

TORNADO^{G1}

CONSTRUCTION MANUAL

3-7
YEARS



Length	97 - 127 cm / 38 - 50 inch
Max weight	31 kg / 69 lbs
Time to build	3,5 hours



World's first real constructible rides



WARNING - IMPORTANT NOTICE TO PARENTS

Before you start constructing and use our product, please carefully read the following safety warning and download our manual from our website. This safety warning and manual contains important information relating to your child's safety. It is your responsibility to review this information with your child and make sure they are fully aware of all the warnings before they start riding. Failure to follow instructions and safety precautions can result in serious injury or death.

You can find a digital copy of the manual at the following web address:

www.infentorides.com

PLEASE PRINT OUT THE MANUAL AND KEEP THE MANUAL AND THIS **SAFETY WARNING** IN A SAFE LOCATION FOR FUTURE REFERENCE.

SAFETY SECTION



WARNING! PARENTAL SUPERVISION AND APPROPRIATE USE

Like any moving product, rides made from Infento parts can be dangerous if due care and attention is not paid. To reduce the risk of serious injury: use only under close adult supervision. Parents must review the following warnings and instructions with each Infento ride that is being built. It is your responsibility to review this information and make sure that all riders understand all warnings, cautions, instructions and safety topics, and assure that young riders are able to safely and responsibly use this product. Infento recommends that you periodically review and reinforce the information in this manual with younger riders, and that you inspect and maintain your child's Infento rides to insure their safety.

WARNING! RIDING ON INFENTO RIDES CAN BE A DANGEROUS ACTIVITY

Riding on Infento rides can be a dangerous activity. Certain conditions may cause the equipment to fail without fault of the manufacturer. Rides made from Infento parts can and are intended to move, and it is therefore possible to lose control, fall off and/or get into dangerous situations that no amount of care, instruction or expertise can eliminate. If such things occur you can be seriously injured or die, even when using safety equipment and other precautions. Ride at your own risk and use common sense.

WARNING! NO LIABILITY FOR CONSTRUCTED RIDES THAT DIFFER FROM OUR MANUALS

The rides that you can find in our manuals have been tested by official independent testing agencies. We will not be responsible or liable, directly or indirectly, in any way for any loss or damage of any kind incurred as a result of your decision to build constructions or rides that differ from the official rides that we show in our manuals.

ASSEMBLY – SUBSECTION

WARNING! OUR KITS CONTAIN SMALL PARTS

This package contains small parts which, before assembly, present a choking hazard to children under the age of three. Care should be taken

during unpacking and assembly to insure that all small parts and plastic bags are accounted for and kept out of the reach of children.

WARNING! TO AVOID SERIOUS INJURY:

1. Toys are to be assembled by an adult using Infento manuals.
2. All fasteners (bolts and nuts) should be fully tightened.
3. It is the responsibility of the adult who assembles this bicycle to properly install all parts included in the factory sealed shipping carton and to make the adjustments to the functional parts such as handle bar and seat and chain when necessary.

USE – SUBSECTION

WARNING! TO AVOID SERIOUS INJURY:

1. Continuous adult supervision is required.
2. Only ride constructed rides that have been built according to the instructions given in the official Infento manual.
3. Never exceed the maximum weight. You can find the maximum weight for every specific ride in our manual.
4. Always check the manual to see the minimum and maximum age as well as the minimum and maximum length for every specific ride.
5. Always wear safety equipment such as a helmet, knee pads and elbow pads. We recommend riders always wear a properly fitted helmet that complies with local or national guidelines or laws. Keep chinstrap of helmet securely buckled.
6. Always wear closed toed shoes (lace-up shoes with rubber soles), never ride barefooted or in sandals, and keep shoe laces tied and out of the way of the wheels.
7. Avoid streets and surfaces with water, sand, gravel, dirt, leaves, and other debris. Wet weather impairs traction, braking and visibility.
8. Excessive exposure to sunlight, temperatures below 0 degrees Celsius, water, sand, gravel, dirt, leaves, and other debris can damage, shrink, expand or weaken parts. Keep your ride in a dry environment with proper heating.
9. Avoid sharp bumps, drainage grates and sudden surface changes. Your Infento ride may suddenly stop.
10. Ride on smooth, paved surfaces away from motor vehicles. Wet, slick or uneven and rough

surfaces may impair traction and contribute to possible accidents.

11. Never risk damaging surfaces, such as carpet or flooring, by use of an Infento ride indoors.
12. Never use near motor vehicles, streets, roadways, alleys, swimming pool areas, hills, steps, sloped driveways, inclines and public highways.
13. Watch out for pedestrians, skaters, skateboards, scooters, bikes, children or animals who may enter your path, and respect the rights and property of others.
14. Avoid excessive speed associated with downhill rides.
15. Do not use at night or in periods with reduced visibility.
16. Before every use, please make sure that the complete ride and all joints have been assembled tightly, as with use, joints may wear out.
17. Before using your Infento ride, please check that the screws are tightened securely.
18. It's your own responsibility if you modify the product other than manufacturer's instructions.
19. Maintain a hold on the handlebars at all times.
20. Brake will get hot from continuous use. Do not touch after braking.
21. Periodically check hardware and tighten if necessary. Replace worn or broken parts immediately.
22. Skill is required to avoid falls or collision causing injury to the user and third parties.
23. Check operation of breaks every time before bicycle is ridden.
24. Check local laws before you start with riding.
25. Never tow wagons, other vehicles, or children on skates or skateboards.
26. Make certain that anyone who uses an Infento ride has been fully instructed in its operation.
27. Instruct your child on how to use the breaks.
28. Do not perform stunts.
29. Never use headphones or a cell phone when riding.
30. Only one rider at a time on an Infento ride.
31. Do not allow children to stand on the product at any time.

FAILURE TO USE COMMON SENSE AND HEED THE ABOVE WARNINGS INCREASES RISK OF SERIOUS INJURY. USE WITH APPROPRIATE CAUTION AND SERIOUS ATTENTION TO SAFE OPERATION.

SAFETY SECTION



OUR KITS CONTAIN SMALL PARTS

This package contains small parts which, before assembly, present a choking hazard to children under the age of three. Care should be taken during unpacking and assembly to insure that all small parts and plastic bags are accounted for and kept out of the reach of children.

QUESTIONS? HELP NEEDED?

You can email us at:
support@infentorides.com
and our team will assist you as soon as possible.



MAINTENANCE | INSTRUCTION



1. Oil or grease moving parts periodically.
2. Check nuts and bolts often and tighten if necessary.
3. Any parts showing evidence or wear should be replaced immediately.
4. Follow closely the assembly instructions pertaining to the proper adjustments of parts
5. Periodically check the brake system for proper function
6. Periodically check the steering mechanism for proper function
7. Check the air pressure in the tires to be the amount specified in the manual
8. Periodically check the bicycle's tooth belt to be sure that it is not too loose which could allow the chain to slip off the sprockets.

RECOMMENDED TOOLS



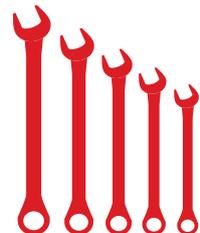
4 x Allen key
3, 4, 5, 6 mm



1 x Tapeline



1 x T-handle
for Allen key

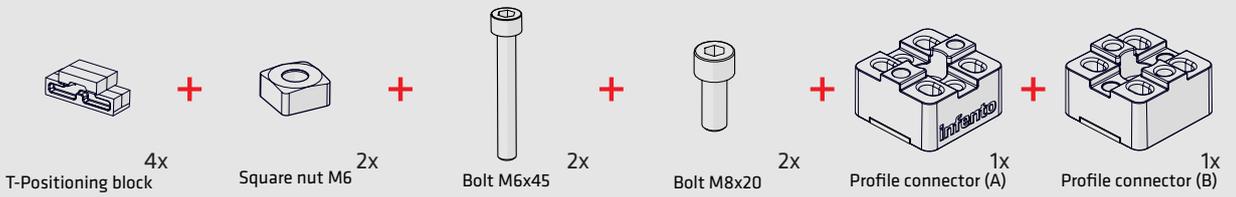


5 x Wrench
10, 13, 14, 15, 19 mm

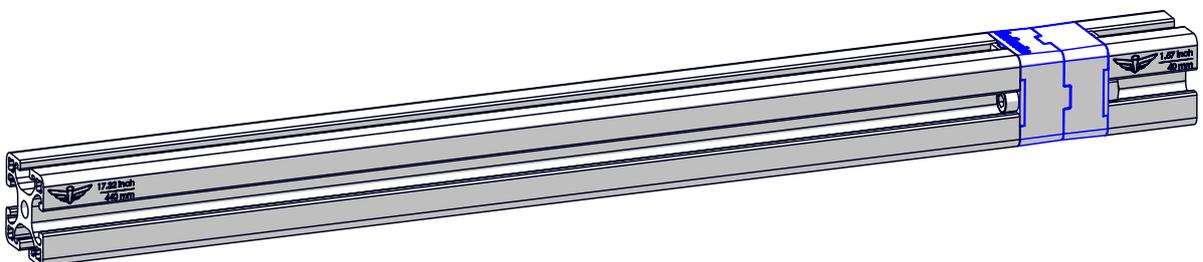
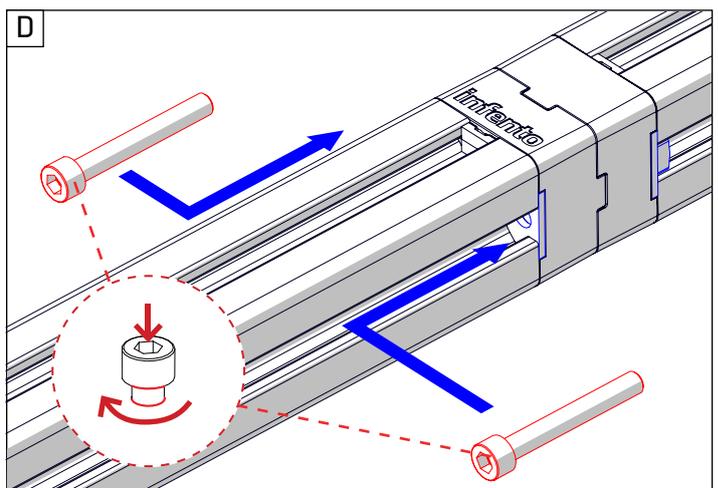
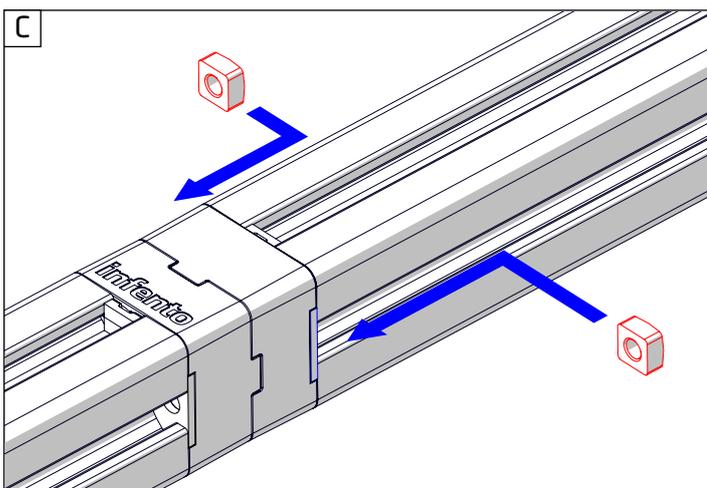
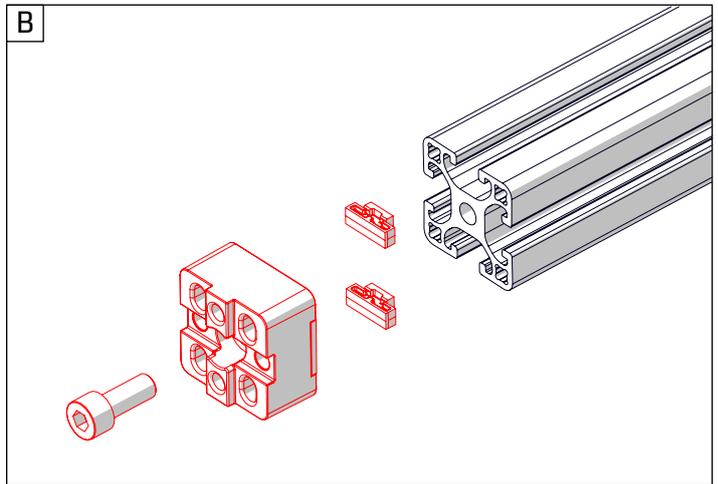
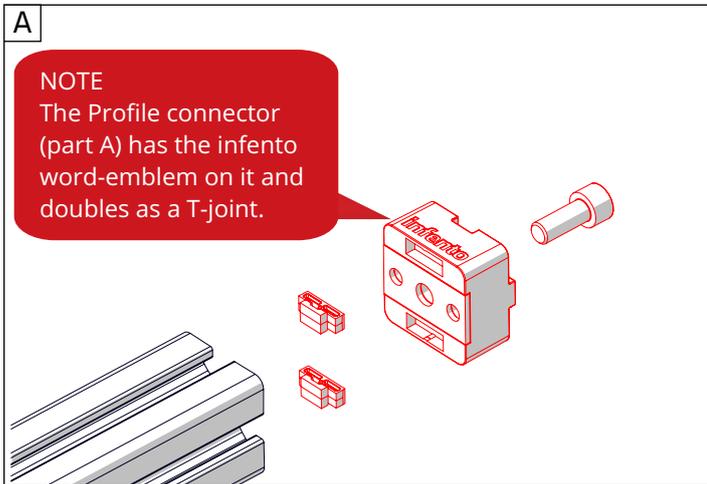
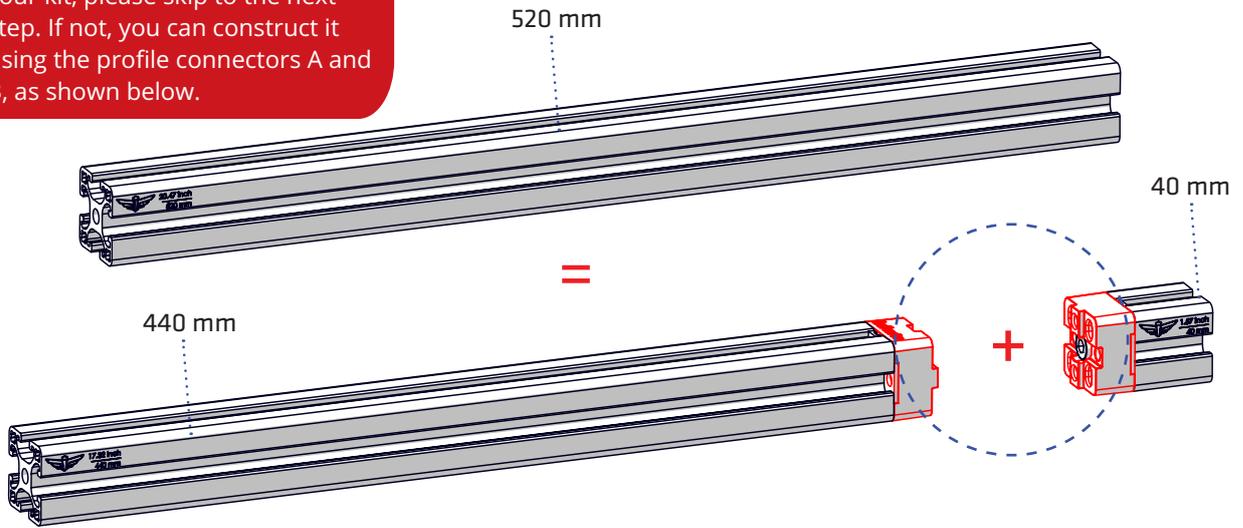


1

ride **TORNADO**



If you have the **520 mm** profile in your kit, please skip to the next step. If not, you can construct it using the profile connectors A and B, as shown below.





2

ride **TORNADO**



Bolt M8x20 nylock 2x
(low head)

+



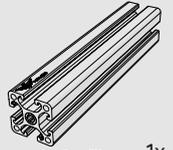
T-Positioning block 6x

+



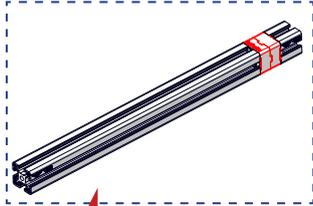
L-joint 2x

+

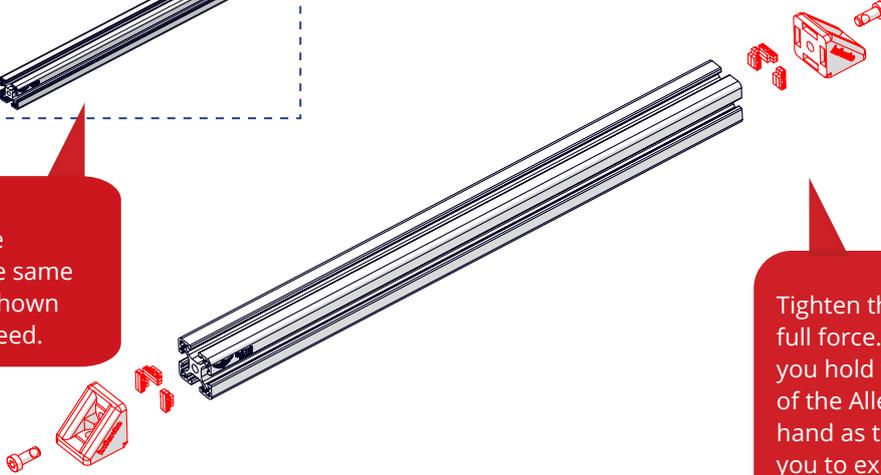


Profile 1x
20.47 inch | 520 mm

First, get all required materials stated here and then follow the instructions.

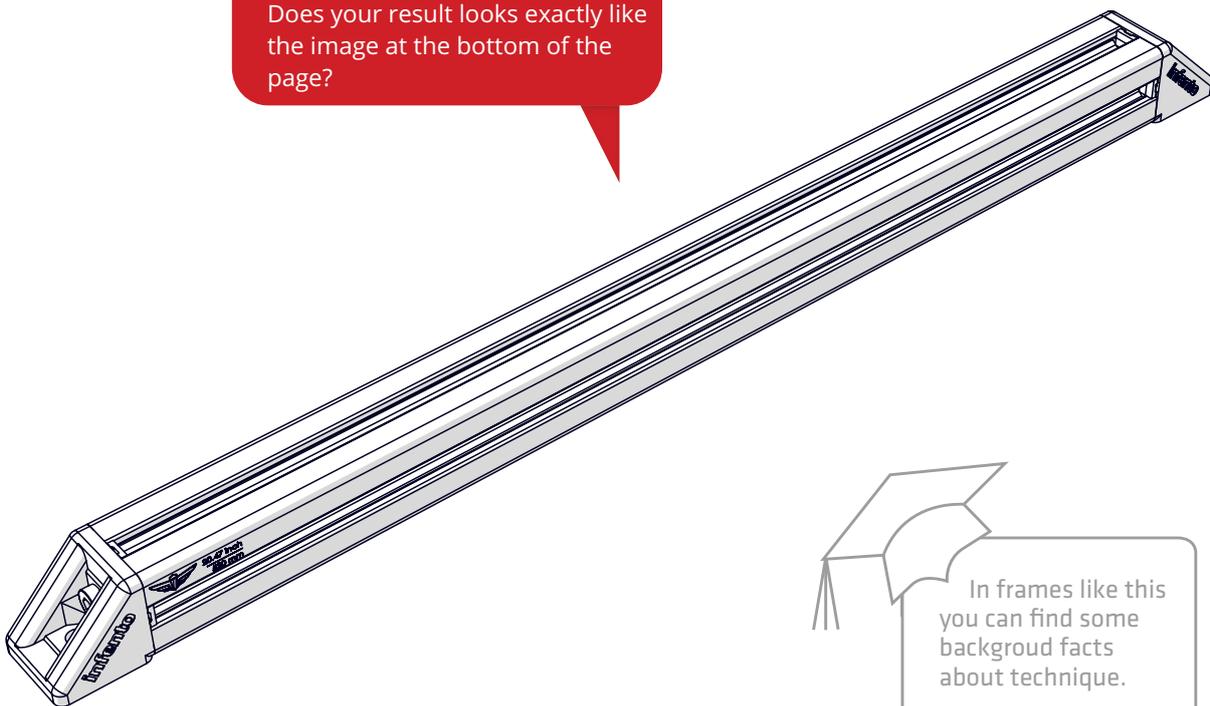


NOTE
Place the profile connector in the same orientation as shown here, then proceed.



Tighten the bolts with full force. Ensure that you hold the long side of the Allen key in your hand as this enables you to exert greater force.

Double check here:
Does your result look exactly like the image at the bottom of the page?



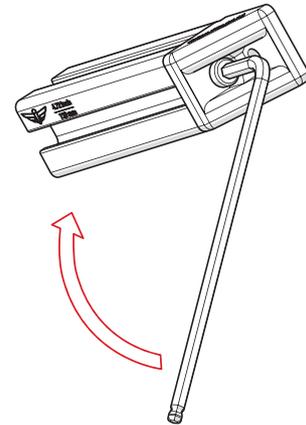
In frames like this you can find some background facts about technique.

TOP 3 REQUIREMENTS MAKING A GREAT INFENTO EXPERIENCE:



1

Tighten bolts with full force (15Nm) to prevent them from coming loose.



2

Constructing and playing always under supervision of an adult.



3

Check frequently if all parts are still firmly tightened and function properly.

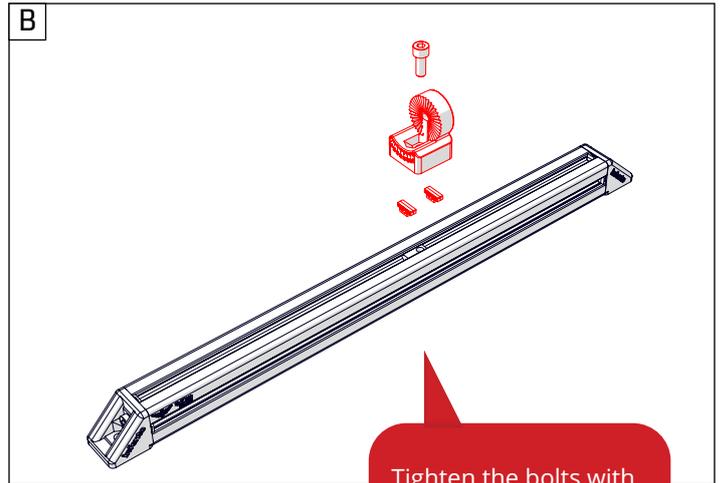
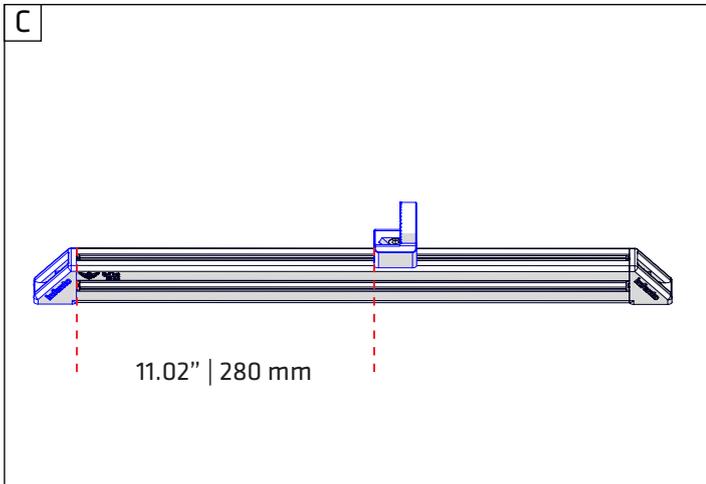
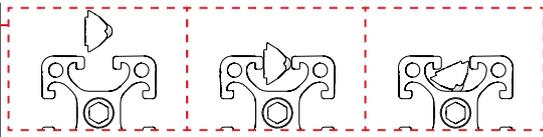
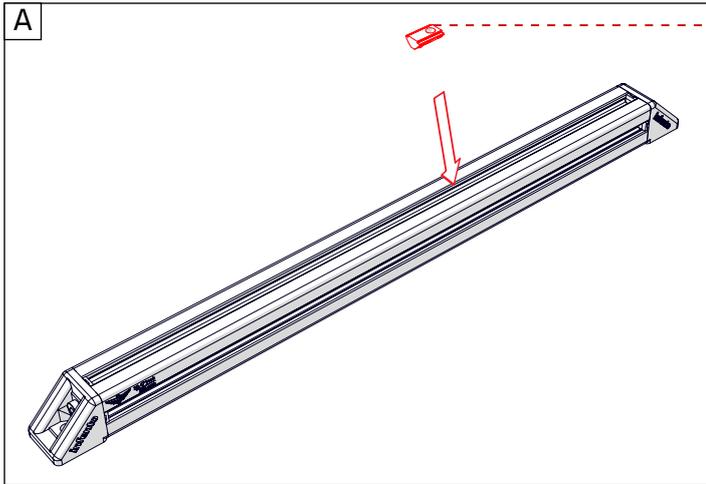




3

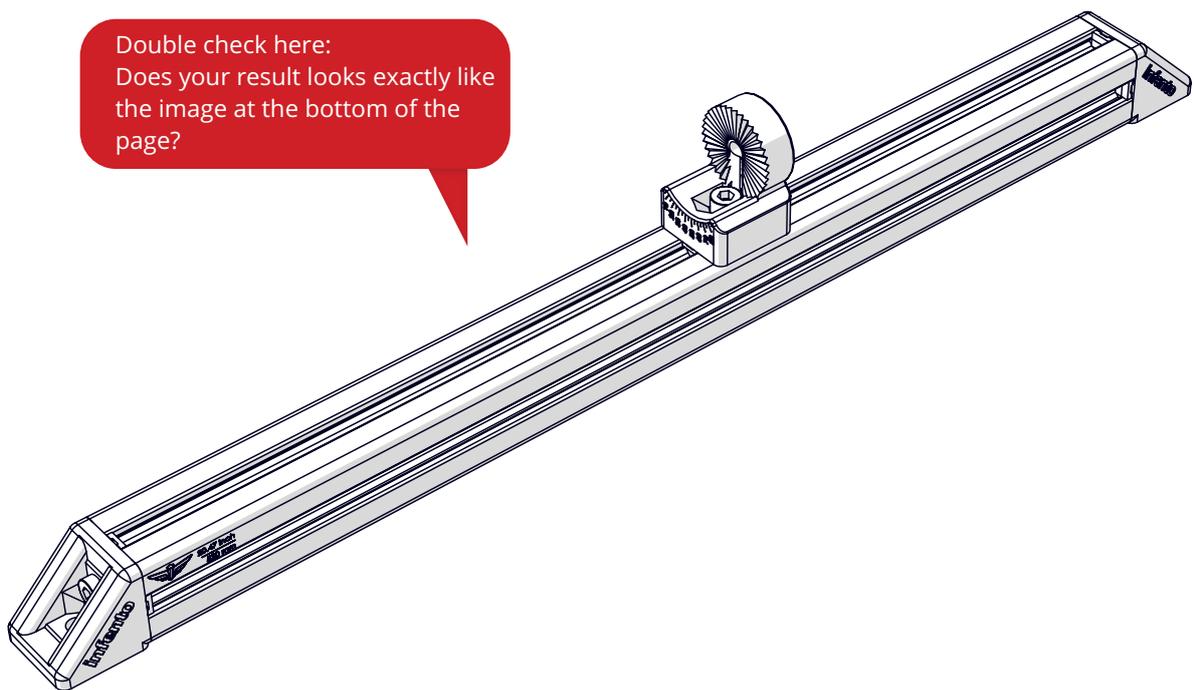
ride **TORNADO**

- 
 Bolt M8x20 1x
- 
 T-Positioning block 2x
- 
 Profile nut short 1x
- 
 Multi angle joint 1x



Tighten the bolts with full force. Ensure that you hold the long side of the Allen key in your hand as this enables you to exert greater force.

