



# Mephyx

exclusive 1/12 scale rc car  
**Assembly manual**



- NEW & REVOLUTIONARY: Magnetic side suspension for easy tweak setting.
- V-Link rear axle technology with adjustable roll center for different track conditions.
- Large rear pod, designed for brushless motors.
- Massive rear pod upper plate for enormous stability.
- Woven carbon protector for rear axle & spur gear.
- Universal chassis for NiMh & LiPo batteries.
- Longitudinal & transversal battery position, ready for 1s & 2s LiPo.
- Perfect weight balance & low roll center using longitudinal battery position.
- Quick toolless battery change system.
- Alloy damper & side tubes.
- Variable travel limiter using L/R titanium turnbuckle.
- Effective front bumper with chassis edge protection.
- Very durable construction.
- High tensile steel screws.
- Special servo mounting system for 2 servo-types, variable servo positions: left or right.
- Variable Ackermann steering geometry.
- Adjustable caster & track width for the front end.
- Titan turnbuckles.
- Ceramic differential balls.
- High performance ball bearings.
- 4 different height adjuster for rear axle cnc machined from massive polycarbonate.
- Quick height setting for the front axle.
- Special design, maded for quick maintenance.
- CNC milled woven carbon parts, wine red anodized alloy parts.

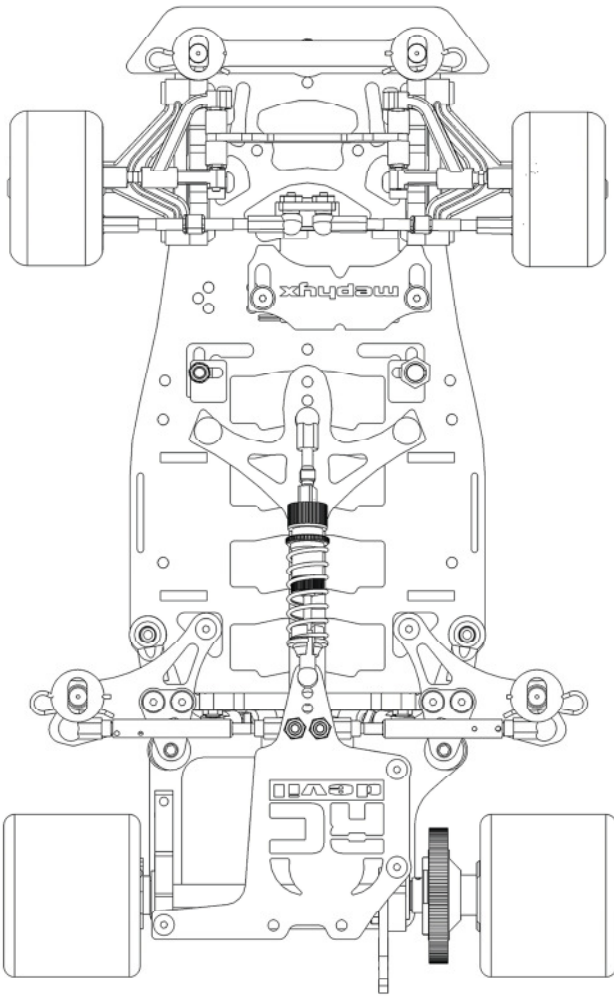
**tested in hell - driven on earth - [www.rcdevil.de](http://www.rcdevil.de)**

# Parts List

BAG:	ArtNo.	Article:	Qty:
A	AL10MMSPPC	Al 10mm spacer	2
A	AL18MMSPPC	Al 18mm spacer	4
A	ALVLRBCPC	V-link brace	1
A	ALSRVMTSPARD	Servo mount washer	2
A	ALBLKHLPC1	Al bulkhead left	1
A	ALBLKHMORPC1	Al motor mount plate	1
A	ALVLBDGPC10H2	V-link bridge	1
<b> </b>			
B	BBFL0125x0313	Ball bearing flanged 0.125" x 0.313"	5
B	BB18FL516	Ball bearing flanged 1,8" x 5/16"	4
<b> </b>			
C	CFKFRAXBCMEP112	Front axle brace 2mm CFK	1
C	CFKSISUPMPL112	Side suspension fixation left 2,5mm CFK	1
C	CFKSISUPMPR112	Side suspension fixation right 2,5mm CFK	1
C	CFKBULPTMEP112	Graphite bumper plate 1mm CFK	1
C	CFKMCHASMEP12UV	Universal chassis 2,5mm CFK	1
C	CFKDISTREARMEP112	Damper stay rear 2mm CFK	2
C	CFKUPPOME121	Upper pod 2mm CFK	1
C	CFKBHMEP112N	Battery holder narrow 2mm CFK	1
C	CFKRPOME112	Rear pod 2,5mm CFK	1
C	CFKSPGPR112	Spur gear & rear axle protection	1
C	CFKSRVPLTMP112	Servo mount plate 2,5mm CFK	1
C	CFKRA2015	Fiber antenna	1
<b> </b>			
D	RHS0510MM	Ride height spacer front 1mm EPOX	2
D	RHS0510MM	Ride height spacer front 0.5mm EPOX	4
D	MTHLPEXM112	Rear pod calibration tool	2
<b> </b>			
E	6299ECP	E clip	4
E	4624CASP	Caster spacers	2
E	4622UPARLI	Upper arm link eye	2
E	4620LWAR	Lower arm	2
E	4113SG0020	Spring front 0020 short	2
E	4403GRHIPN	Grooved hinge pin	2
E	4614FRTBLKHMEP112	Front bulkhead	2
E	8425SHFTAX	Shim steering axle	14
E	1410TITB	Titanium turnbuckle	2
E	ARMNTNUMEP112	Arm mount nut	4
E	4621UPAR	Upper arm	2
E	4623UPHIPI	Upper hinge pin	2
E	4626UPARMT	Upper arm mount	2
E	4626UPARMT	Steering block	1
E	8417PTBA	Pivot ball lo. arm	4
E	4627FRAXL	Front axle	2
E	4673M20FH	M2 flathead screw	2
E	4673M25FH	M2,5 flathead screw	2
E	SCBH3X10	Button head screw M3 x 10	8
<b> </b>			
F	FBUMEP112	Foam bumper	1
F	FABTFXMP112	Foam battery fixation	1
<b> </b>			
G	STBST43MM	4,3 mm ball stud	5
G	STTITB3X42	Titanium turnbuckle 3 x 45	2
G	STTITB3X15	Titanium turnbuckle 3 x 15	2
G	STBDCLIPRED	body clip	8
G	ST05SHISMA	0,5 mm shim	2
G	STBST4MM	4mm ball stud	4
G	STBLST58MM	Ball stud 5,8mm	4
G	STBNU5MM	5mm ball nut	3
G	STBBST5MM	5mm ball stud	2
<b> </b>			
H	LXBTTIRLMTMEP112	Battery corners	2
H	LELBMEP112	Ride height adjuster rear	2
H	LXATHOMP112	Polycarbonate antenna holder	1
H	LXBTTIRLMTMEP112	Battery adjuster triangle	2
H	LXBHFRMP112	Bumperholder polycarbonate	1

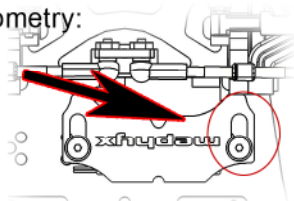
BAG:	ArtNo.	Article:	Qty:
I	PTBYPSTFR	Plastic body posts	4
I	BLLISH4MM	Ball link short 4mm	4
I	BLLI5MM	Ball link closed 5mm	5
I	ORNG19X24	Rubber ring 1,9mm x 2,4mm	2
I	BLL58TRMEP	Balllink 5,8mm	4
I	43MMBLCUNY	4,3 mm ball cups nylon	4
I	PESBLKHIM05	0,5 mm plastic shim	2
I	3897PTBDMT	Pivoting body mount	4
<b> </b>			
R	PLNUDFFMEP112	Plastic nut	1
R	CFKAXCCMEP112	Graphite rear axle	1
R	DFFCBA18	Ceramic differential ball 1/8"	12
R	DFFRMMMEP112	Differential rings	2
R	010SHIMMEP112	0,10mm Shim	6
R	WHLMEP112	Wheel hub left	1
R	WHRMEP112	Wheel hub right	1
R	BVLWSHMEP112	Belleville washer	1
R	DFFTHCNMEP112	Differential thrust cone	1
R	RCDK210	Spur gear 96T	1
<b> </b>			
S	SCSSM3X8	Set screw M3 x 10	2
S	SCRCTM3NUNO	M3 Steel Nut	4
S	SCRCTM3NU	Square flat nut M3	1
S	SCM3LNU	Al M3 lock nut	7
S	SCBH3X8	Button head screw M3 x 8	3
S	SCBH3X6	Button head screw M3 x 6	5
S	SCKNM3	M3 knurled screw	2
S	SCFH3X6	Flat head screw M3 x 6	11
S	SCFH3X8	Flat head screw M3 x 8	12
S	SCFH3X10	Flat head screw M3 x 10	6
S	SCFH3X12	Flat head screw M3 x 12	7
S	SCFH3X14	Flat head screw M3 x 14	3
S	4014WHSCR	40x1/4 cylindar head wheel screws	6
S	ST05SHISMA	0,5 mm shim	4
<b> </b>			
T	SIDATUMEP112	Side damping tubes	2
T	MAGSUPP8MMMP112UP	Upper magnet 8mm strong	2
T	MAGSUPP8MMMP112DO	Lower magnet 8mm strong	2
T	CTDAMPMP112	Central damper	1
T	112SPRGMED	Spring for central damper	1
T	ORNG18X18	Rubber ring 1,8mm x 1,8mm	1

