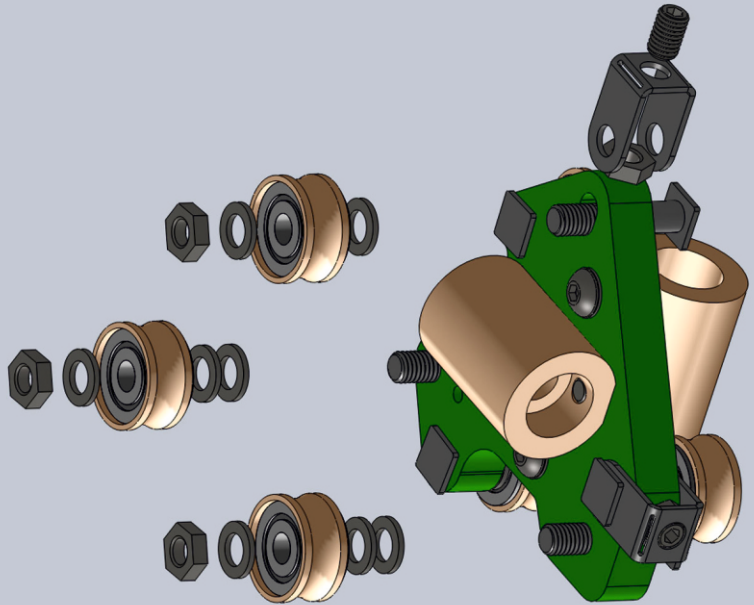
59

49 x3

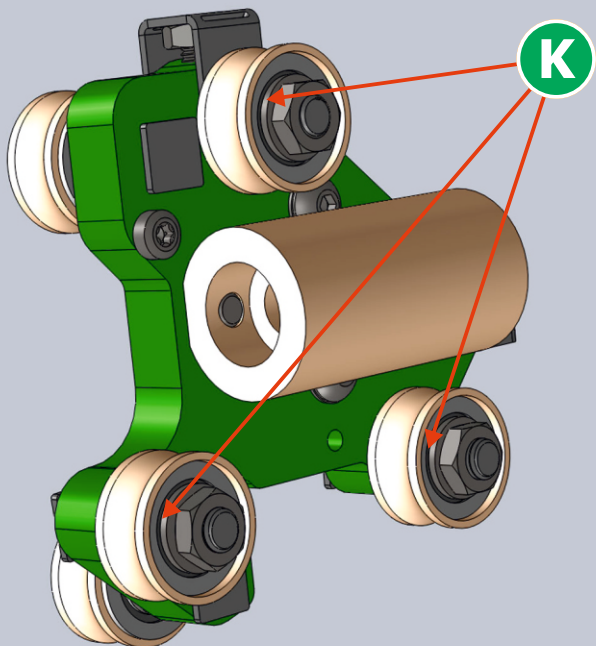
63 x4

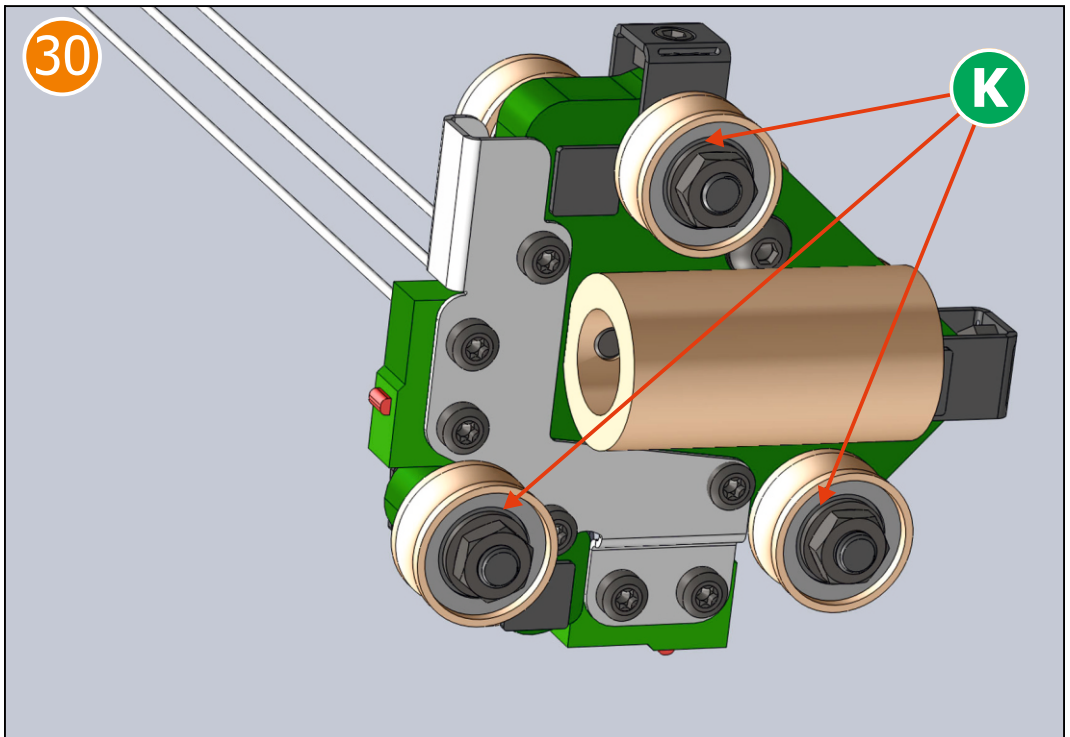
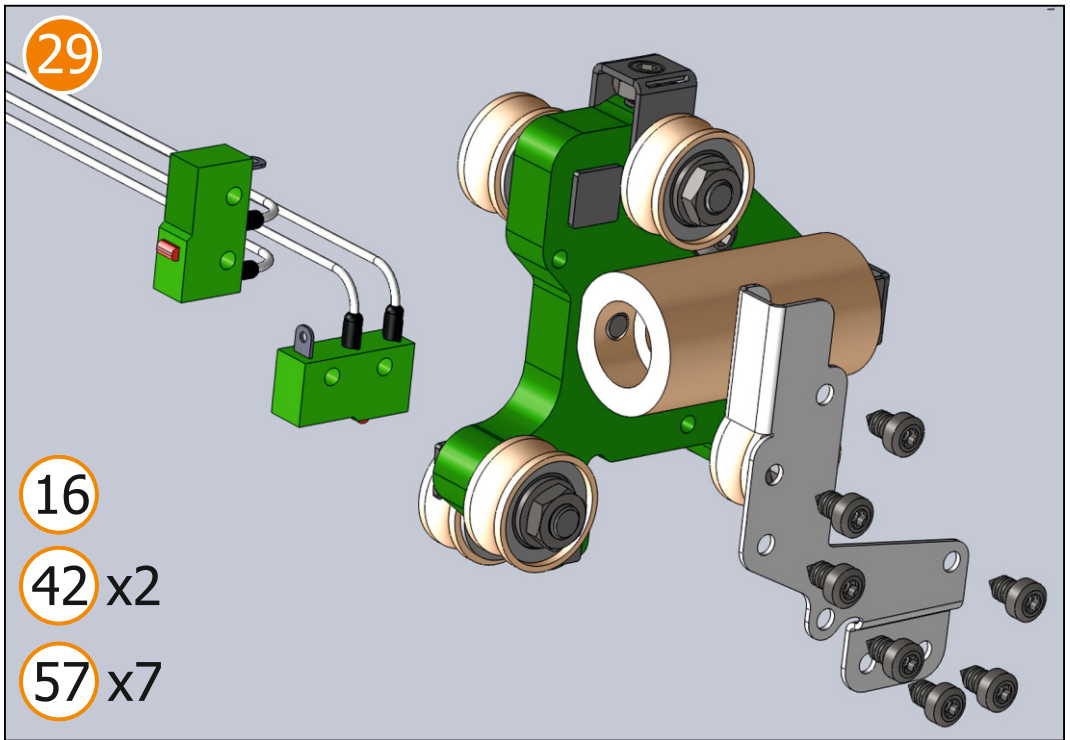
62 x9

