

TC4

Instruction Manual for the Team Associated TC4

30100 - TC4 Team Kit

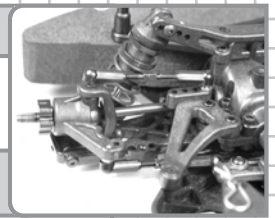
1. Blue anodized aluminum threaded shock bodies.
2. Treaded tires on lightweight AE Dish racing wheels.
3. Blue anodized heavy duty MIP CVD's.
4. Full rubber sealed ball bearings.
5. Machined aluminum motor mount with integrated heatsink.
6. Optimized steering rack/bellcrank system.

30110 - TC4 RTR

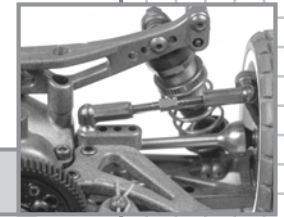
1. VCS Macro shock.
2. Treaded tires on chrome 8-spoke custom wheels.
3. Composite CVD's.
4. Full rubber sealed ball bearings.
5. Machined aluminum motor mount with integrated heatsink.
6. Optimized steering rack/bellcrank system.
7. Painted and mounted body.

TC4 - Key Features

Vertical ball stud adjustment



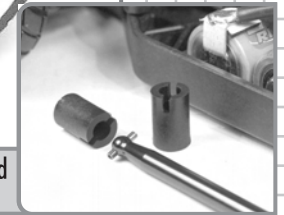
Heavy duty MIP CVD's



Optimized third generation steering rack/bellcrank system



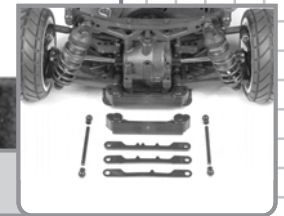
Heavy duty input cups and driveshaft



Adjustable aluminum motor mount with integrated heatsink



Adjustable anti-squat/anti-dive shim system



TC4 Chassis Specs

Length: 373 mm

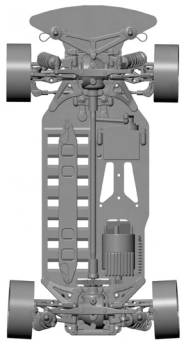
Width: 190 mm

Wheelbase: 259 mm

Internal Gear Ratio: 2.50:1

Weight: 1375 g (as shown)

Drivetrain: Shaft drive



1:10 Scale 4WD Electric Touring Car Kit

Thank you for selecting this Team Associated model.

Team Associated's revolutionary TC3 set the benchmark for touring car performance and quickly became the choice of winning racers all over the world. The TC3's race-proven shaft-drive design captured many national & international championships in the past few years, and has spawned numerous imitations. Now Team Associated is proud to introduce the next generation RC10TC4 Touring Car...the refinement of the proven TC3 racing platform, optimized with more precise tuning features, better balance, and greater durability.

Team Associated wants you to enjoy the process of building, driving and maintaining your new model. If you come across any problems or need help with the assembly of your model, give us a call and we will do our very best to help you.

The Manual

Examine each step carefully before building. Special notes for each step will be marked with a ▼.

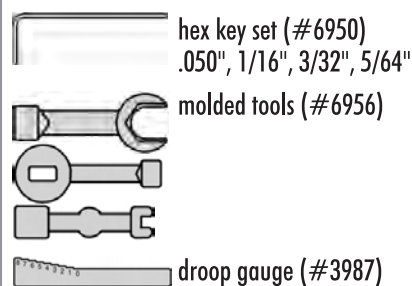
The Bags

Open the bags in order, according to each step. Some bags contain a large amount of small parts. We recommend using a small container to keep the parts together.

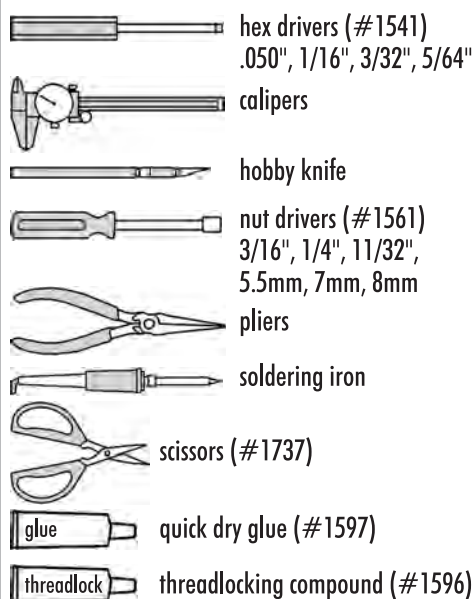
Supplement Sheets

We are constantly developing new parts to improve our kits. These changes, if any, will be noted on supplementary sheets located in the appropriate parts bag. Check each bag for these sheets before you start to build.

kit supplied tools



recommended tools for assembly



items needed to complete your vehicle

1. R/C two channel surface frequency radio system.
2. Six cell battery pack.
3. Battery charger (we recommend a peak detection charger).
4. Electronic Speed Control (ESC).
5. R/C electric motor.
6. Pinion gear, size to be determined by type and wind of motor you will be using.
7. 190mm Lexan body.

Customer Support

Tel: 714.850.9342
Fax: 714.850.1744

Hours: 8:00am - 4:00pm, pst

<http://www.rc10.com>
<http://www.TeamAssociated.com>



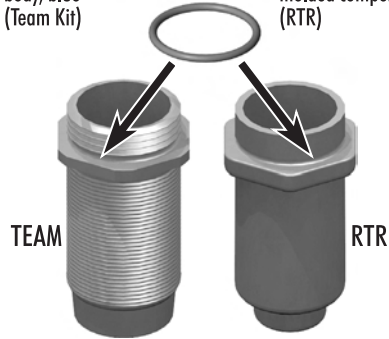
Associated Electrics, Inc.

3585 Cadillac Ave. Costa Mesa, CA 92626 USA

Bag A - Shocks

Step 1

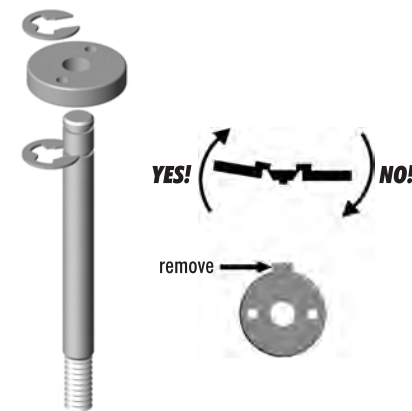
- 3963, qty 1 threaded shock body, blue (Team Kit)
- 6469, qty 1 large o-ring
- 8458, qty 1 macro shock body, molded composite (RTR)



place o-ring over shock body

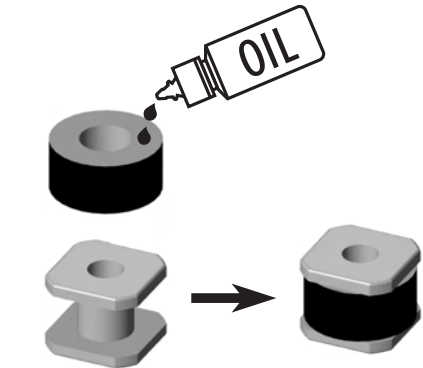
Step 2

- 6299, qty 2 small e-dip
- 6465, qty 1 shock piston #2
- 8844, qty 1 shock shaft, .35"



Step 3

- 5423, qty 1 40 wt silicone oil
- 8456, qty 1 VC bobbin
- 8456, qty 1 VC foam



Step 4

- 5407, qty 2 red o-ring

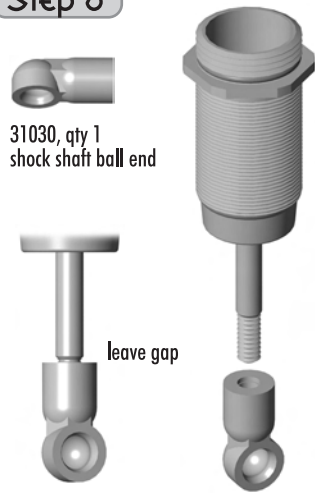


Step 5



Step 6

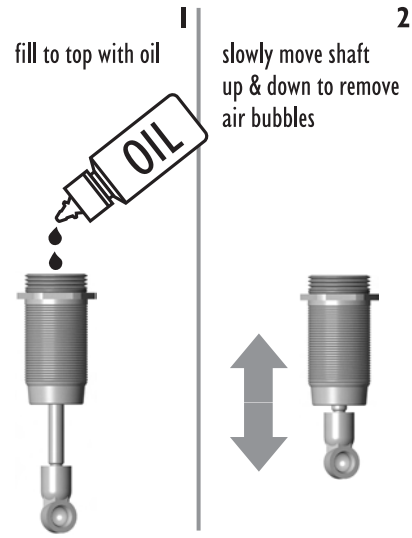
- 31030, qty 1 shock shaft ball end



repeat steps 1-6 for 4 shocks

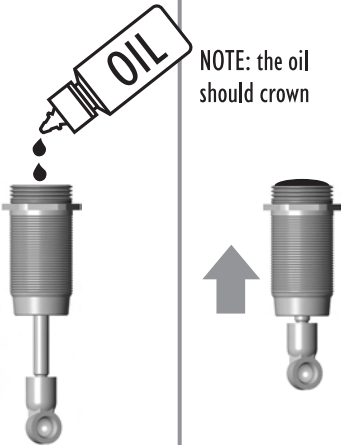
Step 7

- fill to top with oil
- slowly move shaft up & down to remove air bubbles

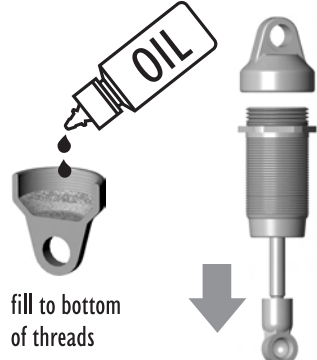


- fill to top with oil

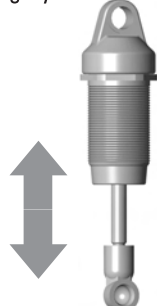
- 3 push the shaft in
- NOTE: the oil should crown



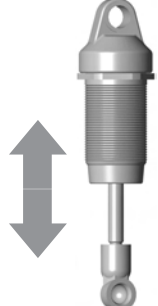
- 4 retain oil as you screw the cap on
- 6428, qty 1 shock cap



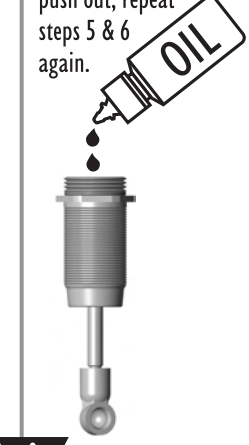
- 5 move shaft up & down a few times, then push it all the way in. the shaft should push itself out slightly.



- 6 if you cannot push the shaft in, bleed out a small amount of oil. repeat step 6.



