# NEMESIS 7.7

CEN Racing introduces their newest monster truck, The NEMESIS 7.7. This high performance monster truck is based off of the mighty GENESIS 46 with racing in mind. The NEMESIS is fully stocked with new features that will conquer any competition in its path. The NEMESIS 7.7 is designed for any monster truck enthusiast that seeks racing quality performance from a true bashing monster truck. Durability and performance are the key factors in the development of the massive NEMESIS 7.7. Whether or not, you're racing at your local R/C track or you' re bashing in your backyard, The NEMESIS 7.7 has all you' ll ever need in a monster truck, and then some.

The NEMESIS 7.7 will also include an FM MX3 radio system from Airtronics / Sanwa. Two 144 oz servos are included for ensured steering and throttle response.

***NEMESIS Fast Facts***

| | |
|---|---|
| Length | : 23.1in(587mm) |
| Width | : 18in(458mm) |
| Wheelbase | : 15.63in(397mm) |
| Ground Clearance | : 3in(76mm) |
| Tire Size | : D7.48xW3.54in(D190xW90mm) |
| Wheel Size | : D4.84in(D123mm) |
| Engine | : 7.6cc |
| Fuel Tank | : 220cc |
| Weight | : 15.4 lbs(7 Kgs) |

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C105009
20050801

# Tools

The following tools are necessary to make assembly & maintenance of your new R/C car. both easier & more enjoyable. For your safty, exercise care when using any hand tools, sharp instruments, or power tools during construction. Always use safty glasses. If you have any questions, please consult your local hobby shop or experienced friend.

***Hexagon wrench*** (kit tools supplied)
1.5mm, 2mm, 2.5mm,3mm.

***Cross wrench*** (hexagon socket tools)
5.5mm, 7mm, 8mm, 10mm, 12mm, 17mm.

***Hobby scissors***
For cutting and trimming the car's body, decals.

***Grease***
Lubrication of gears; reduces friction.

***Glue***
Use to glue tires onto the wheels; temporary repairs.

! Always use hand and eye protection with cyanoacrylic glue.

***Threadlock***
For locking screws and nuts to prevent loosening.

***Hobby knife***
Use for trimming and cutting.

! This knife cuts plastic and fingers with equal ease, so be careful

***Flat blade screwdriver***

***Phillips screwdriver***

***Needle nose pliers***
Clamping parts during assembling and disassembling

***Hand drill***
2mm, 3mm, 6mm.

Soldering iron (40~50 watts) and a small amount of solder.

! Be careful iron is very hot

***Liquid dish soap***

***Ruler***

# SAFETY PRECAUTIONS

- This radio controlled model is not a toy. For yours and others safty, the following guidelines and cautions should be followed carefully.
  **WARNING:** Do not operate R/C car in the following locations:
  1. Street
  2. Crowded area; keep away from children.
  3. Indoors or an unventilated room.

  **SUGGESTION:** Outside in a large open area without obstructions; R/C race track.
- This kit uses many kinds of small parts, sharp tools, large polybag, and chemical materials. Please keep these and other potentially harmful items away from children.
- Use only FCC approved ground frequency crystals in the R/C unit.
- Do not operate a Gas powered car in a residential area. The noise could disturb the peace.
- If you are operating several cars together, check the frequencies to make sure none are the same. Operating the cars on the same frequency can cause radio interference and loss of control of the car.
- If the car is not operating properly, stop immediately and check the condition of the car.
- To avoid damage to the R/C equipment, or losing control of the car, avoid running in or near water.
- To always maintain control of your car and to avoid a jump start, Please do the following:
  1. ON - First turn on the transmitter, then the car's receiver. 2. OFF - Turn off the car's receiver, then the transmitter.
- Do not touch the R/C car after operation, as the engine, muffler, electric motor, battery, and speed controller will be very hot! Allow to cool before handling. While charging your car's battery, it could become hot. Carefully read your battery charger's instructions for proper use.
- When the R/C car is in operation, do not touch any of its moving parts such as drive shafts, wheel ,etc., as the rotating parts can cause serious injury.
- After operation of the R/C car, it is necessary to remove the battery for protection of the R/C equipment.
- Paint and grease are extremely flamable, keep away from sources of ignition. Do not puncture or throw away spray paint cans into garbage.

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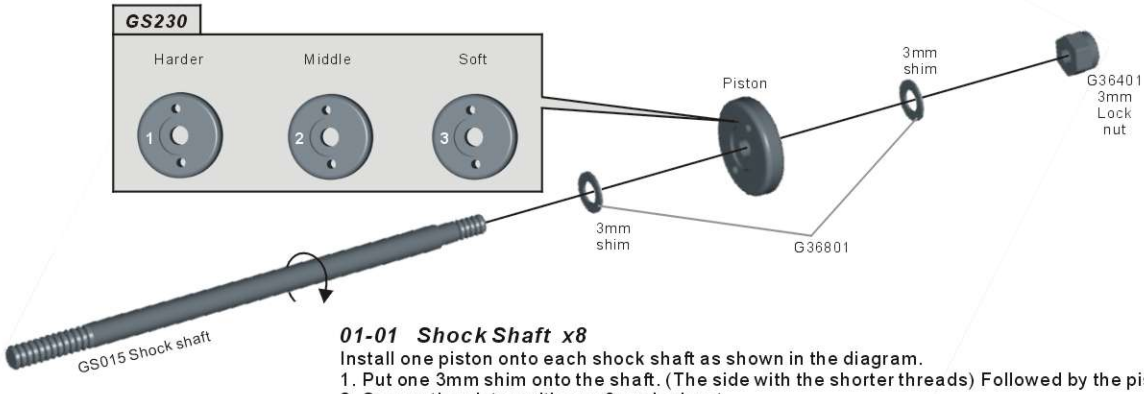
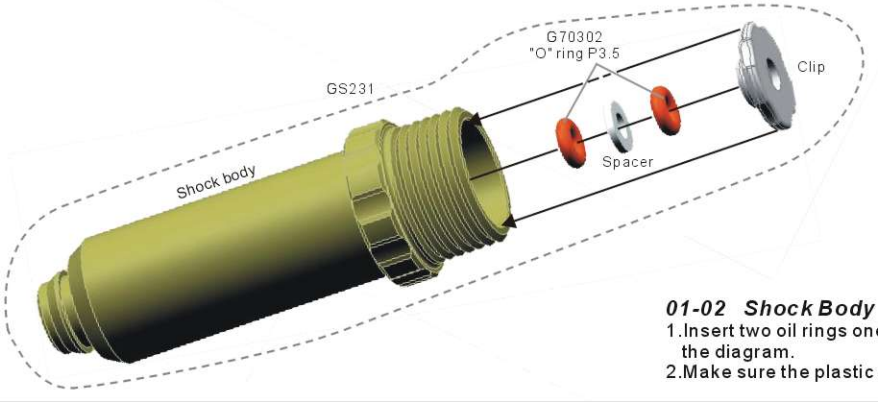
# 01 Shock Assembly

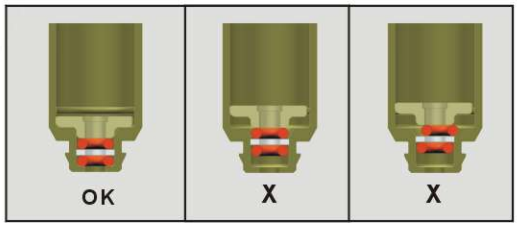



### 01-01 Shock Shaft x8

Install one piston onto each shock shaft as shown in the diagram.
1. Put one 3mm shim onto the shaft. (The side with the shorter threads) Followed by the piston then the last 3mm shim.
2. Secure the piston with one 3mm lock nut.

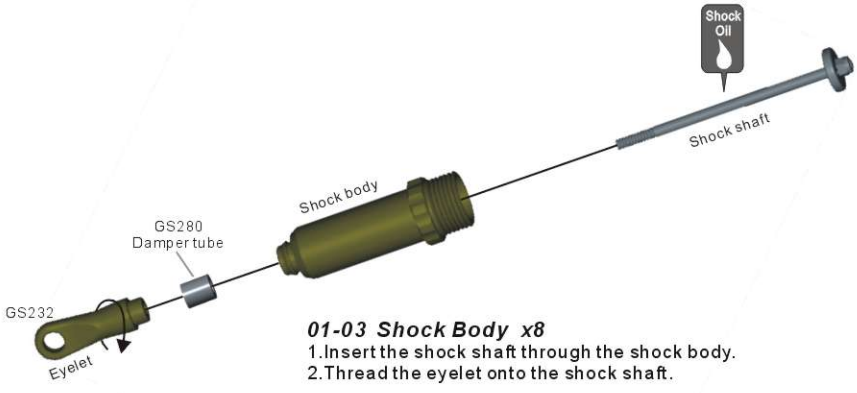
*"Racer Tip"* Thread the nut on with the nylon side first. This will help it stay in place.

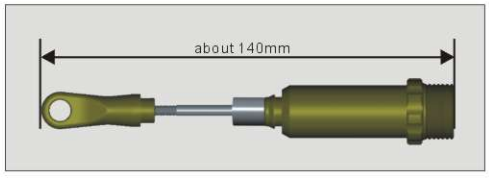



### 01-02 Shock Body x8

1.Insert two oil rings one spacer and one plastic clip into each shock body as shown in the diagram.
2.Make sure the plastic clip is fully seated in the shock body, refer to the diagram.

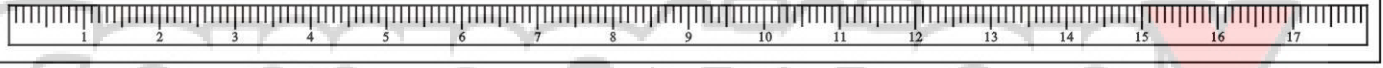



### 01-03 Shock Body x8

1.Insert the shock shaft through the shock body.
2.Thread the eyelet onto the shock shaft.

*"Racer Tip"* Make sure you screw the eyelets on equally. Compare the shafts with each other and adjust eyelet if needed to make them all the same length.

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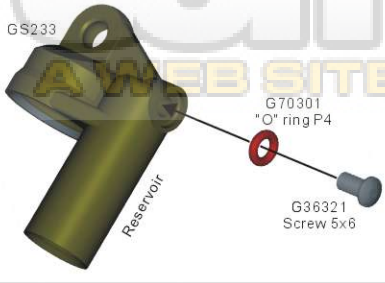


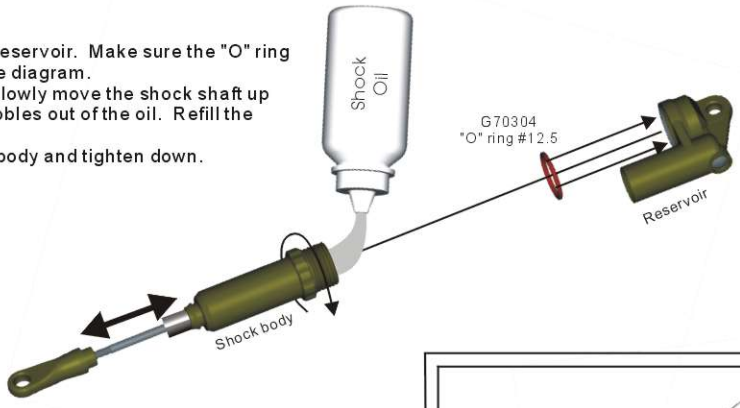

### 01-04 Reservoir x8

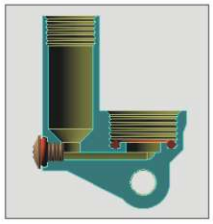
1.First close off the bleeder valve with one P4 "O" ring and 5x6 button head screw.
2.Repeat for each reservoir.

# 01 Shock Assembly

### 01-05 Shock Body x8

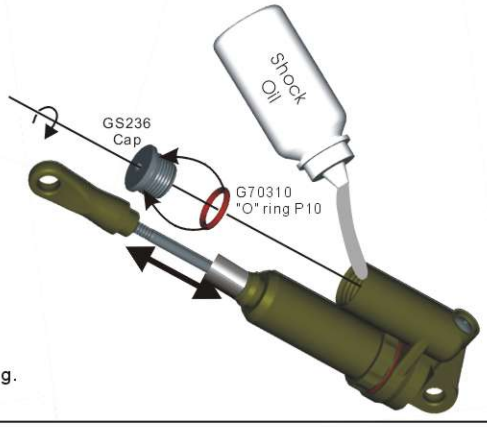
1. Insert one #12.5 "O" ring into each reservoir. Make sure the "O" ring is completely seated as shown in the diagram.
2. Fill the shock body with shock oil. Slowly move the shock shaft up and down until you get all the air bubbles out of the oil. Refill the shock to the top with oil if needed.
3. Screw the reservoir onto the shock body and tighten down.

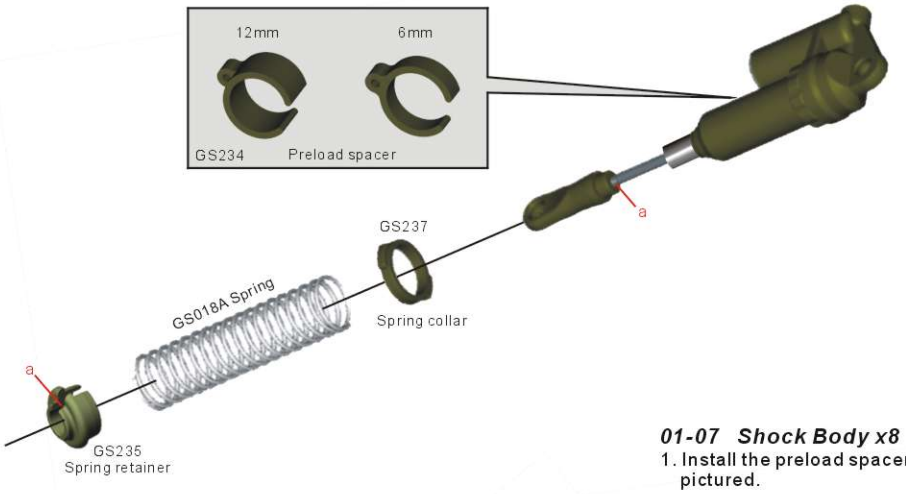


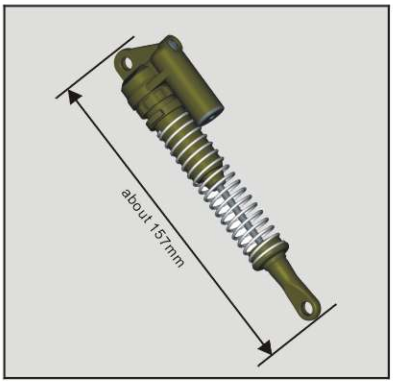



### 01-06 Shock Body x8

1. Now you need to fill the reservoir with oil. Fill the reservoir up to the bottom of the threads. Now slowly move the shaft up and down to get any extra air bubbles out.
2. Refill to the bottom of the threads if needed and insert the cap with the "O" ring. Tighten down then loosen 1 full turn. Slowly push the shock shaft all the way in and while holding the shaft in tighten down the cap.
3. Check your work, the shaft should go all the way into the shock body. If it doesn't you may need to bleed the shock slightly more. Shock action should be smooth without binding.
4. Repeat for each shock.

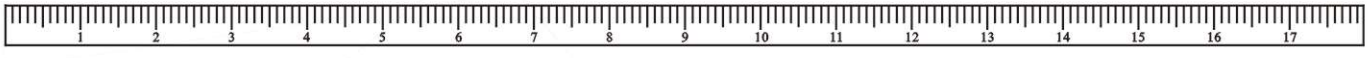


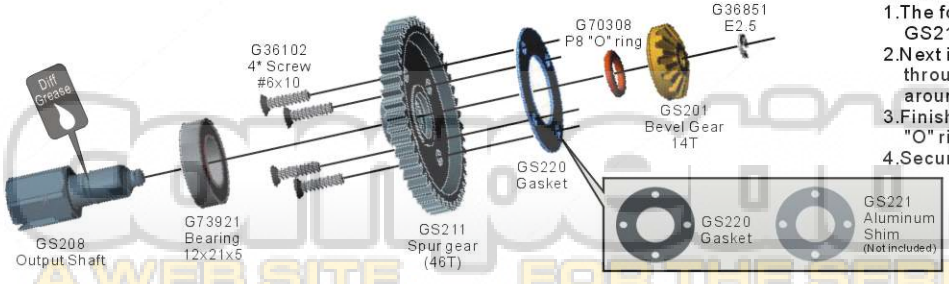




### 01-07 Shock Body x8

1. Install the preload spacers, spring collar, spring, followed by the spring retainer as pictured.




# 02 Transmission Assembly




### 02-01 Center Differential

1. The four #6x10 screws must be inserted through the GS211 spur gear first.
2. Next insert the GS208 output shaft with 12x21x5 bearing through the spur gear. * Apply a small amount of grease around the output shaft as shown.
3. Finish the step at shown with the GS220 gasket, P8 "O" ring, 14T bevel gear.
4. Secure assembly with one E2.5 clip.

