

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

#70010 RC10 SC7 Team Kit





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.AssociatedElectrics.com for the latest versions of our instruction manuals.

RC10SC7 Team Kit Features

- New 3-Gear Laydown Transmission
 - Durable new split case design for secure gear mesh
 - Large 10mm aluminum idler shaft integrates into transmission structure.
 - Added durability and stability of 54 tooth idler with 10x15mm idler bearings
 - Responsive power delivery with reduced lag and lower temps for spec racing
 - Gearbox retrofits B7 buggy
- New Truck Specific gull wing long arm suspension: improves grip and predictability in all conditions
- New updated B7 V2 caster block for added stiffness
- New 0 KPI steering blocks with 3mm and 4mm trail.
- Aluminum front bulkhead and steel hinge pin brace included in front-end design.
- BC10B7 Ball Differential included
- Fit High-Volume B7 Gear Differential: improves consistency of differential action over a longer period. Fits LTC internal gears from the RC10B74.2.
- New low CG 25mm and 31mm length 13mm big-bore shock bodies
- TiN gold 3x24mm and 3x29mm shock shafts
- Included Anti-Roll Bars Front and Rear, accessible design based on RC10B7

Additional

Your new Team Kit comes unassembled and requires the following items for completion (refer to www.AssociatedElectrics.com and www.Reedypower.com for suggestions):

- R/C two channel surface frequency radio system
- AA-size batteries for transmitter
- Electronic Speed Control ("ESC")
- Steering servo
- R/C electric motor (540 size)
- Pinion gear (48P), size determined by type/turn or kV of motor
- Battery charger (a peak detection charger, or LiPo compatible charger)

- 2 cell LiPo battery pack
- Polycarbonate specific spray paint
- Cyanoacrylate glue ("CA") (#1597)
- Thread locking compound (#1596)
- Tires and Inserts, Fronts and Rears
- Wheels w/12mm Hex Front Wheels #9690 (white), #9691 (yelllow) Rear Wheels #9695 (white), #9696 (yelllow)
- Slim Front Wheels w/12mm Hex (carpet/astro turf) #91757 (white) #91758 (yelllow)

Other Helpful Items

- Silicone Shock Fluid (Refer to AssociatedElectrics.com for complete listings)
 Green Slime shock lube (#1105)
- FT Turnbuckle Wrench, 4mm (#1112) FT Body Reamer (#1499)

- Shock Pliers (#1681)
- Wire Cutters

- FT Hex/Nut Wrenches (#1519)
- FT Ballcup Wrench (#1579)
- Hobby Knife
- Needle Nose Pliers

- FT Universal Tire Balancer (#1498)
- Calipers or a Precision Ruler
 FT Body Scissors (#1737)
- Soldering Iron

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



Customer Service Tel: 949.544.7500 Fax: 949.544.7501

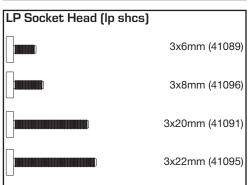
Hardware - 1:1 Scale View

Button Head (bhcs)	
	2x4mm (31510)
	2.5x6mm (31520)
	3x4mm (91158)
	3x6mm (31531)
	3x8mm (31532)
	3x10mm (25211)
	3x12mm (89202)
	3x14mm (25187)
	3x16mm (89203)
	3x18mm (2308)
	3x20mm (25188)
	3x22mm (25189)
	3x24mm (89204)
	3x45mm (71037)
Shims and Washers	5X45HIII (7 1037)

Shims and Washers	
	5.5x0.5mm (31381)
	5.5x1.0mm (31382)
	5.5x2.0mm (31383)

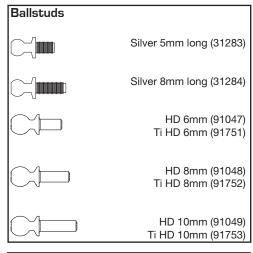
Set Screws	
	3x3mm (25225)
	3x6mm (81257)
	3x10mm (4671)
	3x12mm (81258)
	3x20mm (91737)

Flat Head (fhcs)	
	2x3mm (91749)
	2.5x8mm (31472)
	3x6mm (31541)
	3x8mm (25201)
	3x10mm (25202)
	3x12mm (25203)
	3x14mm (89208)
	3x16mm (25204)



Niuto (lee	k /plain)							
Nuts (lock/plain)								
	M3 Nut (Black) (91477) M3 Alum. Locknut (Blue) (31550) M3 Locknut (Black) (25215)							
	M3 Locknut w/Flange (Black) (25612) FT 3mm Locknuts (Blue) (25392)							
	M4 Locknuts: Serrated Steel LP (Black) (91150) Serrated Steel (Silver) (91826) Serrated Aluminum (Black) (91738)							

Ball Bearings	
	4x7x2.5mm (31732)
	5x8x2.5mm (31400)
	5x10x4mm (91560)
	5x10x4mm flanged (92324)
	5x12x4 (91567)
	10x15x4 (91563)





Notes:

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Notes



This symbol indicates a special note or instruction in the manual.



This symbol indicates the number of the same part that is required.



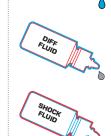
This symbol indicates the order within a step to assemble parts.



This symbol indicates there are optional FT parts available



This symbol indicates a Racers Tip.



applied. *not included

This symbol indicates

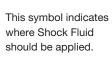
where Diff Fluid

should be applied.

This symbol indicates

where Thread Lock

Adhesive should be





This symbol indicates where FT Silicone Grease should be applied.
*not included



This symbol indicates where FT Diff Lube should be applied.
*not included



This symbol indicates where Black Grease should be applied.

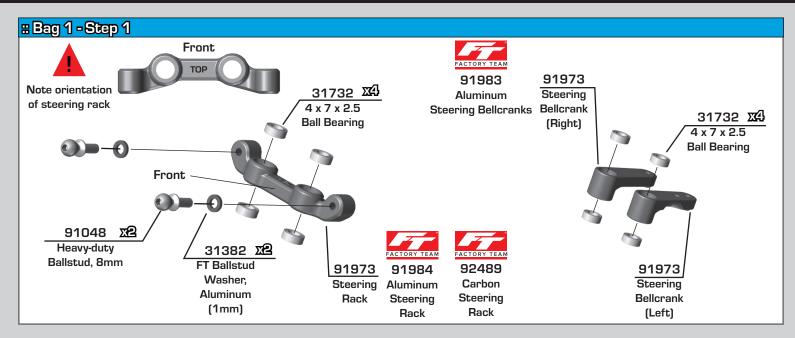


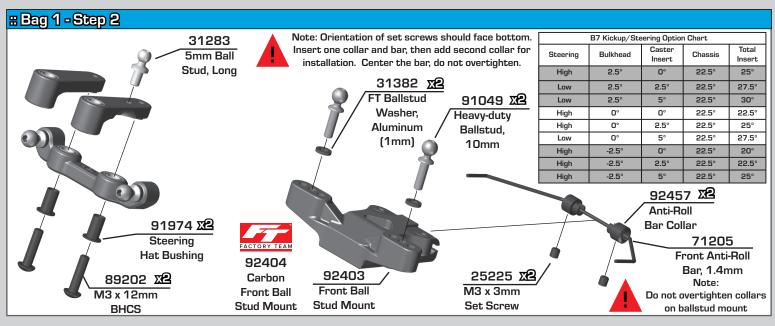
This symbol indicates where Green Slime can be applied.
*not included

