

2019 Genesis

Instruction Manual

Bag A

| Part Number | Part | Quantity |
|-------------|-----------------------|----------|
| 1105 | Lower Arm | 4 |
| 3030 | Roll-Bar Mount | 4 |
| 3041 | Shock Mount | 4 |
| 3280 | Ball Joint Ball | 8 |
| 5040 | Wishbone Insert | 12 |
| 5050 | C Clips for Wishbone | 13 |
| 3192 | Knuckles | 4 |
| ST03 | Upper stud on knuckle | 4 |
| ST04 | Lower stud on knuckle | 4 |
| P06 | P06 Downstop Insert | 4 |
| BSL | Long Ballstuds | 4 |
| BSS | Short Ballstuds | 4 |

| | | |
|--|---------------------|----|
| | P3x4 | 4 |
| | C3x8 | 8 |
| | M2x8 Cap Head Screw | 4 |
| | M2x6 Cap Head Screw | 10 |

A.1. Downstop Inserts



1. Install the qty4 P06 into the chassis individually. Light filing of the edges of the designated holes in the chassis may be required for easier installation; where the small semi-circle intersects the larger.

Place the P06 with the larger end on a flat surface. Then take the chassis in hand so that the P06 will be installed from the top of the chassis through to the bottom. The large end of P06 will shoulder on the upper side of the chassis. Align the designated hole of the chassis with the P06, and push the chassis onto the P06 piece.

The P06 will snap into place. Repeat for the remaining P06. CA glue can be used to further secure the piece into the chassis if desired.

2. Install a P3x4 set screw into each P06.
3. With a hobby-knife, trim off any of the P06 surpassing the bottom side of the chassis.

A.2. Lower Arm Joint



1. Install qty8 3280 Ball Joint Balls using qty 8 C3x6 screws in the indicated diagram below. For a starting setup, install a 1mm shim below each 3280 for a starting lower roll-center setting.

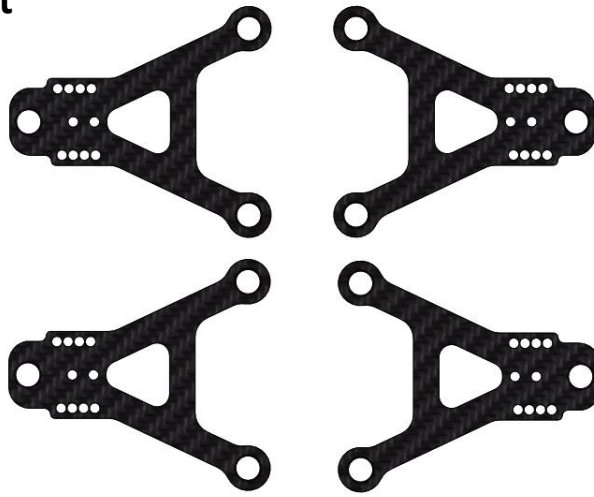


2. Snap qty 8 5040 Wishbone Inserts onto the already installed 3280's on the chassis.

A.3. Lower Arms

Top View

Front

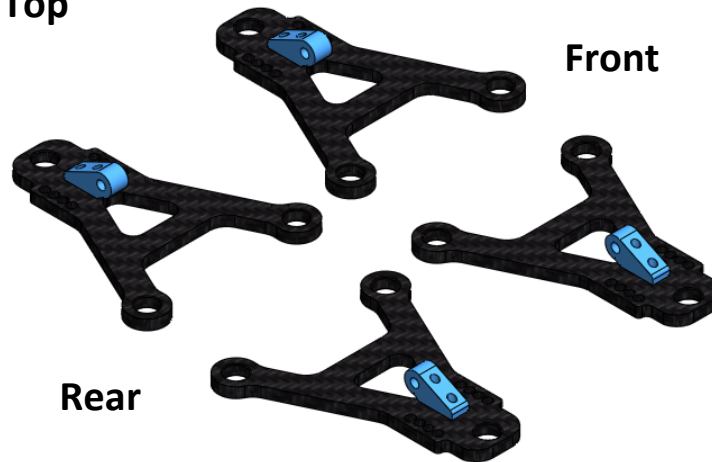


Rear

Please note that the arms have 2 sets of holes for the shock mounts. Use the more inset set of holes to start off to mount your shock mounts. So in other words, in the rear, have the narrower set of holes facing the back and in the front, have the narrower set of holes facing the front.

1. Install 3030 Roll Bar Mount to the top of each of the four lower arms using qty 2 B2.5x8 per mount.

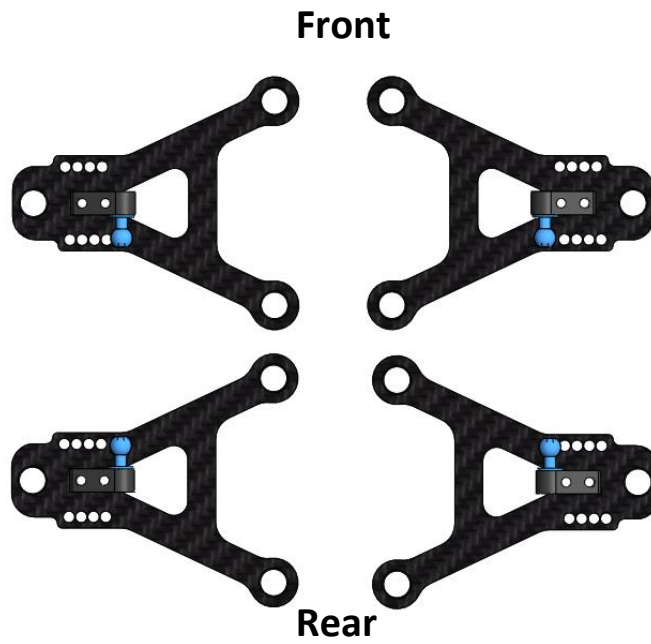
Viewing Top



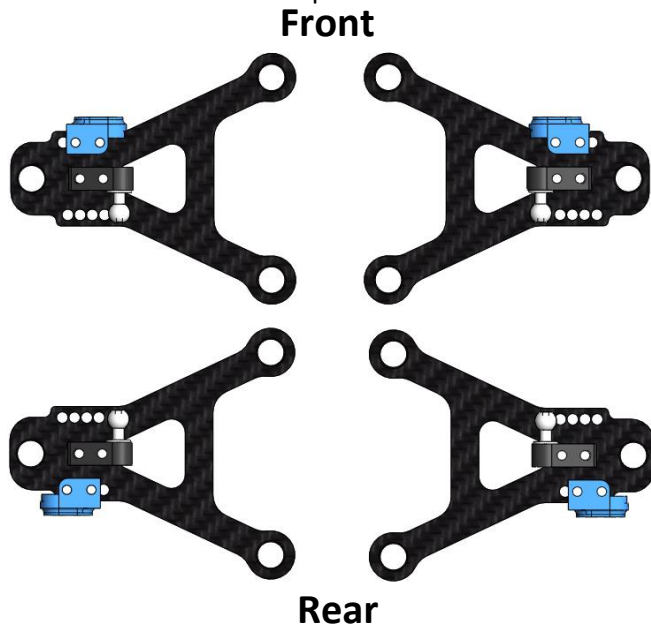
Viewing Bottom

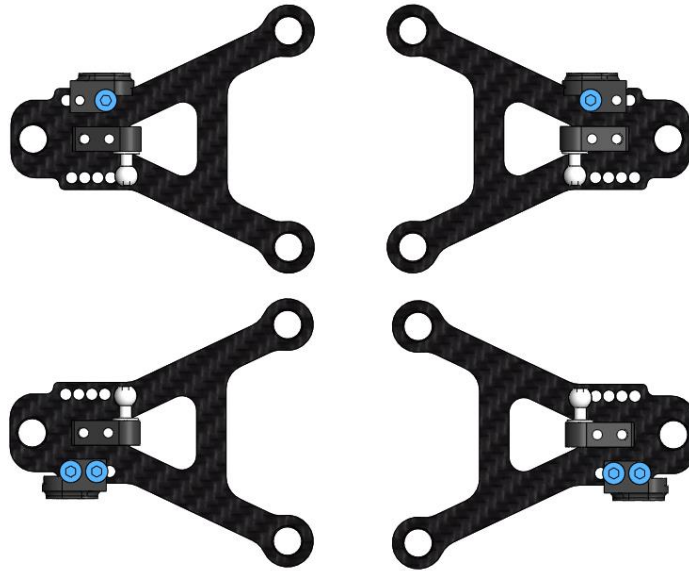


2. Install Ballstud BSS into the Roll Bar Mounts as seen below.

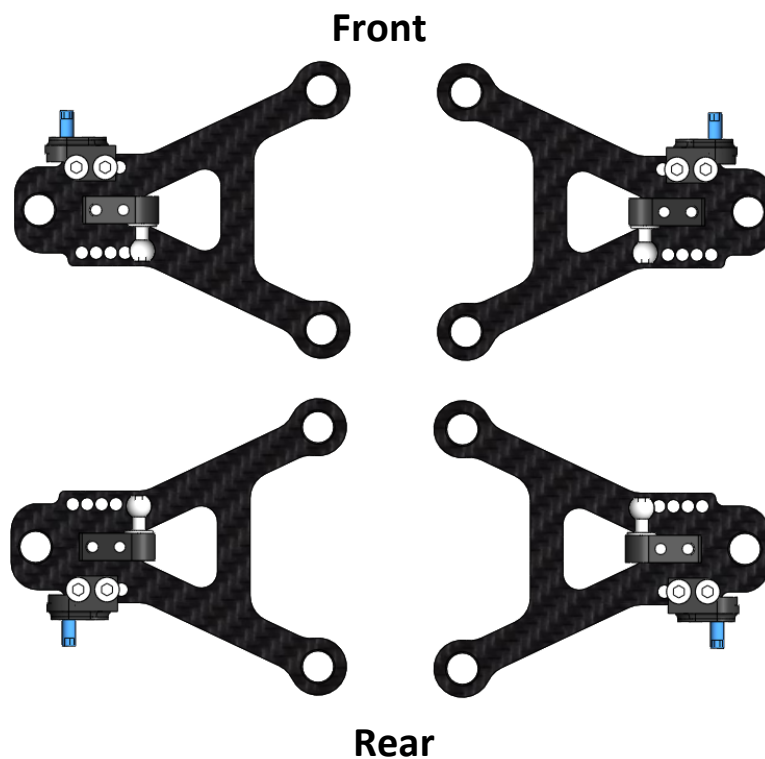


3. Install Shock Mounts with screws M2x8 Cap Head Screw.





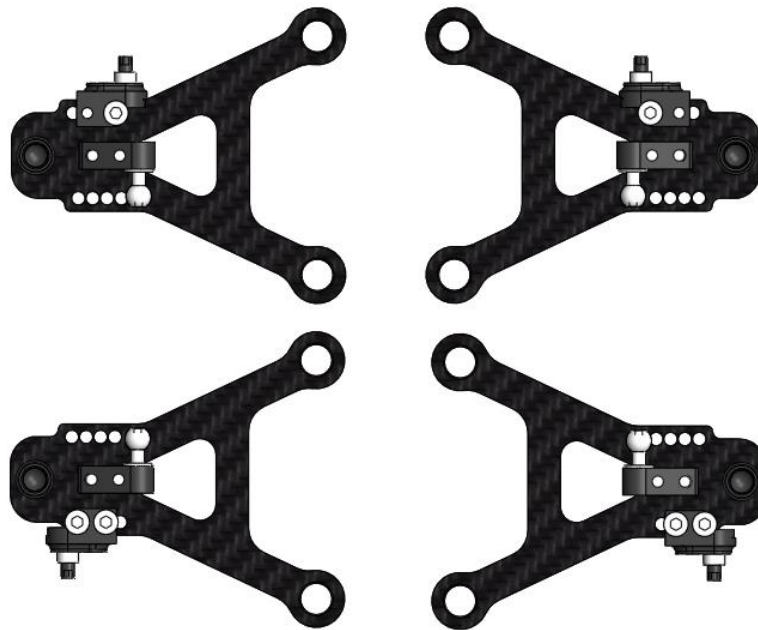
4. Install P3x4 set screw into the Shock Mounts. Use the long set screws where you mount the shocks and the short ones in the other hole to clamp down the shock mounts on to the arms.



