



# **S104 EK1**

*1/10 OFF ROAD RACING EP BUGGY*

**SWORKz S104 EK1 INSTRUCTION MANUAL**



## INSTRUCTION

After 2 years of our 1/8th race buggy, SWORKz is now on its new project. A 1/10 EP 4WD buggy called the S104 EK1. There is a Pro Kit version and also a S104 EX1 Sport Ready to Run model. From the S350 BE1, we learned a lot about the buggy's strong points. Using our 1/8th buggy knowledge, we produced the S104 series. We believe that the S104 will perform very strongly in the 1/10 buggy field. The S104 is a very light weight car with a narrow chassis design that comes standard with SWORKz X-system transmission. The X-system was chosen for its excellent car acceleration. Equipped with Big Bore Shocks and oil filled gear differentials, the S104 EK1 delivers good traction and balance on any off road track. The pivot ball steering system gives the driver a good feel and control of the S104 buggy.

The S104 can be fitted with either saddle pack Li-Po batteries or shorty packs.

In order to withstand the brushless motor's powerful torque, the S104 EK1 Pro comes standard with full CNC gear system and CVD drive shafts.

14mm hex wheel hubs are used so the wheels can last when using the high power brushless motors.

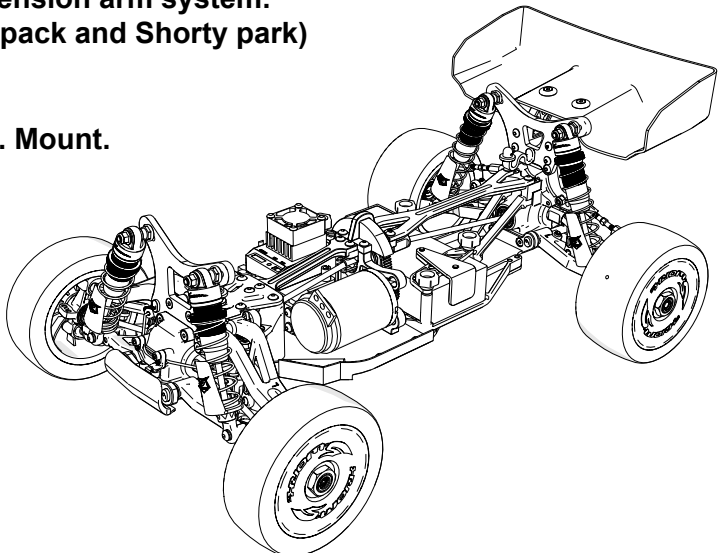
Congratulations on your purchase of the new SWORKz S104 EK1 1/10 scale off-road racing buggy pro kit.

Please read this manual thoroughly before you attempt to start or drive your S104 EK1. This manual contains step-by-step instructions to help you complete, prepare for startup, and fine-tune your Buggy. Updates, setups, and product news will be posted on our website ([www.sworkz.com](http://www.sworkz.com)), so check often.

As always, if you should ever have any questions or need help with your S104 EK1, please feel free to contact our official SWORKz dealers and distributors, as they will be glad to help you. You may also contact us anytime for the most up to date information and support.

### S104 EK1 Pro Kit Features :

1. Comes standard with SWORKz X-System transmission gear system.
2. Full CVD drive shafts.
3. Front and rear gear differential system with CNC crown and pinion gears.
4. Narrow 7075 aluminum chassis design.
5. Front and Rear Big Bore Shocks.
6. Adjustable front upper and lower suspension arm system.
7. Fits 2 types of Li-Po batteries. (Saddle pack and Shorty park)
8. Rear kick up chassis system
9. Center Spur Gear Protection Cover.
10. One Unit Motor Holder with Center Diff. Mount.
11. 14mm Hex Wheel Hub system
12. Pivot ball steering system
13. Double step rear shock tower system



Specification	
Length:	380mm
Width:	245mm
Height:	170mm
Ground Clearance:	50mm
Wheelbase:	275-278mm
Track:	F:223mm / R:223mm
Gear Ratio:	C:86~88T, F/R 42/17T
Weight:	1720g~1830g



## WARRANTY

Your SWORKz S104 EK1 kit warranty covers workmanship and manufacturing defects of original and unmodified parts. Warranty claims resulting from crashes, abuse, improper operation, improper mounting, improper adjustment or lack of maintenance will not be honored.

Contact your local hobby shop or SWORKz distributor for all claims and questions. Claims must be well documented. All Claims are subject to expert examination and approval by SWORKz.



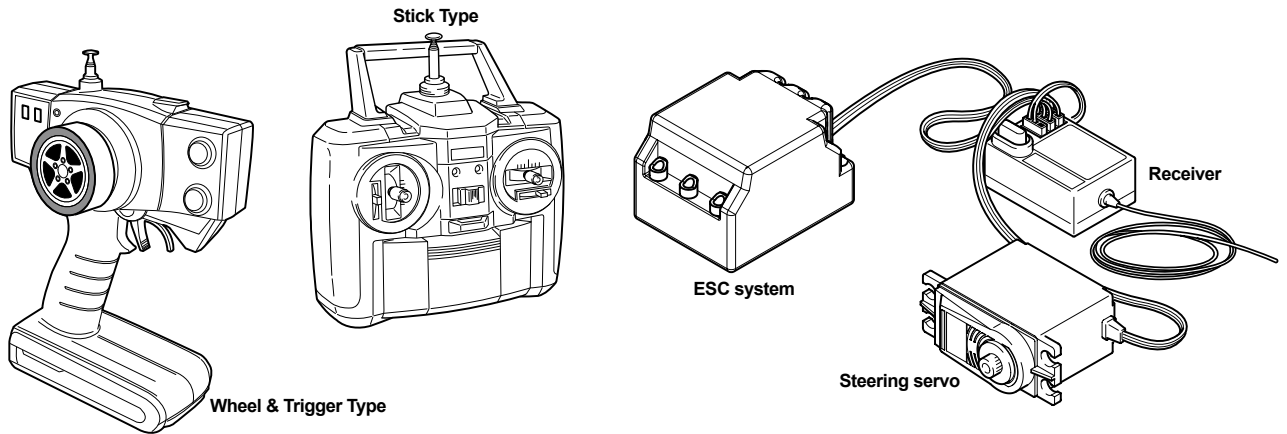
<b>INSTRUCTION</b>	<b>2</b>
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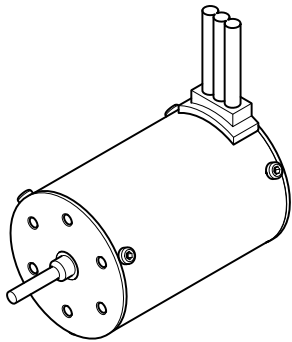
**This radio control racing car is not a toy!  
This high-performance R/C model is recommended for ages  
14 and older.**

# Required Equipment for Operation

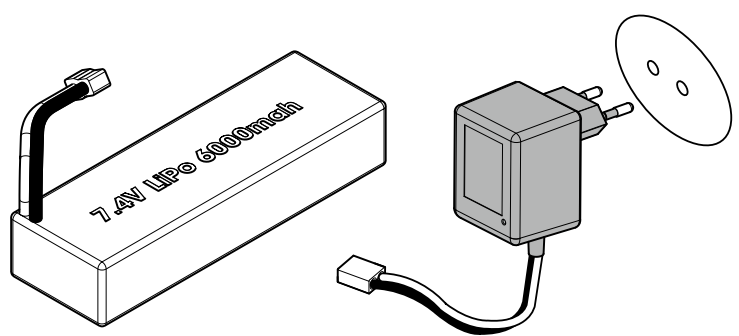
## Radio Gear



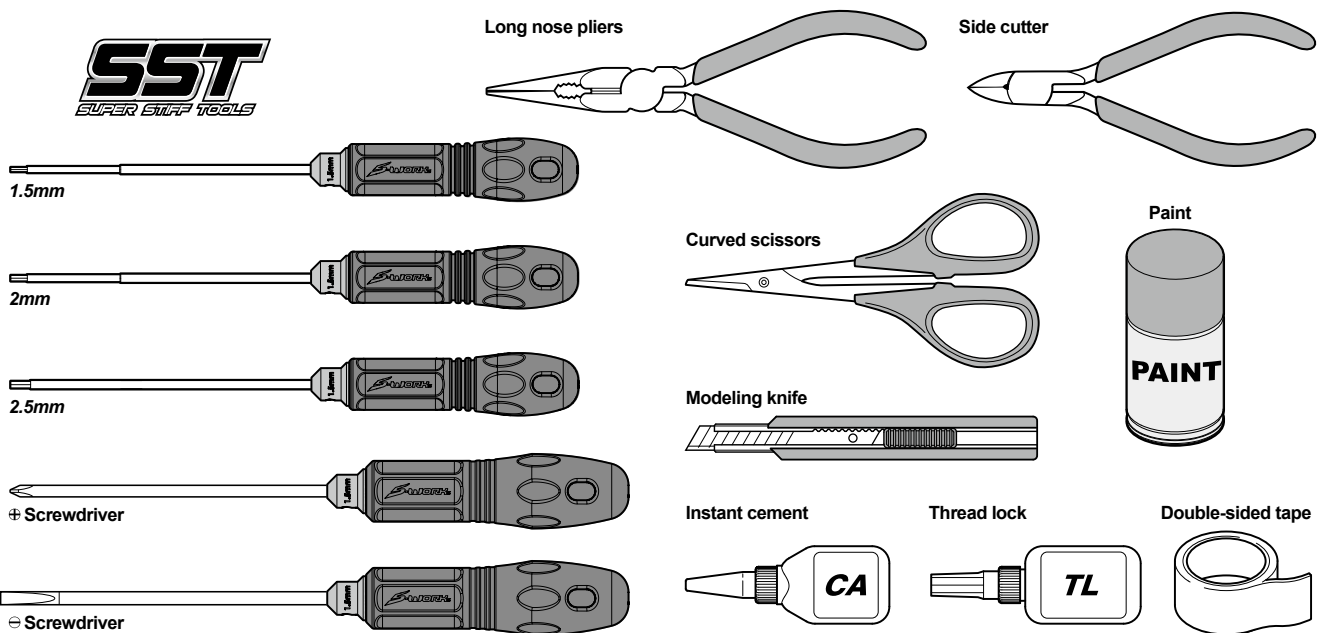
## Breshless Motor



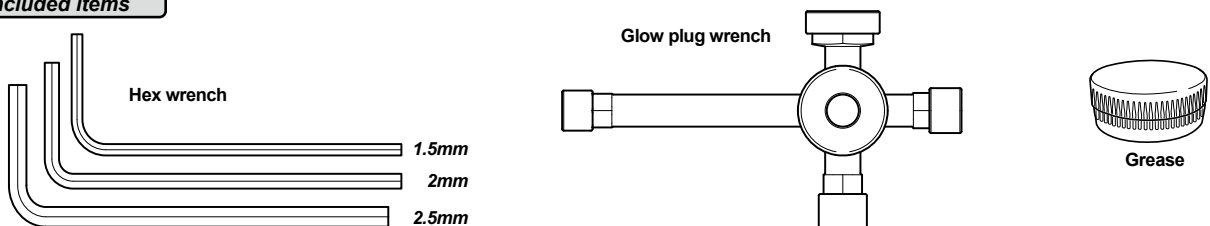
## Charger and LiPo Battery



## Tools Recommended



## Included items





**104004**  
M3x3mm Set Screw x6



**104005**  
M3x4mm Set Screw x4



**104002**  
M3x10mm Set Screw x1



**104009**  
M3x16mm Set Screw x8



**104008**  
M4x4mm Set Screw x4



**105004**  
M2.6x6mm Cap Screw x4



**105011**  
M3x23mm Hex Scket OH/TP Screw x4



**106014**  
M2x6mm Hex Scket OH/TP Screw x4



**106018**  
M3x3mm Hex Socket OH/TP Screw x6



**106011**  
M3x4mm Hex Socket OH/TP Screw x1



**106015**  
M3x5mm Hex Socket OH/TP Screw x6



**106010**  
M3x6mm Hex Socket OH/TP Screw x17



**106001**  
M3x8mm Hex Socket OH/TP Screw x21



**106002**  
M3x10mm Hex Socket OH/TP Screw x6



**106008**  
M3x12mm Hex Scket OH/TP Screw x4



**106005**  
M3x15mm Hex Scket OH/TP Screw x2



**108017**  
M2.6x10mm FH/ST HEX Screw x8



**108014**  
M3x3mm FH/ST HEX Screw x2



**108007**  
M3x6mm FH/ST HEX Screw x13



**108006**  
M3x8mm FH/ST HEX Screw x33



**108003**  
M3x10mm FH/ST HEX Screw x16



**108001**  
M3x12mm FH/ST HEX Screw x6



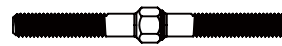
**108018**  
M3x30mm FH/ST HEX Screw x4



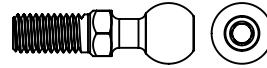
**330331**  
Steering Linkage Ball Stud 4.1mm x2



**330299**  
Steering Linkage Ball Stud 5mm x8



**330300**  
Rear Upper Sus. Arm Turnbuckles x4



**330314**  
Steering Knuckle Pivot Ball Turnbuckle x4



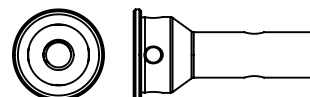
**330315**  
Sway Bar Ball Stud x4



**330312**  
Aluminum Shock Cap Studk x4



**330134**  
Shock Ball Stud x4



**330294**  
CVD Axle x2



**101012**  
Washer M3x6xT0.5mm x6



**101011**  
Shock Washer 2.6x6x0.5mm x4



**330305**  
Shock Washer 3.3x6.7x1mm x4



**101025**  
Shim 3.5x10x0.1mm x8



**101023**  
10x12x0.1mm S104 Shim x6



**101024**  
10x12x0.2mm S104 Shim x3



**117004**  
Bushing 5x8x2.5mm x4



**117003**  
Flange Ball Bearing 3x6x2.5mm x2



**116014**  
Ball Bearing 6x13x5mm x4



**116013**  
Ball Bearing 10x15x4mm x14



**330295**  
CVD Join x6



**330306**  
Shock Washer 3.3x6.5x2.5mm x4



**330316**  
Aluminum Knuckle Pivot Ball Washer 2mm x2



**330321**  
Pin M2x8mm x2



**330283**  
Pin M2x10mm x10



**330285**  
Pin M2x14mm x4



**330279**  
Bevel Gear Shaft x4



**330293**  
Rear Hub Carriers Hing Pin x2



**330332**  
Front Upper Arm Hing Pin x2



**330292**  
Front/Rear Lower Arm Hing Pin x4



**330308**  
Shock Shaft S x2



**330307**  
Shock Shaft L x2



**400013**  
Shock Seal O-ring 2x2.7mm x8



**400002**  
O-ring S5 4.8x1.5 x4



**400008**  
O-ring for Pinion Gear x2



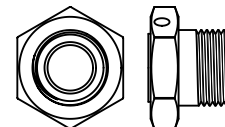
**400014**  
O-Ring 1.5x13.5mm x4



**103001**  
M3 Nut Lock x10



**103003**  
Flange M3 Nut Lock x4



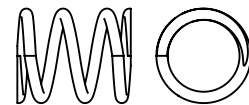
**330297**  
Wheel Hub x4



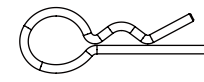
**330298**  
S104 Wheel Nut 14mm x4



**115059**  
S104 Center Slipper Clutch Spring x1



**115058**  
Servo Saver Spring x1



**115062**  
1/10 Body Clip x2



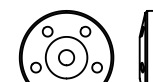
**330303**  
Aluminum Shock Seal Cover x4



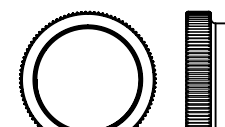
**400016**  
Shock Boot x4



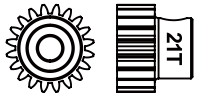
**400015**  
Shock Bladder x4



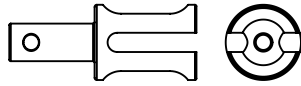
**330310**  
Shock Piston 1.2mmx5 holes x4



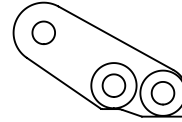
**330304**  
Aluminum Shock Spring Adjust Nut x4



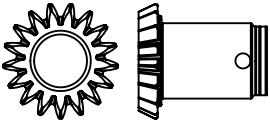
330410  
S104 Motor Gear 21T x1



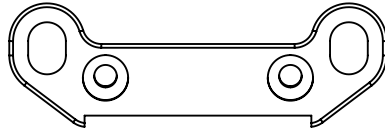
330282  
Front/Rear Diff. Outdrive x4



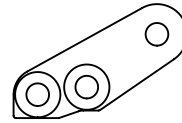
330347  
Carbon Fiber Steering Knuckle Plate (L) x1



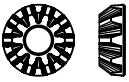
330286  
Pinion Gear 17T x2



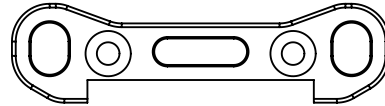
330290  
S104 Rear Lower Arm Holder x1



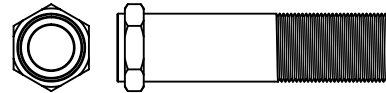
330348  
Carbon Fiber Steering Knuckle Plate (R) x1



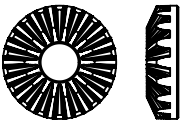
330278  
Diff. Bevel Gear 10T x8



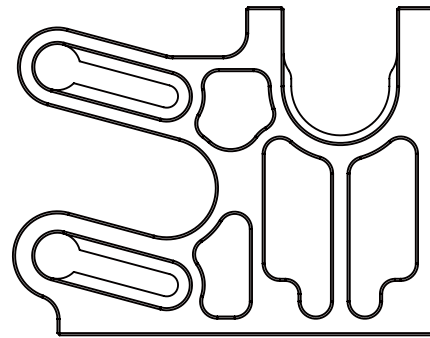
330291  
S104 Front Lower Suspension Plate x1



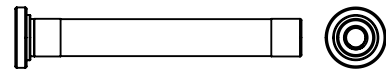
330328  
Servo Saver Post x1



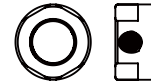
330277  
Diff. Bevel Gear 18T x4



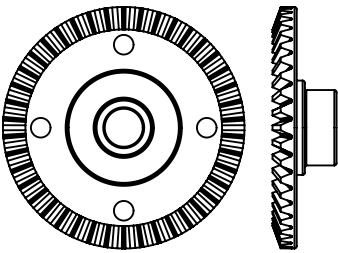
330425  
S104 Aluminum Center Slipper Clutch Mount for Motor x1



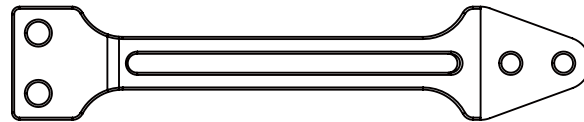
330327  
Servo Saver Shaft x2



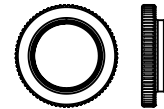
330320  
S104 Center Slipper Clutch Nut x1



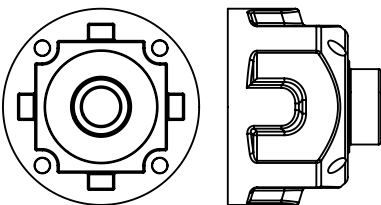
330284  
Crown Gear 42T x2



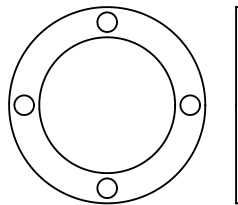
330341  
S104 Aluminum Front Center Support x1



330329  
Servo Saver Nut x1



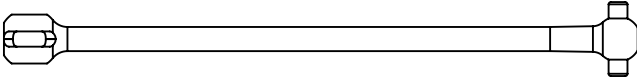
200463  
Diff. Case x2



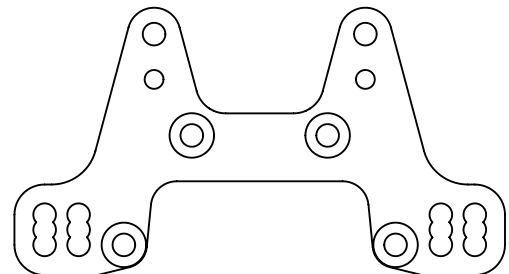
610012  
Diff. Gasket(0.4T) x2



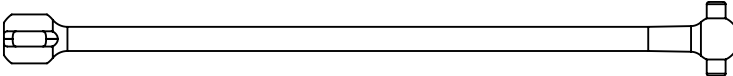
330318  
S104 Center Slipper Clutch Outdrive S x1



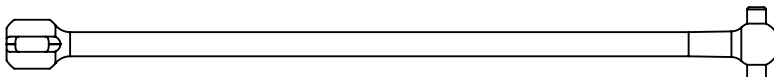
330296  
F/R Drive Shaft 78mm x4



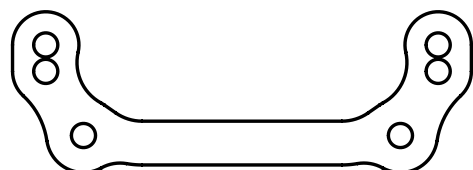
330288  
Rear Shock Tower Holder x1



330325  
S104 EK1 Center Front Drift Shaft 91mm x1

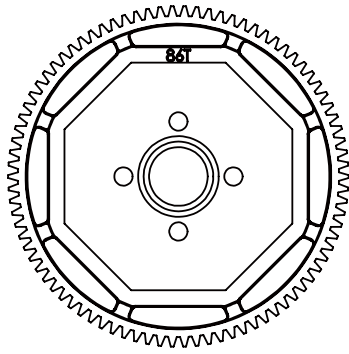


330326  
S104 EK1 Center Rear Drift Shaft 96mm x1

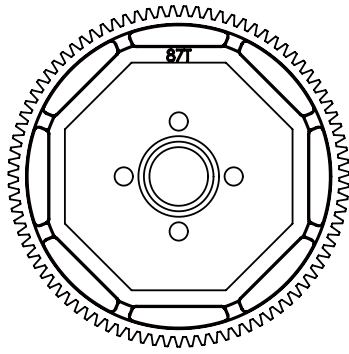


330330  
Servo Saver Steering Plate x1

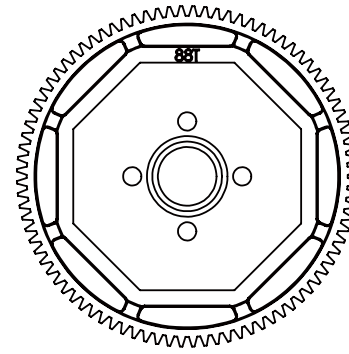




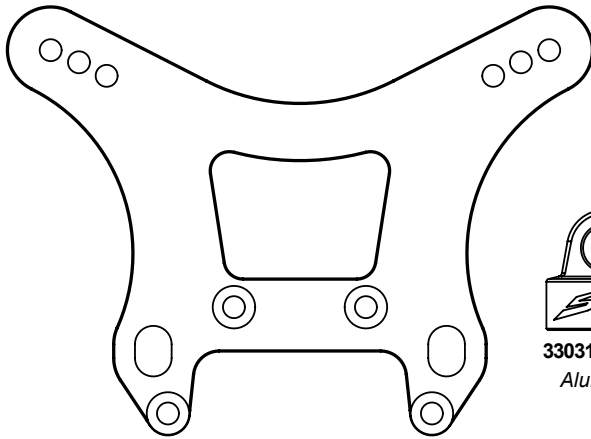
**200455**  
S104 86T Spur Gear (48DP) x1



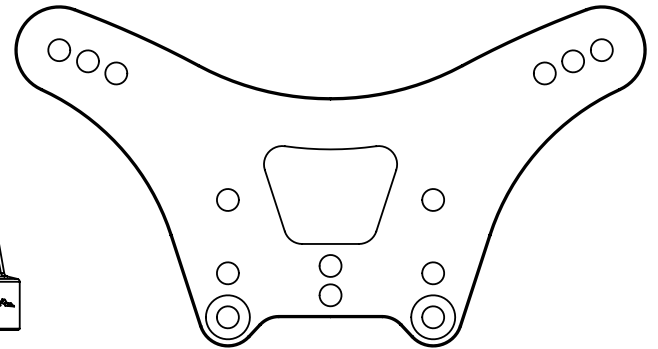
**200348**  
S104 87T Spur Gear (48DP) x1



**200456**  
S104 88T Spur Gear (48DP) x1



**330287**  
Front Shock Tower x1



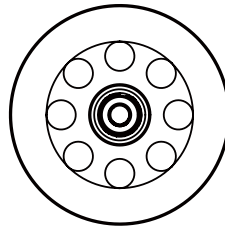
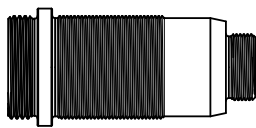
**330313**  
Rear Shock Tower x1



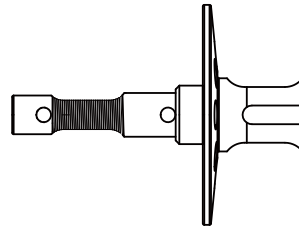
**330311**  
Aluminum Shock Cap x4



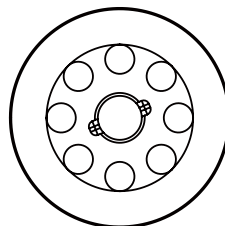
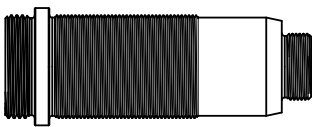
**330302**  
Aluminum Race Shock Body (S) x2



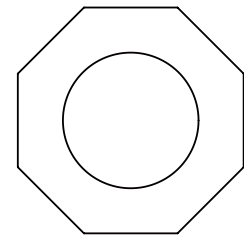
**330317**  
S104 Center Slipper Clutch Holder L x1



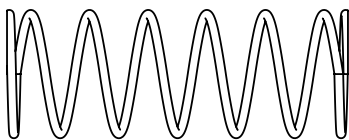
**330301**  
Aluminum Race Shock Body (L) x2



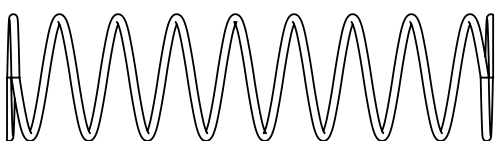
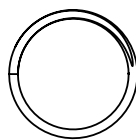
**330319**  
S104 Center Slipper Clutch Plate x1



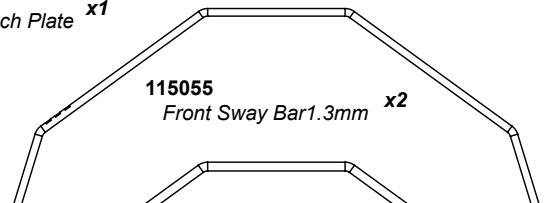
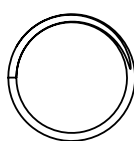
**610013**  
S104 Center Slipper Clutch Pad x2



