



ASSEMBLY GUIDE

1:10 F40

1. INTRODUCTION



STEP 1 Disclaimer

Some images in this guide may be updated or outdated, please read all the text with care to ensure a correct build! Some parts are pre-sliced and have painted on supports, you can find them in a separate folder!

STEP 2 Required tools



To build this model you will need the following items:

- 2.5 mm Allen wrench
- 3.0 mm Allen wrench
- CA-glue
- Needle-nose pliers
- Cutters

STEP 3 Required hardware

To build this model you will need the following hardware:

Hex screws:	AMOUNT:
M3x6	2x
M3x8	10x
M3x10	32x
M3x12	4x
M3x16	4x
M3x20	4x
M3x25	6x
M3x30	6x
M3x35	2x
M4 hex nut	8x
M4x20	4x

Bearings:	AMOUNT:
624-ZZ	4x



On the internet there are various kits available with all the needed screws. We recommend getting a kit like this to save time and money.

TIP: Use black screws to achieve a better look!

STEP 3 Inserting screws

Parts of this model will use holes as threads for screws.

These holes shouldn't need to be tapped. The screws cut thread into the plastic when tightened. Do keep in mind that this is based on the tolerances of your machine. All parts are tested and should fit!



TIP: To prevent breaking parts, it is recommended that you cut the thread using a screw before attaching parts together!

STEP 4 We are here to help!

Do you need any help, or having any problems or questions? **LET US KNOW!**

You can always contact us using the following channels:

- Writing an email to staff.stllabs@gmail.com
- Sending a DM on the platform you got the model from
- Sending a DM on Instagram [@STLLabs](https://www.instagram.com/STLLabs)

2. TUB ASSEMBLY



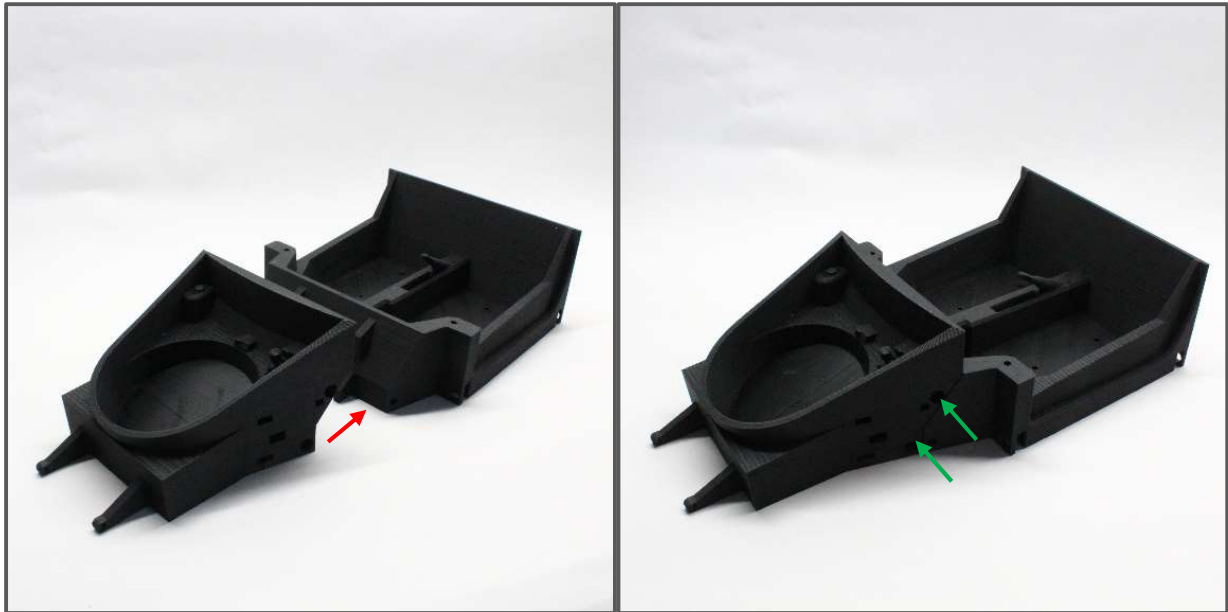
STEP 1 Tub: parts preparation



For this chapter you will need the following parts:

- Monocoque (1x)
- Frunk (1x)
- Chair (2x)
- Front suspension lower arm L (1x)
- Front suspension lower arm R (1x)
- Front suspension upper arm L (1x)
- Front suspension upper arm R (1x)
- Front wheel hub (2x)
- Steering rack (1x)
- M3x8 (6x)
- M3x10 (4x)
- M3x25 (6x)

STEP 2 Mounting the frunk



- Connect the frunk and the monocoque together
- Use M3x25 screws to fix both parts in place

STEP 3 Mounting the Seats



- Put the seats in place
- Use M3x10 screws to fix them in place

STEP 4 Front suspension time!



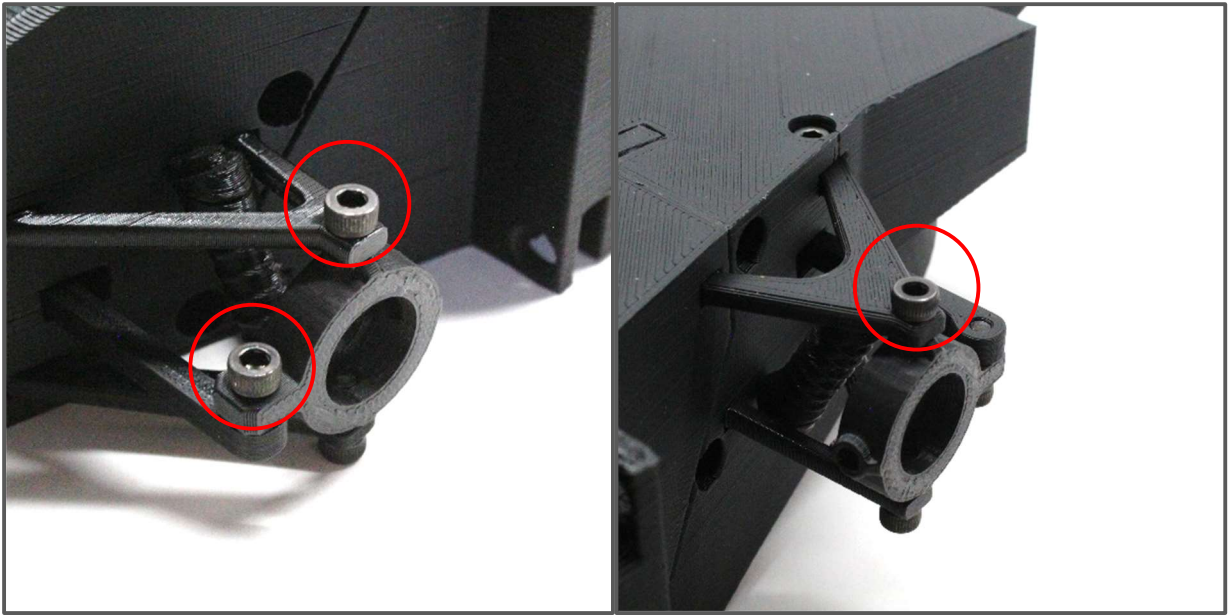
- Prepare the front suspension arms for both sides.
- Insert the front suspension arms into the designated slots.
- Take note of the upper arm, it should be on a slight angle, facing upwards!
- Use M3x25 screws to fix the front suspension into place

STEP 5 Steering rack



- Prepare the steering rod
- Insert the steering rod into the designated slot.

STEP 6 Front wheel-hub installation



- Place the wheel-hubs between the suspension arms, having the hole facing outwards
- Use M3x8 screws to fix the wheel-hubs into place
- Don't fully tighten the screws, the parts should be able to move freely

STEP 6 It's done, for now...



- The tub assembly should now be done, place it aside, as we will install other parts to it later on!

3. ENGINE ASSEMBLY



STEP 1 Preparations



For this chapter you will need the following items:

- Engine block (1x)
- Gearbox (1x)
- Tailpipes (1x)
- Charge coolers (1x)
- Engine cover small (1x)
- Engine cover large (1x)
- Engine intake middle (1x)
- Engine intake side L (1x)
- Engine intake side R (1x)
- Exhaust manifold L (1x)
- Exhaust manifold R (1x)
- Turbo L (1x)
- Turbo R (1x)
- Small tube L (1x)
- Small tube R (1x)
- T-split tube (1x)
- Filter (1x)

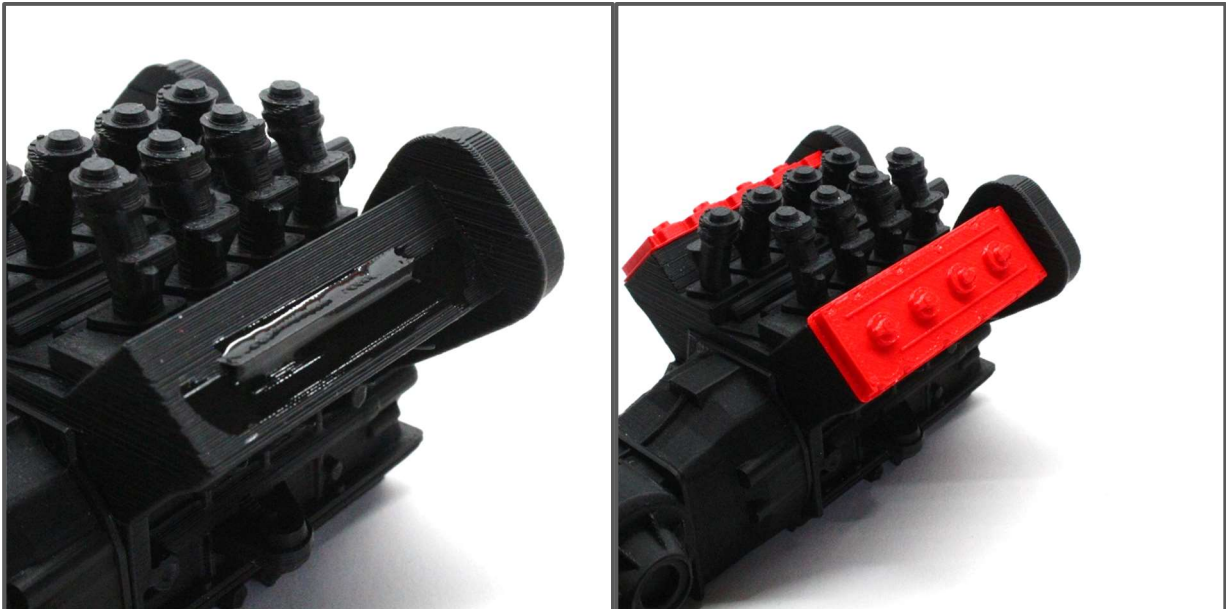
- CA-Glue

STEP 2 Engine and gearbox assembly



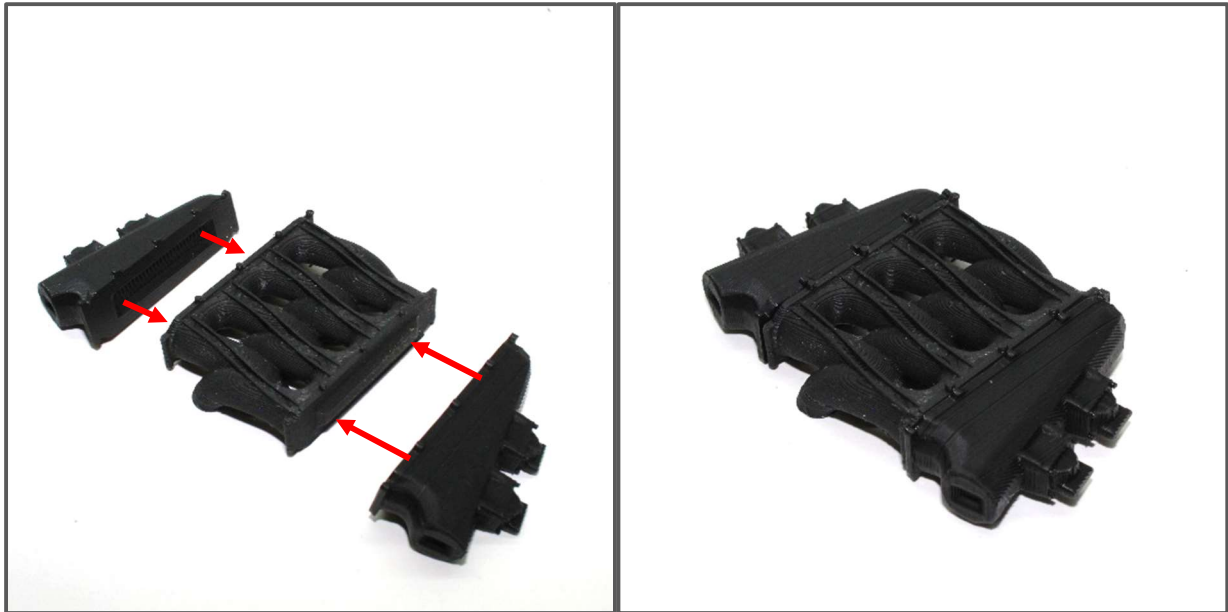
- Put CA-Glue on the dovetail joint to fix both parts into place
- Connect the engine and the gearbox together using the dove-tail