5. Install the Inserts from the bottom into the Lower Arms, which will accommodate the hubs. The Inserts then need to be locked in using the C-Clips.



Shims for the Shocks on the Set Screws can be added now or later when the shocks will be installed.



6. Install the Lower Arms correspondingly onto the Inserts that were already installed on the lower chassis plate. Fix them into position using the C Clips again.

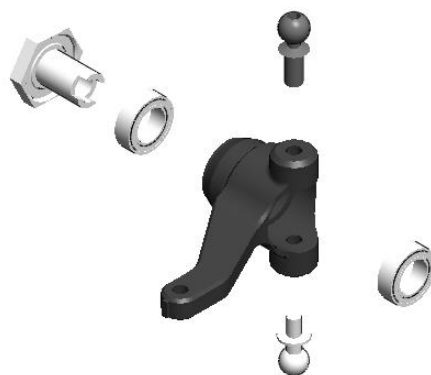




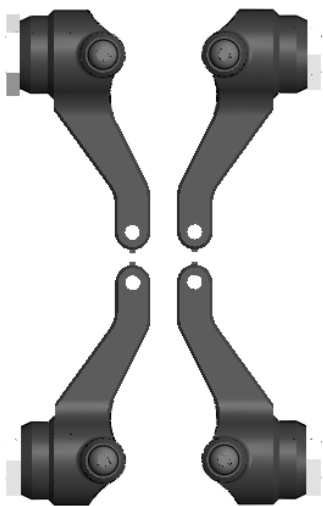
A.4. Hubs

1. Build hub using components as seen below:

* recommended to use 1mm shim under ST03 (upper stud)



Make sure to construct each hub for its respective location.



Set hubs aside until needed.

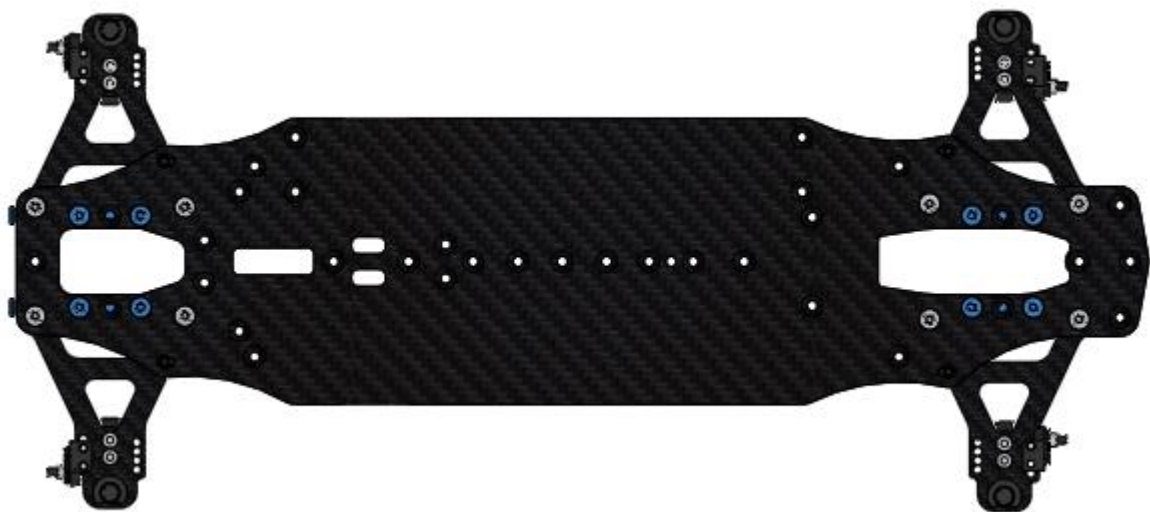
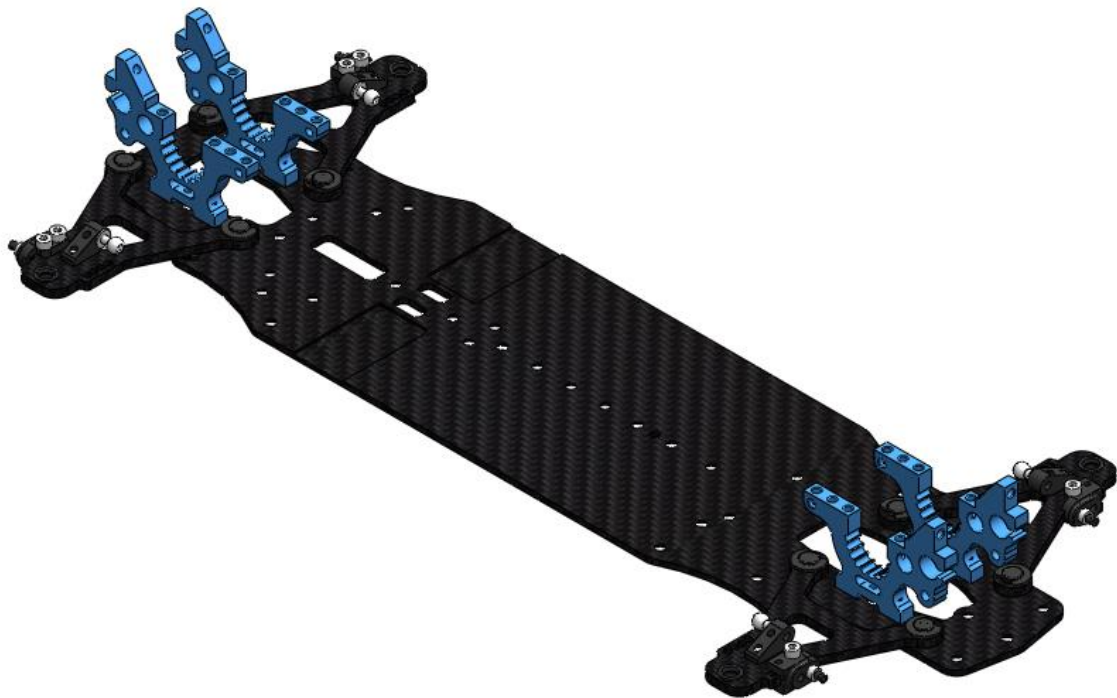
Bag B

| Part Number | Part | Quantity |
|-------------|--------------------------|----------|
| 3151 | Motor Mount | 1 |
| 3061 | Bulkheads | 4 |
| 3191 | Servo Mount | 1 |
| 1153 | Servo Mount Carbon Piece | 1 |
| 20TAP19 | 20T Pulleys | 2 |
| | Spur Gear | 1 |
| B171 | Front Belt | 1 |
| B63 | Rear Belt | 1 |
| | M3x5 CS Screw | 11 |
| | M3x6 CS Screw | 10 |
| | M2x5 CS Screw | 4 |

| Smaller Bag | | |
|-------------|--------------------|----------|
| Part Number | Part | Quantity |
| | M3x10 CS Screw | 1 |
| | M3x6 CS Screw | 1 |
| | 0.2x5 shim | 3 |
| | 0.5x5 shim | 2 |
| CSWM3 | Countersunk washer | 1 |
| ALSM519 | Aluminum Layshaft | 1 |
| | M3x6 BH Screws | 4 |

B.1. Bulkheads

1. Install the qty 4 Bulkheads to the chassis plate using qty 8 C3x6 screws.



B.2. Motor Mount

2. Install the Motor mount using qty 7 C3x5.



B.3. Servo Mount

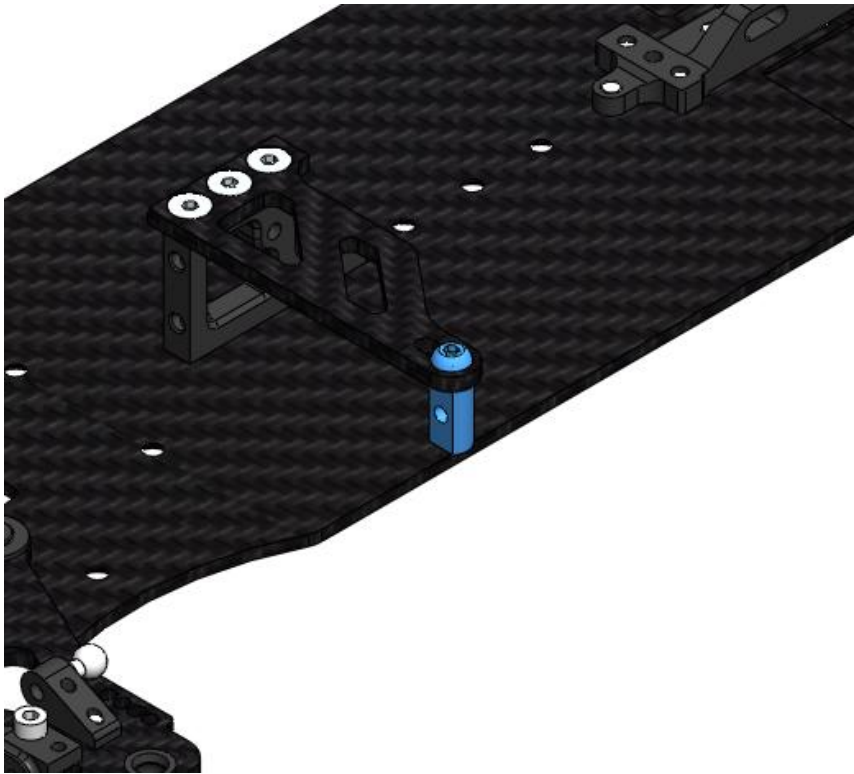
1. Install Servo Mount using qty 3 C3x5.



