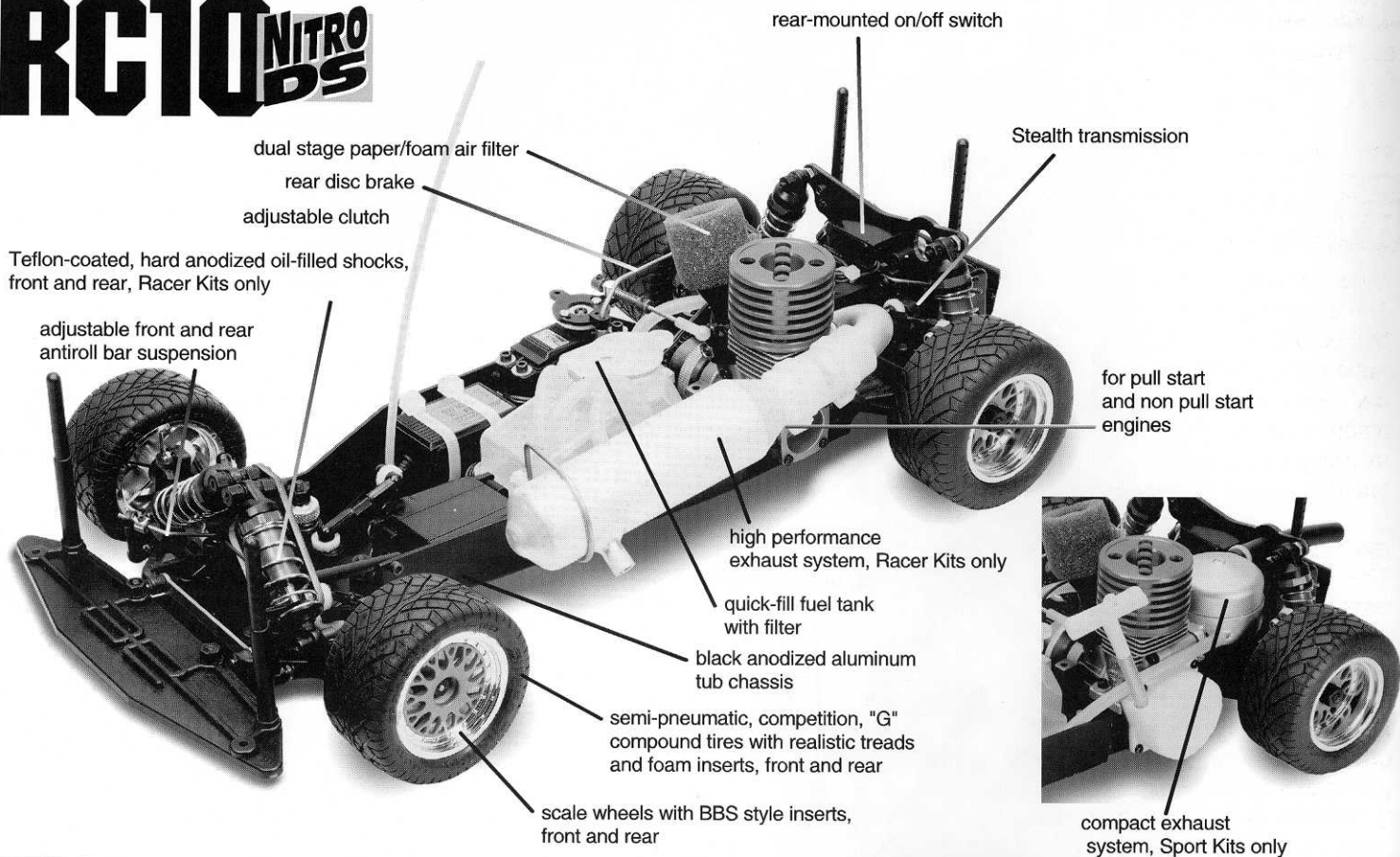


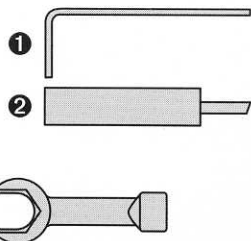
RC10 NITRO BS



TOOLS

KIT TOOLS SUPPLIED

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



EXTRA TOOLS NEEDED

- 1 Phillips screwdrivers #1 and #2
- 2 flat blade screwdriver, small
- 3 needlenose pliers
- 4 Thread locking compound (#242 Blue Loctite® or equivalent)
- 5 super glue (cyanoacrylic glue)
- 6 hobby knife **WARNING!** This knife cuts plastic and fingers with equal ease, so be careful.
- 7 precision ruler

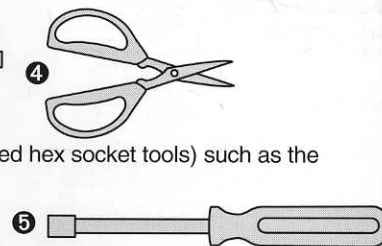


WARNING! Always use hand and eye protection with cyanoacrylic glue!

- 2 Hand drill with 3/32" bit
- 3 Vernier calipers
- 4 Hobby scissors

- 5 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.

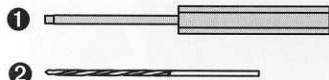


ITEMS NEEDED TO OPERATE YOUR CAR

- 1 2 Channel R/C surface radio system
- 2 .12 ci. Glow fuel R/C engine (with or without pull start)
- 3 Receiver battery pack
- 4 Battery charger (if receiver pack is Ni-Cd batteries, then you will need a charger for this pack)
- 5 Glow plug igniter system.
- 6 Fuel tank fill bottle.
- 7 Starter box, or electric hand starter with car starter donut (for non pull start engine)
- 8 12 volt battery for starter system (for non pull start engine)
- 9 R/C car glow fuel (we recommend only Blue Thunder or O'Donnell fuel)
- 10 Body (racer kit only).

HELPFUL TOOLS (NOT REQUIRED)

- 1 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



CUSTOMER SUPPORT
 (714) 850-9342
 FAX (714) 850-1744

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

BEFORE BUILDING

OPEN THE BAGS IN ORDER

The assembly is arranged so that you will open and finish that bag before you go on to the next bag. **Sometimes you will have parts remaining at the end of a bag. These will become part of the next bag.** Some bags may have a large amount of small parts. To make it easier to find the 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 and how many you will use for the present step. 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 two kits the parts will be used for, and to which steps they apply ("**Remove these parts for: Racer: step 1, Sport: 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 car to help keep you oriented.

6 The instructions in each step are numbered in the order you complete them. Read the words **AND** follow the pictures; both will give you the full information you need. The 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.

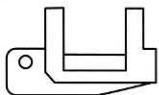
Now clear off your workbench, line up some paper plates and tools, grab the cookie jar, your chocolate malt, corkscrew fries, deluxe chicken sandwich, and let's begin!

