

1:8 Scale 4WD Electric Buggy Kit Manual

# TEAM ASSOCIATED C



#### :: Introduction

Thank you for purchasing this Team Associated product. This manual contains instructions and tips for building and maintaining your new RC8e Kit. Please take a moment to read through it and familiarize yourself with these steps.

# :: RC8e Features

#### :: RC8e

- RC8e body with air scoops (#89523).
- 16mm Big-Bore molded shocks with pre-load clips.
- Upgraded dual bell-crank steering with reduced bump-steer.
- 3mm aluminum shock towers.
- Alloy steel turnbuckles.
- Caster blocks adjust 14, 16, or 18 degrees with molded inserts.
- 10mm thick arms.
- Molded suspension pivot bushings for adjustable pivot height.
- 4.30:1 ratio gearboxes.
- 3.5mm light CVA drivetrain.
- Rear molded CVA boots to keep dirt and mud out of rear joints.
- Pre-drilled RC8 wing with adjustable wing angle and location.
- · Blue aluminum hexes and wheel nuts.
- · Lightened nylock wheel nuts included.
- 83mm Factory Team wheels (#89296).
- 1Hard anodized 7075-T6 aluminum chassis.
- Rigid one-piece motor mount utilizes standard motor screw mounting pattern.
- · Large speed control mounting area raised off of chassis to allow for easy screw mounting of common speed controllers.
- Speed control mounting area includes convenient switch-mounting boss.
- Utilizes 3 hook-and-loop straps to secure LiPo batteries into battery tray.
- Molded battery tray supports 7.4-14.8V battery packs with room for foam pads.
- Accepts two ROAR-approved 1:10 scale size 7.4v LiPo battery packs (#703 Reedy LiPo 5000 Pro (2), #704 Reedy LiPo 5000 w/connector (2), #705 Reedy LiPo 3200 w/connector (2), #709 Reedy LiPo 5000 35C (2)).
- New sealed receiver box for proper electronics placement.
- · Receiver, servo, and battery tray remove from vehicle in one piece for easy maintenance and cleaning.
- · Convenient wire routing keeps critical electronic wires out of drivetrain components and simplifies disassembly.
- Includes pinion gear (15T) and molded spur gear (46T).
- Motor, ESC, transmitter, batteries, and tires are not included.

### :: Additional

#### :: Required Items

Your RC8e Buggy comes unassembled and requires the following items to complete your kit:

- 1/8 Scale Specific Speed Control and Motor.
- High Torque Steering Servo (AE Part # 29167)
- 2 Channel Radio Set FM/PCM recommended (#29155).
- AA-Size Batteries for Transmitter (x8)
- 1/8th Scale Buggy 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
- Plug Extension (depending on ESC)

#### :: RC8e Notes

Your RC8e Manual has a 1:1 pullout of all the included hardware in the back. Use this to correctly size up your hardware for easy installation and kit building ease!

Alert! The Differentials and Shocks are

pre-assembled. They need to be filled

with fluid before use.

Also, there is a Team setup sheet and a blank setup sheet for your records. Use the setup sheet to keep track of any changes you make to your vehicle.

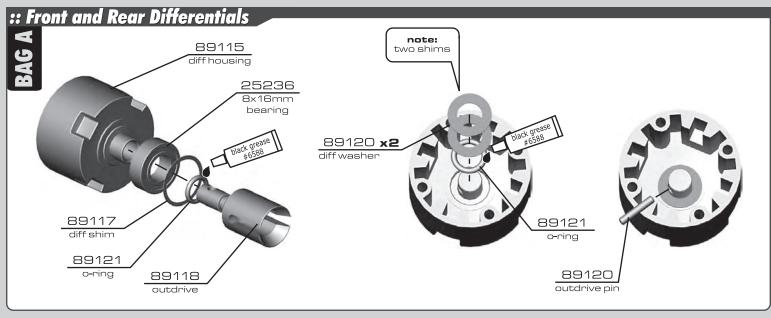
The Catalog will have an included supplement page with all the new electric conversion parts, as well as some new 1/8 scale options!

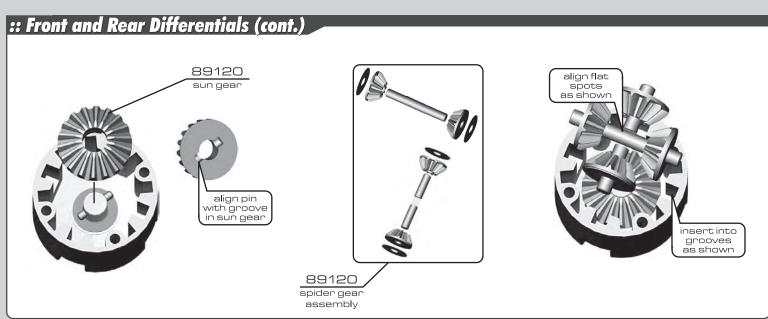


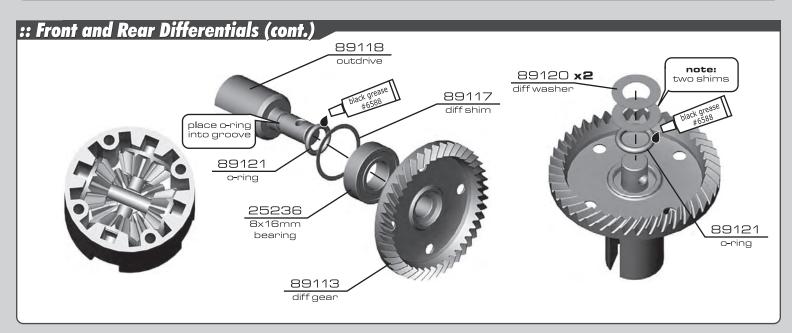


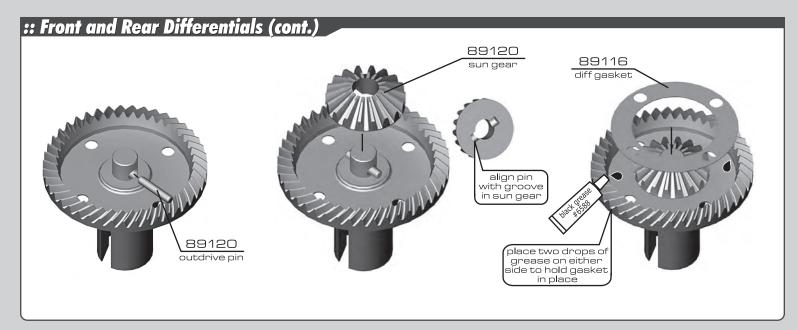


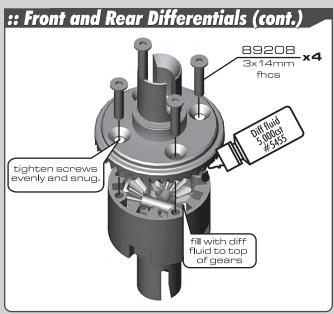
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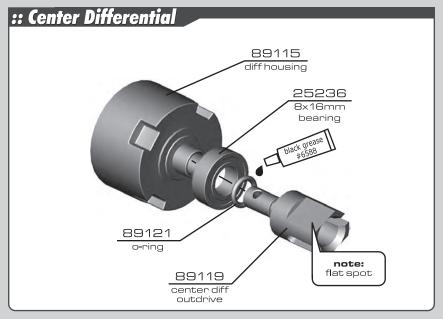


