

# 1:12 SCALE ON ROAD CAR KIT



**INSTRUCTION MANUAL FOR THE  
TEAM ASSOCIATED RC12L4 KIT**

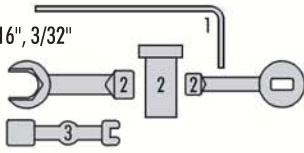


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# REQUIRED EQUIPMENT TO OPERATE YOUR RC12L4

## kit supplied tools

- 1 - Allen wrenches, .050", 1/16", 3/32"
- 2 - shock tools
- 3 - plastic turnbuckle wrench



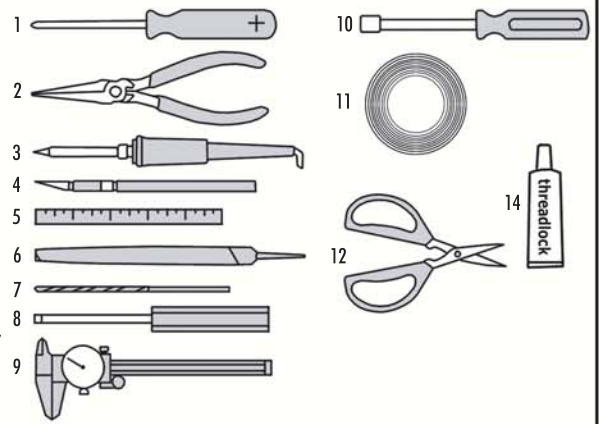
## additional items needed to operate

- 1 - R/C two channel surface frequency radio system.
- 2 - \*4-cell batteries (we recommend Reedy Modified line of batteries).
- 3 - Battery Charger (we recommend Reedy Modified line of competition chargers).
- 4 - \*Electronic Speed Control (we recommend LRP line of ESC's).
- 5 - \*R/C electric motor (we recommend Reedy Modified line of stock & modified motors).
- 6 - \*Pinion gear, size to be determined by type and wind of motor you will be using.
- 7 - \*1/12 scale Lexan body and wing.

\* Available from Associated. See your catalog.

## helpful tools (not required)

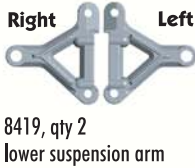
- 1 - Phillips screwdriver, #2
- 2 - needlenose pliers
- 3 - soldering iron (40-50 watts) and a small amount of Rosin core solder. **WARNING!** Iron tip **WILL** get **HOT!**
- 4 - hobby knife. **WARNING!** Knife blade **WILL** be **SHARP!**
- 5 - precision ruler
- 6 - file
- 7 - hand drill with 3/32" (or #43) drill bit
- 8 - Allen drivers: .050" (#6957), 1/16" (#6958), 3/32" (#6960), 2.5mm (#6961)
- 9 - vernier calipers
- 10 - nut drivers: 3/16", 1/4", 11/32"
- 11 - strapping tape
- 12 - hobby scissors (#1737)
- 13 - thread locking compound (AE #1596)



## 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 break the molded parts or strip the threads during installation.

