

1:10 Scale 2WD Electric Off Road Competition Buggy Kit





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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.

RC10B7 Team Kit Features

- 5-gear laydown transmission with low profile motor mount moves weight of motor closer to the center of the car
- Long-arm suspension geometry improves grip and predictability in all conditions
- KPI adjustable steering and caster blocks allows for fine tuning steering feel. Three options are included in kit.
- · Vertical front outer ballstud allows fine tuning of roll center, camber gain, and link length
- Height adjustable aluminum front bulkhead allows for further tuning of front roll center
- Standard and HRC (High Roll Center) rear hubs included
- · High volume gear differential improves consistency of differential action over a longer run. Fits LTC internal diff gears from the RC10B74.2.
- · Highly adjustable battery holder with thumb tabs allows for easy battery removal and fine tuning of weight bias
- 7075-T6 aluminum chassis with increased departure angle and optional weight plate pockets
- Easy access anti-roll bars front and rear
- 6.5mm aluminum front axle increases stability and grip when using slim front wheels and low-profile tires
- HD 69mm CVA bones and differential outdrives for improved durability

Additional

Your new RC10B7 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)
- FT Hex/Nut Wrenches (#1519)
- FT Universal Tire Balancer (#1498)
- FT Ballcup Wrench (#1579)
- Calipers or a Precision Ruler FT Body Scissors (#1737)
- Shock Pliers (#1681)
- Hobby Knife
- Wire Cutters
- Needle Nose Pliers
- Soldering Iron

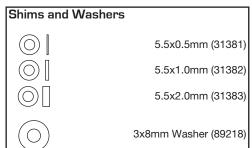
Associated Electrics, Inc. 21062 Bake Parkway. Lake Forest, CA 92630



Customer Service Tel: 949.544.7500 Fax: 949.544.7501

Hardware - 1:1 Scale View

Button Head (bhcs)	
	2x4mm (31510)
	2.5x6mm (31520)
	2.5x10mm (31522)
	3x4mm (91158)
	3x6mm (31531)
	3x8mm (31532)
	3x10mm (25211)
	3x12mm (89202)
	3x14mm (25187)
	3x16mm (89203)
	3x22mm (25189)
	3x24mm (89204)



Set Screws	
	3x3mm (25225)
	3x12mm (81258)
	3x20mm (91737)

Flat Head (fhcs)	
	2x3mm (91749)
	3x8mm (25201)
	3x10mm (25202)
	3x12mm (25203)
	3x14mm (89208)
Cap Head (shcs)	
	1.6x5mm (91611)
	3x16mm (89224)
LP Socket Head (Ip shcs)	
	3x6mm (41089)
	3x8mm (41096)

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

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

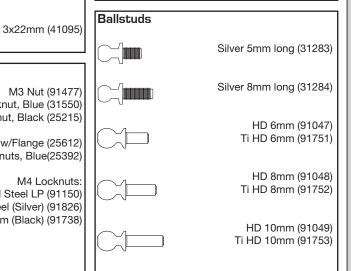




Table of Contents

1..... Cover

2..... Introduction

3.....1:1 Hardware "Fold Out"

4......Table of Contents

5.....Steering Build Bag 1

5.....Front Suspension Build Bag 2

8.....Caster / Steering Blocks Build Bag 3

9.....Rear Suspension Build Bag 4

10.....Gear Differential Build Bag 5 11.....Gearbox Build Bag 6

14.....Rear Hubs Build Bag 7

15.....Turnbuckles Build Bag 8

16.....Shocks Build Bag 9

19.....Electronics Build Bag 10

22.....Tuning Tips

24...... Setup Sheet "Kit Setup"

25..... Setup Sheet "Blank"

26..... Back Cover

Notes



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



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



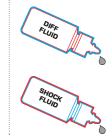
This symbol indicates the order within a step to assemble parts.



This symbol indicates there are optional FT parts available



This symbol indicates a Racers Tip.



This symbol indicates where Thread Lock Adhesive should be applied. *not included

This symbol indicates where Diff Fluid should be applied.

This symbol indicates where Shock Fluid should be applied.



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.

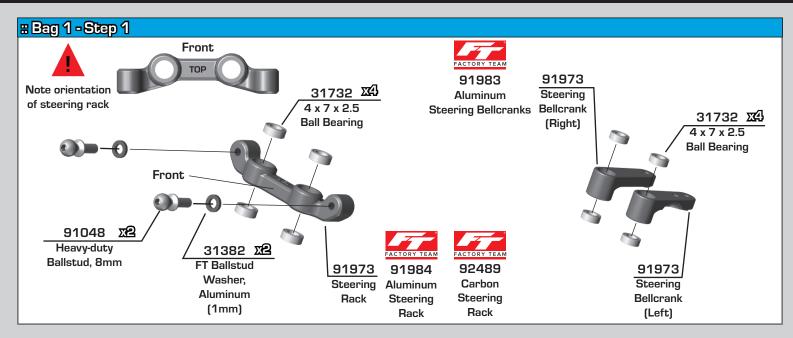


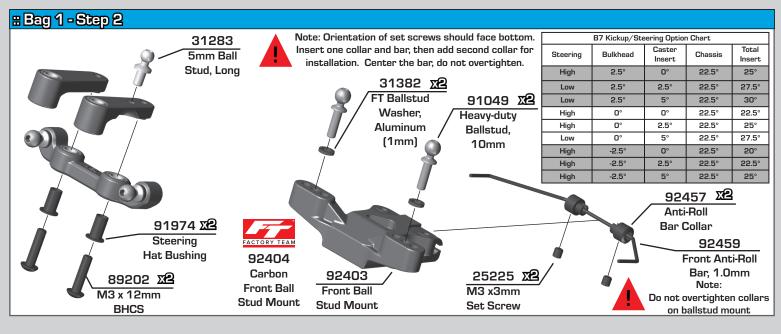
This symbol indicates where Green Slime can be applied.
*not included

