## TAKE YOUR CAR COMPLETELY APART

- Remove everything from the chassis including the front axle bushing grub screws.
- Be sure you leave the rubber o-rings in the chassis alone.
- It's always a good idea to put all of the parts that came off of the car in a sealed container so they are easier to keep track of and find when you go to put your car back together.

## STRAIGHTEN THE CHASSIS

*Before starting this step be sure you have access to the oven in your house for 24 hours straight.*

- Sand off the raised markings on the bottom of the chassis as they may affect the straightening process.  You want the bottom of the chassis to be as flat and smooth as possible.


- Remove all of the grub screws from the front axle holders.
- Remove the rear axle bushing holders
- Leave the o-rings in the chassis.

- Put the bare chassis on a flat metal plate and hold it down to the plate with magnets that you have removed from all your slot cars.  It's key to have magnets on all of the corners of the chassis so it will be as flat as possible when finished.

- Put the chassis, plate and magnets in a pan that is tall enough so water can completely cover the chassis.

- Pre-heat the oven to 275 degrees


- Heat water in a kettle or pan until it boils

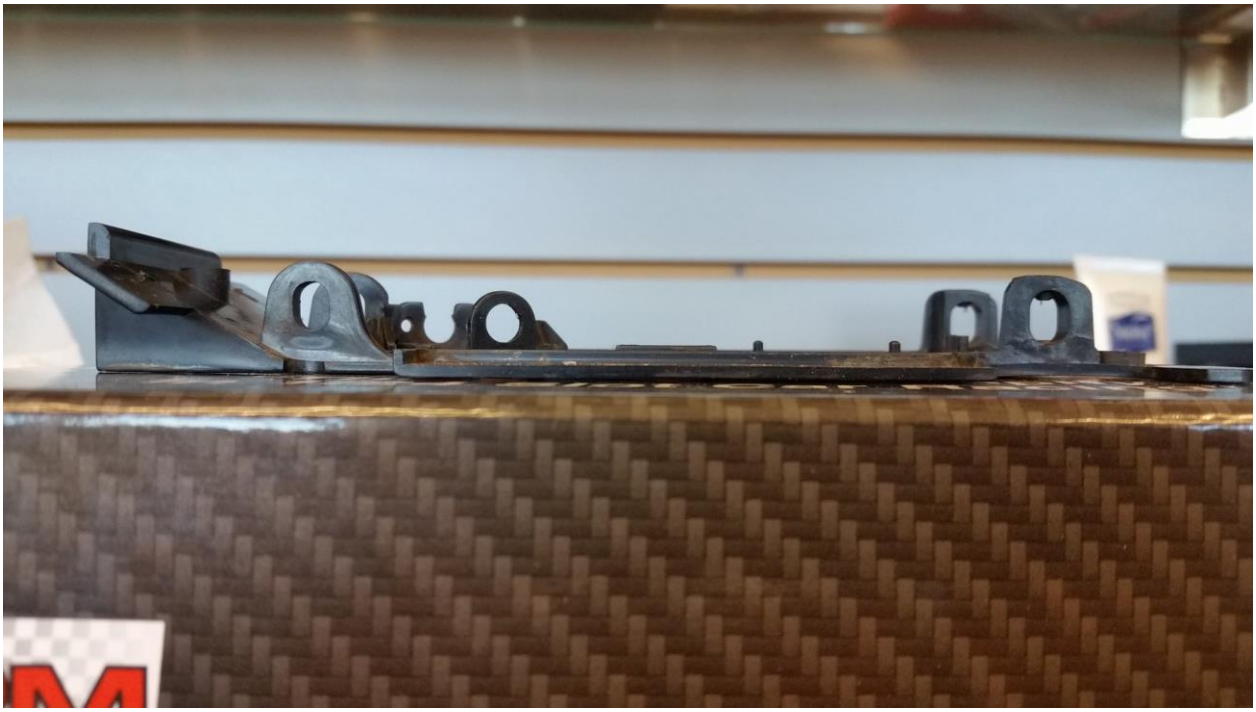
- Carefully pour the water into the pan holding the chassis, plate and magnets.  Be sure to completely cover the chassis with water.  Any part of the chassis exposed to the heat of the oven will melt.

- Put the pan into the preheated oven and leave the heat on for 10 minutes.  Set a timer so you don't forget to turn the oven off.

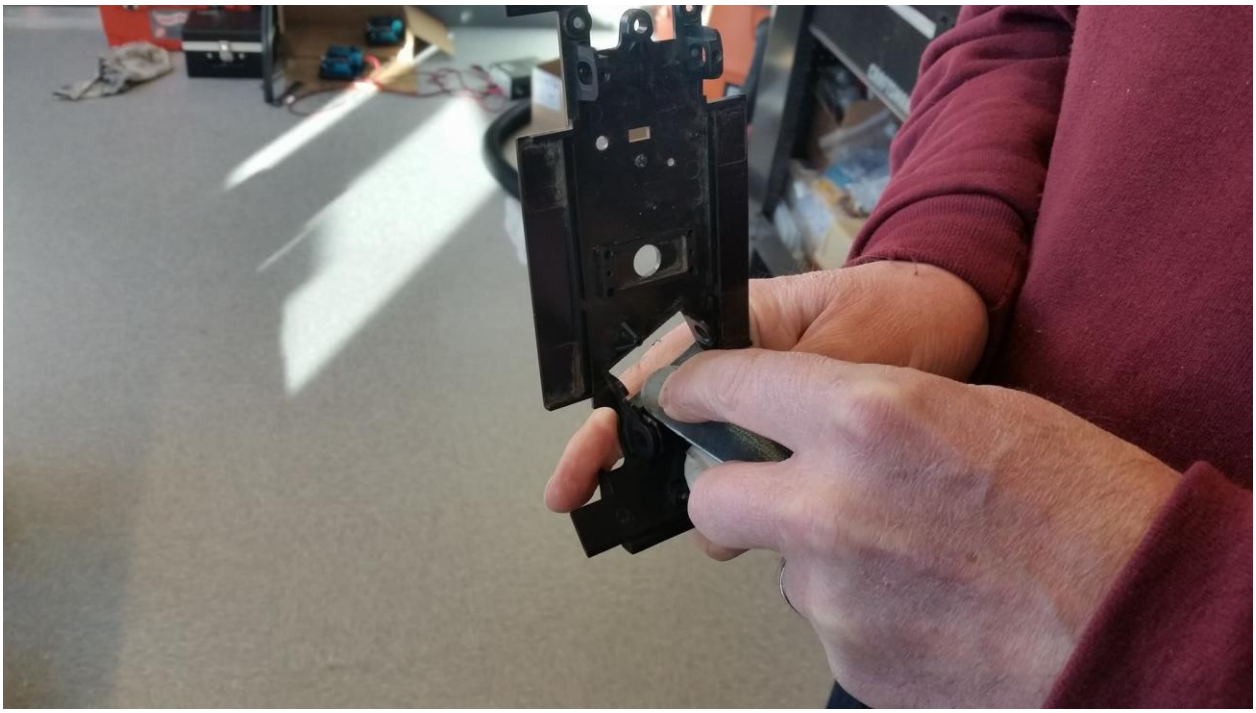
- Turn the oven off and leave the pan with chassis, plate and magnets in the oven for 24 hours.

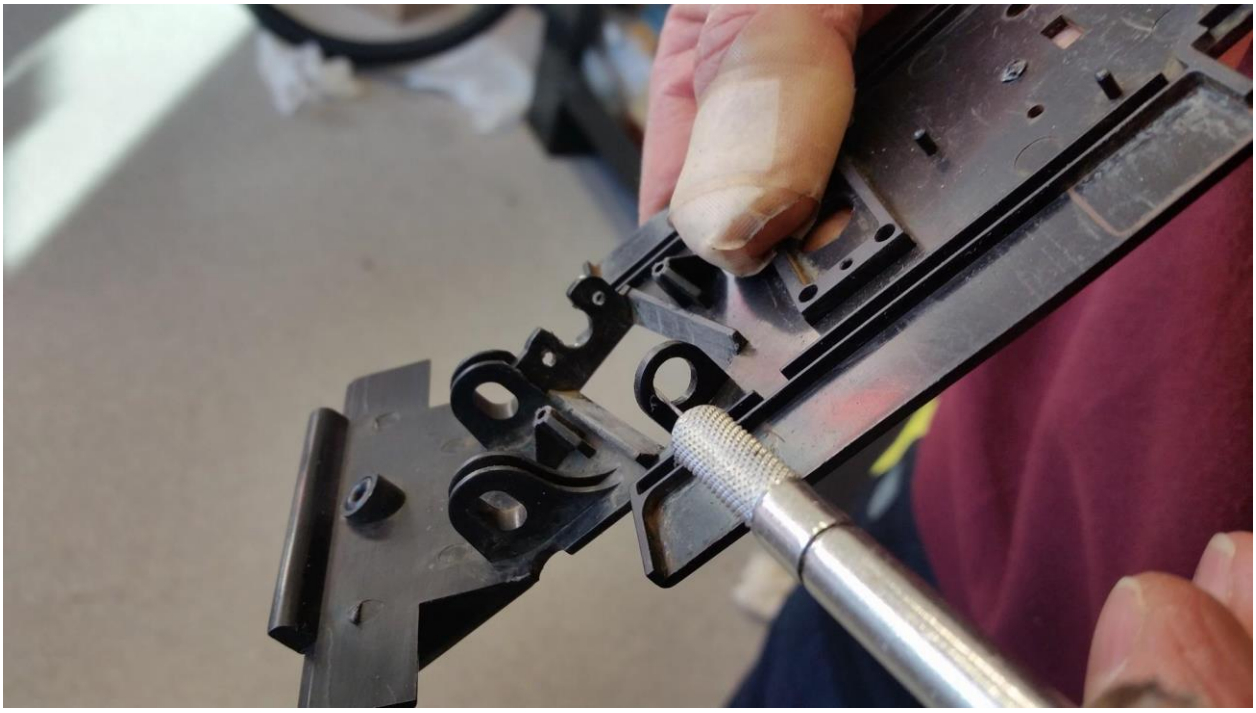
- Put a sign on the oven door letting everyone know not to use the oven while your chassis is baking inside of it.

