



# INSTRUCTION MANUAL



1/8 Scale Radio Controlled Gas Powered Off Road 4wd Racing Buggy

- Length/494 mm (19.4)**
- Width/305 mm (12.0")**
- Height/182 mm (7.2")**
- Gear Ratio/11.72: 1**
- Ground Clearance/27 mm (1.1")**
- Wheelbase/324 ~ 329 mm (12.8" ~ 13.0")**
- Track/F: 258 mm (10.2"), R: 261 mm (10.3")**



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This radio controlled racing buggy is not a toy!  
 This high-performance R/C model is recommended for ages 14 and older.

# STORM Pro™



Thank you for purchasing the GS Racing Storm radio controlled model. Please read through this instruction manual carefully before you attempt to assemble your Storm Pro kit.

This manual contains building steps and instructions you will use to set up your Storm Pro buggies. Follow the directions in this manual closely so you don't encounter any problems on start up. We hope that you will enjoy your new GS Racing gas buggy. If you ever have any questions or need setup help, please feel free to contact us.

See you at the track!

**-GS Racing-**

# Required Equipment for Operation

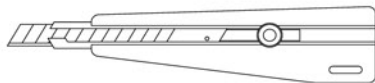
## 1. Tools required for building and maintenance:

- Hobby knife
- Needle nose pliers
- Precision ruler or caliper
- Phillips screwdriver (#0, #1, #2)
- Hobby scissors
- Wire cutters
- Thread locking compound
- CA glue
- Rubber cement

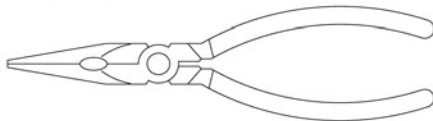
- Precision Ruler or Caliper



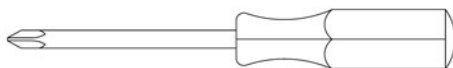
- Hobby Knife



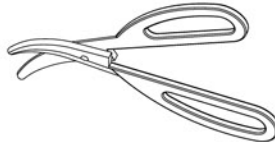
- Needle Nose Pliers



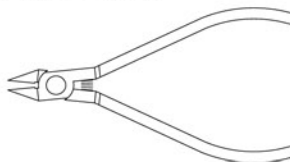
- Phillips Screwdriver (#0, #1, #2)



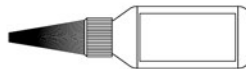
- Hobby Scissors



- Wire Cutters



- Thread Locking Compound

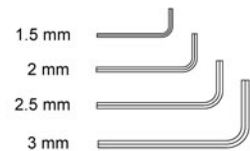


- CA Glue & Rubber Cement

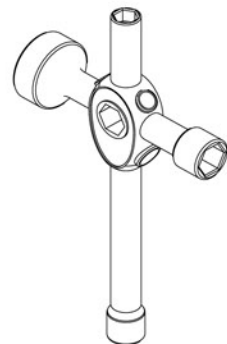


## Tools Included:

- Hex Wrench



- Cross Wrench



## WARNING!

Do not use a power screwdriver to install screws into nylon or plastic materials. The fast rotation speed can heat up the screws being installed. They can then break the molded parts or strip the threads during installation.

## 2. Additional items needed for operation:

Pro Kit #GS 2004 (**\*\*Tires, wheels, and foam tire inserts are not included in the kit!**)

- R/C 2-channel surface frequency radio system with 2 servos (FM recommended!)
- Ni-Cd battery pack (5-cell hump type)
- .21 glow powered rear exhaust R/C racing engine with exhaust system and air filter
- Glow igniter
- Glow fuel
- Fuel bottle
- Starter box (GS Racing Turbo Box recommended!)
- 12-volt battery or two 6-cell 7.2-volt battery packs for starter box
- Polycarbonate Paint

# Before You Start

- 1 Check all parts to ensure that there are no missing or defective parts. If you do find any problems regarding this issue, please contact your local dealer or our GS Racing Distributor.

Note: Wheels, tires, foam tire inserts, engine, exhaust system, and air filter are not included in this STORM Pro kit!

- 2 Symbols used throughout this instruction manual:



Apply CA glue.



Ensure smooth non-binding movement while assembling.



Assemble front and rear sides the same way.



Assemble left and right sides the same way.



Check set-up sheet.



Attention!



Soak air filter oil.



Apply threadlock (screw cement).



Front of buggy.



Assemble in the specified order.

- 3 The assembly is arranged so that you will open and finish that bag before you go to the next one. Sometimes you will have parts remaining at the end of a bag. These will become part of the next bag.
- 4 We are constantly updating parts to improve our products. These changes, if any, will be noted in supplementary sheets located in a parts bag or inside the box. Check the box before you start and each bag as it is opened. When a supplement is found, attach it to the appropriate section of the manual.
- 5 The instructions in each step are numbered in the order you complete them, so please follow the key numbers (the numbers in circles) with the words in each steps. The key numbers are also in the drawing to help you locate them faster.
- 6 When we refer to left and right sides of the buggy, we are referring to the driver's point of view inside the car.



# 1 Gear Differential

**X3**  
4 x 4mm Set Screw

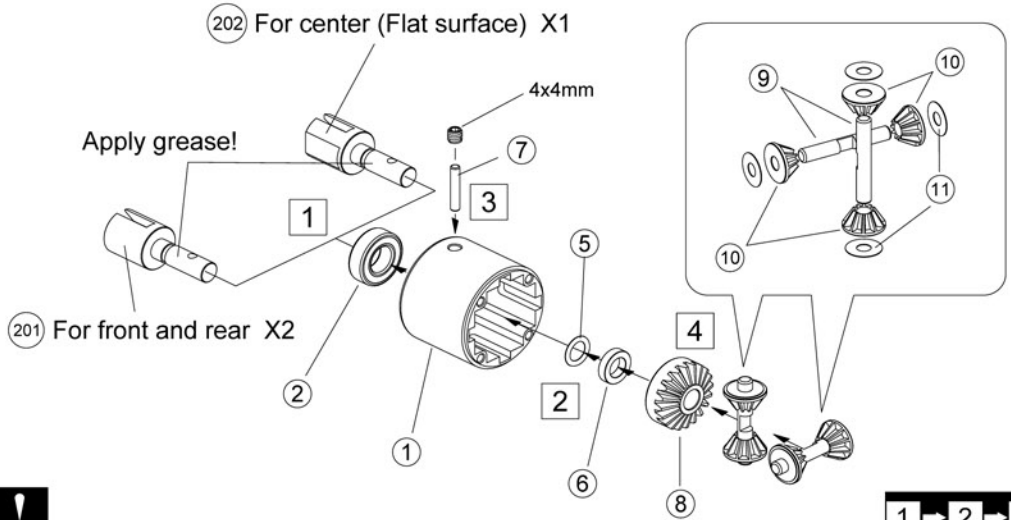
**X12**  
11. 4x10x0.3mm Shim

**X3**  
5. O-ring AS009

**X3**  
6. 6x10x2.5mm Bushing

**X3**  
7. 2.5 x 13.8mm Pin

**X3**  
2. 8x16mm Ball Bearing



**!** Build three differentials: front, center, and rear.

# 2 Gear Differential

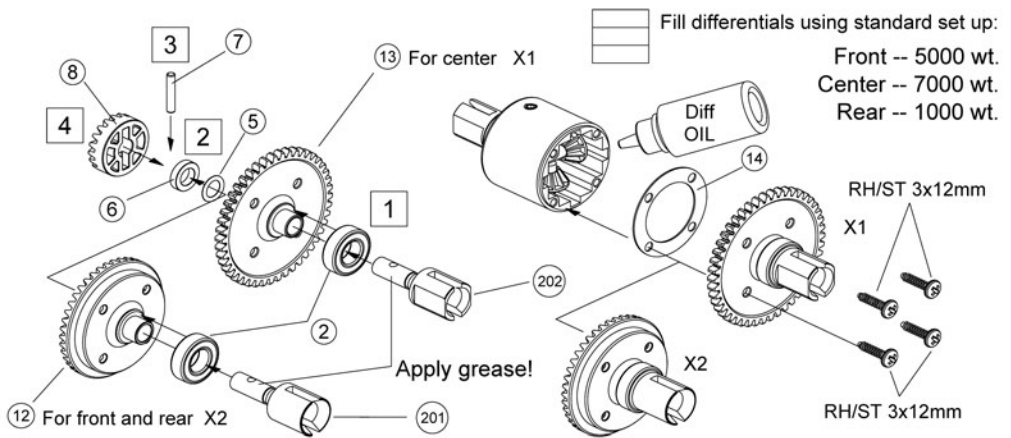
**X12**  
3x12mm RH/ST Screw

**X3**  
5. O-ring AS009

**X3**  
6. 6x10x2.5mm Bushing

**X3**  
7. 2.5 x 13.8mm Pin

**X3**  
2. 8x16mm Ball Bearing



**!** Fill oil up to where the differential gear pins cross.  
**GS Racing Silicone Diff. Oil** recommended!

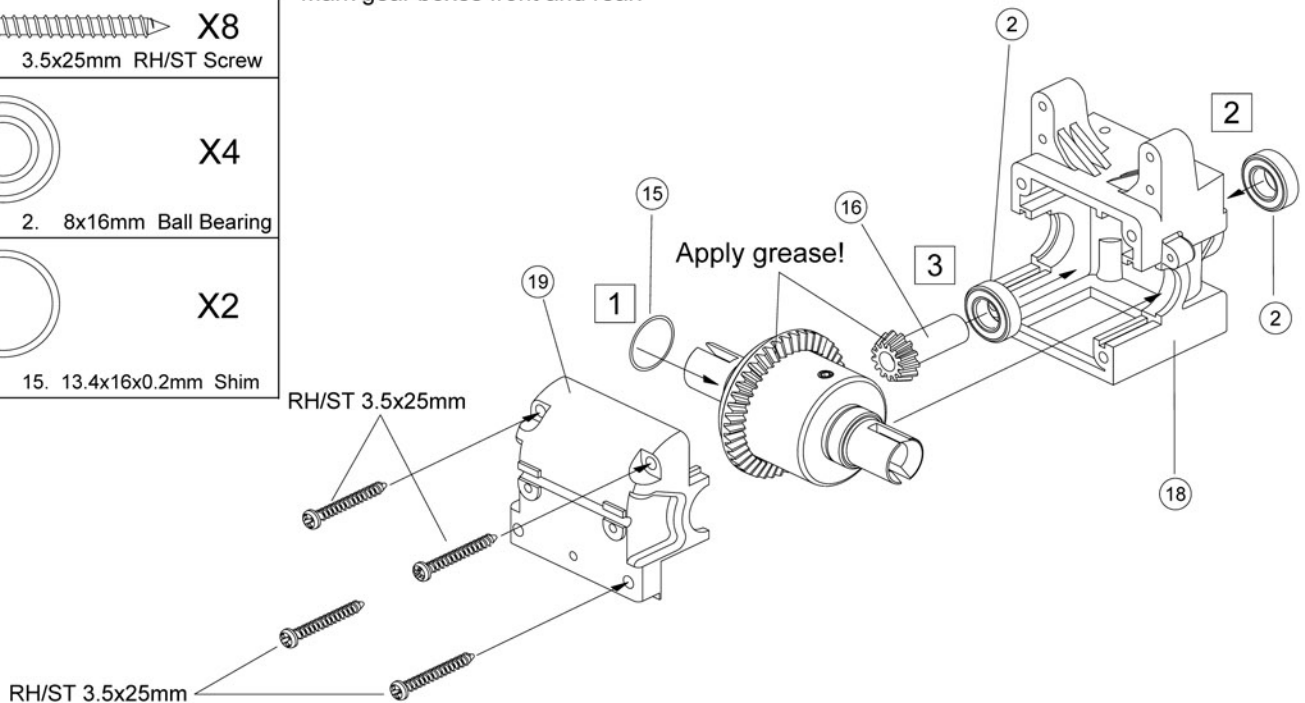
# 3 Gear Box

**X8**  
3.5x25mm RH/ST Screw

**X4**  
2. 8x16mm Ball Bearing

**X2**  
15. 13.4x16x0.2mm Shim

Build two gear boxes.  
Mark gear boxes front and rear.



1 -> 2 -> 3



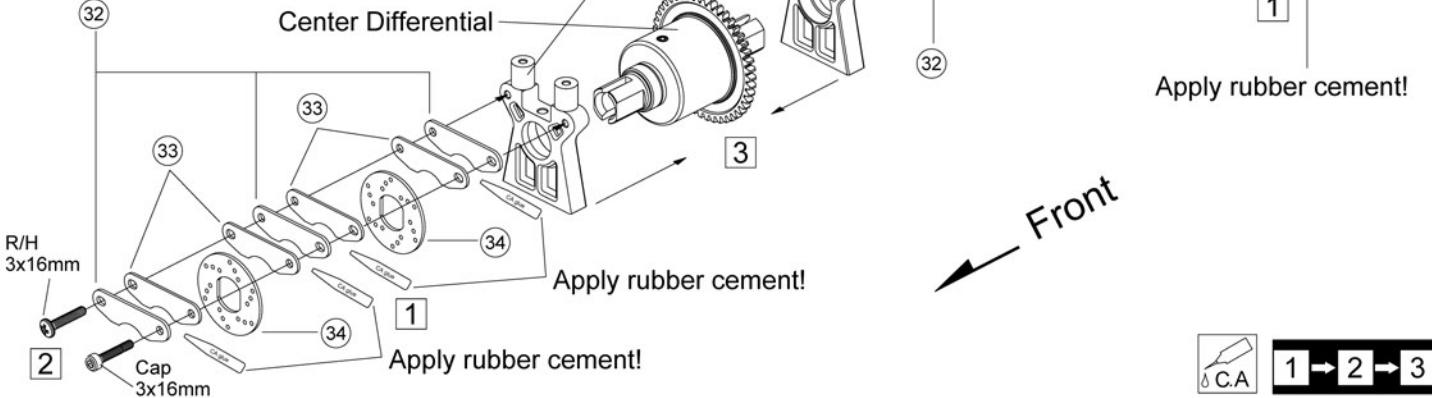
## 6 Center Gearbox

**!** Tighten 3x16mm cap screws evenly to ensure even clearance between brake discs and pads.

X3  
3x16mm Cap Screw

X1  
3x16mm R/H Screw

**!** Sand contact area of brake plates before gluing to ensure a better grip.



## 7 Center Gearbox

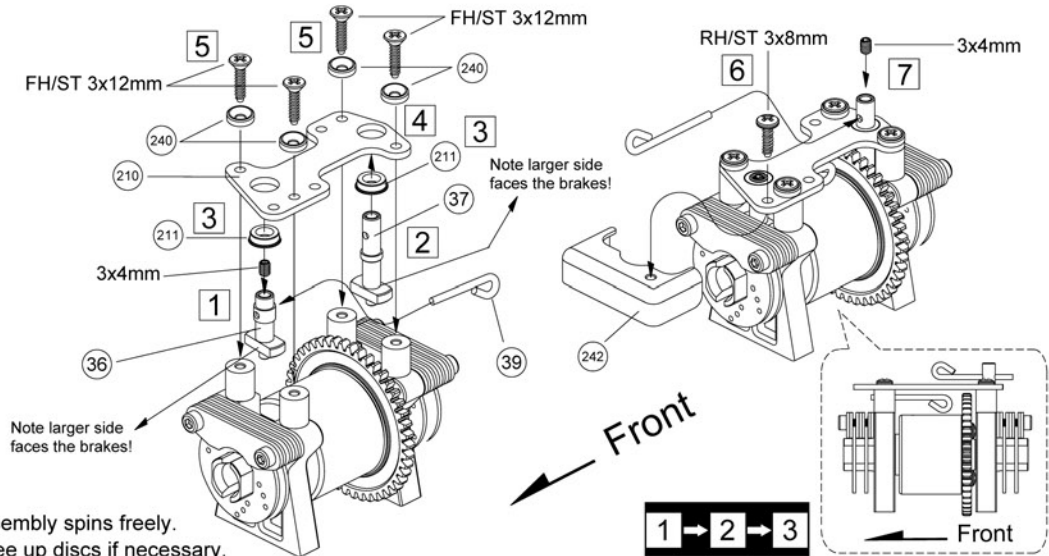
X2  
3x4mm Set Screw

X4  
3x12mm FH/ST Screw

X2  
211. 5x8mm Flanged Ball Bearing

X4  
240. M3 Countersunk Washer

X1  
3x8mm RH/ST Screw



## 8 Steering

X2  
4x12mm F/H Screw

X2  
3mm Lock Nut

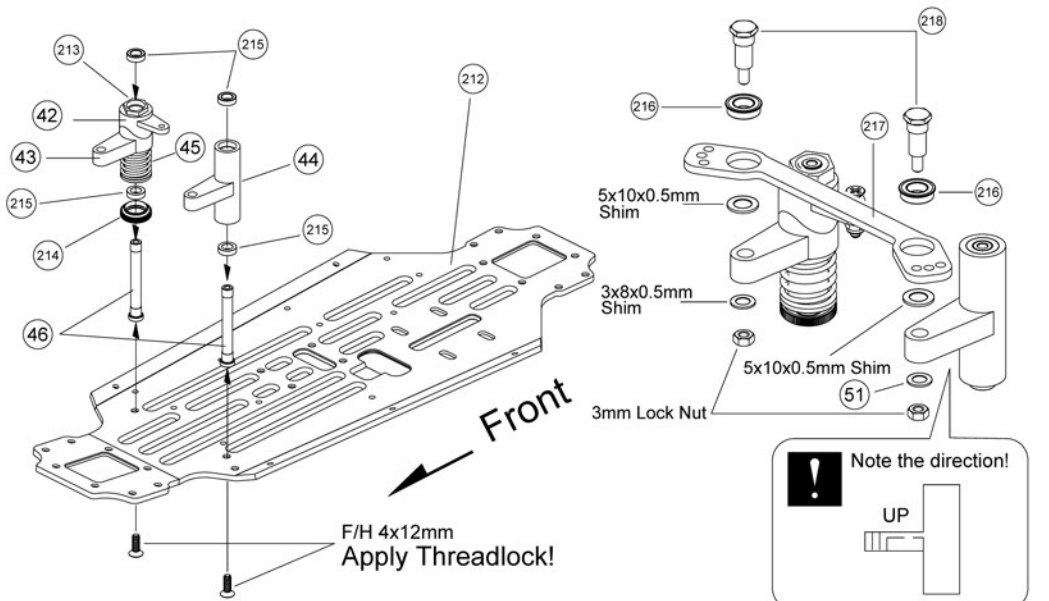
X2  
218. Servo Saver Arm Bushing

X2  
216. 6x10mm Flanged Ball Bearing

X2  
5x10x0.5mm Shim


X2  
51. 3x8x0.5mm Shim


X4  
215. 6x10mm Ball Bearing

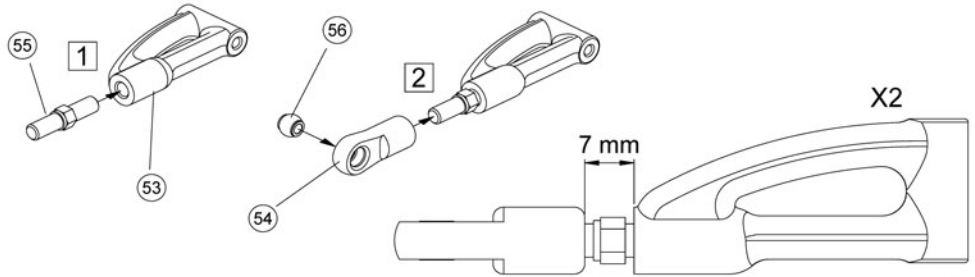


## 9 Front Suspension

 X2  
56. 6.8x6mm Ball

 X2  
55. 5x25mm Turnbuckle

 X2  
54. 6.8mm Ball End (S)




**1 → 2 → 3** Assemble Right and Left sides.

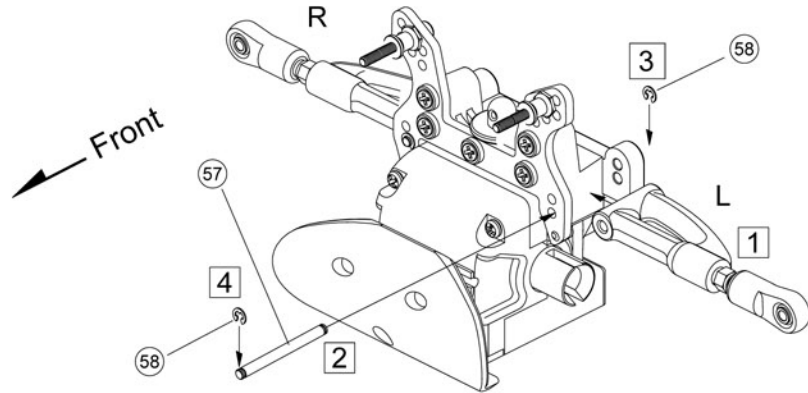
1:1



## 10 Front Suspension

 X4  
58. E-clip E-2.5

 X2  
57. 3x34mm Hinge Pin



**1 → 2 → 3**

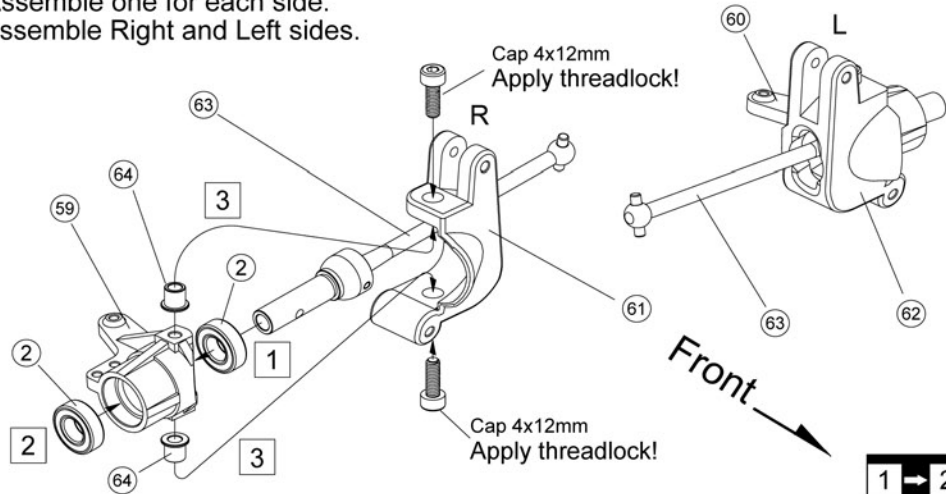
## 11 Front Suspension

 X4  
4x12mm Cap Screw

 X4  
64. Knuckle Collar

 X4  
2. 8x16mm Ball Bearing

Assemble one for each side.  
Assemble Right and Left sides.