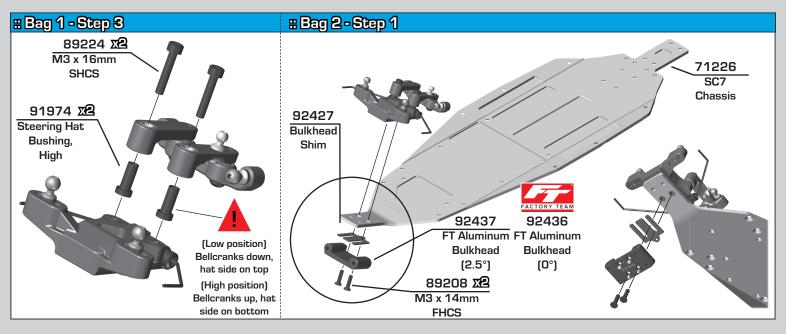


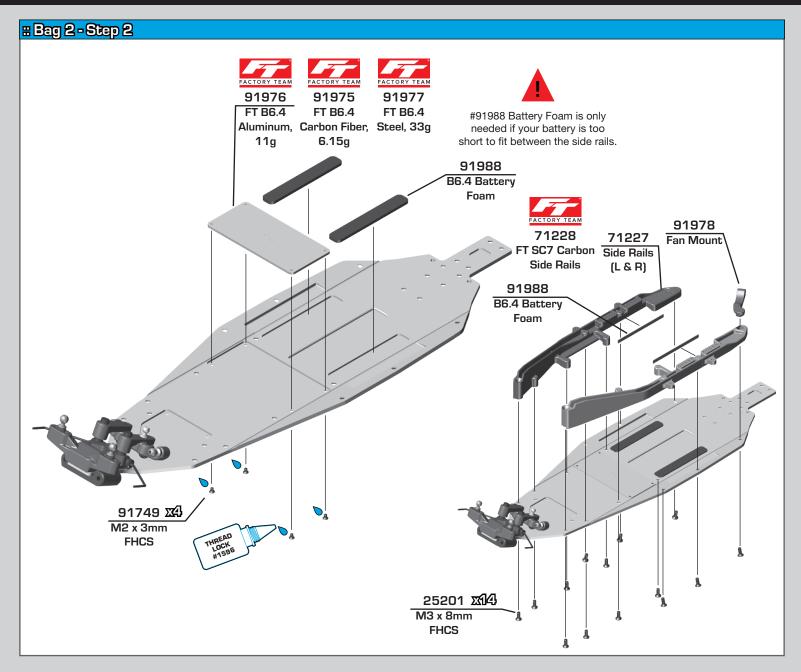
There is a 1:1 hardware foldout page in the front of the manual. To check the size of a part, line up your hardware with the correct drawing until you find the exact size. Each part in the foldout has a number assigned to it for ordering replacement parts.

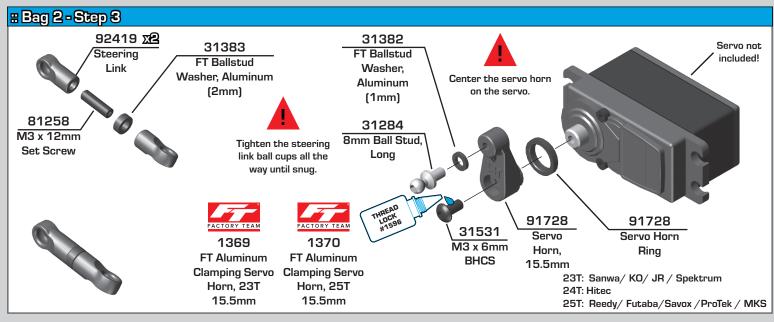
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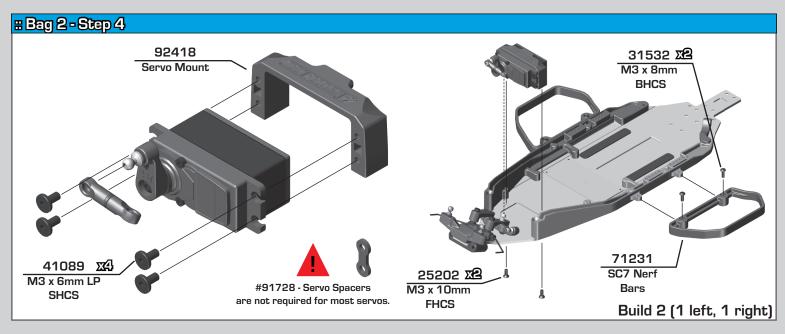


