

1:10 Scale Ready-To-Run Electric 2WD Off Road Manual & Catalog 👊



TEAM ASSOCIATED E



:: Introduction

Thank you for purchasing this Team Associated product. This manual contains instructions and tips for building and maintaining your new B4.1 or T4.1. Please take a moment to read through it and familiarize yourself with these 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 supplimentary sheets located in the appropriate parts bags. Check each bag for these sheets before you start to build.

:: B4.1 Factory Team Features

- Built on 4-time World Champion RC10 B4 platform.
- 2.6:1 Ratio Gearbox that fits optional gear differential
- Dual-sided externally adjustable slipper clutch
- Molded composite low-CG chassis
- Set-screw to secure antenna tube
- 14 rubber sealed ball bearings
- Fully adjustable camber and toe-in
- Angled bell crank "co-planar" steering
- · Built in servo saver
- Vertical ball end adjustment front & rear
- Factory Team 0.5 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
- Pro-Line Vortex body and wing
- Pro-Line M3 Holeshot 2.0 rear and M3 4-rib front tires
- B4.1 rear shock tower with revised geometry for LiPo
- Suspension mounts for 4, 3.5, 3, and 2.5 degrees rear toe included
- Ball differential with light-weight outdrives
- Bleed-screw shock caps
- TiN "Gold" shock shafts front and rear
- Carbon fiber battery strap with thumb screws
- CVA joints with pin retainer clips
- Durable steel center-drilled front axles
- Factory Team blue Titanium turnbuckles
- Factory Team blue milled motor plate
- Factory Team blue aluminum servo mounts
- Factory Team blue aluminum wheel spacers
- Factory Team blue aluminum hinge pin brace
- Factory Team blue aluminum shock bushings
- Factory Team blue aluminum shock pivot balls
- 30 degree caster blocks
- Factory Team blue cone washers for top plate
- · Ball-bearings for steering bell cranks
- Blue aluminum servo saver nut
- 3/16" mini locking nuts

:: T4.1 Factory Team Features

- Built on 7-time National Champion RC10 T4 platform.
- 2.6:1 Ratio Gearbox that fits optional gear differential
- Dual-sided externally adjustable slipper clutch
- Molded composite low-CG chassis
- Set-screw to secure antenna tube
- 14 rubber sealed ball bearings
- Fully adjustable camber, and toe-in
- Angled bell crank "co-planar" steering
- Built in servo saver
- Vertical ball end adjustment front & rear
- Factory Team 0.5 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 Hi-Flow T4 body and spoiler
- JConcepts Double-Dees rear and Carvers front tires
- Suspension mounts for 4, 3.5, 3, and 2.5 degrees rear toe included
- Ball differential with light-weight outdrives
- Bleed-screw shock caps
- TiN "Gold" shock shafts front and rear
- Carbon fiber battery strap with thumb screws
- CVA joints with pin retainer clips
- Factory Team blue Titanium turnbuckles
- Factory Team blue milled motor plate
- Factory Team blue aluminum servo mounts
- Factory Team blue aluminum wheel spacers
- Factory Team blue aluminum hinge pin brace
- Factory Team blue aluminum shock bushings
- Factory Team blue aluminum shock pivot balls
- 30 degree caster blocks
- Factory Team blue cone washers for top plate
- Ball-bearings for steering bell cranks
- Blue aluminum servo saver nut
- 3/16" mini locking nuts



These Symbols Indicate a special note or instructions, or a Factory Team replacement part is available.

:: Additional

Your new B4.1 or T4.1 FT kit comes unassembled and requires the following items for completion (refer to catalog section for suggestions):

- R/C two channel surface frequency radio system
- AA-size batteries for transmitter (x8) (#302 alkaline, #303 rechargealble)
- Electronic Speed Control, ESC (#29140, #29141)
- Steering servo (#29166, #29167) R/C electric motor
- Pinion gear, size determined by type/wind of motor
- Battery charger (a peak detection charger, or LiPo compatible charger)
- 6 cell NiMH battery pack (#700) or a 2 cell LiPo battery pack (#714)

- Calipers or a precision ruler Needle nose pliers
- Lexan specific spray paint Body Scissors (#1737)
- Reamer / hole punch Cyanacrylate glue (#1597)
- Thread locking compound (#1596)

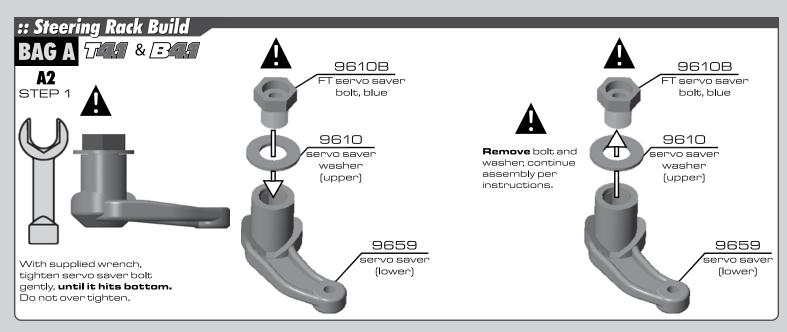
Tools included:

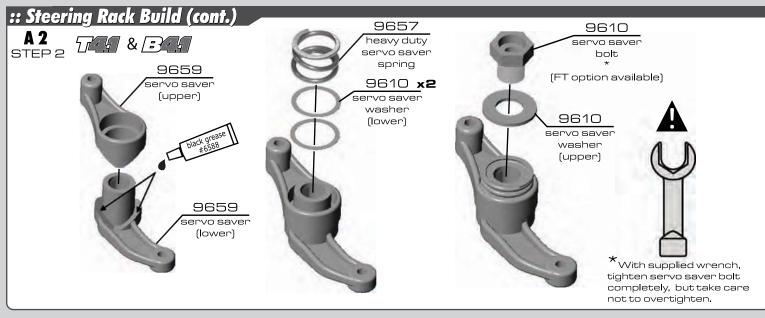
- Allen wrenches #6950 (.050", 1/16", 3/32", 5/64")
- 2.5mm allen wrench (for motor screws)
- Molded tools #6956
- Camber gauge #1719
- Shock building tool #6429

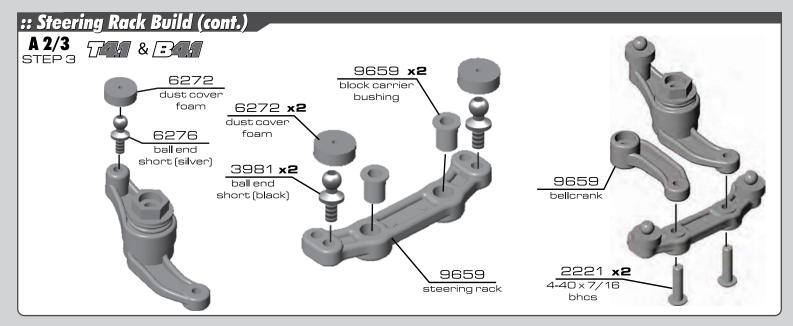


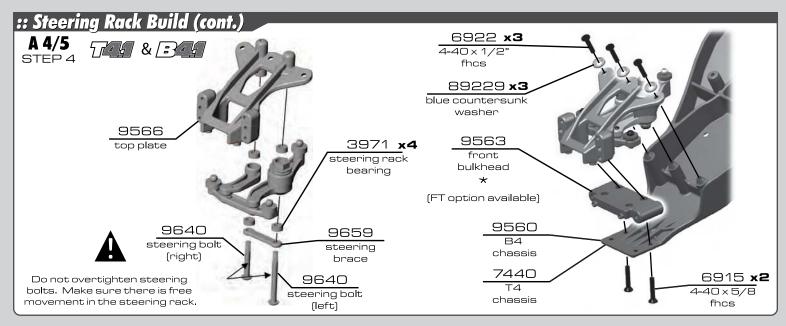
There is a 1:1 fold out in the back of the manual. Fold it out while building your kit for easy parts sizing!