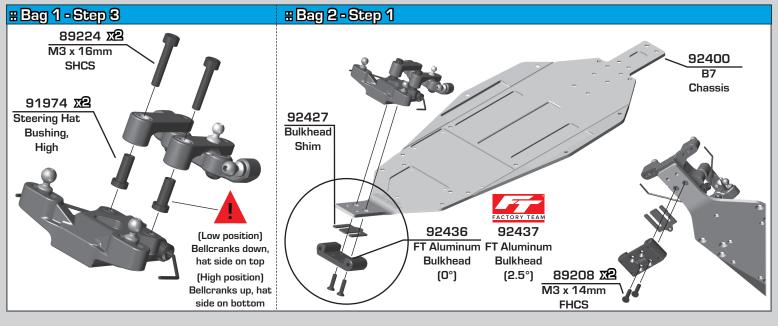


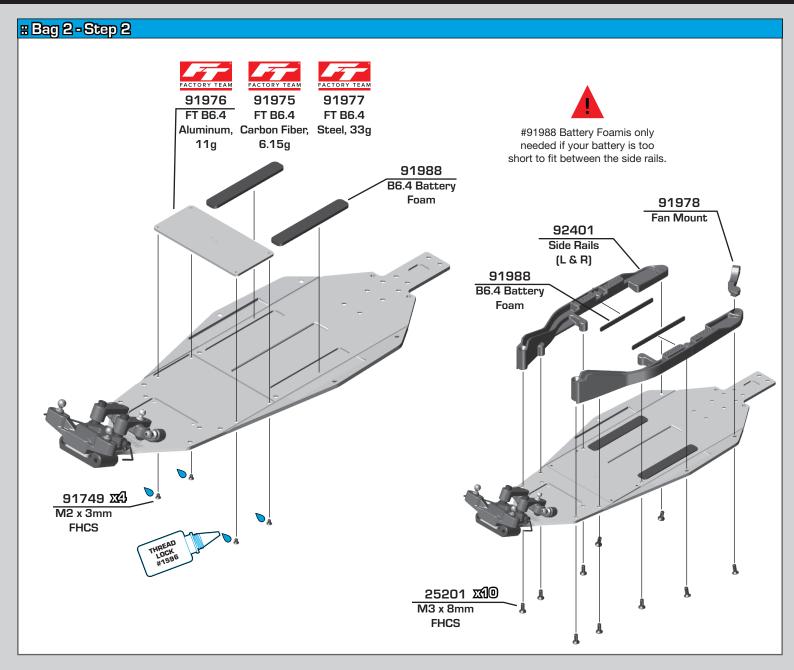
There is a 1:1 hardware foldout page in the front of the manual. To check the size of a part, line up your hardware with the correct drawing until you find the exact size. Each part in the foldout has a number assigned to it for ordering replacement parts.

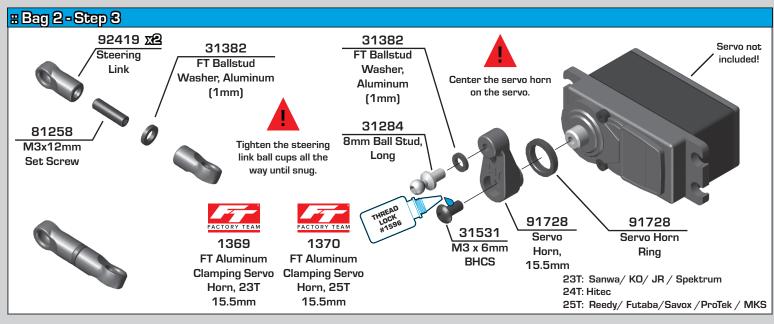
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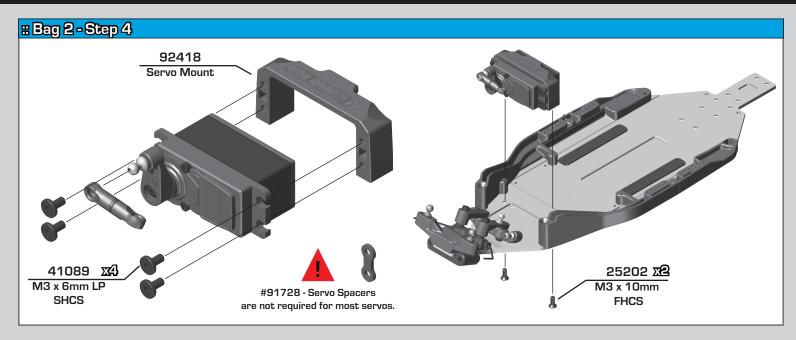


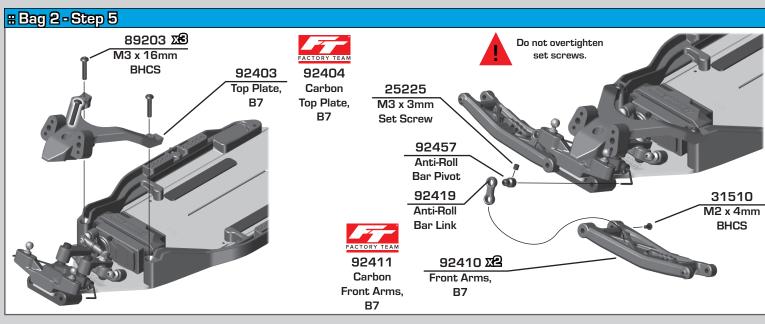


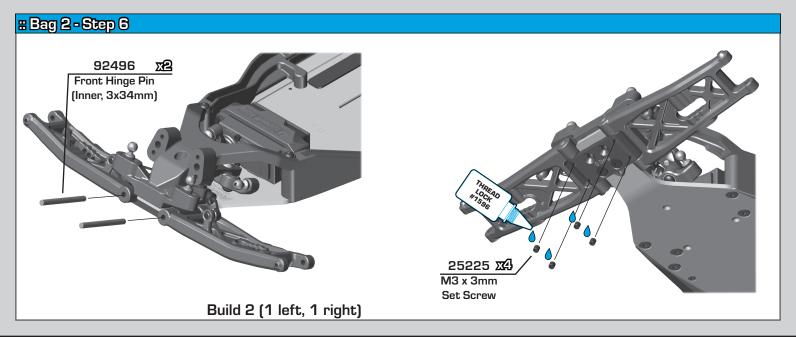


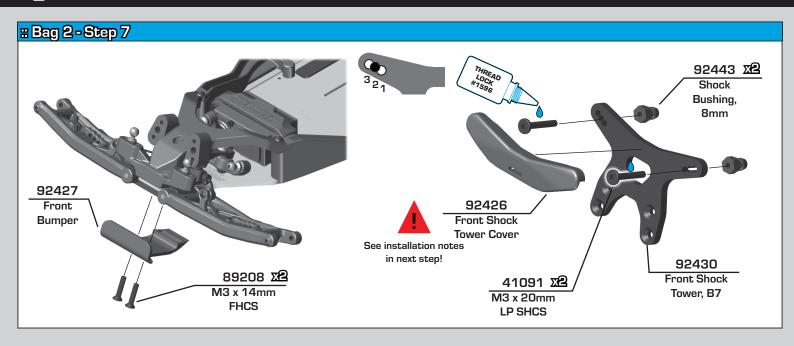


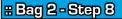












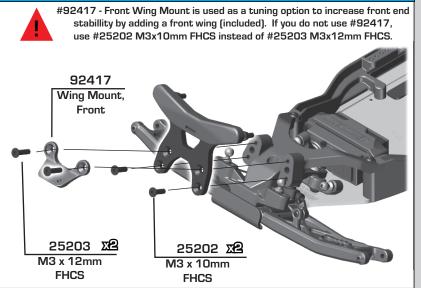


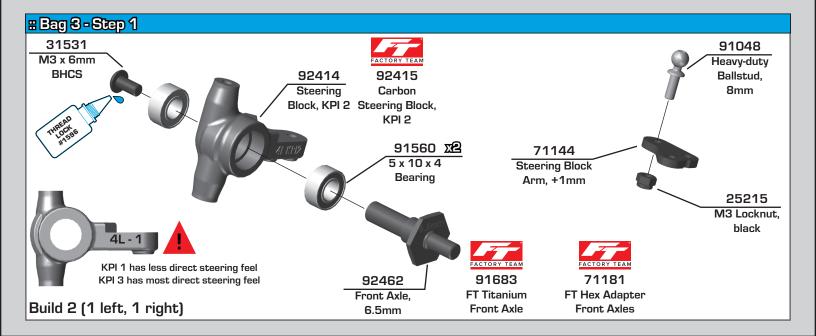
- Line up the front tower cover on the shock tower at an angle as shown in the 1st image to the right.
- Press firmly down on the center of the shock tower cover.