2. Install Servo Plate to Servo Mount using qty 3 C3x5.

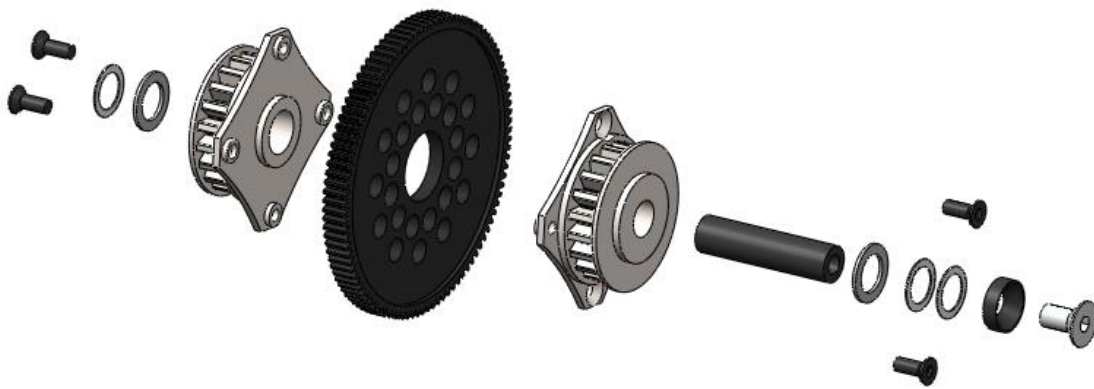


3. Install Servo Post to Servo Plate using qty 1 B3x6.



B.5. Layshaft

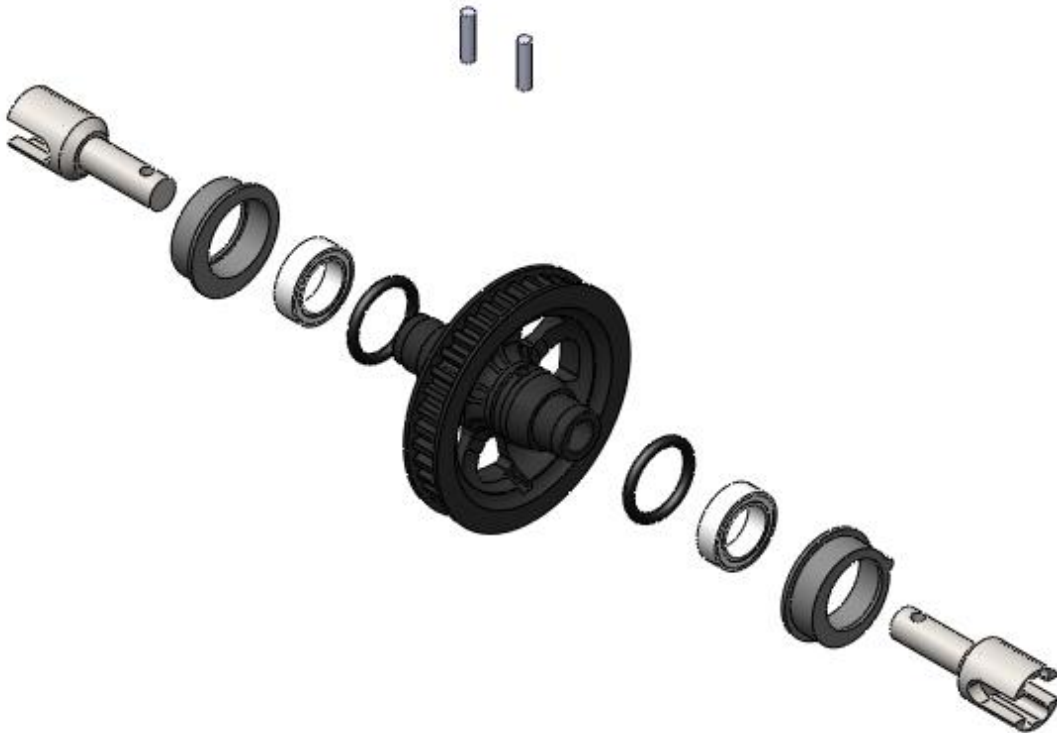
1. Build Center LayShaft as seen below.



Bag C

C.1. Spool

| Part Number | Part Name | Quantity |
|-------------|------------------|----------|
| 4022 | Outdrives V3 | 2 |
| 5071 | Spool | 1 |
| 4055 | Pin 2x8mm | 2 |
| 6010 | Bearing 8x12x3.5 | 4 |
| 3210 | Diff Eccentric | 2 |
| | O-Ring M8x1 | 2 |



Light sanding of the spool on the two outer diameters where the 6010 bearings sit will aid in smooth assembly.

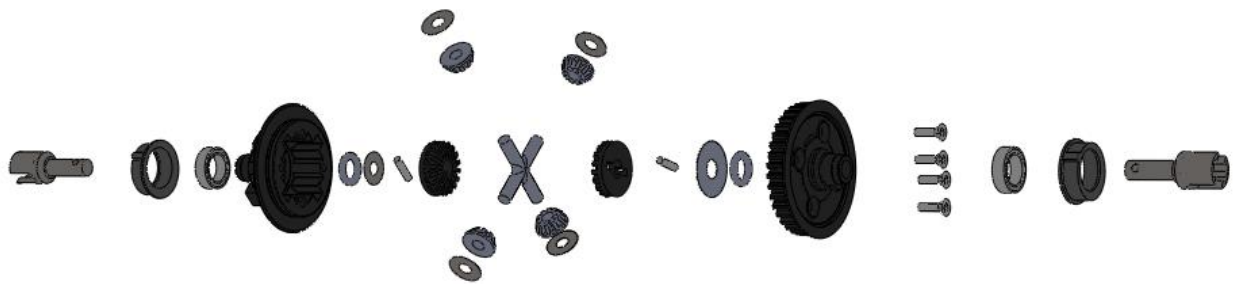
First put the bearings on the Spool, then the outdrives, and then the pins to lock them in place. The rest can then be assembled.

Must install the 6010 bearings before the GZ11705 Outdrives.

Bag D

| Part Number | Part Name | Quantity |
|-------------------------|-----------------------------|----------|
| 4022 | Outdrives V2 | 2 |
| 5010 | Diff Left | 1 |
| 5020 | Diff Right | 1 |
| 4050 | Pin 2x10mm | 2 |
| 304990 | Diff Gasket | 1 |
| 304930 | Diff Gear Set | 1 |
| 964031 | Diff Washer 3.5x10x0.2mm | 4 |
| 964050 | Diff Washer 5x15x0.3mm | 2 |
| 6010 | Bearing 8x12x3.5 | 4 |
| 3210 | Diff Eccentric | 4 |
| 304980 | Diff Cross | 1 |
| 8020 | O-Ring 5x2mm | 2 |
| Screws and Shims | | |
| Part Number | Part Name | Quantity |
| C2.5x8 | Hex Screw C2.5x8 | 4 |

D.1. Rear Differential



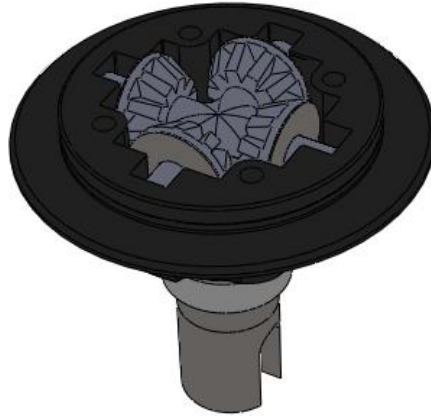
Again, light sanding of the diff on the two outer diameters where the 6010 bearings sit will aid in smooth assembly.

Fill the diff half containing the cross with gears with the oil of your choice, as seen above.

It is best to lubricate the gasket thoroughly with the same oil.

Then join the two halves together

*Be careful to not overtighten the 4 small screws to avoid stripping the threads in the case.

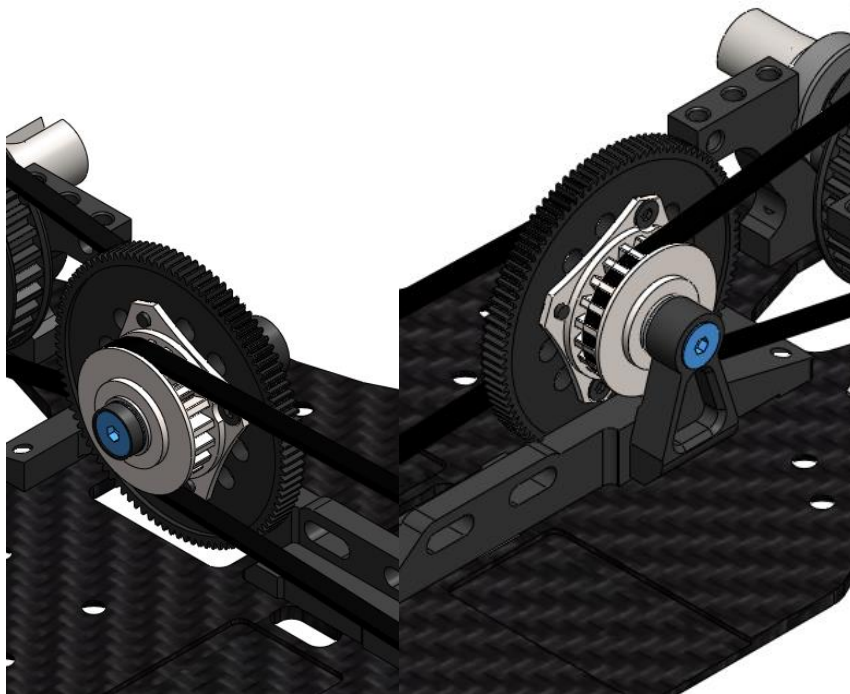


D.2. Install Drivetrain

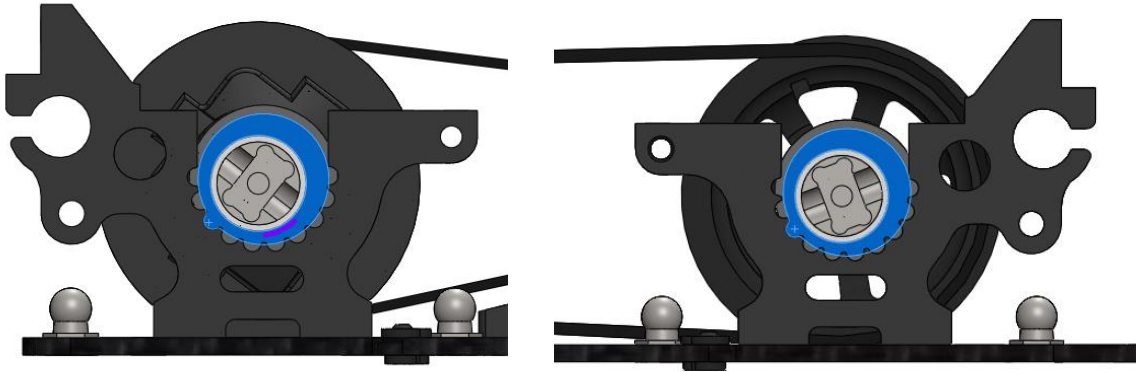
1. Install Drivetrain including the respective Belts, Center Layshaft, Spool and Rear Differential.



