







#70009 RC10SC6.4, Team Kit

1:10 Scale 2WD Electric Off Road Competition Short Course Truck Manual





### :: Introduction

Thank you for purchasing this Team Associated product. This assembly manual contains instructions and tips for building and maintaining your new vehicle. Please take a moment to read through the manual and familiarize yourself with the 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. Check www.rc10.com for the latest versions of our instruction manauls.

### :: RC10SC6.4 KIT Features

- New 13mm big bore threaded aluminum shocks and springs with machined shock pistons for improved bump / jump handling
- 13mm machined shock pistons, 2x1.6mm front and 2x1.8mm rear
- New front ballstud mount and top plate with angled steering system for improved steering consistency
- New 3.5mm heavy-duty ball cups and turnbuckles for maximum durability
- Updated rear suspension with wider C and D mounts from the RC10B6.4 series
- New longer 92.5mm CVA driveshafts for more rear grip
- 7.0mm blue aluminum rear clamping hexes with laser etching
- New chassis side rails with the RC10B6.4 fan mount system
- New short course truck length aluminum chassis with 22.5° kick-up to complement updated front-end geometry and with new shape to reduce chassis scrub with the track surface
- 20°, 22.5°, and 25° molded bulkheads included for a complete range of caster and kickup options 0°, +2.5°, -2.5° Bulkhead
- B6.4 adjustable height steering bellcrank and rack system for optimized bumpsteer at all ride heights and caster angles
- B6.4 -1mm kingpin offset steering and caster block set for smoother and more predictable steering through the entire wheel throw
- · Aluminum RC10B6.4 ESC mounting tray with a wider footprint to fit electronics, resulting in a weight bias placed further forward
- Factory Team RC10B6.4 11g aluminum ESC tray

### :: Additional

Your new SC6.4 Team Kit comes unassembled and requires the following items for completion (Refer to www.rc10.com and www.Reedypower.com for complete listings):

- RC two channel surface frequency radio system
- AA-size batteries for transmitter (#302 alkaline)
- Electronic Speed Control, ESC
- Steering servo
- 540 size electric motor
- Pinion gear (48P), size determined by type/wind of motor
- Battery charger (a peak detection charger, or LiPo compatible charger)
- 2 cell shorty LiPo battery pack
- Polycarbonate 1/10 Short course body
- Polycarbonate specific spray paint

- Cyanoacrylate glue (CA)(#1597)
- Thread locking compound (#1596)
- Tires and Inserts, Fronts and Rears
- Wheels w/12mm Hex Black Method Wheels #71040

### :: Other Helpful Items

- Silicone Shock Fluid (Refer to www.rc10.com for complete listings):
- Body Scissors (AE Part #1737)
- FT Hex/Nut Wrenches (AE Part #1519, 1650) FT Ballcup Wrench (#1579)
- Green Slime shock lube (AE Part #1105)
- Soldering Iron
- Needle Nose Pliers

- FT Body Reamer (#1499)

  - FT 4mm Turnbuckle Wrench (#1112) Calipers or a Precision Ruler
  - Hobby Knife

- Shock Pliers (#1681)
- FT Universal Tire Balancer (#1498)
- Wire Cutters

Associated Electrics, Inc. 21062 Bake Parkway. Lake Forest, CA 92630



**Customer Service** Tel: 949.544.7500 Fax: 949.544.7501

### :: Hardware - 1:1 Scale View

Button Head (bhcs)				
	2x4mm (31510)			
	2.5x6mm (31520)			
	2.5x8mm (31521)			
	2.5x10mm (31522)			
	3x4mm (91158)			
	3x5mm (31530)			
	3x6mm (31531)			
	3x8mm (31532)			
	3x10mm (25211)			
	3x12mm (89202)			
	3x14mm (25187)			
	3x16mm (89203)			
	3x18mm (2308)			
	3x20mm (25188)			
	3x22mm (25189)			
	3x24mm (89204)			
	3x30mm (91478)			

Flat Head (fhcs)	
	2x3mm (91749)
	2.5x8mm (31448)
	3x8mm (25201)
	3x10mm (25202)
	3x12mm (25203)
	3x14mm (89208)
	3x16mm (25204)
	3x18mm (89209)

Socket Head (shcs)

3x2.5mm (31500)

3x3mm (25225)

3x5mm (89219)

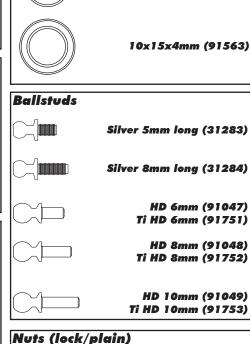
3x10mm (4671)

3x20mm (91737)

1.6 x 5mm (91611)

2.5 x 14mm (71032)

3 x 18mm (25191)



4x7x2.5mm (31732)

5x8x2.5mm (8680)

5x10x4mm (91560)

5x12x4mm (91567)

M3 Plain Nut (91477)

M3 Locknut, Black (25215

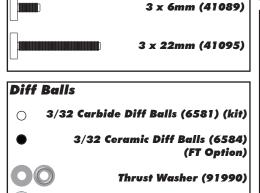
M3 Alum. Locknut, Blue (31550)

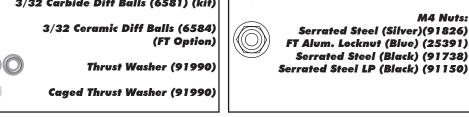
M3 Locknut w/Flange (25612) FT 3mm Locknuts, Blue(25392)

**Ball Bearings** 

## Shims and Washers | 5.5x0.5mm (31381) | 5.5x1.0mm (31382) | 5.5x2.0mm (31383) | 2.6x6mm Washer (89278) | 3x8mm Washer (89218)

Notes:





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### :: Notes



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This symbol indicates a Racers Tip.

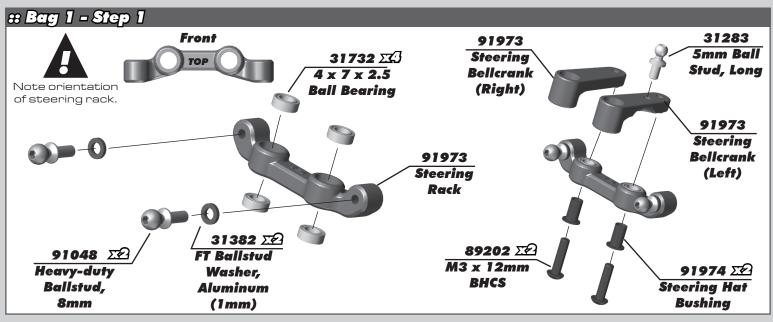


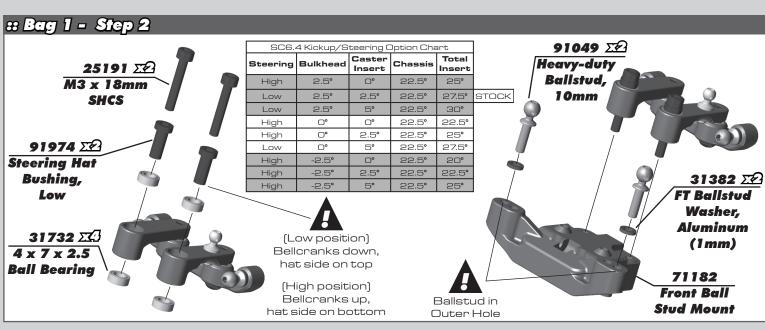
There is a 1:1 hardware foldout page in the front of the manual. To check the size of a part, line up your hardware with the correct drawing until you find the exact size. Each part in the foldout has a number assigned to it for ordering replacement parts.