STEP 3 Engine head covers



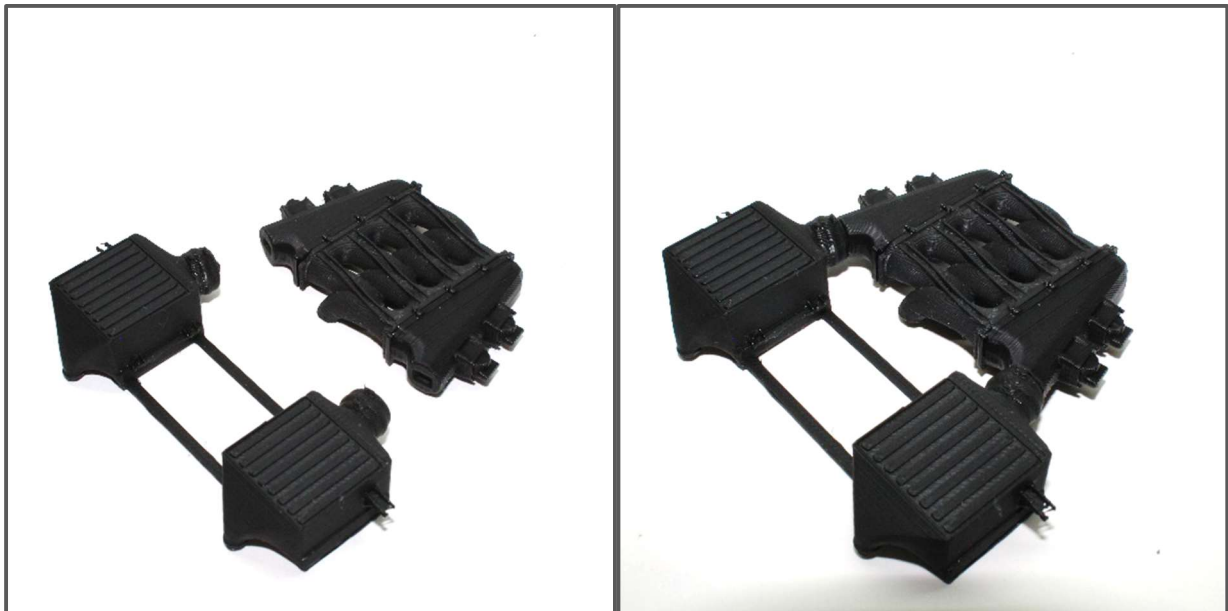
- Put CA-Glue on the notches on the top of the engine block
- Place the engine head covers onto the engine block
- TIP: The parts are fitted with notches to help alignment.
- NOTE: There is a long and a shorter version of both covers, make sure they are oriented correctly!

STEP 4 Intake assembly



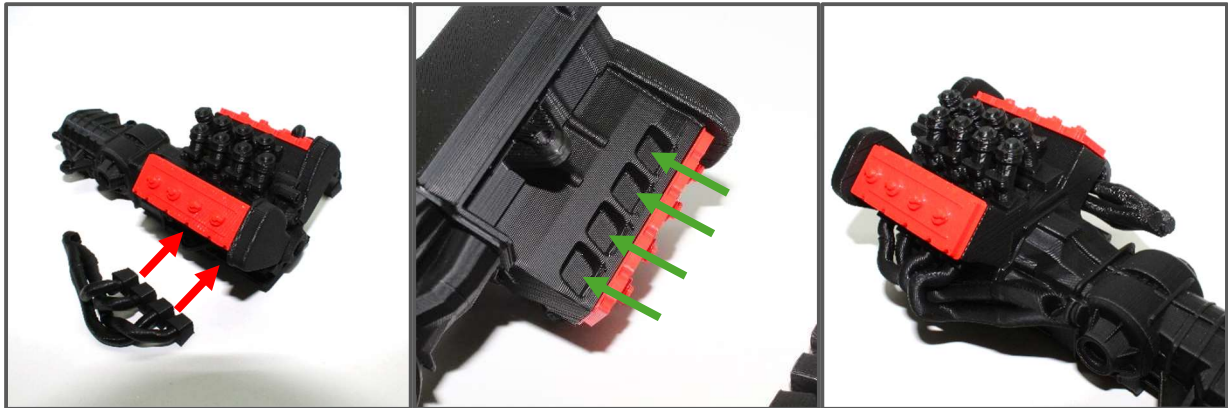
- Use CA-Glue to connect the intake sides to the intake middle
- TIP: The parts are fitted with notches to help alignment.

STEP 5 Charge-cooler assembly



- Use CA-Glue to connect the charge-coolers to the intake assembly
- TIP: The parts are fitted with notches to help alignment.
- After glueing the part into place, you are able to cut the two small beams, this is optional!

STEP 6 Manifold installation



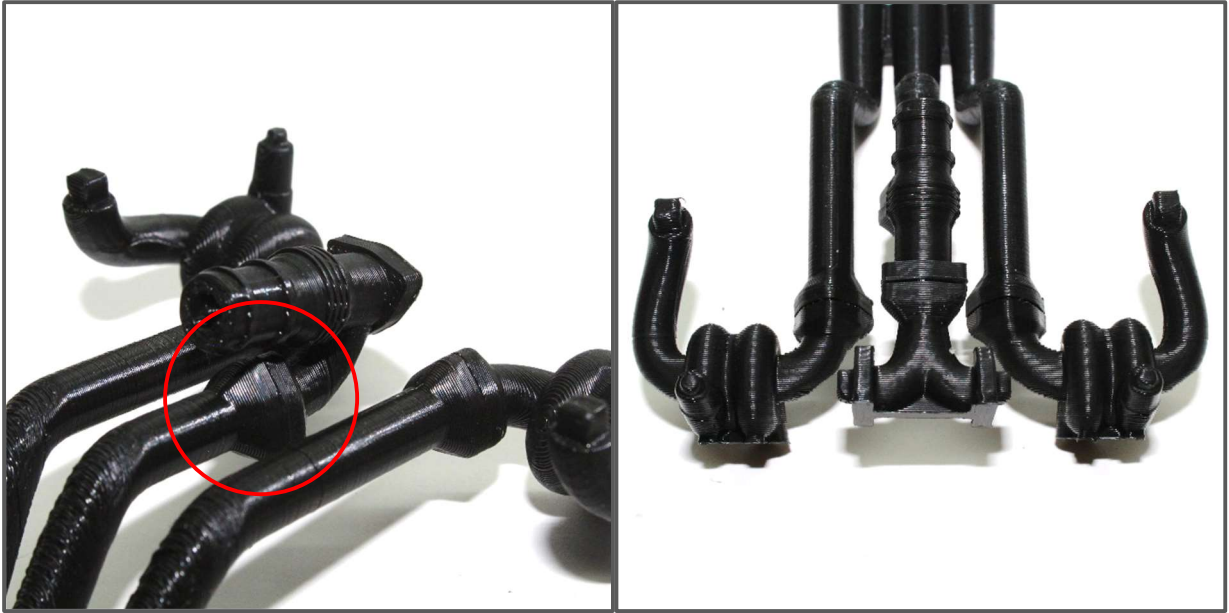
- Prepare the left and right exhaust manifold together with the engine assembly
- Put a drop of CA-Glue into the four holes on one side of the engine block
- Insert the manifold on that side and wait for it to dry
- Repeat this for the manifold on the other side

STEP 7 Turbo Time



- Prepare the tailpipes, turbo's, filter and T-split for the next assembly
- Use CA-Glue to glue the turbo's to the tailpipes.
- **TIP:** Use the triangled pieces to align the parts

STEP 8 Filter and splitter pipe



- Glue the filter part onto the middle tail pipe
- Attach the T-split pipe to the filter
- **TIP:** Use the triangled pieces to align the parts

STEP 9 Bent tubes



- Glue the two small bent pipes to the T-split pipe.
- Make sure the orientation is correct!
- **TIP:** Use the triangled pieces to align the parts

STEP 10 Mounting the exhaust to the engine



- Attach the exhaust assembly to the engine assembly
- Start by glueing the bent pipes into the holes in the manifolds
- Next, Glue the holes in the turbo's to the notches on the end of the exhaust manifolds
- Depending on your previous alignments, some parts may bend a little, this is normal, but excessive force shouldn't be needed!

STEP 11 Intake and charge-cooler installation

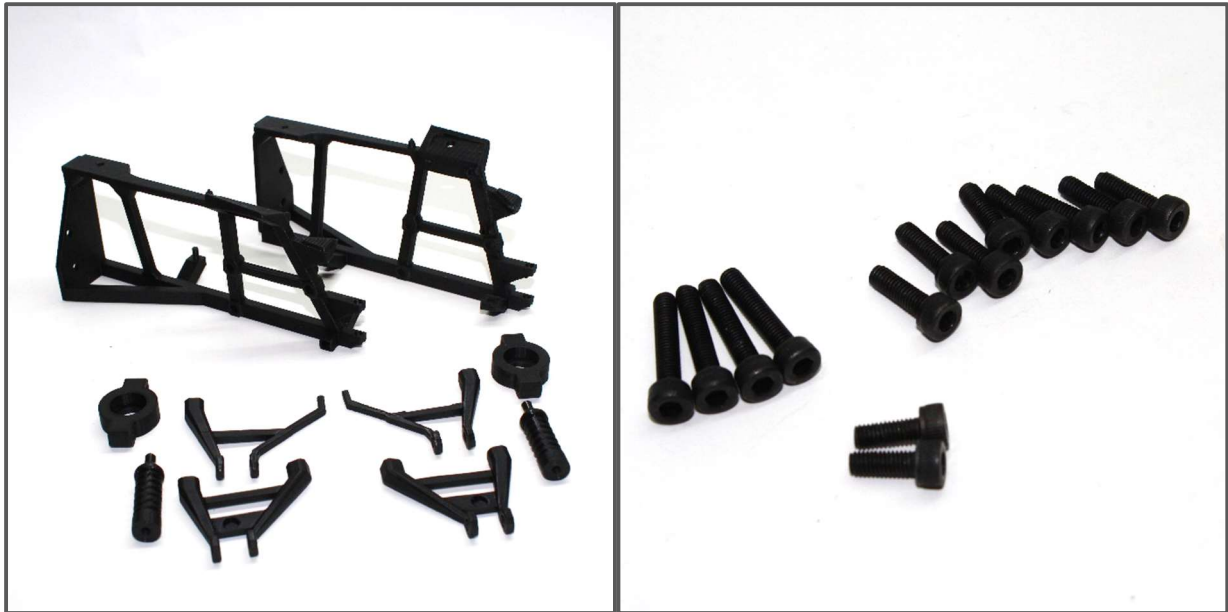


- Attach the intake and charge-cooler assembly to the engine assembly
- Start by connecting the charge-coolers to the turbo's using the notches in both parts
- Next up, connect the engine intake to the engine-block using the notches on both parts
- Depending on your previous alignments, some parts may bend a little, this is normal, but excessive force shouldn't be needed!