# Setup Sheet






### Other settings:

- Rollout:
- Spur gear:  T
- Pinion:  T
- Body:
- Motor:
- ESC:
- ESC setting:
- Battery type:
- Battery position:
- Servo position
- Ackermann steering geometry:



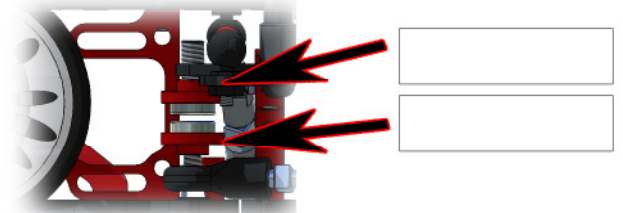
Notes:

### Front

- Tire:
- Diameter:
- Wheel:
- Additive:
- Front springs:
- Upper arm mount: 0  5  10
- Caster, spacer in use:
- thick-thin    thin-thick    thick and thin
-  1.80°
-  3.25°
-  6.15°
- Camber:
- Ride height:
- Lube on kingpin:
- Notes:

### Rear

- Tire:
- Diameter:
- Wheel:
- Additive:
- Central damper
- Oil:                  Spring:
- Side magnetic springs
- Upper spring - Lower spring



- Silicone oil in side dampers:
- V-Link position/ Roll center:



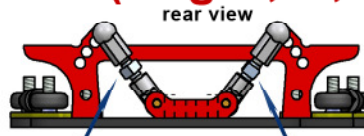
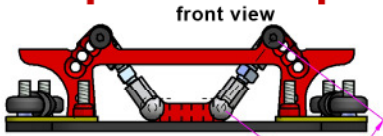
- Ride height:
- Notes:

- Name of the track:
- Traction: low     medium     high
- Track conditions: smooth     bumpy

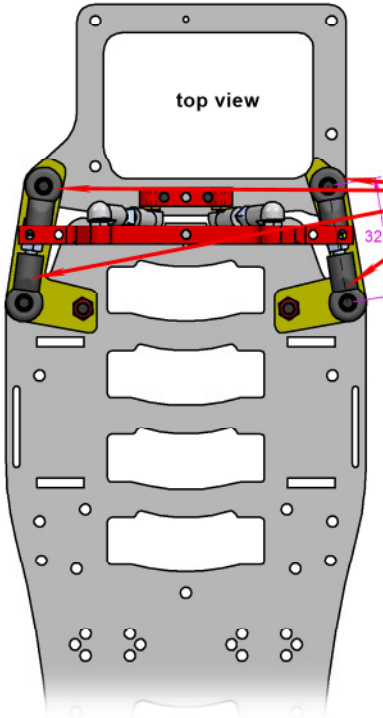


**⚠ For correct positioning of the screws, see the last page of this manual.**

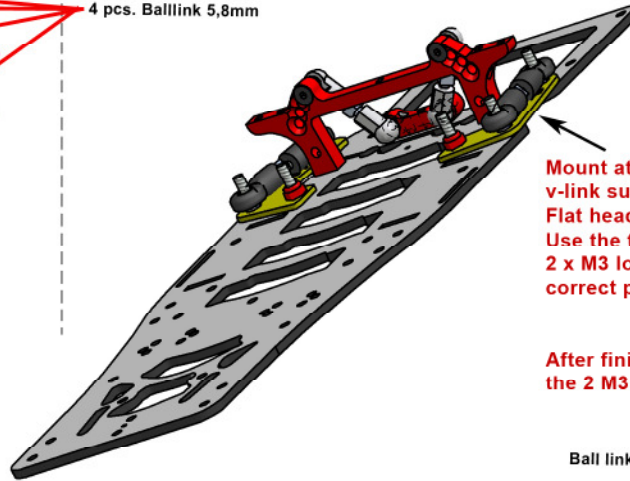
## Step 1: Rear pod mount (Bag A, C, D, G, I, S)



Screw or unscrew the turnbuckles to get the rear pod and the chassis in a perfect flat plane.



4 pcs. Balllink 5,8mm

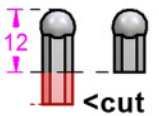


Mount at first the v-link bridge and the v-link support with 4 pcs. M3 x 6 mm Flat head screws.  
Use the temporary mounting helpers and 2 x M3 lock nuts to get the rear pod in the correct position.

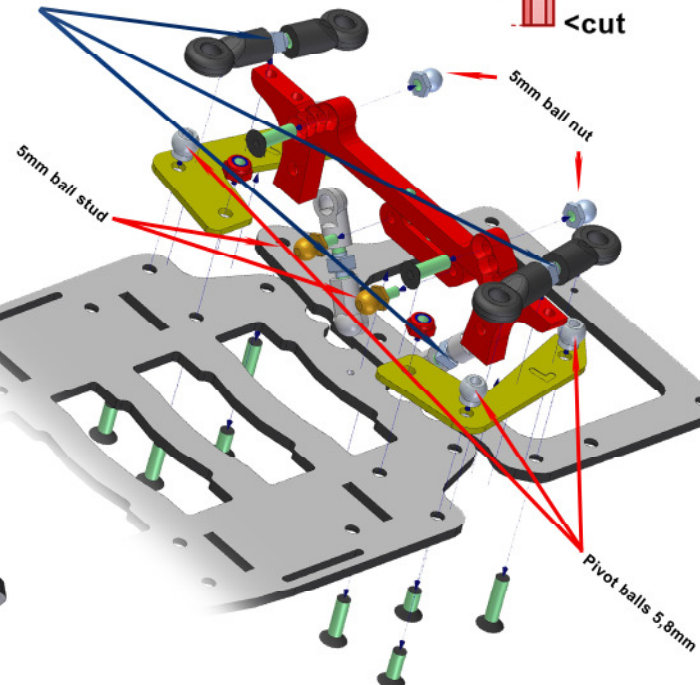
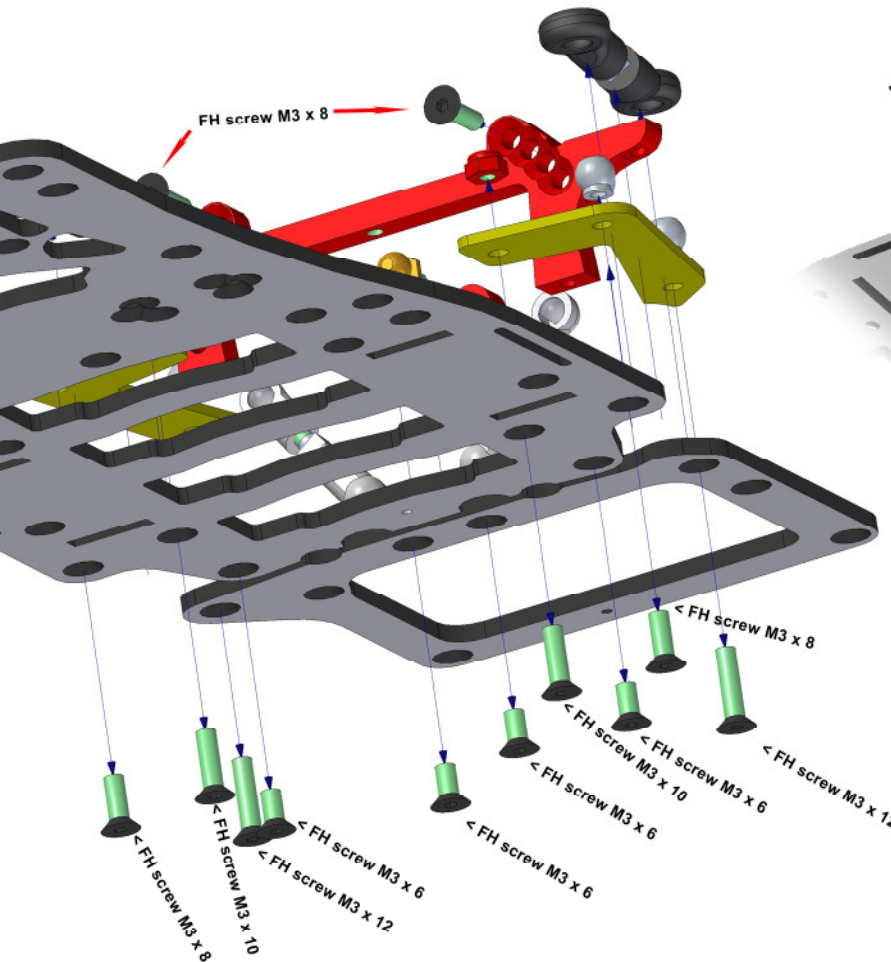
After finishing, remove the 2 mount helpers and the 2 M3 lock nuts.

