

**1:10 SCALE OFF ROAD TRUCK KIT**



**RC10 T3**

**INSTRUCTION MANUAL FOR KITS  
#7003 BASIC, #7013 SPORT, #7037 TEAM**



**TEAM  
ASSOCIATED**

**SAVE THIS MANUAL!**

Use with current catalog for future,  
hassle-free re-ordering of parts.

# RC10 T3

## All kit versions include:

- 2.40:1 Stealth transmission for effortless power handling.
- Molded composite chassis for better rigidity and Lexan® T3 racing truck body.
- Extra-long suspension arms for greater stability and travel.
- Optimized front end geometry improves steering, increases rigidity, and includes optional Ackerman setup.
- Adjustable battery placement for fine tuning of traction or steering.



## TEAM KIT

Shocks: Hard anodized, Teflon-coated gray.  
Wheels: One-piece rims.  
Front Tires: Wide, Proline "Edge" XTR.  
Rear Tires: Pro-Line "Mini Pin" M-2.  
Rear Axles: MIP CVD's.  
**Also includes:** Ball bearings throughout.



## SPORT KIT

Shocks: Gold shocks.  
Wheels: Three-piece rims.  
Front Tires: Wide, Proline "Edge" XTM.  
Rear Tires: Pro-Line "Stubby T" XTM.  
Rear Axles: Associated dogbones & stub axles.  
**Also includes:** Mechanical speed control and motor. Bushings throughout.



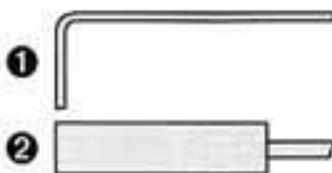
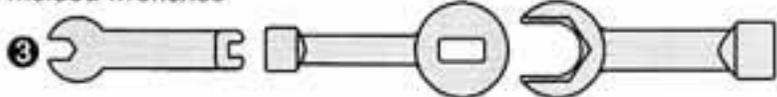
## BASIC KIT

Shocks: Gold shocks.  
Wheels: Three-piece rims.  
Front Tires: Wide, Pro-line "Edge" XTM.  
Rear Tires: Pro-Line "Stubby T" XTM.  
Rear Axles: Associated dogbones & stub axles.  
**Also includes:** Bushings throughout.

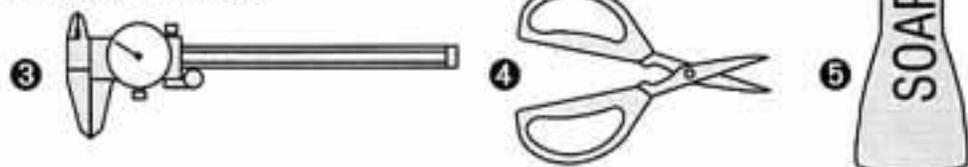
## TOOLS

### KIT TOOLS SUPPLIED

- Allen wrenches, .050", 1/16", 5/64", 3/32"
- Shock assembly tool
- Associated shock, turnbuckle & axle nut molded wrenches



- Vernier calipers
- Hobby scissors
- Liquid dish soap



### EXTRA TOOLS NEEDED

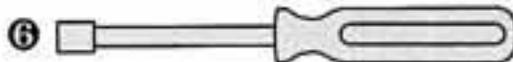
- Phillips screwdrivers #1 and #2
- flat blade screwdriver
- needlenose pliers
- soldering iron (40-50 watts) and a small amount of Rosin core solder. Pencil-type soldering iron is better than the gun type. **DANGER! Tip is HOT!**
- Thread locking compound (#242 Blue Loctite® or equivalent)
- super glue (cyanoacrylic glue)
- hobby knife **WARNING! This knife cuts plastic and fingers with equal ease, so be careful.**
- precision ruler



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

- Nut drivers (screwdriver-handled hex socket tools) such as the following from Associated:  
#SP-86 3/16" nut driver  
#SP-85 1/4" nut driver  
#SP-82 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 or strip the threads during installation.



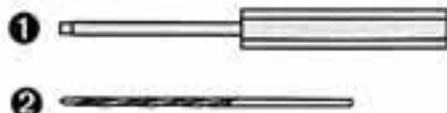
## ITEMS NEEDED TO OPERATE YOUR TRUCK

- R/C two channel surface frequency radio system. **7003, 7037 kits:** requires one servo. **7013 kit:** requires two servos.
- \*Battery pack (6 cell) for all kits.
- Battery charger (we recommend a peak detection charger) for all kits.
- \*Electronic or mechanical speed control for **7003** and **7037 kits**.
- \*R/C electric motor for **7003** and **7037 kits**.
- \*Pinion gear, 48 pitch size to be determined by type and wind of motor you will be using--for **7003** and **7037 kits**.

\* Available from Associated. See your catalog.

### HELPFUL TOOLS (NOT REQUIRED)

- Allen drivers (straight Allen wrenches with hex shaped handles) such as the following made by Associated:  
#6957 .050" Allen wrench  
#6958 1/16" Allen wrench  
#6959 5/64" Allen wrench  
#6960 3/32" Allen wrench  
#6961 2.5mm Allen wrench
- Hand drill with 1/8" & 1/4" bits



# REACHING US

**CUSTOMER SUPPORT**  
 (714) 850-9342  
 Fax (714) 850-1744  
 Internet <http://rc10.com>

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**ASSOCIATED ELECTRICS, INC.**  
 3585 Cadillac Ave.  
 Costa Mesa, CA 92626  
 USA

## BEFORE BUILDING

[Click part number to search eBay](#)

### 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 may have small parts remaining at the end of a bag. These will become part of the next bag. Some bags may have a large amount of small parts. We recommend the use of a partitioned paper plate for spreading out the parts so they will be easier to find.

### MANUAL FORMAT

The following explains the new Associated format of these instructions.

*The beginning of each section indicates:*

- 1 Which bag to open ("**BAG A**").
- 2 Which parts you will use for those steps. Remove only the parts shown. "1:1" indicates an actual size drawing; place your part on top and compare it so it does not get confused with a similar part.
- 3 Which of the kits the parts will be used for, and to which steps they apply ("**Remove these parts for: 7037: step 1,**

- 4 Which tools you should have handy for that section.
- 5 In some drawings, the word "**REAR**" with an arrow indicates which direction is the rear of the truck to help keep you oriented.
- 6 The instructions in each step are ordered in the order you complete them, so read the words **AND** follow the pictures. The step numbers in circles are also in the drawing to help you locate them faster.

### SUPPLEMENTAL SHEETS

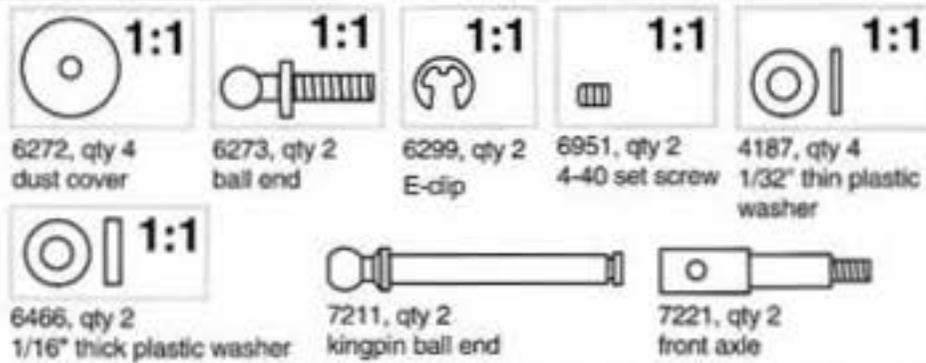
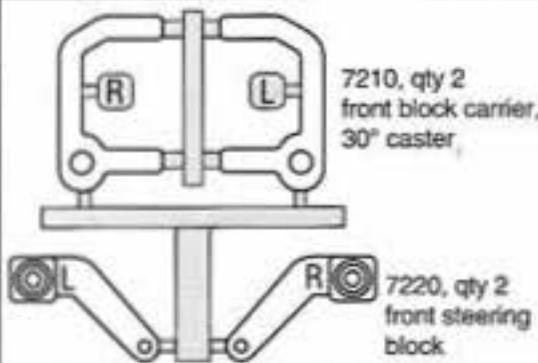
We are constantly developing new parts to improve our kits. These changes, if any, will be noted in supplementary sheets located in a parts bag or inside the kit box. Check the kit box before you start and each bag as it is opened. When a supplement is found, attach it to the appropriate section of the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

**Now clear off your workbench**, line up some paper plates, grab your Big Gulp, triple decker BLT, candy bars, put out the dog, and let's begin!

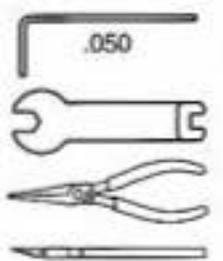
## BAG A

**REMOVE THESE PARTS FOR:**

- 7003: step 1
- 7013: step 1
- 7037: step 1



## TOOLS USED



## STEP 1 LEFT SIDE

### ASSEMBLE STEERING BLOCKS

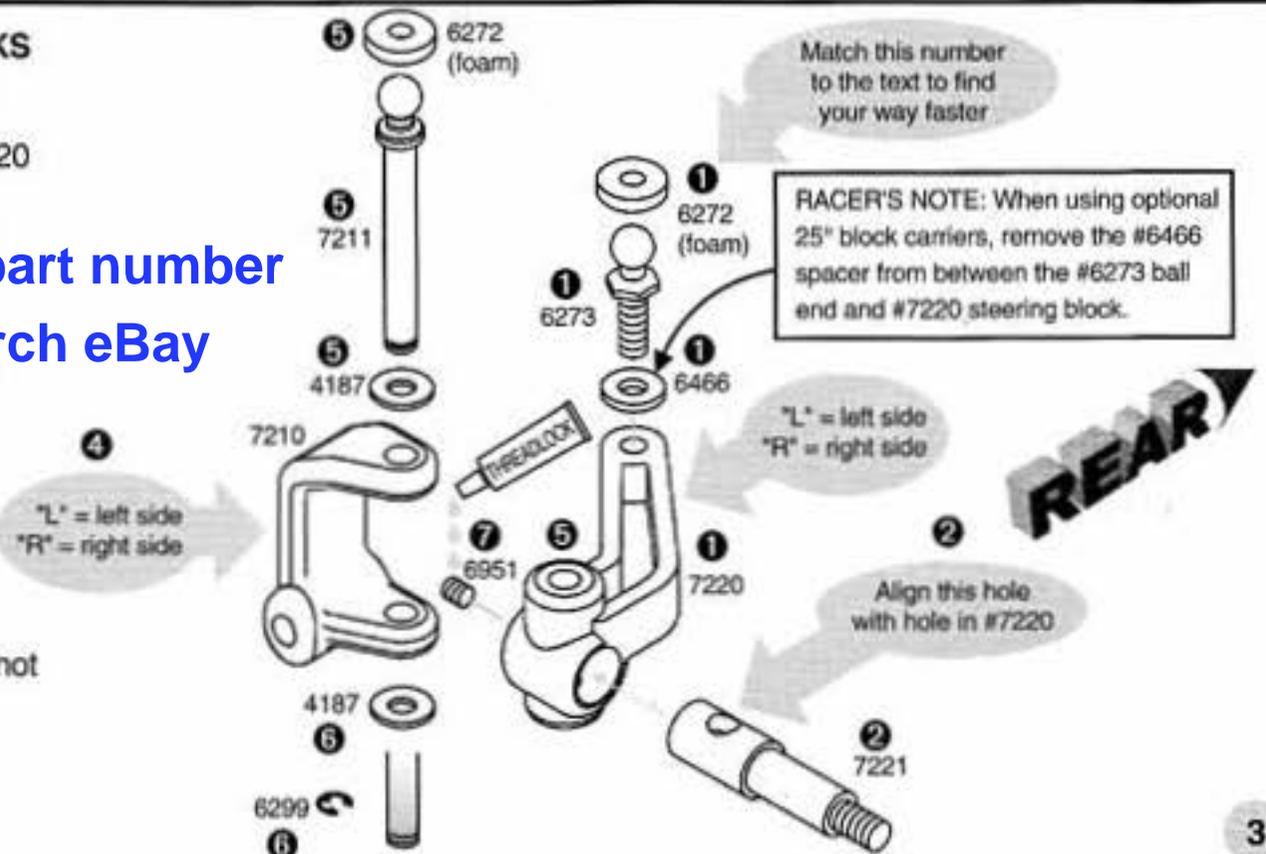
- 1 Assemble parts #7220, 6466, 6273 and 6272.
- 2 Push #7221 axle into the #7220 steering block, lining up holes.

3 Push the #7211 kingpin through both to clear any burrs. Then remove the kingpin.

### ASSEMBLE BLOCK CARRIERS

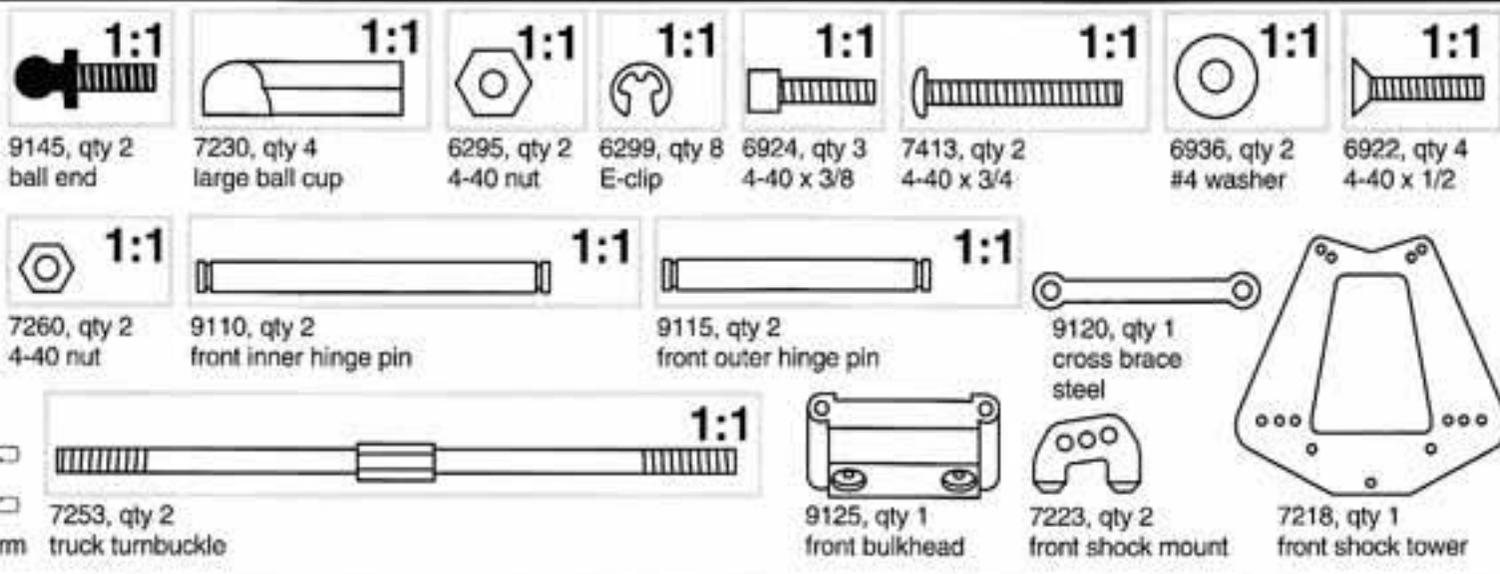
- 4 Note location of L and R on #7210 block carriers and #7220 steering blocks.
- 5 Align holes of #7220 (L) inside #7210 (L). Add one #4187 spacer to #7211 kingpin and insert #7211 through block and axle. Add a #6272 dust cover to the ball end as shown.
- 6 Insert one #4187 spacer and then one #6299 E-clip to the bottom of #7211 kingpin.
- 7 Add screw locking compound such as Loctite® (not included in kit) to #6951 set screw and tighten into #7221.
- 8 Now assemble right side.

[Click part number to search eBay](#)

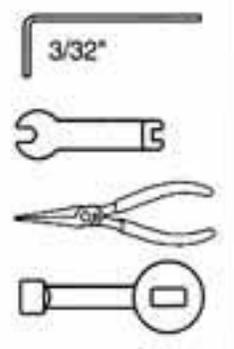


# BAG A

REMOVE THESE PARTS FOR:  
 7003: step 1  
 7013: step 1  
 7037: step 1



# TOOLS USED



## STEP 2 LEFT SIDE

### SHOCK MOUNTS TO SUSPENSION ARMS

1 Twist the #7205 suspension arms from the mold runners (shown in gray) with your pliers, and trim away remaining molding with your hobby knife.  
 2 Place the #7223 front shock mount on the front arm, the taller end of the mount toward the outside of the arm, and secure using two #6922 4-40 x 1/2 screws.

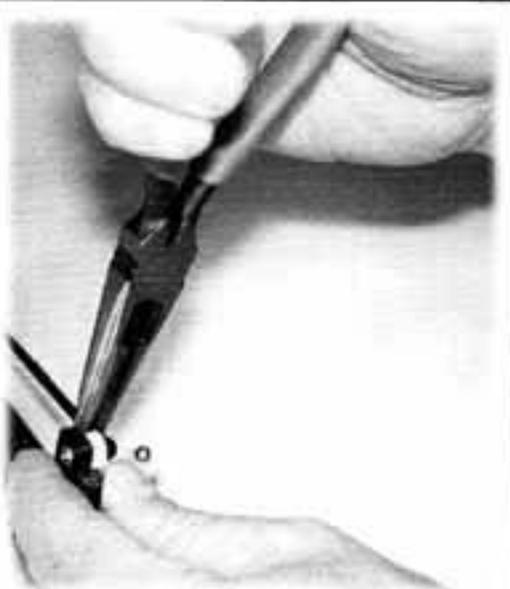
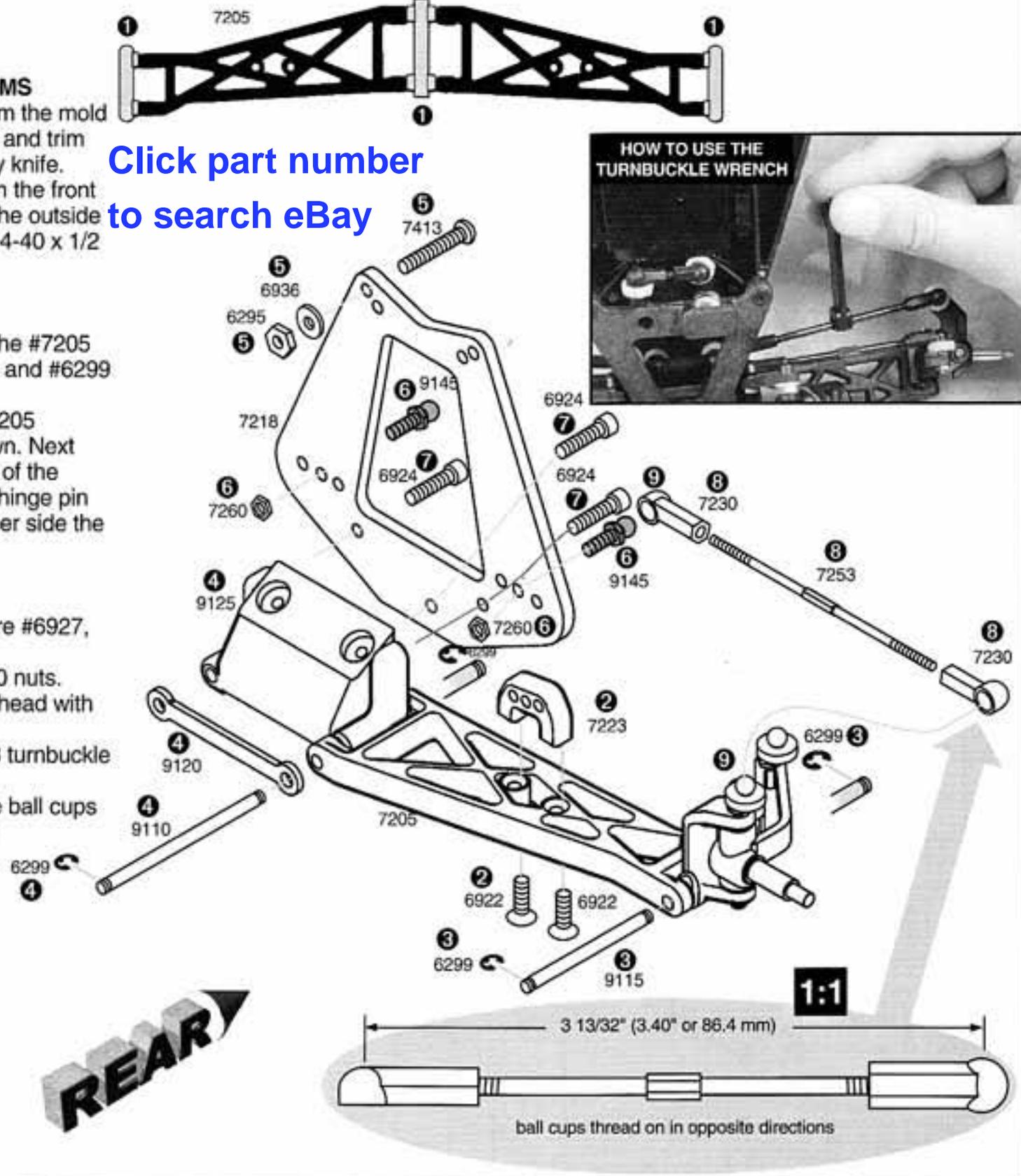
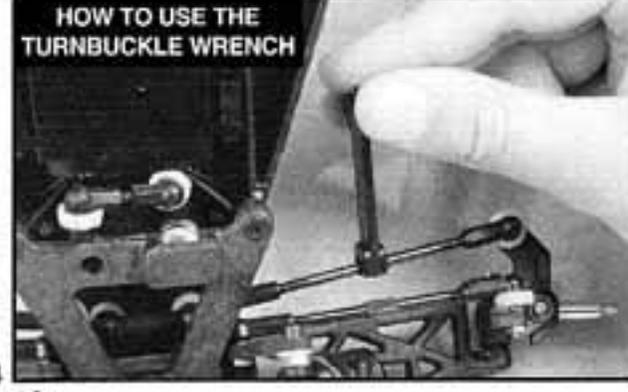
### ARMS TO BULKHEAD

3 Attach the carrier block assembly to the #7205 suspension arm with its #9115 hinge pin and #6299 E-clips.  
 4 Align the #9125 bulkhead with the #7205 suspension arm hinge pin holes as shown. Next hold the #9120 front cross brace in front of the suspension arm while sliding the #9110 hinge pin through the assembly. Assemble the other side the same way.

### SHOCK TOWER TO BULKHEAD

5 Attach the shock screws and hardware #6927, 6936 and 6295.  
 6 Attach the #9145 ball ends and #7260 nuts.  
 7 Attach #7218 shock tower to the bulkhead with the three #6924 screws.  
 8 Twist #7230 ball cups onto the #7253 turnbuckle until you get the dimension shown.  
 9 Connect ball ends with the turnbuckle ball cups as shown, using your needle nose pliers.

[Click part number to search eBay](#)



**4 REMOVING BALL CUPS**  
 Hold the cup next to the ball with your pliers and twist the cup off.

## VIEWED FROM REAR

COMPLETED FRONT ASSEMBLY



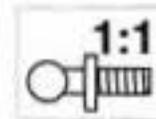
# BAG B

REMOVE THESE PARTS FOR:

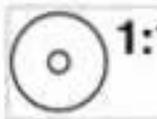
7003: steps 1-3

7013: steps 1-3

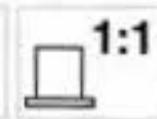
7037: steps 1-3



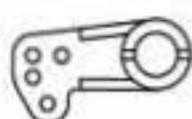
6270, qty 5 ball end



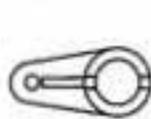
6272, qty 5 dust cover



9155, qty 2 left hand servo saver bushing



9155, qty 1 servo saver arm



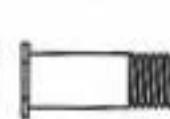
9155, qty 1 servo saver arm



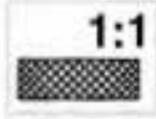
9155, qty 2 bell crank bushing



9155, qty 1 bell crank



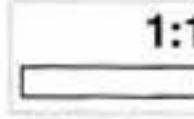
9156, qty 1 tube, aluminum



9157, qty 1 adjusting nut



9157, qty 1 servo saver spring



9160, qty 1 mounting pin, right hand



9160, qty 1 mounting pin, left hand



9165, qty 1 drag link

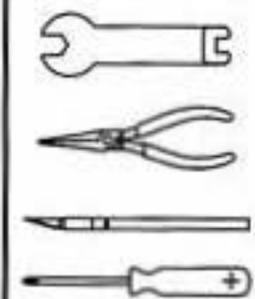


9210, qty 1 kickup



9215, qty 3 6-32 x 3/16

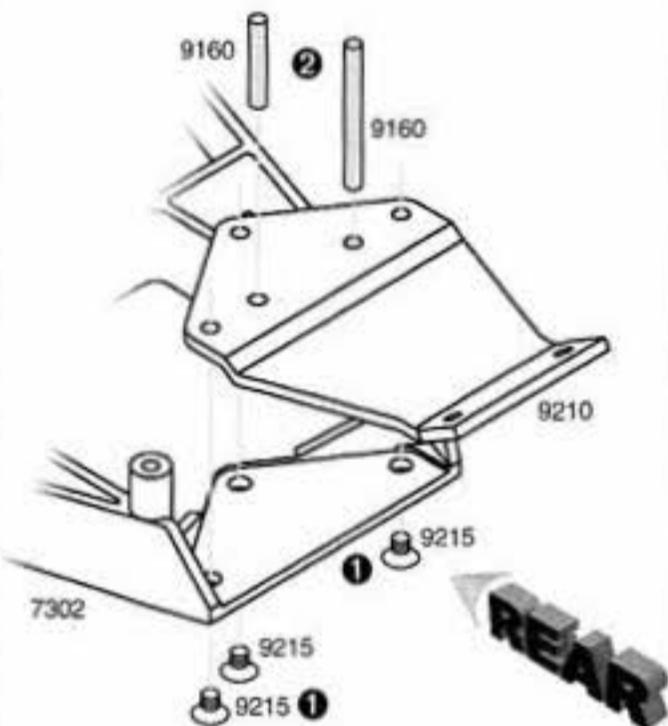
# TOOLS USED



## STEP 1

### KICKUP TO CHASSIS

- 1 Add screw locking compound such as Loctite® (not included in kit) to the three #9215 screws and attach the #9210 aluminum kickup (nose plate) to the #7302 chassis.
- 2 Place the two #9160 servo saver/bell crank mounting pins in the locating holes.



## STEP 2

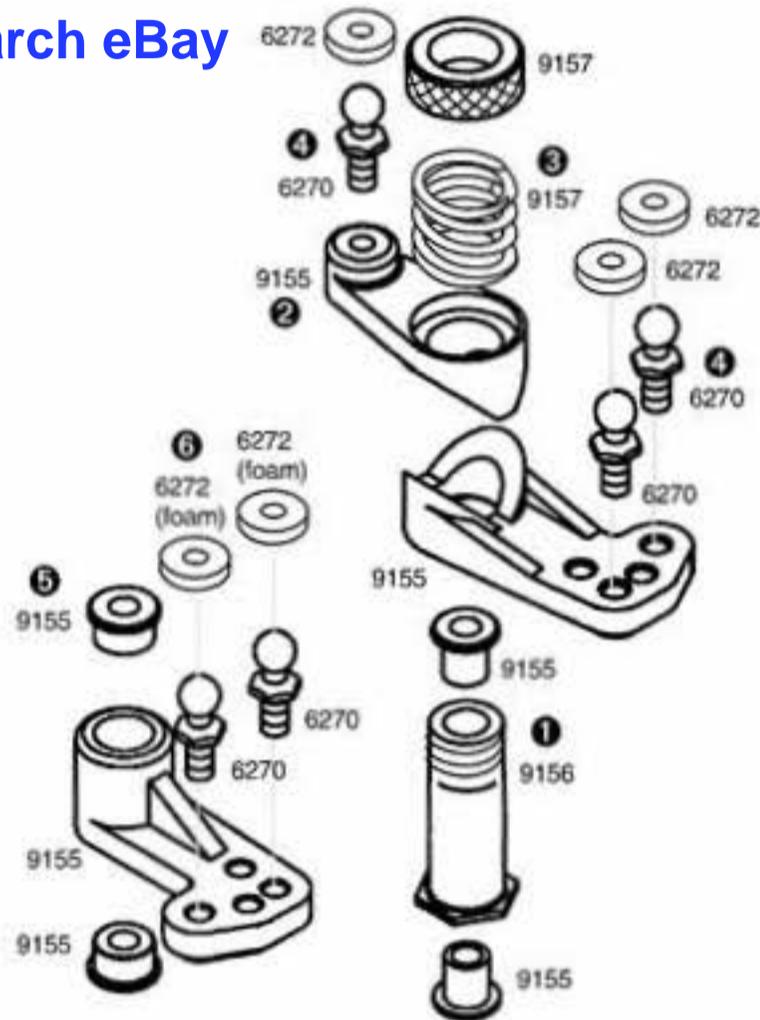
[Click part number to search eBay](#)

### SERVO SAVER

- 1 Push one #9155 servo saver bushing into each end of the #9156 aluminum tube.
- 2 Slide the two #9155 servo saver arms onto the tube.
- 3 Slide the spring and adjusting nut on the tube. Tighten the nut until 1/32" of the tube threads are exposed.
- 4 Add three #6270 ball ends where shown and three #6272 foam dust covers onto them.

