

# ASSOCIATED 1:10 SCALE ELECTRIC BUGGY

# B4!



## INSTRUCTION MANUAL FOR THE TEAM ASSOCIATED RC10B4



WAG

## B4 Features

- >> New Longer MIP CVD dog bones and axles in kit version.
- >> Lower motor mounting position.
- >> Kimbrough Spur Gear.
- >> Pro-Line M3 racing compound front and rear tires in kit version.
- >> Plenty of chassis room to hold most electronics.
- >> All-new molded composite low-CG chassis.
- >> Adjustable battery position.
- >> New design battery hold-down strap.
- >> Rugged steel turnbuckles.
- >> Fully adjustable caster, camber, and toe-in.
- >> Angled bellcrank "co-planar" steering.
- >> Built-in servo saver.
- >> Vertical ball end adjustment, front & rear.

## B4 Factory Team Kit #9035

Threaded shock bodies.  
CVD rear axles.  
Unpainted body.

**Also includes:**  
Bearing Assoc. Transmission.  
Pro-Line racing compound tires.  
Factory Team carbon.  
Factory Team blue aluminum.  
Factory Team titanium turnbuckles.  
Factory Team Unobtainium shock shafts.

## B4 Team Kit #9034

Hard anodized shock bodies.  
CVD rear axles.  
Unpainted body.

**Also includes:**  
Bearing Assoc. Transmission.  
Pro-Line racing compound tires.

## B4 RTR SE #9036

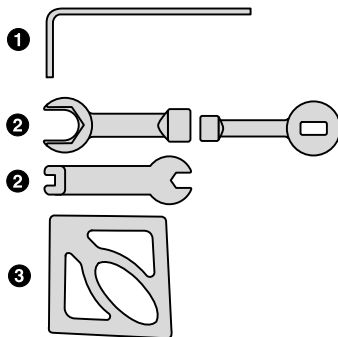
Blue aluminum shock bodies.  
Associated dogbone rear axles.  
Painted body.

**Also includes:**  
Associated Transmission.  
2-Channel radio.  
Electronic speed control.  
Receiver.  
Electric motor and pinion gear.  
Racing tires.  
Already assembled!

## TOOLS

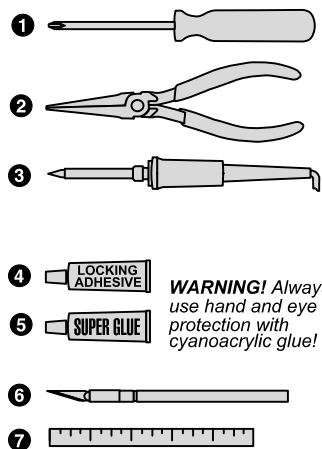
### KIT TOOLS SUPPLIED

- 1 Allen wrenches #6950 (.050", 1/16", 3/32", 5/64")
- 2 Molded tools #6956
- 3 Camber gauge #1719



### EXTRA STUFF NEEDED

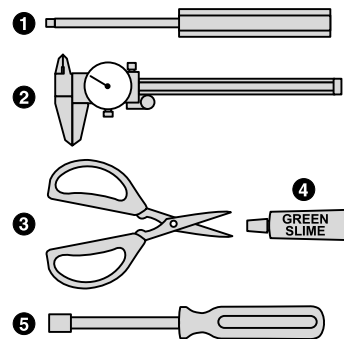
- 1 Phillips screwdriver
- 2 Needlenose pliers
- 3 Soldering iron (40-50 watts) and a small amount of Rosin core solder. Pencil-type soldering iron is better than the gun type. **DANGER! Tip will be HOT!**
- 4 Thread locking compound (#1596 Locking Adhesive or equivalent)
- 5 Super glue (cyanoacrylic glue or #1597 Tire Adhesive).
- 6 Hobby knife **WARNING! This knife cuts plastic and fingers with equal ease, so be careful.**
- 7 Precision ruler



**WARNING!** Always use hand and eye protection with cyanoacrylic glue!

### HELPFUL ITEMS (NOT REQUIRED)

- 1 Allen drivers (straight Allen wrenches with hex shaped handles) such as the following made by Associated:
  - #6957 .050" driver
  - #6958 1/16" driver
  - #6959 5/64" driver
  - #6960 3/32" driver
  - #6961 2.5mm driver
- 2 Vernier calipers
- 3 Body Scissors (#1737)
- 4 Green Slime shock lube (#1105)
- 5 Nut drivers (screwdriver-handled hex socket tools)
  - 3/16" nut driver
  - 1/4" nut driver
  - 11/32" nut driver



### WARNING!

Do not use a power screwdriver to install screws into nylon, plastic, or composite materials. The fast rotation speed can heat up the screws being installed. They can then break the molded parts or strip the threads during installation.

## EXTRA ITEMS NEEDED

	9035	9034	9036
1 R/C two channel surface frequency radio system.	need	need	
2 Battery pack (6 cell).	need	need	need
3 Battery charger (we recommend a peak detection charger).	need	need	need
4 Electronic speed control.	need	need	
5 R/C electric motor.	need	need	
6 Pinion gear, size to be determined by type and wind of motor you will be using.	needed	need	

# CONTACTING US

## CUSTOMER SUPPORT

(714) 850-9342  
 Fax (714) 850-1744  
<http://www.rc10.com/help>



©2003-2005 Associated Electrics, Inc.

## ASSOCIATED ELECTRICS, INC.

3585 Cadillac Ave.  
 Costa Mesa, CA 92626  
 USA  
<http://www.TeamAssociated.com/>

# BEFORE BUILDING

## OPEN THE BAGS IN ORDER

The assembly is arranged so that you will open and finish that bag before you go on to the next bag. **Sometimes you will have parts remaining at the end of a bag. These will become part of the next bag.**

## LEFT AND RIGHT

When we refer to left and right sides of the car, we are referring to the driver's point of view while sitting in the car.

## SUPPLEMENTAL SHEETS

Improvements to our kits, if any, will be noted in supplementary sheets located in a parts bag or inside the kit box. Check the kit box before you start and each bag as it is opened. When a supplement is found, attach it to the appropriate section of the manual.

◀1:1▶ = Actual size part.      x2 = Quantity for step.  
**Rear x2** = Do entire step twice.      ! = Pay attention to this detail.  
**RTR: 9181** = Part number for RTR buggies.

# BAG A

ASTERISK (\*) BY BOLD PART NUMBER INDICATES PART USED IN FACTORY TEAM KIT.

**1**

9659 x1      9659 x1  
 Servo Saver, lower      Servo Saver, upper

6588  
 BLACK GREASE

**2**

◀1:1▶ x2      ▶1:1▶ x1  
 9610      9610, **9657\***  
 Servo Saver washer, lower      Servo Saver spring

**3**

◀1:1▶ x1      ▶1:1▶ x1  
 9610      9610, **9610B\***  
 Servo Saver washer, upper      Servo Saver bolt

Tighten servo saver bolt completely with supplied wrench

**4**

◀1:1▶ x1      ▶1:1▶ x1  
 6271      6272  
 Ball End, short, silver      Dust Cover, foam

**5**

x1      x2      ▶1:1▶ x2      ▶1:1▶ x2  
 9659      9659      6271      6272  
 Steering Rack      Block Carrier Bushing      Ball End, short, silver      Dust Cover, foam

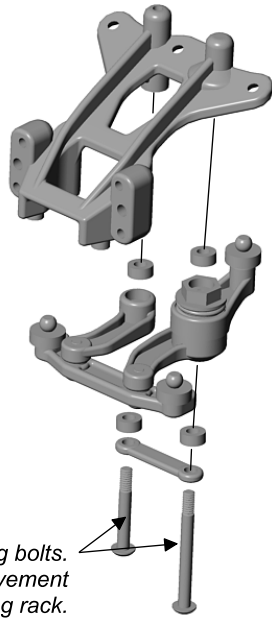
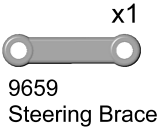
**NOTE**  
 Install ball ends here only when using **OPTIONAL** inline axles #9577, 9623

**6**

◀1:1▶ x2      x1  
 2221      9659  
 B. H. Screw 4-40 x 7/16      Bellcrank

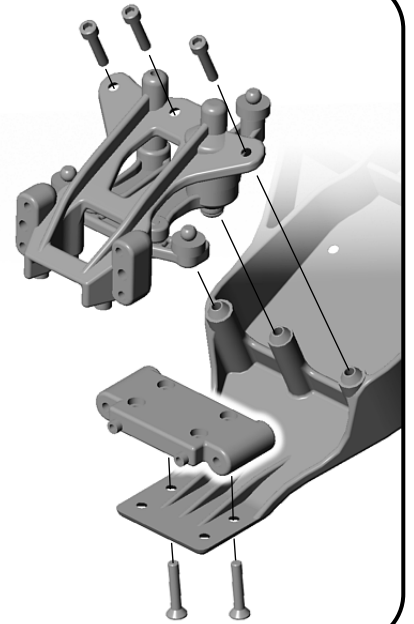
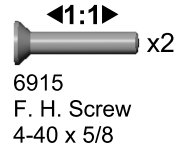
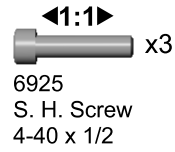
**3**

# BAG A



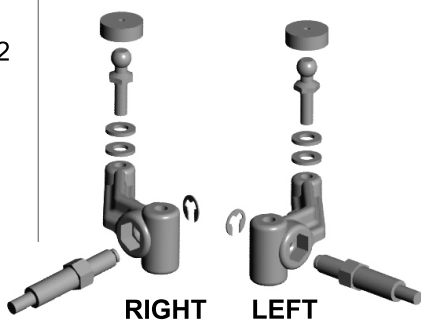
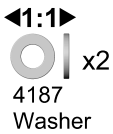
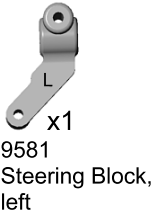
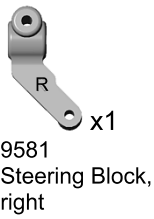
*Do not overtighten steering bolts.  
Make sure there is free movement  
in the steering rack.*

7

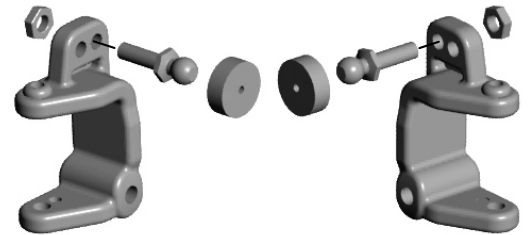
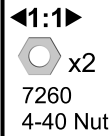