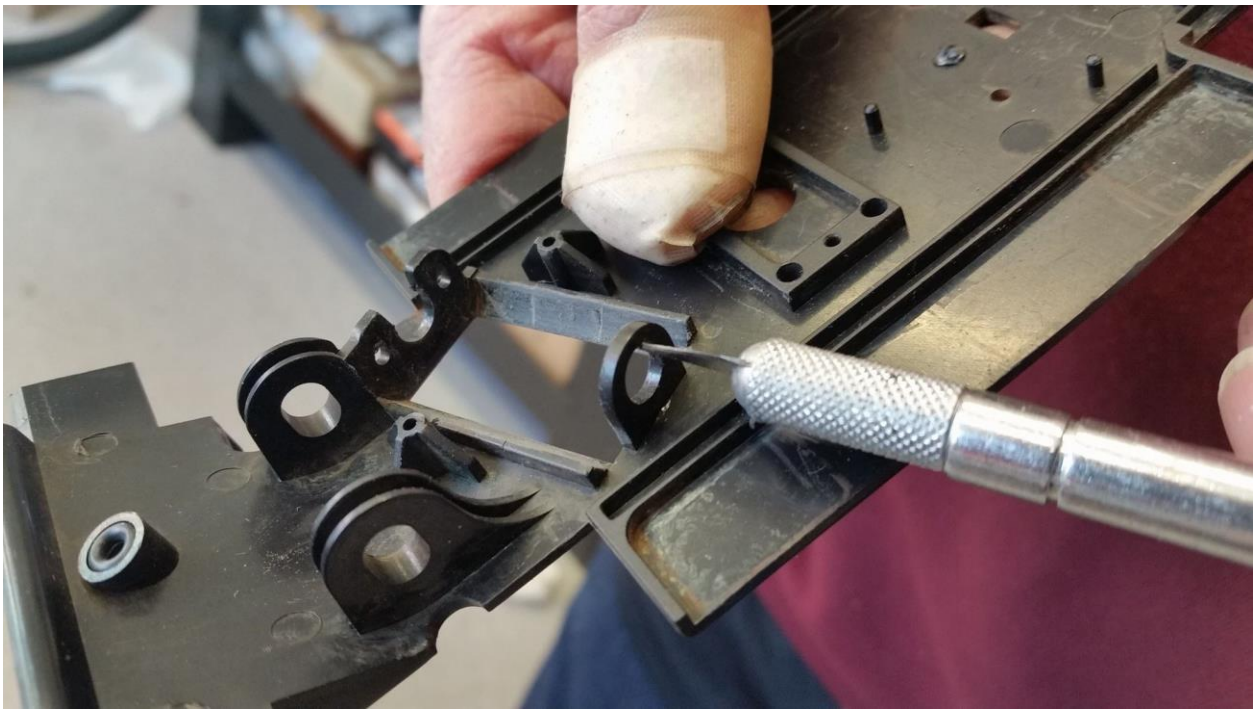
- You can see how flat the chassis is after baking it.

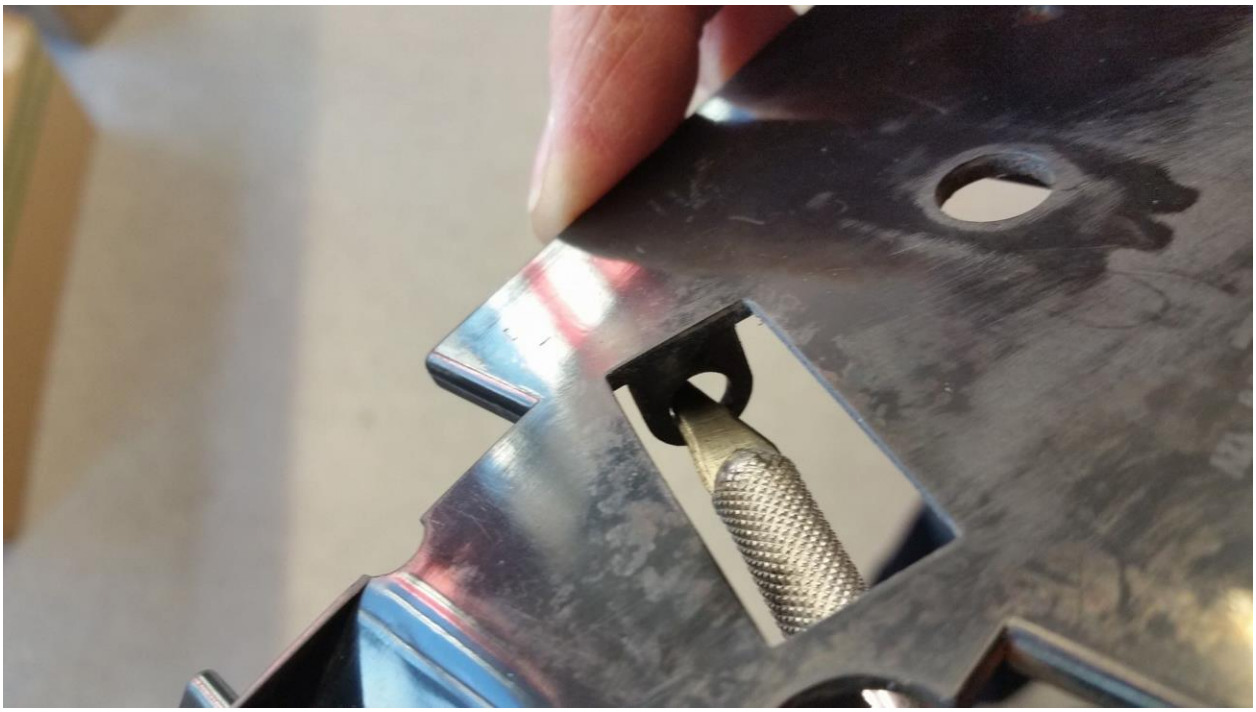


- Trim the motor mount area so the motor moves freely and fits in the chassis without binding.  This will reduce the possibility of the motor distorting/bending the chassis once its installed and screwed down.







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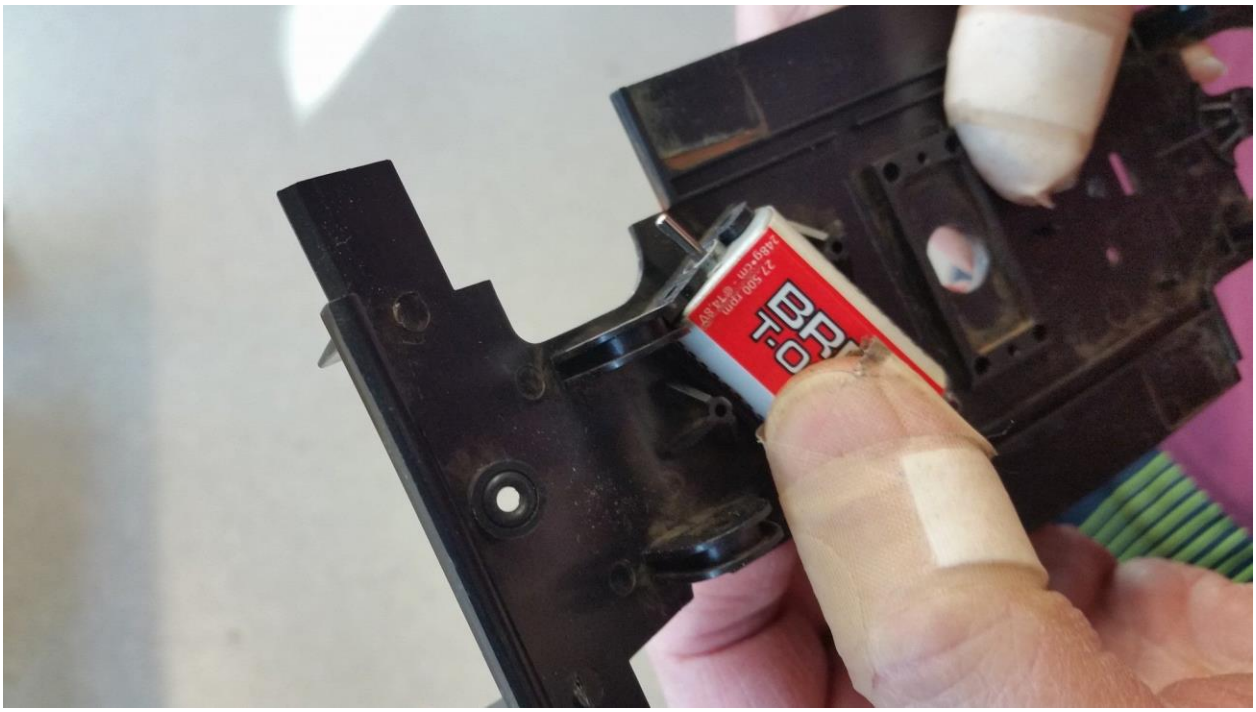
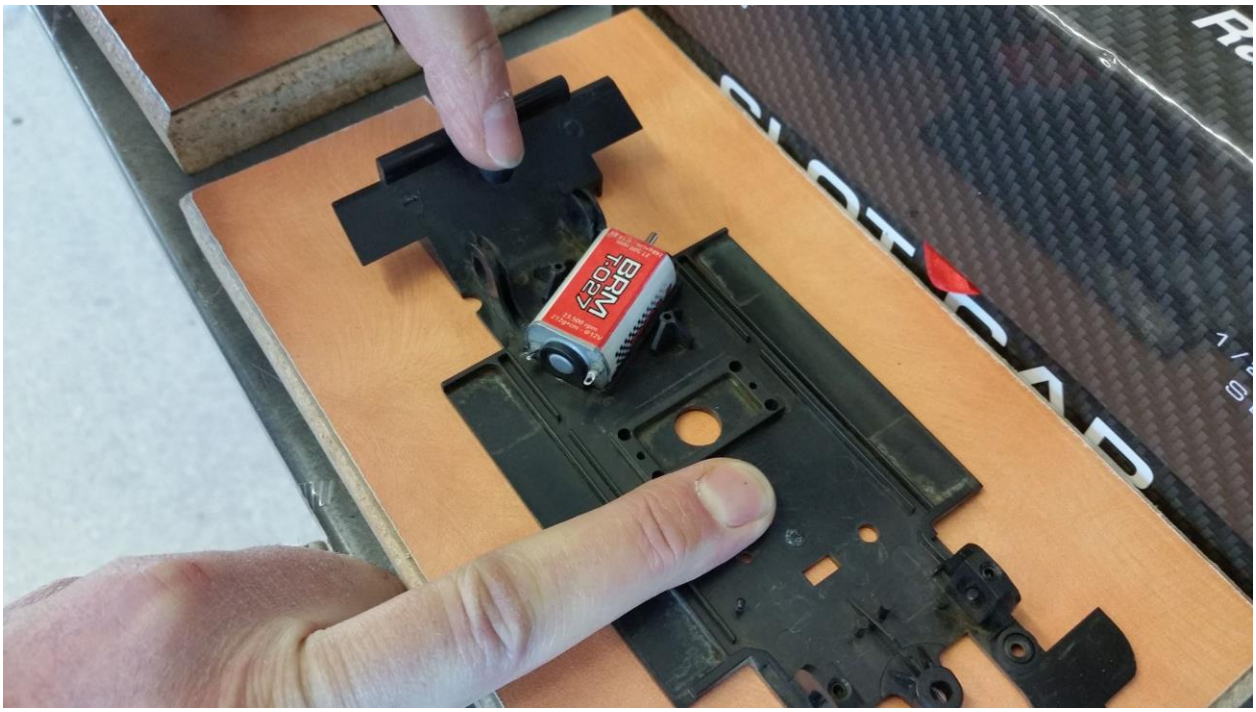
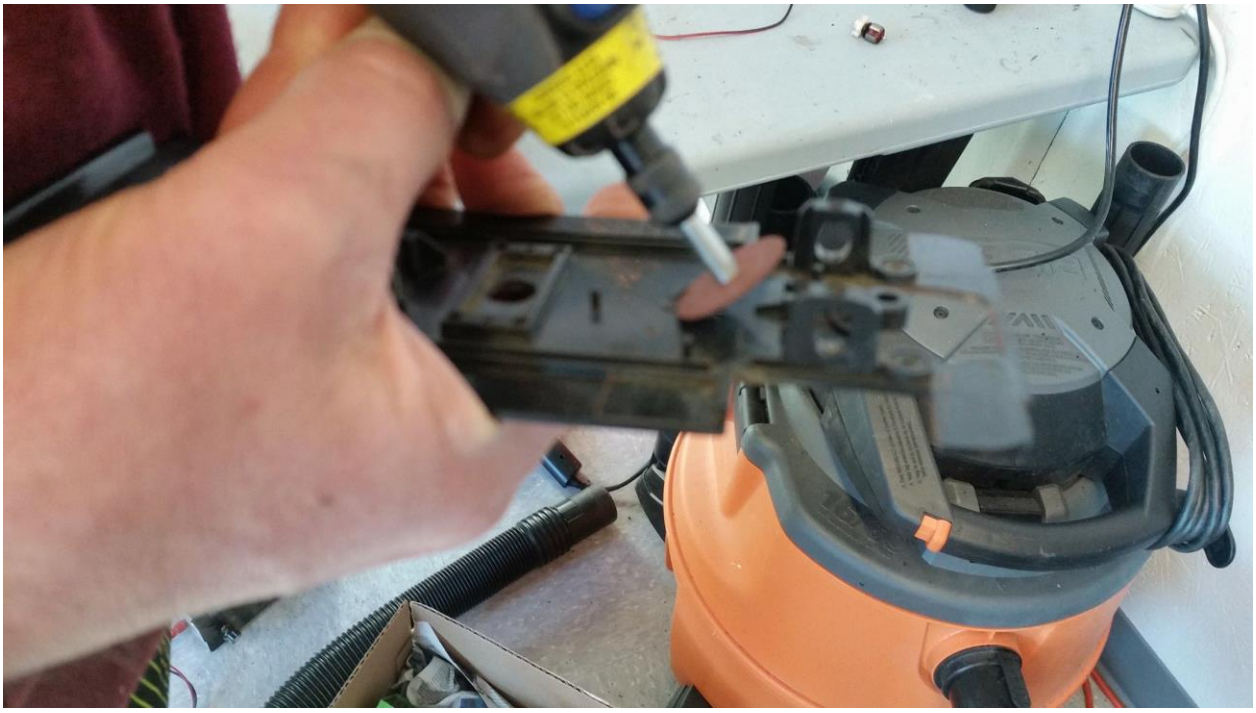


