

CHEVY Legends Slot Car Kit Assembly Guide



Three main
assembly procedures:

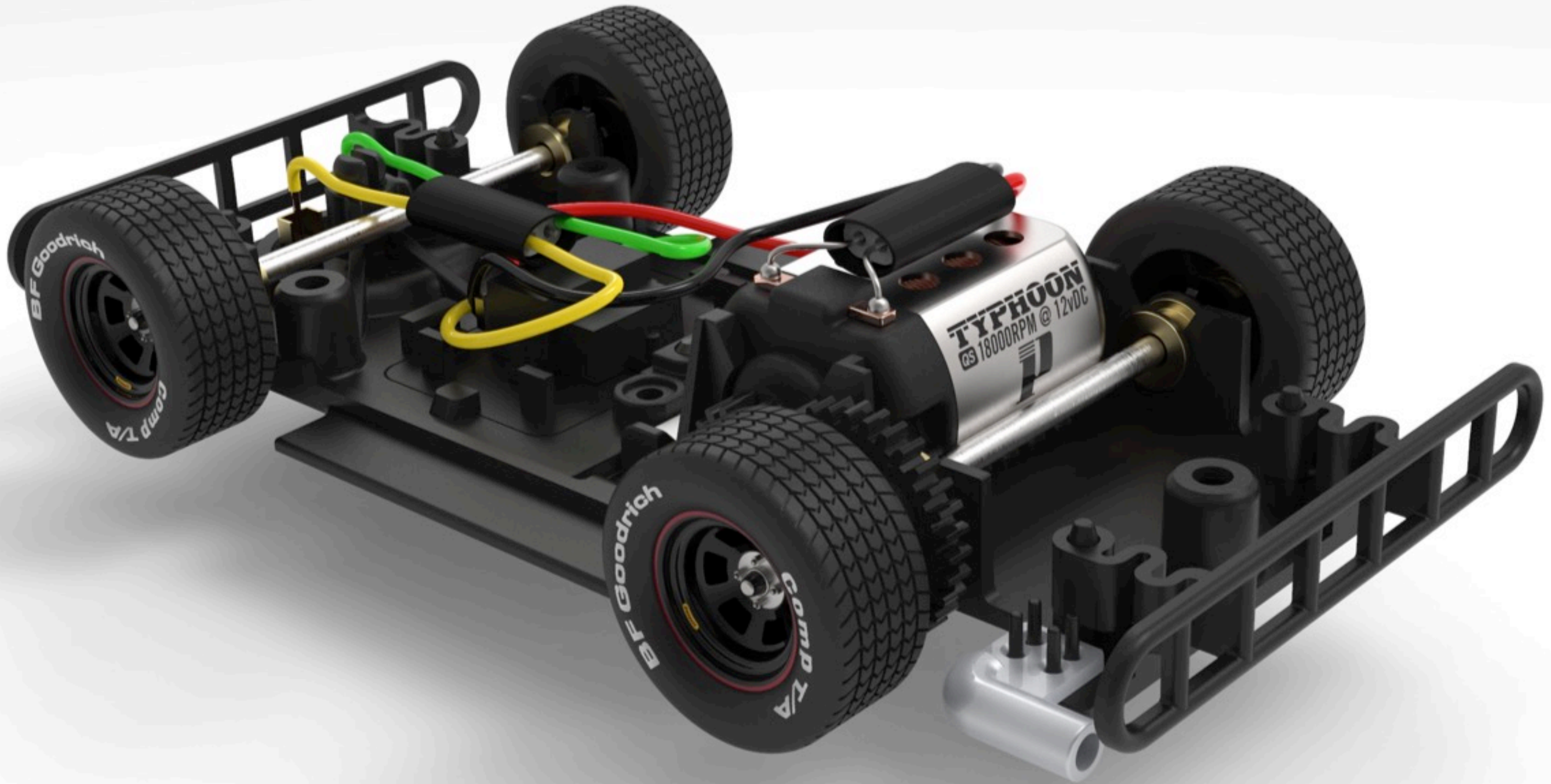
1/ Chassis

2/ Body

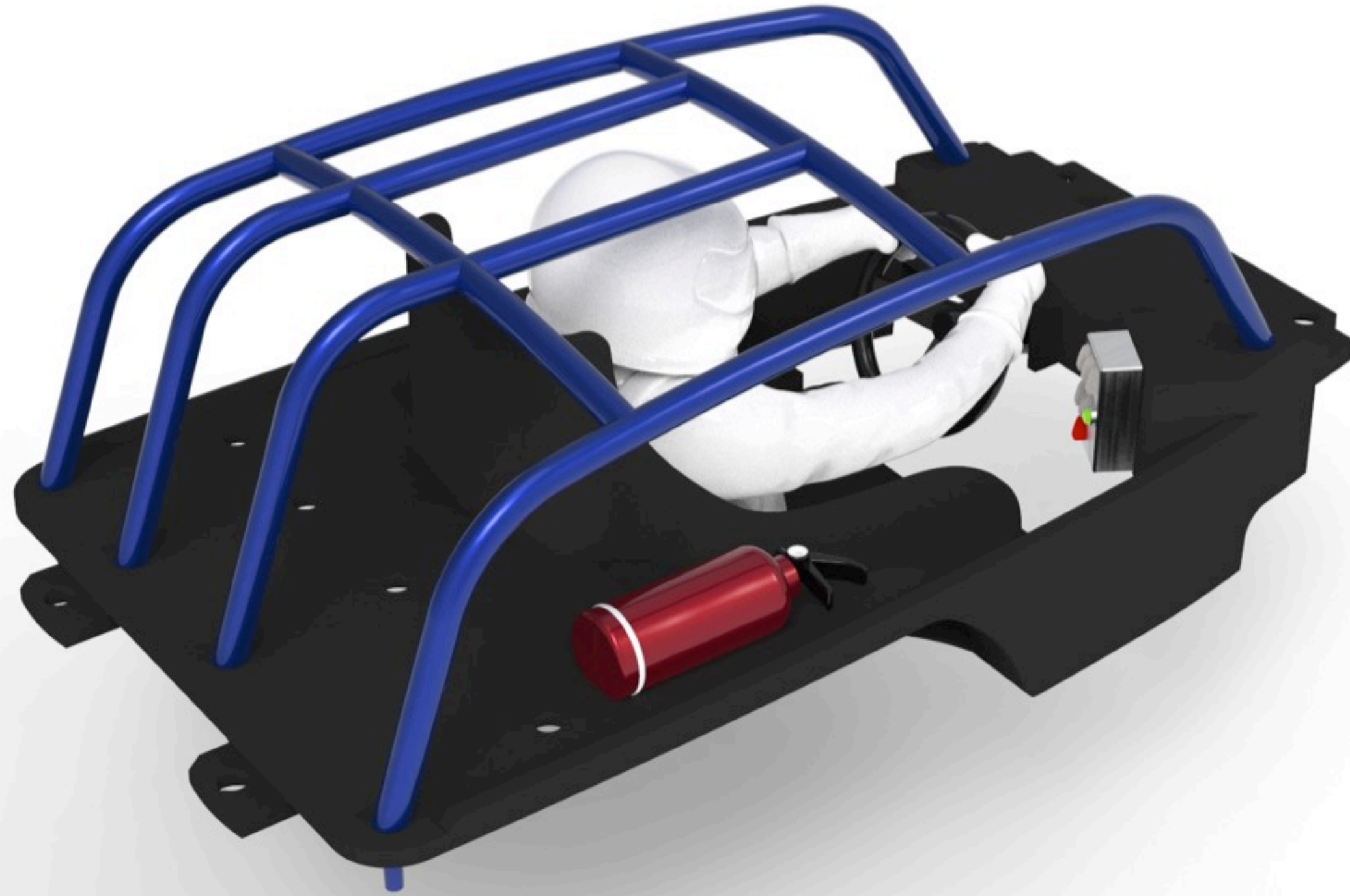
3/ Cockpit Interior

pioneerTM

PAINT IT YOURSELF KIT







Chassis Elements (exploded view)



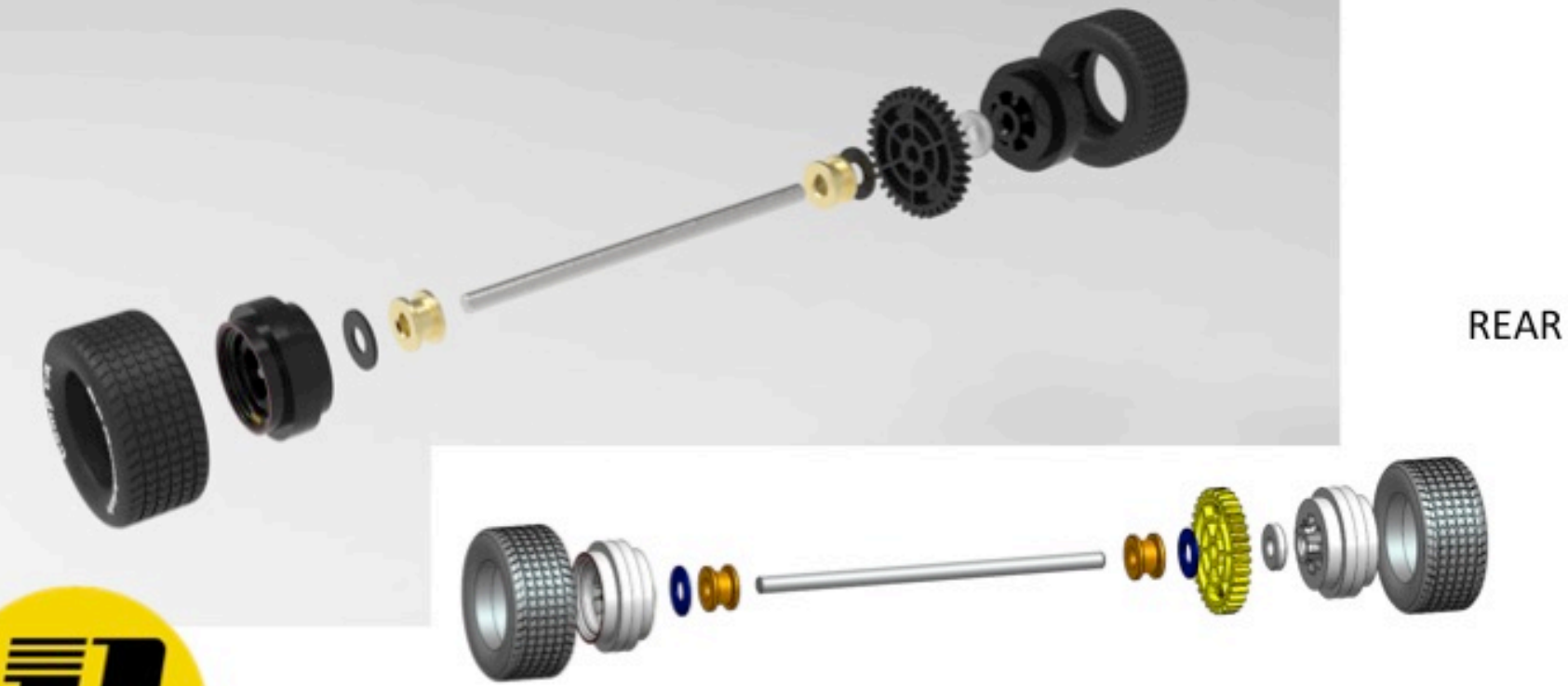
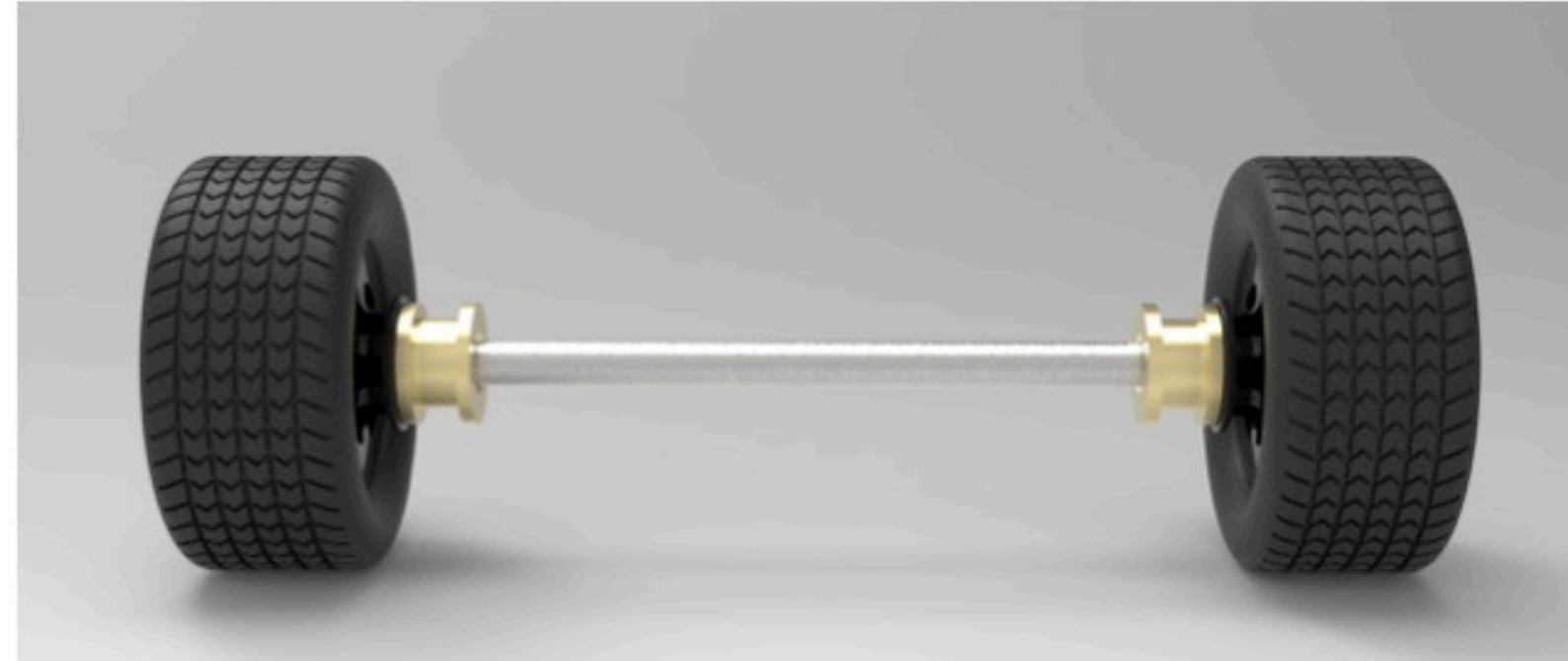
Axles – Fully Assembled (full instructions see pages 7, 8, 9, 10 & 11)



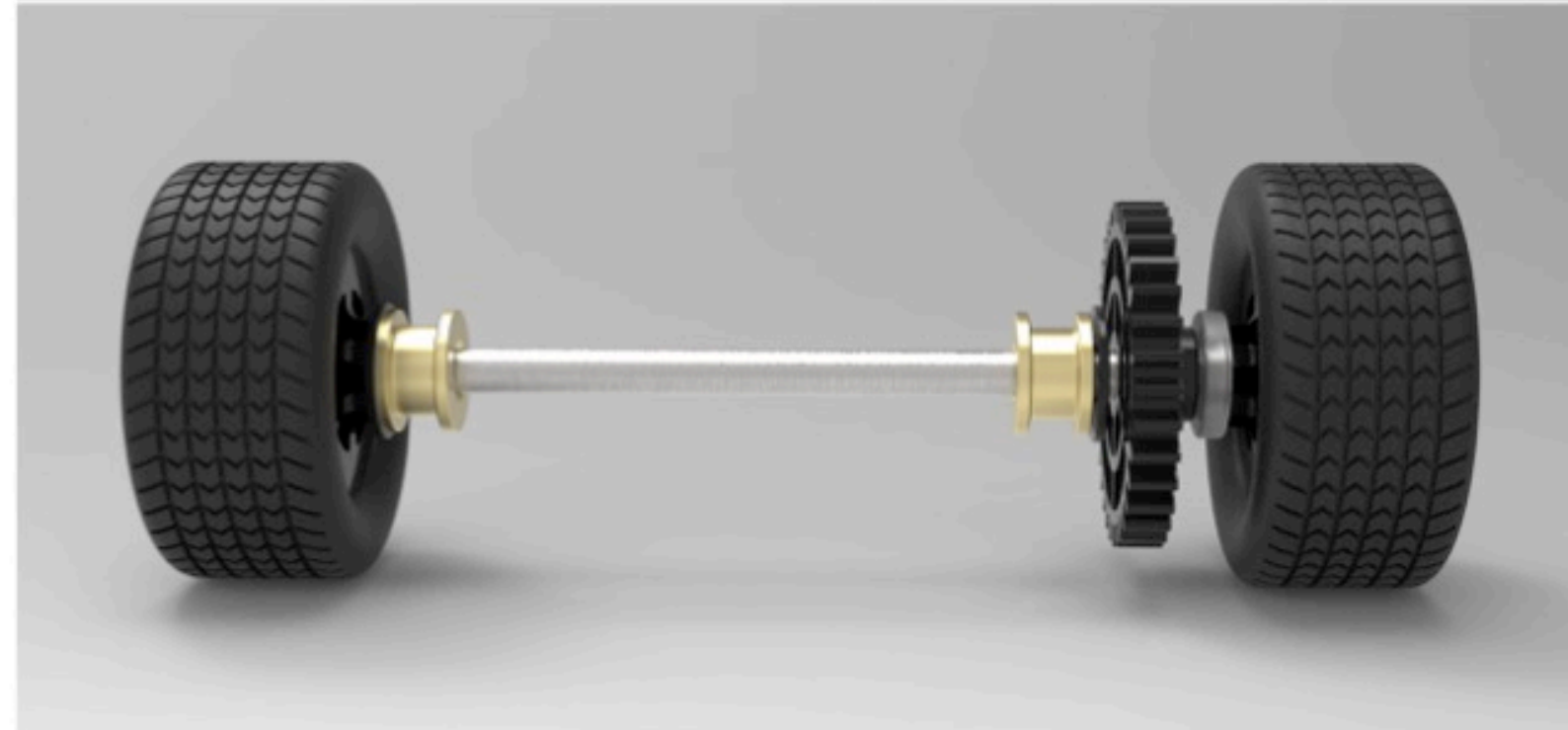
Axle Sub-Assemblies



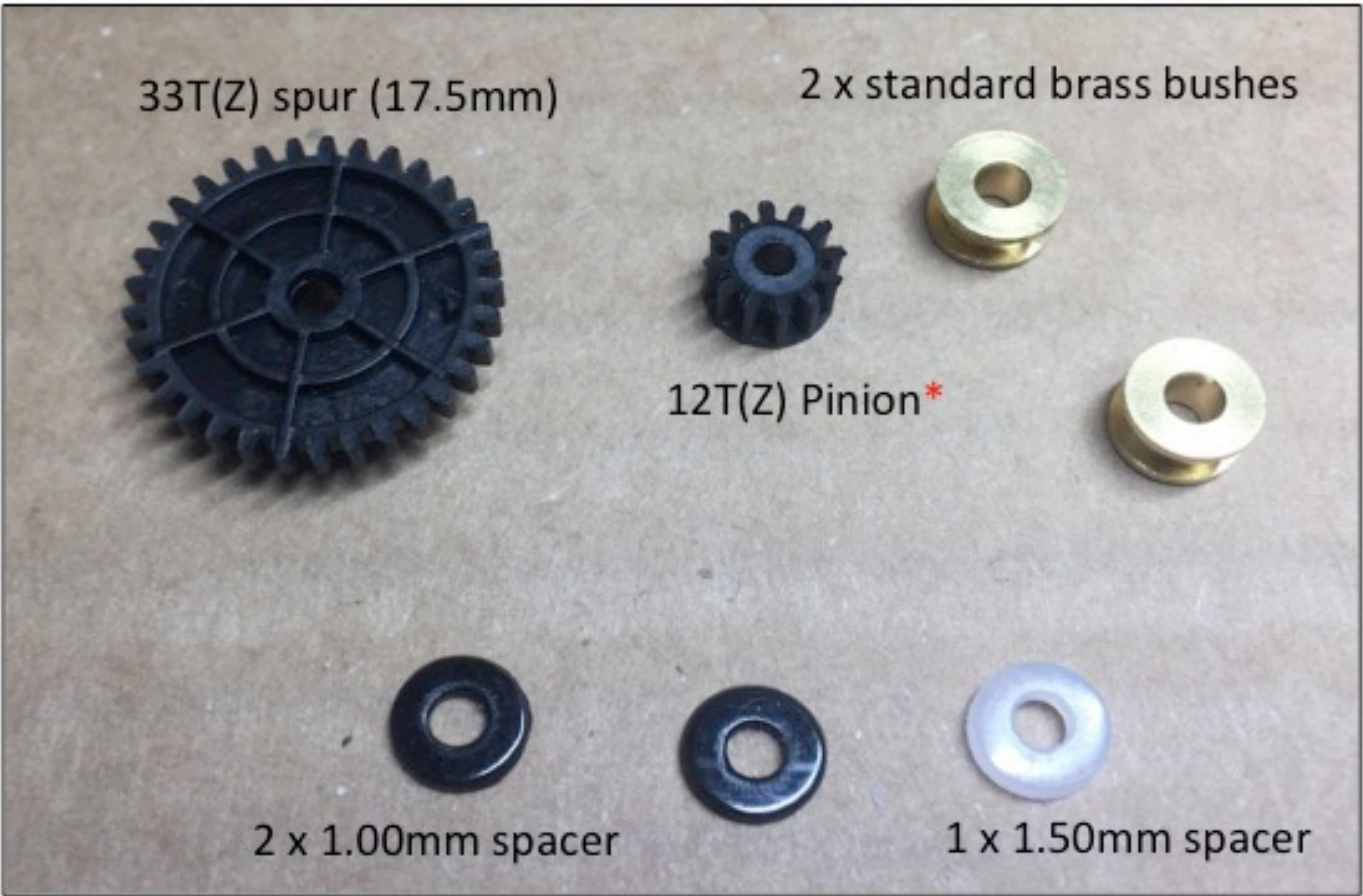
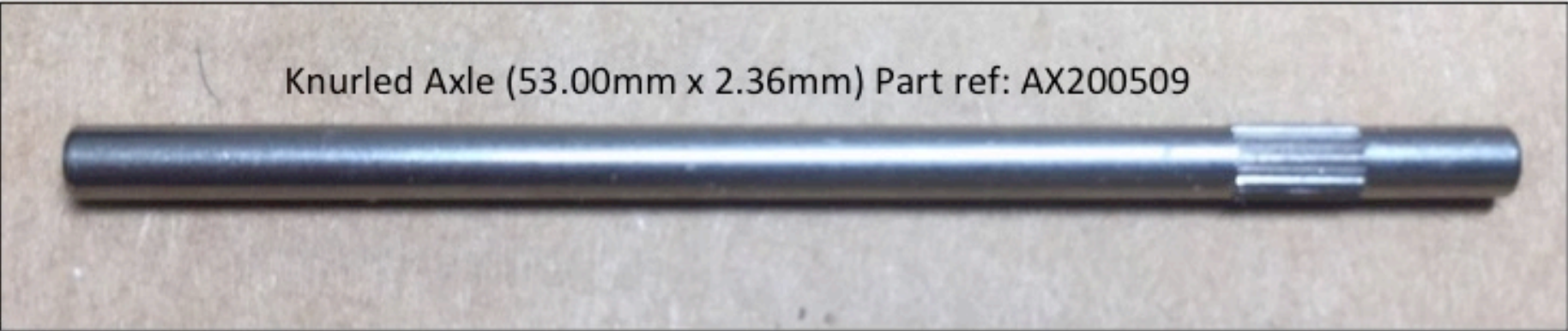
FRONT



REAR



Legends Racer REAR Axle Components (all models)



*In addition to the standard 12T pinion, each kit contains two alternate pinion gears. An 11T(Z) and a 13T(Z). Short tracks will suit the 11T and very long, fast tracks will suit the 13T.

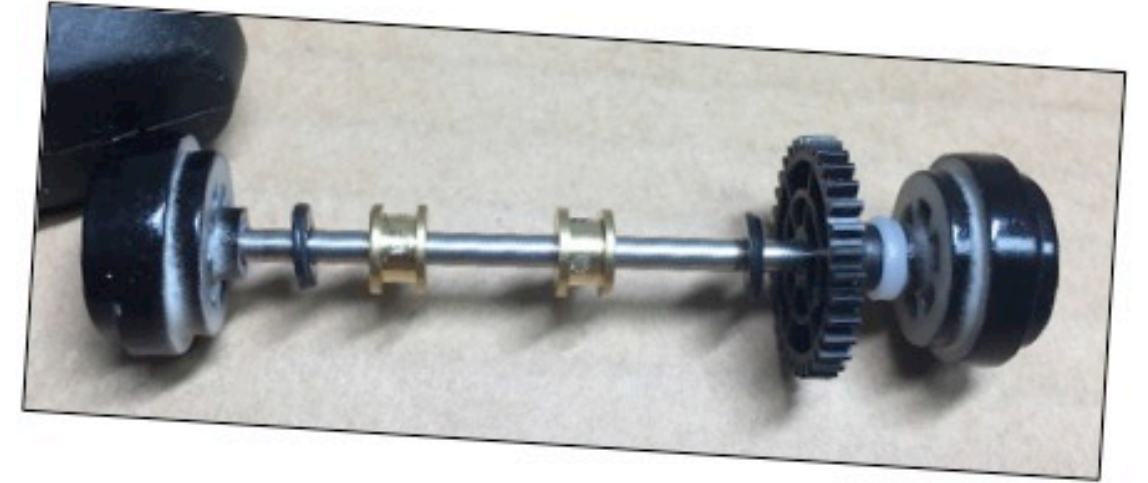


Legends Rear Axle, Assembly Size.

