





1:10 Scale 4WD Electric Off Road Competition Buggy Kit Manual

#90050 RC10B84 Off Road Buggy 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.rc10.com for the latest versions of our instruction manauls.

# #RC10B84 Features

- Molded Height-Adjustable Gearboxes Front and Rear with Additional +2 Rear Gearbox for High-Grip Conditions
- Long-Arm Suspension Geometry: improves grip and predictability in all conditions
- Optimized Steering Bellcranks and Rack: improved bumpsteer control at all ride heights
- Chassis Bracing: Fine tune chassis flex characteristics with upper and lower chassis bracing front and rear
- Standard and HRC (High Roll Center) Rear Hubs Included
- Insert adjustable caster block with 0, +/-1, and +/-2 degree inserts included
- Forward and Back Motor Positions: used for further weight bias adjustment
- Highly Adjustable Battery Holder with Thumb Tabs: allows for easy battery removal and fine tuning of weight bias
- 2.5mm Thick Tapered 7075-T6 Aluminum Chassis with 10 Degrees of Kickup and Improved Departure Angle
- (90050 Only): Decoupled Slipper Clutch Included
- (90051 Only): Molded Ring and Pinion Gears Included
- Aluminum Center-Mounted Servo Mount
- Two heights Included for Rear Wing Mount
- 7-inch Rear Wing
- Low-Profile Body
- · Shock Tower Covers Front and Rear
- 3.5mm Turnbuckles and Ballcups
- 13mm Big-Bore Shocks

# # Additional

Your new RC10B84 Kit comes unassembled and requires the following items for completion (refer to AssociatedElectrics.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
- Pinion gear, 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") (#1697)
- Thread locking compound (#1596)
- Tires and Inserts, Fronts and Rears

# # Other Helpful Items

- Silicone Shock Fluid (Refer to AssociatedElectrics.com for complete listings)
- FT Body Scissors (#1737)
- FT Hex/Nut Wrenches (#1519)
- FT Universal Tire Balancer (#1498)
- FT Dual Turnbuckle Wrench (#1114) Green Slime shock lube (#1105)
- FT Body Reamer (#1499)
- Shock Pliers (#1681)
- Wire Cutters

- Needle Nose Pliers
- Calipers or a Precision Ruler
   Soldering Iron
- FT Ballcup Wrench (#1579) Hobby Knife

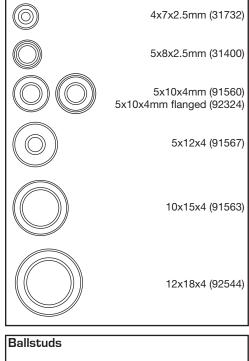
Associated Electrics, Inc. 21062 Bake Parkway. Lake Forest, CA 92630



# # Hardware - 1:1 Scale View

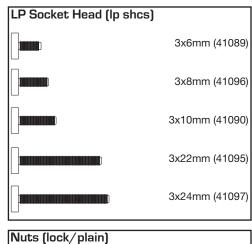
Button Head (bhcs)	
	2x4mm (31510)
	2.5x5mm (31519)
	2.5x6mm (31520)
	2.5x8mm (31521)
	2.5x10mm (31522)
	3x4mm (91158)
	3x5mm (31530)
	3x6mm (31531)
	3x8mm (31532)
	3x10mm (25211)
	3x12mm (89202)
	3x14mm (25187)
	3x16mm (89203)
	3x18mm (2308)
	3x20mm (25188)
	3x22mm (25189)
	3x24mm (89204)
	3x30mm (91478)

Flat Head (fhcs)	
	2x3mm (91743)
	2.5x8mm (31472)
	3x5mm (31540)
	3x6mm (31541)
	3x8mm (25201)
	3x10mm (25202)
	3x12mm (25203)
	3x14mm (89208)
	3x16mm (25204)
	3x18mm (89209)



**Ball Bearings** 

3x20mm (25188) 3x22mm (25189)	
3x24mm (89204)	
3x30mm (91478)	
	Nuts (
3x2.5mm (31500)	
3x3mm (25225)	



Ballstuds	
	HD, short neck 4mm (32041) Ti HD, short neck 4mm (32095)
	HD, short neck 6mm (32042) Ti HD, short neck 6mm (32096)
	HD, short neck 8mm (32040) Ti HD, short neck 8mm (32097)
	HD 6mm (91047) Ti HD 6mm (91751)
	HD 8mm (91048) Ti HD 8mm (91752)
	HD 10mm (91049) Ti HD 10mm (91753)

Set Screws	
	3x2.5mm (31500)
	3x3mm (25225)
	3x6mm (81257)
	3x10mm (4671)
	3x20mm (91737)
	4x5mm (25226)

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)
FT Aluminum (Blue) (31551)

Serrated Aluminum (Black) (91738)

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

1.6 x 5mm (91611)

Cap Head (shcs)



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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.



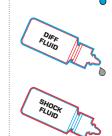
This symbol indicates the order within a step to assemble parts.



This symbol indicates there are optional FT parts available



This symbol indicates a Racers Tip.



where Thread Lock Adhesive should be applied. \*not included

This symbol indicates

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



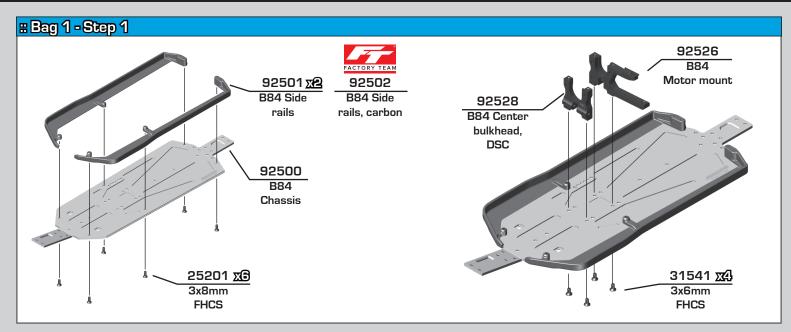
This symbol indicates where Black Grease should be applied.

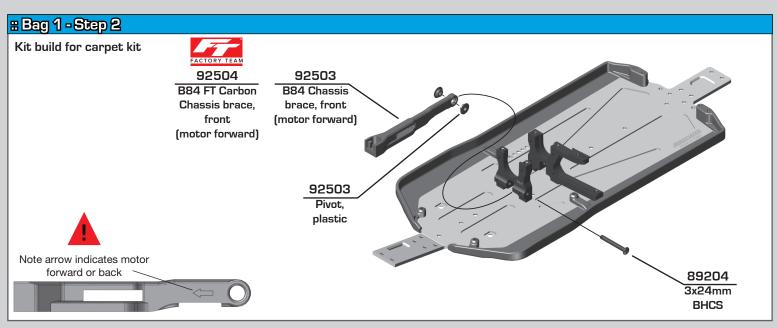


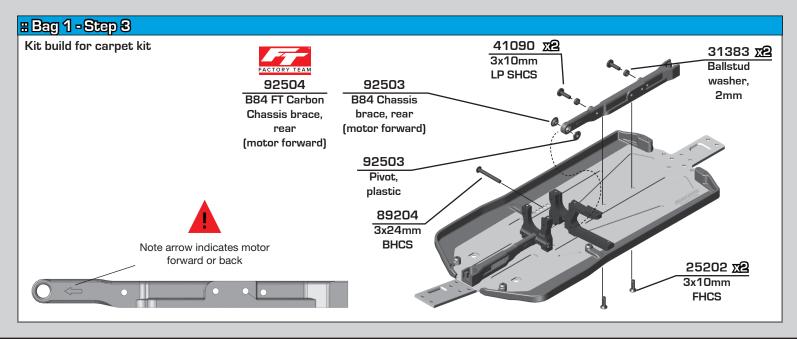
This symbol indicates where Green Slime can be applied.
\*not included