**Make 4 pcs.**

Ball link 5mm (cutted)

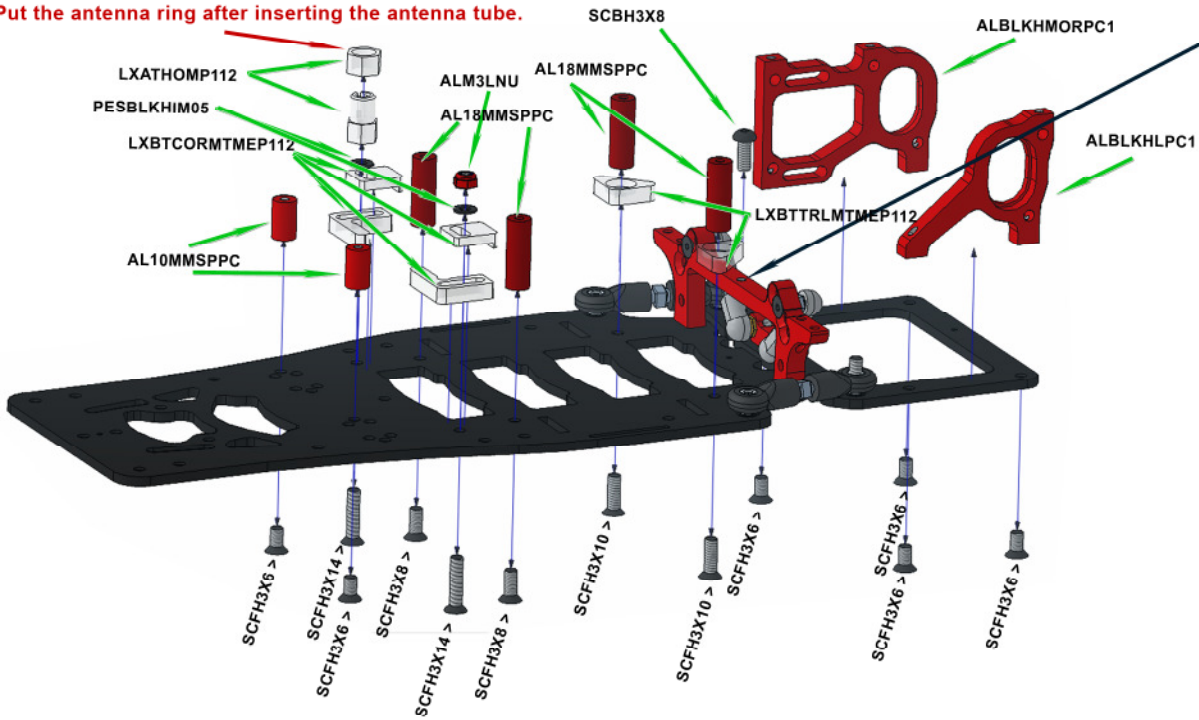


4 pcs. turnbuckles M3 x 15



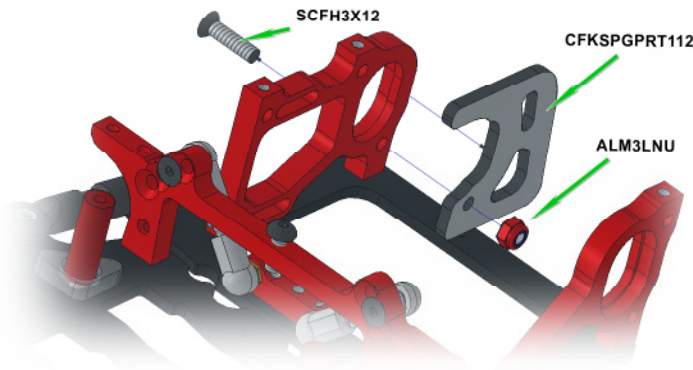
## Step 2: (Bag A, C, H, I, S)

NOTE: Put the antenna ring after inserting the antenna tube.

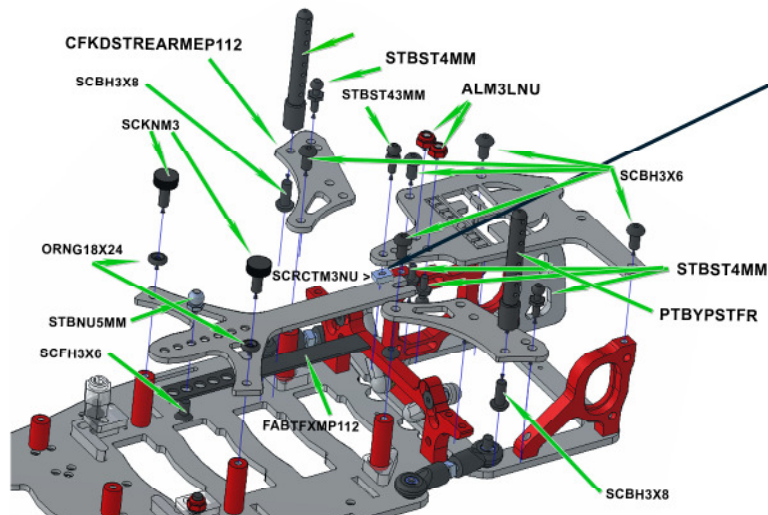


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## Step 3: (Bag C, S)



## Step 4: (Bag C, F, G, S)



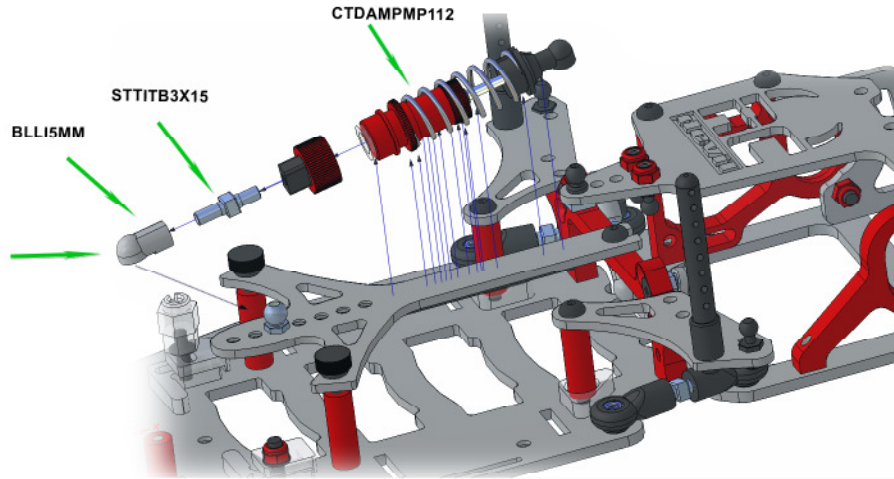
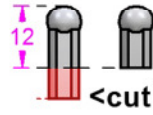


