

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



:: Introduction

Thank you for purchasing this Team Associated product. This assembly manual contains instructions and tips for building and maintaining your new RC10 B44.1. Please take a moment to read through this manual to help familiarize yourself with these steps.

We are continually changing and improving our designs; therefore, actual parts may appear slightly different than in 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.

:: KIT Features

The Factory Team B44.1 is the next generation in a long line of race winning 10th scale 4wd buggies dating back to 2003. The B44 project came to life as a cooperative effort between Team Associated and J Concepts' Jason Ruona and Brad Reelfs, culminating with Team Associated driver Ryan Cavalieri winning the 2005 I.F.M.A.R. World Championships in Italy with the BJ4 World's Edition. The production B44 Factory Team continued the winning ways with Jared Tebo winning the 2007 I.F.M.A.R. World Championship in Japan along with Ryan Maifield and Ryan Cavalieri in a 1-2-3 B44 podium sweep.

Team Associated designers optimized the B44.1 for the latest generation of racers using LiPo batteries and brushless motors. With the advent of this new technology, R/C cars are lighter and more powerful than ever. The B44.1 is geared for strictly LiPo batteries, with no cell slots in the chassis and a carbon fiber battery tray as standard equipment. The center section of the battery tray can be replaced with an optional (not included) ballast weight for more rearward weight bias. Motor installation and adjustment is a breeze thanks to the cam motor mount system. The blue aluminum rear hubs add durability and new camber link adjustment options. Lastly, the B44.1 comes with the latest JConcepts Punisher body and under tray.

Features in the B44.1 Factory Team:

- 2.5mm updated carbon fiber chassis for LiPo batteries only
- Carbon fiber LiPo battery tray with removable center section (*optional ballast weight reg'd)
- 3.5 mm front shock tower
- Updated front top deck for more durability along with new antenna location
- Cam motor mount set
- Factory Team 0 degree aluminum rear hubs with oversize outer bearing.
- Factory Team V2 dual-cap hard anodized shock bodies with threaded collars
- V2 slipper assembly with high-rate spring
- Factory Team Gold slipper pads
- JConcepts Punisher body and under tray
- Pro-Line M3 Holeshot 2.0 tires
- Rear anti-roll bar included
- Bleed-screw shock caps
- TiN "Gold" shock shafts front and rear
- Carbon fiber battery straps with thumb screws
- 1/4" locking and 3/16" mini locking nuts

:: Additional Features

B44.1 F.T. Additional Kit Features:

- Servo mounted 3mm closer to centerline
- Ball differential with light-weight outdrives
- CVA joints with pin retainer clips
- Factory Team blue aluminum servo mounts
- Factory Team blue aluminum shock bushings
- Ball-bearings steering bell cranks
- Built in servo saver

- Chassis cut for additional ground clearance
- Dual-sided externally adjustable slipper clutch
- Factory Team blue Titanium turnbuckles
- Factory Team blue aluminum wheel spacers
- Factory Team blue aluminum shock pivot balls
- Fully adjustable camber, and toe-in
- Vertical ball end adjustment front & rear

:: Other Helpful Items

- Silicone Shock Fluid (Refer to catalog for complete listings)
- Body Scissors (AE Part # 1737)
- Reamer / Hole Punch
- Wire Cutters
- Hobby Knife

- FT Hex Wrenches (AE Part # 1541)
- Needle Nose Pliers
- Multi Tool (AE Part #7494)

• Soldering Iron

- Calipers or a Precision Ruler Green Slime shock lube (AE Part # 1105)

Associated Electrics, Inc. 26021 Commercentre Dr. Lake Forest, CA 92630



Customer Service Tel: 949.544.7500 Fax: 949.544.7501

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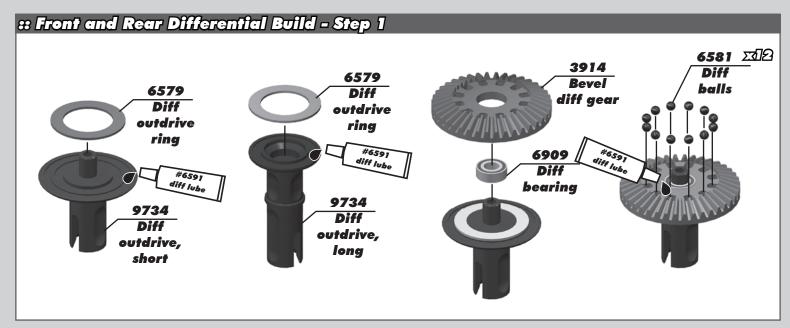


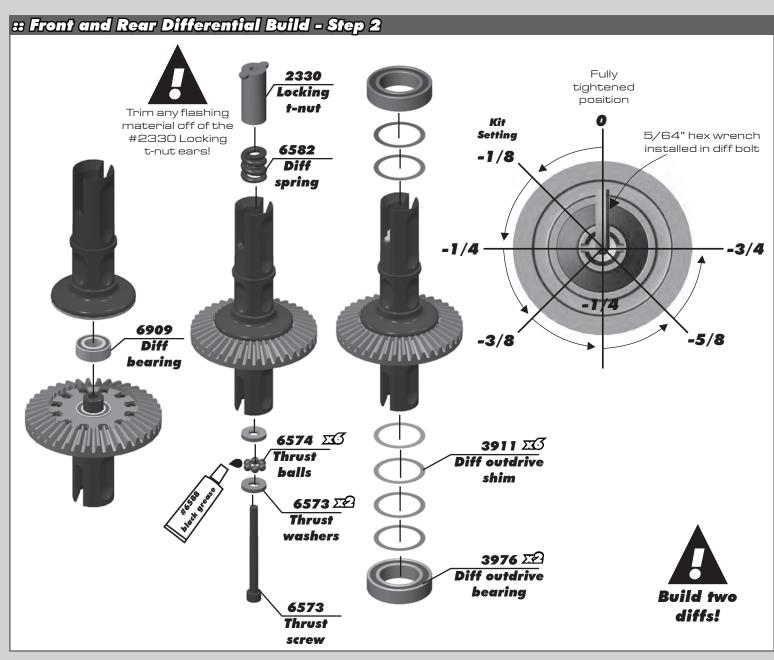
There is a 1:1 hardware foldout page in the back of the manual. To check the size of a part, line up your hardare with the correct drawing until you find the exact size. Each part in the foldout has a number assigned to it for ordering replacement parts.

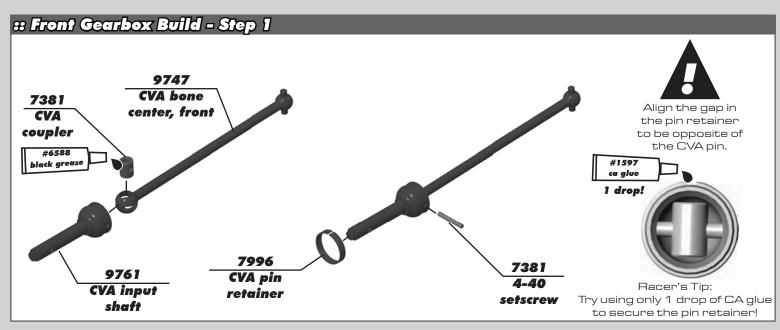
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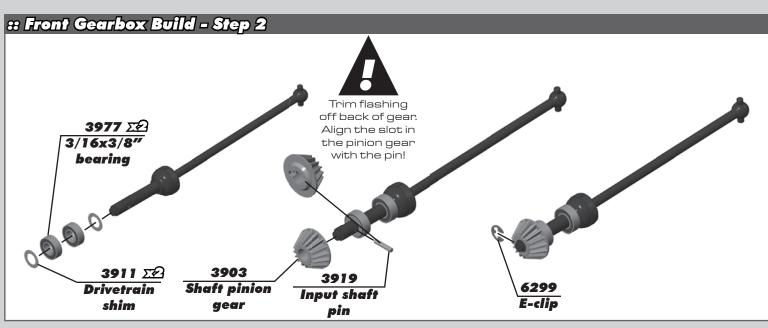