BAG A

REMOVE THESE PARTS FOR:

Racer: step 1

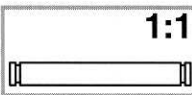
Sport: step 1



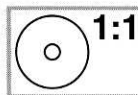
6210, qty 2
front block carrier,
30° caster



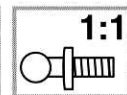
8814, qty 2
front steering
block



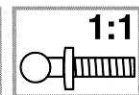
6223, qty 2
kingpin



6272, qty 4
foam dust cover



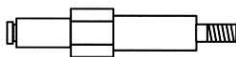
6270, qty 2
ball end



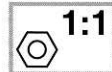
6273, qty 2
ball end



6299, qty 6
E-clip

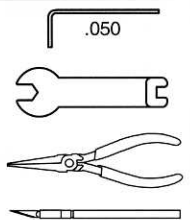


6219, qty 2
front axle



7260, qty 2
4-40 nut

TOOLS USED



STEP 1 LEFT SIDE

ASSEMBLE FRONT STEERING BLOCKS

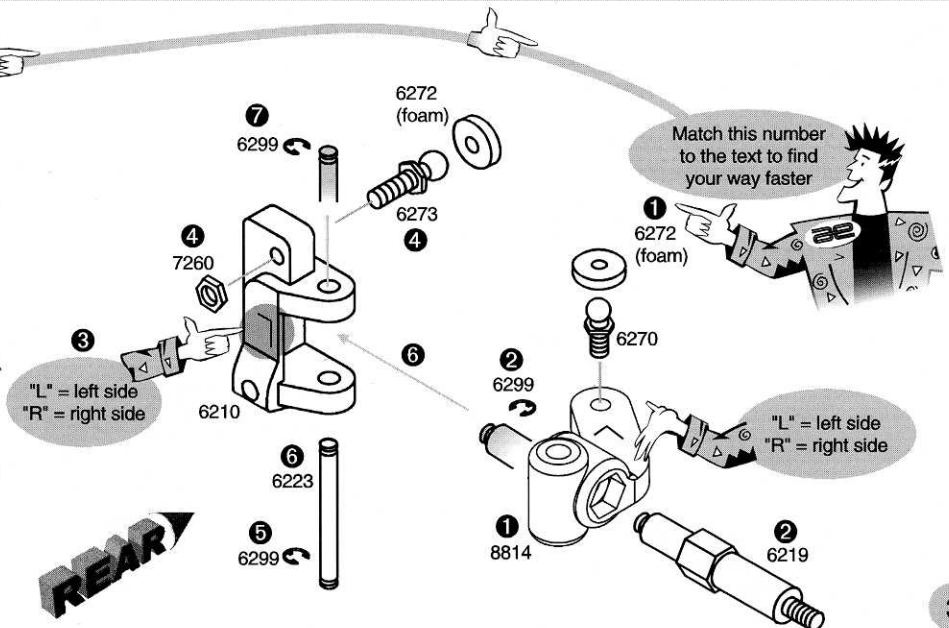
- 1 Assemble parts #8814, 6270 and 6272.
- 2 Push #6219 front axle into #8814 steering block, aligning the hex shapes. Install a #6299 E-clip to the end.

ASSEMBLE BLOCK CARRIERS

- 3 Note location of L and R on block carriers for left and right blocks.
- 4 Assemble parts #6210, 6273, 7260, and 6272.

FINAL ASSEMBLY

- 5 Add one #6299 E-clip to #6223 kingpin.
- 6 Align #8814 steering block inside #6210 block carrier and insert #6223 kingpin through both. Match left steering block to left block carrier.
- 7 Insert E-clip into other end of kingpin.
- 8 Now assemble the right side.

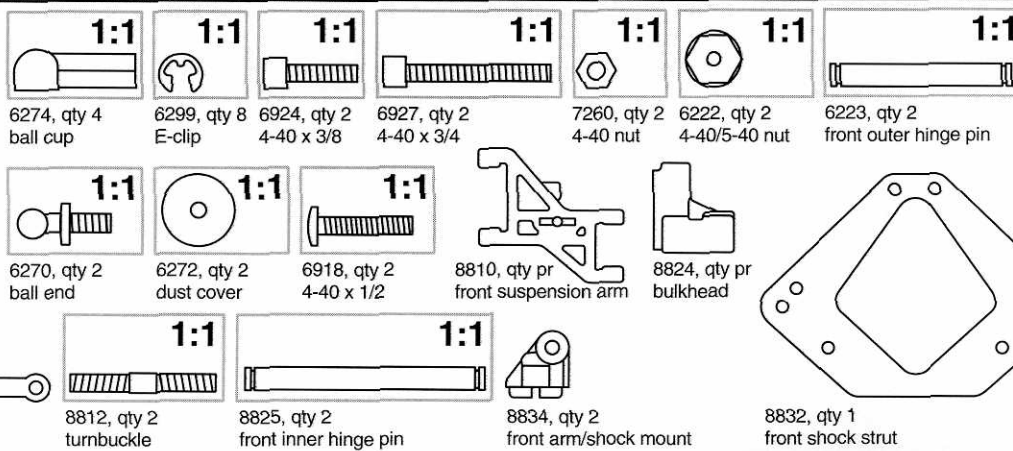


BAG A

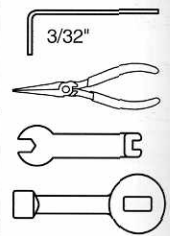
REMOVE THESE PARTS FOR:

Racer: steps 2-3

Sport: steps 2-3



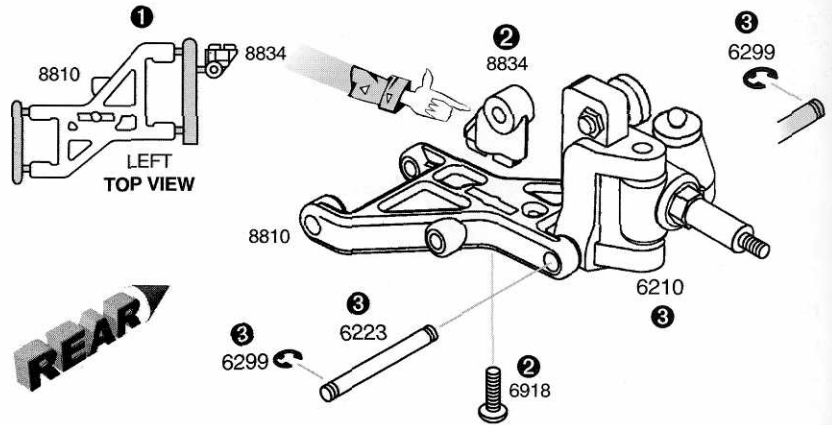
TOOLS USED



STEP 2 LEFT SIDE

BLOCK CARRIERS TO ARMS

- Twist the #8810 suspension arms and #8834 front shock mounts from the mold runners (shown in gray) with your pliers, and trim away the remaining molding with your hobby knife.
- Place the #8834 shock mount on top of the #8810 left arm into the recess in the arm, and secure it to the arm using a #6918 screw as shown.
- Place the #6210 block carrier assembly into the left #8810 left arm, oriented as shown. Insert a #6299 E-clip to the #6223 hinge pin, insert the pin where shown, and secure with another #6299 E-clip. Do the other side.