4. ENGINE FRAME



STEP 1 Preparations



For this chapter you will need the following items:

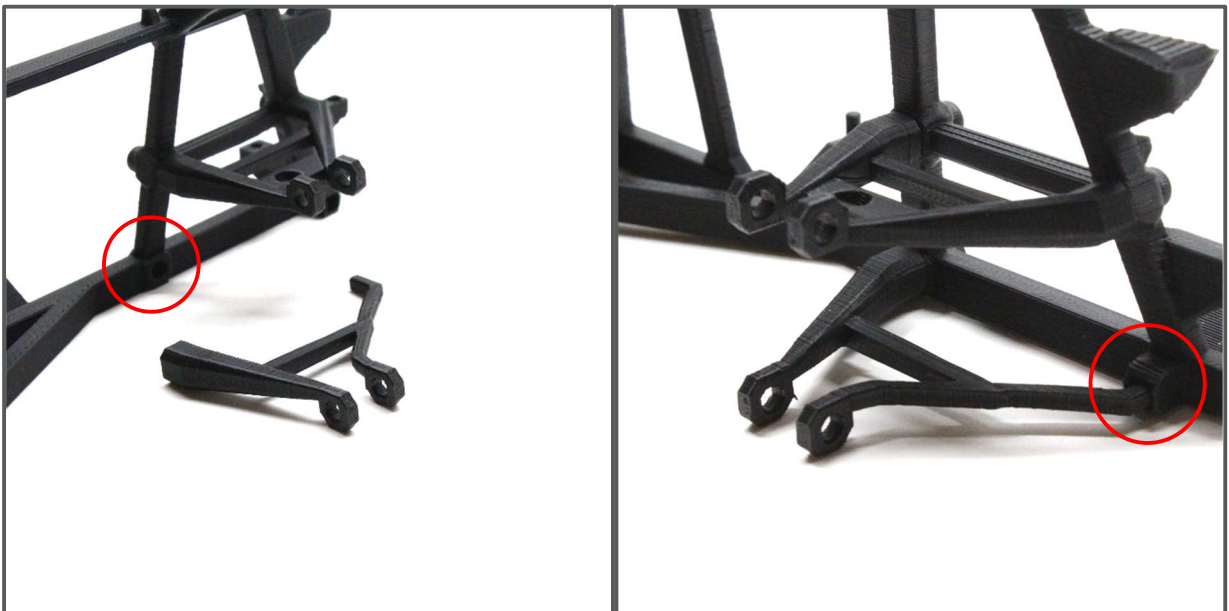
- Engine Frame L (1x)
- Engine Frame R (1x)
- Left rear suspension upper arm (1x)
- Left rear suspension lower arm (1x)
- Left rear suspension spring (1x)
- Rear suspension wheel-hub (2x)
- Right rear suspension upper arm (1x)
- Right rear suspension lower arm (1x)
- Right rear suspension spring (1x)
- Engine Frame connection frame (1x)
- Rear parcel-shelf (1x)
- Turbo intake L (1x)
- Turbo intake R (1x)
- M3x8 (2x)
- M3x10 (14x)
- M3x16 (4x)
- CA-Glue

STEP 2 Rear suspension upper arm



- Attach the upper suspension arm to the upper two holes using two M3x10 screws
- Make sure the part is oriented correctly! The small hole needs to face up, and the more angled side should be facing outwards

STEP 3 Rear suspension lower arm



- Attach the lower suspension arm to the lower two holes using a M3x10 screw and the alignment hole in the part
- It is possible to bend or break the part when tightening the screw, hold it firmly!
- Make sure the part is oriented correctly! The small hole needs to face up, and the more angled side should be facing outwards

STEP 4 Rear suspension spring



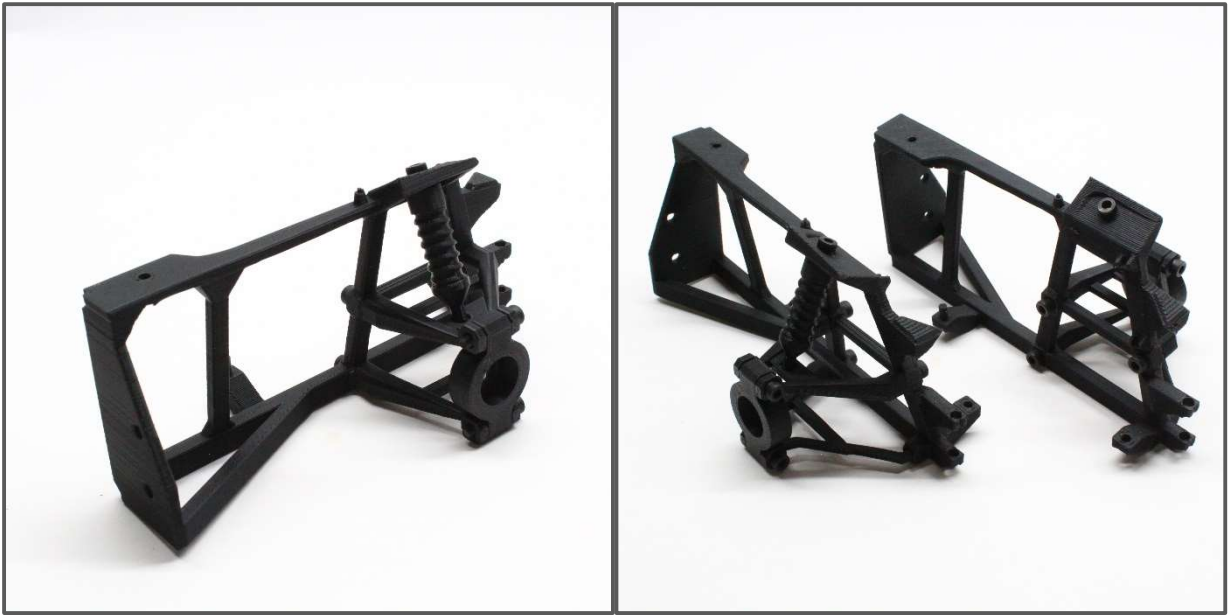
- Attach the rear suspension spring using a M3x8 screw
- The bottom of the spring should fit into the small hole in the upper suspension arm.

STEP 5 Rear suspension wheel-hub



- Now attach the wheel-hub to the suspension arms using two M3x16 screws
- Make sure the part is oriented correctly! The hole should be facing outwards, and the screws should face outwards.

STEP 6 RINSE AND REPEAT



- Repeat the previous steps for the other side. You should now have two engine frames

STEP 7 Mounting the engine



- Next, prepare the engine and both frames, together with the engine frame connector and two M3x10 screws

STEP 8 PLACEHOLDER



■ Now place the engine onto the two pegs at the front of the frames

■ Next, secure the engine assembly into place using two M3x10 screws at the back of the frame.

STEP 9 Engine frame connector

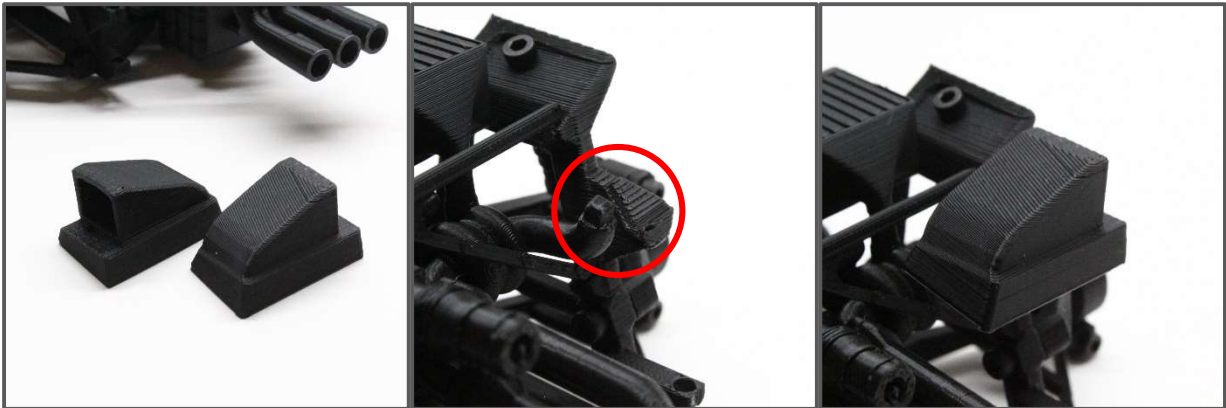


■ Place the engine frame connector between the frames.

There are 4 little holders which it will slide into.

■ The part should stay in position, if not, use a small drop of CA-Glue to keep it in place.

STEP 10 Turbo intakes



- Let's install the turbo intakes onto the frame and the turbo
- It's recommended that you glue the turbo intakes to only ONE part! So either the turbo, or the frame! This is for disassembly purposes
- So place a drop of glue on either the frame or the turbo, and secure it into place
- The notches should help you with alignment of the parts

STEP 11 The engine-assembly is now done!

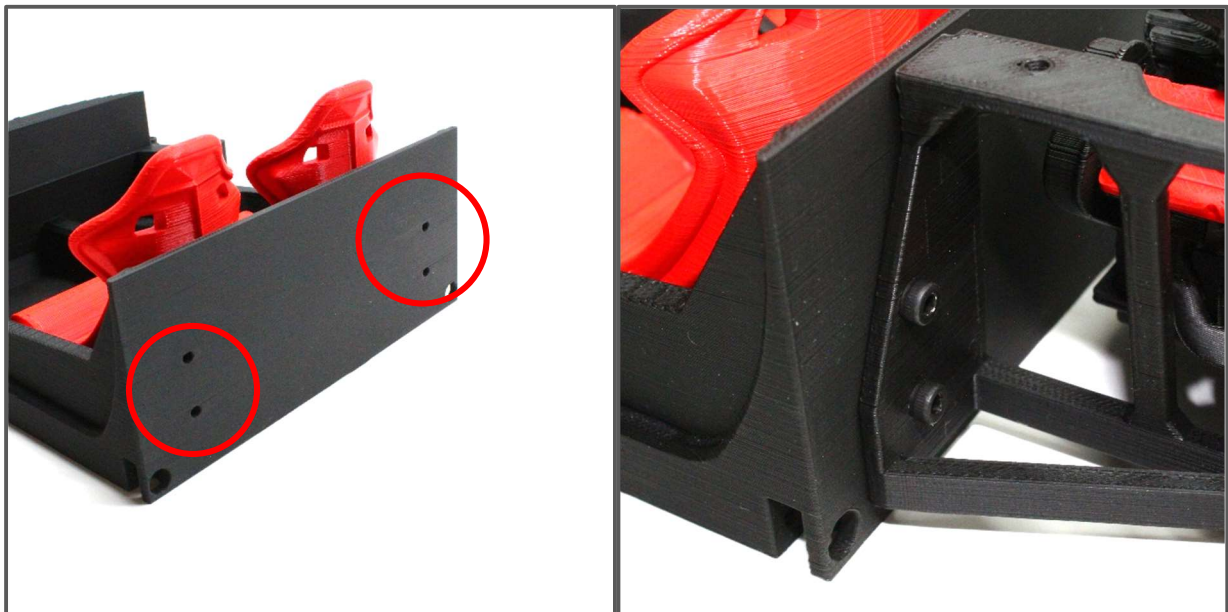


STEP 12 Attaching the engine frame to the tub



■ Let's attach the frame to the tub! For this you will need both assemblies and four M3x10 screws