### BELLCRANK

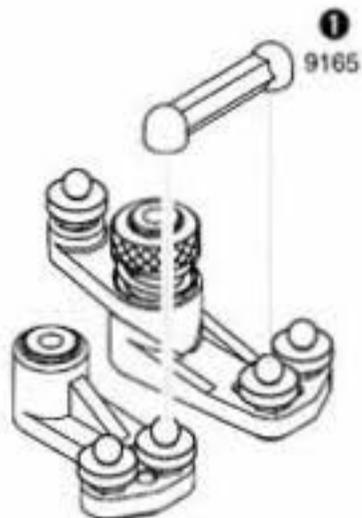
- 5 Install the two #9155 bell crank bushings into the bell crank.
- 6 Add two #6270 ball ends where shown and two #6272 foam dust covers onto them.



## STEP 3

### DRAG LINK

- 1 Install the #9165 drag link over the two ball ends with your needlenose pliers.



## PROFILE

### MARK PAVIDIS

Mark and his Associated trucks have a long list of winning accomplishments. His many wins include the Reedy Race of Champions, the NORRCA Truck Nationals, and many others.



# BAG B

REMOVE THESE PARTS FOR:

7003: steps 4-6  
7013: steps 4-6  
7037: steps 4-6



6292, qty 4  
4-40 x 3/8



6923, qty 2  
4-40 x 3/4



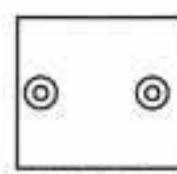
7673, qty 2  
4-40 x 5/16



6918, qty 2  
4-40 x 1/2



9130, qty 1  
front top plate



9220, qty 1  
front bumper



7321, qty 1  
front body mount

# TOOLS USED



## STEP 4

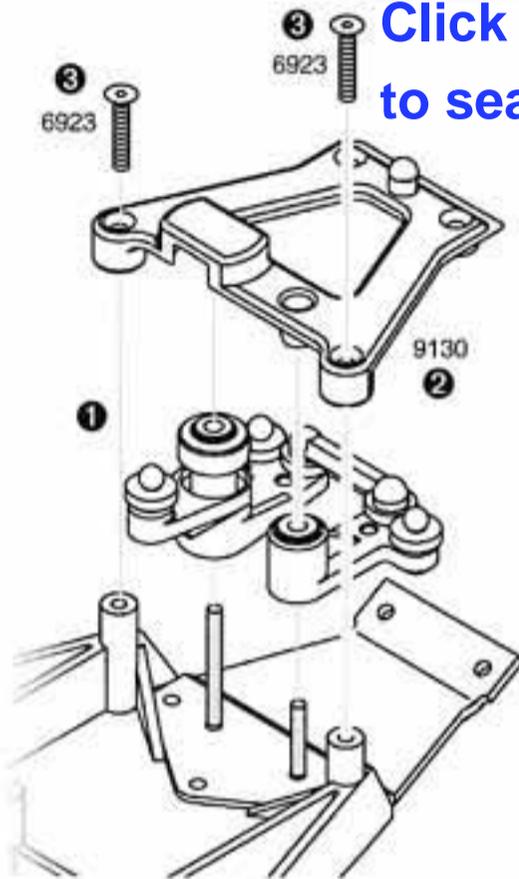
### SERVO SAVER TO CHASSIS

1 Place the servo saver assembly over the pins.

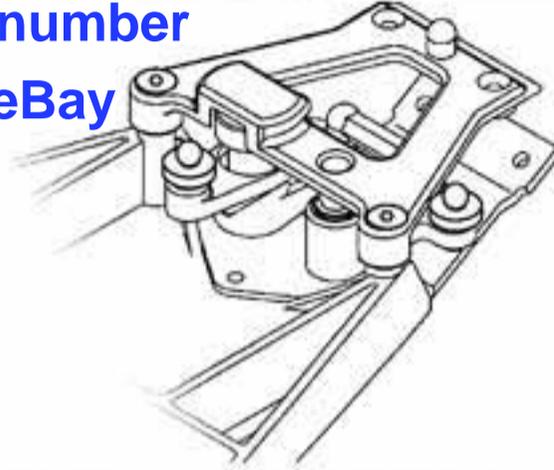
### TOP PLATE TO CHASSIS

2 Line up the #9130 front top plate with the servo saver pins and screw holes.

3 Bolt down the top plate with two #6923 screws tightly, then back off both screws one full turn. This will allow us to accomplish step 5 below.



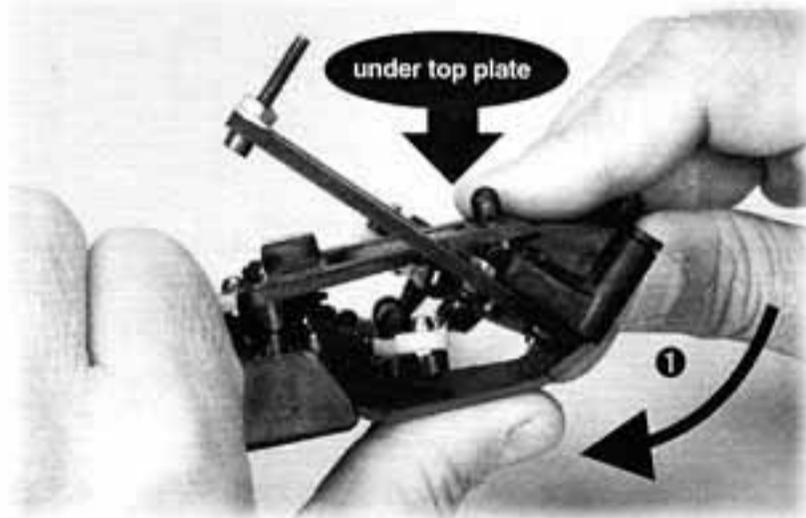
Click part number to search eBay



## STEP 5

### FRONT END TO CHASSIS

1 Slip front end under top plate, then push rearward over kickup.

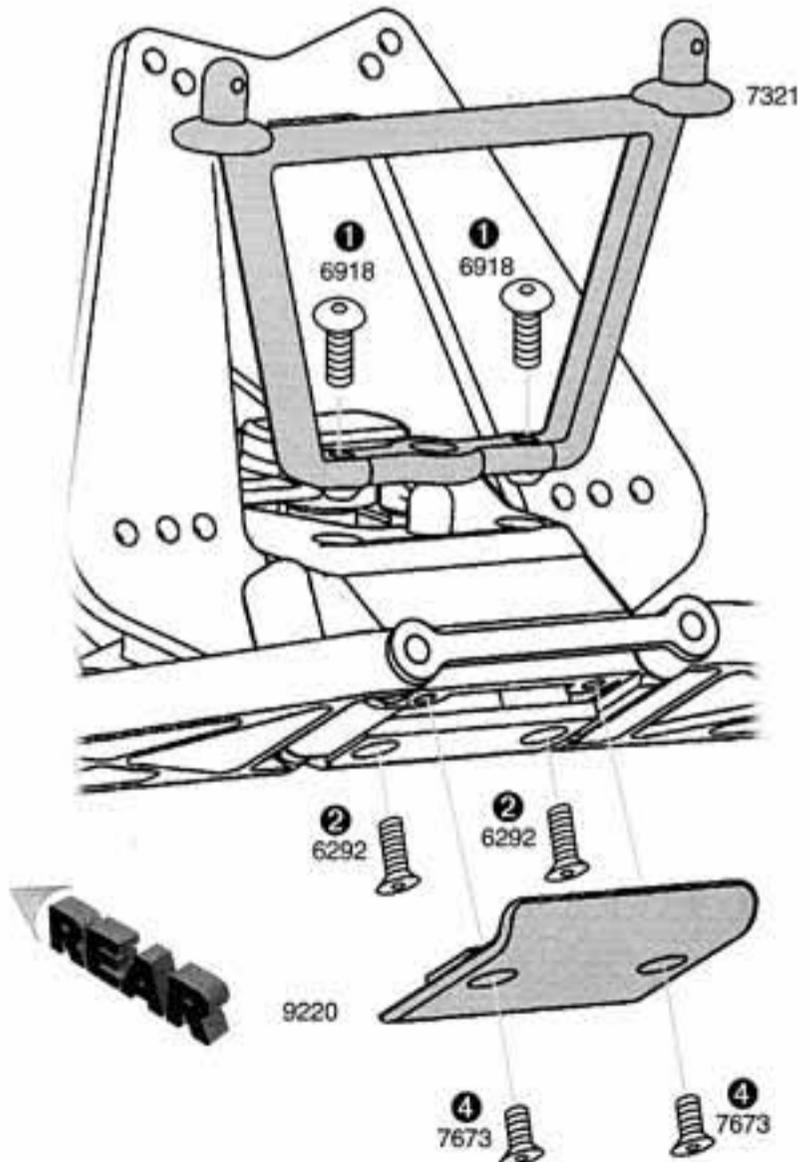


6

## STEP 6

### FRONT BODY MOUNT & BUMPER

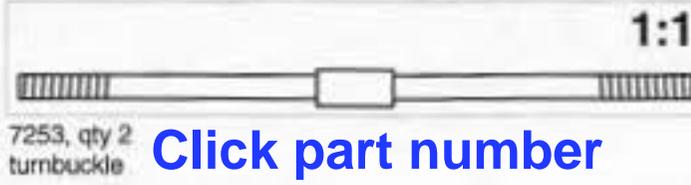
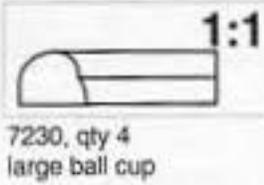
- 1 Secure the #7321 front body mount to the top plate with two #6918 screws.
- 2 Add two #6292 screws to secure the front end assembly to the front kickup.
- 3 Go back and tighten the two #6923 screws from Bag B in step 4.
- 4 Bolt on the #9220 bumper with the two #7673 screws.



# BAG B

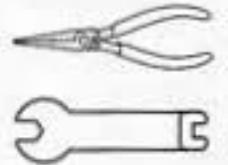
REMOVE THESE PARTS FOR:

7003: step 7  
7013: step 7  
7037: step 7



[Click part number to search eBay](#)

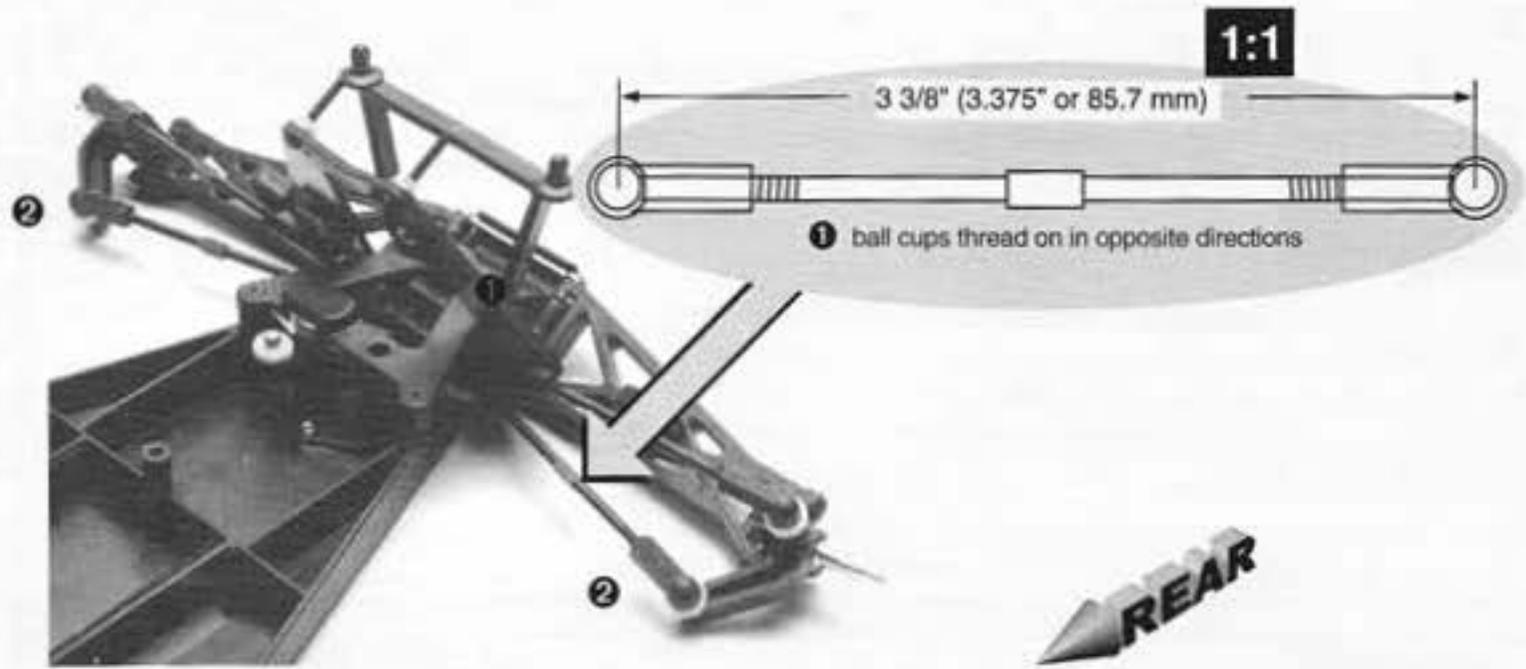
# TOOLS USED



## STEP 7

### TURNBUCKLES

- 1 Add #7230 ball cups to two #7253 turnbuckles to the dimension shown.
- 2 Pop on the turnbuckles with your needle-nose pliers. Do both sides.



## PROFILE

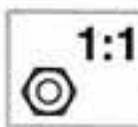


RANCH PIT SHOP, Pomona California, USA.

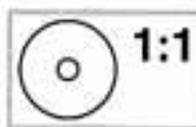
# BAG C

REMOVE THESE PARTS FOR:

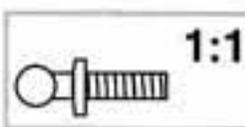
7003: step 7  
7013: step 7  
7037: step 7



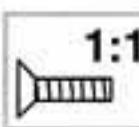
7260, qty 2  
4-40 locknut



6272, qty 2  
dust cover



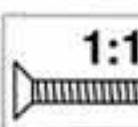
6273, qty 2  
ball end



6292, qty 4  
4-40 x 3/8



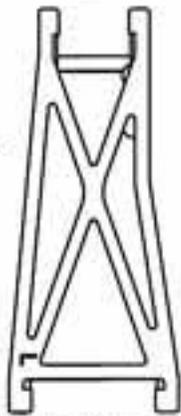
6299, qty 4  
E-clip



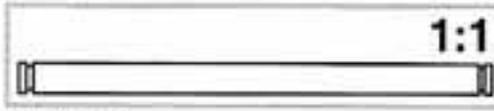
9269, qty 4  
5-40 x 1/2



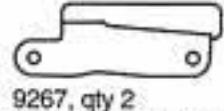
7341, qty pr  
rear shock mount



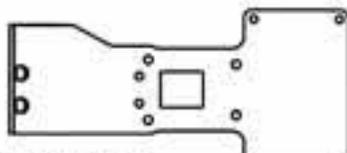
7340, qty pr  
suspension arm



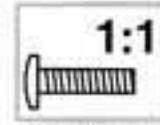
9260, qty 2  
rear inner hinge pin



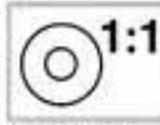
9267, qty 2  
rear suspension mount, 3-3  
(3° toe-in, 3° anti-squat)



9241, qty 1  
rear chassis plate

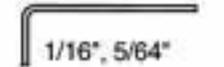


6917, qty 4  
4-40 x 3/8



6936, qty 2  
#4 washer

# TOOLS USED



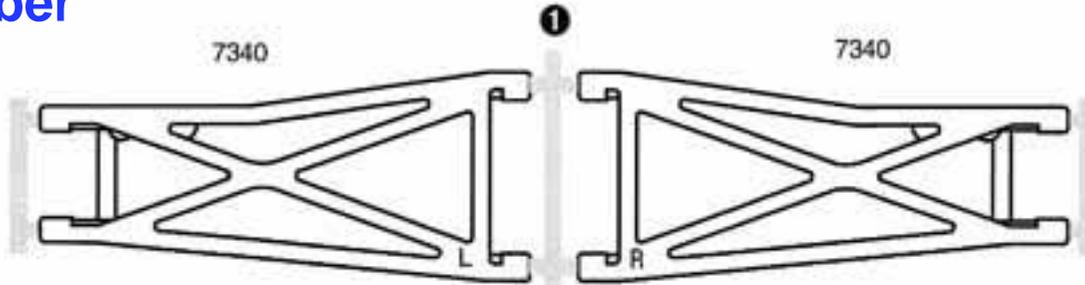
1/16", 5/64"

## STEP 1

[Click part number to search eBay](#)

### TRIM SUSPENSION ARMS

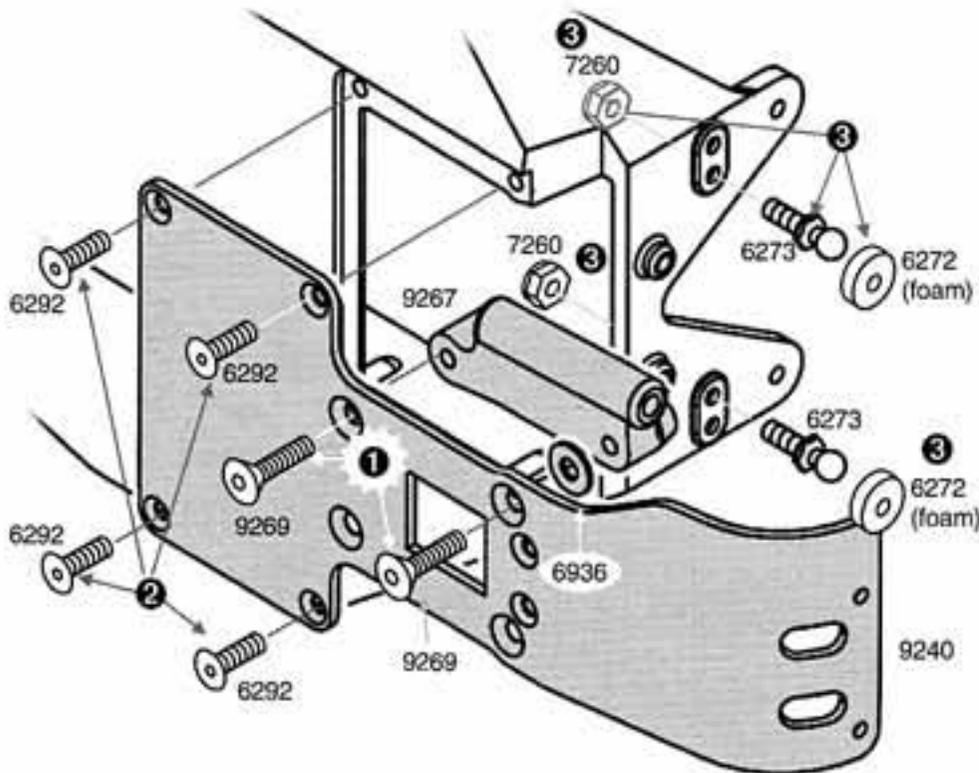
1 Twist the #7340 suspension arms from the mold runners (shown in gray) with your pliers, and trim away the remaining molding with your hobby knife.



## STEP 2 LEFT SIDE

### REAR PLATE TO CHASSIS

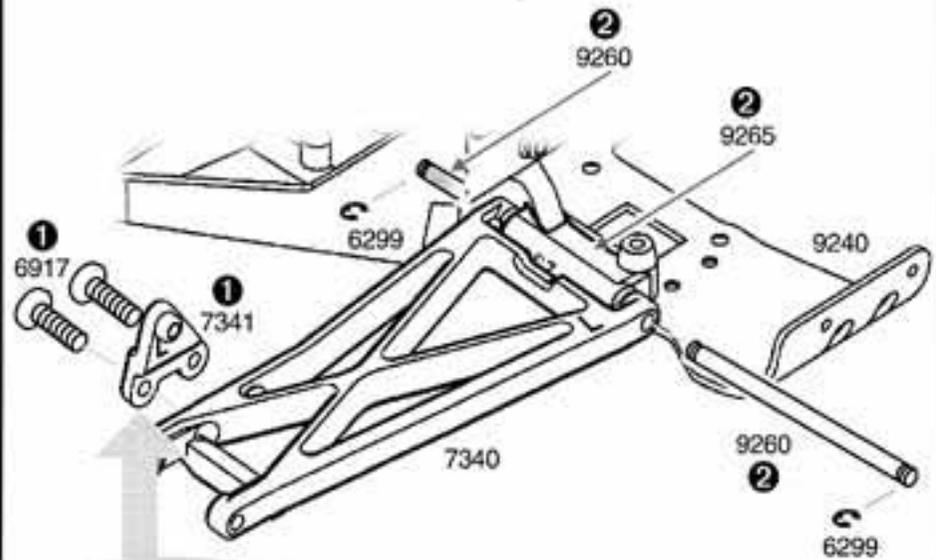
- 1 Attach the two #9267 (3-3) rear suspension arm mounts to the #9241 chassis plate with two #9269 5-40 x 1/2 screws and a single #6936 washer as shown. These mounts are marked L3-3 (left) and R3-3 (right). The coding stands for 3° toe in and 3° anti-squat. *NOTE: by using the #4 washer, your anti-squat is effectively reduced to 1.5°.*
- 2 Fasten the chassis plate to the bottom of the chassis with four #6292 screws.
- 3 Add two #6273 ball ends to the inside holes of the chassis, then thread on the #7260 nuts to the ball ends. Then add the #6272 foam dust covers.



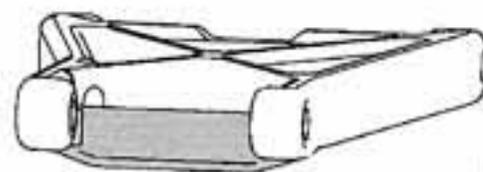
## STEP 3 LEFT SIDE

### SUSPENSION ARMS TO MOUNTS

- 1 Attach the #7341 left shock mount to the #7340 left suspension arm with two #6917 screws. Both are labeled "L".
- 2 Attach the #7340 left suspension arm to the #9267 left mount with the #9260 hinge pin and #6299 E-clips.
- 3 Now do the right side.



Make sure the "L" and "R" face the rear



Make sure the arm outer rib is facing down

# BAG D

REMOVE THESE PARTS FOR:

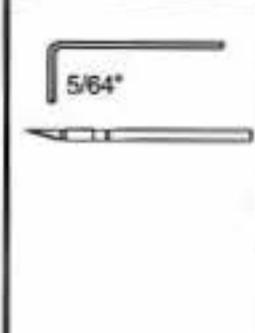
7003: steps 1-4

7013: steps 1-4

7037: steps 1-4

1:1 6573, qty 2 diff thrust washer	1:1 6574, qty 6 diff thrust ball	1:1 6575, qty 1 T-nut	1:1 6575, qty 1 diff thrust bolt cover, nylon	1:1 6575, qty 1 2-56 diff bolt	1:1 6581, qty 12 diff balls carbide	1:1 6582, qty 1 diff spring
6588, qty 1 black grease	6591, qty 1 diff lube	9365, qty 1 diff gear	9367, qty 2 diff drive ring	9370, qty 1 left diff outride hub	9375, qty 1 right diff outride hub	

# TOOLS USED

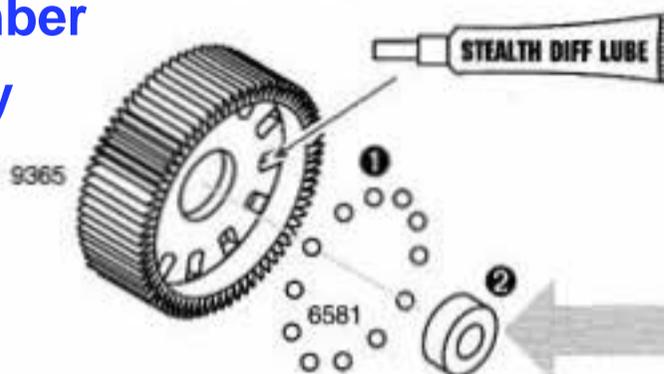


## STEP 1

[Click part number to search eBay](#)

### SET UP DIFF GEAR

- 1 Add a generous amount of #6591 diff lube to the #9365 diff gear ball holes and push in the twelve #6581 diff balls. Then push the lube that came out back in.
- 2 Insert one #6597 bushing or #6589 bearing into the gear.



TEAM ONLY	BASIC & SPORT
1:1 6589, qty 1 5/32 x 5/16 ball bearing	1:1 6597, qty 1 5/32 x 5/16 bushing

## STEP 2

### LEFT OUTDRIVE HUB

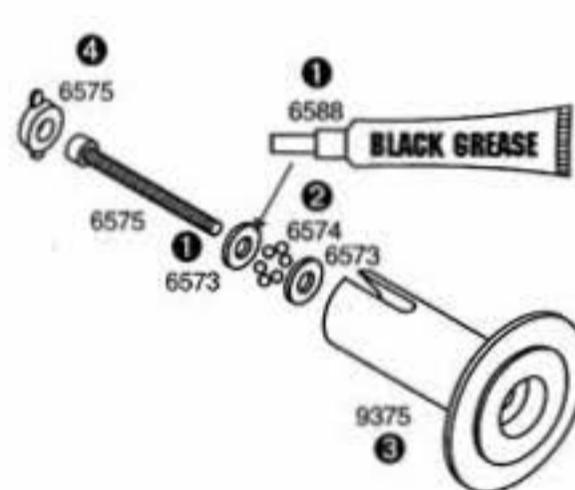
Push in the #6582 spring and #6575 T-nut.



## STEP 3

### RIGHT OUTDRIVE HUB

- 1 Slide one #6573 washer onto the #6575 bolt. Apply a generous amount of #6588 black grease to the washer on the side facing away from the bolt head.
- 2 Stick six #6574 balls into the grease against the #6575 bolt and washer. Add the other #6575 washer. The grease will hold the balls in place during assembly.
- 3 Slide all this into the #9375 right outride hub, being careful not to lose any of the balls.
- 4 Insert the #6575 bolt cover.



## STEP 4

### RIGHT OUTDRIVE HUB

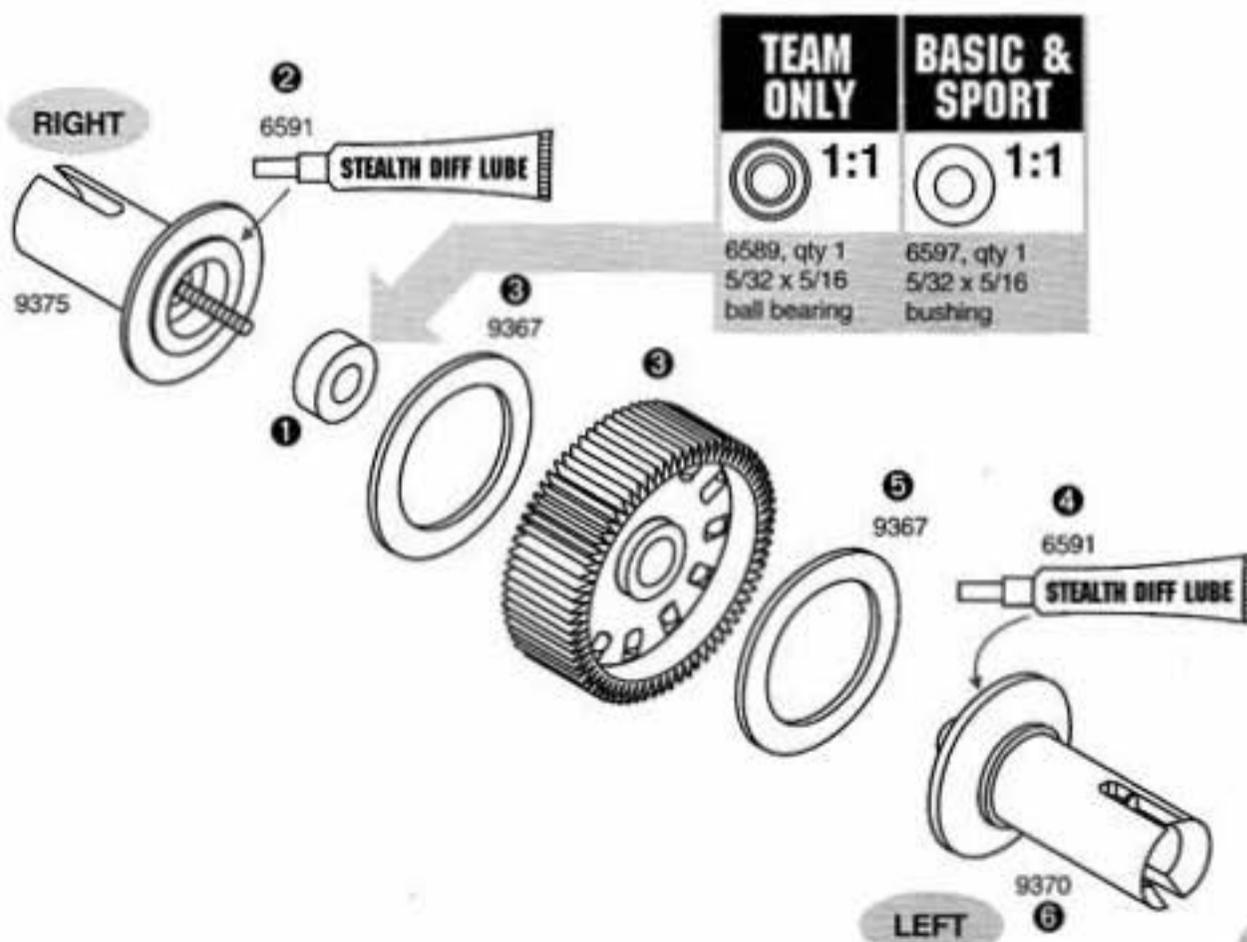
- 1 Insert one #6597 bushing or #6589 bearing into the #9375 right hub.
- 2 Add a light coat of #6591 diff lube to right hub where shown.
- 3 Place a #9367 diff drive ring and then the gear assembly on the hub.

