





## BEFORE YOU START

Before building and operating your F-109, you must read through all of the operating instructions and instruction manual and fully understand them to get the maximum enjoyment and prevent unnecessary damage. Read carefully and fully understand the instructions before beginning assembly. Make sure you review this entire manual,. We cannot accept your F-109 kit for return or exchange after it has been partially or fully assembled.

### CUSTOMER SUPPORT

We have made every effort to make these instructions as easy to understand as possible. However, if you have any difficulties, problems, or questions, please do not hesitate to contact the 3Racing support team at support@3racing.com.hk. Also, please visit our web site at http://www.3racing.hk to find the latest updates, set up information, option parts, and many other goodie. We pride ourselves on taking excellent care of our customers.

### SAFETY PRECAUTIONS

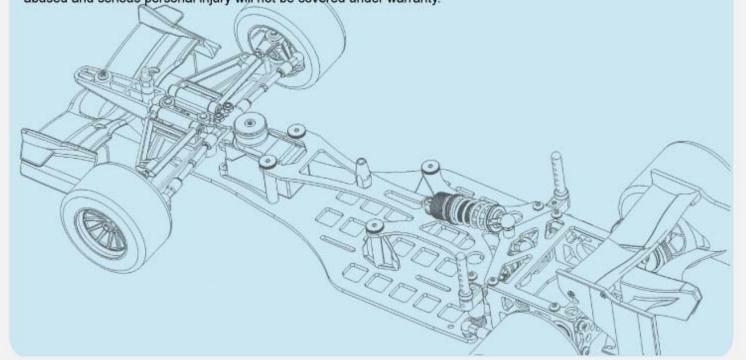
Please read the instruction manual before building and operating this model and follow all safety precautions. For reference reasons, please keep the instruction manual at hand. For provide the maximum performance, we have a full line upgrade parts for our F109. Original authentic 3Racing parts for maximum performance. Using any third party parts on this model will void guaranty immediately. The buyer expressly agrees to indemnify and hold harmless 3Racing for all claims resulting directly or indirectly from the purchase, ownership or use of the product.

## IMPORTANT NOTES - GENERAL

- This kit only suitable for adult which a upper 16 years of age.
- Read carefully and fully understand the instructions before commencing assembly.
- When using tools and handle the small parts. Extra care should be taken to avoid personal injury.
- Take care when building, as some parts may have sharp edges.
- Read and follow instructions supplied with paints and / or cement, if used (not included in kit).
- Follow the operating instructions for the radio equipment at all times.
- Keep the wheels of the model off the ground when checking the operation of the radio equipment.
- Please switch off and remove all electronic items before storing your model.
- Please keep cleaning of your model away.
- If the model behaves strangely, immediately stop the model, check and clear the problem.
- To prevent any serious personal injury and /or damage to property, be responsible when operating all remote controlled models.
- Never disassemble battery or cut battery cables.
- Use a recommended charger for the receiver and transmitter batteries. Incorrect charging may cause the batteries to become dangerous. Do not recharge battery while battery is still warm, wait until it cools down before charging.
- Please read the instruction manual before you use.

## **QUALITY CERTIFICATE**

3RACING F1-09 Formula kit is uses only the highest quality materials, its combine with FRP plate, alloy and plastic parts. We guarantee that all parts are manufactured with the highest quality. Product which have been defective, abused and serious personal injury will not be covered under warranty.





### BRACING F109 1/10 FORMULA 1 CHASSIS SPECIFICATION

3RACING is one of the most famous RC optional parts manufacturers in the world. We have had over 20 years experience in RC industry that we are extremely familiar with every component of RC car kits. Today, we would like to announce that "It is the revolution of RC World because 3RACING has reached a new level in RC development. Our ALL-NEW F1-09 1/10 Formula 1 Chassis will be born!" Formula One is the highest class of car racing in the world. We are very pleased to introduce our new 1/10 scale F1 kit – F1-09 with all features to you. It is a high quality, durable, best-handling and extremely fast car with very affordable price.

## FEATURE:

- Precision cut FRP 2.5mm main chassis and 2.0mm upper desk.
- King pin coil spring independently front suspension.
- Rear suspension uses friction dampers and floating mono shock.
- Aluminum mono shock.
- Aluminum ball differential.
- Full ball bearings.
- Longitudinally placed servo (Isometric steering load applied).
   Lightweight differential joint.
- Height adjustable alloy gear case.
- Rear suspension ball mount.
- Realistic detailed lexan polycarbonate body.
- Front and rear wings.
   ESC, 2-channel R/C system, 7.2V battery and charger separately required.

### SPECIFICATION:

Scale 1/10 Steering Direct steering with servo saver Front king ping coil spring Suspension Shocks Floating mono damper

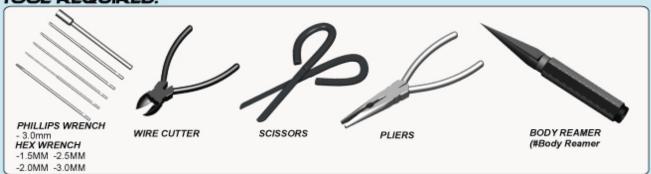
Transmission Direct drive 2WD 98/23

Gear Ratio Length 435mm Width 200mm Height 101mm Wheelbase 275mm Tread (F) Tread (R) 155mm 135mm

F 30mm; R 45mm F 57mm; R 57mm Tire Width Tire Size

Overall Weight Shell Weight 610g 42g 568g Net Weight

## TOOL REQUIRED:



#### TOOLS AND REQUEST INCLUDED:







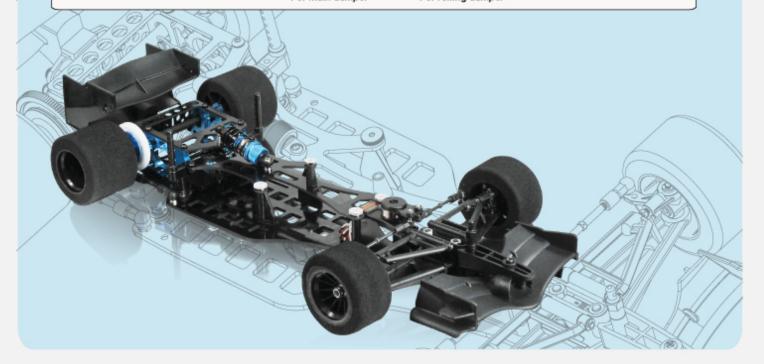




SILICON OIL For rolling damper



TURNBUCKLE TOOL

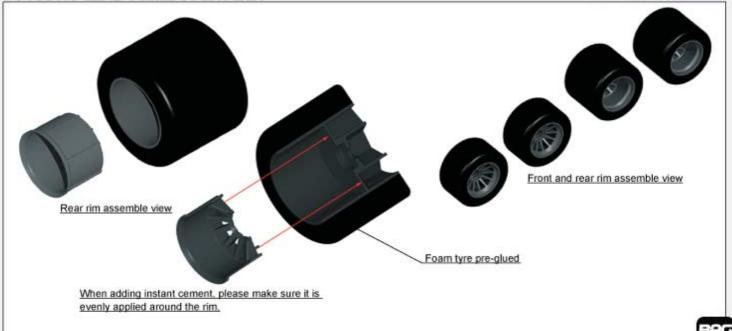




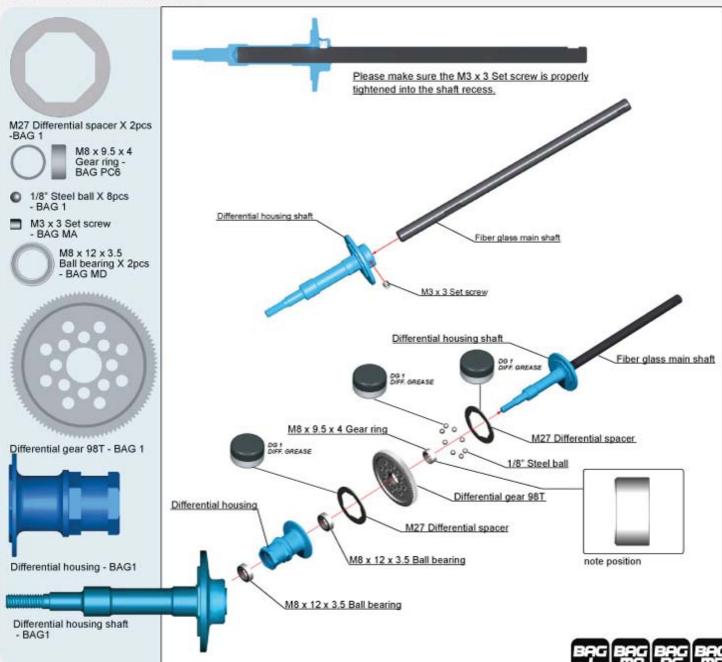
Front and rear rim set	PAGE 1
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## 1. FRONT AND REAR RIM SET





