

1:8 Scale Nitro 4WD Offroad Truggy Kit Manual

TEAM ASSOCIATED



:: Introduction

Thank you for purchasing this Team Associated product. This manual contains instructions and tips for building and maintaining your new RC8T / RC8T RTR. Please take a moment to read through it and familiarize yourself with these steps.

:: RC8T Features

:: Factory Team RC8T

- Factory assembled shocks, diffs and turnbuckles.
- Factory Team shock and diff fluids included.
- Factory Team "Big Bore" threaded, hard-coated shocks feature 16mm six hole pistons and 4mm gold shock shafts.
- Factory Team Aluminum Top Plate and Steering Rack.
- Factory Team chassis braces with integrated center stiffener.
- 4mm woven carbon fiber shock towers.
- Blue aluminum wheel hexes featuring captured drive pins and nyloc wheel nuts.
- FFC Free Float Caliper brake-system eliminates the possibility of unwanted brake drag while on throttle.
- Two-piece split-center diff mount allows quick and easy access to the center diff.
- High-Torque capacity three-shoe aluminum clutch.
- Full ball bearing drivetrain and steering.
- Factory blue titanium turnbuckles.
- True-Lock kingpin system.
- Heavy duty CVA's with captured pins.
- Woven carbon fiber radio tray.
- Durable 10mm thick suspension arms.
- Rubber rear CVA boots.
- Fully adjustable pre-drilled screw mounted wing.

:: Ready-To-Run

- · Aluminum wheel nuts
- Tough, steel turnbuckles
- True-Lock kingpin system
- Heavy duty CVA's with captured pins
- Hard coated shock bodies with 4mm shock shafts and rubber
- Durable, molded radio tray & antenna mount
- Sealed radio box
- 3mm aluminum front/rear shock towers
- Durable 10mm thick suspension arms
- Rubber CVA boots
- Fully adjustable pre-drilled screw mounted wing
- Strong anti-wobble wheels
- Anti-foaming fuel tank
- Low-profile, elliptical, high-flow two-stage air filter

:: Additional

:: Factory Team

Your RC8T Truggy comes with all the Factory Team hopups. However, there are some items you will need to complete your kit:

- .21 Class Rear Exhaust Engine
- 2 Channel Radio Set FM/PCM recommended.
- 4.8v-6.0v Receiver Battery Pack (RC8T will accept either flat or hump pack, AE Part #613 Flat, 612 Hump)
- Muffler, Joining Pack or Manifold & Spring
- AA-Size Batteries for Transmitter (x8)
- Model Car Fuel (30% Nitro recommended)
- Fuel Bottle (AE Part #1749)
- Glow Starter (AE Part #1738)
- Starter Box (AE Part #1750)
- 1/8th Scale Truggy Tires
- FT Tire Glue (AE Part #1597)
- Thread Lock Compound (AE Part#1596)
- Lexan Specific Spray Paint
- FT Body Scissors (AE Part#1737)
- Reamer/Hole Punch
- FT Hex Driver Set (AE Part #1541)
- Hobby Knife
- Needle Nose Pliers
- Wire Cutters

:: Ready-To-Run

Your RC8T RTR Truggy 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 #613 Flat, 612 Hump)
- D-Size Battery for Glow Starter (x1)
- 6-Cell Sub-C Size Battery Pack for Pro-Start Starting Gun, AE Part #695
- Charger for Battery Pack
- Model Car Fuel (20%-30% Nitro recommended)

:: RC8T FT Only Notes

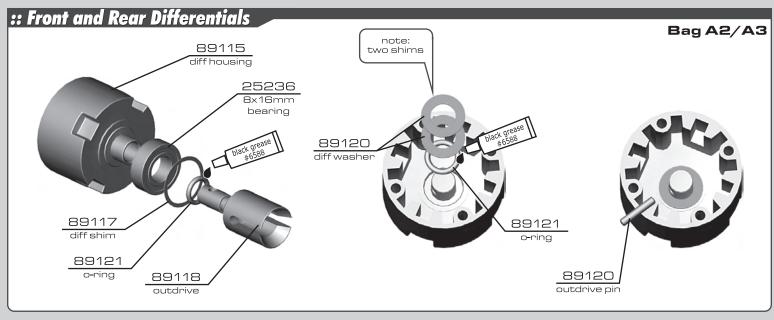
Your RC8T FT Truggy comes with pre-built Diffs, Turnbuckles, and Shocks. The manual goes through the complete build of the kit for your future reference and maintenance.

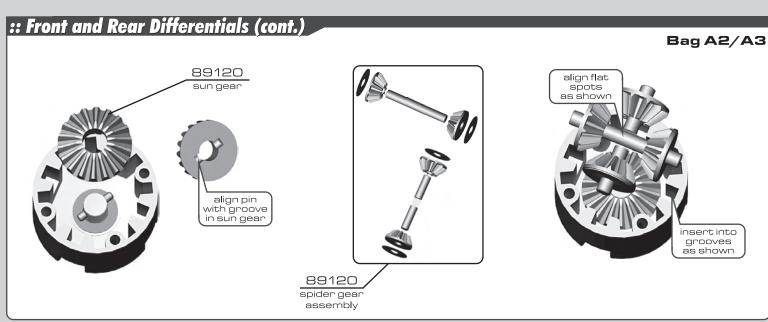
- Page 4: Fill the front and rear differentials with 7000cst diff fluid
- Page 5: Fill the center differential with 7000cst diff fluid

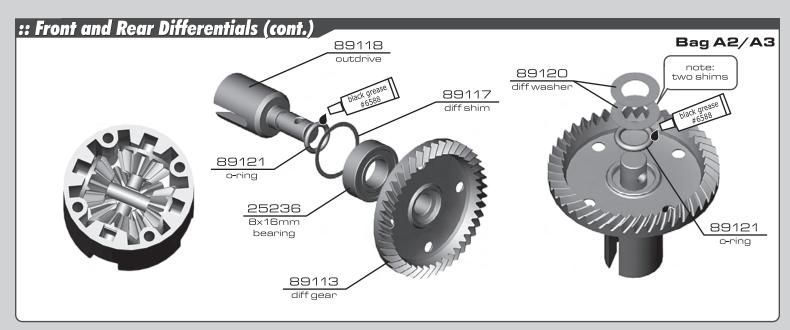
Page 7-8: Fill pre-assembled shocks with shock oil.

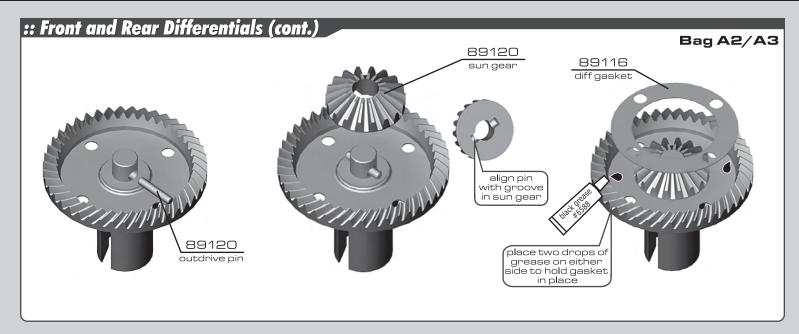
You can now continue on to build the rest of your new Team Associated FT RC8T Kit!