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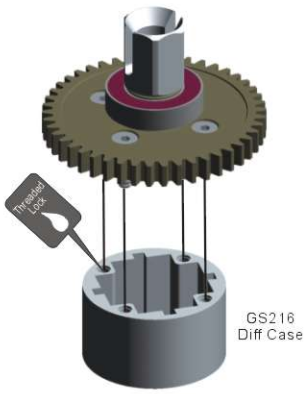
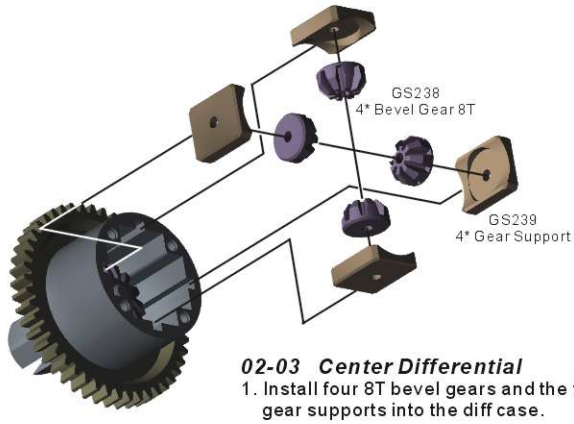



### 02-02 Center Differential

1. Screw the four #6x10 screws down evenly until tight. Thread lock is highly recommended on these screws.

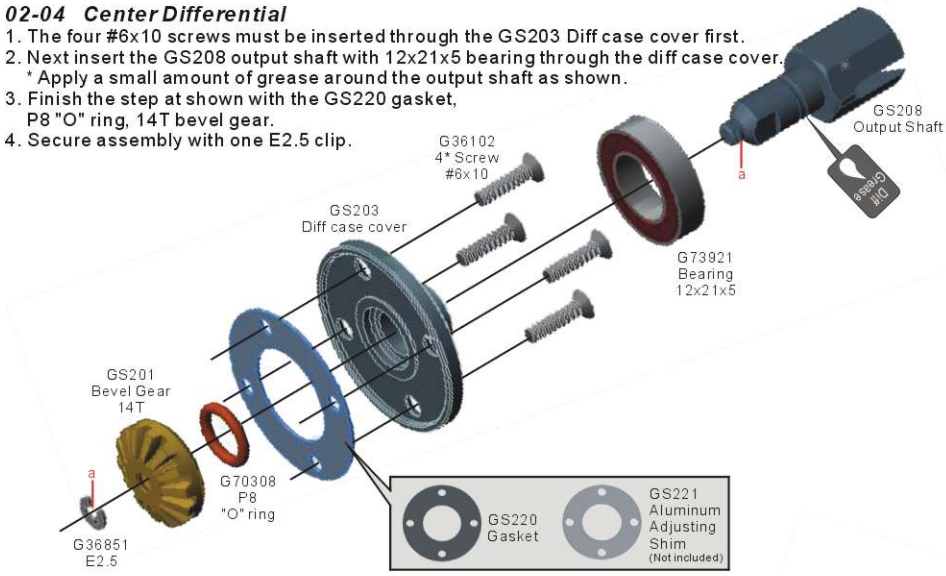


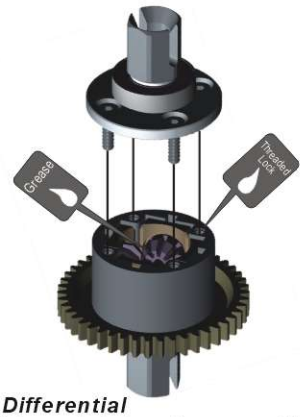

### 02-03 Center Differential

1. Install four 8T bevel gears and the four square gear supports into the diff case.

### 02-04 Center Differential

1. The four #6x10 screws must be inserted through the GS203 Diff case cover first.
2. Next insert the GS208 output shaft with 12x21x5 bearing through the diff case cover.
   * Apply a small amount of grease around the output shaft as shown.
3. Finish the step at shown with the GS220 gasket, P8 "O" ring, 14T bevel gear.
4. Secure assembly with one E2.5 clip.



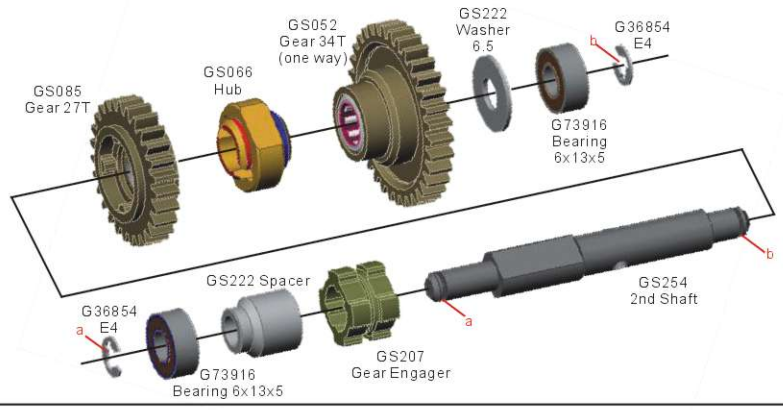

### 02-05 Center Differential

1. Fill the differential case just above the gears with differential grease.
2. Secure the diff case cover assembly with four #6x10 screws. Tighten them down evenly until tight. * Thread lock is highly recommended

*"Racer Tip"* Tighten down the four screws evenly making sure they are all equally snug.

### 02-06 2nd shaft Unit

1. Assemble the 2nd shift unit as shown in picture. Make sure both end of the shaft are secure by E4 "E" clips



### 02-07 1st shaft Unit

1. 1st shift unit is assembled as pictured. Make sure the 2.6x12 pin is lined up with the slot on the side of the GS050 twin gear.
2. Slide on the 6x13x5 bearing and then secure with one E4 "E" clip.
3. Following the aluminum tube , slide G73916 bearing 6x13x5

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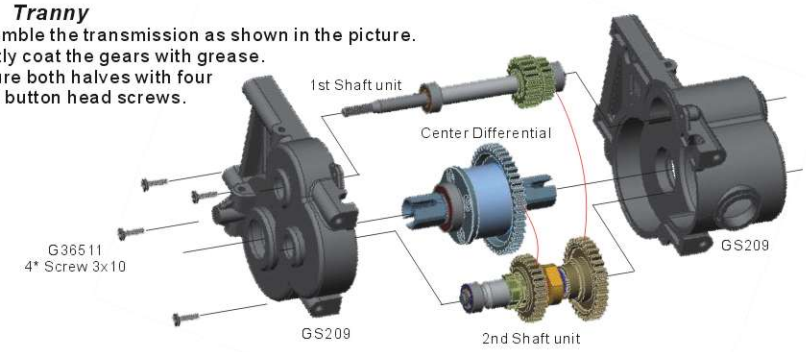
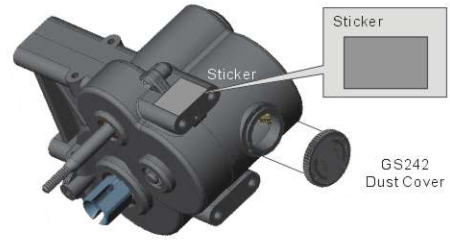
# 02 Transmission Assembly

### 02-08 Tranny

1. Assemble the transmission as shown in the picture.
2. Lightly coat the gears with grease.
3. Secure both halves with four 3x10 button head screws.

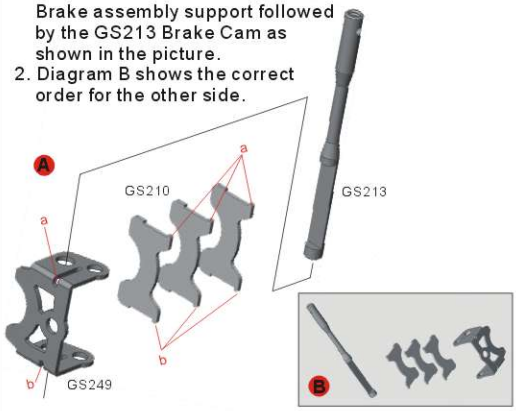



### 02-09 Tranny



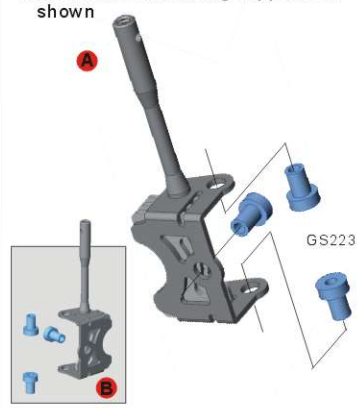

### 02-10 Brake Unit

1. Put three of the GS210 brake shoes into the GS249 Brake assembly support followed by the GS213 Brake Cam as shown in the picture.
2. Diagram B shows the correct order for the other side.



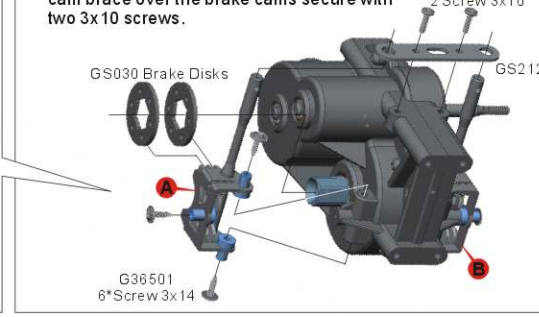

### 02-11 Brake Unit

1. Insert three mounting supports as shown



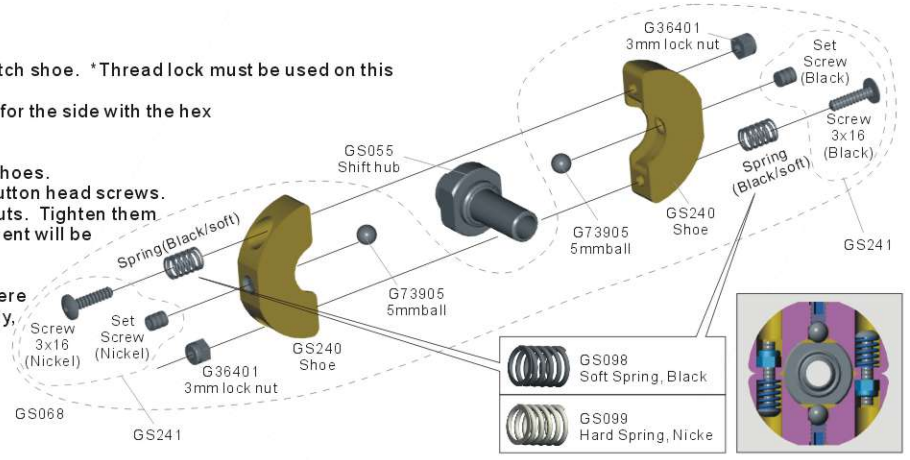

### 02-12 Brake Unit

1. Install the two GS030 brake disks between the brake shoes. Make sure each disk is in between two shoes.
2. Next align the hex in the disks with the hex on the outdrive.
3. Carefully aligning all the parts slide all the way onto the outdrive and secure with three 3x14 screws. Repeat for the other set.
4. With both the front and rear brake assemblies secured to the center transmission install the GS212 brake cam brace over the brake cams secure with two 3x10 screws.




### 02-13 External Expanding Clutch(2nd Speed)

1. Assemble the clutch as shown in the diagram.
2. Start by threading the setscrew into the center of each clutch shoe. *Thread lock must be used on this setscrew to keep it in place.
3. Next insert one 3mm lock nut into each clutch shoe. Lock for the side with the hex where the lock nut will sit.
4. Place one 5mm ball into the center if each shoe.
5. Next place the GS055 shift hub into the center of the two shoes.
6. Slide one black, (soft) spring, onto each of the two 3x16 button head screws.
7. Thread the 3x16 screws, with springs, into the 3mm locknuts. Tighten them up just enough to hold the shoes to the hub. Final adjustment will be made later.
8. Adjust the setscrews so the ball just touches the shift hub. Slowly tighten the setscrew while looking at the center where the shoes and hub meet. Once you see the shoe lift slightly, loosen 1/8 turn. Repeat for the other shoe.
9. After you have adjusted both setscrews tighten down 3x16 screws all the way being careful not to crush the springs. Then loosen each screw 5 turns. Minor adjustment may be desired for personal shift point preference.




### 02-14 External Clutch Gear

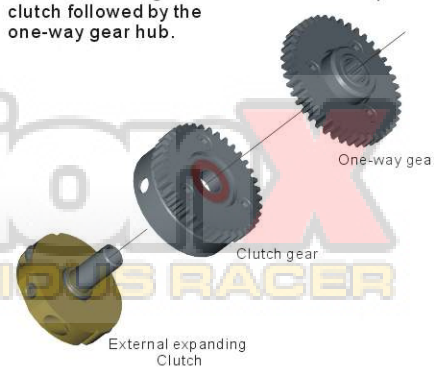
1. Insert one G73914 8x16x5 bearing into the GS056 hub.
2. Attach the spur gear to the GS056 hub using three 3x5 screws.
3. Thread lock is required on these screws.

### 02-15 External One Way Gear

1. Attach the spur gear to the GS047 one-way hub using three 3x5 screws.
2. Thread lock is required on these screws

### 02-16 External Shift Unit

1. Slide the clutch gear onto the external expanding clutch followed by the one-way gear hub.

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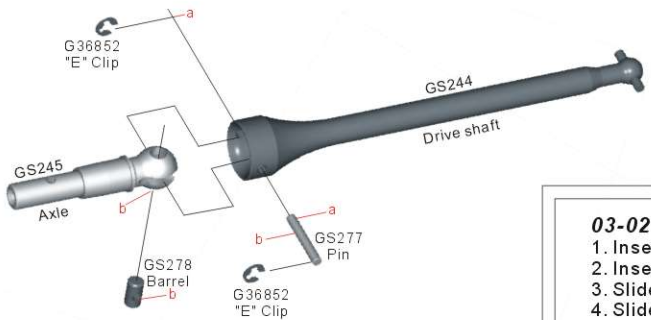
# 02 Transmission Assembly

### 02-17 Tranny

1.Insert one 2.5x10 pin through the main shaft as shown.
2.Slide external shift unit assembly onto the main shaft.
3.Secure with one "T" bolt. * Don't tighten too much or it will bind the assembly.

# 03 Suspension Assembly



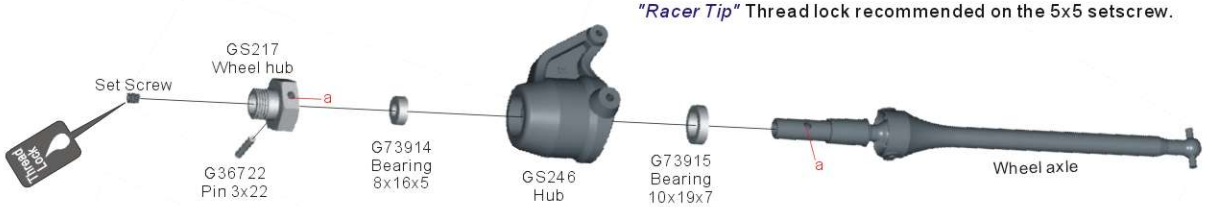

### 03-01 Drive Shaft Assembly x4

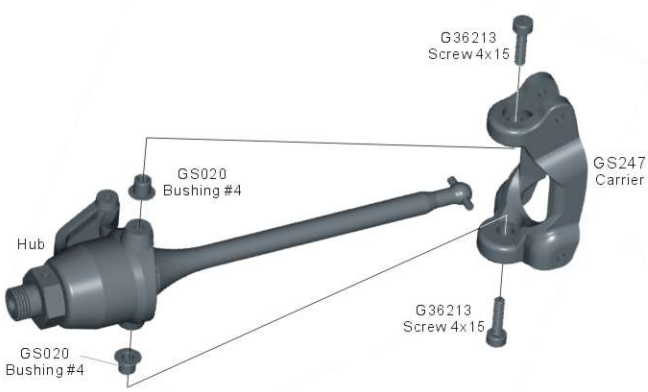
1. Insert one barrel into the axle as shown.
2. Align the pin hole on the drive shaft and barrel.
3. Push pin through and secure with two E2 "E" clips
4. Repeat three more times.

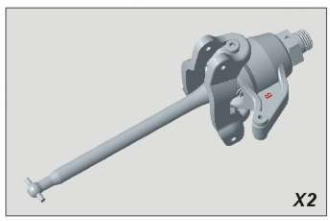
### 03-02 Hub and Driveshaft Assembly x4

1. Insert one 10x19x5 bearing on the inside of the GS246 hub.
2. Insert one 8x16x5 bearing on the outside of the GS246 hub.
3. Slide the wheel axle through the hub and bearings as shown in the picture
4. Slide on the wheel hub and secure by inserting one 3x22 pin and set screw.
5. Repeat for each hub.

*"Racer Tip"* Thread lock recommended on the 5x5 setscrew.

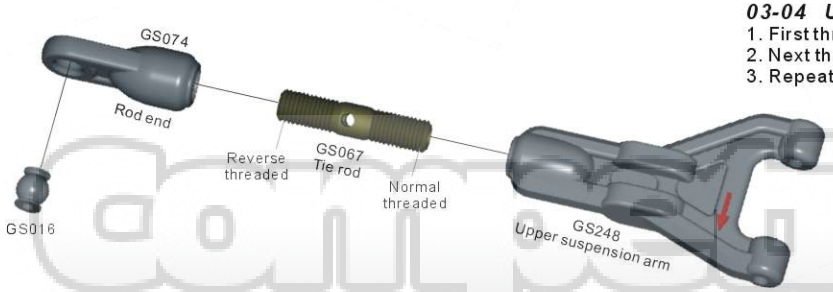





### 03-03 Hub and Spindle Assembly x4

1. Put two #4 pivot bushings into the carrier as shown in the diagram.
2. Line up the spindle pivot bushings and the hub, and tighten down two 4x15 cap head screws.
3. Repeat for each hub.




### 03-04 Upper Suspension Arm Assembly x4

1. First thread on the GS074 rod end onto the GS067 threaded tie rod.
2. Next thread the tie rod and rod end into the GS248 upper suspension arm.
3. Repeat for the other side.