STEP 13 Attaching the engine frame to the tub



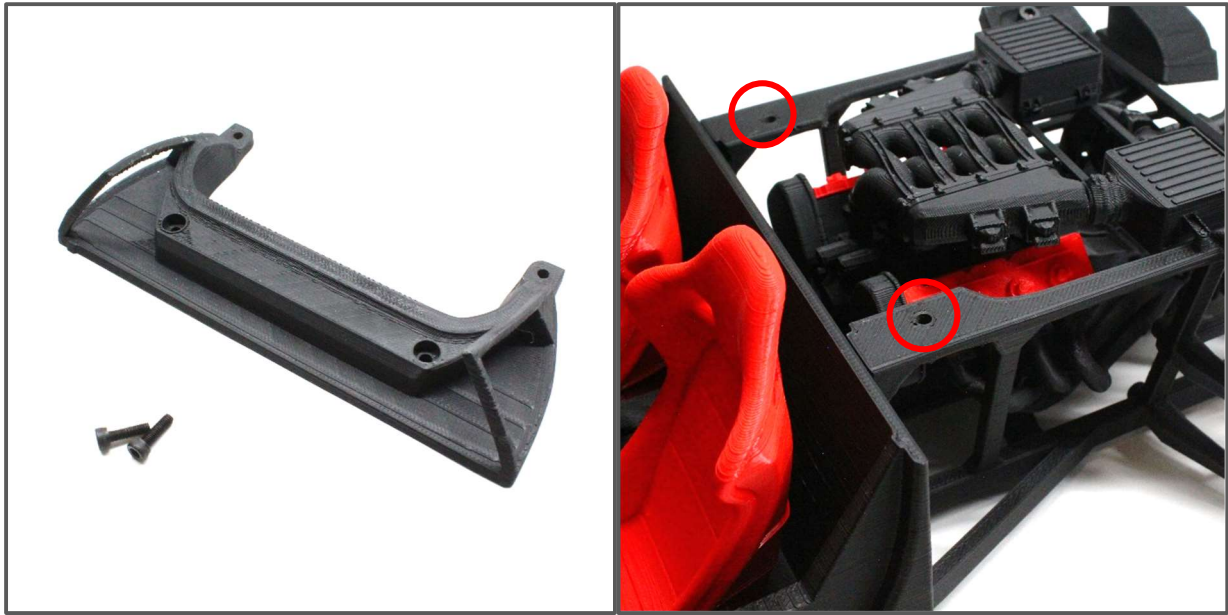
■ Use the M3x10 screws and the four holes, on both the frame and the tub, to secure both parts together

STEP 14 finished (almost)



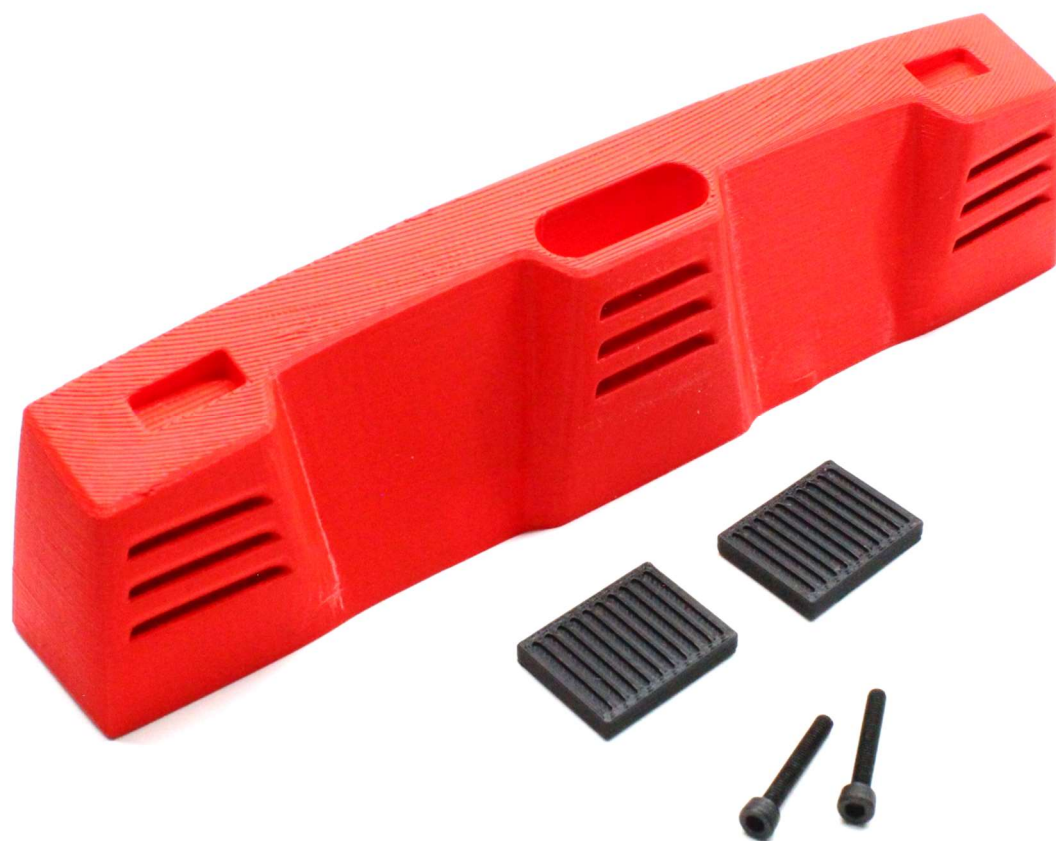
■ This part is almost done, all that's left is the rear parcel-shelf!

STEP 15 Rear parcel-shelf



- Connect the rear parcel-shelf using some M3x10 screws and the holes in the engine-frames
- Congratulations! Most of the underlaying assembly is now done, let's continue with some bodywork!

5. REAR BUMPER



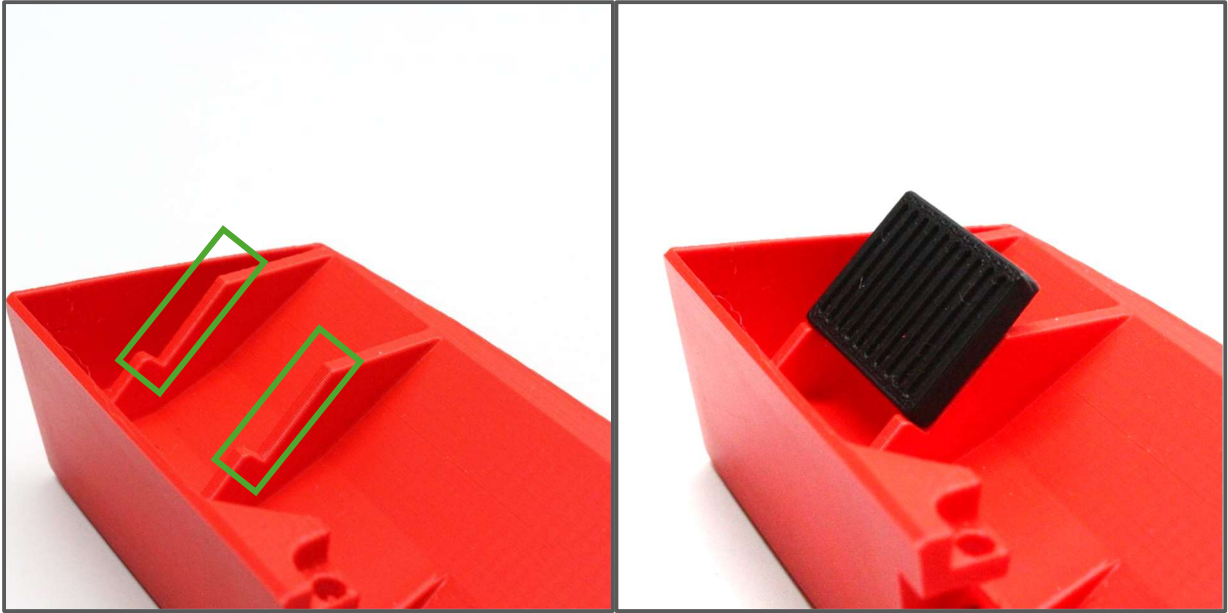
STEP 1 Preparations



For this chapter you will need the following items:

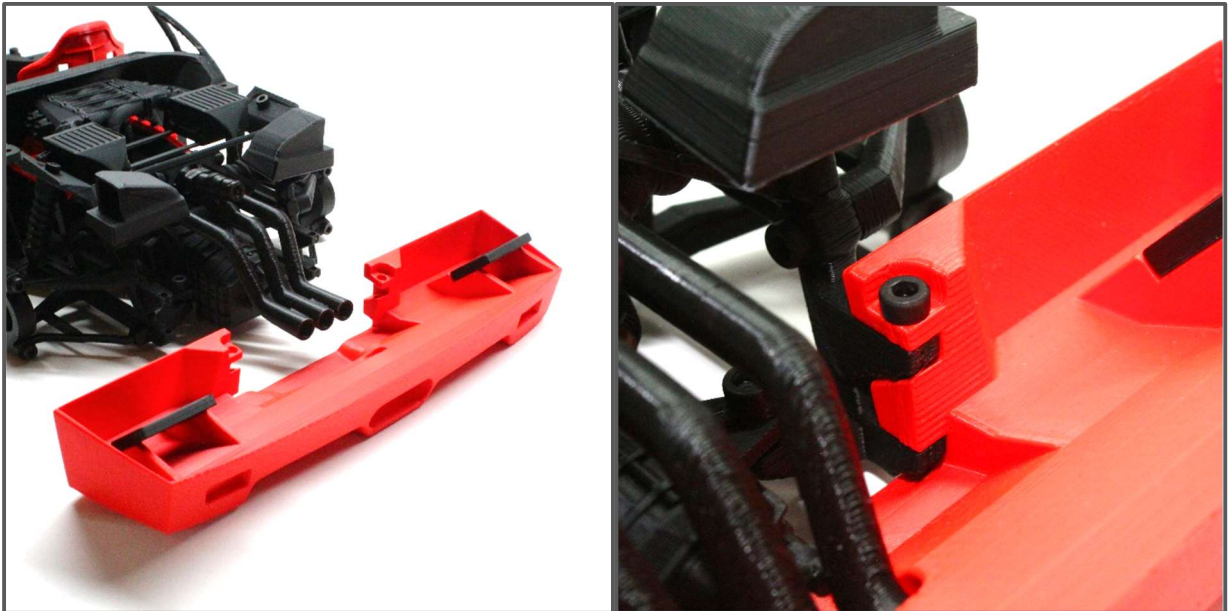
- Rear bumper (1x)
- Rear radiator (2x)
- M3x20 (2x)

STEP 2 Attaching the Radiators



- Apply a thin strip of CA-Glue on the radiator holders
- Glue the radiators into place

STEP 3 Attaching the bumper to the frame



- Use the M3x20 screws and the holes, on both the frame and the rear bumper, to secure both parts together. Make sure to slot the exhaust through carefully!
- The rear bumper assembly is now complete!

