

1:10 Scale Electric 2WD Off Road Race Truck Kit Manual & Catalog,,,

TEAM ASSOCIATED



:: Introduction

Thank you for purchasing this Team Associated product. This manual contains instructions and tips for building and maintaining your new SC10. 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.

:: SC10 Factory Team Features

- '09 Championship 0.040" polycarbonate Short Course Body with decal kit
- JConcepts Subcultures SCT rear tires with molded foam inserts (1 pr.)
- Ball differential with light-weight outdrives
- Factory Team V2 dual-cap hard anodized shock bodies with threaded collars
- Bleed-screw shock caps
- Carbon fiber battery strap
- 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
- Factory Team blue aluminum screws for body mounts
- Suspension mounts for 4, 3.5, 3, and 2.5 degrees rear toe included
- 30 degree caster blocks
- Factory Team blue cone washers for top plate
- Ball bearings for steering bellcranks
- Blue aluminum servo saver nut
- Factory Team gold slipper pads

- Gray rear, Red front shock springs
- 3/16" mini locking nuts
- Updated V2 slipper assembly with high-rate spring for a more consistent slipper clutch
- Updated suspension settings ideal for Short Course racing
- Updated chassis and front suspension arms for increased durability
- Updated rear wheels with more drive pin support
- Built on 7-time National Champion RC10 T4 Platform
- KMC style wheels front and rear
- All-terrain front tires with molded inserts.
- Realistic bumpers front and rear for maximum durability
- Rubber AE logo mud flaps
- 2.6:1 Ratio Gearbox
- Dual-sided externally adjustable slipper clutch
- Molded composite low-CG chassis
- Set-screw to secure antenna tube
- Durable front and rear body mounts with adjustable height
- Complete set of 14 rubber sealed ball bearings
- Fully adjustable caster, camber, and toe-in
- Angled bellcrank "co-planar" steering
- Built in servo saver
- Vertical ball end adjustment, front and rear

:: Additional

Your new SC10 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 2-3 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



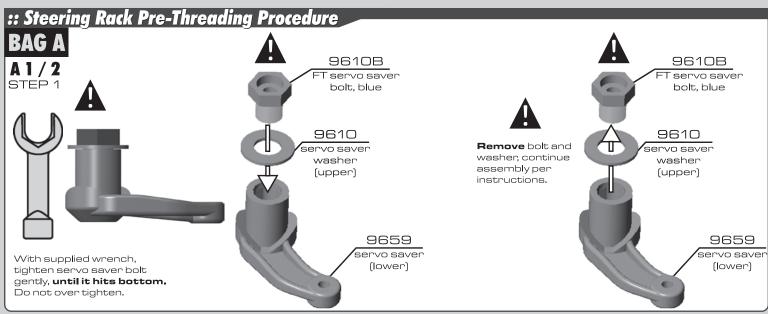
*These Symbols Indicate
a special note or instructions,
or a Factory Team replacement
part is available.

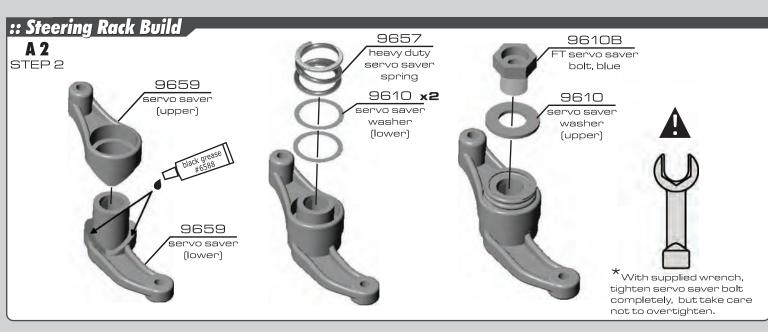
There is a 1:1 fold out in the back of the manual. Fold it out while building your kit for easy parts sizing!

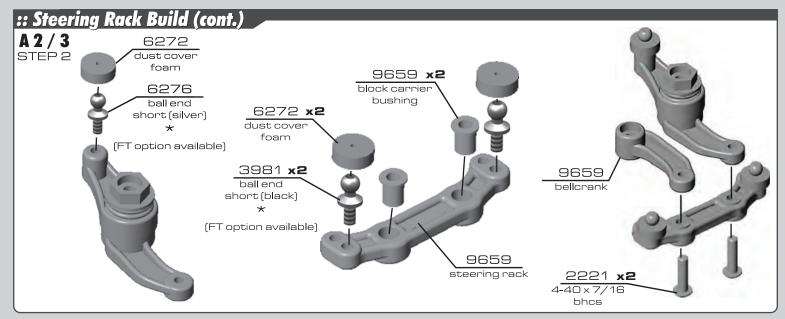
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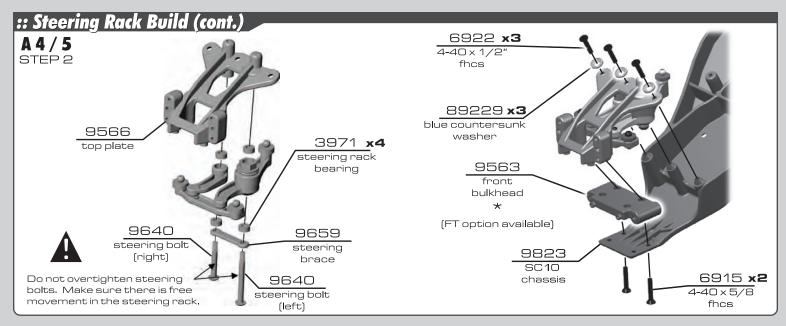


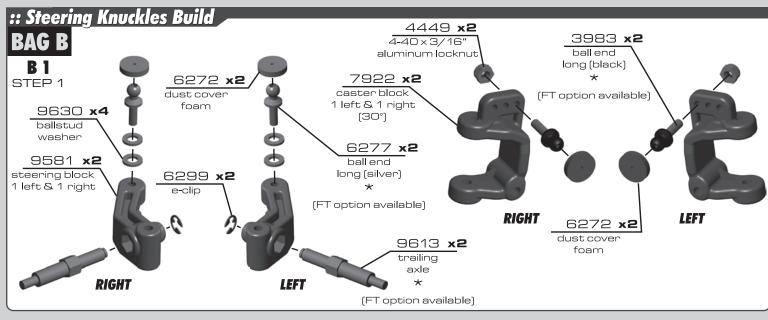
Customer Service Tel: 949.544.7500 Fax: 949.544.7501

