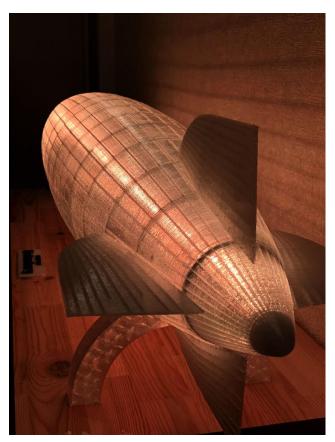


#### 1/200Scale Airship LZ129 Hindenburg







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# Highlights of this model kit

This model is a scale model of 1/200 scale Hindenburg airship. The unique stringer rib construction reproduces the realistic skeleton of the Hindenburg, as well as the passenger cabin and gondola, and engine car are also incorporated. It can also be used as a beautiful interior light by incorporating LED tape lights.

#### Note

Please scale the data according to the size of the build plate of your 3D printer. Example prusaMk3s 98%. Length 1200 mm

Material Easy-to-obtain, transparent PLA filament, and some colors if you want. For LED mount frame, I recommend to Use PETG

## List of items in this kit

partsNo	Partsname	sliœr	nozzle	perimater	infill	material	brim	layerhight	Quantity	note
1	backstand.stl		0.4	3	5	PLA		0.2	1	
2	endcap.stl		0.4	3	15	PLA		0.15	1	
3	engine_RL.stl		0.4	3	15	PLA	Support	0.15	1	
4	engine_FR.stl		0.4	3	15	PLA	Support	0.15	1	
5	engine_RR.stl		0.4	3	15	PLA	Support	0.15	1	
6	engineFL.stl		0.4	3	15	PLA	Support	0.15	1	
7	frontcap.stl		0.4	3	15	PLA		0.15	1	
8	gondra.stl	Cura	0.4			PLA			1	Cura profile
9	LEDstayType1.stl		0.4	3	15	PETG		0.15	2	
10	LEDstayType2.stl		0.4	3	15	PETG		0.15	2	
11	logoplate.stl		0.4	3	15	PLA		0.15	1	
12	LZ129_fn8.stl	Cura	0.4			PLA	on		1	Cura profile
13	LZ129_fn2 stringer.stl		0.4	3	15	PLA		0.15	1	
14	LZ129_fn2.stl	Cura	0.4			PLA	on		1	Cura profile
15	LZ129_fn3.stl	Cura	0.4			PLA	on		1	Cura profile
16	LZ129_fn3stringer.stl		0.4	3	15	PLA		0.15	1	
17	LZ129_fn4.stl	Cura	0.4			PLA	on		1	Cura profile
18	LZ129_fn4stringer.stl		0.4	3	15	PLA		0.15	1	
19	LZ129_fn5.stl	Cura	0.4		-	PLA	on		1	Cura profile
20	LZ129_fn5stringer.stl		0.4	3	15	PLA		0.15	1	
21	LZ129 fn6 bulge.stl		0.4	3	15	PLA		0.15	1	
22	LZ129 fn6 interiorFirstdeck.stl	Cura	0.4	3	15	PLA			1	
23	LZ129 fn6 interiorsecond deck.stl	Cura	0.4	3	15	PLA			1	
24	LZ129_fn6_stringer.stl		0.4	3	15	PLA		0.15	1	
25	LZ129_fn6withcabin.stl	Cura	0.4			PLA	on		1	Cura profile
26	LZ129_fn7 .stl	Cura	0.4			PLA	on		1	Cura profile
27	LZ129_fn7_Stringer.stl		0.4	3	15	PLA		0.15	1	
28	LZ129_fn8_stringer.stl		0.4	3	15	PLA		0.15	1	
29	LZ129_fn9.stl	Cura	0.4			PLA	on		1	Cura profile
30	LZ129_fn9_stringer.stl		0.4	3	15	PLA		0.15	1	
31	LZ129_fn10.stl	Cura	0.4			PLA	on		1	Cura profile
32	LZ129_fn10_stringer.stl		0.4	3	15	PLA		0.15	1	
33	LZ129_fn11.stl	Cura	0.4			PLA	on		1	Cura profile
34	LZ129_fn11_stringer.stl		0.4	3	15	PLA		0.15	1	