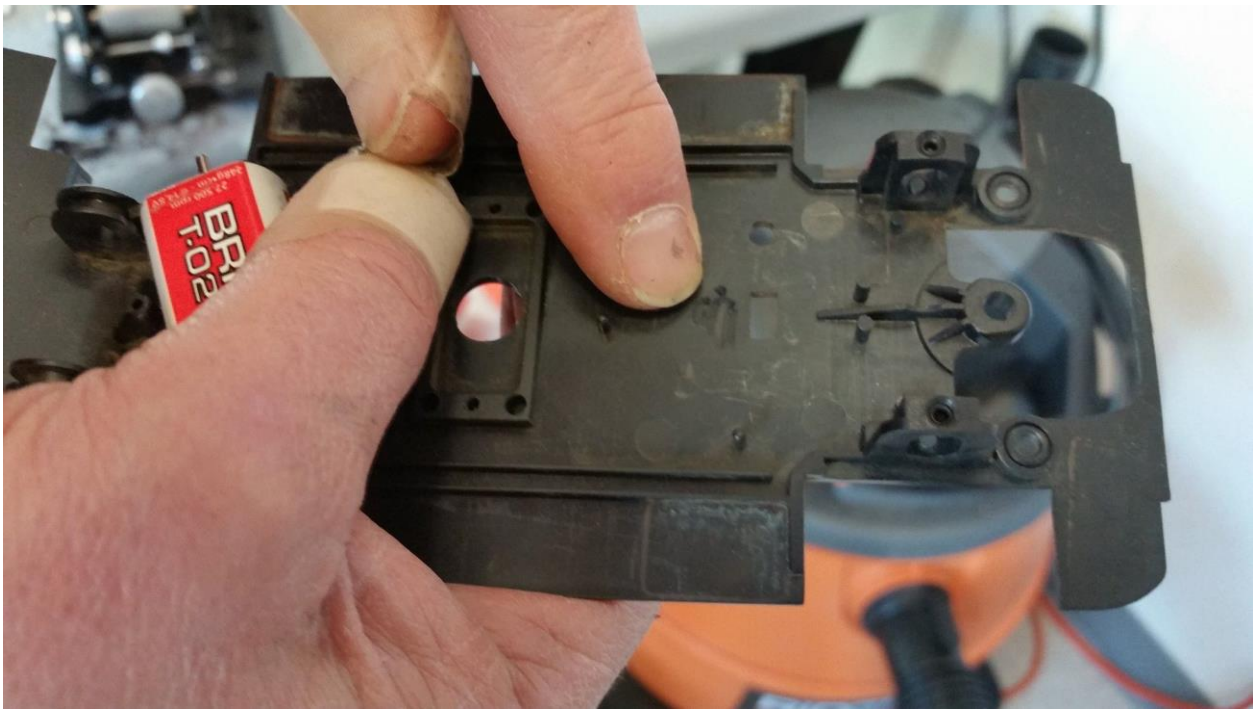

BRAVO

- With the motor fitted, check the chassis on your set up plate and make sure the chassis is still flat.  Continue to sand the area around the motor until you can get the motor to fit with movement and without distorting/bending the chassis.



- Trim the flashing on the inside of the chassis under the driver as this chassis mold flashing can push the driver cockpit up and may interfere with the body.






BRM
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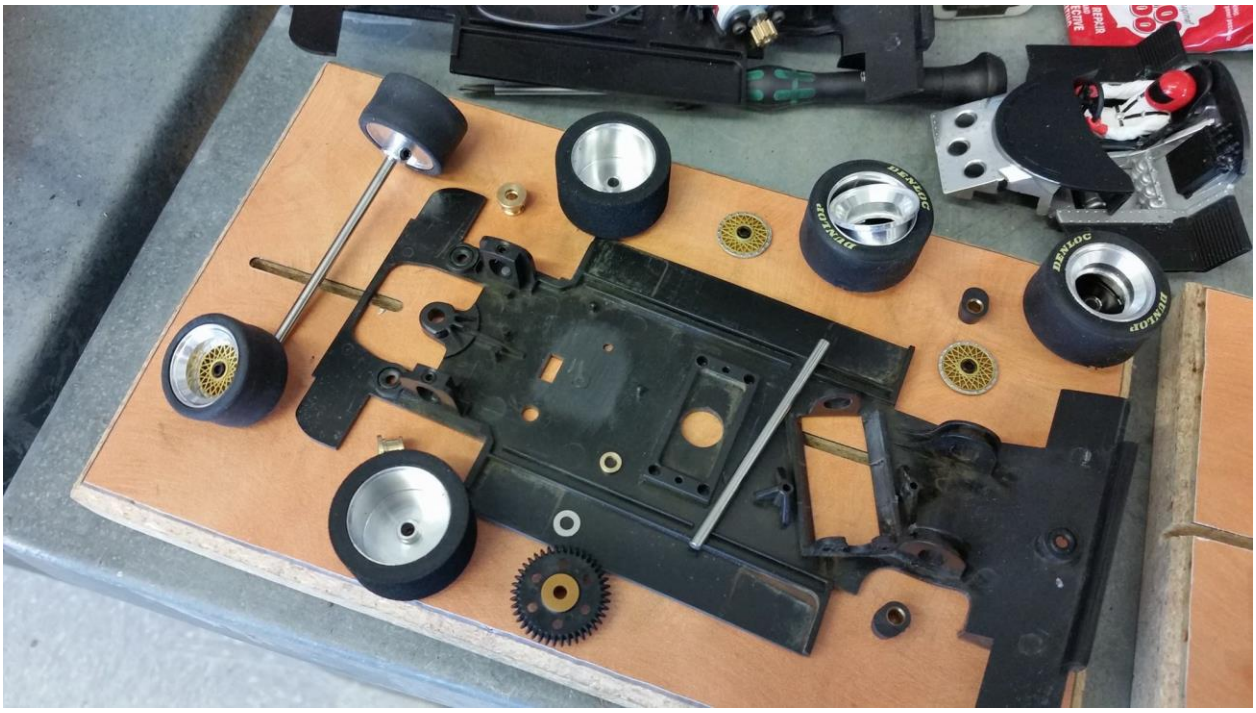
- Lightly sand the edges of the chassis to remove any of the mold flashing.  Don't remove too much material as that is illegal.  Just remove the burs from the molding.  If you can fit a credit card between the chassis and the body you have removed too much material.

- The chassis is ready to be built up.

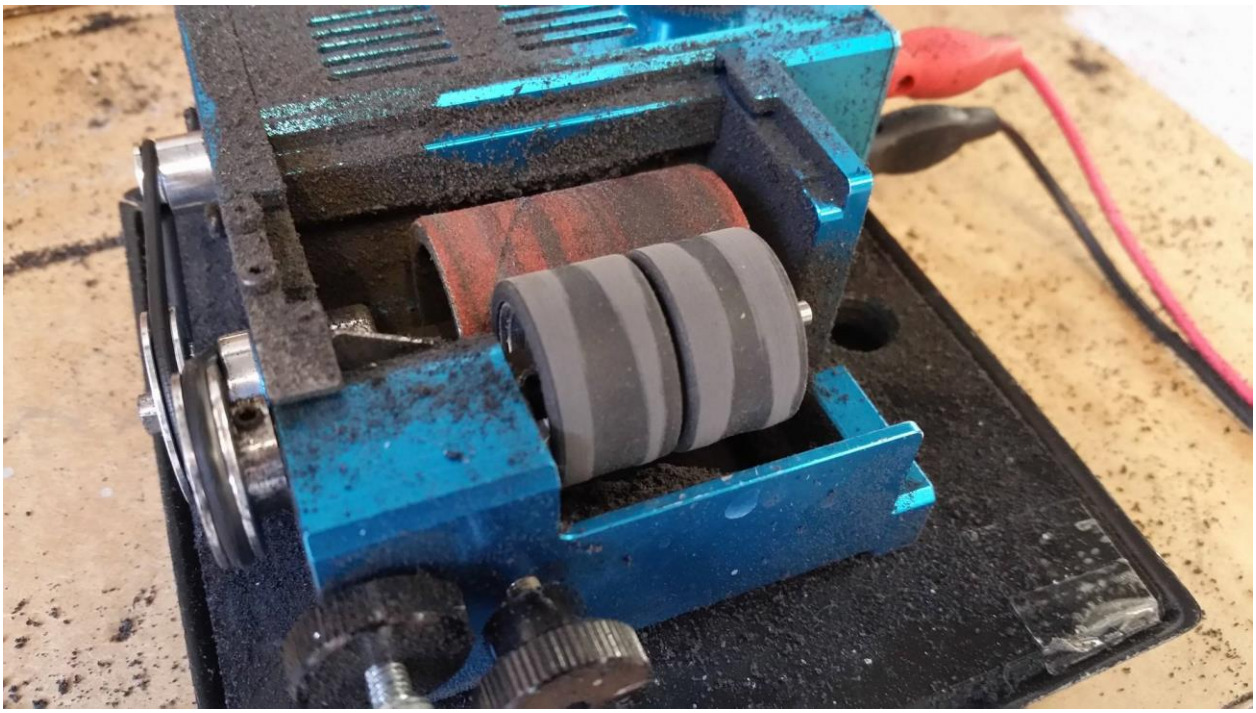
# ASSEMBLE THE CHASSIS

Now that the chassis is ready its time to put the car together.



- Its highly suggested to run the low-profile front tires if you car does not come with them.  These will need to be trued but will not need to be glued.

- Truing up the front tires.
- Be sure you round the edges of the tires, so they don’t chatter when cornering.

