

ADVANCED CHASSIS CONVERSION KIT
FOR THE LOSI LMT



01

This manual shows building the OGRE_X with a right side rear motor location but you have the option to run the motor in any location front/rear/left/right.

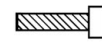
1. Trim off end of screw boss from the gear box housing.
2. Attach gear box housing and battery posts to chassis.



M3x10mm
standoff x2



M3x20mm
Cap Head x2

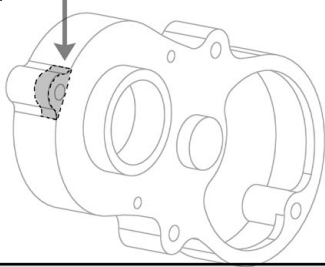


M2.5x10mm
Cap Head x2

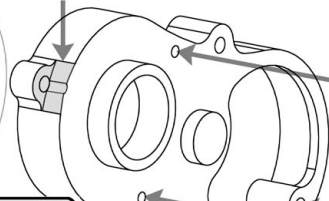


M2.5x10mm
Flat Head x1

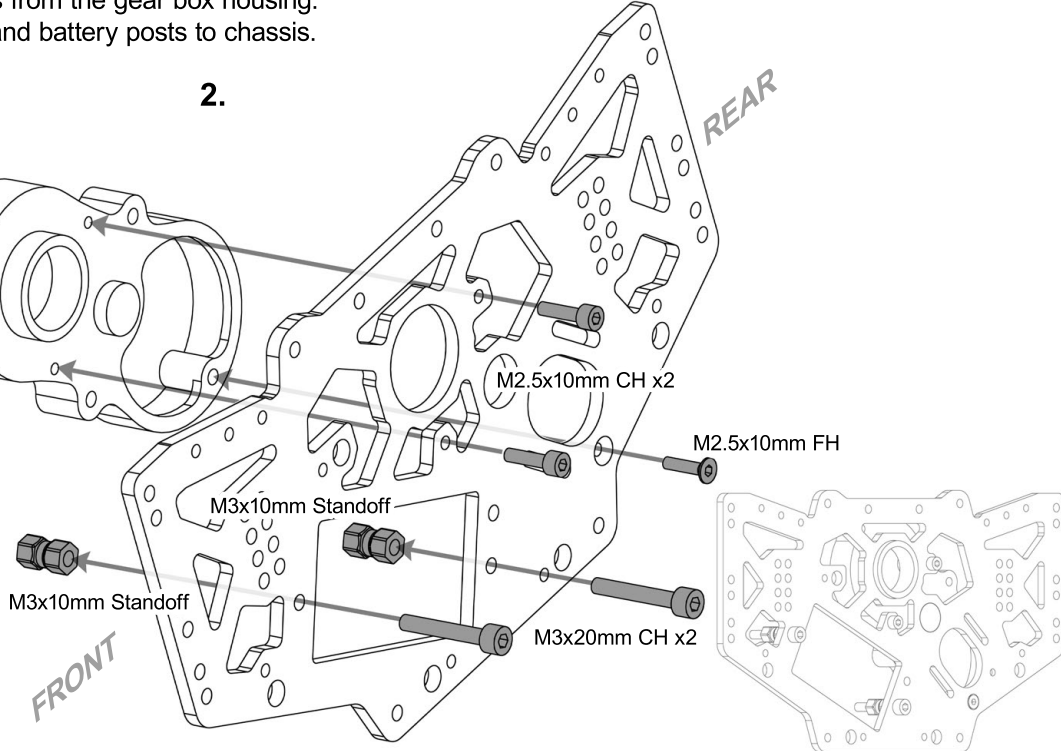
1. CUT OFF 2.5mm depth



After cut



2.

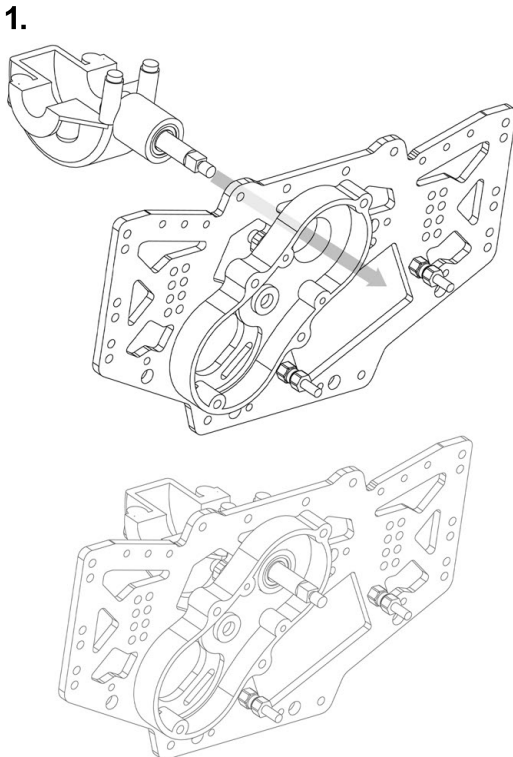


NOTE! If you do not want to trim your housing you can choose to run the motor on the left side at the rear of the chassis or the right side at the front of the chassis. Just be sure to flip your center diff so the ring gear is at the rear if you run the motor on the left side of the chassis. You will also need to pay special attention while building because some steps will be flipped!

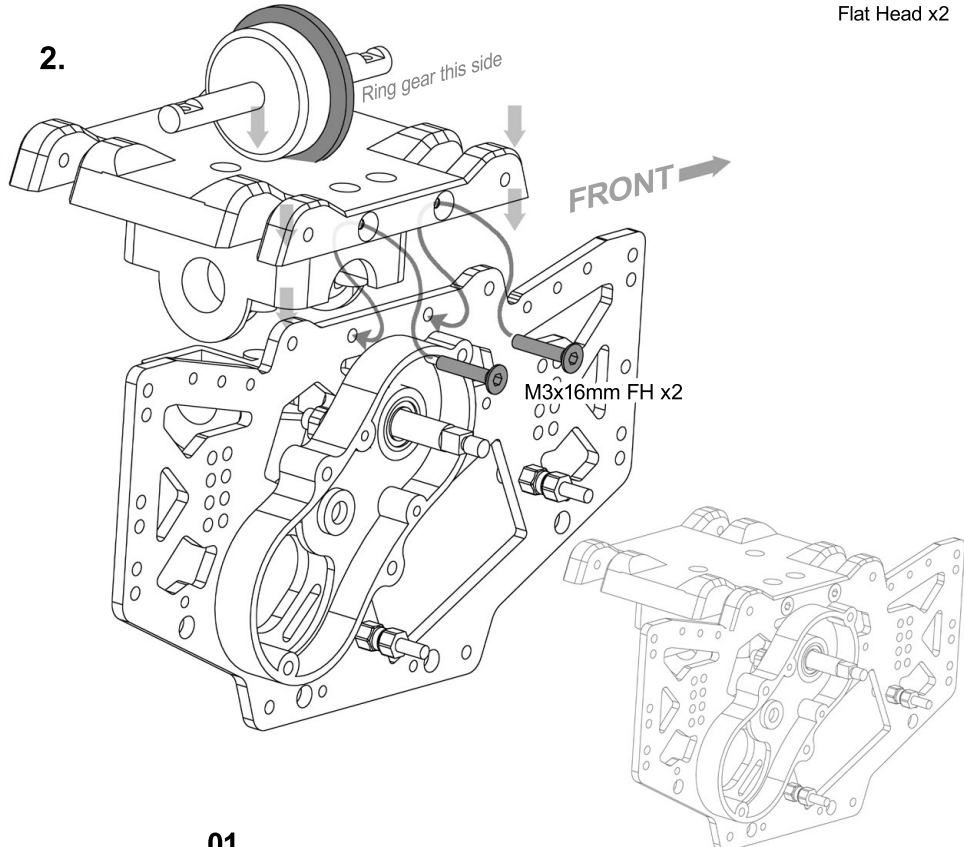
You flip it - you figure it out! ;)

1. Attach diff cap with input pinion gear installed.
2. Attach differential housing skid plate with center diff ring gear toward the front as shown.

02



2.