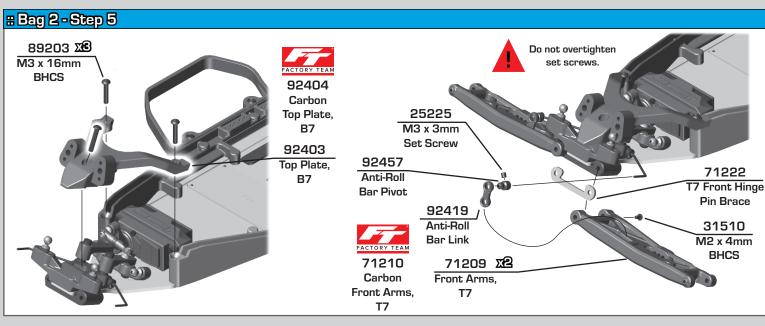


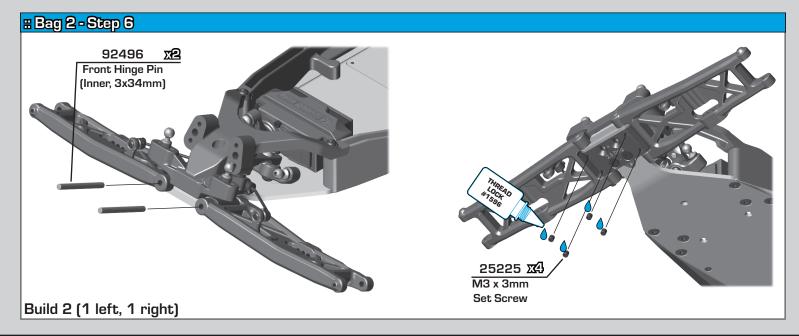


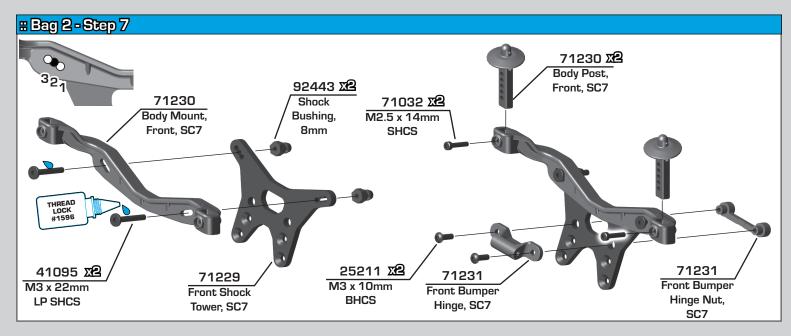


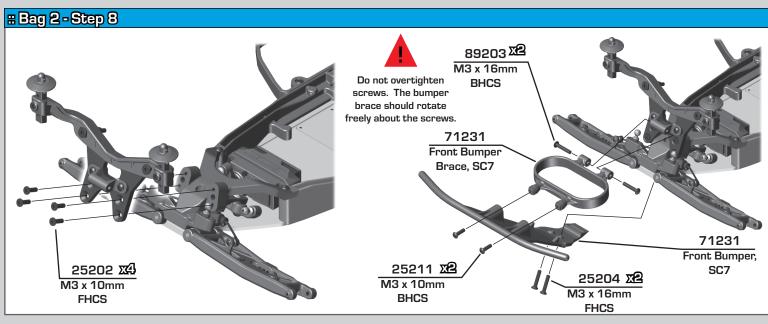


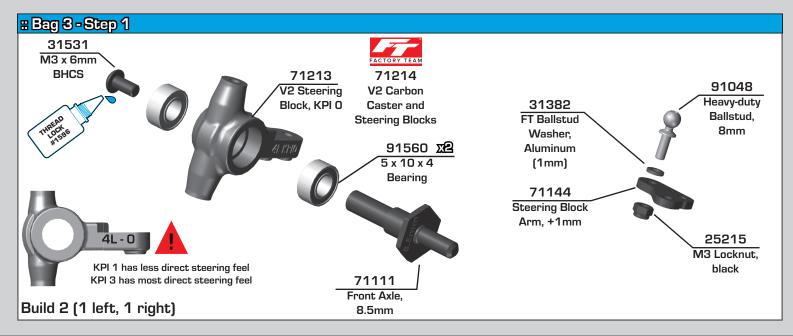


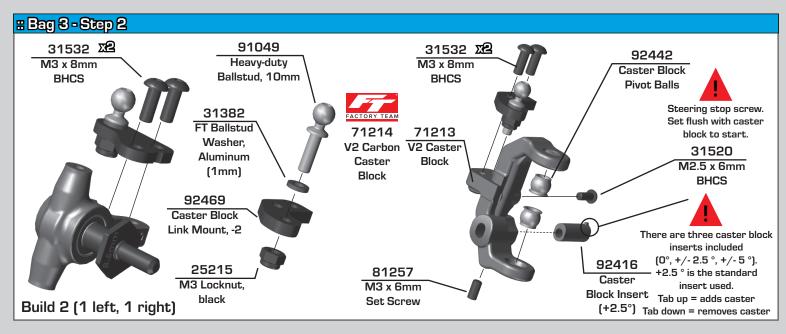


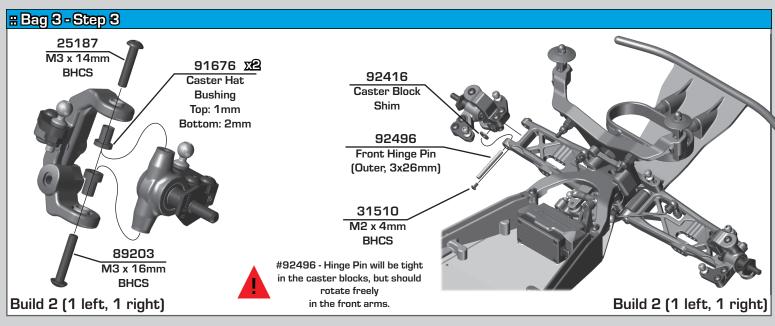


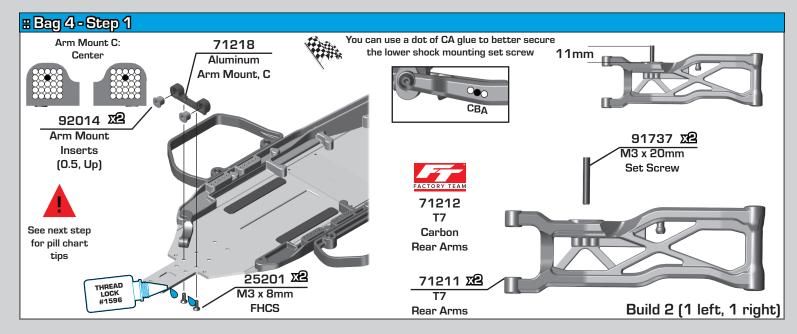


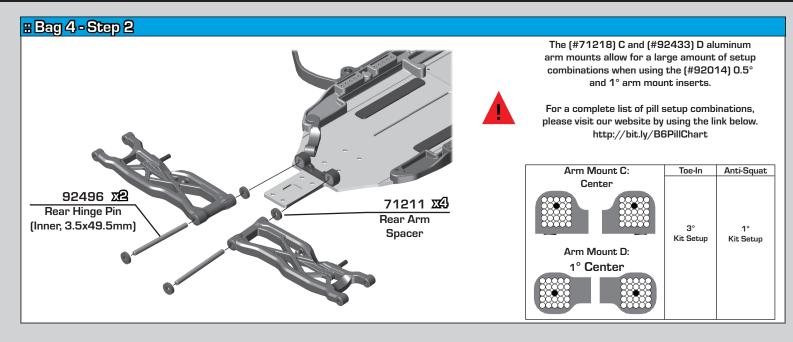


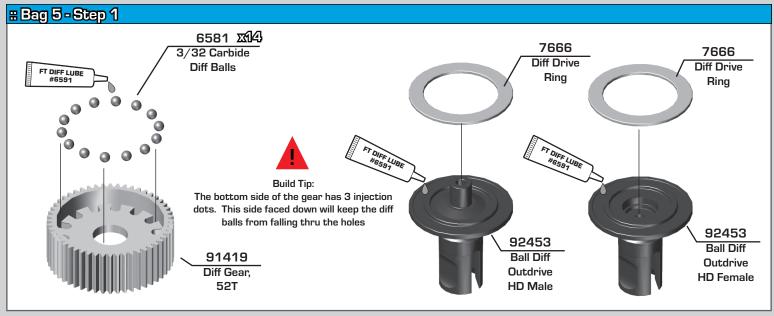


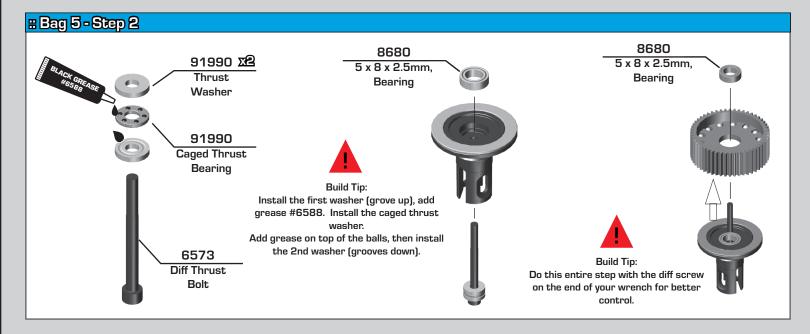












Bag 5-Step 3 ■ Bag 5 ■ Bag



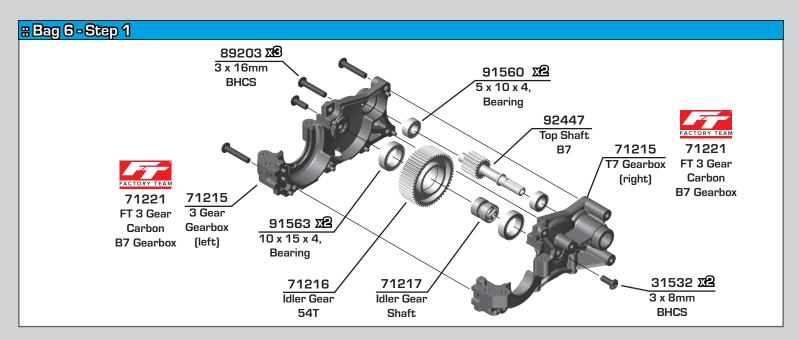
As you tighten the diff bolt, you will notice the T-nut ears moving closer to the bottom of the outdrive slot. This compresses the spring behind the T-nut. The spring should be completely