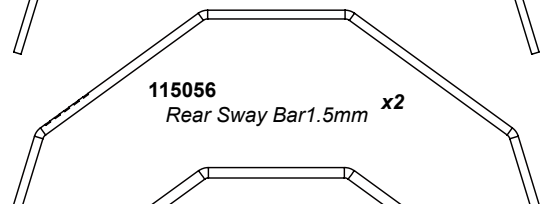
**115060**  
Shock Spring S (BK) x2



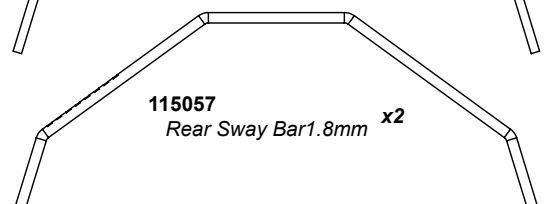
**115061**  
Shock Spring L (BK) x2



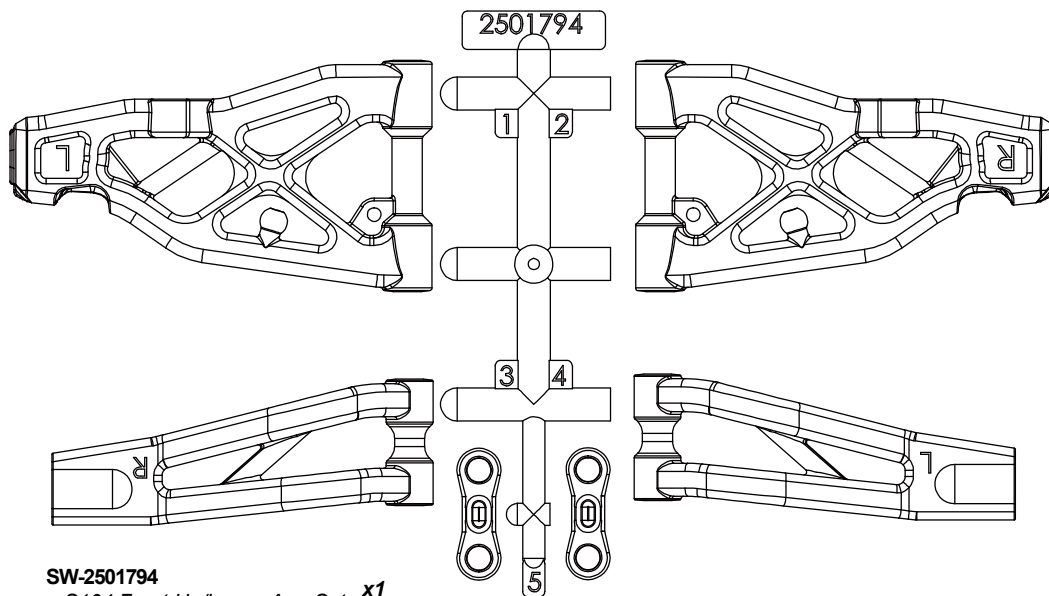
**115055**  
Front Sway Bar 1.3mm x2



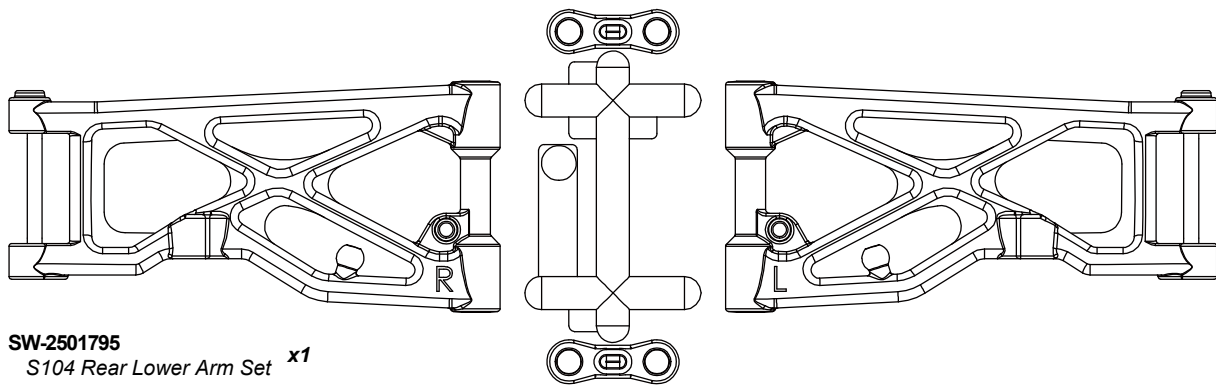
**115056**  
Rear Sway Bar 1.5mm x2



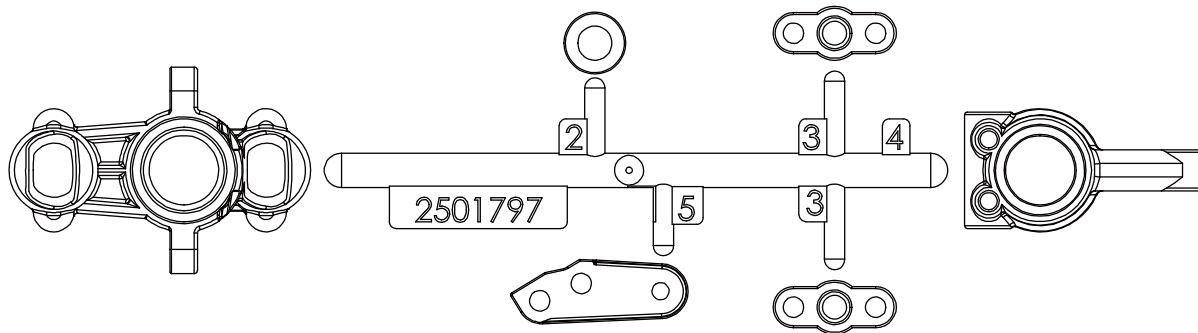
**115057**  
Rear Sway Bar 1.8mm x2



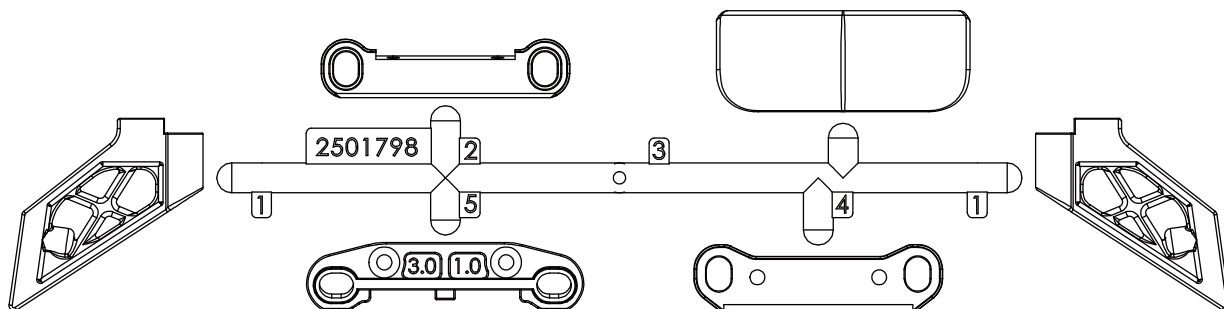
**SW-2501794**  
S104 Front Up/Lower Arm Set **x1**



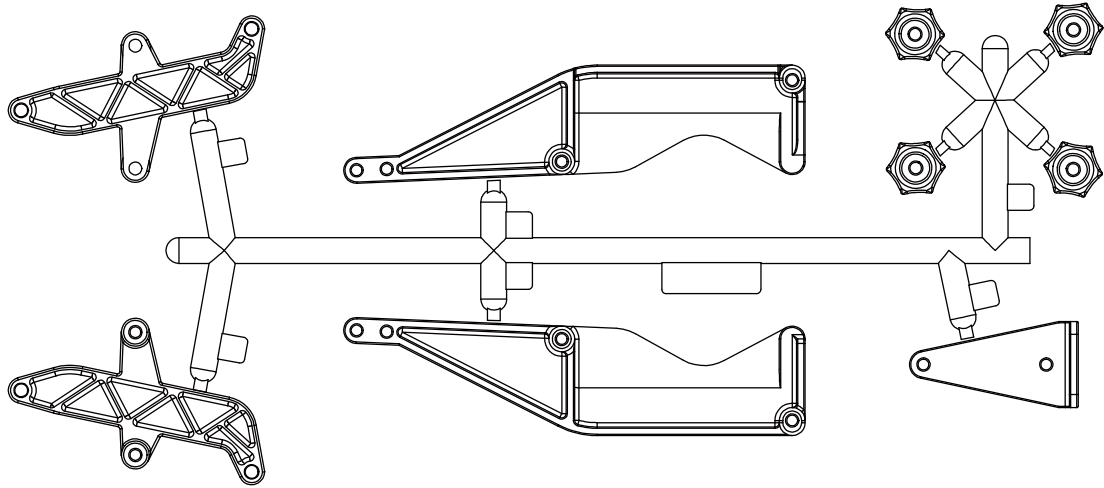
**SW-2501795**  
S104 Rear Lower Arm Set **x1**



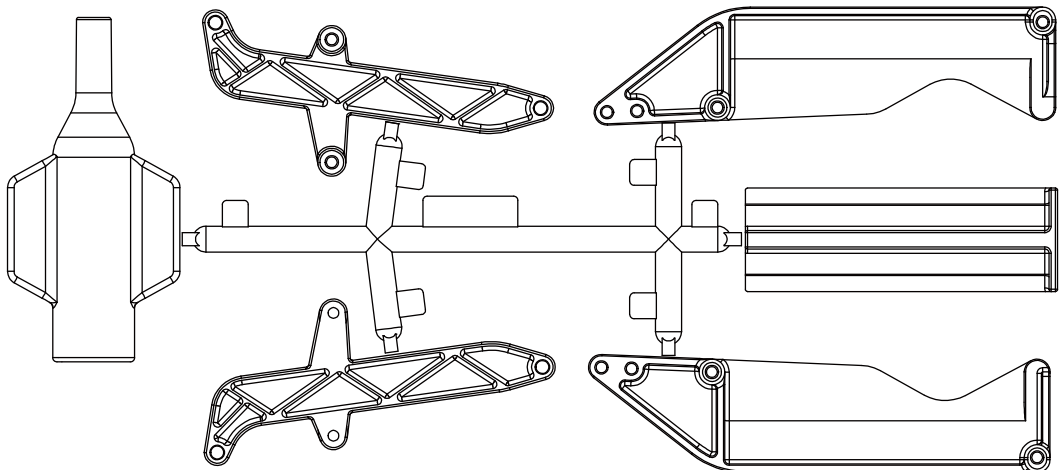
**SW-2501797**  
S104 Front Steering Knuckle and Rear Hub Carrier Set **x2**



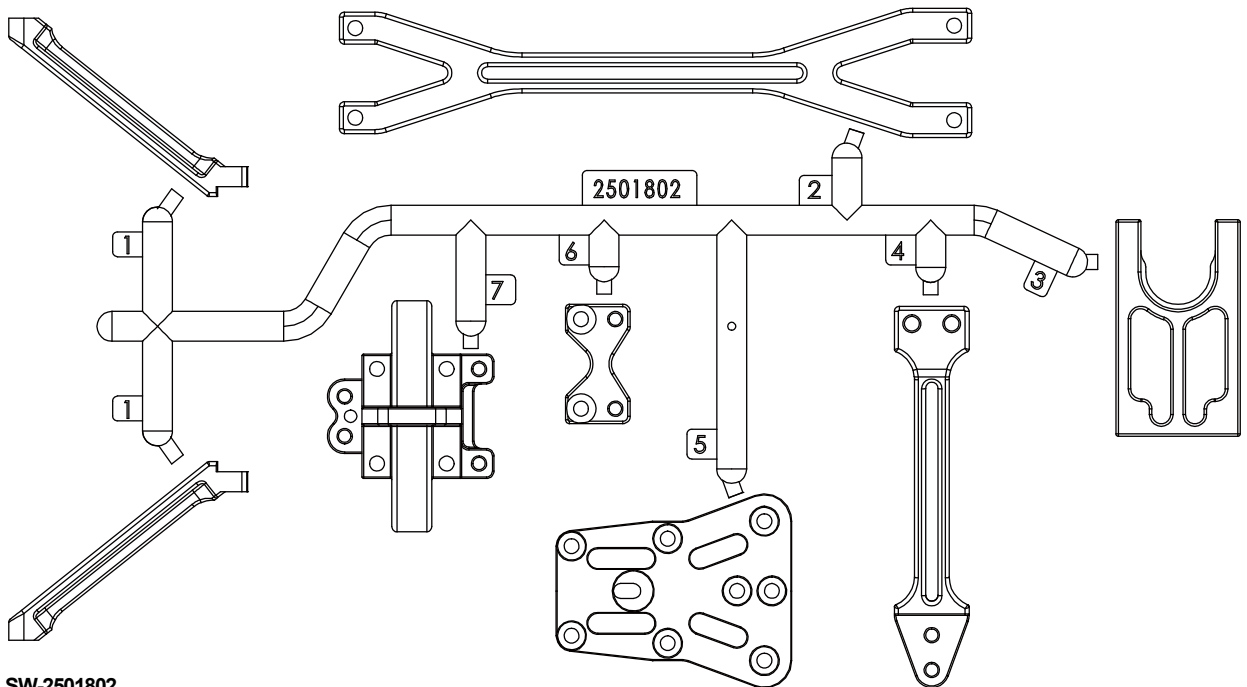
**SW-2501798**  
S104 Wing Stay Set with Bumper and Arm Holder **x1**



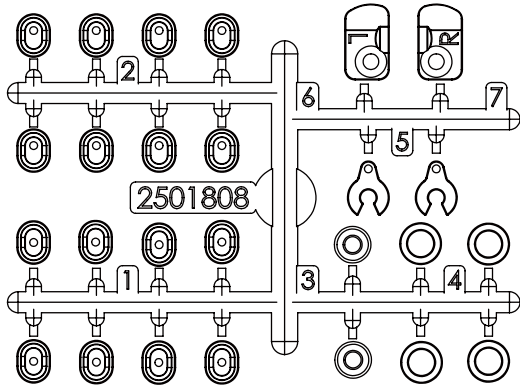
**SW-2501803**  
*S104 Shorty Battery Side Guard with Battery Holder Set* **x1**



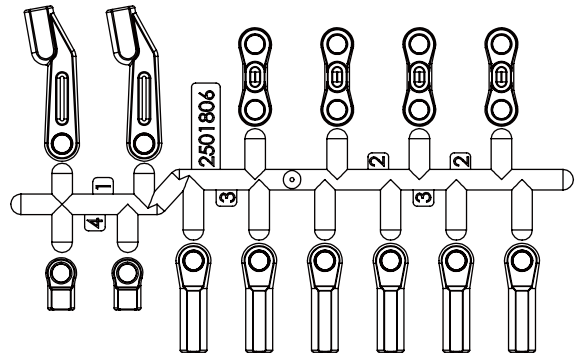
**SW-2501845**  
*S104 Saddle Pack Battery Side Guard with Battery Holder Set* **x1**



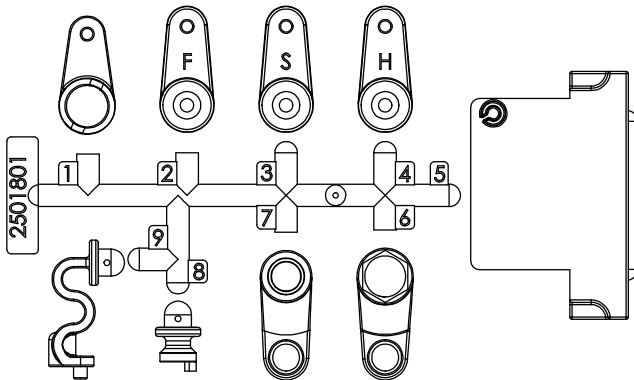
**SW-2501802**  
*S104 Center Plastic Support Set* **x1**



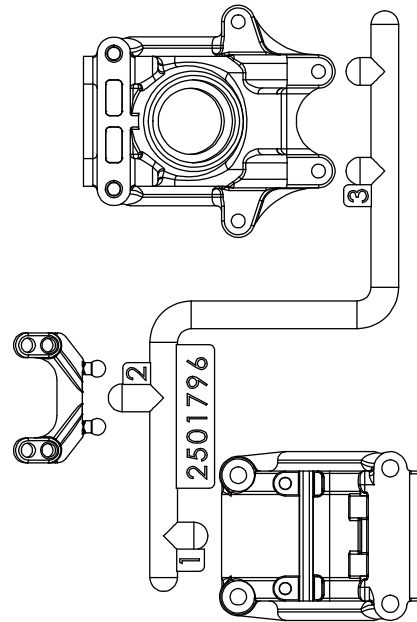
**SW-2501808**  
S104 Plastic Insert Set **x1**



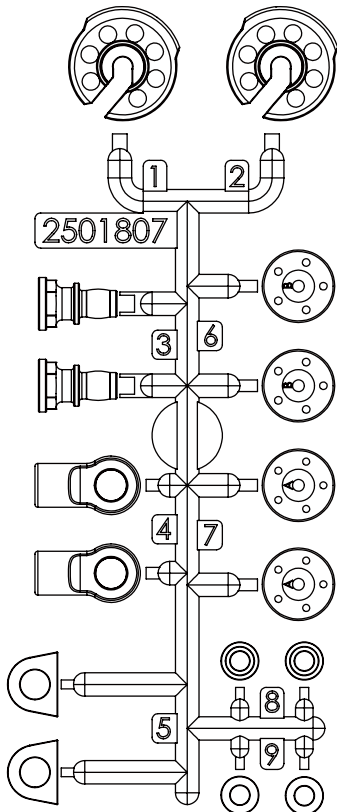
**SW-2501806**  
S104 Plastic Ball End Set **x1**



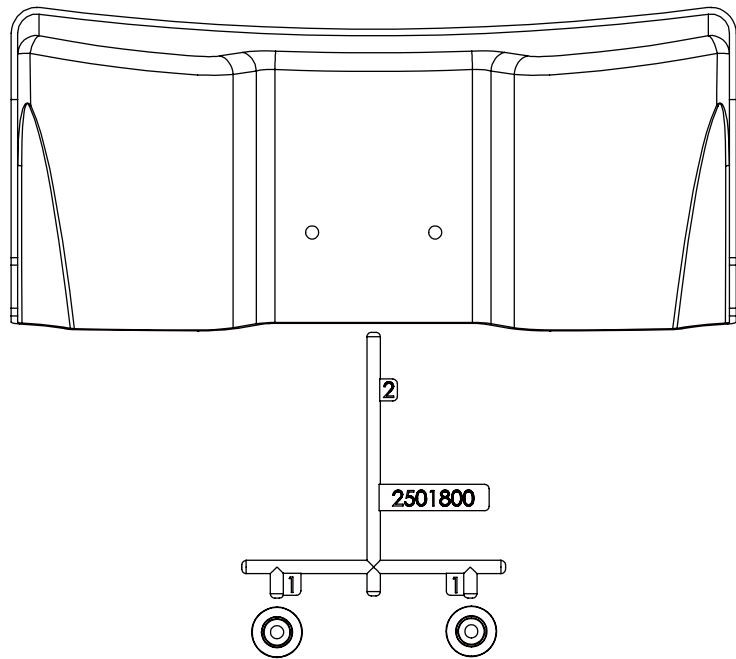
**SW-2501801**  
S104 Setring Bellcrank Set with Servo Horn Set **x1**



**SW-2501796**  
S104 Gear Box Set (F&R) **x2**



**SW-2501807**  
S104 Shock Spring Holder with Ball End Plastic Parts **x2**

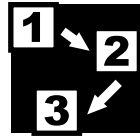


**SW-2501800**  
S104 Rear Wing Set **x1**

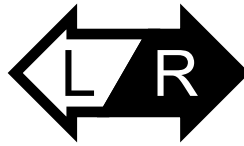
## Operation Guide



Assemble front and rear



Assemble in the specified order



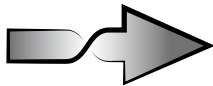
Assemble both left and right sides



Assemble for 2 sets



Assemble for 4 sets



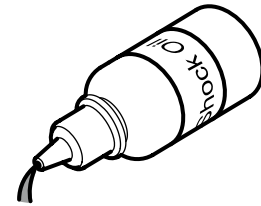
overturn



Thread Locking Compound



Grease



Pure Silicone Oil

## Safety Precautions

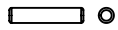
The SWORKz S104 EK1 is a high performance radio control model which needs to be operated with caution and common sense.

The S104 EK1 Pro Kit is not intended for children under the age of 14 without adult supervision. SWORKz shall not be held liable for any loss or damages, whether direct, indirect, act of nature, arising from abuse or misuse of this product or any other product required.

- The LiPO Battery can be dangerous if improperly handled.
- Always keep your LiPO Battery in a cool area and never use it near flames, sparks, or while smoking.
- Keep your LiPO Battery, and all other flammables, out of the reach of children.
- After running your car, all parts of the Motor and ESC can become extremely hot. Be careful not to touch these parts.
- This model is controlled by your radio controller and can be vulnerable to interference from many outside sources. This interference can cause a loss of control so it is necessary to operate this model in an open area to avoid personal or property damage. Always ensure turning on your radio first.
- Keep all the products included in the package out of the reach of children.
- This model contains many fast rotating parts. Never touch them during operation.
- Follow the instructions included with your radio gear.
- Never operate your model near people or property. The speed of this model has the potential to injure people and or damage property if misused.
- Always use original SWORKz spare parts and option parts.
- Always ensure that the buggy is in proper working condition before use.
- Always exercise caution when using any tools.

# BAG B

**1** **F/R** **x2**



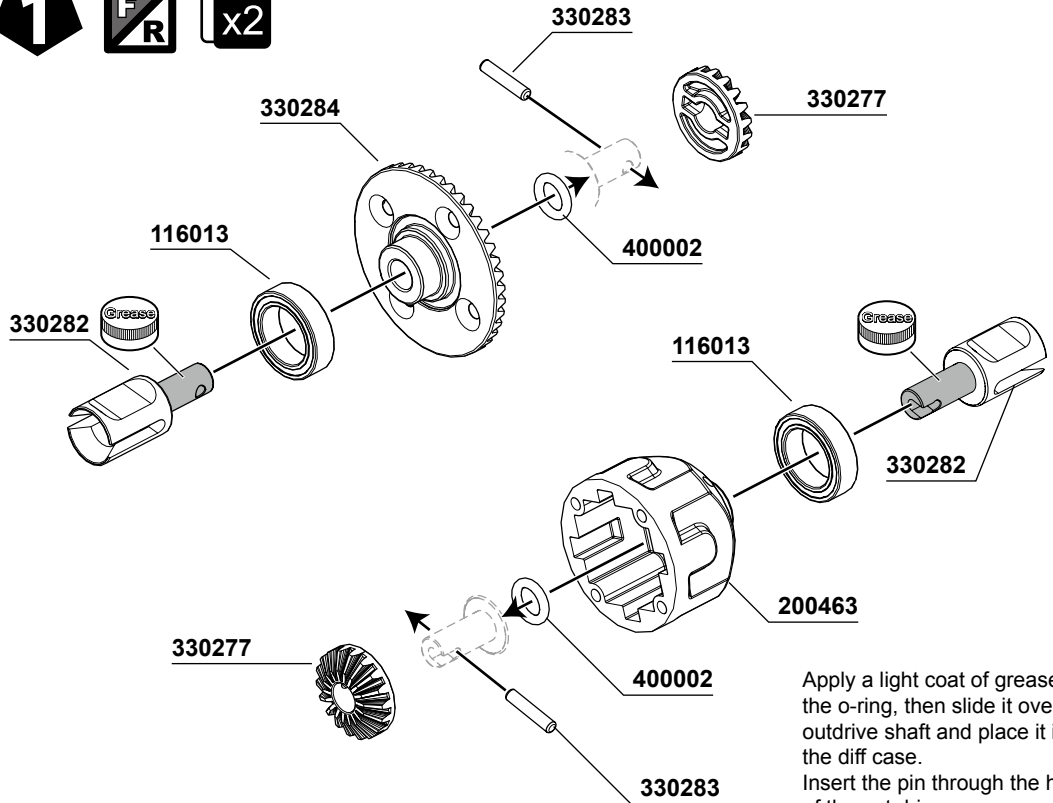
**330283**  
Pin M2x10mm **x4**



**400002**  
O-ring S5 4.8x1.5 **x4**



**116013**  
Ball Bearing 10x15x4mm **x4**

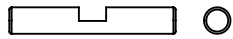


Apply a light coat of grease to the o-ring, then slide it over the outdrive shaft and place it in the diff case. Insert the pin through the hole of the out drive.

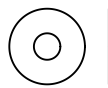
**2** **F/R** **x2**



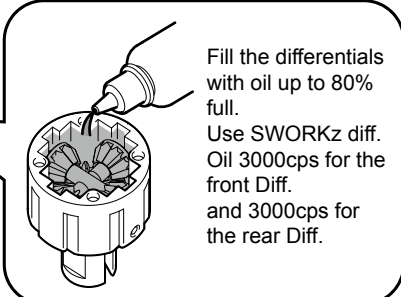
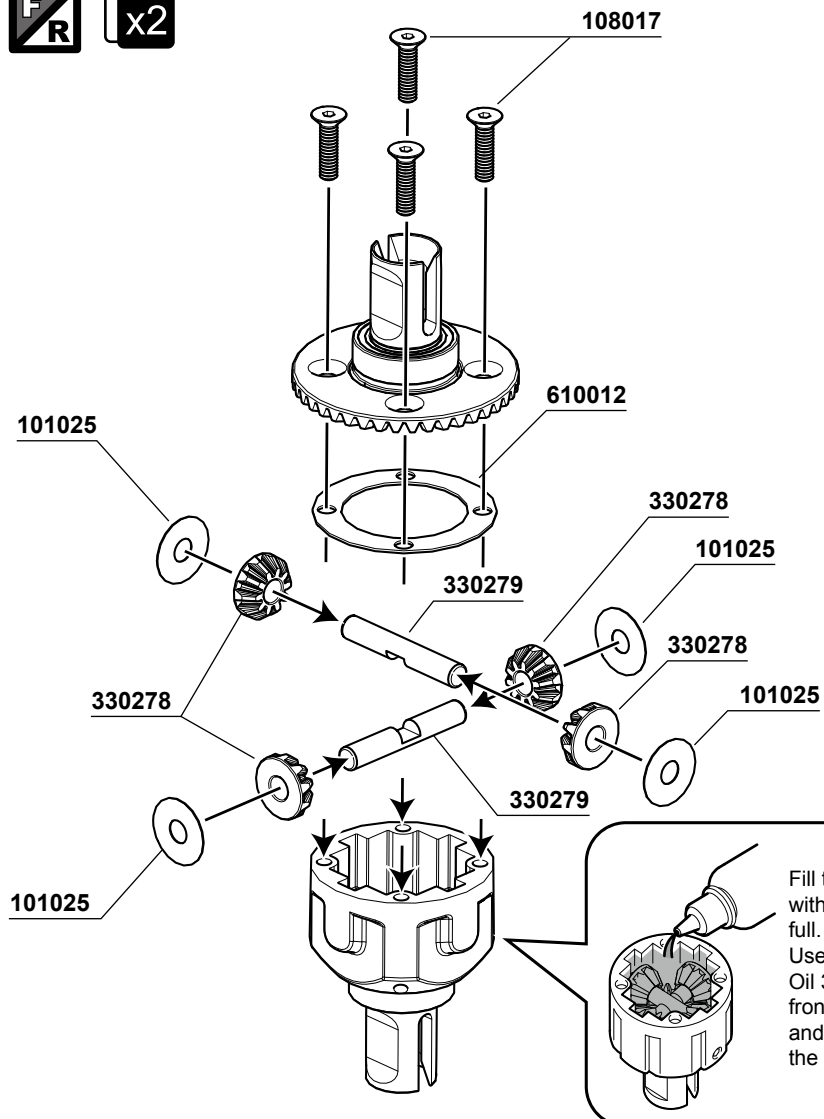
**108017**  
M2.6x10mm FH/ST HEX Screw **x8**



**330279**  
Bevel Gear Shaft **x4**



**101025**  
Shim 3.5x10x0.1mm **x8**



Fill the differentials with oil up to 80% full. Use SWORKz diff. Oil 3000cps for the front Diff. and 3000cps for the rear Diff.