- 7 if the shaft does not push out, repeat steps 5 & 6 again.



repeat step 7 for 4 shocks

TC4 Team Kit

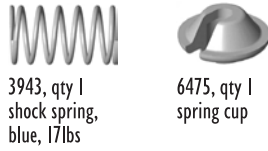
Step 8



Step 9

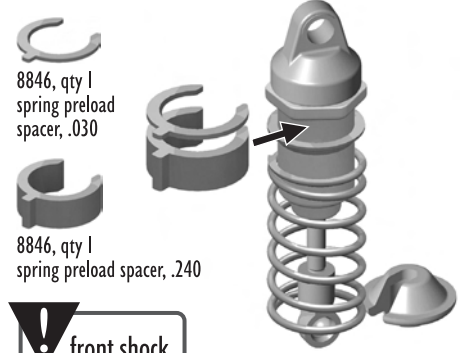


Step 10



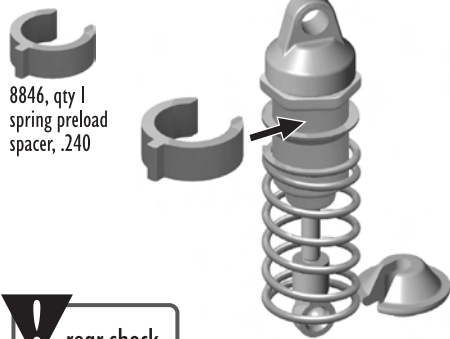
TC4 RTR

Step 11



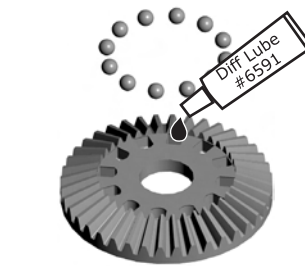
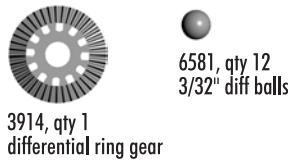
TC4 RTR

Step 12

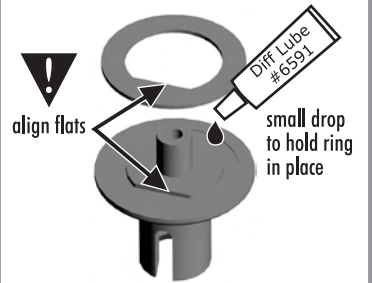
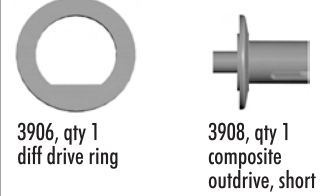


Bag B - Differentials

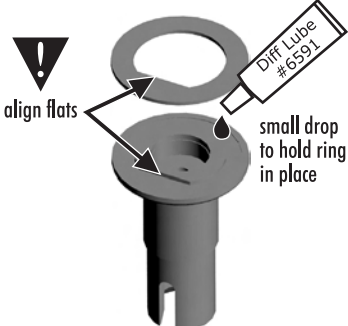
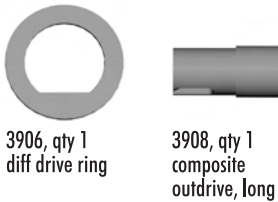
Step 1



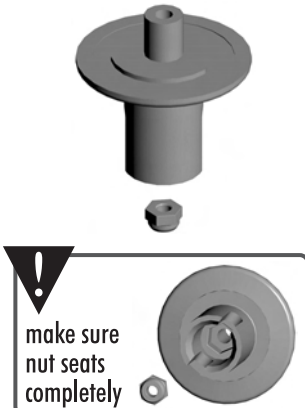
Step 2



Step 3



Step 4

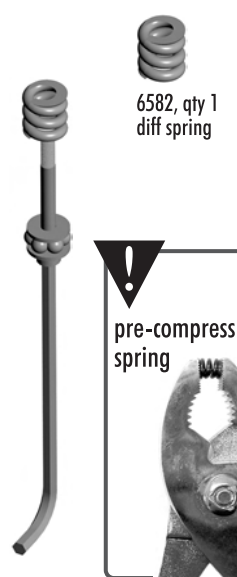


Step 5



supplied 5/64" wrench

Step 6



Step 7

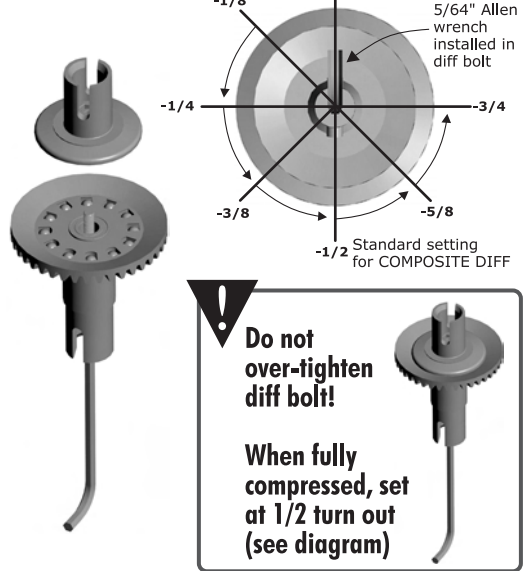


Step 8



3916, qty 2
composite
diff bearings

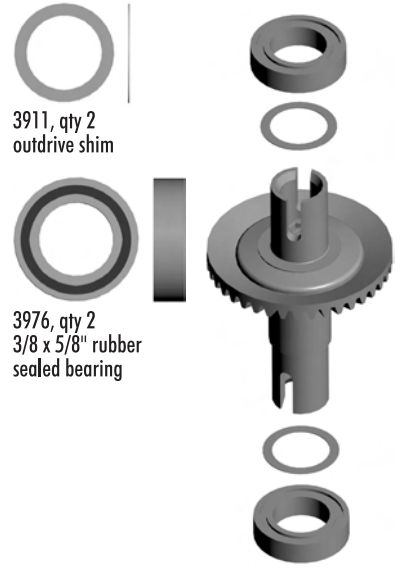
Step 9



Do not over-tighten diff bolt!

When fully compressed, set at 1/2 turn out (see diagram)

Step 10

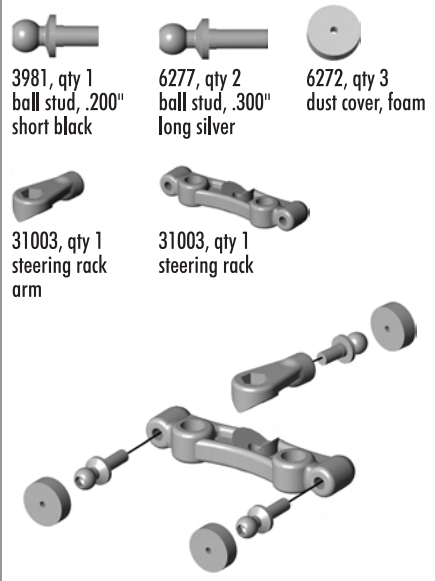


3911, qty 2
outdrive shim

3976, qty 2
3/8 x 5/8" rubber
sealed bearing

Bag C - Steering

Step 1



3981, qty 1
ball stud, .200"
short black

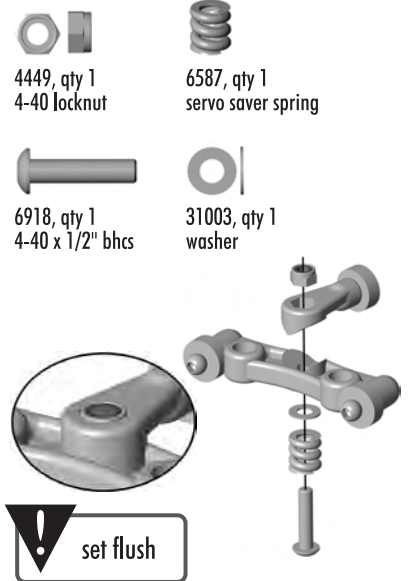
6277, qty 2
ball stud, .300"
long silver

6272, qty 3
dust cover, foam

31003, qty 1
steering rack
arm

31003, qty 1
steering rack

Step 2



4449, qty 1
4-40 locknut

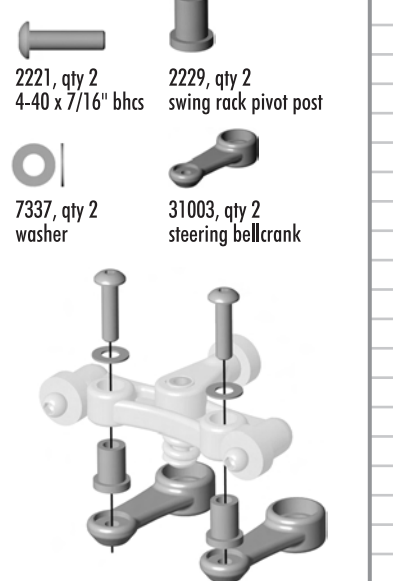
6587, qty 1
servo saver spring

6918, qty 1
4-40 x 1/2" bhcs

31003, qty 1
washer

set flush

Step 3



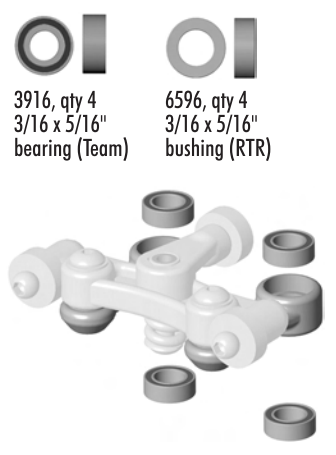
2221, qty 2
4-40 x 7/16" bhcs

2229, qty 2
swing rack pivot post

7337, qty 2
washer

31003, qty 2
steering bellcrank

Step 4

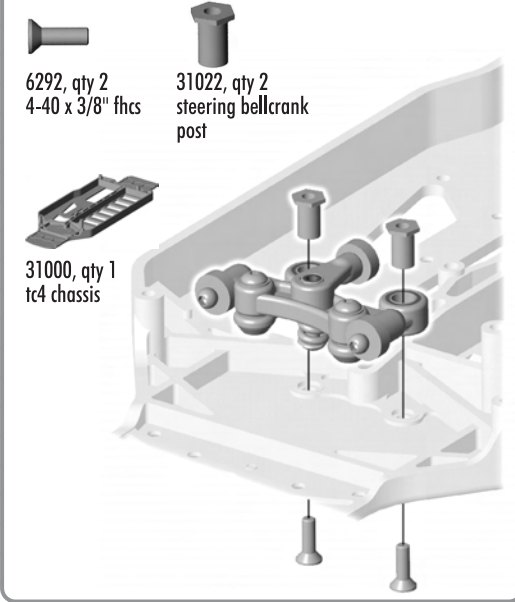


3916, qty 4
3/16 x 5/16"
bearing (Team)