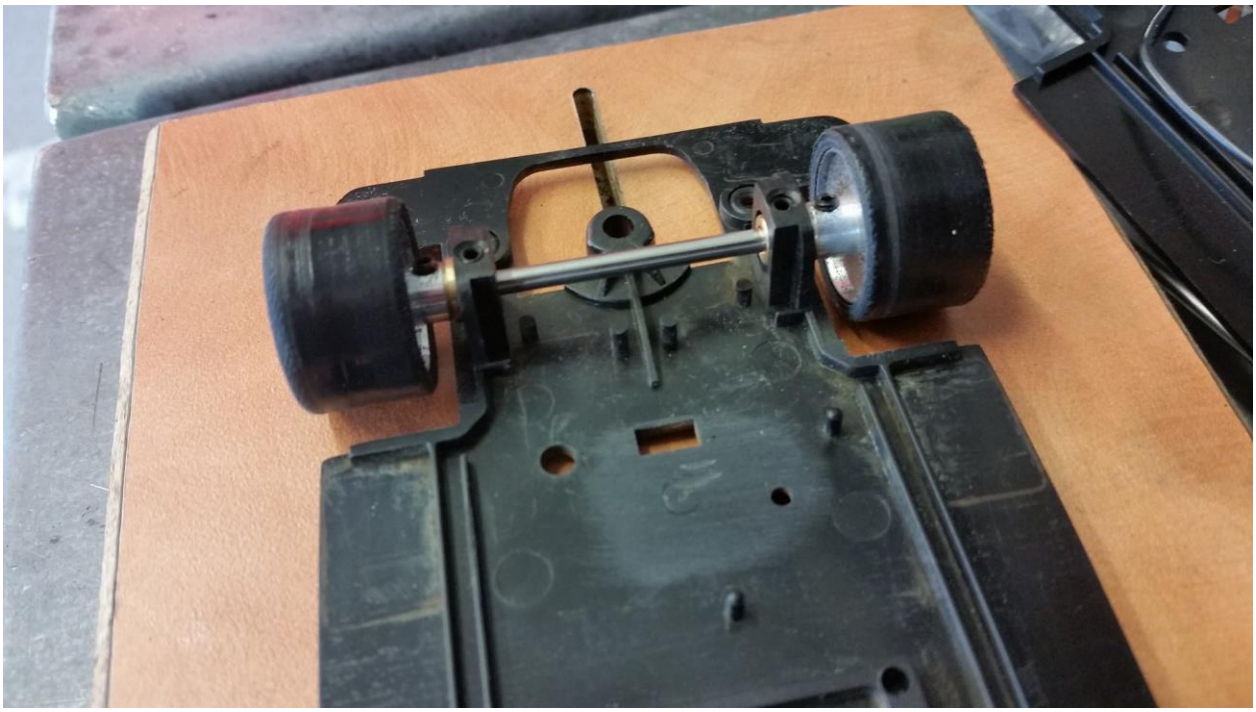


- Check the diameter.  Our rules do not allow for any slick coating on the front tires.

- Install the front brass bushings into the chassis.

- Reinstall the upper and lower grub screws.

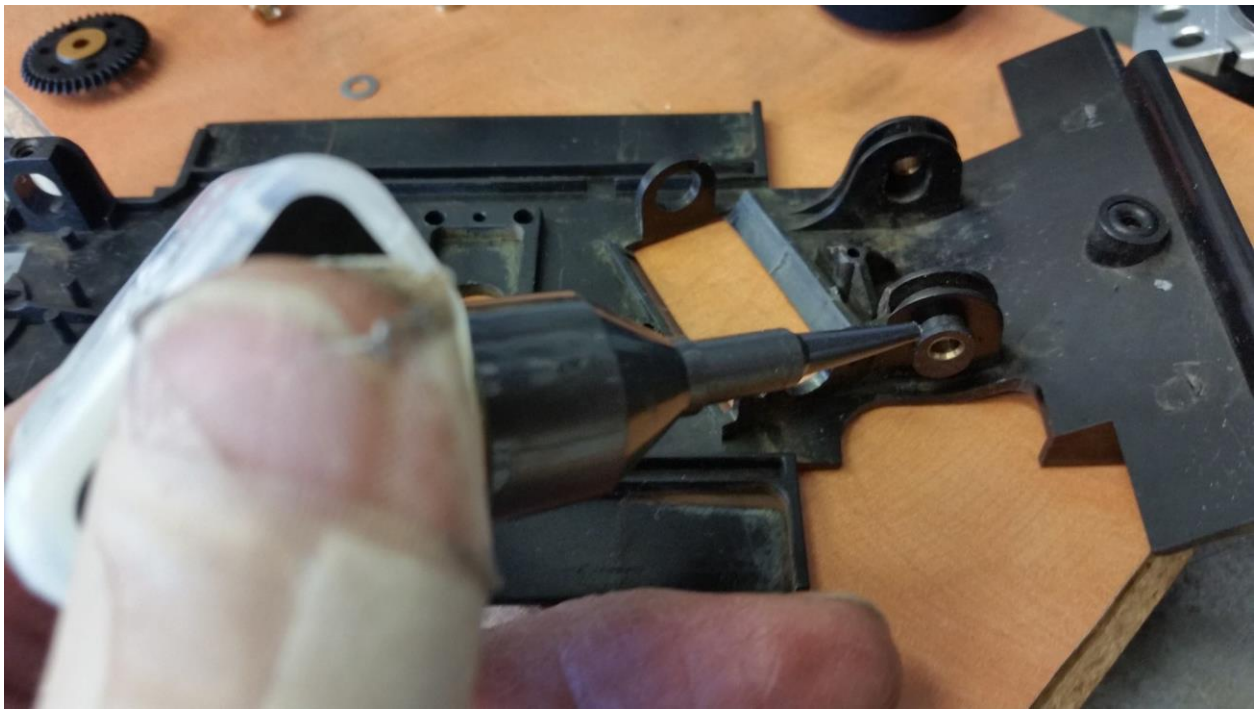
- Install the front axle and both front wheels with the trued tires.



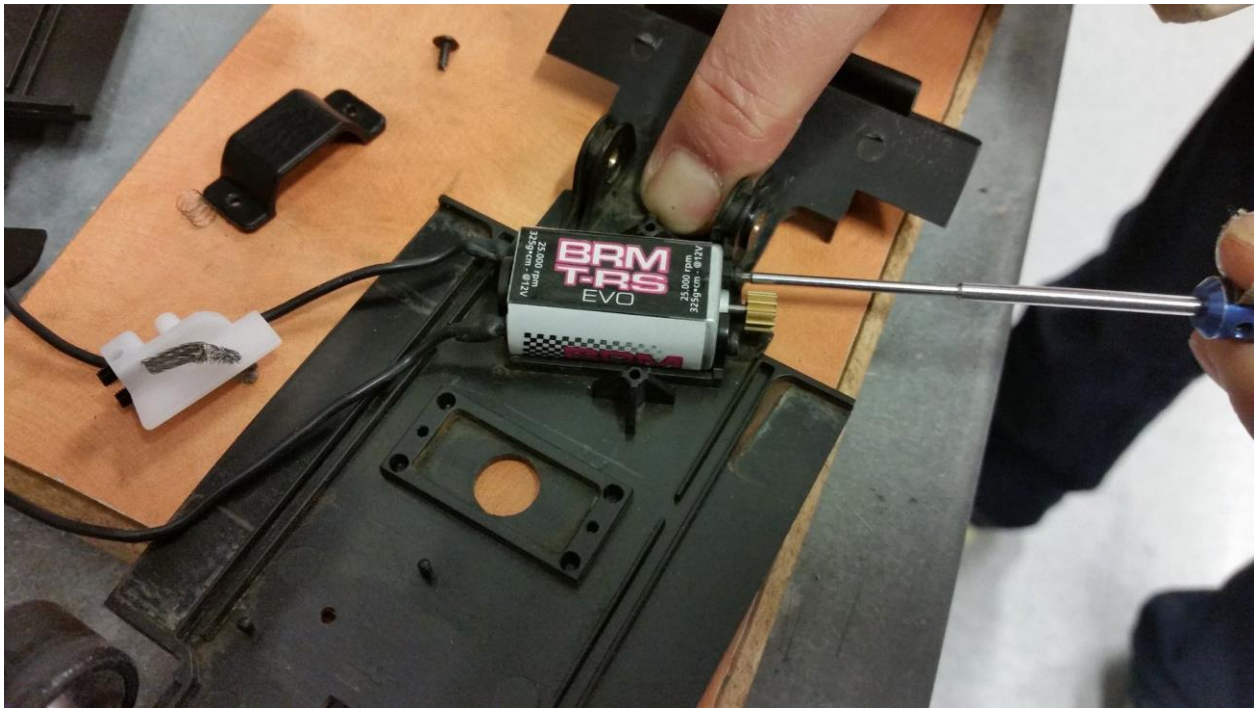
- Install the rear axle bushing holders.


IMPORTANT! - DON’T glue them in until you have determined if your car runs better with them in the upper or lower or center (if you have purchased the center position bushing holders).

Use the clear canopy glue to glue these bushings in place.  Be sure NOT to get glue on the bushings themselves.

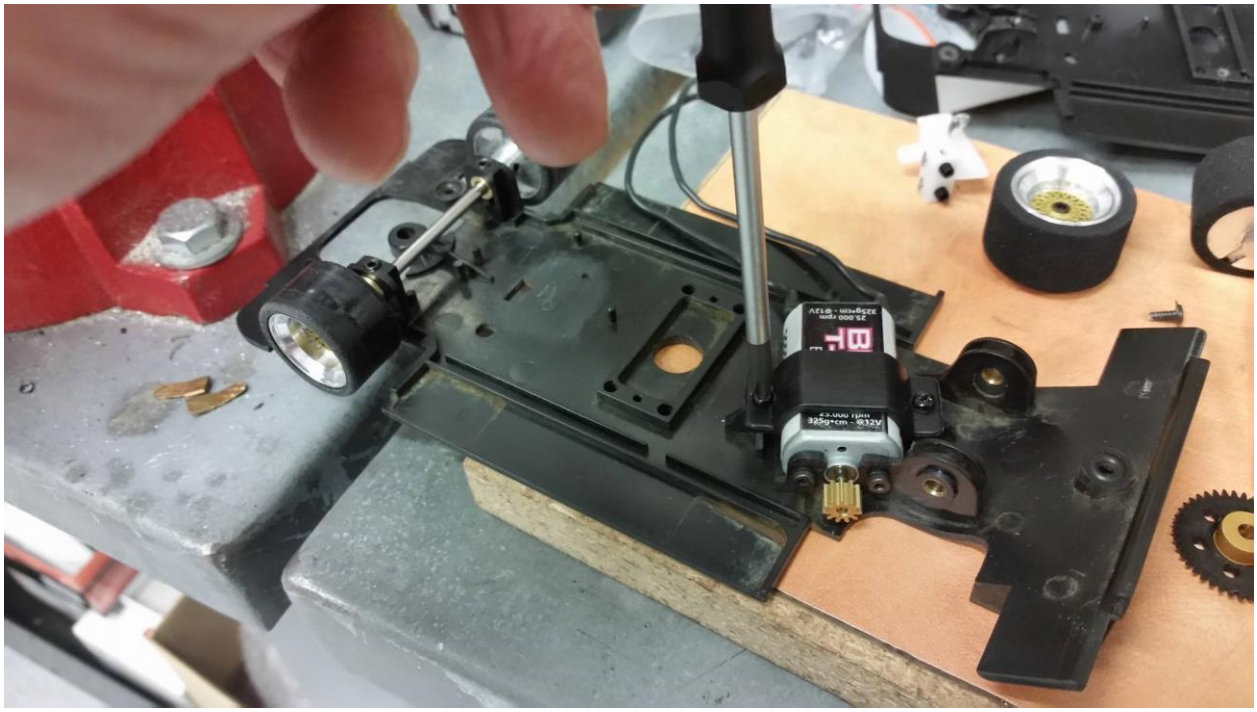


- Mount the motor




- Note how far the pinion is on the motor shaft.  Don't push the pinion on too far.