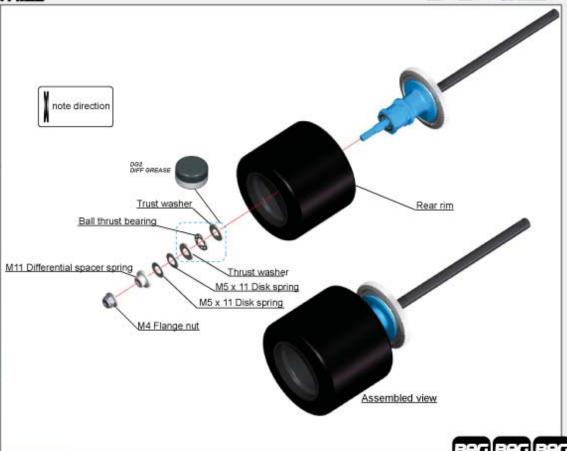
## 2. BALL DIFFERENTIAL



## 2. BALL DIFFERENTIAL







## 3. MOTOR MOUNT INSTALLATION:

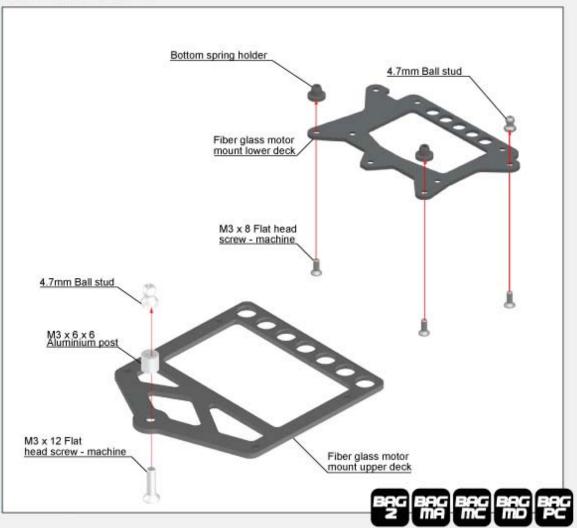


Bottom spring holder X 2pcs - BAG PC7

M3 x 8 Flat head screw - machine X 3pcs - BAG MA

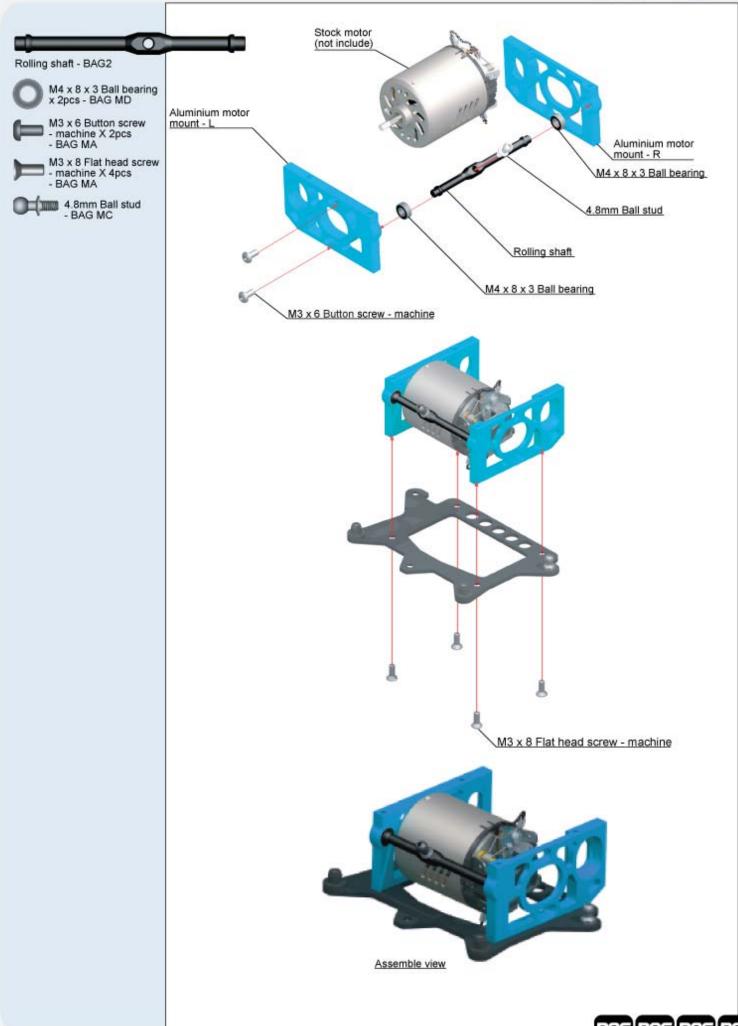
> M3 x 12 Flat head screw - machine - BAG MA