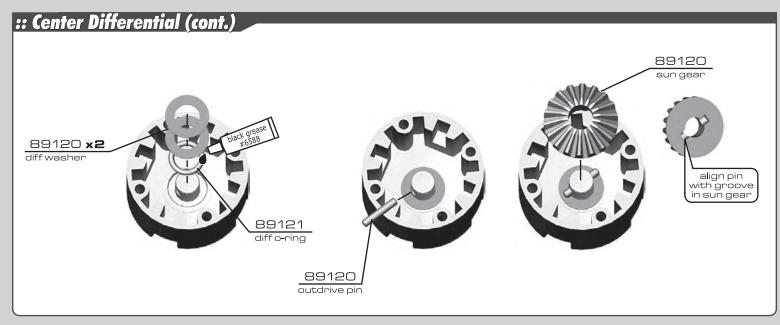


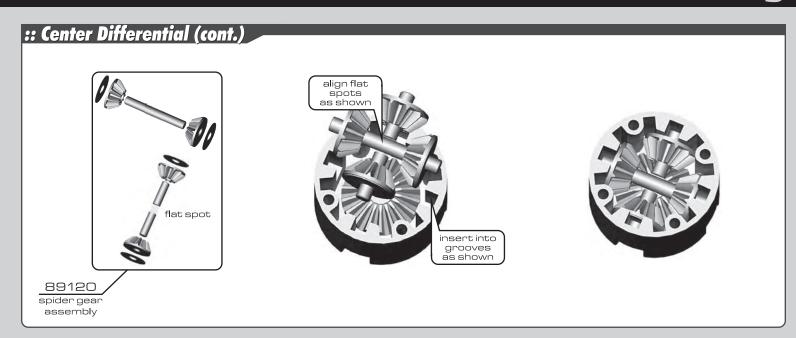


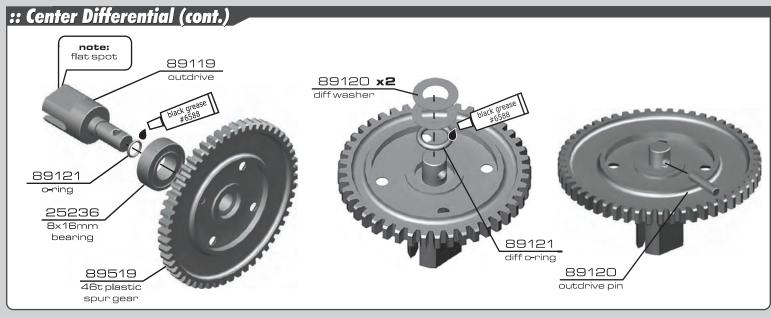


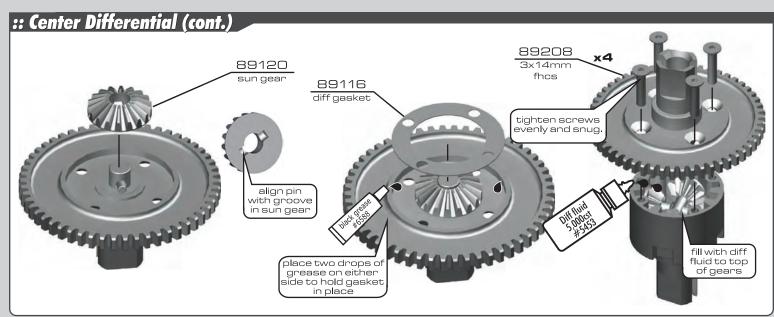


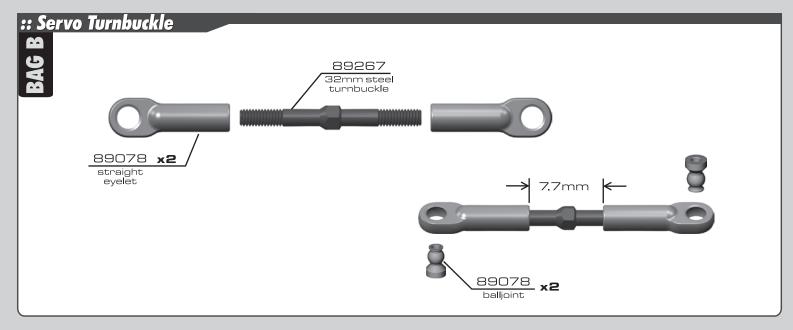


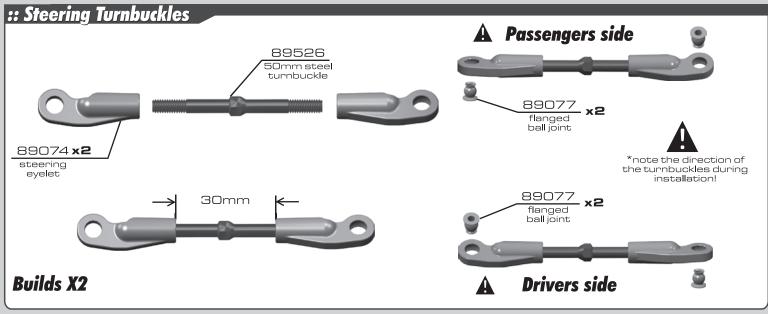


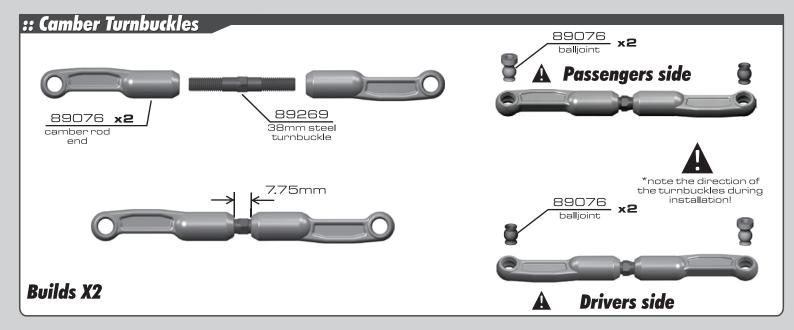


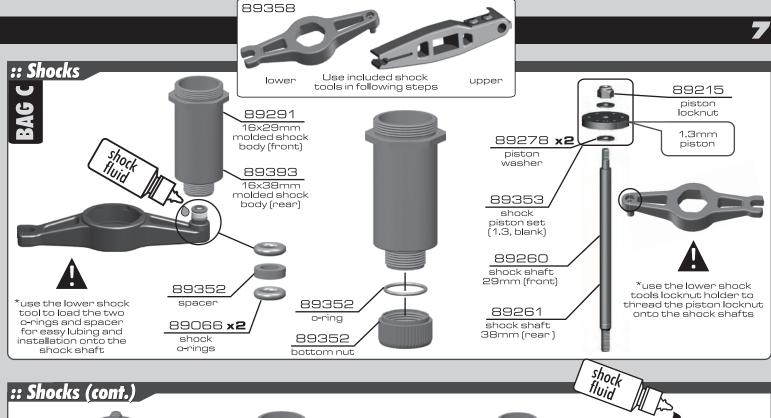


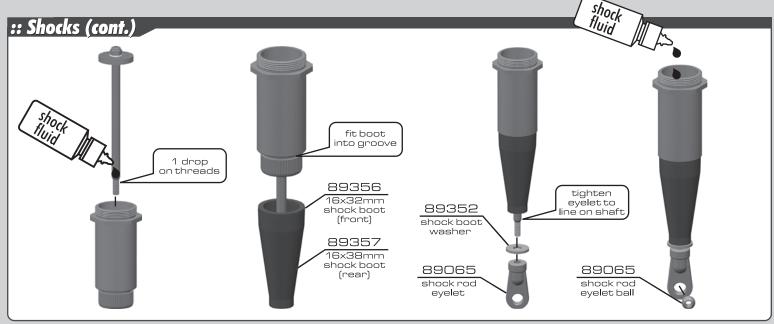


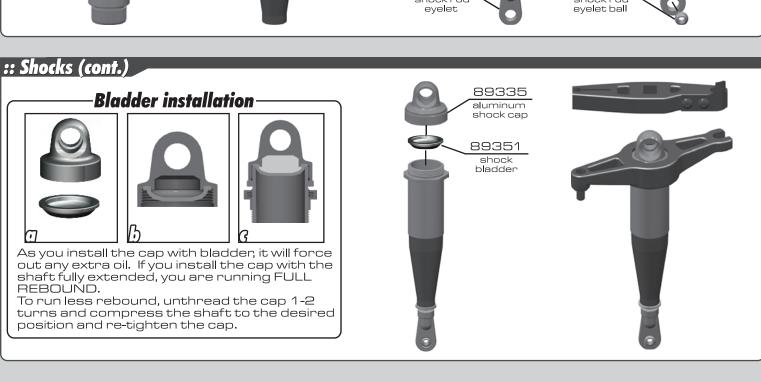


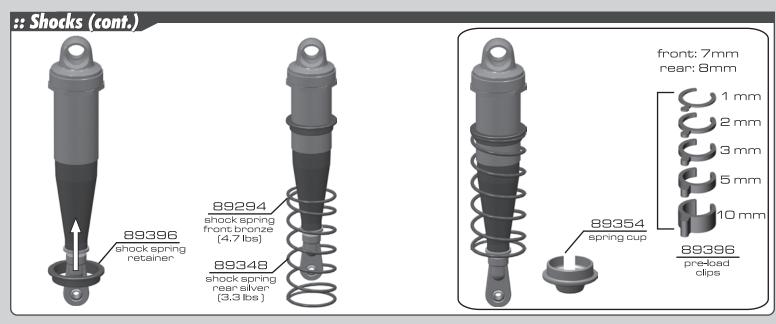


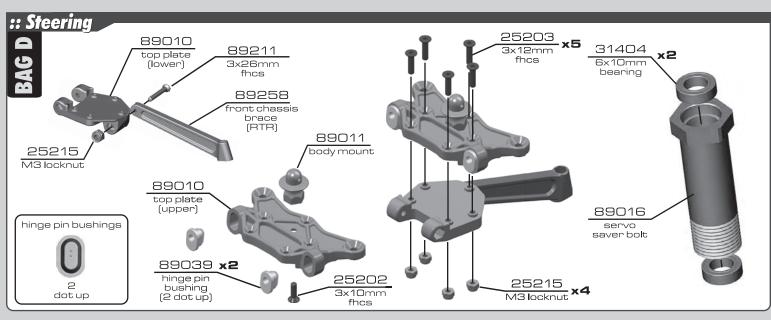


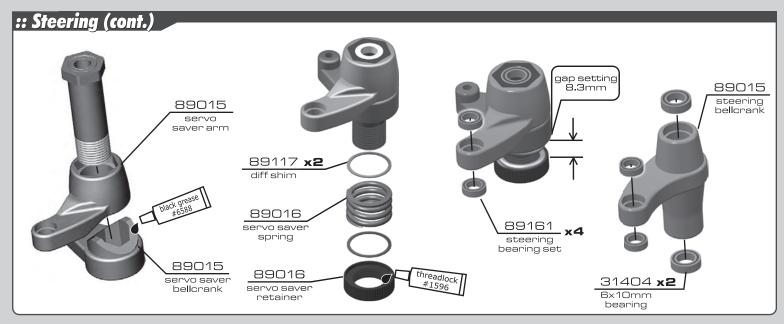