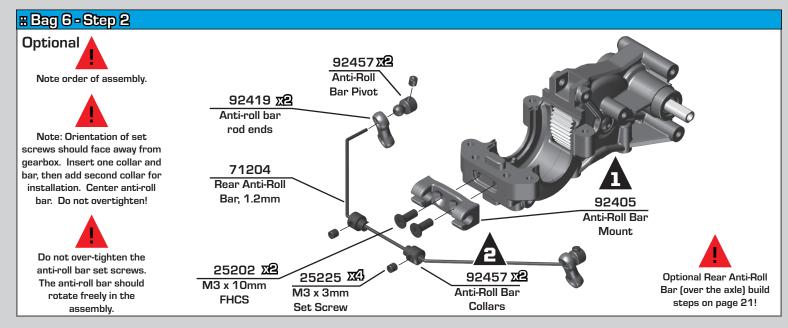
compressed at the time the T-nut reaches the end of the slot. Caution! Pay close attention to the feeling when the spring is completely compressed. Do not overtighten the bolt. When you feel the spring completely compressed, loosen the diff bolt 1/8 of a turn. Your diff should now operate smoothly but with

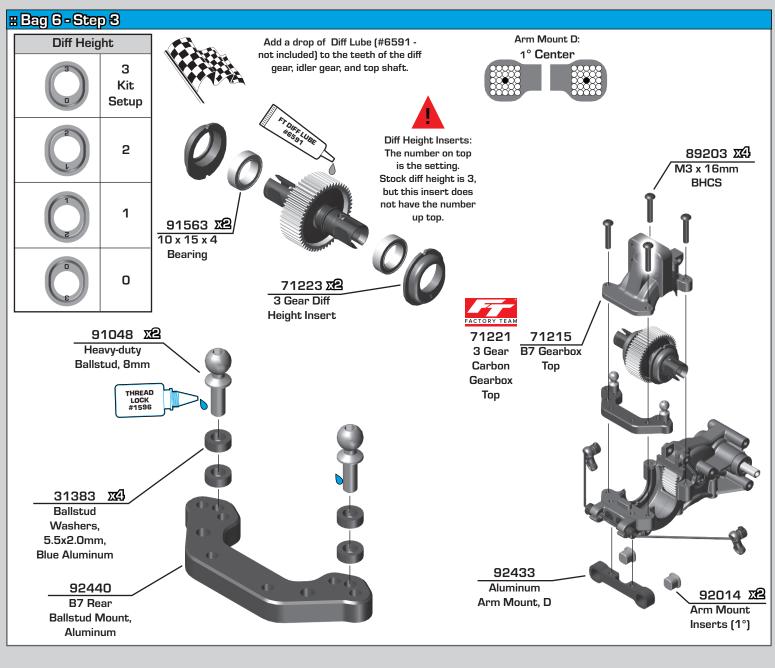
resistance as the outdrives move in opposite directions.

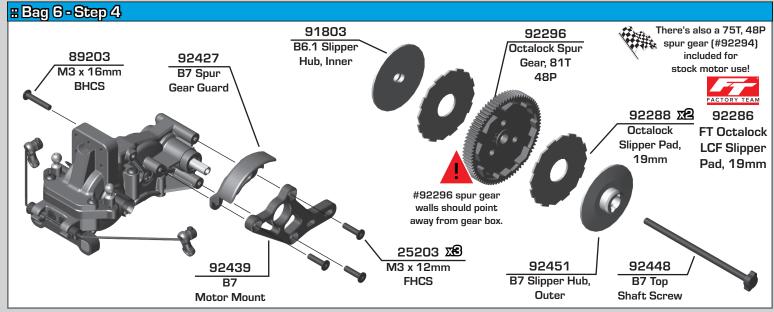
After you have driven the car once, re-check the diff setting.