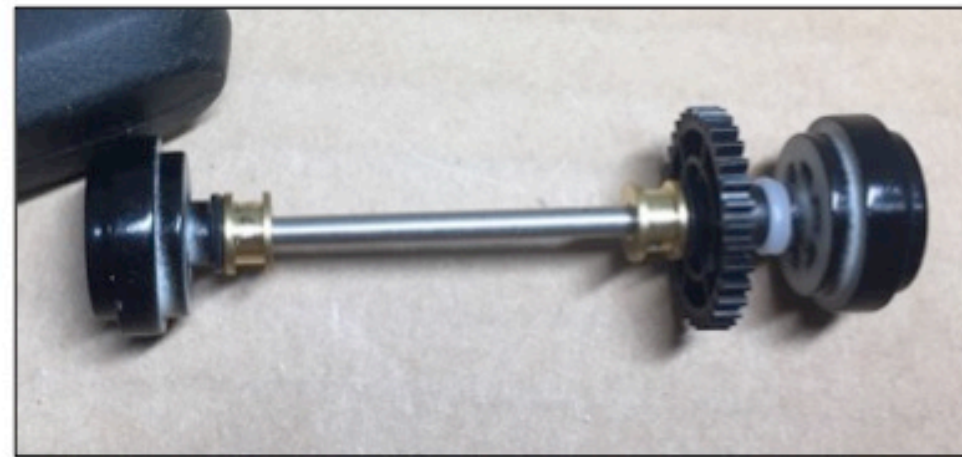
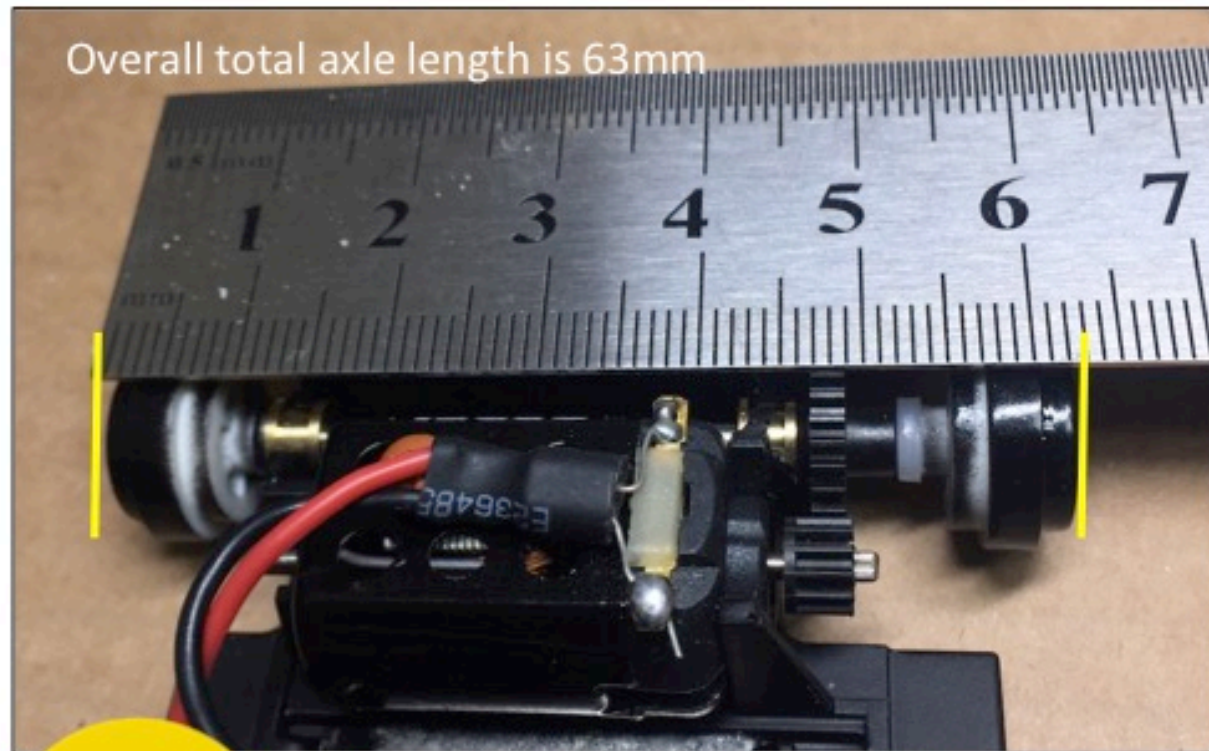
A/ Apply tiny amount of glue onto knurled area of axle, then push spur gear (by hand) onto axle until 6mm of axle is available between end of spur gear boss and end of axle.



B/ add 1.50mm spacer onto spur gear end, then apply tiny amount of glue into wheel hub hole and press-fit (by hand) wheel until it meets spacer.



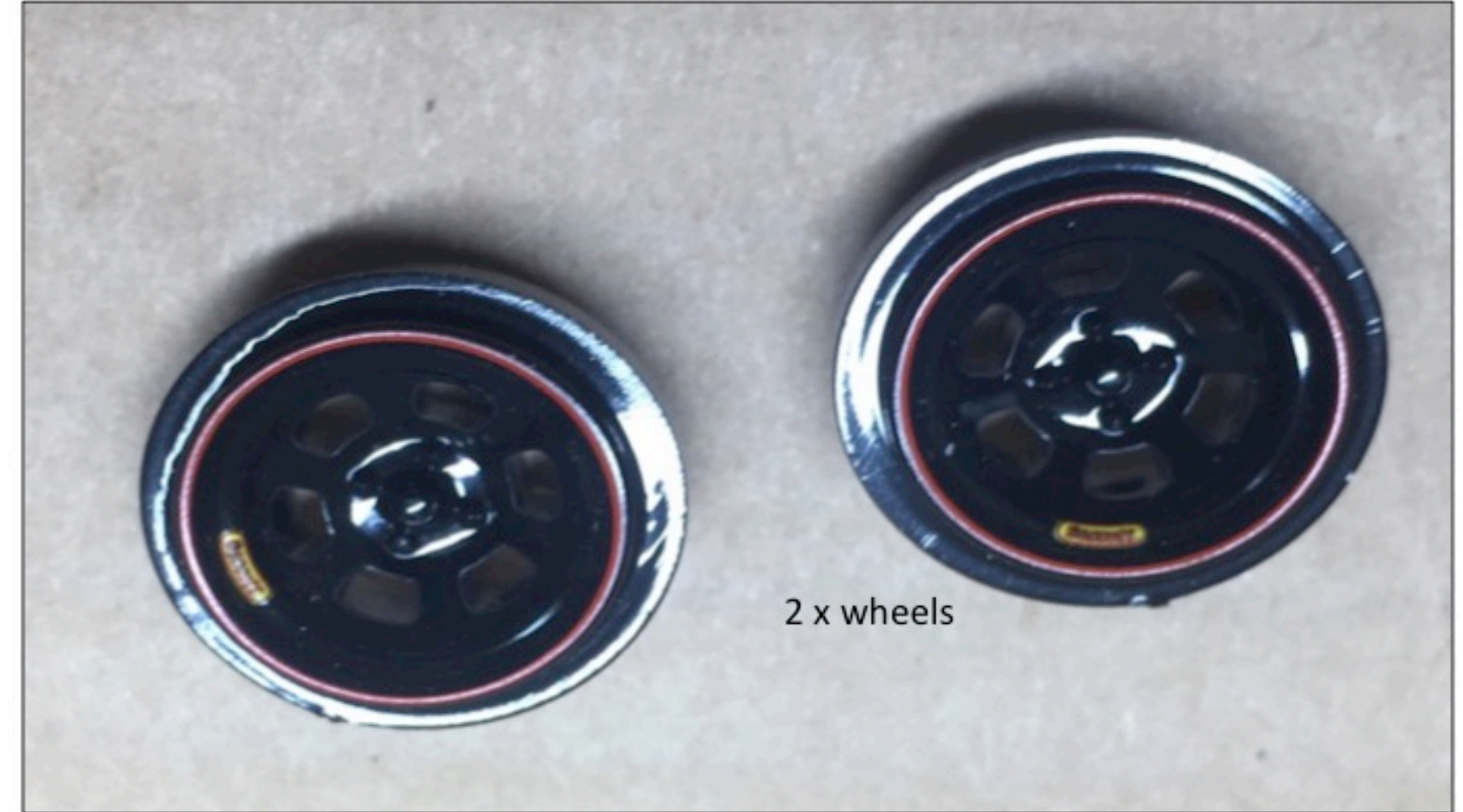
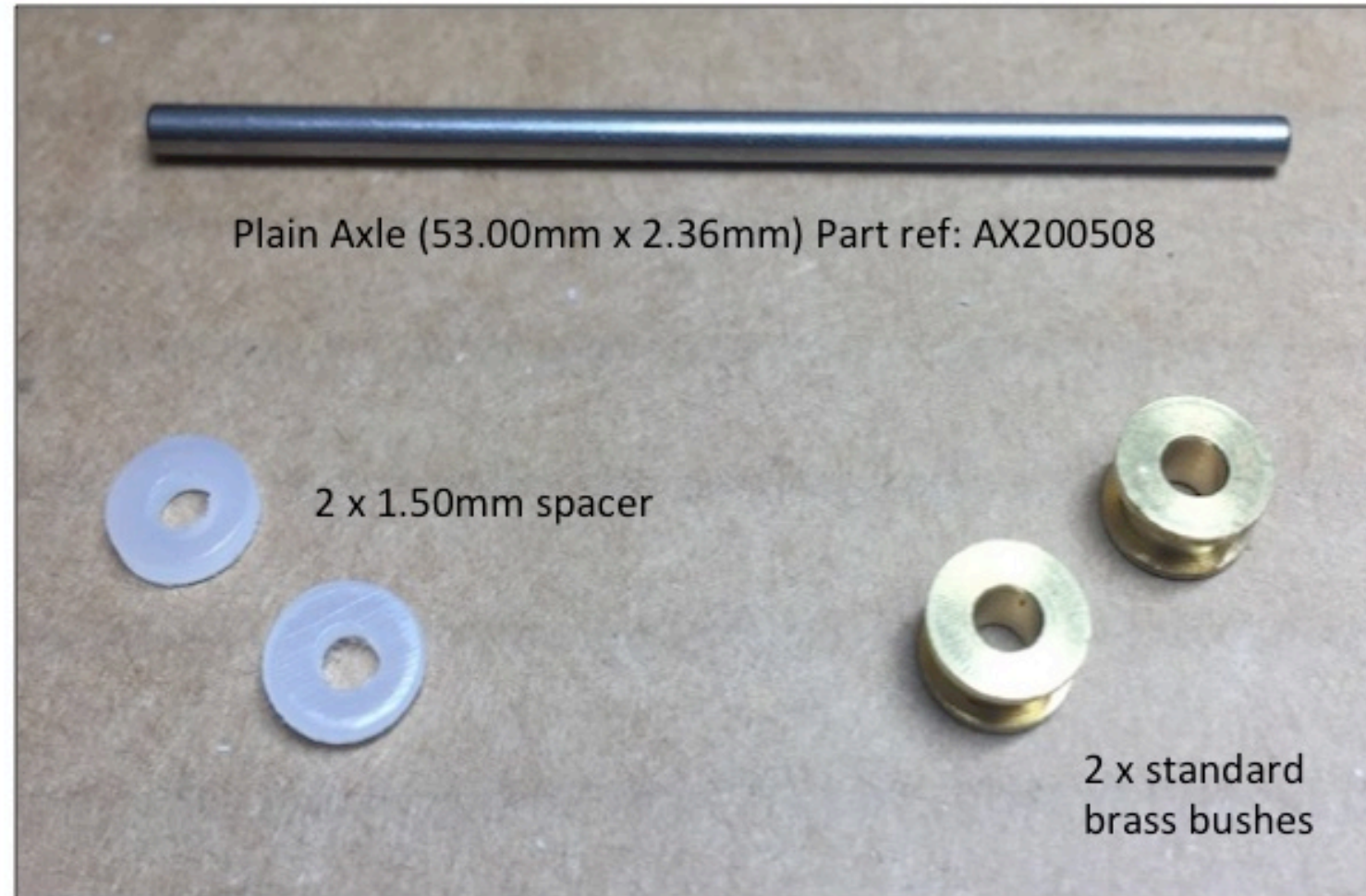
C/ add 1.0mm spacer, then two brass bushes, then another 1.0mm spacer. Apply tiny amount of glue into wheel hub and press fit the wheel until total axle length is 63mm (from outside rim of wheels)



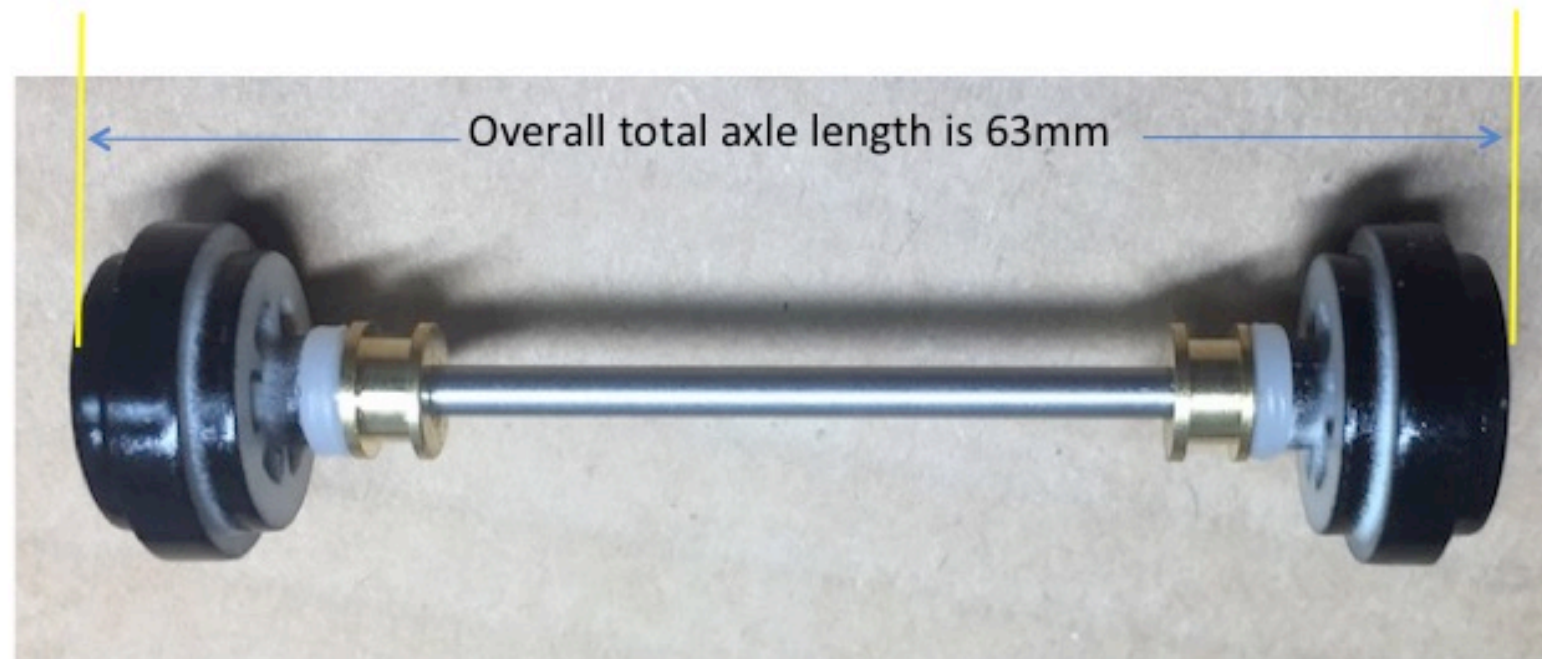
NOTE: the hub hole to axle diameter size is very tight fit and should be hand assembled with light tap until correct overall length is achieved.



Legends Racer FRONT Axle Components (all models)



Legends Front Axle, Assembly Size.



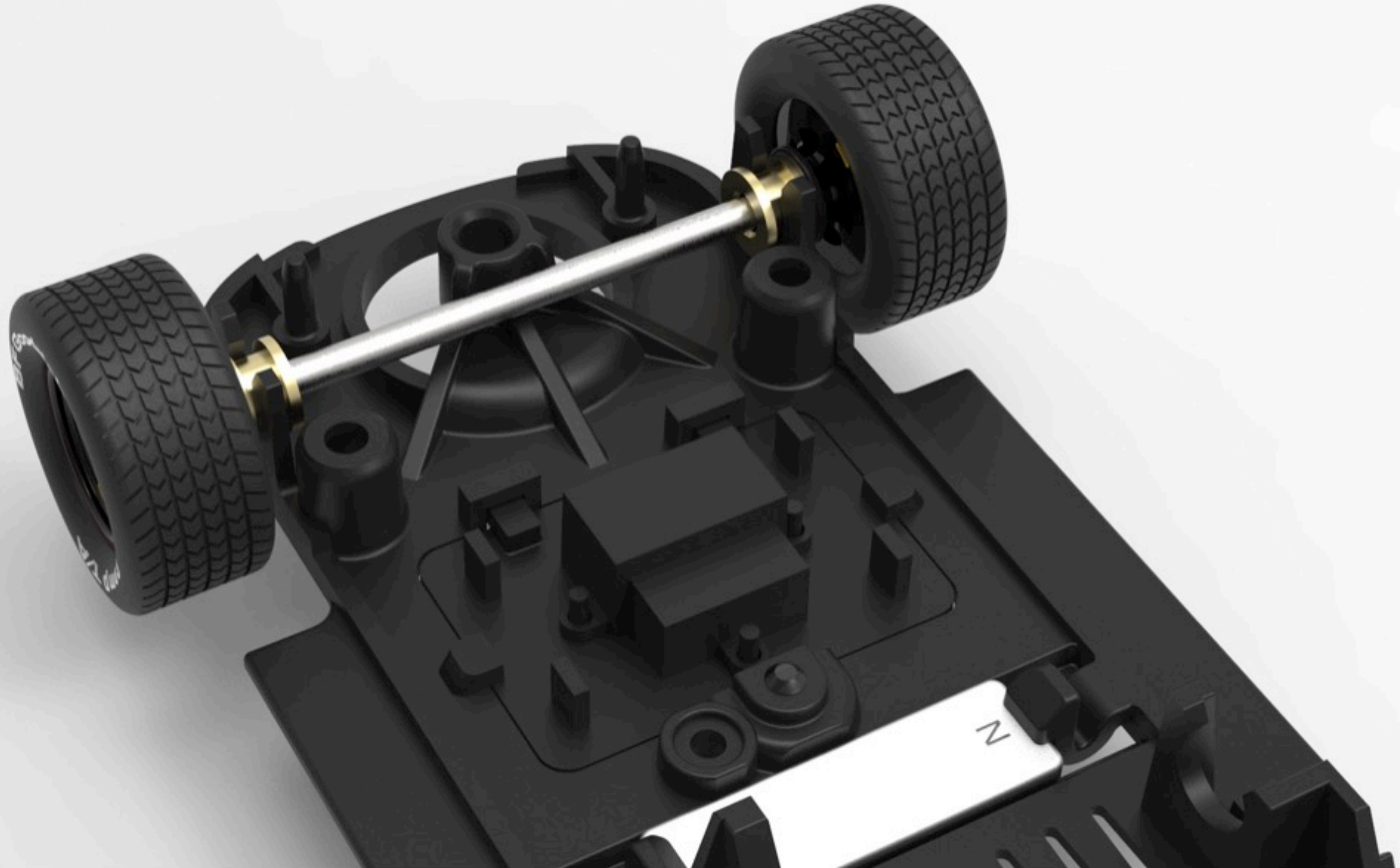
A/ Apply tiny amount of glue into one wheel hub hole and press-fit (by hand) wheel until just enough to locate wheel on hub (DO NOT push fully on until (b) is completed).

B/ add 1.5mm spacer onto axle, then two brass bushes, then another 1.5mm spacer. Apply tiny amount of glue into wheel hub and press (compress) fit the second wheel until total axle length is 63mm (from outside rim of wheels)

NOTE: the hub hole to axle diameter size is very tight fit and should be hand assembled with light tap until correct overall length is achieved.

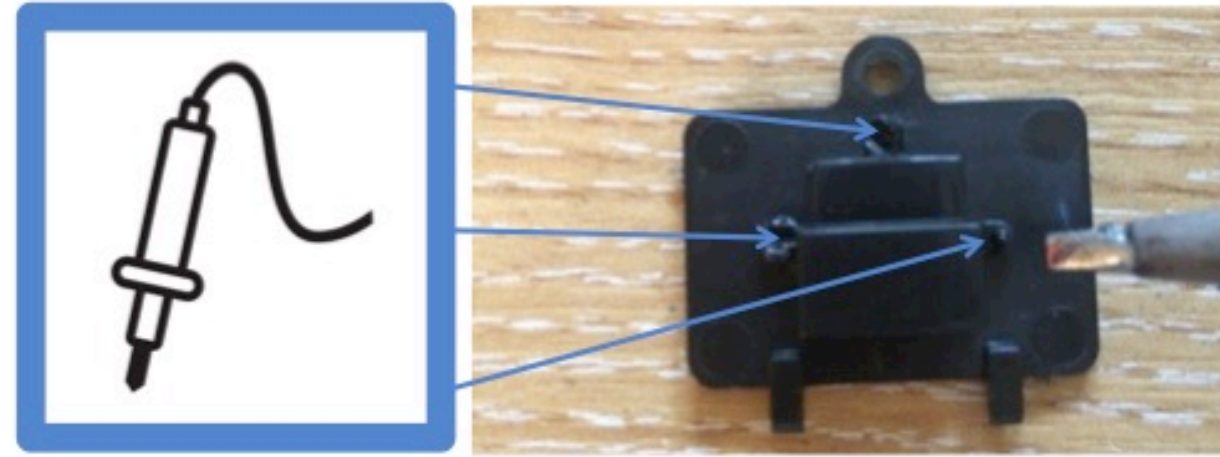
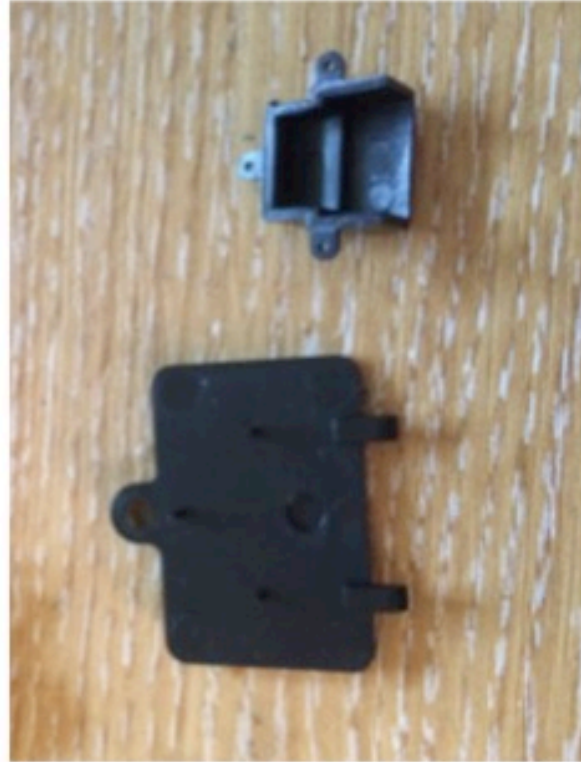


Chassis Assembly – Front Axle ‘Snap’ Into Place

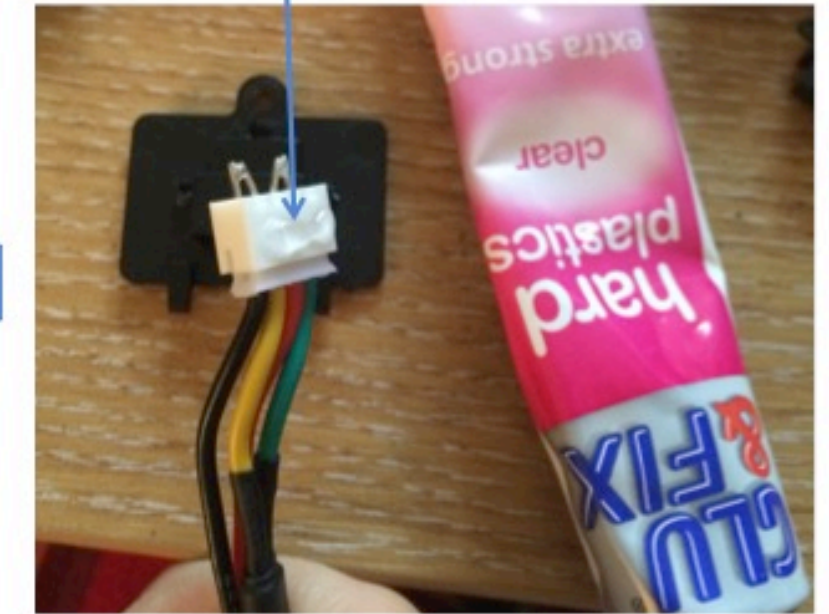


Chassis Assembly – DPR Door.