4.7mm Ball stud X 2pcs - BAG MC



# 3. MOTOR MOUNT INSTALLATION:



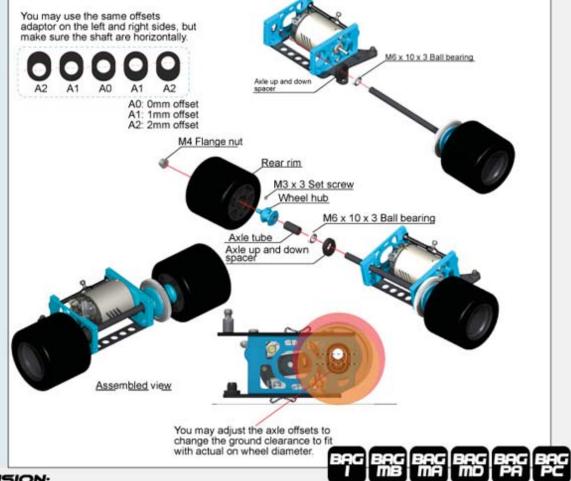


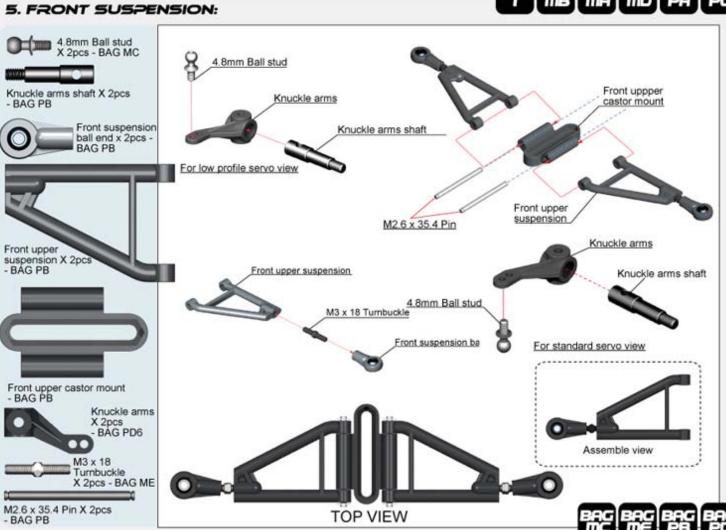
-3-





Rear rim - BAG PA

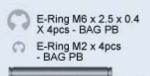




## 5. FRONT SUSPENSION:



O-Ring M1.8 x 1

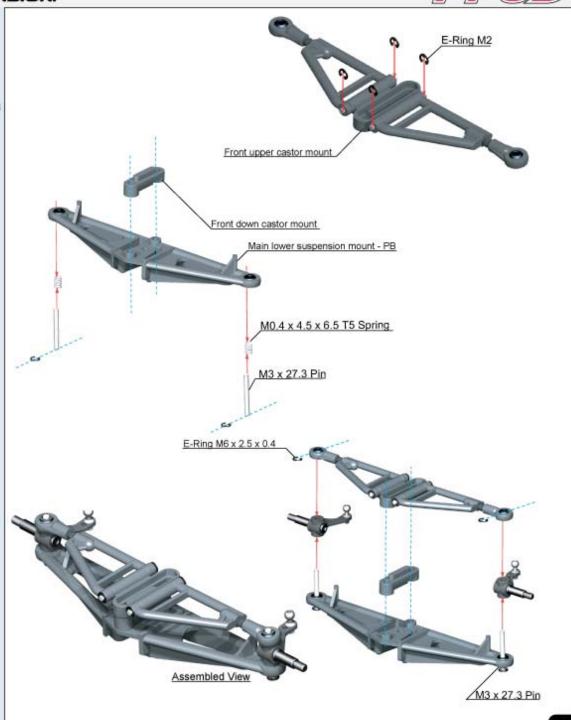


M3 x 27.3 Pin X 2pcs - BAG PB

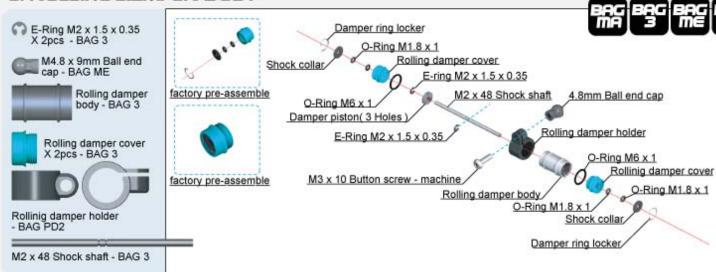


Front down castor mount - BAG PB

M0.4 x 4.5 x 6.5 T5 Spring X 2pcs - BAG PB

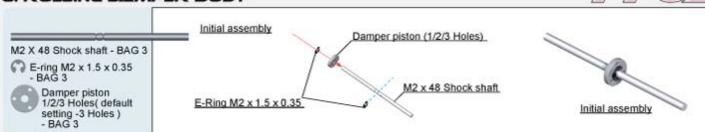


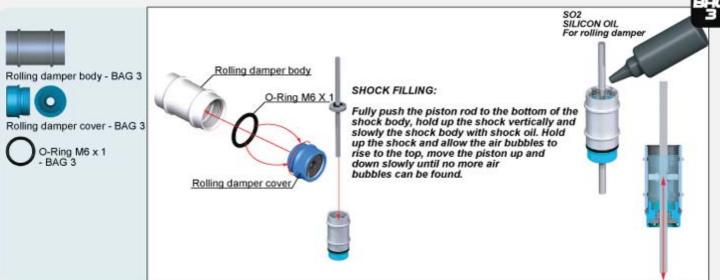




### 6. ROLLING DAMPER BODY

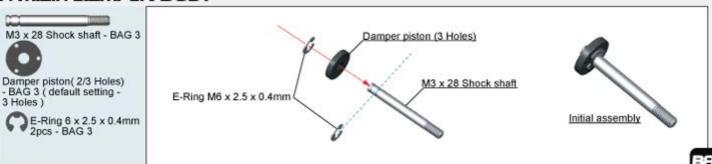




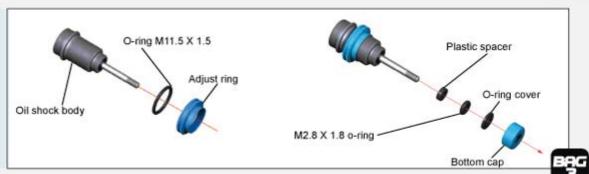




## 7. MAIN DAMPER BODY

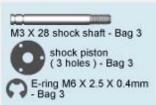


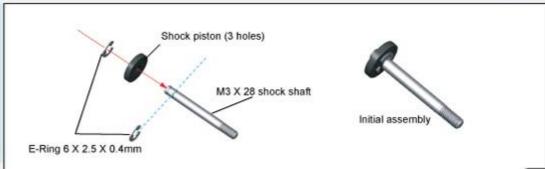




### 7. MAIN DAMPER BODY



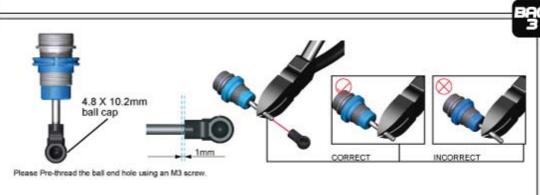






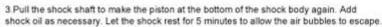
4.8mm X 10.2mm ball cap

- Bag 3

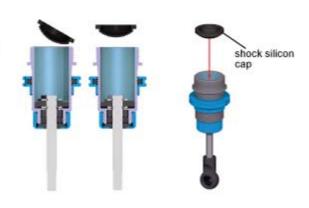




- Fully pull the shock shaft to make the piston at the bottom of the shock body.
   Then hold the stock upright and overfill the shock body with stock oil slightly.
- 2.Slowly move the piston up and down to allow the bubbles to rise to the top until no more air bubbles appear.



- 4.Place the shock silicon cap on top of the shock body from a side. Some oil will leak out and it is normal
- 5. Fully tighten the cap and clean off any excess oil.



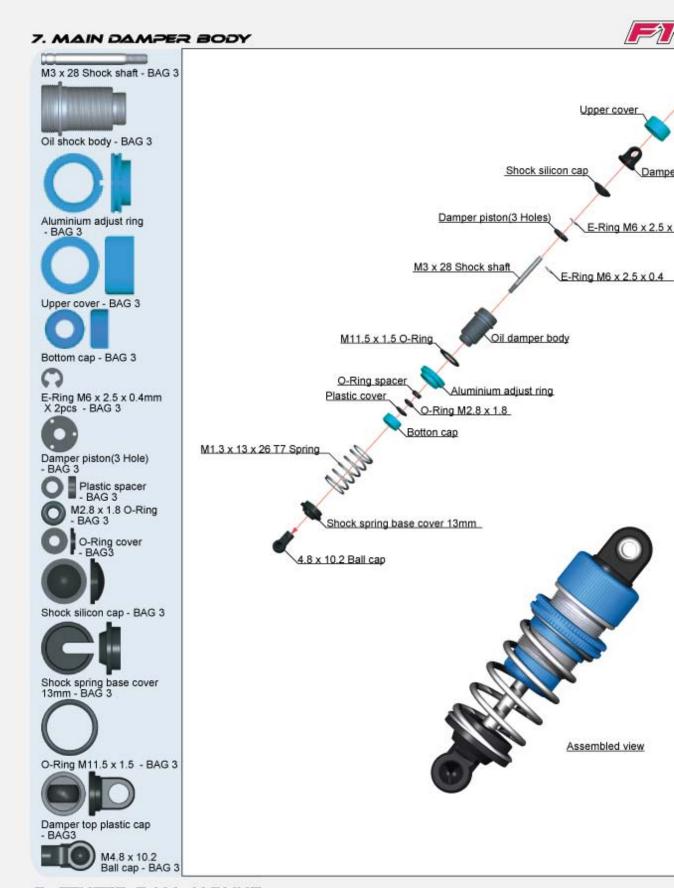


Cover the shock silicon cap to shock body, it will case some oil will leak out, this is a normal situation.