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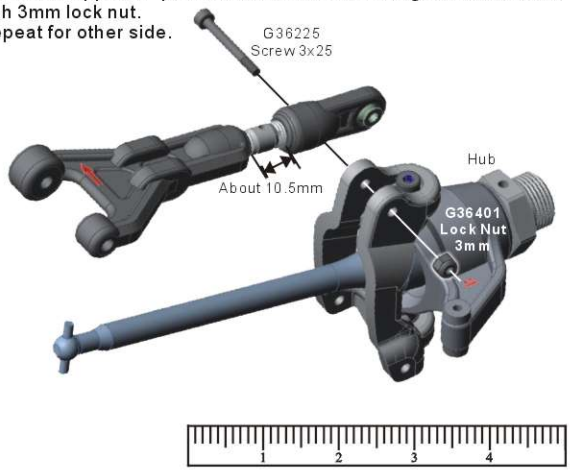
# 03 Suspension Assembly

### 03-05 Suspension Arm Assembly (Front-right)

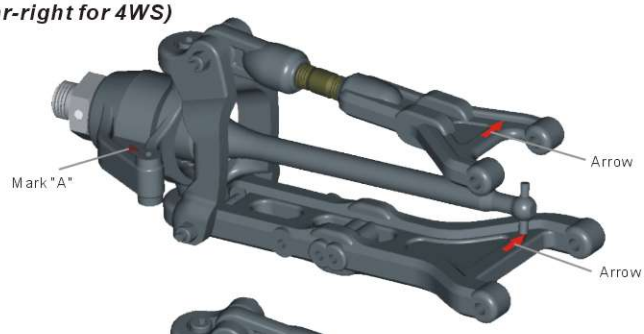
1. Attach the upper suspension arm to the hub using one 3x25 screw with 3mm lock nut.
2. Repeat for other side.



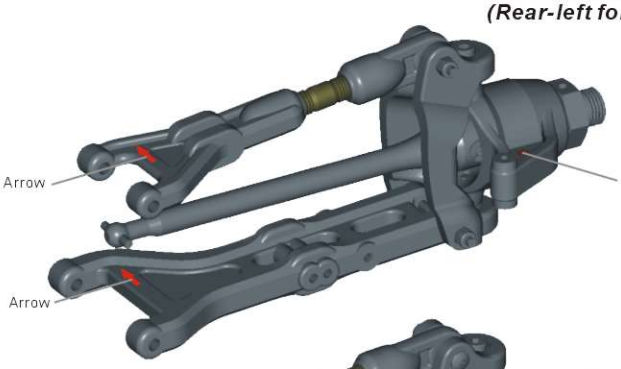

### 03-06 Suspension Arm Assembly (Front-right)

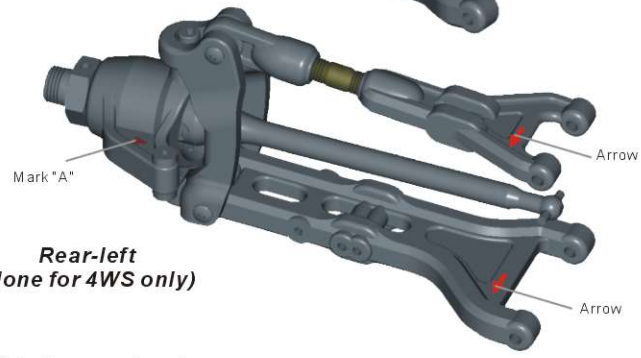
1. Attach the lower suspension arm to the hub assembly using one 3x44 screw and 3mm lock nut.

***Front-left***
***(Rear-right for 4WS)***

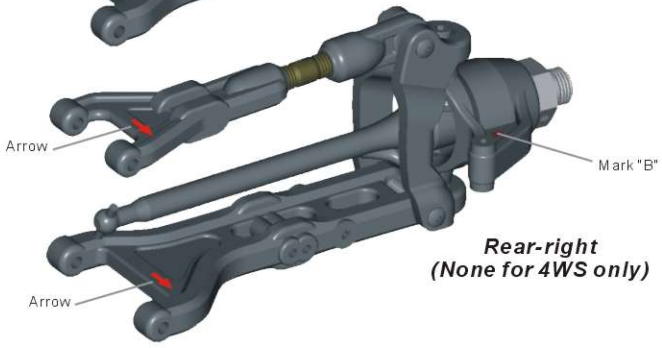



***Front-right***
***(Rear-left for 4WS)***




***Rear-left***
***(None for 4WS only)***




***Rear-right***
***(None for 4WS only)***

### 03-07 Suspension Arms

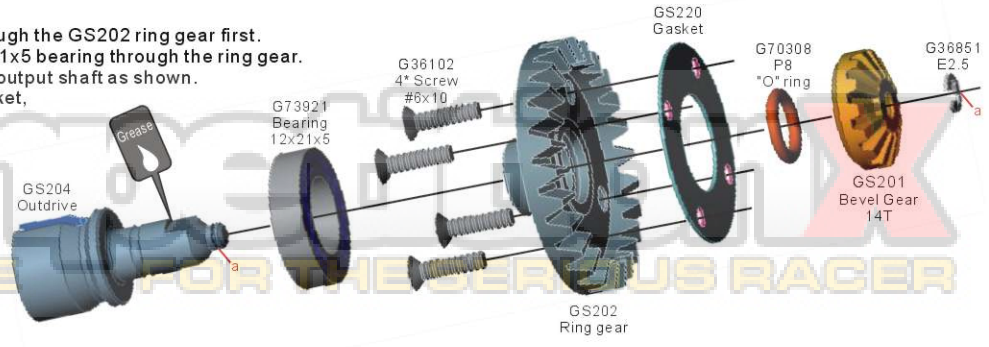
1. Mount the suspension arms as shown in the diagram. Notice the direction of the arms.

***Notice:*** Look carefully and you will find an arrow. This arrow should always point towards the outside of the truck. Use this arrow for the front and rear.

# 04 Differential Assembly

### 04-01 Differential

1. The four #6x10 screws must be inserted through the GS202 ring gear first.
2. Next insert the GS204 output shaft with 12x21x5 bearing through the ring gear.
   * Apply a small amount of grease around the output shaft as shown.
3. Finish the step at shown with the GS220 gasket, P8 "O" ring, 14T bevel gear.
4. Secure assembly with one E2.5 clip.

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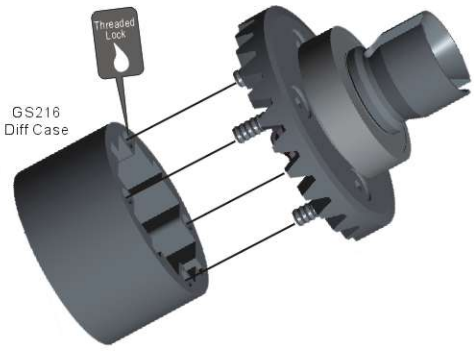
# 04 Differential Assembly

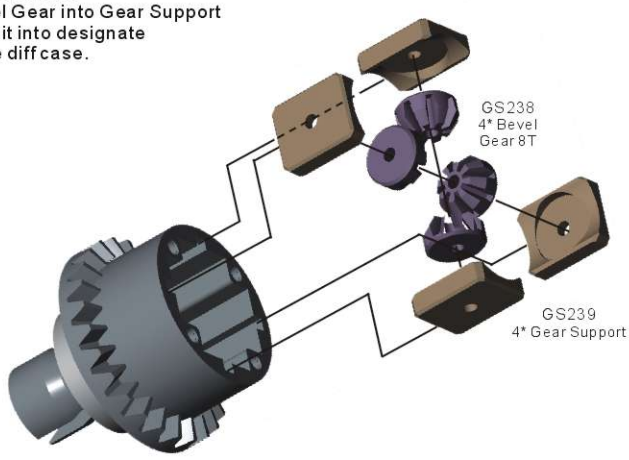



### 04-02 Differential

1. Screw the four #6x10 screws down evenly until tight. Thread lock is highly recommended on these screws.

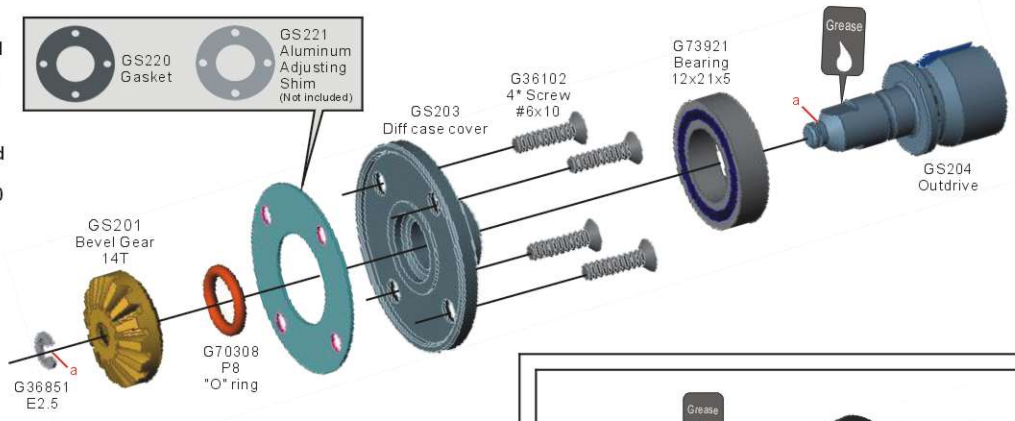
### 04-03 Differential

1.Install Bevel Gear into Gear Support
2.Slide the unit into designate slots on the diff case.




### 04-04 Differential

1. The four #6x10 screws must be inserted through the GS203 Diff case cover first.
2. Next insert the GS204 output shaft with 12x21x5 bearing through the diff case cover.
   * Apply a small amount of grease around the output shaft as shown.
3. Finish the step at shown with the GS220 gasket, P8 "O" ring, 14T bevel gear.
4. Secure assembly with one E2.5 clip.




### 04-05 Differential

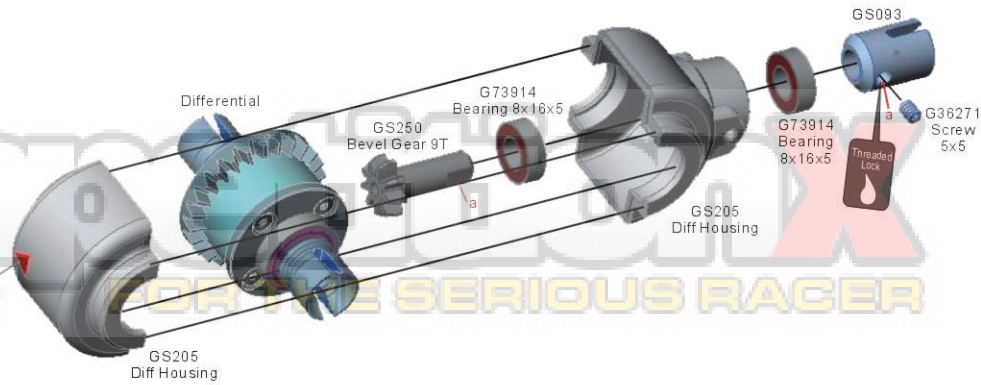
1. Fill the differential case just above the gears with differential grease.
2. Secure the diff case cover assembly with four #6x10 screws. Tighten them down evenly until tight. * Thread lock is highly recommended.

*"Racer Tip"* Tighten down the four screws evenly making sure they are all equally snug.

# 05 Gear Box Unit

### 05-01 Gear Box Unit

1.Slide 2 8x16x5 bearing onto the diff housing
2.Slide on Bevel Gear and Differential
3.Close the diff case with diff housing marked "A"
4.Slide GS093 onto the Bevel Gear shaft
5.Apply Threaded Lock on the 5x5 screw

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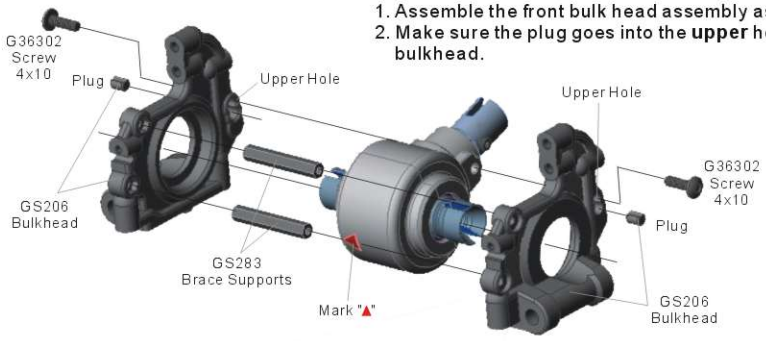
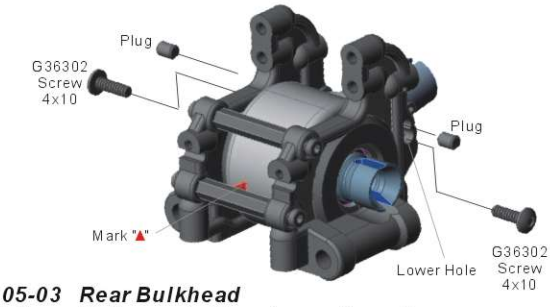
# 05 Gear Box Unit

### 05-02 Front Bulkhead

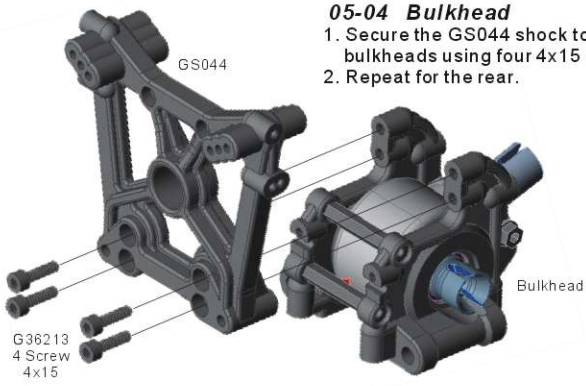
1. Assemble the front bulk head assembly as shown.
2. Make sure the plug goes into the **upper** hole on the bulkhead.



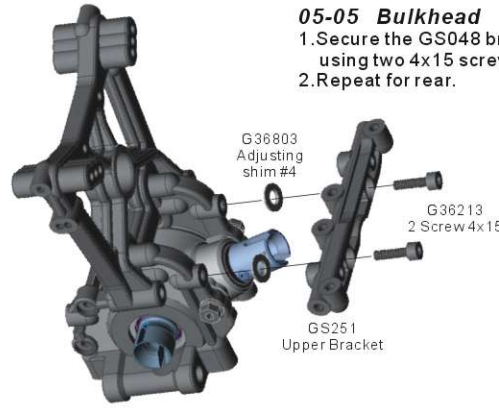

### 05-03 Rear Bulkhead

1. Assemble the rear bulk head assembly as shown.
2. Make sure the plug goes into the **lower** hole on the bulkhead.




### 05-04 Bulkhead

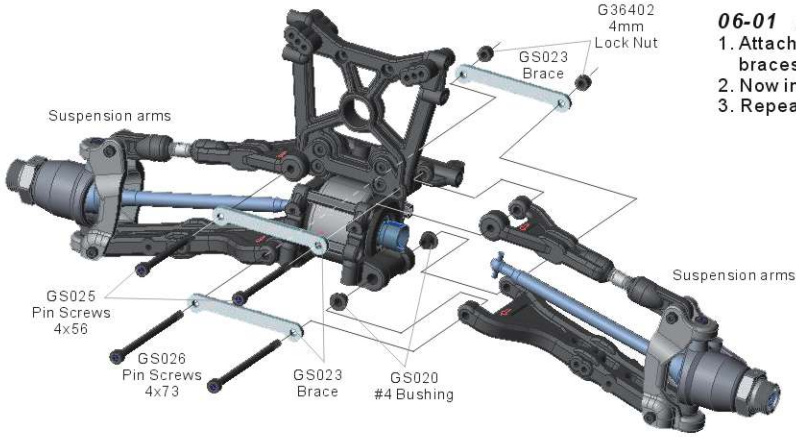
1. Secure the GS044 shock tower to the bulkheads using four 4x15 cap screws.
2. Repeat for the rear.




### 05-05 Bulkhead

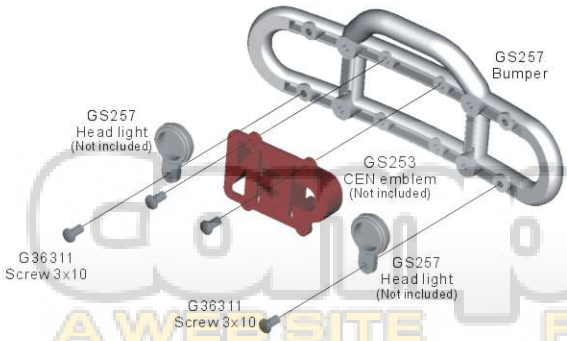
1. Secure the GS048 bracket to the bulkhead using two 4x15 screws and #4 shims.
2. Repeat for rear.

# 06 Front/Rear End



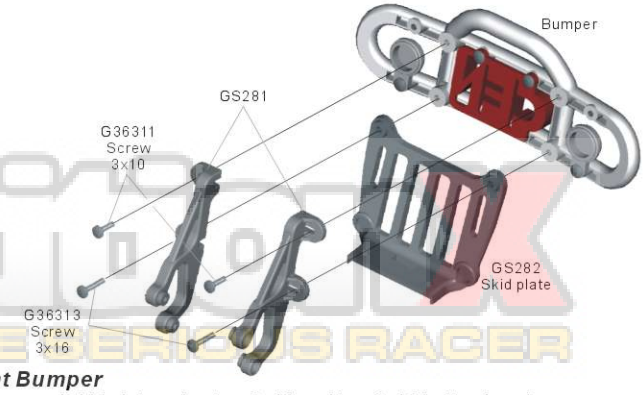

### 06-01 Bulkhead

1. Attach the suspension arms using two GS026 pin screws, two aluminum braces, followed up with lock nuts.
2. Now install the upper suspension arms and braces using GS025 pin screws.
3. Repeat for the rear.




### 06-02 Front Bumper

1. Attach the CEN emblem and head lights using 3x10 button head screws to the front bumper only.




### 06-03 Front Bumper

1. Attach bumper and skid plate using two 3x10 and two 3x16 button head screws. Notice 3x16 screws must go through skid plate into the bumper.