**1 → 2 → 3**


## 12 Front Suspension

 X2  
3x4mm Set Screw

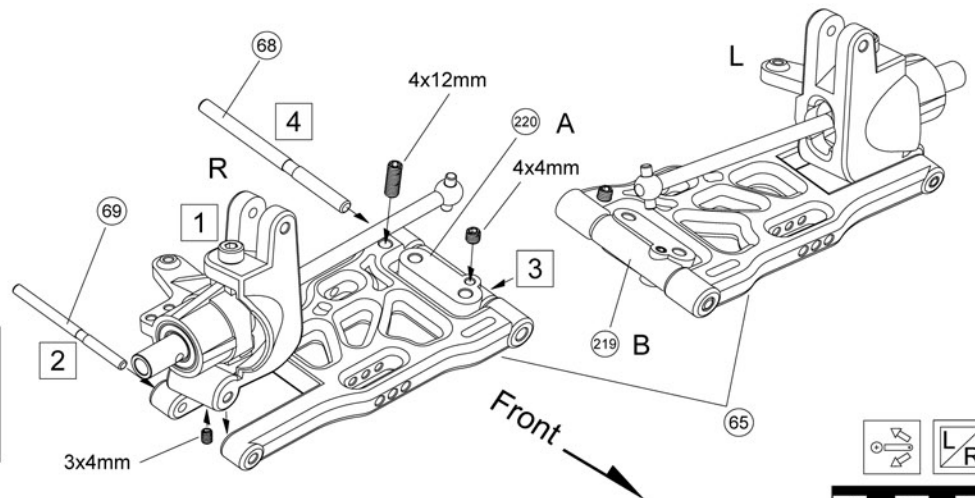
 X2  
4x4mm Set Screw

 X2  
4x12mm Set Screw

 X2  
69. 3x36mm Hinge Pin

 X2  
68. 4x57mm Hinge Pin

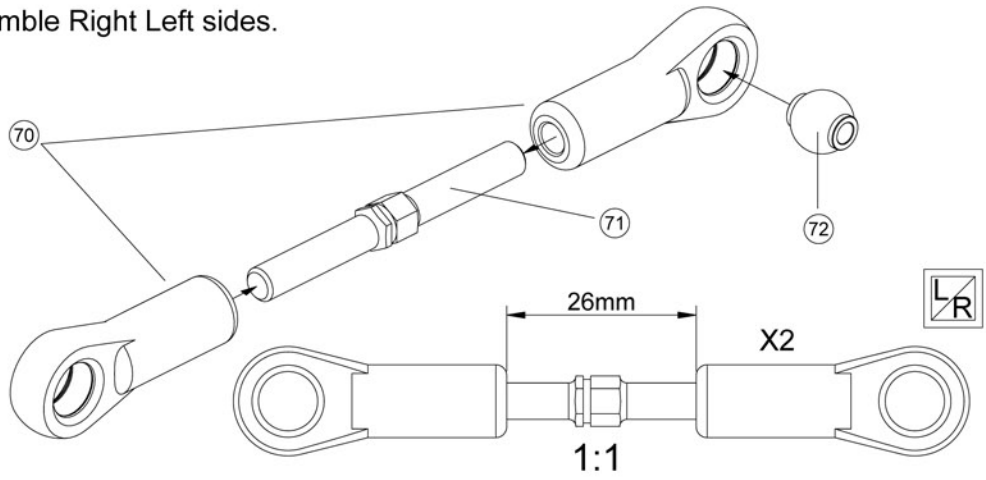
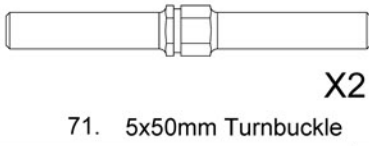
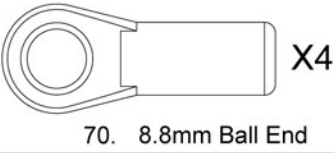
Assemble Right and Left sides.



**1 → 2 → 3**

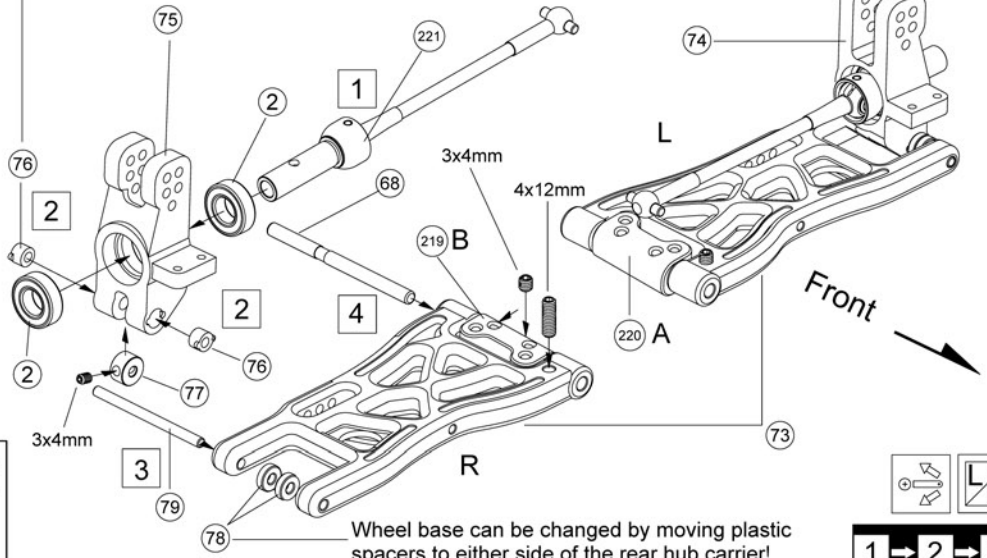
# 13 Rear Suspension

Assemble Right Left sides.

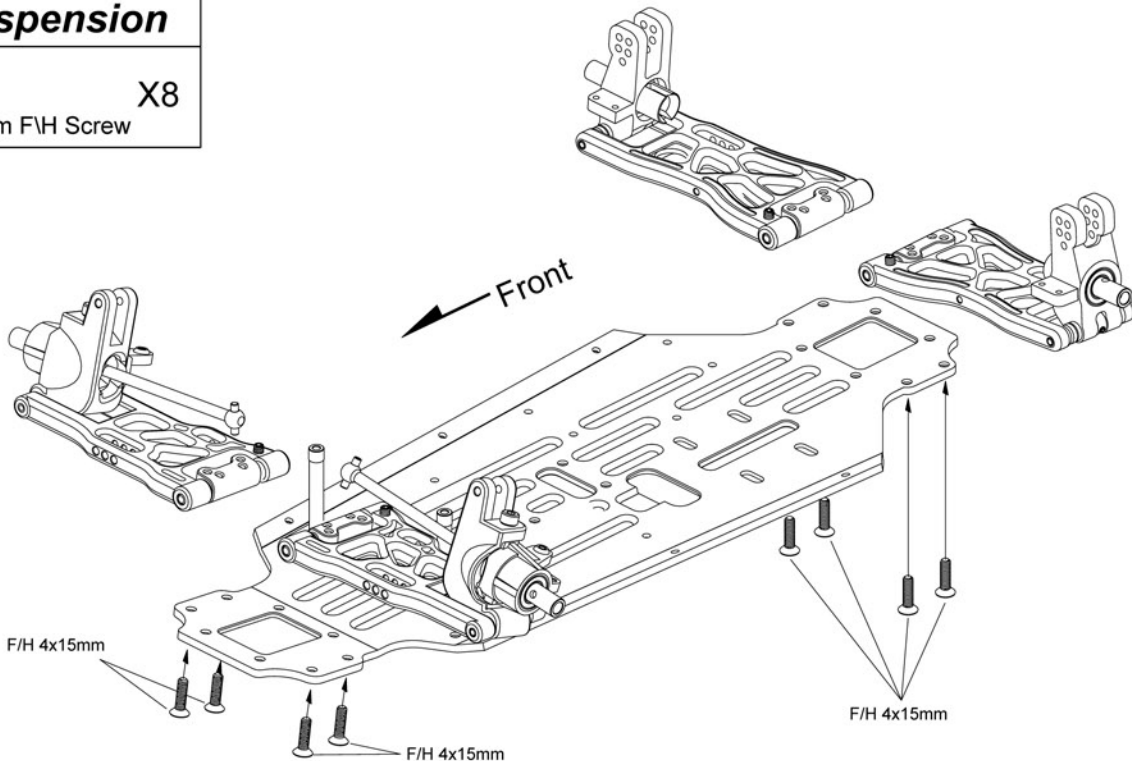


# 14 Rear Suspension

Rear toe-in can be adjusted by switching the adjusters! Refer to page 39.




# 15 Suspension



# 16 Chassis

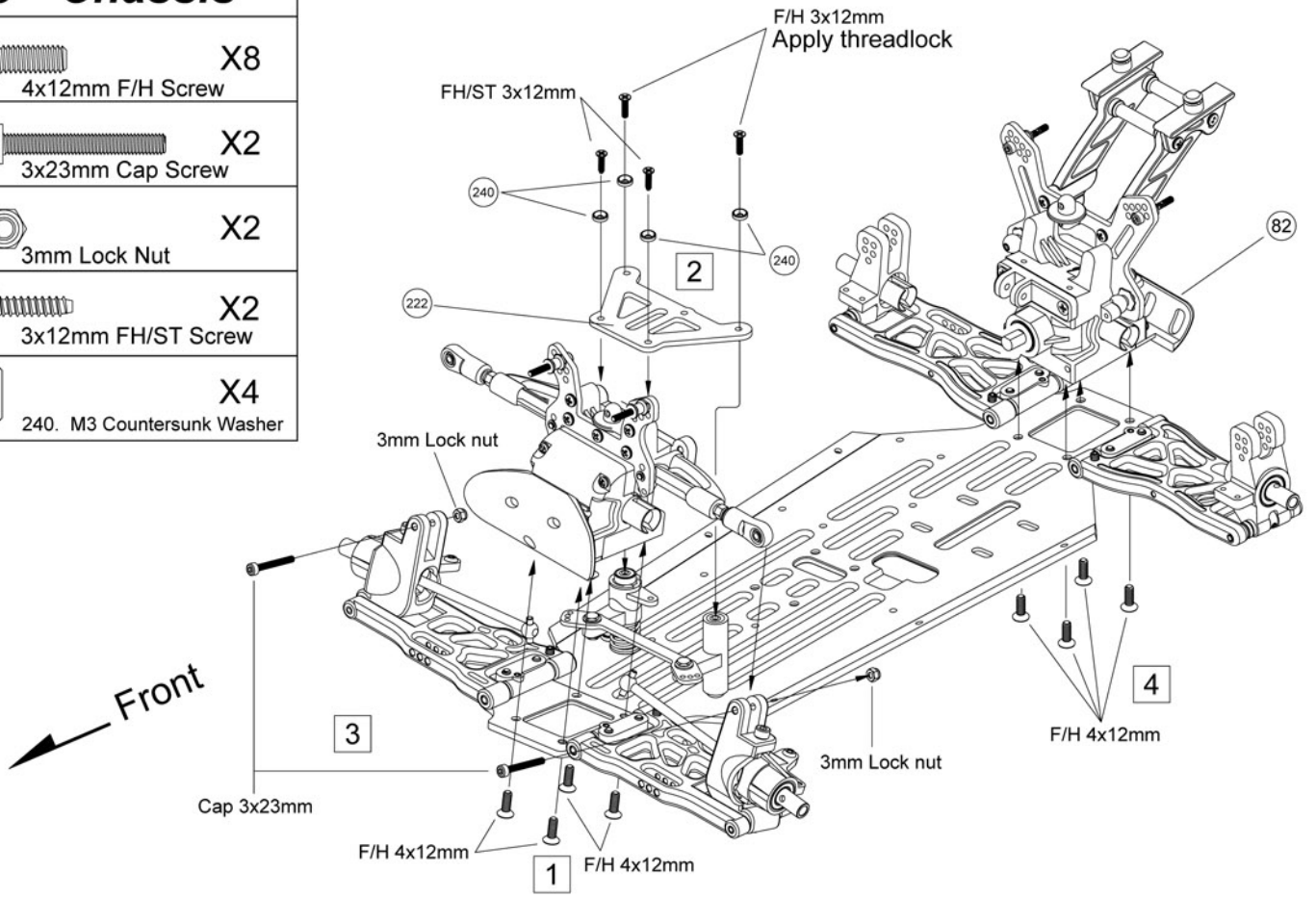
 X8  
4x12mm F/H Screw


 X2  
3x23mm Cap Screw

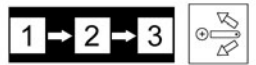
 X2  
3mm Lock Nut

 X2  
3x12mm FH/ST Screw

 X4  
240. M3 Countersunk Washer




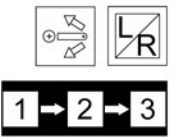
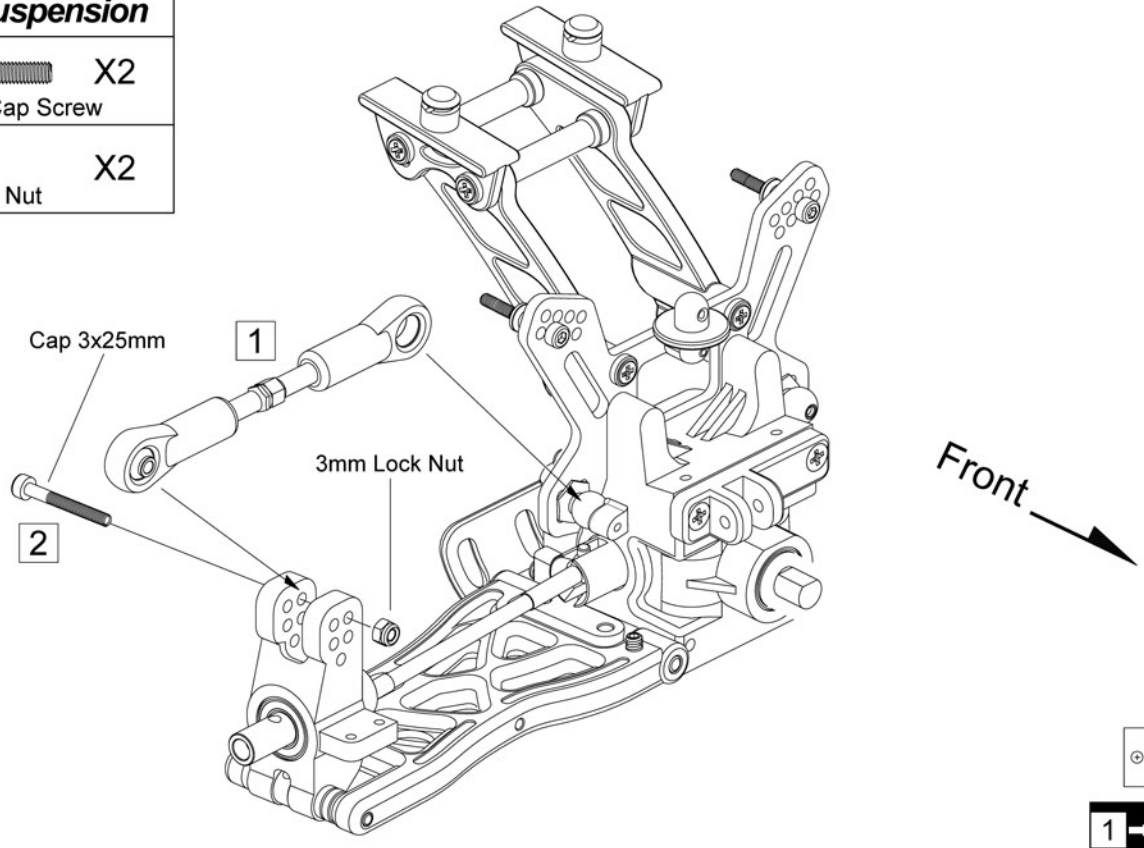
 Check for binding after final assembly of all suspension parts!



# 17 Rear Suspension

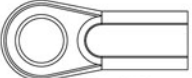






 X2  
3x25mm Cap Screw



 X2  
3mm Lock Nut

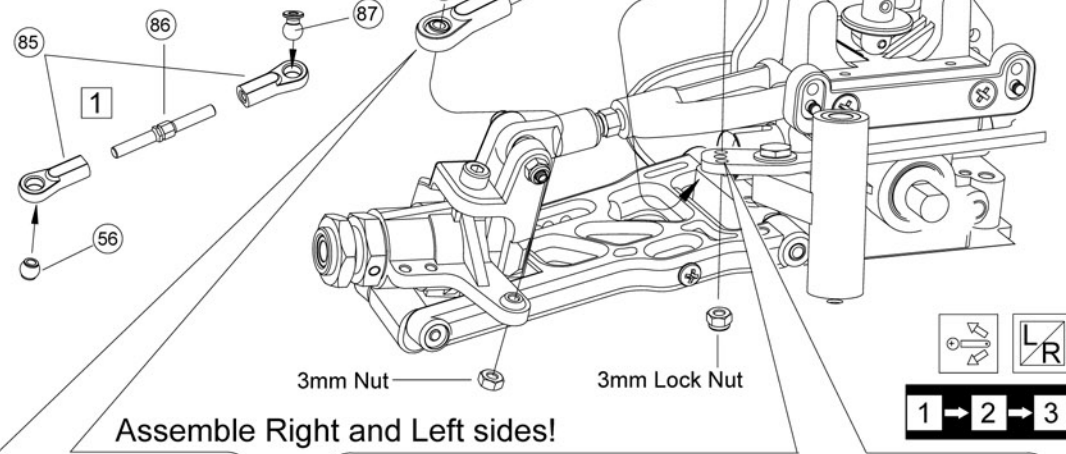




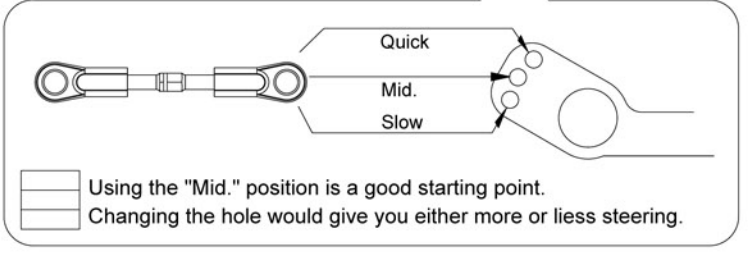
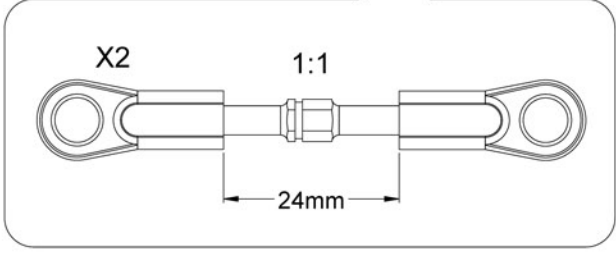
# 18 Steering

	X4
85. 6.8mm Ball End (R)	
	X2
86. 4x46mm Turnbuckle	
	X2
56. 6.8x6mm Ball	
	X2
87. 6.8x9mm Pivot Ball	
	X2
3x16mm F/H Screw	
	X2
3mm Nut	
	X2
3mm Lock Nut	










	X2
240. M3 Countersunk Washer	
	X2
3x20mm F/H Screw	

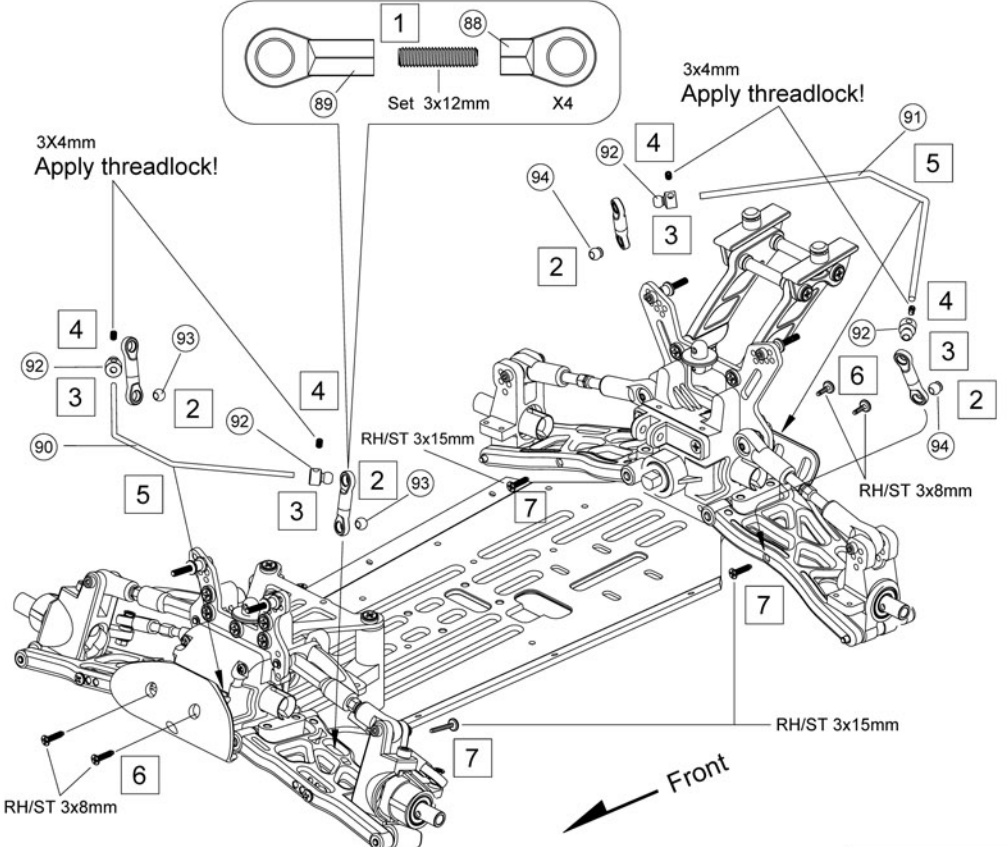


Assemble Right and Left sides!