### ASSEMBLE THE HUBS

- 4 Add light coat of #6591 diff lube to left hub where shown.
- 5 Place a #9367 diff drive ring on the hub.
- 6 Push the #9370 hub over the diff bolt and center the hub.

### CHECK ALIGNMENT OF HUBS

- 7 Tighten the diff with your 5/64" Allen wrench, but not completely.
- 8 Rotate the diff hubs several times as you are tightening the bolt to check for proper alignment of the parts.
- 9 We'll adjust the diff on the next page.

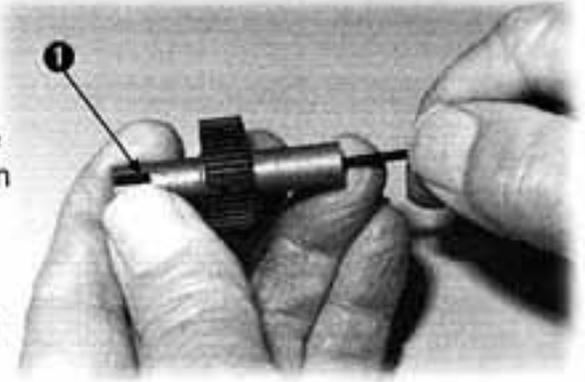


## STEP 5

### ADJUST THE DIFFERENTIAL

1 As you tighten the diff bolt, you will notice the T-nut ears moving closer to the bottom of the diff hub slot. This compresses the spring behind the T-nut. The spring should be fully compressed at the same time the T-nut reaches the end of the slot. **Caution:** Pay close attention to feeling when

the spring is fully compressed. **Do not overtighten the bolt.** When you feel the spring fully compressed, loosen the diff bolt 1/8 of a turn. No more, no less. Your diff should now operate very smoothly when turning the hubs in opposite directions. After you have driven the car once, recheck the diff adjustment. Never adjust the diff any other way.



## BAG D

### REMOVE THESE PARTS FOR:

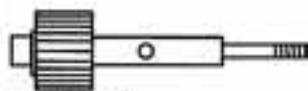
7003: steps 6-7

7013: steps 6-7

7037: steps 6-7



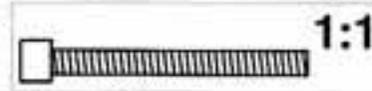
6292, qty 1  
4-40 x 3/8



6571, qty 1  
drive shaft/gear



6572, qty 1  
drive shaft  
roll pin



6928, qty 3  
4-40 x 1



7669, qty 2  
drive shaft  
spacer



9352, qty 1  
right tranny case



9352, qty 1  
left tranny case



9360, qty 1  
idler gear

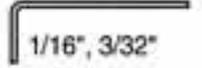


9361, qty 1  
idler gear shaft



7337, qty 3  
washer, gold

## TOOLS USED

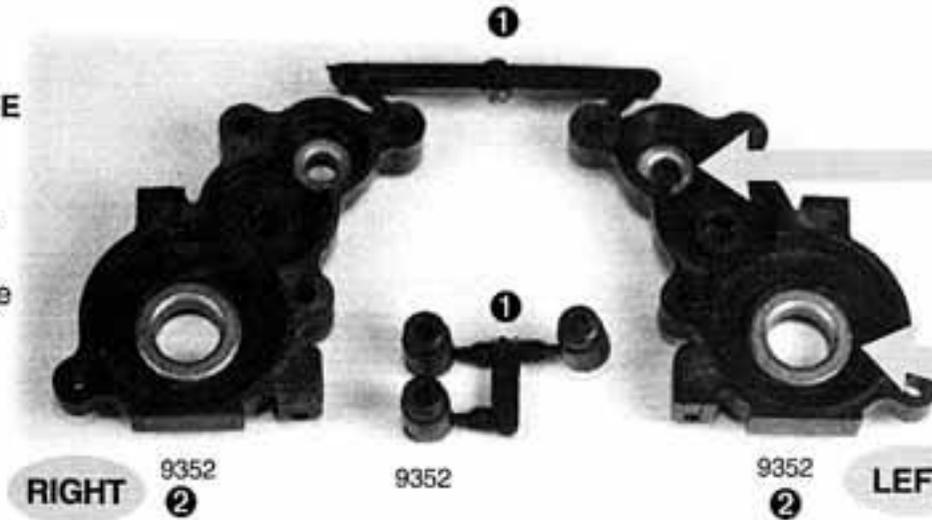


Click part number  
to search eBay

## STEP 6

### ADD BUSHINGS OR BEARINGS TO THE CASE HALVES

1 Cut the two #9352 transmission case halves and the three #9352 spacers from the runner.  
2 Add bushings or bearings to each case half.



TEAM ONLY	BASIC & SPORT
 6906, qty 2 3/16 x 3/8 unflanged bearing	 6599, qty 2 3/16 x 3/8 bushing
 6903, qty 2 3/8 x 5/8 unflanged bearing	 6598, qty 2 3/8 x 5/8 bushing

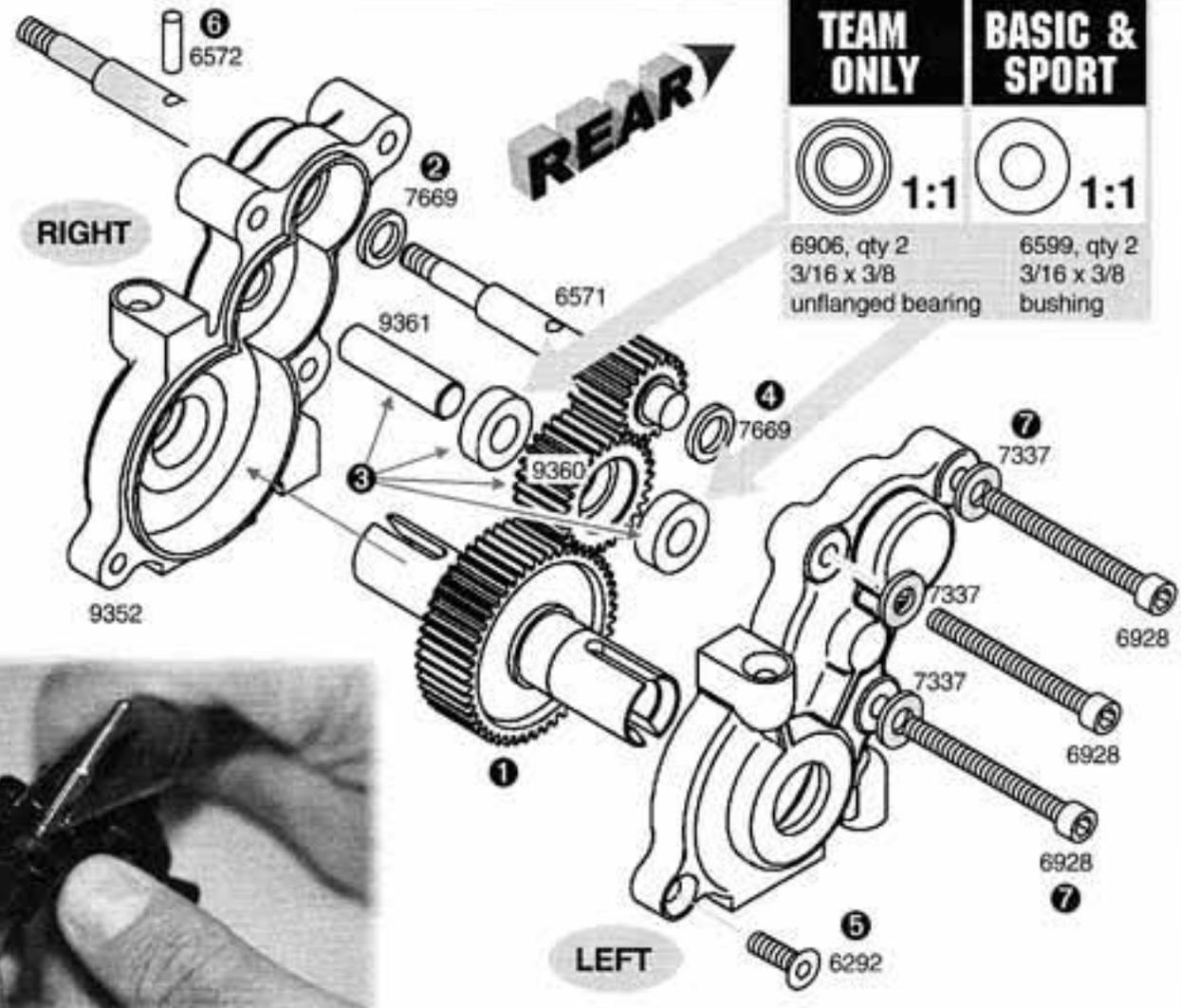
## STEP 7

### INSIDE THE TRANNY

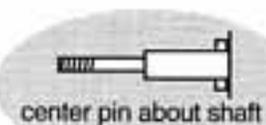
1 Install the right side diff assembly into the right case. (Page 9, Step 3 will show you which diff hub is the right side.)  
2 Add the #7669 spacer to the #6571 drive shaft and put both into the case.  
3 Install the two bushings or bearings in the #9360 gear, followed by the #9361 shaft. Insert the assembly into the case.  
4 Add the other #7669 spacer to the #6571 shaft and put the case halves together.

### OUTSIDE THE TRANNY

5 Screw the halves together with one #6292 bolt.  
6 Insert the #6572 roll pin into the shaft hole with your needlenose pliers.  
7 Push the three #6928 bolts through, each with its own #7337 washer.



TEAM ONLY	BASIC & SPORT
 6906, qty 2 3/16 x 3/8 unflanged bearing	 6599, qty 2 3/16 x 3/8 bushing



center pin about shaft

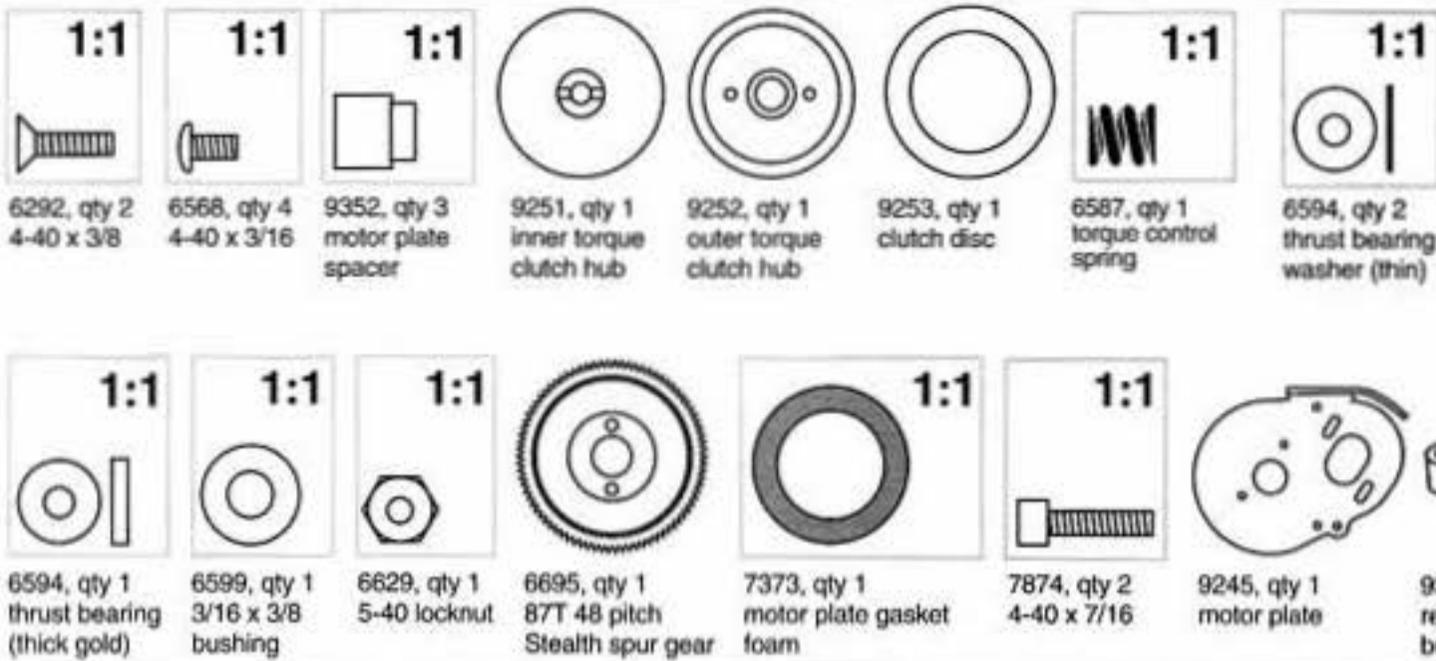
# BAG D

REMOVE THESE PARTS FOR:

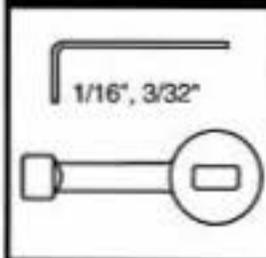
7003: steps 8-11

7013: steps 8-11

7037: steps 8-11



# TOOLS USED



## STEP 8

### REMOVE THE BACKING

- 1 Remove the backing and center from the #7373 gasket.

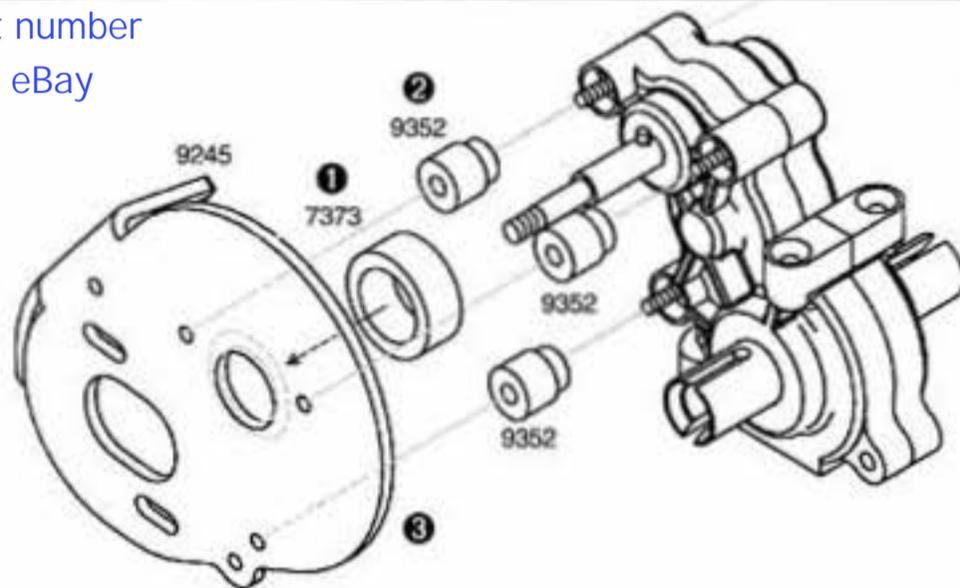


## STEP 9

### INSTALL THE MOTOR PLATE

- 1 Center the #7373 gasket around the large round hole of the plate.
- 2 Install the three #9352 spacers.
- 3 Line up the #9245 plate and fasten with three #6928 screws.

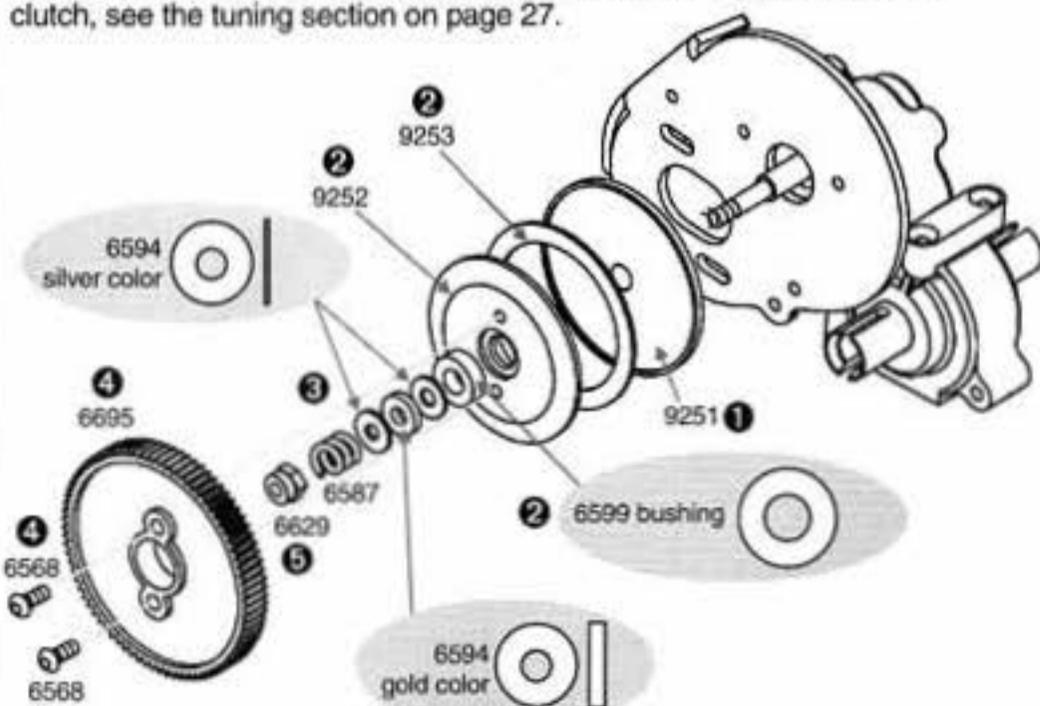
[Click part number to search eBay](#)



## STEP 10

### INSTALL THE ASSOCIATED TORQUE CLUTCH (ATC)

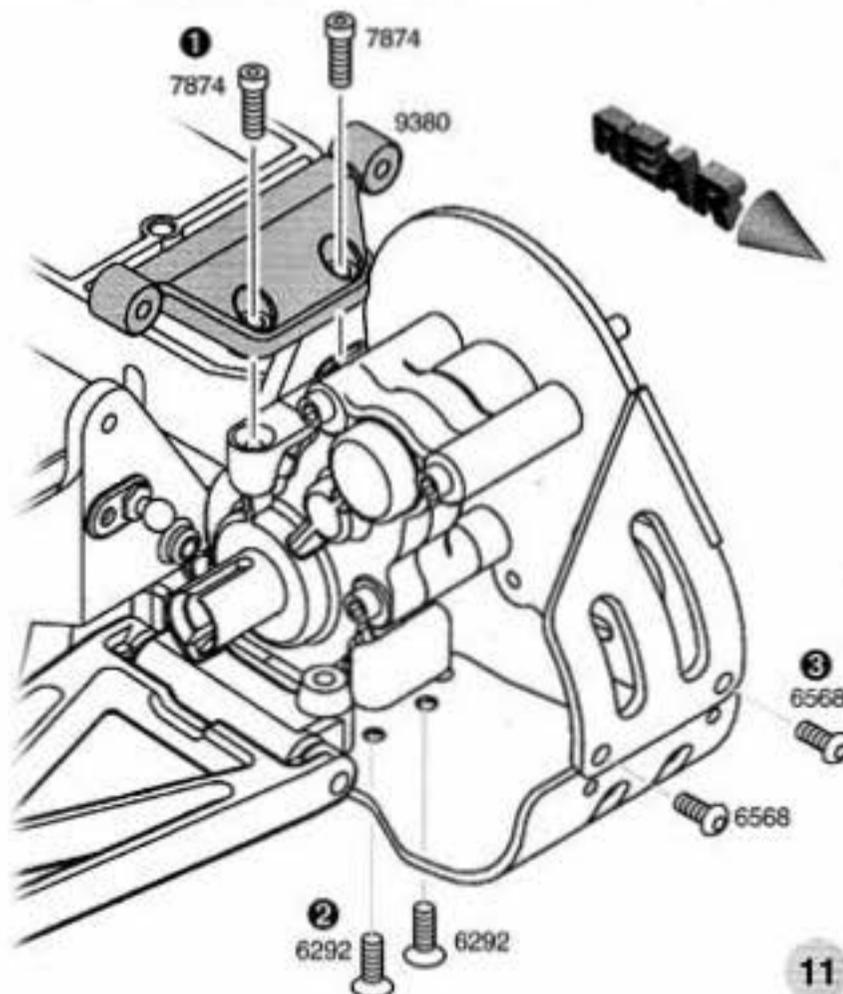
- 1 Add the #9251 inner hub to the shaft, lining up the notch with the roll pin.
- 2 Install the #9253 clutch disc into the inner hub, then add the #9252 outer hub and #6599 bushing.
- 3 Install parts in the following order: #6594 (thin), #6594 (thick), #6594 (thin), #6587 black spring, #6629 locknut.
- 4 Orient the #6695 spur gear side facing out as shown and mount to #9252 with two #6568 screws.
- 5 Tighten the #6629 locknut so the end of the shaft is flush with the end of the nut. This is a good initial adjustment. For further info on the torque clutch, see the tuning section on page 27.



## STEP 11 LEFT SIDE

### MOUNT THE TRANSMISSION

- 1 Mount the #9380 brace with two #7874 screws.
- 2 Mount the tranny with the two #6292 screws from below, lining up the motor plate holes as shown.
- 3 Bolt the motor plate to the rear chassis with two #6568 screws.



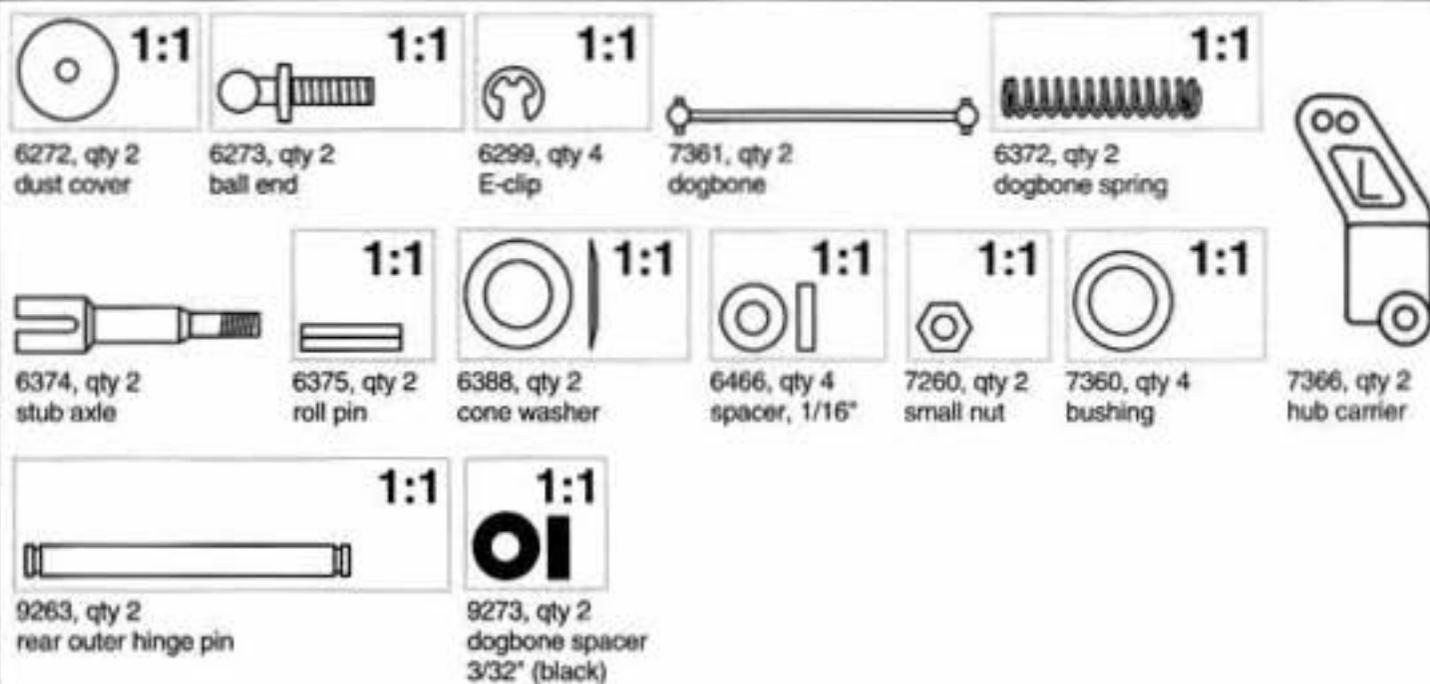
# BASIC & SPORT KITS ONLY

## BAG E

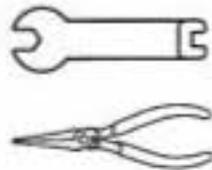
REMOVE THESE PARTS FOR:

7003: step 1

7013: step 1



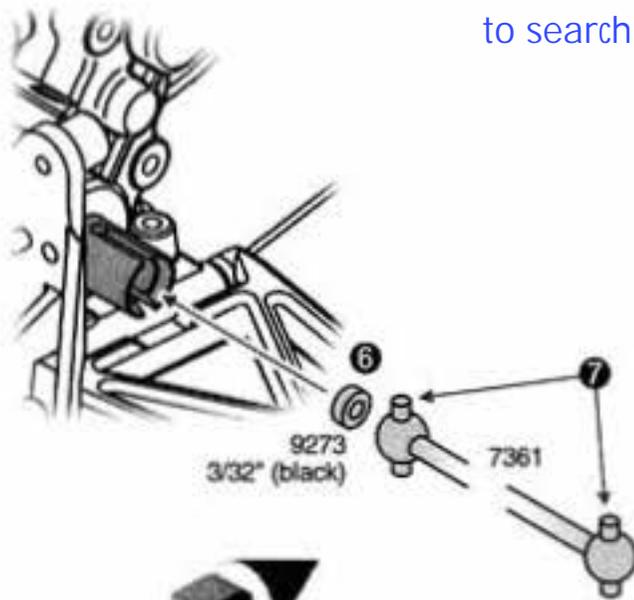
## TOOLS USED



## STEP 1 LEFT SIDE

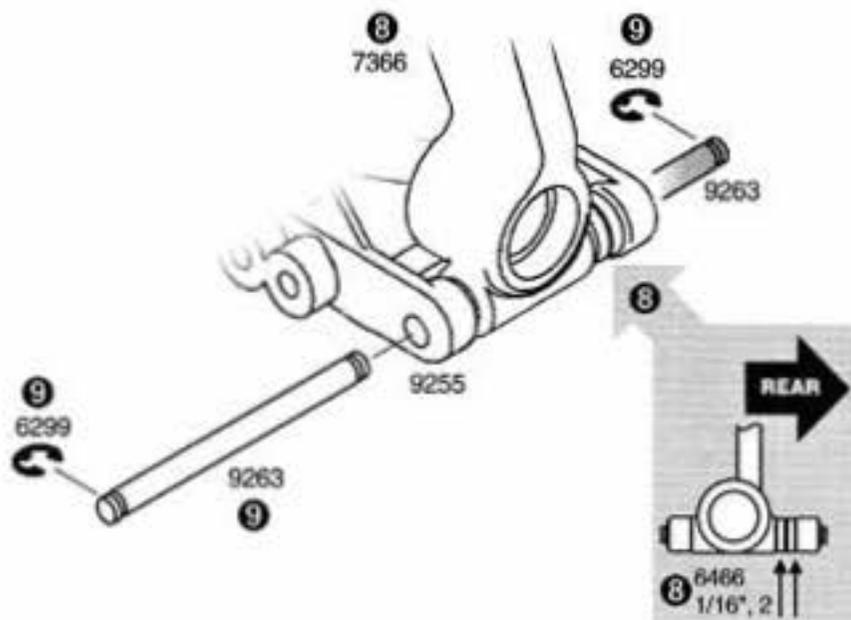
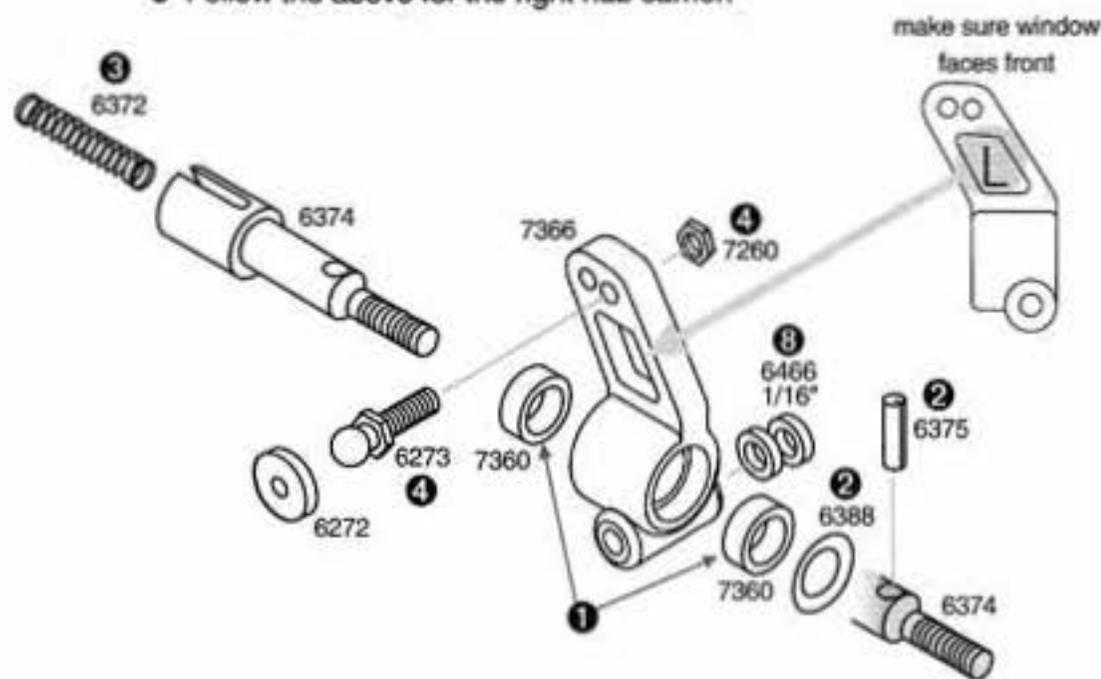
# BASIC & SPORT KITS ONLY

[Click part number to search eBay](#)



### ASSEMBLE REAR HUB CARRIERS

- Note that the #7366 hub carriers are marked for left and right. Insert #7360 bushings into each side of the left hub carrier. Install the #6374 stub axle as shown.
- Insert #6388 cone washer as shown, raised outer edges facing out. Add #6375 roll pin.
- Insert the #6372 spring into the stub axle.
- Thread on the #6273 ball end and add the #7260 nut to the other side. (When you do the other hub carrier, thread the ball end into the other side so both will point to the front when assembled.) Add a #6272 dust cover to the ball end.
- Follow the above for the right hub carrier.