6596, qty 4
3/16 x 5/16"
bushing (RTR)

insert bearings seal side up

Step 5

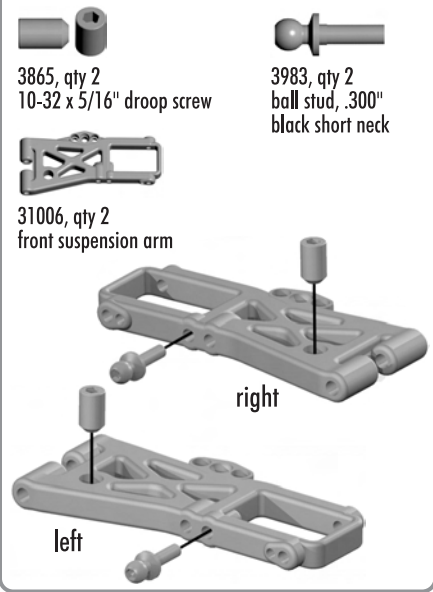


6292, qty 2
4-40 x 3/8" fhcs

31022, qty 2
steering bellcrank
post

31000, qty 1
tc4 chassis

Step 1



3865, qty 2
10-32 x 5/16" droop screw

3983, qty 2
ball stud, .300"
black short neck

31006, qty 2
front suspension arm

right
left

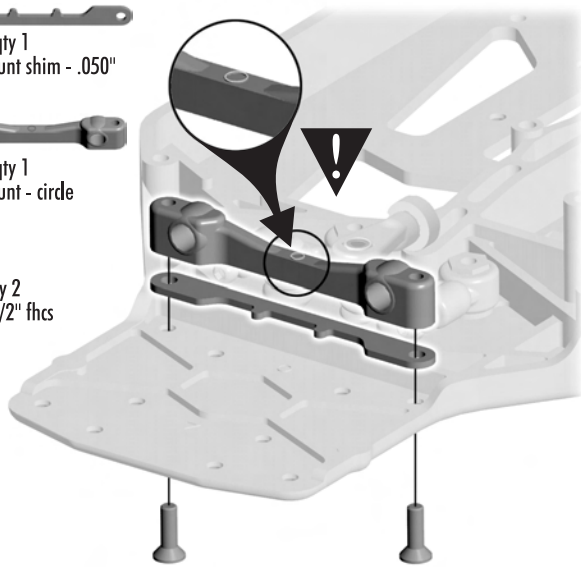
Bag D - Suspension

Step 2

31010, qty 1
arm mount shim - .050"

31025, qty 1
arm mount - circle

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

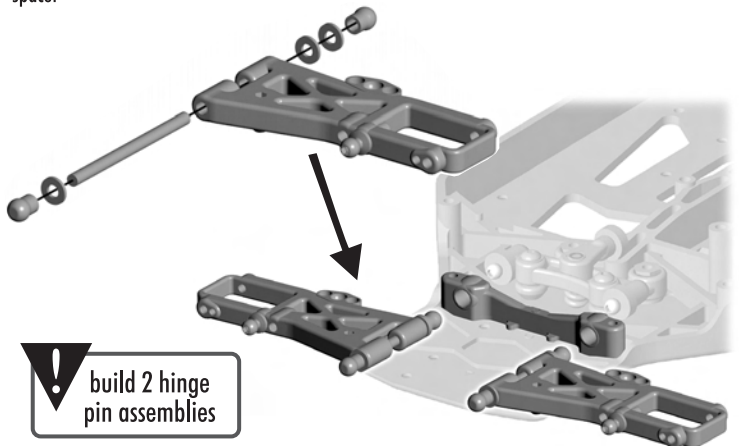


Step 3

31010, qty 3
wheelbase adjustment
spacer

31010, qty 2
hinge pin pivot ball

31024, qty 1
hinge pin



! build 2 hinge pin assemblies

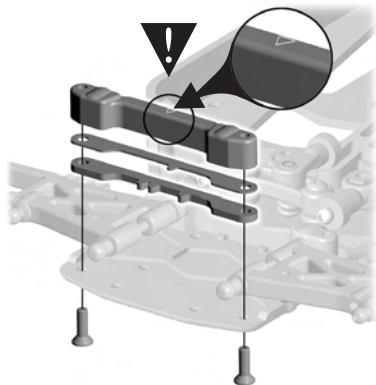
Step 4

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

31010, qty 1
arm mount shim - .075"

31010, qty 1
arm mount shim - .025"

31025, qty 1
arm mount - triangle

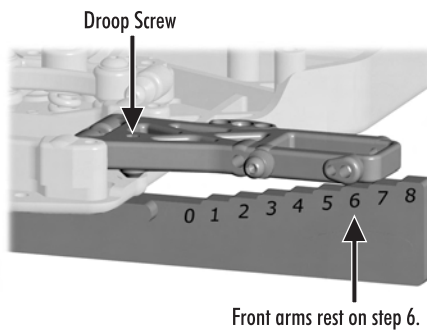


Setting Front Droop

Adjust Droop

↑ Screw out, smaller number, more Droop

↓ Screw in, larger number, less Droop



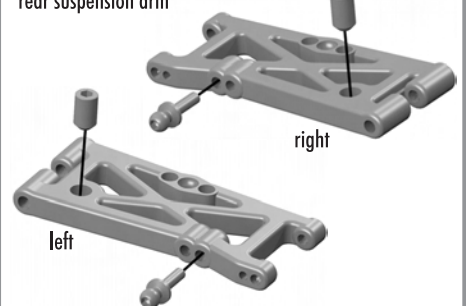
Step 5

3983, qty 1
ball stud, .300"
black short neck

3865, qty 1
10-32 x 5/16"
droop screw



31008, qty 1
rear suspension arm



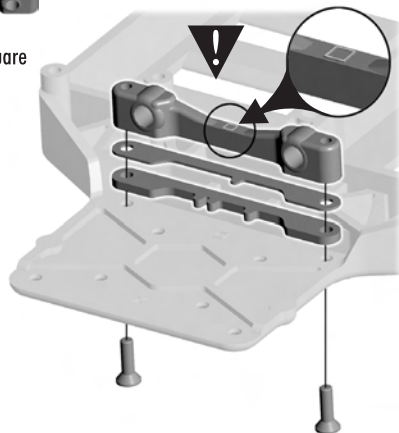
Step 6

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

31010, qty 1
arm mount shim - .025"

31010, qty 1
arm mount shim - .075"

31025, qty 1
arm mount - square

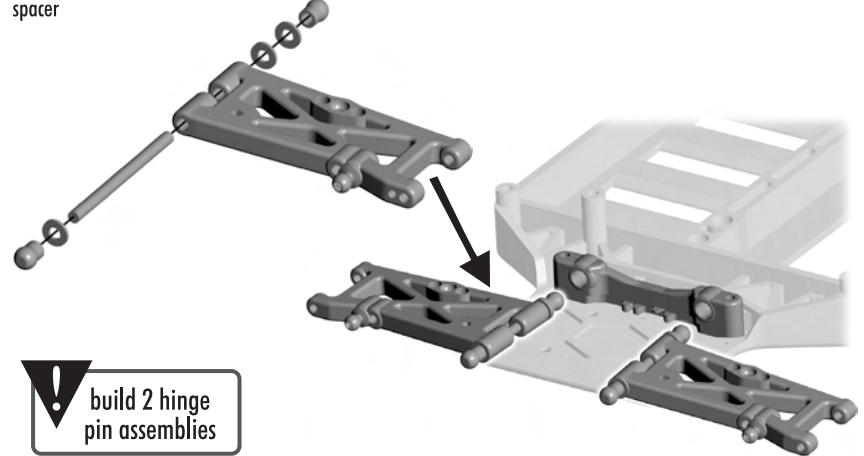


Step 7

31010, qty 3
wheelbase adjustment
spacer

31010, qty 2
hinge pin pivot ball

31024, qty 1
hinge pin



! build 2 hinge pin assemblies

Step 8

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

31010, qty 1
arm mount shim - .075"

31010, qty 1
arm mount shim - .025"

31025, qty 1
arm mount - X

Setting Rear Droop

Adjust Droop

Screw out, smaller number, more Droop

Screw in, larger number, less Droop

Droop Screw

Rear arms rest on step 4.

Step 1

Bag E - Transmission

3914, qty 1
drive pinion

remove burrs

debur 2 gears

Step 2

3911, qty 2
input shaft shim

3915, qty 1
front input shaft

3919, qty 1
dowel pin

3977, qty 1
3/16 x 3/8" rubber sealed bearing

6299, qty 1
small e-clip

Step 3

3911, qty 1
input shaft shim

3919, qty 1
dowel pin

3977, qty 1
3/16 x 3/8" rubber sealed bearing

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

31019, qty 1
tc4 drive cup

31019, qty 1
foam spacer

Step 4

3922, qty 1
72t spur gear

6288, qty 3
4-40 x 1/4" bhcs

31019, qty 1
spur gear hub

Step 5

3916, qty 1
rear input shaft

3919, qty 1
c-clip

3919, qty 1
dowel pin

3919, qty 1
large e-clip

Step 6

3977, qty 1
3/16 x 3/8" rubber sealed bearing

31019, qty 1
input bearing housing

Step 7

3911, qty 1
input shaft shim

3911, qty 1
input shaft shim, aluminum

3919, qty 1
dowel pin

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

31019, qty 1
tc4 drive cup

31019, qty 1
foam spacer

Step 8



3911, qty 2
input shaft
shim



3914, qty 1
drive pinion



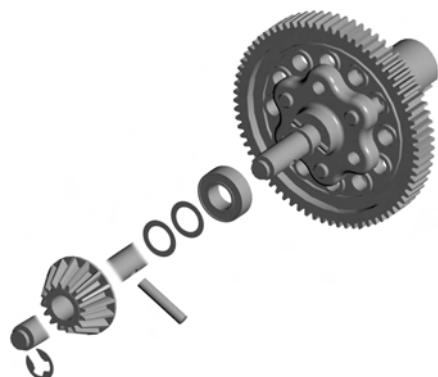
3919, qty 1
dowel pin



3977, qty 1
3/16 x 3/8" rubber
sealed bearing



6299, qty 1
small e-dip



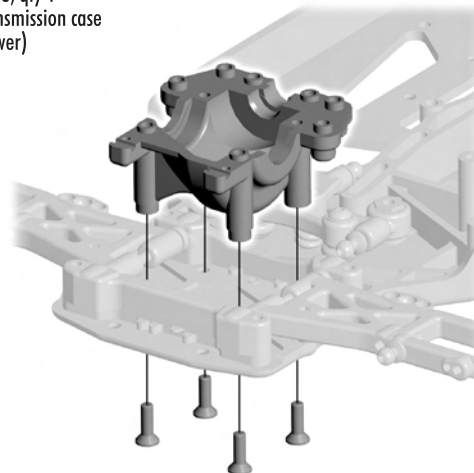
Step 9



2368, qty 1
transmission case
(lower)



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



Step 10



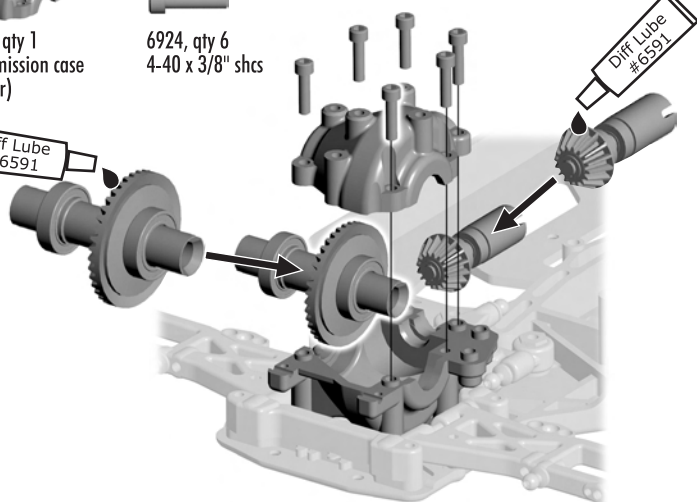
2368, qty 1
transmission case
(upper)