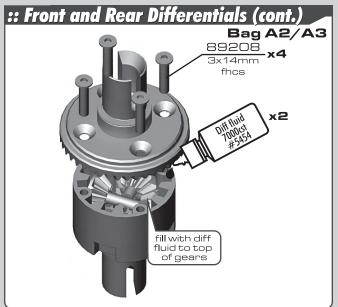


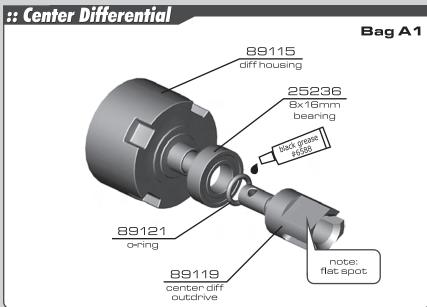




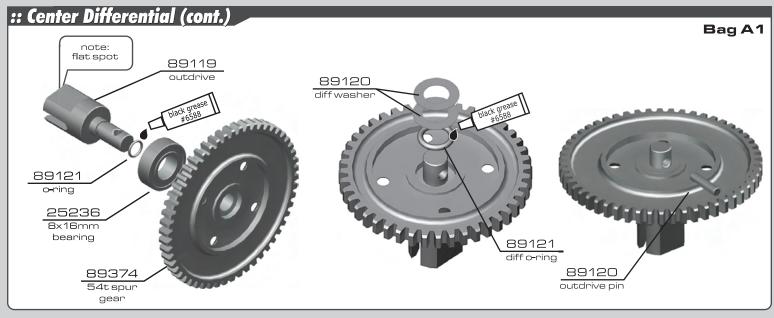


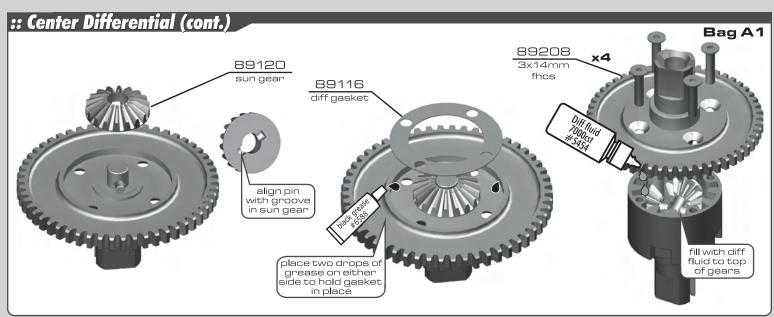


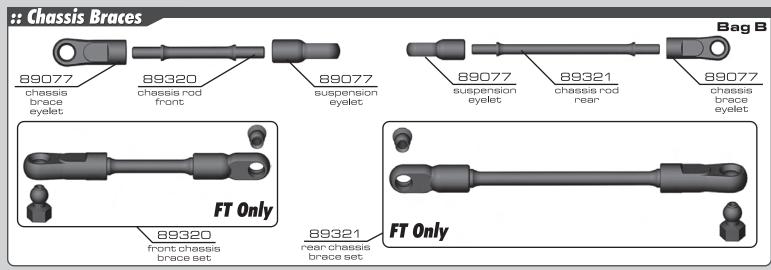


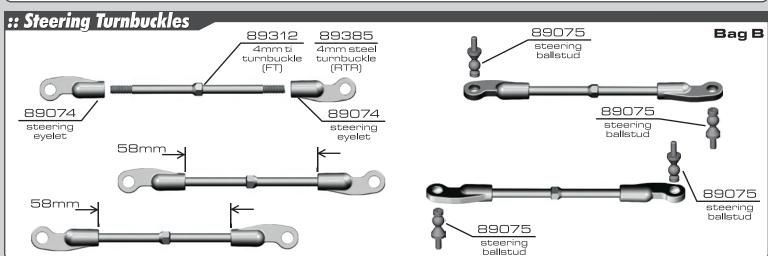




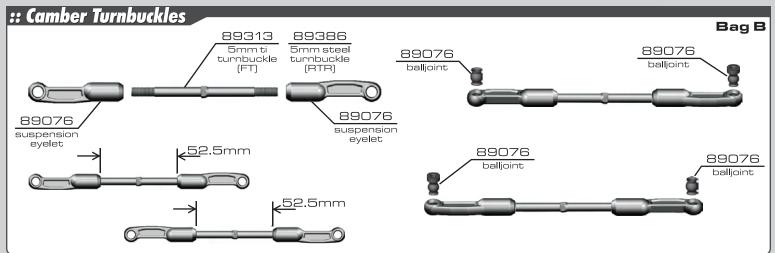


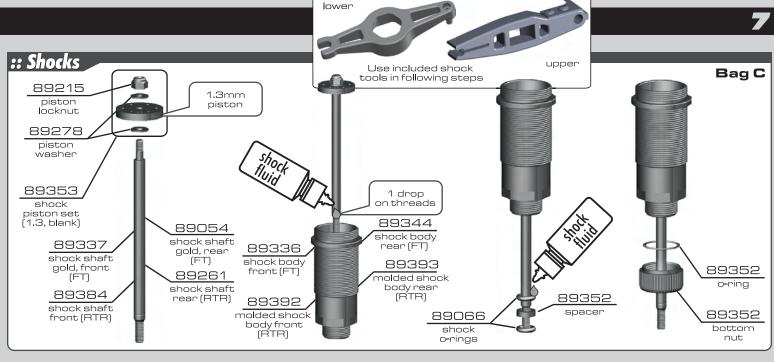


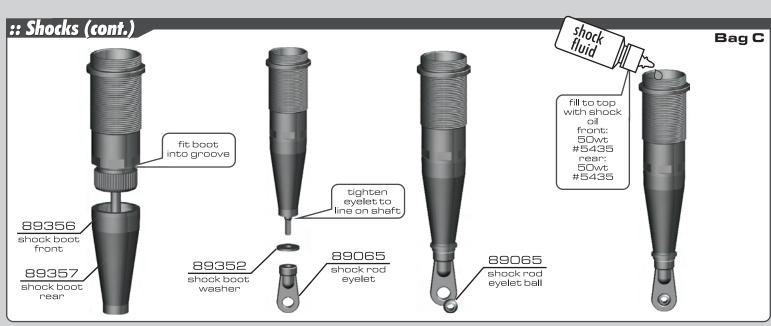


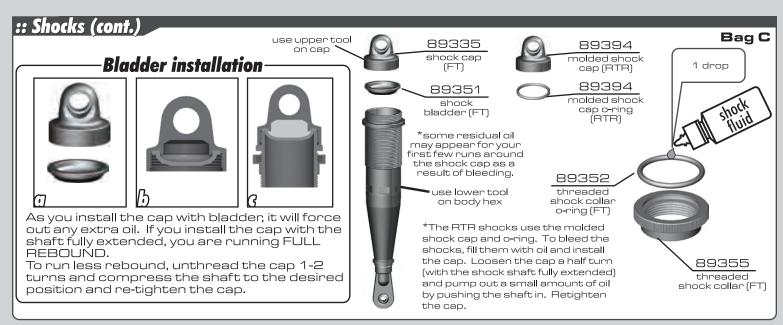


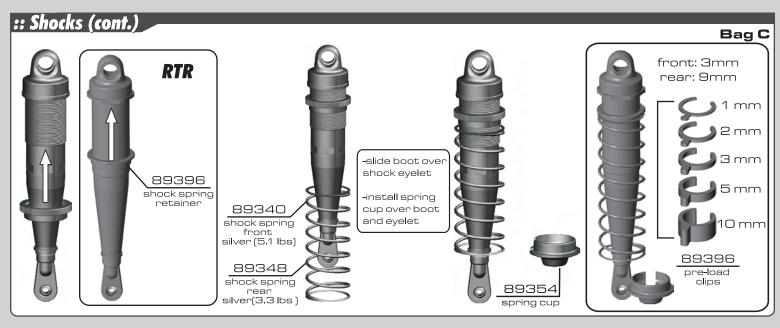


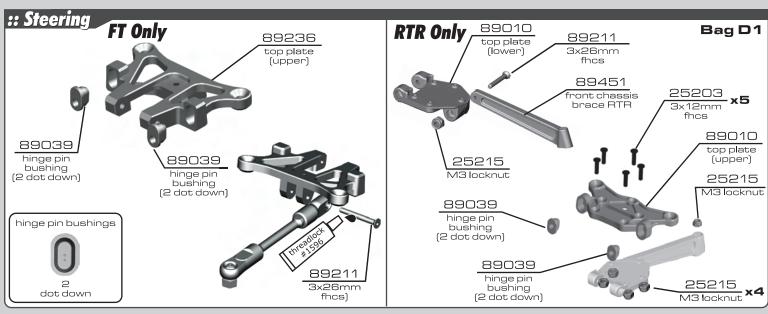


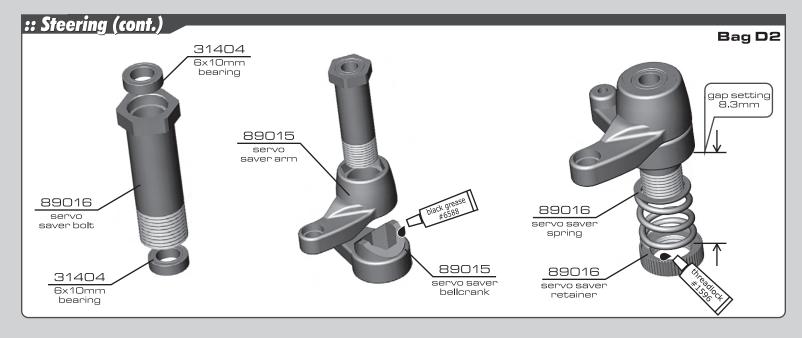


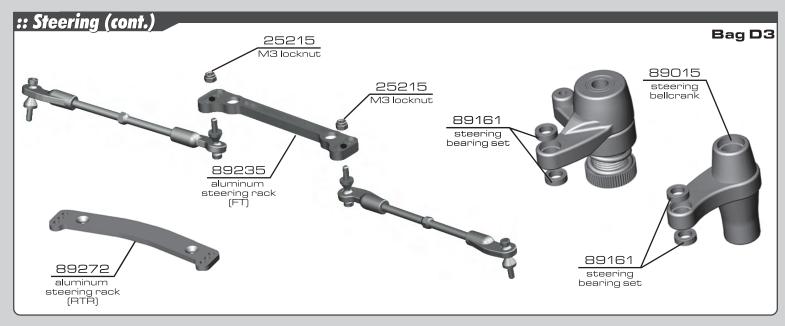


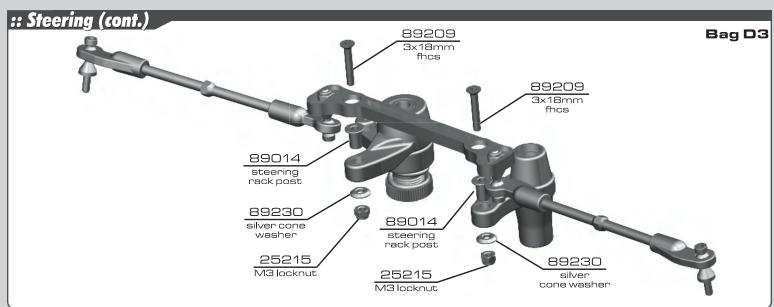


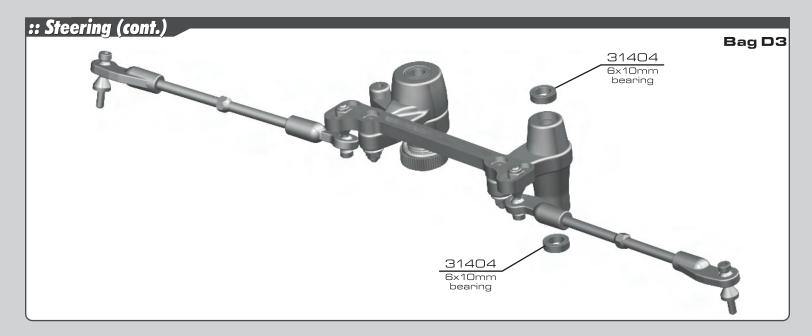