M3x16mm
Flat Head x2

03

1. Complete right side skid assembly.
2. Attach right side battery strap.



M3 Locknut
x2



M3x8mm
spacerx2

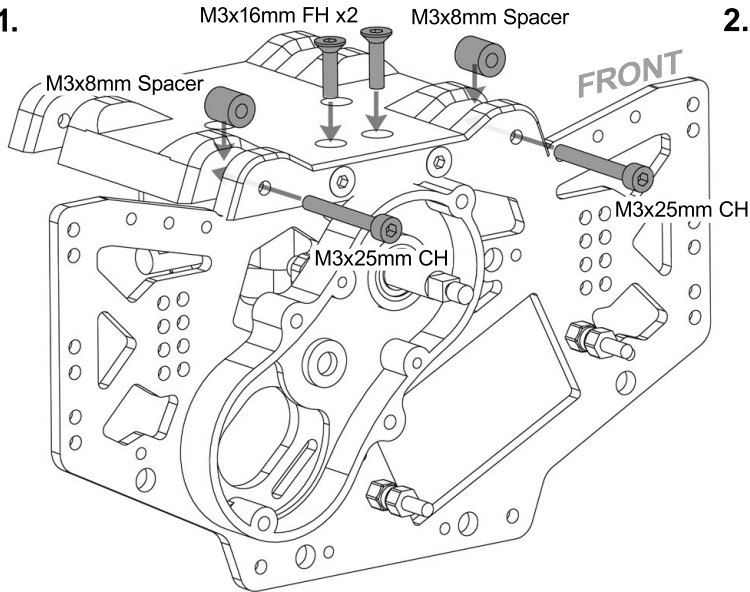


M3x25mm
Cap Head x2

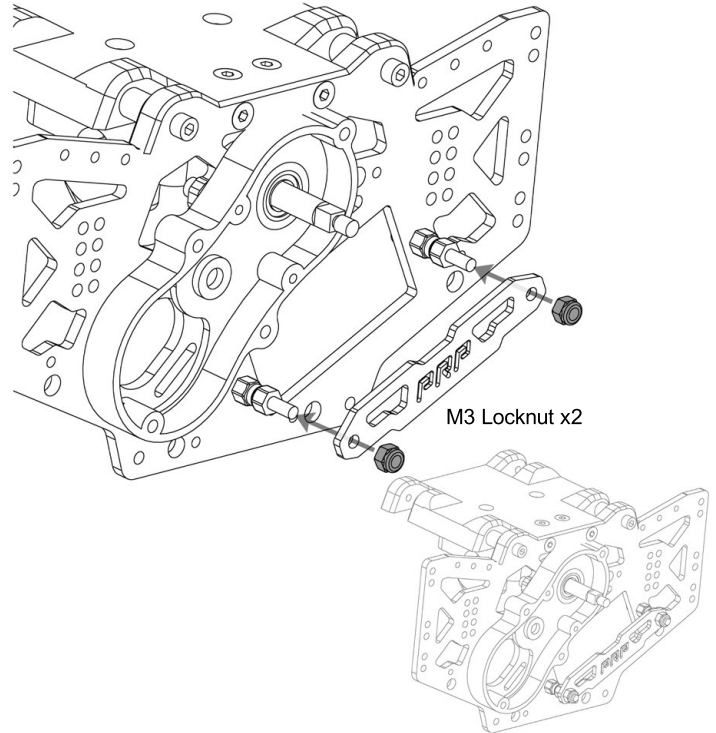


M3x16mm
Flat Head x2

1.



2.



04

1. Attach two (2) LOS241032 Cross Braces.
2. **Optional** Cross Brace installation.



M3 Washer x3

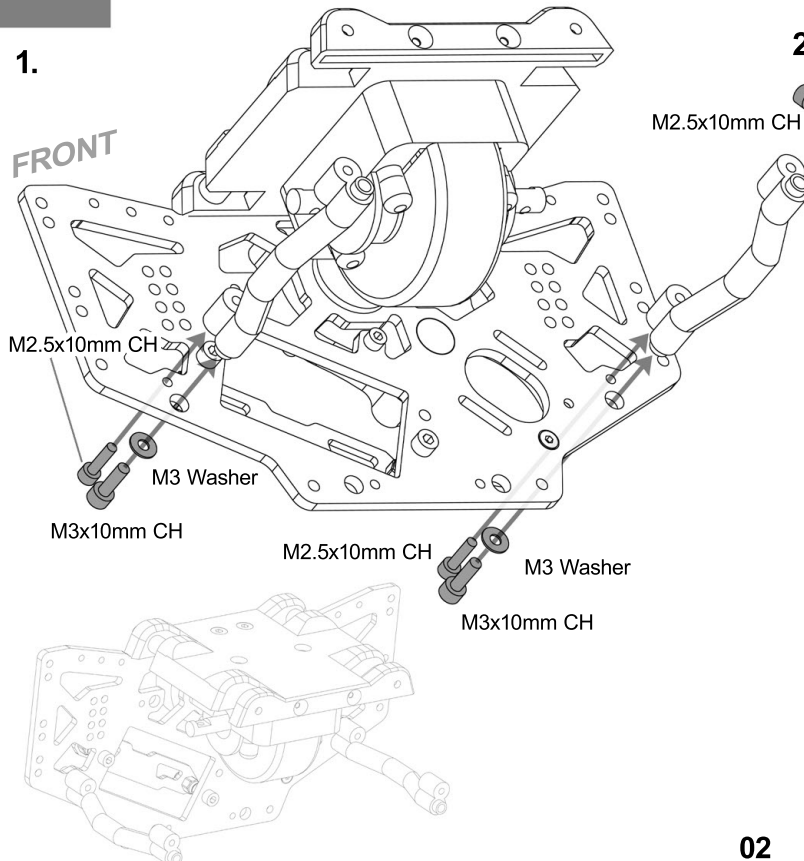


M3x10mm
Cap Head x4

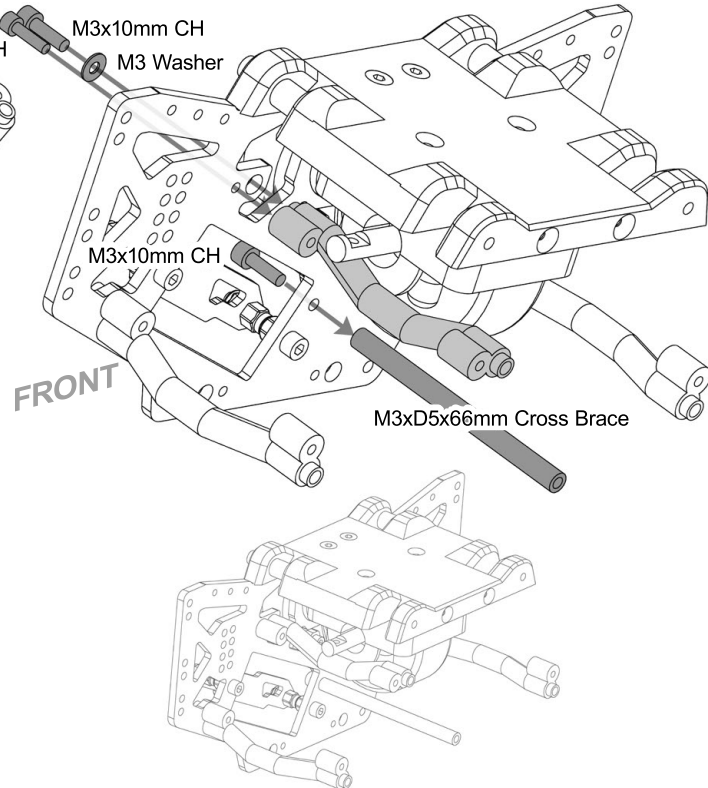


M2.5x10mm
Cap Head x3

1.

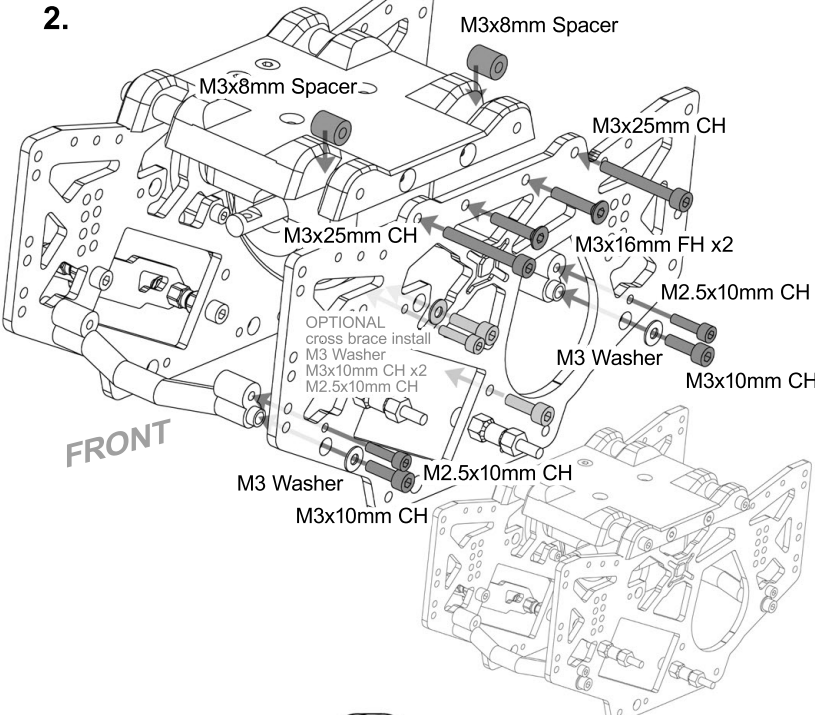
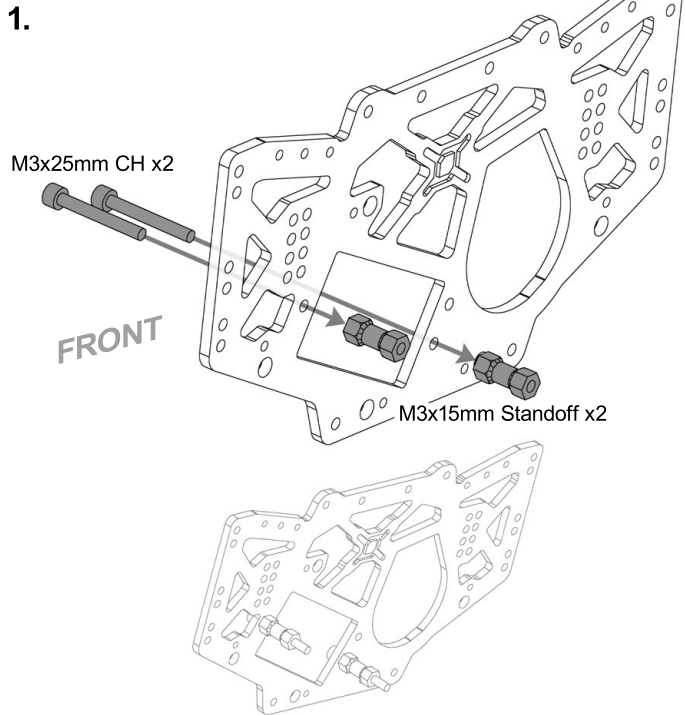
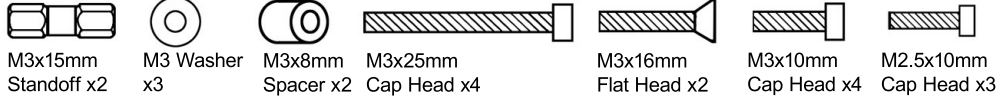


2. **Optional** Cross Brace installation.