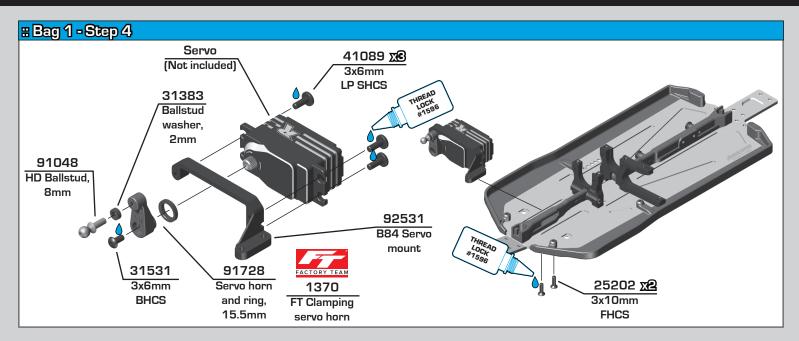


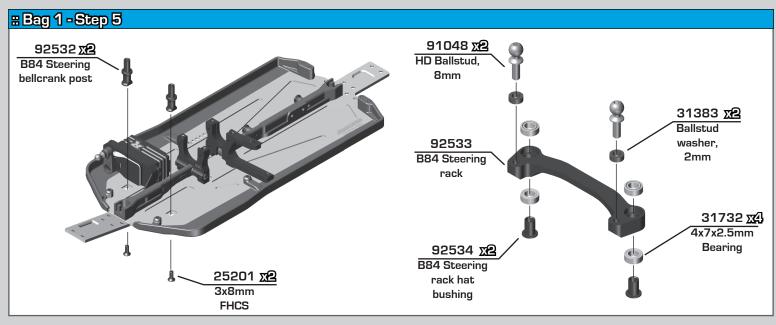
There is a 1:1 hardware foldout page in the front of the manual. To check the size of a part, line up your hardware with the correct drawing until you find the exact size. Each part in the foldout has a number assigned to it for ordering replacement parts.