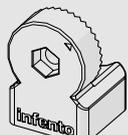
Double check here:
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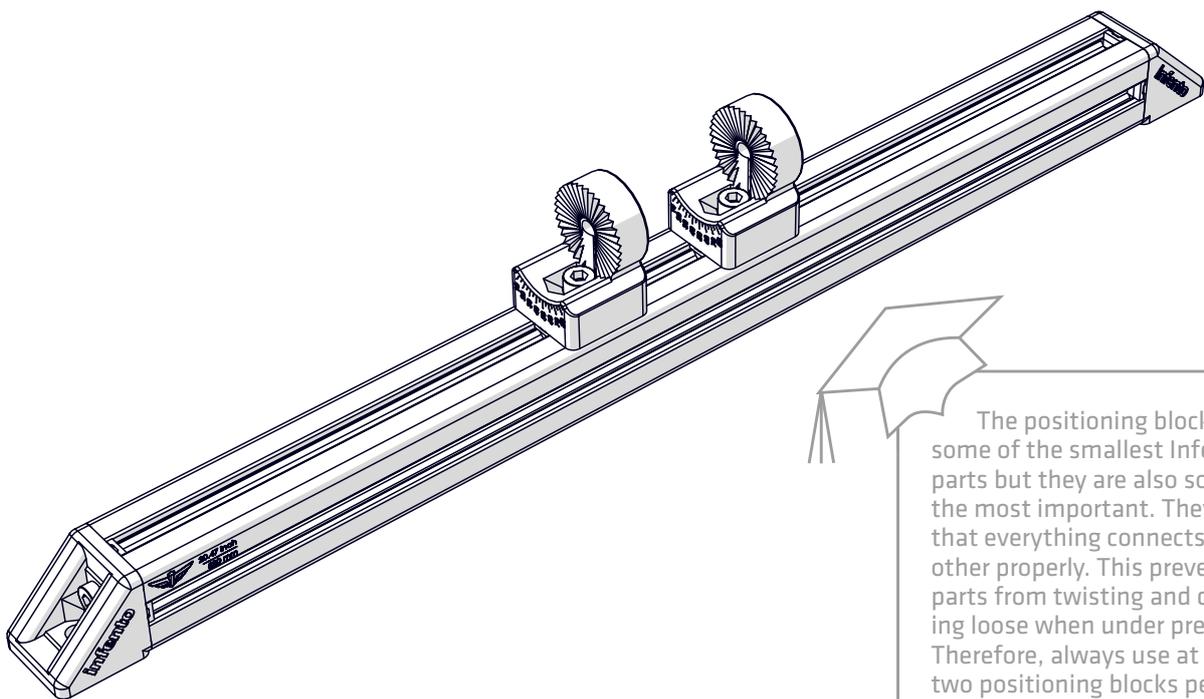
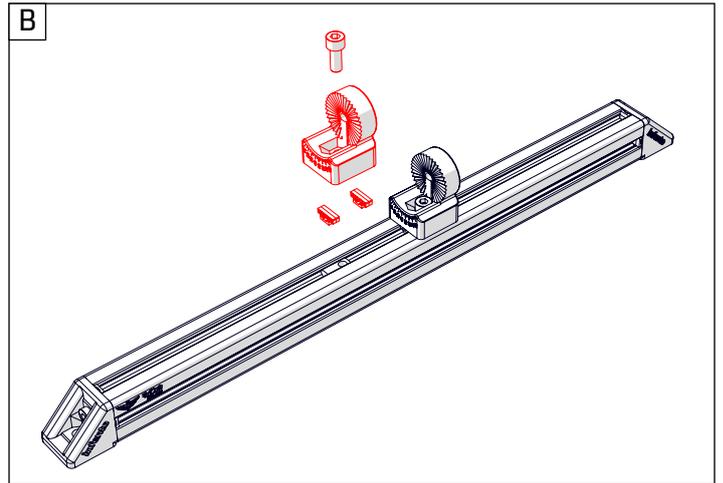
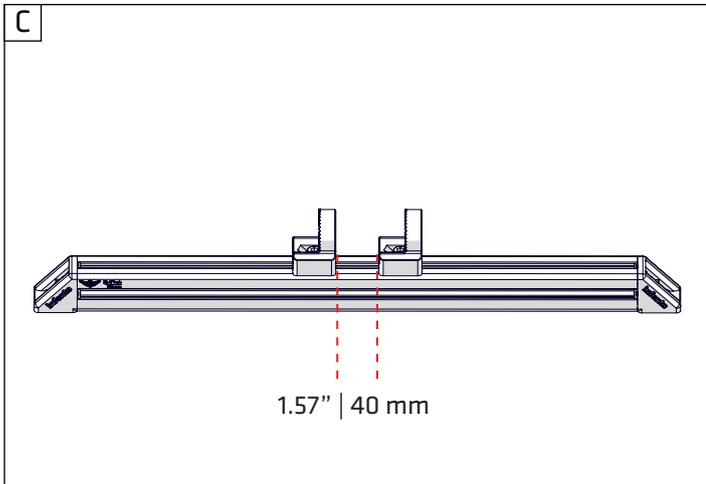
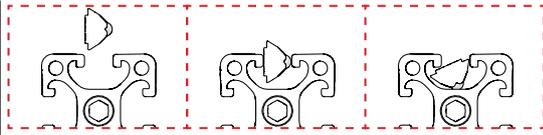
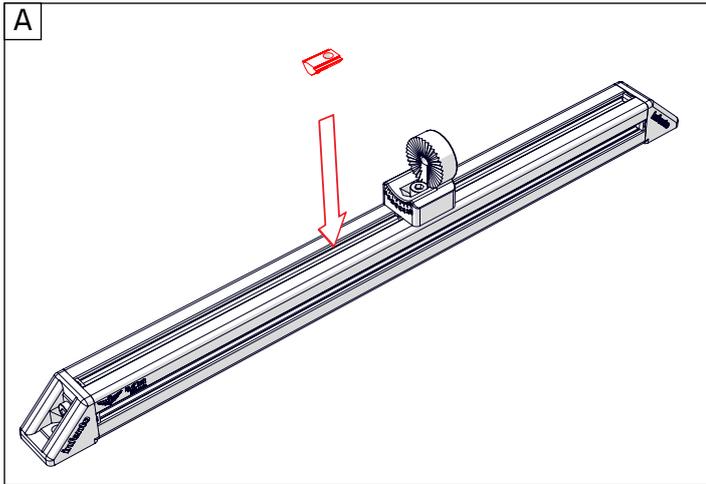




4

ride **TORNADO**

-  1x
-  1x
-  2x
-  1x

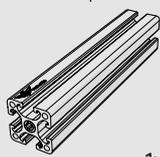


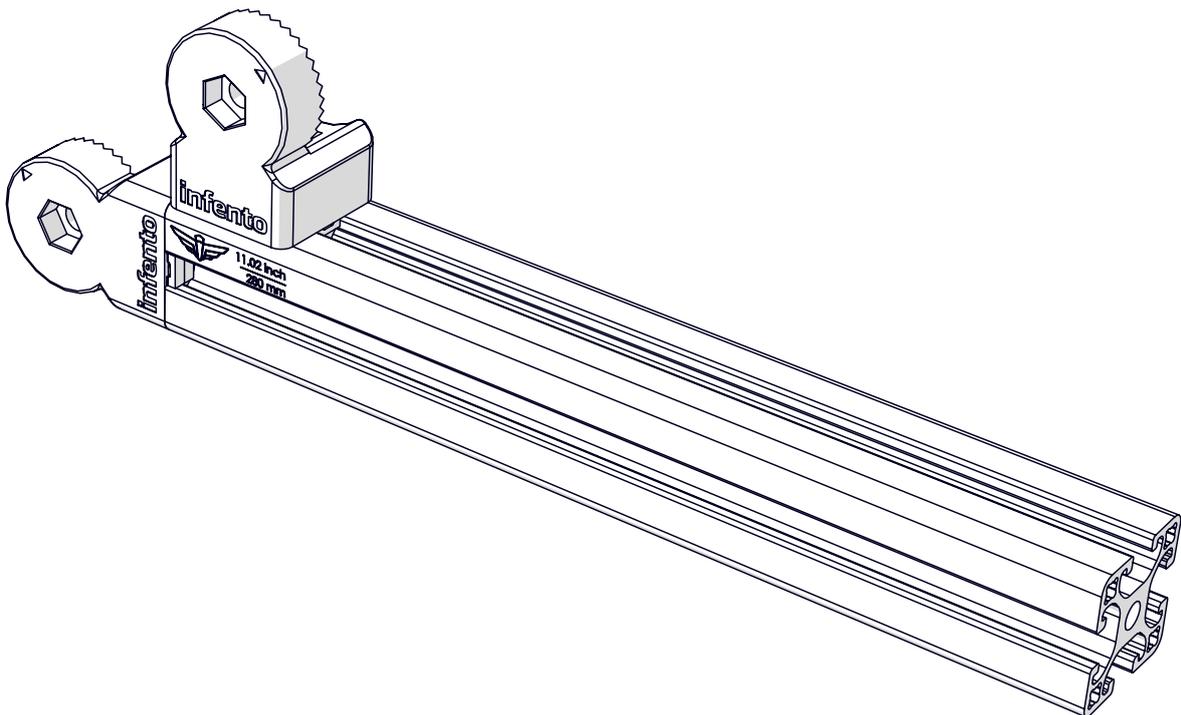
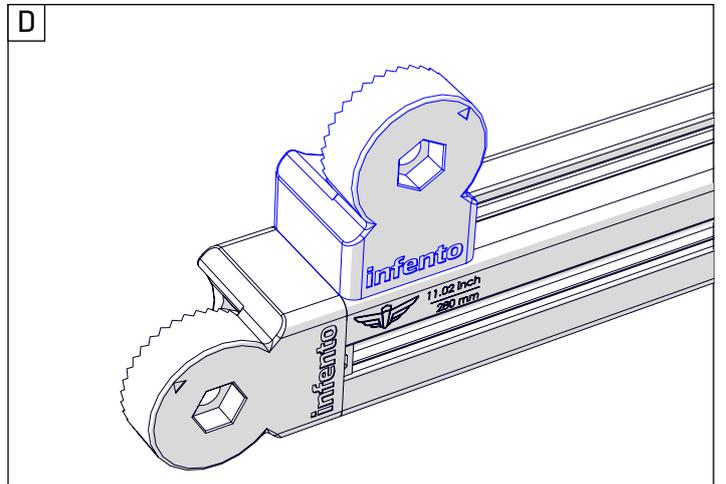
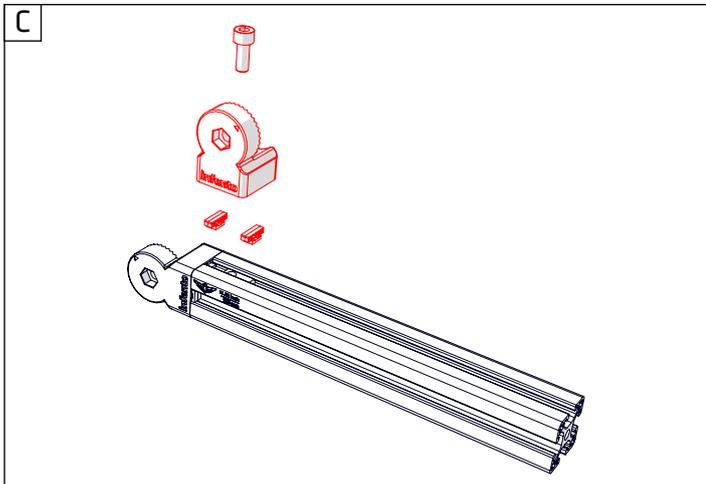
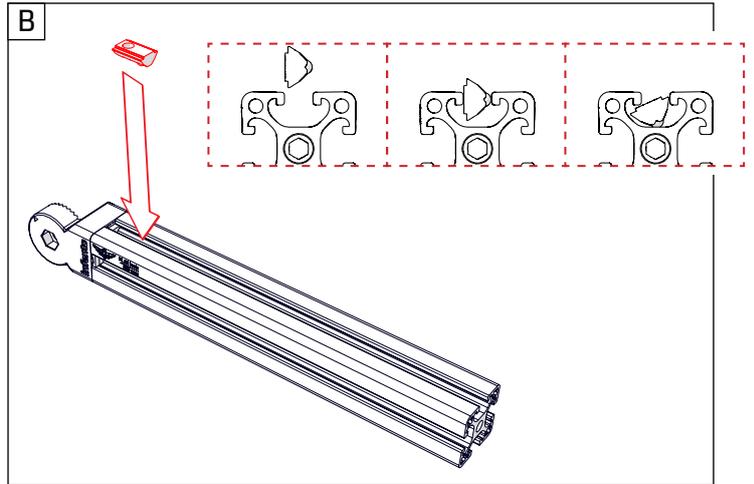
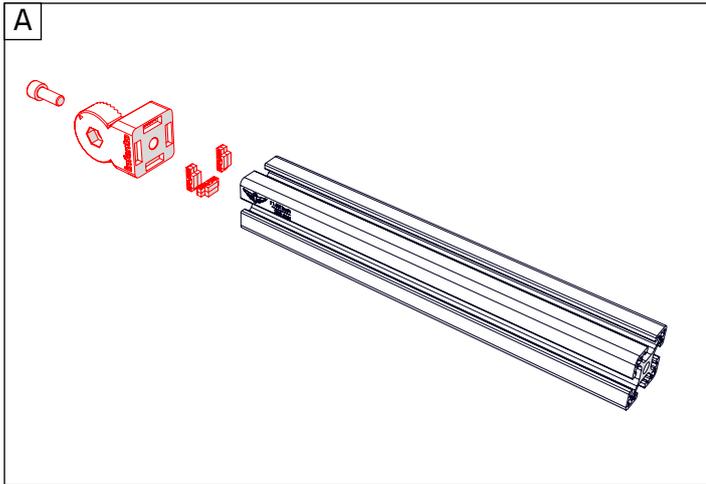
The positioning blocks are some of the smallest Infento parts but they are also some of the most important. They ensure that everything connects to each other properly. This prevents parts from twisting and coming loose when under pressure. Therefore, always use at least two positioning blocks per block.



5

ride **TORNADO**

-  2x Bolt M8x20
-  1x Profile nut short
-  5x T-Positioning block
-  2x Multi angle joint
-  1x Profile 11.02 inch | 280 mm

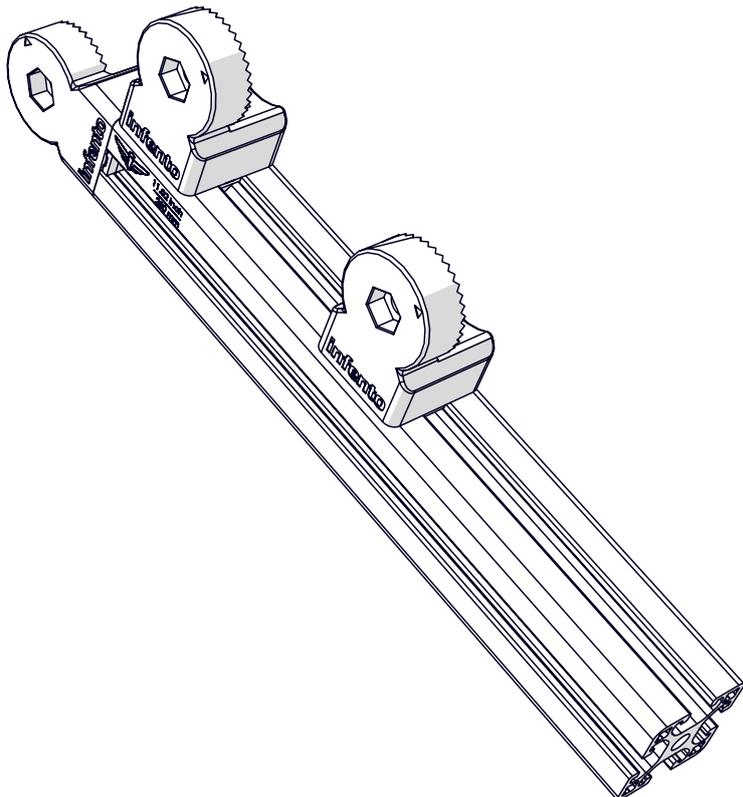
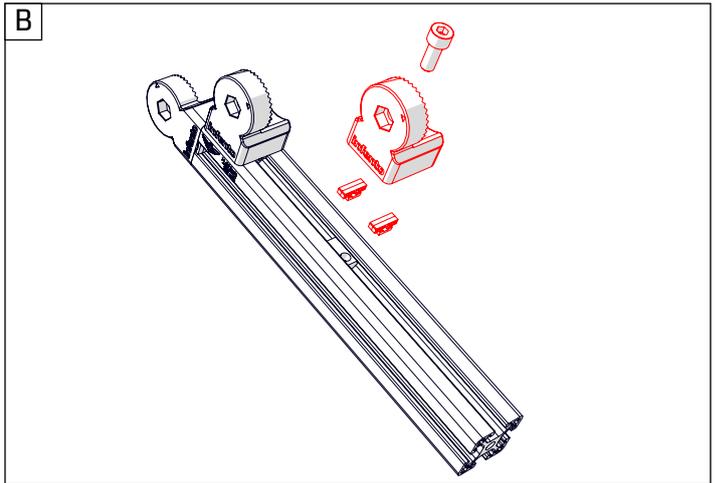
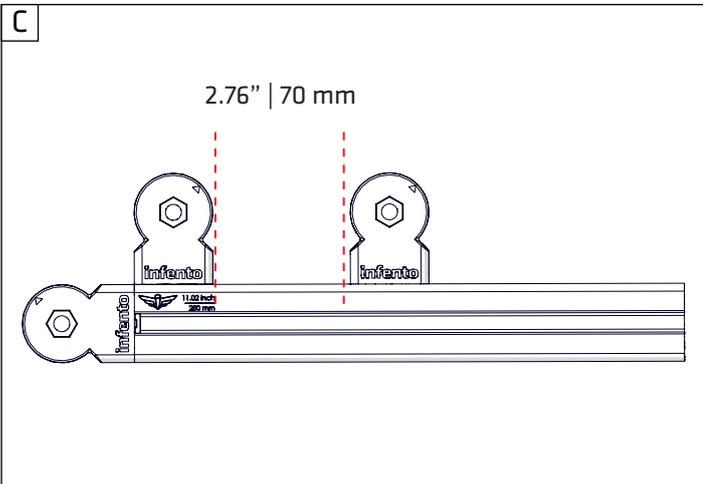
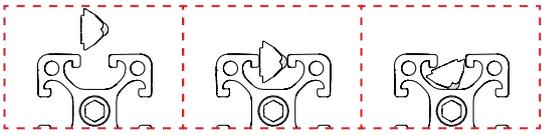
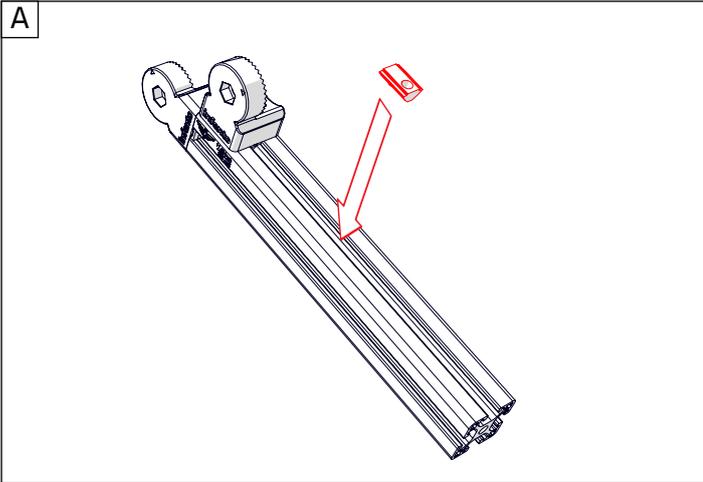




6

ride **TORNADO**

- 
Bolt M8x20
- +
- 
Profile nut short
- +
- 
T-Positioning block
- +
- 
Multi angle joint





7

ride **TORNADO**



Bolt M8x20
(low head) 2x

+



Profile nut short 2x

+

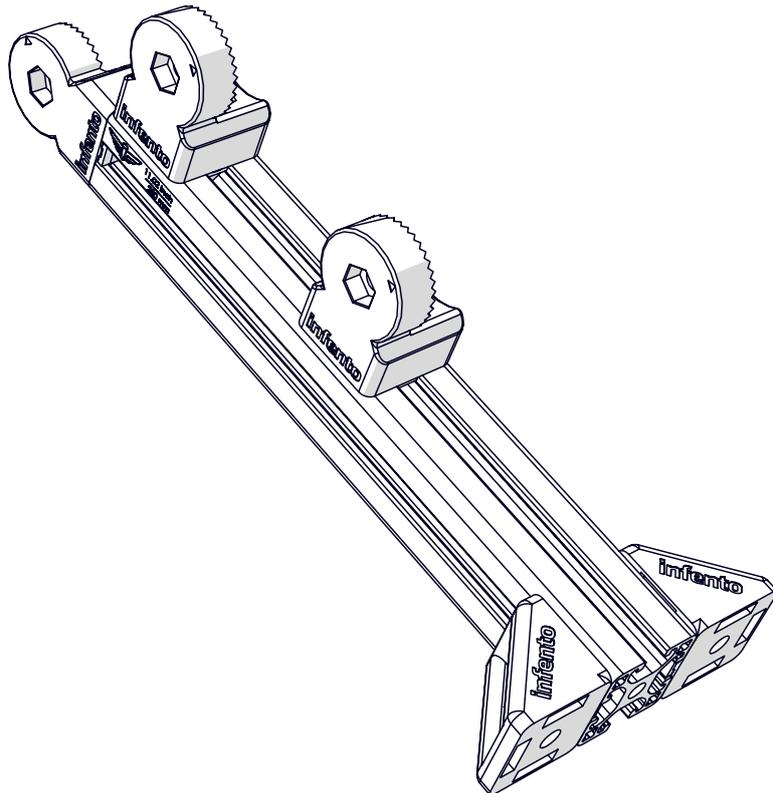
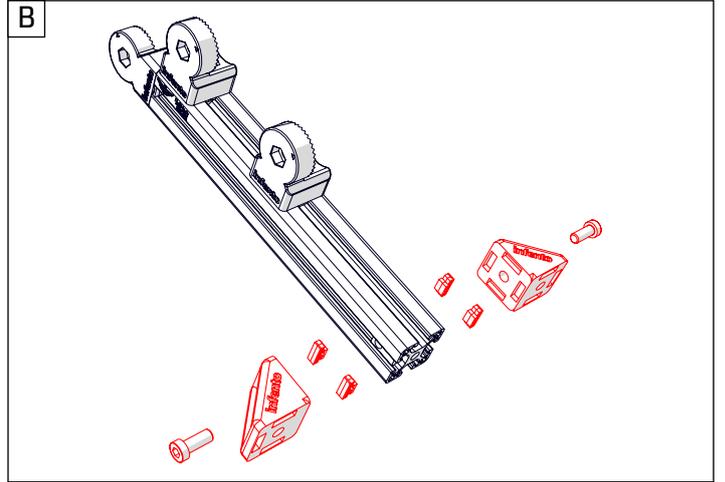
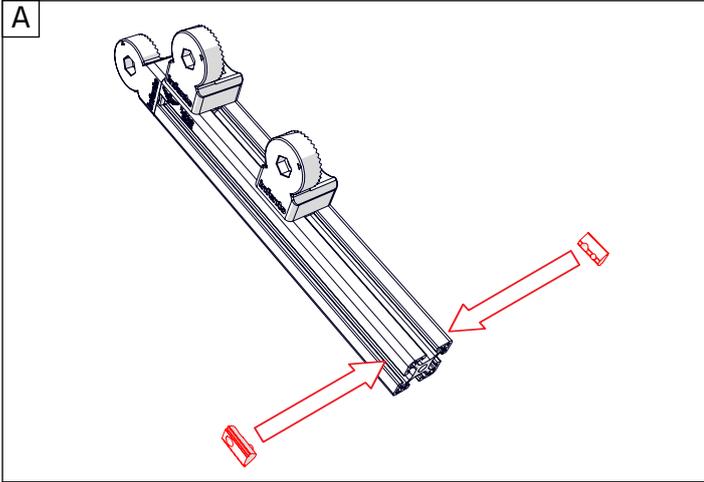


T-Positioning block 4x

+



L-joint 2x



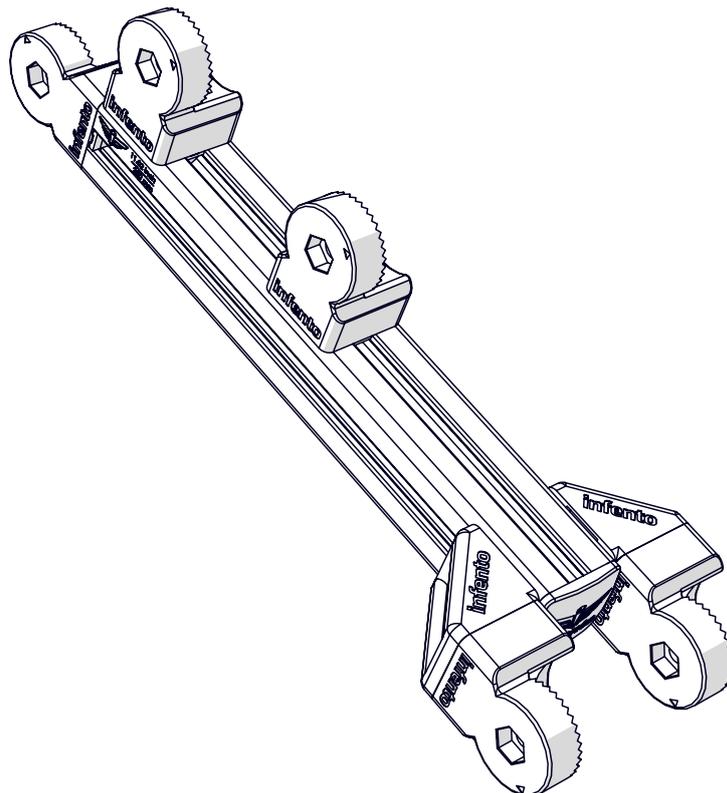
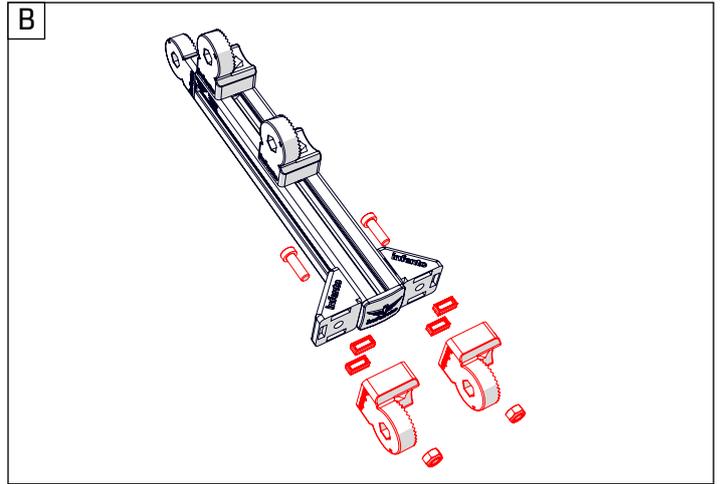
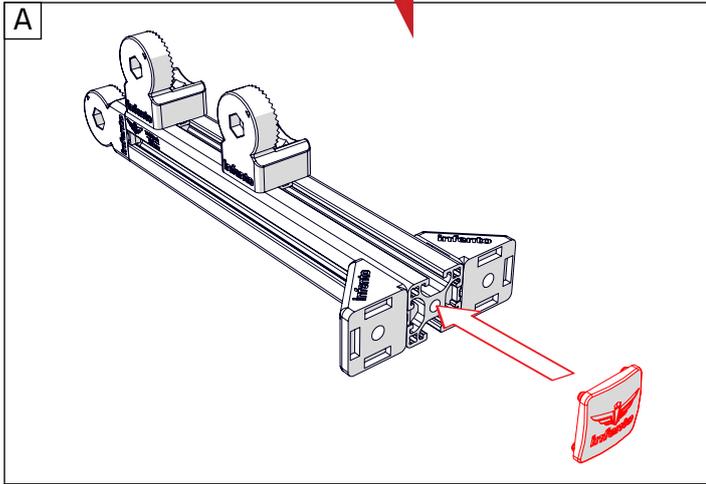


8

ride **TORNADO**

- Bolt M8x25 2x
(low head)
- +
- Locknut M8 2x
- +
- Positioning block 4x
- +
- Multi angle joint 2x
- +
- Protect cap 1x

If your protect cap has a hole, use a M8x12 countersunk bolt to fasten it



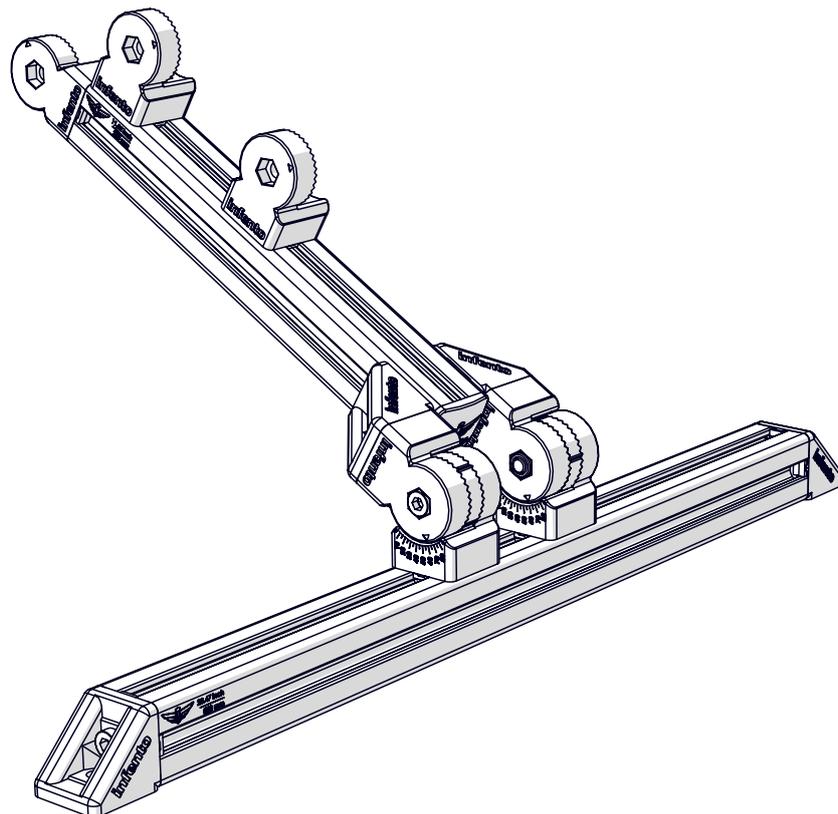
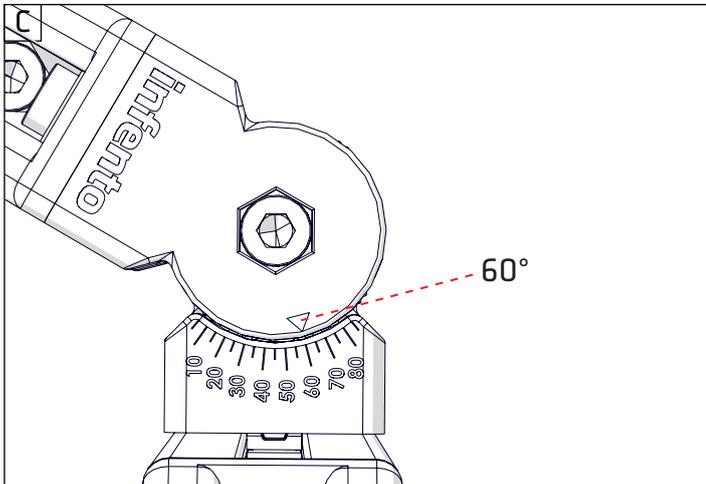
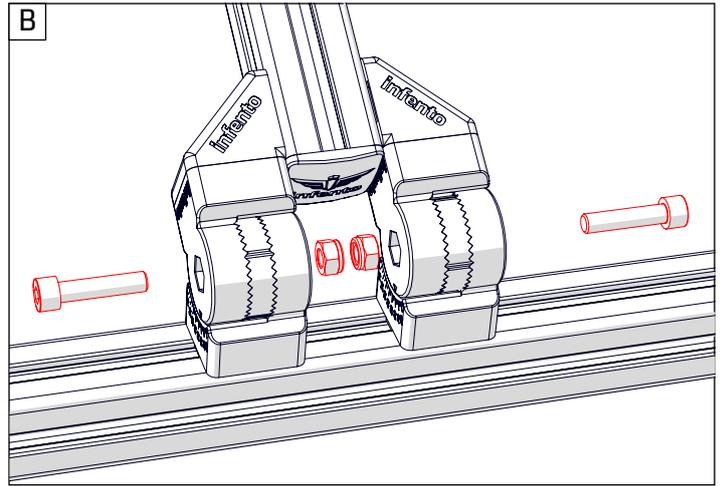
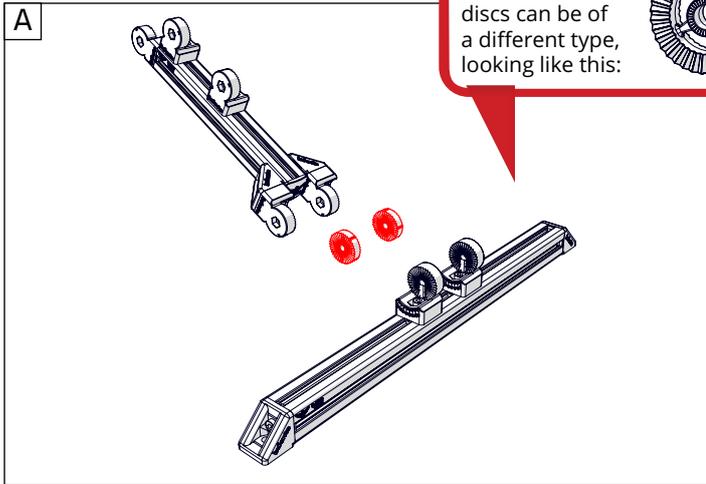
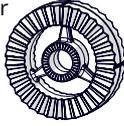