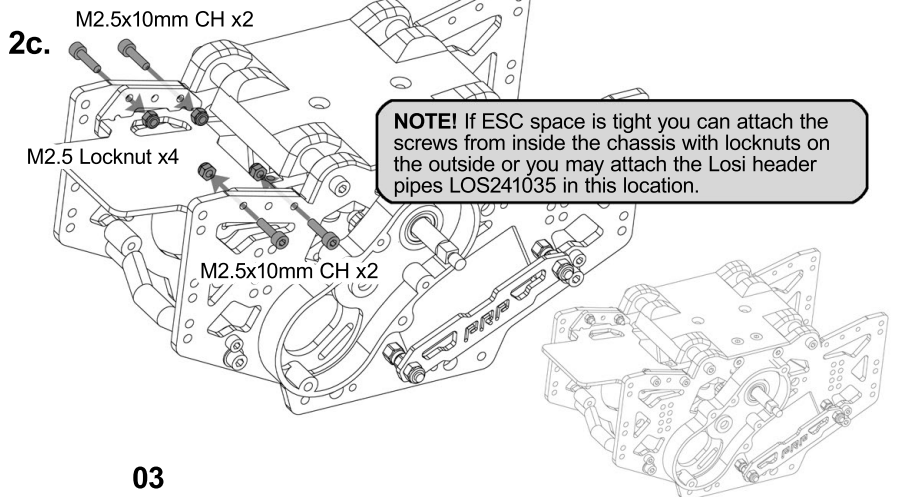
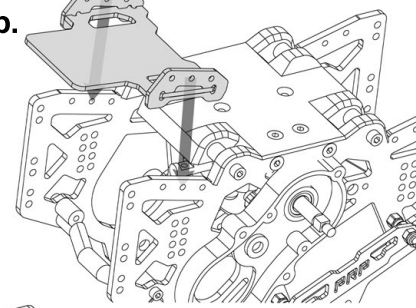
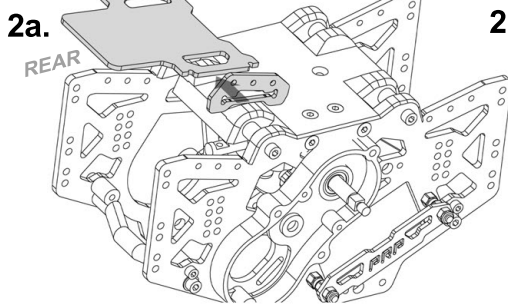
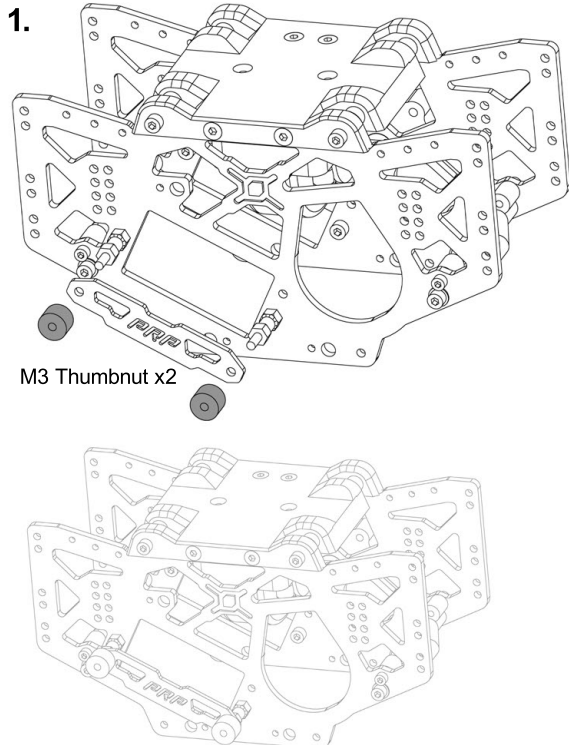
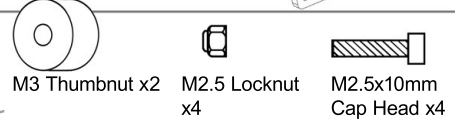
05

1. Attach left side battery posts.
2. Mount the left side chassis plate into the center diff assembly/skid carefully flexing the plate over the cross braces.



06

1. Attach battery strap.
2. Assemble and install esc tray.



NOTE! If ESC space is tight you can attach the screws from inside the chassis with locknuts on the outside or you may attach the Losi header pipes LOS241035 in this location.

07

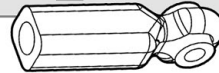
1. Build upper 4-links x4.
2. Attach upper links to chassis.



M4x2mm Plastic Spacer x4



M3 Locknut x4



M4x26mm Rod End x8

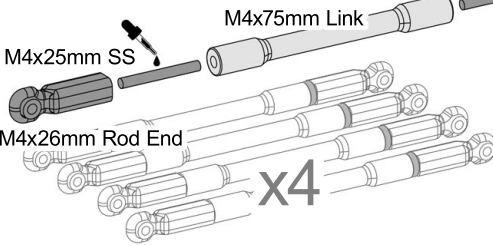


M4x25mm Set Screw x8

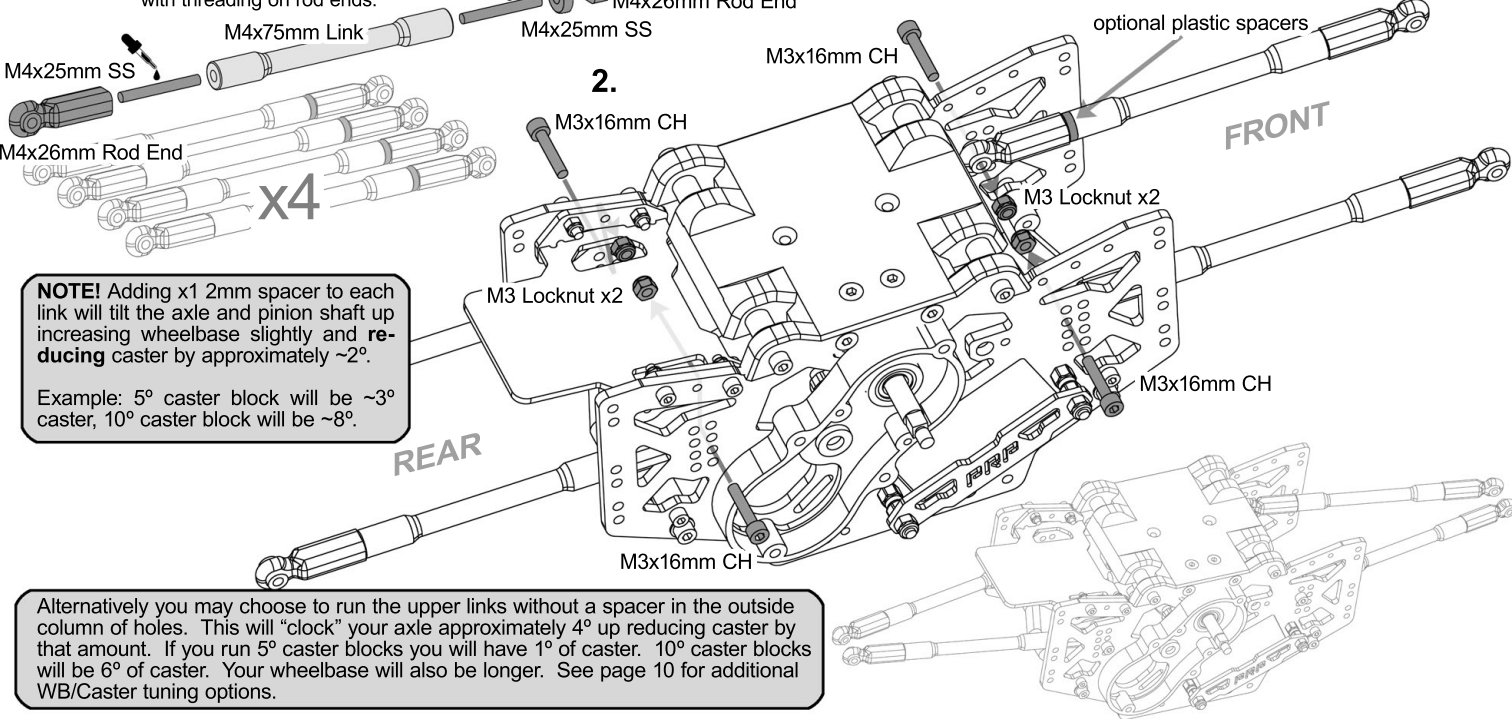


M3x16mm Cap Head x4

1. Tip: Adding a drop of light oil helps with threading on rod ends.



2.