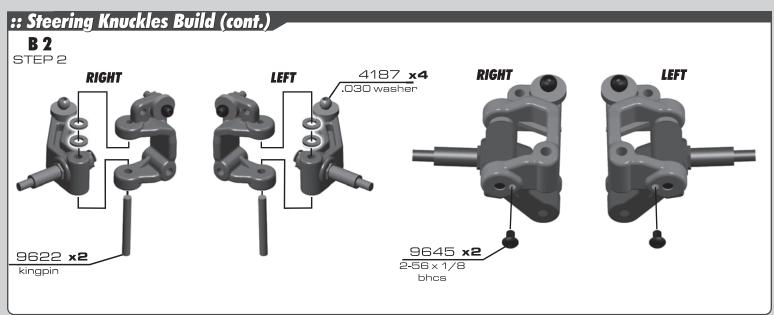


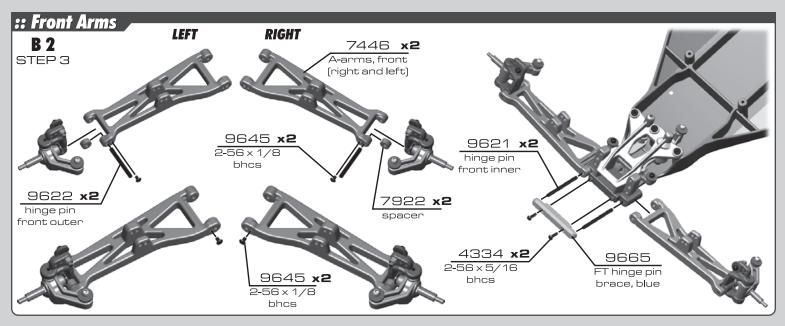


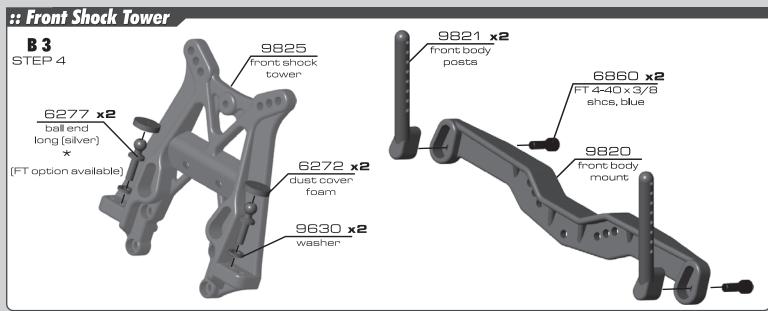


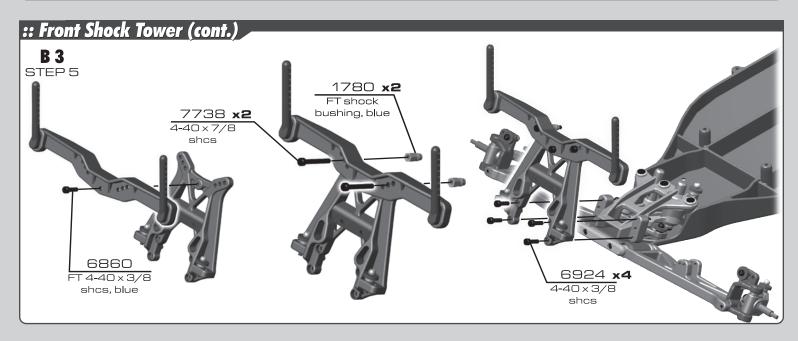


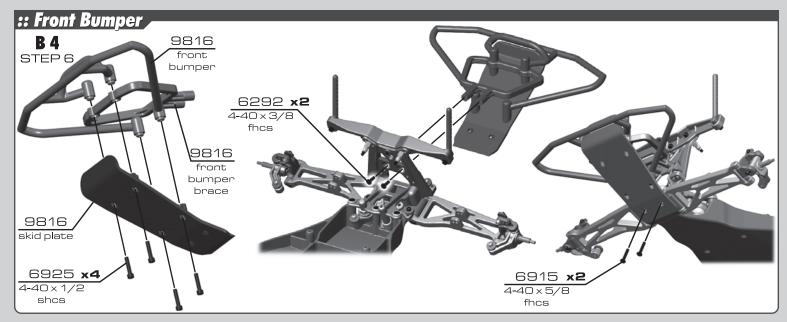


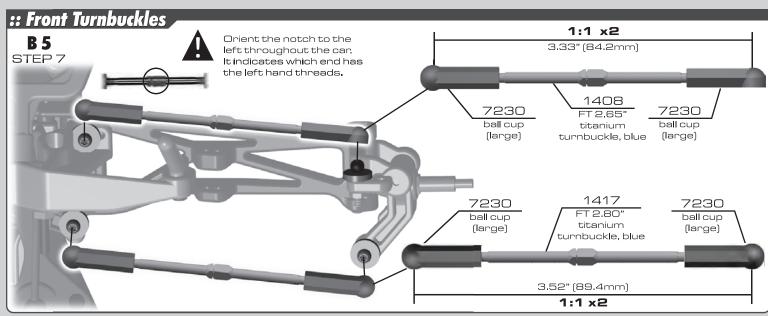




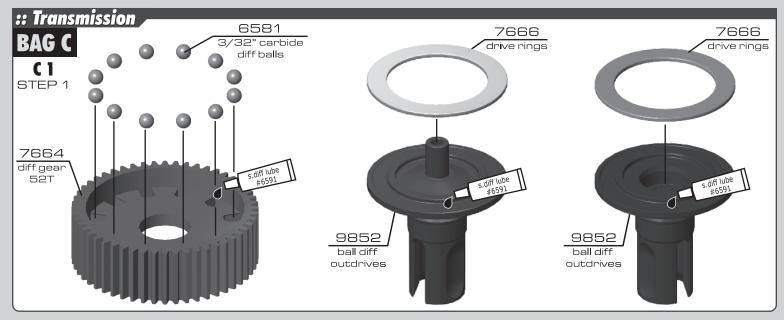


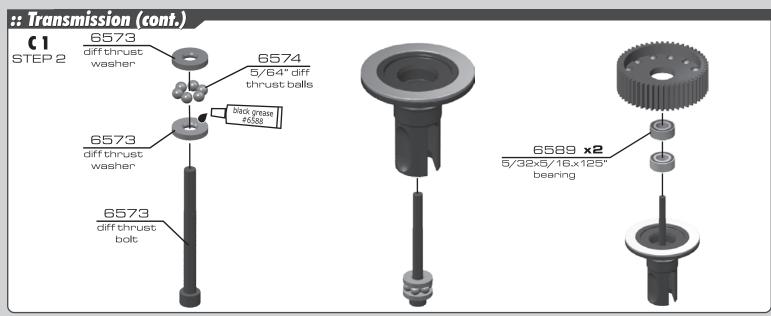


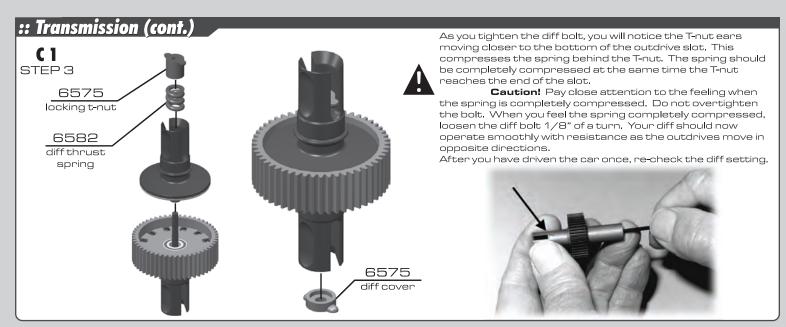


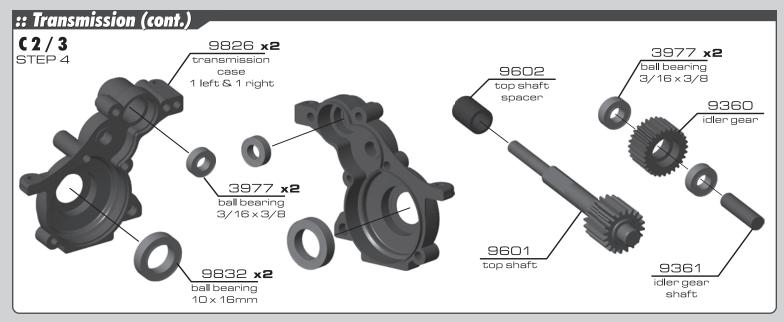


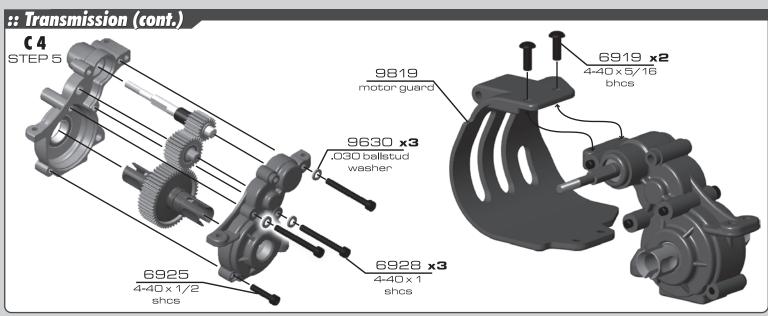


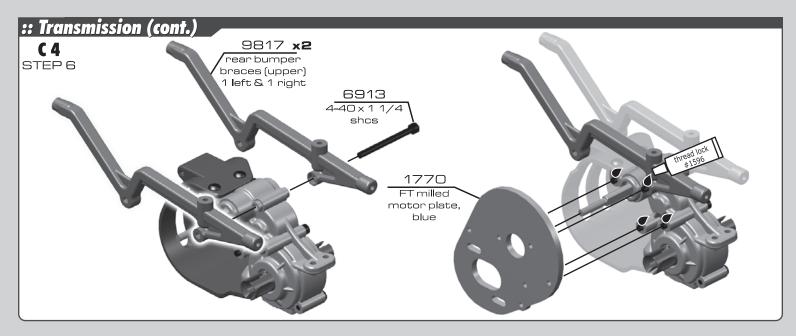


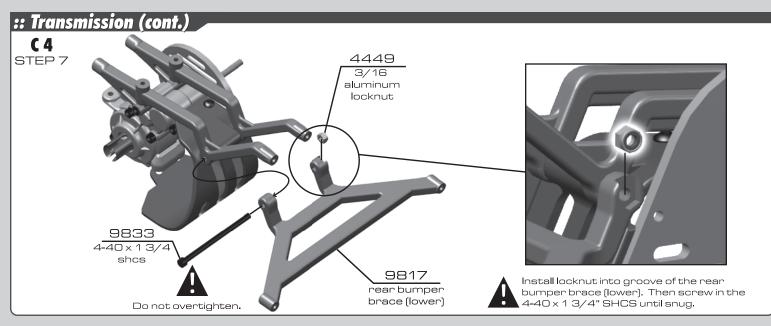


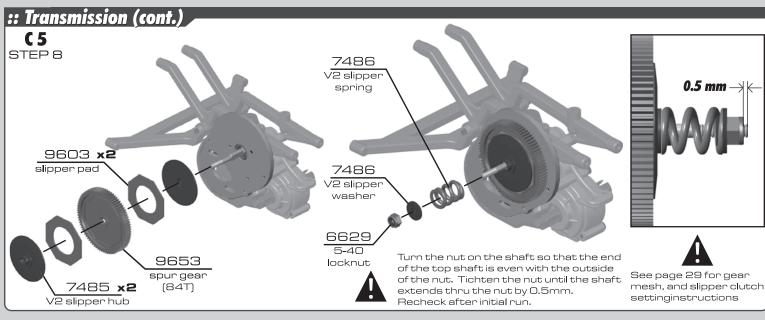


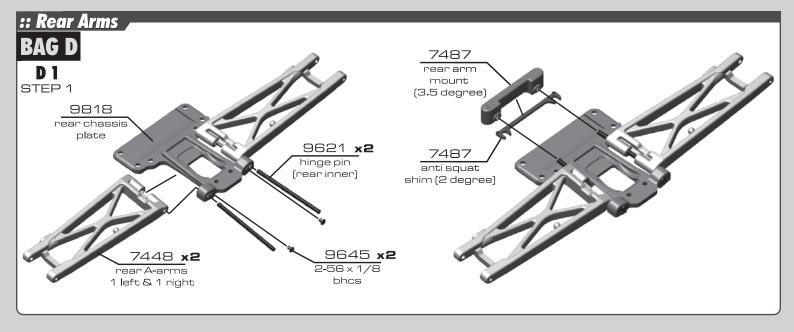


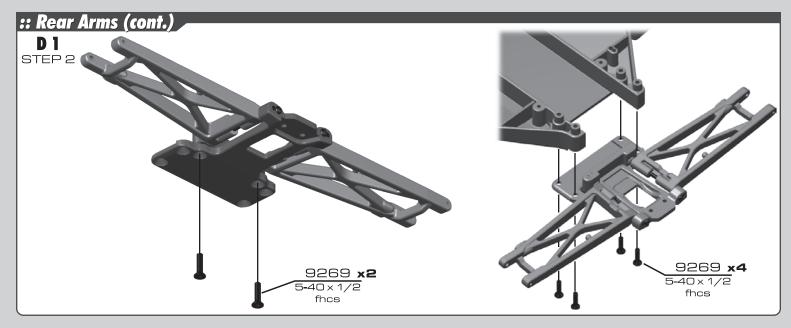


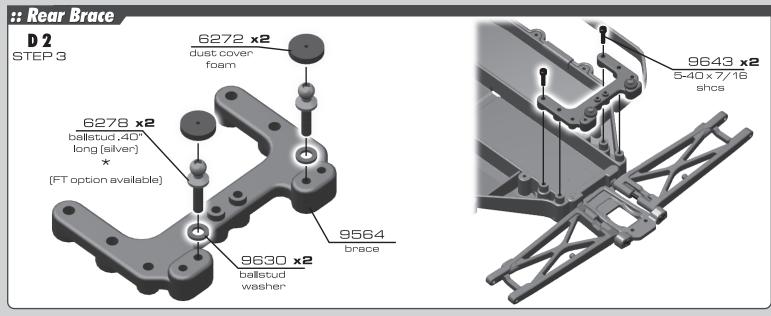