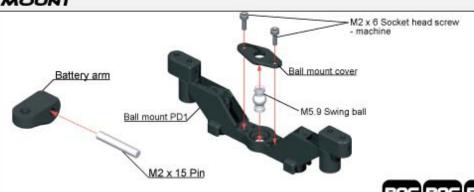
Damper top plastic cap

E-Ring M6 x 2.5 x 0.4









## 8. CENTER BALL MOUNT

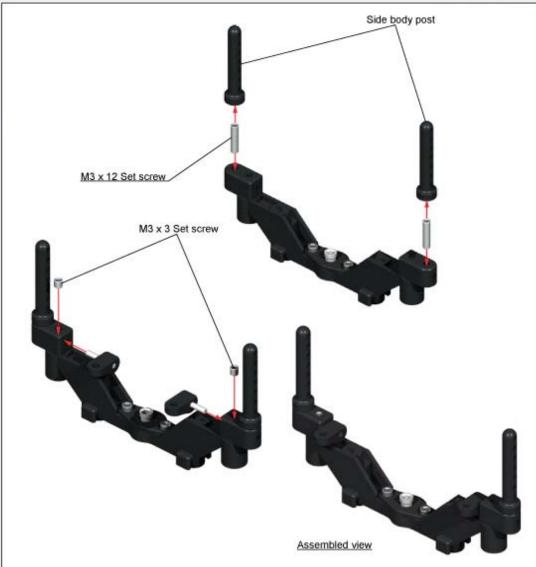




Body post X 2pcs -BAG PC3

M3 x 12 Set screw X2pcs - BAG MA

M3 x 3 Set screw X 2pcs - BAG MC



## 9. SERVO SAVER ASSEMBLY:







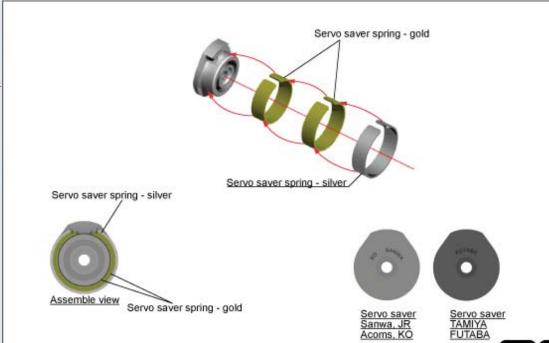




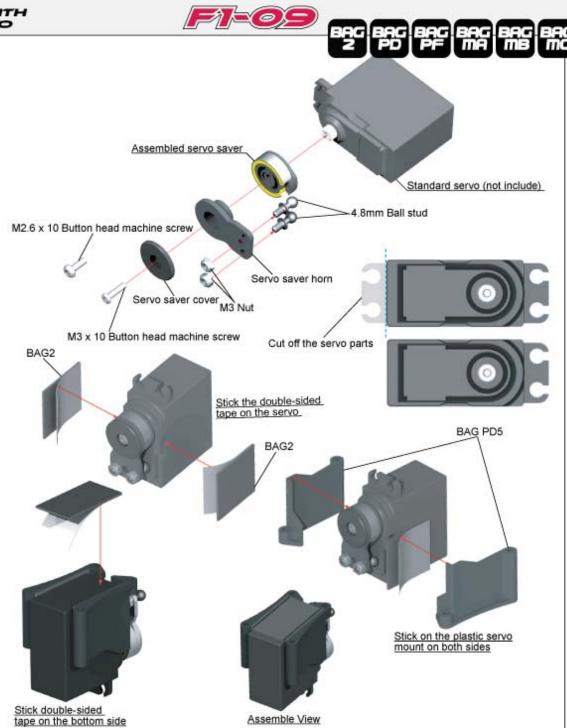
Servo saver spring - silver - BAG MB

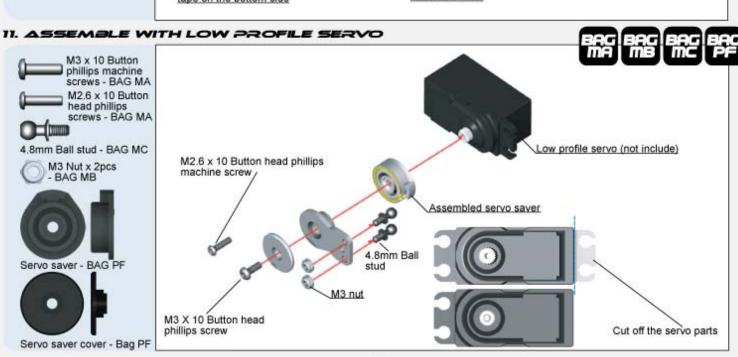


Servo saver spring - gold X 2pcs - BAG MB



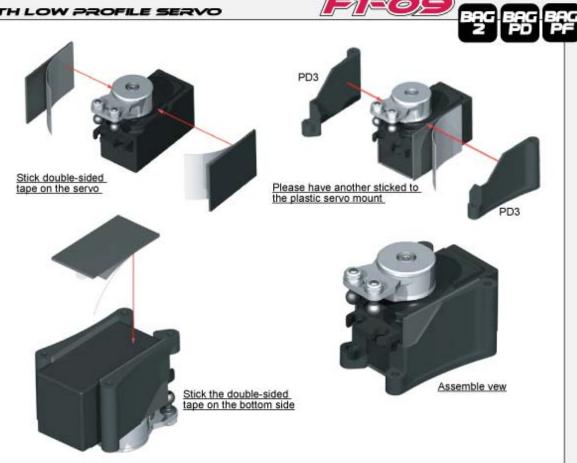


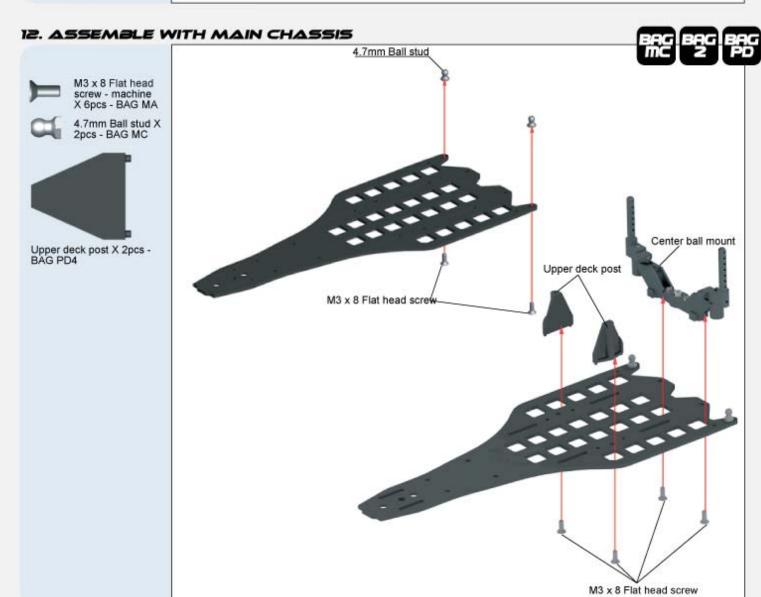




# 11. ASSEMBLE WITH LOW PROFILE SERVO

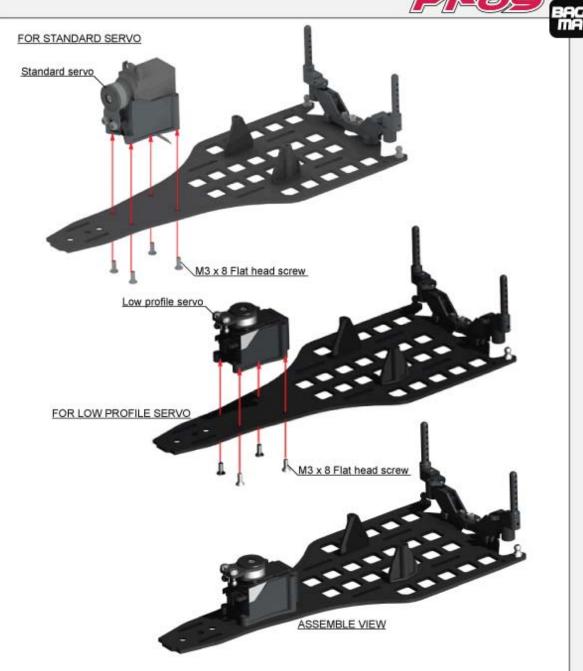


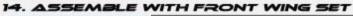






M3 X 8 Flat head X 4pcs







M3 x 10 Button phillips screw - self tapping X 1pcs



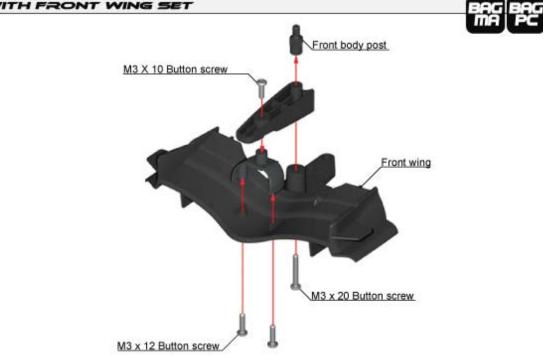
M3 x 12 Button phillips screw - self tapping X 2pcs