- Install the motor mount clamp

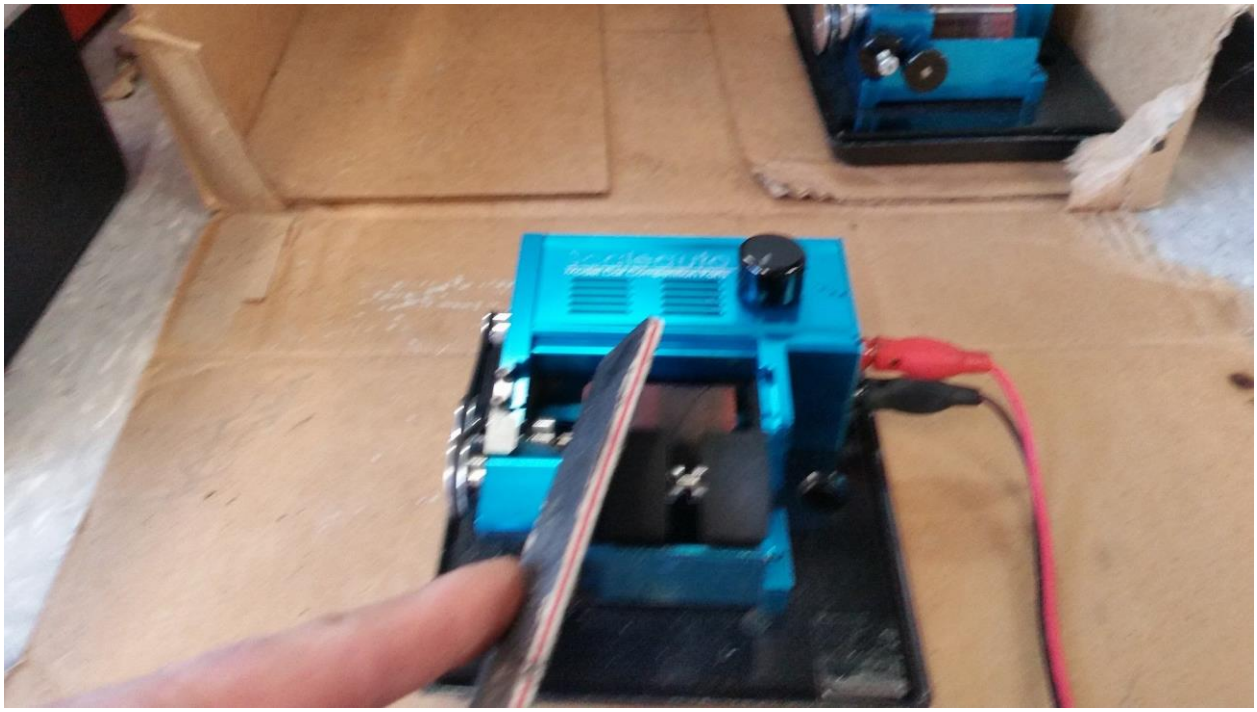


- Be sure you have a variety of 3mm axle washers as you will need some very thin ones to get the gear mesh just right.


**NOT SHOWN:** Use the small spacers to get the gear mesh just right. The rear axle should have just the slightest amount of side to side play. You should be able to run a thin piece of paper between the pinion and the spur gear. If the paper will not fit the mesh is too tight and if the paper moves around the mesh is too loose.

- True the rear BRM foam wheels.


- Be sure to round the sides of the rear tires when you true them.



- Once you have the rear wheels trued its time to install the wheel inserts.
- Start by installing the larger section of the insert.

- Use the side of a table or other hard surface and push the wheel on to the insert.

- Be sure the insert is in all the way.  Don’t want that coming out during a race.

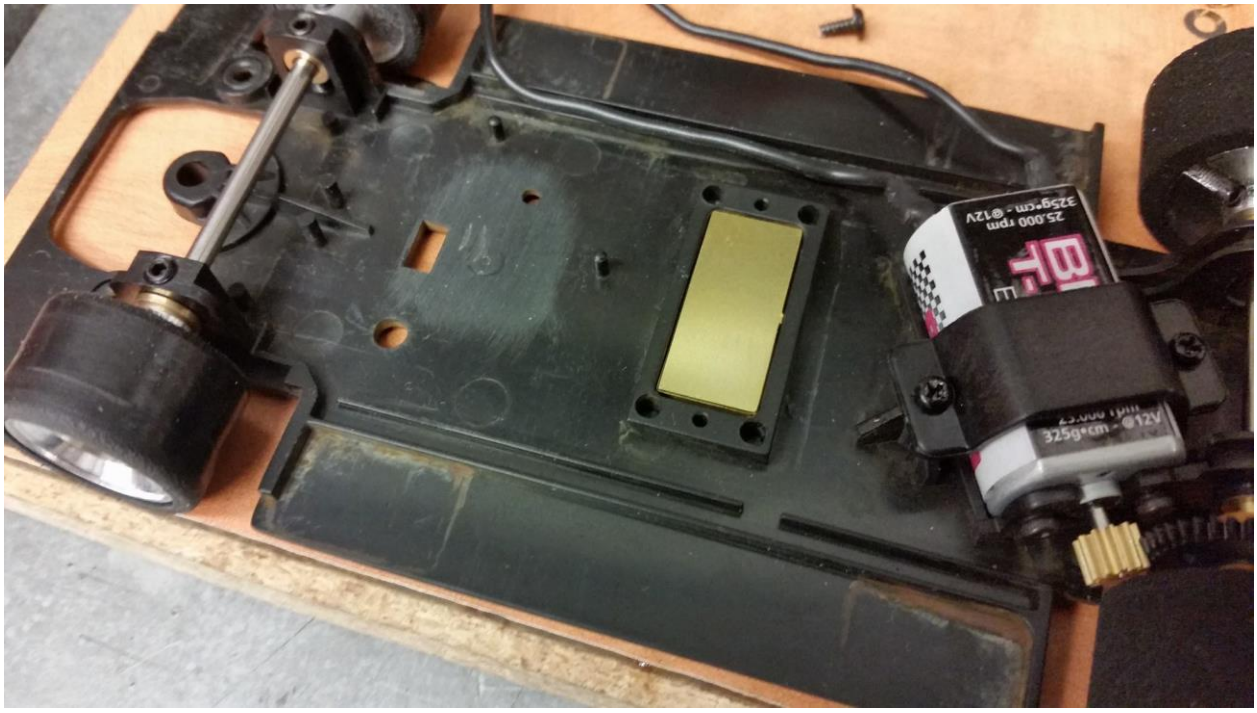
- Install the small insert portion or the wheel insert.  These will typically just fall in place.

- Use the canopy glue to glue the inner wheel inserts in place.

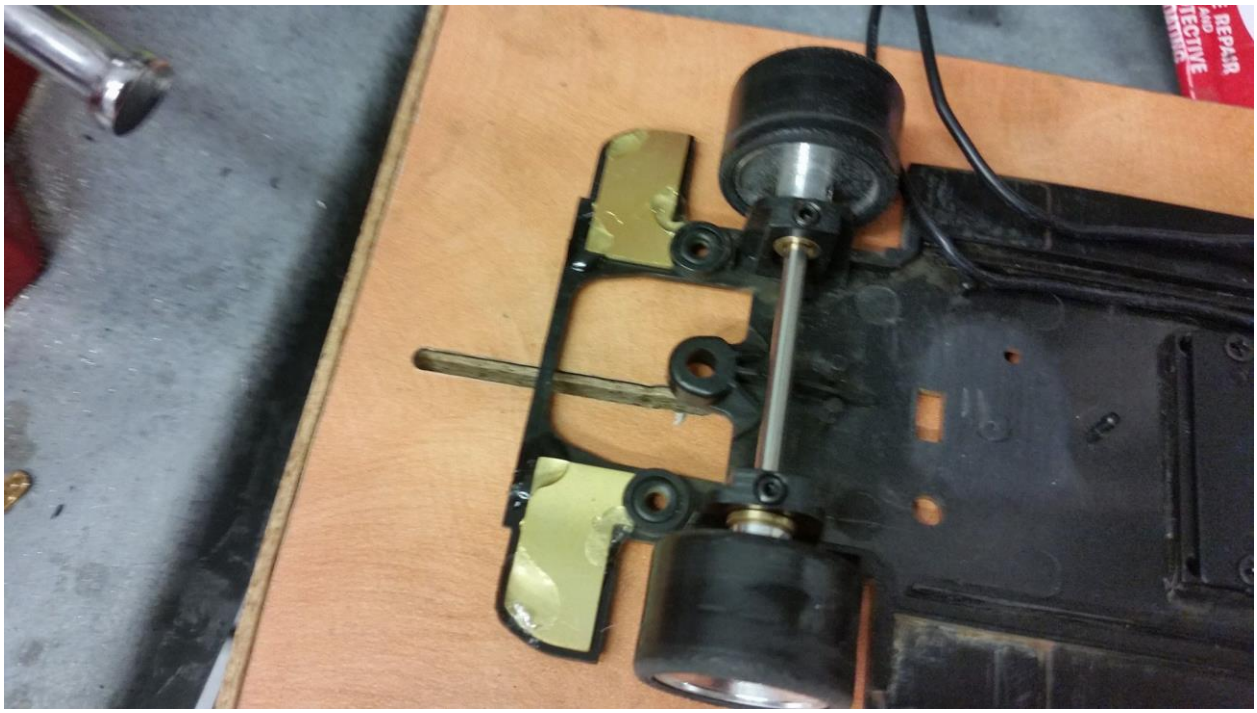
# INSTALLING WEIGHTS

BRM Group C cars have weight kits that are designed specifically for all their models.  The instructions below will help you better understand how and where to install the weights.

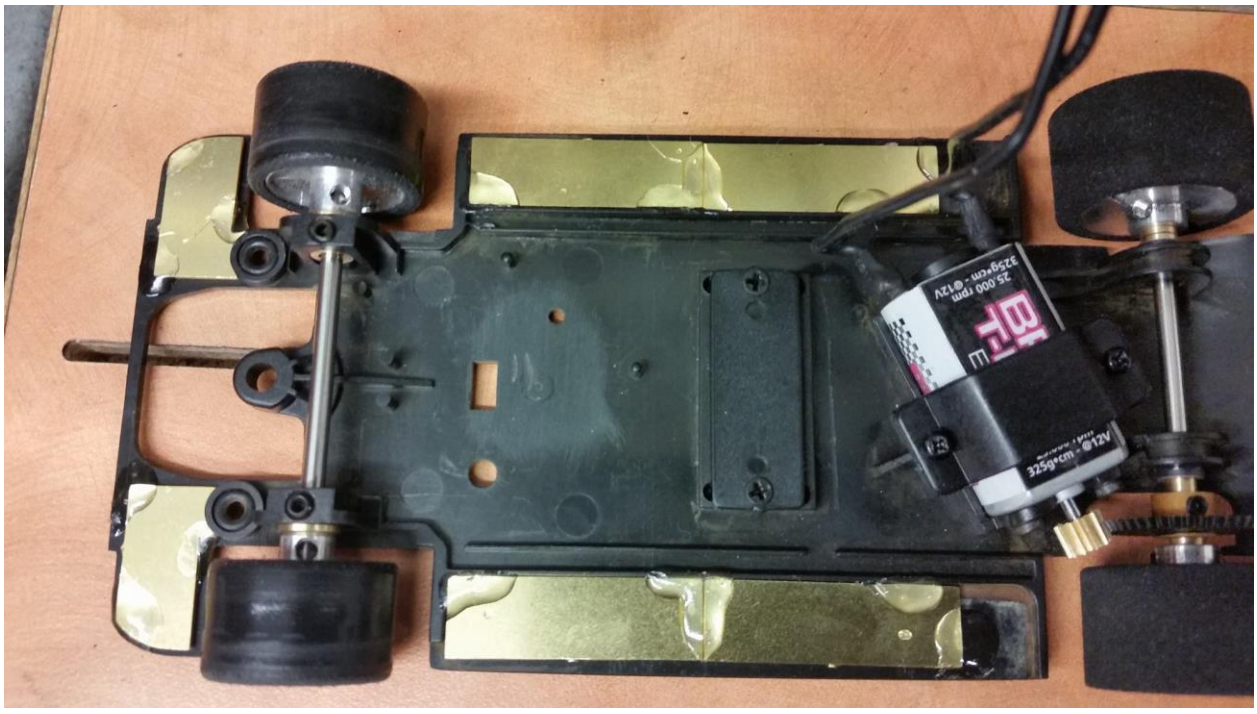
One of the best places to install weight is in the magnet holder location. This area has a screw down cover that will keep these weights in place,



Here are the front weights being held in using Shoe Goo.