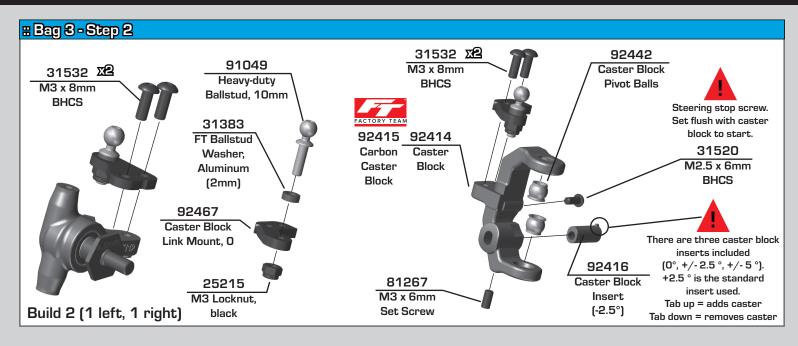
 Be sure to keep the tower cover centered on the tower.
- 3. The cover should snap into place with the tap locking on the back side of the tower.

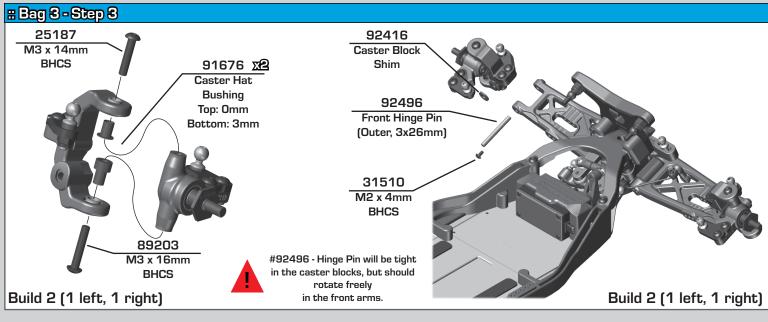
NOTE: The tower cover was designed to key into place with the supplied LP SHCS. Use of another screw type is not recommended.