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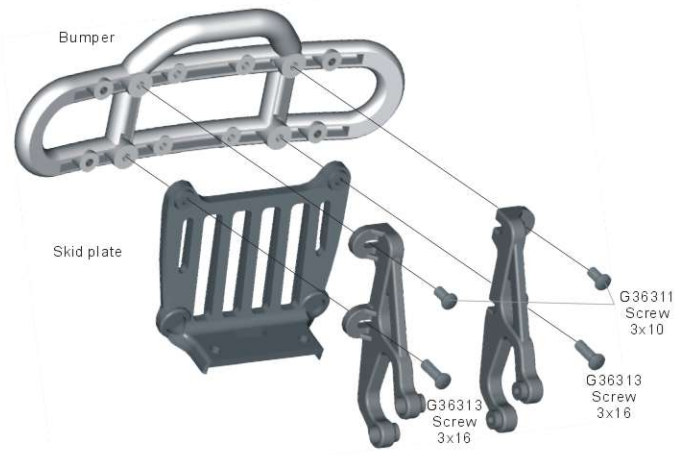
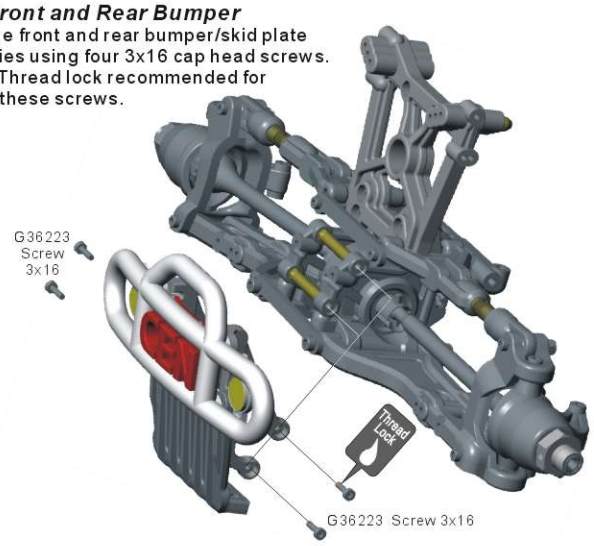



### 06-04 Rear Bumper (GS042)

1. .Attach the bumper and skid plate using two 3x10 and two 3x16 button head screws. Notice 3x16 screws must go through skid plate into the bumper.

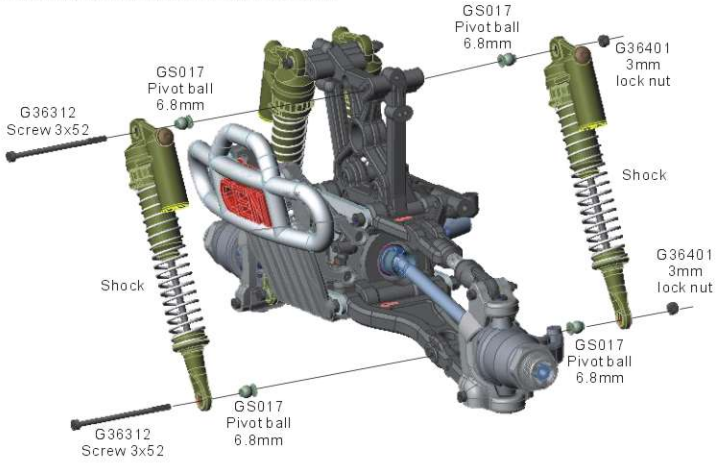
### 06-05 Front and Rear Bumper

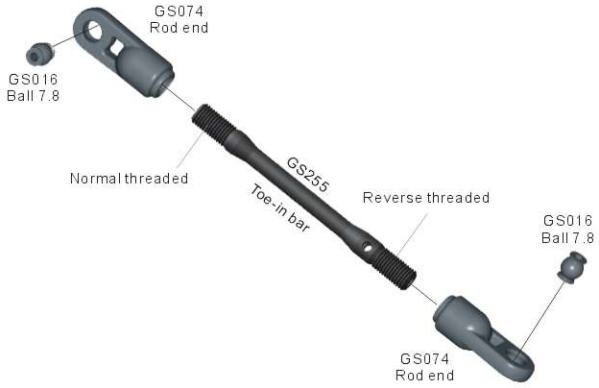
1. Attach the front and rear bumper/skid plate assemblies using four 3x16 cap head screws.
   *Notice:* Thread lock recommended for these screws.




### 06-06 Front and Rear Shocks

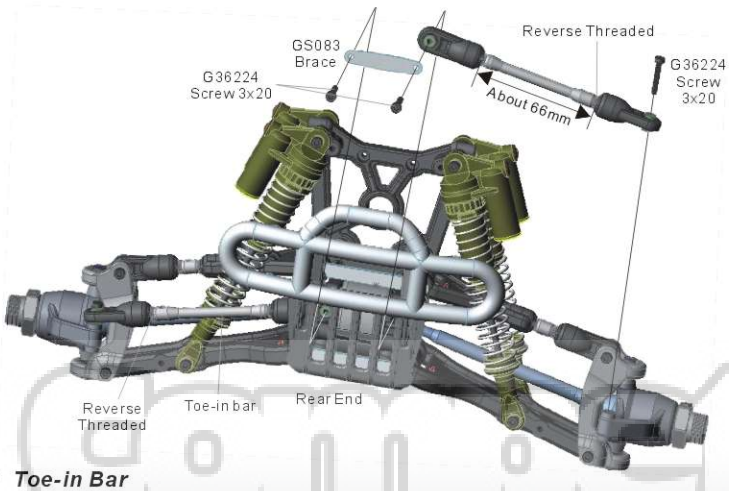
1. Press in one shock mount pivot ball into the upper and lower eyelets for each shock.
2. Attach two shocks to each suspension arm using two 3x52 screws and two 3mm look nuts.



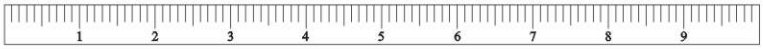

### 06-07 Toe-in Bar x2

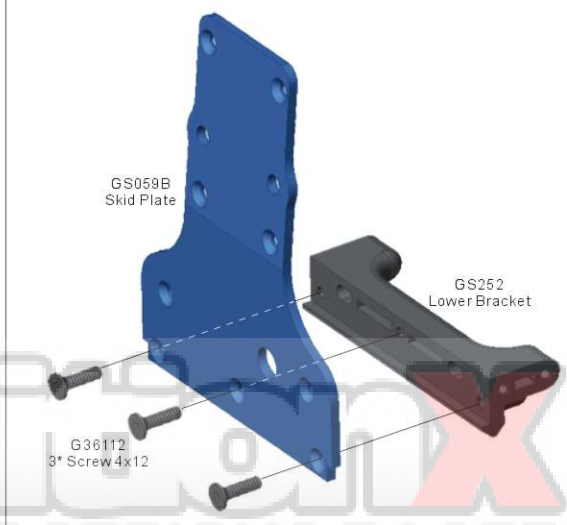
1. Thread the GS074 rods ends onto the rear GS255 toe-in bars.
2. Press one GS016 pivot bushing into each rod end.
   *Notice:* Carefully look at the eyelet holes. Insert bushing into open side.




### 06-08 Toe-in Bar

1. Secure the toe-in bars with brace to the rear bulkhead using two 3x20 cap head screws.
   *Notice:* Mount bars with adjusting hole on the outside for easier adjustment.
2. Secure the outer side of the bar to the rear spindle using two 3x20 cap head screws.




### 06-09 Lower Bracket x2

1. Mount one GS048 bracket onto front and rear GS059B skid plates using three 4x12 flat head screws.

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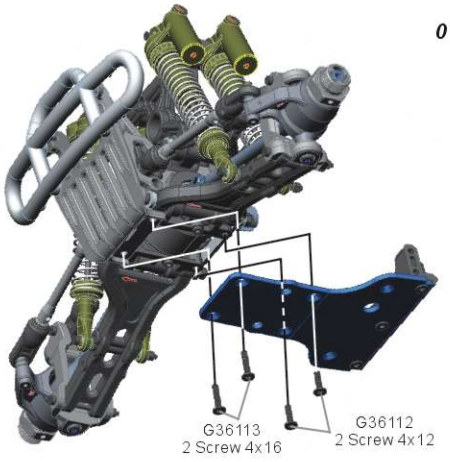
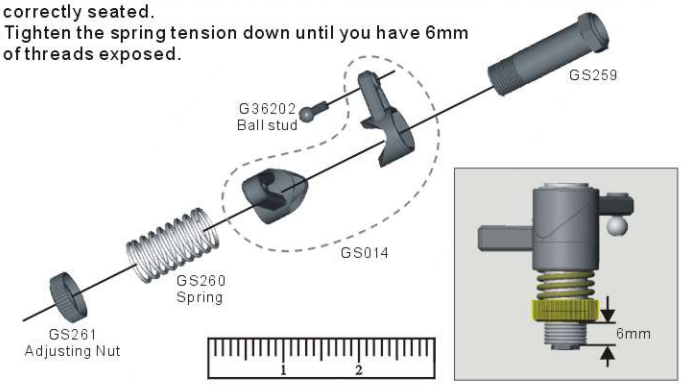
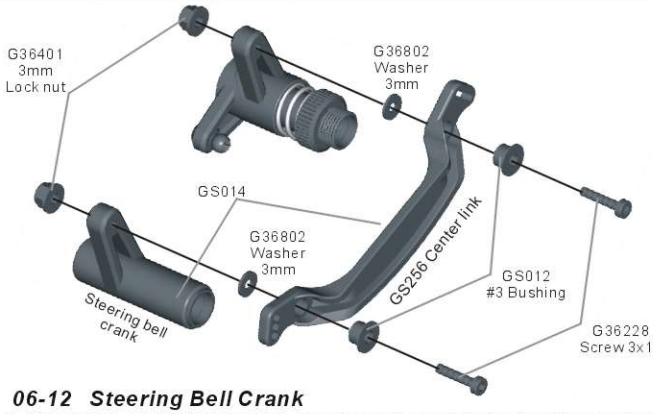
### 06-10 Rear Skid Plate




### 06-11 Servo Saver

1. Screw ball stud into the saver
2. Assemble the servo saver as shown. Make sure the hex on the GS259 is correctly seated.
3. Tighten the spring tension down until you have 6mm of threads exposed.



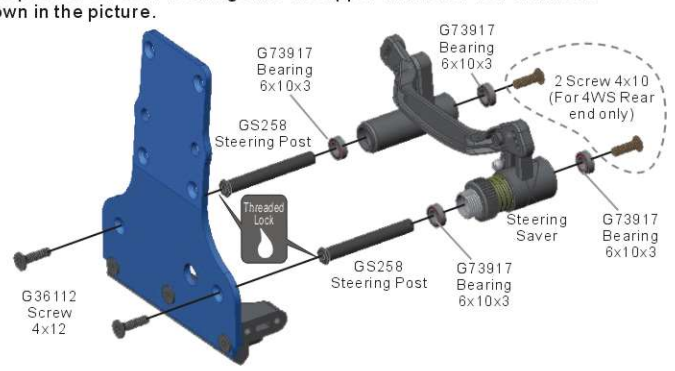



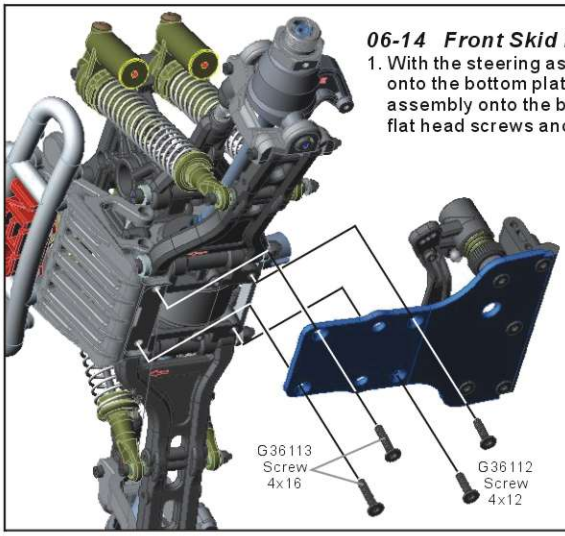

### 06-12 Steering Bell Crank

1. Attach the center link to each steering bell crank using 3x18 cap screws, two 3mm washers, two 3mm lock nuts and the GS012 #3bushings Double check you have the parts in the correct order as pictured.
2. Bell cranks should pivot freely. Loosen screws slightly if needed.

### 06-13 Servo Saver

1. Attach two GS258 steering posts onto the front bottom plate using two 4x12 flat head screws.
   *Notice:* Thread lock is recommended for these screws.
2. Next put four G73917 bearings into the upper and lower bell cranks as shown in the picture.



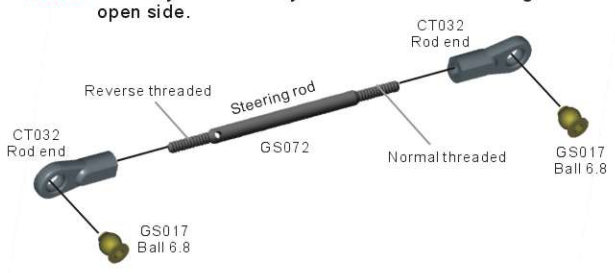



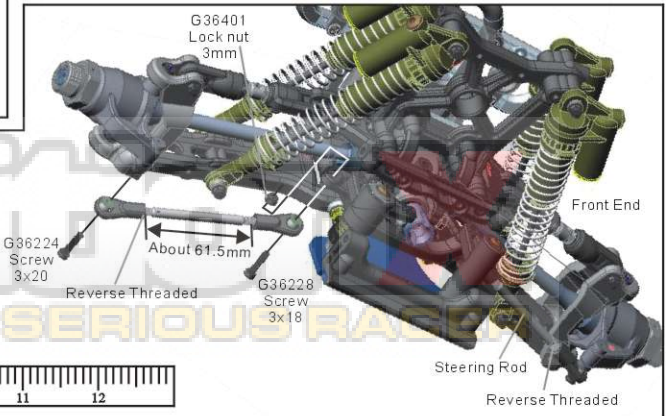

### 06-14 Front Skid Plate

1. With the steering assembly mounted correctly onto the bottom plate, secure the entire end assembly onto the bottom plate using two 4x16 flat head screws and two 4x12 flat head screws.

### 06-15 Steering Rod Assembly x2

1. Thread two CT032 into two GS072 steering rods.
2. Press in one pivot bushing(Ball 6.8) into each rod end.
   *Notice:* Carefully look at the eyelet holes. Insert bushing into open side.




### 06-16 Steering Rods

1. First mount the steering rods to the bell cranks using two 3x18 caps screws and 3mm lock nuts. The steering rod should be mounted to the bottom side of the bell cranks.
2. Next mount the outer side of the steering rod to the spindles using two 3x20 cap head screws.

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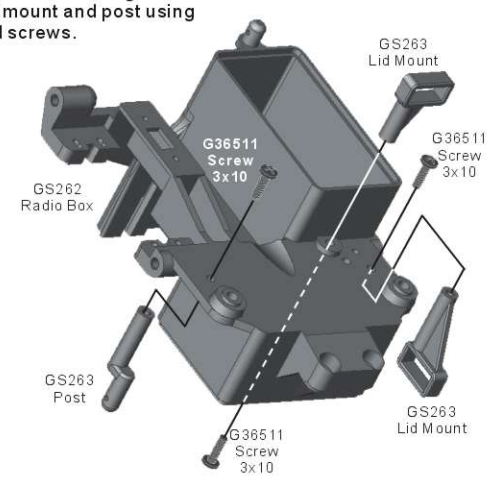
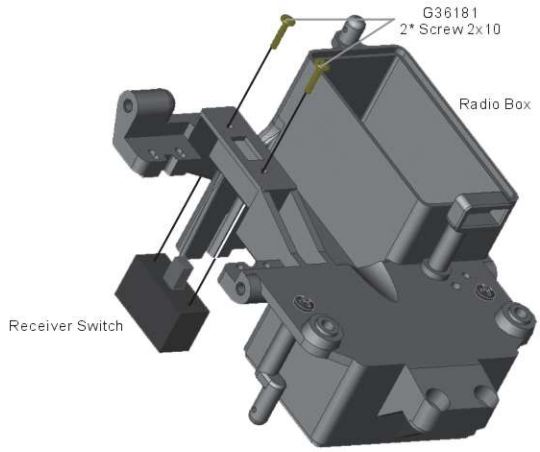
### 07-01 Radio Box (GS038)

1. Attach the lid mount to the box using one 3x10 button head screw.
2. Mount the second lid mount and post using two 3x10 button head screws.



