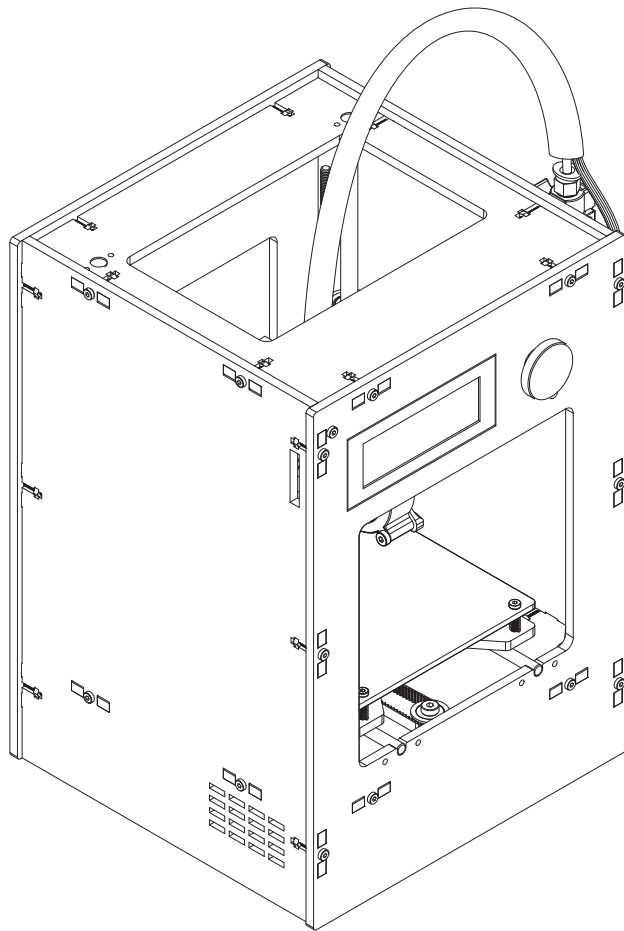


BLOCKS



ZERO

ASSEMBLY GUIDE

MANUAL DE MONTAGEM

BLOCKS

Hi,

Congratulations, you are now the owner of a brand new Blocks zero 3D printer!
We welcome you on your journey through the fantastic world of 3D printing!

This assembly manual will guide you step by step to ensure your 3D printer is up and running in no time! You will find that with each step you complete you will gain valuable insights on how your Blocks Zero 3D printer works.

If you prefer a video version of this assembly manual we've got you covered!

Just go to the Support page on our website at www.blockstec.com/zero.html and watch the whole process!

PS.: Don't forget to subscribe!

Thank you for choosing the Blocks zero as your new adventure and let's get started!

Olá,

Parabéns, tu és agora o proprietário de uma nova impressora 3D Blocks zero! Damos-te as boas-vindas ao início da tua viagem pelo fantástico mundo da impressão 3D!

Este manual de montagem irá guiar-te passo a passo assegurando-te que a tua impressora estará a funcionar num instante! Durante o processo ganharás profundas noções acerca do funcionamento da tua impressora 3D Blocks zero.

Se preferires uma versão vídeo deste manual de instruções, estamos contigo!

Acede à nossa página de Support no nosso website www.blockstec.com/zero.html e visualiza todo o processo de montagem!

PS.: Não te esqueças de subscrever!

Agradecemos-te a escolha da Blocks zero na tua nova aventura e sem mais demora vamos começar!

How to start?

Como começar?

The kit is divided in 6 phases and the elements related to each phase are alphabetically ordered. The technical elements such as screws, nuts, etc..., can be found in the toolbox.

O kit está dividido em 6 fases, onde os elementos de cada uma delas estão denominados alfabeticamente. Os elementos técnicos como parafusos, porcas, etc..., encontram-se na caixa de ferramentas.

TOTAL ASSEMBLY TIME: 4 HOURS

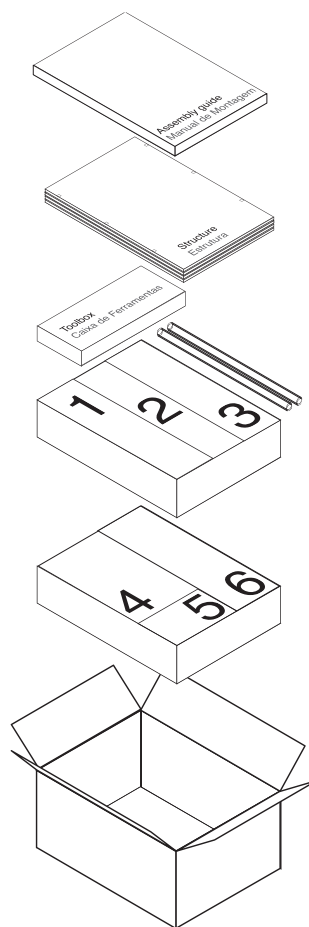
TEMPO DE MONTAGEM TOTAL: 4 HORAS

Assembly guide
Manual de Montagem

Structure
Estrutura

Toolbox
Caixa de Ferramentas

Rods
Varões estruturais



1 - Assemblies
Assemblagens

2 - Z Axis + X Axis + Hotend
Eixo Z + Eixo X + Hotend

3 - External Assemblies
Assemblagens Exteriores

4 - Print Table and Support Cart
Mesa de Impressão e Suporte

5 - Cables
Cablagem

6 - Power Supply
Transformador

INDEX ÍNDICE

Phase 1 Fase 1	05
Phase 2 Fase 2	13
Structure Part 1 Estrutura Parte 1	30
Phase 3 Fase 3	34
Structure Part 2 Estrutura Parte 2	39
Phase 4 Fase 4	43
Phase 5 Fase 5	49
Phase 6 Fase 6	61

 20 min.

PHASE

FASE

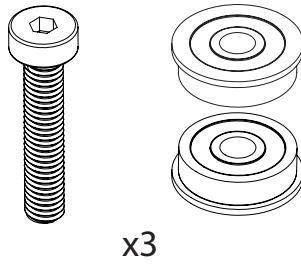
1

A

PHASE
FASE

1

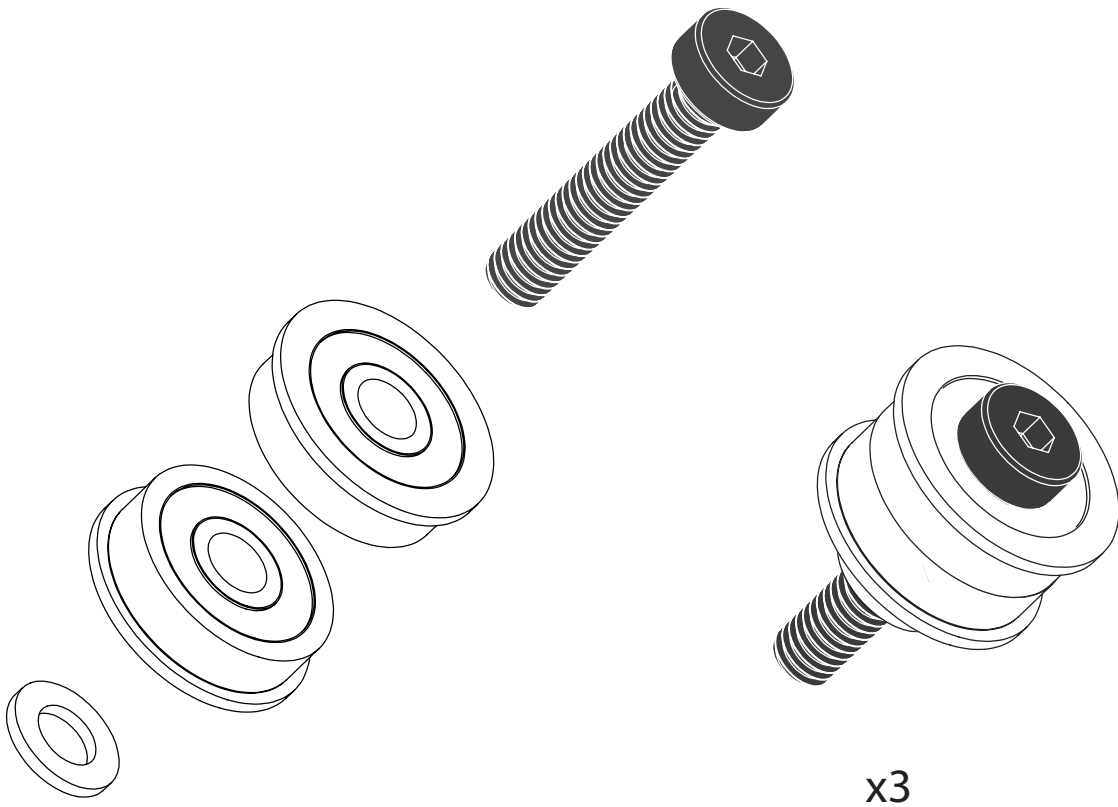
You will need:
Vais precisar:



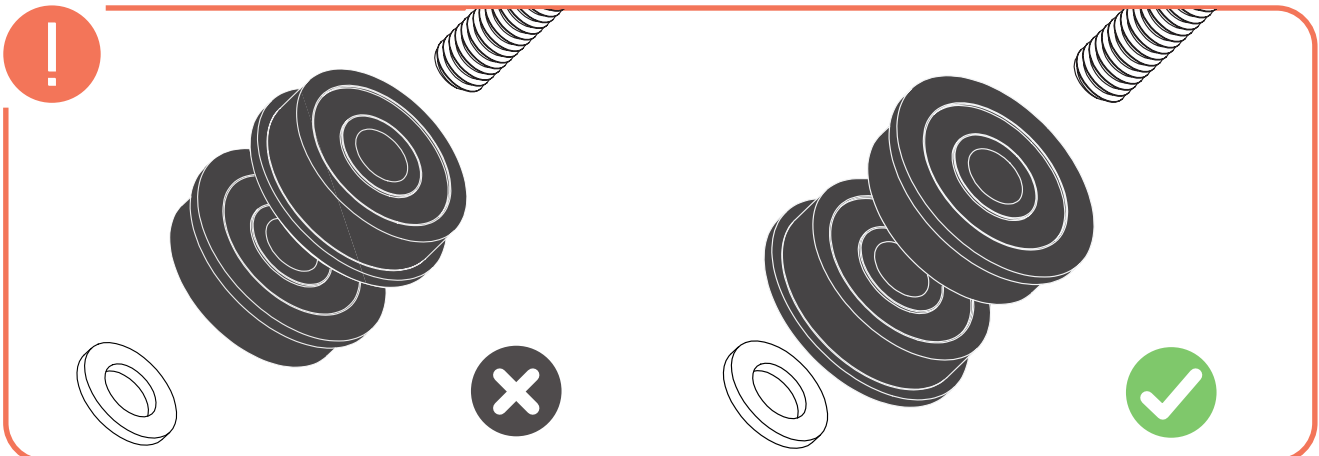
TOOLBOX



3x Washer
Anilhas



Attention: Flange direction
Atenção: Direção do componente

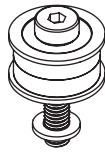


A

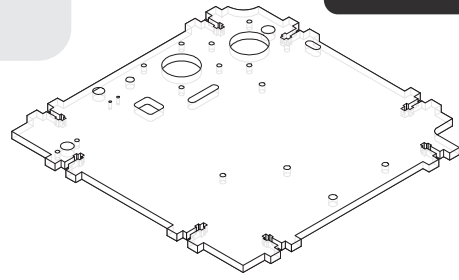
PHASE
FASE

1

You will need:
Vais precisar:



3x



Structure 1 Estrutura 1

TOOLBOX

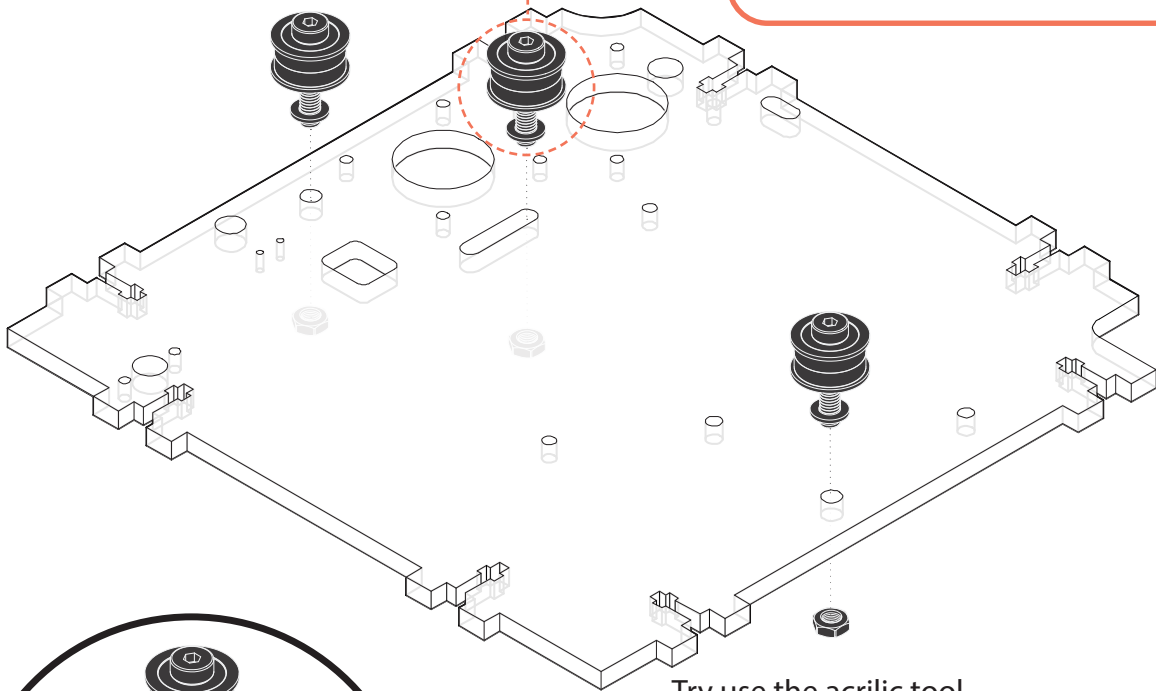
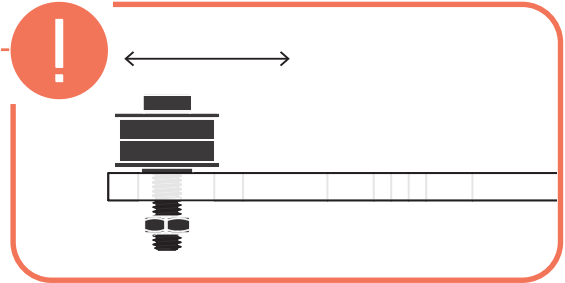


Allen 4

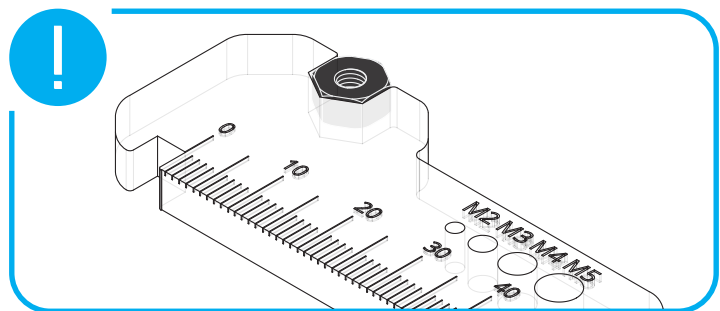
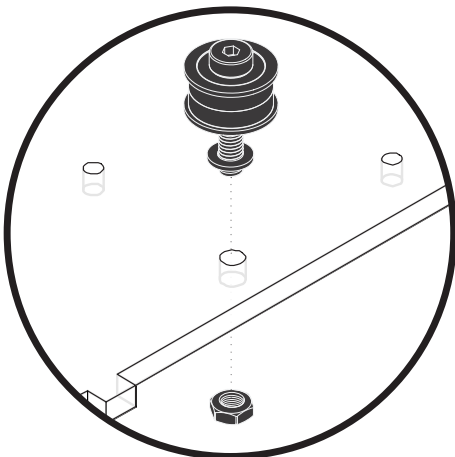


3x M5 Screw Nut
Porcas M5

Attention: Let it loose
Atenção: Deixar folgado



Try use the acrylic tool
Experimenta usar a ferramenta acrílica

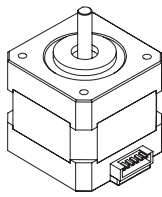


B

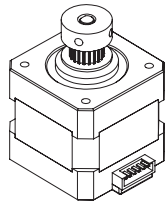
PHASE
FASE

1

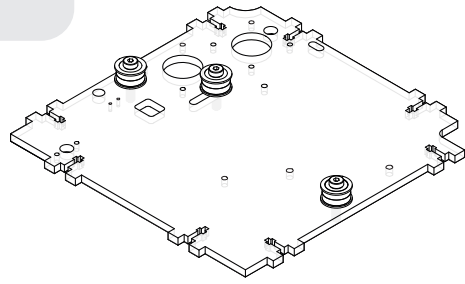
You will need:
Vais precisar:



B.1



B.2



Structure 1 Estrutura 1

TOOLBOX



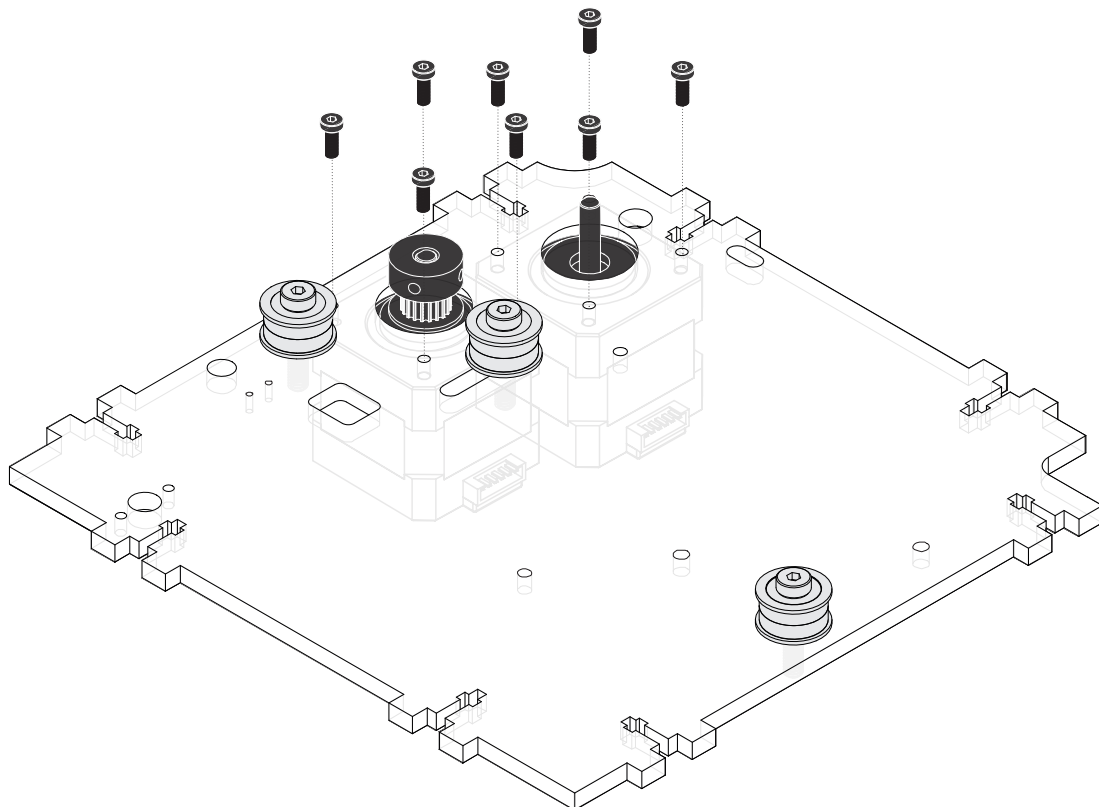
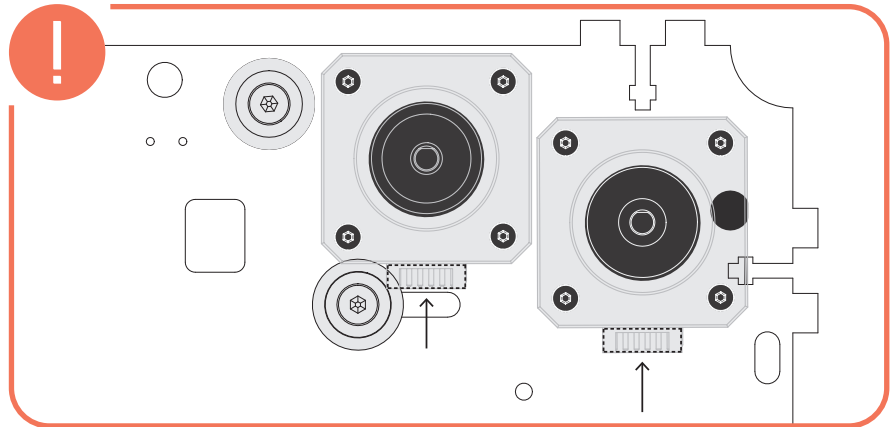
Allen 2



8x M3 8mm

Attention: Direction of the cable plug

Atenção: Direção da entrada de cabos componente

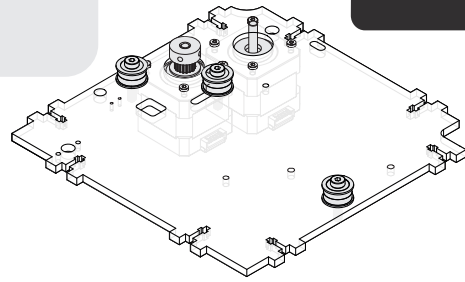
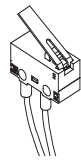
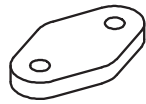


B

PHASE
FASE

1

You will need:
Vais precisar:

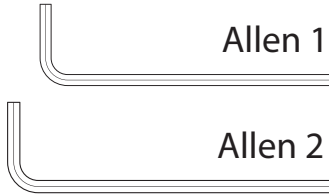


TOOLBOX

B.3

B.4

Structure 1 Estrutura 1



Allen 1

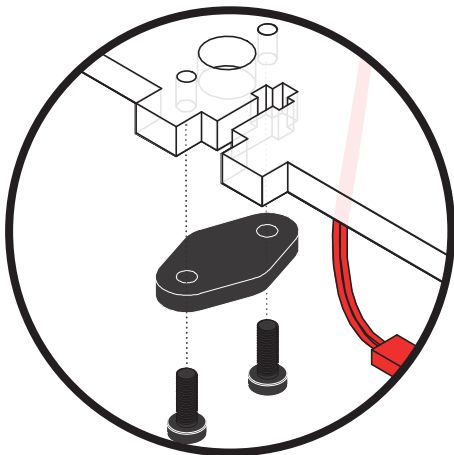
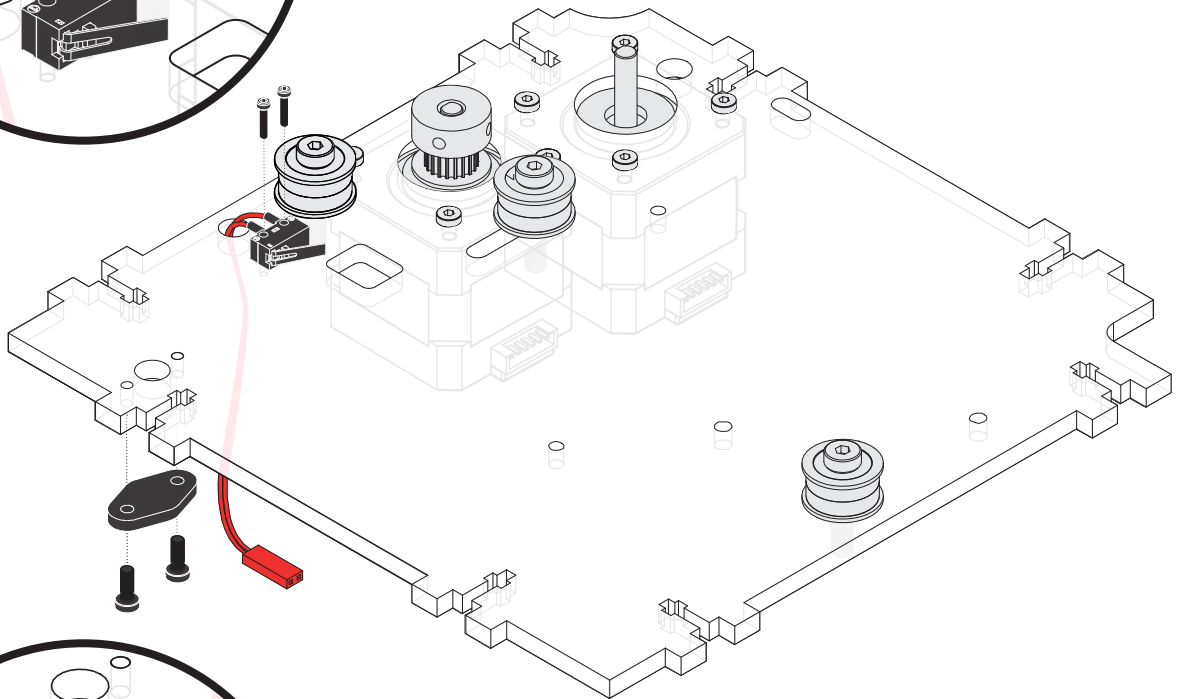
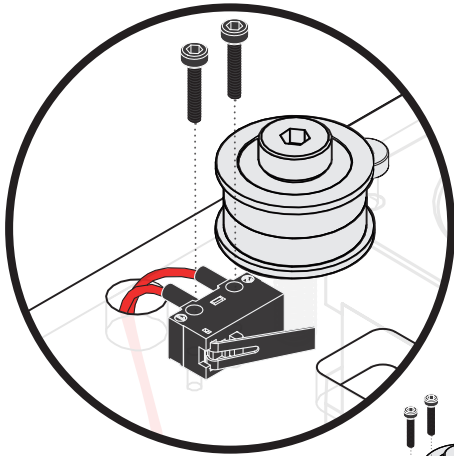
Allen 2



2x M3 8mm



2x M2 8mm

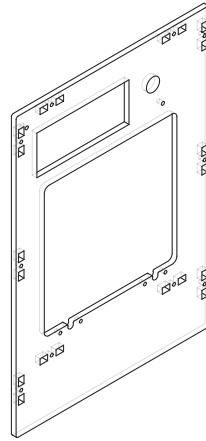
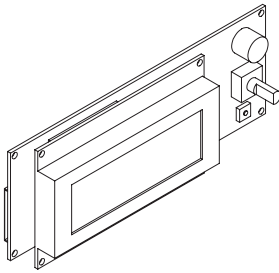


C

PHASE
FASE

1

You will need:
Vais precisar:



TOOLBOX

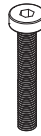
C.1

C.2

Structure 2 Estrutura 2



Allen 2



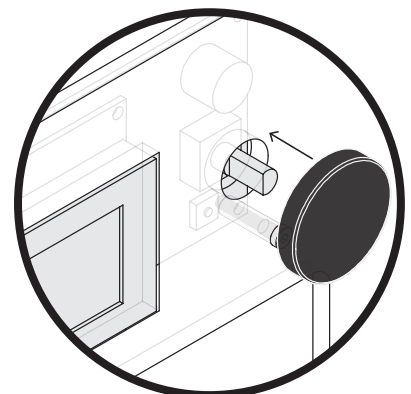
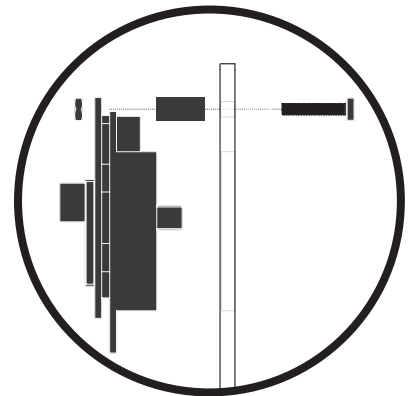
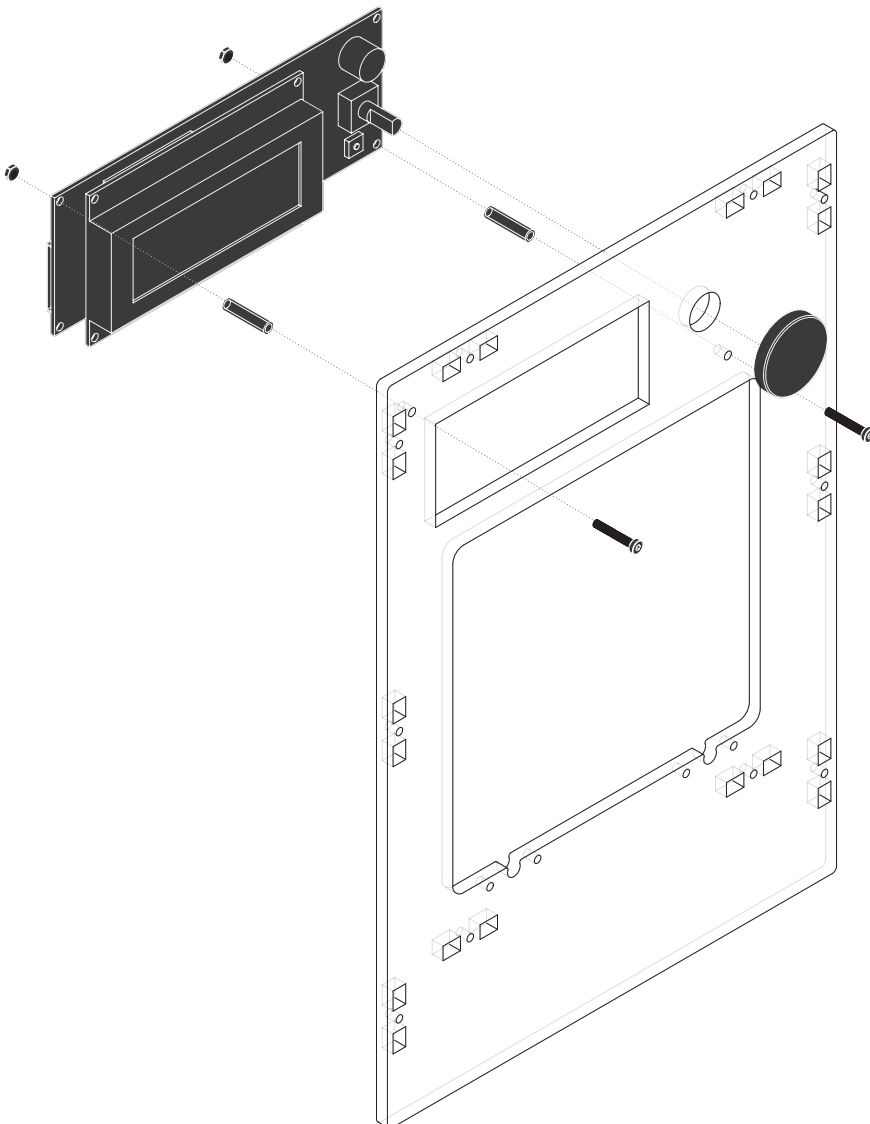
2x M3 20mm



2x Smallest spacer
Espaçador(pequeno)



2x M3 Screw Nut
Porcas M3

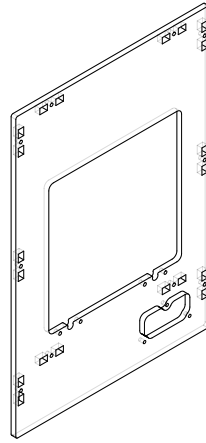
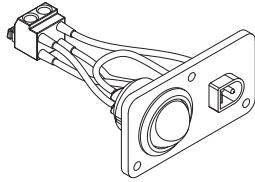


D

PHASE
FASE

1

You will need:
Vais precisar:



TOOLBOX

D.1

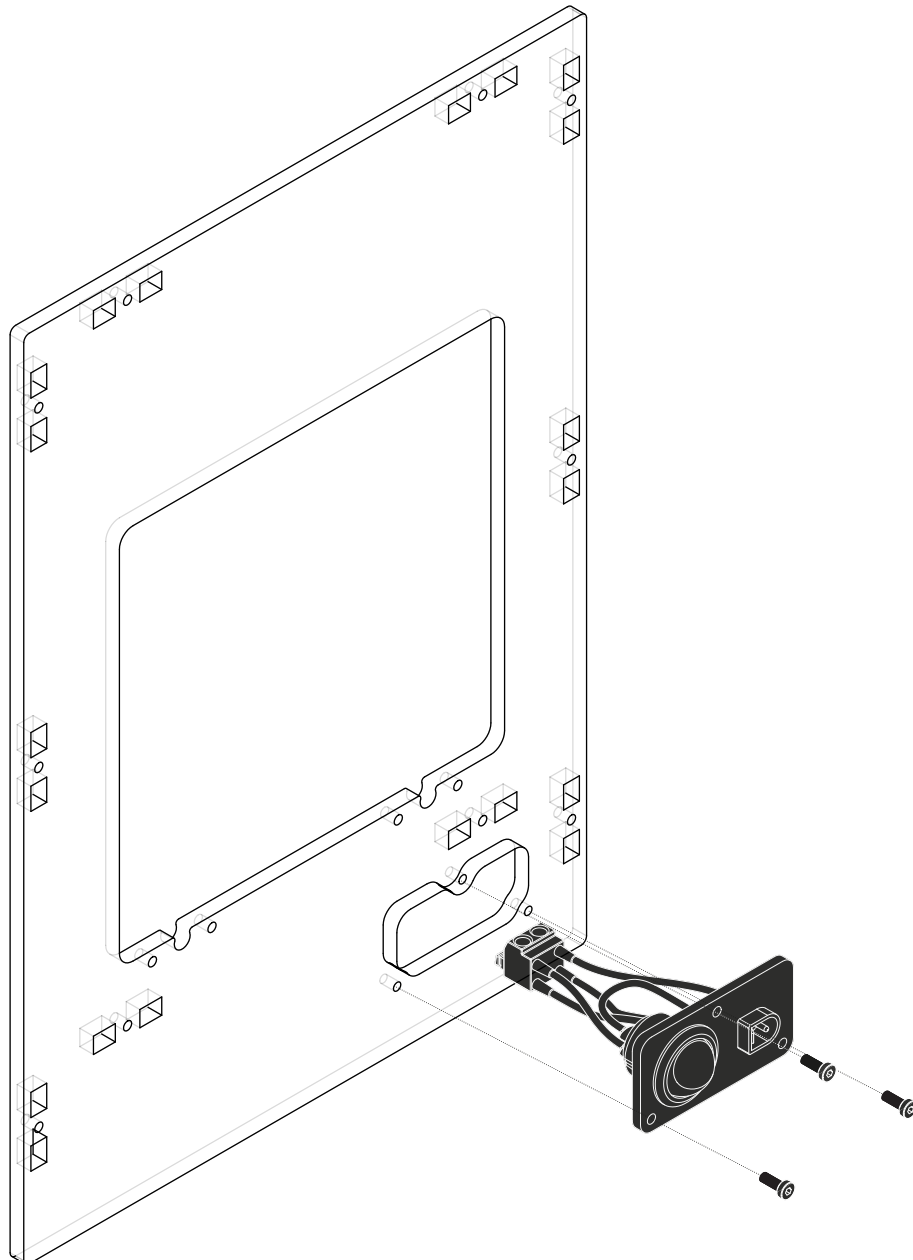
Structure 3 Estrutura 3

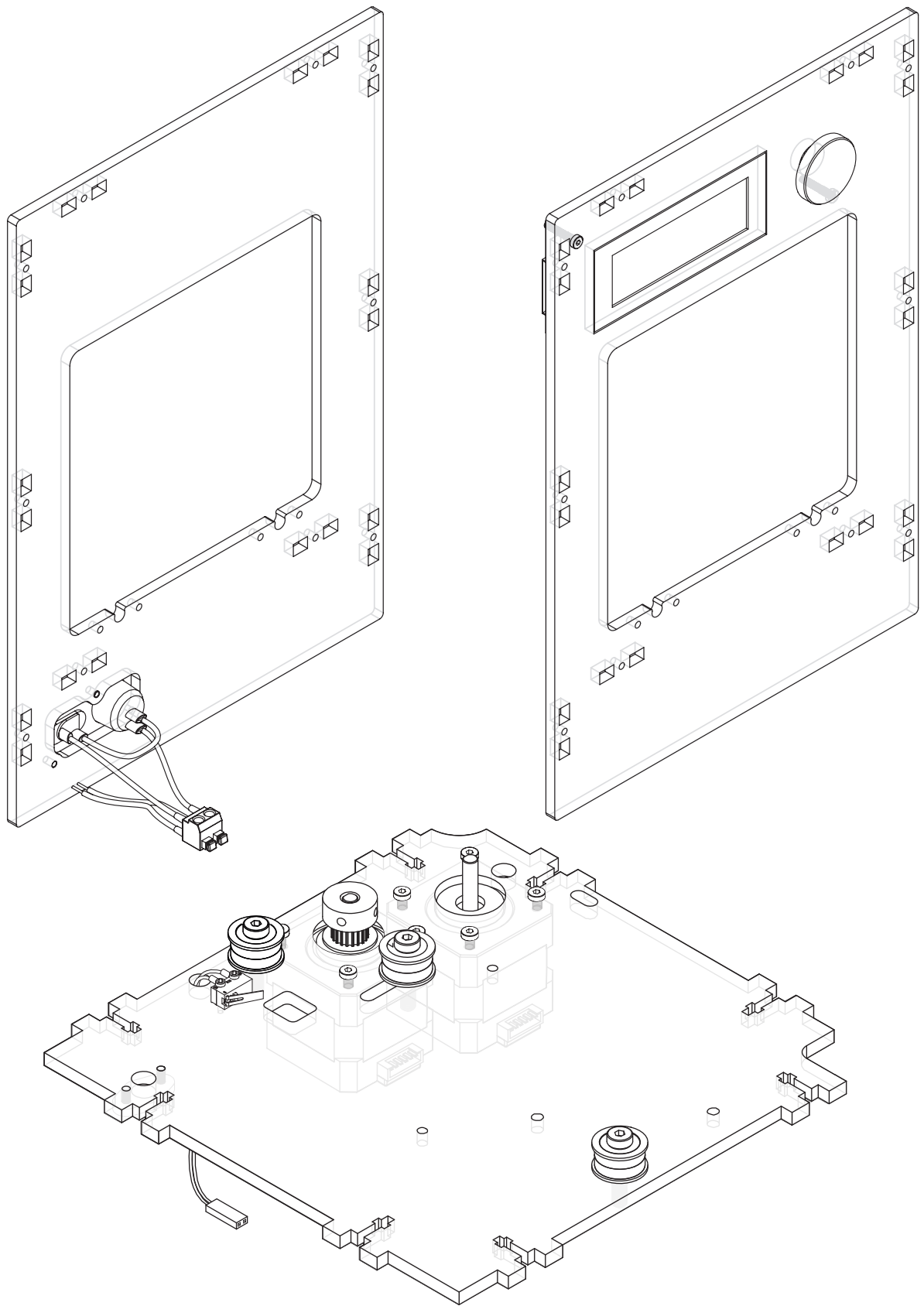


Allen 2



3x M3 8mm





Phase 1 has been concluded!
A Fase 1 está concluída!

 35 min.

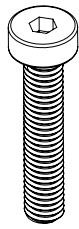
PHASE

FASE

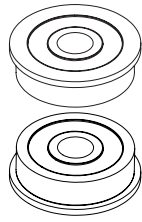
2

E

You will need:
Vais precisar:



3x

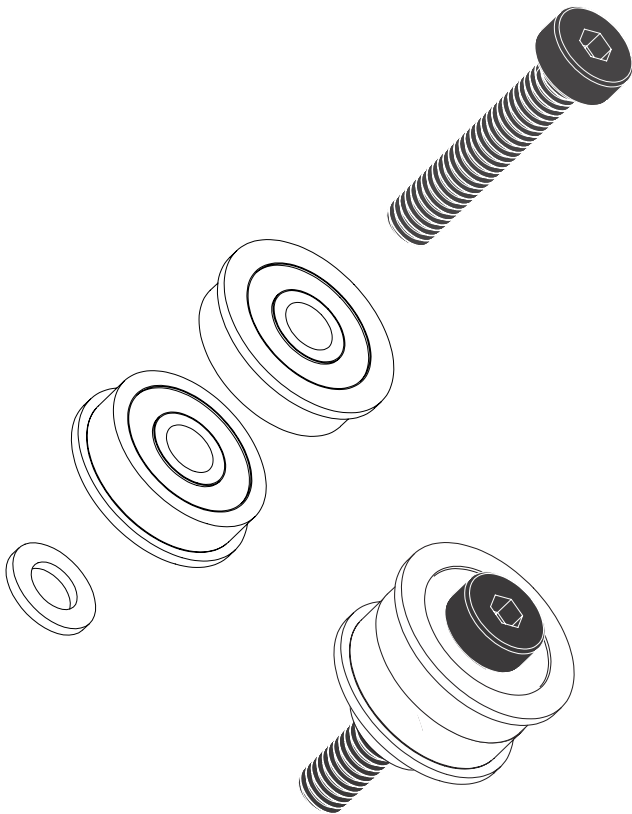


1x

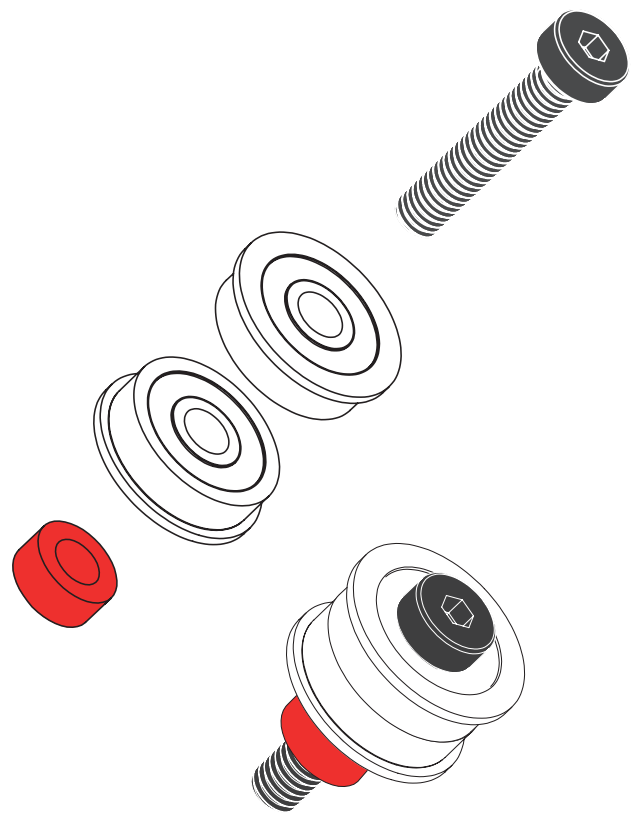
TOOLBOX



2x Washer
Anilhas

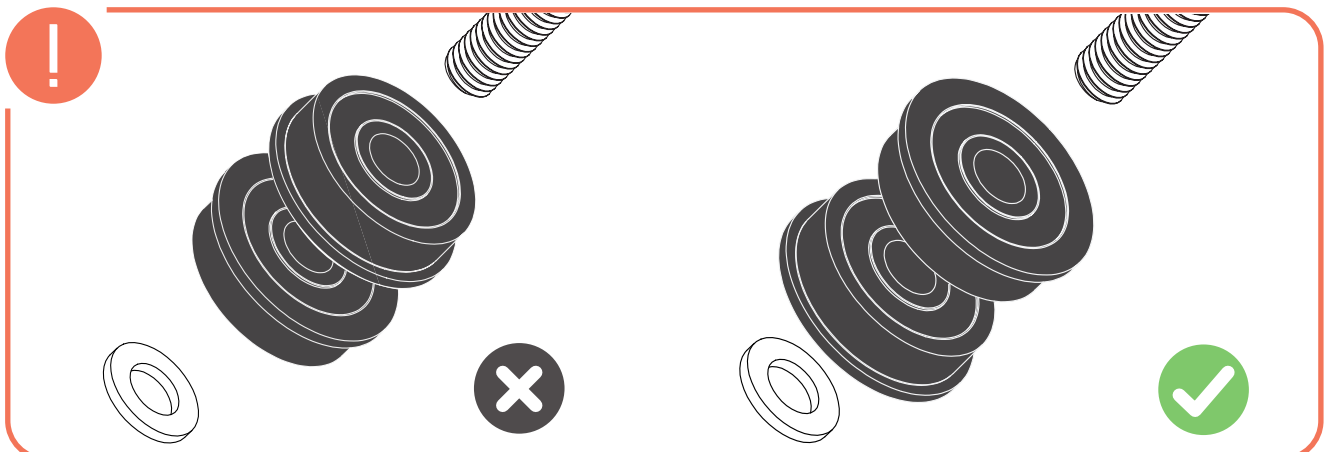


E.1 x2



E.2 x1

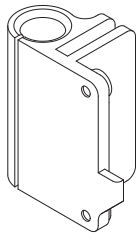
Attention: Flange direction
Atenção: Direção do componente



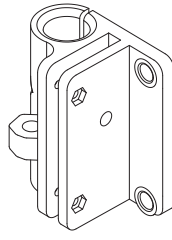
F

PHASE
FASE 2

You will need:
Vais precisar:



F.1



F.2

TOOLBOX

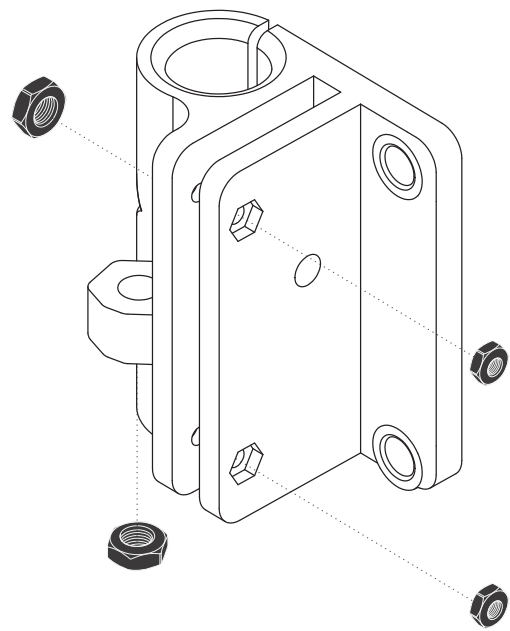
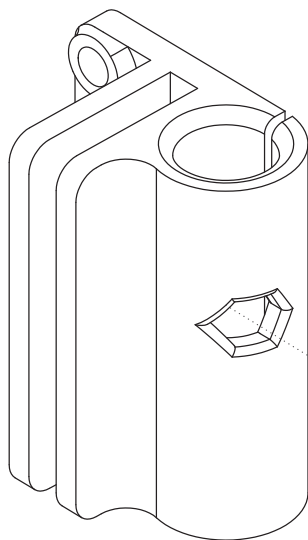
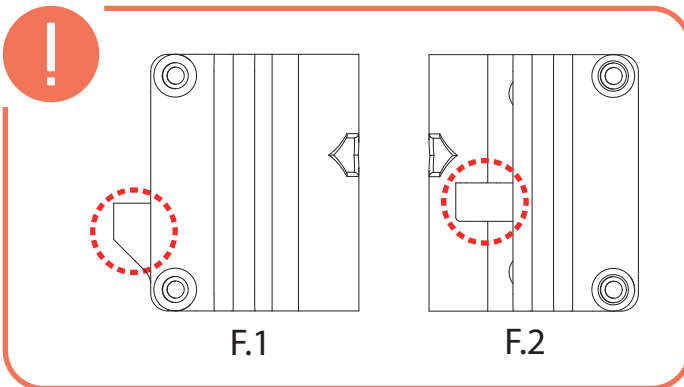


3x M5 Screw Nut
Porcas M5

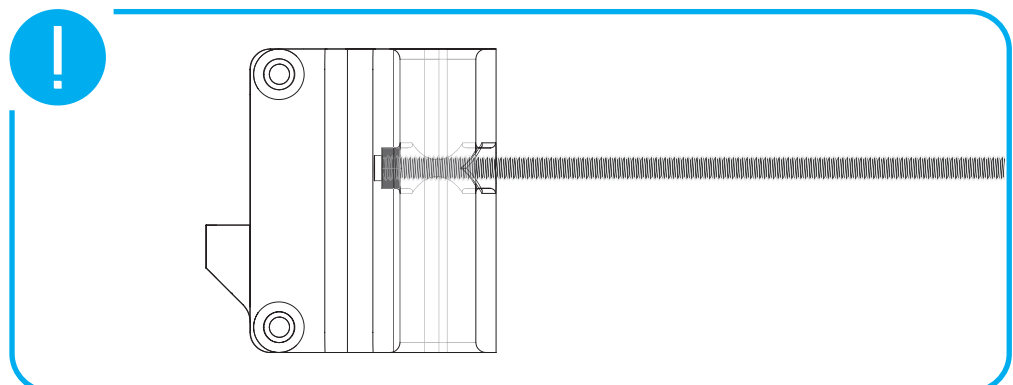


2x M3 Screw Nut
Porcas M3

Attention: The parts are different
Atenção: As peças são diferentes



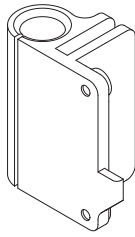
Try using the threaded rod so that the screw nut is perfectly aligned
Experimenta usar o varão roscado para que a porca fique perfeitamente alinhada



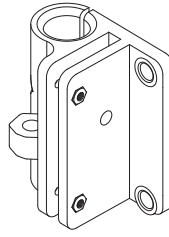
F

PHASE
FASE 2

You will need:
Vais precisar:



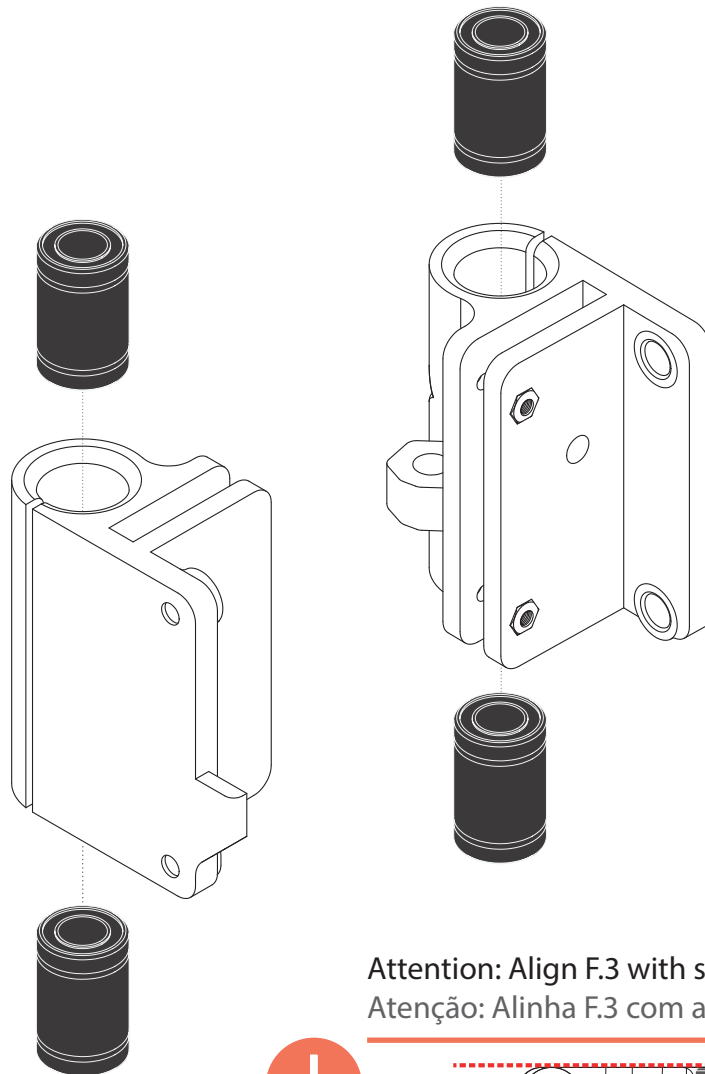
F.1



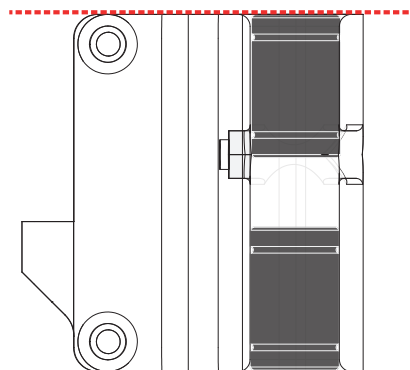
F.2



F.3 x4



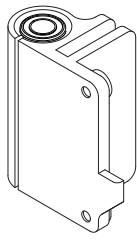
Attention: Align F.3 with surface
Atenção: Alinha F.3 com a superfície



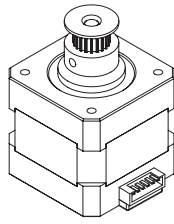
G

PHASE
FASE 2

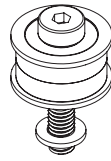
You will need:
Vais precisar:



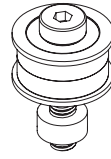
F.1



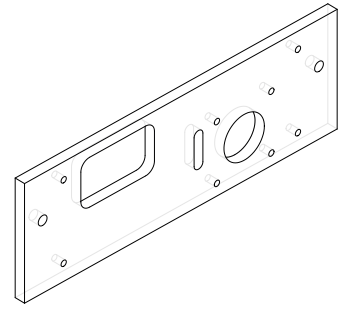
G.1



E.1 x1

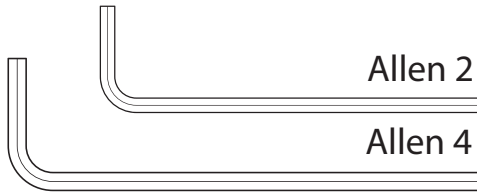


E.2



Structure 4 Estrutura 4

TOOLBOX



Allen 2

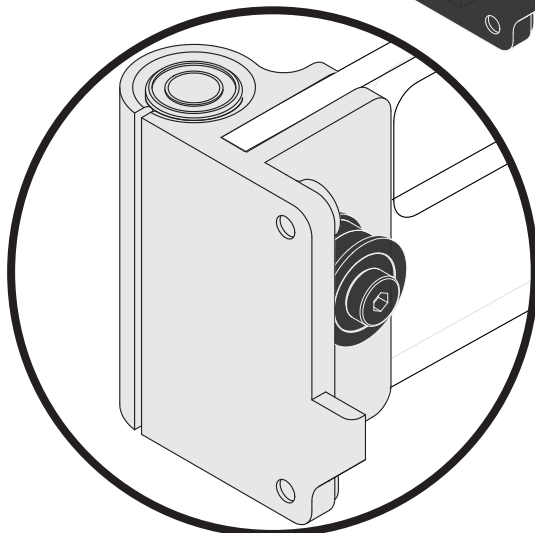
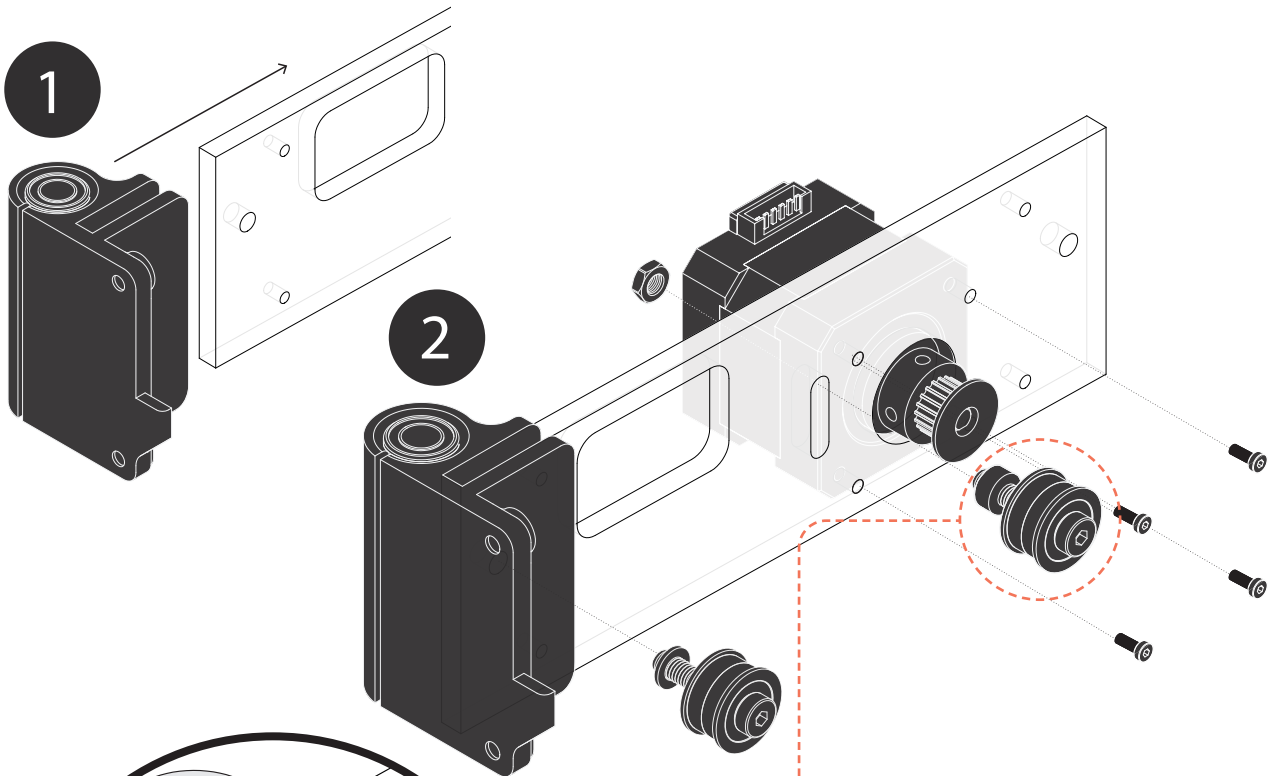
Allen 4