9

ride **TORNADO**

-  2x
-  2x
-  2x

Depending on your Kit, the knurled discs can be of a different type, looking like this:

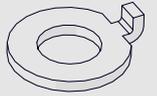




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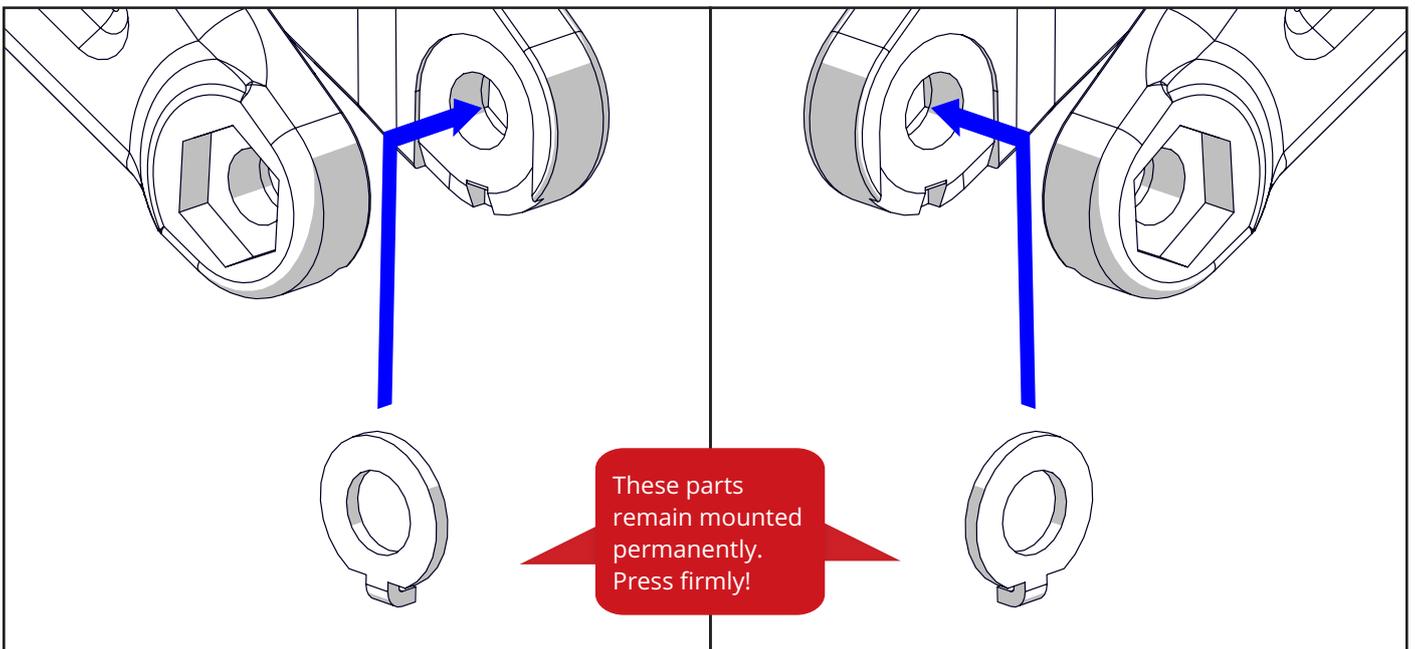
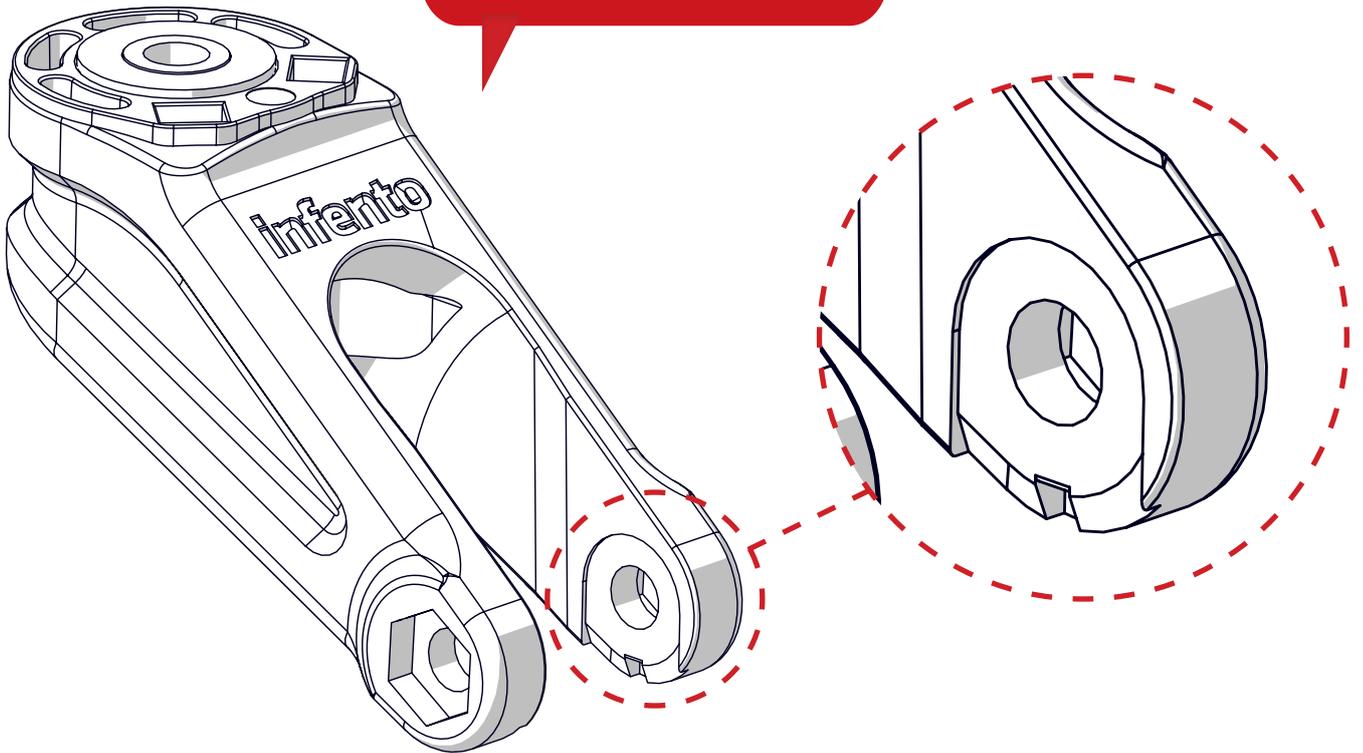
ride **TORNADO**

If your Kit contains a white fastener bag with 12 Nock Washers, please follow the steps on this page. If not, please skip to the next page of the manual.



2x
Nock washer M8-16

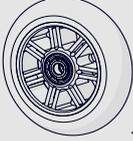
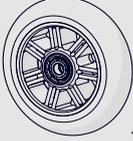
This is the 4" Swivel Wheelhouse. Before being able to use this part, you need two Nock Washers M8-16. Press these washers into the slots.

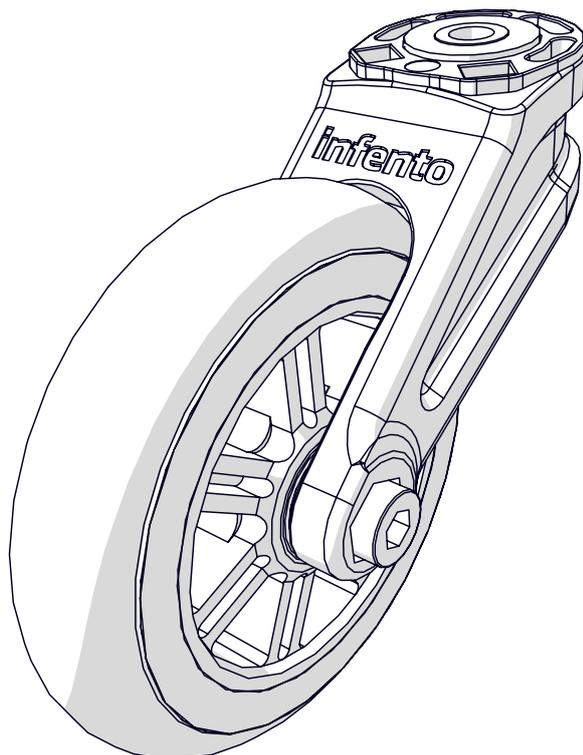
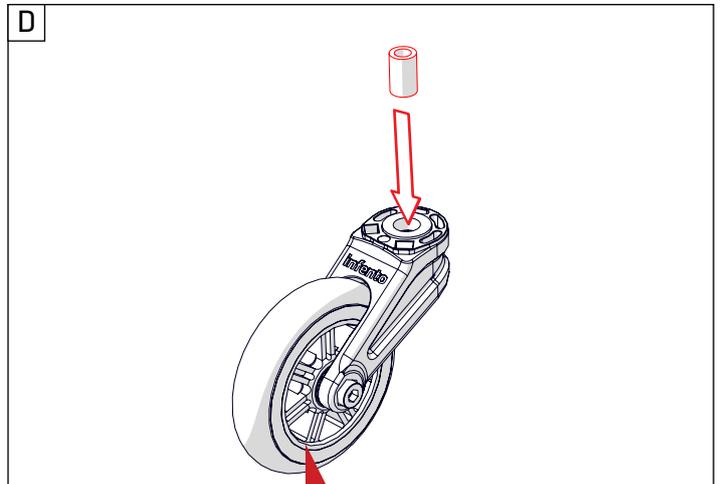
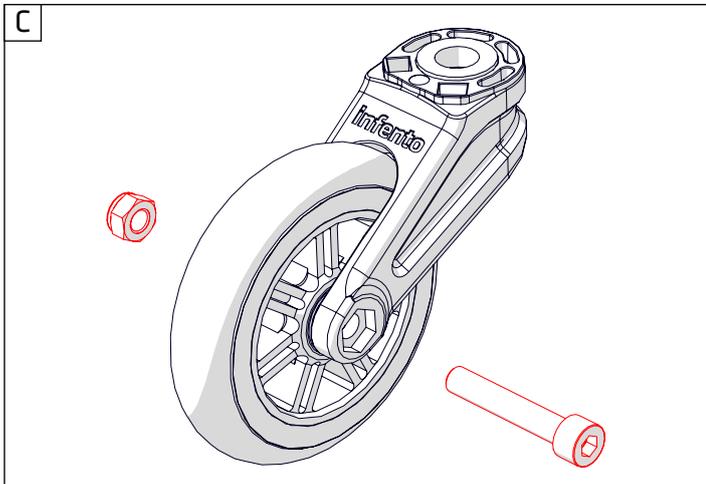
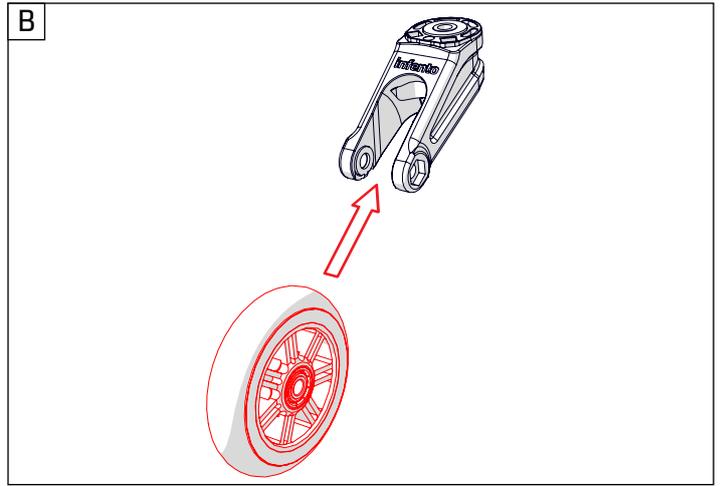
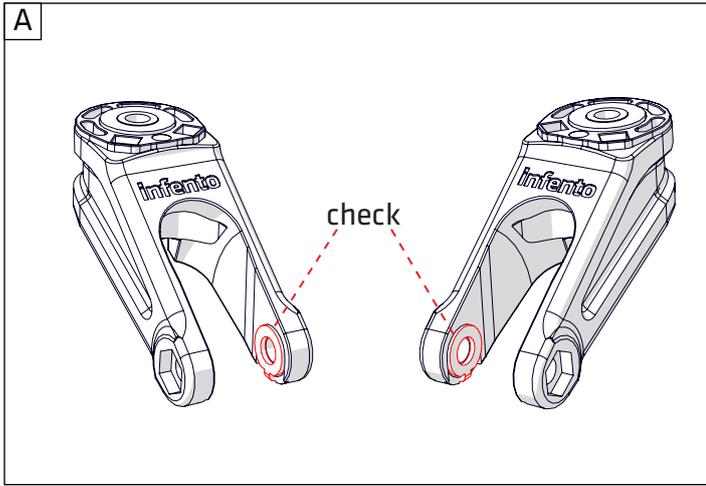




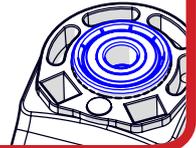
11

ride **TORNADO**

-  1x
- +
-  1x
- +
-  1x
- +
-  1x
- +
-  1x
- +
-  1x



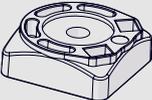
If your **Swivel Fork 4" Wheel** contains a metal bearing on top (instead of a red plastic ring), you can skip this step!

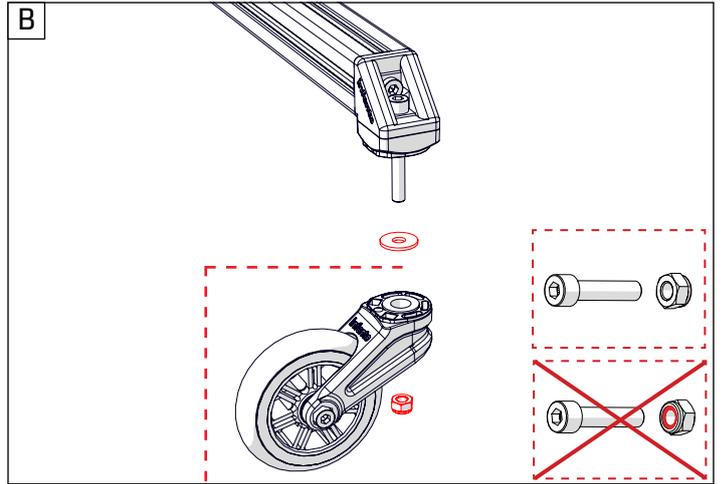
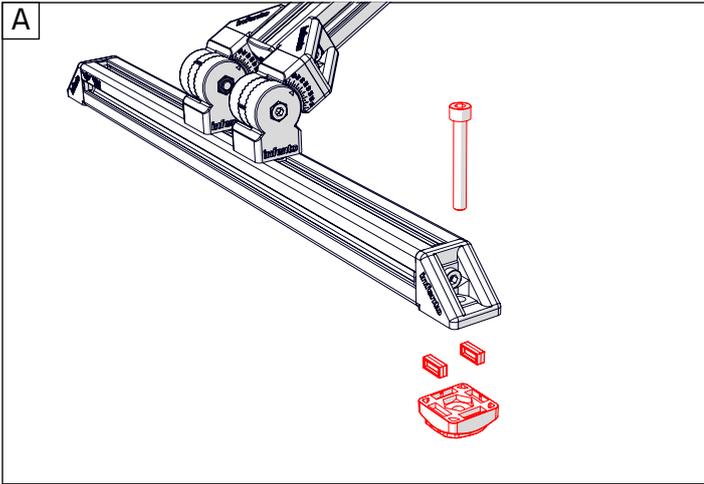




12

ride **TORNADO**

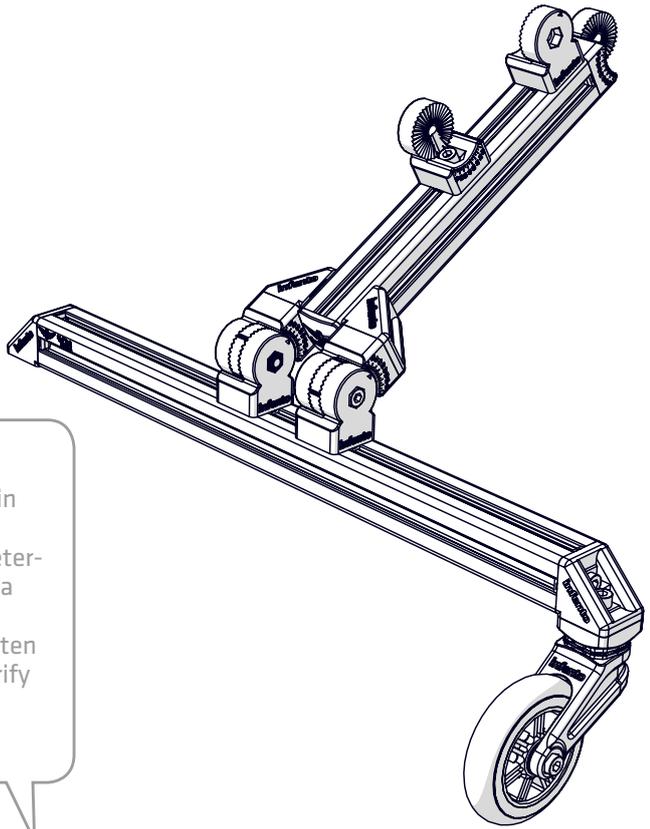
- 
Bolt M8x60 1x
- +
- 
Positioning block 2x
- +
- 
Connector Swivel fork 4 inch wheel 1x
- +
- 
Locknut M8 1x
- +
- 
Washer M8-24 1x



If your **Swivel Fork 4" Wheel** contains a metal bearing on top, add a Washer M8-16 between the bearing and the Washer M8-24.



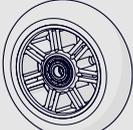
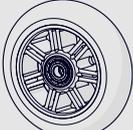
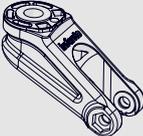
TIP!
It is best to tighten the bolt in such a way that you can still move the block and easily determine the right position with a tape measure. After that, you can then tighten the block further and you verify whether the size is correct.

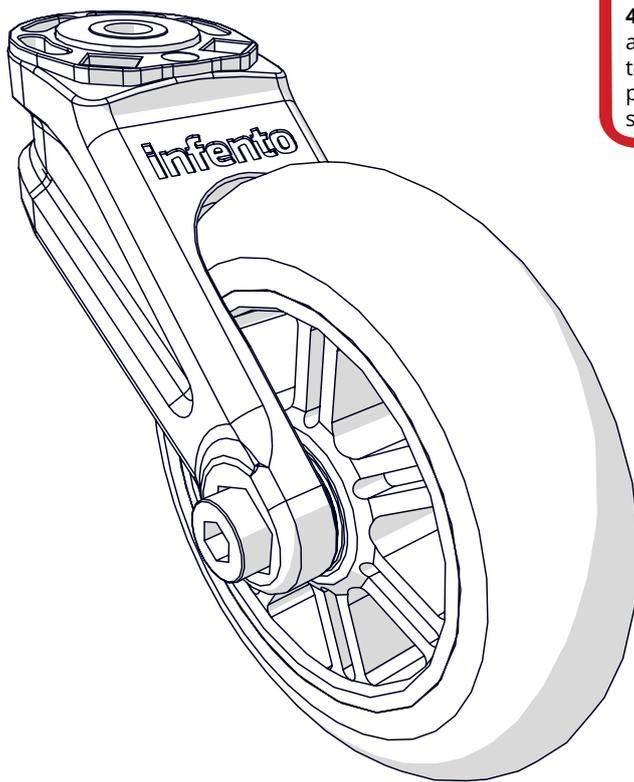
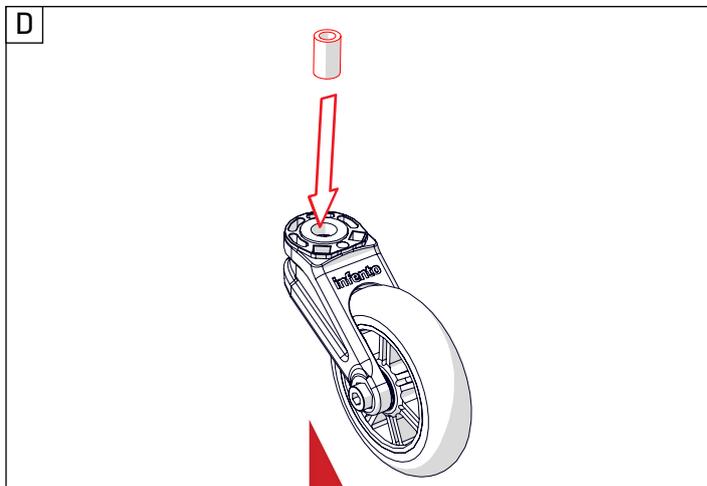
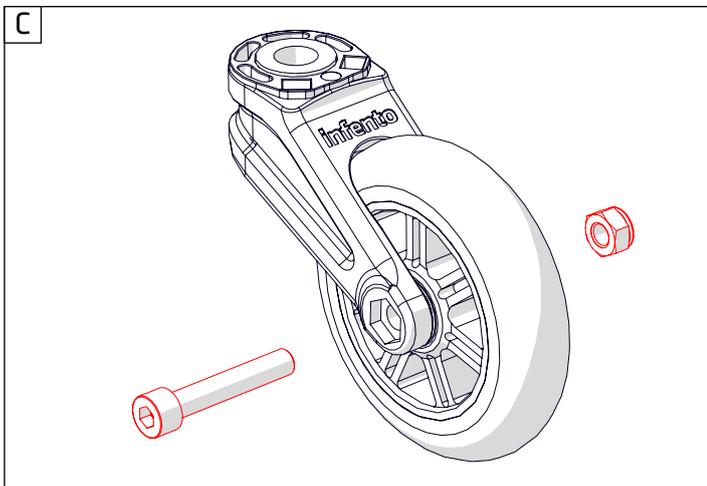
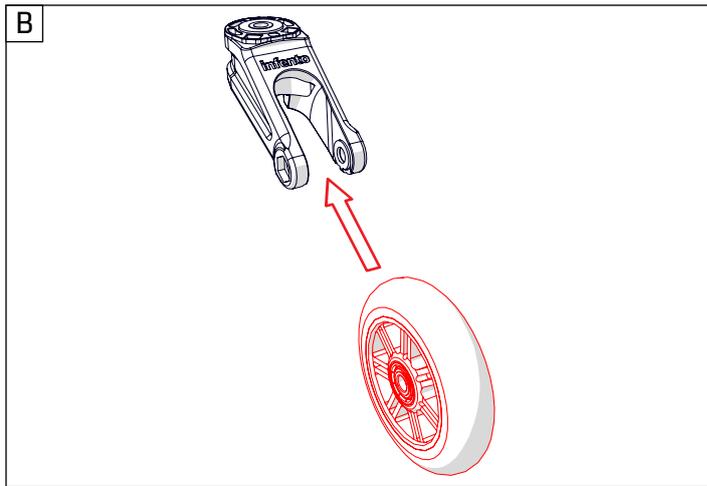
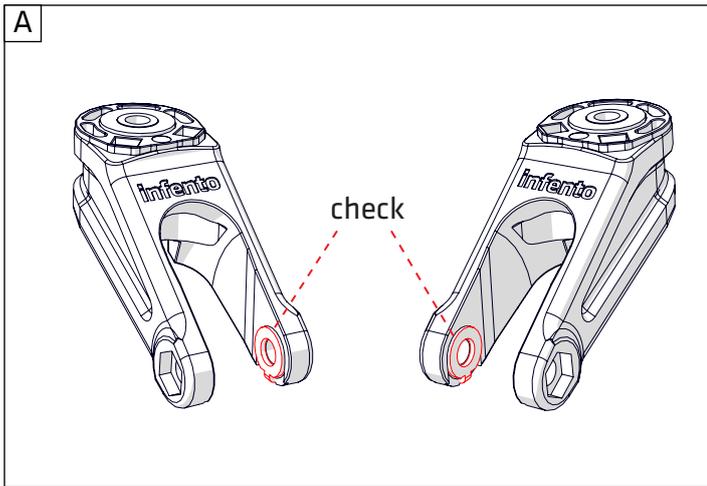




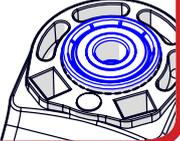
13

ride **TORNADO**

-  1x
- +
-  1x
- +
-  1x
- +
-  1x
- +
-  1x
- +
-  1x



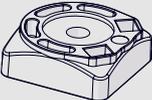
If your **Swivel Fork 4" Wheel** contains a metal bearing on top (instead of a red plastic ring), you can skip this step!

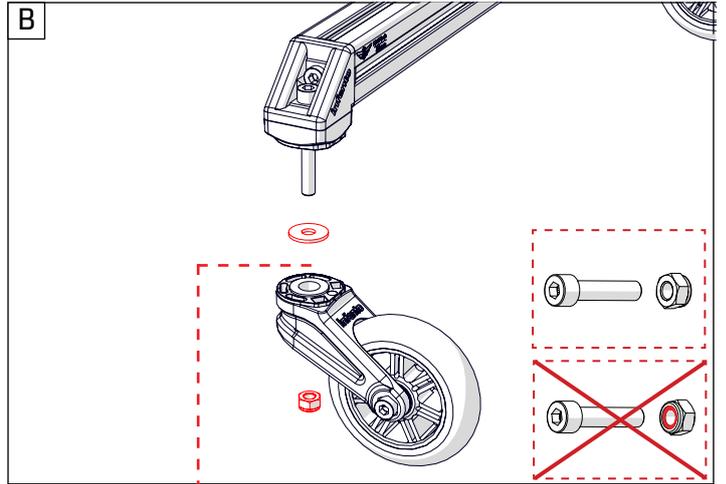
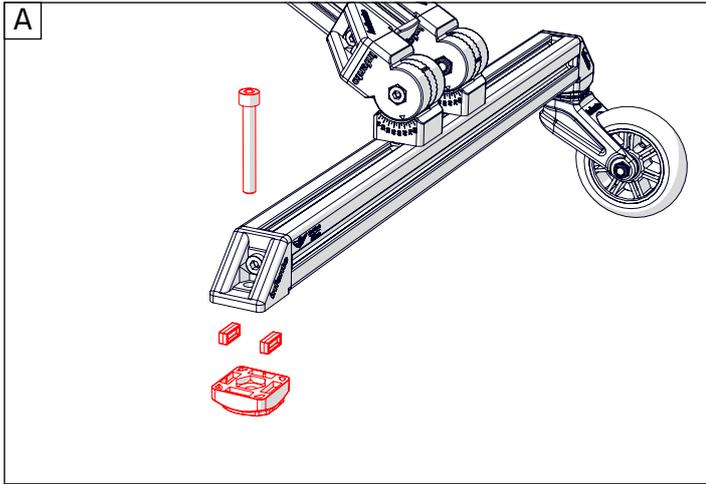




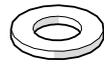
14

ride **TORNADO**

- 
Bolt M8x60 1x
- +
- 
Positioning block 2x
- +
- 
Connector Swivel fork 4 inch wheel 1x
- +
- 
Locknut M8 1x
- +
- 
Washer M8-24 1x

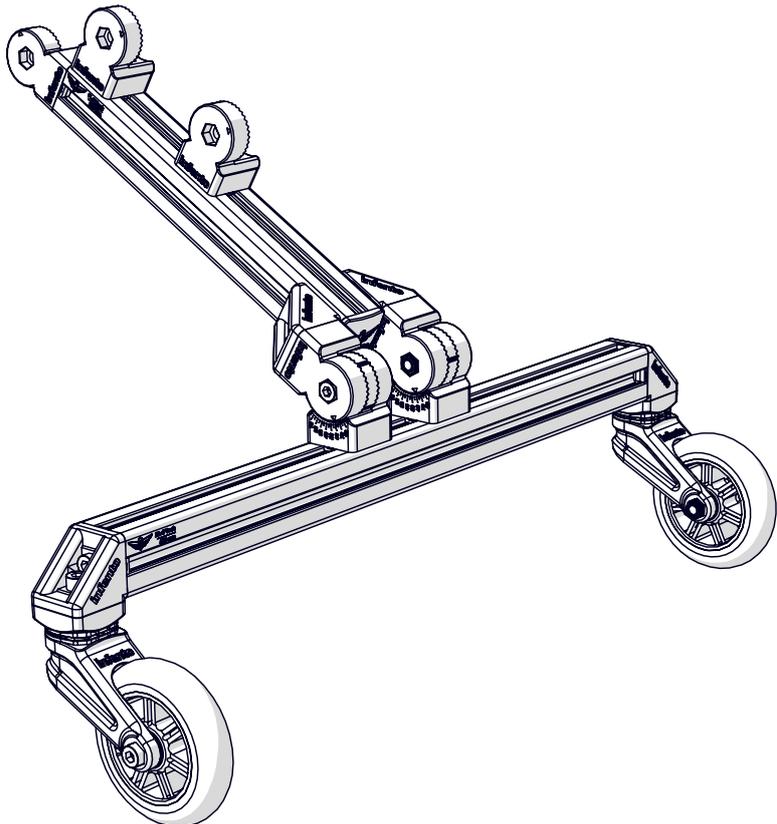


If your **Swivel Fork 4"** **Wheel** contains a metal bearing on top, add a Washer M8-16 between the bearing and the Washer M8-24.