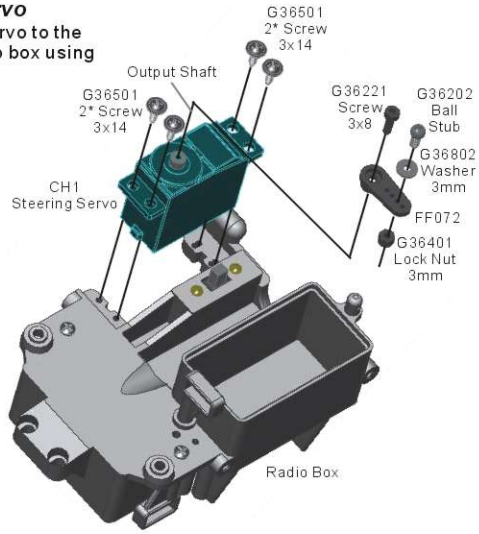

### 07-02 Radio Box

1. Mount the G82113 on/off switch with plate using two 2x10 screws



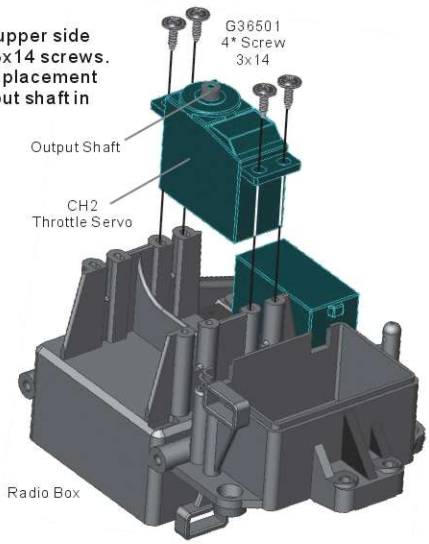

### 07-03 Steering Servo

1. Mount the steering servo to the underside of the radio box using four 3x14 screws.



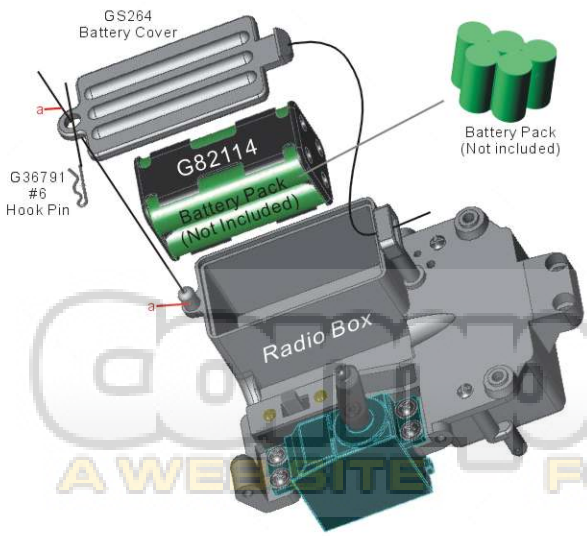

### 07-04 Throttle Servo

1. Mount throttle servo to the upper side of the radio box using four 3x14 screws.
   *Notice:* Pay attention to the placement of each servos output shaft in the diagram



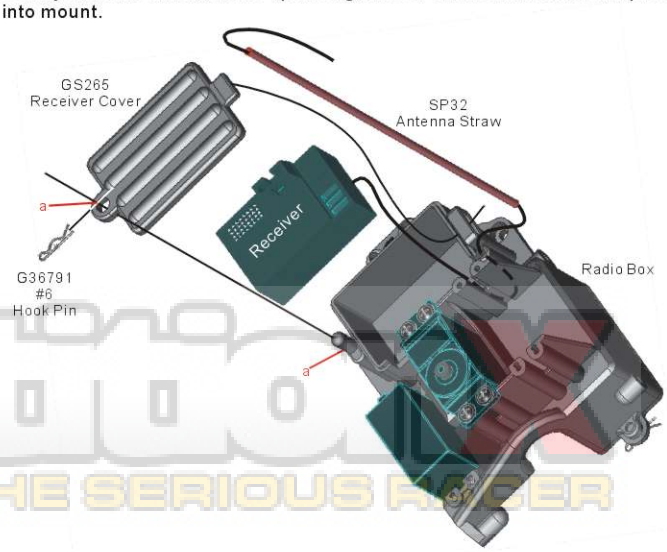

### 07-05 Battery Compartment

1. Install four fresh AA batteries into the G82114 battery pack.
2. Feed the plug through the outlet hole on the inside of the battery compartment.
3. Mount and secure GS264 Battery cover with one G36791 clip.




### 07-06 Receiver Compartment

1. Feed the antenna wire through the outlet hole located on the inside of the receiver compartment.
2. Mount and secure the GS265 receiver cover with one G36791 clip.
3. Gently slide the antenna wire up through the SP32 antenna straw and press into mount.

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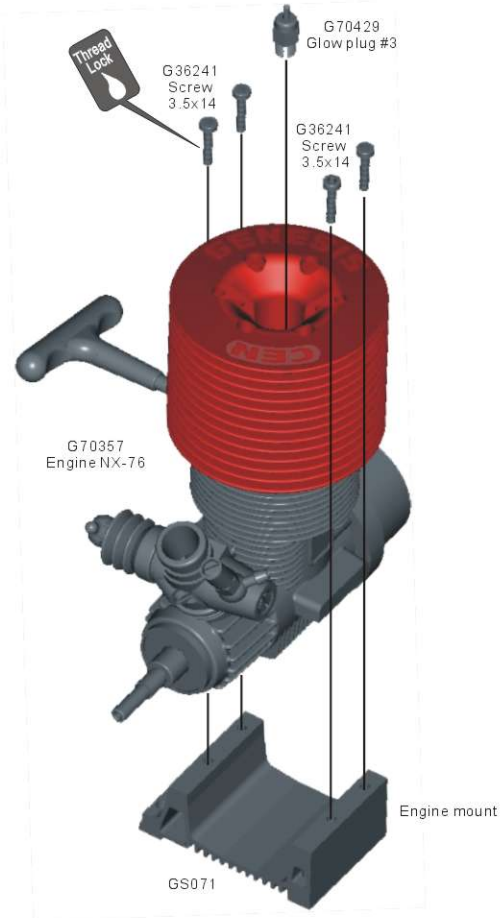


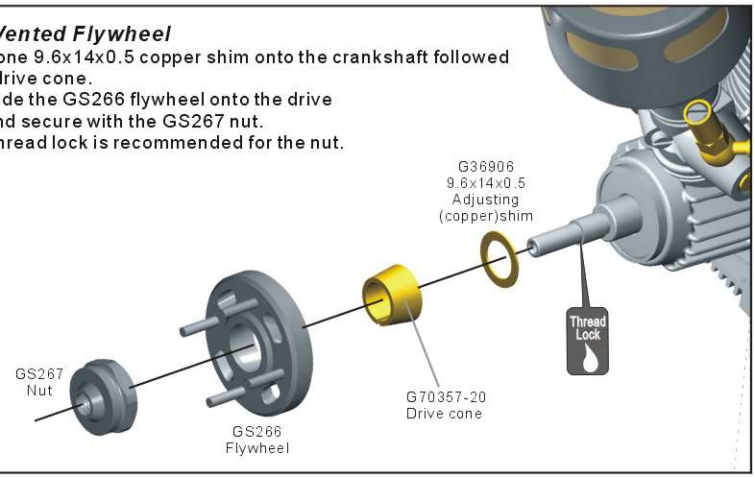

### 08-01 Engine Mount

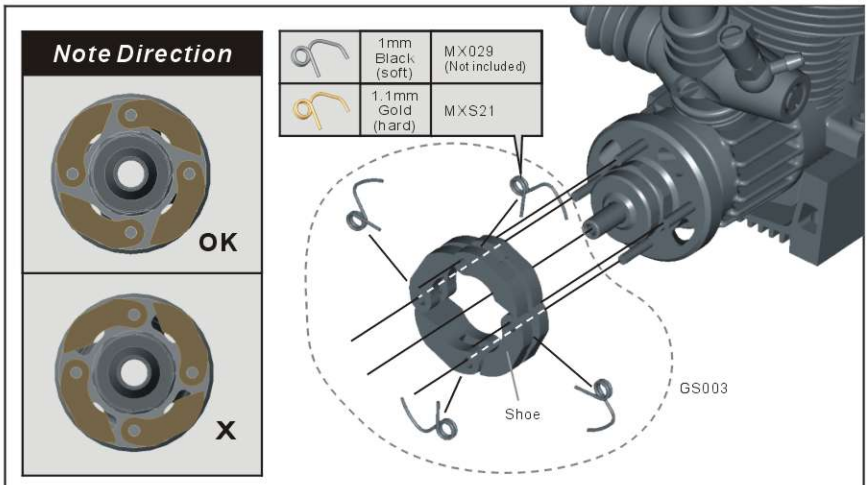
1. Mount the engine to the engine mount using four 3.5x14 cap head screws.
   *Notice:* Thread lock recommended on these screws.

### 08-02 Vented Flywheel

1. Install one 9.6x14x0.5 copper shim onto the crankshaft followed by the drive cone.
2. Next slide the GS266 flywheel onto the drive cone and secure with the GS267 nut.

*Notice:* Thread lock is recommended for the nut.



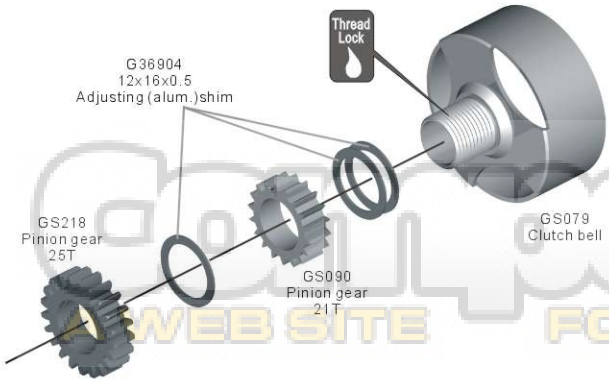




### 08-03 Clutch Shoes

1. Put one clutch spring into the center of each shoe lining up the eyelet with the hole in each shoe.
2. Press the shoe with the spring in the center halfway onto the pin on the flywheel.
3. Using a flat head screwdriver press the small tab on the spring into the groove found on the clutch nut.
4. Press shoe and spring all the way down onto the flywheel pin.
5. Repeat for each shoe.
6. If done correctly the shoes will be held close by the springs.

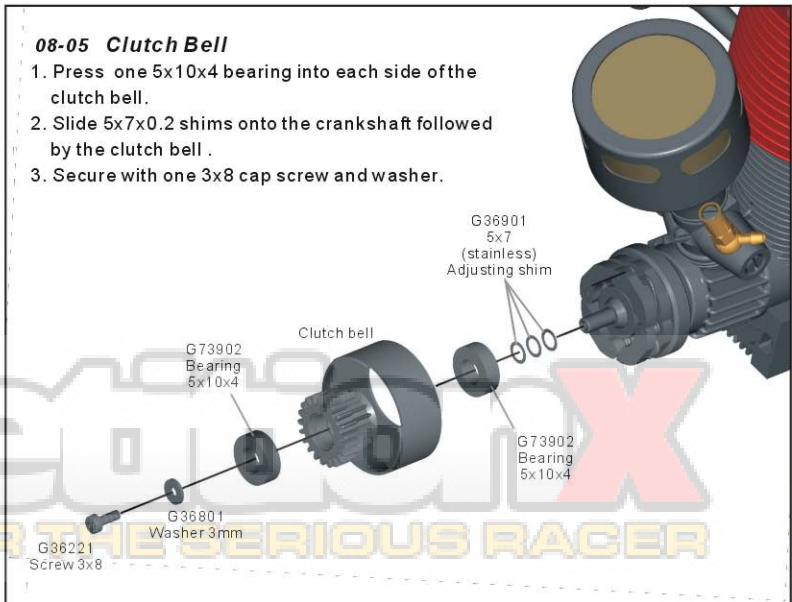
### 08-04 Clutch Bell

1. Put adjusting shim onto the clutch bell after threading on the first pinion gear if needed.
   *Notice:* Thread lock recommended for both pinion gears.
2. Slide one more adjusting shim onto the clutch bell and thread on second gear.




### 08-05 Clutch Bell

1. Press one 5x10x4 bearing into each side of the clutch bell.
2. Slide 5x7x0.2 shims onto the crankshaft followed by the clutch bell .
3. Secure with one 3x8 cap screw and washer.

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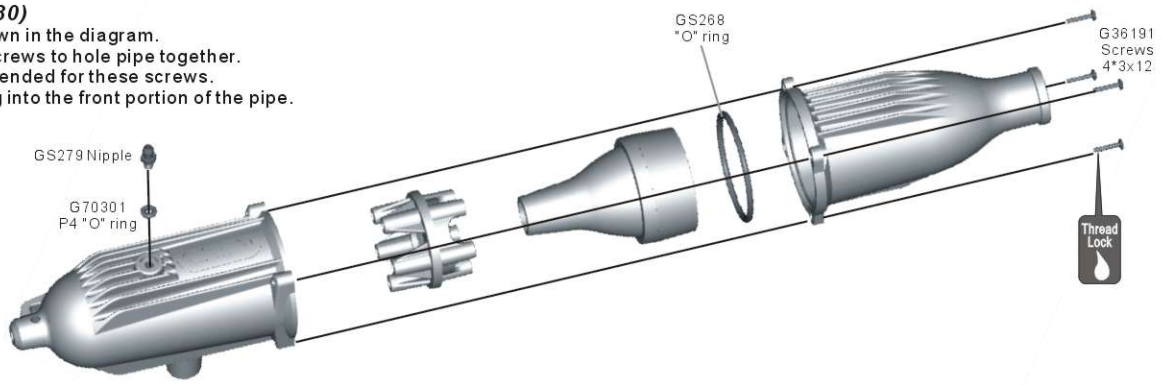
# 08 Engine

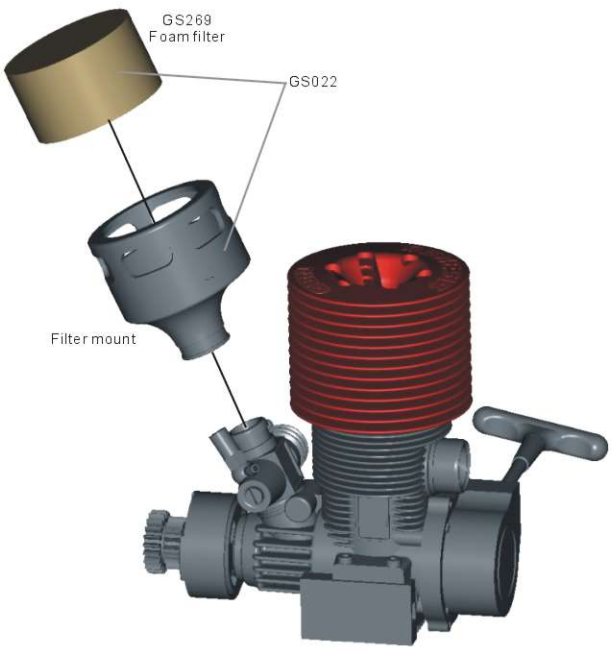
### 08-06 Muffler Pipe (GS080)

1.Assemble the muffler as shown in the diagram.
2.Use four 3x12 button head screws to hole pipe together.
*Notice:* Thread lock recommended for these screws.
3.Thread in nipple with "O" ring into the front portion of the pipe.



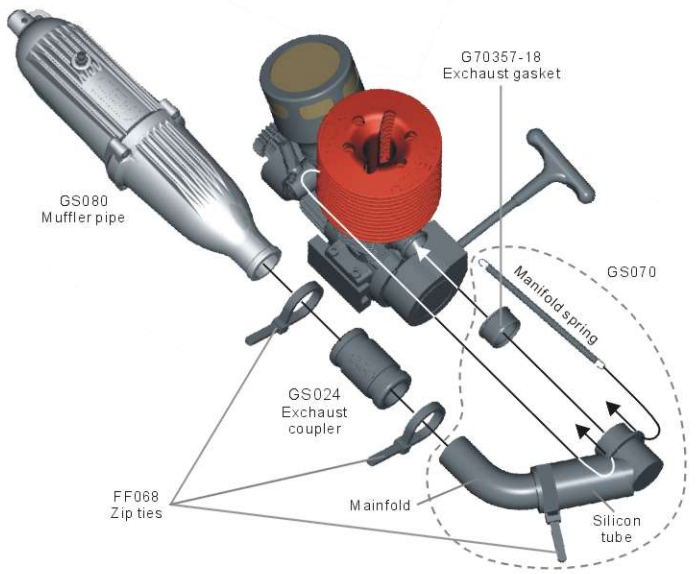

### 08-07 Air Filter

1.Press the foam filter into the rubber air filter mount.
2.Press entire air filter onto the carburetors air intake.




### 08-08 Muffler Pipe

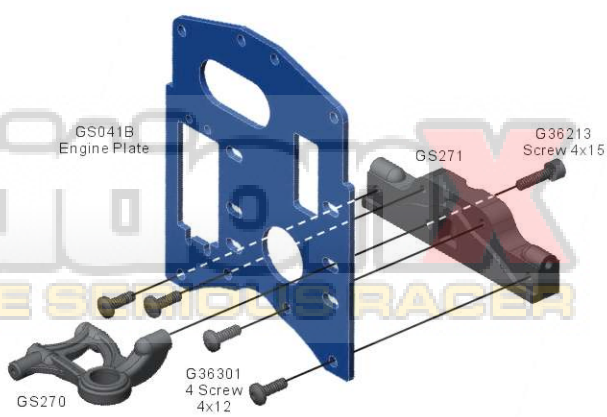
1. Push the GS024 exhaust coupler onto the GS080 pipe.
2. Press the GS070 manifold into the GS024 exhaust coupler
3. Secure using two FF068 medium zip ties. Trim off excess zip tie.
4. Press one exhaust gasket onto the engines exhaust port.
5. Gently press the manifold assembly onto the engine and secure using the supplied manifold spring.
*Notice:* The exhaust spring should wrap around the engine case not the carburetor.




