

ASSOCIATED 1:10 SCALE ELECTRIC BUGGY

B4J



INSTRUCTION MANUAL FOR THE TEAM ASSOCIATED RC10B4



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 Unobtanium shock shafts.

B4 Kit #9034

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

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

B4 RTR #9050

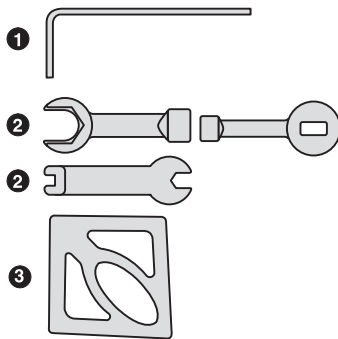
Blue aluminum shock bodies.
Associated dogbone rear axles.
Painted body.

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

TOOLS

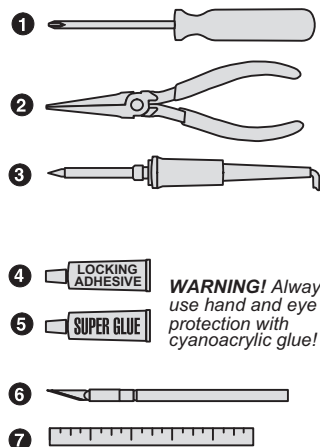
KIT TOOLS SUPPLIED

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



EXTRA STUFF NEEDED

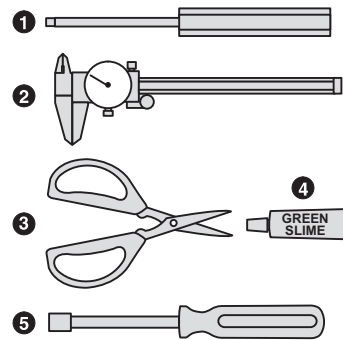
- 1 Phillips screwdriver
- 2 Needlenose pliers
- 3 Soldering iron (40-50 watts) and a small amount of Rosin core solder. Pencil-type soldering iron is better than the gun type. **DANGER! Tip will be HOT!**
- 4 Thread locking compound (#1596 Locking Adhesive or equivalent)
- 5 Super glue (cyanoacrylic 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 | 9050 |
|---|------|------|------|
| 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. | need | need | |

CONTACTING US

CUSTOMER SUPPORT

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



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ASSOCIATED ELECTRICS, INC.

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 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

BLACK GREASE 6588

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

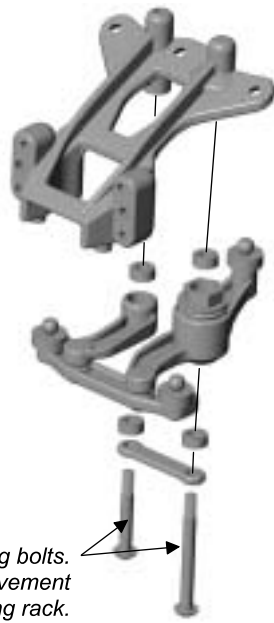
6

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

3

BAG A

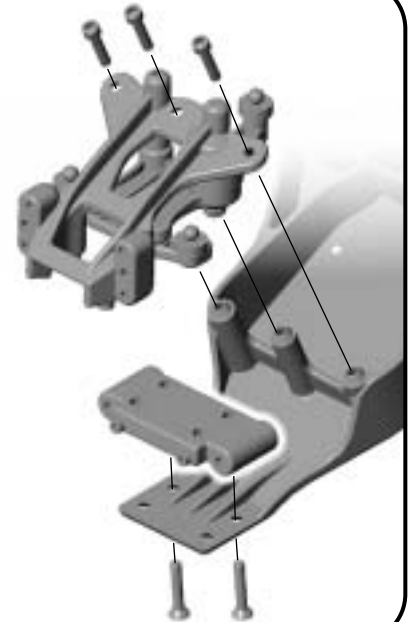
- 9566, 9567* Top Plate x1
- 3856, 3971* Steering Rack Bushing x4
- 9659 Steering Brace x1
- 9640 Steering Bolt, right x1
- 9640 Steering Bolt, left x1



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

7

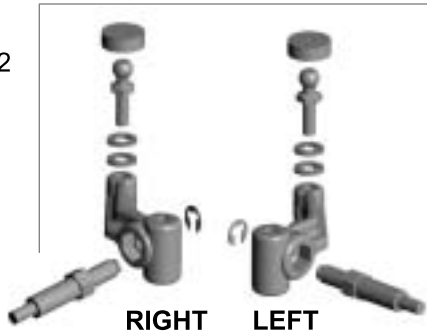
- 9563 Front Bulkhead x1
- 6925 S. H. Screw 4-40 x 1/2 x3
- 6915 F. H. Screw 4-40 x 5/8 x2
- 9560, 9561* B4 Chassis x1



8

BAG B

- 9581 Steering Block, right x1
- 9581 Steering Block, left x1
- 6272 Dust Cover, foam x2
- 6273 Ball End, long, silver x2
- 6299 E-clip x2
- 4187 Washer x2
- 9613, 1585* Front Axle, trailing x2



RIGHT

LEFT

1

- 9580 25° Caster Block, right x1
- 9580 25° Caster Block, left x1
- 6272 Dust Cover, foam x2
- 3858 Ball End, long, black x2