# 19 Rear Suspension

	X4
88. 5.8mm Ball End (S)	
	X4
89. 5.8mm Ball End (M)	
	X4
3x12mm Set Screw	
	X4
3x4mm Set Screw	
	X2
93. 5.8x4.6mm Ball	
	X2
94. 5.8x5.4mm Pivot Ball	
	X4
92. 5.8x11mm Stabilizer Ball	
	X4
3x8mm RH/ST Screw	
	X4
3x15mm RH/ST Screw	



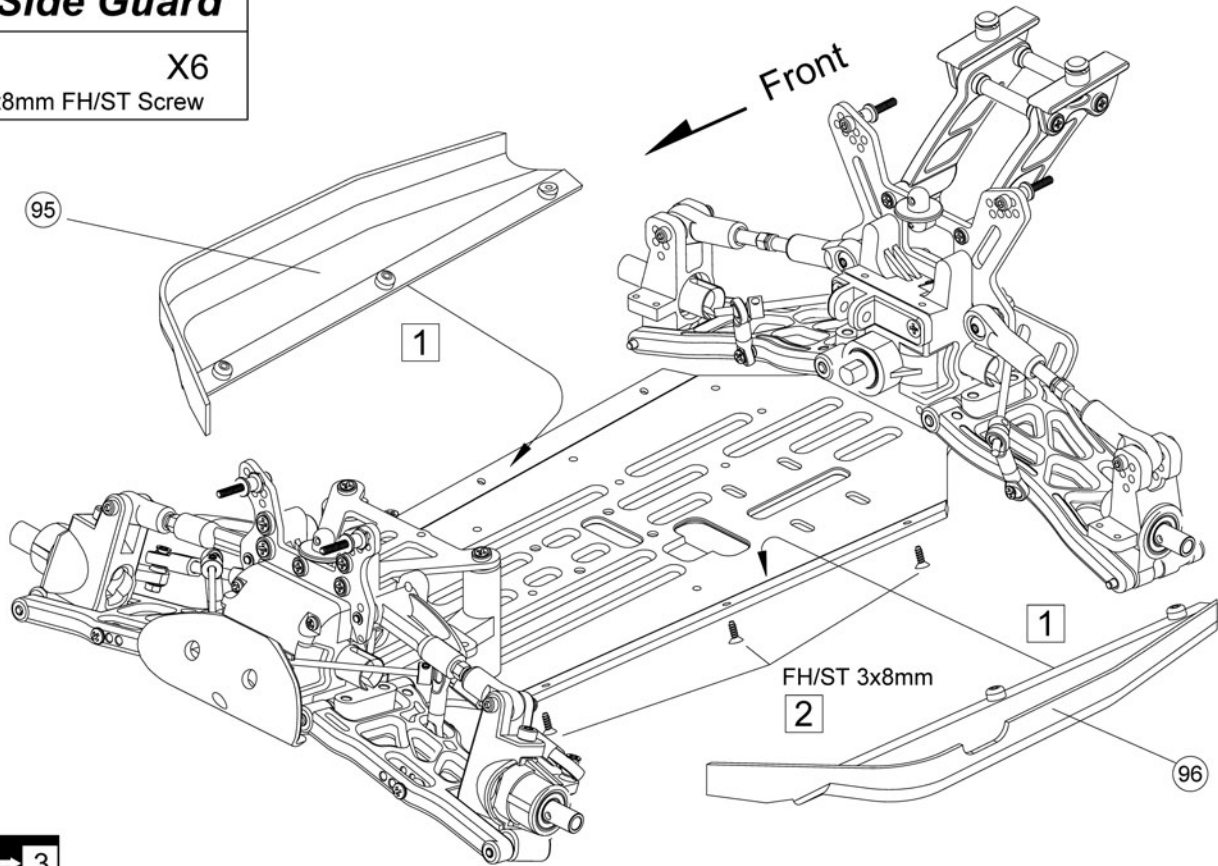
**!** Do not over tighten 3x8mm RH/ST 3x8mm screws. The sway bars should move freely.



## 20 Side Guard

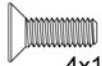


X6  
3x8mm FH/ST Screw



1 → 2 → 3

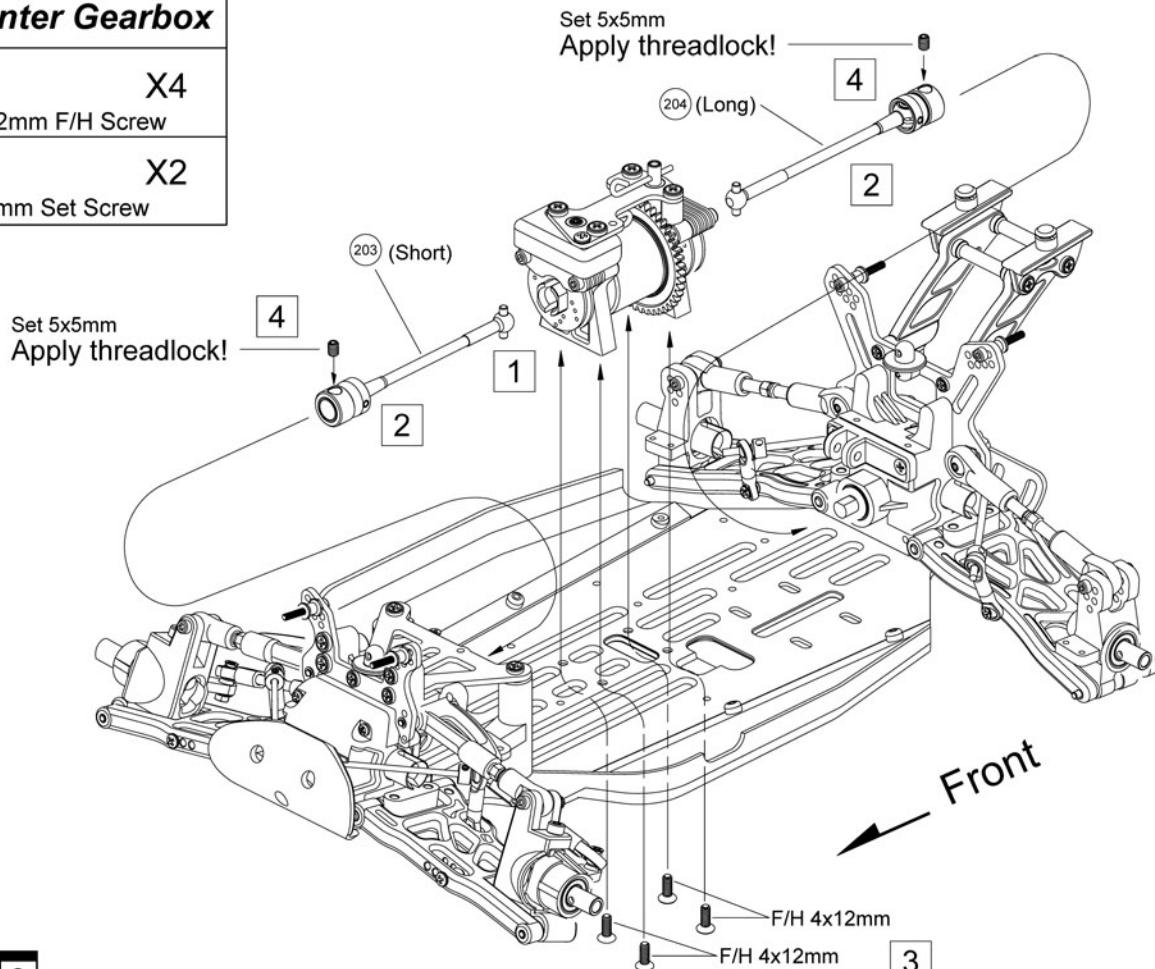
## 21 Center Gearbox



X4  
4x12mm F/H Screw



X2  
5x5mm Set Screw



1 → 2 → 3

## 22 Chassis

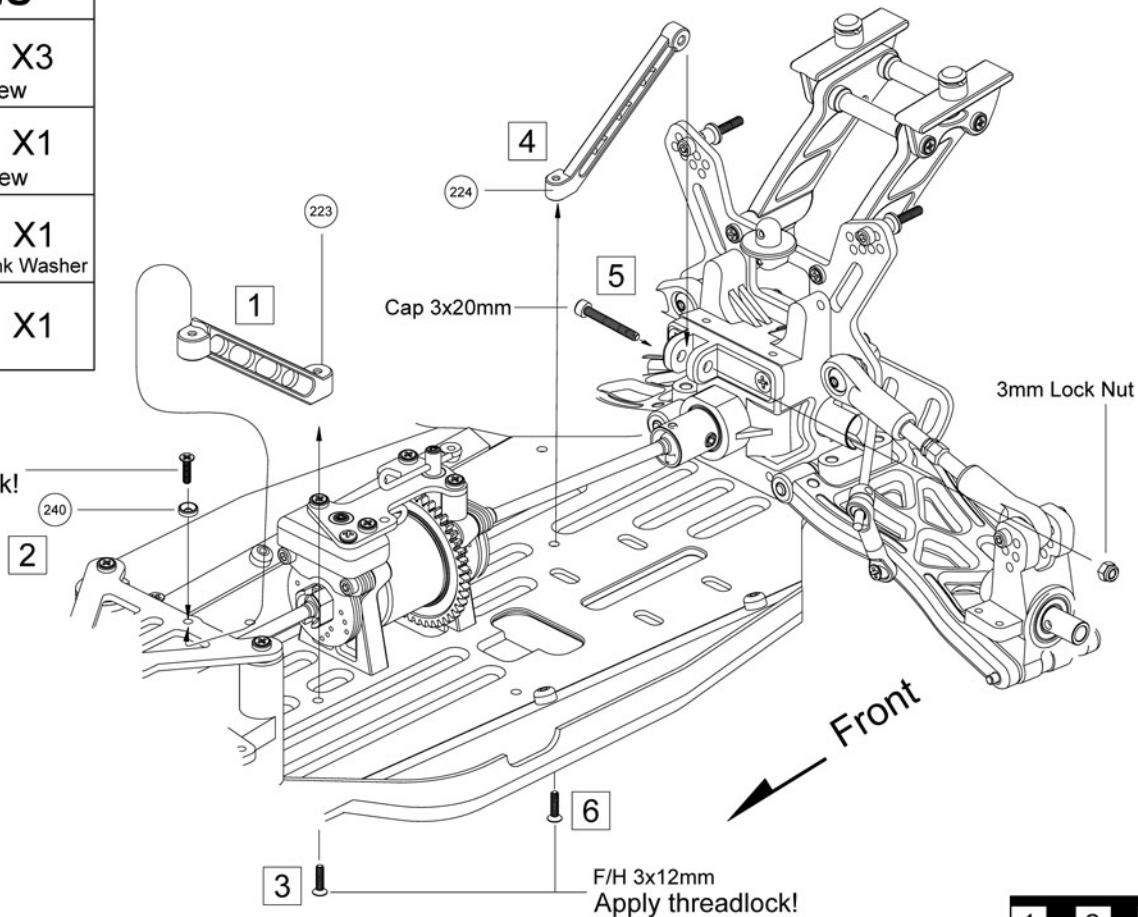
 X3  
3X12mm F/H Screw

 X1  
3x20mm Cap Screw

 X1  
240. M3 Countersunk Washer

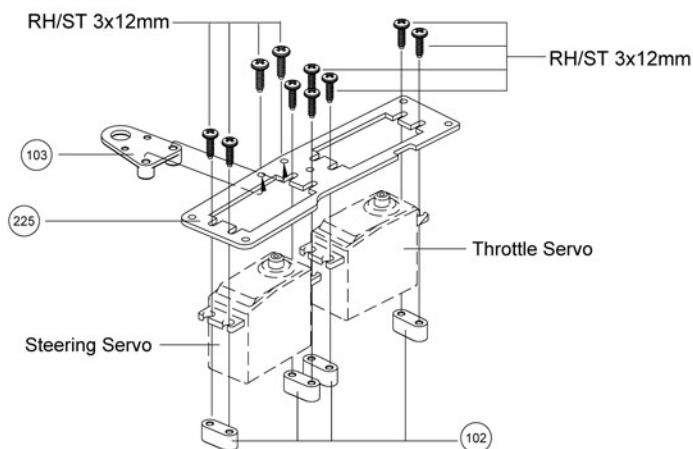
 X1  
3mm Lock Nut

F/H 3x12mm  
Apply threadlock!



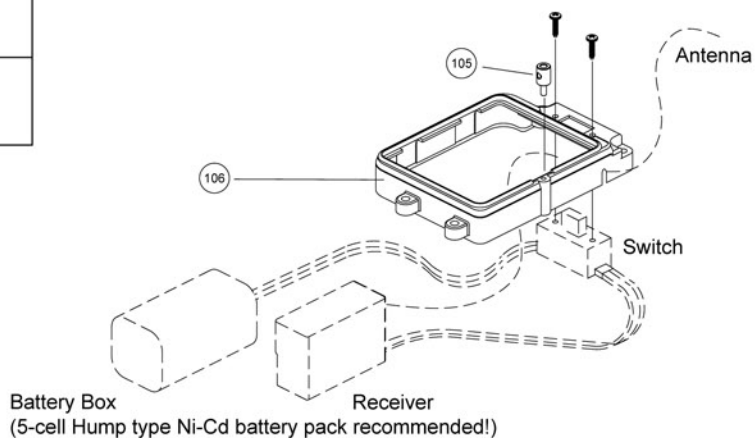
## 23 Radio

 X10  
3x12mm RH/ST Screw



## 24 Radio

 X1  
105. Pin Holder



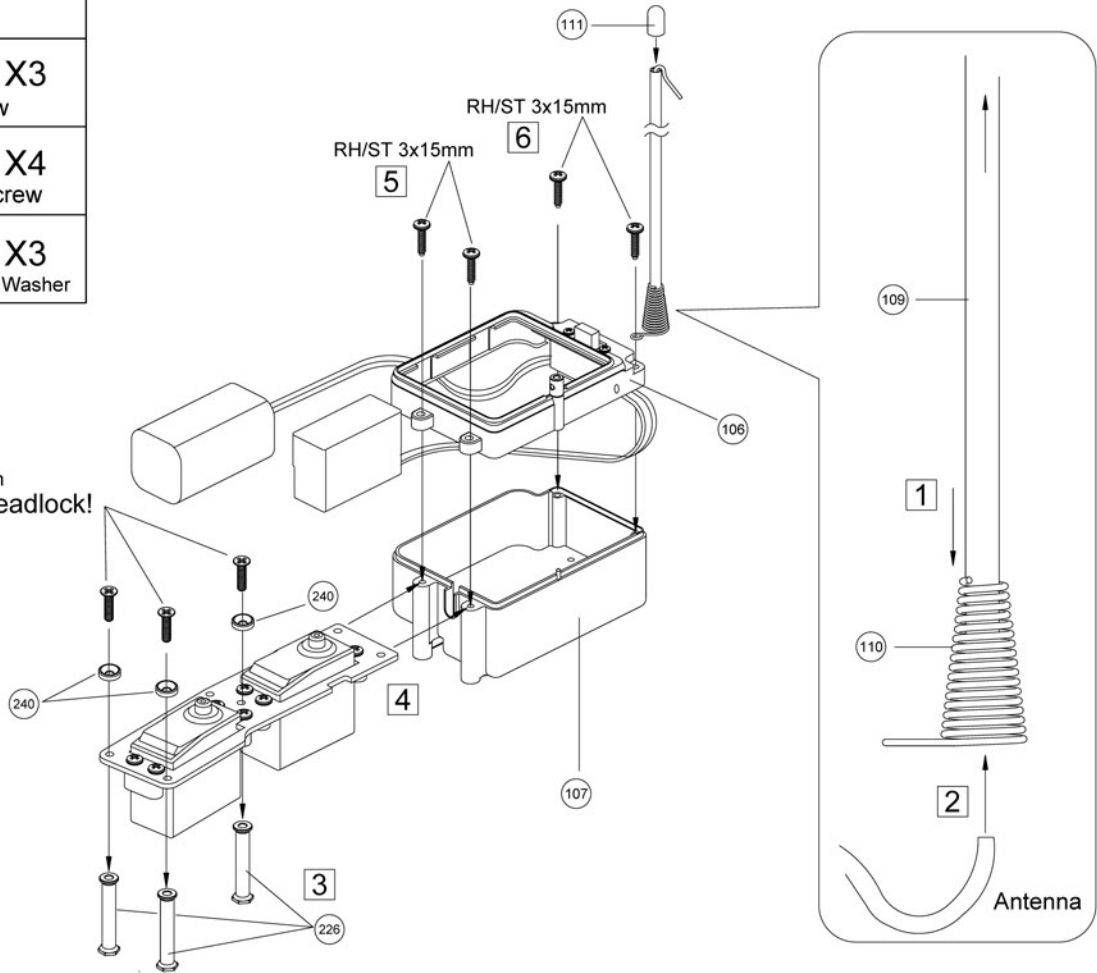
# 25 Radio

**X3**  
3x10mm F/H Screw

**X4**  
3x15mm RH/ST Screw

**X3**  
240. M3 Countersunk Washer

F/H 3x10mm  
Apply threadlock!

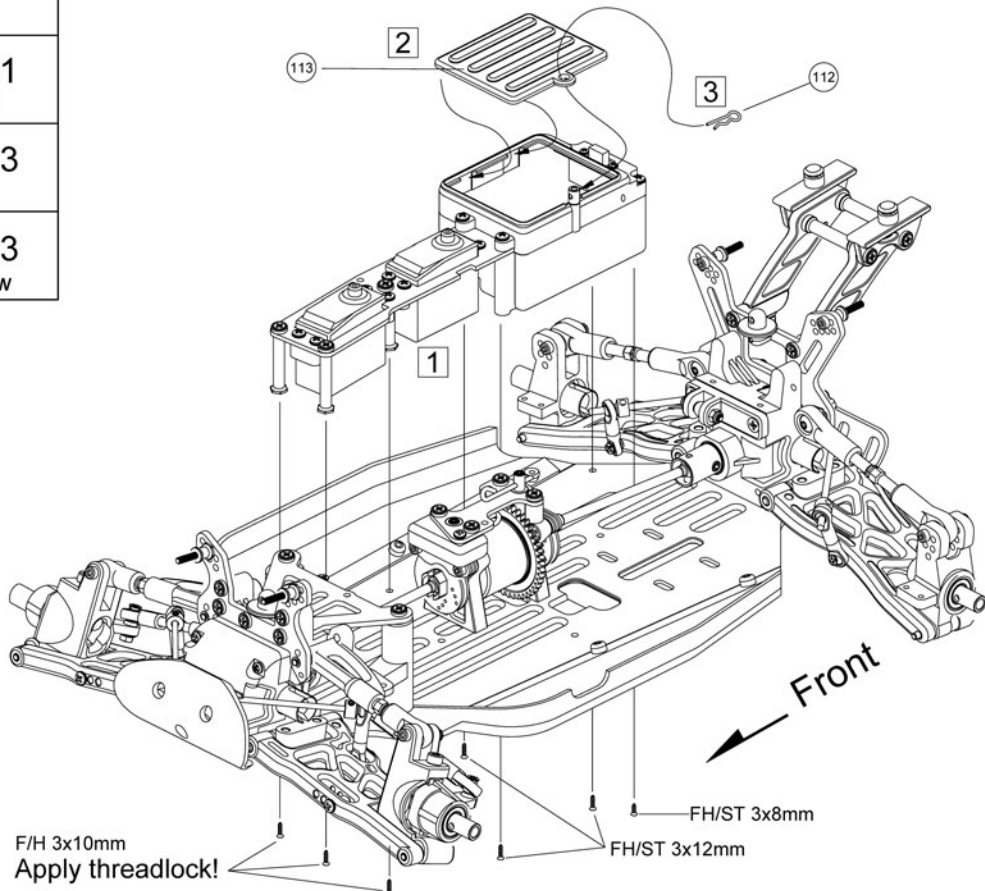


# 26 Radio

**X1**  
3x8mm FH/ST Screw

**X3**  
3x10mm F/H Screw

**X3**  
3x12mm FH/ST Screw



F/H 3x10mm  
Apply threadlock!

FH/ST 3x8mm

FH/ST 3x12mm

Front

## 27 Engine

X1  
3x6mm Cap Screw

X4  
3x12mm Cap Screw

X2  
126. 5x10mm Ball Bearing

X1  
51. 3x8x0.5mm Shim

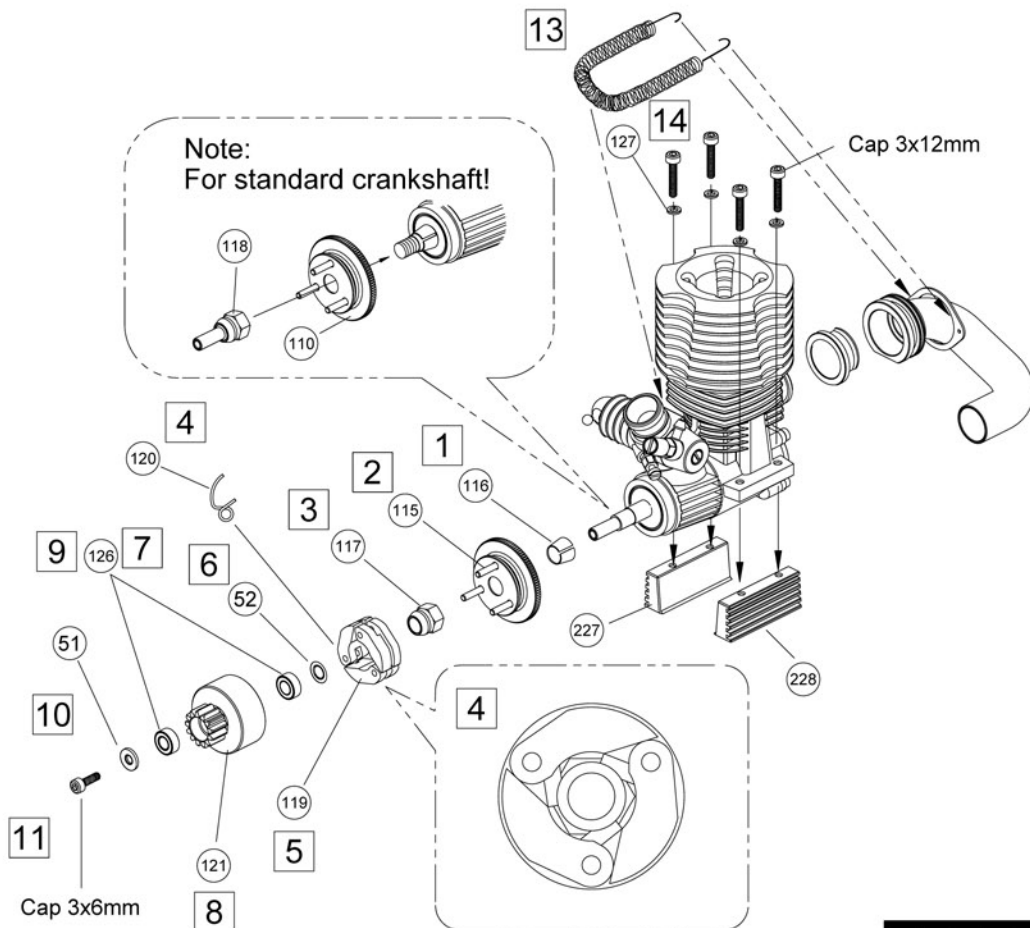
X3  
52. 5x7x0.2mm Washer

X1  
116. Corn Collar

X1  
118. Pilot Shaft (Standard)

X1  
117. Pilot Nut (SG)

X4  
127. M3 Spring Washer

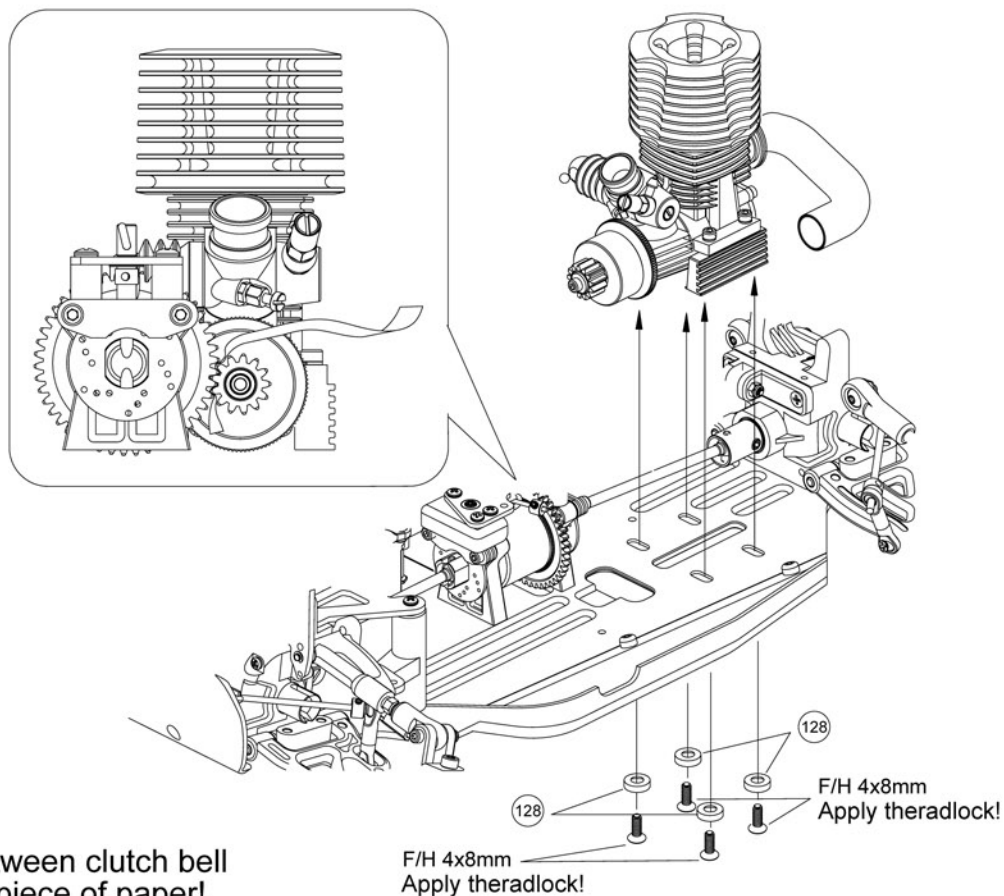


Engine and manifold set are not included in the STORM Pro kit.