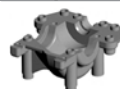
6924, qty 6
4-40 x 3/8" shcs

Diff Lube
#6591

Diff Lube
#6591



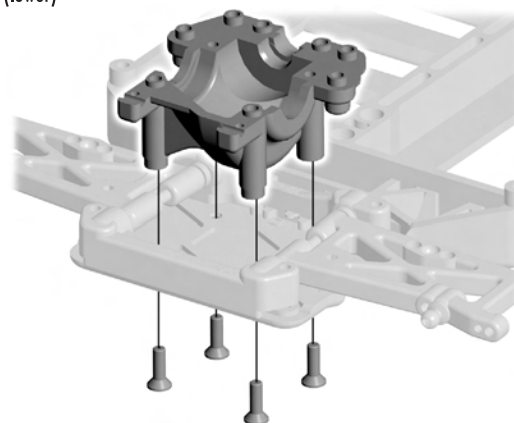
Step 11



2368, qty 1
transmission case
(lower)



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



Step 12

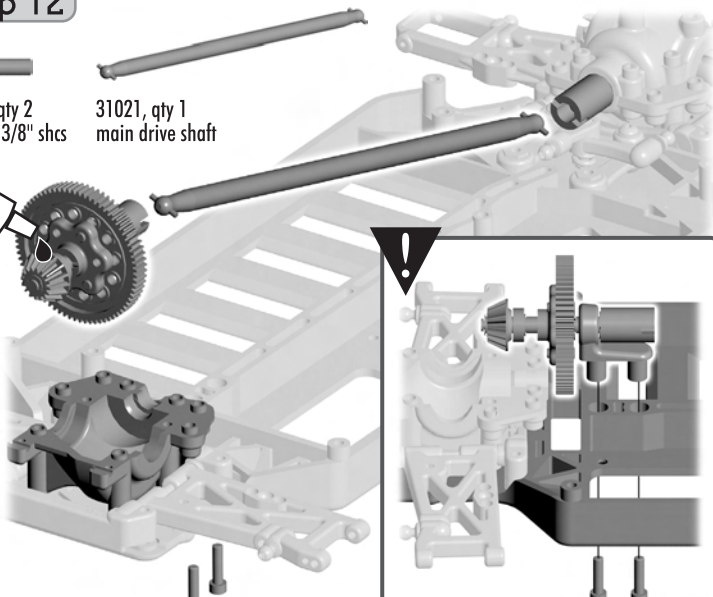
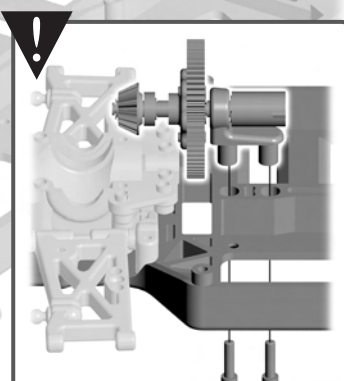


6924, qty 2
4-40 x 3/8" shcs



31021, qty 1
main drive shaft

Diff Lube
#6591



Step 13

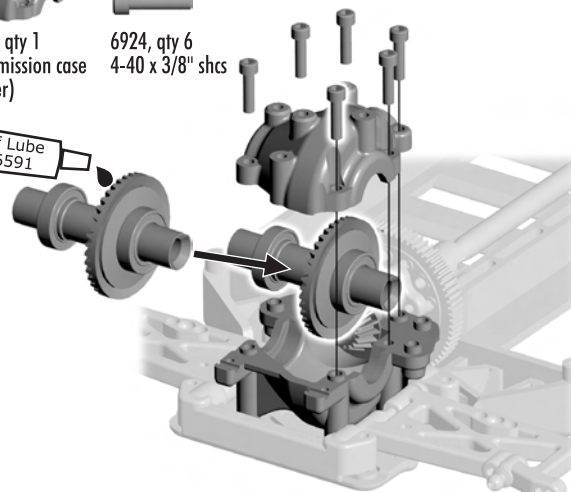


2368, qty 1
transmission case
(upper)






6924, qty 6
4-40 x 3/8" shcs

Diff Lube
#6591


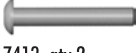



Bag F - Shock Towers

Step 1



 7260, qty 2 4-40 plain nut	 7413, qty 2 4-40 x 3/4" bhcs	 31011, qty 1 shock tower, front
-------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------

front

 7260, qty 2 4-40 plain nut	 7413, qty 2 4-40 x 3/4" bhcs	 31013, qty 1 shock tower, rear
--------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------


rear

Step 2

 2230, qty 2 rear body posts	 6918, qty 2 4-40 x 1/2" bhcs
----------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------


rear

Step 3


6924, qty 3
4-40 x 3/8" shcs



front

Step 4


6924, qty 3
4-40 x 3/8" shcs



rear

Step 5

 6472, qty 2 shock mounting nuts	 6473, qty 2 shock bushing
---------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------

front







Step 6

 6472, qty 2 shock mounting nuts	 6473, qty 2 shock bushing
---------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------

rear

Bag G - CVD's

Step 1

 3886, qty 1 CVD axle	 7381, qty 1 CVD set screw	 7381, qty 1 CVD coupling
 7381, qty 1 CVD cross pin	 31034, qty 1 aluminum CVD bone (Team)	 3887, qty 1 composite CVD bone (RTR)

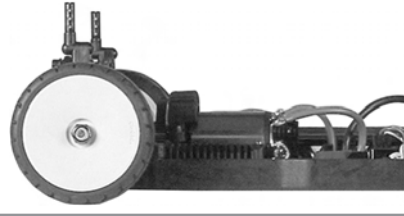
Threadlock #1596

Black Grease #6588

assemble 4 CVD's

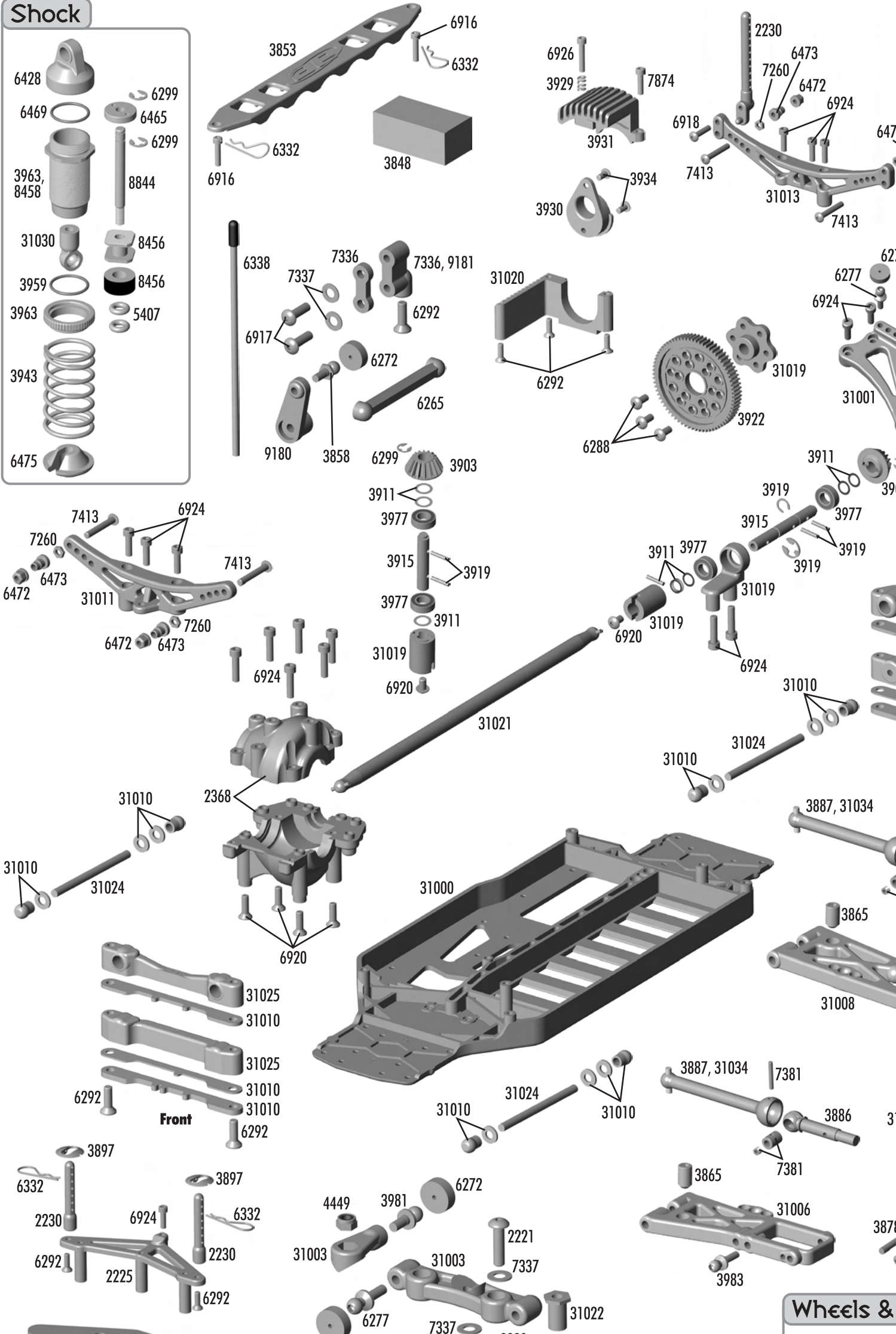
TCA!

1:10 Scale 4WD Electric Touring Car Kit



Exploded View

Shock

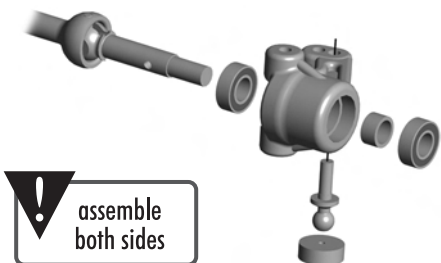


Wheels &

Step 2

- 3965, qty 1 bearing spacer
- 3977, qty 2 3/16 x 3/8" rubber sealed bearing
- 6272, qty 1 dust cover, foam

- 6277, qty 1 ball stud, .300" long silver
- 31004, qty 1 steering block



! assemble both sides

Step 3

- 3874, qty 2 block carrier bushing
- 31015, qty 1 caster block, 0 degrees

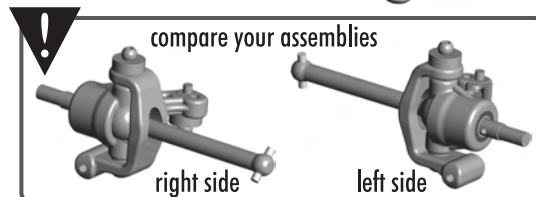
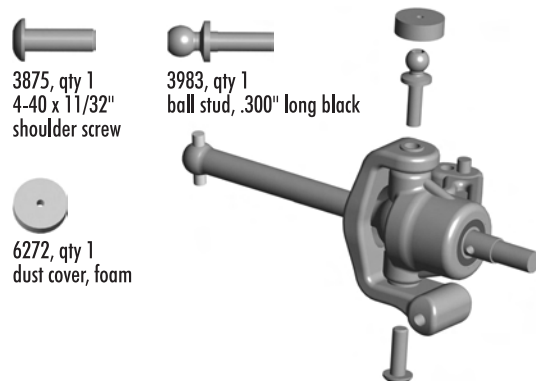