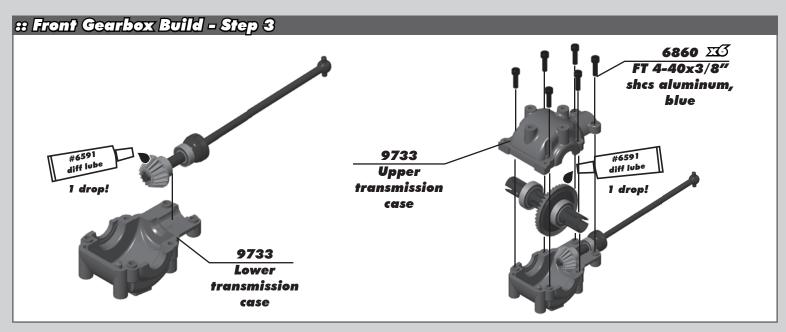
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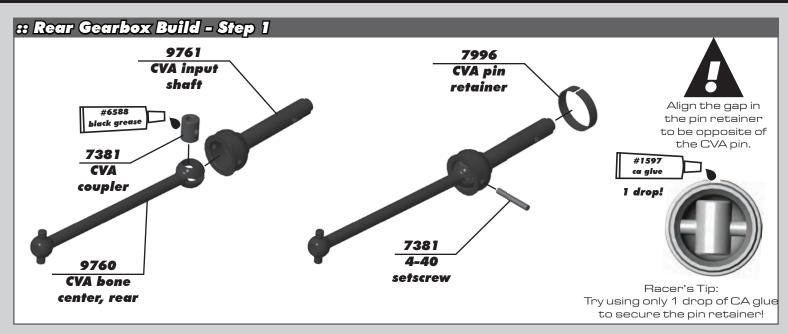