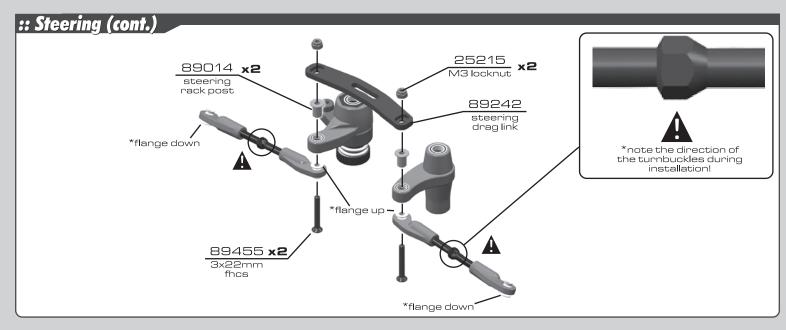


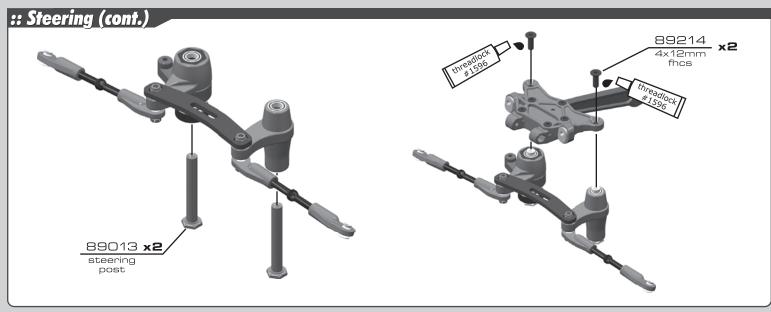


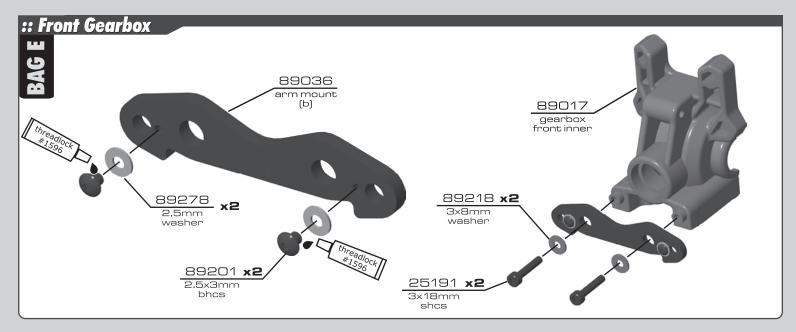


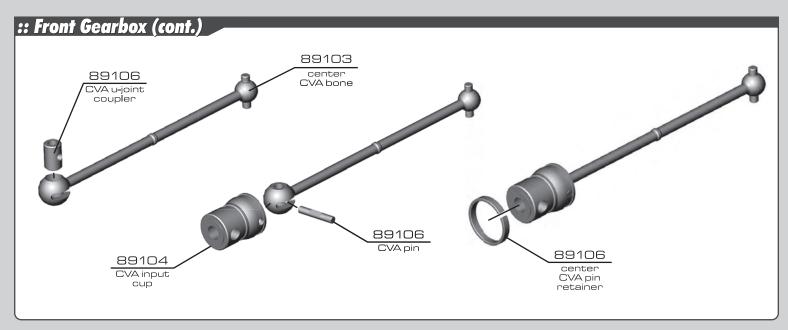


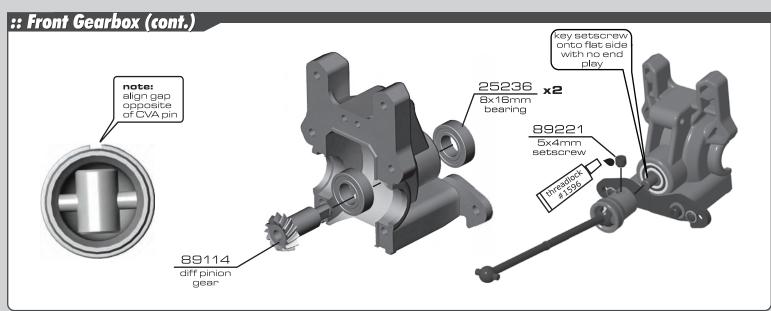


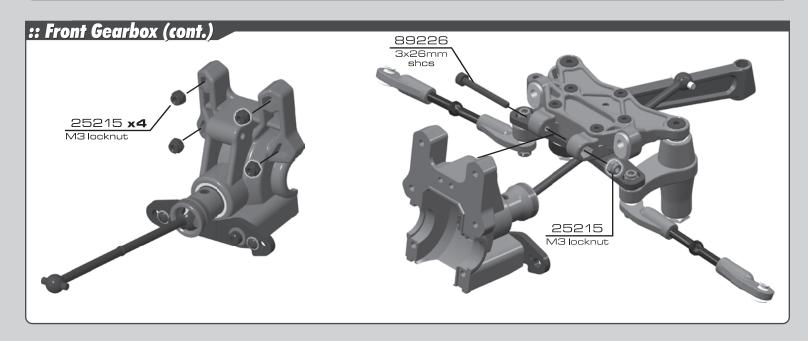


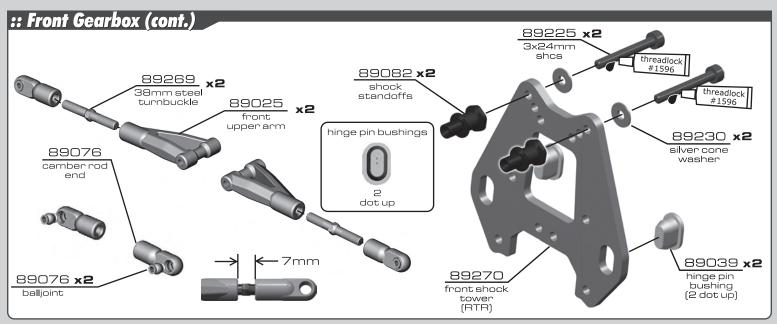


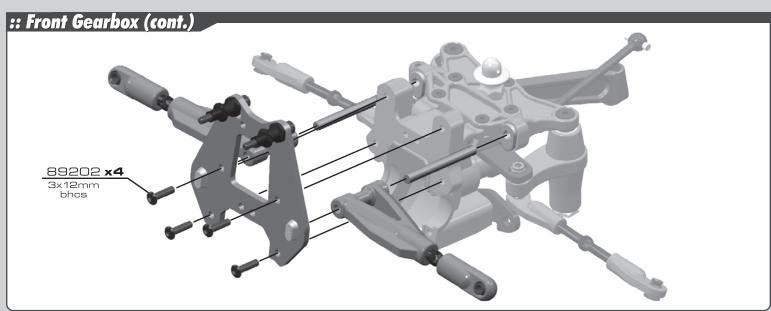


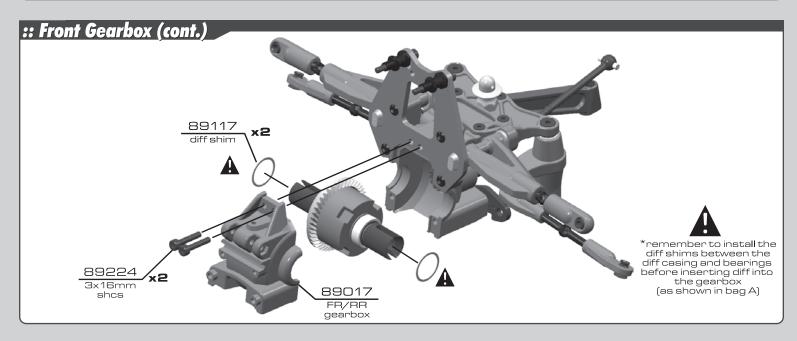


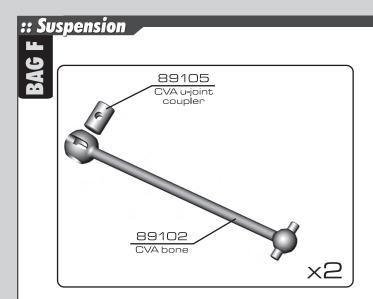


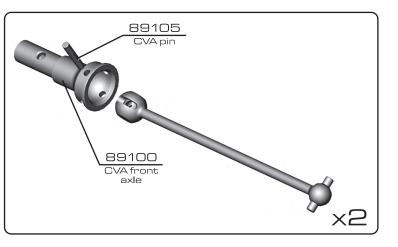


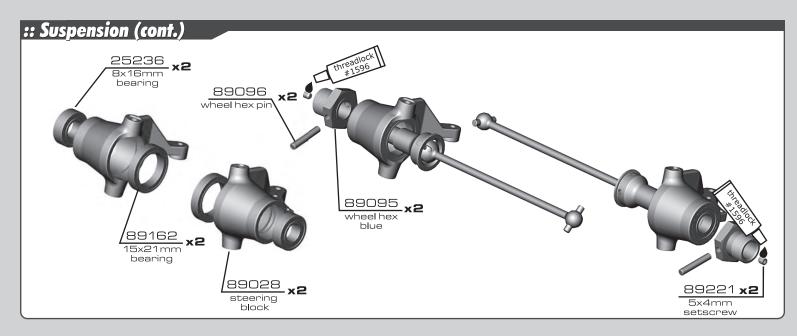


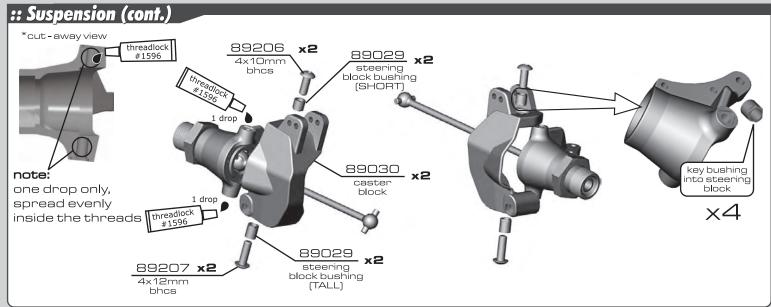


