ELISAVA
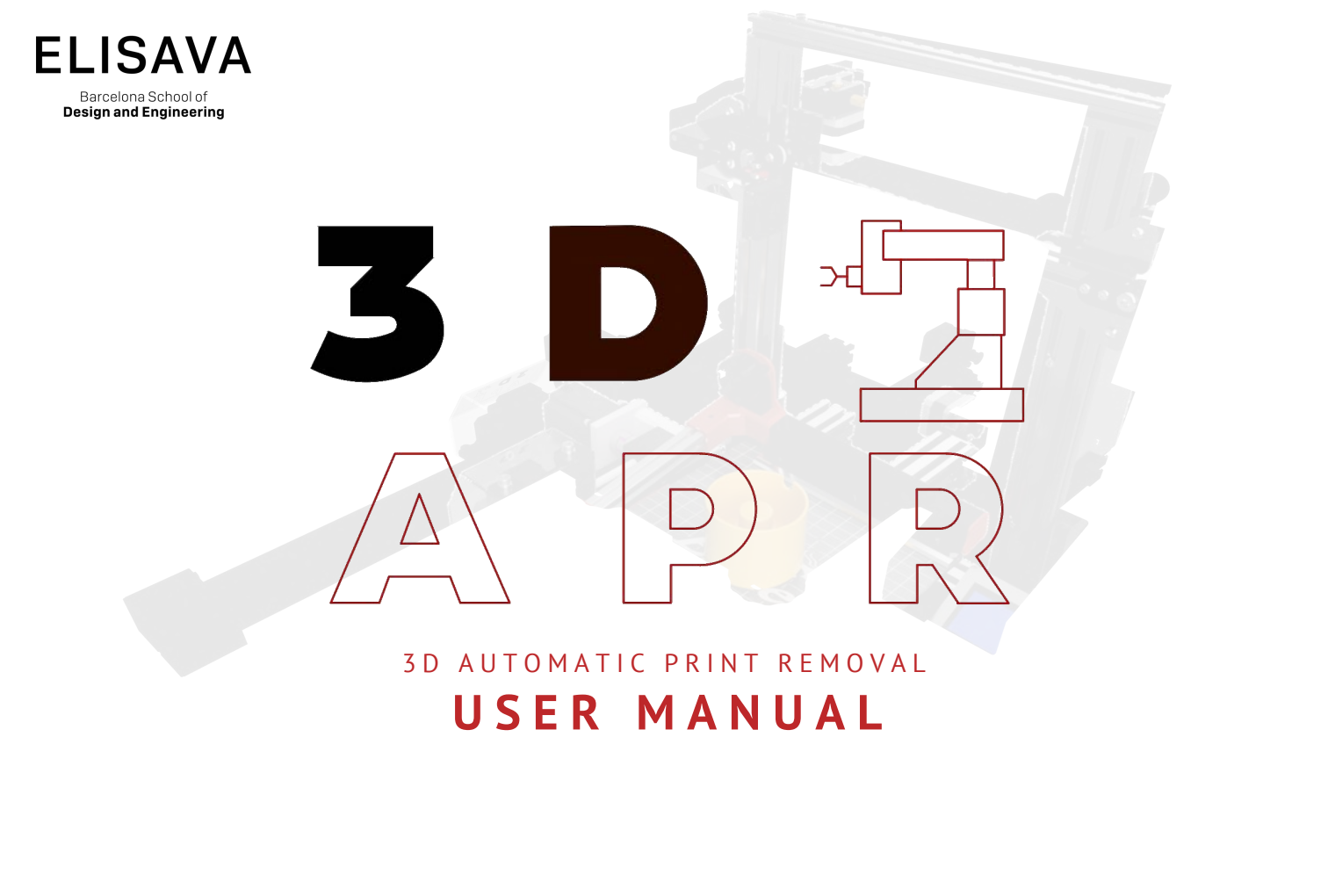
Barcelona School of
Design and Engineering

3D
APR

3D AUTOMATIC PRINT REMOVAL
USER MANUAL

CONTENTS
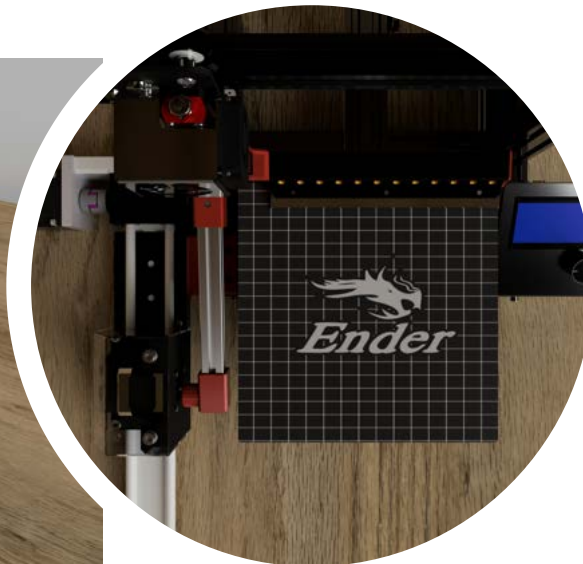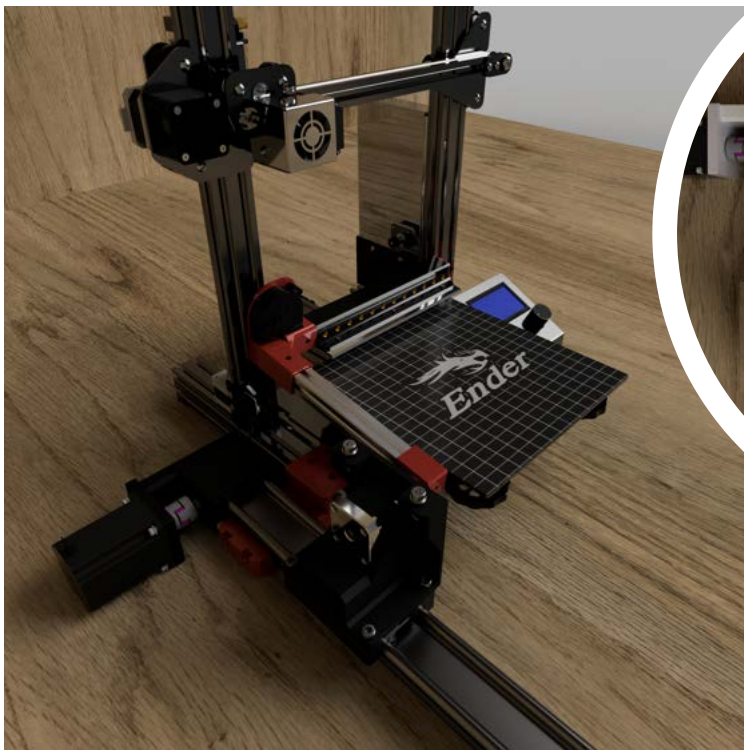
INTRODUCTION

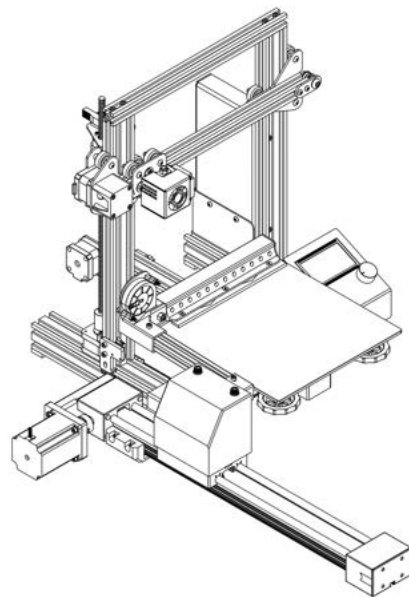

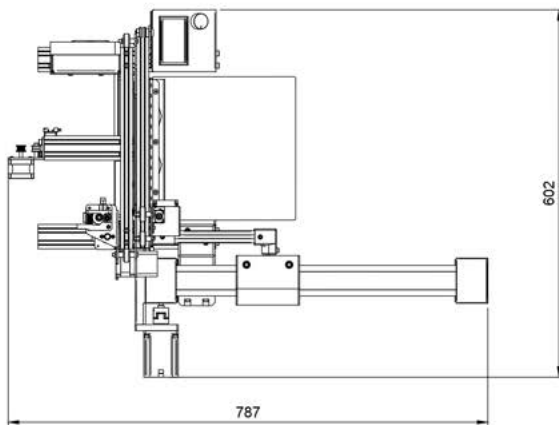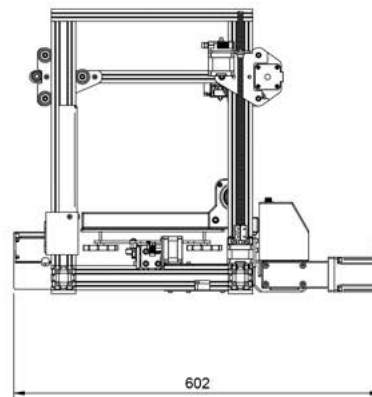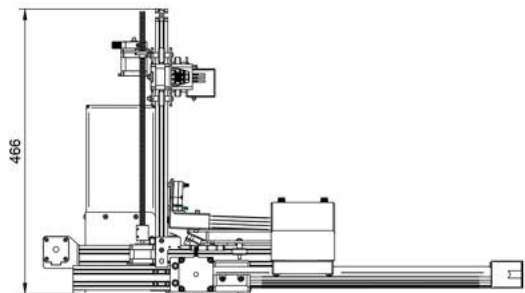In association with Creality and IGUS, 3D APR is a system which allows for hands-free extraction of a printed piece, both for safety and continuous production reasons.