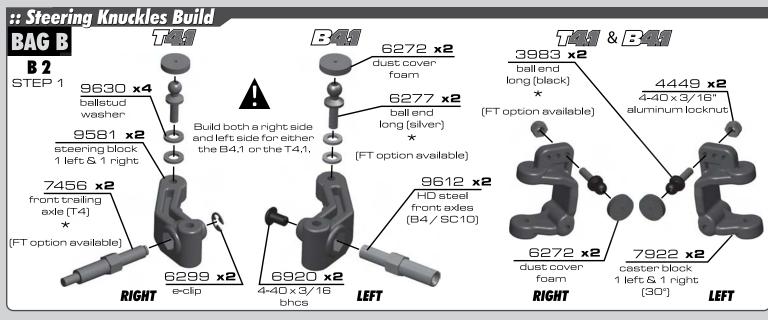


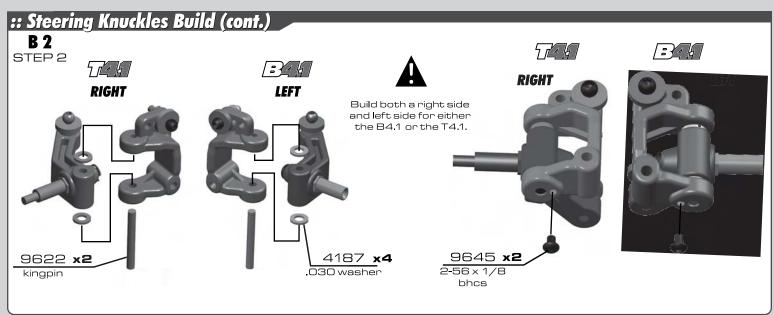


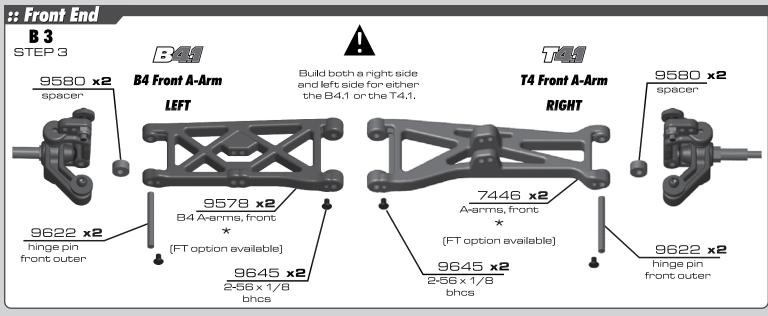


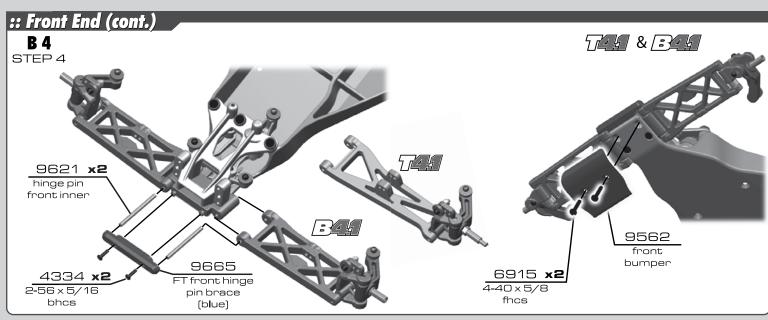


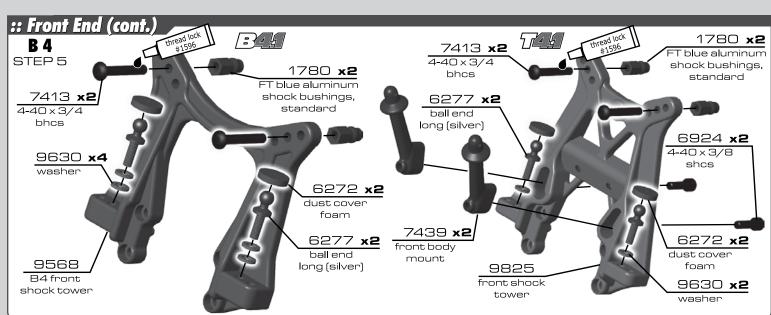


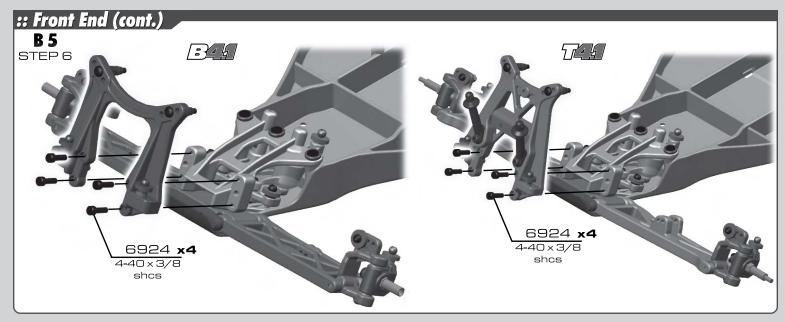


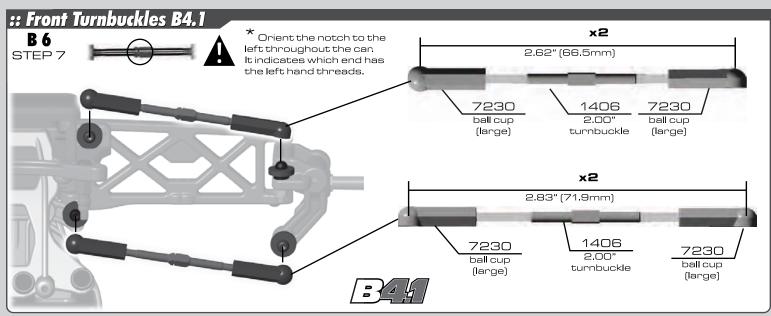


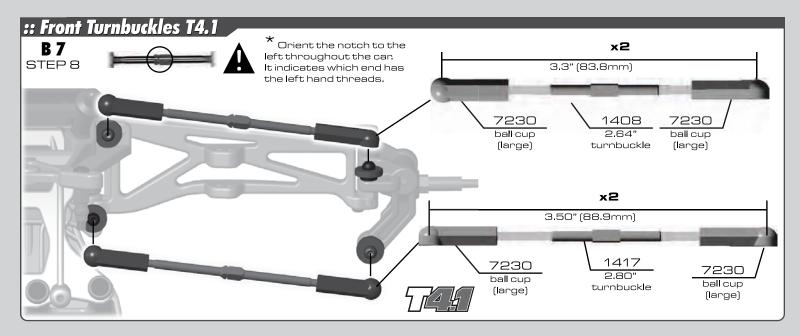


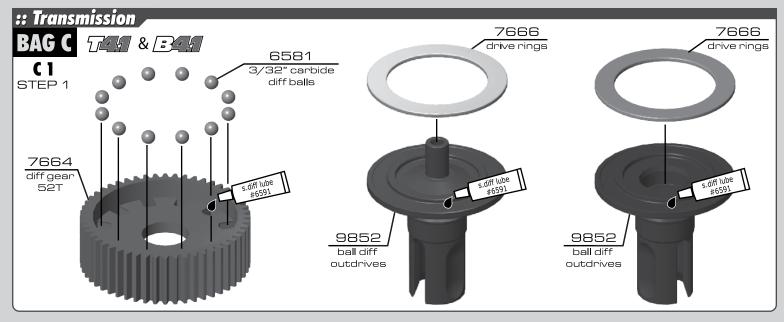


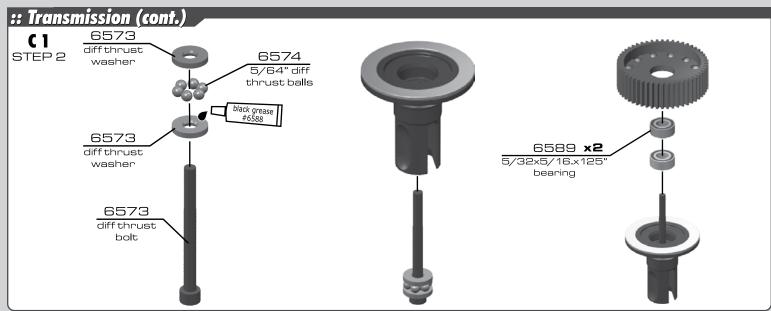


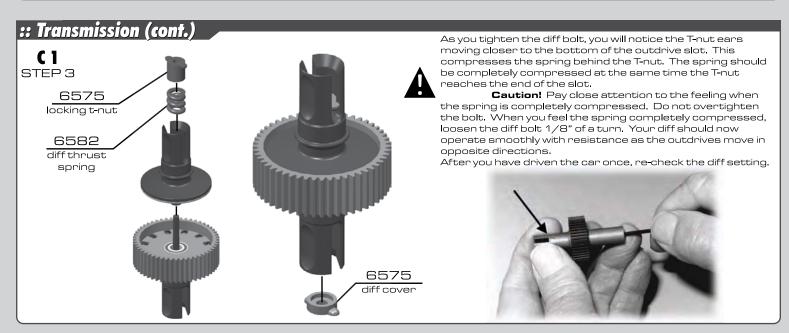


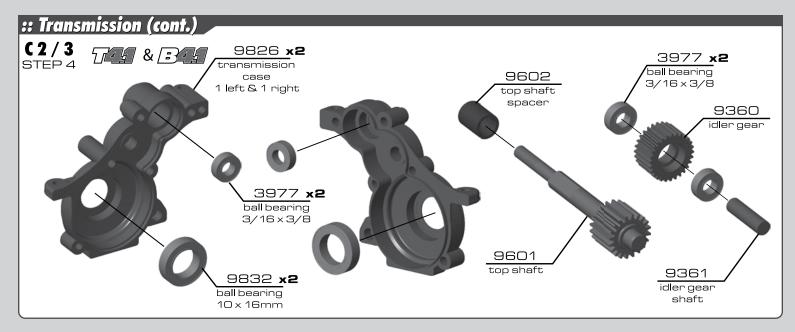


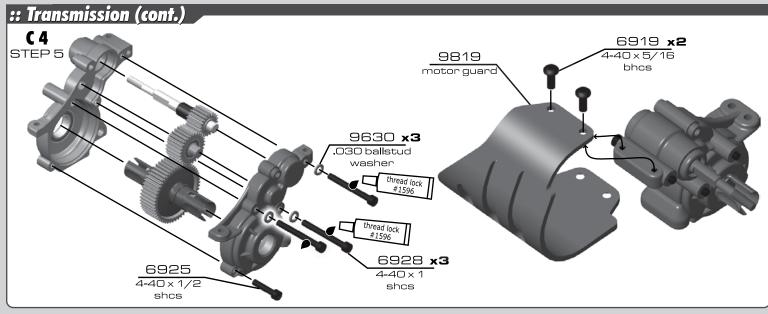


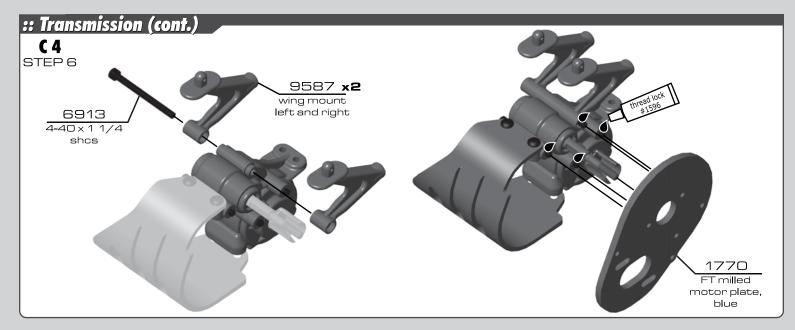




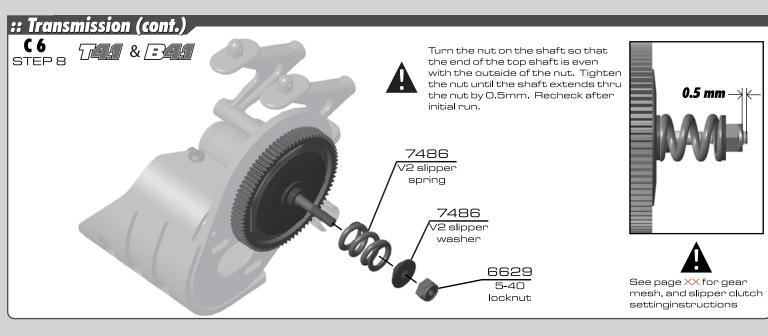


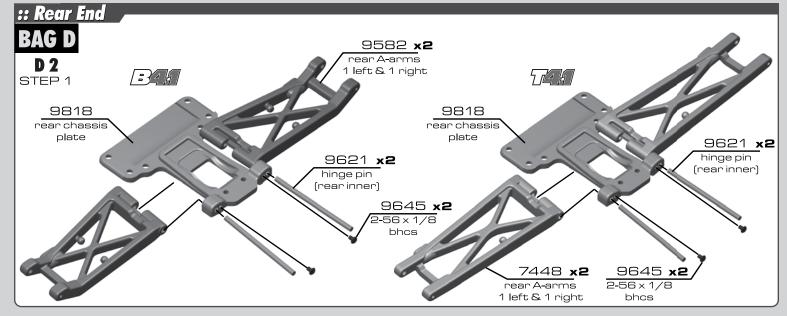


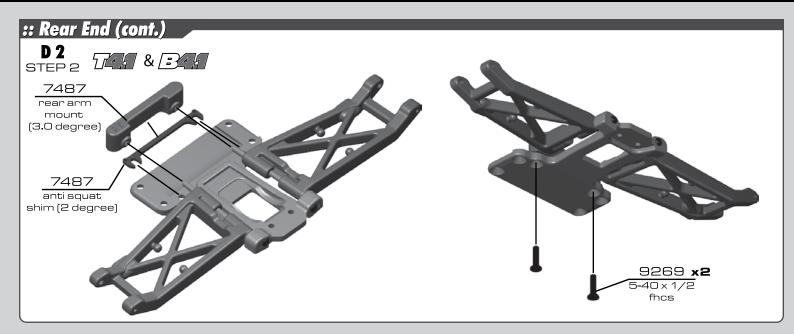