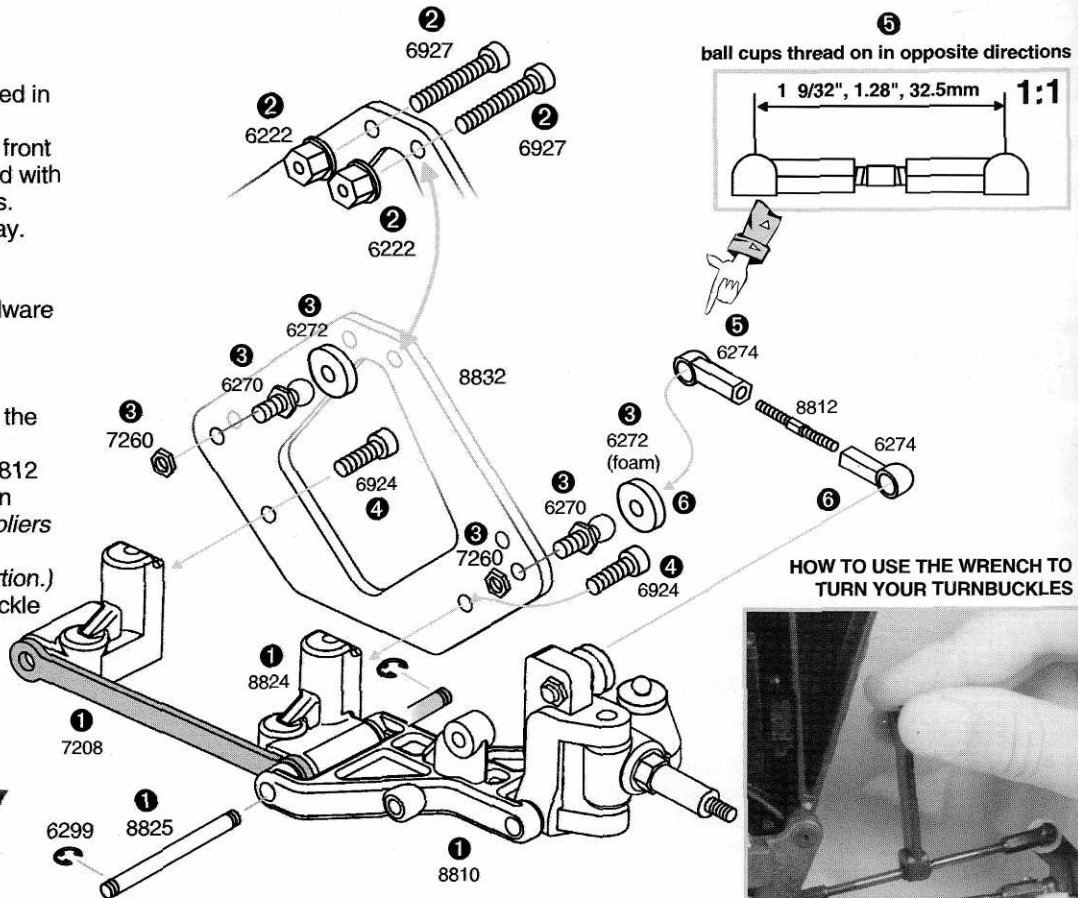
STEP 3 LEFT SIDE

ARMS TO BULKHEAD

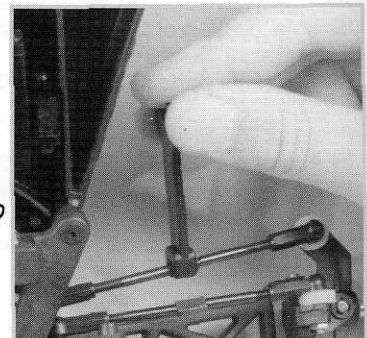
- Hold the #7208 cross brace (shaded in drawing) against the #8824 left front bulkhead while you attach the #8810 front suspension arm to the same bulkhead with its #8825 hinge pin and #6299 E-clips. Assemble the other side the same way.

SHOCK TOWER TO BULKHEAD

- Attach the shock screws and hardware #6927 and #6222.
- Attach the #6270 short ball ends, #7260 nuts, and #6272 dust covers.
- Attach #8832 front shock tower to the bulkheads with #6924 screws.
- Twist #6274 ball cups onto the #8812 turnbuckle until you get the dimension shown. (Hold cups with needlenose pliers while screwing in turnbuckle with turnbuckle wrench around center portion.)
- Connect ball ends with the turnbuckle ball cups as shown, using your needlenose pliers. Repeat for the other side.



HOW TO USE THE WRENCH TO TURN YOUR TURNBUCKLES

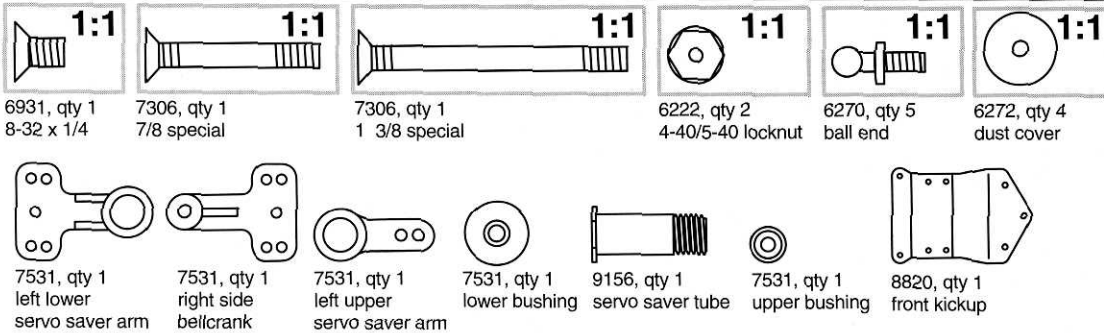


BAG B

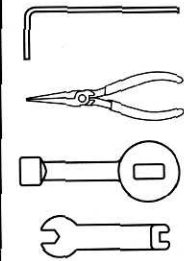
REMOVE THESE PARTS FOR:

Racer: steps 1-4

Sport: steps 1-4



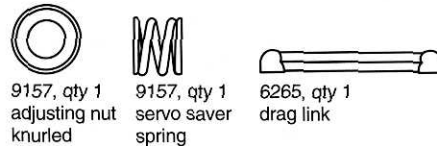
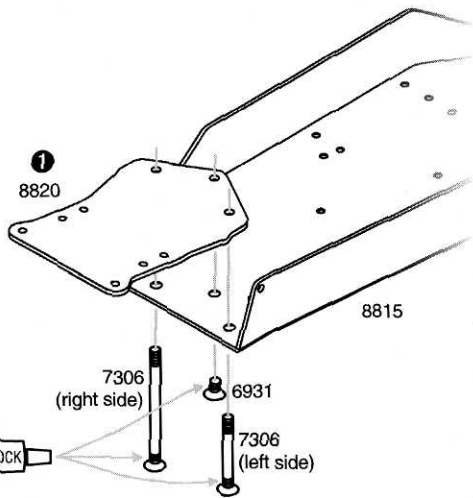
TOOLS USED



STEP 1

KICKUP TO CHASSIS

1 Attach the #8820 front kickup to the chassis using #6931 and #7306 bell crank screws (long and short) as shown.



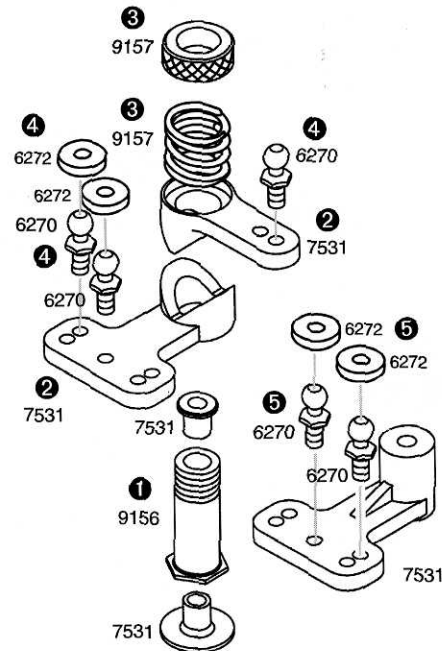
STEP 2

SERVO SAVER

- 1 Push the #7531 bushings into the ends of the #9156 aluminum tube.
- 2 Slide the #7531 servo saver arms onto the tube, orienting the notches as shown.
- 3 Slide the #9157 spring and #9157 adjusting nut onto the tube. Turn nut until top is flush with the #9156 tube.
- 4 Add three #6272 ball ends where shown and two #6272 foam dust covers onto them.

BELLCRANK

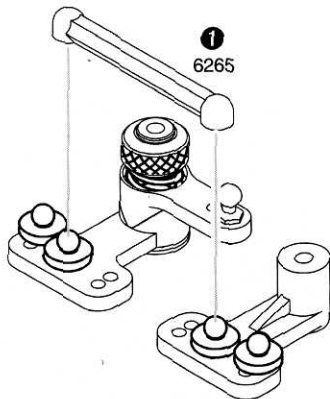
- 5 Add two #6270 ball ends to the #7531 bellcrank where shown and two #6272 foam dust covers onto them.