NOTE! Adding x1 2mm spacer to each link will tilt the axle and pinion shaft up increasing wheelbase slightly and **reducing** caster by approximately $\sim 2^\circ$.

Example: 5° caster block will be $\sim 3^\circ$ caster, 10° caster block will be $\sim 8^\circ$.

Alternatively you may choose to run the upper links without a spacer in the outside column of holes. This will "clock" your axle approximately 4° up reducing caster by that amount. If you run 5° caster blocks you will have 1° of caster. 10° caster blocks will be 6° of caster. Your wheelbase will also be longer. See page 10 for additional WB/Caster tuning options.

08

1. Build rear shock tower assembly.
2. Build front shock tower assembly.

***Don't forget the sway bars!**



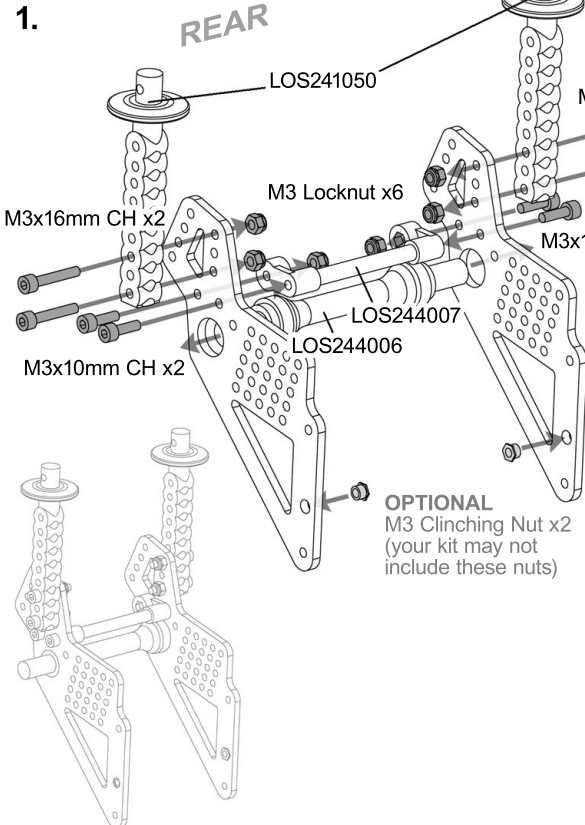
M3 Locknut x12



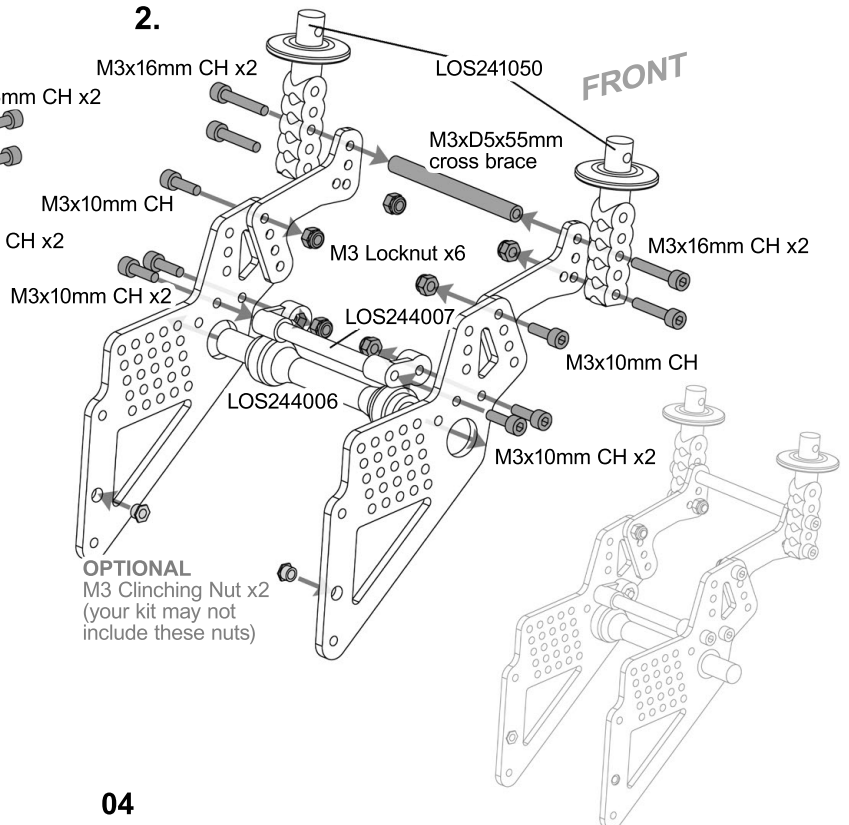
M3x16mm Cap Head x8



M3x10mm Cap Head x10

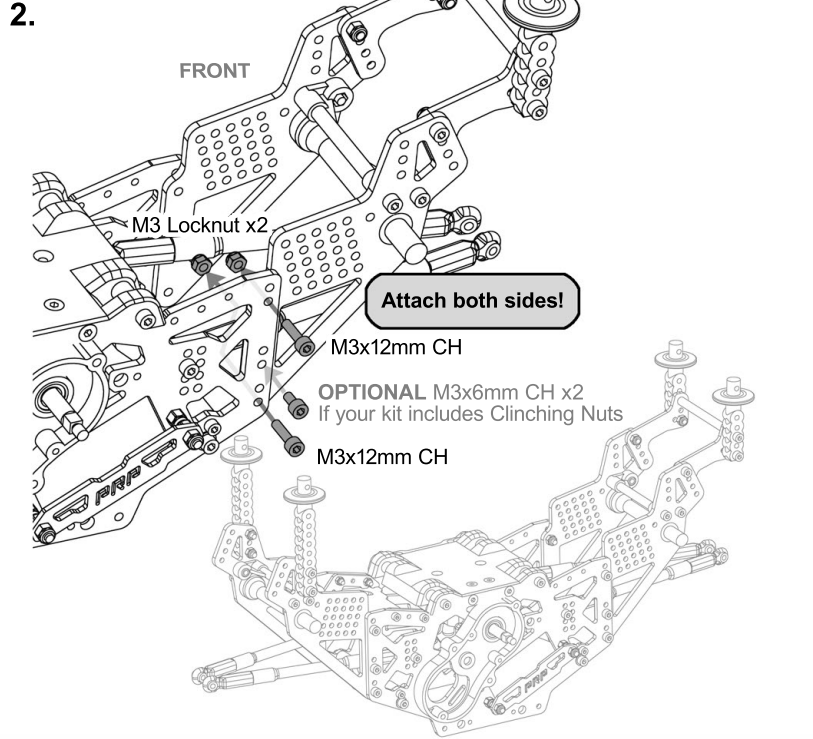
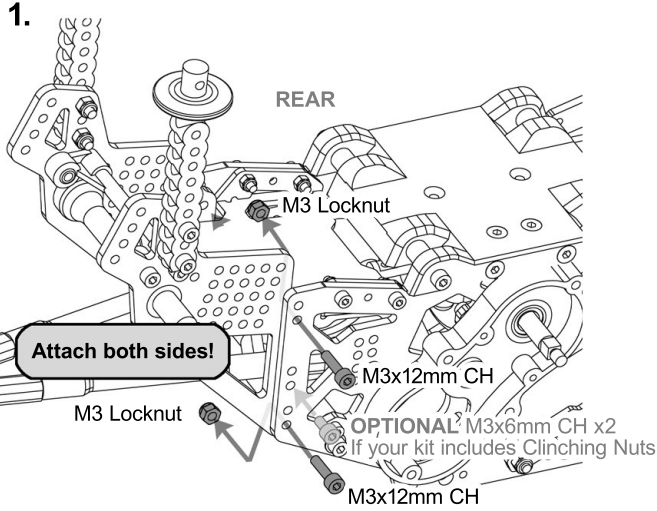


2.