## 28 Engine





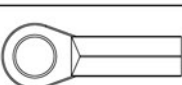
X4  
4x8mm F/H Screw

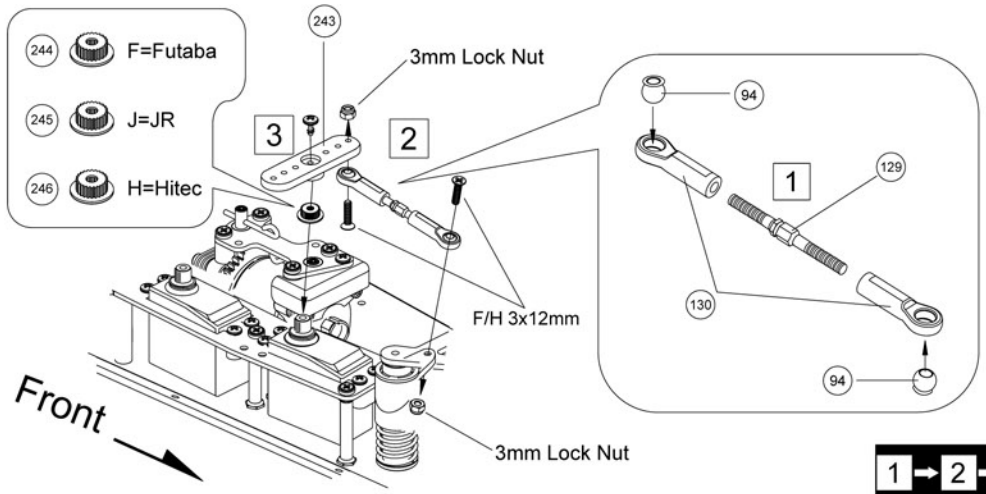
X4  
128. M4 Countersunk Washer











**!** Check gear mesh between clutch bell and spur gear with a piece of paper!

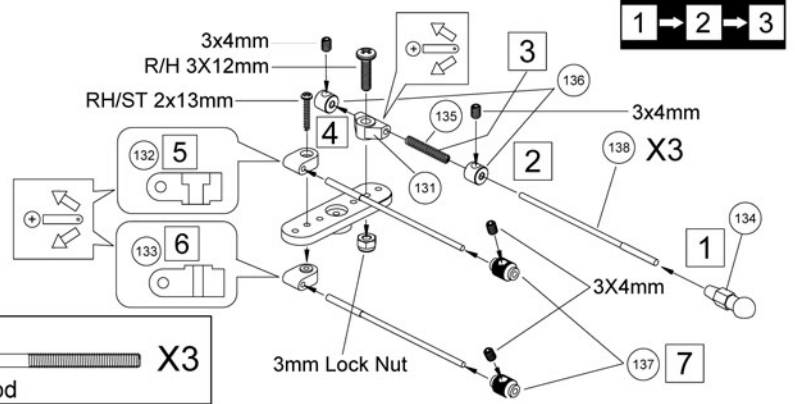
## 29 Radio

	X2	94. 5.8x5.4mm Pivot Ball
	X2	3x12mm F/H Screw
	X1	129. 3x30mm Turnbuckle
	X2	3mm Lock Nut
	X2	130. 5.8mm Ball End (L)



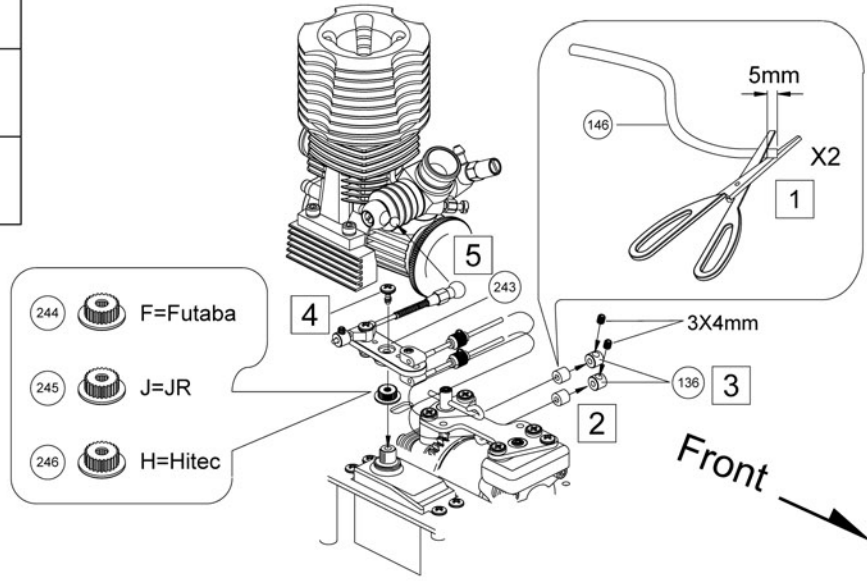
## 30 Radio

	X4	3x4mm Set Screw		X2	136. 2mm Stopper
	X1	2x13mm RH/ST Screw		X2	137. Adjuster Knob
	X1	135. Linkage Spring		X1	3mm Lock Nut
	X1	3x12mm R/H Screw		X3	138. Linkage Rod

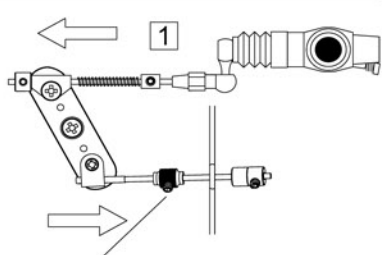


## 31 Radio

	X2	3x4mm Set Screw
	X2	136. 2mm Stopper



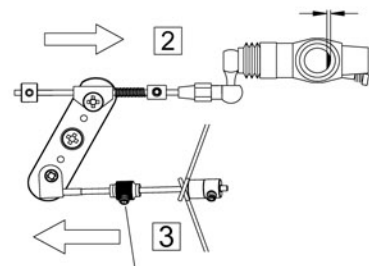
## 32 Linkage Adjustment



1 → 2 → 3

\*\*Adjust so brake is at neutral position at full throttle!

\*\*At full brake the carburetor should only open 0.7 ~ 1mm!



\*\*Tighten or loosen adjuster knob to adjust brake action!

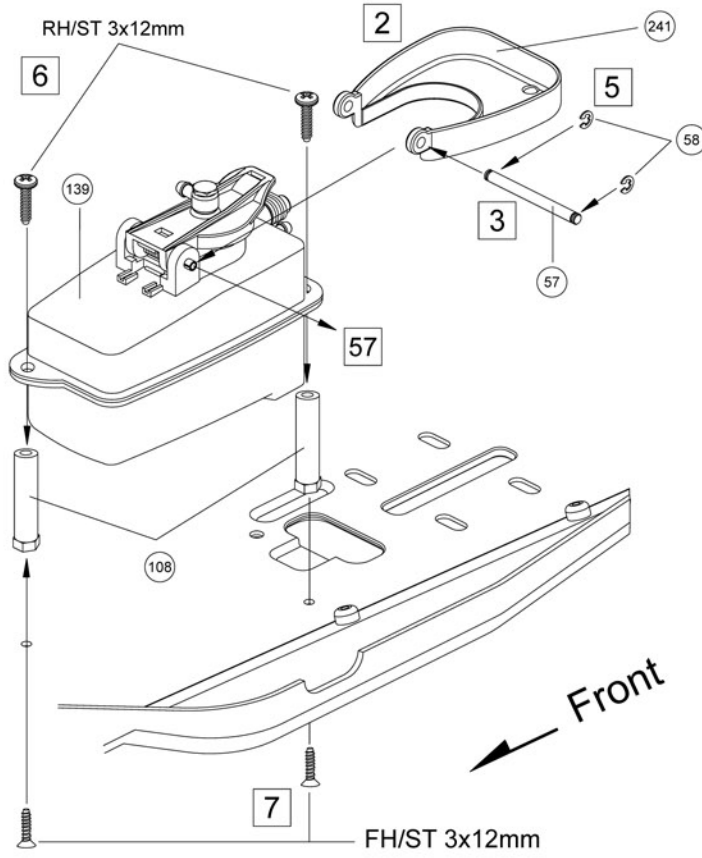
# 33 Fuel Tank

X2  
3x12mm FH/ST Screw

X2  
3x12mm RH/ST Screw

X2  
58. E-clip E-2.5

X1  
57. 3x34mm Hinge Pin



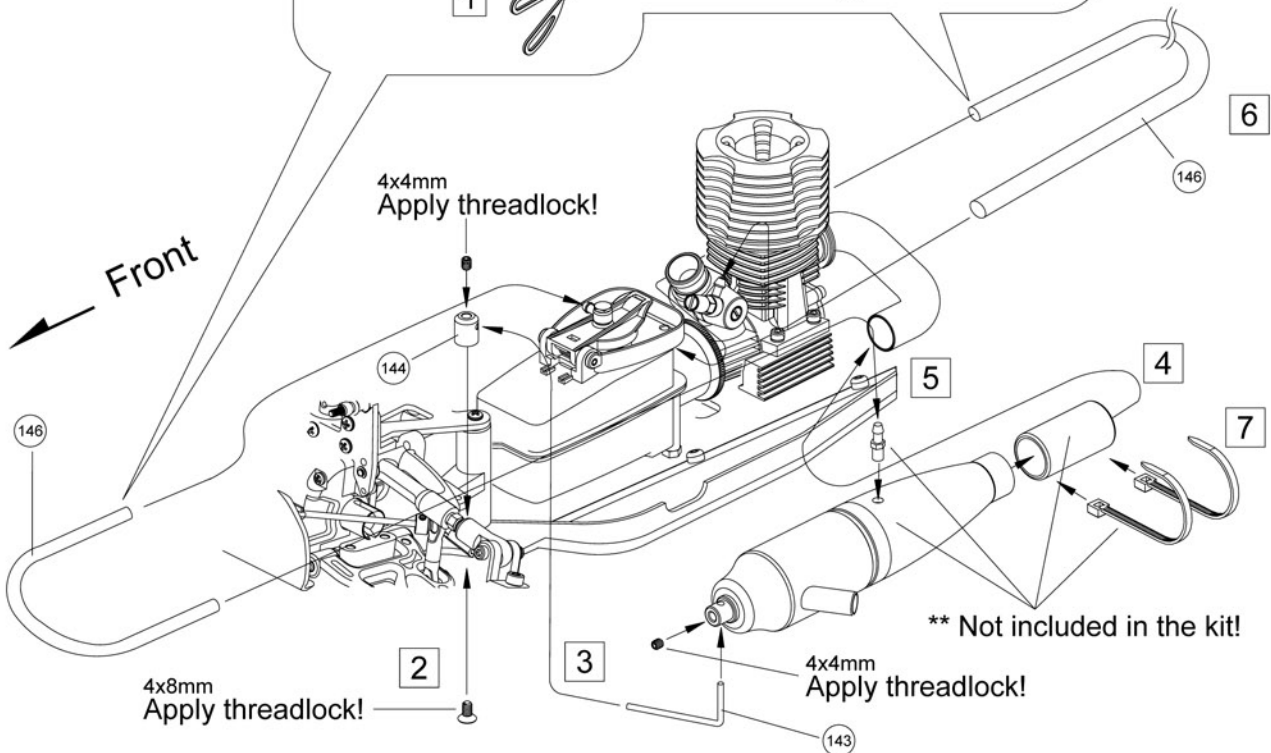
1 → 2 → 3

# 34 Fuel Tank

X1  
4x8mm F/H Screw

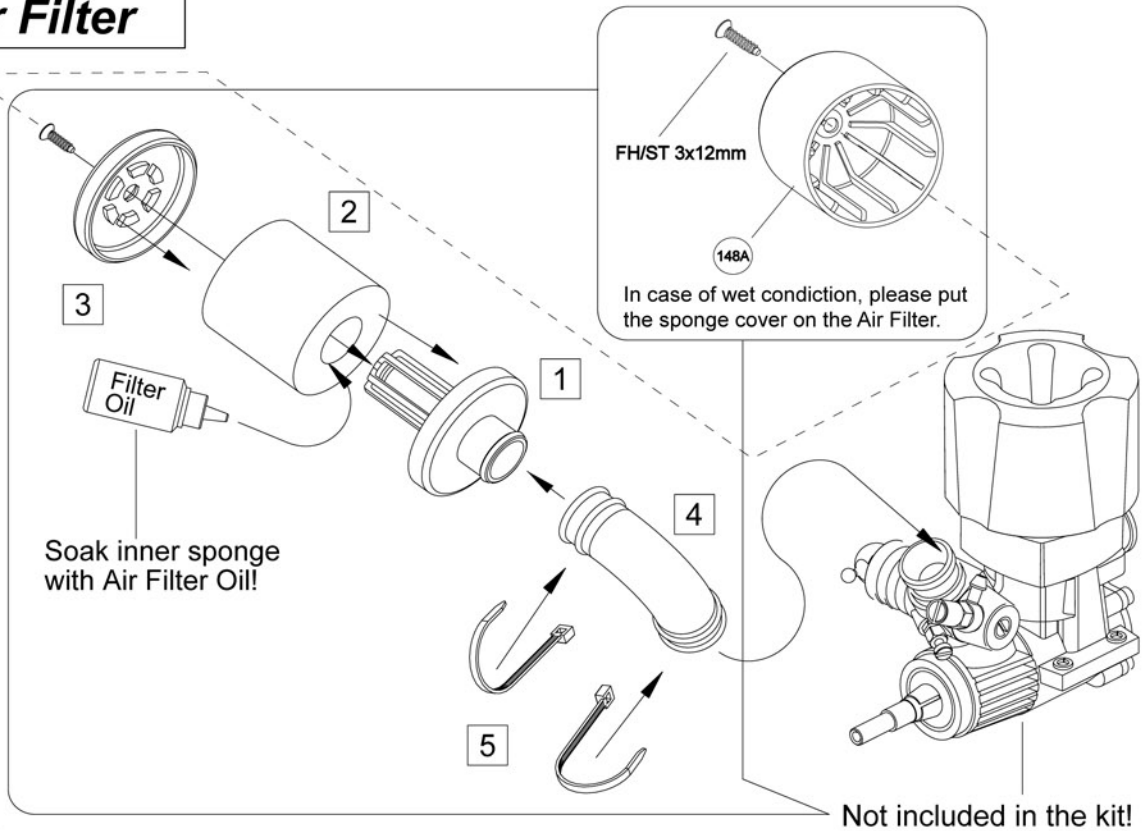


Front



1 → 2 → 3

# 35 Air Filter



1 → 2 → 3

# 36 Shock

**!** Build four shocks!

235. Front Shock Shaft 55mm X2

236. Rear Shock Shaft 61mm X2

236. Rear Shock Shaft 61mm X2

236. Rear Shock Shaft 61mm

156. C-ring X4

237. P3 Silicone O-ring X8

232. Collar (Thick) X4

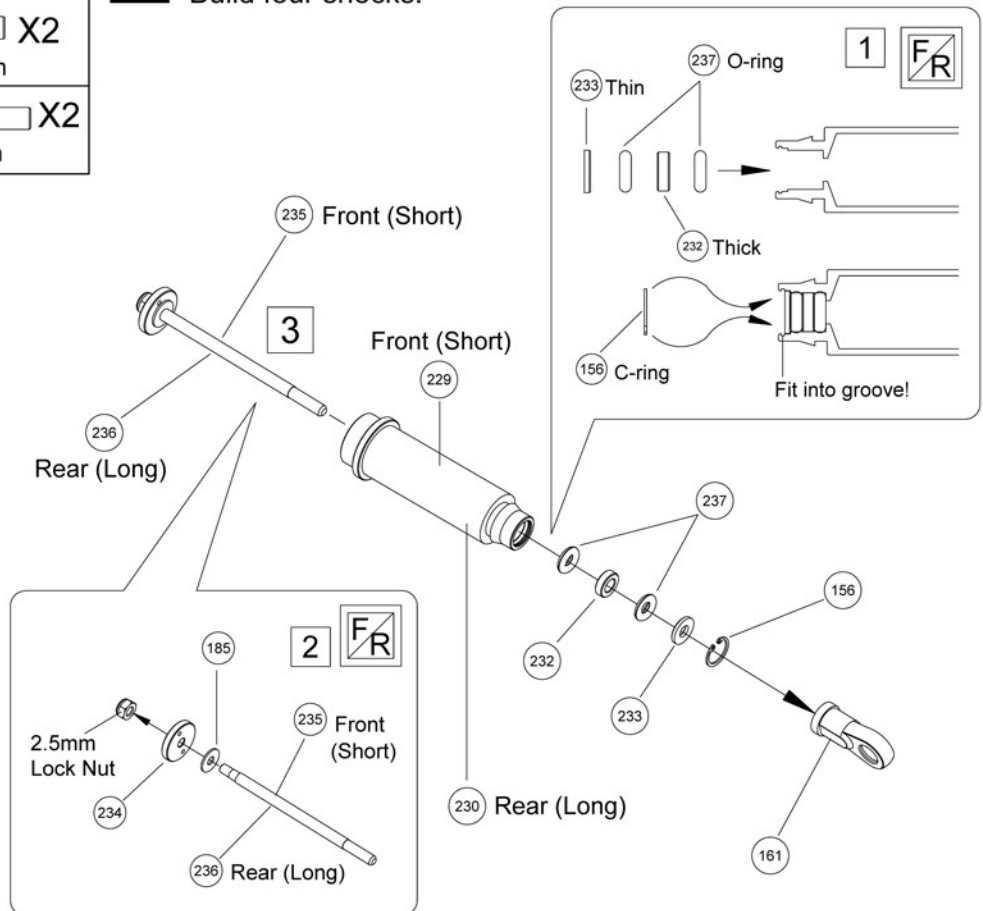
233. Collar (Thin) X4

185. 2.6x6x0.5mm Shim X4

234. Shock Piston X4

161. 5.8mm Ball End X4

2.5mm Lock Nut X4



1 → 2 → 3



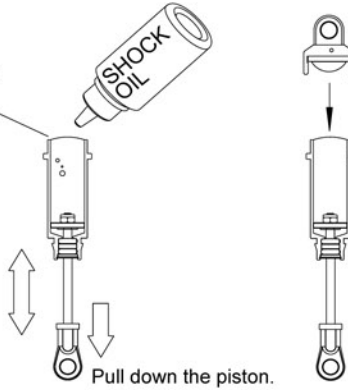
# 37 Shock



Use 35wt. oil on standard setting. **GS Racing Silicone Shock Oil** recommended!

Fill with oil to the top of the shock body.

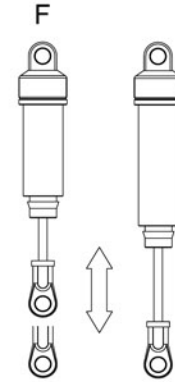
Slowly move the piston up and down to get rid of the air bubbles.



Pull down the piston.



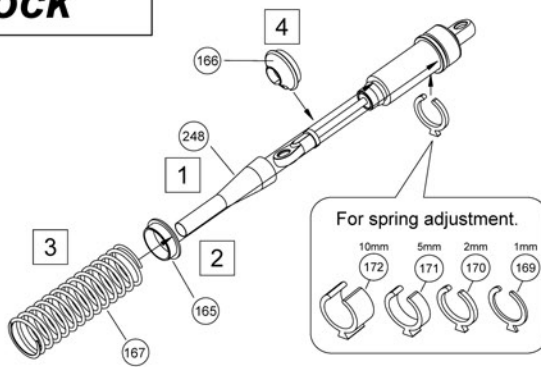
Fit into groove!



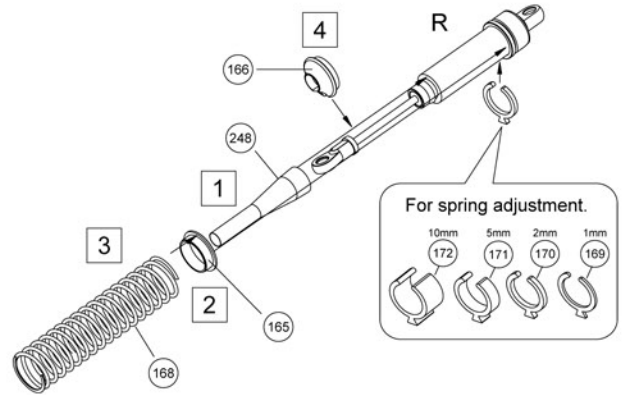
The piston should move smoothly!



# 38 Shock




For spring adjustment.



For spring adjustment.