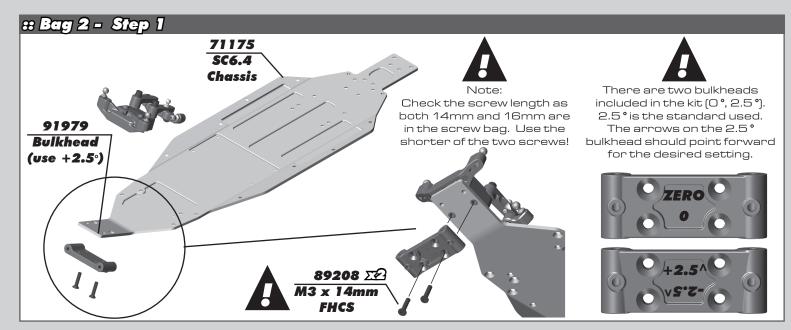
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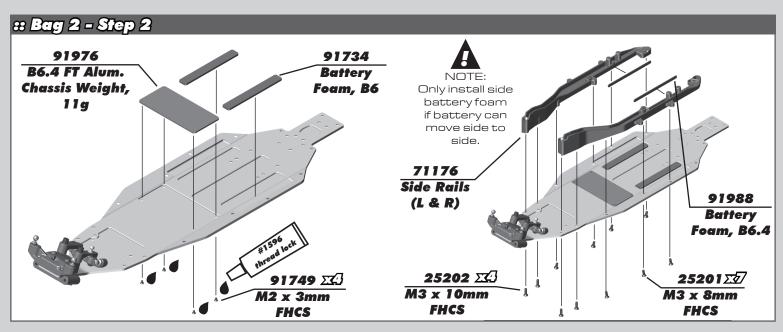


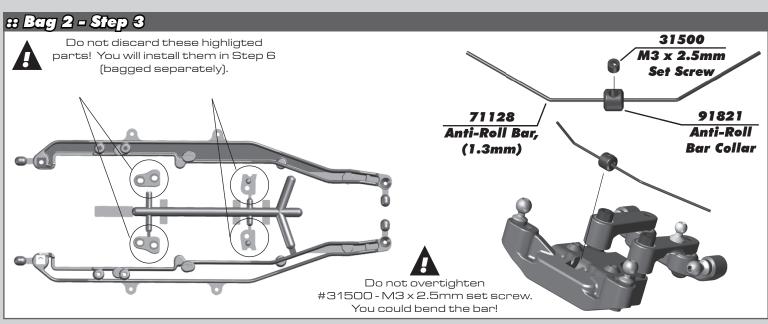
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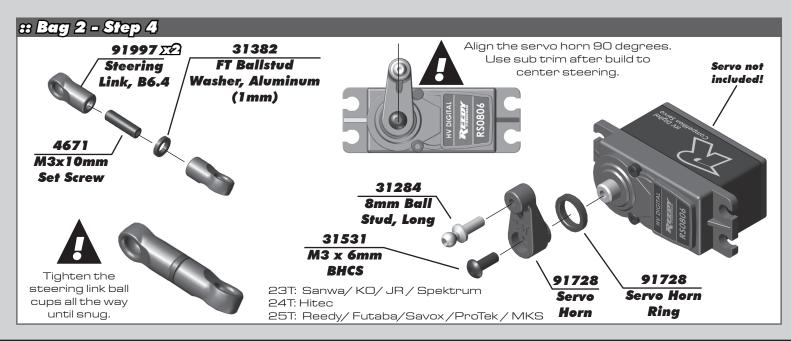


