

# SC8

SHORT COURSE

## :: Instruction Manual

80924: AE Team RTR



80920: Red Bull RTR



80921: Lucas Oil RTR



80922: KMC RTR



80923: Bully Dog RTR

## :: Introduction

Thank you for purchasing this Team Associated product. This manual contains instructions and tips for building and maintaining your new SC8. Please take a moment to read through it and familiarize yourself with these steps. We are continually changing and improving our designs; therefore, actual parts may appear slightly different than the illustrations. New parts will be noted on supplementary sheets located in the appropriate parts bags. Check each bag for these sheets before you start to build.

## :: SC8 Features

- Aluminum Nyloc wheel nuts
- Tough, steel turnbuckles
- True-Lock kingpin system
- Hard coated shock bodies with 4mm shock shafts and rubber boots
- Durable, molded radio tray & antenna mount
- Sealed radio box
- 3mm 7075 aluminum front/rear shock towers
- Durable 10mm thick suspension arms
- Rubber CVA boots
- Anti-foaming fuel tank
- Low-profile, elliptical, high-flow two-stage air filter
- Fully functional roll cage with integrated dirt shields
- Independently adjustable front and rear disk brakes
- 150cc quick fill fuel tank
- Milled 3mm black hard coated 7075 aluminum chassis
- Full ball bearings in drive train and steering
- Precision universal drive shafts in six locations

## :: Additional

Your SC8 RTR comes factory assembled including radio gear. However, there are some items you will need to complete your kit:

- AA-Size Batteries for Transmitter (x8)
- AA-Size Batteries for the onboard electronics (x4) (or a 4.8v-6.0v Receiver Battery Pack, 3x2 pack recommended, AE Part #614 Flat, 615 Hump)
- D-Size Battery for Glow Starter (x1)
- 6-Cell Sub-C Size Battery Pack for Pro-Start Starting Gun
- Charger for Battery Pack
- Model Car Fuel (20%-30% Nitro recommended)

## :: Optional

Optional parts and gear to accessorize and maintain your SC8:

- Glow Starter (AE Part # 1738)
- Starter Box (AE Part # 1750)
- Cyanoacrylate glue (AE Part # 1597)
- Thread Locking Compound (AE Part # 1596)
- Silicone Shock Fluid (Refer to catalog for complete listings)
- Silicone Diff Fluid (Refer to catalog for complete listings)
- Body Scissors (AE Part # 1737)
- Reamer / Hole Punch
- Hex Wrenches (AE Part # 1541)
- Hobby Knife
- Needle Nose Pliers
- Wire Cutters
- Flat Blade Screwdriver (AE Part # 1552)
- Spring Hook Tool (AE Part # 1554)

**There is a 1:1 fold out  
in the back of the manual.  
Fold it out while building  
your kit for easy parts sizing!**

# SC8

SHORT COURSE



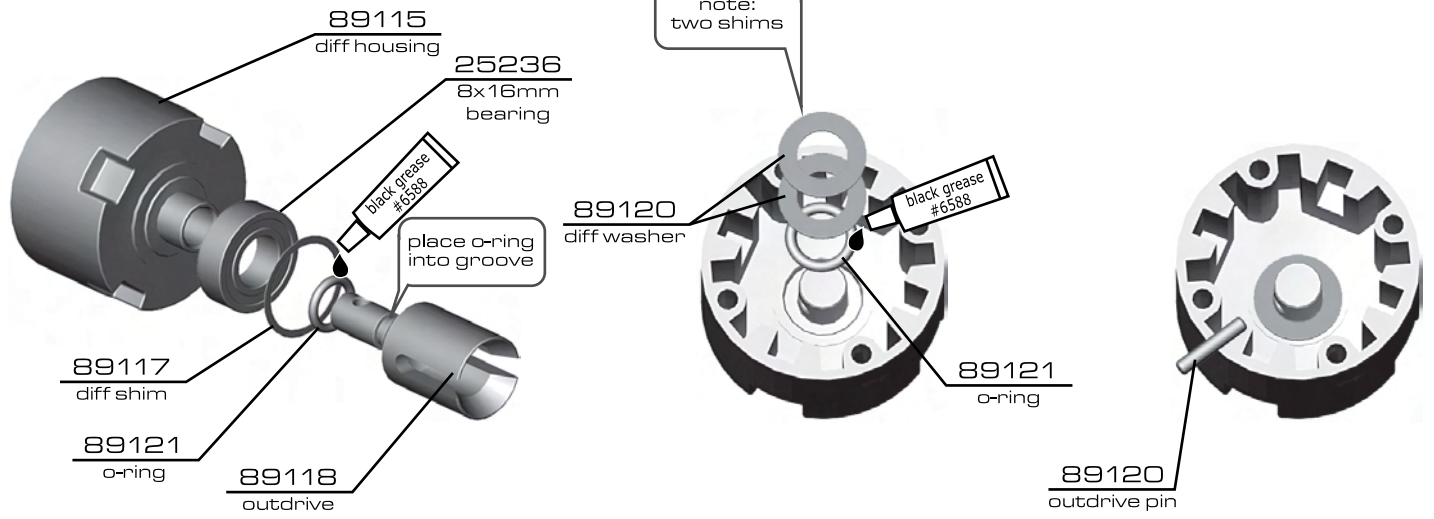
Associated Electrics, Inc.  
26021 Commercentre Dr.  
Lake Forest, CA 92630



<http://www.TeamAssociated.com> • <http://www.RC10.com>

Customer Service  
Tel: 949.544.7500  
Fax: 949.544.7501

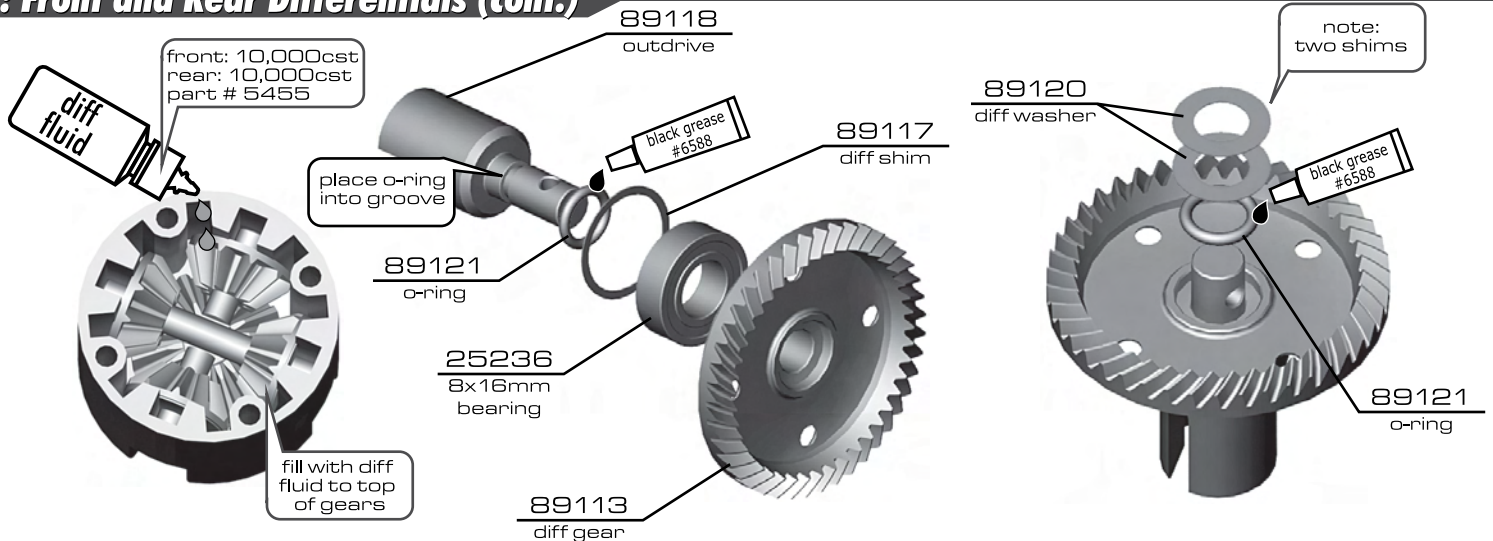
**:: Front and Rear Differentials**



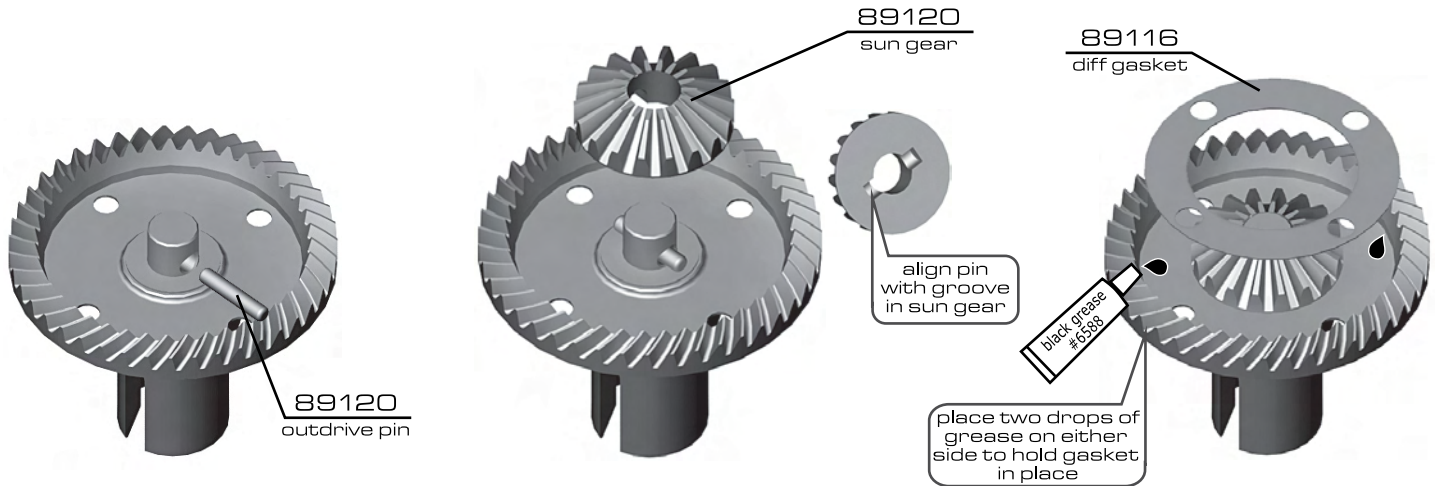
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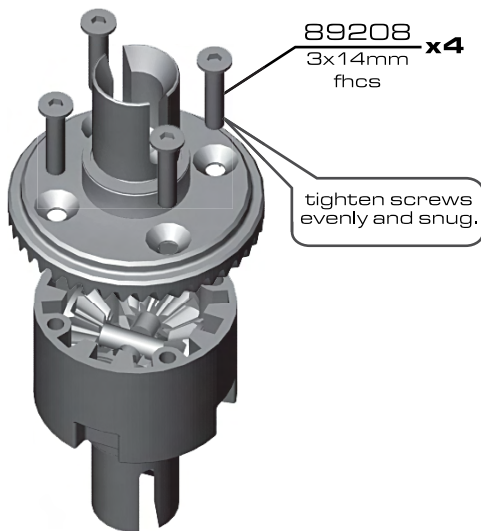
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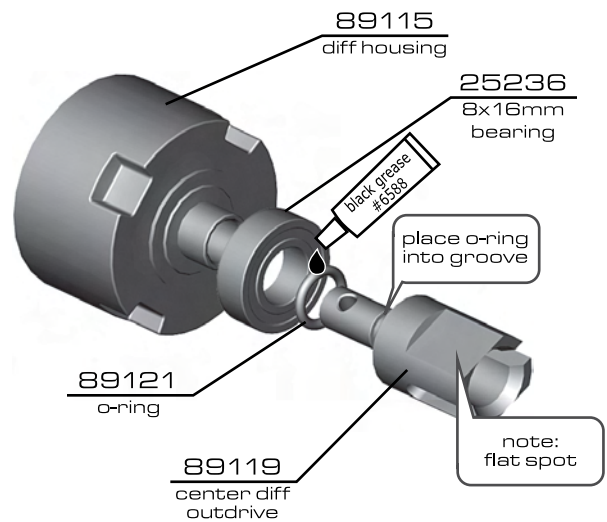
**:: Front and Rear Differentials (cont.)**



**:: Front and Rear Differentials (cont.)**



**:: Center Differential**



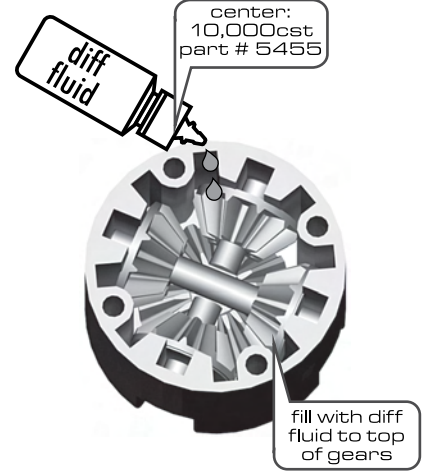
**:: Center Differential (cont.)**



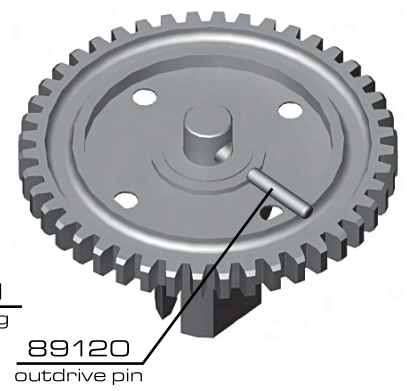
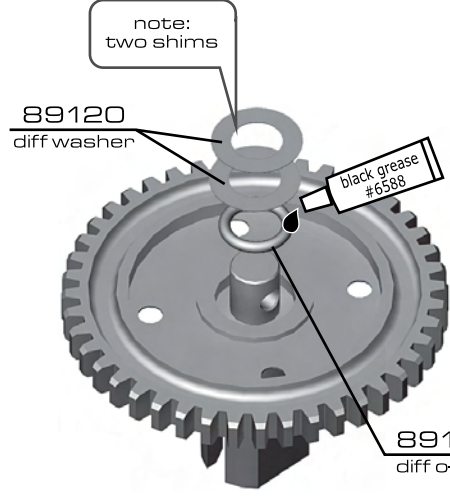
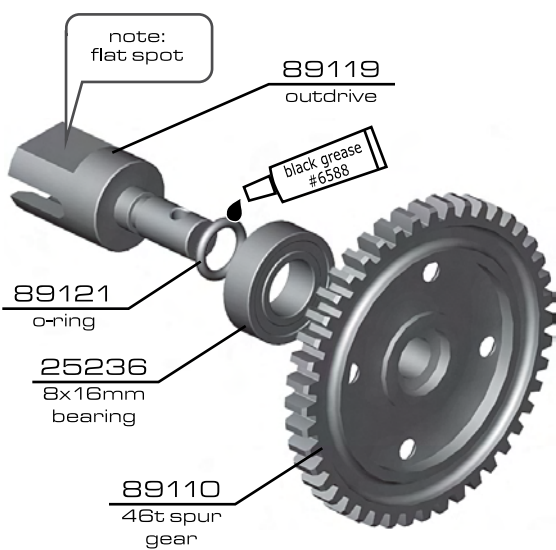
**:: Center Differential (cont.)**



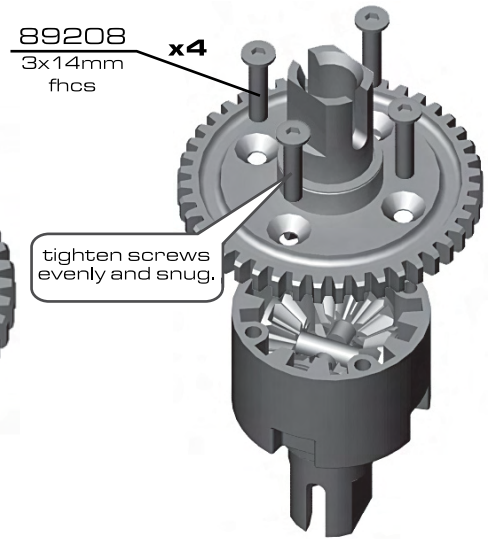
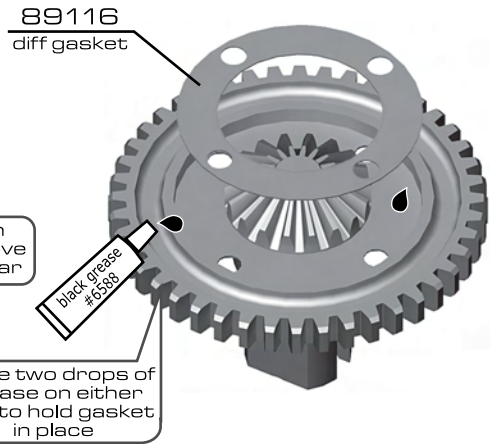
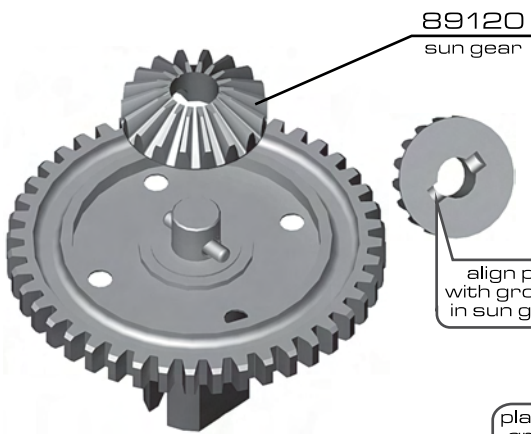
89120 spider gear assembly



**:: Center Differential (cont.)**



**:: Center Differential (cont.)**



**:: Shocks**

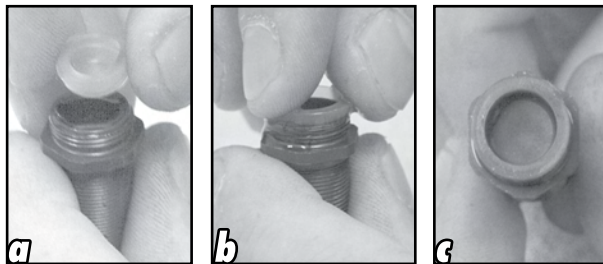
89215 piston locknut  
1.6mm piston  
89055 shock piston set (1.4, 1.5, 1.6mm)  
89260 shock shaft front  
89261 shock shaft rear  
89263 shock body front  
89264 shock body rear  
89066 shock o-rings  
89064 shock rebuild kit  
shock fluid  
clip will snap into groove  
shock fluid  
1 drop on threads

**:: Shocks (cont.)**

fit boot into groove  
89058 shock boot front  
89059 shock boot rear  
tighten eyelet to line on shaft  
89065 shock rod eyelet  
press fit  
shock fluid  
89063 shock bladder  
fill to top with shock oil  
front: 50wt #5435  
rear: 40wt #5423  
89065 shock rod eyelet ball

**:: Shocks (cont.)**

**Bladder installation**



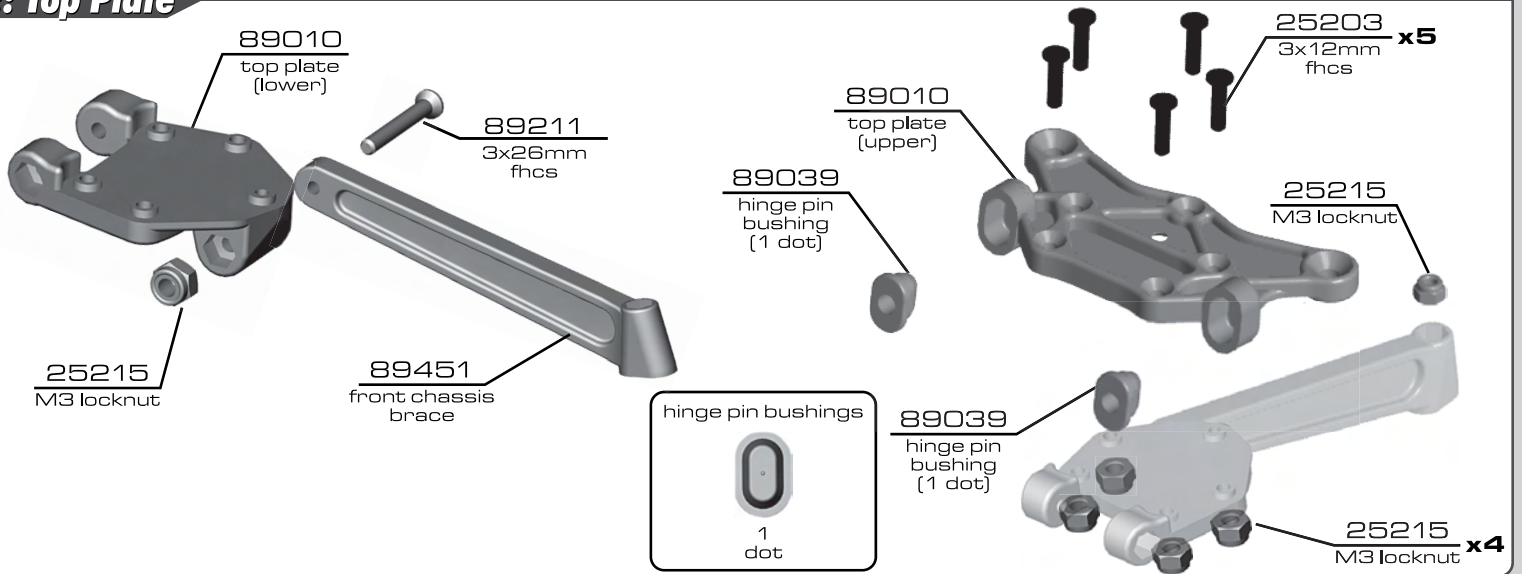
With the shaft fully extended, place bladder onto the top of the shock body (a), displacing the extra fluid (b). Make sure there are no air bubbles under the bladder (c). If there are, gently lift one side of the bladder to allow air bubbles to escape.

89262 RTR molded shock cap  
89266 shock spring retainer

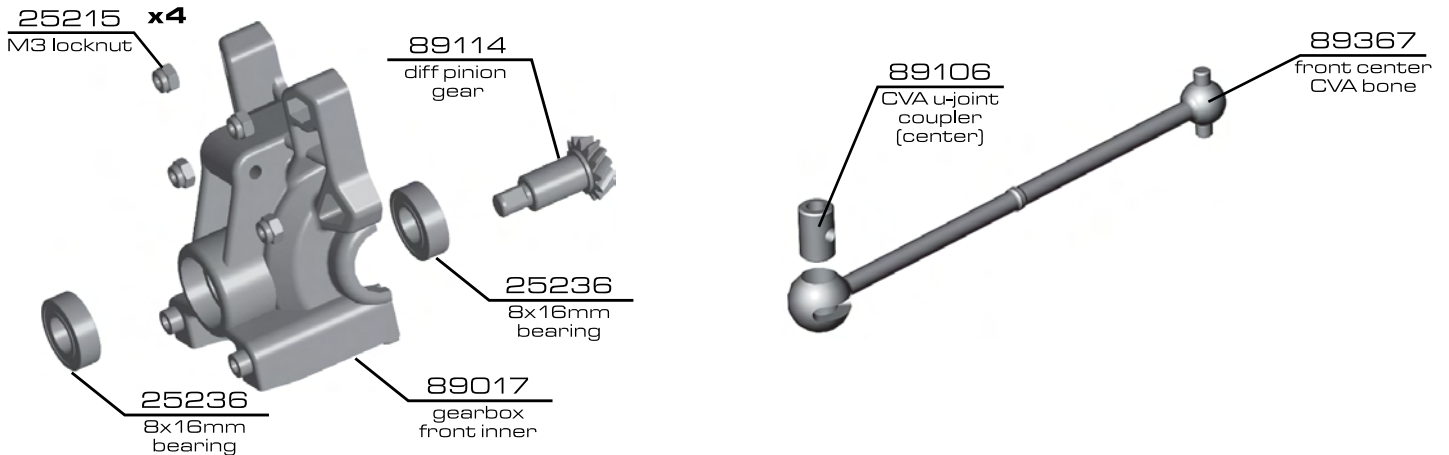
**:: Shocks (cont.)**



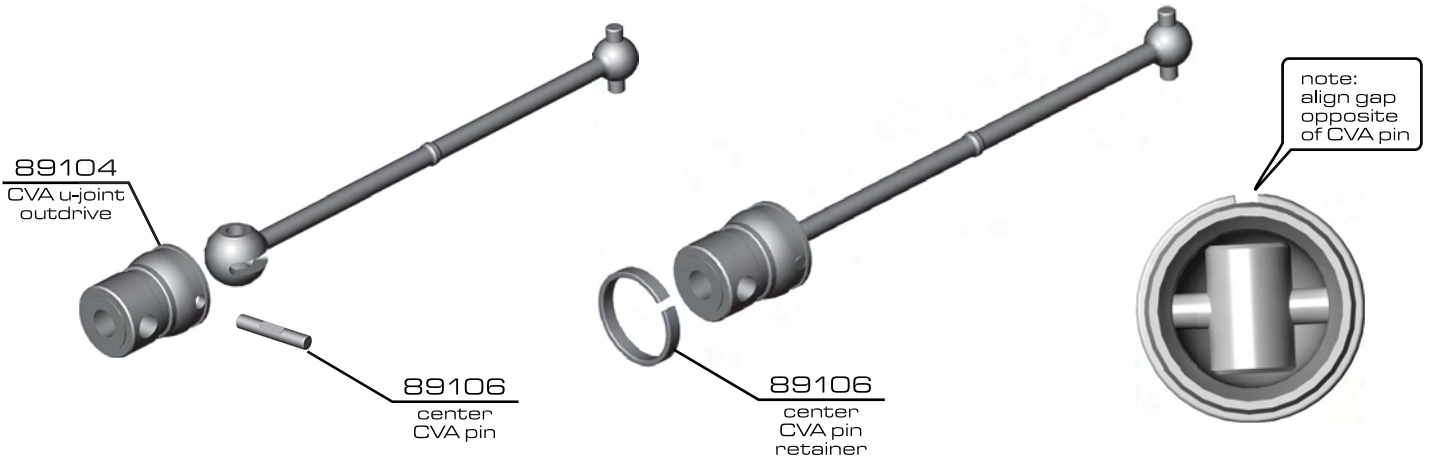
**:: Top Plate**



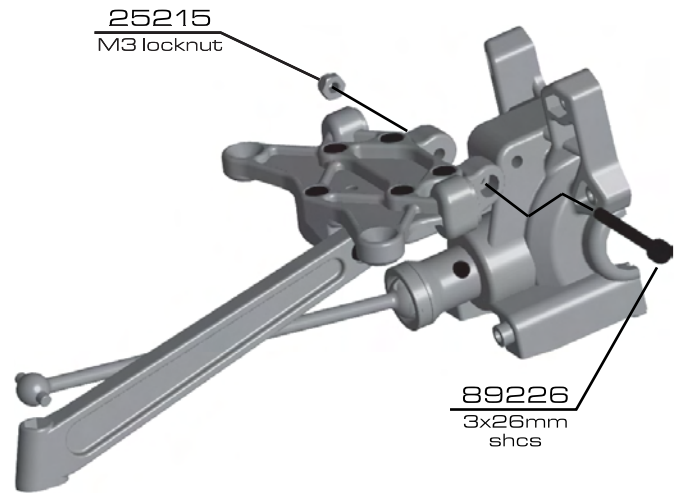
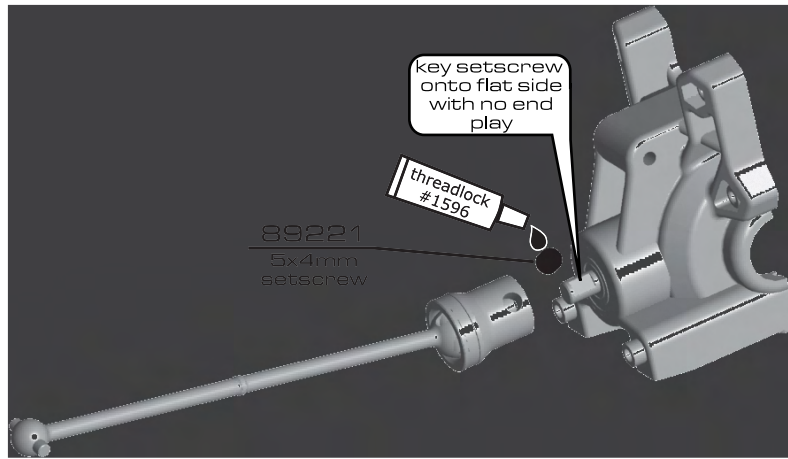
**:: Front Gearbox**



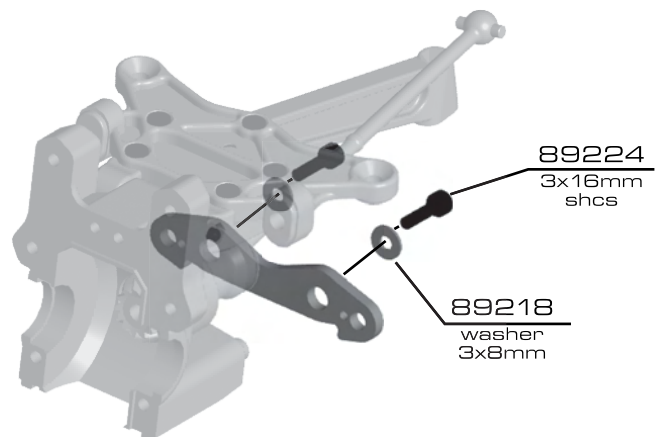
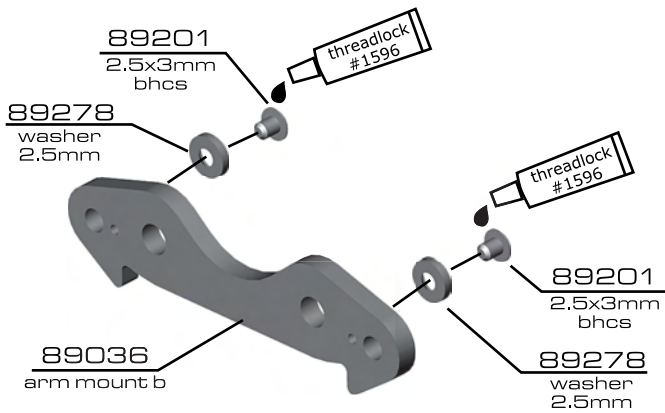
**:: Front Gearbox (cont.)**