R x3

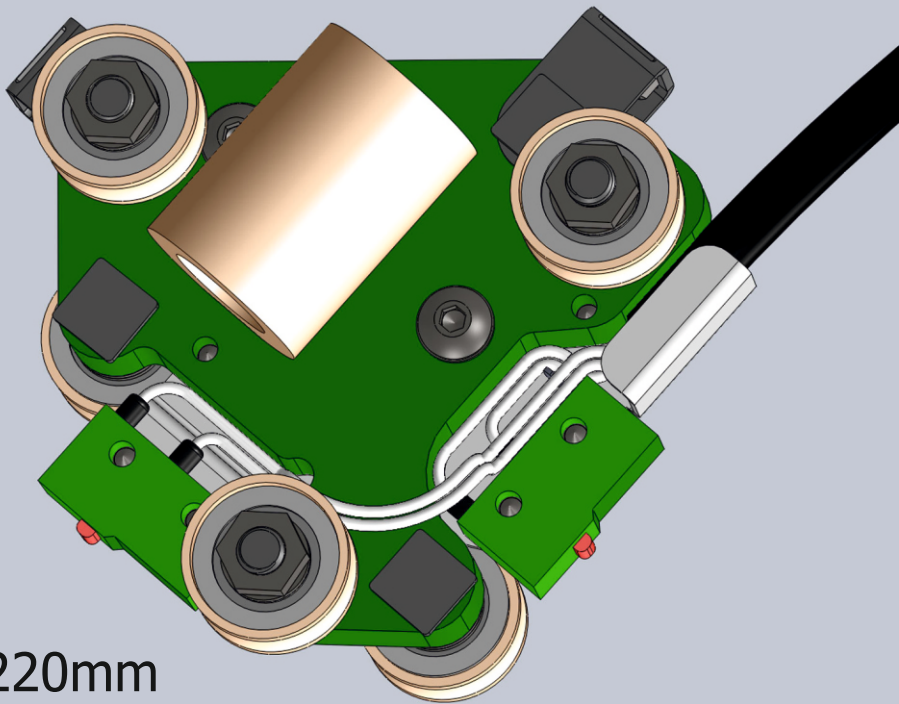


28



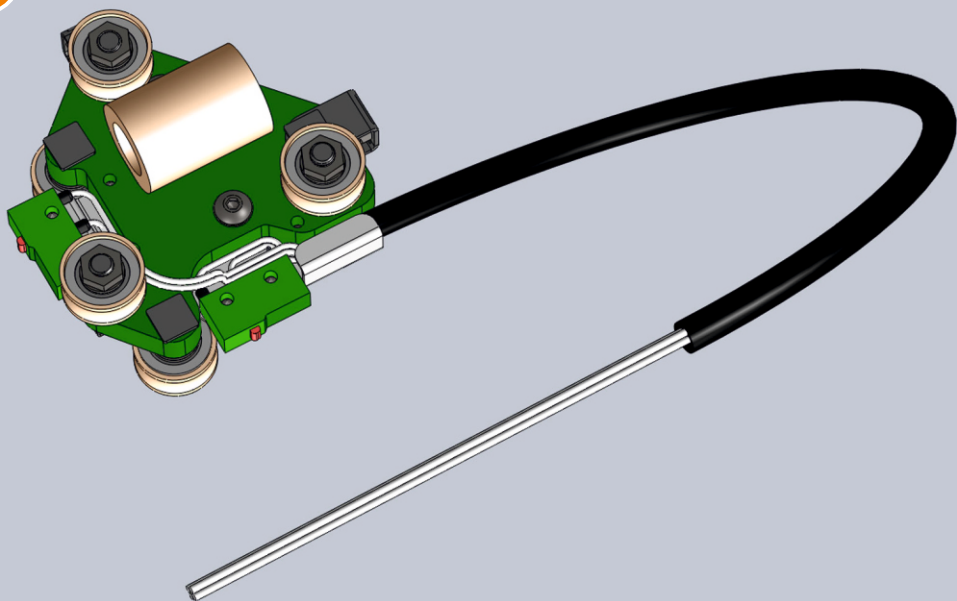


31

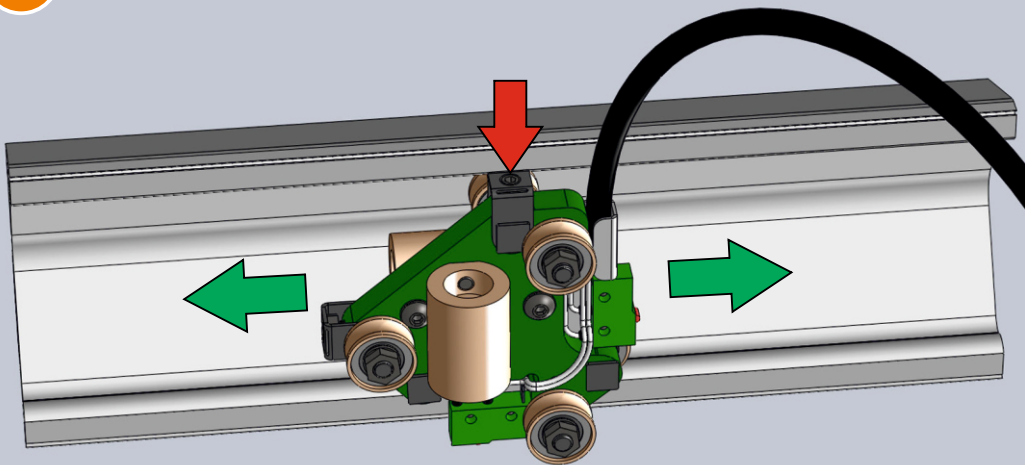


44 = 220mm

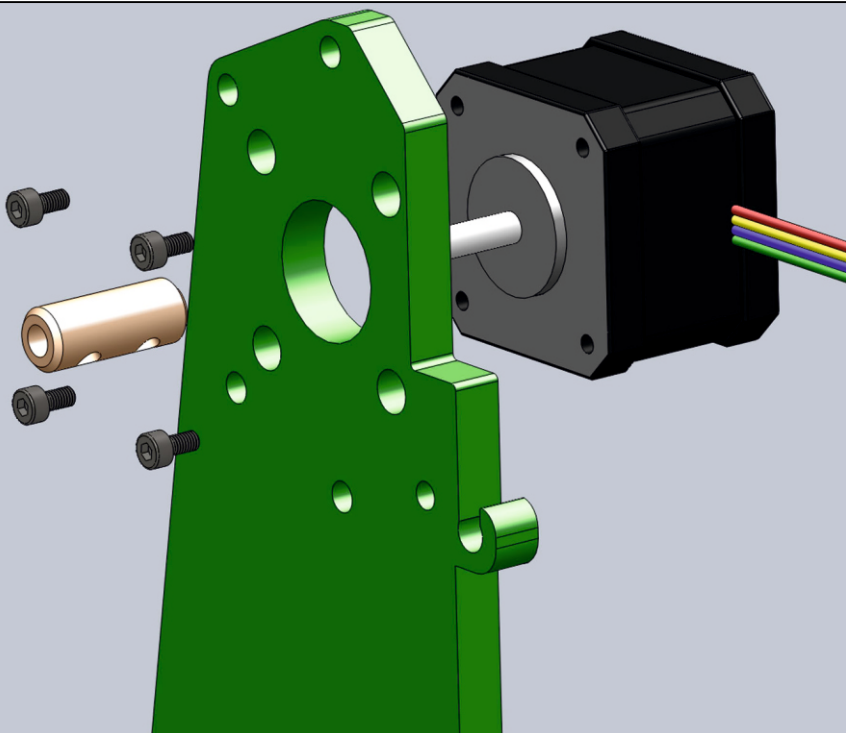
32



33



34

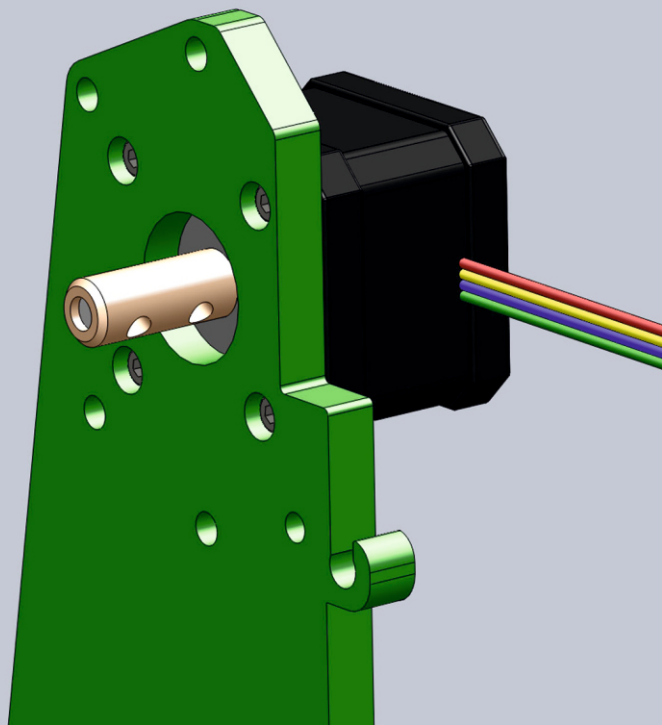


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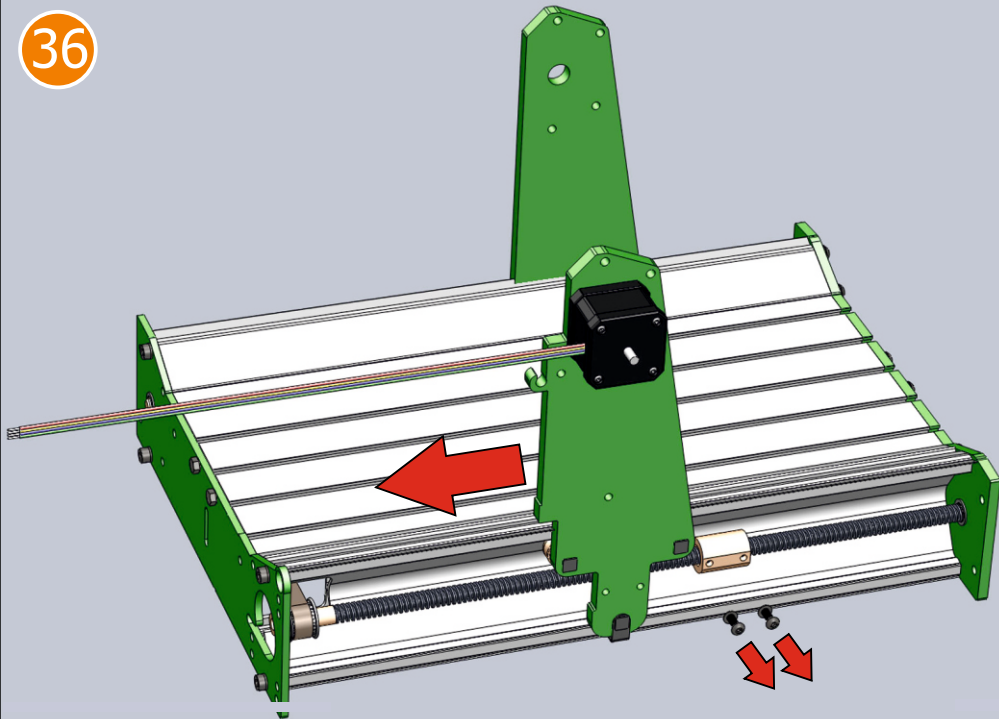
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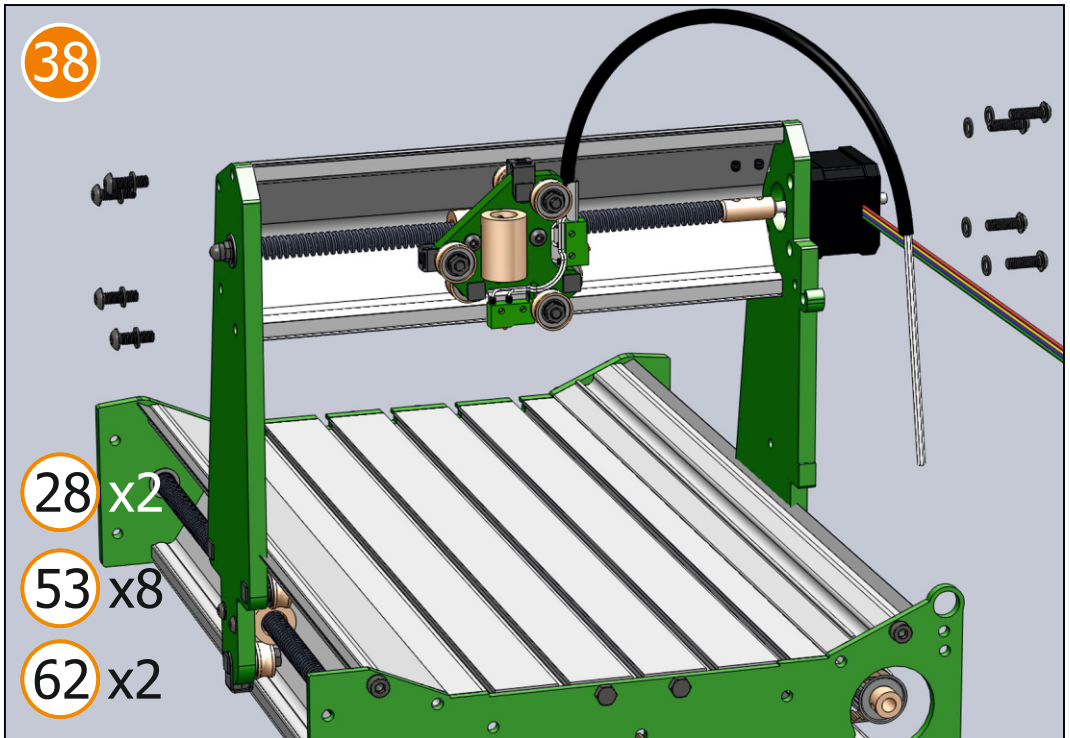
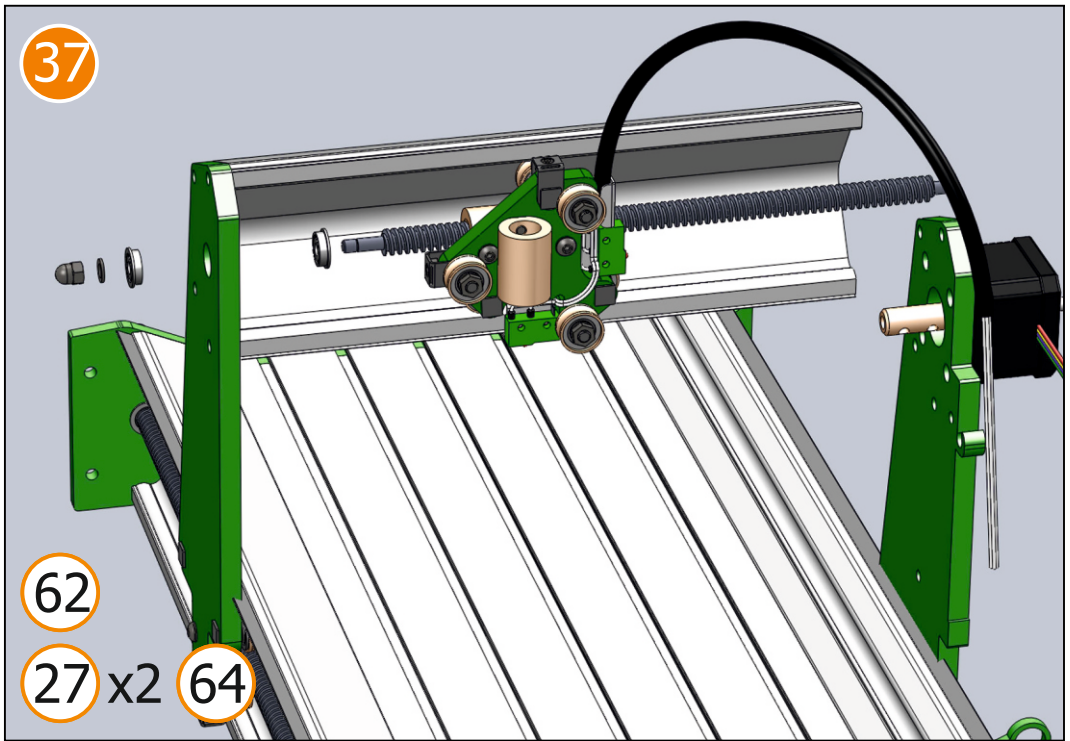
55 x4