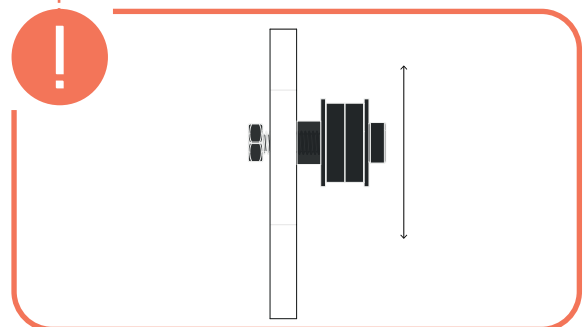
4x M3 8mm



1x M5 Screw Nut
Porca M5



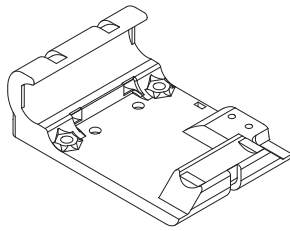
Attention: Let it loose
Atenção: Deixar folgado



H

PHASE
FASE 2

You will need:
Vais precisar:

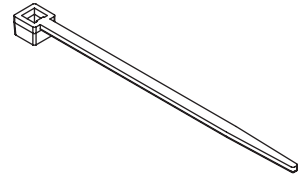


H.1

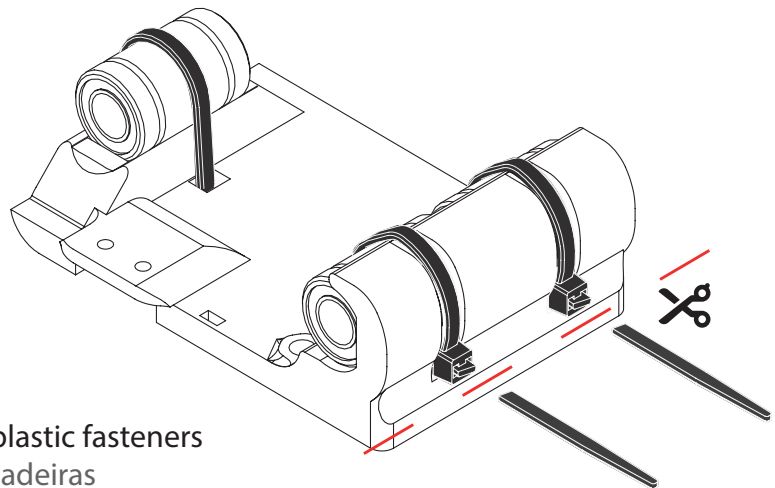
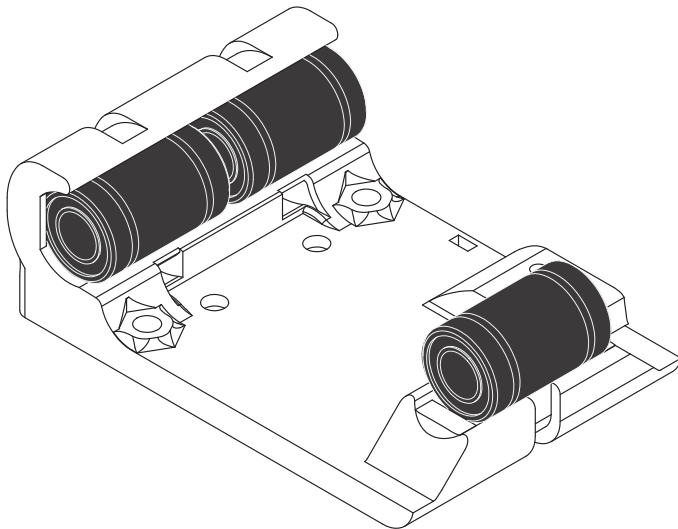


H.2 x3

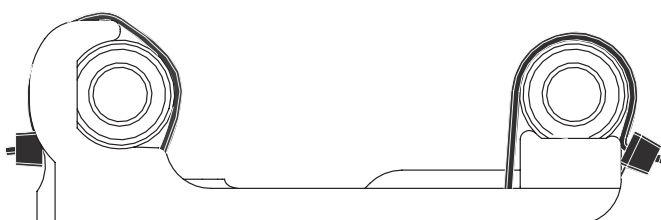
TOOLBOX



3x Plastic Fastener
Abraçadeira



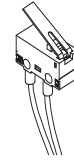
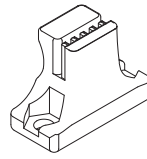
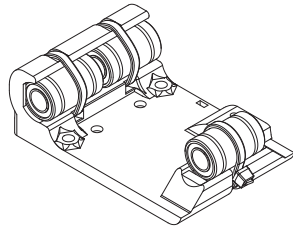
Attention: Final position of the plastic fasteners
Atenção: Posição final das abraçadeiras



H

PHASE 2
FASE 2

You will need:
Vais precisar:

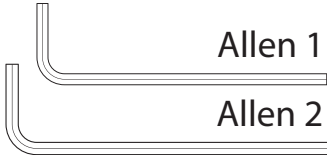


TOOLBOX

H.1

H.3

H.4



Allen 1

Allen 2



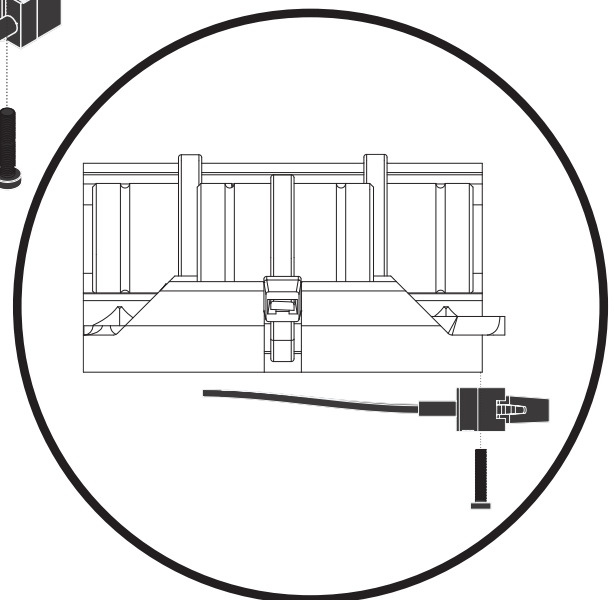
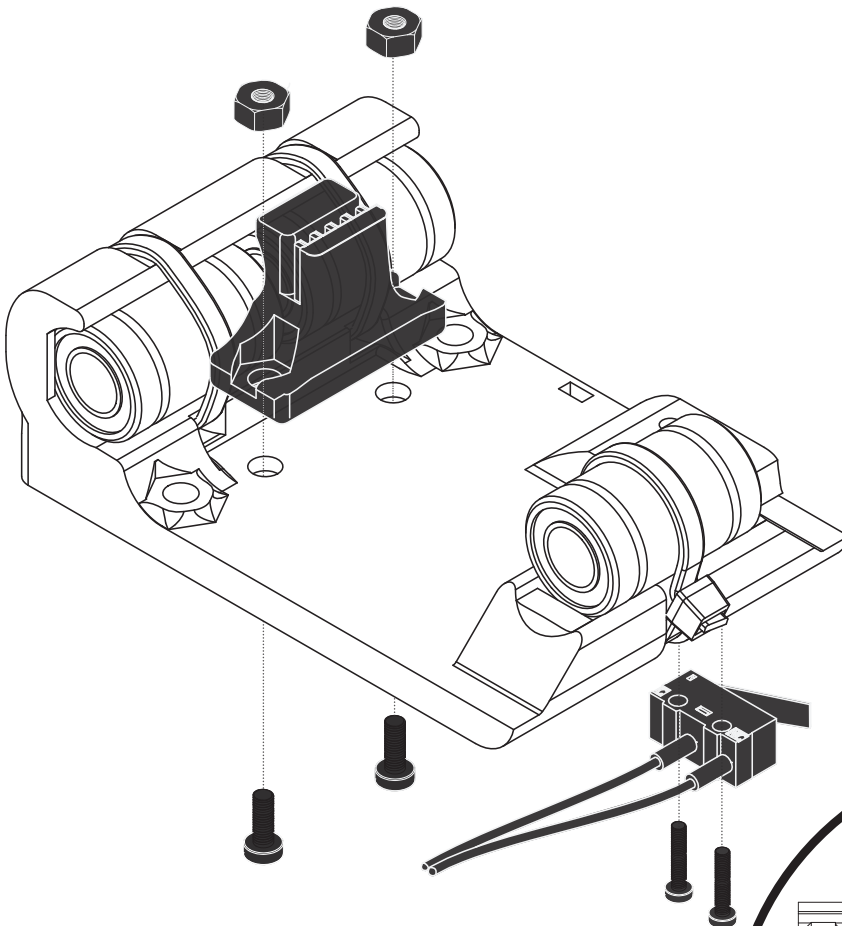
2x M3 8mm



2x M2 8mm



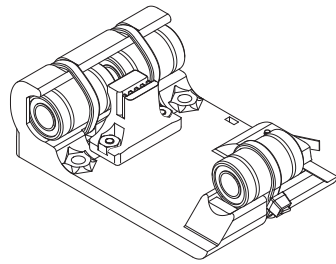
2x M3 Screw Nut
Porcas M3



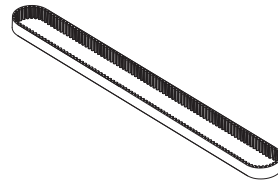
H

PHASE 2
FASE 2

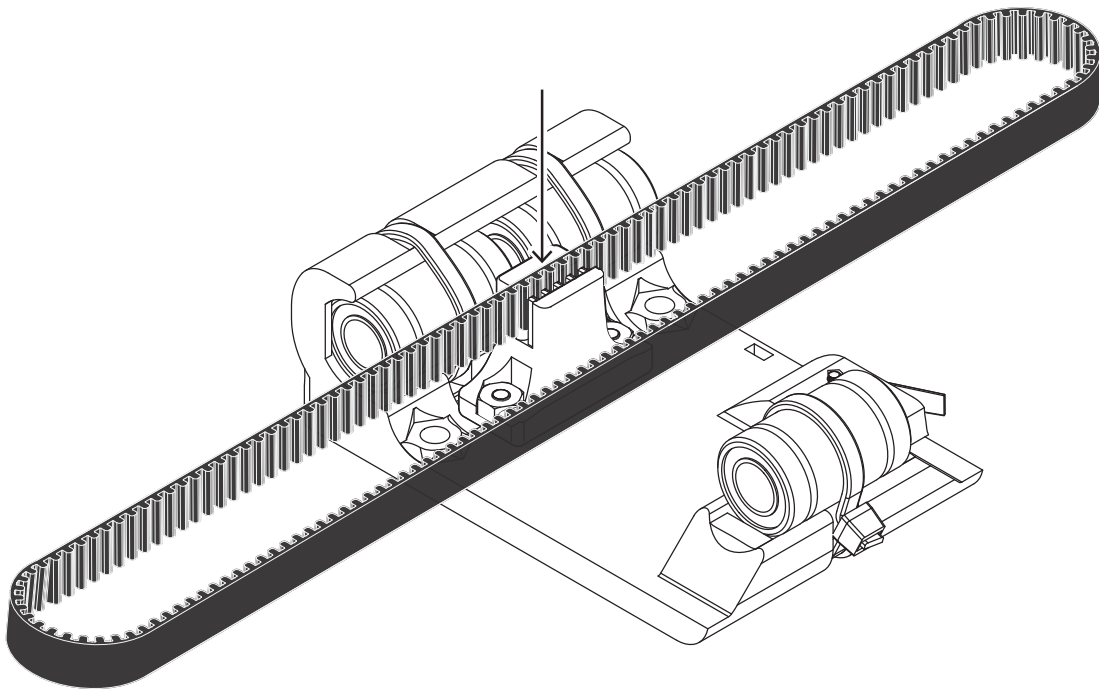
You will need:
Vais precisar:



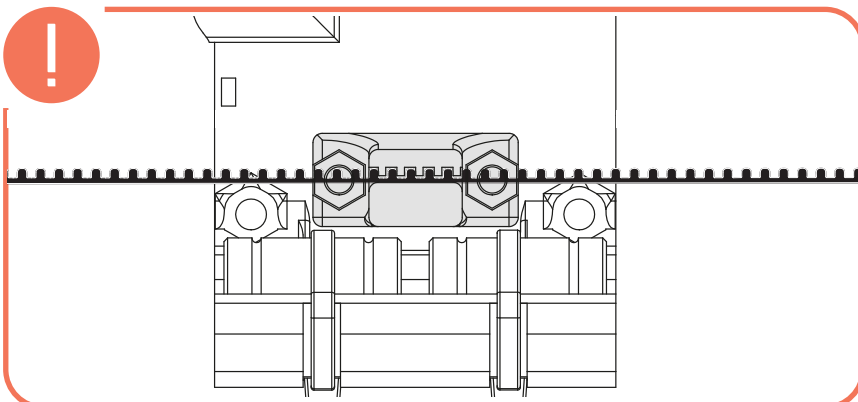
H.1



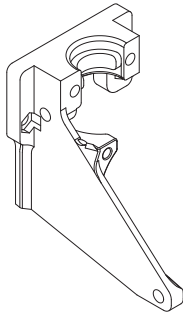
H.5 x 1



Attention: Position of the belt
Atenção: Posicionamento da correia

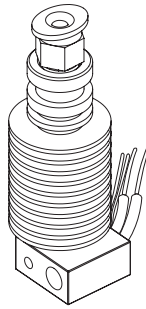


You will need:
Vais precisar:

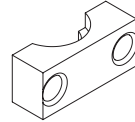


TOOLBOX

I.1



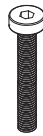
I.2



I.3



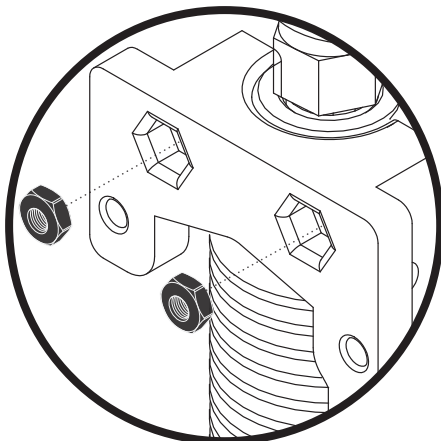
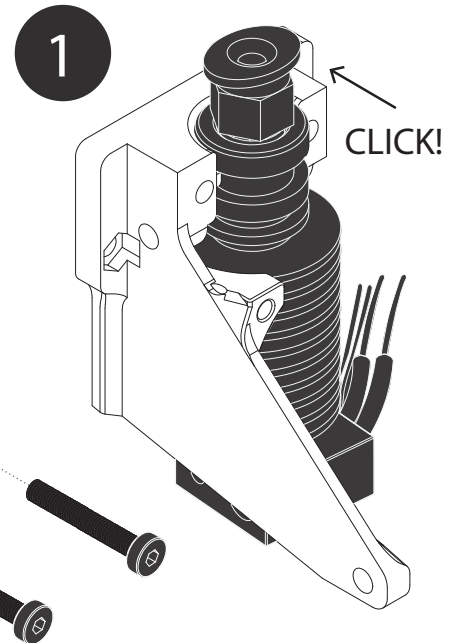
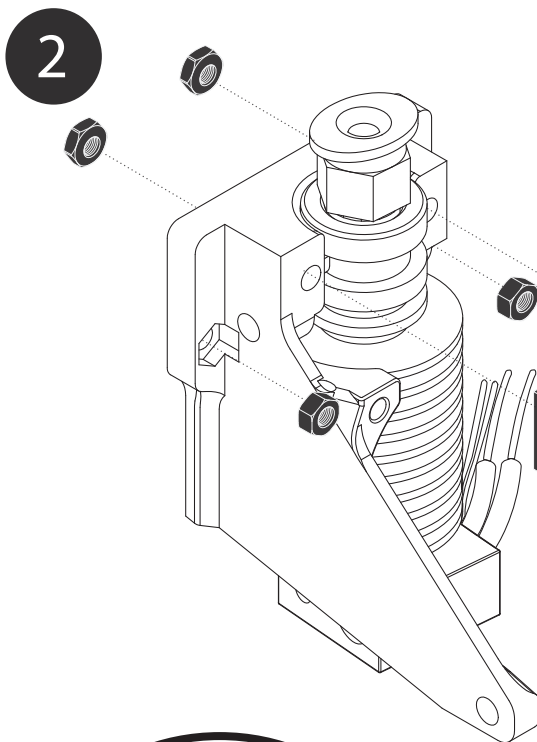
Allen 2



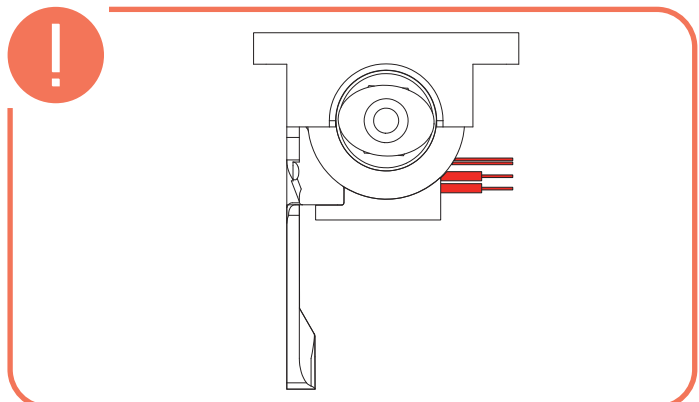
2x M3 20mm



4x M3 Screw Nut
Porcas M3

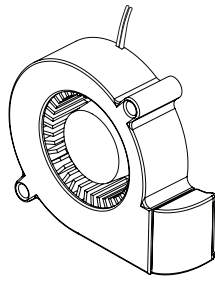


Attention: Cables orientation
Atenção: Orientação dos cabos

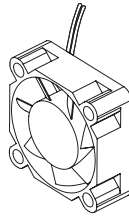


J

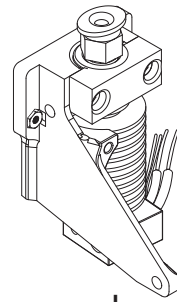
You will need:
Vais precisas:



J.1

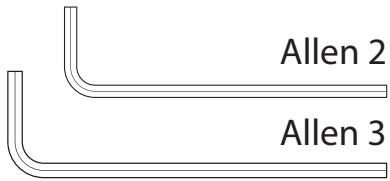


J.2



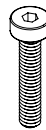
I

TOOLBOX

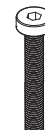


Allen 2

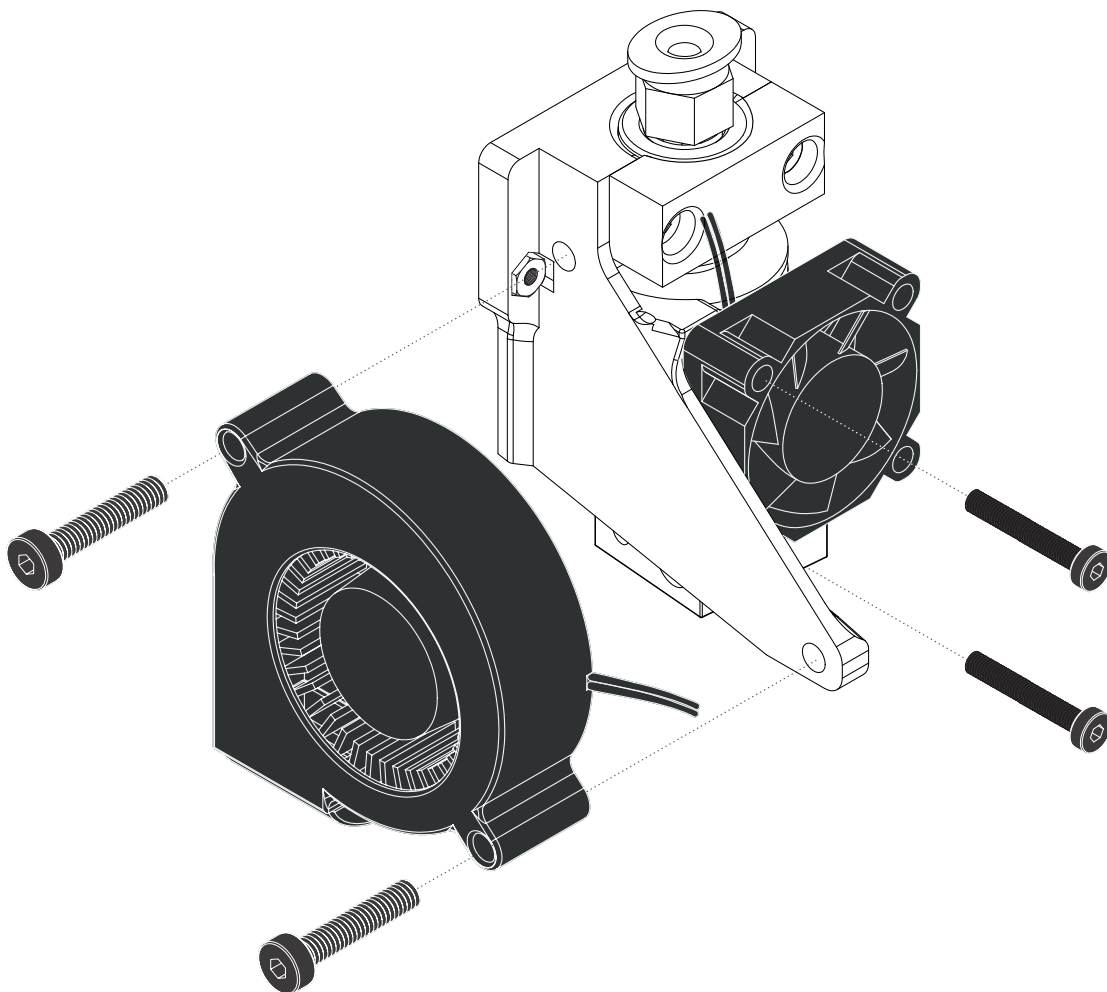
Allen 3



2x M4 20mm



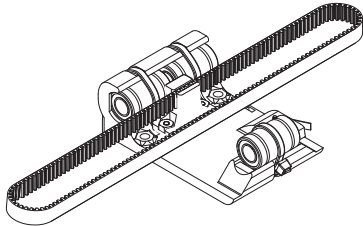
2x M3 16mm



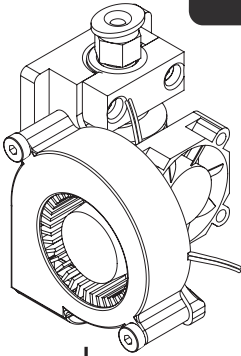
ELEMENTS ASSEMBLY
ELEMENTOS: MONTAGEM

PHASE
FASE **2**

You will need:
Vais precisar:



H



I

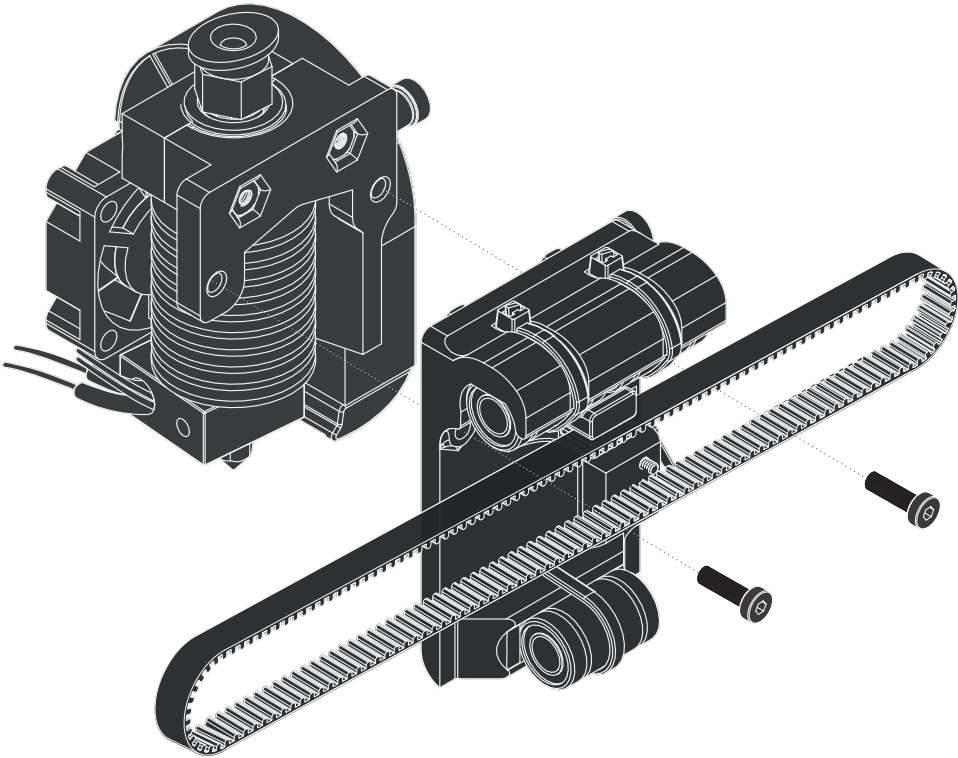
TOOLBOX



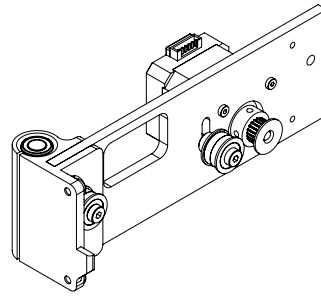
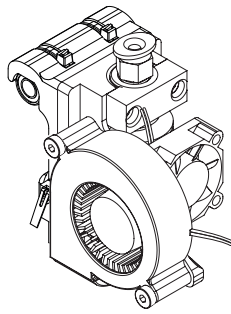
Allen 2



2x M3 10mm



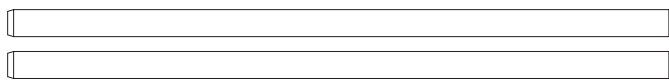
You will need:
Vais precisar:



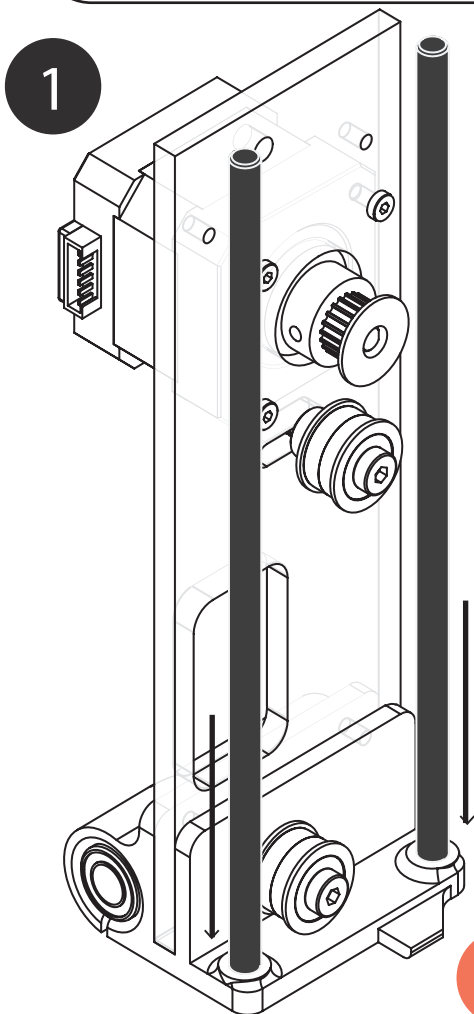
TOOLBOX

1

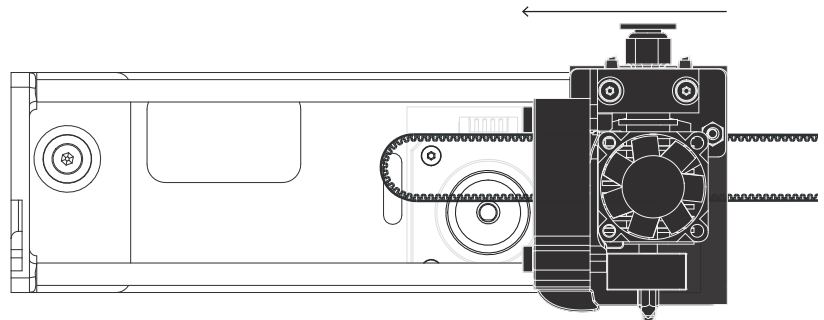
Structure 4 Estrutura 4



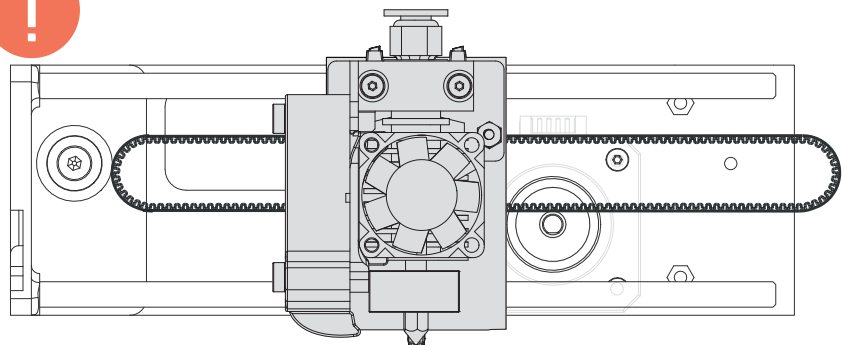
Smallest Rods
Varões (pequenos)



2



Attention: Hold the belt so that it passes between the rods
Atenção: Segura a correia de forma a passar no meio dos varões

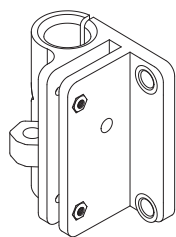


ELEMENTS ASSEMBLY

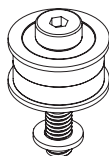
ELEMENTOS: MONTAGEM

PHASE
FASE 2

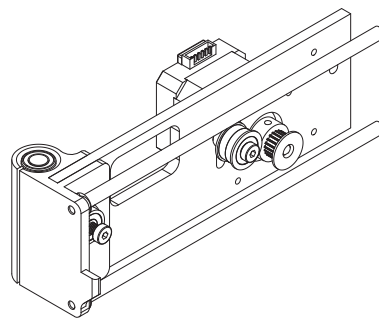
You will need:
Vais precisar:



F.2

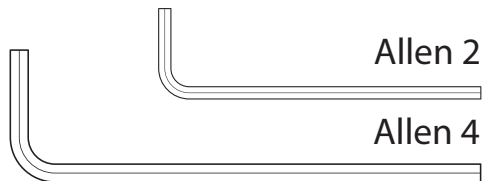


1x E.1



Structure 4 Estrutura 4

TOOLBOX

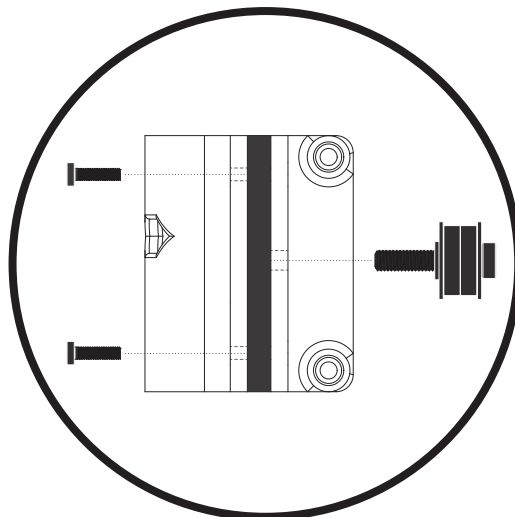
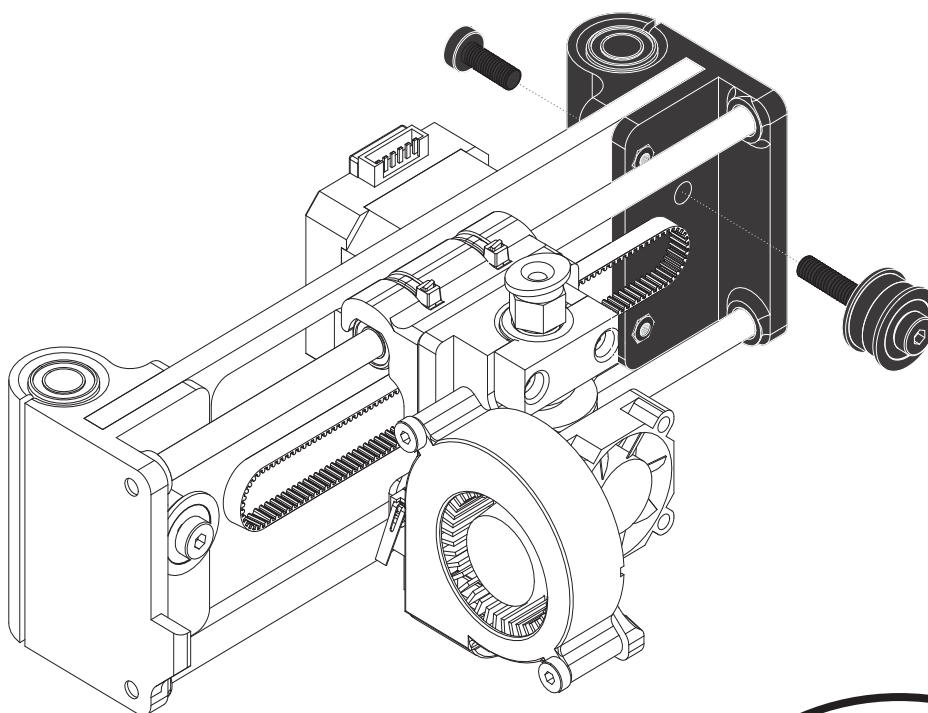


Allen 2

Allen 4



2x M3 10mm



ELEMENTS ASSEMBLY

ELEMENTOS: MONTAGEM

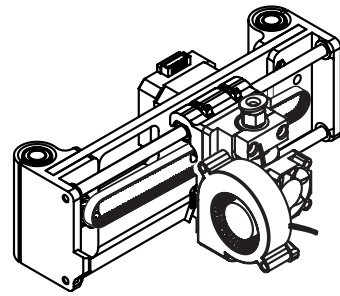
PHASE 2
FASE 2

You will need:
Vais precisar:

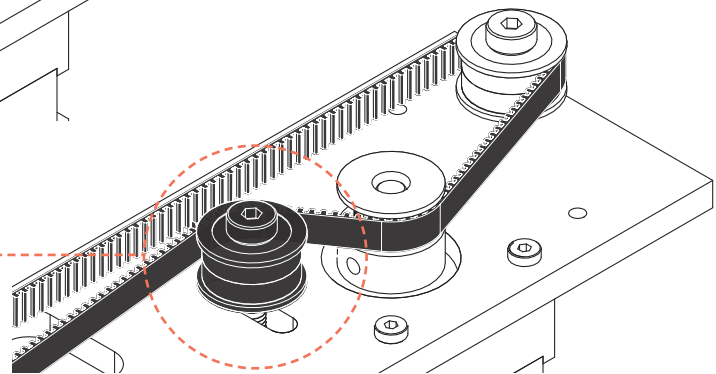
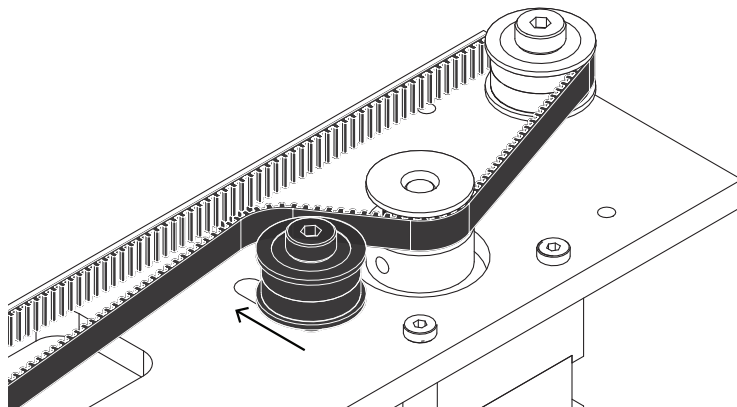
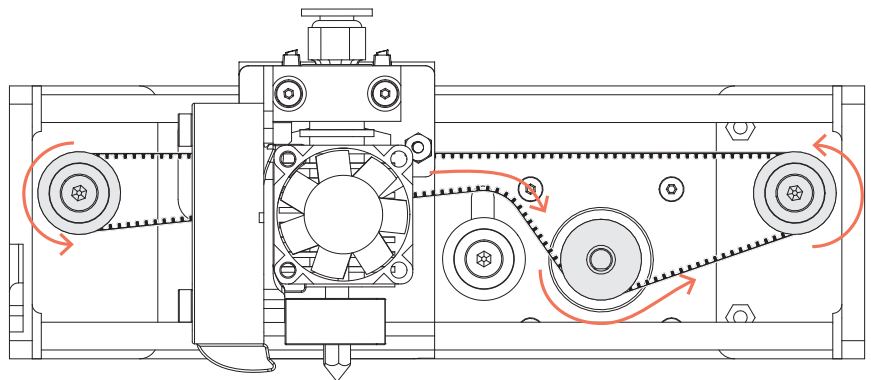
TOOLBOX



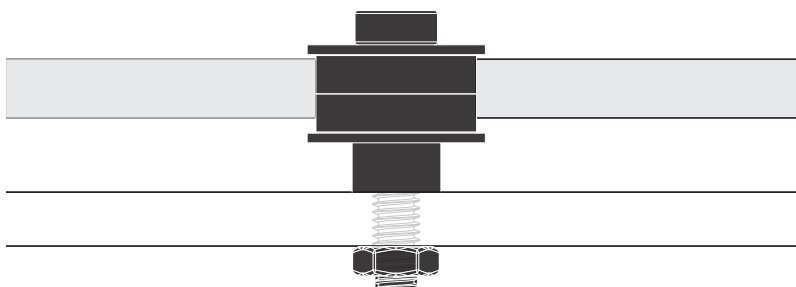
Allen 4



Structure 4 Estrutura 4



Attention: Tighten up the screw when the belt is tensioned
Atenção: Aperta o parafuso quando a correia estiver tensionada



LAST ASSEMBLY ÚLTIMA MONTAGEM

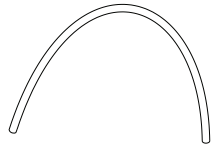
PHASE
FASE 2

You will need:
Vais precisar:

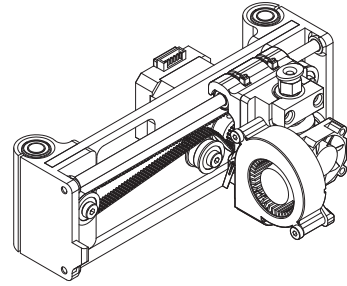


Threaded rod
Varão roscado

TOOLBOX



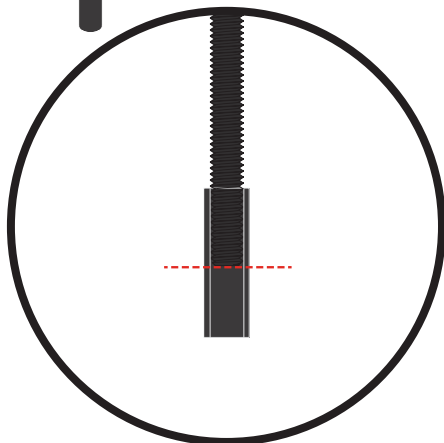
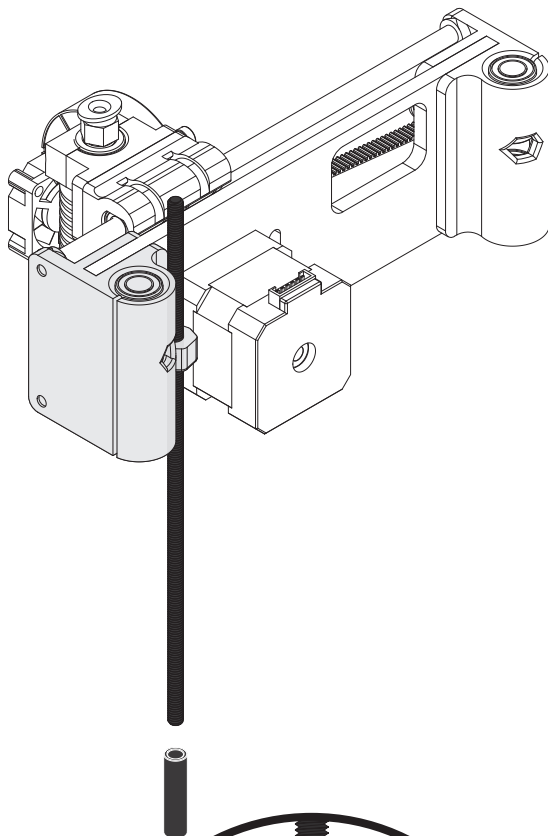
PTFE tube
Tubo PTFE



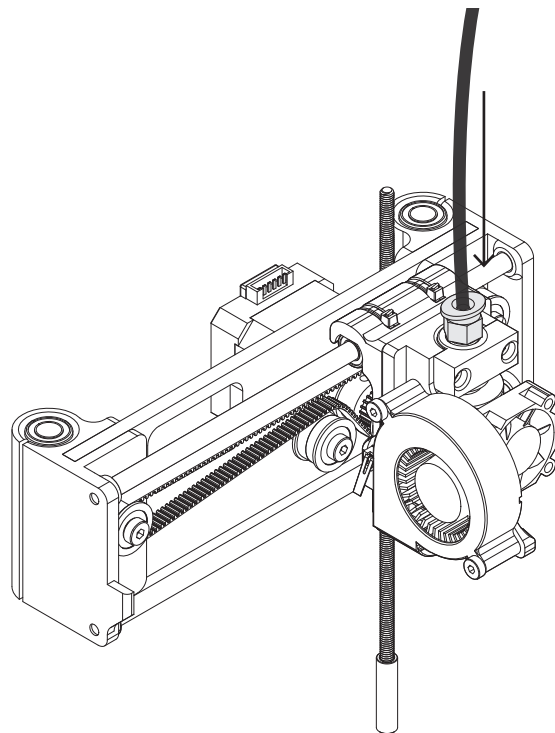
Structure 4 Estrutura 4

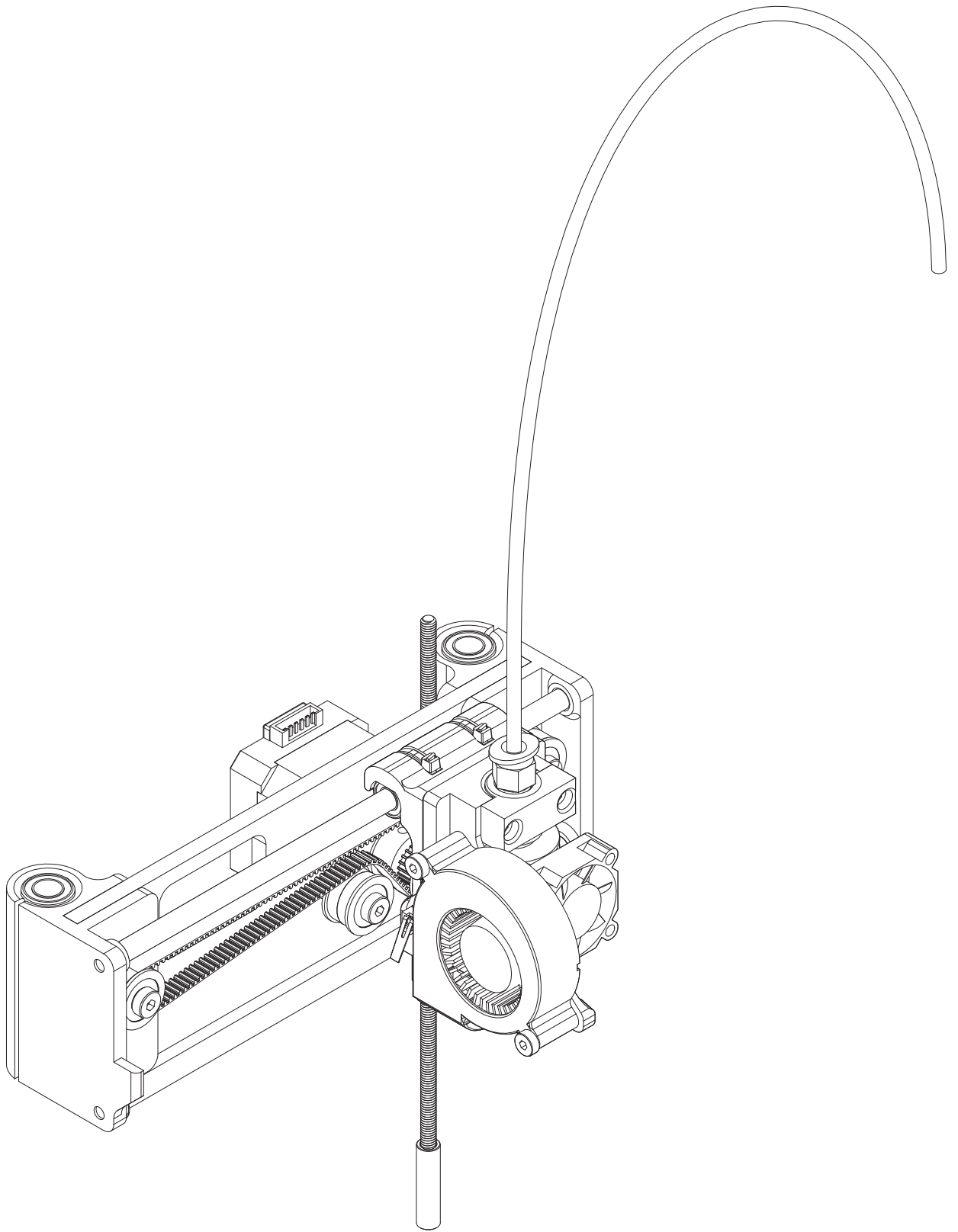


Larger plastic spacer
Espaçador plástico (o maior)



Attention: Insert the PTFE tube all the way into the hotend
Atenção: Insere o tubo de PTFE até ao fim do hotend





Phase 2 has been concluded!
A Fase 2 está concluída!

STRUCTURE

ESTRUTURA

Part

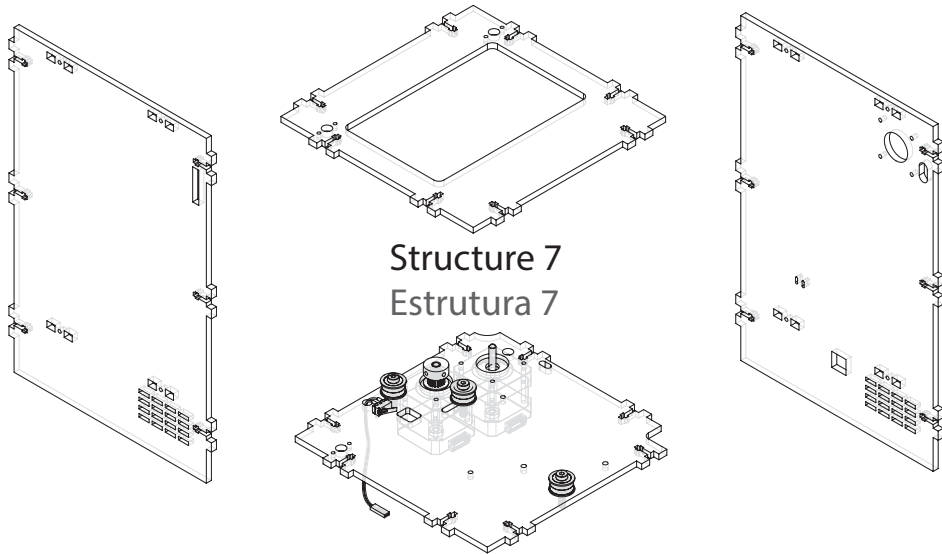
Parte

1

STRUCTURE PRE-ASSEMBLY

ESTRUTURA: PRÉ-MONTAGEM

You will need:
Vais precisar:



TOOLBOX

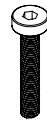
Structure 5
Estrutura 5

Structure 1
Estrutura 1

Structure 6
Estrutura 6



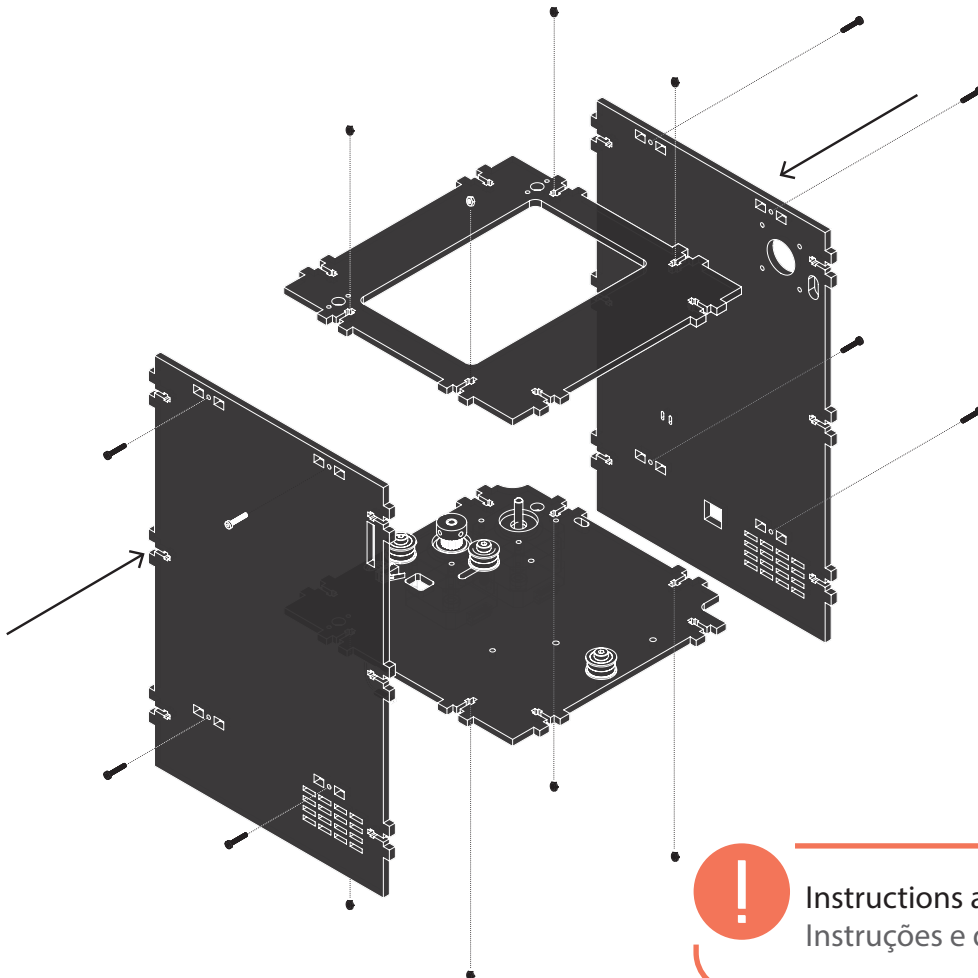
Allen 2



8x M3 16mm

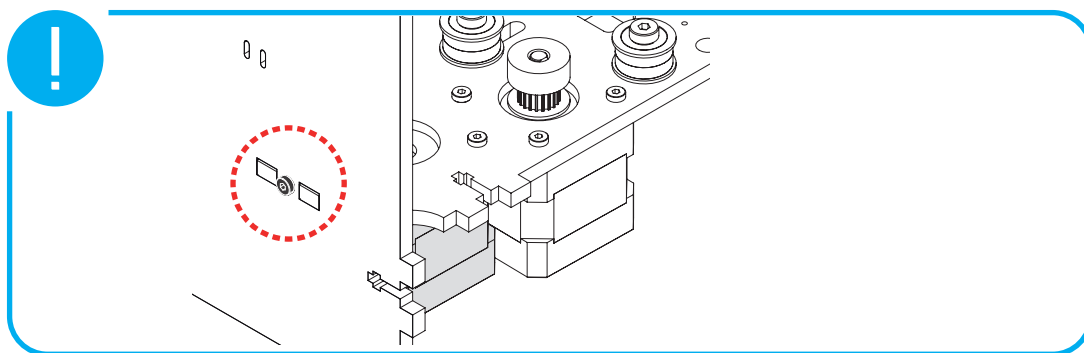


8x M3 Screw Nut
Porcas M3

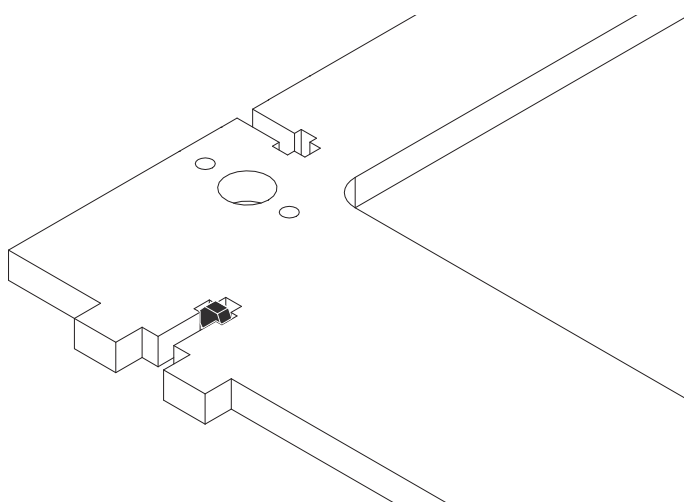


Instructions and tips in the next page
Instruções e dicas na próxima página

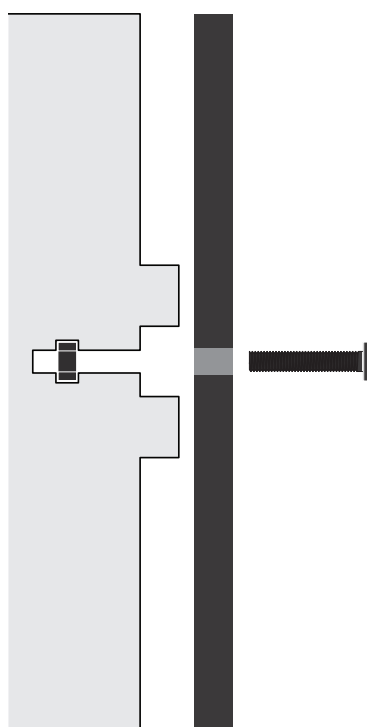
Start the assembly from the motor side to have more stability
Começa a montagem pelo lado do motor para ganhar estabilidade