1. The center Layshaft is connected to the motor mount using C3x10 in conjunction with C3x6.



2. The tension of front and rear belts can be adjusted based on the position of the eccentric pieces in the Bulkheads.



D.3. Top Deck

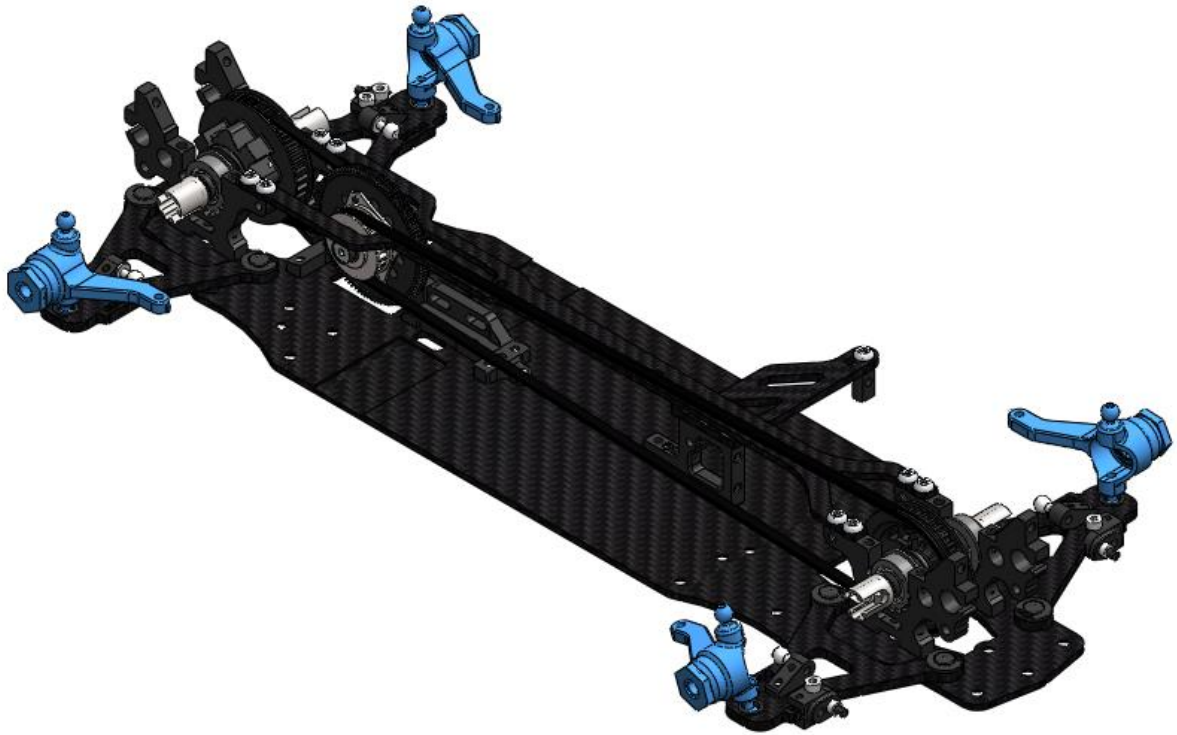
1. Install the Top Deck using qty 8 B3x6.





D.4. Hubs

1. Install the hubs in their respective positions.



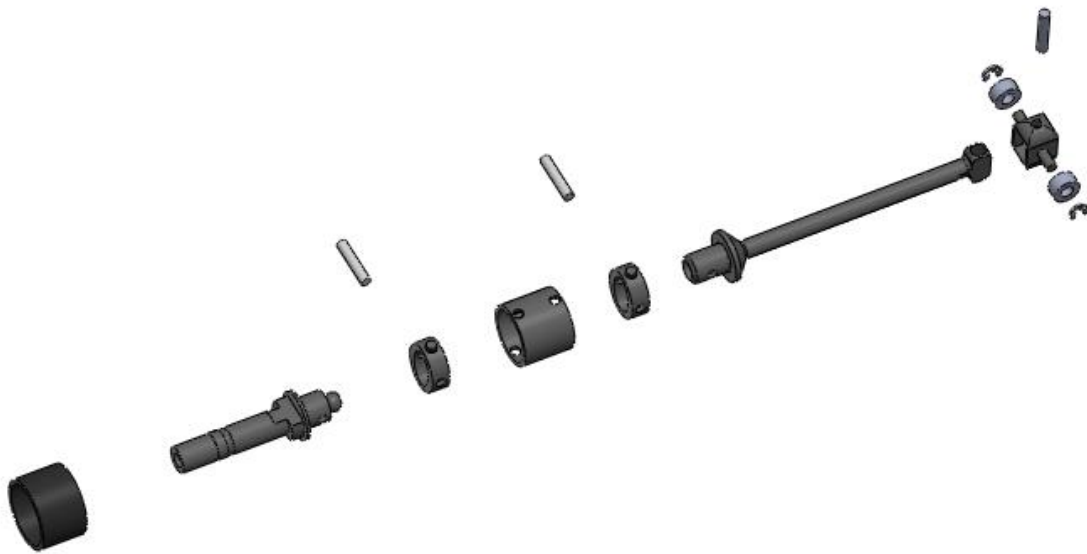
Bag E

| Part Number | Part Name | Quantity |
|-------------|------------------------|----------|
| ST01 | Front Axles | 2 |
| PIN01 | Pin 1.5x7.8mm | 6 |
| ST113 | Front Universal Bones | 2 |
| ST16 | U-Joint Cross | 6 |
| UB2 | Bushings Kit with ST11 | 1 |
| ST17 | Universal Ring | 2 |
| ST02 | Rear Axle | 2 |
| ST114 | Rear Universal Bones | 2 |
| P20 | DCJ Cover | 2 |
| ST116 | IRJ/IFJ Coupling | 4 |
| MB415 | Bearings 4x1.5mm | 8 |
| Pin01 | 1.5x7.8mm pin | 8 |
| MC15 | 1.5mm E clips | 8 |
| P16 | Driveshaft Lockring | 4 |