M3 x 20 Button phillips screw - self tapping



Front body post - BAG PC1



### 15. ASSEMBLE WITH REAR WING MOUNT

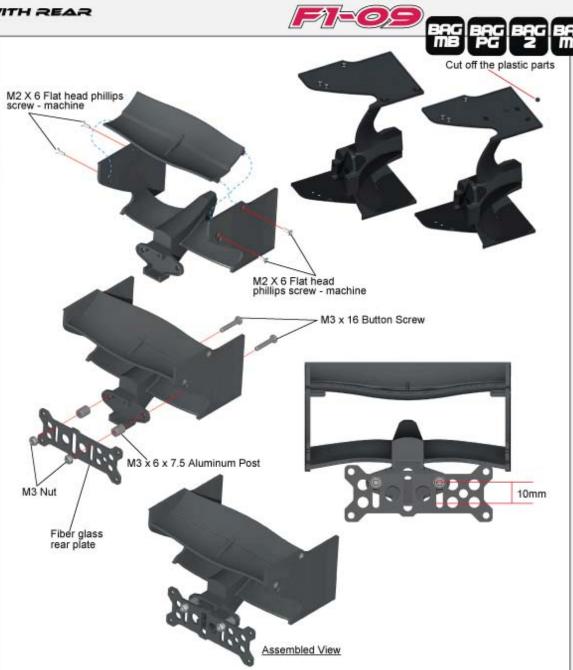




M3 x 6 x 7.5 Aluminum Post X 2pcs



M3 nut X 2pcs





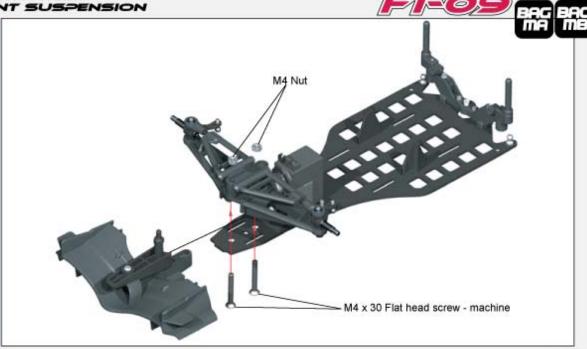
#### 17. ASSEMBLE WITH MAIN CHASSIS & FRONT SUSPENSION



M4 x 30 Flat head screw - machine X 2pcs - BAG MA

0

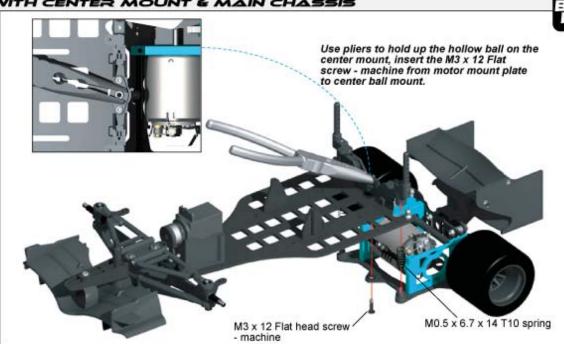
M4 Nut x 2pcs - BAG MB

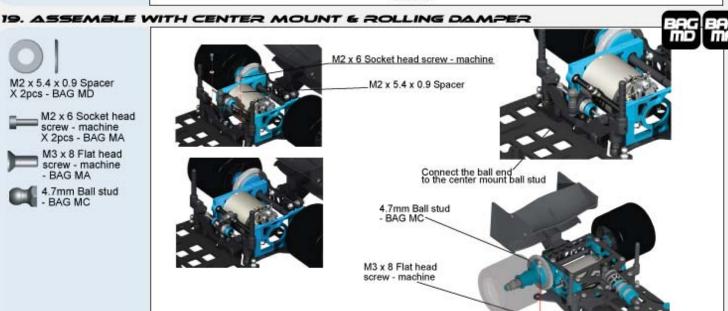


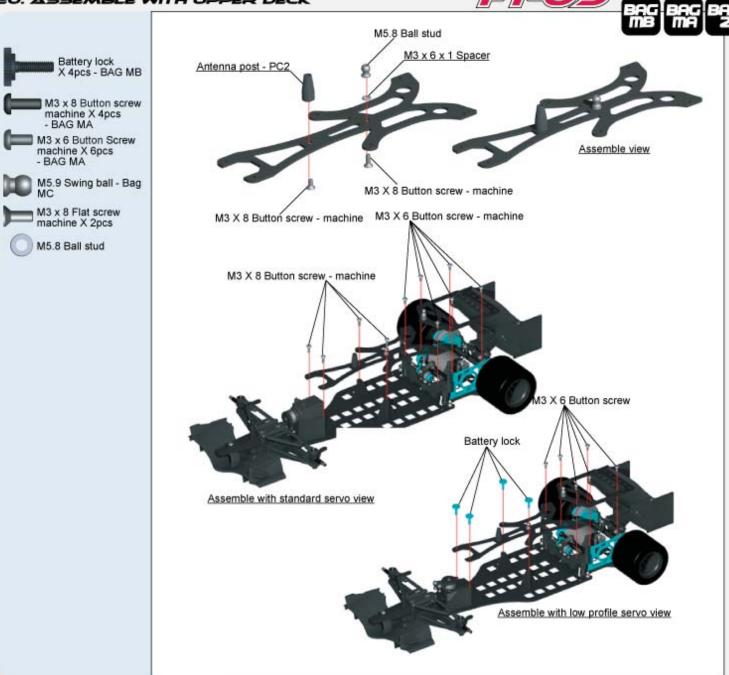
## 18. ASSEMBLE WITH CENTER MOUNT & MAIN CHASSIS

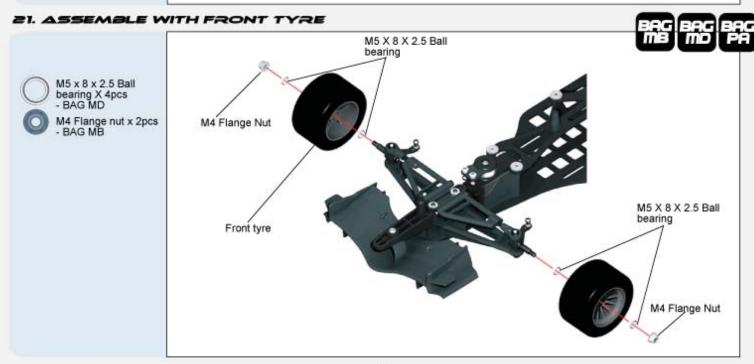
M3 x 12 Flat head screw screw - machine - BAG MA