**:: Front Gearbox (cont.)**

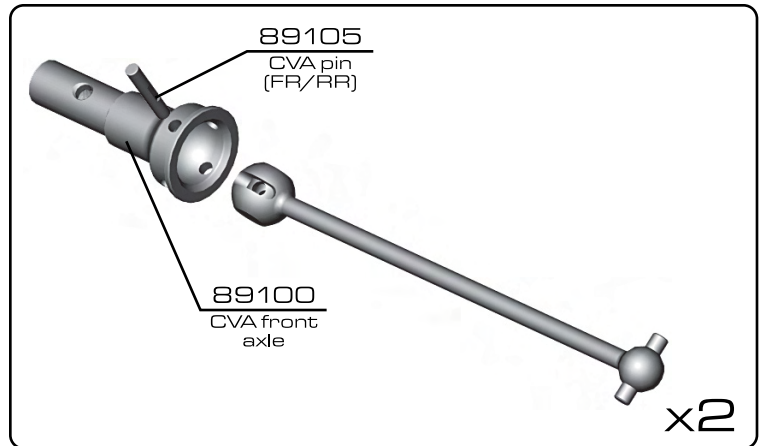
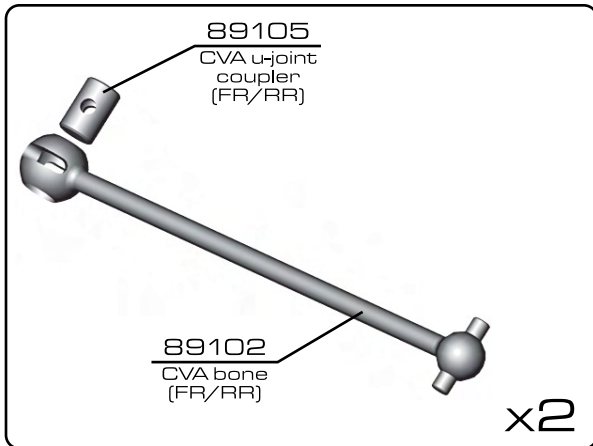


**:: Front Gearbox (cont.)**

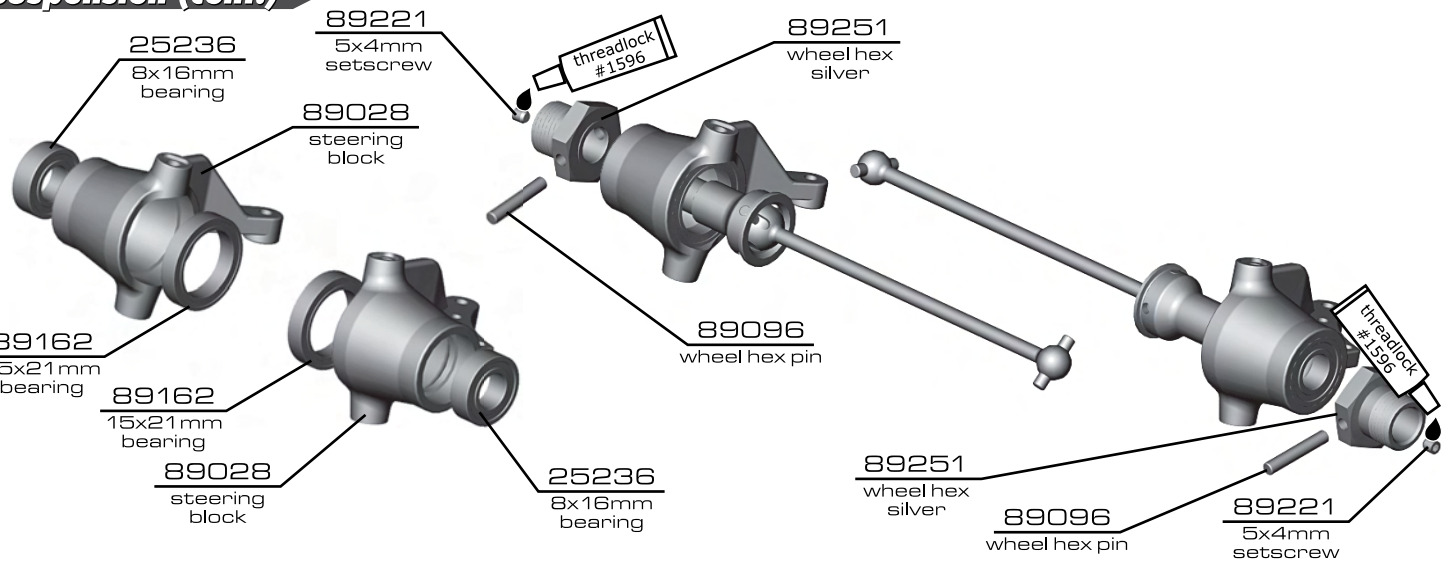




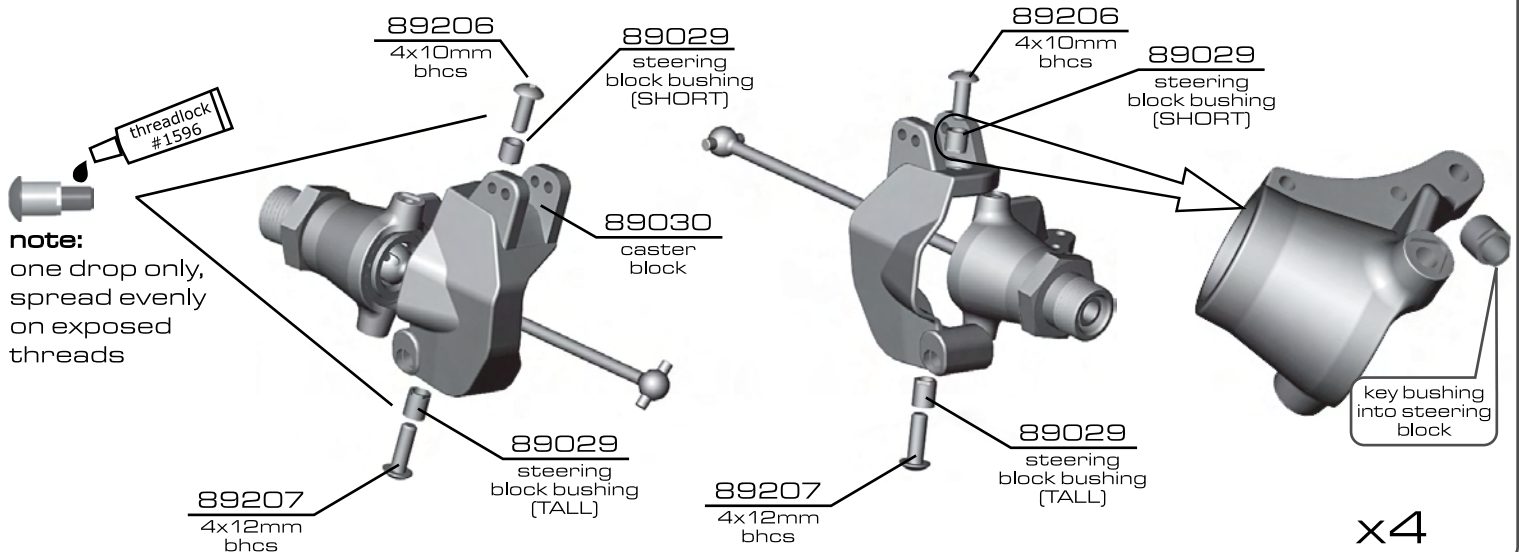
**:: Suspension**



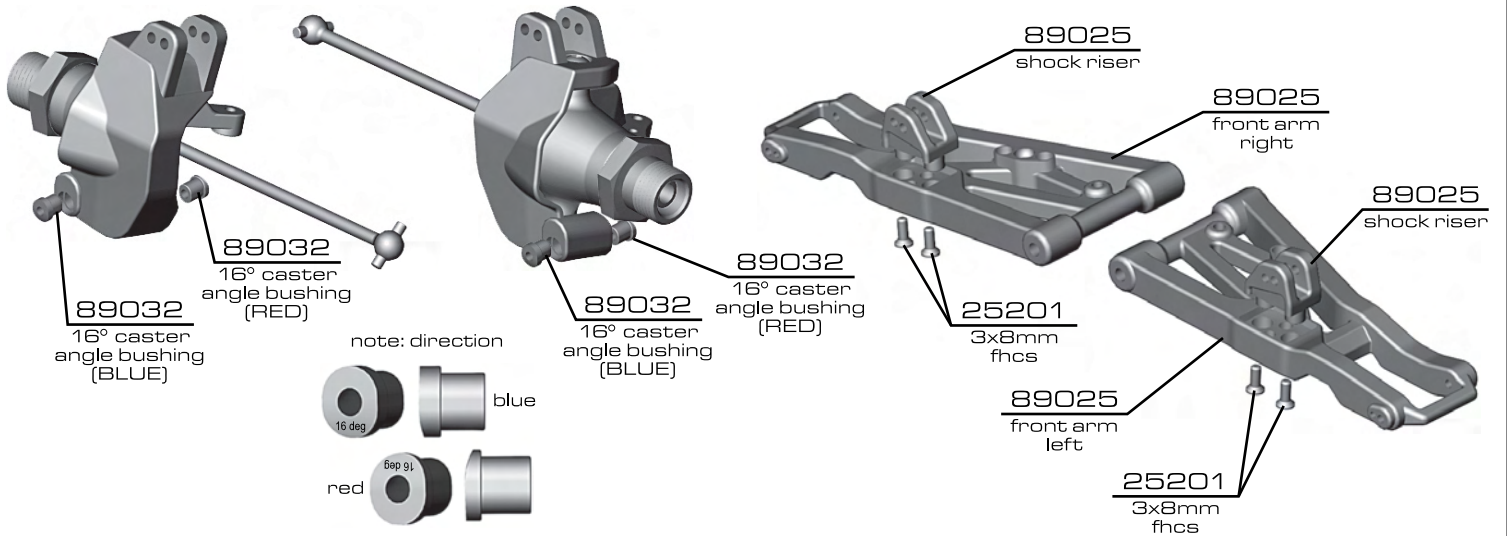
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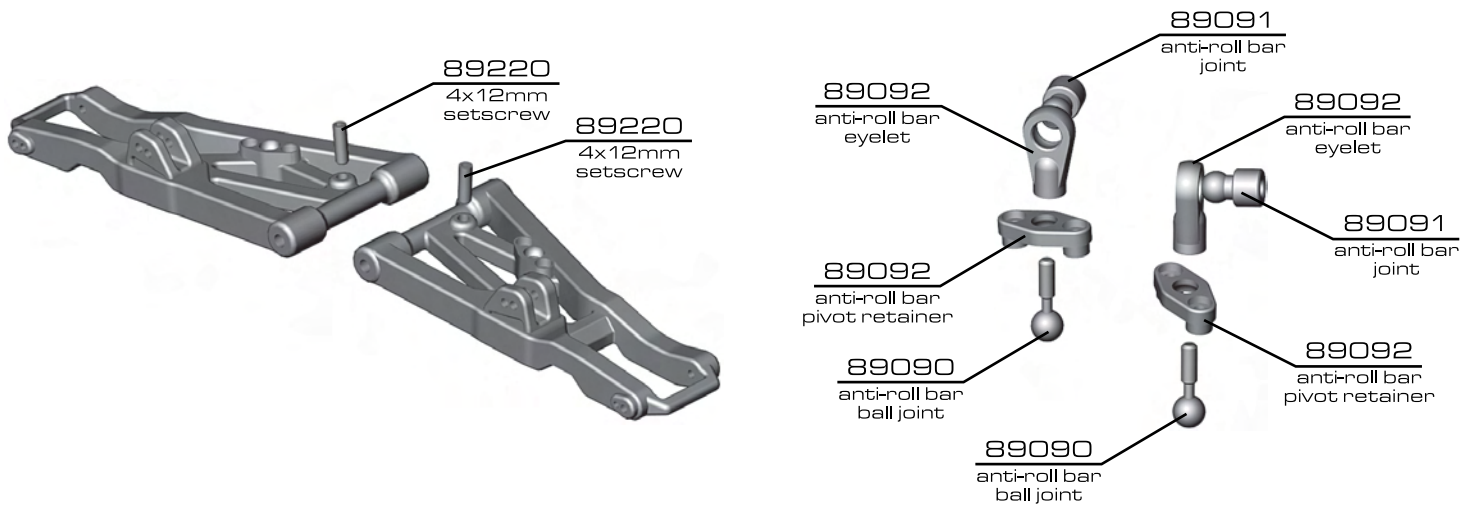
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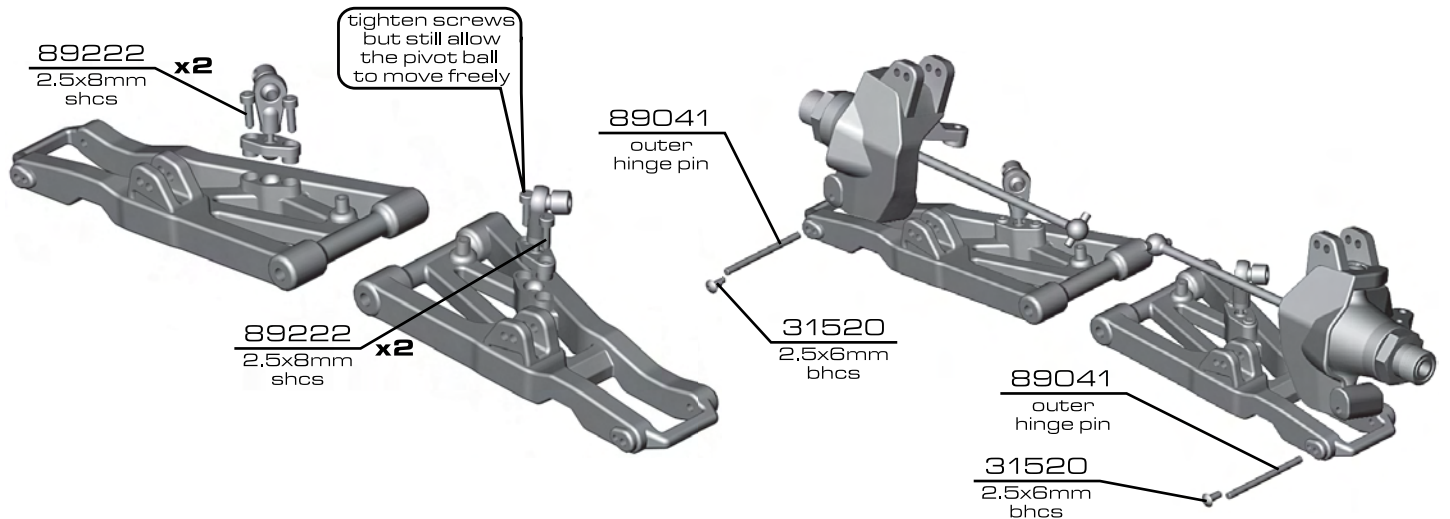
:: Suspension (cont.)



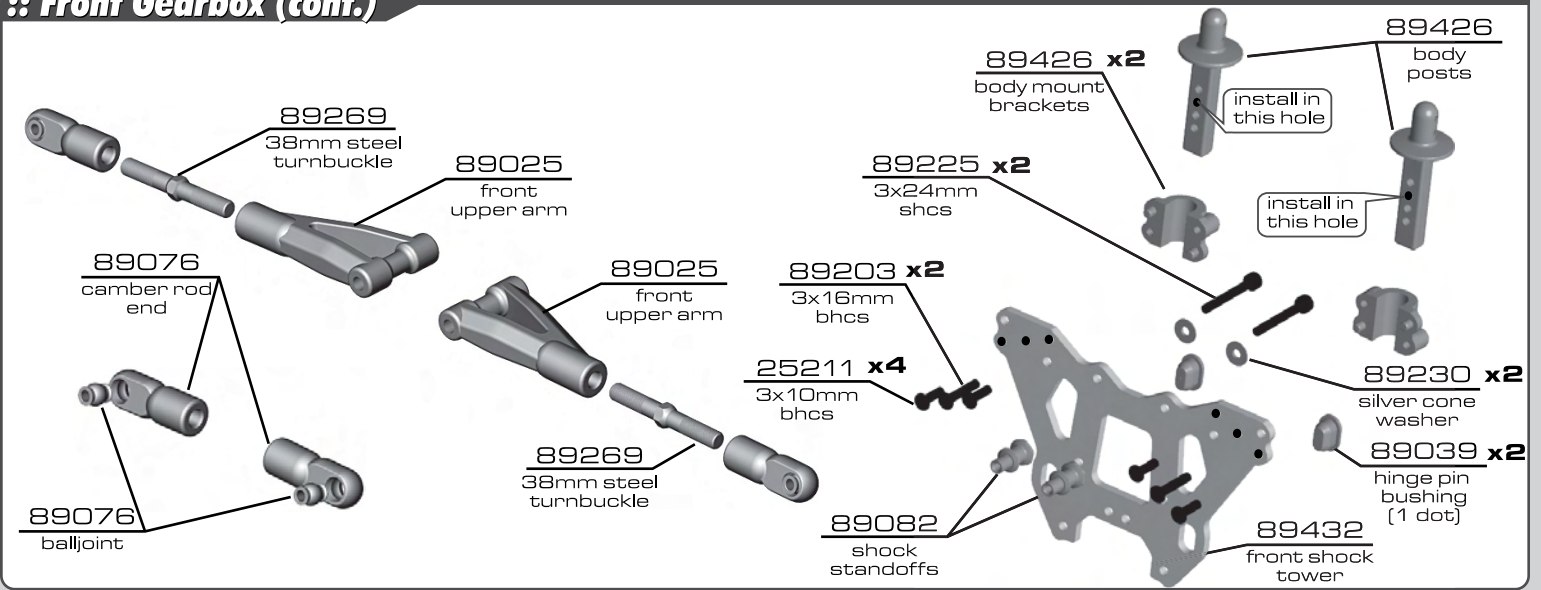
:: Suspension (cont.)



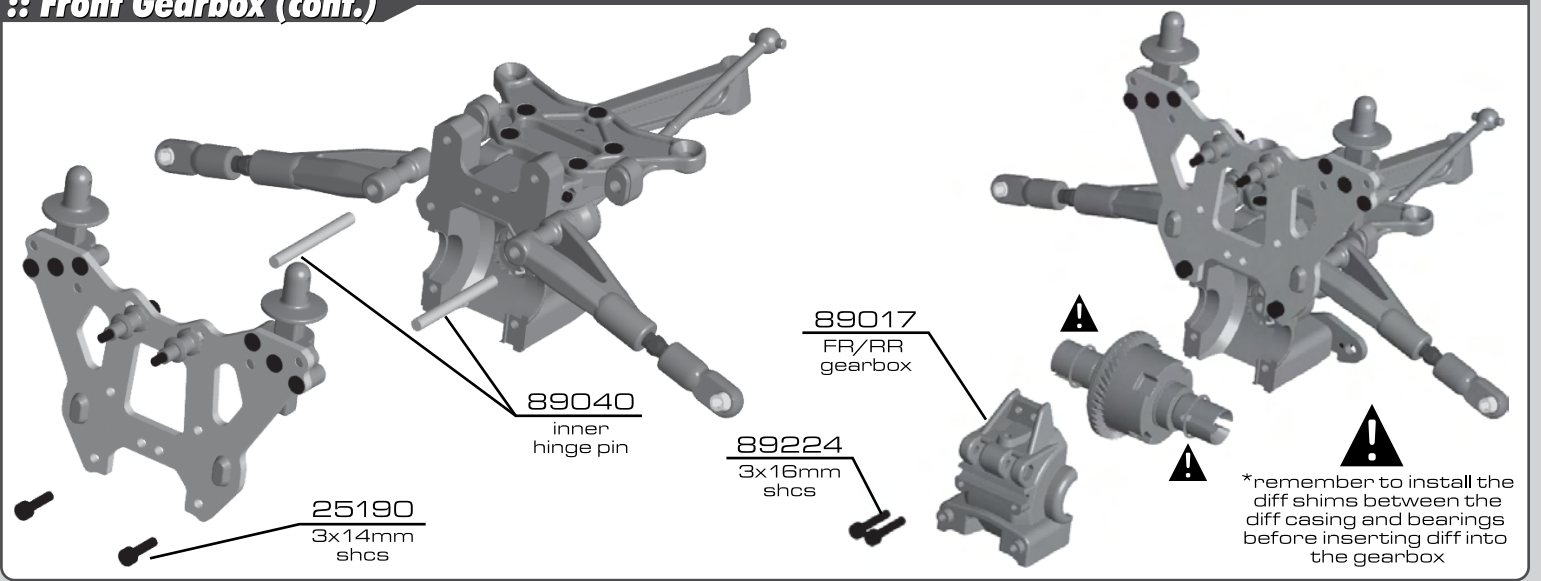
:: Suspension (cont.)