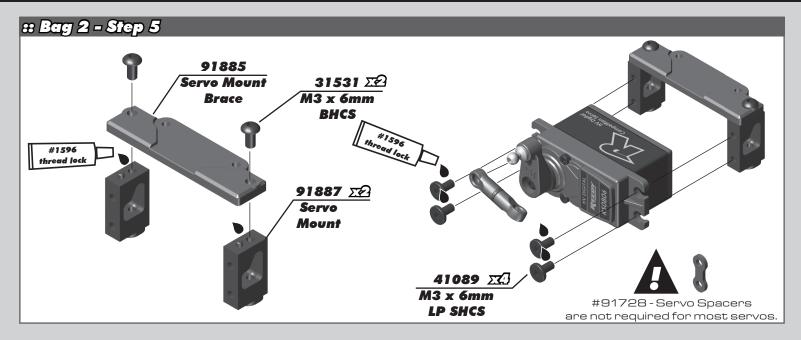


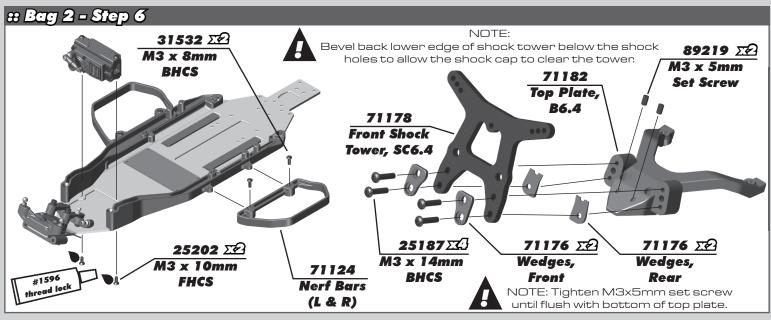


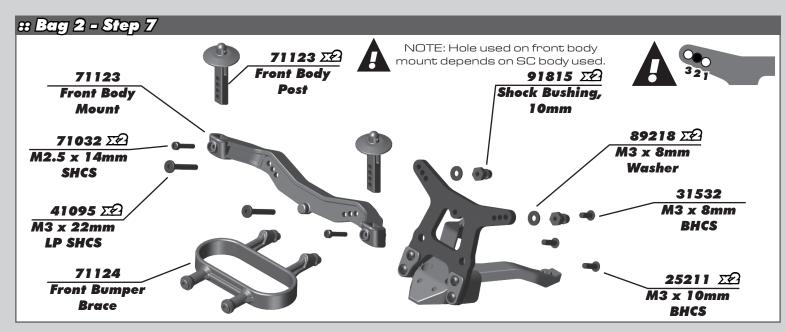


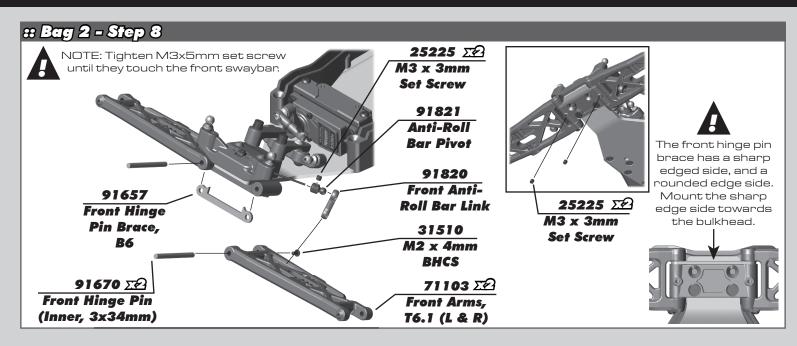


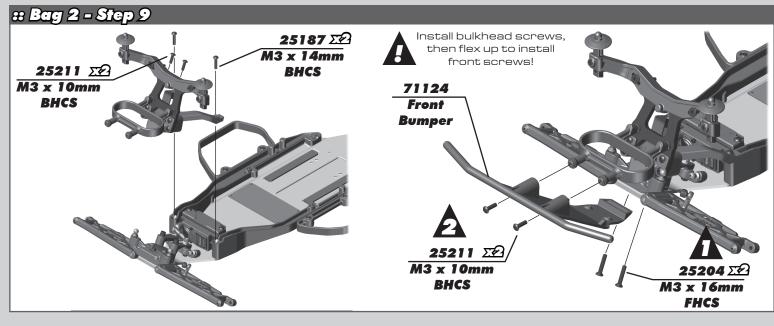


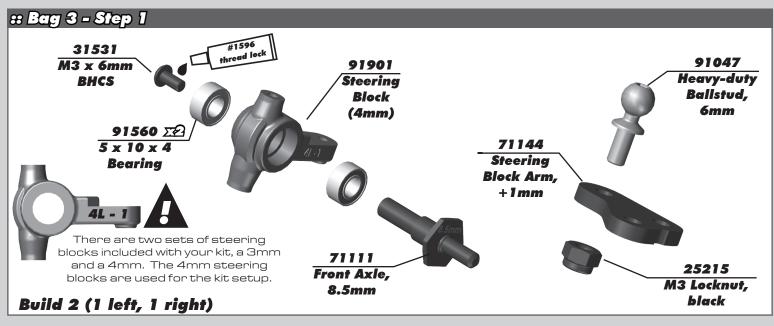


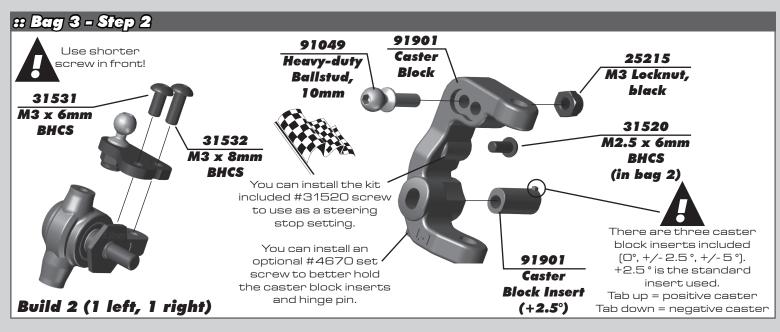


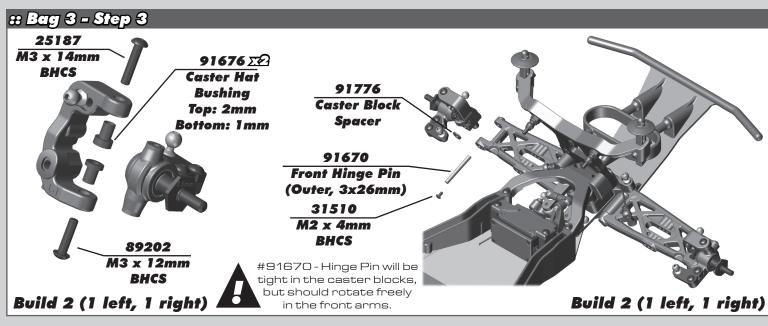


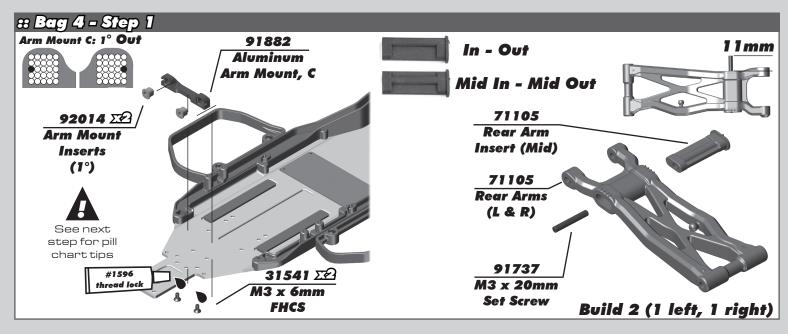


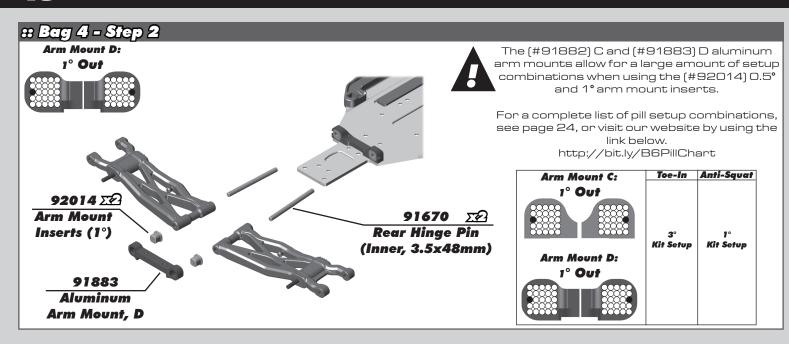


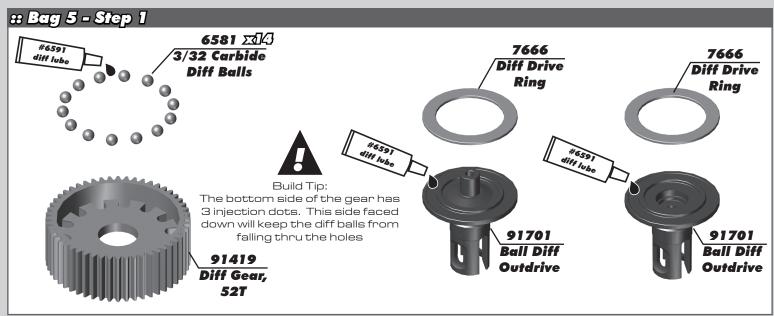










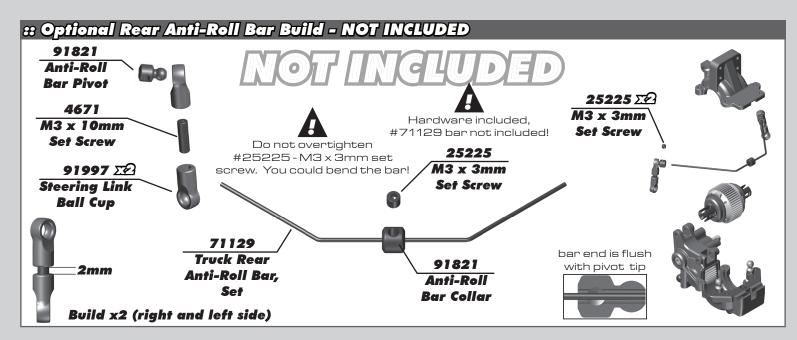


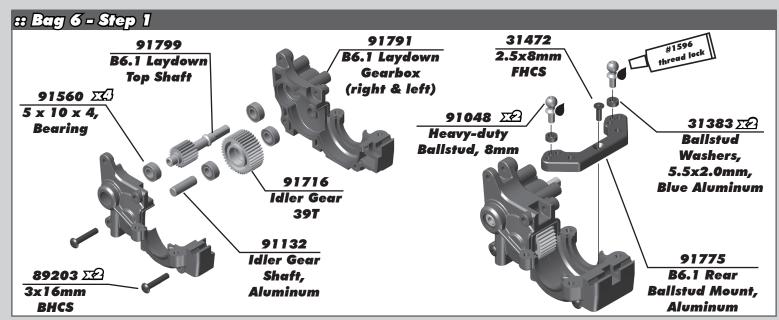




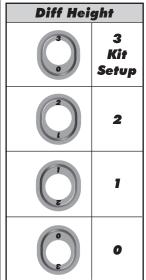
As you tighten the diff bolt, you will notice the T-nut ears moving closer to the bottom of the outdrive slot. This compresses the spring behind the T-nut. The spring should be completely compressed at the time the T-nut reaches the end of the slot. Caution! Pay close attention to the feeling when the spring is completely compressed. Do not overtighten the bolt. When you feel the spring completely compressed, loosen the diff bolt 1/8 of a turn. Your diff should now operate smoothly but with resistance as the outdrives move in opposite directions. After you have driven the car once, re-check the diff setting.