Locate these two parts



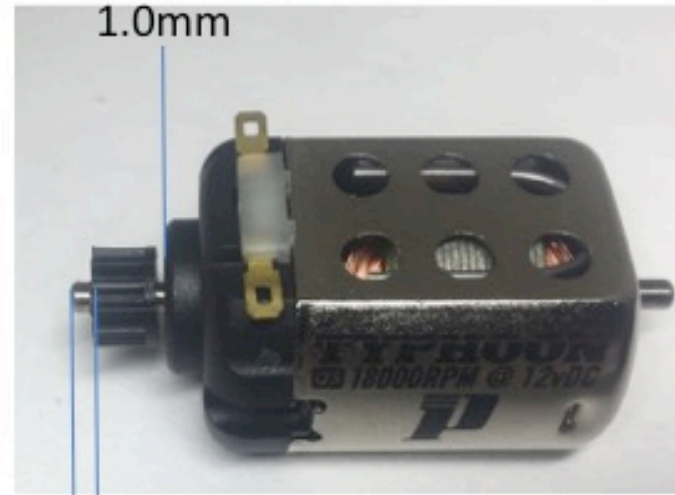
Insert white plug into holder



Chassis Assembly – Motor Preparation

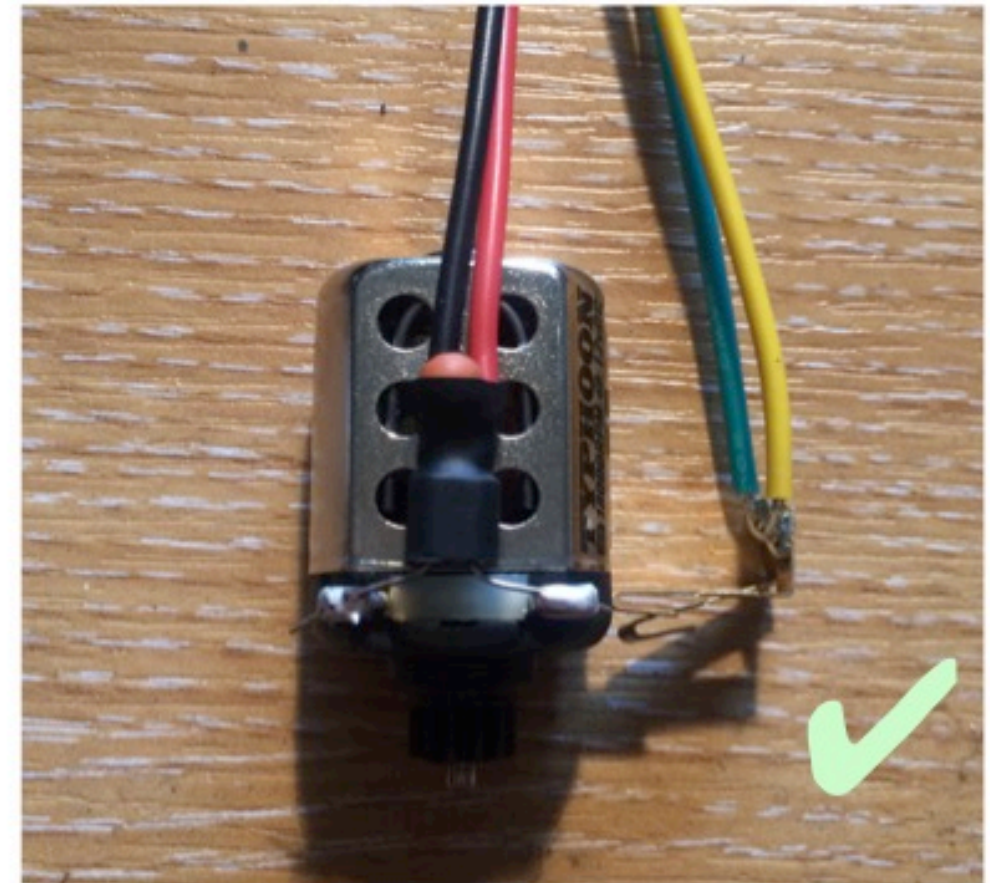
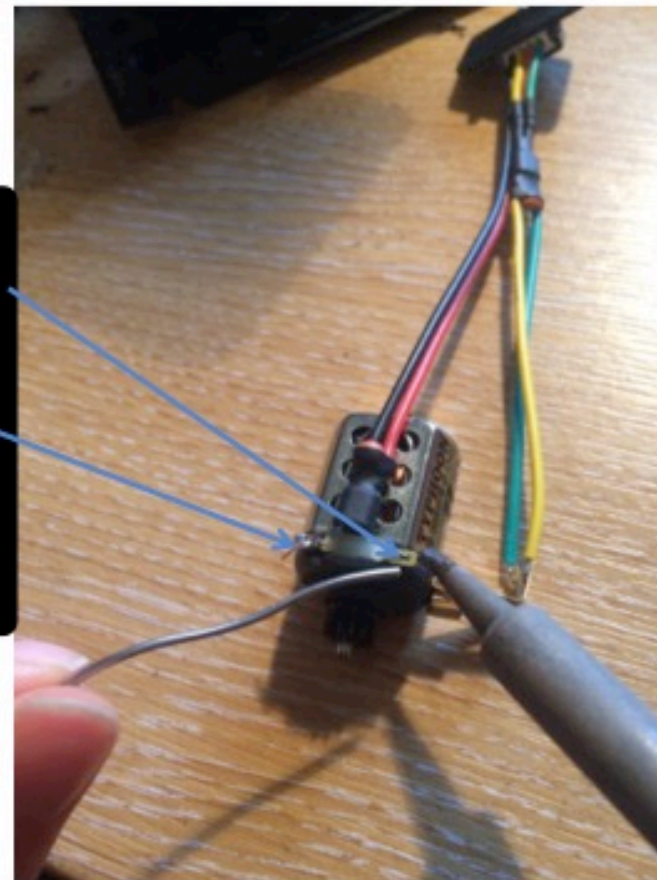
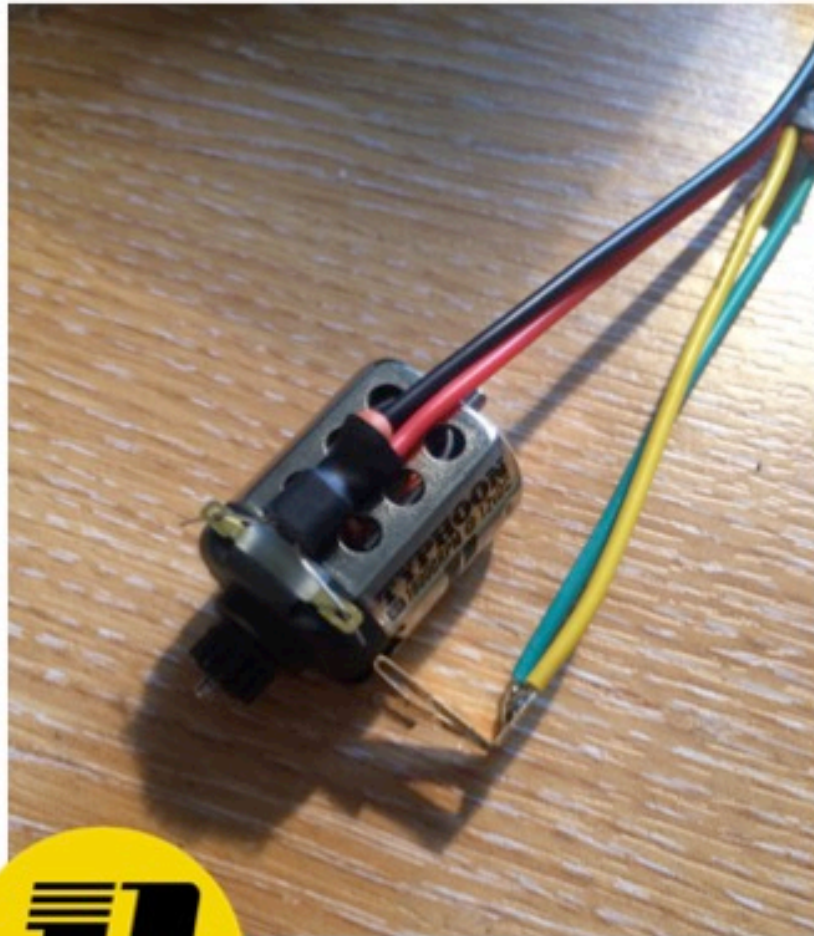
1/ Press-fit Pinion Gear onto motor shaft

Note pinion gear position on motor shaft
See page 24 for full explanation



1.5mm

2/ Poke the motor wire connections through the brass tags on the motor.



Chassis Assembly – Magnet Fitting (Best to do BEFORE fitting motor)



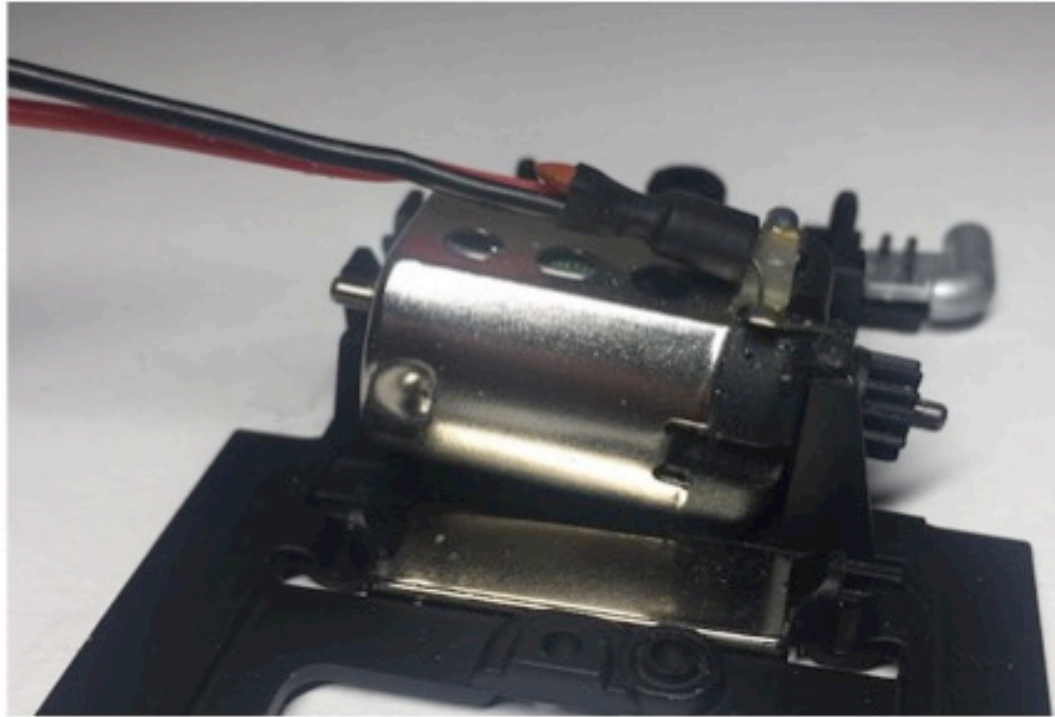
- Step 1. Slide magnet (at angle) under one of the retainers



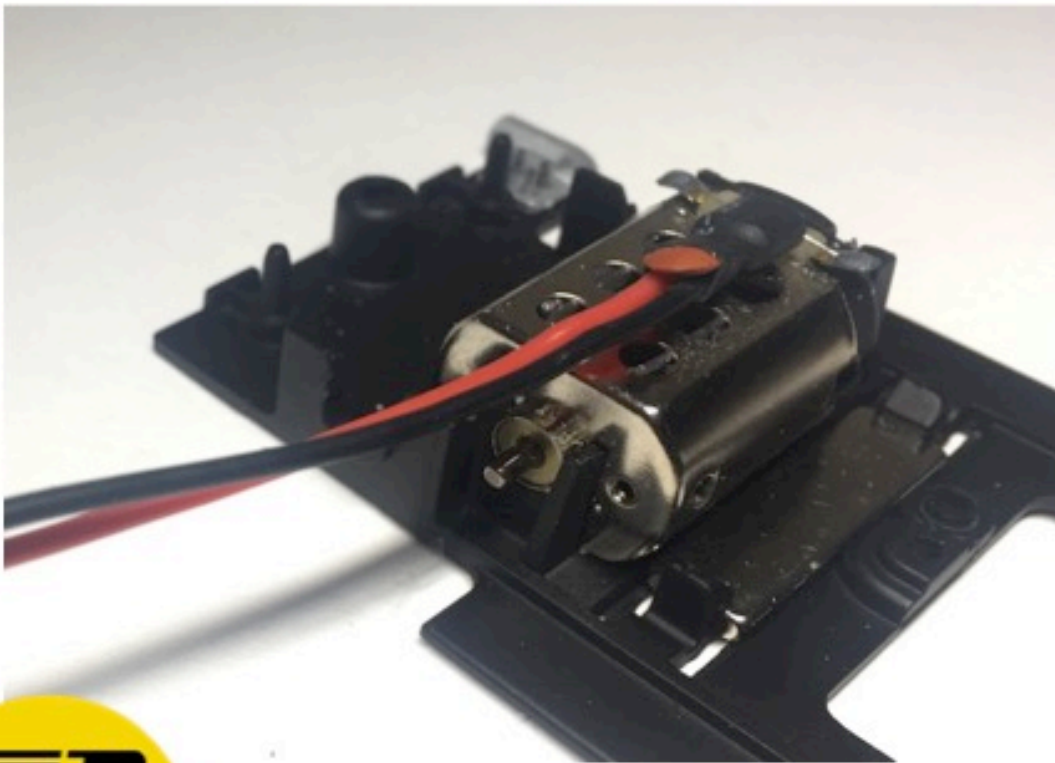
- Step 2. Press firmly on the other end of magnet until “SNAP”, the magnet will click securely into place.



Chassis Assembly – Secure Motor Into Place



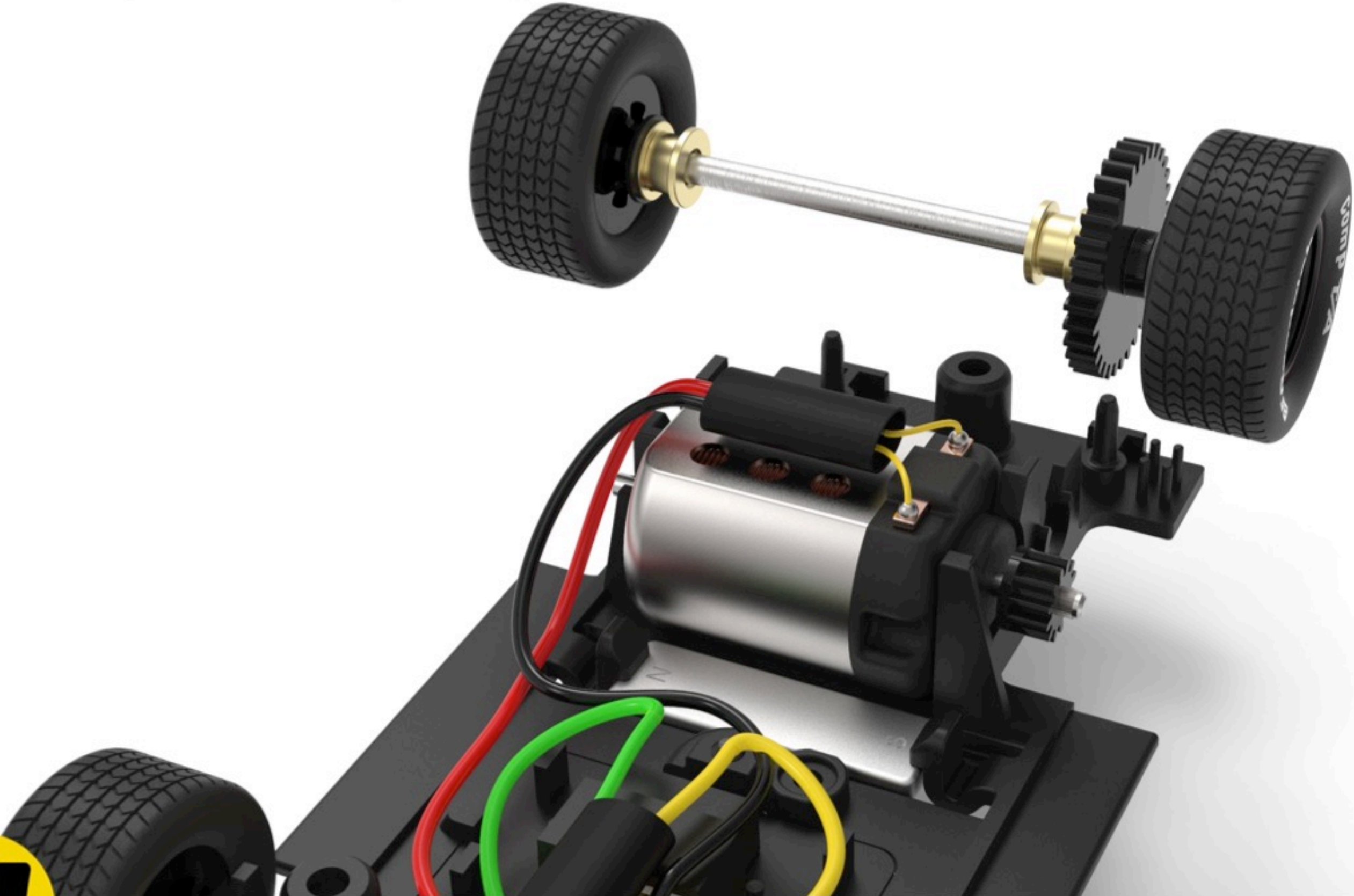
- Step 1, At an angle, place the pinion side of the motor into position in the snap fit.



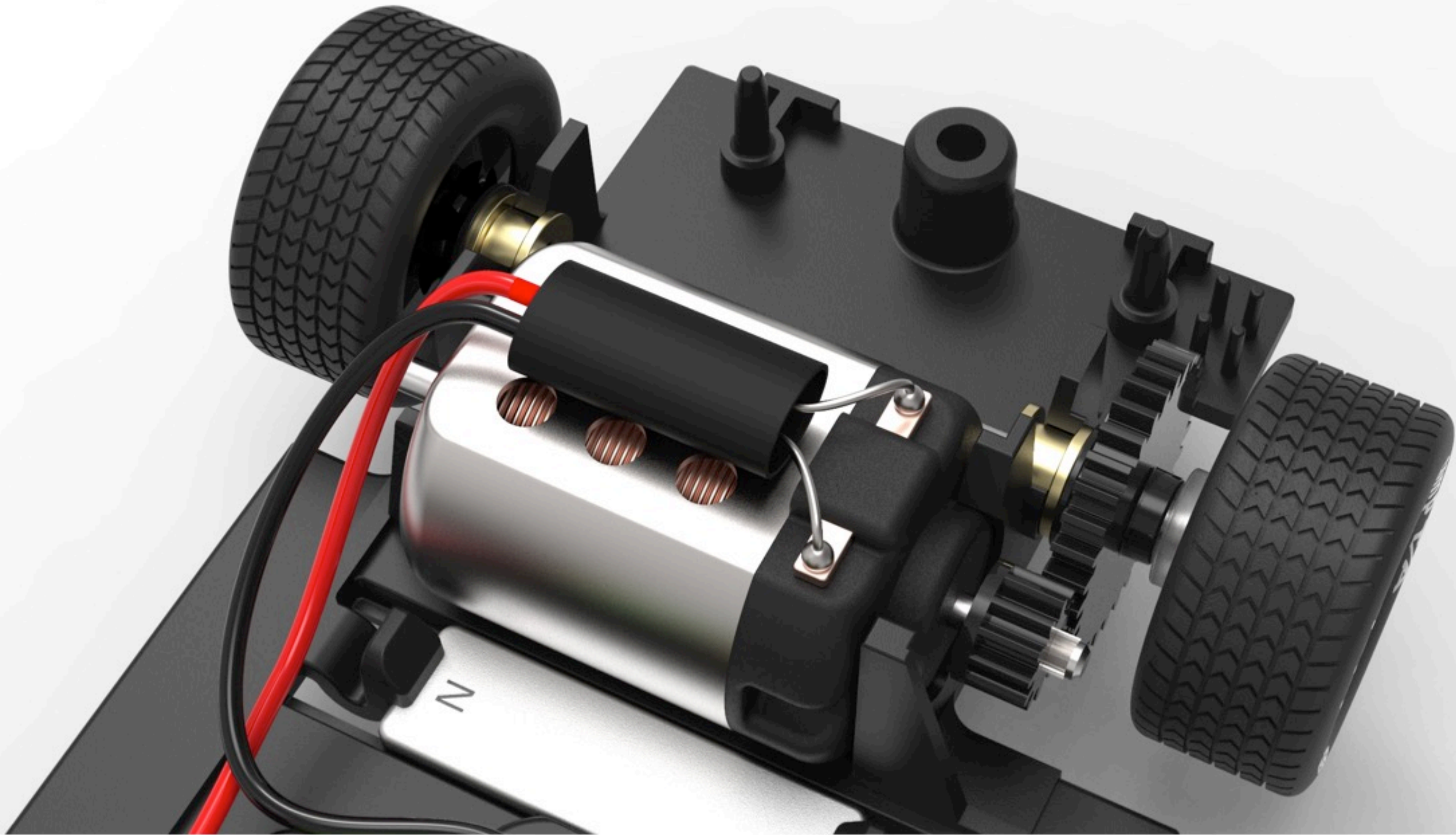
- Step 2, Push down very firmly on the other side of the motor to CLICK into place so that the motor boss fits securely into place.



Chassis Assembly – Rear Axle Ready To ‘Snap’ Into Place



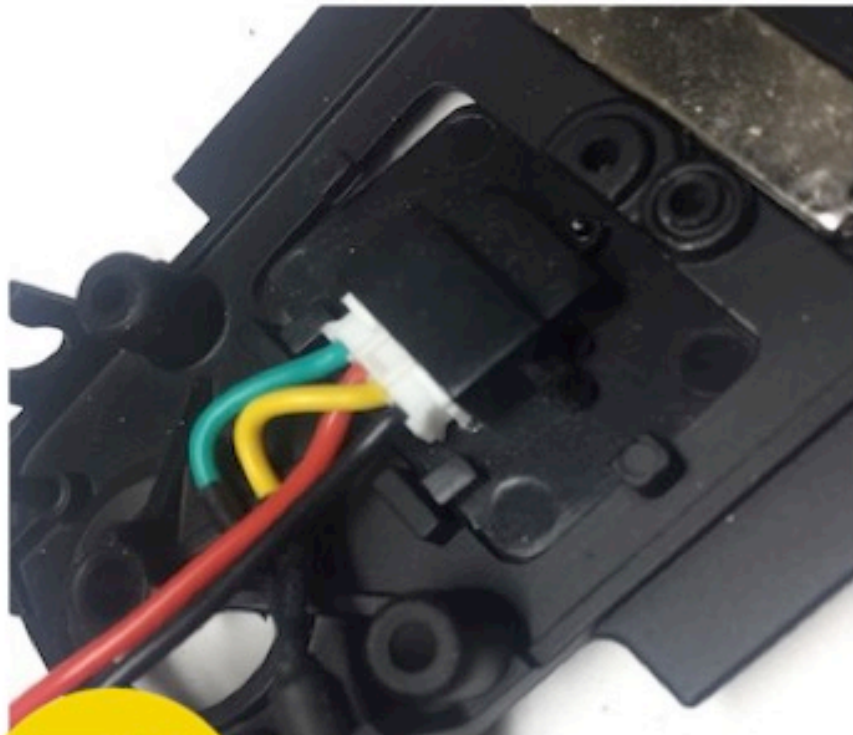
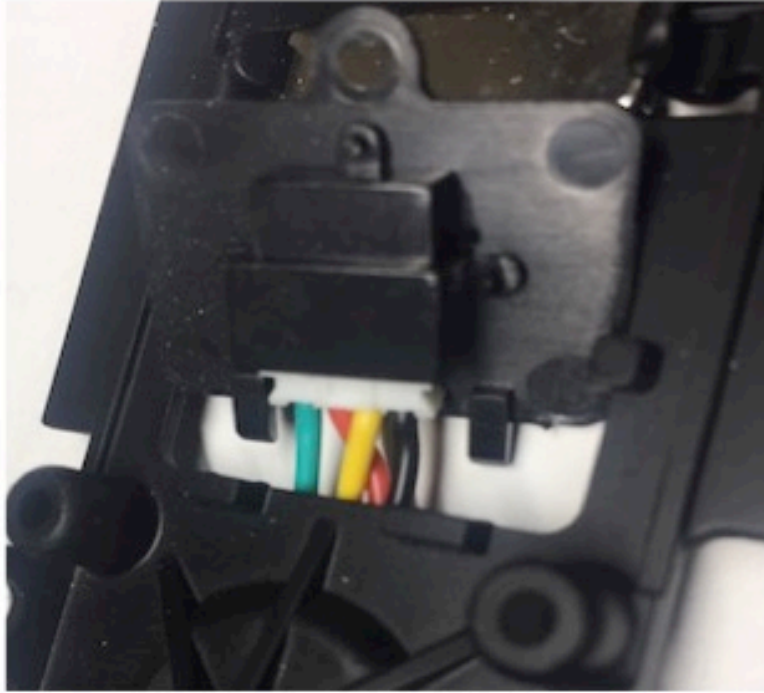
Chassis Assembly – Rear Axle In Place



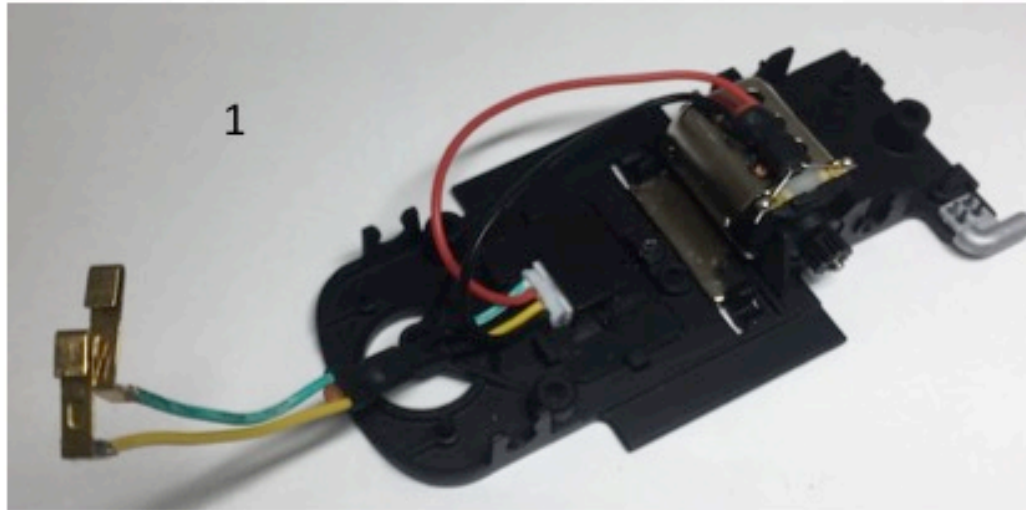
Chassis Assembly – Secure Wire Loom and DPR Door

Note: Some kits may have a wiring loom where the yellow wire in these images is white in colour. The wire colour (white or yellow) can be considered in the same way to complete the wiring of model.

