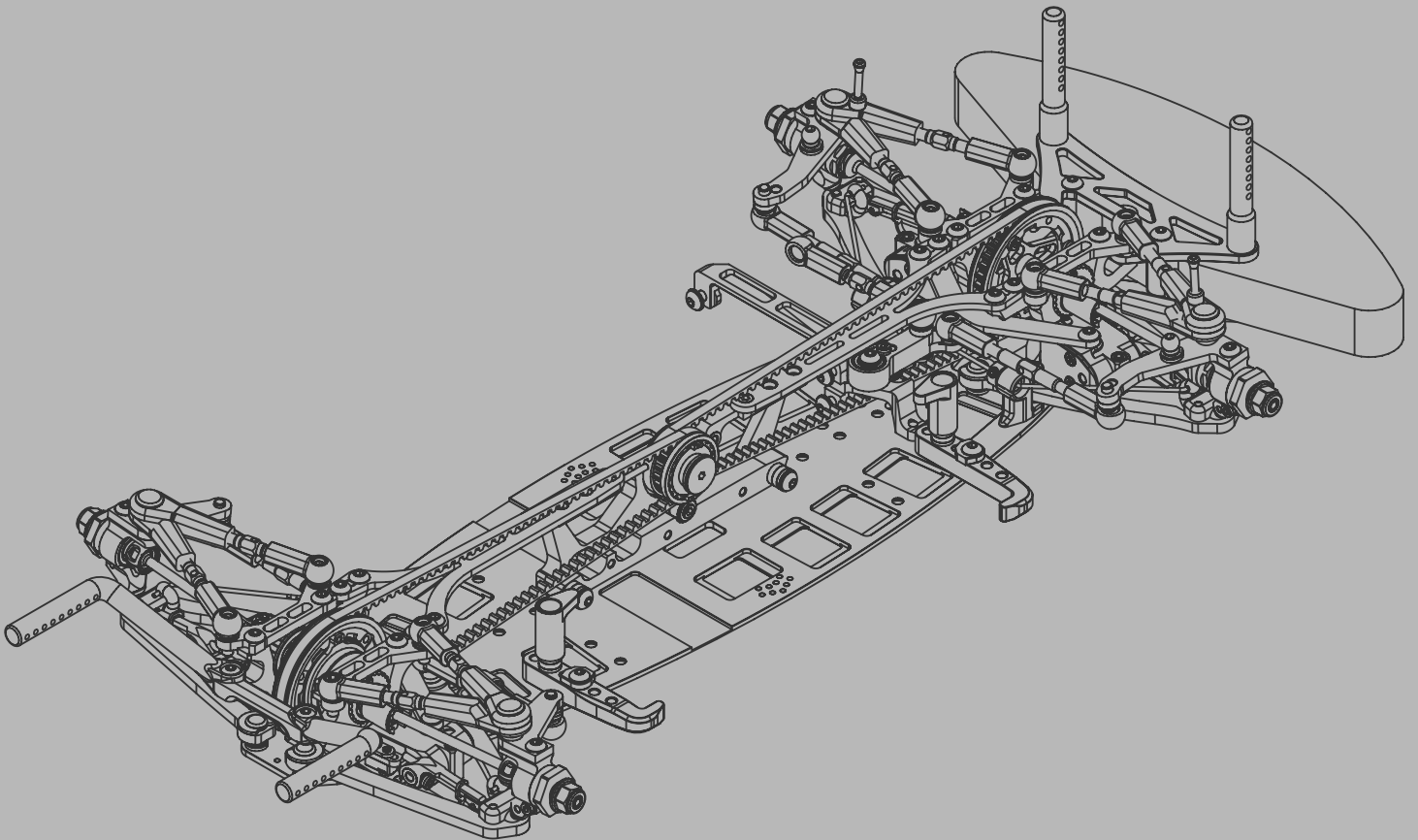


# A800RR

1/10-SCALE TOURING CAR



## INSTRUCTION MANUAL

## INTRODUCTION

Congratulations on purchasing your Awesomatix car!

The A800RR car was produced by UAB “Awesomatix” company.

The A800RR car utilises many unique features, including some patented innovations.

## BEFORE YOU START

The A800RR car is a high-quality, innovative 1/10-scale touring car and should be built only by users with previous experience building R/C model racing cars.

This is not a toy and is not intended to be used by children without direct supervision of a responsible, knowledgeable adult. Read the instruction manual carefully and fully understand it before beginning assembly. If you have any problems or questions please do not hesitate to contact the Awesomatix team at [support@awesomatix.com](mailto:support@awesomatix.com).

If, for any reason, you decide that you do not want your A800RR car you must not begin assembly.

Your A800RR car cannot be returned to UAB Awesomatix for a refund or exchange if it has been fully or partially assembled.

This kit is a radio controlled model racing product and could cause harm and personal injury.

The A800RR car is designed for use on r/c car race tracks. It should not be used in general public areas.

UAB Awesomatix accept no responsibility for any injuries caused by making or using this kit.

Due to policy of continuous product development the exact specifications of the kit may vary.

UAB Awesomatix do reserve all rights to change any specifications without prior notice. All rights reserved.

## ASSEMBLY NOTES

Before starting each build-stage check that you have the right quantity and size of items for the build-stage. To assist you with assembling your A800RR car, we have included full-size images of all the small hardware components. You can place each part directly on the images to easily verify their size and length.. You can find useful tips, pictures and advices regarding the A800RR platform at the following link: <http://site.petitrc.com/reglages/awesomatix/SetupSheetsAwesomatixA800RR.html>

## GENERAL PRECAUTIONS

- Many of the items in this kit are small enough to be accidentally swallowed and are therefore potential choking hazards, making them potentially fatal. Please ensure that when assembling the kit you do so out of the reach of small/young children.
- Take care when building, as some parts may have sharp edges.
- Please read this manual carefully to understand which ancillary items (tools, electrics, electronics etc) are used with this kit. UAB “Awesomatix” accepts no responsibility for the operation of any such ancillary items.
- Exercise care when using tools and sharp instruments.
- Follow the operating instructions for the radio equipment at all times.
- Never touch rotating parts of the car as this may cause injury.
- Keep the wheels of the model off the ground when checking the operation of the radio equipment.
- To prevent any serious personal injury and/or damage to property, be responsible when operating all remote controlled models.
- The model car is not intended for use on roads or areas where its operation can conflict with or disrupt pedestrian or vehicular traffic.
- Do not run your car in poor light or if it goes out of sight. Any impairment to your vision may result in damage to your car or, worse, injury to others or their property.
- As a radio controlled device, your car is subject to radio interference from things beyond your control. Any such interference may cause a loss of control of your car so please consider this possibility at all times.
- When not using RC model, always disconnect and remove battery.
- Insulate any exposed electrical wiring to prevent dangerous short circuits. Take particular care in wiring, connecting and insulating cables. Make sure cables are always connected securely. Check for loose connectors and if so reconnect them securely. Never use R/C models with damaged wires. A damaged wire is extremely dangerous and can cause short-circuits resulting in fire.

## EQUIPMENT RECOMMENDED (NOT INCLUDED)

- Radio Transmitter
- Radio Receiver
- Electronic Speed Control
- Steering Servo
- Servo Horn
- Electric Motor
- Pinion Gear (64 or 48 Pitch)
- Spur Gear (64 or 48 Pitch)
- 7.4 V Li-Po Battery
- 190mm Body Shell
- Touring Car Wheels, Tires, Inserts

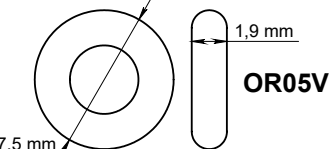
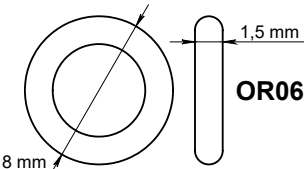
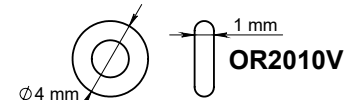
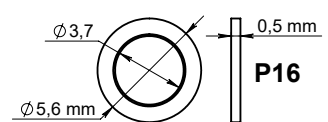
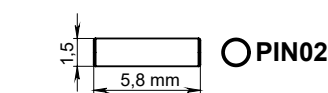
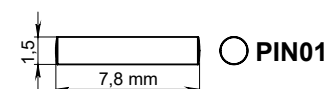
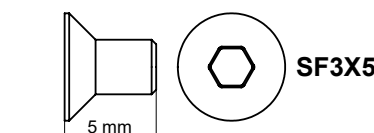
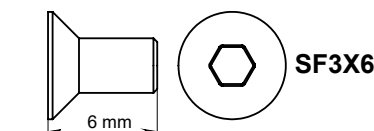
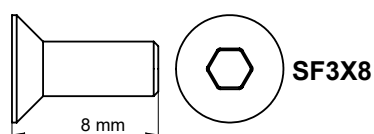
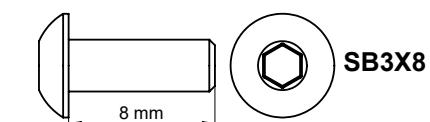
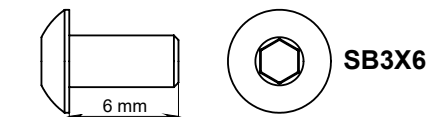
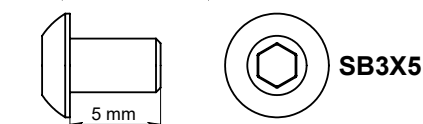
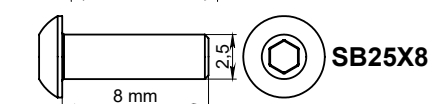
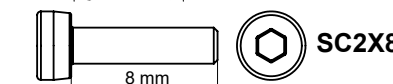
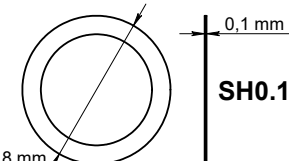
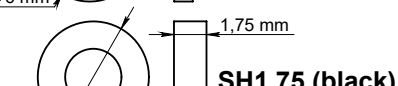
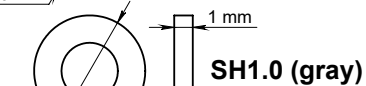
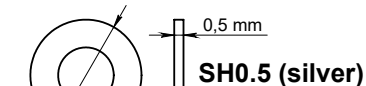
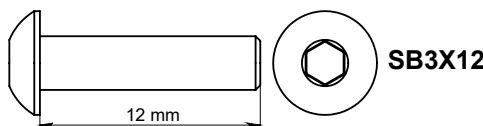
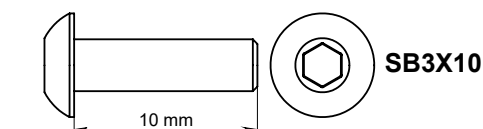
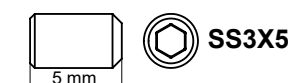
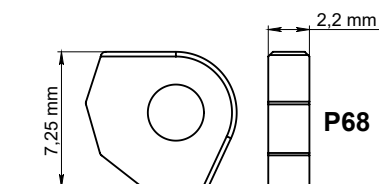
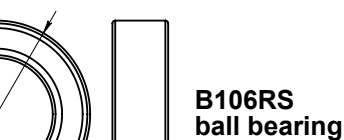
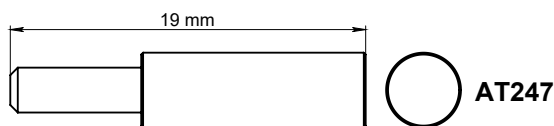
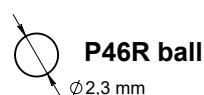
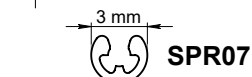
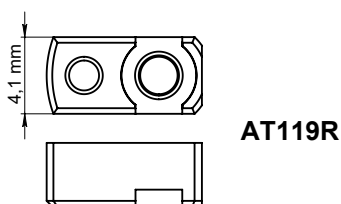
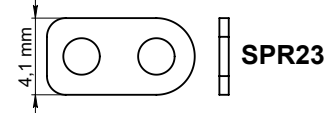
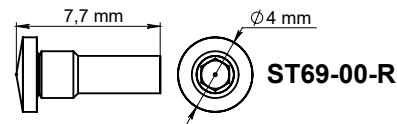
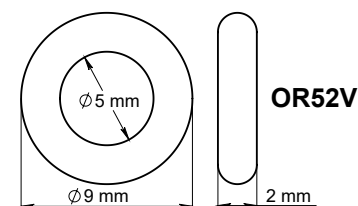
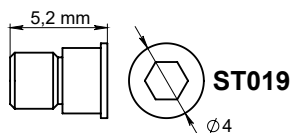
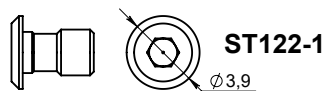
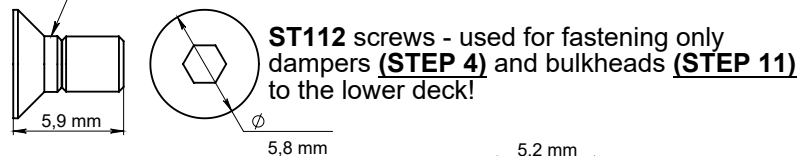
## TOOLS RECOMMENDED (NOT INCLUDED)

- 1.5mm, 2.0mm Hex Driver
- 5.5mm, 3/8, 10mm Wrenches
- Calipers
- Hobby Knife
- Camber Gauge
- Ride Height Gauge
- Thread Lock
- 5'000 cst Silicone Diff Oil
- 300 cst Silicone Shock Oil
- Joint Grease
- O-Ring Grease



# Note these items at assembling of the car.

Note the shoulder

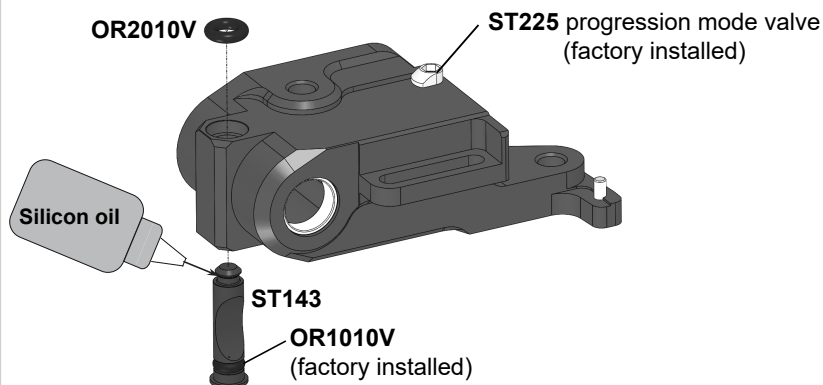




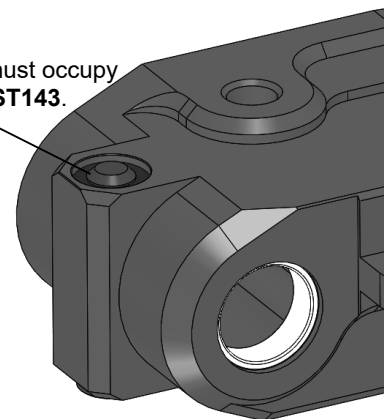
## STEP 1 - Assembling of the D4 Dampers

D4 dampers feature external switching between linear, progressive and semi-progressive damping modes without the need for disassembly. See page 28 for setup technique.

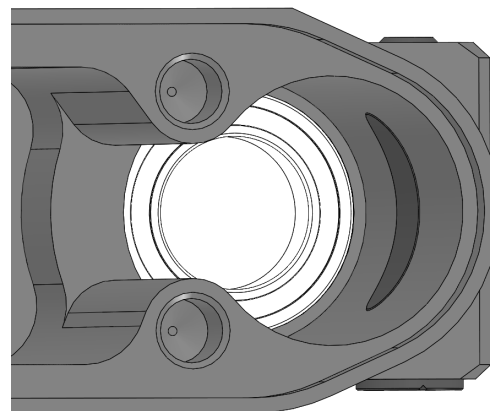
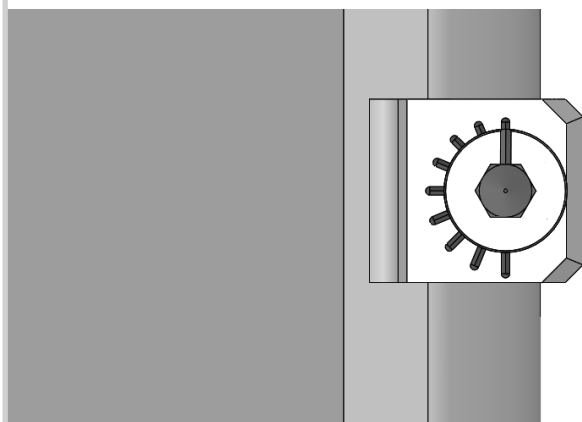
- #1** Insert **OR2010V** o-ring into the upper cavity of **AM242R/L-D4** case. Lubricate **ST143** with a small amount of silicon oil. Note that one **OR1010V** o-ring is already factory installed on each **ST143**. Hold **OR2010V** o-ring with the tip of your finger and insert the lubricated **ST143** into **AM242R/L-D4** hole. Rotate and press on **ST143** simultaneously with 1,5mm hex screwdriver so that the pointed tip of **ST143** passes through **OR2010V** o-ring.



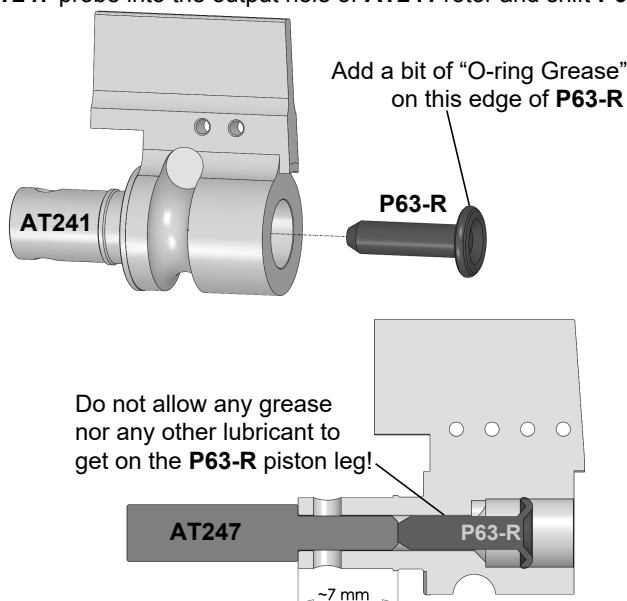
**OR2010V** o-ring must occupy the top groove of **ST143**.



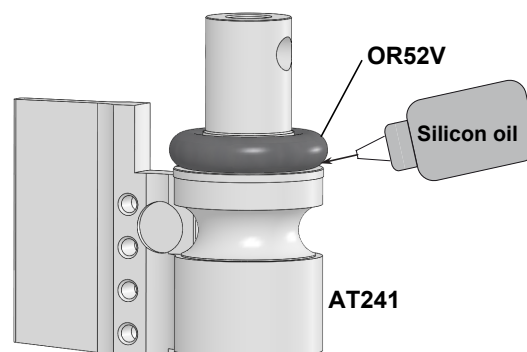
- #2** Turn **ST143** valve into the shown position to allow insertion of **AT241** rotor.



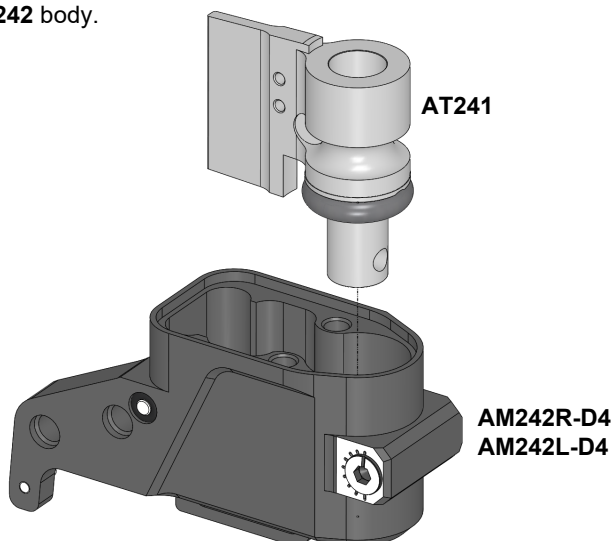
- #3** Lubricate the outer edge of the P63-R piston with a small amount of "O-ring Grease". MXLR brand o-ring grease is recommended. Do not allow any grease nor any other lubricant to get onto the **P63-R** piston leg! Insert **P63-R** piston into **AT241** at full depth. Insert **AT247** probe into the output hole of **AT241** rotor and shift **P63-R** piston to the recommended ~7mm position.



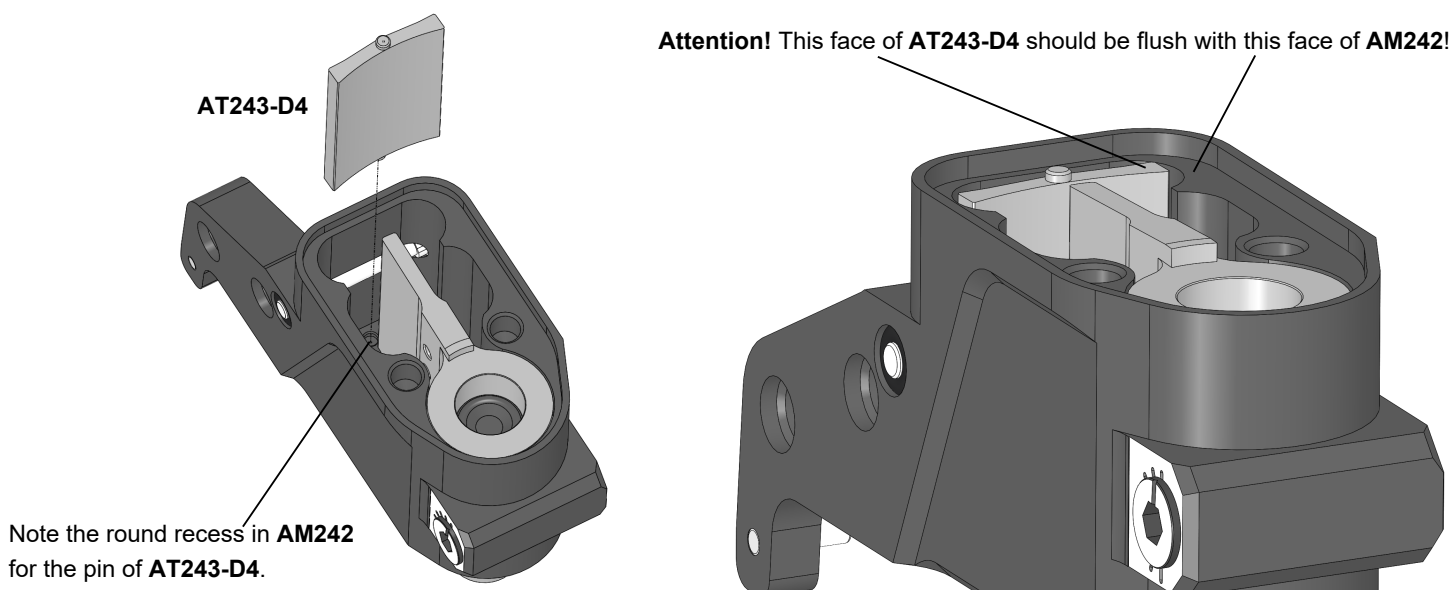
- #4** Slide **OR52V** o-ring onto **AT241** rotor's shaft and add a drop of silicone to fill the gap under the o-ring.



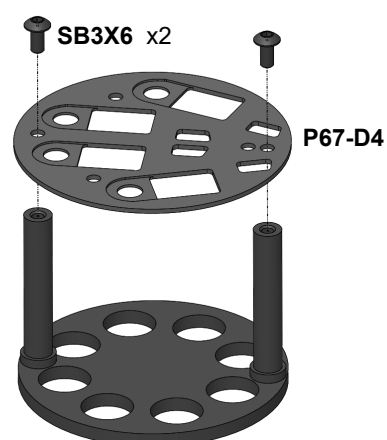
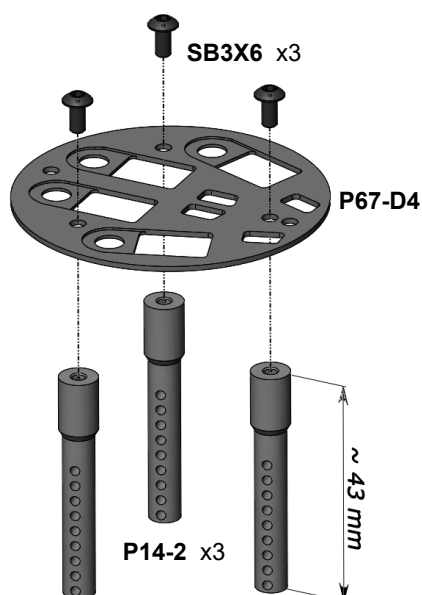
**#5** Insert **AT241** rotor all the way into **AM242** body.



**#6** Insert **AT243-D4** progression damper plate all the way into **AM242**.



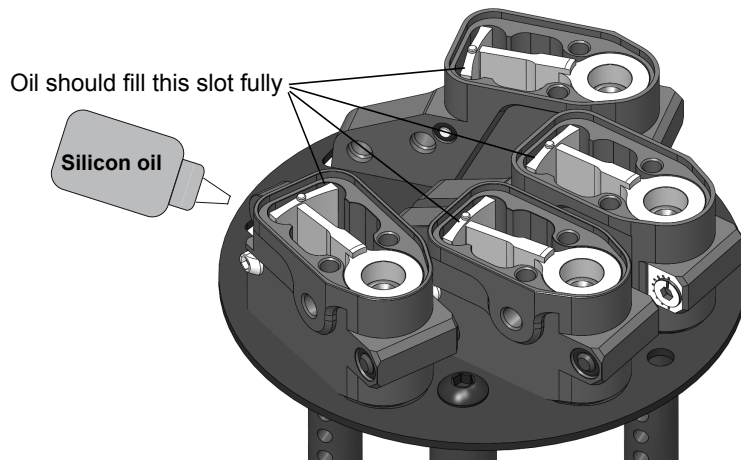
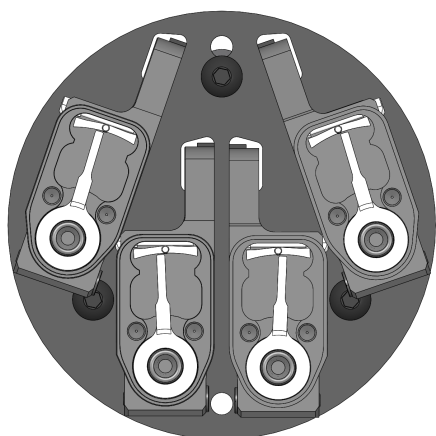
**#7** Prepare the damper stand enabling the use of your typical Tamiya style RC Damper Oil Air Remover tool. Either attach **P67-D4** stand to three **P14-2** posts (cut to ~43mm length) or directly replace one of the original plate by **P67-D4**.



**TIP / Recommended items:**

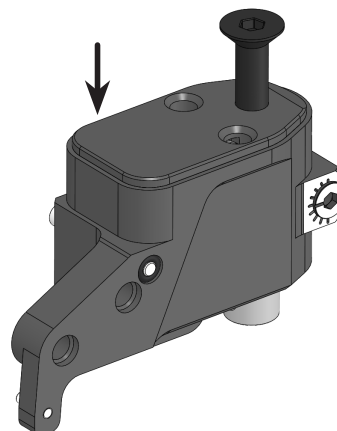
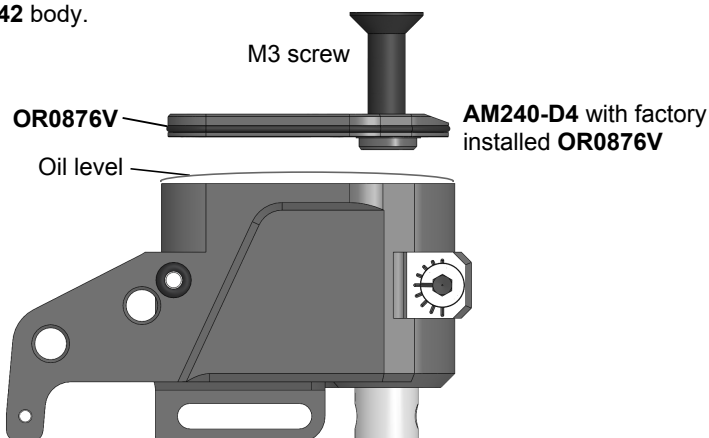
MAX-02-003 - MXLR Awesomatix A800R ShockVac  
MAX-01-003 - MXLR O-Ring grease (for P63 & OR52V)

**#8** Install the dampers on the air remover stand and keep them vertically. We recommend 300 cst silicone oil as a base. Fill up the dampers with the desired silicone oil. The oil level should reach the top face of **AT243-D4** and **AT241** at this stage. Make sure to also fill up the cavity over **P63-R** piston. Pay special attention to the narrow slot behind **AT243-D4**. A lack of oil here is hard to detect, add oil if necessary!