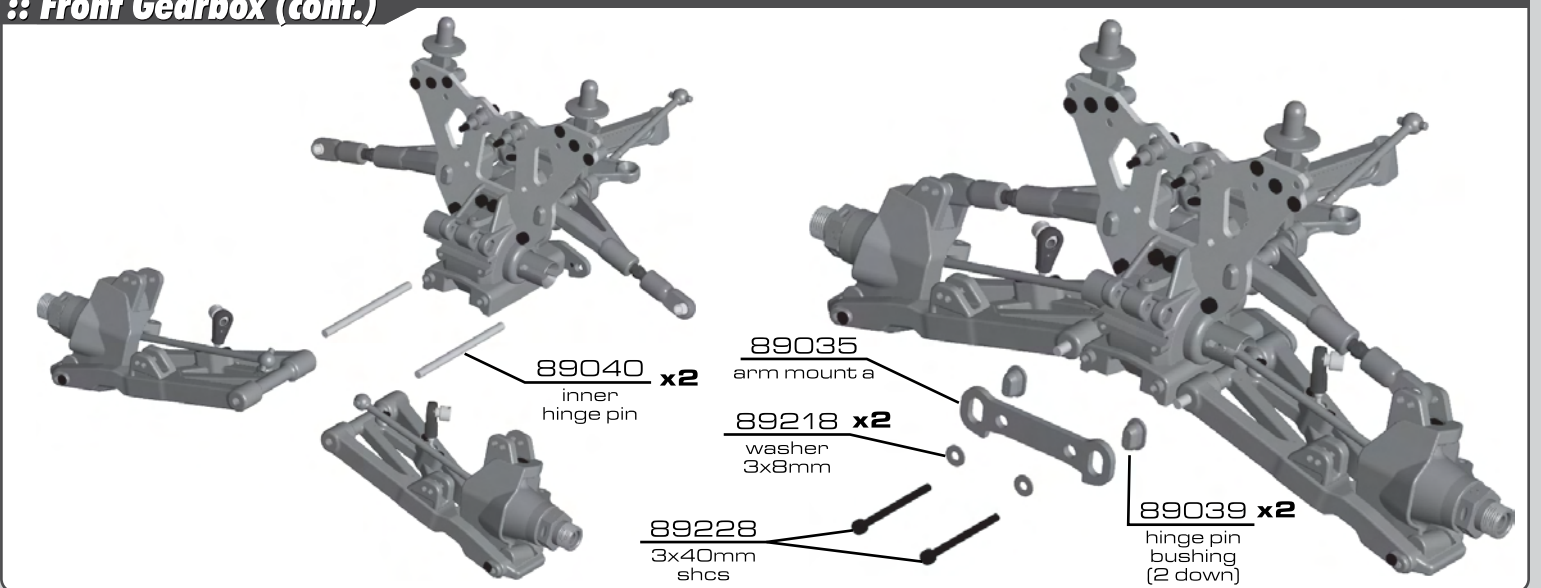
**:: Front Gearbox (cont.)**



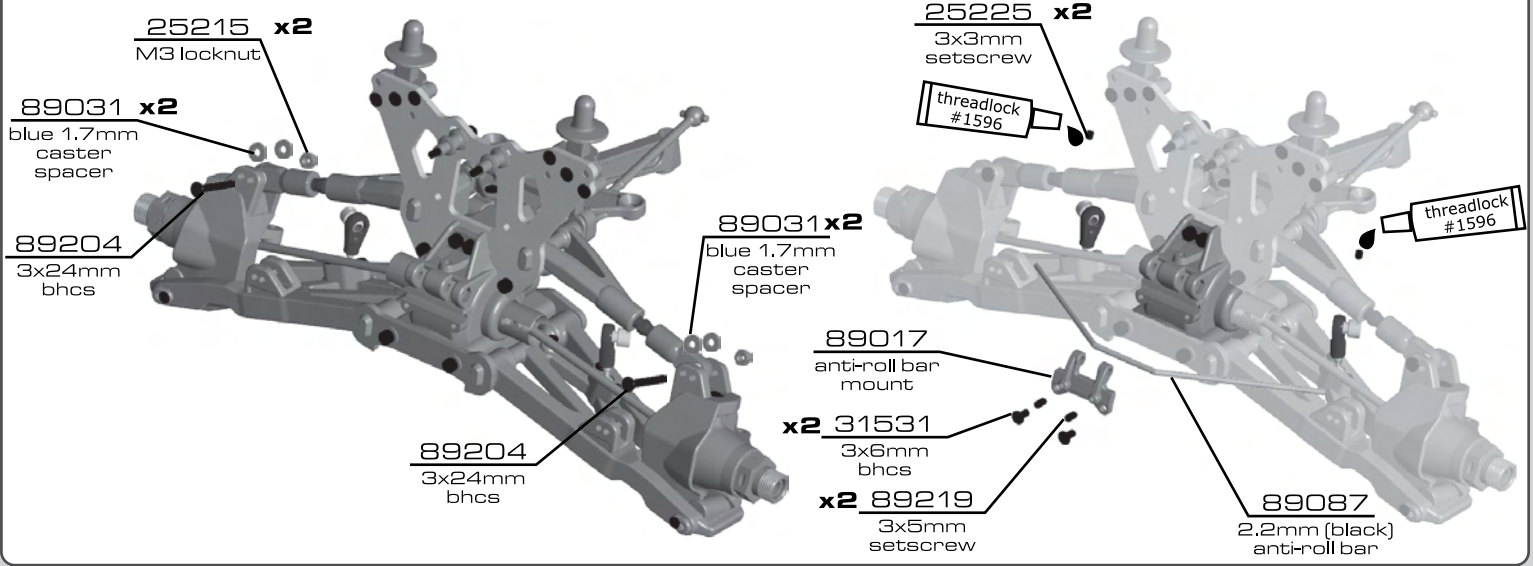
**:: Front Gearbox (cont.)**



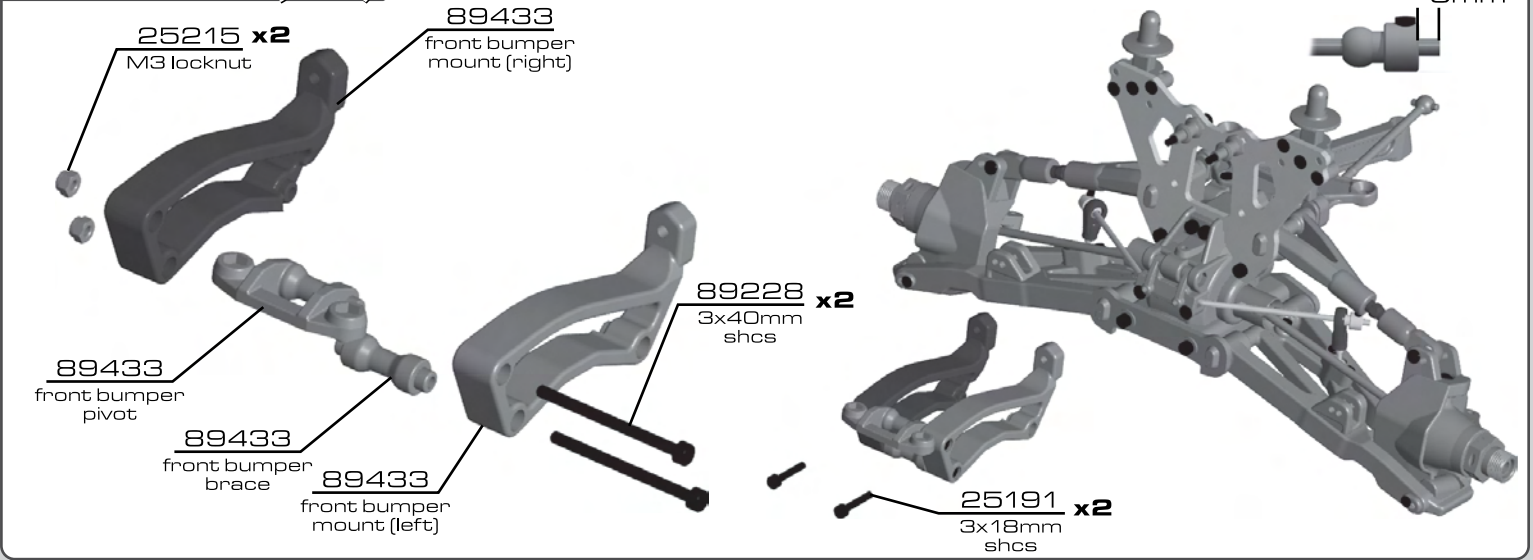
**:: Front Gearbox (cont.)**



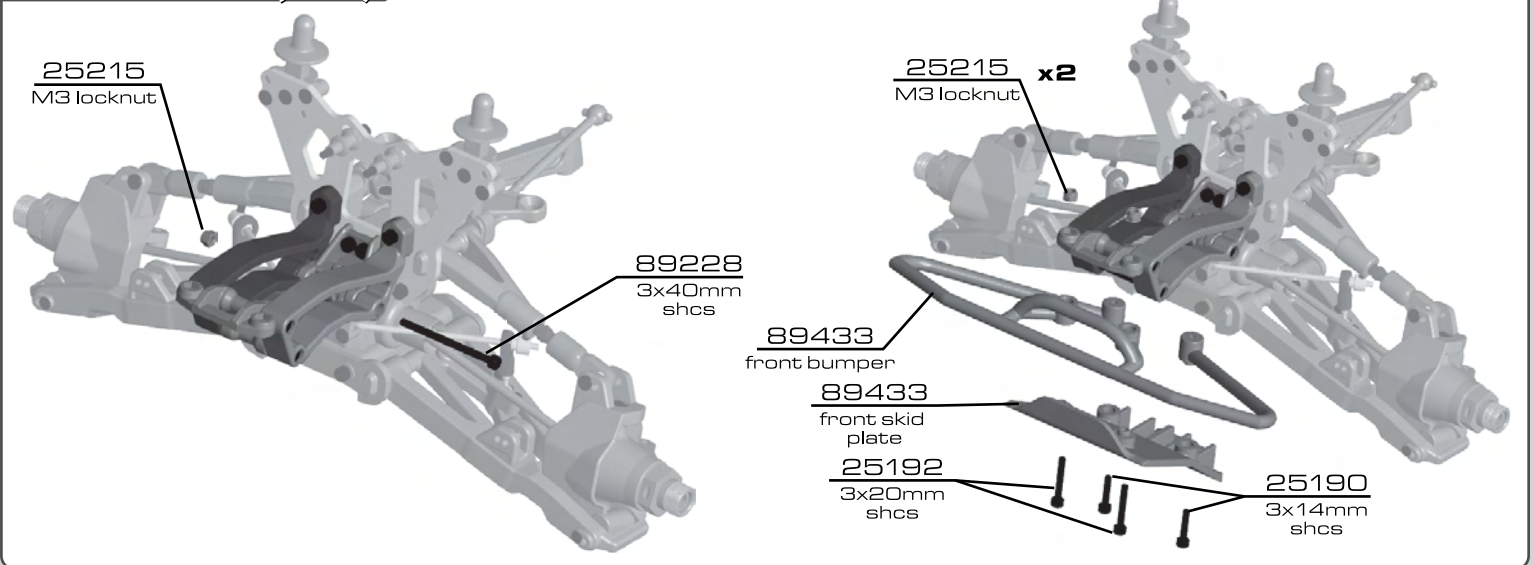
**:: Front Gearbox (cont.)**



**:: Front Gearbox (cont.)**



**:: Front Gearbox (cont.)**



**:: Front Gearbox (cont.)**

**\*install front shocks**

**25215 x2**  
M3 locknut

**89083 x2**  
shock bushings

**25215 x2**  
M3 locknut

**89203**  
3x16mm bhcs

**89203**  
3x16mm bhcs

note:  
use inner-most hole

**:: Rear Gearbox**

**25215 x4**  
M3 locknut

**89114**  
diff pinion gear

**25236**  
8x16mm bearing

**25236**  
8x16mm bearing

**89017**  
gearbox

**:: Rear Gearbox (cont.)**

**89106**  
CVA u-joint coupler (center)

**89106**  
CVA pin (center)

**89104**  
CVA u-joint outdrive (center)

**89106**  
drive cup pin retainer

black grease #6558

note:  
align gap opposite of CVA pin

**89370**  
CVA bone

**:: Rear Gearbox (cont.)**

key setscrew onto flat side with no end play

**89221**  
5x4mm setscrew

threadlock #1596

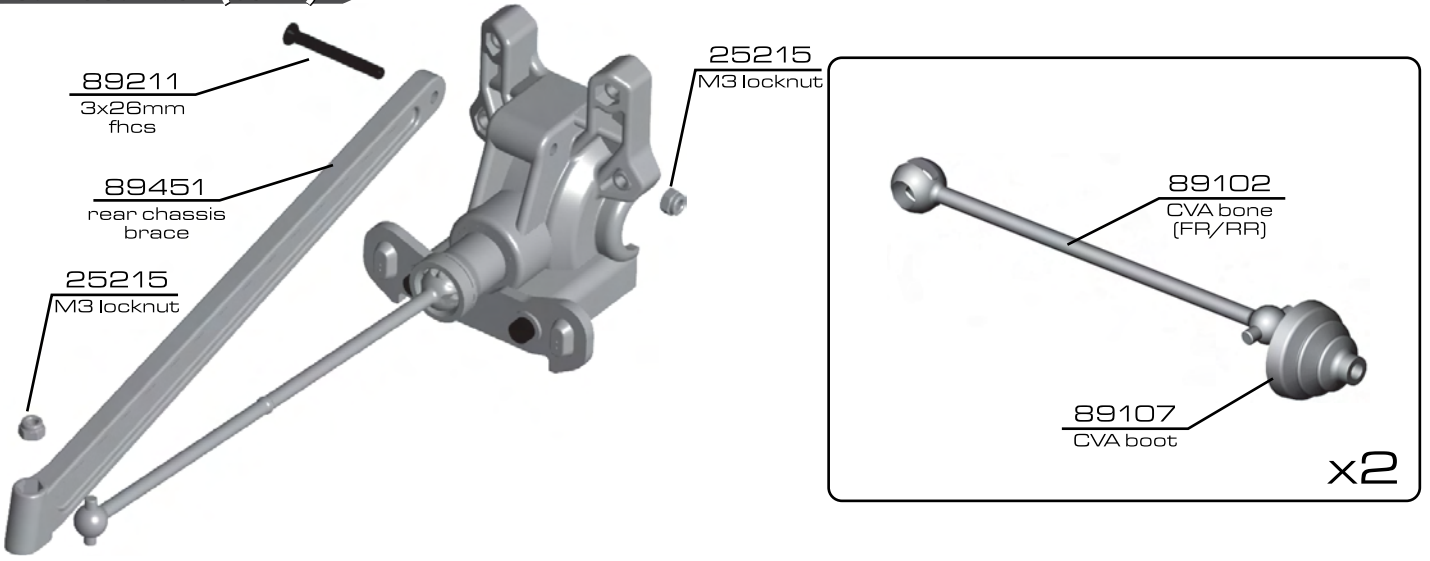
**89039 x2**  
hinge pin bushing (2 down)

**89218 x2**  
washer 3x8mm

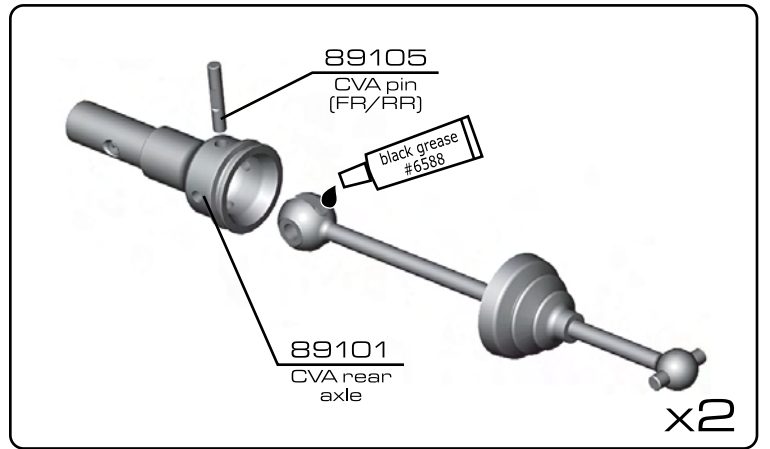
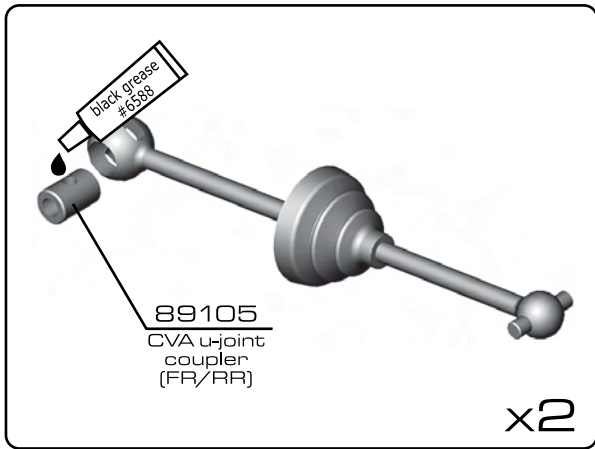
**89037**  
arm mount c

**89224 x2**  
3x16mm shcs

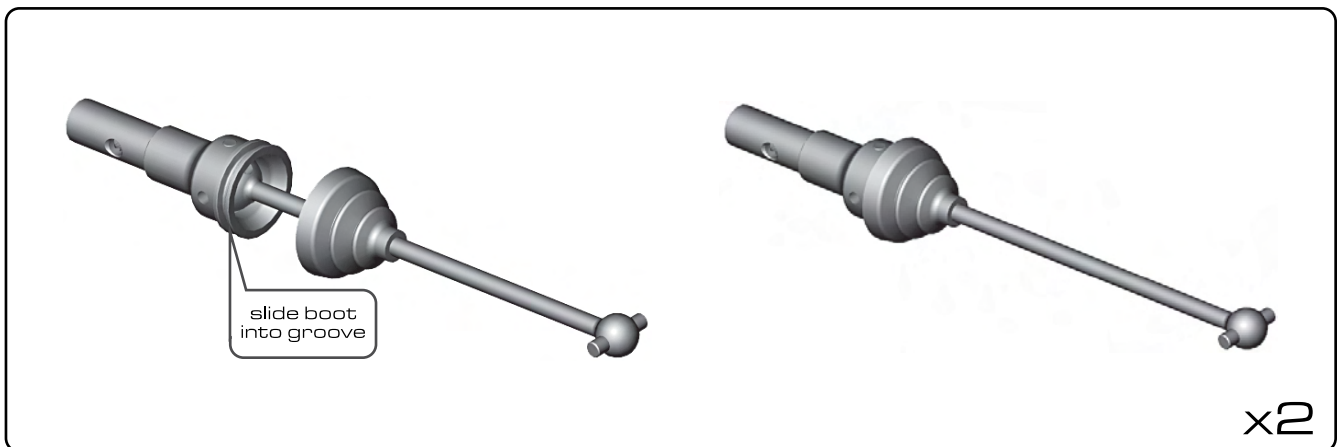
**:: Rear Gearbox (cont.)**



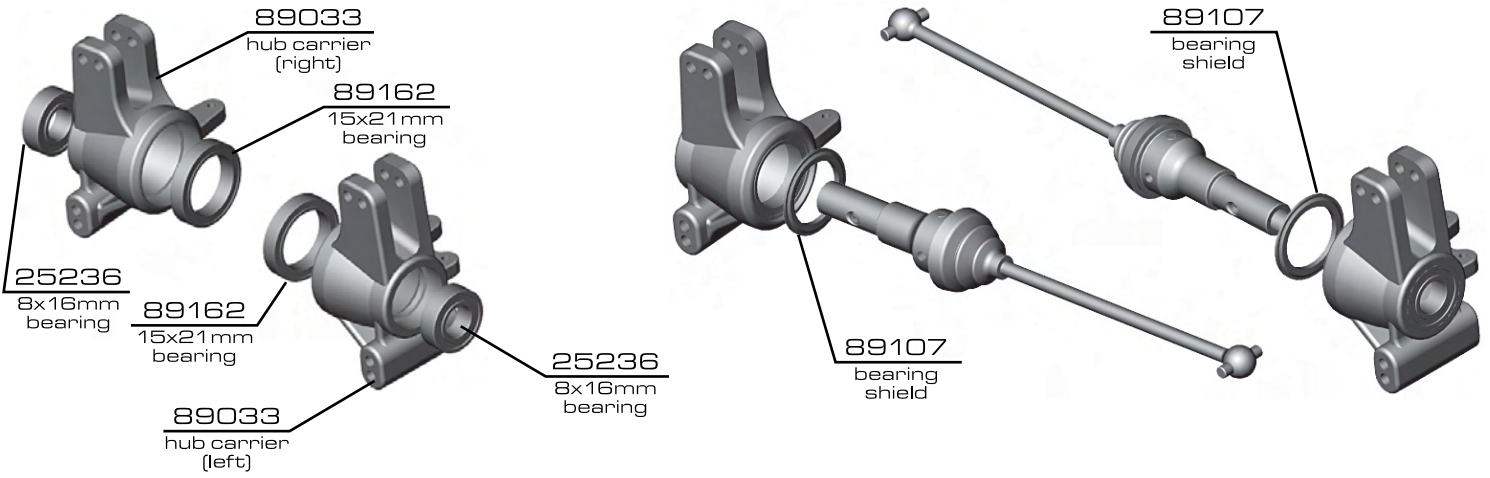
**:: Suspension (cont.)**



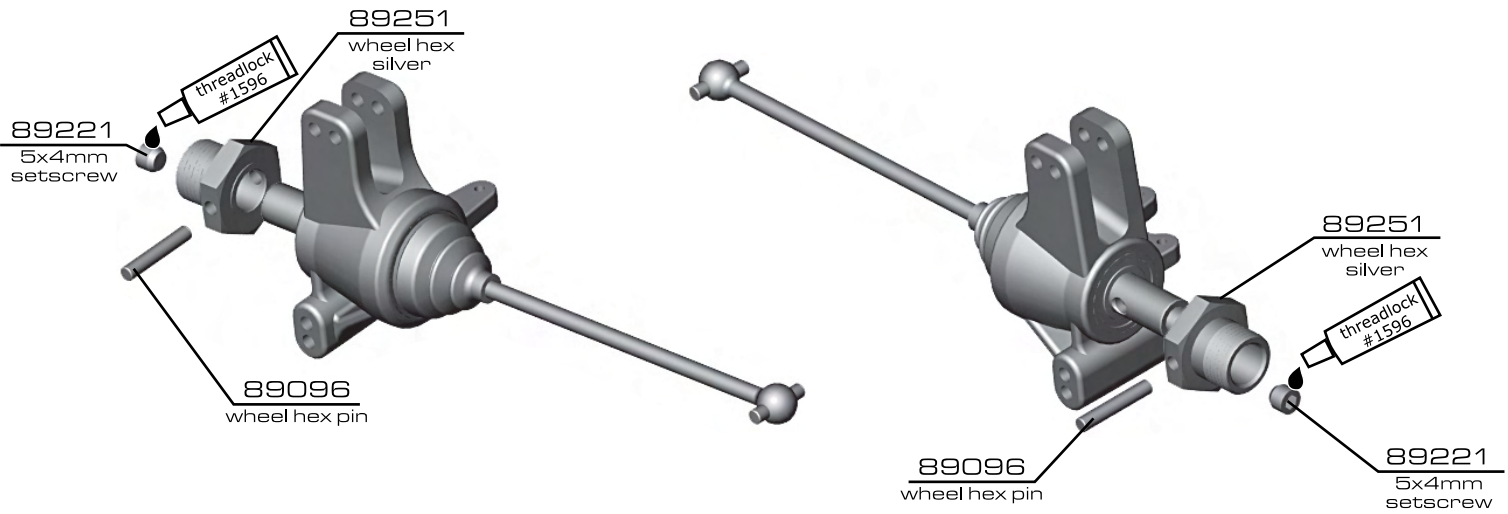
**:: Suspension (cont.)**



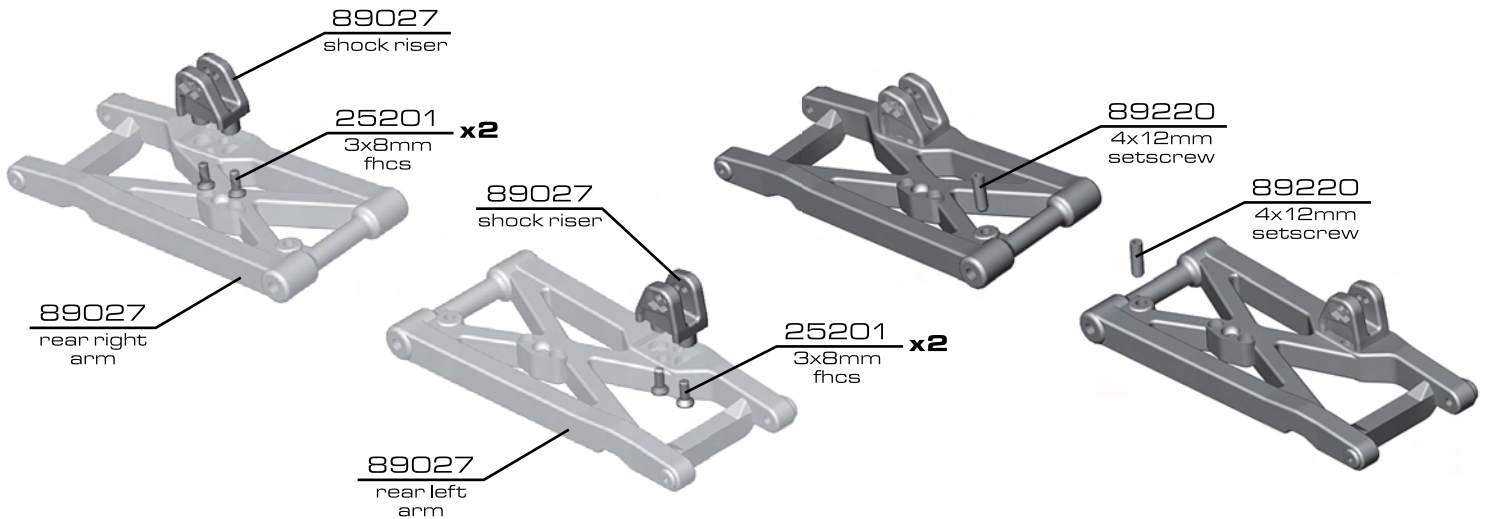
**:: Rear Gearbox (cont.)**



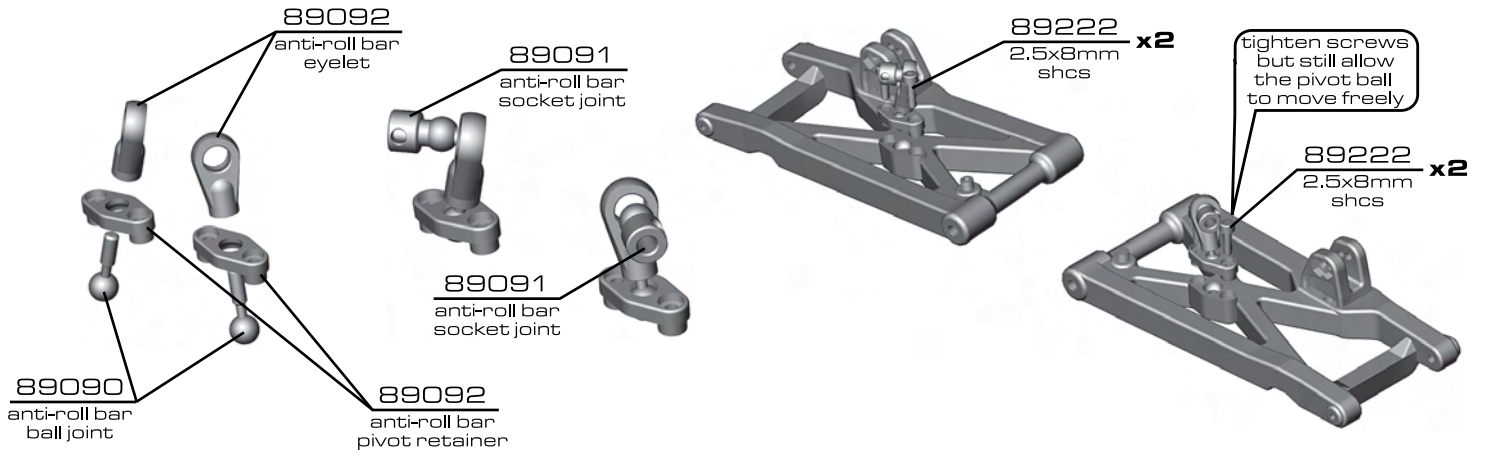
**:: Rear Gearbox (cont.)**



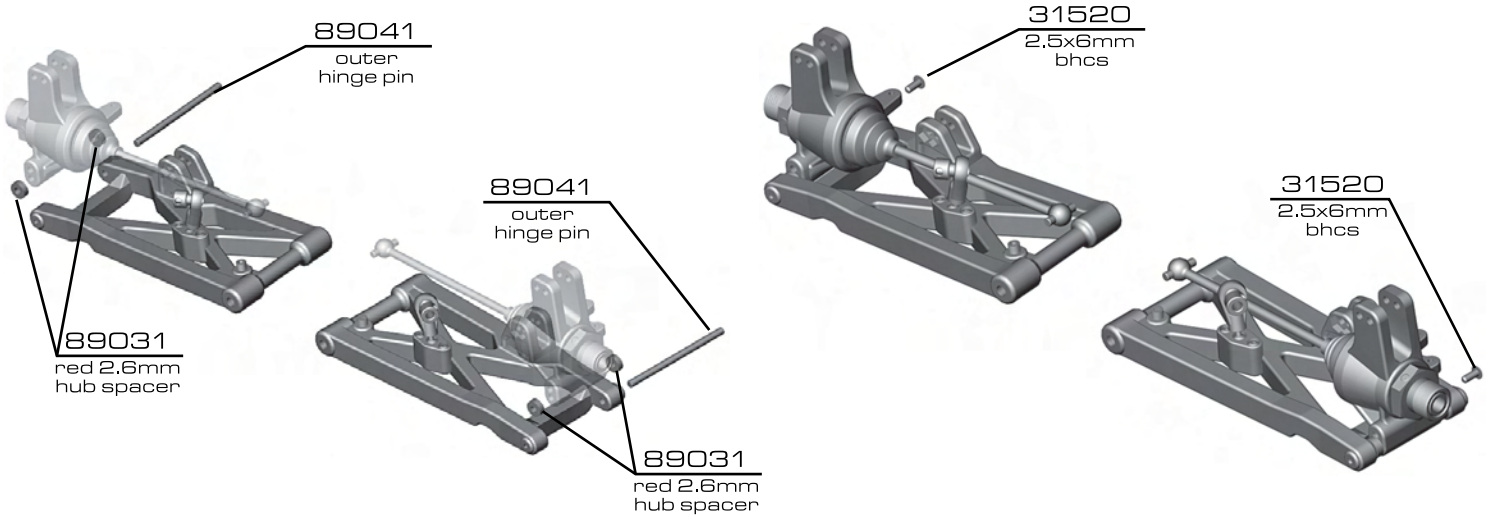
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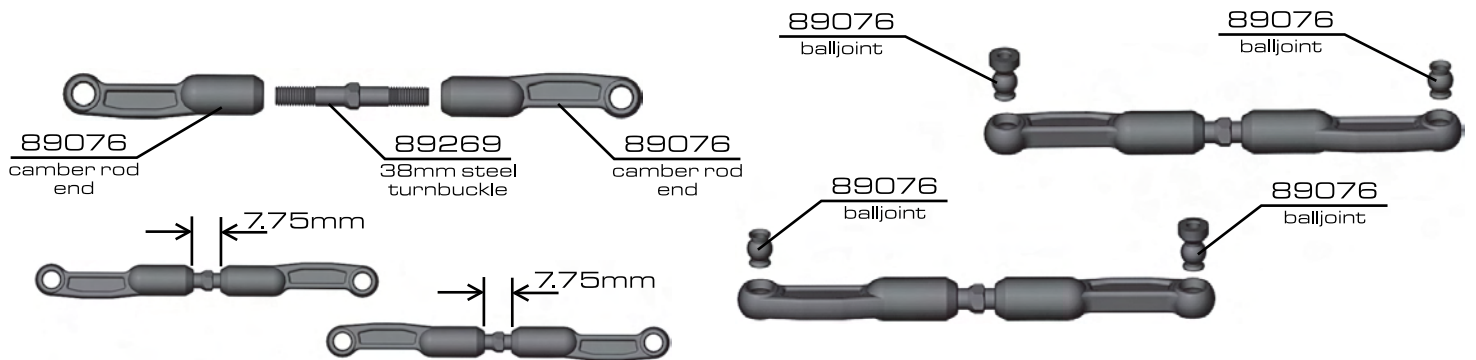
**:: Rear Gearbox (cont.)**