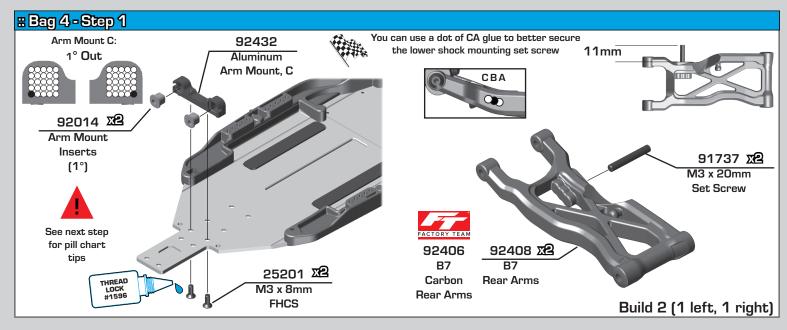


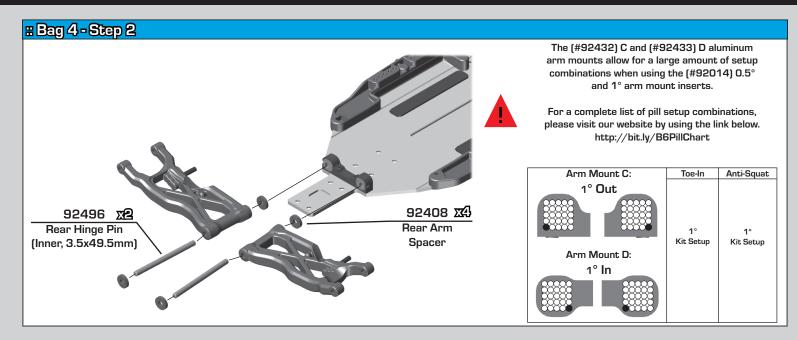


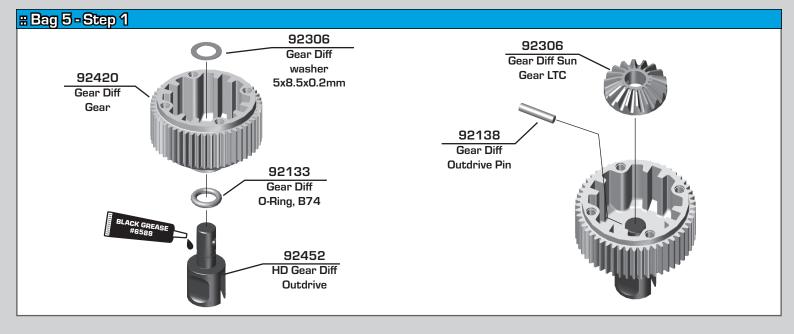


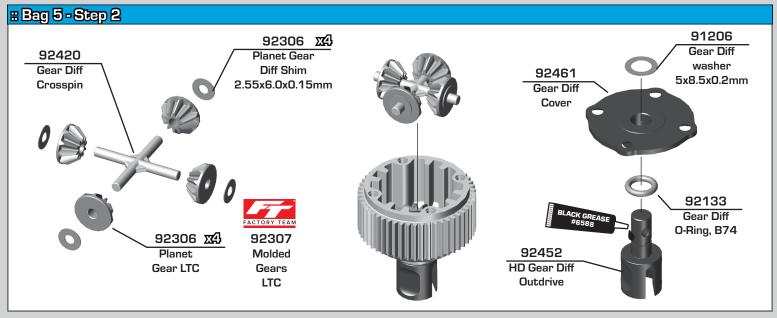


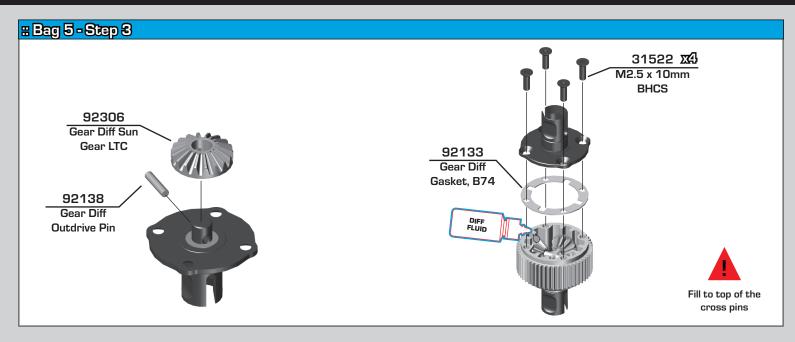


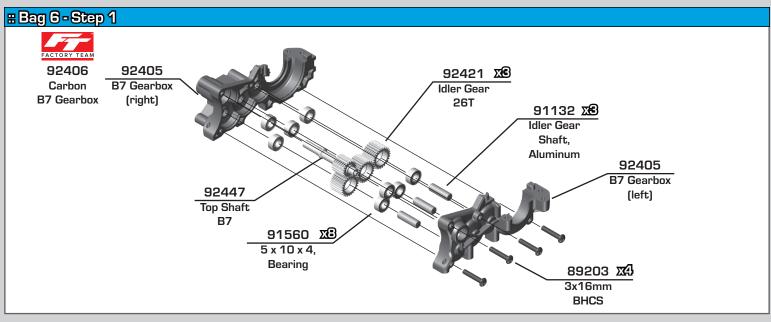


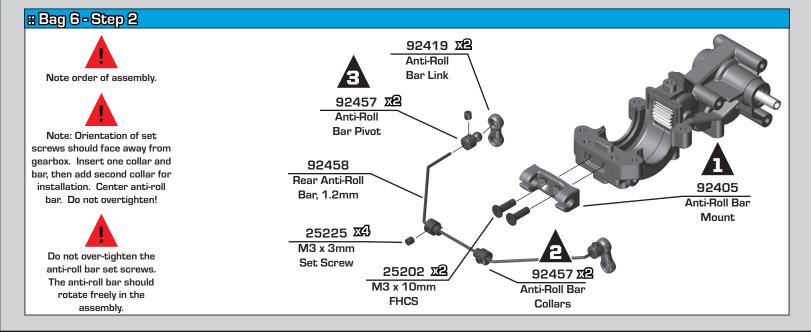


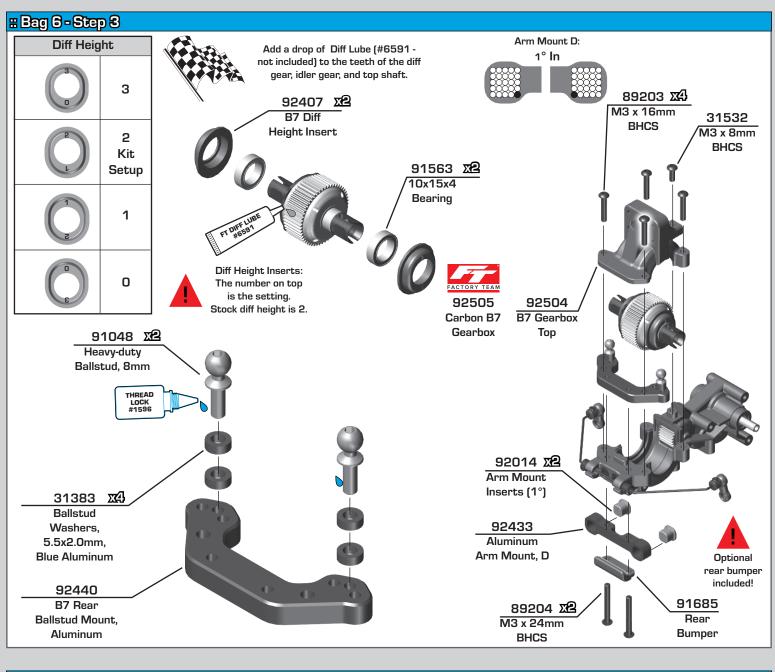


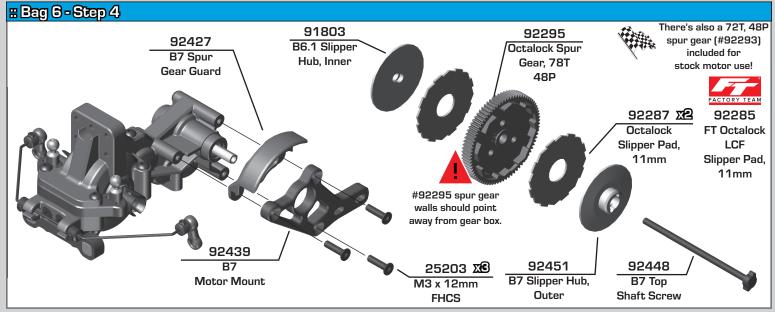


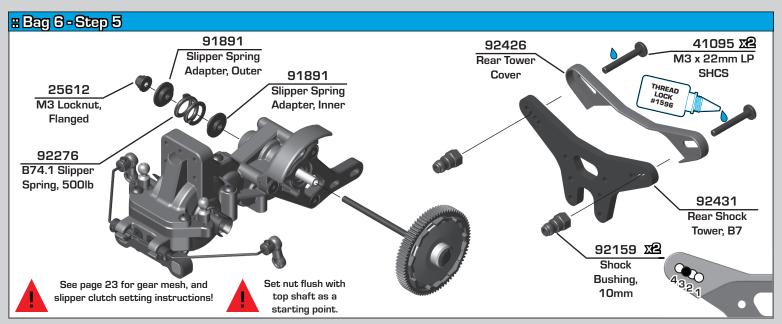


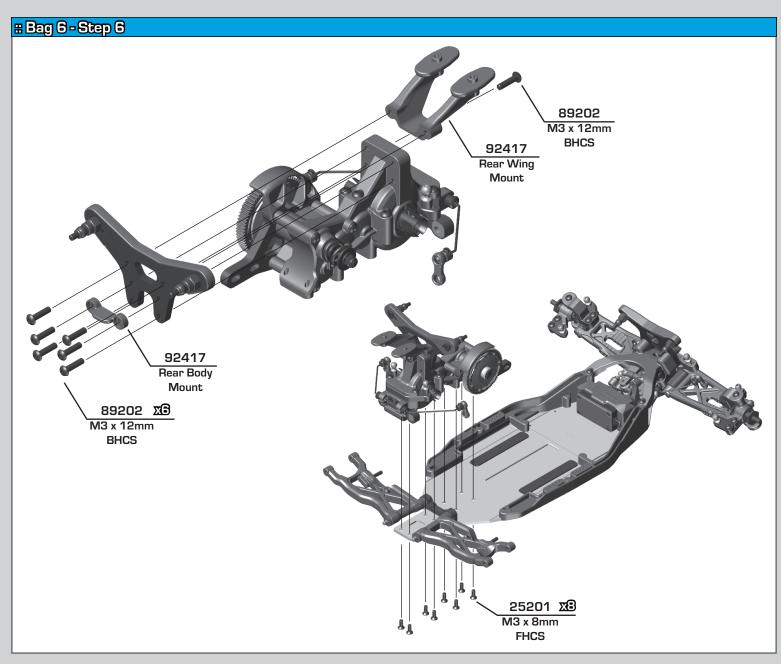


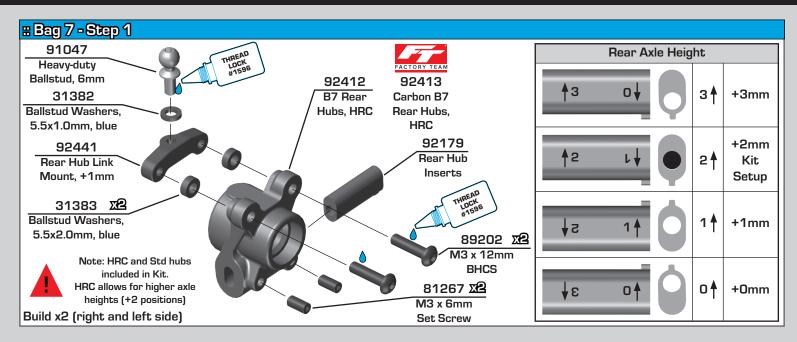


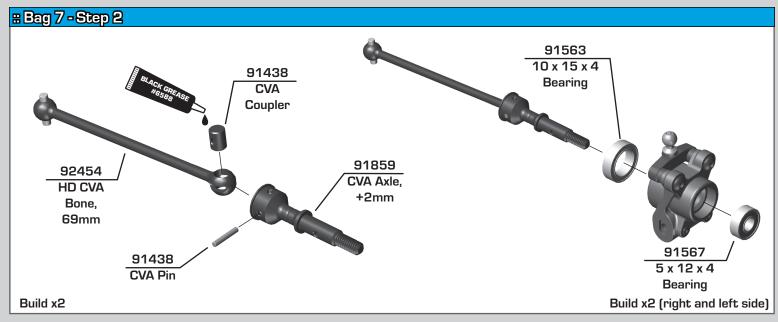


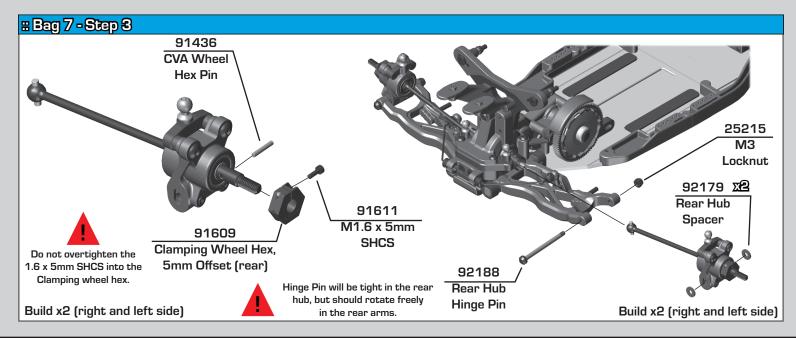


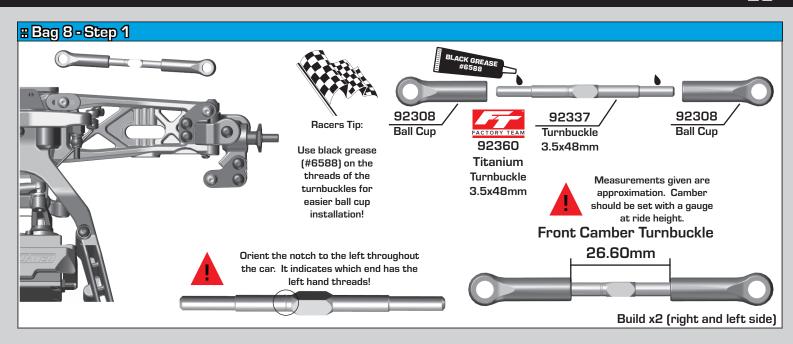


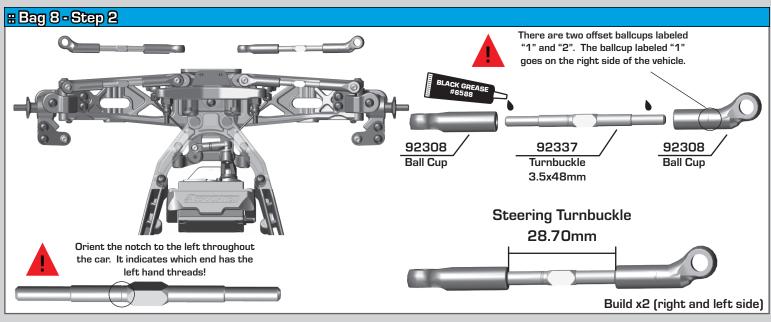


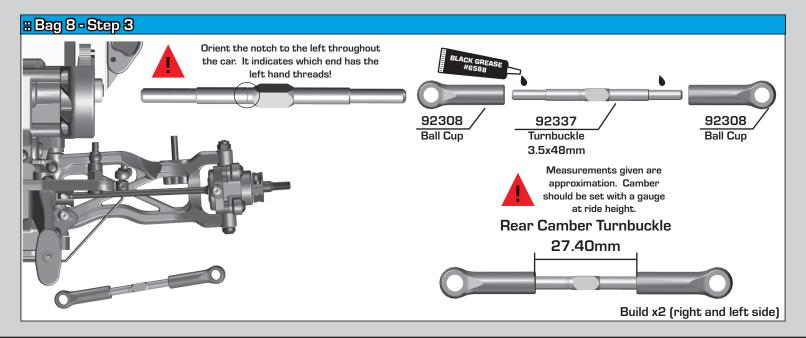