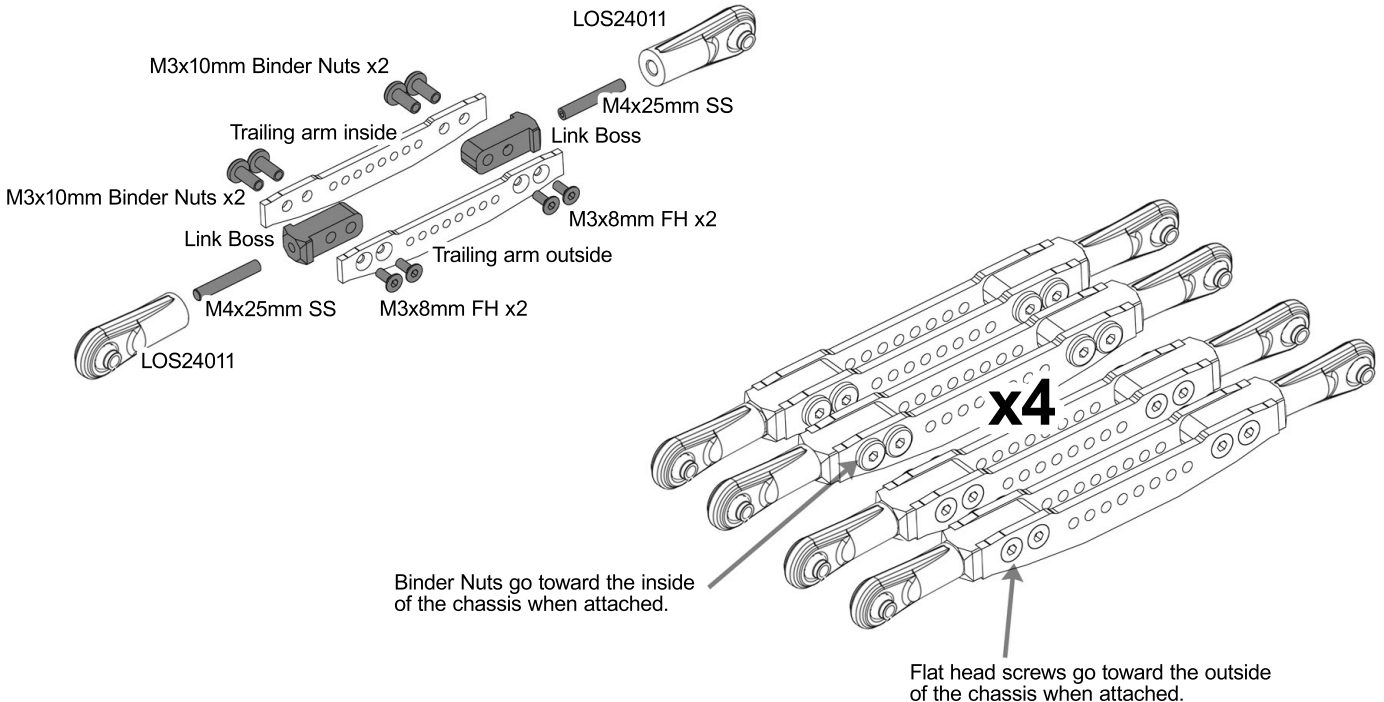
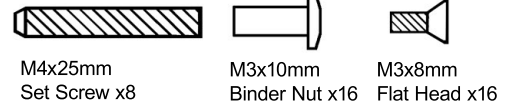
09

1. Attach rear shock tower assembly.
2. Attach front shock tower assembly.



10

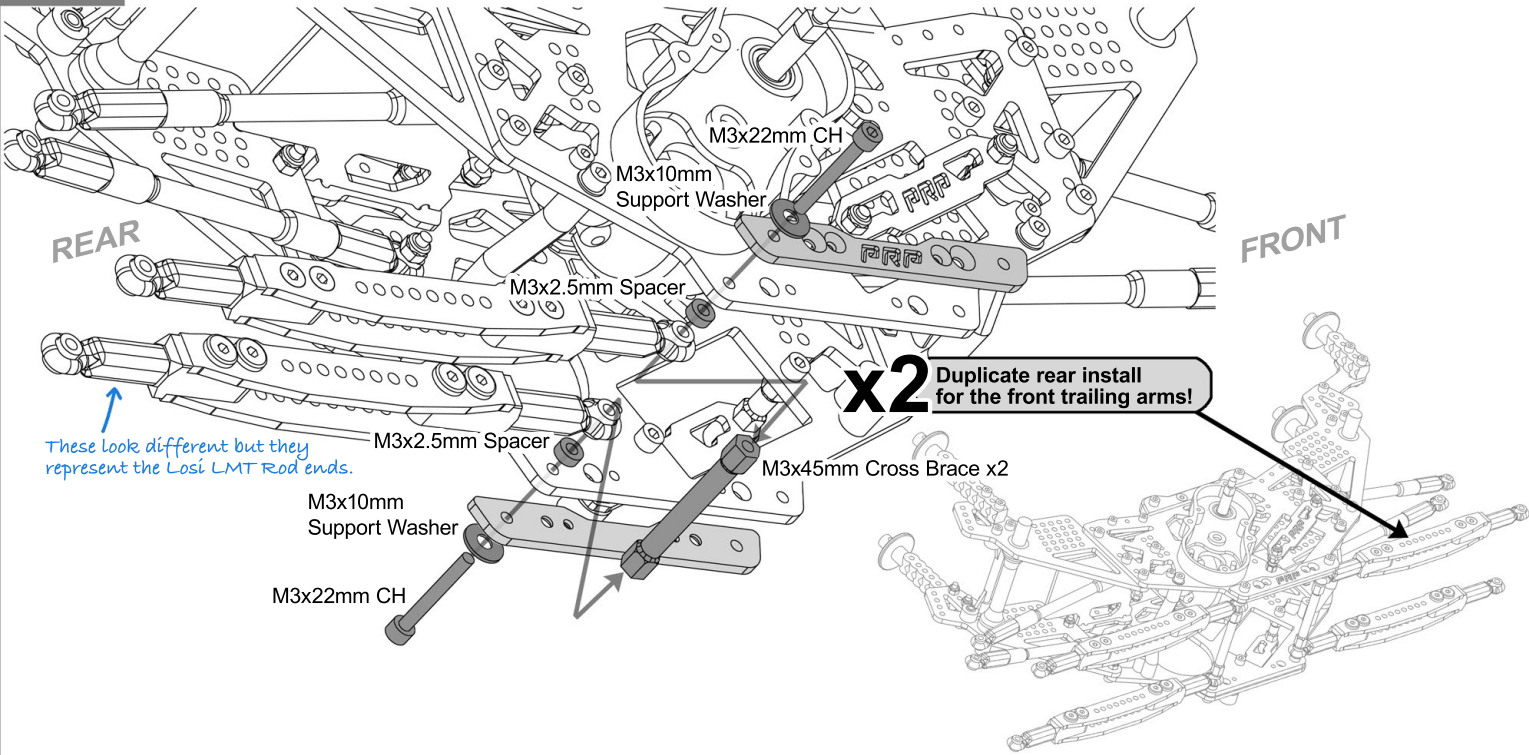
1. Build 4 Trailing Arms with Losi LMT Rod Ends.



11

1. Attach both G10 Skid Rails and all 4 Trailing Arms to the chassis.

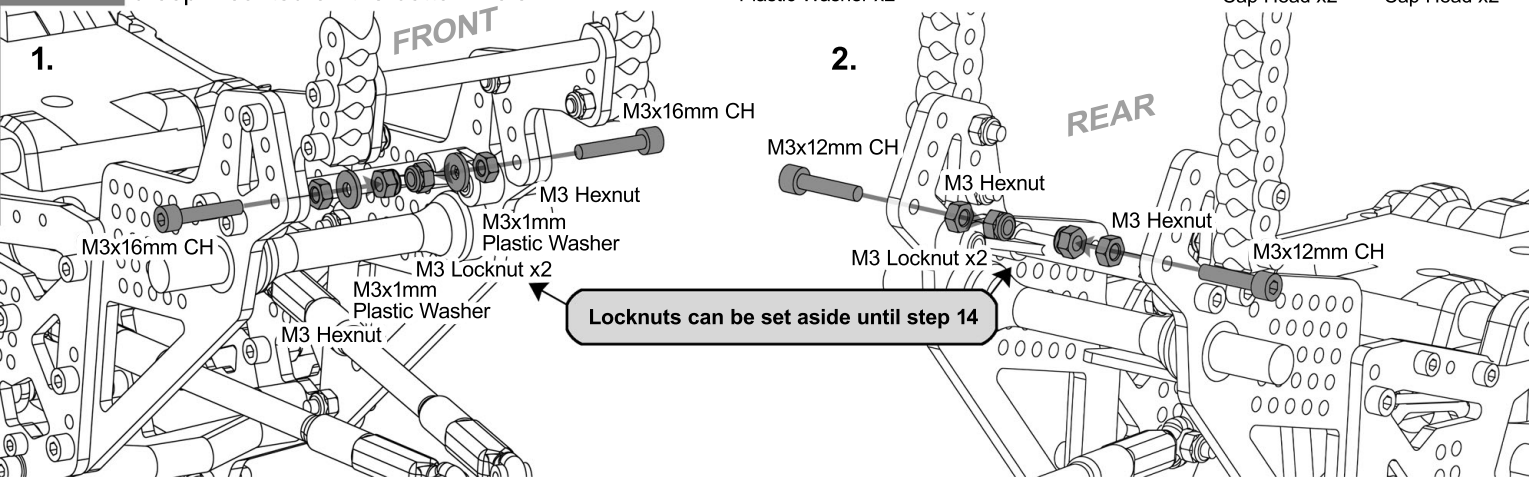
-  M3x10mm Support Washer x4
-  M3x2.5mm Aluminum Spacer x4
-  M3x22mm Cap Head x4



12

1. Attach front limit strap mounting hardware.
 2. Attach rear limit strap mounting hardware.
NOTE! 95mm limit straps will give you full droop mounted on the bottom hole.