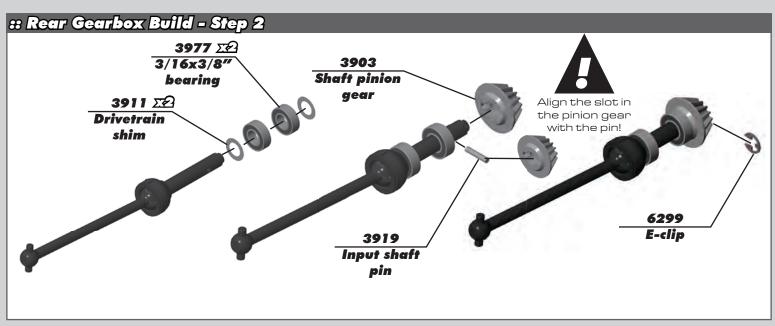


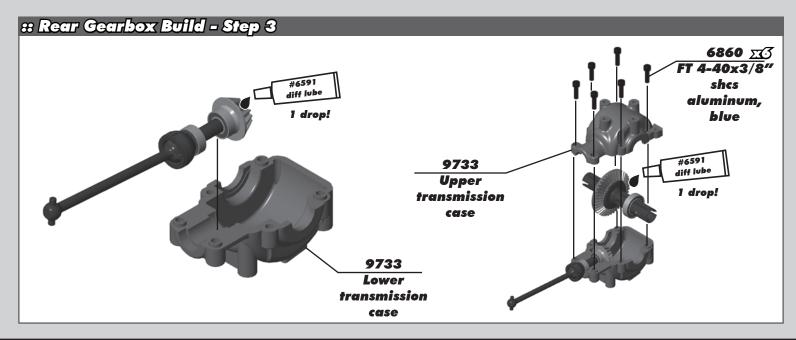


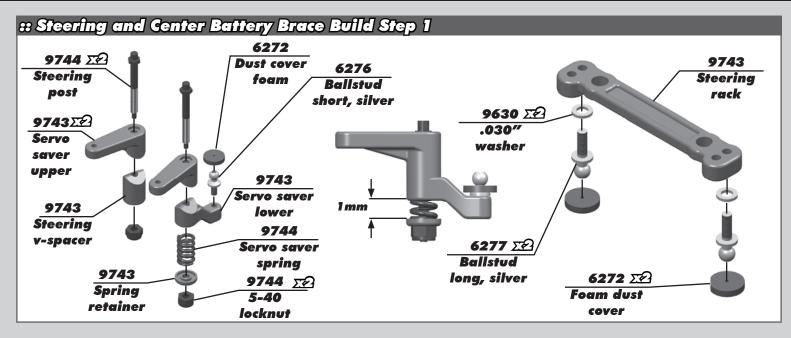


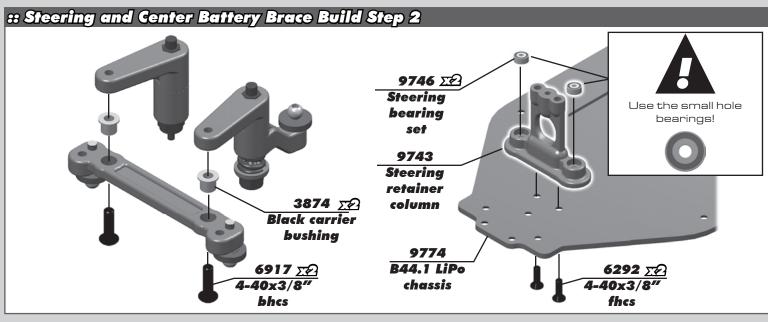


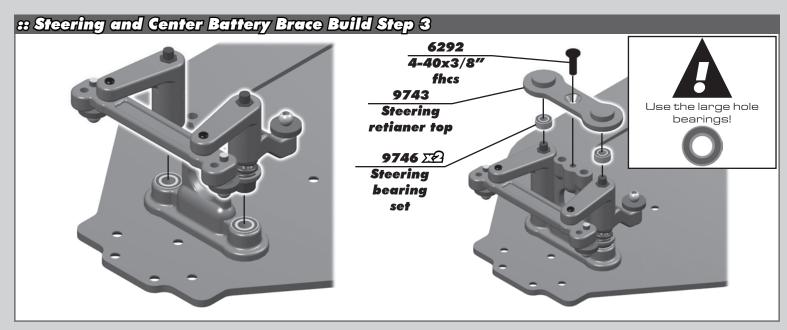


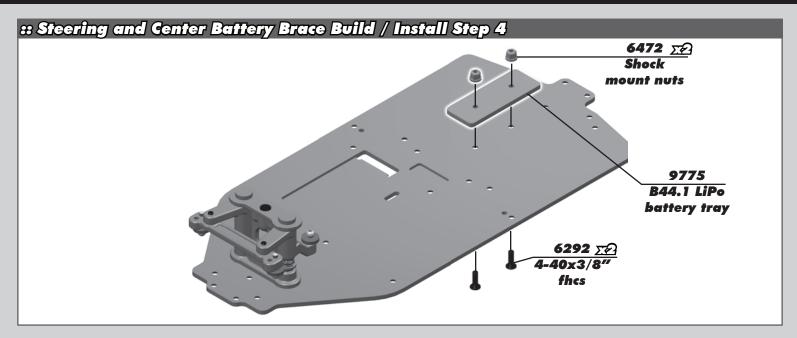


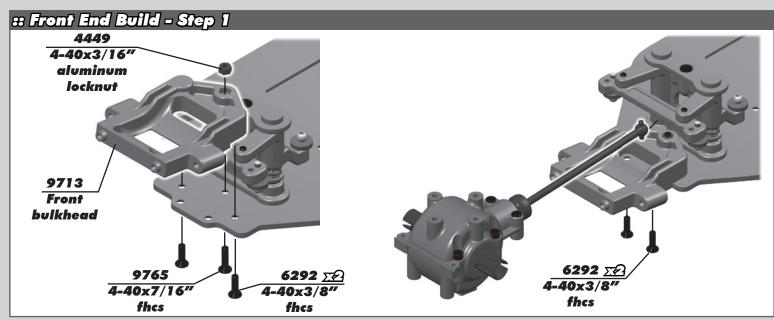


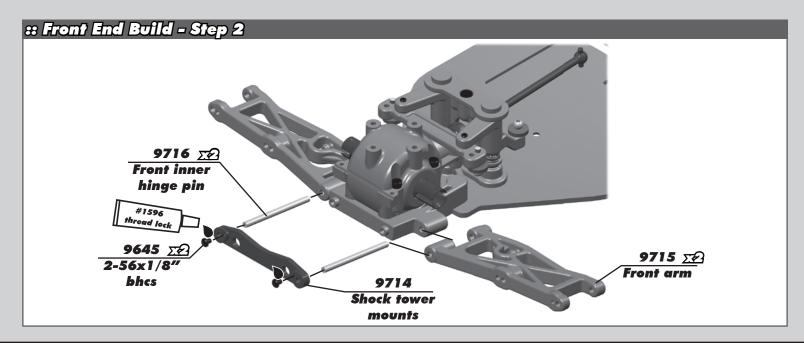


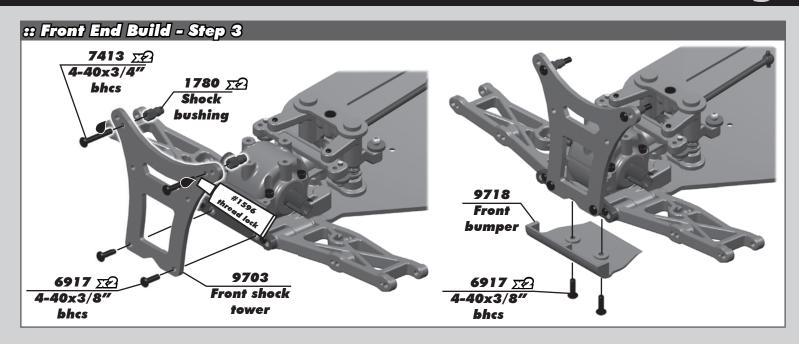


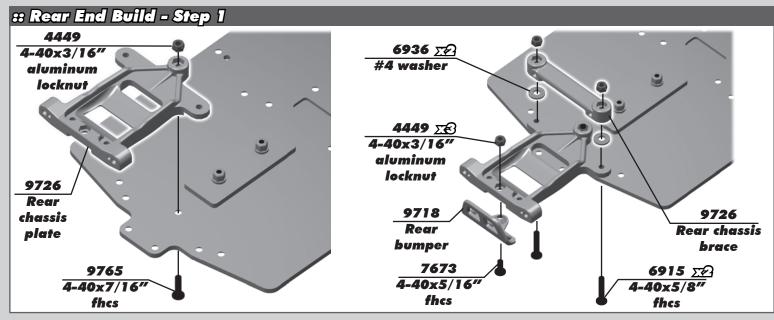


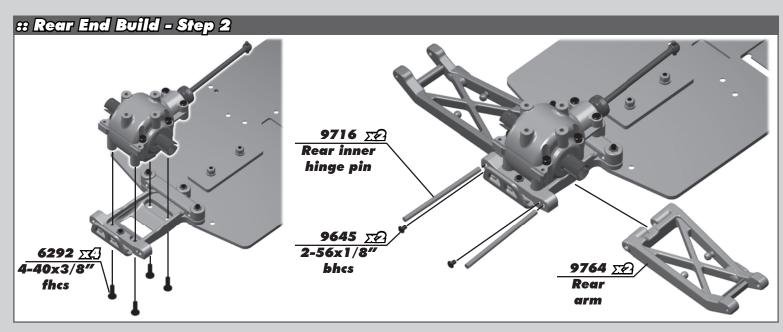


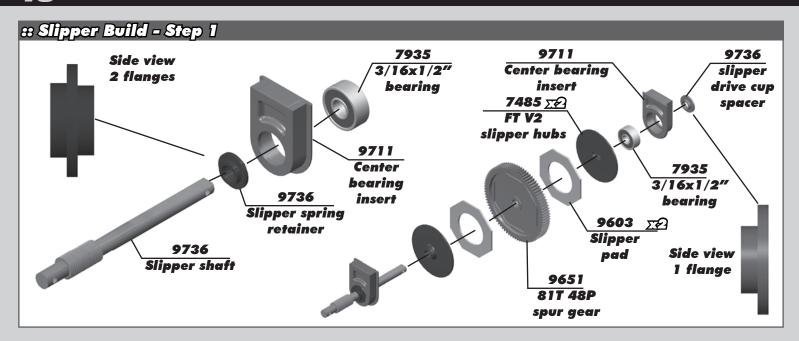


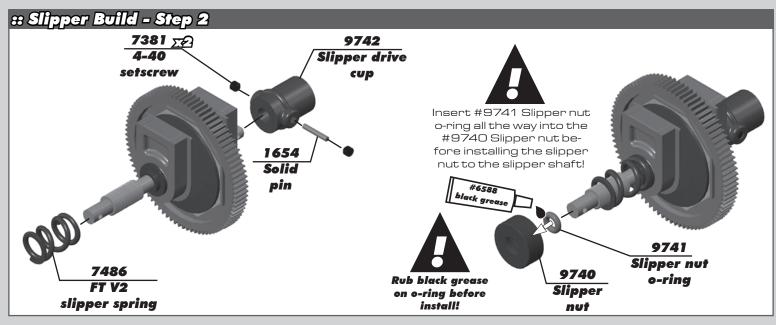


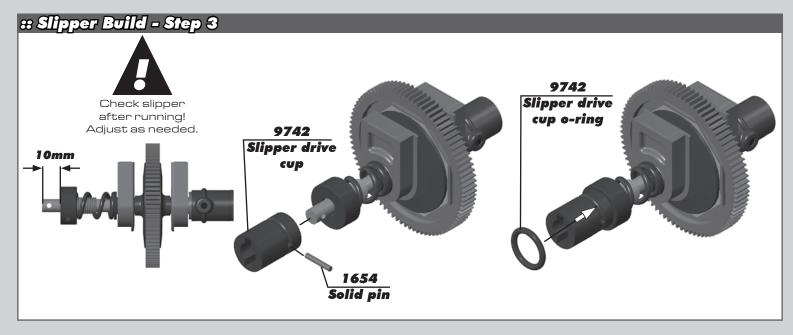


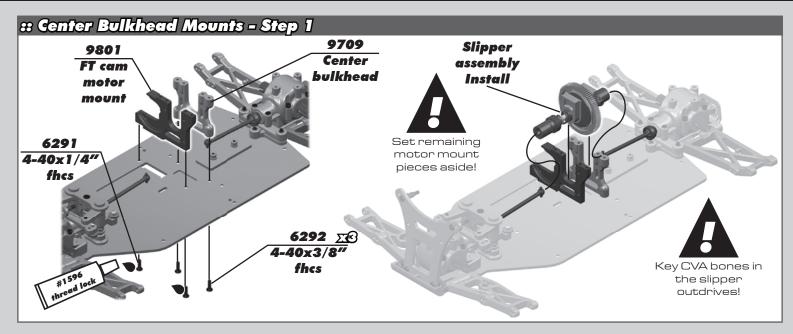


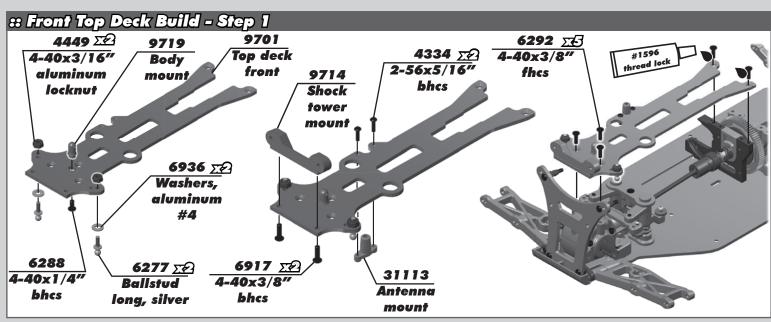


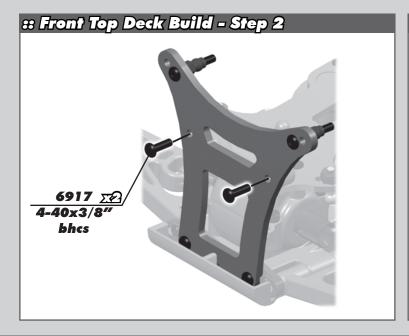


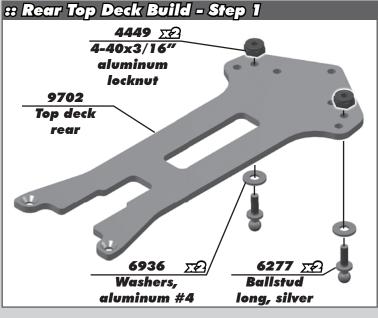


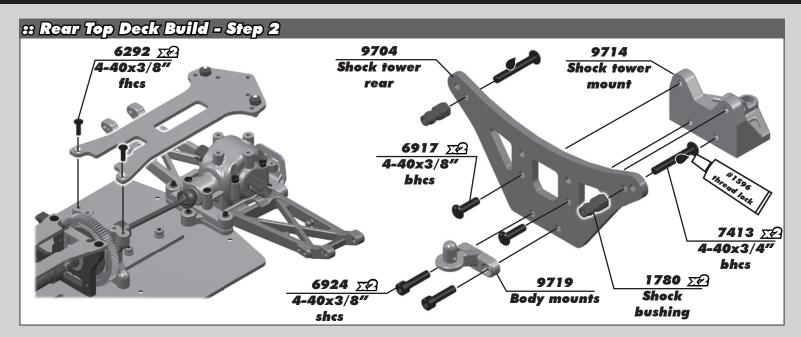


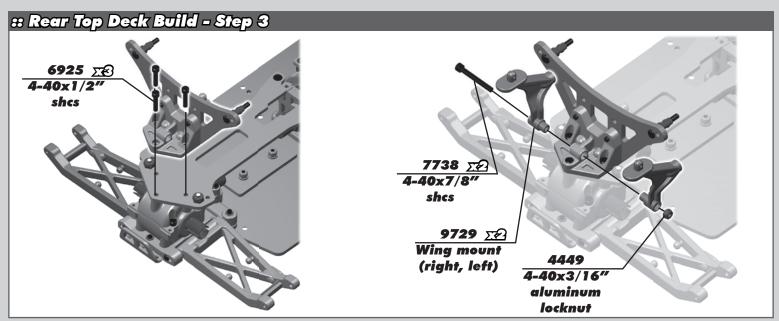


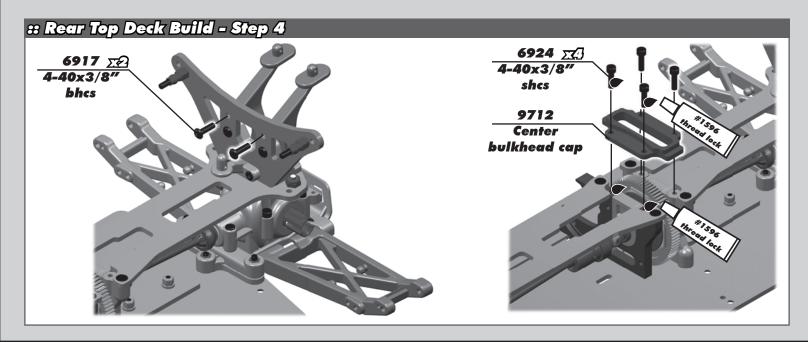


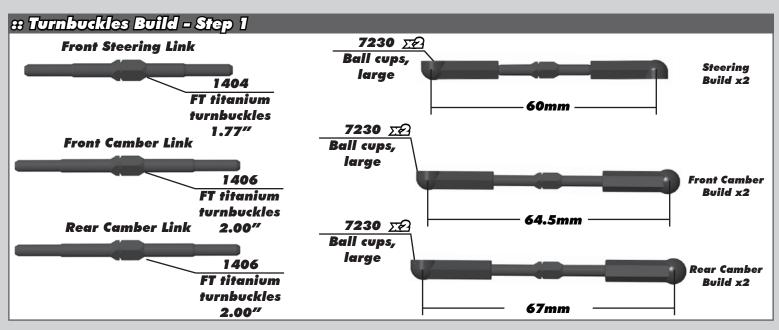


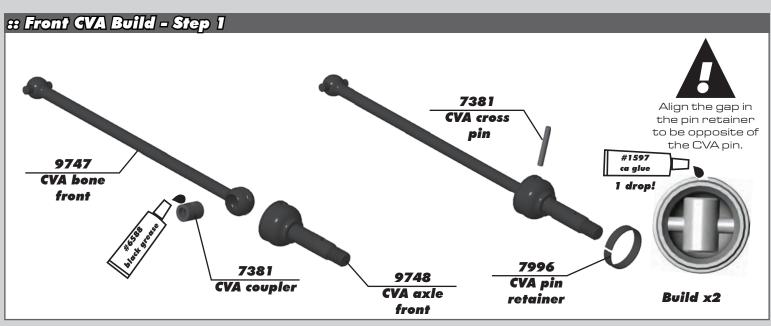


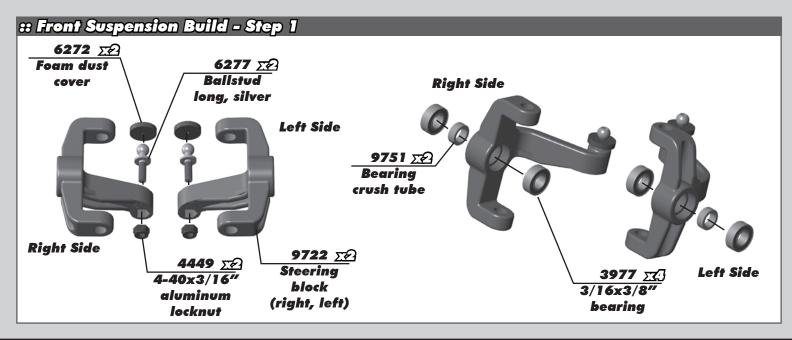


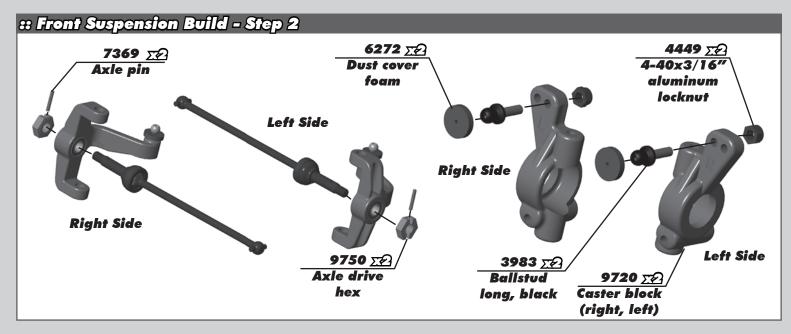


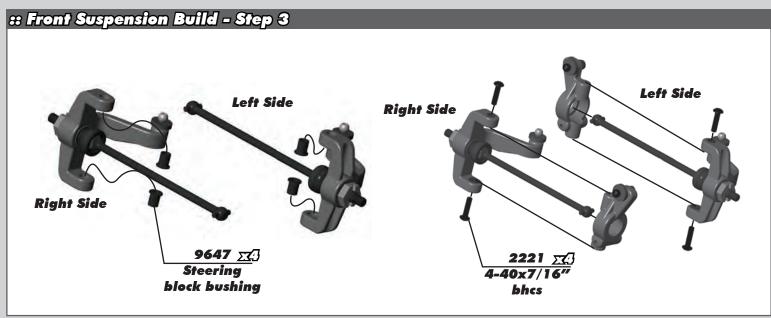


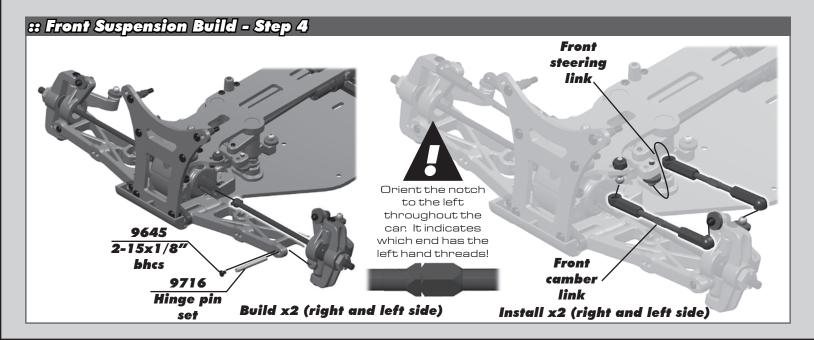


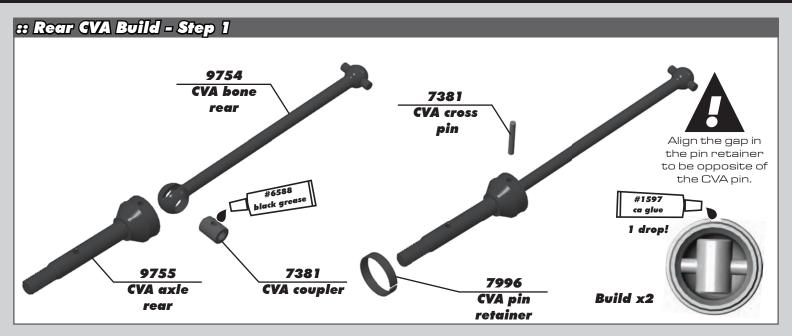


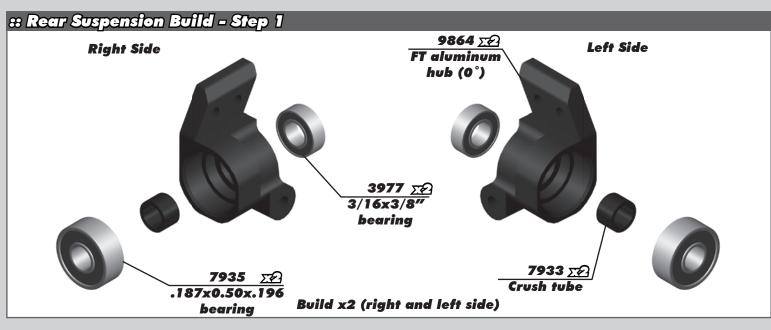


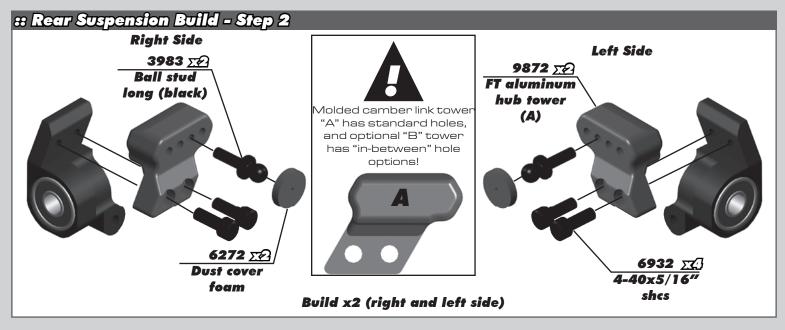


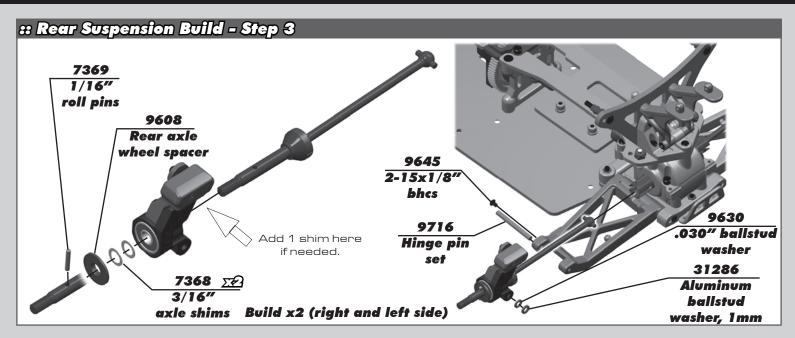


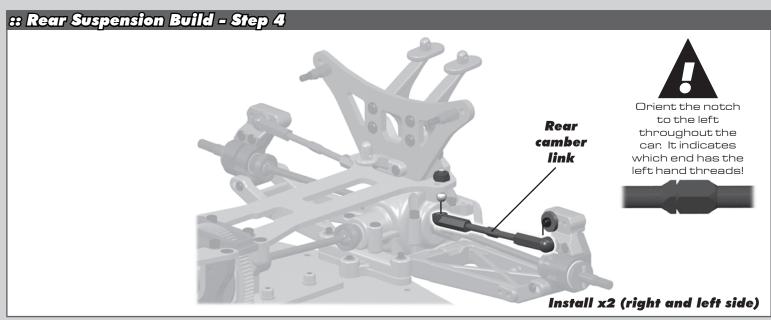


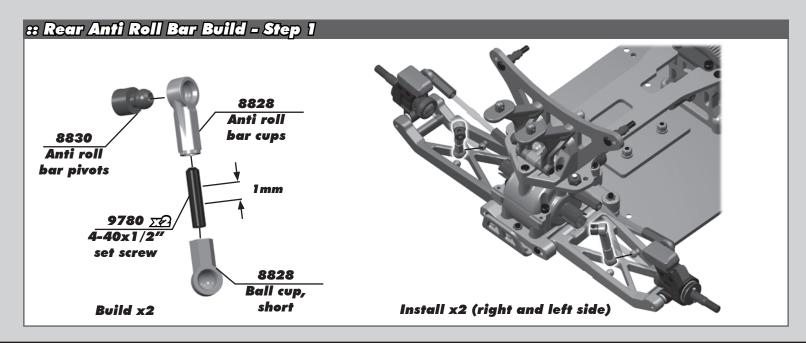


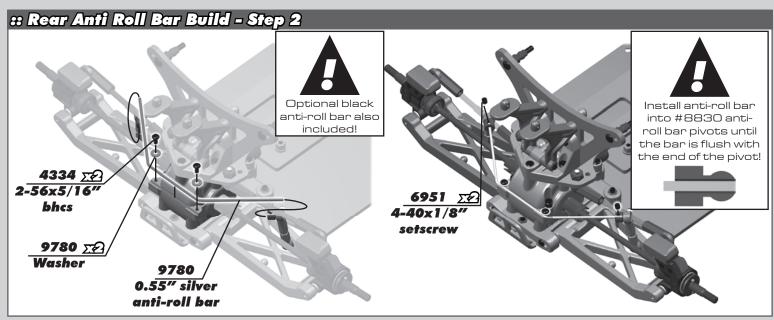


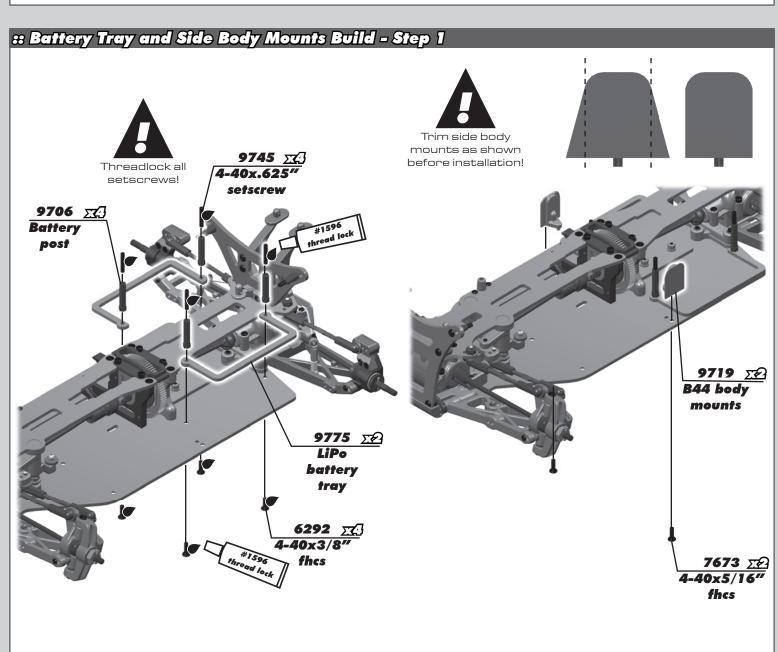