- 7260 4-40 Nut x2

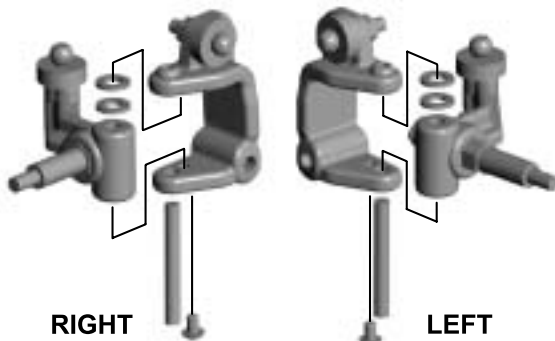


RIGHT

LEFT

2

- 9622 Kingpin x2
- 4187 Washer x4
- 9645 B. H. Screw 2-56 x 1/8 x2



RIGHT

LEFT

4

3

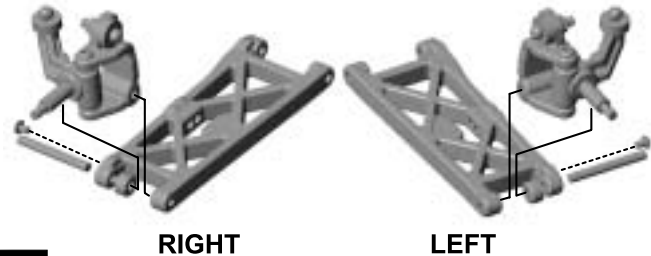
STEPS 1-3
ASSEMBLED
RIGHT

STEPS 1-3
ASSEMBLED
LEFT



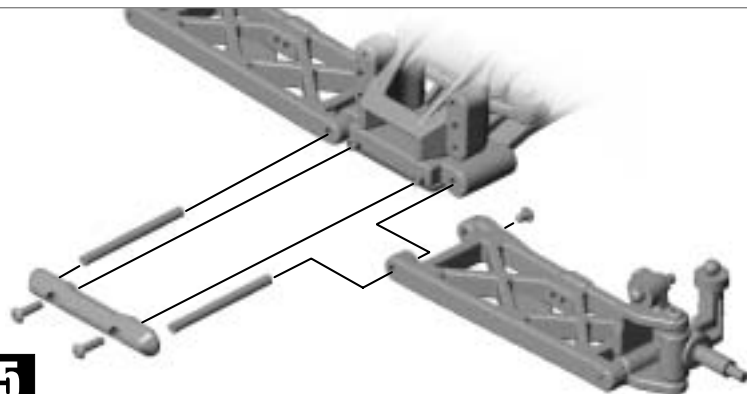
BAG B

- 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



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

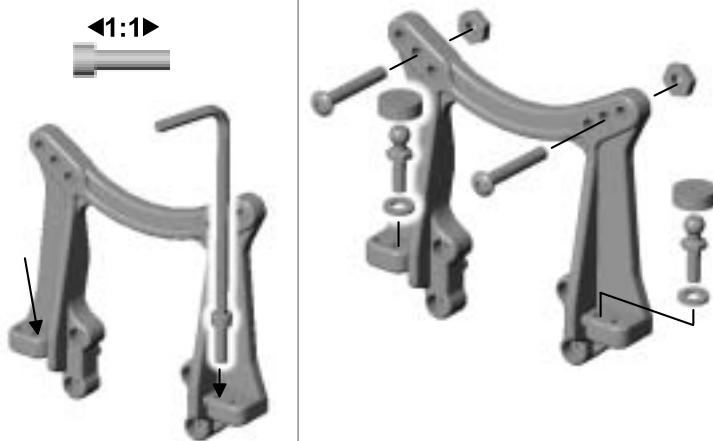


5

- 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

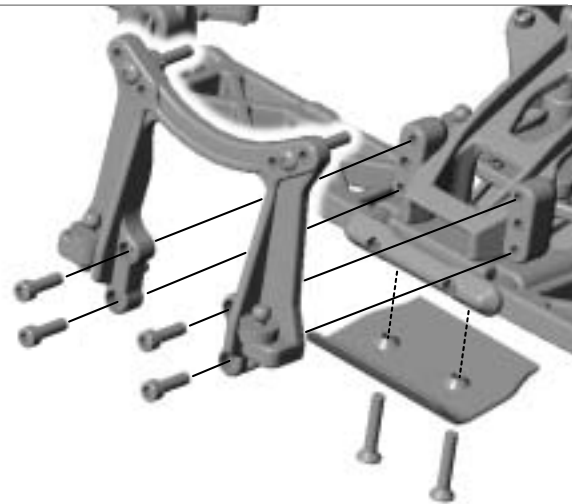
Pre-tap holes with a #6924 screw for easier ball end installation

- 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

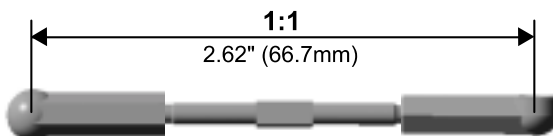
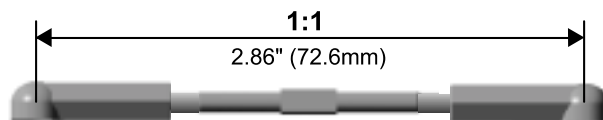
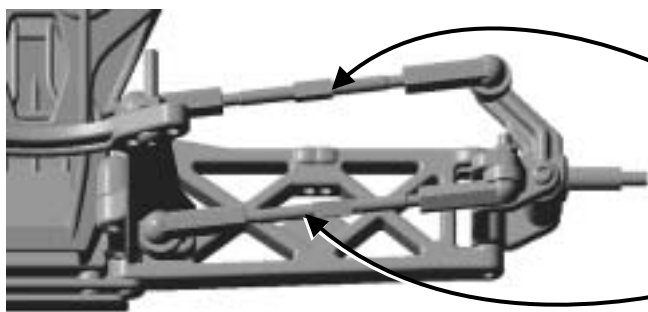
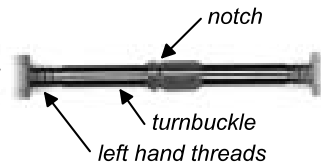


7

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

x2

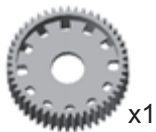
Orient the notch to the left throughout the buggy. It indicates which end has the left hand threads.



8

5

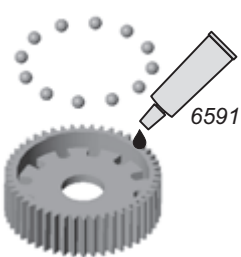
BAG C



7664
Diff Gear, 52T

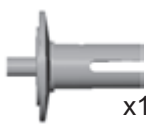
◀1:1▶
● x12

6581
Carbide Diff Balls
3/32



Fill ball holes
with tranny lube

1



7668, 1766*
Diff Outdrive
Hub, left



7666
Diff Ring



Apply tranny lube
to rim

2



7667, 1766*
Diff Outdrive
Hub, right



7666
Diff Ring



Apply tranny lube
to rim

3

◀1:1▶



6573
Thrust Washer

◀1:1▶



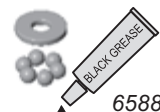
6574
Diff Thrust Ball,
5/64

◀1:1▶ x1



6575
Diff Thrust Bolt

Apply Black Grease
to washer to hold balls
in place



6588



4



6589
Ball Bearing,
5/32 x 5/16

OR



RTR 6597
Bushing,
5/32 x 5/16



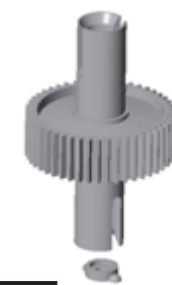
6575
Locking T-nut



6582
Diff Thrust Spring



6575
Diff Cover

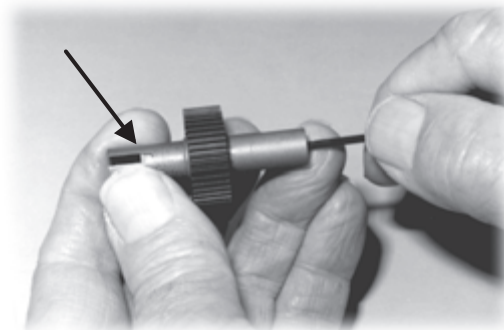


8

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



5



6



Compress spring first.

7

BAG C

10

11

12

13

14

Diff adjustment screw is on this end

15

Do not tighten this screw until page 9 step D8.