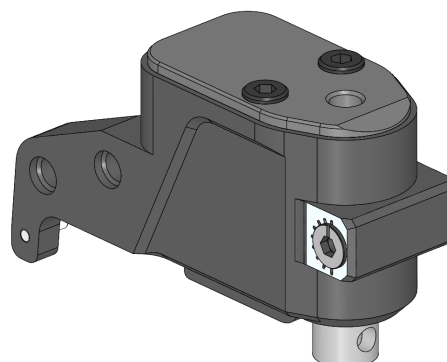
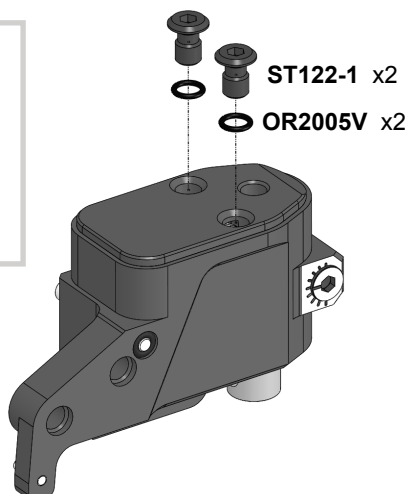
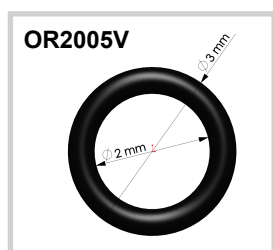


**#9** Vacuum should be applied at least 10 times x 2 minutes. Try to reach the maximum possible level of vacuum on each cycle. There are many small cavities inside the damper bodies where air might get trapped for a long time. Repeat as many vacuum cycles as necessary for as long as air bubbles keep appearing. This step is crucial to obtain perfectly operating dampers!

**#10** Add more oil into the damper. The oil level should be a little over the upper edge of **AM242**. Insert a long M3 screw into the special hole of **AM240-D4** to grab **AM240-D4** cover. **AM240-D4** should be inserted 100% horizontally and slowly to allow the oil to fill the cavity of **AM240-D4** and to push trapped air through the two mounting screw holes. **AM240-D4** should dive into the oil under its own weight at this stage. Next carefully press onto **AM240-D4** with your fingertip to slowly submerge **AM240-D4** all the way into its pocket on top of **AM242** body.

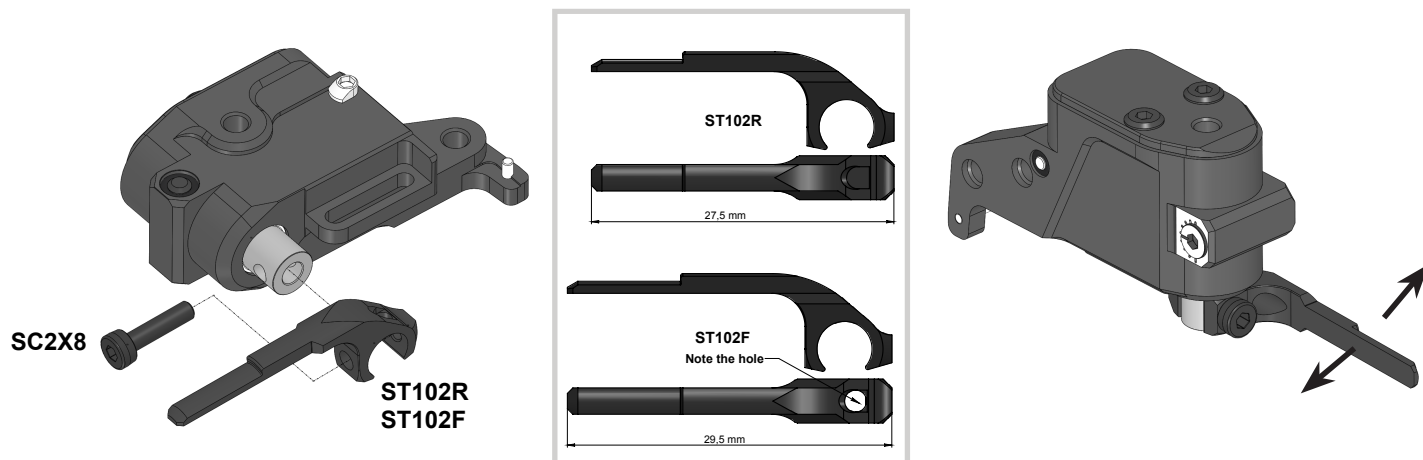


**#11** Keep the damper vertically while screwing on the two **ST122-1** screws with **OR2005V** o-rings. Make sure not to overtighten these screws to avoid stripping the threads!



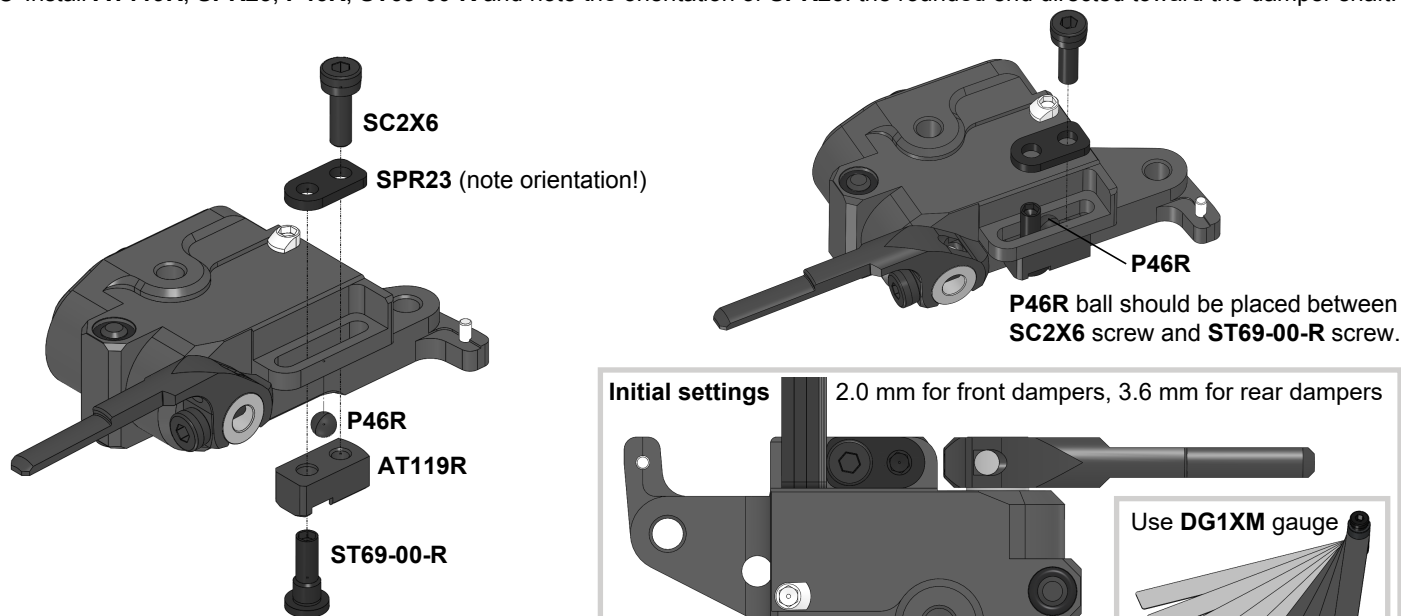
Wipe off the oil excess from the damper body with paper towels and remove M3 screw.

**#12** Install **ST102F** (longer part) onto the front dampers and **ST102R** (shorter part) onto the rear dampers. Tighten **SC2X8** screw until contact, then add  $\frac{1}{4}$  of a turn (ensuring coupling between **ST102** and **AT241** is done by friction, and not by the screw acting as a pin). Keep the damper vertically and swing **AT241** rotor a few times in both directions. In case you feel air bubbles inside the damper remove **AM240-D4** cover, add some oil into the damper and repeat the **AM240-D4** installation process.



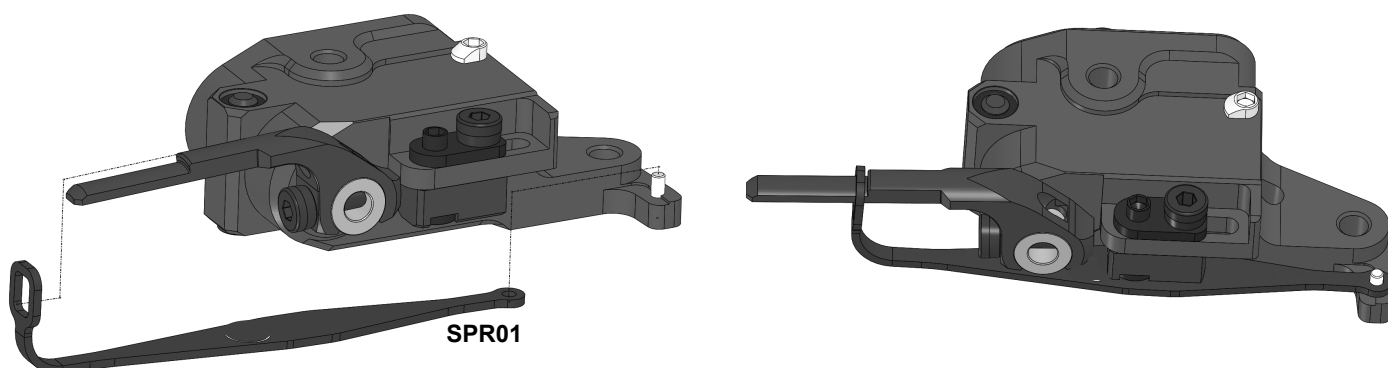
**Comment:** Note that dampers sit in the horizontal position in the car. Therefore, any trapped air is necessarily located near the top wall of the damper and does not affect the rotor action. These dampers are equally effective on track even with a bit of air trapped inside. These bubbles can only be felt when they can go through the rotor blade when the dampers are operated vertically.

**#13** Install **AT119R**, **SPR23**, **P46R**, **ST69-00-R** and note the orientation of **SPR23**: the rounded end directed toward the damper shaft.



Optional **ST69-25-R** screws for 25% progressive spring action are available (not included).  
Optional **PSSX** set for 30% progressive spring action is available (not included).

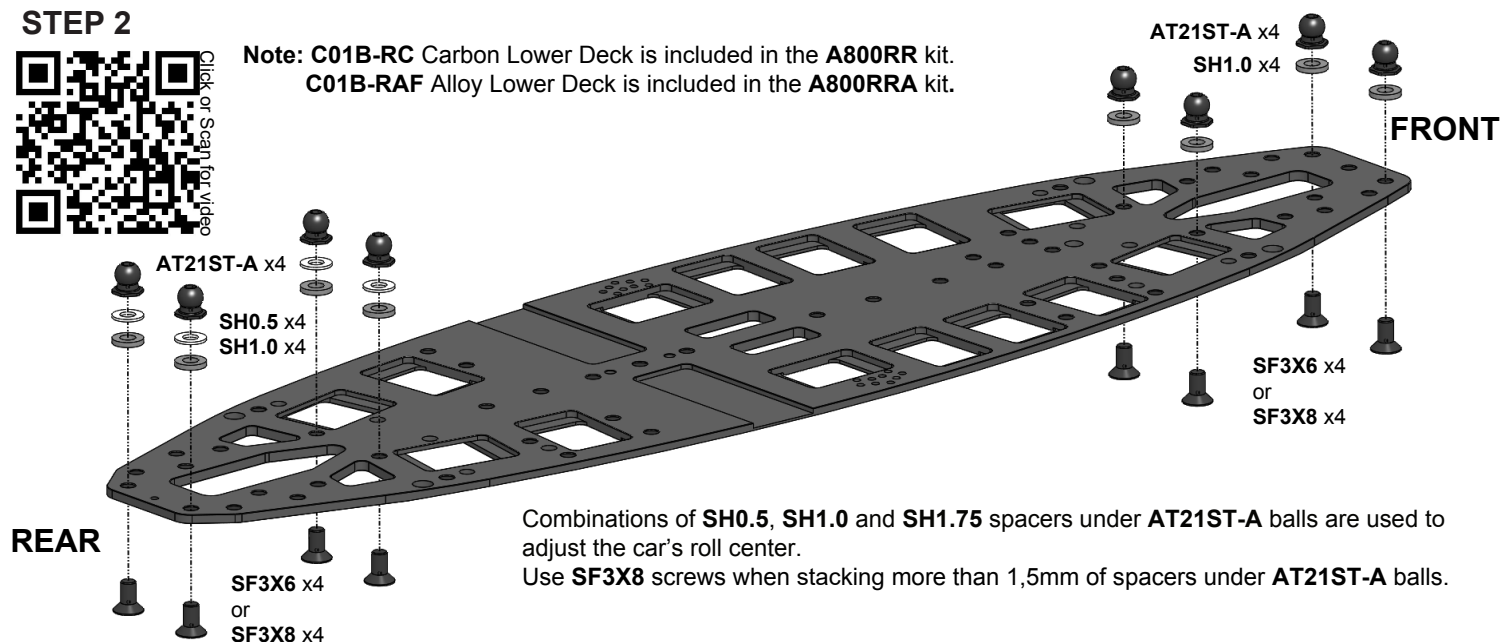
**#14** Install **SPR01** springs.



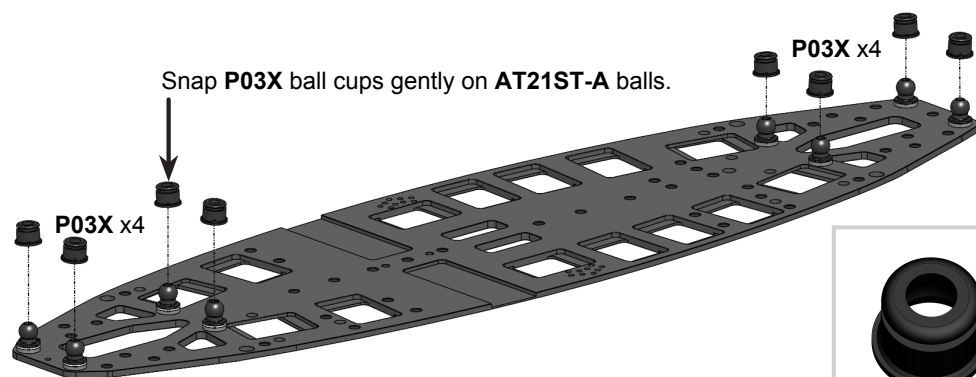
## STEP 2



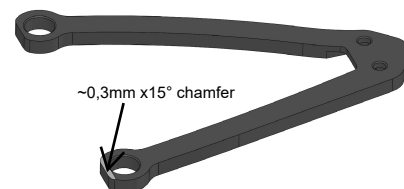
**Note:** C01B-RC Carbon Lower Deck is included in the **A800RR** kit.  
C01B-RAF Alloy Lower Deck is included in the **A800RRA** kit.



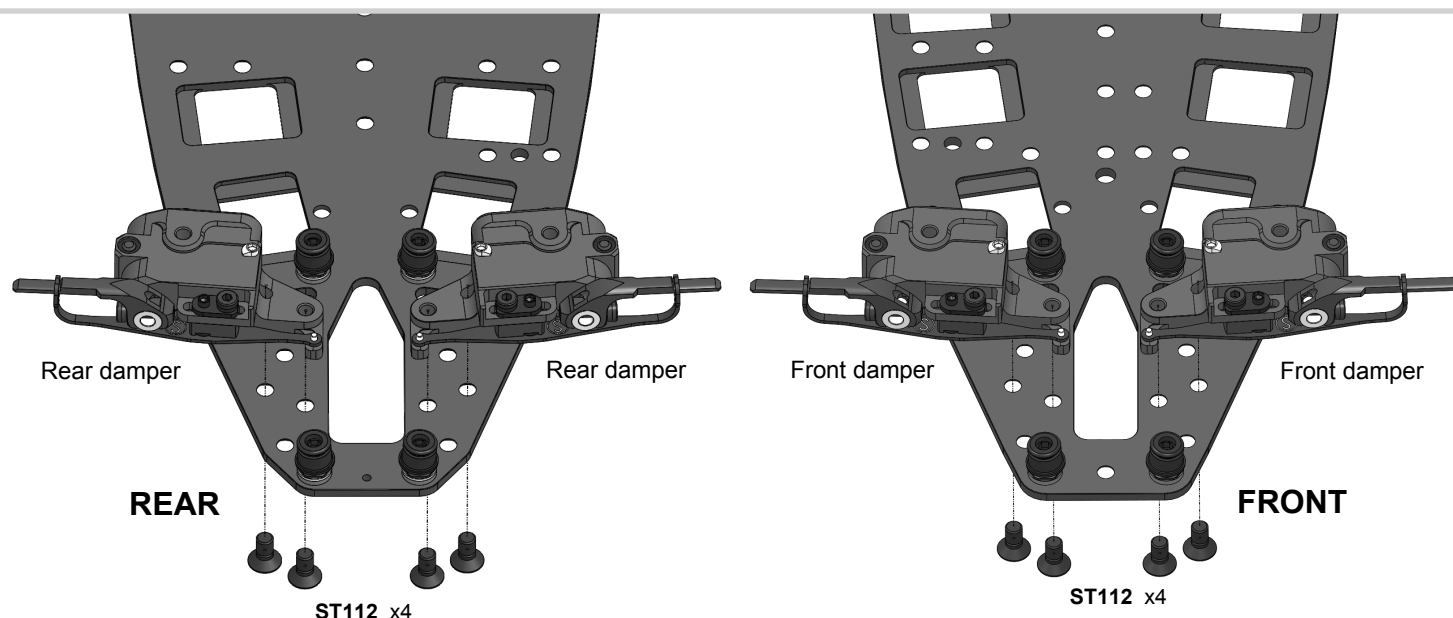
## STEP 3



**Note:** At 0mm FF roll centre setting, front **C204R** and **C204L** lower arms may need a slight chamfer to avoid interference with **P14-1-R** bumper during uptravel.



## STEP 4

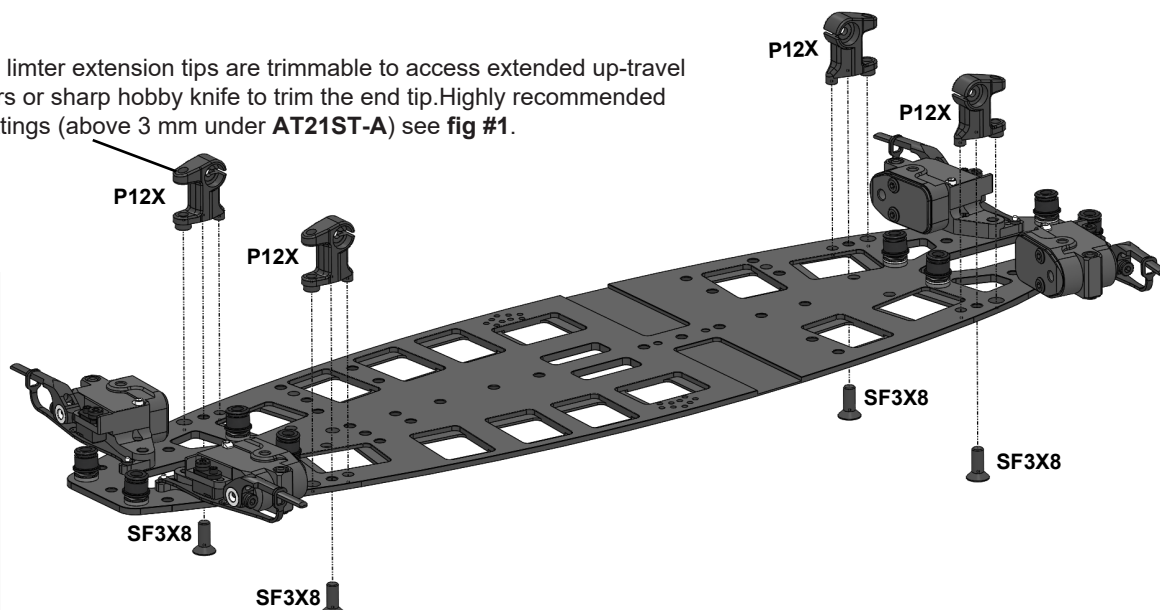


**⚠Attention:** Use **ST112** centering screws for bolting the dampers onto the chassis.

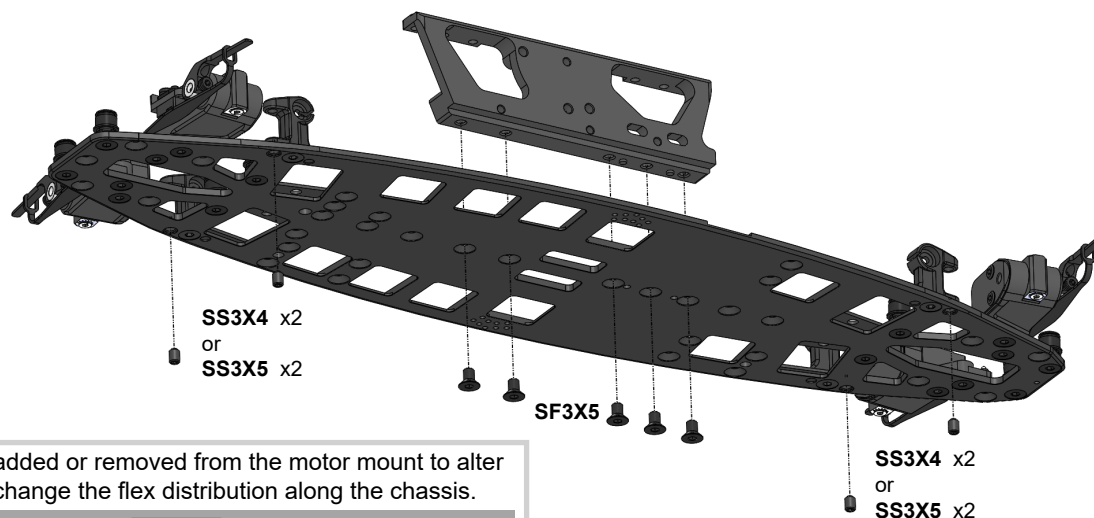


## STEP 5

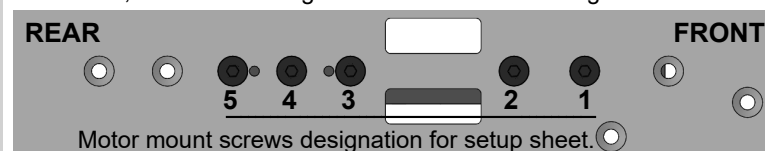
**Note:** P12X Up-travel limiter extension tips are trimmable to access extended up-travel range. Use side cutters or sharp hobby knife to trim the end tip. Highly recommended for high roll centre settings (above 3 mm under AT21ST-A) see fig #1.



## STEP 6



SF3X5 screws can be added or removed from the motor mount to alter overall flex, as well as change the flex distribution along the chassis.



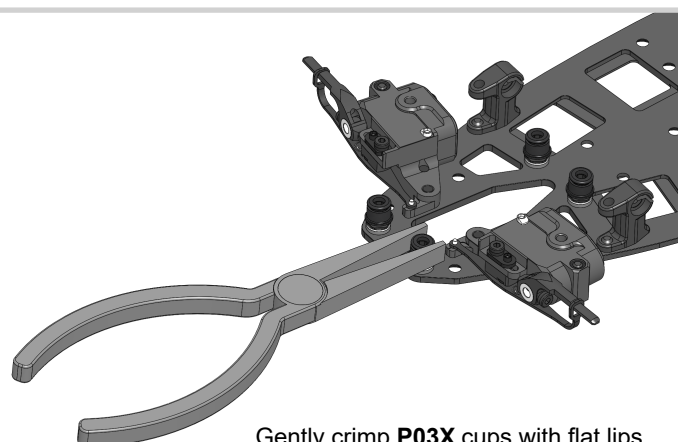
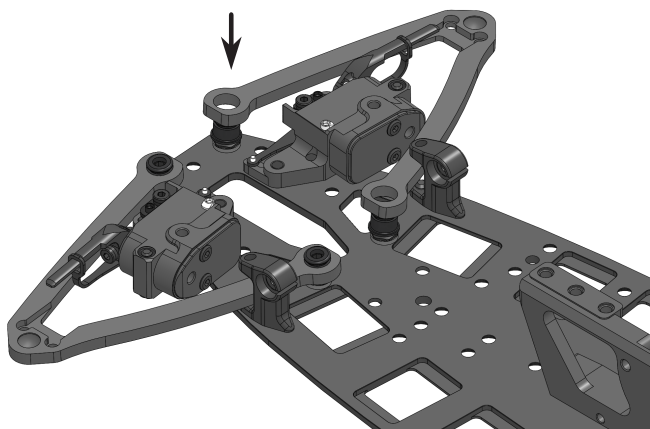
**Note:** SS3X5 set screws should be used when more than 2 mm spacers are used under AT21ST-A balls.

## STEP 7

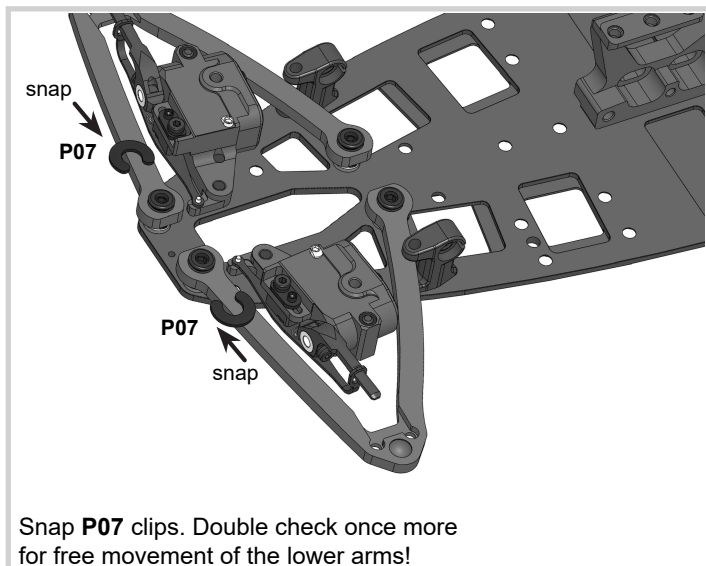
Insert C204R and C204L lower arms on P03X cups.

Note orientation of recesses on the arms!

**Note:** C204R and C204L lower arms should swing freely and fall back under their own weight.

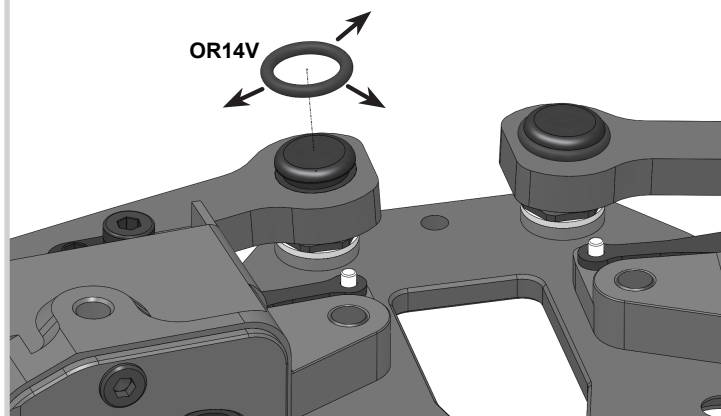


## STEP 8

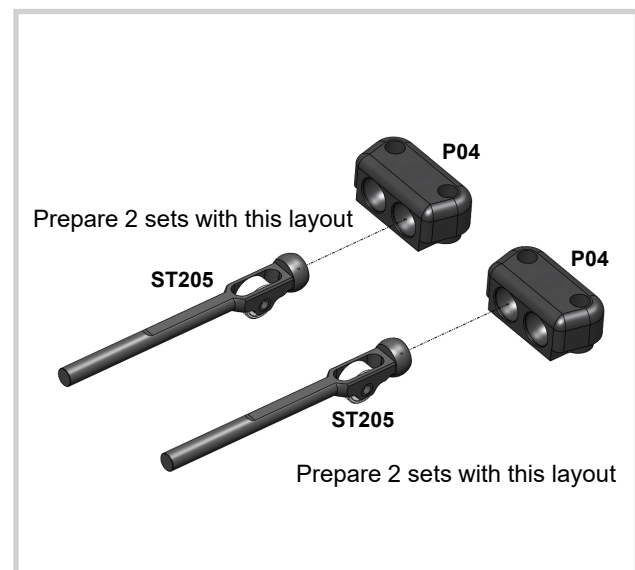


Snap **P07** clips. Double check once more for free movement of the lower arms!

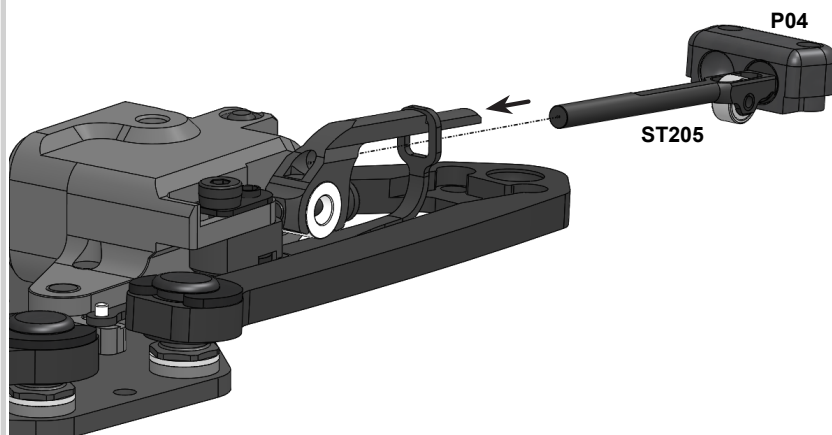
Optional **OR14V** rubber o-rings can be used instead of **P07** clips.