# 09 Mid

### 09-01 Fuel Tank

### 09-02 Engine Plate

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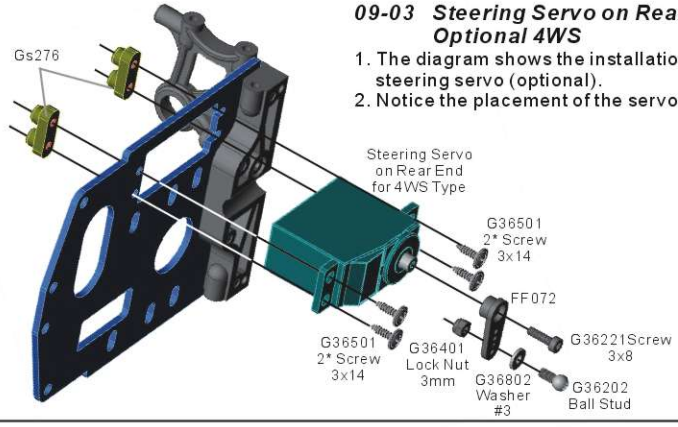
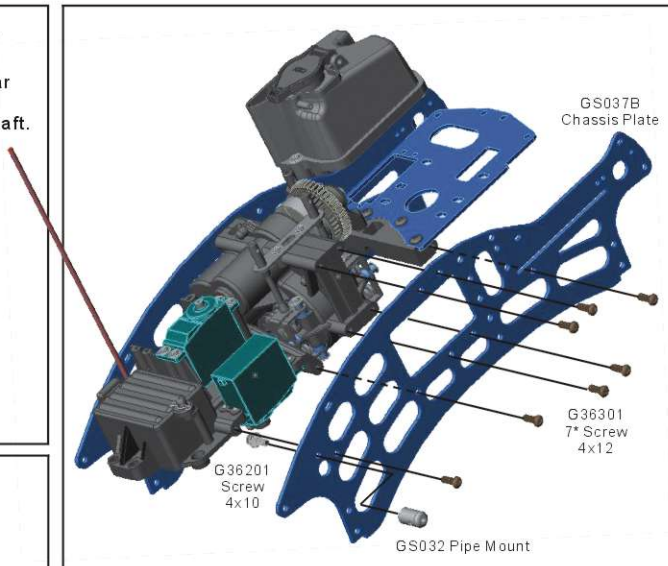
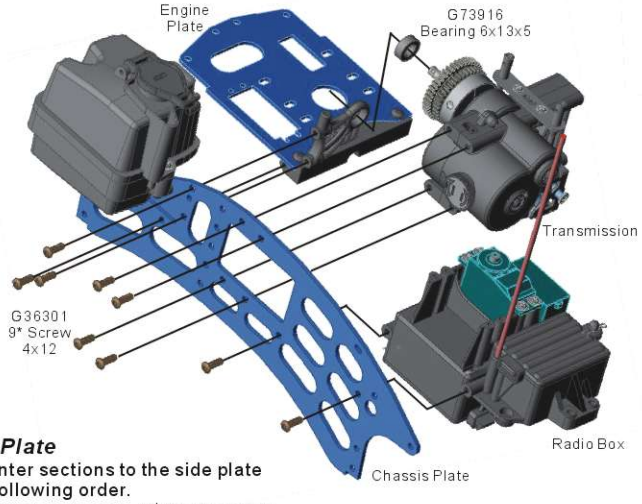
### 09-03 Steering Servo on Rear End for Optional 4WS

1. The diagram shows the installation of the rear steering servo (optional).
2. Notice the placement of the servos output shaft.




### 09-04 Chassis Plate

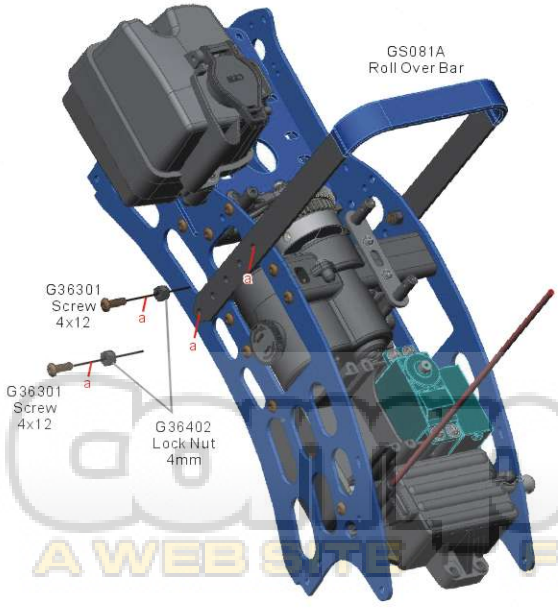
1. Assemble the center sections to the side plate as shown in the following order.
2. 1st Radio Box, 2nd Transmission, 3rd Engine plate.

### 09-05 Chassis Plate

1. Attach the GS092 pipe mount to the left side plate using one 4x10 screw.
2. Secure the side plate to the main chassis assembly using seven 4x12 screws.

### 09-06 Roll Over Bar

1. Mount the GS081A roll over bar using four 4x12 button head screws and four 4mm locknuts.

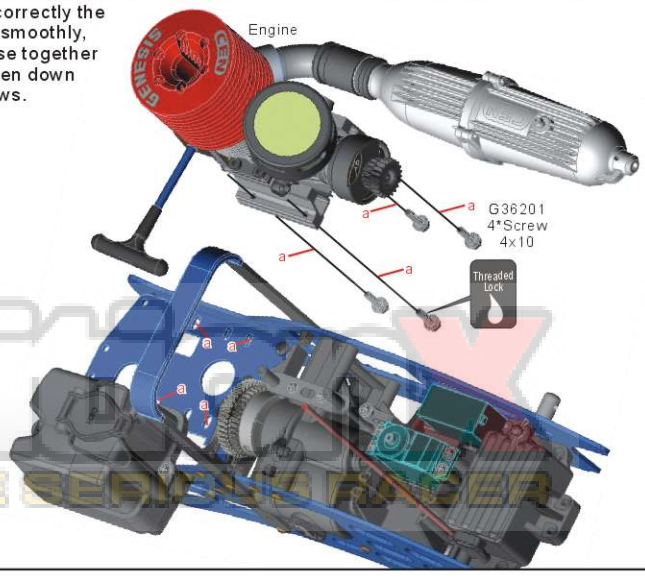



### 09-07 Engine

1. Mount the massive .46 engine to the engine plate using four 4x10 hexagonal head crews. Gear mesh will need to be set. *Notice:* Thread lock is recommended on all these screws.

Setting Proper Gear Mesh

The engine plate is slotted to allow different size gears to be used. This means you must manually set the distance between the spur and pinion gears. First screw all four engine mounting screws down leaving them just loose enough to slide the engine right and left. Slide the two sets of gears all the way together then back off slightly. Tighten down two of the screws temporarily to hold engine in place. Now you need to check the gear mesh. Hold one set of gears still, and check the other set for movement between the two sets of gears. When set correctly the gears should spin smoothly, while being as close together as possible. Tighten down all remaining screws.

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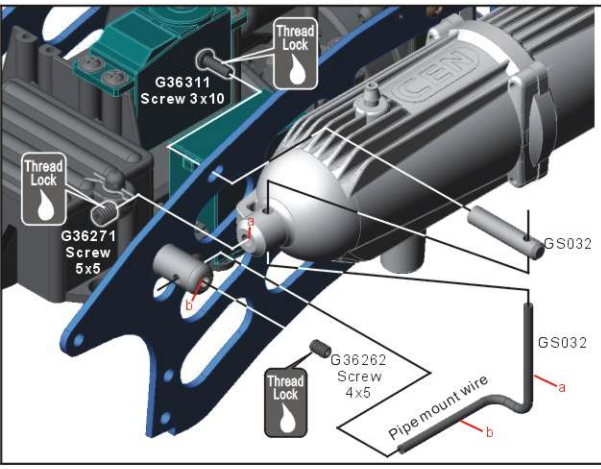
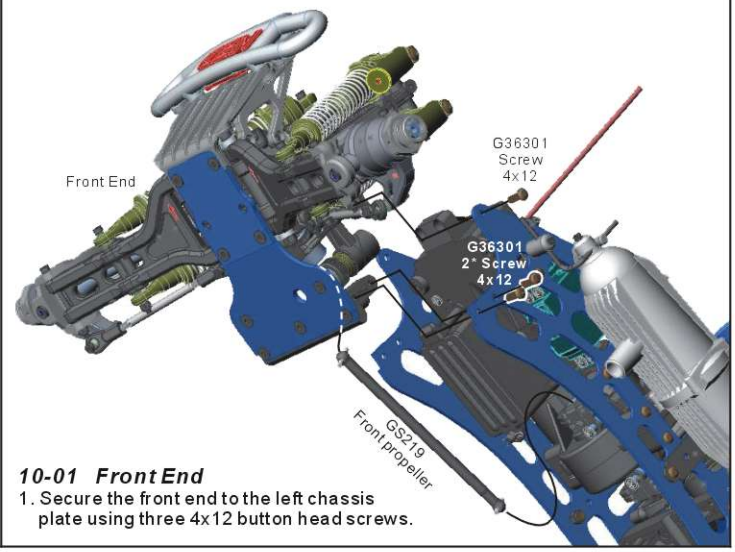
# 09 Mid




### 09-08 Muffler Mount

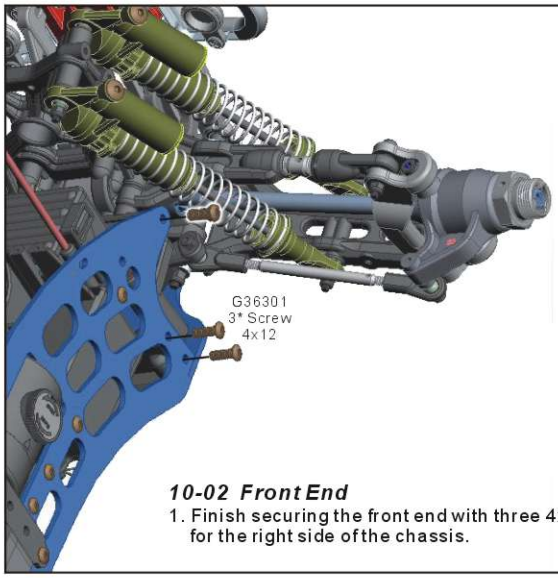
1. First slide the pipe mount wire through the pipe mount hole. Secure it with the 4x6 set screw.
2. Next slide the pipe mount wire through the end of the muffler. Secure it with the 5x6 set screw.

# 10 Frame



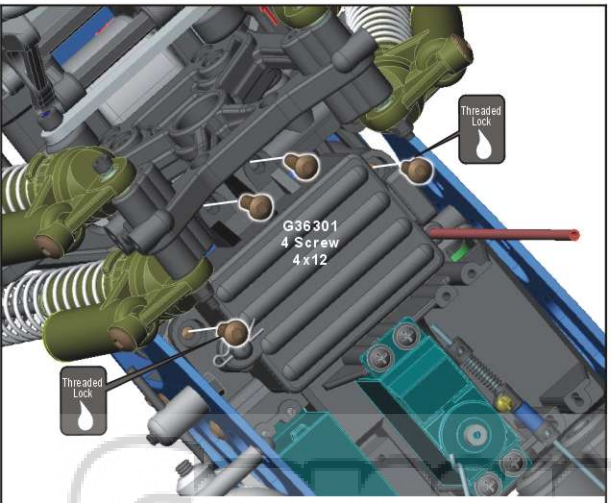

### 10-01 Front End

1. Secure the front end to the left chassis plate using three 4x12 button head screws.




### 10-02 Front End

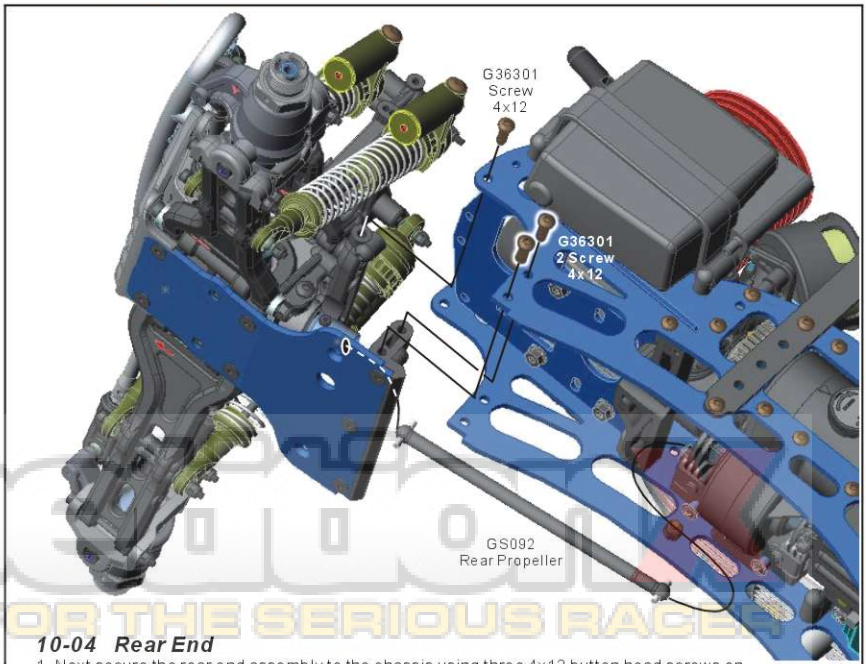
1. Finish securing the front end with three 4x12 head screws for the right side of the chassis.




### 10-03 Front End

1. Secure the front side of the radio box using four 4x12 screws as shown in the picture.

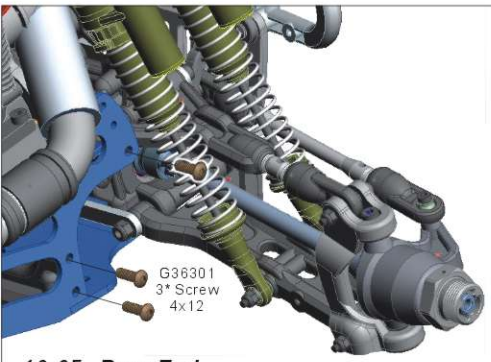
*Notice:* Thread lock is recommended for the two 4x12 screws that thread into the steering posts.




### 10-04 Rear End

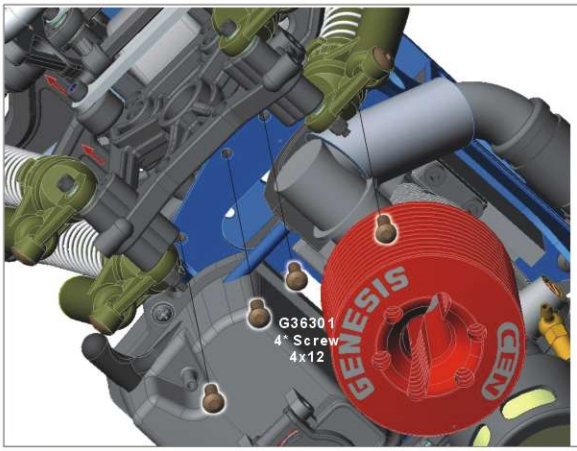
1. Next secure the rear end assembly to the chassis using three 4x12 button head screws on each side as shown.

FOR THE SERIOUS RACER




### 10-05 Rear End

1. Secure the left side using three 4x12 button head screws.

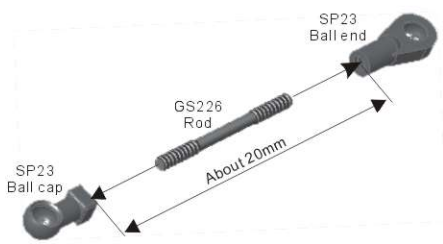


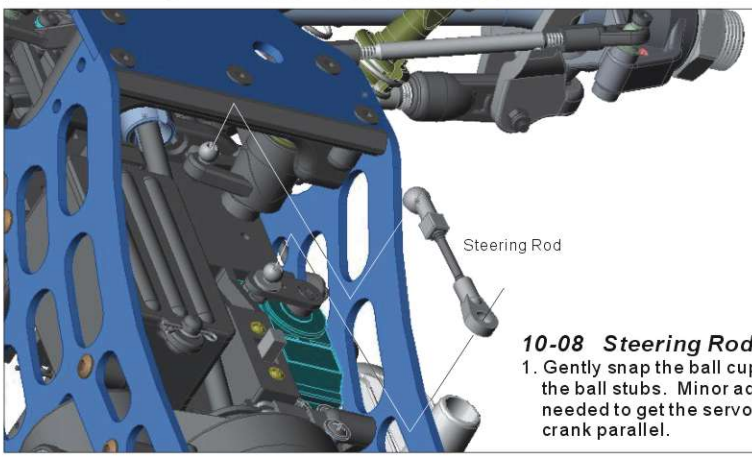

### 10-06 Rear End

1. Secure the rear of the engine mounting plate using four 4x12 button head screws as shown.

### 10-07 Steering Rod

1. Screw the call cup and the ball end on equally until you get a distance of 20mm between the ends of each cup.



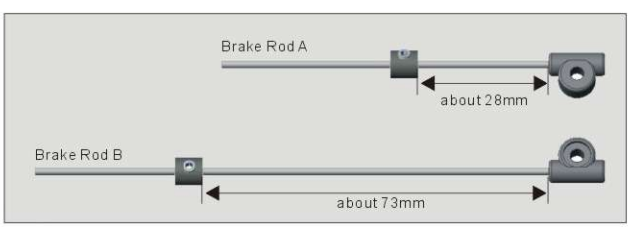




### 10-08 Steering Rod

1. Gently snap the ball cup and ball end onto the ball stubs. Minor adjusting may be needed to get the servo arm and the bell crank parallel.

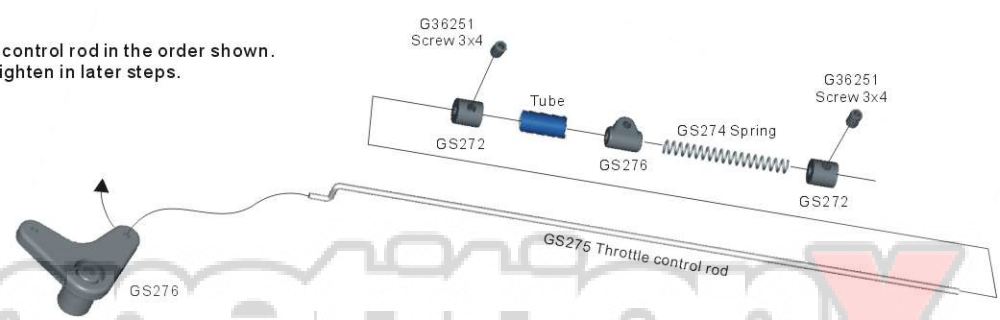
### 10-09 Brake Linkage (A.B)

1. Thread one brake rod into each rod mount.
2. Slide one collet onto each rod and secure with setscrew the correct length away from rod mount as shown.
3. Leave the screws loose, will adjust in the later steps.