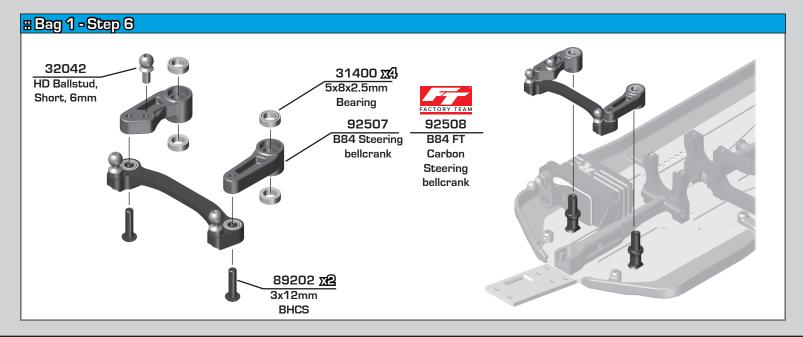


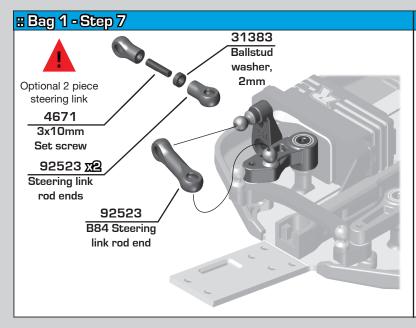


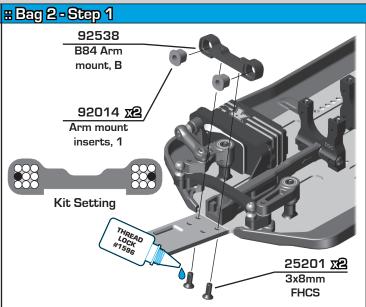


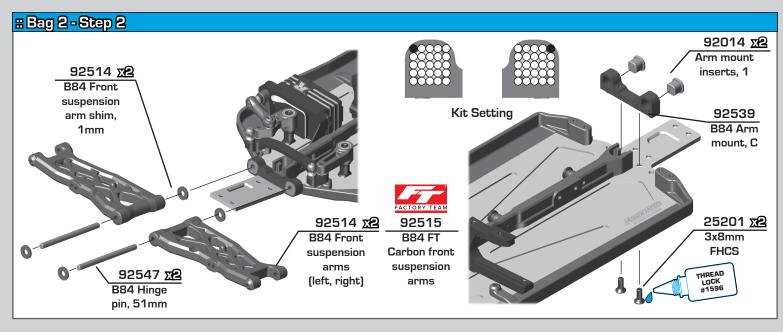


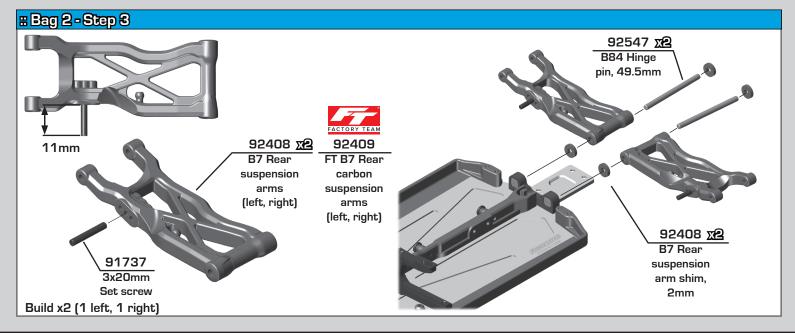


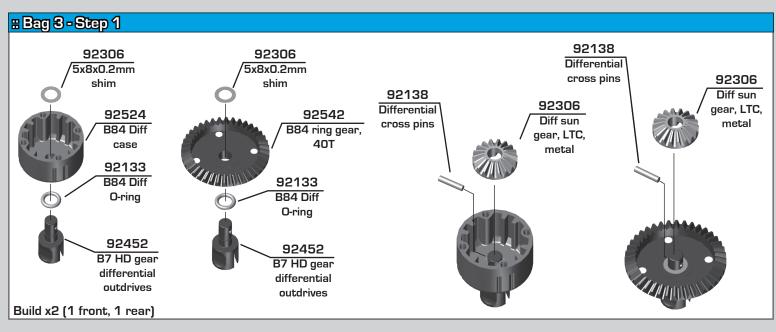


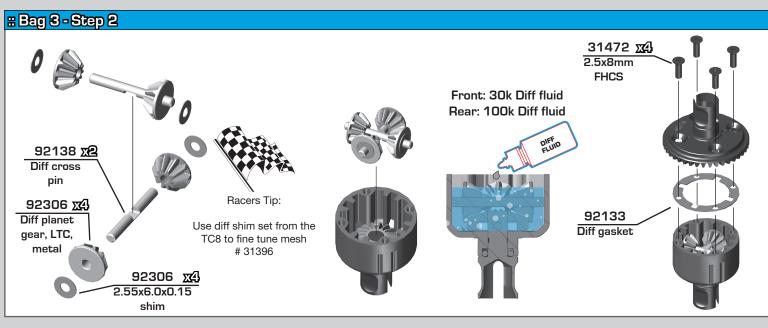


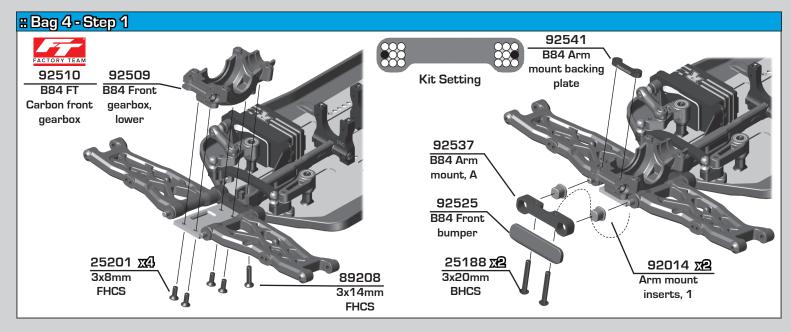


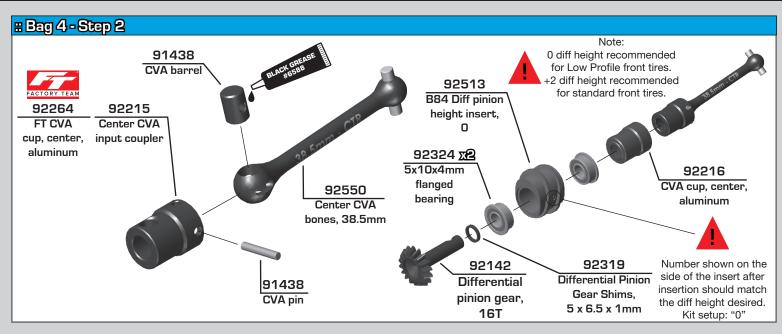


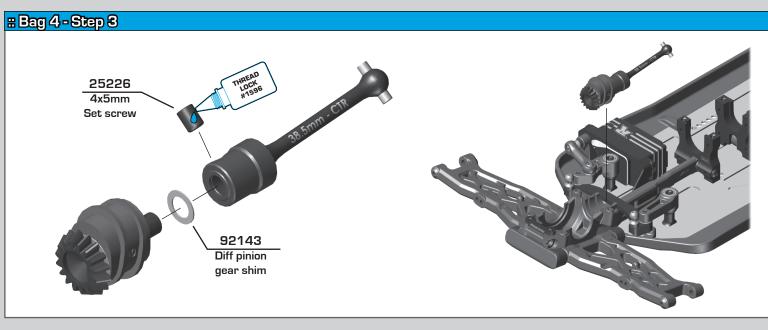


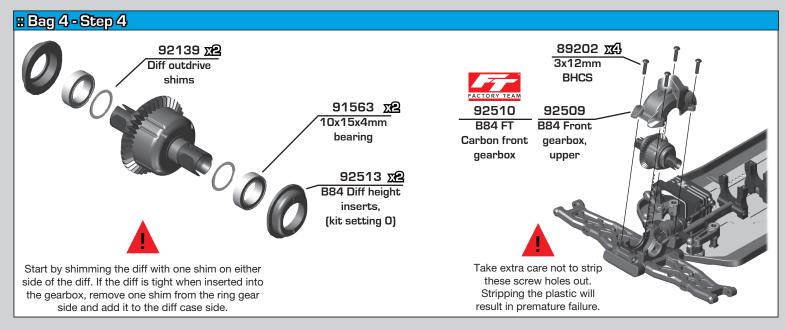


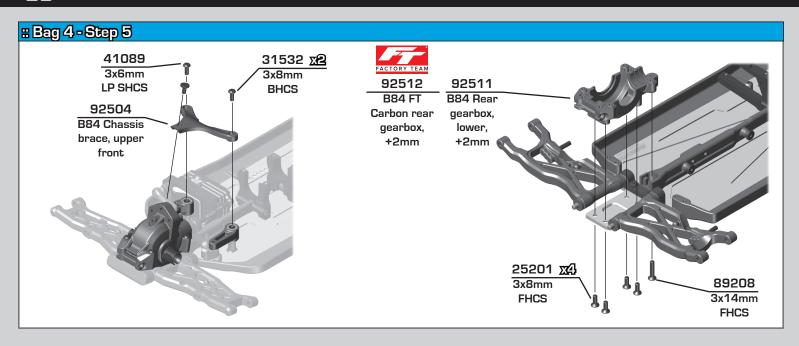


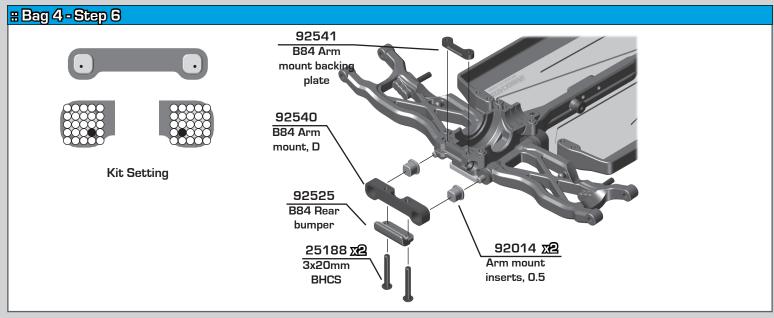


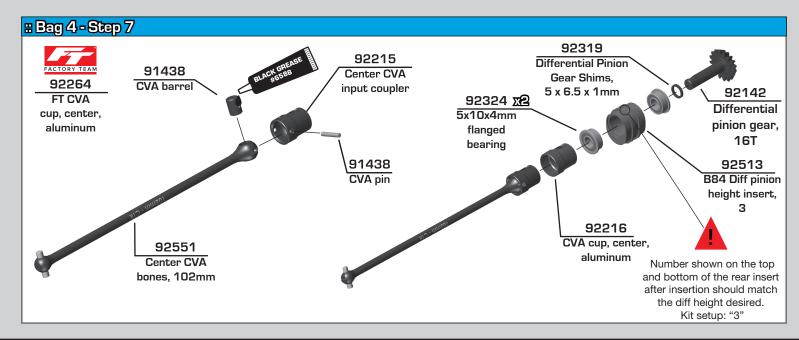


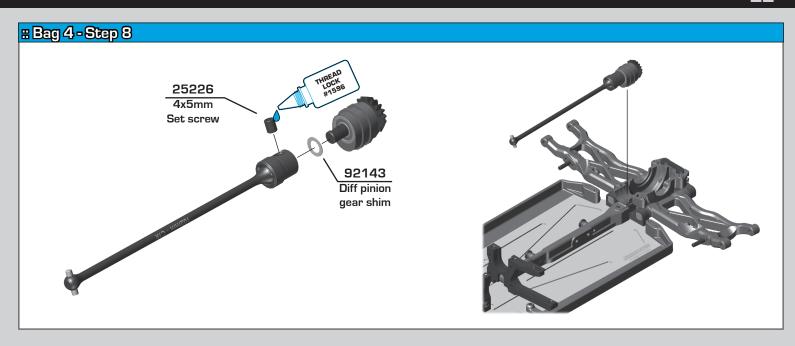


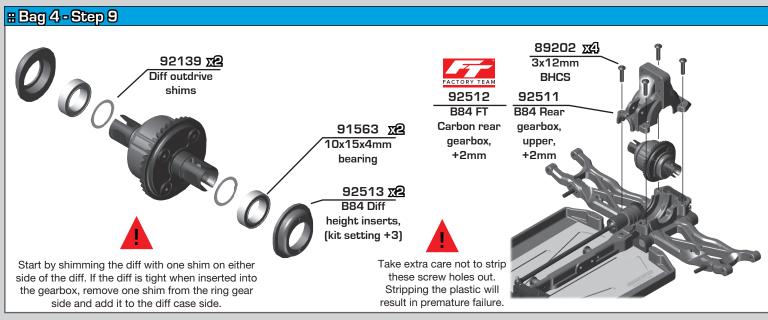


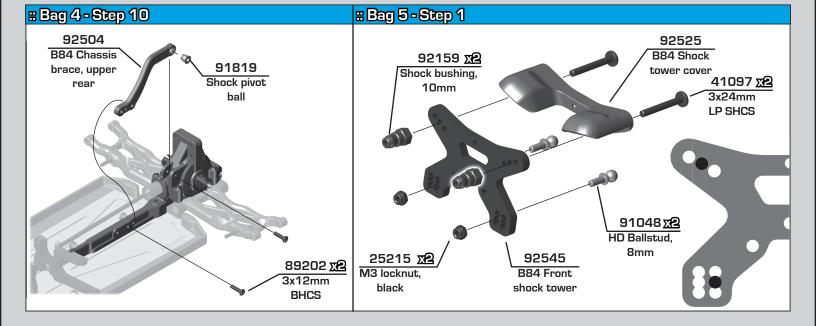


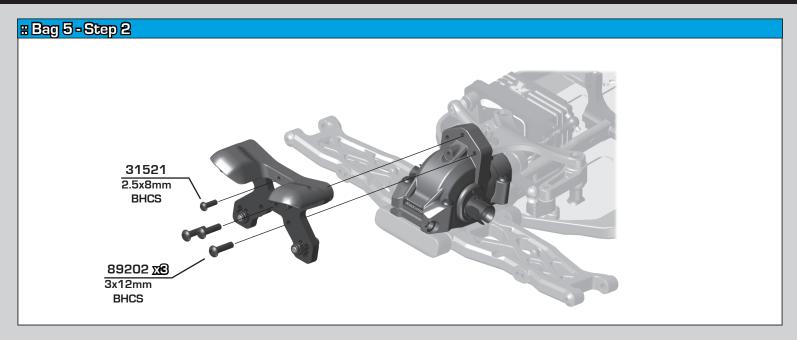


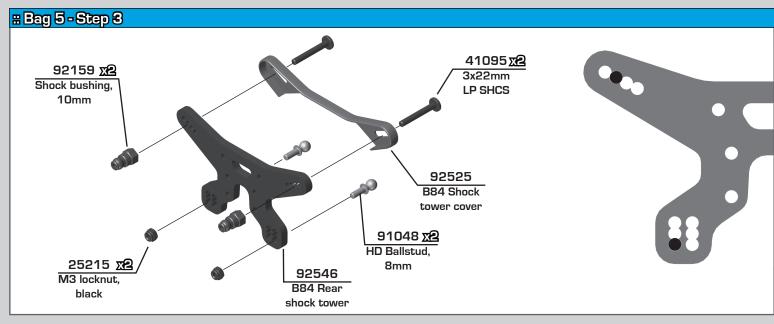


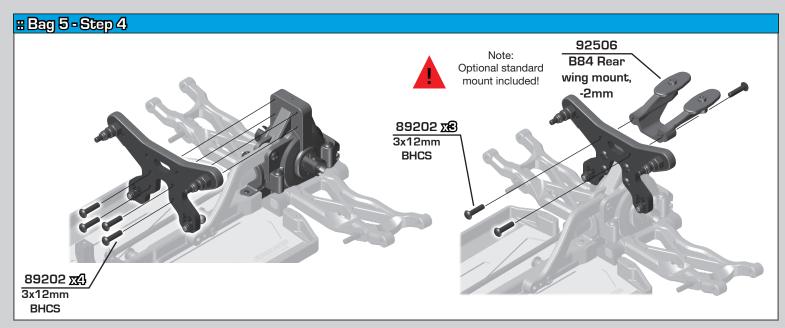


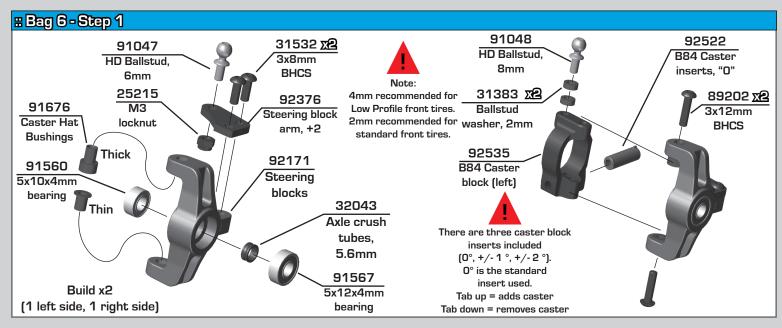


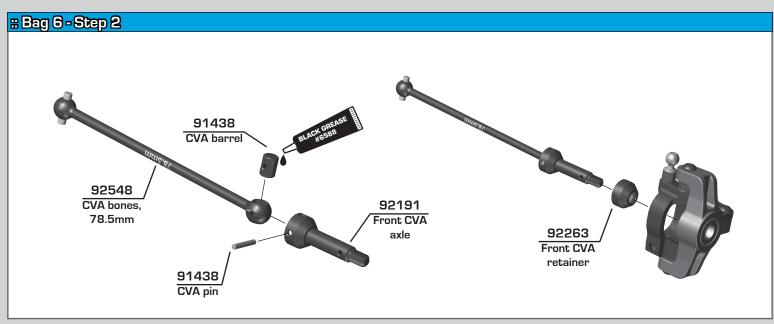