## List of items in this kit

35	LZ129 fn12.stl	Cura	0.4			PLA	on		1	Cura profile
36	LZ129_fn12_stringer.stl		0.4	3	15	PLA		0.15	1	
37	LZ129_fn13.stl	Cura	0.4			PLA	on		1	Cura profile
38	LZ129_fn13_stringer.stl		0.4	3	15	PLA		0.15	1	
39	LZ129_fn14.stl	Cura	0.4			PLA	on		1	Cura profile
40	LZ129_fn14_stringer.stl		0.4	3	15	PLA		0.15	1	
41	LZ129_fn15.stl	Cura	0.4			PLA	on		1	Cura profile
42	LZ129_fn15_stringer.stl		0.4	3	15	PLA		0.15	1	
43	LZ129_fn16.stl	Cura	0.4			PLA	on		1	Cura profile
44	LZ129_fn16_stringer.stl		0.4	3	15	PLA		0.15	1	
45	LZ129_fn17.stl	Cura	0.4			PLA	on		1	Cura profile
46	LZ129_fn17_stringer.stl		0.4	3	15	PLA		0.15	1	
47	LZ129_fn5_stringer.stl		0.4	3	15	PLA		0.15	1	
48	prop.stl		0.4	3	15	PLA		0.15	4	
49	piano.stl		0.4	3	15	PLA		0.15	1	
50	stabilizer.stl	Cura	0.4			PLA	on		4	Cura profile
51	tower_mast1.stl		0.4	3	15	PLA		0.15	1	
52	tower_mast2.stl		0.4	3	15	PLA		0.15	1	
53	tower_mast3.stl		0.4	3	15	PLA		0.15	1	
54	tower_mast4.stl		0.4	3	15	PLA		0.15	1	
55	towerBase.stl		0.4	3	15	PLA		0.2	1	
56	towerfcoupler.stl		0.4	3	15	PLA		0.15	1	

## What you need besides the kit

itemname	Quantity	link	note
super clear epoxiglue	1	<u>amazon</u>	example
CA glue	1	amazon	example
Carbon rod		amazon	5 φ *400mm by 3
LED tape	1	<u>amazon</u>	example
Threaded Rod Set	1	amazon	example

Active link list on google drive.



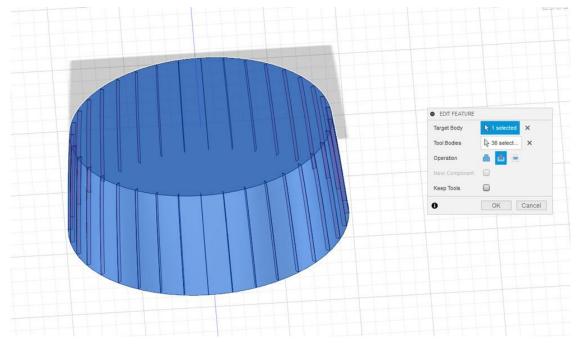
# How to slice the STL data.

The STL data in this kit must be uniquely sliced.

For this reason, we have included data that has already been Gcode-ized.

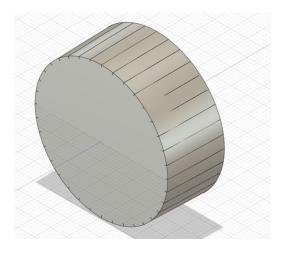
To slice STL data properly, CURA is required, so please download <u>CURA</u> if necessary.

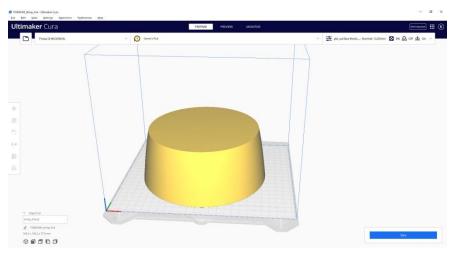
Detailed configuration profiles for Cura's PLA(not for LW-PLA) filaments are also included in this kit.