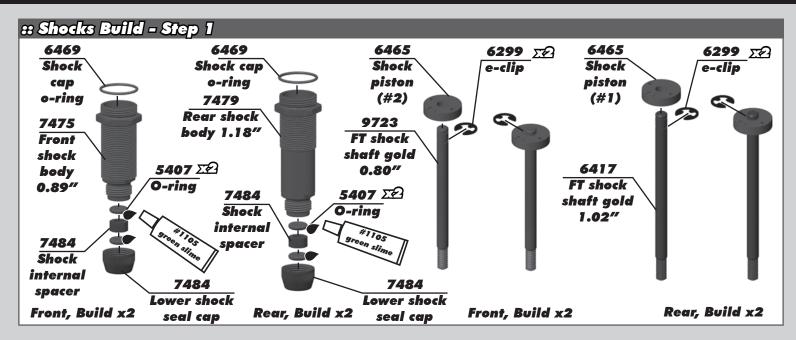


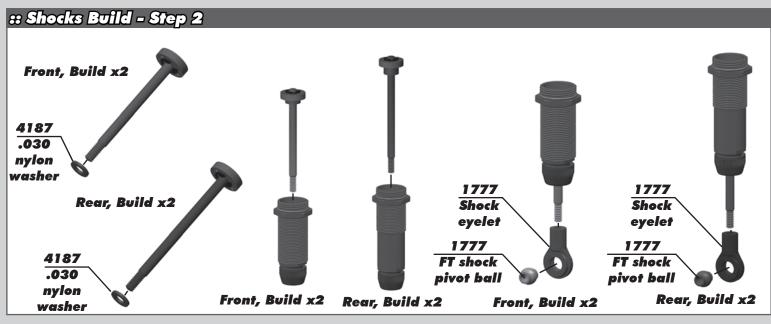


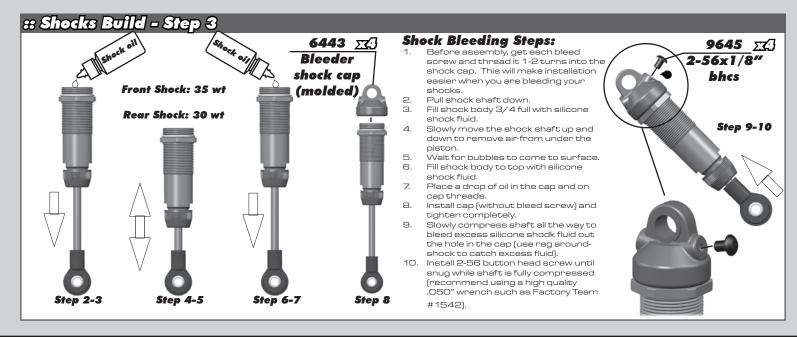


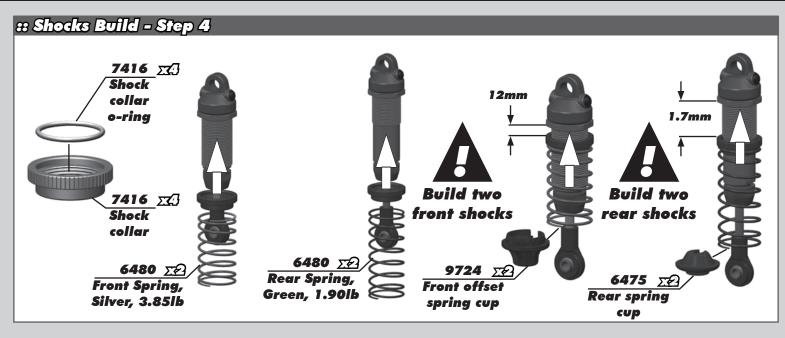


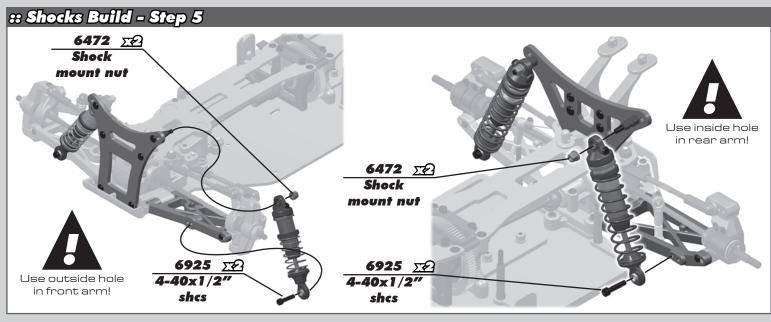


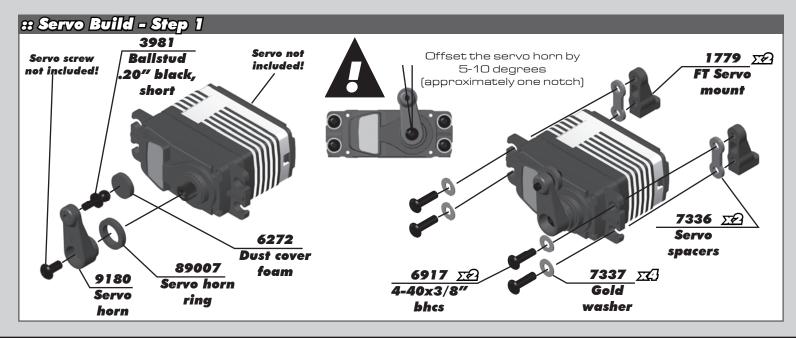


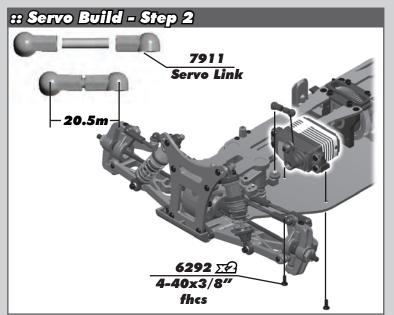


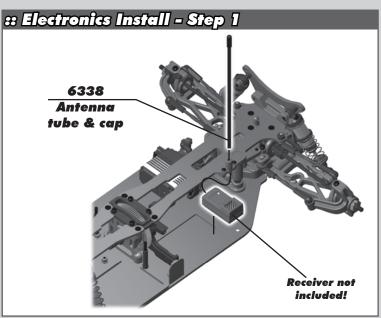


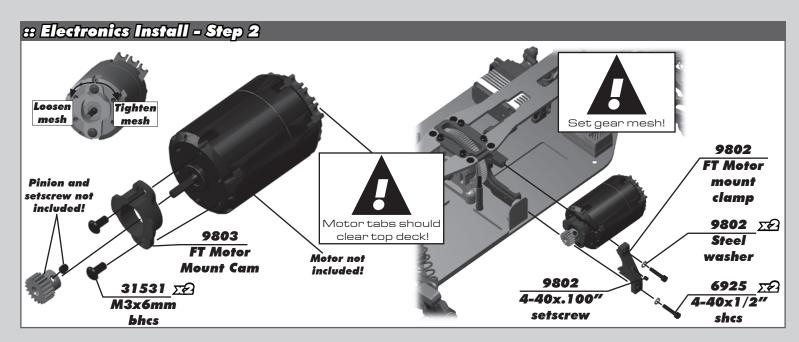


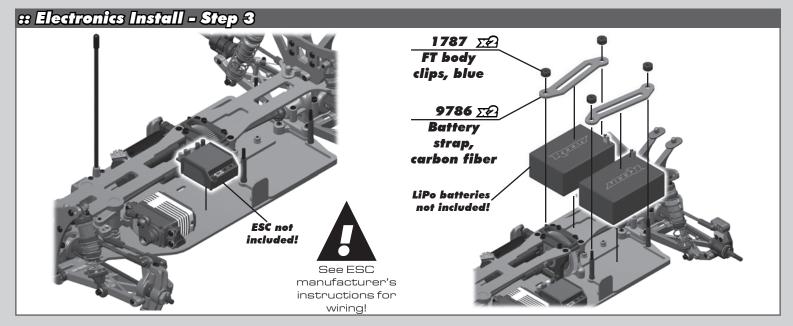


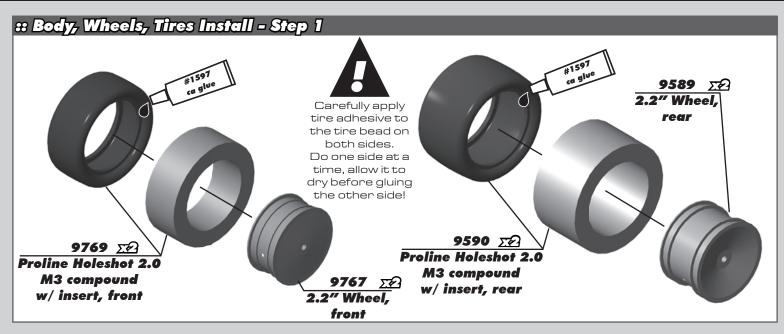


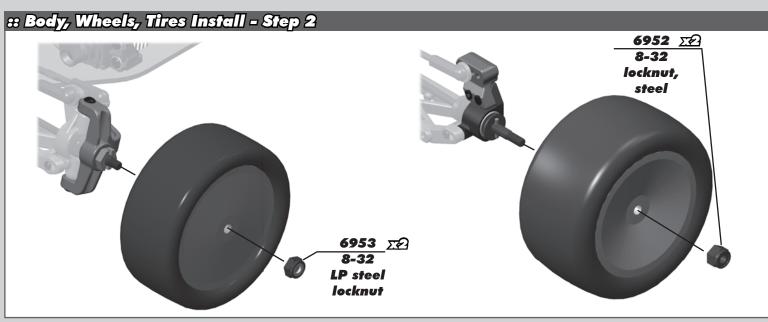


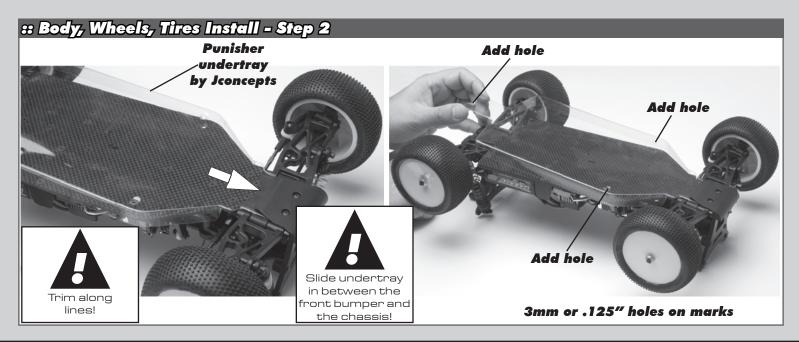












9718 Rear bumper

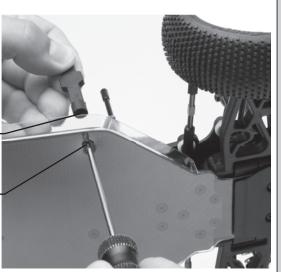




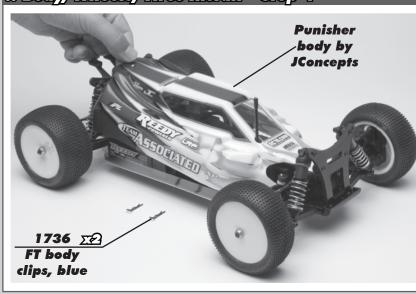
Use the screw for the servo mount for the opposite side!

> 6472 nylon nut

7673 4-40 x 5/16" fhcs



:: Body, Wheels, Tires Install - Step 4



Painting Tips:

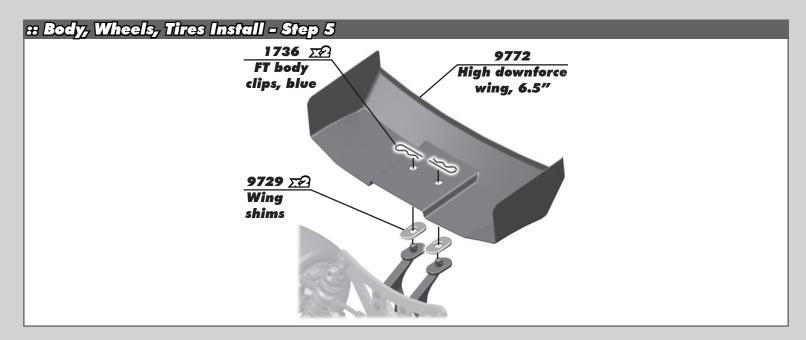
Body:

Your B44.1 FT comes with 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. 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 from the inside).

Using high quality masking tape, apply tape to the inside of the body to create a design. Spray (either rattle can or airbrush) the paint to the inside of the body (prefferably dark colors first, lighter colors last).

NOTE: use ONLY paint that is recommended for use with (polycarbonate) plastics. If you don't, you can destroy the plastic body!!!!).

After painting, cut the body along the trim lines. Make sure to drill or use a body reamer to make the holes for the body mounts and antenna!