### 10-10 Throttle Linkage

1. Slide the throttle hardware onto the throttle control rod in the order shown. Leave the setscrews loose, will adjust and tighten in later steps.

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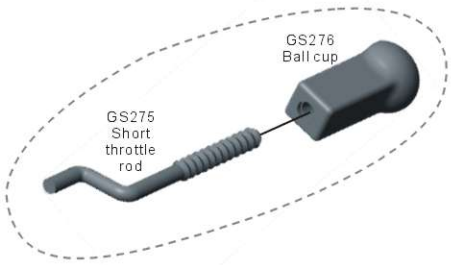
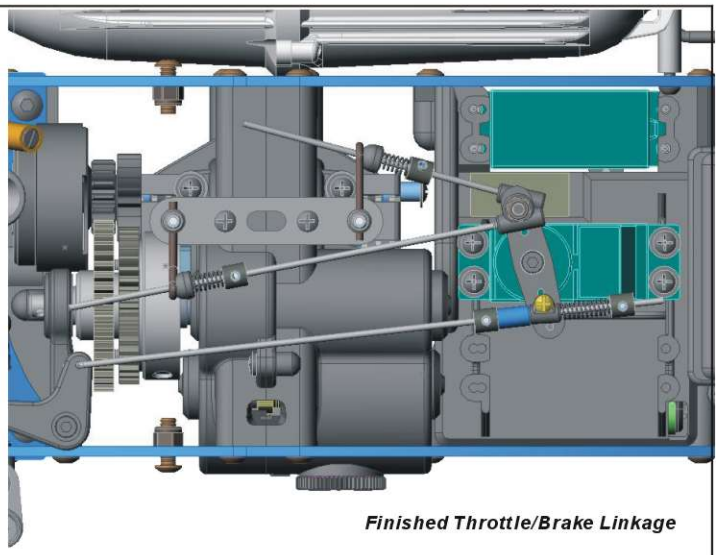



### 10-11 Carburetor Arm

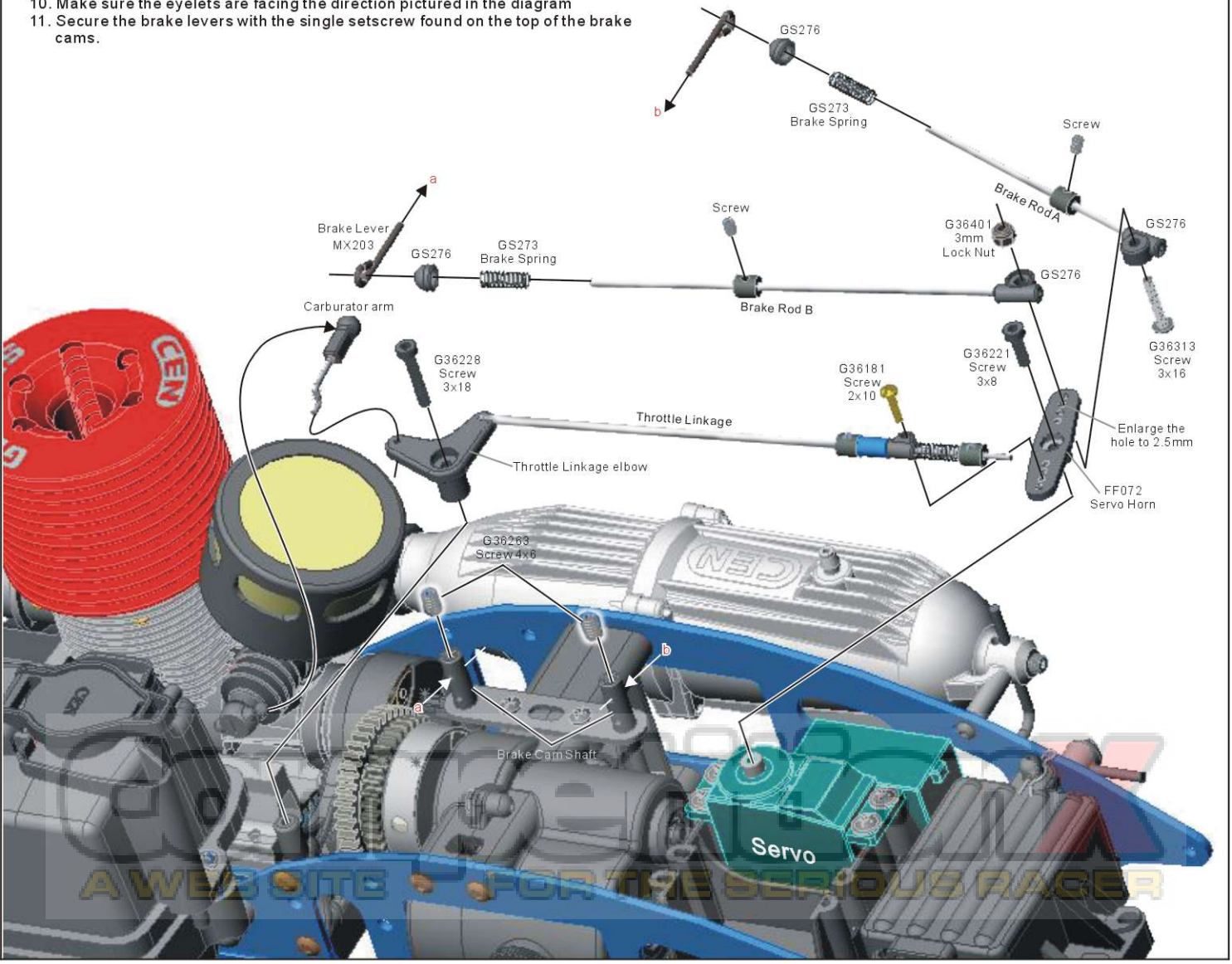
1. Thread the carburetor ball cup onto the short throttle rod.



*Finished Throttle/Brake Linkage*

### 10-12 Throttle/Brake Linkage

1. Mount the throttle linkage elbow to the bracket using one 3x18 cap head screw. Leave loose enough to move freely.
2. Insert the carburator arm into the throttle elbow as shown.
3. Snap the ball cup onto the ball stud found on the carburetor.
4. Slide one spring and one spring collar onto each rod.
5. Enlarge the third hole in from the end on the servo horn to 2.5mm.
6. Using one 3x16 screw, mount rod mount (A) on the bottom and rod mount (B) on top of the servo horn as pictured in the diagram. Secure with 3mm lock nut.
7. Don't over tighten the screw, rod mounts should move freely.
8. Slide both brake rods with the springs and collars through the brake levers.
9. Install the brake lever with 1mm sticking out the other side of the brake cam.
10. Make sure the eyelets are facing the direction pictured in the diagram
11. Secure the brake levers with the single setscrew found on the top of the brake cams.

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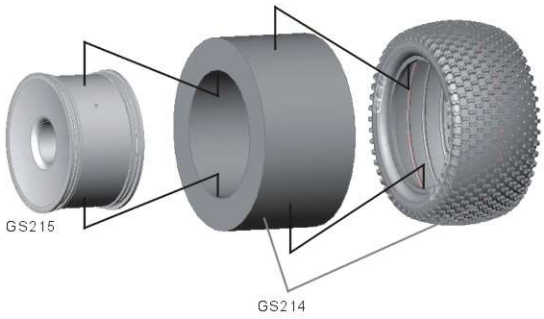
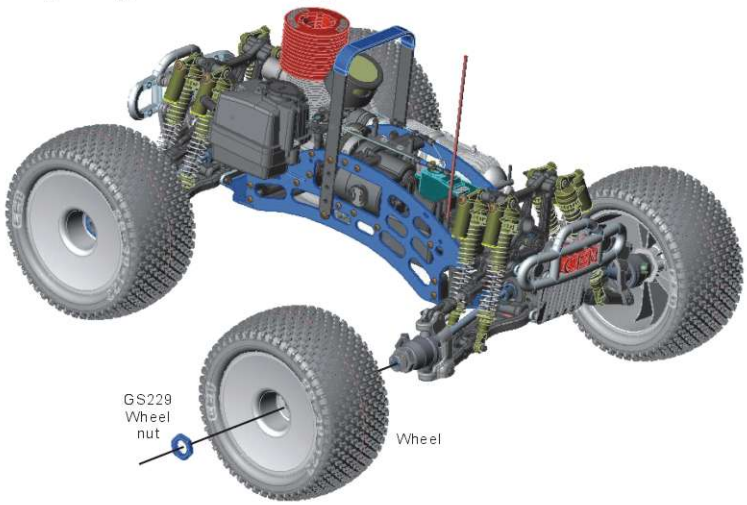
### 10-13 Wheels(GS228)

1. First carefully seat the foam inside the tire.
2. Gently pull the tire with insert over the wheel. You want the mounting rib to sit in the ridge on the wheel.
3. After the tire is neatly seated on the wheel you need to glue the tires to the wheels.
4. Using CA glue, lift the tire up slightly from the wheel and apply a small bead around the entire wheel/tire.
5. Repeat for each side of each tire.



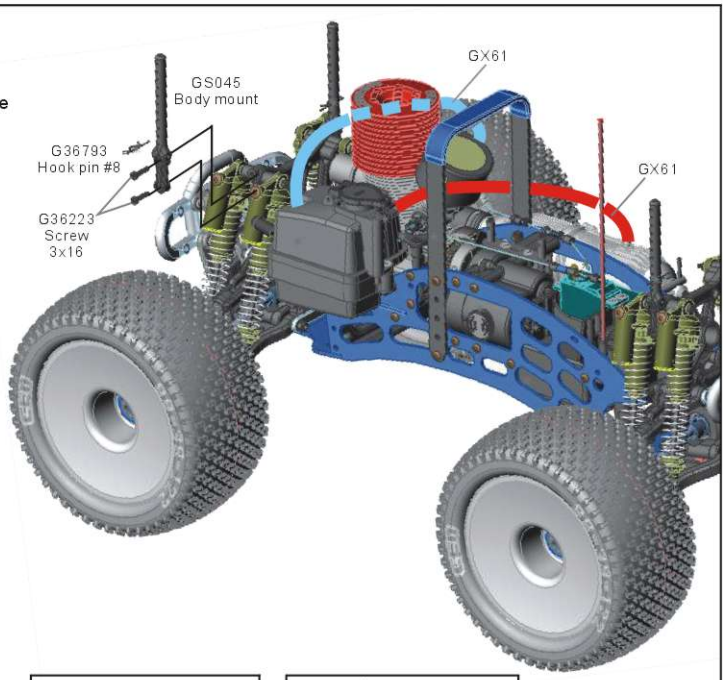

### 10-14 Wheels

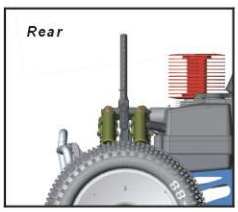
1.After the glue on the tires has dried completely it is time to bolt them to the truck.
2.Using the supplied wheel wrench, tighten down the GS229 wheel nuts.

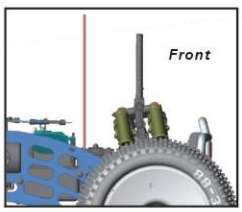


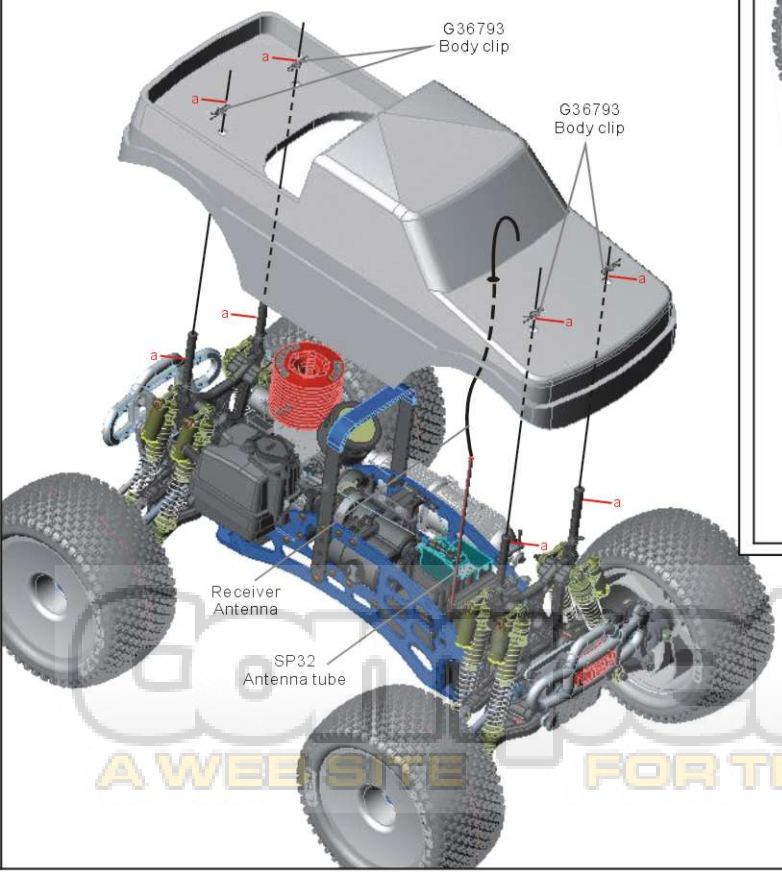

### 10-15 Body Mounts

1. Mount four GS045 body mounts to the front and rear shock towers using eight 3x16 cab screws. You will use two screws on each mount.
   ***Notice:*** There are two lowers holes to choose from. On the rear shock tower use the forward hole. On the front use the backward hole. When done the front and rear mounts should point straight up.
2. Put one body clip into the second hole from the bottom on each post.
3. After putting the body on secure with a second set of body clips.




### 10-16 Body

1.The Nemesis body comes pre-drilled for you.
2. Select the height you would like the body to sit. Insert one G36793 body clip into each body post. Make sure you have the clips in the same hole on each post.
3. Place body onto the post and secure with FF069 body clips. Remember to insert the antenna tube through the body.

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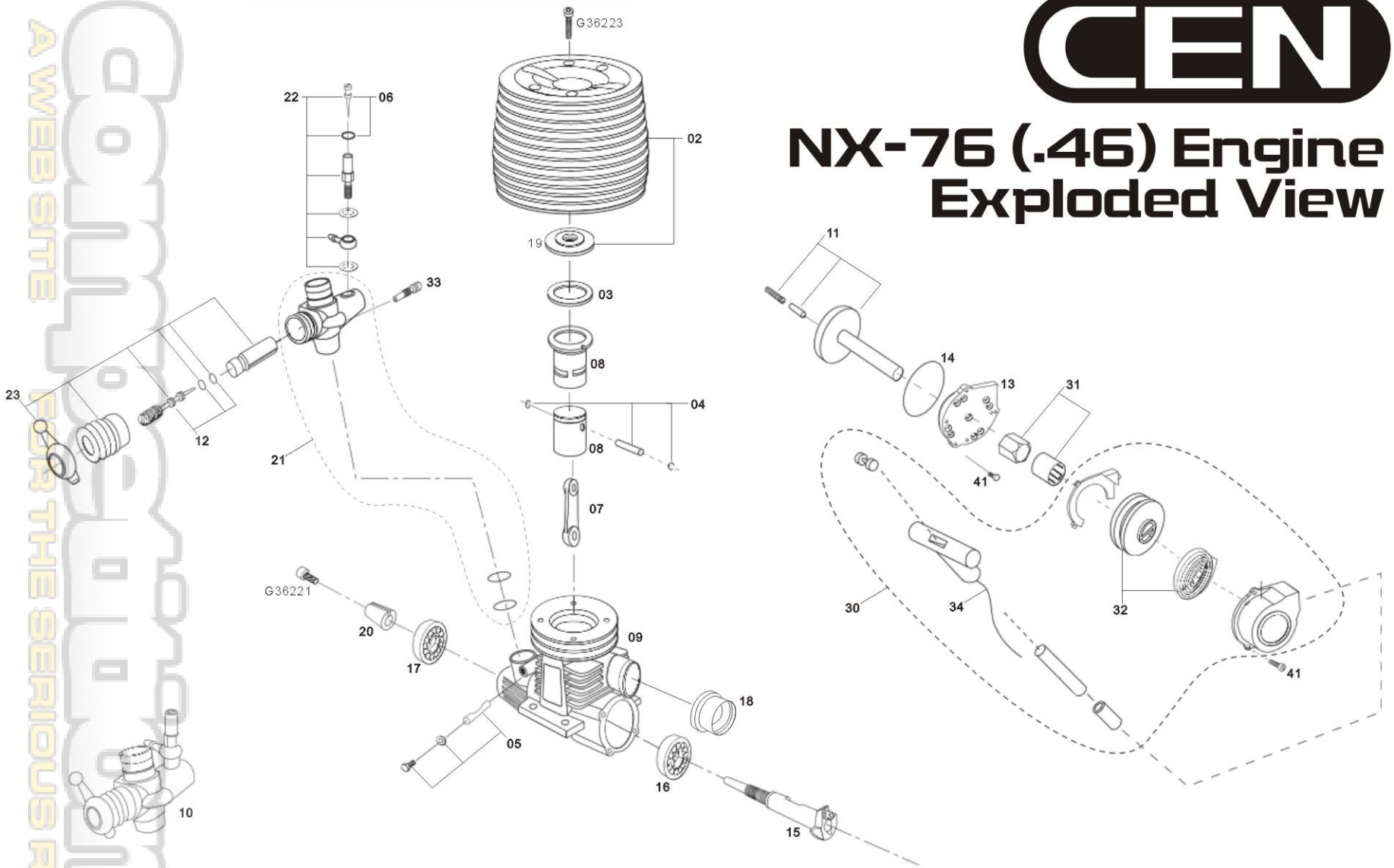
# NX-76 (.46) Engine
# Exploded View




| | | | | | |
|---|---|---|---|---|---|
| G70357-02 Cylinder Head | G70357-07 Connecting Rod | G70357-12 Slow Needle | G70357-17 Front Ball Bearing | G70357-22 Carburetor Main Needle Set | G70357-33 Throttle Stop Screw |
| G70357-03 Cylinder Head Gasket | G70357-08 Piston and Cylinder | G70357-13 Rear Cover | G70357-18 Exhaust Seal Ring | G70357-23 Carburetor Slow Needle Set | G70357-34 Starter Rope |
| G70357-04 Piston pin | G70357-09 Crank Case | G70357-14 Rear Cover Gasket | G70357-19 Combustion Chamber | G70357-30 Recoil Assembling | G70349-41 Rear Cover Screw |
| G70357-05 Lock Nut for Carb. | G70357-10 Carburetor | G70357-15 Crank Shaft | G70357-20 Drive Cone | G70357-31 Oneway Hub | G36221 Screw 3x8 cap |
| G70357-06 Main Needle | G70357-11 Oneway Start Shaft | G70357-16 Rear Ball Bearing | G70357-21 Carburetor Main Case | G70357-32 Recoil Spring | G36223 Cylinder Head Screw |