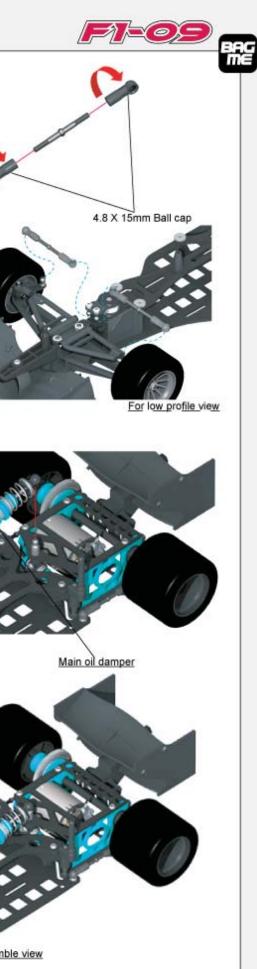
M0.5 x 6.7 x 14 T10 spring

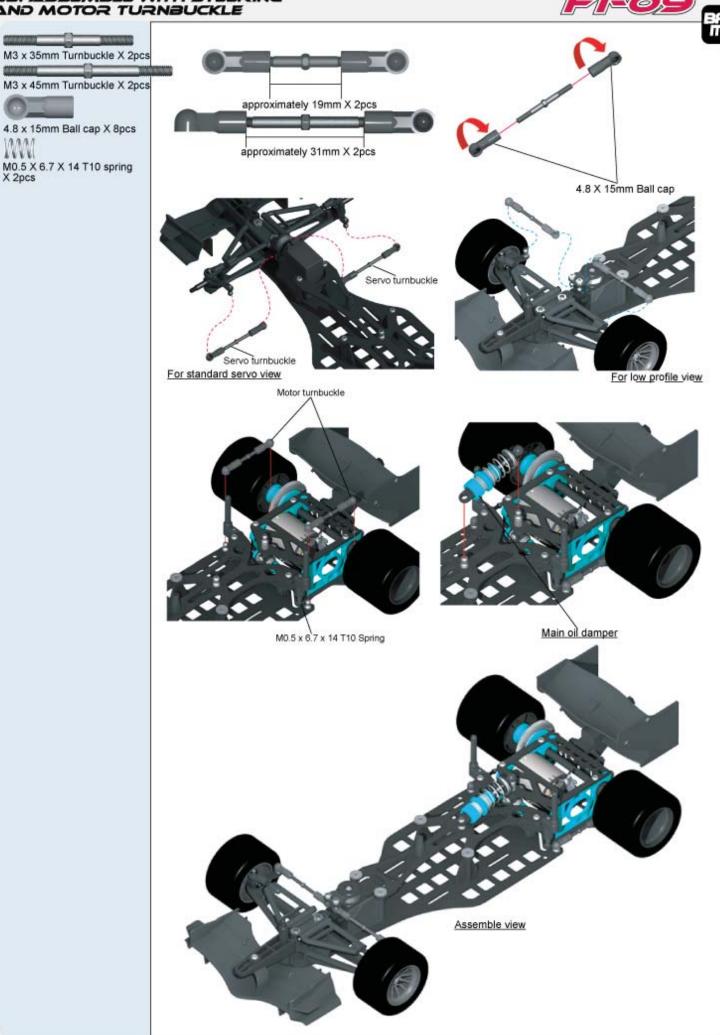


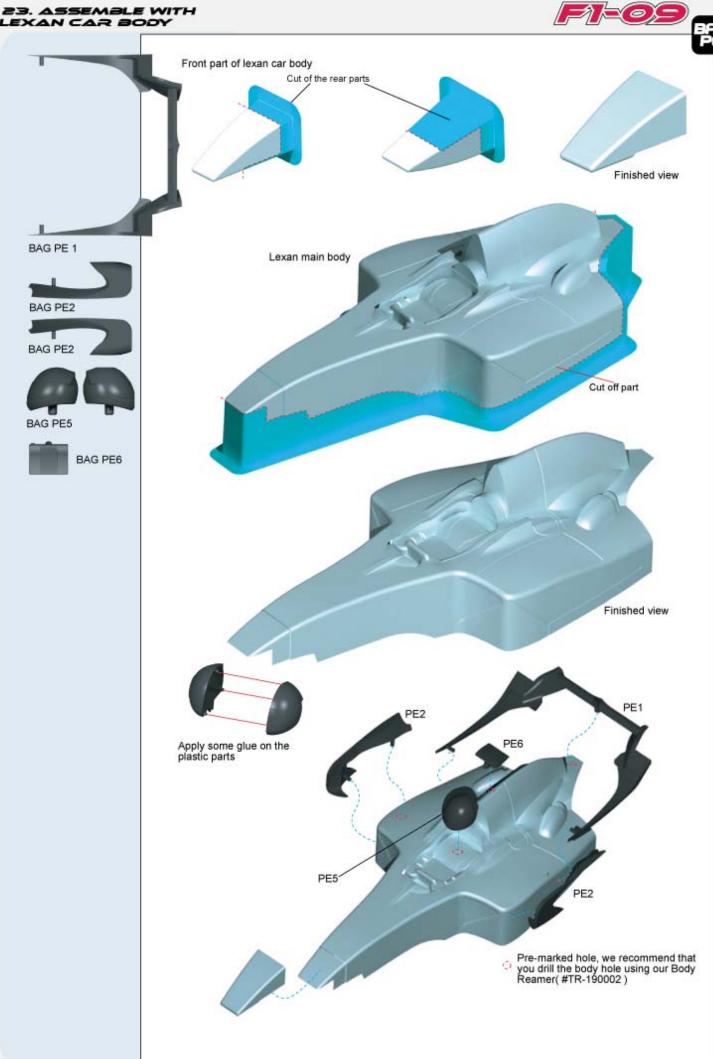


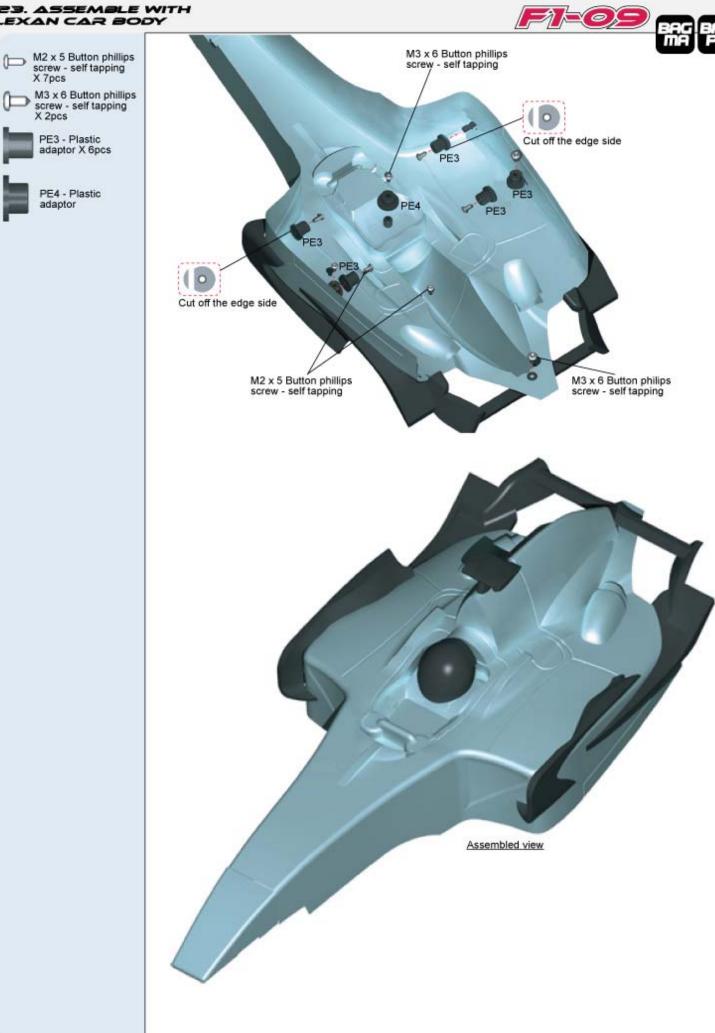




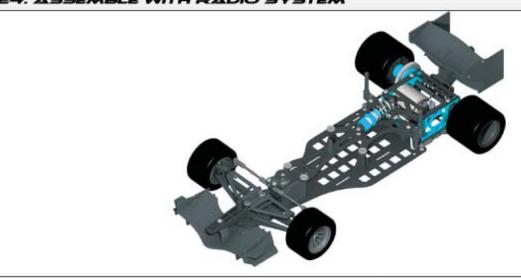


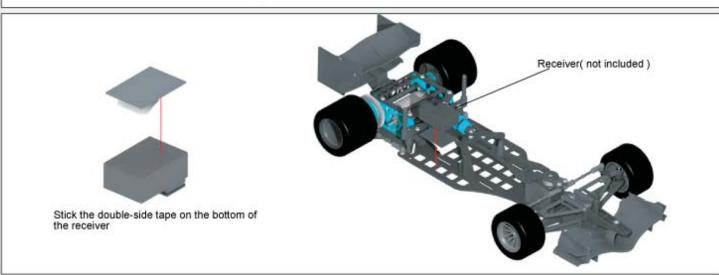


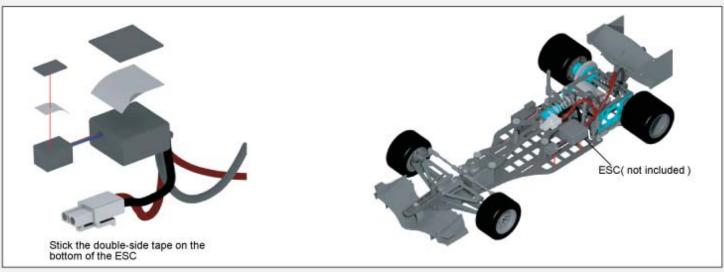


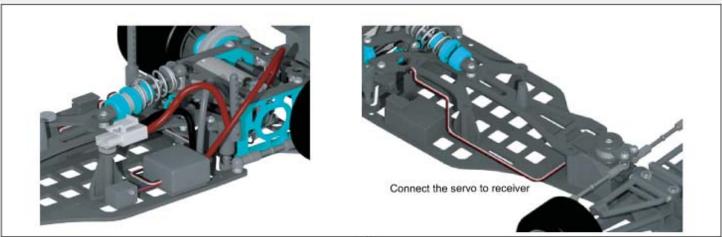




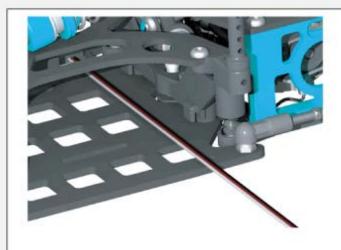


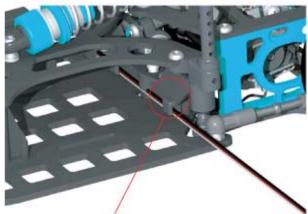








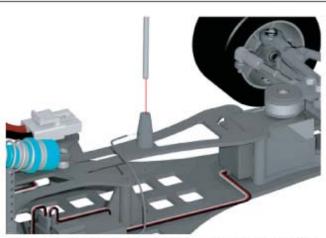




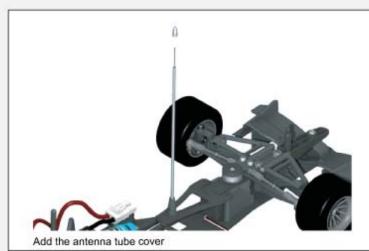
When you connect the ESC wire to the receiver, you may hooks the ESC wire on the edge of center mount.