E.1. Build Driveshafts

E.1.1. Front DCJ

1. Construct Front DCJ Driveshafts



E.1.2. Rear Driveshafts

1. Construct Rear Driveshafts.

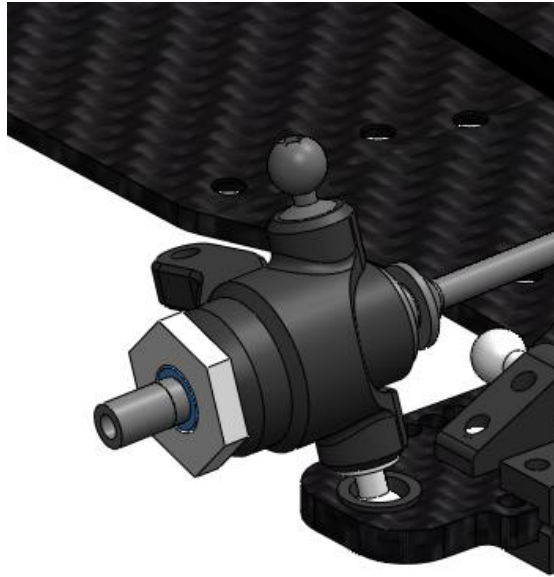


E.1.2. Complete Drivetrain

1. Install the Front and Rear Driveshafts.



2. Install the P16 Lock Ring to fix the driveshafts into place.

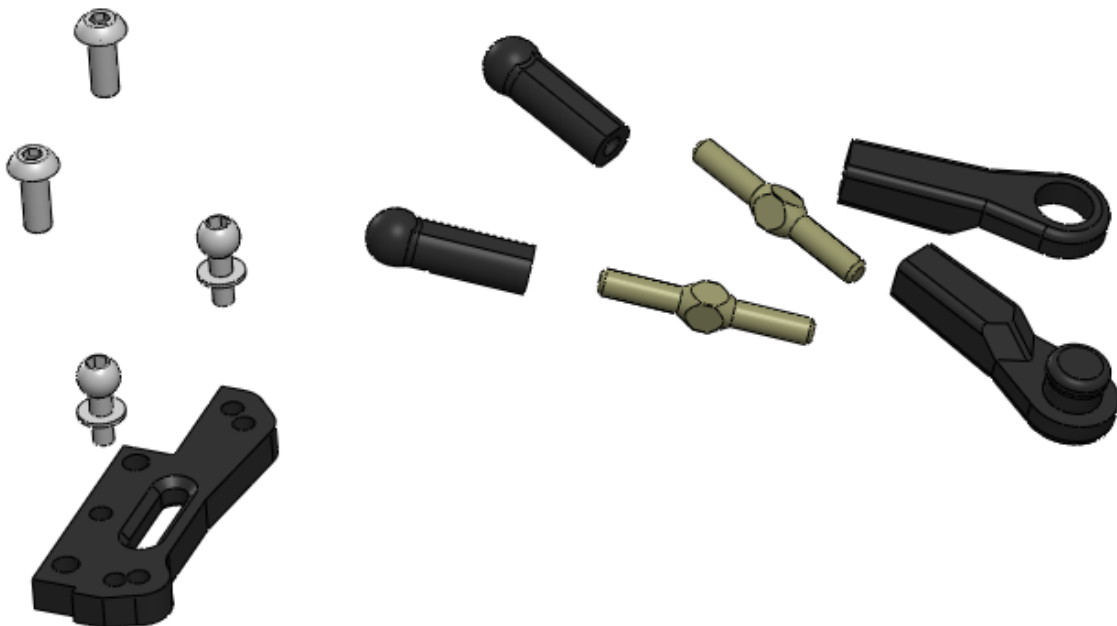


Bag F

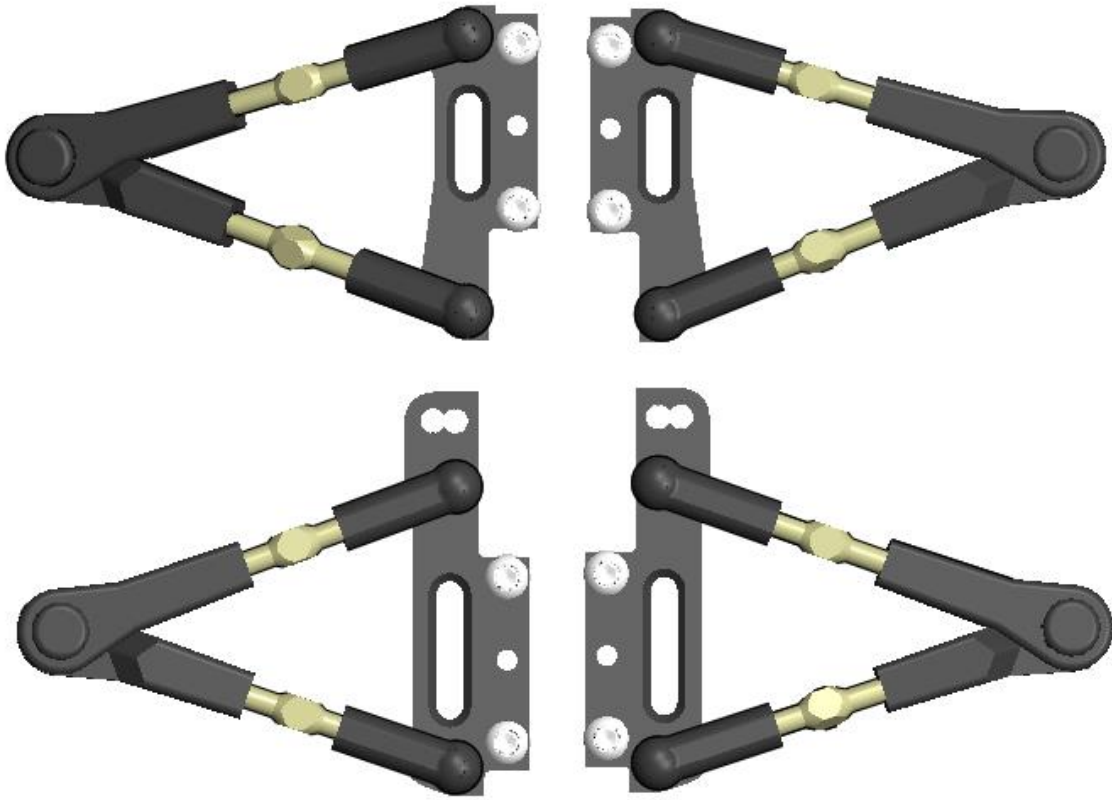
| Part | | |
|------------------|----------------------|----------|
| Part Number | Part Name | Quantity |
| 1216 | Caster Plate - Front | 2 |
| 1215 | Caster Plate - Rear | 2 |
| 3141 | Upper Arm Plastics | 4 |
| 3270 | Turnbuckle 27mm | 8 |
| BSS | Ball Studs Short | 8 |
| Screws and Shims | | |
| Part Number | Part Name | Quantity |
| B3x6 | Hex Screw B3x6 | 8 |

F.1. Upper-arms

1. Assemble each of the respective upper arms following the orientation of the second image.

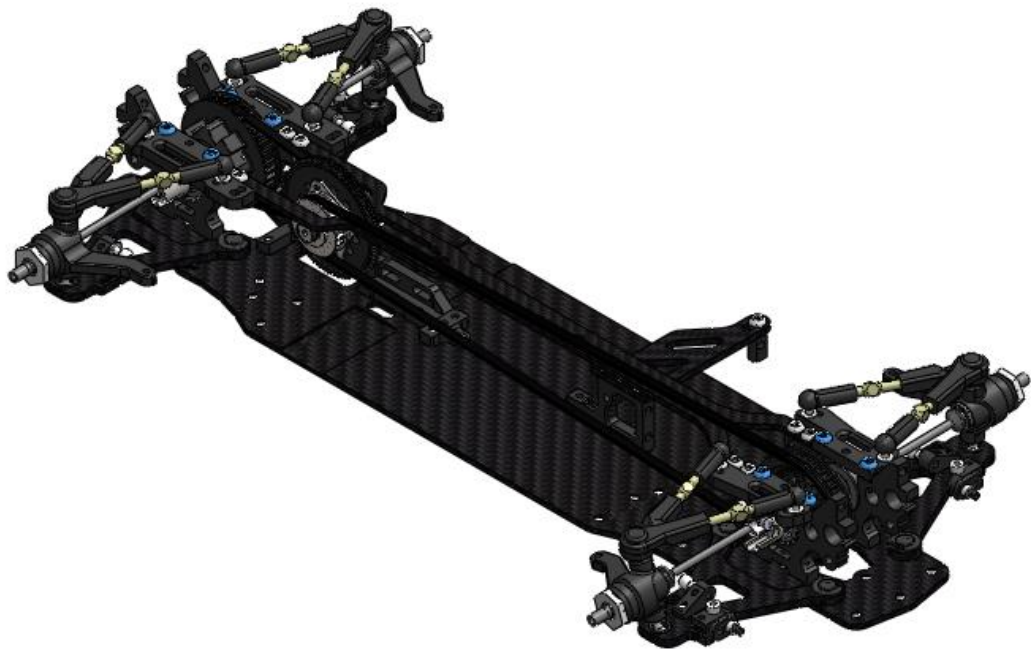


Front



Rear

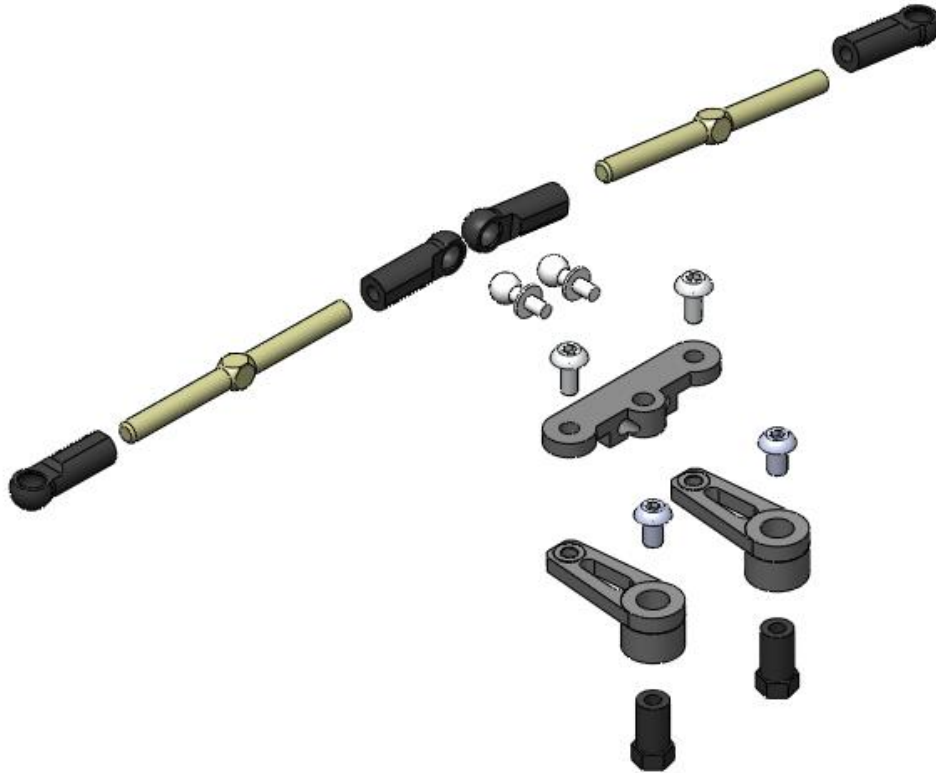
2. Install the Upper-arms to the chassis in their respective positions as seen below.



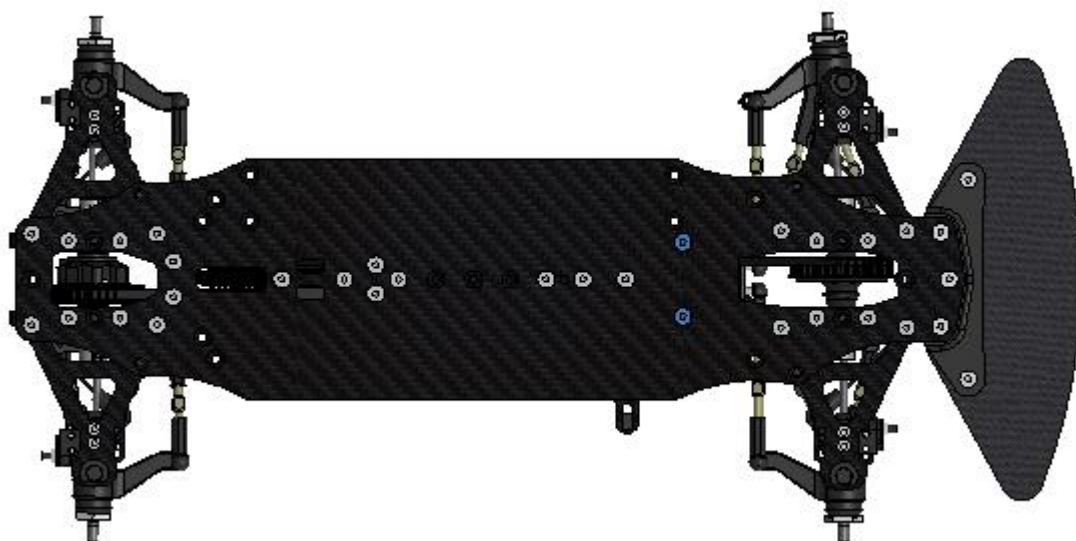
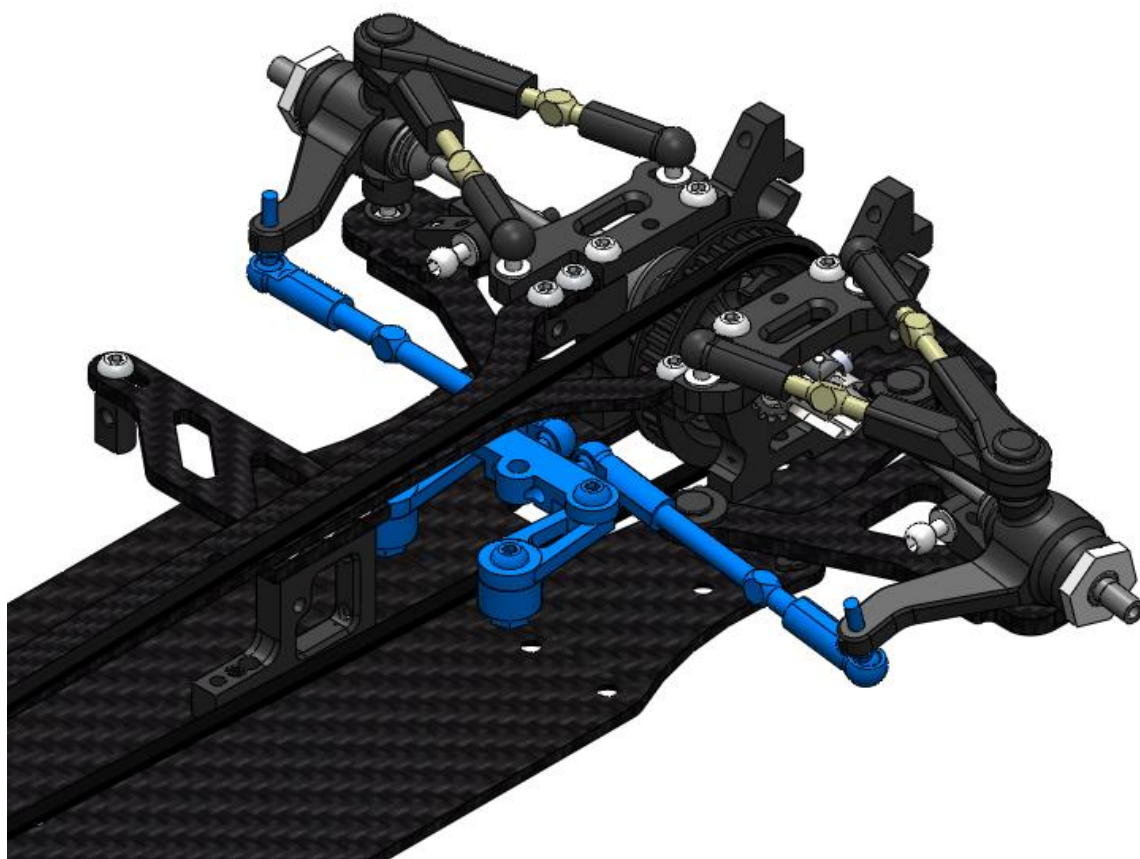
Bag G