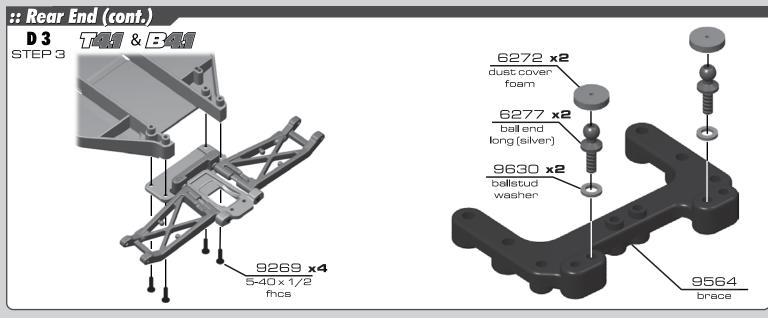


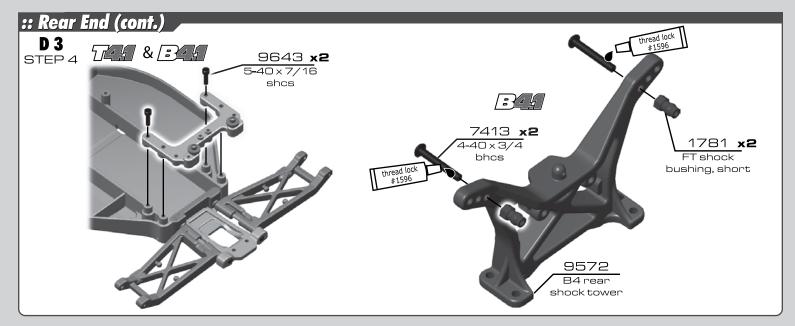


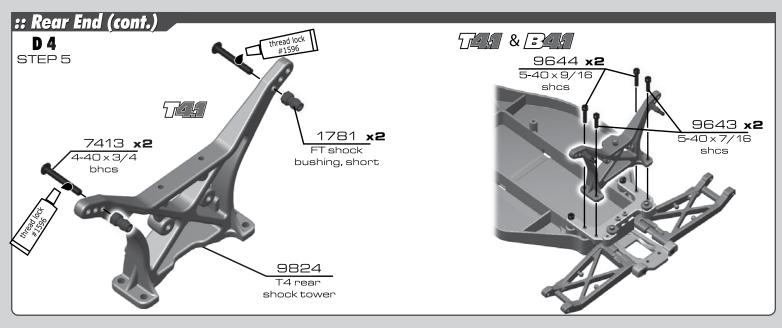


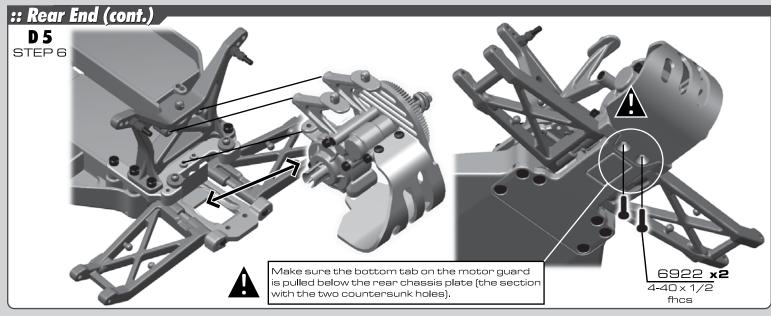


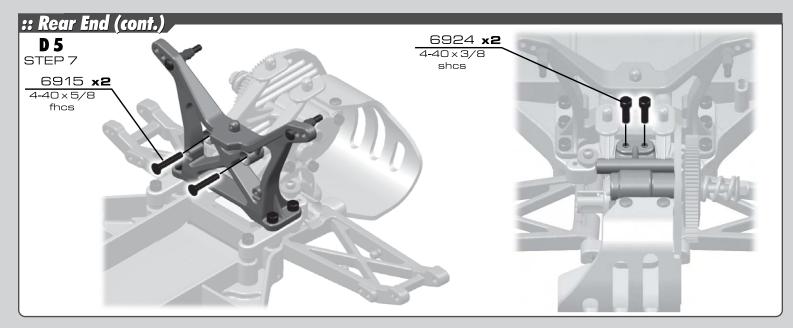


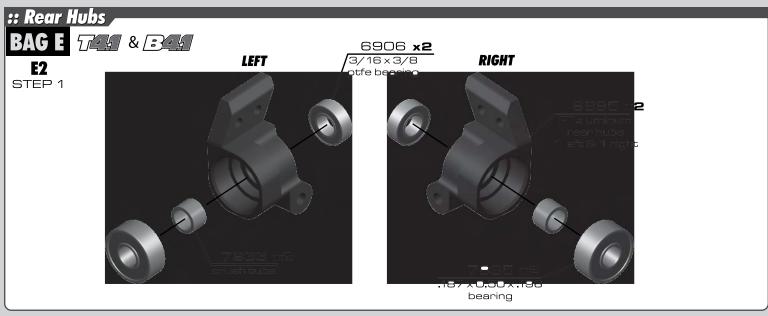


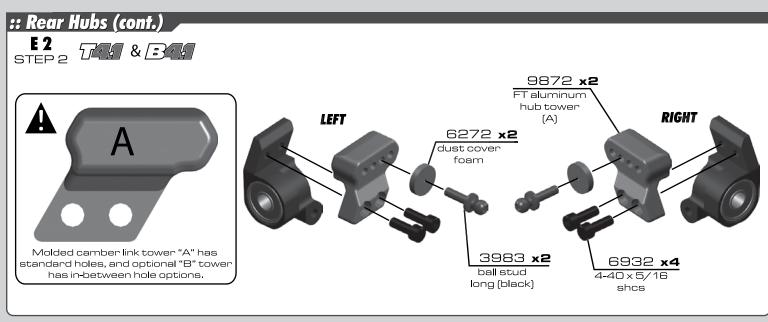


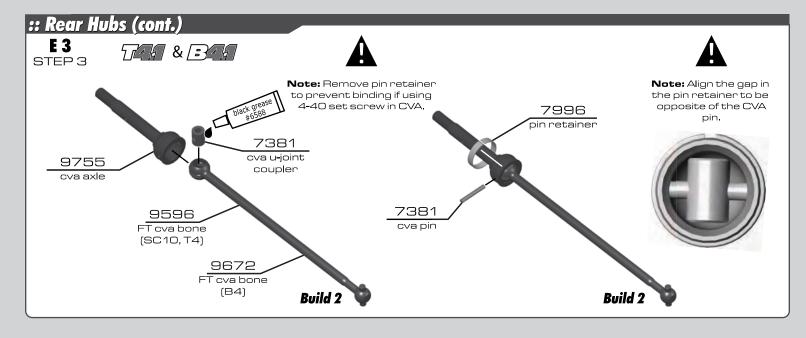


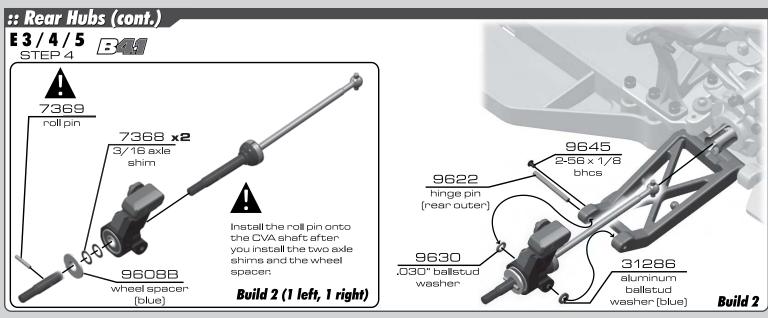


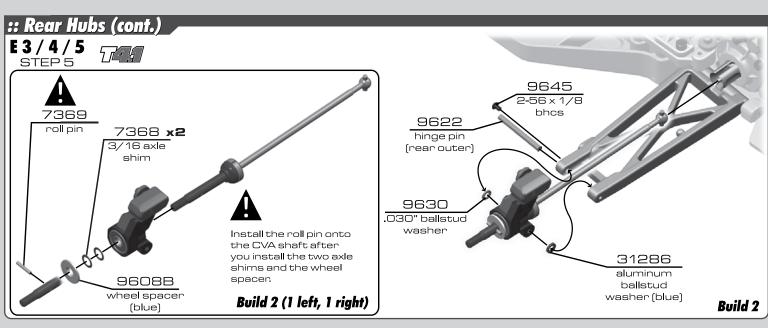


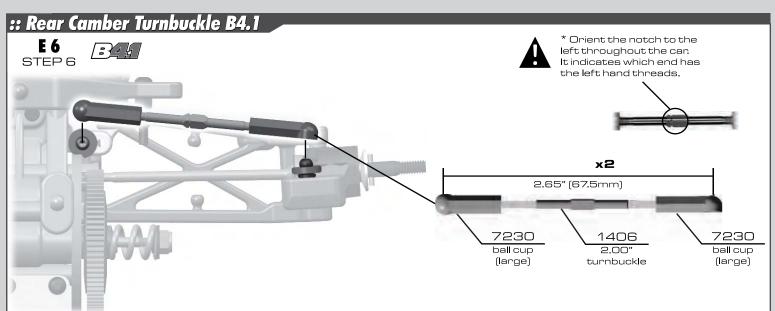


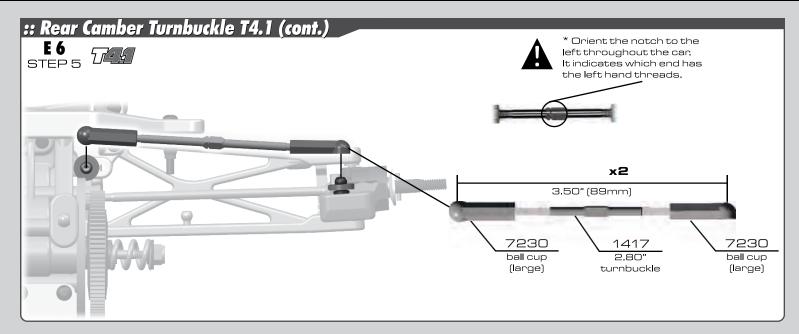


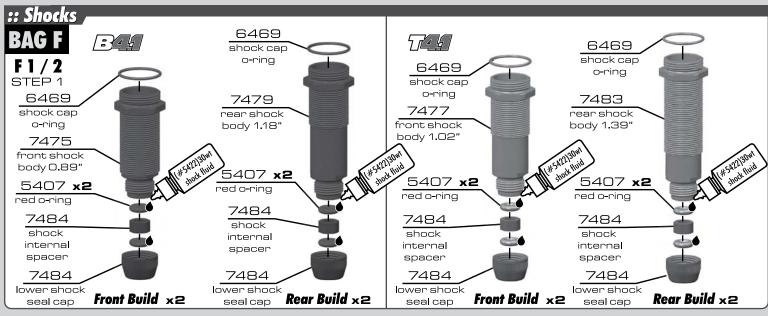


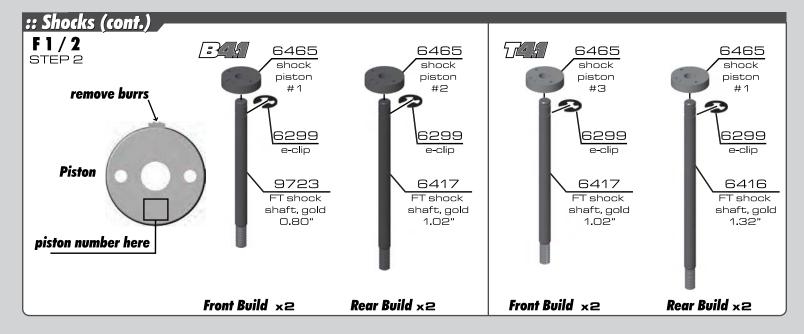




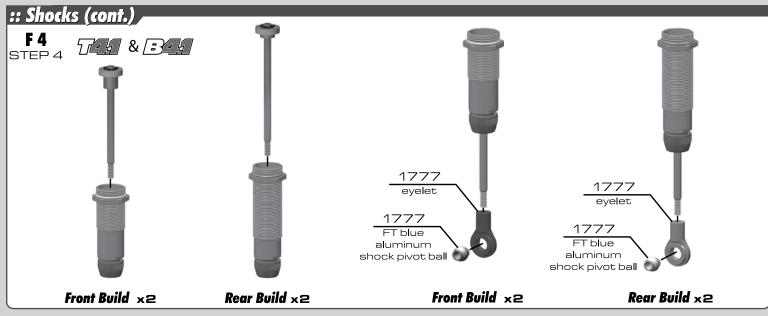


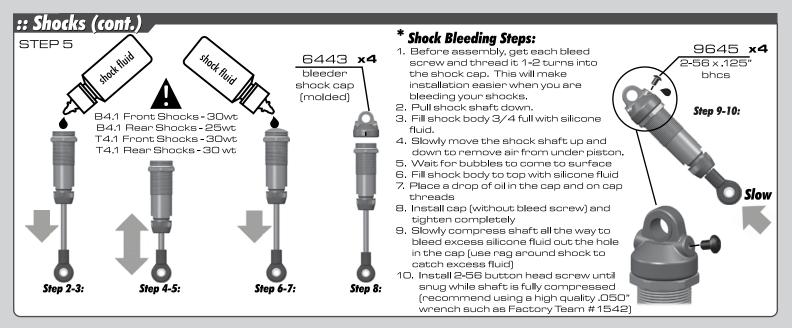