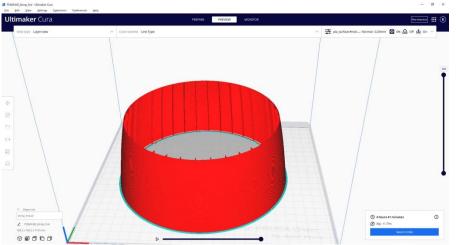


Sample of original STL data

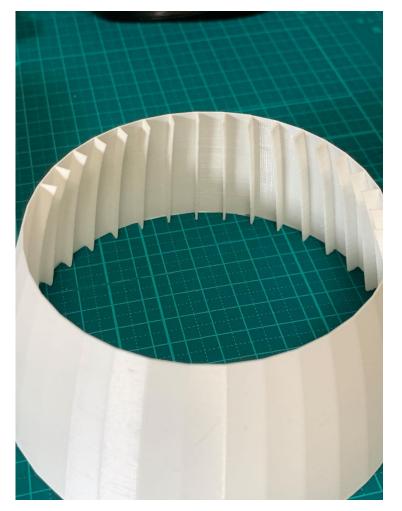
#### Slice1

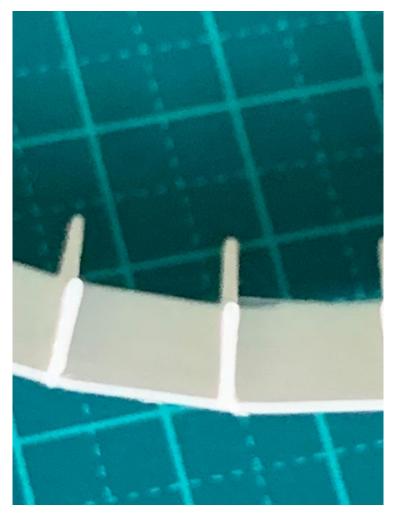






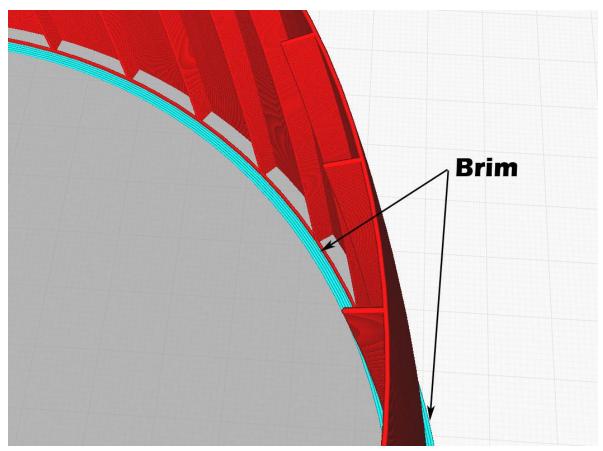
## Slice2





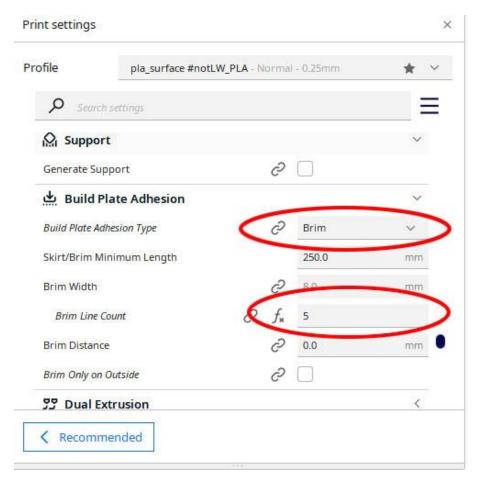
### Brim

Because of the small footprint of the build plate, the adhesion of the first layer is very important. Both the inside and outside brim should be set.



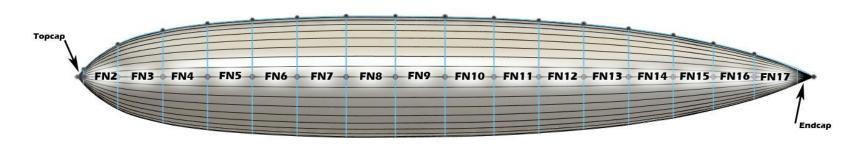
#### Brim

After molding, the outer brim is removed cleanly with a design knife or similar tool. The inner brim is used to join the other frames, so it should be left in place.



## **Frame and Stringer assembling**

The fuselage is divided into 17 frames.



This section describes the process of attaching the Stringer to the FN4. Slide the Stringer from the bottom of the frame to the top, making sure it is flat at the very top, and secure the Stringer with CAglue. Use the minimum amount of CAglue necessary to avoid discoloration to white.

#### **Detailed description on Youtube>>**





Install the STRINGER on all 17 frames in the same manner. The correspondence between frames and stringers is as follows.