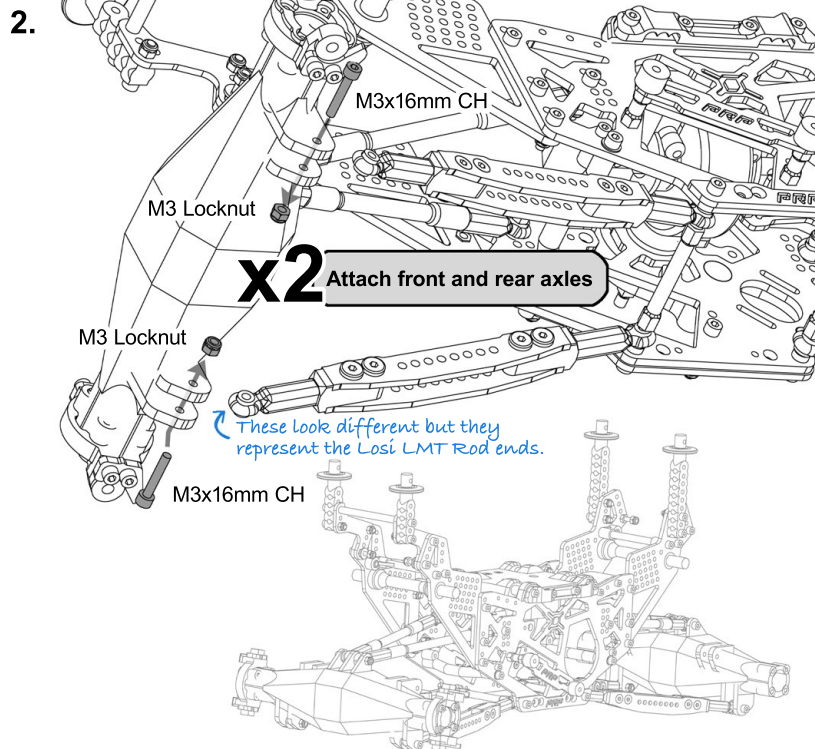
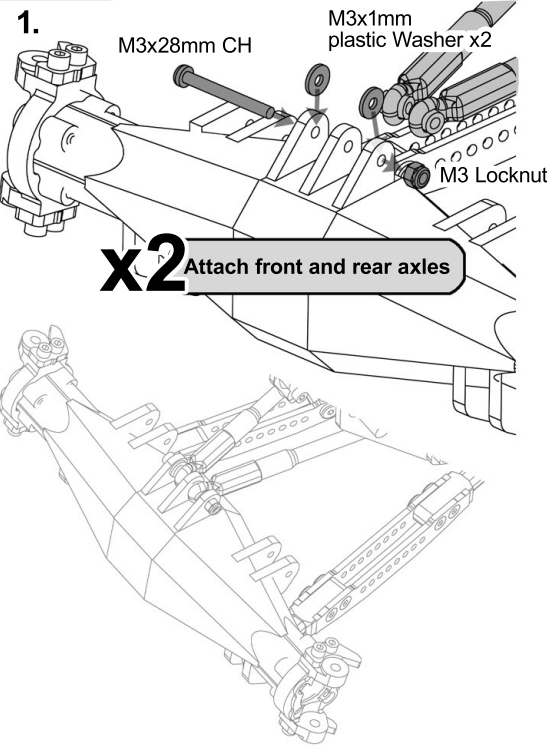
-  M3x1mm Plastic Washer x2
-  M3 Locknut x4
-  M3 Hexnut x4
-  M3x16mm Cap Head x2
-  M3x12mm Cap Head x2



13

1. Attach Upper links to axles with washers outside of the rod end pivot balls.
2. Attach trailing arm lower links to the axles.

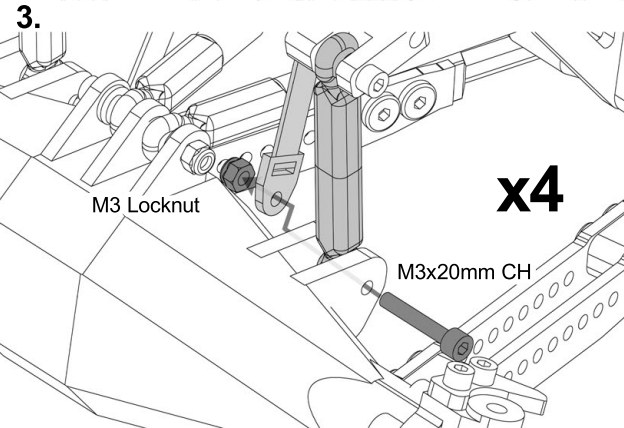
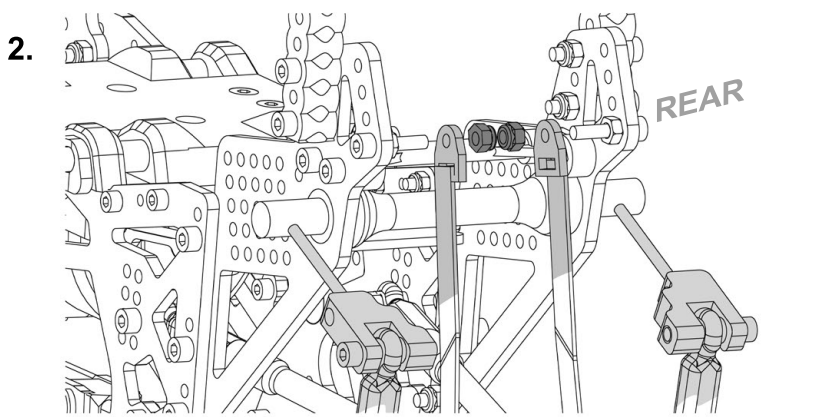
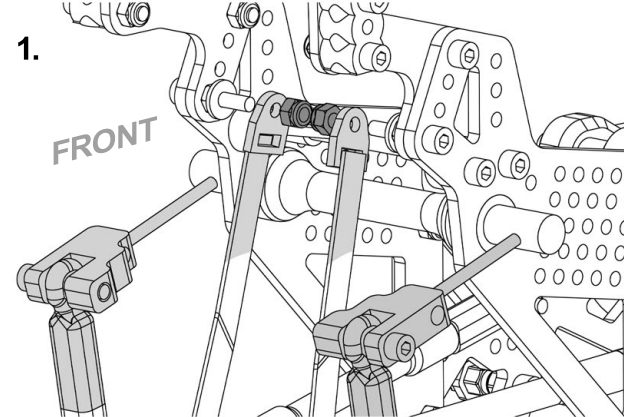
-  M3 Locknut x6
-  M3x1mm Plastic Washer x4
-  M3x28mm Cap Head x2
-  M3x16mm Cap Head x4



14

- Attach the limit straps to the shock towers and the axles.
NOTE! 95mm limit straps will give you full droop when mounted on the shock tower's bottom hole.

-  M3 Locknut x4
-  M3x20mm Cap Head x4

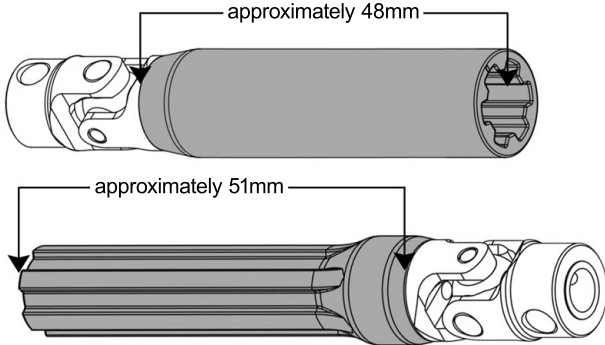


15

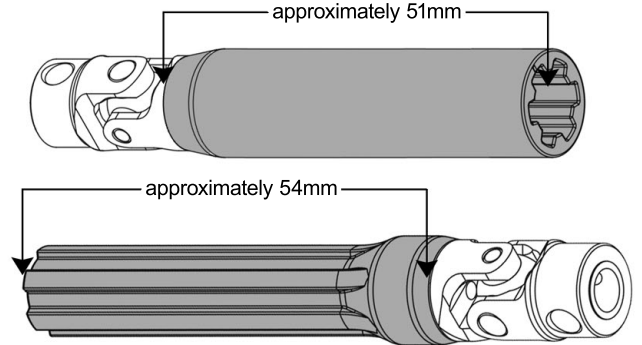
1. Cut Losi LMT Mega Center Shafts #LOS242057 down to length. Usually this is 15 to 18mm off each end depending on your setup. Take care and test fit with full suspension cycle. If you feel you cut too much thankfully replacement plastic drive shafts(#LOS242057) are only \$11.99.
2. Install drive shafts per the TLR Tuned Losi LMT manual if you need install reference.