6. FRONT BUMPER AND BONNET



STEP 1 preparations

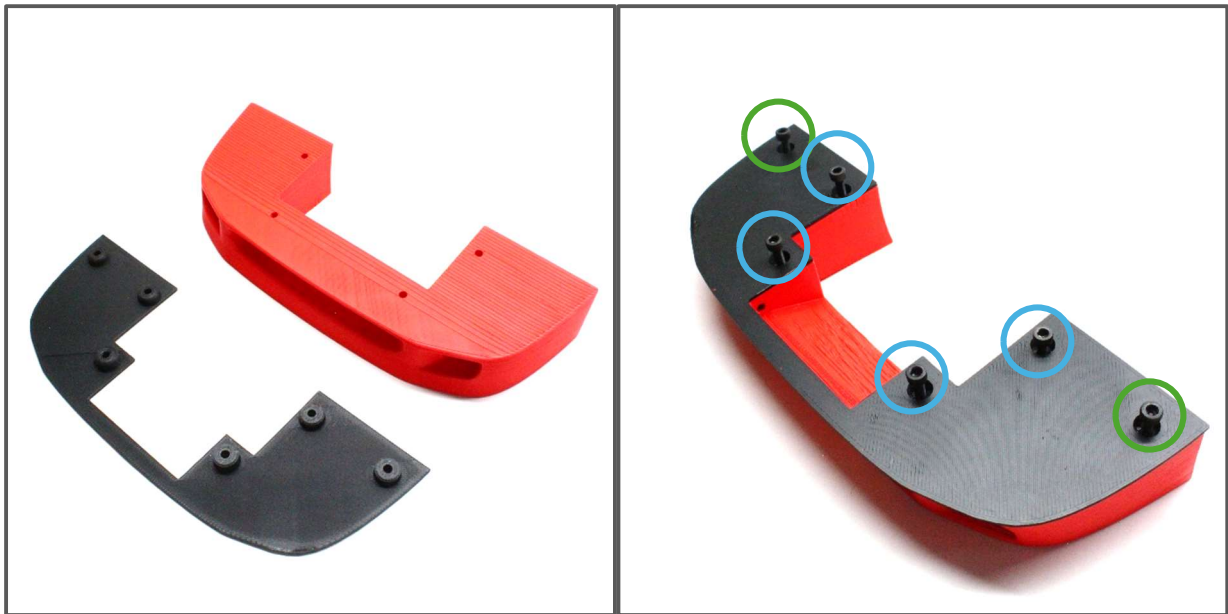


For this chapter you will need the following items:

- Front splitter (1x)
- Front bumper (1x)
- Front bumper spacer (1x)
- Bonnet (1x)
- Headlight L (1x)
- Headlight R (1x)
- Popup headlight L (1x)
- Popup headlight R (1x)
- M3x10 (4x)
- M3x30 (4x)

- CA-Glue

STEP 2 Attaching the splitter to the bumper



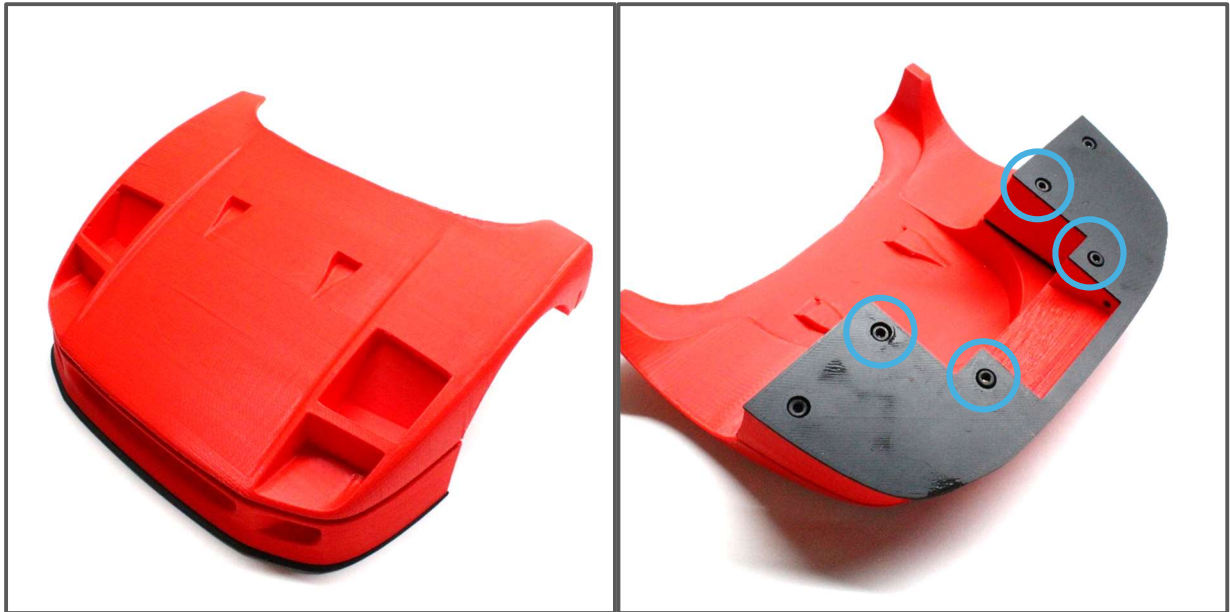
- Connect the front splitter to the front bumper using two M3x10 screws and four M3x30 screws
- The outer two holes are for the M3x10 screws!

STEP 3 Spacer placer



- Place the spacer on the four protruding screws.

STEP 4 Connecting the bonnet



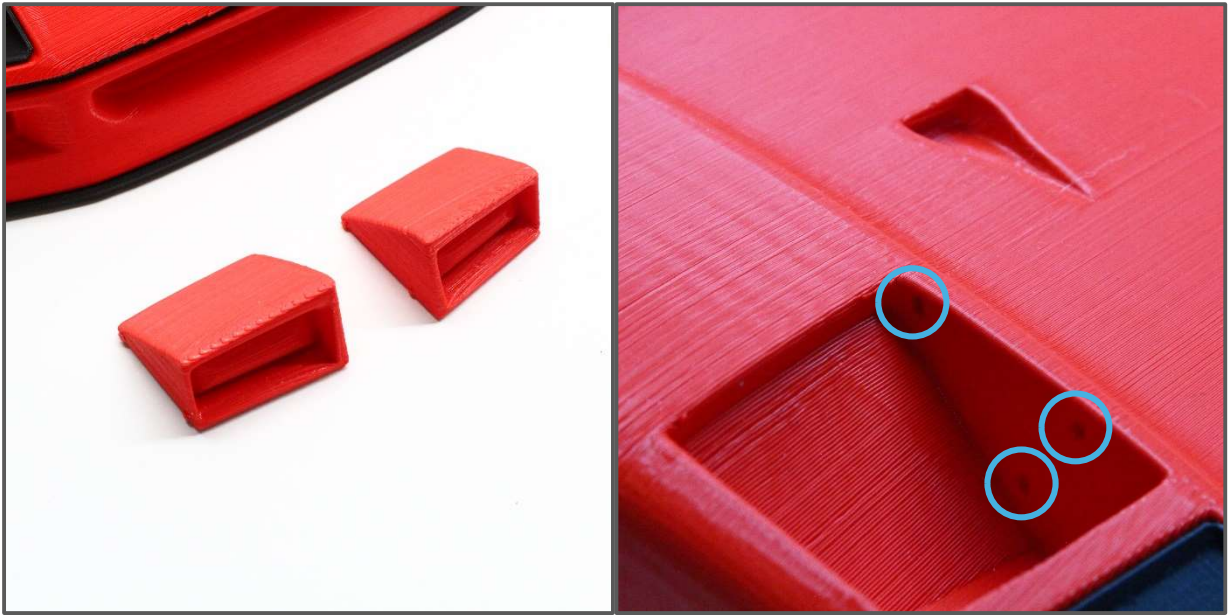
- Connect the bonnet to the four protruding screws and tighten them all

STEP 5 Fixed headlights



- Use a small drop of CA-Glue to glue the fixed headlights into the sockets

STEP 6 Popup headlights preparation



- Prepare the popup headlights
- The bonnet has 3 pin holes, the rear one is the hinge, while the front ones are for the position of the lamp
- They need to click into place, so this assembly can be quite tricky!

STEP 7 POPUP HEADLIGHT INSTALLATION



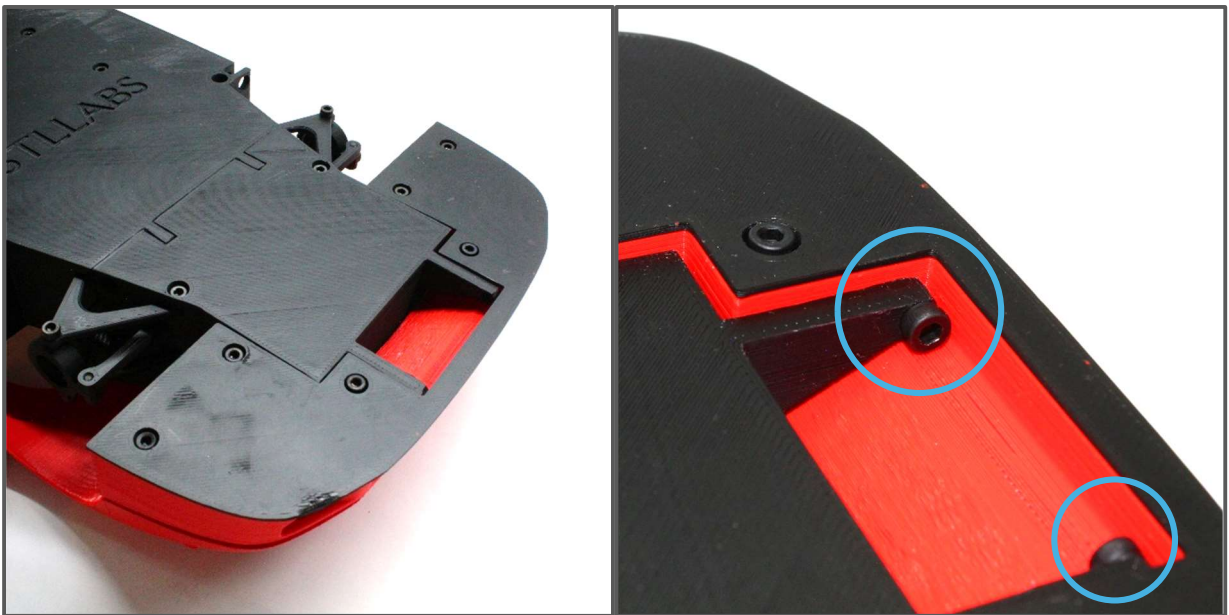
- Place the rear notch on one of the lamp into the small hole at the back of the bonnet
- Rotate the light into place so the rear hinge snaps into place
- Push the headlight into place
- You can fold and unfold the headlights by pulling in the small gap that is at the front

STEP 8 Installing the bumper and bonnet



- Prepare both the front bumper assembly, and the tub assembly

STEP 9 POPUP HEADLIGHT INSTALLATION



- Connect the bonnet hinge using M3x10 screws
- Don't fully tighten the screws! The bonnet still needs to articulate!

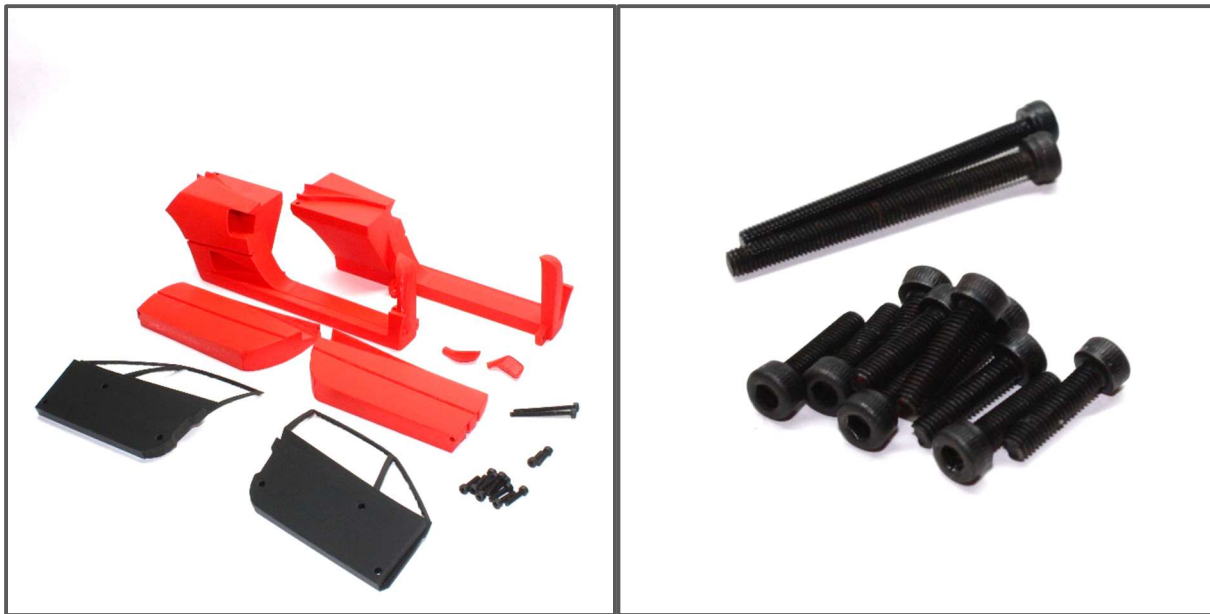
STEP 6 DONE!