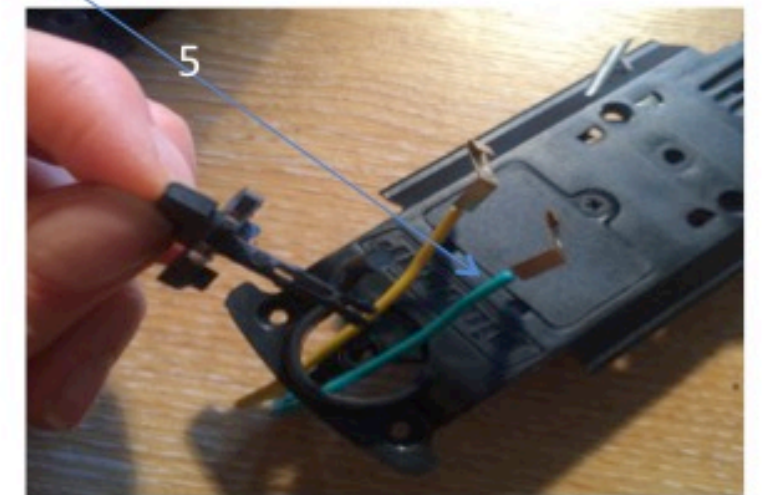
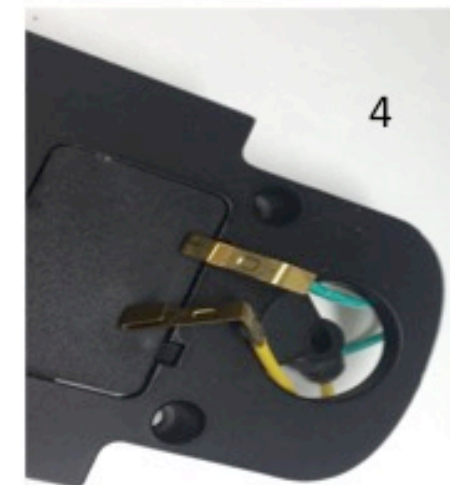
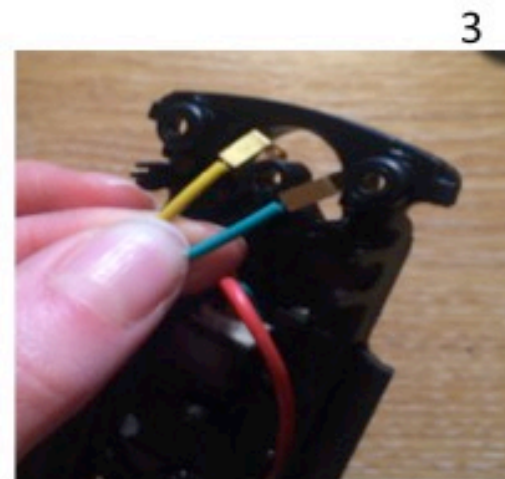
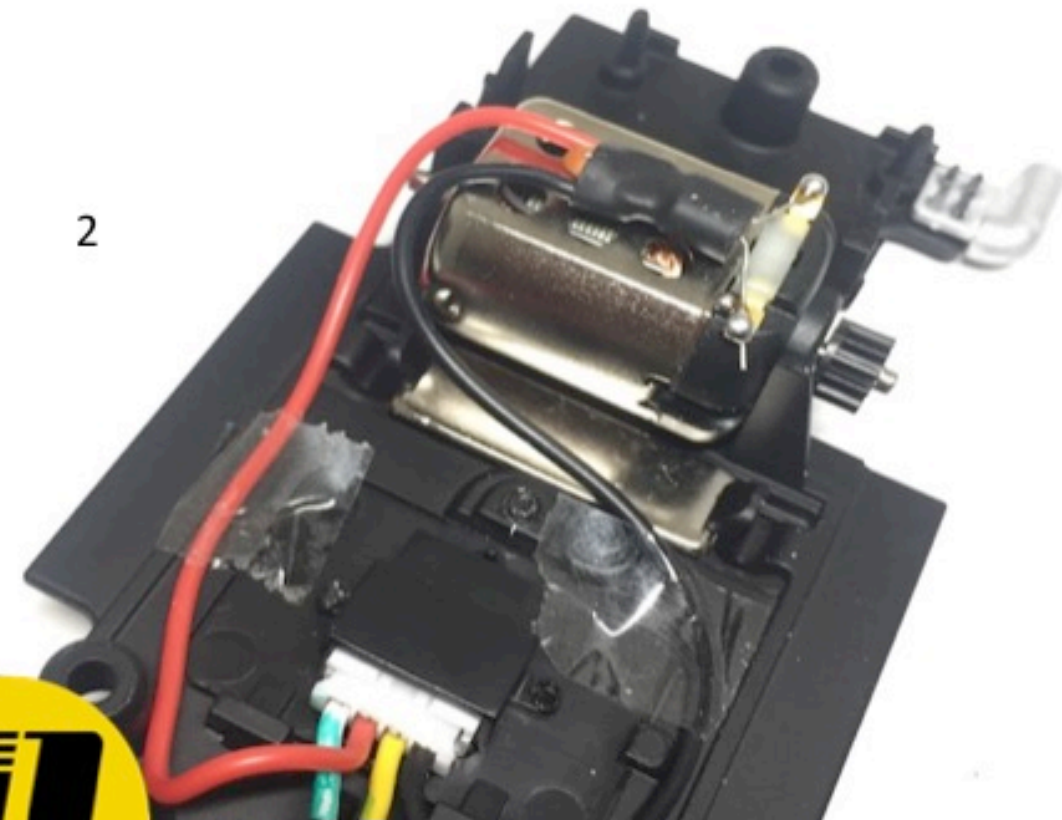
- 1/ Now feed the Terminal holder through the chassis.
- 2/ Locate the two tabs into the retainers.
- 3/ Press the terminal holder plate into position and secure with small CS screw (do not over tighten, just enough to make flush with chassis).



Chassis Assembly – Routing The Wires To The Guide

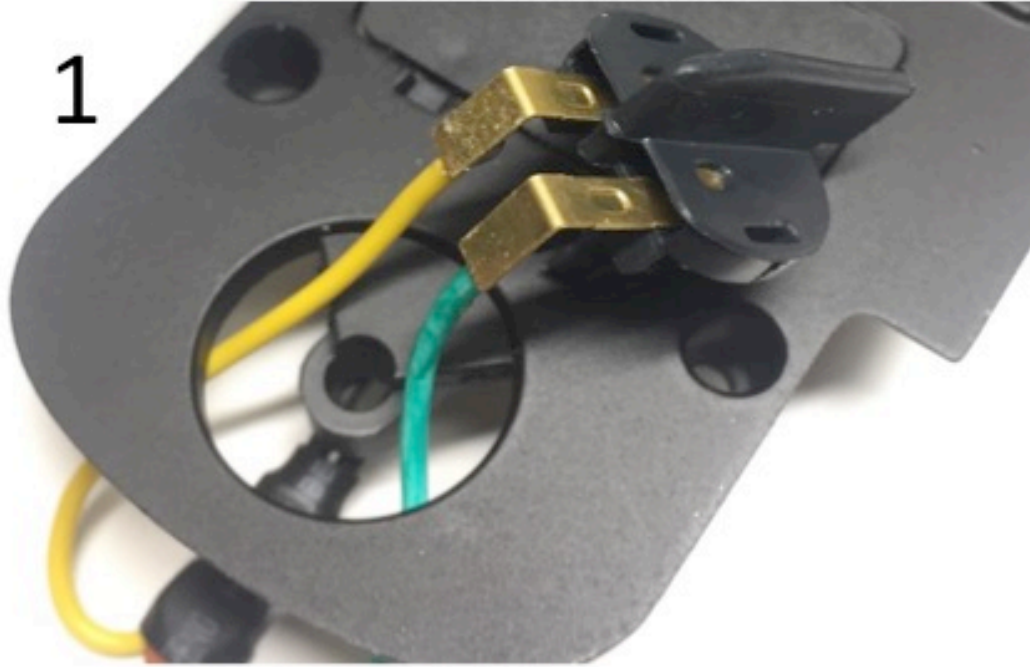


- The chassis should now look like image 1.
- Tape wires flat to chassis (image 2). Alternatively, the wires may both stay to one side as long as body fitment does not trap wires.
- Take care to position wires so that they do not get trapped when body is screwed into place.
- Thread the two brass 'L' pieces of guide blade wires through the circular hole in the chassis. (image 3) then turn chassis over (image 4)
- Keeping the green wire on the right side, this is what the chassis should look like on the bottom.



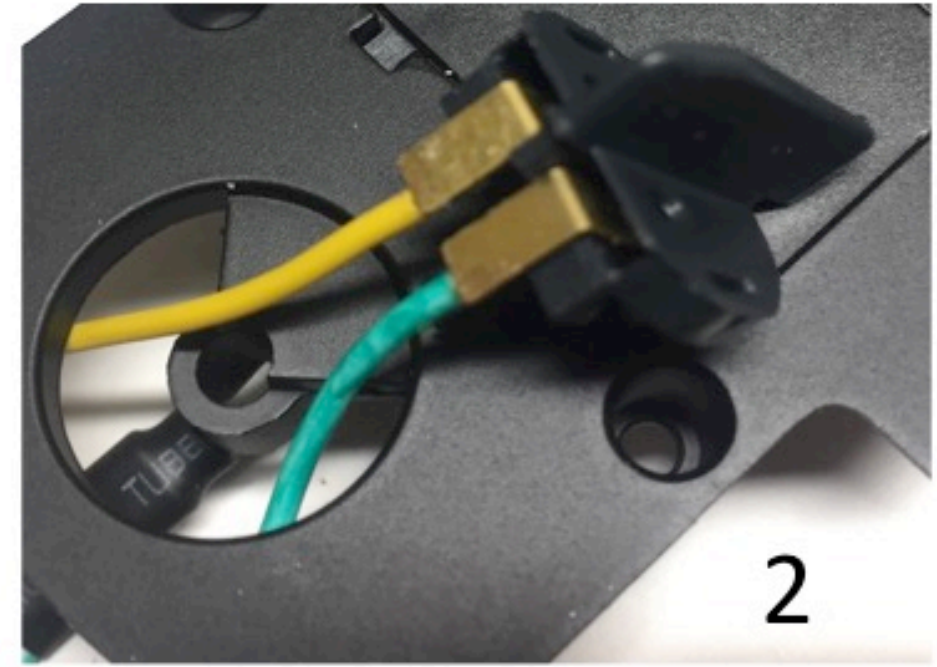
Chassis Assembly – Inserting Lead Wires and Braids Into Guide

1



Insert the brass 'L' pieces of the green wire into the front side of the guide on the RIGHT, and the yellow on the LEFT.

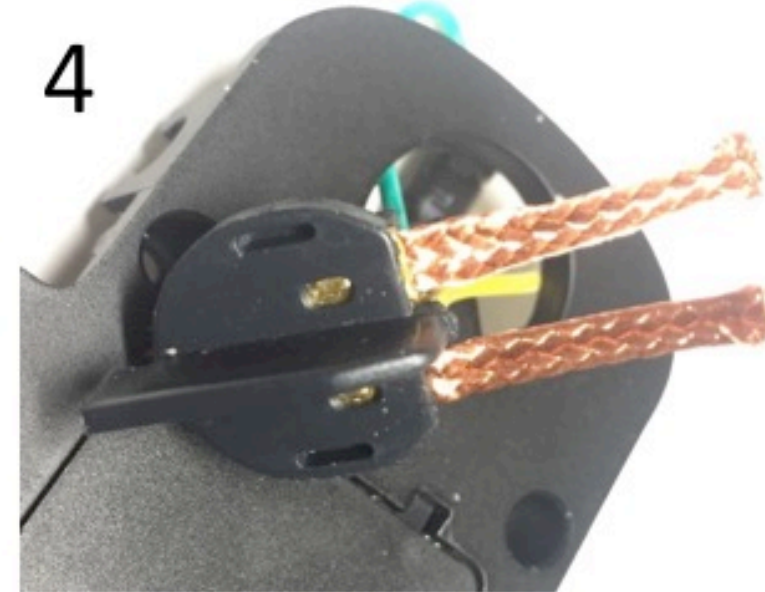
2



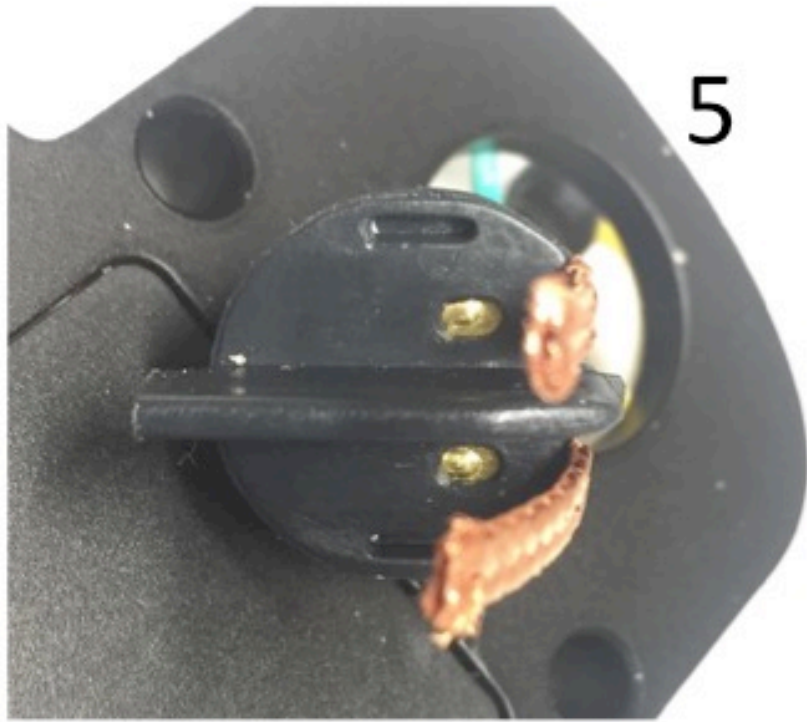
Push braids firmly into place. Take care not to twist copper braid. Try to keep nice and flat.

NOTE. If brass crimp is loose when inserted into guide then you must deform either the 'L' piece or the brass crimp to achieve tight fit.

4



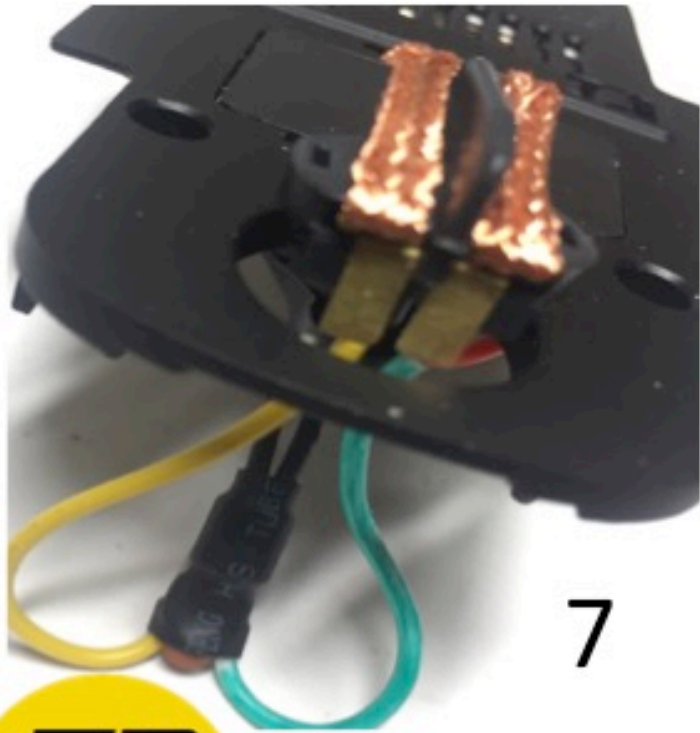
Chassis Assembly – Inserting Copper Pick-Up Braids Into Guide (continued)



5 Partly insert guide post into holder.



6 Flatten braids back on the underside of the guide.



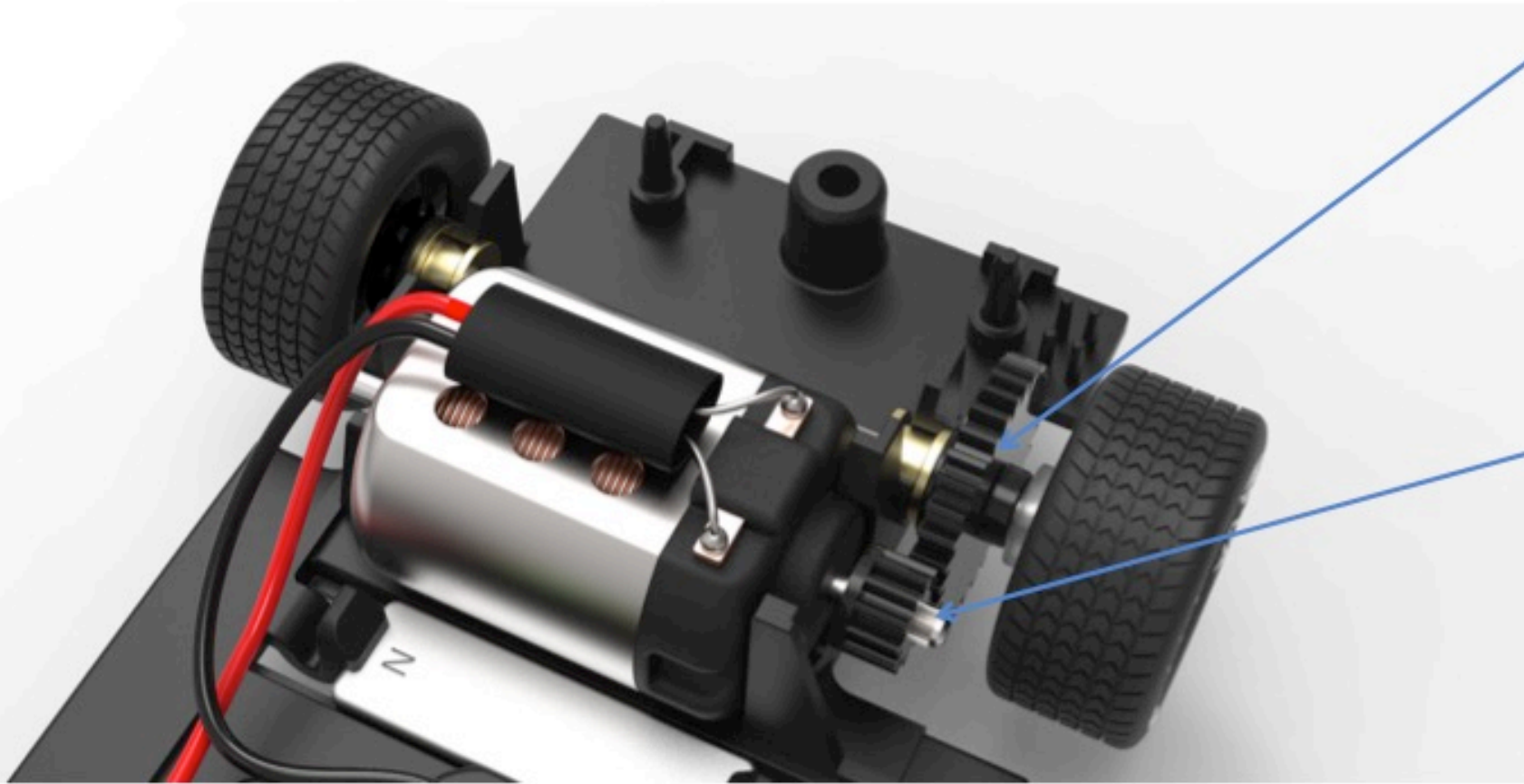
7 Try to get both braids neat and inline.



8 Push guide fully home into post hole.



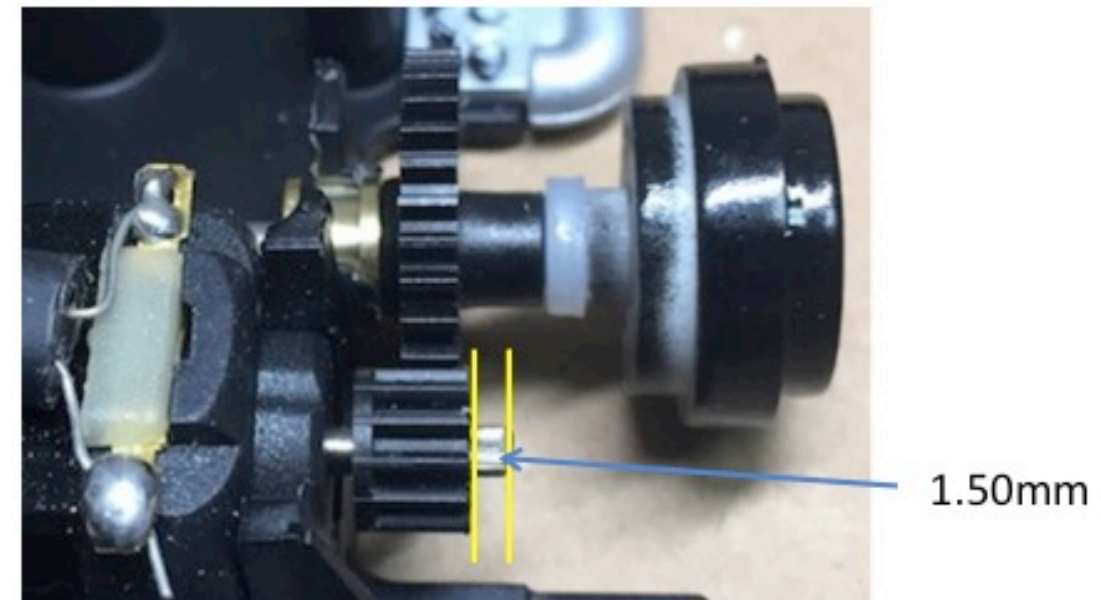
Position of Pinion on Motor Shaft (Important)



Care must be taken with the accuracy of the position of the spur gear onto the rear axle as the spur gear must mesh in exactly the same position as this illustration.

If measurements are correctly done, then the spur gear will mesh with the pinion teeth nicely, not too far one way or the other, just in the middle of the pinion teeth.

It is also very important that the pinion gear is pressed onto the motor shaft so that exactly 1.50mm of motor shaft is seen poking through the pinion center hole.

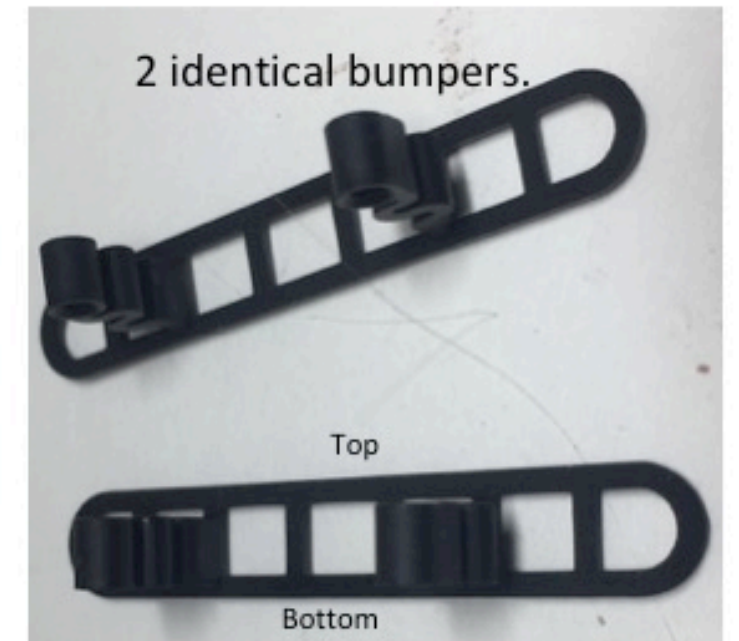
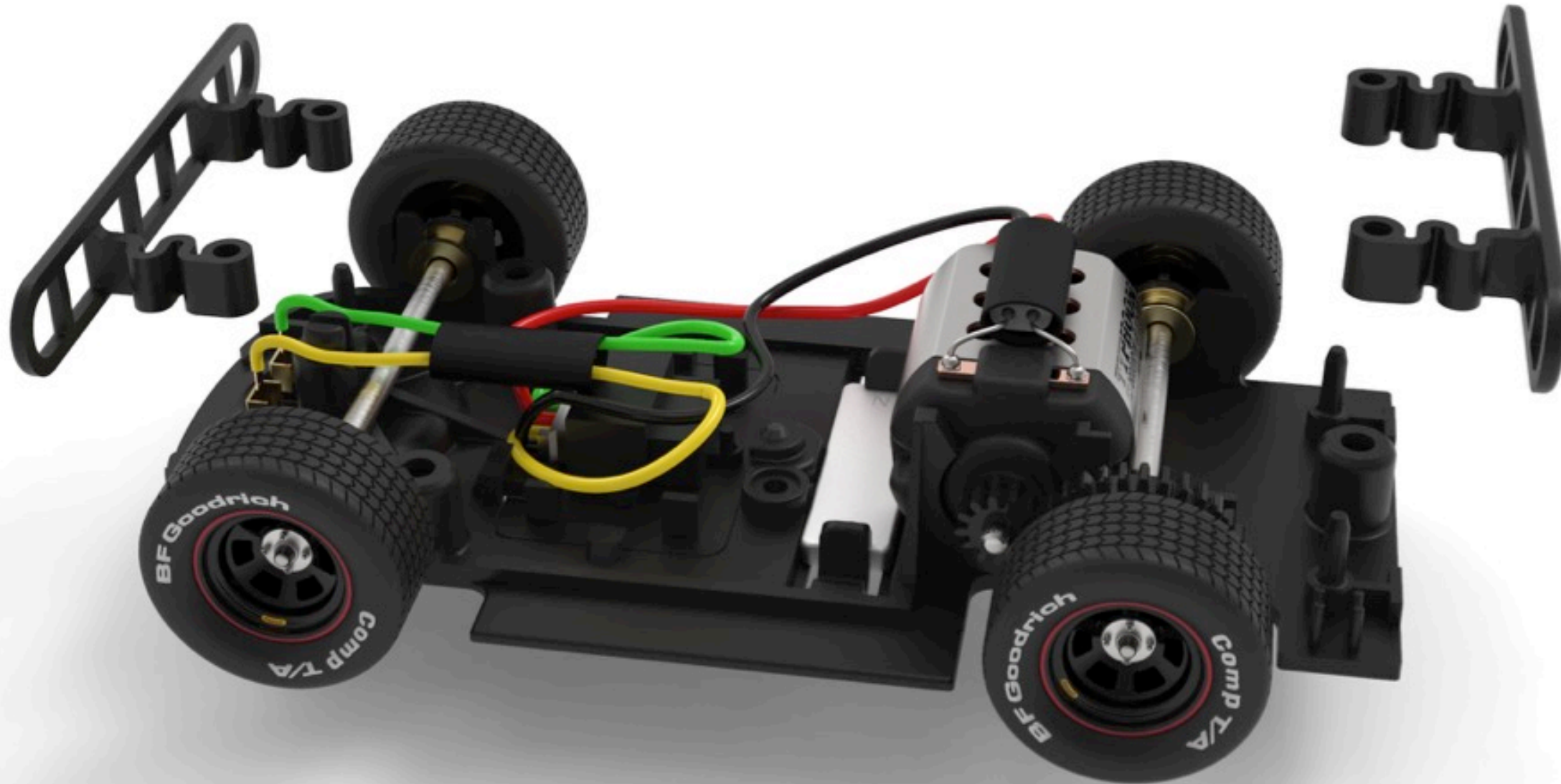


When the rear axle is snapped into place, it should turn against the motor pinion without any rubbing or tightness.