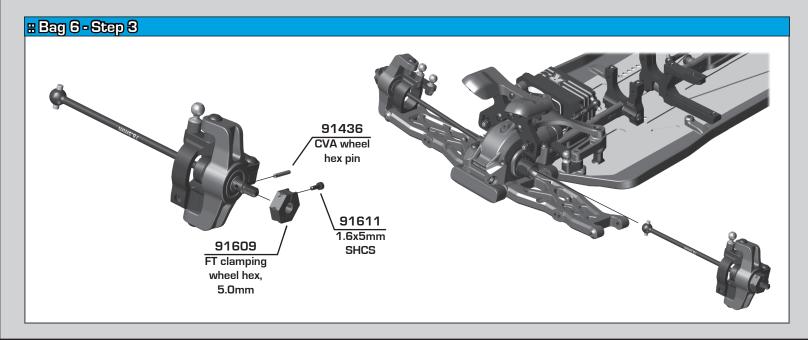


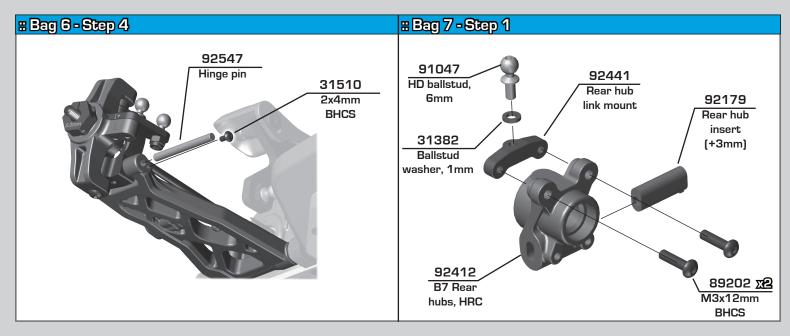


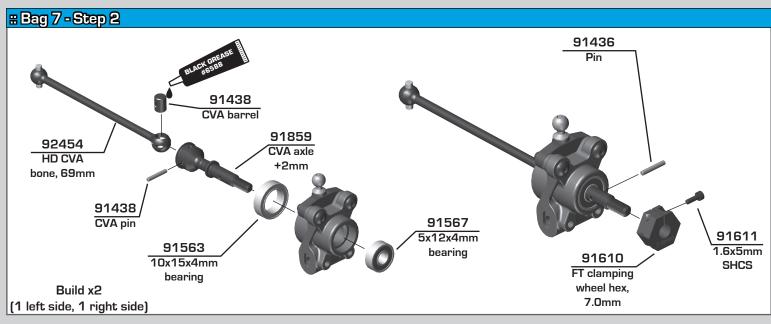


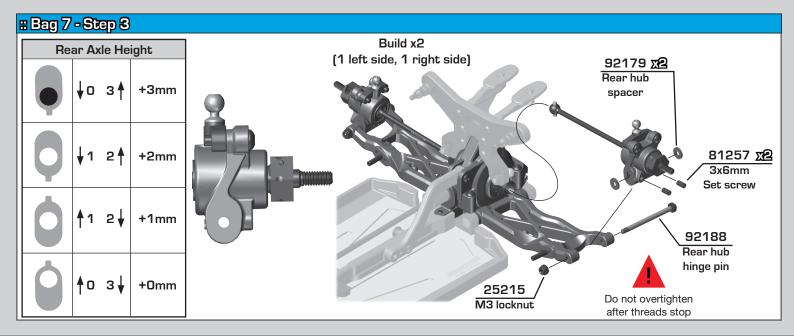


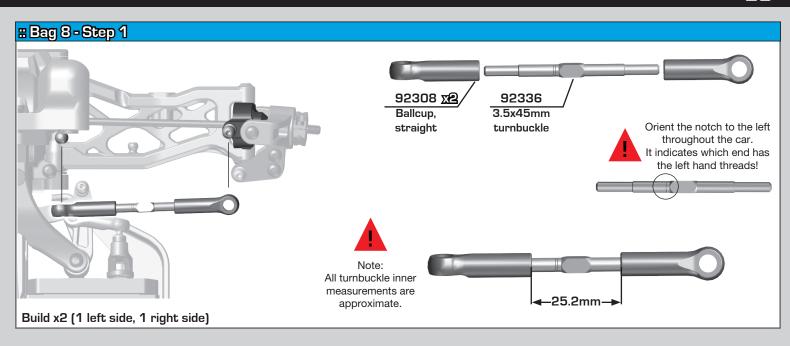


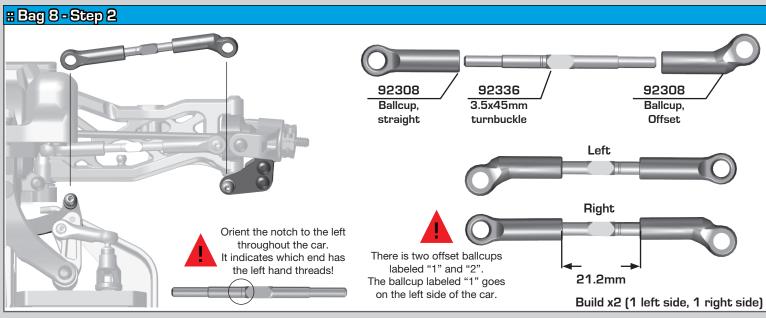


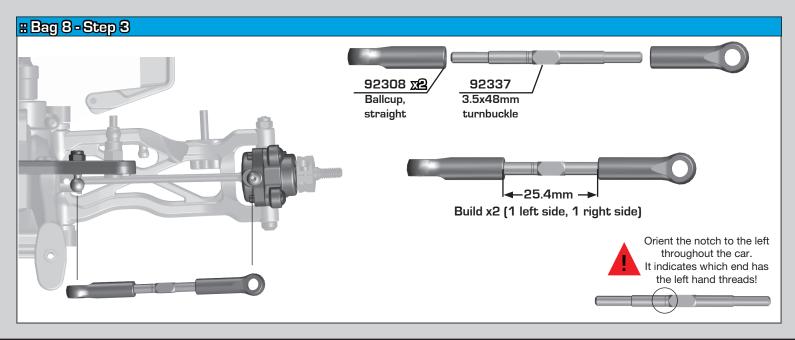




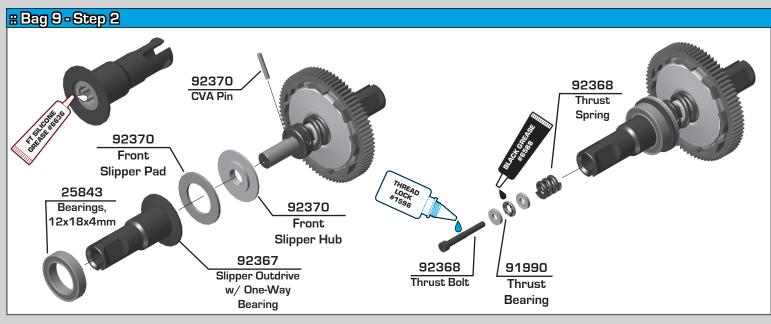


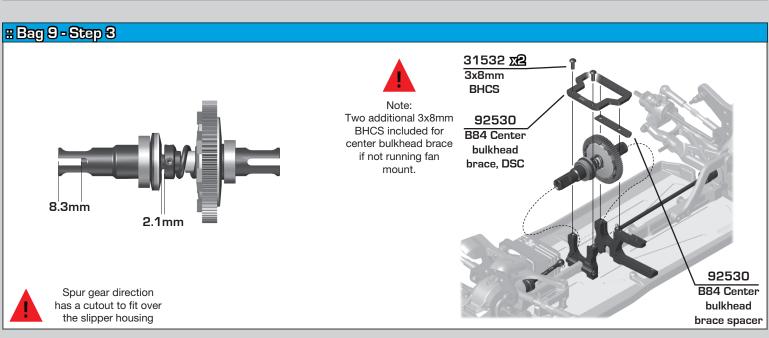


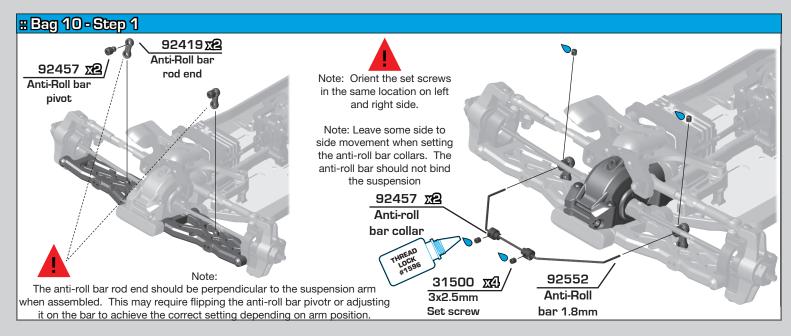


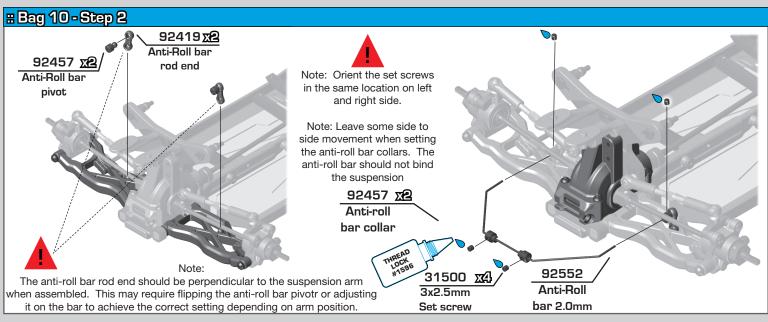


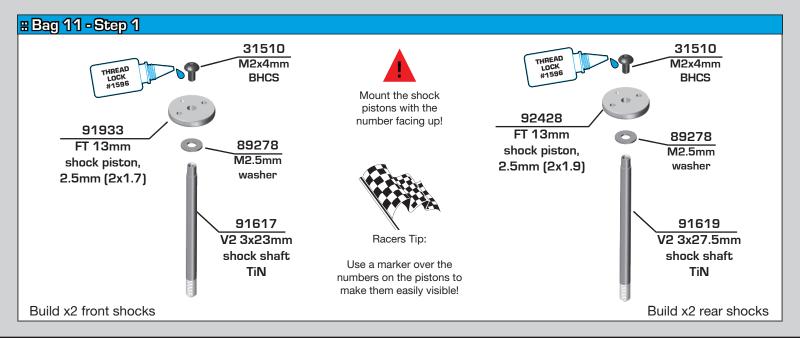


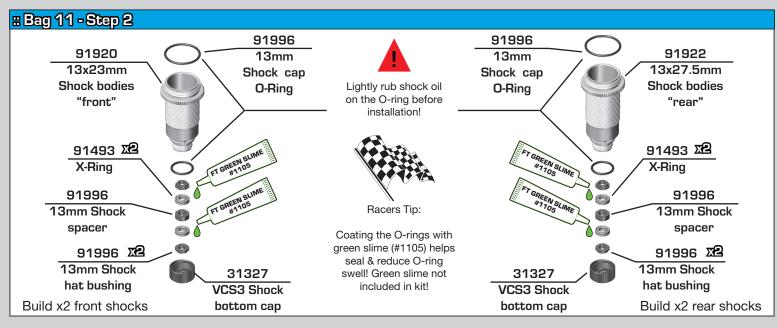


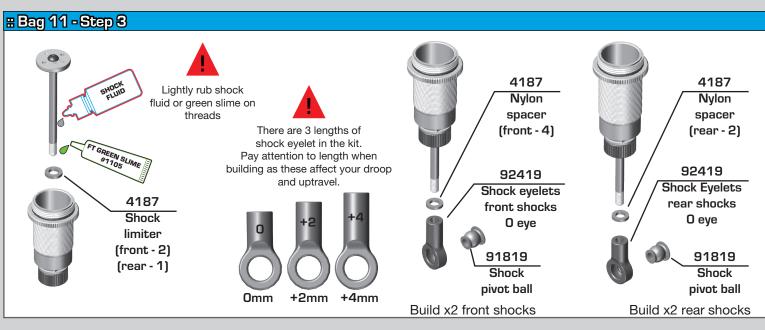


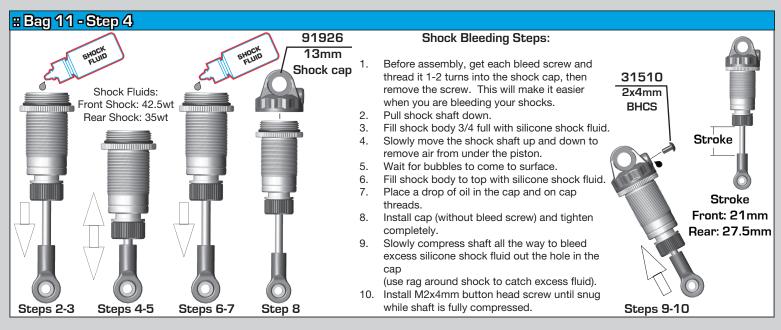


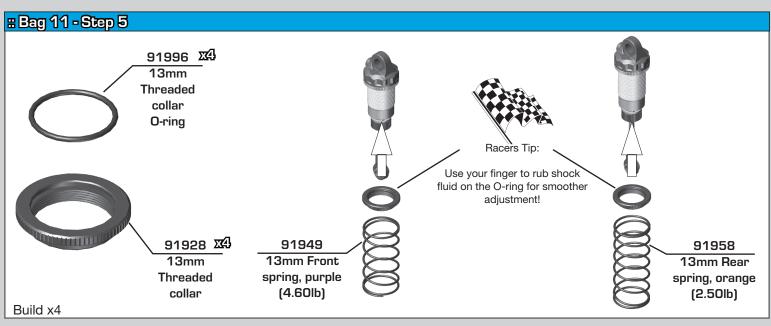


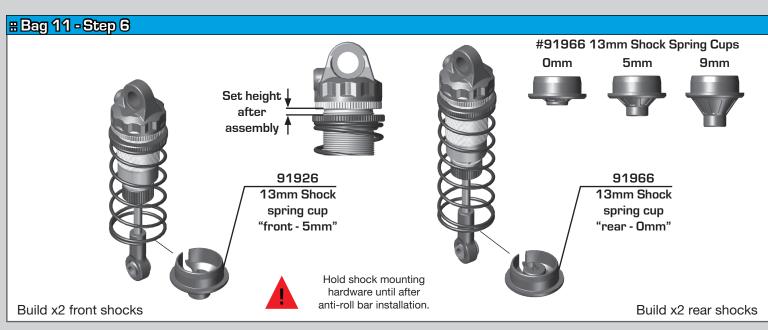


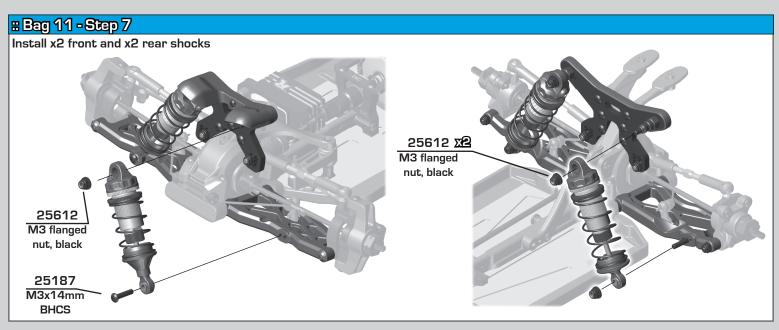


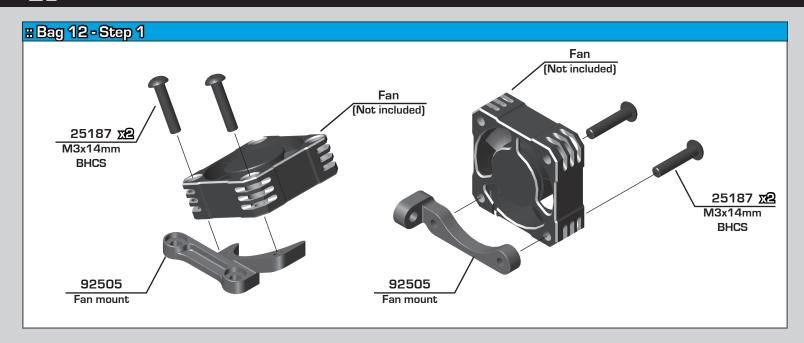


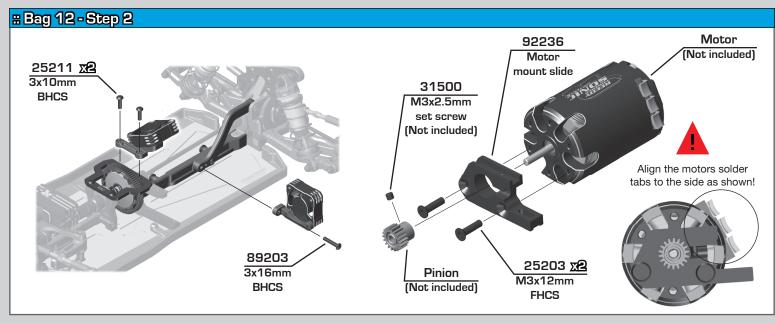


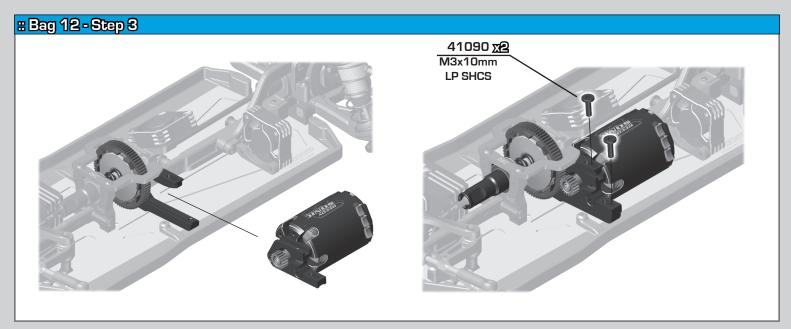


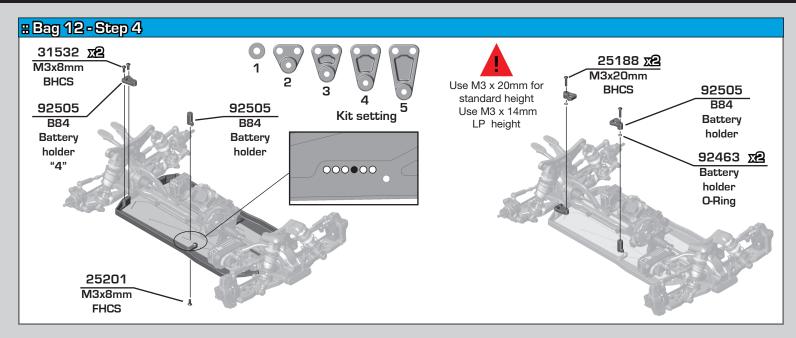