# BAG C

## 3

F R

x2

330283  
Pin M2x10mm x2

330295  
CVD Join x2

400008  
O-ring for Pinion Gear x2

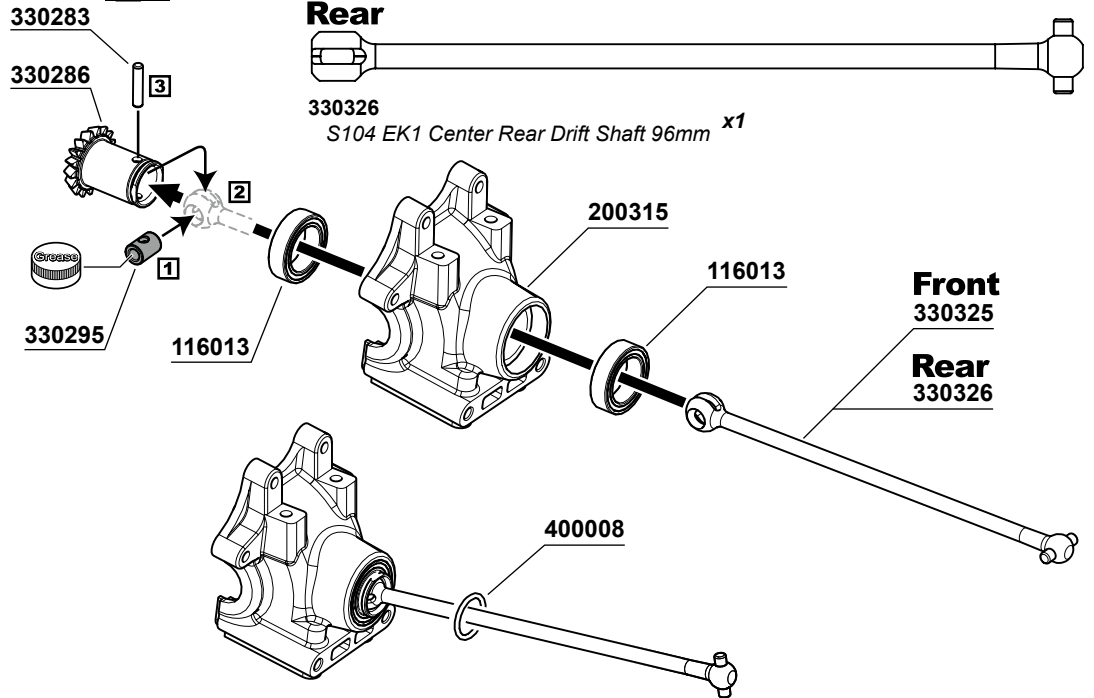
116013  
Ball Bearing 10x15x4mm x4

Front

330325  
S104 EK1 Center Front Drift Shaft 91mm x1

Rear

330326  
S104 EK1 Center Rear Drift Shaft 96mm x1



## 4

F R

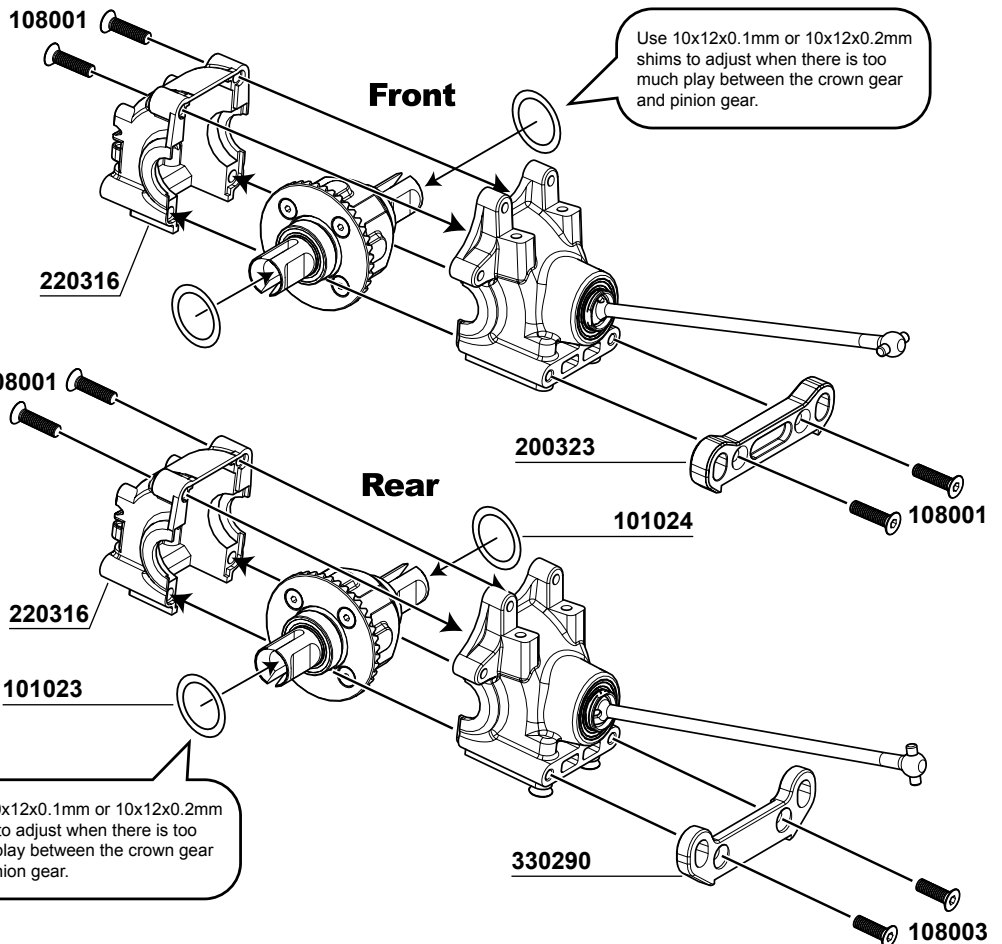
x2

108003  
M3x10mm FH/ST HEX Screw x2

108001  
M3x12mm FH/ST HEX Screw x6

101023  
10x12x0.1mm S104 Shim x5

101024  
10x12x0.2mm S104 Shim x2



# BAG D

## 5



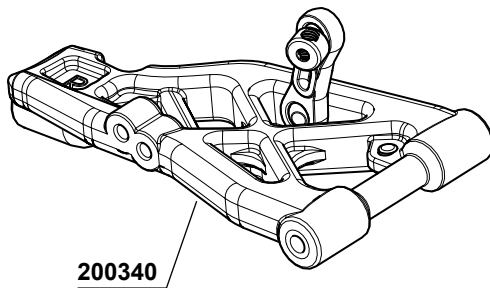
### x2



106010  
M3x6mm Hex Socket OH/TP Screw x2



330315  
Sway Bar Ball Stud x2



Front

330315

200341

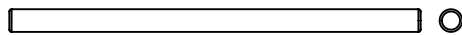
200339

106010

## 6



108018  
M3x30mm FH/ST HEX Screw x2



330292  
Front/Rear Lower Arm Hing Pin x2

Front

200324

330292

200324

200324

330292

200324

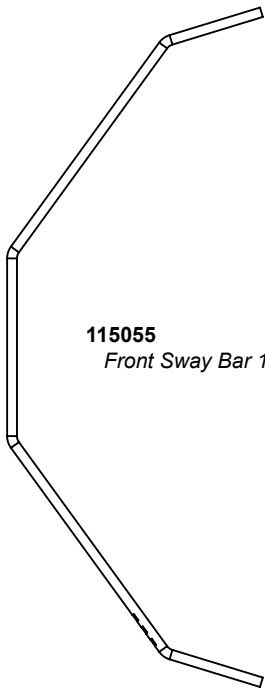
330291

108018



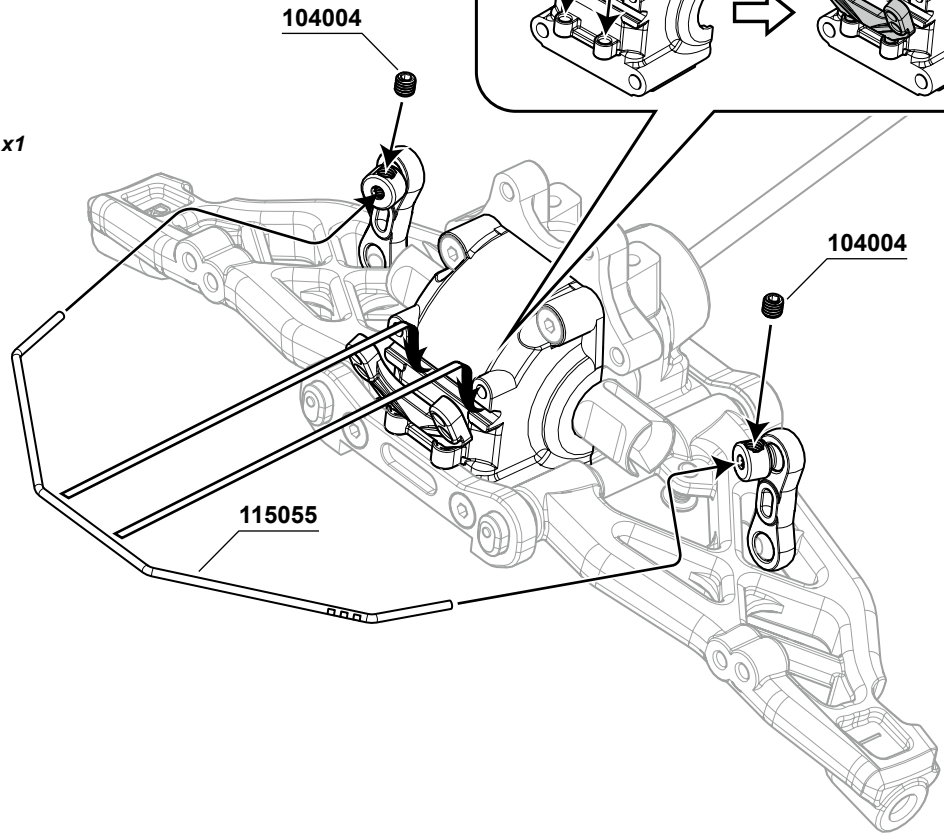
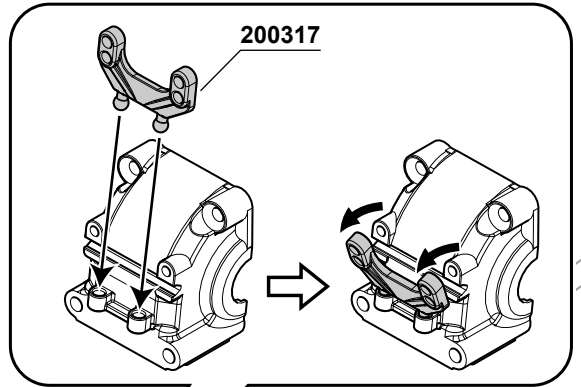


**104004**  
M3x3mm Set Screw x2



**115055**  
Front Sway Bar 1.3mm x1

**7**

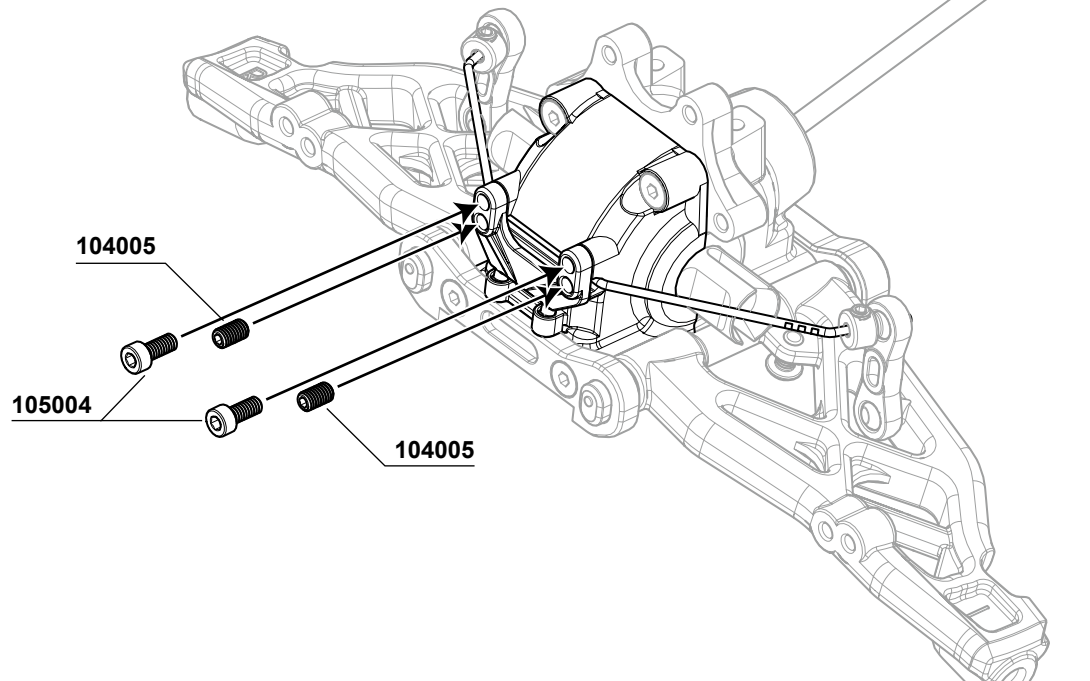


**104005**  
M3x4mm Set Screw x2



**105004**  
M2.6x6mm Cap Screw x2

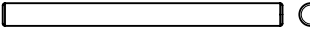
**8**



**9** 

  
**108006**  
 M3x8mm FH/ST HEX Screw x2

  
**108003**  
 M3x10mm FH/ST HEX Screw x2

  
**330332**  
 Front Upper Arm Hing Pin x2

**200324**

**108006**

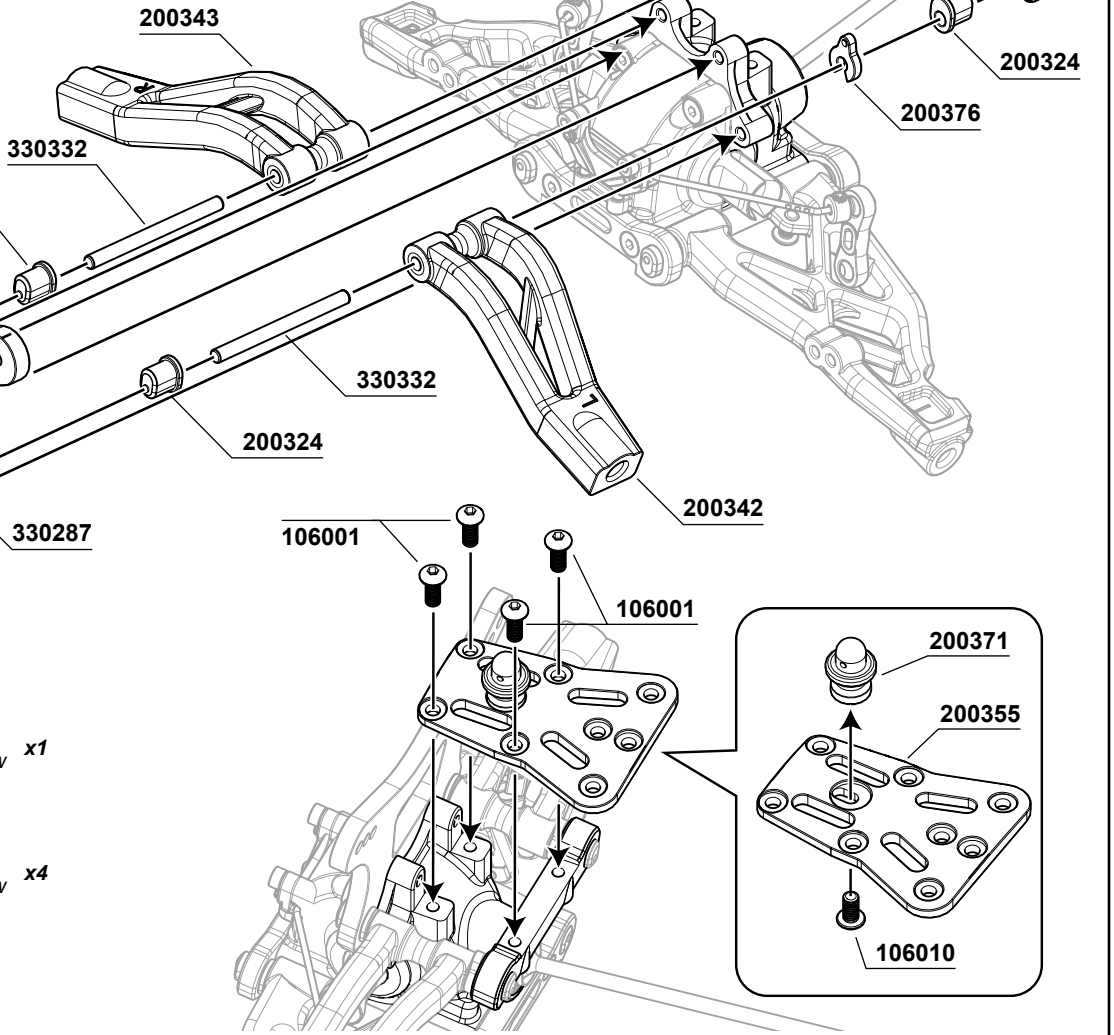
**108003**

  
**106010**  
 M3x6mm Hex Socket OH/TP Screw x1

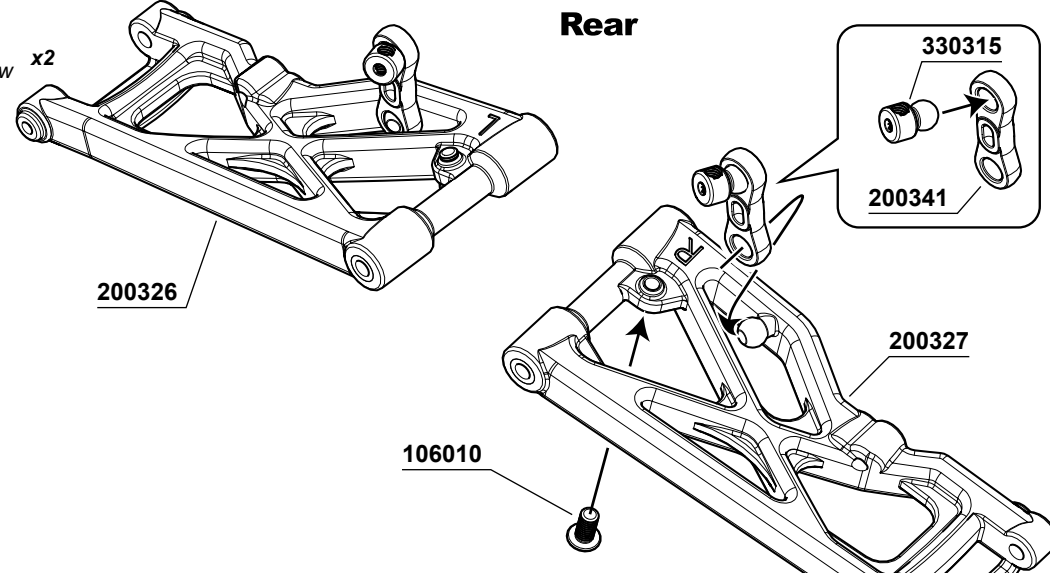
  
**106001**  
 M3x8mm Hex Socket OH/TP Screw x4

  
**106010**  
 M3x6mm Hex Socket OH/TP Screw x2

  
**330315**  
 Sway Bar Ball Stud x2



**10**  **x2**



# 11



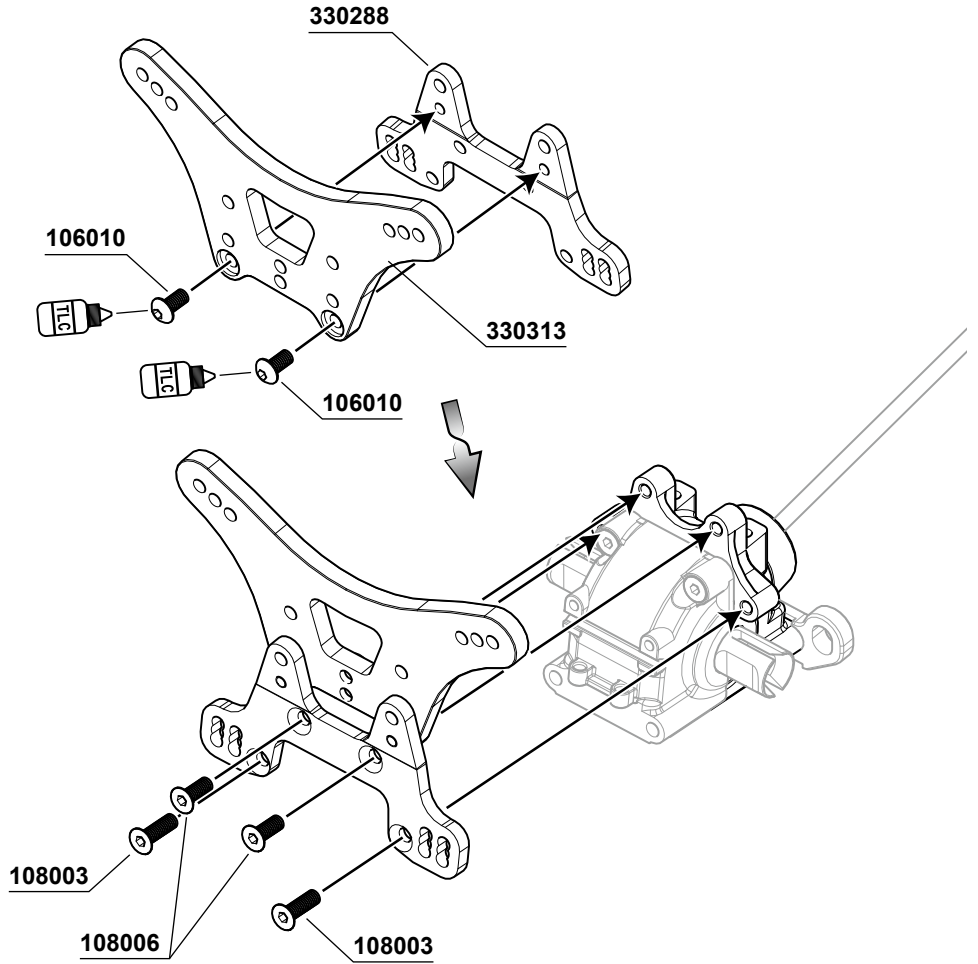
**108006**  
M3x8mm FH/ST HEX Screw x2



**108003**  
M3x10mm FH/ST HEX Screw x2



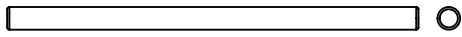
**106010**  
M3x6mm Hex Socket OH/TP Screw x2



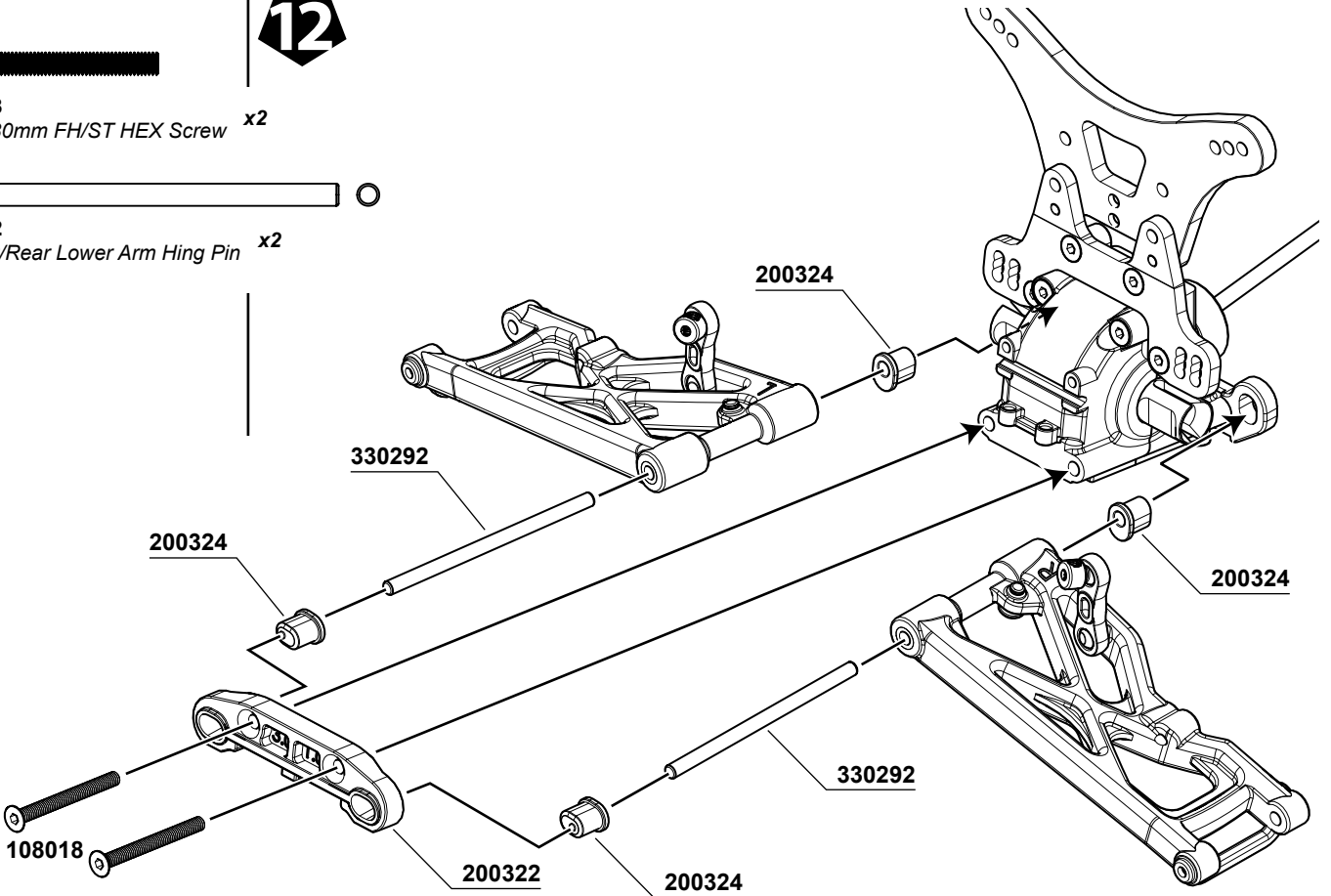
# 12



**108018**  
M3x30mm FH/ST HEX Screw x2

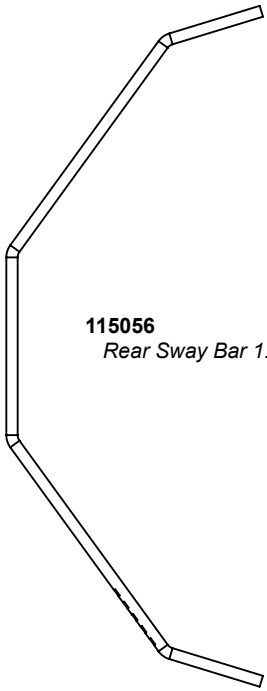


**330292**  
Front/Rear Lower Arm Hing Pin x2



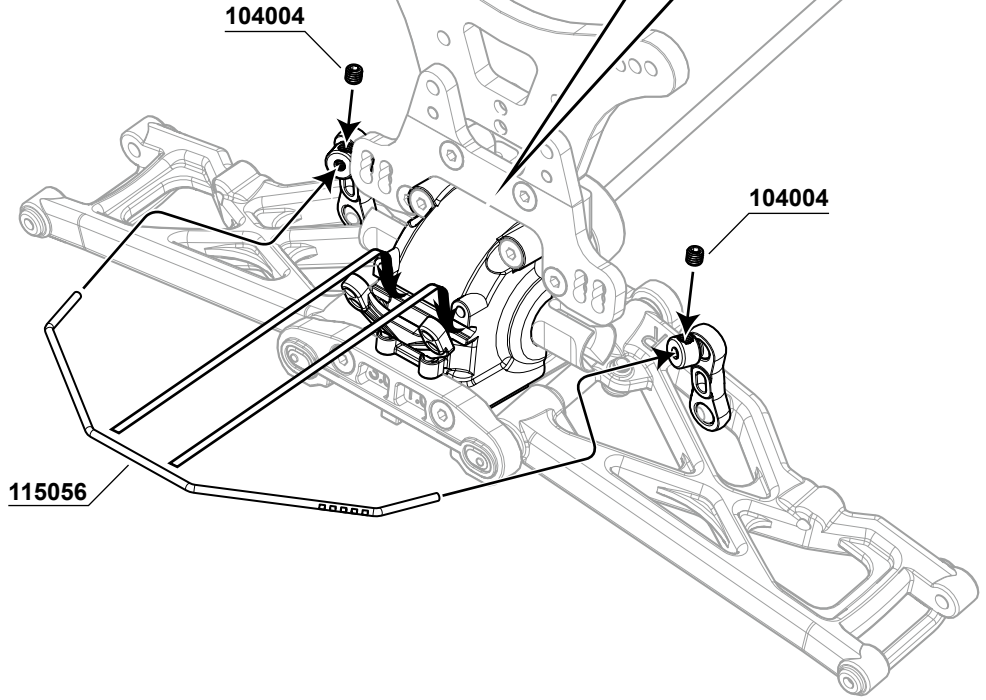
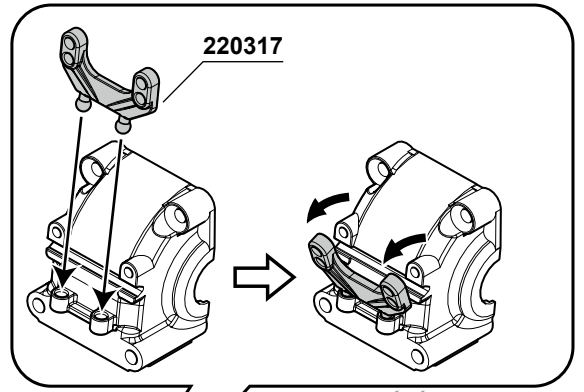