STEP 3

DRAG LINK

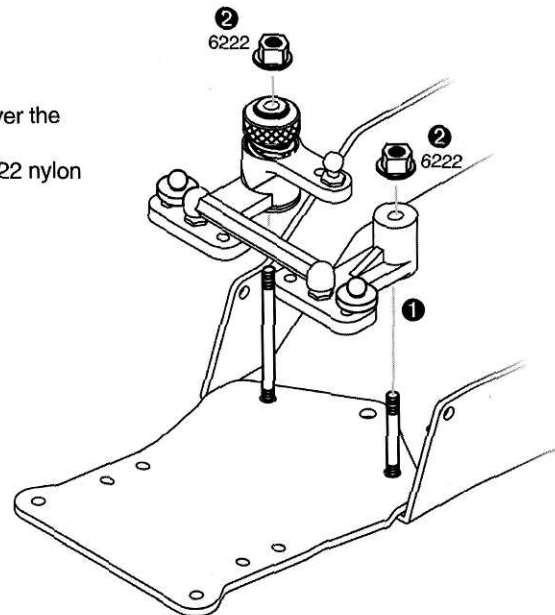
- 1 Install the #6265 drag link over the two ball ends with your needle-nose pliers.



STEP 4

SERVO SAVER TO CHASSIS

- 1 Place the servo saver assembly over the screws.
- 2 Secure servo saver using two #6222 nylon nuts. Do not overtighten.

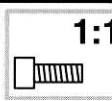
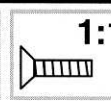

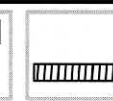
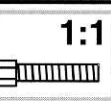
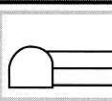



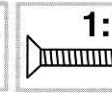
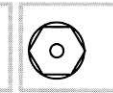
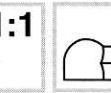
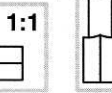



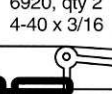
BAG B

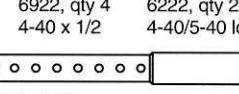
REMOVE THESE PARTS FOR:


Racer: steps 5-8


Sport: steps 5-8

 6285, qty 2 4-40 x 1/4	 6292, qty 4 4-40 x 3/8	 6919, qty 2 4-40 x 5/16	 6260, qty 2 turnbuckle	 6274, qty 4 ball cup	 6270, qty 2 ball end	 6951 qty 2 set screw
 8816, qty 1 front bumper	 6920, qty 2 4-40 x 3/16	 8830, qty 2 roll bar pivot	 6922, qty 4 4-40 x 1/2	 6222, qty 2 4-40/5-40 locknut	 8828 qty 2 closed cup	 8828 qty 2 open cup

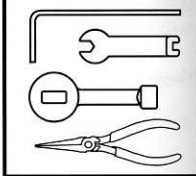

8818, qty 2
front body mount


8826 qty 1
front antiroll bar


8828 qty 2
5/16 set screw


8822, qty 2
nose tube

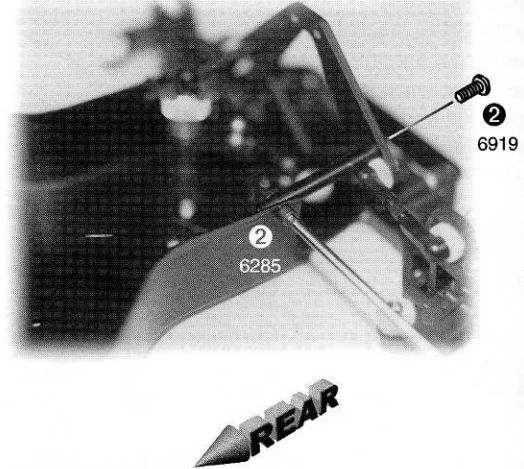
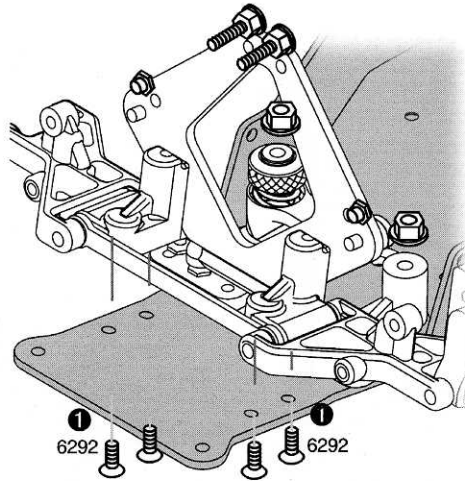
TOOLS USED



STEP 5

FRONT END TO KICKUP

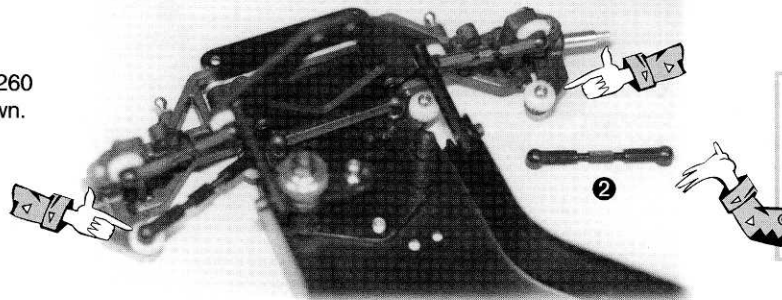
- Secure the front suspension assembly to the front kickup using four #6292 screws where shown.
- Attach the front nose tubes #8822 to the chassis and shock tower using #6919 and #6285 screws.



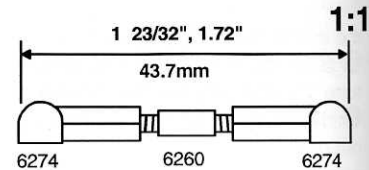
STEP 6

TURNBUCKLES

- Add #6274 ball cups to two #6260 turnbuckles to the dimension shown.
- Pop on the turnbuckles where indicated. Do both sides.



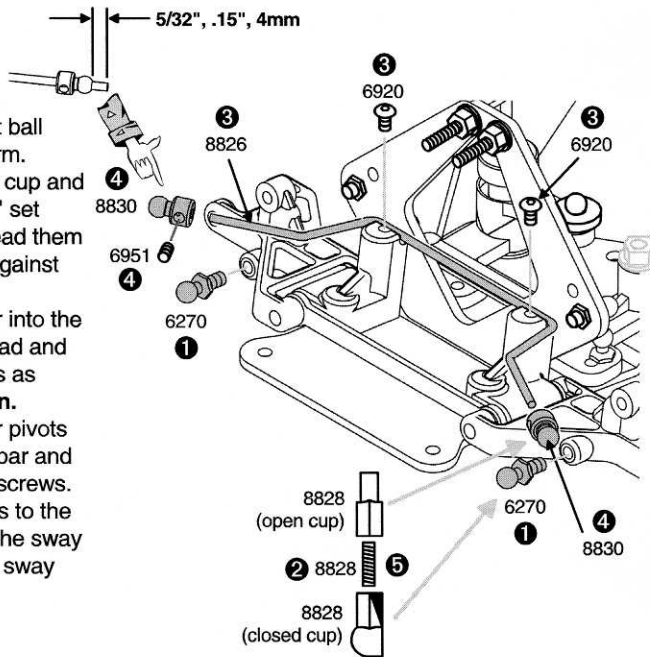
- ball cups thread on in opposite directions



STEP 7

FRONT ANTIROLL BAR

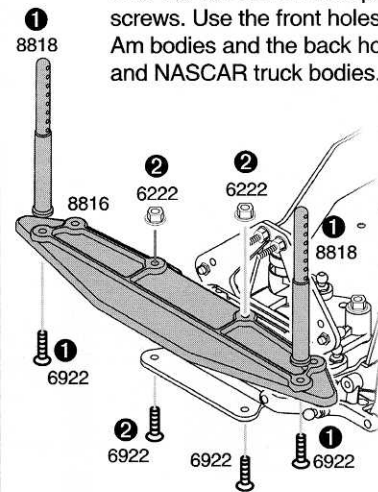
- Thread two #6270 short ball ends into the front of the arm.
- Thread the #8828 open cup and closed cup onto each 5/16" set screw. Do your best to thread them on equally until they stop against each other.
- Place the #8826 roll bar into the grooves in the front bulkhead and secure using #6920 screws as shown. **Do not overtighten.**
- Place the #8830 roll bar pivots over the ends of the sway bar and tighten with the #6951 set screws.
- Connect the #8828 cups to the front suspension arm and the sway bar as shown, open cup to sway bar.