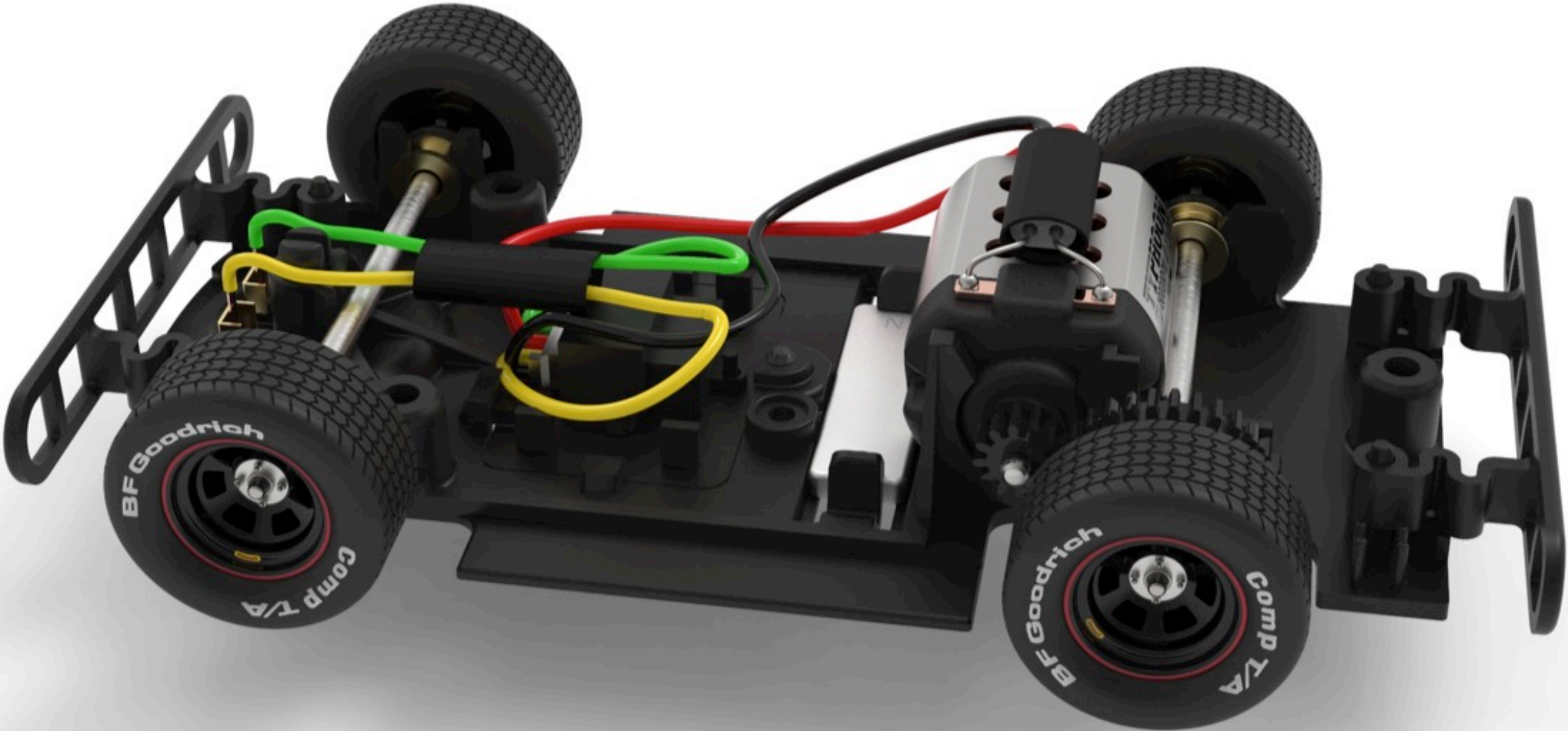


Bumpers, Front and Rear.

Bumpers slide down onto posts. **DO NOT GLUE OR HEAT-MELT**



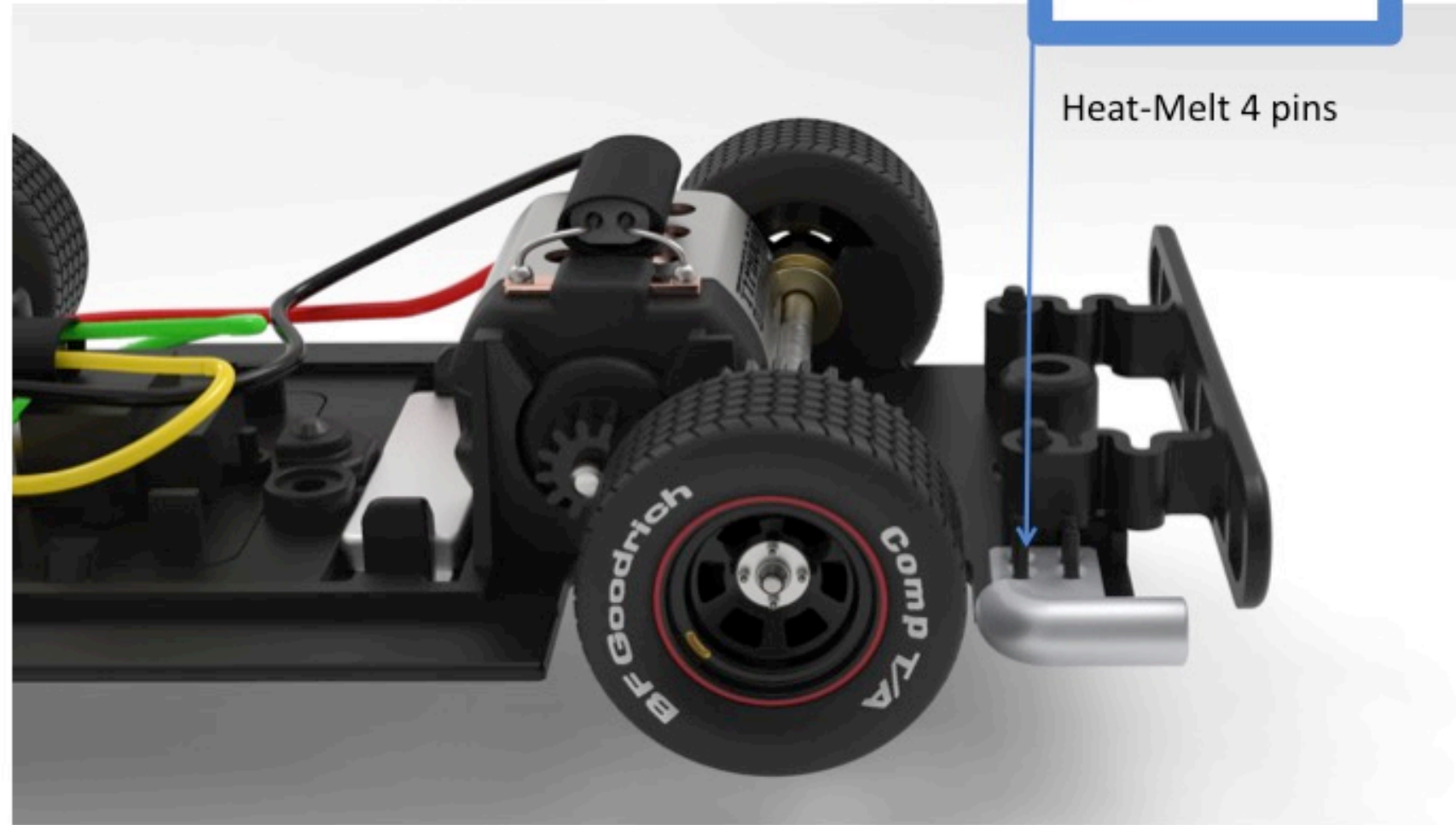
Bumpers – in position



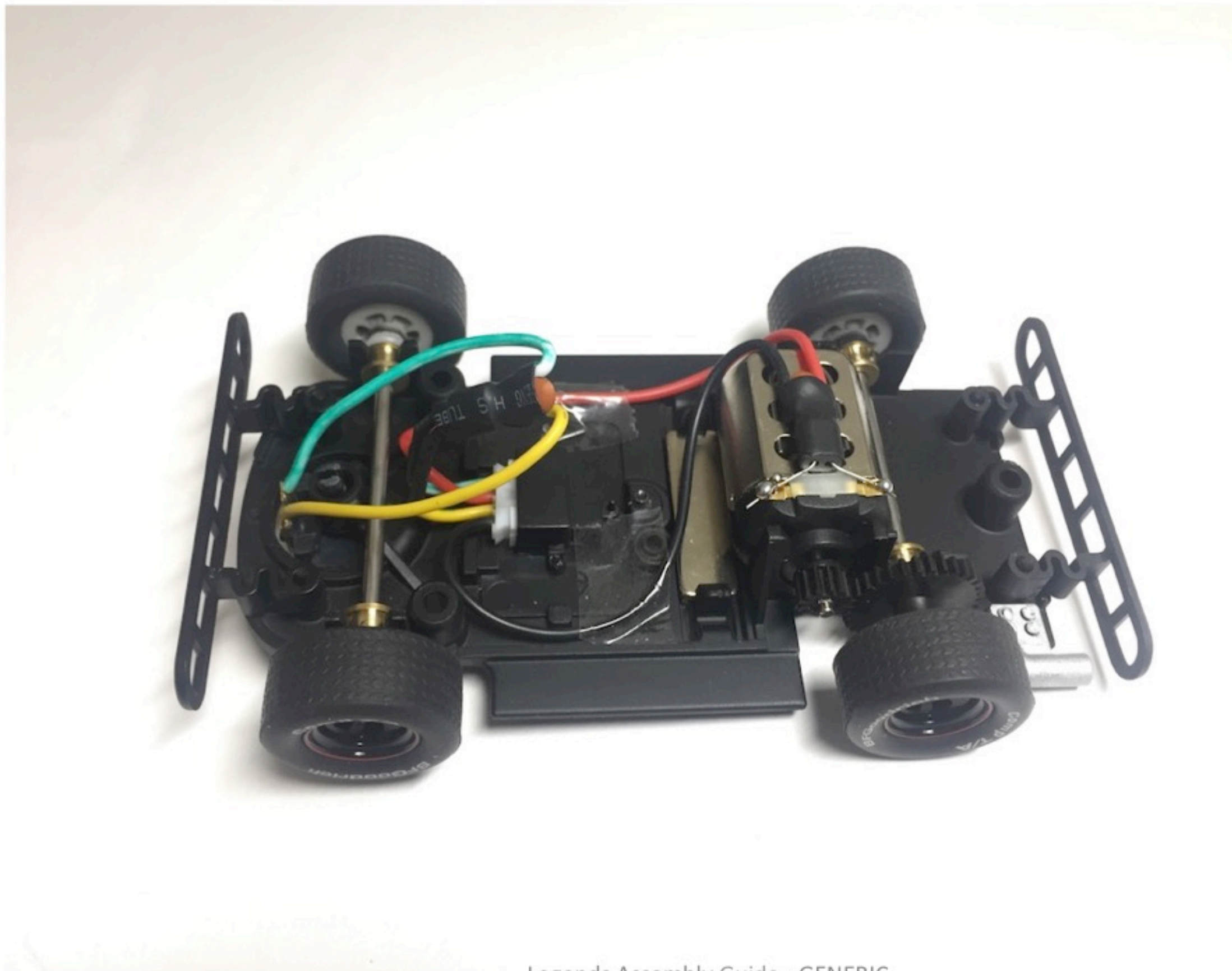
Fit Exhaust Into Place



Heat-Melt 4 pins



Chassis - Completed



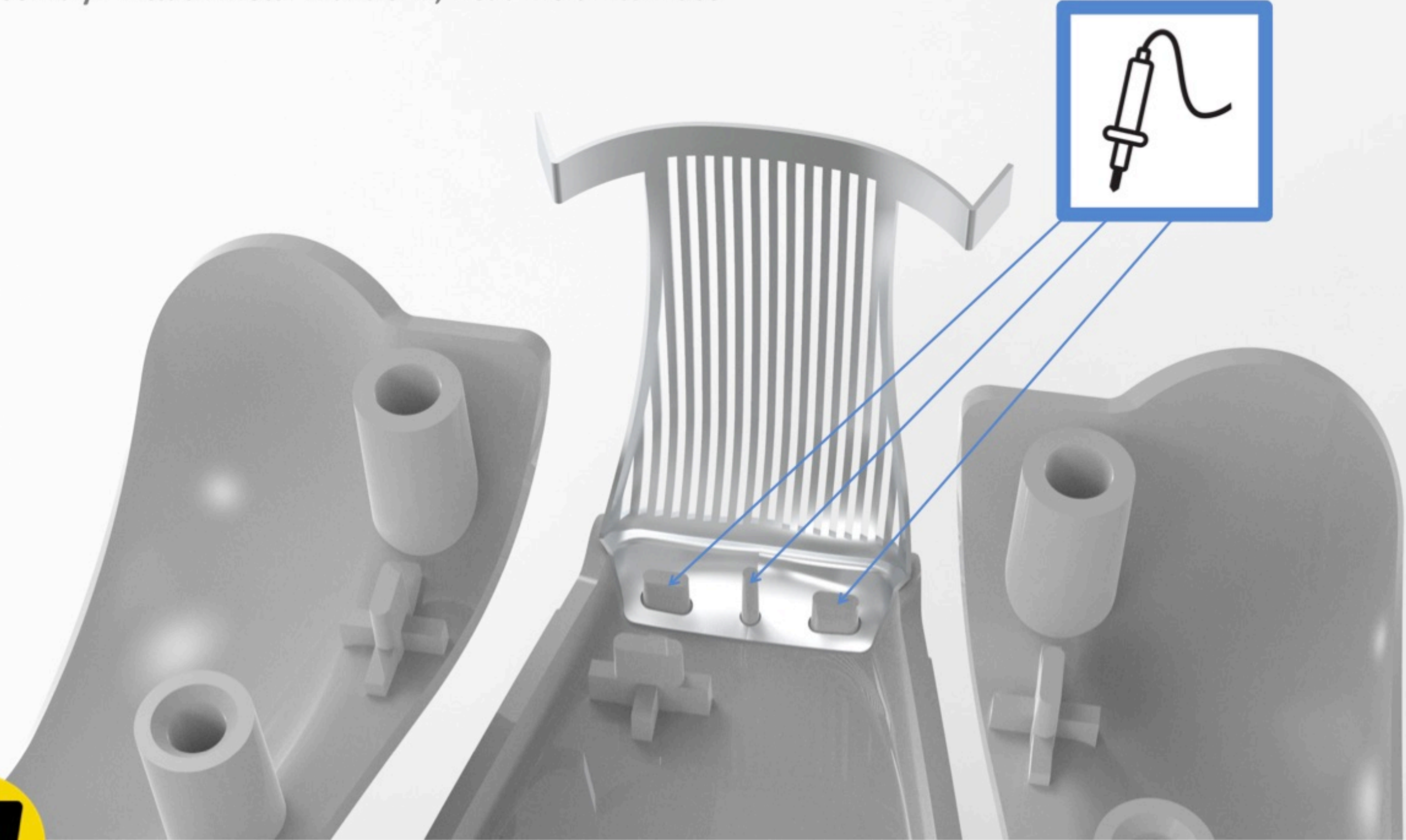


Bare Body Shell – Paint Before Attaching Other Parts

NOTE: The body shell should be painted before installing remaining components.



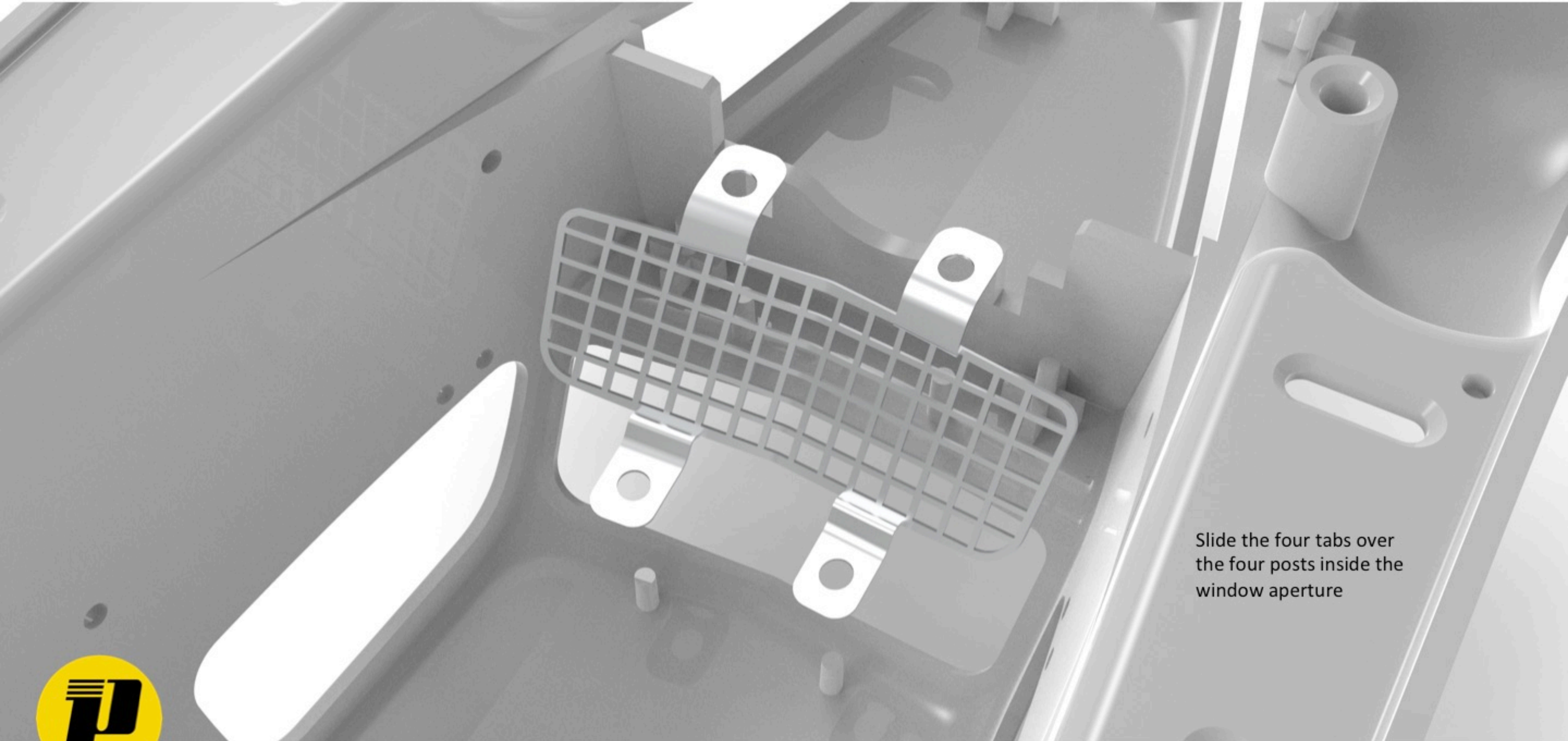
Body Assembly – Attach Metal Front Grill, Heat-Melt Into Place



Body Assembly – Metal Front Grill In Position



Body Assembly – Metal Window Grill (optional fitting)



Slide the four tabs over
the four posts inside the
window aperture



Body Assembly – Metal Window Grill & Sun Visor (optional) fitting

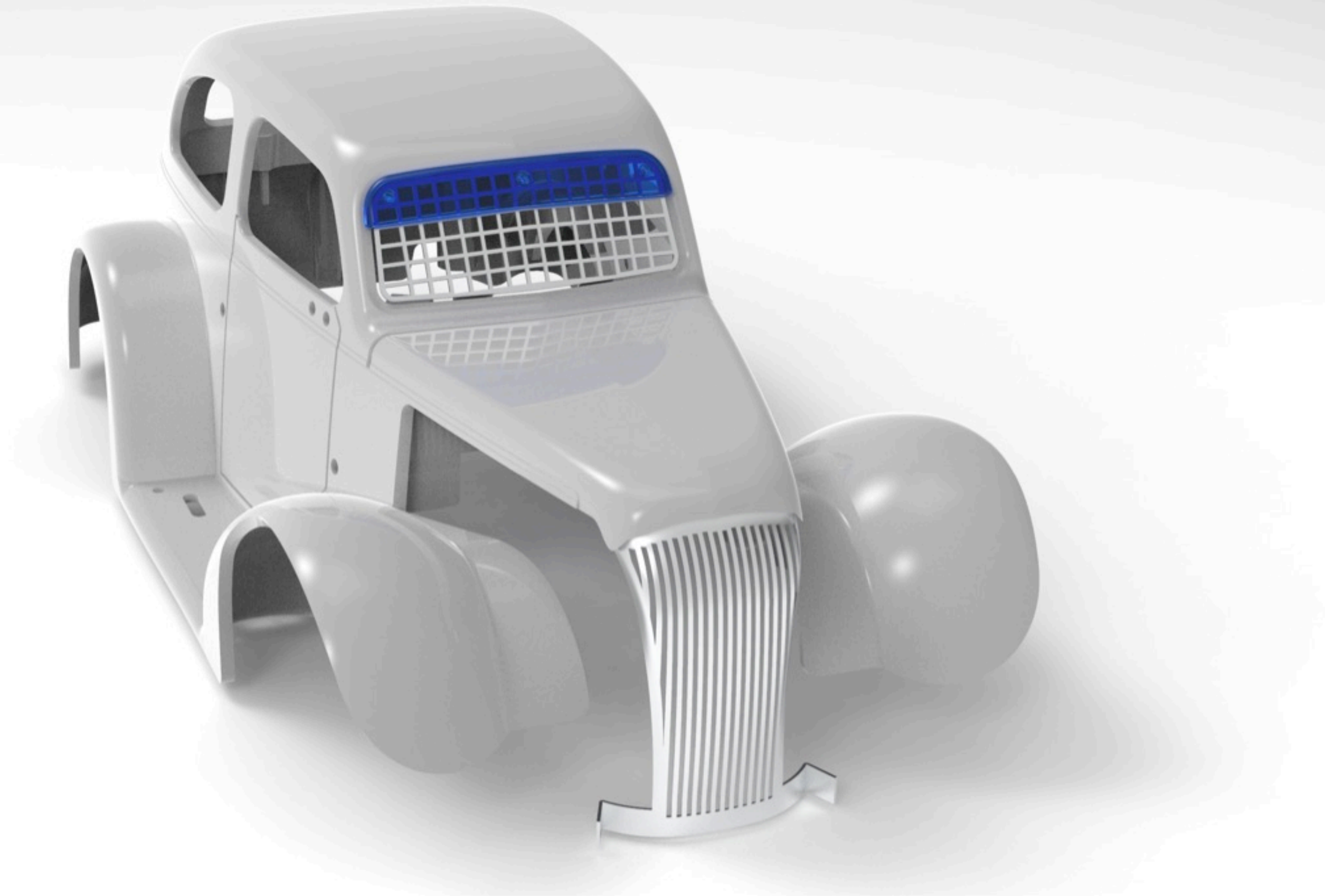


Ensure the metal location tabs are seated correctly and the metal window is correctly aligned inside the window aperture (check also from the outside). When correctly in position, heat melt to secure.

If you have chosen to fit the sun visor, you should insert it into position now and heat-melt to secure in place.