4

PRODUCT OVERVIEW

466

602

602

787
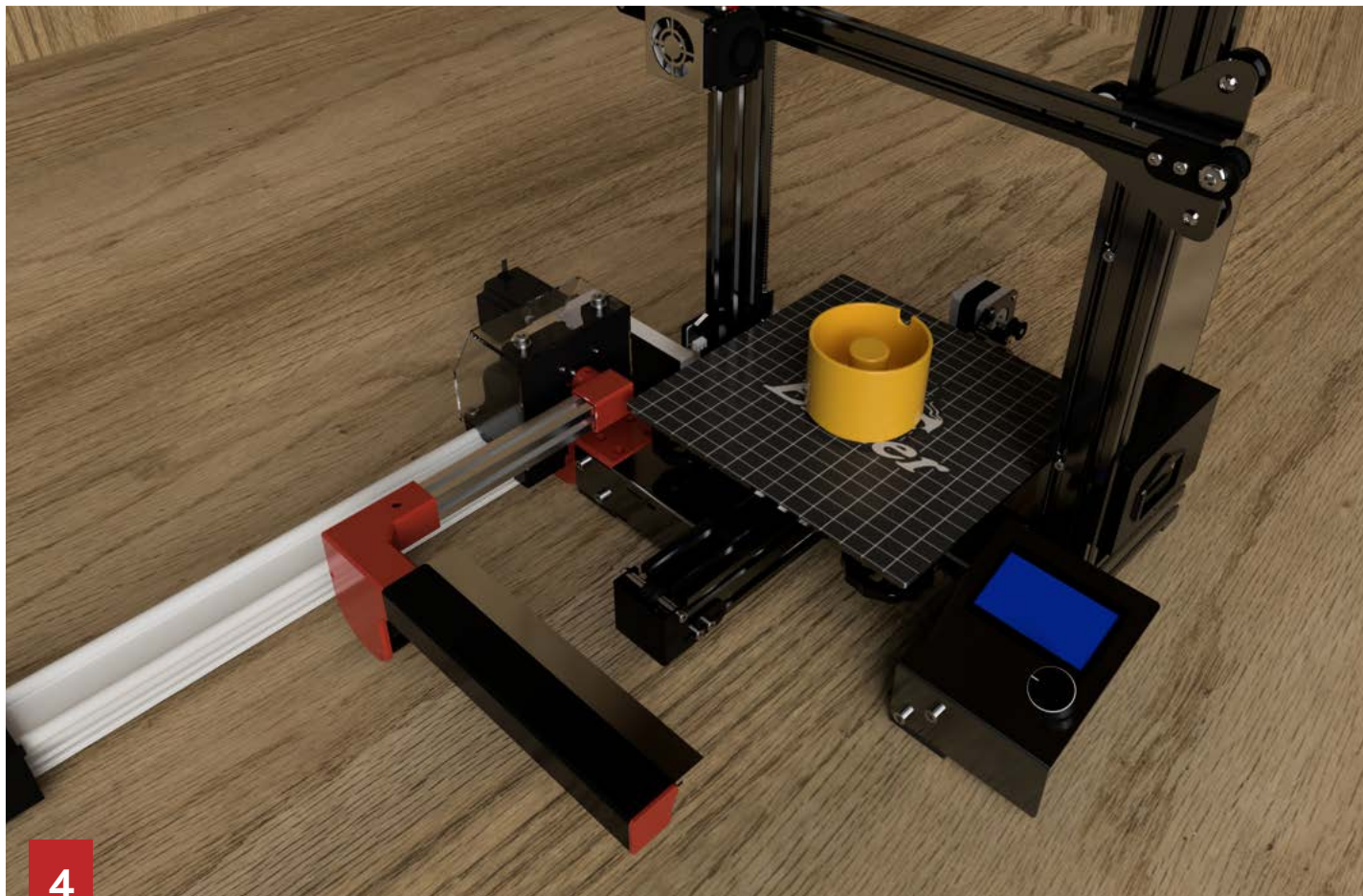
General Description

Assembly of 3D APR, IGUS DLE and Creality Ender 3 Pro
Includes all necessary components (aside from 3D Printed parts)
3D Printed parts in ABS Plastic

Technical Specifications

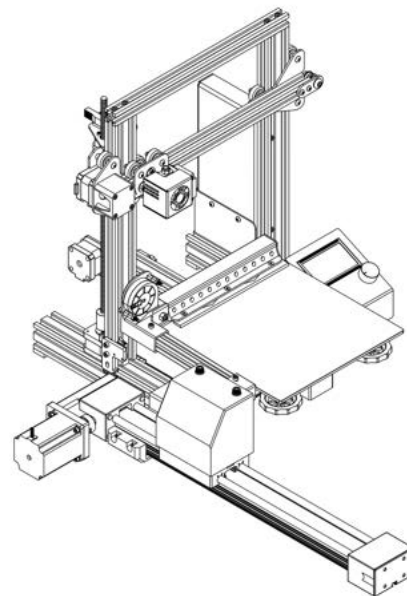**General Dimensions:** 466x787x602 ⊠[mm]
Weight: 10.3 ⊠[kg]
Stepper Motor Torque: 0.53 ⊠[Nmm]
Stepper Motor Power: 0.2 ⊠[W]
5015 Fan Airflow: 8.5 ⊠[L/s]
Input Voltage: 220 ⊠[V]
Linear Actuator Model: IGUS DLE-FG-0003

Maintenance

Clean all components with a soft rag with no abrasives or solvents
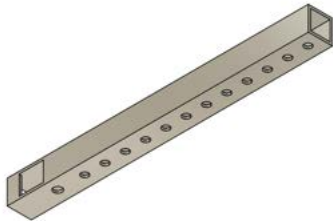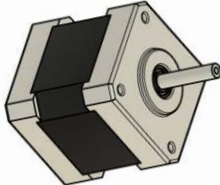
European Legislation

CE
85/374/CEE
2004/48/CE

UNE-EN- ISO/ASTM 17296-3:2017

PACKAGE LIST

Structural Components

Square Aluminum Tube	2020 Extrusion	Scraper x3

Electronic Components

LongRunner Stepper Motor Nema17	5015 Spiral Fan

Fasteners

M3x7 DIN912 x4pcs	M4x10 DIN912 x8pcs
M4x5 DIN7991 x3pcs	M4x16 DIN912 x4pcs

USB Drive x1pcs

M4x30 DIN912 x2pcs

M6x16 DIN912 x4pcs	M4 T-Nut x6pcs

M6x30 DIN912 x5pcs
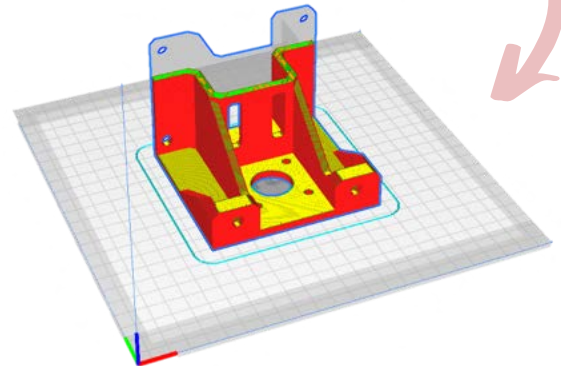
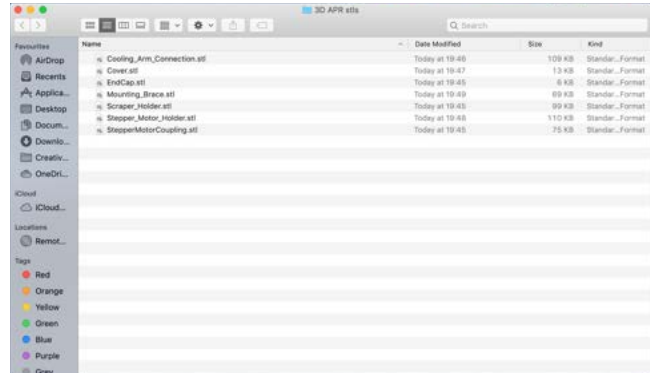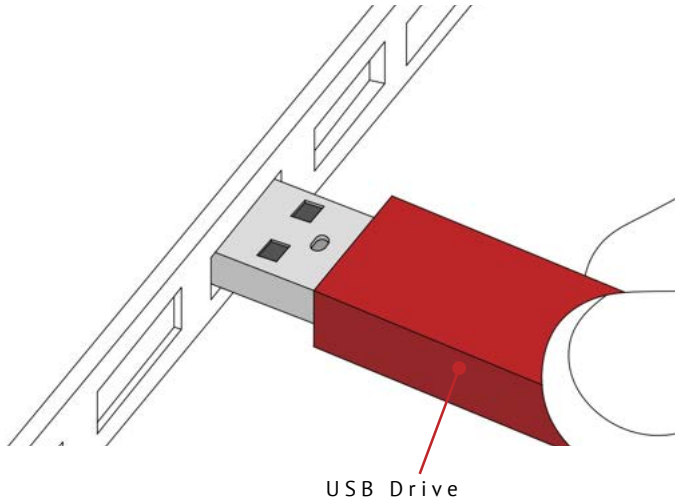|	
M4 Hex Nut x2pcs	M6 Hex Nut x3pcs