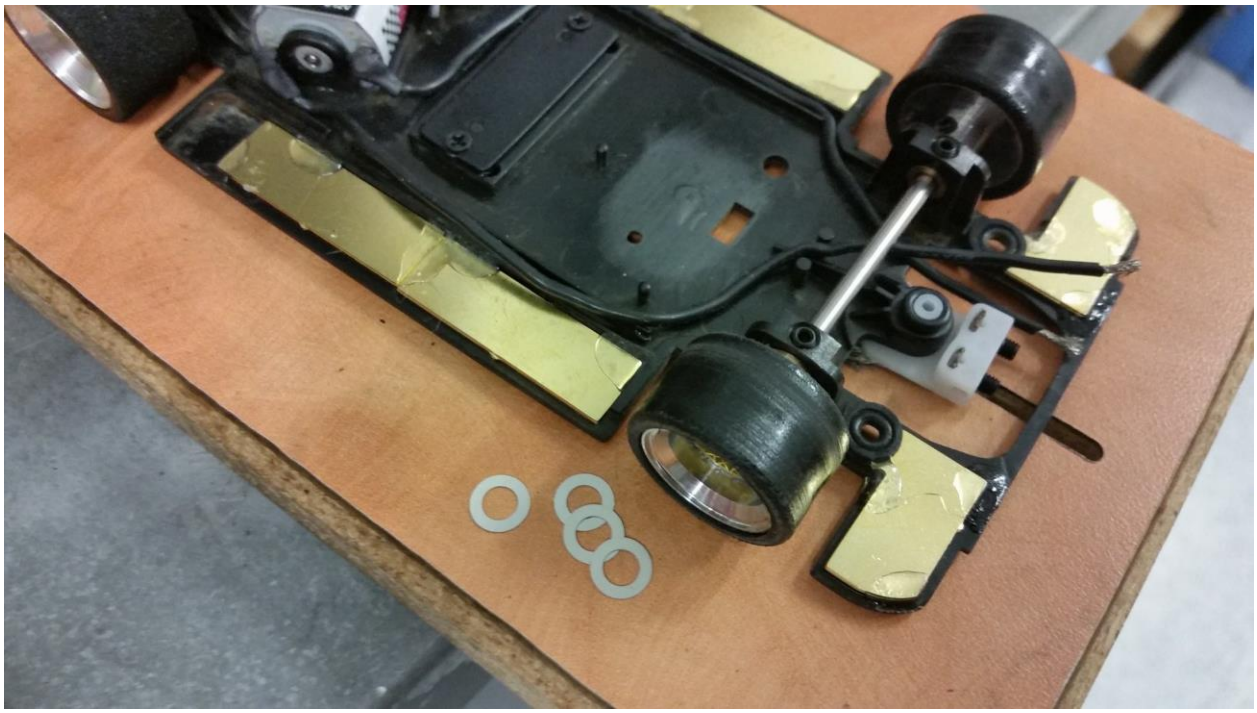


Here are the side weights installed using Shoe Goo.  In this picture you can also see the screw on cap to the magnet/weight area.

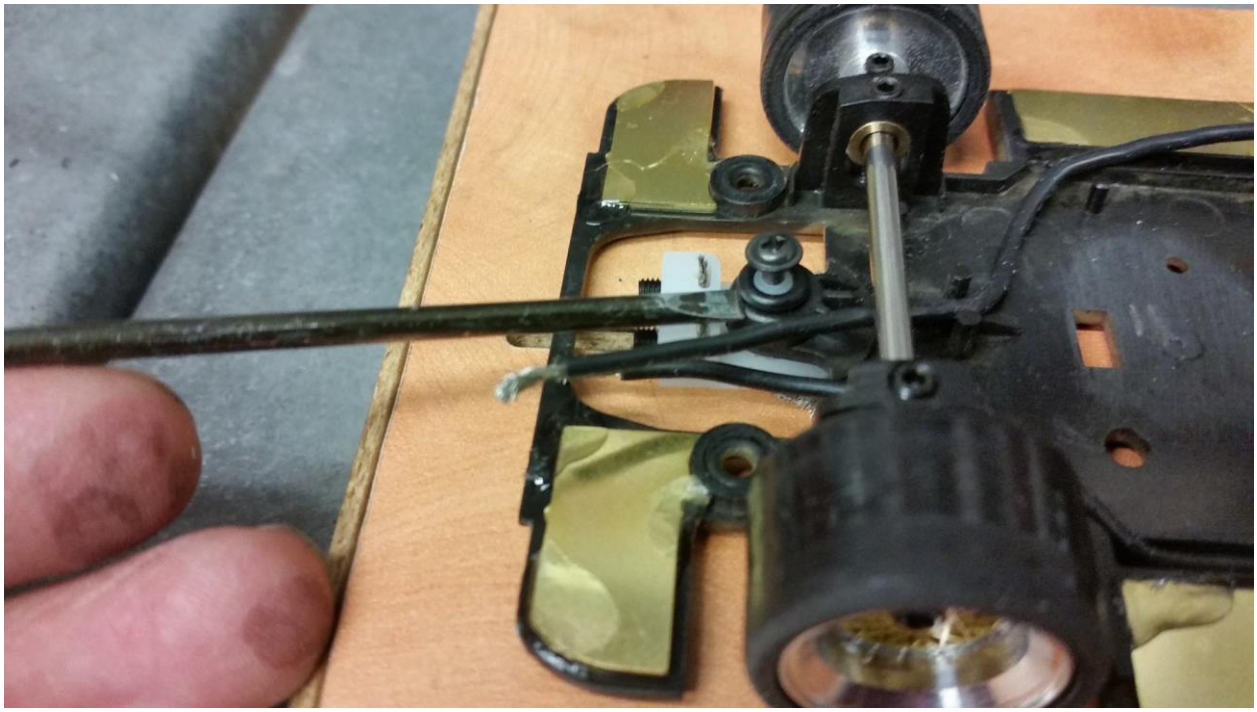


# GUIDE SET UP

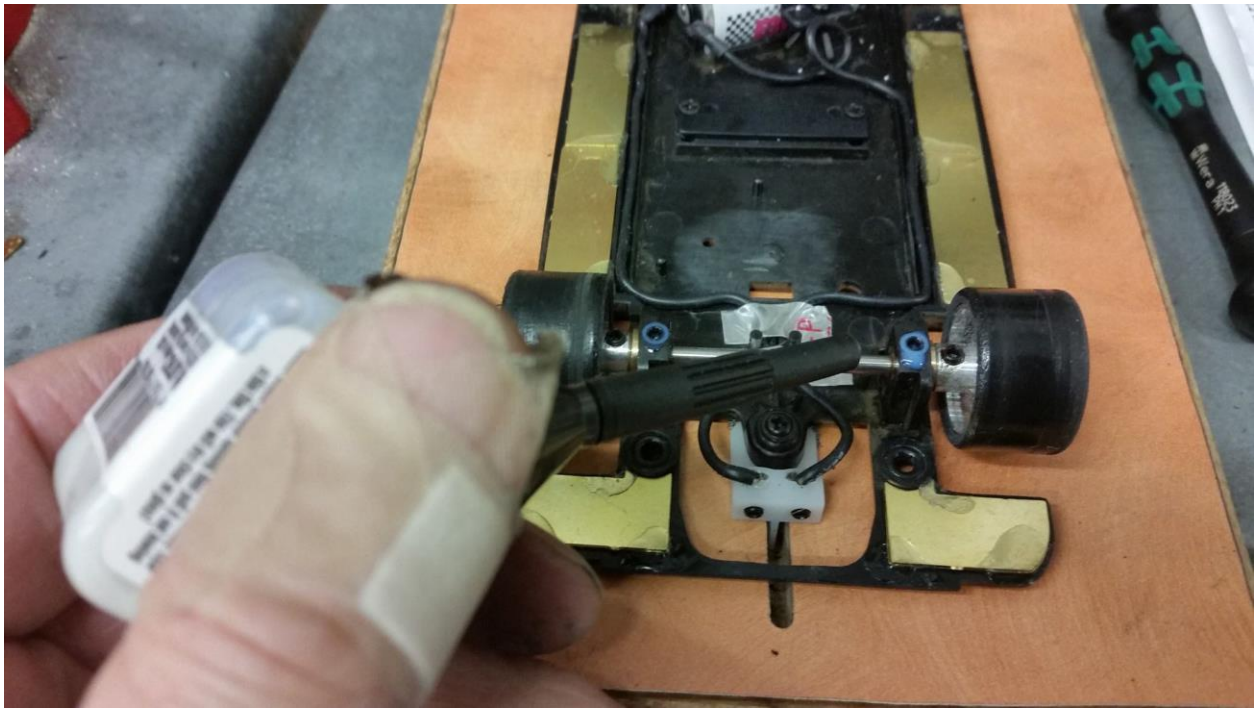
To get the front guide set up properly you will need some guide shims. This will allow you to get the guide lowered so you have the maximum engagement between the guide and the slot.  This adjustment is done independent from the front axle height although that will have an impact on how many guide spacers you use.

The guide comes with an o-ring at the top to take up the space on the guide shaft while making the guide more adjustable.



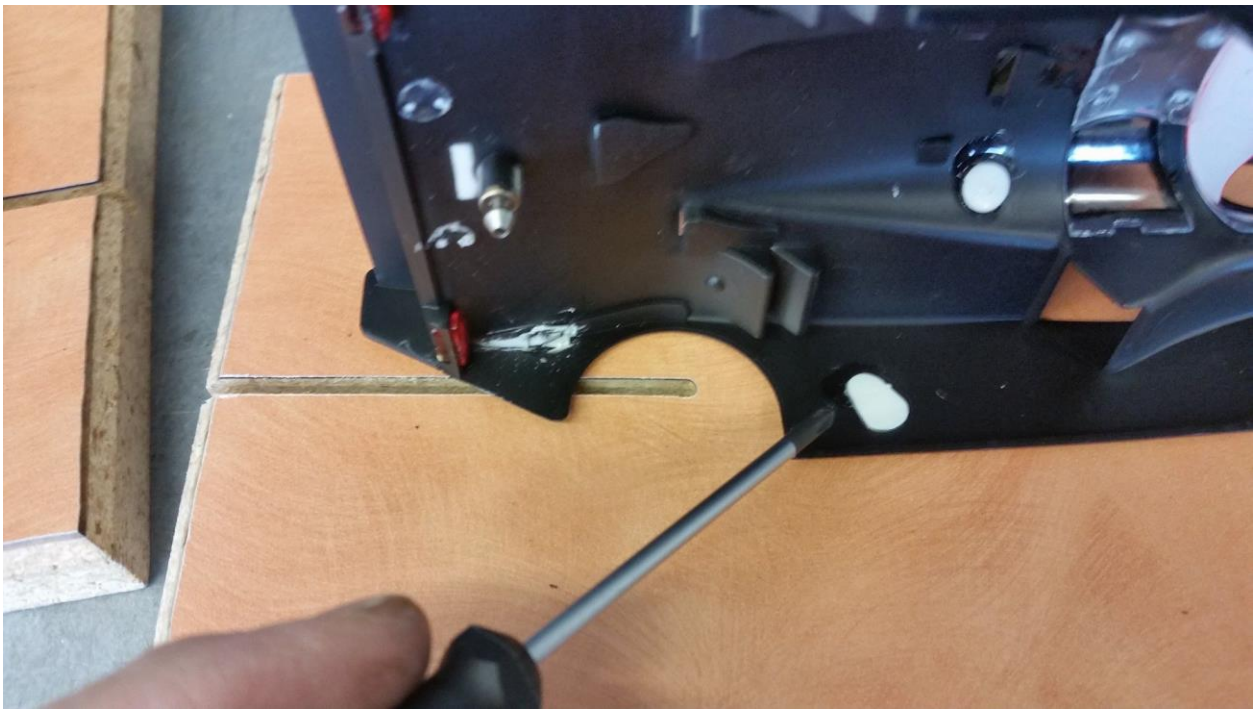
Once you have the guide set to the correct depth you can set the front axle with the grub screws.  Once you have the front axle height where you want it you can put some blue Loctite on the top of the top and bottom grub screws to hold them in place.