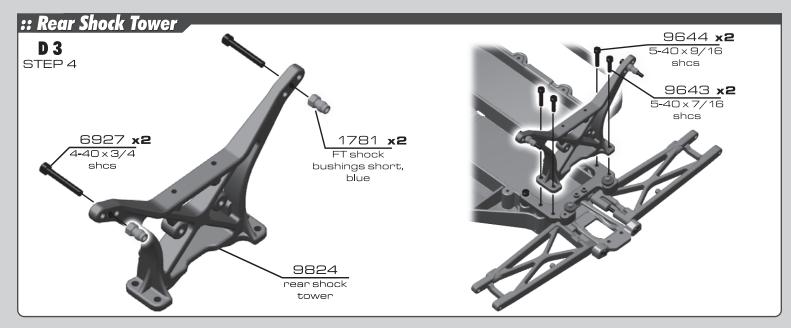


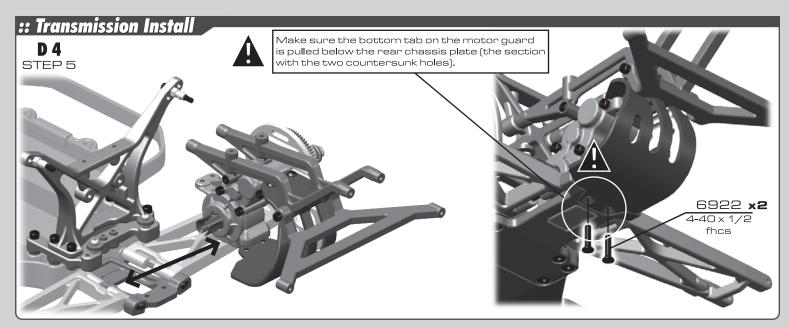


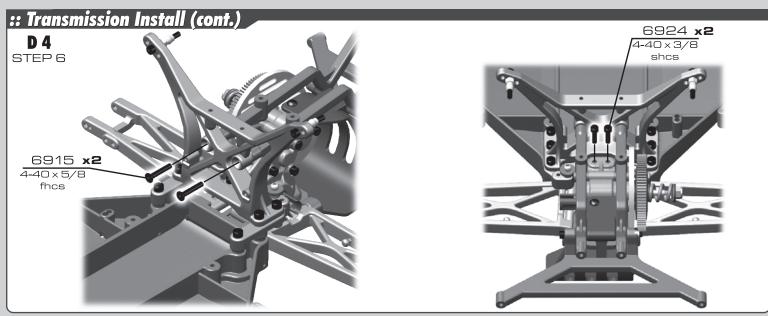


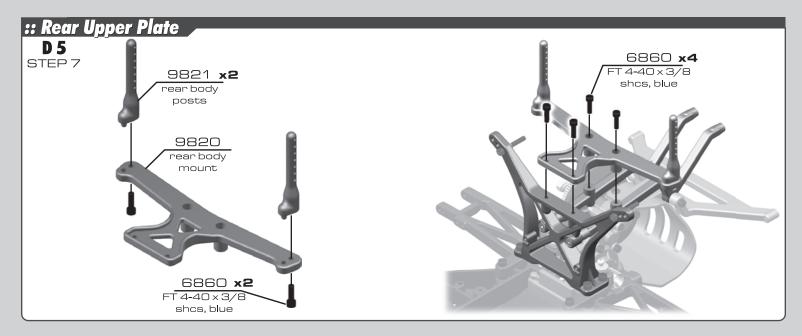


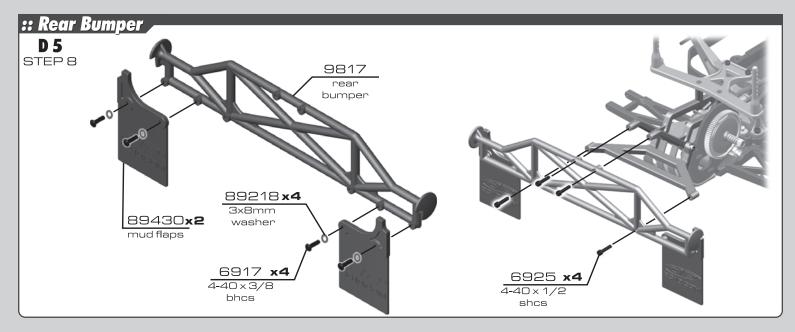


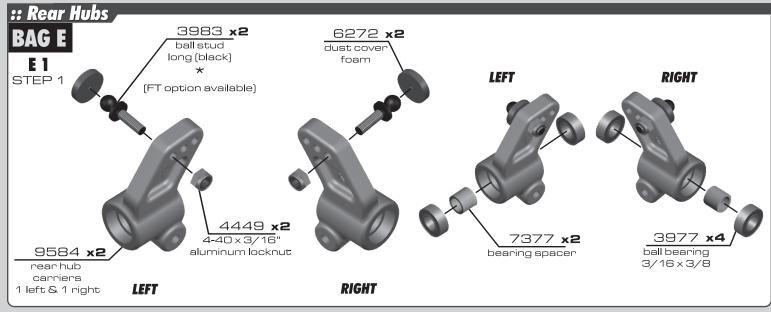


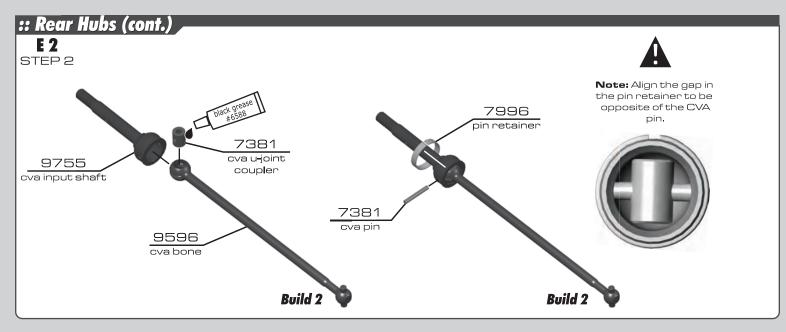


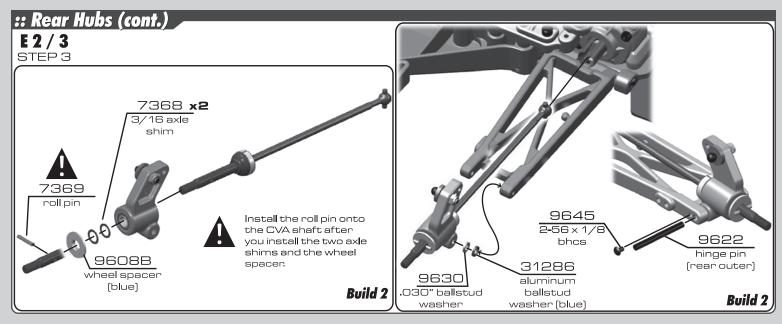


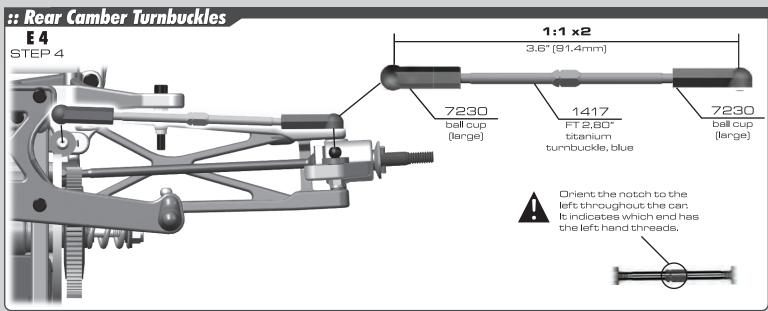


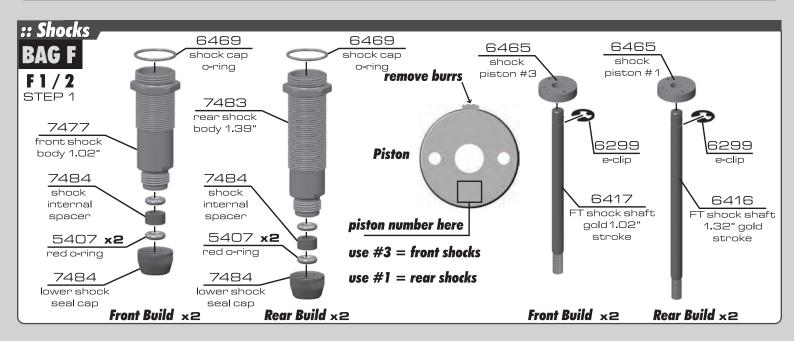


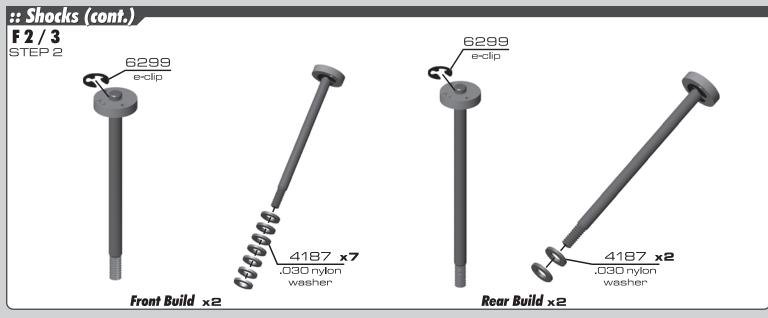


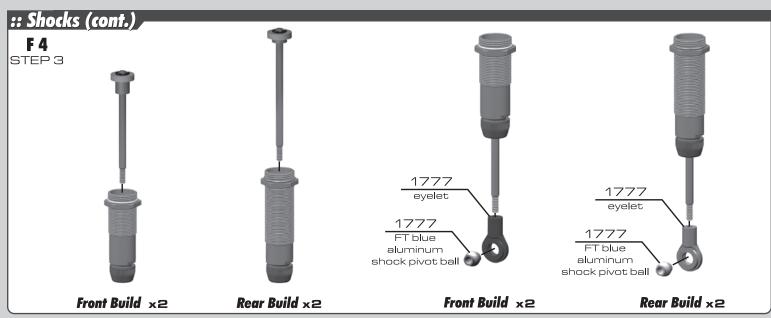


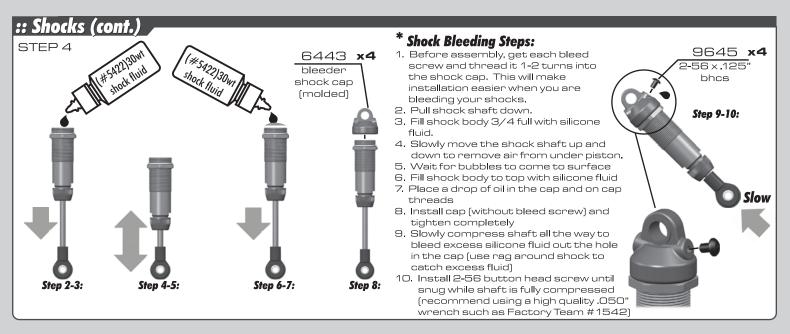


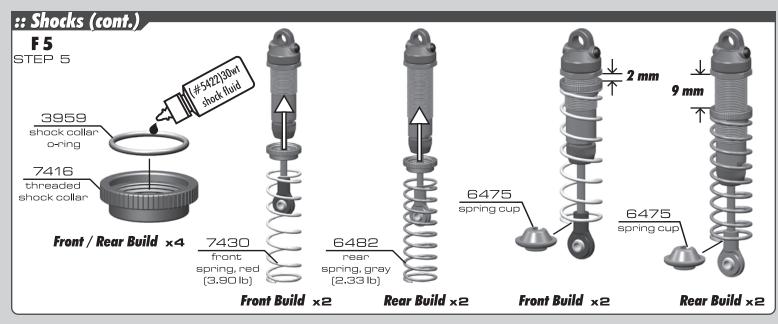


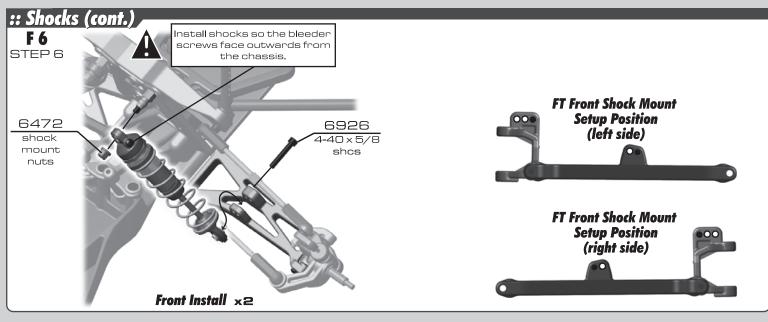


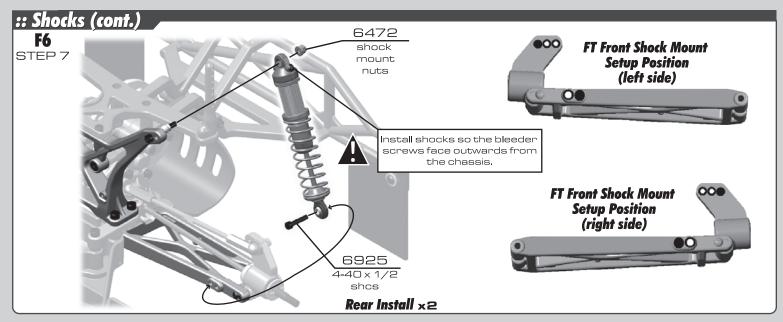


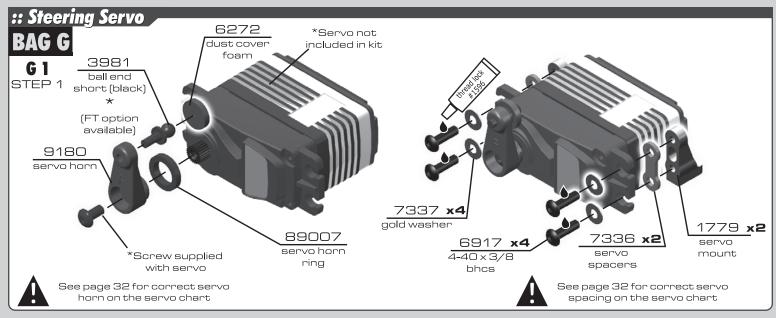