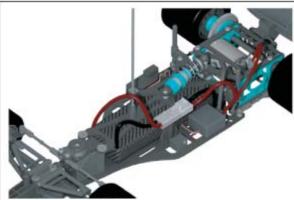


Connect the ESC wire with the receiver channel plug

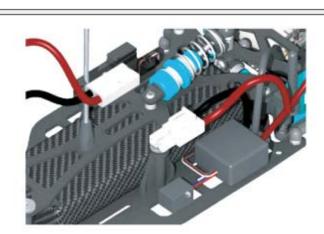


Connect the antenna wire through antenna post mount to the tube.

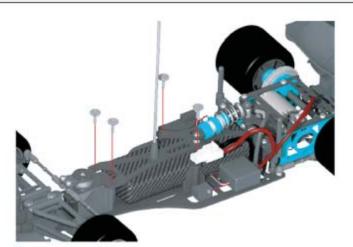


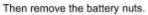


How to change a battery: For use on low profile servo, you can change the battery by unlocking off the quick change battery lock nut. First of all, remove the battery plug



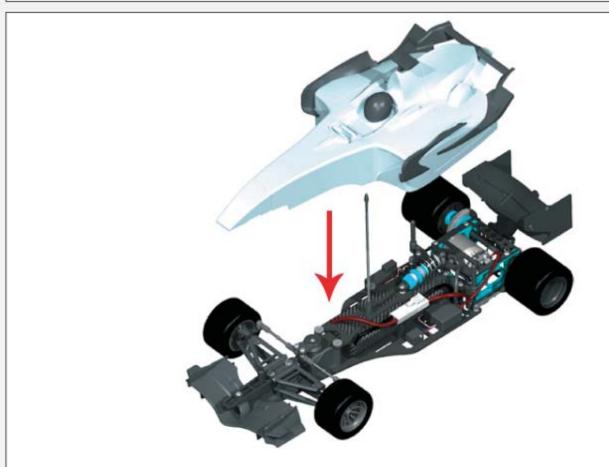


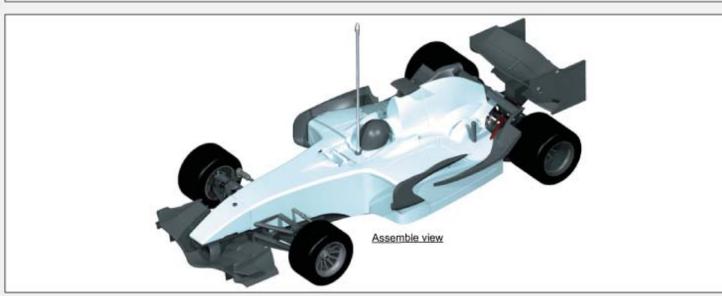




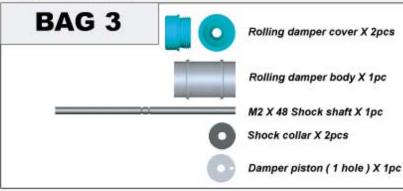


Finally, pull up the upper deck and remove / insert battery as needed to suitable angle.