! assemble both sides

Step 4

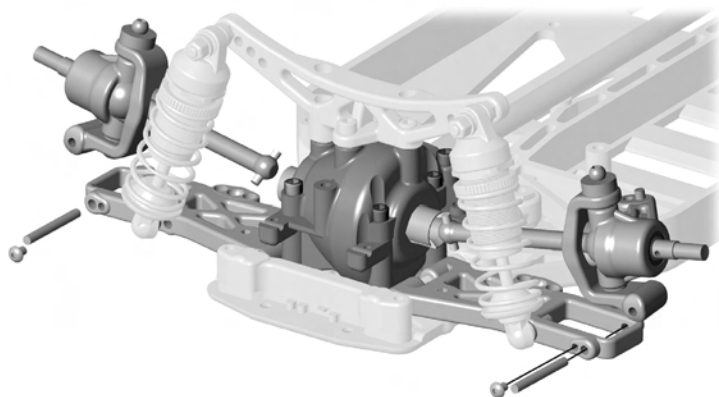
- 3875, qty 1 4-40 x 11/32" shoulder screw
- 3983, qty 1 ball stud, .300" long black

- 6272, qty 1 dust cover, foam



Step 5

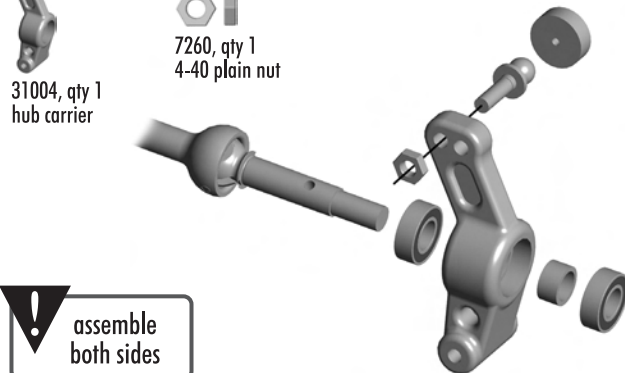
- 3878, qty 2 front outer hinge pin
- 9645, qty 2 2-56 x 1/8" bhcs



Step 6

- 3965, qty 1 bearing spacer
- 3977, qty 2 3/16 x 3/8" rubber sealed bearing
- 3983, qty 1 ball stud, .300" long black
- 6272, qty 1 dust cover, foam

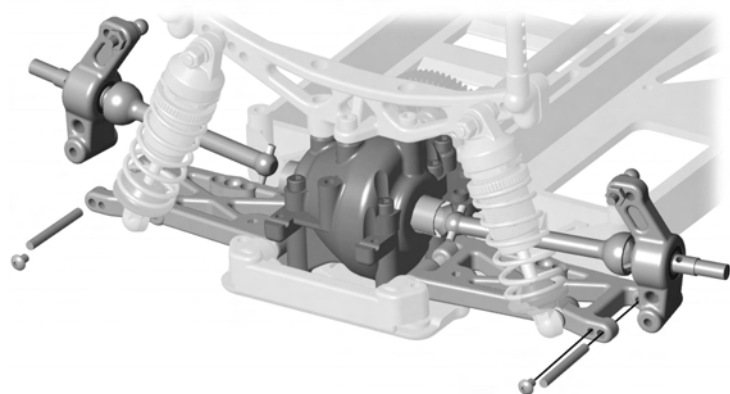
- 31004, qty 1 hub carrier
- 7260, qty 1 4-40 plain nut



! assemble both sides

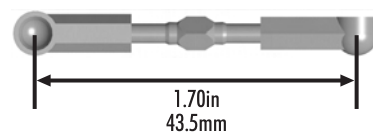
Step 7

- 3878, qty 2 rear outer hinge pin
- 9645, qty 2 2-56 x 1/8" bhcs



Step 1

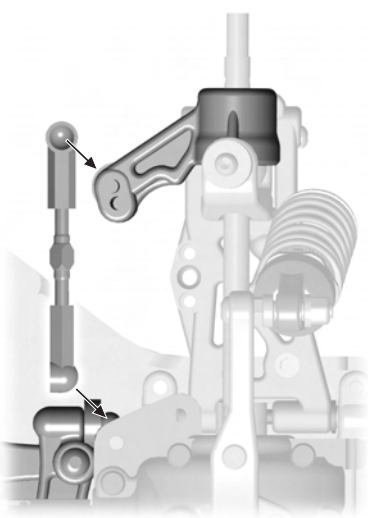
- 6260, qty 1 turnbuckle, 1.00"
- 6274, qty 2 ball cup






! assemble 2 steering linkages

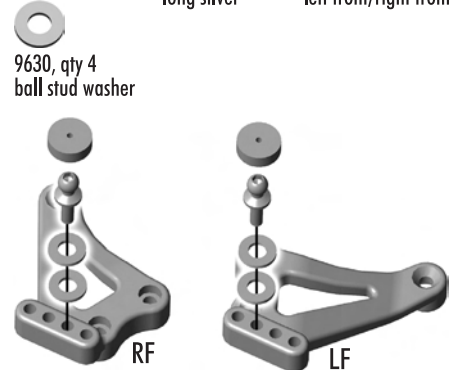
Bag H - Linkage

Step 2



Step 3

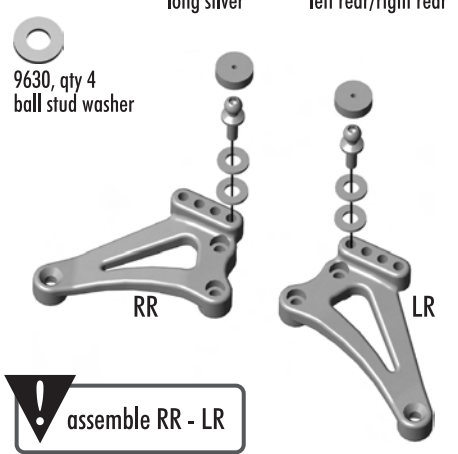
-  6272, qty 2
dust cover, foam
-  6277, qty 2
ball stud, .300"
long silver
-  31001, qty 2
chassis braces,
left front/right front



 assemble RF - LF

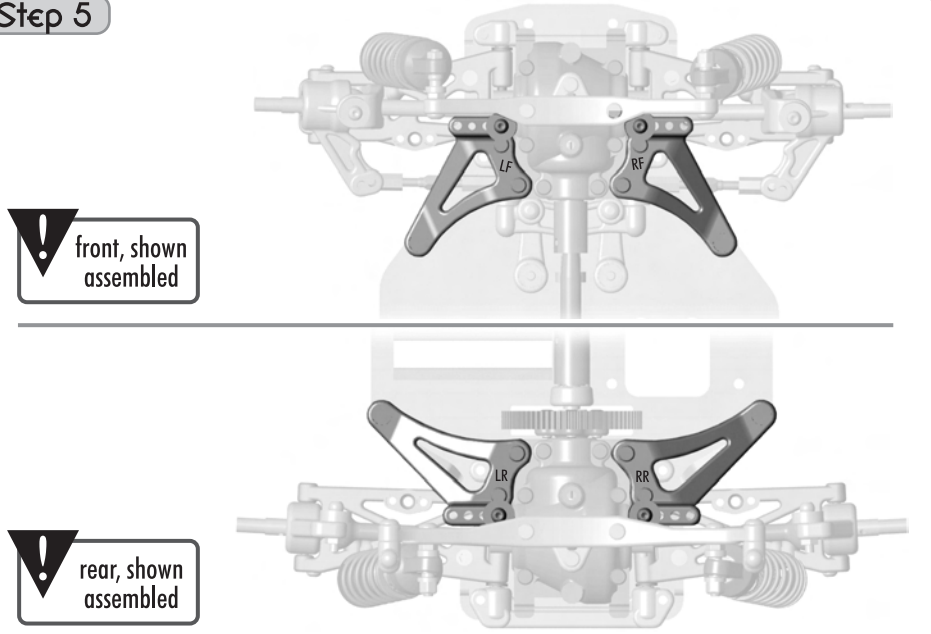
Step 4

-  6272, qty 2
dust cover, foam
-  6277, qty 2
ball stud, .300"
long silver
-  31001, qty 2
chassis braces,
left rear/right rear



 assemble RR - LR



Step 5

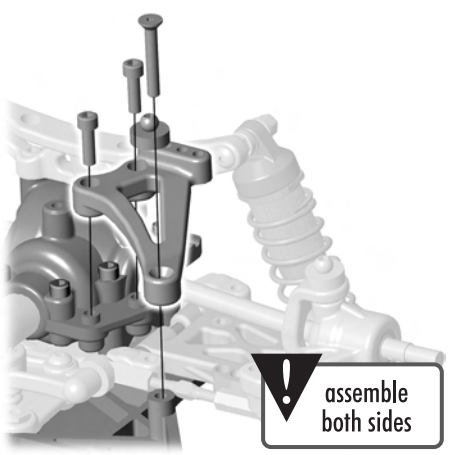


 front, shown assembled

 rear, shown assembled



Step 6

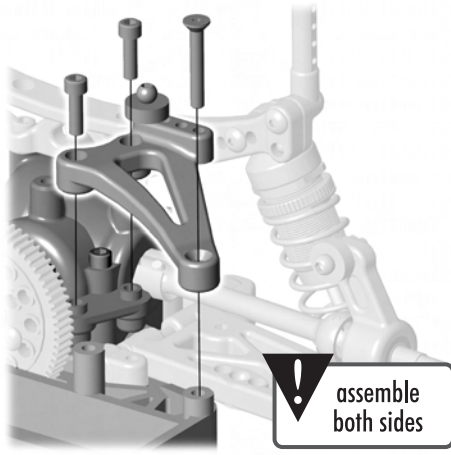
-  6923, qty 1
4-40 x 3/4" fhcs
-  6924, qty 2
4-40 x 3/8" shcs



 assemble both sides

Step 7

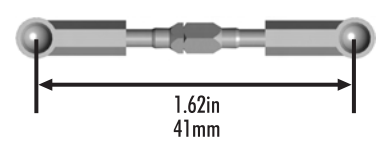
-  6923, qty 1
4-40 x 3/4" fhcs
-  6924, qty 2
4-40 x 3/8" shcs