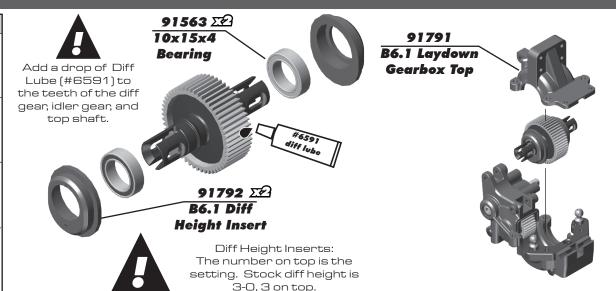


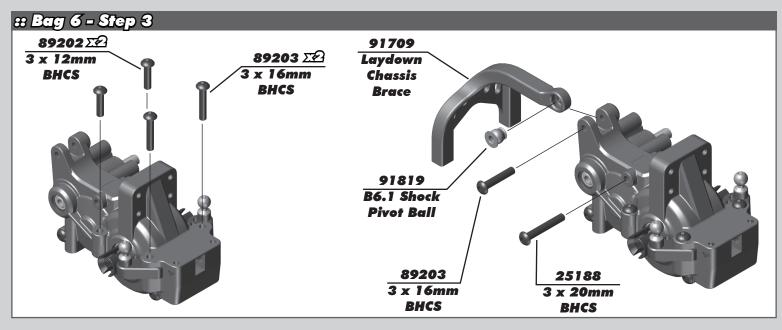


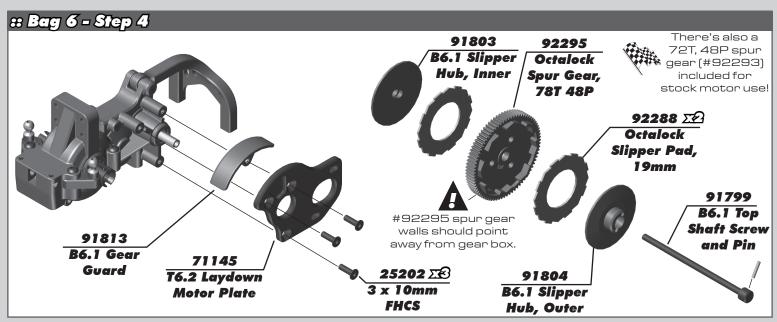


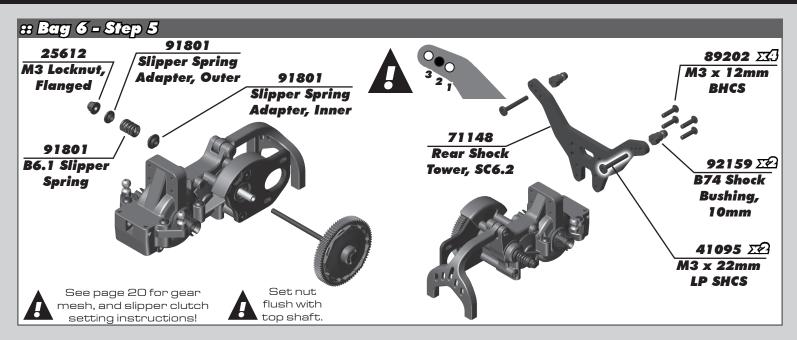
### :: Bag 6 - Step 2

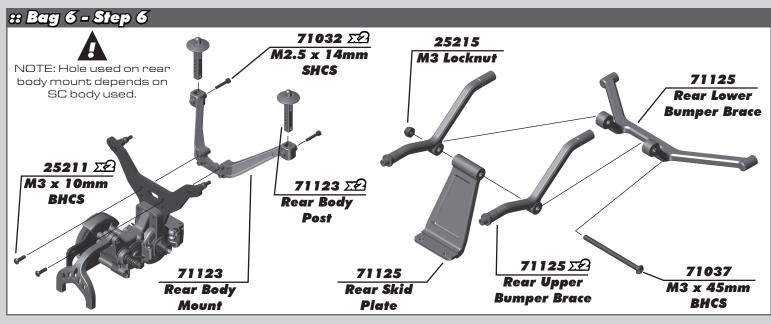


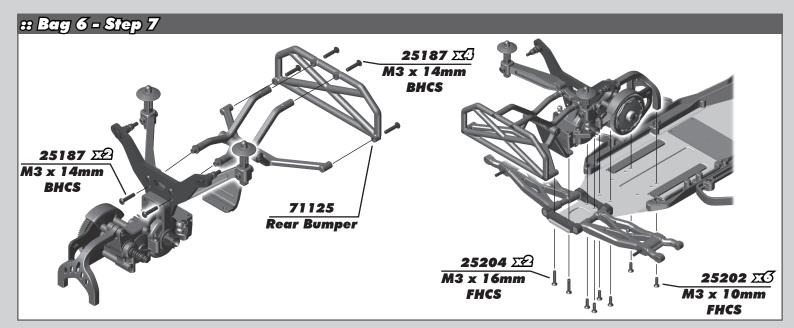


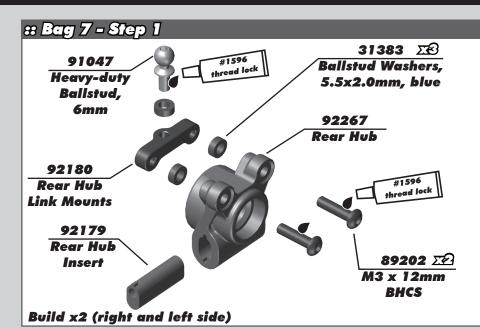




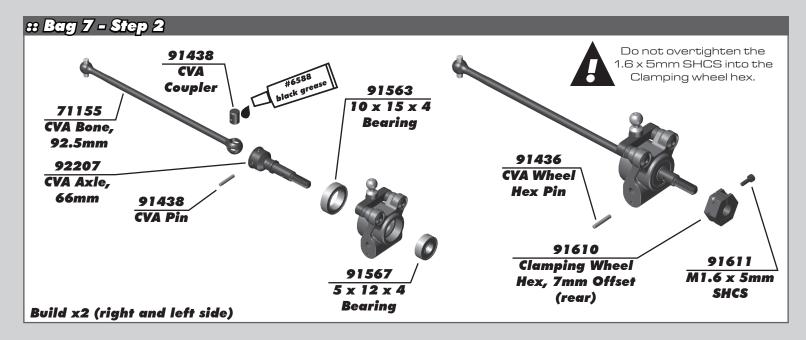


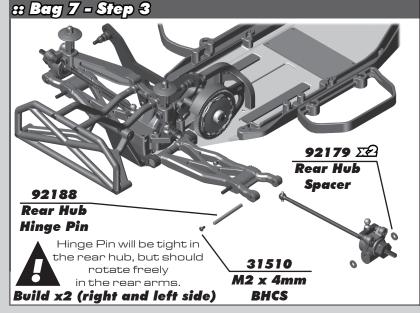






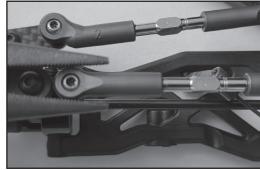
Rear Axle Height			
<b>†</b> 3	o t	3∱	+3mm
<b>†</b> 2	ı ţ	21	+2mm
<b>†</b> z	71	7 1	+ 1 mm
<b>↓</b> ε	o †	01	+0mm Kit Setup

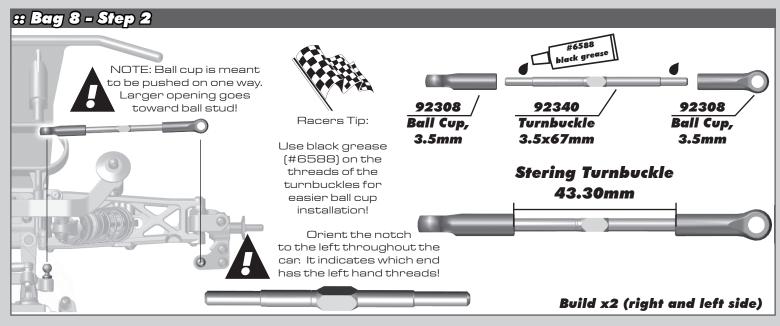


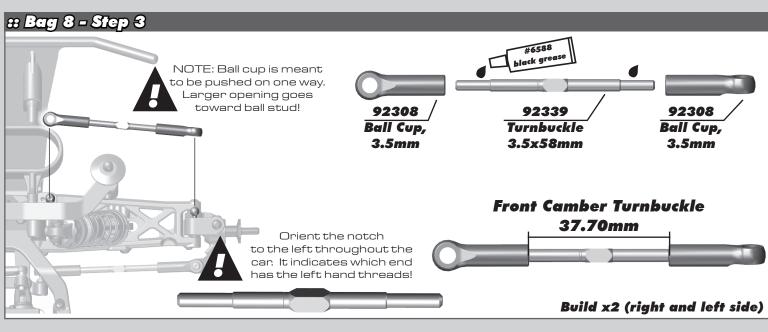


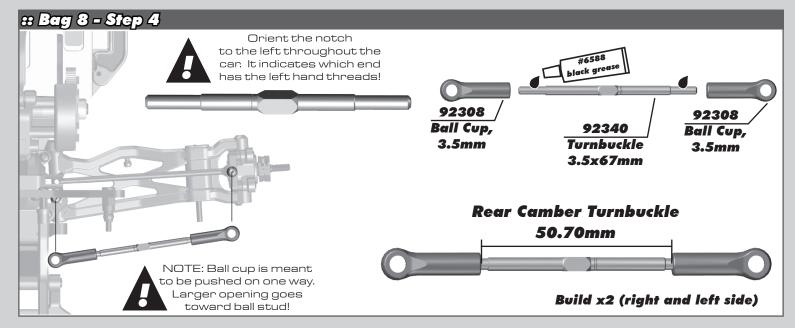
### :: Bag 8 - Step 1

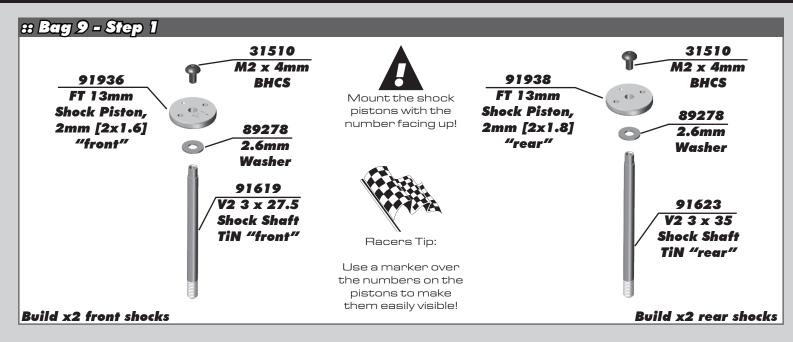
It is important that the turnbuckle eyelets move freely once snapped on to the ballstud. If the fit is too tight, the car handling will be inconsistent. To check, grab turnbuckle eyelet with fingers and rotate the cup. If there is resistance, lightly squeeze ball cup with needle nose pliers as shown and test again. It is important that the ball cup be snapped onto the ballstud before squeezing with needle nose pliers. Be sure to check and adjust the fit for each ball cup that is installed.