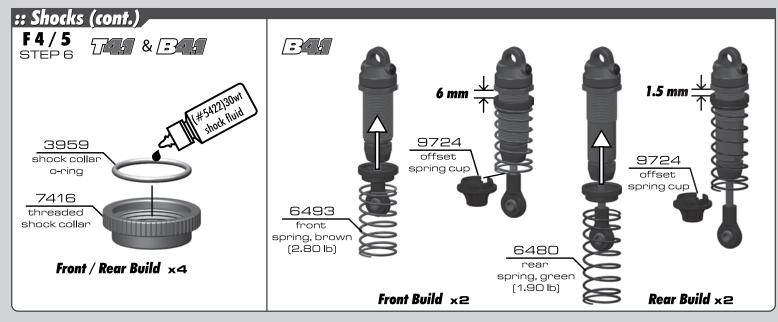


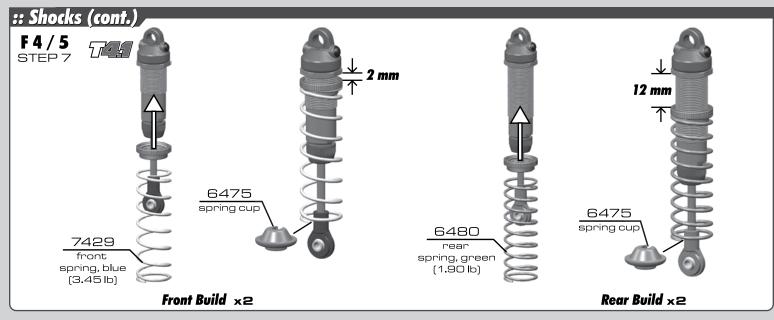


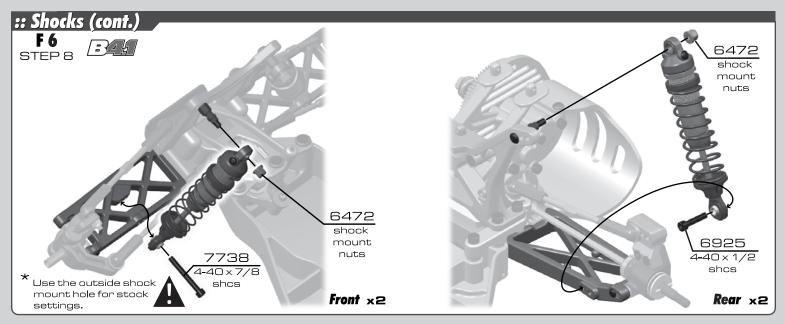


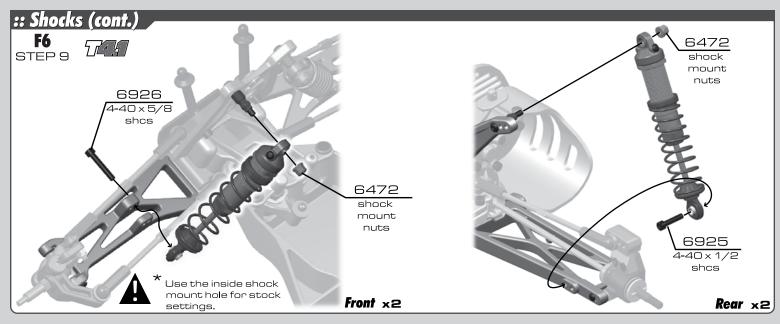


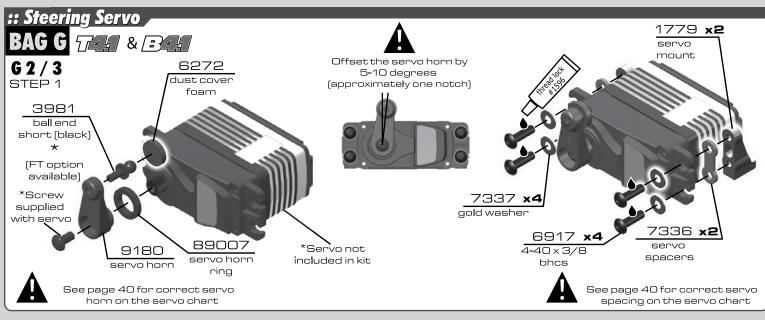


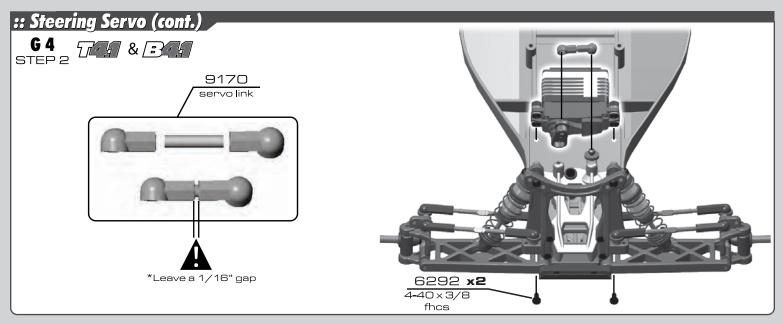


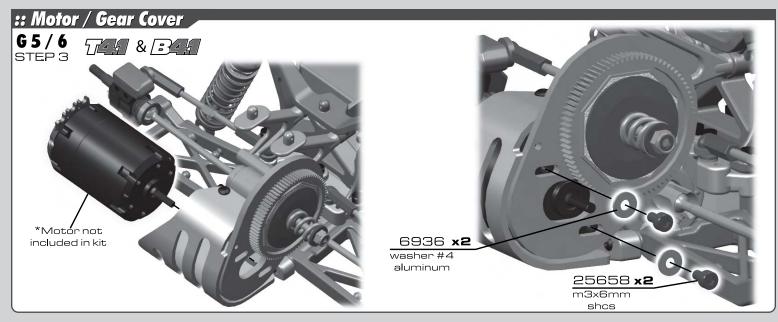


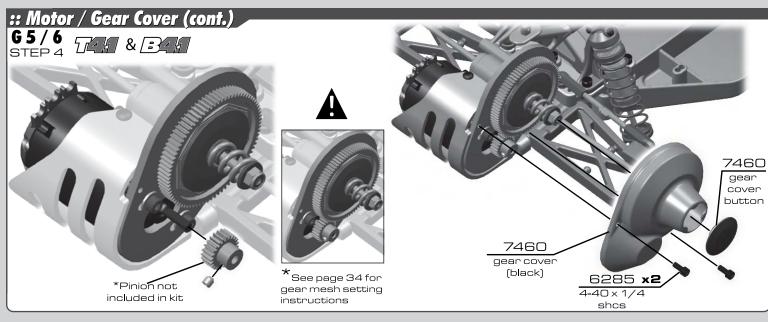


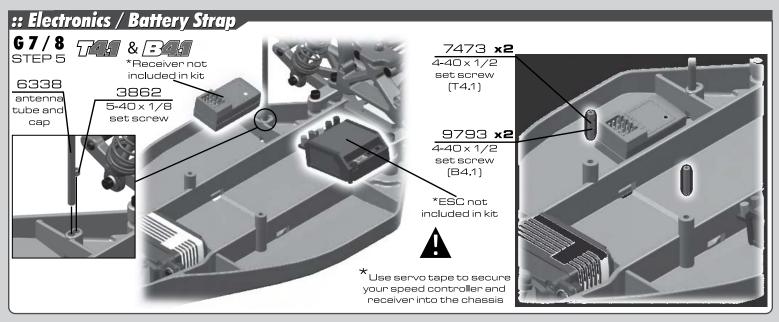


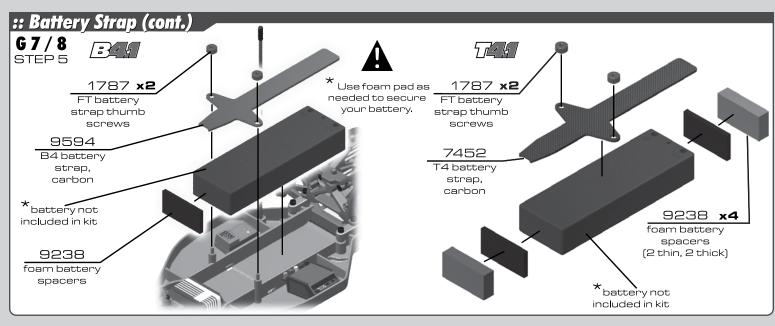


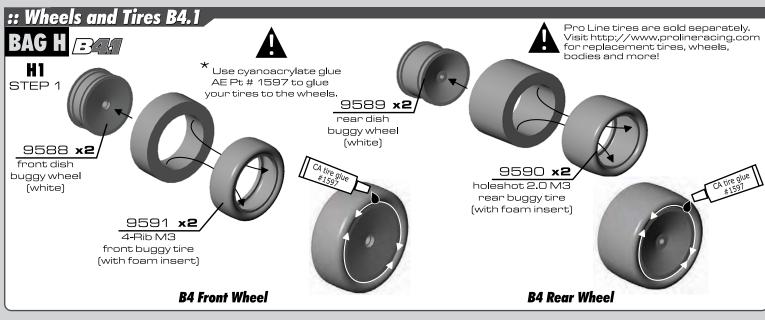




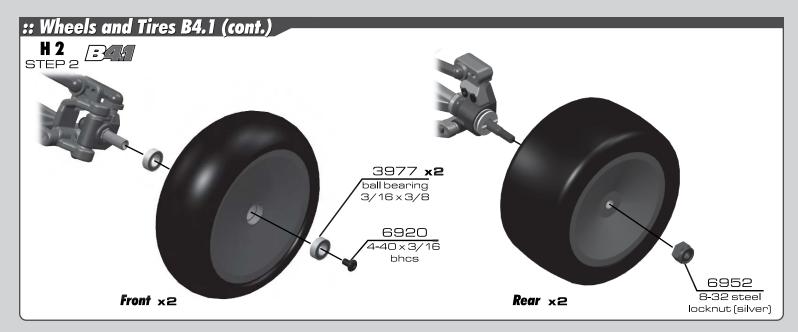


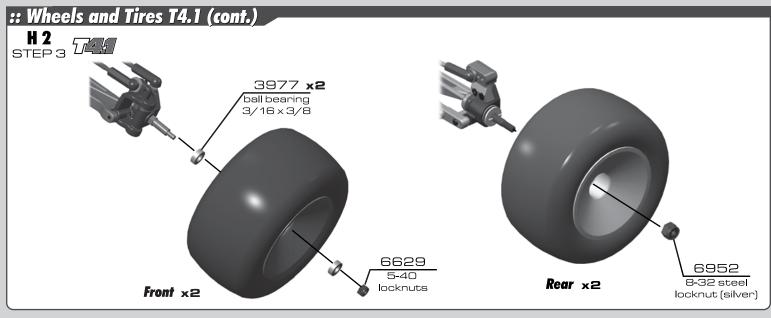


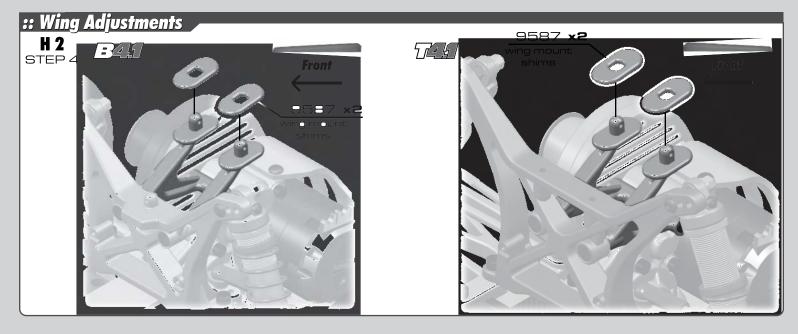


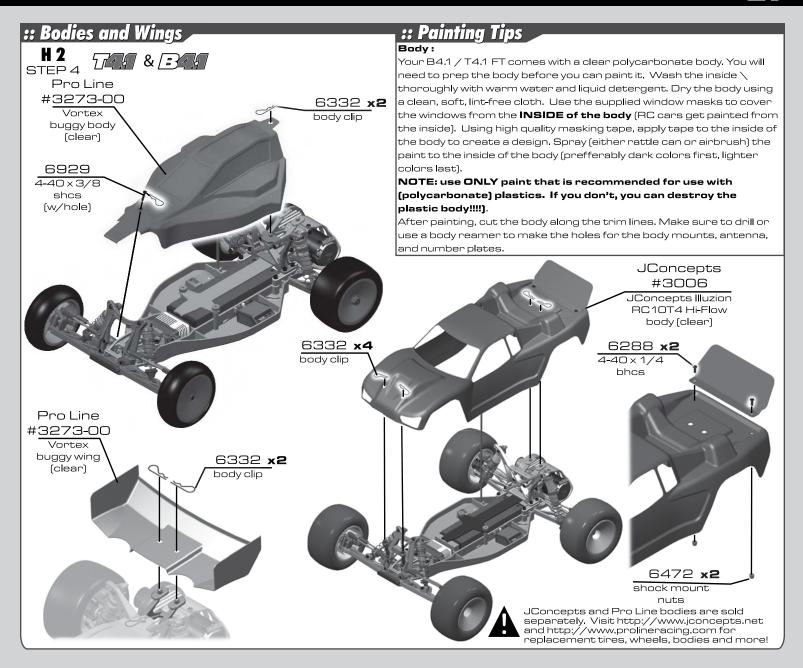












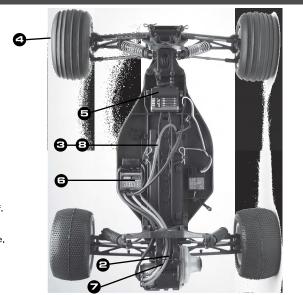
:: Adjustments / Tips

Use the following steps to make the final adjustments on your vehicle.

- **1.** Turn the transmitter on.
- 2. Make sure the motor is disconnected.
- 3. Connect your battery pack and turn the power switch on.
- **4.** Move the steering control on the transmitter to the right and left. Do the wheels move in the correct direction? If not, you must reverse the steering servo direction on your transmitter (see transmitter manual).
- **5.** Adjust your steering trim (see radio manual) until the steering rack is centered under the top plate. Then, using the two steering turnbuckles, adjust the front wheels so they are pointing straight ahead.
- **6.** Adjust the ESC (electronic speed control) according to the speed control manufacturer's instructions. **Some manufacturers have the motor**

connected during adjustment and some do not. Now turn the power switch off.

- 7. Connect the motor. Place your car on a block or car stand so that all four wheels are elevated. Turn the power switch on again. Check the throttle, brake, and steering settings you have made and then turn the power switch back off.
- 8. Remember this! The transmitter is always the FIRST TO BE TURNED ON and THE LAST TO BE TURNED OFF.



:: Adjustments / Tips

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.



* Recommendations for 17.5 and 13.5 motors are for racers using "stock spec" type speed controls, which have advanced timing.