8

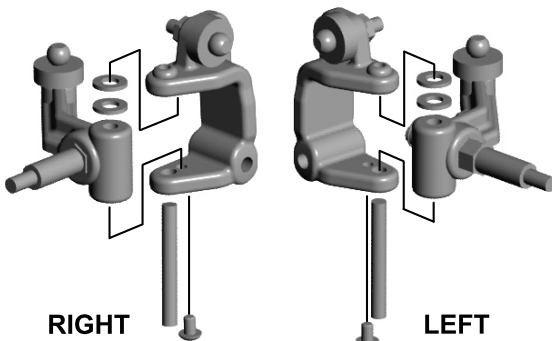
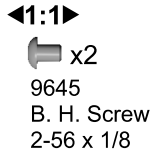
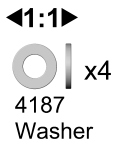
# BAG B



1



2

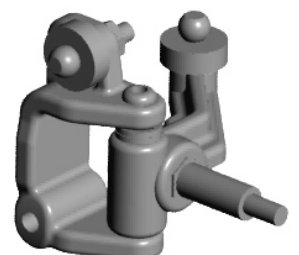
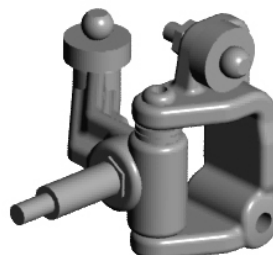


4

3

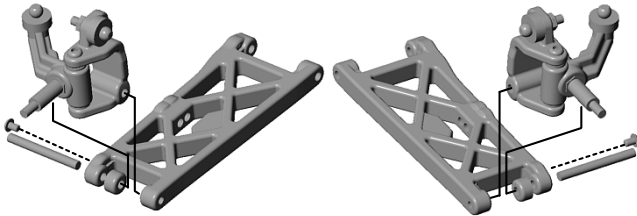
STEPS 1-3  
ASSEMBLED  
RIGHT

STEPS 1-3  
ASSEMBLED  
LEFT



# BAG B

- x2 9578, 9579\* A-arms, front
- 1:1 x2 9580 Spacer
- 1:1 x2 9645 B. H. Screw 2-56 x 1/8
- 1:1 x2 9622 Hinge Pin, front outer

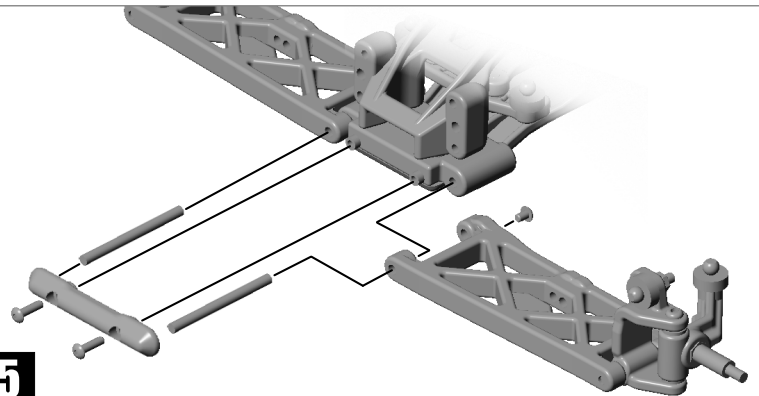


RIGHT

LEFT

4

- x1 9564, 9665\* Front Hinge Pin Brace
- 1:1 x2 9621 Hinge Pin, front inner
- 1:1 x2 9645 B. H. Screw 2-56 x 1/8
- 1:1 x2 4334 B. H. Screw 2-56 x 5/16

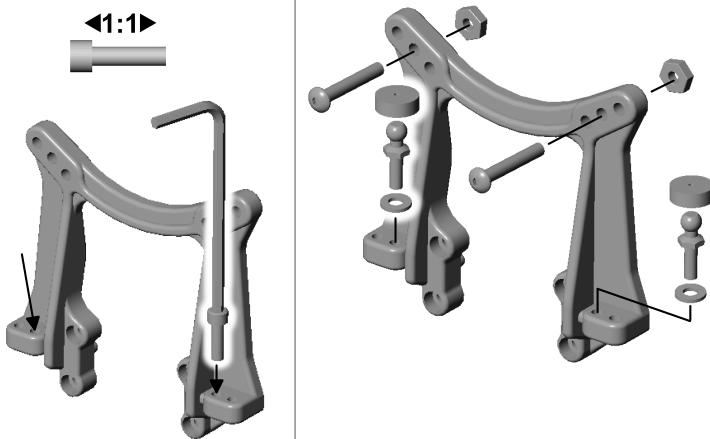


5

- 6272 Dust Cover, foam
- 1:1 x2 6273 Ball End, long, silver
- 1:1 x2 9630 washer
- 1:1 x2 6295 4-40 nut
- 9568, 9569\* Front Shock Tower

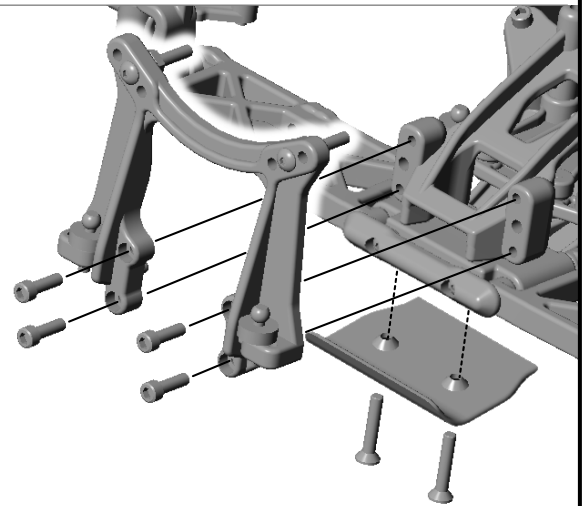
Pre-tap holes with a #6924 screw for easier ball end installation

- 1:1 x2 7413 B.H. Screw 4-40 x 3/4



6

- 9562 Front Bumper
- 1:1 x4 6924 S. H. Screw 4-40 x 3/8
- 1:1 x2 6915 F. H. Screw 4-40 x 5/8

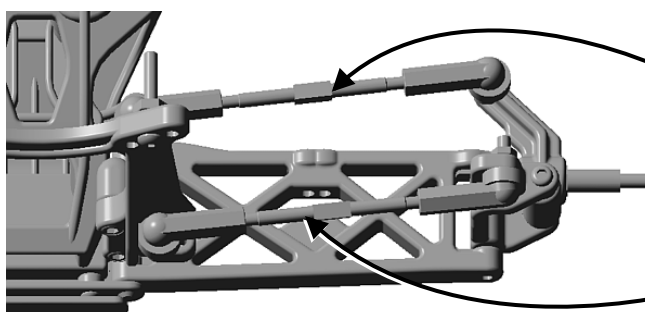
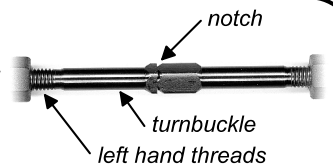


7

- 1:1 x4 6263, 1406\* (2.00") 2.06" Turnbuckle
- 1:1 x8 7230 Ball Cup, large

x2

Orient the notch to the left throughout the buggy. It indicates which end has the left hand threads.



1:1  
2.86" (72.6mm)

1:1  
2.62" (66.7mm)

8

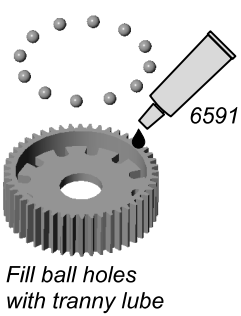
5

# BAG C

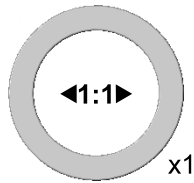


◀1:1▶  
● x12

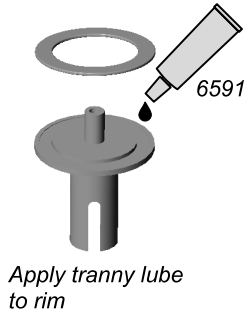
6581  
Carbide Diff Balls  
3/32



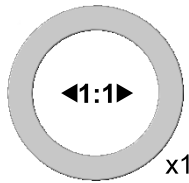
1



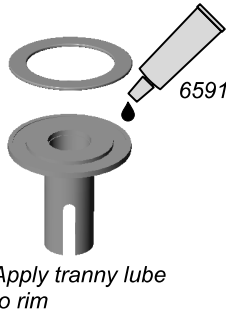
7666  
Diff Ring



2

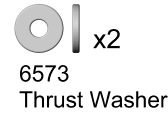


7666  
Diff Ring



3

◀1:1▶

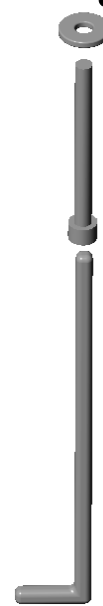
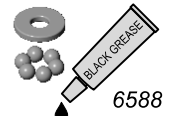


◀1:1▶  
● x6

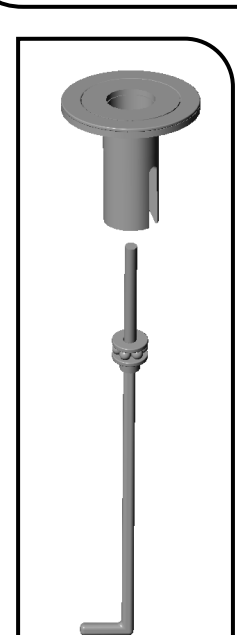
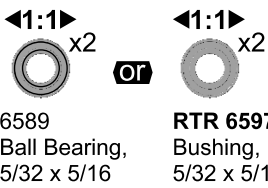
6574  
Diff Thrust Ball,  
5/64



Apply Black Grease  
to washer to hold balls  
in place

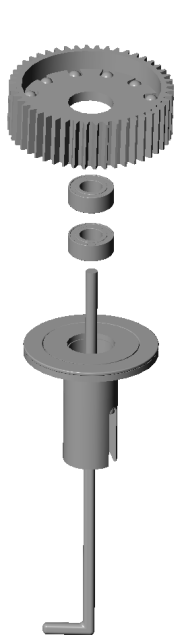


4

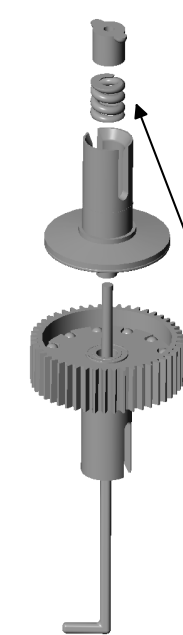
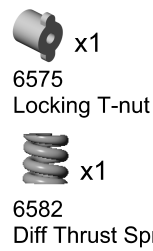


6

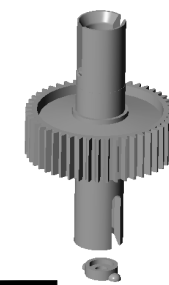
5



6



7

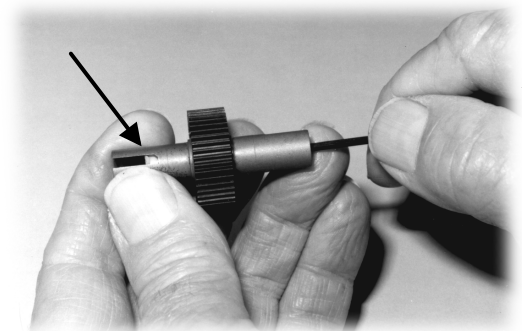


8

## SETTING THE DIFFERENTIAL

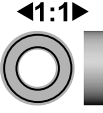
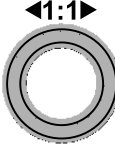
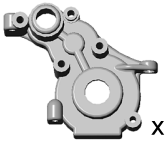
As you tighten the diff bolt, you will notice the T-nut ears moving closer to the bottom of the outdrive slot. This compresses the spring behind the T-nut. The spring should be completely compressed at the same time the T-nut reaches the end of the slot.