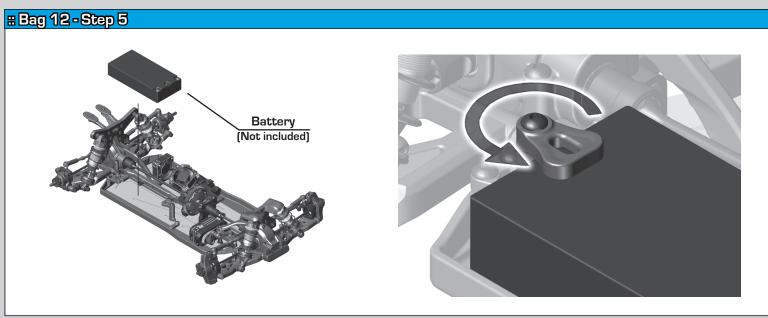


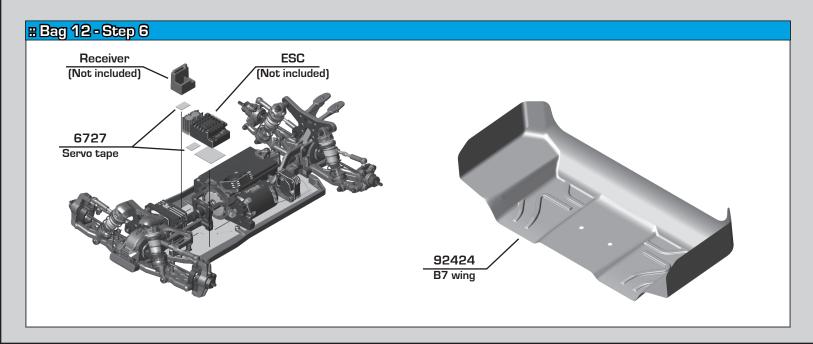


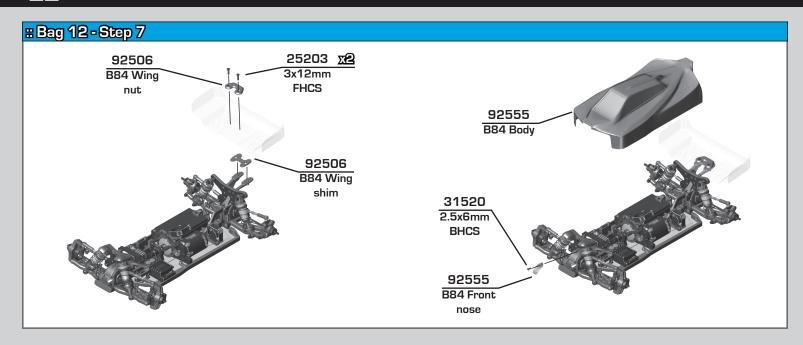


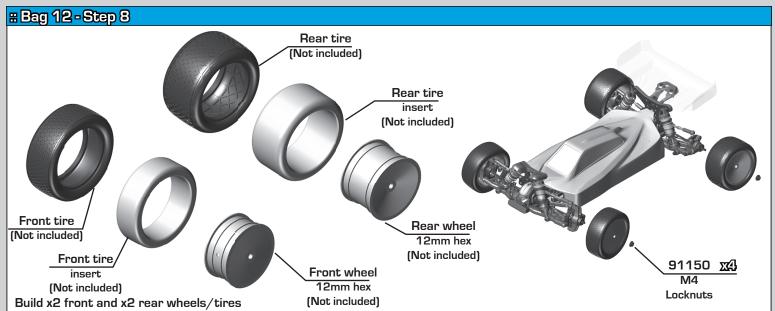












# # Tuning Tips - Painting, Beginners

# 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.

# # Tuning Tips - Front Arm Mount Pill Insert Setups

**B** Mount

B Mount

(i)

(G)

0

(i)

# Standard Position

Use this position as a reference when changing pill locations.

> Kick-up: 10° Roll Center: +0 Pin Width: +0

> > Pin Width

More distance = wider pivot

Less distance = narrower pivot

0

(19)

(3)

0

(9)

(4)

Pin Height Higher pin = Higher roll center Lower Pin = Lower roll center

A Mount

A Mount

0

(9)

0

6

(5)

0

(9)

(4)



B Mount

= +1.4mm

= +0.7mm

= -0.7mm

= -1.4mm

= +0.7mm

= +0.35mm

= -0.35mm

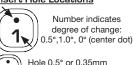
= -0.7mm

= 0mm

= 0 mm



## Insert Hole Locations

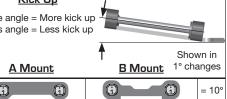