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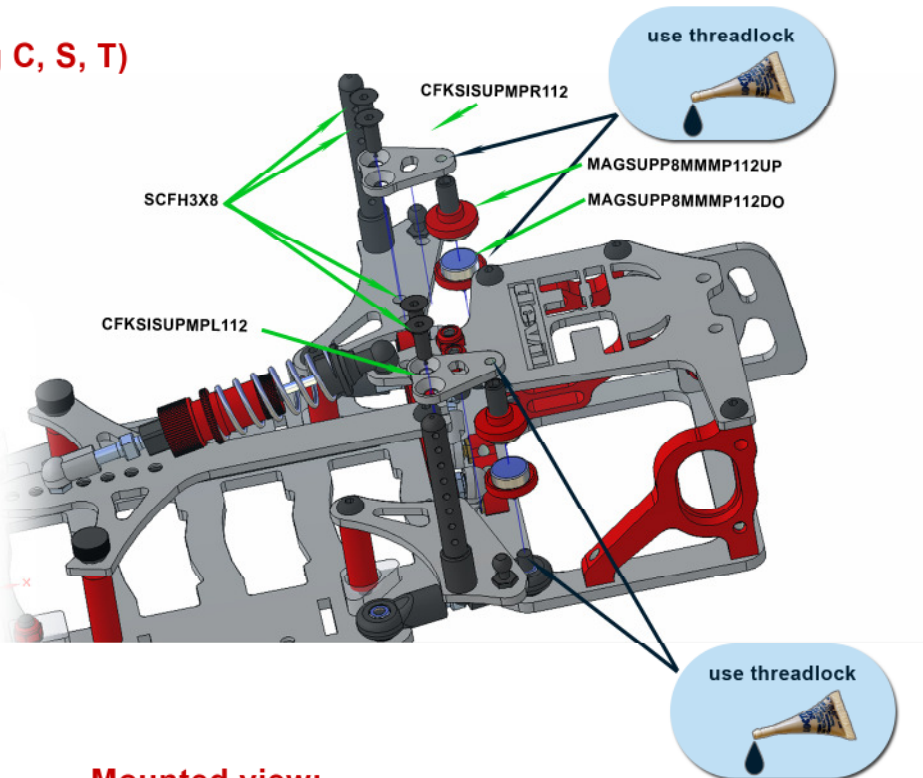
**Step 5: (Bag G, I, T)**

NOTE: Use 30 WT silicone oil for the standard setup

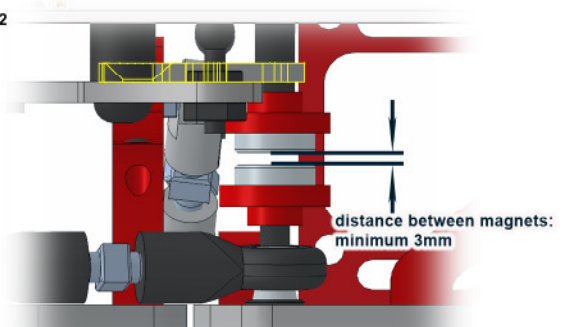
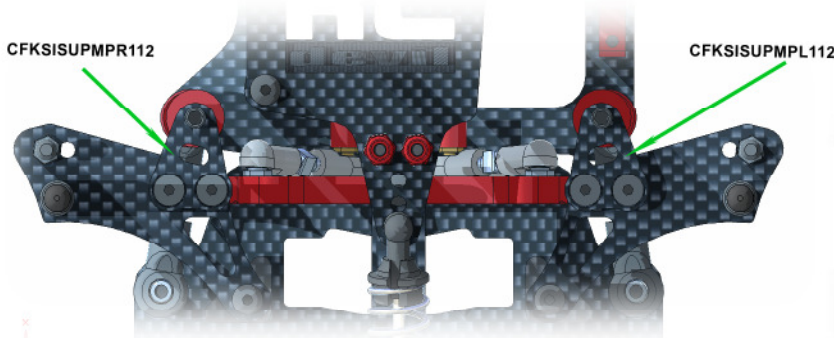
Make 1 pcs.



**Step 6: (Bag C, S, T)**

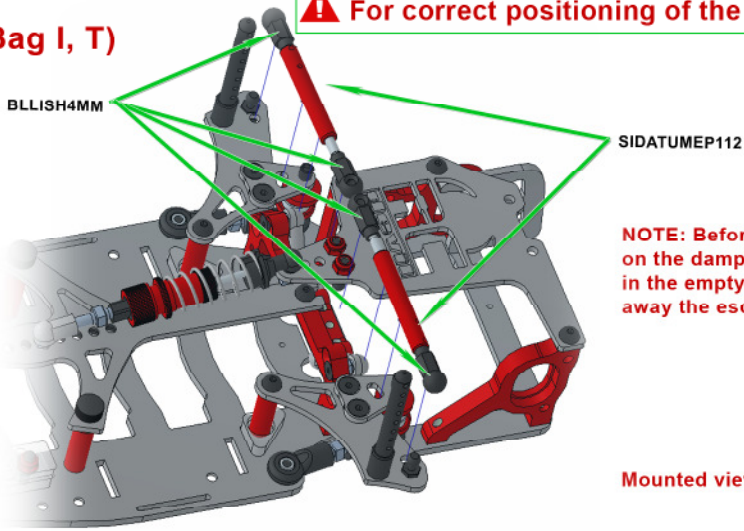


**Mounted view:**



**⚠ For correct positioning of the screws, see the last page of this manual.**

**Step 7: (Bag I, T)**

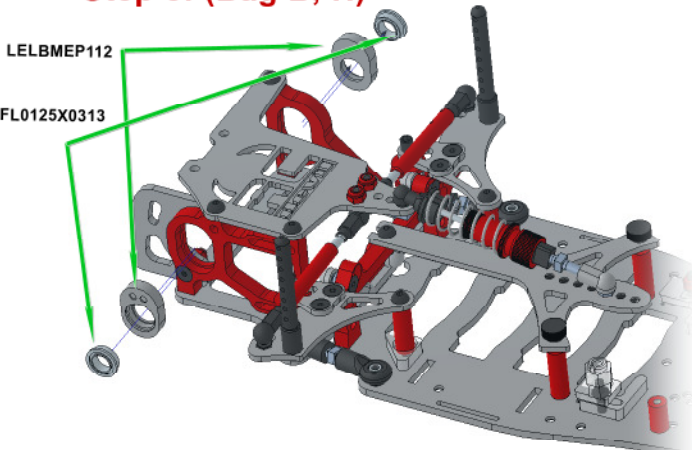


**NOTE:** Before you atache the side dampers, screw the 4mm balllinks on the damper pistons. After that fill the damper sirup in the empty tubes, move the pistons several times, and dash away the escaping silicone sirup.

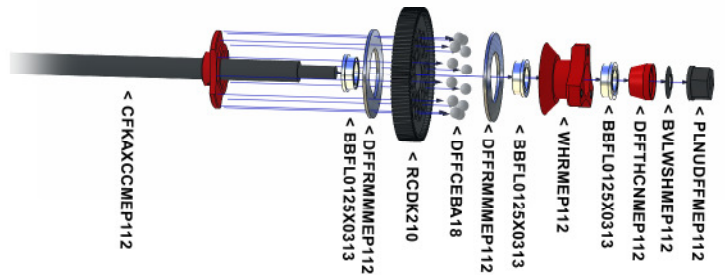
Mounted view:



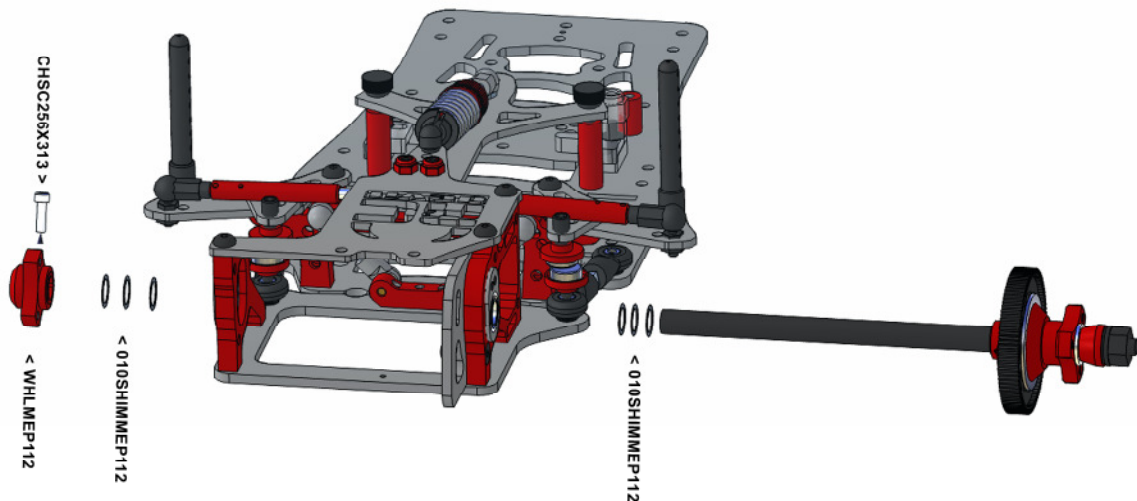
**Step 8: (Bag B, H)**



**Step 9: (Bag B, R)**



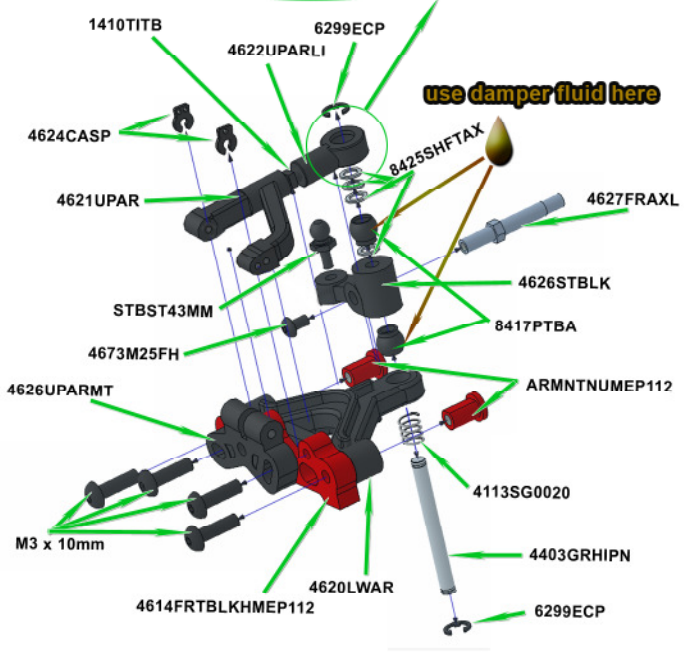
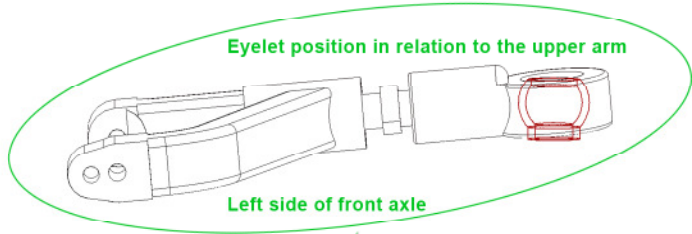
**Step 10: (Bag R)**



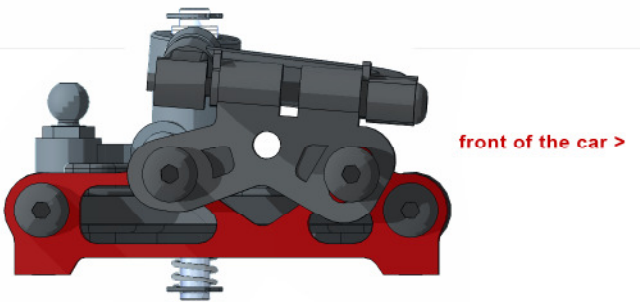
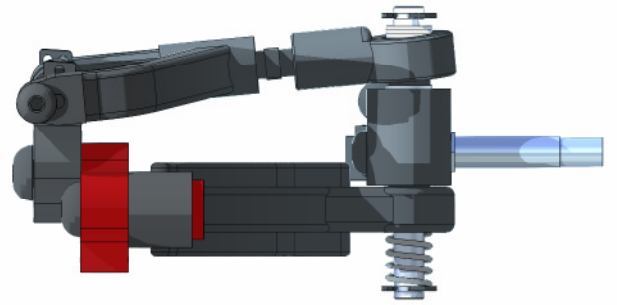
**!** For correct positioning of the screws, see the last page of this manual.

**Step 11: (Bag E)**

**NOTE:** This assembly instruction show the left side of the front axle. The same principle must be used to assembly the right side of the front axle.



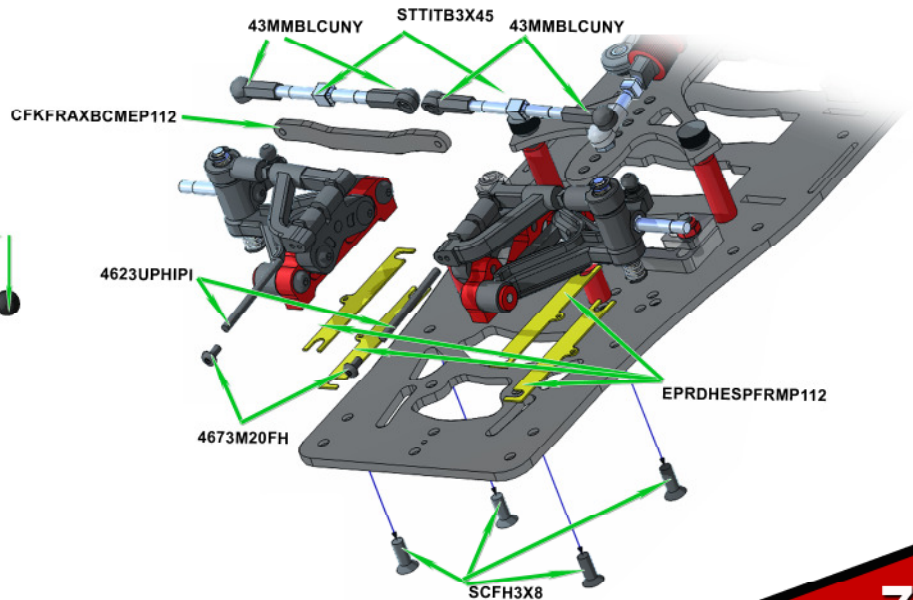
Left front axle, mounted view from the front of the car



Right side Mounted view from the underside of the car. Left side

**Step 12: (Bag D, E, G, I, S)**

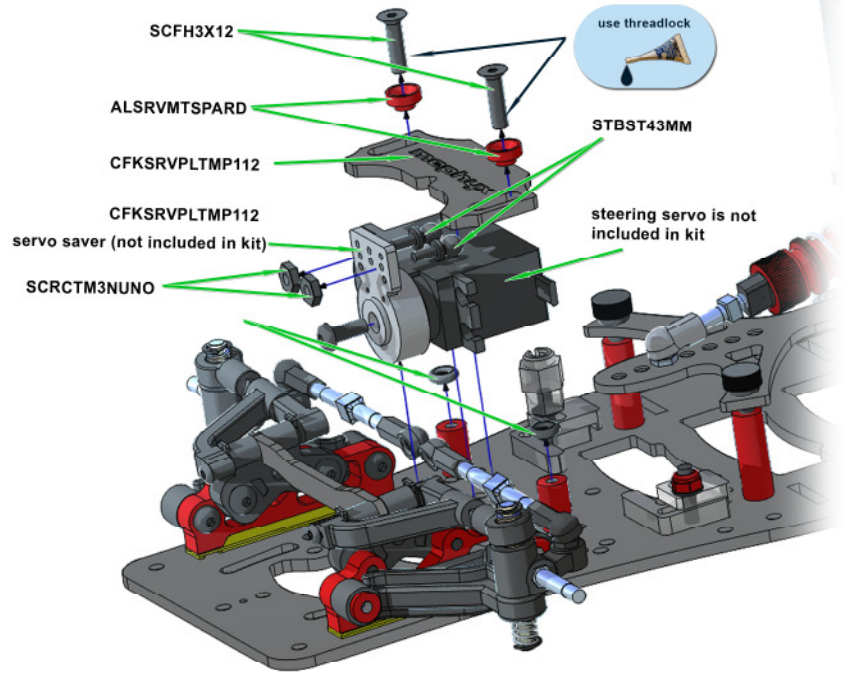
Steering links: make 2 pcs.