Washer M8-16 1x

TIP!
It is best to tighten the bolt in such a way that you can still move the block and easily determine the right position with a tape measure. After that, you can then tighten the block further and you verify whether the size is correct.



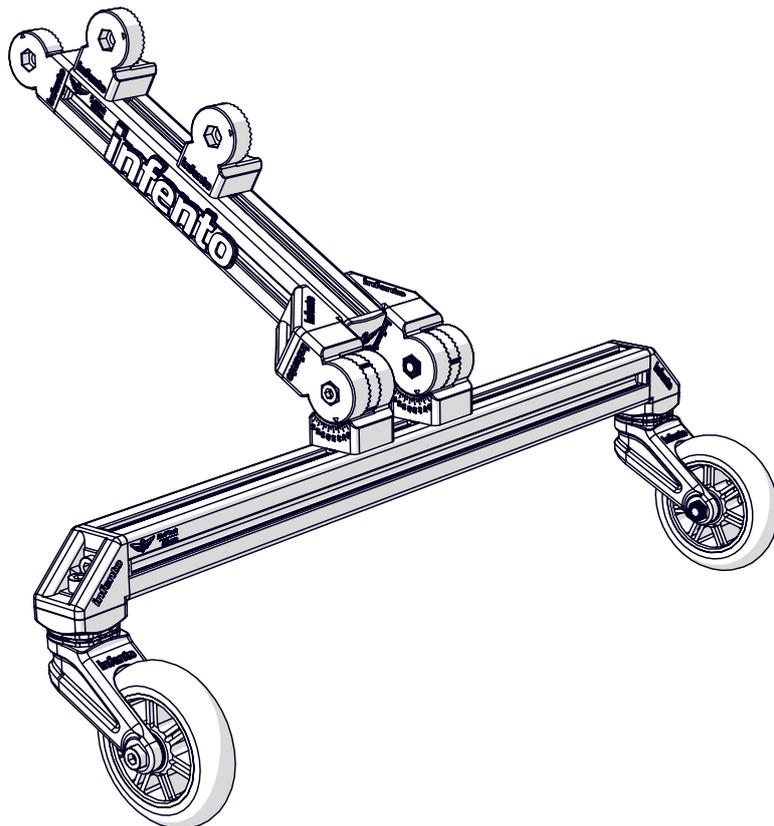
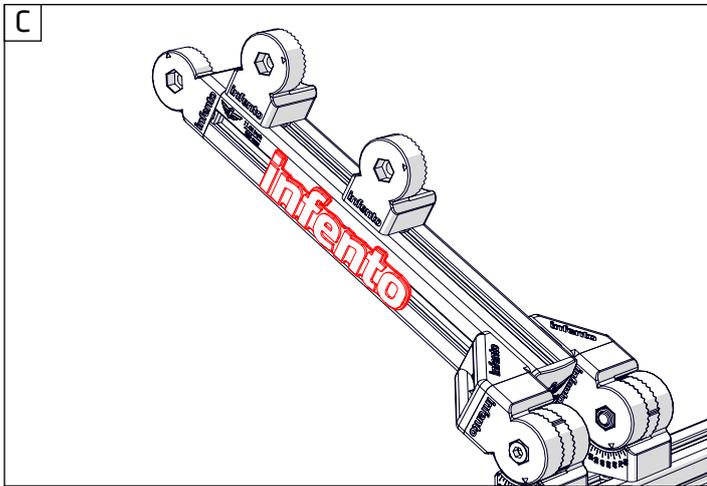
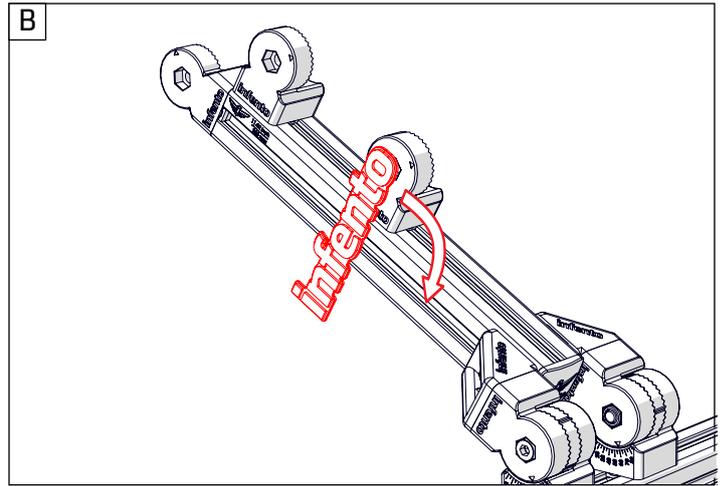
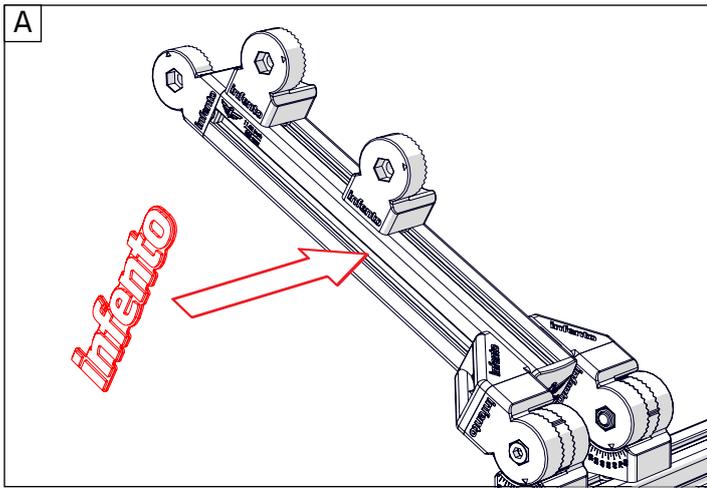


15

ride **TORNADO**

infento

1x
Word mark

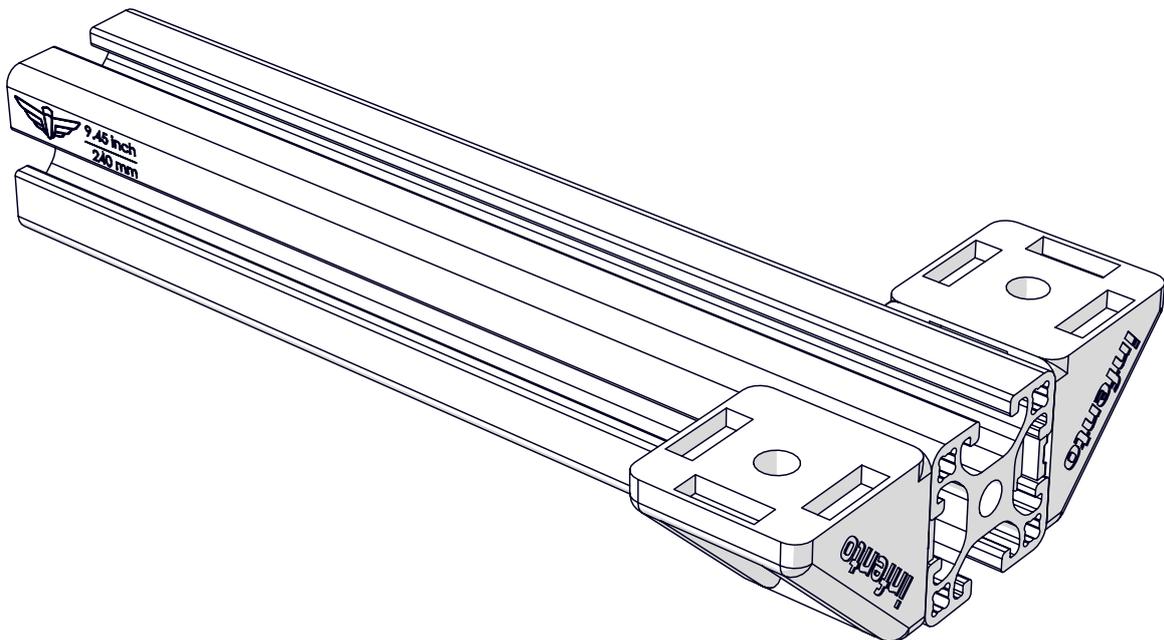
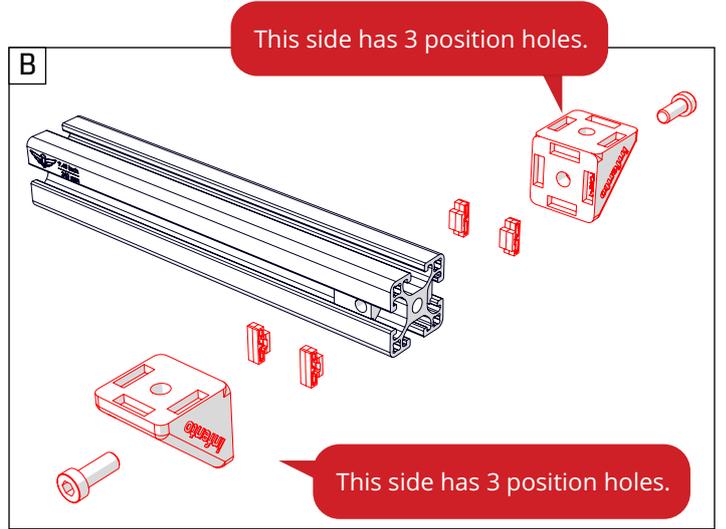
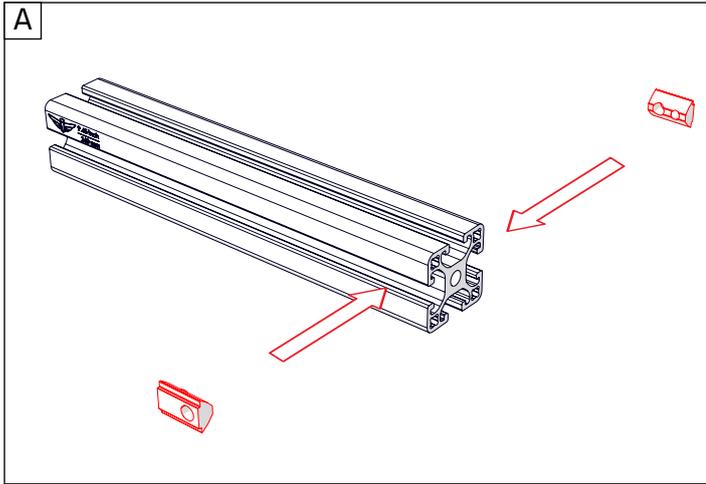




16

ride **TORNADO**

- Bolt M8x20 (low head) 2x
- Profile nut short 2x
- T-Positioning block 4x
- L-joint 2x
- Profile 9.45 inch | 240 mm 1x

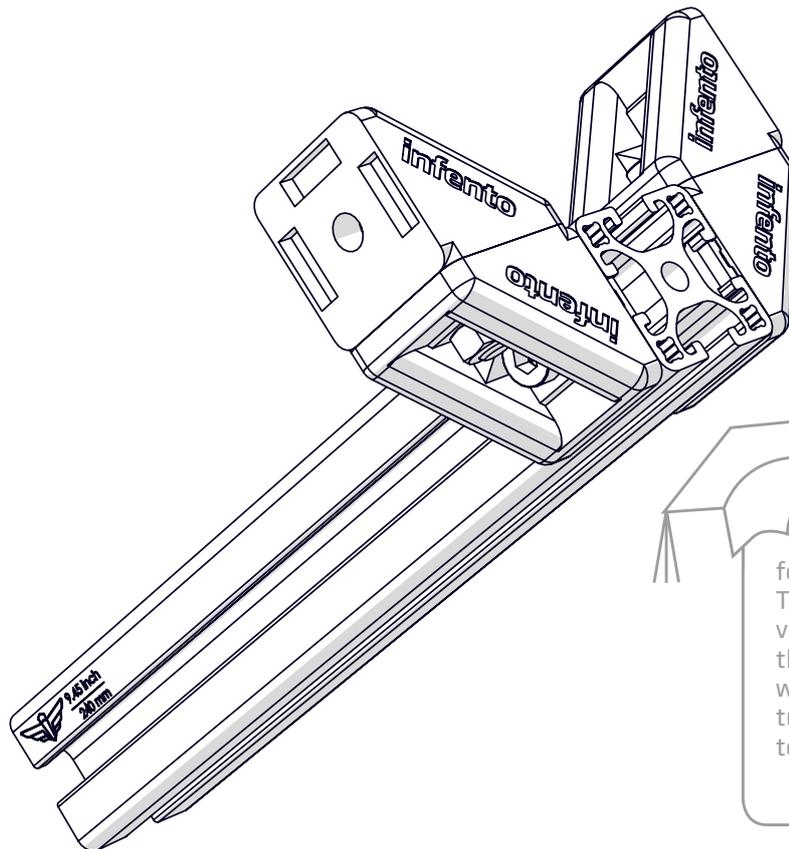
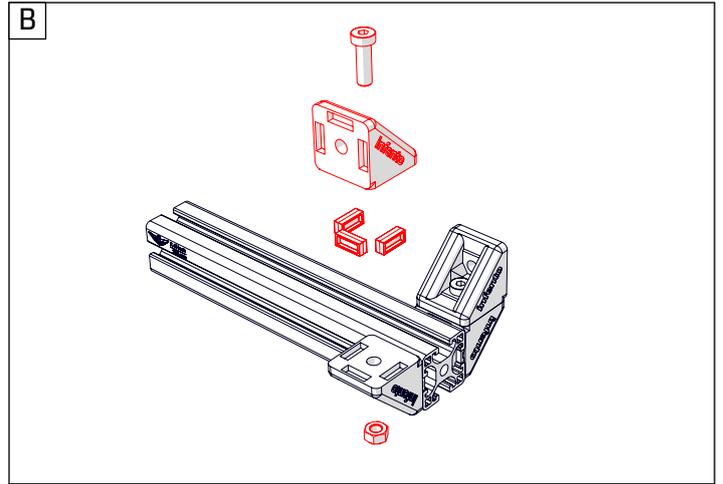
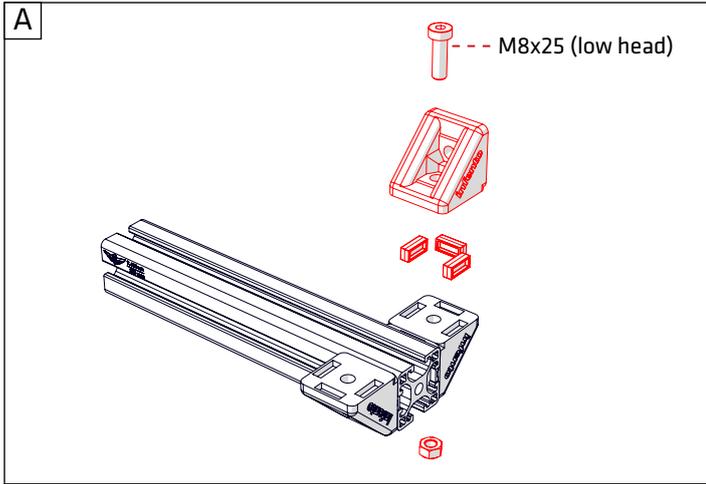




17

ride **TORNADO**

- Bolt M8x25
(low head) 2x
- +
- Nut M8 2x
- +
- Positioning block 6x
- +
- L-joint 2x



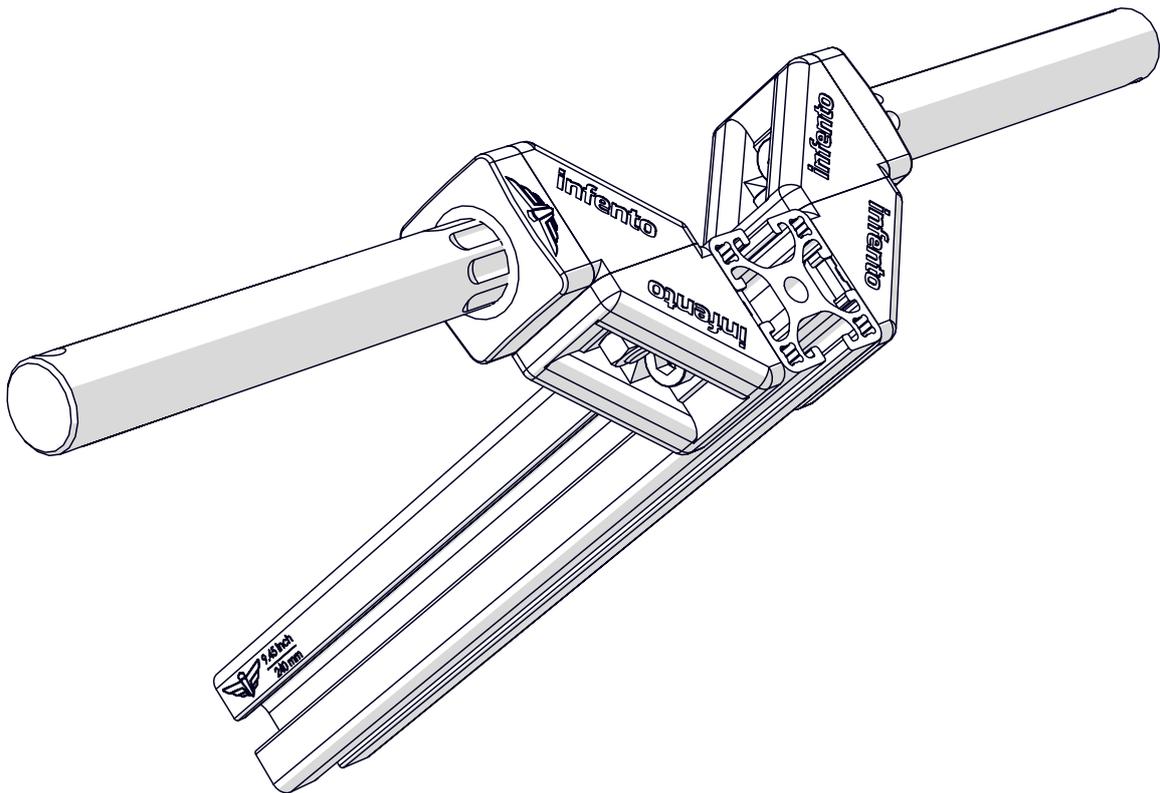
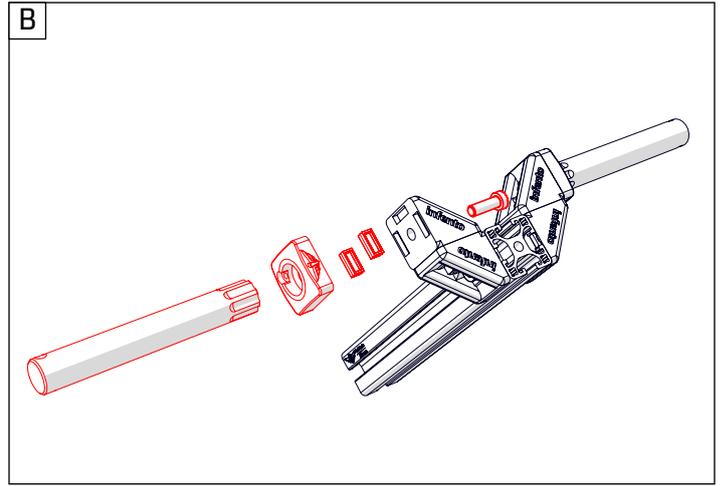
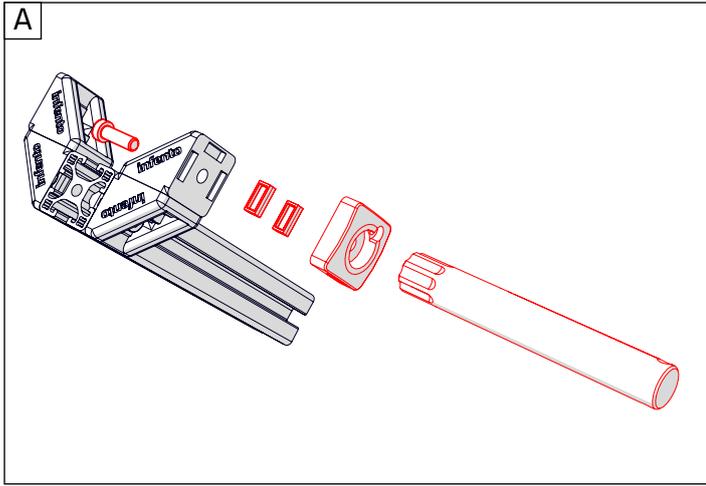
Most nuts that you use for Infento are self-locking. This means that they cannot vibrate loose. On the inside of the bolt you will see a plastic washer that ensures it cannot turn freely, even if there is no tension on the bolt.



18

ride **TORNADO**

- Bolt M8x25
(low head) 2x
- +
Positioning block 4x
- +
Axle plate 2x
- Handlebar short 2x

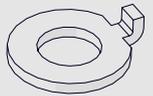




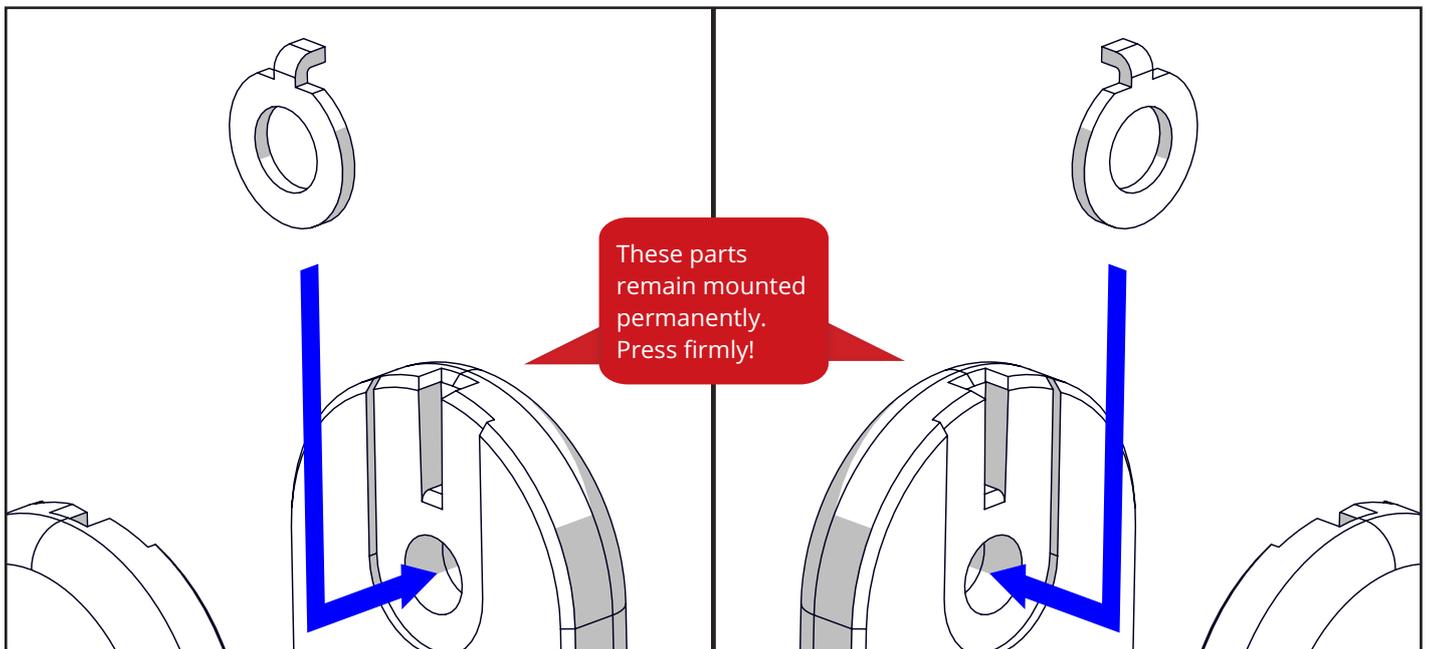
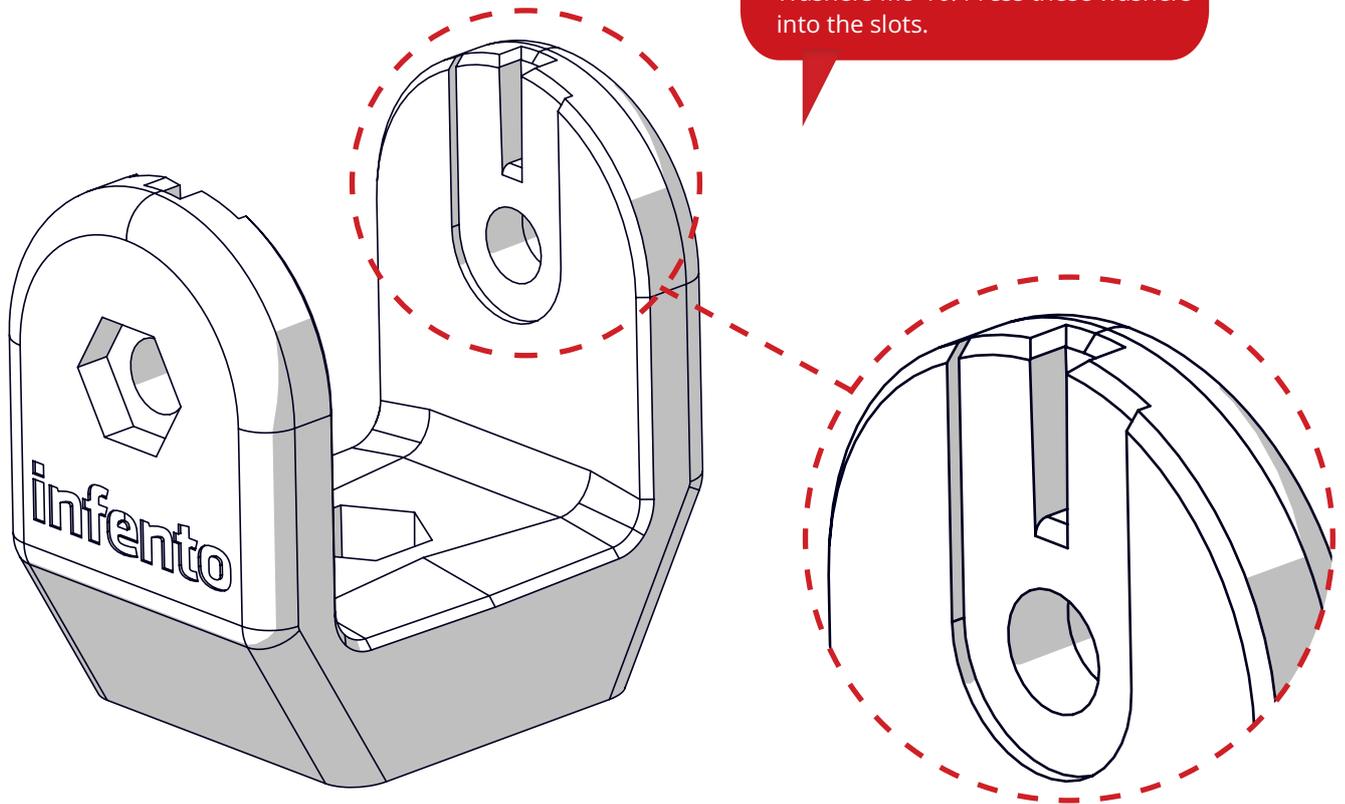
19

ride **TORNADO**

If your Kit contains a white fastener bag with 12 Nock Washers, please follow the steps on this page. If not, please skip to the next page of the manual.