Other Components

IGUS DLE-FG-0003
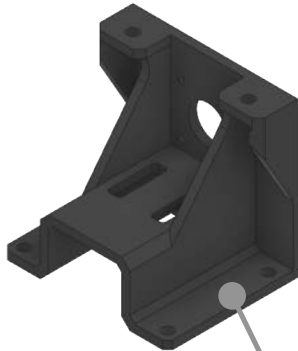

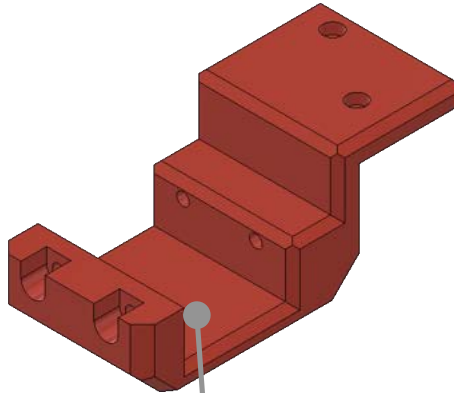Creality Ender 3 Pro

ASSEMBLY

3D print all the included files (found in the included USB Drive) in ABS Plastic with the Creality Ender 3 Pro
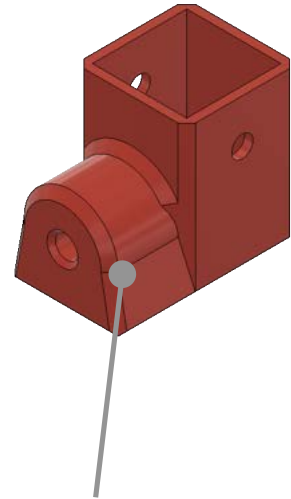

USB Drive

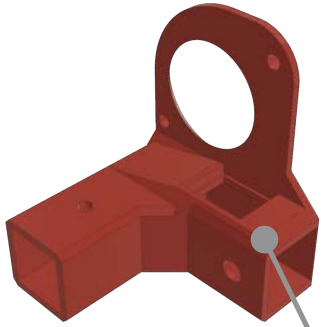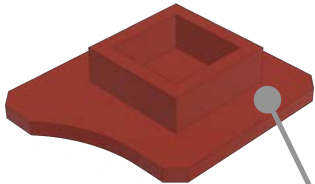Parts that need to be 3D printed:
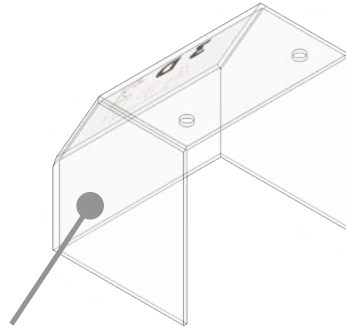
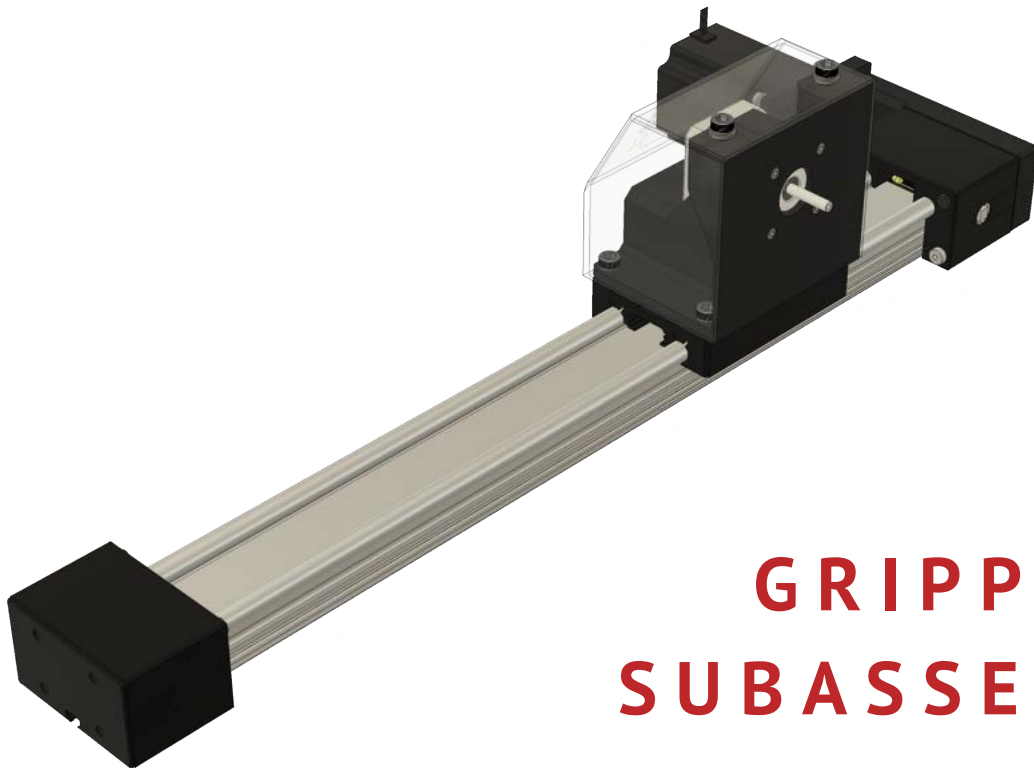Stepper Motor
Holder