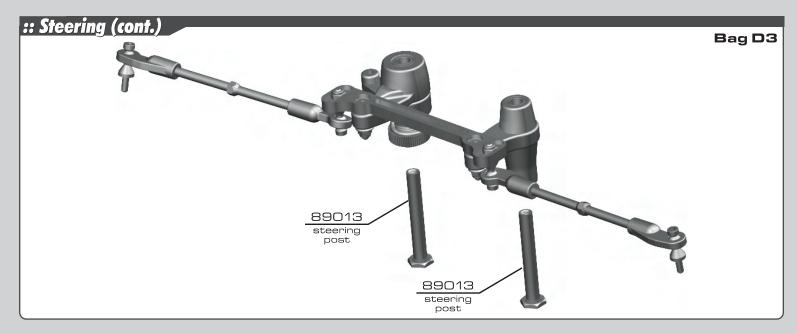


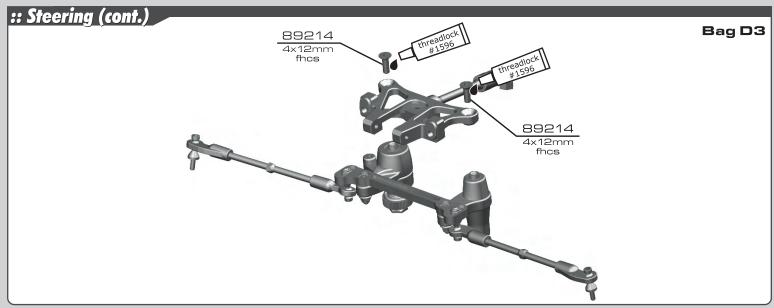


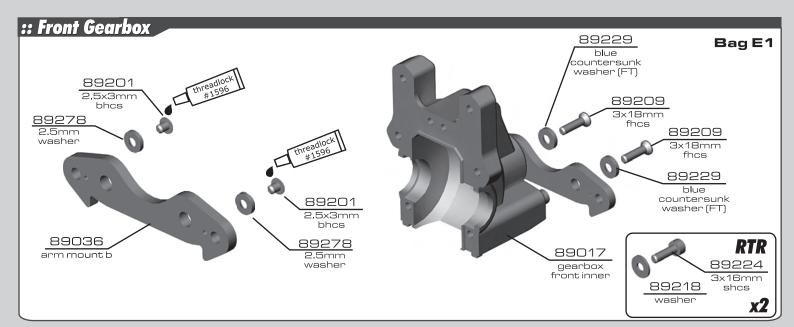


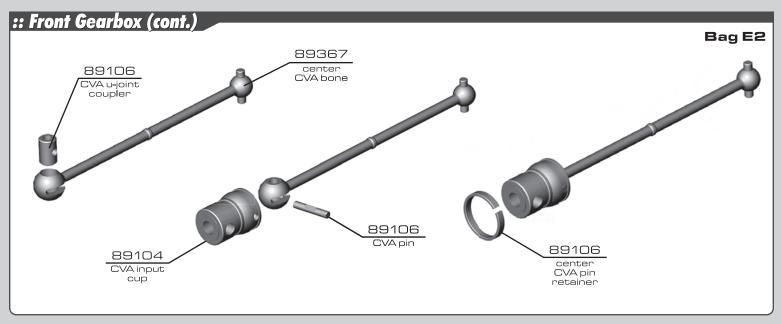


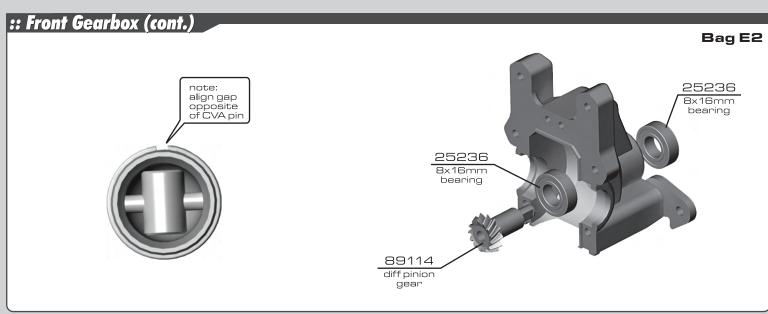


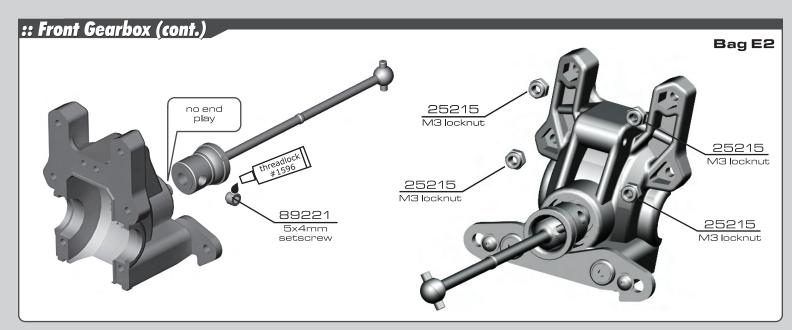


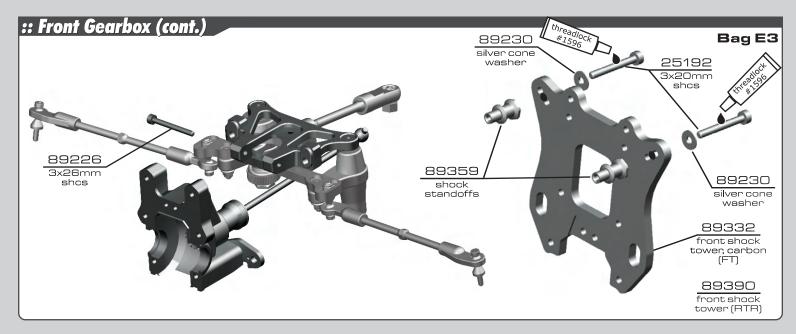


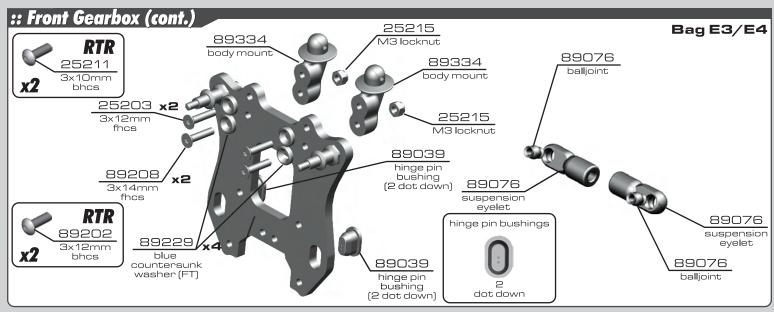


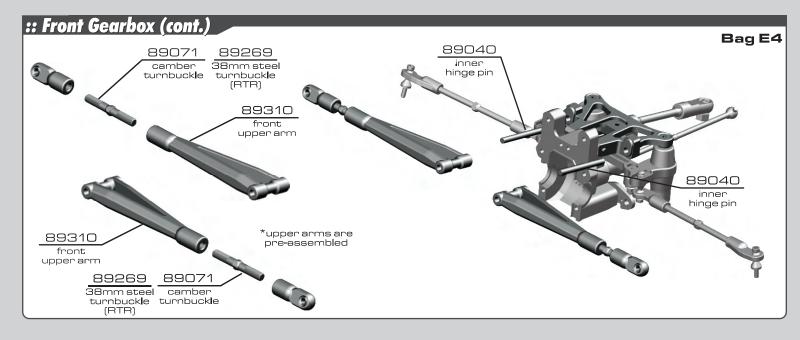




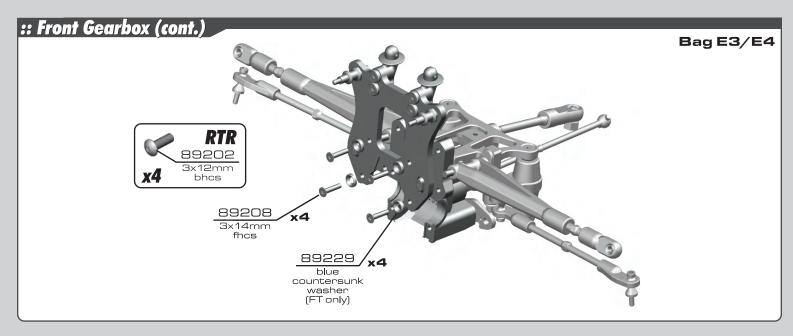


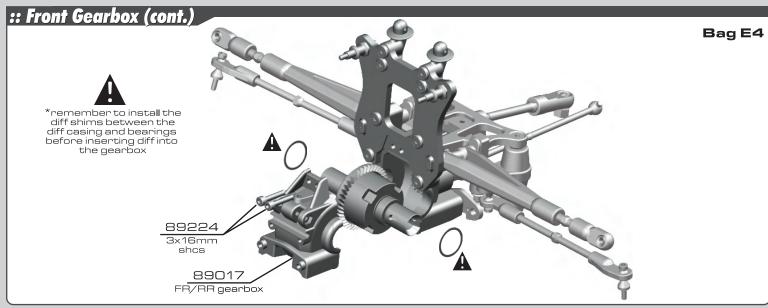


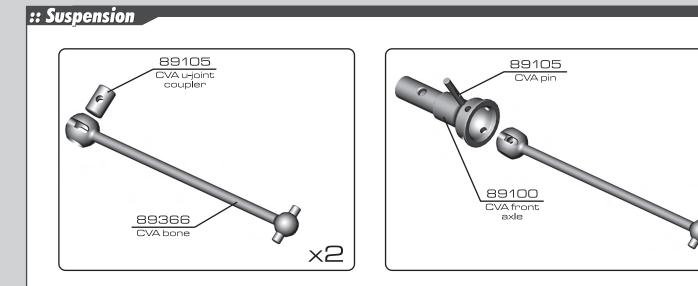


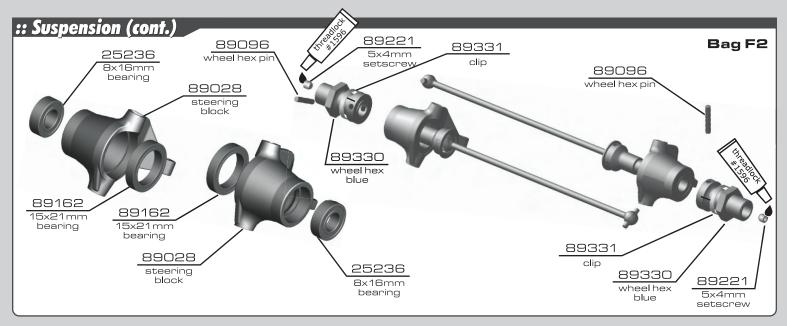


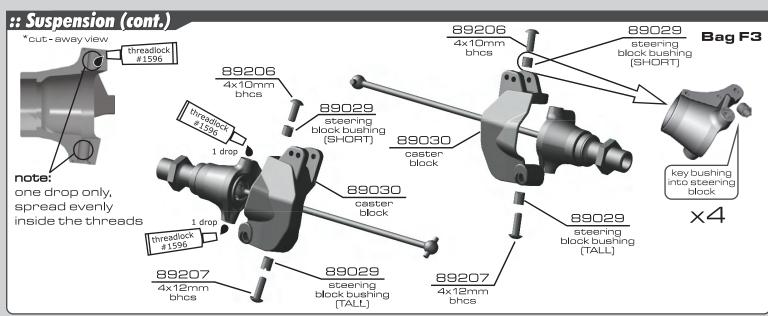
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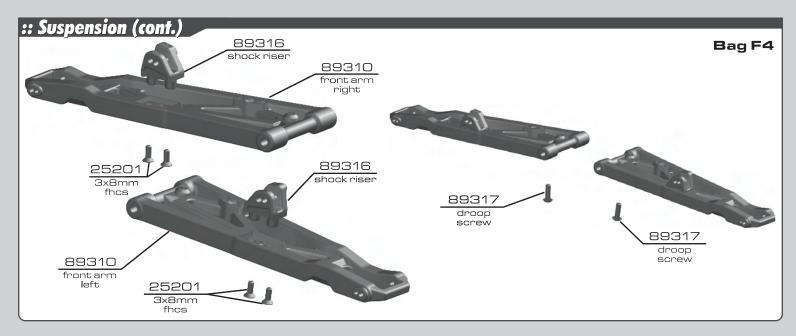