:: Tuning Tips

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.

Differential:

Adjust the differential (AKA 'diff' for short) as noted in the assembly instructions. Adjusting the rear diff is not meant to be a tuning option. If you can hear the diff making a "barking" or "chirping" sound on jump landings or under acceleration, either your diff is set too loose or your slipper clutch is set too tight. The front diff can go out 1/16" turn to get more steering.

Slipper Clutch:

The assembly instructions give you a base setting for your clutch. To preserve the differentials, always start with the slipper on the loose side and slowly tighten the adjustment nut until it is set. To adjust the slipper, remove the body and insert a 2mm (or 5/64") hex wrench through the center of the top deck (or through the bottom slot in the chassis). Then, grab both of the rear wheels and rotate forwards to tighten and backwards to loosen. As you spin the wheels, you'll feel the motor click every $\frac{1}{4}$ of a wheel revolution. At the track, tighten or loosen the nut in 2 click increments until you hear only a faint slipping sound for 1-2 feet on takeoffs.

Front Camber Link Length & Number of Washers Under Ballstud:

Changing the length of the camber link is considered a bigger step than adjusting the ballstud height. Typically shortening the camber link (orlowering the ballstud) will give the front end less roll and quicken steering response. Lengthening the camber link (or raising the ballstud) will give the front more roll and slower steering response. To raise the ballstud, remove washers from between the ballstud and upper deck.

Front Camber:

A good starting camber setting is -1 degrees. Use the included #1719 camber gage to set your camber. Positive camber, where the top of the tire is leaning out, is typically not recommended.

Front Toe-In:

Zero degree toe-in (tires pointing straight forward) is the setting that should be used in almost all track conditions.
Occasionally you can increase turn in by adding a little toe-out (front of tires point slightly out). Front toe in is not a typical tuning adjustment used by The Team.

Front Arm Hole:

The kit silver springs and outside front arm hole will work best in most cases. Moving the shock to the inside hole on the front arm requires you to add another down travel limiter to the front shocks, so there should be two down travel limiters in each shock. You should also change to a stiffer spring to account for the difference in leverage on the shock.

Front Ride Height:

The standard front ride height setting is 21 mm. Check the ride height by lifting up the entire car about 8-12 inches off the bench and drop it. After the suspension "settles" into place, raise or lower the shock collars as necessary until there is 21 mm gap from the bottom of the chassis to the ground.

Anti-Squat:

Anti-squat denotes the angle of the rear arms relative to the ground. Zero anti-squat means that the rear arms are flat, parallel with the ground. The kit setting is 2 degrees, and can be reduced to 1 degree by removing the included #4 washer underneath the arm mount. You can add another #4 washer so that there is two washers underneath the arm mount to get 3 degrees of anti-squat. Adding anti-squat tends to make the car "rotate" more in corners, but doesn't handle as well through the bumps. 1 degree will be better in bumpy sections.

Rear Camber Link Length & # of Washers under Ballstud:

Changing the length of the camber link is considered a bigger step than adjusting the ballstud height on the rear chassis brace. Typically shortening the camber link (or lowering the ballstud) will give the rear end less roll and the car will tend to accelerate or "square up" better. Lengthening the camber link (or raising the ballstud) will give the rear more roll and more cornering grip. To raise the ballstud, remove washers from in-between the ballstud and upper deck. You should normally use the kit setting and only adjust the ballstud height

:: Tuning Tips (cont.)

Rear Hub Spacing:

You have 3 options for rear hub spacing, FORWARD, MIDDLE, & BACK. The kit setting is FORWARD, which provides the most rear traction and will be used most often. For improved handling in bumps or rhythm sections, try moving the hubs to MIDDLE or BACK. This can also make the car handle better in 180 turns.