35

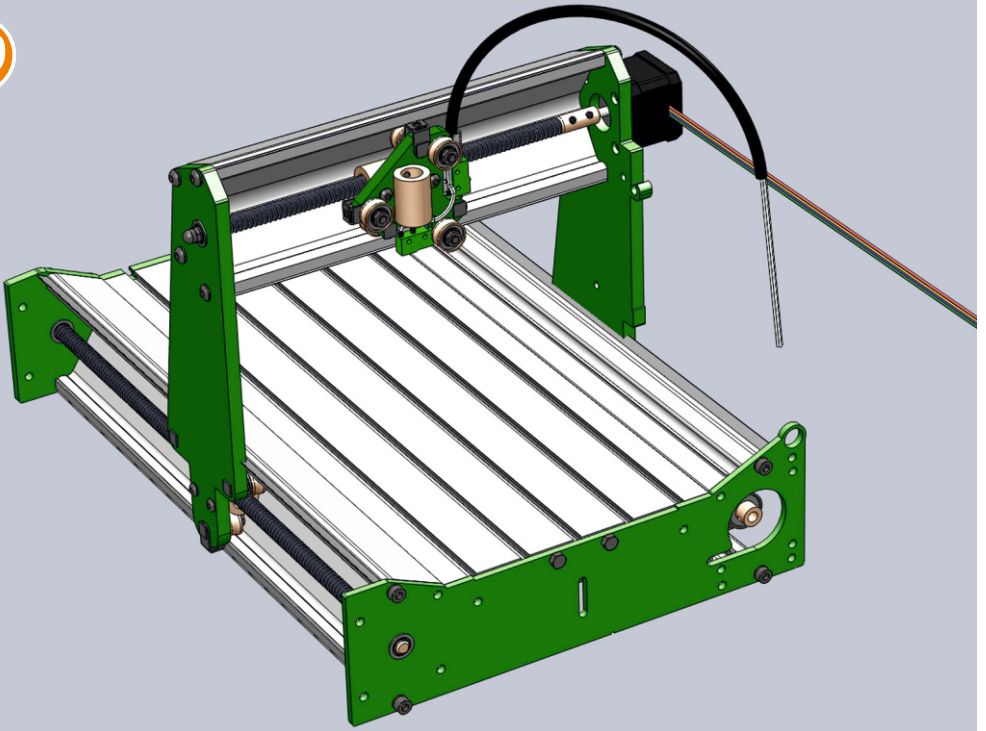


36





39



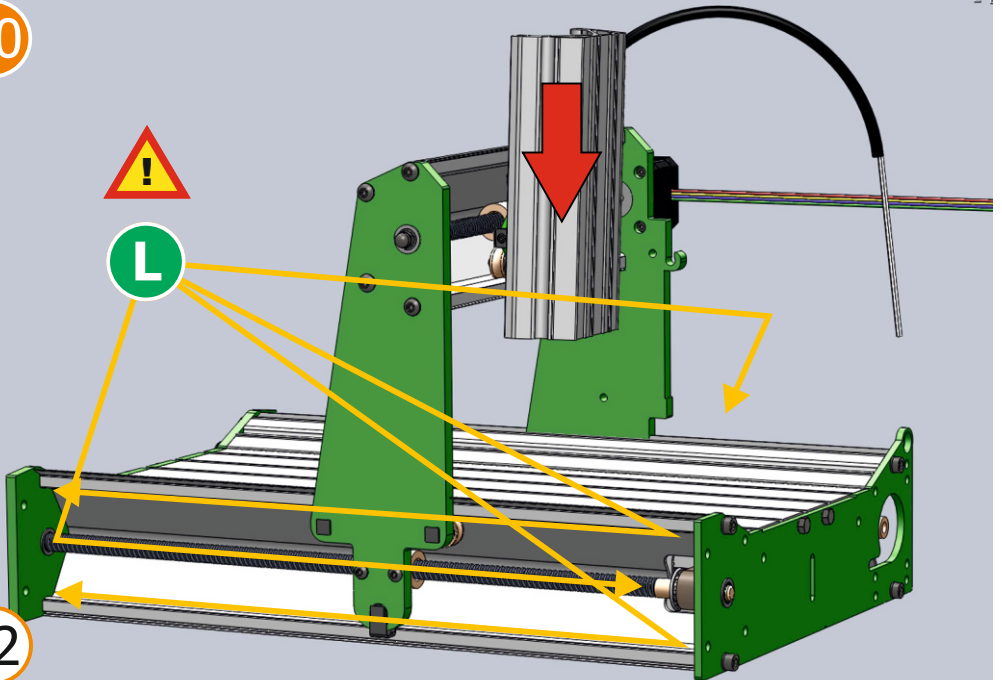
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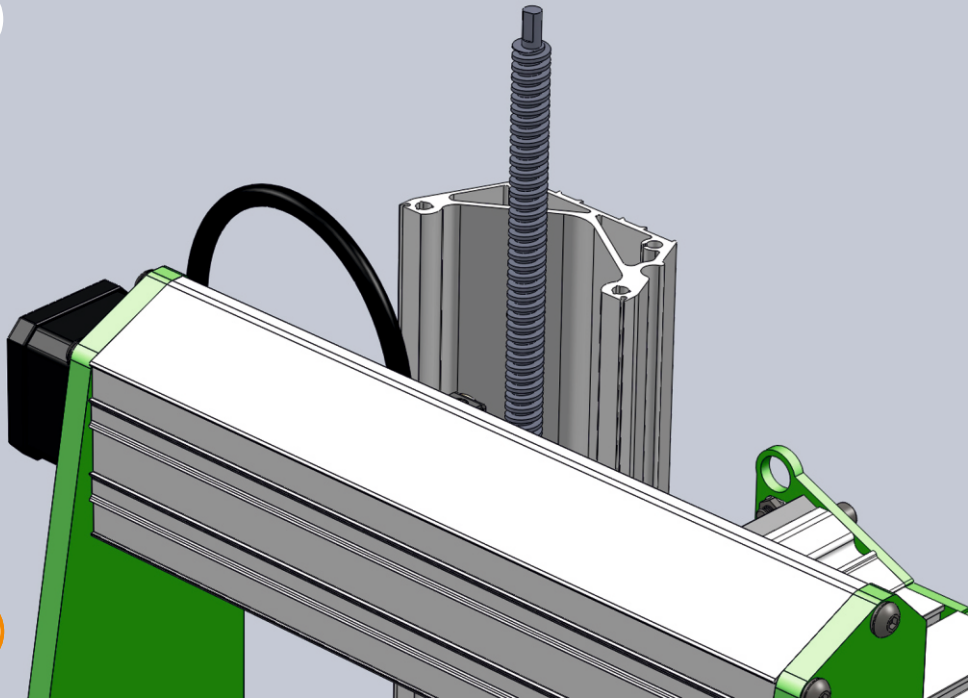
L



12

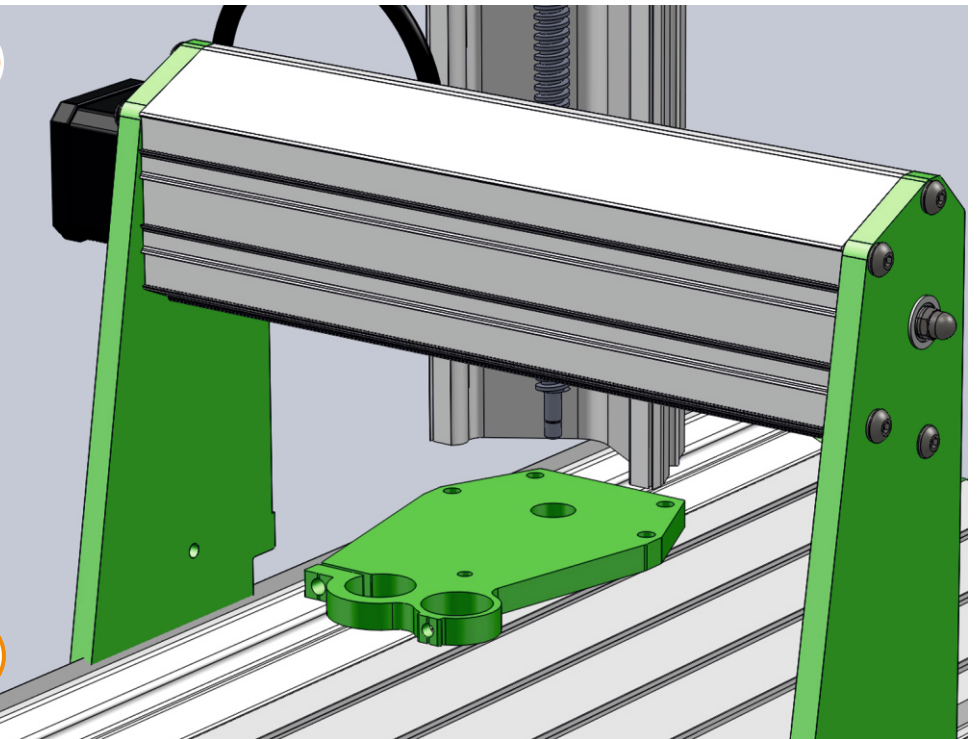


41

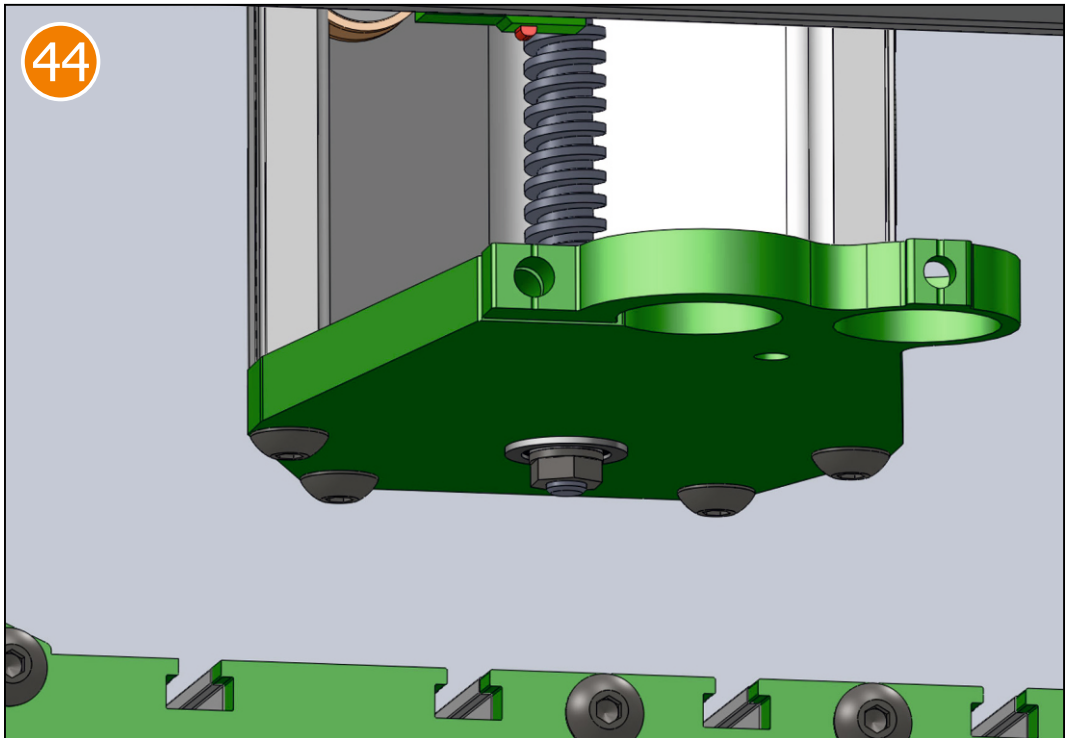
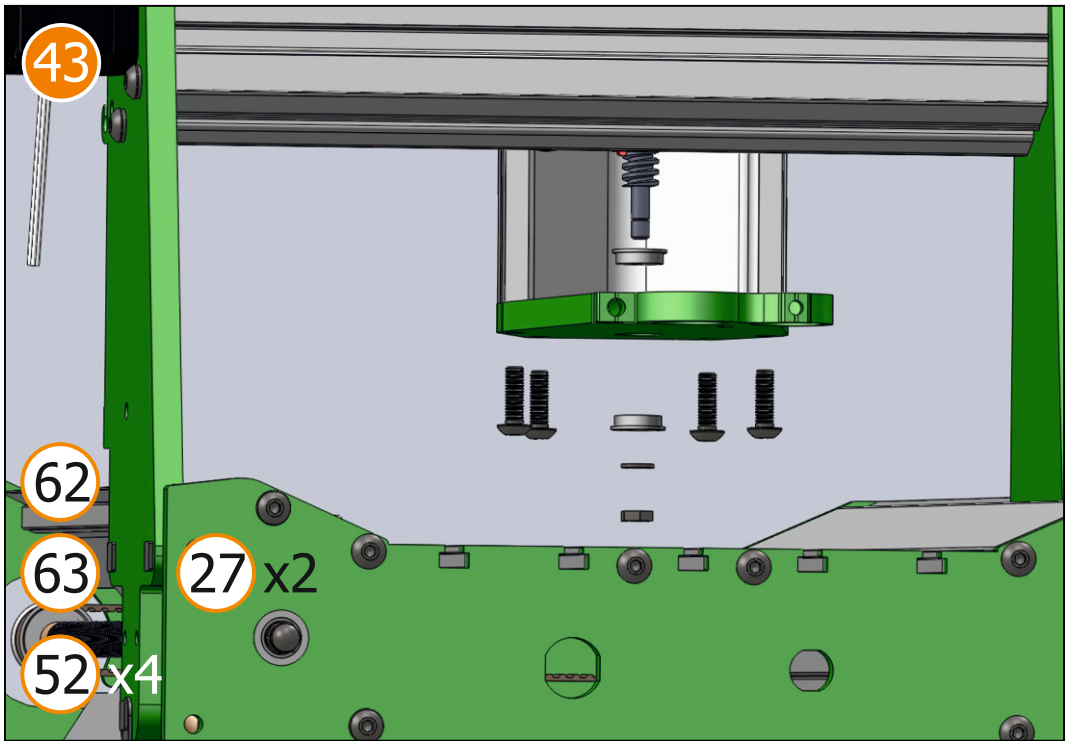


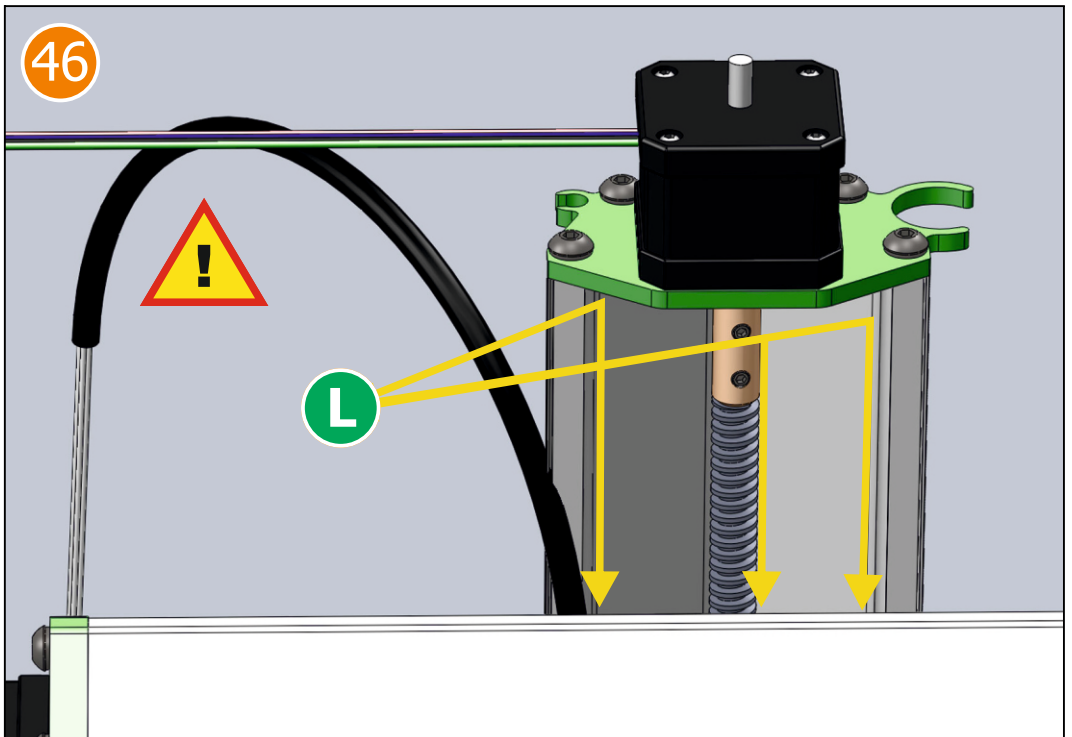
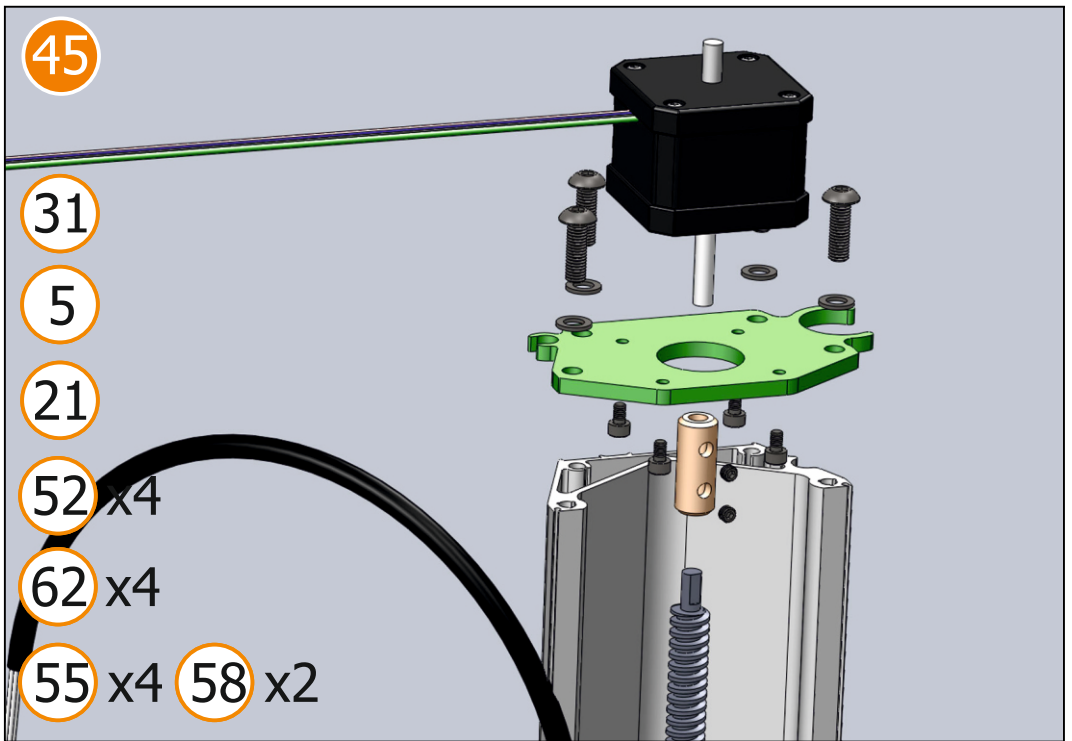
15