**:: Rear Gearbox (cont.)**



**:: Rear Gearbox (cont.)**



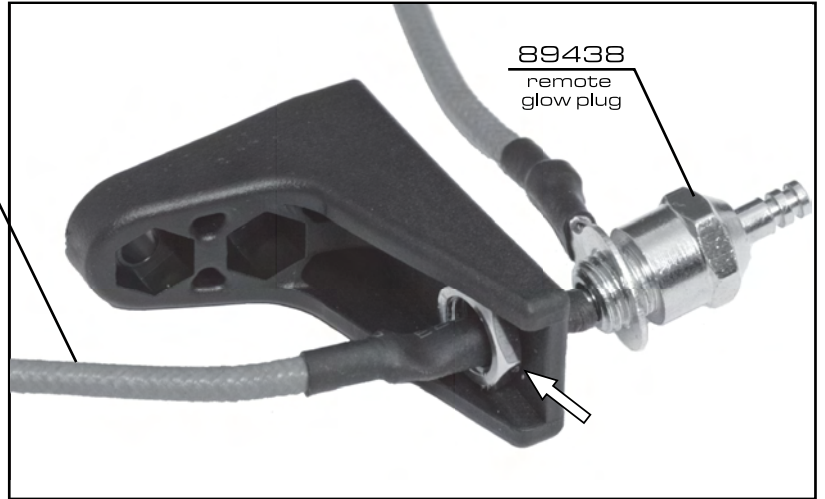


**:: Rear Gearbox (cont.)**

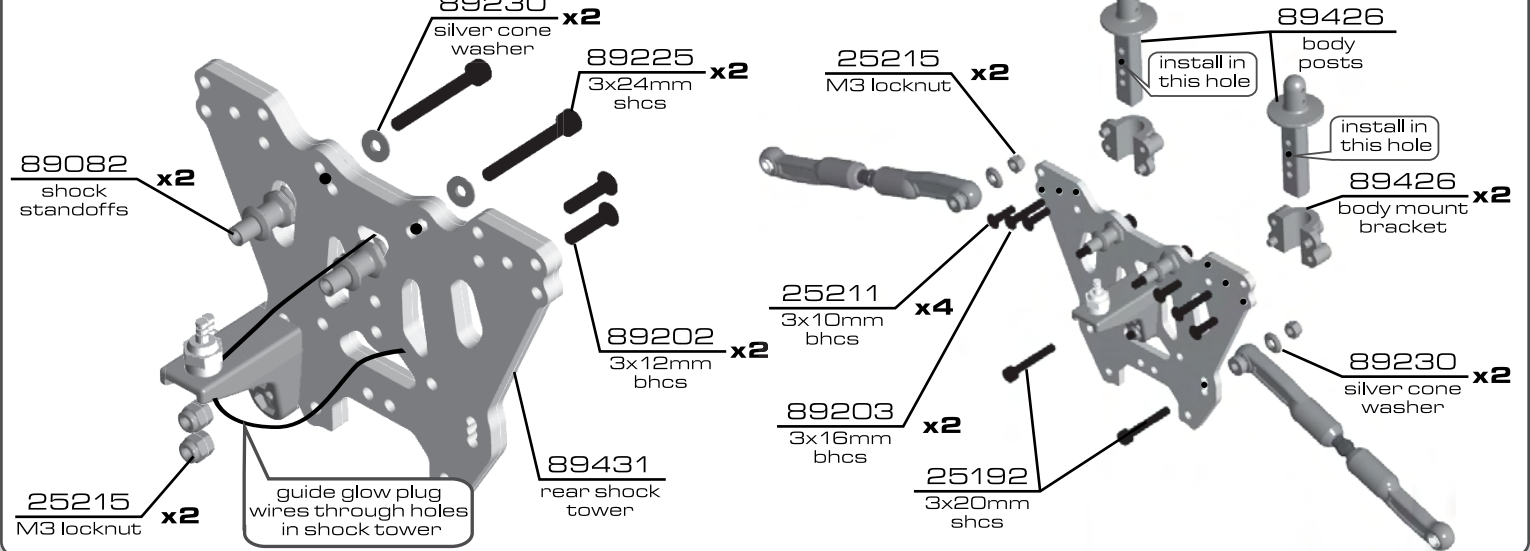


89438  
remote glow plug wire

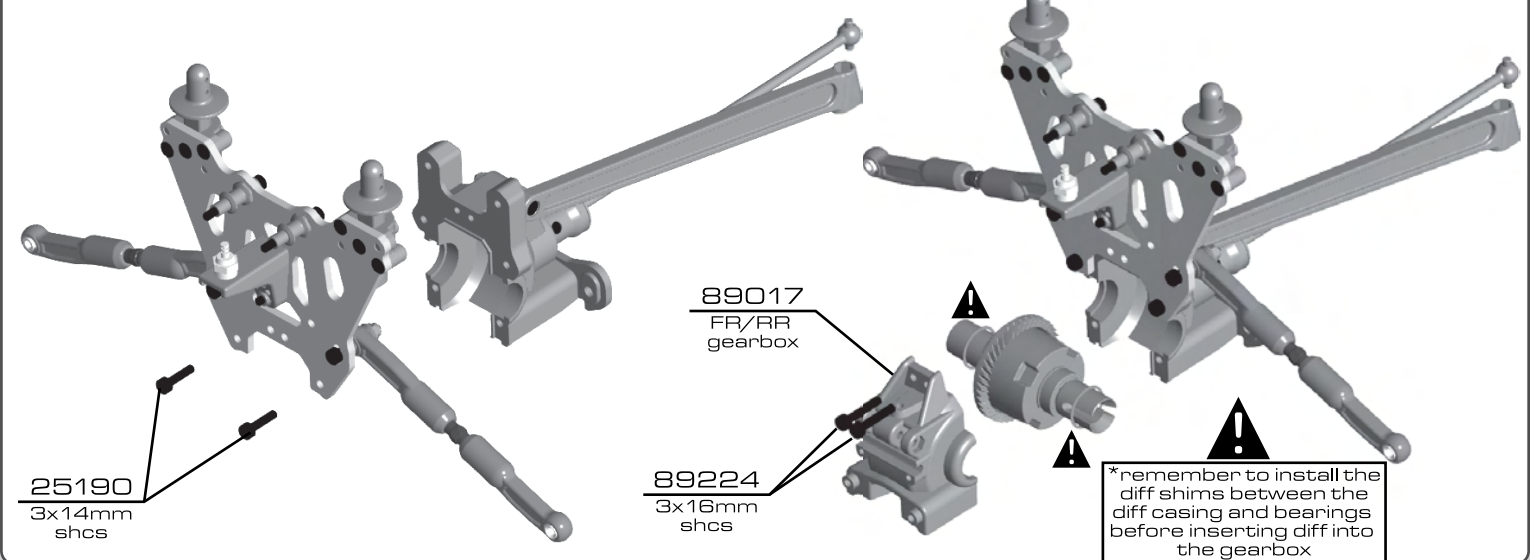
89438  
remote glow plug nut



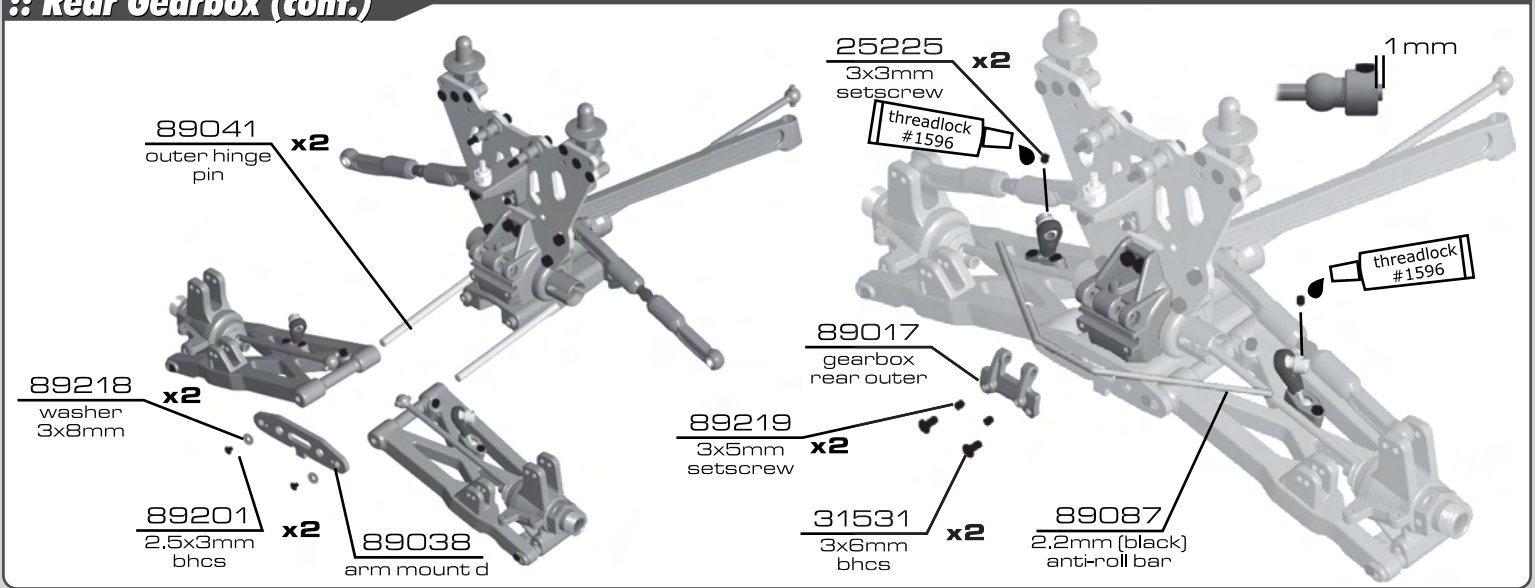
**:: Rear Gearbox (cont.)**



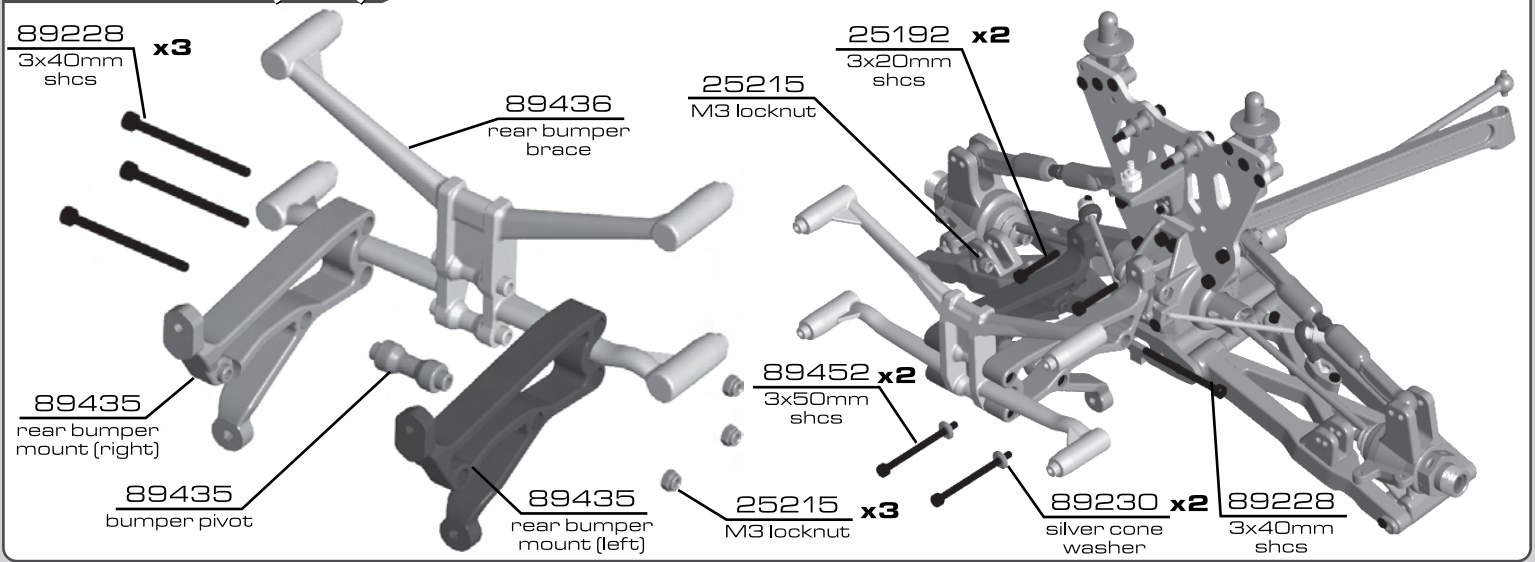
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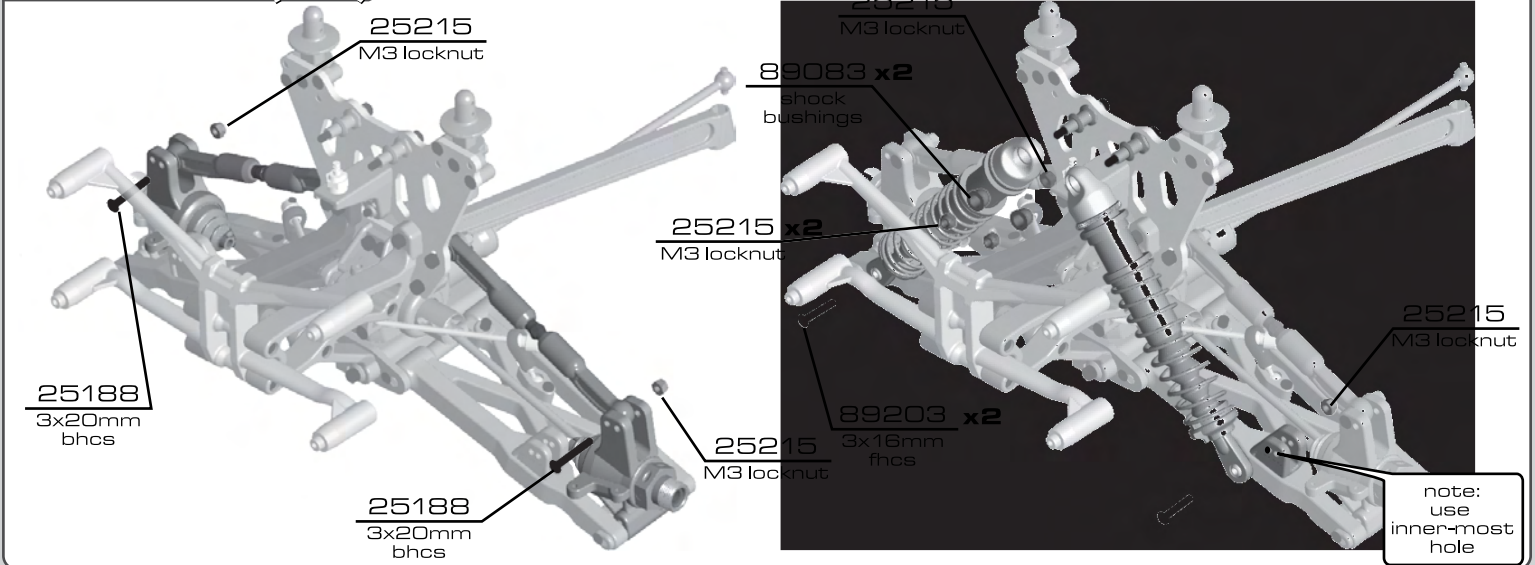
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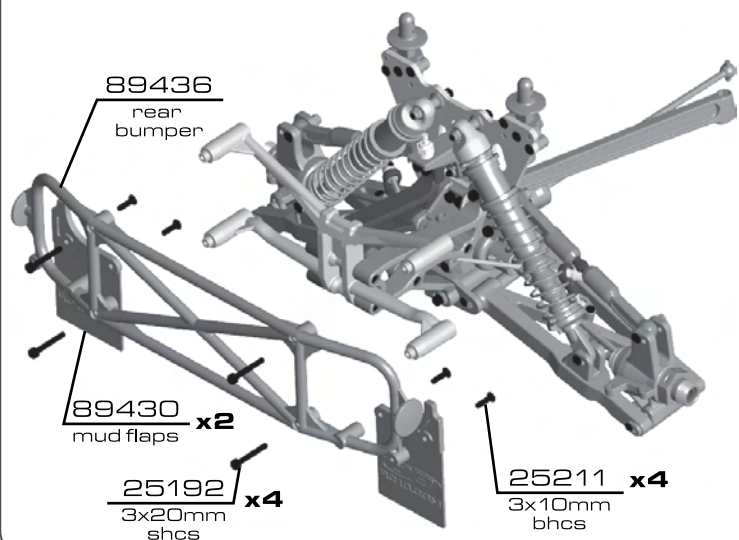
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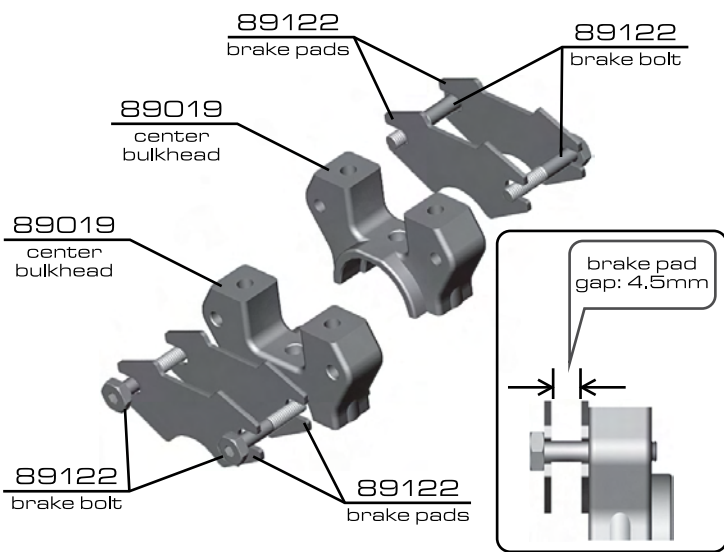
**:: Rear Gearbox (cont.)**



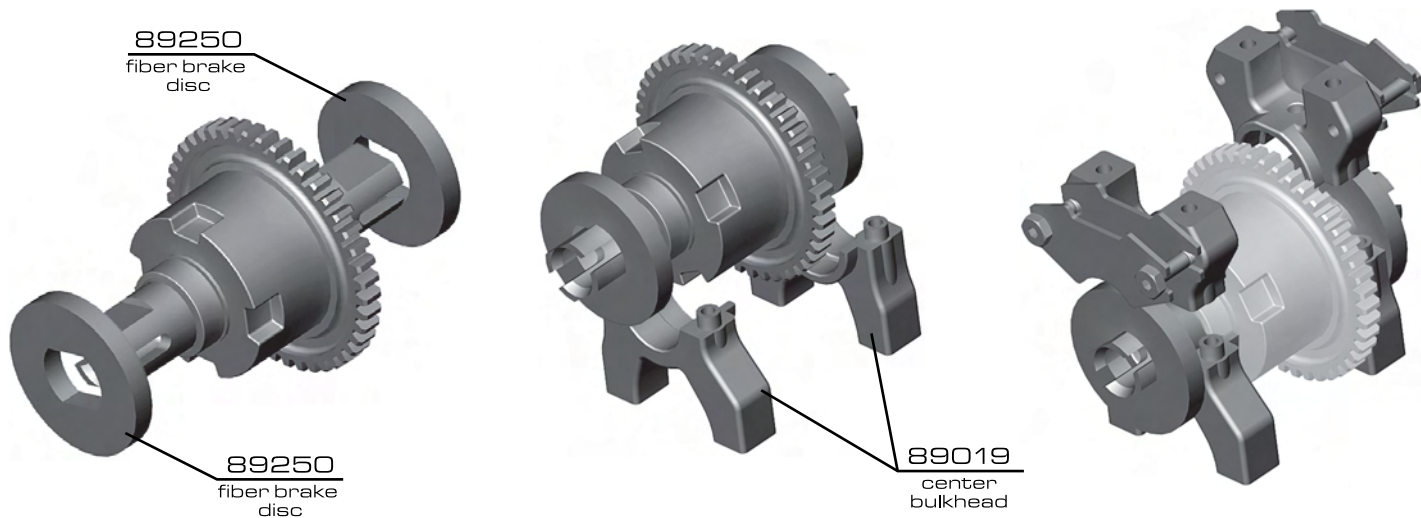
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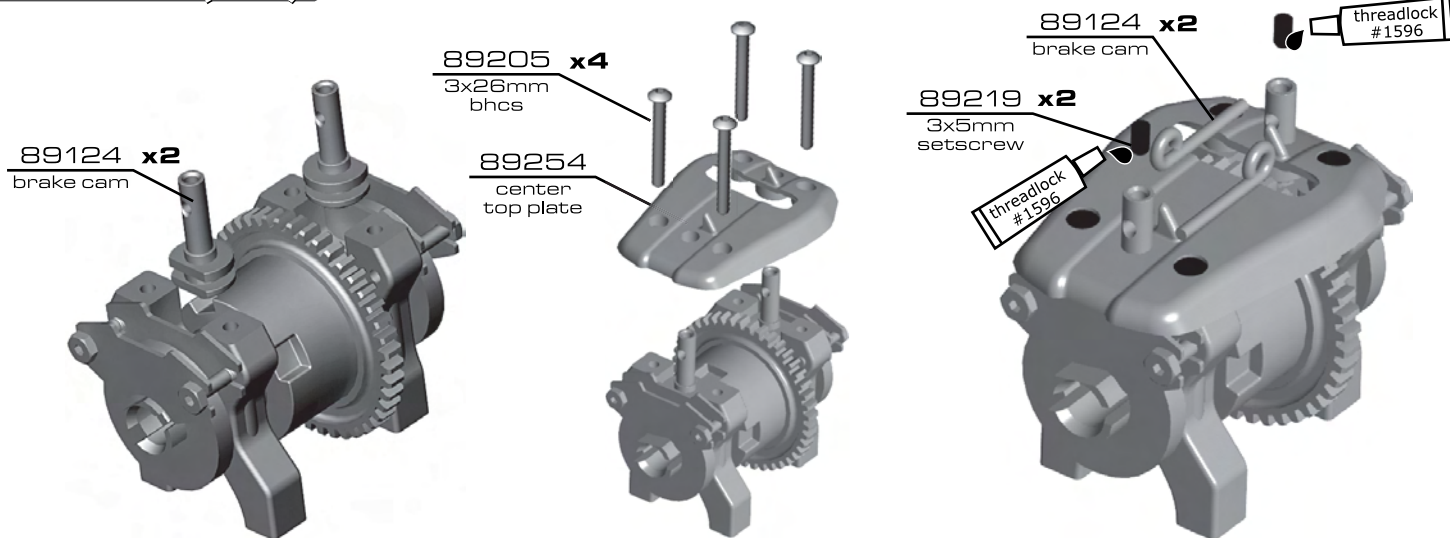
**:: Center Diff**



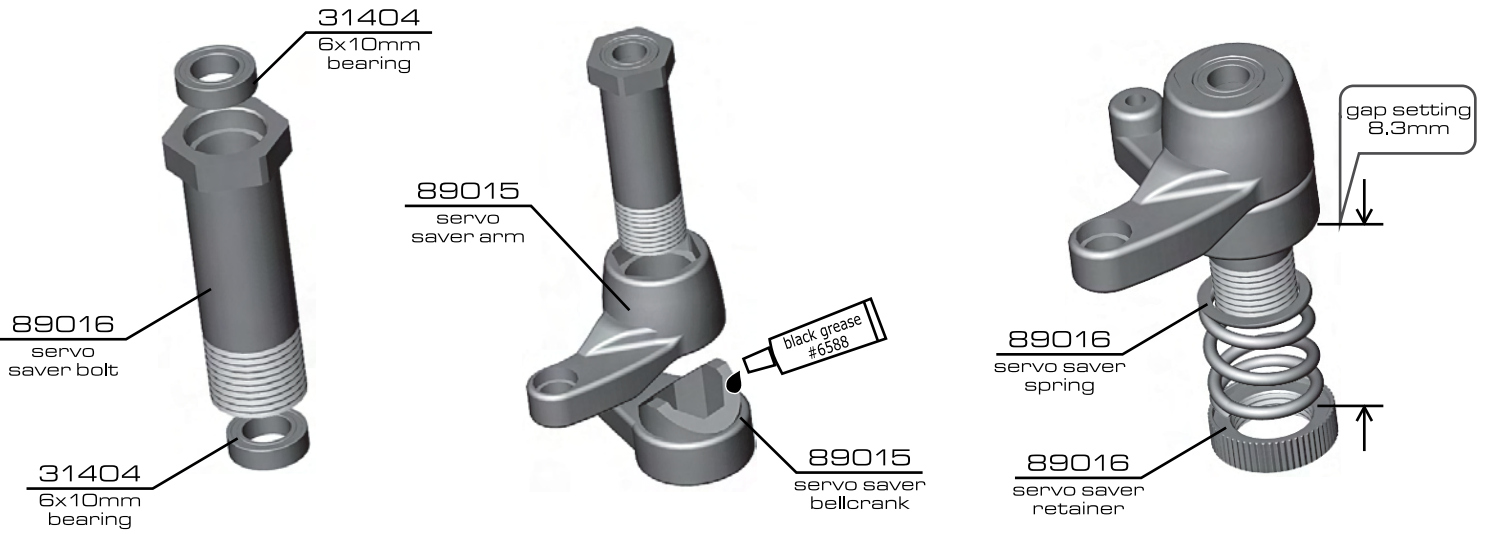
**:: Center Diff (cont.)**



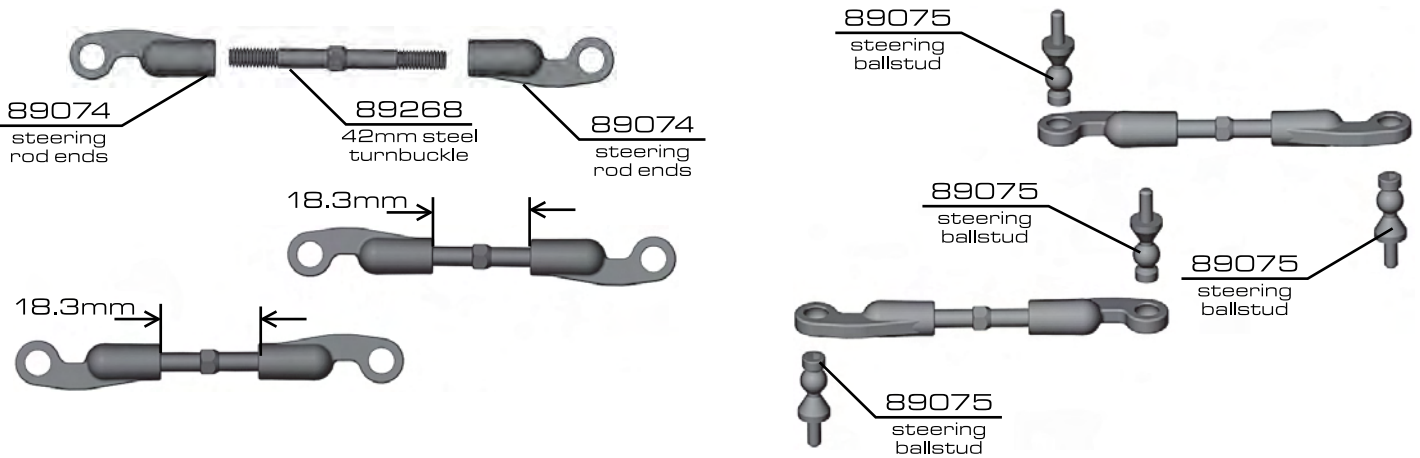
**:: Center Diff (cont.)**



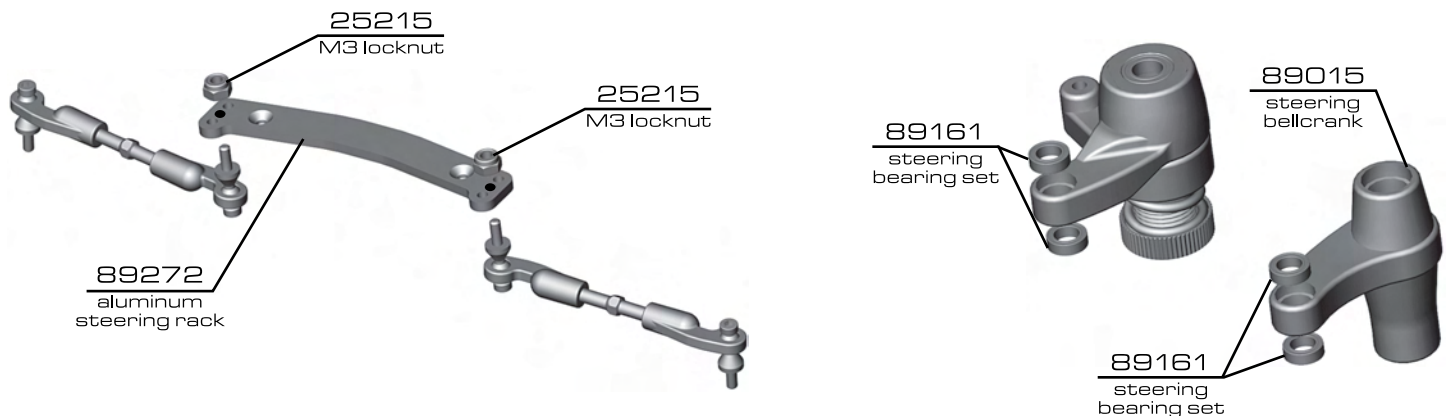
:: Steering



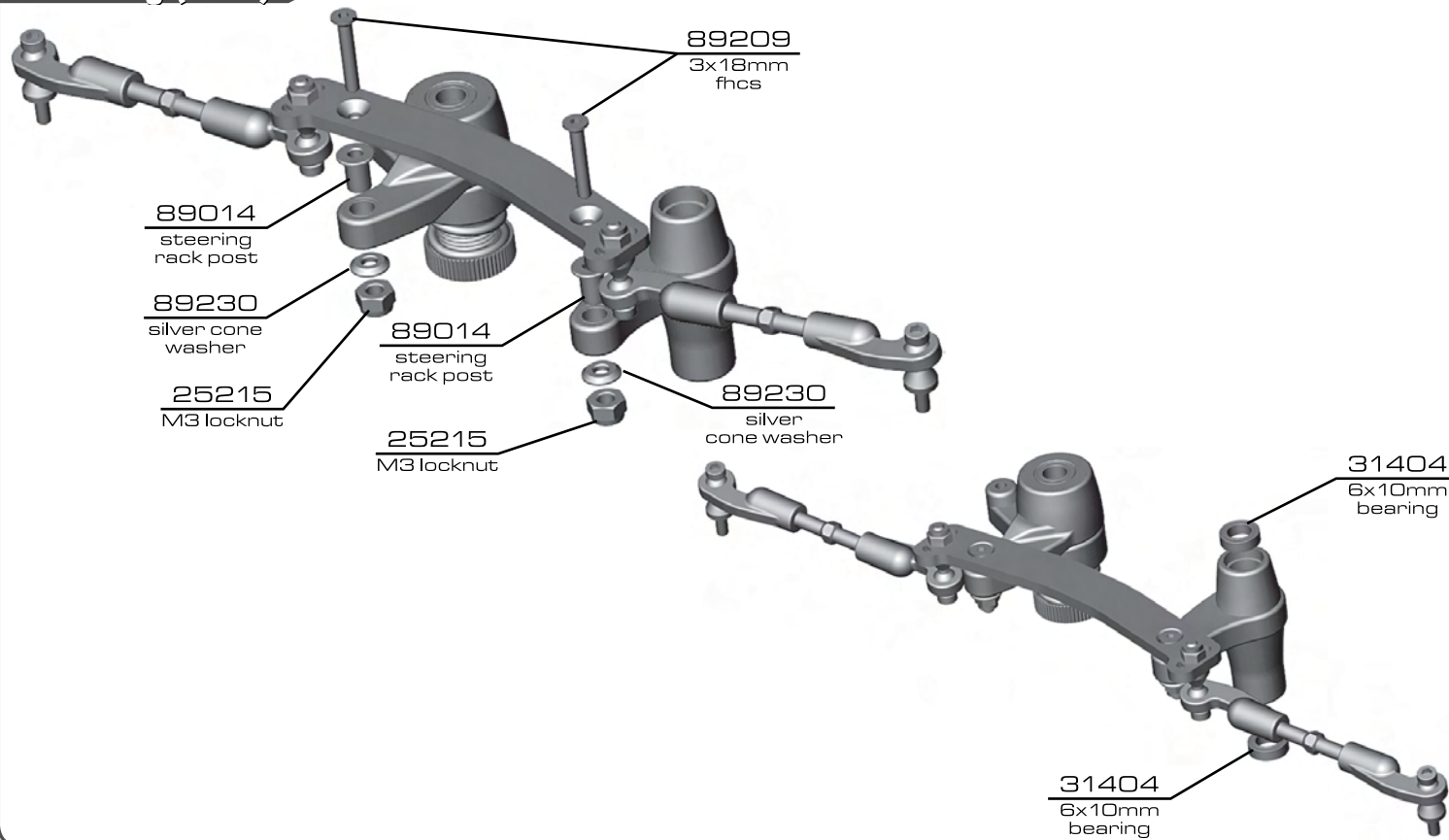
:: Steering (cont.)



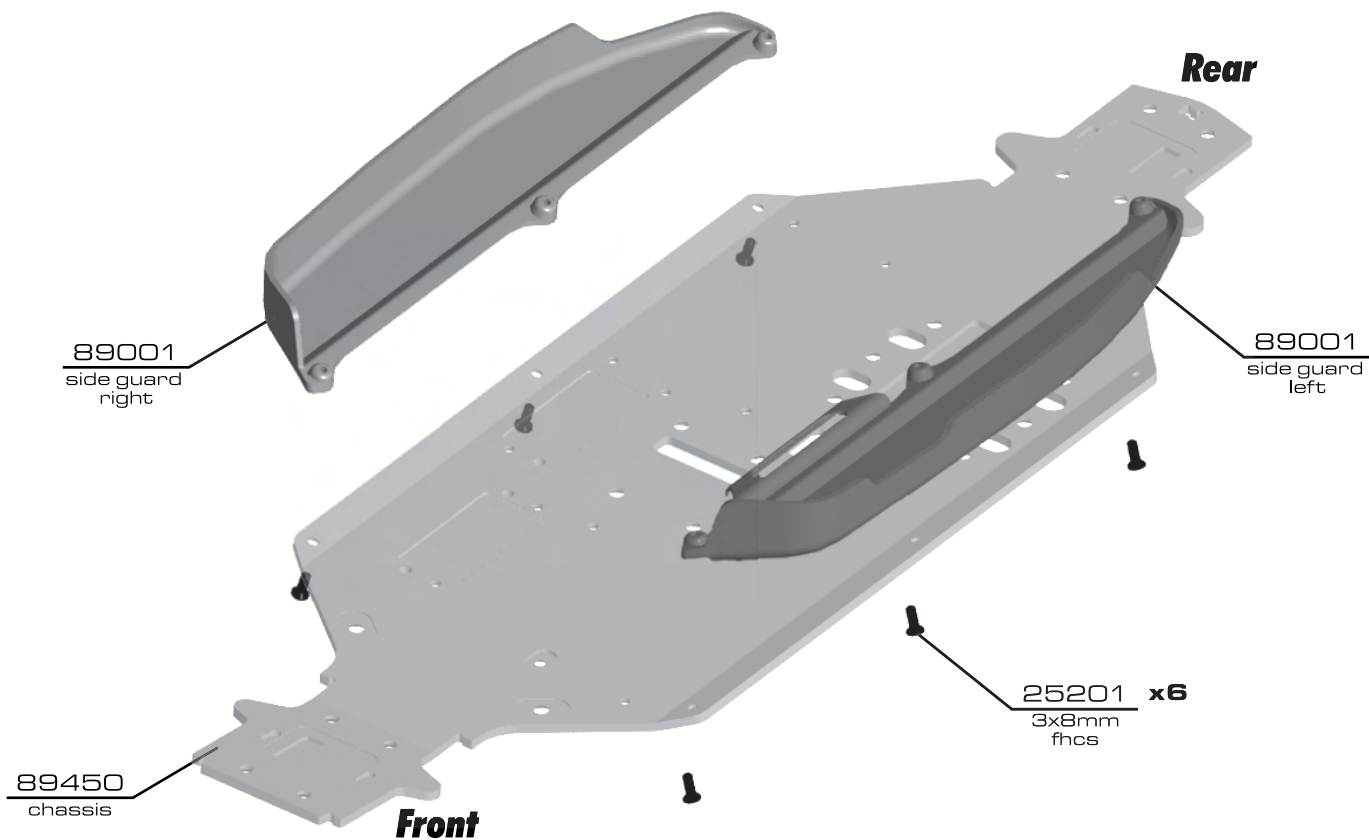
:: Steering (cont.)