Racer's Tip:
 Apply a small amount of locking adhesive to these holes to prevent screws from loosening.

right wing mount left wing mount
 solid on one side hollow on both sides

solid side here right wing mount

16

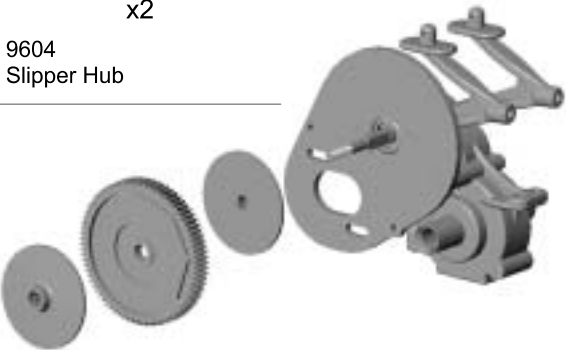
Press pads into spur gear.

7

BAG C



9604
Slipper Hub



17



9605
Slipper Spring



6629
Locknut, 5-40

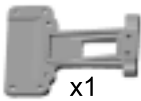
Install locknut until even with end of shaft. Then tighten 4 turns for kit slipper setting.

Compress spring first.



18

BAG D



9570
Rear Chassis Plate



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



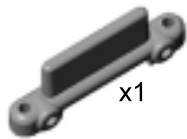
9621
Hinge Pin,
rear inner



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



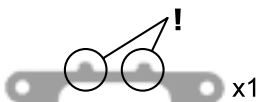
1



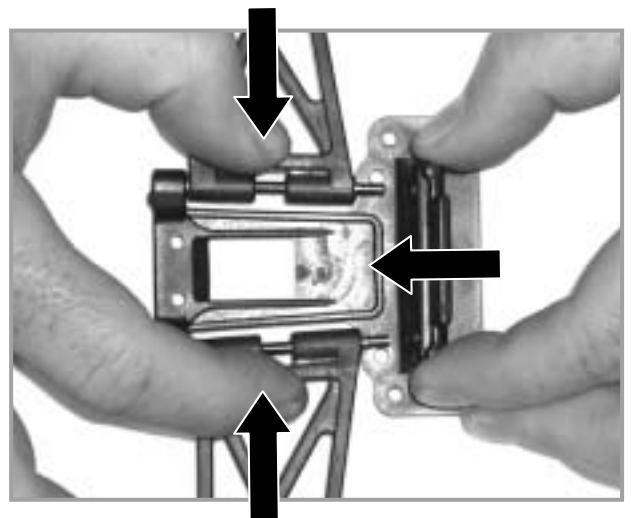
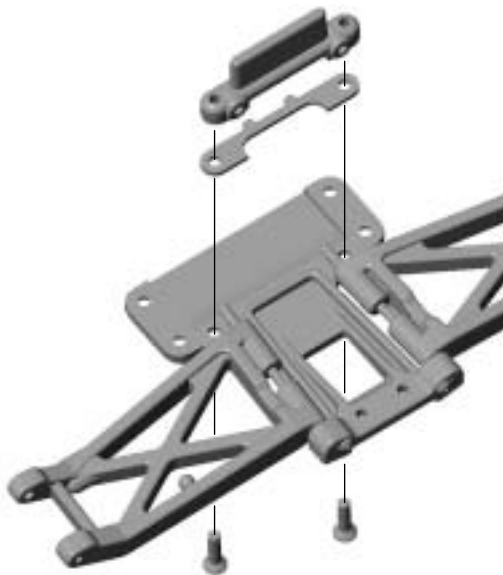
9571
Rear Arm Mount



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



9571
Anti-squat Shim, 2 deg.

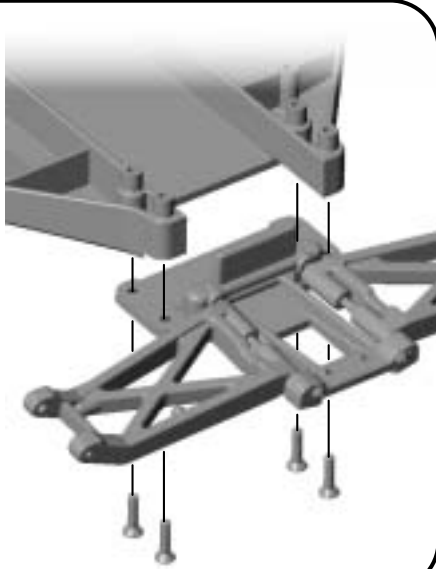


8

2

BAG D

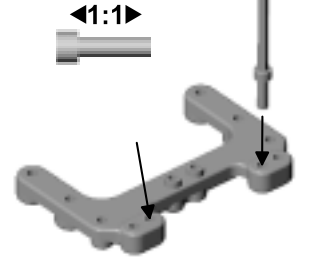
-  x4
9269
S. H. screw,
5-40 x 1/2



3

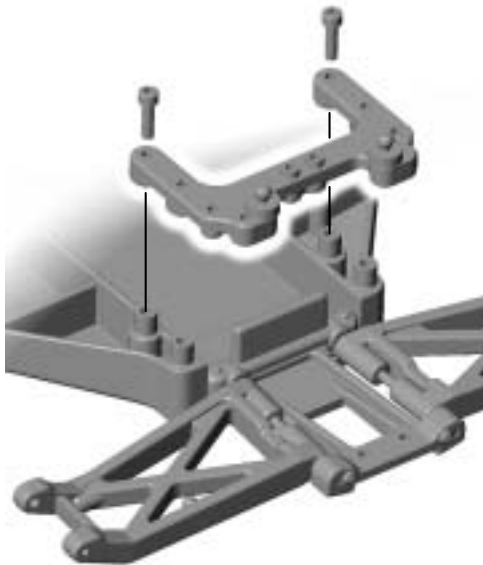
-  x2
6272
Dust Cover,
foam
-  x2
6273
Ball End,
long
-  x4
9630
washer
-  x1
9564, 9565*
Brace

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



4

-  x2
9643
S. H. Screw
5-40 x 7/16



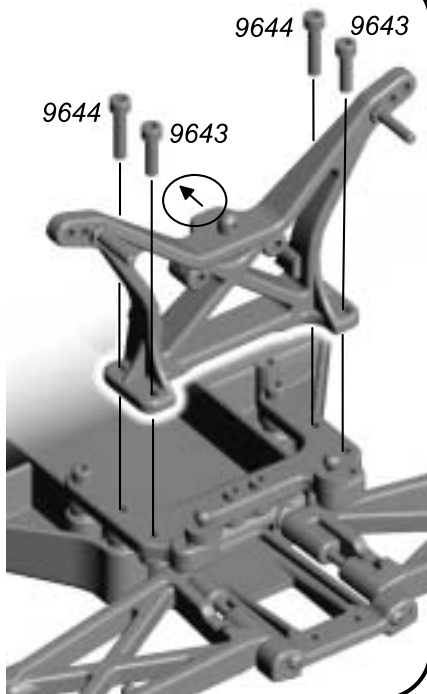
5

-  x2
7413
B. H. screw,
4-40 x 3/4
-  x2
7260
4-40 nut
-  x1
9572, 9573*
Rear Shock Tower