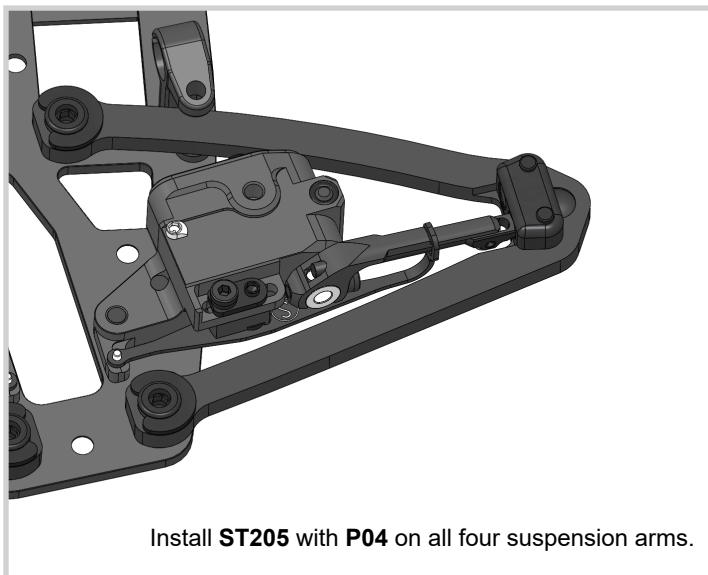
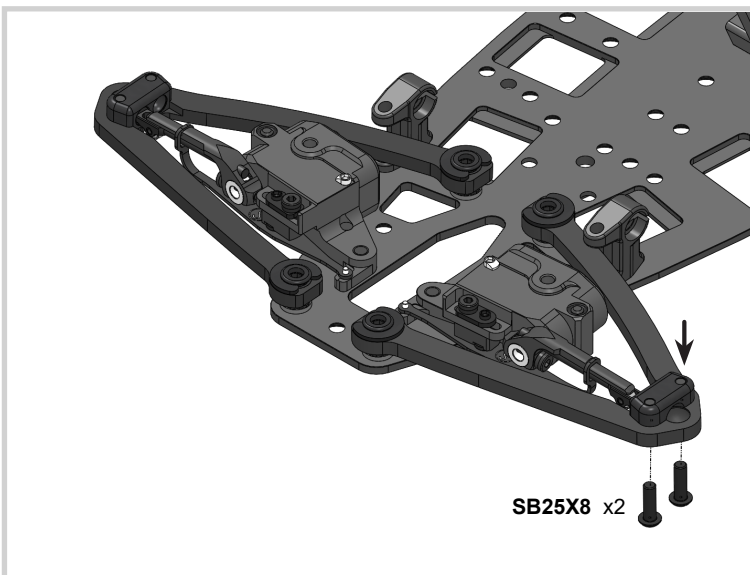
## STEP 9



Slide **ST205** shaft through **SPR01** eylet and **ST102** hole.



## STEP 10

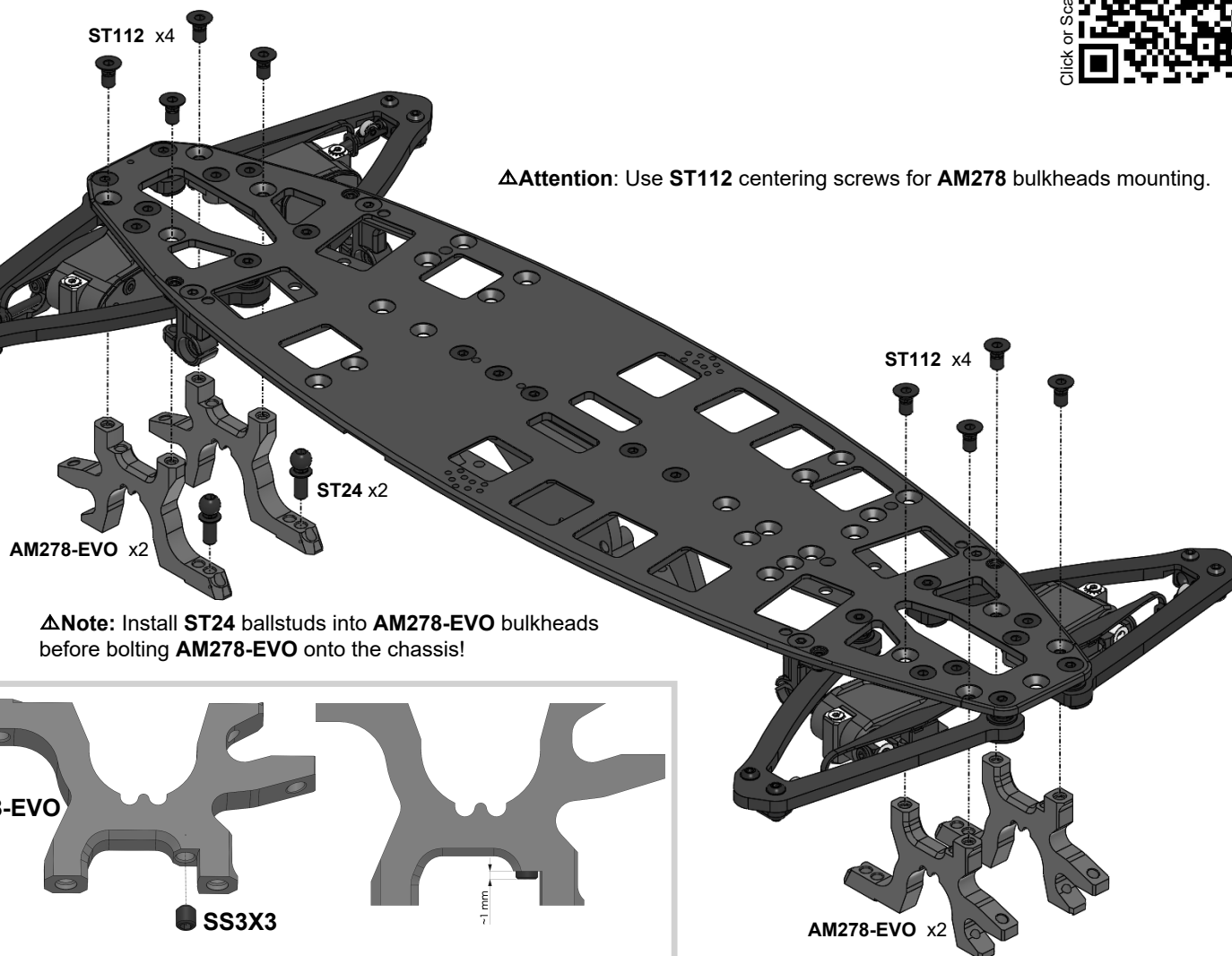


Install **ST205** with **P04** on all four suspension arms.

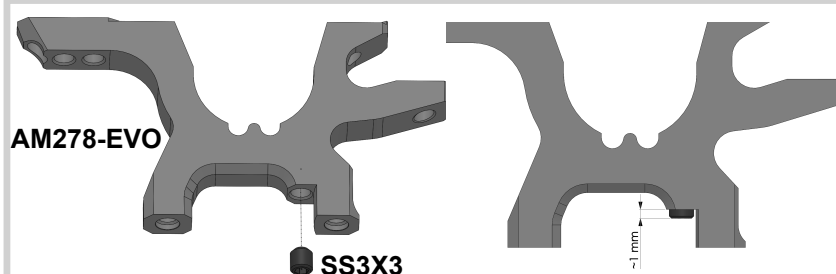
## STEP 11



**△Attention:** Use **ST112** centering screws for **AM278** bulkheads mounting.

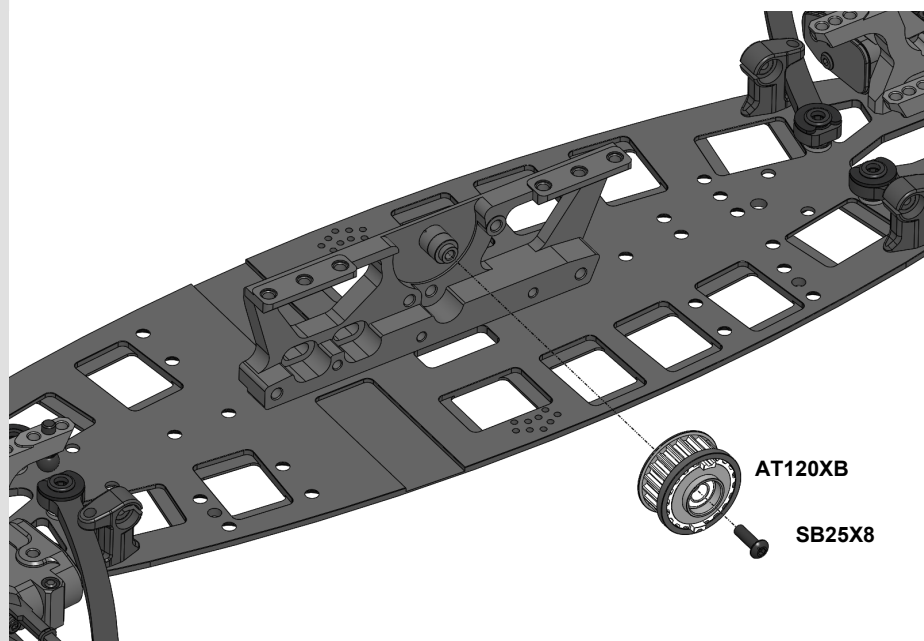


**△Note:** Install **ST24** ballstuds into **AM278-EVO** bulkheads before bolting **AM278-EVO** onto the chassis!

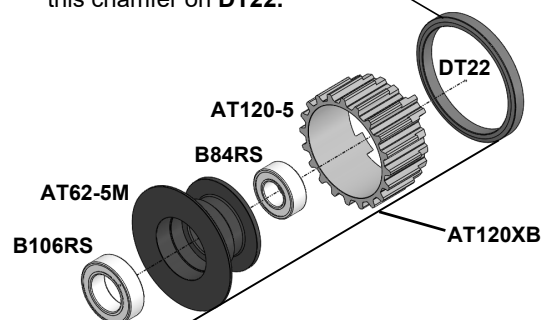


Insert **SS3X3** set screw into **AM278-EVO** bulkhead as shown (protruding 1mm). Use threadlock!

## STEP 12

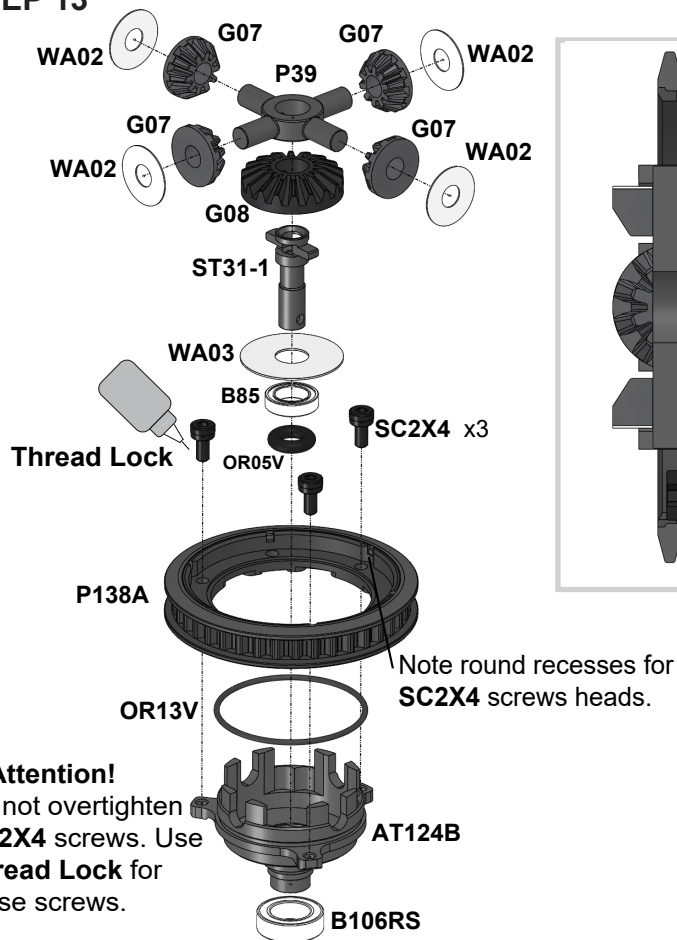


**Attention!** Note orientation of this chamfer on **DT22**.

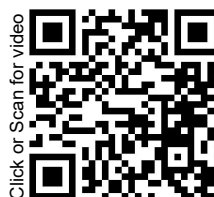
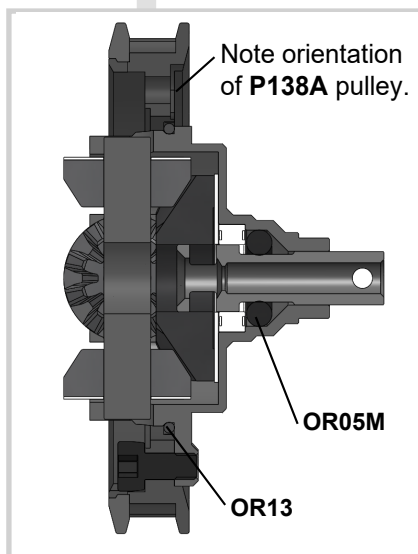


**Note:** **AT120XB** is fully factory assembled for your kit.

## STEP 13

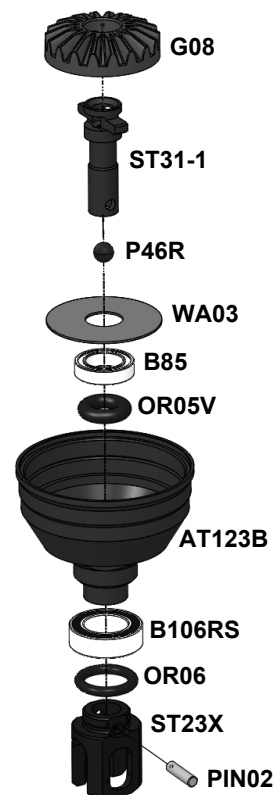


## STEP 14



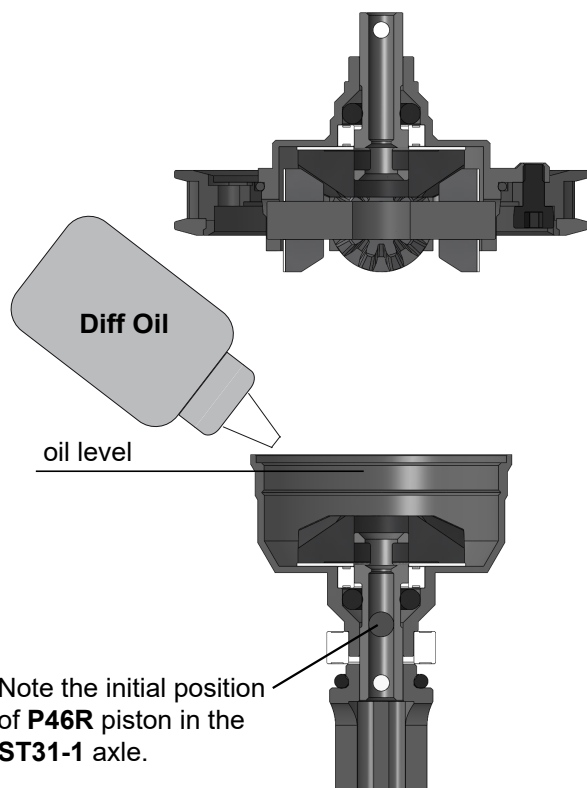
### TIP / Recommended items:

MAX-01-003 - MXLR O-Ring grease (for OR05V)  
MAX-02-002 - MXLR Awesomatix TC Multi Tool



## STEP 15

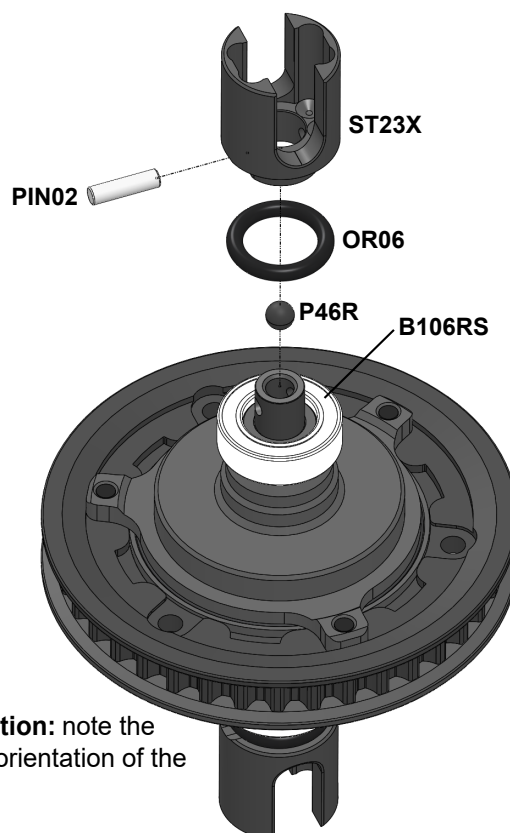
Fill up with the desired silicone oil (not included).  
Screw AT123B case with 10mm wrench slowly.  
The oil excess will go out through the ST31-1 axial hole.



## STEP 16

### TIP / Recommended items:

MAX-01-001 - MXLR Ball Bearing oil

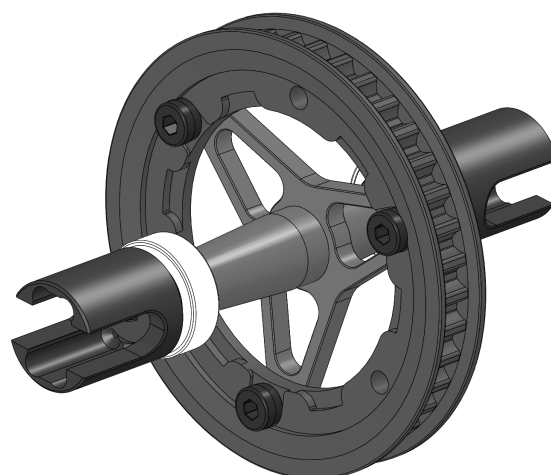
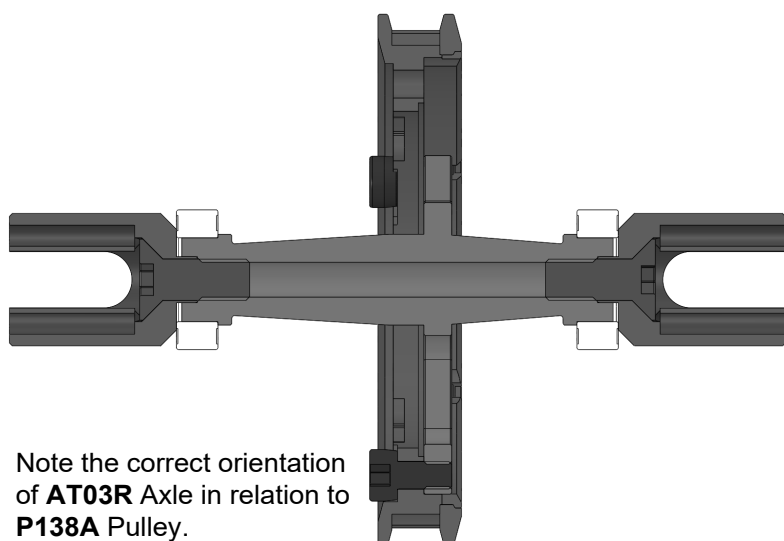
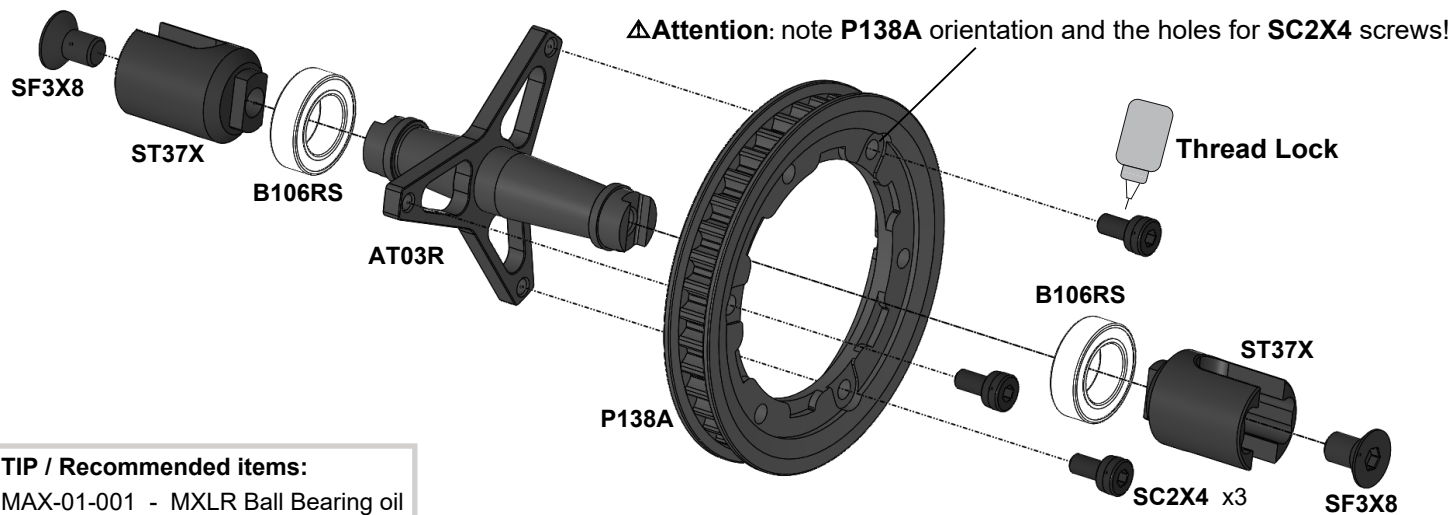


**△Attention:** note the correct orientation of the pulley!



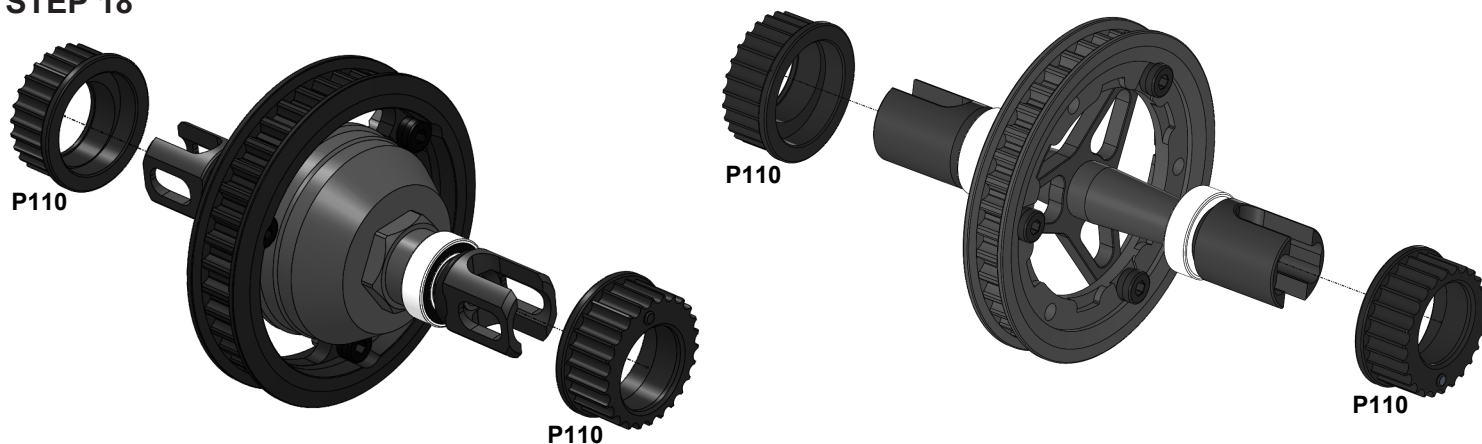
## STEP 17

### AT03R Spool Axle

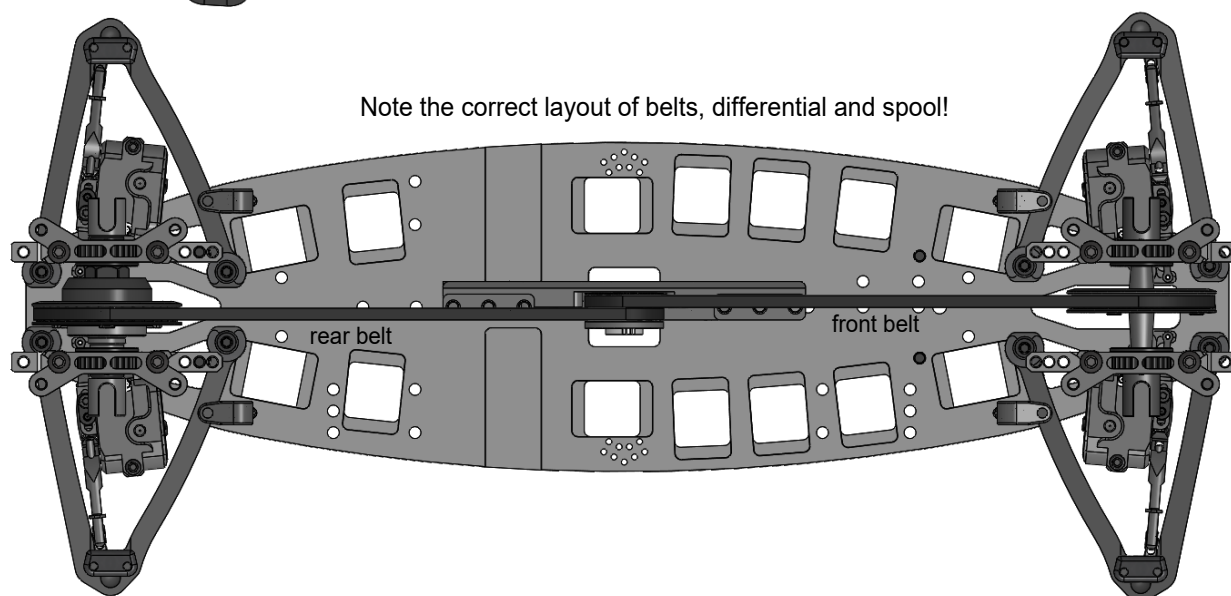
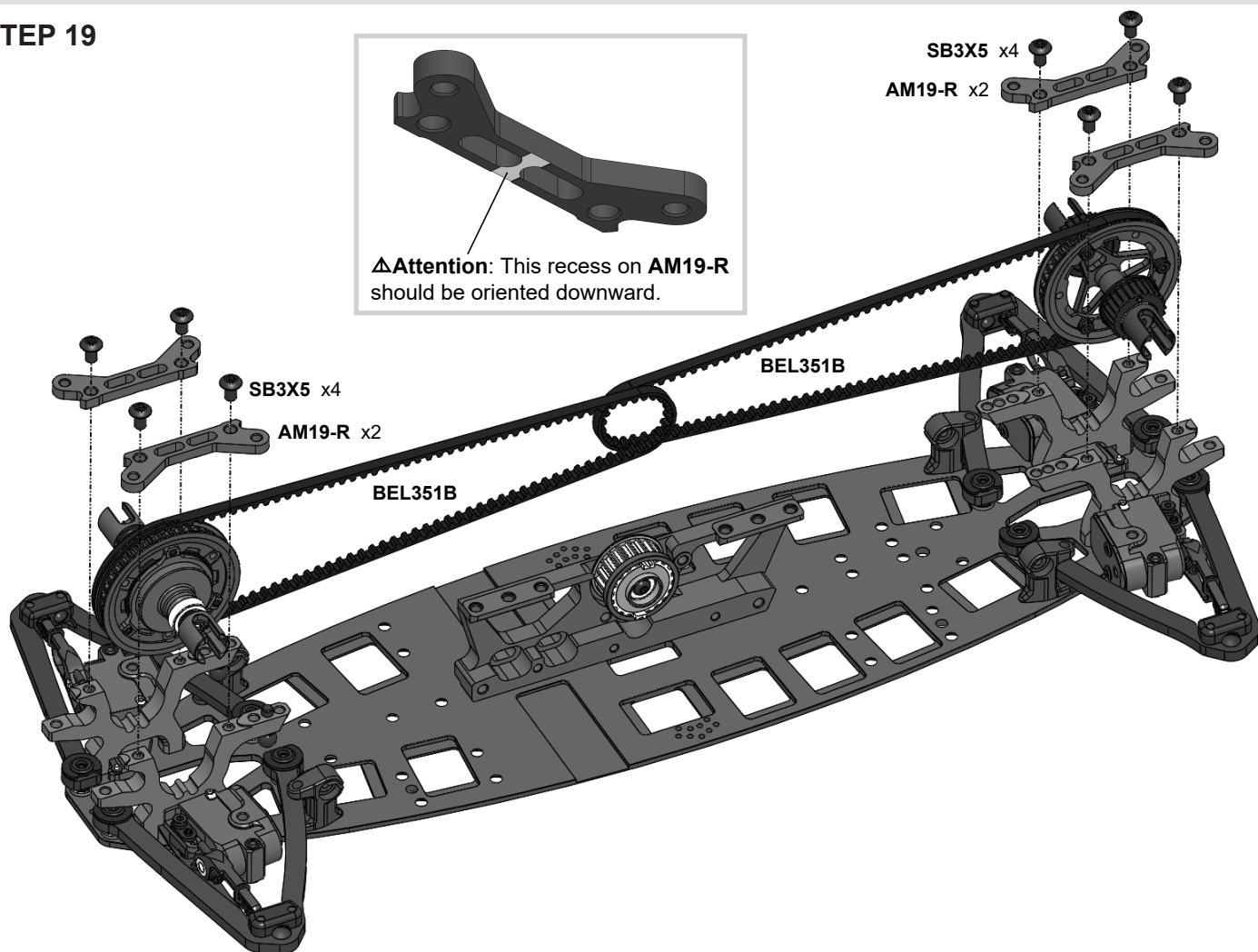


**Attention!**  
Do not overtighten **SC2X4** screws.  
Excess torque may deform **P138A** pulley.  
Use **Thread Lock** for these screws!