**104004**  
M3x3mm Set Screw x2



**115056**  
Rear Sway Bar 1.5mm x1

**13**



**104005**  
M3x4mm Set Screw x2



**105004**  
M2.6x6mm Cap Screw x2



**103001**  
M3 Nut Lock x2

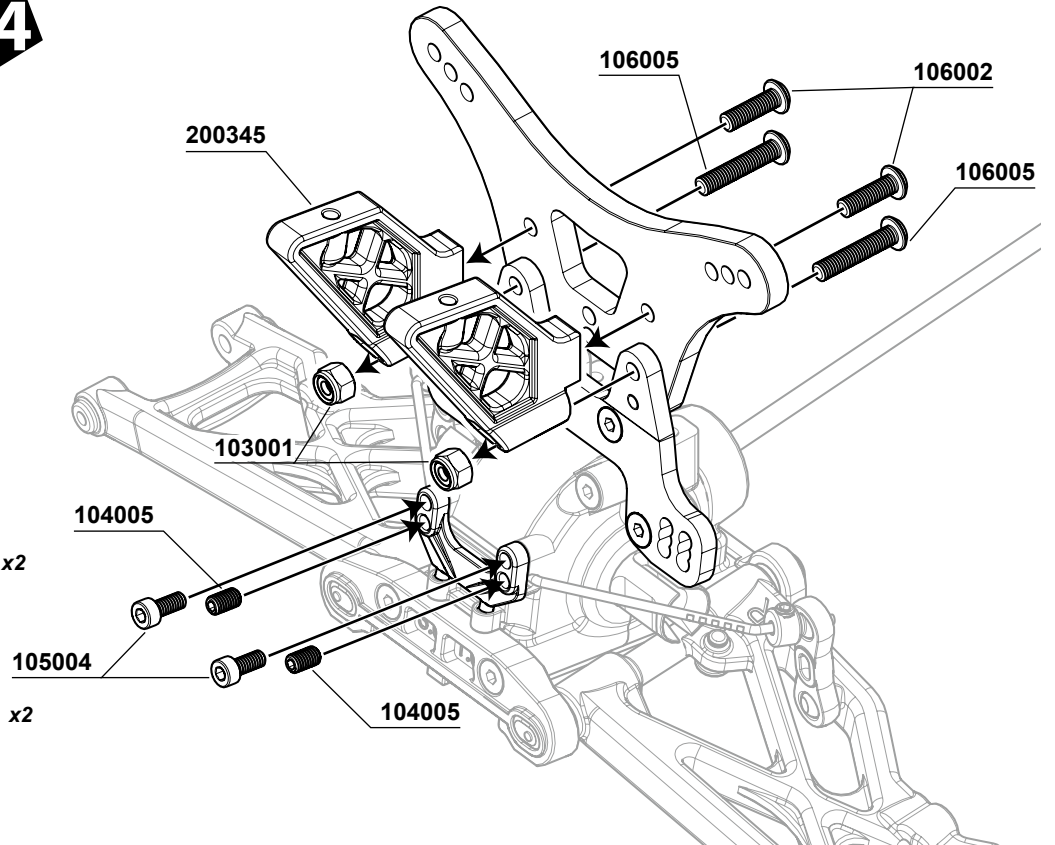


**106002**  
M3x10mm Hex Socket OH/TP Screw x2



**106005**  
M3x15mm Hex Soked OH/TP Screw x2

**14**

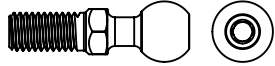




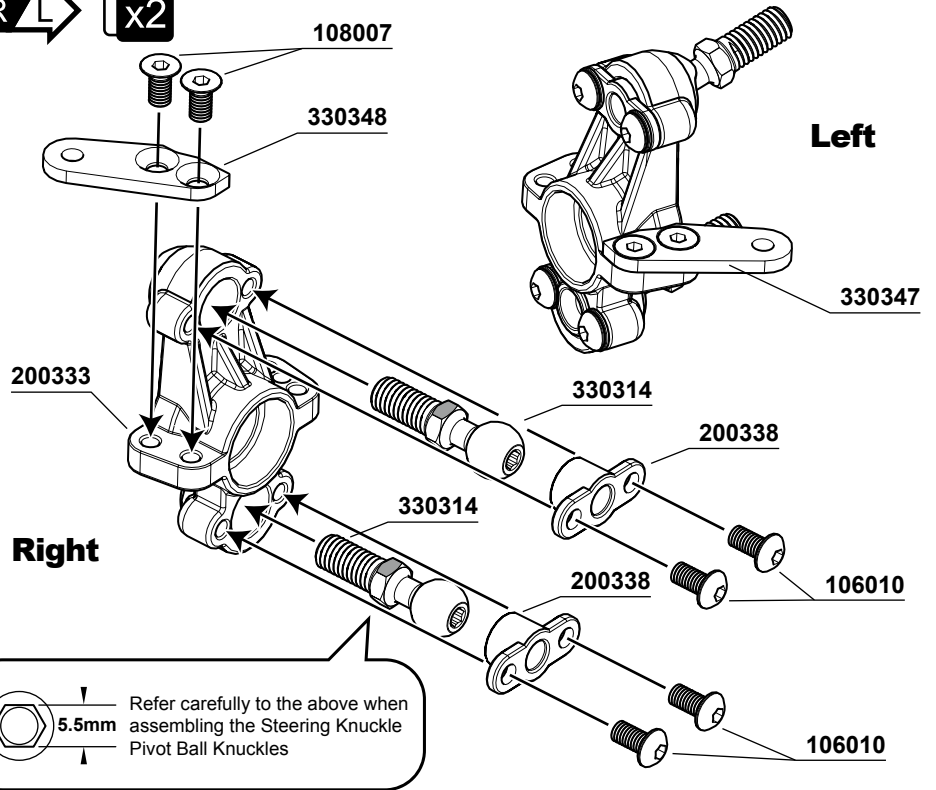
**106010**  
M3x6mm Hex Socket OH/TP Screw x8



**108007**  
M3x6mm FH/ST HEX Screw x4



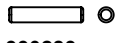
**330314**  
Steering Knuckle Pivot Ball Turnbuckle x4



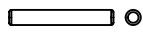
**104008**  
M4x4mm Set Screw x2



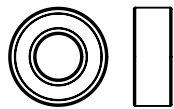
**330295**  
CVD Join x2



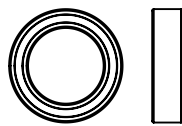
**330283**  
Pin M2x10mm x2



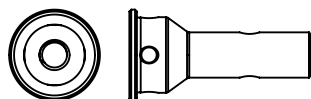
**330285**  
Pin M2x14mm x2



**116014**  
Ball Bearing 6x13x5mm x2



**116013**  
Ball Bearing 10x15x4mm x2



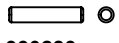
**330294**  
CVD Axle x2



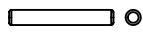
**104008**  
M4x4mm Set Screw x2



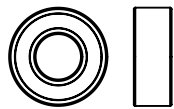
**330295**  
CVD Join x2



**330283**  
Pin M2x10mm x2



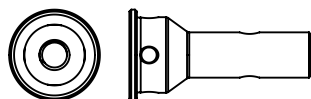
**330285**  
Pin M2x14mm x2



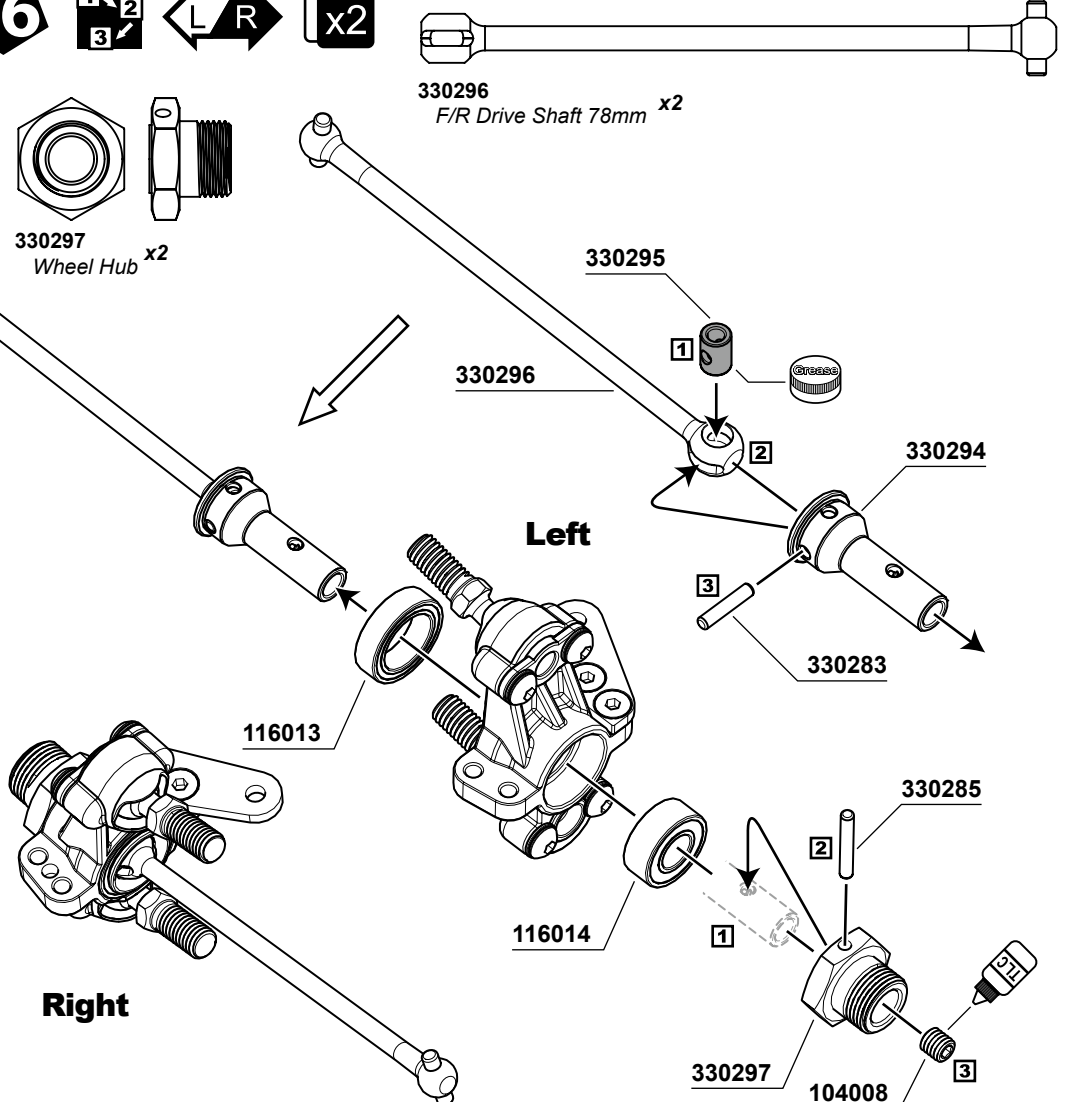
**116014**  
Ball Bearing 6x13x5mm x2



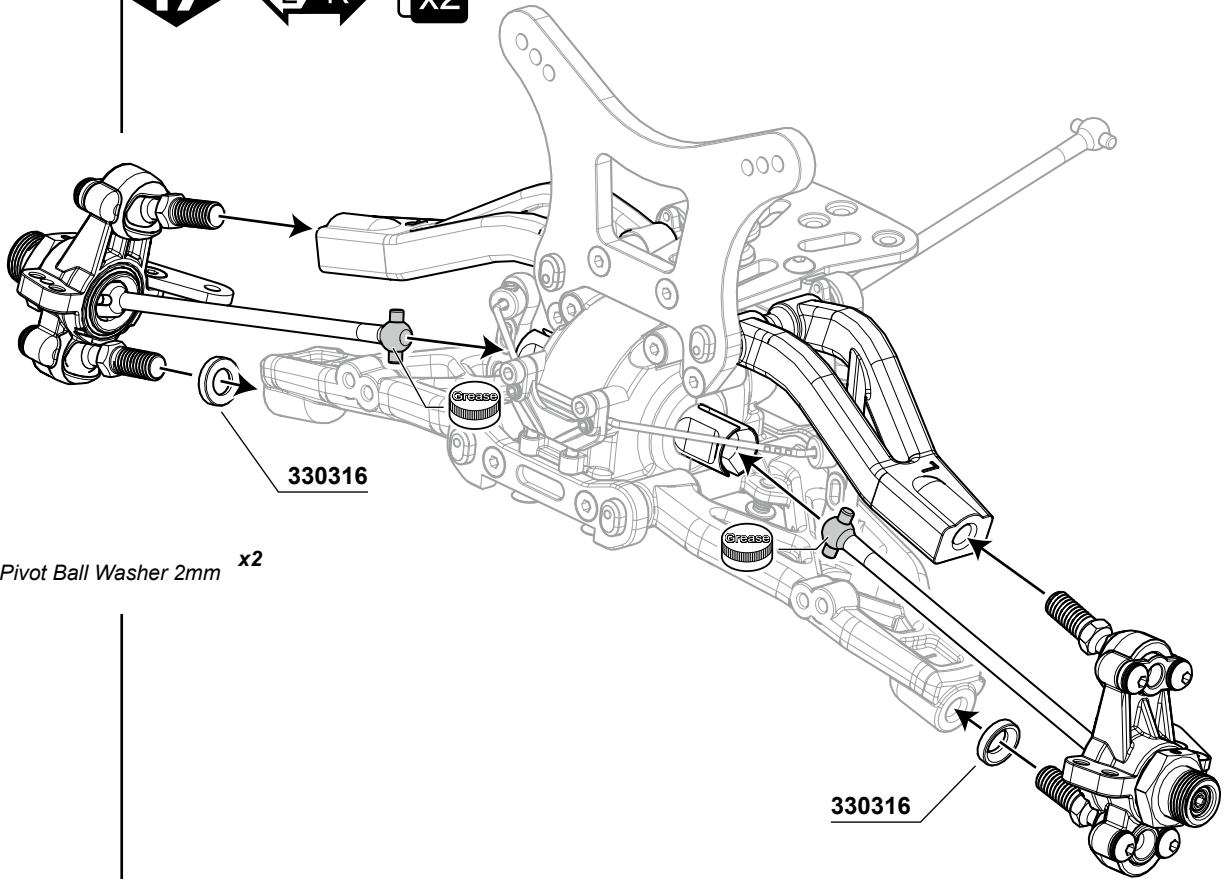
**116013**  
Ball Bearing 10x15x4mm x2



**330294**  
CVD Axle x2



**17**



**330316**  
Aluminum Knuckle Pivot Ball Washer 2mm x2

**104008**  
M4x4mm Set Screw x2

**330295**  
CVD Join x2

**330283**  
Pin M2x10mm x2

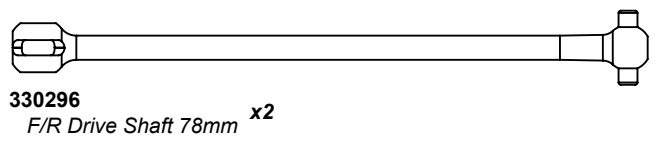
**330285**  
Pin M2x14mm x2

**116014**  
Ball Bearing 6x13x5mm x2

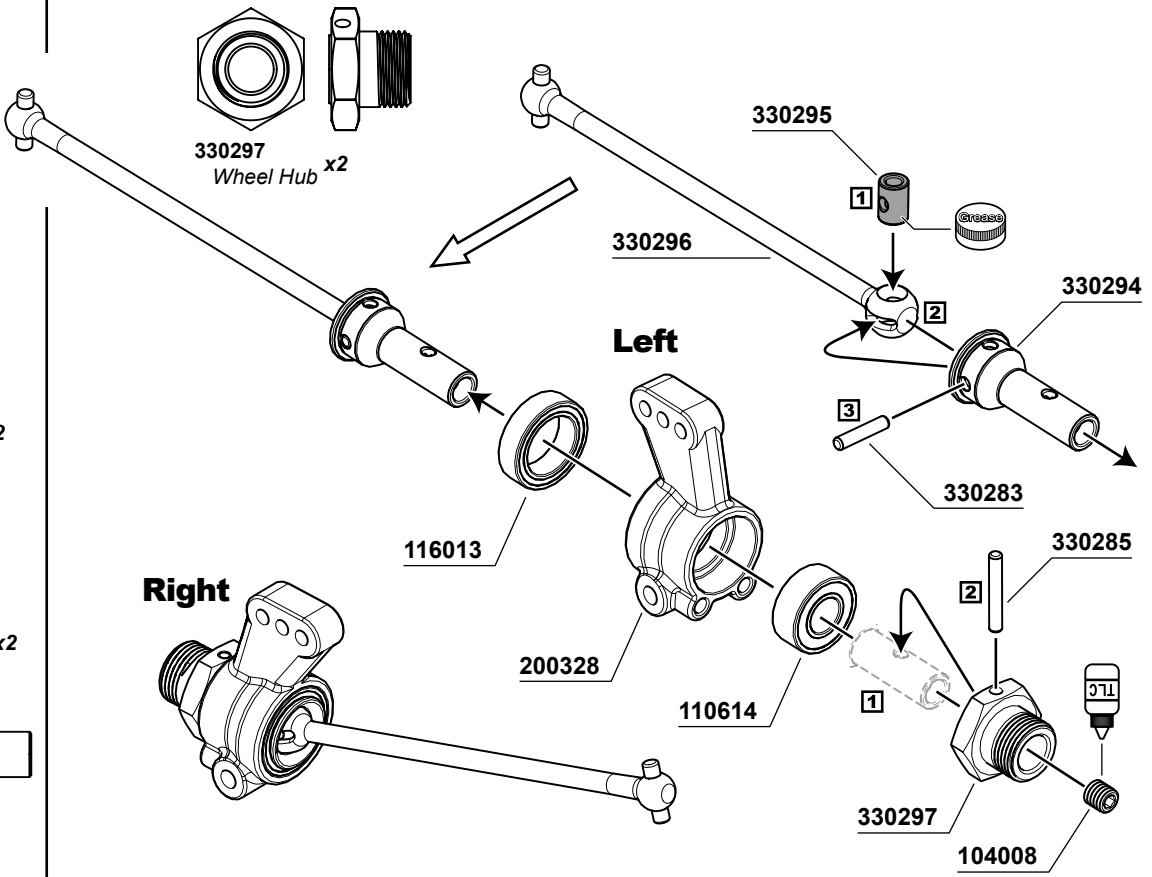
**116013**  
Ball Bearing 10x15x4mm x2

**330294**  
CVD Axle x2

**18**



**330296**  
F/R Drive Shaft 78mm x2

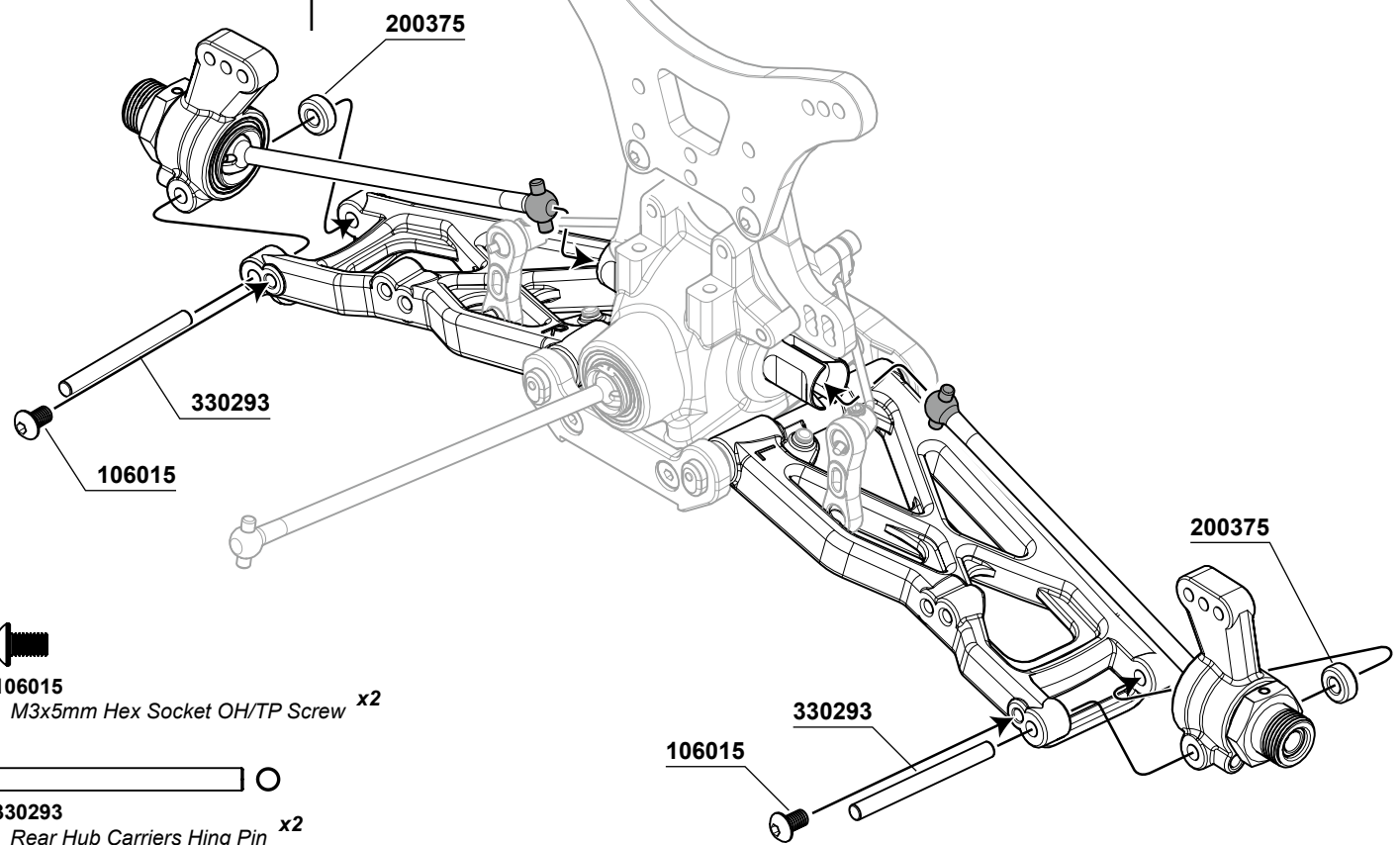


**330297**  
Wheel Hub x2

**Left**

**Right**

**19** **L R** **x2**



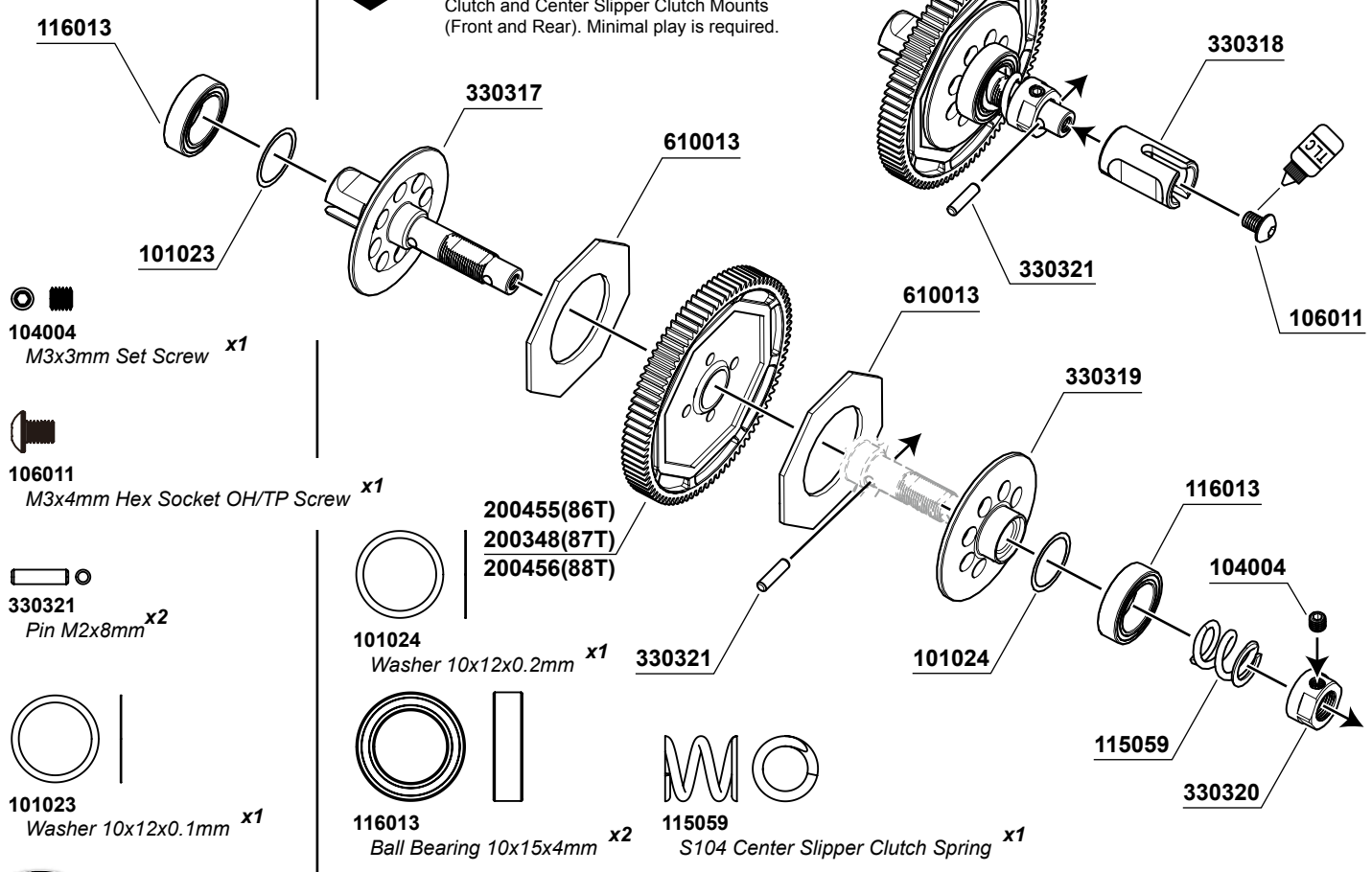
**106015**  
M3x5mm Hex Socket OH/TP Screw **x2**

**330293**  
Rear Hub Carriers Hing Pin **x2**

**BAG F**

**20**

Use 10x12x0.1mm or 10x12x0.2mm shims to adjust the play between the Center Slipper Clutch and Center Slipper Clutch Mounts (Front and Rear). Minimal play is required.