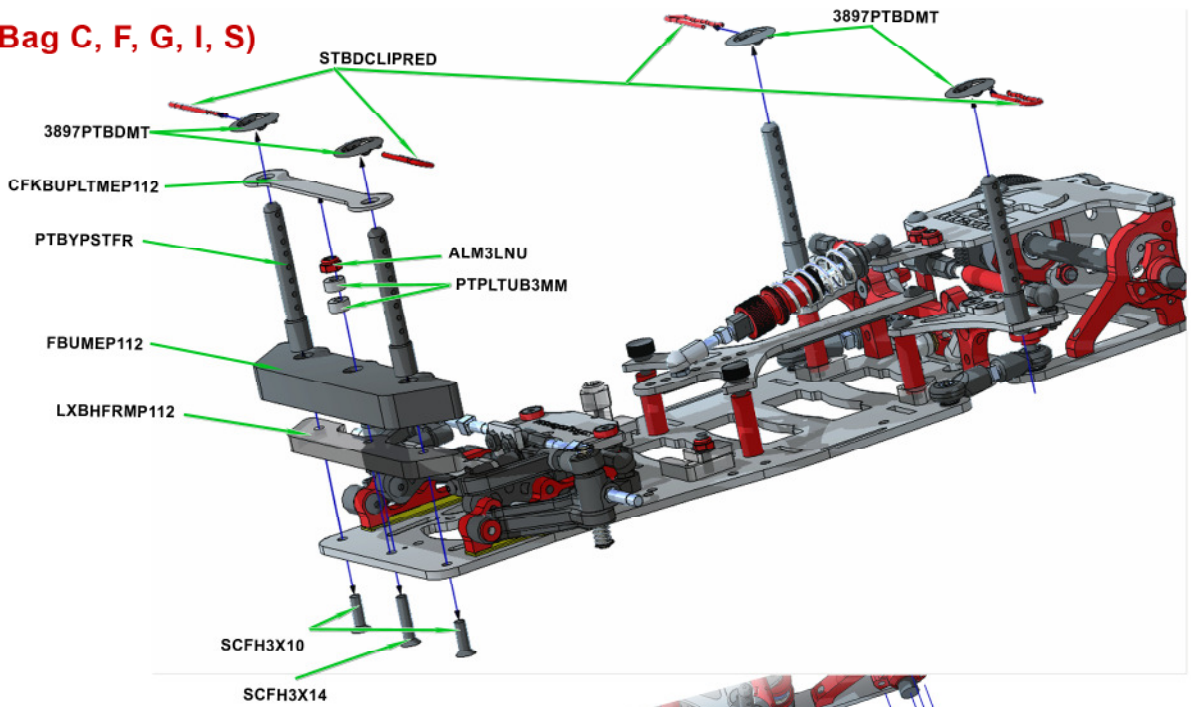


**Step 13: (Bag A, C, I, S)**

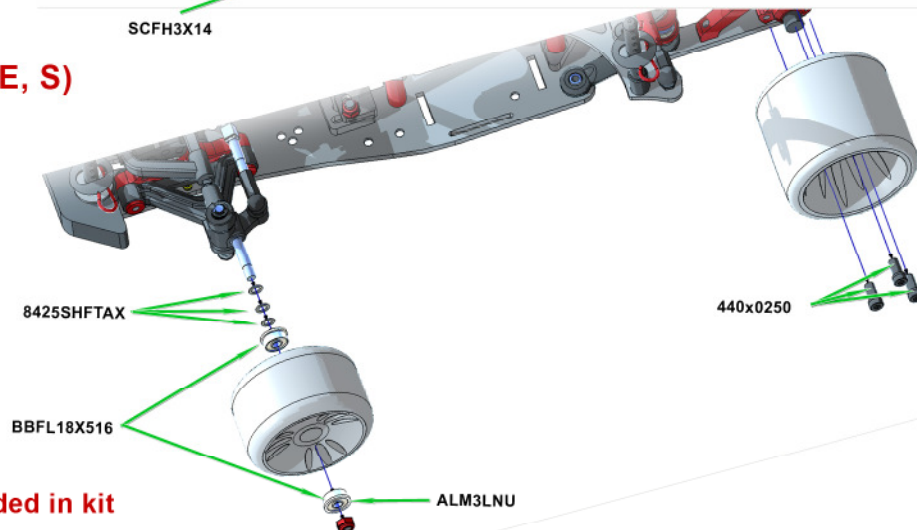
**⚠ For correct positioning of the screws, see the last page of this manual.**



**Step 14: (Bag C, F, G, I, S)**



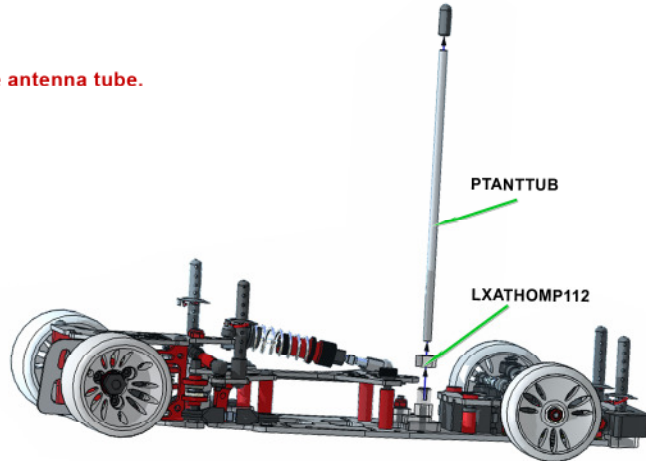
**Step 15: (Bag B, E, S)**



\* Tires are not included in kit

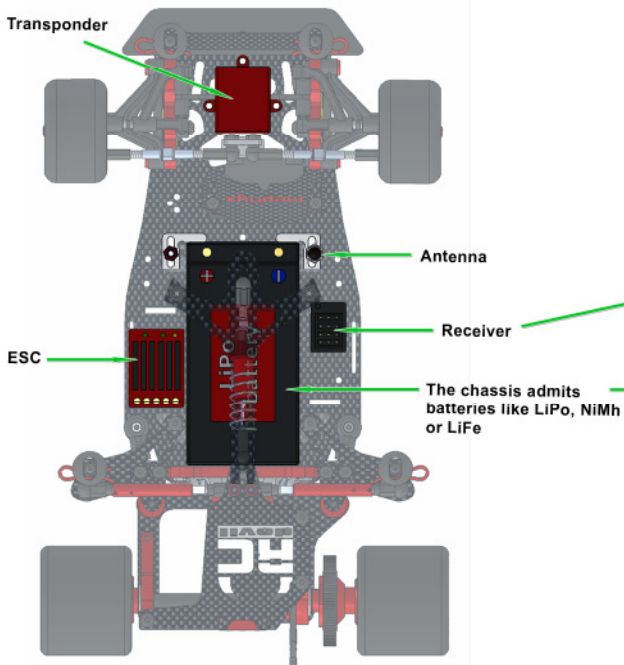
**Step 16: (Bag H, I)**

**NOTE:** Attach the antenna ring after inserting the antenna tube.

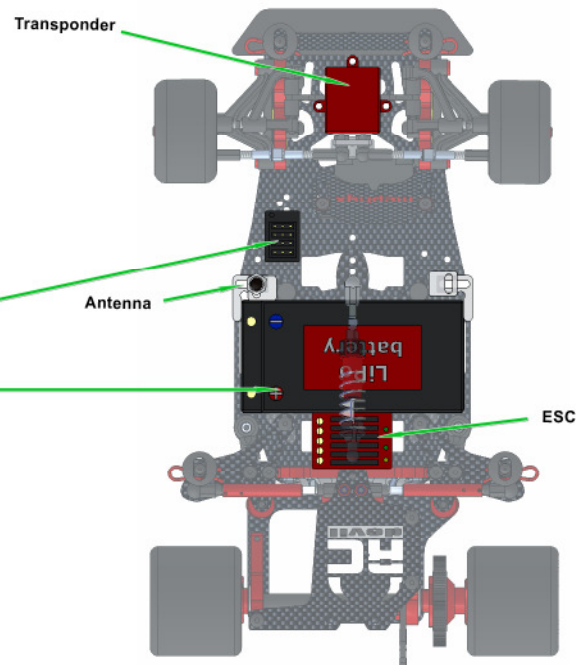


Mephyx offers the possibility to place the battery, the ESC, the receiver, the antenna and servo on different positions:

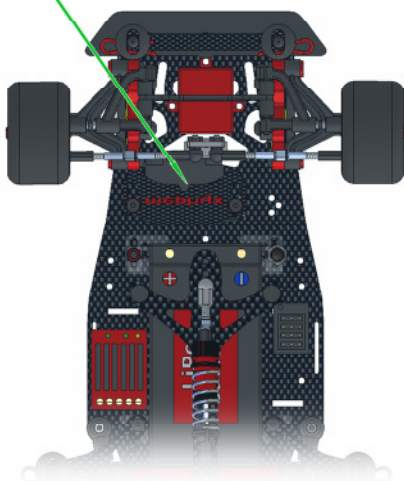
**Variant 1:**



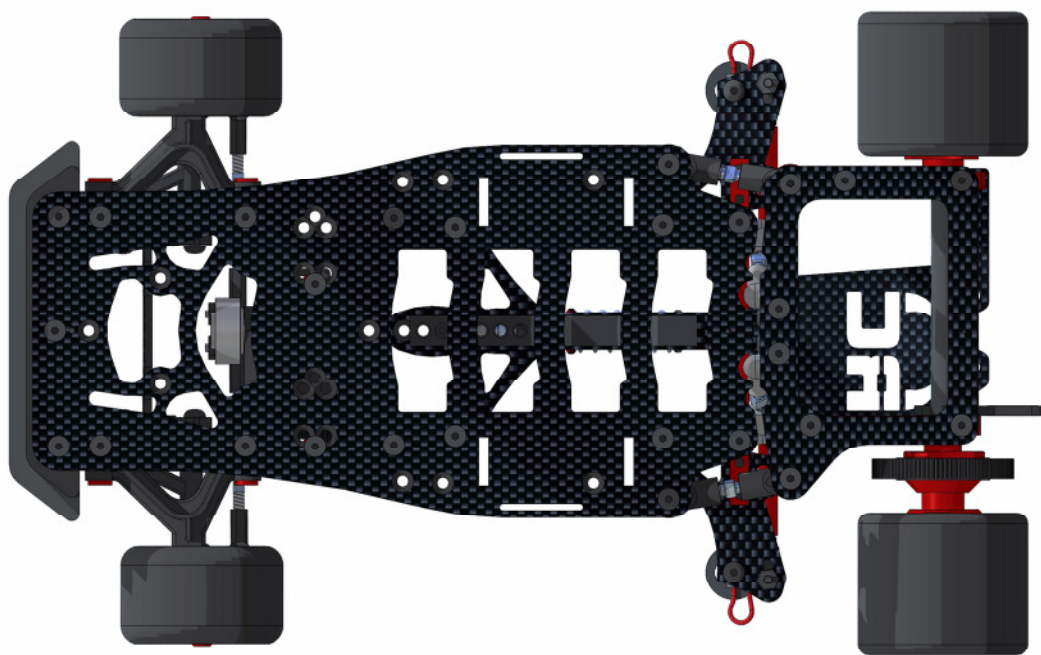
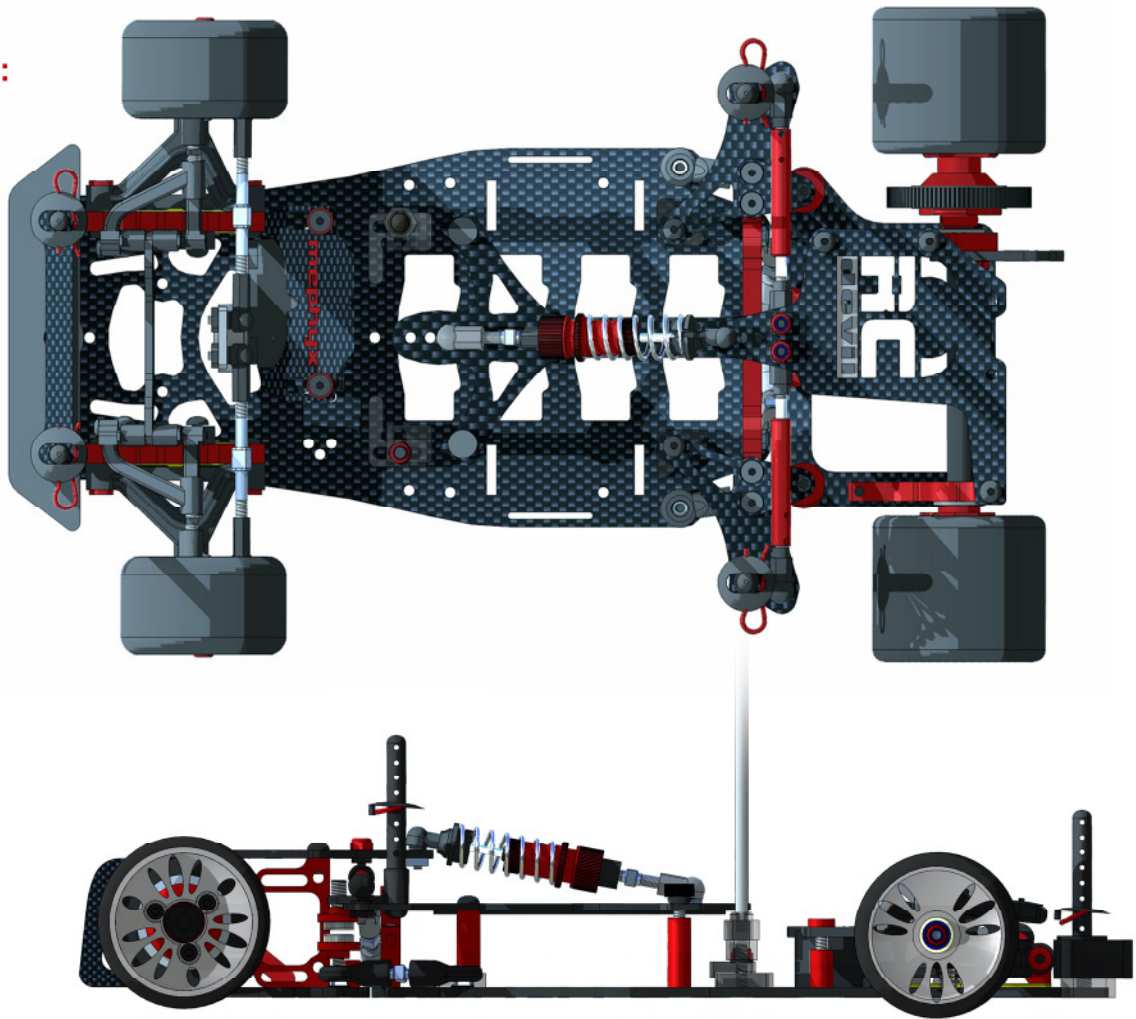
**Variant 2:**



**Variant 3: With servo on the left side**

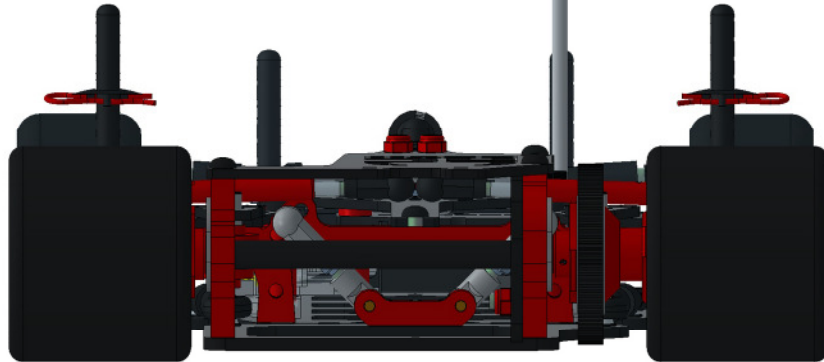
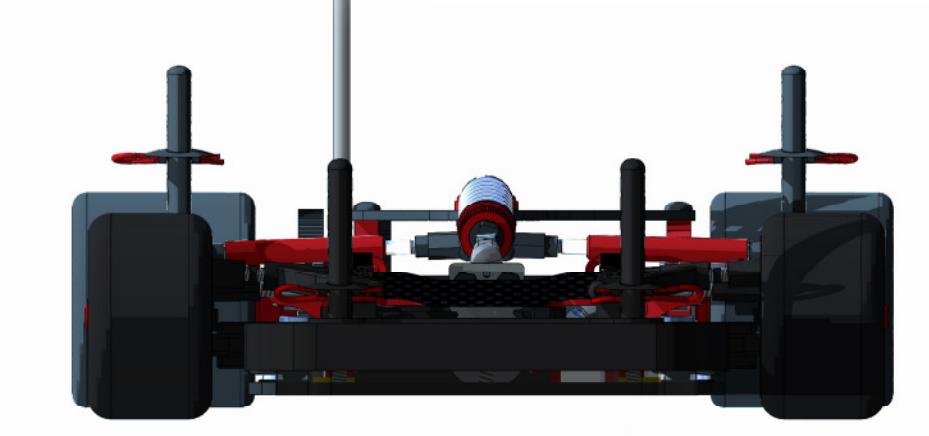
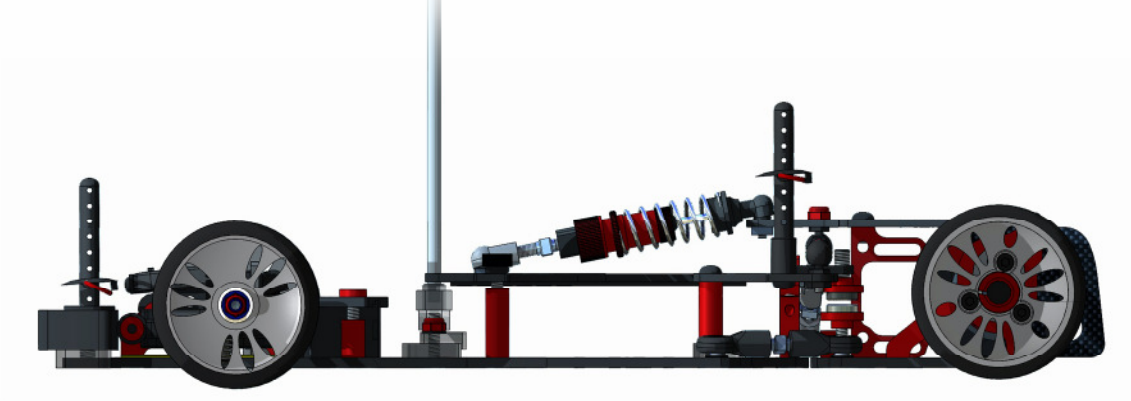