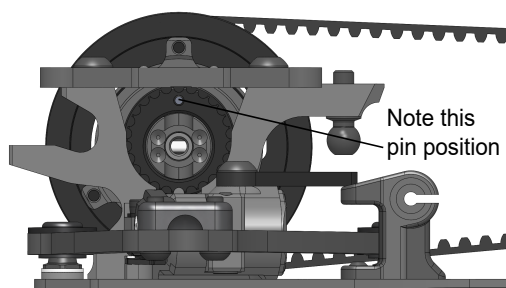
## STEP 18



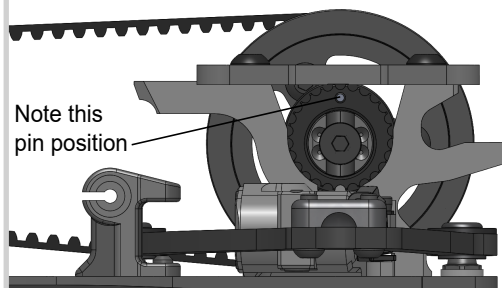
# STEP 19



Initial position of rear P110

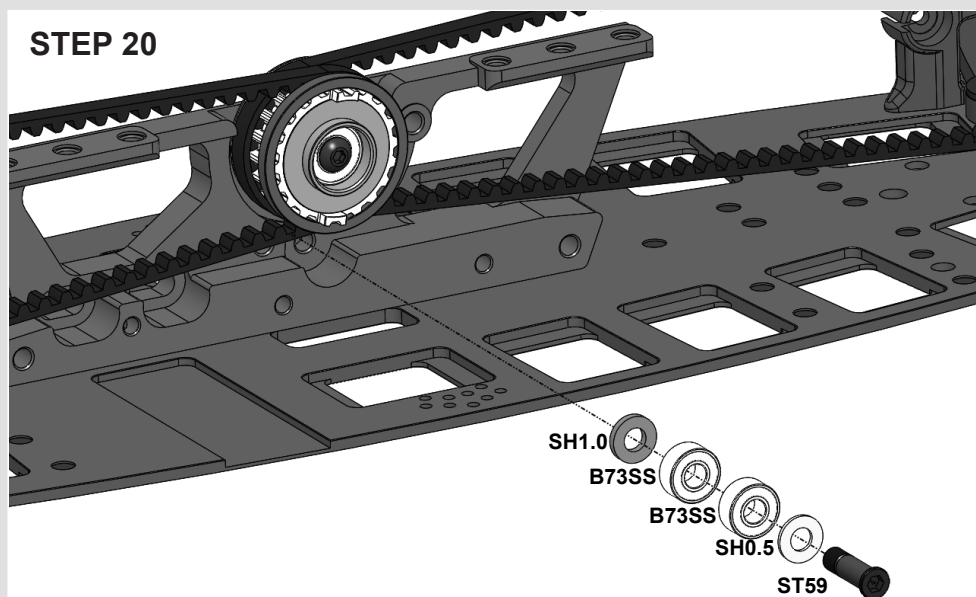


Initial position of front P110



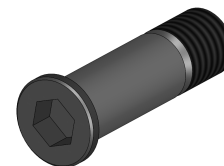


## STEP 20



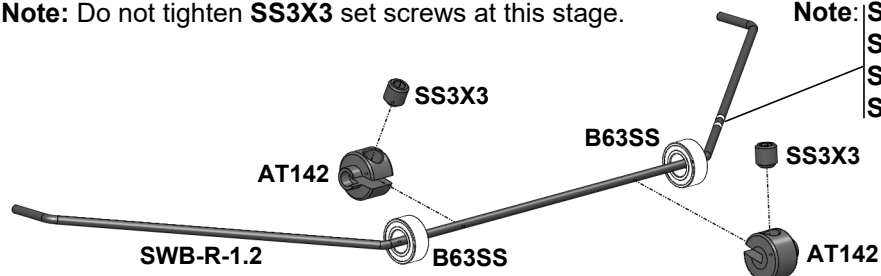
ST59

11 mm

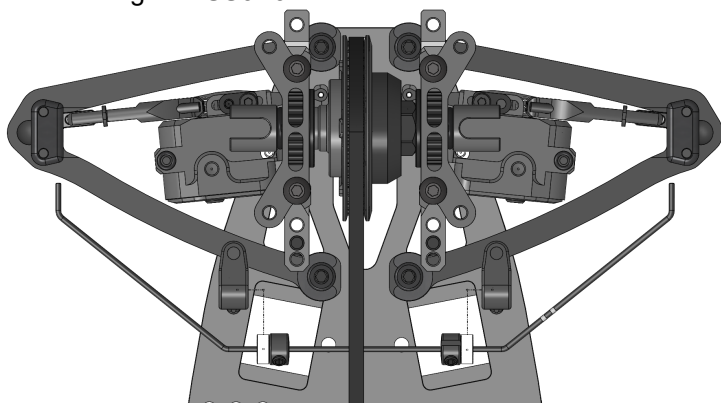


## STEP 21

**Note:** Do not tighten **SS3X3** set screws at this stage.

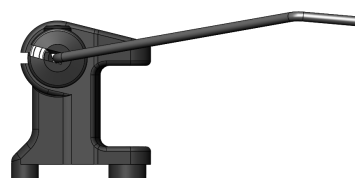


Install rear and front sway bars into **P12X**.  
Adjust **AT142** stoppers to achieve centered sway bar position  
and then tighten **SS3X3** set screws.

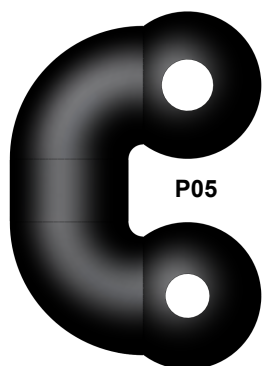


**Attention!**

The deflected tips of sway bar  
should be directed downwards.

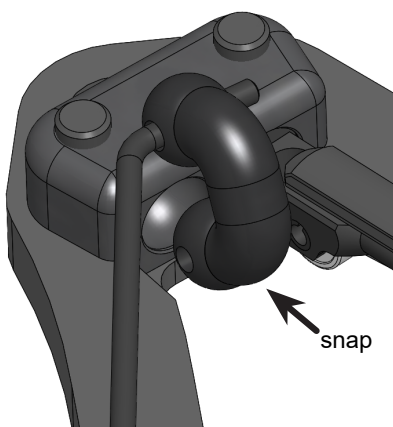


## STEP 22

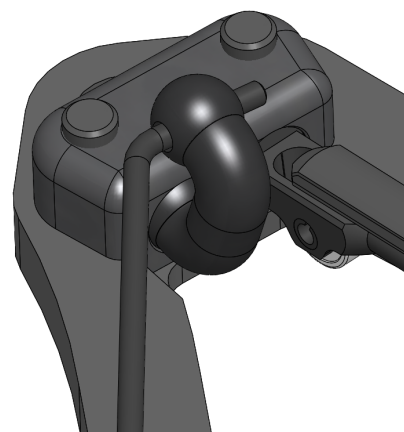


Use bigger hole for  
**SWB-R-1.2** and  
**SWB-R-1.3**  
sway bars.

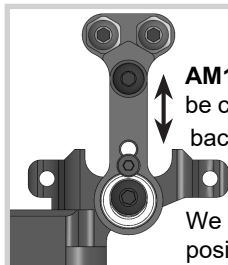
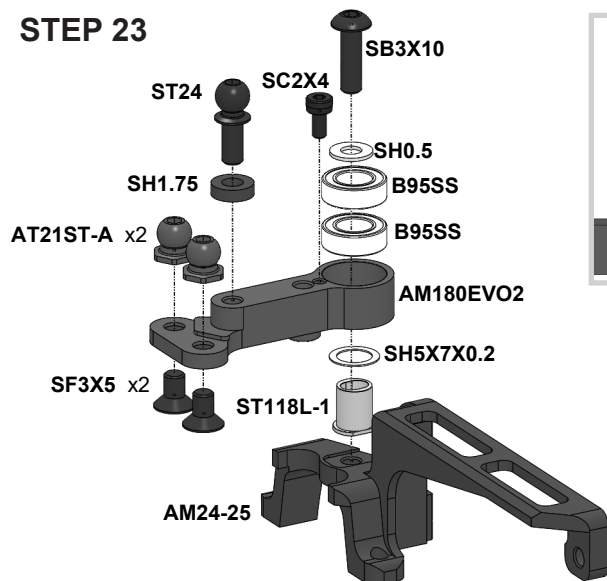
Use smaller hole for  
**SWB-R-1.0** and  
**SWB-R-1.1**  
sway bars.



Snap **P05** on all four suspension arms.

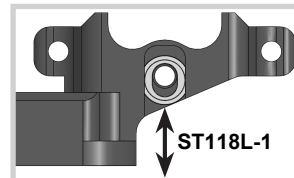


## STEP 23

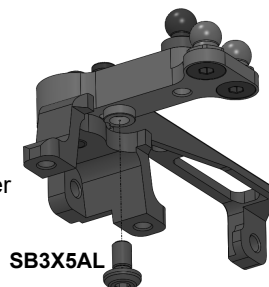


AM180EVO2 bellcrank position can be changed by sliding **ST118L-1** axle back and forth through a 1mm range to adjust Ackermann setting.

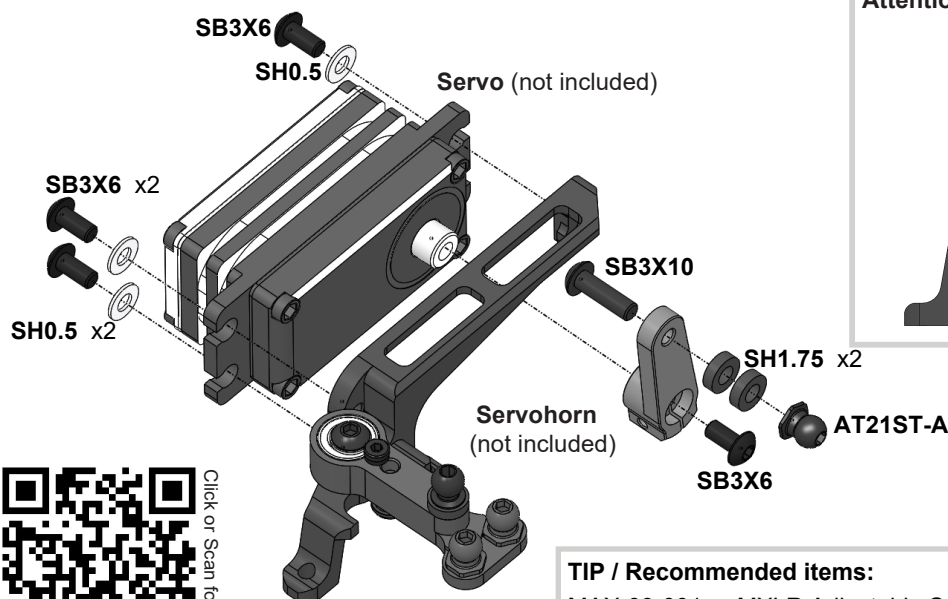
We recommend the rearward position for carpet and the forward position of **AM180EVO2** bellcrank for asphalt tracks.



**Tip:** use **SB3X5AL** screw as a steering limiter (maxing out inner wheel steering angle at ~25°).



## STEP 24



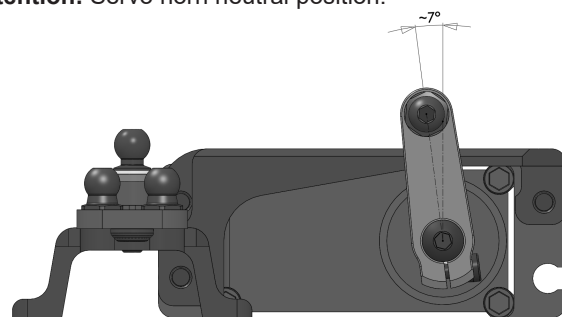
Click or Scan for video

### TIP / Recommended items:

MAX-09-001 - MXLR Adjustable Servo Arm 23T

MAX-09-002 - MXLR Adjustable Servo Arm 25T

**Attention!** Servo horn neutral position.

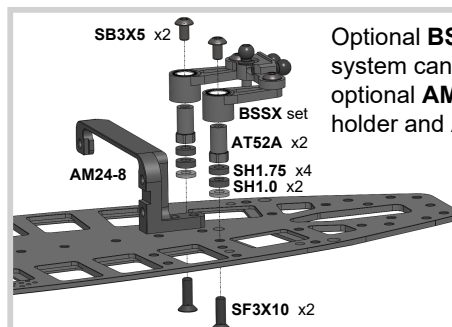
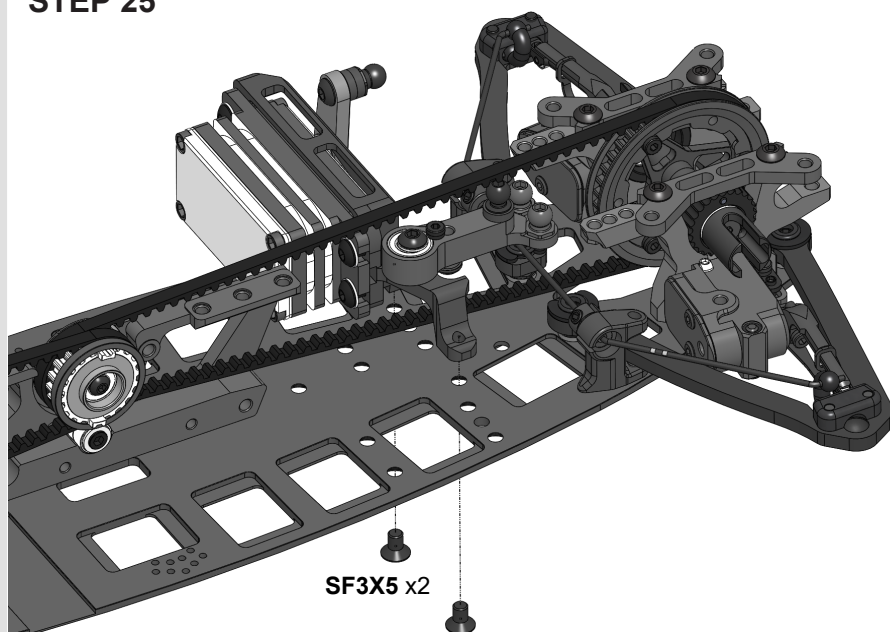


### Note:

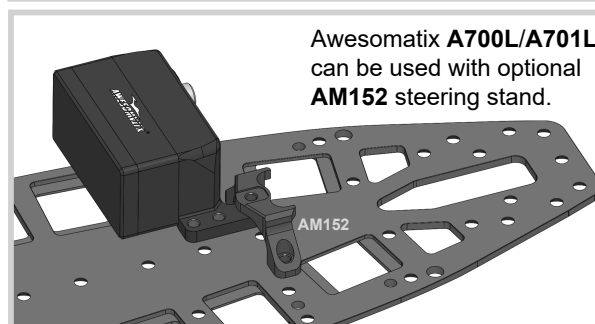
Recommended servo horn length: 16,5-17,5 mm.



## STEP 25

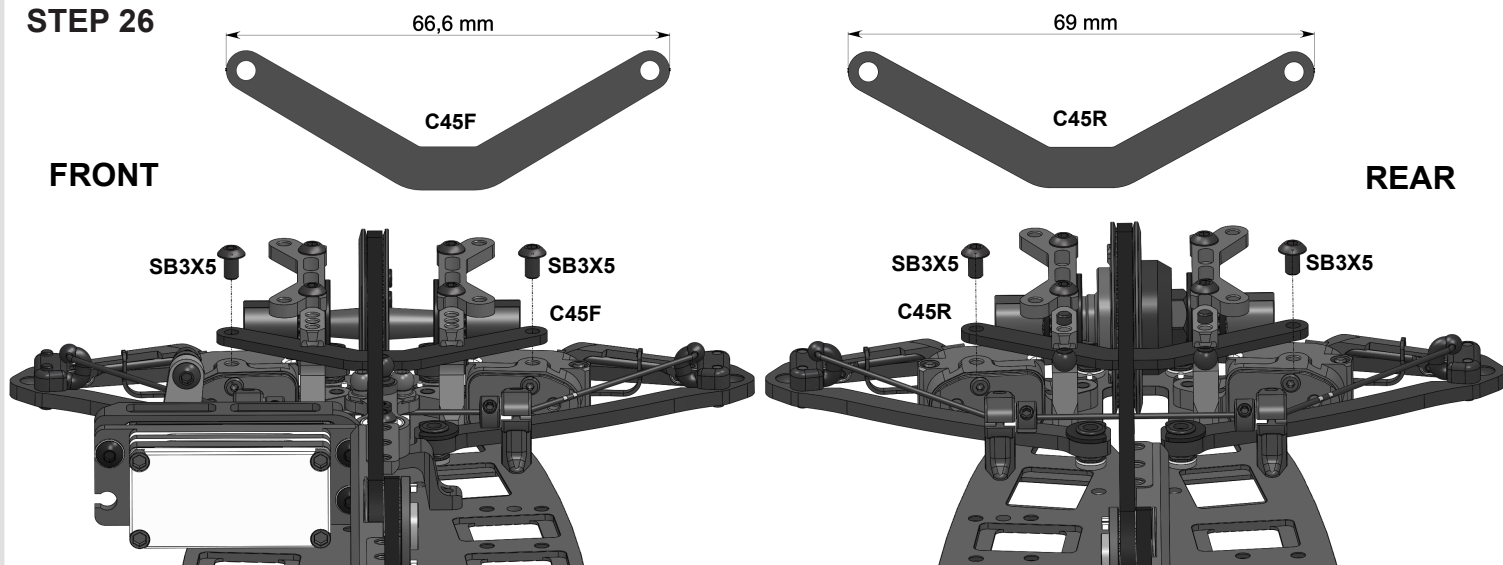


Optional **BSSX** steering system can be used with optional **AM24-8** servo holder and **AT52A** posts.

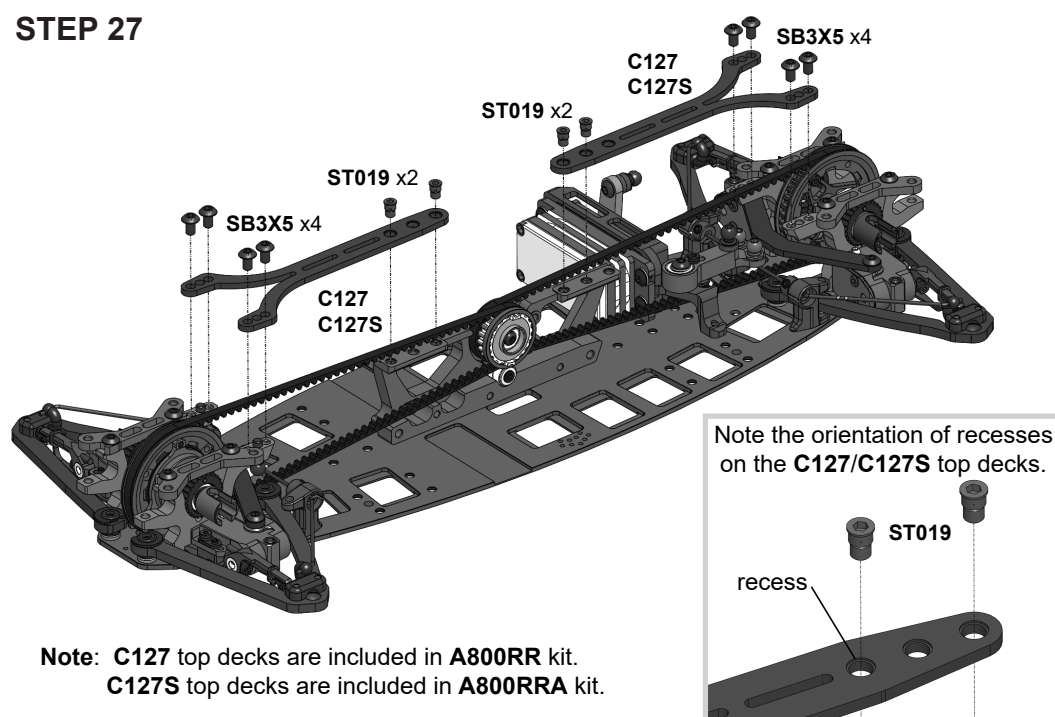


Awesomatrix **A700L/A701L** can be used with optional **AM152** steering stand.

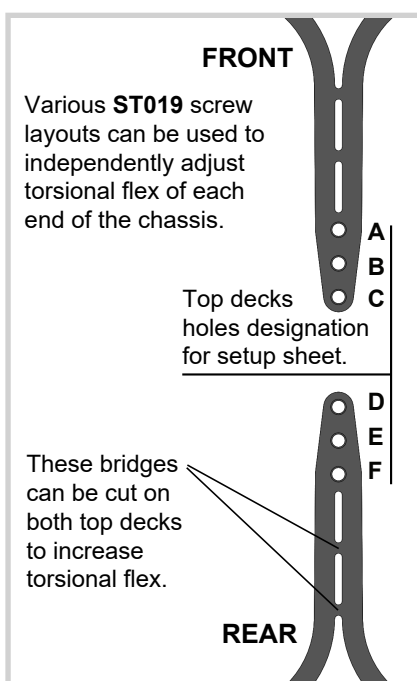
## STEP 26



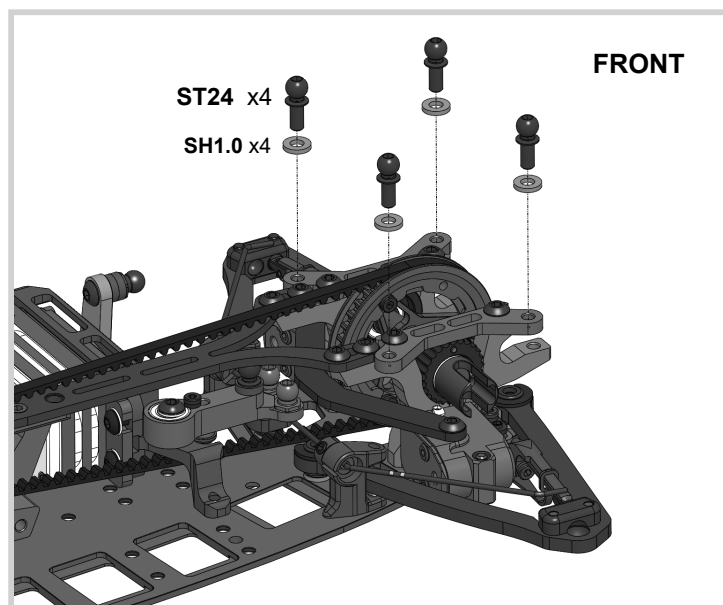
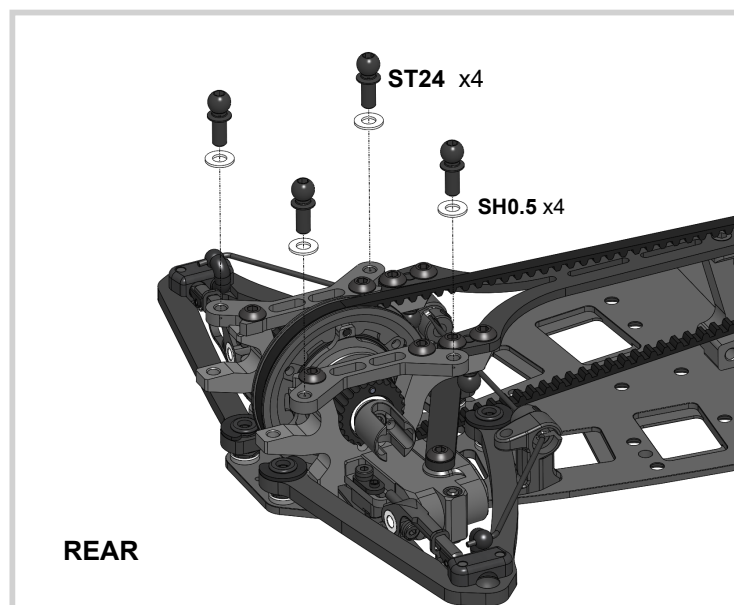
## STEP 27



**Note:** C127 top decks are included in A800RR kit.  
C127S top decks are included in A800RRA kit.

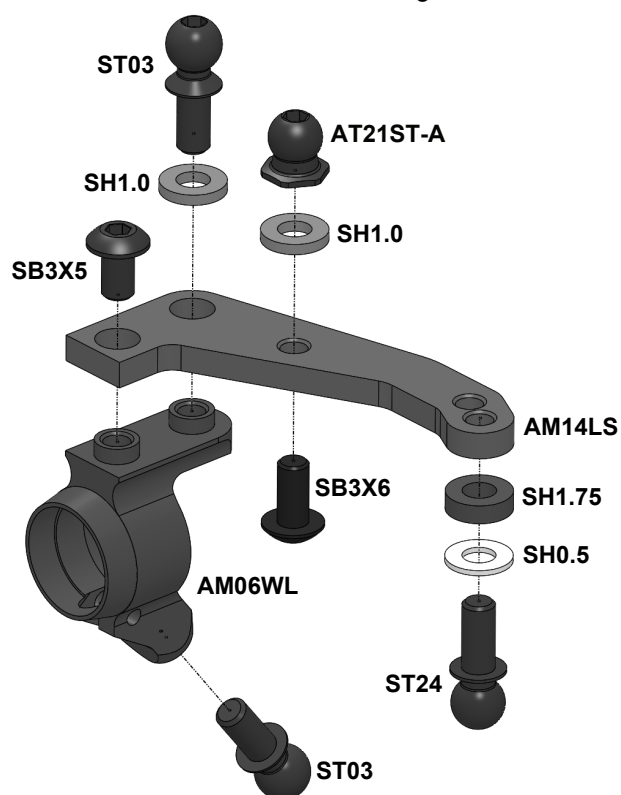


## STEP 28

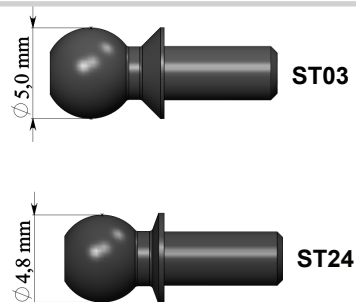
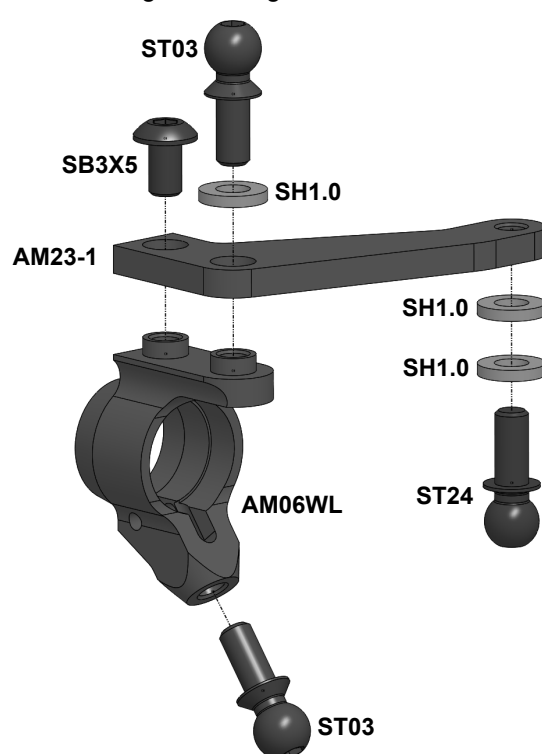


## STEP 29

Front left steering knuckle



Rear right steering knuckle



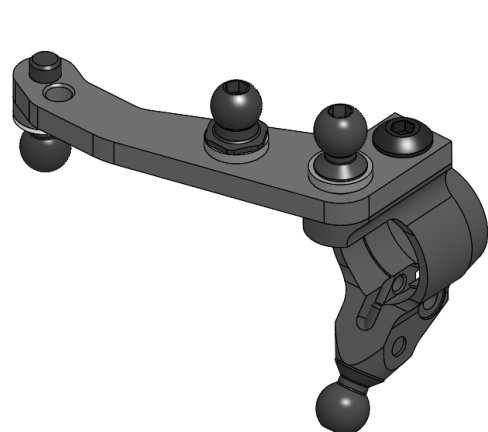
Note the difference between **ST03** and **ST24** Ball Studs!

**Attention:** The last turns of the lower **ST03** Ball Studs and **SB3X5** screws can be tight. Screw them on with force!

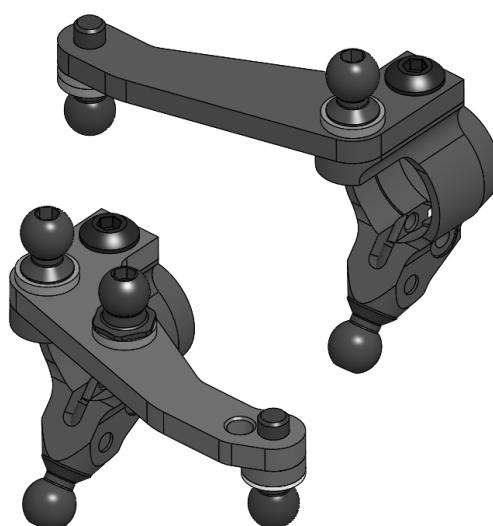
**Note:** Other combinations of **SH0.5**, **SH1.0** and **SH1.75** spacers can be installed under **ST03** and **ST24** ball studs to set-up the car for different track condition.



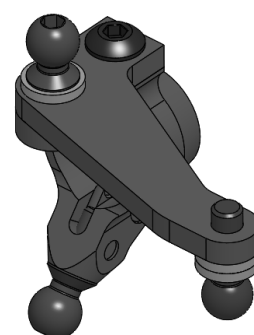
Click or Scan for video



Assemble front right and front left steering knuckles.