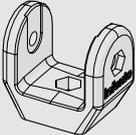
2x
Nock washer M8-16

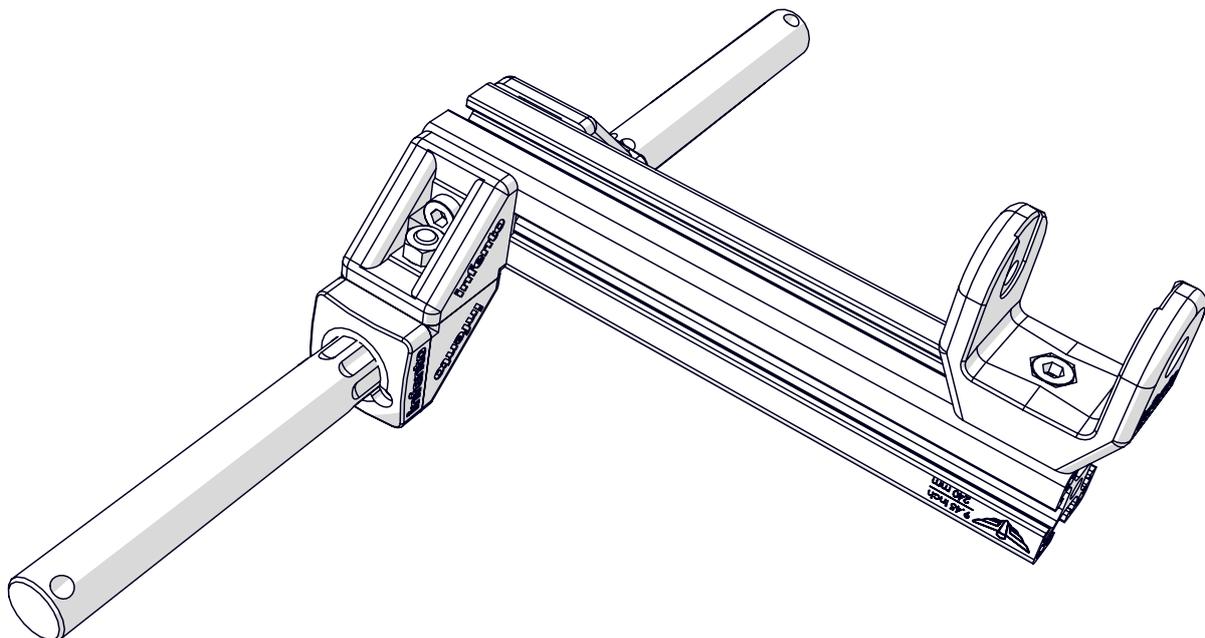
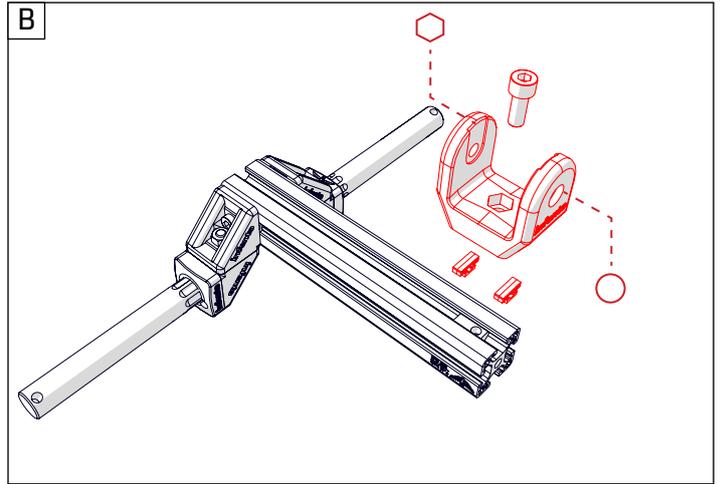
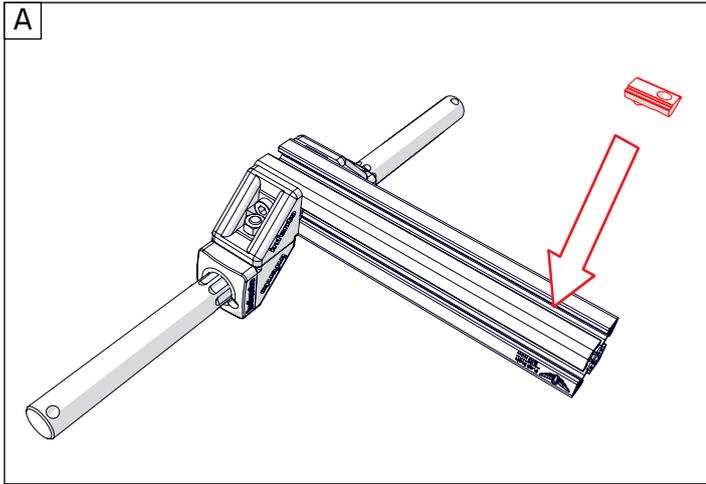




20

ride **TORNADO**

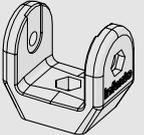
- 
Bolt M8x20 1x
- 
T-Positioning block 2x
- 
Profile nut short 1x
- 
U-Block 1x

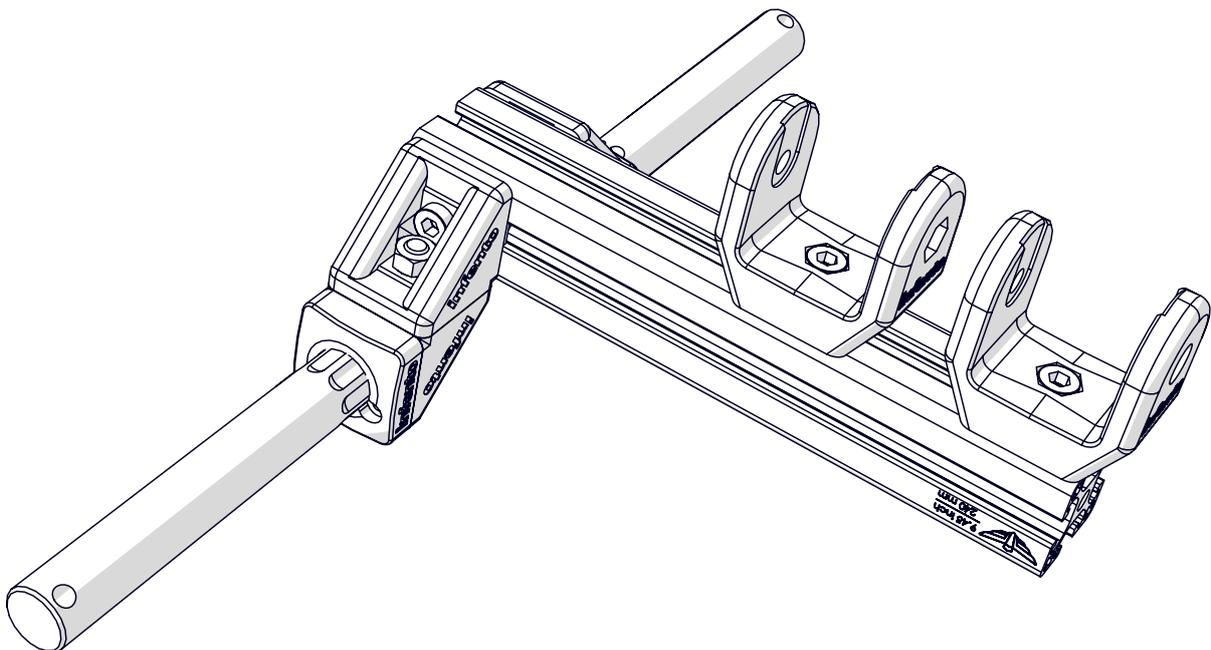
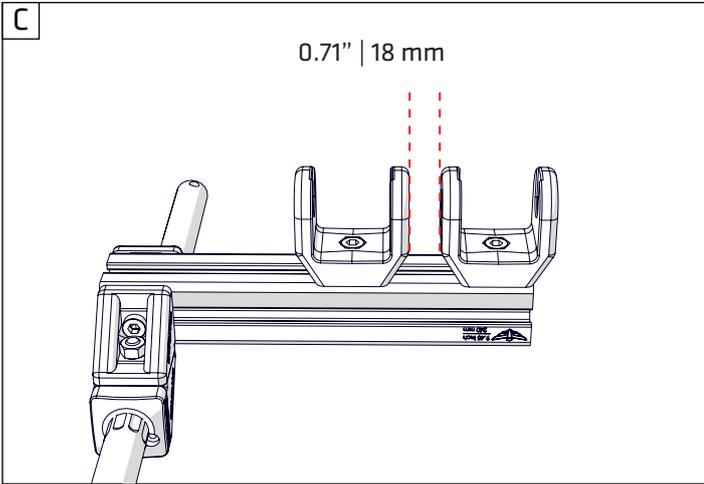
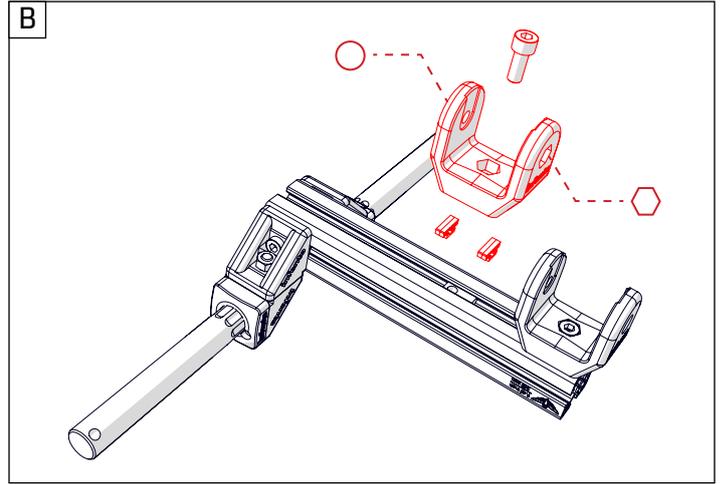
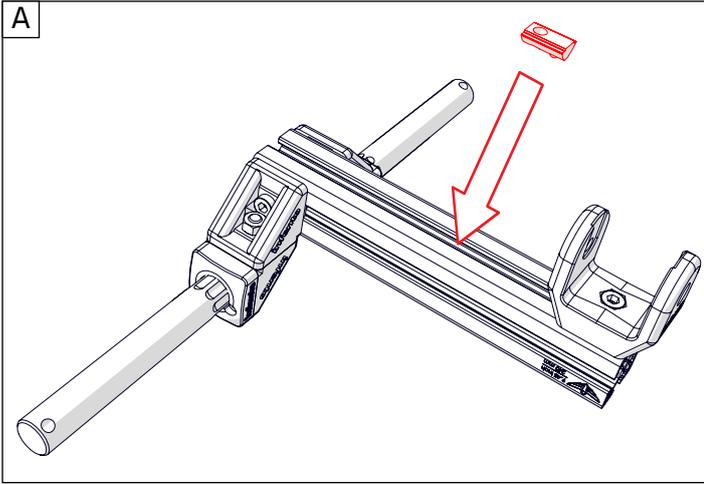




21

ride **TORNADO**

-  Bolt M8x20 1x
-  T-Positioning block 2x
-  Profile nut short 1x
-  U-Block 1x





22

ride **TORNADO**



Bolt M8x20
(low head) 1x

+



T-Positioning block 2x

+

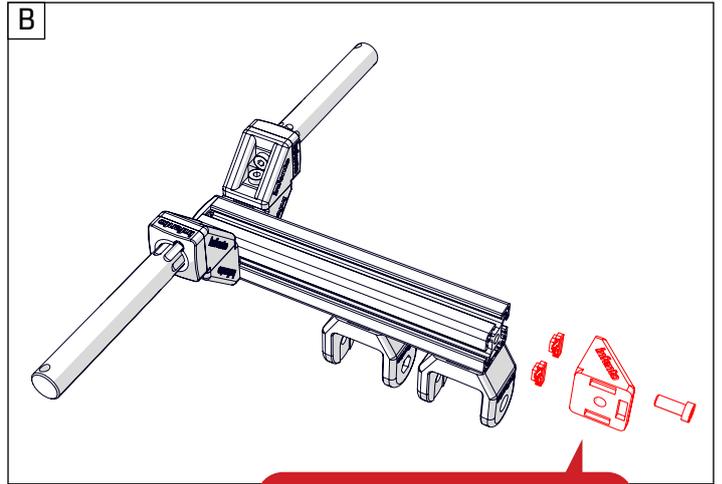
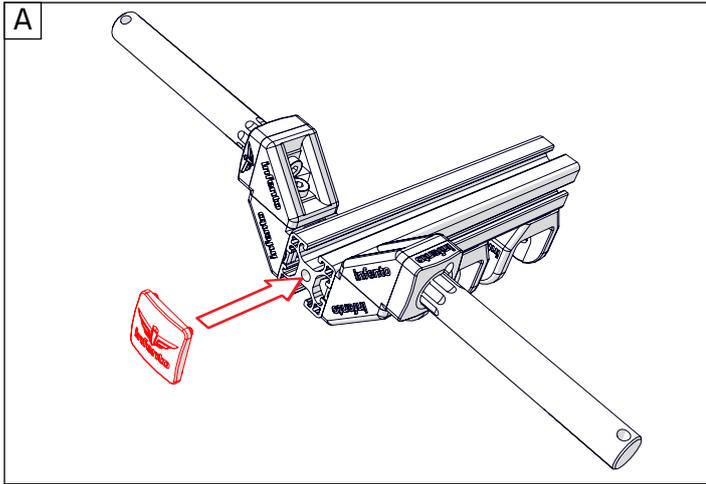


Protect cap 1x

+



L-joint 1x

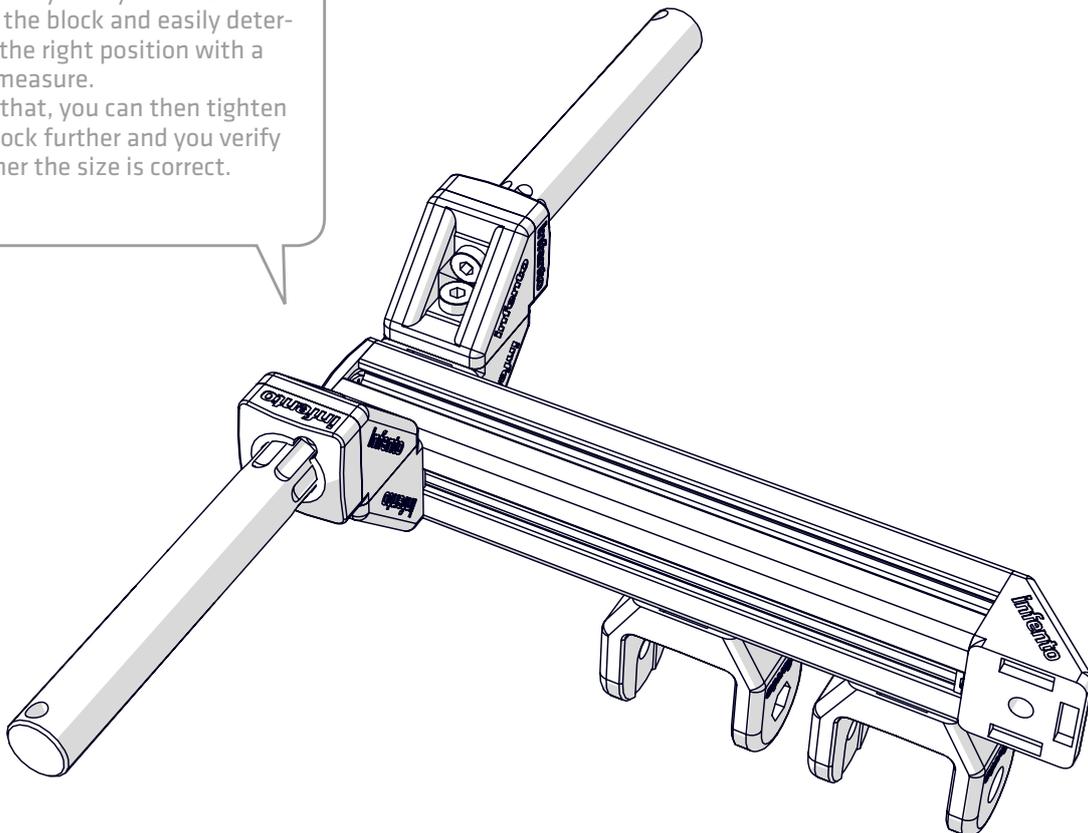


This side has 3 position holes.



TIP!

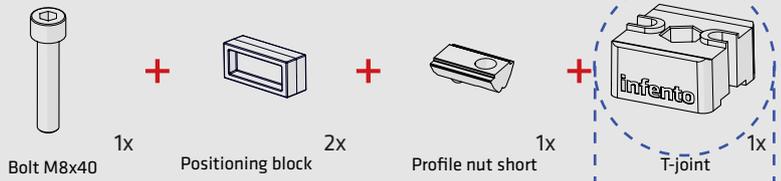
It is best to tighten the bolt in such a way that you can still move the block and easily determine the right position with a tape measure. After that, you can then tighten the block further and you verify whether the size is correct.



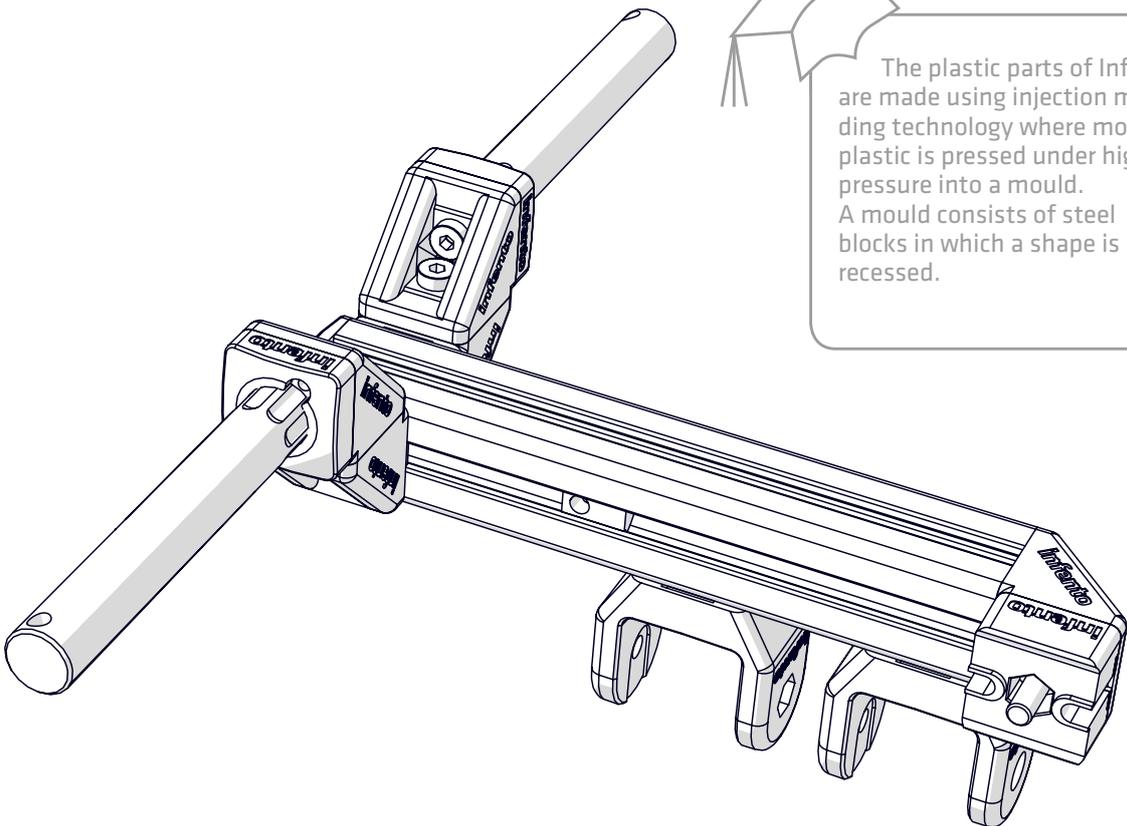
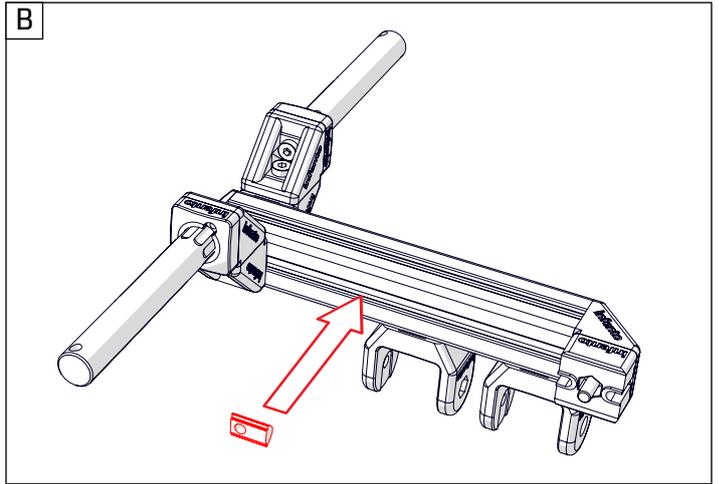
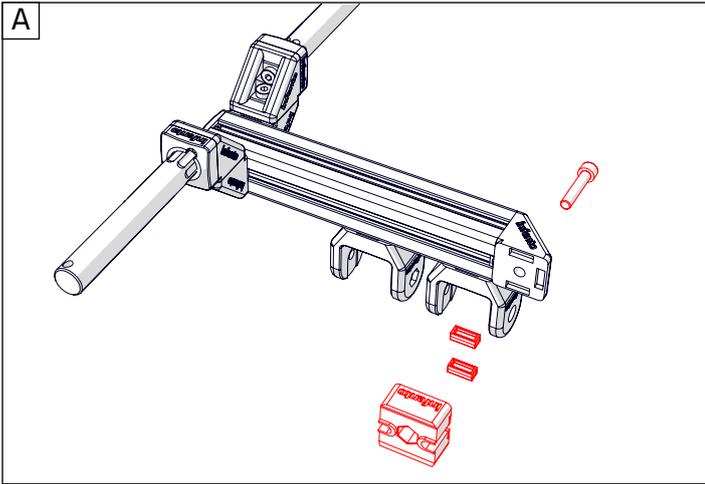
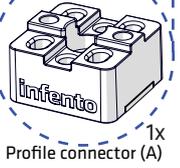


23

ride **TORNADO**



Depending on your Kit, the T-joint might look like this. The new T-joint doubles as a profile connector (part A)

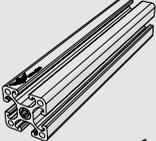


The plastic parts of Infento are made using injection moulding technology where molten plastic is pressed under high pressure into a mould. A mould consists of steel blocks in which a shape is recessed.

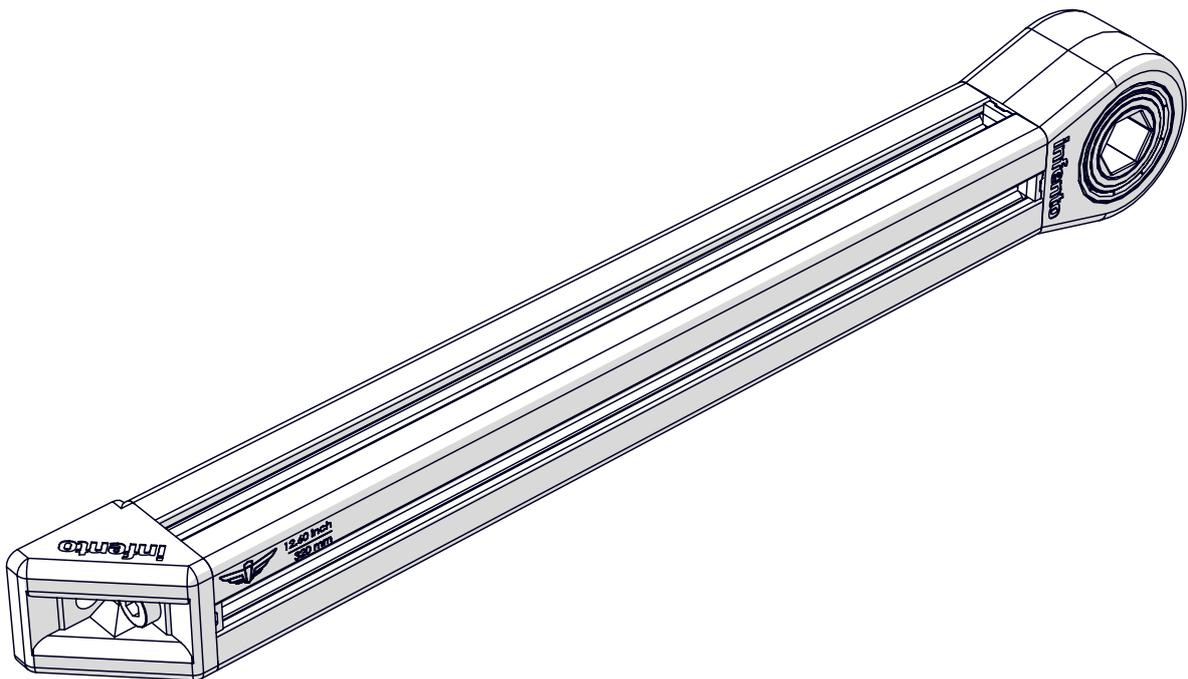
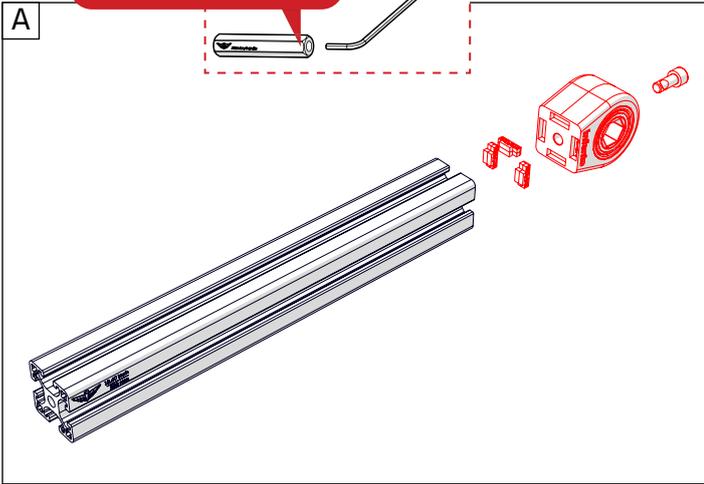


24

ride **TORNADO**

-  1x Bolt M8x20 nylock
-  1x Bolt M8x20 (low head)
-  5x T-Positioning block
-  1x L-joint
-  1x Bearing block 40x40_Hexa 19
-  1x Profile 12.60 inch | 320 mm

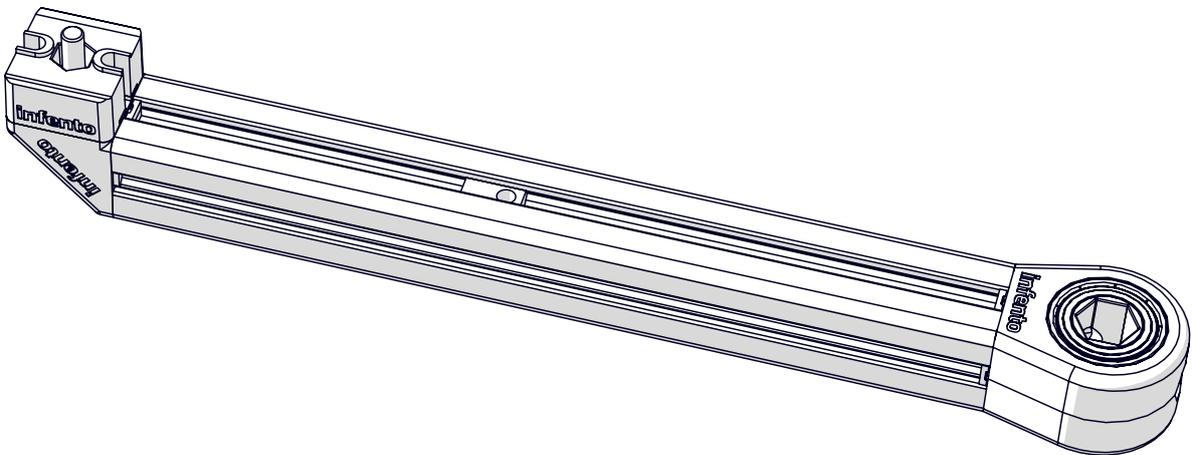
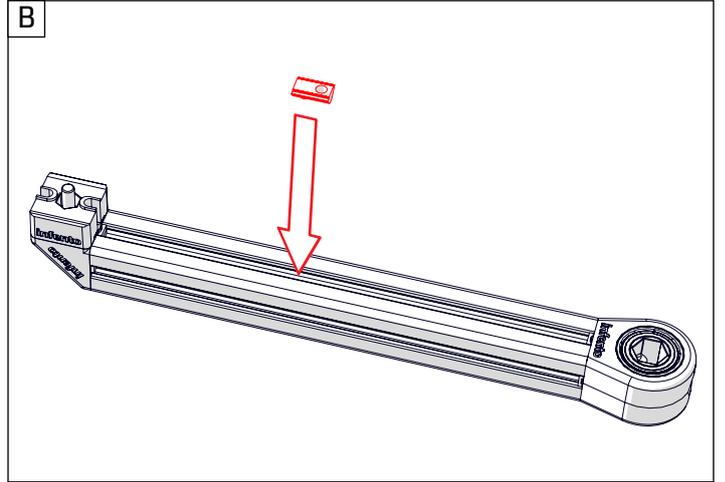
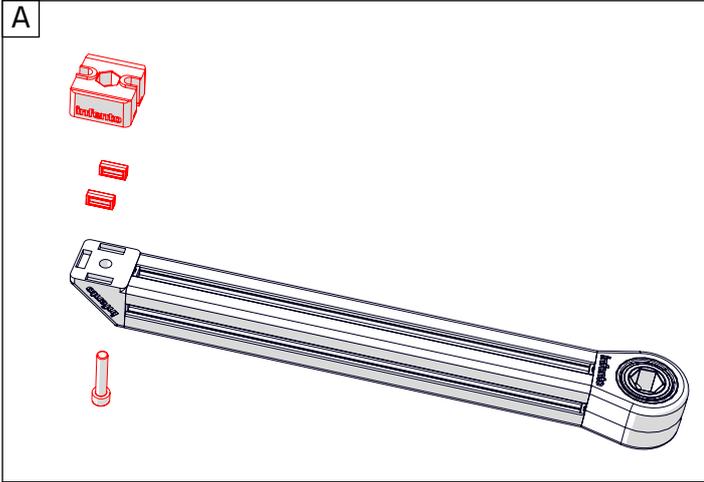
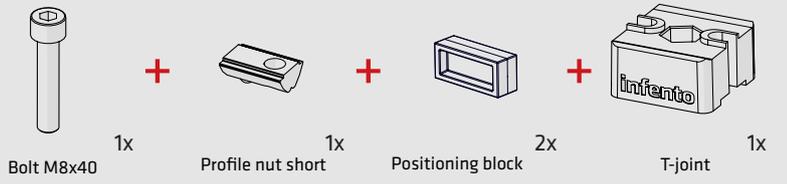
Use the Allen key handle so you can tighten the bolt well.