FN3>Stringer2 FN4>Stringer3 FN4>Stringer4 FN5>Stringer5 FN6>Stringer5 FN7>Stringer6 FN8>Stringer7

# Tips2



**Caution** FN9> bottom side>Stringer8 FN9> upside> Stringer10

FN10>Stringer11 FN11>Stringer12 FN12>Stringer13 FN13>Stringer14 FN14>Stringer15 FN15>Stringer16 FN16>Stringer17

### FN6 passenger compartment

The structure of FN6 is slightly different from other frames. Windows that allow you to see the ground from the lounge and the two-story guest room, and an aluminized grand piano placed in the lounge.

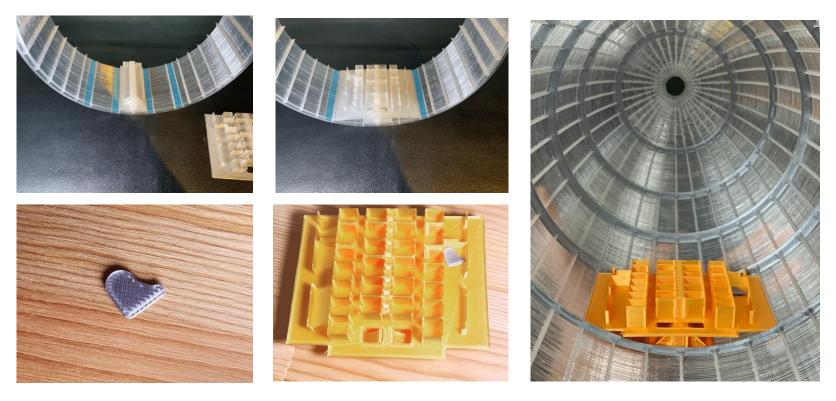


#### Blue represents the windows

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## FN6 passenger compartment

The structure of FN6 is slightly different from other frames. Windows that allow you to see the ground from the lounge and the two-story guest room, and an aluminized grand piano placed in the lounge.

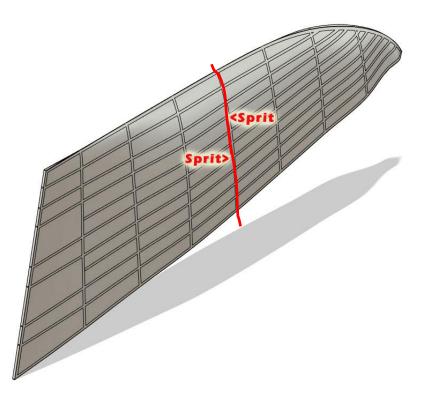


# **Build up the frame**



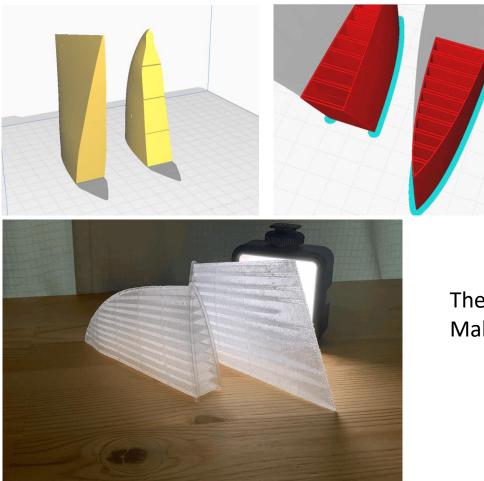
The front side is assembled from FN2 to FN9, and the rear side from FN10 to FN17. The assembly of the frame will be stopped here in order to install the LED lights in the airship.

#### **Stabilizer Build**



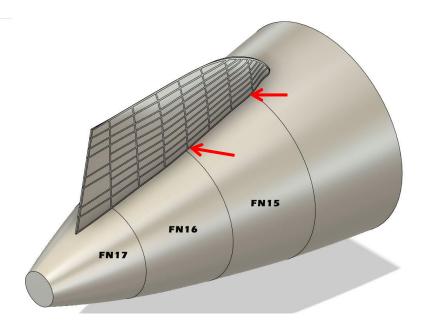
Divide the stabilizer into at the locations shown in the figure above and slice it with the same profile as the other frames.