# BODY SET UP

Use clear canopy model glue to reinforce the rear wing mounting location.

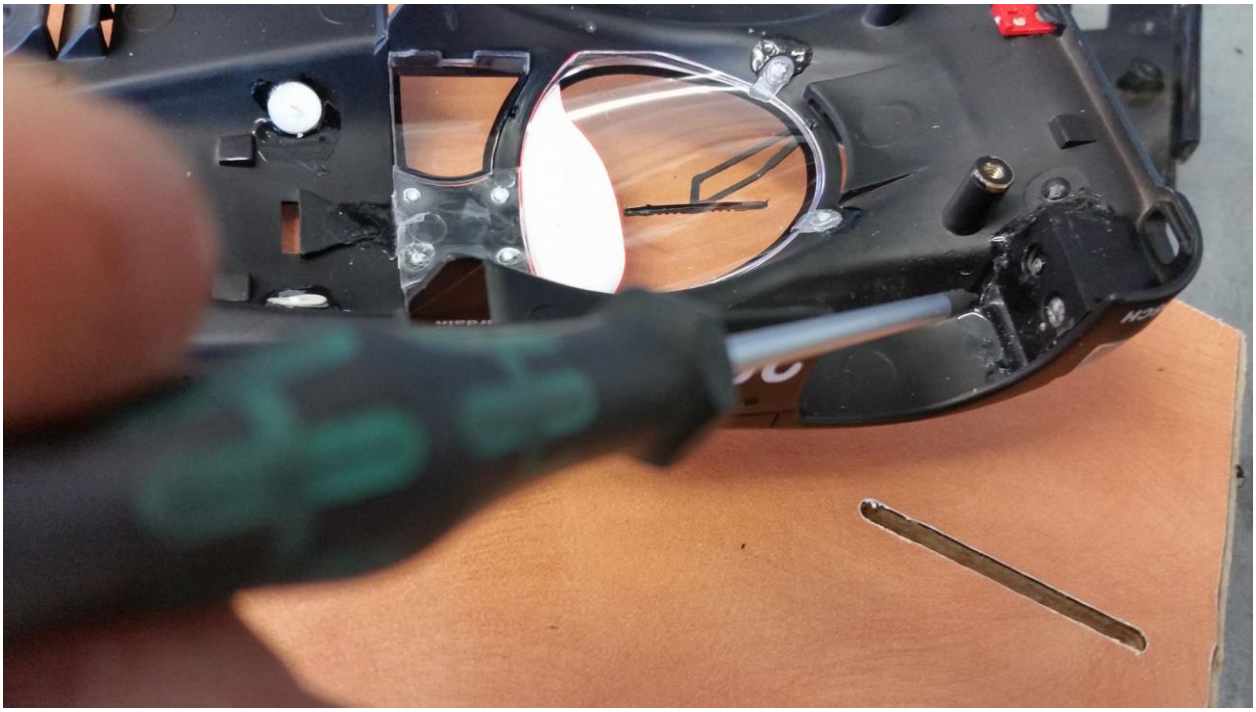

Apply the canopy glue to the other fittings on the car body.

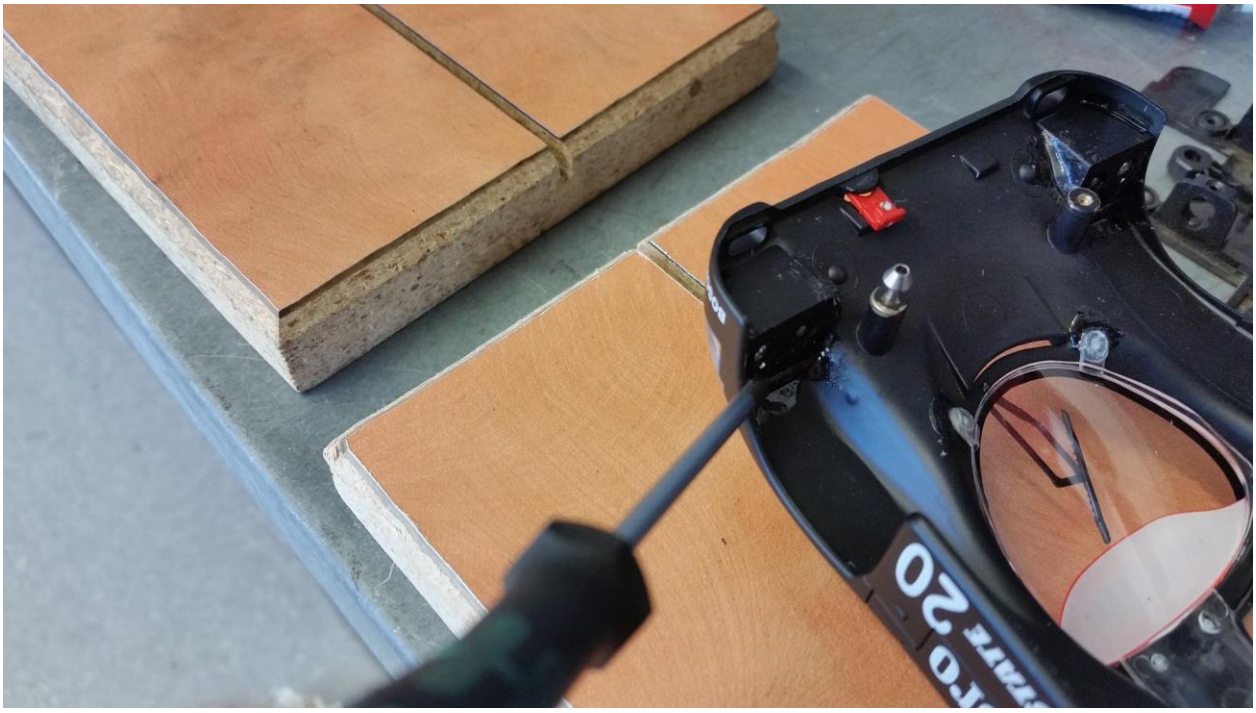



Apply canopy glue to the base of the windshield wiper or remove it as it is not required to be on the body to pass technical inspection.

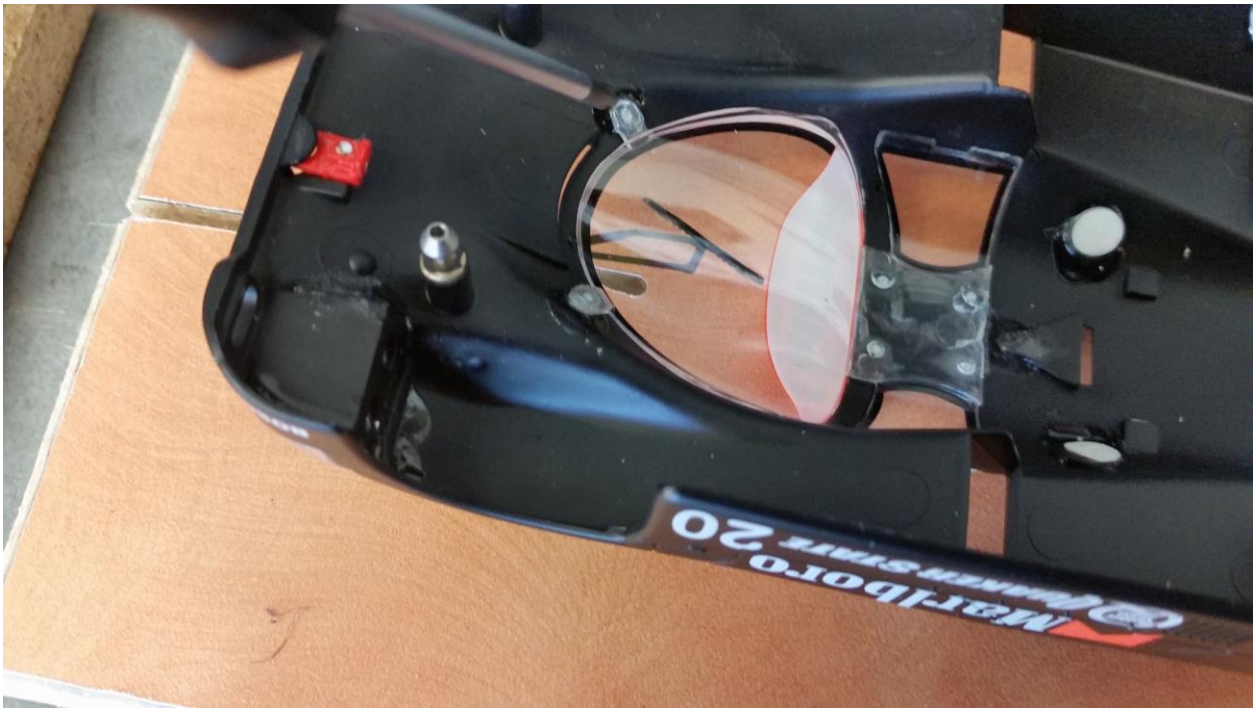

You will also want to install clear canopy glue to the rear taillights and the front clear section of the headlights to help hold both of those items in place.

Apply Shoe Goo to the following areas:  The inside of the front light buckets.