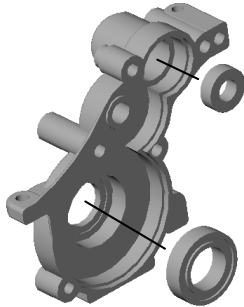
**Caution:** Pay close attention to the feeling when the spring is completely compressed. Do not overtighten the bolt. When you feel the spring completely compressed, loosen the diff bolt 1/8 of a turn. Your diff should now operate smoothly with resistance as the outdrives move in opposite directions. After you have driven the car once, recheck the diff setting.



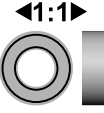

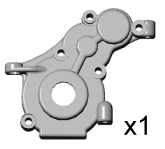
9

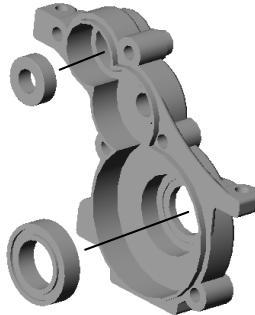
# BAG C

-  x1
  -  x1
  -  x1
- 3977, 6906\* Ball Bearing, 3/16 x 3/8
- 3976, 6903\* Ball Bearing, 3/8 x 5/8
- 9574 Transmission Case, right





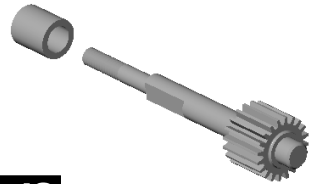
10

-  x1
  -  x1
  -  x1
- 3977, 6906\* Ball Bearing, 3/16 x 3/8
- 3976, 6903\* Ball Bearing, 3/8 x 5/8
- 9574 Transmission Case, left





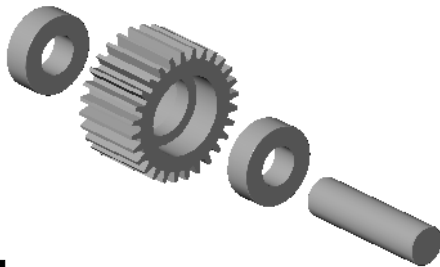
11

-  x1
  -  x1
- 9601 Top Shaft
- 9602 Top Shaft Spacer






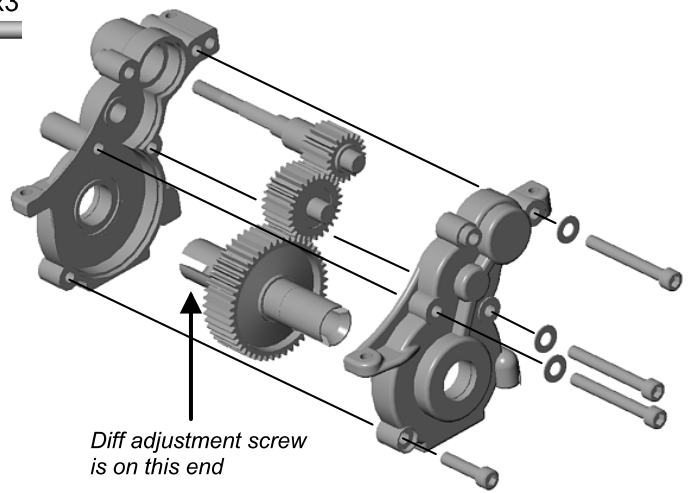
12

-  x1
  -  x1
  -  x2
- 9360 Idler Gear
- 9361 Idler Gear Shaft
- 3977, 6906\* Ball Bearing, 3/16 x 3/8


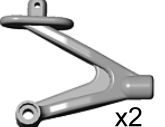



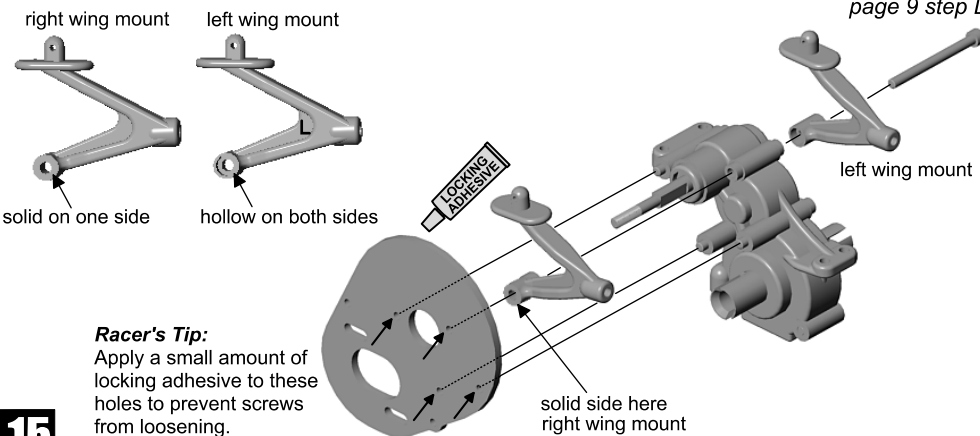
13

-  x3
  -  x1
  -  x3
- 6928 S.H. Screw 4-40 x 1
- 6925 S.H. Screw 4-40 x 1/2
- 7337 washer
- Diff adjustment screw is on this end*

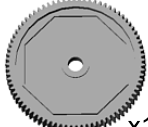



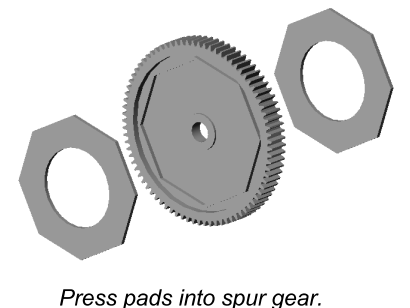
14

-  x1
  -  x2
  -  x1
- 9600, 1770\* (milled) Motor Plate
- 9587 Wing Mount, left & right
- 3929 S.H. Screw 4-40 x 1.25



15

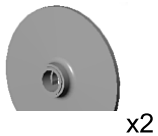
-  x1
  -  x2
- 9651 Spur Gear, 81T
- 9603 Slipper Pad



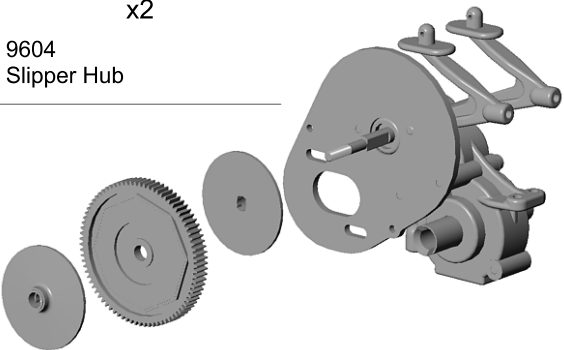
16

7

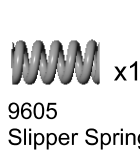
# BAG C



9604  
Slipper Hub



17



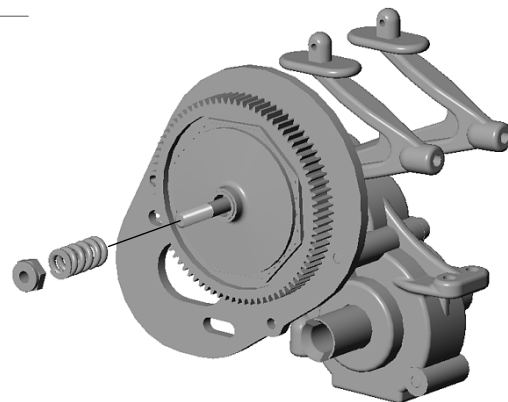
9605  
Slipper Spring



6629  
Locknut, 5-40

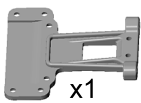
*Install locknut until even with end of shaft. Then tighten 4 turns for kit slipper setting.*

*Compress spring first.*



18

# BAG D



9570  
Rear Chassis Plate



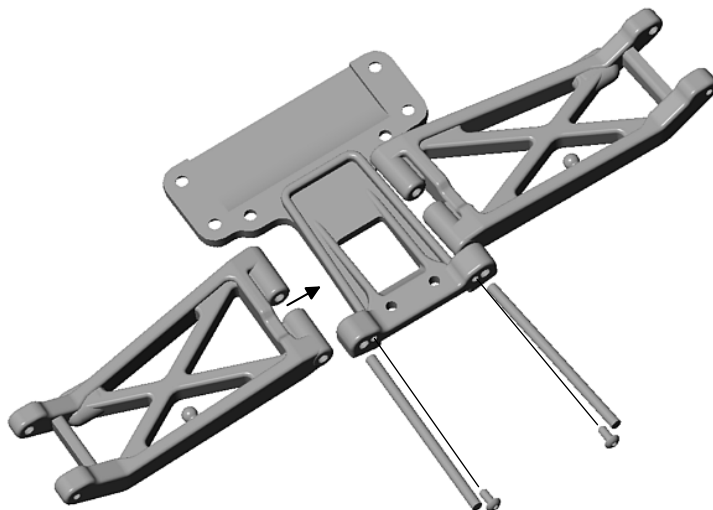
9582, 9583\*  
Rear A-arms,  
left and right