STEP 8

FRONT BUMPER AND BODY MOUNTS

- Mount the two #8818 front body mounts onto the #8816 front bumper with two #6922 screws. Use the front holes for the Trans-Am bodies and the back holes for the DTM and NASCAR truck bodies.
- Mount the #8816 front bumper to the front kickup with two #6922 screws and #6222 locknuts.



BAG C

REMOVE THESE PARTS FOR:

Racer: steps 1-2

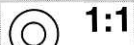
Sport: steps 1-2



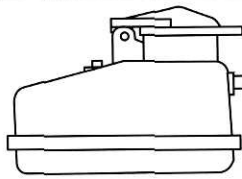
6292, qty 7
4-40 x 3/8



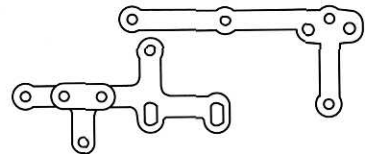
7673, qty 3
4-40 x 5/16



5407, qty 3
red O-ring



7720, qty 1
fuel tank



7625, qty 1
engine mount

7625, qty 1
engine mount

TOOLS USED

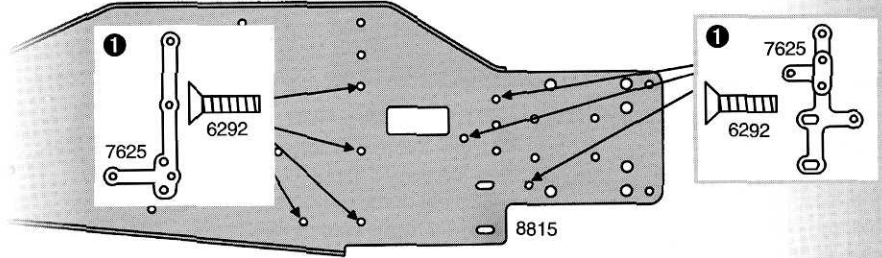


STEP 1

PARTS REMOVED TO IMPROVE CLARITY

INSTALLING THE ENGINE MOUNTS

1 Mount the #7625 engine mounts to the #8815 chassis using seven #6292 screws where shown, adding thread locking compound to each screw first. The screws are pushed up from the bottom of the chassis.

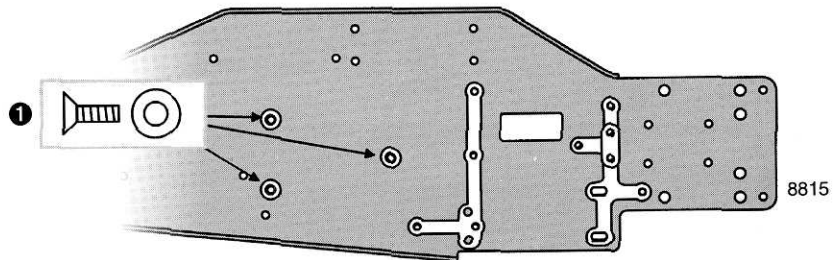


STEP 2

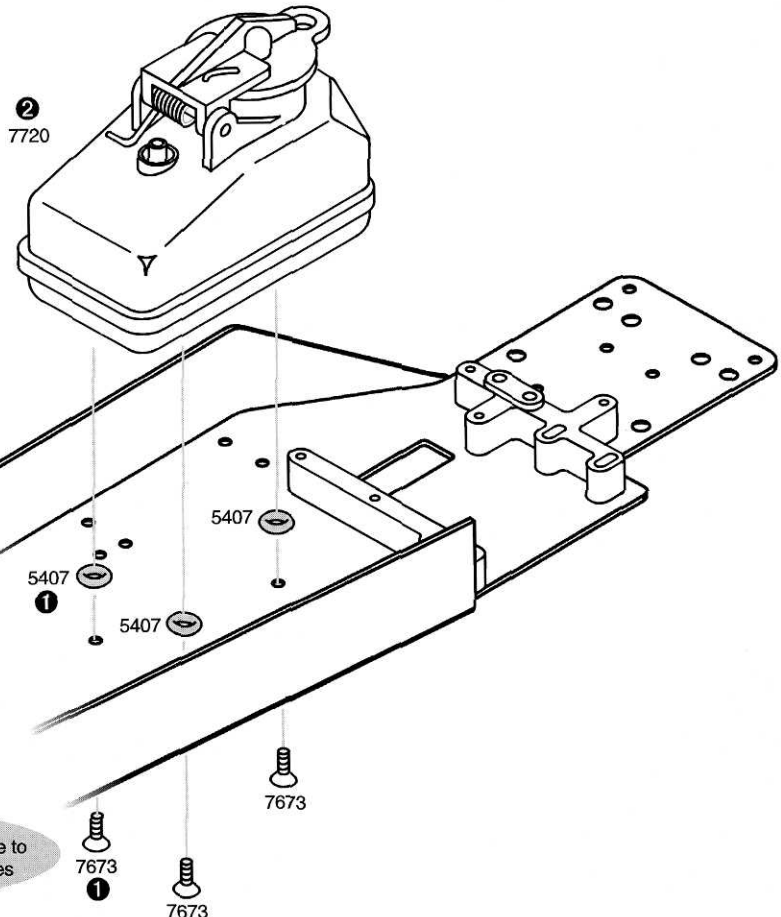
PARTS REMOVED TO IMPROVE CLARITY

MOUNTING THE FUEL TANK

1 Push three #7673 screws through the chassis from the bottom. Place a #5407 O-ring on each, on top of the chassis.



2 Install the #7720 fuel tank onto the screws. Tighten the screws just enough to hold the tank in place. **Do not overtighten!** **Do not overcompress the O-rings.**



REAR

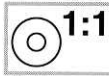
Use the shaded top view above to help you locate the three holes

BAG D

REMOVE THESE PARTS FOR:

Racer: steps 1-4

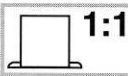
Sport: steps 1-4



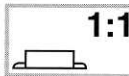
6573, qty 2
diff thrust
washer



6574, qty 6
diff thrust
ball



6575, qty 1
T-nut



6575, qty 1
diff thrust bolt
cover, nylon



6575, qty 1
2-56 diff bolt



6581, qty 12
diff balls
carbide



6582, qty 1
diff spring



6588, qty 1
black grease



6591, qty 1
diff lube



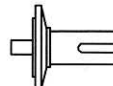
7664, qty 1
diff gear



7666, qty 2
diff drive ring

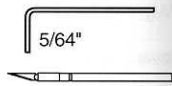


7667, qty 1
right outdrive
hub



7668, qty 1
left outdrive
hub

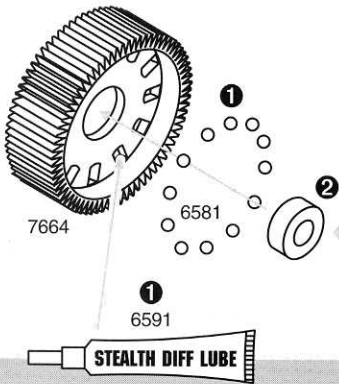
TOOLS USED



STEP 1

SET UP DIFF GEAR

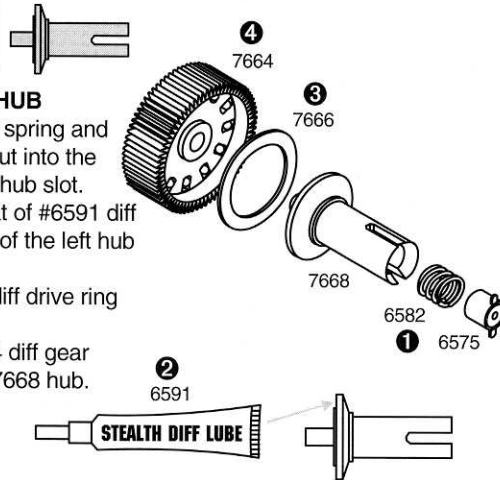
- 1 Add a generous amount of #6591 diff lube to the #7664 diff gear ball holes and push in the twelve #6581 diff balls. Then push back in the lube that came out.
- 2 Insert one #6597 bushing or #6589 bearing into the gear.