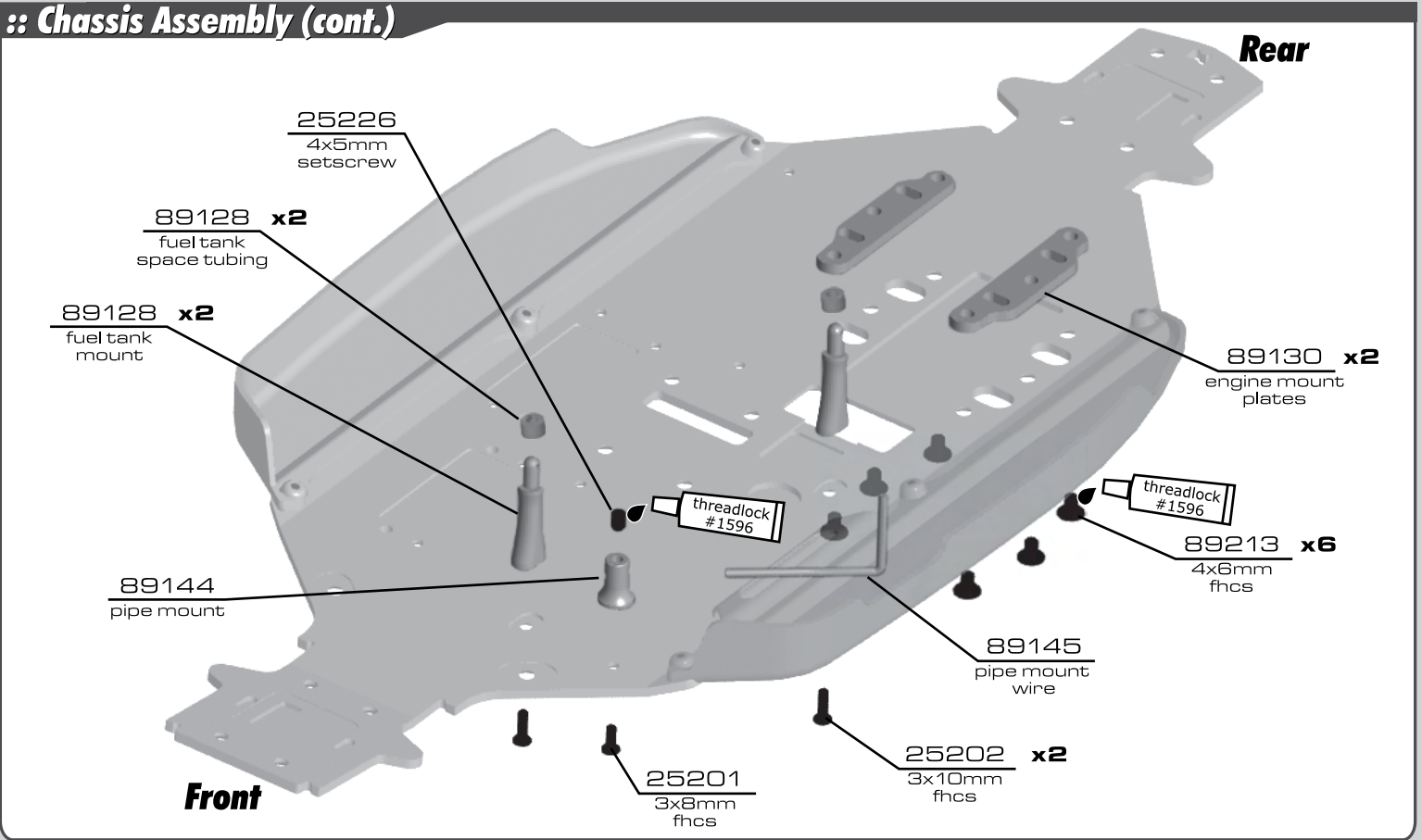
**:: Steering (cont.)**



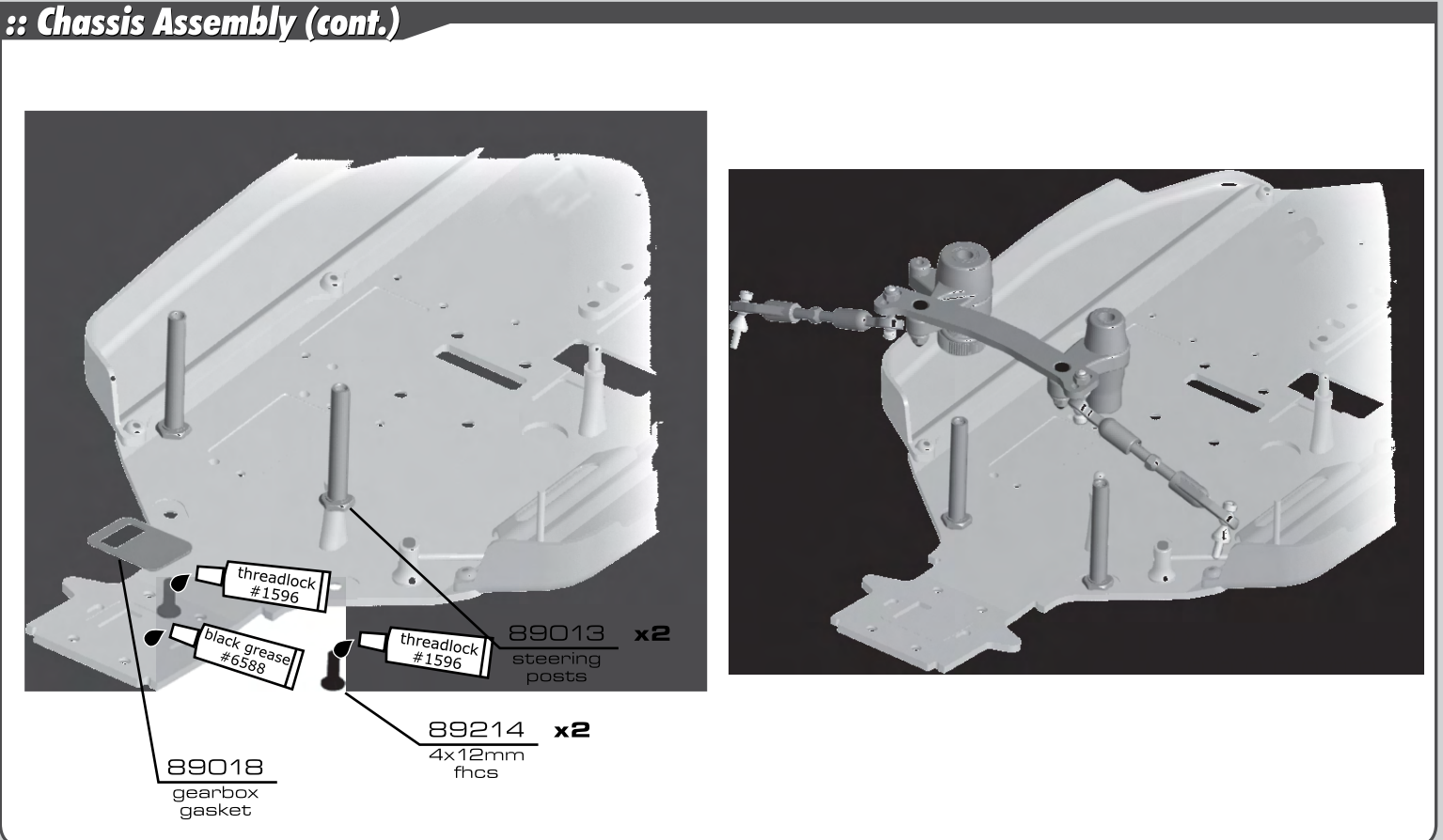
**:: Chassis Assembly**



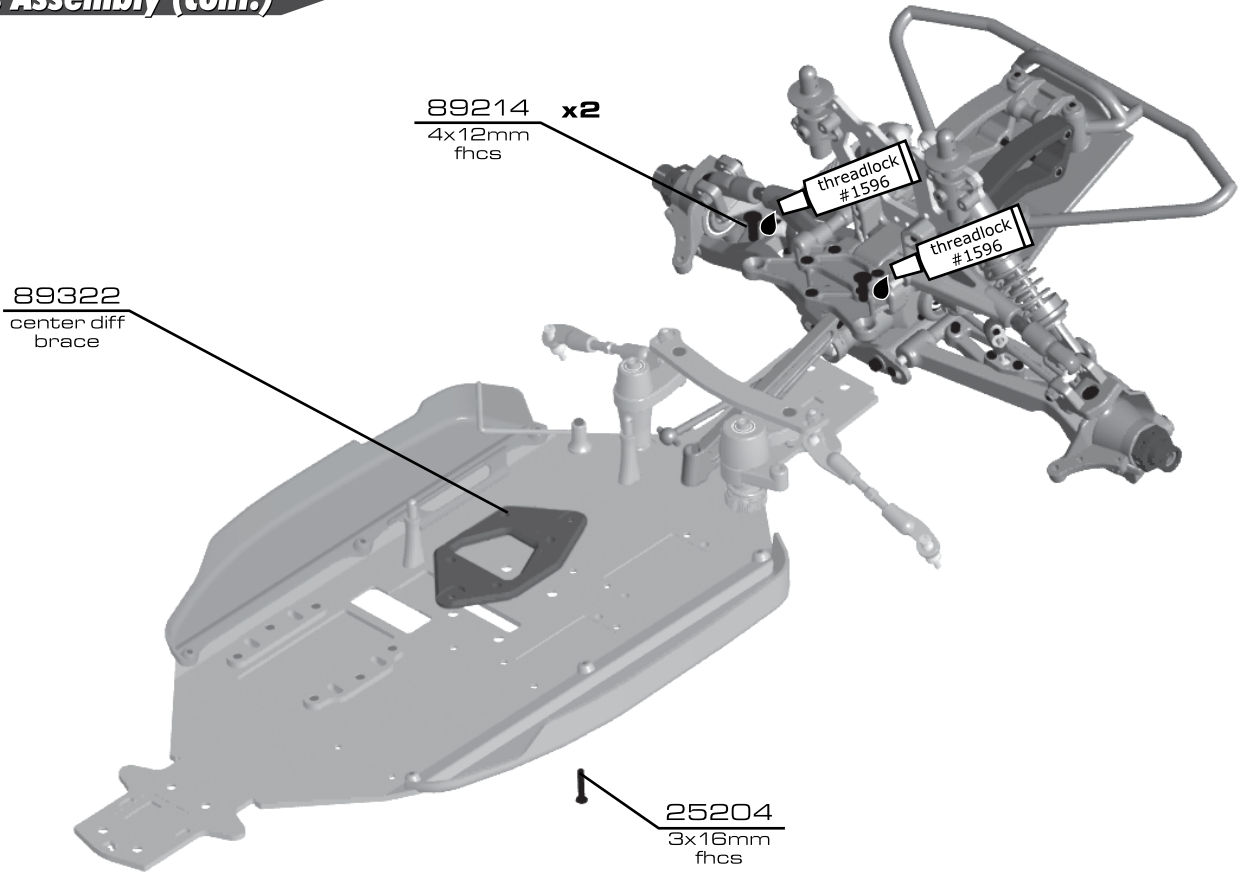
**:: Chassis Assembly (cont.)**



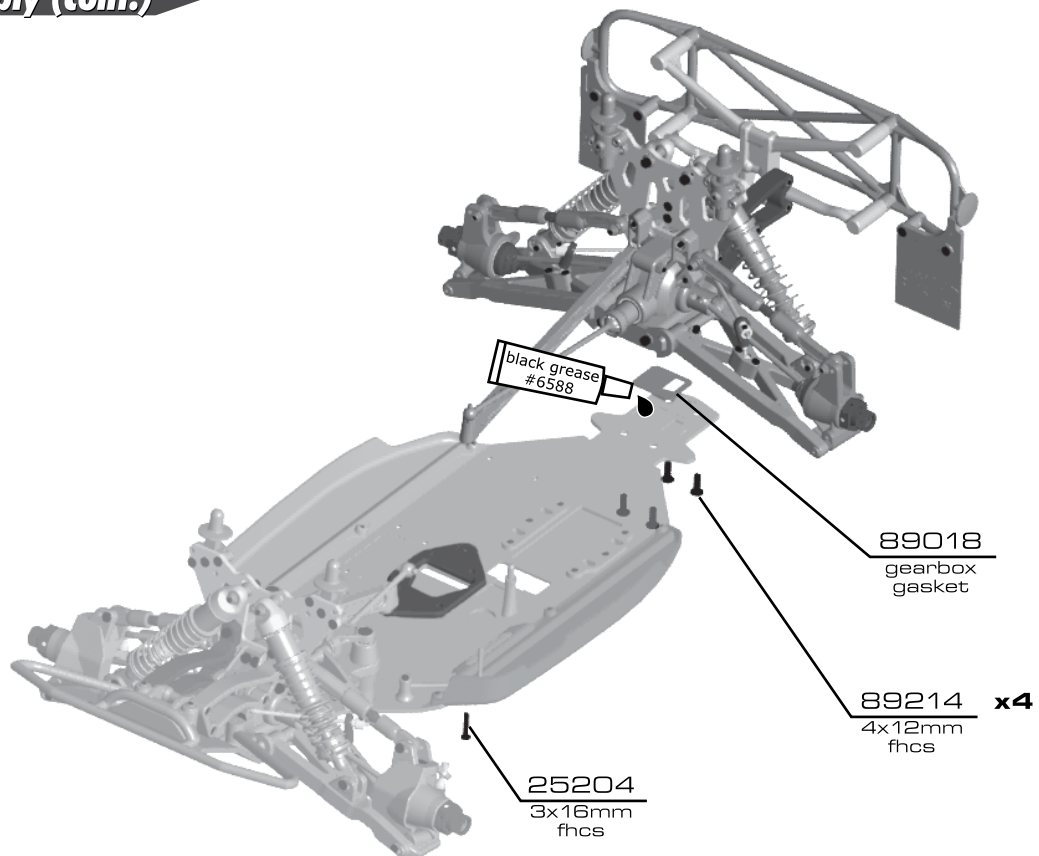
**:: Chassis Assembly (cont.)**



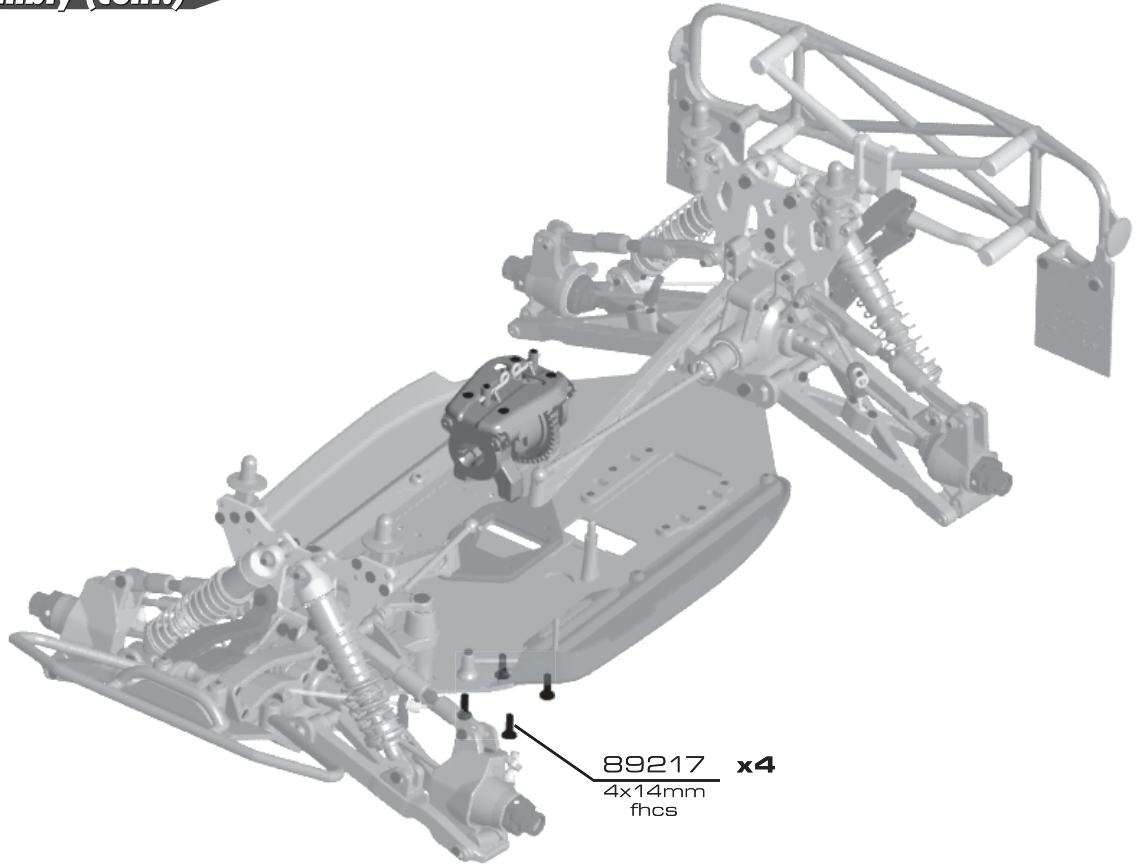
**:: Chassis Assembly (cont.)**



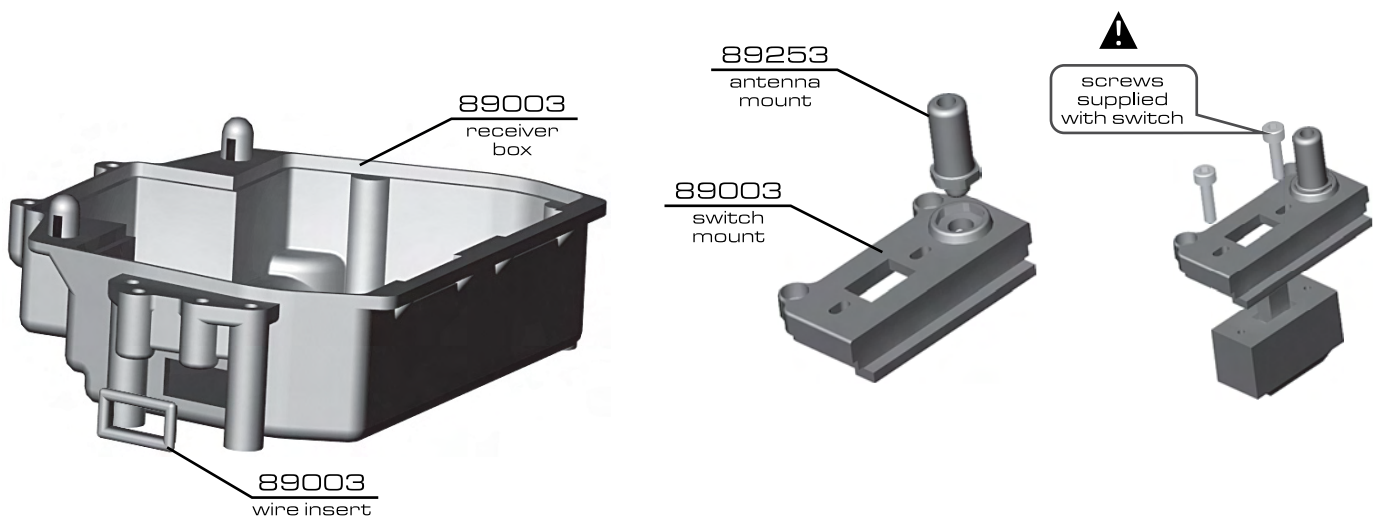
**:: Chassis Assembly (cont.)**



:: Chassis Assembly (cont.)