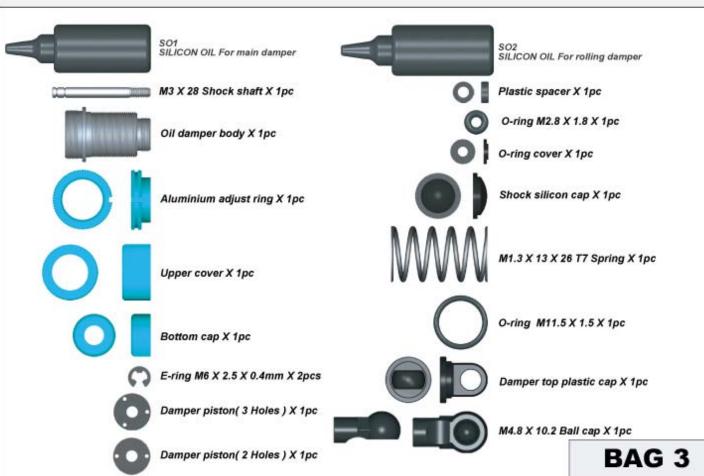


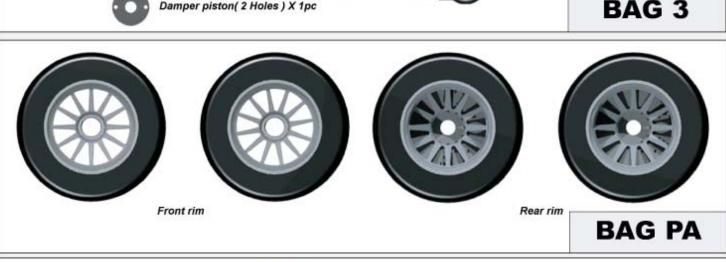


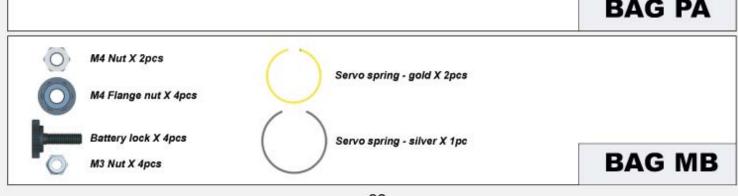




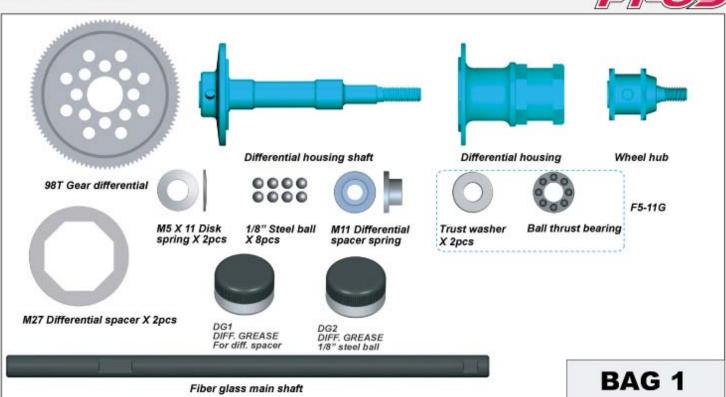


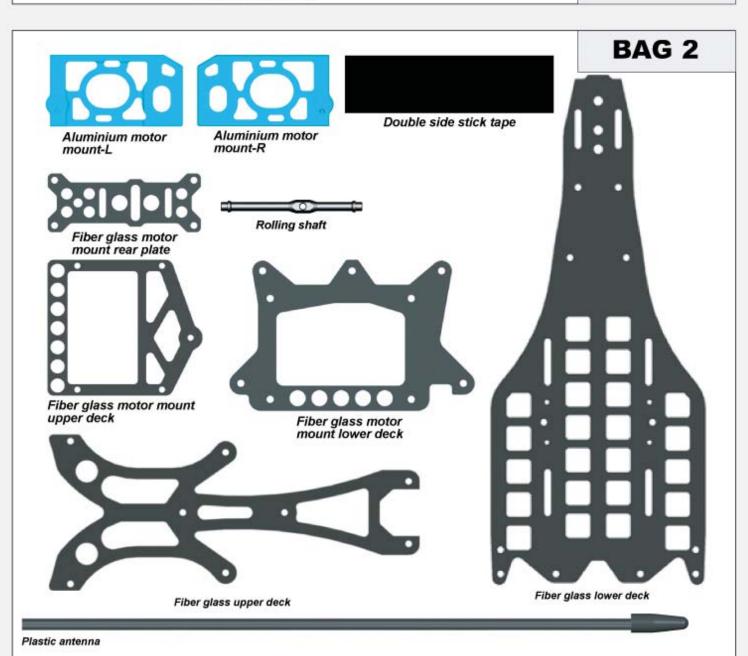




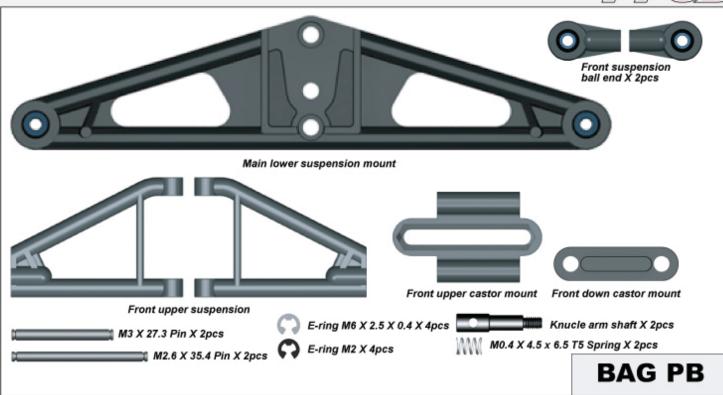


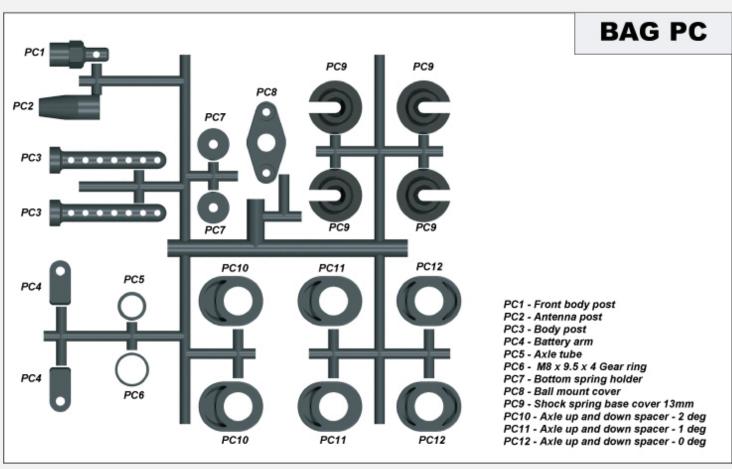


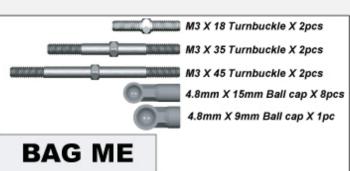








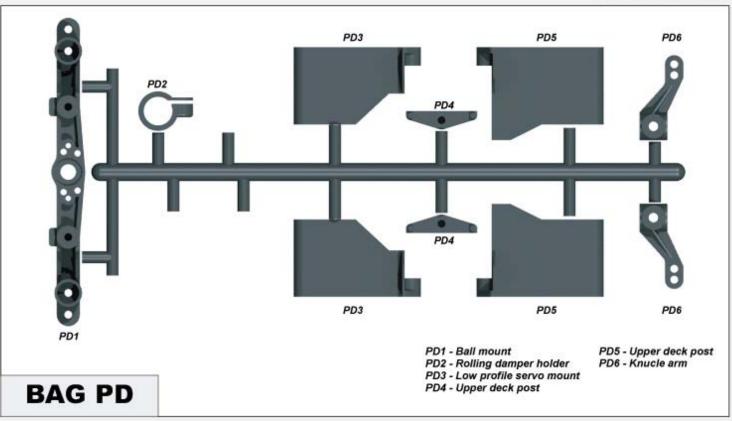


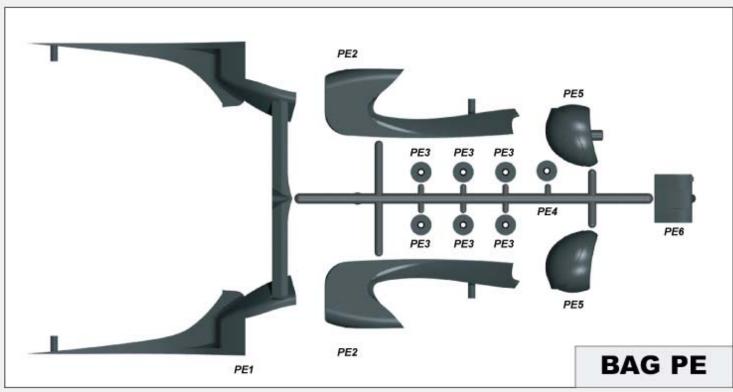


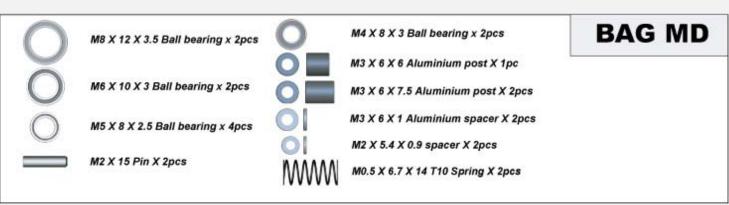


**BAG MC** 

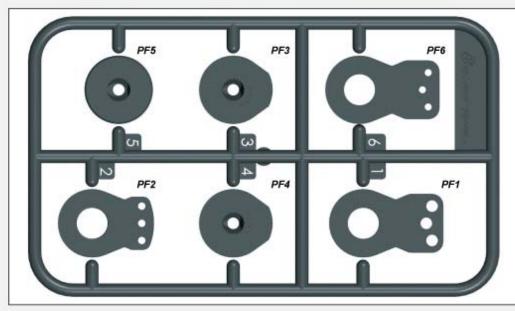








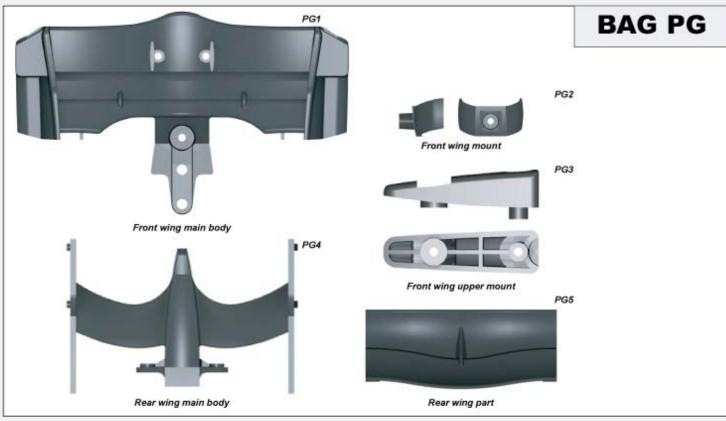


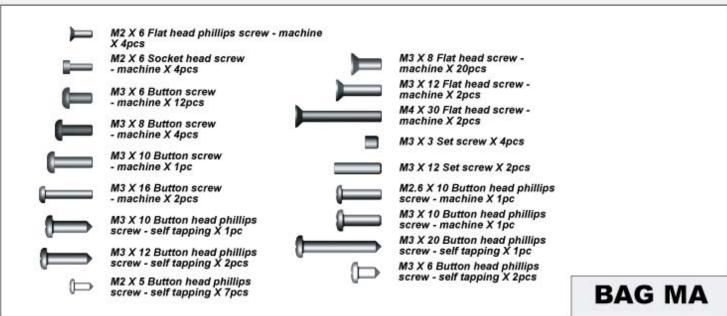


PF1 - 3mm Servo horn PF2 - 2mm Lower servo horn PF3 - Servo Saver for FUTABA PF4 - Servo Saver for KO / SANWA

PF5 - Servo Saver cover PF6 - 2mm Lower servo horn

**BAG PF** 









WH-29FFO/BL Front Foam Tyre And Rim Set



WH-29RFO/BL Rear Foam Tyre And Rim Set



F103RM-12/BL Front And Rear Wing Set - High Downforce - Black



F103RM-12/WI Front And Rear Wing Set -High Downforce - White



F103RM-10 Front Suspension



F103RM-10RK Front Suspension Plastic Part



F103RM-03 Rear Axle Up & Down Offset Spacer



TT01-22 4.8mm Ball Cap



3RAC-SHAMU Plastic Servo Saver Set



F109-01 Plastic Parts - Part A



F109-02 Plastic Parts - Part B



BDY-F109RK Plastic Parts - Part C



3RAC-TR345 64 Titanium 3mm Turnbuckle - 45mm(2 Pcs)



3RAC-TR335 64 Titanium 3mm Turnbuckle - 35mm(2 Pcs)



F109-03 Main Chassis And Upper Deck FRP Set



F109-04/LB Aluminium Main Damper



F109-04/RK Rebuild Kit For F109 Chassis



F109-05 Aluminium Center Rolling Damper



F109-06 Aluminium Center Mount Rolling Spring S/M/H



F109-07/WO FRP Motor Plate



F109-08 Aluminium Motor Mount



F109-09 Main Shaft - FRP



F109-10 Aluminium Diff. Housing



F109-10/RB Rebuild Kit For #F109-11



F109-11 98T Gear For F109



F109-12 Rolling Shaft