## Bag A Step 1



Table

**NOTE!**  
Shoulder up

## Step 2



start with 10 degree mount



## Step 3

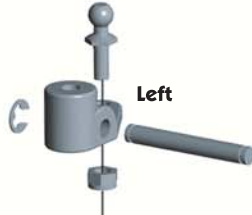


8405, qty 2  
upper suspension  
arm

Table

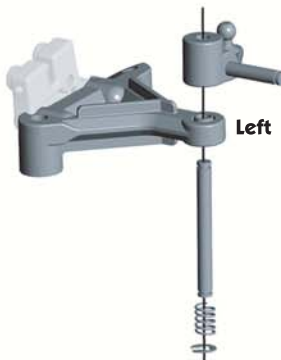
**NOTE!**  
Shoulder down

## Step 4

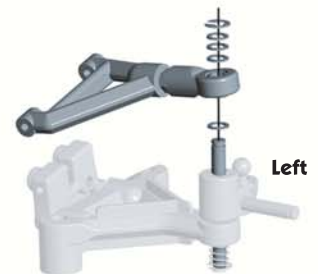


**NOTE!**  
Location of axle hole

## Step 5



## Step 6





**Step 7**

4473, qty 1  
spring  
adjusting nut

**Step 8**

6274, qty 1  
ball cup

4471B, qty 1  
shock shaft end  
blue aluminum

**Step 9**

6951, qty 1  
set screw

4476, qty 1  
green spring

**Shock Disassembly**

Carefully insert the disassembly tool into one of the rounded grooves of the star clip and pop it out.

**Step 10**

**Bag E Step 1**

4448, qty 2  
ball end  
blue aluminum

4449, qty 2  
4-40 locknut

3760, qty 1  
servo saver

enlarge holes slightly

**Step 2**

6515, qty 1  
servo saver screw

**Servo Applications**

We suggest the following servos:

Airtronics - 94141Z.....	56oz/.16
Airtronics - 94145Z.....	32oz/.07
Futaba - S9650.....	62oz/.11
JR - JRPSZ3550.....	38oz/.11
KO Propo - PDS-947FET.....	38oz/.09

A = 1/10 scale applications  
B = 1/12 scale applications

1 = servo back  
2 = servo forward

**Step 3**

4145, qty 4  
4-40 x 5/16" shcs  
blue aluminum

4562, qty 2  
servo mounts  
blue aluminum

7337, qty 4  
#4 washer

use hole B

**Step 4**

6934, qty 2  
4-40 x 3/8" fhcs  
blue aluminum

4449, qty 2  
4-40 locknut

use hole 1

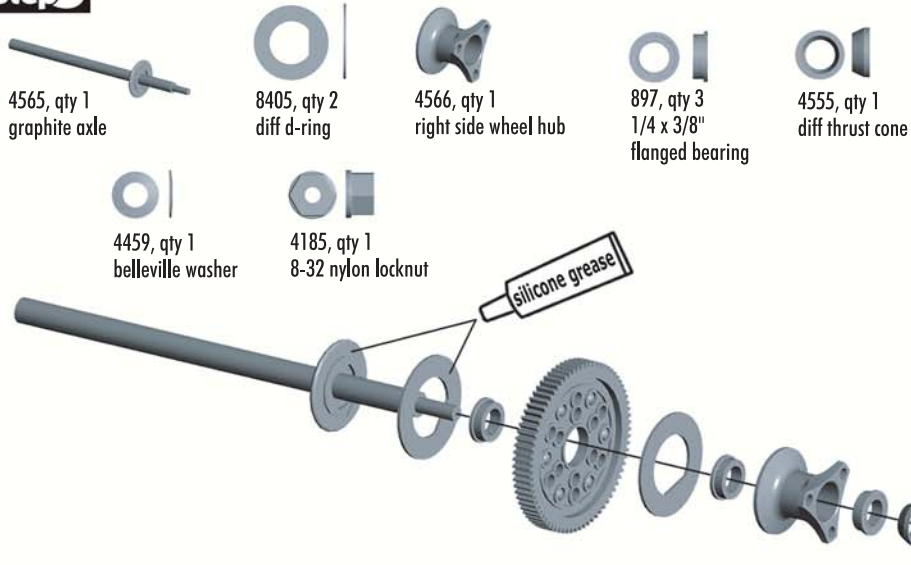
**Step 5**

6274, qty 4  
ball cup

1404, qty 2  
1.775" titanium turnbuckle, blue

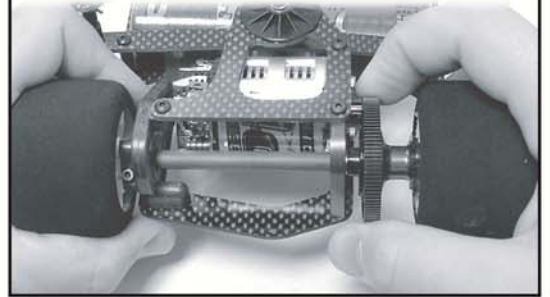
2.18" (55mm)