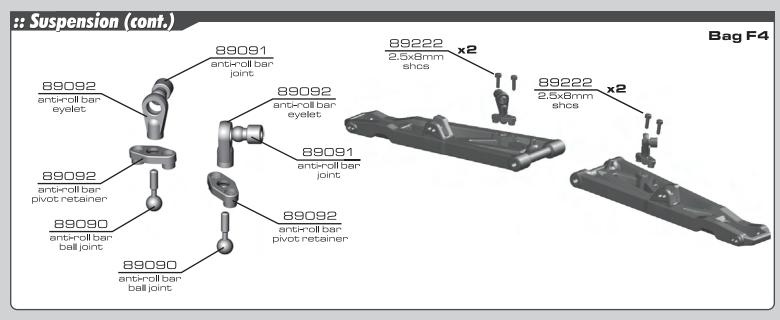


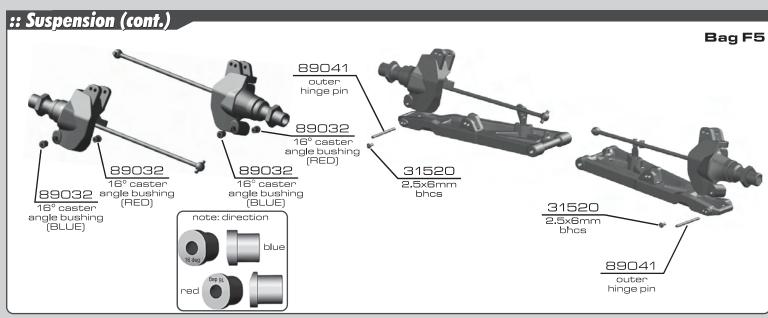


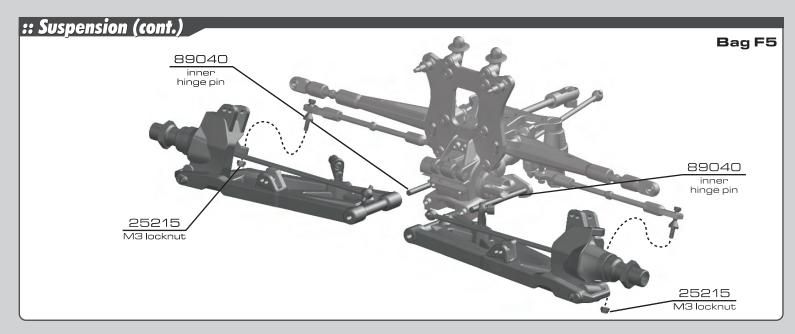


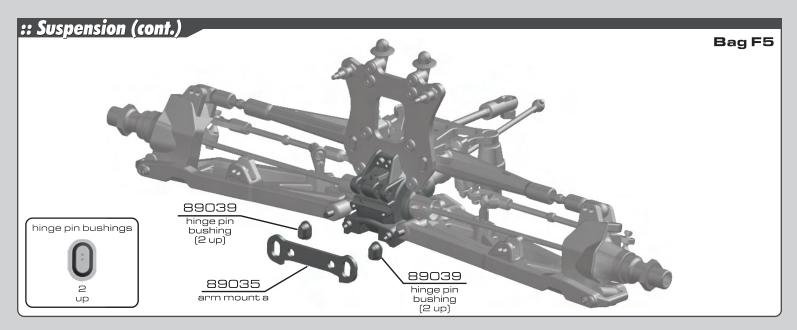


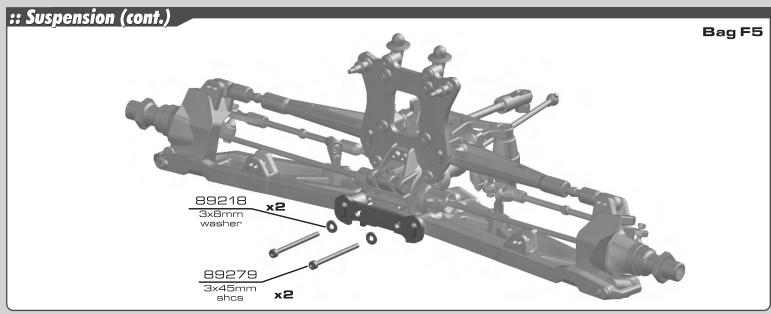


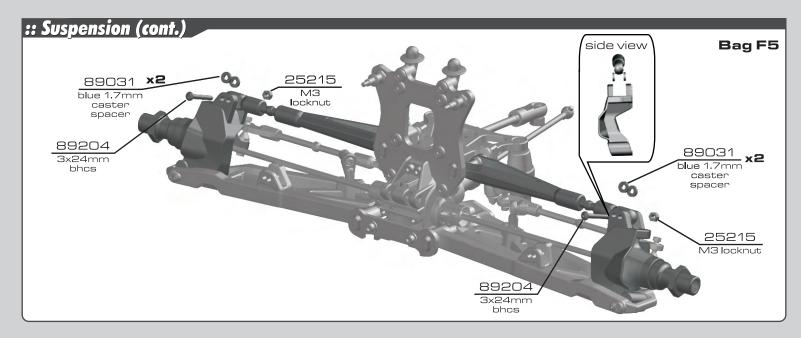


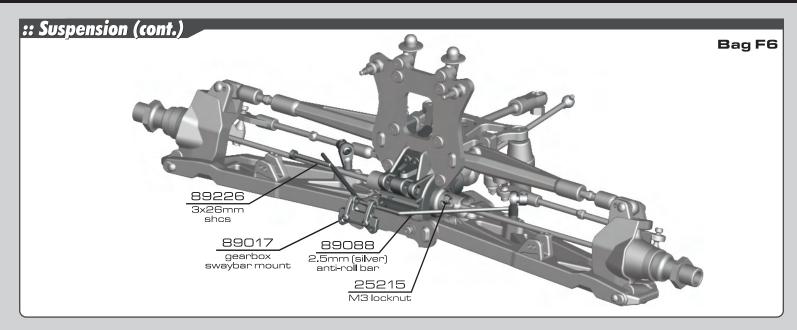


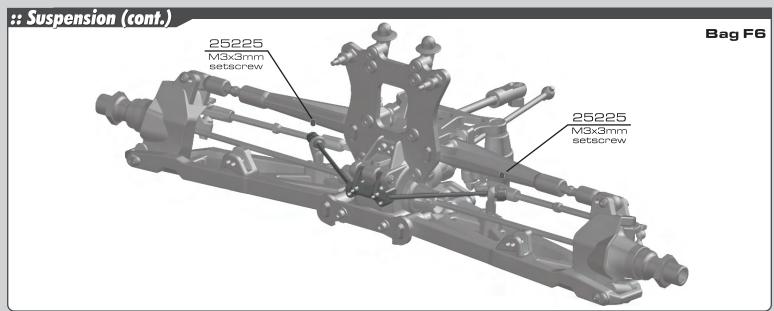


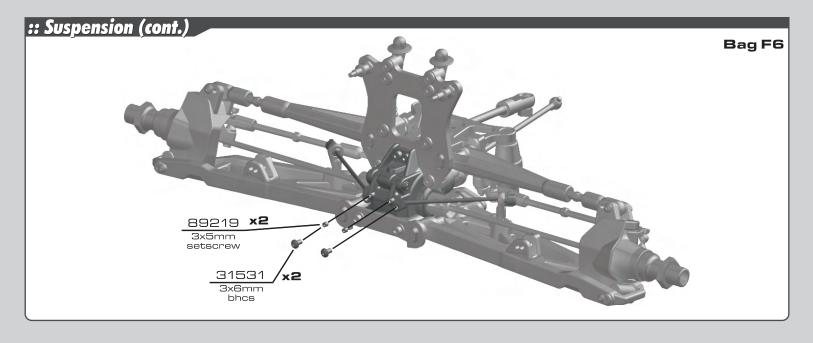


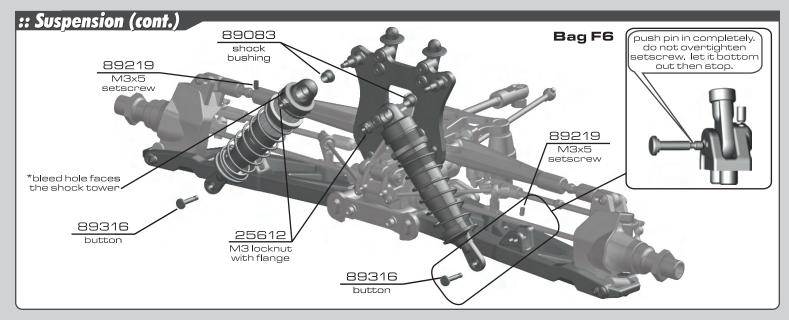


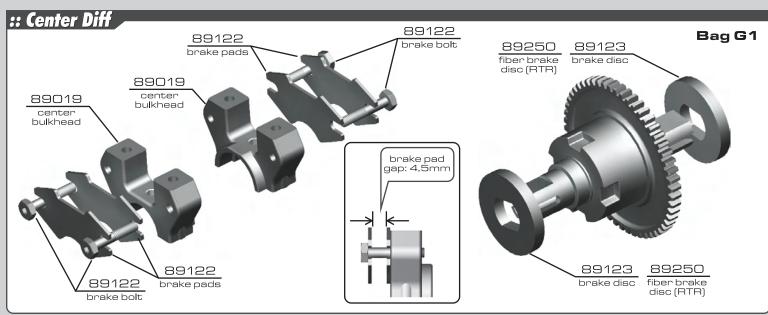


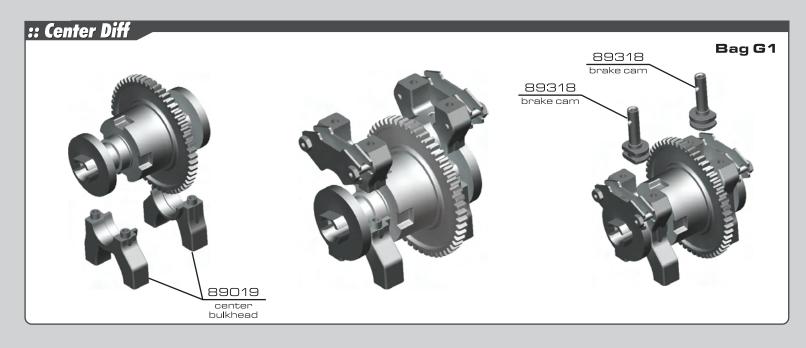


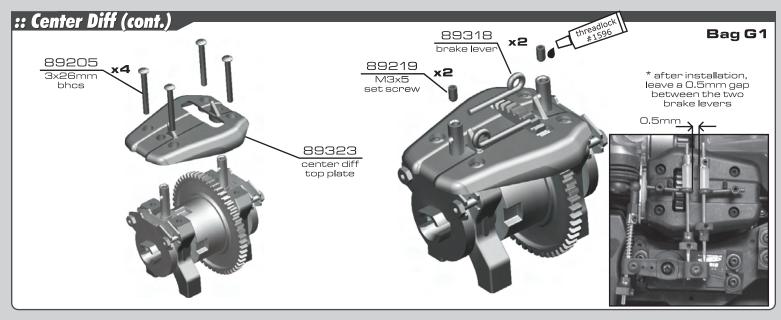


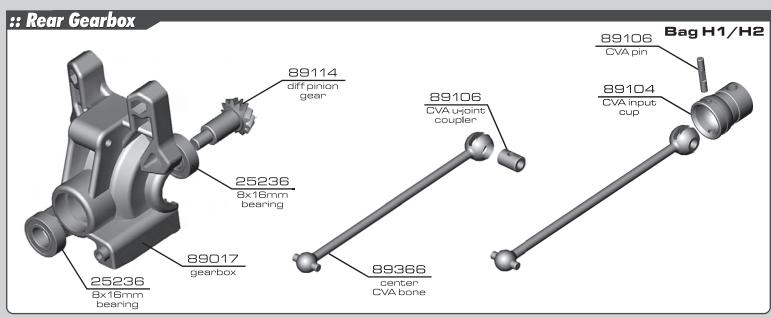


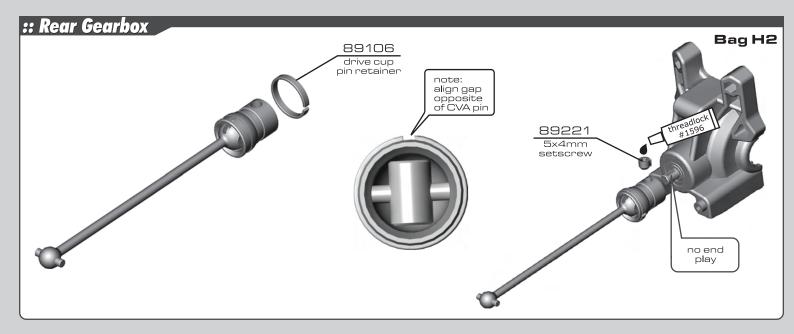


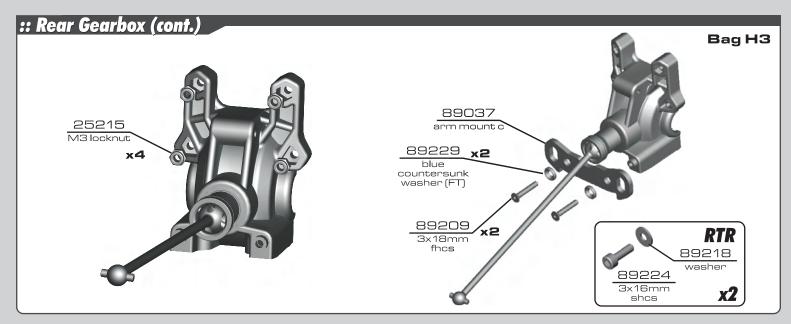


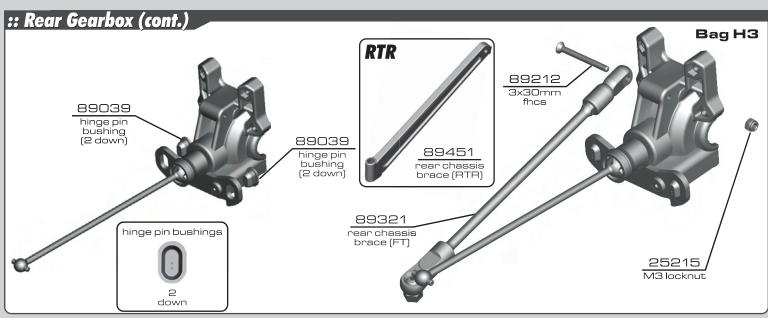


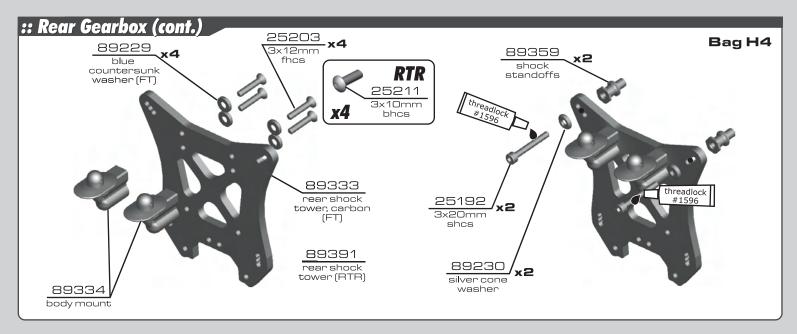


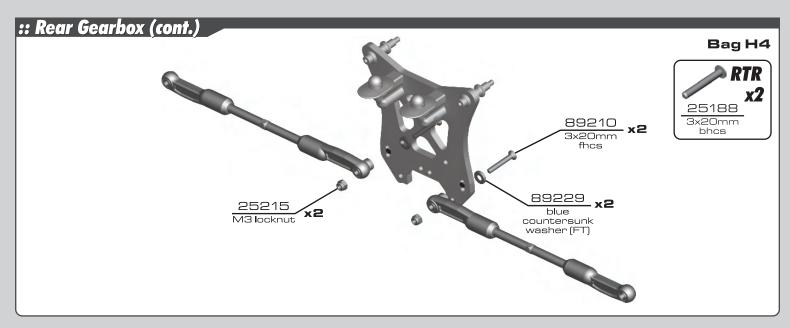


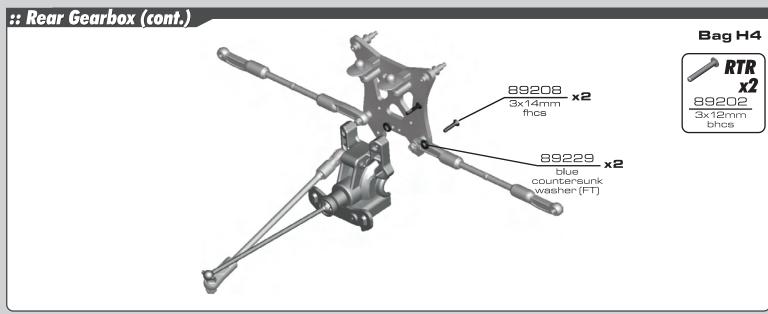


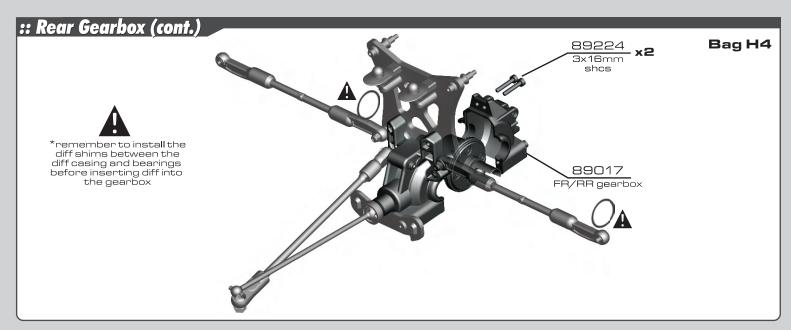


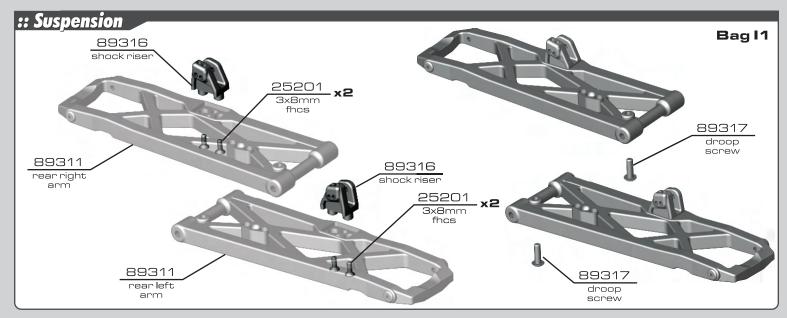


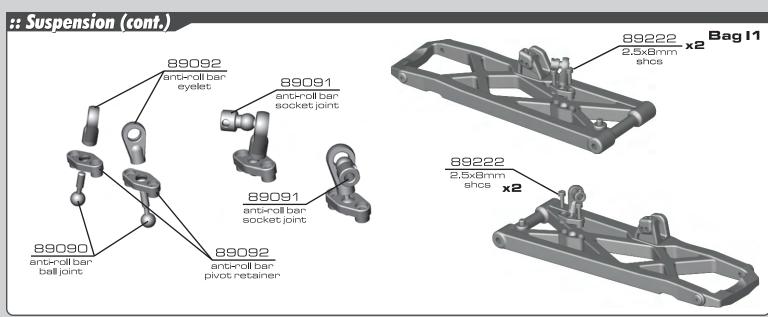


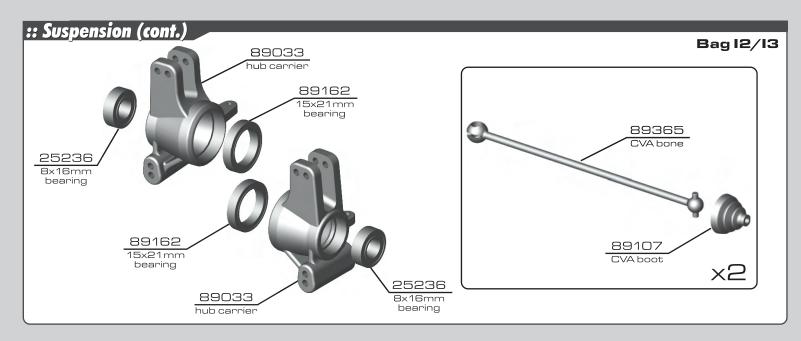






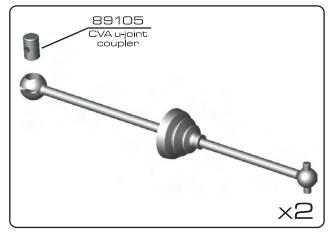


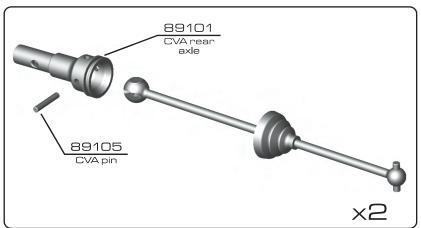


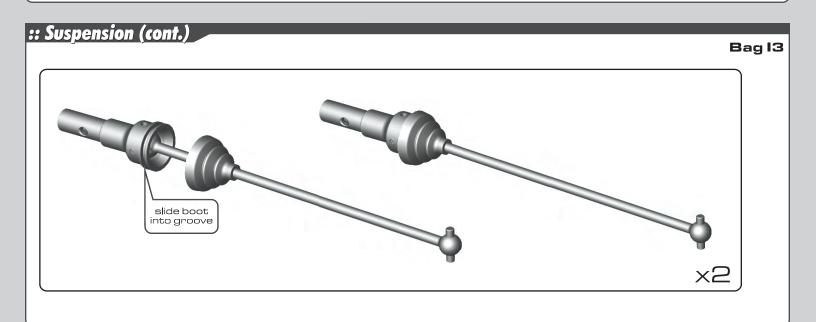


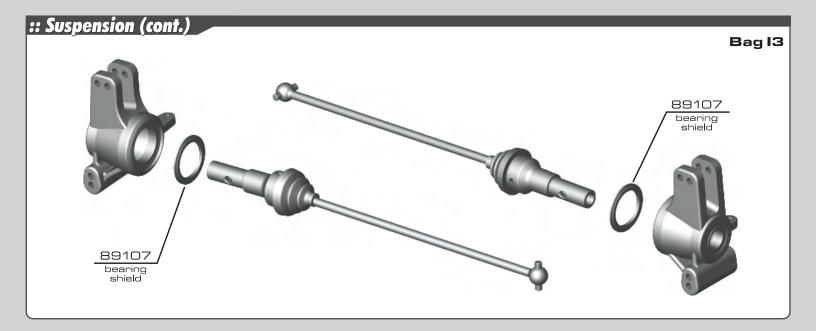
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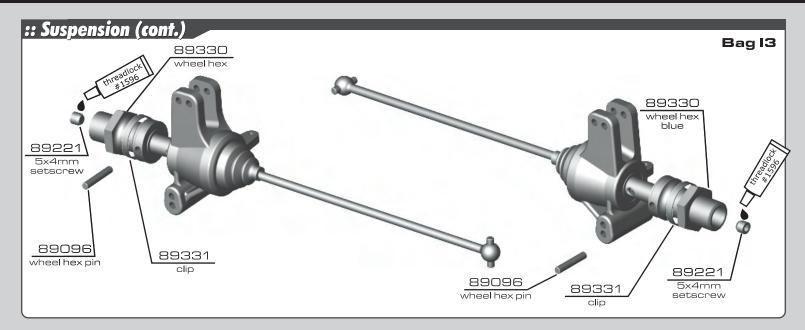