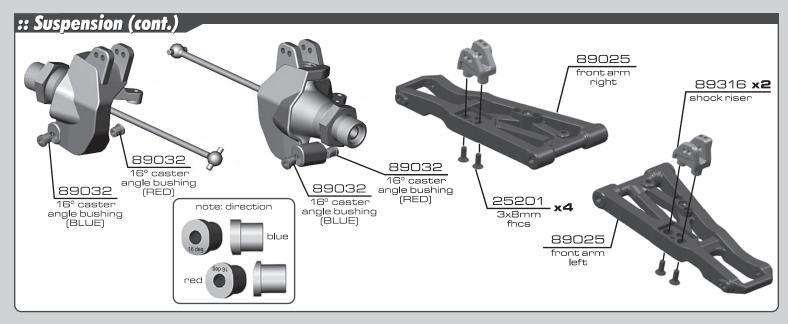


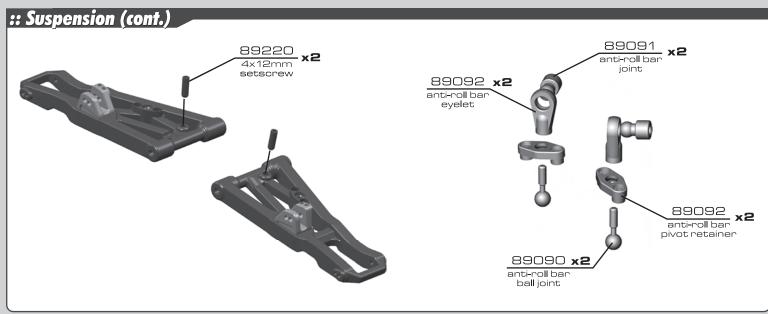


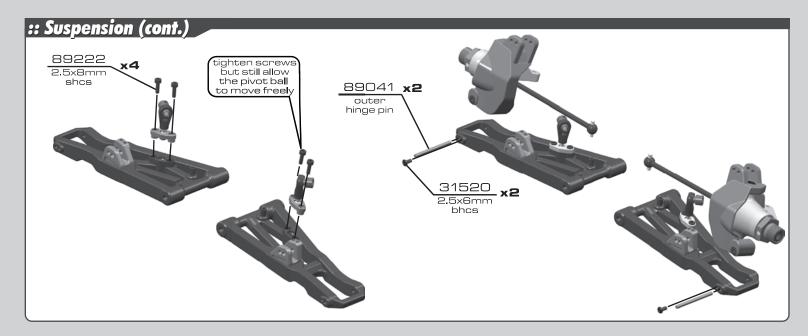


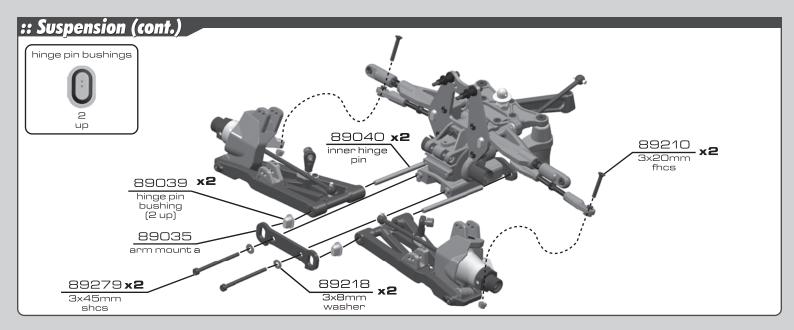


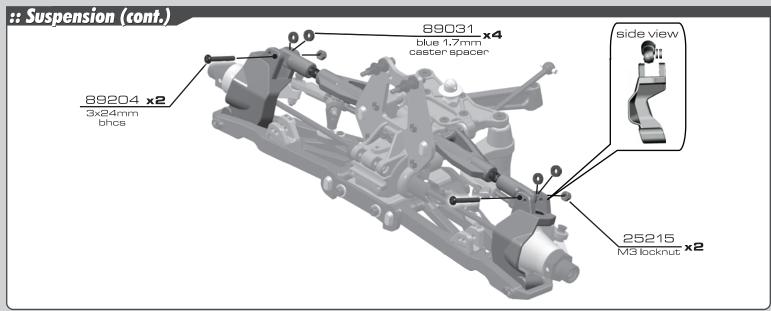


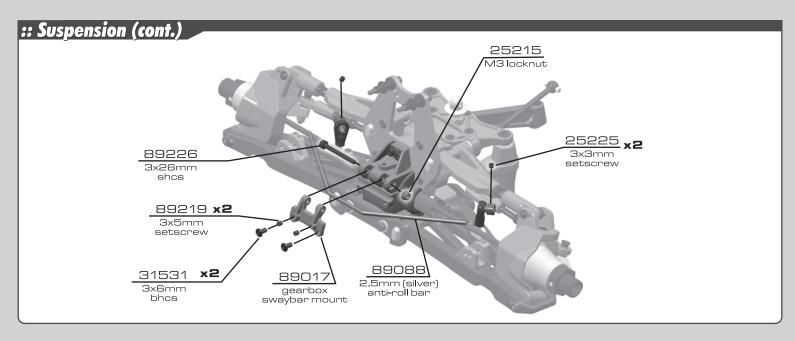


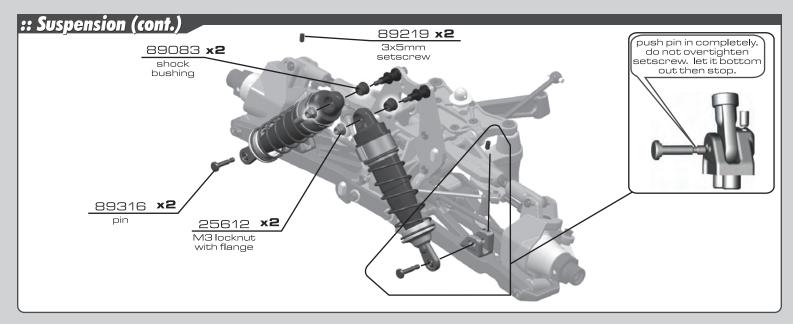


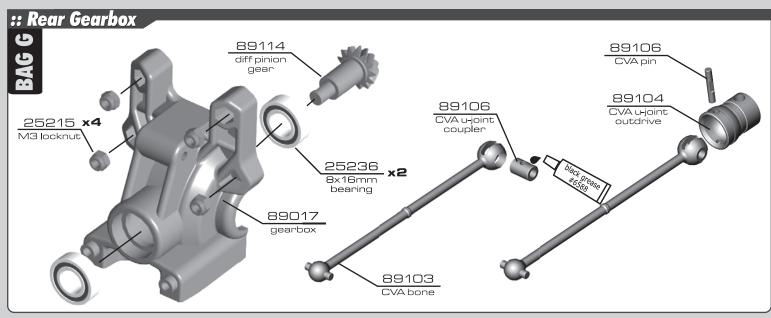


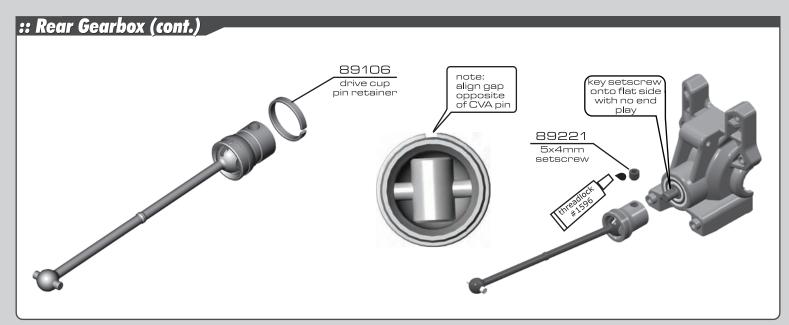


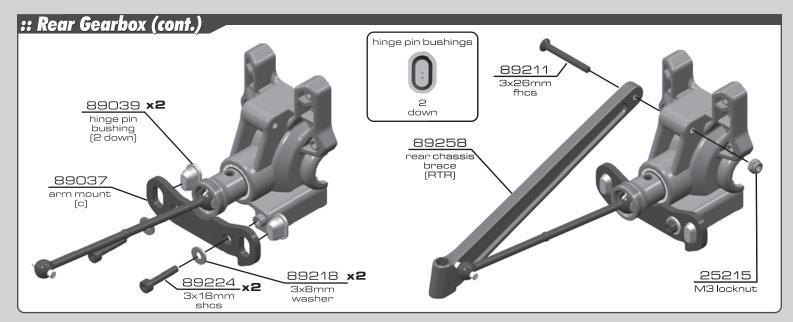


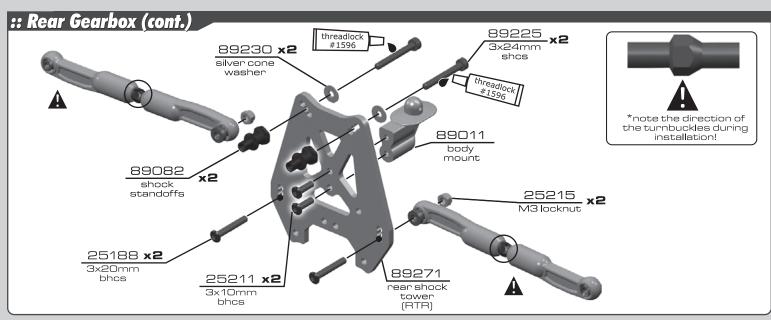


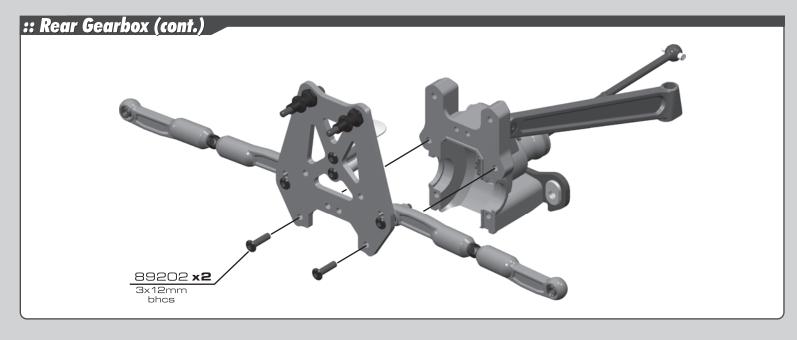


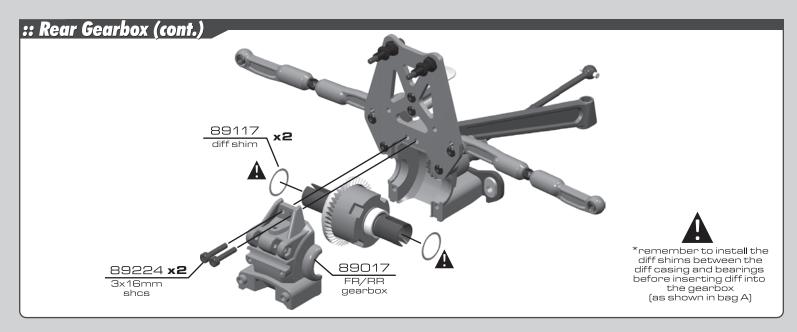