### HUB CARRIERS TO REAR ARMS

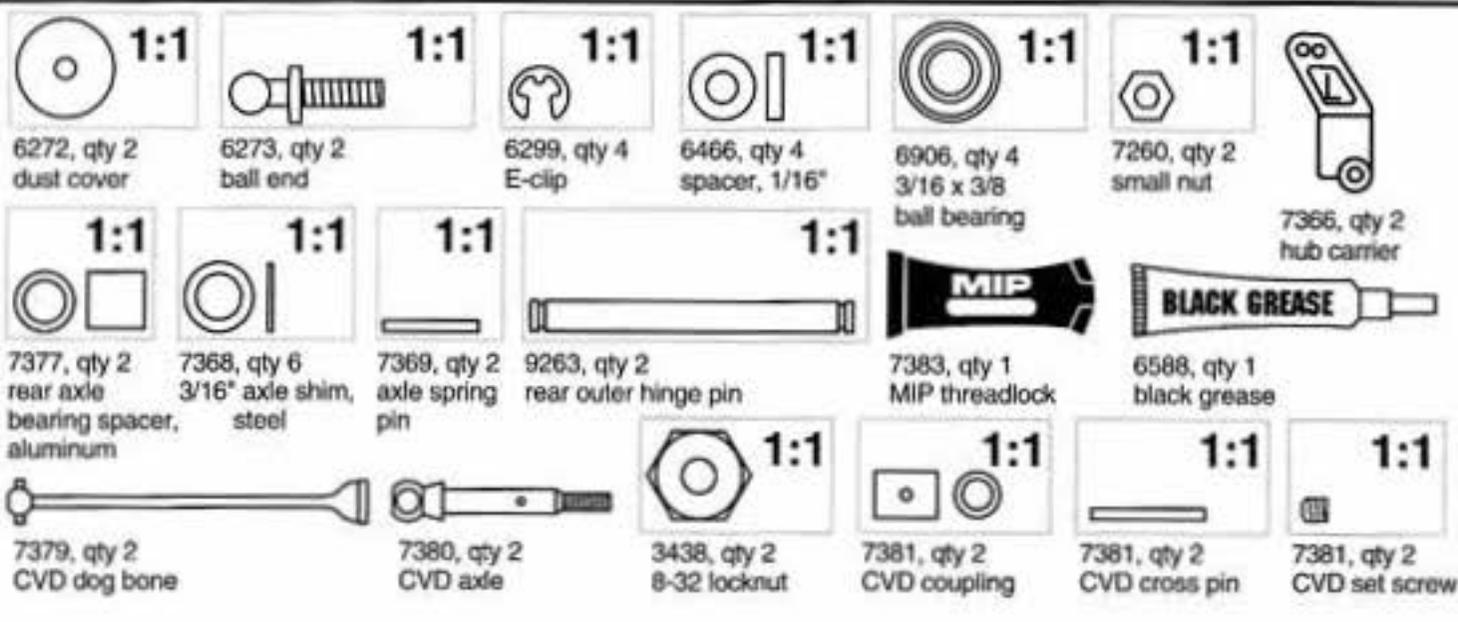
- (Upper left drawing:) Push the #9273 spacer into the outdrive of the transmission.
- (Upper left drawing:) Insert the dogbone pins into the stub axle and outdrive hub as shown.
- Place the hub carrier between the arm holes as shown and add two #6466 spacers where shown.
- Add one #6299 E-clip to the end of the #9263 hinge pin, insert it as shown, then add the other #6299 E-clip.
- Now install the axle assembly for the right side.

# TEAM KIT ONLY

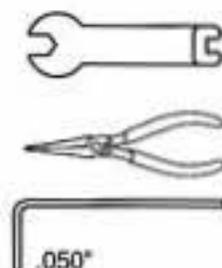
## BAG E

REMOVE THESE PARTS FOR:

7037: step 1



## TOOLS USED



## STEP 1 LEFT SIDE

# TEAM KIT ONLY

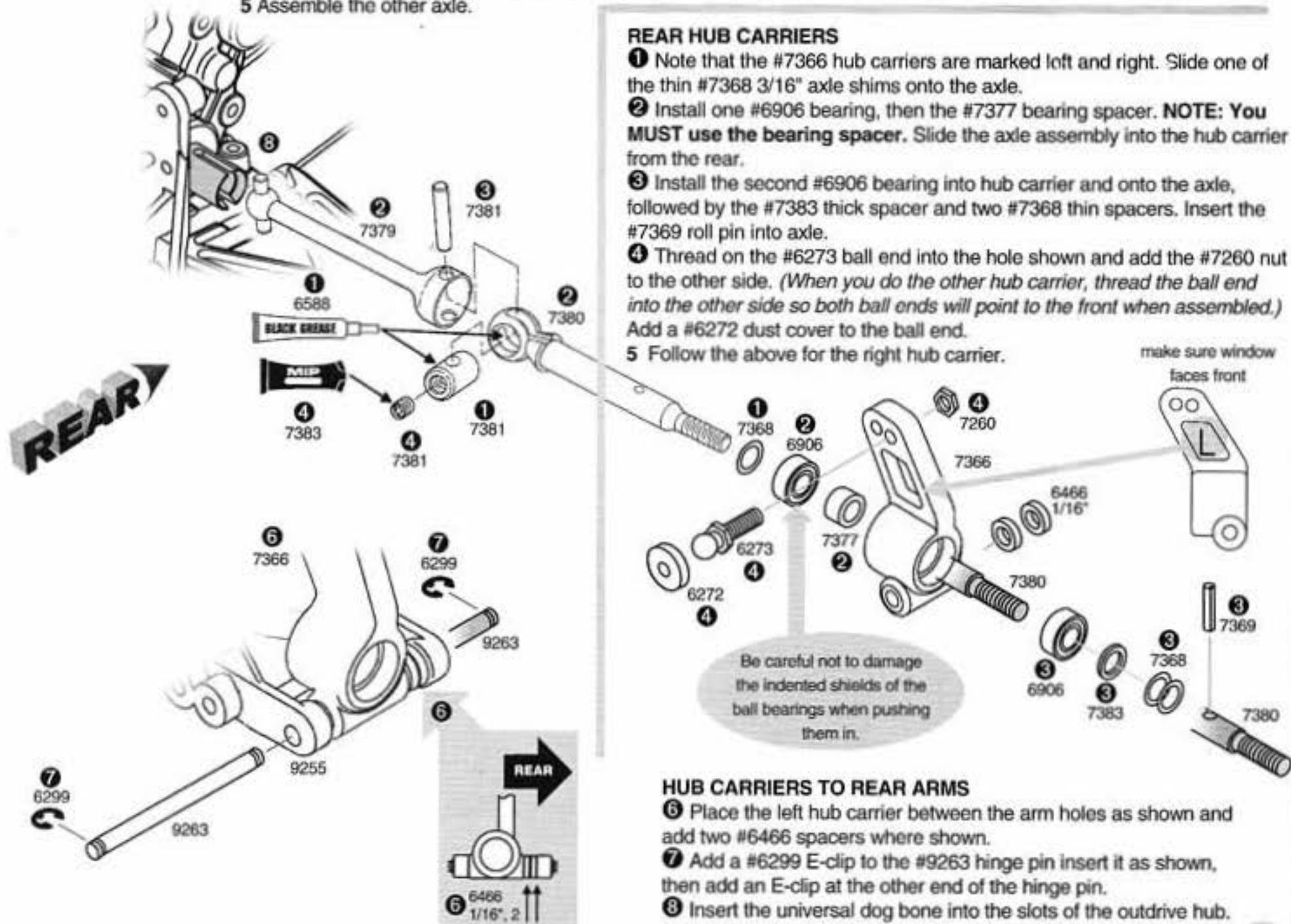
[Click part number to search eBay](#)

### ASSEMBLE THE #7383 MIP CVD™ (Constant Velocity Drive™)

- 1 Spread some Associated #6588 black grease inside the axle hole where shown, then on the coupling, and insert the coupling into the axle.
- 2 Slide the axle into the dog bone, aligning the cross holes.
- 3 Insert the cross pin, making sure it is evenly spaced on both sides of the bone.
- 4 Add the MIP thread lock to the set screw. Angle and turn the MIP CVD™ so the set screw can be screwed in with the Allen wrench.
- 5 Assemble the other axle.

### REAR HUB CARRIERS

- 1 Note that the #7366 hub carriers are marked left and right. Slide one of the thin #7368 3/16" axle shims onto the axle.
- 2 Install one #6906 bearing, then the #7377 bearing spacer. **NOTE: You MUST use the bearing spacer.** Slide the axle assembly into the hub carrier from the rear.
- 3 Install the second #6906 bearing into hub carrier and onto the axle, followed by the #7383 thick spacer and two #7368 thin spacers. Insert the #7369 roll pin into axle.
- 4 Thread on the #6273 ball end into the hole shown and add the #7260 nut to the other side. (When you do the other hub carrier, thread the ball end into the other side so both ball ends will point to the front when assembled.) Add a #6272 dust cover to the ball end.
- 5 Follow the above for the right hub carrier.



### HUB CARRIERS TO REAR ARMS

- 6 Place the left hub carrier between the arm holes as shown and add two #6466 spacers where shown.
- 7 Add a #6299 E-clip to the #9263 hinge pin insert it as shown, then add an E-clip at the other end of the hinge pin.
- 8 Insert the universal dog bone into the slots of the outdrive hub.
- 9 Now install the axle assembly for the right side.

# BASIC, SPORT & TEAM KITS

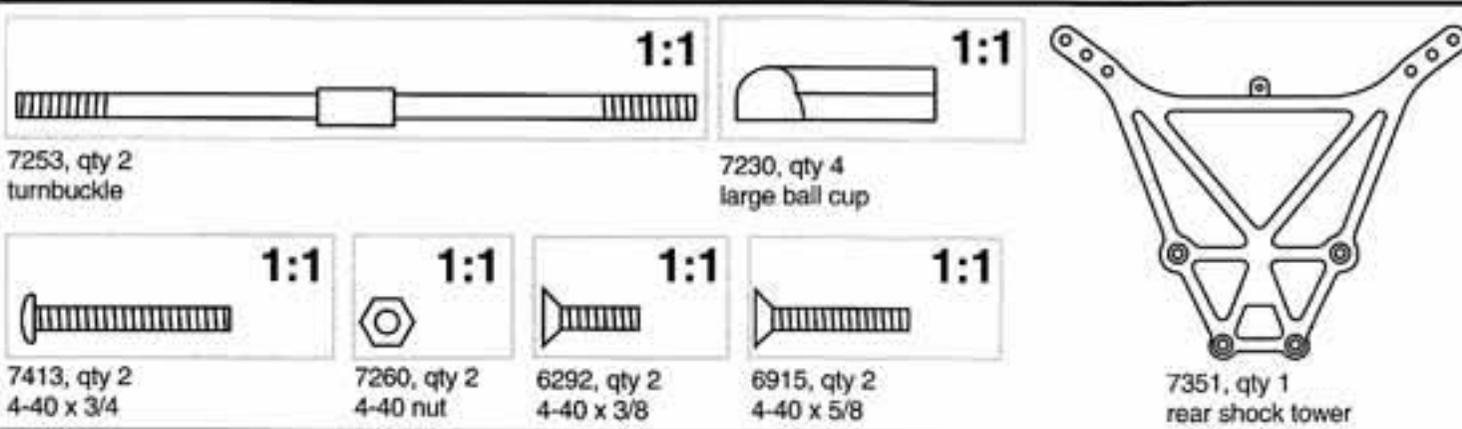
## BAG E

REMOVE THESE PARTS FOR:

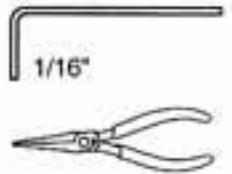
7003: steps 2-3

7013: steps 2-3

7037: steps 2-3



## TOOLS USED

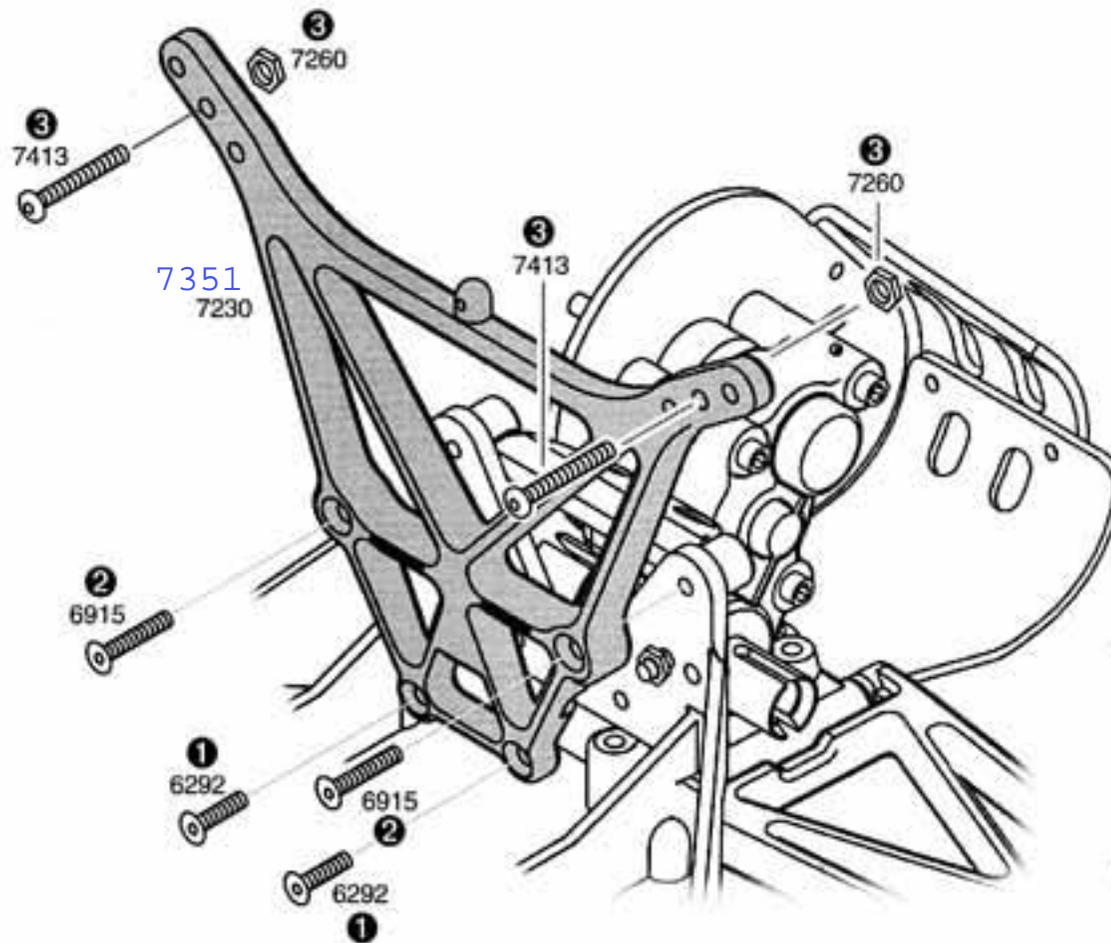


## STEP 2 LEFT SIDE

### MOUNT THE REAR SHOCK TOWER

- 1 Orient the tower outward as shown and mount to bulkhead with #6292 screws.
- 2 Fasten the tower to the transmission brace with the #6915 screws.
- 3 Add two #7413 screws in the middle holes at top, then thread on #7260 nuts.

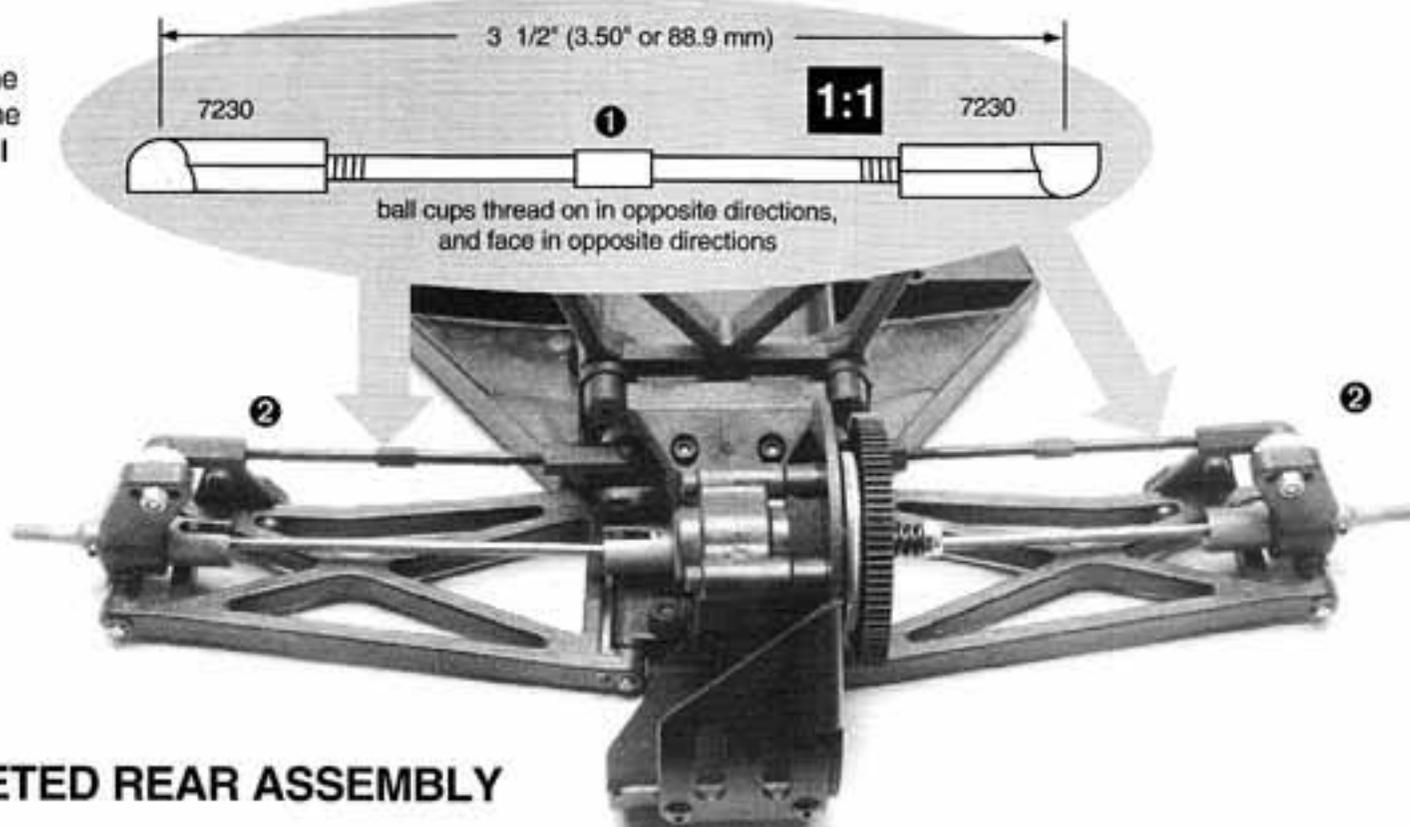
[Click part number to search eBay](#)



## STEP 3 REAR VIEW

### ADD TURNBUCKLES

- 1 Twist #6274 ball cups onto the #7253 turnbuckle until you get the dimension shown. **Ball cups will face in opposite directions.**
- 2 Connect ball ends with the turnbuckle ball cups as shown, using your needle-nose pliers. Assemble both right and left sides.



COMPLETED REAR ASSEMBLY

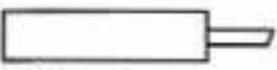
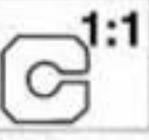
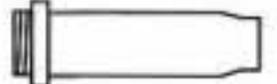
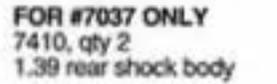
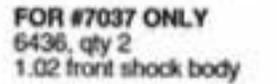
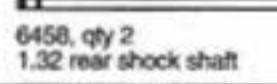
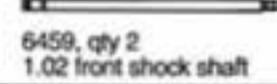
# BAG F

## REMOVE THESE PARTS FOR:

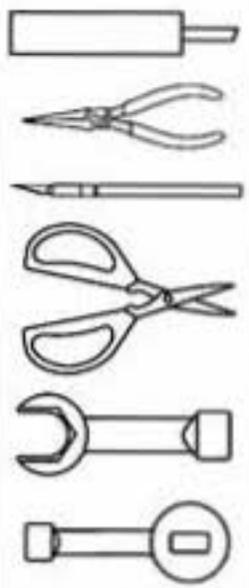
7003: steps 1-4

7013: steps 1-4

7037: steps 1-4

 5407, qty 8 red O-ring	 6299, qty 8 E-clip	 6429, qty 1 shock assembly tool	 6440, qty 4 split locking washer	 6440, qty 8 small washer	 6440, qty 4 large spacer	 7217, qty 4 pivot ball plastic	 7217, qty 4 eyelet nylon
 6465, qty 2 shock piston #1	 6465, qty 2 shock piston #2	 6428, qty 4 shock cap	 6469, qty 4 large O-ring	 <b>FOR #7003, 7013 ONLY</b> 7411, qty 2 1.39 rear shock body	 <b>FOR #7003, 7013 ONLY</b> 6425, qty 2 1.02 front shock body	 <b>FOR #7037 ONLY</b> 7410, qty 2 1.39 rear shock body	 <b>FOR #7037 ONLY</b> 6436, qty 2 1.02 front shock body
 5422, qty 1 30 wt silicone oil	<a href="#">Click part number to search eBay</a>		 6458, qty 2 1.32 rear shock shaft	 6459, qty 2 1.02 front shock shaft			

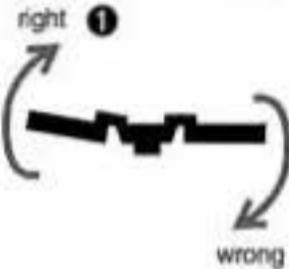
## TOOLS USED



## STEP 1

### TRIM SHOCK PISTONS

1 Burrs interfere with smooth shock action within the shock body. To remove from tree without creating burrs, twist up, not down. Remove two each of #1 and #2.  
2 Remove remaining burrs carefully with hobby knife.



### TRIM SHOCK WASHERS & SPACERS

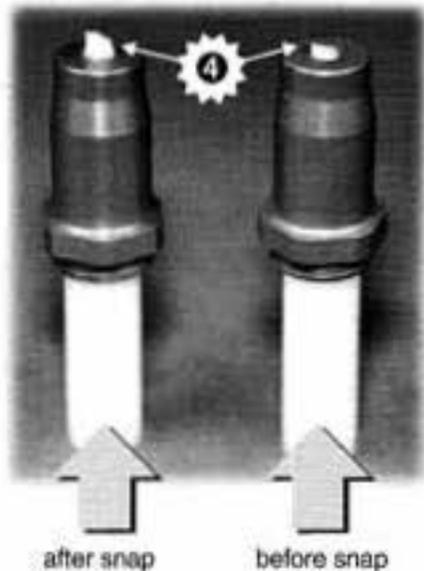
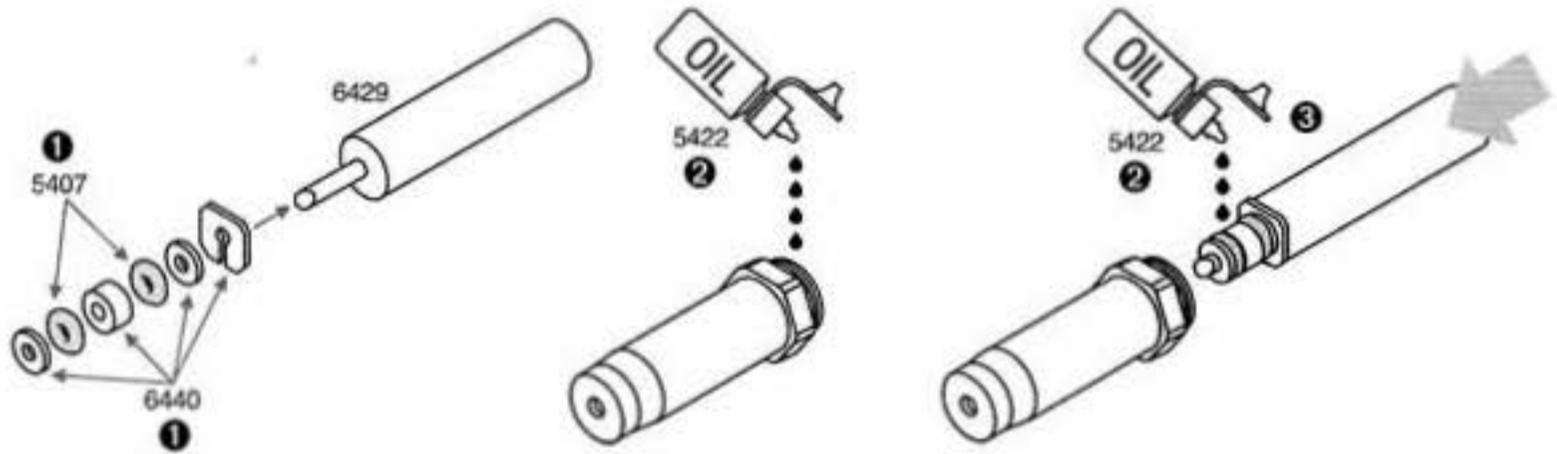
For best shock performance, trim each part from the parts tree so no part of the two molding runners remain. It is safer to remove a tiny amount of the part than to risk the chance of a burr remaining. Short blade scissors or a hobby knife will work fine, as shown at right. Run your finger over the edges to feel for burrs you cannot see. Remove the ones you find. Burrs can keep the parts from snapping in correctly, and can cause the shock to leak or the shaft to jam.



## STEP 2

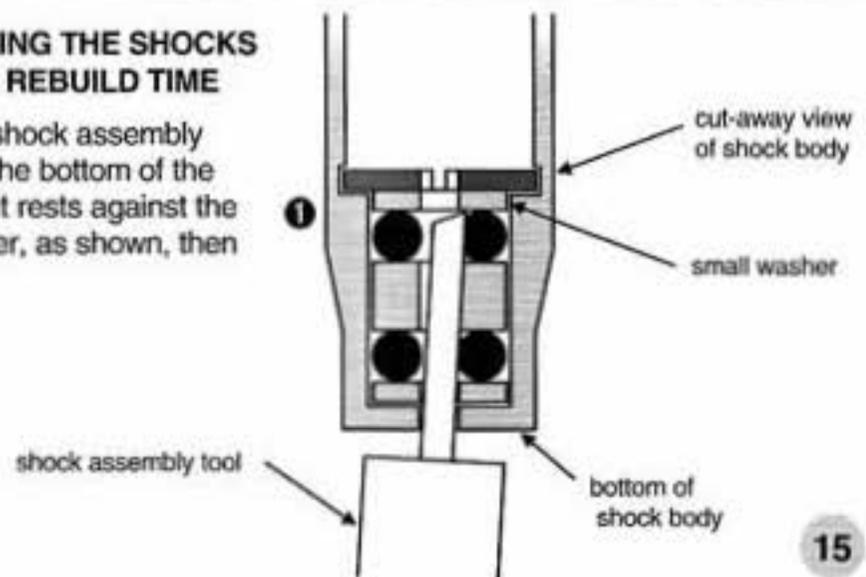
### SHOCK SEAL PARTS

1 Install the #5407 and #6440 parts shown onto the #6429 tool tip.  
2 Add 3-4 drops of #5428 oil to the inside of the shock body, and to the shock seal parts.  
3 Insert the tool tip into the shock body all the way. Push easily until the parts snap into place.  
4 Check the tool height in photo. The right shock shows just before snapping parts in place, the left shows after.  
5 If your shocks do not snap together easily, check the parts for burrs again.  
6 Assemble the other shock bodies the same.