**104004**  
M3x3mm Set Screw **x1**

**106011**  
M3x4mm Hex Socket OH/TP Screw **x1**

**330321**  
Pin M2x8mm **x2**

**101023**  
Washer 10x12x0.1mm **x1**

**101024**  
Washer 10x12x0.2mm **x1**

**116013**  
Ball Bearing 10x15x4mm **x2**

**115059**  
S104 Center Slipper Clutch Spring **x1**



103001  
M3 Nut Lock x2



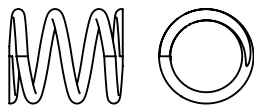
106001  
M3x8mm Hex Socket OH/TP Screw x2



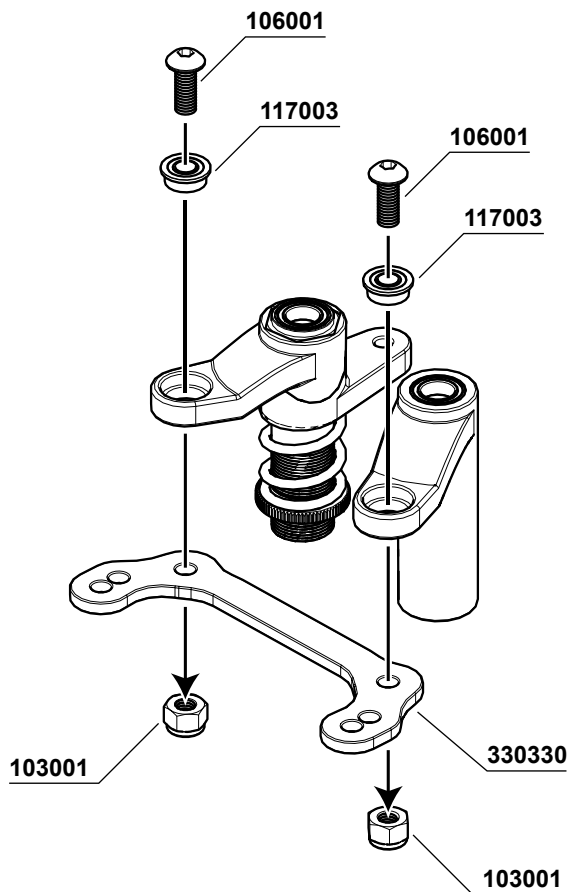
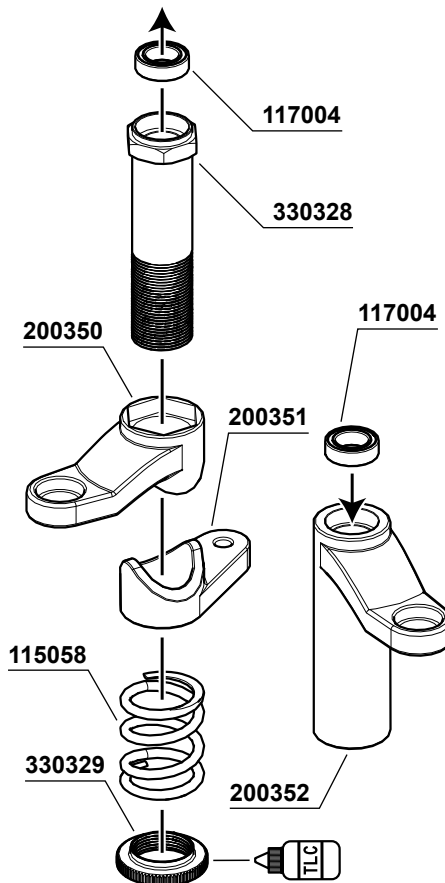
117003  
Flange Ball Bearing 3x6x2.5mm x2



117004  
Bushing 5x8x2.5mm x2



115058  
Servo Saver Spring x1





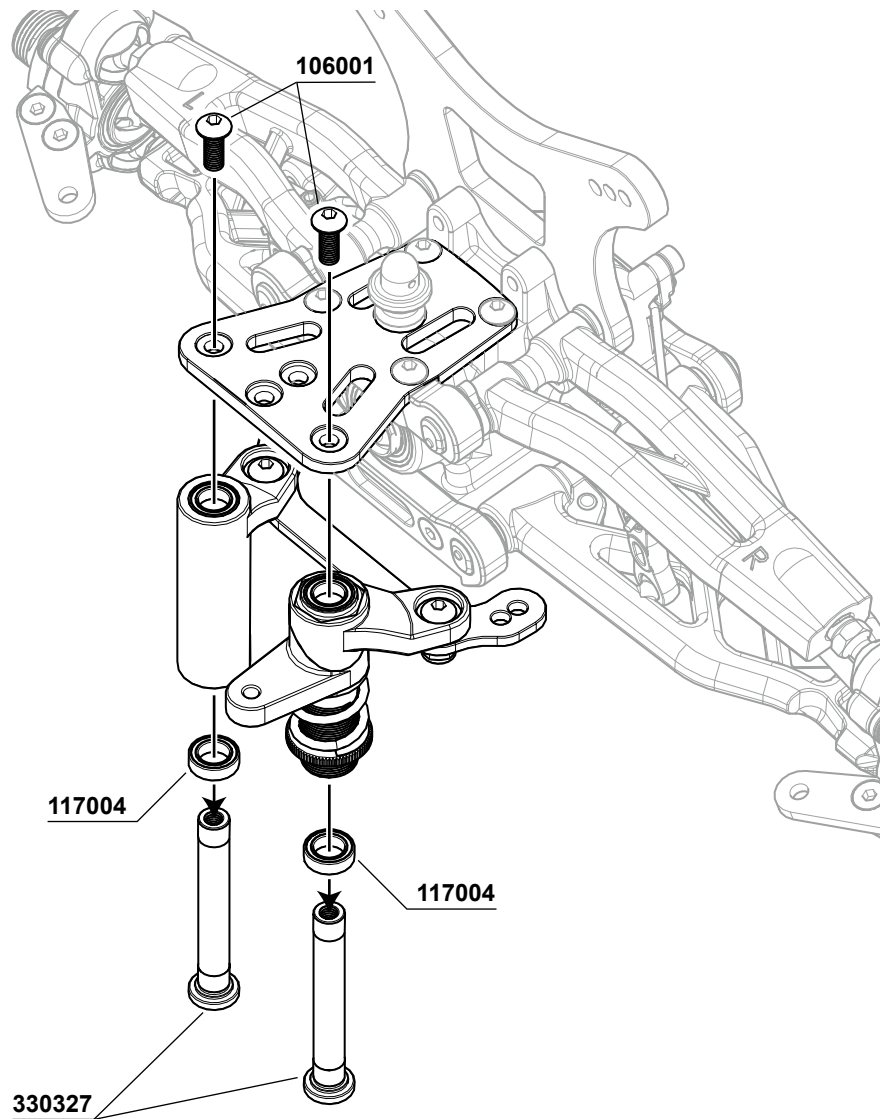
**23**



**106001**  
M3x8mm Hex Socket OH/TP Screw x2



**117004**  
Bushing 5x8x2.5mm x2



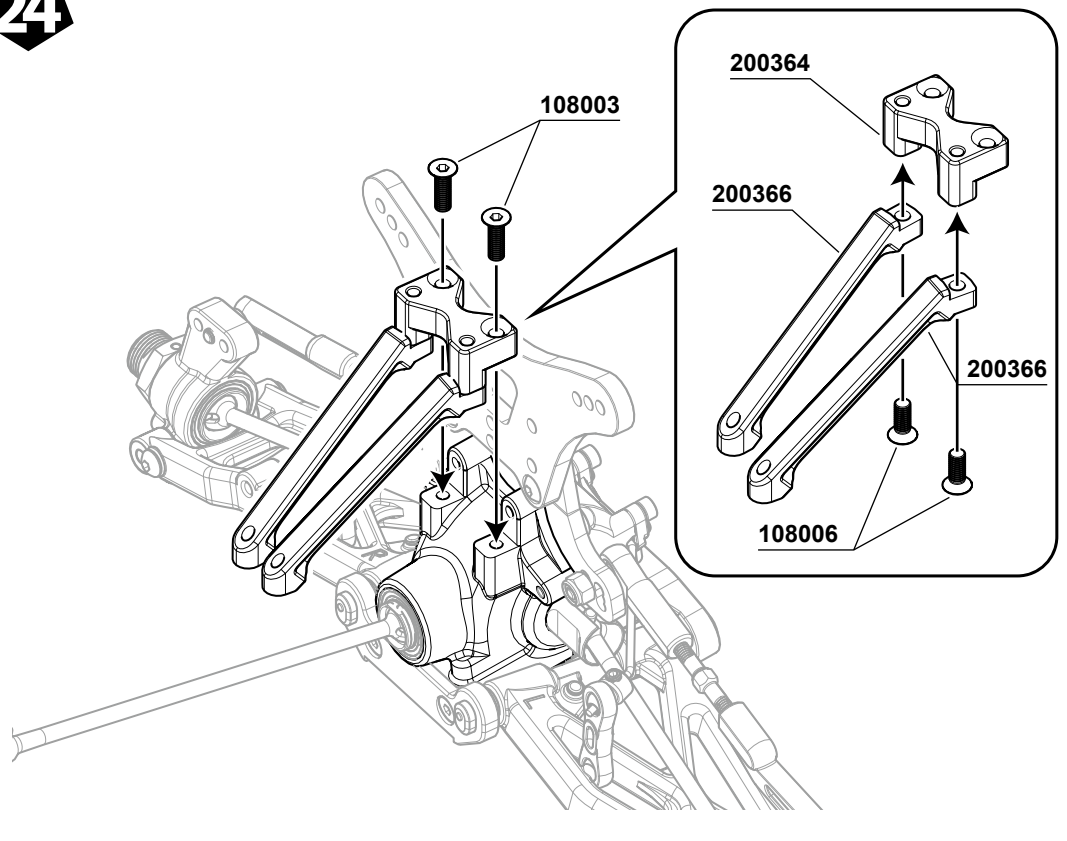
**24**



**108006**  
M3x8mm FH/ST HEX Screw x2



**108003**  
M3x10mm FH/ST HEX Screw x2



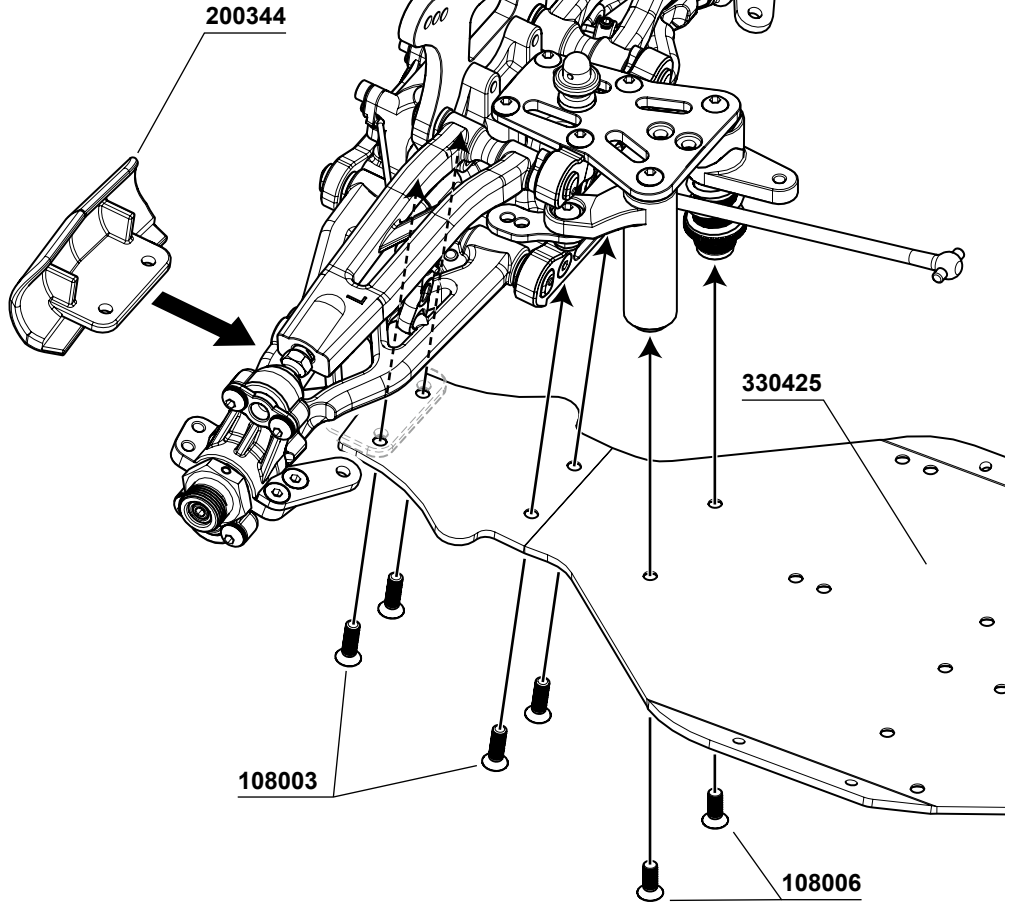
25



108006  
M3x8mm FH/ST HEX Screw x2



108003  
M3x10mm FH/ST HEX Screw x4



26



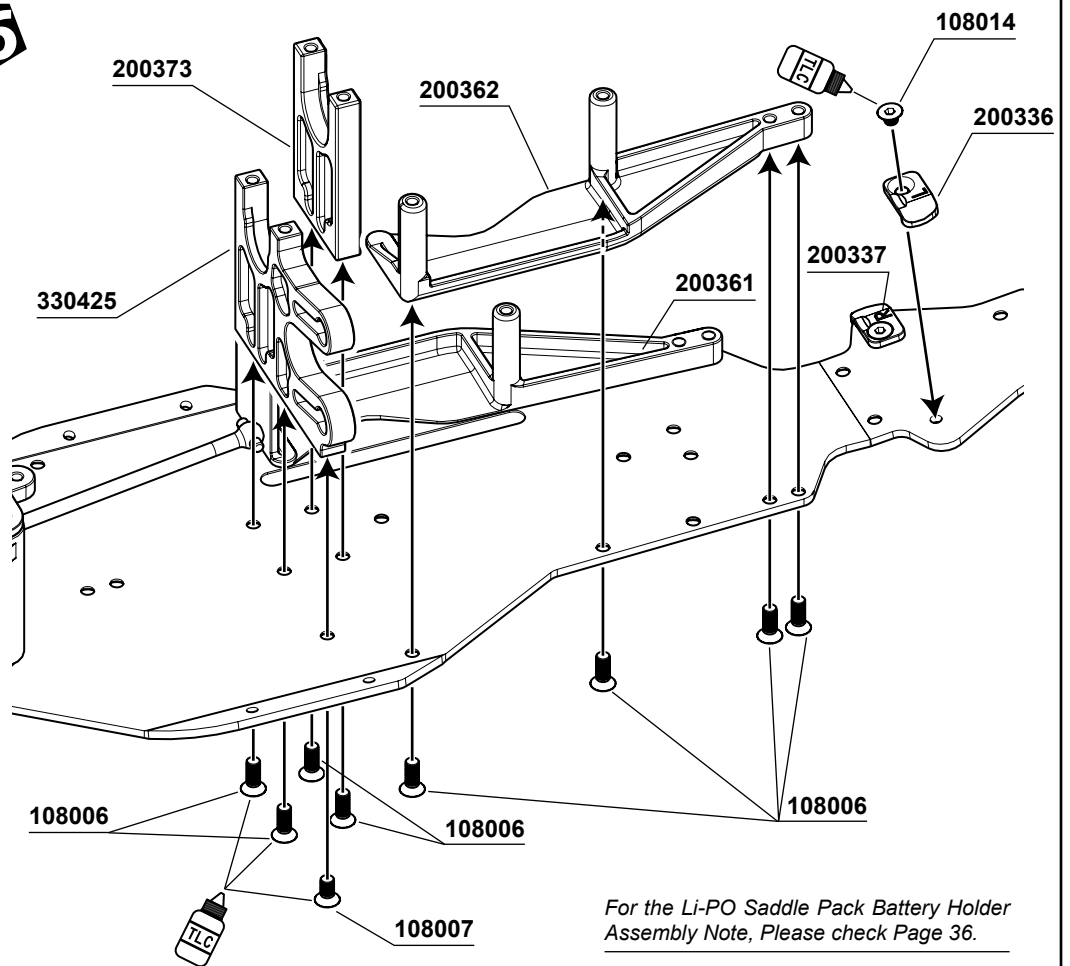
108014  
M3x3mm FH/ST HEX Screw x2



108007  
M3x6mm FH/ST HEX Screw x1



108006  
M3x8mm FH/ST HEX Screw x12

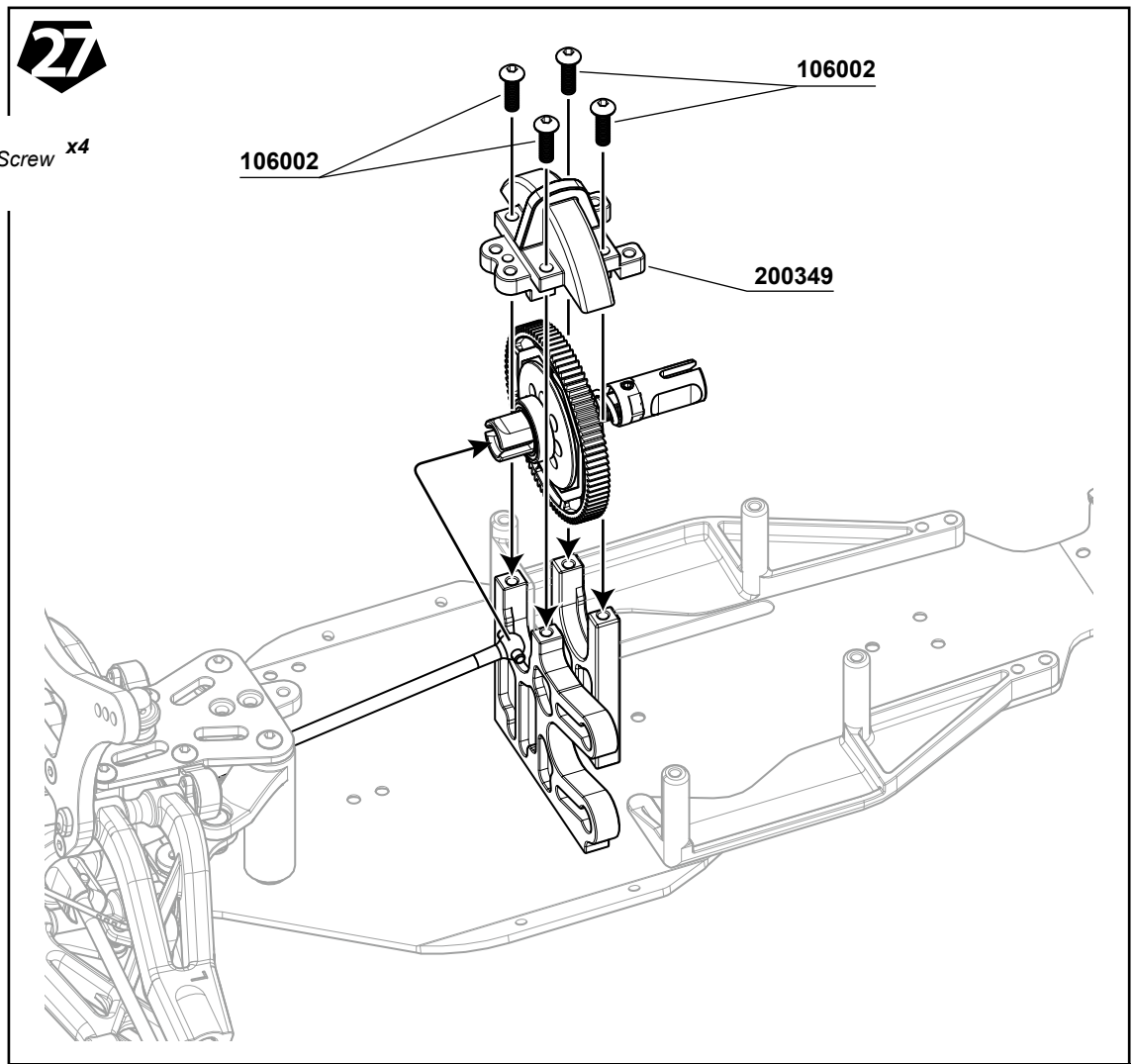


For the Li-PO Saddle Pack Battery Holder Assembly Note, Please check Page 36.



**106002**  
M3x10mm Hex Socket OH/TP Screw **x4**

**27**

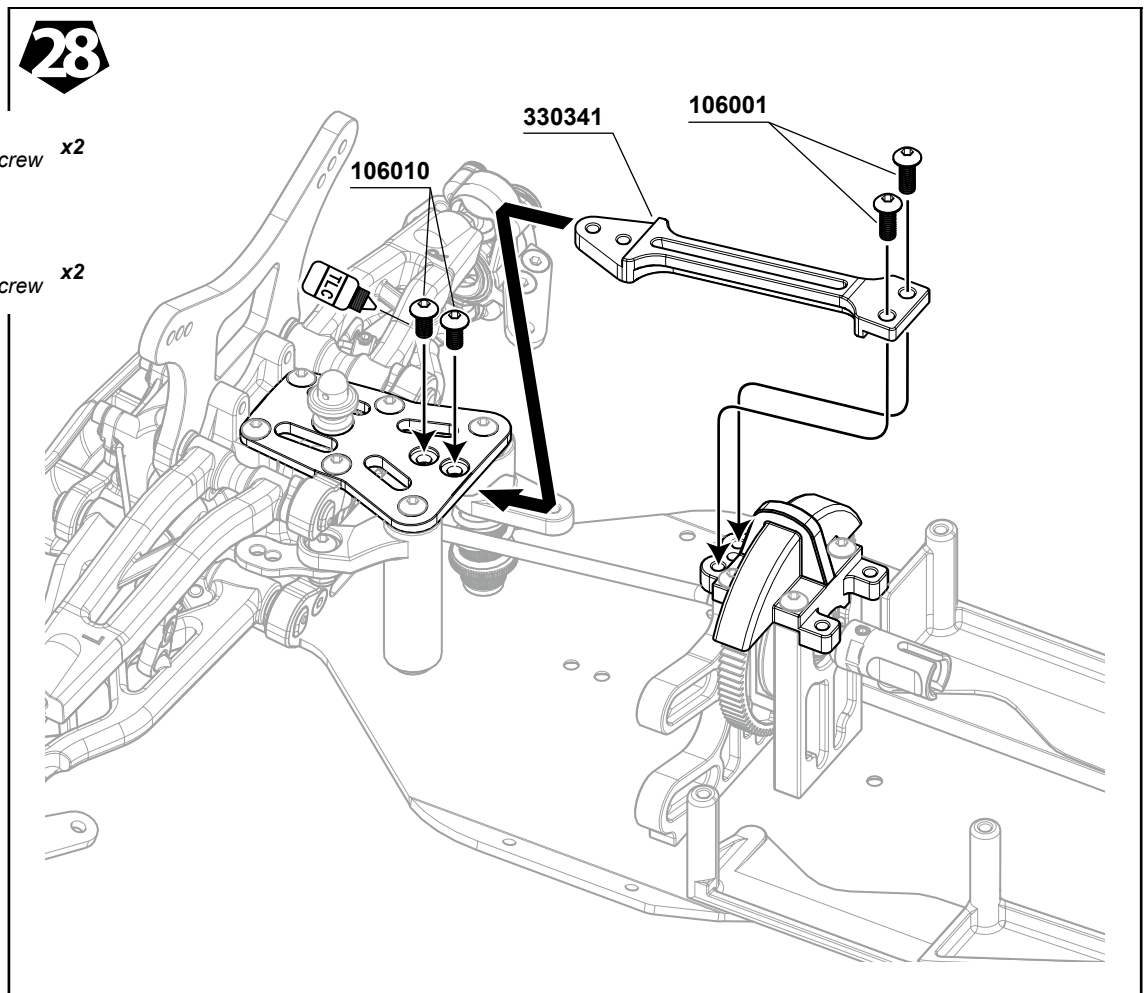


**106010**  
M3x6mm Hex Socket OH/TP Screw **x2**



**106001**  
M3x8mm Hex Socket OH/TP Screw **x2**


**28**

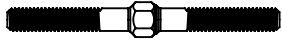


**29** 

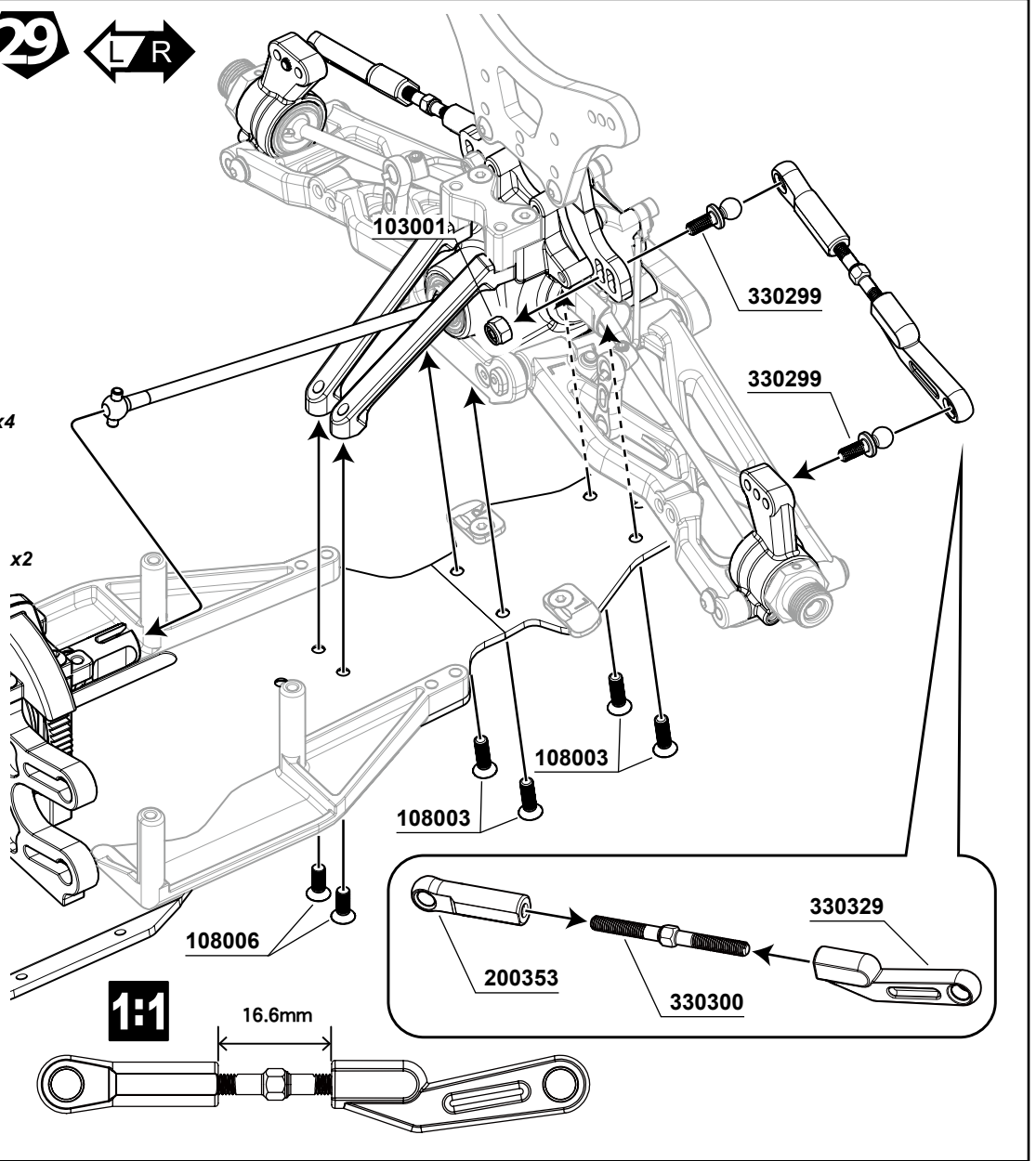
  
**108006**  
*M3x8mm FH/ST HEX Screw* x2

  
**108003**  
*M3x10mm FH/ST HEX Screw* x4

  
**330299**  
*Steering Linkage Ball Stud 5mm* x4

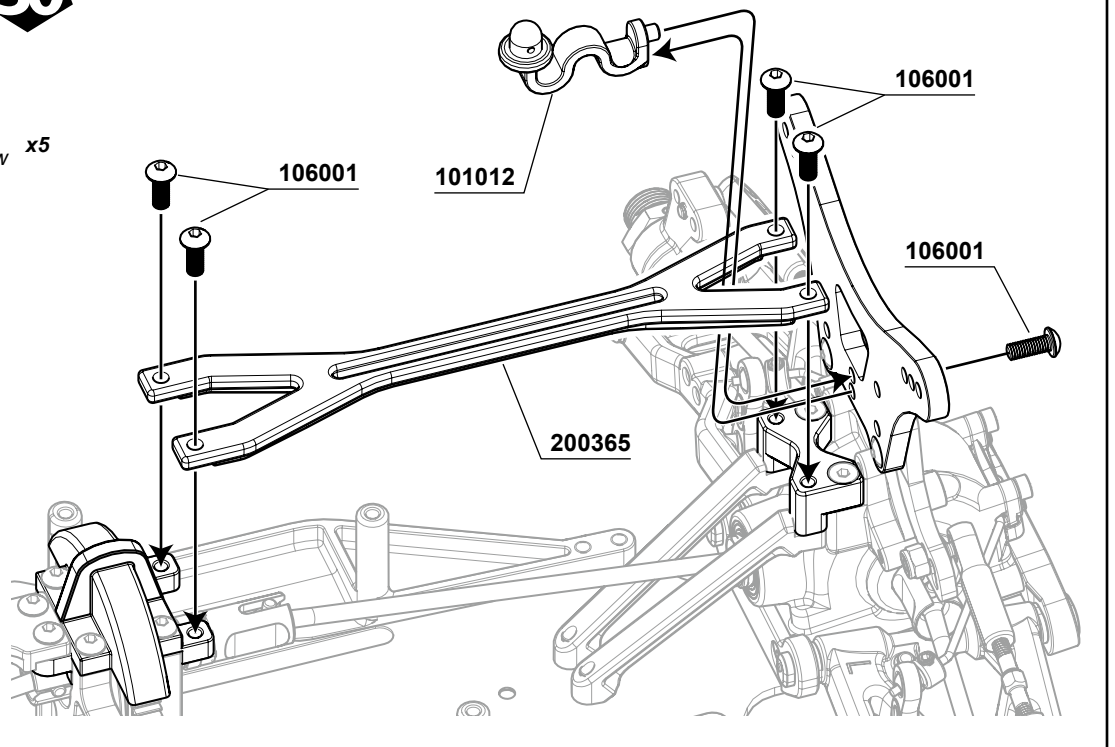
  
**330300**  
*Rear Upper Sus. Arm Turnbuckles* x2

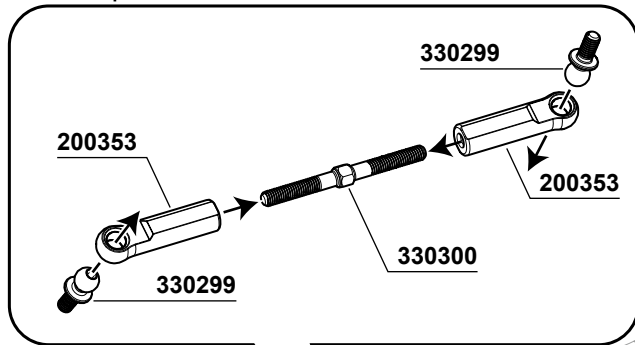
  
**103001**  
*M3 Nut Lock* x2



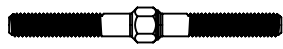
**30**

  
**106001**  
*M3x8mm Hex Socket OH/TP Screw* x5





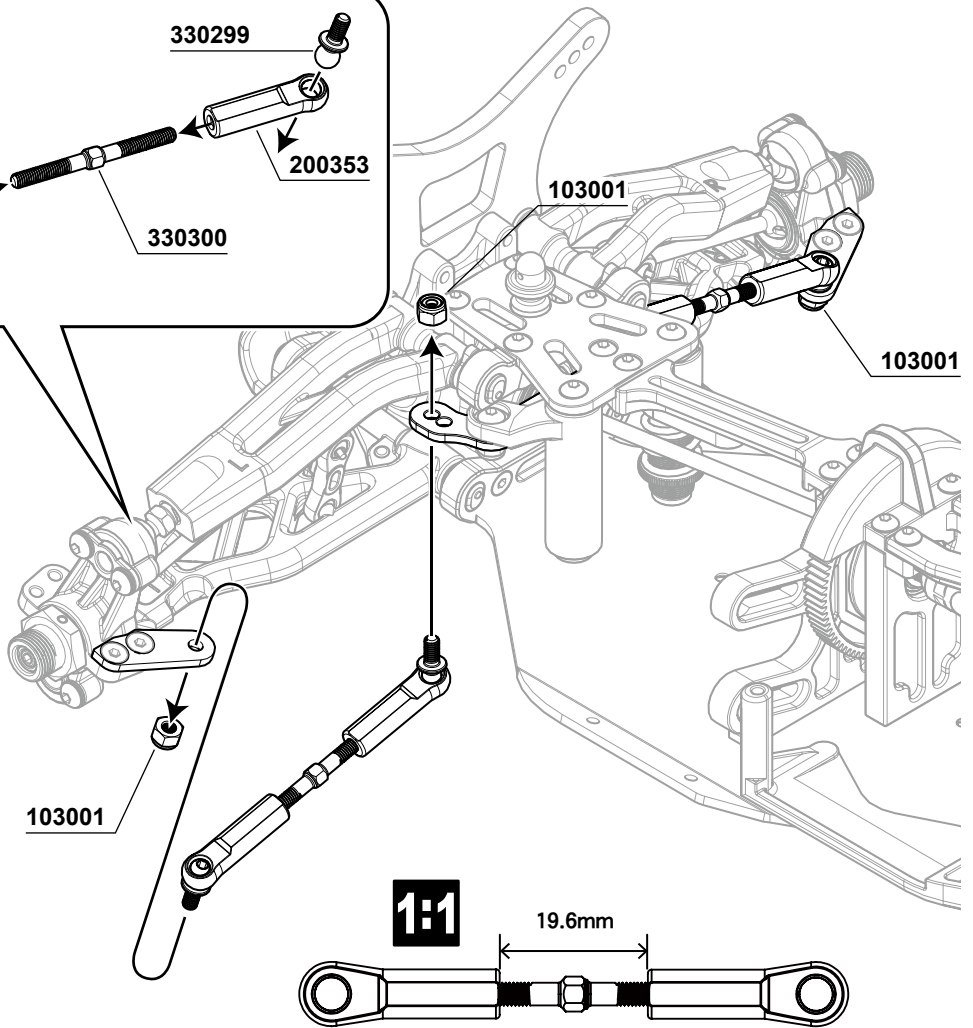
**330299**  
Steering Linkage Ball Stud 5mm x4