1. Trim Lengths:

A. Shorter wheelbase or with less axle tilt/flat axle (more caster).

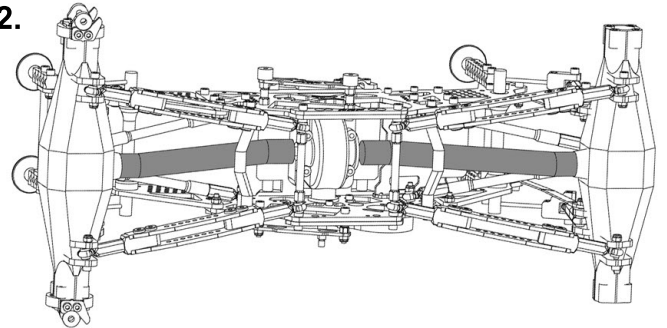


B. Longer wheelbase or with axle tilted up/angled axle (less caster)



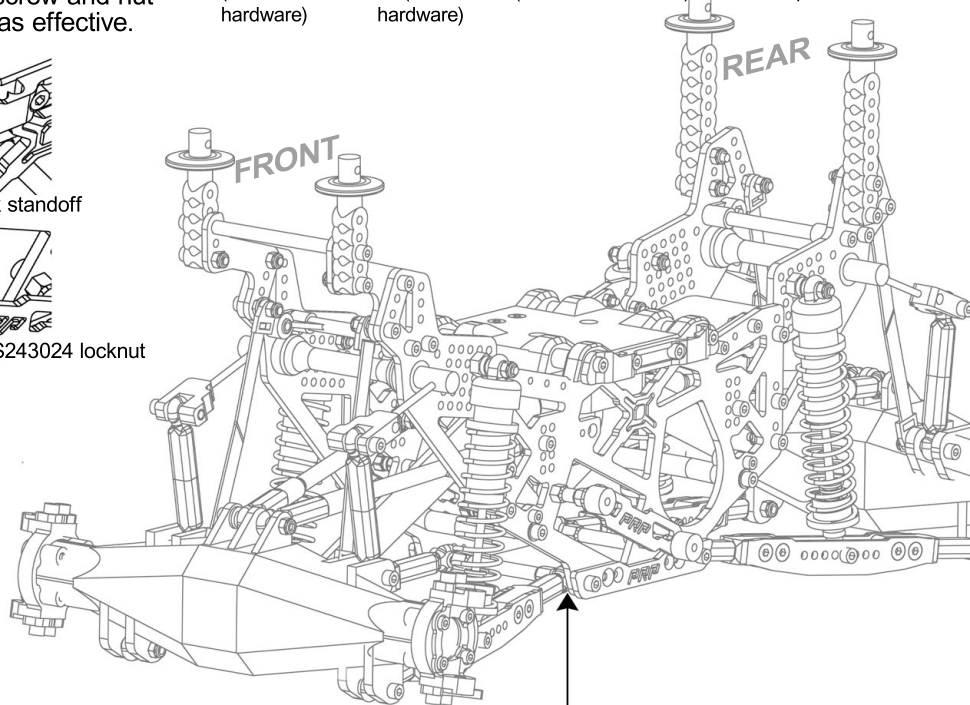
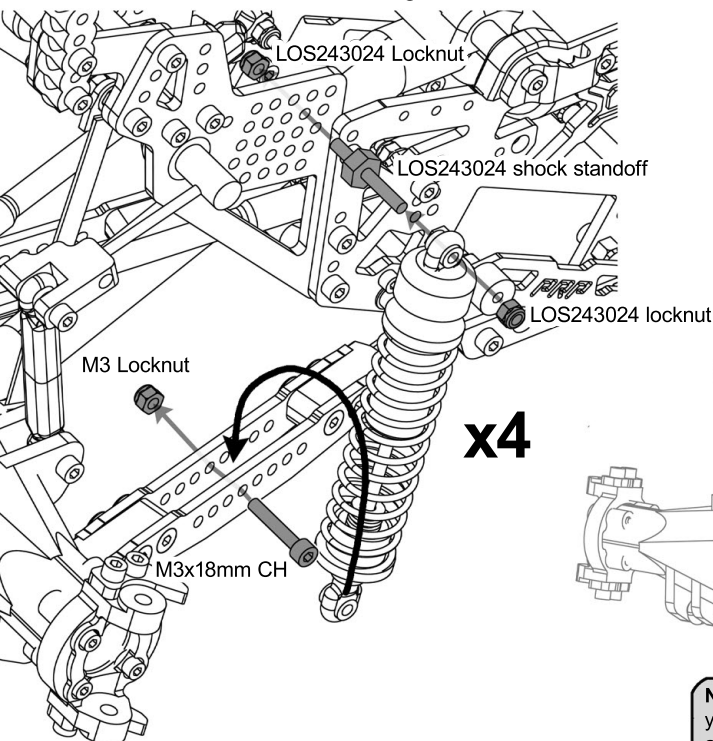
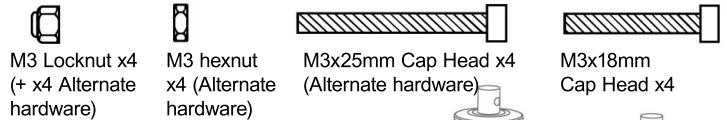
NOTE! Be sure to clean up the cut as needed for a smooth interface. The shaft should slide very free throughout the entire length of the shafts. There is only one position where the shafts mate perfectly free and smooth.

2.



16

We recommend Losi LMT TLR Tuned Shock Standoffs part # LOS243024. They are a simple install and a very solid fit with a locknut on the inside of the shock towers. Otherwise you may use the supplied screw and nut alternate hardware though it won't be as effective.



NOTE: If you're running wide shocks and having trouble with them binding on the chassis you can remove the 2.5mm aluminum spacer on the lower link trailing arms and then use a 50mm cross brace between the trailing arm pivot balls. And of course you can space the top of the shocks out further if absolutely necessary.

17

Motor mounting: 1. We recommend testing motor positions and possible wire configurations **prior to soldering!** Then take note of wire routing and solder the motor wires on **before installing** the motor. 2. Attach motor to chassis. Route wires to ESC and lastly solder wires to ESC. See **Step 19** for a 3D print wire router option.



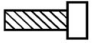
M3 Lock Washer x2



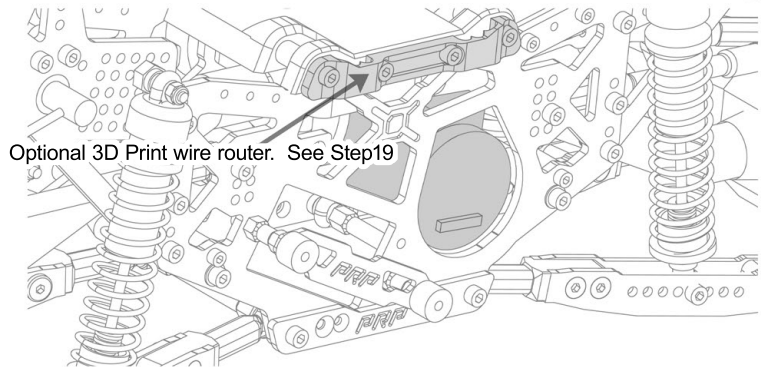
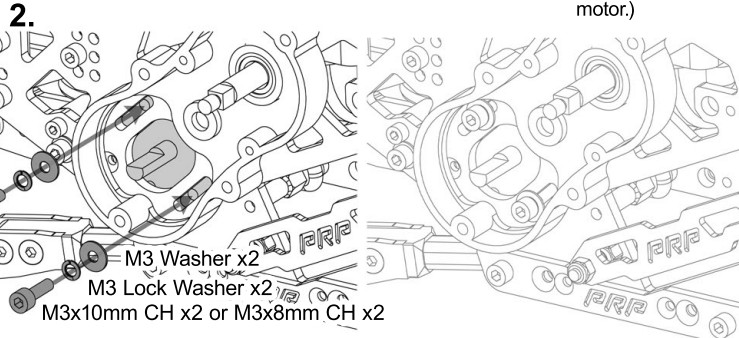
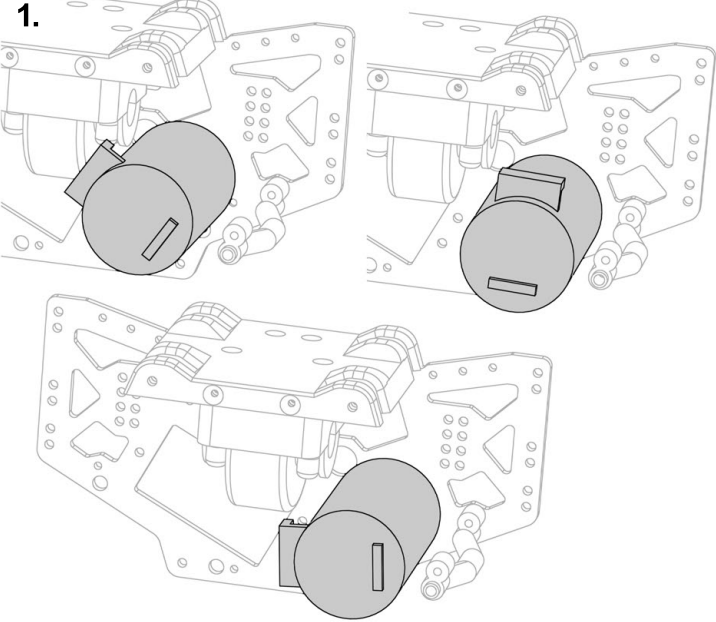
M3 Washer x2