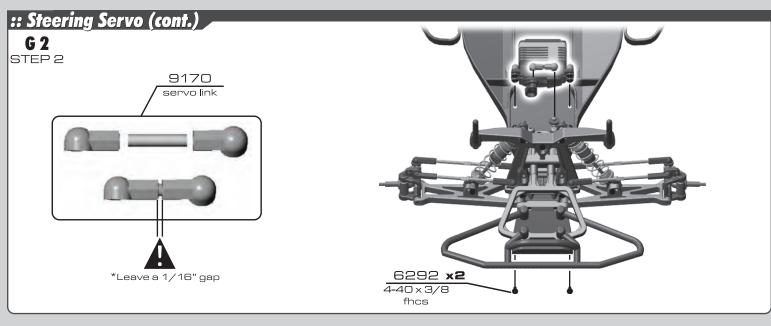


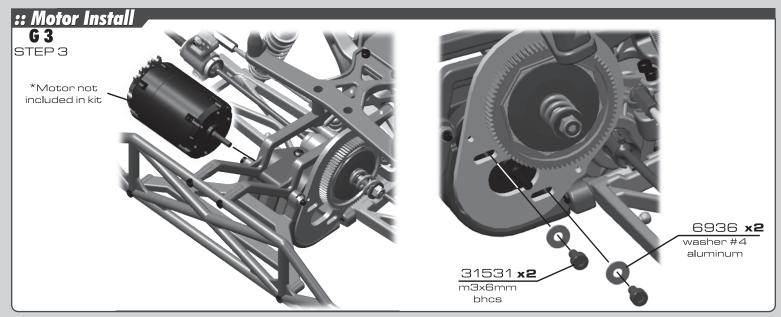


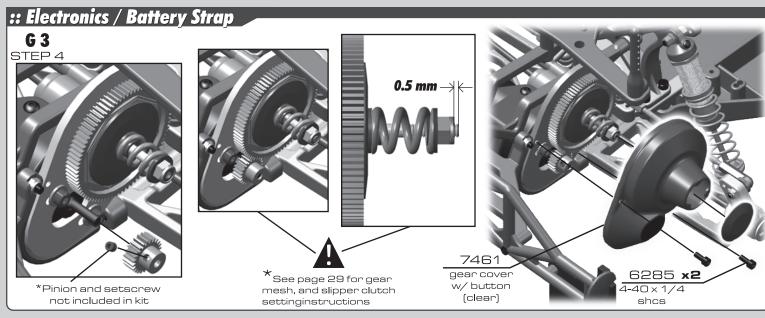


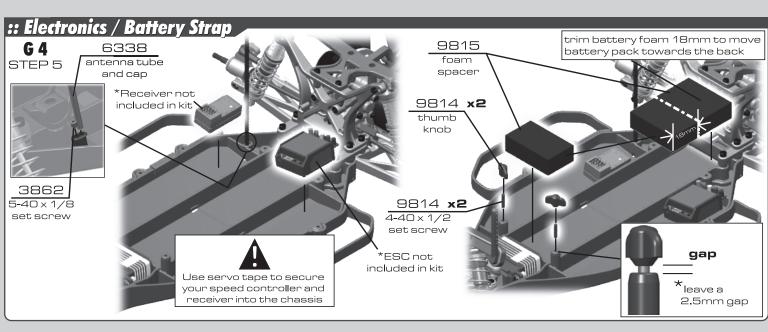


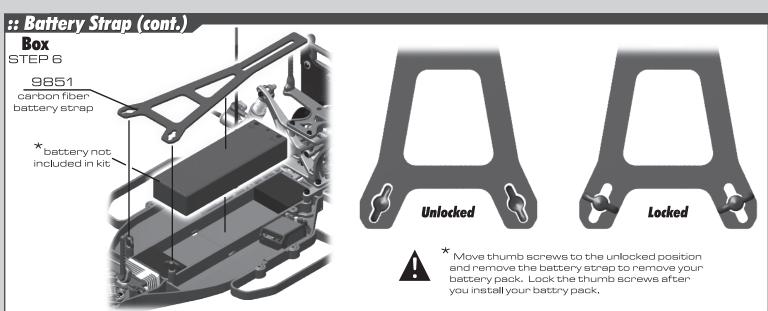


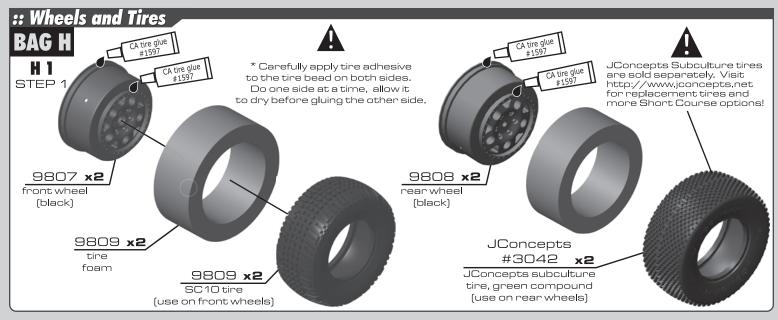


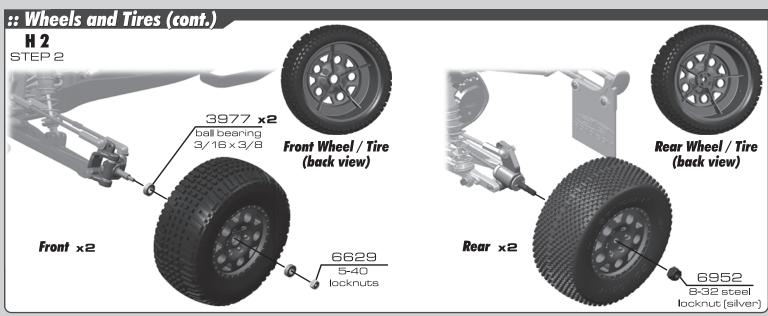


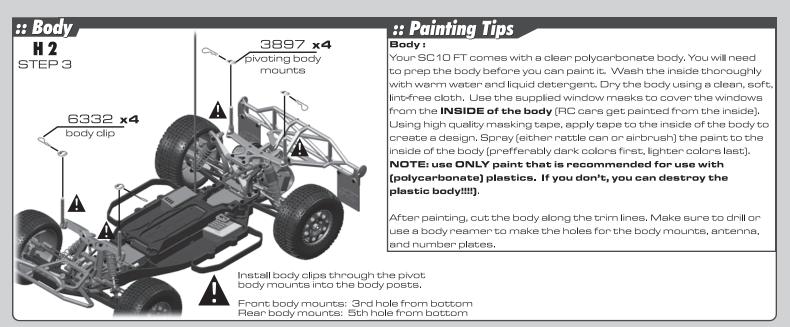


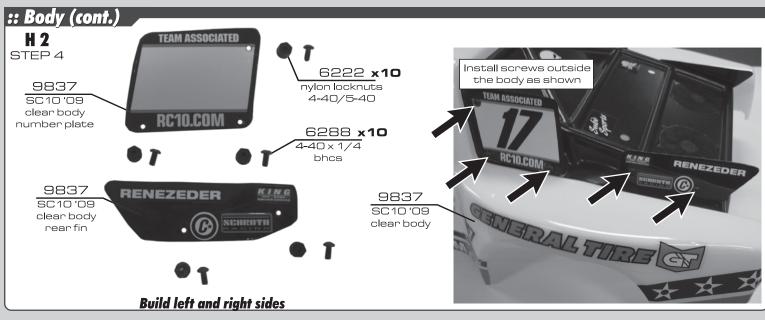








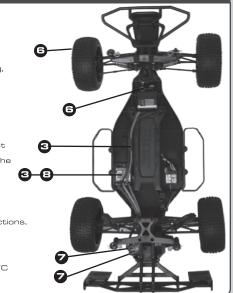






:: Final Adjustments

- 1. Place your car on a block or stand so that all 4 wheels are elevated and free to move. Remove the body.
- 2. Turn the transmitter **ON**
- 3. Connect your battery pack and turn the ESC (electronic speed control) power switch ON.