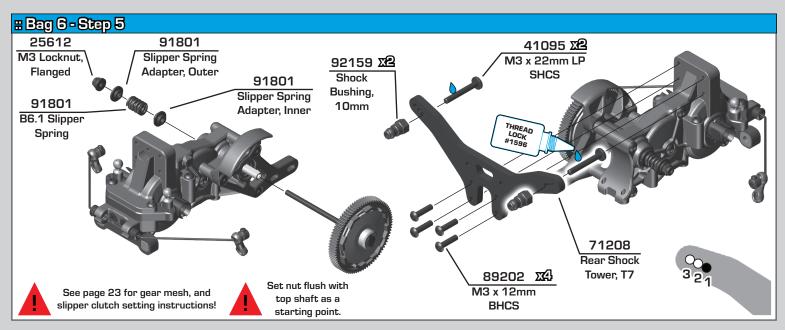


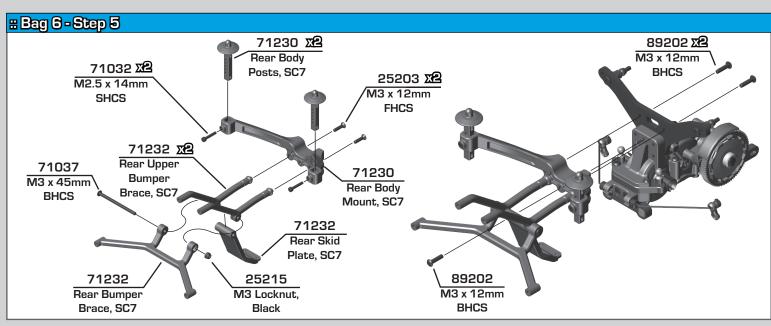


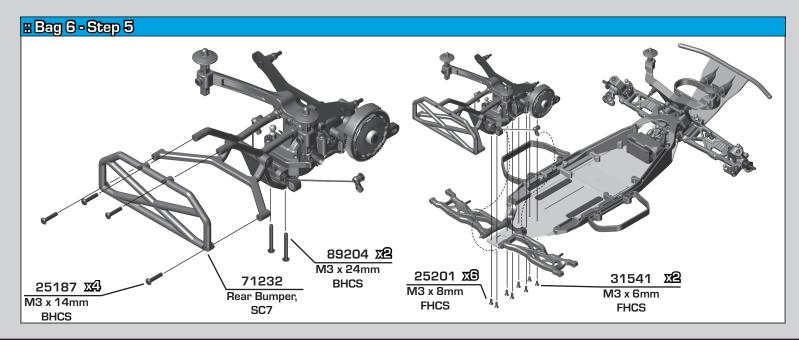


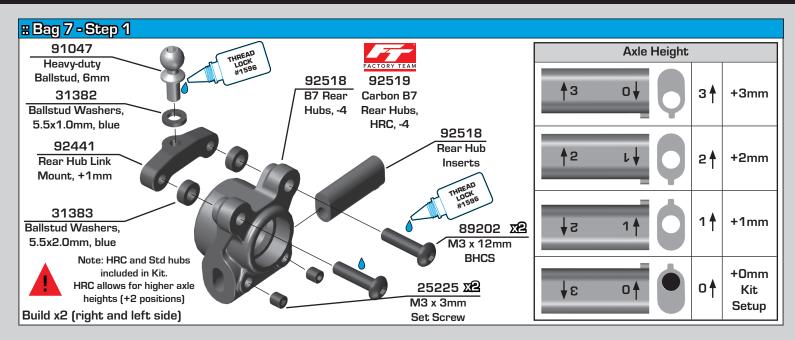


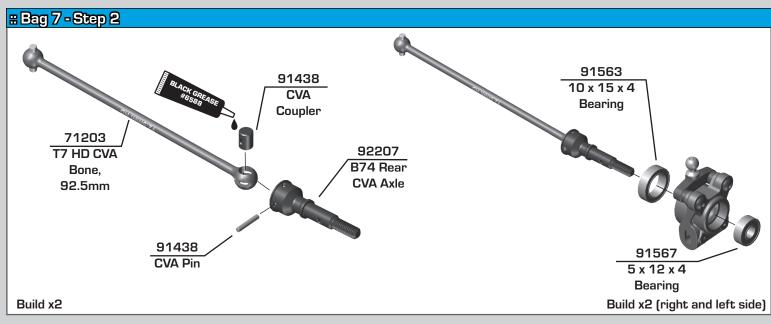


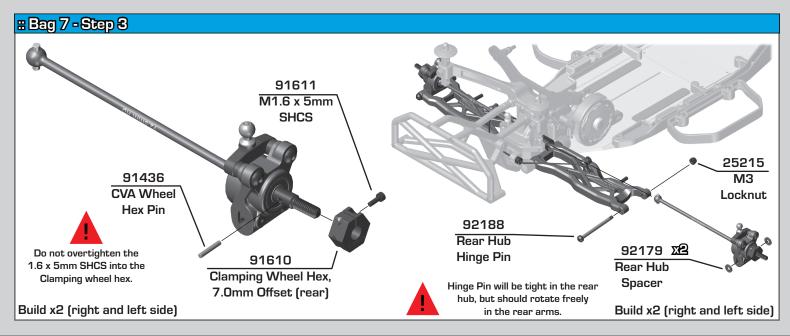


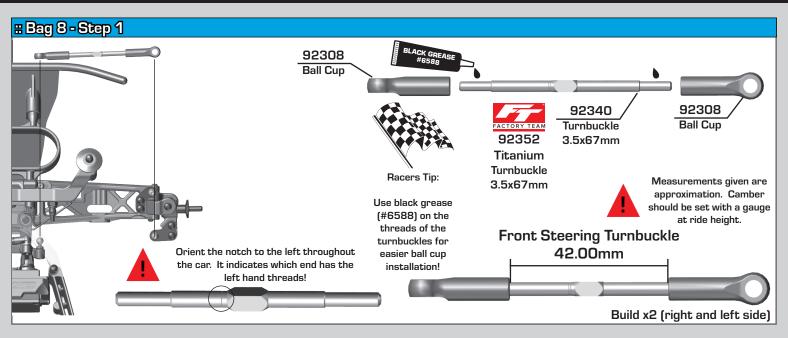


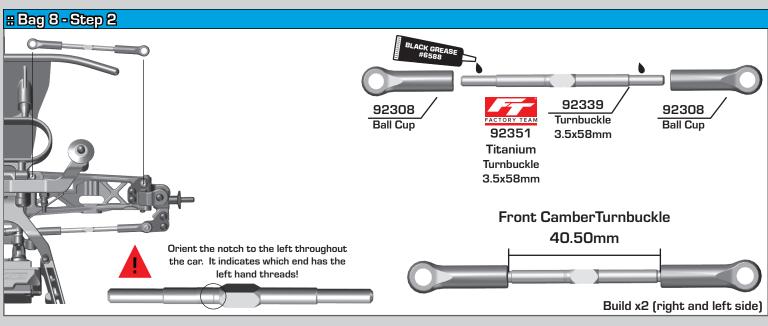


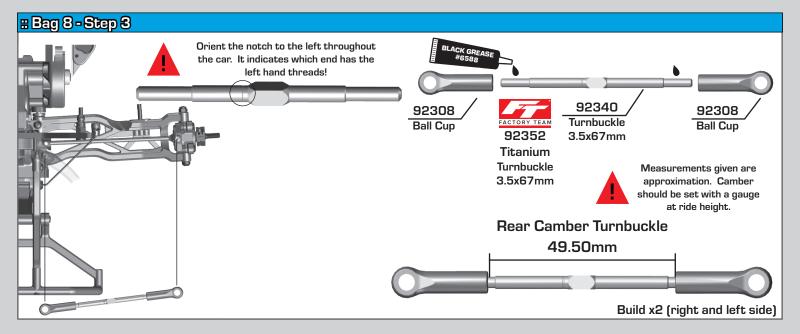


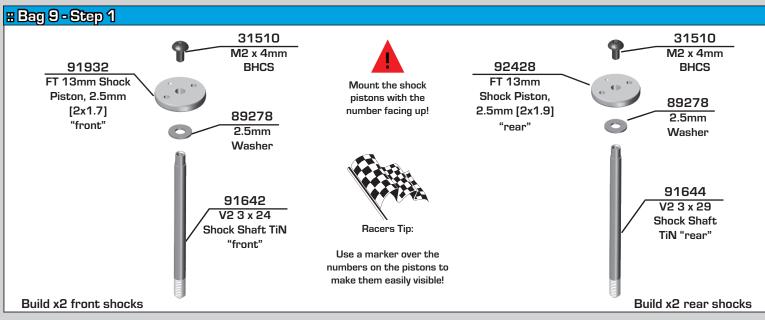


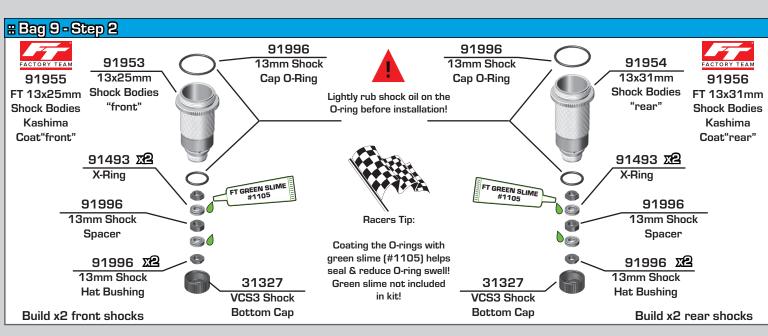


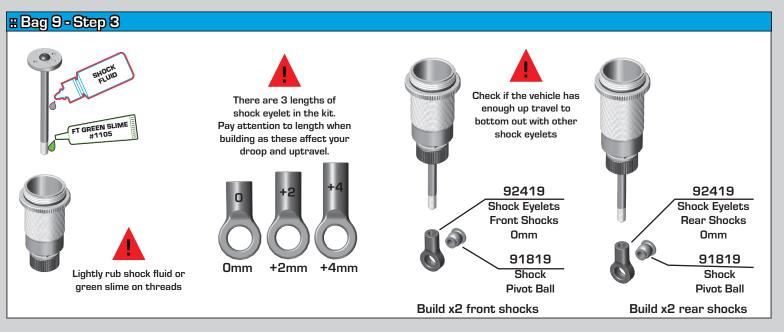


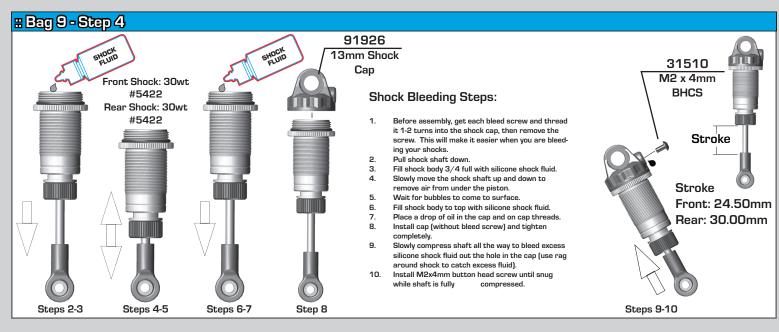


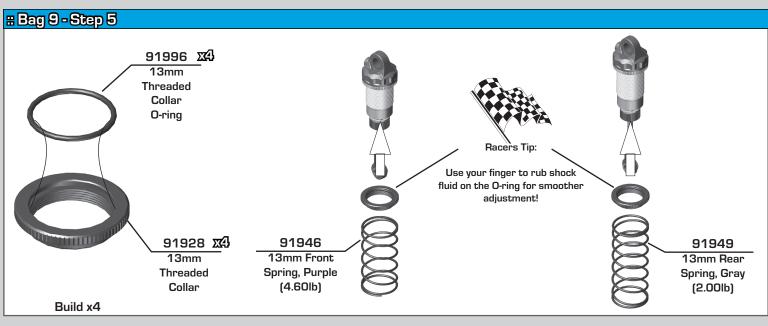


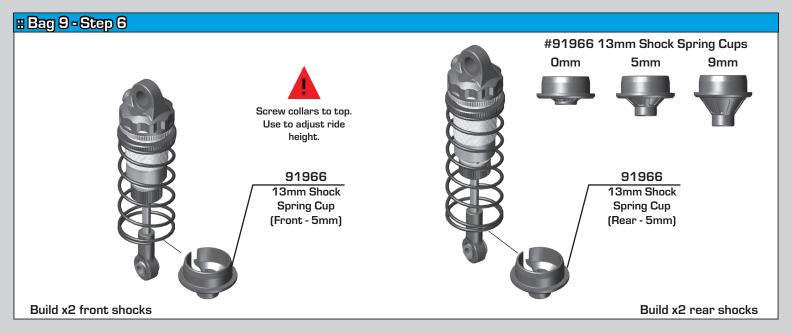


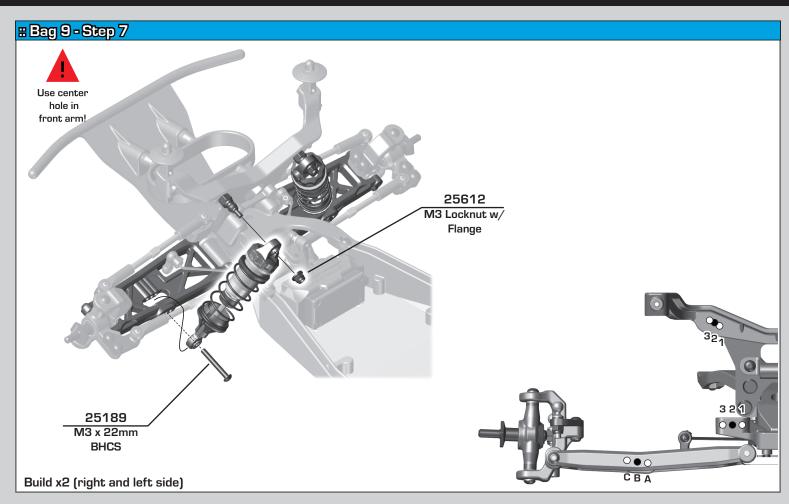


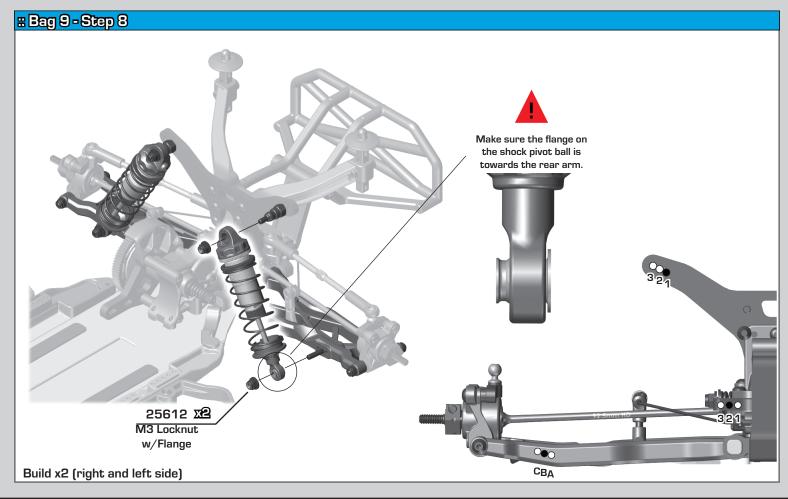


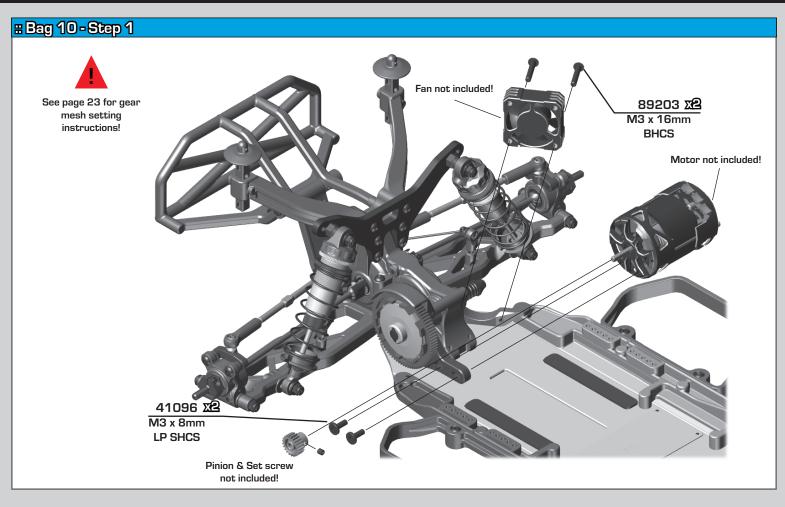


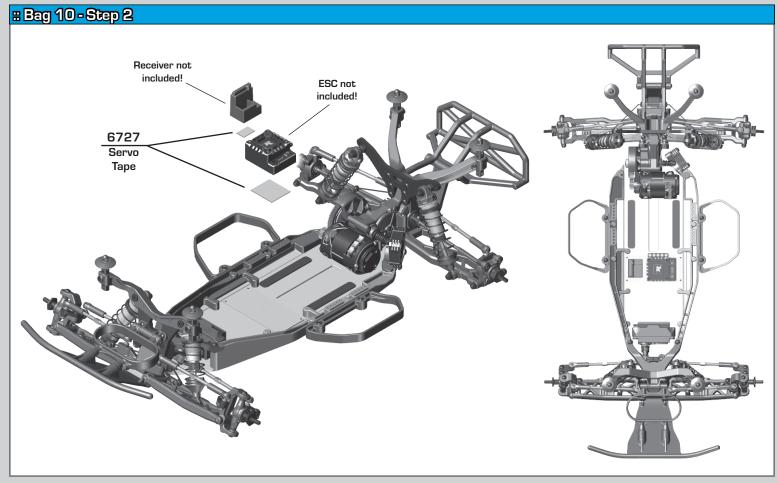


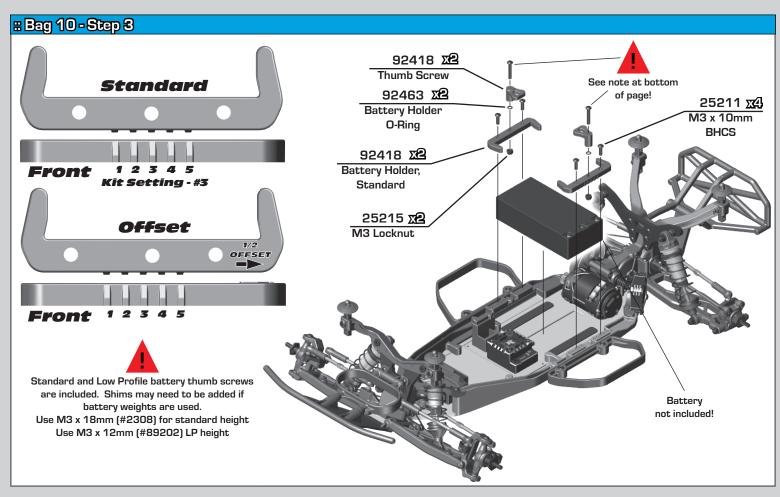


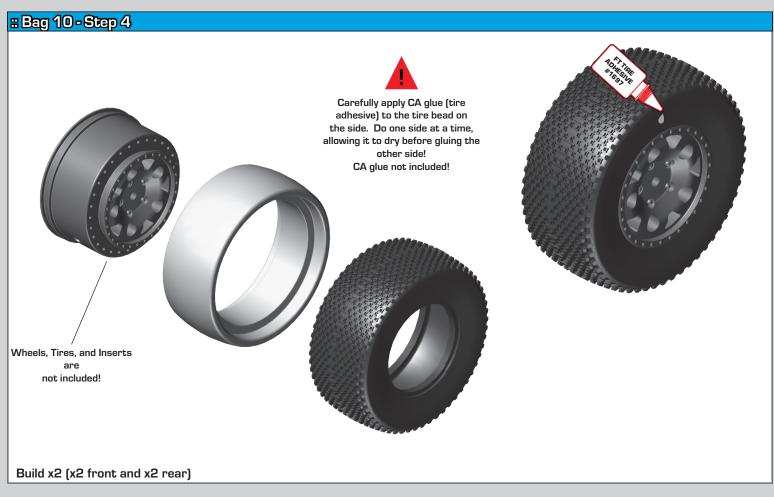