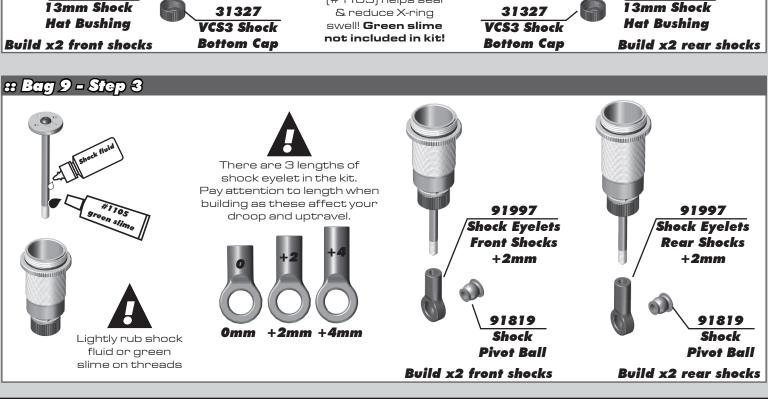


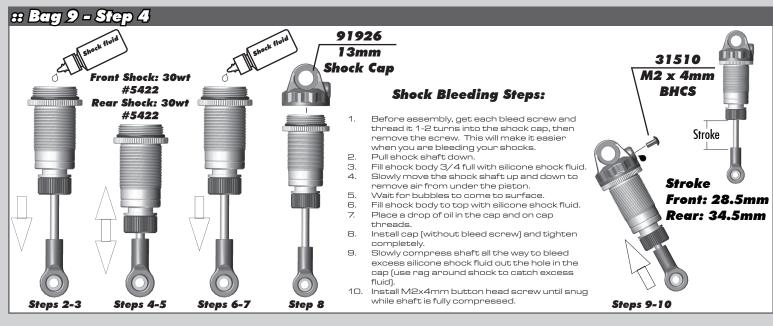


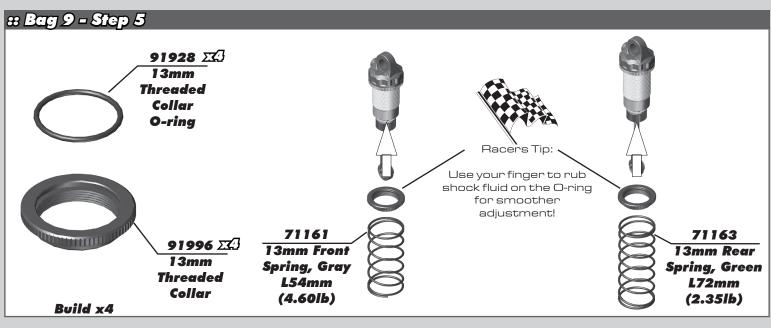


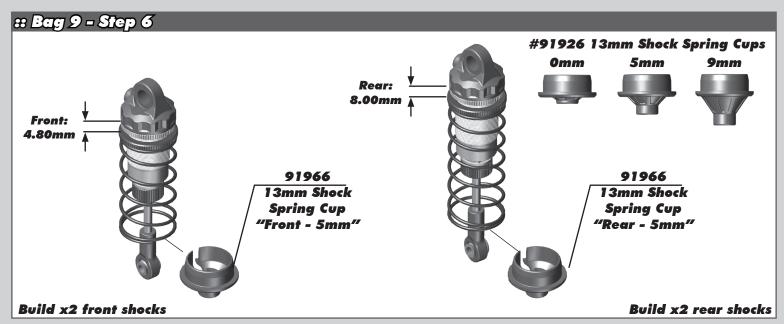


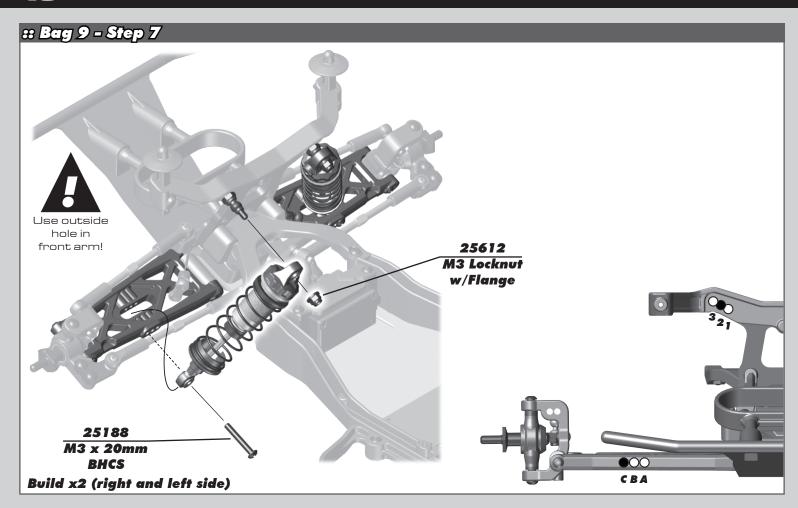


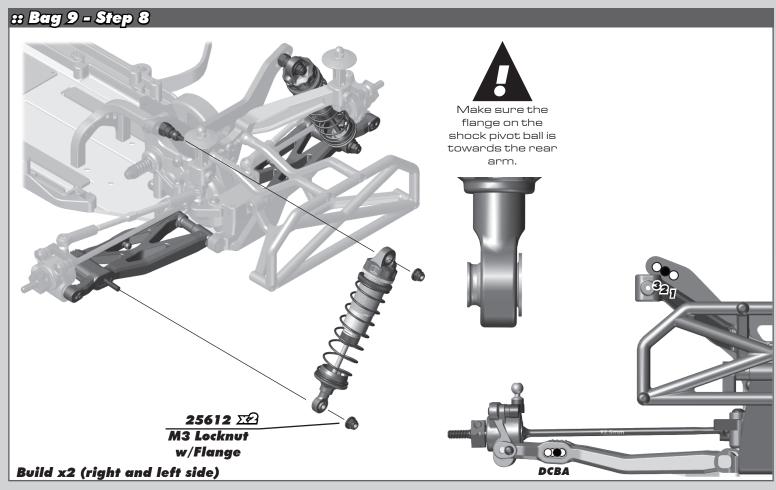


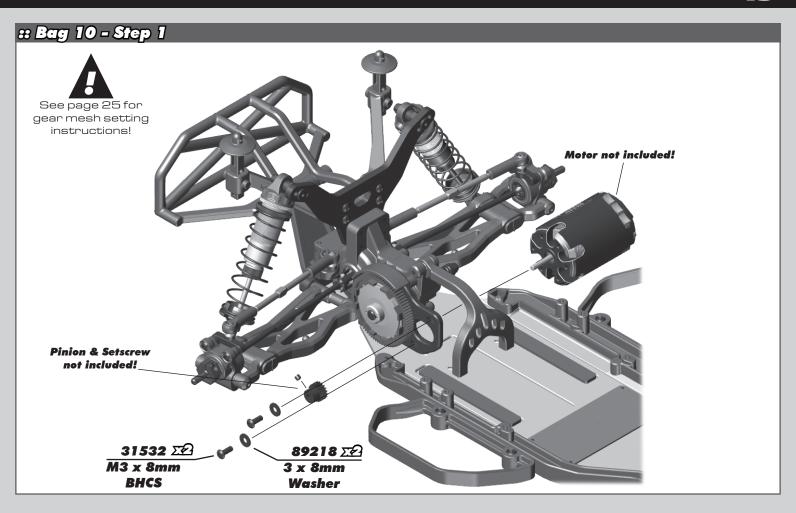


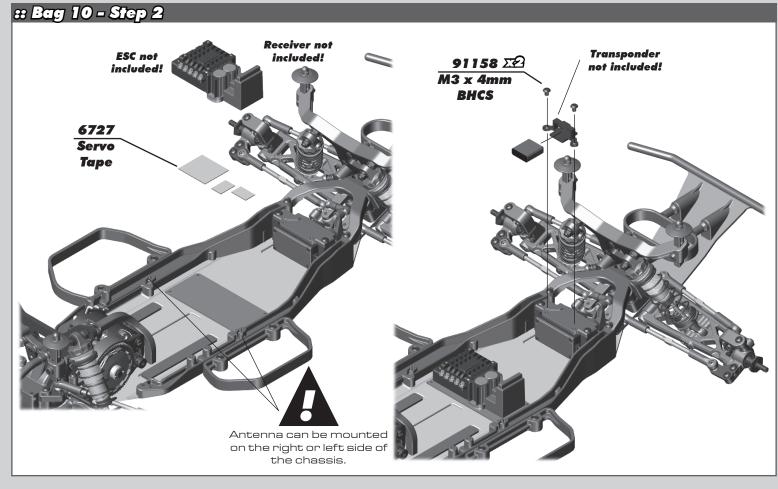


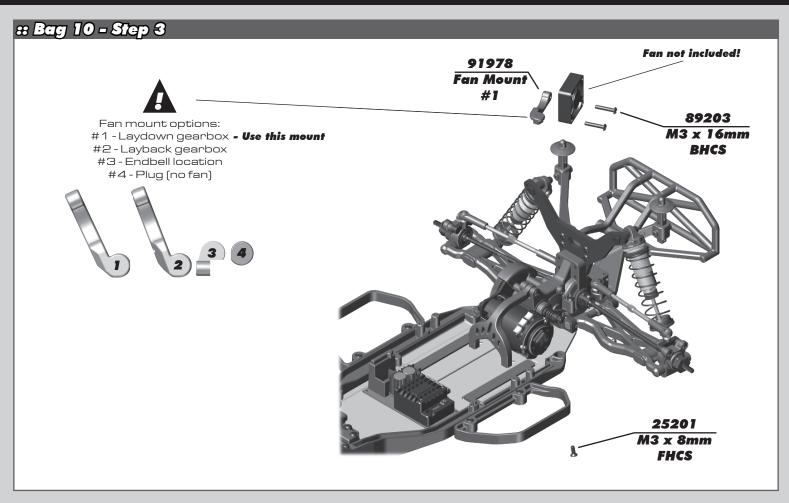