| Part | | |
|------------------|--------------------|----------|
| Part Number | Part Name | Quantity |
| BSSX | Bellcrank Steering | 1 set |
| 3270 | M3 x 39 Turnbuckle | 2 |
| 5060 | Ball Joints | 4 |
| AT55S | Steering Posts | 2 |
| | Ball Stud Short | 2 |
| Screws and Shims | | |
| Part Number | Part Name | Quantity |
| | M3x6 BH Screw | 4 |
| | M3x6 CS Screw | 2 |

G.1. Steering System

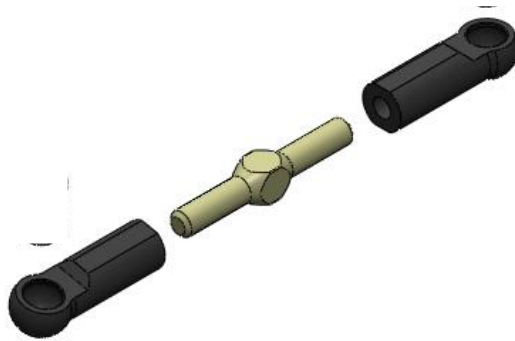


1. Thread on the ball joints to the turnbuckle.
2. Assemble the bell crank steering system as seen above and attach the long turnbuckles.
3. Either, put the posts to the chassis first or to the bell cranks, and attach remaining on to the car.
4. Snap ball joints to the respective ball studs on the hub knuckles.



G.2. Rear Toe-Links

1. Thread the Ball Joints onto the turnbuckle.
2. One side can be snapped onto the respective ballstud on the hub
3. The inner side will be mounted using a M3x16 button head screw from the top, 6mm of shims and 4.8mm ball.



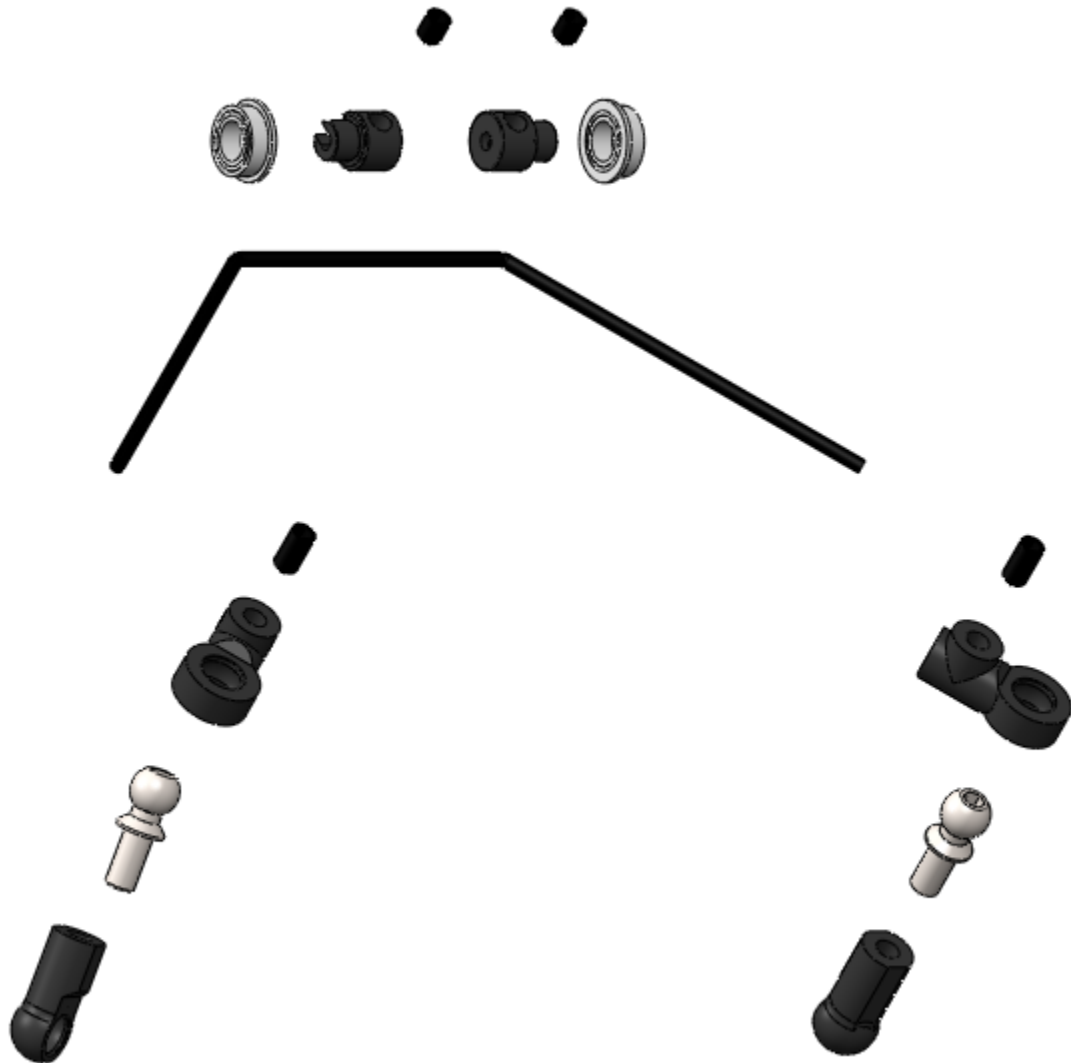
Bag H

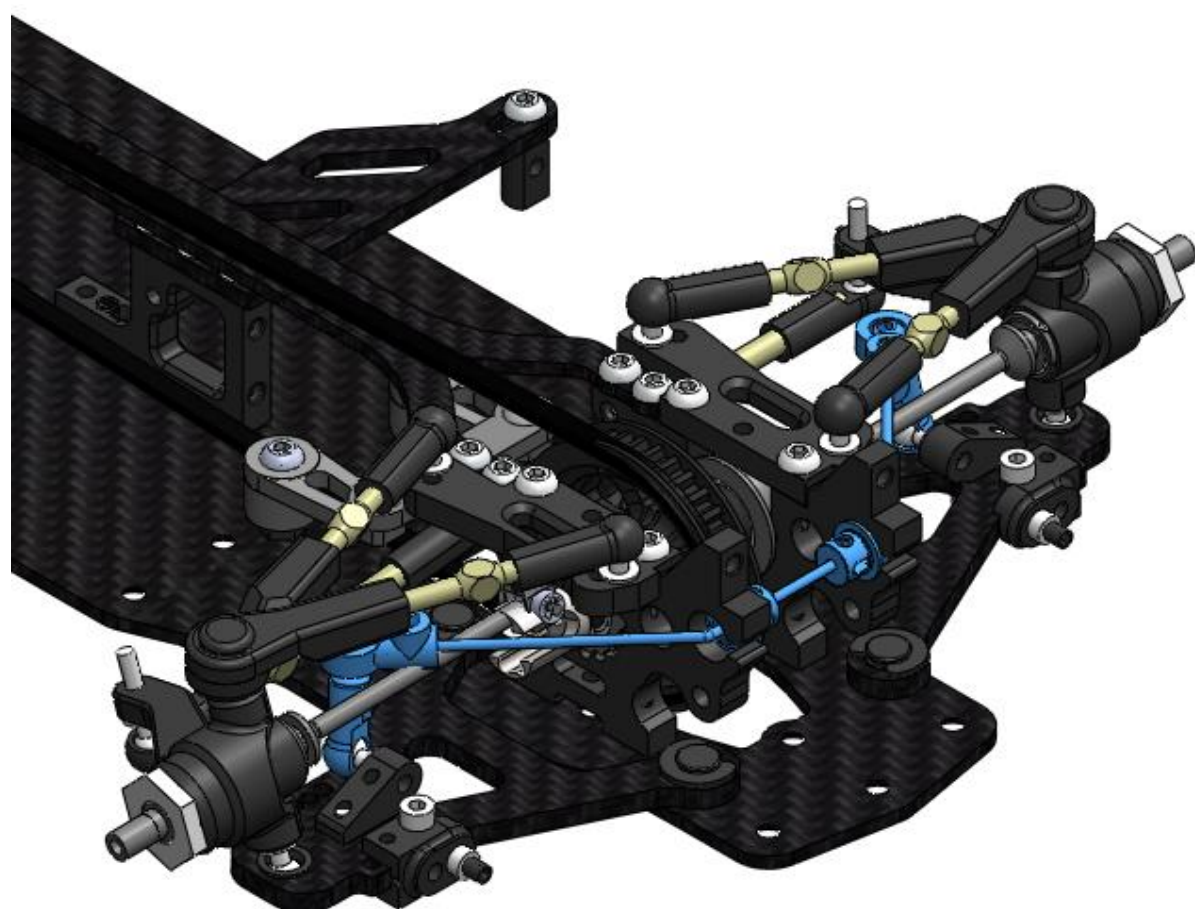
| Parts | | |
|------------------|--------------------------|----------|
| Part Number | Part Name | Quantity |
| 5060 | Ball Joints | 4 |
| 4000 | Anti Roll Bar 1.4mm | 1 |
| 4010 | Anti Roll Bar 1.3mm | 2 |
| 4015 | Anti Roll Bar 1.2mm | 1 |
| 3000 | Roll Bar Side Steer | 4 |
| 303455 | Anti Roll Bar Ball Joint | 2 |
| 362650 | Anti Roll Bar Screw | 4 |
| 6030F | Bearing 4x7x2.5mm Flange | 4 |
| Screws and Shims | | |
| Part Number | Part Name | Quantity |
| P3x3 | Set Screw P3x3 | 4 |
| P3x5 | Set Screw P3x5 | 4 |