### Step 3

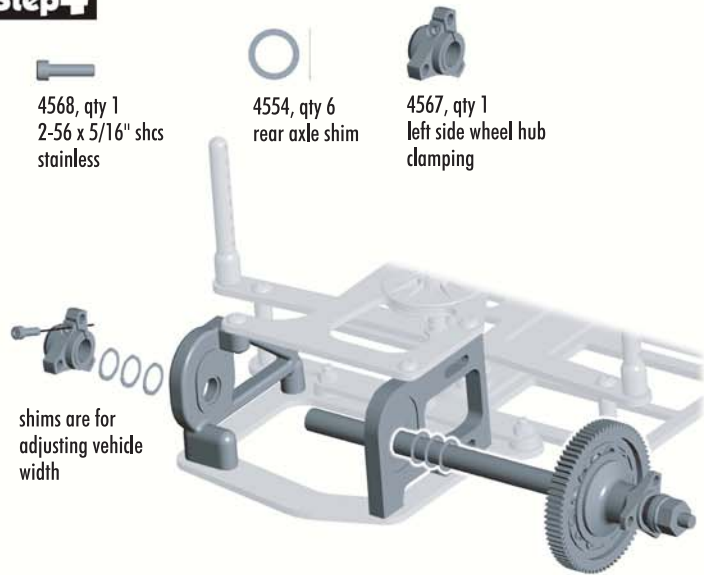


### Differential Adjustment

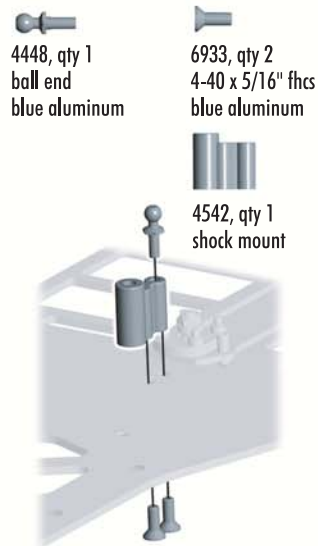
While holding both rear wheels with your hands, use your right thumb and index finger to try to rotate the spur gear. The spur gear should be very difficult to rotate. If you can rotate it easily, tighten the #4185 11/32" nut at the end of the axle, *a little at a time*, until the spur gear is difficult to rotate.