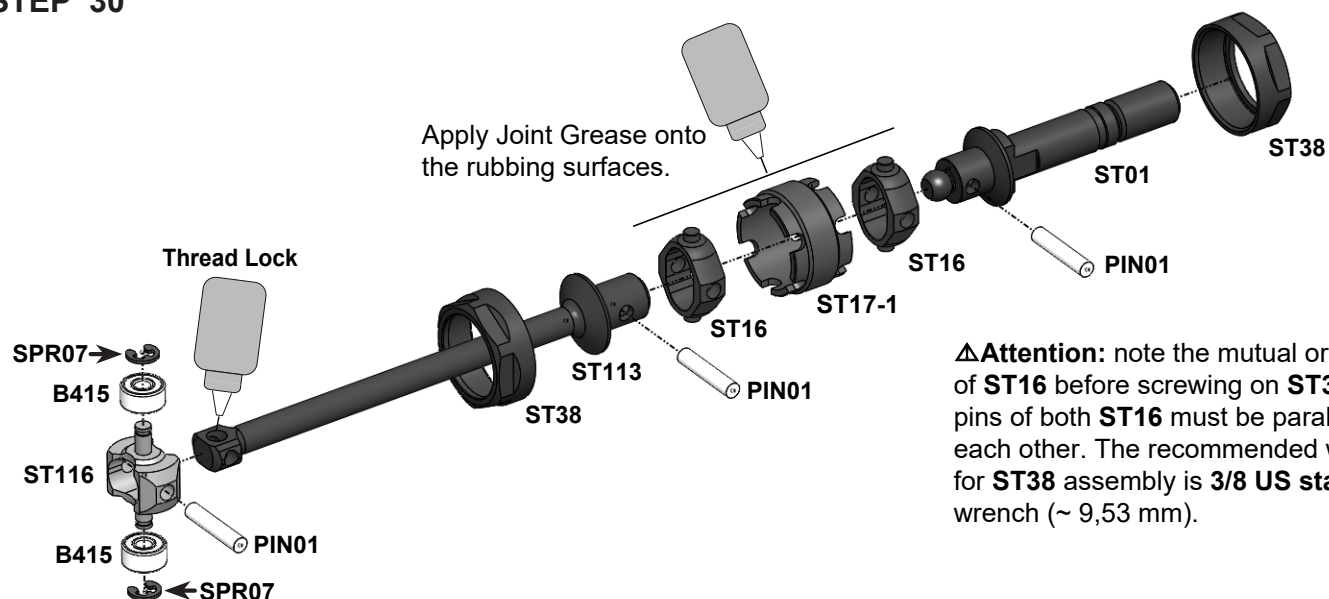


Assemble rear right and rear left steering knuckles.





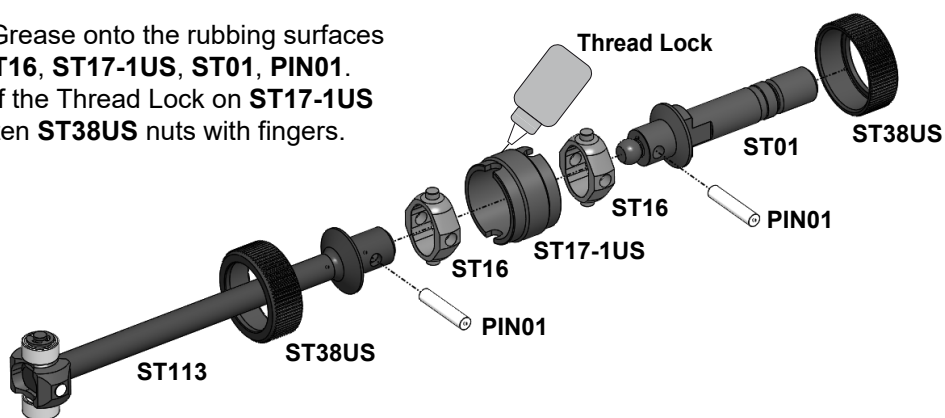
## STEP 30



Click or Scan for video

### Version of the front drive for US-spec kits.

Apply Joint Grease onto the rubbing surfaces of **ST113**, **ST16**, **ST17-1US**, **ST01**, **PIN01**. Apply a bit of the Thread Lock on **ST17-1US** thread. Tighten **ST38US** nuts with fingers.



### TIP / Recommended items:

MAX-01-002 - MXLR Driveshaft & Gears oil  
MAX-02-002 - MXLR Awesomatix TC Multi Tool

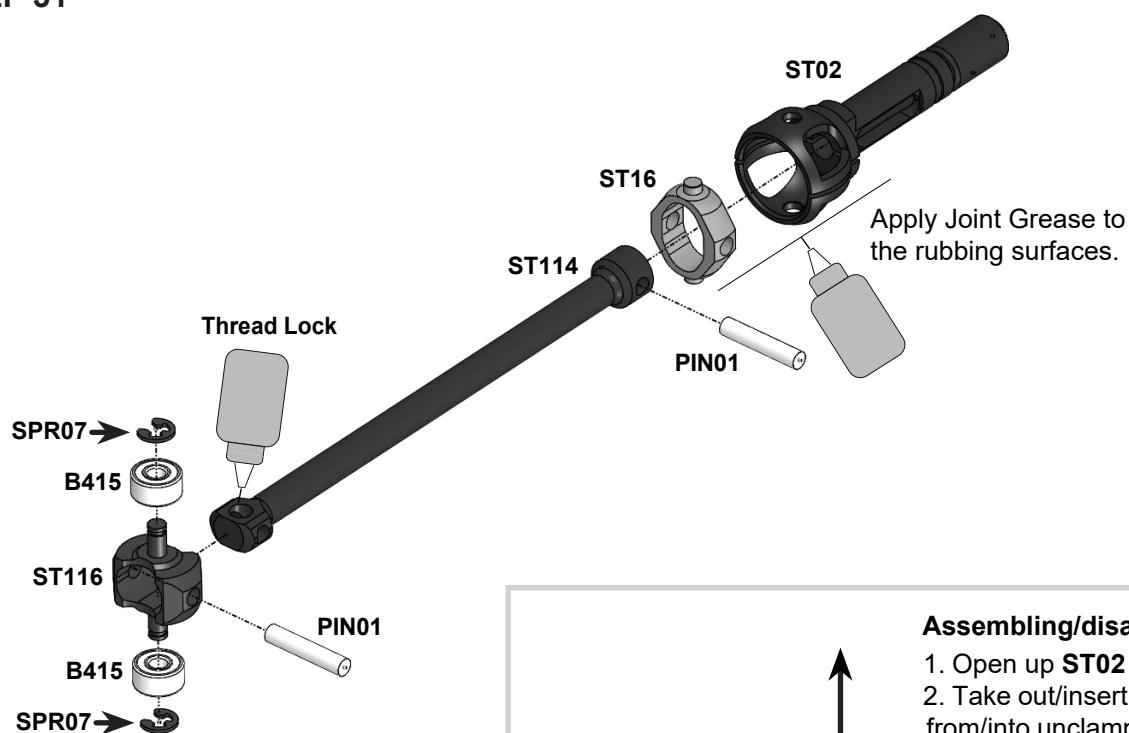
Build two front drive shafts



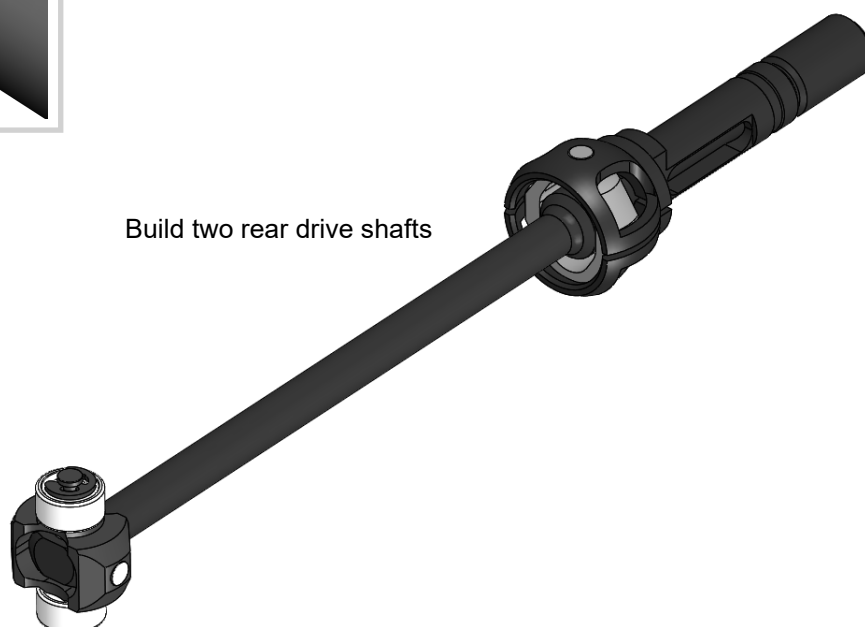
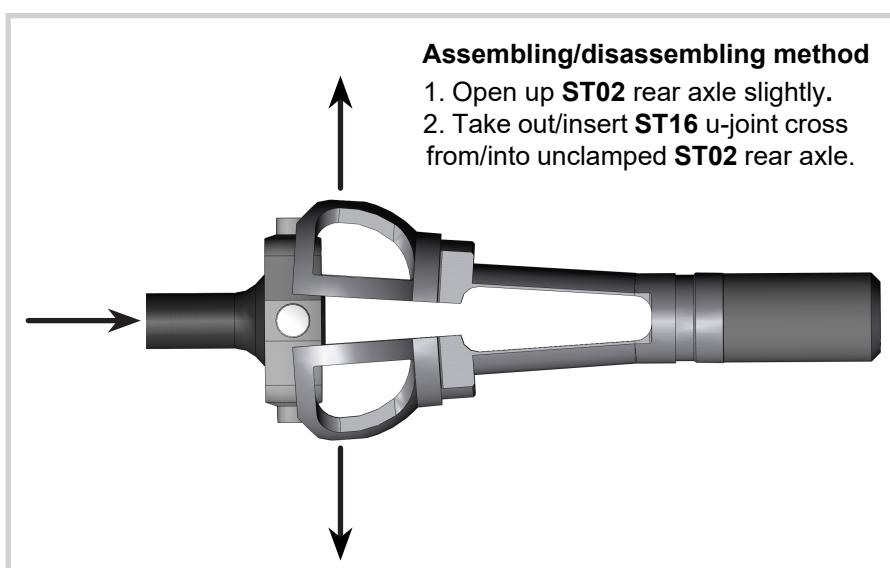
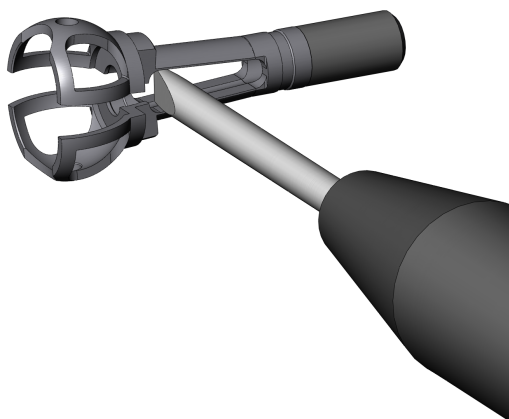
Front drive shafts for US-spec kits



## STEP 31

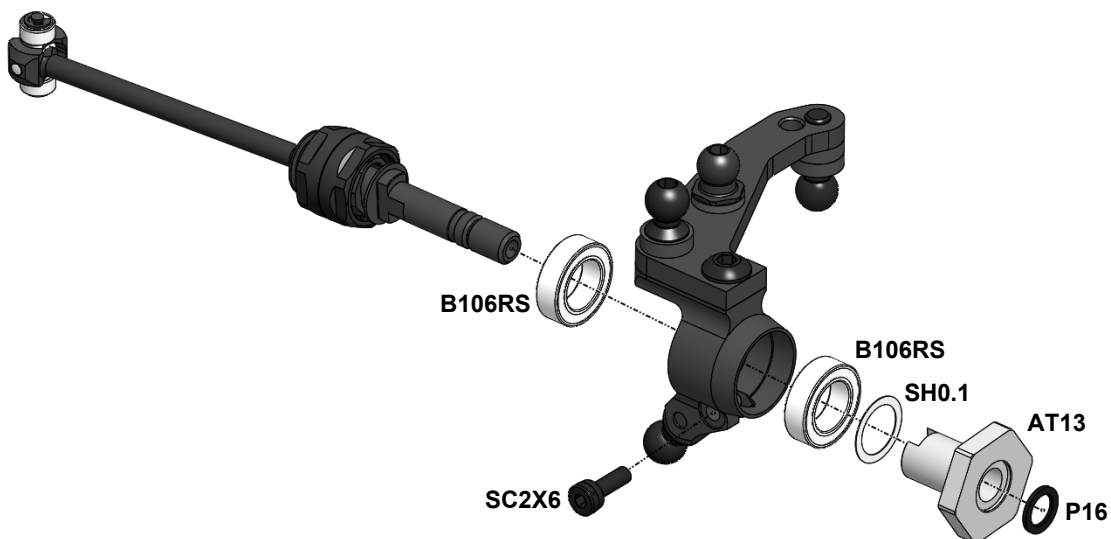


**Tip:**  
Insert a 2.5mm flat screwdriver (or tail end of **Awesomatix T01** wrench) into **ST02** slot then rotate 90° to open it up.

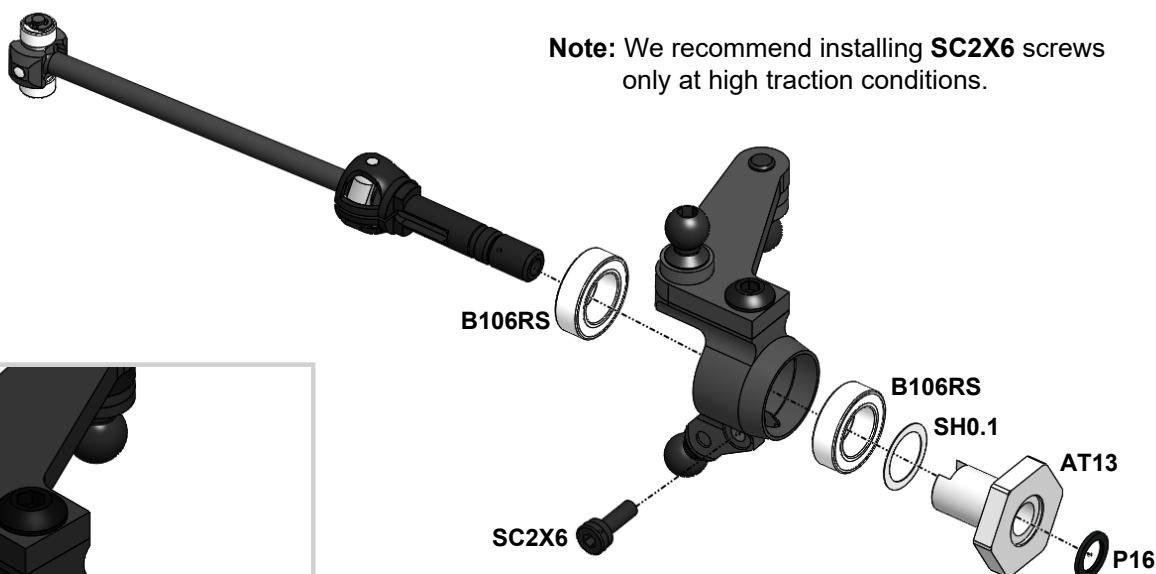




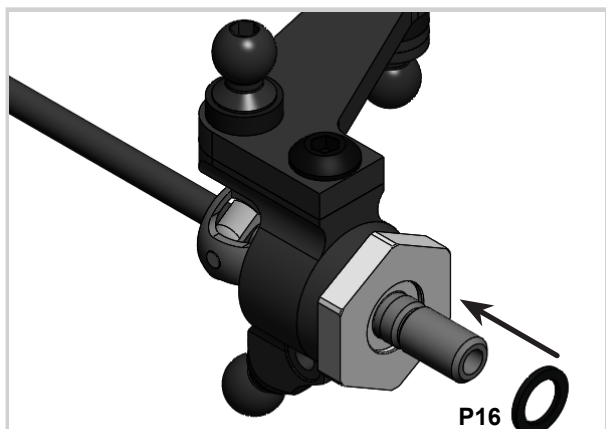
## STEP 32



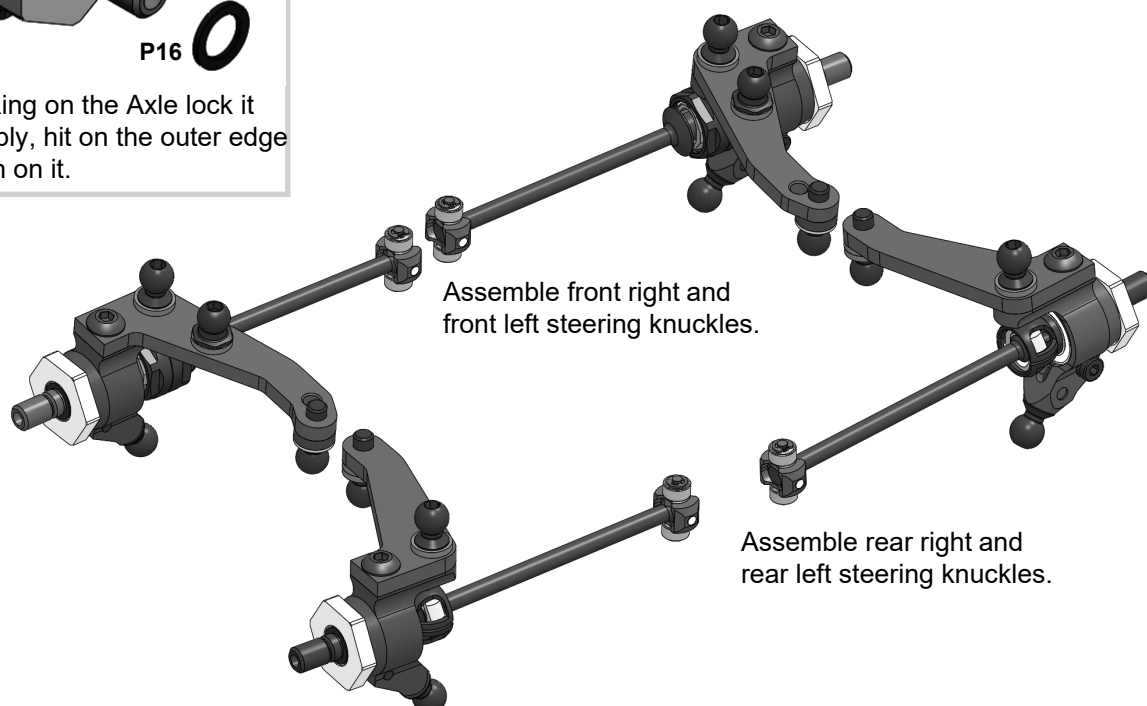
**Note:** We recommend installing **SC2X6** screws only at high traction conditions.



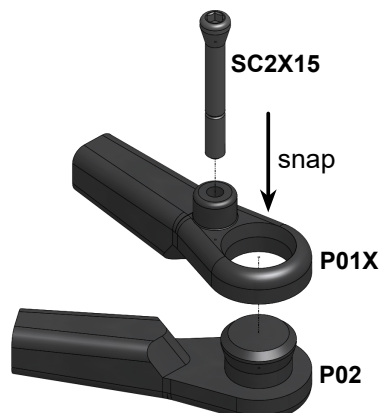
**Note:** Rear universal joints may be a bit tight at this stage. They will settle into their true position once the wheels are fully tightened.



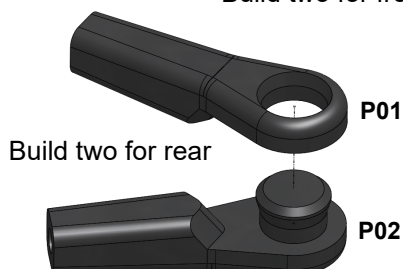
**Note:** Press **P16** Lock Ring on the Axle lock it into place. For disassembly, hit on the outer edge of the Axle or press down on it.



# STEP 33

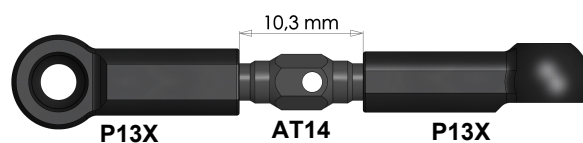


Build two for front

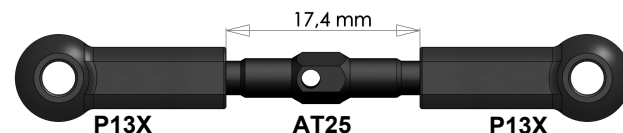


Build two for rear

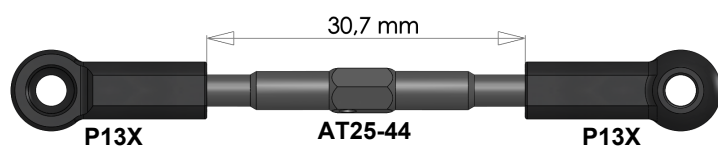
Servo link:



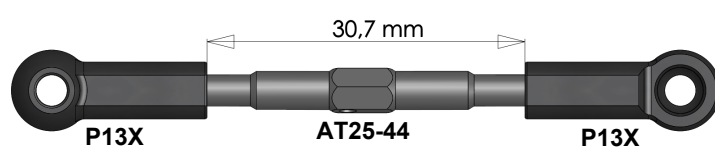
Rear toe link:



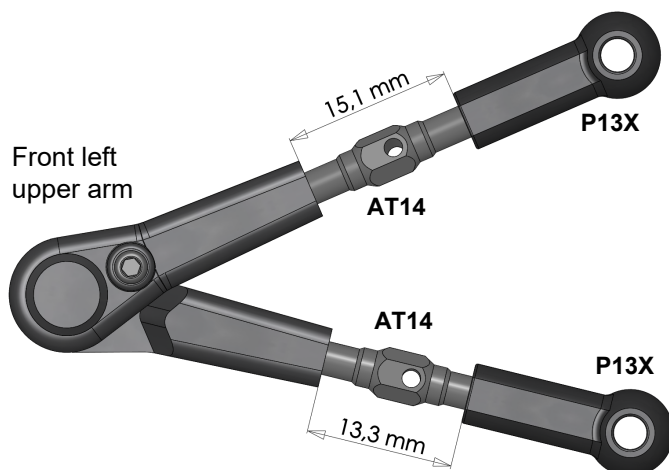
Build two!



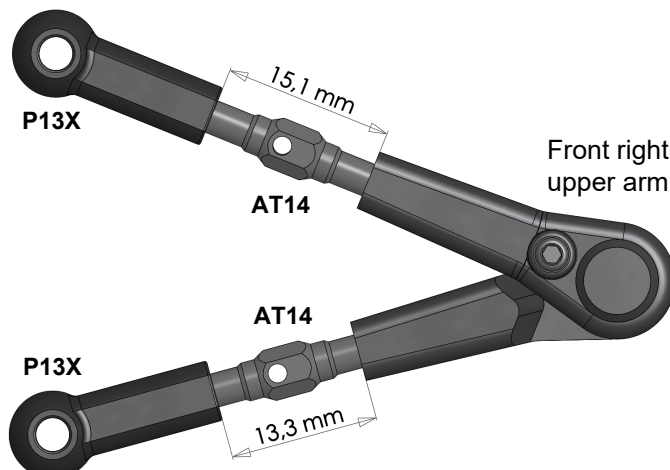
Front left steering link



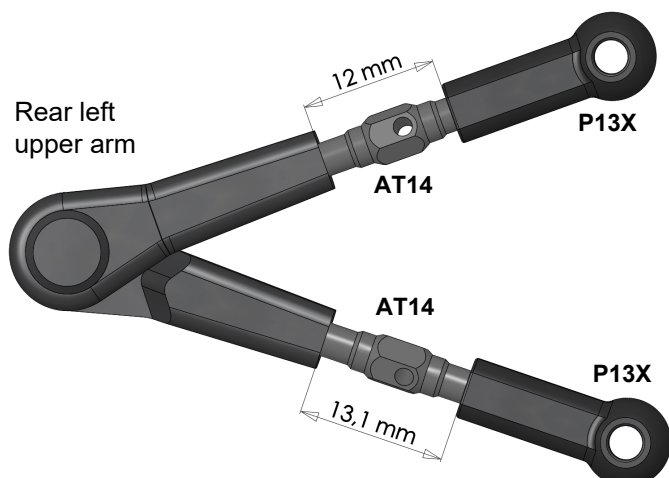
Front right steering link



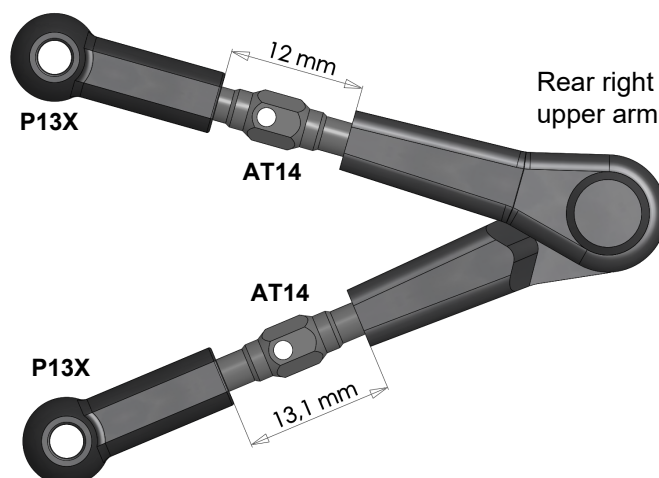
Front left upper arm



Front right upper arm



Rear left upper arm

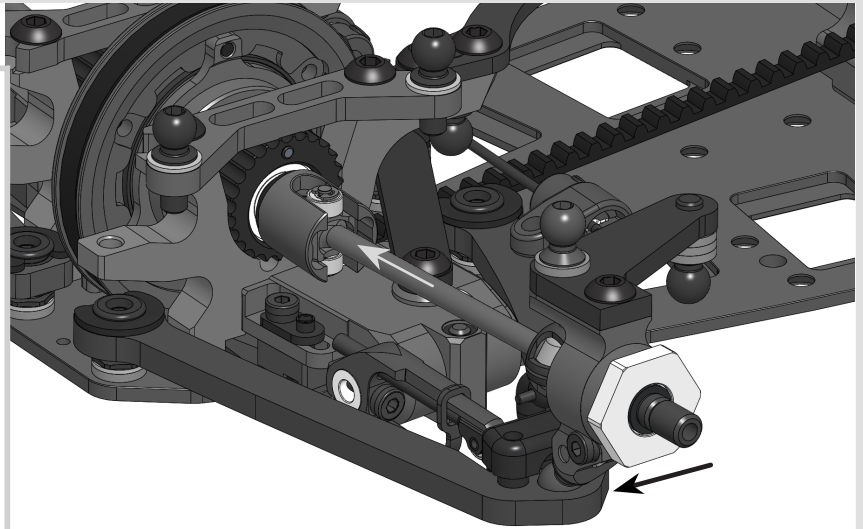
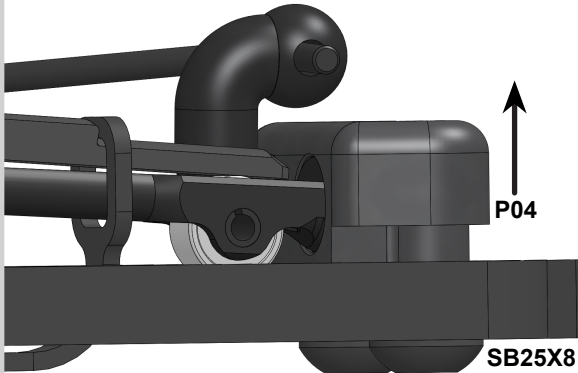


Rear right upper arm

**Note:** The rods and arms sizes are given for approximately 5.5° front caster and -2° rear caster, 0.5° front camber and 1° rear camber, 2.5° rear toe-in and 1° front toe-out. Use a setup station or a angle gauge for precise suspension geometry setting. See our recommendations on page #28 for quick and easy suspension geometry change.

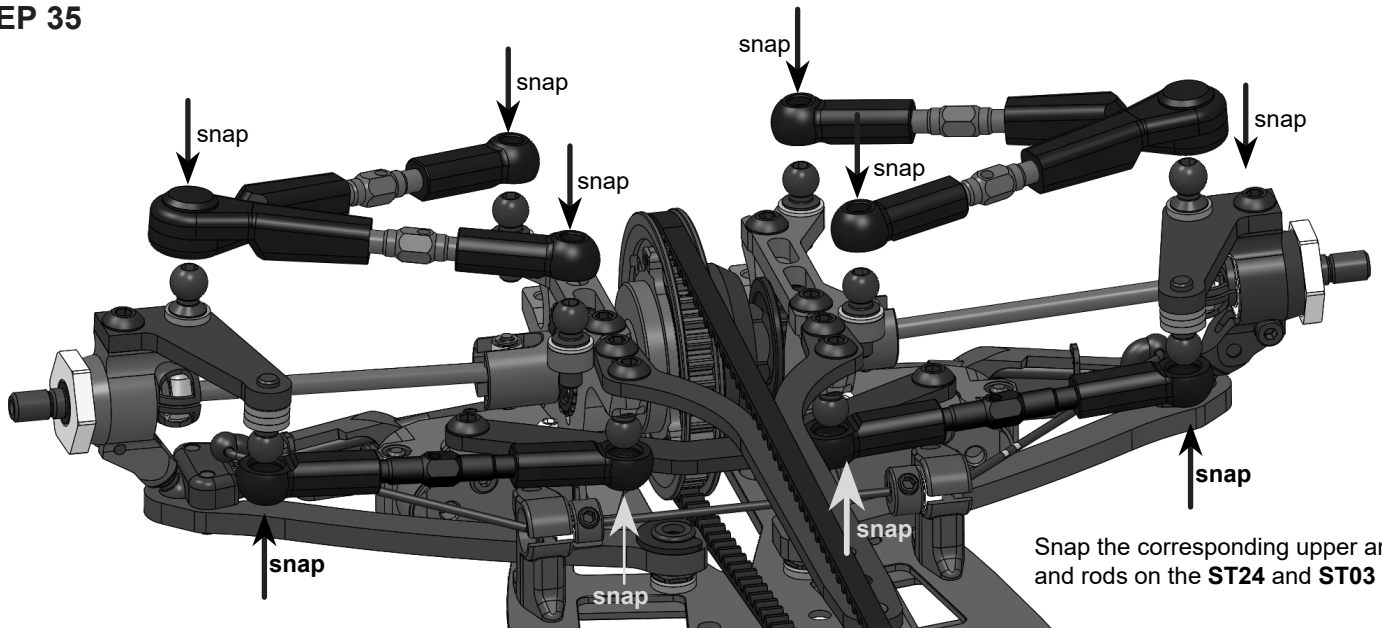
## STEP 34

Unscrew **SB25X8** screws on ~3 turns and shift **P04** up to create ~1.5mm gap between **P04** and the lower arm.