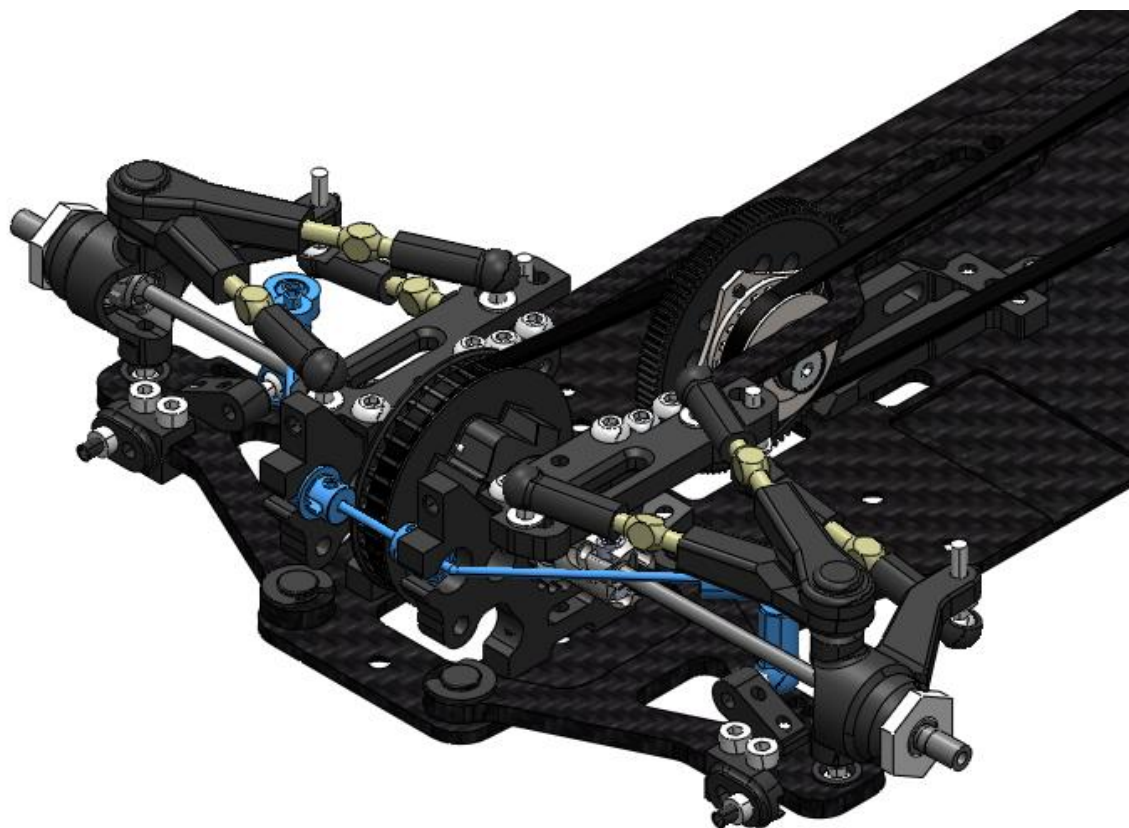
The anti-roll bar systems are identical front and rear. The kit includes 4 anti roll bars of different thicknesses (1.2, two 1.3, and a 1.4) to fine tune the handling of the car.

Assemble and place into car as seen in images below.

H.1. Swaybars





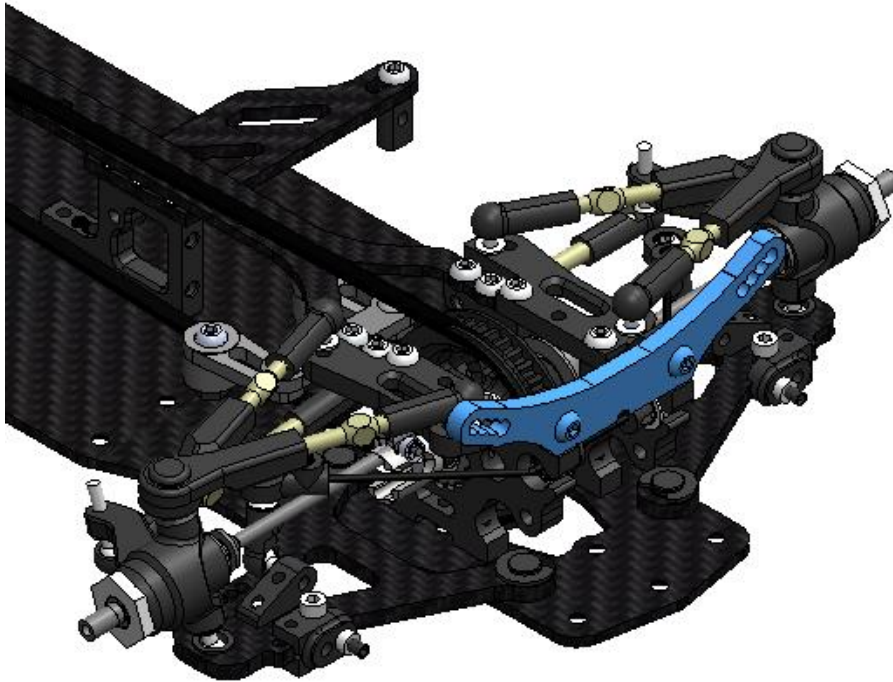


Bag I

| Parts | | |
|------------------|--------------------------|----------|
| Part Number | Part Name | Quantity |
| 1126 | Front Shock Tower | 1 |
| 1127 | Rear Shock Tower | 1 |
| SPR102 | 2.35 Spring (front) | 2 |
| SPR103 | 2.55 Spring (rear) | 2 |
| SLP308333 | Shock Parts | 2 |
| SLP308334 | Shock Piston Complete | 2 |
| SLP308323 | Alu Shock Body | 4 |
| SLP308353 | Alu Shock Cap Top | 4 |
| SLP308042 | Alu Shock Adjustable Nut | 4 |
| 303241A | Aluminum Ball (5.8mm) | 8 |
| 308082 | Shock Membrane | 4 |
| 965023 | E-Clip 2.3mm | 4 |
| SLP308364 | Shock Shaft | 4 |
| 972030 | O-Ring 3x2mm | 4 |
| 970130 | O-Ring 13x1.5mm | 4 |
| | | |
| Screws and Shims | | |
| Part Number | Part Name | Quantity |
| B3x8 | Hex Screw B3x8 | 4 |

I.1. Shock Towers

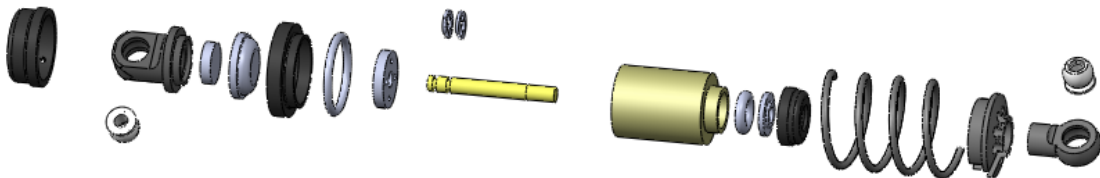
Attach rear shock towers to bulkheads.