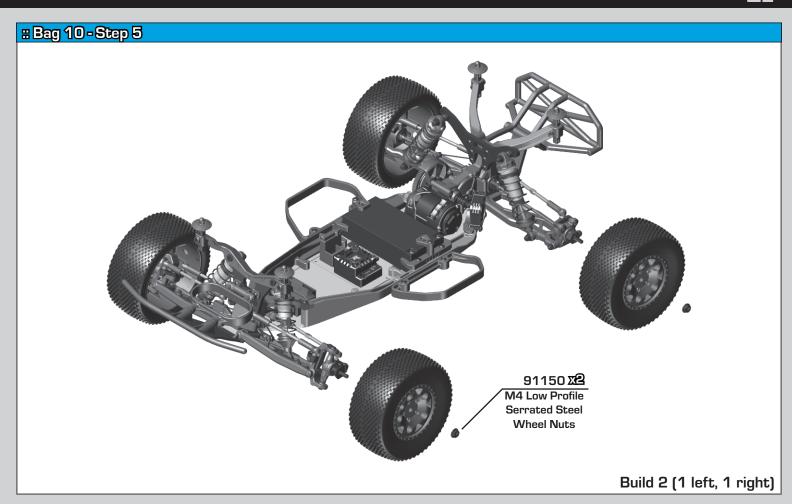


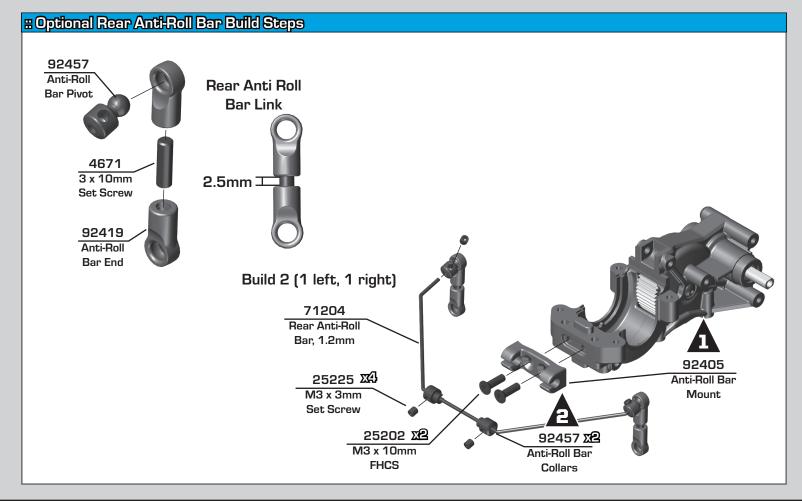












Tuning Tips - Painting, Beginners

Painting:

Your Kit requires a clear polycarbonate body. 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 bodies 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 hook and loop tape to secure the body to the side rails of the vehicle.

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.

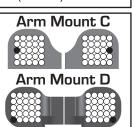
Rear Arm Mount Pill Insert Setup:

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: 2° Roll Center: +0 Pivot Width: +0



Insert Hole Locations Number indicates degree of change: 0.5°, 1.0°, 0° (center dot)

Hole 0.5° or 0.35mm from center

> Hole 1.0° or 0.7mm from center

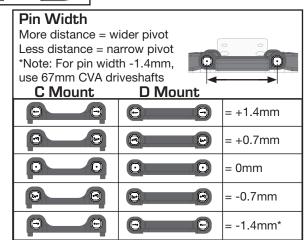
Anti-squat Angle

More angle = More anti-squat Less angle = Less anti-squat

Shown in 1° changes C Mount **D** Mount

0	0	= 1°