- 1 Insert and hold the screw nut in place
Insere e mantém a porca no sítio



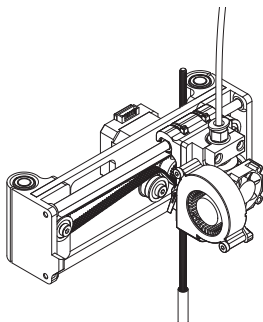
- 2 Insert the screw
Insere o parafuso



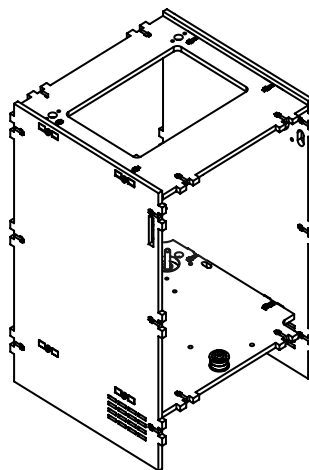
STRUCTURE PRE-ASSEMBLY

ESTRUTURA: PRÉ-MONTAGEM

You will need:
Vais precisar:



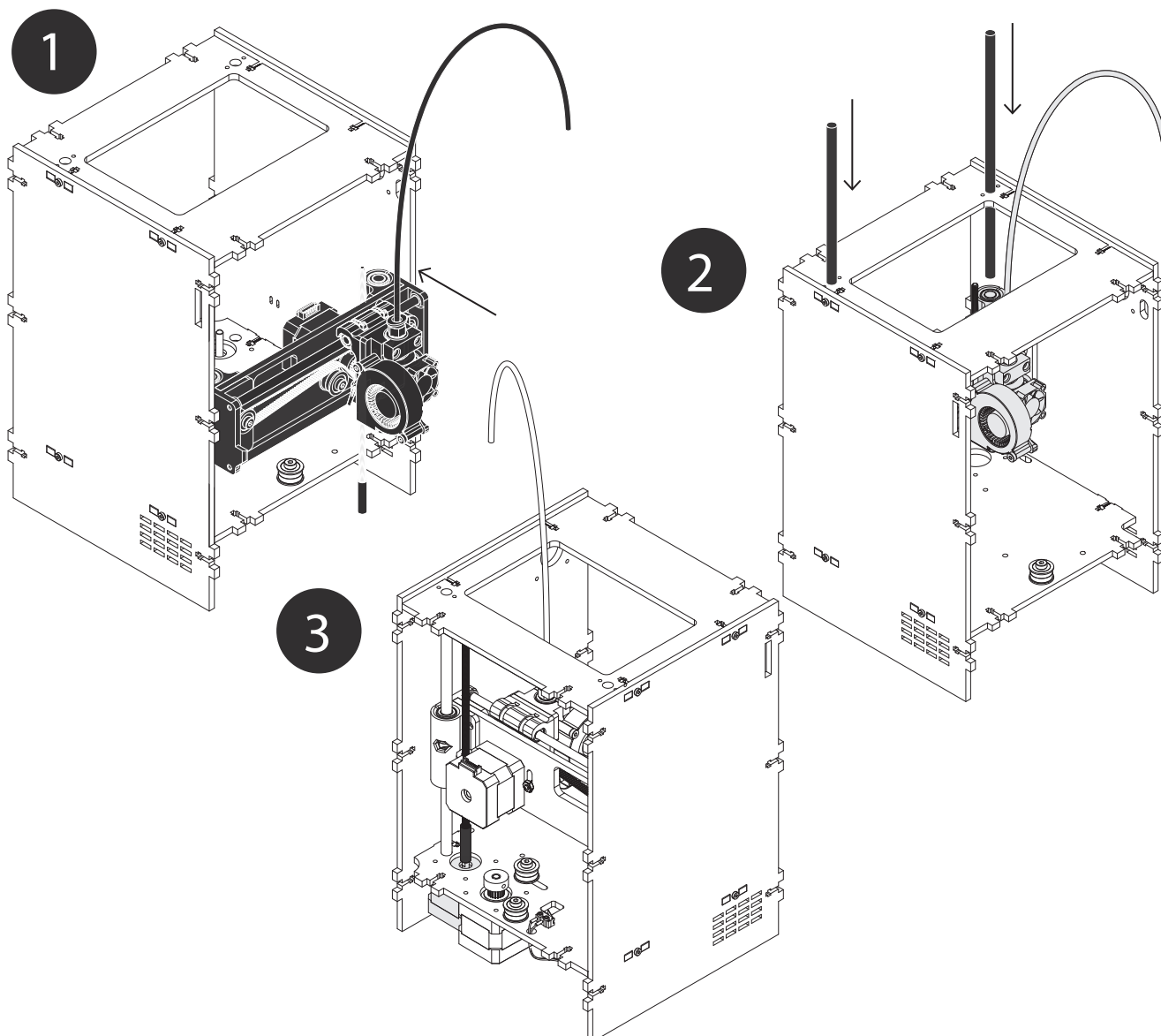
Phase 2 Fase 2




Structure Estrutura



2x Rods
Varões



 90 min.

PHASE

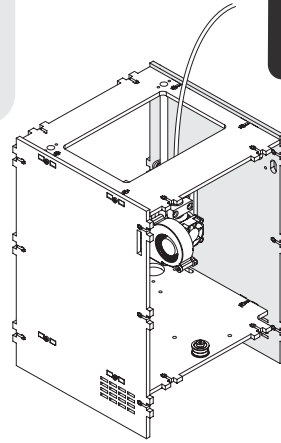
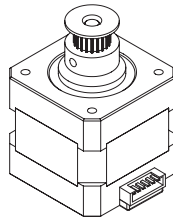
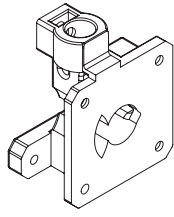
FASE

3

K

PHASE 3
FASE 3

You will need:
Vais precisar:



TOOLBOX

K.1

K.2

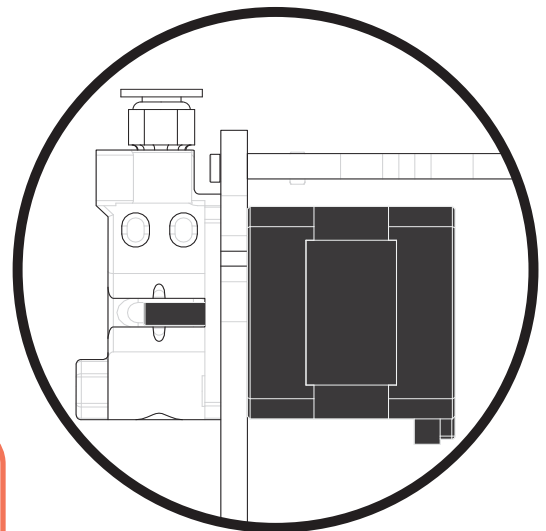
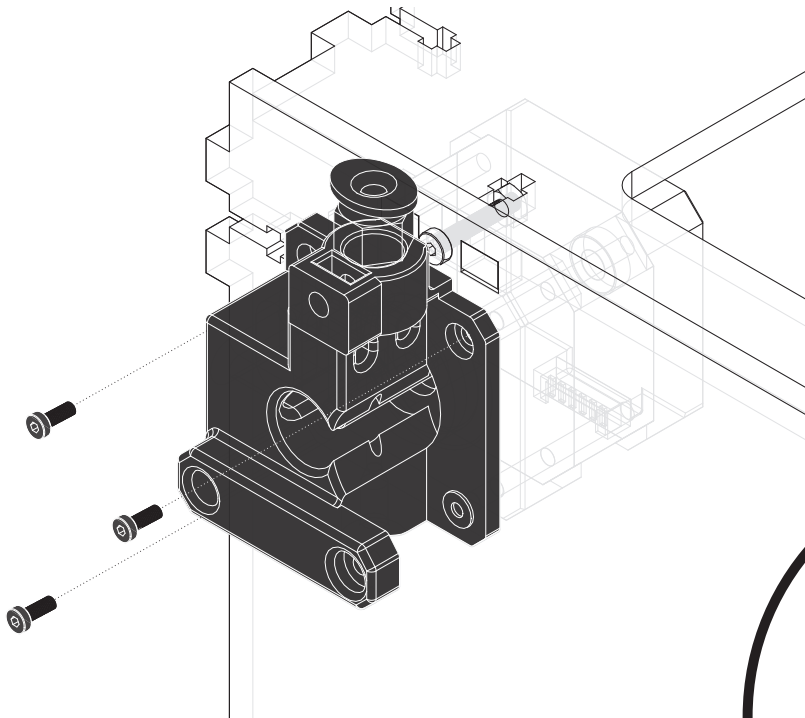
Structure Estrutura



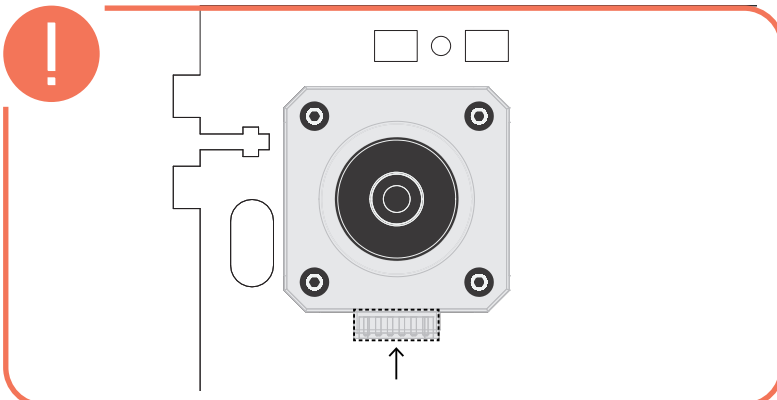
Allen 2



3x M3 10mm



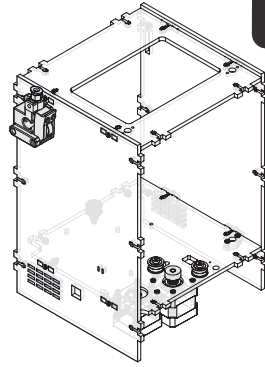
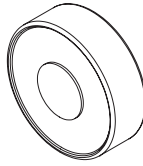
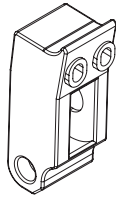
Attention: Direction of the cable plug
Atenção: Direção da entrada de cabos



L

PHASE 3
FASE 3

You will need:
Vais precisar:

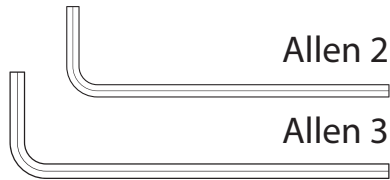


TOOLBOX

L.1

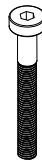
L.2

Structure Estrutura



Allen 2

Allen 3



1x M3 30mm



2x M3 50mm

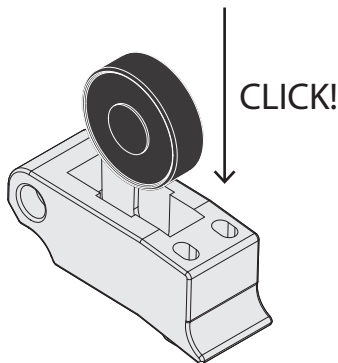


2x Long Springs
Molas Maiores

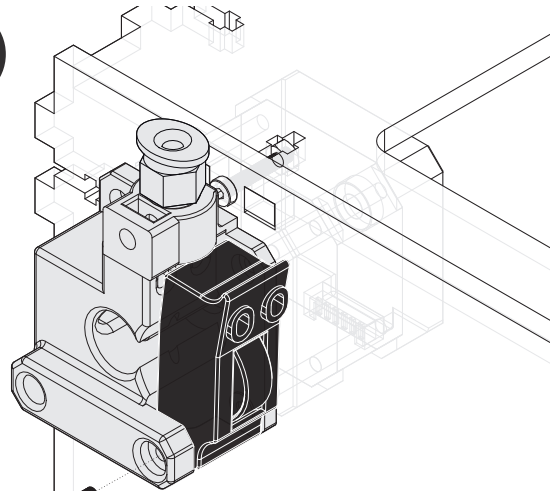


2x M3 Screw Nuts
Porcas M3

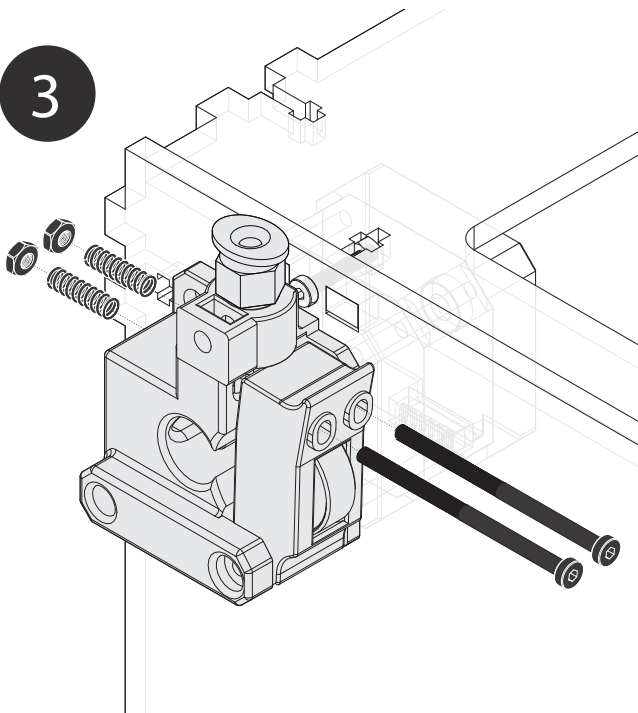
1



2

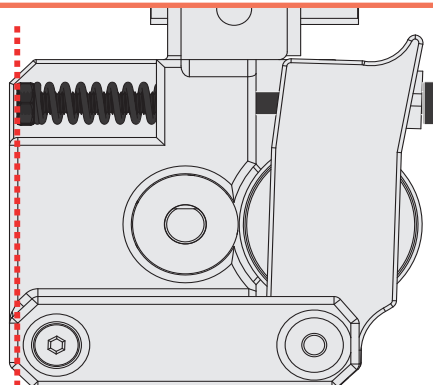


3



Attention: The screw must be aligned with the nut surface

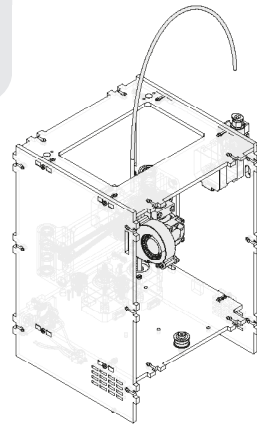
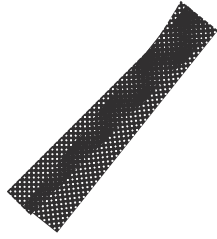
Atenção: O parafuso deve alinhar com a superfície da porca



M

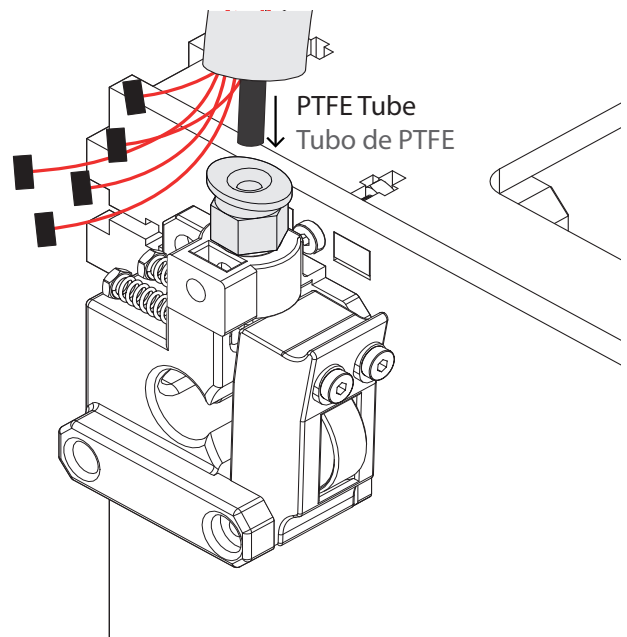
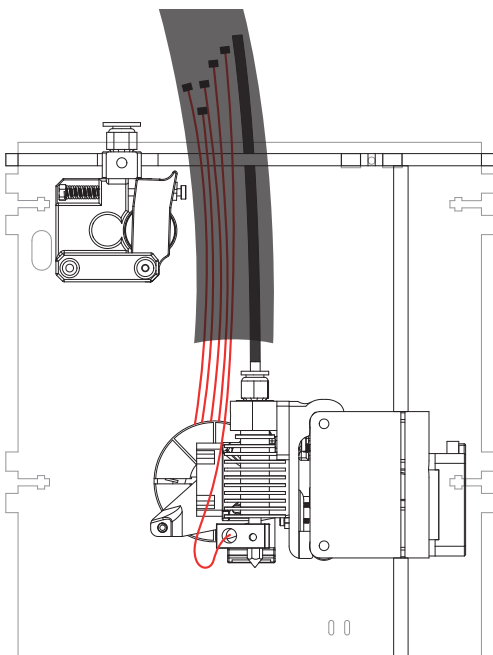
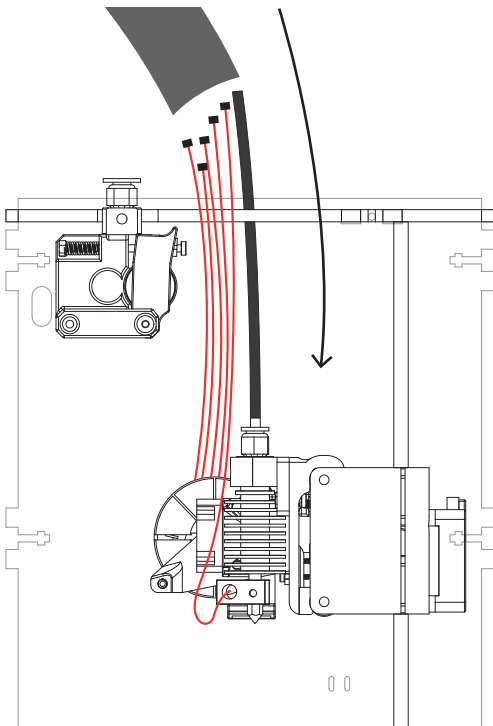
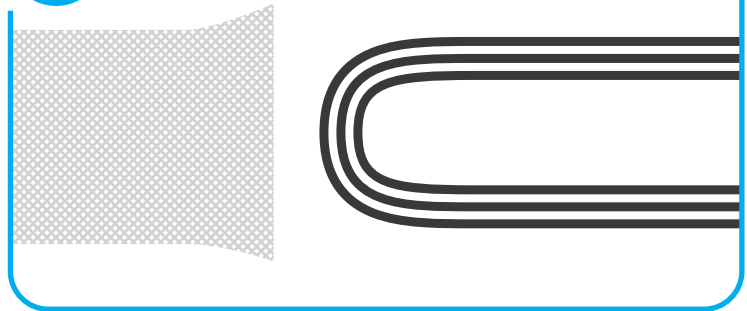
PHASE 3
FASE 3

You will need:
Vais precisar:



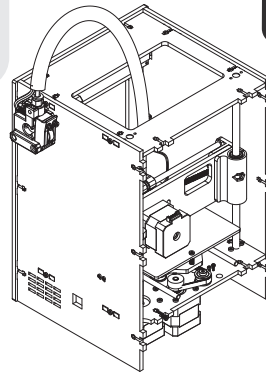
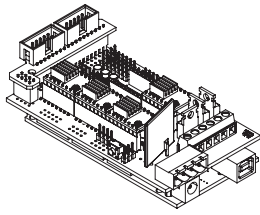
Structure Estrutura

Bend the cables in half for an easy passage
Dobra os cabos para passar facilmente



N

You will need:
Vais precisar:

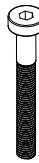


TOOLBOX

Structure Estrutura



Allen 3



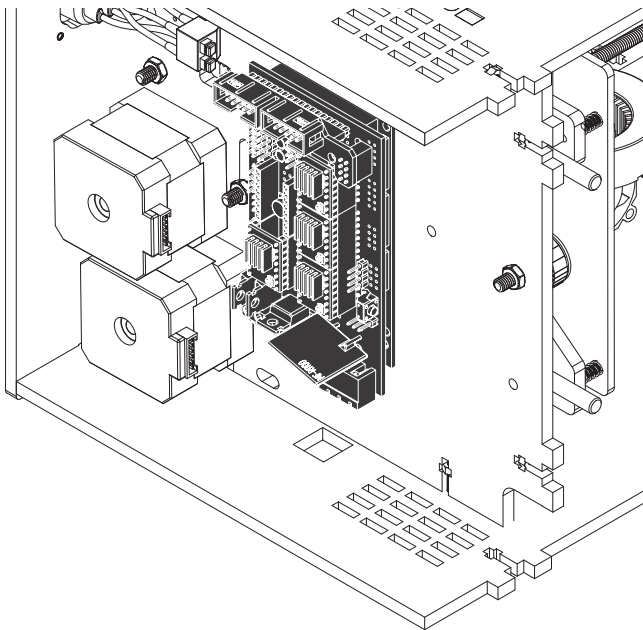
1x M3 40mm



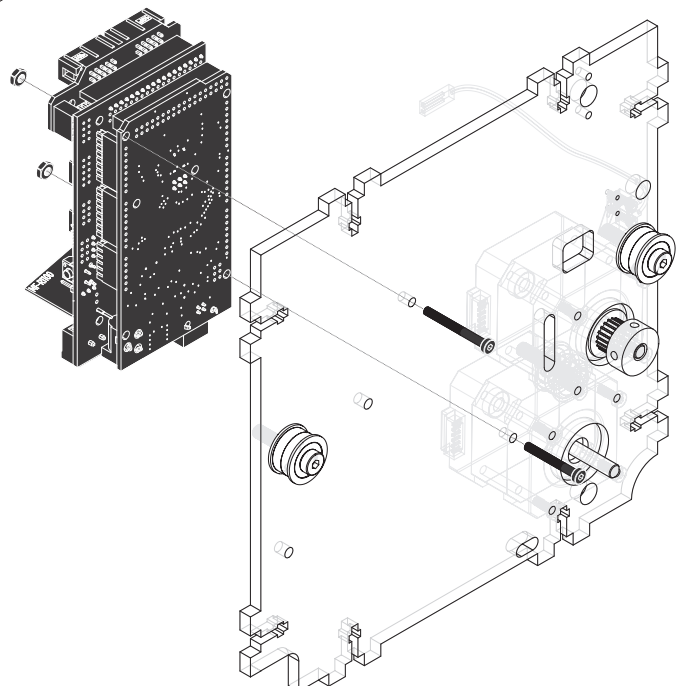
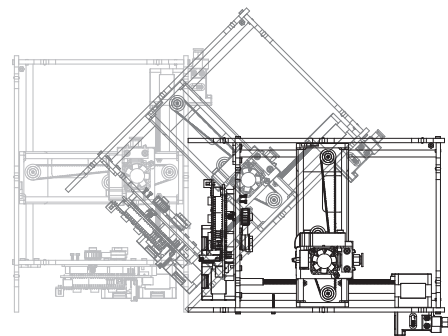
1x M3 50mm



2x M3 Screw Nuts
Porcas M3



Tip the machine 90 degrees (sideways)
Vira a máquina a 90 graus (lateral)



STRUCTURE

ESTRUTURA

Part

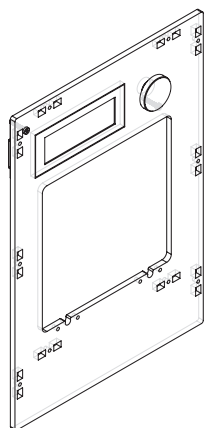
Parte

2

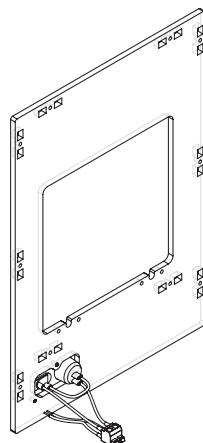
STRUCTURE ASSEMBLY

ESTRUTURA: MONTAGEM

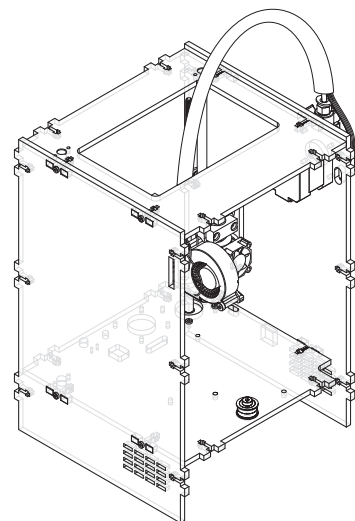
You will need:
Vais precisar:



Structure 2
Estrutura 2



Structure 3
Estrutura 3



Structure
Estrutura

TOOLBOX



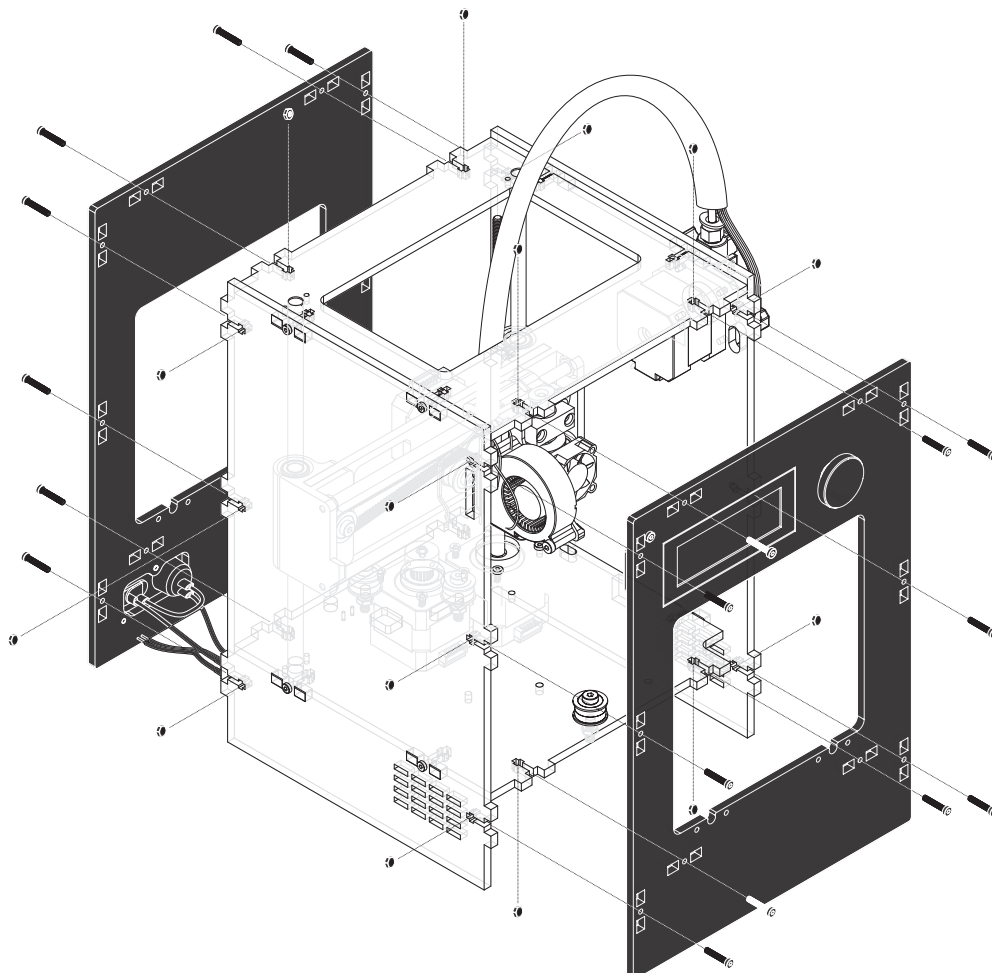
Allen 2

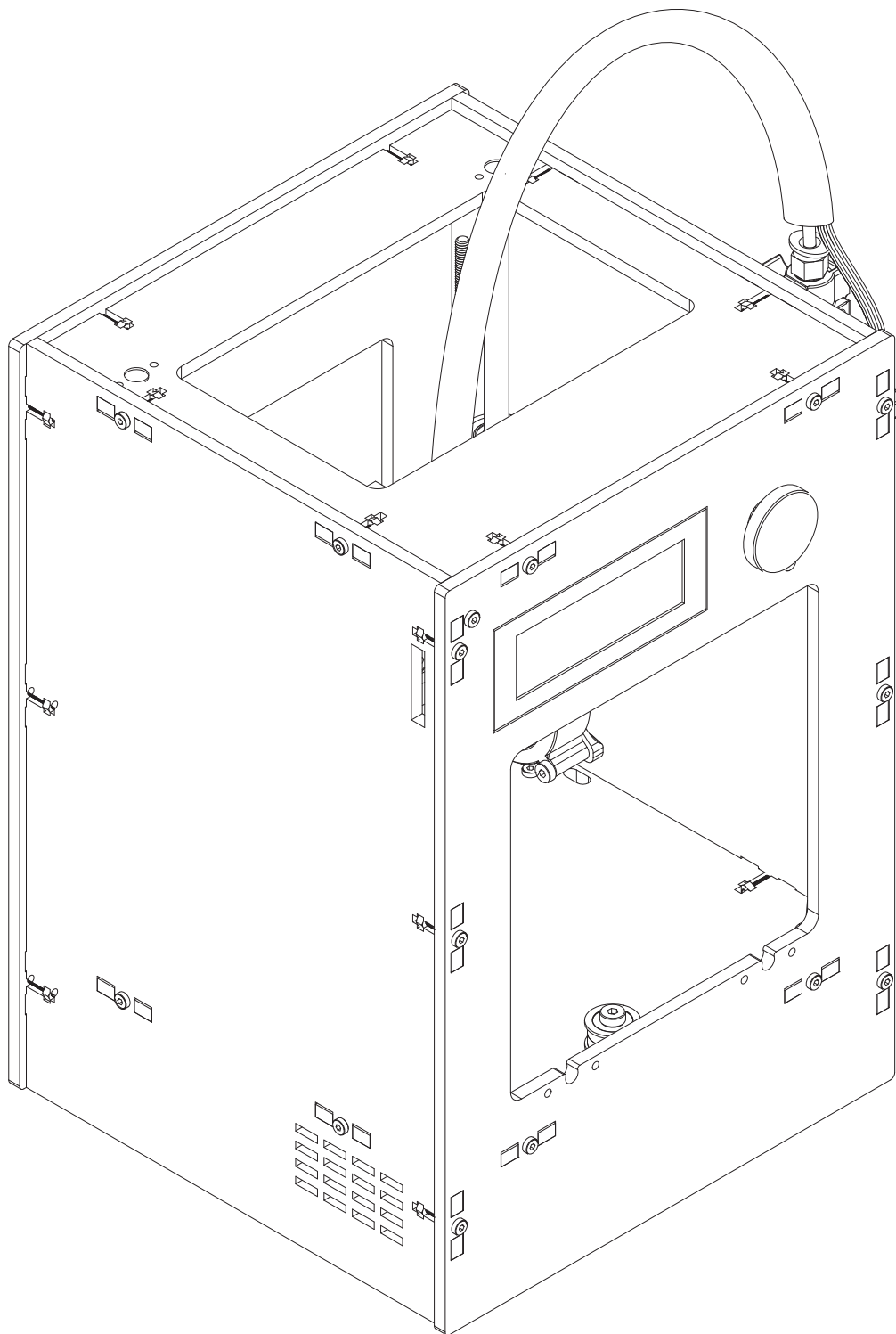


20x M3 16mm



20x M3 Screw Nut
Porcas M3





Phase 3 has been concluded!
A Fase 3 está concluída!