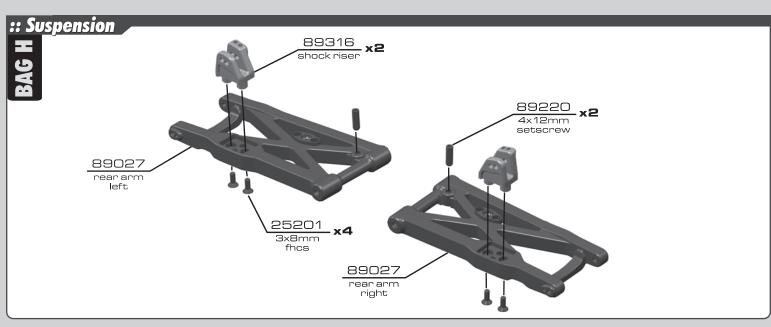


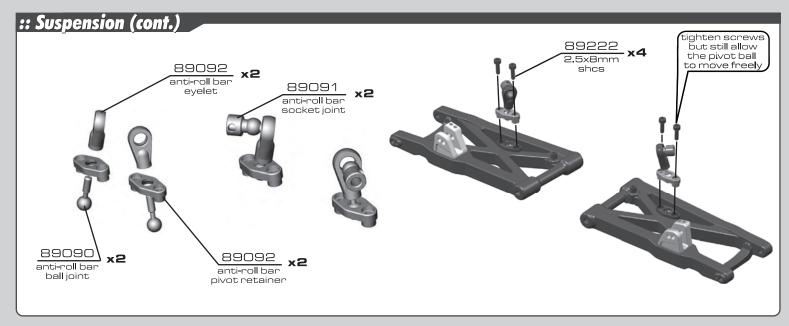




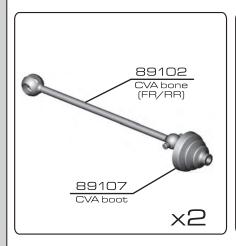


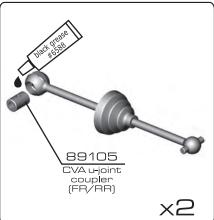


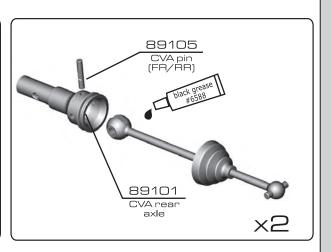




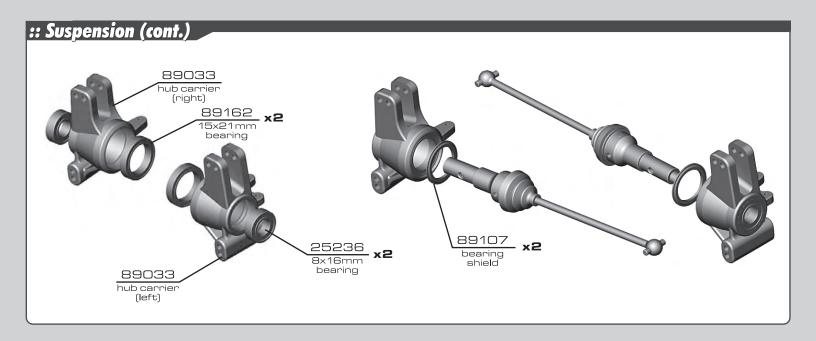
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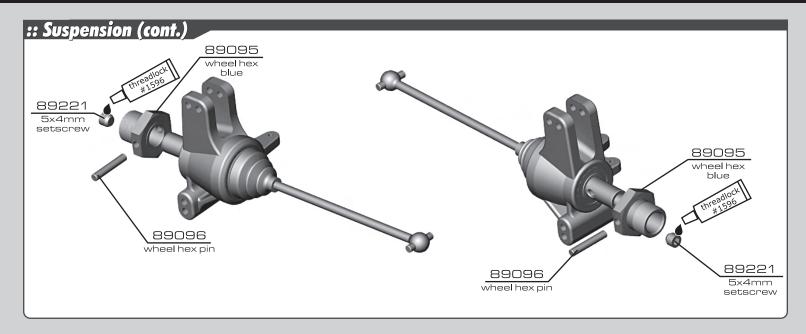


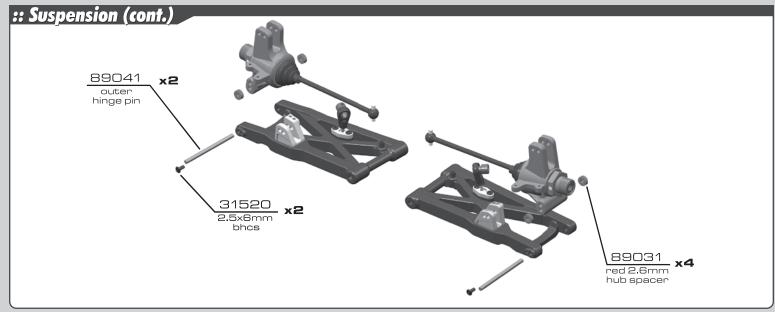


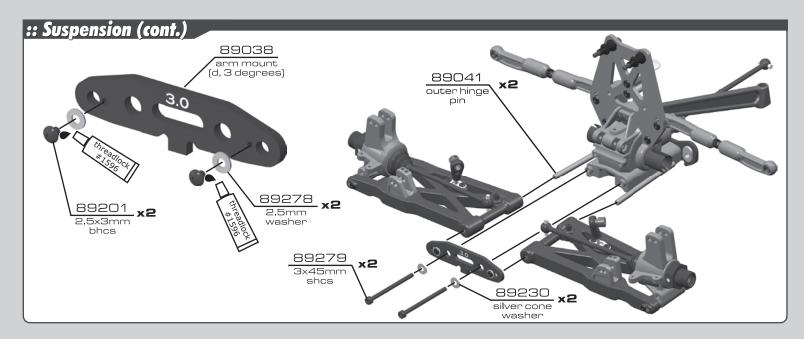


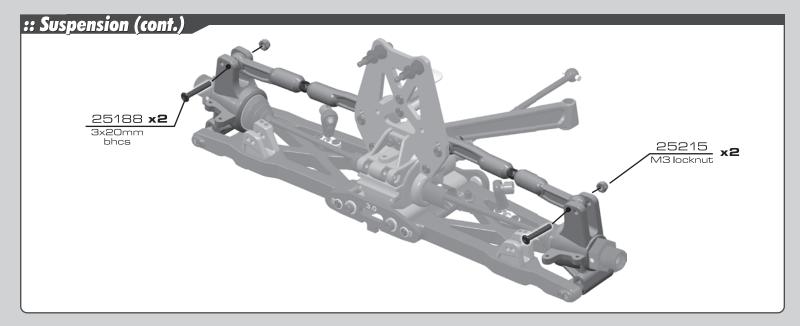
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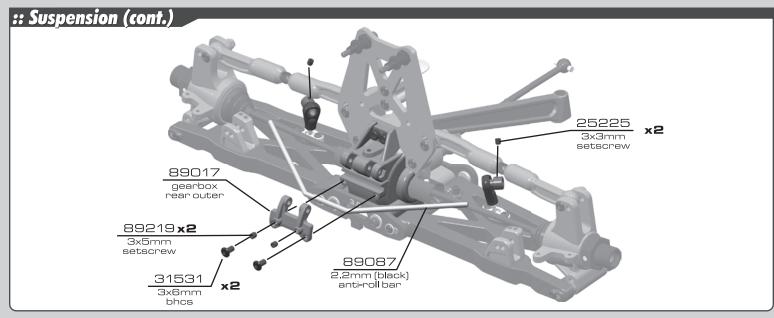