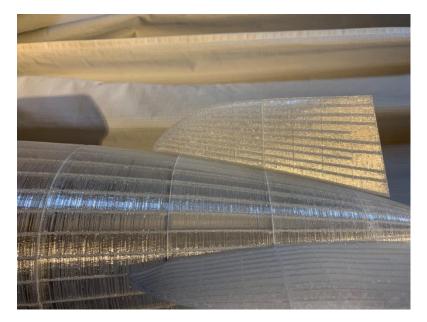
#### **Stabilizer Build2**



Then glue them together with CAglue. Make 4 sets of stabilizers.

#### **Stabilizer Build3**





#### Attach the stabilizer to the fuselage using clear epoxy adhesive.

## **LED tape frame**

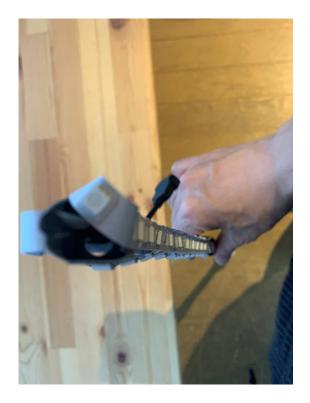


Connect  $5\Phi^*400$ mmCarbonRod using LEDstayType1.stl to make a 1200mm (47inch) rod. Attach LEDstayType2.stl to both ends of it. Fix the front side at 2cm (0.79inch) from the tip and the rear side at 10cm (3.9inch) from the

Fix the front side at 2cm (0.79inch) from the tip and the rear side at 10cm (3.9inch) from the tip.

## LED tape frame



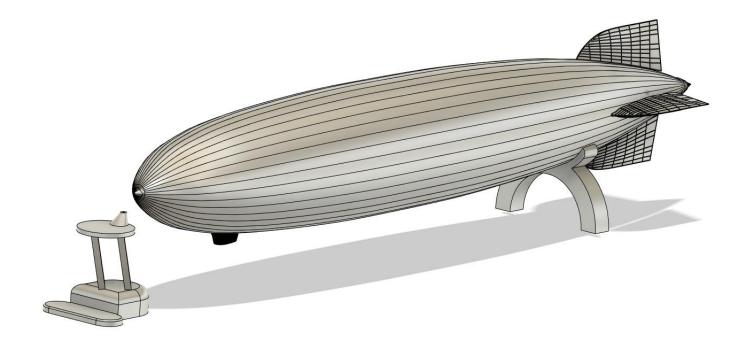


# **TopCap and Endcap**



The wiring for the LEDs is pre-routed out of the TopCap's wiring opening and glued to the fuselage. The EndCap is glued to the FN17.

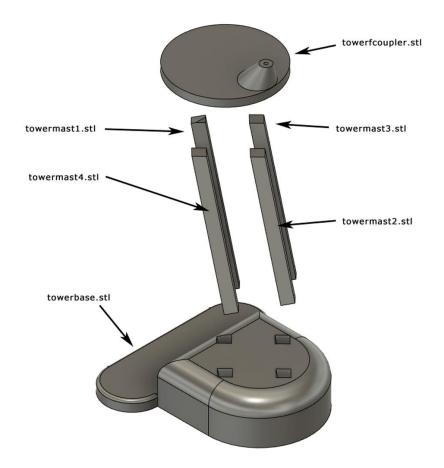
# **Completion of the fuselage**



Finally, join the front and rear of the fuselage.

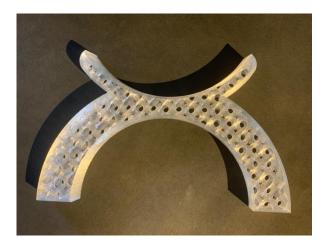
make sure that the LED wiring from the topcap is coming outward, the carbon rod is fitted, and the carbon rod is fitted in the endcap.