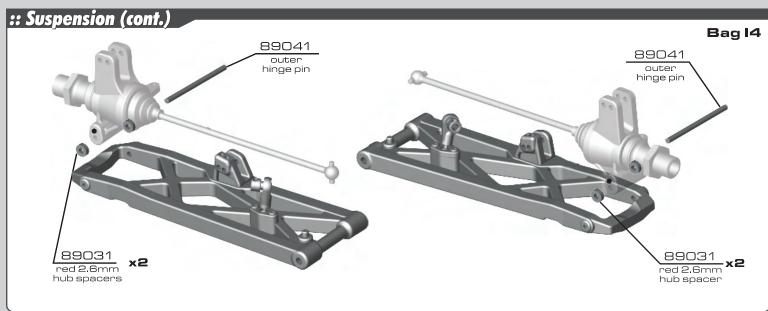


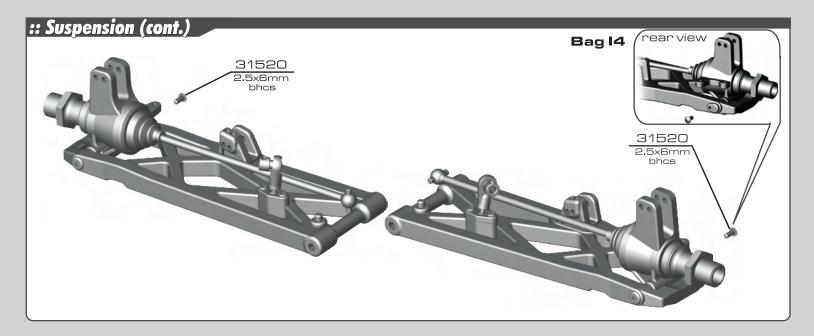


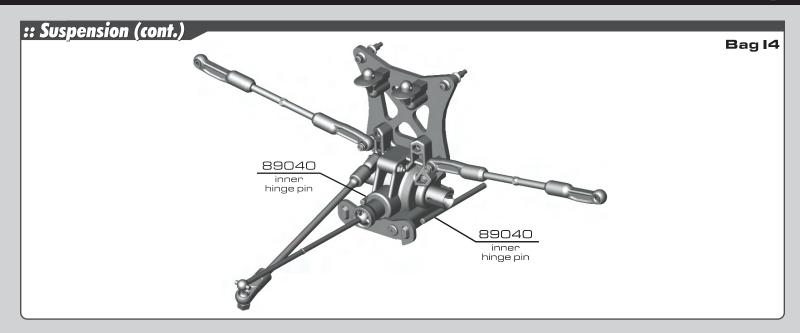


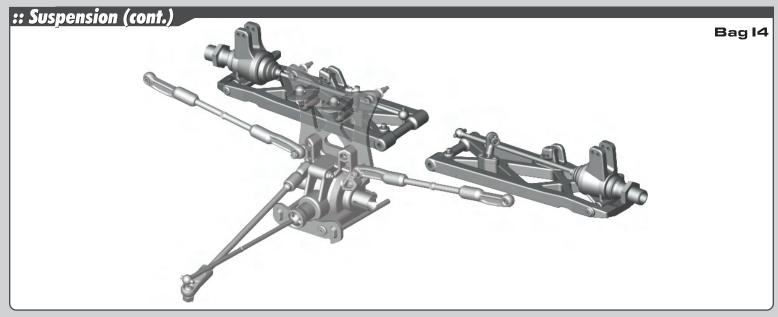


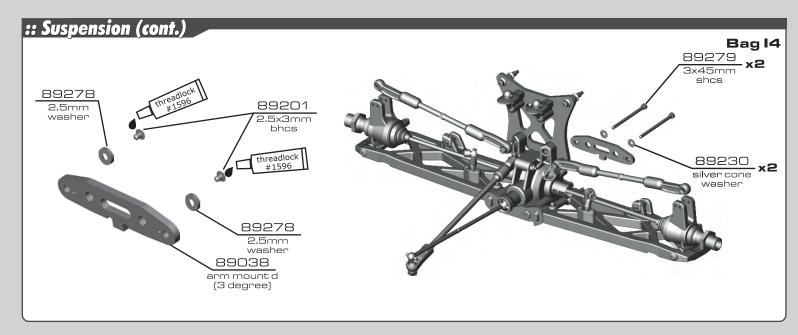


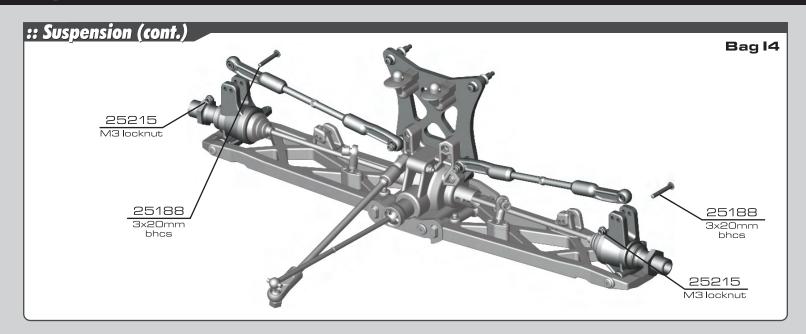


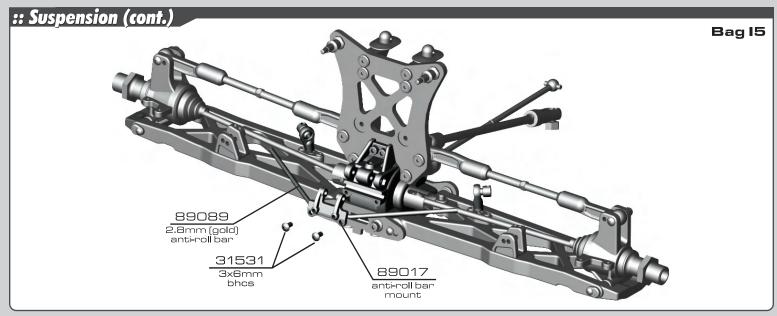


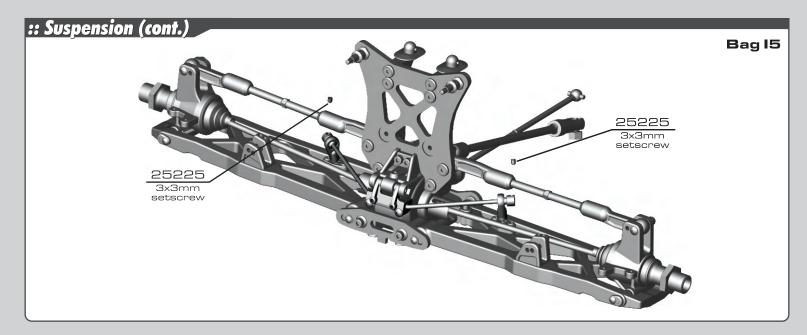


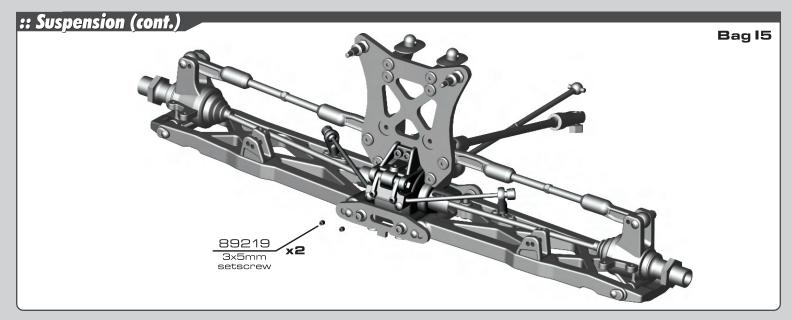


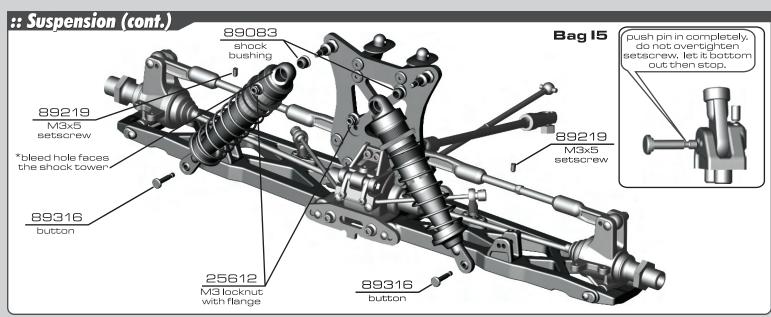


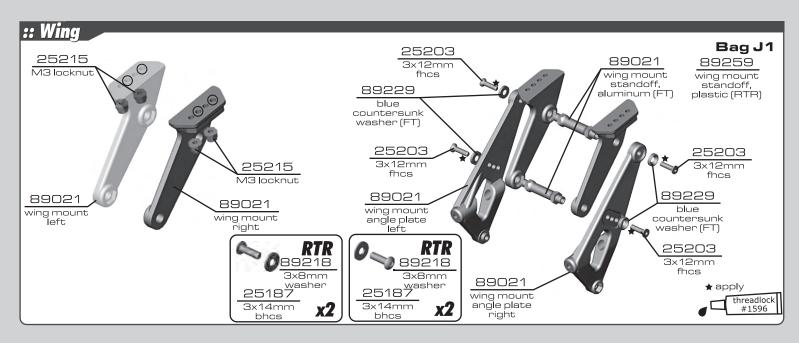


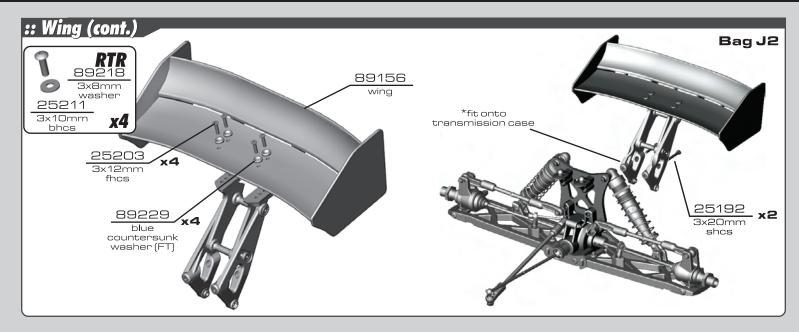


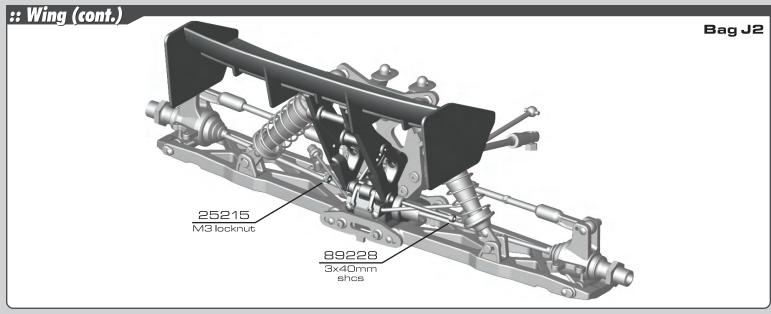


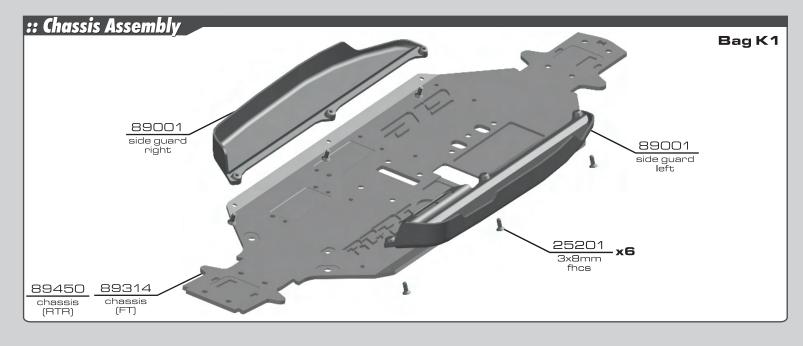


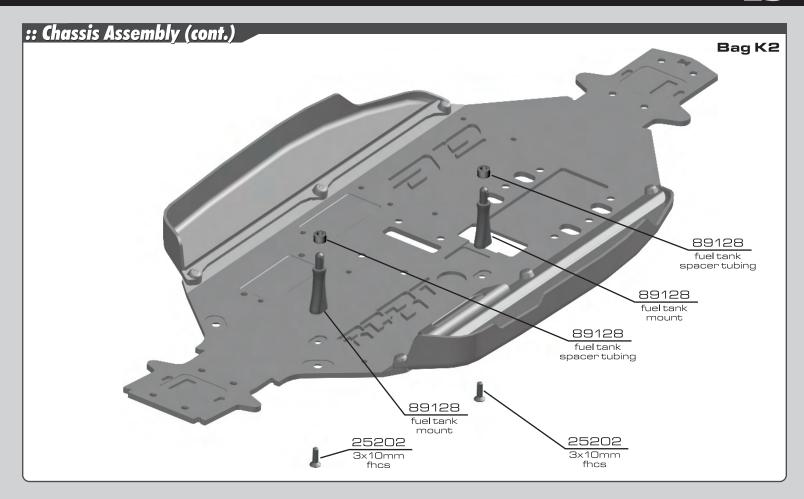


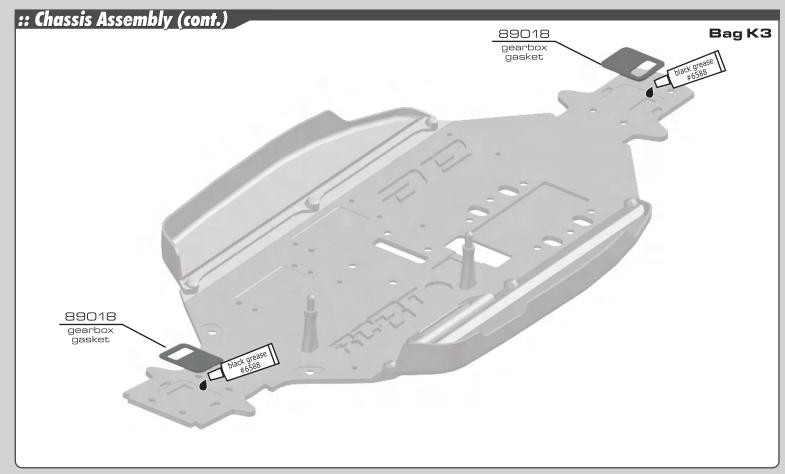


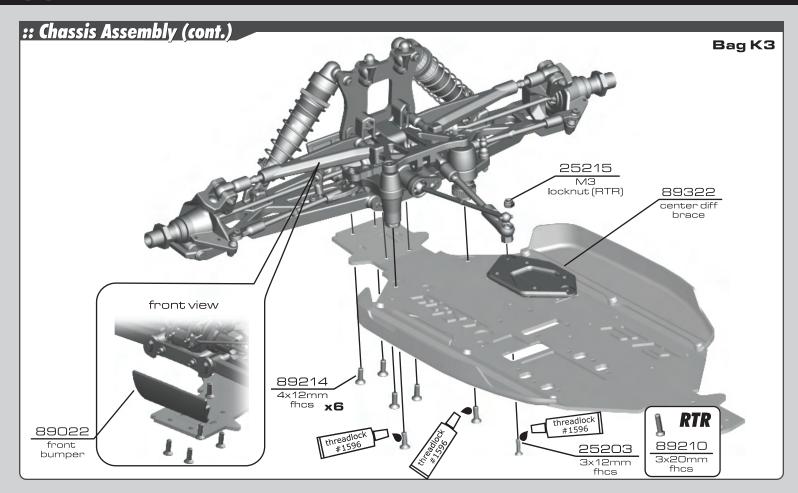


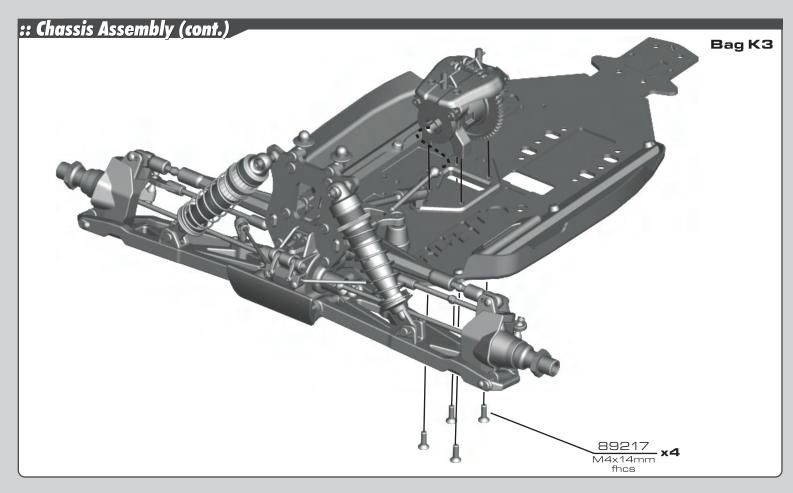


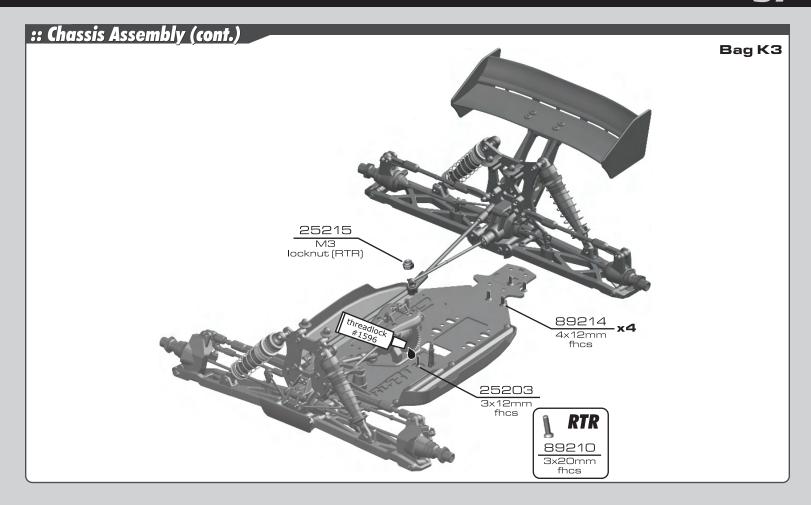


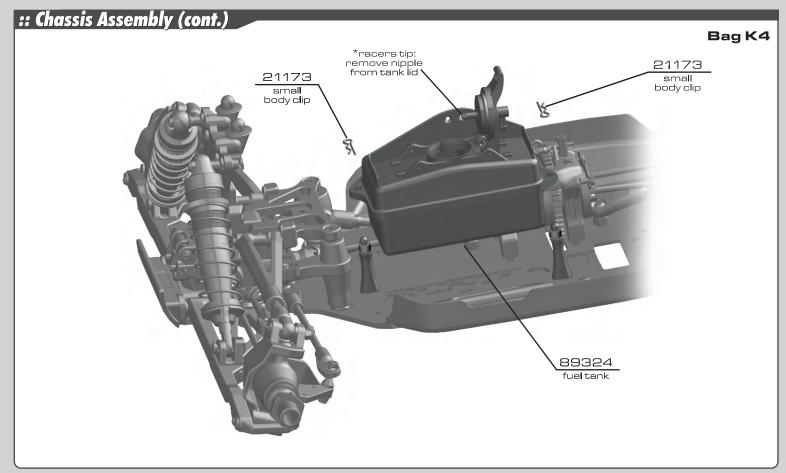


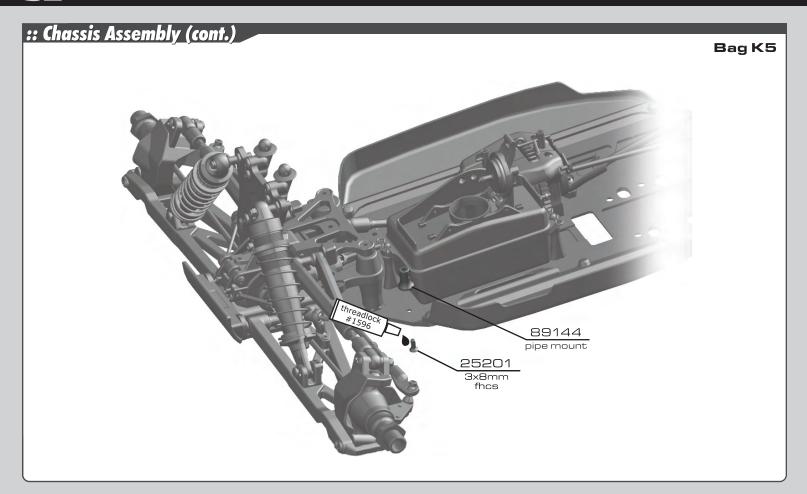


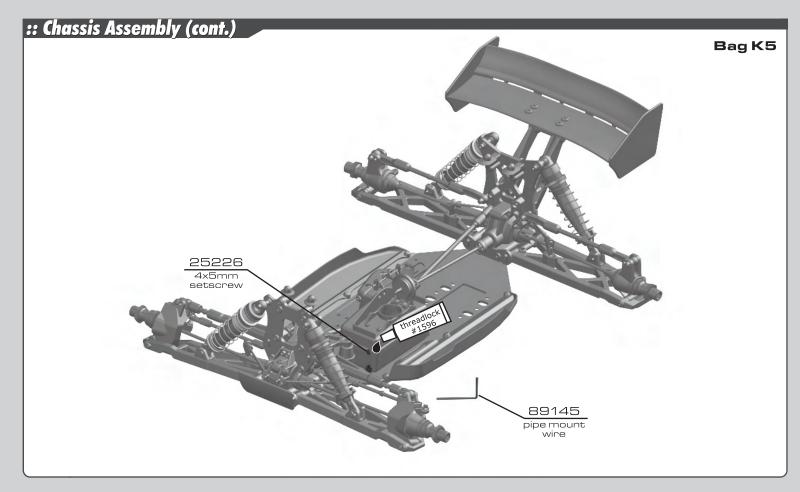


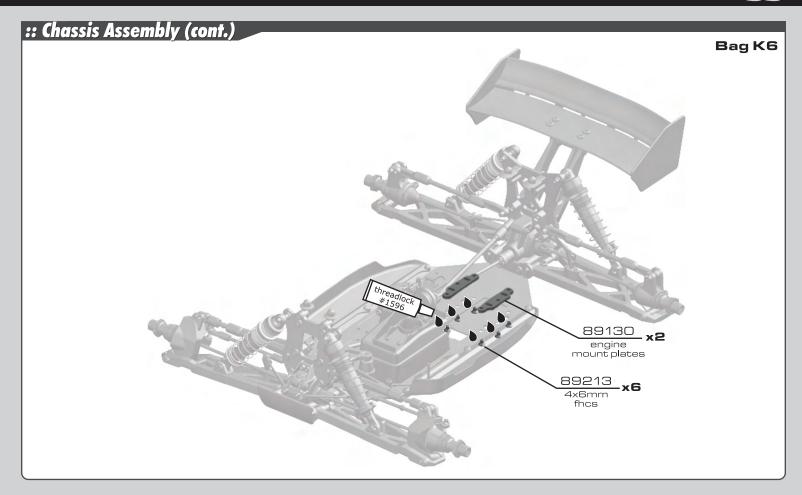


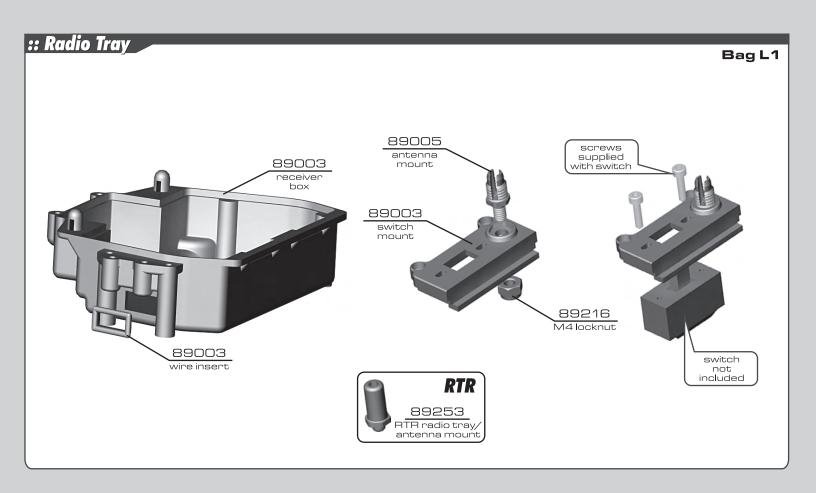


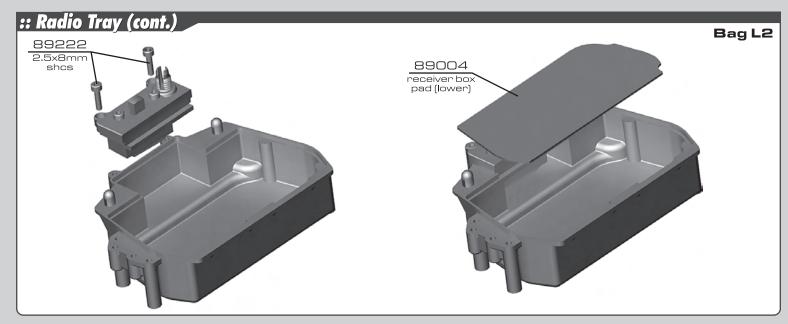


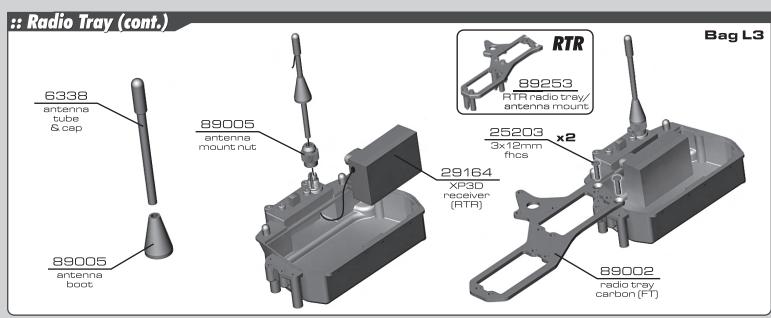


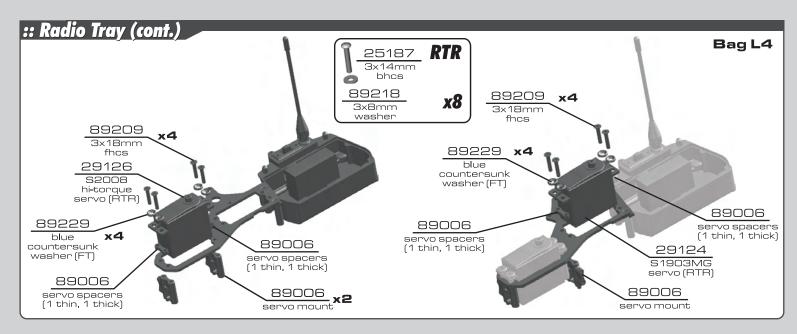


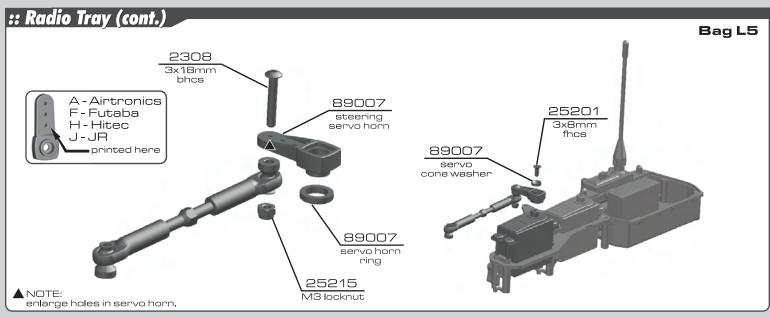


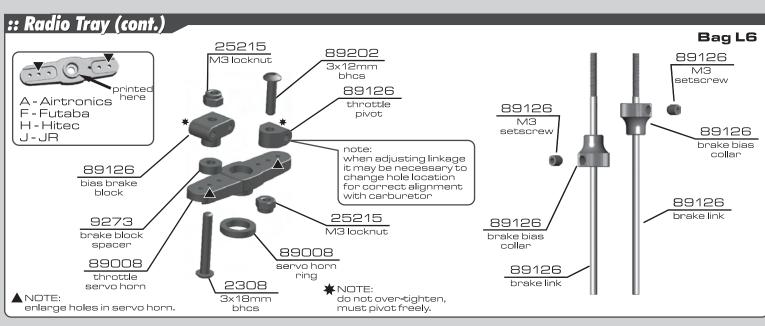