Mounting
Brace

Stepper Motor
Coupling

Cooling Arm
Connection

Scraper Holder

End Cap

Cover

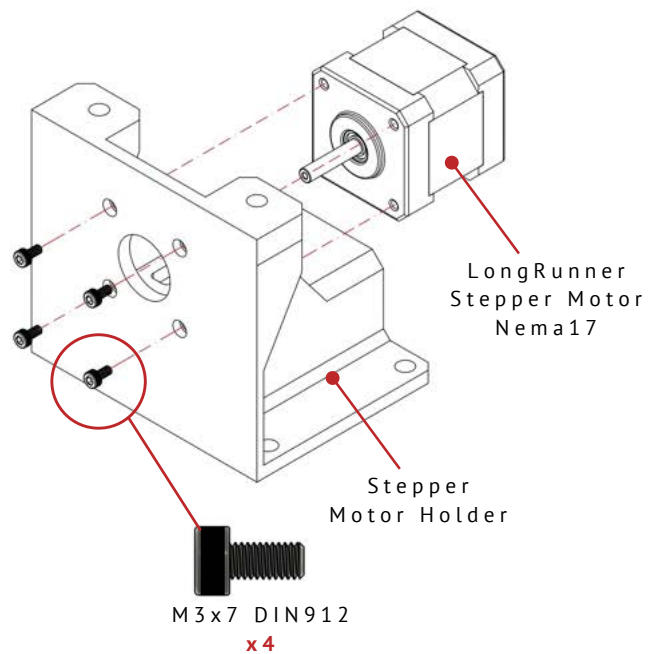**GRIPPER SUBASSEMBLY**

LongRunner
Stepper Motor
Nema17

Stepper
Motor Holder

M3x7 DIN912
x 4

Step 2

M6x30 DIN912
x 4

IGUS DLE-FG-0003

M6x16 DIN912
x2

M6 Washer
x2

Cover

M6 Hex Nut
x2

ARM
SUBASSEMBLY
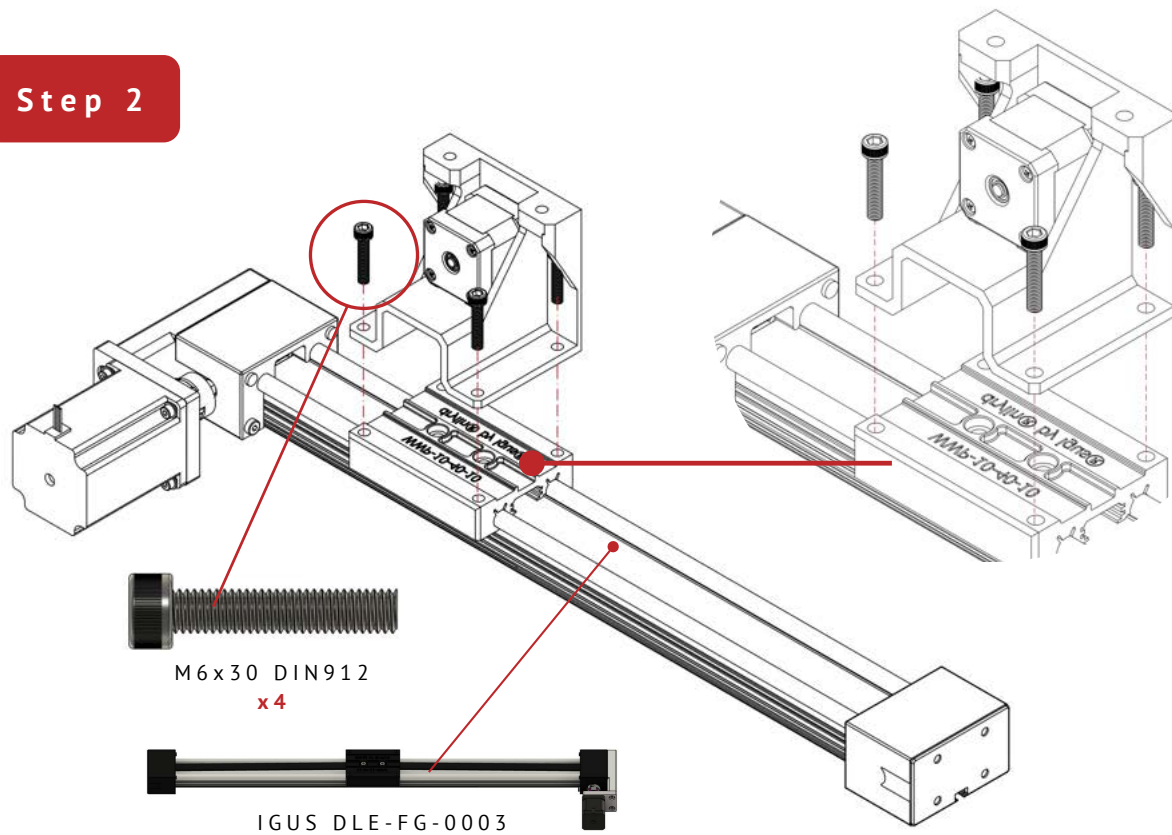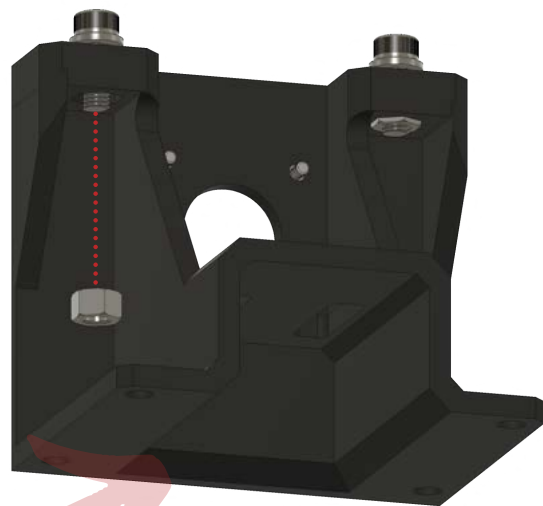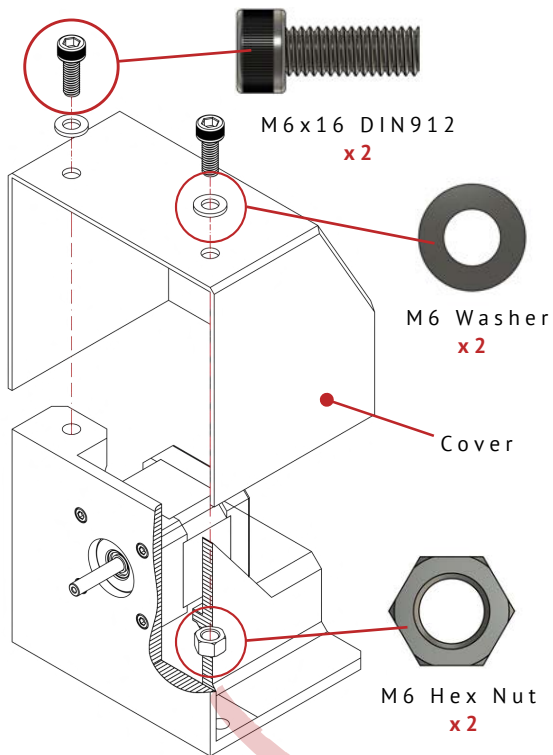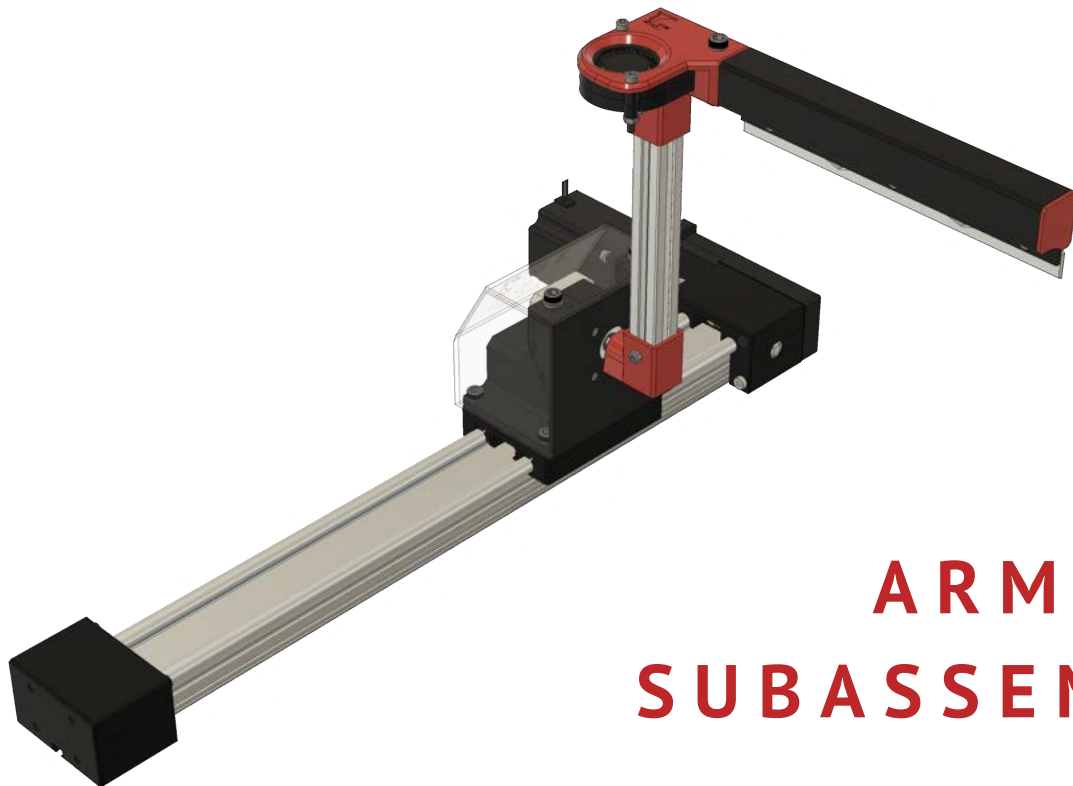
M4x10 DIN912
x2