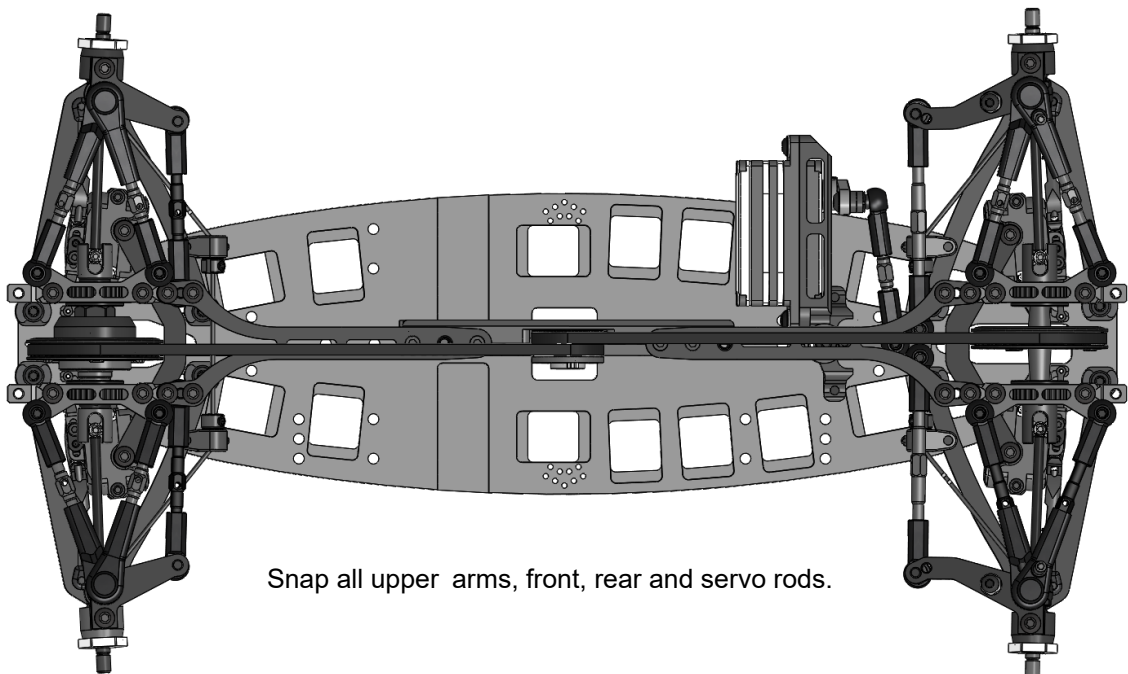


Insert **P03** ball into the spherical cavity of the lower arm and tighten **SB25X8** screws. Insert the driveshaft inner joint into the outdrive of diff/spool.  
**⚠Attention:** do not overtighten **SB25X8** screws to avoid **ST03** ball binding!  
 Achieve free movement of the ball joint with minimum play.

## STEP 35

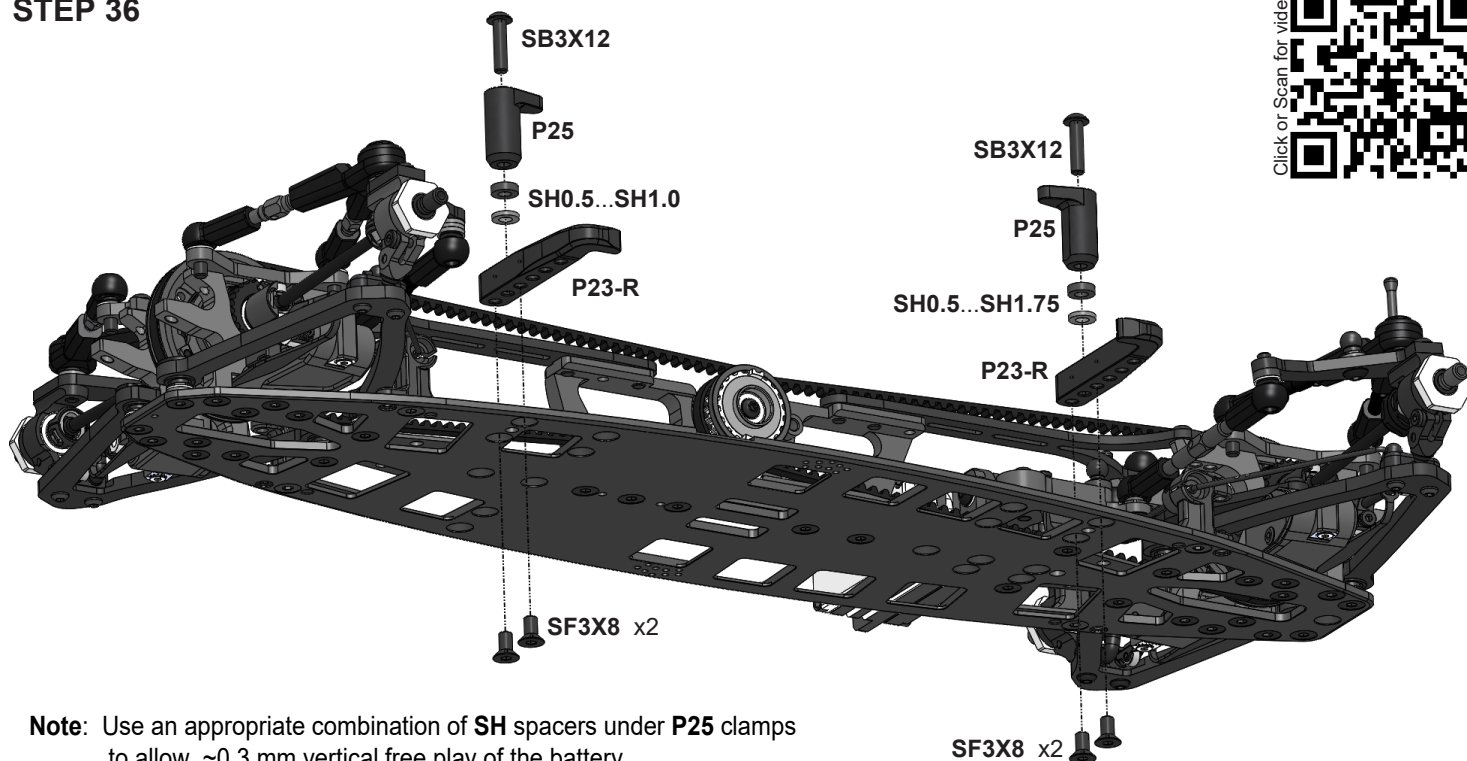


Snap the corresponding upper arms and rods on the **ST24** and **ST03** balls.



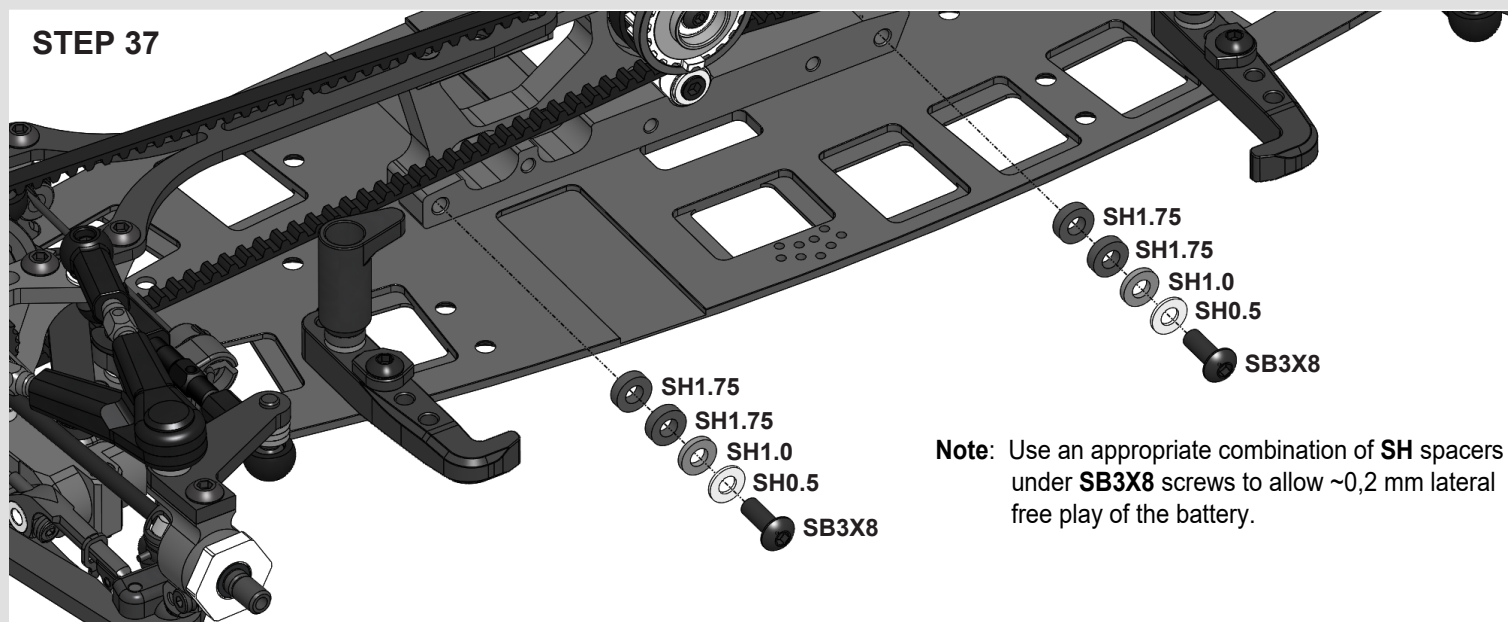
Snap all upper arms, front, rear and servo rods.

## STEP 36



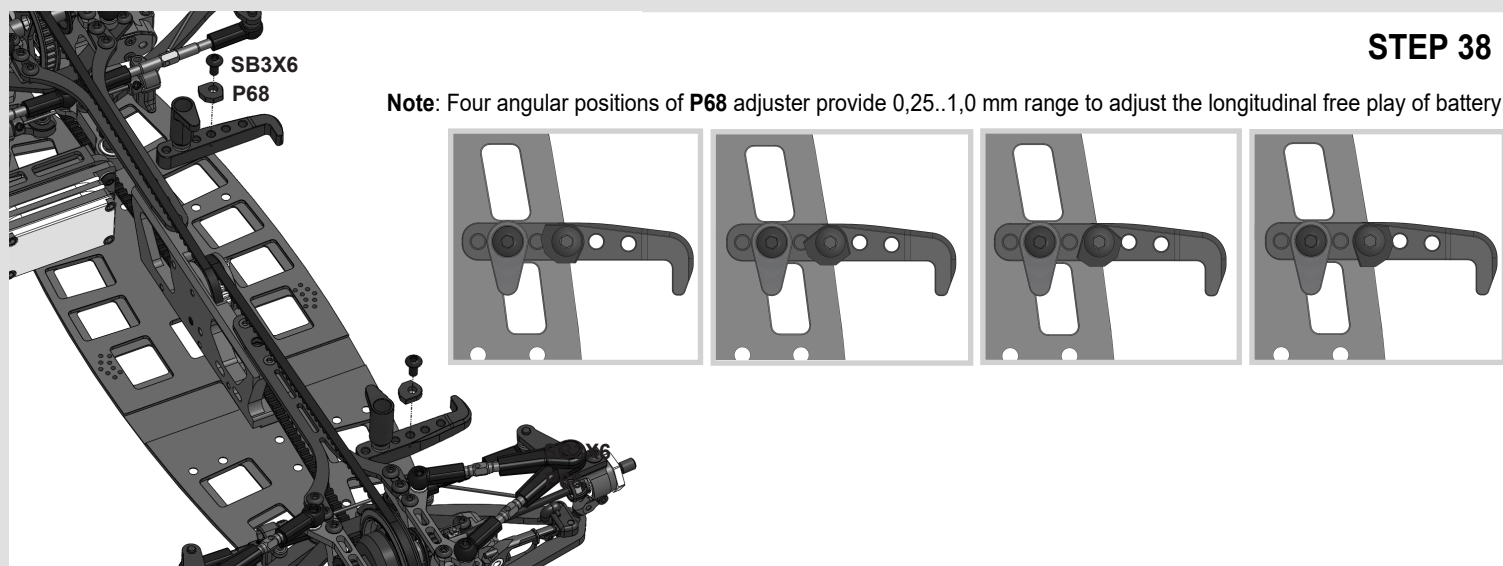
**Note:** Use an appropriate combination of **SH** spacers under **P25** clamps to allow ~0,3 mm vertical free play of the battery.

## STEP 37



**Note:** Use an appropriate combination of **SH** spacers under **SB3X8** screws to allow ~0,2 mm lateral free play of the battery.

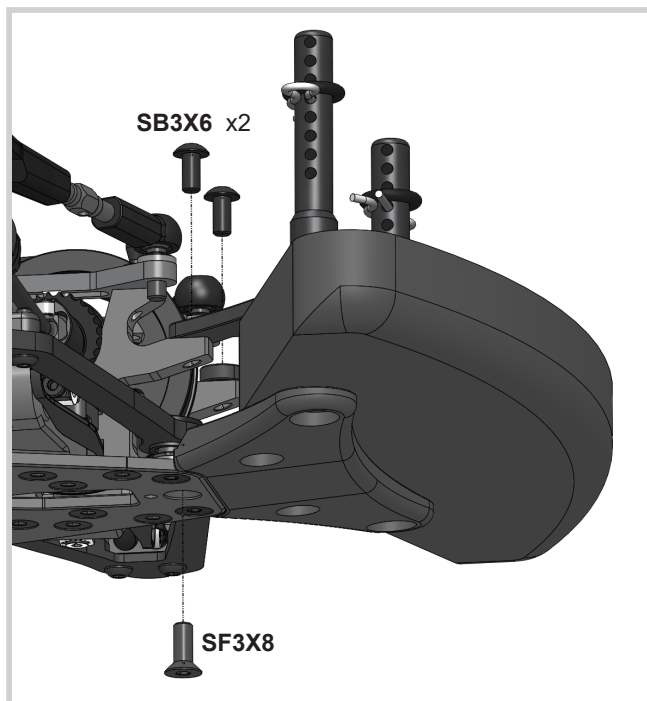
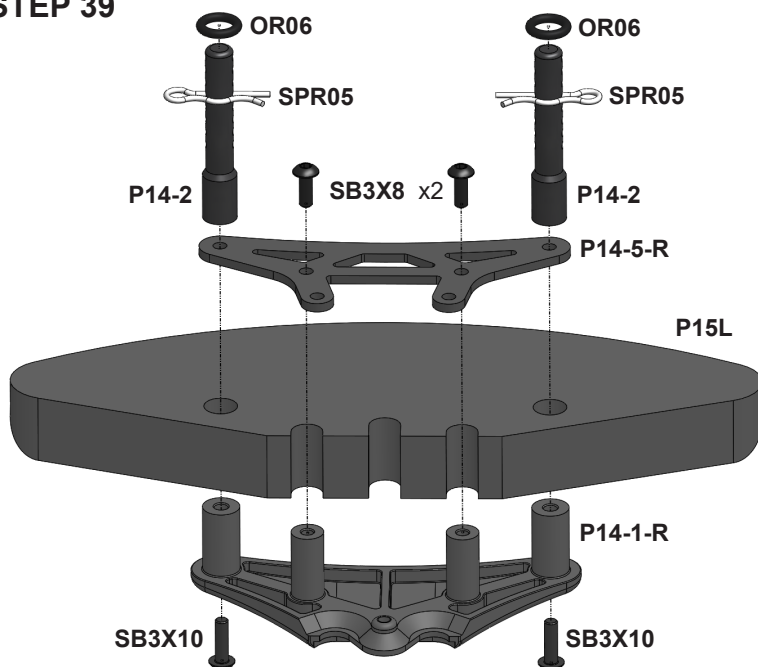
## STEP 38



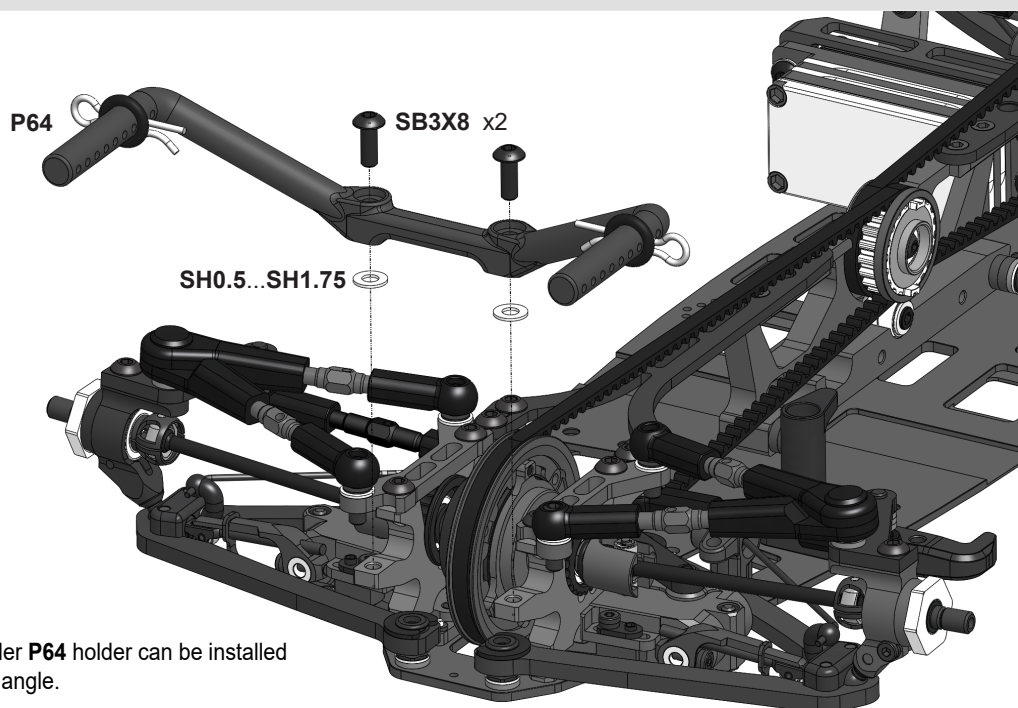
**Note:** Four angular positions of **P68** adjuster provide 0,25..1,0 mm range to adjust the longitudinal free play of battery.



## STEP 39

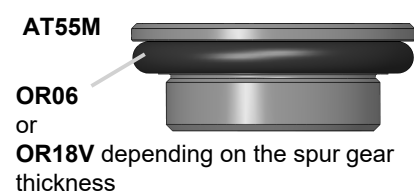
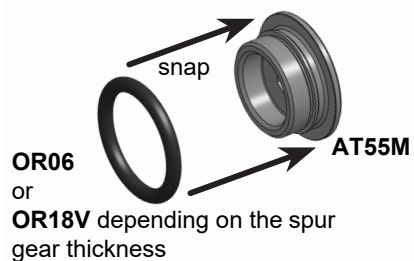
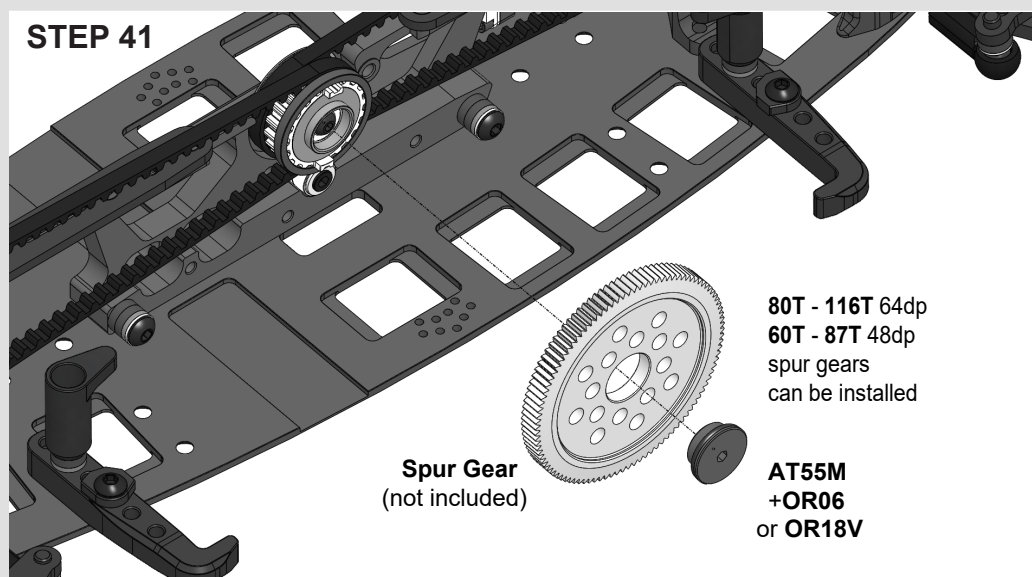


## STEP 40



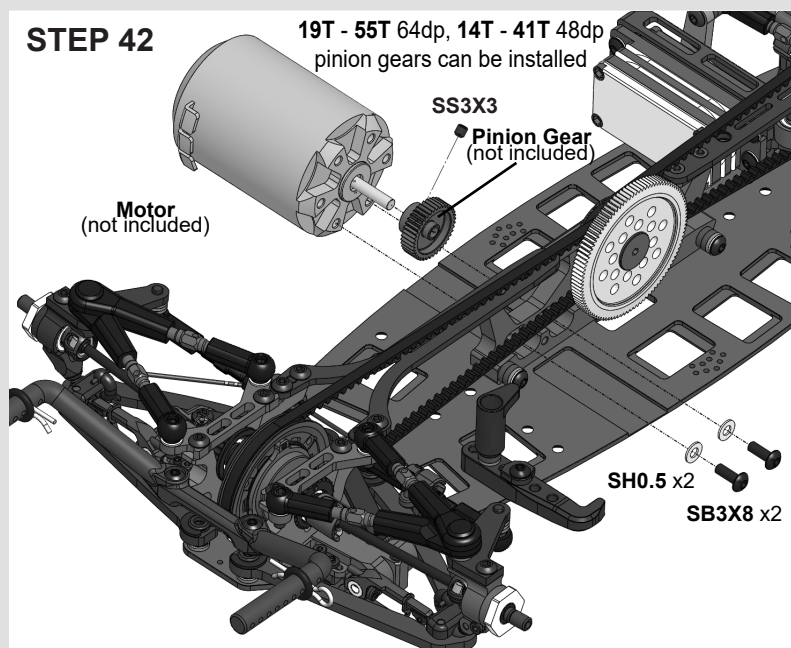
**Note:** SH0.5...SH1.75 spacers under P64 holder can be installed to adjust the bodyshell rake angle.

## STEP 41

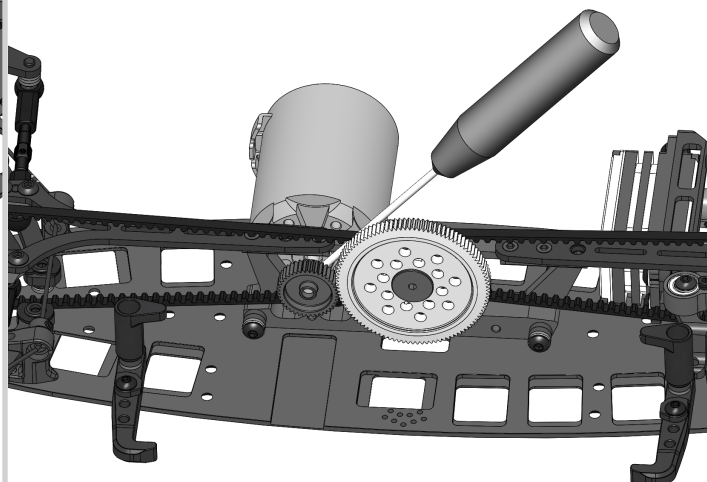


## STEP 42

19T - 55T 64dp, 14T - 41T 48dp  
pinion gears can be installed

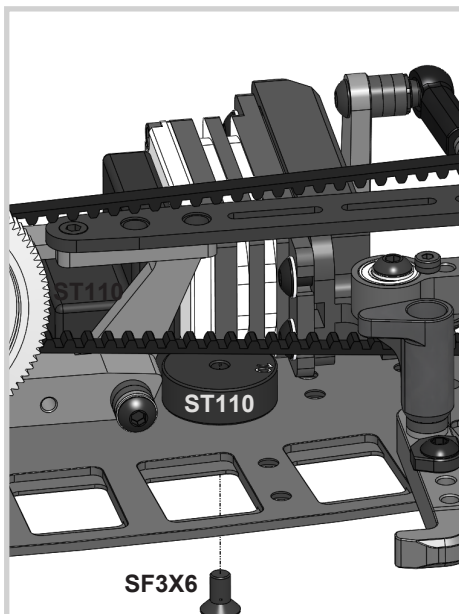
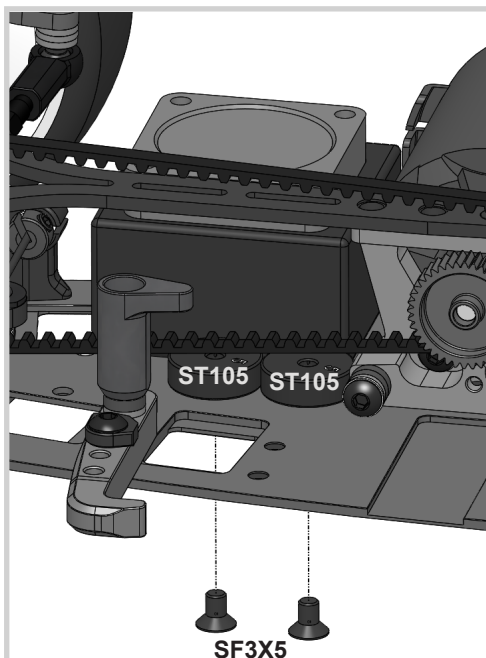
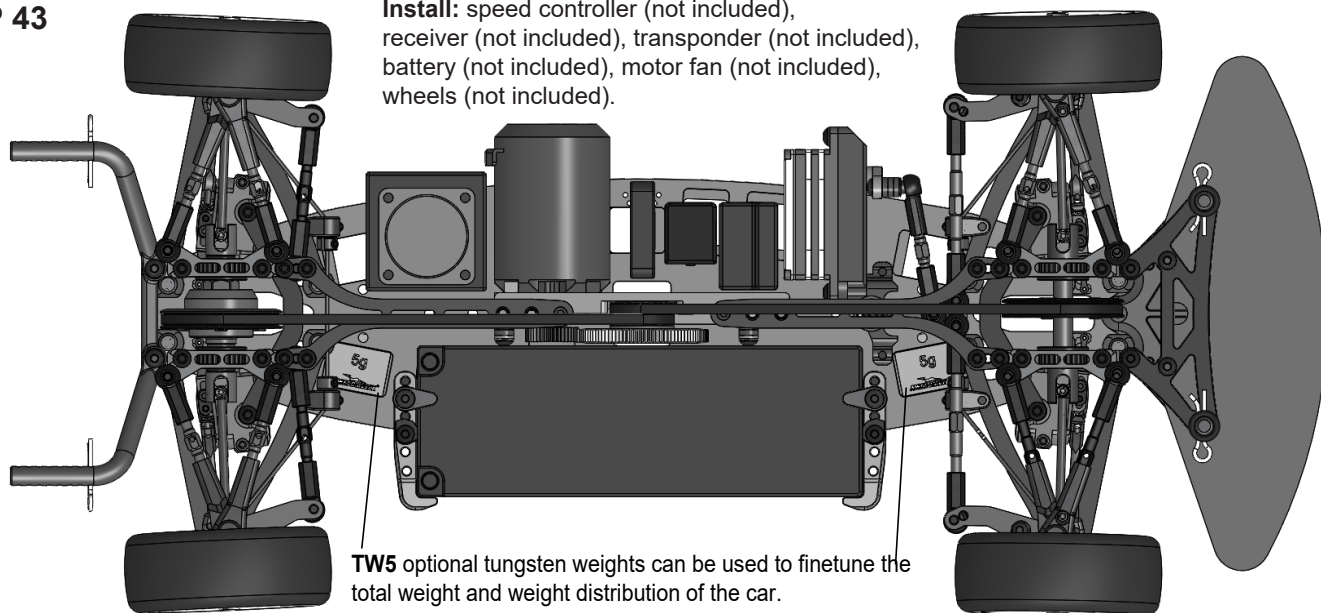


**Note:** This orientation of the hex driver should be used to tighten the pinion gear set screw.



## STEP 43

**Install:** speed controller (not included),  
receiver (not included), transponder (not included),  
battery (not included), motor fan (not included),  
wheels (not included).