 assemble both sides

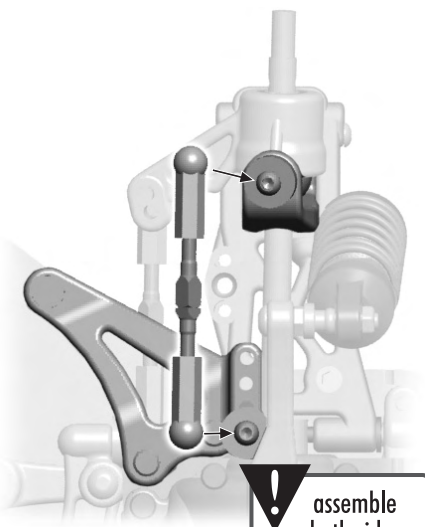
Step 8

-  6261, qty 1
turnbuckle, 1.25"
-  6274, qty 2
ball cup



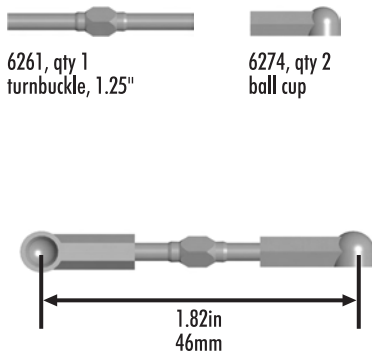
 assemble 2 front camber linkages

Step 9



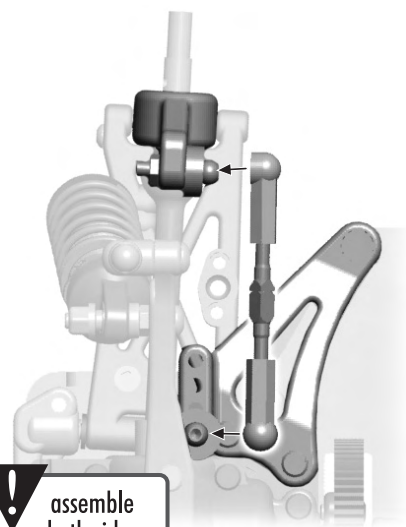
assemble both sides

Step 10



assemble 2 rear camber linkages

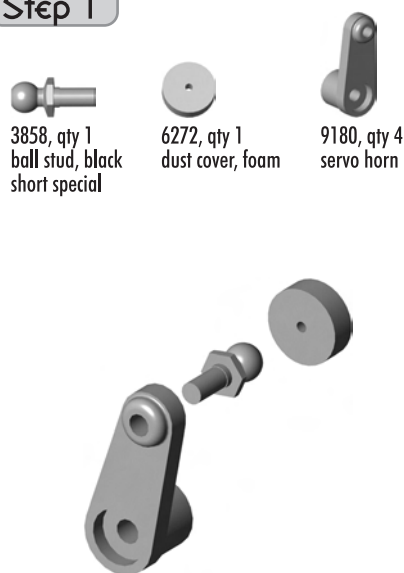
Step 11



assemble both sides

Bag 1 - Servo Install

Step 1



3858, qty 1 ball stud, black short special

6272, qty 1 dust cover, foam

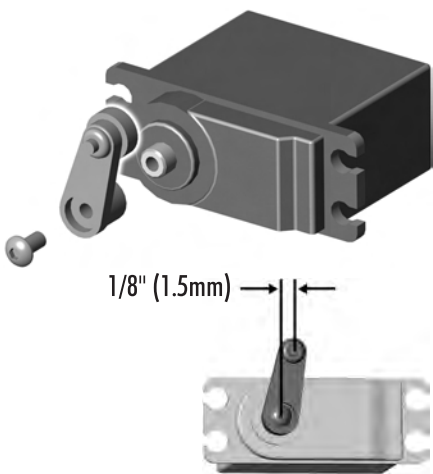
9180, qty 4 servo horn

Steering Servo Chart *

*Not all servo's are listed.

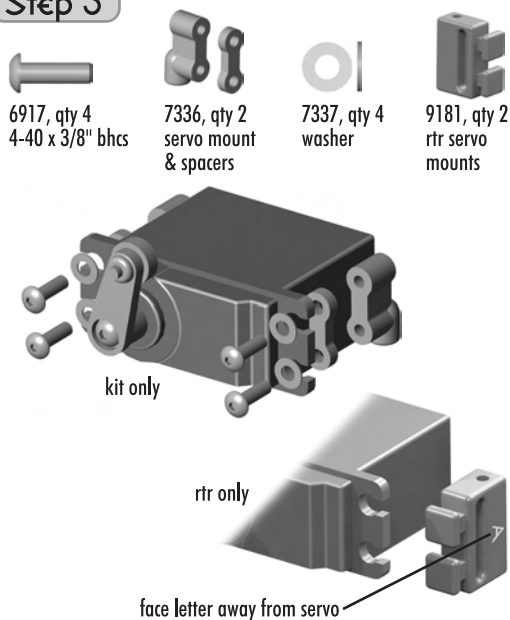
	#7336 Spacer	#9180 Servo Arm
Airtronics 94102	no spacer	A
Airtronics 94738, 94157, 94158, 94257, 94258, 94357, 94358, 94452, 94453, 94751, 94755	thick spacer	A
Hitec HS-5625MG, HS-5645MG, HS625MG, HS645MG	no spacer	H
Hitec HS-303, HS-300BB, HS-945MG, HS-925MG, HS-5945MG, HS-5925MG, HS-525MG, HS-525BB, 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