# 39 Shock

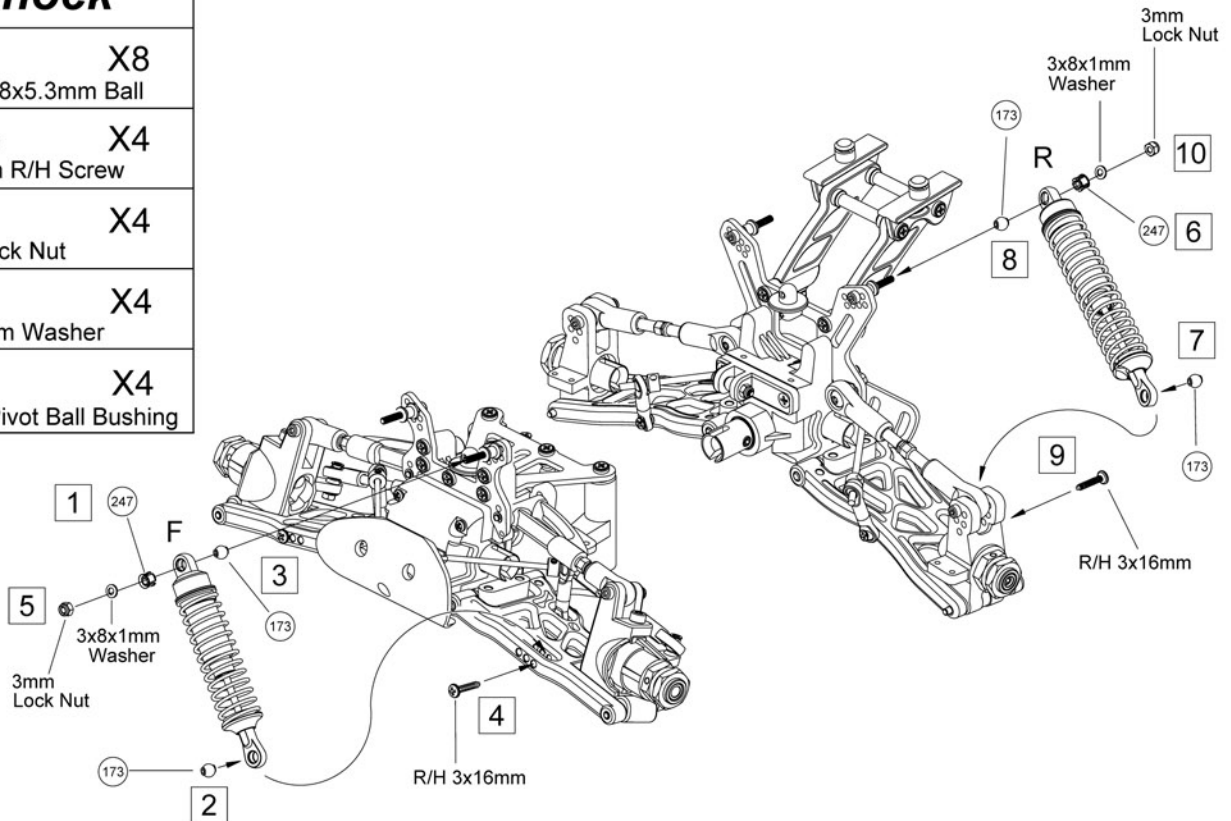
 X8  
173. 5.8x5.3mm Ball


 X4  
3x16mm R/H Screw

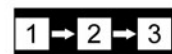
 X4  
3mm Lock Nut

 X4  
3x8x1mm Washer

 X4  
247. Shock Pivot Ball Bushing




 Start to assemble the front shocks on upper outside holes of the shock tower, and the rear shocks on upper second outside holes of the shock tower.




## 40 Wheel Hub

Assemble Right and Left Sides.

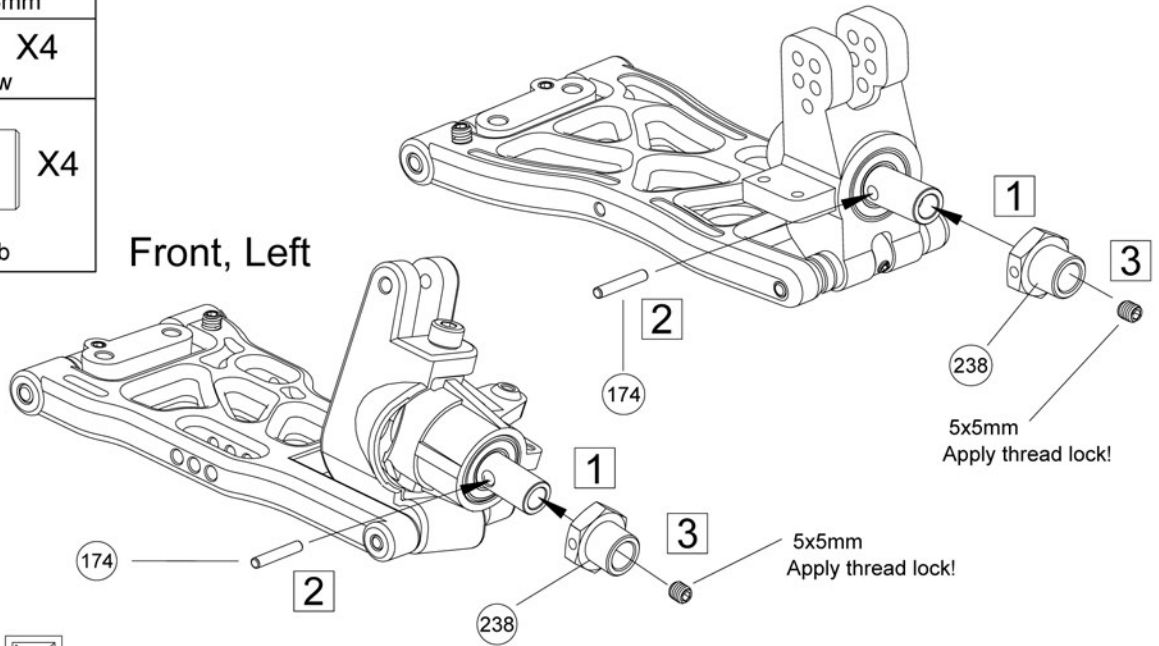
 X4  
174. Pin 3x16.8mm

 X4  
5x5mm Set Screw

 X4  
238. Wheel Hub

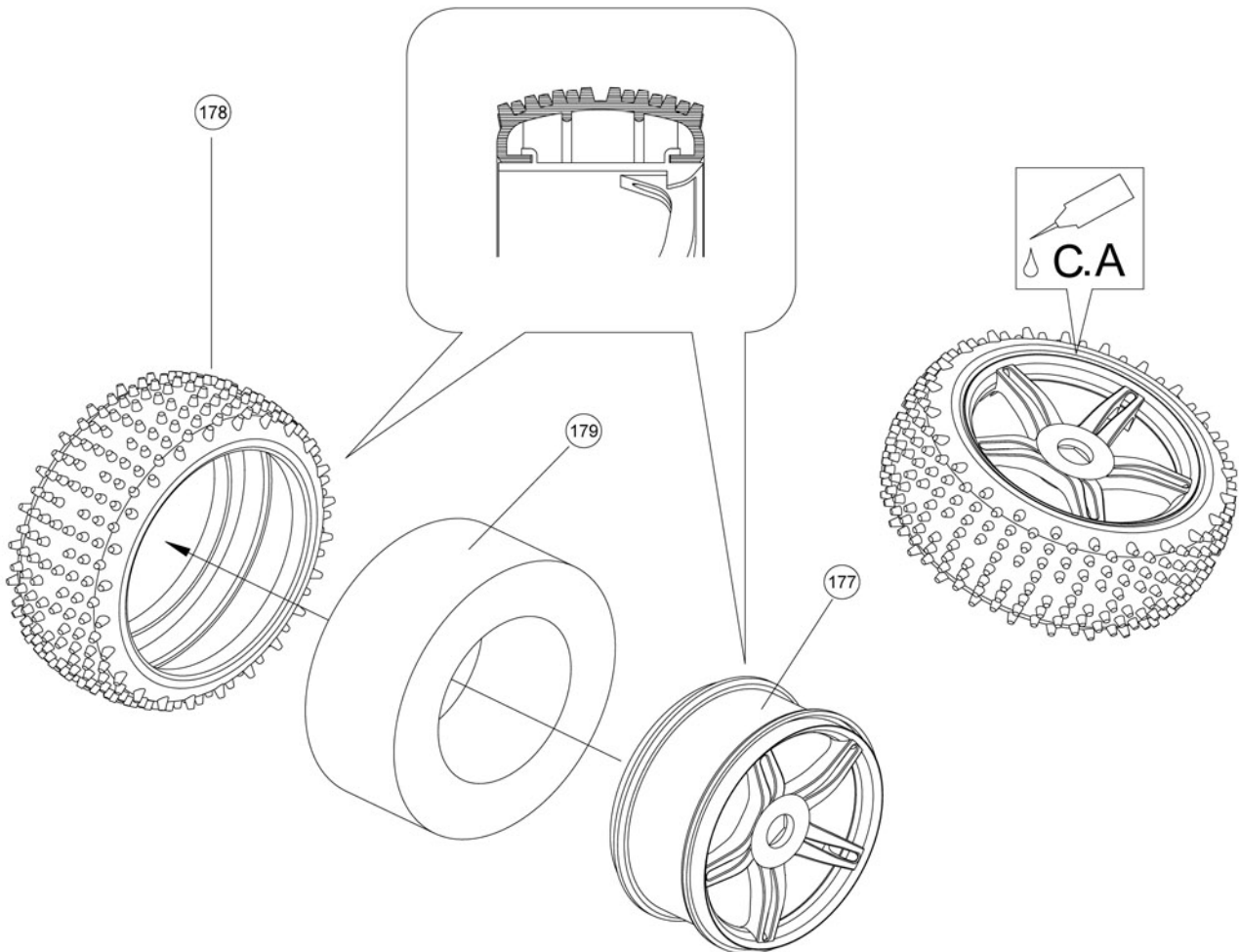
Rear, Left


Front, Left



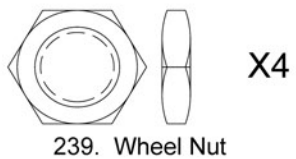
## 41 Tire & Wheel

Note: Tires, wheels, and foam tire inserts are not included in the STORM Pro kit.

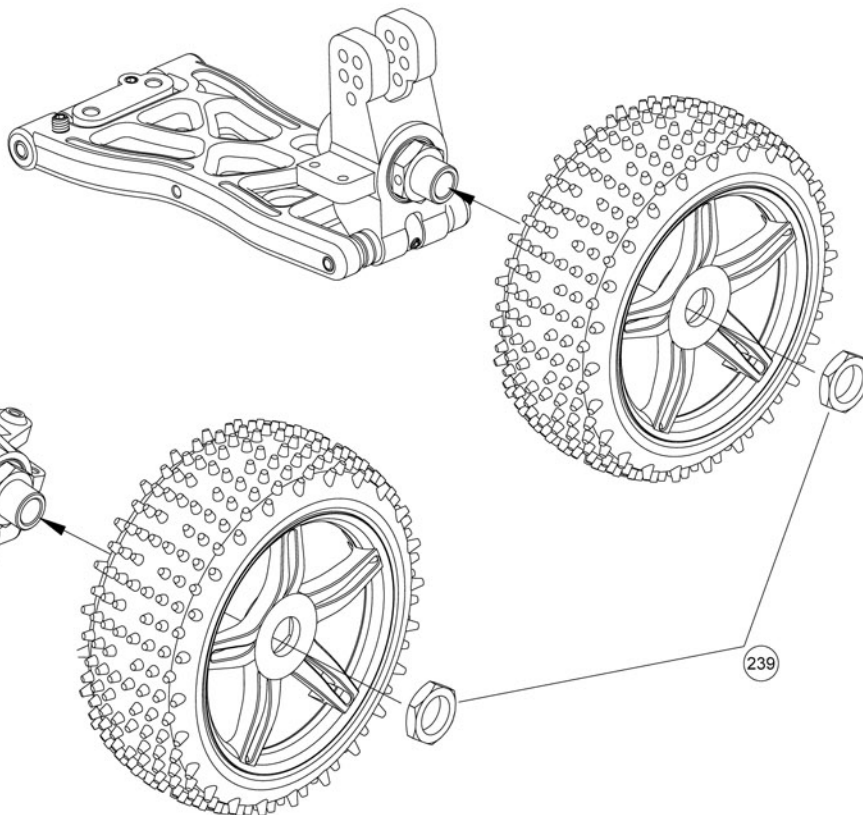


 Clean contact area of the wheels and tires with rubbing alcohol or window cleaner before gluing!

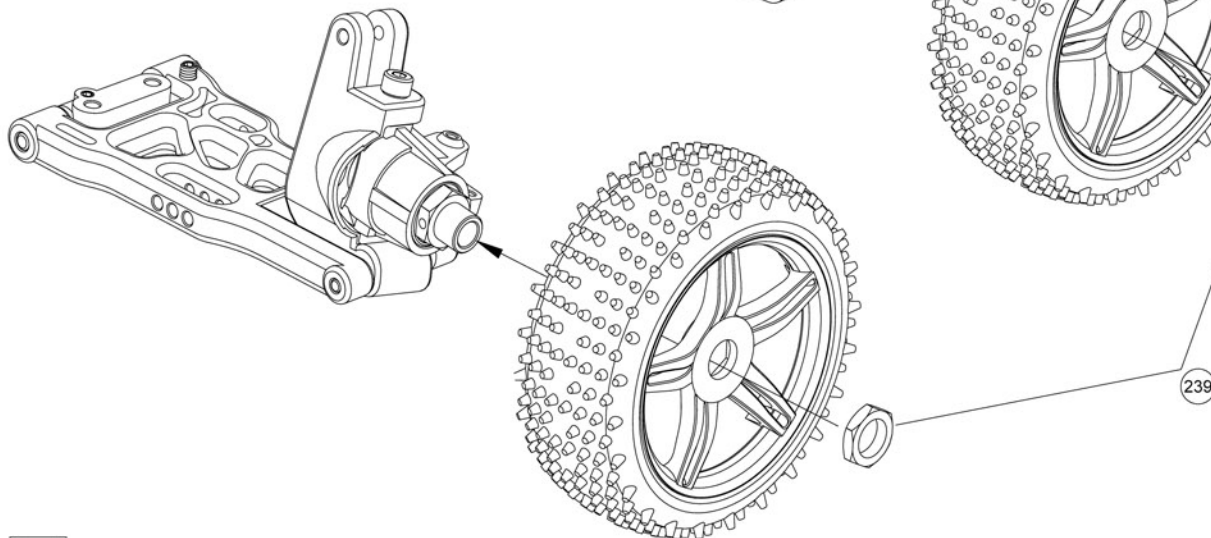
## 42 Tire & Wheel



Rear, Left

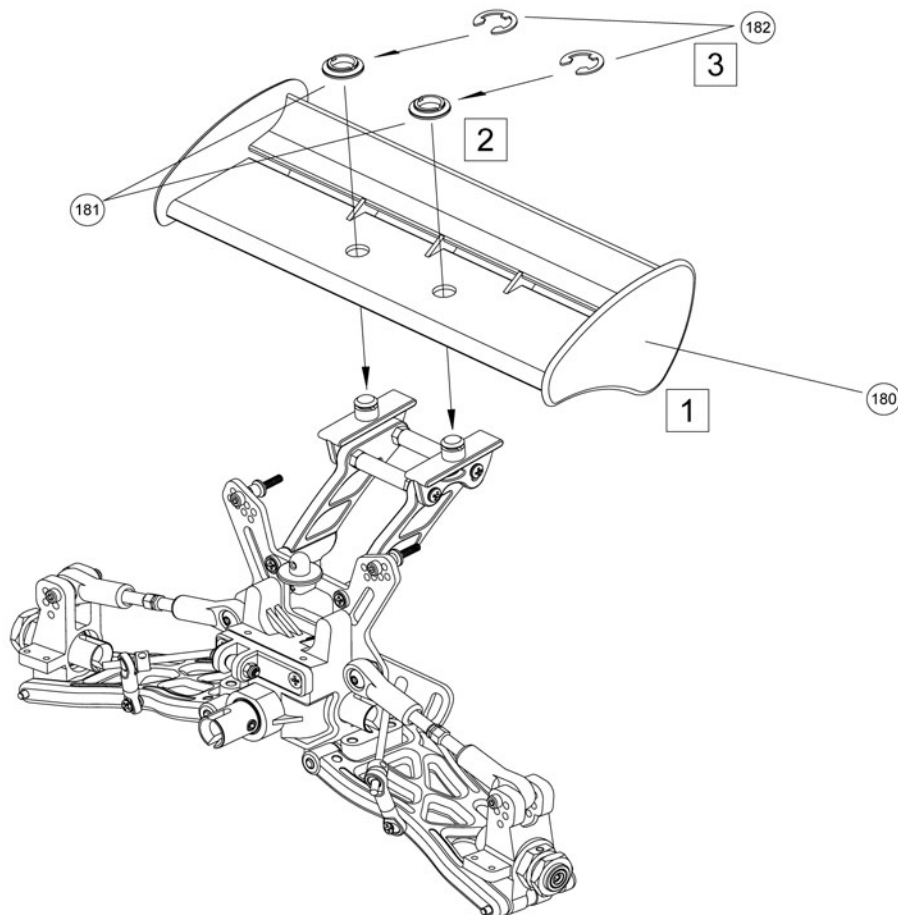


Front, Left



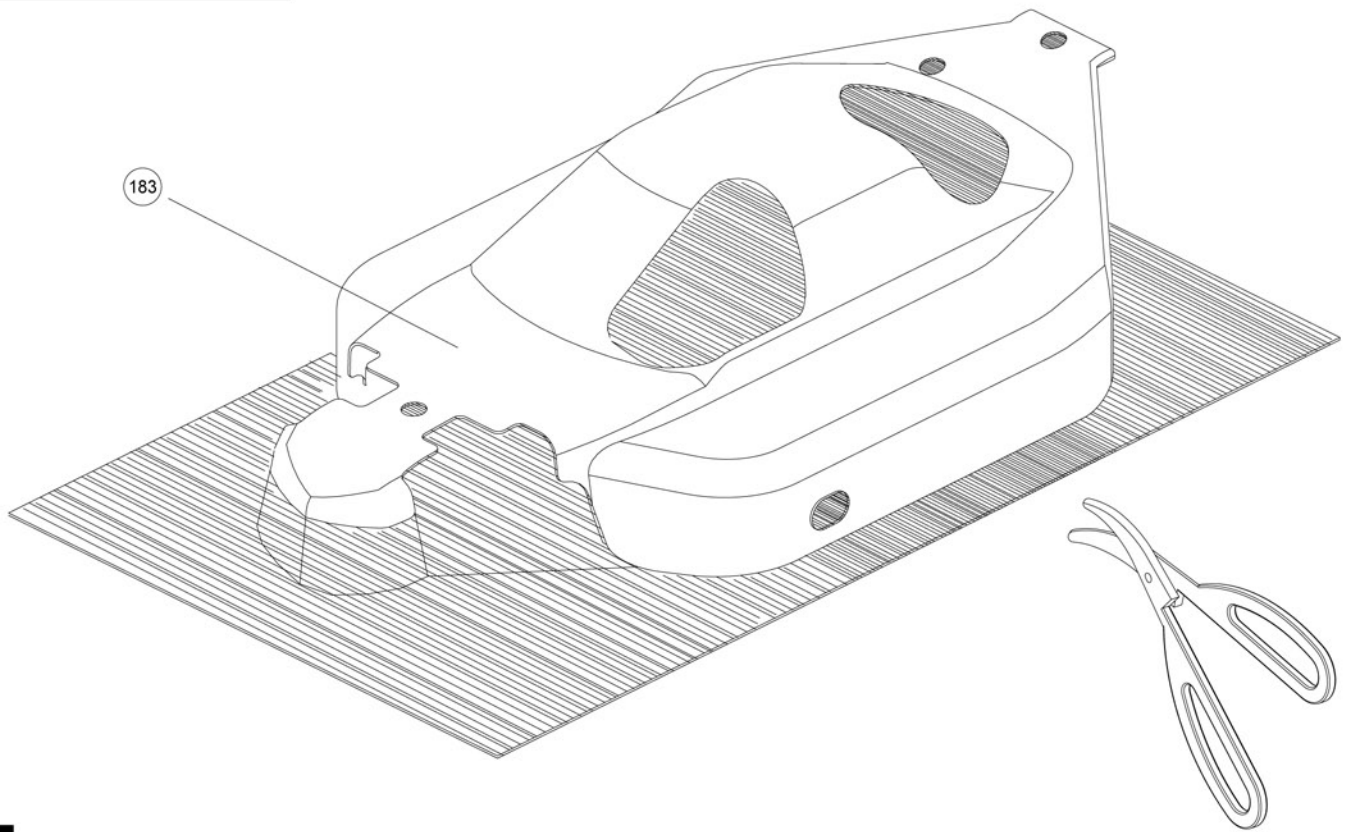
  Assemble Right and Left Sides.