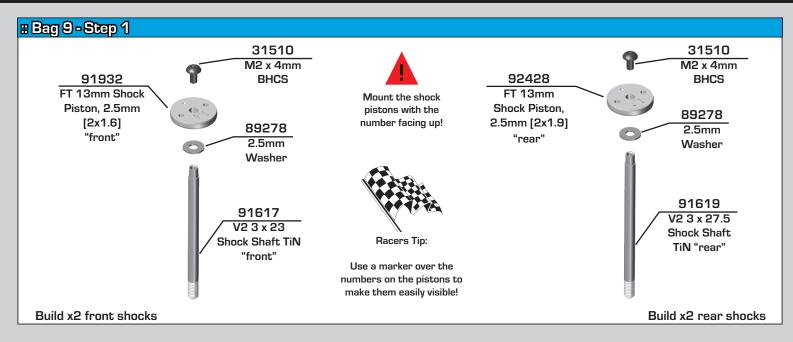


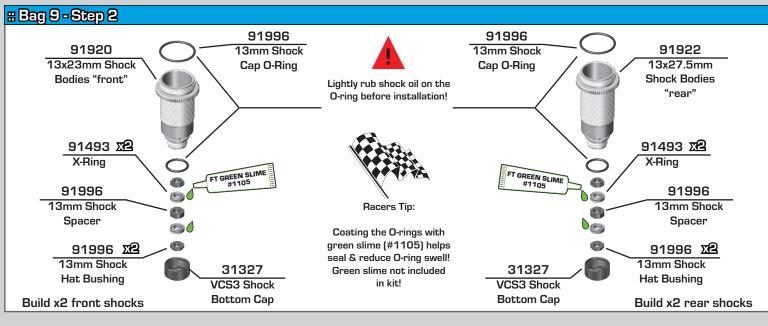


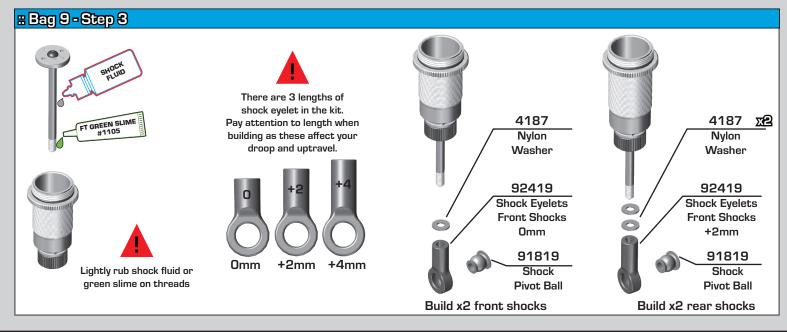


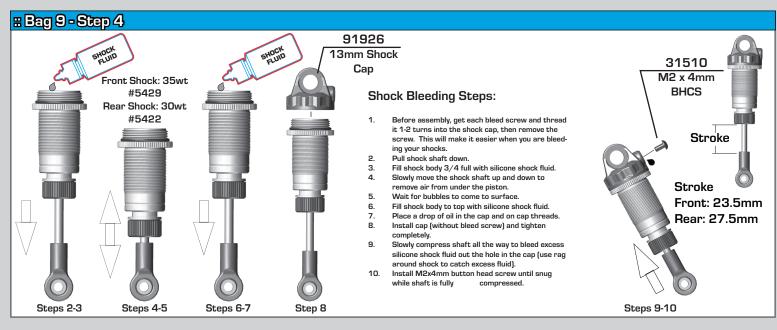


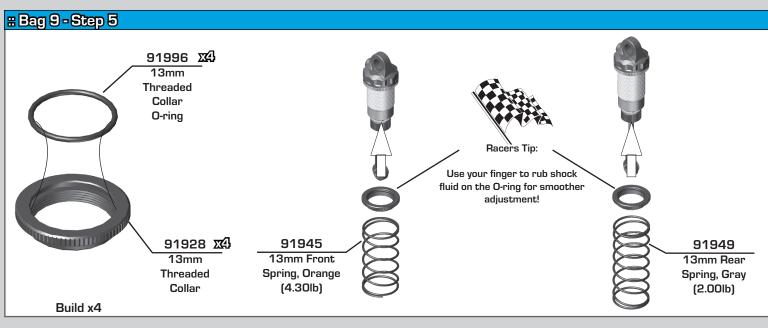


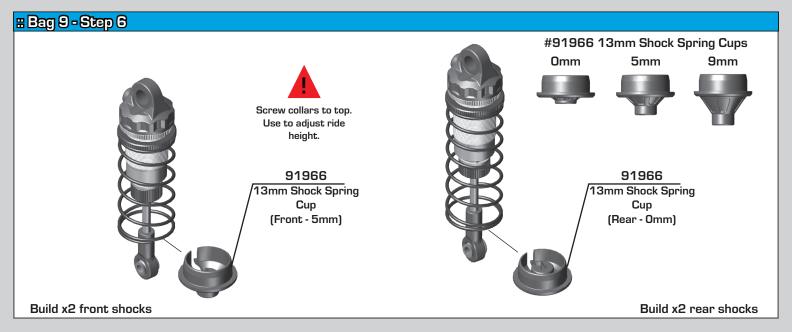


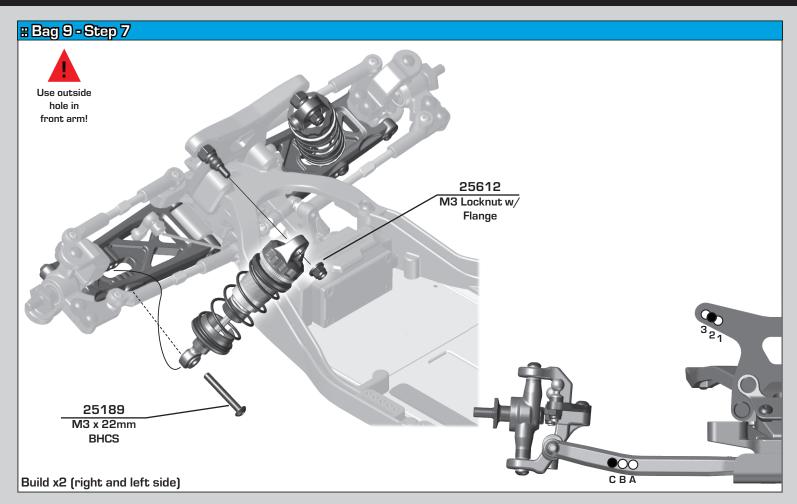


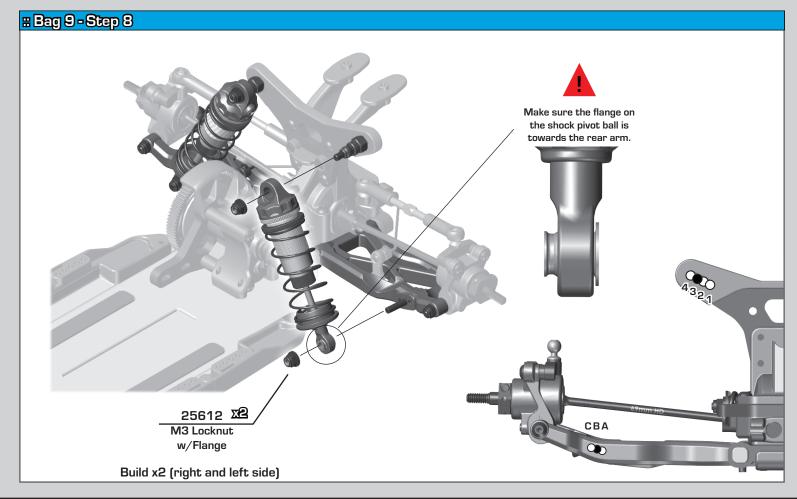


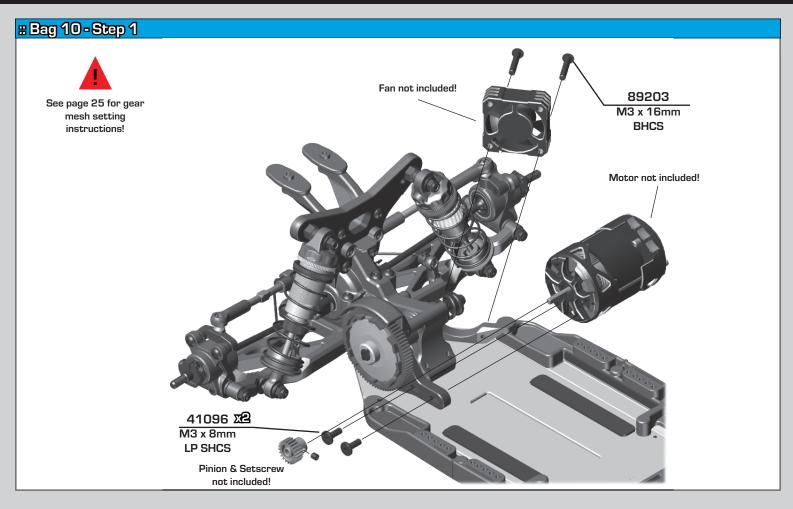


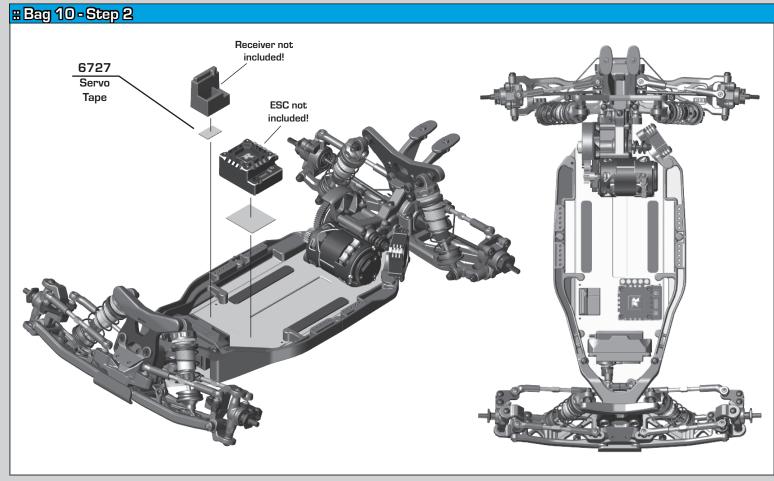


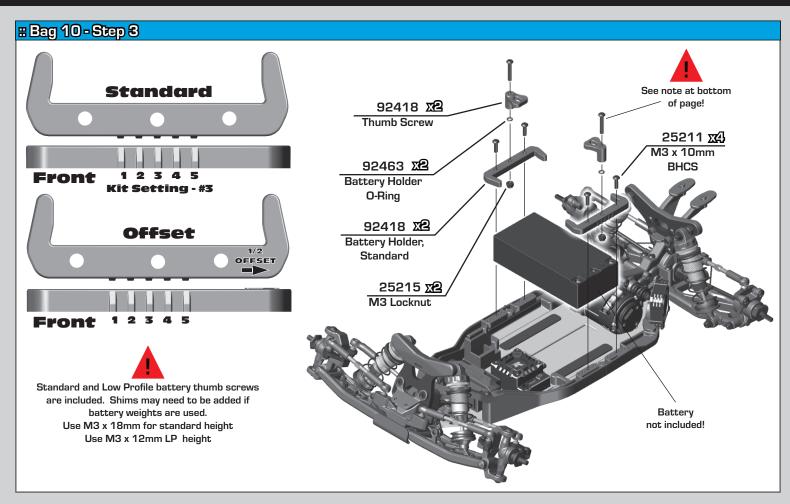


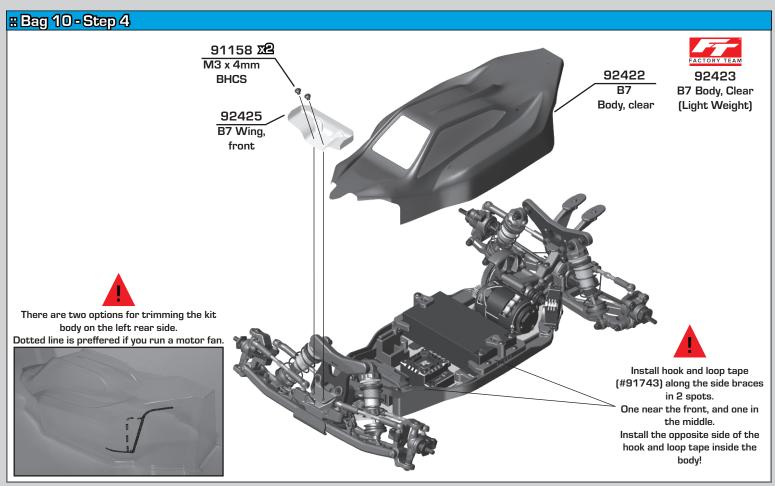


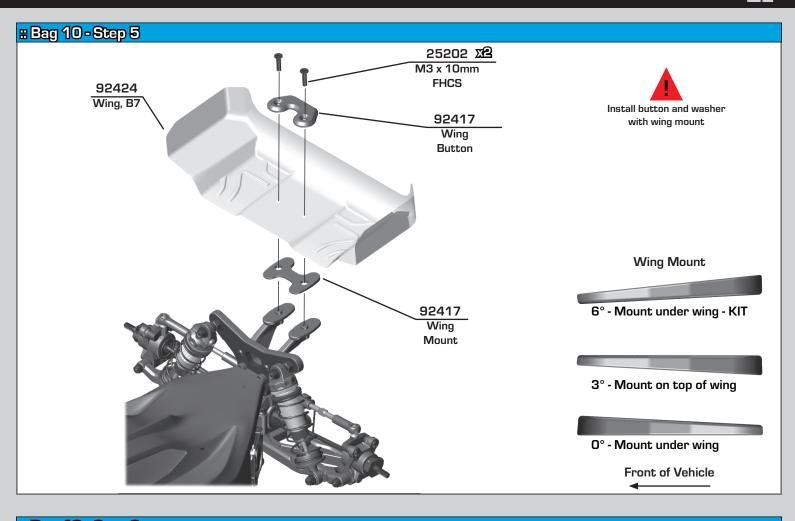


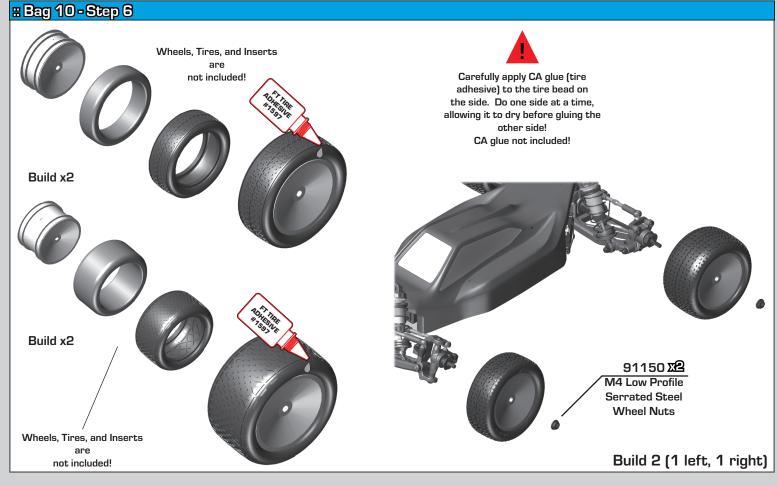












Tuning Tips - Painting, Beginners

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.

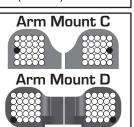