### DISMANTLING THE SHOCKS WHEN IT'S REBUILD TIME

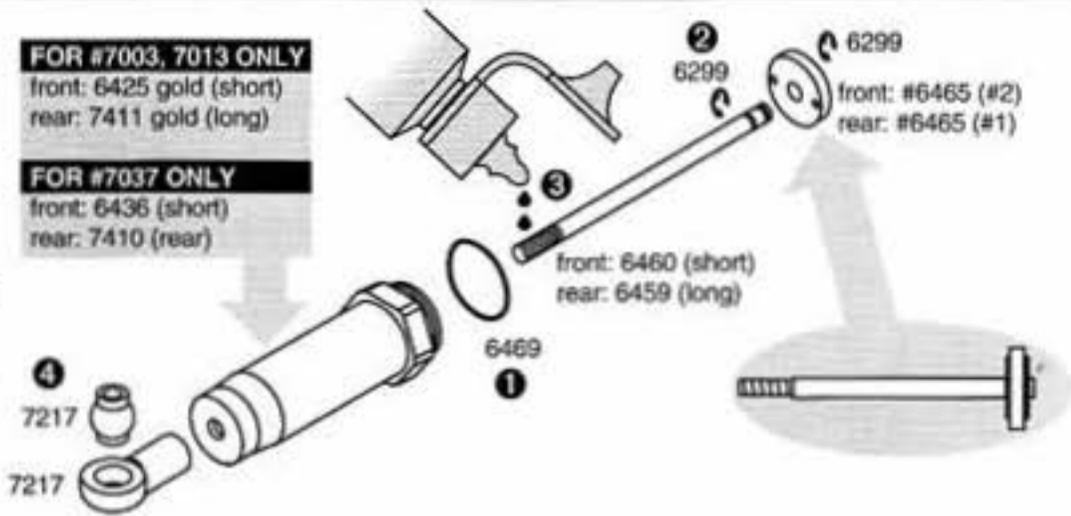
1 Put the shock assembly tooltip into the bottom of the shock until it rests against the small washer, as shown, then push.



## STEP 3

### FINAL INTERNAL SHOCK ASSEMBLY

- 1 Add #6469 O-ring over threads of shock body.
- 2 For the #6460 front shock shaft, install a #6299 E-clip on either side of a #6465 (#2) piston. For the #6459 rear shock shafts, install a #6299 E-clip on either side of a #6465 (#1) piston.
- 3 Place a couple drops of #5428 oil on threaded part of shaft and insert into shock body.
- 4 Push the #7217 pivot ball and eyelet together, then screw the eyelets onto the end of the shock shaft. Hold shaft with rag and needlenose pliers next to threads.



## STEP 4

### FILLING THE SHOCKS

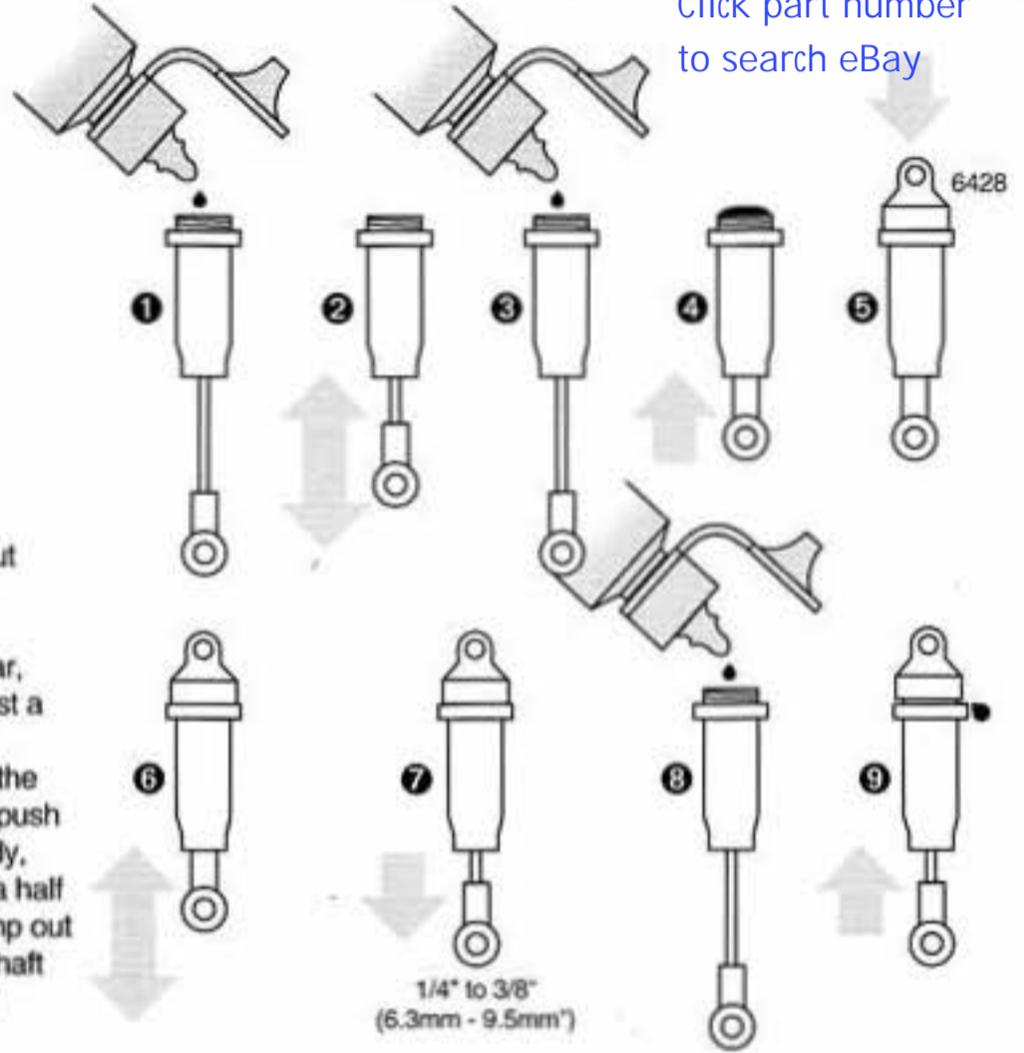
- 1 Holding the shocks upright, fill with oil to the top of the shock body.
- 2 Slowly move the shaft up and down several times to allow air bubbles to escape to the top.
- 3 Refill with oil to the top of the shock body.
- 4 Push the shaft in until the piston is level with top of shock body. The oil will slightly bulge up above the shock body.
- 5 Install the #6428 shock cap and tighten. There should be no gap between the cap and the hex portion of the shock body when tight.



### SETTING THE REBOUND

- 6 Move the shock shaft in and out a few times and then push it all the way in. It should be easy to push the shaft in until the eyelet hits the body.

- 7 Then the shaft should push itself out approximately 1/4" to 3/8" (6.3mm - 9.5mm").
- 8 If the shocks do not push out this far, there is not enough oil in them. Add just a little oil and try steps 6-7 again.
- 9 If the shocks push out farther than the distance in step seven, 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 6-7 again.



Click part number to search eBay

## BAG F

### REMOVE THESE PARTS FOR:

7003: step 5  
7013: step 5  
7037: step 5



6474, qty 4  
spring clamp



6474, qty 4  
spring collar



6474, qty 4  
spring cup

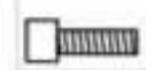


6480, qty 2  
rear spring  
green



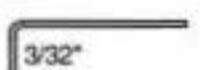
7427, qty 2  
front spring  
green

1:1



6932, qty 4  
4-40 x 5/16

## TOOLS USED

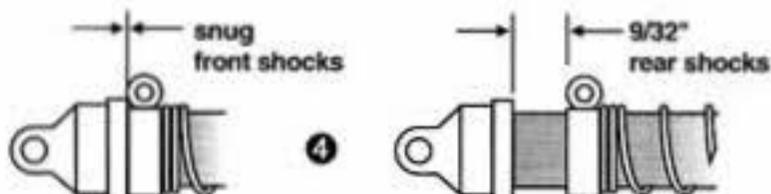


3/32"

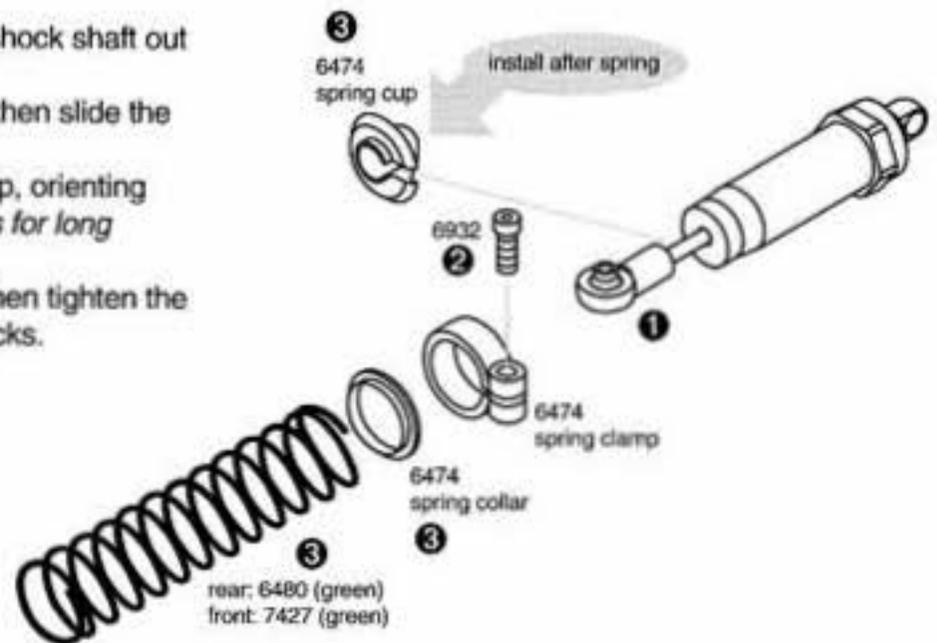
## STEP 5

### FINAL SHOCK ASSEMBLY

- 1 Assemble all four shocks at the same time. Pull the shock shaft out as far as it will go.
- 2 Start the #6932 screw into the #6474 spring clamp, then slide the clamp up the shock body as far as it will go.
- 3 Slide on the spring collar, then spring, then spring cup, orienting them according to the drawing. Remember: long springs for long shocks.
- 4 Adjust the spring clamps to the dimensions shown, then tighten the #6932 screw to hold them there. Do the other three shocks.



DRAWINGS NOT ACTUAL SIZE



# BAG F

REMOVE THESE PARTS FOR:

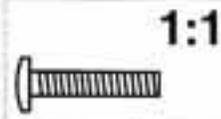
7003: steps 6-7  
7013: steps 6-7  
7037: steps 6-7



6222, qty 4  
4-40/5-40  
locknut



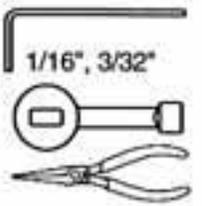
6473, qty 4  
shock bushing



6918, qty 4  
4-40 x 1/2

[Click part number to search eBay](#)

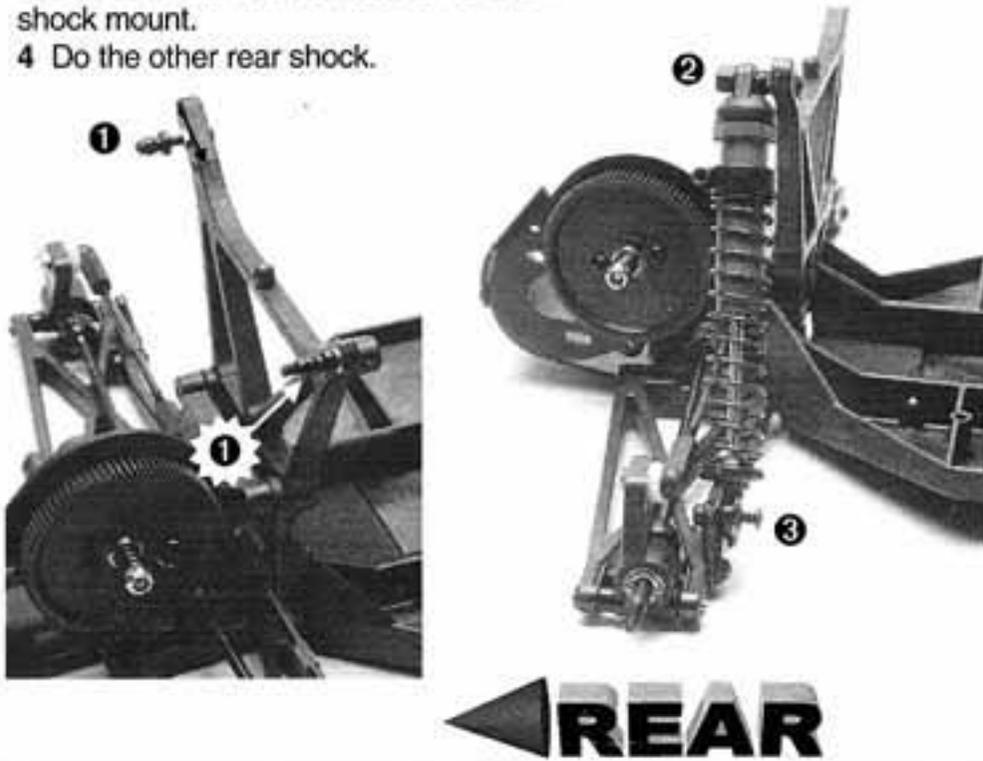
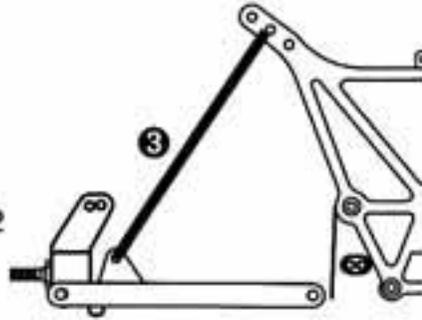
# TOOLS USED



## STEP 6 RIGHT SIDE

### REAR SHOCK MOUNTING

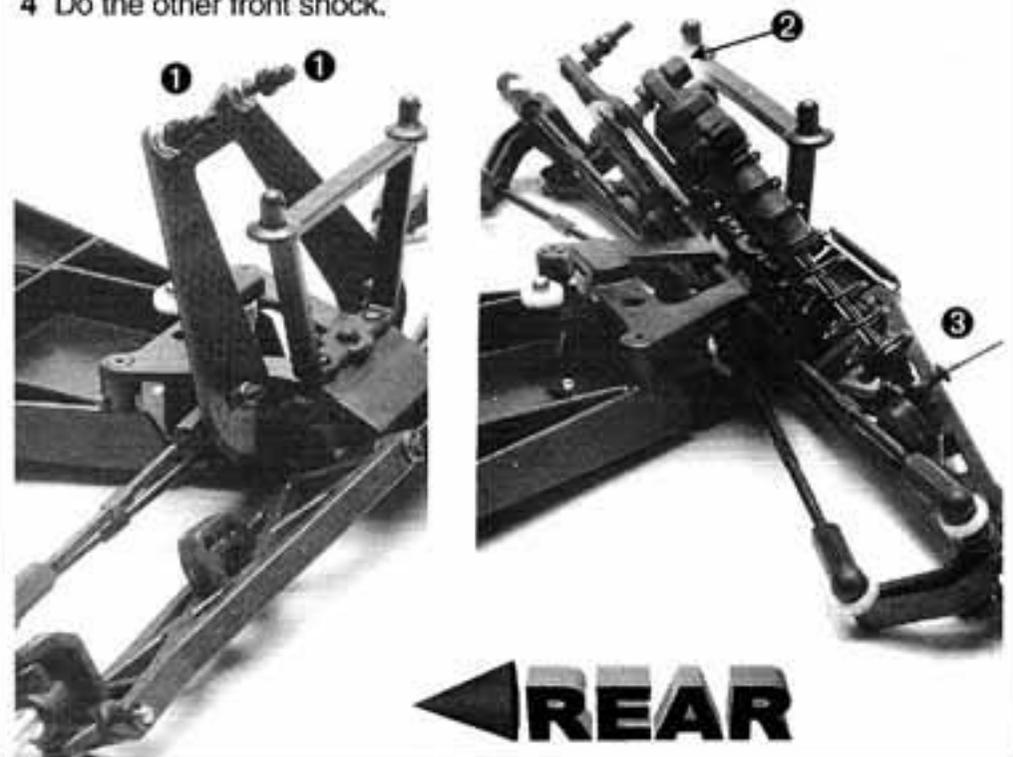
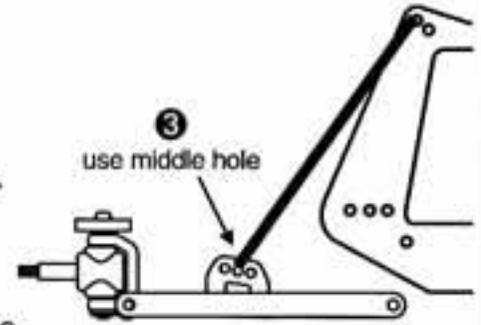
- 1 Add the #6473 bushings as shown.
- 2 Push cap over bushing and add #6222 locknut. Do not overtighten or the shock will bind.
- 3 Fasten the lower shock end with the #6918 screw to front surface of rear arm shock mount.
- 4 Do the other rear shock.



## STEP 7 RIGHT SIDE

### FRONT SHOCK MOUNTING

- 1 Add the #6473 bushings as shown.
- 2 Push cap over bushing and add #6222 locknut. Do not overtighten or the shock will bind.
- 3 Fasten the lower shock end with the #6918 screw into the hole shown.
- 4 Do the other front shock.



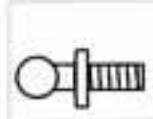
# BAG G

REMOVE THESE PARTS FOR:

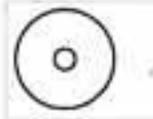
7003: step 1

7013: step 1

7037: step 1



6270, qty 1  
ball end



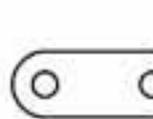
6272, qty 1  
dust cover



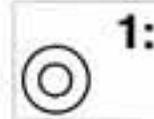
6917, qty 4  
4-40 x 3/8



7336, qty 2  
servo mount

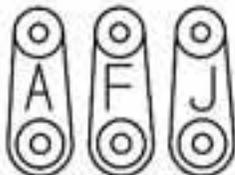


7336, qty 2  
servo mount  
spacer

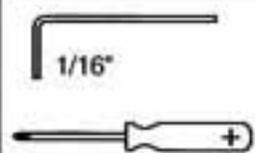


7337, qty 4  
washer

9180, qty 1 ea  
servo horns



# TOOLS USED

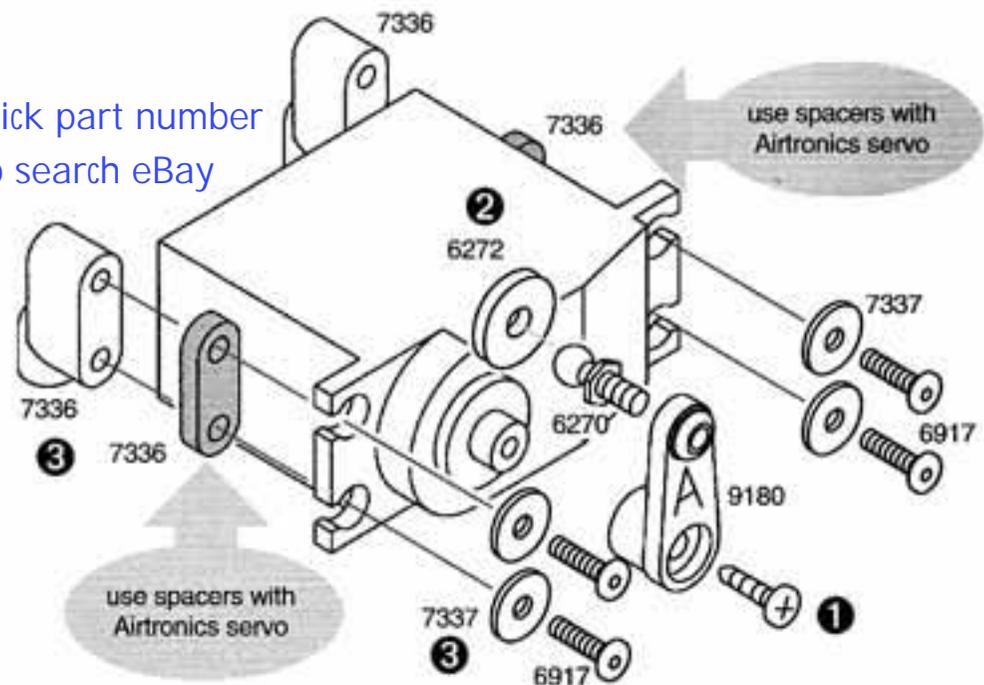


## STEP 1

### ASSEMBLE THE SERVO

- 1 Find the appropriate #9180 servo horn for your servo, marked "A" for Airtronics, "F" for Futaba, "J" for JRPropo. Remove the servo horn from your servo and replace with the #9180 horn, then fasten with the stock mounting screw.
- 2 Install the #6270 ball end into the servo horn. Add the #6272 dust cover.
- 3 Attach the #7336 mounts with the #6917 screws and #7337 washers. Add the #7336 spacers if you have an Airtronics servo.

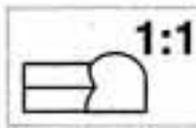
[Click part number to search eBay](#)



# BAG G

REMOVE THESE PARTS FOR:

7003: step 2  
7013: step 2  
7037: step 2



9170, qty 2  
servo link cup

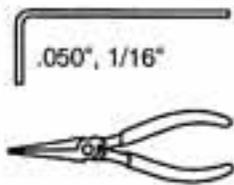


9170, qty 1  
servo link



7673, qty 2  
4-40 x 5/16

# TOOLS USED

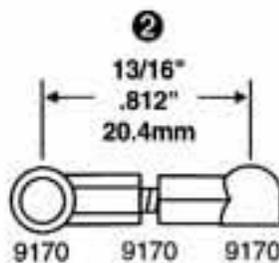


## STEP 2 RIGHT SIDE

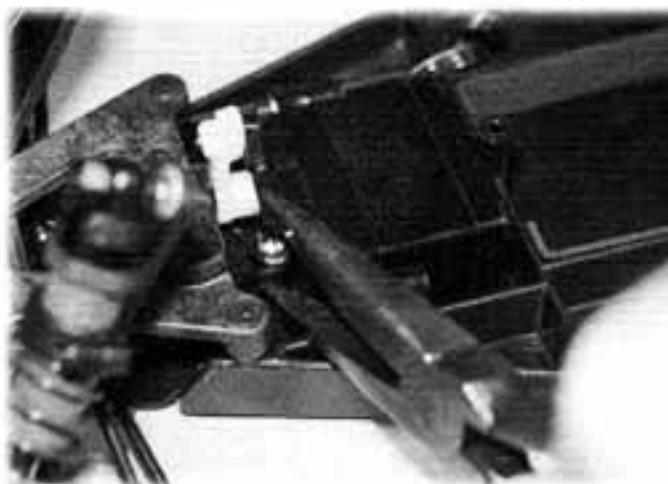
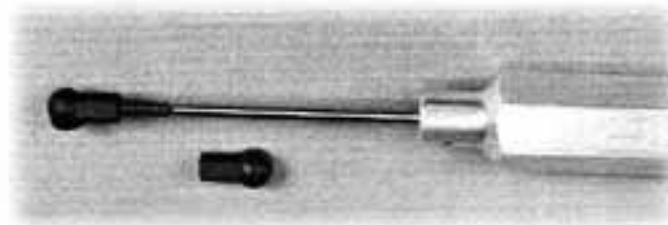
[Click part number to search eBay](#)

### MOUNT THE SERVO

- 1 Mount the servo with two #7673 screws.
- 2 Assemble the #9170 servo link, matching the length to the true scale drawing.
- 3 Use needle-nose pliers to attach link to ball ends.



1:1



PARTS REMOVED TO IMPROVE CLARITY

# BAG G

REMOVE THESE PARTS FOR:

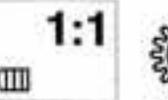
7003: step 3  
7013: step 3  
7037: step 3



6515, qty 2  
3mm x 6mm gold



6936, qty 2  
#4 washer



6951, qty 1  
4-40 x 1/8 set screw



FOR SPORT ONLY  
6674, qty 1  
16 tooth pinion gear

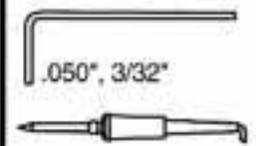


FOR SPORT ONLY  
6520, qty 3  
.1uf capacitor



FOR SPORT ONLY  
6742, qty 1  
motor connection plug

# TOOLS USED



## STEP 3 RIGHT SIDE

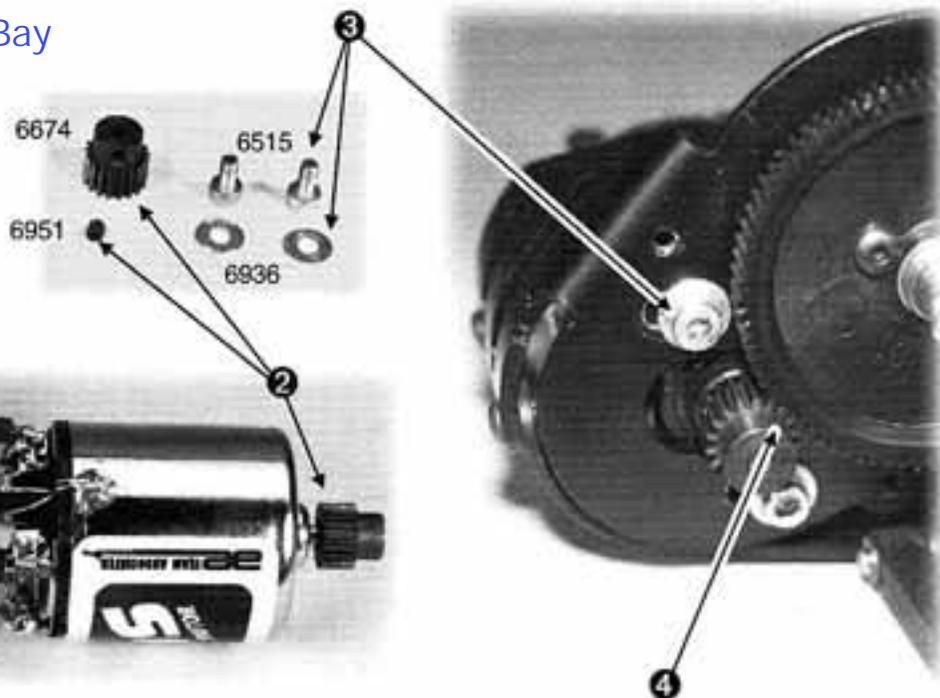
### INSTALL THE MOTOR

- 1 Attach three capacitors to your motor according to the instructions that came with your motor, if they are not on already. For the #7013 kit, solder the colored plug wire to a positive tab on the motor and the black wire to a negative tab. For the #7003, 7037 kits, you must buy your own motor, then follow this step.
- 2 Install the #6674 gear with the #6951 set screw going to the flat side of the shaft. For the #7003, 7037 kits, you must buy your own pinion gear. (See chart on page 30 for pinion selection.) If you use an electronic speed control, follow its directions for installing motor capacitors.
- 3 Use two #6515 screws and two #6936 washers to mount the motor as shown so the gears mesh.

[Click part number to search eBay](#)

### SET THE GEAR MESH

- 4 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 plastic gear is tight, then loosen the #6515 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.

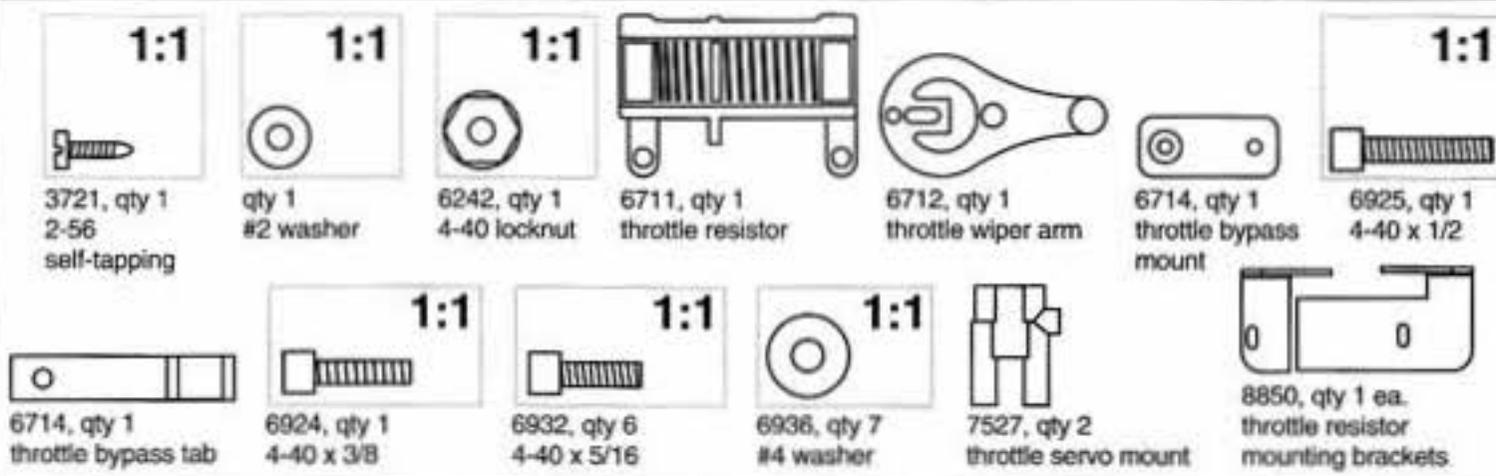


# SPORT KIT ONLY

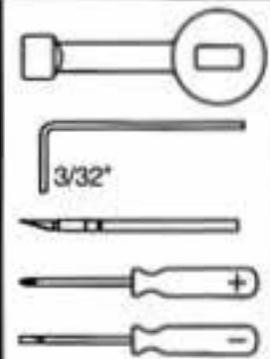
## BAG G

REMOVE THESE PARTS FOR:

7013: steps 4-6



## TOOLS USED



## STEP 4

[Click part number to search eBay](#)

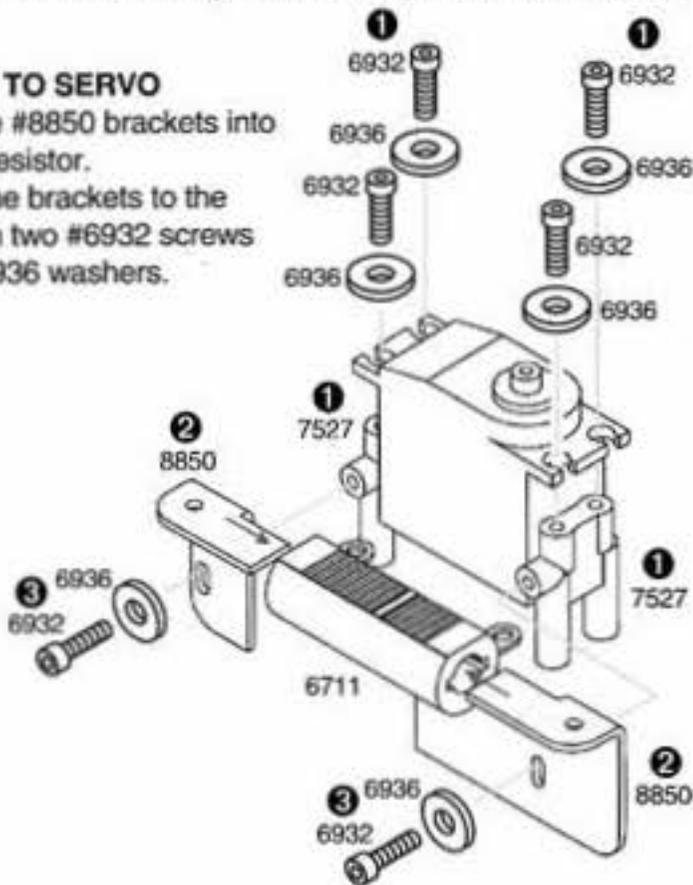
### MOUNTS TO SERVO

1 Attach the #7527 mounts to the servo with four #6932 screws and four #6936 washers. Orient your servo output shaft as shown here.