## 43 Wing



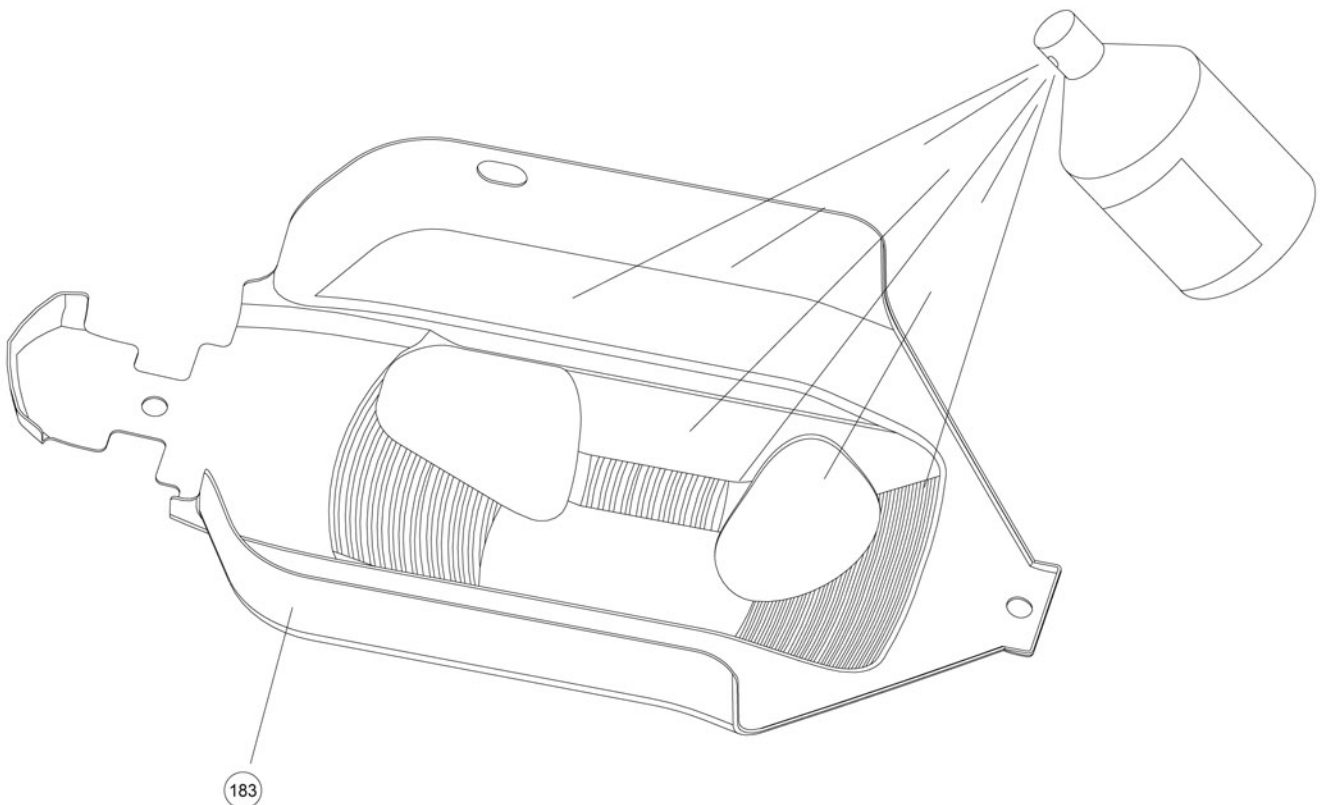
1 → 2 → 3

## 44 *Body*



**!** Cut off shaded portion!

## 45 *Painting*



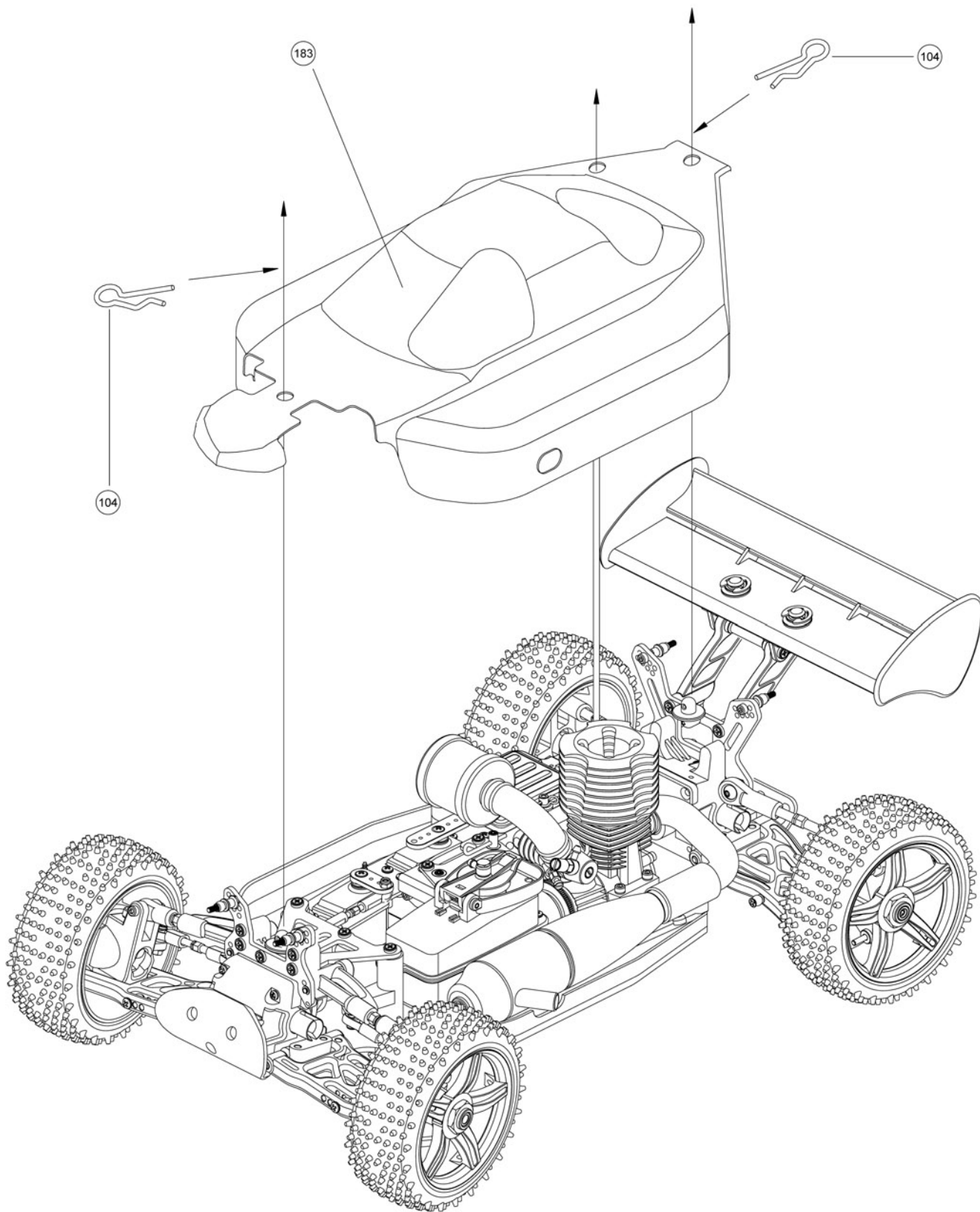
**!** Clean the inside of the body with warm water and dish soap before applying paint. Remove the protective film from the body shell after painting.

# 46 *Body*



X2

104. Body Pin



# ***Before You Run Your STORM***

## ***About Glow Fuel:***

The engines used for the GS Racing Storm require glow fuel. To get the proper fuel is very important for long engine life. Improper fuel can cause starting problems, poor performance, and excessive wear on the engines. There are many brands of glow fuels; however, they must meet the following requirements:

1. Use a popular name brand of glow fuel.
2. Try to keep the nitro (nitro methane) between 10% ~ 30%!
3. Do not use any type of airplane or helicopter fuels. The fuels for airplanes and helicopters may not have the necessary oil types and ratios needed for R/C cars.
4. Be careful not to purchase gasoline or kerosene by mistake. Both cannot be used! Also, be very careful when handling glow fuel, which is highly flammable and explosive!

## ***About Radio System:***

Read the instructions that come with your radio. You should understand the operation of your transmitter. Place eight AA batteries in the transmitter, and put four in the receiver pack (Ni-Cd battery pack for receiver is recommended!) It is important that all the batteries are fresh or fully charged.

Always check the path and the condition of the battery pack wires as well as the switch wires. A broken wire can cause a short circuit and lead to a loss of control.

**Always turn your transmitter on first and off last.** If you start your car before turning on your transmitter, you will lose control of the car and cause damage to property and your engine.

Test the following radio functions without the engine running:

1. Turn on the transmitter.
2. Turn on the car receiver battery pack switch. Both the steering and throttle servos should move to their respective neutral settings.
3. Turn the steering wheel on the transmitter left and right. The front wheels should turn left and right (when viewed from behind). Use the steering trim adjustment to set the neutral (wheels pointing straight ahead) setting on your car. If your servos are slow, check your batteries.
4. Pull the throttle trigger. The carburetor should open on the engine.
5. Push the throttle trigger open and forward. This will activate the brakes.
6. Use the throttle trim adjustment to set the neutral (carburetor closed, brakes starting to engage) setting on your car.
7. Hold the throttle open and roll the car on the ground. The car should roll freely. While it is still rolling, push on the brakes. The car should come to an immediate stop. If these steps do not produce these results refer to the linkage assembly setup in this manual.

## ***About the Carburetor:***

Let's check the carburetor linkage before you fire up the engine for the first time.

Pull off the air filter. Turn the transmitter on first, followed by the car.

With your finger off the throttle, which is the neutral position, the throttle should be almost closed, with an opening about 0.7 ~ 1mm.

Pull the throttle wide open and look into the carburetor and see if it's opening all the way up. If you don't see the gap, adjust the "Throttle End Point Adjustment" on your transmitter according to the radio manual, or adjust the linkage shown earlier in this manual to achieve full throttle. When everything is adjusted OK, turn the switch off in your car first, followed by your transmitter. You must remember to turn off your car's electronics everytime in this order.

Now, place the air filter back on your carburetor and fasten it with a tie wrap.

## ***Checklist before Running***

- Ensure all screws are securely tightened.
- Ensure all moving parts move without binding. Are they greased for non-binding movement?
- Install an oiled air filter. Ensure it is clean and not clogged.
- Ensure the fuel line is leak proof, with no cracks. Ensure it is not clogged.
- Ensure the muffler and exhaust are damage-free.
- Ensure the radio batteries are fresh. Ensure they are securely installed.
- Ensure servos and linkages move without binding.
- Ensure the area of operation is safe.
- Ensure no one is on your frequency.

## ***\*\*Break-in the Engine***

The break-in step is required for brand new engines. If you fail to properly break-in an engine, you will cause permanent and premature damage to your engine. Engine operation and tuning will become difficult and engine life will be shortened. During the break-in period, do not operate the engine at high rpm's!

Please check the following steps for breaking-in your engine.

1. Start the engine using either a Starter Box or Hand Starter.
2. Place the car on top of a stand with the wheels off the ground.
3. Slowly raise the throttle and check to make sure the tires spin and the brakes work.  
(If the tires do not spin at all, or they spin poorly, refer to the assembly instruction manual.)
4. Break-in the engine. Allow the engine to idle for 5 minutes, then shut down and allow it to cool. Repeat this procedure for an entire tank of fuel. After the first tank, begin to run the car at low speeds. After each tank of fuel is consumed, tighten the main needle valve  $10^{\circ} \sim 20^{\circ}$ . Monitor engine temperature during this process. You want to slowly bring the temperature of the motor up to around 200F. Make sure there is plenty of smoke coming out of the exhaust. During this time you may need to adjust the idle and bottom end needle valves setting as well. Bottom end setting should be set so that the engine "blubbers" on take off. Idle should be just high enough to prevent the engine from shutting off.
5. Run the engine a total of 5 tanks of fuel to complete the brake-in.

\*\* Refer to your engine instruction manual.



# **\*\*Engine Adjustment**

Adjust in the order 1, 2, and 3 after completing the break-in.

## 1. Needle Valve Adjustment (Top End R.P.M. Adjustment)

- Start the engine and run your car until motor reaches operating temperature.  
NEVER MAKE NEEDLE VALVE ADJUSTMENTS UNTIL MOTOR REACHES OPERATING TEMPERATURE!
- Monitor the top speed of your car at full throttle. When tightening (leaning) the main needle valve 10° ~ 20° degrees, speed increases. As your car reaches top speed, the needle valve setting is optimal.
- Tightening the main needle valve further will cause a decrease in both engine rpm and exhaust emissions. Running the engine with this setting (too lean) will cause engine damage. Unscrew (richen) the needle valve at once. Note that for normal operation, unscrew the main needle valve 10° ~ 20° from the optimal setting position! Normal operating temperature for most motors is between 200F to 250F.

## 2. Idle Adjustment Screw (Idle R.P.M. Adjustment)

- Set throttle position to neutral (carburetor in closed position.)
  - I. The engine stalls. --- Tighten by 1/8 ~ 1/4 turns.
  - II. The car rolls forward or idle is too high. --- Unscrew by 1/8 ~ 1/4 turns.
- Adjust the idle so the car will not speed off when the throttle is in neutral and the brakes are not applied.

## 3. Bottom End Adjustment Screw (Low end R.P.M.)

- Allow motor to reach maximum rev's for 1 ~ 2 seconds then set throttle position to neutral (carburetor in closed position.)
  - I. Idle stays high for 5 ~ 6 seconds, then drops to normal idle, then shuts off.  
--- Tighten by 1/8 ~ 1/4 turns (bottom end too rich.)
  - II. Idle drops to normal then rises.  
--- Loosen by 1/8 ~ 1/4 turns (bottom end too lean)
- Adjust bottom end so that engine idles smooth for at least 30 seconds. Upon applying throttle, the engine should emit a good amount of exhaust smoke. After applying full throttle and returning to the neutral position, engine should return to normal idle within 1 ~ 3 seconds.

## **IMPORTANT!**

NEVER run your nitro powered R/C cars without an oiled air filter on. The air filter is essential for keeping dirt out of the engine. The air filter should be inspected carefully every time you refuel. When the air filter starts to get dirty, do the following steps:

1. Clean the foam out with fuel or alcohol. Do this by pouring a small amount in a small can and kneading the filter in it. When the foam is clean, dispose of the fuel or alcohol properly.
2. Squeeze out the fuel with a paper towel until it's dry.
3. Apply the air filter oil around the filter, put the filter in a plastic bag and knead it until the filter is saturated, but not soaked.

**\*\* Refer to your engine instruction manual!**

# Maintenance

- Before storing your car away, draw out any fuel from the fuel tank.
- Next, restart the engine to combust remaining fuel. Leaving fuel inside the engine will make engine starting difficult and may cause rust to form. Apply after-run oil to the engine.
- Wipe off dirt and oil.
- Check all parts for loose screws.
- Grease all moving parts.
- Disconnect the receiver batteries.

## Operating Your Model Safely

### 1. Operate the model in open areas with no people around! Do not operate it:

- on public roads!
- in places where children and people are present!
- in residential districts and parks!
- indoors and in confined areas!

*Non-observance may account for personal injury and property damage!*

### 2. Always check the batteries in the transmitter and the battery pack for the receiver!

When the batteries get weak, the transmission and reception of the radio decrease. You may lose control of your model when operating it under such conditions. This may lead to accidents!

### 3. Keep in mind that people around you might also be operating a radio control model!

**Never** share the same frequency with somebody else at the same time! Signals will be mixed and you will lose control of your model. This may lead to accidents!

### 4. Always use approved ground frequencies!

### 5. When the model is behaving strangely...!

Immediately stop the model and check for the cause. As long as the problem is unclear, do not operate the car! This may lead to further trouble and unforeseen accidents!

### 6. Handle fuel outdoors only!

Fuel vapors and exhausts are toxic and are bad for your health!

### 7. Do not put fingers or any objects inside rotating and moving parts!

Parts rotate/move at high speeds, you may be seriously injured!

### 8. After using, do not touch equipment on the model such as the engine and muffler, because they generate high temperatures!

You may cause severe burns to yourself by touching them!

### 9. Use only glow fuel for this radio control model!

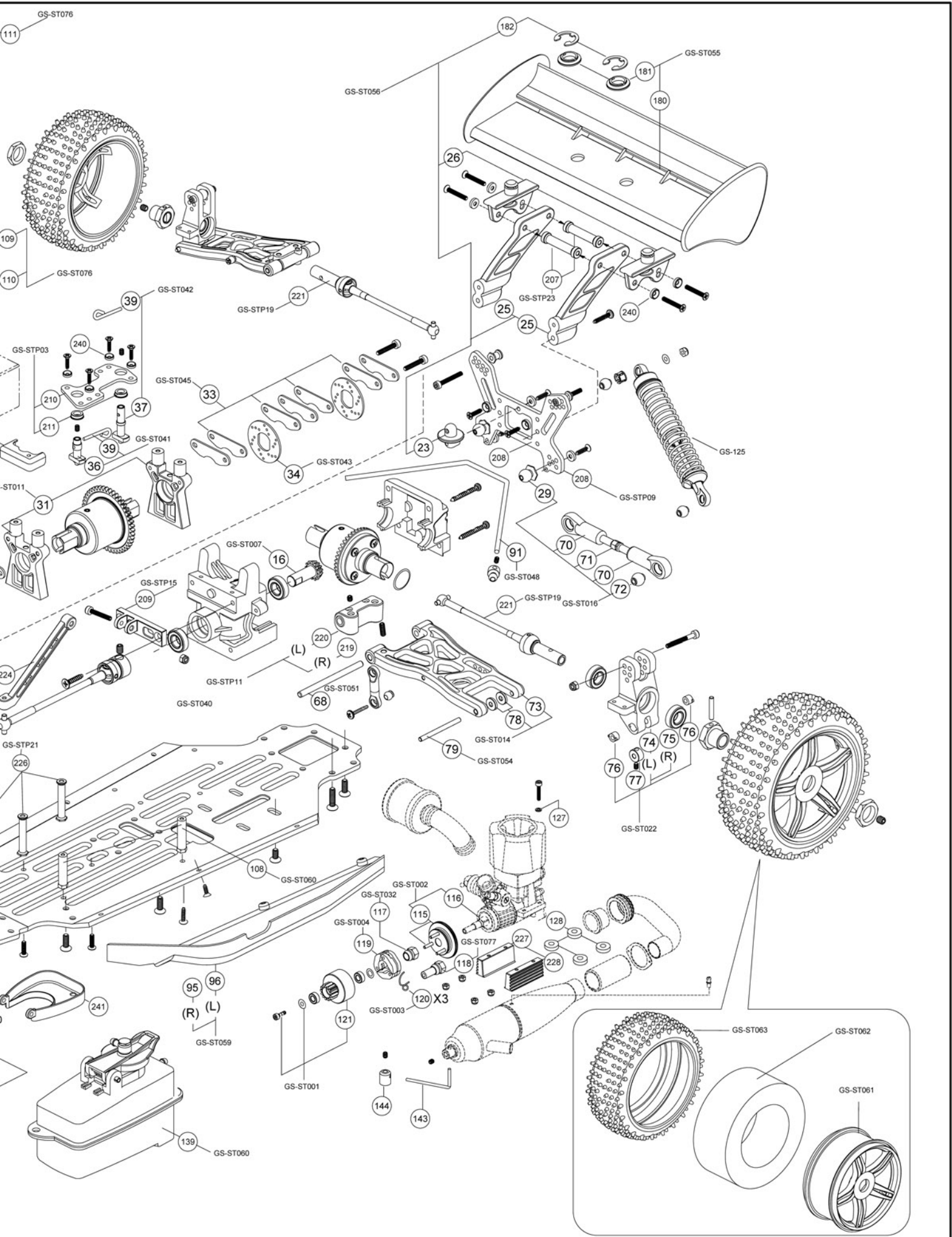
### 10. Fuel is highly flammable and explosive!

- Never use fuel indoors or in places with open fires and sources of heat!
- Store fuel in cool, dry and dark places. Keep out of children's reach! Shut the cap tightly!
- Do not dispose of empty fuel cans into a fire! There is danger of explosion.

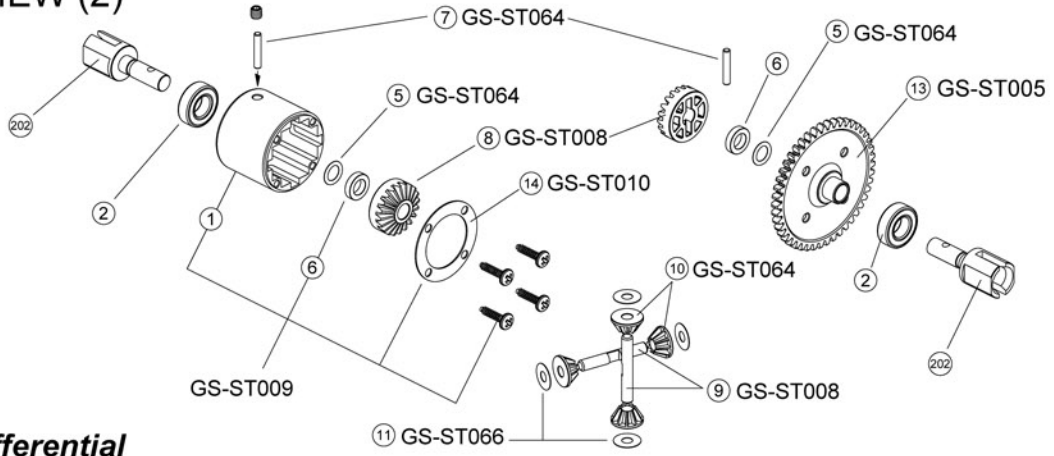
### 11. Do not swallow fuel. Do not allow for contact to eyes, nose, face and ears!

If fuel is swallowed, induce vomiting. If fuel gets into eyes, rinse them with water and seek medical help.