**330300**  
Rear Upper Sus. Arm Turnbuckles x2



**103001**  
M3 Nut Lock x4



**32**



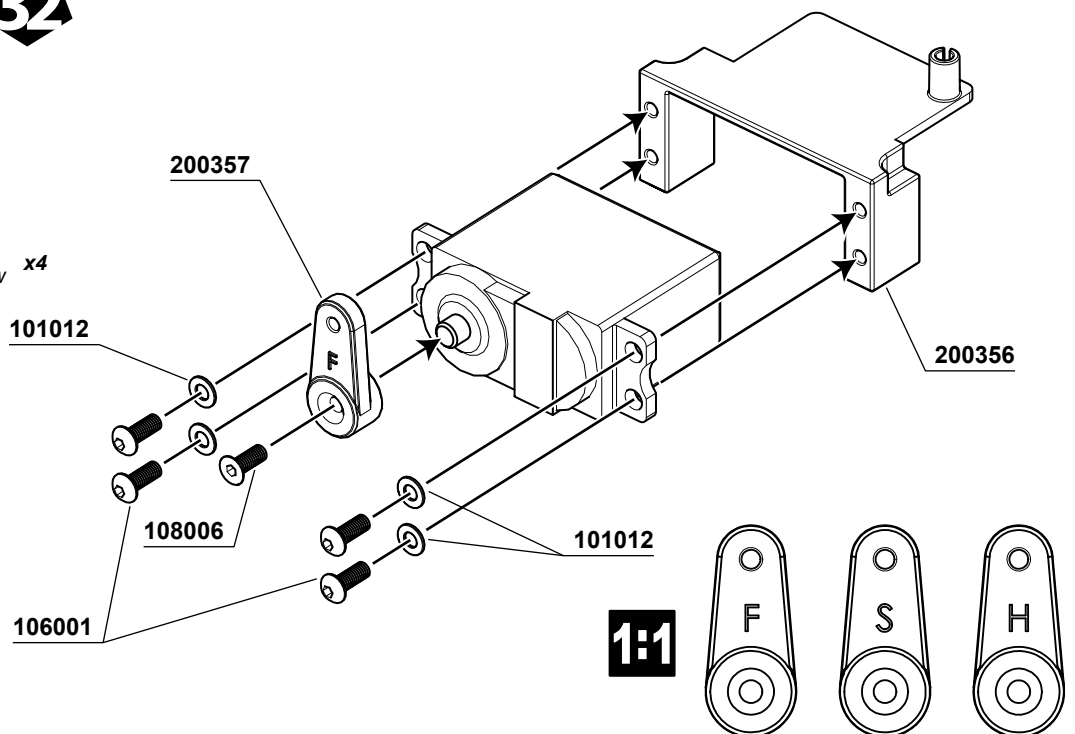
**108006**  
M3x8mm FH/ST HEX Screw x1



**106001**  
M3x8mm Hex Socket OH/TP Screw x4



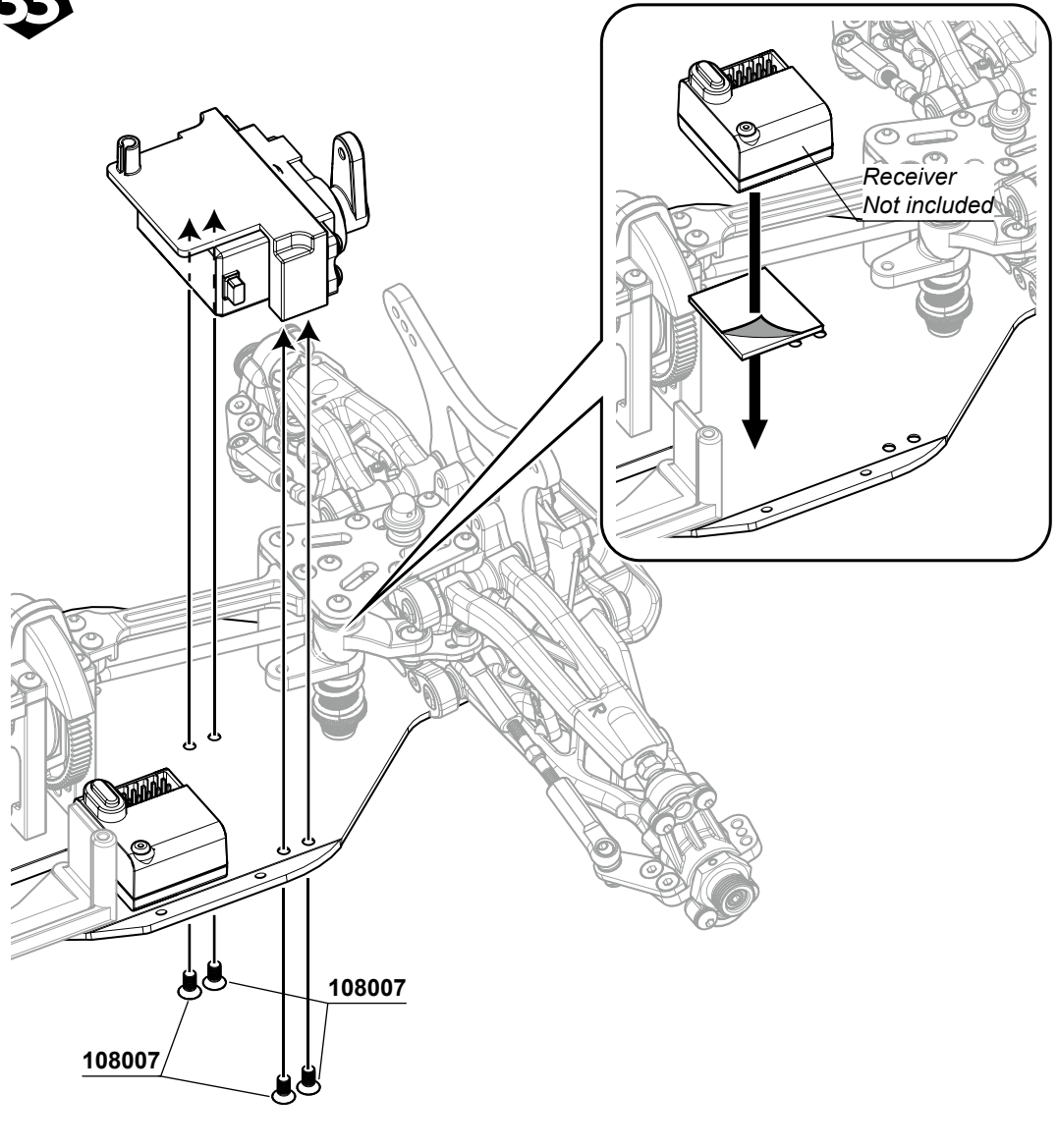
**101012**  
Washer M3x6xT0.5mm x4





108007  
M3x6mm FH/ST HEX Screw x4

**33**

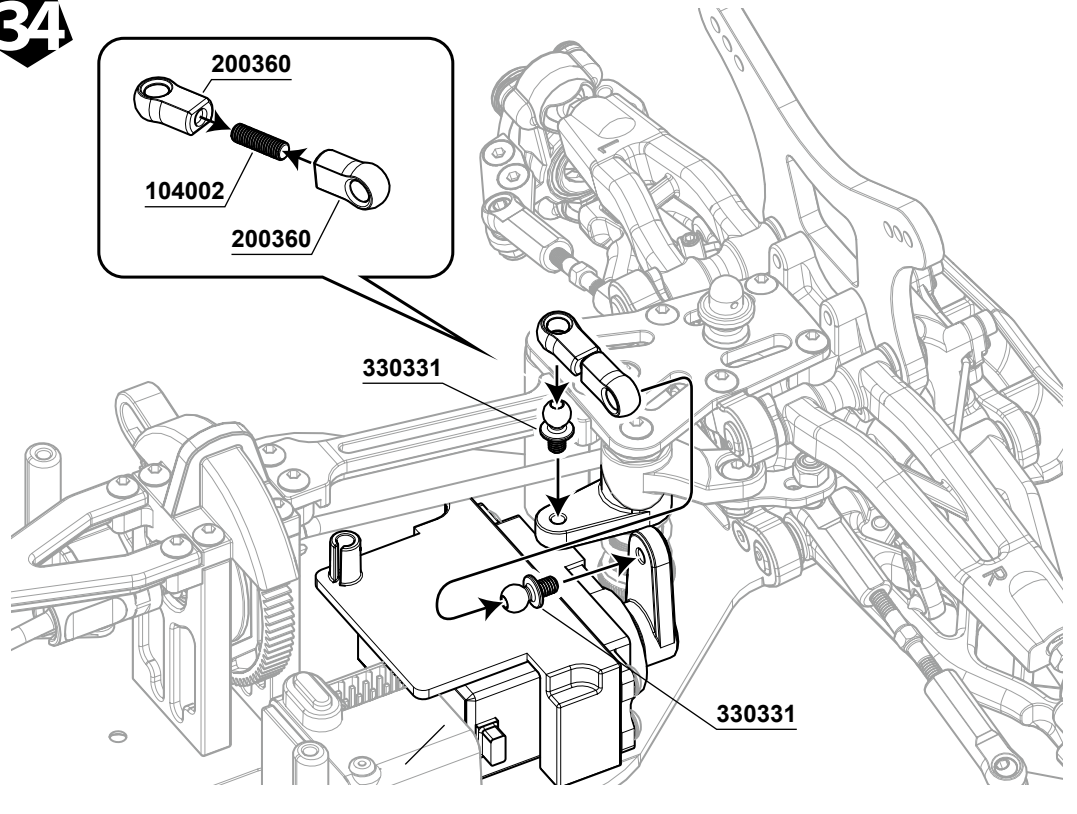


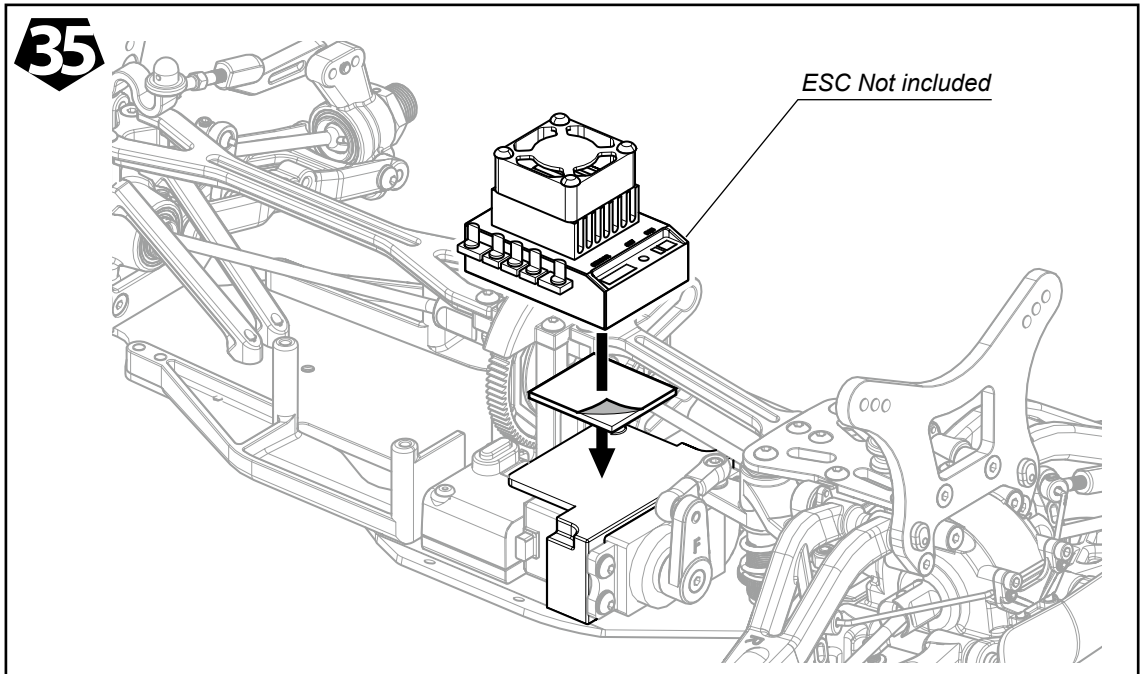
330331  
Steering Linkage Ball Stud 5mm x2



104002  
M3x10mm Set Screw x1

**34**



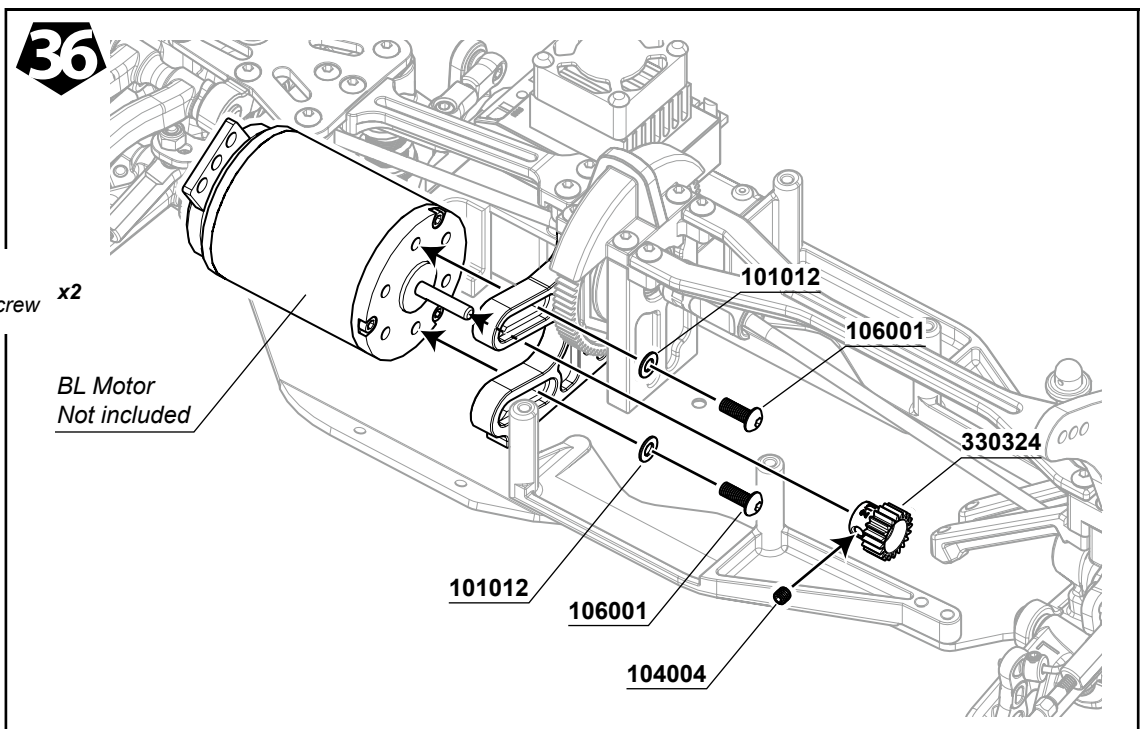


**104004**  
M3x3mm Set Screw x1

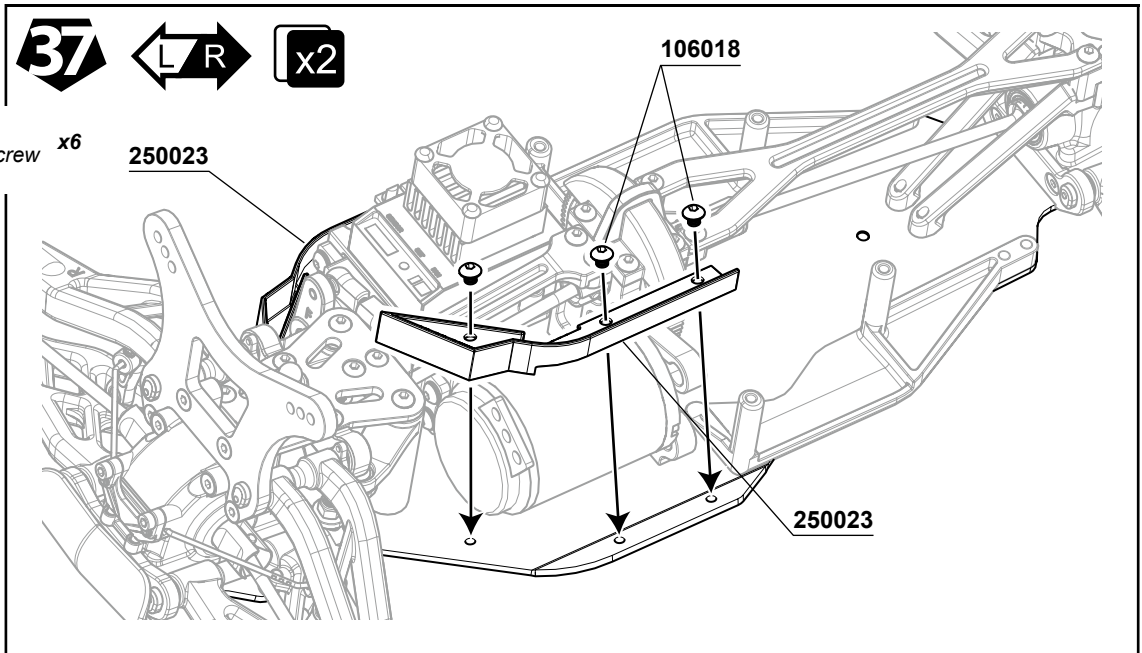
**106001**  
M3x8mm Hex Socket OH/TP Screw x2