42

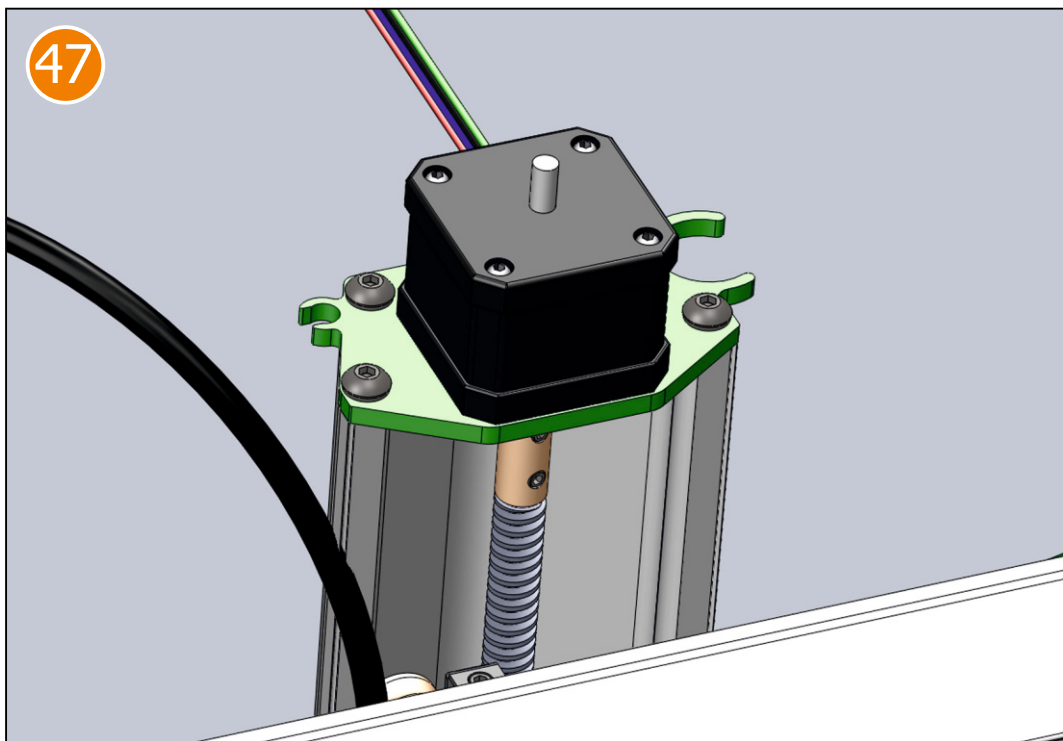


6

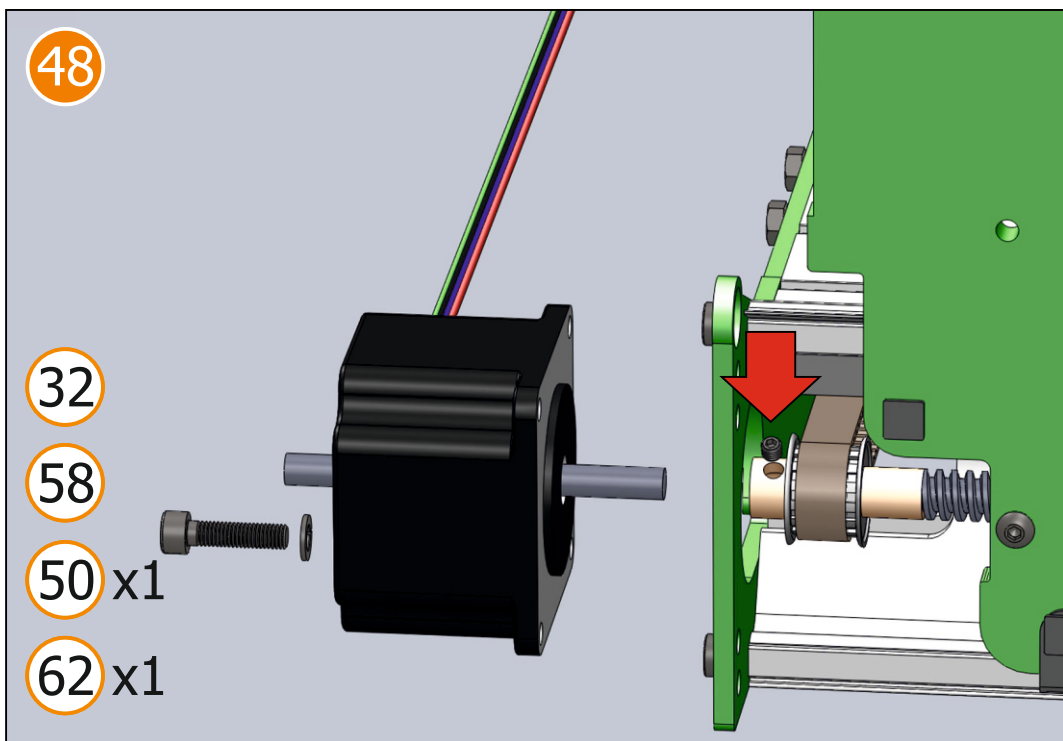


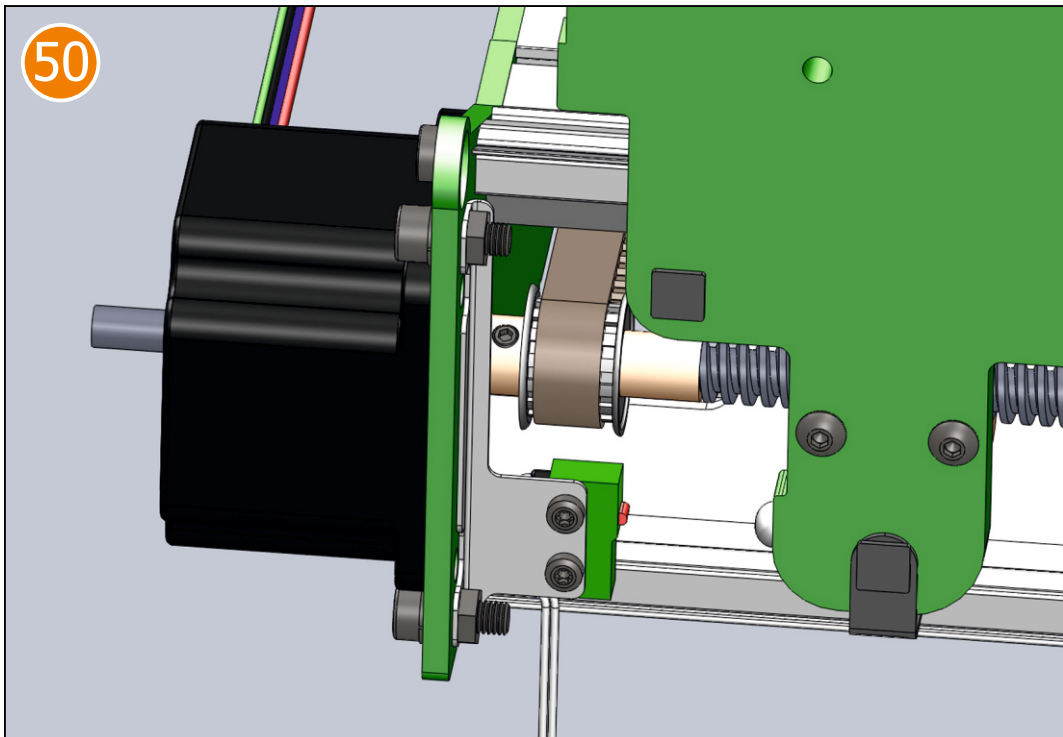
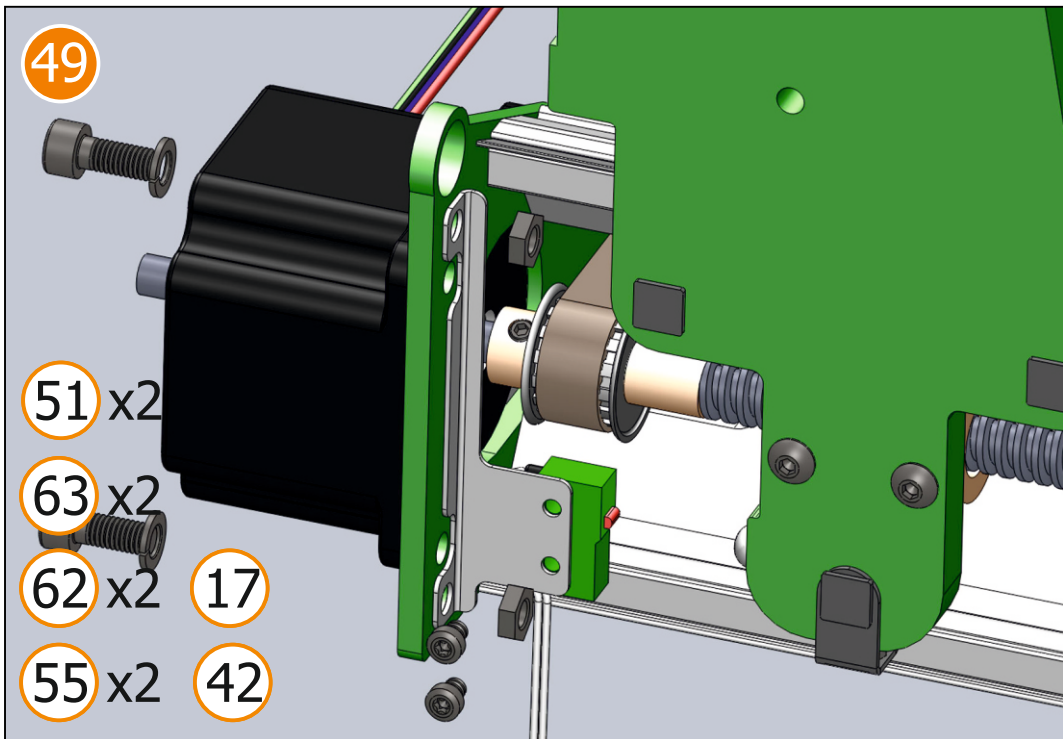