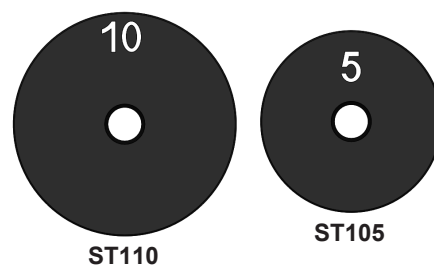


Install **ST110** and **ST105** beveled side  
down to reduce adverse effect on flex.

**ST110**  
or  
**ST105**



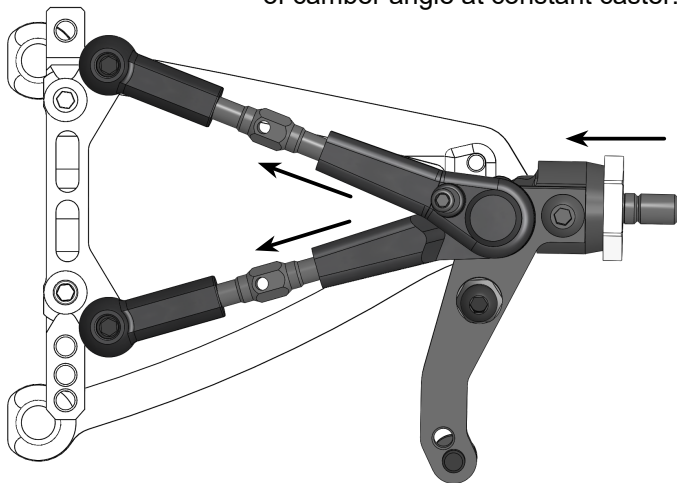
The engraved sides of **ST110** and **ST105**  
are flat. The opposite sides are beveled.



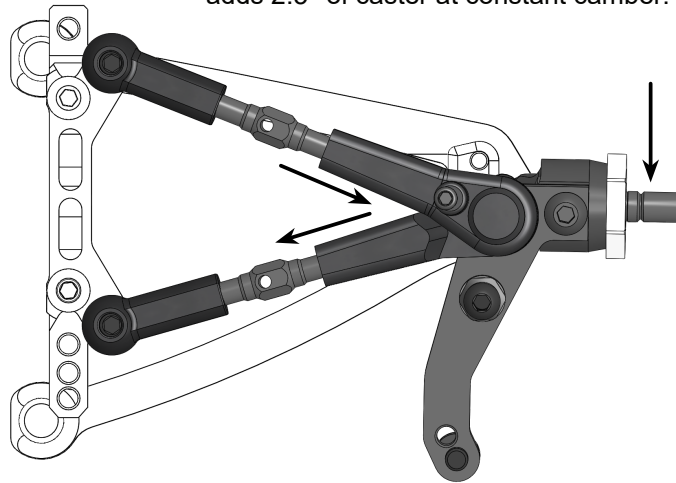


## SUSPENSION SETTING TECHNIQUE

**Camber adjustment rule:** Simultaneous both upper rods 0.5mm shortening (1/2 turn of both turnbuckles) adds 1.0° of camber angle at constant caster.

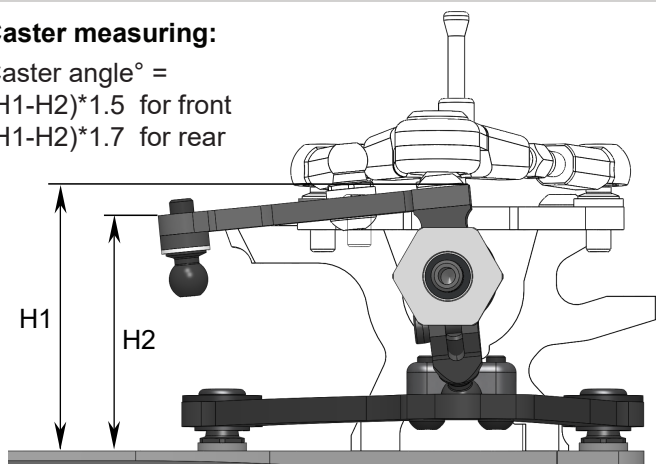


**Caster adjustment rule:** Simultaneous front upper rod 0.5mm elongation and rear upper rod 0.5mm shortening adds 2.5° of caster at constant camber.



### Caster measuring:

Caster angle° =  
 $(H1-H2)*1.5$  for front  
 $(H1-H2)*1.7$  for rear

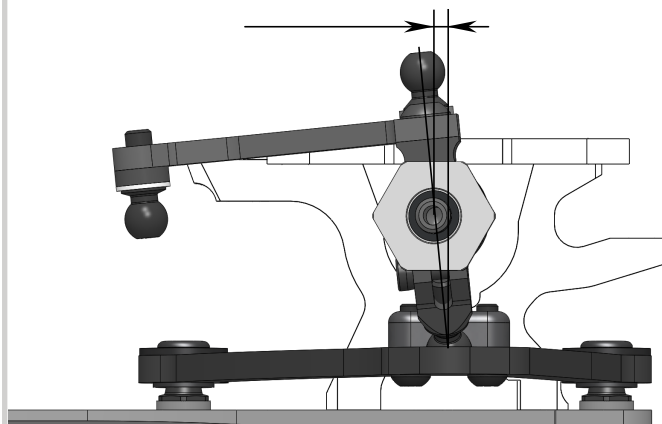


#### TIP / Recommended items:

MAX-02-001 - MXLR Awesomatix Caster Tool

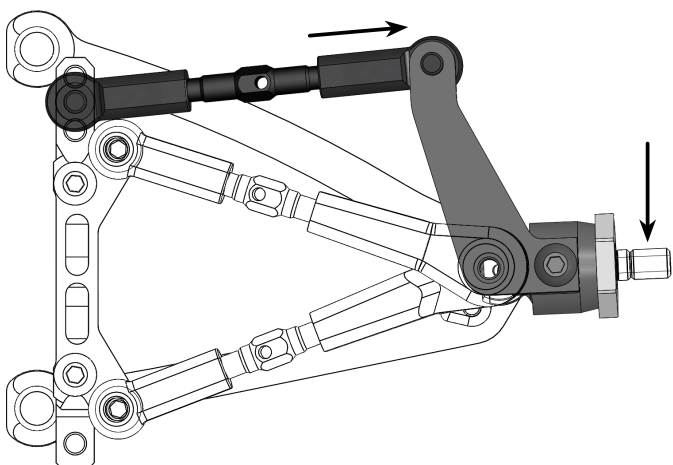
### Wheelbase adjustment:

Alter the car's wheelbase by adjusting rear caster. A 4° caster change provides a 1mm wheelbase change.



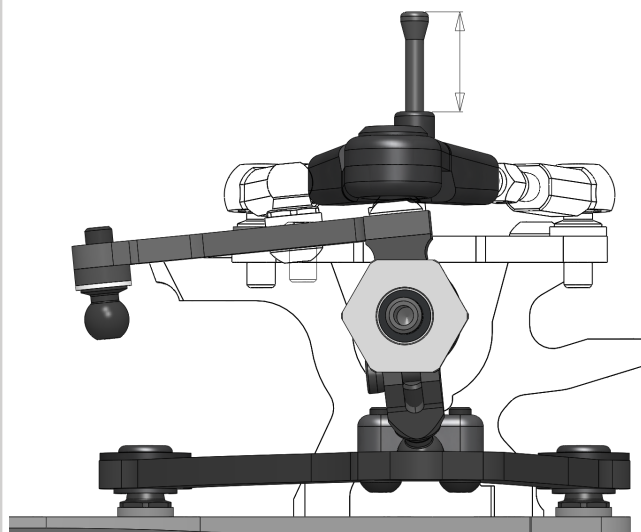
### Rear suspension toe-in adjustment:

Rear rod 0.5mm elongation reduces the toe-in by 1.0°



### Body shell front end downtravel adjustment:

Use SC2X15 screws to adjust bodyshell down travel limit.

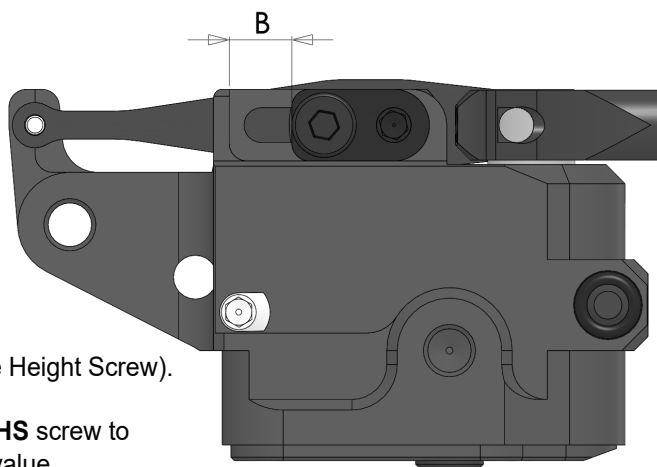


## D4 dampers setting technique

**Attention!** D4 dampers allow to adjust the damping level, spring rate and progressivity of damping without replacing of the shock's oil and spring and without disassembling the damper.

### 1. Damping and Shock Spring rate setting

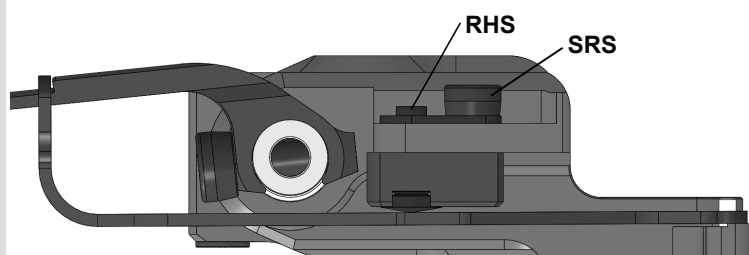
Increase **B** distance (slide **AT119R** holder outward) to increase the spring rate. Reduce **B** distance (slide **AT119R** holder inward) to reduce the spring rate. Use **SRS** (Spring Rating Screw) to unlock **AT119R** holder and to lock it at the desirable position.



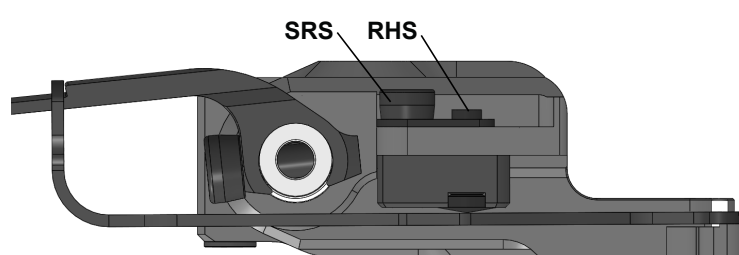
### 2. Shock Spring preload setting

Spring preload and the ride height of the car is adjusted by the **RHS** (Ride Height Screw). In A800RR kit **ST69-00-R** screw is provided as **RHS** screw. Turn IN (CW) **RHS** screw to increase spring preload. Turn OUT (CCW) **RHS** screw to decrease spring preload. Use spring preload setting to adjust ride height value.

### 3. SRS/RHS Screws arrangements



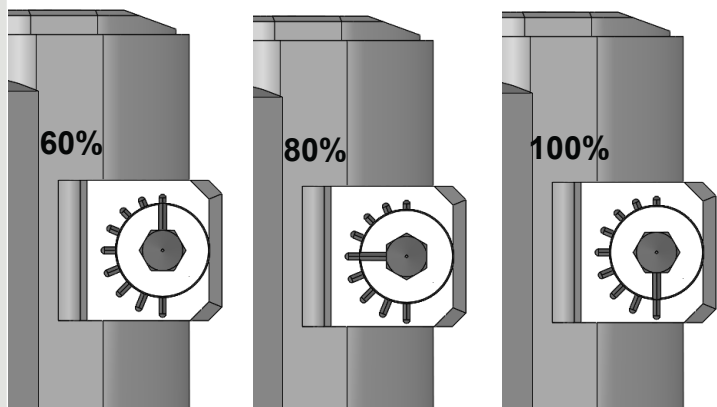
SRS/RHS screws arrangement I



SRS/RHS Screws arrangement II

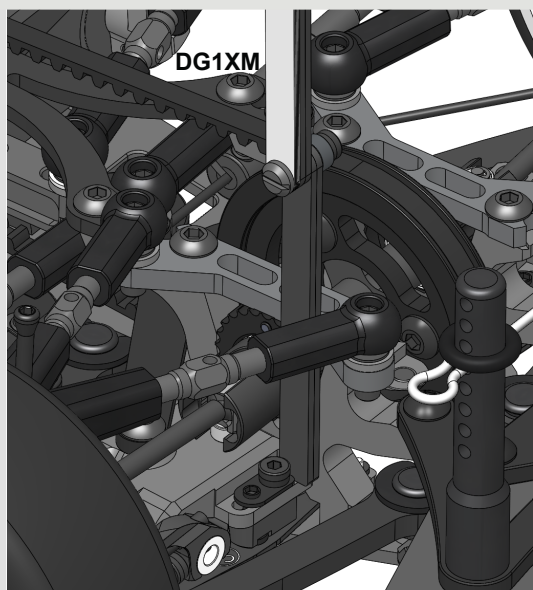
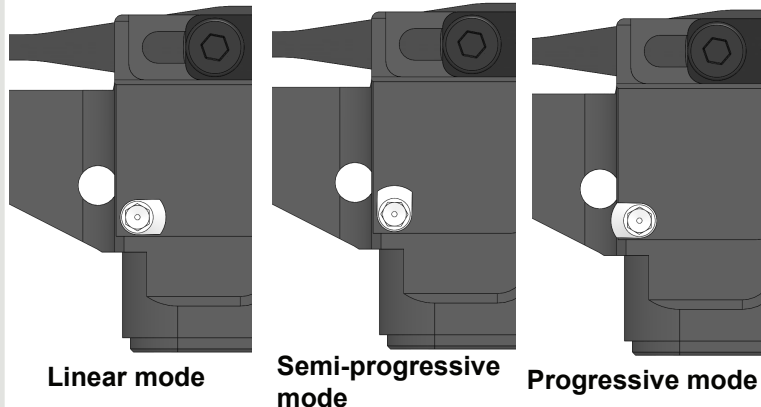
### 4. Damping level setting

**ST143** valve angular position indicates the damping level from 60% to 100% at 5% increment.

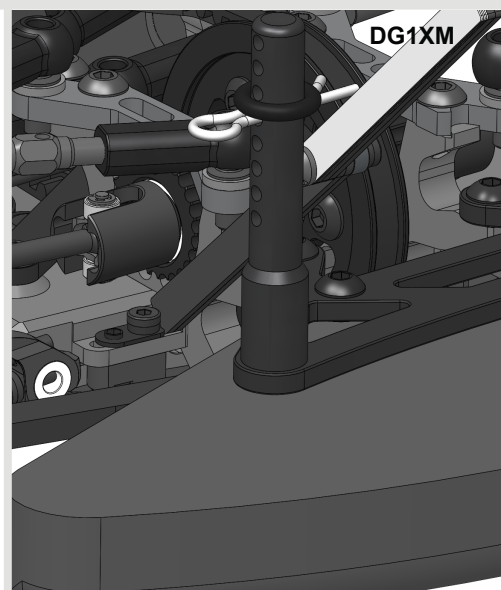
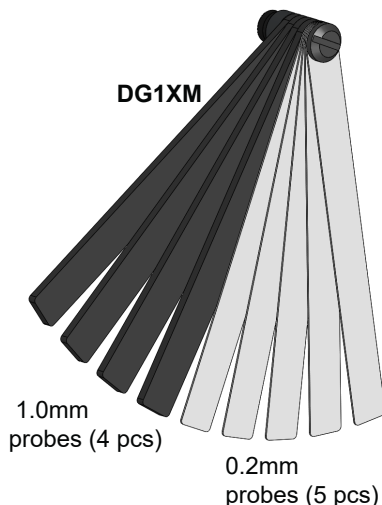


### 5. Damping progressivity setting

**ST225** valve angular position indicates one of three possible damping progressivity levels.

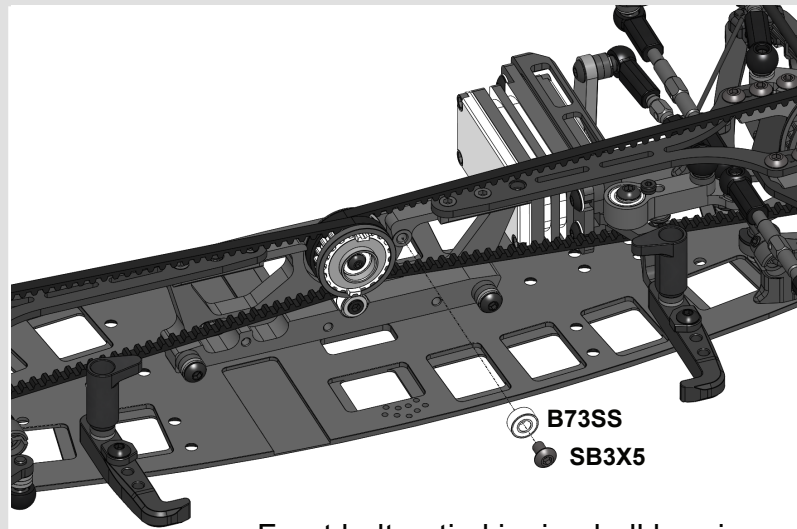
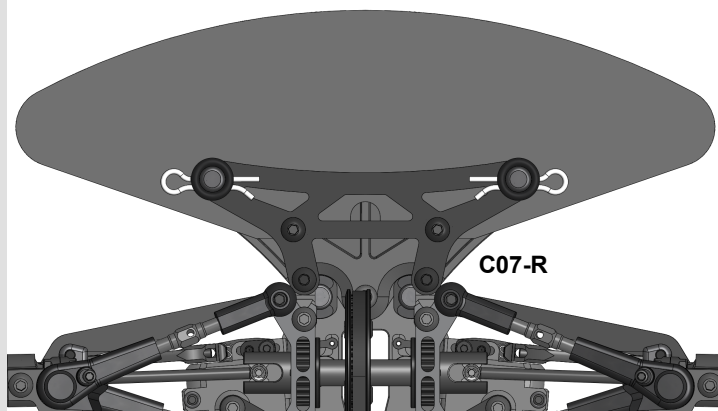


### 6. DG1XM gauge using



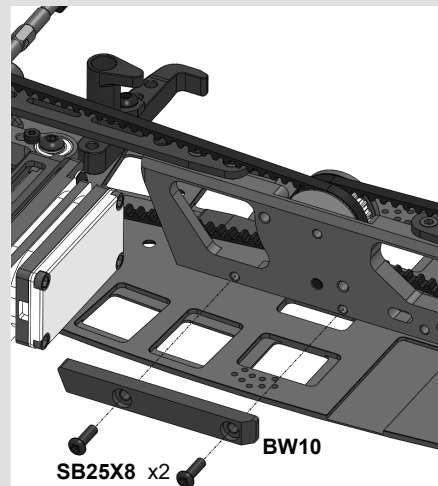
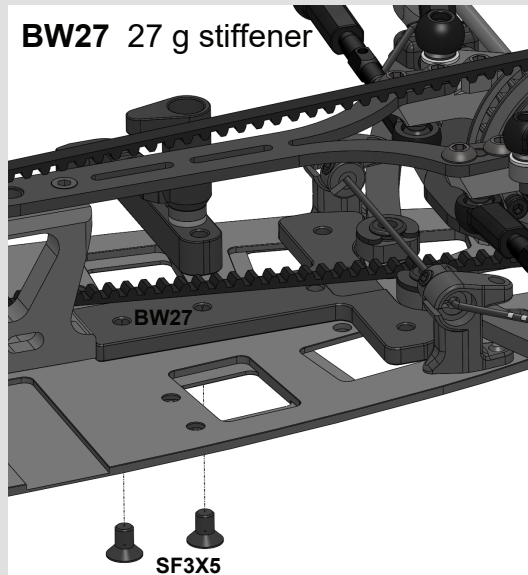
## Optional parts and sets

### C07-R carbon bumper plate

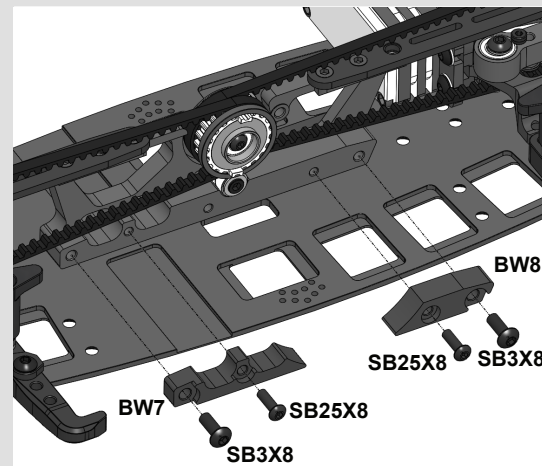


Front belt anti-skipping ball bearing

### BW27 27 g stiffener

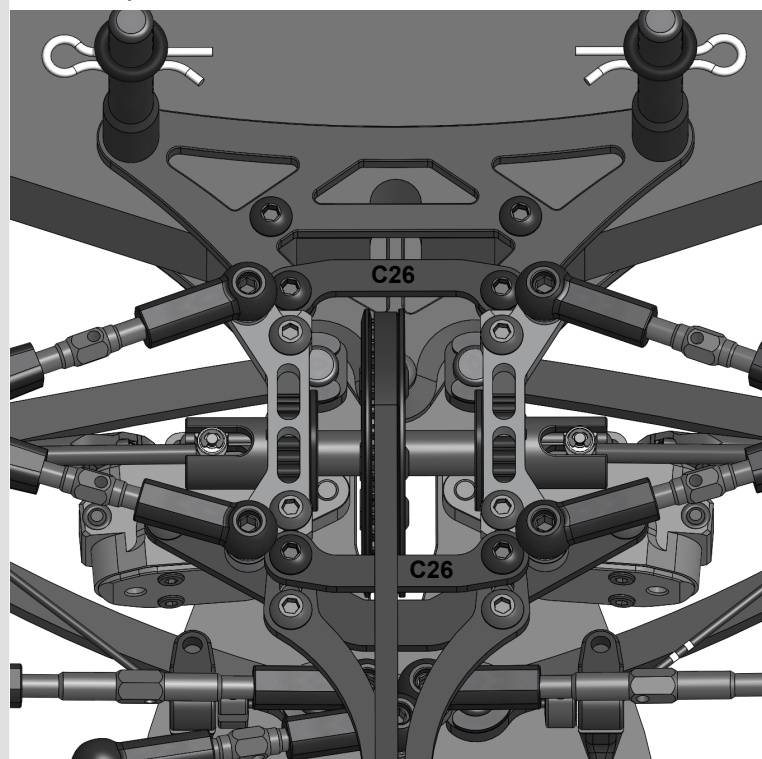


BW10 10 g weight

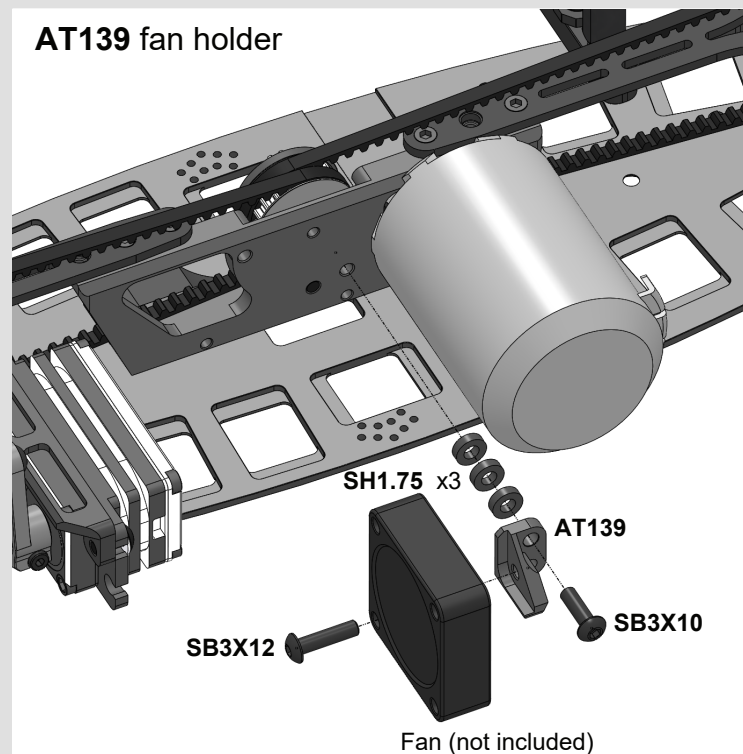


BW7 7 g , BW8 8 g weights

### C26 top stiffener

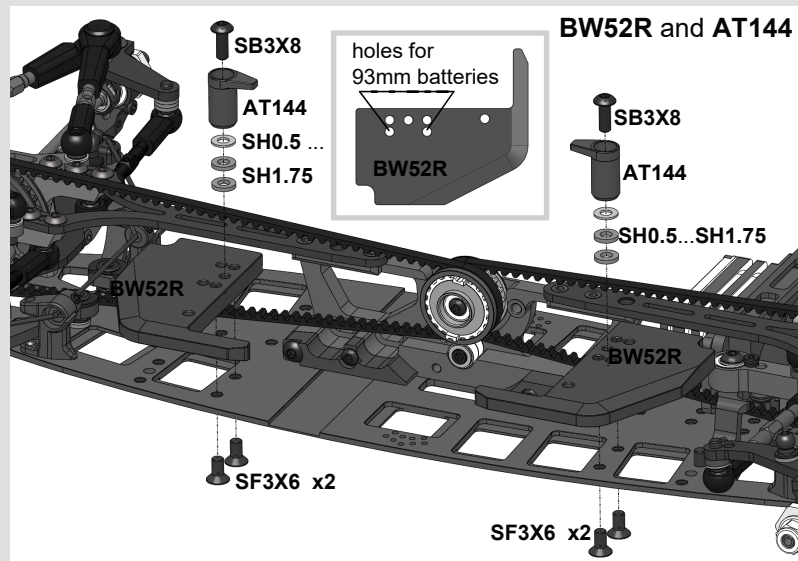
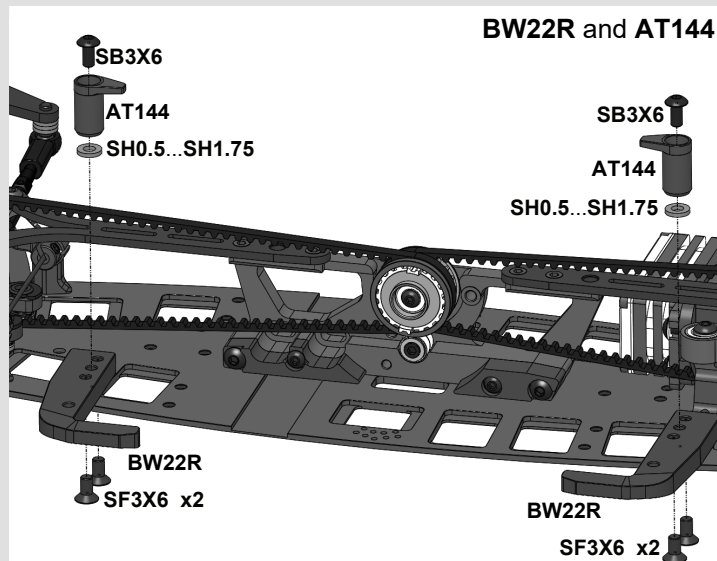


### AT139 fan holder





## Optional parts and sets



### AT143 anti-roll bar stiffener

AT143 stiffener increases stiffness of the anti-roll bar up to one step.