**101012**  
Washer M3x6xT0.5mm x2

**330410**  
S104 Motor Gear 21T x1



**106018**  
M3x3mm Hex Socket OH/TP Screw x6



# BAG I

## 38



x2 For Front

x2 For Rear

101011  
Shock Washer 2.6x6x0.5mm x4

330306  
Shock Washer 3.3x6.5x2.5mm x4

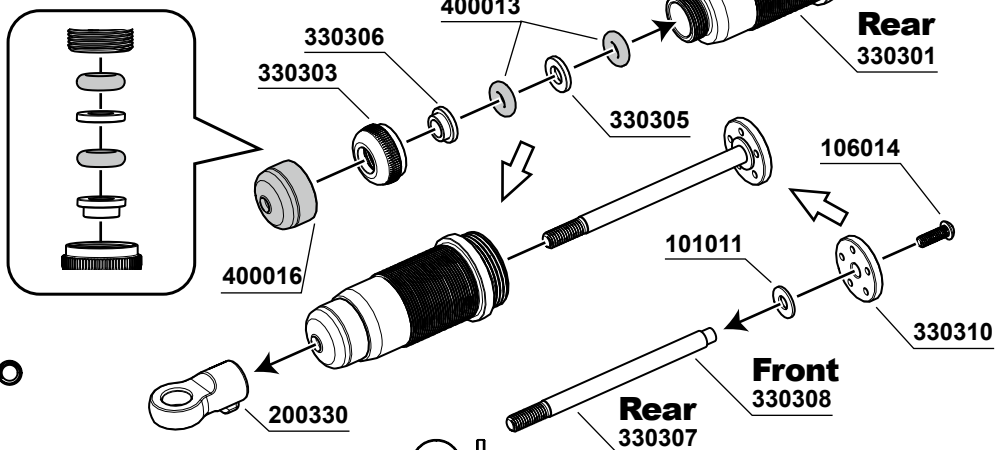
400013  
Shock Seal O-ring 2x2.7mm x8

330307  
Shock Shaft L x2

330308  
Shock Shaft S x2

106014  
M2x6mm Hex Soked OH/TP Screw x4

330305  
Shock Washer 3.3x6.7x1mm x4



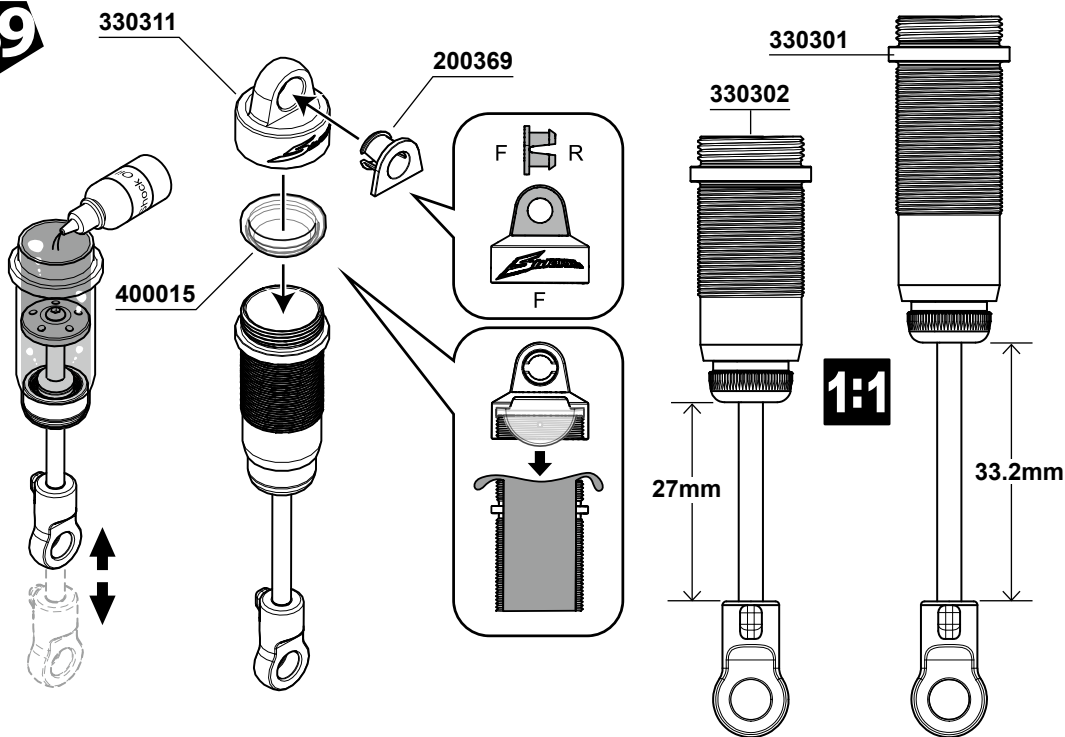
330303  
Aluminum Shock Seal Cover x4

400016  
Shock Boot x4

400015  
Shock Bladder x4

330310  
Shock Piston 1.2mmx5 holes x4

## 39

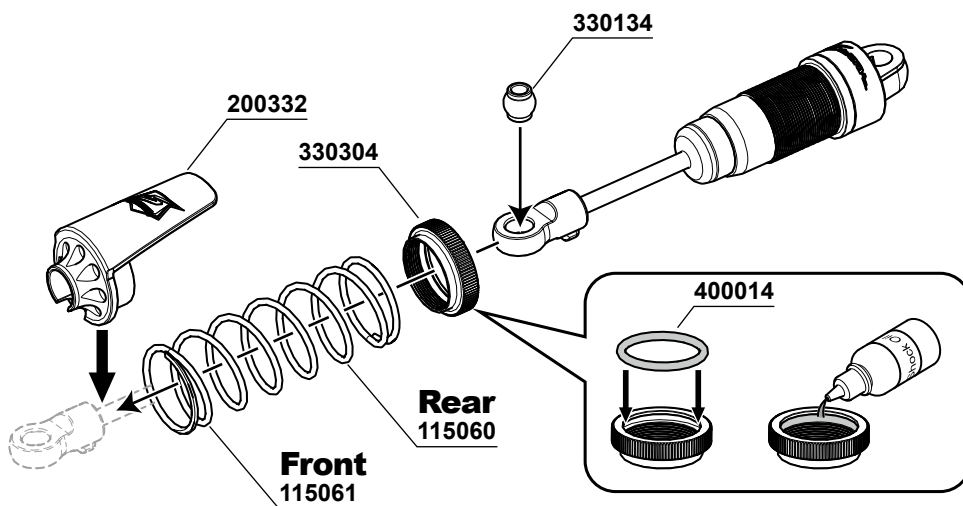


330304  
Aluminum Shock Spring Adjust Nut x4

400014  
O-Ring 1.5x13.5mm x4

330134  
Shock Ball Stud x4

## 40





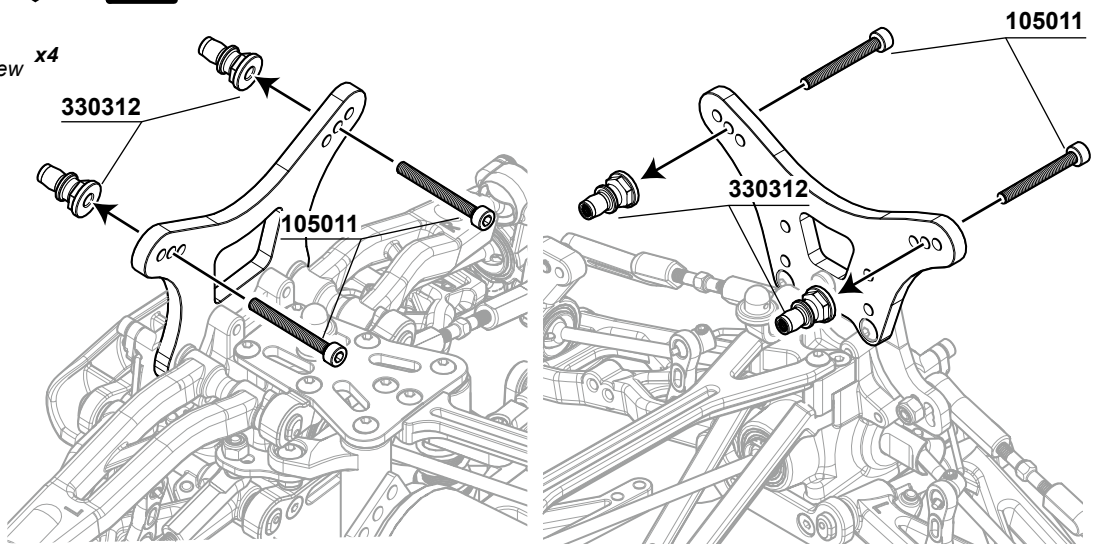


105011  
M3x23mm Hex Scket OH/TP Screw x4



330312  
Aluminum Shock Cap Studk x4

**41** **F** **R** **x2 For Front** **x2 For Rear**

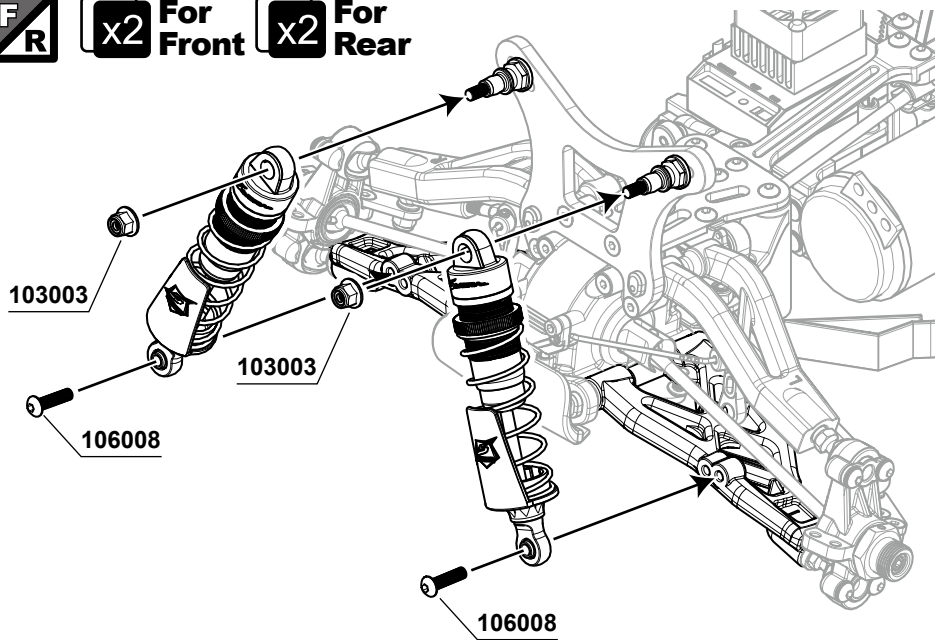


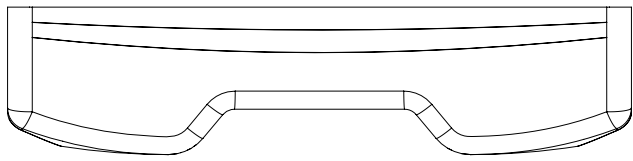
103003  
Flange M3 Nut Lock x4



106008  
M3x12mm Hex Scket OH/TP Screw x4

**42** **F** **R** **x2 For Front** **x2 For Rear**

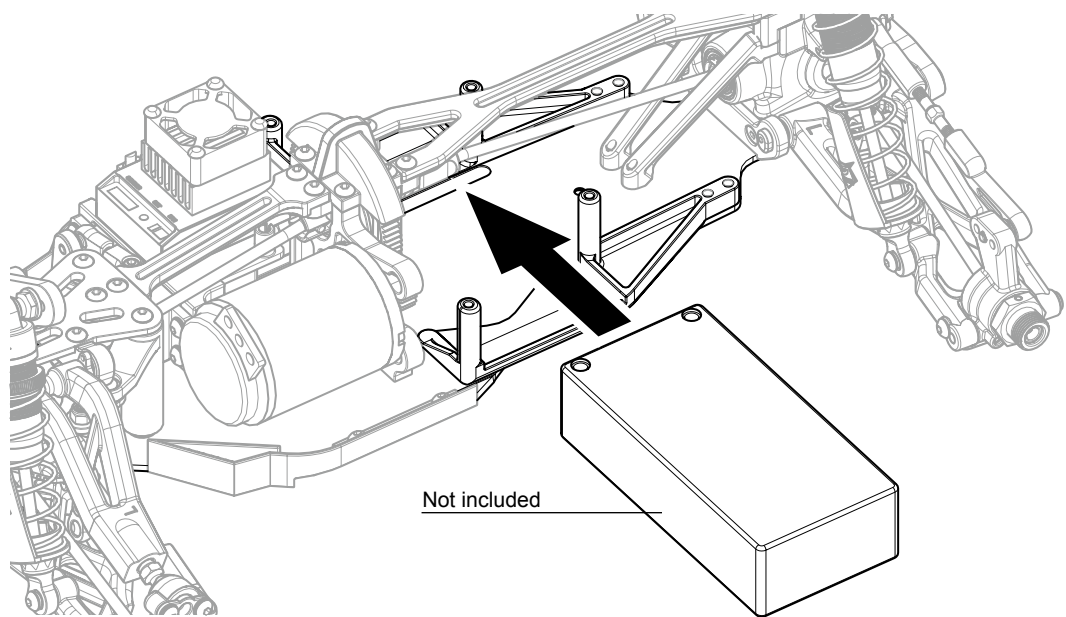
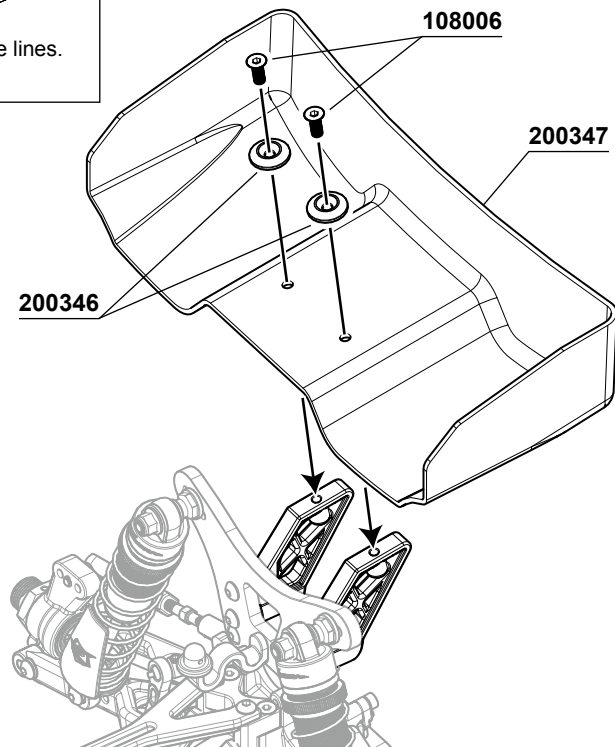




When less down force is needed, cut the rear wing following the lines.