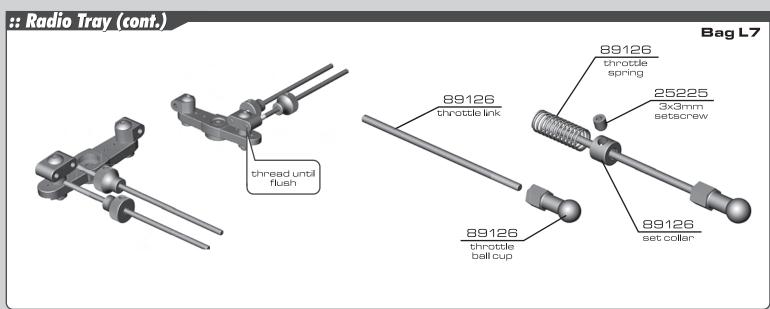


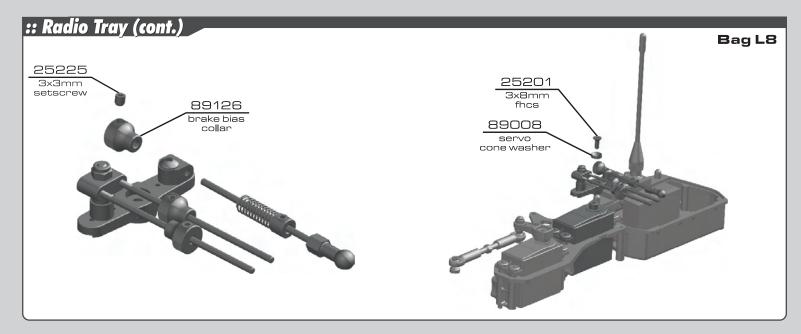


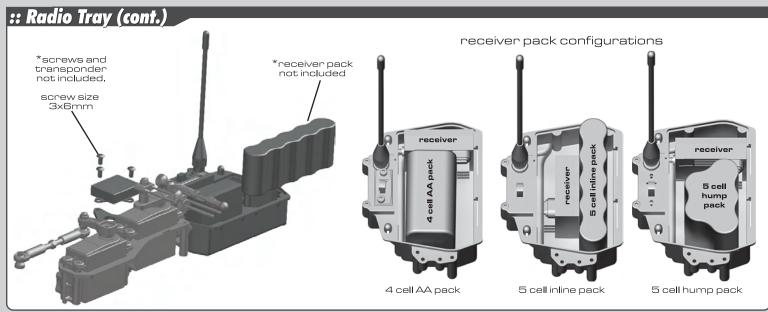


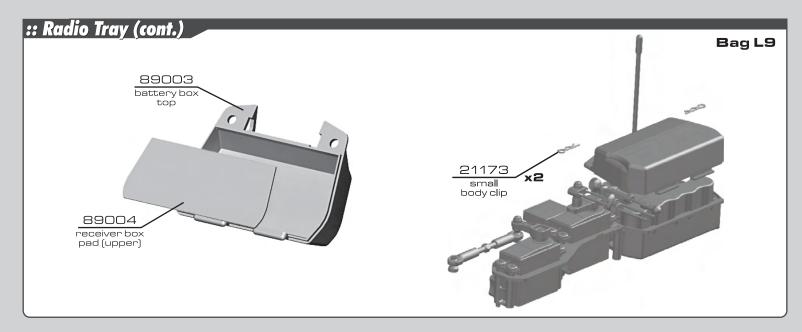


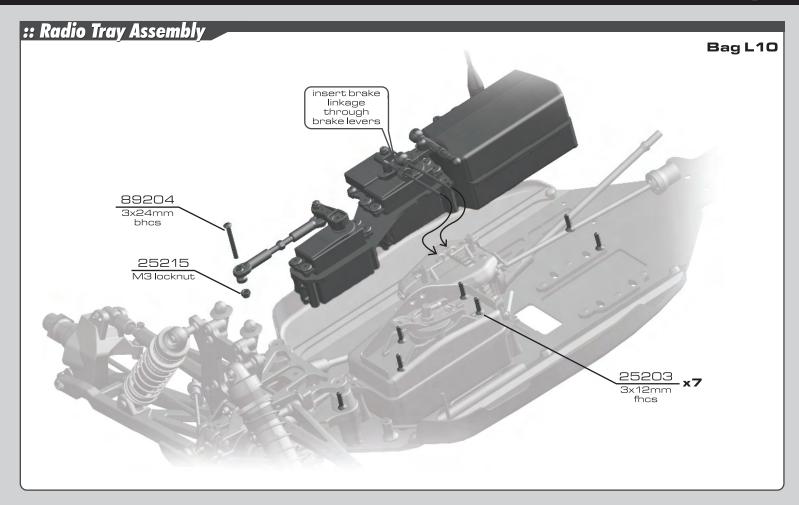


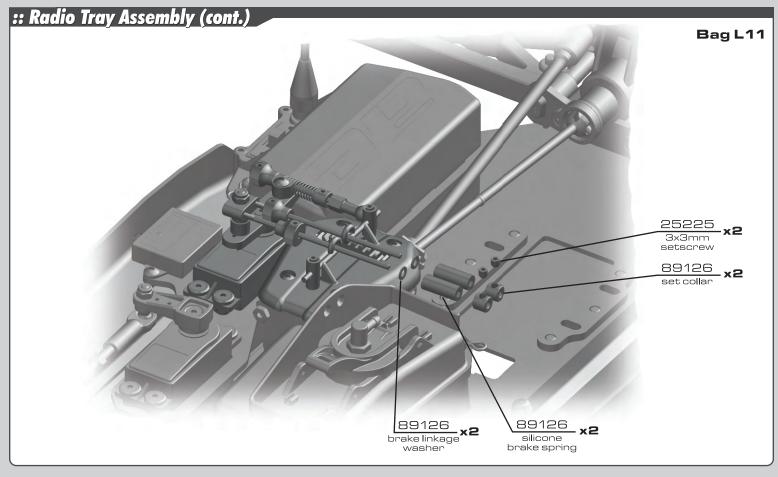


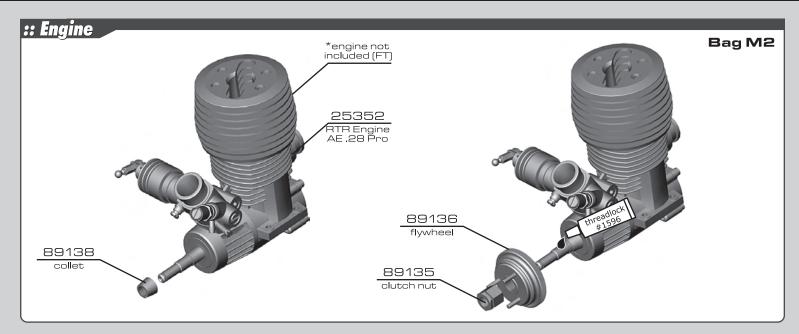


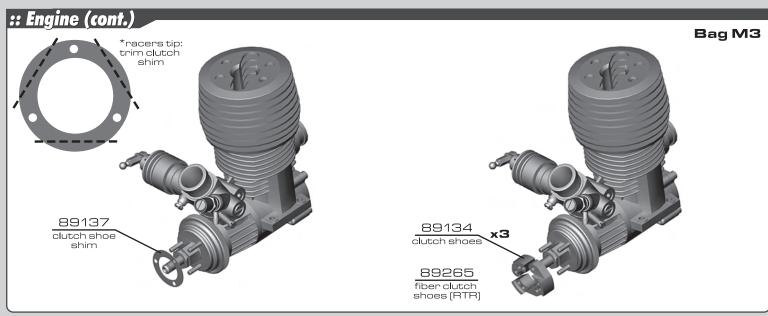


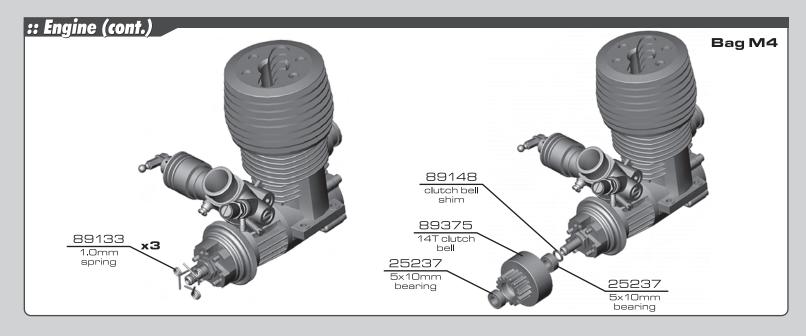




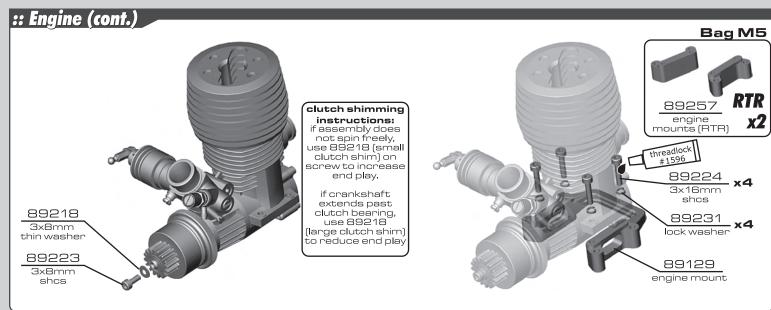


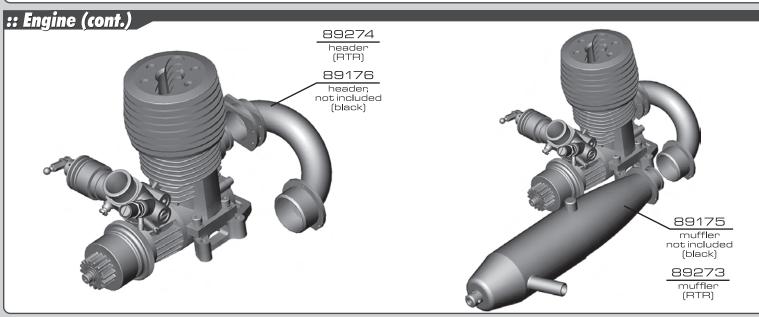


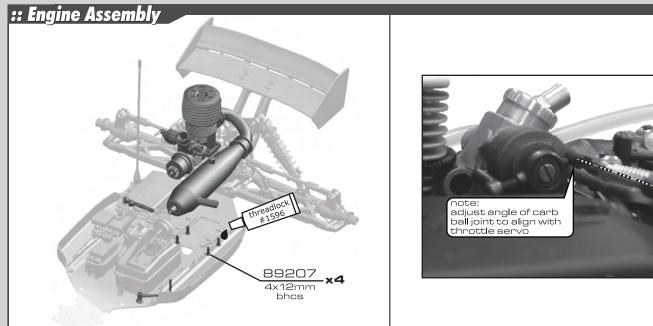




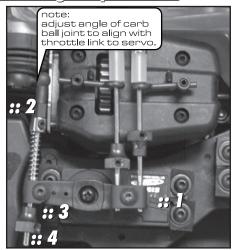
Bag M6



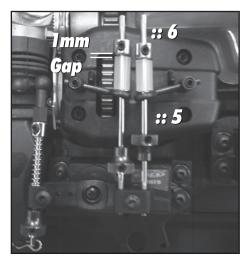




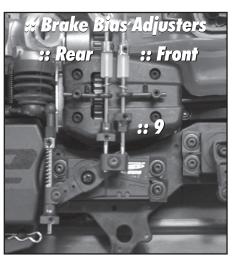
:: Linkage Adjustment



- 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.

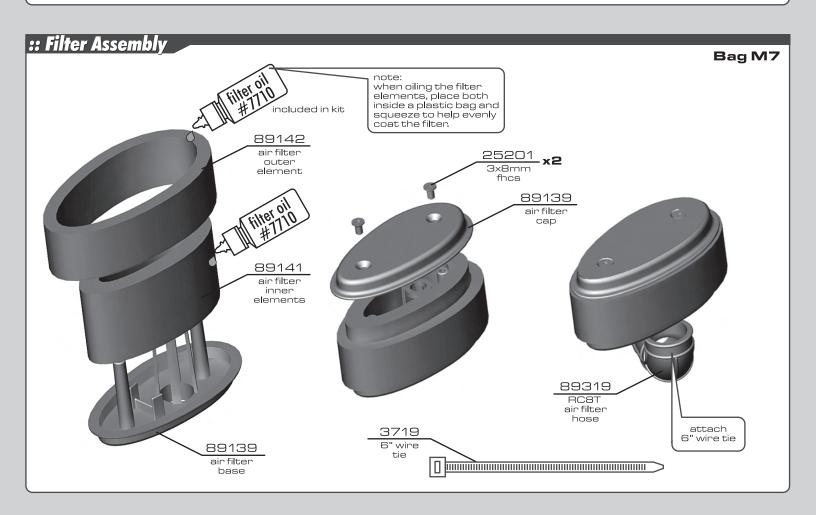


- 5: pull cams to engage brakes. set collar (with brakes engaged) to have 1 mm gap between tubing and collar. remember: transmitter is still on during this step.
- 6: trim off excess brake link wire.

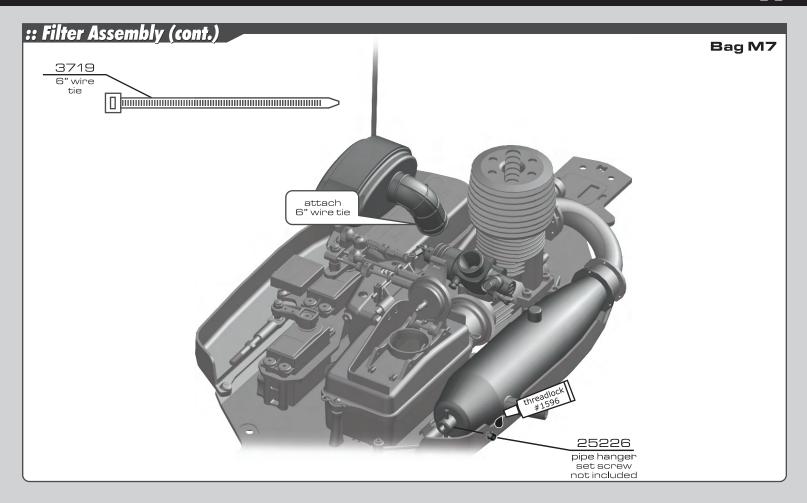


- 7: set throttle EPA max. apply full throttle on transmitter and set EPA so that the carb is full open. be careful not to over-extend the carb.
- 8: set max brake EPA at 30% as a starting point.