**+1 step** stiffness increasing means that

1.0 mm bar acts like 1.1 mm bar

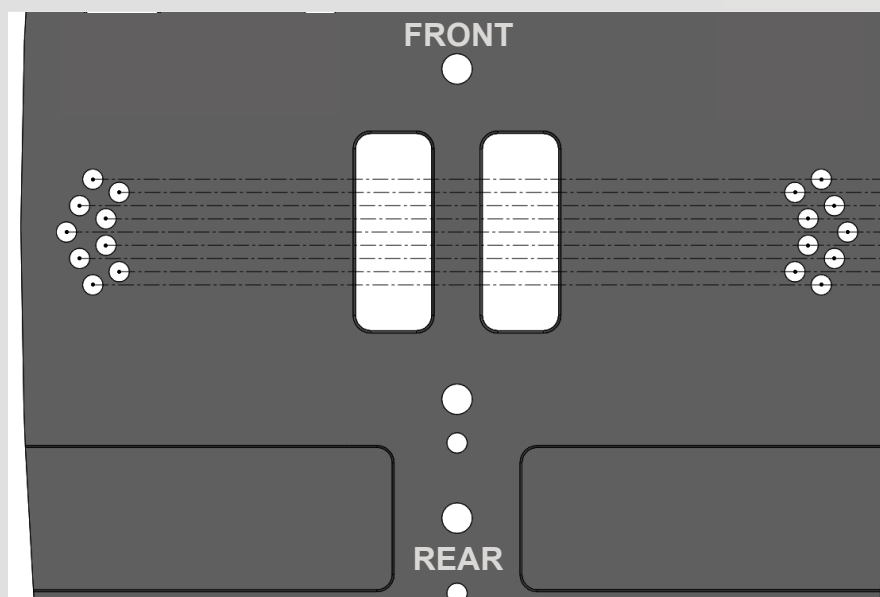
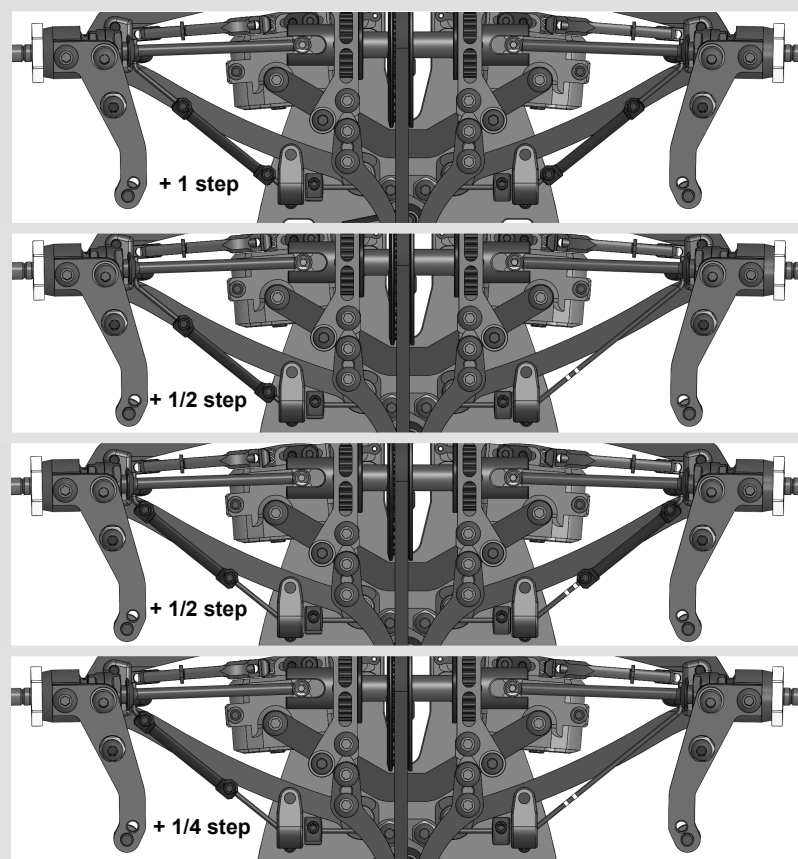
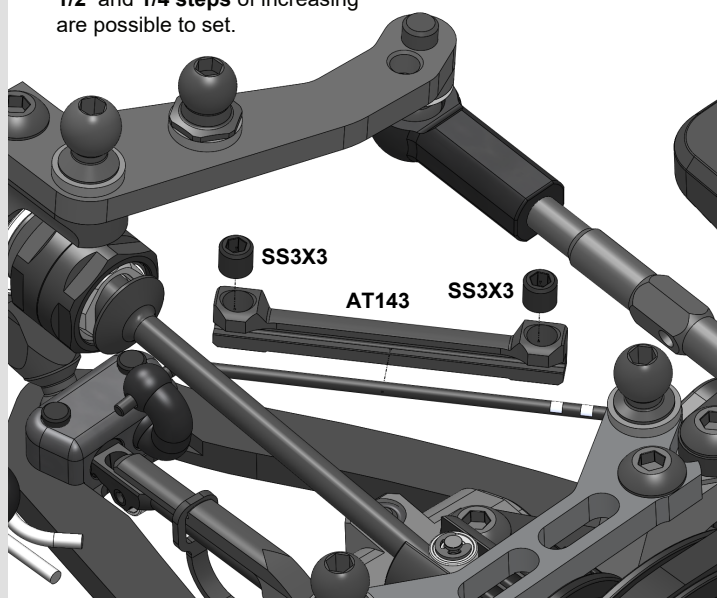
1.1 mm bar acts like 1.2 mm bar

1.2 mm bar acts like 1.3 mm bar

1.3 mm bar acts like 1.4 mm bar.

**1/2** and **1/4 steps** of increasing

are possible to set.



### Front/Rear weight distribution measuring holes on the lower deck.

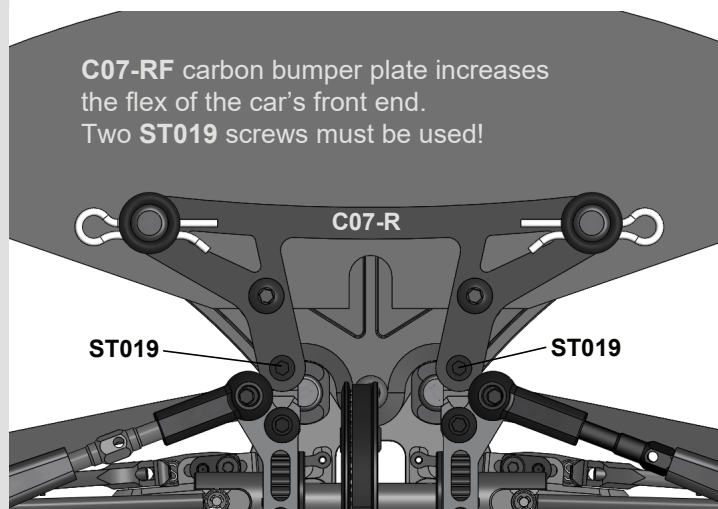
F52/R48% F51.5/R48.5% F51/R49% F50.5/R49.5% F50/R50%  
F48/R52% F48.5/R51.5% F49/R51% F49.5/R50.5%



## Optional parts and sets

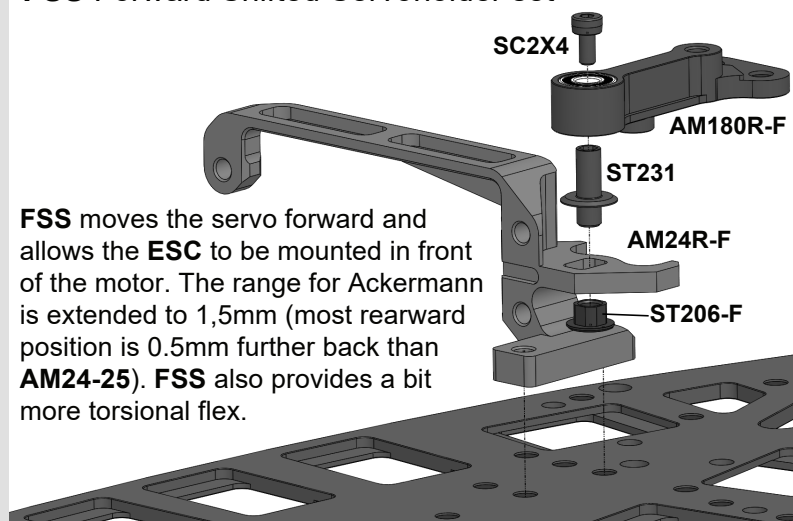
### C07-RF Carbon Bumper Plate

C07-RF carbon bumper plate increases the flex of the car's front end. Two ST019 screws must be used!



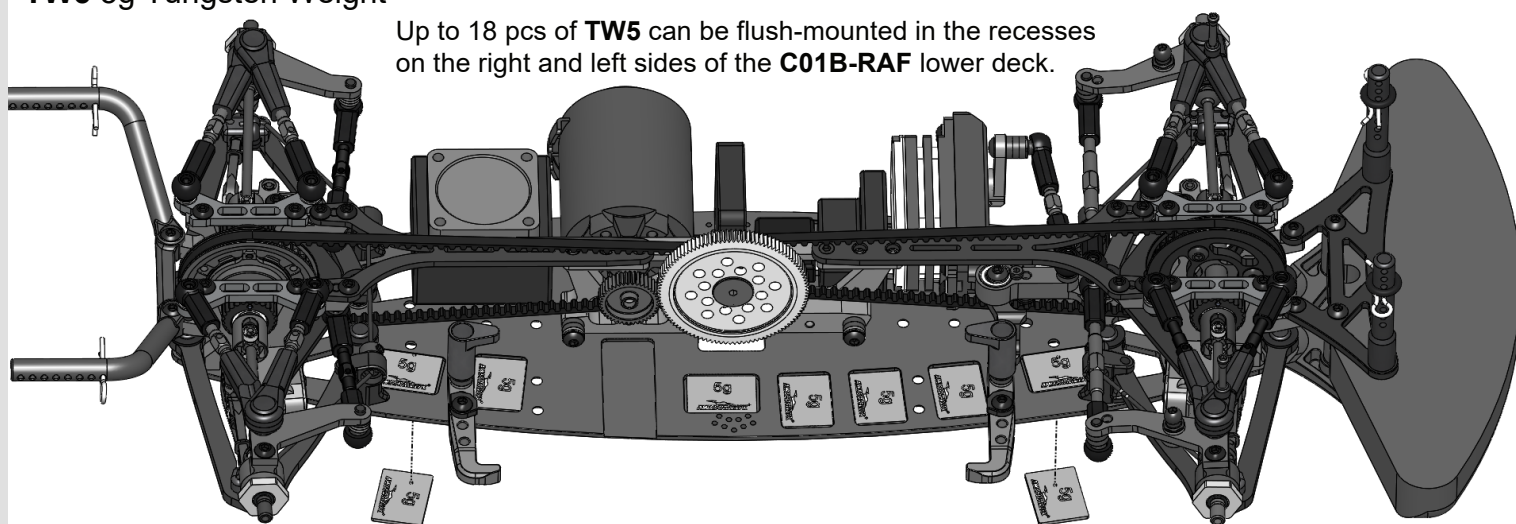
### FSS Forward Shifted Servoholder set

FSS moves the servo forward and allows the ESC to be mounted in front of the motor. The range for Ackermann is extended to 1,5mm (most rearward position is 0.5mm further back than AM24-25). FSS also provides a bit more torsional flex.



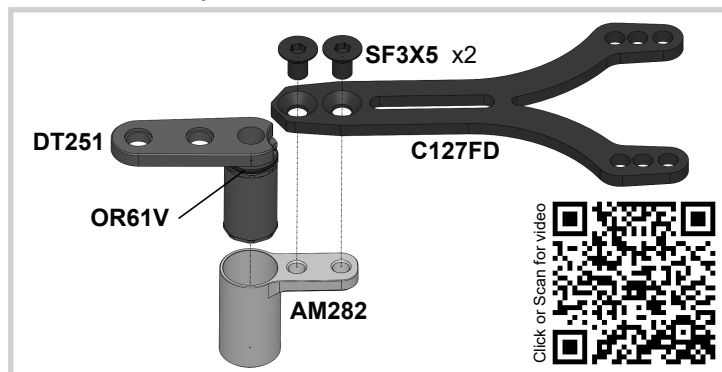
### TW5 5g Tungsten Weight

Up to 18 pcs of TW5 can be flush-mounted in the recesses on the right and left sides of the C01B-RAF lower deck.

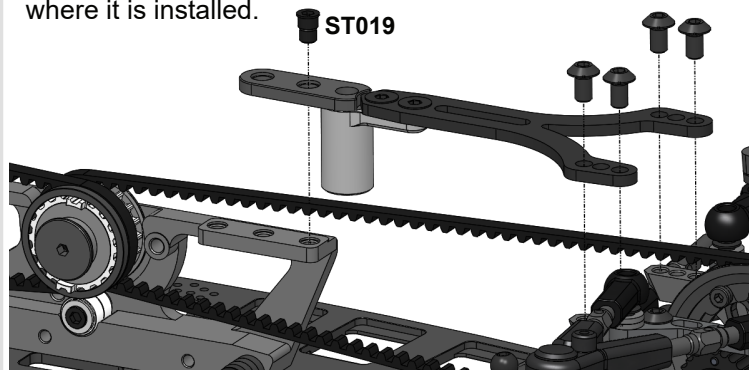


To install TW5, use thin double-sided tape or flexible adhesive (UHU POR).

### FD Flex Damper set

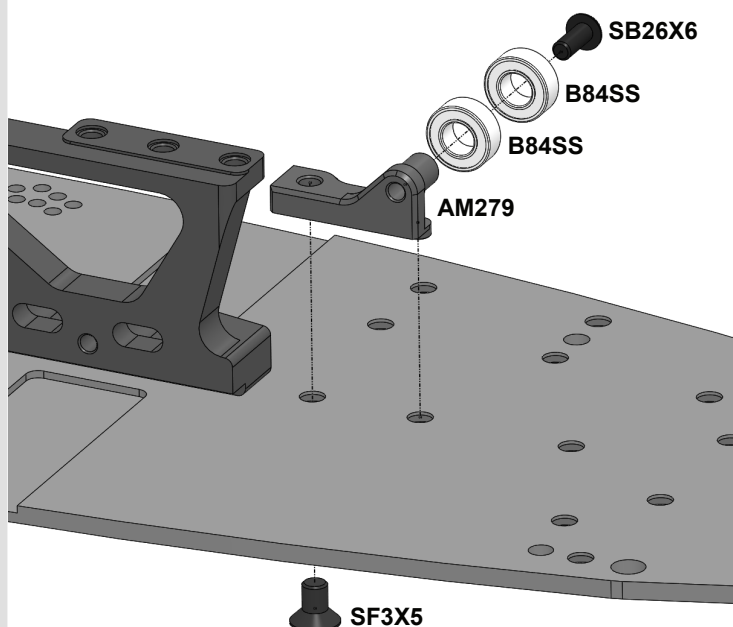


FD provides additional torsional flex of the car's end where it is installed.



### AM279 Rear Belt Tensioner set

AM279 tensioner reduces vibrations of the rear belt at high speeds that noticeably extends the life of the rear belt.

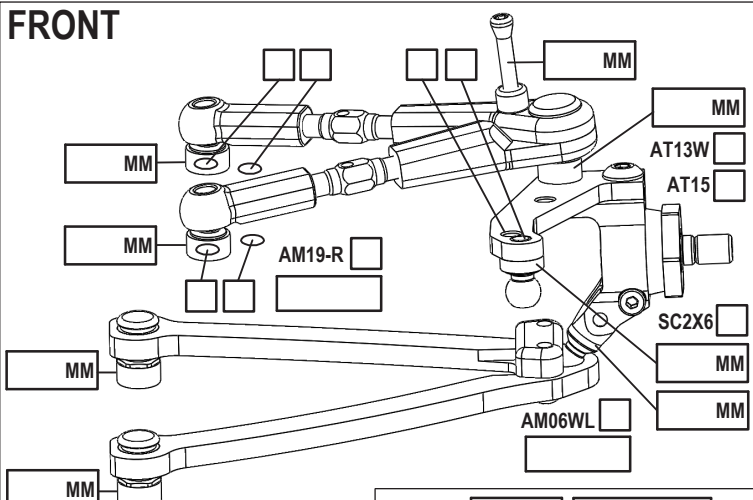




NAME \_\_\_\_\_  
 COUNTRY \_\_\_\_\_  
 RACE \_\_\_\_\_  
 TRACK \_\_\_\_\_

DATE \_\_\_\_\_ TEMP. °C AIR / TRACK \_\_\_\_\_ /  
 TRACK SURFACE ASPHALT ☐ CARPET ☐  
 TRACK LAYOUT TECHNICAL ☐ MIXED ☐ FAST ☐  
 TRACTION LOW ☐ MEDIUM ☐ HIGH ☐

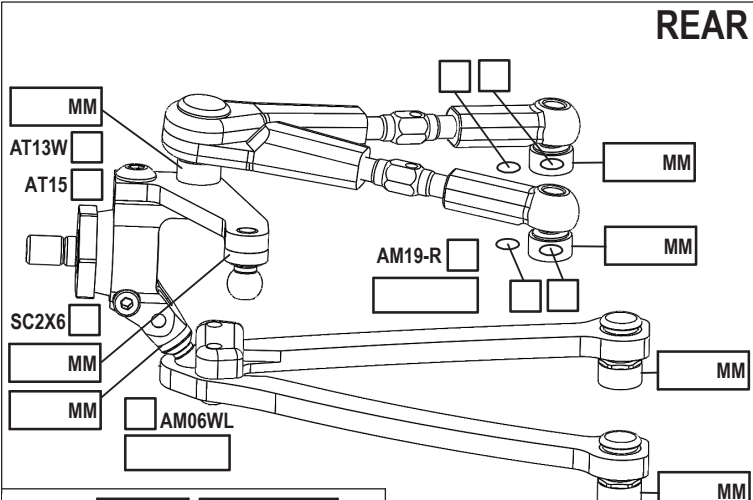
### FRONT



CAMBER ANGLE / ° \_\_\_\_\_  
 CASTER ANGLE / ° \_\_\_\_\_  
 TOE ANGLE / ° \_\_\_\_\_  
 RIDE HEIGHT / MM \_\_\_\_\_  
 DOWNSTOP / MM \_\_\_\_\_  
 ANTI-ROLL BAR Ø / MM \_\_\_\_\_  
 ARB STIFFENER 1/4 ☐ 1/2 ☐ 3/4 ☐ 1 ☐  
 LOWER ARM EXTENSION / MM \_\_\_\_\_  
 STEER. ARM AM14LS ☐  
 2ND SPRING SPR-P2 ☐ P1 ☐  
 WHEEL SPACER / MM \_\_\_\_\_  
 DRIVE SPOOL ☐ DIFF ☐  
 DRIVE POSITION DOWN ☐ UP ☐ +1 ☐  
 DIFF OIL ☐ DIFF SHIMS ☐

SHOCKS SETUP  
 ST205 ☐ GF/MM \_\_\_\_\_  
 ST05-R ☐  
 DAMPER D4 ☐  
 ROTOR 2 HOLES ☐  
 SPRING STD ☐ S ☐  
 SRS/RHS ARR. I ☐ II ☐  
 PSS SETUP 30% ☐ 25% ☐ 15% ☐  
 DAMPING LINEAR ☐ P1 ☐ P2 ☐  
 DAMPER SPACER / MM \_\_\_\_\_  
 C45 YES ☐ NO ☐

### REAR



SHOCKS SETUP  
 ST205 ☐ GF/MM \_\_\_\_\_  
 ST05-R ☐  
 DAMPER D4 ☐  
 ROTOR 2 HOLES ☐  
 SPRING STD ☐ S ☐  
 SRS/RHS ARR. I ☐ II ☐  
 PSS SETUP 30% ☐ 25% ☐ 15% ☐  
 DAMPING LINEAR ☐ P1 ☐ P2 ☐  
 DAMPER SPACER / MM \_\_\_\_\_  
 C45 YES ☐ NO ☐

CAMBER ANGLE / ° \_\_\_\_\_  
 CASTER ANGLE / ° \_\_\_\_\_  
 TOE ANGLE / ° \_\_\_\_\_  
 RIDE HEIGHT / MM \_\_\_\_\_  
 DOWNSTOP / MM \_\_\_\_\_  
 ANTI-ROLL BAR Ø / MM \_\_\_\_\_  
 ARB STIFFENER 1/4 ☐ 1/2 ☐ 3/4 ☐ 1 ☐  
 LOWER ARM EXTENSION / MM \_\_\_\_\_  
 STEER. ARM AM23-1 ☐  
 2ND SPRING SPR-P2 ☐ P1 ☐  
 WHEEL SPACER / MM \_\_\_\_\_  
 DRIVE DIFF ☐  
 DRIVE POSITION DOWN ☐ UP ☐ +1 ☐  
 DIFF OIL ☐ DIFF SHIMS ☐

CHASSIS FLEX AND WEIGHT SETTINGS  
 BW22-R ☐ ABH ☐ BW52-R ☐  
 TW5 ☐ TW5 ☐ TW5 ☐ TW5 ☐ TW5 ☐ TW5 ☐ TW5 ☐ TW5 ☐ TW5 ☐  
 1 2 3 4 5  
 MOTORMOUNT SCREWS  
 BW27 SCREWS  
 C07R ☐ C07RF ☐  
 LOWER DECK C01B-RAF ☐ C01B-RC ☐ C01RS ☐ OTHER \_\_\_\_\_  
 BUMPER TOP PLATE CUT ☐ FRONT BUMPER P15L ☐ OTHER \_\_\_\_\_  
 C26 ☐  
 FRONT TOP DECK C127 ☐ OTHER \_\_\_\_\_ REAR TOP DECK C127 ☐ OTHER \_\_\_\_\_  
 C127S ☐ C127S ☐  
 SINGLE TOP DECK C27MMX ☐ OTHER \_\_\_\_\_ BELT TENSIONER AM279 ☐ OTHER \_\_\_\_\_

BODY POSITION  
 BOTTOM WINDOW LINE TO BODY POST DISTANCE \_\_\_\_\_  
 FRONT BODY POST ORING YES ☐ NO ☐  
 HOLE # \_\_\_\_\_  
 WINGLET YES ☐ NO ☐  
 REAR HRB SETTING / MM \_\_\_\_\_  
 SURFACE TO WING MOUNT DISTANCE / MM \_\_\_\_\_

TIRES \_\_\_\_\_  
 INSERTS \_\_\_\_\_  
 SIDE WALLS GLUE Ø / MM F \_\_\_\_\_ R \_\_\_\_\_  
 ADDITIVE \_\_\_\_\_ TIME MIN. F \_\_\_\_\_ R \_\_\_\_\_  
 TOTAL WEIGHT \_\_\_\_\_ WEIGHT DISTRIBUTION % F \_\_\_\_\_ R \_\_\_\_\_  
 NOTES: \_\_\_\_\_

MOTOR LATERAL SHIFT / MM \_\_\_\_\_  
 MOTOR \_\_\_\_\_  
 SPUR PINION RATIO \_\_\_\_\_  
 BODY \_\_\_\_\_  
 WING \_\_\_\_\_  
 ESC \_\_\_\_\_  
 ESC SETTING \_\_\_\_\_  
 BEST LAPTIME \_\_\_\_\_ QUALIF./FINAL POSITION \_\_\_\_\_ /  
 COMMENTS: \_\_\_\_\_

SERVO \_\_\_\_\_  
 SERVOHORN / HEIGHT \_\_\_\_\_  
 STEER TRAVEL IN \_\_\_\_\_ OUT \_\_\_\_\_  
 BATTERY \_\_\_\_\_  
 RECEIVER \_\_\_\_\_  
 RADIO \_\_\_\_\_







## Standard Spare Parts

Parts#	Description	Parts#	Description
AM06WL	Steering Block	P68	Battery Adjuster
AM14LS	Steering Arm	P110	Bearing Housing
AM19-R	Upper Arm Holder	P138A	38T Pulley
AM23-1	Rear Steering Arm	C01B-RC	Lower Deck Carbon
AM24-25	Central Servo Holder	C01B-RAF	Lower Deck Alloy
AM240-D4	Damper Cover	C45F	Dampers Brace Front
AM242L-D4	Damper Body L	C45R	Dampers Brace Rear
AM242R-D4	Damper Body R	C127	Top Deck
AM278-EVO	Bulkhead	C127S	Top Deck
AM177-2	Motor Mount	C204R	Suspension Arm
AM180EVO2	SB Bellcrank	C204L	Suspension Arm
AT03R	Spool Axle	SWB-R-1.0	Sway Bar 1.0mm
AT13	Wheel Hex	SWB-R-1.1	Sway Bar 1.1mm
AT14	Turnbuckle	SWB-R-1.2	Sway Bar 1.2mm
AT21ST-A	Pivot Ball Steel	SWB-R-1.3	Sway Bar 1.3mm
AT25	Turnbuckle Long	SPR01	Shock Spring
AT25-44	Turnbuckle 44mm	SPR01S	Shock Spring Soft
AT241	Damper Rotor	SPR23	Shock Pointer
AT243-D4	Progression Damper Plate	SPR05	Body Clip
AT247	Damper Piston Probe	SPR07	E-Ring
AT55M	Spur Nut	SH0.5	6x3x0.5mm Spacer (Silver)
AT119R	Spring Screw Holder	SH1.0	6x3x1.0mm Spacer (Gray)
AT120XB	20T Alloy Pulley	SH1.75	6x3x1.75mm Spacer (Black)
AT123B	GD2B Case1	SH0.1	6x8x0.1mm Shim
AT124B	GD2B Case2	SH5X7X0.2	5x7x0.2mm Shim
AT142	Sway Bar Stopper	WA02	3x5x0.2 Washer
ST01	Front Axle	WA03	5x15x0.3 Washer
ST02	Rear Axle	PIN01	1.5x7.8 Pin
ST03	Ball Stud	PIN02	1.5x5.8 Pin
ST114	RJ Universal Bone	OR13	1x13 mm O-ring
ST116	IFJ/IRJ Cross	OR05V	GD O-Ring Viton
ST16	U-Joint Cross	OR06	5.5mm O-ring
ST17-1	Universal Ring	OR0876V	O-Ring 17x0.5 Viton
ST019	Top Deck Screw	OR1005V	O-ring 1x0.5 Viton
ST23X	IRJ Outdrive	OR1010V	O-ring 1x1 Viton
ST24	4,8x6mm Ball Stud	OR2010V	O-ring 2x1 Viton
ST31-1	GD2 Output Axle	OR2005V	O-ring 2x0.5 Viton
ST37X	IFJ Outdrive	B106RS	B106RS Ball Bearing
ST38	Universal Nut	B85	B85 Ball Bearing
ST59	LS2 Long Screw	B84SS	B84SS Ball Bearing
ST68	Flanged Wheel Nut	B63SS	B63ZZ Ball Bearing
ST69-00-R	Linear Spring Screw	B73SS	B73ZZ Ball Bearing
ST102F	Damper Rod Guide Front	B415	B415ZZ Ball Bearing
ST102R	Damper Rod Guide Rear	SC2X4	M2x4 Cap Head Screw
ST105	5g Round Weight	SC2X6	M2x6 Cap Head Screw
ST110	10g Round Weight	SC2X8	M2x8 Cap Head Screw
ST112	Centering Screw	SC2X15	BDL Screw 15 mm
ST118L-1	SB Bellcrank Axle	SB2.5X8	M2.5x8 Button Head Screw
ST122-1	Damper Screw	SS3X3	M3x3 Set Screw
ST143	Damper valve	SS3X4	M3x4 Set Screw
ST205	Damper Rod	SS3X5	M3x5 Set Screw
ST225	Progression Valve	SB3X5AL	M3x5 Alloy Screw
G07	GD2 Satellite Gear	SB3X5	M3x5 Button Head Screw
G08	GD2 Bevel Gear	SB3X6	M3x6 Button Head Screw
P01	Ball Joint-1	SB3X8	M3x8 Button Head Screw
P01X	Ball Joint BDL	SB3X10	M3x10 Button Head Screw
P02	Ball Joint-2	SB3X12	M3x12 Button Head Screw
P03X	Arm Ball Cap	SF3X5	M3x5 Flat Head Screw
P04	Arm Hasp	SF3X6	M3x6 Flat Head Screw
P05	Sway Bar Joint	SF3X8	M3x8 Flat Head Screw
P07	Arm Clip	BEL351	351mm Bando Belt Damper
P12X	Sway Bar Holder	DG1XM	Gauge Set A800RR
P13X	Ball End	STS-A800RR	Stickers Sheet
P14-1-R	Bumper		
P14-5-R	Top Bumper		
P14-2	Body Post		
P15L	Lightweight Foam Bumper		
P16	Lock Ring		
P23-R	Outer Battery Holder		
P25	Battery Clamp		
P39	GD2 Cross Pin		
P46R	Diff Piston		
P56	Antenna Holder		
P63R	Damper Piston		
P64	Rear Body Holder		
P67-D4	Dampers Stand Plate		

## Optional Parts

Parts#	Description
AM14-RC	Steering Arm Carbon
AM14H	Steering Arms Set
AM19-LTL	Upper Arm Holder
AM19-RC	Upper Arm Holder Carbon
AM23-R	Rear Steering Arm
AM23-RC	Rear Steering Arm Carbon
AM177R	Motor Mount
AM152	SB Steering Stand
AM279	Rear Belt Tensioner
AT06	Alloy Antenna Holder
AT13W	Wheel Hex Wide
AT15	Bearing Spacer
AT18	BSSX Steering Limiter
AT21R	Pivot Ball
AT139	Fan Holder
AT143	ARB Stiffener
AT144	ULCG Battery Clamp
C01B-RS	Lower Deck Steel
C204R+1	Suspension Arm Right +1 mm
C204R-1	Suspension Arm Right -1 mm
C204L+1	Suspension Arm Left +1 mm
C204L-1	Suspension Arm Left -1 mm
C07-R	Carbon Bumper
C07-RF	Flex Carbon Bumper
C26	Top Stiffener
C27MMX-G	Top Deck GF
C45F-PS	Dampers Brace Front PS
C45R-PS	Dampers Brace Rear PS
C127-G	Top Deck GF
C127S-G	Top Deck GF
ST03-Ti	Ball Stud Titanium
ST05-R	Damper Rod
ST24M	4,8x8mm Ball Stud
ST24L	4.8x10mm Ball Stud
ST24S	4.8x5mm Ball Stud
ST24-Ti	4,8x6mm Ball Stud Titanium
ST24M-Ti	4,8x8mm Ball Stud Titanium
ST24S-Ti	4,8x5mm Ball Stud Titanium
ST69-15	Progressive Spring Screw
ST69-25-R	Progressive Spring Screw
ST123	M2.5x7mm Screw
ST147	PS Retainer
ST237	Damper Spacer
BW7	Weight 7g
BW8	Weight 8g
BW10	Weight 10g
BW22R	Battery Holder 22g
BW27	Rear Stiffener 27 g
BW52R	Battery Holder 52g
DT10+1.0	Bearing Housing
OR14V	O-ring 4x1 Viton
P40F	Servo Arm (Futaba)
P40K	Servo Arm (KO)
P74	Progressive Spring Holder set
P138LFA	38T Pulley Low Friction
P138S-LFA	Spool 38T Pulley Low Friction
P14-1-RS	Bumper
SH3X5X0.1	3x5x0.1mm Shim
SH3X5X0.5	3x5x0.5mm Shim
SH0.25	6x3x0.25mm Spacer
SH5.9X0.4	5.9x0.4mm Spacer
SPR-P1	Progressive Spring
SPR-P2	Progressive Spring
T01	5.5/4 mm Wrench
T02	Wrench
TW5	Tungsten Weight 5 g.
BSSX	Bellcrank Steering Set
HRB	Horizontal Rear Bodypost Set
FD	Flex Damper Set
FSS	Forward Shifted Servoholder Set
ABH	Adjustable Battery Holder set
PSSX	Progressive Spring System
SCC	Steel Chassis Conversion set



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