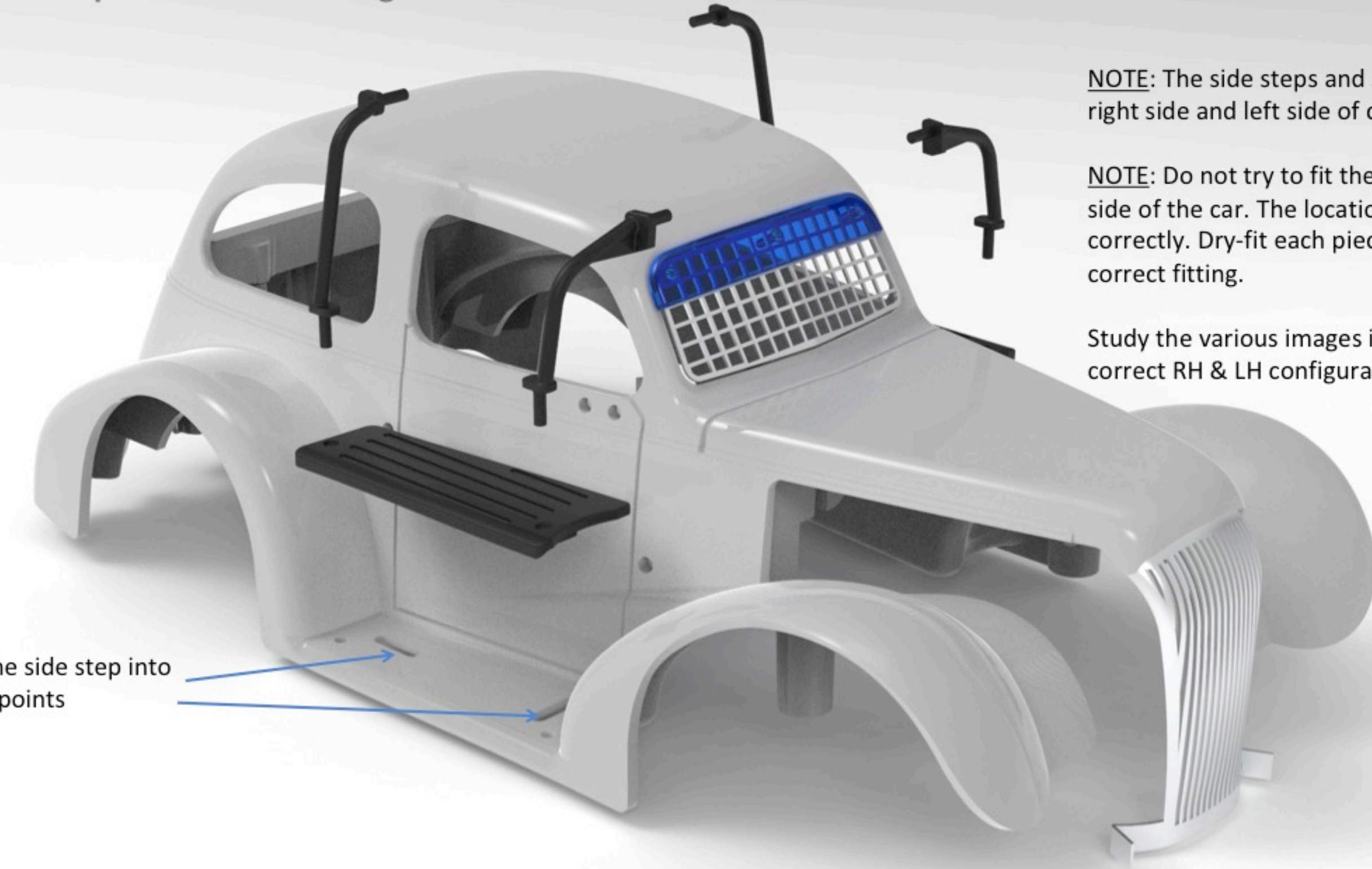


Body Assembly – Metal Window Grill & Sun Visor In Place



Body Assembly – Side Step & Side Bars Fitting.

Locate the side step into
location points



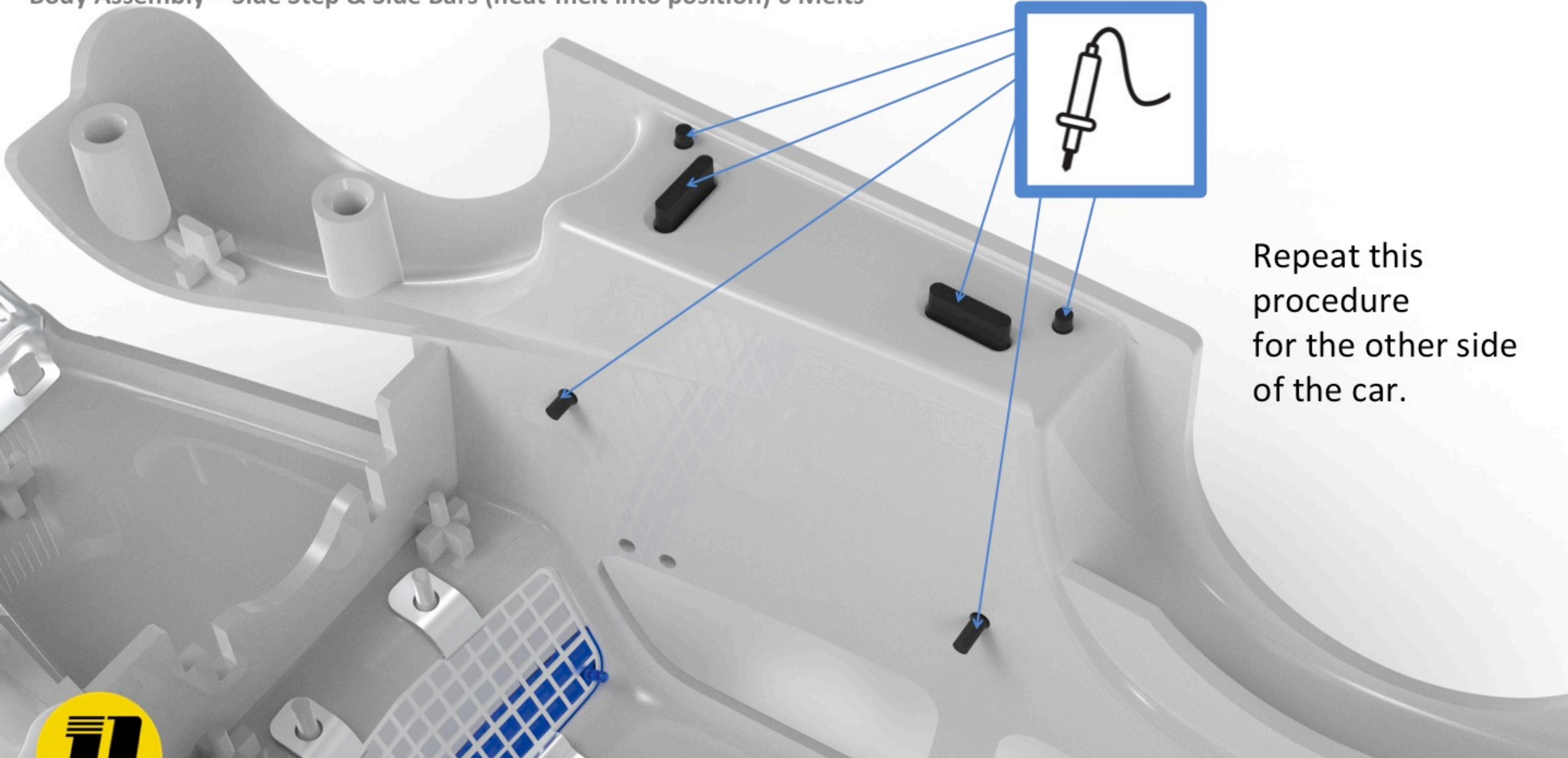
NOTE: The side steps and side bars are specific to the right side and left side of car.

NOTE: Do not try to fit the side bars to the wrong side of the car. The location holes will not align correctly. Dry-fit each piece carefully to verify correct fitting.

Study the various images in this guide to establish correct RH & LH configuration



Body Assembly – Side Step & Side Bars (heat-melt into position) 6 Melts



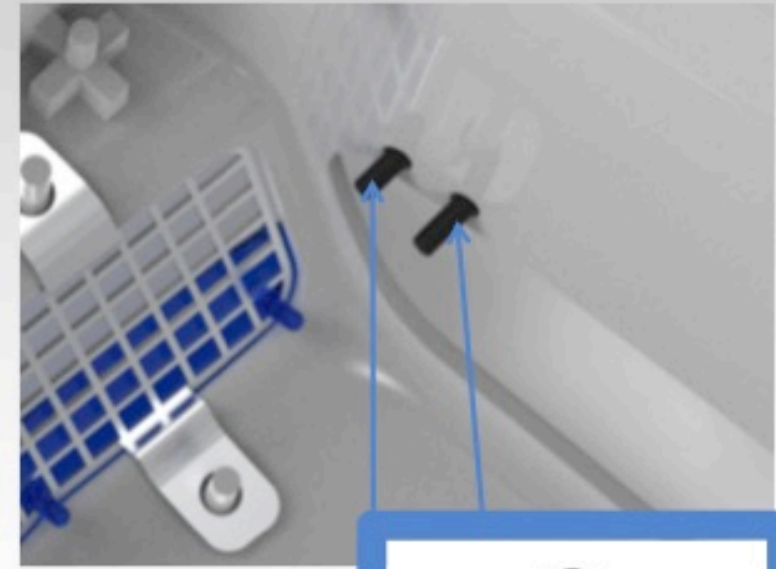
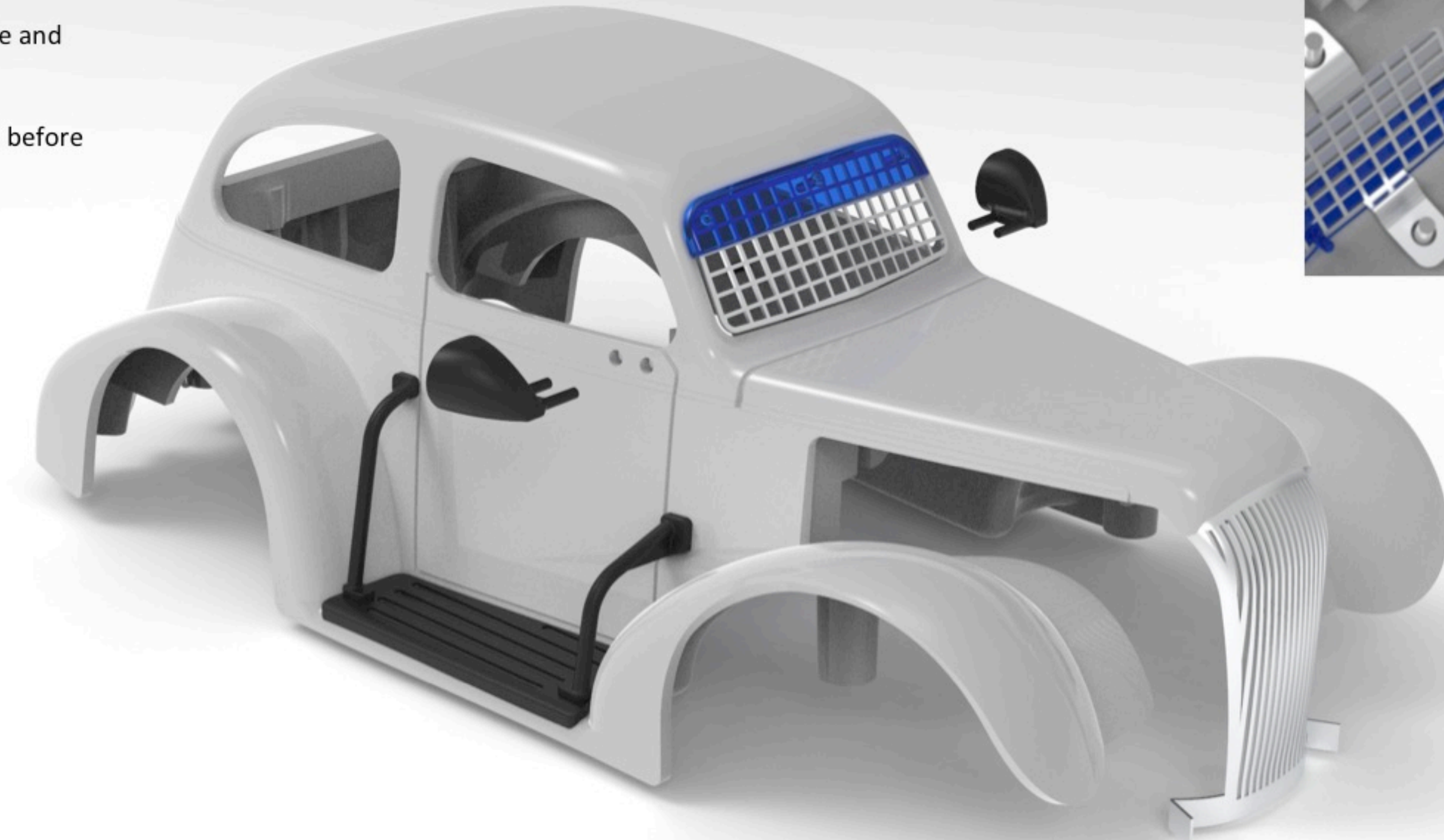
Repeat this procedure for the other side of the car.



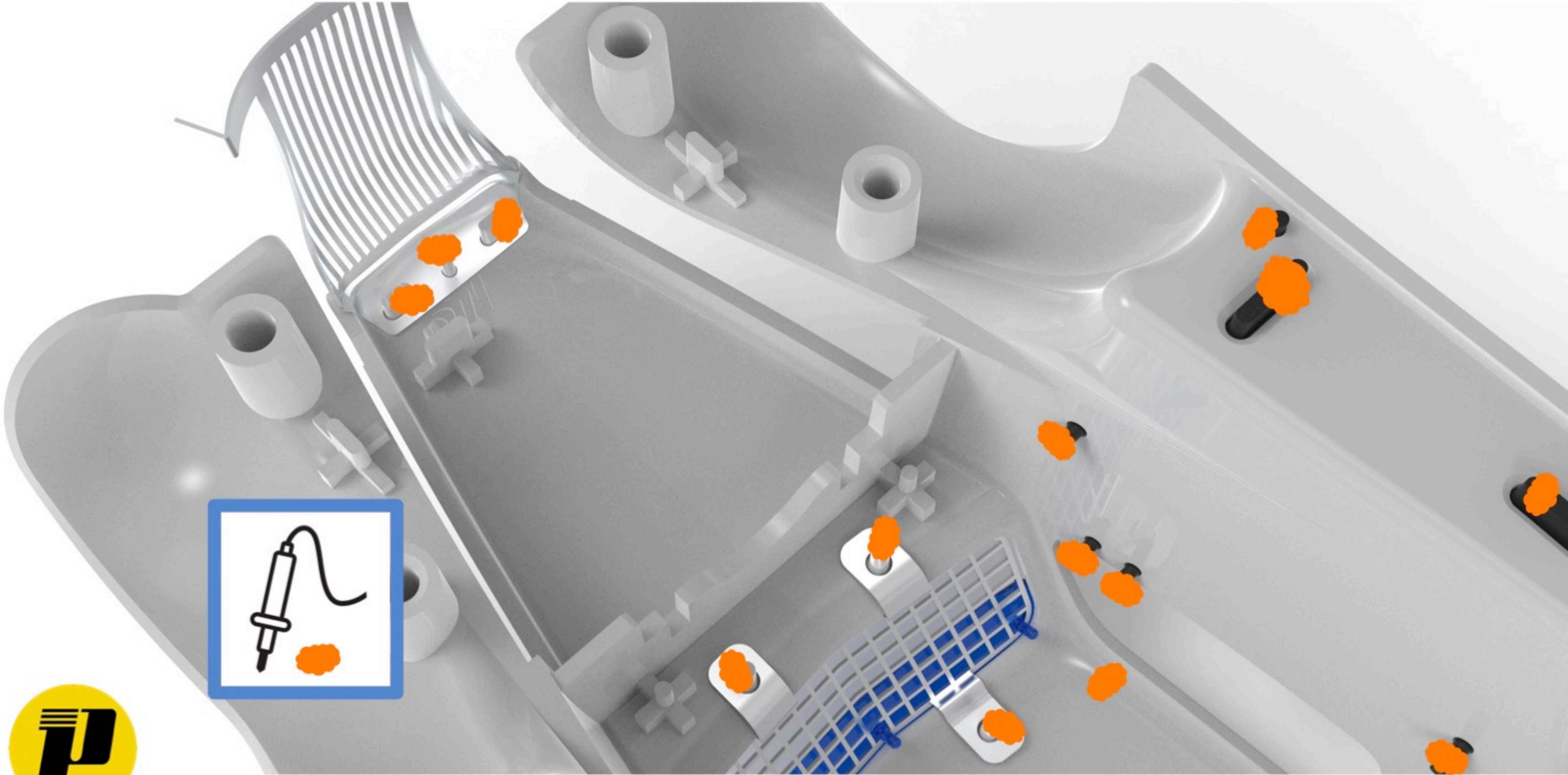
Body Assembly – Door Mirrors, Heat-Melt to Secure

Note: Mirrors are right side and left side specific.

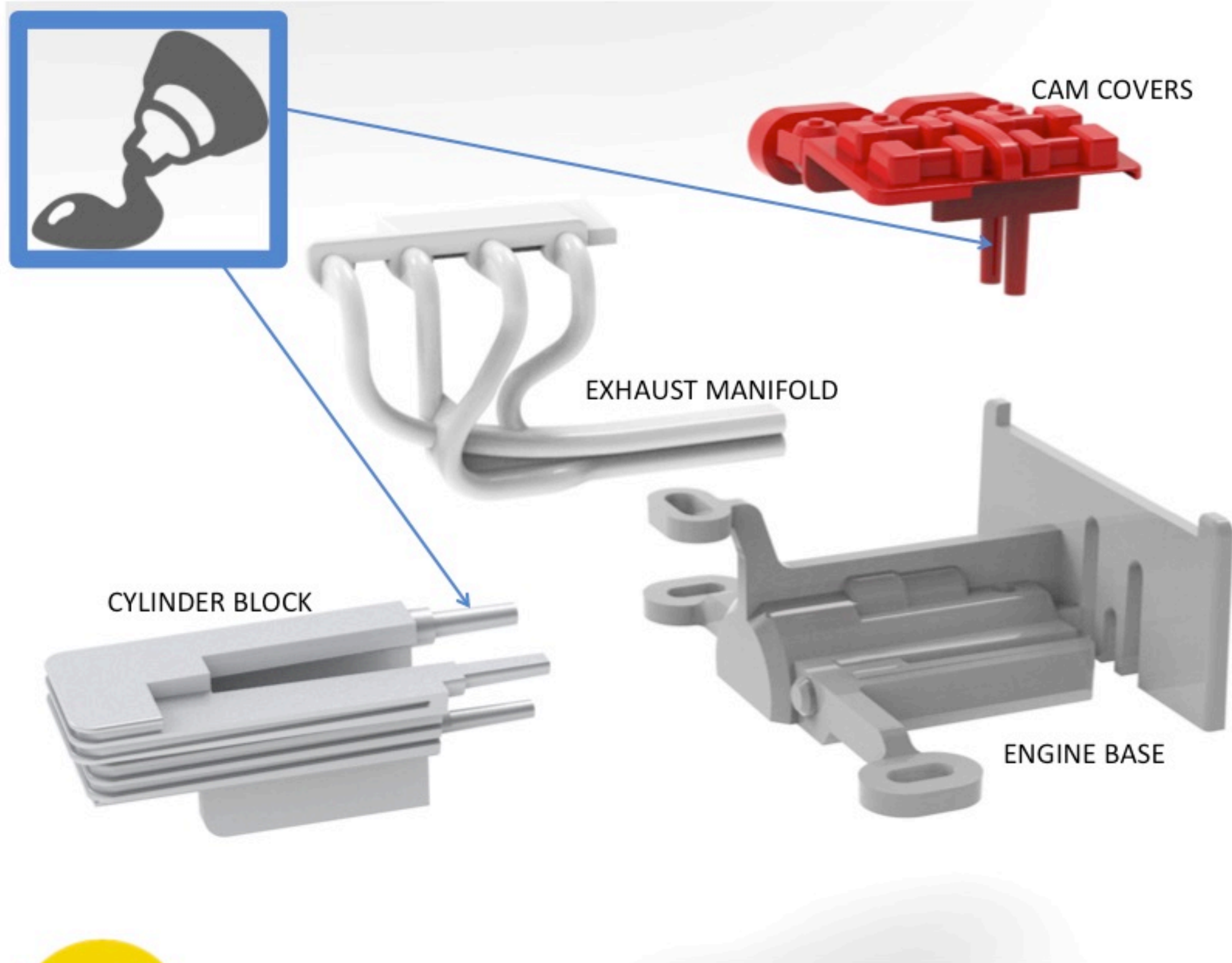
Test assemble each mirror before heat-melting into place



Body Assembly – Check all these points are heat-melted inside the body

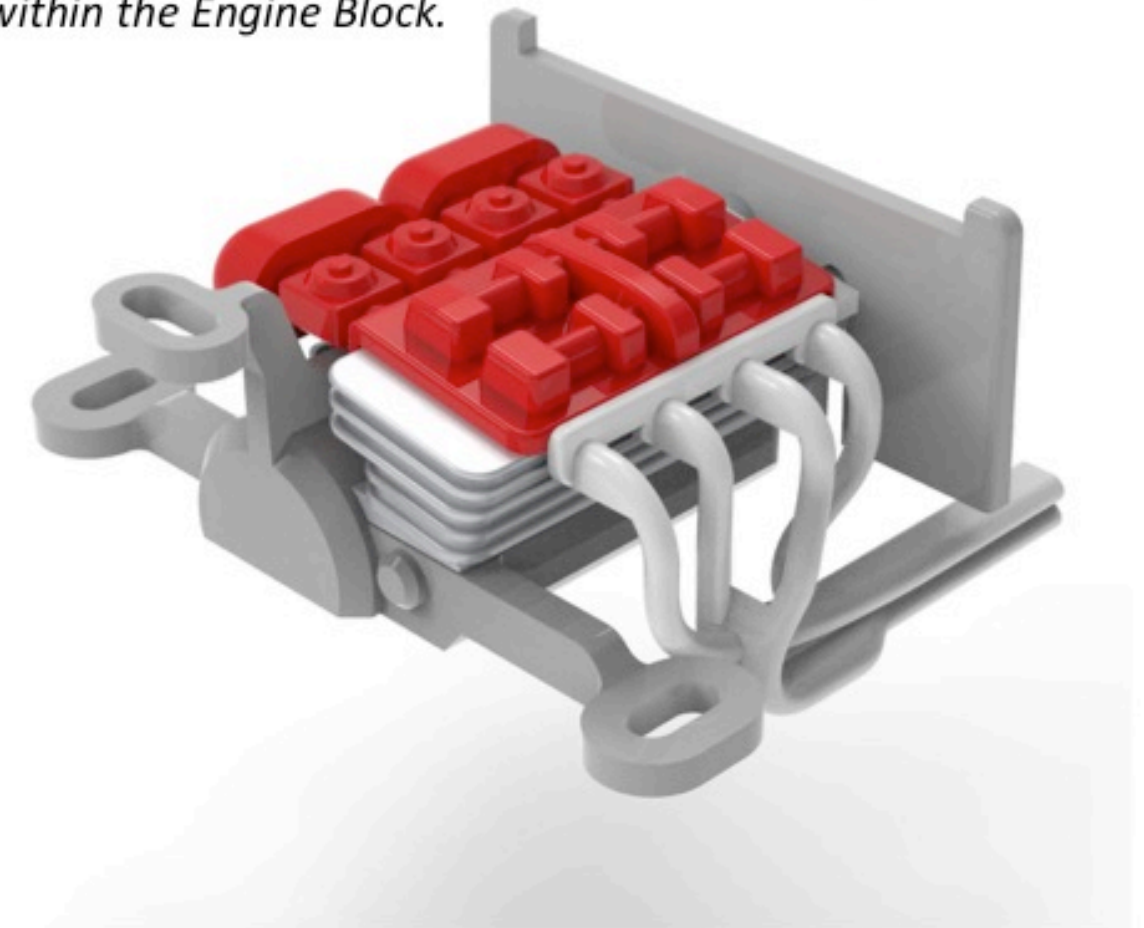


Engine Sub-Assembly

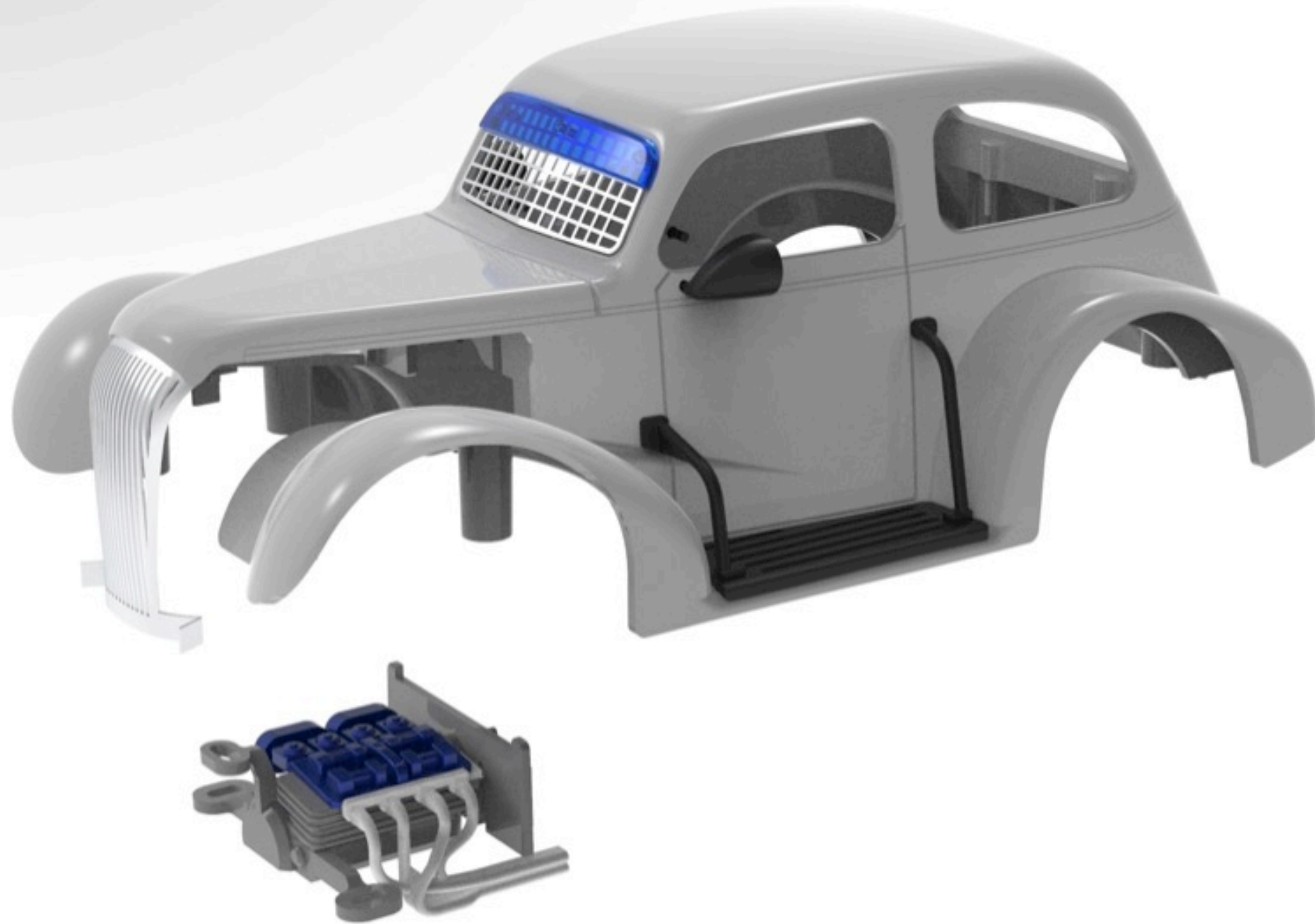


Note: Paint and dry fit all engine pieces before assembling with glue.