Rear Arm Mount Pill Insert Setup:

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

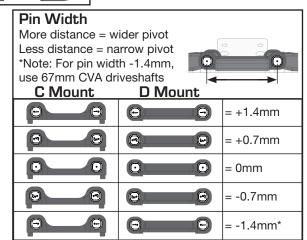
Anti-squat Angle

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	= 3°
0 0	0	= 2°

Possible Insert Locations



Toe Anale

	,					
More angl	e = More	toe in		-		
ess angle = Less toe in						
Shown in C M	1° chang	es _				
C M	ount	D	Mount			
Θ	Θ	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 = Higher roll center Lower pin = lower roll center C Mount D Mount						
	(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			

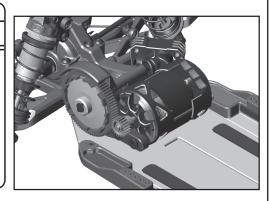
Shown in 1° changes C Mount D Mount						
9 9	O O = 3°					
0 0	O = 4°					
0 0	e = 5°					
9 9	• = 2°					
0 0	o = 3°					
0 0	• = 4°					
0 0	O = 1°					
0 0	e = 2°					
9 9	O = 3°					

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.

B7 Gear Ratio Chart (Internal Gear Ratio 2.60:1)							
Motor	Pinion	Spur	Final Drive Ratio				
21.5 Reedy S-Plus Brushless	33	72	5.67:1				
17.5 Reedy S-Plus Brushless	29	72	6.45:1				
13.5 Reedy S-Plus Brushless	27	*75	7.22:1				
10.5 Reedy 540-M4 Brushless	24	78	8.45:1				
9.5 Reedy 540-M4 Brushless	23	78	8.82:1				
8.5 Reedy 540-M4 Brushless	22	78	9.22:1				
7.5 Reedy 540-M4 Brushless	21	78	9.65:1				
6.5 Reedy 540-M4 Brushless	20	78	10.14:1				
*75T spur gear (#92294) not included							



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.





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.