7. DOORS



STEP 1 preparations

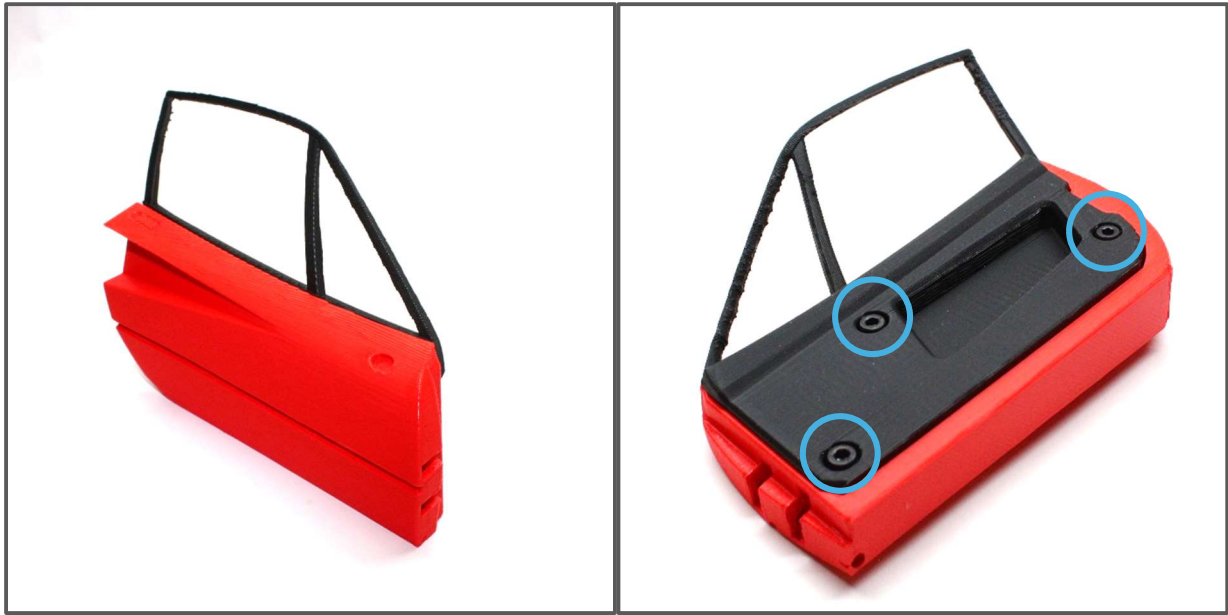


For this chapter you will need the following items:

- Door frame L (1x)
- Door frame R (1x)
- Door L (1x)
- Door R (1x)
- Inner door liner L (1x)
- Inner door liner R (1x)
- Mirror L (1x)
- Mirror R (1x)
- M3x10 (6x)
- M3x12 (4x)
- M3x35 (2x)

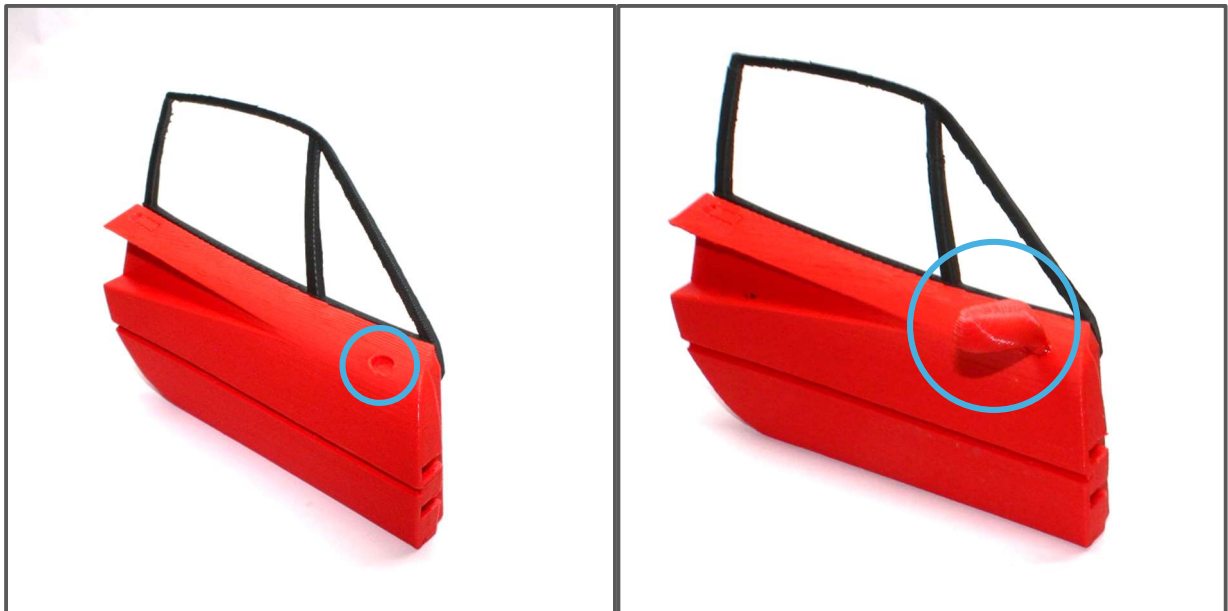
- CA-Glue

STEP 2 Attaching the inner door liner



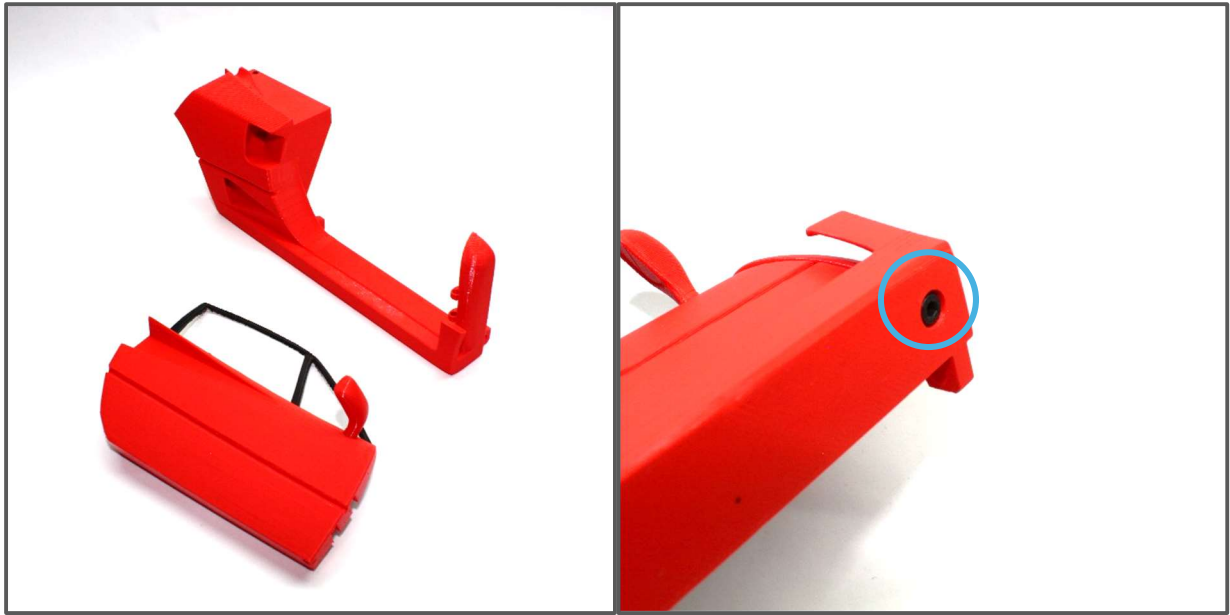
- Connect the inner door liner to the door, it should fit snugly into the cutout.
- Secure the part using M3x10 screws

STEP 3 mirror, mirror on the door



- Use a drop of CA-Glue to attach the mirror to the small notch in the door

STEP 4 Attaching the door to the frame



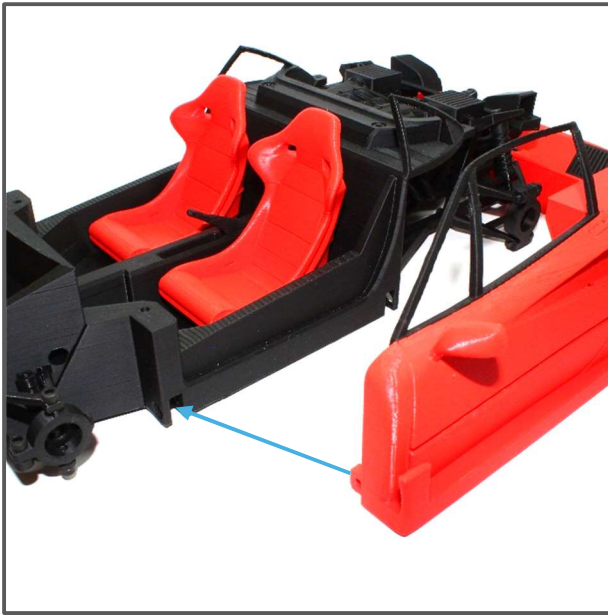
- Connect the door to the door frame
- Use a M3x35 screw to secure it into place
- Carefully tighten the screw, the door should be able to open without excessive force!

STEP 5 Rinse and repeat



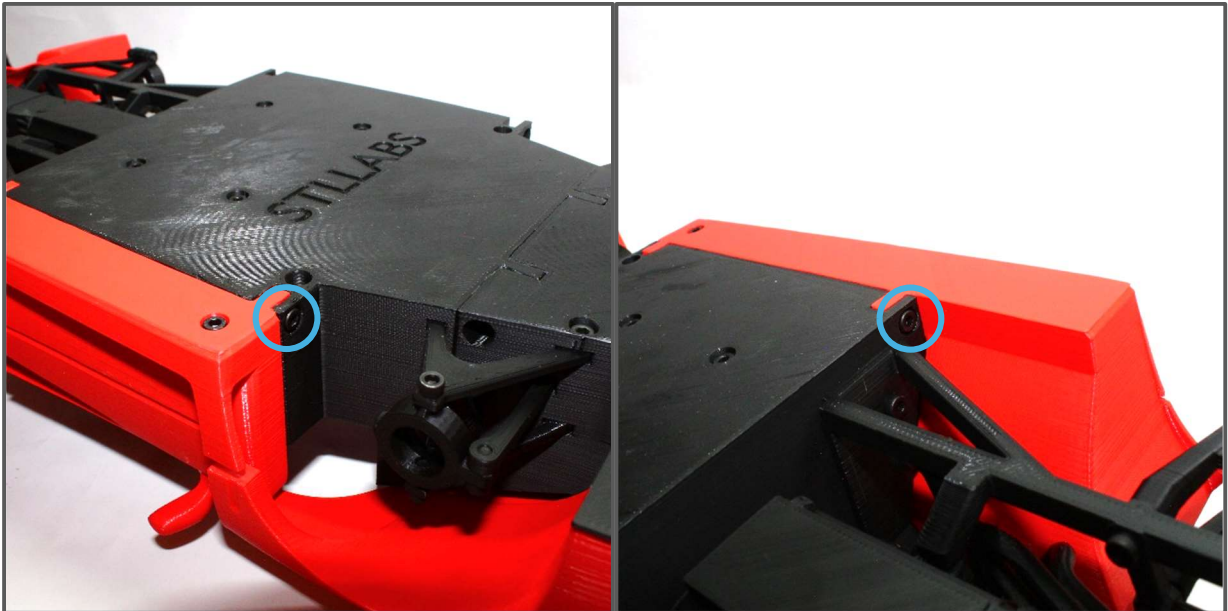
- Repeat this for the other side

STEP 6 Attaching the Doors to the tub



- Prepare both door assemblies together with the main assembly.
- Slide the assemblies against each other, there are notches for alignment.