M4 T-Nut
x2

2020 Extrusion

Stepper Motor
Coupling
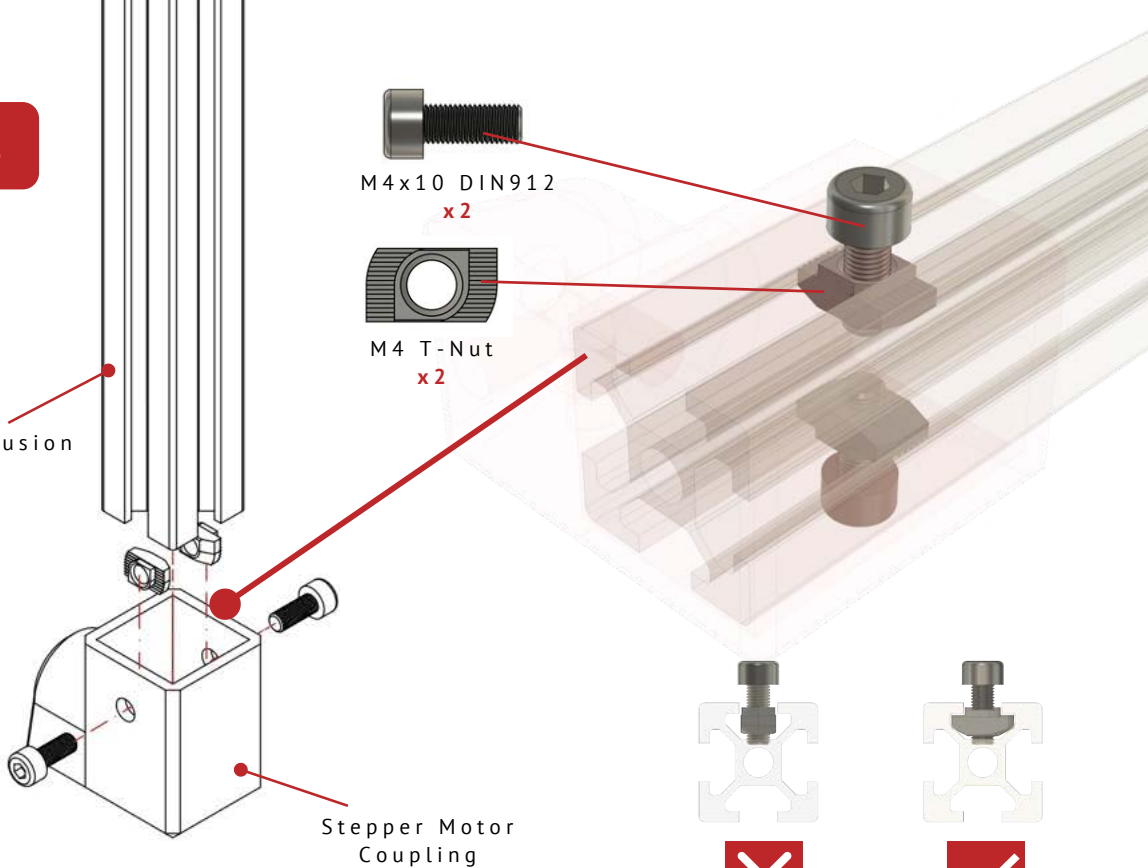
M4x10 DIN912
x 2

M4 T-Nut
x 2

Cooling Arm
Connection

5015 Spiral Fan

M4 Hex Nut
x 2

M4x30 DIN912
x 2

M6x30 DIN912
x 1

M6 Hex Nut
x 1

Square
Aluminum Tube

Scraper
Holder

End Cap

Step 6

M4x5 DIN7991
x3pcs

Scraper