from center Hole 1.0° or 0.7mm from center

The aluminum front arm mounts utilize eccentric pill inserts to make fine adjustments to kick-up, pin height, and pin width. Adjustments can be made using the supplied inserts (#92014)



More angle = More kick up Less angle = Less kick up

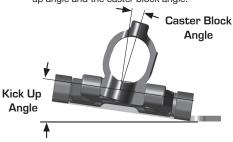


.5

A Mount			wn in anges
<b>(3)</b>	<b>(1)</b>	<b>(1)</b>	= 10°
	0		= 9°
			= 8°
	<b>(3)</b>		= 11°
	0		= 10°
			= 9°
<b>(1)</b>	<b>(1)</b>		= 12°
	0	(9)	= 11°

#### **Total Caster Angle**

Total caster angle is the sum of the kick up angle and the caster block angle.



		К	Kick Up Angle						
		8°	9°	10°	11°				
쓩	6°	14°	15°	16°	17°				
Caster Block Angle	7°	15°	16°	17°	18°				
ter E	8°	16°	17°	18°	19°				
Ste	9°	17°	18°	19°	20°				
8	10°	18°	19°	20°	21°				

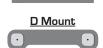
# # Tuning Tips - Rear Arm Mount Pill Insert Setups

#### Standard Position

Use this position as a reference when changing pill locations.