47

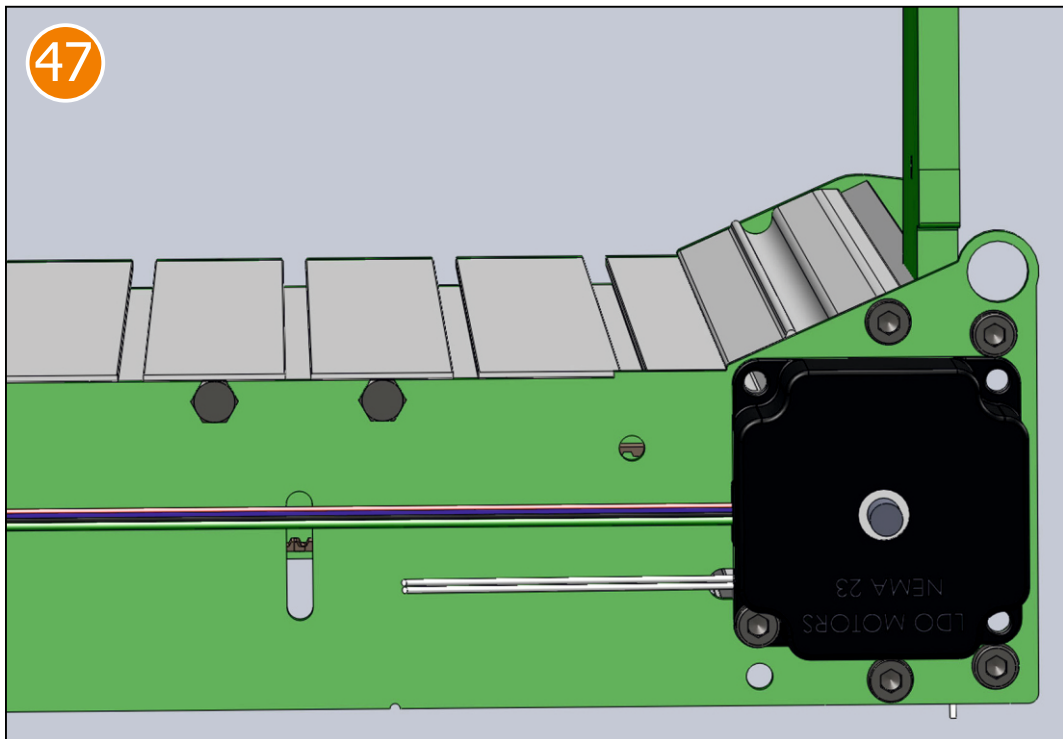


48





47



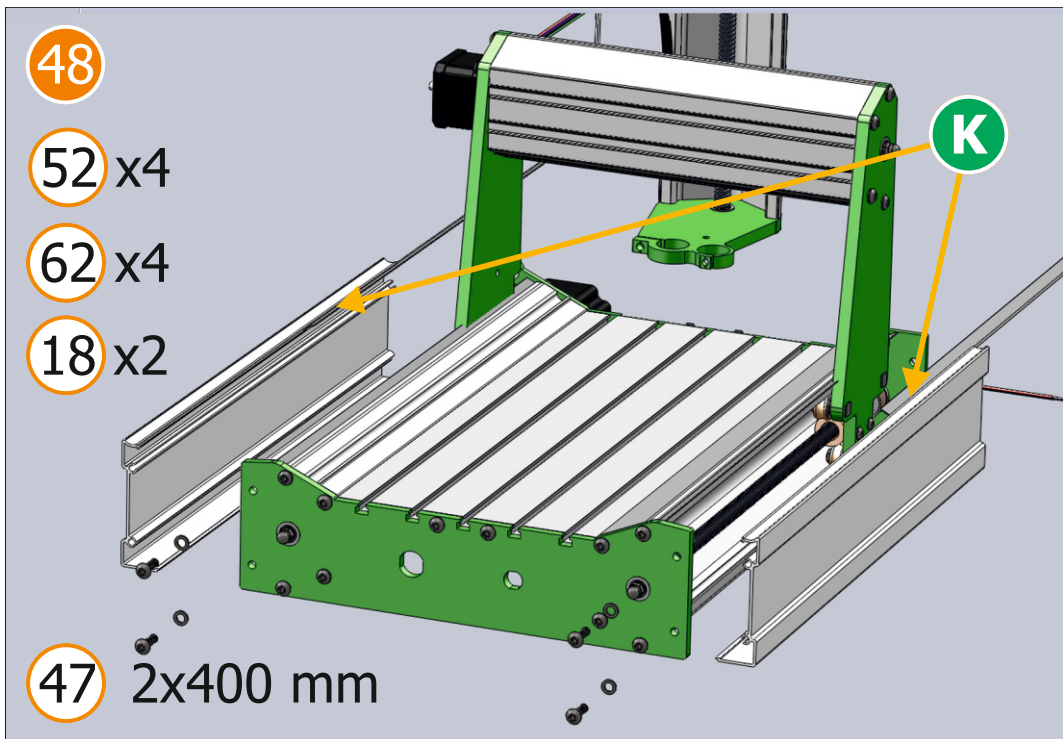
48

52 x4

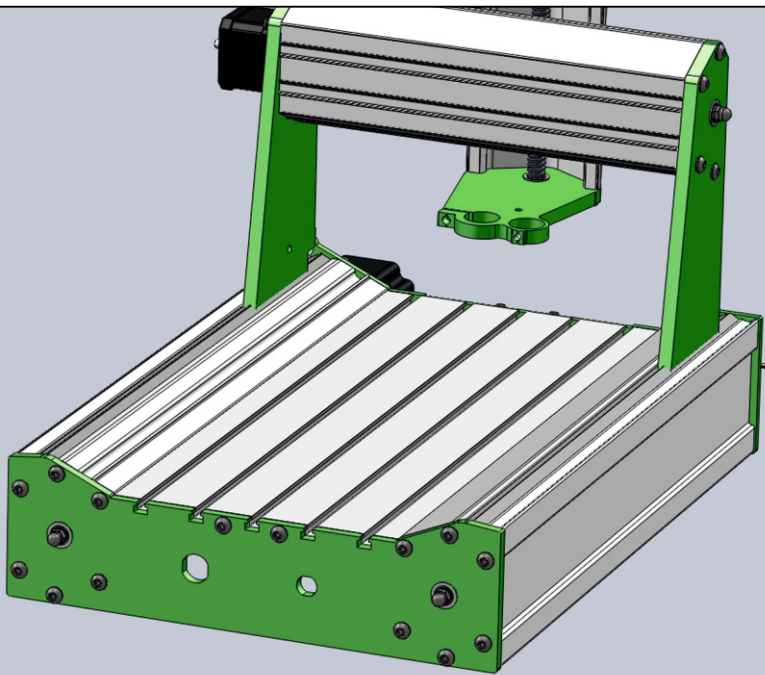
62 x4

18 x2

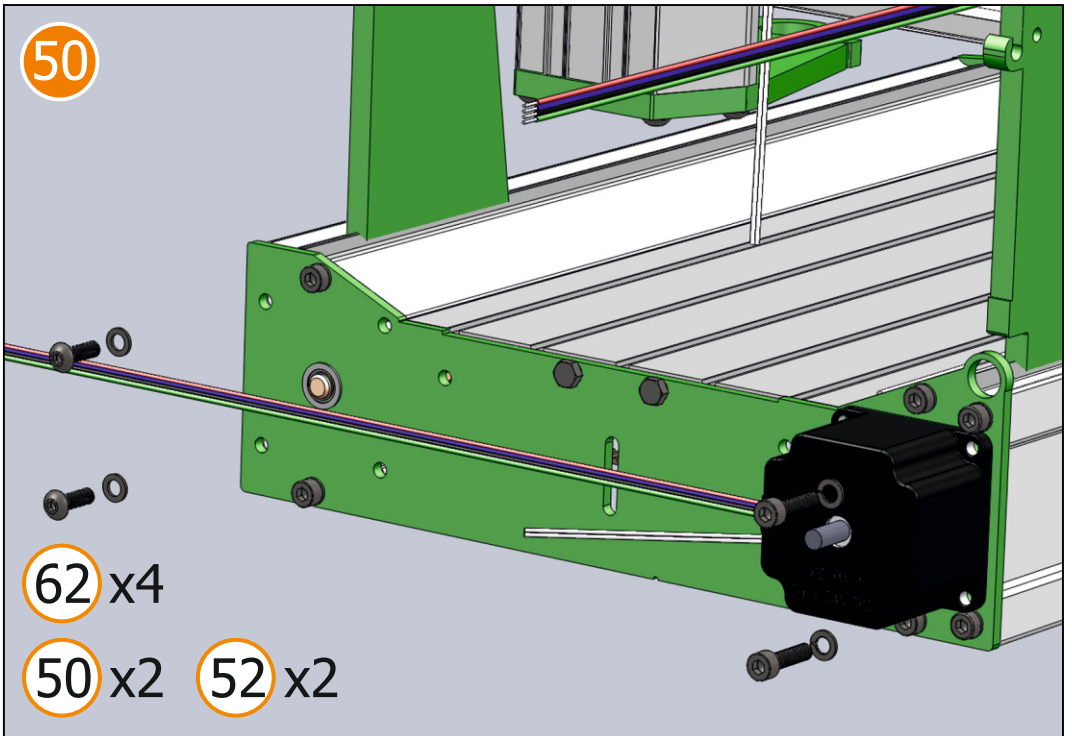
47 2x400 mm



49

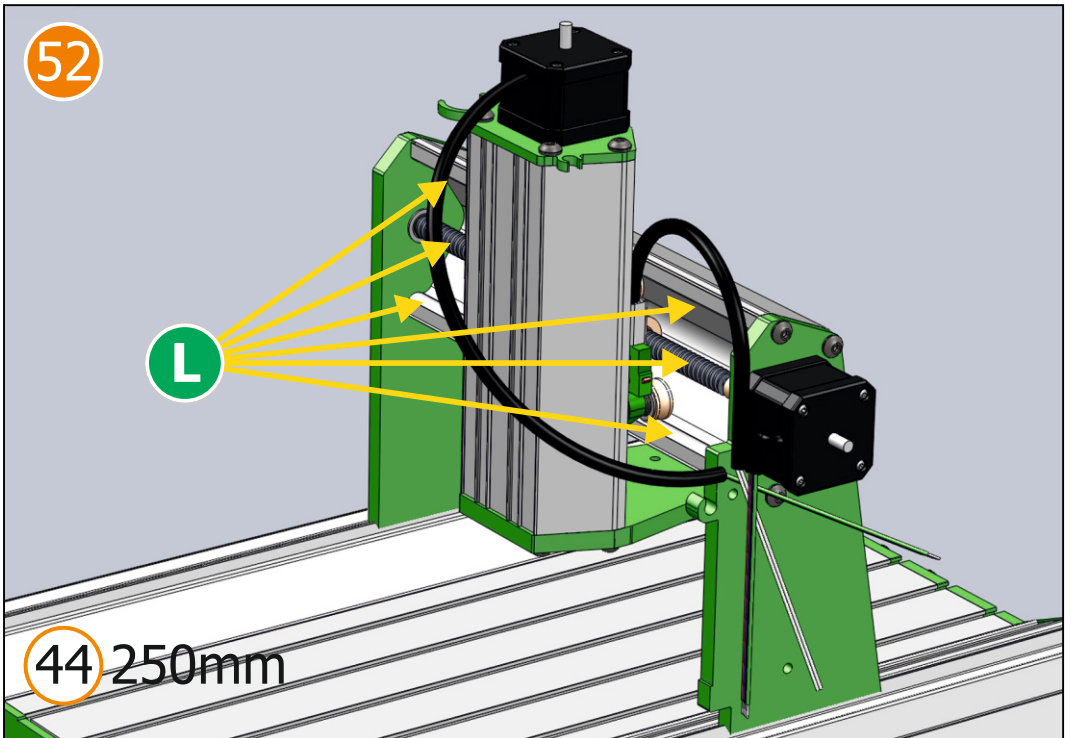
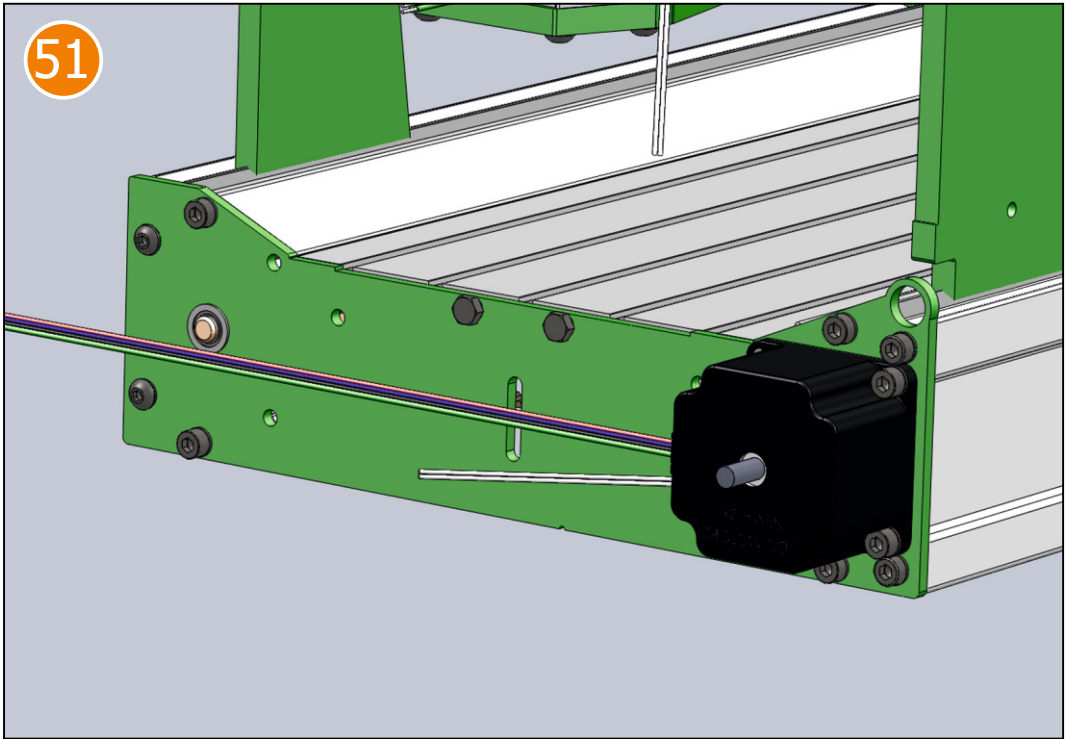