## **Tower and Rear Stand**





## **Tower and Rear Stand**

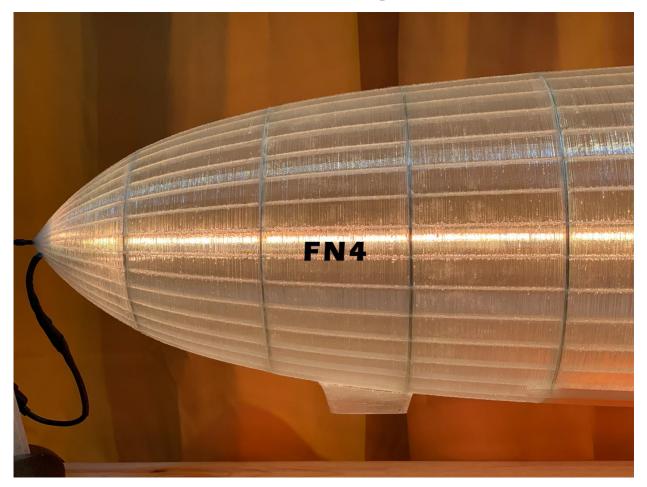


#### Backstand.stl Top and the bottom layer is 0 and Gyroid infill at 5%

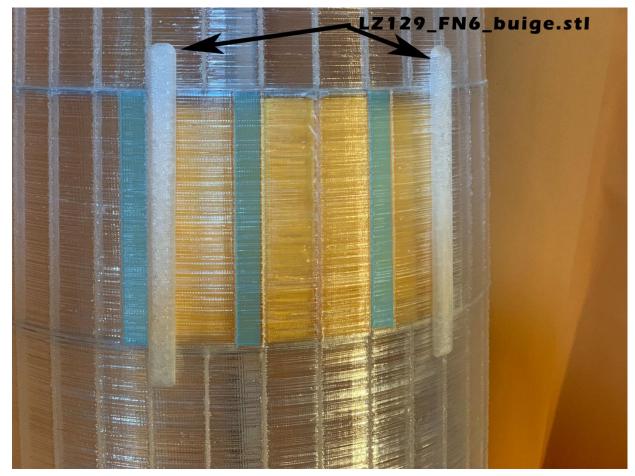


Tower and Rear Strand

#### **Final assembly Gondra**



#### **Final assembly Bulge**

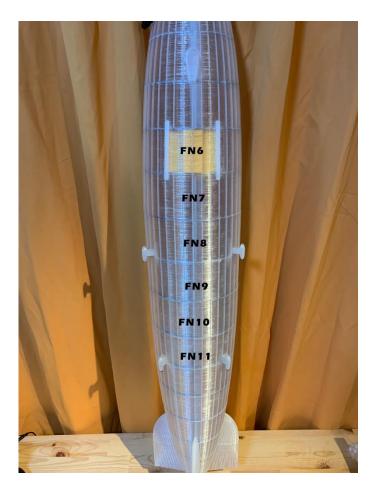


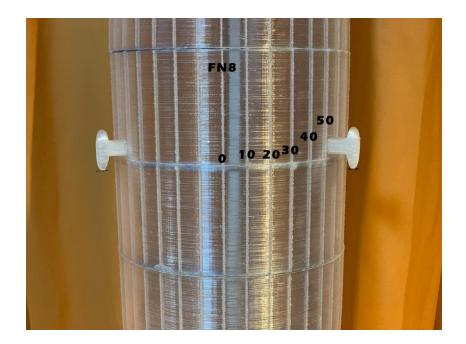
#### **Final assembly Engine Car**



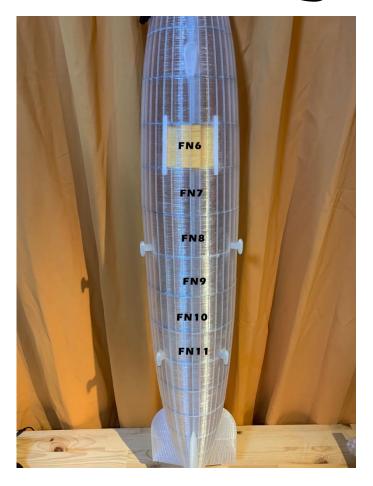
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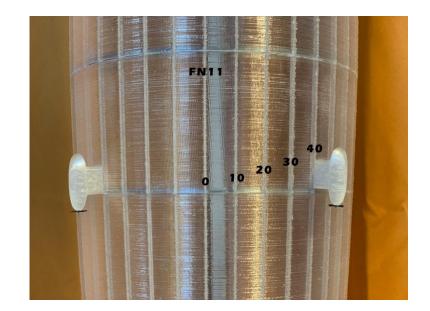
## Final assembly Engine Car Front





#### Final assembly Engine Car Rear





## **Work With alexa**

The Alexa-enabled LED tape allows for voice control and would make a great interior light for your room.

# How to get the STL Data

You can Download this model's Full STL data from crafthub.io