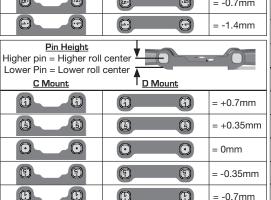
> Toe: 3° Anti-Squat: 2° Roll Center: +0 Pin Width: +0

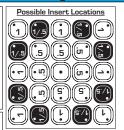




#### Pin Width More distance = wider pivot Less distance = narrower pivot C Mount D Mount

		= +1.4mm
		= +0.7mm
	0 0	= 0mm
		= -0.7mm
<b>9 0</b>		= -1.4mm





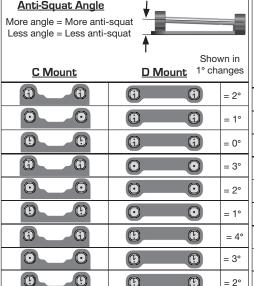
# **Insert Hole Locations** Number indicates

Hole 0.5° or 0.35mm

degree of change: 0.5°,1.0°, 0° (center dot)

from center Hole 1.0° or 0.7mm from center

The aluminum front arm mounts utilize eccentric pill inserts to make fine adjustments to kick-up, pin height, and pin width. Adjustments can be made using the supplied inserts (#92014)



Toe Angle More angle = More toe in Less angle = Less toe in Shown in 1° changes C Mount D Mount 0 0 **G** (e) = 3° 0 0 0 = 4° 0 0 0 = 5° (e) = 2°  $\odot$ 0 0 0 0 = 3° 0 0 0 = 4° 0 = 1° 0 0 = 2° = 3°