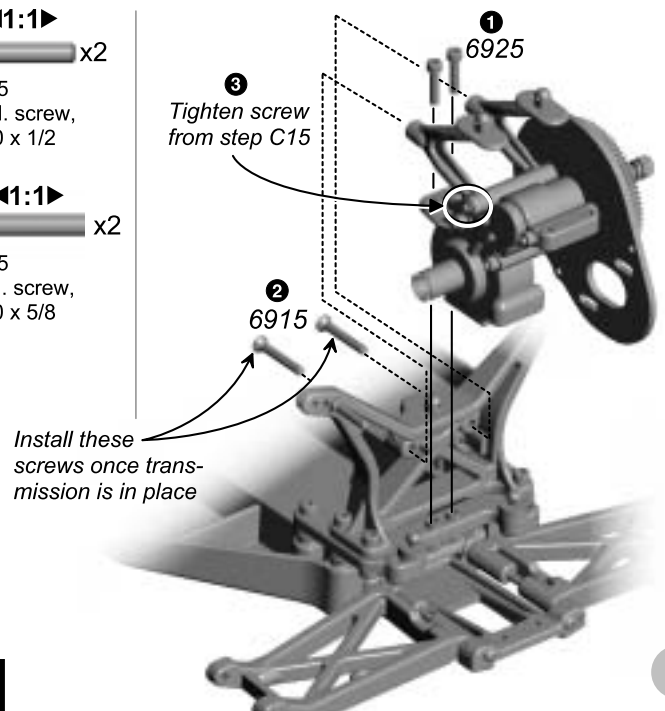
6

-  x2
9644
S. H. screw,
5-40 x 9/16
-  x2
9643
S. H. screw,
5-40 x 7/16



7

-  x2
6925
S. H. screw,
4-40 x 1/2
-  x2
6915
F. H. screw,
4-40 x 5/8

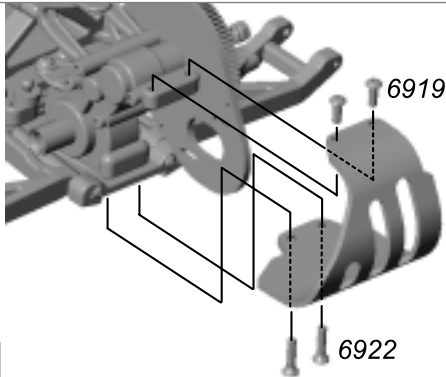


8

9

BAG D

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



9

BAG E

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



1

- ◀1:1▶ x2
7260
Plain Nut

RTR only x2

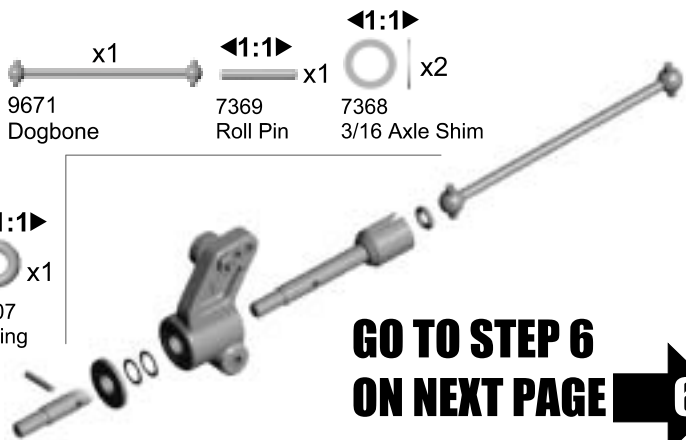
- ◀1:1▶ x2
7377
Bearing Spacer
- ◀1:1▶ x4
3977, 6906*
Ball Bearing, 3/16 x 3/8



2

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

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



GO TO STEP 6 ON NEXT PAGE

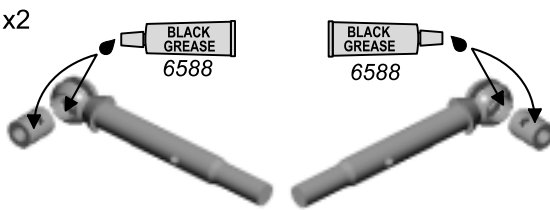
6

3

BAG E

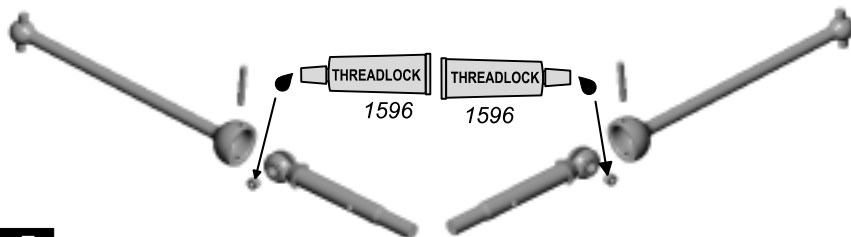
9034, 9035

- x2
9598
MIP CVD Axle
- x2
7381
CVD Coupling



3

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



4

9034, 9035

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



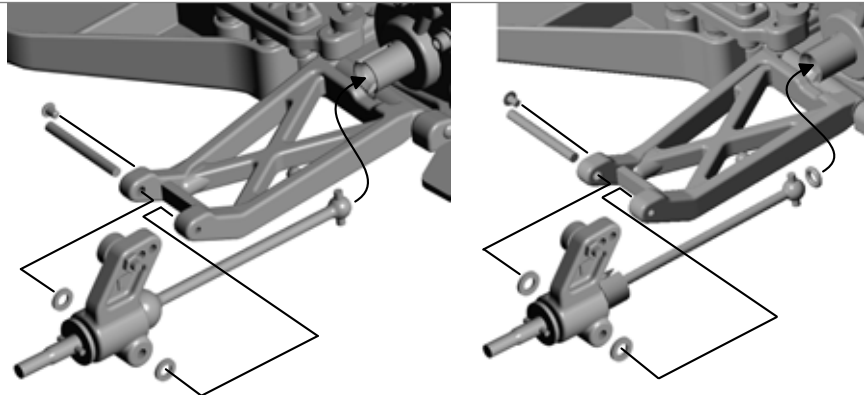
5

10

BAG E

x2

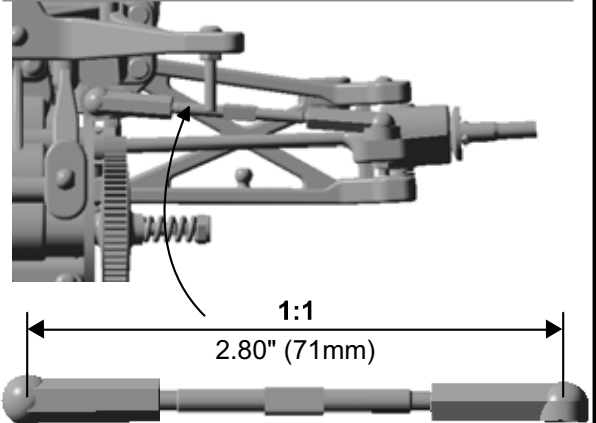
- 9622 Hinge Pin, rear outer x1
- 9645 B.H. Screw 2-56 x 1/8 x2
- 4187 Spacer x2
- RTR: 5407 O-ring x1