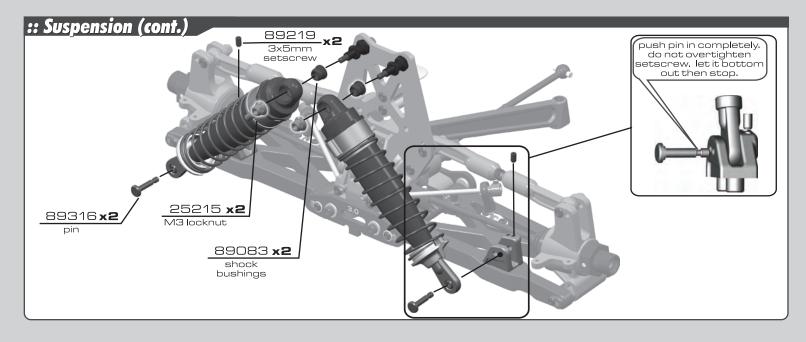


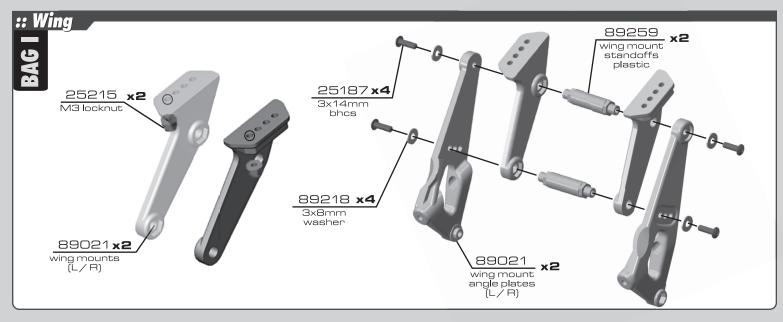


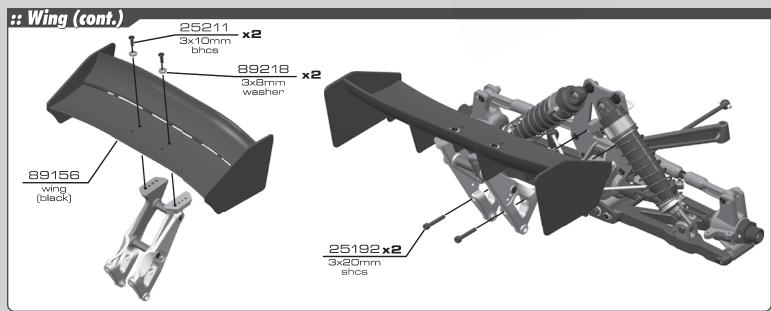


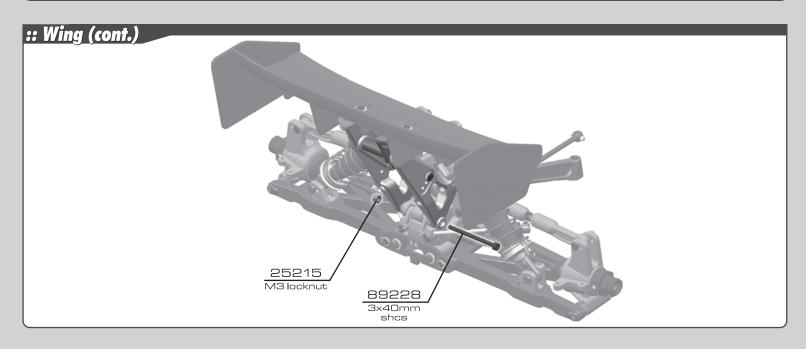


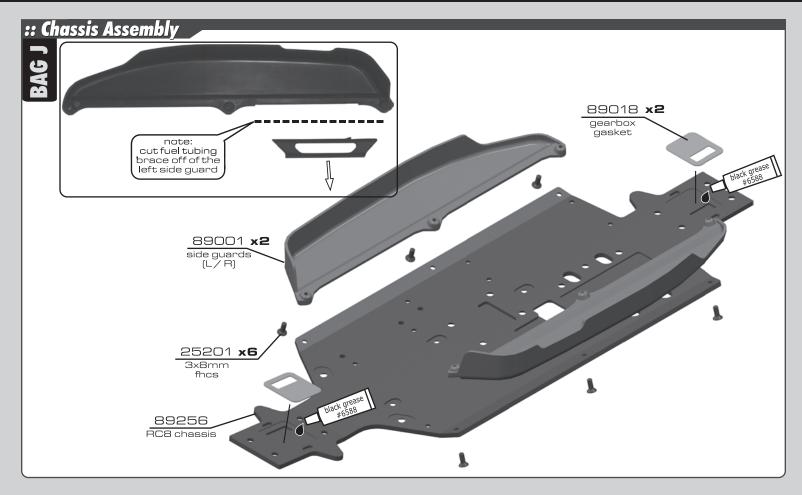


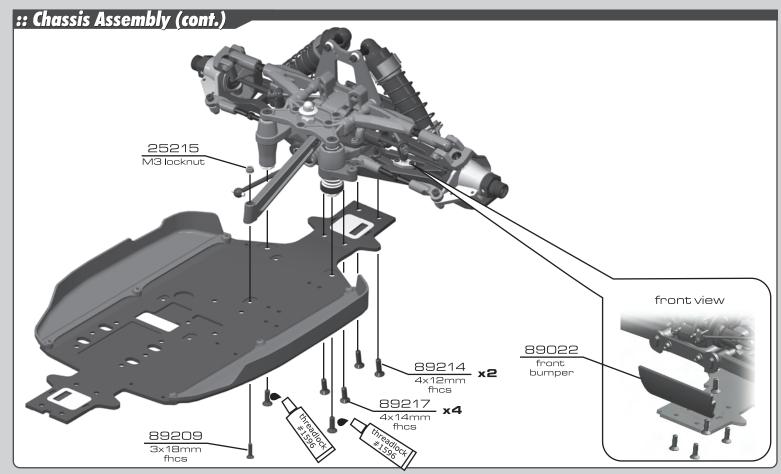


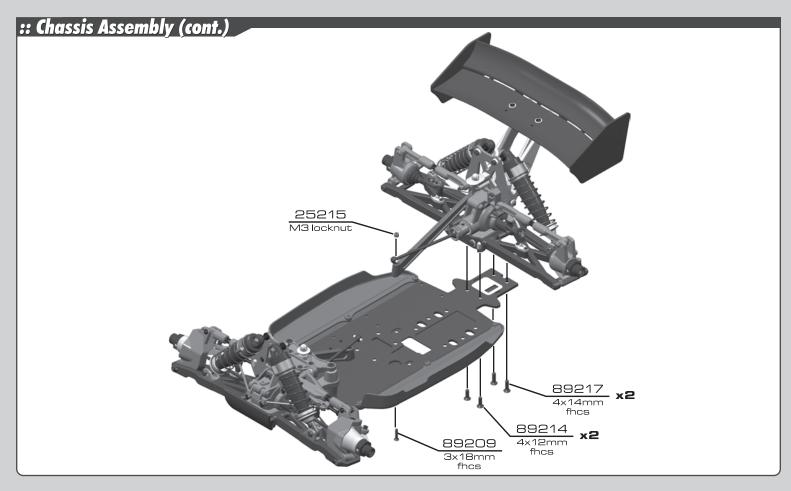


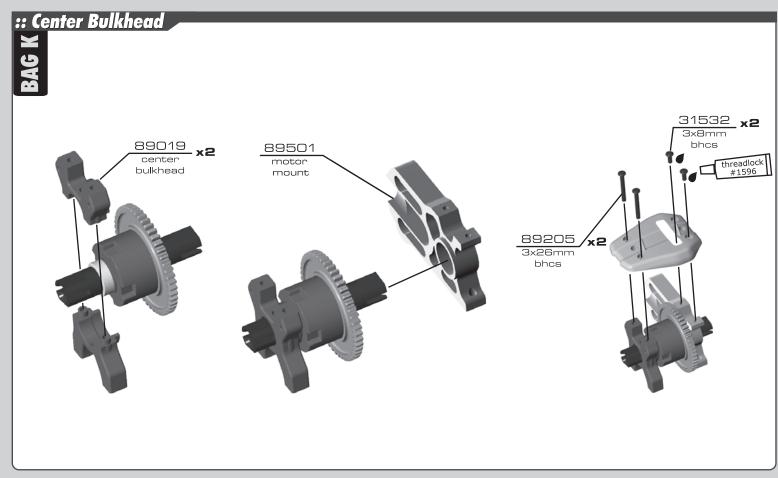


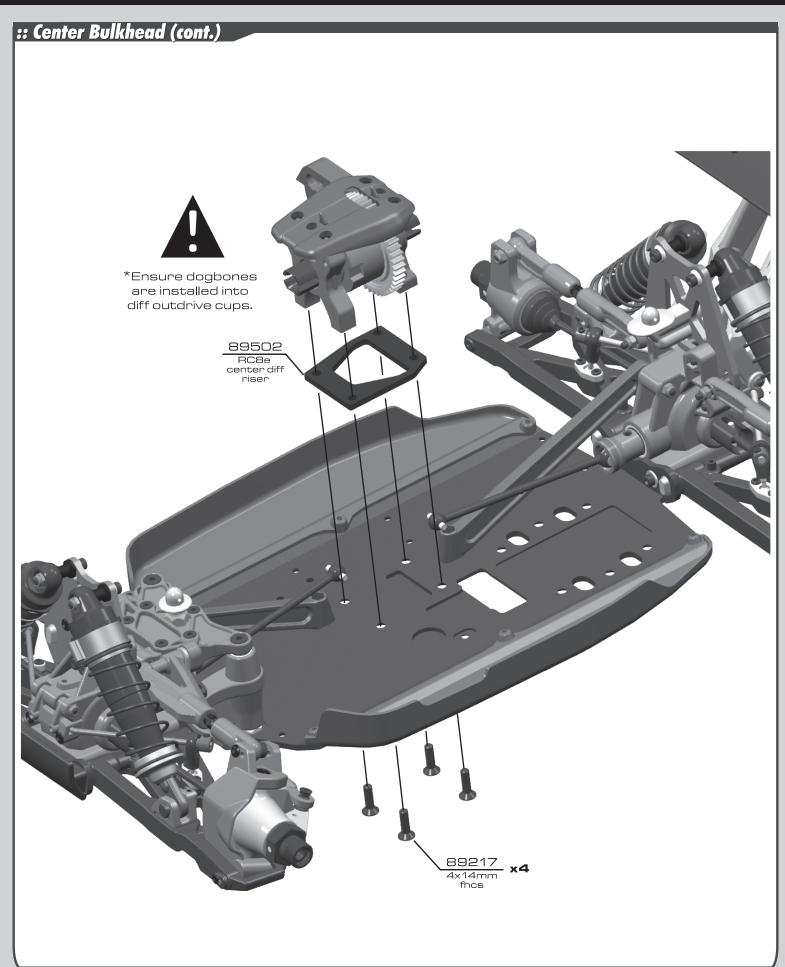


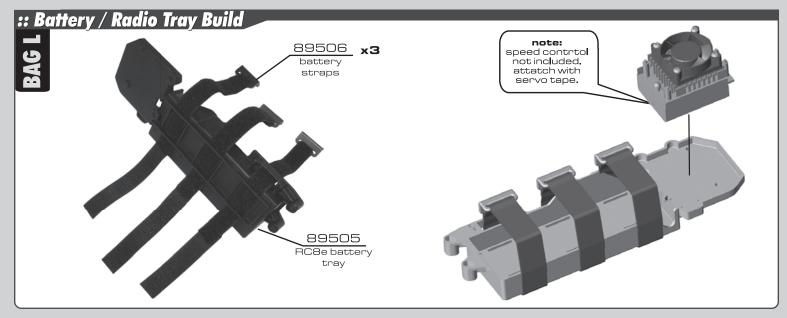


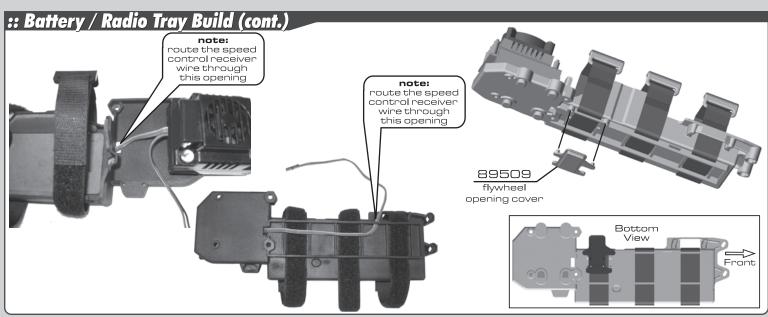


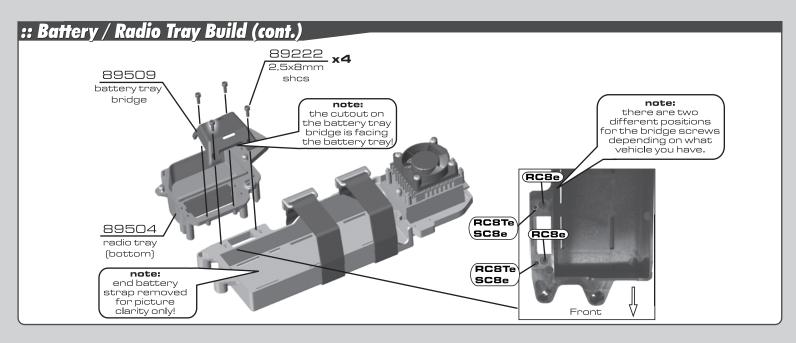


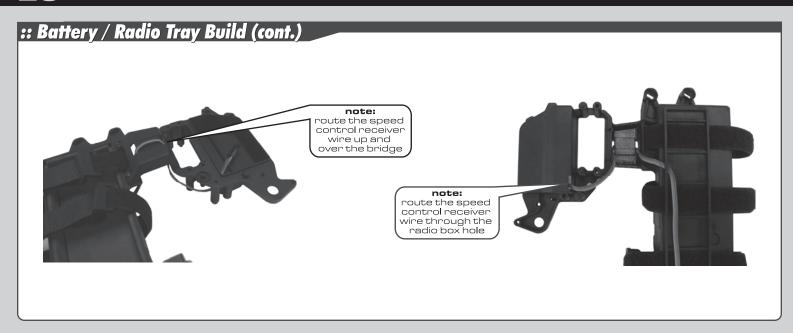


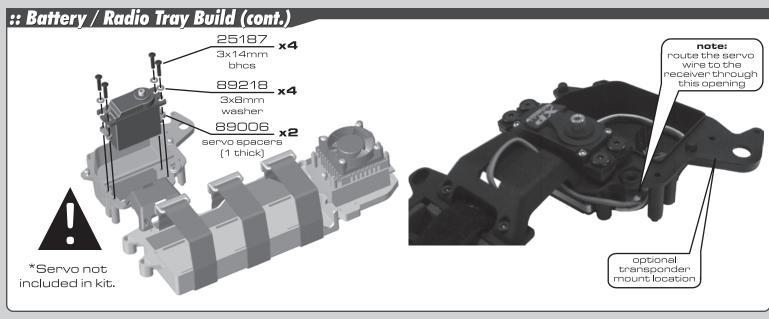


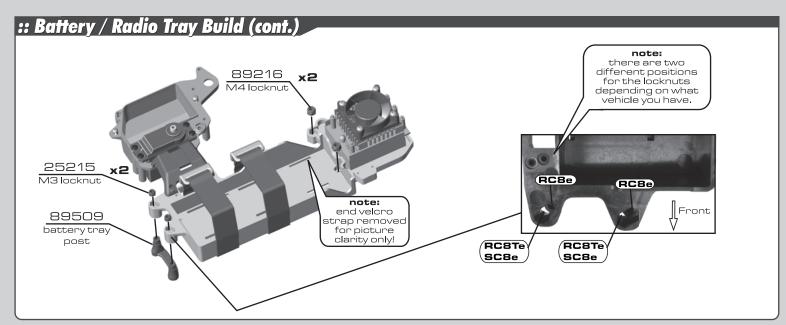


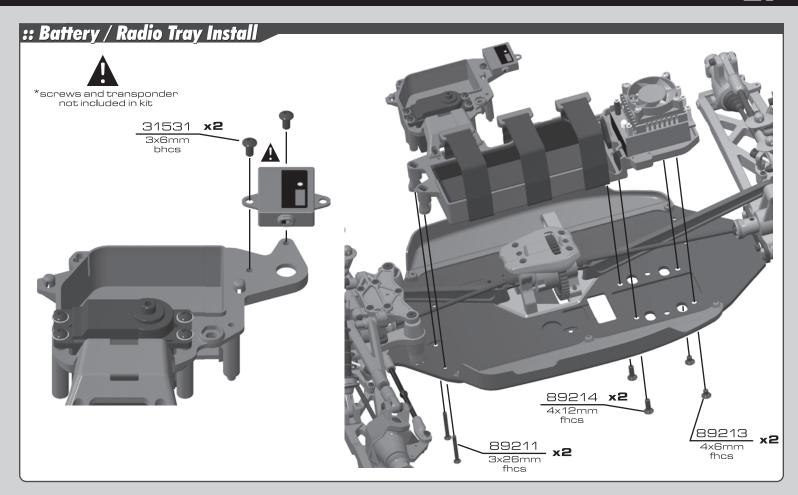


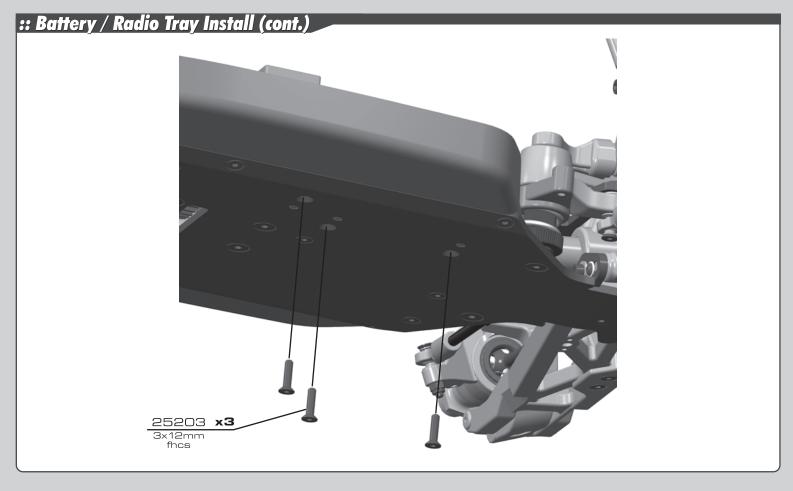


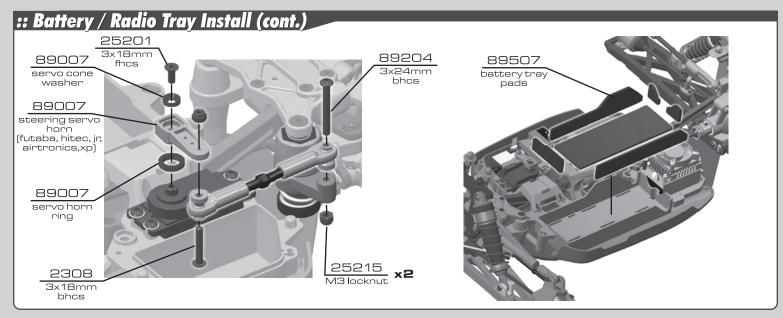


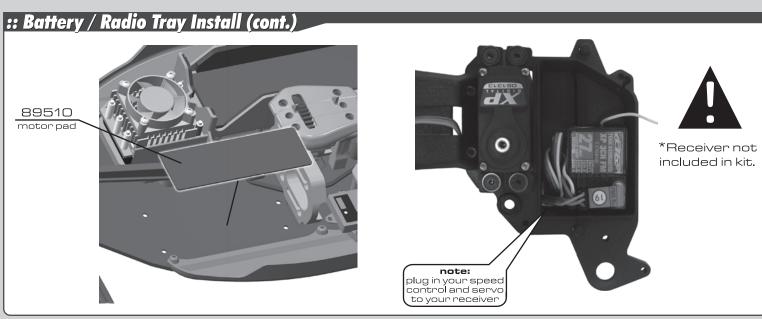


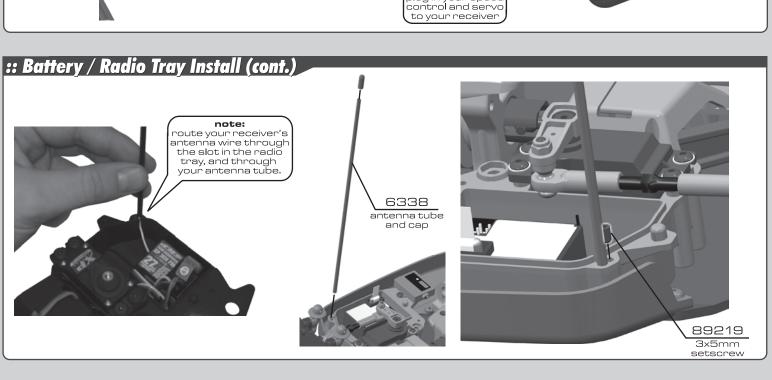


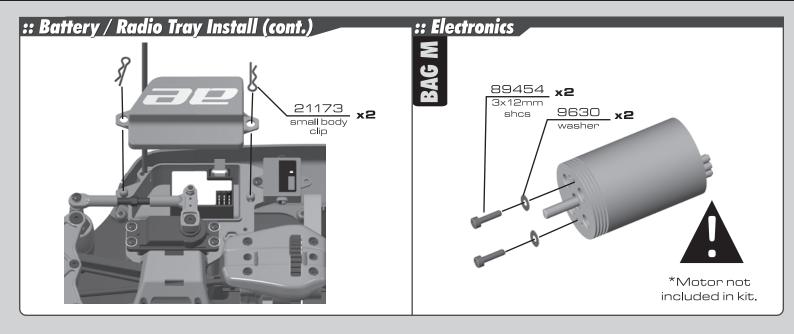


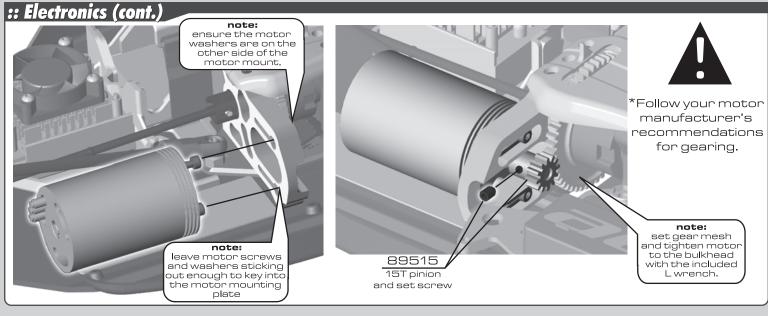


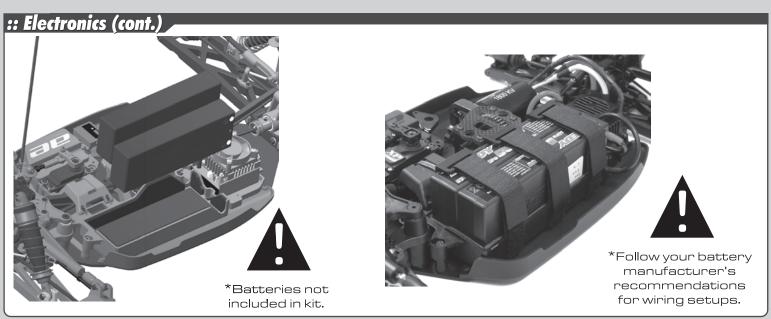


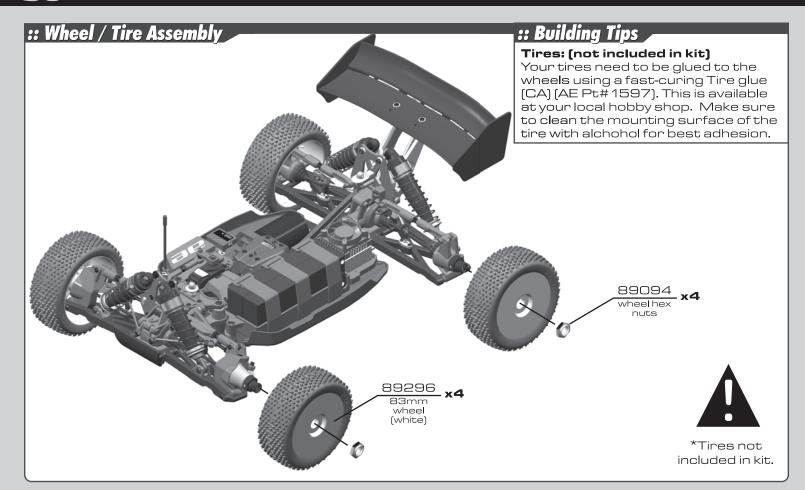


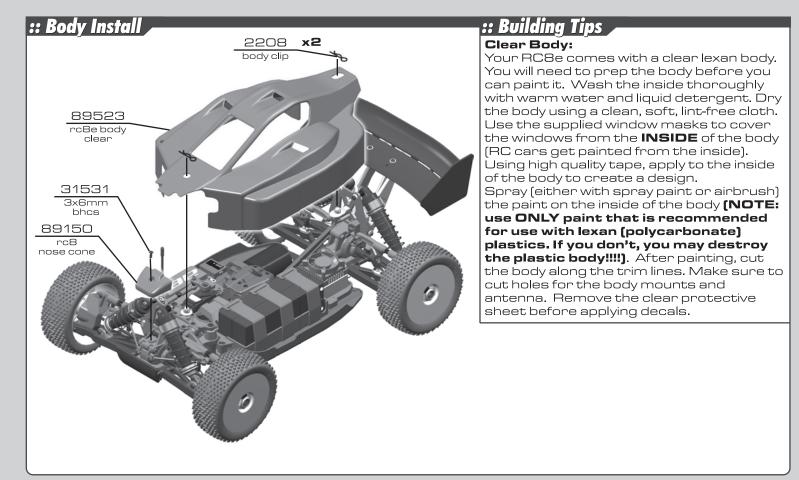












# :: Tuning

#### Gearing:

Recommended Gearing: 15-46. This is a good starting point for most tracks. Follow your motor manufacturer's recommendations for gearing options.

#### Gear Mesh:

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

- 1. Loosen the motor mount screws so you can slide your motor from side to side freely.
- 2. Slide the motor until the pinion gear comes in contact with the spur gear. Tighten the motor mount screws. Now "rock" the spur gear. There should be a little "free play" between the gears.
- 3. If you have a small amount of 'free-play', continue building your RC8e. If not, go back to Step 1. Be sure to check for "free-play" through a full rotation of the spur gear.

#### Differential Fluid:

Team Associated includes a complete bottle of 5,000cst diff oil. You can also provide your own oil and try one of the optional setups.

Standard differential fluid setup: Front = 5,000cst; Center = 5,000cst; Rear = 5,000cst.

Optional diff setup 1 (high grip track): Front = 5,000cst; Center = 10,000cst; Rear = 5,000cst.