- 4. Turn the steering wheel on the transmitter. If the vehicle does not respond, check your battery connection, ESC plug, and servo plug are all installed correctly. If both systems are powered on, then refer to your transmitter manual for help on binding the 2.4 GHz radio systems.
- 5. If the steering is working, check that the wheels turn left when you turn the transmitter wheel to the left. If not, then you must check the servo revering switches (see transmitter manual).
- 6. Adjust the steering trim setting on the transmitter until the steering rack (page 4) is centered in the car. Then, adjust the steering turnbuckles (page 6) so that both front wheels point straight forward. Use the steering trim to fine-tune the centering adjustment once you finish the checklist and start driving your car.
- 7. Now connect the motor to the ESC (refer to ESC instructions for proper installation).
- 8. Set the ESC according to the manufacturer's instructions. **WARNING:** Some ESC's have the motor dis-connected during setup and some do not. You risk damaging your brushless system if you do not follow the manufacturer's instructions.
- 9. Check that your ESC settings are working by lightly applying the throttle and brake.
- 10. Re-install the body. You are now ready to drive!
- 11. **REMEMBER** that the transmitter is the first to be turned on and the last to be turned off. Always operate your R/C vehicle in a safe area clear of any cars or pedestrians.

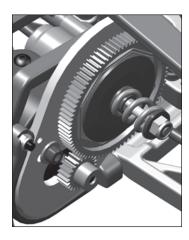


:: Adjustments / Tips

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.

SC10 Gear Ratio Chart				
MOTOR	Pinion	Spur	FDR	
27T Stock Motor	19	87	11.91:1	
19T Super Stock Motor	19	87	11.91:1	
17.5 Brushless Motor	28	75	6,96:1	
13.5 Brushless Motor	21	84	10.40:1	
10.5 Brushless Motor	19	84	11.49:1	
9.5 Brushless Motor	18	84	12,13 :1	
8.5 Brushless Motor	17	84	12.85 :1	
3300kV Brushless Motor	18	84	12.13:1	



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 #31531 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 30° caster blocks (#7922) are recommended in most cases. For less corner entry steering and more exit steering, try the optional 25° blocks (#7919).

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.