6 with MIP CVDs RTRs with Assoc. Axle

x2

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

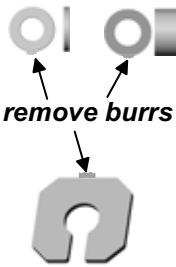


7

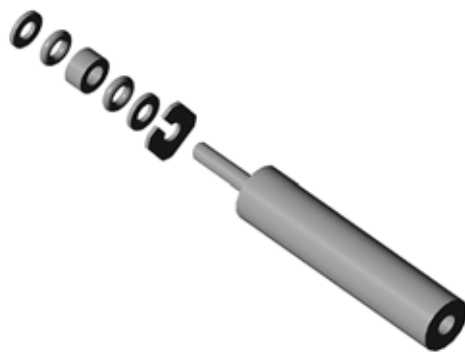
BAG F

Front x2

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

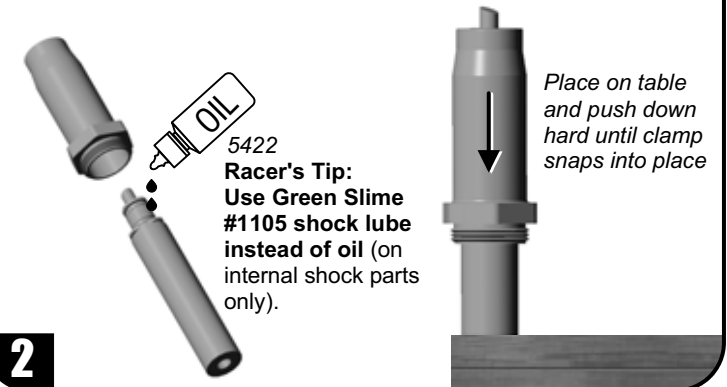


1



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

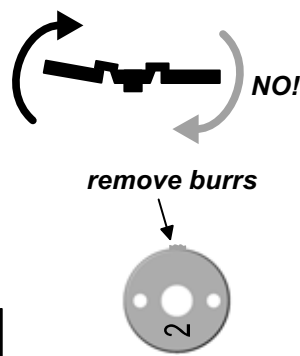
- 6469 Shock Cap O-ring x1



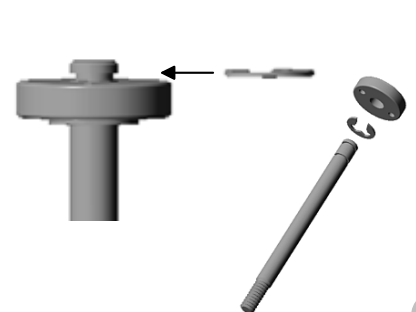
3

Front x2

- 6299 E-clip x2
- 6465 Shock Piston #2 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

Tightening your shock cap

15

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

5422

OIL

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

4 Install spring then compress to insert cup

3

2

1

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

4 Install spring then compress to insert cup

3

2

1

4

.25 .12 .03

20

BAG F

Front x2

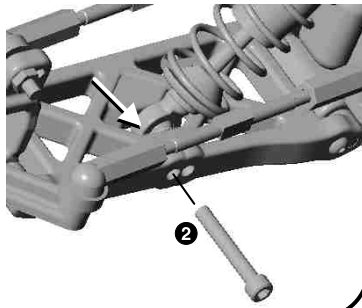
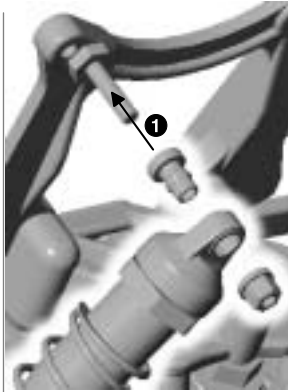
◀1:1▶

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

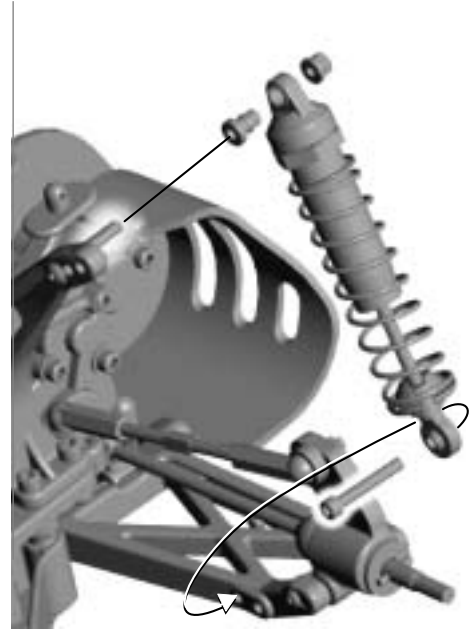
◀1:1▶

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



| | | |
|--|--------------|----------|
| Airtronics 94102 | no spacer | A |
| Airtronics 94738, 94157, 94158, 94257, 94258, 94357, 94358, 94452, 94453, 94751, 94755 | thick spacer | A |
| Hitec HS-5625MG, HS-5645MG, HS-625MG, HS645MG | no spacer | H |
| Hitec HS-303, HS-300BB, HS-945MG, HS-925MG, HS-5945MG, HS-5925MG, HS-525MG, HS-525BB, HS-425BB, HS-422 | thin spacer | H |
| JR Z4725, Z4750, Z2750, Z8450, Z8550, NES-4750 | no spacer | J |
| JR Z250, Z550 | thin spacer | J |
| Futaba S9204, S9250, S9450, S148 | no spacer | F |
| Futaba S3003, S9202, S9101 | 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 |