### RESISTOR TO SERVO

2 Push the #8850 brackets into the #6711 resistor.

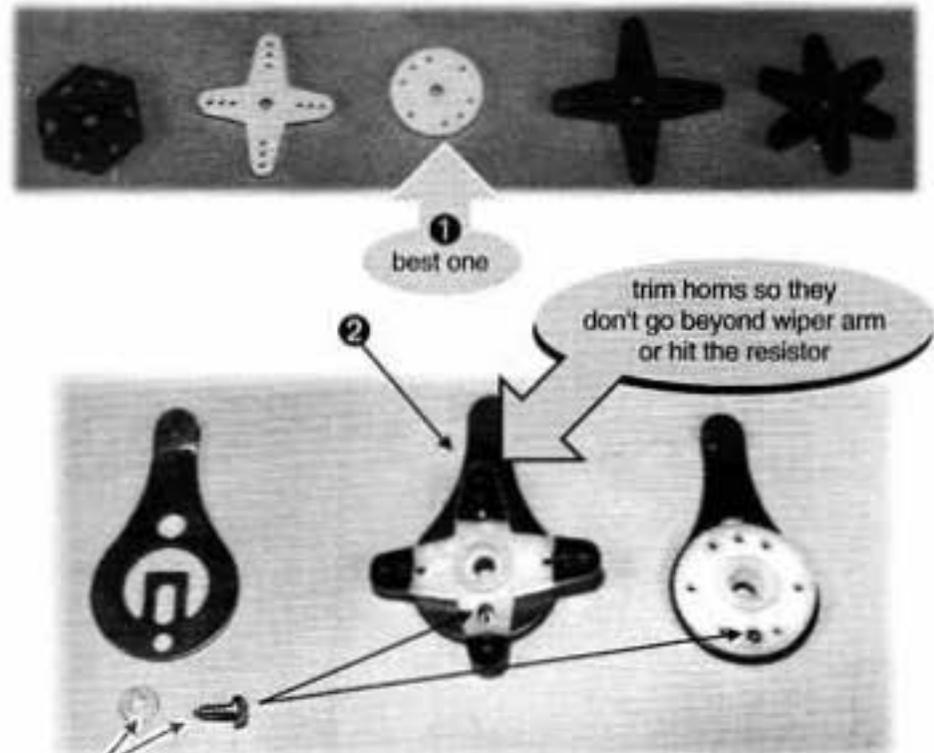
3 Attach the brackets to the mounts with two #6932 screws and two #6936 washers.



## STEP 5

### MODIFY THE SERVO HORN

1 There are many servo horns available. The round one is the best one.  
2 You must modify the horn if you are not using the round one. Trim them so they don't go beyond the #6712 throttle wiper arm outer edge. Also trim so it will clear the resistor.



## STEP 6

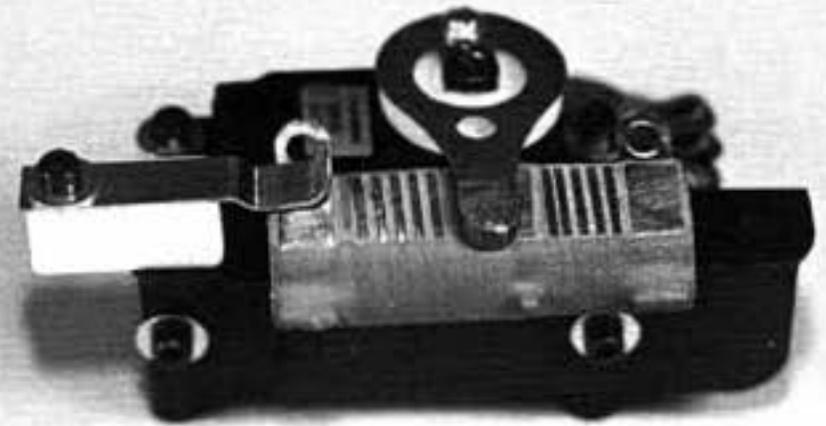
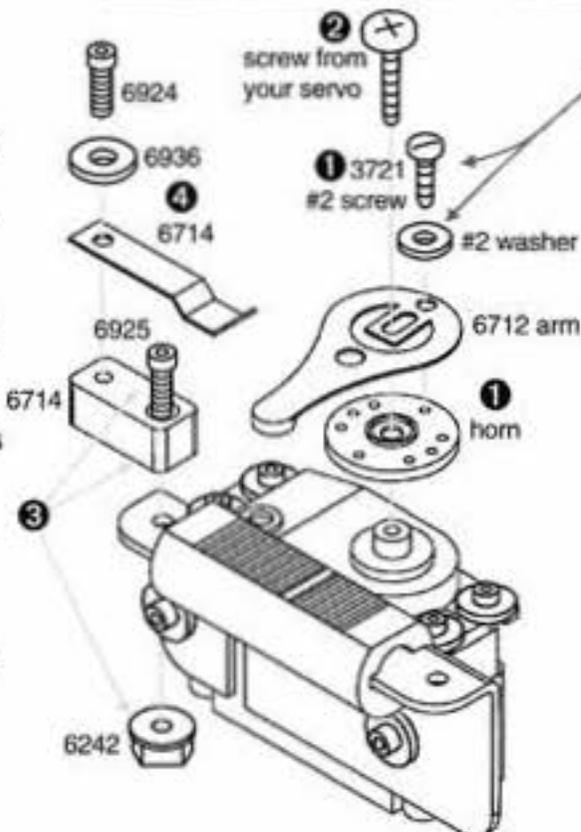
### FINAL RESISTOR/ SERVO ASSEMBLY

1 Attach the #6712 arm to the horn with the #3721 screw and #2 washer.

2 Mount the arm and horn to the servo with the screw from your servo. Trim the #3721 screw tip if it contacts the servo body.

3 Add the #6714 mount using #6925 screw and #6242 locknut.

4 Add the #6714 bypass tab to the #6714 mount with a #6924 screw and #6936 washer.



ASSEMBLED THROTTLE ARM AND RESISTOR

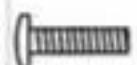
# SPORT KIT ONLY

## BAG G

REMOVE THESE PARTS FOR:

7013: steps 7-9

1:1



6917, qty 2  
4-40 x 3/8



6747, qty 1  
battery input harness

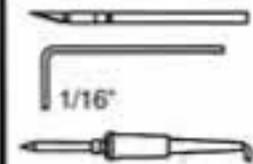


6745, qty 1  
motor output harness



qty 1  
servo tape  
(roll, #6726)

## TOOLS USED

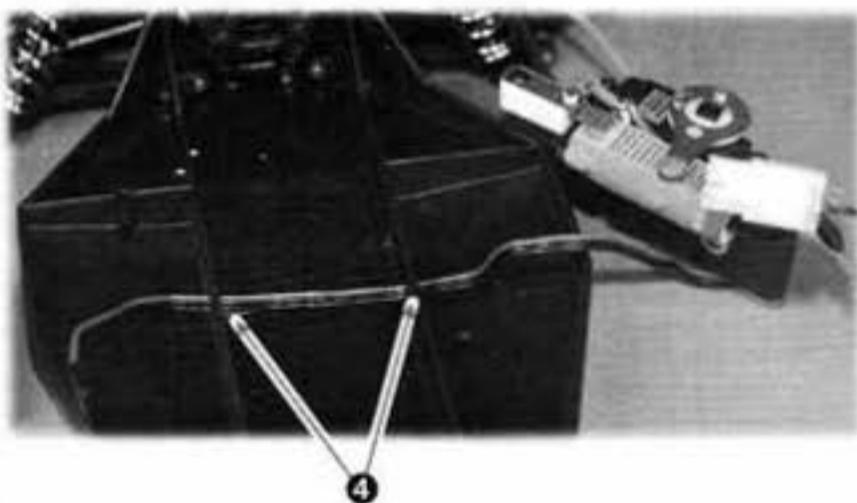
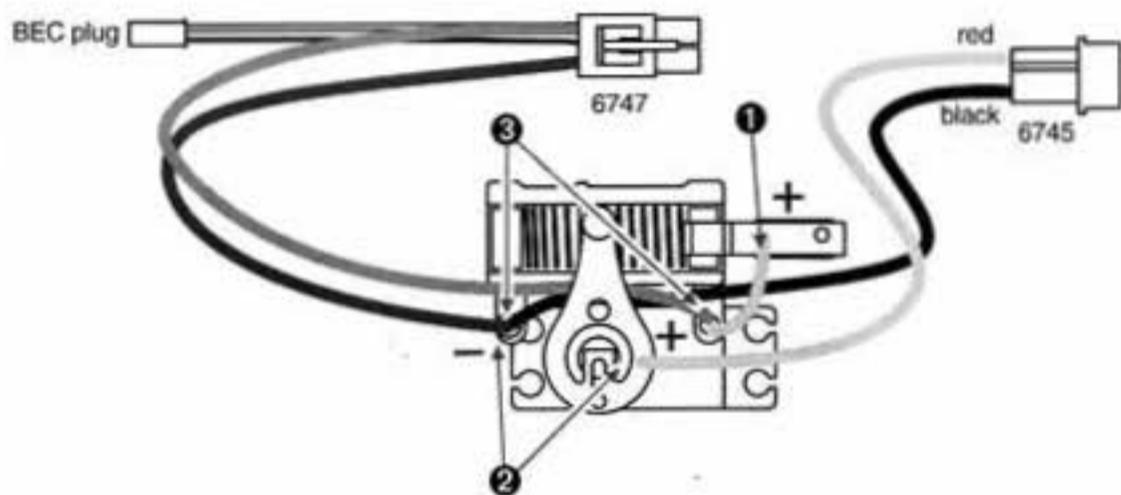


## STEP 7

[Click part number to search eBay](#)

### WIRE THE RESISTOR

- 1 Solder the small red wire between the positive resistor tab and the brass bypass tab.
- 2 Solder the #6745 harness to the wiper arm and negative tab on the resistor.
- 3 Solder the #6747 harness to the positive and negative tabs on the resistor.
- 4 Run the wire of the servo attached to the resistor through the battery slot area.

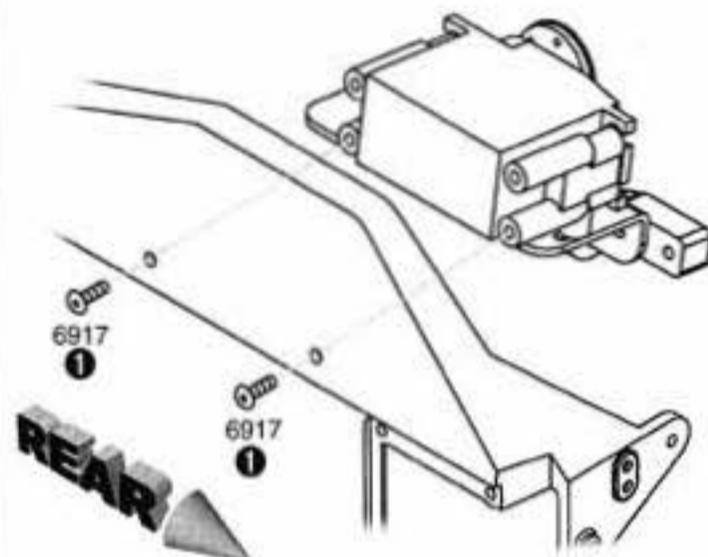


PARTS REMOVED TO IMPROVE CLARITY

## STEP 8 LEFT SIDE

### SPEED CONTROL TO CHASSIS

- 1 Attach speed control to chassis with two #6917 screws from the bottom.



PARTS REMOVED TO IMPROVE CLARITY

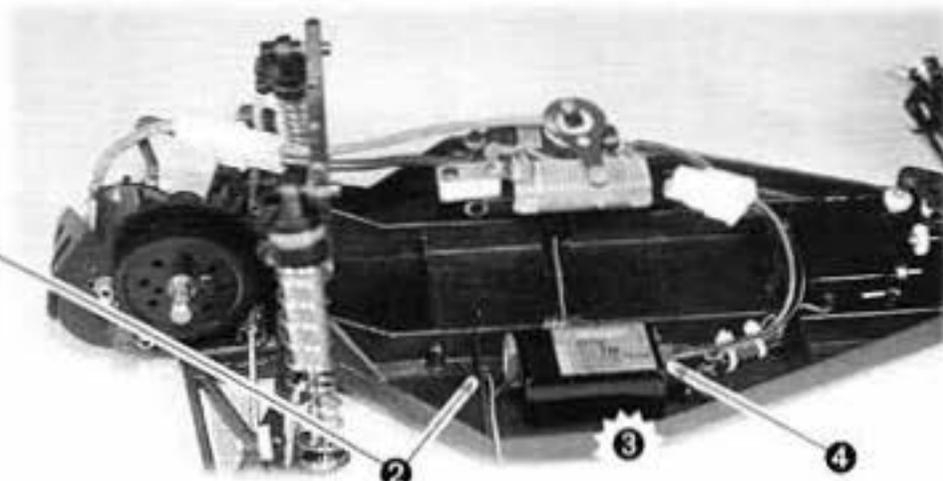
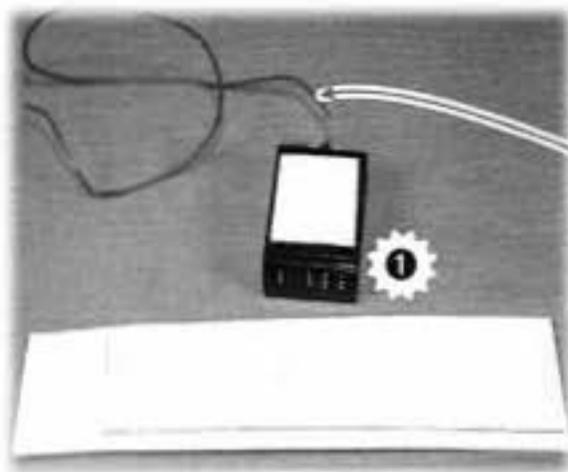
**REAR**

## STEP 9 LEFT SIDE

### RADIO RECEIVER TO CHASSIS

- 1 Cut a piece of servo tape, remove the paper from one side, and attach it to the bottom of your receiver.
- 2 Slip the receiver wire through the built-in chassis antenna mount.
- 3 Remove the paper from the other side and attach to the chassis as shown.
- 4 Plug the small #6747 BEC plug (of step 7) into the receiver's on/off switch.
- 5 Follow the instructions that accompany your radio receiver system.

**REAR**



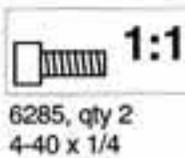
# BAG H

REMOVE THESE PARTS FOR:

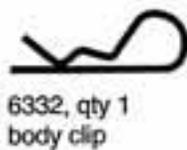
7003: steps 1-2

7013: steps 1-2

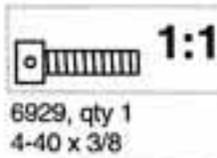
7037: steps 1-2



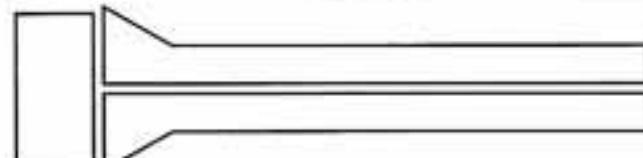
6285, qty 2  
4-40 x 1/4



6332, qty 1  
body clip



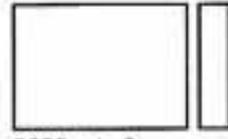
6929, qty 1  
4-40 x 3/8



9235, qty 1  
foam battery pads



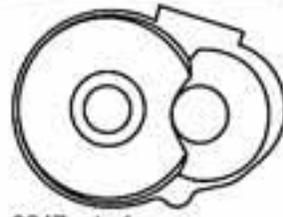
7330, qty 1  
battery hold down strap



9238, qty 3  
battery spacer



9247, qty 1  
button



9247, qty 1  
gear cover

# TOOLS USED

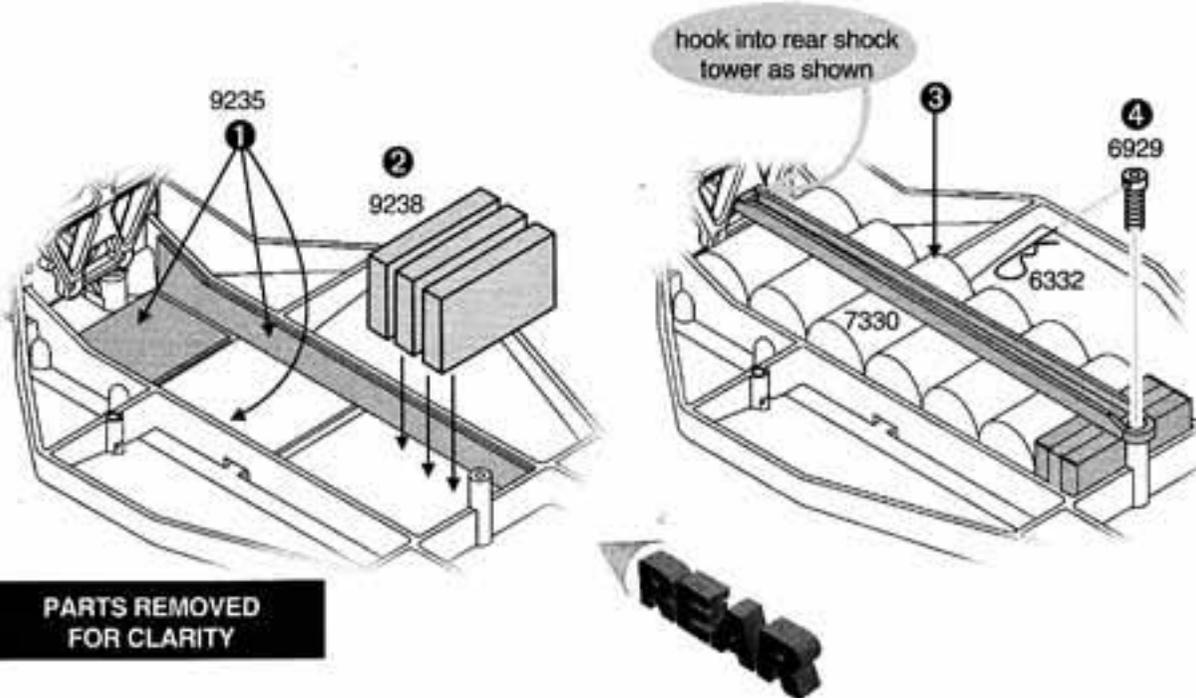


## STEP 1 LEFT SIDE

[Click part number to search eBay](#)

### INSTALLING THE BATTERY PACK

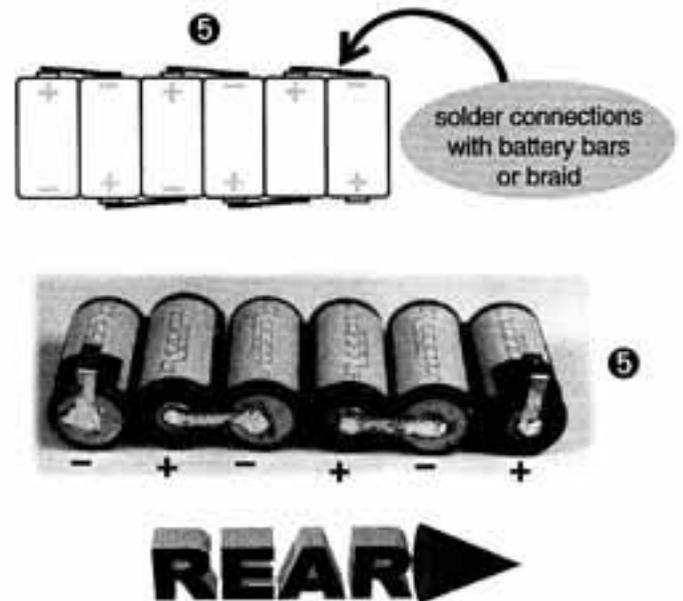
- 1 Install the three #9235 foam battery pads.
- 2 Install the three #9238 foam battery spacers. (Page 29 will show you how to adjust your steering or traction by moving these spacers.)
- 3 Install your battery pack. (See step 5 if you need to assemble it first.)
- 4 Thread on the #6929 screw. Aim the body clip hole across the chassis. Add the #7330 battery hold down strap. Adjust the screw so the batteries are held tight, but you are still able to push the #6332 body clip through the screw.



PARTS REMOVED FOR CLARITY

### SOLDERING INDIVIDUAL CELLS

- 5 Solder connections properly to assemble a battery pack from individual cells. Team racers prefer battery bars or braid for sturdier connections. Insulated wire will not allow the pack to fit in the battery slot.

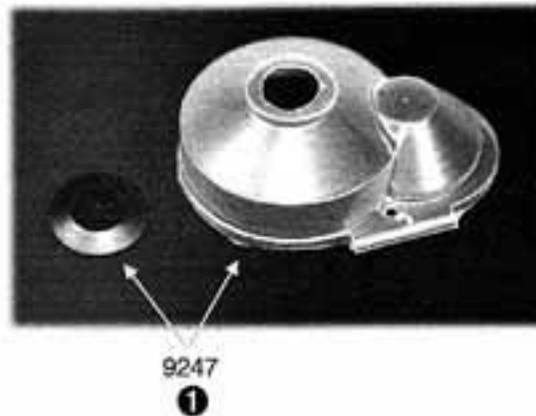


BATTERY PRODUCTS ARE NOT INCLUDED IN KIT

## STEP 2 RIGHT SIDE

### GEAR COVER

- 1 Trim the #9247 gear cover, cutting out three holes shown. Insert the #9247 insert button into the large hole cut into the gear cover.
- 2 Mount the cover with two #6285 screws.



# BASIC KIT AND TEAM KIT

## BAG H

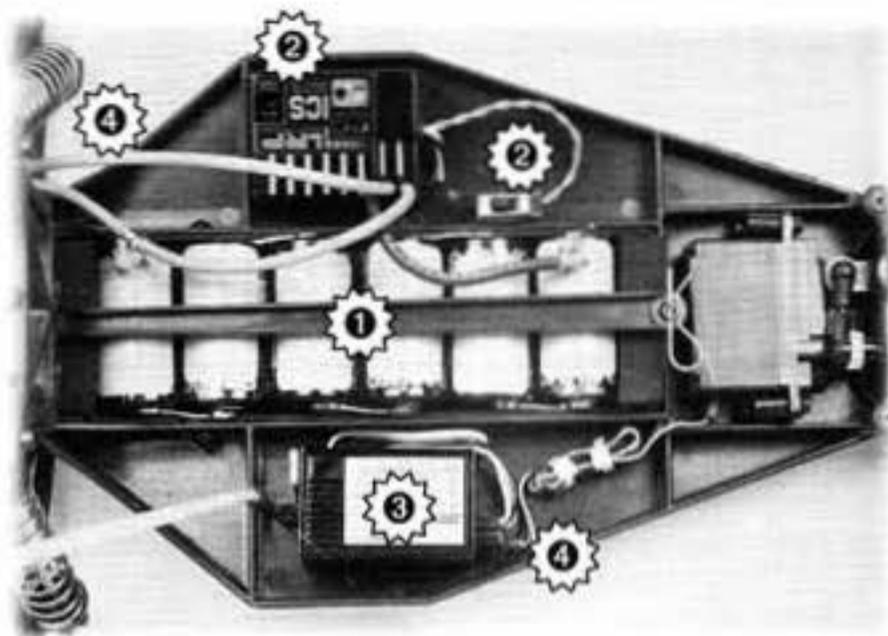
REMOVE THESE PARTS FOR:

7037: step 1



qty 1  
servo tape

## TOOLS USED



## STEP 1

### RADIO AND RECEIVER INSTALLATION

- 1 Install your battery pack as shown. If you need to assemble the battery, see step 1 #5 on page 21.
- 2 Cut a piece of servo tape and use it to attach your ESC and switch where shown.
- 3 Cut a piece of servo tape and use it to attach your receiver where shown.
- 4 Connect the ESC and steering servo to your receiver according to your radio or ESC instructions, then connect the motor to your ESC.

# ALL KITS

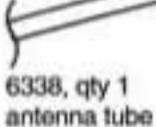
## BAG H

REMOVE THESE PARTS FOR:

7003: steps 2-3  
7013: steps 2-3  
7037: steps 2-3



6338, qty 1  
antenna tube cap

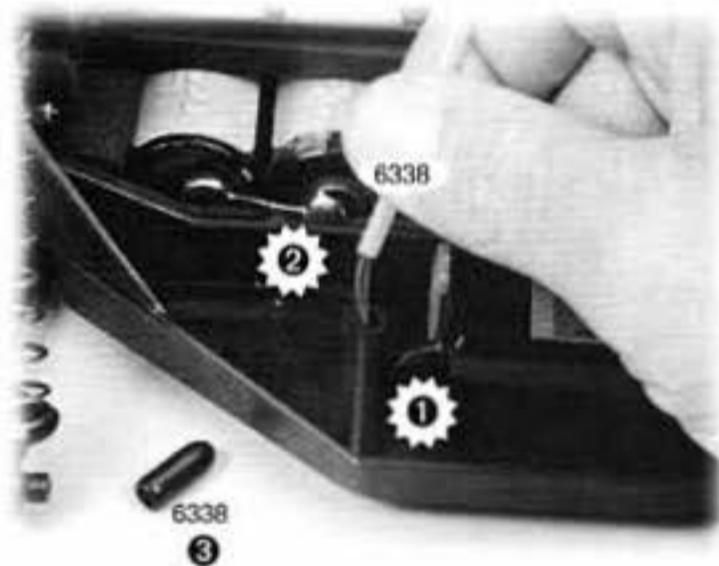
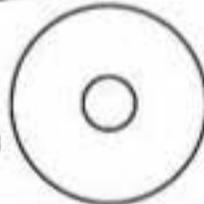


6338, qty 1  
antenna tube



6332, qty 3  
body clip

7320, qty 3  
washer



## STEP 2

### MOUNT THE ANTENNA

- 1 Push your receiver wire through the built-in antenna mount hole.
- 2 Thread the wire through the #6338 antenna and push the antenna firmly into the chassis' antenna mount hole.
- 3 Cap the other end of the antenna tube and wire.

## STEP 3

### BODY MOUNTING

- 1 Trim and paint the body. Trim where shown here, following the trim lines on the Lexan body. Page 25 contains brief painting tips.
- 2 Place three #7320 washers on the body mounts. Place the body on the body mounts. Secure the body to the chassis with three #6332 body clips where shown.
- 3 #7185 Truck spoiler shown is sold separately. Mount the spoiler on the angled surface as shown using two short button head screws and 4-40 nylon nuts.