RC10 RC10		Kit Setup (Carpet) Even	∄		Qualify:	Maline
	Dates _	Trad	t e		Finish:	Best Lep Tilmer
Front Suspension:						
Ride Height: 13mm	\neg	Ball Stud Spacing: 1m	m -	-6	Steen	ring Bellcrank Position: Up Down
Camber: -1 degree	╡	Dan Otta Opacing.			<u> </u>	ing Belief drik i Calaban. Op Bowin
Toe: O degree	╡	Ball Stud Spacing: Om	m		Ball S	Stud Spacing: 1mm
Anti-Roll Bar: 1.0mm	╡	Dan Otaa Opasing. Offi			Dail C	See Speeding. Think
Arm Type: Kit	Bump St.	eer Spacing: 1mm			Ball S	Stud Spacing: 1mm
Tower Type: Kit		\	177	12		Stud Spacing: 2mm
Wheel Hex: 6.5mm	Steering	Plate: +1	5.0mm			
Steering Block KPI: 2			-(0		ے	
Caster Block Insert: 0 -2.5 -5	Ħ		A			
Bulkhead Type: Aluminum			1			3210
Kick-Up Angle: -2.5 0 +2.5	≒	T 9				
Steering Stop Spacing: Omm			Height:			
Caster Block Spacing: Fwd Back		+3 +2				C B A
Notes:		+1	티		Caste	er Block Link Mount: 0
		+0			Front	Bulkhead Spacing: 1mm
Rear Suspension:						
Ride Height: 13mm	C Mount	:	Axle He	ight:		
Camber: -1 degree	Aluminur	m Steel	0 ▼0 3	4 +3		420
Anti-Roll Bar: 1.2mm		00000	● ▼1 2	▲ +2		.321
Arm Type: Kit	₹ 8888		A	+		Camber Link Spacing: 2mm
Tower Type: Kit],	Ball Stud Spacing: 1mm
Arm Spacing: Fwd Mid Back			0 40 3	▼ +0	 	Ball Stud Spacing: 4mm
Wheel Hex: 5mm	D Mount	:				
Hub Type: Std HRC	Aluminur	m Steel				
Hub Spacing: Fwd Mid Back						5°mm HD 321 □/
Drive Shaft: CVA's Universals		2000				521
Notes:						
		0000				СВД
Electronics		Drivetrain:		Shocks:		
Radio: Servo:		Differential: Ball	Diff:		Front	Rear
EPA: Throttle: % Brake:	%	Height: 2 Gea	ır Diff:	Piston:	2x1.6	6 2x1.9
ESC:		Diff Setting: 30k		Thickness	: 2.5mi	m 2.5mm
ESC Settings:				Fluid:	35w	t 30wt
Motor / Wind:	Timing:	Notes:		Spring:	Orang	ge Gray
Pinion: Spur:		Slipper Clutch:		Limiters:	Int:	Ext:_1_ Int: Ext:_2 §
Battery Mount: Std Offset		Type: HD		Stroke:	23.5m	Ext: 1 Int: Ext: 2 §
11111		# of Pads: 2x11m	m	Eyelet:	0	+2
Back 1	Forward	Setting:		Cup Offse	t: 0 +5	+9 0 +5 +9
Battery: Weight:		Notes:		Kashima I	Bodies: C	hrome Shafts: Machined Spacers:
Notes:				Notes:		
Trackinfo	Tires:		Body, We	iight∎		Vehicle Comments:
Size:	Front Tires:		Body:	RC10	37	Notes:
Surface:	Front Compo	ound:	Front Wing	g: R(C10B7	
Traction:	Front Insert:		Rear Wing	: RC	10B7 7"	
Moisture:	Rear Tires:		Wing Angle	e: 0°	3°]
Condition:	Rear Compo	und:	Chassis Le	ngth:	0	
	Rear Insert:		Servo Wei	ghts:	None	
Temperature:	Wheel (F/R)	:	Electronic	Weights:	Aluminum]
Notes:	Notes:		Total Vehic	le Weight:		
WFon more column with	alla lattacen // //	www.accodatodalacte	lancom/t			als_and_setup_sheets/
			نا/التحديد	emessu.	TELLE METERS	

RC10 RC10		Even	Œ		Quality:	Maline	
	Dates	TIREC	ke		Finish:	Best Lep Tilmer_	
Front Suspension:							
Ride Height:	7	Ball Stud Spacing:			Steering	g Bellcrank Position: Up	□ Down □
Camber:	╡	Dan Stad Spacing.	Ţ.) Docci III,	g Doner arm i Goldieri. Gp	
Toe:	┪	Ball Stud Spacing:			Ball Stu	d Spacing:	
Anti-Roll Bar:	╡	g.				а ораст.д.	8
Arm Type:	Bump Ste	eer Spacing:			Ball Stu	ıd Spacing:	
Tower Type:		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \) [7]	12		id Spacing:	³ 2 ₁
Wheel Hex:	Steering	Plate:	5.0mn			, ,	-1
Steering Block KPI:					-		
	╗		A		1		Q
Bulkhead Type:	i (3 2 1
Kick-Up Angle: -2.5 0 +2.5	i -	T • _					000
Steering Stop Spacing:			e Height:				
Caster Block Spacing: Fwd Back		+3 +2	님			C B A	
Notes:		+1			Caster	Block Link Mount:	7
		+0			Front B	ulkhead Spacing:	<u></u>
Rear Suspension:							
Ride Height:	C Mount:		Axle He	eight:			
Camber:	Aluminun	n Steel	♦ ♦ 0 3	▲ +3		Q 45	%
Anti-Roll Bar:		00000	○ ▼ 1 2	4 +2		-	21
Arm Type:			♠ 1 2	▼ +1	Ca	mber Link Spacing:	
Tower Type:		60000	<u> </u>		Вє	III Stud Spacing:	
Arm Spacing: Fwd Mid Back			○ ▲ 0 3	▼ +0	□ Be	III Stud Spacing:	
Wheel Hex:	D Mount:					\	
Hub Type: Std HRC	Aluminun	n Steel					M
Hub Spacing: Fwd Mid Back						69mm HD	321
Drive Shaft: CVA's Universals		88888			10	9	
Notes:	7 88888					200	
						ВД	
Electronics		Drivetrain:		Shocks			
Radio: Servo:			l Diff:		Front	Rear	
EPA: Throttle: % Brake:	%	II • 	ar Diff: 🔲	Piston:			
ESC:		Diff Setting:		Thickness	5:		
ESC Settings:				Fluid:			
	iming:	Notes:		Spring:		. 1	
Pinion: Spur:		Slipper Clutch:		Limiters:	Int: Ex	t: Int: Ext	Stroke
Battery Mount: Std Offset		Type:		Stroke:			— ₺
	1 5	# of Pads:		Eyelet:			+9 🗍
Back 1 2 3 4 5	Forward	Setting:		Cup Offse			<u></u>
Battery: Weight:		Notes:		Kashima	Bodies: Chr	ome Shafts: Mach	nined Spacers:
Notes:	Therese		Delle W	Notes:		Weller Comments	
	Tilres		Body, W	eight#		Vehicle Comments	#
Size:	Front Tires:		Body:	_		Notes:	
Surface:	Front Compo		Front Win				
Traction:	Front Insert:		Rear Wing				
Moisture:	Rear Tires:		Wing Ang		3° ☐ 6° ☐		
Condition:	Rear Compo	una:	Chassis Lo				
 	Rear Insert:		Servo We	gnts:			
Temperature:	VA/I 1 (= /==		FI	\A/-:			
Notes:	Wheel (F/R): Notes:		Electronic	Weights: cle Weight:			

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