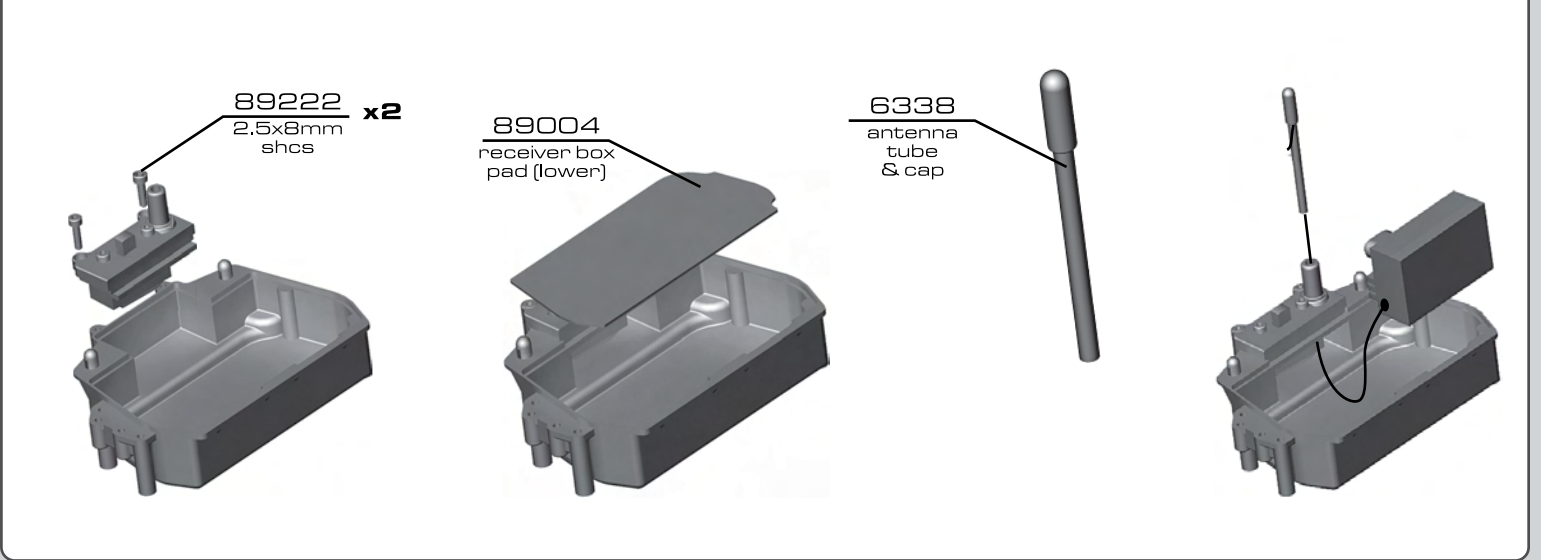


:: Radio Tray Assembly

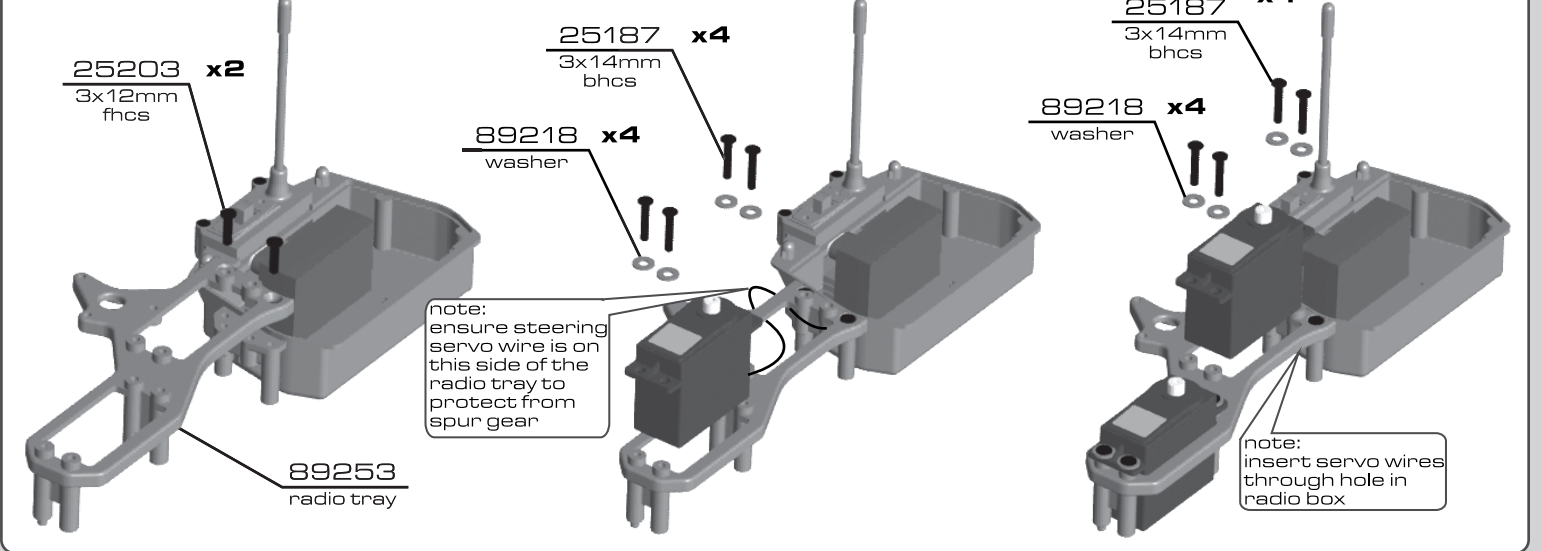




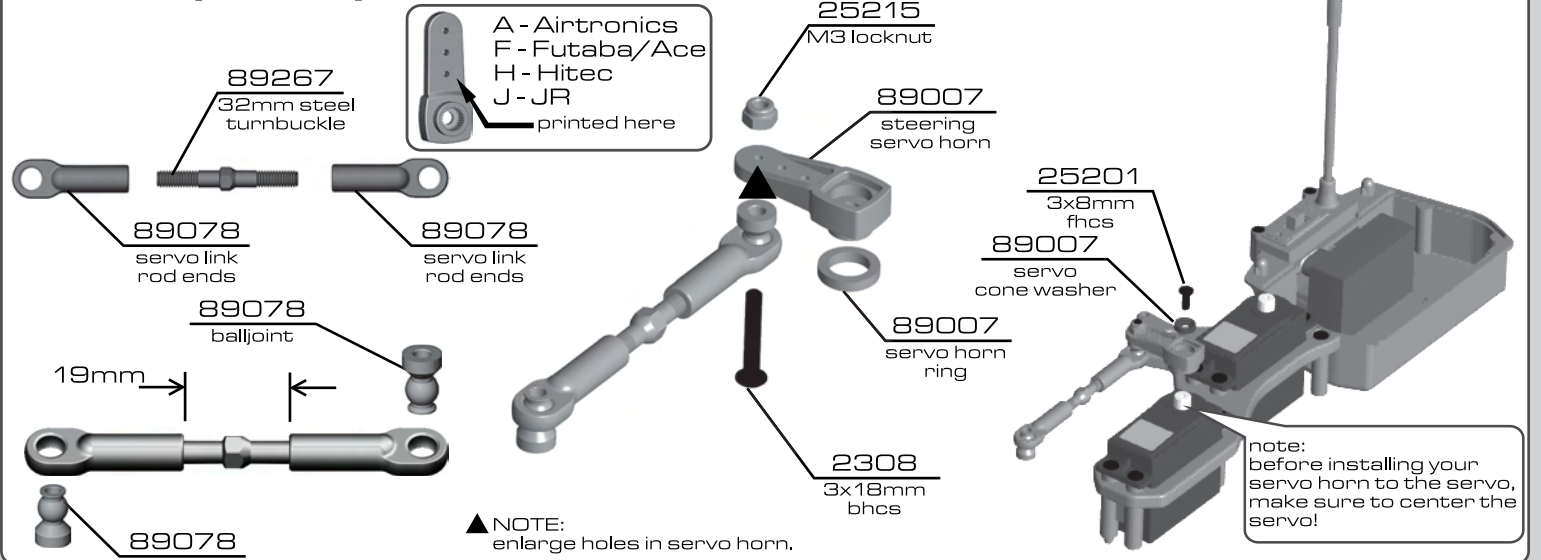
**:: Radio Tray Assembly (cont.)**



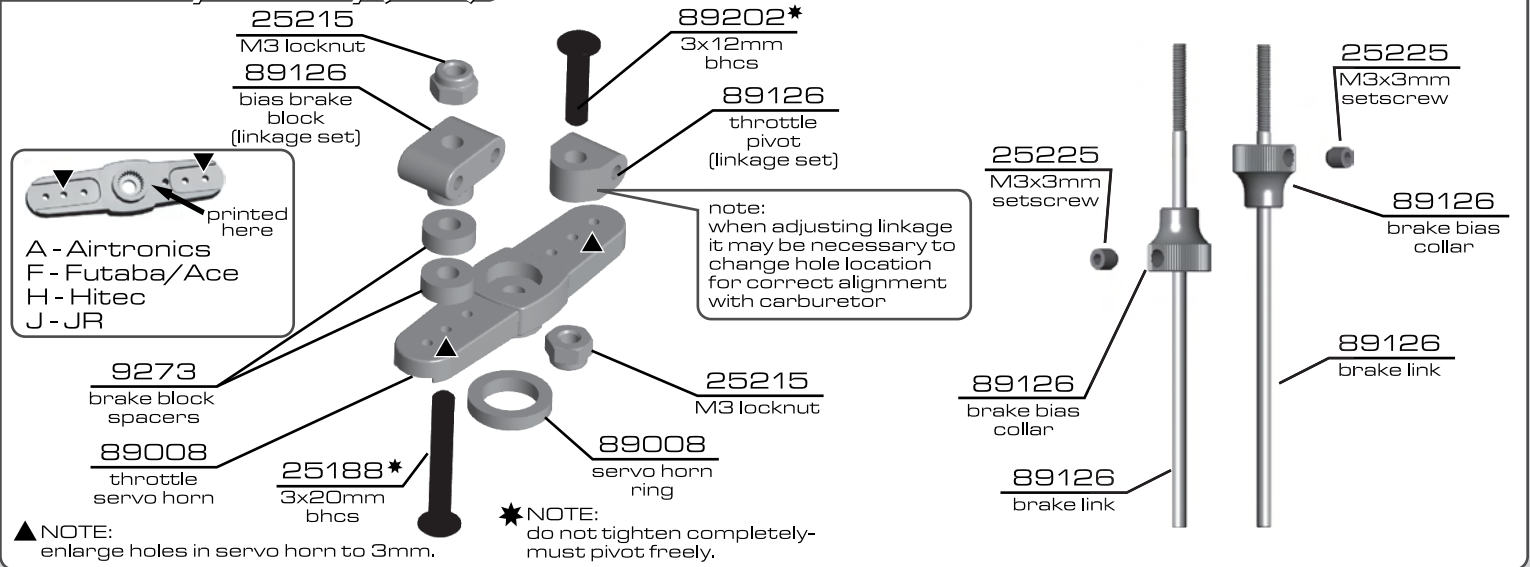
**:: Radio Tray Assembly (cont.)**



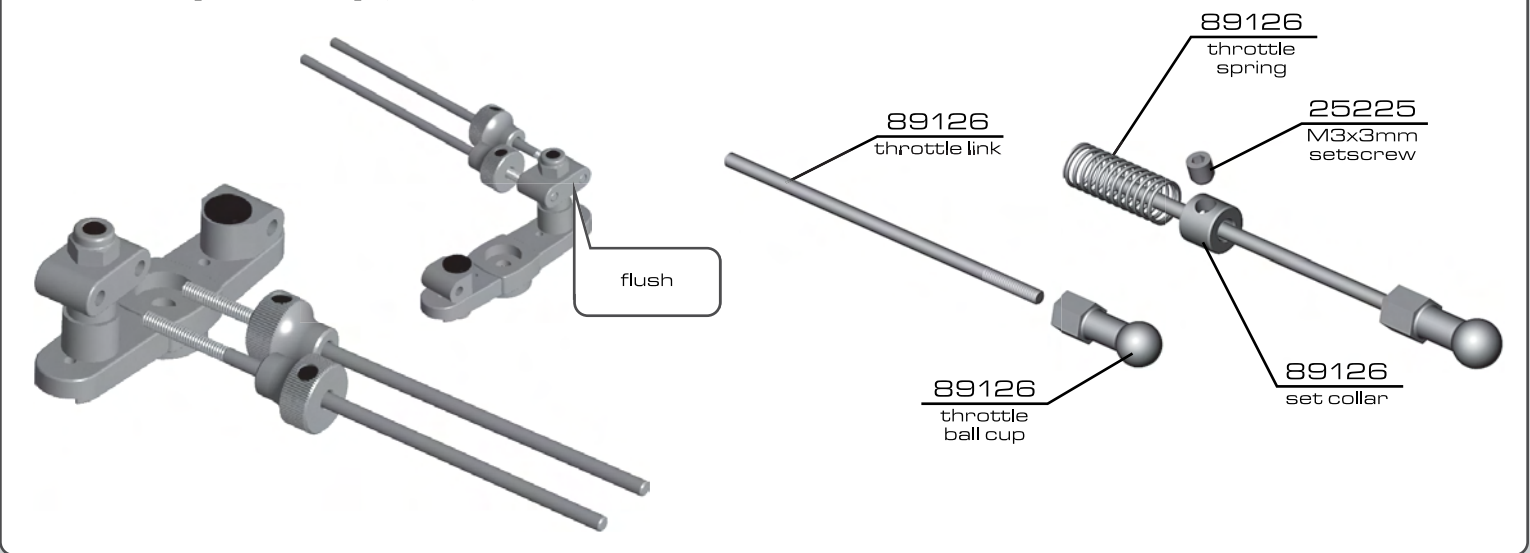
**:: Radio Tray Assembly (cont.)**



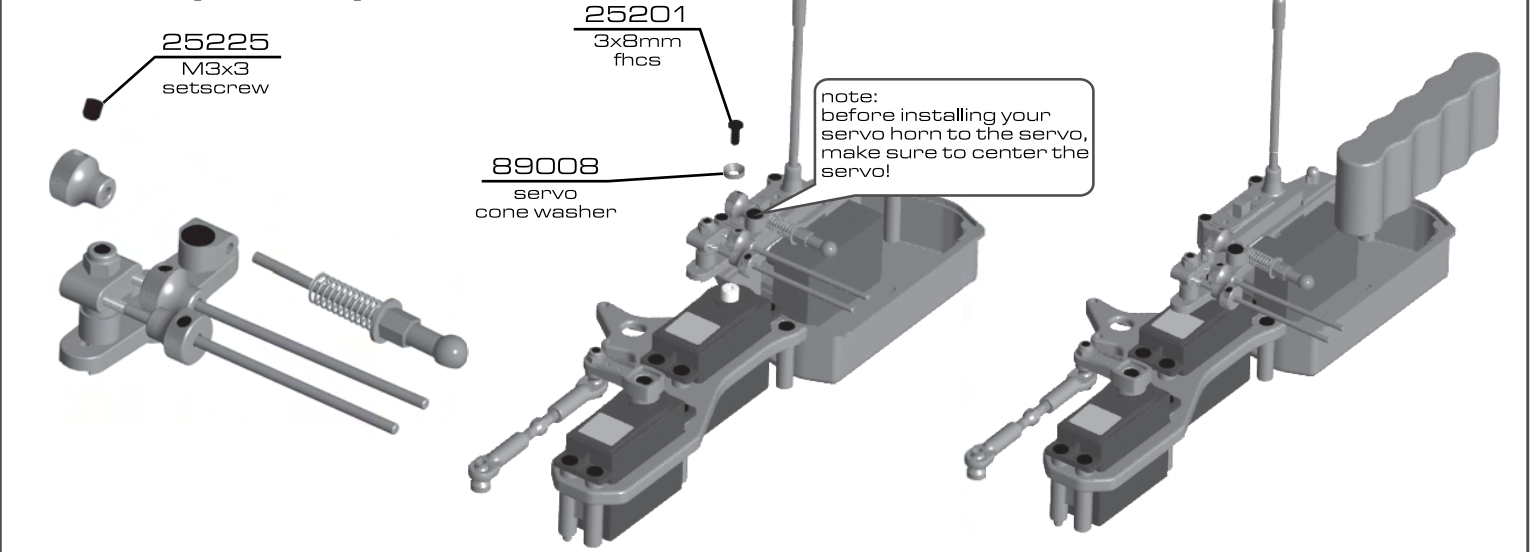
**:: Radio Tray Assembly (cont.)**



**:: Radio Tray Assembly (cont.)**

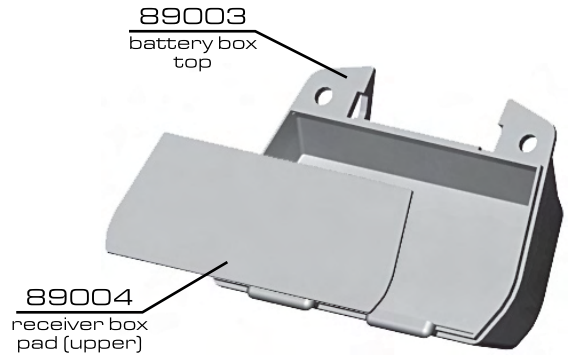
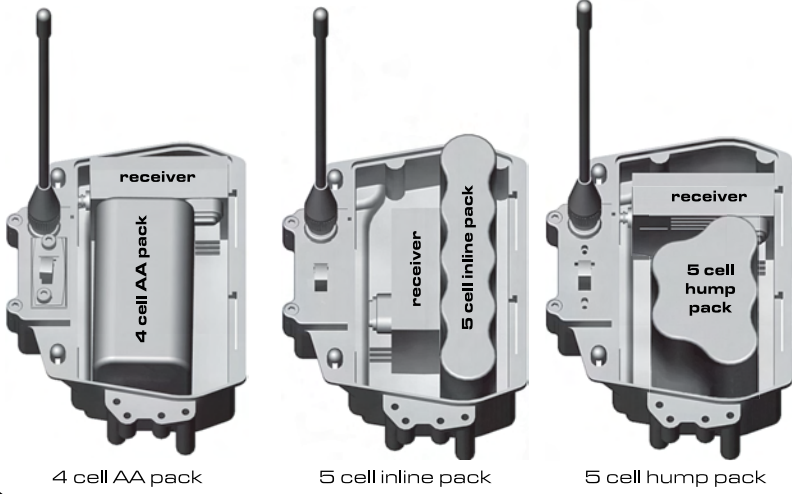


**:: Radio Tray Assembly (cont.)**

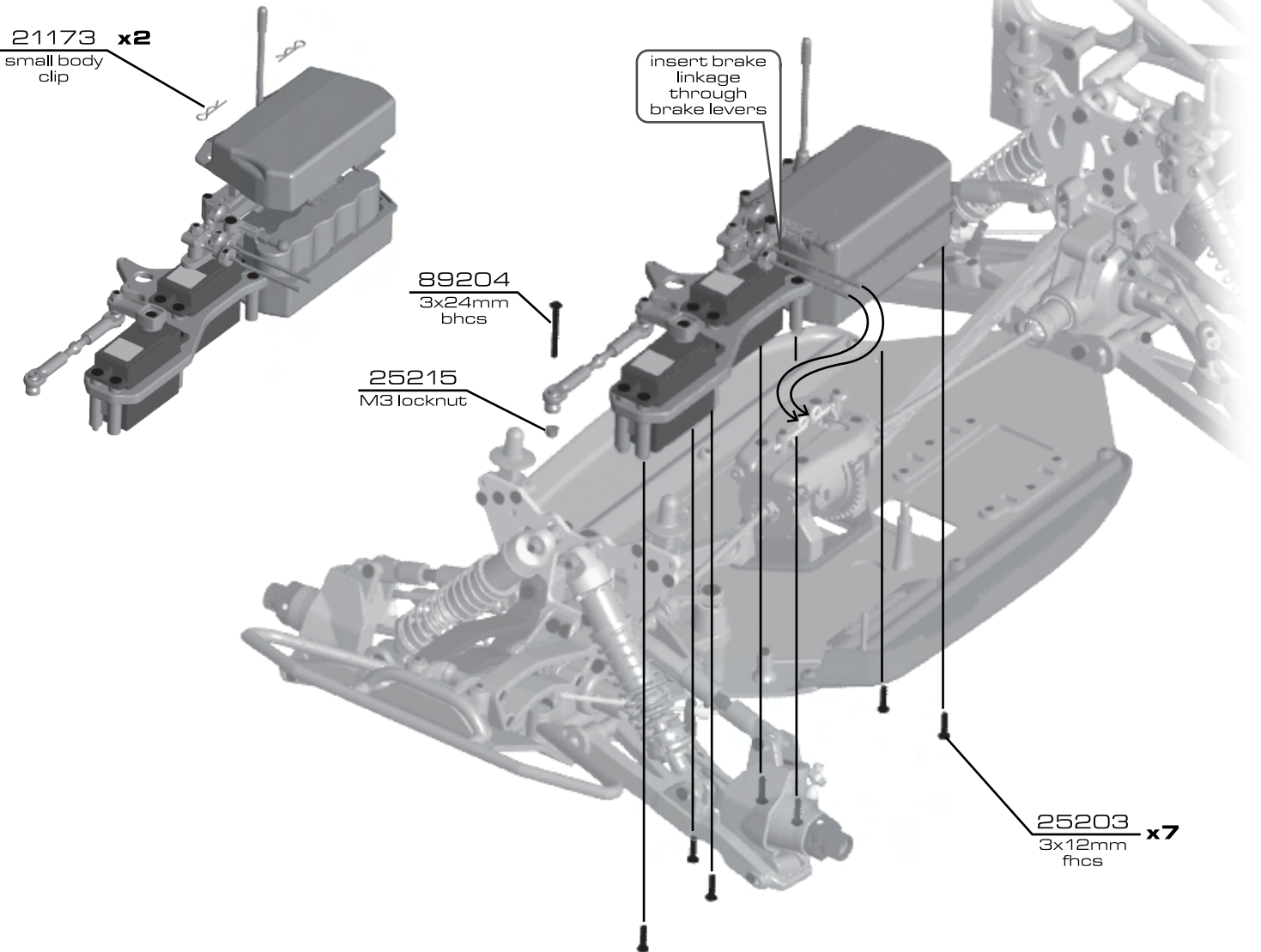


### :: Radio Tray Assembly (cont.)

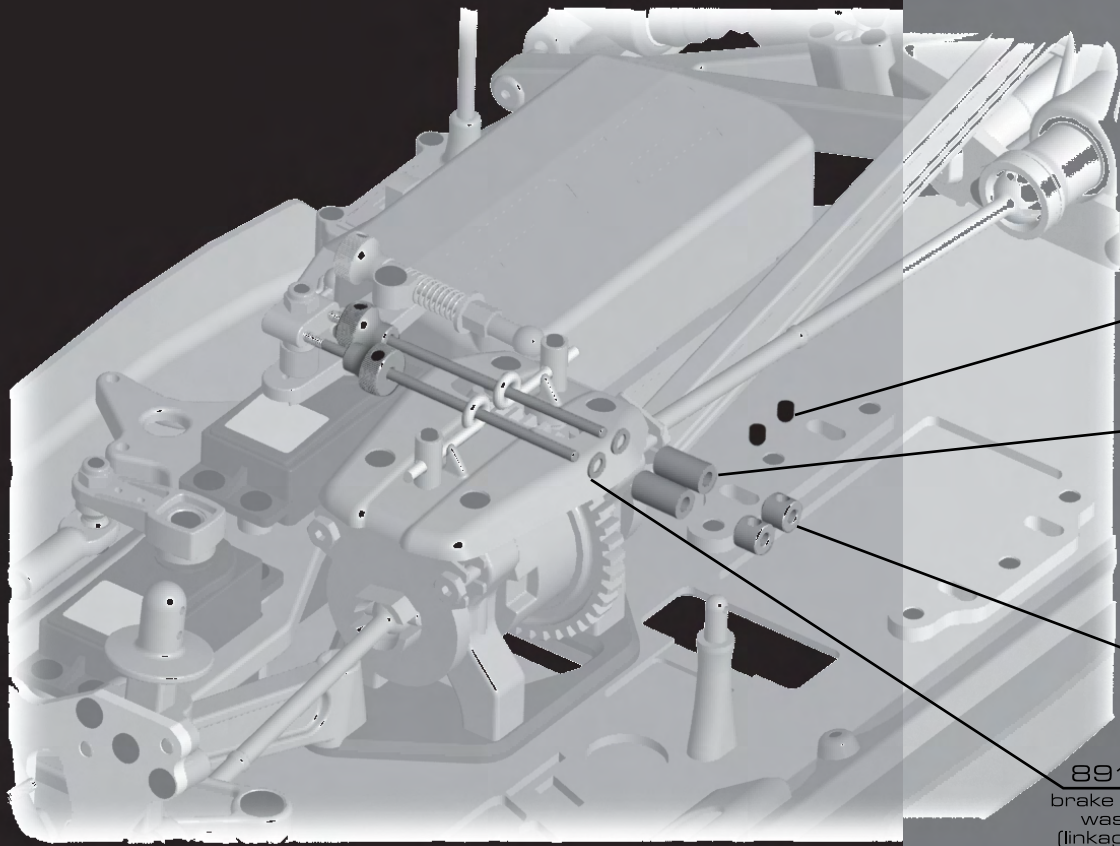
receiver pack configurations



### :: Radio Tray Assembly (cont.)



**:: Radio Tray Assembly (cont.)**



25225 x2  
3x3mm  
setscrew

89126 x2  
silicone  
brake spring

89126 x2  
set collar  
(linkage set)

89126 x2  
brake linkage  
washer  
(linkage set)

**:: Fuel Line**

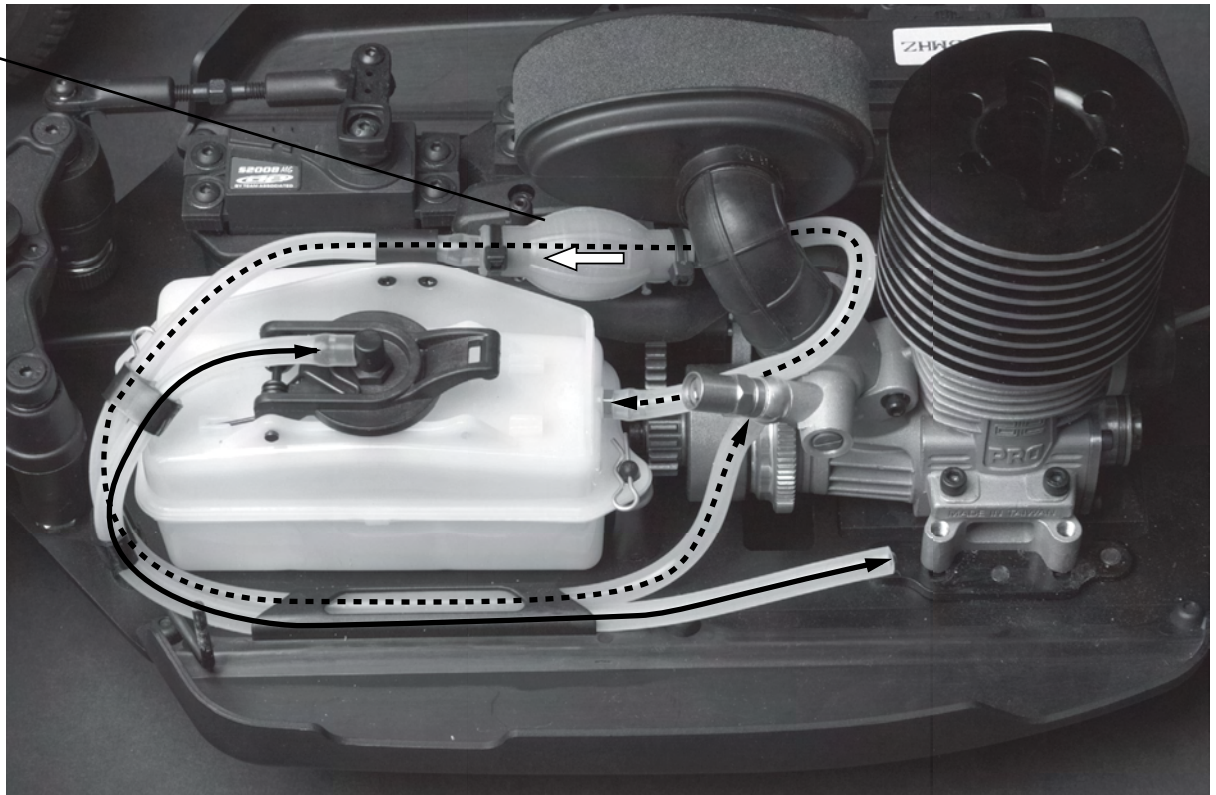
25076  
fuel primer  
bulb

\*picture shown for  
fuel line placement  
reference ONLY.

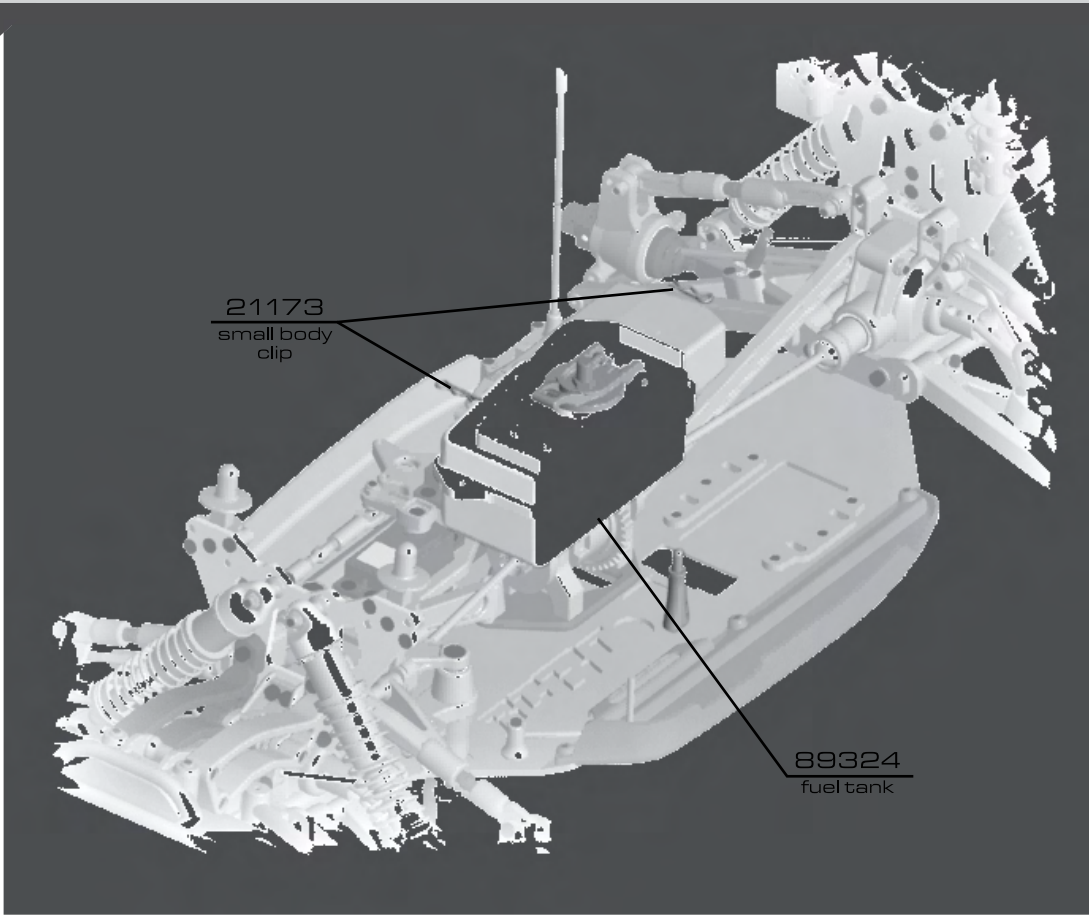
—————  
pressure line  
from fuel tank lid to  
exhaust pipe nipple

.....  
fuel line  
from fuel tank to  
carburetor

note:  
make sure the arrow  
on the fuel primer  
bulb is pointing  
towards the  
carburetor

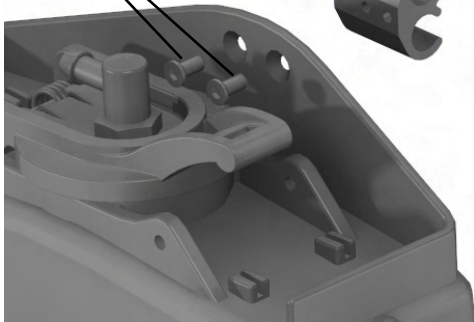


**:: Fuel Tank**



**:: Fuel Tank (cont.)**

89326  
2x4mm  
fhps



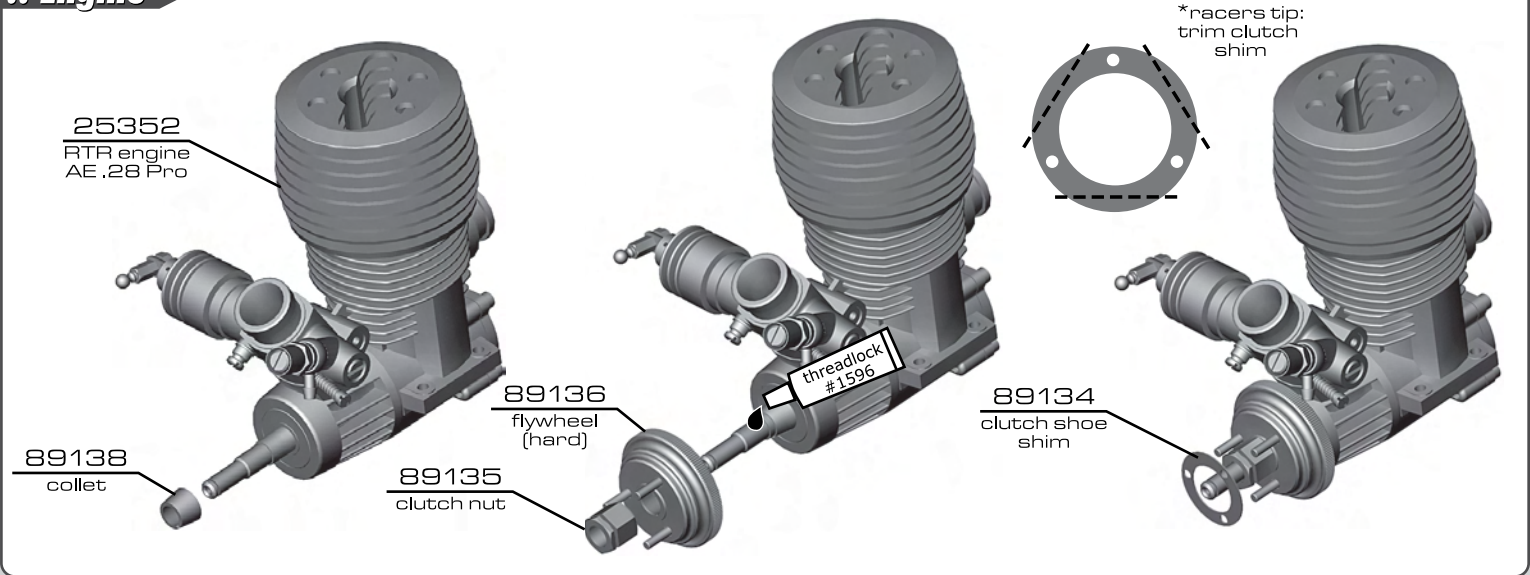
89325  
fuel tubing  
clip



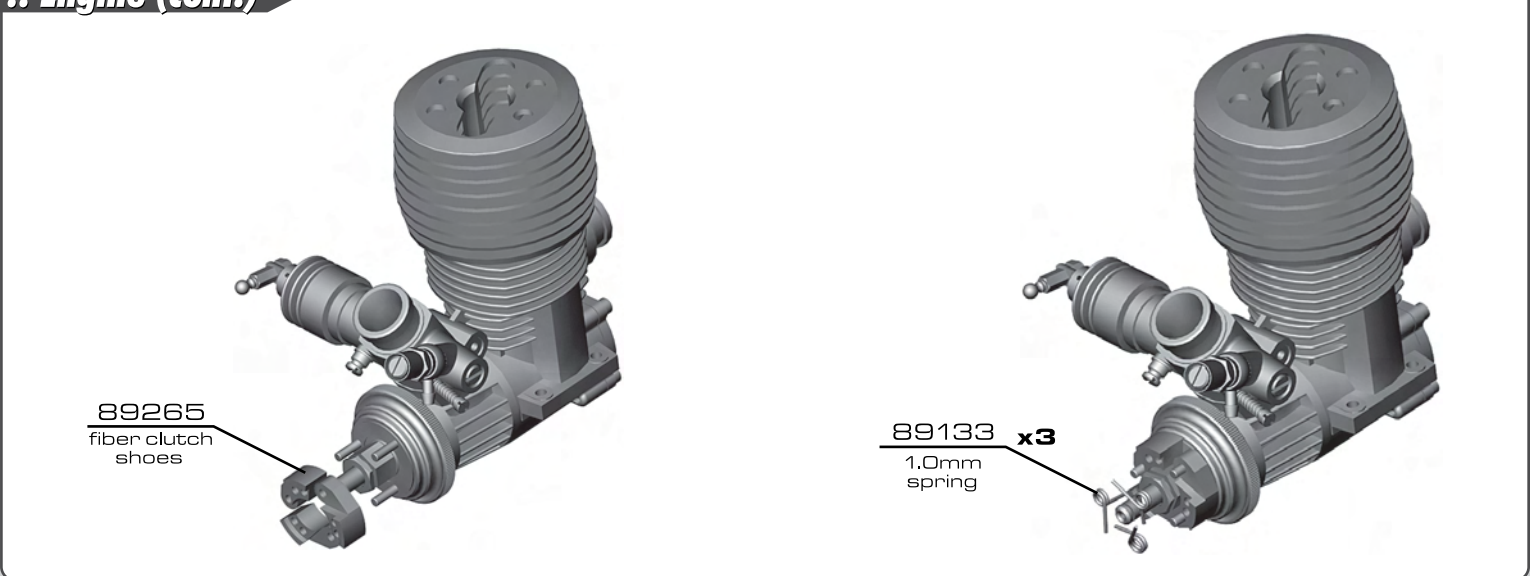
89325  
fuel tubing  
clip



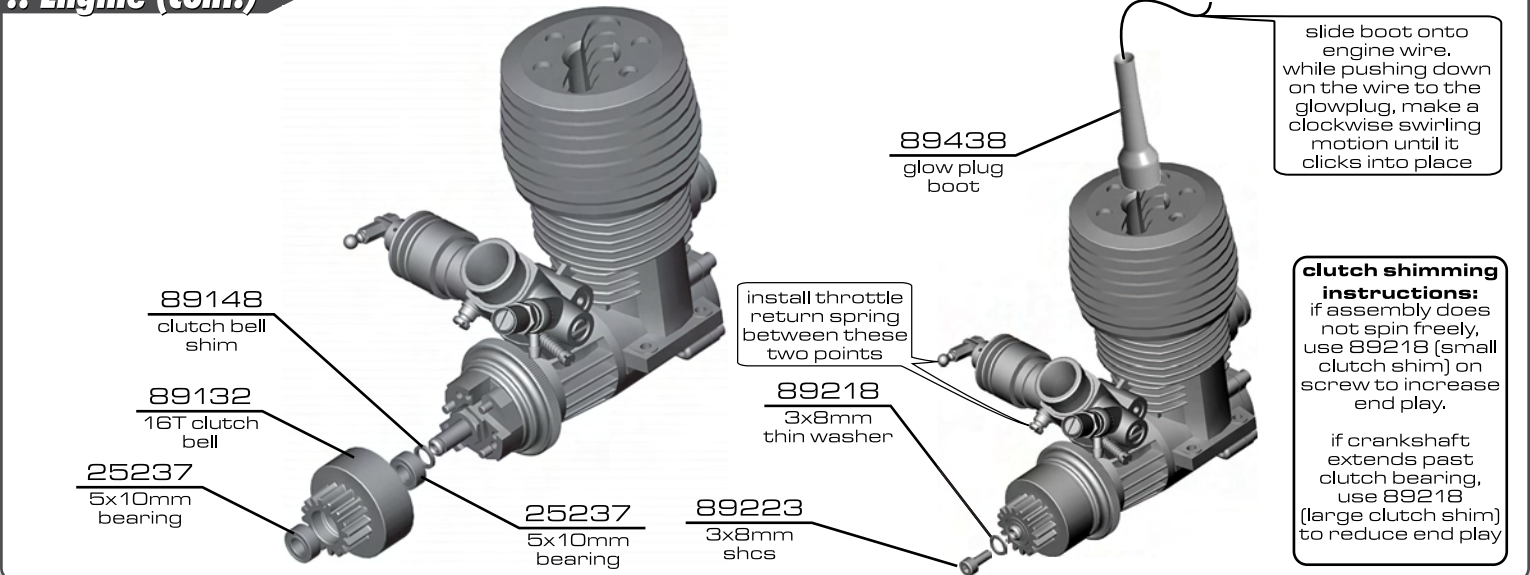
:: Engine



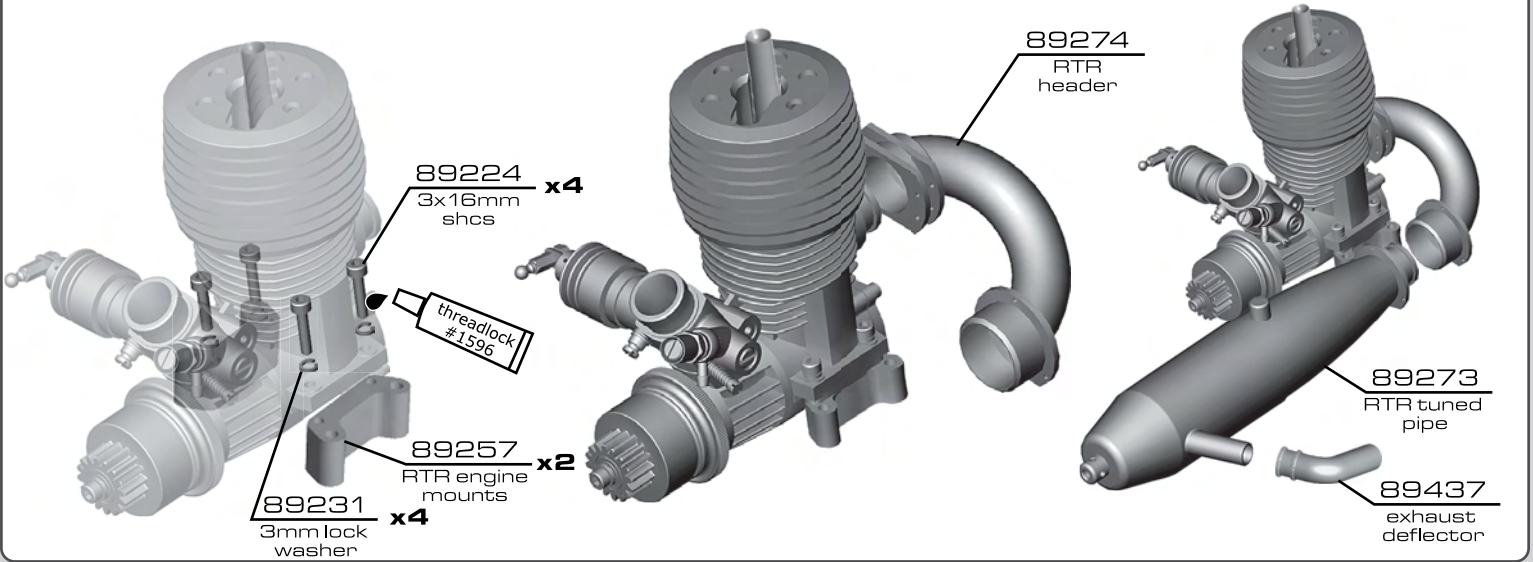
:: Engine (cont.)