25

ride **TORNADO**



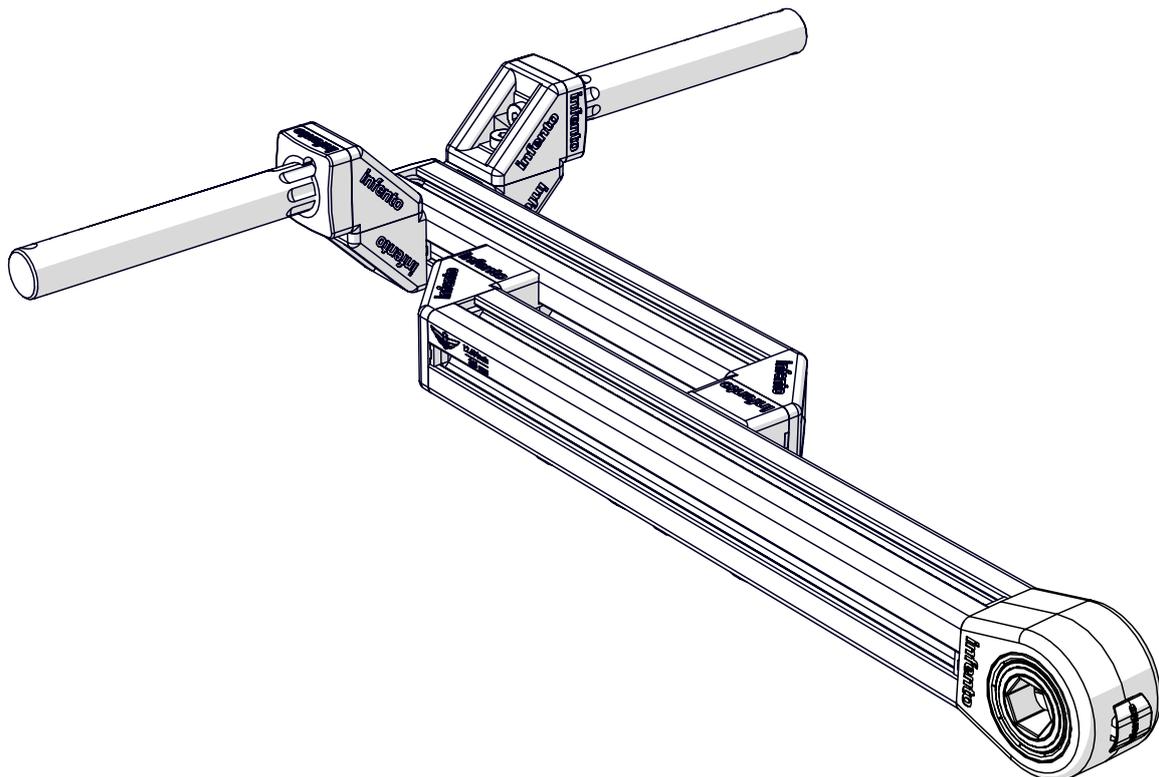
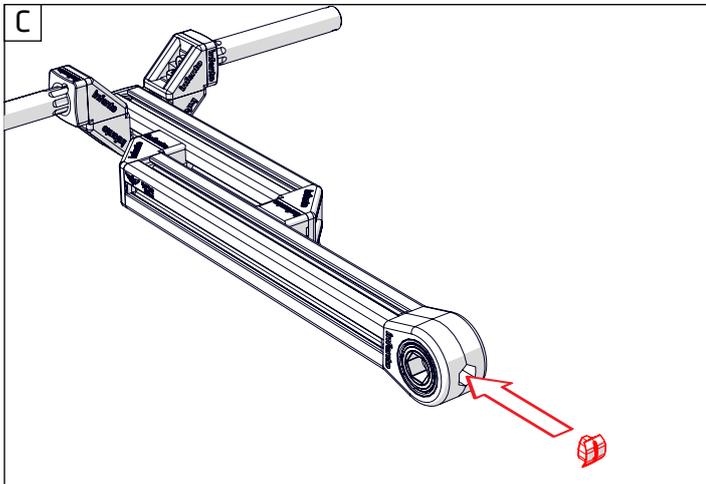
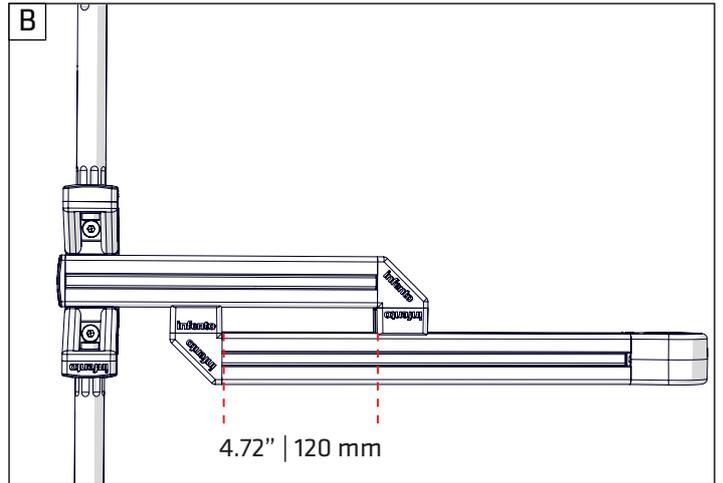
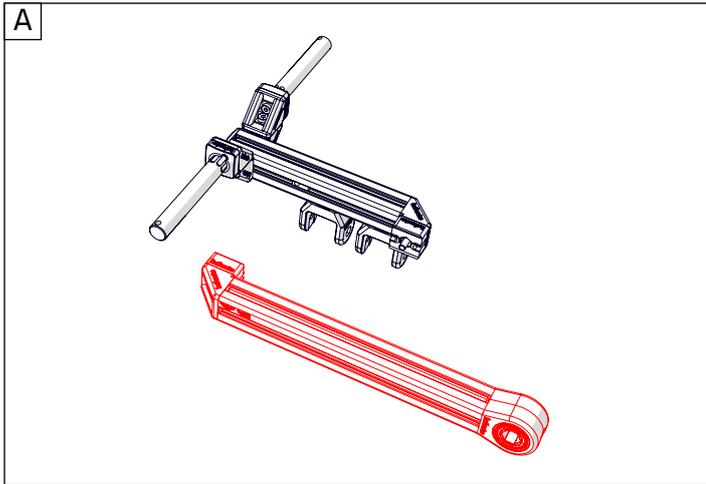


26

ride **TORNADO**



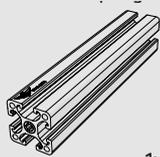
Bearing 1x
protection cap

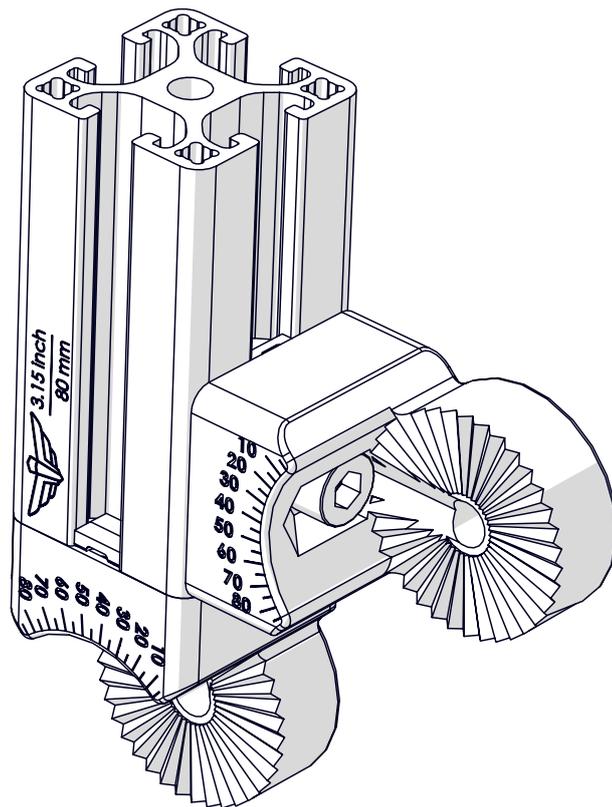
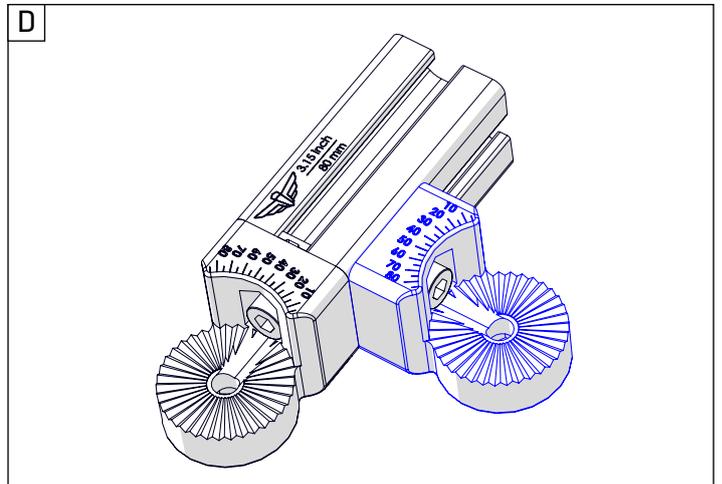
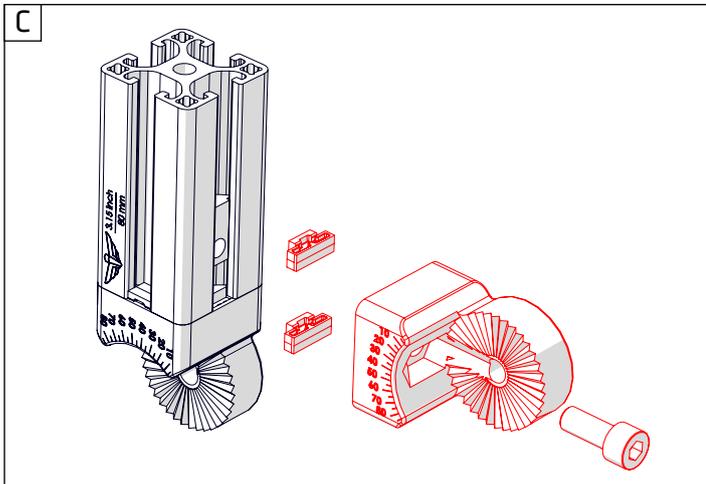
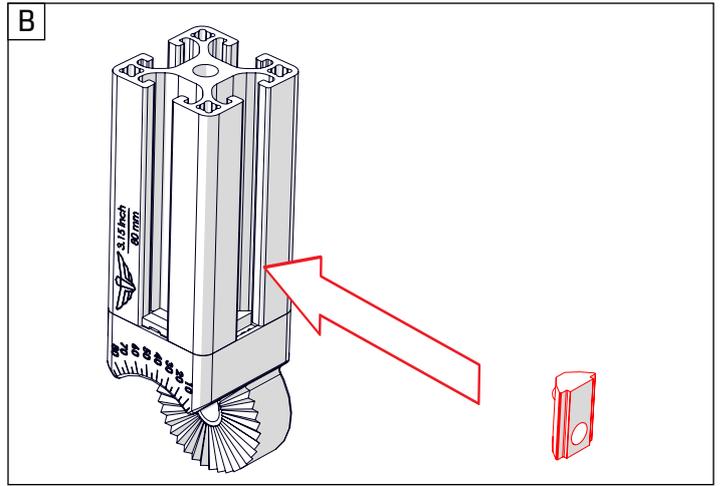
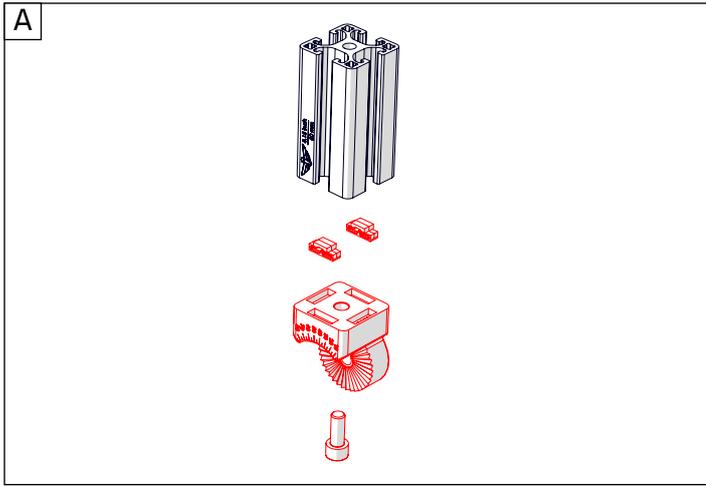




27

ride **TORNADO**

- 
Bolt M8x20 2x
- 
Profile nut short 1x
- 
T-Positioning block 4x
- 
Multi angle joint 2x
- 
Profile 3.15 inch | 80 mm 1x

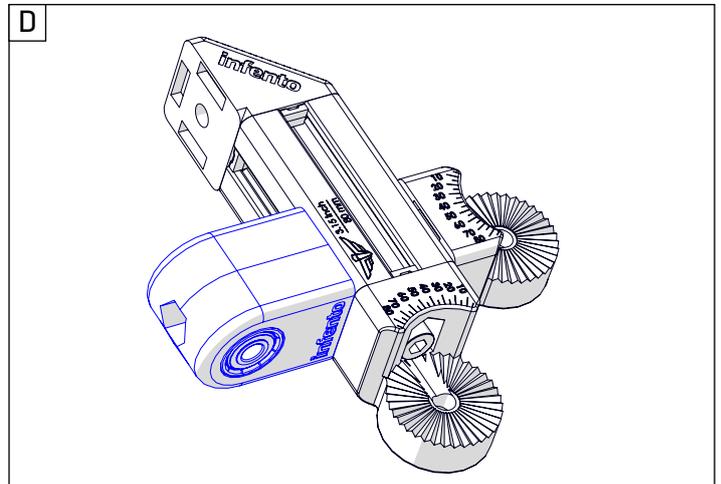
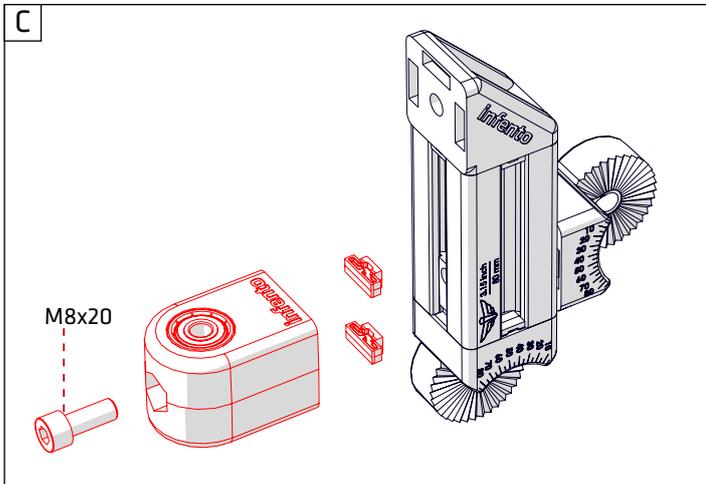
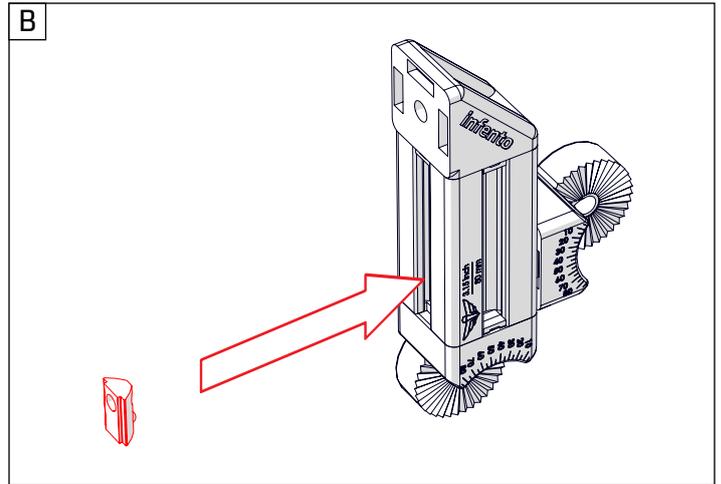
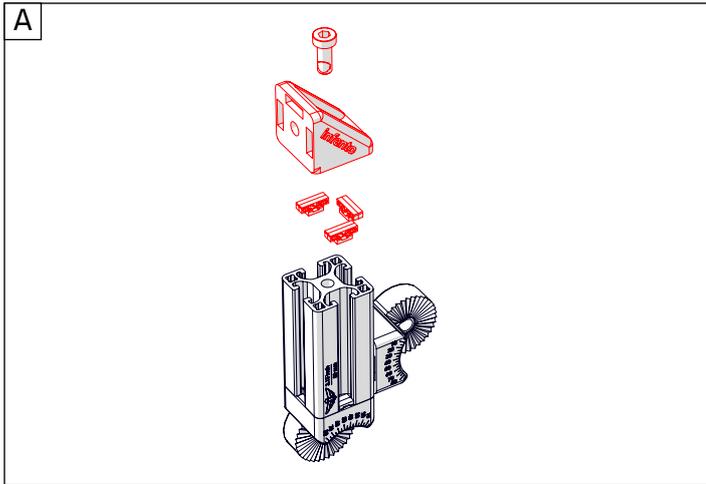




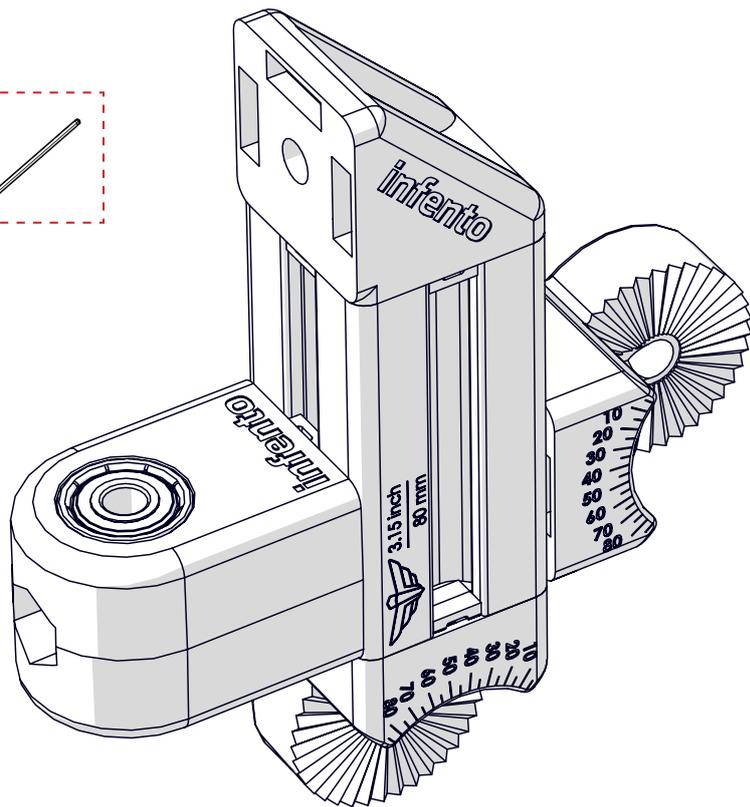
28

ride **TORNADO**

-  1x
-  1x
-  1x
-  5x
-  1x
-  1x



Use the Allen key handle so you can tighten the bolt well.

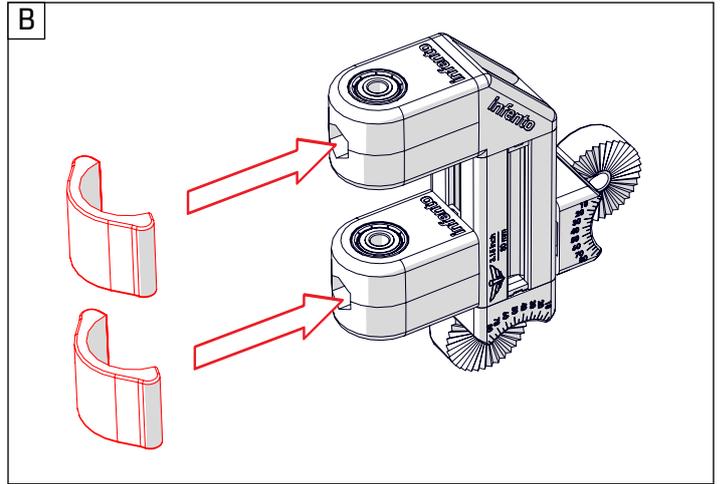
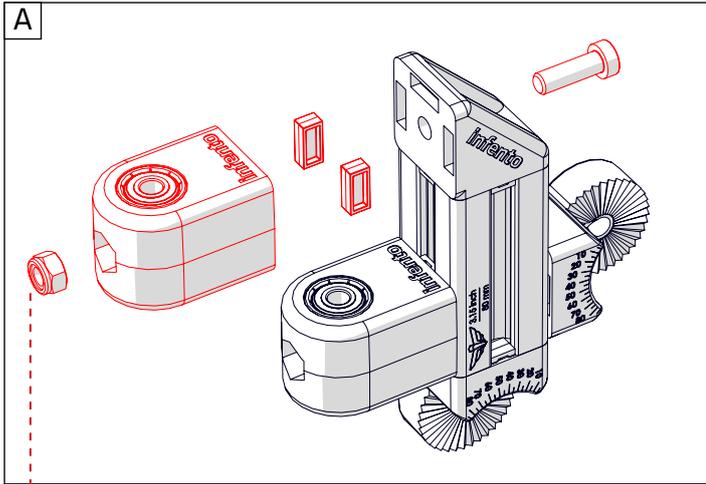




29

ride **TORNADO**

- 
 Bolt M8x25 (low head) 1x
- +
- 
 Positioning block 2x
- +
- 
 Locknut M8 1x
- +
- 
 Angle limiter 40° 2x
- +
- 
 Bearing block 40x40_8 1x



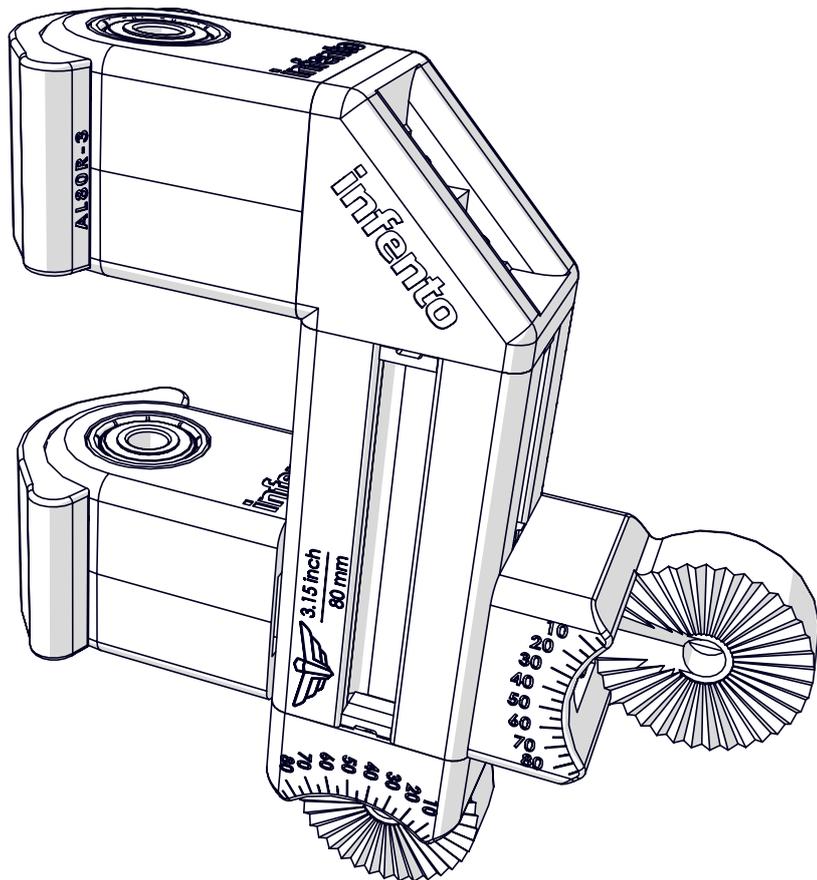
NUT-IN-PART-TRICK

- 

1 take a 5mm Allen key, slide the nut on it
- 

2 stick the Allen key through the part
- 

3 let the nut slide down

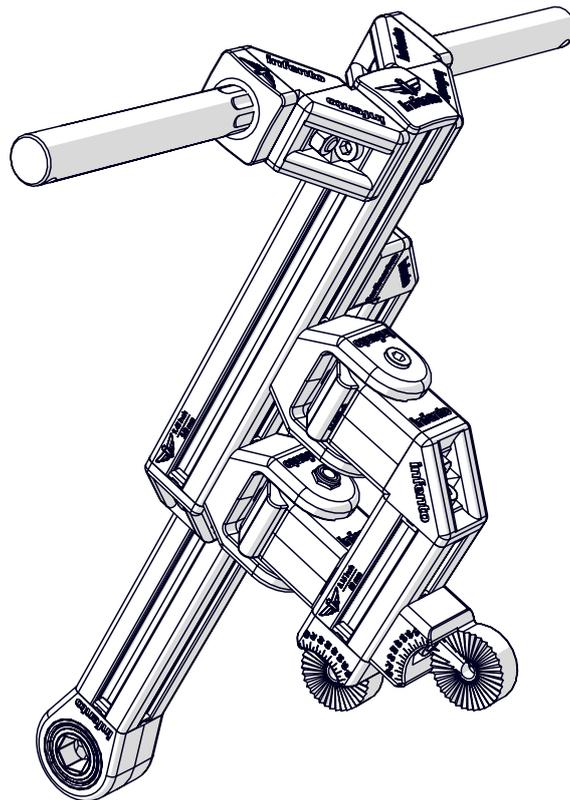
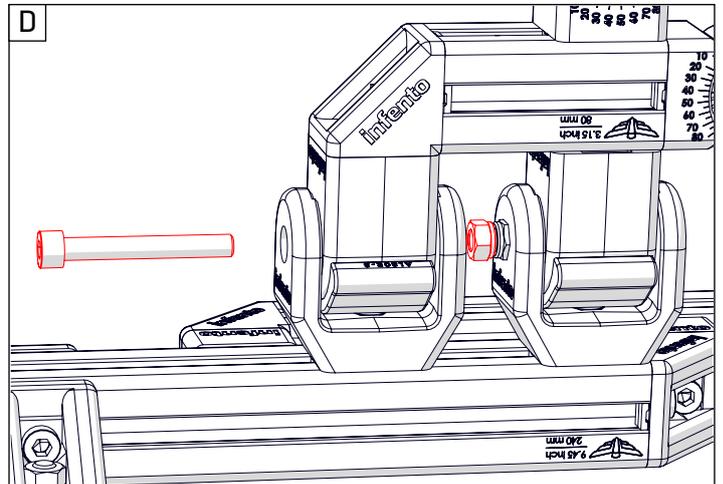
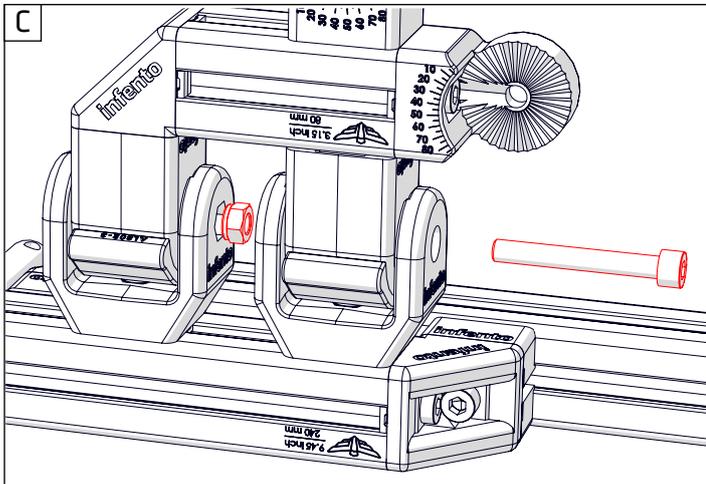
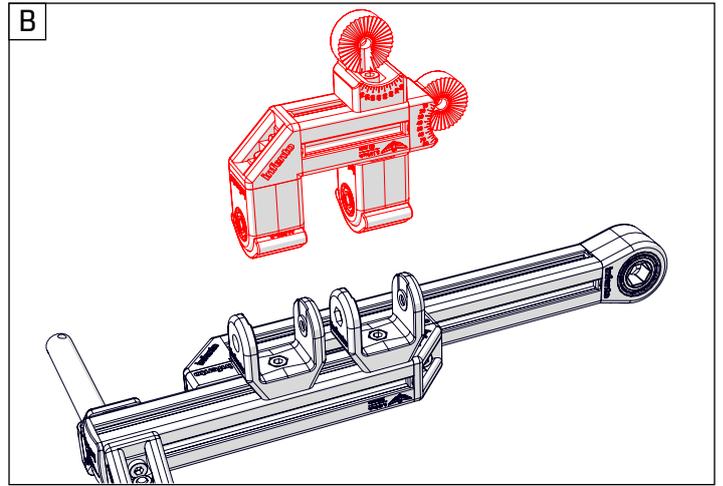
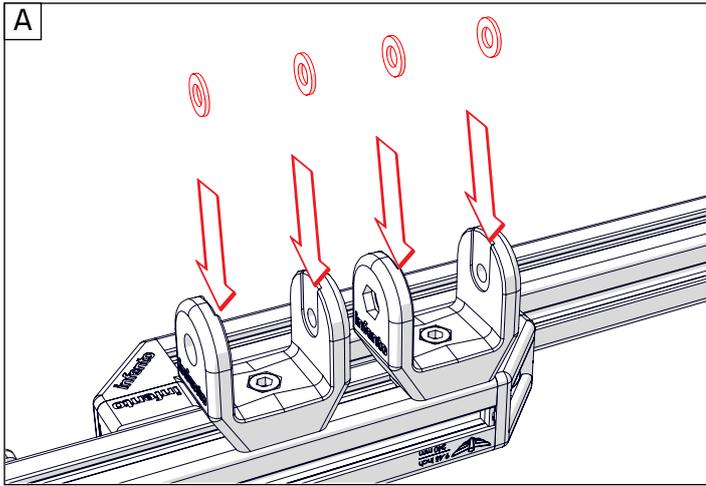