#### 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 buggy is 3,000 cst. the thicker 5,000cst 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-up. Going up (3 up - 1 mm each dot) will give more turn in, but less steering on exit. going down (1 dot, 2 down, 3 down) will reduce turn in, but give more steering on exit.

#### Front Caster Block Location:

The standard short location will work the best for most tracks. going to the long front link will give you more steering, but can make the car less predictable in bumps and exiting 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 29mm 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 vehicle 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 and recheck.

#### 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 inner hinge pin 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:

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 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 upper hole gives more rear grip on turn in, and good forward traction, but it might have difficulty squaring up out of turns. The lower hinge pin hole in the hub will be more responsive on throttle, and 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 for more on-power steering. 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 29mm of gap between the chassis bottom and ground. Check the ride height with the FT Ride Height Gauge (#1449) by lifting up the entire vehicle 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 and recheck.

#### 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.

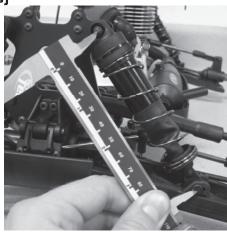
#### Kickup Bushing:

Generally more kick-up will provide better handling in the bumps and have better straight line acceleration. Less kick-up will provide more all around steering and have a more aggressive feel.

# :: Tuning (cont.)

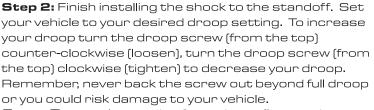
#### Droop Settings: (Truggy shown but applicable for all vehicles)





**Step 1:** With only the bottom of the shocks attatched, the droop screws raised 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 109mm, while the rear shocks should be 127.5mm.







**Step 3:** 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 O-5mm from the FULL DROOP measurement.

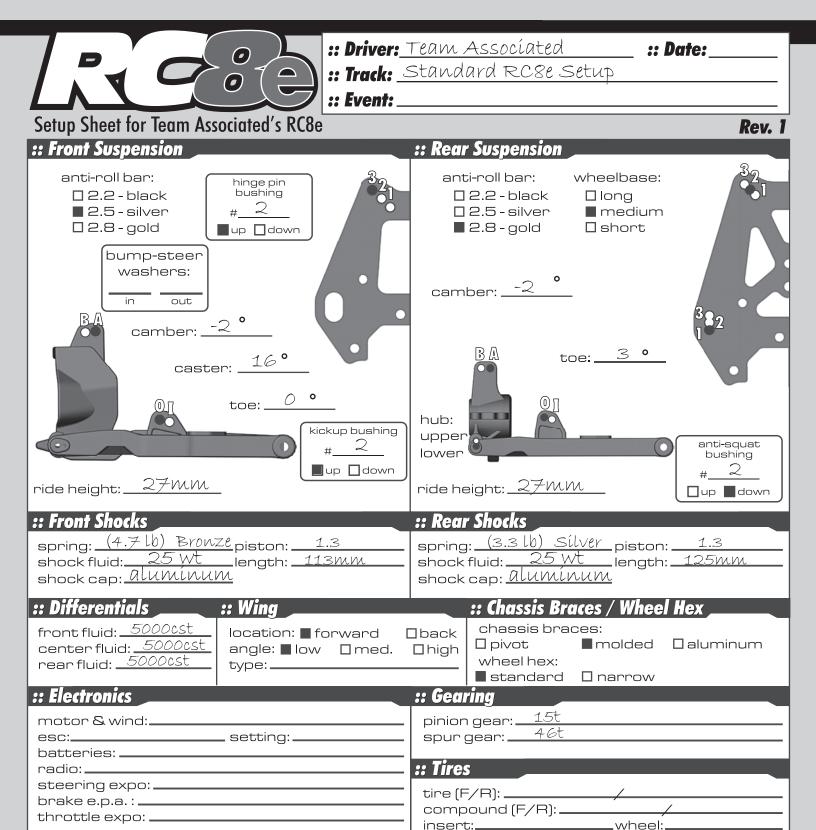
**Front Droop:** Increasing front droop (loosen droop screws) will increase off-throttle steering. It also allows the front end to lift more, giving more rear grip and less front grip on-power. Remember to never loosen the screws beyond the FULL DROOP setting. Decreasing front droop (tighten droop screws) 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 Racing link, then the Setup Sheets link, then click on the link that applies to your vehicle. 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.

:: Notes	