 40 min.

PHASE

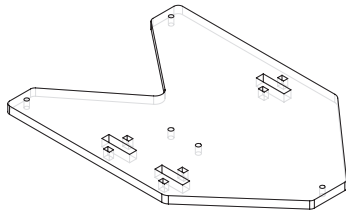
FASE

4

0

PHASE
FASE 4

You will need:
Vais precisar:

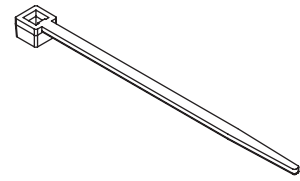


0.1

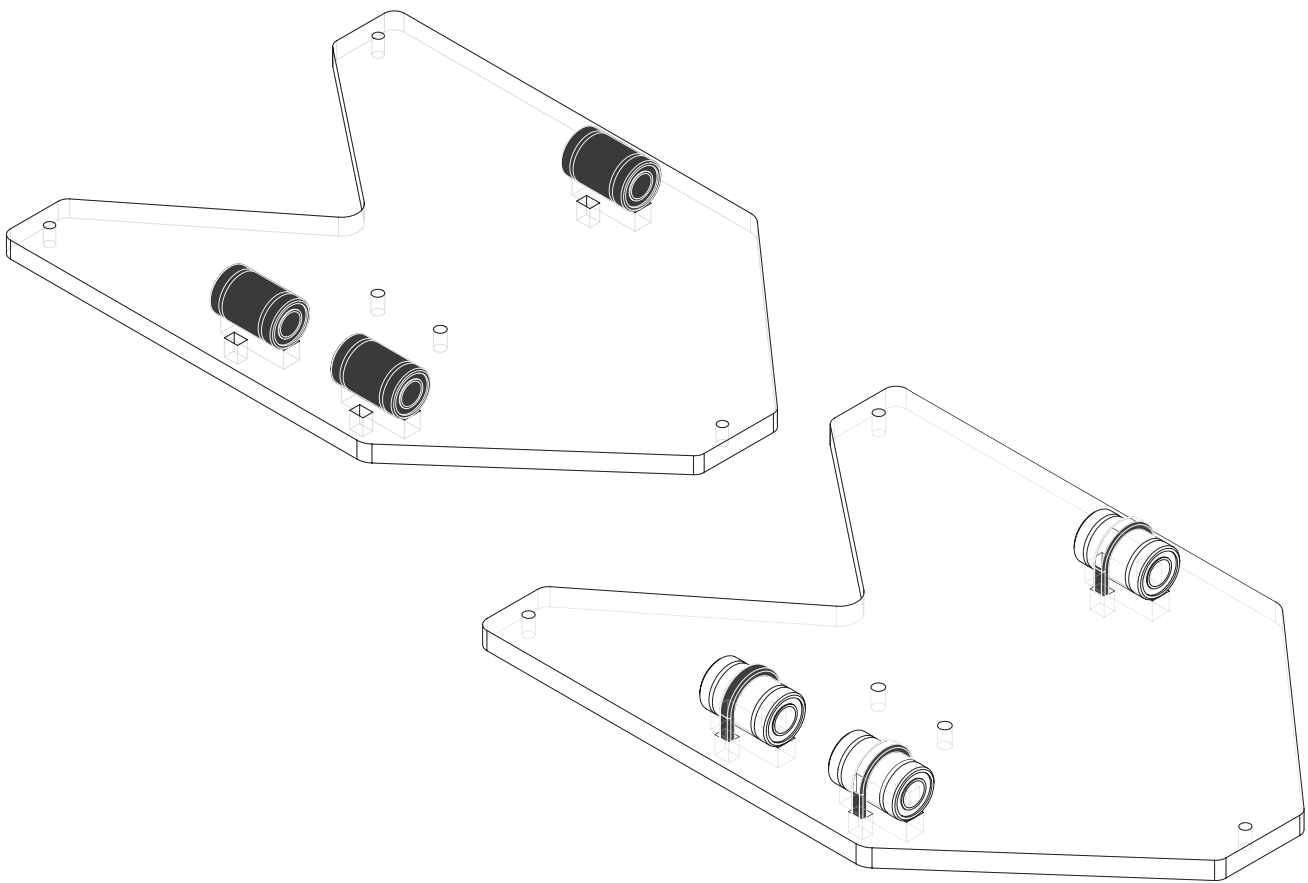


0.2 x3

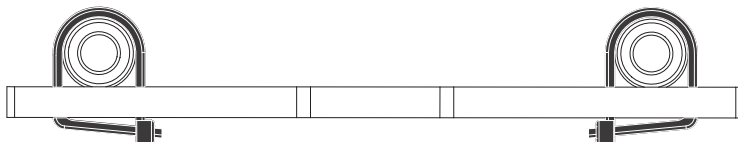
TOOLBOX



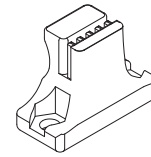
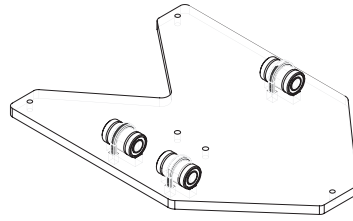
3x Plastic Fastener
Abraçadeiras



Attention: Final position of the plastic fasteners
Atenção: Posição final das abraçadeiras



You will need:
Vais precisar:



TOOLBOX

O.1

O.3



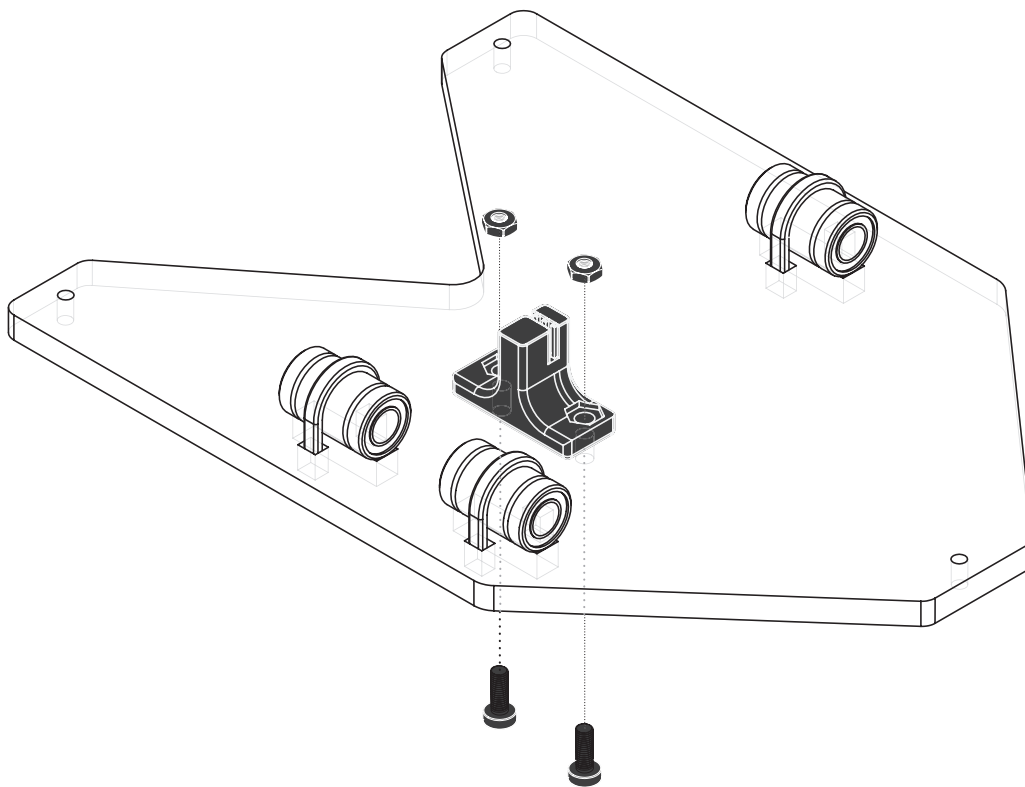
Allen 2



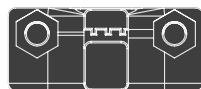
2x M3 10mm



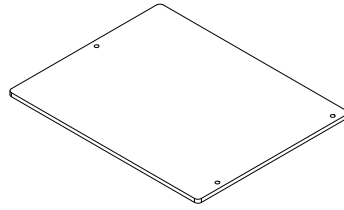
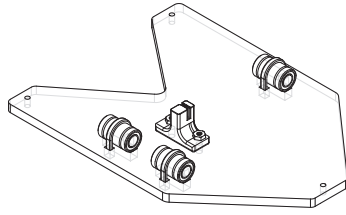
2x M3 Screw Nut
Porcas M3



Attention: To the orientation of piece O.3
Atenção: Orientação do componente O.3



You will need:
Vais precisar:



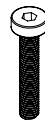
TOOLBOX

0.1

0.4



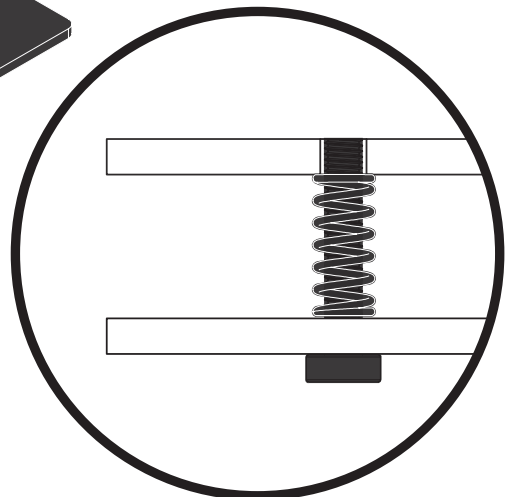
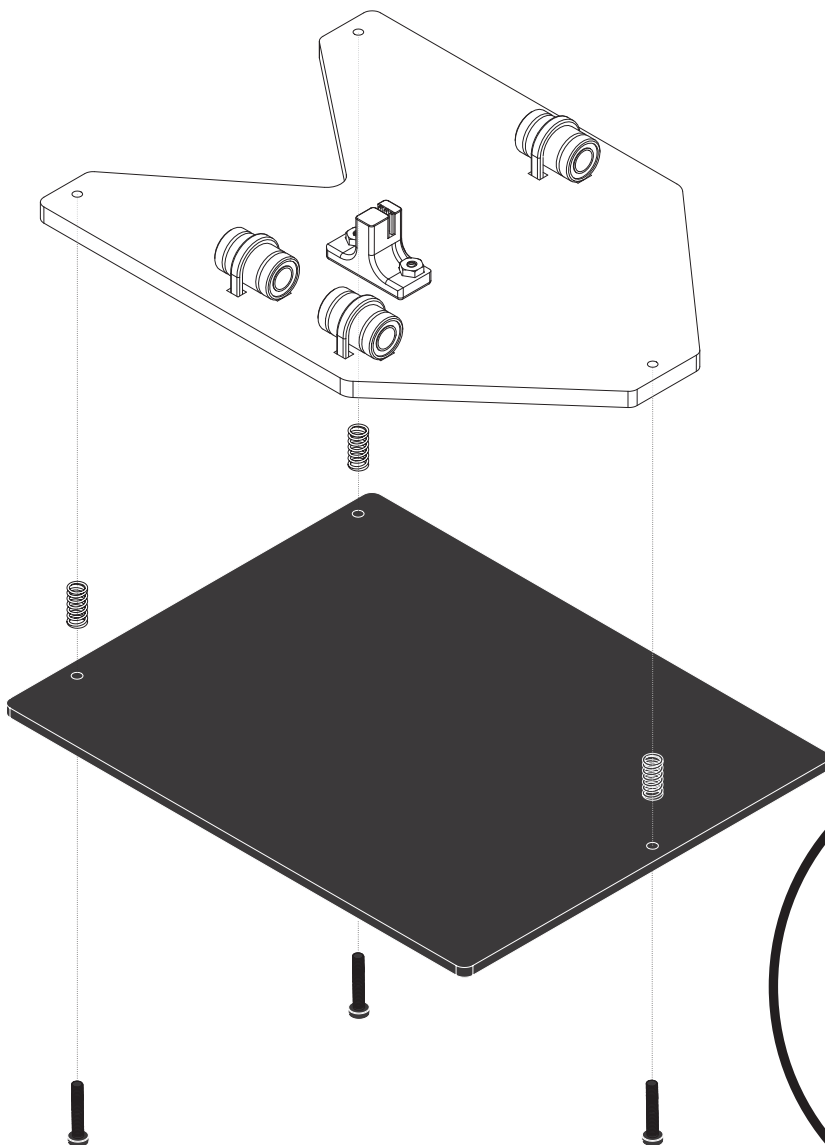
Allen 2



3x M3 16mm



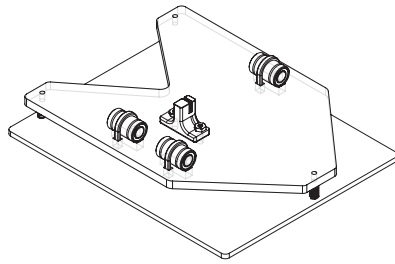
3x Short springs
Molas curtas



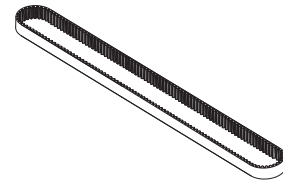
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PHASE
FASE 4

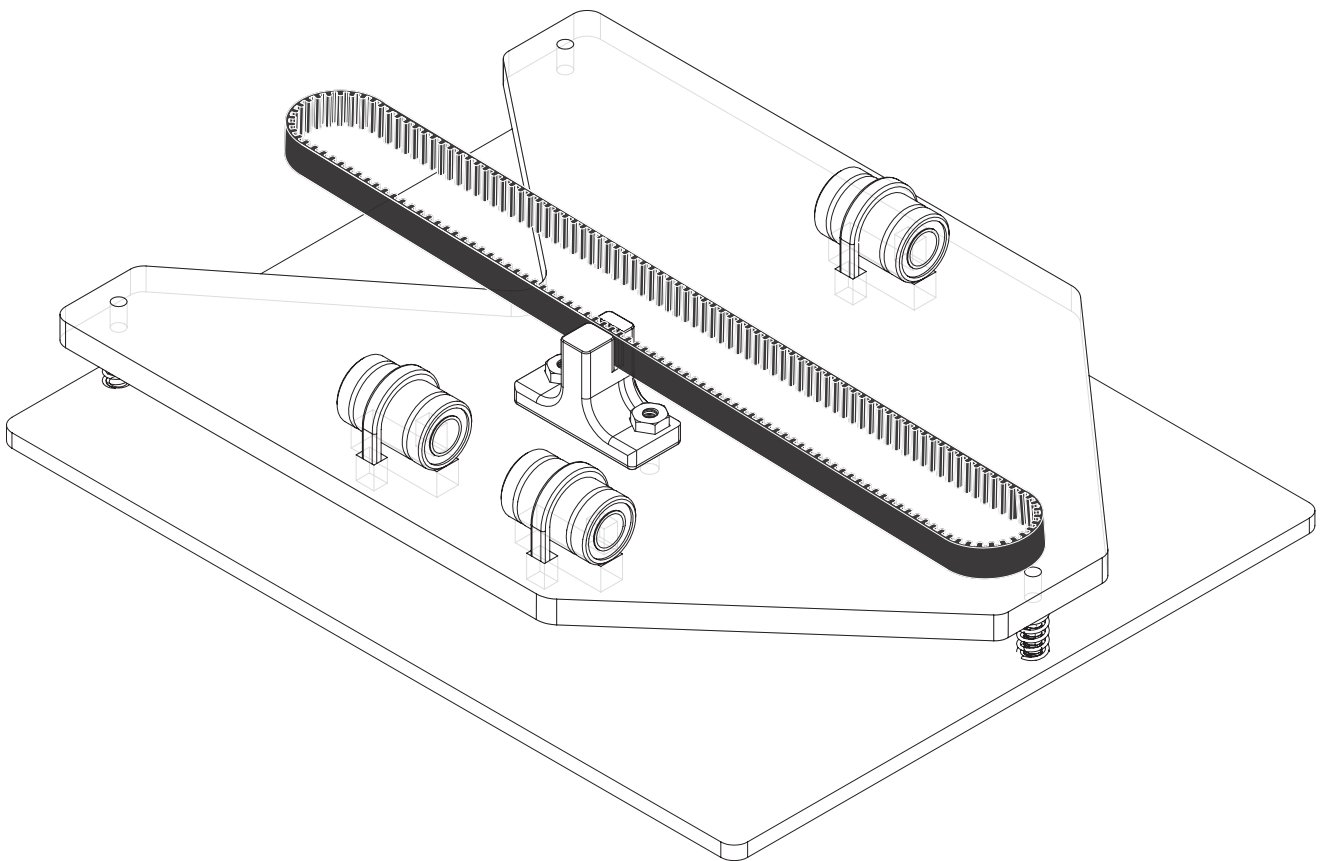
You will need:
Vais precisar:



0

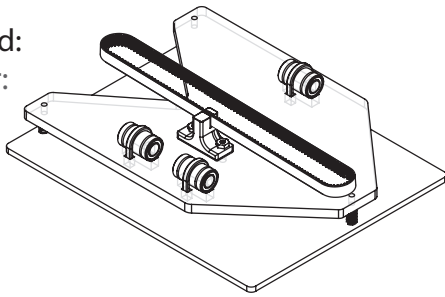


Belt
Correia

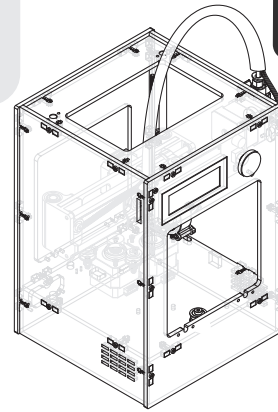


0

You will need:
Vais precisar:



0



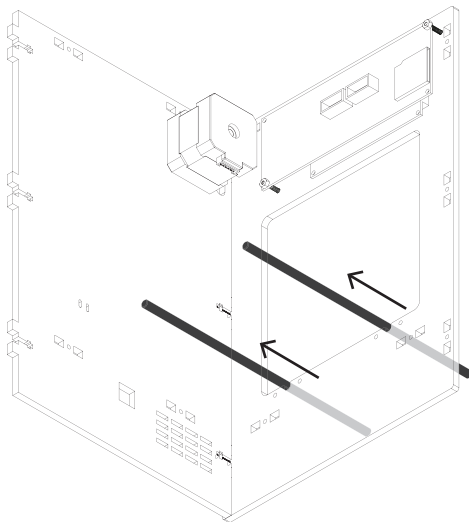
Structure Estrutura



2x Larger Rods
Varões (os maiores)

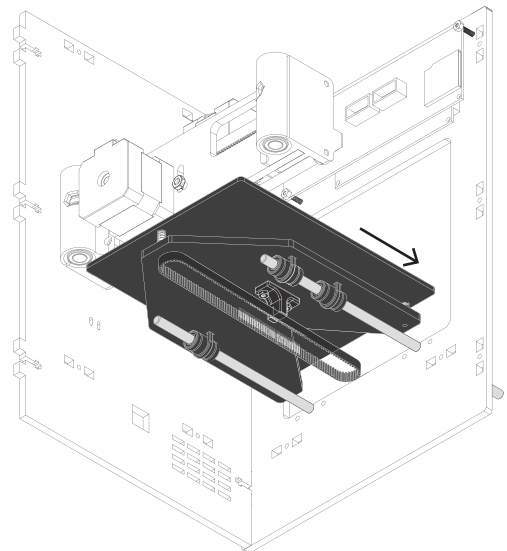
1

Slide the rods through the front rod trails until half way
Desliza os varões através dos cortes frontais até meio



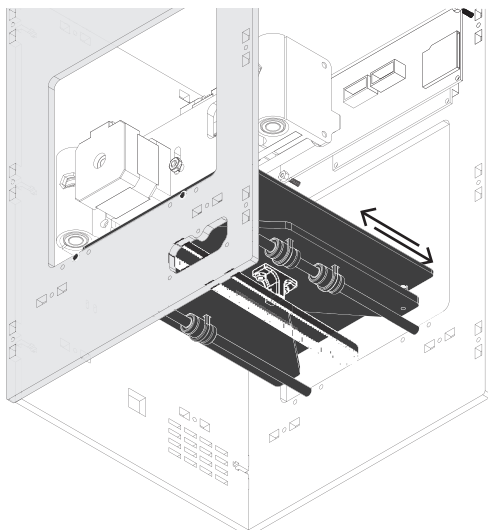
2

Slide the print table through the rods
Desliza a mesa de impressão através dos varões



3

Adjust and slide the rods until they fit through the back rail trails
Ajusta os varões até passarem nos cortes traseiros



!