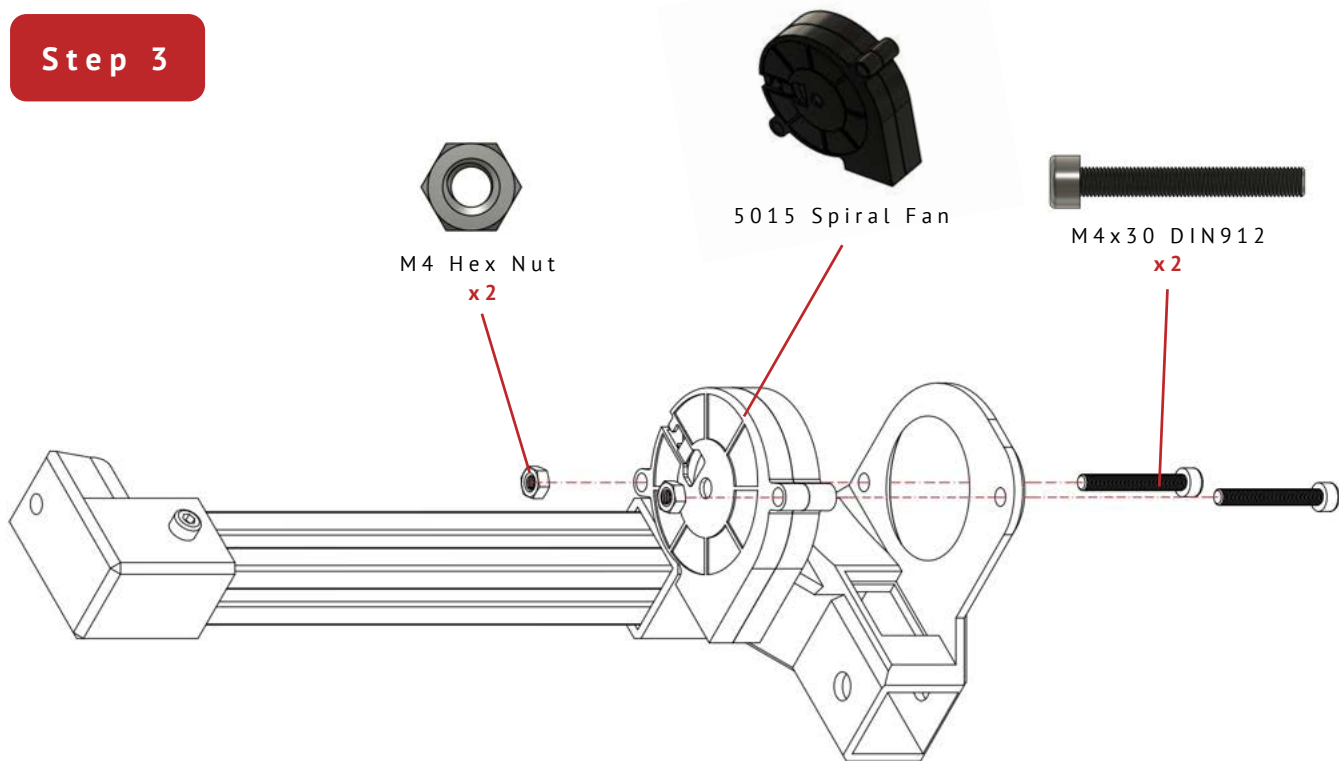**x1pcs**

Arm

Gripper
Subassembly
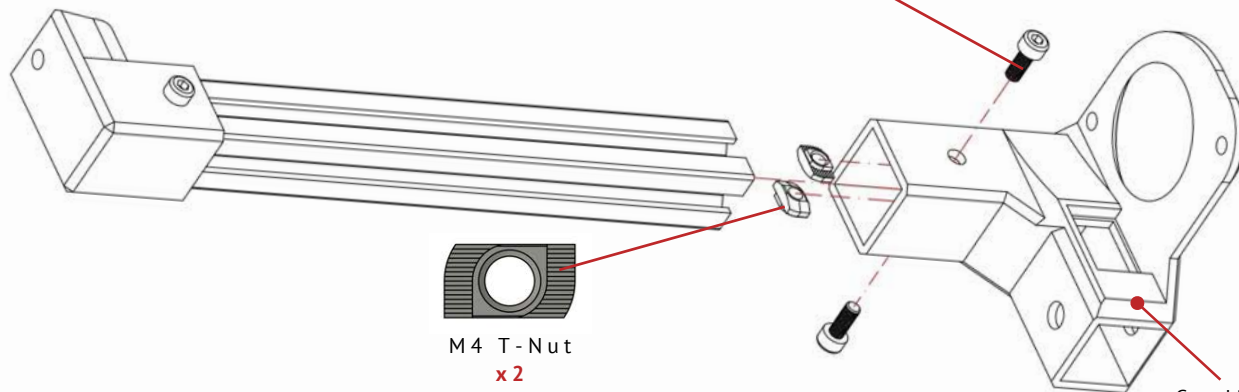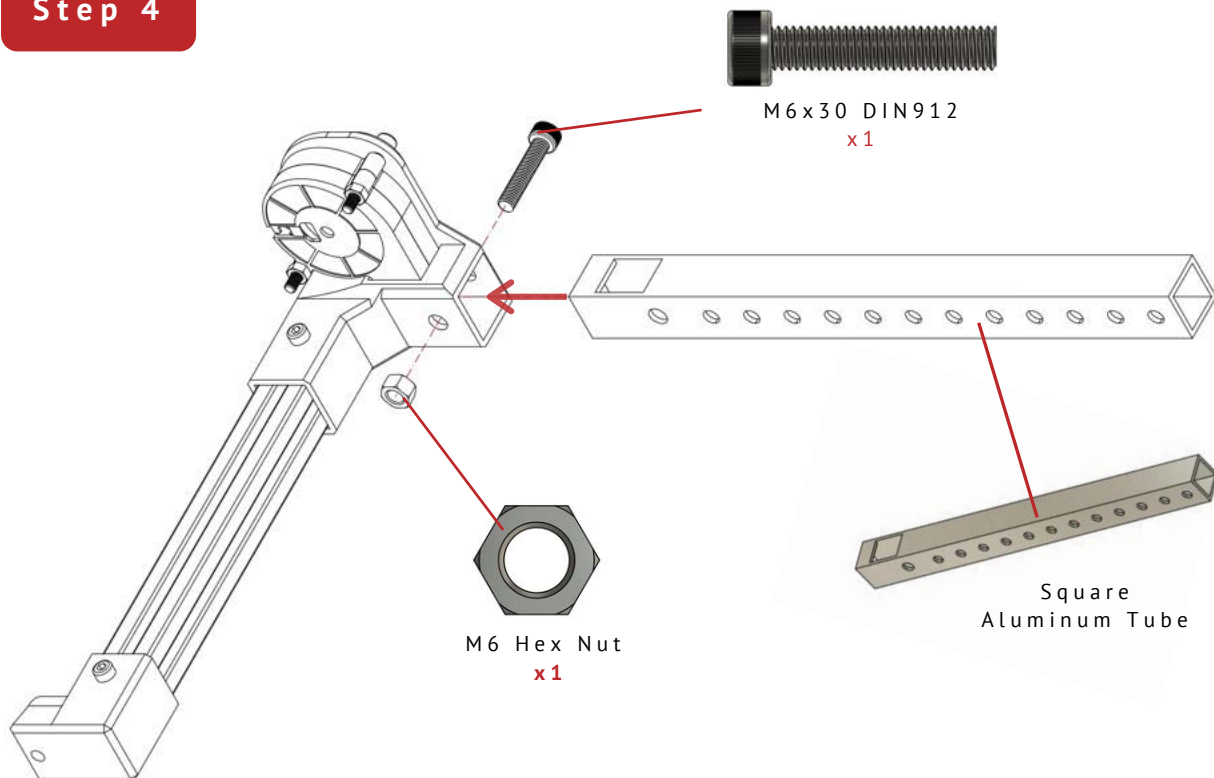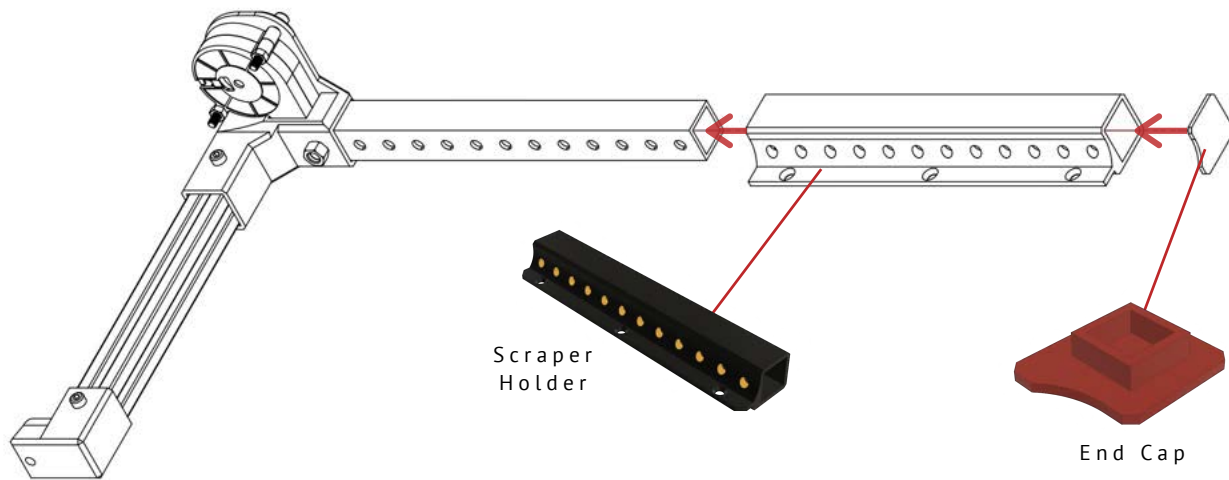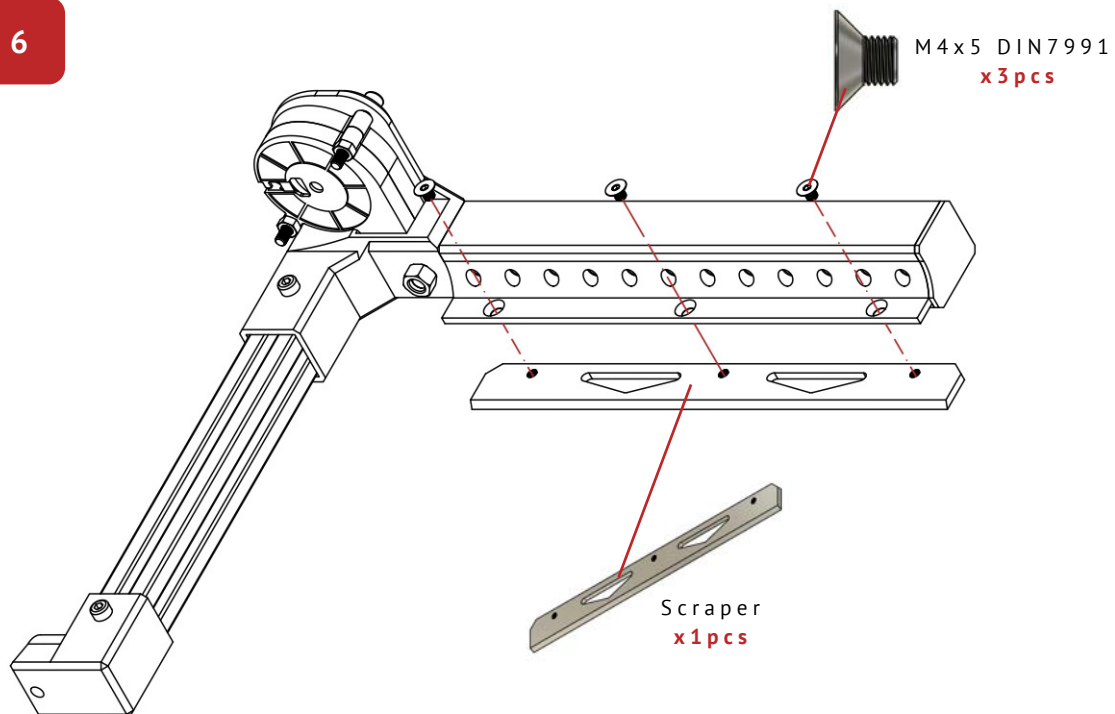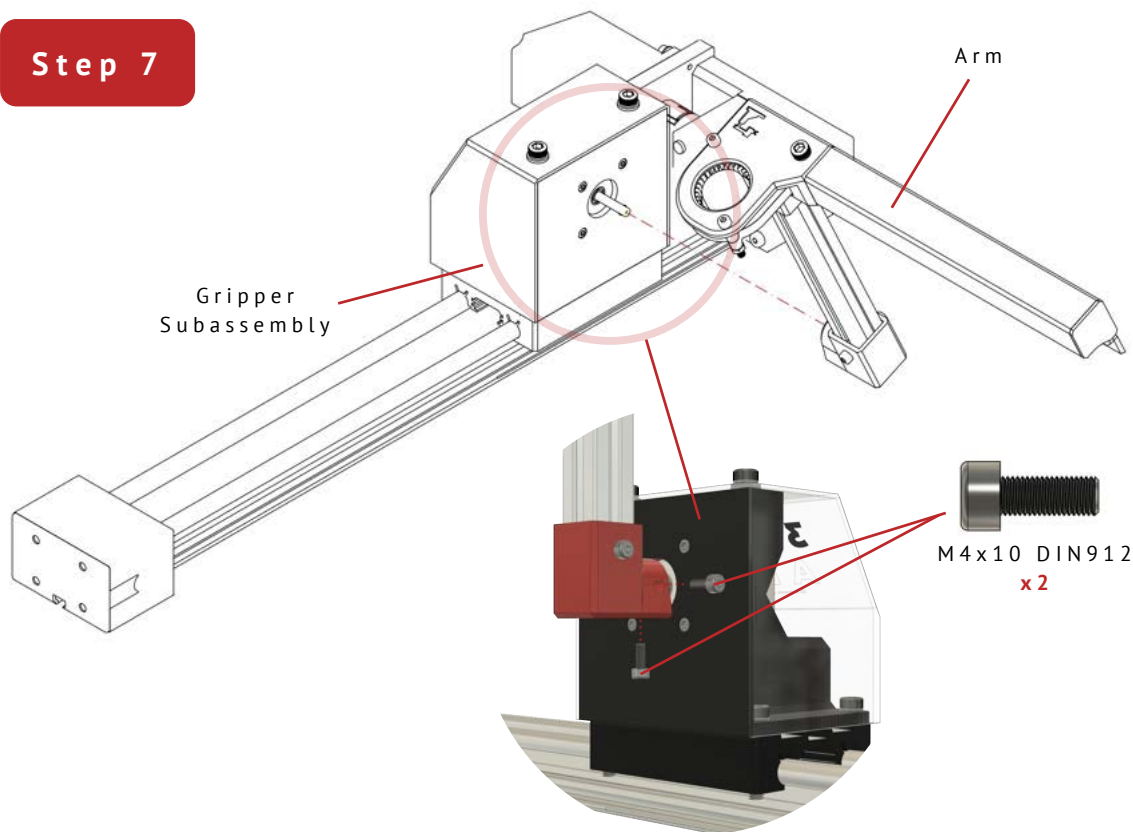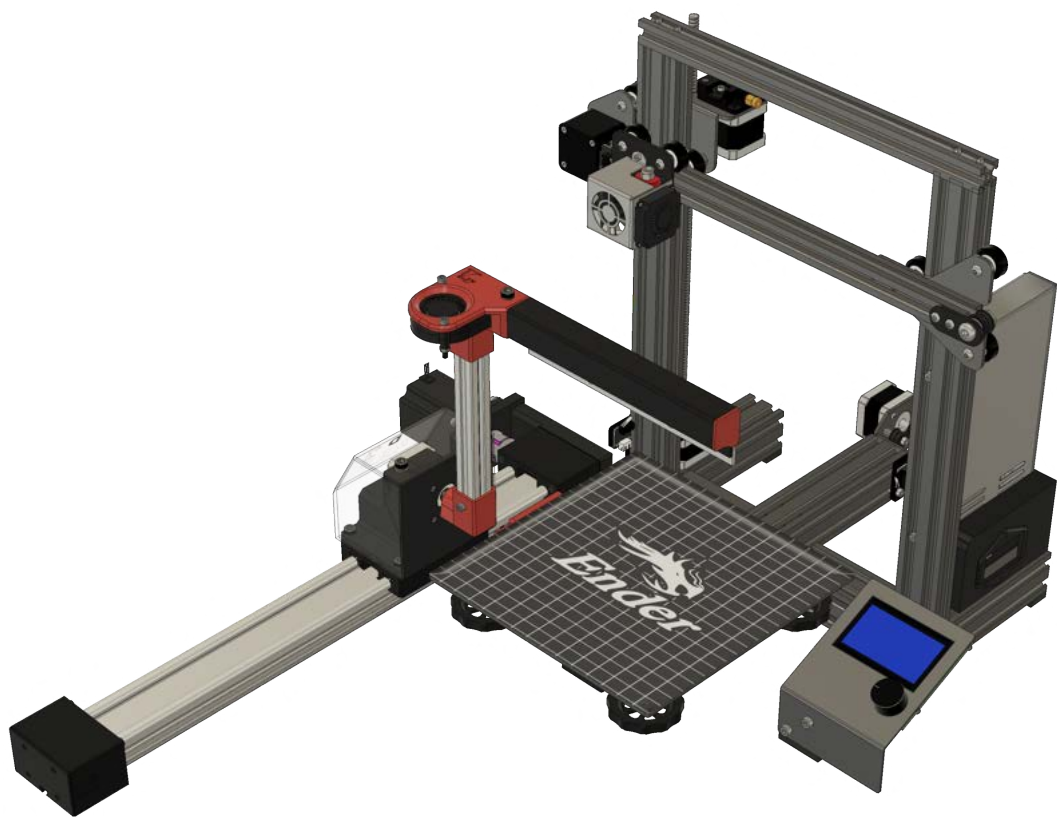
M4x10 DIN912
x2