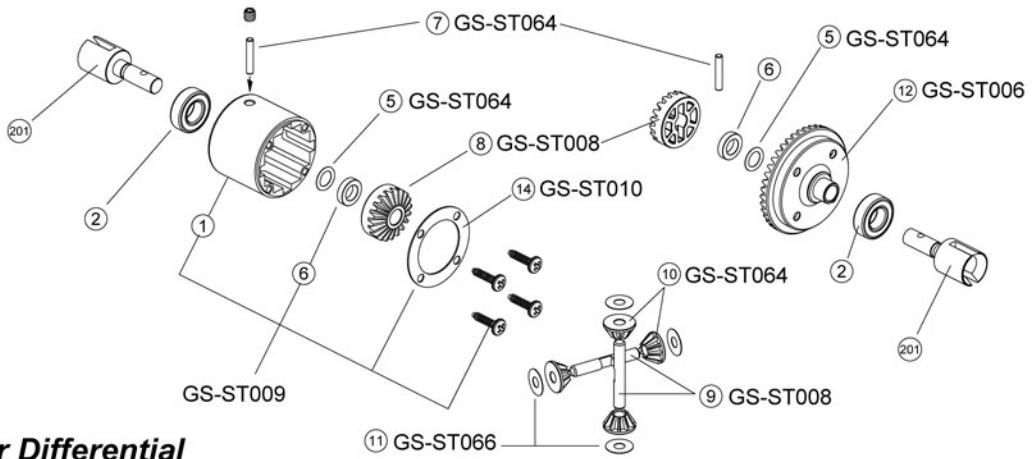




# EXPLODED VIEW (2)

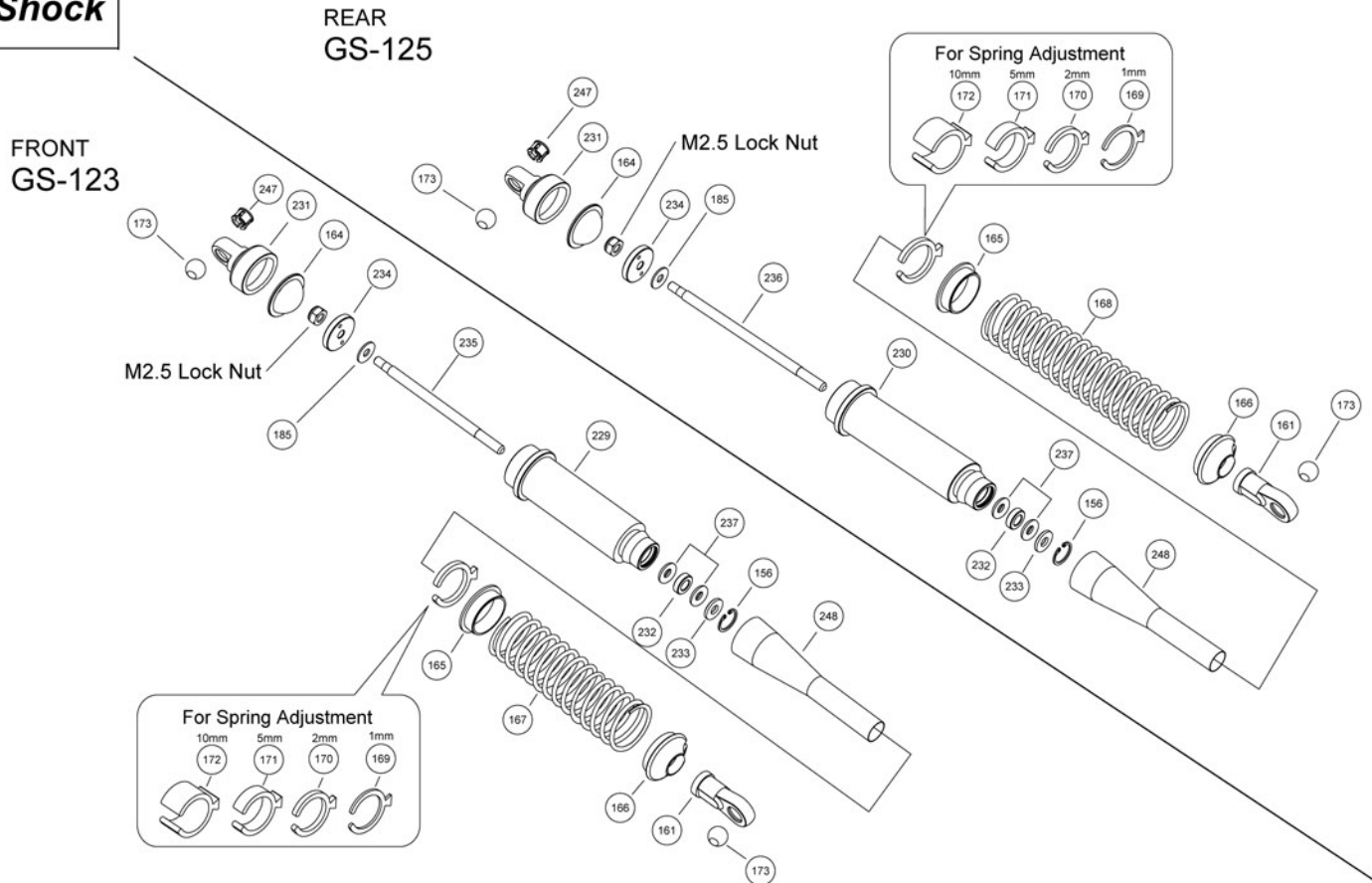


## Center Gear Differential



## Front/Rear Gear Differential

# Shock





# Parts Name List

Key No.	Part Name	Q'ty	Key No.	Part Name	Q'ty	Key No.	Part Name	Q'ty
001	Diff. Case	3	096	Side Guard, Left	1	218	Servo Saver Arm Bushing	2
002	Ball Bearing, 8 x 16 mm	18	102	Servo Mount	4	219	Lower Sus. Hinge Pin Holder A, 7075 T6	2
005	O-ring, AS009	6	103	Transponder Stay	1	220	Lower Sus. Hinge Pin Holder B, 7075 T6	2
006	Bushing, 6 x 10 x 2.5 mm	6	104	Body Pin, R5	2	221	Universal Drive Shaft, Rear	2
007	Pin, 2.5 x 13.8 mm	6	105	Pin Holder	1	222	Front Support Plate, Carbon Fiber	1
008	Diff. Bevel, Large	6	106	Receiver Box A	1	223	Special Chassis Brace, Front, 7075 T6	1
009	Bevel Shaft	6	107	Receiver Box B	1	224	Special Chassis Brace, Rear, 7075 T6	1
010	Diff. Bevel, Small	12	108	Fuel Tank Post, Plastic	2	225	Radio Plate, Carbon Fiber	1
011	Shim, 4 x 10 x 0.3 mm	12	109	Antenna Tube	1	226	Radio Plate Post, Aluminum	3
012	Crown Gear, Large	2	110	Antenna Tube Holder	1	227	Heat-sink Engine Mount A, Right	1
013	Steel Main Gear, 46T	1	111	Antenna Tube Cap	1	228	Heat-sink Engine Mount B, Left	1
014	Diff. Gasket	3	112	R-pin, R4	1	229	Shock Body, Hard Coating w/Teflon (S)	2
015	Shim, 13.4 x 16 x 0.2 mm	4	113	Receiver Box Cap	1	230	Shock Body, Hard Coating w/Teflon (L)	2
016	Pinion Gear, Small	2	115	Flywheel	1	231	Special Shock Cap	2
018	Bulkhead (B)	2	116	Corn Collar	1	232	Shock Collar, Thick	4
019	Bulkhead (A)	2	117	Pilot Nut (SG)	1	233	Shock Collar, Thin	4
022	Front Bumper	1	118	Pilot Shaft (Standard)	1	234	Shock Piston, 1.2 mm x 2 Holes	4
023	Body Mount	2	119	Clutch Shoe	3	235	Special Shock Shaft, 55 mm	2
024	Shock Bushing	4	120	Clutch Spring	3	236	Special Shock Shaft, 61 mm	2
025	Wing Stay	2	121	Clutch Bell, 13T	1	237	Special Silicone O-ring, P3, 55 Shore A	8
026	Upper Wing Stay	2	126	Ball Bearing, 5 x 10 mm	2	238	Wheel Hub, Hard Anodized	4
029	Pivot Ball, 8.8 x 10 mm	2	127	Spring Washer	4	239	Wheel Nut, Hard Anodized	4
031	Center Diff. Mount	2	128	M4 Countersunk Aluminum Washer	4	240	M3 Countersunk Aluminum Washer	28
032	Brake Plate	4	129	M3 x 30 Turnbuckle, Steering Servo	1	241	Fuel Tank Splashguard	1
033	Brake Pad	4	130	Ball End, 5.8 mm, Long	2	242	Brake Splashguard, Front	1
034	Brake Disc, Steel	2	131	Throttle Rod Support	1	243	Servo Horn	2
036	Brake Cam, Front	1	132	Brake Rod Support, Upper	1	244	Servo Horn Adaptor, Futuba	2
037	Brake Cam, Rear	1	133	Brake Rod Support, Lower	1	245	Servo Horn Adaptor, JR	2
039	Brake Level	2	134	Throttle Rod End	1	246	Servo Horn Adaptor, Hitec	2
042	Servo Saver Arm B	1	135	Linkage Spring	1	247	Shock Pivot Ball Bushing, 5.8 mm	4
043	Servo Saver Arm C	1	136	Stopper, 2 mm	4	248	Silicone Shock Boot	4
044	Servo Saver Arm A	1	137	Adjuster Knob	2	249	Decals, Pro Version	1
045	Servo Saver Spring	1	138	Linkage Rod	3	Opt.	Wheel	4
046	Servo Saver Shaft	2	139	Fuel Tank	1	Opt.	Tire	4
051	Shim, 3 x 8 x 0.5 mm	3	143	Muffler Stay Wire	1	Opt.	Foam Tire Insert	4
052	Shim, 5 x 7 x 0.2 mm	1	144	Muffler Stay	1		M3 x 12 Cap Screw	2
053	Upper Suspension Arm, Front	2	146	Silicone Fuel Tubing	1		M3 x 16 Cap Screw	7
054	Ball End, 6.8 mm, Short	2	156	C-ring	4		M3 x 20 Cap Screw	1
055	M5 x 25 Turnbuckle, Front Upper Arm	2	161	Ball End, 5.8 mm, for Shock	4		M3 x 23 Cap Screw	6
056	Ball, 6.8 x 6 mm	4	164	Silicone Shock Bladder	4		M3 x 25 Cap Screw	2
057	Upper Suspension Hinge Pin, Front	3	165	Spring Collar	4		M3 x 6 Cap Screw	1
058	E-clip, E-2.5	6	166	Spring Cup	4		M4 x 12 Cap Screw	4
059	Steering Knuckle, Right	1	167	Shock Spring, Short	2		M3 x 12 Set Screw	4
060	Steering Knuckle, Left	1	168	Shock Spring, Long	2		M3 x 4 Set Screw	16
061	Front Hub Carrier, Right	1	169	Spring Adjuster, 1 mm	8		M4 x 12 Set Screw	4
062	Front Hub Carrier, Left	1	170	Spring Adjuster, 2 mm	8		M4 x 4 Set Screw	9
063	Universal Drive Shaft, Front	2	171	Spring Adjuster, 5 mm	4		M5 x 5 Set Screw	6
064	Knuckle Collar	4	172	Spring Adjuster, 10 mm	4		M2 x 13 RH/ST Screw	1
065	Lower Suspension Arm, Front	2	173	Ball, 5.8 x 5.3 mm	8		M3.5 x 25 RH/ST Screw	9
068	Lower Suspension Hinge Pin, Long	4	174	Pin, 3 x 16.8 mm	4		M3 x 10 F/H Screw	6
069	Lower Sus. Hinge Pin, Front, Short	2	180	Nylon Wing	1		M3 x 12 F/H Screw	7
070	Ball End, 8.8 mm	4	181	Wing Stay Spacer	2		M3 x 16 F/H Screw	2
071	M5 x 50 Turnbuckle, Rear Upper Arm	2	182	E-clip, E-6	2		M3 x 20 F/H Screw	6
072	Ball, 8.8 x 9 mm	2	183	Body	1		M4 x 12 F/H Screw	14
073	Rear Lower Suspension Arm	2	184	Decals	1		M4 x 15 F/H Screw	8
074	Rear Hub Carrier, Left	1	185	Shim, 2.6 x 6 x 0.5 mm	4		M4 x 8 F/H Screw	5
075	Rear Hub Carrier, Right	1	201	Diff. Outdrive, F/R	4		M3.5 x 16 FH/ST Screw	4
076	Rear Toe-in Adjuster	4	202	Center Diff. Outdrive	2		M3 x 12 FH/ST Screw	21
077	Stopper, 3 mm	2	203	Universal Drive Shaft, Center Front	1		M3 x 8 FH/ST Screw	7
078	Spacer, Plastic	4	204	Universal Drive Shaft, Center Rear	1		M3 x 12 R/H Screw	1
079	Lower Suspension Hinge Pin, Short	2	205	Front Shock Tower, 7075 T6	1		M3 x 16 R/H Screw	4
082	Rear Bumper	1	206	Front Upper Sus. Hinge Pin Holder, 7075 T6	1		M3 x 12 RH/ST Screw	25
085	Ball End, 6.8 mm, Regular	4	207	Wing Joint, Aluminum	2		M3 x 15 RH/ST Screw	8
086	M4 x 46 Turnbuckle, Steering	2	208	Rear Shock Tower, 7075 T6	1		M3 x 8 RH/ST Screw	5
087	Pivot Ball, 6.8 x 9 mm	2	209	Real Chassis Brace Holder, 7075 T6	1		M3 Nut	2
088	Ball End, 5.8 mm, Short	4	210	Center Diff. Support Plate, Carbon Fiber	1		M2.5 Lock Nut	4
089	Ball End, 5.8 mm, Medium	4	211	Ball Bearing, 5 x 8 mm, Flanged	2		M3 Lock Nut	16
090	Sway Bar, Front	1	212	Special Main Chassis Plate, 7075 T6	1		Washer, 3 x 8 x 1 mm	4
091	Sway Bar, Rear	1	213	Adjustable Servo Saver Pipe	1		Shim, 5 x 10 x 0.5 mm	2
092	Stabilizer Ball, 5.8 x 11 mm	4	214	Adjustable Servo Saver Nut	1		Shim, 6 x 8 x 0.8 mm	1
093	Ball, 5.8 x 4.6 mm	2	215	Ball Bearing, 6 x 10 mm	4		Instruction Manual, Pro Version	1
094	Pivot Ball, 5.8 x 5.4 mm	4	216	Ball Bearing, 6 x 10 mm, Flanged	2		Cross Wrench	1
095	Side Guard, Right	1	217	Steering Plate, 7075 T6	1		M3x16 R/H Screw x1, M3x18 RH/ST Screw x2	

# Parts Name List (by Bag No.)

Bag No.	Key No.	Part Name	Q'ty	
<b>1</b>	001	Diff. Case	3	
	018	Bulkhead (B)	2	
	019	Bulkhead (A)	2	
	Step 1 ~ 3	007	Pin, 2.5 x 13.8 mm	6
		009	Bevel Shaft	6
	008	Diff. Bevel, Large	6	
	010	Diff. Bevel, Small	12	
	201	Diff. Outdrive, F/R	4	
	203	Universal Drive Shaft, Center Front	1	
	204	Universal Drive Shaft, Center Rear	1	
	016	Pinion Gear, Small	2	
	012	Crown Gear, Large	2	
	013	Steel Main Gear	1	
	202	Center Diff. Outdrive	2	
	011	Shim, 4 x 10 x 0.2 mm	14	
	005	O-ring, AS009	7	
	014	Diff. Gasket	3	
	015	Shim, 13 x 16 x 0.2 mm	8	
	002	Ball Bearing, 8 x 16 mm	10	
	006	Bushing, 6 x 10 x 2.5 mm	6	
		M4 x 4 Set Screw	4	
		M5 x 5 Set Screw	2	
		M3.5 x 25 RH/ST Screw	9	
		M3 x 12 RH/ST Screw	13	
	<b>2</b>	210	Center Diff. Support Plate, Carbon Fiber	1
		217	Steering Plate, 7075 T6	1
		218	Servo Saver Arm Bushing	2
Step 4 ~ 8		216	Ball Bearing, 6 x 10 mm, Flanged	2
		211	Ball Bearing, 5 x 8 mm, Flanged	2
209		Real Chassis Brace Holder, 7075 T6	1	
206		Front Upper Sus. Hinge Pin Holder, 7075 T6	1	
222		Front Support Plate, Carbon Fiber	1	
022		Front Bumper	1	
023		Body Mount	2	
025		Wing Stay	2	
026		Upper Wing Stay	2	
207		Wing Joint, Aluminum	2	
031		Center Diff. Mount	2	
033		Brake Pad	8	
039		Brake Level	2	
034		Brake Disc, Steel	4	
032		Brake Plate	6	
036		Brake Cam, Front	1	
037		Brake Cam, Rear	1	
205		Front Shock Tower, 7075 T6	1	
208		Rear Shock Tower, 7075 T6	1	
024		Shock Bushing	4	
029		Pivot Ball, 8.8 x 10 mm	2	
240		M3 Countersunk Aluminum Washer	34	
046		Servo Saver Shaft	2	
213		Adjustable Servo Saver Pipe	1	
214		Adjustable Servo Saver Nut	1	
045		Servo Saver Spring	1	
215		Ball Bearing, 6 x10 mm	4	
044		Servo Saver Arm A	1	
042		Servo Saver Arm B	1	
043		Servo Saver Arm C	1	
051		Shim, 3 x 8 x 0.5 mm	2	
		M3 x 12 Cap Screw	2	
		M3 x 16 Cap Screw	4	
		M3 x 23 Cap Screw	4	
		M4 x 12 F/H Screw	2	
		M3 x 20 F/H Screw	4	
		M3.5 x 16 FH/ST Screw	4	
		M3 x 12 RH/ST Screw	1	
		M3 x 15 RH/ST Screw	2	
		M3 x 4 Set Screw	2	
		M3 Lock Nut	2	
		M3 x 12 FH/ST Screw	20	
	Shim, 6 x 8 x 0.8 mm	1		
	Shim, 5 x 10 x 0.5 mm	2		

Bag No.	Key No.	Part Name	Q'ty
Step 8	212	Special Main Chassis Plate, 7075 T6, Hard Anodized & Teflon Coating	1
	065	Lower Suspension Arm, Front	2
<b>3</b>	073	Lower Suspension Arm, Rear	2
	060	Steering Knuckle, Left	2
Step 9 ~ 17	059	Steering Knuckle, Right	2
	062	Front Hub Carrier, Left	1
061	Front Hub Carrier, Right	1	
053	Upper Suspension Arm, Front	2	
054	Ball End, 6.8 mm, Short	2	
070	Ball End, 8.8 mm	4	
074	Rear Hub Carrier, Left	1	
075	Rear Hub Carrier, Right	1	
219	Lower Sus. Hinge Pin Holder A, 7075 T6	2	
220	Lower Sus. Hinge Pin Holder B, 7075 T6	2	
063	Universal Drive Shaft, Front	2	
221	Universal Drive Shaft, Rear	2	
238	Wheel Hub, Hard Anodized	4	
239	Wheel Nut, Hard Anodized	4	
055	M5 x 25 Turnbuckle, Front Upper Arm	2	
071	M5 x 50 Turnbuckle, Rear Upper Arm	2	
056	Ball, 6.8 x 6 mm	2	
072	Ball, 8.8 x 9 mm	2	
064	Knuckle Collar	4	
078	Spacer, Plastic	4	
076	Rear Toe-in Adjuster	4	
077	Stopper, 3 mm	2	
002	Ball Bearing, 8 x 16 mm	8	
069	Lower Suspension Hinge Pin, Front, Short	2	
079	Lower Suspension Hinge Pin, Short	2	
068	Lower Suspension Hinge Pin, Long	4	
057	Upper Suspension Hinge Pin, Front	2	
174	Pin, 3 x 16.8 mm	4	
058	E-clip, E-2.5	4	
	M4 x 12 Cap Screw	4	
	M3 x 23 Cap Screw	2	
	M3 x 25 Cap Screw	2	
	M3 x 4 Set Screw	4	
	M4 x 4 Set Screw	4	
	M4 x 12 Set Screw	4	
	M5 x 5 Set Screw	4	
	M3 x 12 F/H Screw	2	
	M4 x 15 F/H Screw	9	
	M3 x 12 FH/ST Screw	2	
	M3 Lock Nut	4	
	M4 x 12 F/H Screw	13	
<b>4</b>	096	Side Guard, Left	1
	095	Side Guard, Right	1
Step 18 ~ 20	090	Front Sway Bar	1
	091	Rear Sway Bar	1
082	Rear Bumper	1	
088	Ball End, 5.8 mm, Short	4	
089	Ball End, 5.8 mm, Medium	4	
085	Ball End, 6.8 mm, Regular	4	
092	Stabilizer Ball, 5.8 x 11 mm	4	
093	Ball, 5.8 x 4.6 mm	2	
094	Pivot Ball, 5.8 x 5.4 mm	2	
056	Ball, 6.8 x 6 mm	2	
087	Pivot Ball, 6.8 x 9 mm	2	
086	M4 x 40 Turnbuckle, Steering	2	
	M3 x 16 F/H Screw	2	
	M3 x 20 F/H Screw	2	
	M3 Nut	2	
	M3 Lock Nut	2	
	M3 x 12 Set Screw	4	
	M3 x 4 Set Screw	4	
	M3 x 8 FH/ST Screw	6	
	M3 x 8 RH/ST Screw	4	
	M3 x 15 RH/ST Screw	4	



## Parts Name List (by Bag No.)

Bag No.	Key No.	Part Name	Q'ty	
<b>5</b>	107	Receiver Box B	1	
	106	Receiver Box A	1	
	113	Receiver Box Cap	1	
	Step 18 ~ 20	223	Special Chassis Brace, Front, 7075 T6	1
		224	Special Chassis Brace, Rear, 7075 T6	1
		225	Radio Plate, Carbon Fiber	1
		227	Heat-sink Engine Mount A, Right	1
		228	Heat-sink Engine Mount B, Left	1
		112	R-pin, R4	1
		104	Body Pin, R5	1
		226	Radio Plate Post, Aluminum	3
		129	M3 x 30 Turnbuckle, Steering Servo	1
		105	Pin Holder	1
		094	Pivot Ball, 5.8 x 5.4 mm	2
		136	Stopper, 2 mm	4
		137	Adjuster Knob	2
		138	Linkage Rod	3
		135	Linkage Spring	1
		131	Throttle Rod Support	1
		132	Brake Rod Support, Upper	1
	133	Brake Rod Support, Lower	1	
	103	Transponder Stay	1	
	102	Servo Mount	4	
	130	Ball End, 5.8 mm, Long	2	
	134	Throttle Rod End	1	
	243	Servo Horn	2	
	244	Servo Horn Adaptor, Futaba	2	
	245	Servo Horn Adaptor, JR	2	
	246	Servo Horn Adaptor, Hitec	2	
		M3 x 12 R/H Screw	1	
		M3 x 10 F/H Screw	6	
		M3 x 12 F/H Screw	3	
		M2 x 10 RH/ST Screw	1	
		M3 x 15 RH/ST Screw	4	
	M3 x 12 FH/ST Screw	3		
	M3 x 8 FH/ST Screw	1		
	M3 x 12 RH/ST Screw	10		
	M3 x 20 Cap Screw	1		
	M3 Lock Nut	4		
	M3 x 4 Set Screw	6		
	M3 x 18 RH/ST Screw	2		
Step 25	109	Antenna Tube	1	
	111	Antenna Tube Cap	1	
	110	Antenna Tube Holder	1	
Step 27 ~ 34	115	Flywheel	1	
	116	Corn Collar	1	
	143	Muffler Stay Wire	1	
	121	Clutch Bell, 13 T	1	
	119	Clutch Shoe	3	
	108	Fuel Tank Post, Plastic	2	
	126	Ball Bearing, 5 x 10 mm	2	
	128	M4 Countersunk Aluminum Washer	4	
	120	Clutch Spring	3	
	117	Pilot Nut (SG)	1	
	118	Pilot Shaft (Standard)	1	
	144	Muffler Stay	1	
	051	Shim, 3 x 8 x 0.5 mm	1	

Bag No.	Key No.	Part Name	Q'ty	
<b>6</b>	052	Shim, 5 x 7 x 0.3 mm	3	
	127	Spring Washer	4	
	139	Fuel Tank	1	
	Step 27 ~ 34 (continued)	146	Silicone Fuel Tubing	1
		057	Hinge Pin, for Fuel Tank	1
		058	E-clip, E-2.5	2
		241	Fuel Tank Splashguard	1
		242	Brake Splashguard, Front	1
			M3 x 16 Cap Screw	4
			M3 x 6 Cap Screw	1
			M4 x 4 Set Screw	1
			M3 Lock Nut	4
			M4 x 8 F/H Screw	5
		M3 x 12 FH/ST Screw	2	
		M3 x 12 RH/ST Screw	2	
		M3 x 8 RH/ST Screw	1	
	Step 43	180	Nylon Wing	1
		104	Body Pin	2
		181	Wing Stay Spacer	2
		182	E-clip, E-6	2
	<b>7</b>	169	Spring Adjuster, 1 mm	4
		170	Spring Adjuster, 2 mm	8
		171	Spring Adjuster, 5 mm	8
		172	Spring Adjuster, 10 mm	4
		167	Shock Spring, Short	2
		168	Shock Spring, Long	2
		229	Shock Body, Hard Coating w/Teflon, Short	2
230		Shock Body, Hard Coating w/Teflon, Long	2	
231		Special Shock Cap	4	
232		Shock Collar, Thick	4	
233		Shock Collar, Thin	4	
234		Shock Piston, 1.2 mm x 2 Holes	4	
247		Shock Pivot Ball Bushing, 5.8 mm	4	
235		Special Shock Shaft, 55 mm	2	
236		Special Shock Shaft, 61 mm	2	
164		Silicone Shock Bladder	4	
237		Special Silicone O-ring, P3, 55 Shore A	8	
248		Silicone Shock Boot	4	
165		Spring Collar	4	
166		Spring Cup	4	
161		Ball End, 5.8 mm, for Shock	4	
173		Ball, 5.8 x 5.3 mm	8	
156		C-ring	4	
185		Shim, 2.6 x 6 x 0.5 mm	4	
		Washer, 3 x 8 x 1 mm	4	
		M3 x 16 R/H Screw	4	
		M3 Lock Nut	4	
	M2.5 Lock Nut	4		
Step 44 ~ 46	183	Body	1	
	184	Decals	1	
	249	Decals, Pro Version	1	
	Opt.1	Wheel	0	
	Opt.2	Tire	0	
	Opt.3	Foam Tire Insert	0	