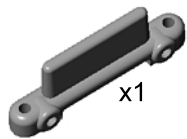
9621  
Hinge Pin,  
rear inner



9645  
B. H. Screw  
2-56 x 1/8



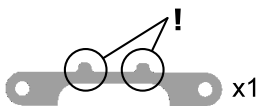
1



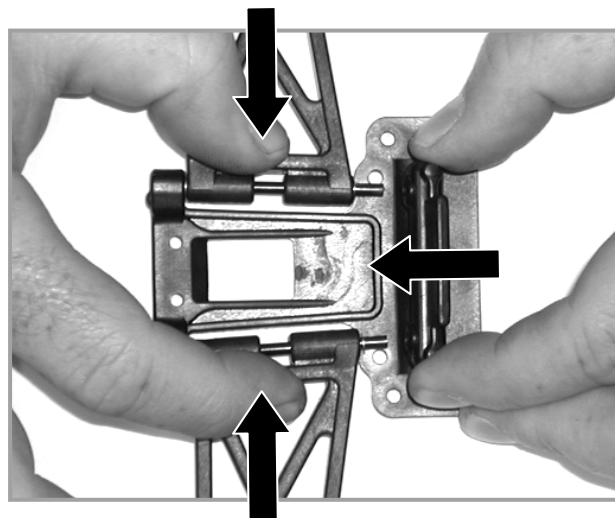
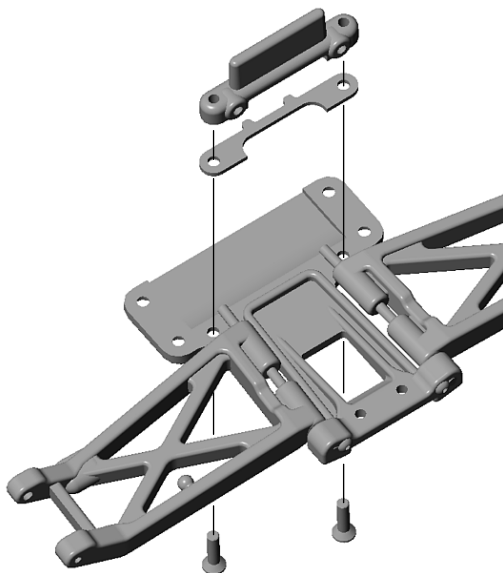
9571  
Rear Arm Mount



9269  
F. H. screw  
5-40 x 1/2



9571  
Anti-squat Shim, 2 deg.



8

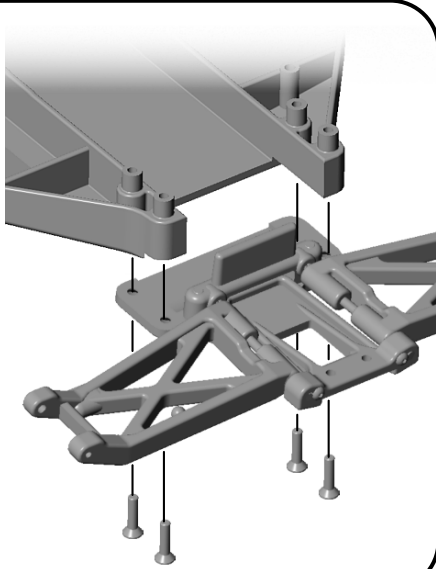
2



# BAG D

◀1:1▶  
9269 x4

9269  
S. H. screw,  
5-40 x 1/2



3

◀1:1▶

6272 x2  
Dust Cover,  
foam

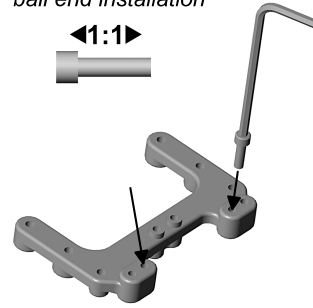
x1  
9564, 9565\*  
Brace

◀1:1▶ x2

6273  
Ball End,  
long

*Pre-tap holes with a  
#6924 screw for easier  
ball end installation*

◀1:1▶

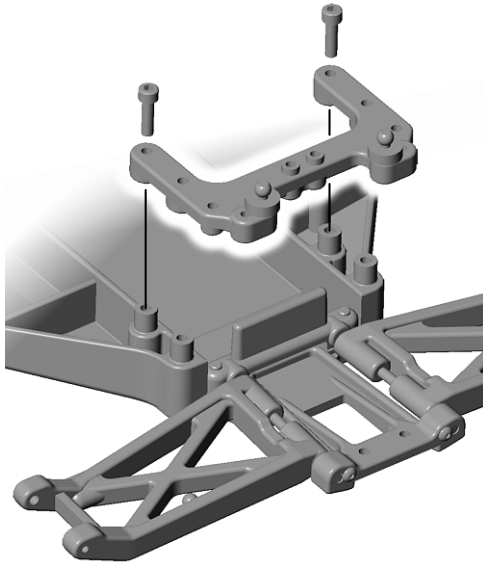


4

◀1:1▶

x2

9643  
S. H. Screw  
5-40 x 7/16



5

◀1:1▶

x2

7413  
B. H. screw,  
4-40 x 3/4

◀1:1▶

x2

7260  
4-40 nut

x1  
9572, 9573\*  
Rear Shock Tower



6

◀1:1▶

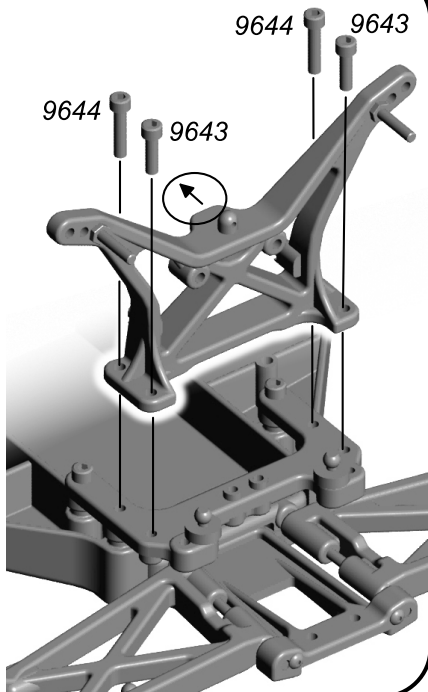
x2

9644  
S. H. screw,  
5-40 x 9/16

◀1:1▶

x2

9643  
S. H. screw,  
5-40 x 7/16



7

◀1:1▶

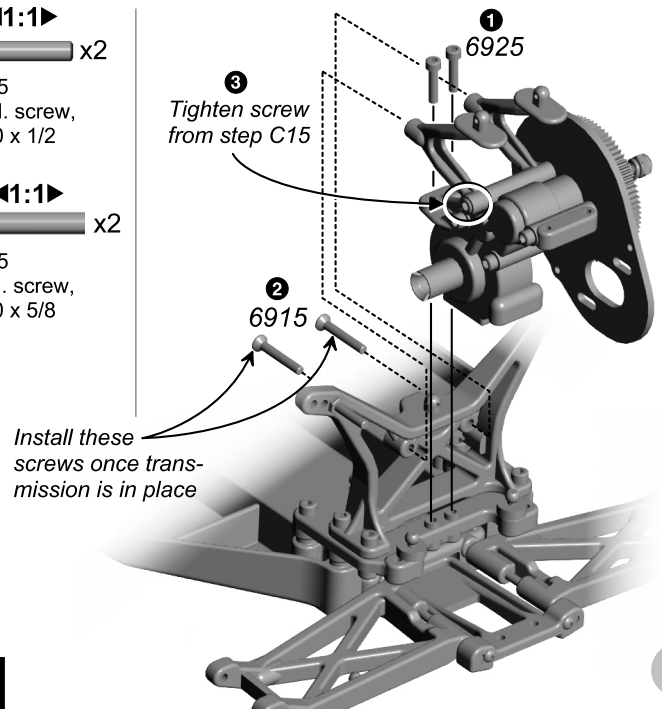
x2

6925  
S. H. screw,  
4-40 x 1/2

◀1:1▶

x2

6915  
F. H. screw,  
4-40 x 5/8

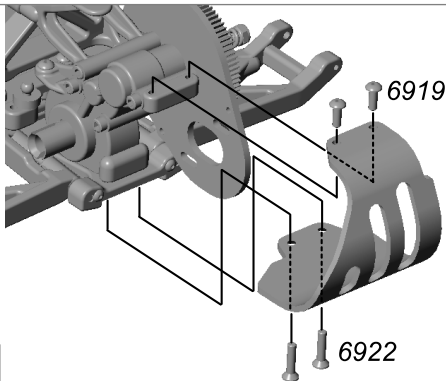


8

9

# BAG D

- 1:1** 6919 B. H. screw, 4-40 x 5/16 x2
- 1:1** 6922 F. H. screw, 4-40 x 1/2 x2
- 9575 Motor Guard x1

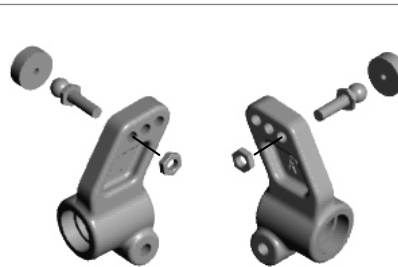


9

# BAG E

- 1:1** 6272 Dust Cover, foam x2
- 1:1** 3858 Ball End, black x2
- 9584 Rear Hub Carriers, left and right x1

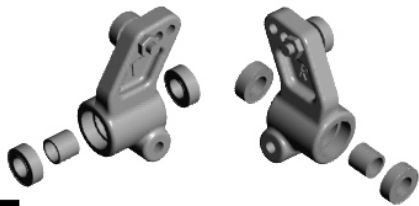
- 1:1** 7260 Plain Nut x2



1

# RTR only x2

- 1:1** 7377 Bearing Spacer x2
- 1:1** 3977, 6906\* Ball Bearing, 3/16 x 3/8 x4



2

- 9670 Rear Axle x1
- 9671 Dogbone x1
- 1:1** 7369 Roll Pin x1
- 1:1** 7368 3/16 Axle Shim x2