* Testing camber with camber gauge

> 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

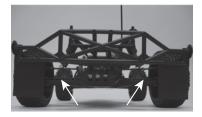
Ride height is the distance from the ground to the bottom of the chassis.

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. A short wheelbase will make the rear end more responsive.



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

Anti-Roll bar

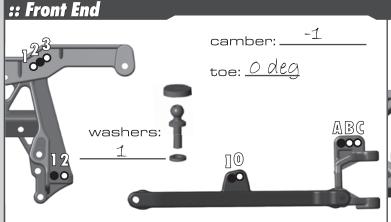
The optional #9635 rear anti-roll bar kit (also called the "swaybar") allows you to add roll resistance to the rear end with minimal effect on handling over bumps and jumps. It is an especially helpful tuning item on high-grip tracks (try the gold bar). The silver and black anti-roll bars are typically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



:: Driver:	SC10 FT Standard Setup	:: Date:
:: Track:	·	
:: Event:		

Setup	Sheet	for	Team	Associated's	s S	C10
					_	

Rev. 2



ride height: <u>Arms level</u>



-axle height caster 20°

middle \square down

25° 30°

:: Rear End



rear hub carriers std O°

0.5° 1° 1.5° П

bones level ride height: __



wheel base long

medium 🔲 short

anti-roll bar none

black (soft) silver (med) gold (hard)

:: Front Shocks

sprina: __ piston: _ shock oil: 30Wt limiter:__ :: Rear Shocks

radio: not included

throttle / brake epa: _

throttle / brake expo: _

initial brake:_____

ball diff settings: 0.5mm

spring: <u>Grau</u> piston:_ limiter: 2 thin shock oil: __

:: Electronics

motor & wind: not included pinion: not included spur gear: 84 batteries: not included battery placement: back, cut foam block.

servo:_ _ steering expo:_ :: Gear Differential / Ball Differential

esc: <u>not included</u> throttle profile:__

_ drag brake:_

:: Other body: SC10 09' notes:_

:: Front Tires

tire: standard compound: Standard insert: Standard

:: Rear Tires

gear diff fluid: □__

tire: <u>JConcepts Subcult</u>ures compound: <u>Arlen</u> insert: <u>Standard</u>

wheel: KMC - Black. wheel: KMC - Black

:: Race and Vehicle Comments

comments: ____

qualify: _____ finish: ____ tq: _

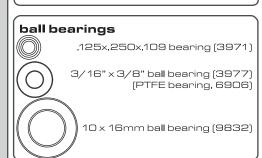
:: Track Info _ smooth: □ bumpy: □ blue groove: □

traction: Dhigh Dmed. Dlow soft dirt: ☐ grass: ☐ clay: ☐ wet: ☐ dusty: other:

:: Hardware - 1:1

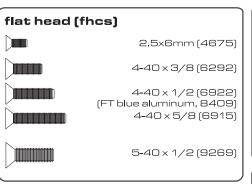
setscrews

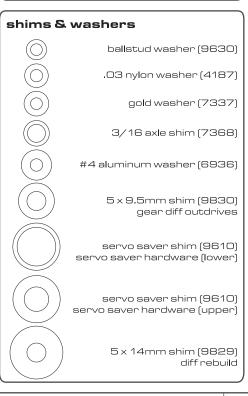
socket head (shcs) 4-40 × 1/4 (6285) (FT blue aluminum, 6284) 4-40 x 3/8 (6924) (FT blue aluminum, 6860) 4-40 × 1/2 (6925) 4-40 x 5/8 (6926) (FT blue aluminum, 7801) 4-40 x 3/4 (6927) 4-40×7/8 (7738) 4-40 x 1 (6928) (FT blue aluminum, 6935) 4-40 × 1 1/4 (6913) 4-40 x 1 3/4 (9833) 5-40×7/16 (9643) 5-40×9/16 (9644) 5-40 X 3/4 (9835)

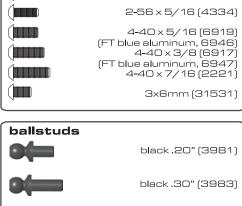


4-40 x 1/2 (9170)

5-40 x 1/8 (3862)







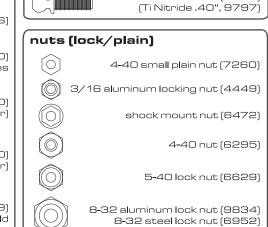
2-56 x 1/8 (9645)

silver .20" (6276)

silver .30" (6277)

silver .40" (6278)

button head (bhcs)



Servo Chart 1 FIND YOUR SERVO TYPE	STEERING SERVO TYPE (Steering servo is sold separately) NOT ALL SERVOS ARE LISTED	2 #7336 SPACER	#9180 SERVO ARM
BERVETTE	Associated Electrics / XP AE SHV1504MG, DS1015, DS1313	thin spacer	F
	Airtronics 94102	no spacer	A
es li	Airtronics 94738, 94157, 94158, 94257, 94258, 94357, 94358, 94452, 94453, 94751, 94755	thick spacer	А
2 FIND YOUR SPACER(S)	Hitec HS-5625MG, HS-5645MG, HS-625MG, HS-645MG	no spacer	н
	Hitec HS-303, HS-300BB, HS-945MG, HS-925MG, HS-5945MG, HS-5925MG, HS-525MG, HS-525BB, HS-425BB, HS-422	thin spacer	н
20	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
	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:	
·· Fvent·	

Setup Sheet for	Team Associated's SC10				Re	v. 2
:: Front End			:: Rear End			Ę
23	camber:		123	C	camber:	
700	toe:			• 6	anti-squat:	—
	9		wasl	ners: 🖁 🍙 t	soe:	
wash	ers: [0] ride height:	ABC			rear hu carrier std 0° 0.5° 1° 1.5°	rs
			ride heigl —	nt:		
bump steer spacer:	axle height up middle down	caster 20° 25° 30°		wheel base long medium short	anti-roll bar none black (soft) silver (med) gold (hard)	
:: Front Shocks			:: Rear Shock	S		
	piston: limiter:				ston: niter:	
:: Electronics						
motor & wind:_ pinion: spur gear: batteries:	nent:		throttle / brathrottle / braesc:	ake expo : th dr	rottle profile: ag brake: eering expo:	
:: Other			:: Gear Differ	ential / Ball L	Differential	
1 ,			0	: :gs:		
:: Front Tires			:: Rear Tires			
tire: compound: insert:			compound: _ insert:			
:: Race and Veh	icle Comments		:: Trac	k Info		
' '	main: finish:		tracti	on: 🗆 high 🗀 ı] clay: wet:	
						—



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

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