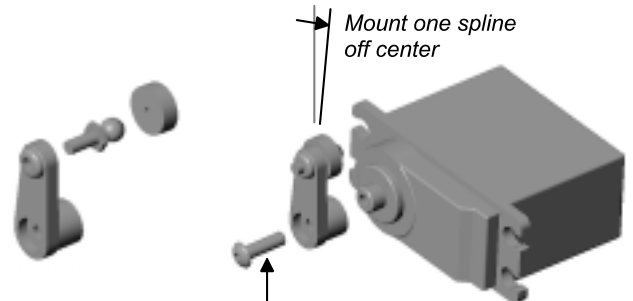
◀1:1▶

6272
Ball End Dust Cover

9180
Servo Horn

◀1:1▶

3858
Ball End, black



Screw supplied with servo

2

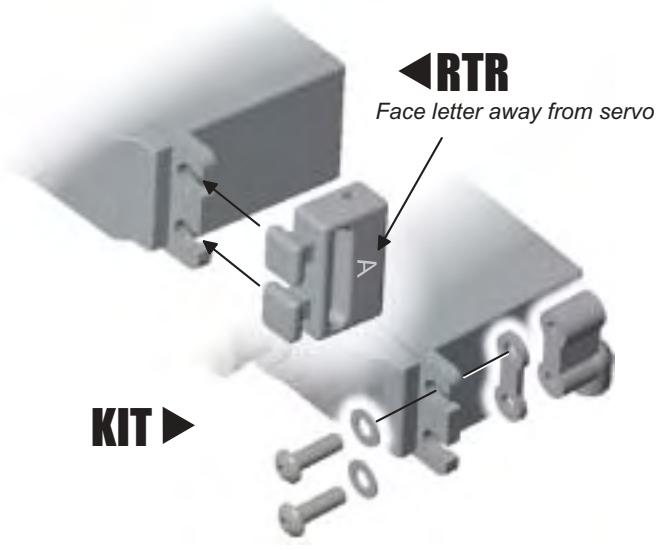
- x2
7336, 1779* Servo Mount
- x0 or x2
7336 Servo Spacer

- x4
6917, 4145* 4/40-3/8 B.H Screw
- x4
7337 Spacer



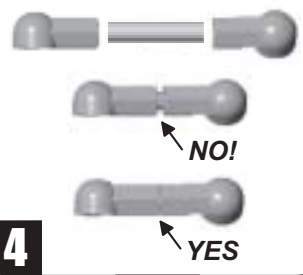
RTR: 9181
RTR Clip-on Servo Mount

3



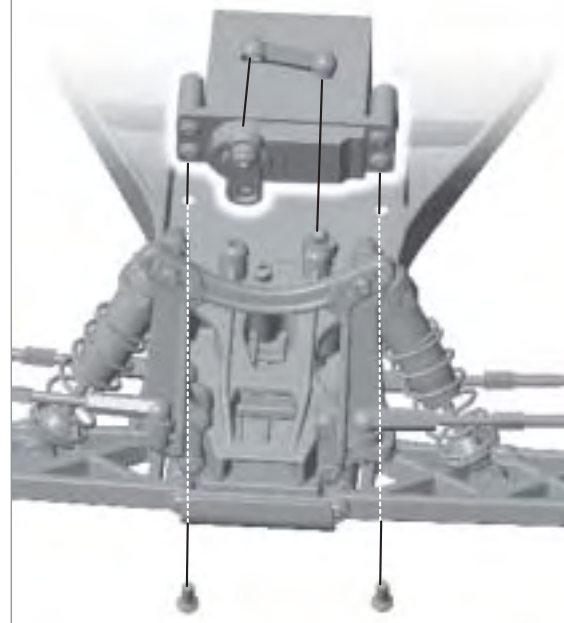
- x2
9170 Servo Link Cup

- x1
9170 Servo Link



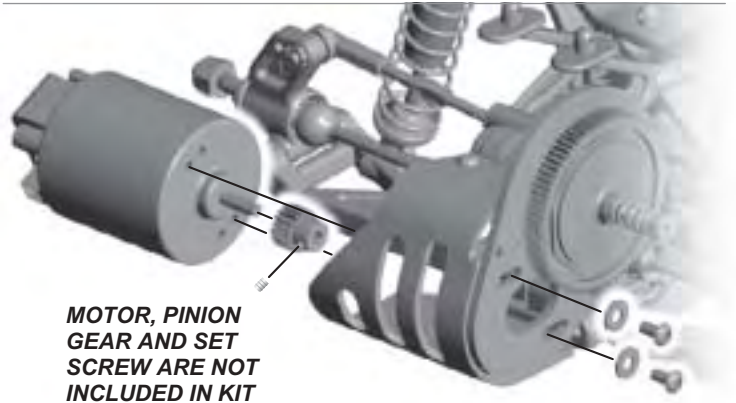
4

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

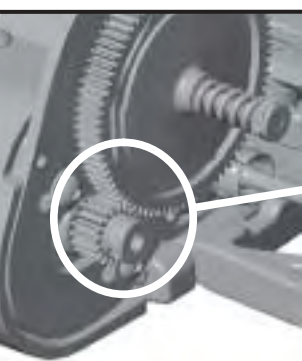


5

- x2
3934 B.H. screw 3mm
- x2
6936 Washer
- x1
RTR: 6951 Set Screw
- x1
RTR: 6681 23 Tooth Pinion
- x1
RTR: 9624 17 Turn Motor



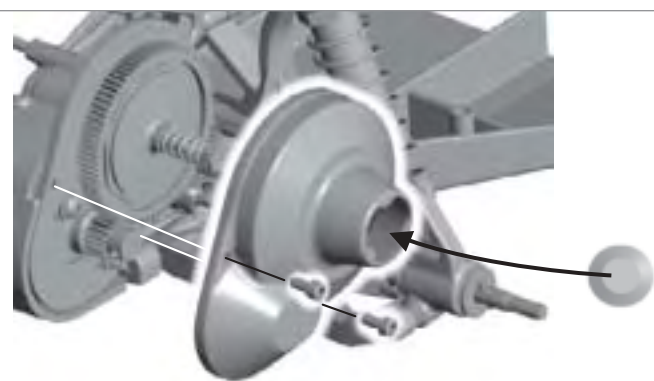
6



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.

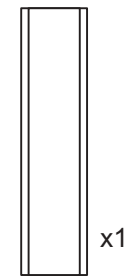
7

- x2
6285 S.H.C. screw 4-40 x 1/4
- x1
7461 Gear Cover, clear
- x1
7461 Gear Cover Button