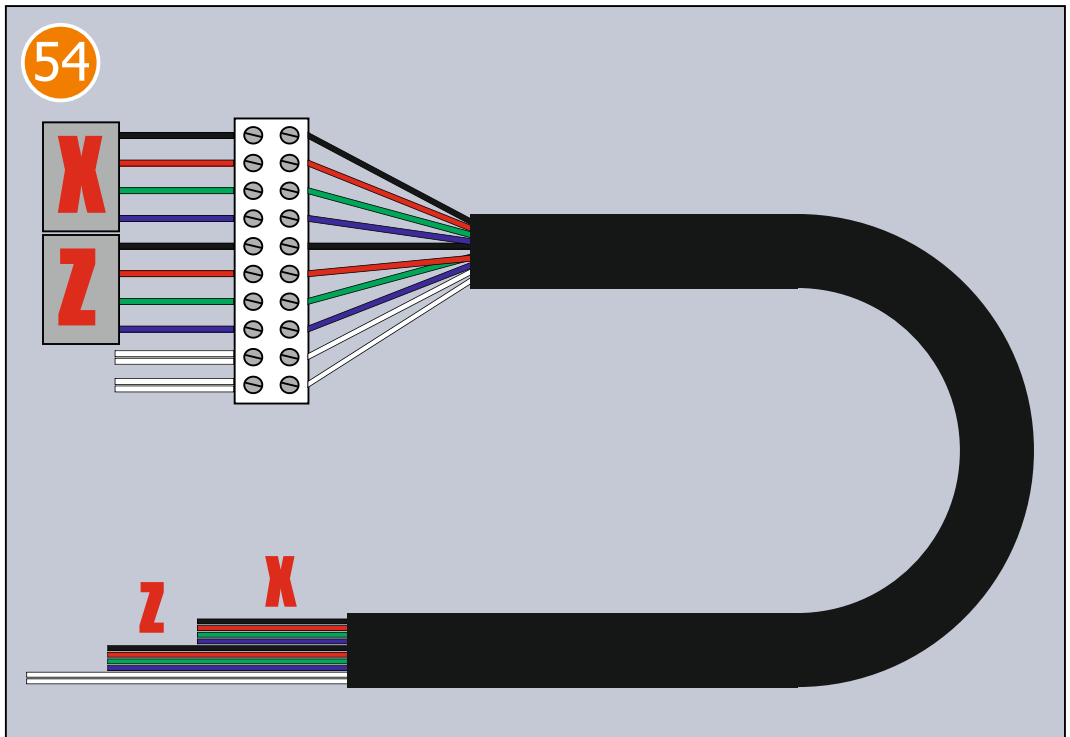
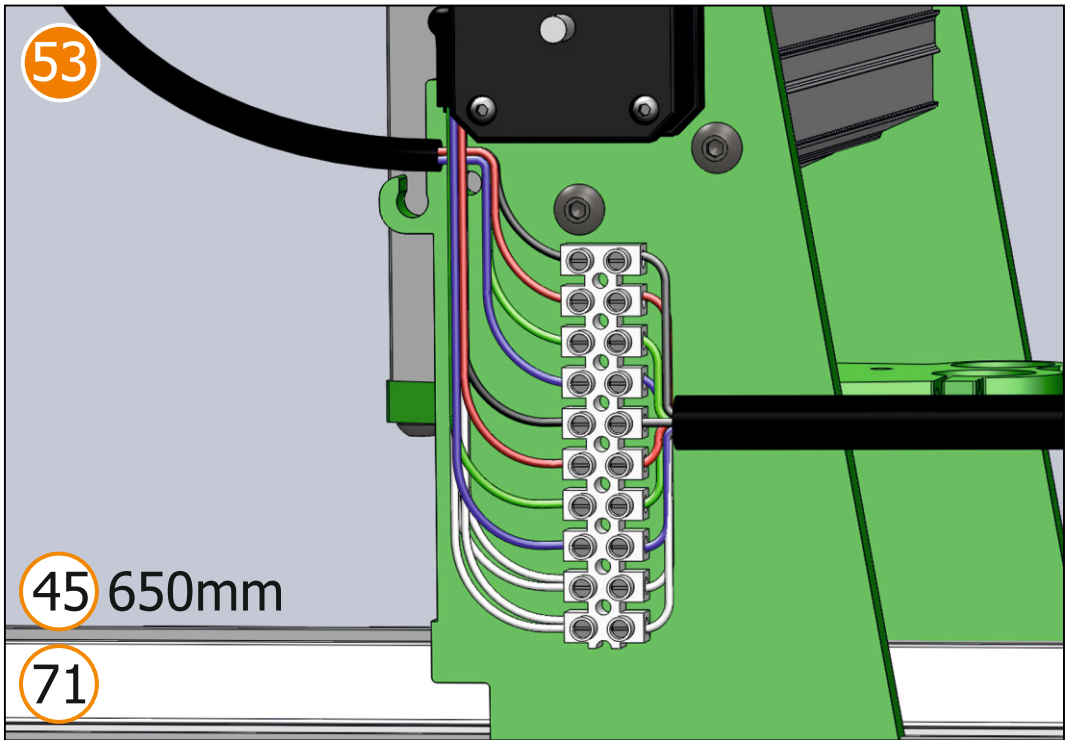
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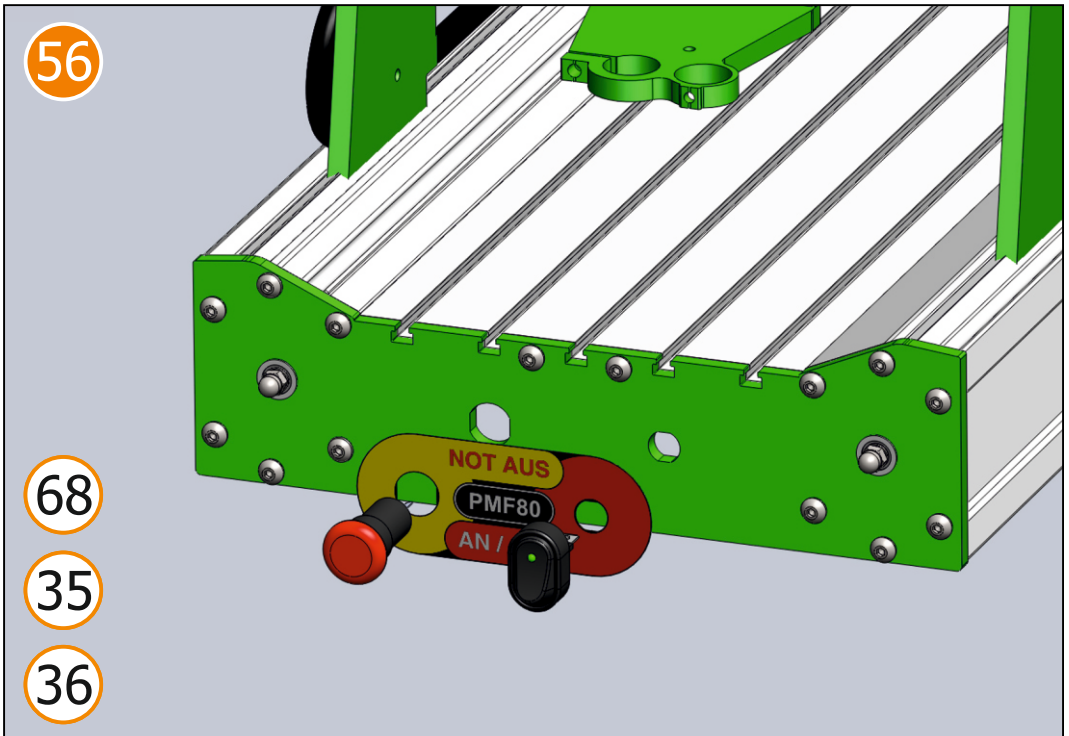
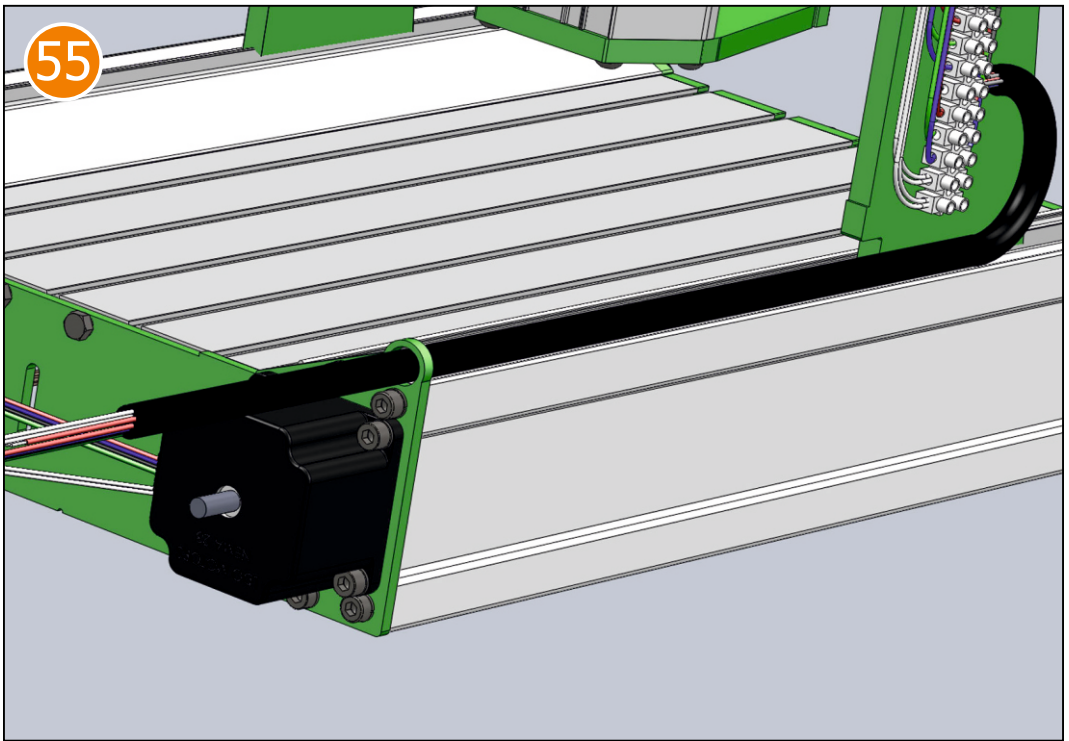


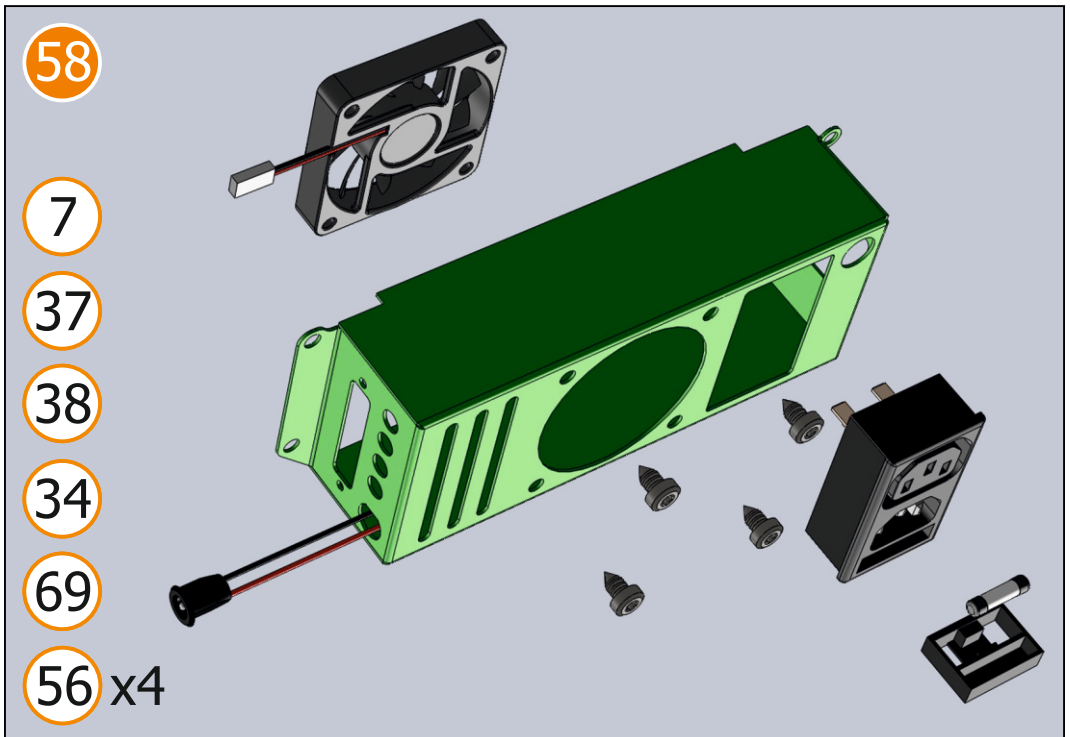
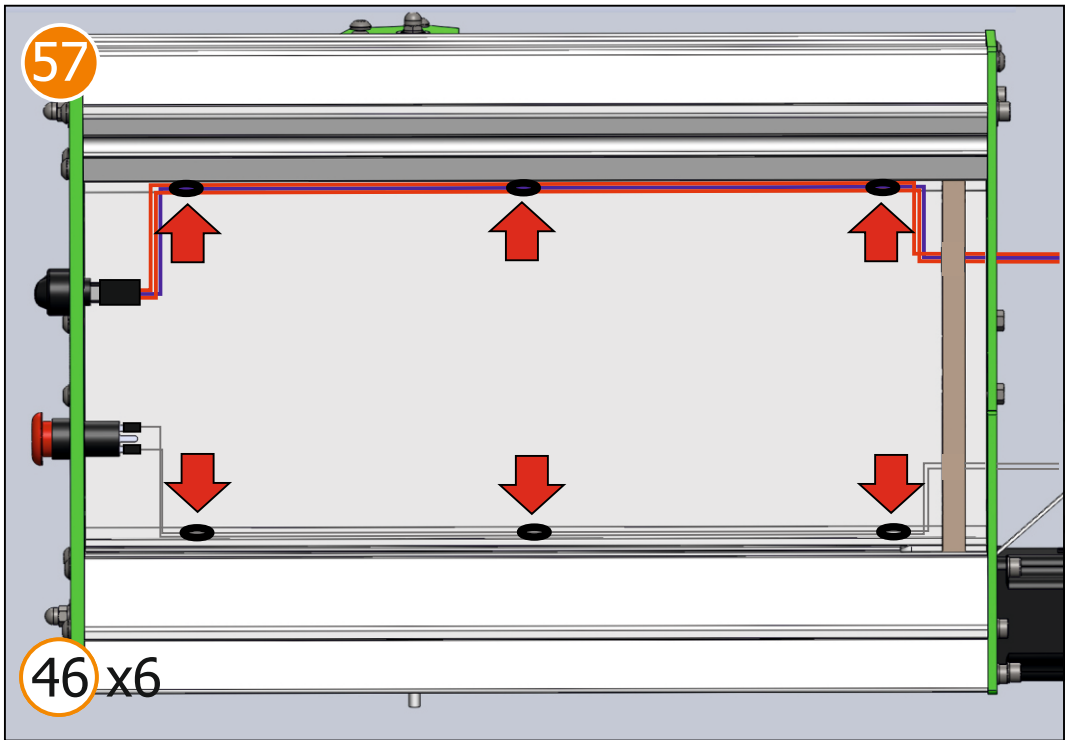
62 x4