- 1:1** 9608, 9608B\* Wheel Spacer x1
- 1:1** 5407 O-ring x1



**GO TO STEP 6 ON NEXT PAGE**

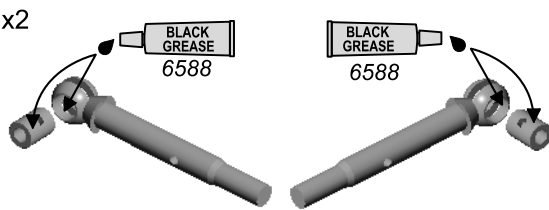
6

3

# BAG E

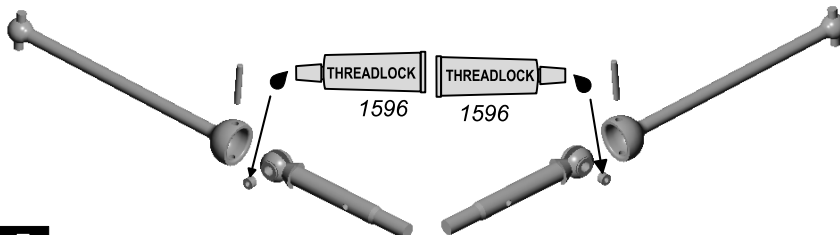
# 9034, 9035

- 9598 MIP CVD Axle x2
- 7381 CVD Coupling x2



3

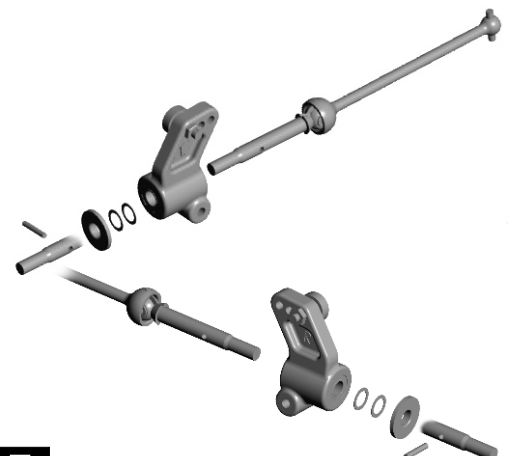
- 9597 CVD Bone x2
- 1:1** 7381 CVD Cross Pin x2
- 1:1** 7381 Set Screw x2



4

# 9034, 9035

- 1:1** 9608, 9608B\* Wheel Spacer x2
- 1:1** 7368 3/16 Axle Shim x4
- 1:1** 7369 Roll Pin x2



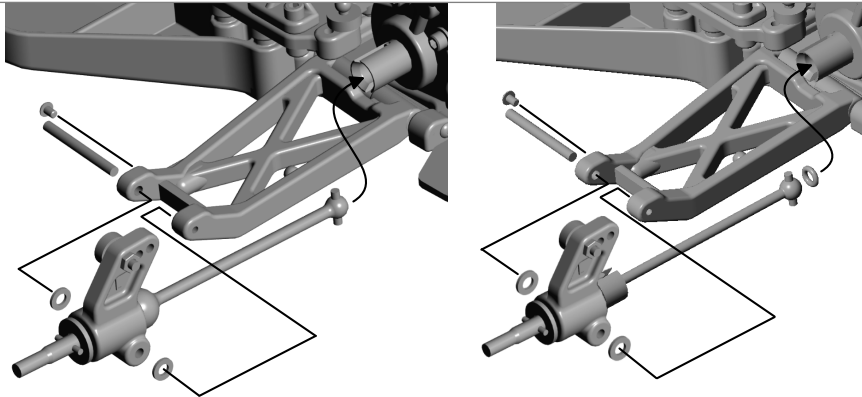
5

10

# BAG E

x2

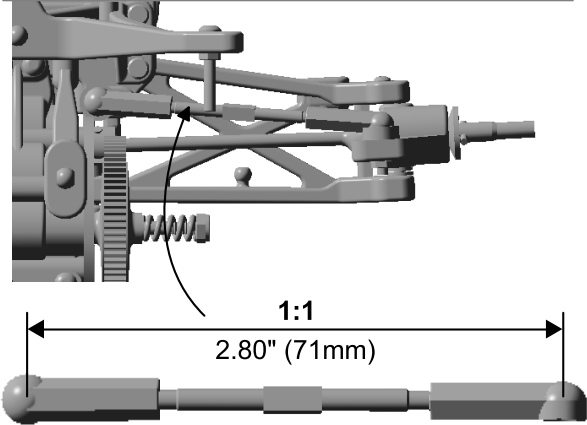
- 9622 Hinge Pin, rear outer x1
- 9645 B.H. Screw 2-56 x 1/8 x1
- 4187 Spacer x2
- RTR: 5407 O-ring x1



**6** with MIP CVDs RTRs with Assoc. Axle

x2

- 6263, 1406\* (2.00") Turnbuckle, 2.06" x1
- 7230 Ball Cup x2

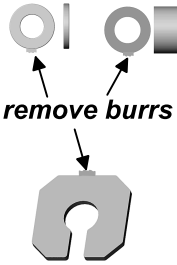


**7**

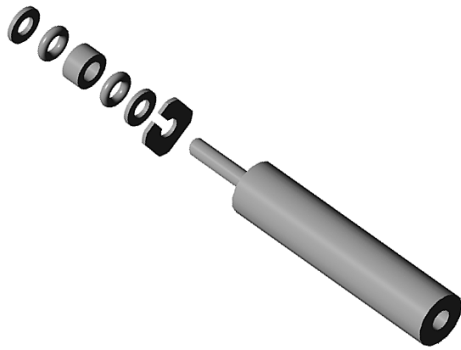
# BAG F

Front x2

- 6440 Clamp x1
- 6440 Thick Washer x1
- 6440 Thin Washer x2
- 5407 Red O-ring x2

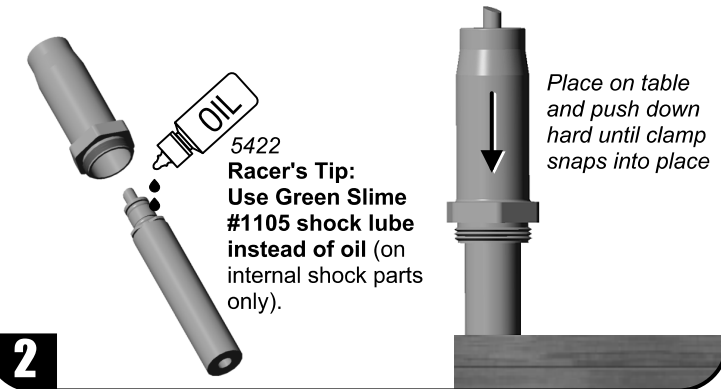


**1**



Front x2

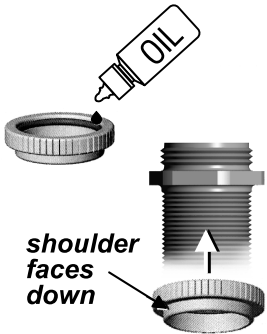
- 9310 Front Shock Body, .89" hard anodized x1
- RTR: 9311B blue aluminum
- 9312\* threaded hard anodized alum.



**2**

# 9035

- 7416 Shock Collar and O-ring



DO ALL FOUR SHOCKS

Front x2

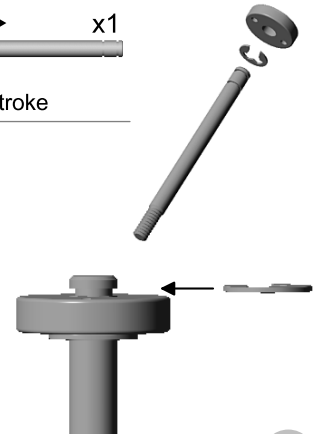
- 6469 Shock Cap O-ring x1



**3**

Front x2

- 6299 E-clip x2
- 6465 Shock Piston #1 x1
- 6460, 6418\* Shock Shaft, .71 stroke x1



**4**

**11**

**BAG F** **Front x2**

x1  
7217, 1777\*  
Pivot Ball

x1  
7217  
Eyelet

5422

**5**

**BAG F** **Rear x2**

x1  
6440  
Clamp

x1  
6440  
Thick Washer

x2  
6440  
Thin Washer

x2  
5407  
Red O-ring

remove burrs

**6**

**REAR SHOCKS**

→

**BAG F** **Rear x2**

x1

5422

**Racer's Tip:**  
Use Green Slime  
#1105 shock lube  
instead of oil.

Place on table  
and push down  
hard until clamp  
snaps into place

**7**

**Rear x2**

x1  
6469  
Shock Cap O-ring

**8**

**Rear x2**

x2  
6299  
E-clip

x1  
6465  
Shock Piston #1

x1  
6459, 6417\*  
Shock Shaft, 1.02" stroke

x2  
6466  
Shock Downstop  
(Limiter), 1/32

remove burrs

NO!

**9**

**Rear x2**

x1  
7217, 1777\*  
Pivot Ball

x1  
7217  
Eyelet

5422

**10**

5422

OIL

Fill to top with oil

**11**

Move shaft up and down to remove air bubbles

**12**

5422

OIL

Fill to top with oil

**13**

Push the shaft in

**14**

5422

OIL

1 Fill cap with oil

2 Retain oil as you screw cap on

x4  
6428 Shock Cap, molded

**15**

Tightening your shock cap

Move the shock shaft in and out a few times. Then push it all the way in

**16**

The shaft should push itself out by the amount shown

1/4" to 3/8"  
(6.3mm - 9.5mm)

**17**

If the shaft does not push out that far, do steps 15-17 again

**A**

**Bleeding the Shocks**

If the shocks push out farther than the distance in step 17, or you cannot push the shaft in until the eyelet hits the body, there is too much oil. Loosen the cap a half turn (with the shaft extended) and pump out a small amount of oil by pushing the shaft in. Retighten the cap and try steps 15-17 again.

**B**

**9035 KIT**

.370"

FRONT

.300"

REAR

**18**

**Front x2**

**NOT USED IN #9035 KIT**

6493 Spring, brown x1

6475 Spring Cup x1

6475 Spring Collar x1

8846 Preload Spacer, 1 each of .25, .12, .06, .03

Install spring then compress to insert cup

1 2 3 4

.25 .12 .06 .03

**19**

**Rear x2**

**NOT USED IN #9035 KIT**

6481 Spring, black x1

6475 Spring Cup x1

6475 Spring Collar x1

8846 Preload Spacer, 1 each of .25, .12, .03

Install spring then compress to insert cup

1 2 3 4

.25 .12 .03

**20**

**15**

# BAG F

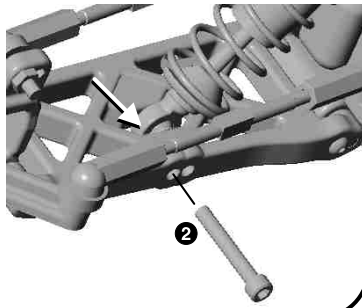
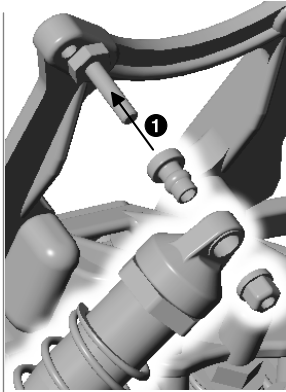
# Front x2