- Slide the 3 pins and the bottom blade of the **Cylinder Head Block** into the **Engine Base**.
- Position the **Exhaust Manifold** within the indentation atop the **Cylinder Block**.
- While holding the **Exhaust Manifold** in place, slide the two pins under the **Cam Covers** into the holes position within the **Engine Block**.



Engine – now ready to insert into position on 3 locating pins under car.



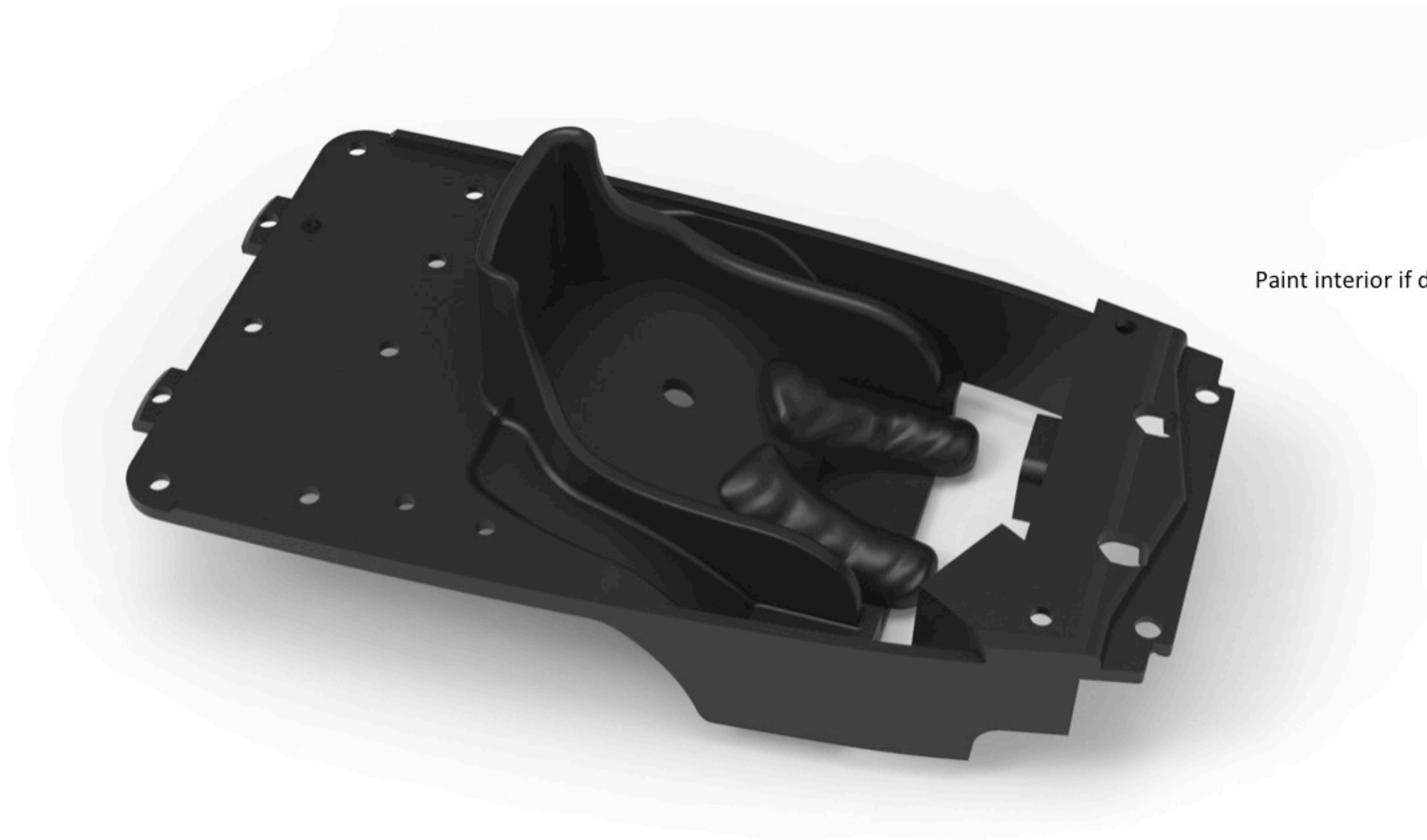
Engine – Final fit into position

Heat-melt the 3 location pins showing through the location rings.



Cockpit Interior (exploded view)

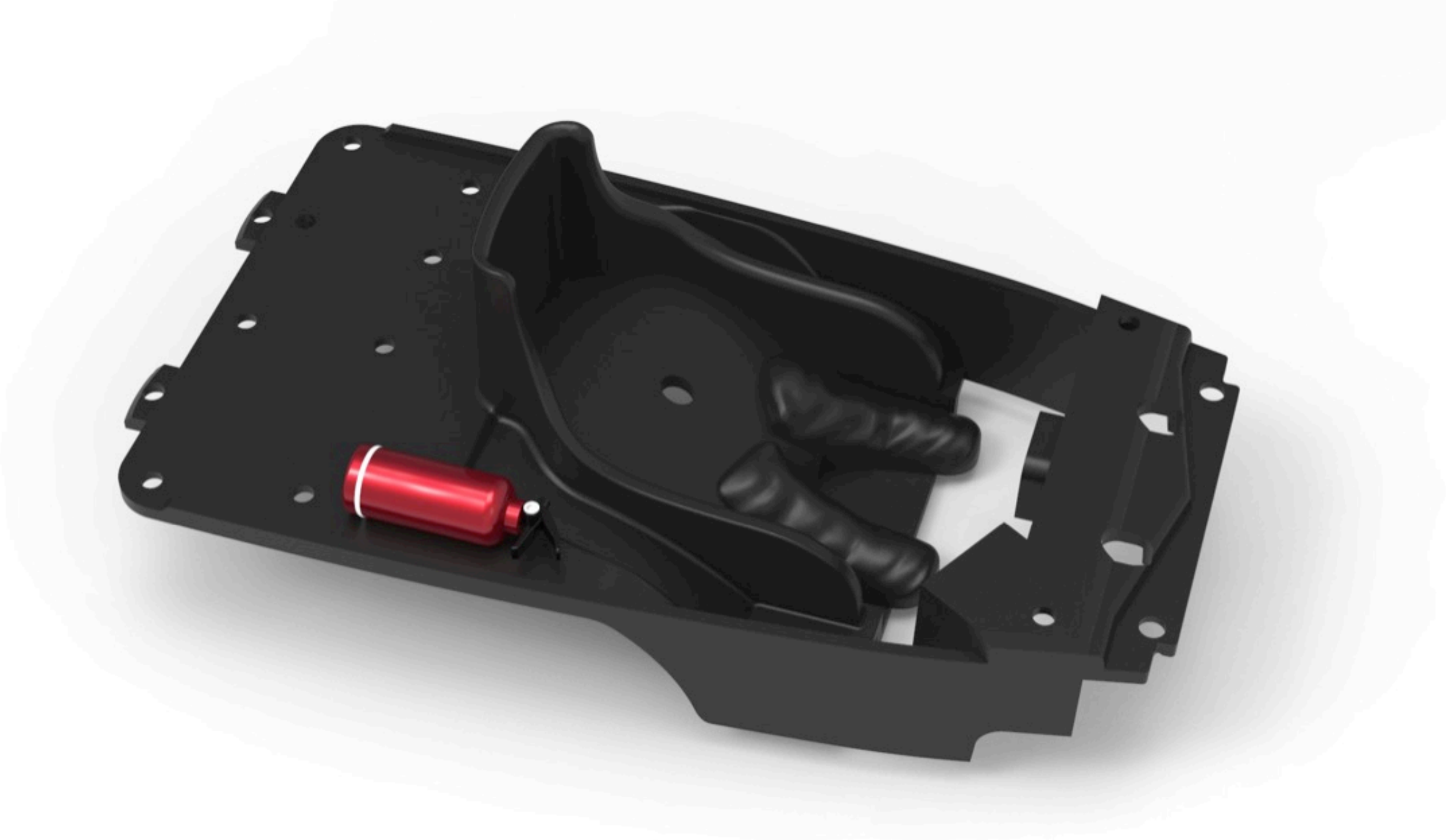




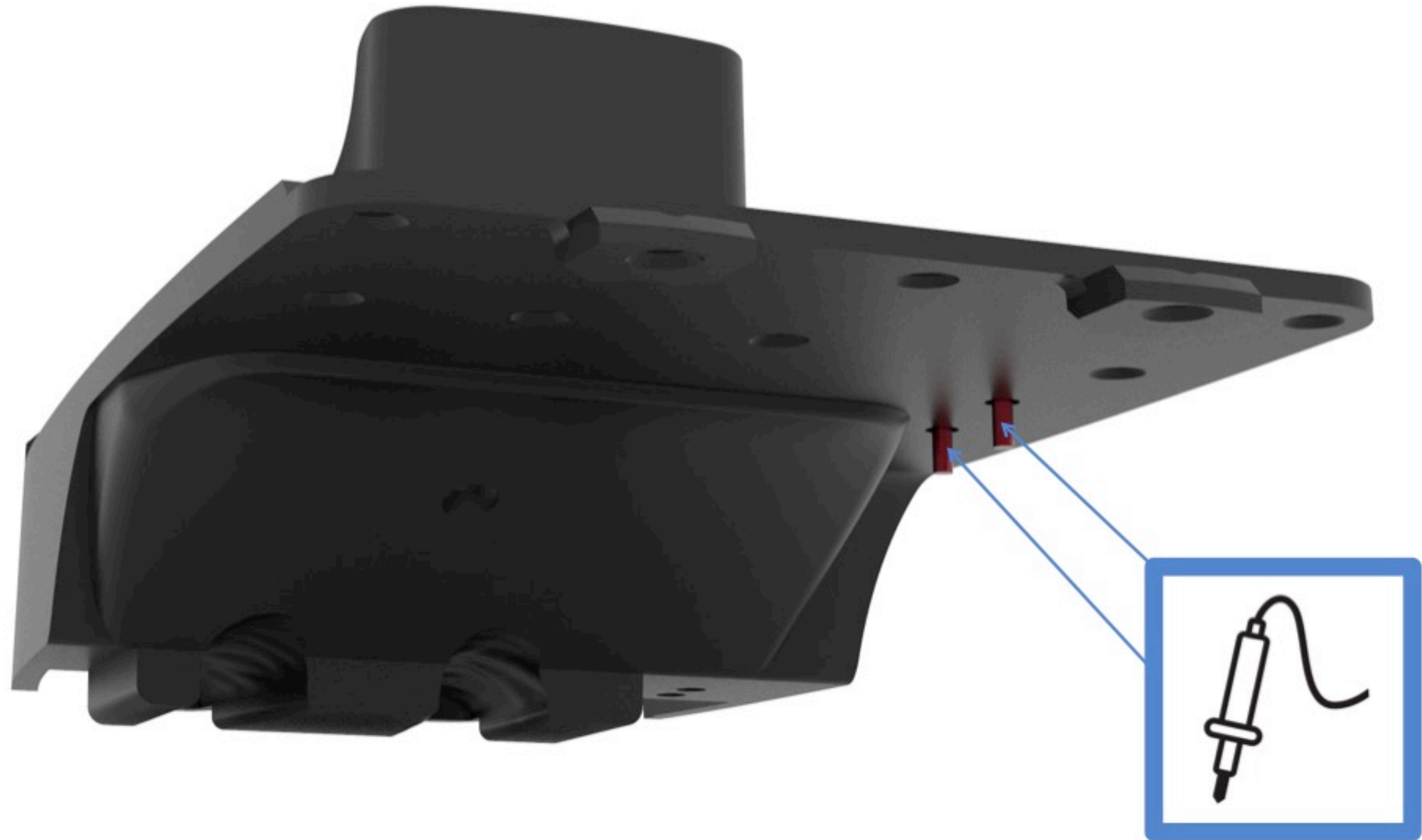
Paint interior if desired.



Cockpit Interior – Fire Extinguisher, Locate In Position



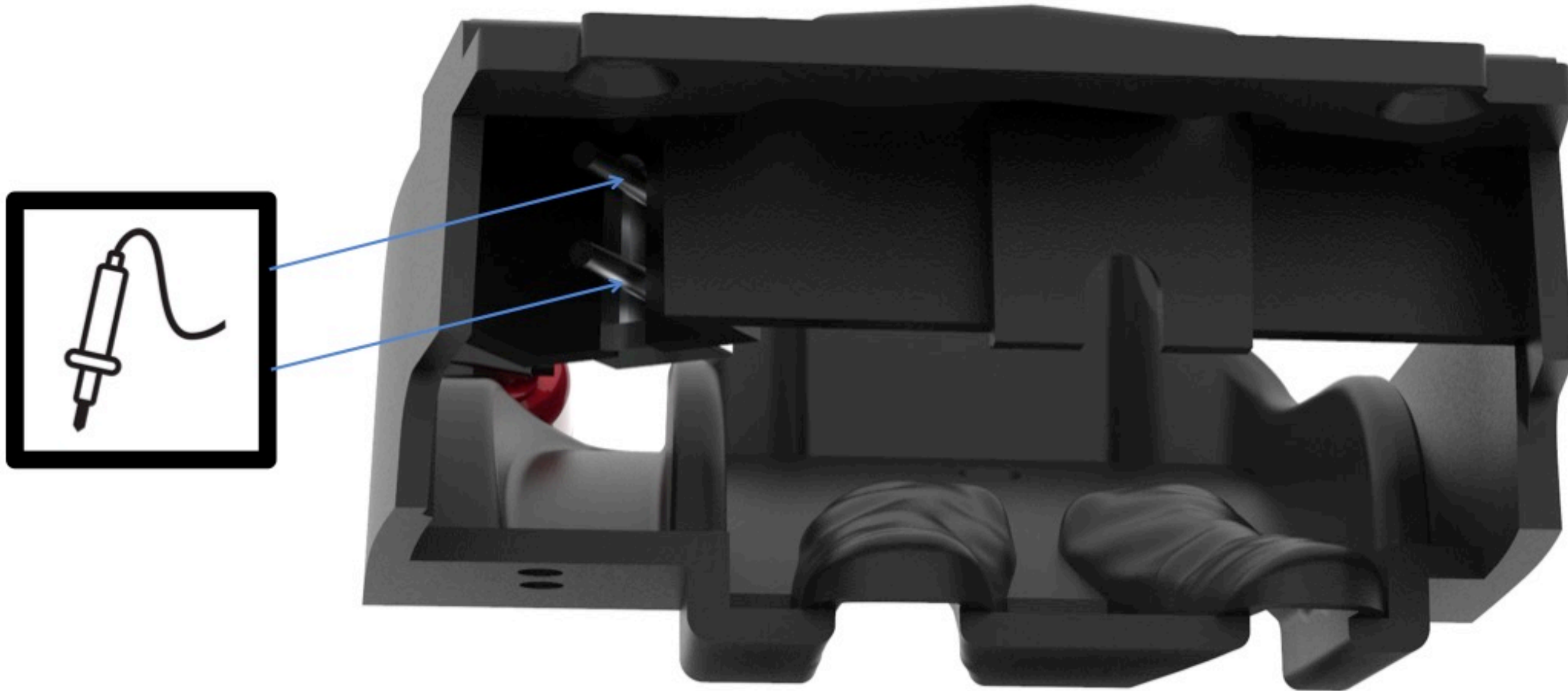
Cockpit Interior – Fire Extinguisher, Heat-Melt To Secure In place



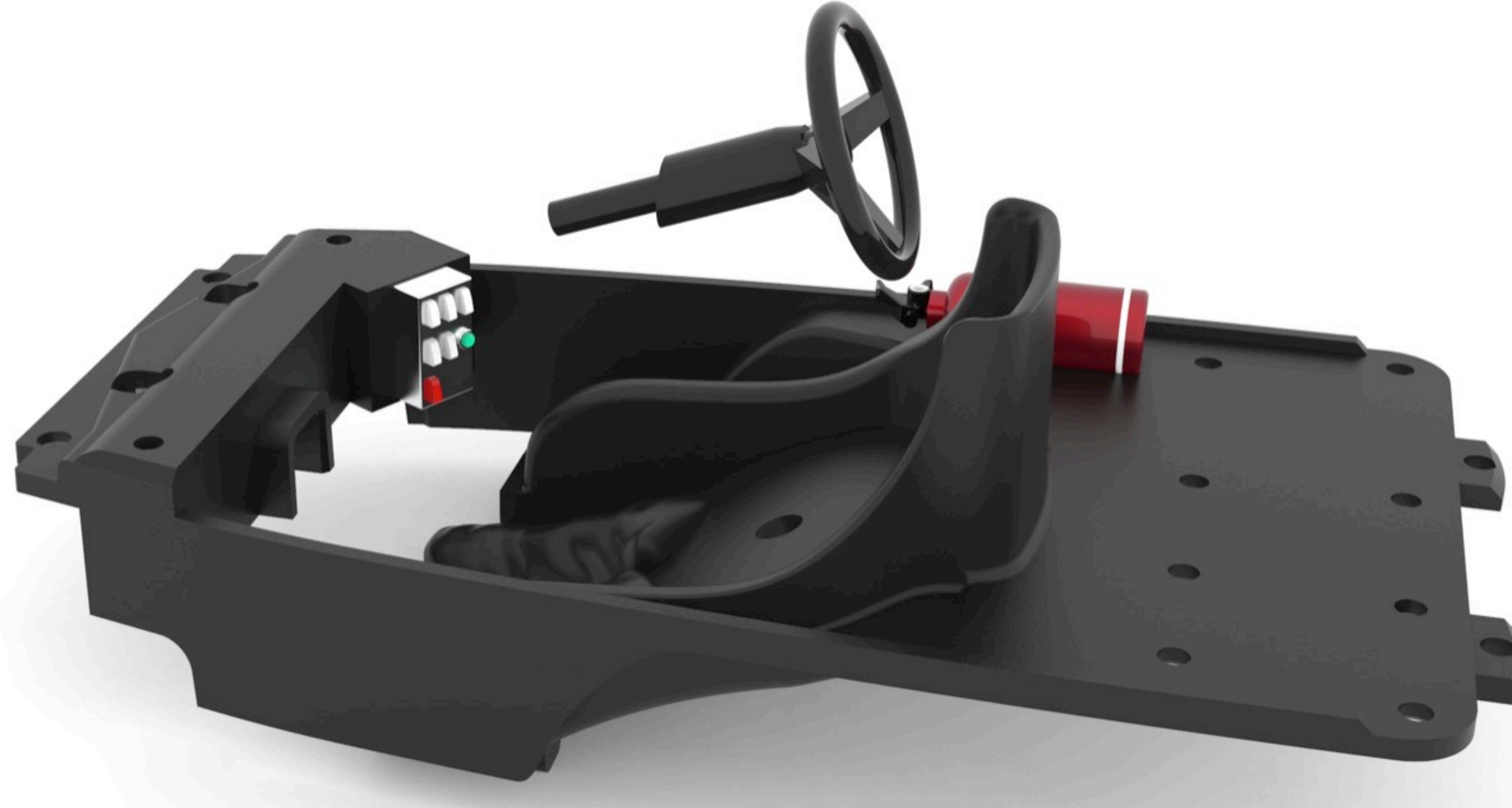
Cockpit Interior – Switch Box, Locate In Position



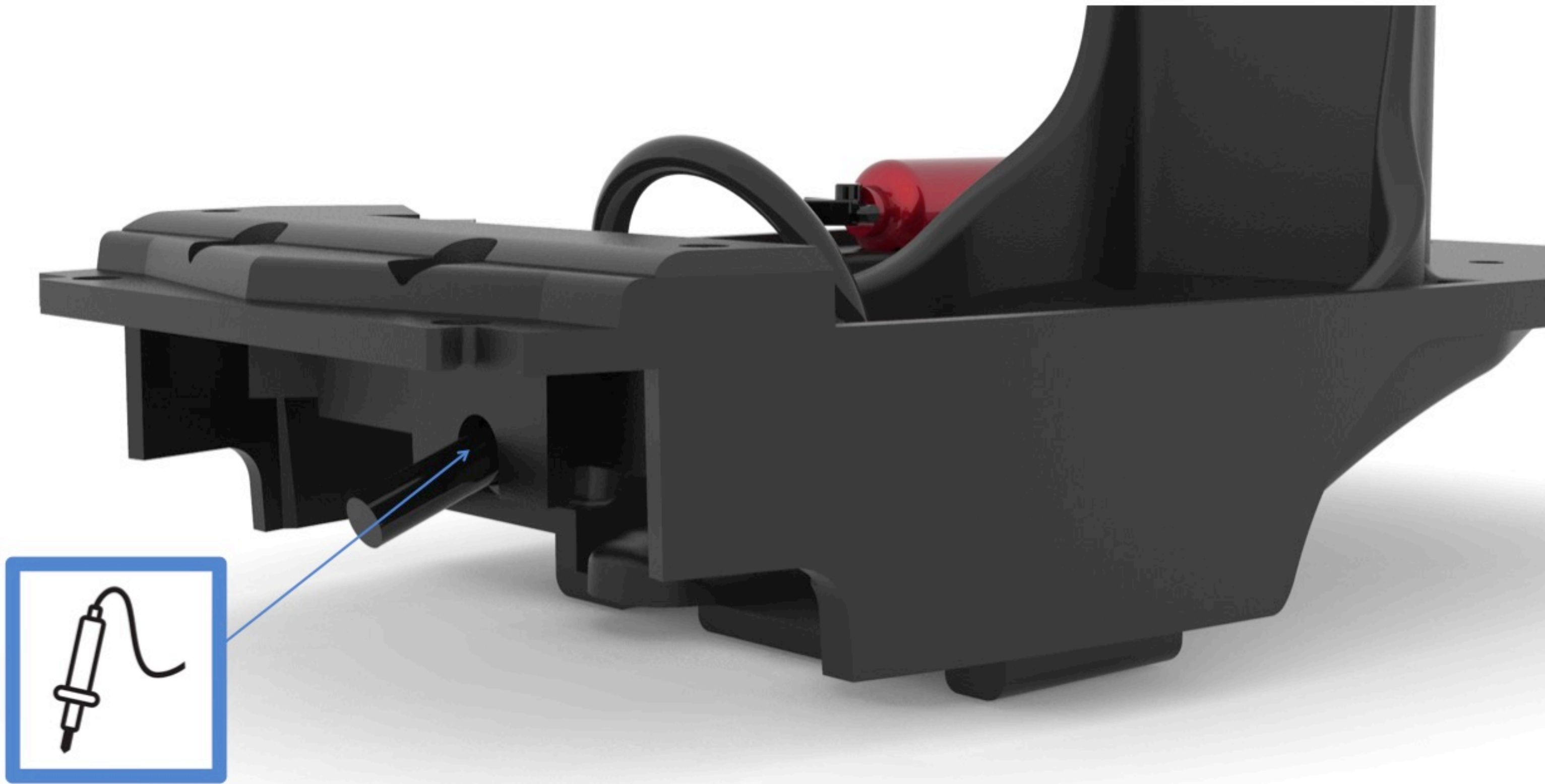
Cockpit Interior – Switch Box, Heat-Melt To Secure In Place