M3x10mm Cap Head x2

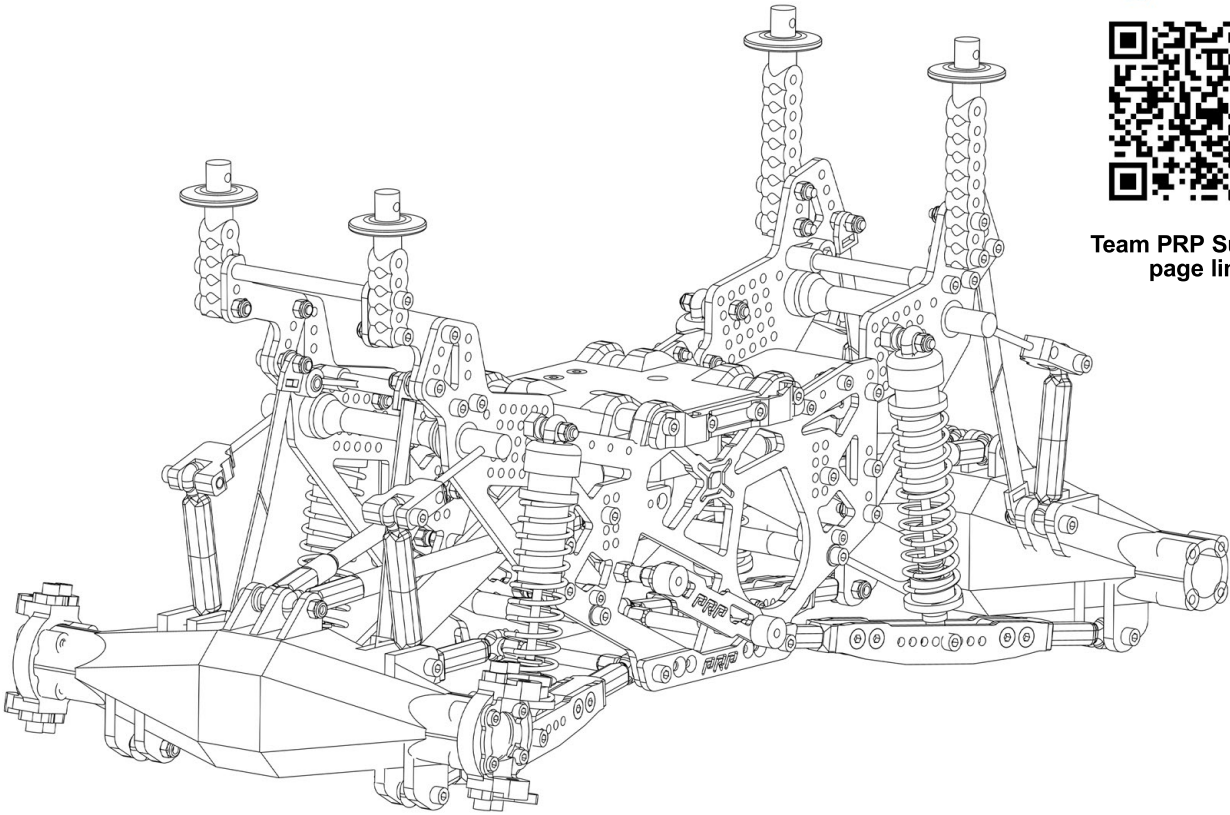


M3x8mm Cap Head x2 (If 10mm is too long for your motor.)



18


Complete your build as you normally would with your remaining LMT parts and electronics. Refer to the TLR Tuned LMT Manual if you need build reference. **NOTE!** If your kit includes **Team PRP Option Parts** please download their individual instruction sheets from our shop support page at teamprp.bigcartel.com/support.



Team PRP Support page link

19

Optional installs and wheelbase adjustments

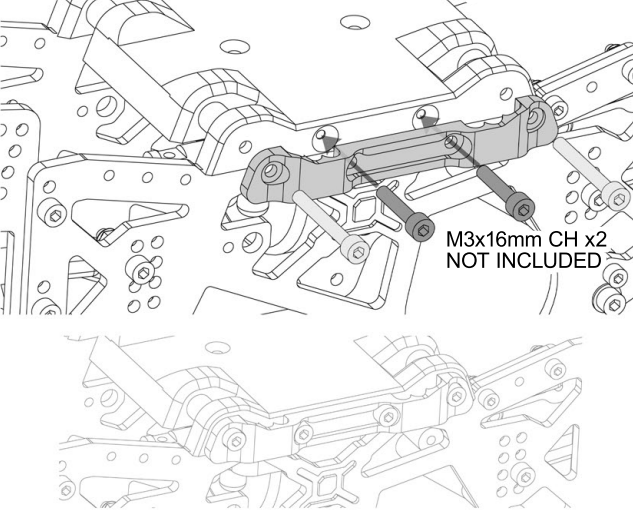


M3x12mm
Flat Head x4

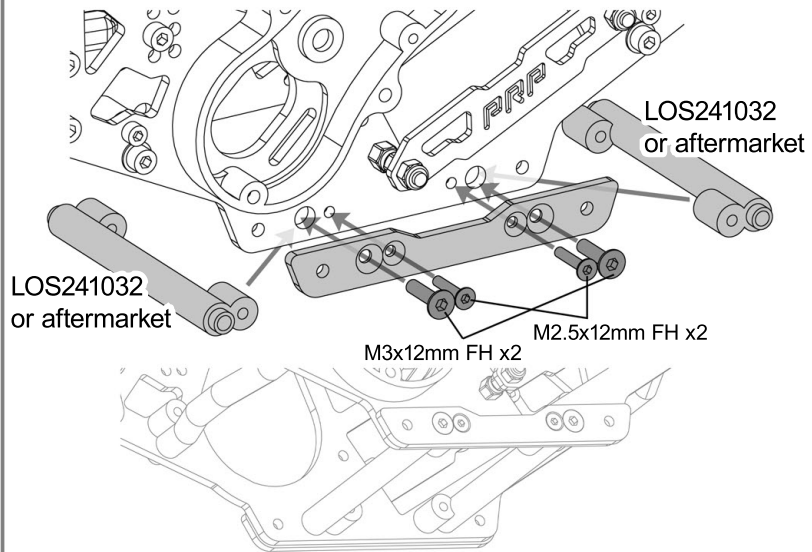


M2.5x12mm
Flat Head x4

1. Wire Router 3D STEP File available online on the shop support page

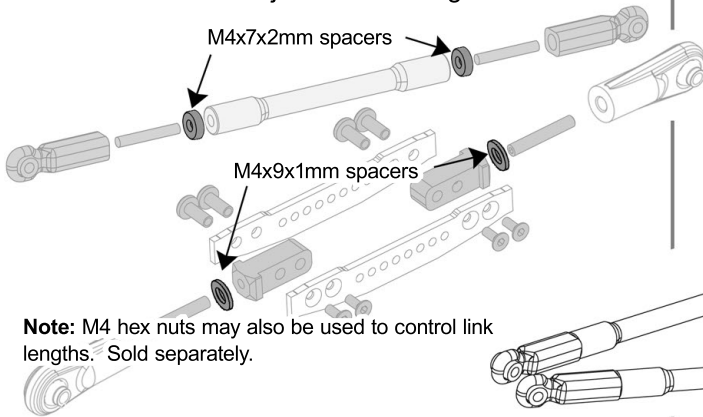


2. Lower Cross Braces



3. 4-link tuning kit: To fine tune wb or caster angles add/remove any variable of spacers to your links.

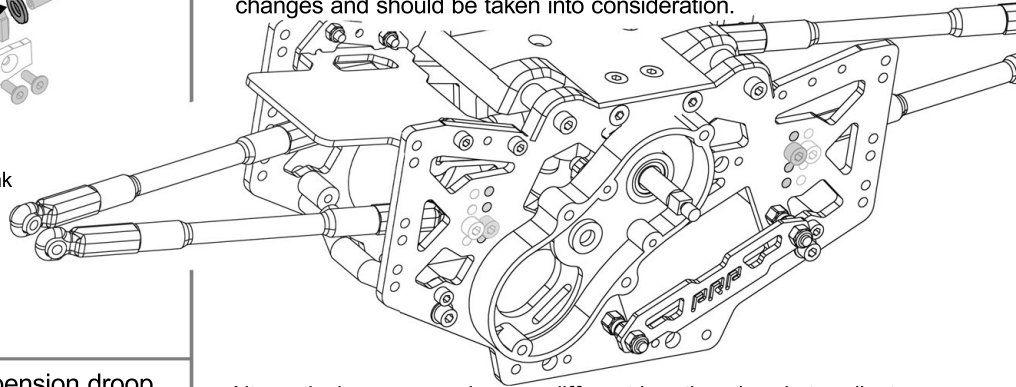
- M4x7x2mm x8 to adjust upper links.
- M4x9x1mm x8 to adjust lower trailing arms.



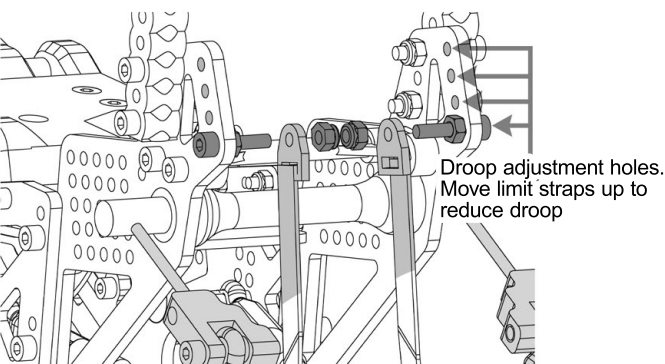
Note: M4 hex nuts may also be used to control link lengths. Sold separately.

5. Additional wheelbase/caster adjustment: To reduce wheelbase (WB) you may remove any spacers (or m4 nuts) you may have intalled from the upper and lower links. When shortening WB you may also need to trim the LMT Mega center driveshafts back further to allow more compression and/or reduce suspension droop. To increase WB you may add spacers and/or move the upper links to the outside column of holes.

NOTE: Caster angles will change depending on your link length changes and should be taken into consideration.



4. Droop: To fine tune the amount of suspension droop simply move your limit straps on the column of holes on the shock towers.



Alternatively you may also use different length rod ends to adjust your wheel base further. Axial makes 8mm wide pivot balls and shorter rod ends for their RBX10 kit (Part #'s AXI234025 & AXI234028) and Vitavon makes 8mm wide pivot balls for rod ends with 5.8mm hole diameter such as the RC4WD, Traxxas, RPM ends. But Vitavon comes with a warning! The Vitavon balls are a headache due to most of them requiring to be cleaned out. Or of course you can use any M4 rod end which usually come with 7mm to 7.5mm wide pivot balls requiring the gaps to be shimmed for proper installation. Changes in wheelbase will affect how much suspension droop the axles can achieve before the universal joints on the drive shafts bind up and must be taken into account! The longer the wheelbase the more suspension droop can be achieved. If you make big WB changes get extra sets of center drive shafts to cut to custom lengths.