ENDER 3 SUBASSEMBLY

Mounting Brace
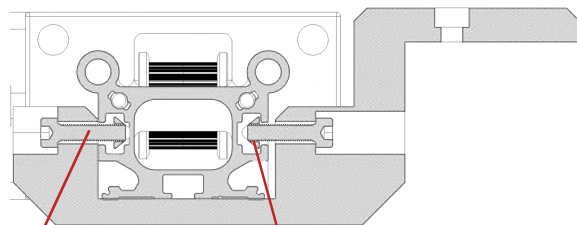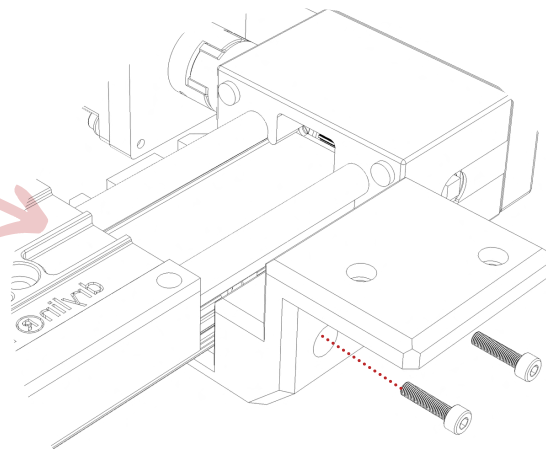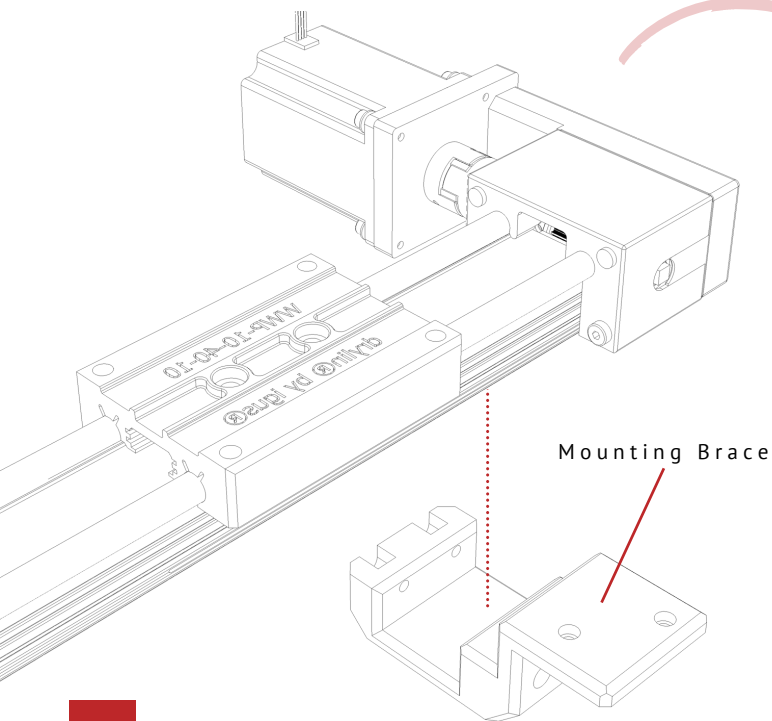
M4x16 DIN912
x 4

M4 T-Nut
x 4

Creality Ender 3 Pro
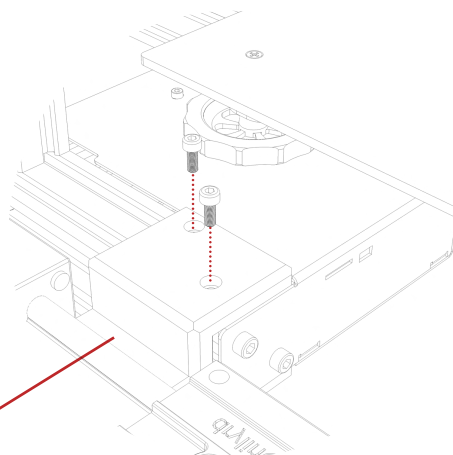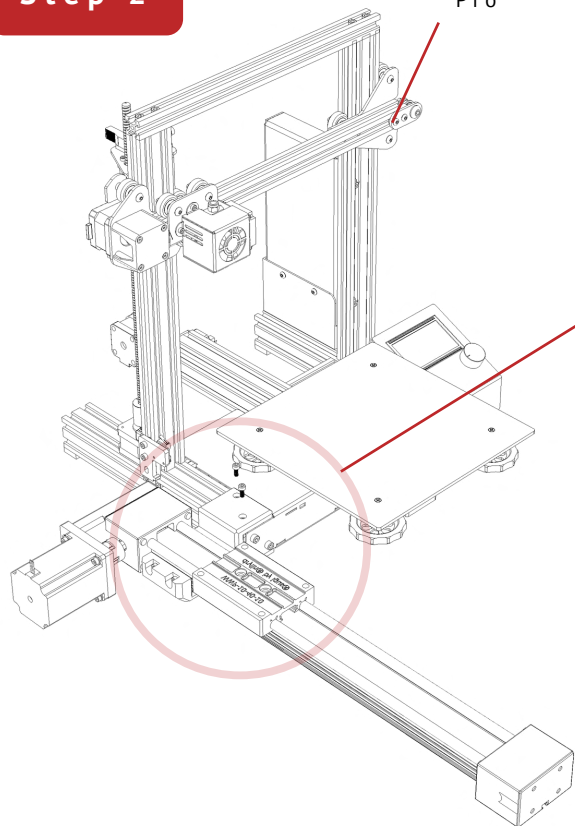
M4 T-Nut
x 2
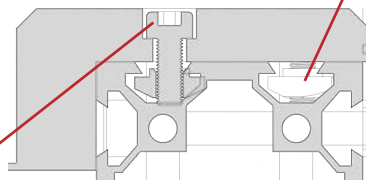
M4x10 DIN912
x 2