**108006**  
M3x8mm FH/ST HEX Screw x2



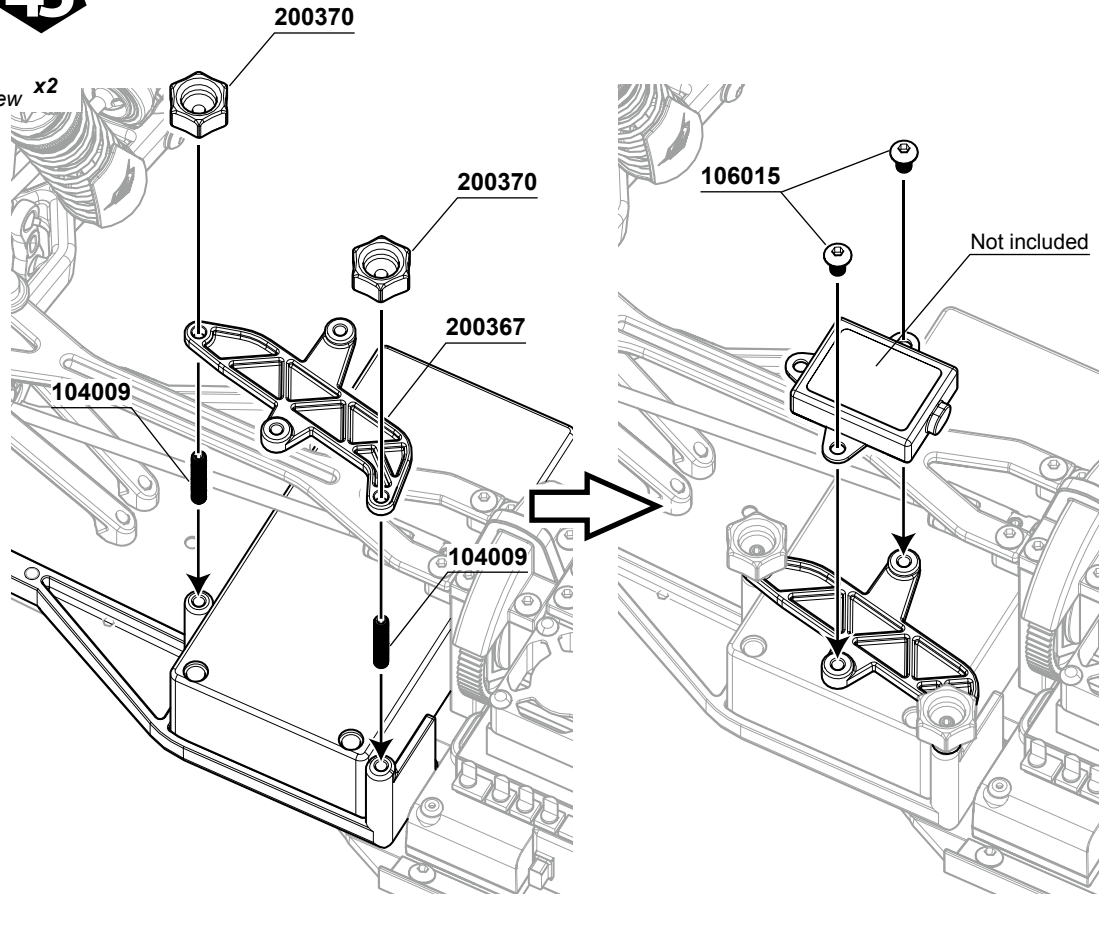
**45**



**106015**  
M3x5mm Hex Socket OH/TP Screw x2



**104009**  
M3x16mm Set Screw x2



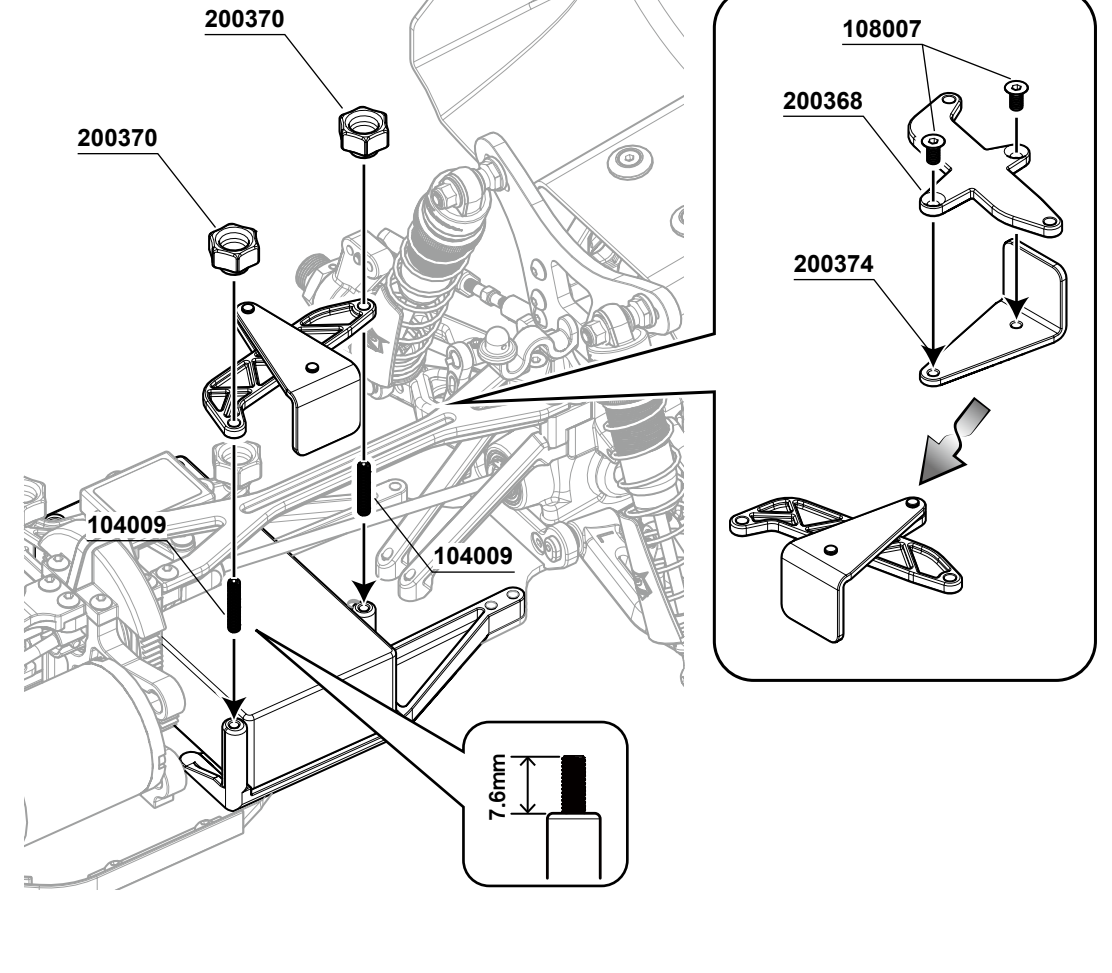
**46**



**108007**  
M3x6mm FH/ST HEX Screw x4



**104009**  
M3x16mm Set Screw x2

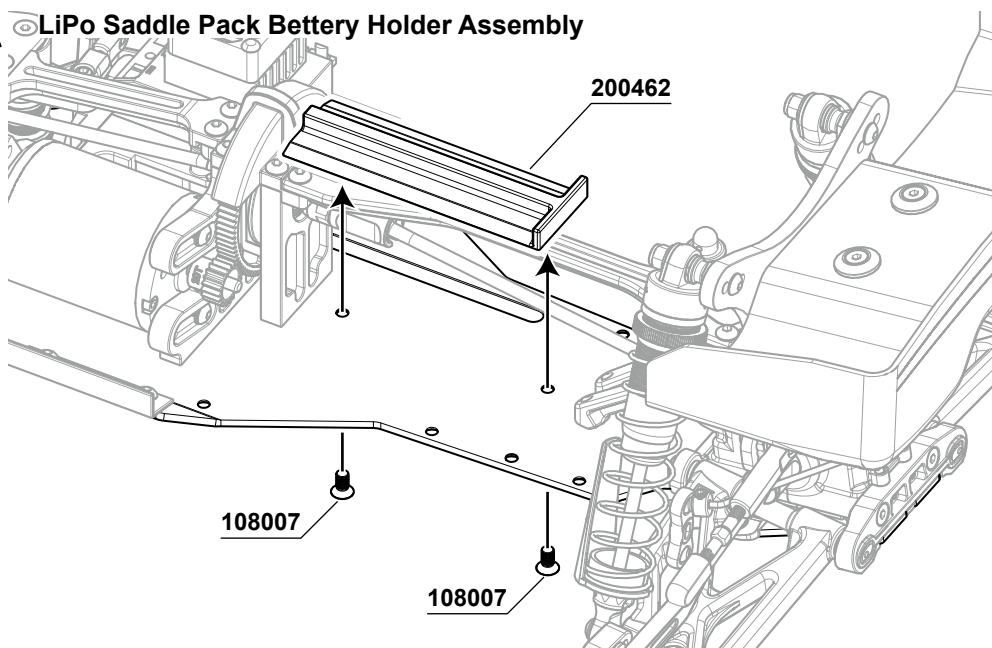


**47**

**LiPo Saddle Pack Battery Holder Assembly**



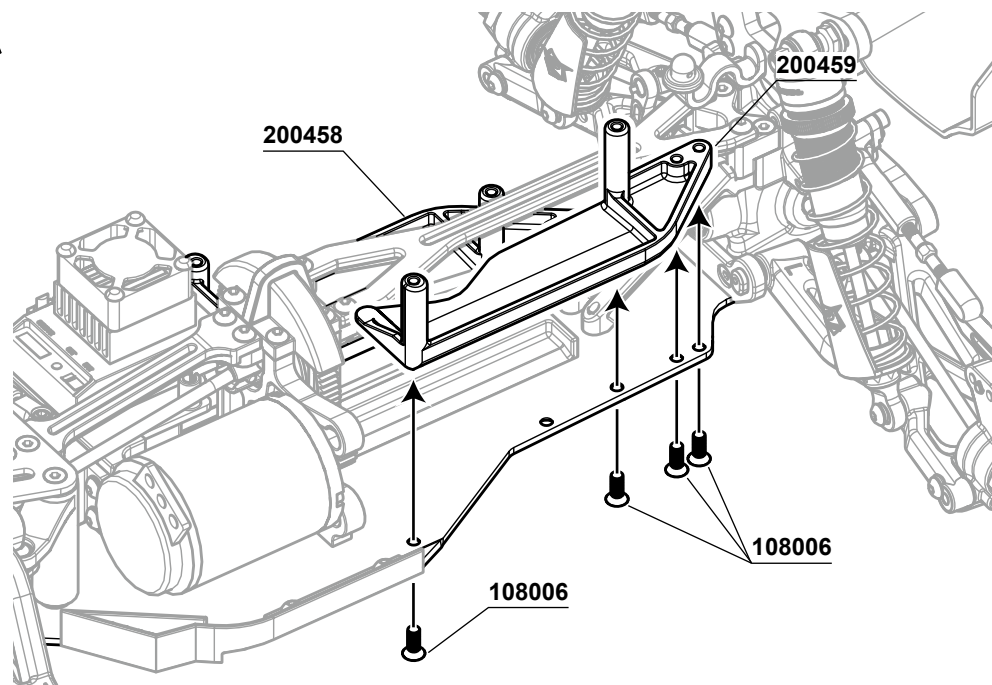
**108007**  
M3x6mm FH/ST HEX Screw x2



**48**

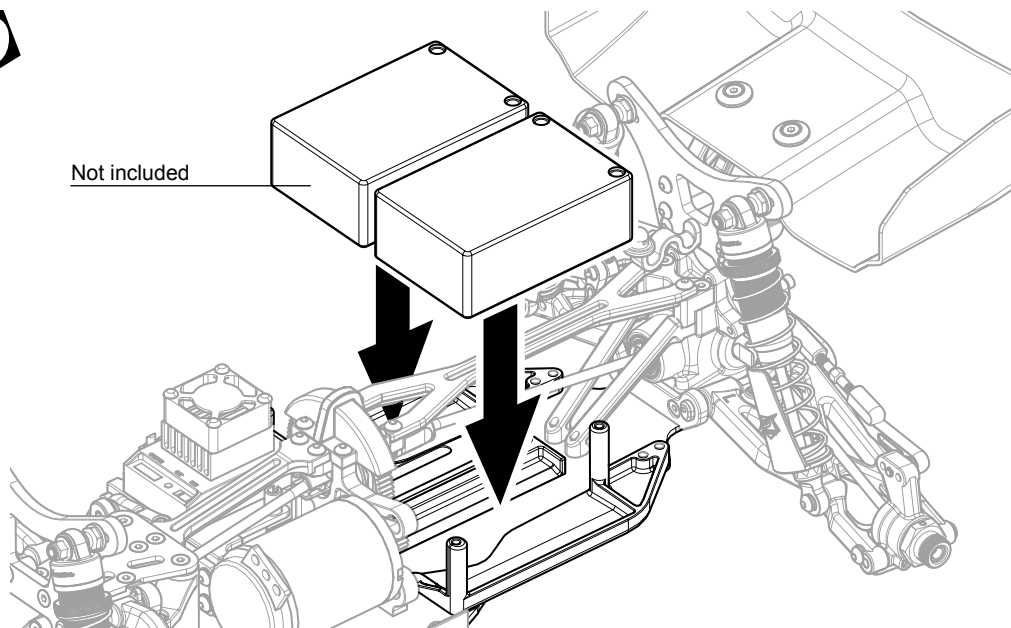


**108006**  
M3x8mm FH/ST HEX Screw x8



**49**

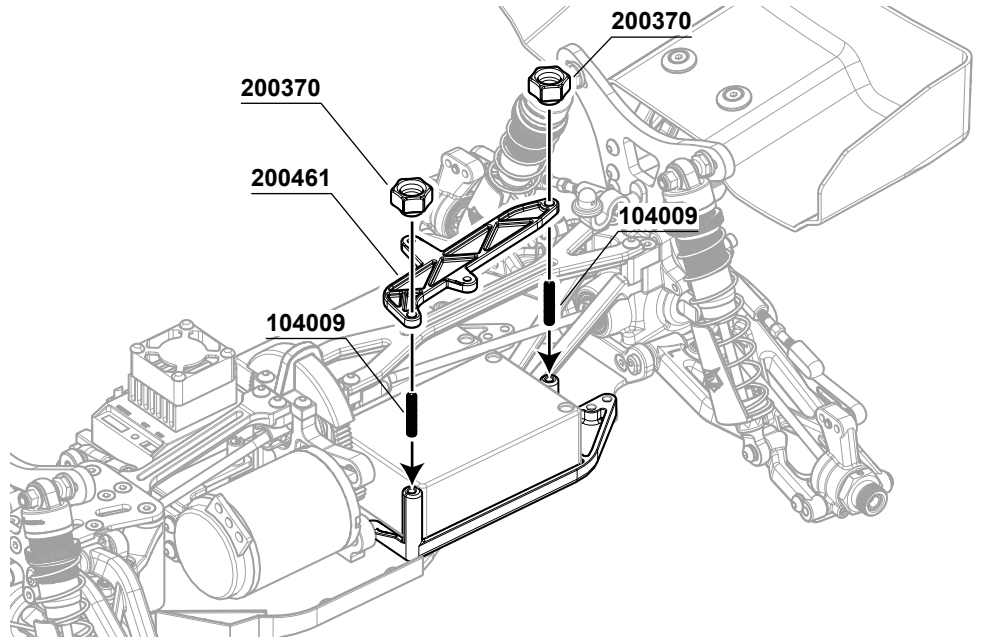
Not included





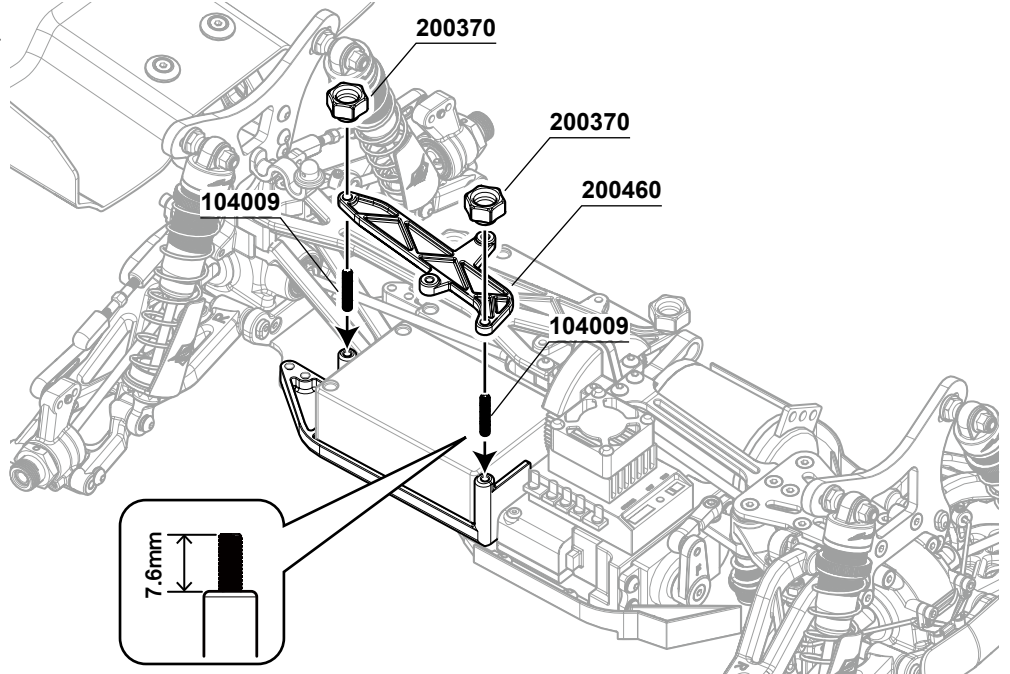
**104009**  
M3x16mm Set Screw x2

**50**



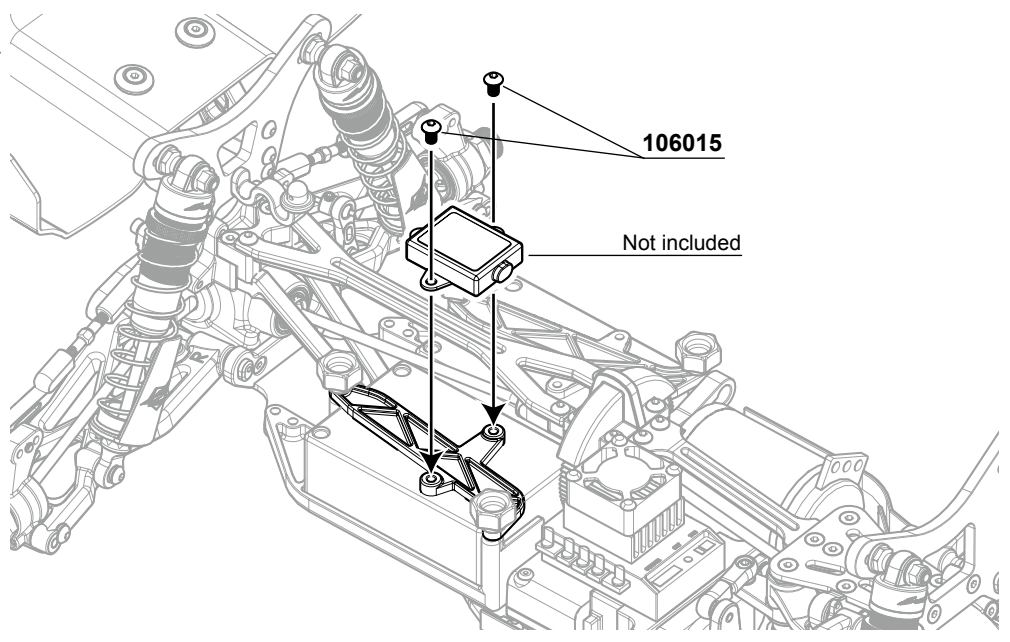
**104009**  
M3x16mm Set Screw x2

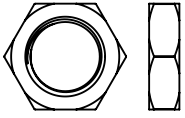
**51**



**106015**  
M3x5mm Hex Socket OH/TP Screw x2

**52**





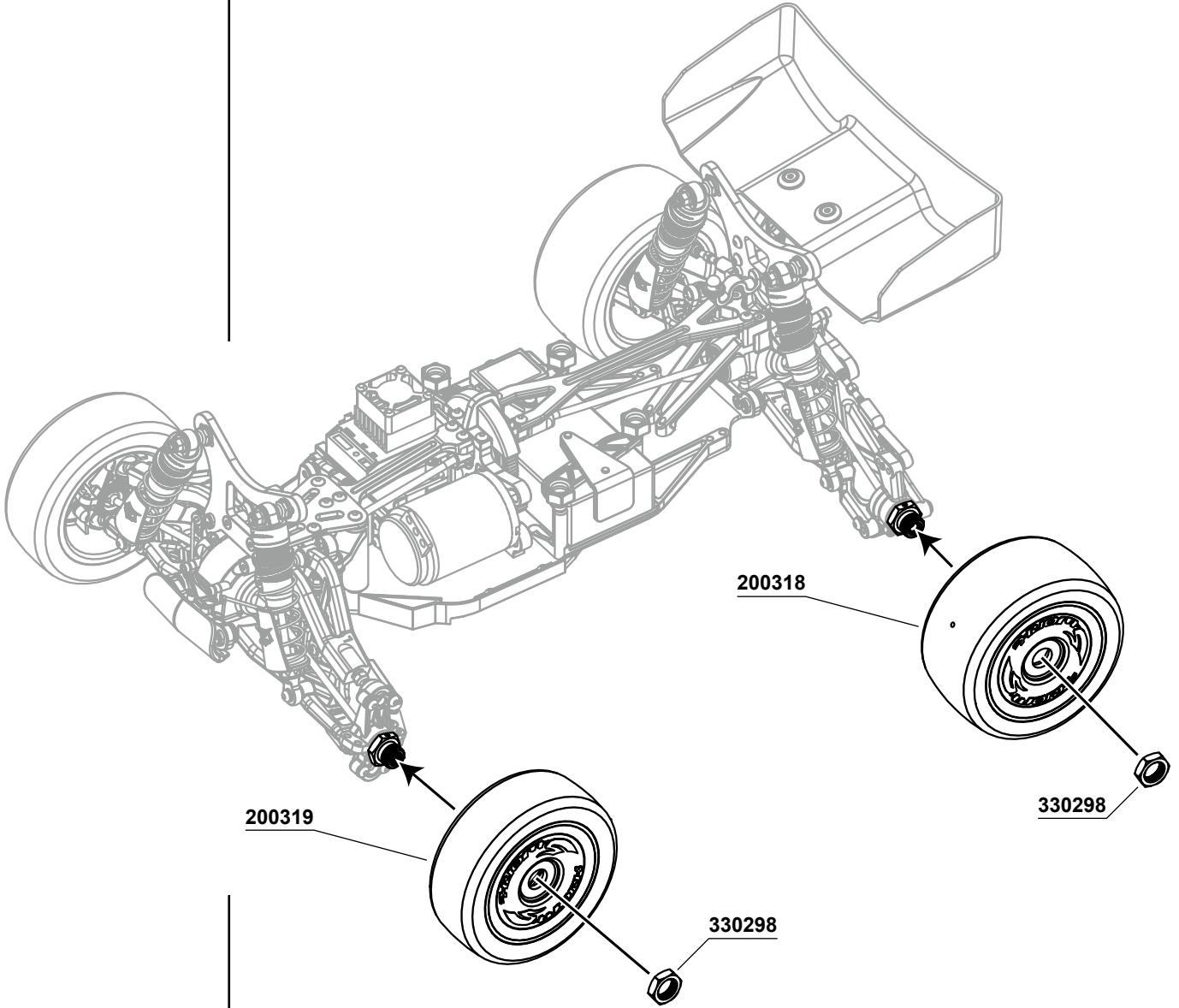
330298  
S104 Wheel Nut 14mm x4

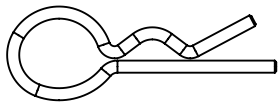
53

F  
R

x2 For Front

x2 For Rear

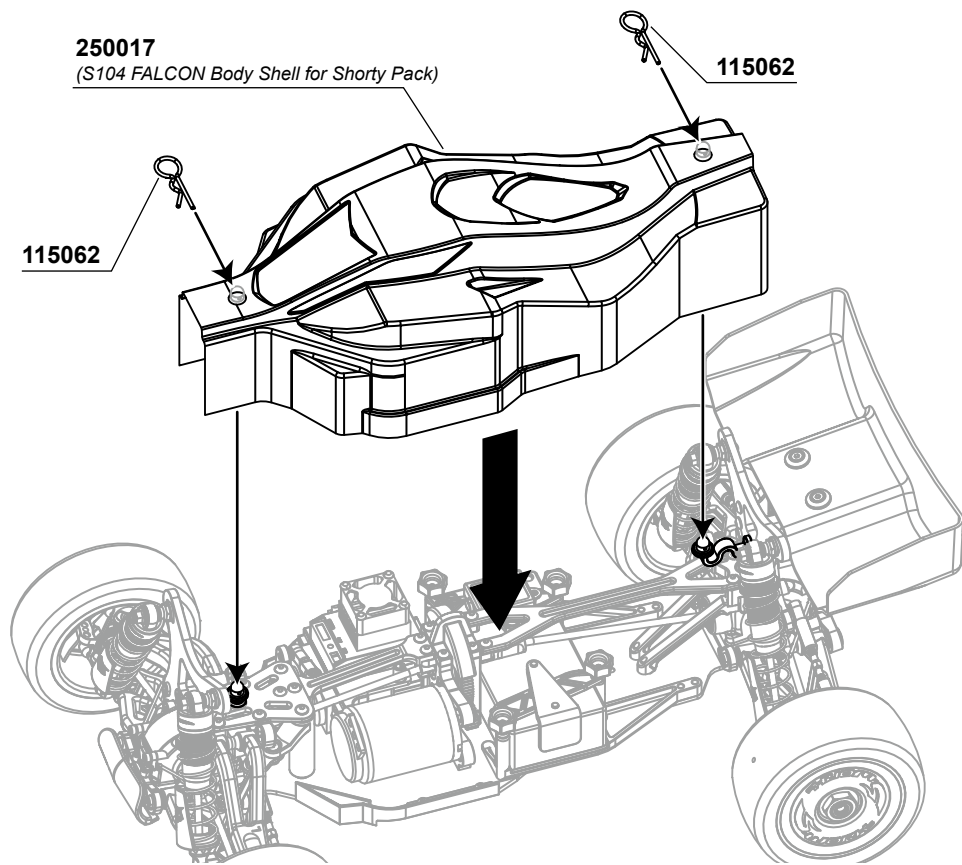




115062  
1/10 Body Clip x2

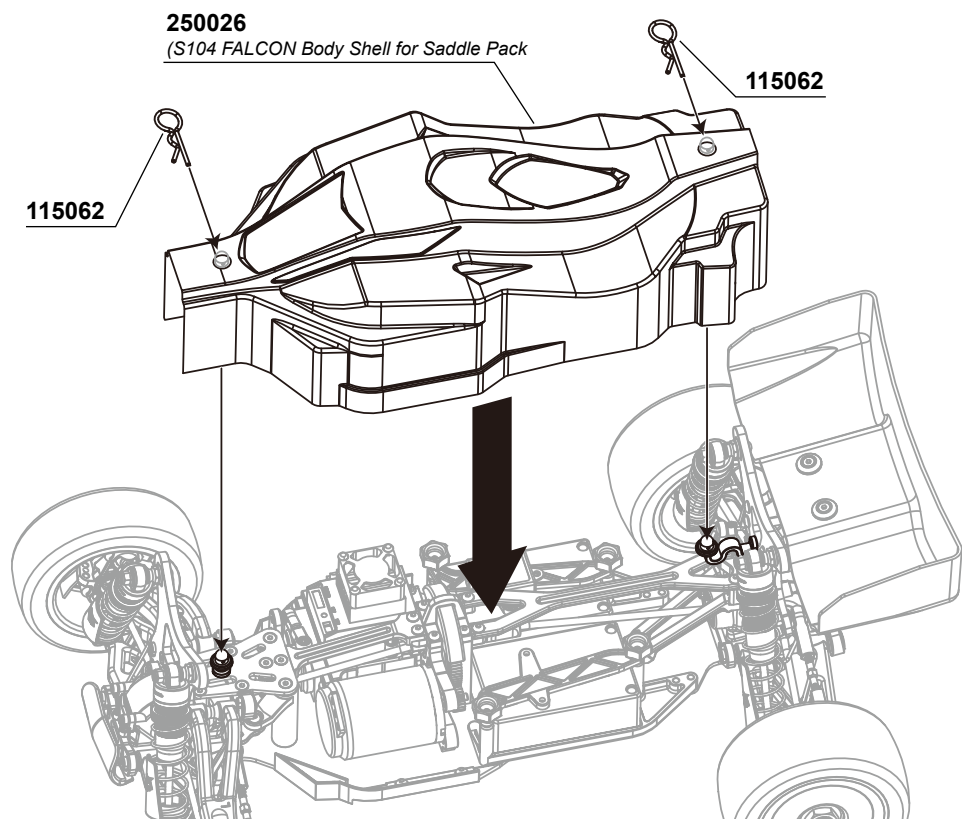
# 54

## S104 FALCON Body Shell for Shorty Pack Assembly



# 55

## S104 FALCON Body Shell for Saddle Pack Assembly





### Track Conditions

- Size:  Open  Med.  Tight  
 Traction:  High  Med.  Low  
 Surface:  Smooth  Med.  Bumpy

Name: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Track: \_\_\_\_\_

**Diff. Oil**  
 Front: \_\_\_\_\_  
 Rear: \_\_\_\_\_

### Electric System

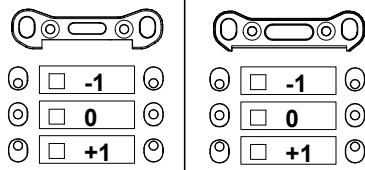
ESC Type: \_\_\_\_\_  
 Motor Type: \_\_\_\_\_  
 Motor Gear/Spur Gear: \_\_\_\_\_  
 Battery Type **A:** Saddle Pack \_\_\_\_\_  
                   **B:** Shorty Pack \_\_\_\_\_

### Tire

Front                                      Rear  
 Type: \_\_\_\_\_                      Type: \_\_\_\_\_  
 Foam: \_\_\_\_\_                      Foam: \_\_\_\_\_

### Front Suspension

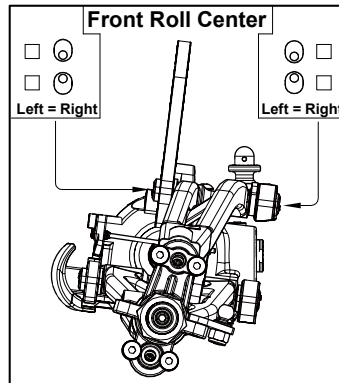
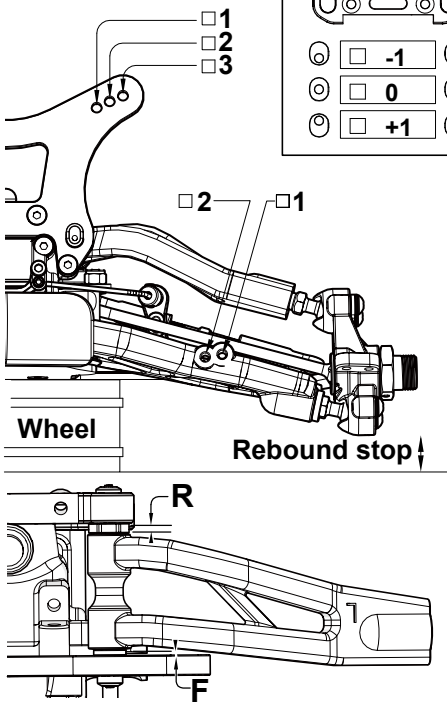
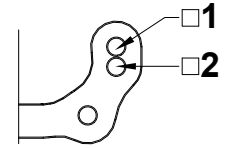
#### Front in-Board Toe



#### Front Shocks

Oil: \_\_\_\_\_  
 Pistons: \_\_\_\_\_  
 Spring: \_\_\_\_\_  
 Spacer: \_\_\_\_\_ mm

#### Steering Ackerman



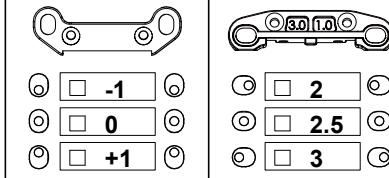
Track width \_\_\_\_\_ mm  
 Camber angle Upper \_\_\_\_\_ mm  
    Lower \_\_\_\_\_ mm  
 Toe angle \_\_\_\_\_ mm  
 Rebound stop \_\_\_\_\_ mm  
 Sway bar  Use \_\_\_\_\_ mm  
                    None

R: \_\_\_\_\_ mm  
 F: \_\_\_\_\_ mm

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### Rear Suspension

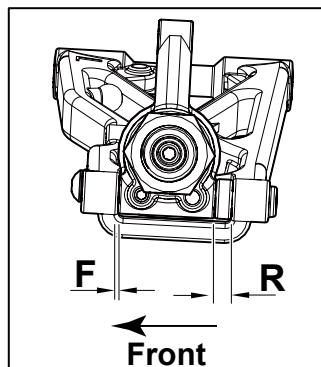
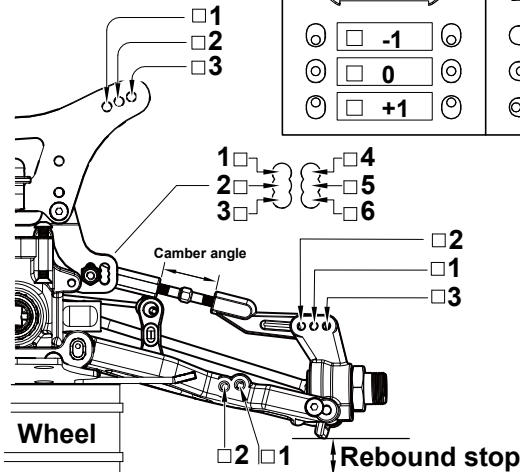
#### Rear Toe-In



#### Rear Shocks

Oil: \_\_\_\_\_  
 Pistons: \_\_\_\_\_  
 Spring: \_\_\_\_\_  
 Spacer: \_\_\_\_\_ mm

Camber angle \_\_\_\_\_ mm  
 Rebound stop \_\_\_\_\_ mm



Wheelbase F \_\_\_\_\_ mm  
                   adjustment R \_\_\_\_\_ mm  
 Sway bar  Use \_\_\_\_\_ mm  
                    None

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_





Name: SWORKZ  
 Date: 2013/7/5  
 Track: \_\_\_\_\_

Diff. Oil  
 Front: 3000  
 Rear: 3000

### Tire

Front JC Rear JC  
 Type: 3003 Type: 3002  
 Foam: Standard Foam: Standard

### Track Conditions

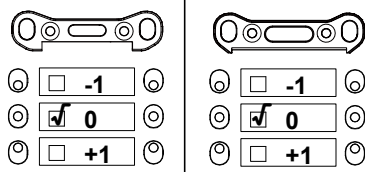
Size:  Open  Med.  Tight  
 Traction:  High  Med.  Low  
 Surface:  Smooth  Med.  Bumpy

### Electric System

ESC Type: Speed Passion Rerenton Pro  
 Motor Type: Speed Passion 3.0V 6.5R  
 Motor Gear/Spur Gear: 22/87T  
 Battery Type A: Saddle Pack LP 5400  
 B: Shorty Pack \_\_\_\_\_

### Front Suspension

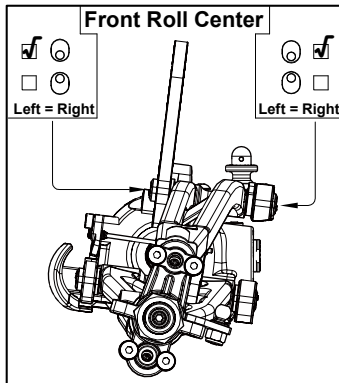
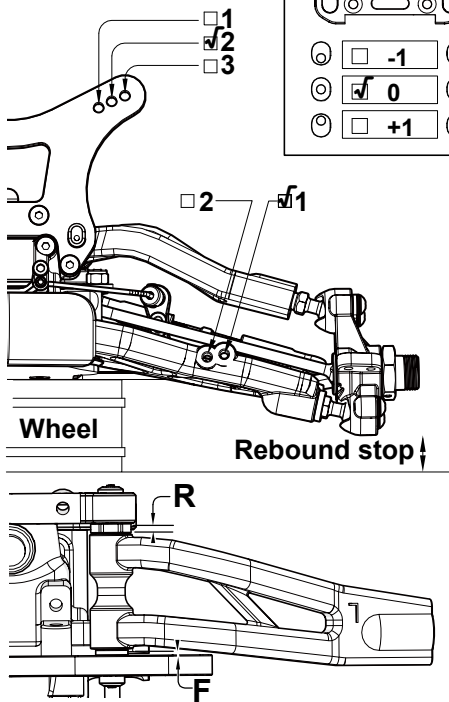
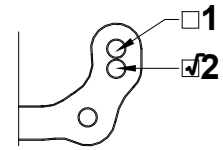
#### Front in-Board Toe



#### Front Shocks

Oil: 550  
 Pistons: 1.2x5  
 Spring: Red  
 Spacer: 5 mm

#### Steering Ackerman



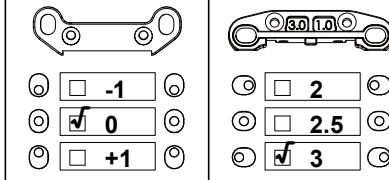
Track width 223 mm  
 Camber angle Upper 0 mm  
 Lower 2 mm  
 Toe angle \_\_\_\_\_  
 Rebound stop \_\_\_\_\_ mm  
 Sway bar  Use 1.1 mm  
 None

R: 0 mm  
 F: 2 mm  
1 mm

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### Rear Suspension

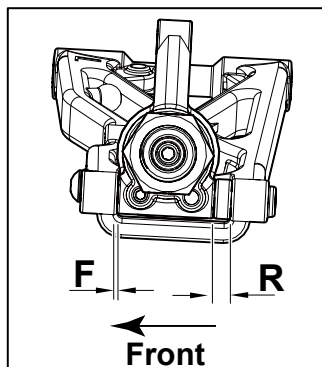
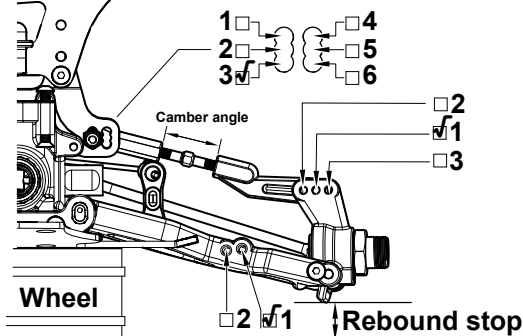
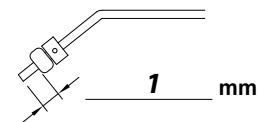
#### Rear Toe-In



#### Rear Shocks

Oil: 500  
 Pistons: 1.2x5  
 Spring: Pink  
 Spacer: 1.2 mm

Camber angle \_\_\_\_\_ mm  
 Rebound stop \_\_\_\_\_ mm



Wheelbase F 3 mm  
 adjustment R \_\_\_\_\_ mm  
 Sway bar  Use 1.2 mm  
 None

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Parts No. List

Part No.	Part Name	Q'ty in Use	Item No.
SW-330321	S104 Center Slipper Clutch Pin M2.0x8mm		
SW-330325	S104 Center Front CVD Drive Shaft 91mm		
SW-330326	S104 Center Rear CVD Drive Shaft 96mm		
SW-330327	S104 Servo Saver Shaft		
SW-330328	S104 Servo Saver Post		
SW-330329	S104 Servo Saver Nut		
SW-330330	S104 Servo Saver Steering Plate		
SW-330331	S104 Steering Linkage Ball Stud 5mm		
SW-330331	S104 Steering Linkage Ball Stud 4.1mm		
SW-330332	S104 Front Upper Arm Arm HingPin		
SW-330341	S104 Aluminum Front Center Support		
SW-330348	S104 Carbon Fiber Steering Knuckle Plate (L)		
SW-330348	S104 Carbon Fiber Steering Knuckle Plate R		
SW-330410	S104 Motor Gear 21T		
SW-330425	S104 Aluminum Center Slipper Clutch Mount for Motor		
SW-400002	O-ring S5		
SW-400008	S104 O-ring for Pinion Gear 7.65x1.2mm		
SW-210037	S104 Shock Seal O-ring 2x2.7mm		
SW-400014	S104 Aluminum Shock Spring Adjust Nut O-Ring 1.5x13.5mm		
SW-400015	S104 Shock Bladder		
SW-400016	S104 Shock Boot		
SW-510045	S104 EK1 Body Decal Sheet		
SW-250017	S104 EK1 Body Window Mask		
SW-610012	S104 Diff. Gasket (0.4T)		
SW-610013	S104 Center Slipper Clutch Pad		

## Spare Part List

Item No.	Part Name
SW-101011	M2.6x6xT0.5mm
SW-101012	M3x6xT0.5mm
SW-101023	Shim 10x12x0.1mm
SW-101024	Shim 10x12x0.2mm
SW-101025	Shim 3.5x10x0.1mm
SW-103001	M3 Nut Lock
SW-103003	Flange M3 Nut Lock
SW-104002	M3x10mm Set Screw
SW-104004	M3x3mm Set Screw
SW-104005	Set Screw M3x4
SW-104008	M4x4mm Set Screw
SW-104009	M3x16mm Set Screw
SW-105004	M2.6x6mm Cap Screw
SW-105011	M3x23mm Hex Soket OH/TP Screw
SW-106001	M3x8mm Hex Soket OH/TP Screw
SW-106002	M3x10mm Hex Soket OH/TP Screw
SW-106005	M3x15mm Hex Soket OH/TP Screw
SW-106008	M3x12mm Hex Soket OH/TP Screw
SW-106010	M3x6mm Hex Soket OH/TP Screw
SW-106011	M3x4mm Hex Soket OH/TP Screw
SW-106014	M2x6mm Hex Soket OH/TP Screw
SW-106015	M3x5mm Hex Soket OH/TP Screw
SW-106018	M3x3mm Hex Soket OH/TP Screw
SW-108001	M3x12mm FH/ST HEX Screw
SW-108003	M3x10mm FH/ST HEX Screw
SW-108006	M3x8mm FH/ST HEX Screw
SW-108007	M3x6mm FH/ST HEX Screw
SW-108014	M3x3mm FH/ST HEX Screw
SW-108017	M2.6x10mm FH/ST HEX Screw
SW-108018	M3x30mm FH/ST HEX Screw
SW-115055	S104 Sway Bar 1.3mm
SW-115056	S104 Sway Bar 1.5mm
SW-115057	S104 Sway Bar 1.8mm
SW-115058	S104 Servo Saver Spring
SW-115059	S104 Center Slipper Clutch Spring
SW-115060	S104 Shock Spring L44mm/1.2mmxP8 (RD) (2pc)
SW-115061	S104 Shock Spring L64mm/1.1mmxP8 (RD)
SW-115062	1/10 Body Clip
SW-116013	Ball Bearing 10x15x4mm
SW-116014	Ball Bearing 6x13x5mm
SW-117003	Flange Ball Bearing 3x6x2.5mm (2pc)
SW-117004	Bushing 5x8x2.5mm
SW-200193	Antenna Tube
SW-210036	S104 Diff. Case Set
SW-210037	S104 Series Pro Shock Seal Kit
SW-250017	S104 FALCON Body Shell for Shorty Pack
SW-250023	S104 Side Guard Set
SW-250026	S104 FALCON Body Shell for Saddle Pack
SW-2501794	S104 Front Up/Lower Arm Set
SW-2501795	S104 Rear Lower Arm Set
SW-2501796	S104 Gear Box Set (F&R)
SW-2501797	S104 Front Steering Knuckle andRear Hub Carrier Set
SW-2501798	S104 Wing Stay Set with Bumper and Arm Holder
SW-2501800	S104 Rear Wing Set
SW-2501801	S104 Settring Bellcrank Set with Servo Horn Set
SW-2501802	S104 Center Plastic Support Set
SW-2501803	S104 Shorty Battery Side Guard with Battery Holder Set
SW-2501804	S104 Spur Gear Set (86/87/88T)
SW-2501806	S104 Plastic Ball End Set
SW-2501807	S104 Shock Spring Holder with Ball End Plastic Parts
SW-2501808	S104 Plastic Insert Set
SW-2501810WH	S104 Front Wheel (WH)
SW-2501811WH	S104 Rear Wheel (WH)
SW-2501845	S104 Saddle Pack Battery Side Guard with Battery Holder Set
SW-330134	Shock Ball Stud 6mmxL6.7
SW-330278	S104 Diff. Bevel Gear Set
SW-330279	S104 Bevel Gear Shaft
SW-330282	S104 Front/Rear Diff. Outdrive
SW-330283	S104 Pin M2.0x10mm
SW-330284	S104 Crown Gear 42T
SW-330285	S104 Pin M2.0x14mm
SW-330286	S104 Pinion Gear 17T
SW-330287	S104 Carbon Fiber Front Shock Tower
SW-330288	S104 Rear Shock Tower Holder

## Spare Part List

Item No.	Part Name
SW-330289	S104 Pro Kit Main Chassis
SW-330290	S104 Aluminum Rear Lower Arm Holder
SW-330291	S104 Aluminum Front Lower Suspension Plate
SW-330292	S104 Front/Rear Lower Arm HingPin (2pc)
SW-330293	S104 Rear Hub Carrier Hing pin (2pc)
SW-330294	S104 CVD Axle (2pc)
SW-330295	S104 CVD Join (2pc)
SW-330296	S104 CVD Drive Shaft 78mm (2pc)
SW-330297	S104 Wheel Hub 14mm (2pc)
SW-330298	S104 Wheel Nut 14mm (2pc)
SW-330299	S104 Steering Linkage Ball Stud 5mm (4pc)
SW-330300	S104 Rear Upper Sus. Arm Turnbuckles (2pc)
SW-330301	S104 Aluminum Race Shock Body (L) (2pc)
SW-330302	S104 Aluminum Race Shock Body (S) (2pc)
SW-330303	S104 Aluminum Shock Seal Cover (2pc)
SW-330304	S104 Aluminum Shock Spring Adjust Nut
SW-330307	S104 Shock Shaft L (2pc)
SW-330308	S104 Shock Shaft S (2pc)
SW-330310	S104 Shock Piston 1.2mmx5 holes (4pc)
SW-330311	S104 Aluminum Shock Cap (2pc)
SW-330312	S104 Aluminum Shock Cap Stud (2pc)
SW-330313	S104 Carbon Fiber Rear Shock Tower
SW-330314	S104 Steering Knuckle Pivot Ball Turnbuckle (4pc)
SW-330315	Sway Bar Linkage Ball Stud (4pc)
SW-330316	S104 Aluminum Knuckle Pivot Ball Washer 2mm (2pc)
SW-330317	S104 Center Slipper Clutch Holder L
SW-330318	S104 Center Slipper Clutch Outdrive S
SW-330319	S104 Center Slipper Clutch Plate
SW-330320	S104 Center Slipper Clutch Nut
SW-330321	S104 Center Slipper Clutch Pin M2.0x8mm (2pc)
SW-330325	S104 Center Front CVD Drive Shaft 91mm
SW-330326	S104 Center Rear CVD Drive Shaft 96mm
SW-330327	S104 Servo Saver Shaft
SW-330328	S104 Servo Saver Post
SW-330329	S104 Servo Saver Nut
SW-330330	S104 Servo Saver Steering Plate
SW-330331	S104 Steering Linkage Ball Stud 5mm (4pc)
SW-330331	S104 Steering Linkage Ball Stud 4.1mm
SW-330332	S104 Front Upper Arm Arm HingPin (2pc)
SW-330341	S104 Aluminum Front Center Support
SW-330348	S104 Carbon Fiber Steering Knuckle Plate Set
SW-330410	S104 Motor Gear 21T
SW-330425	S104 Aluminum Center Slipper Clutch Mount for Motor
SW-400002	O-ring S5 4.8X1.5
SW-400008	S104 O-ring for Pinion Gear 7.65x1.2mm (2pc)
SW-400014	S104 Aluminum Shock Spring Adjust Nut O-Ring 1.5x13.5mm
SW-400015	S104 Shock Bladder
SW-400016	S104 Shock Boot
SW-510045	S104 EK1 Body Decal Sheet
SW-610012	S104 Diff. Gasket (0.4T) (2pc)
SW-610013	S104 Center Slipper Clutch Pad (2pc)

## Option Part List

Item No.	Part Name
SW-115078	S104 Shock Spring L44mm/1.1mmxP8 (OG) (2pc)
SW-115079	S104 Shock Spring L44mm/1.1mmxP10 (PK) (2pc)
SW-115080	S104 Shock Spring L64mm/1.0mmxP8 (OG) (2pc)
SW-115081	S104 Shock Spring L64mm/1.0mmxP10 (PK) (2pc)
SW-115082	S104 Shock Spring L42mm/1.2mmxP10 (SB) (2pc)
SW-115083	S104 Shock Spring L62mm/1.1mmxP10 (SB) (2pc)
SW-115084	S104 Sway Bar 1.1mm
SW-115085	S104 Sway Bar 1.2mm
SW-115086	S104 Sway Bar 1.4mm
SW-115087	S104 Sway Bar 1.6mm
SW-210039	S104 Series F/R Diff. Set (42T)
SW-210040	S104 Series Center Slipper Clutch Set
SW-210041	S104 series Pro Shock Set
SW-2501800ABK	S104 Rear Wing Set (W/O Holes) (BK)
SW-2501800AFY	S104 Rear Wing Set (W/O Holes) (FY)
SW-2501800AOG	S104 Rear Wing Set (W/O Holes) (OR)
SW-2501800AWH	S104 Rear Wing Set (W/O Holes) (WH)
SW-2501956	S104 Front Wheel (FY) (2pc)
SW-2501957	S104 Rear Wheel (FY) (2pc)
SW-330323	S104 Aluminum Center Slipper Clutch Mount R
SW-330324	S104 Motor Gear 20T
SW-330333	S104 Aluminum Rear Kick up Insert
SW-330335	S104 Aluminum Rear Wing Washer
SW-330337	S104 Carbon Fiber Battery Holder Set for Shorty Pack
SW-330338	S104 Aluminum Battery Holder Nut (4pc)
SW-330339	S104 Carbon Fibe Rear Center Support
SW-330340	S104 Carbon Fibe Settring Bellcrank Plate
SW-330342	S104 Aluminum Front Upper Arm Holder
SW-330409	S104 Motor Gear 19T
SW-330411	S104 Motor Gear 22T
SW-330412	S104 Motor Gear 23T
SW-330413	S104 Motor Gear 24T
SW-330418	S104 Carbon Fiber Battery Holder Set for Saddle Pack
SW-330431	S104 Aluminum Center Slipper Clutch Plate







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