		B4.1			T4.1)
MOTOR	Pinion	Spur	FDR	Pinion	Spur	FDR
27T Stock Motor	23	81	9.16:1	20	87	11.31:1
19T Super Stock Motor	22	81	9.57:1	19	87	11.91:1
Radon 17T Motor	19	81	11.08:1	18	87	12.57:1
17.5 Brushless Motor *	22	81	5.91:1	20	87	6.50:1
13.5 Brushless Motor *	20	81	6.96:1	18	87	7.80:1
10.5 Brushless Motor	24	81	8.42:1	22	87	10.28:1
9.5 Brushless Motor	23	81	8.76:1	21	87	10.77:1
8.5 Brushless Motor	22	81	9,16:1	20	87	11,31:1
7.5 Brushless Motor	21	81	9.57:1	19	87	11.91:1
6.5 Brushless Motor	21	81	10.03:1	18	87	12.57:1
3300kV Brushless Motor	21	81	10,03:1	18	87	12,57:1
3900kV Brushless Motor	21	81	10.03:1	18	87	12.57:1
4900kV Brushless Motor	19	81	11.08:1	17	87	13.31:1
6100kV Brushless Motor	18	81	11,70:1	16	87	14.14:1



Set The Gear Mesh

You should be able to rock the spur gear back and forth in the teeth of the pinion gear without making the pinion gear move. If the spur gear mesh is tight, then loosen the #25658 screws 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.

MAINTENANCE

Check For Fit

Periodically check all moving suspension parts. Suspension components must be kept clean and move freely without binding to prevent poor and / or inconsistent handling.

Motor Maintenance

Brushed motors require frequent maintenance to keep performance levels at their maximum. Between runs and after letting the motor cool completely, inspect the brushes to ensure that they are moving freely in their holders. Remove the springs and slide the brushes in and out of their holders checking for any resistance or rough spots. If found, remove the brush and carefully wipe it clean. Removing buildup will allow the brush to slide freely and create maximum contact with the commutator resulting in maximum power output.

After every 3-5 runs, remove the brushes from their holders and inspect the tips for wear or burning. If there is noticeable wear (less than 75% of the brush remaining), it is best to cut the commutator and replace the brushes with a new pair. If the tips become a burned blue color, the lubricant in the brush has been burned away and new brushes should be installed.

Occasionally, the motor should be cleaned with a soft brush to prevent dirt build up around the brush hood area and ball bearings. At this time, it is a good idea to add one drop of bushing / bearing oil to each bushing or ball bearing.

If using a brushless motor, please refer to the motor manufacturer's guidelines for proper maintenance.

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. Tighten the nut until the shaft extends thru the nut by 0.5mm. 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.

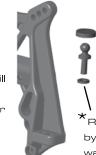
Another popular way to set the clutch is to hold both rear tires firmly in place and apply short bursts of throttle. If the clutch is properly set, the front tires should lift slightly up off the surface.

:: Adjustments / Tips

Front Camber Links

Changing the length of the camber link is considered a bigger step than adjusting the ball end height on the tower. Shortening the camber link (or lowering the ball end) will give the front end less roll and quicken steering response. Lengthening the camber link (or raising the ball end) will give the front more roll and slower steering response.

Longer camber links are typically used on high grip tracks and shorter links tend to work better on medium-grip loose tracks.



Raise or lower the ball end by adding or subtracting washers here

Caster

Caster describes the angle of the kingpin as it leans toward the rear of the vehicle. Positive caster means the kingpin leans rearward at the top. The supplied 25° caster blocks (#7919) are recommended in most cases. For more corner entry steering and less exit steering, try the optional 30° blocks (#7922).

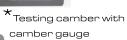
Front Camber

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°. Use the included #1719 camber gauge to set your camber. Positive camber, where the top of the tire is leaning out, is not recommended.

Rear Camber Link

Changing the length of the camber link is considered a bigger step than adjusting the ball end height on the rear chassis brace. Shortening the camber link (or lowering the ball end) 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 ball end) will give the rear more roll and more cornering grip. Longer camber links are typically used on high grip tracks, while shorter links tend to work better on med-grip loose tracks. The kit setting is the best compromise of cornering grip and acceleration.



Raise or lower the ball end by adding or subtracting washers here

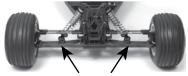
Rear Camber

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°. Use the included #1719 camber gauge to set your camber. 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.

Ride Height

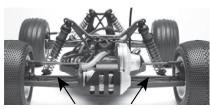
Ride height is the distance from the ground to the bottom of the chassis.

The standard front ride height setting is with the front arms level (reffered to as "arms level"). 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, add or remove pre-load clips so that the left & right arms appear to be level.



* Front arms should be in a straight line when ride height is set at "arms level"

The rear ride height setting you should use most often is with the outdrive, driveshaft, and axles all on the same imaginary horizontal line (reffered to as "bones level"). 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, add or remove pre-load clips so that the left & right driveshafts appear to be level.



Dogbones should be in a straight line when ride height is set at "dogbones level"

Wheelbase Adjustment

You have three options for rear hub spacing, Forward, Middle, & Back. The kit setting provides the most rear traction, and will be used most often. For improved handling in bumps or rhythm sections, try moving the hubs to the Middle or Back position. This can also make the car handle better in 180° turns.



Spacers to the rear will place hubs forward, shortening the wheelbase

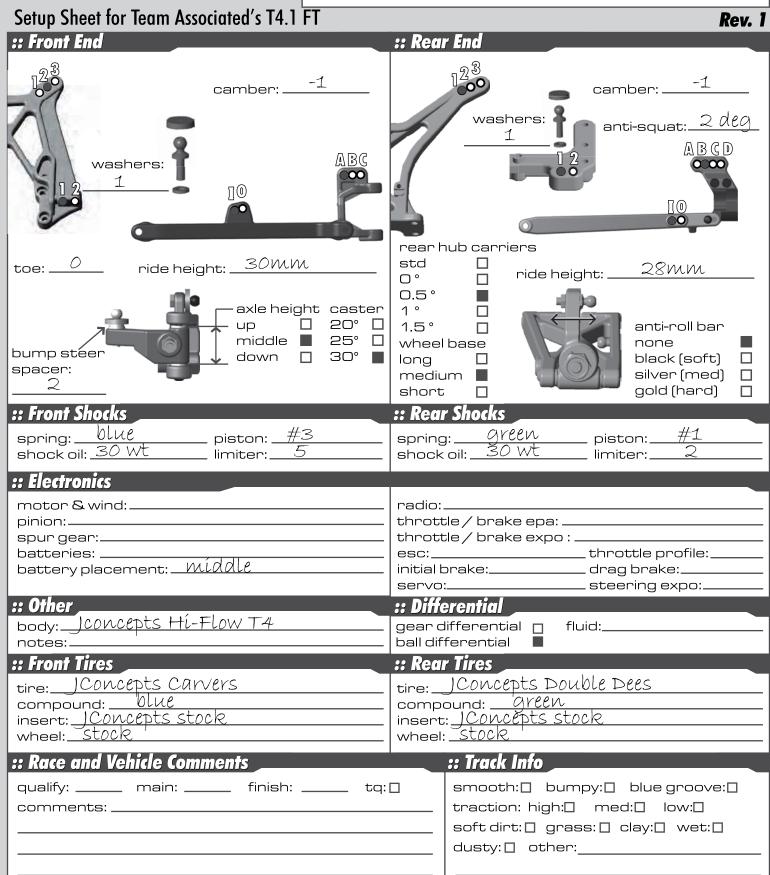
Anti-Roll bar

The optional #9635 rear anti-roll bar kit (also called the "swaybar") allows you to add roll resistance to the rear end with minimal effect on handling over bumps and jumps. It is an especially helpful tuning item on high-grip tracks (try the gold bar). The silver and black anti-roll bars are typically used on medium-grip loose tracks.