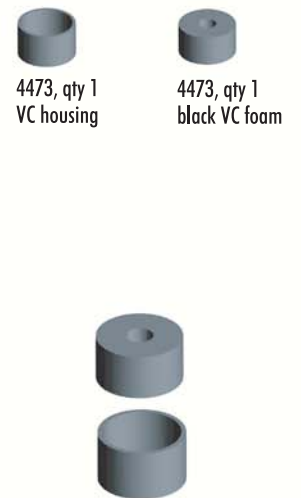
### Step 4



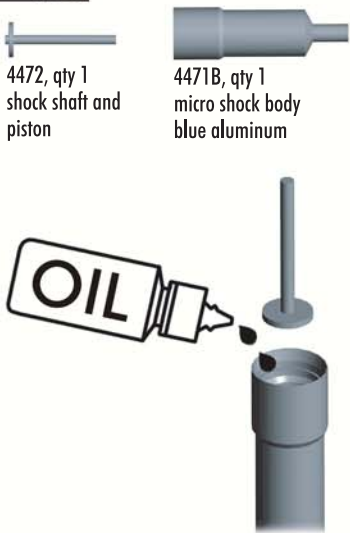
### Bag D Step 1



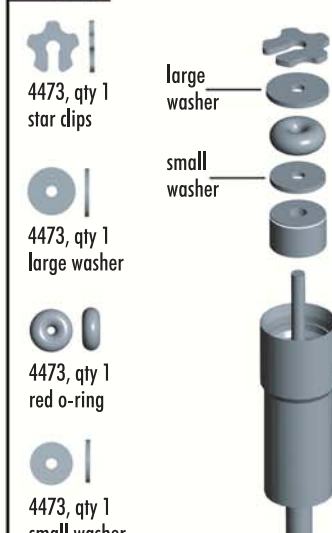
### Step 2



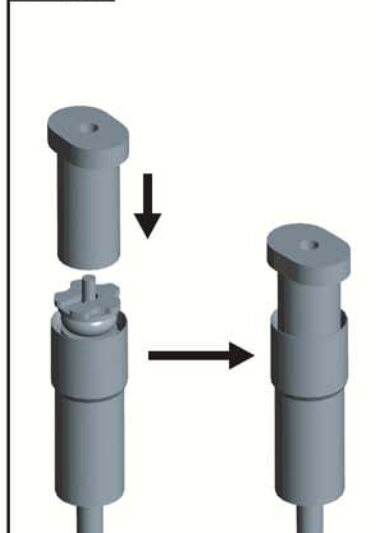
### Step 3



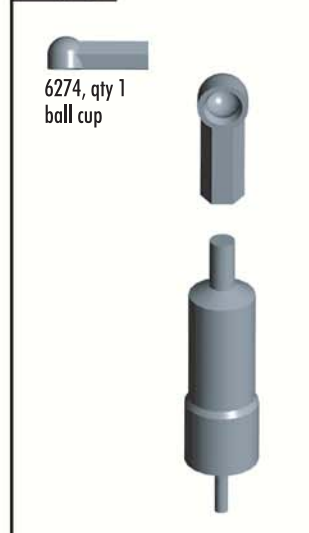
### Step 4



### Step 5



### Step 6



### Step 6

6919, qty 3  
4-40 x 5/16" bhcs

4442B, qty 2  
damper brace standoff  
blue aluminum

4442B, qty 1  
damper center post  
blue aluminum

4534, qty 1  
rear chassis brace



### Step 7

6917, qty 1  
4-40 x 3/8" bhcs

4517, qty 1  
damper spring

4340, qty 1  
damper washer

4542, qty 1  
damper post



8330, qty 1  
damper o-ring



### Step 8

6917, qty 2  
4-40 x 3/8" bhcs

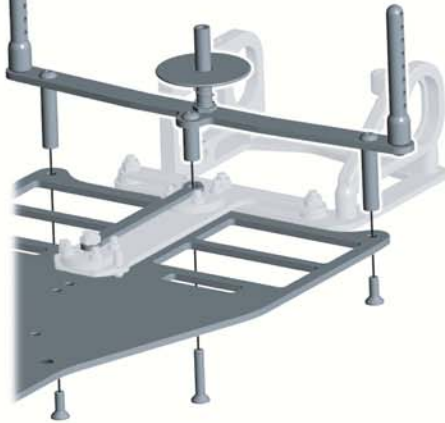
4535, qty 2  
body mount



### Step 9

7673, qty 2  
4-40 x 5/16" fhcs

6915, qty 1  
4-40 x 5/8" fhcs



### Step 10

4448, qty 1  
4-40 ball end  
blue aluminum

4449, qty 1  
4-40 locknut

4530, qty 1  
damper plate



### Step 11

6919, qty 2  
4-40 x 5/16" bhcs

6917, qty 1  
4-40 x 3/8" bhcs



### Step 12

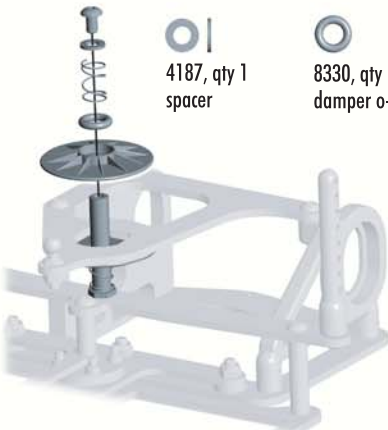
6920, qty 1  
4-40 x 3/16" bhcs

4517, qty 1  
damper spring

4340, qty 1  
damper washer

4187, qty 1  
spacer

8330, qty 1  
damper o-ring



### Bag Step 1

897, qty 2  
1/4 x 3/8"  
flanged bearing

4349, qty 2  
ride height adjuster,  
#1 down