STEP 7 Securing the doors



- Fix the assemblies together using M3x12 screws
- It might be tricky to get to the screws, we recommend using the ball-end of the Allen-wrench!

STEP 8 Almost there!

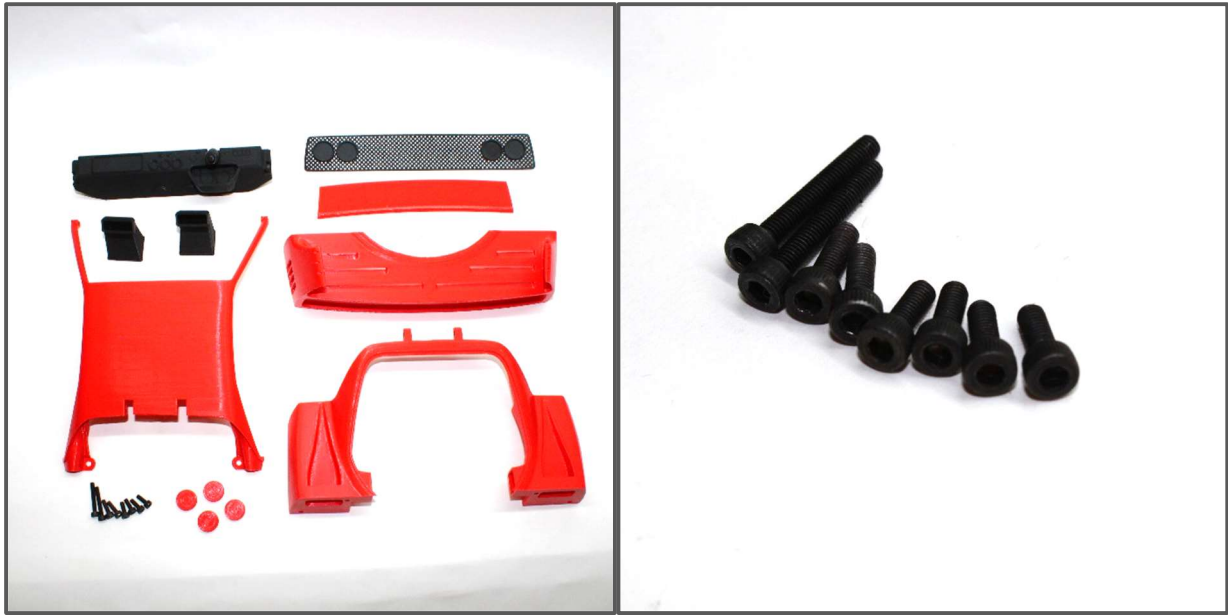


■ The bodywork is almost done! Let's finish this roadster and put a roof on it!

8. ROOF AND REAR CLAMSHELL



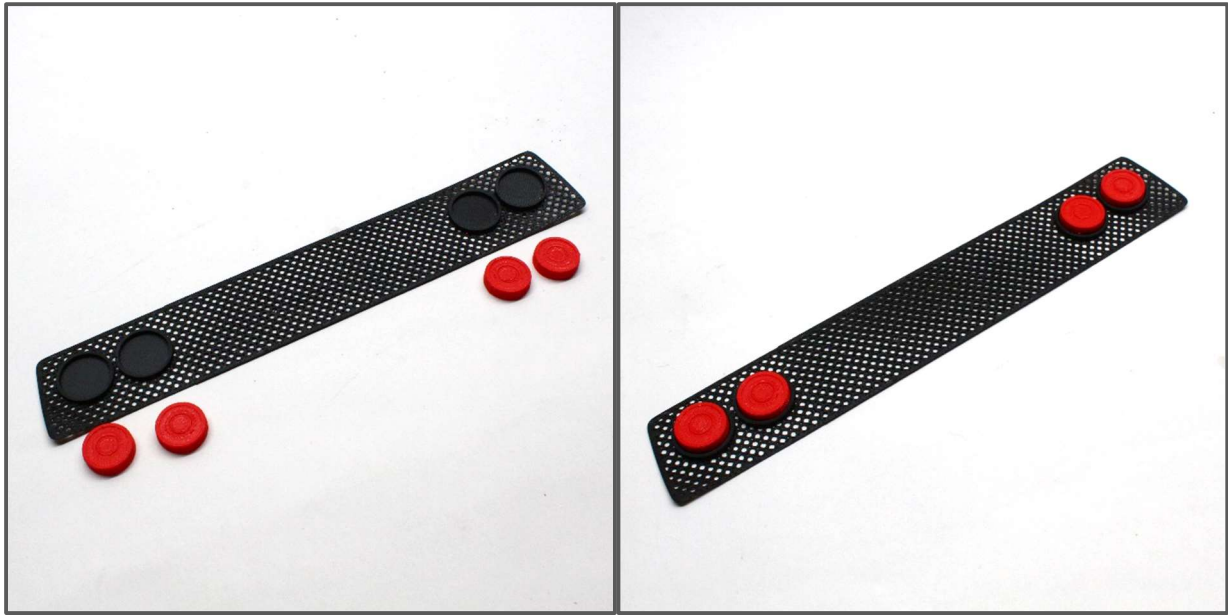
STEP 1 preparations



For this chapter you will need the following items:

- Dashboard (1x)
- Steering wheel (1x)
- Rear grille (1x)
- Rear clamshell back (1x)
- Rear clamshell front (1x)
- Rear clamshell louver (1x)
- Rear wing (1x)
- Roof (1x)
- Rear radiator chute L (1x)
- Rear radiator chute R (1x)
- Rear light (4x)
- M3x6 (2x)
- M3x8 (4x)
- M3x10 (4x)
- M3x20 (2x)
- CA-Glue

STEP 2 Attaching the Rear lights



- Use small drops of CA-Glue to glue the lights into the sockets of the rear grille

STEP 3 Attaching the grille



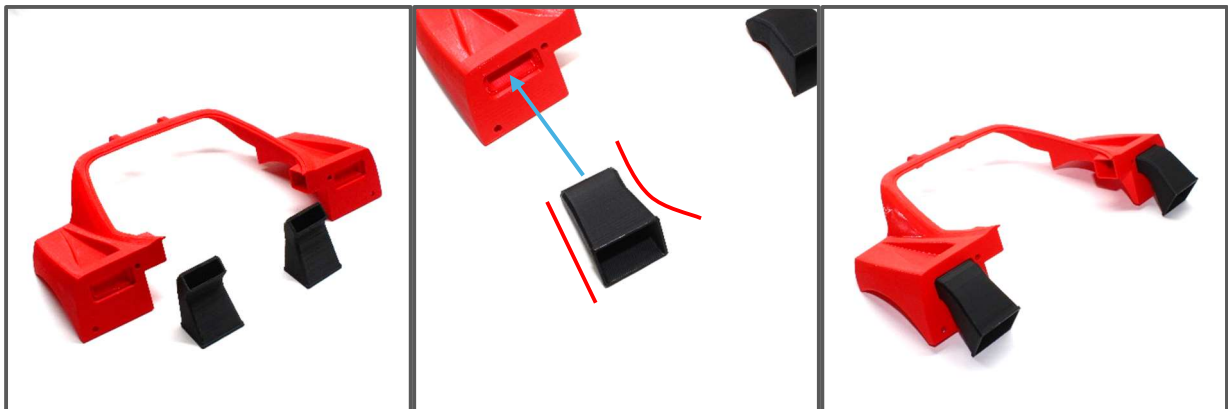
- Use CA-Glue to attach rear grille to the rear clamshell

STEP 4 Attaching the Rear WING



■ Use CA-Glue to glue the rear wing into place

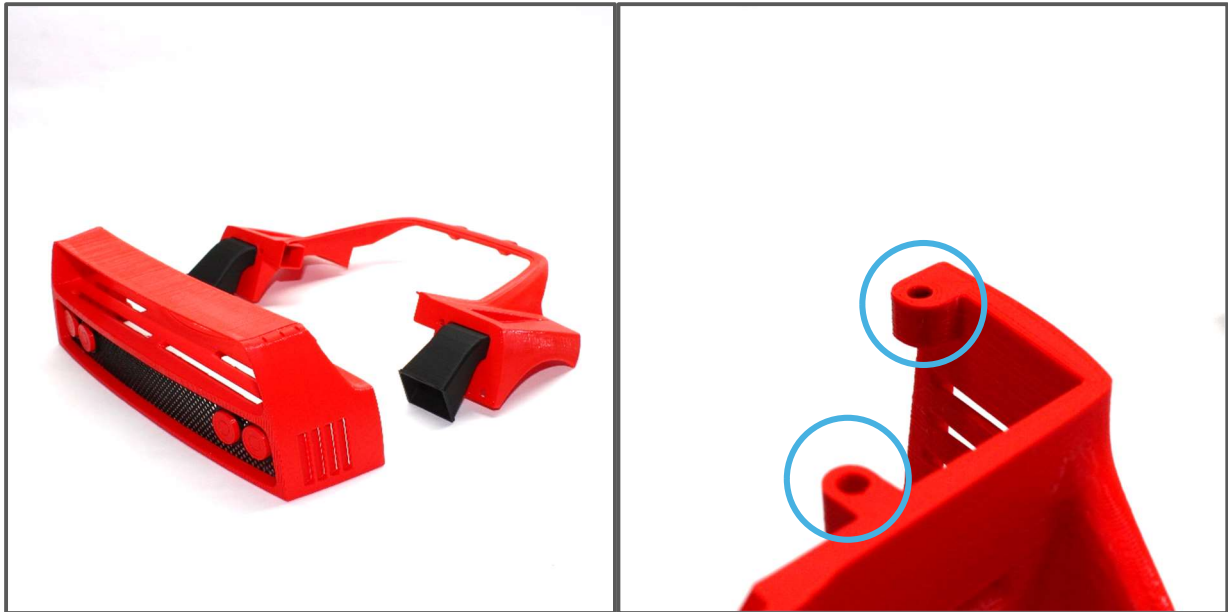
STEP 5 Attaching the Rear radiator ducts



■ Use CA-Glue to attach rear radiator ducts to the rear clam shell

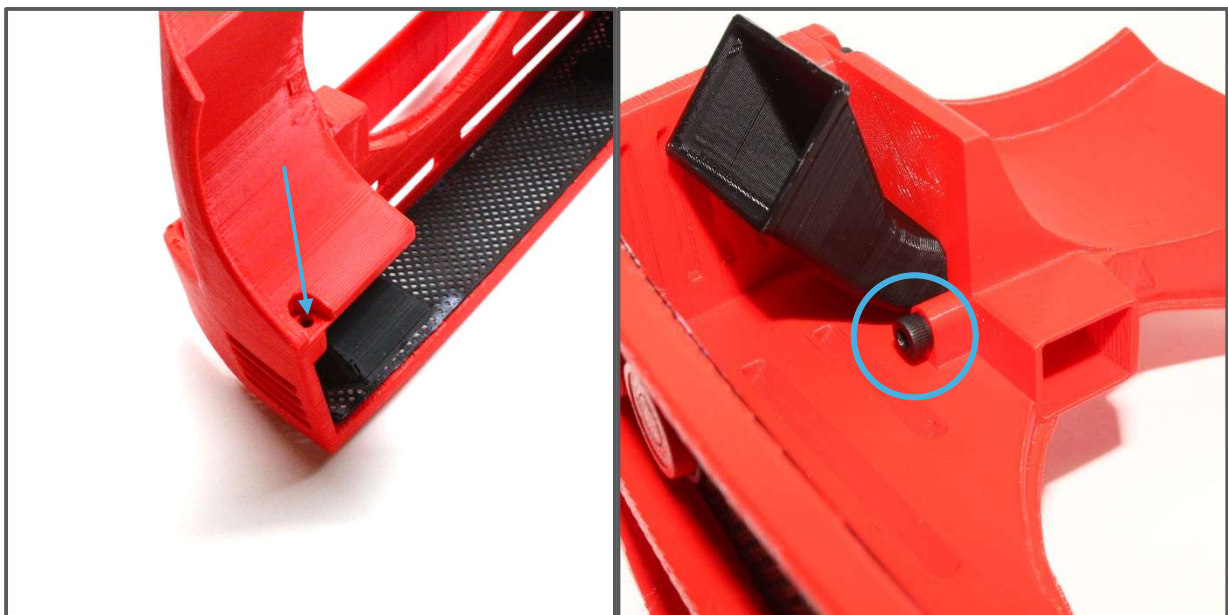
■ Make sure the orientation is correct! The bent part should be facing inside!