30

ride **TORNADO**

-  Bolt M8x60 2x
-  Locknut M8 2x
-  Washer M8-16 4x

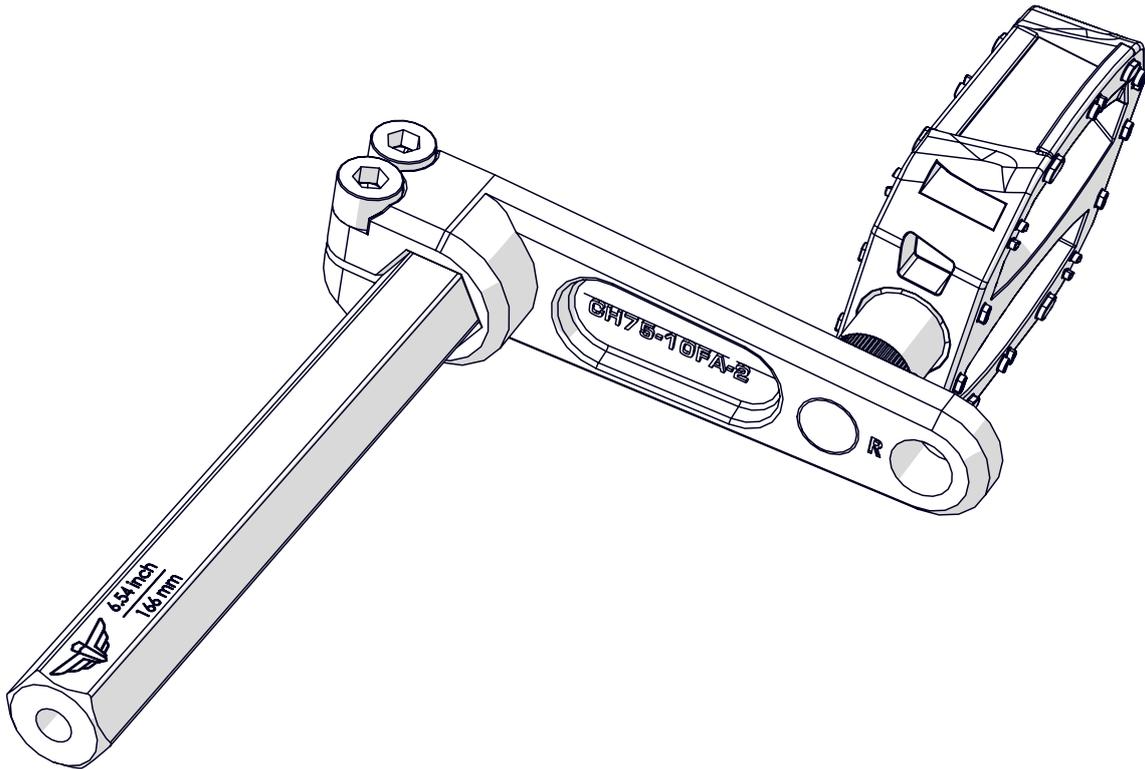
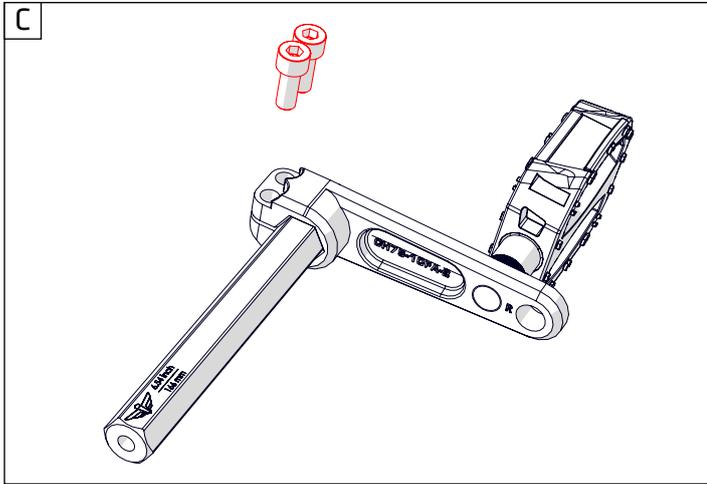
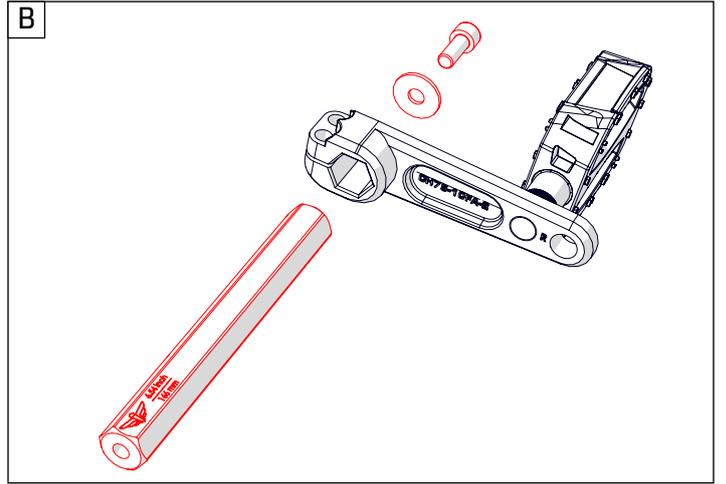
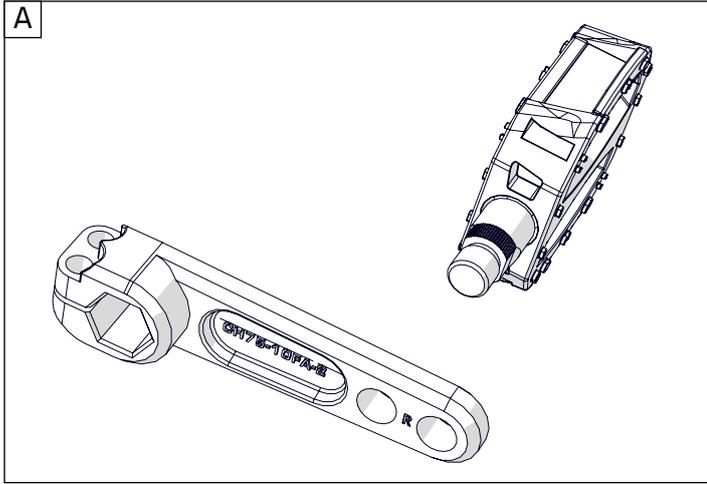




31

ride **TORNADO**

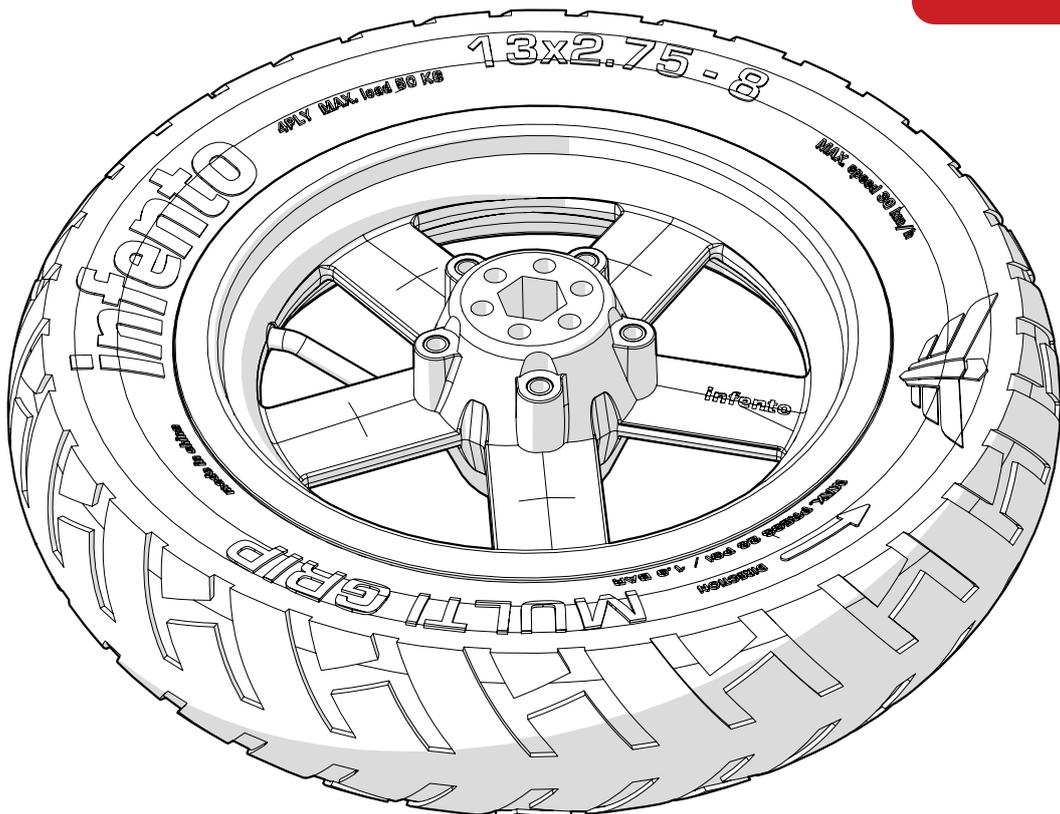
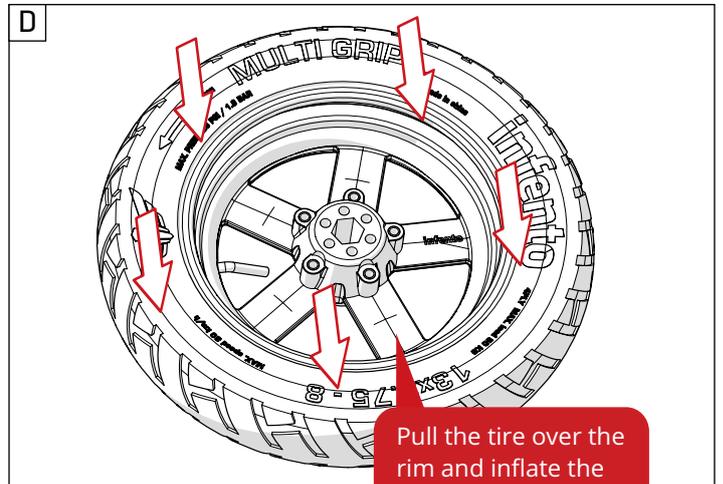
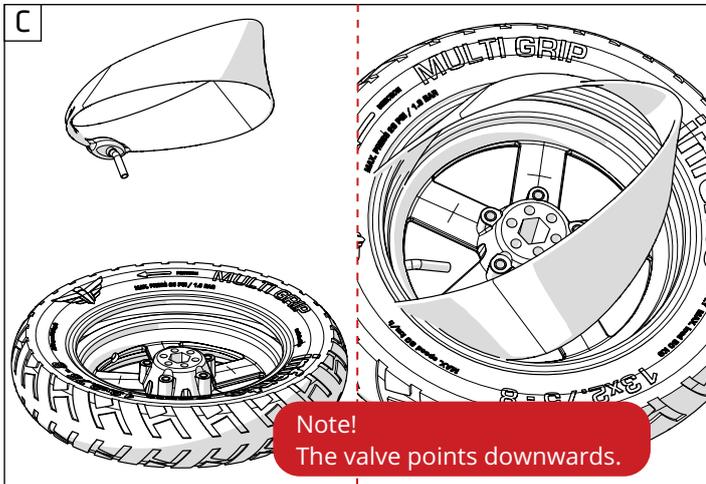
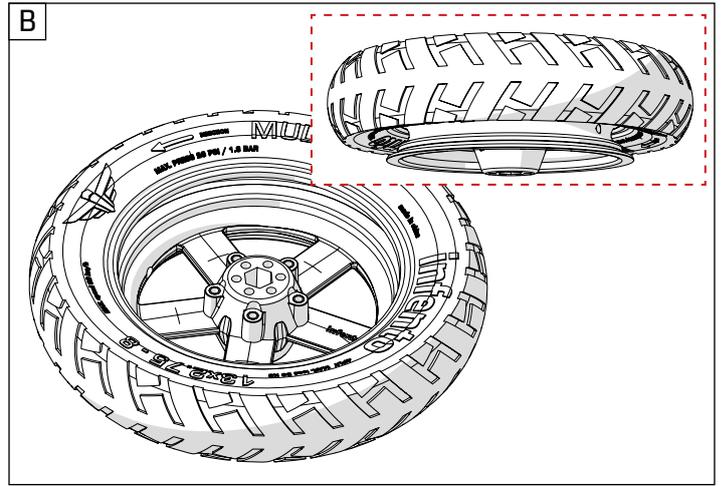
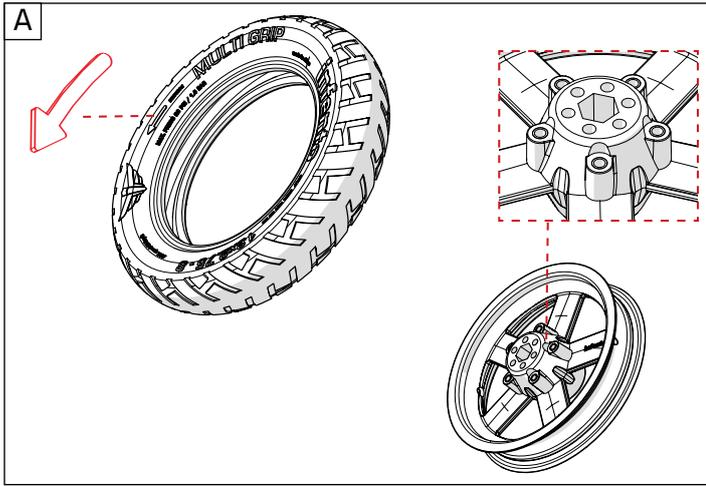
-  +
 -  +
 -  +
 -  +
 -  1x
- Bolt M8x20 3x Washer M8-24 1x Axle 6.54 inch | 166 mm 1x Pedal right 1x Crank large right 1x





32

ride **TORNADO**





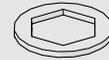
33

ride **TORNADO**



13 inch
Driven wheel 1x

+

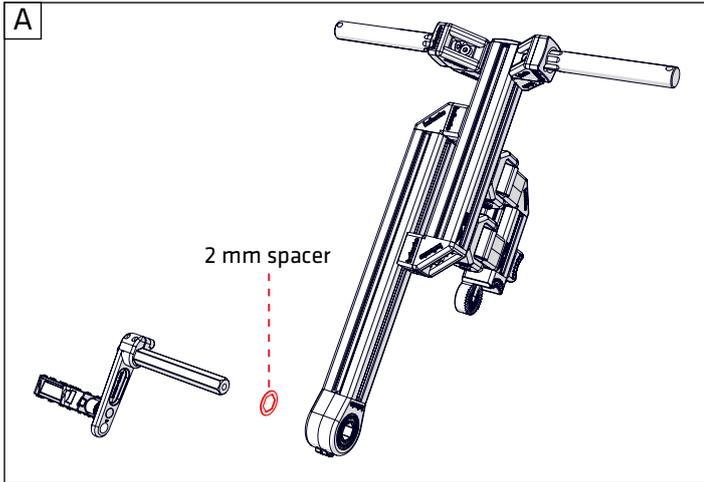


Spacer 1x
0.08 inch | 2 mm

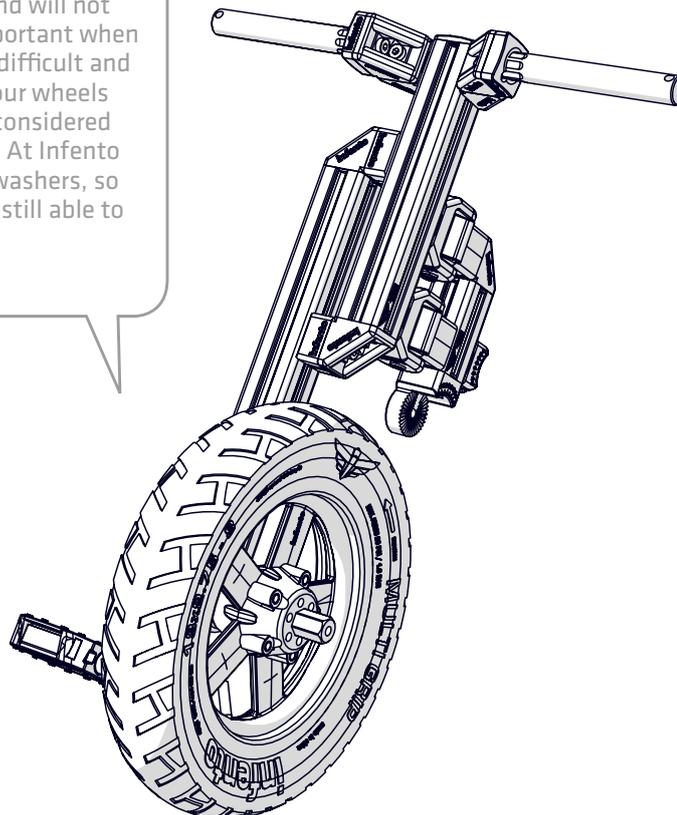
+



Spacer 1x
0.2 inch | 5 mm



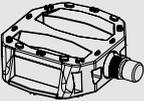
A wheel always has to be locked tightly with washers because the wheel might otherwise move over the axle. This way you ensure that the wheel does not touch anywhere and will not rattle. This is especially important when steering. Just imagine how difficult and hazardous it is to steer if your wheels are moving. This has to be considered for all vehicles with wheels. At Infento this is solved using spacer washers, so you can build freely but are still able to tighten the wheel properly.

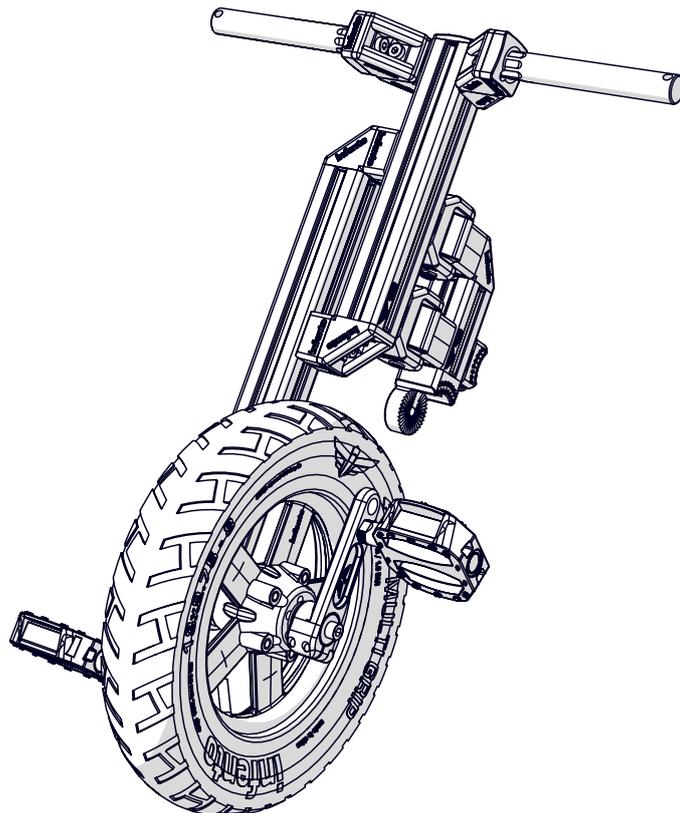
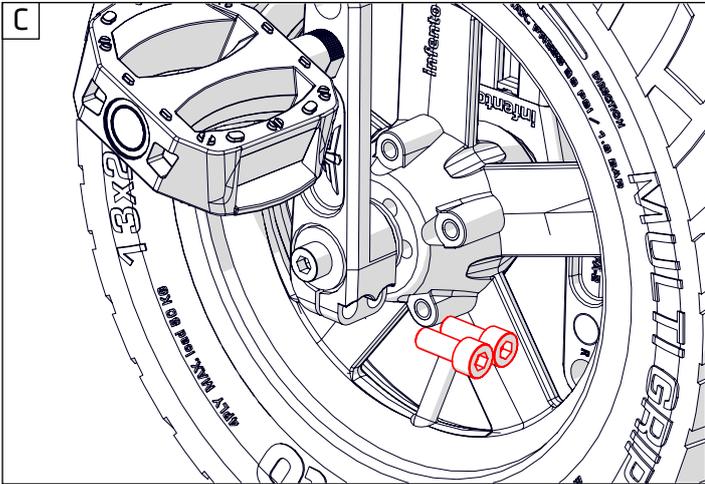
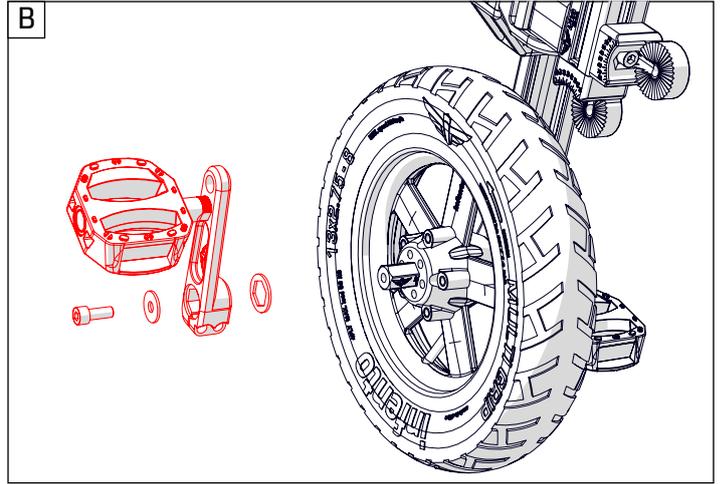
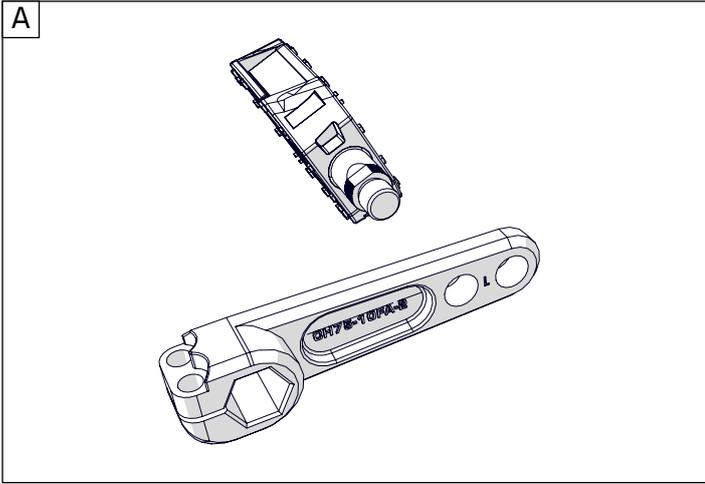




34

ride **TORNADO**

-  **Bolt M8x20** 3x
-  **Spacer 0.08inch | 2 mm** 1x
-  **Washer M8-24** 1x
-  **Crank large left** 1x
-  **Pedal left** 1x

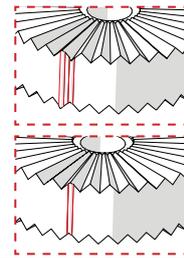




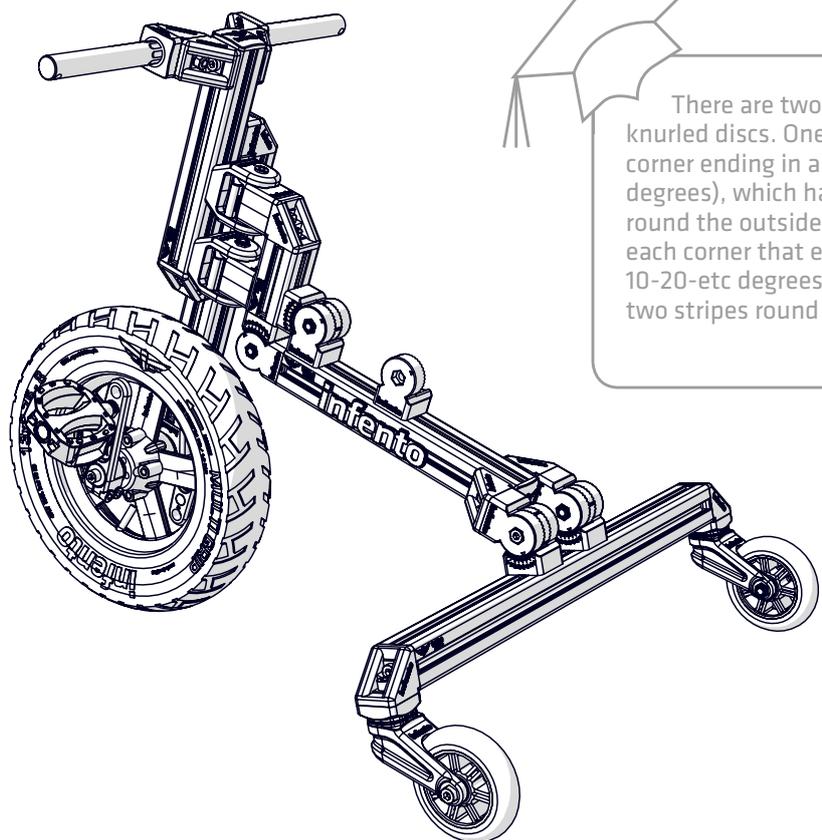
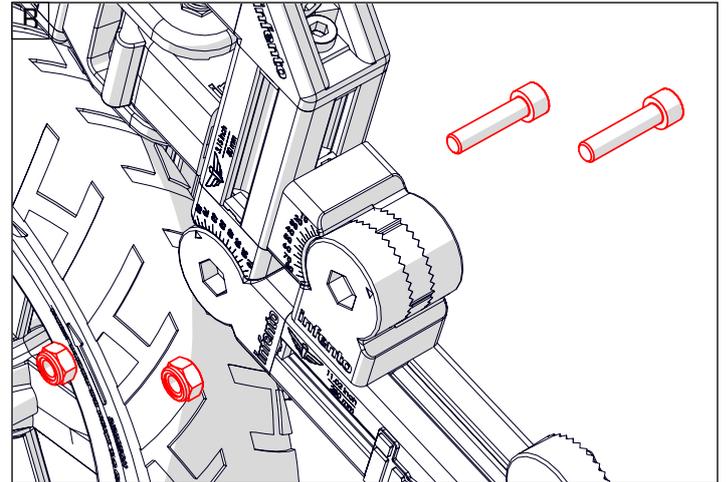
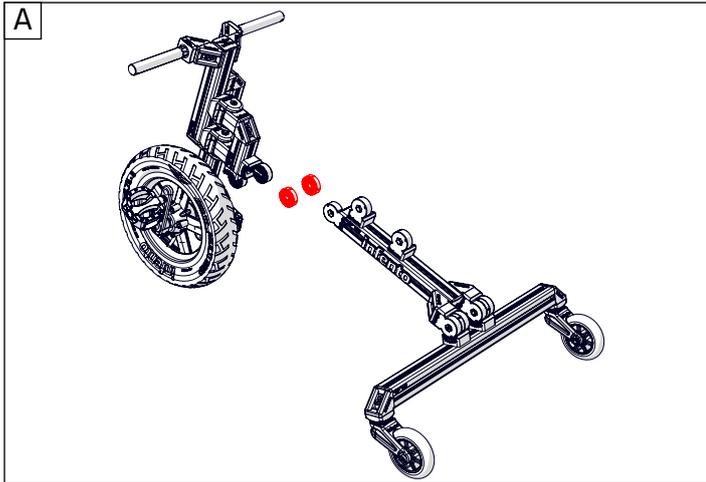
35

ride **TORNADO**

- 
 Bolt M8x35 2x
- 
 Locknut M8 2x
- 
 Knurled disc 2 stripes 2x



There are two types of knurled discs. Please see education section.