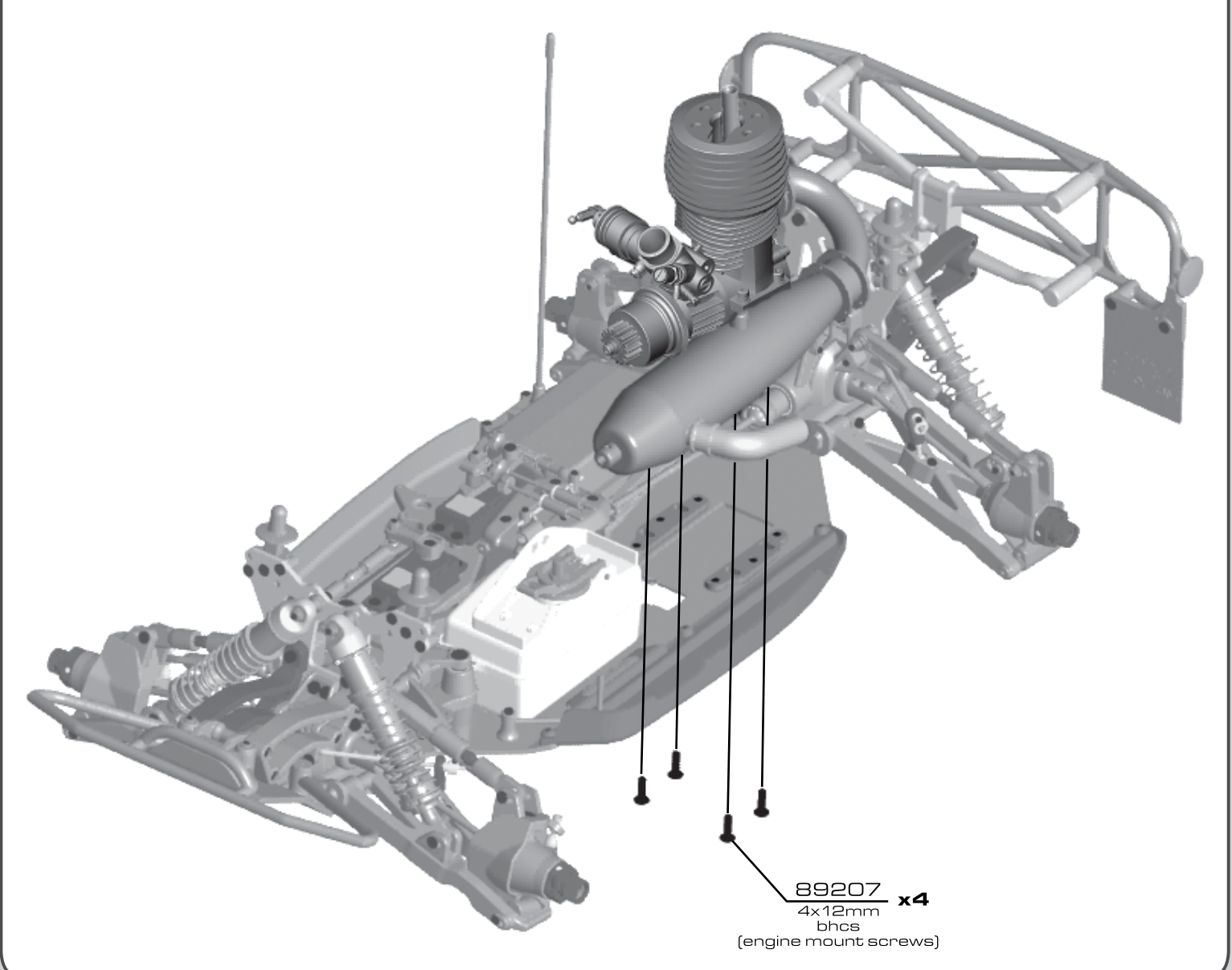
:: Engine (cont.)



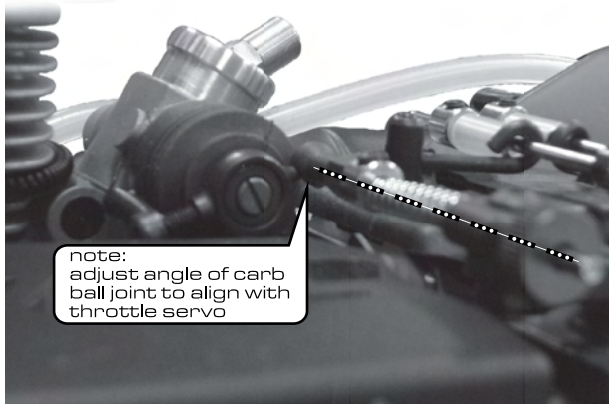
:: Engine (cont.)



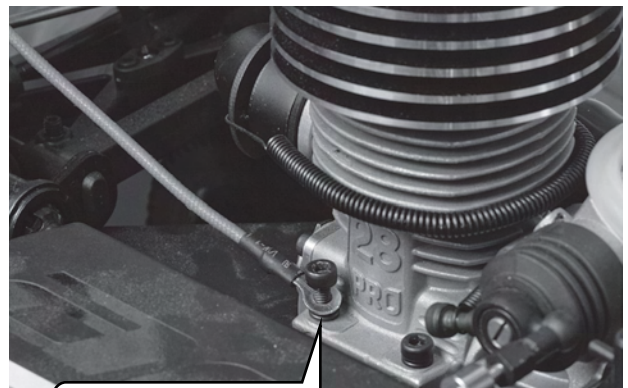
:: Engine (cont.)



**:: Engine (cont.)**

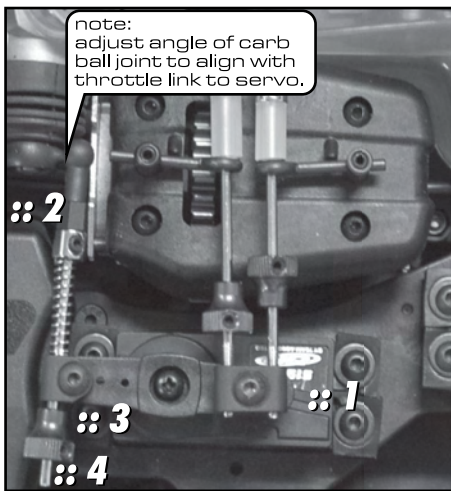


note:  
adjust angle of carb  
ball joint to align with  
throttle servo



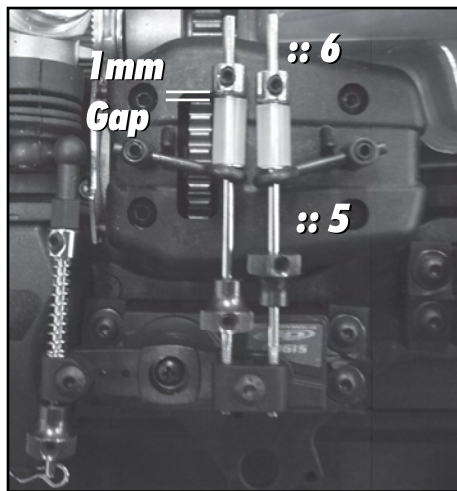
note:  
install ground wire on  
right rear engine  
mount screw, between  
the head of the screw  
and the lock washer

**:: Linkage Adjustment**

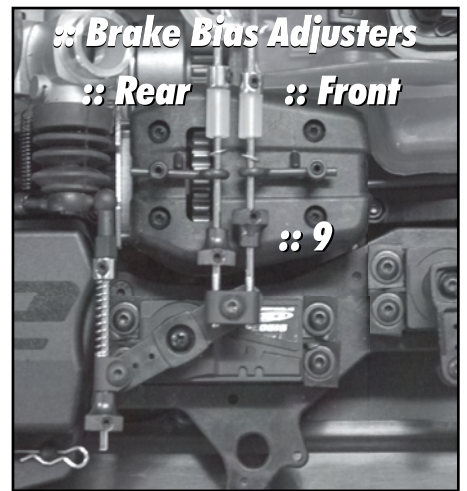


note:  
adjust angle of carb  
ball joint to align with  
throttle link to servo.

- 1: turn on transmitter and car; adjust servo horn until position is parallel with centerline at neutral.
- 2: set pre-load on spring so that throttle will close.
- 3: set .05mm gap on throttle collar.
- 4: trim off excess rod.



- 5: pull cams to engage brakes. set collar (with brakes engaged) to have 1 mm gap between tubing and collar; remember: transmitter is still on during this step.
- 6: trim off excess brake link wire.

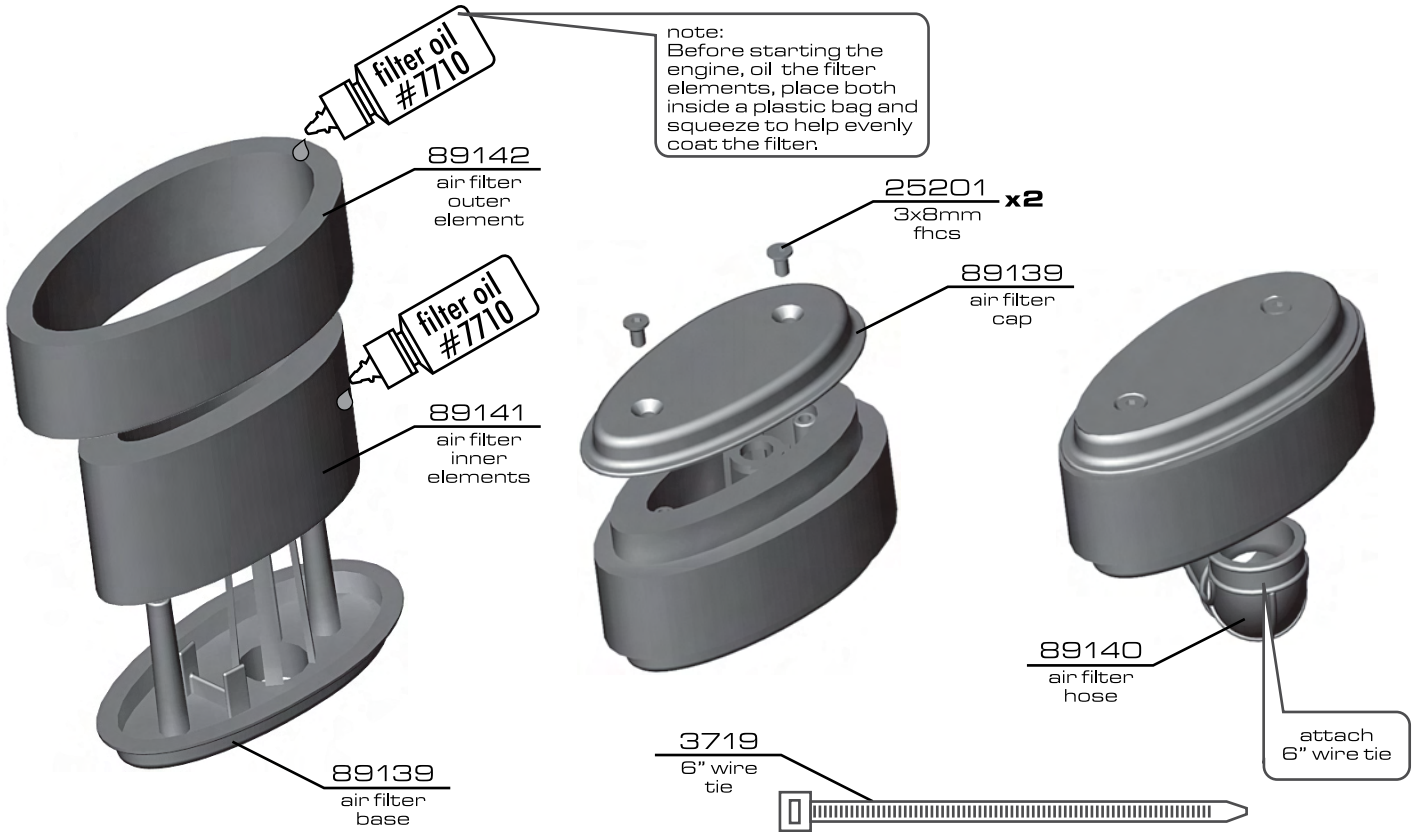


- 7: set throttle EPA max. apply full throttle on transmitter and set EPA so that the carb is full open. be careful not to over-extend the carb.
- 8: set max brake EPA at 30% **AS A STARTING POINT.**
- 9: brake bias adjusters: thread the adjuster into the mount to achieve stronger brakes on that end of the car.

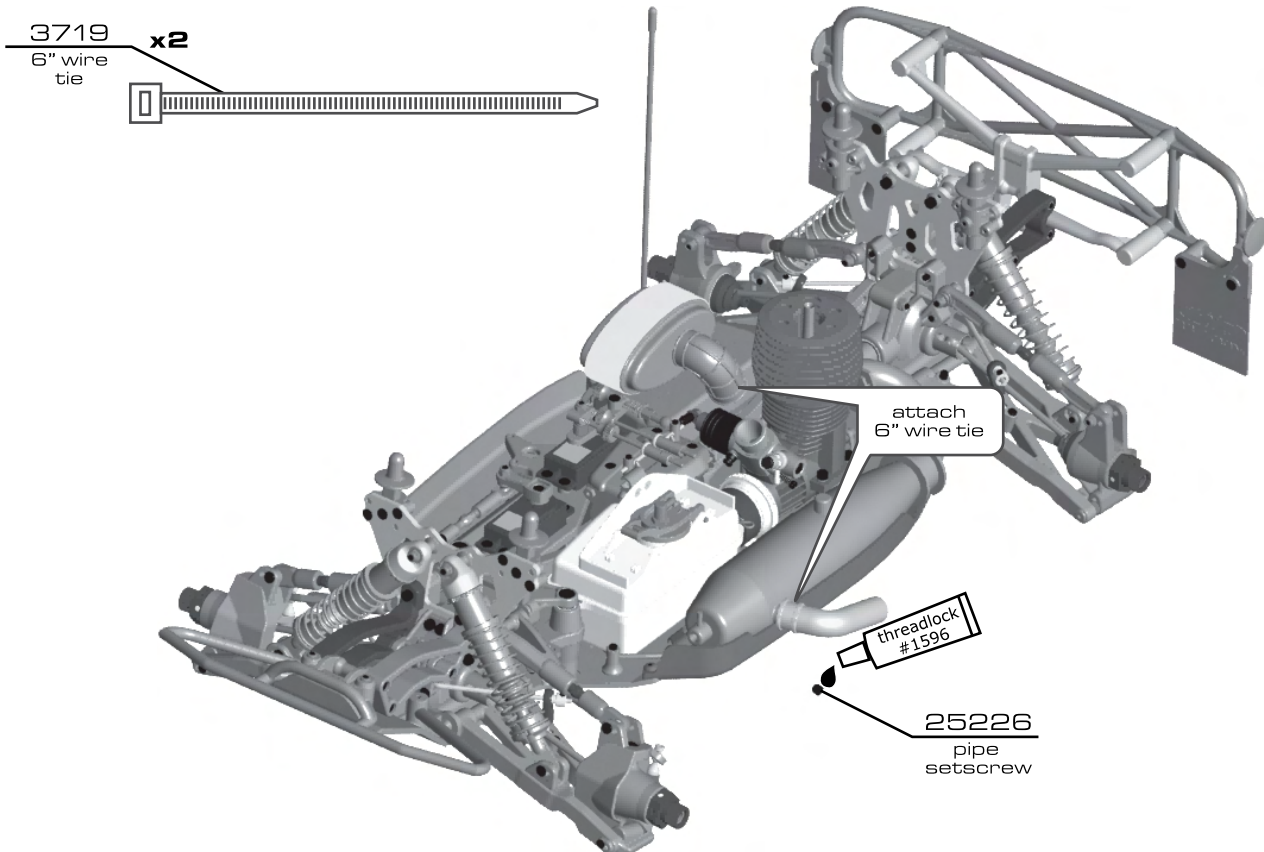
**!DO NOT START ENGINE FOR THIS STEP!**



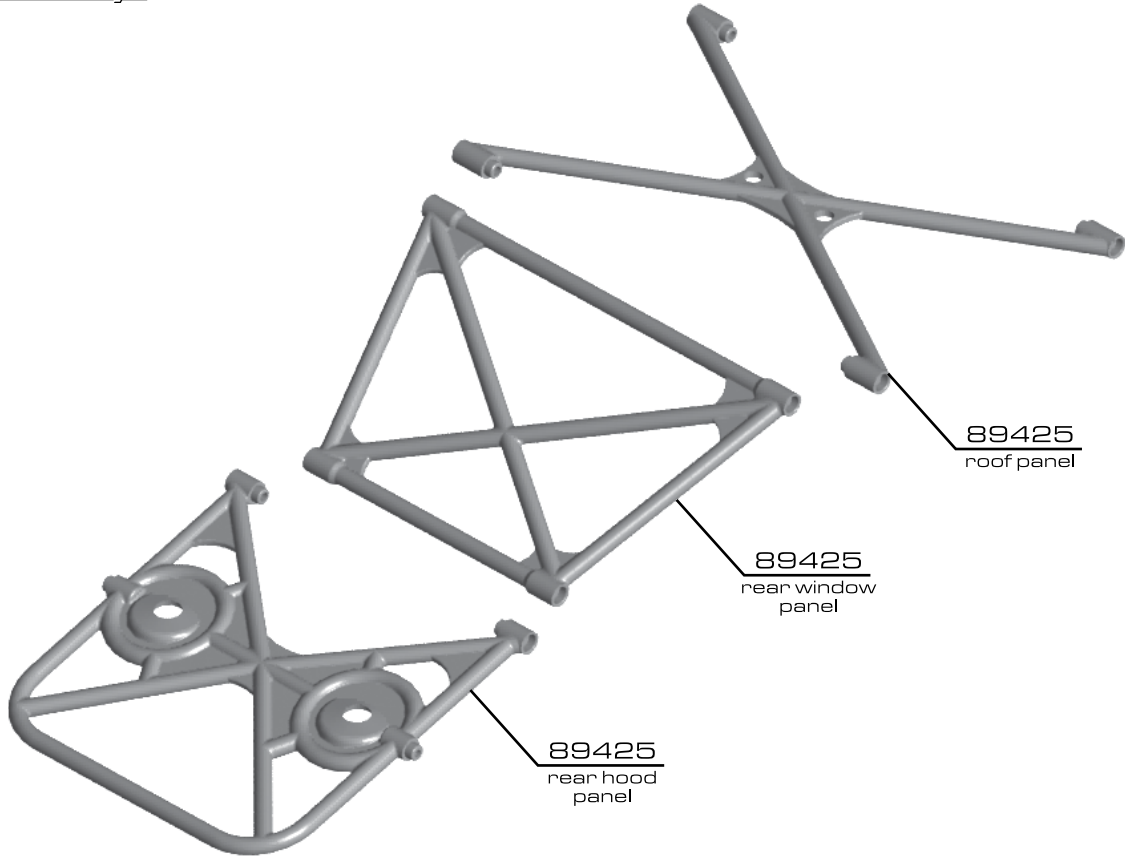
:: Filter Assembly



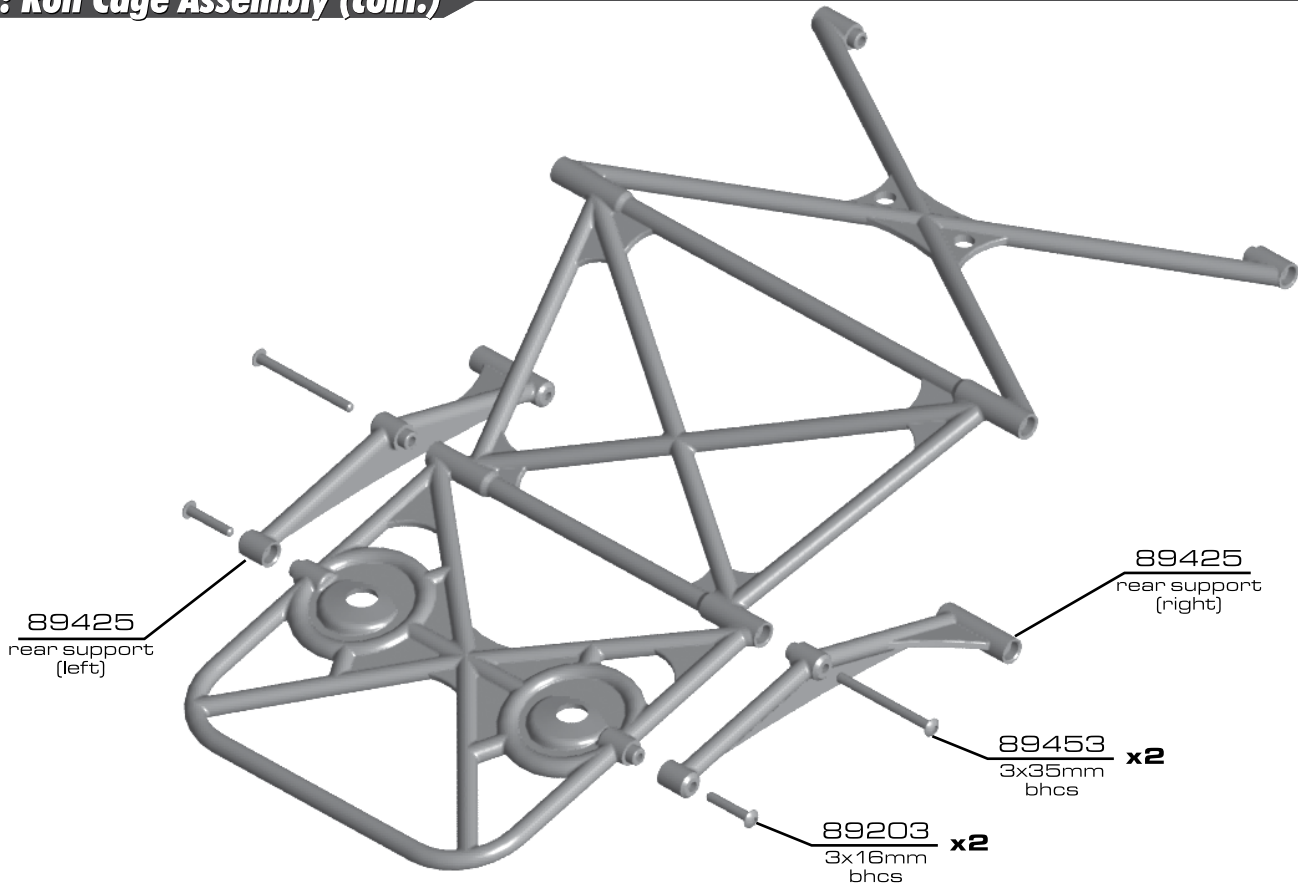
:: Filter Assembly (cont.)



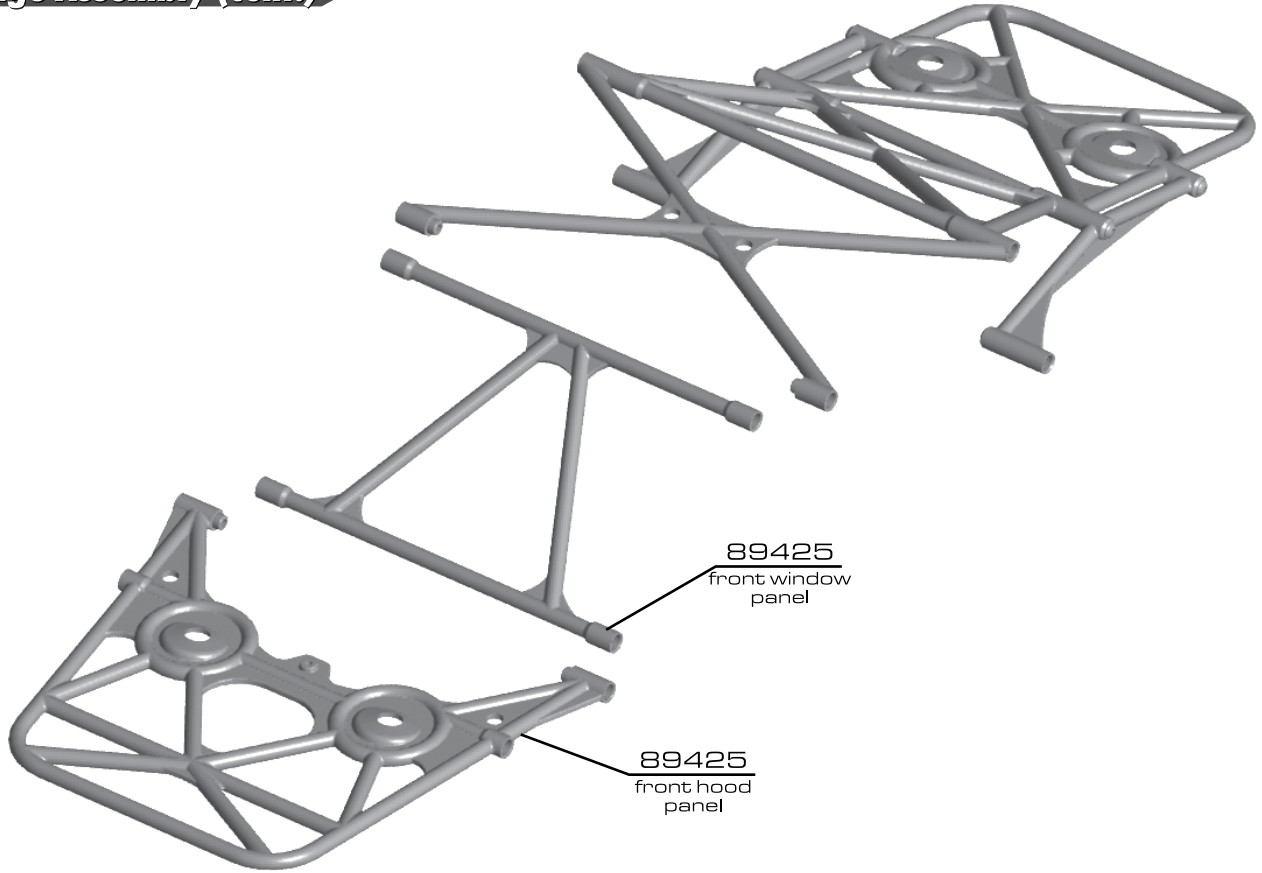
:: Roll Cage Assembly



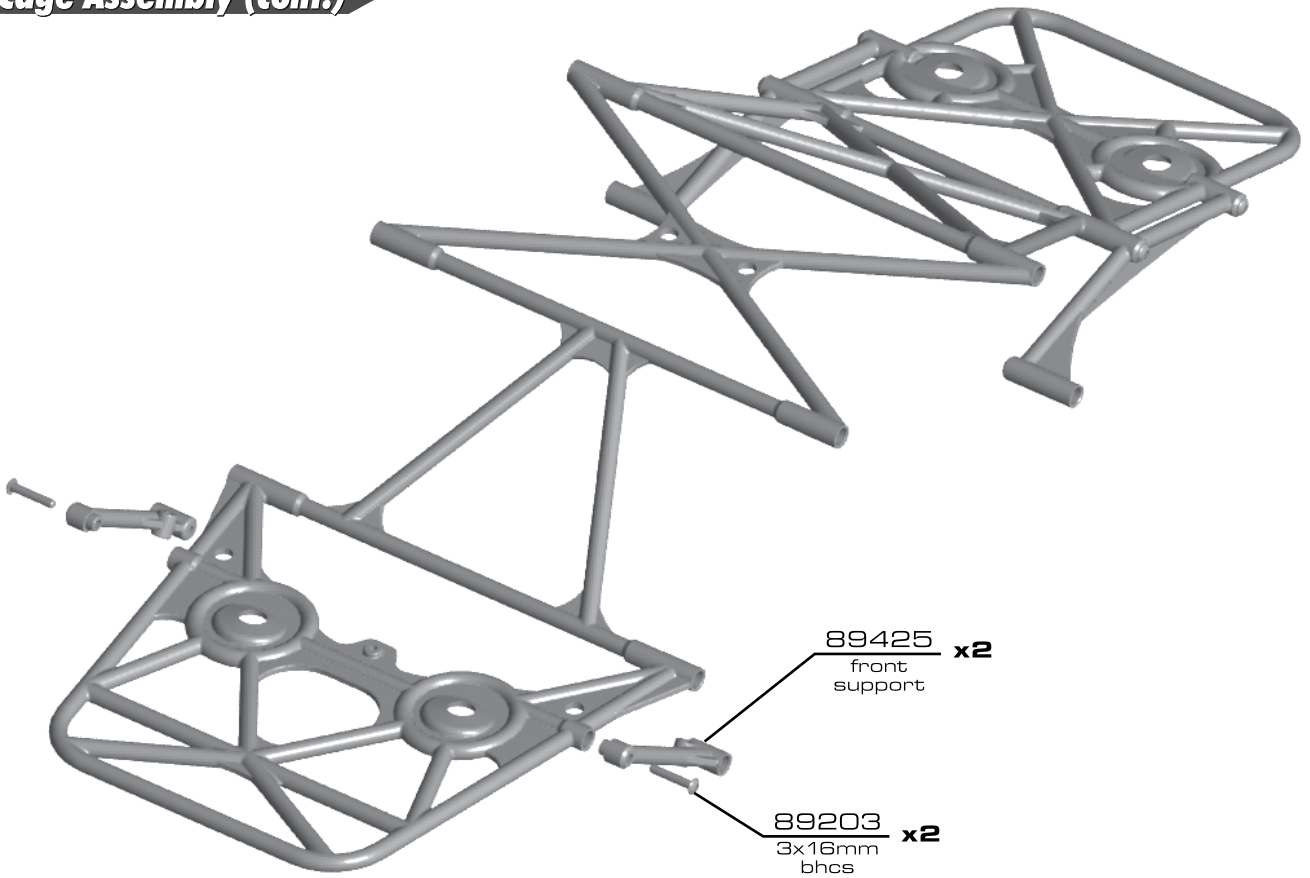
:: Roll Cage Assembly (cont.)