◀1:1▶

6472  
4-40/5-40 Plastic Nut

6473  
Shock Bushing

◀1:1▶ x1  
7738  
S.H. Screw  
4-40 x 7/8



21

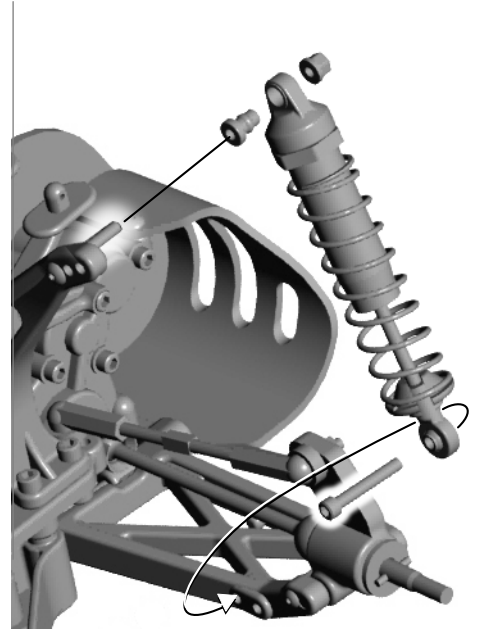
# Rear x2

◀1:1▶

6472  
4-40/5-40 Plastic Nut

6473  
Shock Bushing

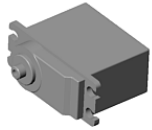
◀1:1▶ x1  
6925  
S.H. Screw  
4-40 x 1/2



22

# BAG G

1  
FIND YOUR SERVO TYPE



2  
SELECT YOUR SPACER(S)

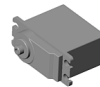


3  
SELECT YOUR SERVO HORN



1

1  
**STEERING SERVO TYPE**  
*(Steering servo is sold separately)*  
NOT ALL SERVOS ARE LISTED



2  
#7337  
SPACER

3  
#9180  
SERVO  
ARM



<b>Airtronics</b> 94102	no spacer	<b>A</b>
<b>Airtronics</b> 94738, 94157, 94158, 94257, 94258, 94357, 94358, 94452, 94453, 94751, 94755	thick spacer	<b>A</b>
<b>Hitec</b> HS-5625MG, HS-5645MG, HS-625MG, HS645MG	no spacer	<b>H</b>
<b>Hitec</b> HS-303, HS-300BB, HS-945MG, HS-925MG, HS-5945MG, HS-5925MG, HS-525MG, HS-525BB, HS-425BB, HS-422	thin spacer	<b>H</b>
<b>JR</b> Z4725, Z4750, Z2750, Z8450, Z8550, NES-4750	no spacer	<b>J</b>
<b>JR</b> Z250, Z550	thin spacer	<b>J</b>
<b>Futaba</b> S9204, S9250, S9450, S148	no spacer	<b>F</b>
<b>Futaba</b> S3003, S9202, S9101	thin spacer	<b>F</b>
<b>Futaba</b> S9404	thick spacer	<b>F</b>
<b>KO</b> PS-401, PS-2001, PS-2004, PS-2015, PS-2173, PS-2174, PS-2123, PS-2143, PS-2144	thin spacer	<b>J</b>

◀1:1▶

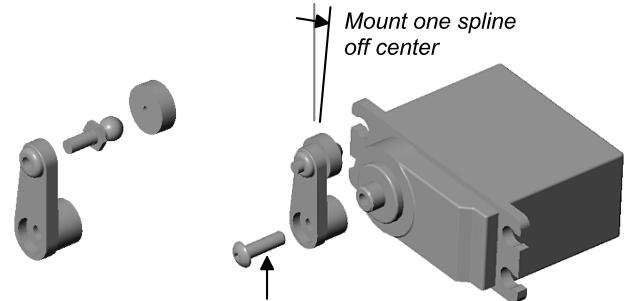
6272  
Ball End Dust Cover



9180  
Servo Horn

◀1:1▶

3858  
Ball End, black



Screw supplied with servo

2

# BAG G

**3**

7336, 1779\* x2  
Servo Mount

7336 x0 or x2  
Servo Spacer

6917, 4145\* x4  
4/40-3/8 B.H. Screw

7337 x4  
Spacer

RTR: 9181 x2  
RTR Clip-on Servo Mount

**RTR**  
Face letter away from servo

**KIT**

**4**

9170 x2  
Servo Link Cup

9170 x1  
Servo Link

1/16" gap

**5**

7673 x2  
F. H. Screw  
4-40 x 5/16

**6**

3934 x2  
B.H. screw  
3mm

6936 x2  
Washer

RTR: 6951 x1  
Set Screw

RTR: 6681 x1  
23 Tooth Pinion

RTR: 9627 x1  
15 Turn Motor

**MOTOR, PINION GEAR AND SET SCREW ARE NOT INCLUDED IN KIT**

**7**

**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 #3934 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.

**8**

6285 x2  
S.H.C. screw  
4-40 x 1/4

7461 (Team, FT) Gear Cover, clear  
7460 (RTR) Gear Cover, black

7461 x1  
Gear Cover Button

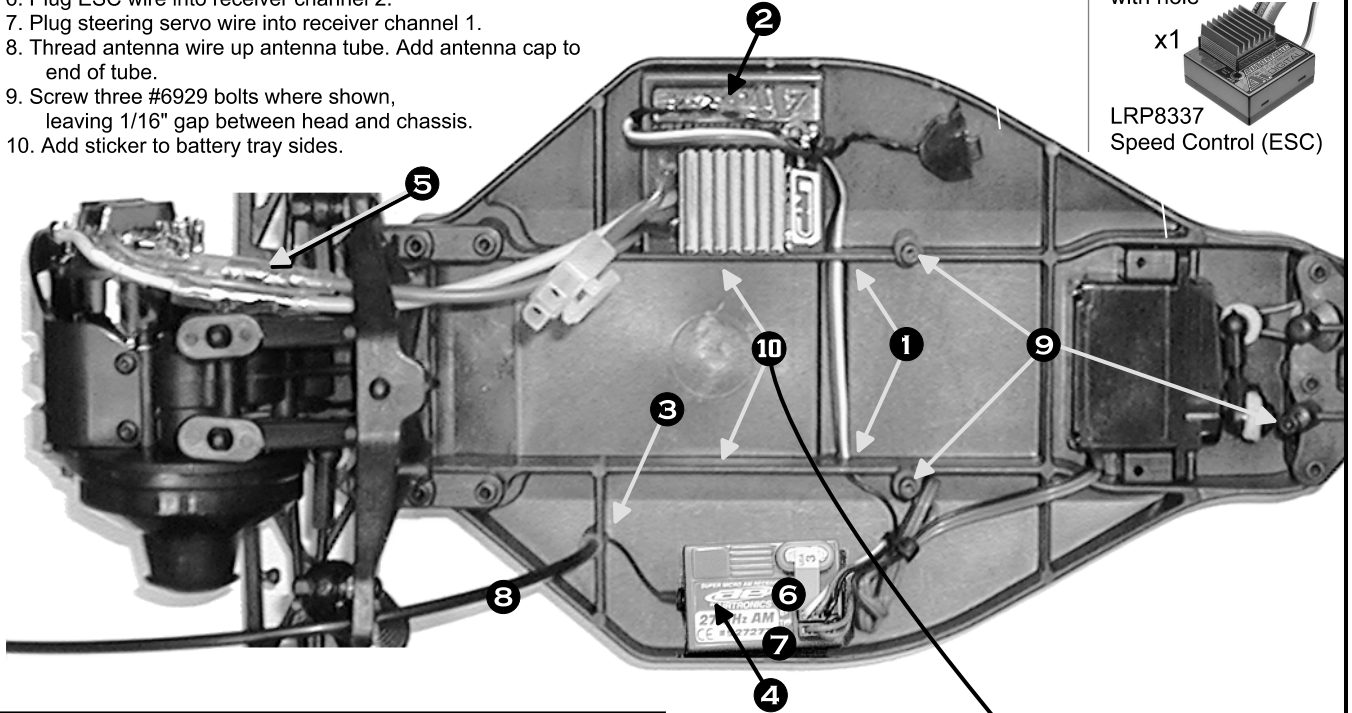
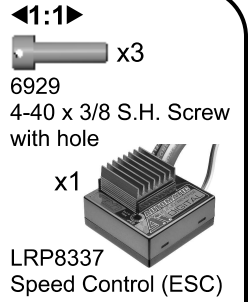
**17**

# BAG G

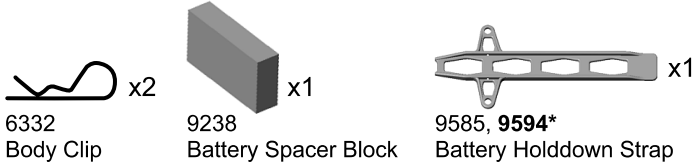


1. Feed ESC wire through holes as shown.
2. Attach servo tape under ESC and attach ESC where shown.
3. Feed antenna wire through antenna mount.
4. Attach servo tape under receiver and attach receiver where shown.
5. Thread ESC wires through tower and connect to motor.
6. Plug ESC wire into receiver channel 2.
7. Plug steering servo wire into receiver channel 1.
8. Thread antenna wire up antenna tube. Add antenna cap to end of tube.
9. Screw three #6929 bolts where shown, leaving 1/16" gap between head and chassis.
10. Add sticker to battery tray sides.

**SPEED CONTROL (ESC)  
IS NOT INCLUDED IN KITS**



9

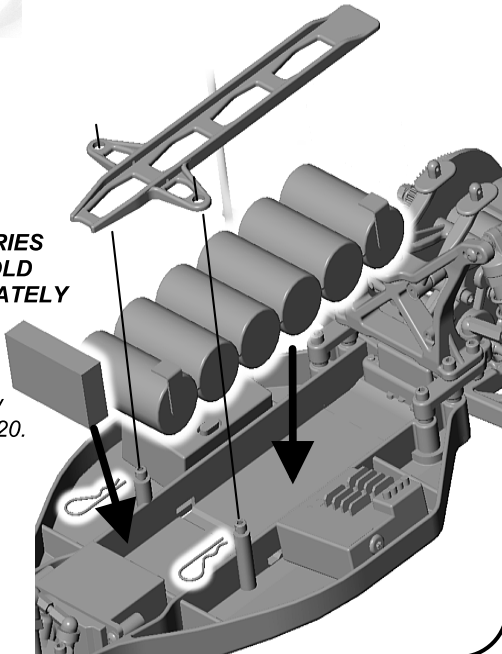


Your **OPTIONAL** batteries may come in stick pack form, shown at left.

**CONNECT BATTERY  
PLUG TO ESC PLUG**

**BATTERIES  
ARE SOLD  
SEPARATELY**

If you need help on  
assembling your battery  
pack, please see page 20.