50 x2 52 x2

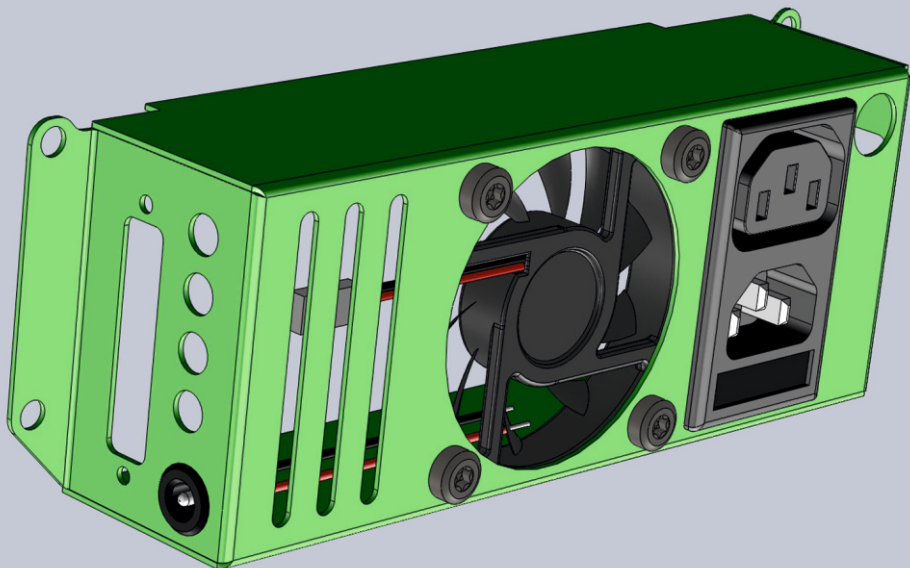




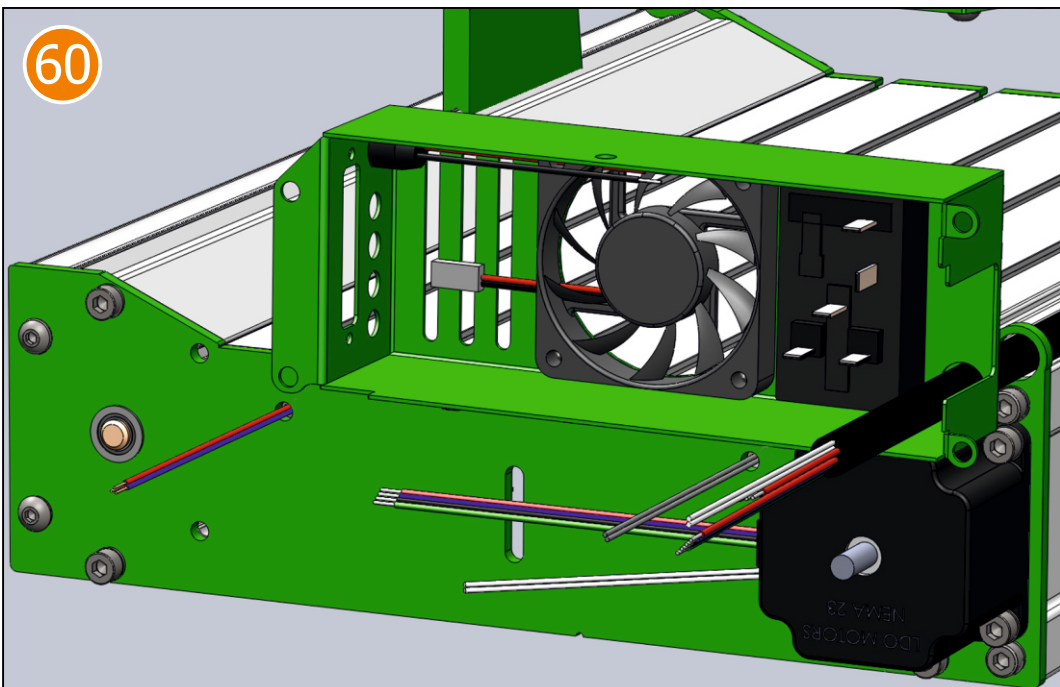


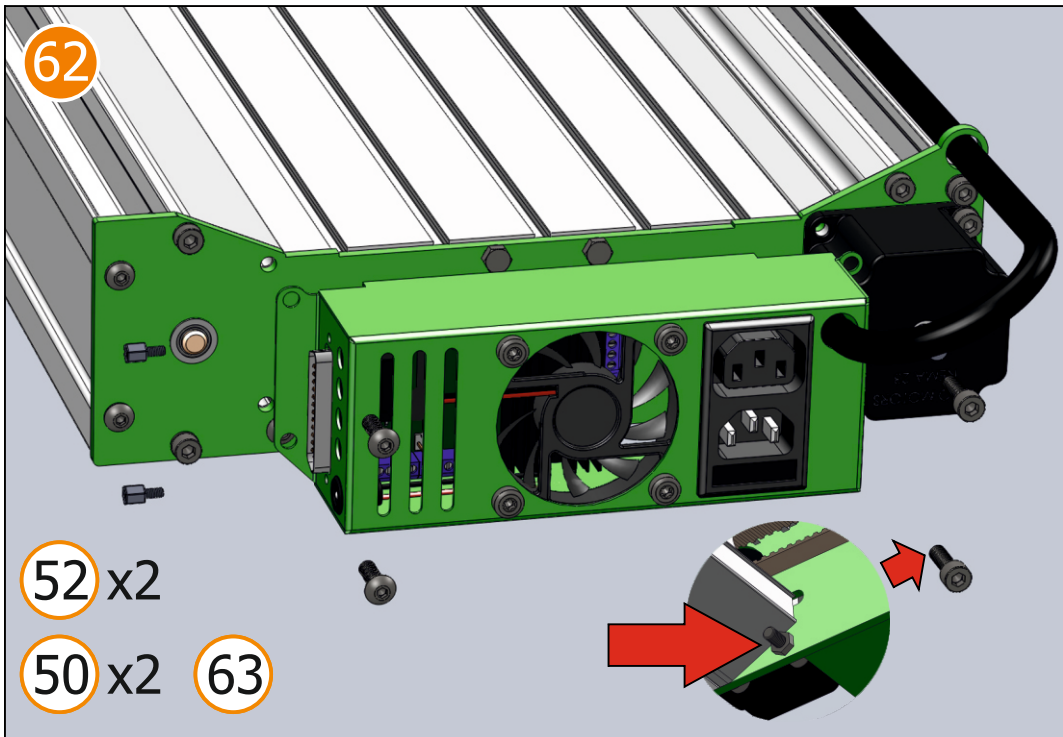
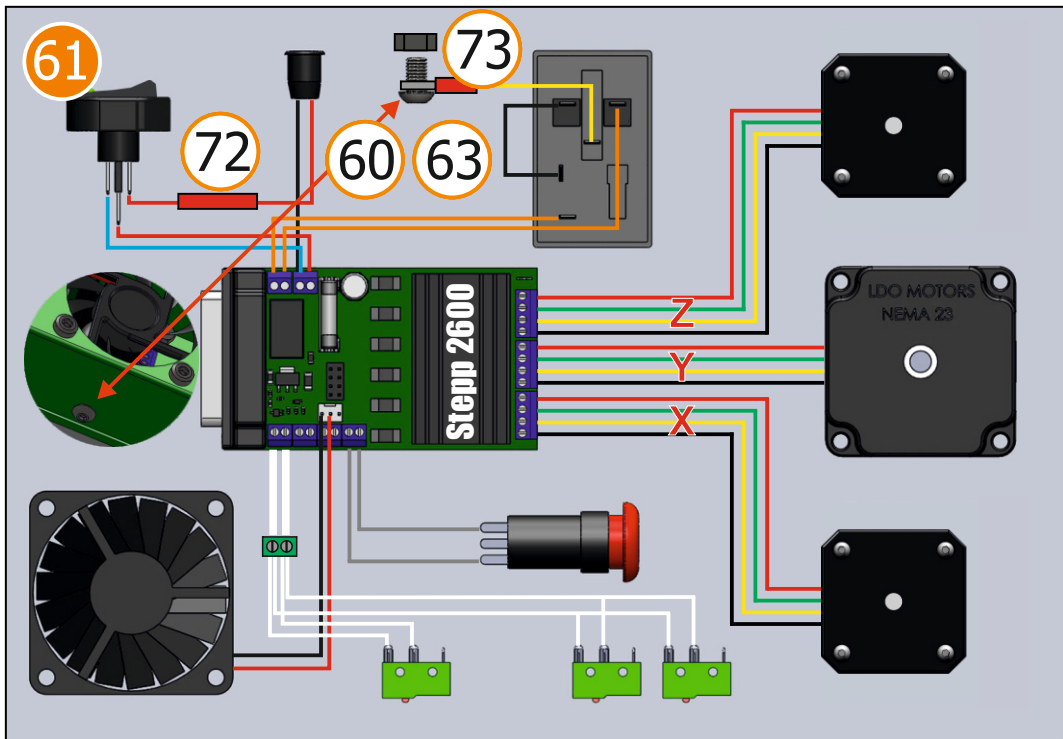


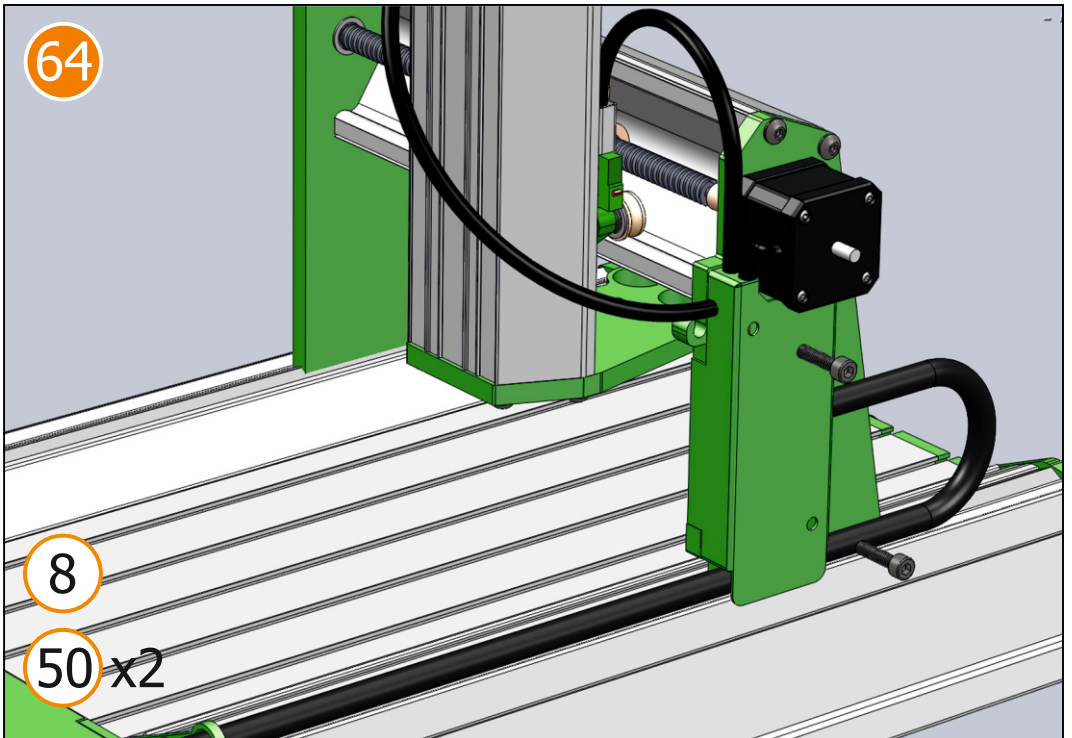
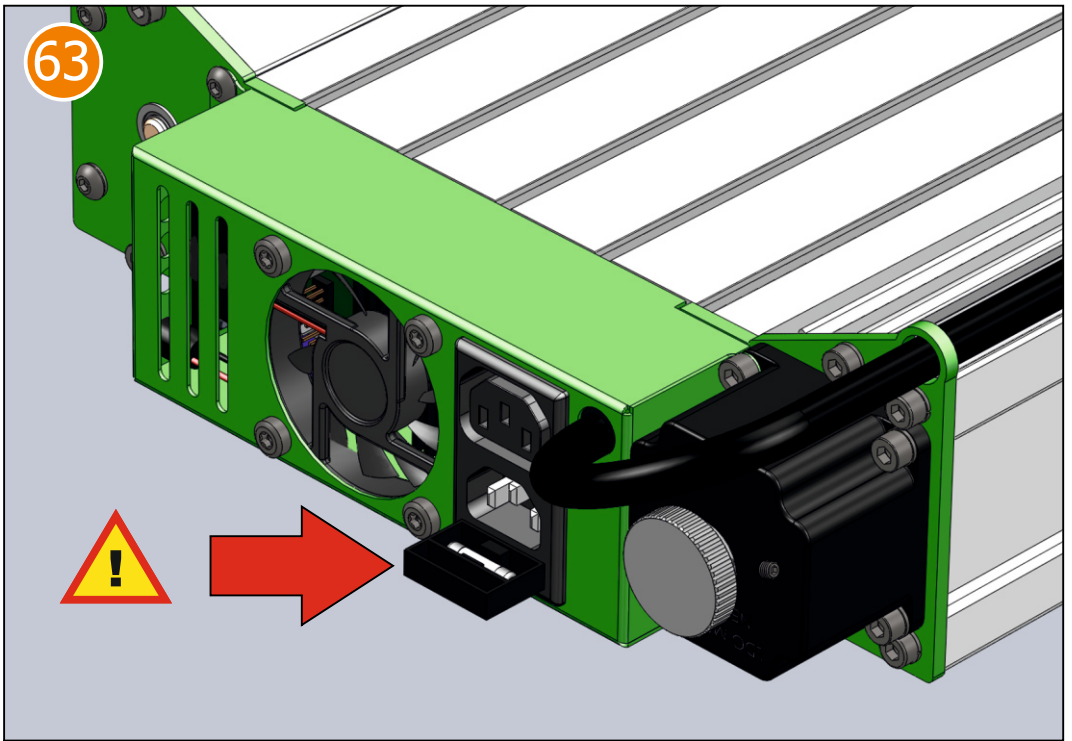
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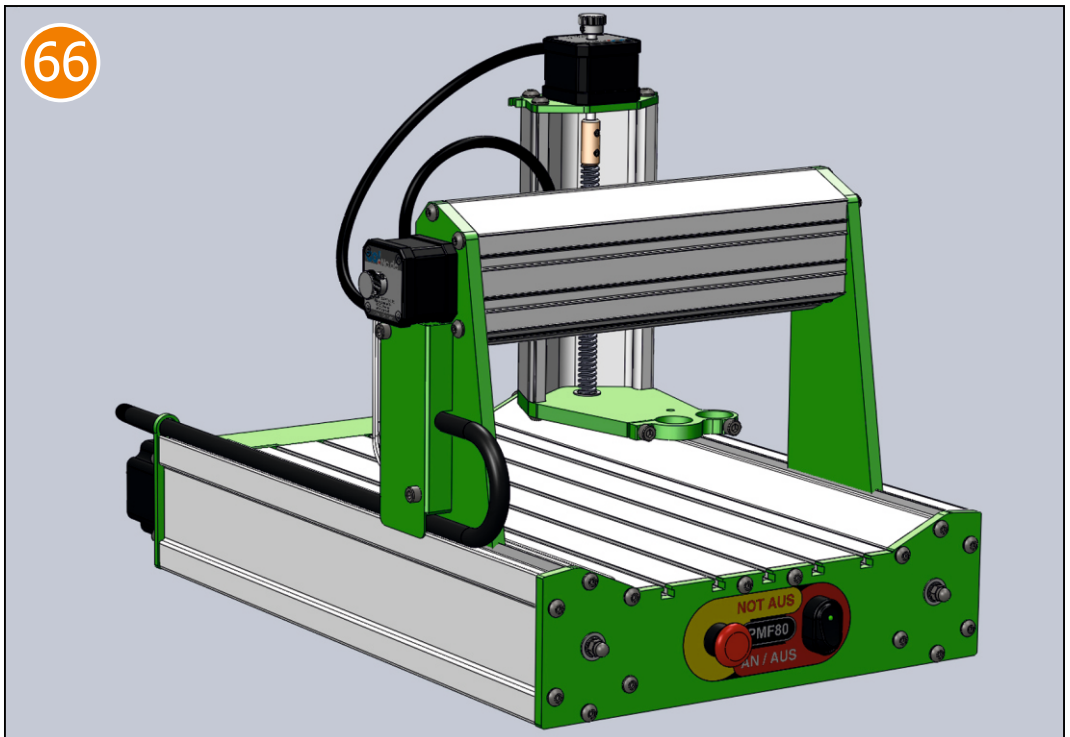
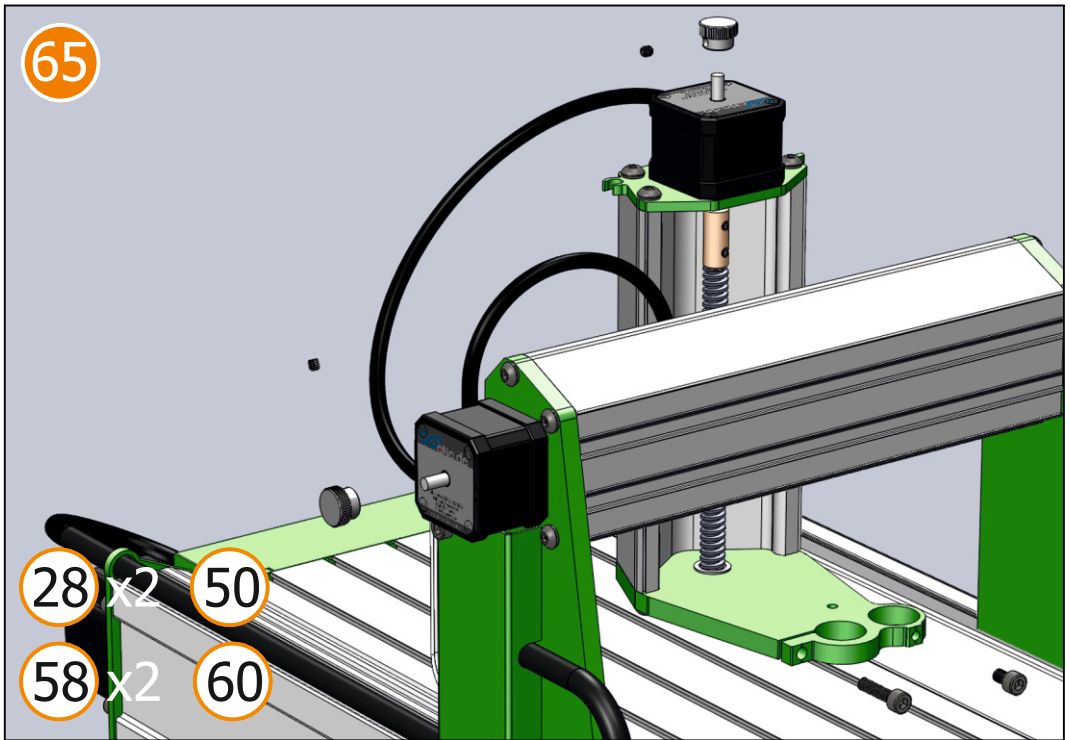