Step 2



assemble using stock servo screw

Step 3



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

7336, qty 2 servo mount & spacers

7337, qty 4 washer

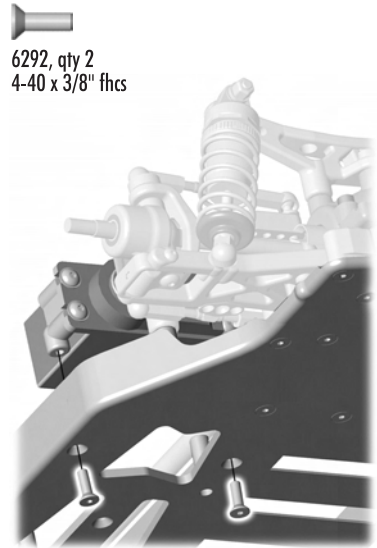
9181, qty 2 rtr servo mounts

kit only

rtr only

face letter away from servo

Step 4

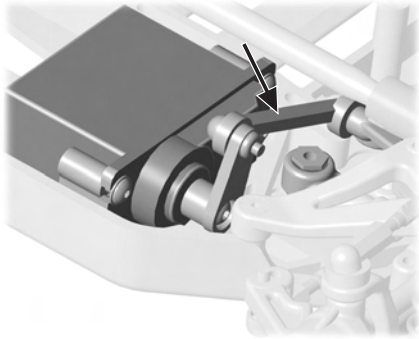


6292, qty 2 4-40 x 3/8" fhcs

Step 5



6265, qty 1
tc4 steering drag link



Step 1



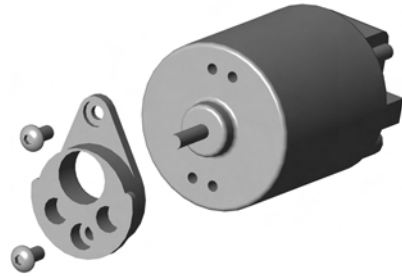
3930, qty 1
motor cam



3934, qty 2
3mm motor screw



9627, qty 1
15 turn motor



! motor included
in RTR only

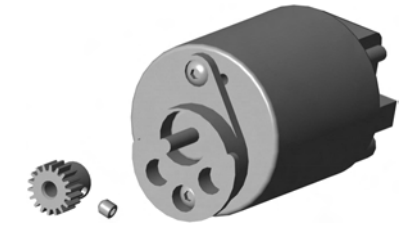
Step 2



6681, qty 1
23 tooth pinion



3862, qty 1
pinion set screw



! pinion & setscrew
included in RTR only

Baq J - Power System

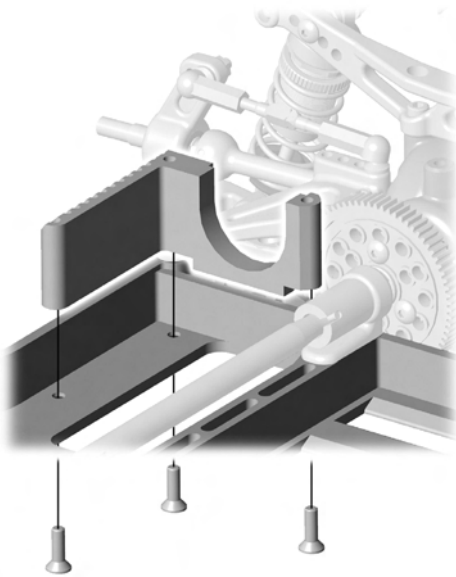
Step 3



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



31020, qty 1
motor mount



Step 4



3929, qty 1
motor damp spring



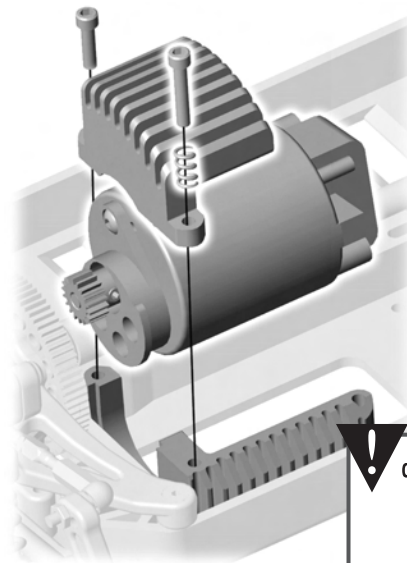
3931, qty 1
heatsink
motor damp



6926, qty 1
4-40 x 5/8" shcs



7874, qty 1
4-40 x 7/16" shcs



! compress spring
completely,
then loosen 1
to 1 1/2 turns

Step 5



6338, qty 1
antenna tube & cap

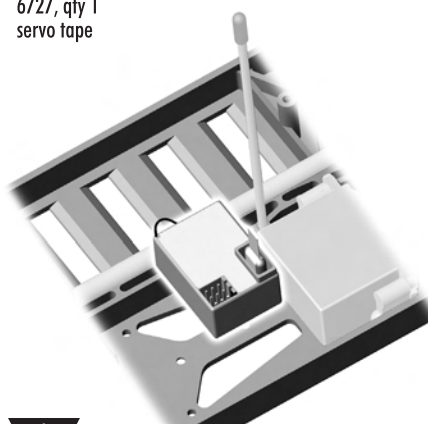


! feed antenna as shown
receiver included in RTR only

Step 6



6727, qty 1
servo tape

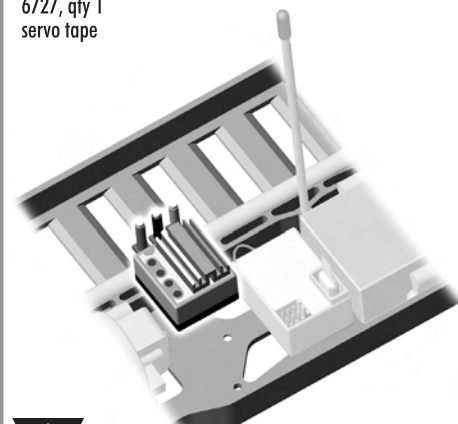


! attach receiver to
chassis with servo tape

Step 7



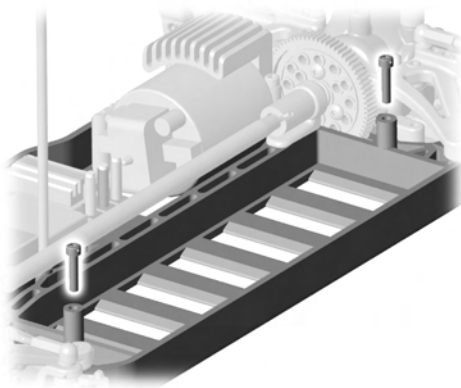
6727, qty 1
servo tape



! attach speed control to chassis with
servo tape. esc included in RTR only

Step 8

6916, qty 2
4-40 x 1/2" shcs
with hole

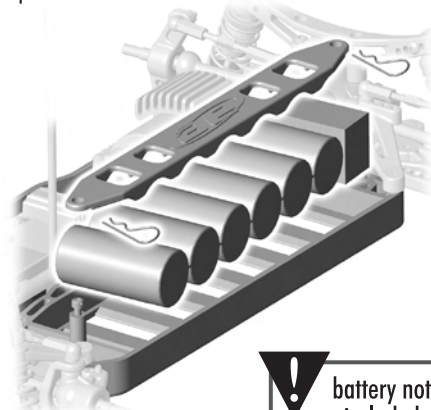


Step 9

3848, qty 1
battery foam
spacer

3853, qty 1
battery brace

6332, qty 2
body clip



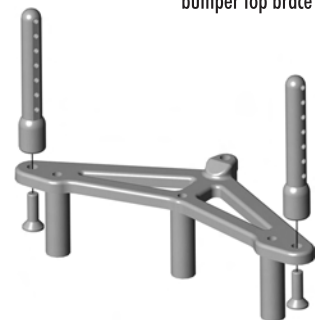
! battery not included

Step 1

2230, qty 2
body posts

6292, qty 2
4-40 x 3/8" fhcs

2225, qty 1
bumper top brace

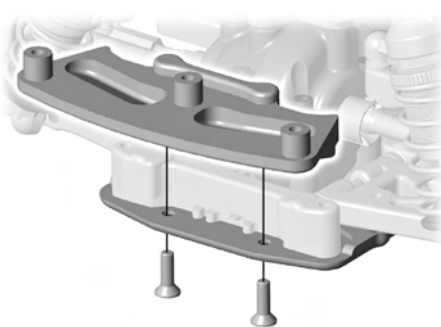


Bag K - Bumper & Body

Step 2

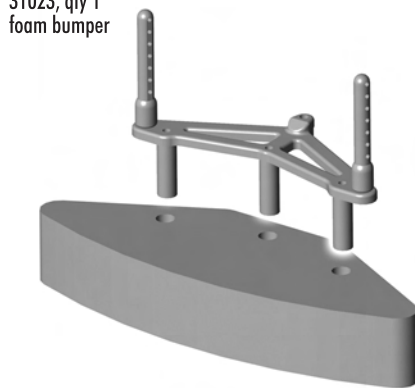
6292, qty 2
4-40 x 3/8" fhcs

31026, qty 1
front bumper



Step 3

31023, qty 1
foam bumper



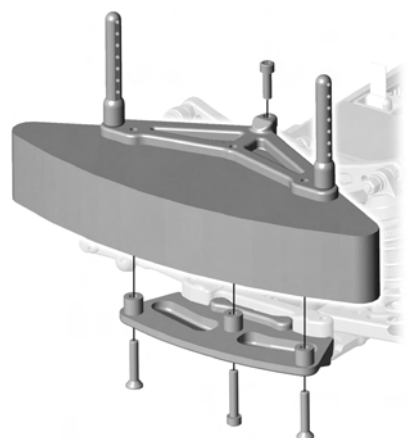
! foam bumper may require trimming to fit under some bodies

Step 4

6915, qty 2
4-40 x 5/8" fhcs

6924, qty 1
4-40 x 3/8" shcs

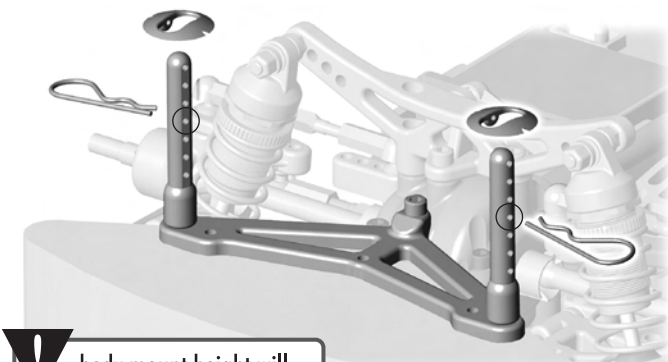
6926, qty 1
4-40 x 5/8" shcs



Step 5

3897, qty 2
pivoting body mount

6332, qty 2
body clip

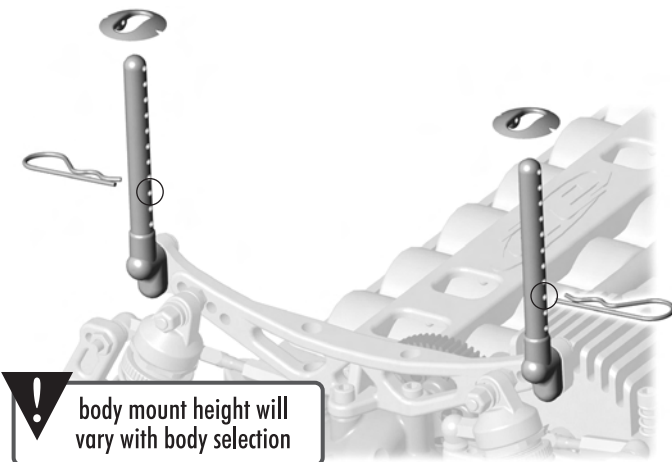


! body mount height will vary with body selection

Step 6

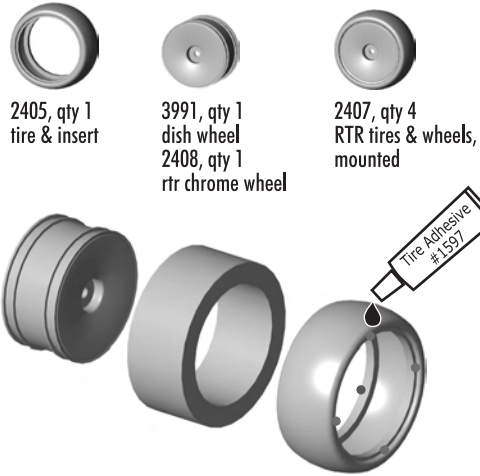
3897, qty 2
pivoting body mount

6332, qty 2
body clip



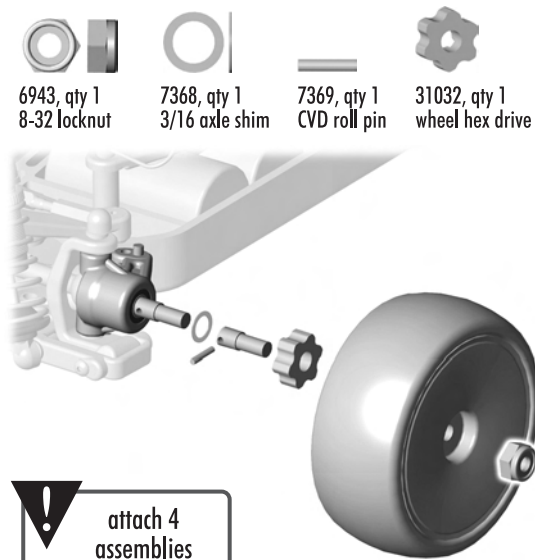
! body mount height will vary with body selection

Step 1



! assemble 4 wheels, kit only

Step 2



! attach 4 assemblies

Congratulations!

This completes the assembly of the Team Associated TC4. It is suggested that you select a body shell that best suits the situation for which your new TC4 will be used. Follow the instructions included with the body for painting and mounting.

Ackermann

The inside hole on the steering blocks gives more Ackermann, while the outboard hole yields less Ackermann. Increasing Ackermann will smooth out steering and is best when running a one-way or on a high traction surface such as carpet. Reduced Ackermann will typically work best with a front diff or a solid axle. This will give more mid-to-exit steering and more corner speed.

Anti-Dive

Rear mount higher than front mount, negative result. Adding anti-dive reduces weight transfer to the front on deceleration entering corners. It also reduces caster at the wheel.

Arm Mount Shimming

The TC4s new arm mounting system allows for maximum adjustability for both asphalt and foam tire conditions. The shimming system allows you to run the pins flat, kick-up, anti-dive, anti-squat, and pro-squat. Each shim is numbered 1, 2, and 3 is designated by the number of tabs on the shim. To determine what you are running, for each pair of mounts (Δ and \bigcirc for front, \square and \times for rear) subtract the number of tabs on the forward arm mount (Δ or \square) from the number of tabs on the rearward arm mount (\bigcirc or \times).

Some examples:

Front Suspension

triangle	circle	result	Type	Roll Center
2	2	0	flat	std.
3	3	0	flat	high
0	0	0	flat	low
4	2	+2	kick-up	std.
2	0	+2	kick-up	low
2	1	+1	kick-up	low
2	4	-2	anti-dive	high
0	2	-2	anti-dive	low
1	2	-1	anti-dive	std.

Rear Suspension

square	x	result	Type	Roll Center
4	4	0	flat	std.
6	6	0	flat	high
2	2	0	flat	low
4	2	+2	anti-squat	std.
2	0	+2	anti-squat	low
4	3	+1	anti-squat	std.
2	4	-2	pro-squat	std.
0	2	-2	pro-squat	low
3	4	-1	pro-squat	std.

Also, you can raise or lower the mounts for maximum roll-center adjustability. Simply raise the mounts in equal increments under both mounts and you can raise the roll center. Lowering the mounts in equal increments will lower the roll center.

Anti-Squat

Front mount higher than rear mount, positive result. Increasing anti-squat will make the rear suspension stiffer. It tends to give the car more entry steering and reduce rearward weight transfer on power.

Pro-Squat

Rear mount higher than front mount, negative result. Running Pro-Squat will increase rearward weight transfer on power.

Kick-Up

Front mount higher than rear mount, positive result. Increasing kick-up will make the front suspension stiffer, as well as increasing caster at the wheel.

Caster

Caster describes the angle of the kingpin from vertical while looking from the side of the car. Positive caster means the top of the kingpin leans rearward. Adding negative caster means the kingpin is leaning towards the front of the car. Since caster is measured at the wheel, it is affected by running any inclination in your inboard arm mount. Kick-up adds (+) caster, and anti-dive adds (-) caster.

When figuring out your caster at the wheel, add the number of degrees of kick-up or anti-dive and add it to the degree caster blocks you have on the car.

Typically for most racing surfaces, 4 degrees caster is the normal starting point for the Team. From there, increase caster to reduce mid to exit steering and make the front end less responsive. Conversely, decreased caster gives a more responsive feel and more exit steering.

Ballstud Height & Camber Location

You can lower the front or rear roll center by lowering the arm mounts, or raising the inner ballstud. A lower roll center will put more weight on the tires during cornering, and increases traction to that end of the car. Shortening the link (typically used on high grip and carpet) will raise the roll center and decrease grip. A similar effect can come from lowering the ballstud. You can lower the ballstud from standard by using a black short-neck ballstud.

Battery Placement

For most cases, run the battery in the standard forward position. Typically this will be the most stable and easiest to drive. Try moving the battery back if you encounter a low traction surface.

Wheelbase

Moving the wheels towards the center of the car will increase traction on that end of the car. Lengthening the front will reduce steering, shortening the front will increase steering. Shortening the rear will increase rear grip, lengthening the rear will decrease rear traction.

Droop

The standard settings of 5mm front and 4mm rear will work best in most cases. Reducing the droop by 0.5 to 1mm both front and rear will increase responsiveness. On carpet, you should run more droop to account for smaller tire diameters.

Ride Height

The standard starting point for ride height is 5mm front and rear and will be used at 90% of conditions. You can lower the front slightly relative to the rear to gain steering. Raise the car slightly for tracks with banking or large bumps. Some carpet tracks have a minimum ride height so check with the track manager.

Rear Toe-In

The TC4 comes with 3 rear toe-in per side. Decreasing toe-in will decrease rear traction and increase corner speed. The optional parts needed are #31068 2.5 degree toe-in and #31069 2.0 degree toe-in blocks.