**RECEIVER IS NOT  
INCLUDED IN KITS**



# BAG H

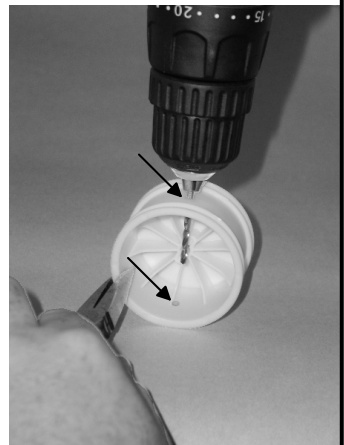
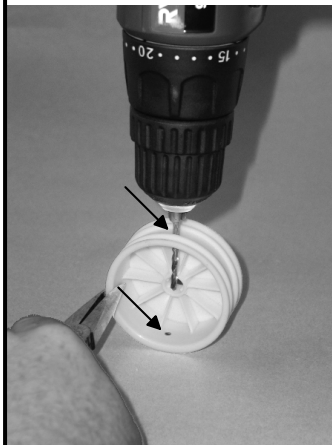
# 9034 kit



To vent your wheels, please  
use a drill or hobby knife to  
make two .12 holes in each  
wheel where shown.  
(Not necessary for RTR  
buggies.)

**FRONT**

**REAR**



1

10

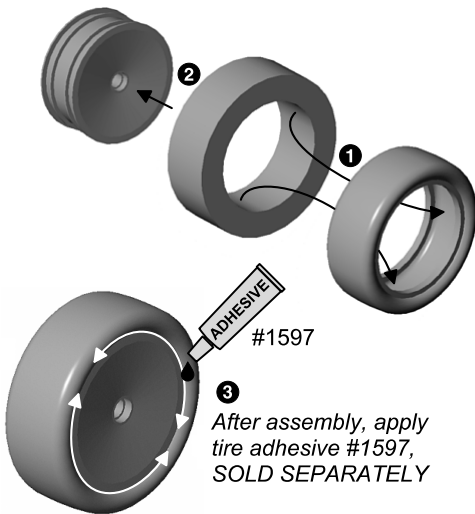
18



# BAG H

## Kit only--Front x2

-  x1  
9588  
Front Wheel
-  x1  
9591  
Front Tire
-  x1  
9591  
Front Insert

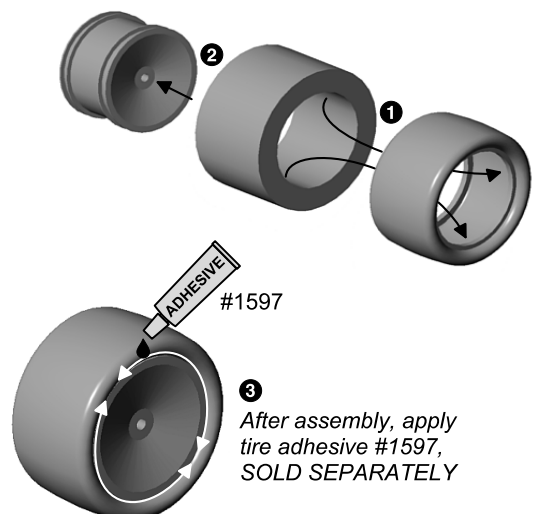


After assembly, apply tire adhesive #1597, SOLD SEPARATELY

2

## Kit only--Rear x2





-  x1  
9589  
Rear Wheel
-  x1  
9590  
Rear Tire
-  x1  
9590  
Rear Insert

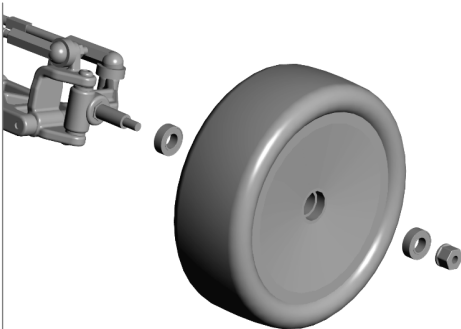


After assembly, apply tire adhesive #1597, SOLD SEPARATELY

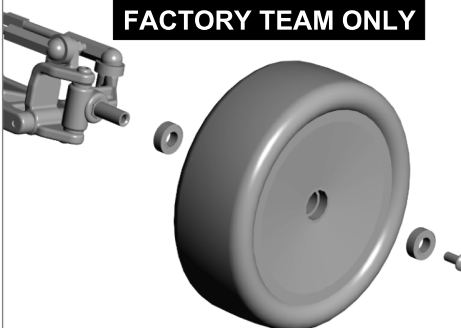
3

## Front x2

-  x1  
RTR: 9668  
Front Tire, premounted
-  x1  
6222  
4-40/5-40 locknut
-  x2  
3977, 6906\*  
3/16 x 3/8 ball bearing
-  x1  
6288\*  
4-40 X 1/4" BH screw



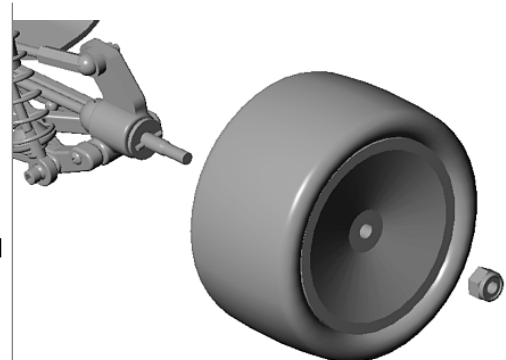
**FACTORY TEAM ONLY**



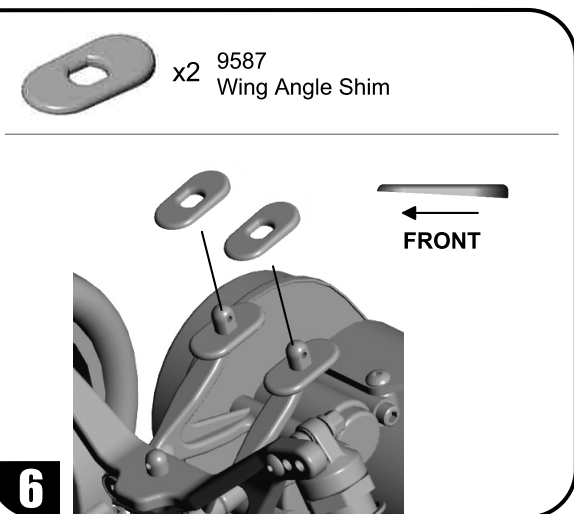
4

## Rear x2


-  x1  
6943\*  
8-32 Alum. Locknut
-  x1  
RTR: 6952  
8-32 Steel Locknut
-  x1  
RTR: 9669  
Rear Tire premounted



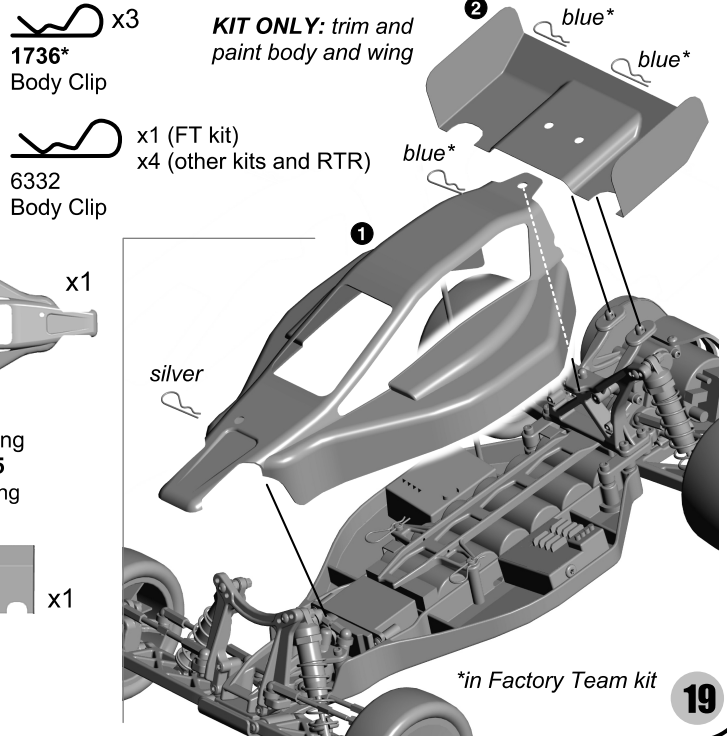
5



6

-  x1  
9614  
Body & Wing  
RTR: 9625  
Body & Wing
-  x1  
9666  
Wing

7



19

## FINAL ADJUSTMENTS

### RADIO ADJUSTMENTS

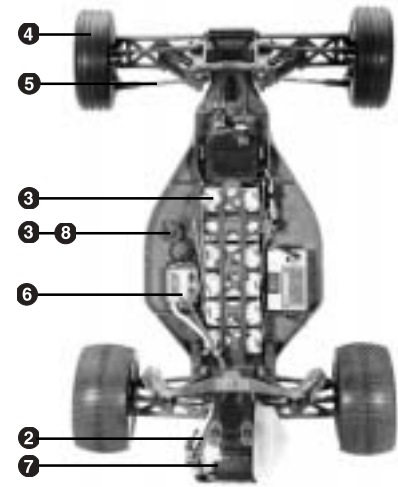
Use the following steps to make the final adjustments on your car.

1. Turn the transmitter on.
2. Make sure the motor is disconnected.
3. Connect your battery pack (if RTR) and/or turn the ESCs power switch on (if included).
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 radio manual.)
5. Adjust your steering trim (see radio manual) until the #9659 steering rack is centered under the top plate. Then, using the two steering

*Make these adjustments before you drive the buggy*

turnbuckles, adjust the front wheels so they are pointing straight ahead.

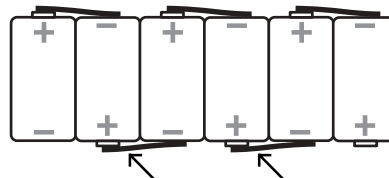
6. Adjust the ESC (electronic speed control) according to the speed control manufacturer's instructions. *Some manufacturers have the motor connected during adjustment and some do not.* Now turn the power switch off.
7. Connect the motor. Place your car on a block or car stand so that all four wheels are elevated. Turn the power switch on again. Check the ESC 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 TURNED OFF**.



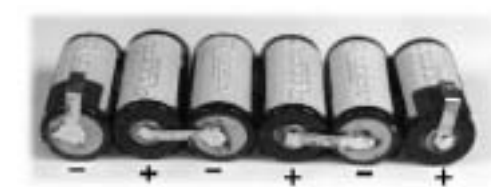
### ASSEMBLE BATTERY PACK

If you are not using a stick battery pack, here is how to assemble your battery pack. Solder individual cell connections as shown.

Team racers prefer battery bars for sturdier connections. Insulated wire will not allow the pack to fit in the battery slot.