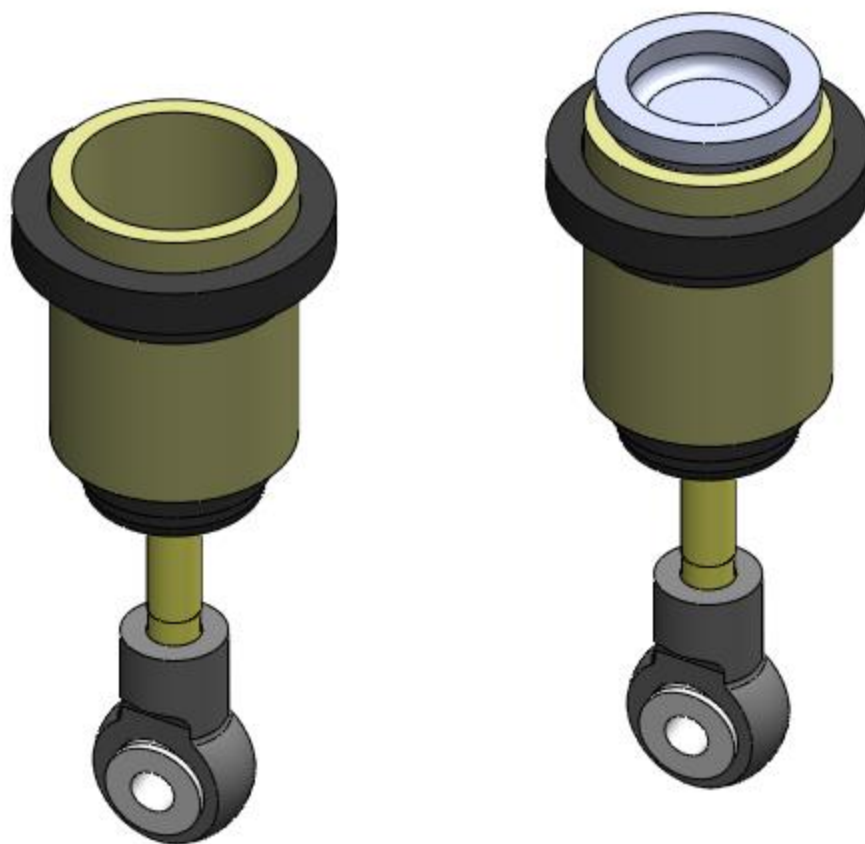




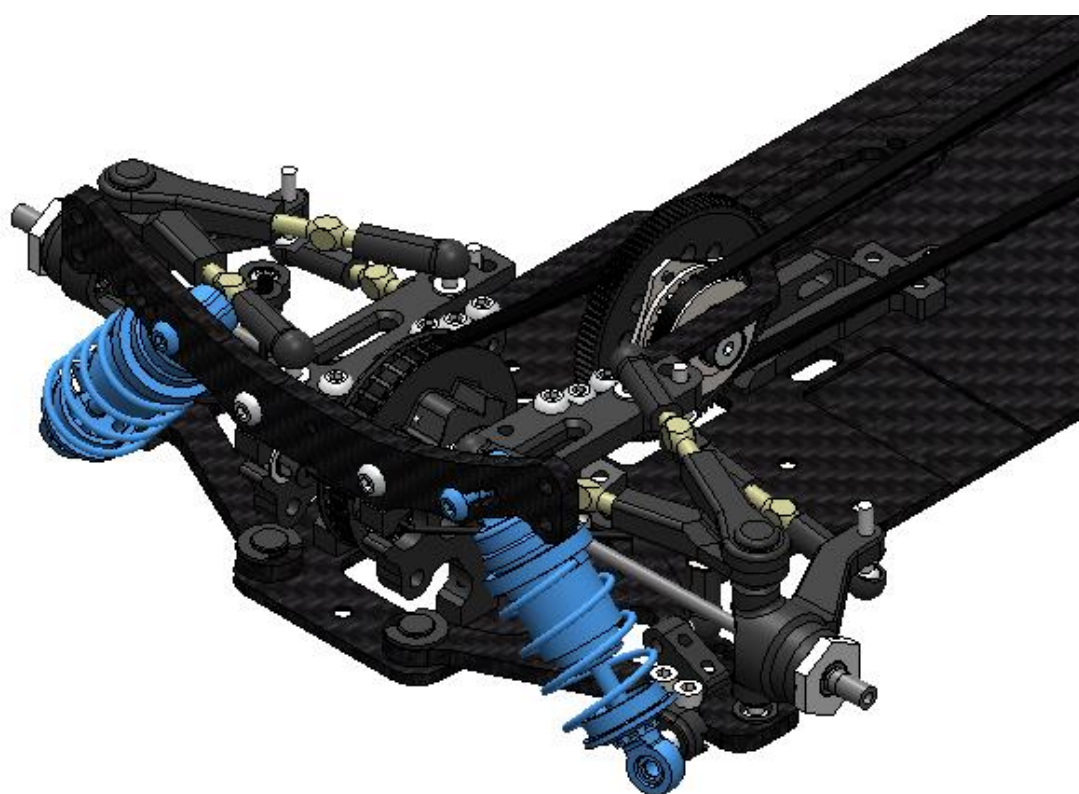
I.2. Shocks

Qty 4 Shocks are to be assembled. The first step is to assembly the internal and lower components in the order depicted below. The Piston of the shock must be secured to the shaft using the two E-Clips; one on each side. Then the shaft can be passed through the Shock Body. Before installing the lower plastic pivot piece to the shaft, it is necessary to install the O-Ring, Plastic Retainer, and Lower Aluminum Shock Cap around the Shaft and onto the lower part of the Shock Body. Then the Universal Ball can be installed; install it from the shiny side of the plastic.





Qty4 B3x8 to attach each Shock Absorber to the Shock Towers, respectively. Attach lower end of Shock Absorber to the Set Screw of the Shock Mounts on the Lower Arms.

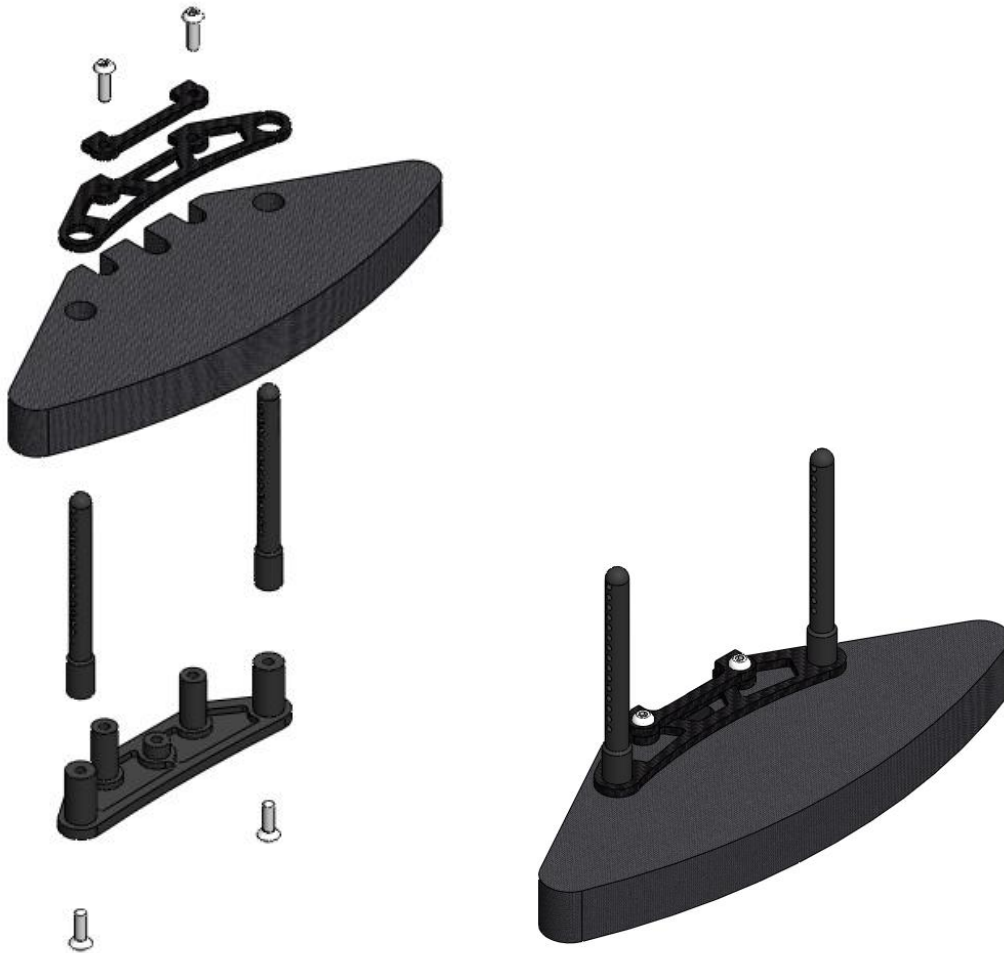


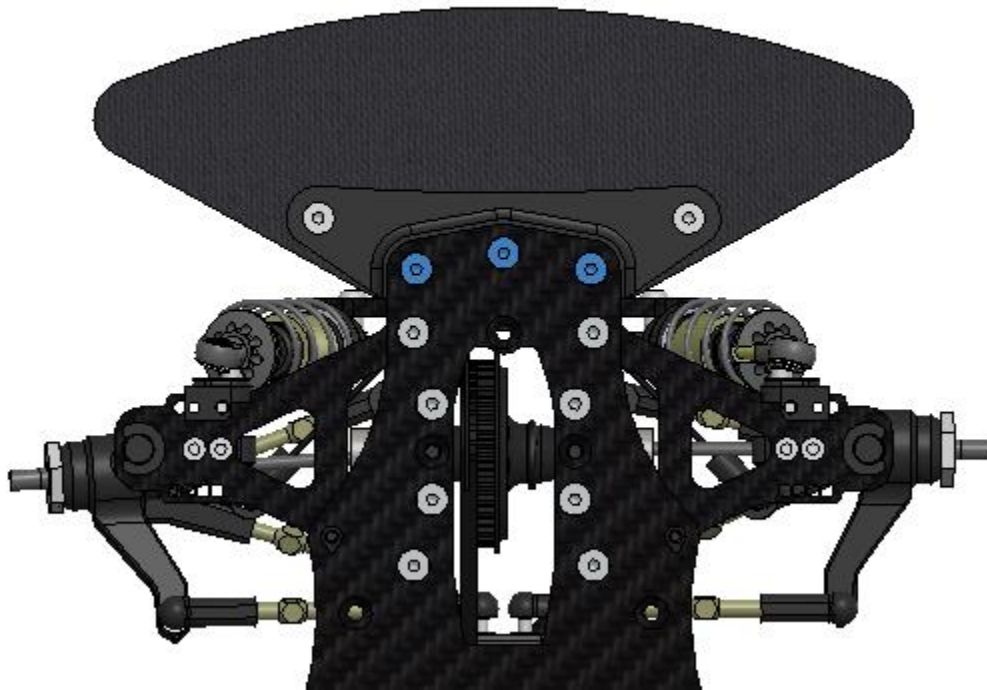
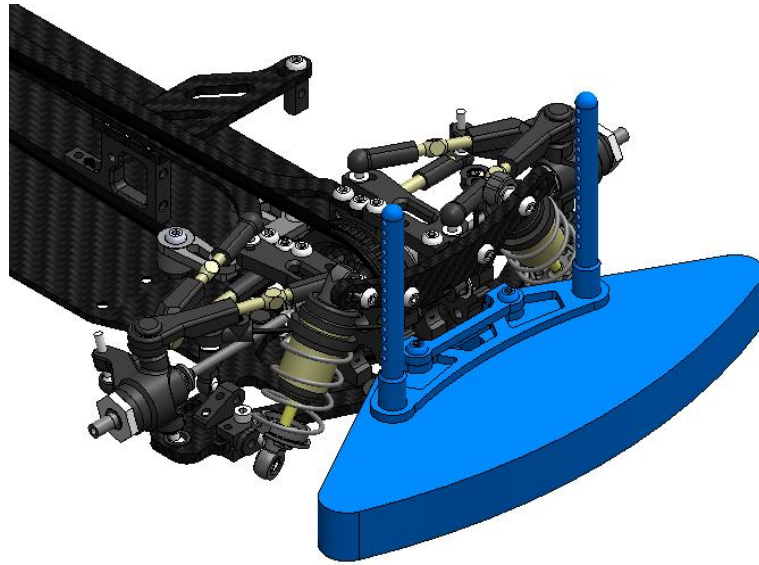
Bag J

| Parts | | |
|------------------|-----------------------------|----------|
| Part Number | Part Name | Quantity |
| | Bumper Brace | 1 |
| | CF Bumper Top | 1 |
| P15 | Bumper | 1 |
| P14 | Plastic Bottom Bumper Piece | 1 |
| P14 | Front Posts | 2 |
| 301332 | Rear Posts | 2 |
| 1082 | Battery Tab | 2 |
| 1082 | Battery Posts | 2 |
| 1082 | Battery Positioners | 2 |
| 1082 | Battery Hooks | 2 |
| WH01 | Nuts | 4 |
| | | |
| Screws and Shims | | |
| Part Number | Part Name | Quantity |
| | B3x8 | 2 |
| | B3x6 | 2 |
| | C3x6 | 3 |
| | C3x8 | 2 |

J.1. Bumper

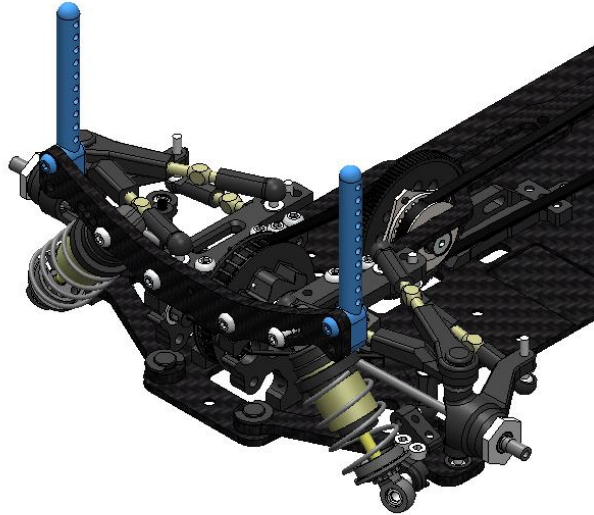
Assemble bumper sub-system and then attach to chassis via the three screws on the bottom.





J.2. Install Rear Posts

Install rear posts on the inside of the shock tower. It is possible to shim them forward for more body mounting positions.



J.3. Battery Tabs

Assemble battery retention system outside of car first so that can turn both screws against each other.

Then assemble onto chassis via screws from bottom of chassis and nuts on top of battery hooks.