**Memo:**

# Spare Parts List

Item No.	Part Name	Key No./Q'ty	Item No.	Part Name	Key No./Q'ty		
GS-ST001	Clutch Bell, 13T	52 x1	GS-ST022	(continued)	75 x1		
		121 x1			76 x4		
		3x6mm Cap Screw x1			77 x2		
GS-ST002	Flywheel Set	115 x1	GS-ST023	Universal Drive Shaft, Front (2)	63 x2		
		116 x1			5x5mm Set Screw x2		
GS-ST003	Clutch Spring	120 x3	GS-ST024	Drive Shaft, Rear (2)	84 x2		
GS-ST004	Clutch Shoe	119 x3	GS-ST025	Drive Shaft, Front Center	97 x1		
GS-ST005	Steel Main Gear, 46T	13 x1, 5 x1, 6 x1	GS-ST026	Drive Shaft, Rear Center	98 x1		
GS-ST006	Crown Gear, Large	12 x1, 5 x1, 6 x1	GS-ST027	Center Diff. Outdrive (2)	4 x2		
GS-ST007	Pinion Gear, Small	16 x1	GS-ST028	Diff. Outdrive, F/R (2)	3 x2		
GS-ST008	Diff. Bevel Gear Set	8 x2	GS-ST029	Drive Joint (2)	17 x2		
		9 x2			5x5mm Set Screw x2		
		10 x4					
GS-ST009	Diff. Case Set	1 x1	GS-ST030	Wheel Hub Set (1)	174 x1		
		6 x1, 5 x1			175 x1		
		14 x1			176 x1		
		3x12mm RH/ST Screw x4					
GS-ST010	Diff. Gasket	14 x2	GS-ST031	Engine Mount Set, 17mm	114 x2		
		4x4mm Set Screw x1			127 x4		
GS-ST011	Center Diff. Mount Set	31 x2			128 x4		
		4x12mm F/H Screw x4			3x16mm Cap Screw x4		
GS-ST012	Bulkhead Set (1)	18 x1	GS-ST032	Pilot Nut (SG)	117 x1		
		19 x1			GS-ST033	Shock Tower, Front	20 x1
		4x12mm F/H Screw x4					3x12mm RH/ST Screw x4
GS-ST013	Bumper Set (F, R)	3.5x25mm RH/ST Screw x4	GS-ST034	Shock Tower, Rear	28 x1		
		22 x1			3x12mm RH/ST Screw x4		
		82 x1					
GS-ST014	Lower Suspension Arm, Rear (1)	73 x1	GS-ST035	Steering Plate Set	48 x1		
		78 x2			49 x2		
GS-ST015	Lower Suspension Arm, Front (1)	4x12mm Set Screw x1			3x12mm R/H Screw x2		
		65 x1			51 x2		
GS-ST016	Upper Suspension Arm Set, Rear (1)	4x12mm Set Screw x1	GS-ST036	Servo Saver Set	41 x1		
		70 x1			42 x1		
		71 x1			43 x1		
		72 x1			44 x1		
		29 x1			45 x1		
		3x12mm Cap Screw x1			46 x2		
		3x25mm Cap Screw x1			47 x4		
		M3 Lock Nut x1			50 x1		
GS-ST017	Front Upper Suspension Arm Set (2)	53 x2			51 x2		
		54 x2			52 x2		
		55 x2			3x12mm R/H Screw x2		
		56 x2			4x12mm F/H Screw x2		
		M3 Lock Nut x2					
GS-ST018	Lower Suspension Hinge Pin Holder (2)	3x23mm Cap Screw x2	GS-ST037	Steering Linkage Set	94 x2		
		66 x1			129 x1		
		67 x1			130 x2		
		4x4mm Set Screw x2			3mm Lock Nut x2		
GS-ST019	Hub Carrier Set, Front (L, R)	4x15mm F/H Screw x4			3x12mm F/H Screw x2		
		61 x1			131 x1		
		62 x1			132 x1		
GS-ST020	Steering Knuckle, Left	3x4mm Set Screw x2			133 x1		
		60 x1			134 x1		
		64 x2			135 x1		
GS-ST021	Steering Knuckle, Right	4x12mm Cap Screw x2			136 x4		
		59 x1			137 x2		
		64 x2			138 x3		
GS-ST022	Hub Carrier Set, Rear (L, R)	4x12mm Cap Screw x2	GS-ST038	Throttle Linkage Set	2x13mm RH/ST Screw x1		
		74 x1			3x12mm R/H Screw x1		
					3x4mm Set Screw x6		
			GS-ST039	Chassis Brace Set, Front	3mm Lock Nut x1		
					83 x2		

# Spare Parts List

Item No.	Part Name	Key No./Q'ty	Item No.	Part Name	Key No./Q'ty
GS-ST039	(continued)	85 x2	GS-ST058	(continued)	3x8mm F/H Screw x1
		100 x1			3x12mm FH/ST Screw x6
		3x12mm F/H Screw x1	GS-ST059	Side Guard Set	95 x1
		3x12mm R/H Screw x1			96 x1
GS-ST040	Chassis Brace Set, Rear	30 x1	GS-ST060	Fuel Tank Set, Standard	3x8mm FH/ST Screw x6
		56 x1			108 x2
		83 x1			139 x1
		85 x2			3x12mm FH/ST Screw x2
		100 x2	3x12mm RH/ST Screw x2		
		3mm Lock Nut x1	GS-ST061	5-Spoke Wheel (2)	177 x2
		3x12mm F/H Screw x1	GS-ST062	Foam Tire Insert (2)	179 x2
		3x20mm Cap Screw x1	GS-ST063	Tire (2)	178 x2
3.5x16mm FH/ST Screw x2	GS-ST064	Pin, 2.5 x 13.8 mm (6)	7 x6		
GS-ST041	Brake Cam Set, Front	36 x1	GS-ST065	Shim, 5 x 7 x 0.2 mm (10)	52 x10
		39 x1	GS-ST066	Shim, 4 x 10 x 0.3 mm (10)	11 x10
		3x4mm Set Screw x1	GS-ST067	O-ring, AS009 (6)	5 x6
GS-ST042	Brake Cam Set, Rear	37 x1	GS-ST068	Steering Turnbuckle Set (2)	85 x4
		39 x1			86 x2
		3x4mm Set Screw x1			87 x4
3x16mm R/H Screw x4					
GS-ST043	Brake Disc, Steel (2)	34 x2	GS-ST069	Rear Wheel Axle (2)	80 x2
GS-ST044	Brake Plate (2)	32 x2			5x5mm Set Screw x2
GS-ST045	Brake Pad (2)	33 x10	GS-ST070	Main Chassis Plate, 6061 T6	40 x1
		3x12mm Cap Screw x2			GS-ST071
GS-ST046	Sway Bar Linkage Set	88 x2			
		89 x2			4x8mm F/H Screw x1
		92 x2			4x4mm Set Screw x1
		93 x2	GS-ST072	Front Shock Set (2)	51 x2
		94 x2			152 x2
		3x4mm Set Screw x2			154 x2
		3x12mm Set Screw x2			156 x2
		3x15mm RH/ST Screw x2			157 x4
GS-ST047	Front Sway Bar (Standard)	90 x1			158 x2
GS-ST048	Rear Sway Bar (Standard)	91 x1			159 x2
GS-ST049	Front Support Plate	81 x1			160 x2
GS-ST050	Center Diff. Support Plate Set	35 x1			161 x2
		38 x2			162 x2
		3x12mm RH/ST Screw x4			163 x2
GS-ST051	Lower Suspension Hinge Pin, Long	68 x2			164 x2
GS-ST052	Upper Suspension Hinge Pin, Front (2)	57 x2			165 x2
		58 x4			166 x2
GS-ST053	Lower Suspension Hinge Pin, Front (2)	69 x2			167 x2
GS-ST054	Lower Suspension Hinge Pin, Short (2)	79 x2			169 x4
GS-ST055	Nylon Wing Set	180 x1			170 x4
		181 x1			171 x2
GS-ST056	Wing Mount Set	23 x2			172 x2
		25 x2			173 x4
		26 x2			175 x2
		27 x2			185 x2
		182 x2			3x16mm R/H Screw x2
		3x12mm RH/ST Screw x2			3x23mm Cap Screw x2
		3x18mm RH/ST Screw x6			3mm Lock Nut x2
GS-ST057	Radio Plate	101 x1			2.5mm Lock Nut x2
		3x12mm RH/ST Screw x5	GS-ST073	Rear Shock Set (2)	51 x2
GS-ST058	Radio Box Set	102 x4			153 x2
103 x1		155 x2			
106 x1		156 x2			
107 x1		157 x4			
108 x3		158 x2			
113 x1		159 x2			
3x12mm RH/ST Screw x13		160 x2			
3x15mm RH/ST Screw x4					

# Spare Parts List

Item No.	Part Name	Key No./Q'ty
GS-ST073	(continued)	161 x2
		162 x2
		163 x2
		164 x2
		165 x2
		166 x2
		168 x2
		169 x4
		170 x4
		171 x2
		172 x2
		173 x4
		185 x2
		3x16mm R/H Screw x2
		3x23mm Cap Screw x2
		3mm Lock Nut x2
		2.5mm Lock Nut x2
GS-ST074	Body	183 x1
GS-ST075	Decals	184 x1
GS-ST076	Antenna Stay Set	109 x1
		110 x1
		111 x1
GS-ST077	Pilot Shaft (Standard)	118 x1
GS-ST078	Manifold Holder Set	124 x1
		125 x1
GS-ST079	Manifold Set	122 x1
		123 x1
		124 x1
		125 x1
GS-ST080	Upper Suspension Holder, Front	21 x1
		3.5x16mm FH/ST Screw x2
GS-ST081	Muffler Set	140 x1
		141 x1
		142 x1
		145 x2
		4x4mm Set Screw x1
GS-STP01	Carbon Fiber Radio Plate	225 x1
GS-STP02	Carbon Fiber Support Plate, Front	222 x1
GS-STP03	Carbon Fiber Support Plate Set, Center	210 x1
		211 x2
GS-STP04	Special Steering Plate Set, 7075 T6	216 x2
		217 x1
		218 x2
GS-STP05	Special Main Chasis Plate, 7075 T6	212 x1
GS-STP08	Shock Tower, Front, 7075 T6	205 x1
GS-STP09	Shock Tower, Rear, 7075 T6	208 x1
GS-STP10	Upper Sus. Hinge Pin Holder (F), 7075 T6	206 x1
GS-STP11	Lower Sus. Hinge Pin Holder Set, #3, 7075 T6	219 x1
		220 x1
GS-STP13	Adjustable Servo Saver Pipe Set	213 x1
		214 x1
GS-STP14	Chasis Brace, Front, 7075 T6	223 x1
GS-STP15	Rear Chasis Brace Holder, 7075 T6	209 x1
GS-STP16	Chasis Brace, Rear, 7075 T6	224 x1
GS-STP17	Universal Drive Shaft, Front Center	203 x1
		5x5mm Set Screw x1
GS-STP18	Universal Drive Shaft, Rear Center	204 x1
		5x5mm Set Screw x1
GS-STP19	Universal Drive Shaft, Rear	221 x2
		5x5mm Set Screw x2

Item No.	Part Name	Key No./Q'ty
GS-STP20	Hard Anodized Wheel Hub Nut Set	238 x2
		239 x2
GS-STP21	Aluminum Post	226 x3
GS-STP22	Heat-sink Engine Mount Set	227 x1
		228 x1
GS-STP23	Aluminum Wing Joint	207 x2
GS-80006	Body Pin	104 x6
GS-123	High Performance Shock, Short	156 x2
		161 x2
		164 x2
		165 x2
		166 x2
		167 x2
		169 x4
		170 x4
		171 x2
		172 x2
		173 x4
		185 x2
		229 x2
		231 x2
		232 x2
		233 x2
		234 x2
237 x4		
247 x2		
Special Shock Shaft (S) x2		
3x8x1mm Washer x2		
3x16mm R/H Screw x2		
3mm Lock Nut x2		
2.5mm Lock Nut x2		
GS-124	High Performance Shock, Medium	156 x2
		161 x2
		164 x2
		165 x2
		166 x2
		169 x4
		170 x4
		171 x2
		172 x2
		173 x4
		185 x2
		231 x2
		232 x2
		233 x2
		234 x2
		235 x2
		237 x4
247 x2		
Special Shock Body (M) x2		
Shock Spring (M) x2		
3x8x1mm Washer x2		
3x16mm R/H Screw x2		
3mm Lock Nut x2		
2.5mm Lock Nut x2		
GS-125	High Performance Shock, Long	156 x2
		161 x2
		164 x2
		165 x2
		166 x2

# Spare Parts List

Item No.	Part Name	Key No./Q'ty	Item No.	Part Name	Key No./Q'ty
GS-125	(continued)	168 x2	GS-25075	Shock Body, w/Hard & Teflon Coating, Long (2)	230 x2
		169 x4	GS-30022	Special O-ring, P3, 55 Shore A (10)	237 x10
		170 x4	GS-34002	Silicone Shock Boot, Original Color (4)	248 x4
		171 x2	GS-68020	Shock Spring Set, Short (6)	
		172 x2	GS-68022	Shock Spring Set, Medium (6)	
		173 x4	GS-68024	Shock Spring Set, Long (6)	
		185 x2	GS-69002	6x10x3mm Ball Bearing, Flanged (2)	216 x2
		230 x2	GS-69004	5x8x2.5mm Ball Bearing, Flanged (2)	211 x2
		231 x2	GS-69005	6x10x3mm Ball Bearing, Regular (2)	215 x4
		232 x2	GS-100006	Ball End, 6.8mm, short	54 x4
		233 x2	GS-250044	Pivot Ball, 8.8x10mm	29 x4
		234 x2	GS-250045	Ball, 8.8x9mm	72 x4
		236 x2	GS-600153	Shim, 13x13.4x0.2mm	15 x10
		237 x4	GS-900028	Ball, 5.8x4.6mm	93 x10
		247 x2	GS-900029	Pivot Ball, 5.8x5.4mm	94 x10
		3x8x1 mm Washer x2	GS-900031	Ball, 6.8x7mm	56 x10
		3 x16 mm R/H Screw x2	GS-ST002A	Corn Collar	116 x2
		3mm Lock Nut x2	GS-ST009A	Bushing, 6x10x2.5mm	6 x6
	2.5mm Lock Nut x2	GS-ST016A	Ball End, 8.8mm	70 x4	
GS-10060	Shock Accessories Kit		GS-ST016B	M5x50 Turnbuckle, Rear Upper Arm	71 x2
GS-10063	Special Shock Piston Set (6)		GS-ST017A	M5x25 Turnbuckle, Front Upper Arm	55 x2
GS-25069	Special Shock Cap (2)	231 x2	GS-ST020A	Knuckle Collar	64 x4
GS-25070	Special Shock Shaft, Short (2)		GS-ST035A	Servo Saver Arm Bushing	49 x2
GS-25071	Special Shock Shaft, Medium (2)	235 x2	GS-ST036A	Servo Saver Shaft	46 x2
GS-25072	Special Shock Shaft, Long (2)	236 x2	GS-ST056A	Body Mount	23 x2
GS-25073	Shock Body, w/Hard & Teflon Coating, Short (2)	229 x2	GS-ST068A	Turnbuckle, 4x40mm	86 x2
GS-25074	Shock Body, w/Hard & Teflon Coating, Medium (2)				

**MEMO:**

## ***Optional Parts List***

<b><i>Item No.</i></b>	<b><i>Part Name</i></b>
GS-STP06	Special Steering Knuckle, Right, T6 CNC Machined
GS-STP07	Special Steering Knuckle, Left, T6 CNC Machined
GS-STP12	Special Lower Suspension Hinge Pin Holder Set, 1.5°, 7075 T6
GS-STP24	Special Fiber Brake Plate (1)
GS-STP25	Special Torsen Differential Set, Center
GS-STP26	Special Torsen Differential Set, Front/Rear
GS-STP27	Special 2-piece Center Diff. Mount Set, 7075 T6 CNC Machined
GS-STP28	Wide Wheel Hub Nut Set w/Hard Anodized (2)
GS-STP29	Sway Bar Set, Front
GS-STP30	Sway Bar Set, Rear
GS-123	High Performance Shock Set (S) (2)
GS-124	High Performance Shock Set (M) (2)
GS-125	High Performance Shock Set (L) (2)
GS-34002FY	Silicone Shock Boot, FY (4)
GS-34002FG	Silicone Shock Boot, FG (4)
GS-34002FP	Silicone Shock Boot, FP (4)
GS-34002PR	Silicone Shock Boot, PR (4)
GS-34002TBL	Silicone Shock Boot, TBL (4)
GS-70004	Pure Silicone Shock Oil, 250 cps.
GS-70005	Pure Silicone Shock Oil, 300 cps.
GS-70006	Pure Silicone Shock Oil, 350 cps.
GS-70007	Pure Silicone Shock Oil, 400 cps.
GS-70008	Pure Silicone Shock Oil, 450 cps.
GS-70009	Pure Silicone Shock Oil, 500 cps.
GS-70019	Pure Silicone Diff. Oil, 1000 cps.
GS-70021	Pure Silicone Diff. Oil, 3000 cps.
GS-70023	Pure Silicone Diff. Oil, 5000 cps.
GS-70025	Pure Silicone Diff. Oil, 7000 cps.
GS-70028	Pure Silicone Diff. Oil, 10000 cps.
GS-70030	Pure Silicone Diff. Oil, 30000 cps.
GS-70032	Pure Silicone Diff. Oil, 50000 cps.
GS-700105	Pure Silicone Shock Oil, 20 wt.
GS-700107	Pure Silicone Shock Oil, 25 wt.
GS-700109	Pure Silicone Shock Oil, 30 wt.
GS-700111	Pure Silicone Shock Oil, 35 wt.
GS-700113	Pure Silicone Shock Oil, 40 wt.
GS-700115	Pure Silicone Shock Oil, 45 wt.
GS-700117	Pure Silicone Shock Oil, 50 wt.
GS-700119	Pure Silicone Shock Oil, 55 wt.
GS-700121	Pure Silicone Shock Oil, 60 wt.



# STORM Set-up Sheet

Name of Driver		Date		Track		Engine	
Fuel	Plug	Clutch Bell	Tire	Inner	Muffler		
/ No.		Teeth					

## Shock Set-up

Silicone Shock Oil Brand:

	Front	Rear
Shock Piston (Optional Parts)	φ 1.2mm X 2 holes	φ 1.2mm X 2 holes
	φ 1.2mm X 3 holes	φ 1.2mm X 3 holes
	φ 1.4mm X 2 holes	φ 1.4mm X 2 holes
Shock Oil	wt.	wt.
Shock Spring (rate)		
Spring Adjuster	mm	mm

## Wing Angle

Upper . Under

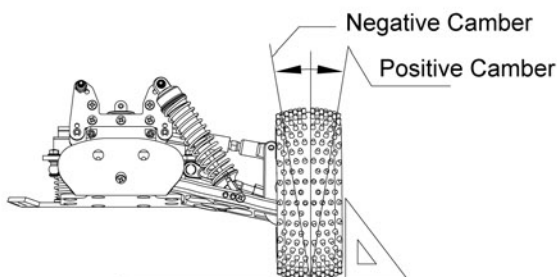
## Ground Clearance

	Front	Rear
Height	mm	mm



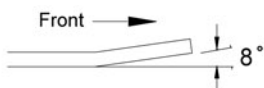
## Camber Angle

	Front	Rear
Camber Angle		



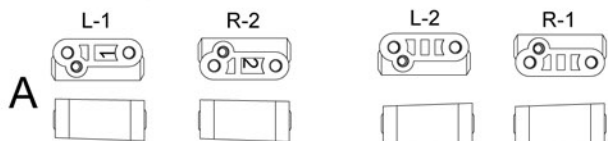
## Anti-squat

Front	A . B
Rear	A . B



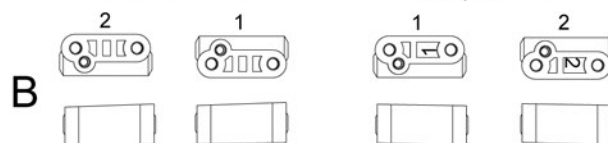
Front, UP = 6°

Rear, UP = 1°



Front, UP = 10°

Rear, UP = 2°



## Steering Plate

A . B . C



## Shock Mounting Position

	Front	Rear
Shock Tower	I . C . O	I . C . O
Suspension Arm	I . C . O	I . C . O

I = Inside Hole  
C = Center Hole  
O = Outside Hole

## Diff. Gear Set-up

Silicone Diff. Oil Brand:

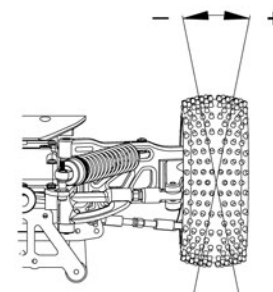
	Front	Center	Rear
Diff. Oil	wt.	wt.	wt.

## Toe Angle (Front)

	Front
Toe Angle	

## Toe Angle (Rear)

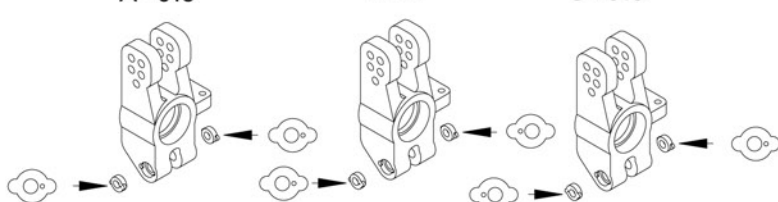
L	R	Rear
Toe Angle	A . B . C	



A=0.5°

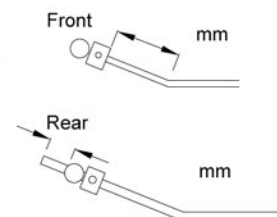
B=2°

C=3.5°



## Sway Bar

Front	Rear
φ	φ
mm	mm

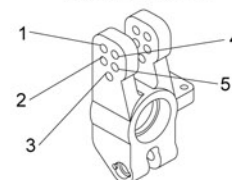
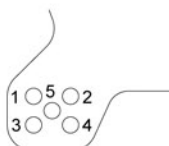


## Upper Arm Position

	Front	Rear
Shock Tower	Upper . Under	1 . 2 . 3 . 4 . 5
Hub Carrier		1 . 2 . 3 . 4 . 5

Rear Shock Tower

Rear Hub Carrier





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