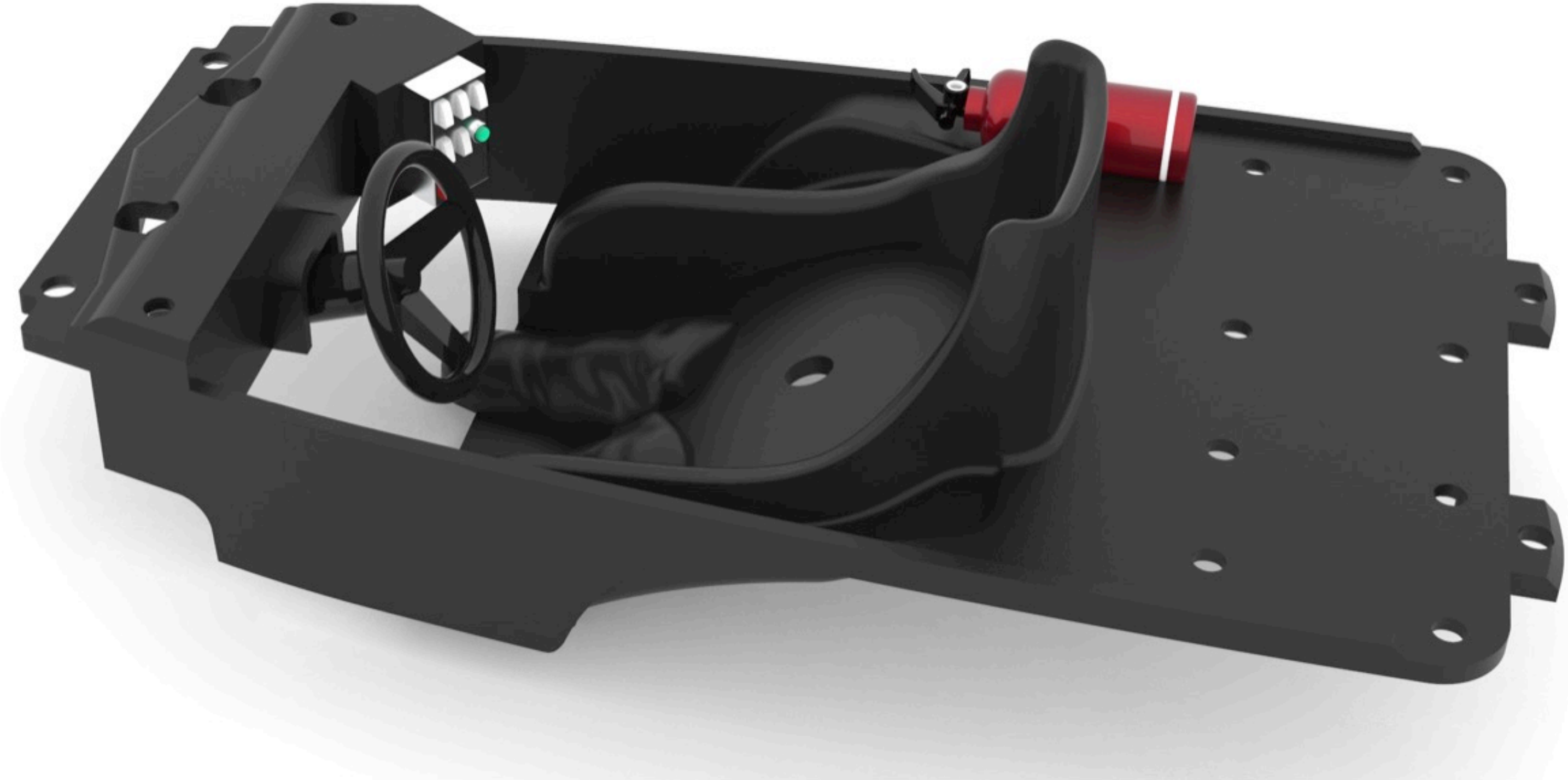
Cockpit Interior – Steering Wheel, Locate In Position In Dashboard

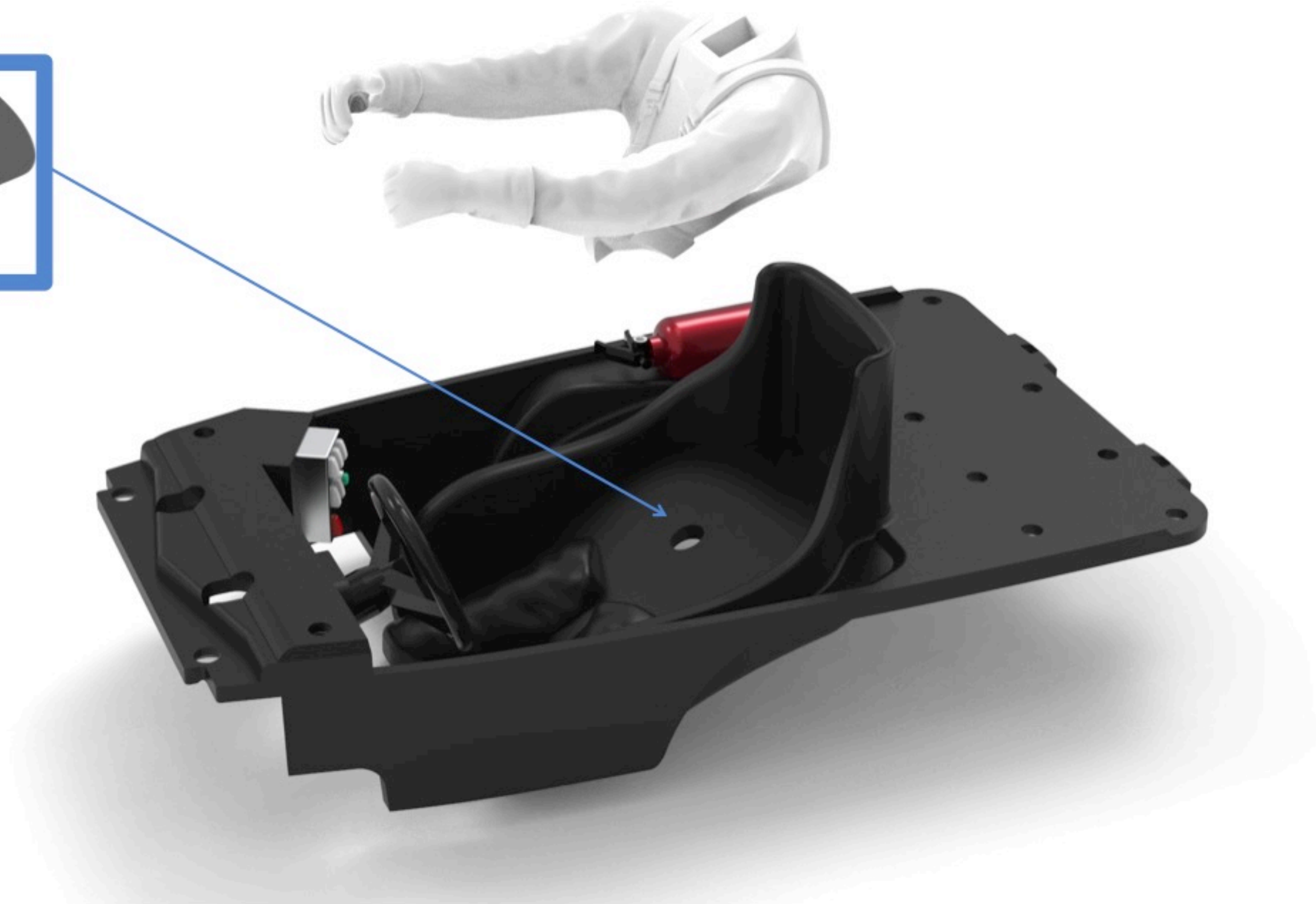


Cockpit Interior – Steering Wheel, Heat-Melt Behind Dashboard To Secure In Place



Cockpit Interior – Now Ready For Driver Figure







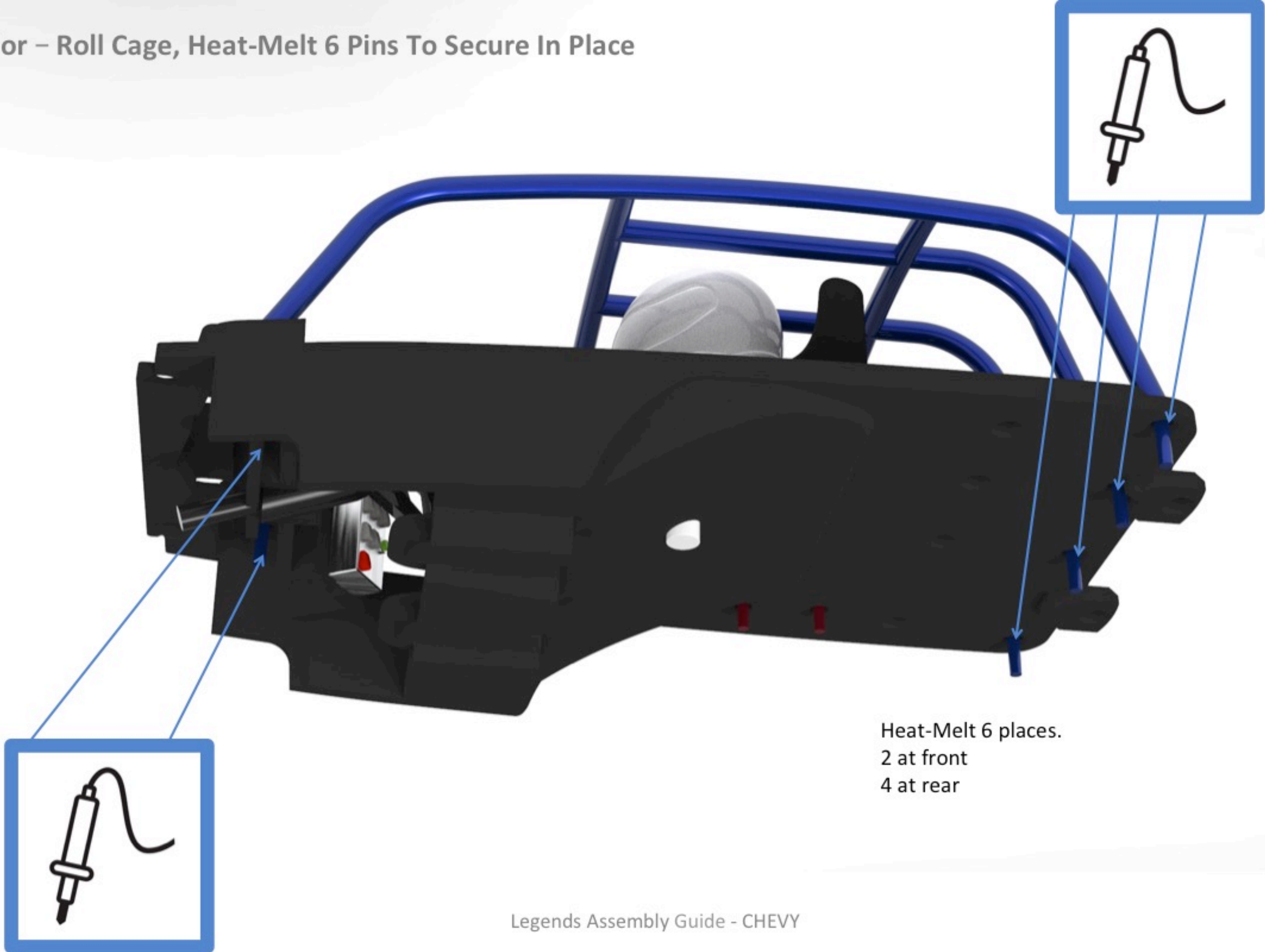
Cockpit Interior – Roll Cage, Locate 6 Pins Into Correct Position



Note: The generic cockpit interior base is used in multiple Legend models. Therefore, some holes within the base may remain unused depending on model.



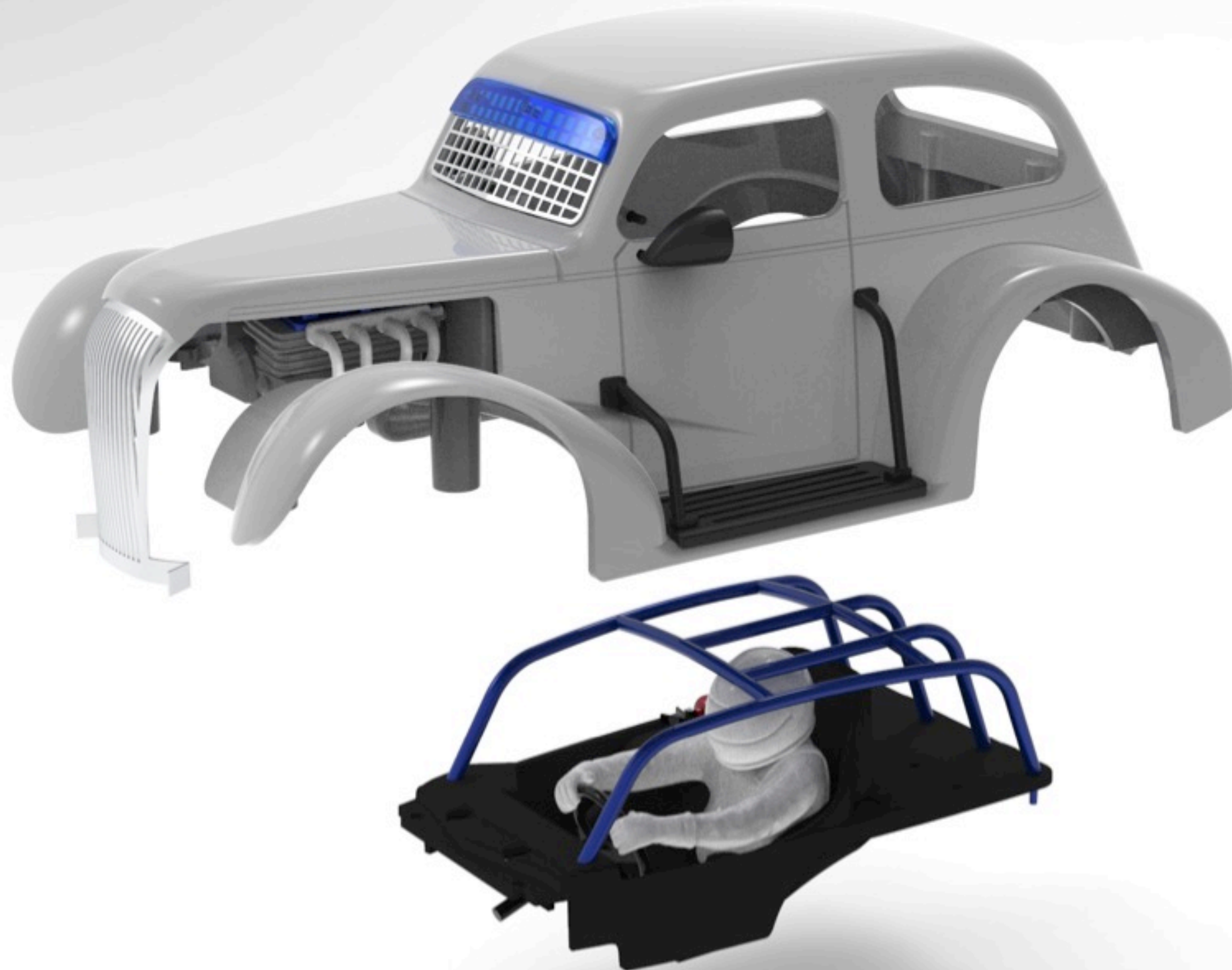
Cockpit Interior – Roll Cage, Heat-Melt 6 Pins To Secure In Place



Heat-Melt 6 places.
2 at front
4 at rear

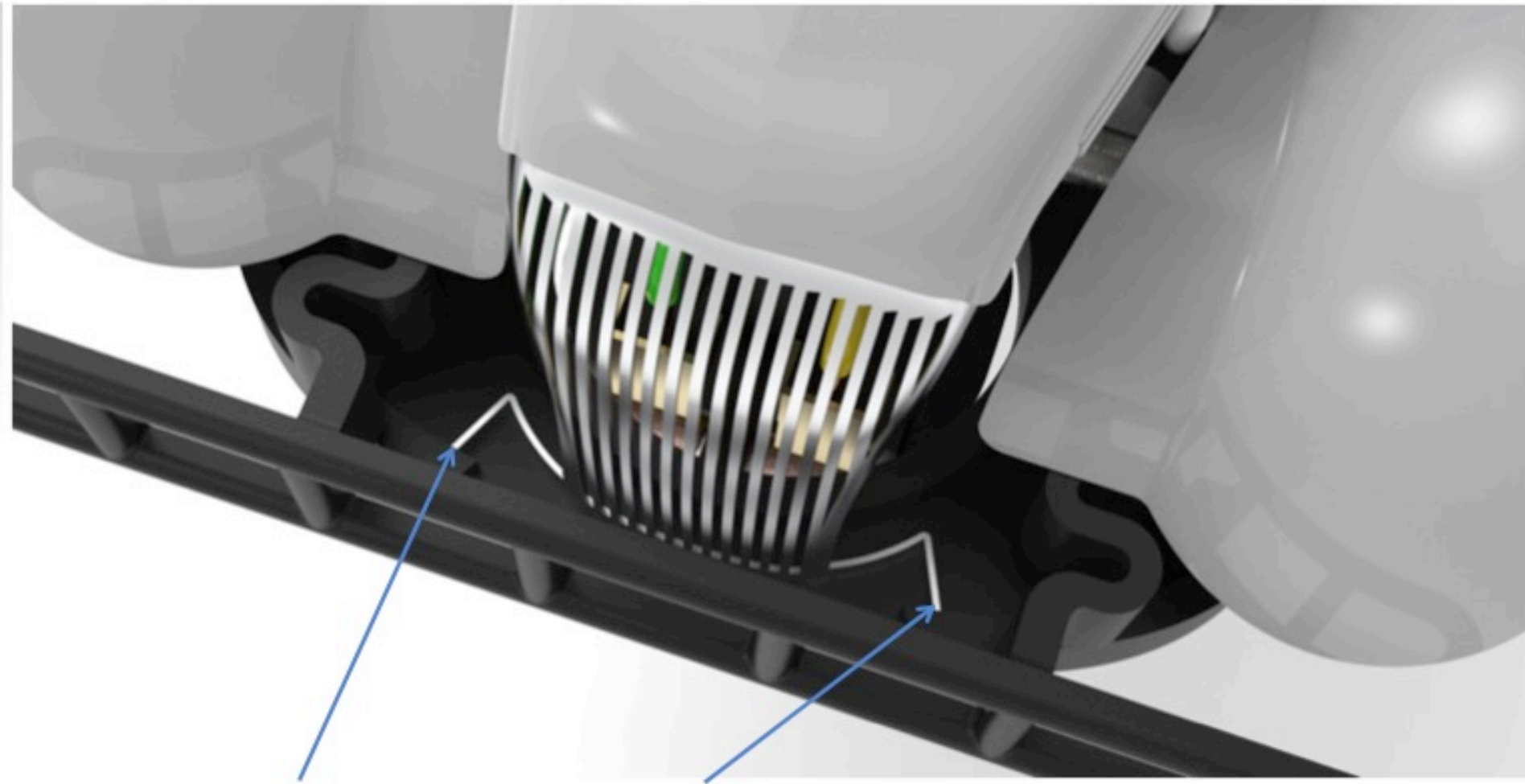


Cockpit Interior – Ready To Insert and Secure In Place Inside Body



The cockpit interior may be glued or heat-melted onto the location pins inside the body.

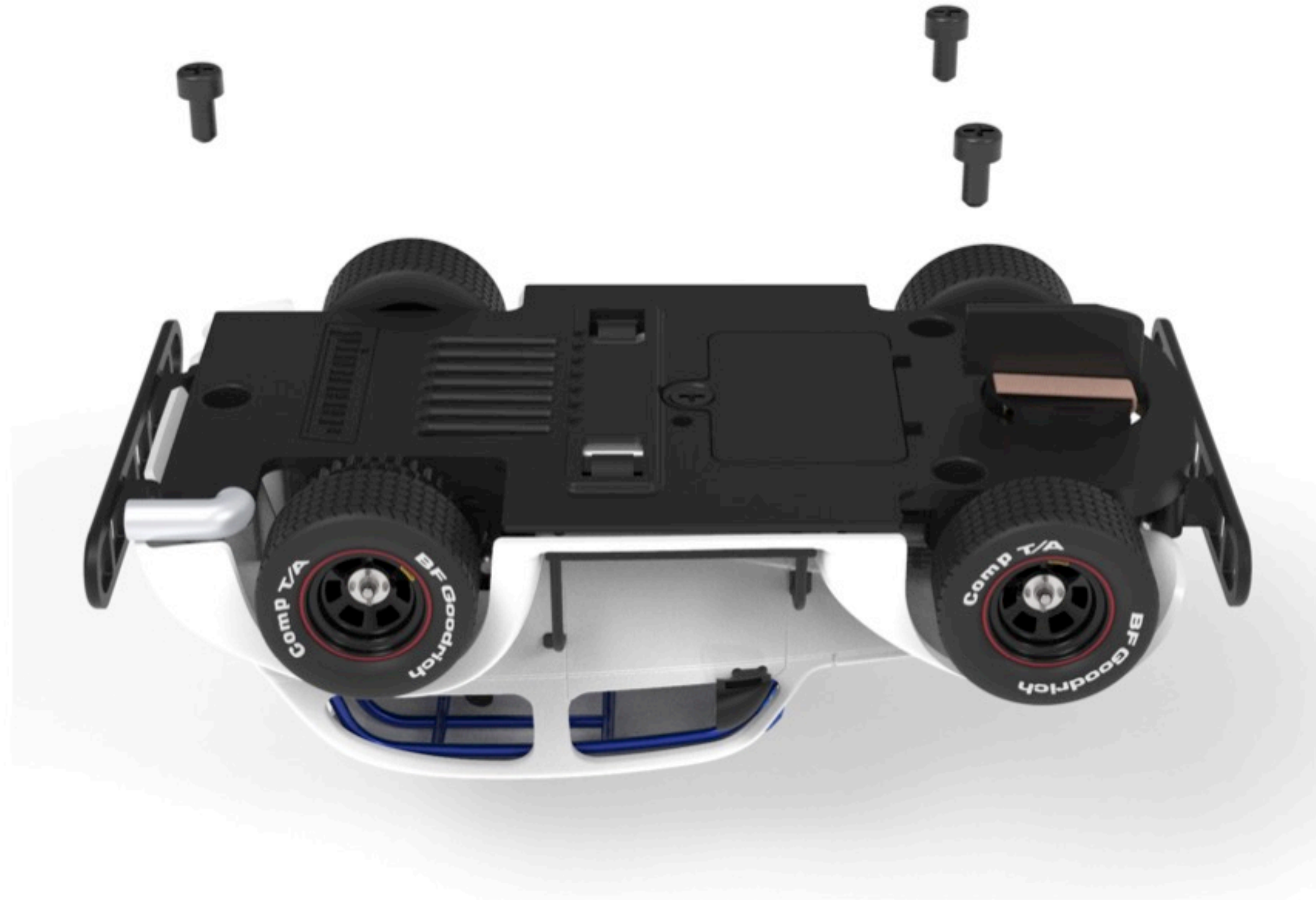




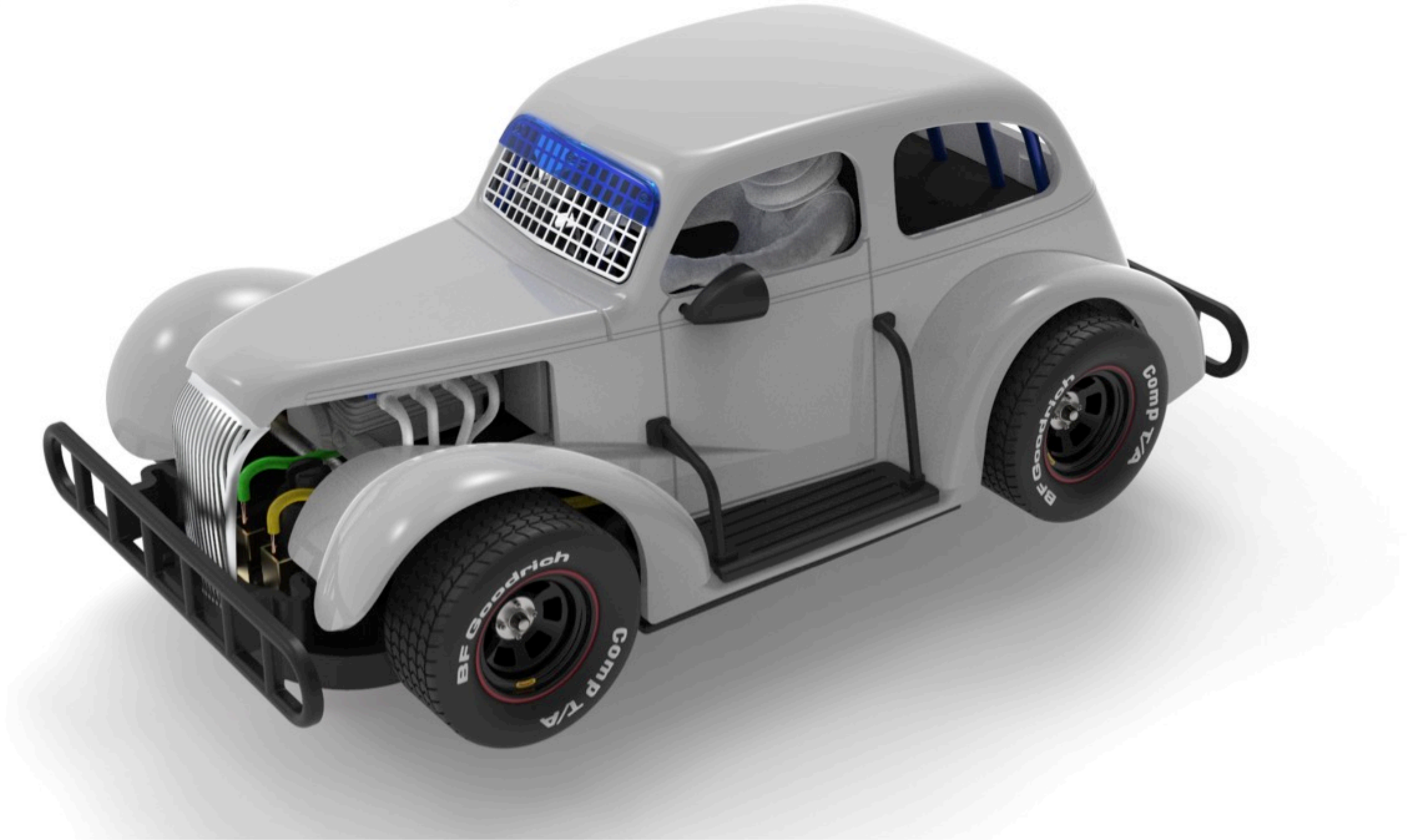
NOTE: Specific to Chevy Model Only, Body-to-Chassis Assembly –
The two lower metal angled folds of grill must rest against the two lugs at front of chassis. When the 3 chassis screws are secured into place the grill will be ‘held’ in place.



Body Assembly – three screws to secure chassis to body



Your Chevy Legends Racer slot car model is now ready to run!



Visit: www.pioneerslotcars.com for more information on available kits and other Pioneer Slot Car models.