Attention: Apply force to the rods
(not the print table)
Atenção: Aplicar força nos varões
(não na mesa de impressão)

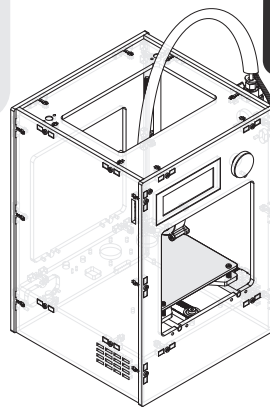
0

You will need:
Vais precisar:

TOOLBOX

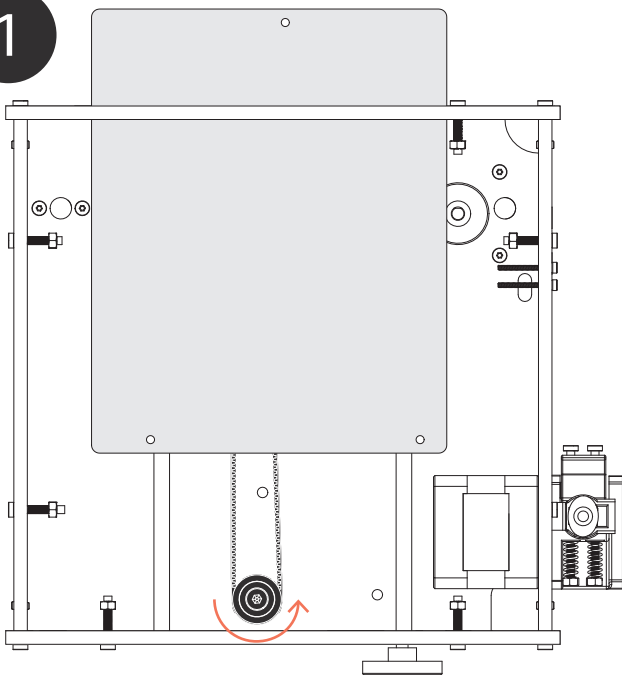


Allen 4

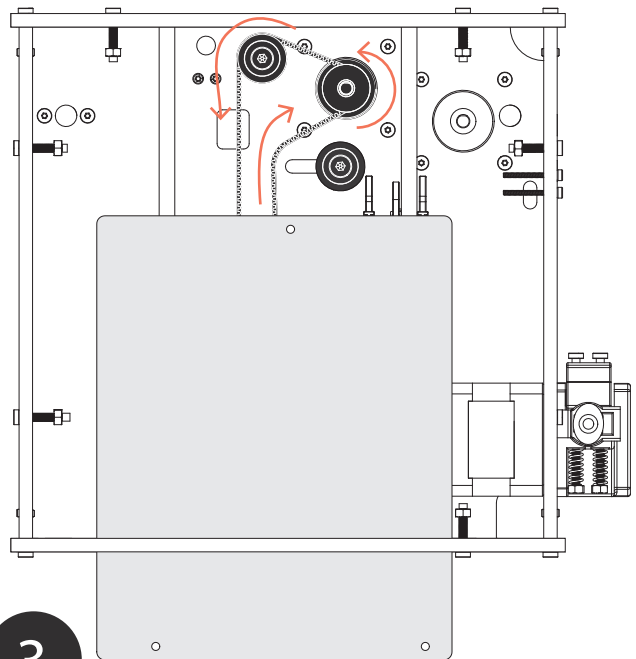


Structure Estrutura

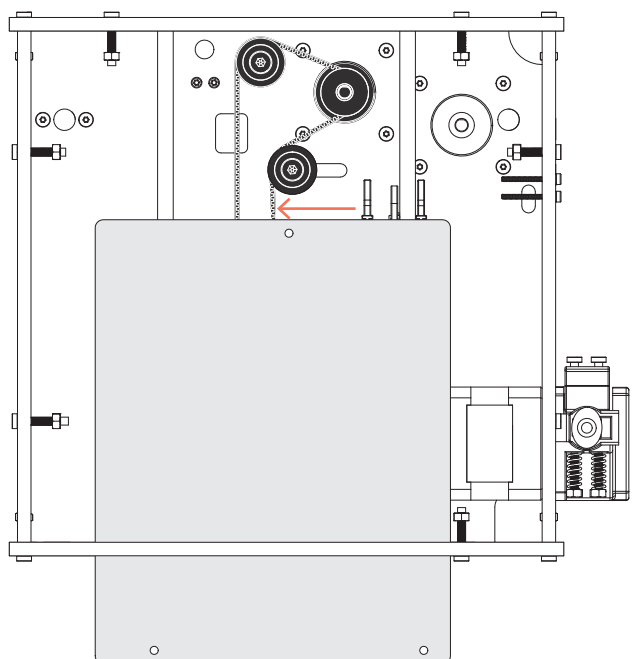
1



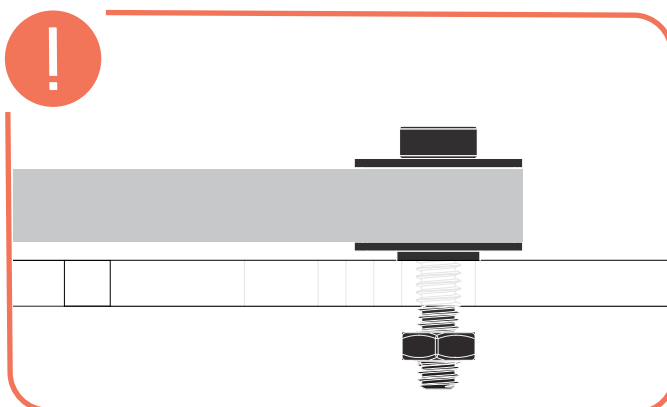
2



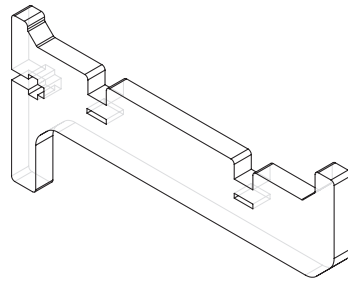
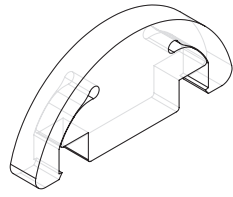
3



Attention: Tighten up the screw when
the belt is tensioned
Atenção: Aperta o parafuso quando
a correia estiver tencionada



You will need:
Vais precisar:



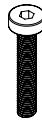
TOOLBOX

2x 0.5

2x 0.6



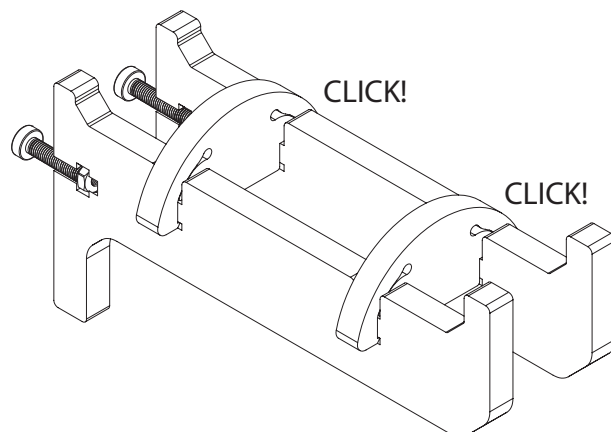
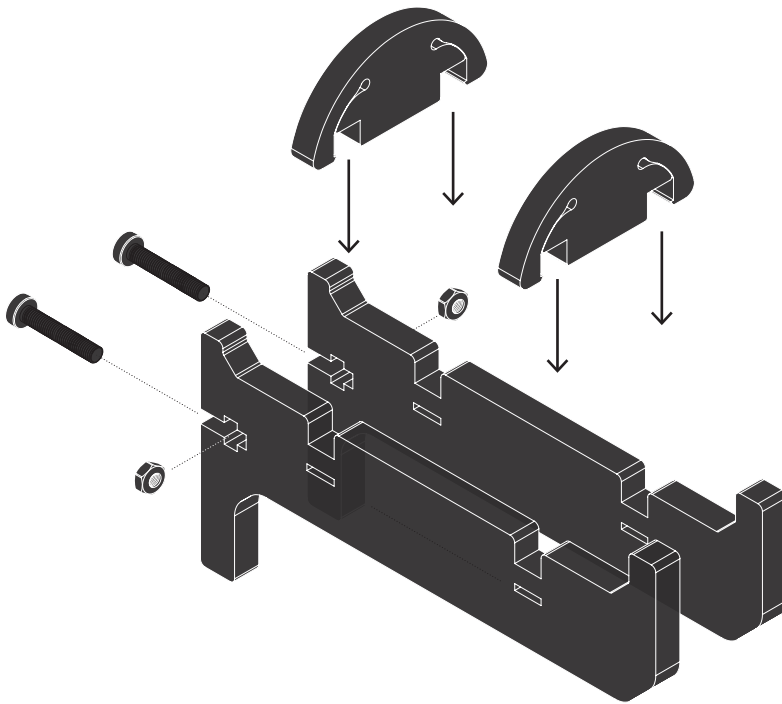
Allen 2

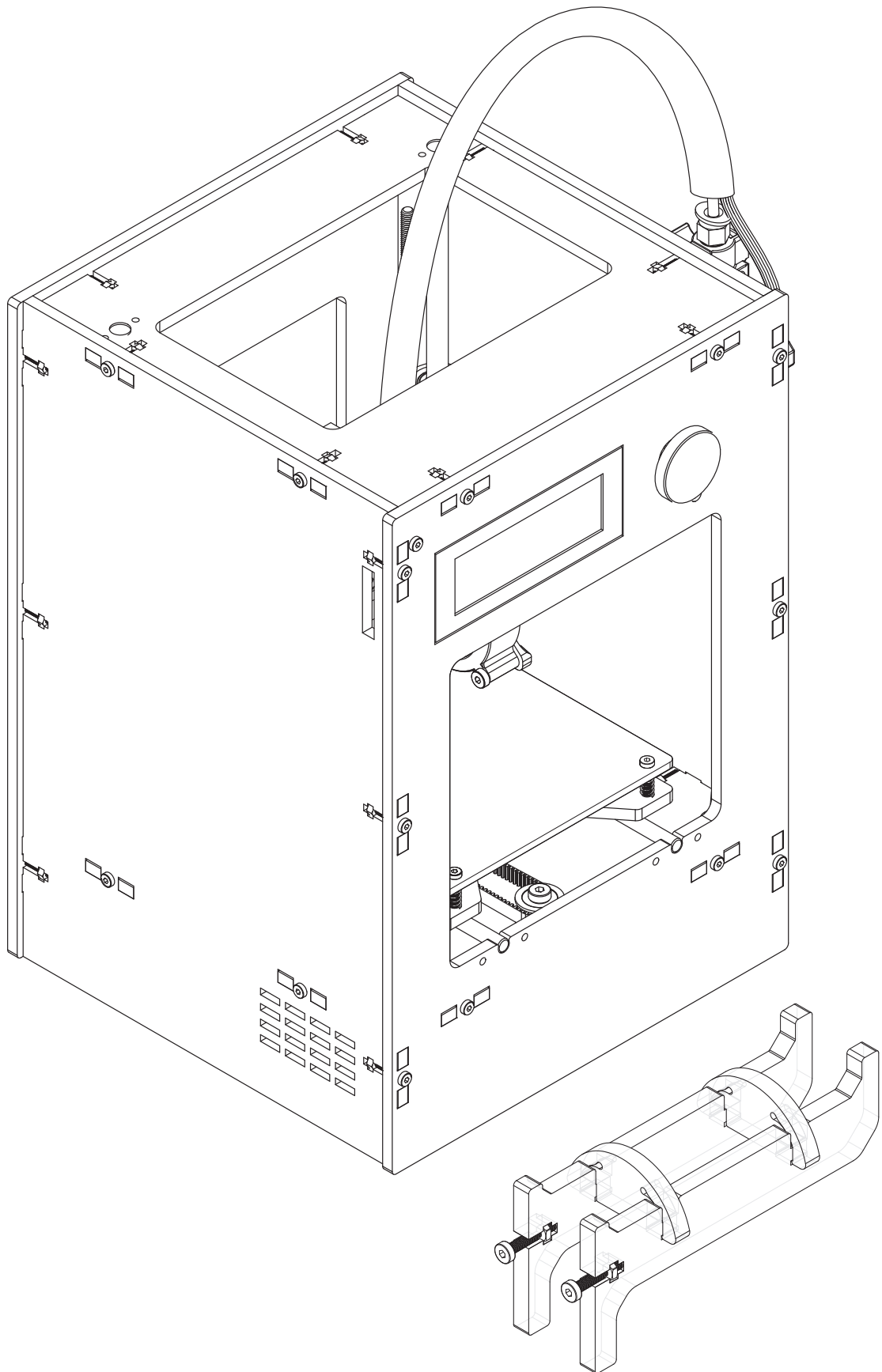


2x M3 16mm



2x M3 Screw Nuts
Porcas M3





Phase 4 has been concluded!
A Fase 4 está concluída!

 40 min.

PHASE

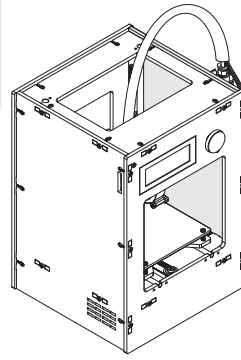
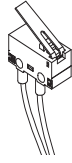
FASE

5

CABLES CABELAGEM

PHASE 5
FASE

You will need:
Vais precisar:



TOOLBOX

P.1-Z

Structure Estrutura



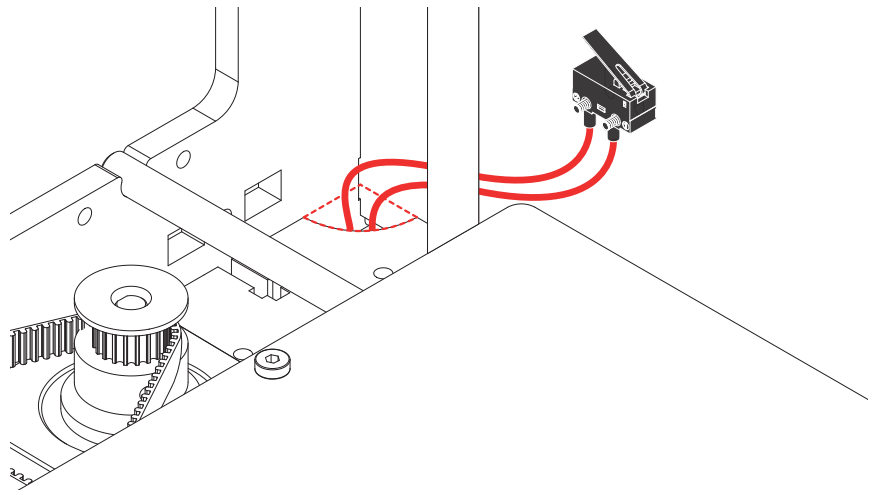
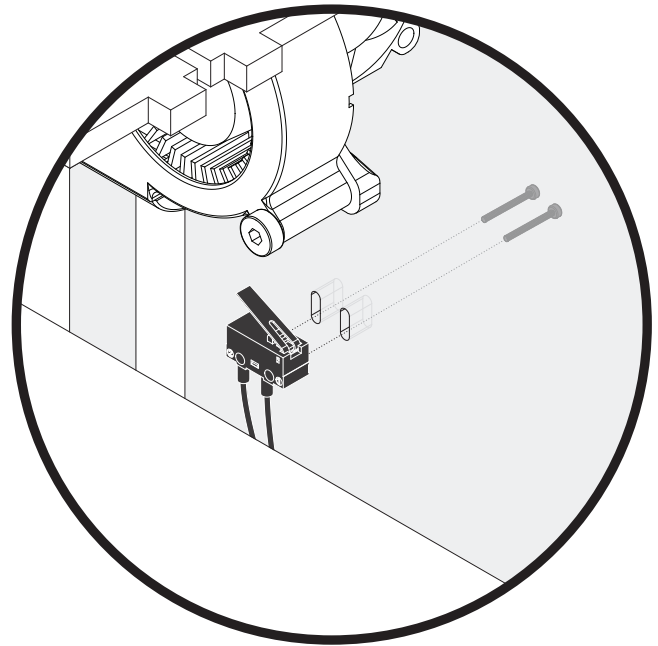
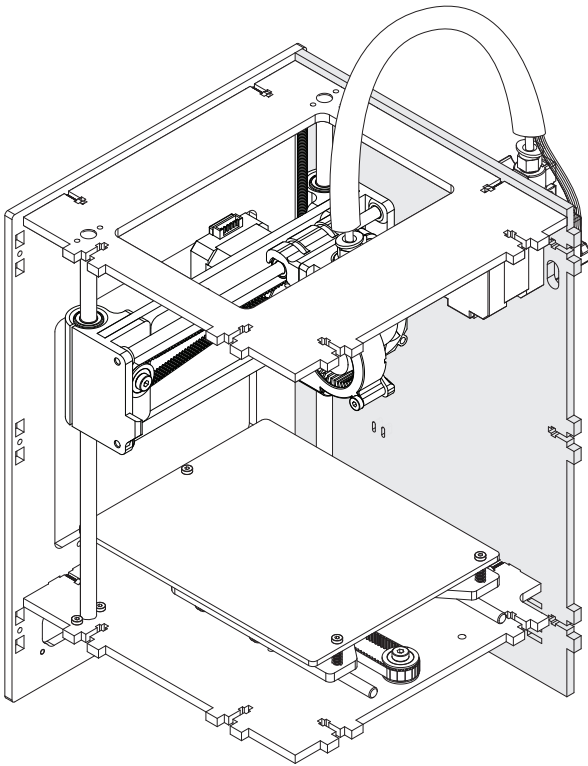
Allen 1



2x M2 12 mm



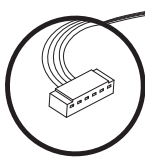
2x M2 Screw Nuts
Porcas M2



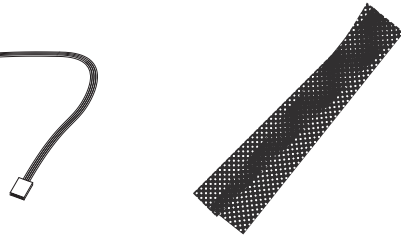
CABLES CABELAGEM

PHASE 5
FASE

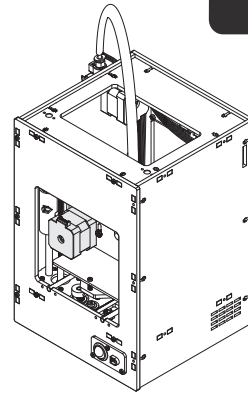
You will need:
Vais precisar:



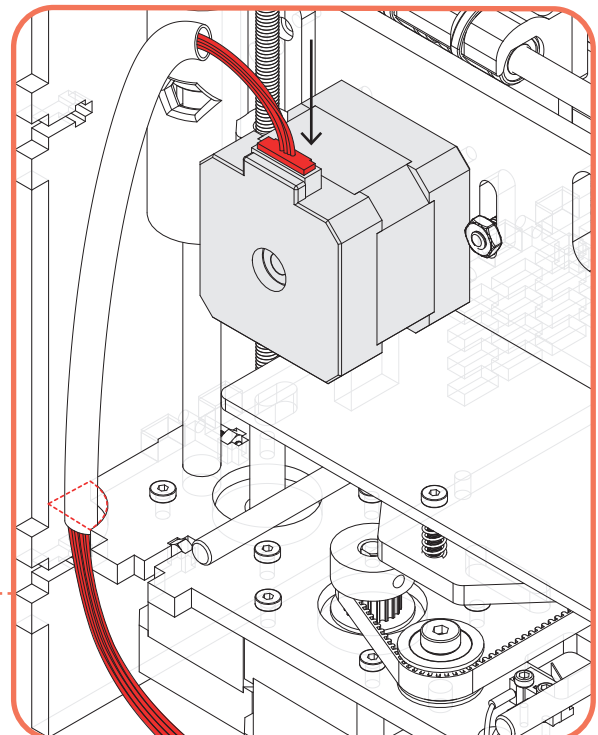
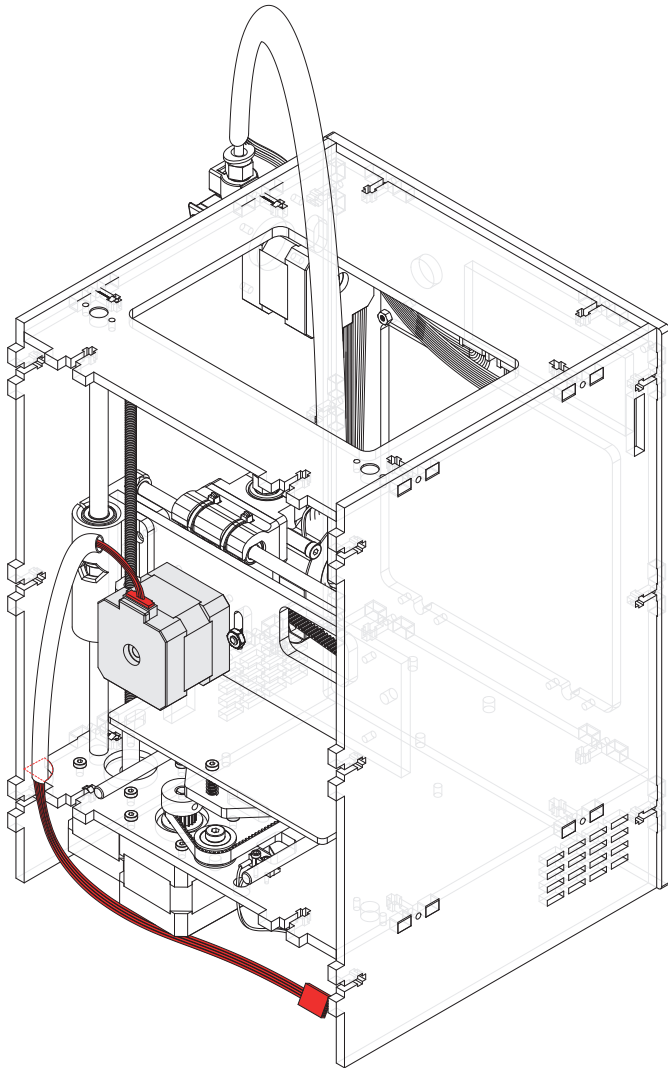
P.2-X



Protective Sleeve Manga



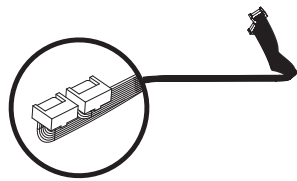
Structure Estrutura



CABLES CABELAGEM

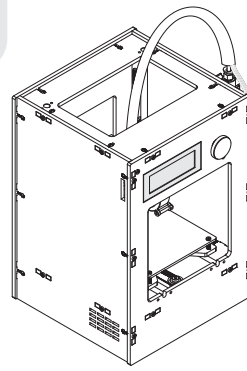
PHASE 5
FASE

You will need:
Vais precisar:

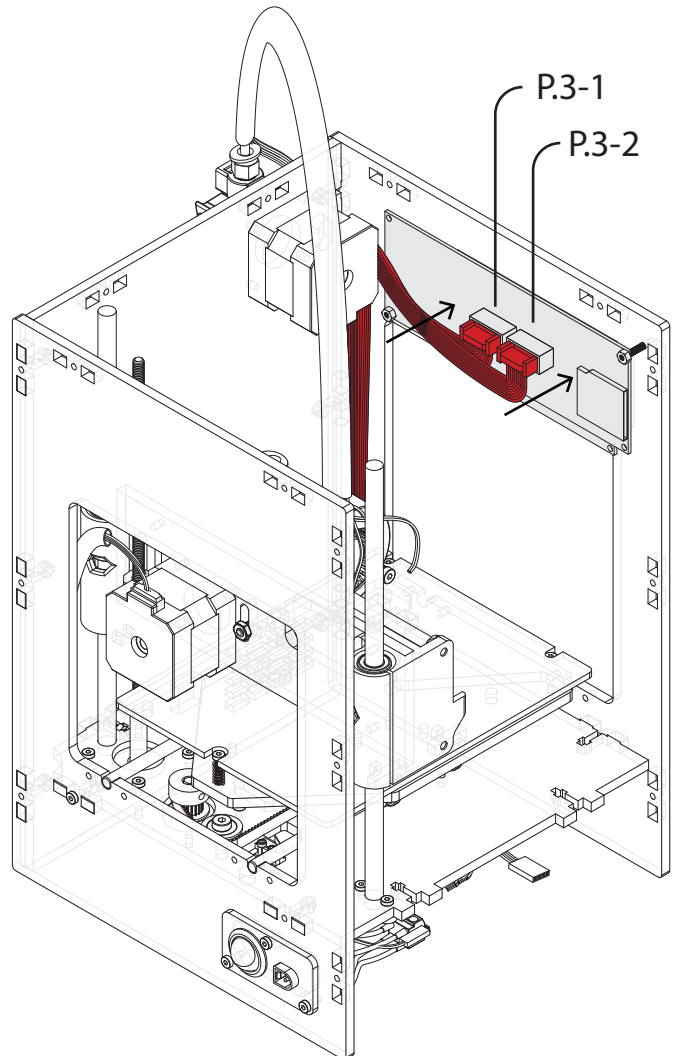
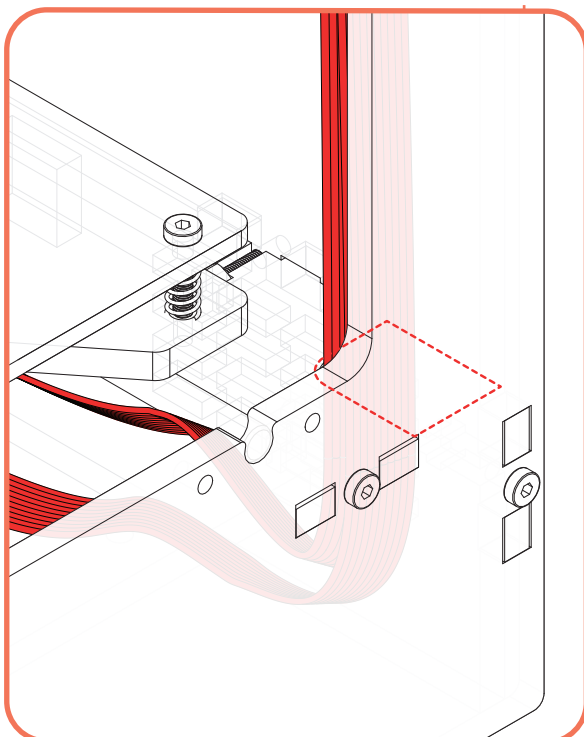
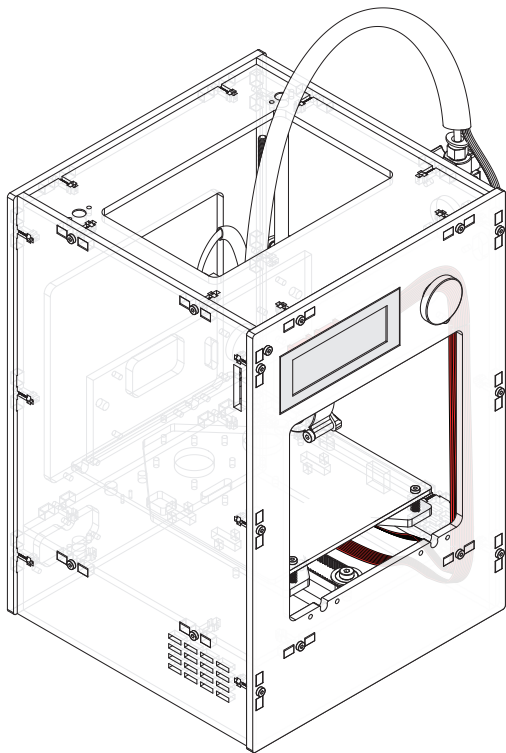


P.3-1

P.3-2



Structure Estrutura



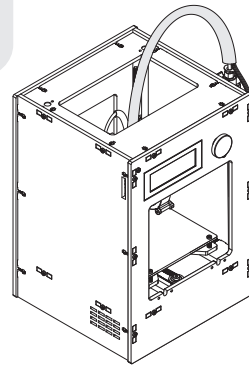
P.3-1

P.3-2

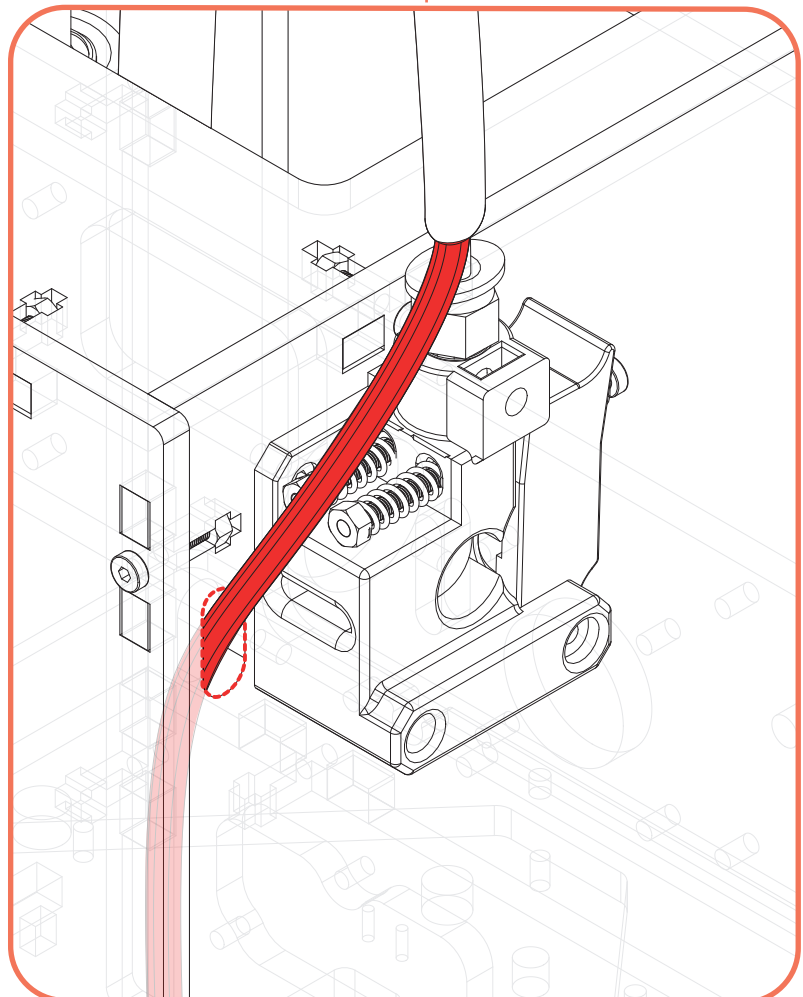
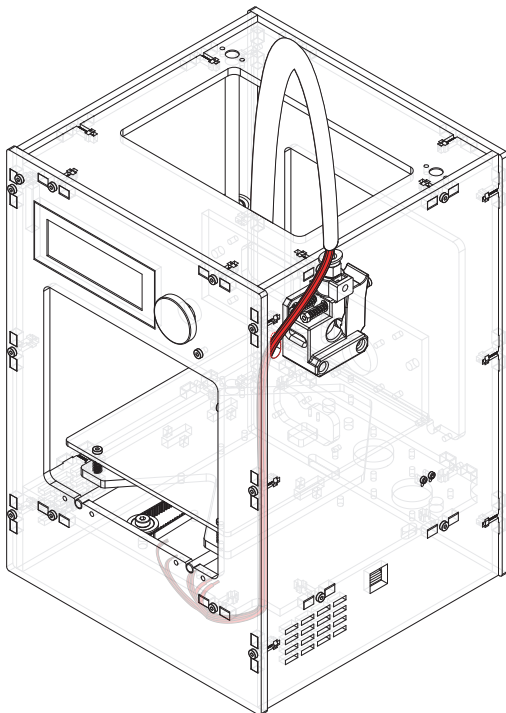
CABLES CABELAGEM