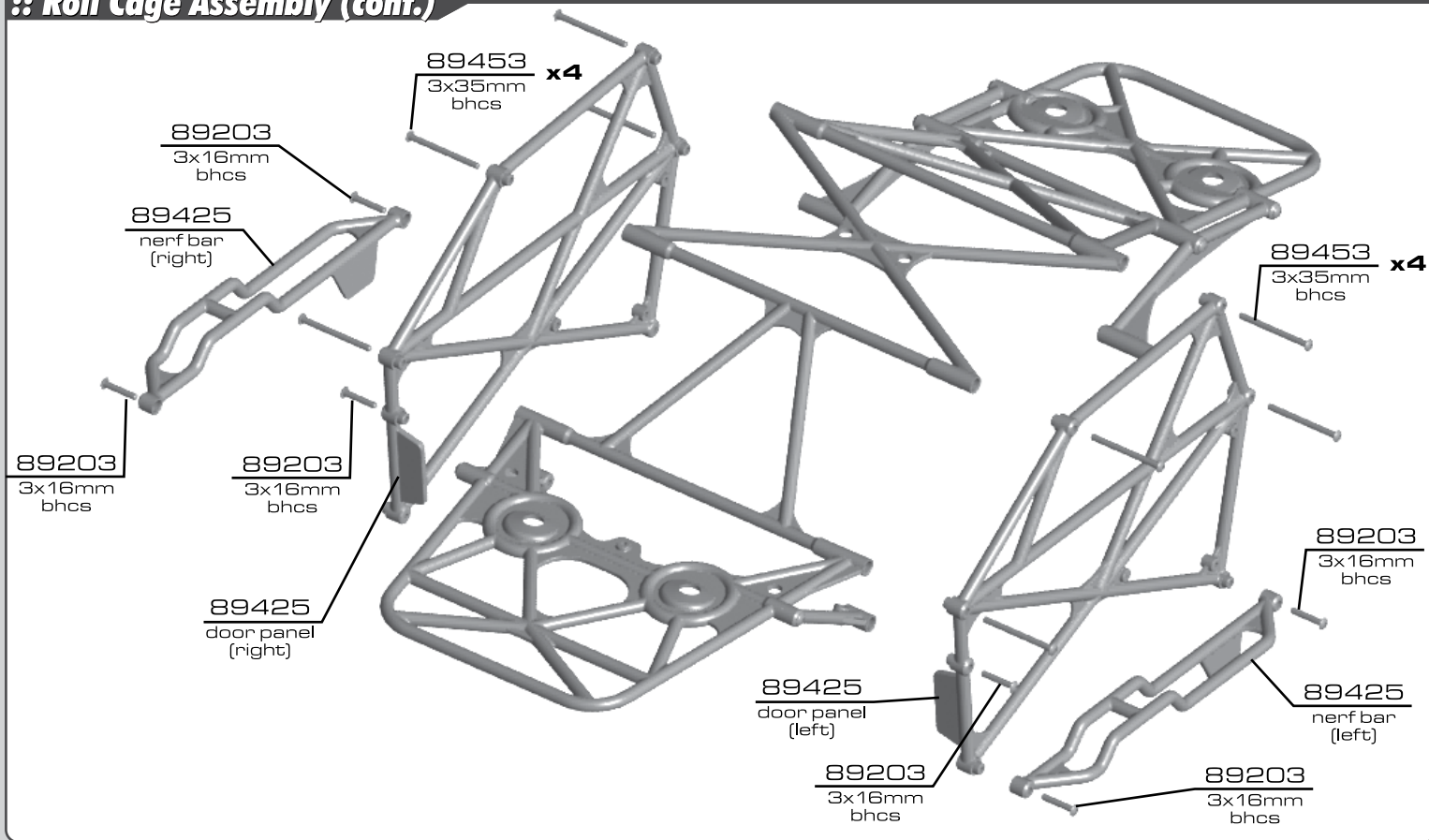
**:: Roll Cage Assembly (cont.)**



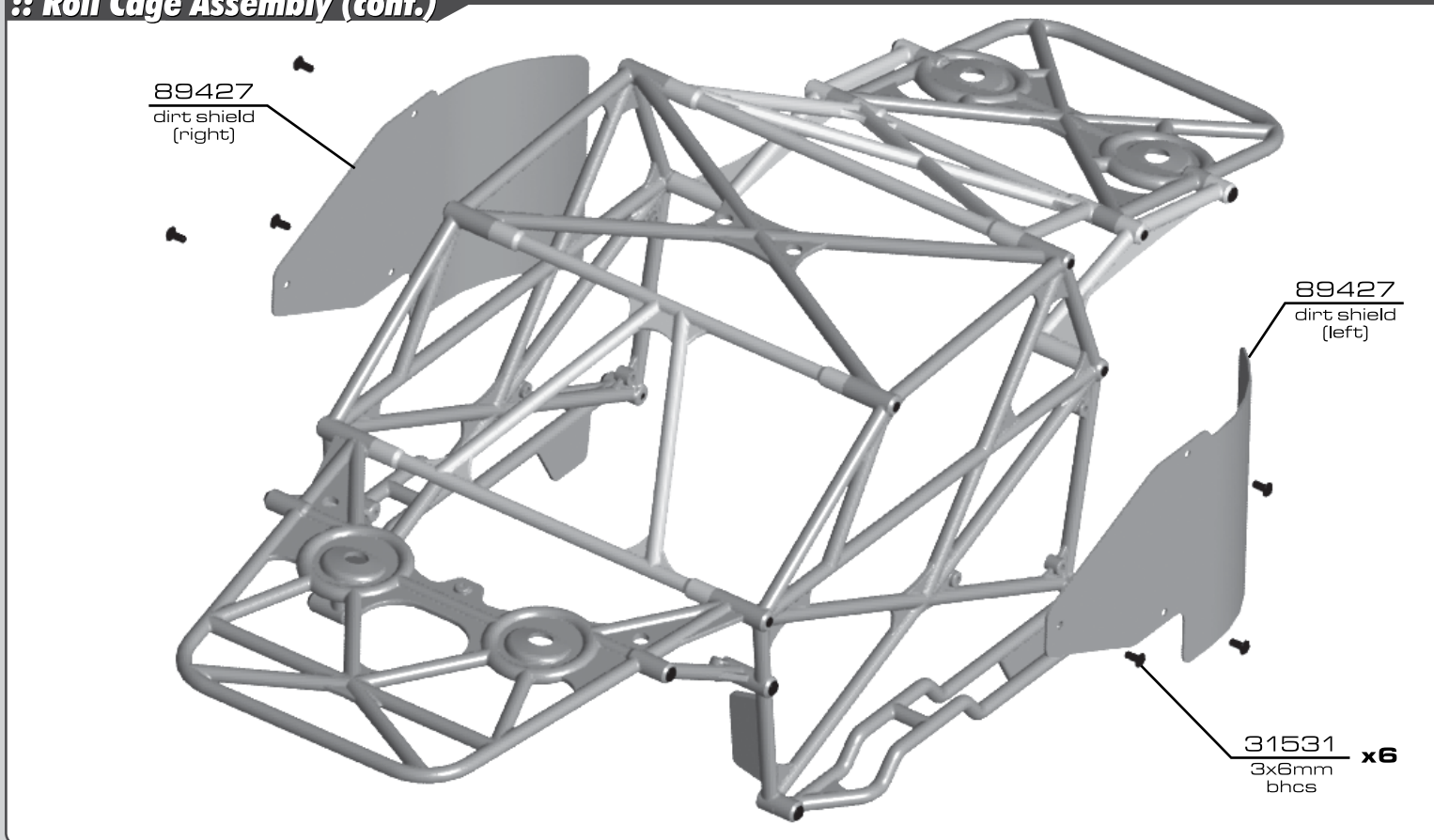
**:: Roll Cage Assembly (cont.)**



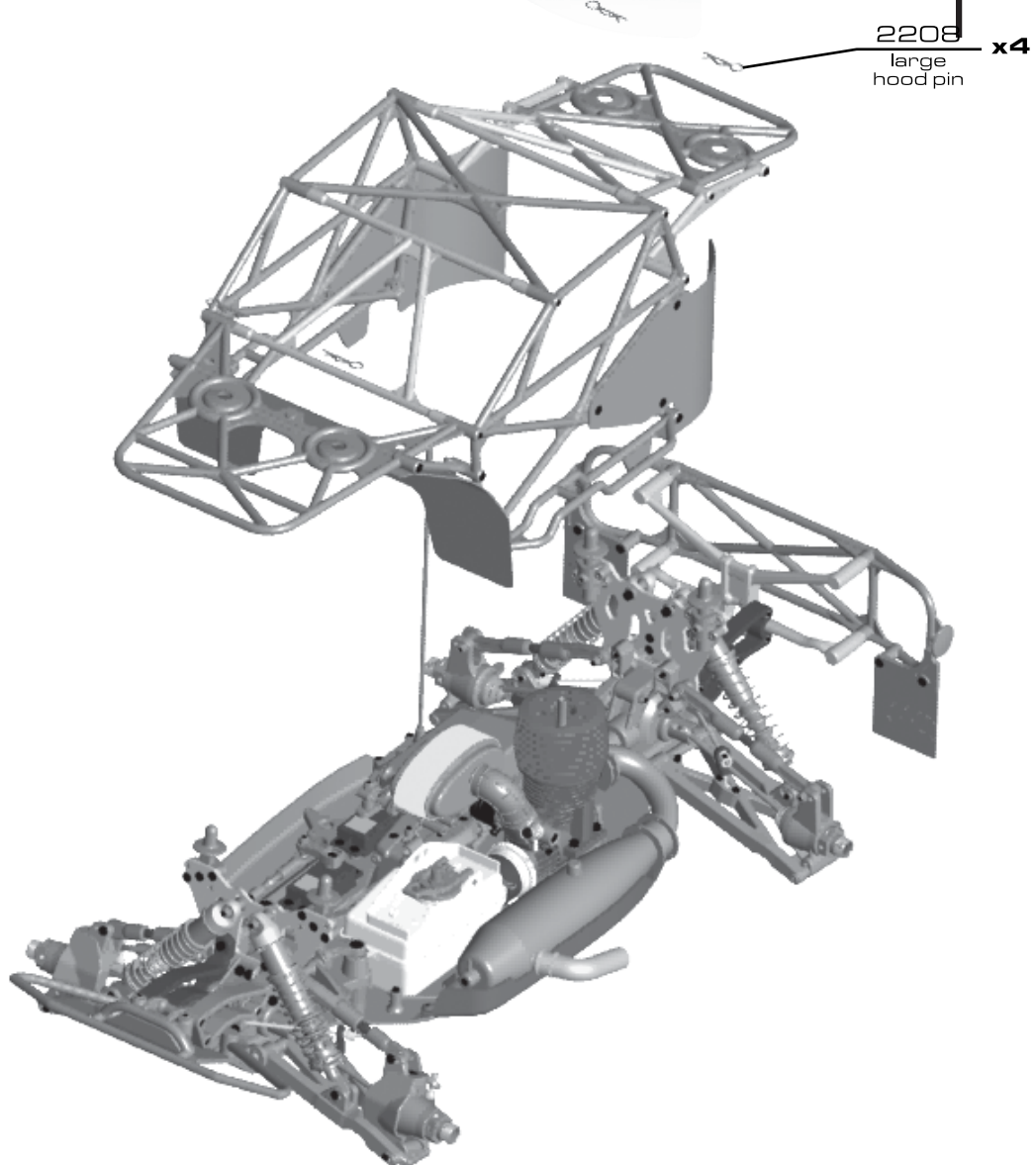
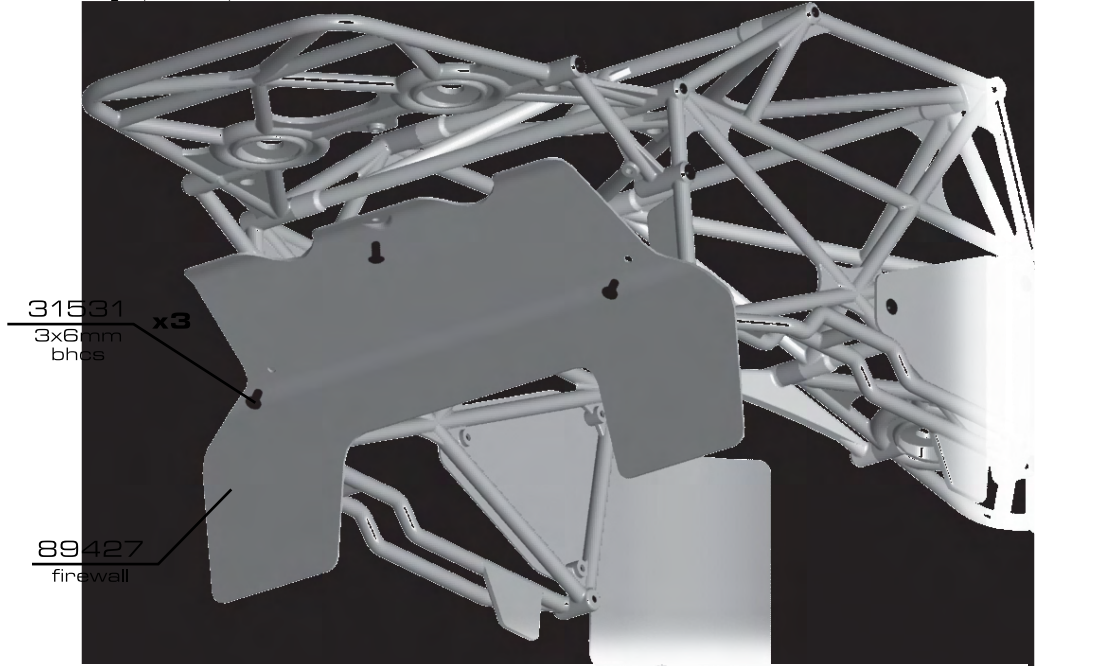
:: Roll Cage Assembly (cont.)



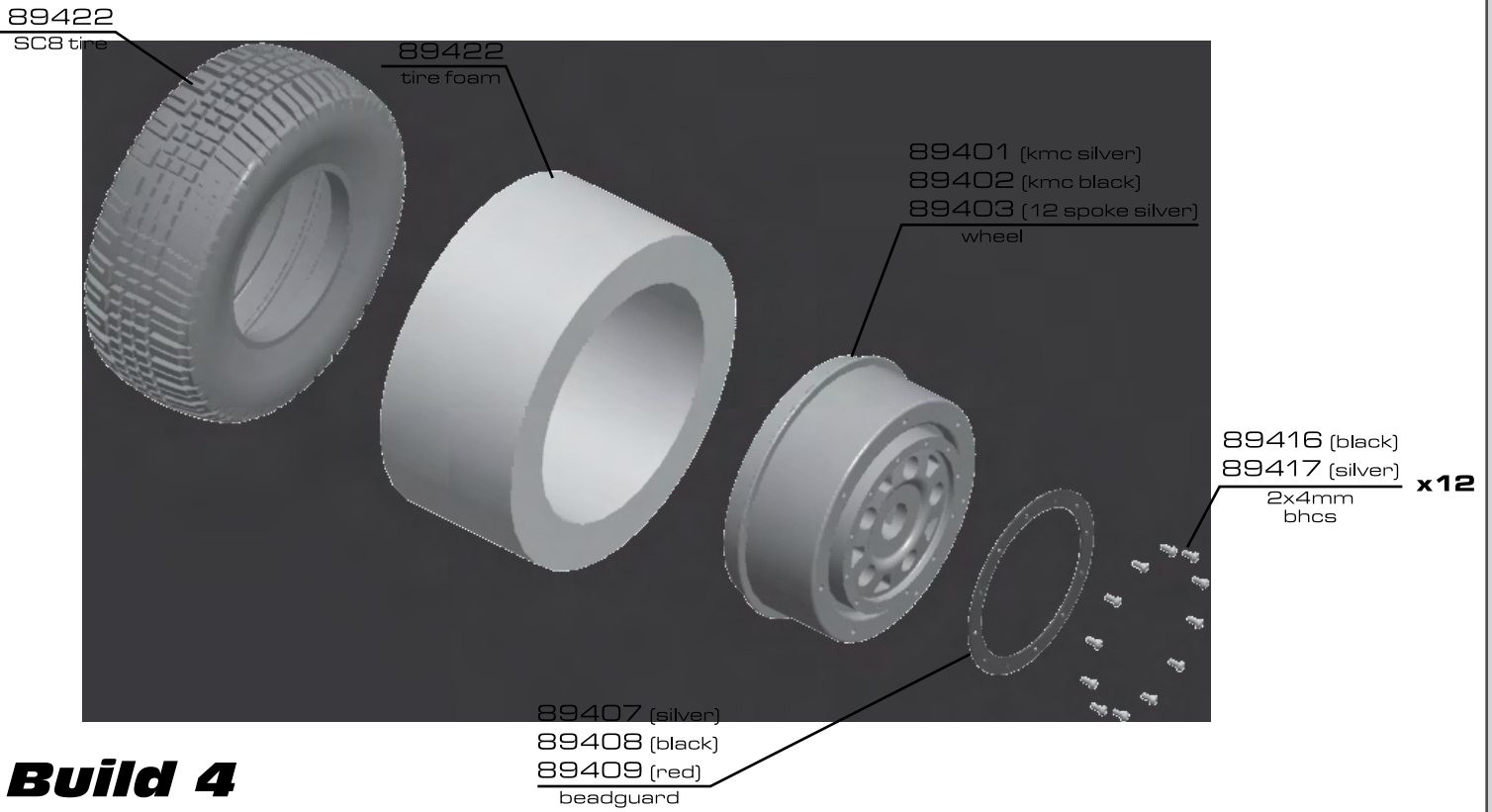
:: Roll Cage Assembly (cont.)



:: Roll Cage Assembly (cont.)

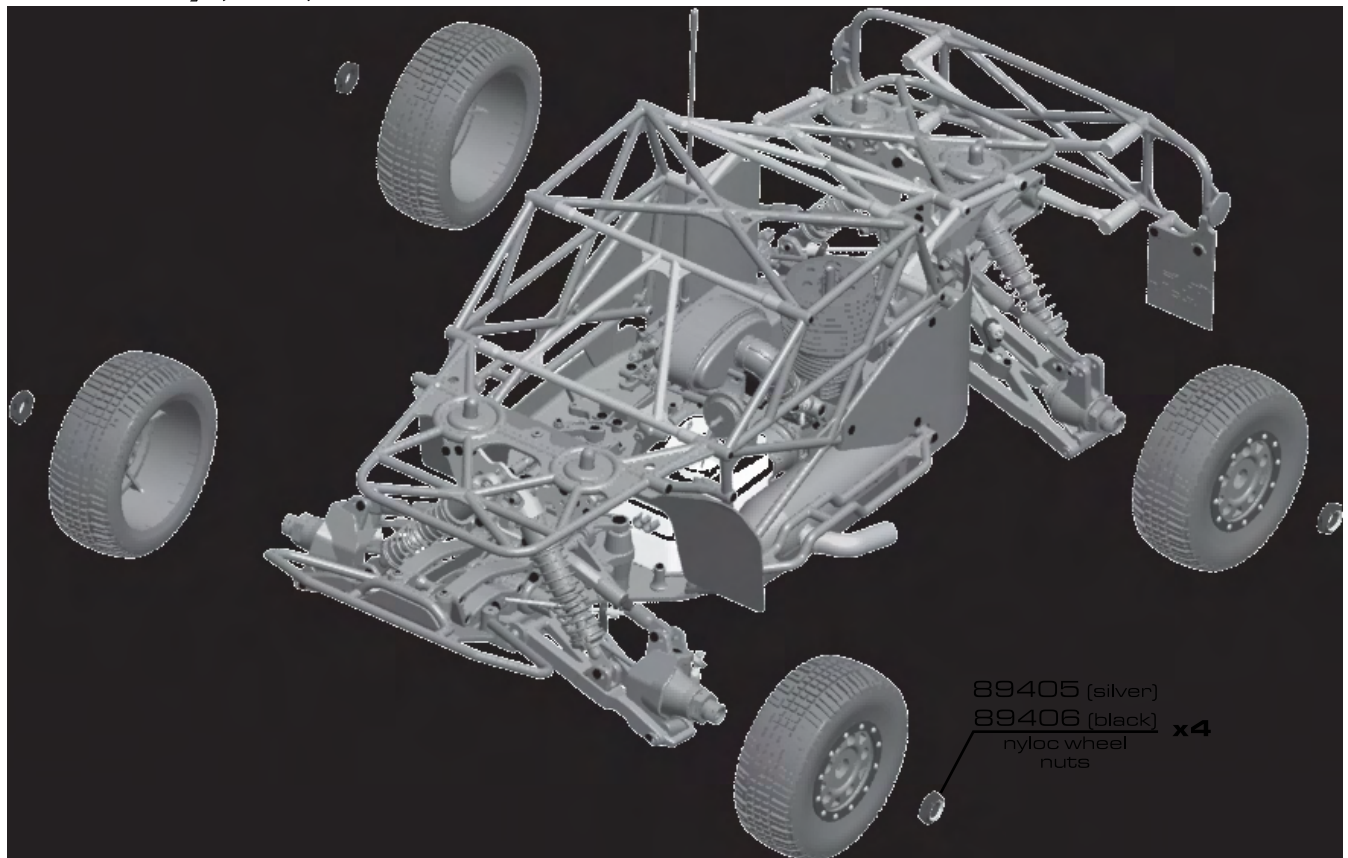


:: Wheel Assembly



**Build 4**

:: Wheel Assembly (cont.)



:: Body Install













:: Complete Truck














## :: Hardware - 1:1
















### cap head (shcs)

	2.5x8mm (89222)
	3x8mm (89223)
	3x10mm (25620)
	3x14mm (25190)
	3x16mm (89224)
	3x18mm (25191)
	3x20mm (25192)
	3x24mm (89225)
	3x40mm (89228)
	3x50mm (89452)






### flat head (fhcs)

	3x8mm (25201)
	3x10mm (25202)
	3x12mm (25203)
	3x14mm (89208)
	3x16mm (25204)
	3x18mm (89209)
	3x20mm (89210)
	3x26mm (89211)
	3x30mm (89212)
	4x6mm (89213)
	4x12mm (89214)




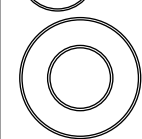
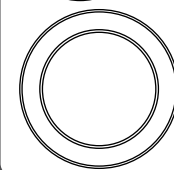
### button head (bhcs)

	2x4mm black (89416) silver (89417)
	2.5x3mm (89201)
	2.5x6mm (31520)
	3x6mm (31531)
	3x10mm (25211)
	3x12mm (89202)
	3x14mm (25187)
	3x16mm (89203)
	3x18mm (2308)
	3x20mm (25188)
	3x24mm (89204)
	3x26mm (89205)
	3x35mm (89453)
	4x10mm (89206)
	4x12mm (89207)




### setscrews

	3x3mm (25225)
	3x5mm (89219)
	4x5mm (25226)
	4x12mm (89220)
	5x4mm (89221)






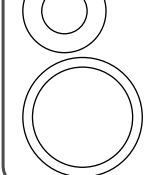
### ball bearings

	steering bearing (89161)
	5x10mm (25237)
	6x10mm (31404)
	8x16mm (25236)
	15x21mm (89162)

### nuts (lock/plain)

	piston locknut (89215)
	m3 locknut (25215)
	m4 locknut (89216)

### shims & washers

	linkage set washer (89126)
	2.5mm washers (89278)
	3x8mm washer (89218)
	clutch bell shims (89148)
	diff washer (89120)
	diff shim (89117)


### notes




## Setup Sheet for Team Associated's SC8

### :: Front Suspension

anti-roll bar:  2.2 - black  
 2.5 - silver  
 2.8 - gold

front body mount hole: 

steering rack:   
back  
mid  
front

hinge pin bushing: # \_\_\_\_\_  
 up  down

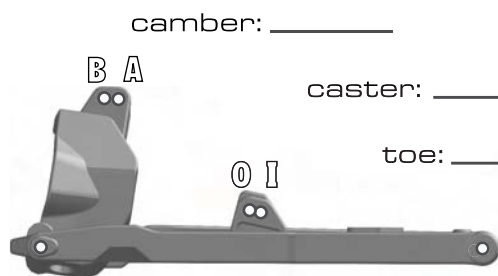
camber: \_\_\_\_\_

caster: \_\_\_\_\_

toe: \_\_\_\_\_

ride height: \_\_\_\_\_


kickup bushing: # \_\_\_\_\_  
 up  down



### :: Rear Suspension

anti-roll bar:  2.2 - black  
 2.5 - silver  
 2.8 - gold

wheelbase:  long  
 medium  
 short

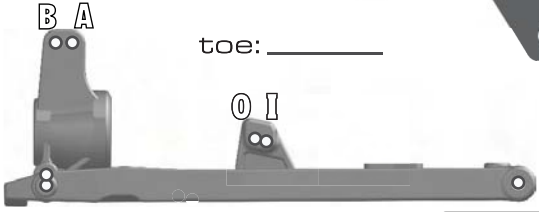
rear body mount hole: 

camber: \_\_\_\_\_

toe: \_\_\_\_\_

ride height: \_\_\_\_\_

anti-squat bushing: # \_\_\_\_\_  
 up  down



### :: Front Shocks

spring: \_\_\_\_\_ piston: \_\_\_\_\_  
shock fluid: \_\_\_\_\_ length: \_\_\_\_\_  
shock cap: \_\_\_\_\_

### :: Rear Shocks

spring: \_\_\_\_\_ piston: \_\_\_\_\_  
shock fluid: \_\_\_\_\_ length: \_\_\_\_\_  
shock cap: \_\_\_\_\_

### :: Differentials

front fluid: \_\_\_\_\_  
center fluid: \_\_\_\_\_  
rear fluid: \_\_\_\_\_

### :: Wing

location:  forward  back  
angle:  low  med.  high  
type: \_\_\_\_\_

### :: Chassis Braces

standard  molded  aluminum  
other: \_\_\_\_\_

### :: Engine

engine: \_\_\_\_\_ restrictor: \_\_\_\_\_  
muffler: \_\_\_\_\_ temp: \_\_\_\_\_  
glow plug: \_\_\_\_\_  
fuel: \_\_\_\_\_

### :: Gearing/Clutch

gearing: \_\_\_\_\_  
shoes: \_\_\_\_\_ x aluminum \_\_\_\_\_ x fiber  
spring: \_\_\_\_\_ x .9mm \_\_\_\_\_ x 1.0mm \_\_\_\_\_ x 1.1mm  
notes: \_\_\_\_\_

### :: Notes

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### :: Tires

tire (F/R): \_\_\_\_\_ / \_\_\_\_\_  
compound (F/R): \_\_\_\_\_ / \_\_\_\_\_  
insert: \_\_\_\_\_ wheel: \_\_\_\_\_

### :: Race and Vehicle Comments

qualify: \_\_\_\_\_ main: \_\_\_\_\_ finish: \_\_\_\_\_ tq:   
comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### :: Track Info

traction:  high  med.  low  
surface:  smooth  bumpy  
 blue groove  soft dirt  grass  
 clay  wet  dusty  
other: \_\_\_\_\_  
\_\_\_\_\_



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**<http://www.TeamAssociated.com>**  
**<http://www.RC10.com>**