**Mounted views:**

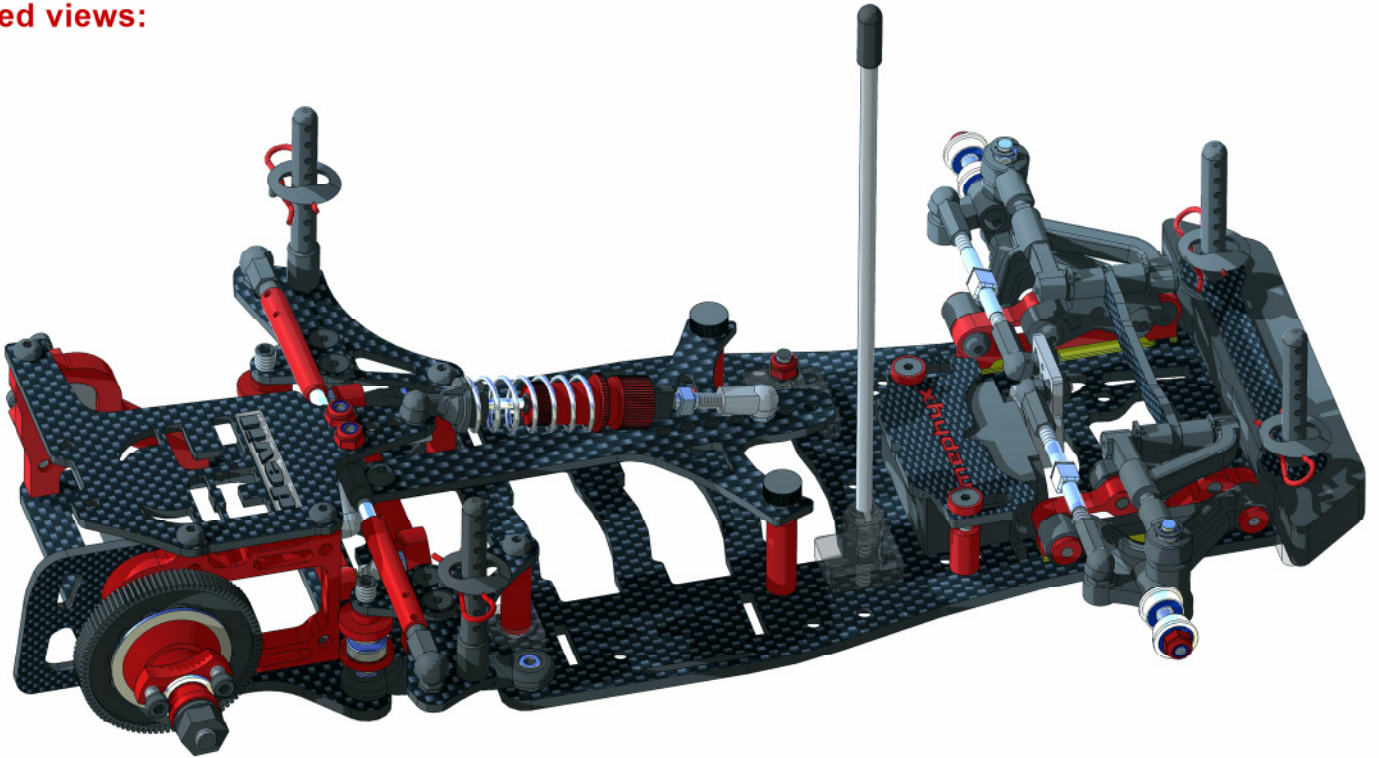




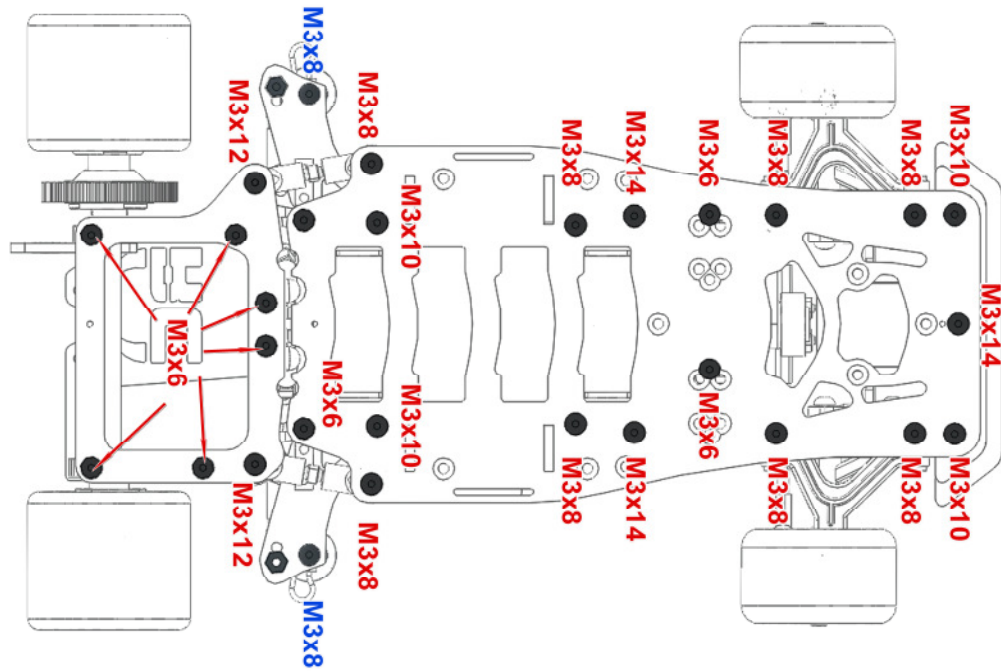
**Mounted views:**



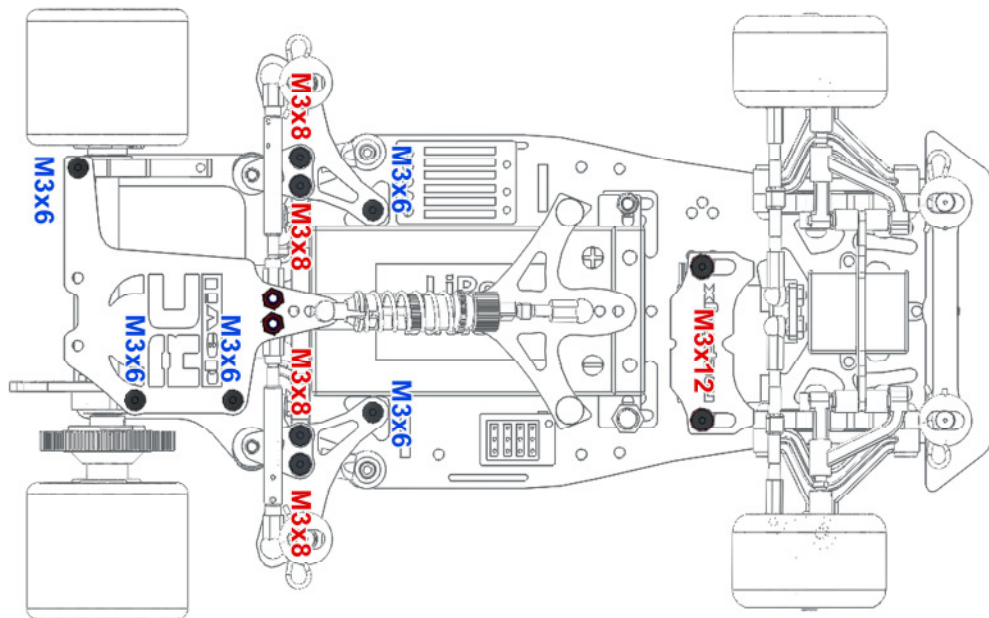
**Mounted views:**



**Screw plan - bottom view:**



**Screw plan - top view:**



**red = Flat head screw**

**blue = Round head screw**