PHASE 5
FASE

You will need:
Vais precisar:



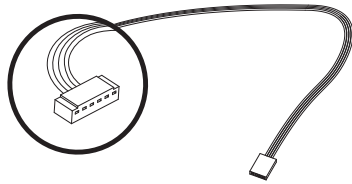
Structure Estrutura



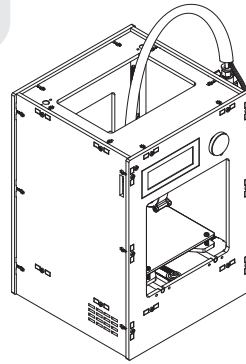
CABLES CABELAGEM

PHASE 5
FASE 5

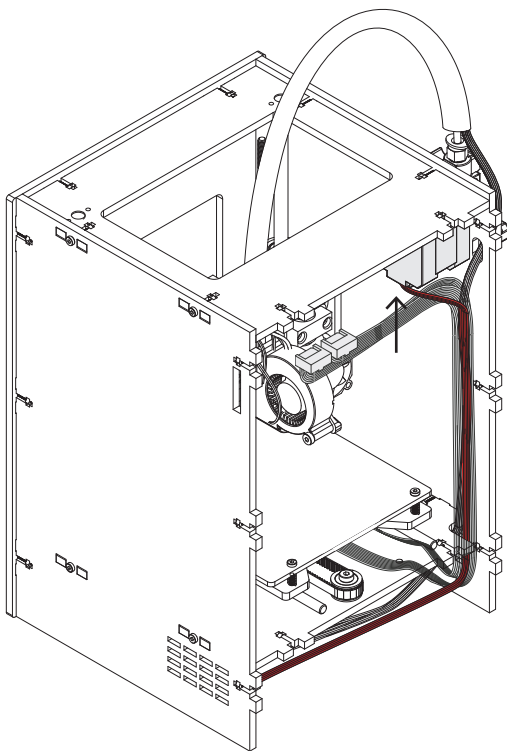
You will need:
Vais precisar:



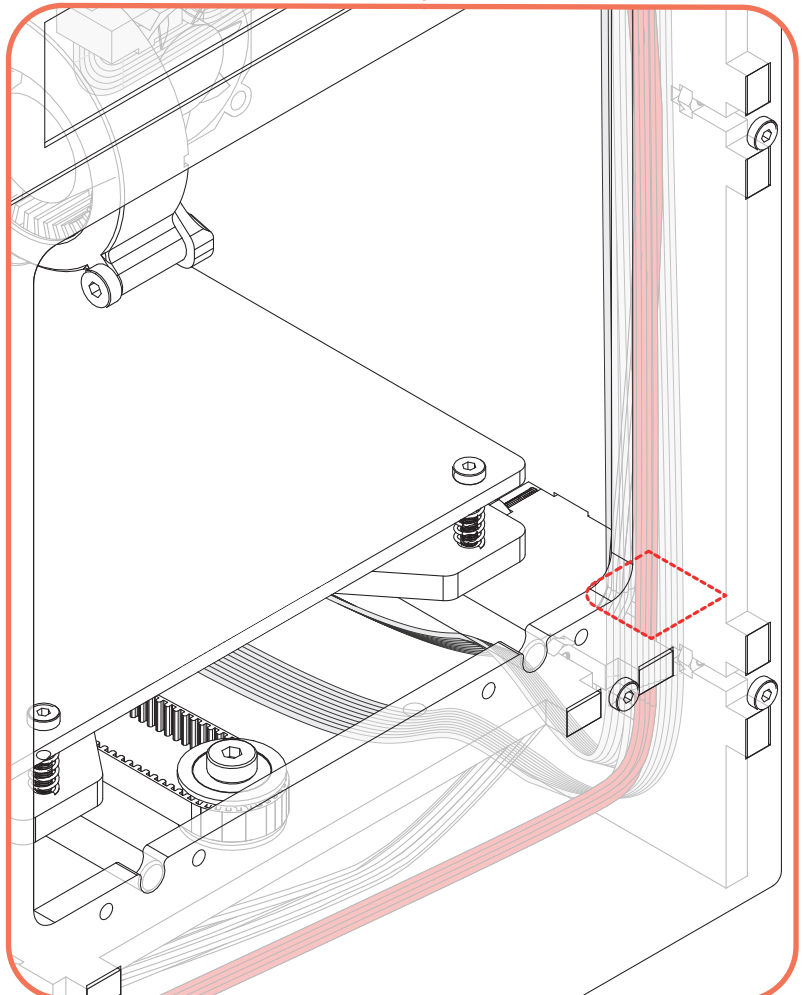
P.4-E0



Structure Estrutura



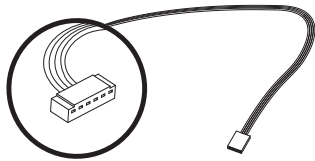
Use some plastic fastener
to keep the cables organized
Use algumas abraçadeira para manter
os cabos organizados



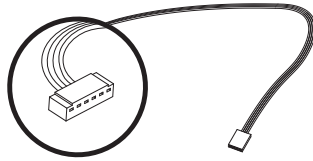
CABLES CABELAGEM

PHASE 5
FASE 5

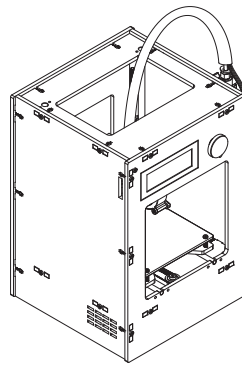
You will need:
Vais precisar:



P.5-Z

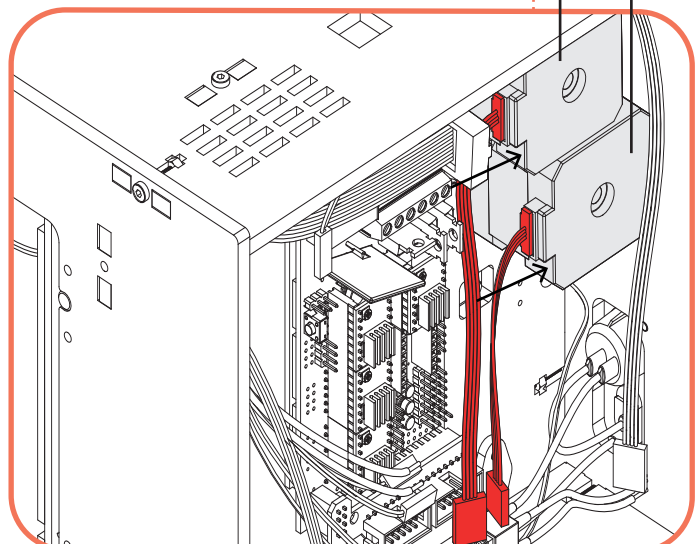
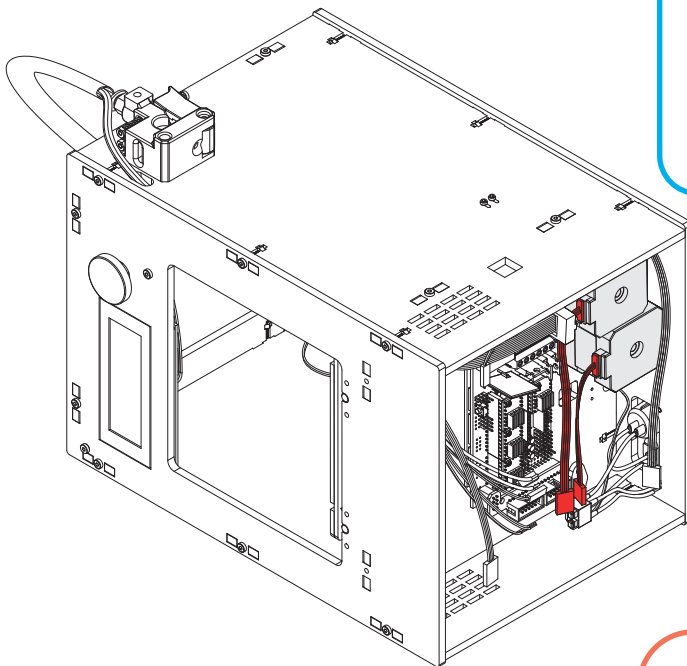
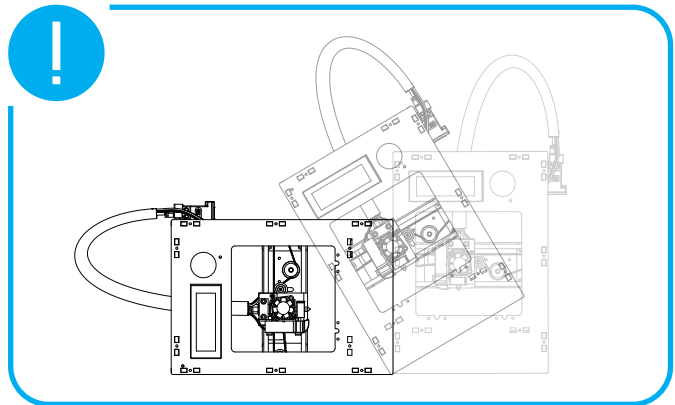


P.6-Y



Structure Estrutura

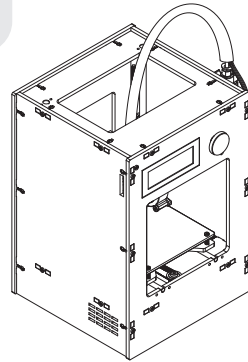
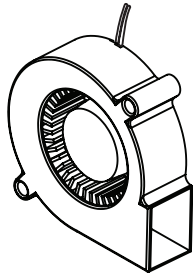
Tip the machine 90 degrees (sideways)
Vira a máquina a 90 graus (lateral)



CABLES CABELAGEM

PHASE
FASE 5

You will need:
Vais precisar:



TOOLBOX

P.7

Structure Estrutura



Allen 2



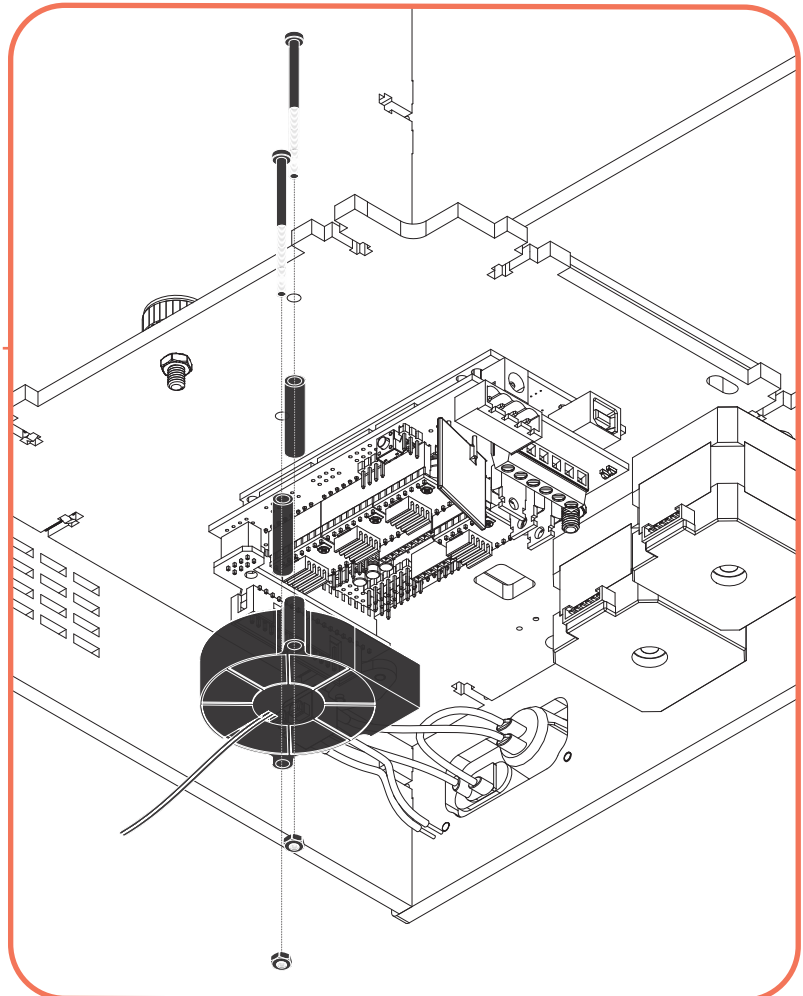
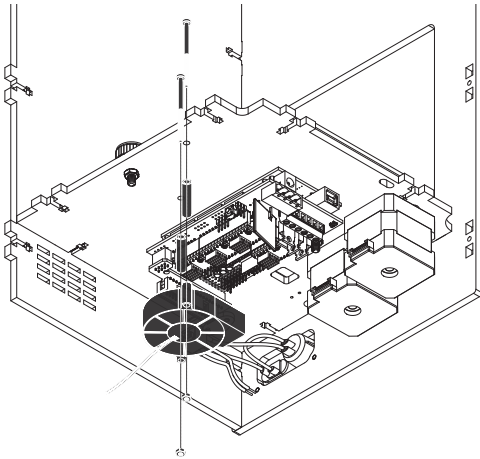
Plastic spacer
Espaçador plástico



2x M3 50mm



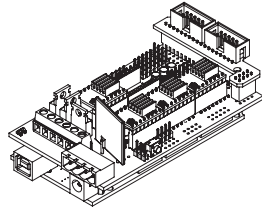
2x M3 Screw Nuts
Porcas M3



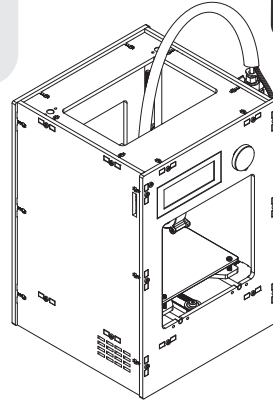
CABLES CABELAGEM

PHASE 5
FASE 5

You will need:
Vais precisar:



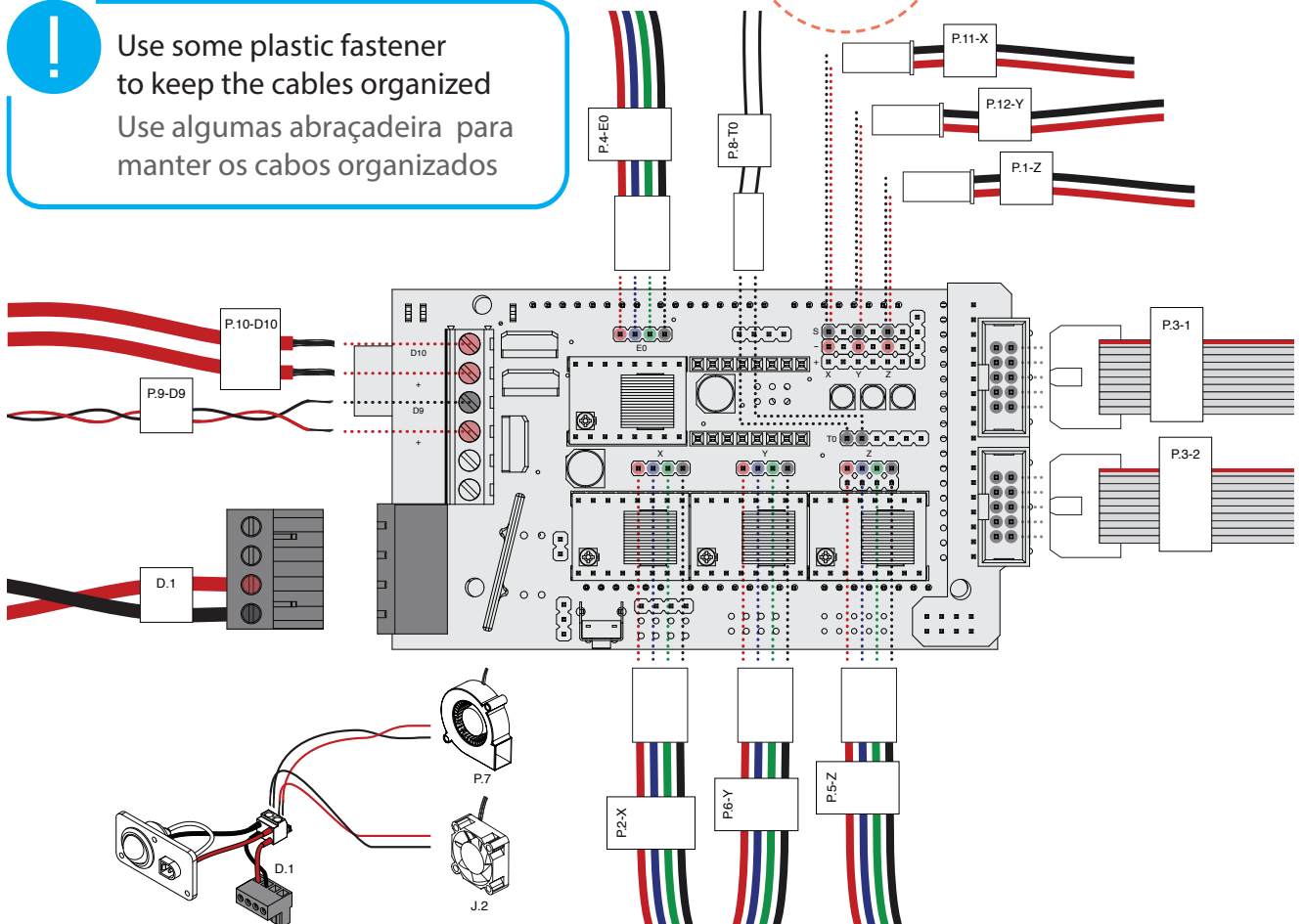
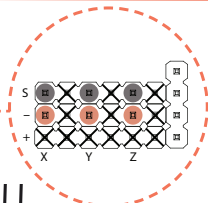
N




Be careful to properly connect the cables or you may damage the equipment.
Tem cuidado em ligar corretamente os cabos, ou podés danificar o equipamento.



Use some plastic fastener to keep the cables organized
Use algumas abraçadeira para manter os cabos organizados



 05 min.

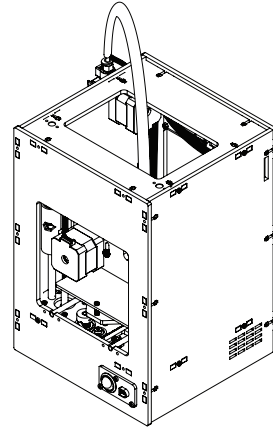
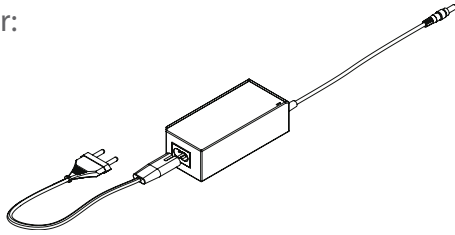
PHASE

FASE

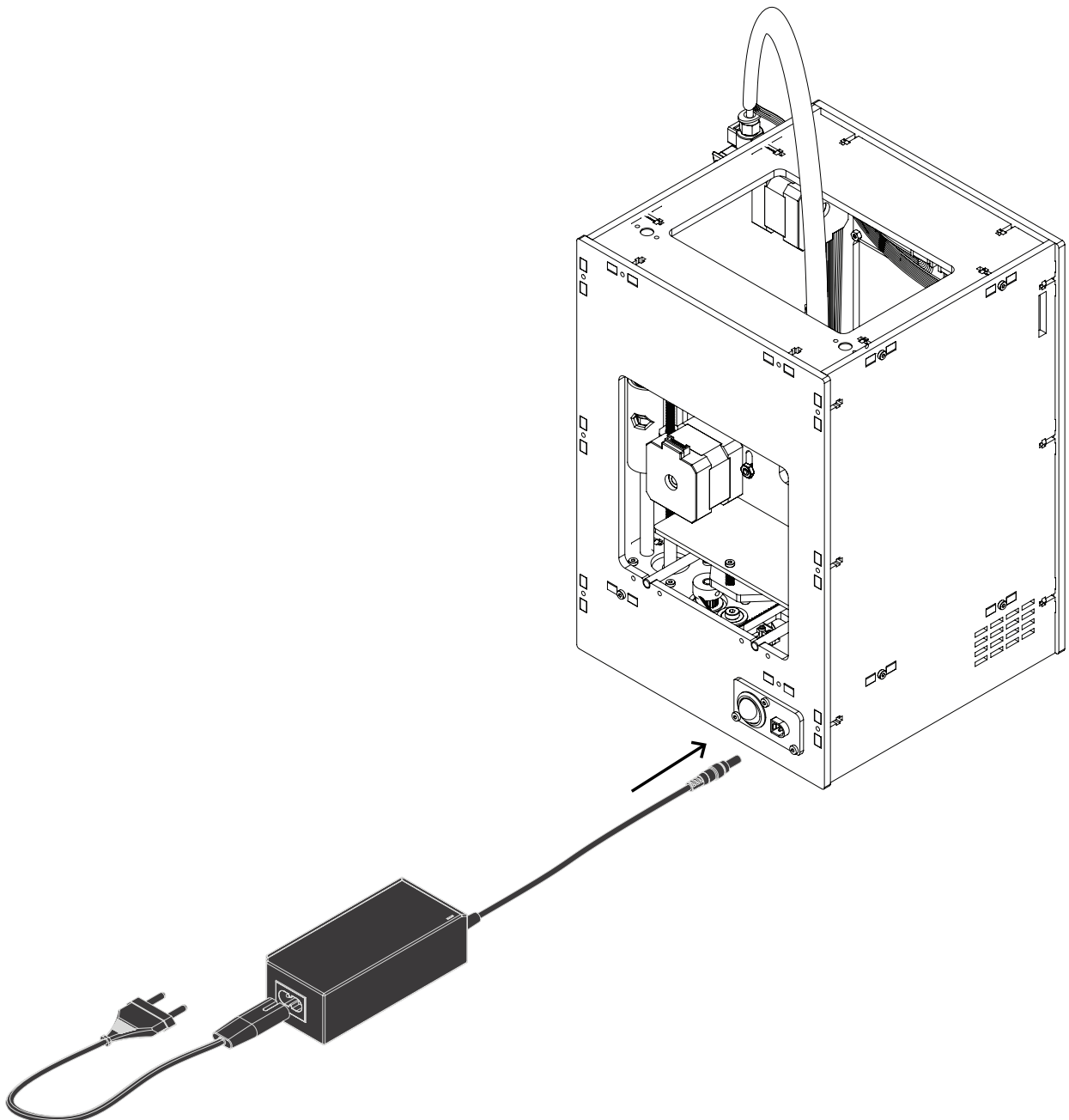
6

Q

You will need:
Vais precisar:



Estrutura Estrutura

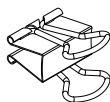


LAST ASSEMBLY

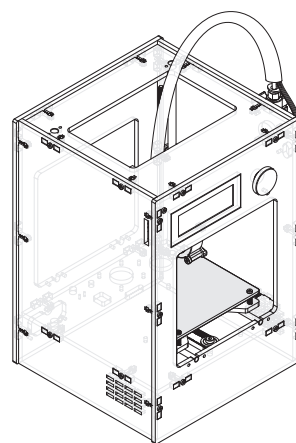
ÚLTIMA MONTAGEM

You will need:
Vais precisar:

TOOLBOX

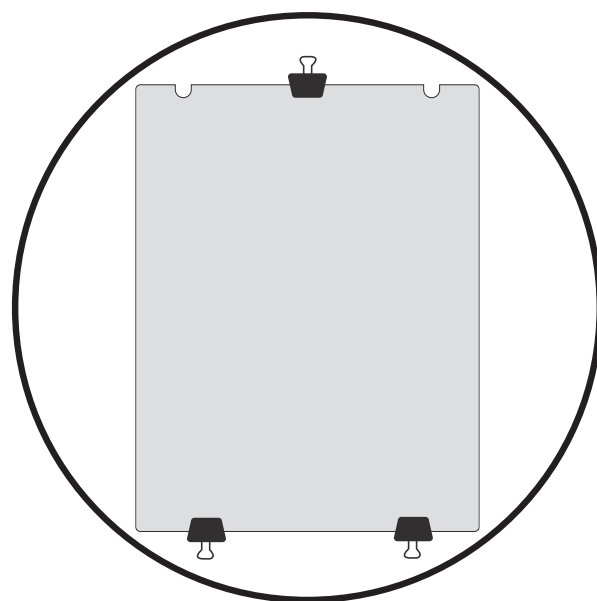
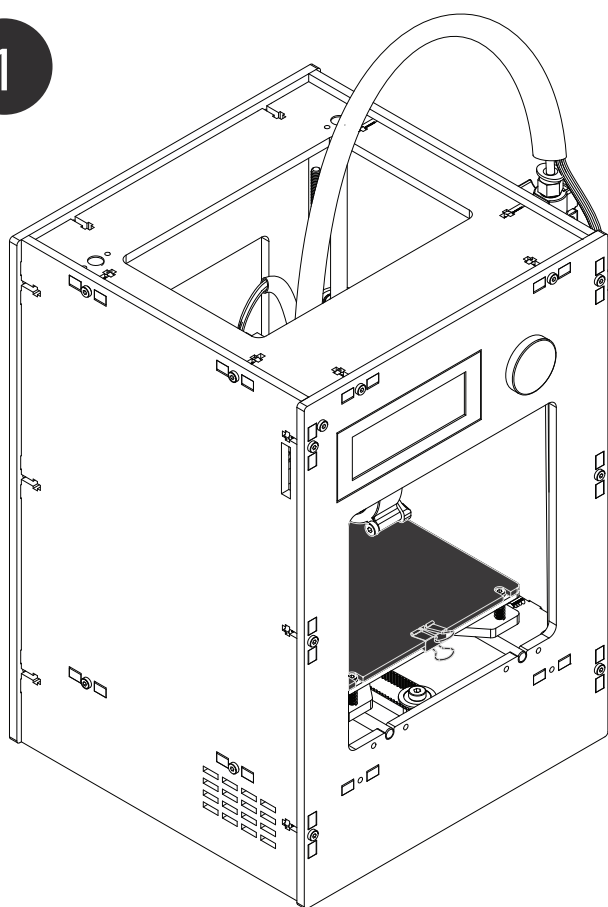


2x Metal Paper Clip Grampo

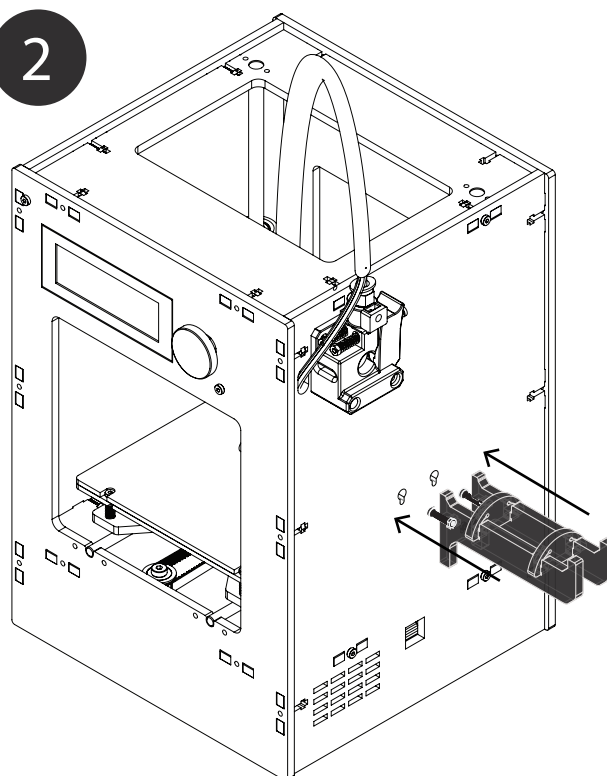


Structure Estrutura

1



2



BLOCKS

Congratulations!

Now that your printer is assembled, follow the step by step instalation guide and your printer will be up and running in no time!

Parabéns!

Agora que a tua máquina está montada, segue o guia de instalação passo a passo e a tua impressora vai estar pronta a imprimir em menos de nada!