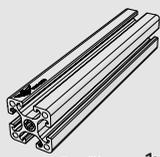


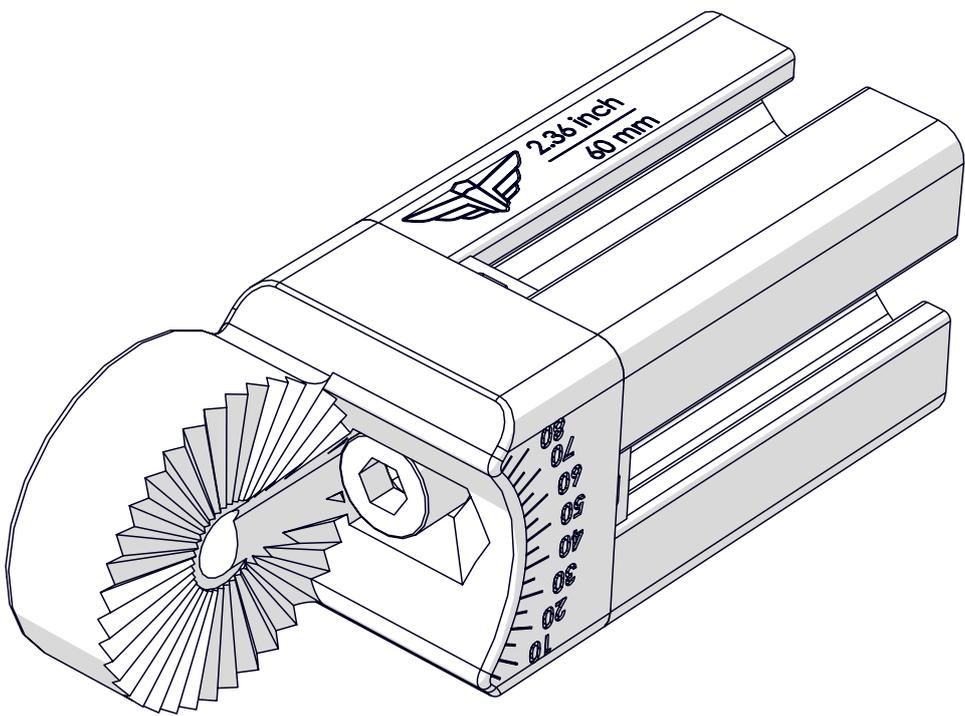
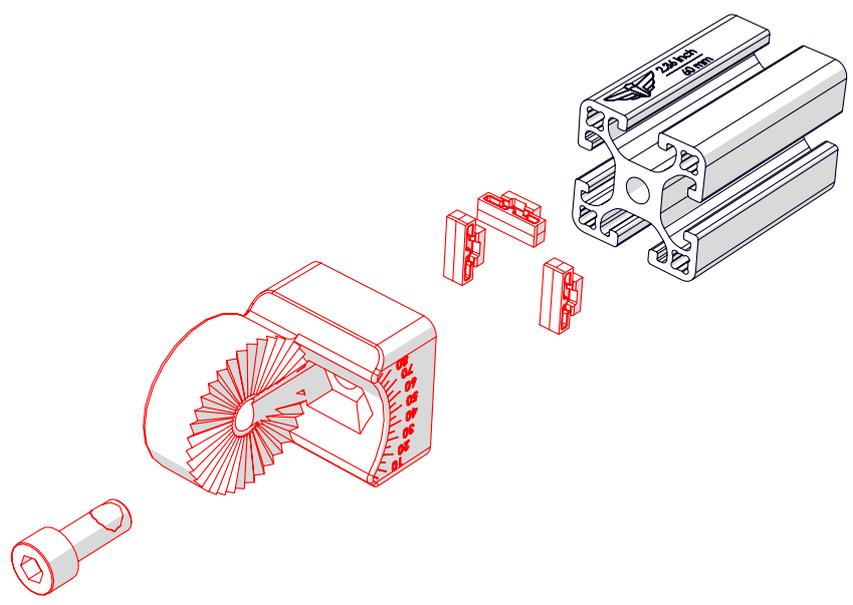
There are two different knurled discs. One for each corner ending in a 5 (5-15-25-etc. degrees), which has one stripe round the outside, and one for each corner that ends in a 0 (0-10-20-etc degrees), which has two stripes round the outside.



36

ride **TORNADO**

-  1x
-  3x
-  1x
-  1x





37

ride **TORNADO**



Bolt M8x20 2x
(low head)

+



Profile nut short 2x

+

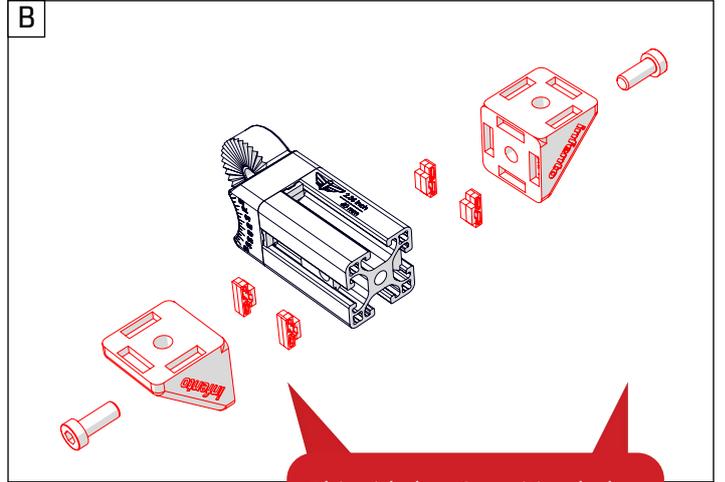
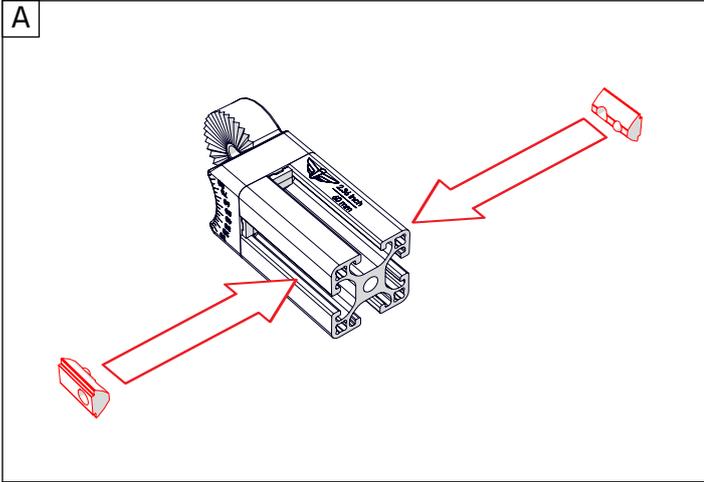


T-Positioning block 4x

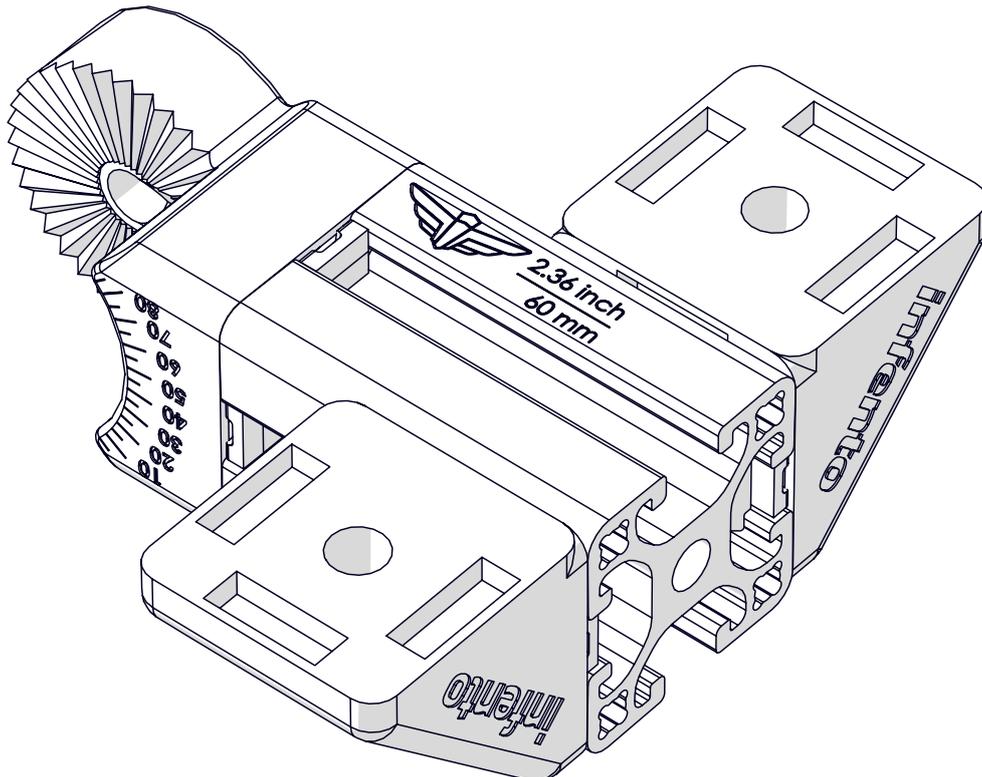
+



L-joint 2x



This side has 3 position holes.





38

ride **TORNADO**



1x

+



1x

+

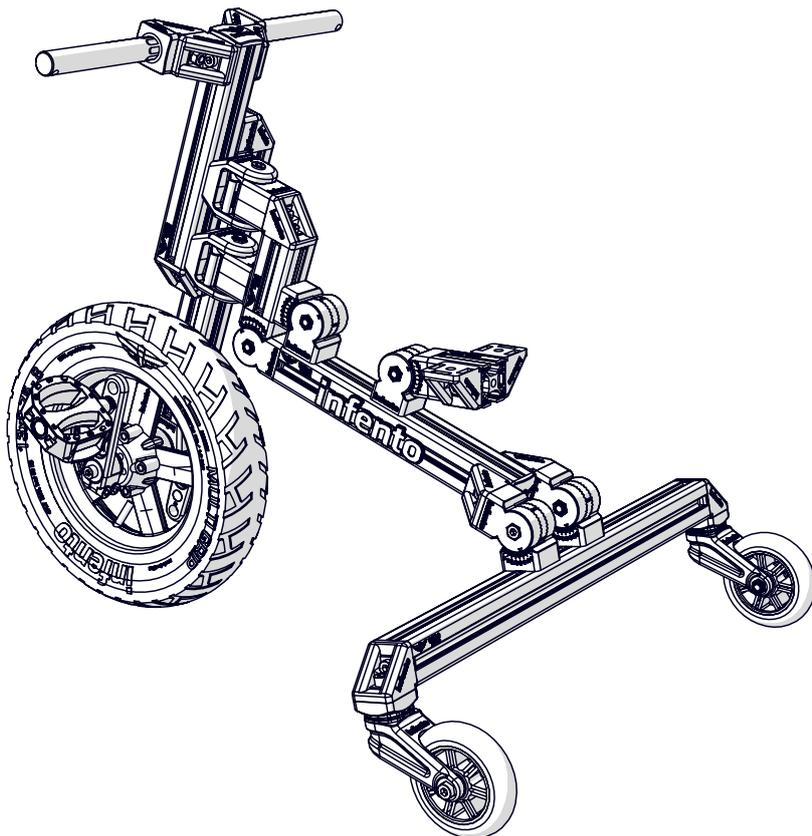
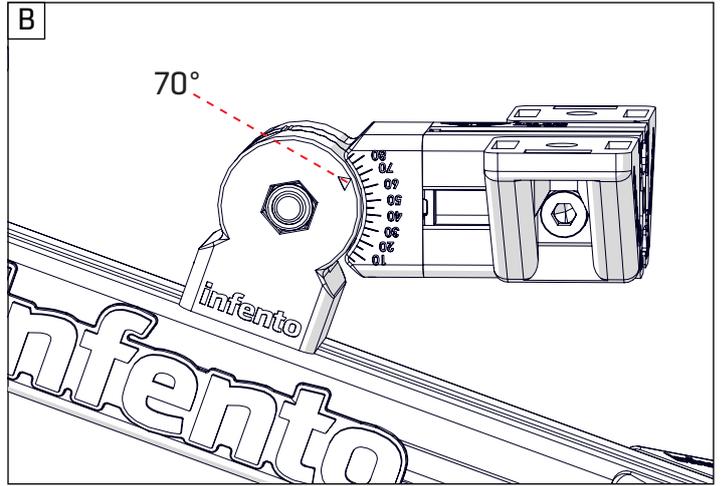
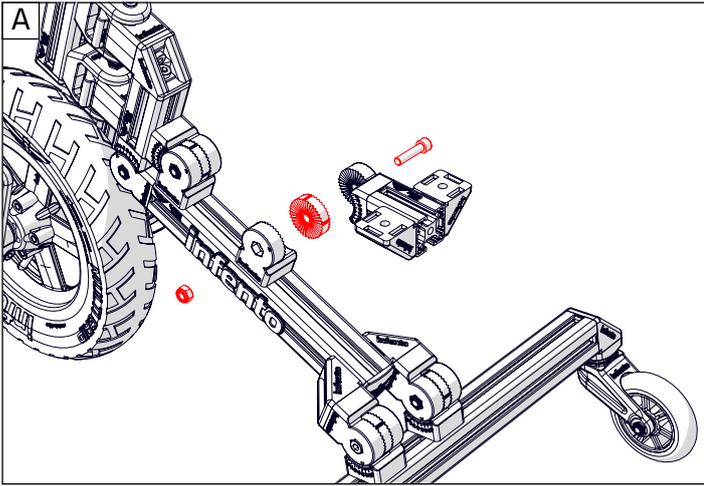


1x

Bolt M8x35

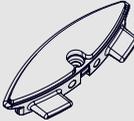
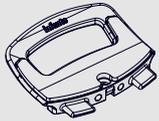
Locknut M8

Knurled disc 2 stripes

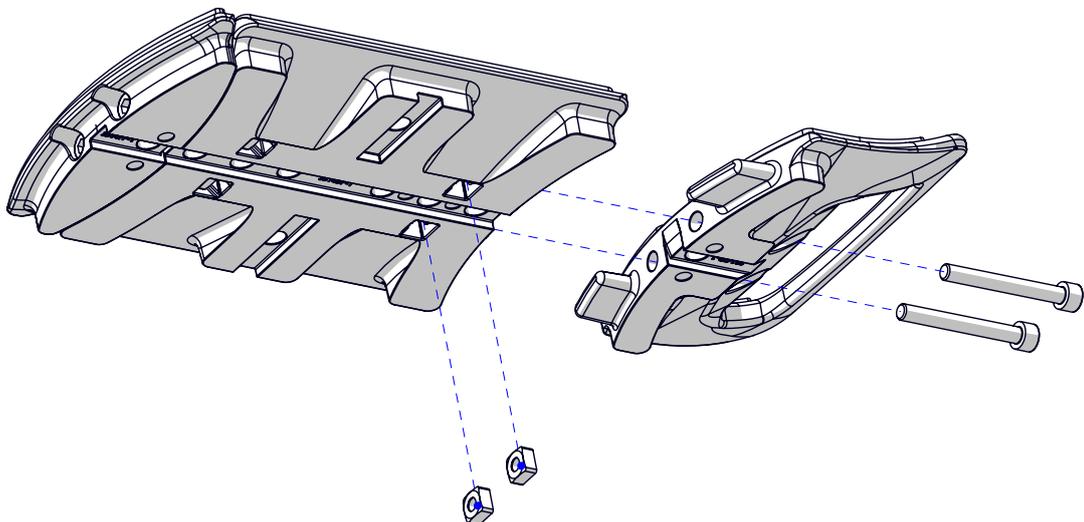
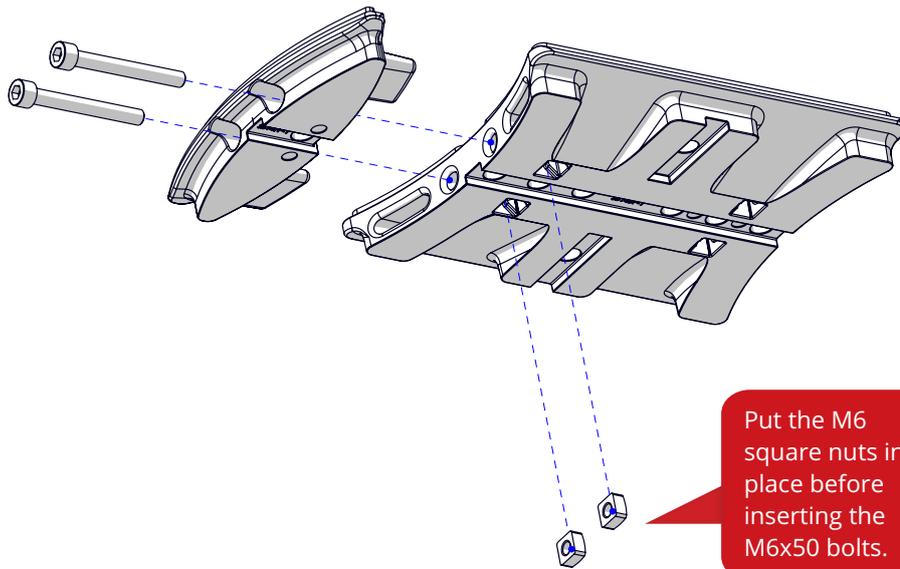
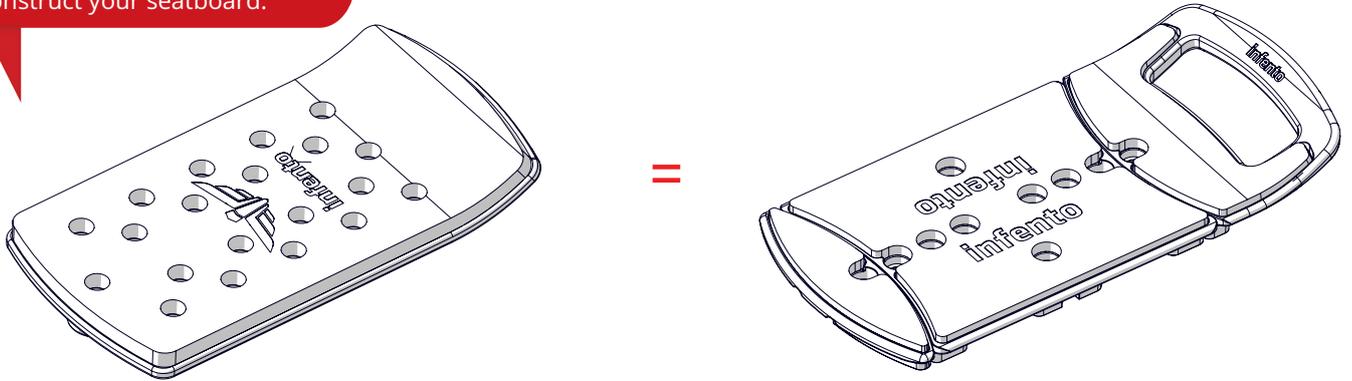




39

-  4x
-  4x
-  1x
-  1x
-  1x

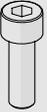
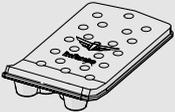
If you have this type of seat in your Kit, please skip to the next page. If not, follow the instructions below to construct your seatboard.

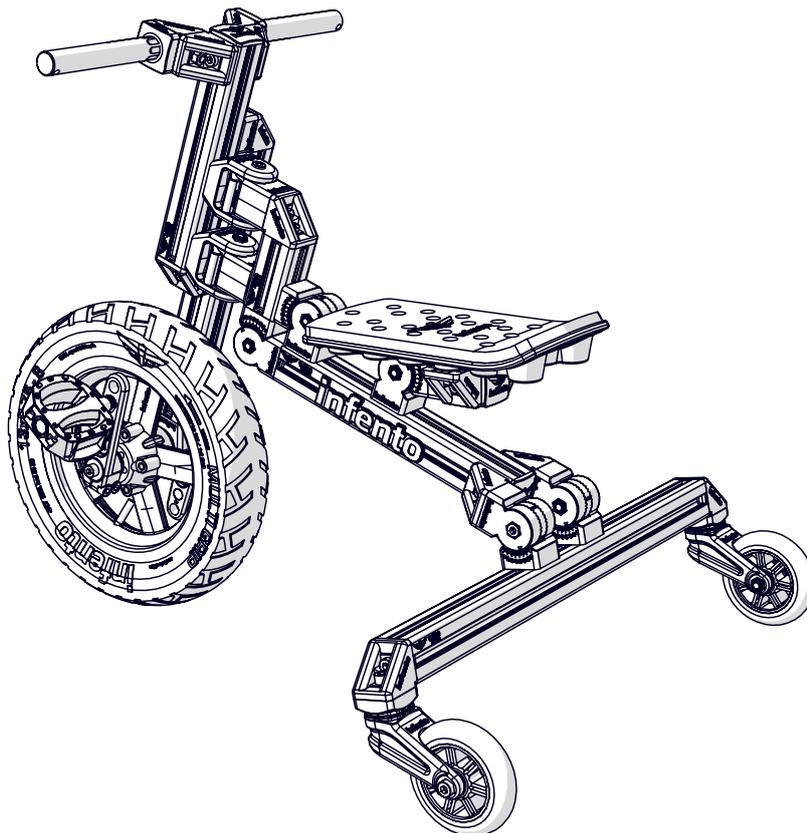
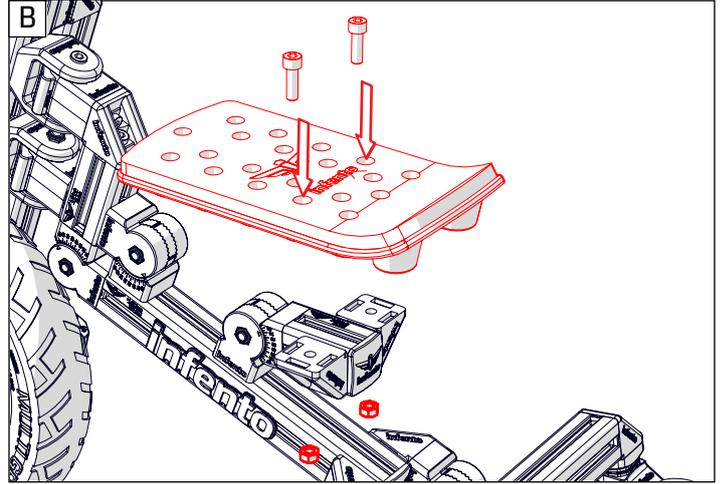
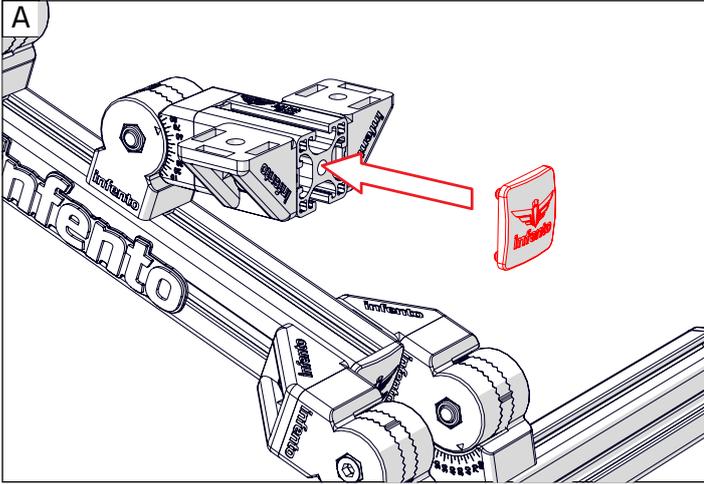




40

ride **TORNADO**

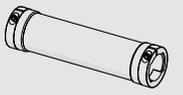
-  2x
-  2x
-  1x
-  1x



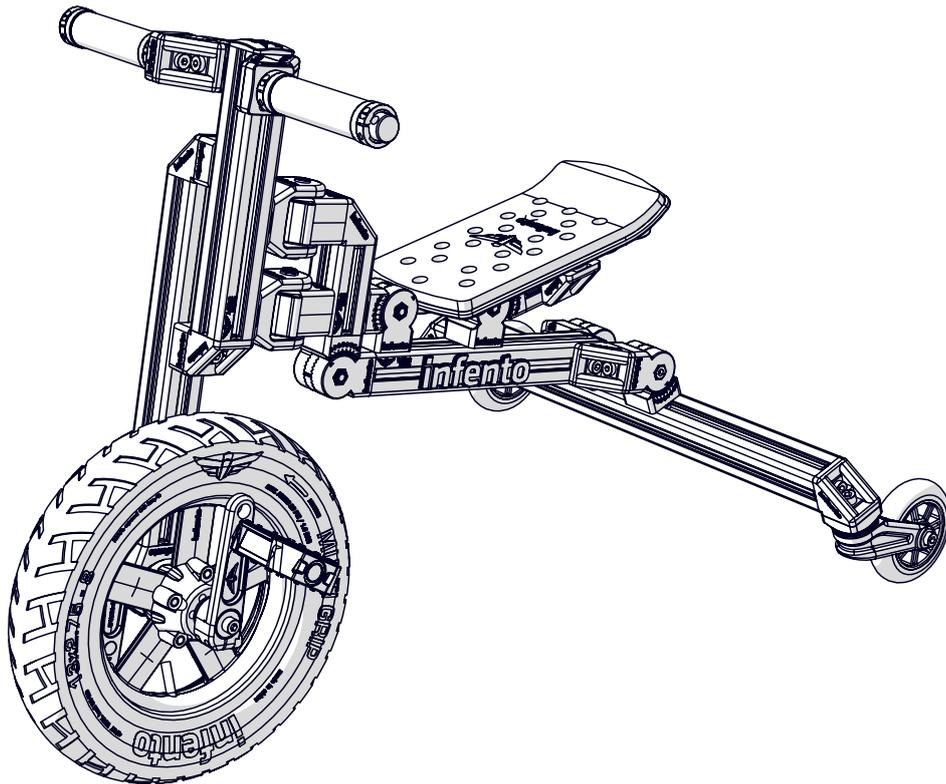
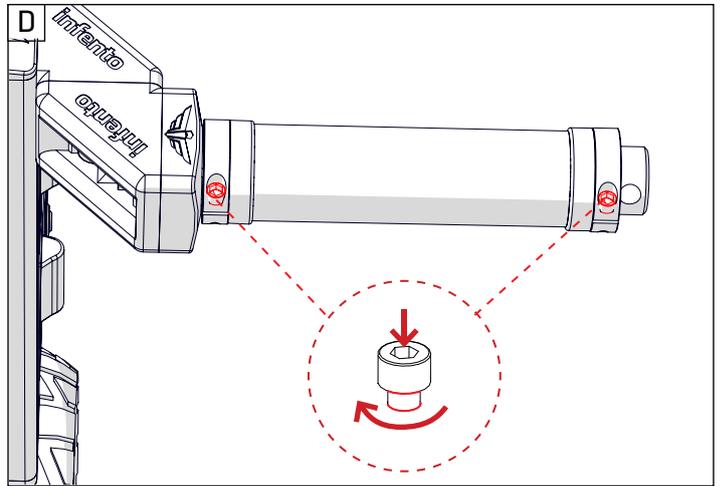
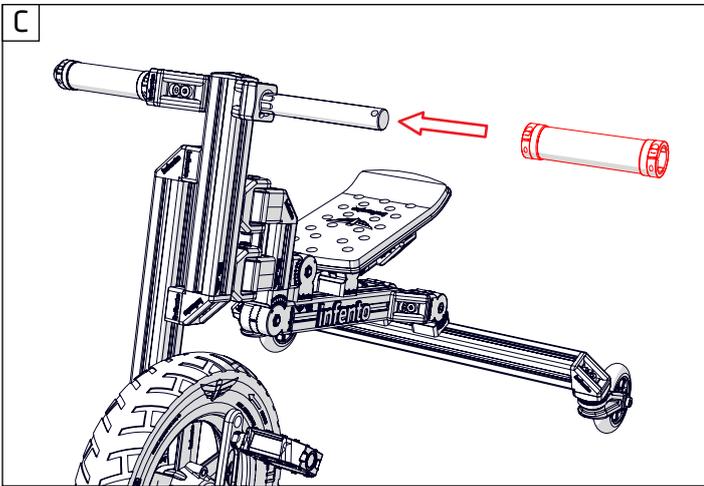
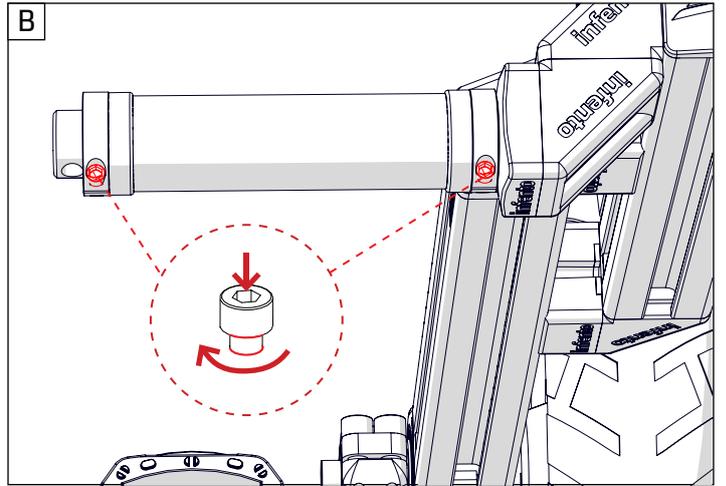
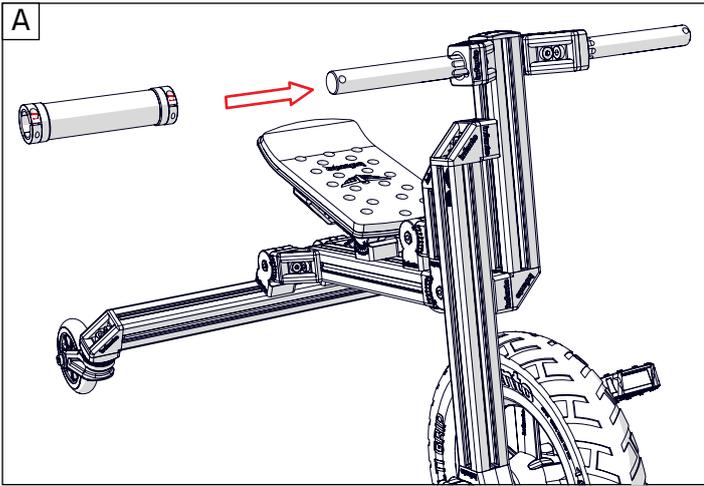


41

ride **TORNADO**



Handgrip 2x



TORNADO^{G1}



THANK YOU FOR READING ME!