0 0		= 0°
	0	= -1°
	0 0	= 2°
0 0	0 0	= 1°
0 0	0 0	= 0°
0	0	= 3°
0 0	0	= 2°

Possible Insert Locations



Toe Anale

	,			
More angl	e = More	toe in		-
_ess angl	e = Less	toe in	- 0	
Shown in C M	1° chang	es _		
C M	ount	D	Mount	
Θ_	9	Θ	Θ	= 3°



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

http://bit.ly/B6PillChart



Pin Height Higher pin = Highe Lower pin = lower C Mount		ınt 🕈	•
0	(i)	1	= +0.7°mm
3	3	3	= +0.35°mm
0 0	0	0	= 0mm
0	•	•	= -0.35°mm
0 0	0		= -0.7°mm

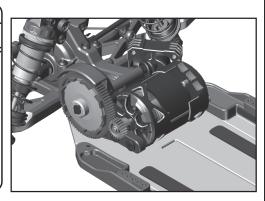
Shown in 1° chang C Mount	
9 9	O O = 3°
0 0	O = 4°
0	e = 5°
9 9	• = 2°
0 0	o = 3°
0 0	• = 4°
0 0	O = 1°
0 0	O = 2°
9 9	O = 3°

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.

SC7 Gear Ratio Chart (Internal Gear Ratio 2.60:1)										
Motor Pinion Spur Final Drive Rat										
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							
*78T spur gear not included in kit!										