STEP 6 Attaching THE CLAMSHELLS TO EACHOTHER



■ Let's connect both clamshell parts together, they have four holes, use these to align the parts

STEP 7 Fixing it in place



- Use four M3x8 screws to connect both of the parts together
- Take note that the screws go in from two different sides!
- It might be tricky to get to the screws, we recommend using the short side of the Allen wrench!

STEP 8 Attaching THE CLAMSHELLS louver



- Use a small amount of CA-Glue on the edges of the clamshell to fit the louver into place
- It is recommended that you only glue it to the large clamshell part so disassembly is still possible in the future!

STEP 9 Attaching the roof to the clamshell



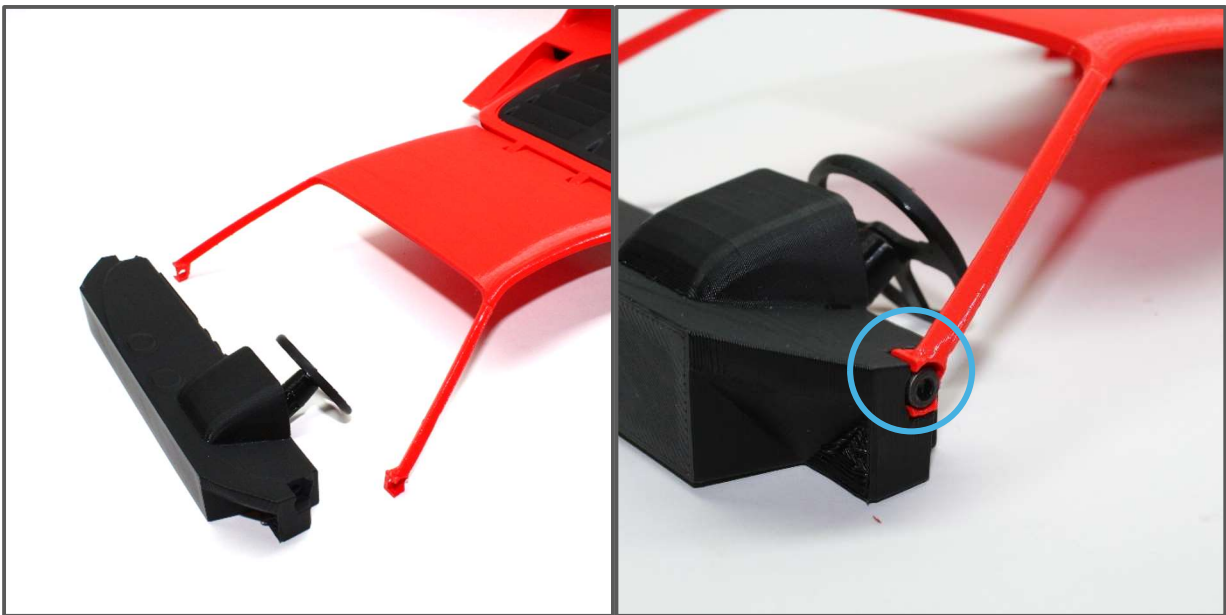
- Use M3x10 screws to connect the rear clamshell to the roof
- It might be tricky to get to the screws, we recommend using the ball-end side of the Allen wrench!

STEP 10 Attaching the steering wheel



■ Let's attach the steering wheel to the dashboard using a small drop of CA-Glue

STEP 11 Attaching the Dashboard



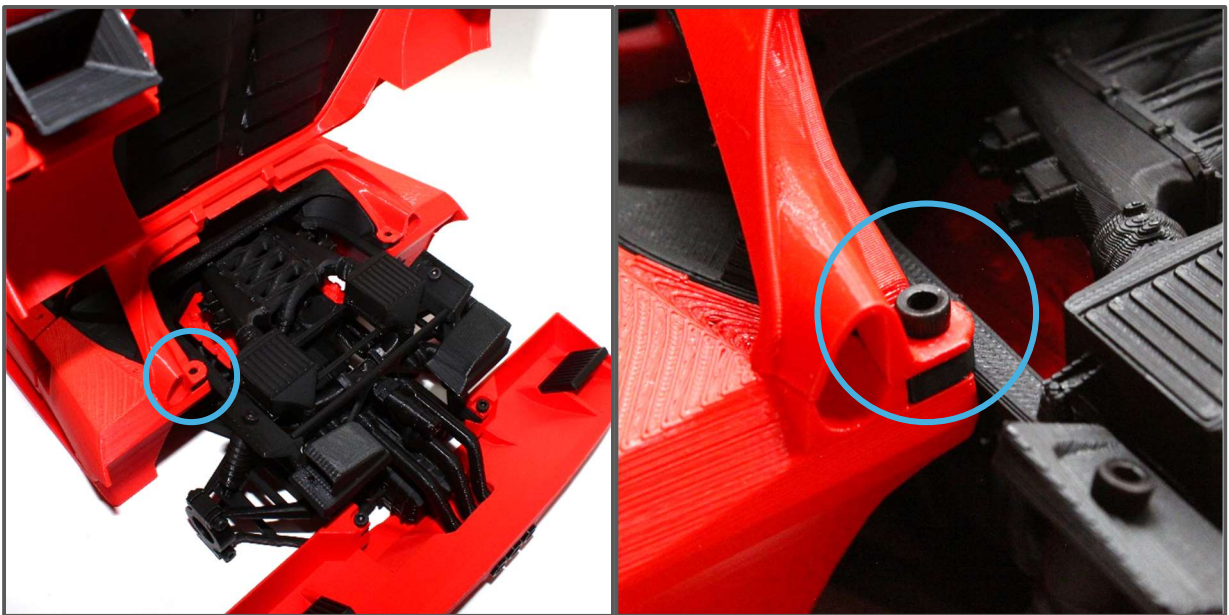
■ Use M3x6 screws to connect the dashboard to the roof

STEP 12 Attaching the roof to the main assembly



- Start by placing the roof assembly on the main assembly

STEP 13 Attaching the roof to the main assembly



- Use M3x10 screws to connect the roof to the rear parcel-shelf and the door frames.
- You may need to align the parts, by pushing or pulling a bit, in order for the screw to go in!

STEP 14 Attaching the dashboard to the main assembly



- Use M3x20 screws to fix the dashboard in place
- Congratulations! The bodywork is now totally done, only the tyres are left!

9. WHEELS



STEP 1 preparations



For this chapter you will need the following items:

- Rear rim (2x)
- Front Rim (2x)
- Rear tyre Inner (2x)
- Rear tyre outer (2x)
- Front tyre inner (2x)
- Front tyre outer (2x)
- Brake disk (4x)
- 624ZZ Bearing (4x)
- M4 nut (8x)
- M4x20 (4x)

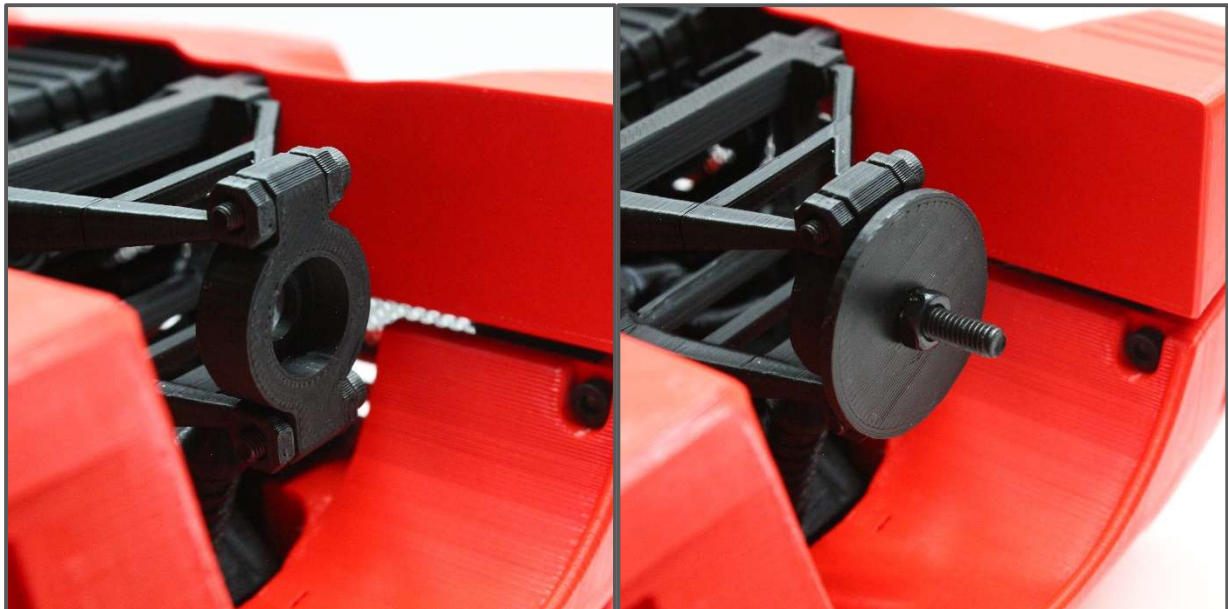
- CA-Glue

STEP 2 Assembling the axles



- Attach the bearing to the brake disk in the following way: Screw – Bearing – Brake disk – Nut
- Make sure that the protruding part on the brake disk is facing the bearing!
- Tighten the screw and the nut using pliers and an Allen wrench!
- Repeat this for all four axles

STEP 3 Attaching the axles



- Now insert the axles into the wheel hubs
- The bearings should be held firmly in place, if this isn't the case we recommend using a little bit of CA-Glue on the outer ring of the bearing!

STEP 4 Assembling the Tyres



- Use CA-Glue to attach the inner to the outer tyre
- This is only needed if you printed the split tyres!

STEP 5 Attaching the axles



- Now insert the rims into the tyres
- The rim should be held firmly in place, if this isn't the case we recommend using CA-Glue!

STEP 6 ATTACHING THE wheels



- The rims have a hex cutout on the inside, if you place the rim over the nut on the axle, this will allow you to tighten the nut on the outside by simply holding the wheel!

STEP 7 ITS ALL DONE AND DUSTED!



- **Congratulations! You just finished the F40 build!**
- Feel free to share your make and your building experience on the platform where you acquired this model! Also feel free to share it on social media and tag us (@STLLabs)!
- **Now go and enjoy your model!**