60









67 CNC Studio Einstellungen

CNC-Studio USB by GoCNC.de

Programm | **Einstellungen** | Editor | Stepp 2500 (Hobby, MF70) | Stepp 2600 (Next3D) | Version und Änderungen

LPT Belegung

PIN 1	Spindel	<input type="checkbox"/> Invertieren
PIN 2	Richtung X	<input type="checkbox"/> Invertieren
PIN 3	Takt X	<input type="checkbox"/> Invertieren
PIN 4	Richtung Y	<input type="checkbox"/> Invertieren
PIN 5	Takt Y	<input type="checkbox"/> Invertieren
PIN 6	Richtung Z	<input type="checkbox"/> Invertieren
PIN 7	Takt Z	<input type="checkbox"/> Invertieren
PIN 8	Nicht belegt	<input type="checkbox"/> Invertieren
PIN 9	Nicht belegt	<input type="checkbox"/> Invertieren
PIN 10	Referenzschalter XYZ	<input type="checkbox"/> Invertieren
PIN 11	Not Aus	<input type="checkbox"/> Invertieren
PIN 12	Nicht belegt	<input type="checkbox"/> Invertieren
PIN 13	Nicht belegt	<input type="checkbox"/> Invertieren
PIN 14	Nicht belegt	<input type="checkbox"/> Invertieren
PIN 15	Nicht belegt	<input type="checkbox"/> Invertieren
PIN 16	Bereit	<input type="checkbox"/> Invertieren
PIN 17	Nicht belegt	<input type="checkbox"/> Invertieren
PIN 18 bis 25 sind fest mit GND verbunden		

Maschineneinstellungen

	Achse X	Achse Y	Achse Z
Schritte pro Umdrehung	200	200	200
Mikroschritte (1,2,4,8,16)	2	2	2
Spindelsteigung mm	3	3	3
Schritte für Rampe	200	300	100
Referenzschalter	Rechts	Hinten	Oben
Maximale Geschwindigkeit mm/s	30	60	30
Start/Stop Geschwindigkeit mm/s	6	6	6
Mauel fahren/ schnell mm/s	20	30	20
Manuellfahren langsam mm/s	4	4	4
Referenzfahrt - suchen mm/s	2	2	2
Referenzfahrt - frefahren mm/s	3	3	3
Referenzfahrt - frefahren mm	2	2	2
Schritte für Umkehrspiel	5	5	5
Achsenfahrweg mm	160	295	75

Weitere Einstellungen

Maschinennulppunkt: vorne links

Reihenfolge Referenzfahrt: Z, dann X, dann Y


Frässpindel mit Software Steuern

Kühlung / Absaugung mit Software steuern

Dauerstrom an Schrittmotoren

Sprache: Deutsch

Integrierte Hardwareunterstützung



Werkzeuglängensensor

Position X: 100
Position Y: 100
suchen mm/s: 2
frefahren mm/s: 2

Höhe vermessen | Stop

Position X: 00, Position Y: 00
Aktuelle Position übernehmen

Arbeitsgang

Sicherheitsabstand mm: 10
Eintauchtiefe mm: 1
Wiederholen x: 2
Fräsen mm/s: 25
Bohren mm/s: 20

Singale testen

Y Z
X STOP X
Y Z

USB Box Status: Nicht eingerichtet

Laden | Speichern | Speichern unter

68 CNC Studio settings

CNC-Studio USB by GoCNC.de

Program | **Setting** | Edit CNC file | Stepp 2500 Setting | Stepp 2600 (Next3D) | Version_Changes

LPT port setting

PIN 1	Engine	<input type="checkbox"/> Invert
PIN 2	Direction X	<input type="checkbox"/> Invert
PIN 3	Step X	<input type="checkbox"/> Invert
PIN 4	Direction Y	<input type="checkbox"/> Invert
PIN 5	Step Y	<input type="checkbox"/> Invert
PIN 6	Direction Z	<input type="checkbox"/> Invert
PIN 7	Step Z	<input type="checkbox"/> Invert
PIN 8	not used	<input type="checkbox"/> Invert
PIN 9	not used	<input type="checkbox"/> Invert
PIN 10	Reference switch XYZ	<input type="checkbox"/> Invert
PIN 11	Emergency Stop	<input type="checkbox"/> Invert
PIN 12	not used	<input type="checkbox"/> Invert
PIN 13	not used	<input type="checkbox"/> Invert
PIN 14	not used	<input type="checkbox"/> Invert
PIN 15	not used	<input type="checkbox"/> Invert
PIN 16	Ready	<input type="checkbox"/> Invert
PIN 17	not used	<input type="checkbox"/> Invert
PIN 18 to 25 are rigidly connected to GND		

CNC Router setting

	Achse X	Achse Y	Achse Z
Steps per revolution	200	200	200
Microstepping (2,4,8,16)	2	2	2
Distance per revolution mm	3	3	3
Steps for ramp	200	300	100
Reference switch location	Right	Rear	Up
Maximal speed mm/s	30	60	30
Ramp drive from mm/s	6	6	6
Fast manual speed mm/s	20	30	20
Slow manual speed mm/s	4	4	4
Homing speed mm/s	2	2	2
Reverse homing speed mm/s	3	3	3
Reverse homing distance mm/s	2	2	2
Clearance steps	5	5	5
Axis lenght mm	160	295	75

Other settings

Home position: Left Front

Homing sequence: Z, then X, then Y


Milling spindle control with software

Cooling control with software

Everytime Current to Stepper motor

Language: English

Integrierte Hardwareunterstützung



Tool-length sensor

Sensor position X: 100
Sensor position Y: 100
Search speed mm/s: 2
Reverse distance mm: 2

Measure tool now | Cancel measure

Position X: 00, Position Y: 00
Take current position

Current operation setting

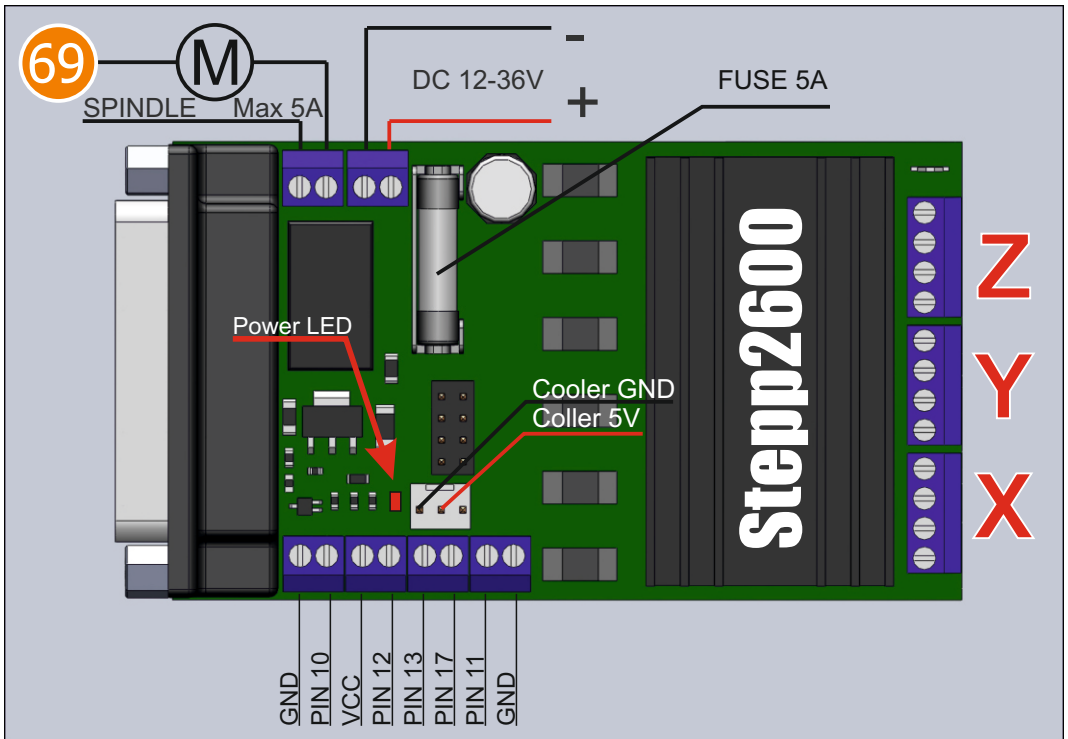
Safety distance mm: 10
Depth mm: 1
Repetitions *: 2
Milling speed XY mm/s: 25
Immersion Speed Z mm/s: 20

Test axis

Y Z
X STOP X
Y Z

USB Box Status: Not established

Read settings | Save settings | Save as



Stepp 2500/2600 LPT Port :

Pin 1 - Engine on/off	Pin 8 - Direction A	Pin 15 - Input
Pin 2 - Direction X	Pin 9 - Step A	Pin 16 - Power On
Pin 3 - Step X	Pin 10 - Input (XYZ Switches)	Pin 17 - Input
Pin 4 - Direction Y	Pin 11 - Input	Pin 18-25 - GND
Pin 5 - Step Y	Pin 12 - Input	
Pin 6 - Direction Z	Pin 13 - Input	
Pin 7 - Step Z	Pin 14 - Output	



„Hobby“cnc router series