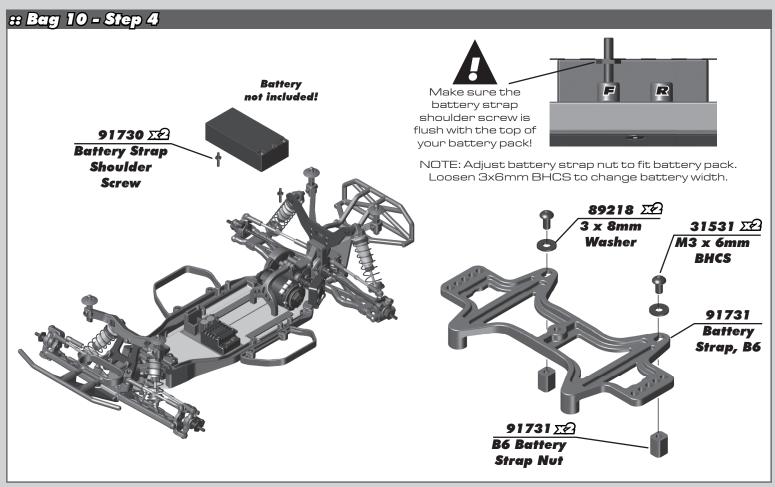


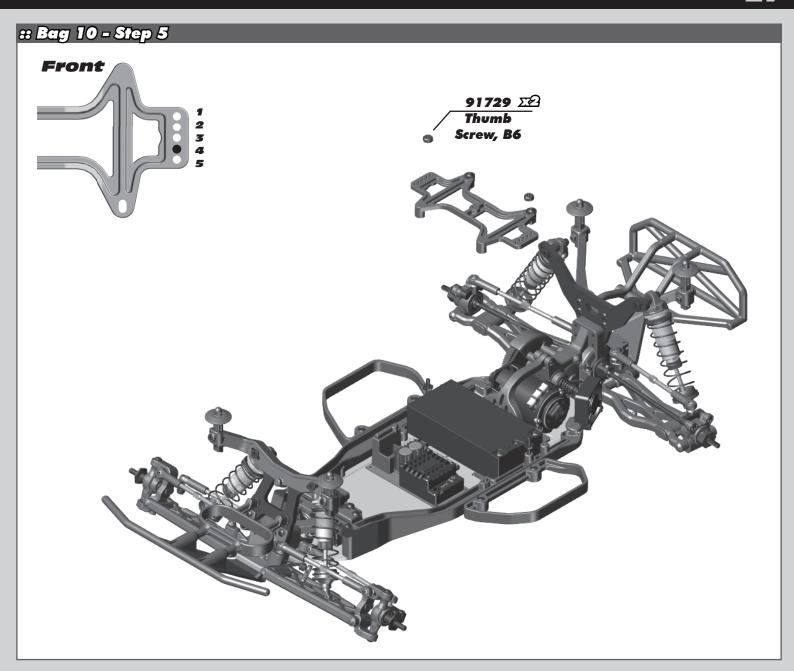


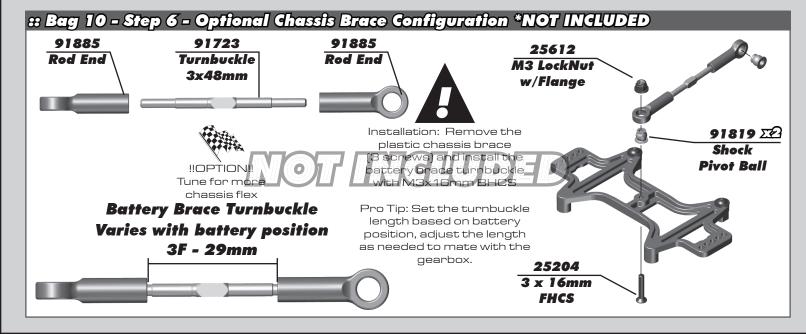




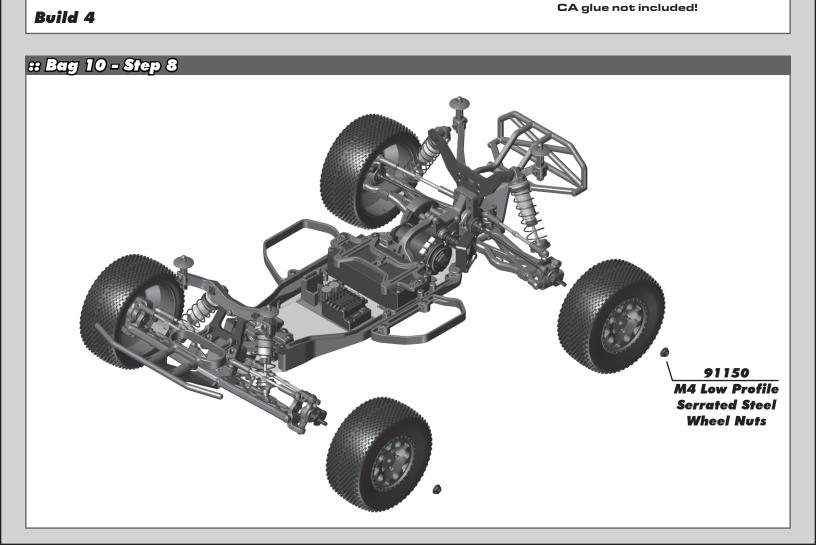








# Wheels, Tires, and Inserts are not included! Carefully apply CA glue (tire adhesive) to the tire bead on the side. Do one side at a time, allowing it to dry before gluing the other side!