							A		
TEAM KIT	) Date:					ਸ <del>਼</del>	idshi	BestLepTilmer	
Front Suspension:									
Ride Height: 11mm	Lower Br	ace Type:	Fixed	Pivot	9			Axle Height:	
Camber: -1 deg			_		_/[	er .		+3 +2 +1	0 🔲
Toe: O deg				Bal	l Stud Spaci	ng: 2mm	9	Ball Stud Spacing: 0	
Anti-Roll Bar: 1.8mm	╡				•	5 =			
Arm Type: Kit	Arm Mou	nt Δ· 1°	· • 0	5° □	$\neg$			Steering Plate: +2	
Tower Type: Kit		Gray	=	k □					
Wheelbase Shim: Arm Middle	<b>-</b>			<u></u>	Diff H	leight:		<sup>3</sup> 2 <sub>1</sub>	$^{\circ}$
Wheel Hex: 5mm	$\dashv$	}			+3		Ball Stu	d Spacing: 4mm	
Steering Block Type: B74	=				+2			3	60
Caster Block: 6° 7° 8° 9° 10°	Arm Mou	nt D: 1	· • 0	5° □	<b>⊣</b>  +1			2 8	ğ
Chassis Brace Material: Kit		Gray	_	s □ k □	+0	┸,			الة
Top Plate Brace Material: Kit	╡└──					•			A
	$\exists$			000					
Front Axles: CVA DCV	-							ВА	
Notes:									
Rear Suspension:						11 : 1 :			
Ride Height: 11mm	Lower Br	ace Type:	Fixed	Pivot		Height:	9	Gearbox: Standard	
Camber: -1 deg			.000			3 ▲ +3		+2	
Anti-Roll Bar: 2.0mm	Rear Cha	ssis Brac	e Screws	:	<b>○ ▼</b> 1	2 <b>4</b> +2	077		
Arm Type: Kit - B7	Arm Mou	nt C: 1 °		5° 🗌		2♥ +1		4321	
Tower Type: Kit	$\exists$ $lacksquare$	Gray	/ Blac	k 🗌	_	3 ♥ +0			
Wheelbase Shim: Arm Middle	-	88	8			0 1 10	Cambe	r Link Spacing: O	
Wheel Hex: 7mm	<b>」</b>	88	8				9	3	
Hub Type: Kit - B7 HRC								Ball Stud Spacing: 1mm 1	ğ
Drive Shaft Type: 69mm Bone	Arm Mou	nt <b>D</b> : 1 °	° 🔲 0.	5°	Diff Hei	ght:		7 mining 1	4
Chassis Brace Material: Kit	<b>ᆜ</b> └──	Gray	/ Blac	k 🗌	+3 +2			69mm HD	A55
Upper Chassis Brace Material: Kit		88	2	2000	+1	ΗI			
Hub Spacing: Fwd Mid Back	⊒ 888		[ ]		+0			000	
Notes:		00	C					CBA	
Electronics		Differe	ential:			Shocks:			
Radio: Servo:			Front	Center	Rear		Front	Rear	
EPA: Throttle: % Brake:	%	Fluid:	30K		100K	Piston:	2x1.7	2x1.9	
ESC:		Gears:	LTC		LTC	Thickness:	2.5mm	2.5mm	
ESC Settings:		Туре:	Metal		Metal	Fluid:	42.5wt	35wt	
Motor / Wind:	iming:	Notes:				Spring:	Purple	Orange	
Pinion: Spur:		Slippe	r Clutch	'E		Limiters:	Int: 2 Ex	t: 4 Int: 1 Ext: 2	Stroke
Motor Position: Forward: Back:		Type:				Stroke:	21mm	27.5mm	\$ं∟
Battery Position:		# of Pa	ds:			Eyelet:	0	0	
Back 1 □ 2 □ 3 □ 4 ■ 5 □	] Forward	Setting				Cup Offset:	0 +5	+9 0 +5 +9	
Battery: Weight:		Notes:				Kashima Be		ome Shafts: Machined Spa	cers:
Notes:						Notes:		<u> </u>	
TirackInfo:	Titres				Body, W			Vehicle Comments:	
Size:	Front Tires:				Body:	B84	1	Notes:	
Surface:	Front Compo	und:			Front Win		ose	Notes.	
	Front Insert:	_			Rear Wing		37		
Traction:  Moisture:				==	Rear Wing		0 -2		
Condition:	Rear Tires:			==					
	Rear Compound:			<del> </del>	Wing Angle: 0° ☐ 3° ☐ 6° ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				
	Rear Insert:			<del> </del>		cle Weight:	Standard		
	Wheel (F/R):			ı ı utal Vehi	cie vvelant:		H		
Temperature:						J	$\equiv \equiv$		
Notes:	Notes:				Notes:			s_and_setup_sheets/	

		Event	l	(	Quality:	IX	allo:		
TEAM KIT   3	Date:	Track	l		Finish:	B	all quite	ne#	
Front Suspension:									
Ride Height:	Lower Br	ace Type: Fixed Pivot	77 🔘				Axle Height:		
Camber:	201101 21	ace Type. Tixed Tivet		er i				2 +1	0 🗌
Toe:		Ba	all Stud Spac	ing:	9	<u> </u>	Ball Stud Sp	pacing:	
Anti-Roll Bar:	╡			9.				, a.e.i.g.	
Arm Type:	Arm Mou	nt A: 1 ° 0 .5°	$\neg$				Steering Pla	ate:	
Tower Type:	╡[*******	Gray Black							
Wheelbase Shim:		· · · · · · · · · · · · · · · · · · ·	Diff H	leight:				31	21
Wheel Hex:	╡ (※		+3		Ball 9	Stud Sp	acing:		
Steering Block Type:	i		+2					3	006
Caster Block: 6° 7° 8° 9° 10°	Arm Mou	nt B: 1 ° 0 .5°	一  +1	밁				3 2 1	885
Chassis Brace Material:	<u> </u>	Gray Black	+0						-60
Top Plate Brace Material:	i T								
Front Axles: CVA DCV		2000					(00)		
Notes:	$\exists$						ВА		
Rear Suspension:									
Ride Height:	Lower Br	ace Type: Fixed Pivot	Axle	Height:	-	<b>a</b> [c	Gearbox:		
Camber:			₩0	3 ▲ +3	ر	5	Standard 🗌	Ŋ	
Anti-Roll Bar:	Rear Cha	ssis Brace Screws:		2 ▲ +2			+2		
Arm Type:	₹ ===	nt C: 1 ° 0 .5°						43	A.
Tower Type:		Gray Black		2♥ +1		۲		224	Q/
Wheelbase Shim:		00 0000	<b>—</b>	3♥ +0	Can	shon Lin	nk Spacing:	—— `	
Wheel Hex:	<b>∃</b> 888				G	)	ik Spacing.		
Hub Type:	╡  ‱					i		3/2	885
Drive Shaft Type:	Arm Mou	nt D: 1 ° 0 .5°	Diff Hei	ght:		Ball	Stud Spacing:	1	004
Chassis Brace Material:		Gray Black	+3				69mm H	ID	100
Upper Chassis Brace Material:		0000	<del></del>		10				
Hub Spacing: Fwd Mid Back	ī 888		+1 +0	님		T.	000		
Notes:	7 888		1+0			(	СВА		
Electronics		Differential:		Shocks					
Radio: Servo:		Front Center	r Rear		Fron	t.		Rear	1 _
EPA: Throttle: % Brake:	%	Fluid:		Piston:					i O
ESC:	75	Gears:		Thickness	<u> </u>		1		
ESC Settings:		Type:		Fluid:			+		
	iming:	Notes:		Spring:					
Pinion: Spur:	9.	Slipper Clutch:		Limiters:	Int:	Ext:	Int:	Ext:	\$ T
Motor Position: Forward: Back:		Туре:		Stroke:			1		Stroke
Battery Position:		# of Pads:		Eyelet:			<del> </del>		i A
Back 1 2 3 4 5	] Forward	Setting:		Cup Offse	t: 0 +5	+9[	□ 0 □ +5	5 +9	
Battery: Weight:	,	Notes:		Kashima			Shafts:	Machined 9	⊔ Spacers: □
Notes:				Notes:					
Trackinfo:	Tires		Body, W			W	hicle Com	ments	
Size:	Front Tires:	1	Body:	agnu			otes:	Пенсен	
Surface:	Front Compo	ninq.	Front Win	ıa.		<b>≓∐``</b> `			
Traction:	Front Insert:		Rear Wing			≓II−			
Moisture:	Rear Tires:		Rear Wing		0 -2[	╣║╴			
Condition:	Rear Compo	und:	Wing Ang		3°∏ 6°[	<b>    </b>			
	Rear Insert:	ини.	Chassis L		<u> </u>	╡  -			
Temperature:	Wheel (F/R)			cle Weight:		<b>  </b>   −			
Notes:	Notes:		Notes:	ole vveigni.		<b>  </b>   −			
140063.	140003.		INDIES.			ᅴᆜ			

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