### Step 2

6619, qty 6  
carbide diff balls

4462, qty 1  
kimbrough 100t 64p  
spur gear





### Step 7



8413, qty 4  
caster shim



4569, qty 2  
titanium hinge pin



4564, qty 1  
cross brace



Left

### Step 8



3862, qty 4  
5-40 x 1/8" set screw



Left

### Step 9



8439, qty 4  
8-32 x 5/8" blue aluminum



4558, qty 1  
12L4 chassis



### Bag B Step 1



4334, qty 8  
2-56 x 5/16" bhcs



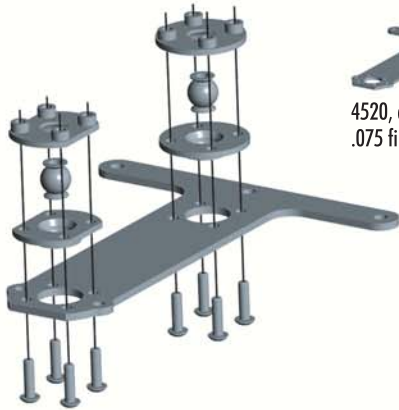
4336, qty 2  
pivot ball



4335, qty 2 each  
pivot socket, upper &  
lower



4520, qty 1  
.075 fiberglass t-bar



### Step 2



4436, qty 2  
tweak set screw



### Step 3



6292, qty 3  
4-40 x 3/8" fhcs



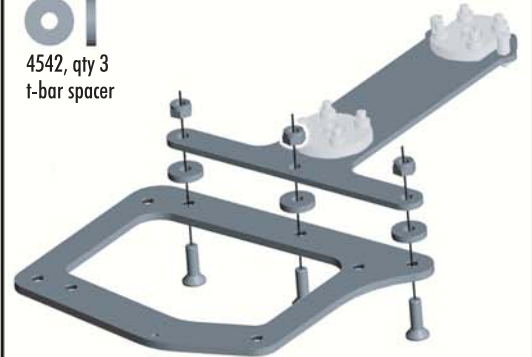
4449, qty 3  
4-40 locknut



4559, qty 1  
lower pod plate



4542, qty 3  
t-bar spacer



### Step 4



6934, qty 3  
4-40 x 3/8" fhcs  
blue aluminum



7673, qty 2  
4-40 x 5/16" fhcs



4541, qty 1  
left rear bulkhead



4537B, qty 1  
motor bulkhead  
blue aluminum



### Step 5



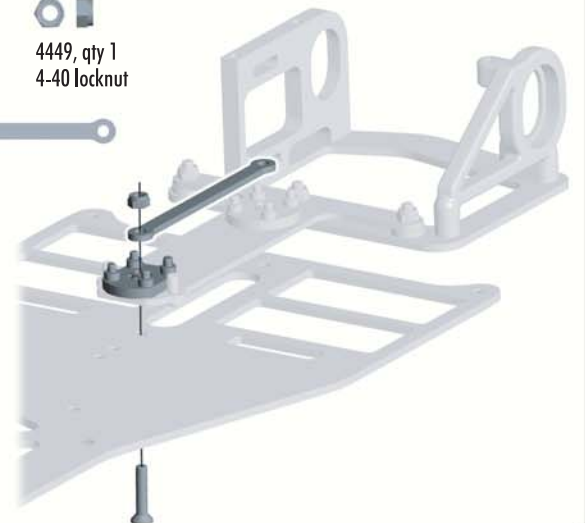
4519, qty 1  
4-40 x 9/16" fhcs



4449, qty 1  
4-40 locknut



4524, qty 1  
t-bar brace



# RC12L4 SETUP SHEET



Date: \_\_\_\_\_  
 Driver: \_\_\_\_\_  
 Track: \_\_\_\_\_  
 Event: \_\_\_\_\_

## Front End

Kingpin Lube: \_\_\_\_\_  
 Springs: \_\_\_\_\_  
 Upper Arm Mounts:  0°  5°  10°  
 Camber: \_\_\_\_\_°  
 Caster:

## Rear End

Shock Oil: \_\_\_\_\_ wt Shock Spring: \_\_\_\_\_  
 T-Bar Thickness: \_\_\_\_\_ T-Bar Spacers:  2  3  
 Damper Lube: \_\_\_\_\_  
 Ride Height Adjuster:  #4-up  #1-up  #2-up  
 #3  #2-down  #1-down  #4-down

## Tires & Wheels

Tire Type (front): \_\_\_\_\_ (rear): \_\_\_\_\_  
 Tire Diameter (front): \_\_\_\_\_ (rear): \_\_\_\_\_  
 Wheel Type (front): \_\_\_\_\_ (rear): \_\_\_\_\_  
 Axle Shims: \_\_\_\_\_   
 Tire Treatment: \_\_\_\_\_  
shade in amount of tire treatment

## Body & Electronics

Body Type and Make: \_\_\_\_\_  
 Battery Type: \_\_\_\_\_  
 Motor Type and Wind: \_\_\_\_\_  
 Gearing: \_\_\_\_\_/\_\_\_\_\_  
 Speed Control: \_\_\_\_\_ Current Limiter: \_\_\_\_\_  
 Receiver: \_\_\_\_\_

Track Description: \_\_\_\_\_  
 Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

# RC12L4 QUICK REFERENCE SECTION

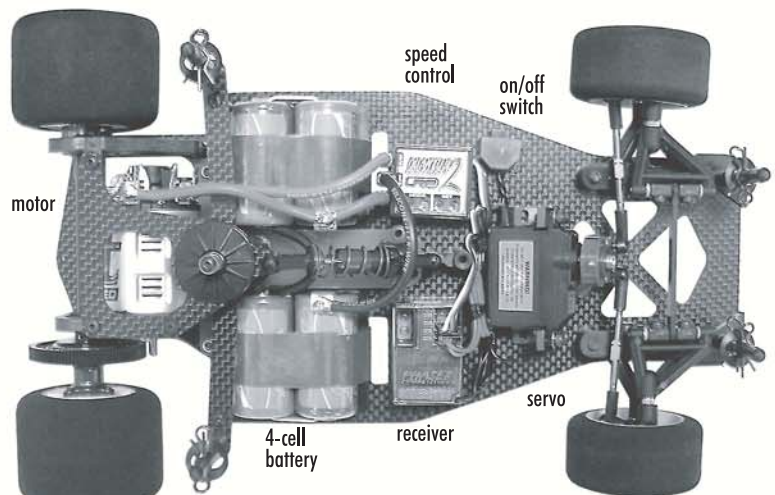
## Gearing (suggested starting point)

Motor	Pinion	Spur
24 ROAR stock motor	35	100
14 turn modified motor	28	100
13 turn modified motor	27	100
12 turn modified motor	25	100
11 turn modified motor	24	100

## Front Springs

Part #	Rate
4113	.020
4114	.018
4116	.024
4117	.022
4118	.014
4119	.016

## Electronics Layout



## Roll Out Calculator

$$\frac{\text{distance (mm)}}{\text{motor turn}} = \frac{3.14 \times \text{tire dia. (mm)}}{\text{pinion teeth} \times \text{spur teeth}}$$

## Center Springs

Part #	Rate
4475	black - 4.0
4476	green - 6.0
8449	copper - 16.0
8451	silver - 8.0
8452	blue - 10.0
8453	gold - 12.0
8454	red - 14.0

## Contact Us

<http://www.TeamAssociated.com/>  
<http://www.RC10.com>

Associated Electronics, Inc. Customer Support  
 3585 Cadillac Ave. Tel: (714) 850-9342  
 Costa Mesa, CA 92626 USA Fax: (714) 850-1744