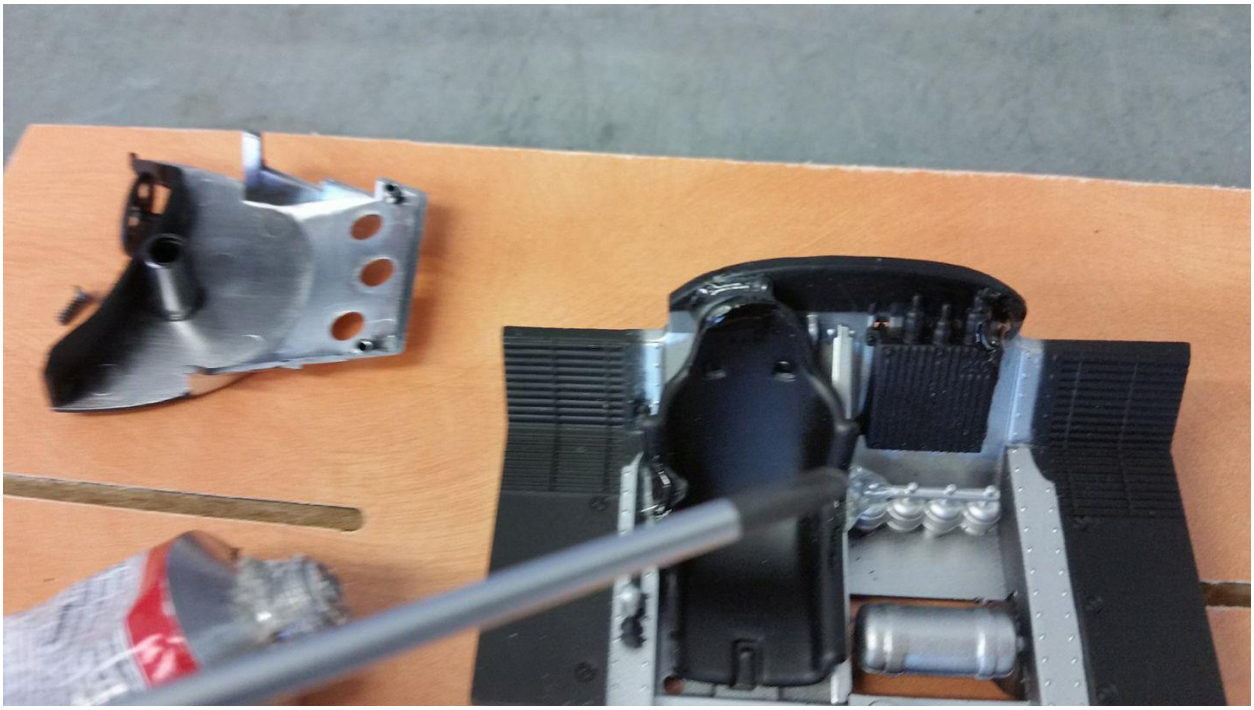
The clear windshield parts.





**NOT SHOWN:** If you are running a Porsche 962 you will also need to apply a layer of Shoe Goo to the underside of the rear wing to help keep it from breaking.

You will also want to apply Shoe Goo to the driver cockpit of the car.  You will want to make sure everything that can come lose is held in place with Shoe Goo.

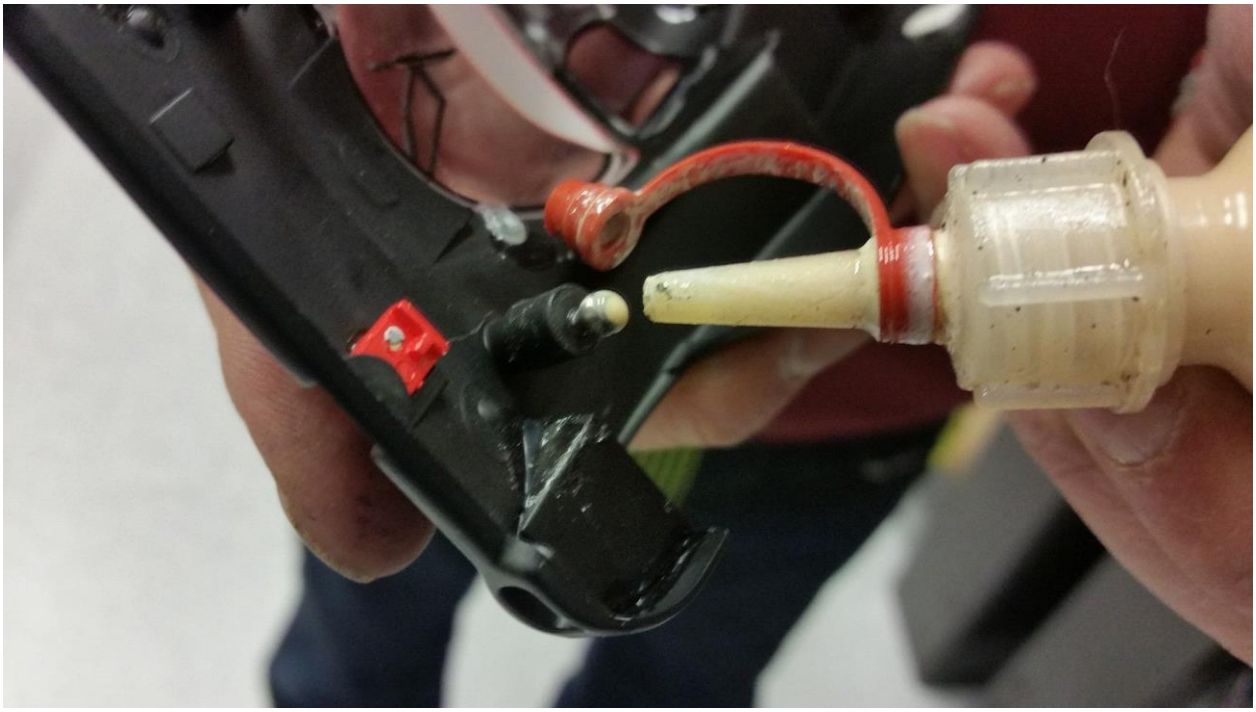


Glue the driver into his seat with Shoe Goo

Remove the body mounting screws and reduce their diameter to 3.68mm. This will make it easier for them to fit through the rubber o-rings on the chassis and will help keep the o-rings in place.

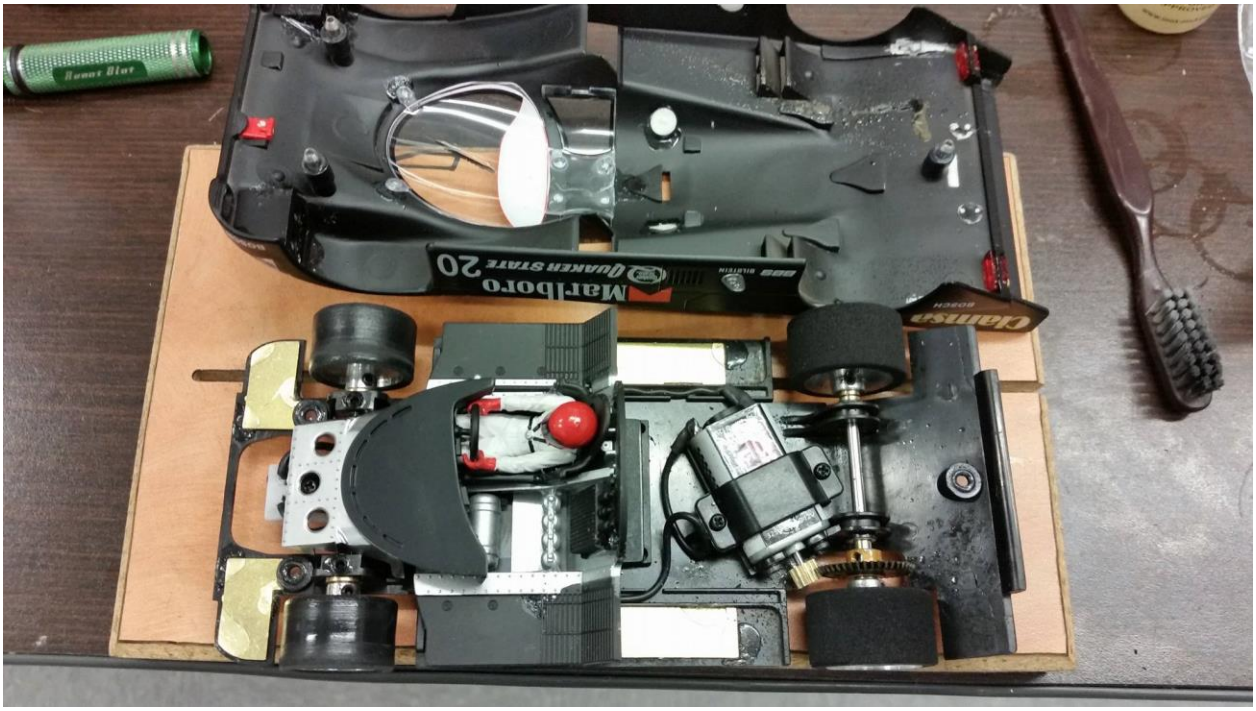

Once you have the body mounting screws filed down to 3.68mm you can re-install them in the body of the car.  Apply blue Loctite to the threads of the body mounting screws and reinstall them.  Don’t screw them in too far otherwise the body of the car will not have any float.

Put a heavy weight oil or grease on the body mounting screws so the body will slide easily on and off the chassis without pulling the O-rings out.

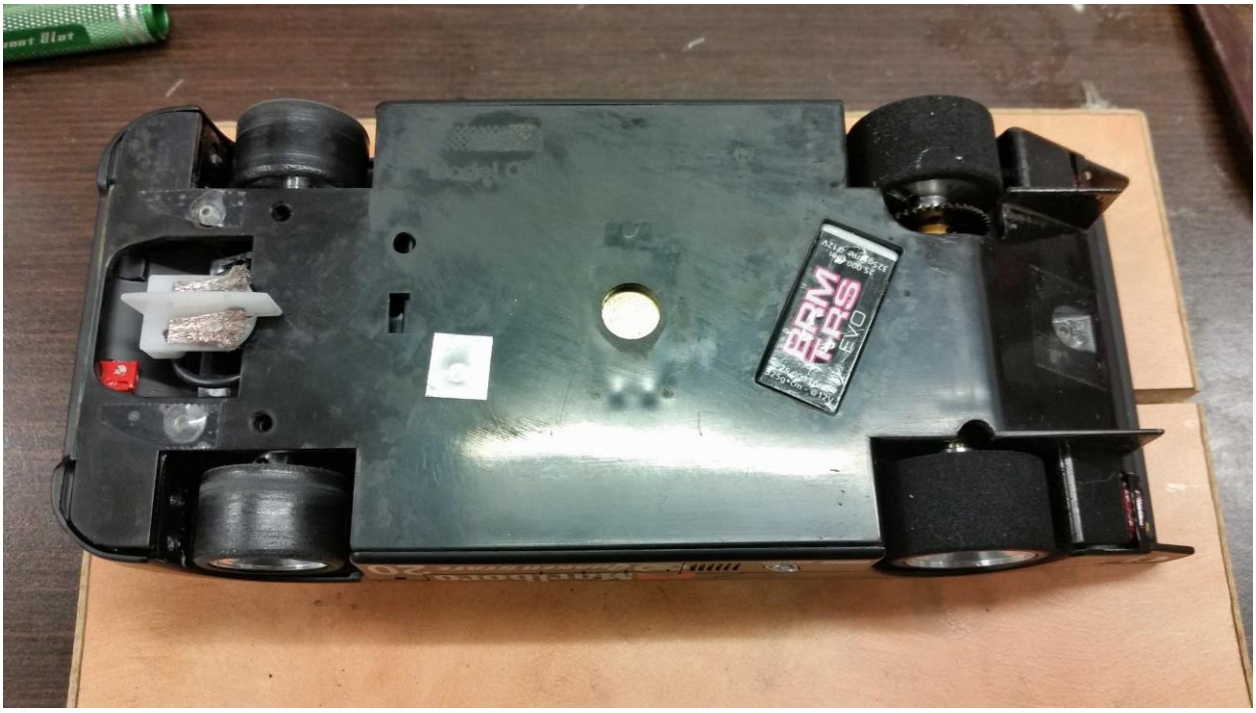


Before the blue Loctite is dry and after you apply the lubrication to the body posts you will be able to adjust the body screws to the correct depth to give you the perfect amount of body float.

Time to put the body on




Note the tape covering all of the screw heads – two front body screws, one rear body screw and one driver cockpit screw.



Weight of the car with chassis weights installed.


Magnetic downforce

Total weight with downforce.


Parts used