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# Parts List

| Spare Parts | |
|---|---|
| MX037 | Driving Bevel Gear(9T1.5M) |
| MX203 | Brake Lever |
| MX207 | Throttle Spring |
| MXS21 | Clutch Spring 1.1mm |
| GS003 | Clutch Shoes .46 |
| GS012 | Flange Bushing #3x6 |
| GS014 | Steering Plastic Parts |
| GS015 | Shock Shaft 77mm |
| GS016 | Ball B7.8 |
| GS017 | Ball B6.8 |
| GS018A | Shock Spring(White) |
| GS020 | Flange Bushing #4x6 |
| GS022 | Air Filter |
| GS023 | Aluminum Arm Brace |
| GS024 | Silicon Exhaust Coupler |
| GS025 | Threaded Hinge Pins 4x56 |
| GS026 | Threaded Hinge Pins 4x73 |
| GS027 | Threaded Hinge Pins 3x44 |
| GS030 | Brake Disk |
| GS032 | Muffler Mount |
| GS036 | 220cc Fuel Tank |
| GS037B | Side Frame (Chassis)/Blue |
| GS038 | Radio Box |
| GS041B | Engine Plate(Blue) |
| GS042 | Bumper Set (Chrome) |
| GS044 | Shock Tower |
| GS045 | Body Post |
| GS047 | External One-way Gear Hub |
| GS050 | Twin Gear 17-20T |
| GS052 | Internal One-way Gear T34 |
| GS055 | External Gear Hub |
| GS056 | External Clutch Gear Hub |
| GS059B | Skid Plate(Blue) |
| GS066 | Internal Clutch Hub |
| GS067 | Turnbuckles 8x36 |
| GS068 | 2-Speed Clutch Shoes Set |
| GS070 | Manifold NX-76 |
| GS071 | Engine Mount |
| GS072 | Turnbuckles 4x78 |
| GS074 | Ball End B7.8 |
| GS079 | Clutch Bell(.46) |
| GS080 | Alum. 4-Piece Tunned Pipe |
| GS081A | Blue heavy Duty Handle |
| GS082 | Plastic Parts Set(Tank Bracket,L Lever) |
| GS083 | Rear Toe-in Brace |
| GS085 | Forward Gear T27 |
| GS087 | Steel Spur Gear 43T |
| GS088 | Steel Spur Gear 39T |
| GS090 | Pinion Gear 21T |
| GS092 | Rear Propeller |
| GS093 | Drive Cup |
| GS098 | Clutch Spring (Black / 0.7mm) |
| GS099 | Clutch Spring (Nickle / 0.8mm) |
| GS104 | Nemesis Flash Body |
| GS201 | Differential Sun Gear d8 |
| GS202 | Ring Bevel Gear d8(26T) |
| GS203 | Diff. Case Cover-d8 |
| GS204 | Diff. Outdriver -d8 |
| GS205 | Aluminum Diff. Gear Box |
| GS206 | Side Plate II |
| GS207 | Gear Engager II |
| GS208 | Diff. Brake Outdriver-d8 |
| GS209 | Tranny Gear Box II |
| GS210 | Brake Shoes |
| GS211 | Spur Gear 46T-d8 |
| GS212 | Brake Cam Brace |
| GS213 | Brake Cam Shaft II |
| GS214 | "Sniper" Racing Tires |
| GS215 | "Assault" Wheels (23mm Hex) |
| GS216 | Aluminum Diff. Case (#6) |
| GS217 | Wheel Hex Driver 23mm |
| GS218 | Pinion Gear 25T |
| GS219 | Front Propeller |
| GS220 | Differential Gasket II |
| GS221 | Aluminum Differential Shim II |
| GS222 | Tranny Spacer |
| GS223 | Rubber Damper |
| GS225 | Suspension Arm |
| GS226 | 1st Shaft |
| GS228 | Wheels (pre-glued) |
| GS229 | Wheel Hex Nuts 23mm |
| GS230 | Piston(14mm) |
| GS231 | Shock Body(14mm) |
| GS232 | Shock End-L |
| GS233 | Reservoir |
| GS234 | Preload Spacer |
| GS235 | Spring Retainer |
| GS236 | Reservoir Cap |
| GS237 | Spring Collar |
| GS238 | Diff. Planet Gear |
| GS239 | Diff. Gear Supports |
| GS240 | Expanding Clutch Shoes |
| GS241 | Adjusting Screws |
| GS242 | Dust Cover |
| GS243 | "T" Bolt |
| GS244 | Swing Dogbone |
| GS245 | Wheel Axle |
| GS246 | Spindle |
| GS247 | Spindle Carrier |
| GS248 | Upper Suspension Arm |
| GS249 | Brake Bracket |
| GS250 | Driving Bevel Gear (9T) |
| GS251 | Upper Bracket |
| GS252 | Lower Bracket |
| GS253 | CEN Emblem |
| GS254 | 2nd Shaft |
| GS255 | Toe-in Bar |
| GS256 | Steering Drag Link |
| GS257 | Bumper |
| GS258 | Steering Post |
| GS259 | Aluminum Sreering Tube |
| GS260 | Steering Spring |
| GS261 | Adjusting Nut |
| GS262 | Radio Box |
| GS263 | Radio Box Lip Mount |
| GS264 | Battery Cover |
| GS265 | Receiver Cover |
| GS266 | Vented Flywheel |
| GS267 | Pilot Nut |
| GS268 | Oil Ring #39.5x2.6 |
| GS269 | Air Foam Filter |
| GS270 | Main Shaft Bracket |
| GS271 | Engine Plate Bracket |
| GS272 | Rod Stopper |
| GS273 | Brake Spring |
| GS274 | Throttle Spring |
| GS275 | Controlled Rod |
| GS276 | Controlled Plastic Parts |
| GS277 | "E" Pin 3x18 |
| GS278 | Cross Pin |
| GS279 | Nipple M4 |
| GS280 | Shock Damper Tube |
| GS281 | Bumper Bracket |
| GS282 | End Guard |
| GS283 | Hex Post 33mm |
| G36101 | Flat Head Screw 3x10 |
| G36102 | Flat Head Screw #6-32x10 |
| G36103 | Flat Head Screw 3x20 |
| G36104 | Flat Head Screw 3x5 |
| G36105 | Flat Head Screw 3x8 |
| G36106 | Flat Head Screw 3x16 |
| G36111 | Flat Head Screw 4x8 |
| G36112 | Flat Head Screw 4x12 |
| G36113 | Flat Head Screw 4x16 |
| G36151 | Binding Head Screw 3x12 |
| G36152 | Binding Head Screw 3x8 |
| G36181 | Round Head Screw 2x10 |
| G36182 | Round Head Screw 2x8 |
| G36191 | Round Head Screw 3x12 |
| G36201 | Flange Hex Head Screw 4x10 |
| G36202 | Ball Studs B5.8xM3x14 |
| G36211 | Cap Screw 4x40 |
| G36212 | Cap Screw 4x10 |
| G36213 | Cap Screw 4x15 |
| G36221 | Cap Screw 3x8 |
| G36222 | Cap Screw 3x12 |
| G36223 | Cap Screw 3x16 |
| G36224 | Cap Screw 3x20 |
| G36225 | Cap Screw 3x25 |
| G36226 | Cap Screw 3x6 |
| G36227 | Cap Screw 3x10 |
| G36228 | Cap Screw 3x18 |
| G36229 | Cap Screw 3x14 |
| G36230 | Cap Bolt 3x18 |
| G36241 | Cap Screw 3.5x14 |
| G36251 | Set Screw 3x4 |
| G36261 | Set Screw 4x4 |
| G36262 | Set Screw 4x5 |
| G36263 | Set Screw 4x6 |
| G36264 | Set Screw 4x12 |
| G36271 | Set Screw 5x5 |
| G36272 | Set Screw 5x6 |
| G36301 | Truss Head Screw 4x12 |
| G36302 | Truss Head Screw 4x10 |
| G36311 | Truss Head Screw 3x10 |
| G36312 | Truss Head Screw 3x52 |
| G36313 | Truss Head Screw 3x16 |
| G36321 | Truss Head Screw 5x6 |
| G36401 | Lock Nut 3 |
| G36402 | Lock Nut 4 |
| G36501 | Tapping Flange Screw 3x14 |
| G36511 | Tapping Binding Head Screw 3x10 |
| G36521 | Tapping Truss Head Screw 4x12 |
| G36702 | Pin 2x20 |
| G36711 | Pin 2.5x10 |
| G36721 | Pin 3x10 |
| G36722 | Pin 3x22 |
| G36724 | Pin 3x12 |
| G36725 | Pin 3x15 |
| G36726 | Pin 3x16 |
| G36731 | Pin 2.6x10 |
| G36732 | Pin 2.6x12 |
| G36791 | Hook Pin #6 |
| G36793 | Hook Pin #8 |
| G36801 | Washer 3x6x0.5 |
| G36802 | Washer 3x8x1 |
| G36803 | Washer 4x10x0.8 |

OFFICIAL WEB SITE FOR THE SERIOUS RACER

# Parts List

| Spare Parts | |
|---|---|
| G36851 | "E" 2.5 Clip |
| G36852 | "E" 2 Clip |
| G36853 | "E" 3 Clip |
| G36854 | "E" 4 Clip |
| G36901 | Shim 5x7 |
| G36902 | Shim 8x11.5 |
| G36903 | Shim 14x16 |
| G36904 | Shim 12x16x0.5 |
| G36906 | Shim 9.6x14x0.5 |
| G70301 | Oil Ring P4 |
| G70302 | Oil Ring P3.5 |
| G70303 | Oil Ring P3 |
| G70304 | Oil Ring 12.5 |
| G70308 | Oil Ring P8 |
| G70309 | Oil Ring 10 |
| G70310 | Oil Ring P10 |
| G73902 | Bearing 5x10x4 |
| G73905 | Ball 5mm |
| G73914 | Bearing 8x16x5 |
| G73915 | Bearing 10x19x7 |
| G73916 | Bearing 6x13x5 |
| G73917 | Bearing 6x10x3 |
| G73921 | Bearing 12x21x5 |
| G70357 | Engine NX-76 |
| G70429 | Glow Plug #3 |
| GX61 | Fuel Tube |
| CT032 | Rod End 6.8 |
| FF068 | Zipper Tie (middle) |
| FF072 | Servo Horn |
| SP23 | Rod End 5.8 |
| SP32 | Antenna Straw |
| SP50 | Zipper Tie (small) |
| G82130 | SafeGuard |

| Tunned Parts | |
|---|---|
| MX029 | Clutch Spring 1mm |
| MX038 | Power Switch Cover |
| MX061 | Aluminum Fuel Filter |
| MX068 | Shock Spring-Blue (Rear) |
| MX073 | Aluminum Steering Post |
| MX086 | Shock Dust-proof Boots |
| MX202 | Tube Clamp |
| MX208 | Fuel Filter |
| MXS20 | CNC Aluminum 3P Clutch Shoes |
| GS004 | Driving Bevel Gear(9T1.5M) |
| GS018 | Shock Spring(Red) |
| GS021 | Wheel Hex Driver 19mm |
| GS034 | Chrome Wheels(19mm) |
| GS035 | V-Pattern Tires |
| GS037 | Side Frame (Chassis)/Red |
| GS041 | Engine Plate |
| GS051 | Internal Clutch GearT31 |
| GS053 | Idle Gear Set |
| GS059 | Skid Plate |
| GS066 | Internal Clutch Hub |
| GS067A | Aluminum Turnbuckles 8x36 |
| GS069 | Shift Lever Set |
| GS073A | Aluminium Turnbuckles 8x90 |
| GS081 | Red heavy Duty Handle |
| GS084 | Over-head Shock Parts |
| GS086 | Reverse Gear T22 |
| GS089 | Pinion Gear 17T |
| GS101 | Genesis Flash Body |
| GS102 | Genesis Body |
| GS103 | Genesis Limited Flash Body |
| GS224 | Swing Dogbone-Pin4 |
| GS227 | Diff. Outdriver -d8-Pin4 |
| GSS01 | 4WS Option Kits(w/10kgs-cm reverse servo) |
| GSS03 | Steel Forward Gear T27 |
| GSS04 | Steel Reverse Gear T22 |
| GSS06 | Aluminium Hex Driver 23mm |
| GSS09 | Aluminium Shocks |
| GSS10 | Outdriver-d8,Swing Shaft-Pin4 |
| G70358 | Roto-tech Starter |
| G70359 | Back Plate Gear Set |
| G82113 | Receiver Switch |
| G82122 | High Torque 10kg-cm Servo (Metal Gear) |
| G82123 | High Torque 10kg-cm Reverse Servo (Metal Gear) |
| G82124 | High Torque 5kg-cm Servo (Metal Gear) |
| G82126 | Metal Servo Gear Set |
| GXS02 | Post 33mm |

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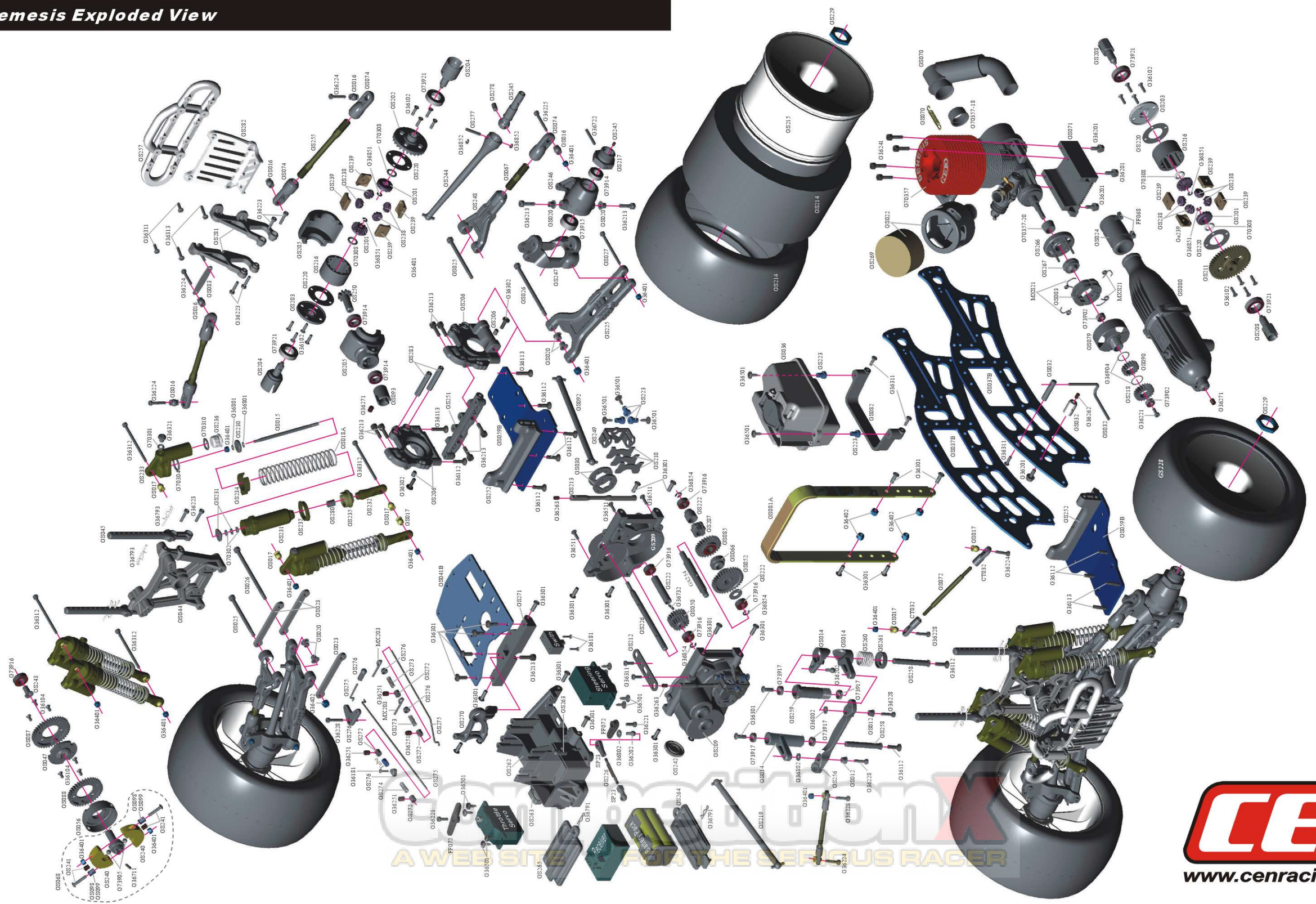
# Nemesis Exploded View