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traction additive:\_\_\_

servo:\_

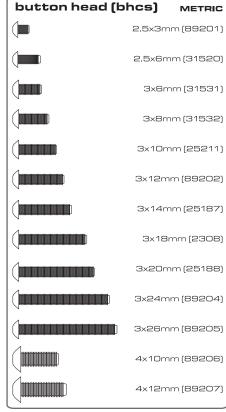
initial brake: \_\_\_\_\_drag brake: \_

# :: Hardware - 1:1

flat head (fhcs	METRIC		
	3x8mm (25201)		
	3x10mm (25202)		
	3x12mm (25203)		
	3x14mm (89208)		
	3x16mm (25204)		
	3x18mm (89209)		
	3x20mm (89210)		
	3x22mm (89455)		
	3x26mm (89211)		
	4x6mm (89213)		
	4x12mm (89214)		
	4x14mm (89217)		

cap head (shcs)	
	<b>METRIC</b> 2.5x8mm (89222)
	3x12mm (89454)
	3x16mm (89224)
	3x18mm (25191)
	3x20mm (25192)
	3x24mm (89225)
	3x26mm (89226)
	3x40mm (89228)
	3x45mm (89279)

shims & washers



1	ball bearing	gs \
		steering bearing (89161)
		6x10mm (31404)
		8x16mm (25236)
		15x21mm (89162)

Notes:



aluminum balltud washer (9630)

setscrews	METRIC
	3x3mm (25225)
	3x5mm (89219)
	4x3mm (25223)
	4x12mm (89220)
	5x4mm (89221)

nuts (lo	ck/plain)
	piston locknut (89215)
	m3 locknut (25215)
	flanged m3 locknut (25612)
	m4 locknut (89216)



<b>::</b>	Driver:	:: Date:
:: '	Track:	
	Erromto	

Julius Jiluul lul luulii Assuululuu s Neu	Setup	Sheet for	Team /	Associated'	s RC8
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Setup Sheet for leam Asso	ociated's RC8e				Rev. 1
:: Front Suspension		:: Rea	r Suspension		
	hinge pin bushing #		ti-roll bar:   2.2 - black   2.5 - silver   2.8 - gold	wheelbase: long medium short	
bump-steer washers: in out  BA camber:		cam	ıber:	_	3 2 2
	toe:		<b>1</b> 0 m	toe:	
nida haightu	kickup bushing #  up \ down	upper lower			anti-squat bushing #
ride height:			eight:		up down
:: Front Shocks		:: Kea	r Shocks		
spring: shock fluid: shock cap:	_length:	shock		piston: _ length: _	
:: Differentials	:: Wing		:: Chassis B	races / Wheel I	Hex
front fluid: center fluid: rear fluid:		]back   high	chassis br pivot wheel hex:	aces:	] aluminum
:: Electronics		:: Gea	ring		
motor & wind: esc: batteries:		pinior spur	n gear: gear:		
radio:steering expo: brake e.p.a. : throttle expo: servo: initial brake:	_drag brake:	comp inser	F/R): bound (F/R):. t: ion additive:_	wheel:	
:: Race and Vehicle Com	ments		:: Track Info		
' '	finish: tq:		traction: 🛘 soft dirt: 🗎	bumpy:   blue high    med. grass:   clay:[ ther:	□low ] wet:□

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



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