- 9: brake bias adjusters: thread the adjuster into the mount to achieve stronger brakes on that end of the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

!DO NOT START ENGINE FOR THIS STEP!



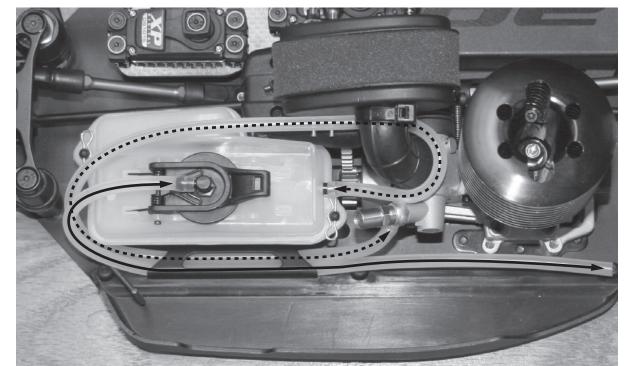
Bag M1

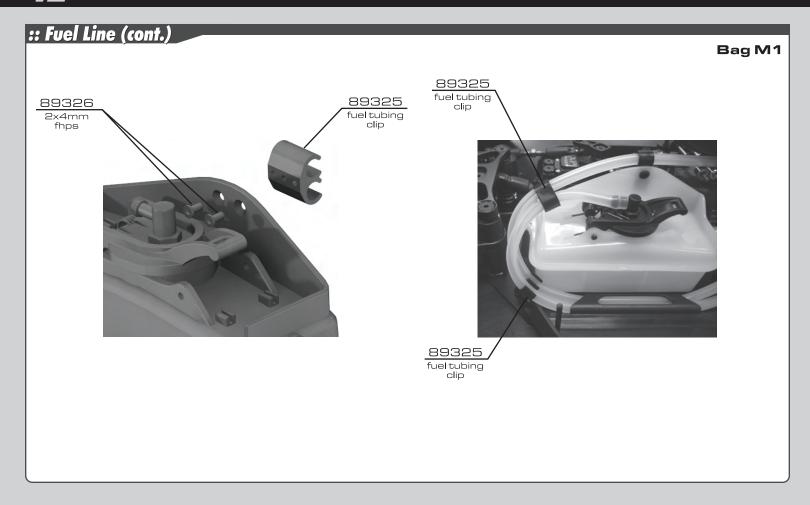


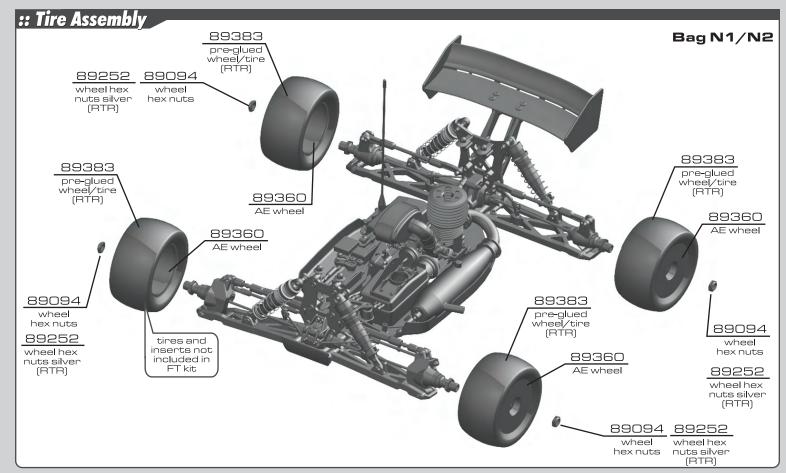
:: Fuel Line

pressure line from fuel tank lid to exhaust pipe nipple

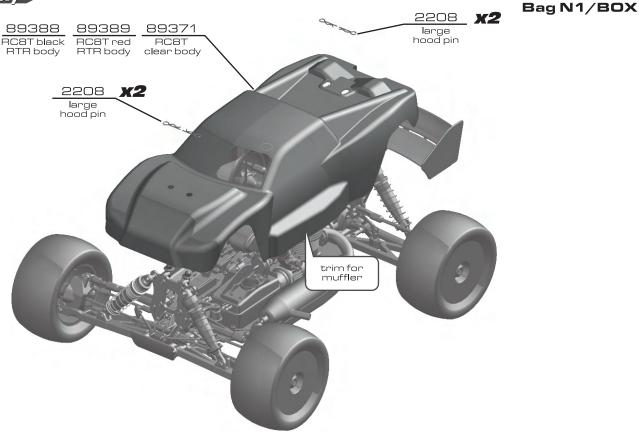
fuel line from fuel tank to carburetor











:: Building Tips

Tires:

The tires need to be glued to the wheels using any fast-curing FT Tire glue (CA) (AE Pt# 1597). This is available at your local hobby shop. Make sure to clean the mounting surface of the tire with alchohol for best adhesion

Gear Mesh:

To correctly set your gear mesh, follow the steps below:

- 1. Loosen engine mount screws so you can slide your engine and mount.
- 2. Slide engine and mount until the clutchbell gear comes in contact with the spur gear. Tighten engine mount screws. Hold the spur gear in place and 'rock' the clutchbell gear. There should be a little 'free-play' between the gears.
- 3. If you have a small amount of 'free-play', continue building your RCST. If not, go back to Step 1.