Rear Anti-Roll Bar:

The #9780 B44 anti-roll bar kit (a.k.a. swaybar) allows you to add roll resistance to the rear end with minimal effect on handling over bumps and jumps. The anit-roll bar is very helpful when trying to tune the suspension. The black bar is the softest (.047" wire) and the silver (.055" wire) is the standard. It is popular to run a rear anti-roll bar in 4wd to help the car square up more out of turns.

Rear Arm Hole:

The inner hole in the arm tends to work the best over the bumps and jump sections. Changing to the outer hole in the rear arm will tend to make the rear end feel more "locked in" and less responsive. Making this change to the outer hole requires you to remove the downtravel limiters from the rear shocks.

Rear Ride Height:

The rear ride height setting you should use most often is 20 mm (the rear arms appear level when looking from the rear). Check the ride height by lifting up the entire car about 8-12 inches off the bench and drop it. After the suspension "settles" into place, raise or lower the shock collars as necessary until there is 20 mm gap from the bottom of the chassis to the ground. Note: Check the ride height gap at the rear end of the carbon fiber chassis, not at the rear chassis plate which is raised for more ground clearance. The chassis should look level from the side.

Battery Setup:

The B44.1 is designed to use LiPo saddle pack batteries. Follow your ESC and battery manufacturer's recommendations for wiring.

Setup Sheets:

Most often, the best way to get your car handling right is to go to our website www.rc 10.com and click on the links to Setup Sheets, then RC 10B44.1 setups. Our team of professional drivers help develop these setups at National events. Also, most drivers have a "base" setup that they use as a starting point for every event. Try running some of our base setups OR look for track conditions and tires that are similar to your local track and mimic that setup. Remember, each adjustment has a purpose, so copy everything from the setup sheet and then make adjustments based on the recommendations in this manual.

Steering	# 9180 servo arm	
Associated	XP-1015, XP-1313	F
Airtronics	94102	A
Airtronics	94738, 94157, 94158, 94257, 94258, 94357, 94358, 94452, 94453, 94751, 94755	A
Hitec	HS-5625MG, HS-5645MG, HS625MG, HS645MG	Н
Hitec	HS-322HD, HS-325HB, HS-965, HS-985MG, HS-5965, HS-5985MG, HS-425BB, HS-422	н
JR	Z4725, Z4750, Z2750, Z8450, Z8550, NES-4750	J
JR	Z250, Z550	J
Futaba	\$9204, \$9250, \$9450, \$148	F
Futaba	\$3003, \$9202, \$9101	F
Futaba	\$9404	F
КО	PS-401, PS-2001, PS-2004, PS-2015, PS-2173, PS-2174, PS-2123, PS-2143, PS-2144	,

^{*} Not all servo's are listed

^{*} Make sure servo linkage clears the servo through full travel in both directions. Use #7336 servo spacers to adjust the servos position

:: Notes	

BAAG CITE	Divers B44.1 Standard Setup Divers				
	<u> </u>				
Setup Sheet	Conclinations:		Reval		
Front Suspension		Rear Suspension			
Anti Roll Bar: 0.047" Black	2001	Anti Roll Bar: 0.047" Black 0.055" Silver None	2001		
Bumpsteer Washer: 0 Camber: -1° Toe: 0°		Toe: 3° Ride Height: 20mm	BCD		
Ride Height: 21mm Washers:	<u>, </u>	Aluminum Hub Tower: A B			
Steering Rack: Front Back	2000	Wheelbase: Long	1 0 2		
00					
Notes:		Notes: <u>Measure ride</u> height on back corner of chassis	- - -		
Front Shocks		Rear Shocks			
Spring: <u>Silver</u>	_ Piston:# 2	_ Spring: Green	Piston:#1		
Shock Oil: 35 Wt	_ Limiter:1	Shock Oil: 30 Wt	Limiter:1		
Electronics					
Motor & Wind:		_ Radio:			
Pinion:		_ Throttle / Brake e.p.a:			
Spur Gear:		_ Throttle / Brake expo:	! > 401		
Batteries:		ESC:Thro Initial Brake:Drag	•		
Battery Placement:			g Brake: ring Expo:		
Differentials		Other	g =xp=-		
Front Diff Setting: Stande	ard		s Punisher		
Rear Diff Setting: Stande		Wing Type: 6.5" high Wing			
Front Tires		Rear Tires	,		
Tire: Holeshot	2.0	_ Tire: Holesho	t 2.0		
Compound: M	3	Compound: M3			
Insert: Standa		Insert: Standard			
Wheel: Standa	ard	_ Wheel:Stand	<u>iard</u>		
Race and Vehicle Comments		Track Info			
Qualify: Main:		_ Traction: 🔲 High: 🔲 Med	Groove: 🗌 ium: 🔲 Low: 🔲 : 🔲 Wet: 🔲		
		$-$ Dusiy: \Box Differ:———			

:: Hardware - 1:1 Scale View Cap Head (shcs) Flat Head (fhcs) **Button Head (bhcs)** 4-40x5/16" (6932) 4-40x5/16" (7673) 2-56x1/8" (9645) (aluminum ,4145) 2-56x5/16" (4334) 4-40x3/8" (6292) 4-40x3/8" (6924) (aluminum ,6860) 4-40x1/4" (6228) 4-40x7/16" (7874) 4-40x7/16" (9765) (aluminum, 7873) 4-40x3/8" (6917) 4-40x1/2" (6925) 4-40x5/8" (6915) 4-40x7/16" (2221) 4-40x7/8" (7738) Shims and Washers 3x6mm (6515) 4-40x3/4" (7413) (motor mounting screws) Ballstud Washer (9630) Nuts (lock/plain) **Ball Bearings** .030" Nylon Spacer (4187) 4-40 Aluminum Locknut (4449) Servo Mount Washer (7337) Steering Bearing (9746) #4 Washer (6936) 4-40 Plastic Nut (6472) 3/16x5/16" (6906) Input Shaft Shim - Black (3911) 5-40 Nylon Locknut (9744) 3/16x3/8" (3977) 3/16" Axle Shim - Silver (7368) 8-32 LP Steel Locknut (6953) 3/16x1/2" RS (7935) 8-32 Steel Locknut (6952) **Outdrive Shim (3911)** Clips 3/8x5/8" RS (3976) Ballstuds E-clip (6299) Silver .20" Short (6276) **Top Hat Bushings Diff Balls** Silver .30" Long (6277) 5/64" Diff Thrust Balls (6574) 0 **Small Top Hat Bushing (3874)** Black .30" Long (3983) 0 3/32" Carbide Diff Balls (6581) Large Top Hat Bushing (9647) Notes:

3/4/4/5			
		Events	
Setup Sheet	Gondlilonss		Revs[]
Front Suspension		Rear Suspension	
Anti Roll Bar:	2 0 ₀ 1	Anti Roll Bar:	2 0 ₀ 1
0.047" Black	A B	0.047" Black ☐ 0.055" Silver ☐ None ☐	
Bumpsteer Washer:			ABCD
Camber:		Ride Height:	
Toe:		Aluminum Hub Tower:	
Steering Rack:	Washers:	A	
Front	200	Medium	1 0 0
00		00	
Notes:		Notes:	
Front Shocks		Rear Shocks	
Spring:	Piston:	Spring:	
Shock Oil:	Limiter:	Shock Oil:	Limiter:
Electronics			
		Radio:	
		Throttle / Brake e.p.a:	
		Throttle / Brake expo:	
		ESC:1 Initial Brake:L	
barrery Placement:		Servo:S	
Differentials		Other	
		Body Type:	
Rear Diff Setting:		Wing Type:V	Ving Angle:
Front Tires		Rear Tires	
Tire:		Tire:	
ı -		Compound:	
Insert: Wheel:		Insert: Wheel:	
Race and Vehicle Com	monts	Track Info	
	mems Aain: Finish: TQ:		Blue Groove:
	nain: rinish: i Q:	Traction: High: 🔲 N	Medium: 🔲 Low: 🔲 Clay: 🔲 Wet: 🗍
-	For more setups, visit RC10.com	and click on "Setup Sheets"	



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