8

17



x1

6727
Servo Tape
double-sided



x1

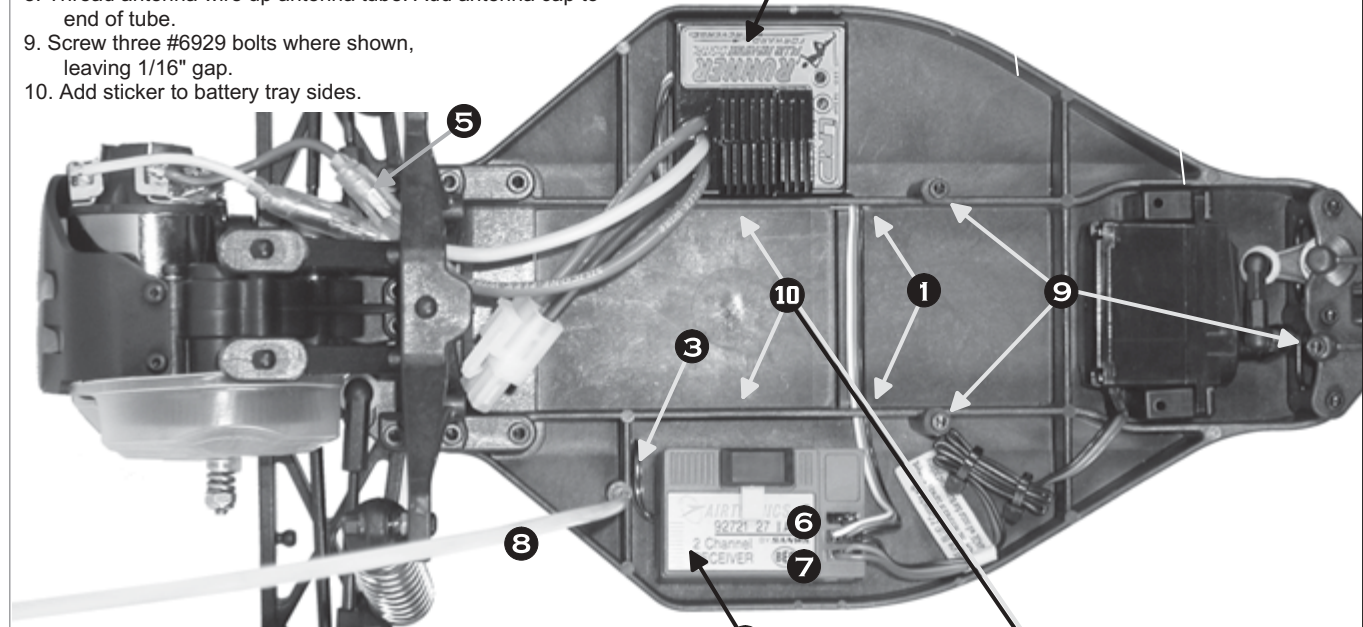
6338
Antenna and
Antenna Cap

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.
10. Add sticker to battery tray sides.

◀1:1▶

6929 x3
4-40 x 3/8 S.H. Screw
with hole

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



9

6332 x2
Body Clip

9238 x1
Battery Spacer Block

9585, 9594* x1
Battery Holddown Strap

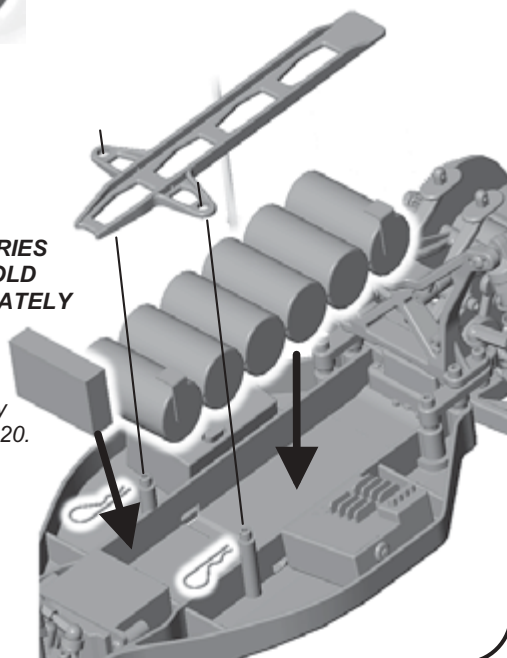


Your **OPTIONAL** batteries may come in stick pack form, shown at left.

**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

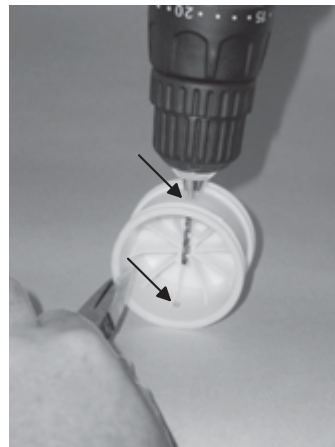
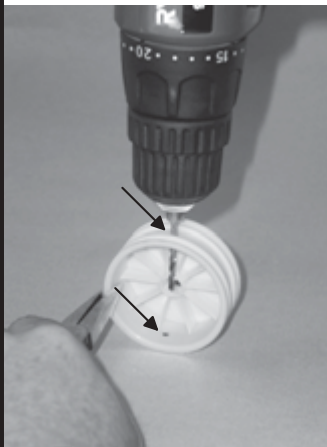
9588 x2
Front Wheel