	:: Notes	
l l		



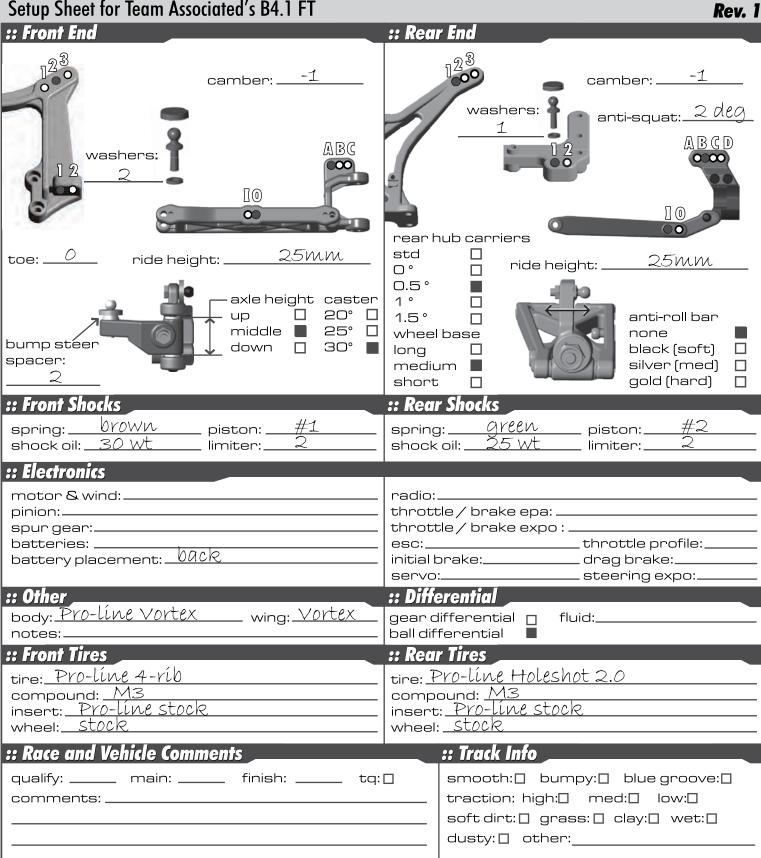
:: Driver:_	Team Associated	:: Date:
:: Track: _		
·· Fvent·		





:: Driver:_	Team Associated	:: Date:
:: Track: _		
Evant.		

	Setup S	Sheet	for	Team	Associated	's	B4.	1	F
--	---------	-------	-----	------	-------------------	----	-----	---	---





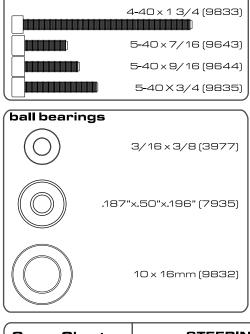
:: Driver:	:: Date:
:: Track:	
·· Fvent·	

Setup Sneet for leam Asso	ociatea s 14.1 F1				Re	ev. 1
:: Front End		:: Rea	r End			
washers:	camber:ABC		washe		camber:anti-squat:ABGD	
toe: ride heig	ght:	reark std O° O.5°	nub carrie 		∏ (0) o t:	_
bump steer spacer: :: Front Shocks	up 20° 20° down 30°	1.5° wheel long mediu short	ım 🛮		anti-roll bar none black (soft) silver (med) gold (hard)	
	nintan.					
spring:shock oil:					piston: limiter:	
:: Electronics						
motor & wind: pinion: spur gear: batteries: battery placement: ### Other body:		thrott thrott esc:_ initial t servo	cle / brake 	e epa: e expo : '	throttle profile: drag brake: steering expo: d:	
notes:			ferential			
tire:compound: insert:wheel:		tire:_ comp insert	ound: :: :			
:: Race and Vehicle Com			:: Track I			
qualify: main: comments:	finish: tq:	<u></u>	traction soft dirt	: high:□ ::□ grass	y: blue groove:[med: low: s: clay: wet:	
İ			I			

:: For more setups, visit www.RC10.com and click on 'Racing'

:: Hardware - 1:1

socket head (sl	ncs)
	4-40 × 1/4 (6285)
	4-40x5/16" (6932) (4145, aluminum)
	4-40 x 3/8 (6924) w/hole (6929)
	4-40 x 1/2 (6925)
	4-40 x 5/8 (6926)
	4-40×3/4 (6927)
	4-40×7/8 (7738)
	4-40×1 (6928)
	4-40×11/4(6913)
	4-40×13/4(9833)
	5-40×7/16 (9643)
	5-40×9/16 (9644)
	5-40 X 3/4 (9835)
ball bearings	



flat head (fhcs)	
	2,5x6mm (4675)
	4-40×3/8 (6292)
	4-40 × 1/2 (6922)
	4-40 × 5/8 (6915)
	5-40 × 1/2 (9269)



ballstuds	
	black .20" (3981)
	black .30" (3983)
	silver ,20" (6276)
	silver .30" (6277)
	silver .40" (6278)

button head (bhcs)
	2-56 x 1/8 (9645)
	2-56 × 5/16 (4334)
	4-40 × 5/16 (6919)
	4-40×3/8 (6917)
	4-40×7/16 (2221)
	3x6mm (31531)

nuts	(lock/plain)
	4-40 small plain nut (7260)
	3/16 aluminum locking nut (4449)
	shock mount nut (6472)
	4-40 nut (6295)
	5-40 lock nut (6629)
	8-32 steel lock nut (6952)

lovver j	sets	crews	
			3×3mm (25225)
9610) upper)			4-40 × 1/2 (9170)
			5-40 × 1/8 (3862)

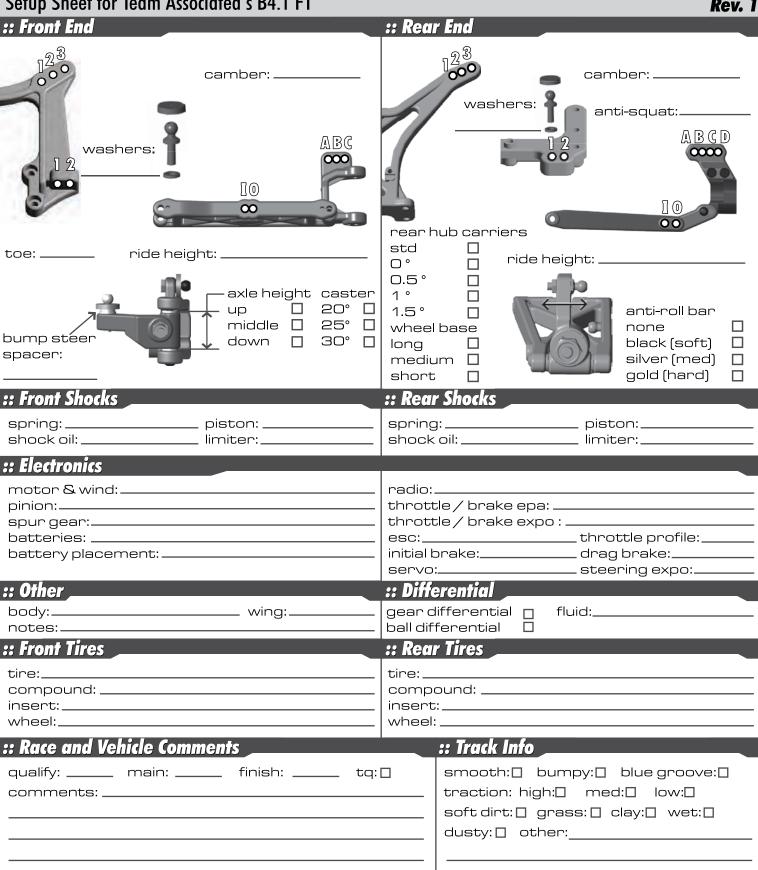
Servo Chart 1 FIND YOUR SERVO TYPE	STEERING SERVO TYPE (Steering servo is sold separately) NOT ALL SERVOS ARE LISTED	2 #7336 }	#9180 SERVO ARM
	Associated Electrics / XP AE SHV1504MG, DS1015, DS1313	thin spacer	F
	Airtronics 94102	no spacer	Α
S. B.	Airtronics 94738, 94157, 94158, 94257, 94258, 94357, 94358, 94452, 94453, 94751, 94755	thick spacer	А
FIND YOUR	Hitec HS-5625MG, HS-5645MG, HS-625MG, HS-645MG	no spacer	н
SPACER(S)	Hitec HS-303, HS-300BB, HS-945MG, HS-925MG, HS-5945MG, HS-5925MG, HS-525MG, HS-525BB, HS-425BB, HS-422	thin spacer	н
00	JR Z4725, Z4750, Z2750, Z8450, Z8550, NES-4750	no spacer	J
33	JR Z250, Z550	thin spacer	J
SELECT YOUR	Futaba S9204, S9250, S9450, S148	no spacer	F
SERVO HORN	Futaba \$3003, \$9202, \$9101	thin spacer	F
0	Futaba S9404	thick spacer	F
	KO PS-401, PS-2001, PS-2004, PS-2015, PS-2173, PS-2174, PS-2123, PS-2143, PS-2144	thin spacer	J



:: Driver:	:: Date:
:: Track:	
:: Event:	

Setup Sheet for Team Associated's B4.1 FT

Rev.





Associated Electrics, Inc.
26021 Commercentre Dr.
Lake Forest, CA 92630 USA
http://www.TeamAssociated.com
http://www.RC10.com
http://twitter/Team Associated
http://bit.ly/AEonFacebook

call: (949) 544-7500 - fax: (949) 544-7501

Check out the following web sites for all of our kits,
current products, new releases, setup help, tips, and racing info!

www.TeamAssociated.com. - www.RC10.com