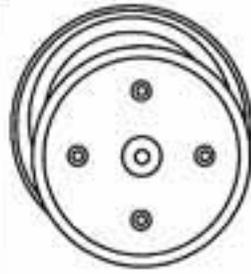
# BASIC AND SPORT KITS

## BAG I

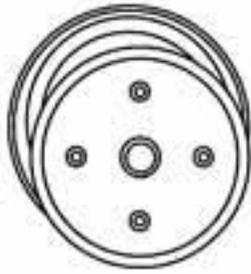
### REMOVE THESE PARTS FOR:

7003: steps 1-2  
7013: steps 1-2

**NOTE:**  
YOUR TIRES MAY  
DIFFER FROM  
THOSE SHOWN



7800Y, qty pr  
3 piece rear wheels



7840Y, qty pr  
3 piece front wheels



7823, qty pr  
rear tire  
XTR Stubby T



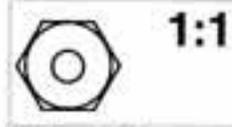
7876, qty pr  
front tire  
Edge



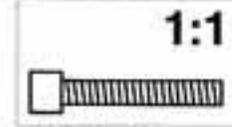
6599, qty 4  
3/16 x 3/8  
unflanged bushing



6222, qty 2  
4-40/5-40  
locknut

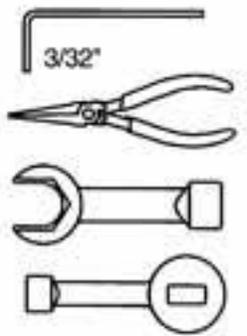


3438, qty 2  
8-32 locknut



6926, qty 16  
4-40 x 5/8

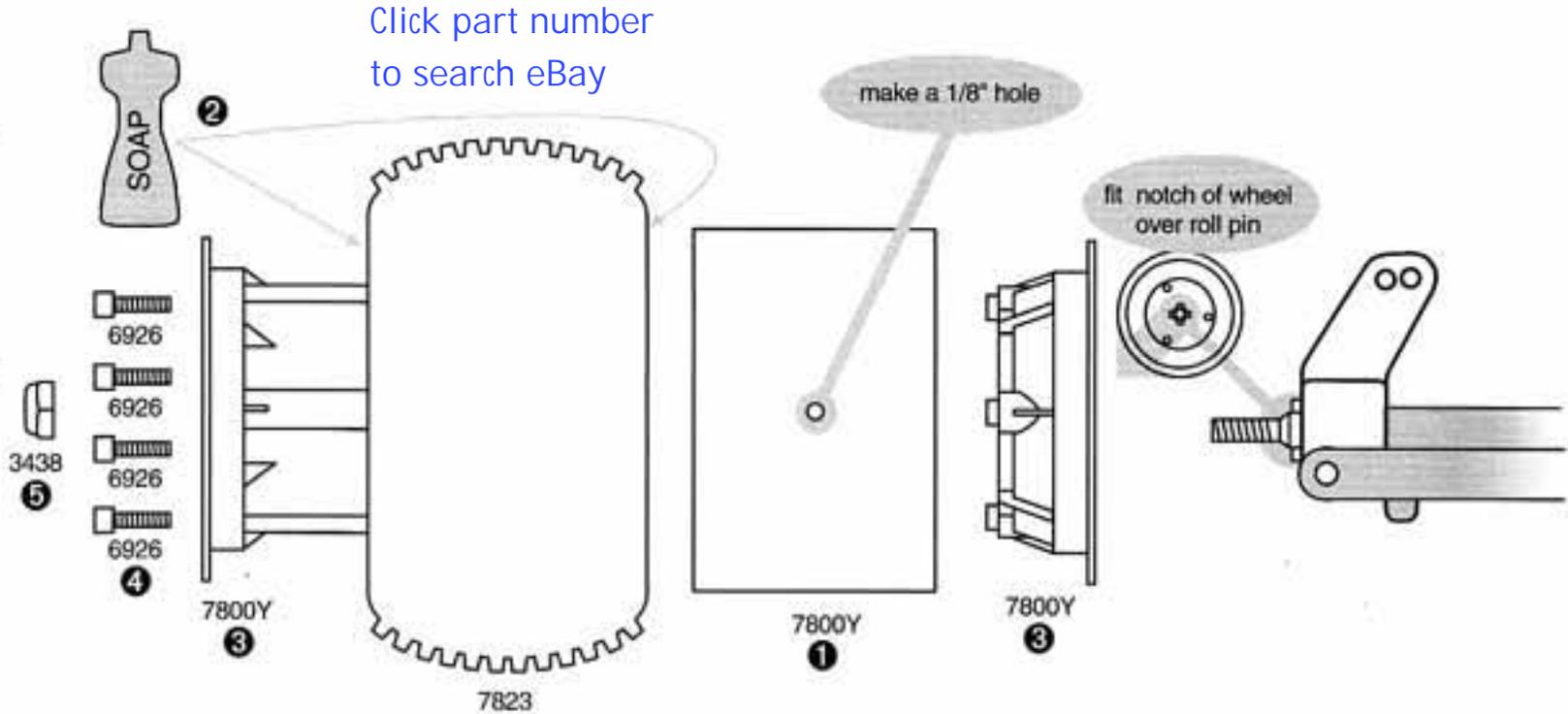
## TOOLS USED



## STEP 1

### REAR WHEELS AND TIRES

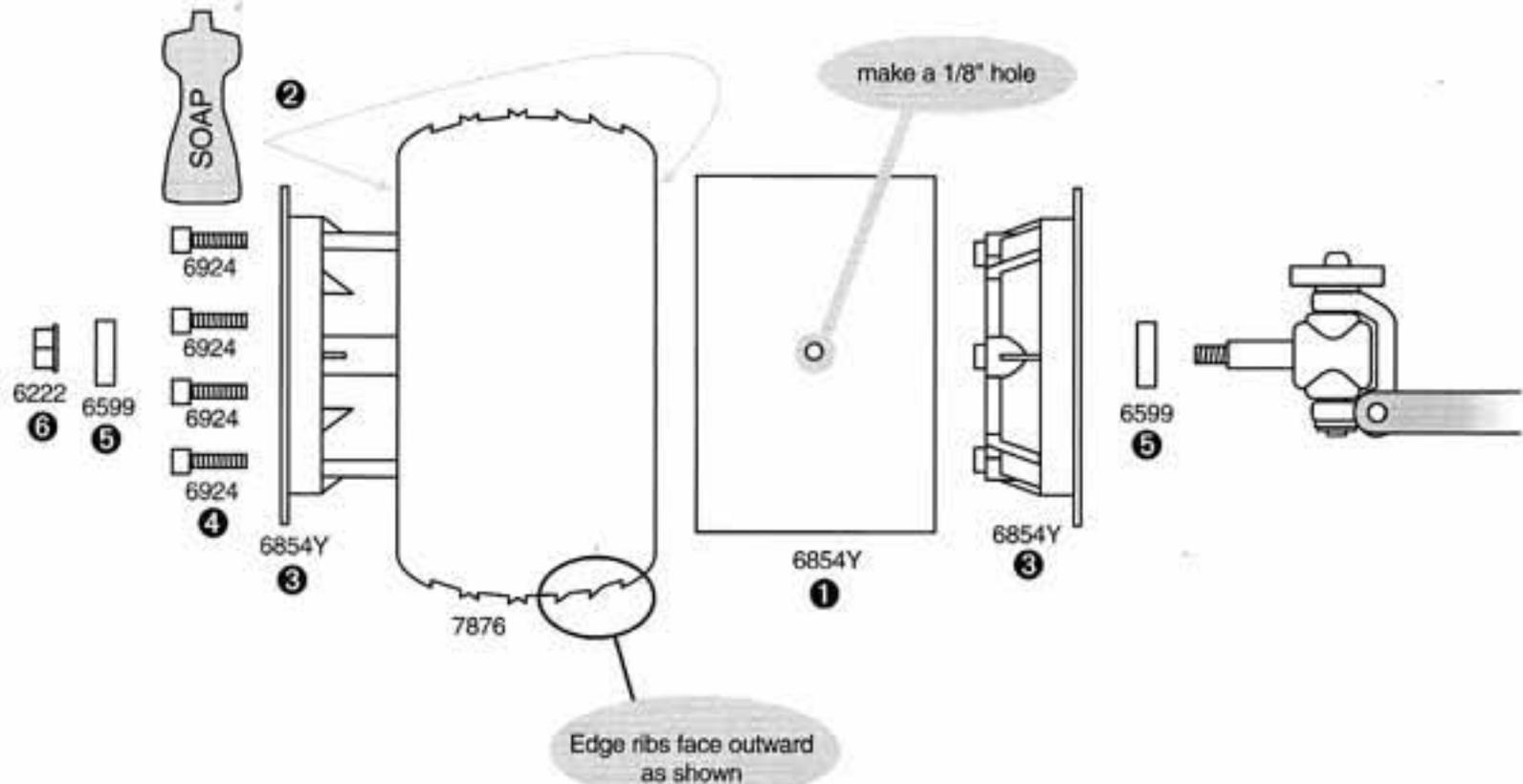
- 1 Make a 1/8" hole in the inner ring. Slip the #7800Y ring into the #7823 rear tires.
- 2 Using your finger, coat each edge of the tire that contacts the two wheel halves with liquid dish soap.
- 3 Push the #7800Y wheel halves into either side of the tire so they interlock.
- 4 Add four #6926 screws to fasten wheel together. Push wheel onto axle so roll pin engages slot in wheel.
- 5 Install #3438 locknut to axle.
- 6 Assemble the other wheel.



## STEP 2

### FRONT WHEELS AND TIRES

- 1 Make a 1/8" hole in inner ring. Slip the #7840Y ring into the #7876 front tire.
- 2 Using your finger, coat each edge of the tire that contacts the two wheel halves with dish soap.
- 3 Push the #7840Y wheel halves into either side of the tire so they interlock, orienting the tire as shown.
- 4 Add four #6926 screws to fasten wheel together.
- 5 Insert #6599 bushings into both sides of front wheel.
- 6 Install wheel onto axle. Install #6222 locknut onto axle.
- 6 Assemble the other wheel.



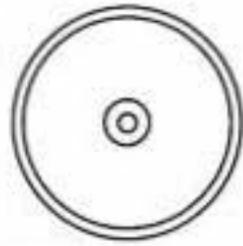
# TEAM KIT

## BAG I

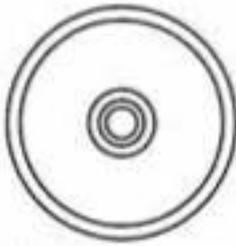
REMOVE THESE PARTS FOR:

7037: steps 1-2

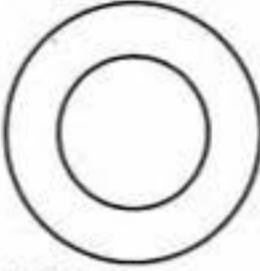
**NOTE:**  
YOUR TIRES MAY DIFFER FROM THOSE SHOWN



7803Y, qty pr  
1 piece rear wheels



7842Y, qty pr  
1 piece front wheels



7880, qty 4  
foam tire insert  
front and rear tires



7822, qty 2  
rear tire  
Mini Pin Spike



7875, qty pr  
front tire  
Edge



3438, qty 2  
8-32 locknut

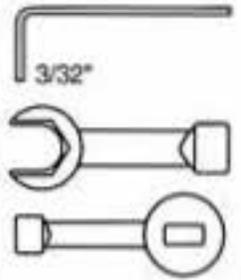


6222, qty 2  
4-40/5-40  
locknut



6906, qty 4  
3/16 x 3/8  
unflanged ball bearing

## TOOLS USED



### MULTIPLE-CHOICE QUIZ:

For protective measures when using cyanoacrylic glue products, you should:

- Read the product manufacturer's warning labels and follow them.
- Wear eye protection.
- Wear hand protection.
- If unsure, have an adult complete the step.

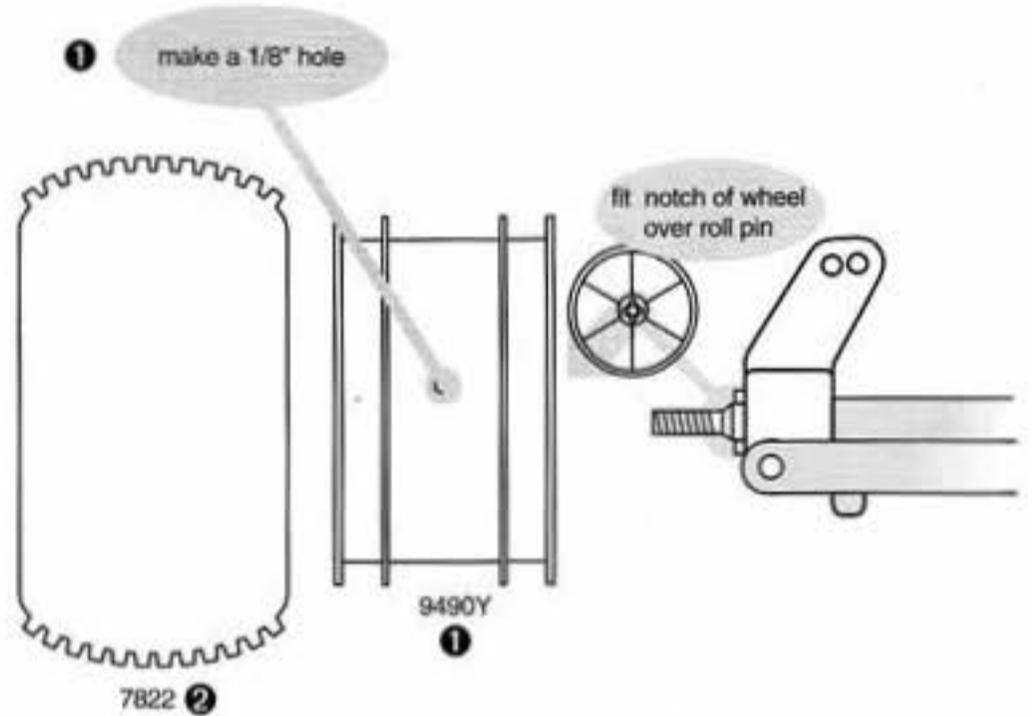
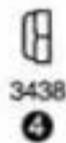
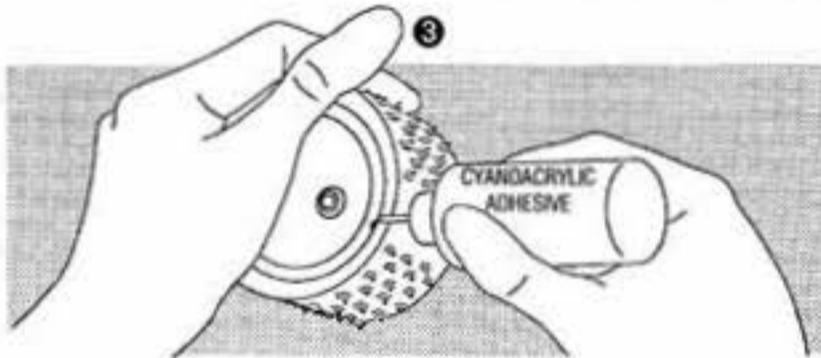
Answer all of the above.

## STEP 1

[Click part number to search eBay](#)

### REAR WHEELS AND TIRES

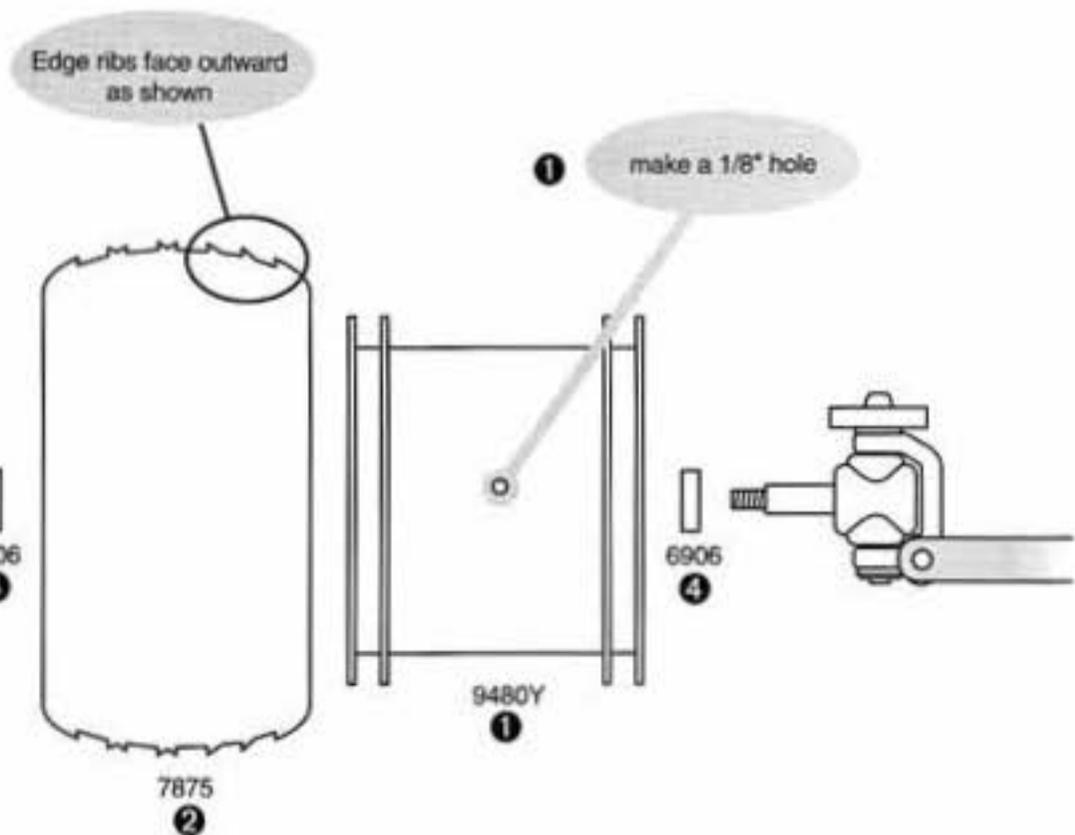
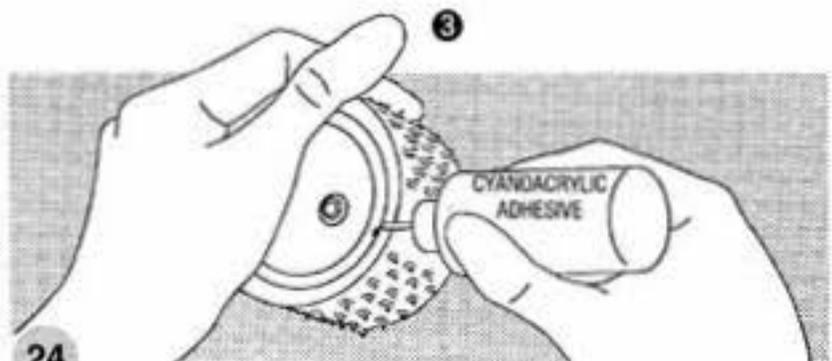
- 1 Make a 1/8" hole in the wheel. Make sure #7880 foam insert is centered in tire.
- 2 Install the #7822 tire to the #7803Y wheel.
- 3 Glue the tire to the wheel with super glue (cyanoacrylic glue) in four spots around the tire on both sides. **WARNING!** Follow the adhesive manufacturer's instructions for proper use and safety. Wear eye and hand protection.
- 4 Install wheel onto axle, lining up roll pin with slot in the wheel. Thread on the #3438 locknut. Finish second rear wheel and tire.



## STEP 2

### FRONT WHEELS AND TIRES

- 1 Make a 1/8" hole in the wheel. Make sure #7880 foam insert is centered in tire.
- 2 Install the #7875 tire onto the #7842Y wheel according to orientation shown.
- 3 Glue the tire to the wheel with super glue (cyanoacrylic glue) in four spots around the tire on both sides. **WARNING!** Follow the adhesive manufacturer's instructions for proper use and safety. Wear eye and hand protection.
- 4 Insert the #6906 ball bearings into both sides of the front wheel.
- 5 Install wheel onto axle. Thread on #6222 locknut. Finish second rear wheel and tire.



**BATTERY CHARGING.** Charge the transmitter batteries if they are NiCads. (Battery charging instructions are found later on this page.) Next charge your battery pack according to the instructions included with your battery charger or battery pack. Make sure all the ESC or mechanical speed control connections are according to the appropriate manuals. Now use the following steps to make the final adjustments on your truck.

- 1 Turn the transmitter switch ON
- 2 Make sure the motor is unplugged or unsoldered.
- 3 Plug in or solder in your battery pack.
- 4 Turn the on/off switch to the ON position. (This will be attached to the ESC or will be the separate on/off switch supplied with your radio system.)
- 5 Move the steering control on the transmitter to the right. Do the wheels steer to the right? If not, you must reverse the steering servo direction on your transmitter (see radio manual).
- 6 After you have the wheels steering in the correct direction, remove your hand from the steering control on the transmitter. Now look at the servo horn mounted on the servo. Is it pointing straight up? If not, adjust its position with the steering trim control on the transmitter, or move its position on the servo.
- 7 Now look at your front wheels. Are they pointed straight ahead in relation to the center line of the chassis? If not, first check the alignment of the servo saver arms in relation to the servo horn. With the horn pointed straight up, the steering servo saver arms should be parallel. Use the servo link to make any

adjustments. Do they now point straight ahead? If not, use the steering tie-rod turnbuckles to adjust each wheel so that it is pointed straight ahead.

**8 (Mechanical throttle resistor only)** Our mechanical speed control is set up for a 70/30 throttle/brake setting. Now check the direction and travel of the throttle servo. The wiper should move to the right and under the bypass tab for forward, and to the left for brake. If the throttle servo moves in the opposite direction, locate the throttle servo reversing switch (on your transmitter) and move it to the opposite position. If your radio does not have a 70/30 setting, it may still work but will require a different setting.

Just to the left of center is the neutral band (it is slightly wider than the other resistor bands). We want the wiper arm contact button over the wide neutral band. It should not be making contact with any of the forward bands (to the right side) at the same time. Use the throttle servo trim control to adjust the neutral position. If it is beyond the range of the trim feature you will need to center the trim knob and rotate the servo horn.

**9 (Basic and Team Kits)** Adjust the ESC (electronic speed control) according to the speed control manufacturer's instructions. **Note:** Some manufacturers have the motor connected during adjustment and some do not. Now turn the truck ON/OFF switch OFF.

**10** Plug in or solder in your motor. Place your truck on a block or truck stand so that the rear wheels cannot touch anything. Turn the truck switch back ON. Check the throttle resistor or

ESC operation and settings. After you have set and checked the throttle resistor speed or speed control, turn the truck switch OFF.

**11** The transmitter switch must always be the **FIRST SWITCH TURNED ON** and **THE LAST SWITCH TURNED OFF**.

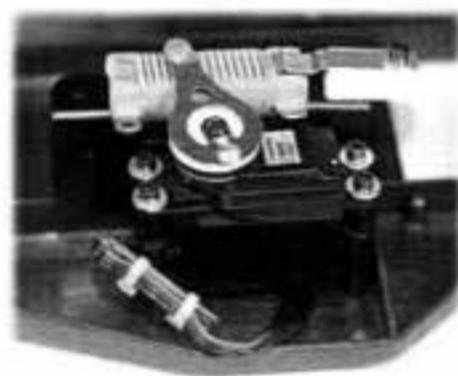
**CONGRATULATIONS! YOUR TRUCK IS NOW READY TO RUN!**



**FORWARD**



**BRAKE**



**NEUTRAL**

### PAINT THE BODY.

- 1 While the body is still clear, cut the body at the trim lines, then cut out the holes for the body mounts and antenna tube.
- 2 Clean the body thoroughly before painting with warm water and a mild dish soap.
- 3 Mask the inside of the body according to your paint scheme, using automotive masking tape for the best results. Take the time to press down all edges of the tape. Mask off the holes you cut with tape on the outside of the body.
- 4 Spray the body, applying the paint in thin coats and letting it dry between coats. We recommend Pactra paints.

### BATTERY CHARGING & DISCHARGING.

The battery packs used for R/C trucks are six-cell, sub-C, rechargeable type found in any hobby shop.

**CHARGING.** Proper battery charging and discharging is important to maintain the performance and life of your battery pack.

Associated recommends the use of a good quality automatic peak detection type charger. Peak detection chargers will automatically sense when the battery pack is fully charged and shut off, thus lessening the chance of damage due to over charging. Timer chargers are not recommended because a mistake can be made, thus damaging the battery pack.

**DISCHARGING.** To maintain performance from your battery packs, it is recommended you completely discharge them between charges. There are several inexpensive dischargers available at your hobby shop. Associated recommends the light bulb type discharger that is popular with the racers. Follow the discharging instructions supplied with your discharger for best battery performance.

**ASSOCIATED CHARGE CORD.** In your Basic kit and Sport kit is the Associated #3736 six cell (7.2 volt) charge cord. While we still recommend the use of a peak detection battery charger, this may not be within the budget of every hobbyist. When assembled, this charge cord will allow you to charge your battery packs from any 12 volt automotive type battery.

**h** In the charge cord bag you will find two large alligator clips, red and black plastic sleeves, and two different types of wire. Before you can solder, install one of the red sleeves over the positive wire and a black sleeve over the negative wire. **WARNING! DO NOT SHORTEN EITHER WIRE.** The arrows in the photo are pointing to the positive wire and clip connector. The positive lead will be the silver wire with the clear plastic coating over it. The negative wire is the black wire.

**2** Strip "" of the clear plastic coating from the silver positive wire with your hobby knife. Insert the wire into one side of the alligator clip and solder it to the clip in the location shown in the photo. **Use Rosin core solder only.**

**3** At the end of the alligator clip there are two tabs. Bend these tightly over the coated wire to help relieve the strain on the solder connection. Slide the red sleeve back over the arm on the alligator clip.

**4** Now take the second red sleeve and slide it over the other arm of the alligator clip. Repeat the above for the black negative wire and the black plastic sleeves.

#### CHARGE CORD CHARGING INSTRUCTIONS

First make sure your Ni-Cad battery pack is fully discharged and cool. Connect the red clip to the positive terminal of your 12 volt battery, then connect the black clip to the negative ter-

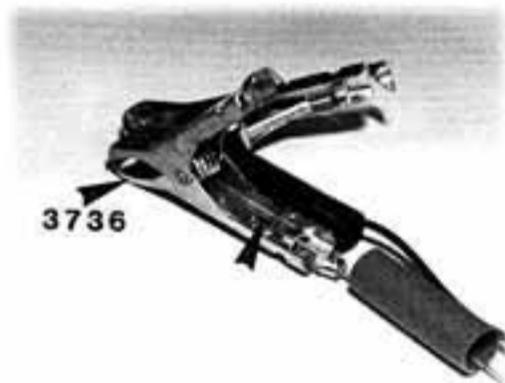
minal. **Always do this first, before you connect the charge cord to your battery pack.**

You are now ready to charge your battery pack. Plug the white battery connector plug (on the end of the charge cord) into the mating plug on your battery pack. You are now charging your battery. The charge cord will start out with a charge of approximately 4.5 amps and as the battery charges this will reduce to approximately 2.5 amps. Normally it will take about 15 minutes to charge your pack (make sure you start with a discharged pack).

**CAUTION! If you are using the charge cord (supplied in the #9011 kit) or some other method of timed charge, you should monitor the battery temperature while charging. Simply feel the battery temperature with your hand as the pack is charging. As soon as the pack feels warmer than the room temperature you should stop charging. If you continue charging, you may damage the battery pack.**

**WARNING! Charge cords and batteries can get extremely hot during charging cycles. Care must be taken around any components that can be damaged or catch fire due to heat from the charge cord or battery pack. This system is designed for use with an automotive 12 volt battery only. It cannot be used with a power supply or battery charger due to the higher voltage output.**

**WARNING! If you need to charge the 12 volt automotive battery you must disconnect any battery pack that is charging. After you have charged the 12 volt automotive battery you can resume charging the battery packs.**



## MAINTENANCE

### FOLLOW THESE STEPS TO KEEP YOUR TRUCK IN SHAPE FOR RACING

You should periodically check all the moving parts: front and rear suspension arms, steering blocks, steering linkage, shocks, and so on. If any of these should get any dirt in them, then your truck's performance will suffer.

**MOTOR MAINTENANCE.** Between runs, inspect the brushes to insure 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 the brush and carefully wipe the brush clean. This will clean off any build-up and lubricate the brush so it 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 run-off is clear and clean. If the run-off is still dirty, repeat the spraying action until clean. After completing the cleaning, apply a small amount of lightweight oil to each bushing for lubrication. Be careful not to apply too much oil, for this will pick up dirt and contaminate the commutator and brushes.

**RADIO MAINTENANCE.** A radio problem is not always caused by the radio system. Often it is the result of a combination of several factors which can include: motor noise, poor electrical connections, poor wiring layout, reversed or defective receiver crystals, weak transmitter batteries, and so on. If your radio problems persist, one of the following tips may help:

- 1 Make sure the motor brushes are free in their brush holders.
- 2 Try a different motor.
- 3 Try a different radio frequency.
- 4 Try mounting the receiver on its side with the crystal up to get it away from the chassis. Also move it away from the side of the chassis.

5 Try moving the receiver to the rear shock tower and mount the antenna on the rear bulkhead or shock strut.

6 Bundle the radio wires well away from the servo and battery wires. Either can generate a signal into the antenna wire.

7 The new high frequency speed controls can generate a signal which can cause interference with the receiver. Try to keep them two inches apart if possible.

Keep in mind that you can also run into outside interference. 75 MHz radio band will tend to be more susceptible to this problem than the 27 MHz band

**BUSHING MAINTENANCE.** The #9011 Sport kit uses bronze bushings in place of the ball bearings used in the #9000 Racer kit. To get the maximum life from the bushings you should only clean them by wiping them off with a rag. Do not use any liquid cleaners on the bushings. The cleaners will remove the oil from the bushings and reduce their life.

**DIFFERENTIAL MAINTENANCE.** You should rebuild the differential when the action gets somewhat "gritty" feeling. Usually cleaning the diff and applying new lube per the instructions will bring it back to new condition. The standard 3/32" tungsten carbide diff balls should rarely need changing. Normally, as the parts seat, the diff will get smoother. If, after carefully cleaning and re-lubing the diff parts, the diff still feels gritty, the thrust balls, thrust washers, and drive rings should be checked and possibly replaced. The parts will normally wear in the following order: #6574 5/64" diff thrust balls, #6573 diff thrust washers, and #7666 2.60:1 diff drive rings. Refer to the diff section to correctly assemble the diff.