9589 x2
Rear Wheel

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



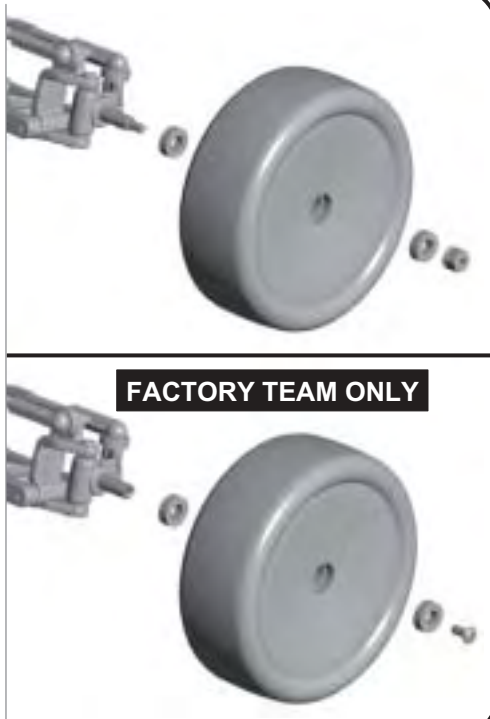
Kit only--Rear x2

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



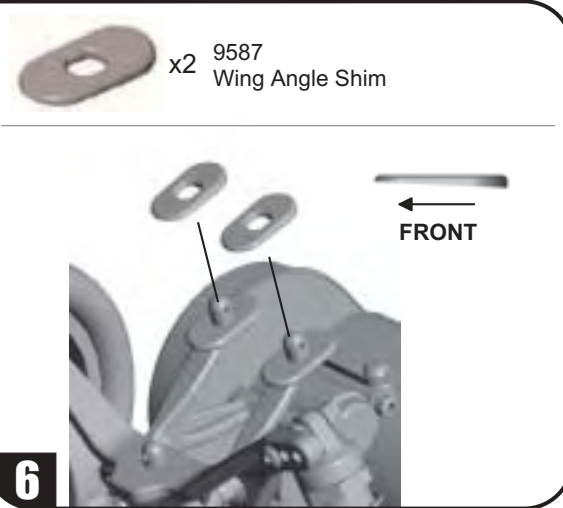
Front x2

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



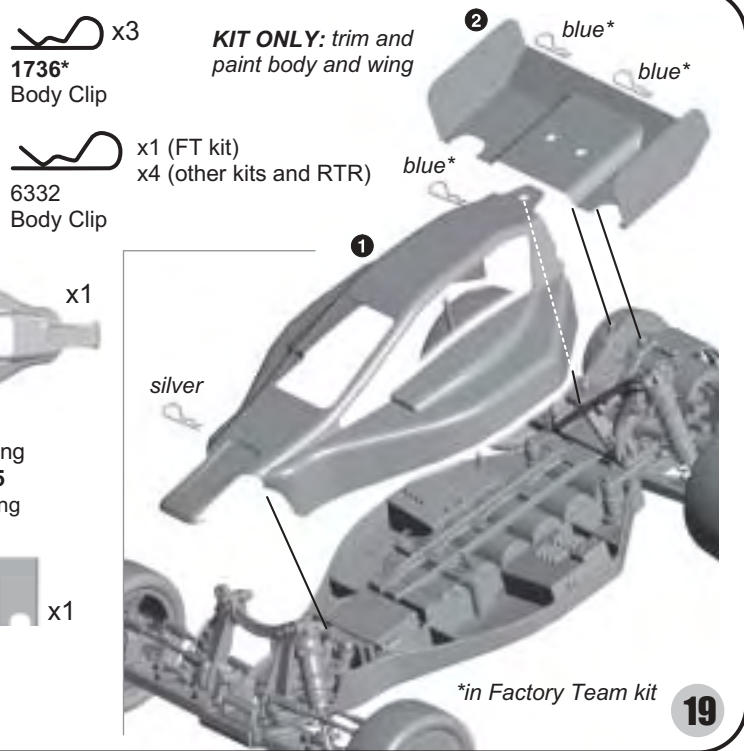
Rear x2

- ◀1:1▶
x1
3438, 6943*
8-32 Alum. Locknut
- RTR: 6952
8-32 Steel Locknut
- x1
RTR: 9669
Rear Tire premounted



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

7



FINAL ADJUSTMENTS

RADIO ADJUSTMENTS

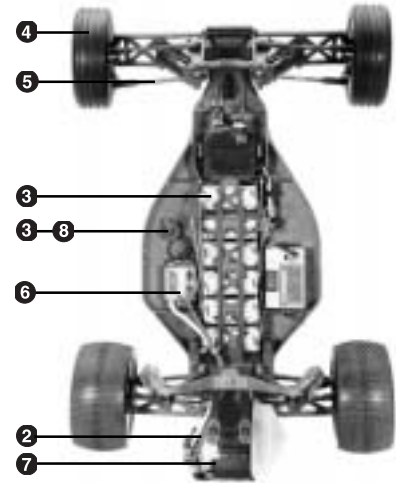
Use the following steps to make the final adjustments on your car.

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.

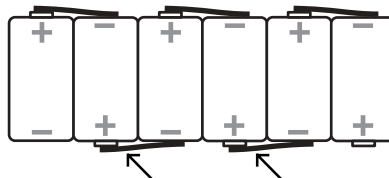
6. Adjust the ESC (electronic speed control) according to the speed control manufacturer's instructions. *Some manufacturers have the motor connected during adjustment and some do not.* Now turn the power switch off.
7. Connect the motor. Place your car on a block or car stand so that all four wheels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



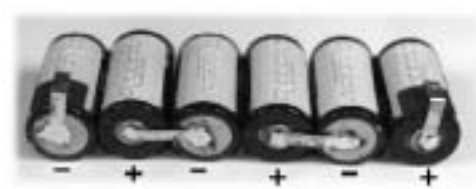
ASSEMBLE BATTERY PACK

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 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° . 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

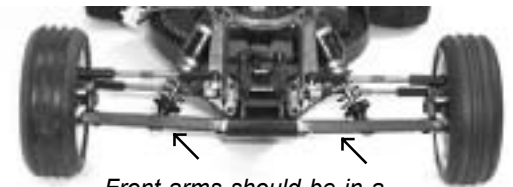
Toe-in describes the angle of the front tires when viewed from the top. With toe-in, the front of the tires point inward.

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° , and can be adjusted by installing or removing the included

shims underneath the arm mount.

The shim with 2 tabs is for 2° and the shim with 1 tab is for 1° . You can use any combination of shims to get 0, 1, 2, or 3° 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°
Lower shim (with two tabs), 2°*

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

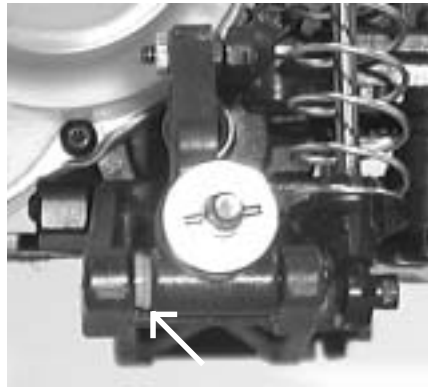
REAR CAMBER

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 (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

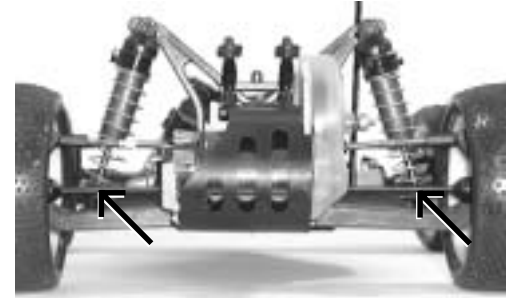
ANTI-ROLL BAR

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.



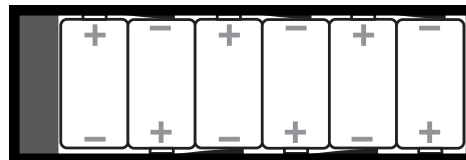
Dogbones should be in a straight line when ride height is set as “dogbones level”

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

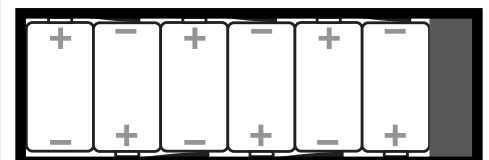
REAR



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, 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.

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 _____ °

TOE-IN (+) / OUT (-) _____ °

BUMP STEER SPACER _____

AXLE HEIGHT up middle down

CASTER 20° 25° 30°

STEERING BLOCK trailing inline

FRONT SHOCKS OIL _____ wt

SPRING (color) _____ PISTON # _____

SHAFT unobtainium STD # LIMITERS _____

FRONT TIRES & WHEELS

FRONT TIRES _____

INSERTS _____ WHEELS _____

TRACTION COMPOUND _____

REAR SHOCK MOUNTING & CAMBER LINK

RIDE HEIGHT _____

CAMBER _____ °

ANTI-SQUAT 0° 1° 2° 3°

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

WHEELBASE long medium short

REAR SHOCKS OIL _____ wt

SPRING (color) _____ PISTON # _____

SHAFT unobtainium STD # LIMITERS _____

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 _____