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 #41096 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:

The diff height adjustment (p.12) is a good way to tune the car for grip level. On high grip with low ride heights, a higher diff height will be a good option. On lower grip with higher ride heights, a lower diff height will be better.

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 0° 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.





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.

RC10		Kit Setup	Event#	Qualify:	Mains
TEAM KIT	Date: _		Thacks	Flidslin	Best Lap Tilmer
Front Suspension:					
Ride Height: 23mm (body on)	7	Ball Stud Spacing	n 2mm	Ste	eering Bellcrank Position: Up Down
Camber: -1	╡		<u> </u>		
Toe: O Degree	╡	Ball Stud Spacing	u: Omm	Bal	Il Stud Spacing: 1mm
Anti-Roll Bar: 1.4mm	=			_	
Arm Type: Kit	Bump Ste	eer Spacing: 1mm			
Tower Type: Kit		3			all Stud Spacing: 1mm
Wheel Hex: 8.5mm	Steering	Plate: +1	5.0mn	В	all Stud Spacing: 2mm
Steering Block KPI: 4 trail, 0 kpi	╡ ̄ ̄゛				
Caster Block Insert: 0 +2.5 +5	₹			40	
Bulkhead Type: Aluminum	<u> </u>				3 2 1
Kick-Up Angle: -2.5 0 +2.5					
Steering Stop Spacing: Omm	Ī		Axle Height: +3	16	
Caster Block Spacing: Fwd Back	<u></u>		+2		CBA
Notes:			+1	Cast	ter Block Link Mount: -2
			+0	Fron	nt Bulkhead Spacing: 1mm
Rear Suspension:					
Ride Height: 23mm (body on)	C Mount:		Axle He	ight:	
Camber: -1	Aluminur	n Steel	_ • • 0 3	4 +3	321
Anti-Roll Bar: Optional - 1.2mm		20000	○ ▼ 1 2	4 +2	
Arm Type: Kit				▼ +1 Ca	amber Link Spacing: 2mm
Tower Type: Kit		5 50000		Bi	all Stud Spacing: 1mm
Arm Spacing: Fwd Mid Back			○ ▲ 0 3	/ <u></u>	all Stud Spacing: 4mm
Wheel Hex: 7mm	D Mount		7	Anti-F	Roll Bar Link Spacing: 2.5
Hub Type: Std HRC	Aluminur	n Steel			a two
Hub Spacing: Fwd Mid Back			(11111111111		92.5mm 321
Drive Shaft: CVA's Universals					
Notes:				000	U,
				СВД	
Electronics		Drivetrain		Shocks:	
Radio: Servo:		Differential:	Ball Diff:		ont Rear
EPA: Throttle: % Brake:	%	Height: 3	_ Gear Diff: D	Piston: 2 x	
ESC:		Diff Setting:		Thickness: 2.	
ESC Settings:					0 30
	iming:	Notes:		Spring: Pur	
Pinion: Spur:		Slipper Clutch:		Limiters: Int:	Ext: Int: Ext: \$
Battery Mount: Std Offset		Type: Standard # of Pads: 2 x 19mm		Stroke: 24	
	1 Campianal		z x 19mm	Eyelet:	
Back 1 2 3 4 5	Forward	Setting:		Cup Offset: 0 +5	
Battery: Weight:		Notes:		Kashima Bodies:	Chrome Shafts: Machined Spacers:
Notes:			Dorlly WV	Notes:	Walterla Commonton
TrackInfo:	Tires		Body, W	eignti	Vehicle Comments:
Size:	Front Tires:		Body:		Notes:
Surface:	Front Compo		≕		—
Traction:	Front Insert:		=		
Moisture:	Rear Tires:			0	⊣ ∥
Condition:		Rear Compound:		ength: 0	⊣ ∥
		Rear Insert:		ghts: None	<u> </u>
Temperature:		Wheel (F/R):		Weights: Aluminum	'
Notes:	Notes:			cle Weight:	
# For more setups, vis	it https:///	www.associated	electrics.com/t	eamassociated/man	nuals and setup sheets/

RC10	Driver:	E ve	1 6 8		Qualify:	Matne		
TEAM KIT	Date: _	TRE	eke		Fildsh:	Best Lap Tilmer		
Front Suspension:								
Ride Height:	7	Ball Stud Spacing:			Steerin	g Bellcrank Position: Up 🔲 🛭	own 🔲	
Camber:	╡	Dan Daaa Spasing.	4		,	g 20::0: a:::::: : co::::::::::::::::::::::::::		
Toe:	ヿ゙	Ball Stud Spacing:			Ball Stu	d Spacing:		
Anti-Roll Bar:	╡	, , ,						
Arm Type:	Bump Sto	eer Spacing:	-	P				
Tower Type:) [LX		ud Spacing:	1	
Wheel Hex:	Steering	Plate:	5.0mr		Ball St	ud Spacing:	0	
Steering Block KPI:	7		-	1				
Caster Block Insert: 0 +2.5 +5 [<u>5</u>					_		
Bulkhead Type:						_	321	
	5 1		Ja I Jaiaha			0	000	
Steering Stop Spacing:	Ī	+3	de Height:			000		
Caster Block Spacing: Fwd Back		+2				CBA		
Notes:		+1			Caster B	lock Link Mount:		
		+0			Front Bu	Ikhead Spacing:		
Rear Suspension:								
Ride Height:	C Mount:		Axle He			000		
Camber:	Aluminur	m Steel	♦ 0 3	▲ +3		321		
Anti-Roll Bar:		20000	○ ▼ 1 2	▲ +2				
Arm Type:			♦ 1 2	▼ +1		er Link Spacing:		
Tower Type:			△ ▲ 0 3	▼ +0	/	ud Spacing:	9-	
Arm Spacing: Fwd Mid Back	=		40 3	* +0	_ /	ud Spacing:		
Wheel Hex:	D Mount				Anti-Roll B	dar Link Spacing:		
Hub Type: Std HRC HRC	Aluminur	m Steel					M	
Hub Spacing: Fwd Mid Back		20000					321	
Drive Shaft: CVA's Universals	- ₩₩					Π		
Notes:	_				000			
Electronics		Drivetrain:		Shocks	СВД			
Radio: Servo:		_	all Diff:	CHUCKS	Front	Rear	1	
EPA: Throttle: % Brake:	%		ear Diff:	Piston:	I FI OIIC	neai .		
ESC:	70	Diff Setting:		Thickness	<u> </u>	<u> </u>	ППП	
ESC Settings:		Din octung.		Fluid:). 			
	iming:	Notes:		Spring:	-			
Pinion: Spur:	9.	Slipper Clutch:		Limiters:	Int: Ex	t: Int: Ext:		
Battery Mount: Std Offset		Туре:		Stroke:			Stroke	
.,,		# of Pads:	Eyelet:		<u> </u>	i "		
Back 1 2 3 4 5	Forward	Setting:		Cup Offse	t: 0 +5	+9 0 +5 +9		
Battery: Weight:		Notes:		Kashima		rome Shafts: Machined S		
Notes:				Notes:		<u> </u>	<u> </u>	
TrackInfor	Titres		Body, W	elchtu		Vehicle Comments:		
Size:	Front Tires:		Body:			Notes:		
Surface:		Front Compound:						
Traction:	Front Insert:							
Moisture:	Rear Tires:		ill					
Condition:	Rear Compo	und:	Chassis L	ength:				
	Rear Insert:			ights:				
Temperature:	Wheel (F/R):		Electronic					
Notes:	Notes:			cle Weight:				
	Ra Decree // /					s and setup sheets/		
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