*Solder connections with Reedy Battery Bars (#651)*



*← Aim negative lead toward the front*

### MOTOR GEARING

To get the most from your motor, proper gearing is important. The gear ratios listed in the chart are recommended starting gear ratios. Ratios can vary from track to track, but you should not change the pinion size more than one tooth from the recommended ratio.

**CAUTION!** *Increasing the pinion size by more than one tooth can damage your motor from excess heat.*

MOTOR	PINION	SPUR	FINAL DRIVE RATIO
24° stock (torque-based)	24	81	8.78:1
24° stock (RPM-based)	22	81	9.57:1
Spec 19	22	81	9.57:1
14 turn modified motor	23	81	9.16:1
13 turn modified motor	22	81	9.57:1
12 turn modified motor	21	81	10.03:1
11 turn modified motor	20	81	10.53:1
10 turn modified motor	19	81	11.08:1

## MAINTENANCE

### CHECK FOR FIT

You should periodically check all the moving parts: front and rear end, suspension arms, steering blocks, steering linkage, shocks, and so on. If any of these should get dirty or bind then your car's performance will suffer.

### MOTOR MAINTENANCE

Between runs, inspect the brushes to ensure they are moving freely in the brush holder. This is done by carefully removing the spring and sliding the brush in and out of the holder. If there is any resistance or rough spots, remove

*Follow these steps to keep your buggy in shape for racing*

the brush and carefully wipe the brush clean. This will clean off any buildup so the brush slides smoothly in the brush holder.

After every 3 to 5 runs, remove the brushes from the holders and inspect the tips for wear and/or burning. If there is a noticeable amount of wear, replace the brush with a new pair. If the tip is a burnt blue color, then the lubricant in the brush has been burned away and new brushes should be installed.

After every other battery charge you should carefully clean the motor. One recommended

method is to spray motor cleaner directly on the brush and commutator area. Run the motor for approximately 15 seconds. Disconnect the motor and spray it again, making sure the runoff is clear and clean. If the runoff is still dirty, repeat the spraying action until clean. After completing the cleaning, apply a small amount of lightweight oil to each bushing or bearing for lubrication. Be careful not to apply too much oil, for this will pick up dirt and contaminate the commutator and brushes.

### DIFFERENTIAL

Adjust the differential ("diff") as noted on page 6. Adjusting the diff is not meant to be a tuning option. If you can hear the diff making a "barking" or "chirping" sound on jump landings, either your diff is set too loose or your slipper clutch is set too tight. First check your slipper setting, then re-set the diff according to the instructions on step C-9.

### 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 4 more turns. 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.

## 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 med-grip loose tracks.



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

## STEERING BLOCKS

The included trailing steering blocks (# 9581) should be used in most cases. The Team especially recommends the trailing blocks on high-grip or "blue-groove".

Changing to the optional inline steering blocks (#9577) will give the car an overall aggressive feeling. Steering entering and exiting the corners is increased, but straight line stability is slightly reduced.

## 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 (#9580) are recommended in most cases. For more corner entry steering and less exit steering, try the optional 30° blocks (#9593).

The optional 20° blocks (#9592) will give you more exit steering and less entry steering.

## 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  $-1^\circ$ . Use the included #1719 camber gauge to set your camber as shown. Positive camber, where the top of the tire is leaning out, is not recommended.



*Testing camber with the camber gauge*

## FRONT TOE-IN

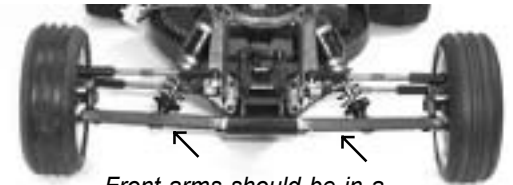
Toe-in describes the angle of the front tires when viewed from the top. With toe-in, the front of the tires point inward.

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 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 (referred 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 flat as seen in the following picture.



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

## 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  $2^\circ$ , and can be adjusted by installing or removing the included

shims underneath the arm mount.

The shim with 2 tabs is for  $2^\circ$  and the shim with 1 tab is for  $1^\circ$ . You can use any combination of shims to get 0, 1, 2, or  $3^\circ$  anti-squat. Adding anti-squat tends to make the car "rotate" more in corners, but doesn't handle as well through the bumps.



*Upper shim (with one tab),  $1^\circ$   
Lower shim (with two tabs),  $2^\circ$*

## 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*

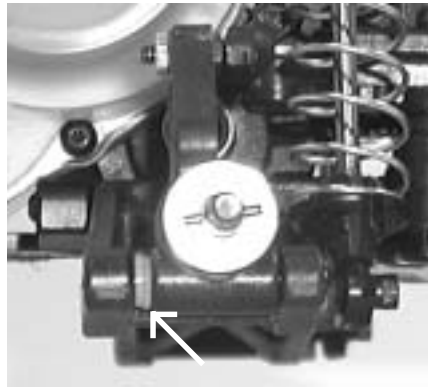
## REAR CAMBER

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  $-1^\circ$ . Use the included #1719 camber gauge to set your camber (shown above). 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.

## 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

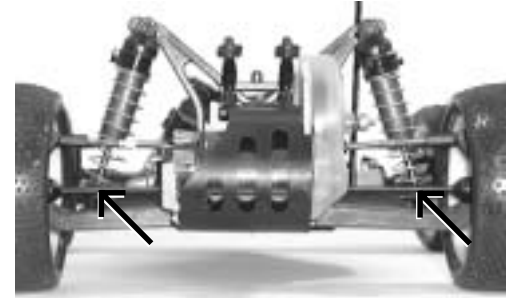
## ANTI-ROLL BAR

The optional #9635 B4 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.

## REAR RIDE HEIGHT

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

The rear ride height setting you should use most often is with the outdrive, driveshaft, and axles all on the same imaginary horizontal line (referred to as “bones level”). Check the ride height by lifting up the entire car about 8-12 inches off the bench and dropping it. After the suspension “settles” into place, add or remove pre-load clips so that the left & right driveshafts appear to be flat as seen in the following picture.



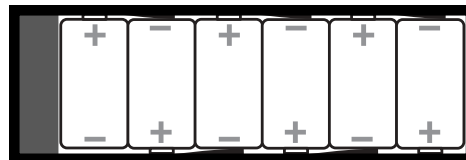
Dogbones should be in a straight line when ride height is set as “dogbones level”

## BATTERY PLACEMENT

This is one of the best adjustments on the car, and it can have the biggest effect on handling. Most of the time, moving the battery pack back will yield more rear traction and decrease steering. Conversely, moving the battery pack forward will yield less rear traction and increase steering. But in some cases on extremely high grip or extremely low grip tracks, moving the pack forward will make the buggy feel more balanced and actually improve rear grip.

### FRONT

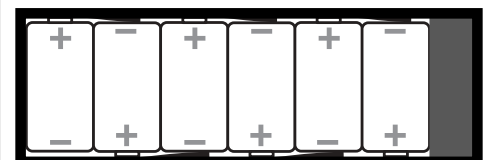
### REAR



Spacer to the front will place batteries to the rear

### FRONT

### REAR



Spacer to the rear will place batteries to the front

## SETUP SHEETS

The best way to get your car handling right is to go to our website, [www.rc10.com](http://www.rc10.com), and click on the links for setup sheets. Our Team 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 these 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 here.

For more information on setups, please go online to the Tuning Guide page and order the **#9656 Complete Tuning Guide: B4**.

## TEAM ASSOCIATED ONLINE

Get online help, tips, and new product information for your kit through Team Associated's web site, [www.TeamAssociated.com](http://www.TeamAssociated.com).

**Tech Help.** Answers to racer's questions are posted for all to learn from.

**Racer Spotlight.** Racers proudly show off their favorite kits. Get your painting ideas here!

**Setup Sheets.** Where racers find blank and standard setups to download for their kit.

**New Products.** Learn of new kits and parts before they are announced anywhere else.

**Team Associated Insider's Newsletter.** Sign up for it if you want the latest Team Associated news delivered right to your e-mail box.

**Hobby Shop and Track Directory.** Locate shops carrying spare parts and tracks where you may race your kit.

**Parts Catalogs.** Find the most up-to-date listing of parts for your kit.

**Contact Associated.** Our expert staff answers your toughest questions about Associated, Reedy, and LRP products.



**SETUP SHEET for the Team Associated RC10B4**

Driver \_\_\_\_\_  
 Track / City \_\_\_\_\_  
 Event \_\_\_\_\_ Date \_\_\_\_\_

**FRONT SHOCK MOUNTING & CAMBER LINK**

RIDE HEIGHT \_\_\_\_\_

CAMBER \_\_\_\_\_ °

**REAR SHOCK MOUNTING & CAMBER LINK**

RIDE HEIGHT \_\_\_\_\_

CAMBER \_\_\_\_\_ °

TOE-IN (+) / OUT (-) \_\_\_\_\_ °

BUMP STEER SPACER \_\_\_\_\_

AXLE HEIGHT  up  middle  down

CASTER  20°  25°  30°

STEERING BLOCK  trailing  inline

ANTI-SQUAT  0°  1°  2°  3°

ANTI-ROLL BAR  none  black (soft)  silver (med)  gold (heavy)

WHEELBASE  long  medium  short

**FRONT SHOCKS** OIL \_\_\_\_\_ wt

SPRING (color) \_\_\_\_\_ PISTON # \_\_\_\_\_

SHAFT  unobtainium  STD # LIMITERS \_\_\_\_\_

**REAR SHOCKS** OIL \_\_\_\_\_ wt

SPRING (color) \_\_\_\_\_ PISTON # \_\_\_\_\_

SHAFT  unobtainium  STD # LIMITERS \_\_\_\_\_

**FRONT TIRES & WHEELS**

FRONT TIRES \_\_\_\_\_

INSERTS \_\_\_\_\_ WHEELS \_\_\_\_\_

TRACTION COMPOUND \_\_\_\_\_

**REAR TIRES & WHEELS**

REAR TIRES \_\_\_\_\_

INSERTS \_\_\_\_\_ WHEELS \_\_\_\_\_

RADIO/BATTERIES	MOTOR	OTHER
RADIO _____ SERVO _____	MOTOR & WIND _____	BODY _____
ESC _____	BRUSHES _____	WING _____
DRAG BRAKE _____ INIT BRAKE _____	SPRING _____	WING ANGLE <input type="checkbox"/> 0° <input type="checkbox"/> 3° <input type="checkbox"/> 6°
BATTERY PLACEMENT <input type="checkbox"/> front <input type="checkbox"/> rear	PINION / SPUR _____ / _____	CHASSIS _____
BATTERIES _____		

**CONDITIONS**

smooth  sandy  
 bumpy  soft dirt  
 low traction  grass  
 med traction  blue groove  
 high traction  clay

wet  dusty  
 dry  other

**COMMENTS**

NOTES \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_