Motor Gearing**Spur (48 Pitch)**

	69	70	71	72	73	74	75
18	9.58	9.72	9.86	10.00	10.14	10.28	10.42
19	9.08	9.21	9.34	9.47	9.61	9.74	9.87
20	8.63	8.75	8.88	9.00	9.13	9.25	9.38
21	8.21	8.33	8.45	8.57	8.69	8.81	8.93
22	7.84	7.95	8.07	8.18	8.30	8.41	8.52
23	7.50	7.61	7.72	7.83	7.93	8.04	8.15
24	7.19	7.29	7.40	7.50	7.60	7.71	7.81
25	6.90	7.00	7.10	7.20	7.30	7.40	7.50
26	6.63	6.73	6.83	6.92	7.02	7.12	7.21
27	6.39	6.48	6.57	6.67	6.76	6.85	6.94
28	6.16	6.25	6.34	6.43	6.52	6.61	6.70
29	5.95	6.03	6.12	6.21	6.29	6.38	6.47
30	5.75	5.83	5.92	6.00	6.08	6.17	6.25
31	5.56	5.65	5.73	5.81	5.89	5.97	6.05
32	5.39	5.47	5.55	5.63	5.70	5.78	5.86

Pinion (48 Pitch)

Motor	72t Spur
24-degree stock (torque based)	28
24-degree stock (RPM based)	27
19 Turn Spec	30
12-Turn Modified (Big Track)	25
12-Turn Modified	24
11-Turn Modified	22
10-Turn Modified	21
9-Turn Modified	20
8-Turn Modified	19

Motor gearing is a starting recommendation only. You may need to adjust your gearing according to your track size.

Tips for beginners...

Before making any changes to the standard setup, make sure you can get around the track without crashing. Changes to your car will not be beneficial if you cannot stay on the track. Your goal is consistent laps.

Once you can get around the track consistently, start tuning your car. Make only ONE adjustment at a time, testing it before making another change. If the result of your adjustment is a faster lap, mark the change on the included setup sheet (make additional copies of the sheet before writing on it). If your adjustment results in a slower lap, revert back to the previous setup and try another change.

When you are satisfied with your car, fill in the setup sheet thoroughly and file it away. Use this as a guide for future track days or conditions.

For more racing tips and setup information, go to: www.RC10.com • www.TeamAssociated.com • www.CompetitionX.com

Associated Electrics, Inc.

3585 Cadillac Ave. Costa Mesa, CA 92626 USA

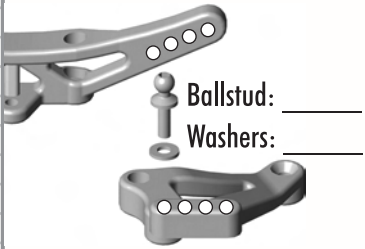
© 2004 Associated Electrics, Inc.



TC4! Setup Sheet

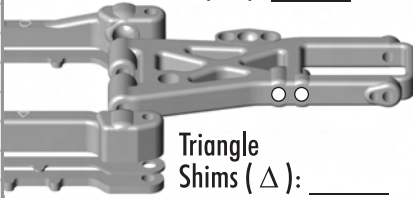
Driver: _____ Date: _____
 Track: _____ Indoor Outdoor
 Event: _____
 Conditions: _____

Front Suspension



Ballstud: _____
 Washers: _____

Circle Shims (O): _____



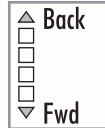
Triangle Shims (Δ): _____

Front Upright



Caster Block: _____
 Washers: _____
 Ballstud: _____

Arm Spacing



Anti-Roll Bar

- .055 - Black
- .063 - Silver
- .078 - Gold
- Other: _____

Notes: _____

Front Shocks

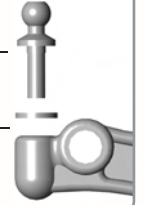


Piston: _____
 Oil: _____ wt
 Spring: _____
 Ride Height: _____ mm

Alignment

Droop: _____
 Camber: _____
 Toe: _____

Steering Rack

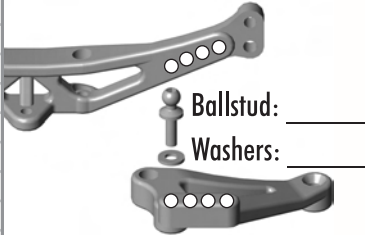


Ballstud: _____
 Washers: _____

Front Diff

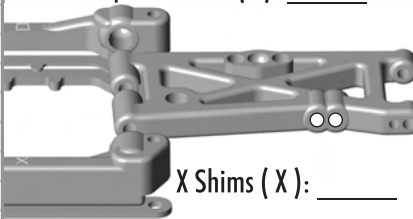
- Diff Setting: _____
- Solid Axle
- Oneway

Rear Suspension



Ballstud: _____
 Washers: _____

Square Shims (□): _____



X Shims (X): _____

Rear Upright



Rear Shocks



Piston: _____
 Oil: _____ wt
 Spring: _____
 Ride Height: _____ mm

Anti-Roll Bar

- .055 - Black
- .063 - Silver
- .078 - Gold
- Other: _____

Notes: _____

Alignment

Droop: _____
 Camber: _____
 Toe: _____

Body & Wing

Body: _____
 Wing: _____
 Sidedams
 Spillplates
 Notes: _____

Tires

Front Tires

Compound: _____
 Insert: _____
 Wheel: _____
 Traction Compound: _____

Notes: _____

Rear Tires

Compound: _____
 Insert: _____
 Wheel: _____

Electronics

Motor: _____ Gear: _____ t/ _____ t
 Motor Brush: _____ Motor Spring: _____
 Motor Timing: _____
 Battery: _____ Position: _____
 ESC: _____ Mode: _____
 Drag Brake: _____ Initial Brake: _____

Race Comments

Main: _____ Qualifying Position: _____ Finish: _____
 Notes: _____

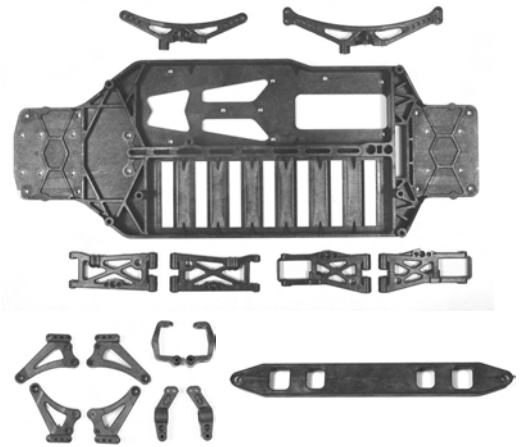
Car Comments

Notes: _____

Factory Team Options

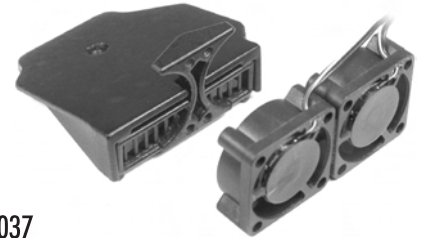
1401	FT 1.30"/33mm Titanium Turnbuckles	Pr.	\$ 8.00
1414	FT 1.125"/28.5mm Titanium Turnbuckles	Pr.	9.00
1729	TC3/TC4/NTC3 HD Oneway Housing w/Bearings	1	40.00
1731	HD Oneway Special Outdrive Bearings	Pr.	8.00
1785	Graphite Battery Spacer	1	8.99
3978	TC3/TC4 HD Front Oneway Assembly	1	61.99
3979	TC3/TC4 HD Front Oneway Outdrives	Pr.	21.00
3985	FT Hard Anodized Threaded Shock Kit (2 complete shocks)	Set	39.99
3990	FT Hard Anodized Threaded Shock Bodies	Pr.	20.00
31002	TC4 Carbon Chassis Braces	Set	9.99
31005	TC4 Carbon Hub Carrier & Steering Block (1 ea)	Set	11.99
31007	TC4 Carbon Front A-Arms	Pr.	10.99
31008	TC4 Carbon Rear A-Arms	Pr.	10.99
31012	TC4 Carbon Front Shock Tower	1	8.99
31014	TC4 Carbon Rear Shock Tower	1	8.99
31035	FT Motor Cooling Duct/Screen	1	5.99
31036	FT Motor Cooling Fans, prewired	2	24.99
31037	FT Motor Cooling Duct/Fan Kit	1	28.99
31039	FT Blue Graphite Battery Brace w/Chrome Decal	1	14.99
31041	TC4 Carbon Chassis	1	39.99
31042	TC4 Carbon Component Kit	Set	69.99
31046	FT TC4 Motor Mount, blue	1	19.99
31047	FT TC4 Motor Clamp, blue	1	27.99
31048	FT Aluminum Motor Heatsink, black (for std clamp)	1	9.99
31049	FT Aluminum Motor Heatsink, blue (for #31047)	1	14.99
31052	FT Titanium Turnbuckle Kit (6 + wrench)	Set	29.99
31054	FT TC4 Aluminum Screw Kit, blue (38 pcs)	Set	12.99
31057	FT Anti-Roll Bar Kit (includes 3 bars)	Set	12.99
31058	FT Aluminum Anti-Roll Bar Studs, blue	2	3.99
31060	FT TC4 Polished Hinge Pin Set	Set	9.99
31062	FT TC4 Lightened Steel Diff Outdrives (1 ea side)	Pr.	19.99
31064	FT TC4 Aluminum F Arm Mount - Triangle	1	12.99
31065	FT TC4 Aluminum F Arm Mount - Circle	1	12.99
31066	FT TC4 Aluminum R Arm Mount - Square	1	12.99
31067	FT TC4 Aluminum R Arm Mount - X-3.0	1	12.99
31068	FT TC4 Aluminum R Arm Mount - X-2.5	1	12.99
31069	FT TC4 Aluminum R Arm Mount - X-2.0	1	12.99

Carbon Chassis Set



#31042

Motor Cooling Duct/Fan Kit



#31037

Motor Mount



#31046

Ti Turnbuckles



#1401

Factory Team Tools

1110	FT Turnbuckle Wrench	1	\$ 1.50	1572	Hex Driver Replacement Tip, .050"	1	5.50
1450	FT Ride Height Gauge	1	14.99	1573	Hex Driver Replacement Tip, 1/16"	1	5.50
1541	Hex Driver Set	Set	59.99	1574	Hex Driver Replacement Tip, 1.5mm	1	5.50
1542	Hex Driver, .050", Silver Handle	1	10.50	1575	Hex Driver Replacement Tip, 5/64"	1	5.50
1543	Hex Driver, 1/16", Black Handle	1	10.50	1576	Hex Driver Replacement Tip, 3/32"	1	5.50
1544	Hex Driver, 1.5mm, Purple Handle	1	10.50	1577	Hex Driver Replacement Tip, 2.5mm	1	5.50
1545	Hex Driver, 5/64", Blue Handle	1	10.50	1578	Hex Driver Replacement Tip, 3mm	1	5.50
1546	Hex Driver, 3/32", Gold Handle	1	10.50	1593	FT Body Reamer Tip	1	9.95
1547	Hex Driver, 2.5mm, Green Handle	1	10.50	1594	FT Body Reamer	1	22.00
1548	Hex Driver, 3mm, Red Handle	1	10.50				
1561	Nut Driver Set	Set	69.99				
1562	Nut Driver, 3/16", Black Handle	1	12.99				
1563	Nut Driver, 1/4", Red Handle	1	12.99				
1564	Nut Driver, 5.5mm, Purple Handle	1	12.99				
1565	Nut Driver, 11/32", Green Handle	1	12.99				
1566	Nut Driver, 7mm, Silver Handle	1	12.99				
1567	Nut Driver, 8mm, Gold Handle	1	12.99				



1541



1561