:: Notes	

### **:: Tuning Tips**

### **Painting:**

Your Kit requires a clear polycarbonate body and polycarbonate specific paint. You will need to prep the body before you can paint it. Wash the INSIDE thoroughly with warm water and liquid detergent (do not use any detergents with scents or added hand lotion ingredients!). Dry the body using a clean, soft, lint-free cloth. Use the supplied window masks to cover the windows from the INSIDE of the body (RC cars get painted on the inside). Using high quality masking tape, apply tape to the inside of the body to create a design. Spray (use either rattle can or airbrush) the paint on the inside of the body (preferably dark colors first, lighter colors last). NOTE: ONLY use paint that is recommended for polycarbonate plastics. If you do not, you can destroy the body! After the paint has completely dried (usually after 24 hours), cut the body along the trim lines. Make sure to drill or use a body reamer to make the holes for the antenna if needed! Use body clips to attach the body to the chassis. Use hook and loop tape to the side rails to secure the body.

### Tips for Beginners:

Before making any changes to the standard setup, make sure you can get around the track without crashing. Changes to your vehicle will not be beneficial if you can't stay on the track. Your goal is consistent laps. Once you can get around the track consistently, start tuning your vehicle. Make only ONE adjustment at a time, testing it before making another change. If the result of your adjustment is a faster lap, mark the change on the included setup sheet (make adddtional copies of the sheet before writing on it). If your adjustment results in a slower lap, revert back to the previous setup and try another change. When you are satisfied with your vehicle, fill in the setup sheet thoroughly and file it away. Use this as a guide for future track days or conditions. Periodically check all moving suspension parts. Suspension components must be kept clean and move freely without binding to prevent poor and/or inconsistent handling.

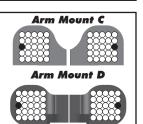
### Rear Arm Mount Pill Insert Setup:

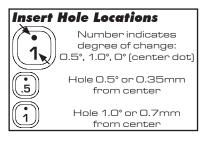
The aluminum rear arm mounts utilize eccentric pill inserts to make fine adjustments to anti-squat, toe, pin heights, and pin width. Adjustments can be made using the supplied inserts (#92014)

### Standard Position

Use this position as a reference when changing pill locations.

Toe: 3° Anti-squat: 1° Roll Center: +0 Pivot Width: +0



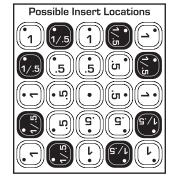


### More angle = More anti-squat Less angle = Less anti-squat Shown in 1° changes C Mount **D** Mount = 1° **(1) -** □° n 1 = -1 O <del>-</del> 2° O = 1° 0 **-** □° 1 **–** 3° <del>-</del> 2°

**–** 1°

Anti-squat Angle

Too Angle





For additional setup tips, please visit our website by using the link or QR code below.

http://bit.ly/B6PillChart



### 

Pin Height Higher pin - Higher roll center			
Lower pin = lower <b>C Mount</b>	roll center <b>D</b> Mo		<b>‡</b>
0	•	0	= +0.7°mm
<b>3</b>	0	3	= +0.35°mm
0 0	0	0	= Omm
3	•	•	= -0.35°mm
0 0	0		= -0.7°mm

More angle = More toe in Less angle = Less toe in Shown in 1° changes  C Mount  D Mount				
9	Θ	9	9	= 3°
0	0	Θ	Θ	= 4°
0	Θ	Θ	Θ	<b>=</b> 5°
9	Θ	0	0	= 2°
0	0	0	0	= 3°
Θ	Θ	0	0	= 4°
9	Θ	Θ	Θ	= 1°
0	0	Θ	9	å

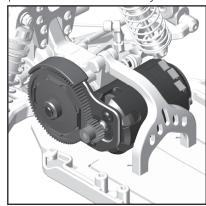
### :: Tuning Tips (cont.)

### **Motor Gearing:**

Proper motor gearing will result in maximum performance and run time while reducing the chance of overheating and premature motor failure. The gear ratio chart lists recommended **starting gear ratios** for the most widely used motor types. Gear ratios will vary depending upon motor brand, wind, and electronic speed control. Consult your motor and electronic speed control manufacturers for more information.

Team Associated is not responsible for motor damage due to improper gearing.

SC6 Gear Ratio Chart	(Intern	al Gear	Ratio 2.60:1)
Motor	Pinion	Spur	Final Drive Ratio
21.5 Reedy S-Plus Brushless	30	75	6.50:1
17.5 Reedy S-Plus Brushless	26	78	7.80:1
13.5 Reedy S-Plus Brushless	25	81	8.42:1
10.5 Reedy 540-M4 Brushless	24	81	8.78:1
9.5 Reedy 540-M4 Brushless	23	81	9.16:1
8.5 Reedy 540-M4 Brushless	22	81	9.57:1
7.5 Reedy 540-M4 Brushless	21	81	10.03:1
6.5 Reedy 540-M4 Brushless	20	81	10.53:1



### Set The Gear Mesh:

You should be able to rock the spur gear back and forth in the teeth of the pinion gear without making the pinion gear move. If the spur gear mesh is tight, then loosen the #31532 screws (p. 19) and move the motor away, then try again. A gear mesh that is too tight or too loose will reduce power and damage the gear teeth.

### **Diff Height Adjustment:**

Diff height adjustment (p.12).

On high grip surface when using low ride heights, a higher diff height would be a good option.

On low grip surface when using high ride heights, a lower diff height would be better.

### **Gear Box Type:**

Selecting the correct gear box is dependent on the type of track it will be used on. The optional 4-gear standup gear box is for the lowest grip conditions. This gear box moves the weight towards the rear of the car and also uses the rotation of the motor to transfer weight to the rear while on-power. The 3-gear standup gear box also moves the weight towards the rear of the car, but in this configuration, the motor's rotation helps with on-power steering. The laydown gear box is used on high grip conditions when on-power steering and stability are most important. This gear box will change directions the quickest and generate the most steering. Layback is used for most indoor clay track conditions.

### Slipper Clutch:

The assembly instructions give you a base setting for your clutch. Turn the nut on the shaft so that the end of the top shaft is even with the outside of the nut. At the track, tighten or loosen the nut in 1/8 turn increments until you hear a faint slipping sound for 1-2 feet on takeoffs. Another popular way to set the clutch is to hold both rear tires firmly in place and apply short bursts of throttle. If the clutch is properly set, the front tires should lift slightly up off the surface.

### **Caster:**

Caster describes the angle of the caster block as it leans toward the rear of the vehicle. Positive caster means the kingpin leans rearward at the top. The kit includes three inserts to adjust caster angle at the caster block, 0°, 2.5°, and +5°. The total caster angle is the sum of the kick-up angle and the caster block angle. Standard total caster angle for the B6 is 30°, with 25° kick-up and +5° caster block angle.

For less entry steering and more exit steering, try O° caster block angle.

### Front Camber:

Camber describes the angle at which the tire and wheel rides when looked at from the front. Negative camber means that the tire leans inward at the top. A good starting camber setting is -1°. Positive camber, where the top of the tire is leaning out, is not recommended. A camber gauge can be used to more accurately set camber.





Testing camber with camber gauge

### Rear Camber:

Camber describes the angle at which the tire and wheel rides when looked at from the back. Negative camber means that the tire leans inward at the top. A good starting camber setting is -1°. 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. A camber gauge can be used to more accurately set camber.

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