Receiver Pack:

Your RC8T does not come with a receiver pack. It is recommended that you use a 5-cell 1000mah pack (minimum) in either stick (AE Pt #613) or hump (AE Pt#612) pack configuration (your RC8T will accept either). Charge your pack per the battery manufacturer's instructions. This will need to be done before you can setup up your RC8T. (RC8T RTR requires 4AA batteries for the included battery holder, or they can be replaced with #612 or #613 rechargeable receiver packs).

Engine Tuning:

Follow the manufacturers instructions to correctly tune your engine. You will need to adjust the fuel mixture according to altitude, weather, etc.

Clear Body (Factory Team only):

Your RCST comes with a clear lexan body. You will need to prep the body before you can paint it. Wash the inside thoroughly with warm water and liquid detergent. Dry using a clean, soft, lint-free cloth. Use the supplied window masks to cover the windows from the **INSIDE** (RC cars get painted from the inside). Using high quality tape, apply to create a design to the inside of the body. Spray (either can or airbrush) the paint to the inside of the body (**NOTE**: use **ONLY** paint that is recommended for use with lexan (polycarbonate) plastics. If you don't, you will destroy the plastic body!!!!).

After painting, cut the body along the trim lines. Make sure to cut holes for the engine head, body mounts, antenna, fuel tank lid, top end adjustment needle and muffler outlet. Remove the clear protective sheet before applying decals.

:: Tuning

Gearing:

Recommended Gearing: 14-54 This is a good starting point for most tracks.

When using a .28 size engine, the Team will typically change the spur gear to a 50 tooth. Other optional gearing for .21 on a smaller track will be 13-52 or 13-54.

Differential Fluid:

Team Associated includes a complete bottle of 7,000cst diff oil. You can also provide your own oil and try one of the optional setups.

Standard differential fluid setup: Front = 7,000cst; Center = 7,000cst; Rear = 7,000cst. Optional diff setup 1 (bumpy outdoor track):

Front = 7,000cst; Cener = 10,000cst; Rear = 3,000cst.

Optional diff setup 2 (high grip track):

Front = 10,000cst; Center = 15,000cst; Rear = 3,000cst.

Front Differential:

Use the standard setup for most cases. Try 10,000cst to 15,000cst to get less low speed steering and better acceleration out of turns.

Center Differential:

Use the standard setup for most cases. Many racers will try thicker oil (10,000 or 15,000cst) for harder acceleration out of turns.

Rear Differential: Start with the standard setup. For expert drivers, the most popular setting for truggy is 3,000 cst. the thicker 7,000cst kit oil will rotate less in the turns and accelerate straight on power. The thinner oil (2,000 or 3,000cst) will give more low speed traction.

Caster:

The supplied caster block inserts are 16 degrees. Standard kickup is 9 degrees (2 dot - up insert). You can reduce caster to 14 degrees for smoother steering (also adjust upper caster spacing with both shims in front of the ball joint) and up to 18 degrees for more steering (also adjust upper caster spacing with both shims behind the ball joint).

Front Upper Pivot Insert:

The standard insert is 2 dot-down. Going up (2 up, 3 up - 1 mm each) will give more turn in, but less steering on exit. going down (2 down, 3 down) will reduce turn in, but give more steering on exit.

Front Caster Block Location:

The standard long location will work the best for most tracks. going to the short front link will give you less steering, but can make the car more predictable in bumps and exiting turns.

Steering Rack Location:

The standard middle location will work the best for most tracks. Going to the back hole will give the car more aggressive steering, especially off-power at low speed. Going to the front hole will give more steering, especially noticeable on power through faster sweeping turns.

Front Camber:

A good starting camber setting is -2 degrees. Positive camber, where the top of the tire is leaning out, is typically not recommended.

Front Toe-In:

Zero degree toe-in (tires pointing straight forward) is a good starting setting. You can increase turn in by adding 1-2 degrees of toe-out (front of tires point slightly out). Front toe - in is not a typical tuning adjustment used by the Team.

:: Tuning (cont.)

Front Ride Height:

The front ride height setting you should use most often is with 37mm of gap between the chassis bottom and the ground. Check the ride height with the FT Ride Height Gauge (#1449) by lifting up the entire car about 8-12 inches off the bench and drop it. After the suspension "settles" into place, then raise or lower the adjustment collars as necessary.

Front Arm Hole Shockmount:

Inside on the arm will give a more responsive front end. Outside on the arm will be less responsive steering, but will be more predictable through bumps.

Anti-squat:

Anti-squat denotes the angle of the rear arms relative to the ground. The kit setting is 2 degrees, and you can also run 1 degree by changing to 3 DOWN insert in front of the rear gearbox. Run the 1 dot insert to get 3 degrees of anti-squat. Less antisquat lets the suspension work more over the bumps, but it will sacrifice the ability to square up on power.

Rear Camber Link Length & Vertical Adjustment:

On the RCST you can change the length of the camber link on the hub, or adjust the inboard location on the tower. The longer link will give the feeling of the most grip, but it will not be as responsive to square up on throttle, and might get loose if the truggy is driven hard. This can easily be corrected by running the shorter link on the hub, but it will sacrifice some forward grip.

Changing to a higher location on the tower will be a smaller adjustment than changing the length of the upper link. Going up on the tower location has a similar effect as the longer link, but not as drastic. For example, if you change to the short rear link on the hub and you need to gain more forward grip, try raising the link up on the tower.

Rear Hub Hinge Pin Height:

The kit setting of the upper hole gives more rear grip on turn in, and good forward traction, but it might have difficulty squaring up out of turns. Changing to the lower hinge pin hole in the hub is one of the best adjustments to make to the rear end, more responsive on throttle, and to give more side grip in the turns.

Rear Hub Spacing:

You have 3 options for rear hub spacing, FWD, MIDDLE, & BACK. The kit setting provides a good balance of rear traction and steering, and will be used most often. Moving the hubs FWD will give more rear traction for low grip tracks. You can use the hubs BACK on high grip tracks. Also, you can replace the included shims to get intermediate settings.

Rear Camber:

A good starting camber setting is -2 degrees. Use the included #1719 camber gauge to set your camber. Adding a small amount of positive camber, where the top of the tire is leaning out, will tend to improve straight-line acceleration on loose tracks.

Rear Ride Height:

The rear ride height setting you should use most often is with 42mm of gap between the chassis bottom and ground. Check the ride height with the FT Ride Height Gauge (#1449) by lifting up the entire truck about 8-12 inches off the bench and drop it. After the suspension "settles" into place, then raise or lower the adjustment collars as necessary.

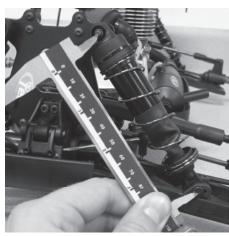
Rear Arm Hole Shockmount:

Inside on the arm will give less entry steering, accelerates better straightline through bumps, but may lack side bite. Outside on the arm will be less grip, more steering, but will be more predictable when it breaks traction.

:: Tuning (cont.)

Droop Settings:

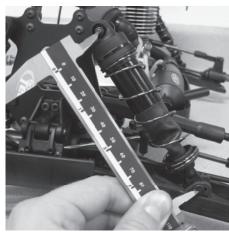




Step 1: With only the bottom of the shocks attatched, the droop screws tightened all the way, and the chassis above your working surface so the arms are at full extension, you should be able to easily slide the top of your shock over the standoff screw, while leaving the shock at full extension. If the mounting hole of the shock cap is above or below the standoff screw, adjust the droop screw accordingly. Repeat for all corners of your vehicle. Measure from the center of the standoff screw to the center of the shock riser button to get your FULL DROOP setting. The front shocks should be 115mm, while the rear shocks should be 126mm.



Step 2: Finish installing the shock to the standoff. Set your vehicle to your desired droop setting. To increase your droop turn the droop screw (from the top) counter-clockwise (loosen), turn the droop screw (from the top) clockwise (tighten) to decrease your droop. Remember, never back the screw out beyond full droop or you could risk damage to your vehicle.



Step 4: Measure from the center of the shock standoff screw to the center of the shock riser button to get your final droop setting. The front shocks should both be set at the same lenght, as should the rear shocks. * The normal droop setting is between 0-5mm from the FULL DROOP measurement.

Front Droop: Increasing front droop (loosen droop screws) will increase off-throttle steering. It also allows the front end to lift more, giving more rear grip and less front grip on-power. Remember to never loosen the screws beyond the FULL DROOP setting. Decreasing front droop (tighten droop screws) yields more on-power steering and quicker response at the expense of some stability in bumpy sections. It will also give less off-throttle steering.

Rear Droop: Increasing rear droop (loosen droop screws) will increase traction in bumpy sections, but will reduce high-speed stability. Remember to never loosen the screws beyond the FULL DROOP setting. Decreasing rear droop (tighten droop screws) will increase stability in high speed sections, but will reduce stability in bumpy sections.

Setup Sheets:

Most often, the best way to get your car handling right is to go to our web site www.rc10.com and click on the Support link, then the Setup Sheets link, then RC8T setups. Our team of professional drivers help develop these setups at National events. Also, most drivers have a "base" setup that they use as a starting point for every event. Try running some of our base setups OR look for track conditions and tires that are similar to your local track and mimic that setup. Remember, each adjustment has a purpose, so copy everything from the setup sheet and then make adjustments based on the recommendations in here and in our online tuning guide at http://www.rc10.com/rc/tuning.

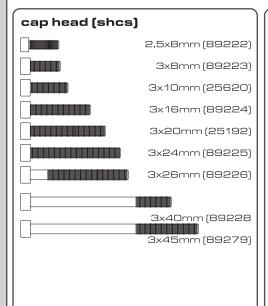


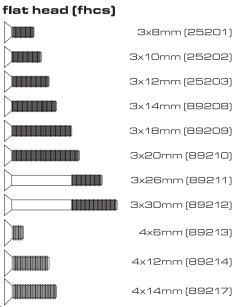
:: Driver:	: Team Associated	:: Date:
:: Track:	Standard RC8T Setup	
:: Event:	,	

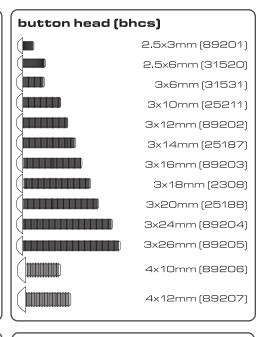
:: Event:				
Setup Sheet for Team Associated's RC8T	Rev.			
:: Front Suspension	:: Rear Suspension			
anti-roll bar: 2.2 - black 2.5 - silver 2.8 - gold hinge pin bushing	anti-roll bar: wheelbase: 2.2 - black long 2.5 - silver medium 2.8 - gold short			
steering rack: back mid front #_2 up down	camber:			
camber:2 ° BA caster:16 ° toe:0 °	toe: 3 ° hub: upper lower anti-squat			
ride height: <u>37mm</u> (kickup bushing #_2 up □down	ride height: <u>43MM</u> # <u>2</u> □up ■down			
## Front Shocks spring: (5.1 lb) silver piston: 1.3 shock fluid: 50 wt. length: 113mm shock cap:	spring: (3.3 lb) silver piston: 1.3 shock fluid: 50 wt. length: 125mm shock cap:			
:: Differentials :: Wing	:: Chassis Braces			
front fluid: <u>7000cst</u> location: □ forward enter fluid: <u>7000cst</u> angle: ■ low □ med. type:	■ back			
:: Engine	:: Gearing/Clutch			
engine: 30% recommended restrictor: temp: glow plug: fuel:	gearing: 14/54 shoes: 3 x aluminum x fiber spring: x.9mm 3x1.0mm x1.1mm notes:			
:: Notes	:: Tires			
	tire (F/R):			
:: Race and Vehicle Comments	:: Track Info			
qualify: main: finish: tq: comments:	☐ traction: ☐high ☐med. ☐low surface: ☐smooth ☐bumpy ☐blue groove ☐soft dirt ☐grass ☐clay ☐wet ☐dusty other:			

:: For more setups, visit www.RC10.com and click on 'Setup Sheets'

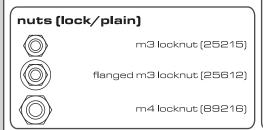
:: Hardware - 1:1

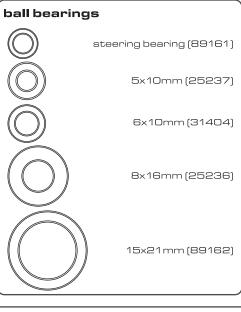


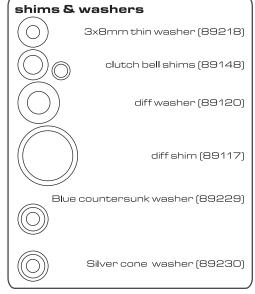












notes



:: Driver:	:: Date:
:: Track:	
:: Event:	

Setup Sheet for Team Associ	ciated's RC8T			Rev.
:: Front Suspension		:: Rear Suspension		
anti-roll bar: 2.2 - black 2.5 - silver 2.8 - gold steering rack:	inge pin bushing	anti-roll bar: 2.2 - black 2.5 - silver 2.8 - gold camber:	wheelbase: long medium short	
ride height:	ter: toe: kickup bushing # up	hub: upper lower ride height:	toe:	anti-squat bushing #
shock cap:	length:	spring:shock fluid:shock cap:	length:	
:: Differentials ::	Wing	:: Chassis B	races	
front fluid: I center fluid:	location: 🛮 forward 🔝]back standard		uminum
:: Engine		:: Gearing/Clutch		
engine: muffler: glow plug: fuel: _	temp:	gearing:xshoes:x.9mm	aluminum nx1.0mm	
:: Notes		tire (F/R):compound (F/R):_insert:	wheel:	
comments:	finish: tq:[surface: [blue grood clay we other:]high med. smooth bumpy ve soft dirt gr t dusty	rass



Associated Electrics, Inc. 26021 Commercentre Dr. Lake Forest, CA 92630 USA http://www.TeamAssociated.com http://www.RC10.com