(not included in kit)

### Step 6



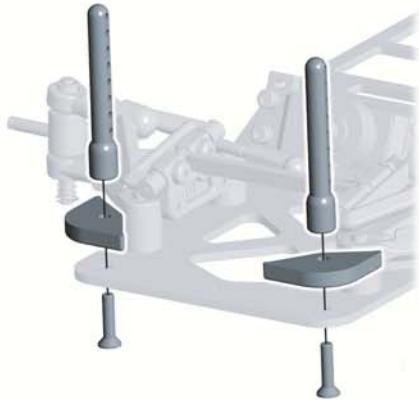
6922, qty 2  
4-40 x 1/2" fhcs



4560, qty 2  
chassis protector



4535, qty 2  
body mount



### Step 7



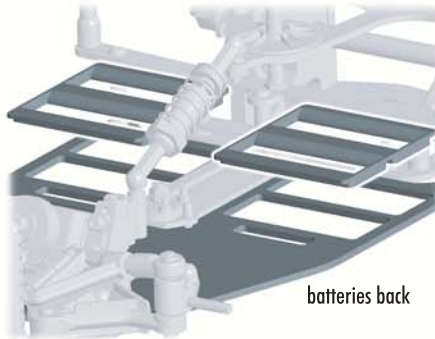
4563, qty 2  
battery tray



batteries back



batteries forward



batteries back

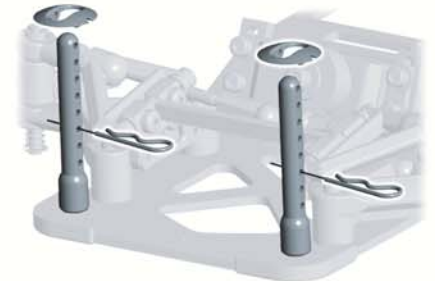
### Step 8



3897, qty 2  
pivoting body mount



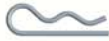
1736, qty 2  
body clips, blue



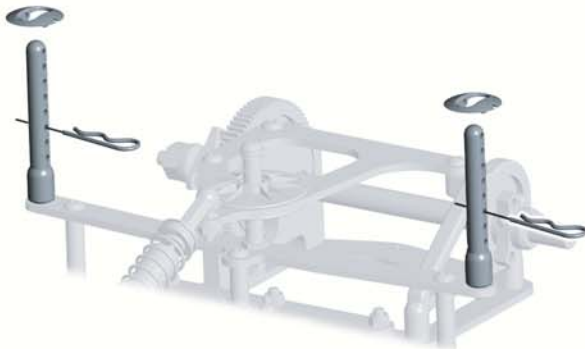
### Step 9



3897, qty 2  
pivoting body mount



1736, qty 2  
body clips, blue

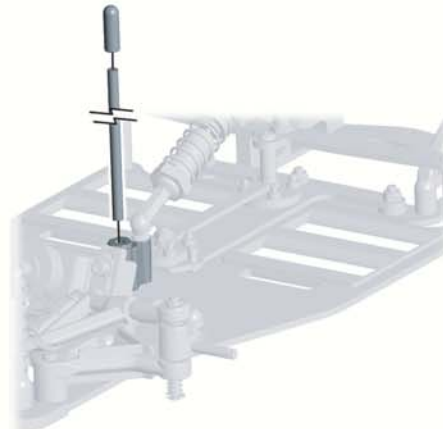


### Step 10

4510, qty 1  
roll over antenna



4510, qty 1  
antenna cap



### Step 11



3656, qty 4  
1/8 x 5/16"  
unflanged ball bearing



tires and wheels NOT included in kit.

### Step 12



4187, qty 2  
spacer



6299, qty 2  
e-clip



### Step 13



6284, qty 6  
4-40 x 1/4" shcs  
blue aluminum



tires and wheels NOT included in kit.

### Final Assembly

Refer to the manual cover for installation of electronics.

Please check our web site,  
[www.rc10.com](http://www.rc10.com)  
for additional information  
and tuning guide.