**CLEANING YOUR TRUCK.** You can clean your truck and electronics (radio and speed control) with an electronics parts cleaner that is designated safe for plastics. They are convenient and work very well, but can be expensive. If you remove your electronics you can also clean the truck and motor with motor cleaning sprays. Like the electronics cleaners, this works very well, but can cost a lot. To keep your maintenance costs down, you can clean the truck (not the motor or electronics)

with normal household cleaners like 409, Fantastic, Simple Green or Associated's #711 Reedy Car Wash. These cleaners have more water in them, so to prevent rust on the metal parts you must completely dry all of these parts, or else spray them with WD40. **WARNING!** Most of these cleaners have chemicals in them that will affect the Lexan body. The best way to clean your Lexan body is with warm water and a mild dish soap.

## **TUNING & SETUP TIPS** THESE STEPS PREPARE YOUR TRUCK FOR MAXIMUM PERFORMANCE

Your T3 is one of the most tunable off road trucks on the market. This section will try to explain the parts and adjustments you can use to tune your truck for different track conditions.

**DIFFERENTIAL ADJUSTMENT.** Once the differential has been correctly adjusted, there should be no need to change it until rebuilding time.

1 Tighten the diff screw down until the T-nut reaches the bottom of the diff hub slot or you feel the spring fully compressed. Do not overtighten. When you feel the spring fully compressed, loosen the diff bolt 1/8 of a turn. No more, no less.

2 On a new or just rebuilt differential, apply a small amount of throttle while holding one of the rear wheels stationary. Do this for about 10 seconds. This will correctly seat all of the differential parts.

3 Now recheck the diff adjustment by again following step 1 above.

**TORQUE CLUTCH ADJUSTMENT.** It is possible to overtighten the torque clutch. If you do, you may damage the diff gears when landing off a jump. On a new or just rebuilt torque clutch, run the setting a little on the loose side for about one minute before readjustment to race settings. With a fully charged battery, your torque clutch should only slip 2-3 feet before fully engaging. On a high traction surface you can adjust the torque clutch a little tighter than you would on a low traction surface. **Remember the purpose of the clutch is to gain traction, not to break the tires loose.**

**CASTER** describes the angle of the kingpin in relation to the vertical plane, when looked at from the side of the truck. As an example, 0° of caster means the kingpin is straight up and down. Positive caster means the kingpin leans rearward at the top.

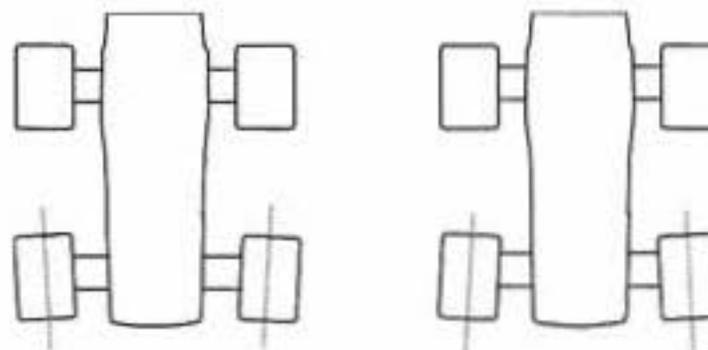


Associated makes block carriers for the RC10T3 with 25° and 30° of caster. Your kit comes with block carriers with 30° of caster, which is recommended for off road racing.

30° of caster will give your truck increased steering entering corners but will have less steering exiting corners. It will also be more stable when accelerating through fast bumpy track conditions. Less caster (changing to block carriers with 25° of caster) will decrease the amount of steering entering corners but will increase steering in the middle and exiting corners. It will also tend to be less stable in fast, bumpy conditions. **NOTE:** Remove the #6466 plastic spacer from the steering block ball end when using the 25° block carriers.

**FRONT TOE-IN AND TOE-OUT.** Adding toe-in to the front tires helps stabilize your truck under acceleration, but at the same time it will decrease the amount of steering when entering a corner.

Toe-out will add steering entering a corner but will cause instability when accelerating through bumps or down a slippery straightway. We suggest using 0° to 1° of toe-in at all times.



FRONT TOE-IN

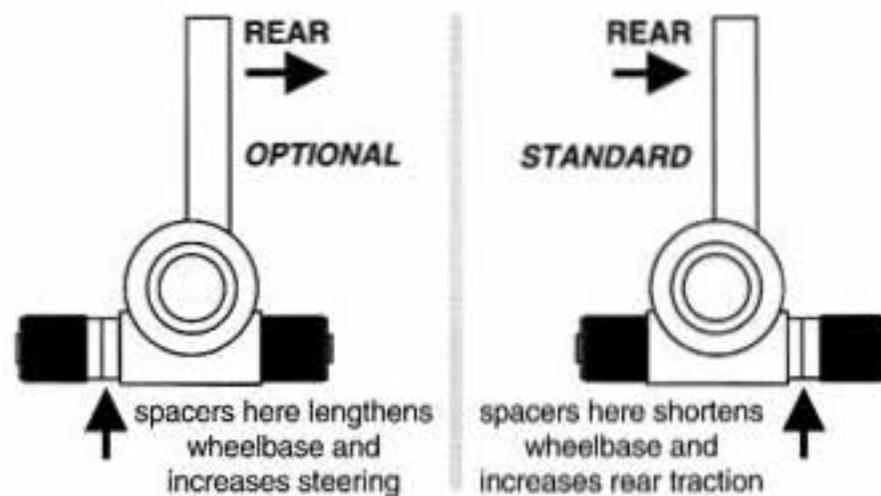
FRONT TOE-OUT

**REAR TOE-IN.** Rear toe-in affects front and rear traction. Decreasing rear toe-in decreases rear traction and adds steering. Increasing rear toe-in will do just the opposite.

Your T3 comes with 3° of rear toe-in per arm mount, for a total of 6°. The kit also comes with 0° rear hub carriers. This setup works best for almost all track conditions. It is rarely changed. However Associated offers optional 2° arm mounts for different track conditions.

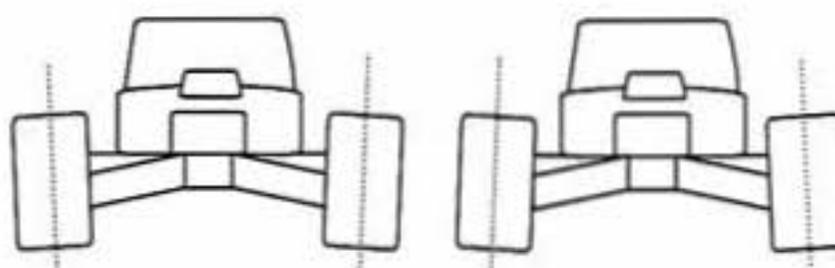
**ANTI-SQUAT.** Anti-squat is the angle at which the rear arms sit in relation to the horizontal chassis surface, e.g. 3° means the front of the arm is mounted 3° higher than the rear of the arm. The standard rear arm mounts have 3° of anti-squat which results in increased traction exiting corners. 3° will also allow your truck to jump higher and farther. Less anti-squat (1.5° and 0°) will allow your truck to accelerate better through bumpy sections but will have less traction.

**WHEELBASE ADJUSTMENT.** The RC10T3 wheelbase can be changed easily to allow further fine tuning of your truck for different track conditions. This can be accomplished by moving the two #6466 1/16" plastic spacers on the rear outer hinge pin (next to the rear hub carrier). Refer to the drawing here to see where the standard position is for your kit.



**CAMBER** describes the angle at which the tire and wheel rides relative to the ground when looked at from the front or back. Negative camber means that the tire leans inward at the top. Positive camber means just the opposite. Positive camber should never be used.

Increasing negative camber (more than 3°) will decrease traction but improve stability in bumps. Less negative camber (0° to 1°) will have the maximum amount of traction but will be less stable in bumpy conditions. We suggest using between 1° and 3° of negative camber at all times.



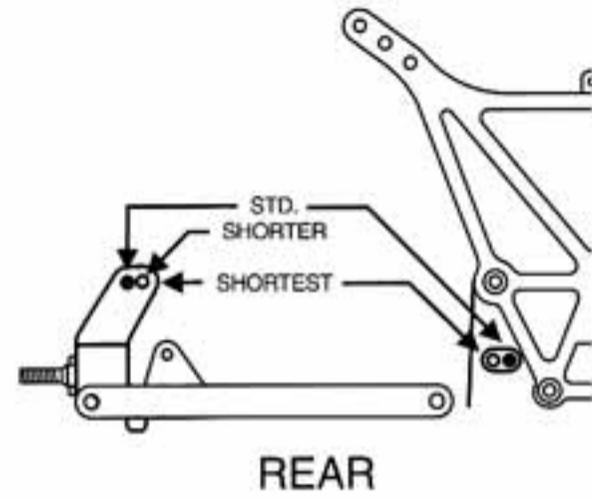
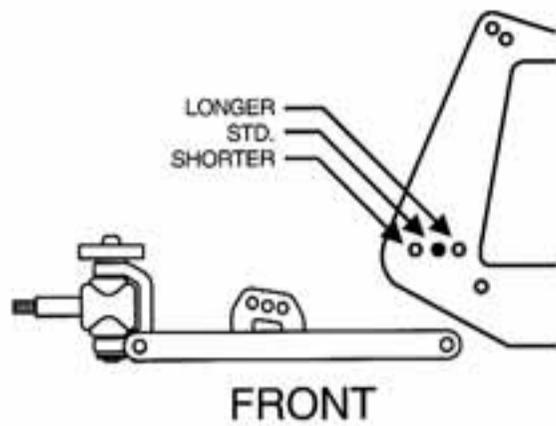
DON'T USE (positive camber)

USE THIS (negative)

**CAMBER LINK ADJUSTMENT.** Changing the mounting position of the camber links can affect traction, stability, and handling on rough tracks. Use the following guidelines to try and find the correct handling for your track conditions.

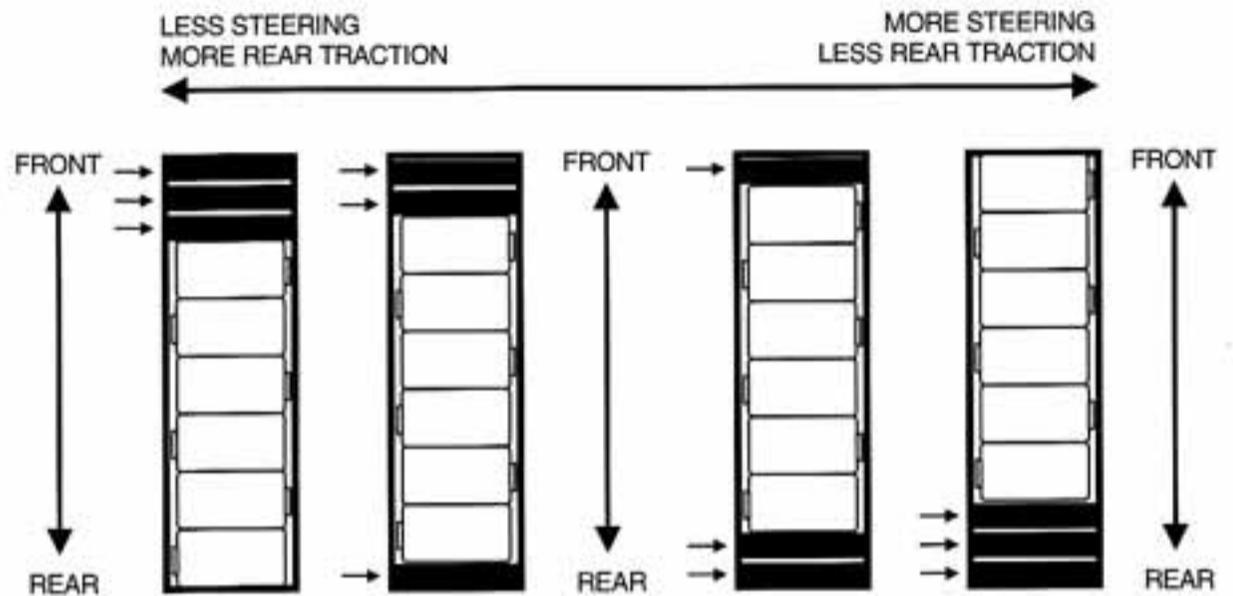
Using a longer mounting position will increase traction but decrease stability and rough track handling.

Using a shorter mounting position will decrease traction but increase stability and rough track handling.



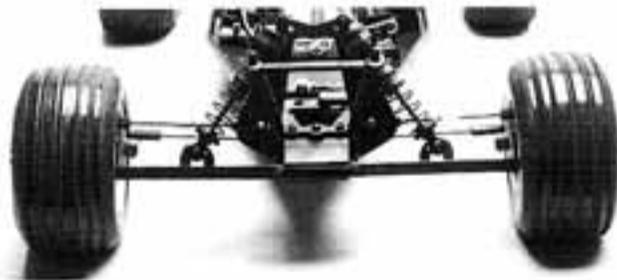
**BATTERY PLACEMENT.** Your T3 also gives you the ability to change weight balance by moving the batteries forward or back.

You accomplish these changes by moving the #9238 foam battery spacers to the front or rear of the battery pack.



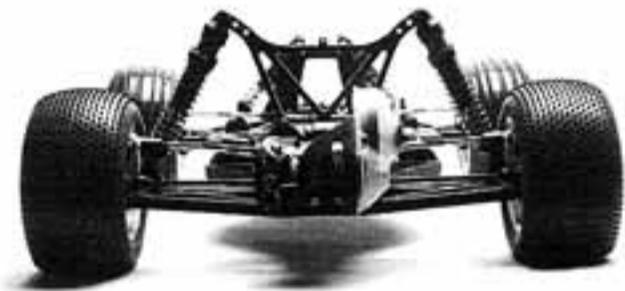
**RIDE HEIGHT.** Now we check the ride height of your T3 to make sure the settings are correct. Before we make this adjustment we should have everything in the truck just as if you were going out to run it, but leave off the body.

For the front, push down on the front suspension and then let go. When the suspension stops, the front arms should be level with the bottom of the nose plate. If not, you can make adjustments by raising or lowering the front shock spring clamps.



FRONT RIDE HEIGHT

Now push down on the back suspension and let go. The axle dogbones should be level. Look at the rear end photo to compare. You adjust the rear shock spring clamps to make changes to the rear ride height.



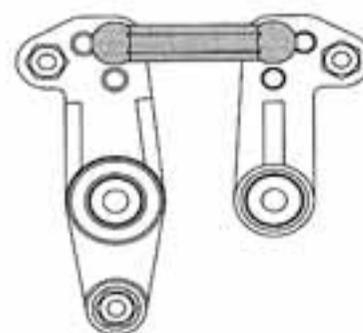
REAR RIDE HEIGHT

Remember that if you move the battery forward or back this will change the weight balance of the truck, so you will need to recheck the ride height.

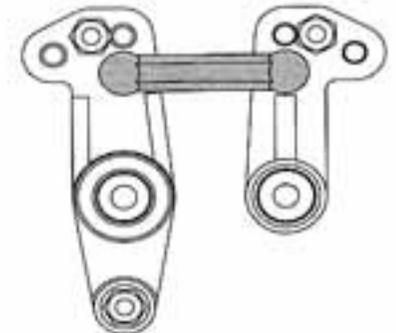
**STEERING ACKERMAN.** Your RC10T3 gives you the choice of two steering Ackerman settings.

**Standard setup.** This is what we recommend for most drivers. This setting gives the truck less aggressive steering and a more forgiving driving feel.

**Optional setup.** Less Ackerman. Gives the truck more aggressive steering but the truck will be less forgiving to drive. **This setup is rarely used.**



STANDARD SETUP



OPTIONAL SETUP

**MOTOR GEARING.** To get the most from your motor proper gearing is important. The gear ratios listed in the chart below 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° ROAR stock motor	24	87	8.7:1
DS Spec motor (kit motor)	24	87	8.7:1
36 deg stock motor	20	87	10.44:1
14 turn modified motor	20	87	10.44:1
13 turn modified motor	19	87	10.98:1
12 turn modified motor	18	87	10.59:1
11 turn modified motor	17	87	12.28:1
10 turn modified motor	16	87	13.05:1

**FINAL DRIVE RATIO.** The "final drive ratio" is a term used to show how many revolutions the motor turns in relation to one wheel revolution. This is a popular way to figure gear ratios, because the internal ratios vary with different types of transmissions. The following is the formula for calculating final drive ratios:

$$(\text{spur gear} \div \text{pinion gear}) \times \text{T3 tranny ratio} = \text{final drive ratio}$$

$$(\text{87} \div \text{25}) \times 2.4 = 8.352$$

**PRECISION RACING GEARS.** These gears are the quietest and longest-lasting gears available. Associated offers you a wide range to suit your racing needs.

PINION GEARS				SPUR GEARS	
15	#8252	21	#8258	75	#8280
16	#8253	22	#8259	78	#8281
17	#8254	23	#8260	81	#8282, 6693
18	#8255	24	#8261	83	#8283, 6697
19	#8256	25	#8262	85	#8284, 6694
20	#8257	26	#8263	87	#8285, 6695

## OPTIONAL RACING PARTS

Associated has many optional racing parts for the serious racer. Here is a list of the available accessories:

- 7700 Ball bearing kit
- 7304 T3 Chassis, (carbon fiber composite)
- 7204 Front suspension arms (carbon fiber composite)
- 7339 Rear suspension arms, (carbon fiber composite)
- 9131 Front top plate, molded (carbon fiber composite)
- 7219 Front shock tower, laminated (carbon fiber)
- 7349 Rear shock tower (carbon fiber composite)
- 7331 Battery hold down strap (carbon fiber composite)
- 9381 Transmission brace (carbon fiber composite)
- 9266 Rear suspension mounts, 2° Toe-in/3° anti-squat
- 9268 Rear suspension mounts, 3° Toe-in/0° anti-squat
- 7212 Caster blocks, 25°
- 7383 MIP CVD drive shafts
- 9248 Gear cover, fits Losi Hydra Drive and Schumacher Viscous drive
- 9162 Ball bearings for right side steering bellcrank
- 6416 Unobtainium shock shaft, 1.32" stroke
- 6417 Unobtainium shock shaft, 1.02" stroke
- 7428 Front suspension springs, silver (more stiff than std.)
- 7426 Front suspension springs, (more soft than std.)
- 6478 Rear suspension springs, (more stiff than std.)
- 6481 Rear suspension springs, (more soft than std.)
- 7199 T3 decal sheet (serious racers must look cool!)
- 7185 T3 Rear Body Spoiler kit
- 6859 Traction Action Tire Conditioner

## T3 SETUP SHEET

The next page shows Team Associated's setup sheet for the T3. Copy that form and keep a record of the settings you used for a particular track. This record of your settings will make it easier to set up your truck the next time you race at that track, as well as compare differences between tuning adjustments. This is a feature that our Team drivers take full advantage of.

### SAVE THIS BOOKLET!!

*More than an instruction manual, its also a handy pictorial supplement to Team Associated's RC10T3 catalog.*

*Refer to this manual for part numbers and description when ordering parts or explaining problems for customer service calls.*

driver \_\_\_\_\_  
 track \_\_\_\_\_  
 date \_\_\_\_\_

## FRONT SUSPENSION

FRONT BLOCK CARRIER (caster setting)

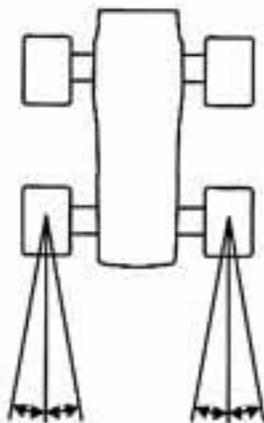
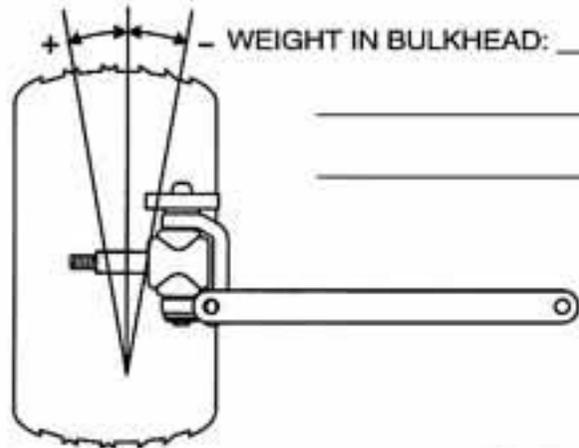
25°  30°

FRONT RIDE HEIGHT: \_\_\_\_\_

STEERING BLOCK \_\_\_\_\_

CAMBER \_\_\_\_\_

WEIGHT IN BULKHEAD: \_\_\_\_\_



TOE-IN \_\_\_\_\_°  
 TOE-OUT \_\_\_\_\_°

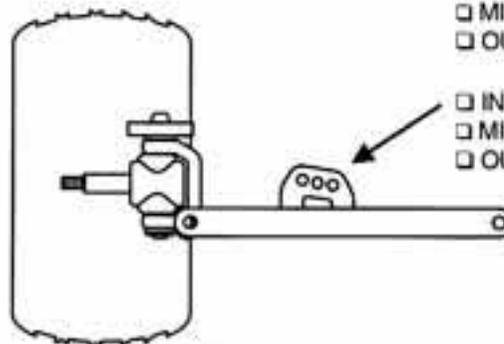
## FRONT SHOCKS

STD  OTHER OIL \_\_\_\_\_ PISTON \_\_\_\_\_

BODY \_\_\_\_\_ SHAFT \_\_\_\_\_ SPRING \_\_\_\_\_

LIMITERS, inside \_\_\_\_\_ outside \_\_\_\_\_

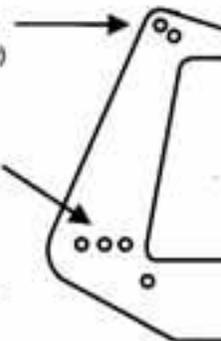
NOTES \_\_\_\_\_



INSIDE  
 OUTSIDE  
 Other (draw)

INSIDE  
 MIDDLE  
 OUTSIDE

INSIDE  
 MIDDLE  
 OUTSIDE



## REAR SUSPENSION

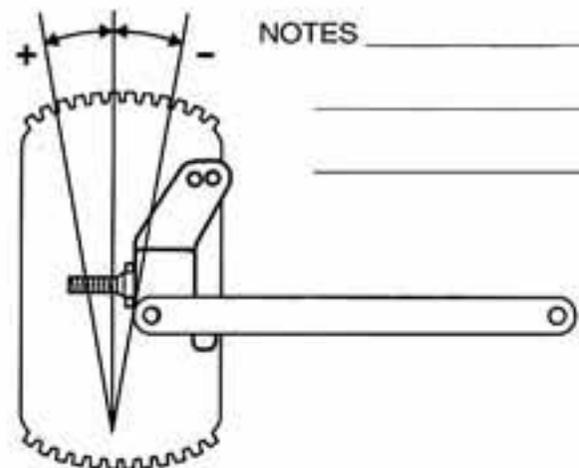
SUSPENSION MOUNTS:  3°  2°  0°

REAR RIDE HEIGHT: \_\_\_\_\_

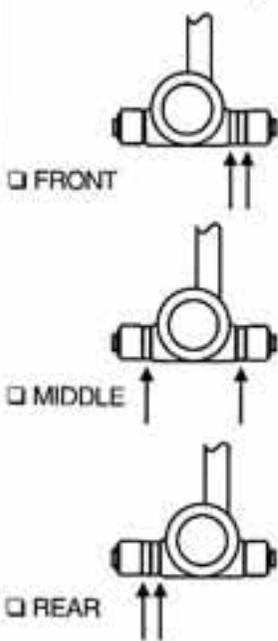
ANTI-SQUAT \_\_\_\_\_

CAMBER \_\_\_\_\_

NOTES \_\_\_\_\_



WHEEL HUB PLACEMENT **REAR**



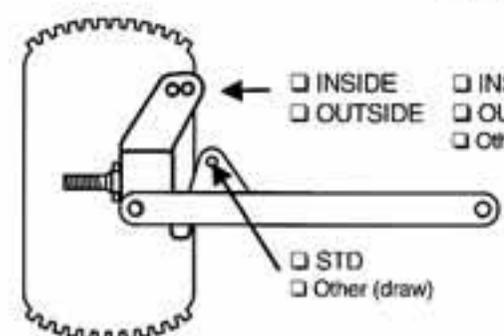
## REAR SHOCKS

STD  OTHER OIL \_\_\_\_\_

PISTON \_\_\_\_\_ SPRING \_\_\_\_\_

LIMITERS, inside \_\_\_\_\_ outside \_\_\_\_\_

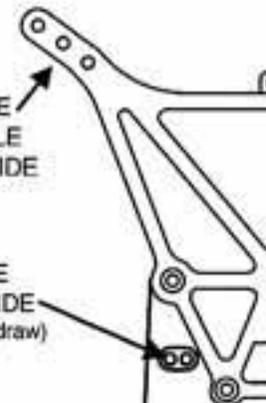
NOTES \_\_\_\_\_



INSIDE  
 MIDDLE  
 OUTSIDE

INSIDE  
 OUTSIDE

INSIDE  
 OUTSIDE  
 Other (draw)



## OTHER

### TIRES & WHEELS

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

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

FRONT WHEELS  1 PIECE  3 PIECE  OTHER

CHASSIS  STD  OTHER

### MOTOR, TRANSMISSION & ELECTRICAL

MOTOR \_\_\_\_\_ PINION \_\_\_\_\_ SPUR GEAR \_\_\_\_\_

DRIVESHAFTS \_\_\_\_\_

SLIPPER  STD  HYDRA  VISCO OIL \_\_\_\_\_

BATTERY TYPE \_\_\_\_\_ PLACEMENT  FRONT  MIDDLE  REAR

RADIO \_\_\_\_\_ SPD. CONT. \_\_\_\_\_ SERVO \_\_\_\_\_

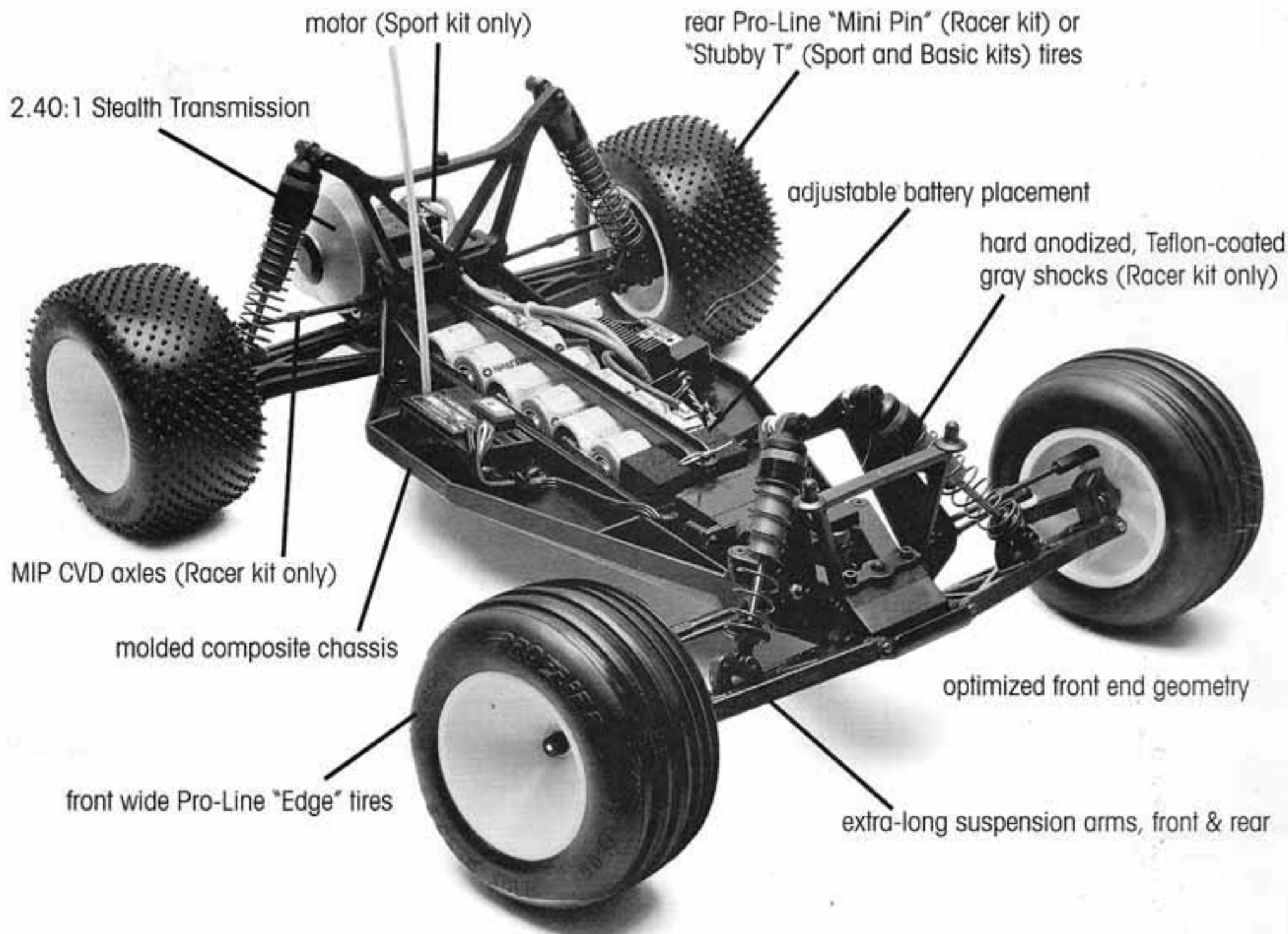
### COMMENTS/EXCUSES

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

# RC10 T3

## FEATURES

See page two for complete specs on what is included for each kit.  
Team kit shown. Radio and electronics are not included in kits.



(not shown) mechanical speed control (Sport kit only)  
(not shown) T3 racing body

**TEAM ASSOCIATED**

ASSOCIATED ELECTRICS, INC.  
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