OPERATION

Step 1
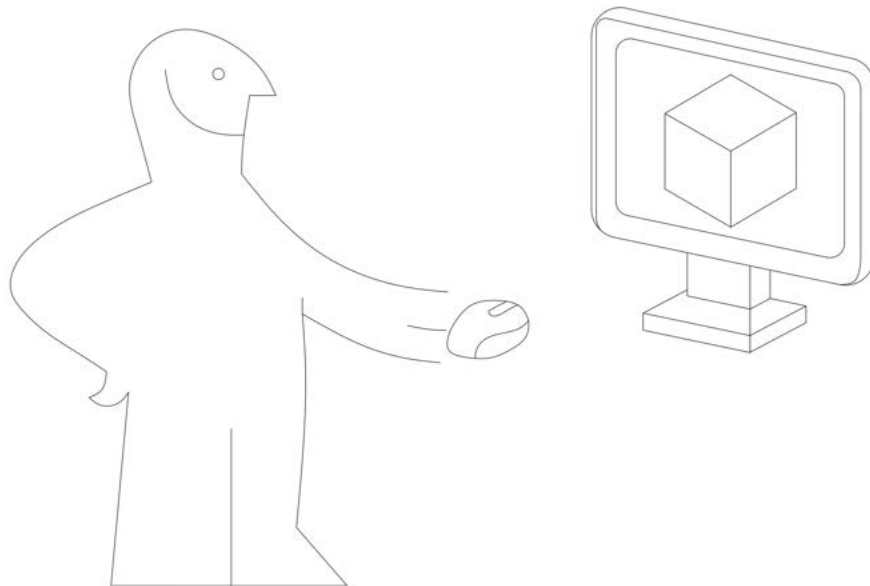
Design your piece in your preferred CAD software
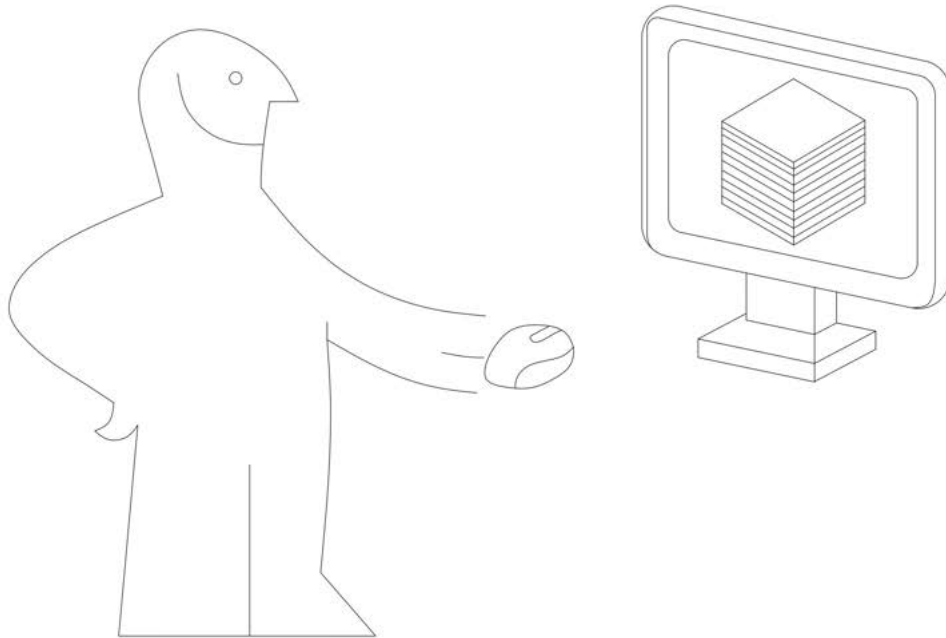
Slice the designed part using your preferred slicing software
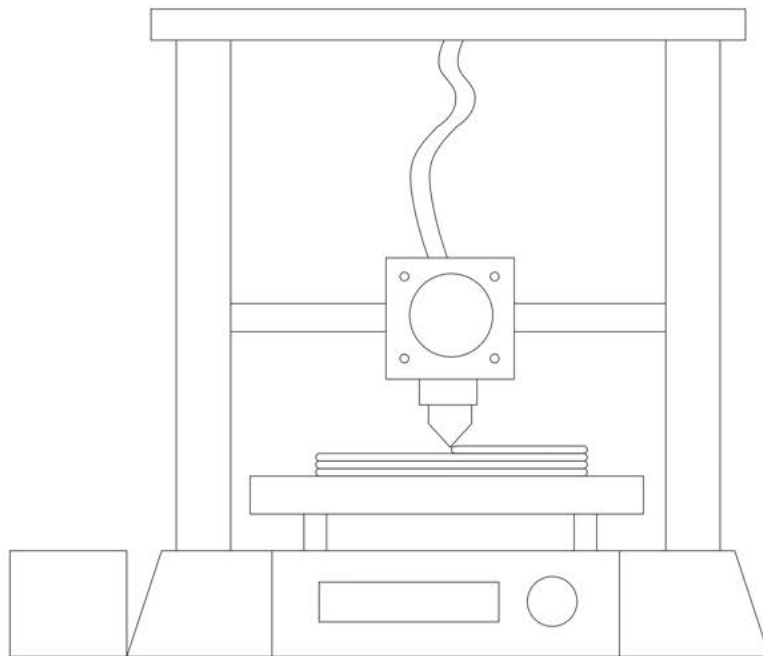
Start 3D Print using Creality Ender 3 Pro 3D Printer
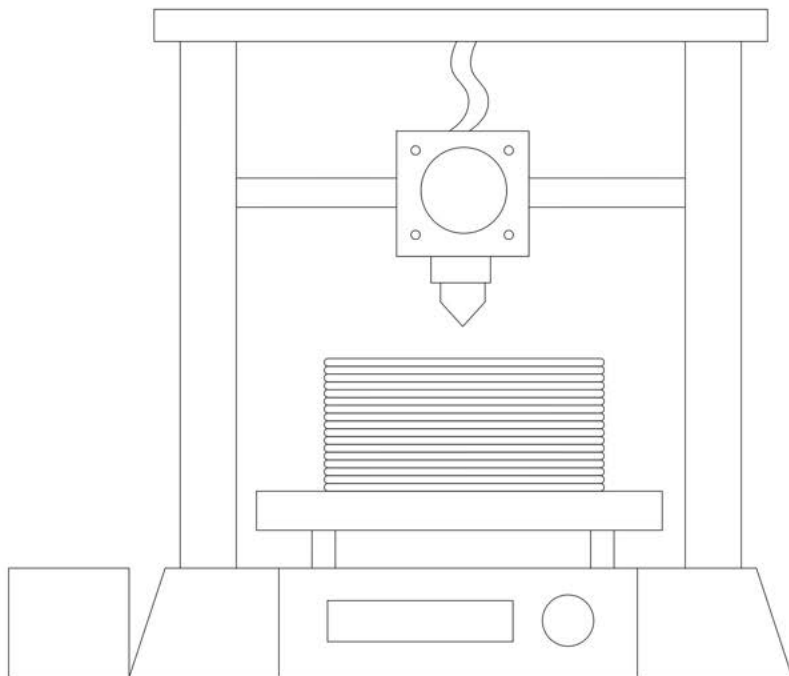
Wait for print to finish
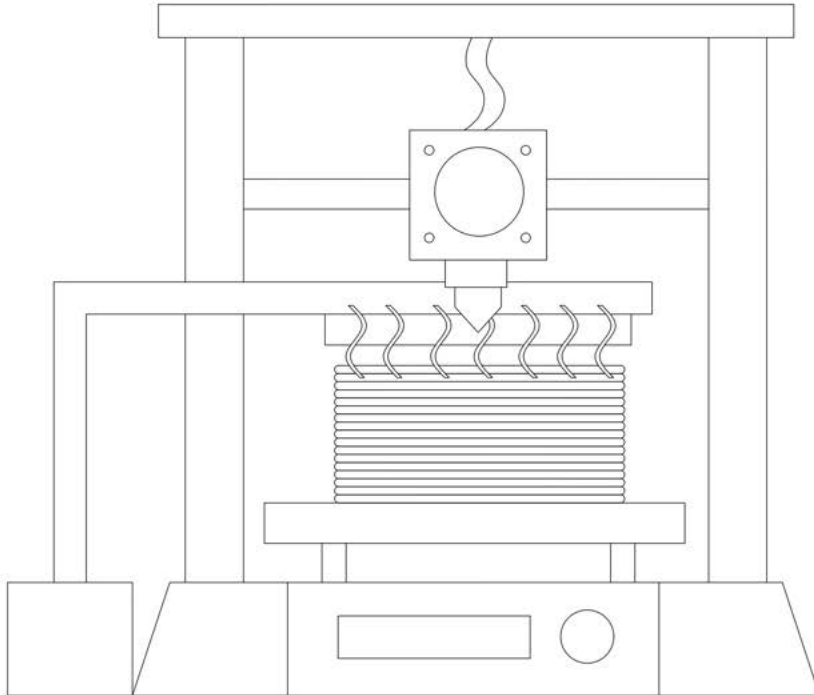
3D APR will commence the cooling process by activating the
5015 Spiral Fan and performing 3 cycles
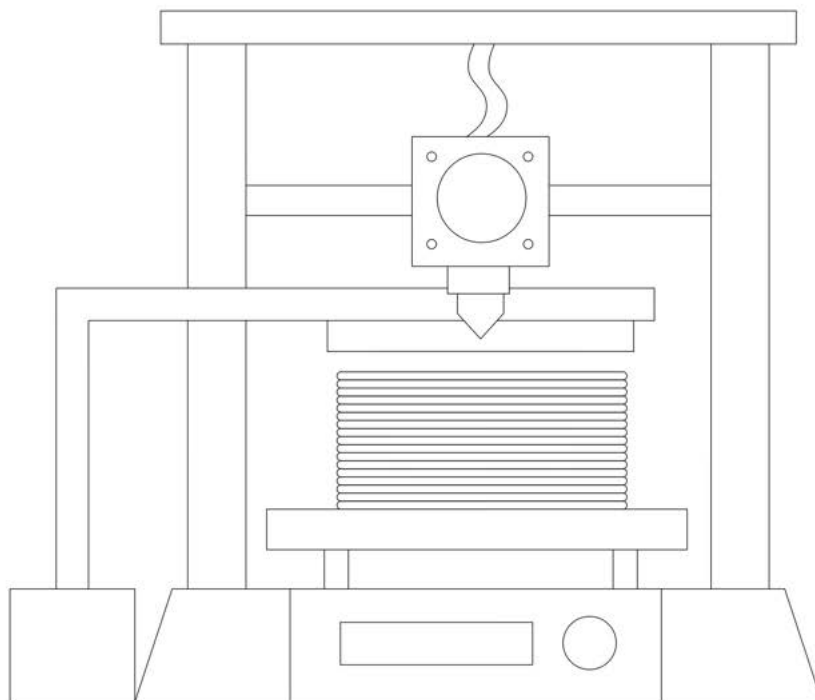
The piece is extracted using the linear movement of the actuator
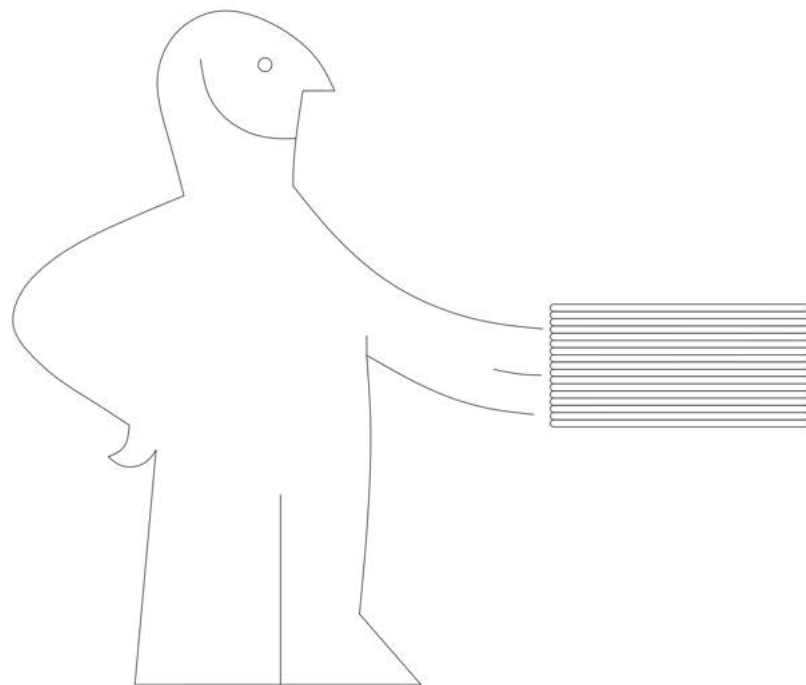
Pick-up the extracted piece

COMPANION APP

This companion app tells the user how much time is left before the print taking place finishes and the amount of prints it has already done.

Download the app now!

Create a username and a password

Enter and set-up your 3D Printer(s)

TROUBLESHOOTING

Q&A support team is on standby and ready to help you with any problems you may have with your 3D APR kit. If the issues or questions are not covered in this User Manual, you can seek for solutions on our official website or contact us via email.
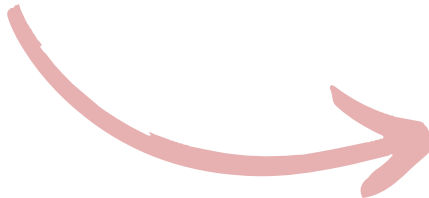
The Q&A support team can be reached by e-mail between the hours of 8:00 a.m. to 5:00 p.m. (PST) Monday through Saturday. In case you contact us during off-duty time, your inquiry will be answered the following business day.

Official Website: www.q&a.com
Email: support@q&a.com
ADD: ELISAVA, La Rambla, 30, 32, 08002 Barcelona

Find Us Socially:
Facebook (@3DAPR)
Instagram (@3DAPR)
Twitter (@3D_APR)

When contacting support, please have your serial number ready.