STEP 2

LEFT OUTDRIVE HUB

- 1 Push the #6582 spring and then the #6575 T-nut into the #7668 left outdrive hub slot.
- 2 Add a **light** coat of #6591 diff lube to the surface of the left hub where shown.
- 3 Place a #7666 diff drive ring on the hub.
- 4 Place the #7664 diff gear assembly on the #7668 hub.

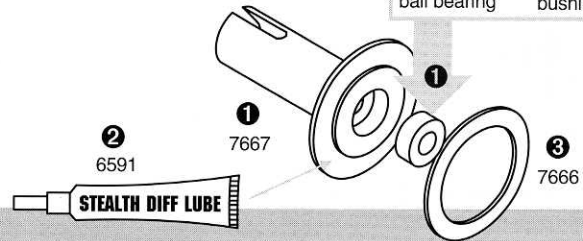


STEP 3

RIGHT OUTDRIVE HUB

- 1 Insert one #6597 bushing or #6589 bearing into the #7667 right outdrive hub center.
- 2 Add a **light** coat of #6591 diff lube on the surface of the right hub where shown.
- 3 Place a #7666 diff drive ring on the hub.

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



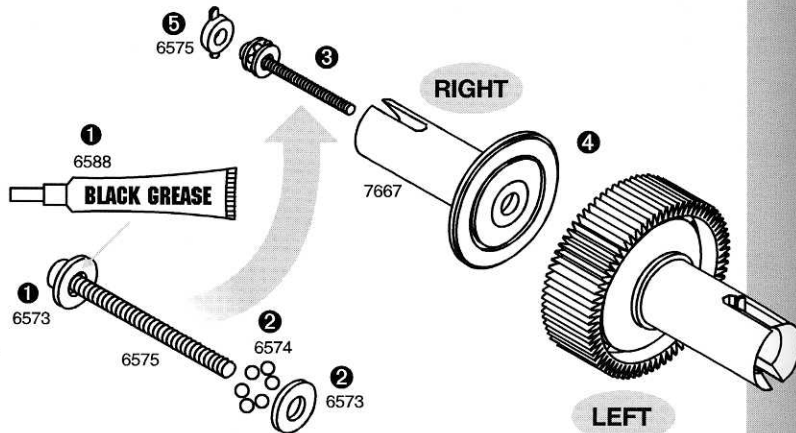
STEP 4

ASSEMBLE THE HUBS

- 1 Slide one #6573 thrust 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 #6573 washer. The grease will hold the balls in place during assembly.
- 3 Slide all this into the #7667 right outdrive hub, being careful

not to lose any of the balls.

- 4 Push together the #7668 and #7667 hubs.
- 5 Insert the #6575 diff thrust bolt cover.
- 6 Start tightening the diff with your 5/64" Allen wrench, but not completely.
- 7 Rotate the diff hubs several times as you are tightening the bolt to check for proper alignment of the parts.
- 8 We'll do our final adjustments to the diff in the next step.



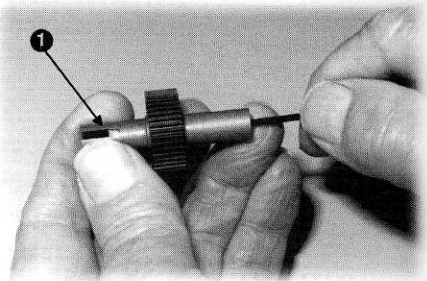
STEP 5

ADJUST THE DIFFERENTIAL

- 1 As you tighten the diff bolt with your 5/64" Allen wrench, you will notice the T-nut ears moving closer to the bottom of the diff hub slots. 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

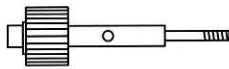
REMOVE THESE PARTS FOR:

Racer: steps 6-7

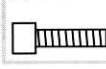
Sport: steps 6-7



6570, qty 1
idler gear

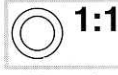


6571, qty 1
drive shaft/gear



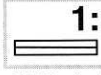
6924, qty 5
4-40 x 3/8

1:1



7669, qty 2
drive shaft
spacer

1:1

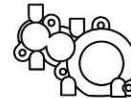


7665, qty 1
roll pin

1:1

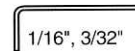


7661, qty 1
Stealth tranny
case, right half



7661, qty 1
Stealth tranny
case, left half

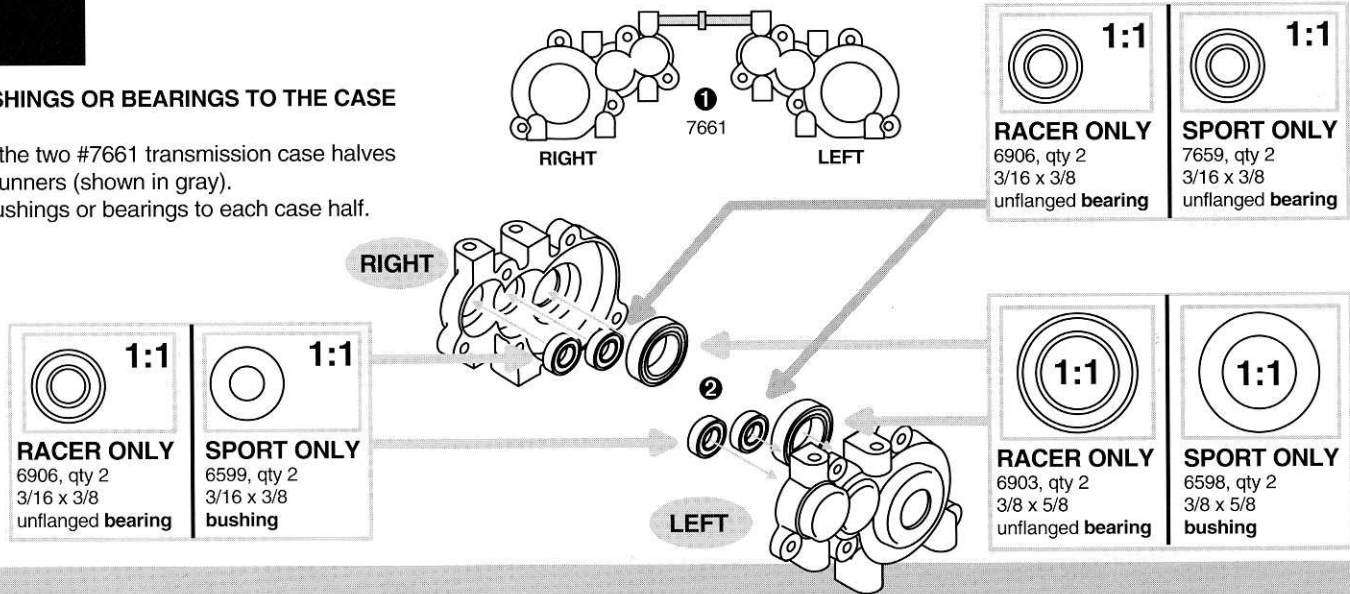
TOOLS USED



STEP 6

ADD BUSHINGS OR BEARINGS TO THE CASE HALVES

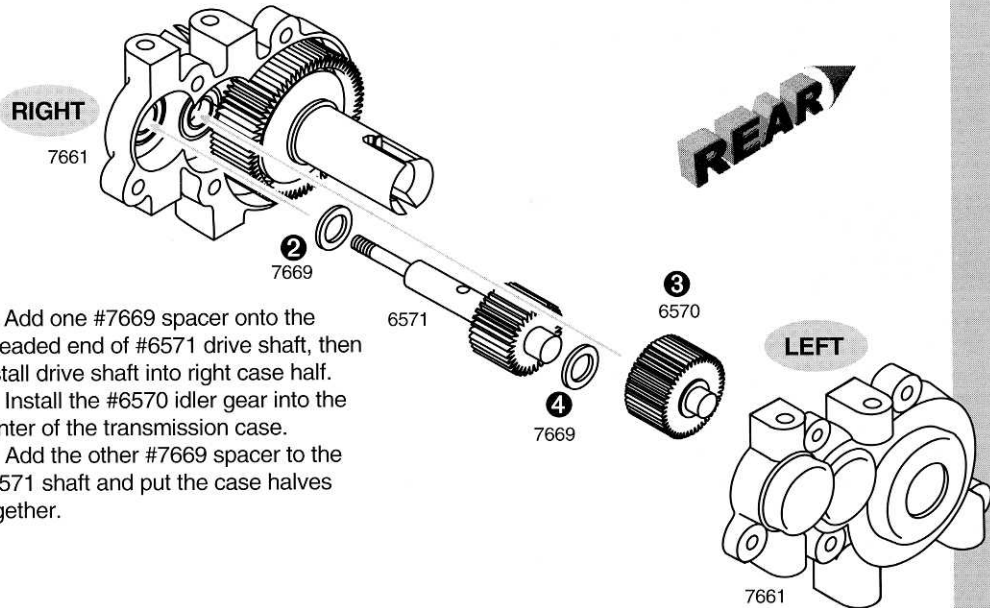
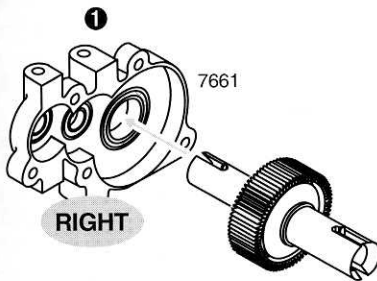
- Break the two #7661 transmission case halves from the runners (shown in gray).
- Add bushings or bearings to each case half.



STEP 7

INSIDE THE TRANSMISSION

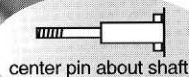
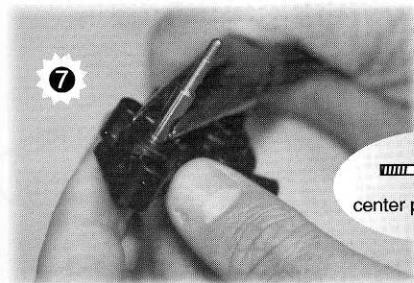
- Install the right side diff assembly (the side with the diff bolt head) into the right case.



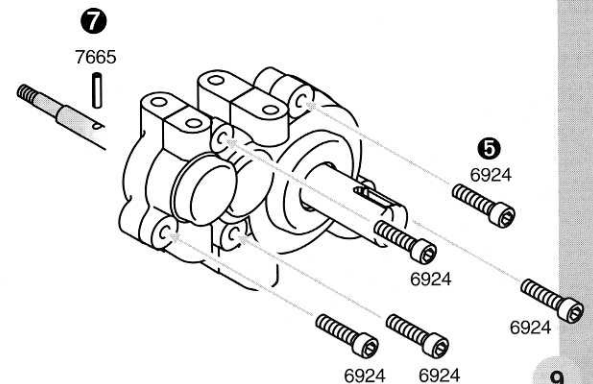
- Add one #7669 spacer onto the threaded end of #6571 drive shaft, then install drive shaft into right case half.
- Install the #6570 idler gear into the center of the transmission case.
- Add the other #7669 spacer to the #6571 shaft and put the case halves together.

OUTSIDE THE TRANSMISSION

- Screw the halves together using five #6924 screws. **Do not overtighten!**
- Use your needlenose pliers to lightly close both ends of the #7665 roll pin.
- Install the roll pin, doing your best to



center pin about shaft



BAG D

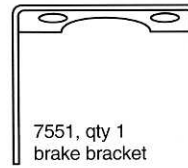
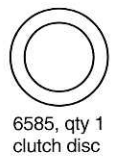
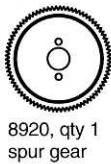
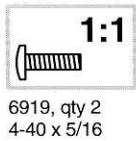
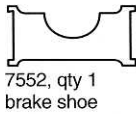
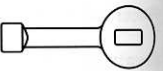
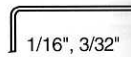
REMOVE THESE PARTS FOR:

Racer: steps 8-9

Sport: steps 8-9



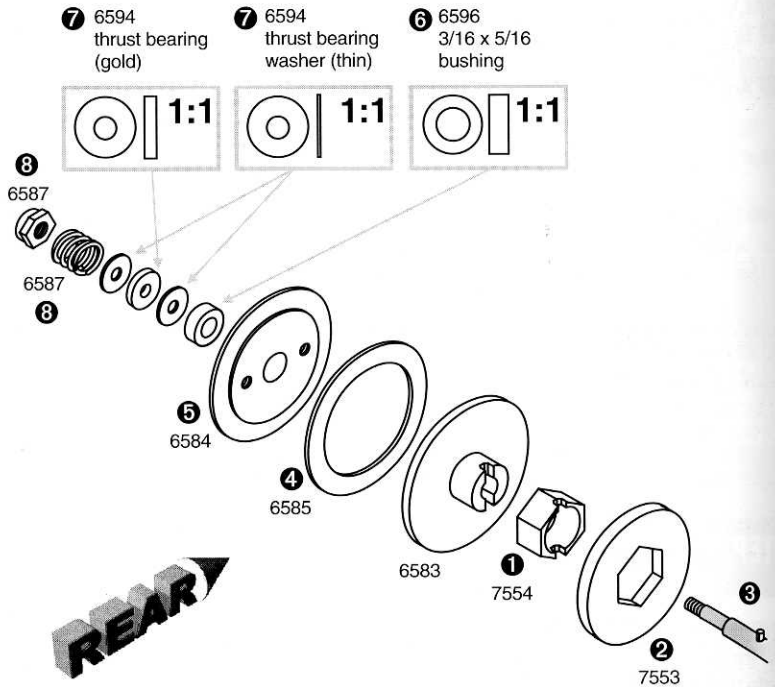
TOOLS USED



STEP 8

INSTALLING TORQUE CONTROL ASSEMBLY AND DISC BRAKE

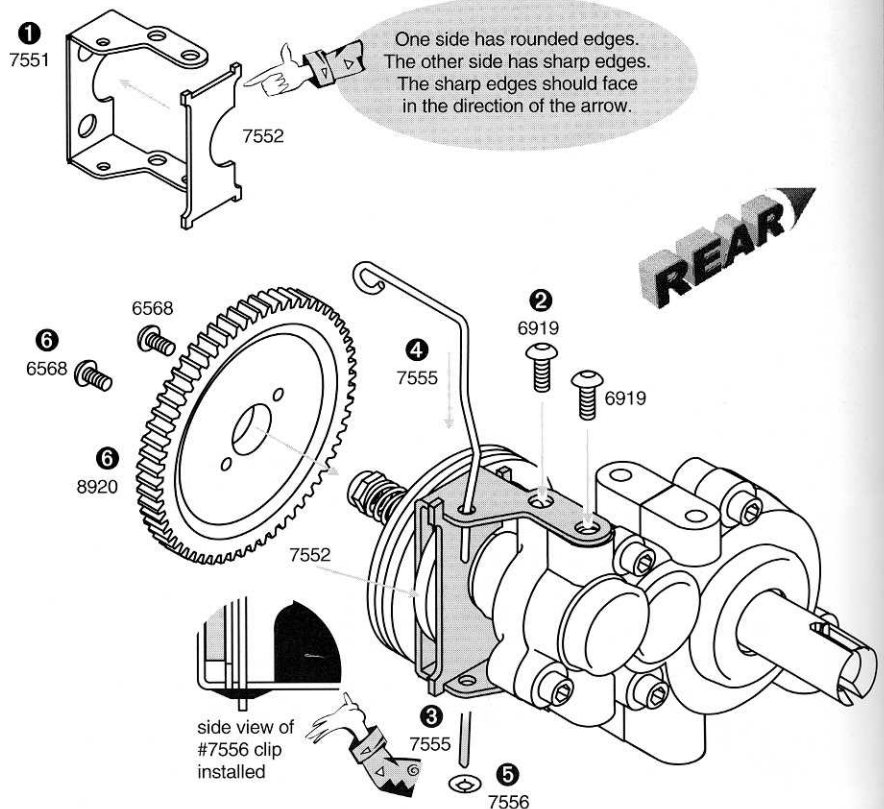
- 1 Install the #7554 plastic brake disc adapter onto the #6583 inner torque control hub. Align the slot in the brake disc adapter with the slot in the inner torque control hub.
- 2 Install the #7553 brake disc over the #7554 brake disc adapter.
- 3 Slide this assembly onto the drive shaft, making sure that the slots of the inner hub and brake disc adapter line up with and then fit over the roll pin shaft.
- 4 Install the #6585 clutch disc onto the #6584 outer torque control hub.
- 5 Place the #6584 outer torque control hub over the shaft and seat it against the inner torque clutch hub. The #6585 clutch disc (slipper disc) is centered between the two torque control (slipper) hubs.
- 6 Next place the #6596 bushing over the shaft and into the raised center hub of the #6584 outer torque control hub.
- 7 Next install one #6594 thrust bearing washer, followed by the #6594 thrust bearing, and the second #6594 thrust bearing washer.
- 8 Install the #6587 torque control spring over the slipper assembly and secure the assembly using the #6629 5-40 locknut. **Note:** To properly adjust the torque clutch, **carefully** tighten the nut until it fully collapses the spring, and then back off the nut a maximum of 1/4 turn.



STEP 9

DISC BRAKE HARDWARE

- 1 Slide the #7552 steel brake shoe onto the #7551 steel brake bracket so that the side with the rounded notch is on the same side as the matching notch in the brake bracket.
- 2 Mount the #7551 brake bracket assembly (shown in gray) to the transmission using two #6919 screws. The bottom of the brake bracket will be secured when we bolt the tranny to the chassis.
- 3 Look at the bottom end of the #7555 brake cam for burrs. Use a file to remove any burrs, and then round the end of the brake cam. This will make it easier to install the #7556 brake cam clip.
- 4 Slide the #7555 brake cam through the hole on the top side of the bracket and then through the hole in the lower end of the bracket. The #7552 brake shoe should be between the brake cam and the brake disc.
- 5 Orient the #7556 brake cam clip on the cam shaft so that the raised center of the clip is facing away from the brake cam. Push it on until it rests against the bottom of the brake bracket as shown. We do not want it to keep the brake cam from swinging freely. **Note: The brake cam clips are brittle. Use a 3/16" nut driver or socket to support the entire outer edge of the clip when installing.**
- 6 Finally, mount the #8920 spur gear to the #6584 outer torque control hub. Secure the spur gear using two #6568 screws. **Note:** The flat side of the spur gear should be facing toward the outside of the car.

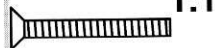


BAG D

REMOVE THESE PARTS FOR:

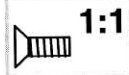
Racer: step 10

Sport: step 10



1:1

7672, qty 2
4-40 x 7/8



1:1

7673, qty 4
4-40 x 5/16

TOOLS USED

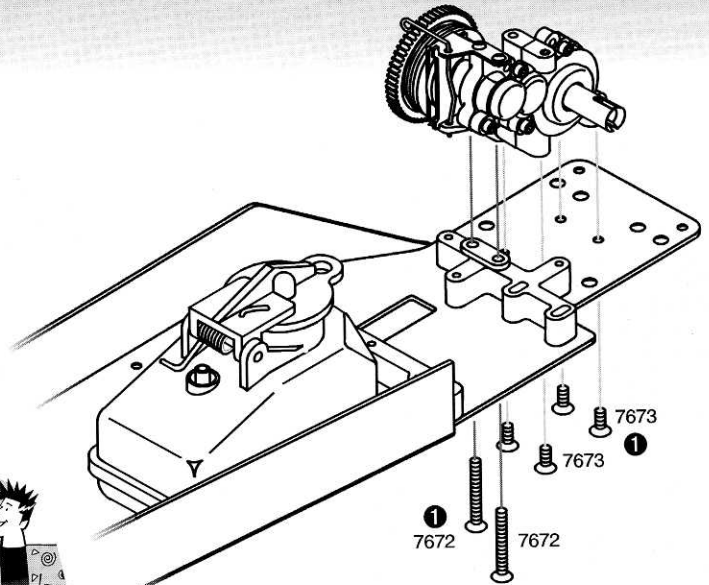
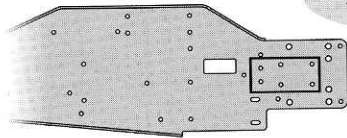


STEP 10

MOUNTING TRANSMISSION TO CHASSIS

1 Mount the transmission to the chassis using four #7673 screws then two #7672 screws where shown.

Mount tranny to these 6 holes



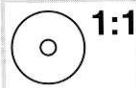
REAR

BAG E

REMOVE THESE PARTS FOR:

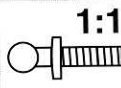
Racer: step 1

Sport: step 1



1:1

6272, qty 2
dust cover



1:1

6273, qty 2
ball end



1:1

6917, qty 2
4-40 x 3/8



1:1

6951, qty 2
set screw



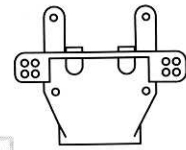
1:1

7260, qty 2
4-40 nut

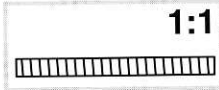


1:1

8830, qty 2
roll bar pivot

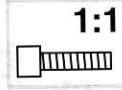


7526, qty 1
rear bulkhead



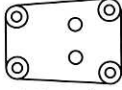
1:1

6235, qty 2
threaded rod

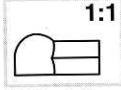


1:1

6924, qty 2
4-40 x 3/8



7670, qty 1
transmission brace



1:1

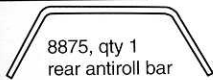
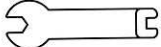
8828 qty 2
closed cup



1:1

8828 qty 2
open cup

TOOLS USED



8875, qty 1
rear antiroll bar

STEP 1

REAR ANTIROLL BAR AND REAR BULKHEAD

1 Install two #6273 ball ends into the front of the #7526 rear bulkhead and secure them with two #7260 nuts.

2 Install two #6272 foam dust covers onto the two #6273 ball ends.

3 Mount the #7670 transmission brace to the top of the rear bulkhead using two #6924 screws.

4 Secure two #8830 pivots to the #8875 antiroll bar ends with two #6951 set screws.

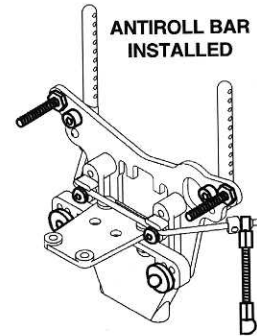
5 Mount the #8875 antiroll bar to the #7526 rear bulkhead using two #6917 screws.

Tighten the screws to take up any play. The antiroll bar still must be able to pivot freely. See small drawing at far right to see bar installed.

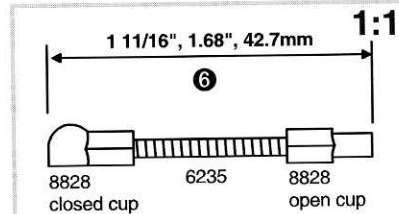
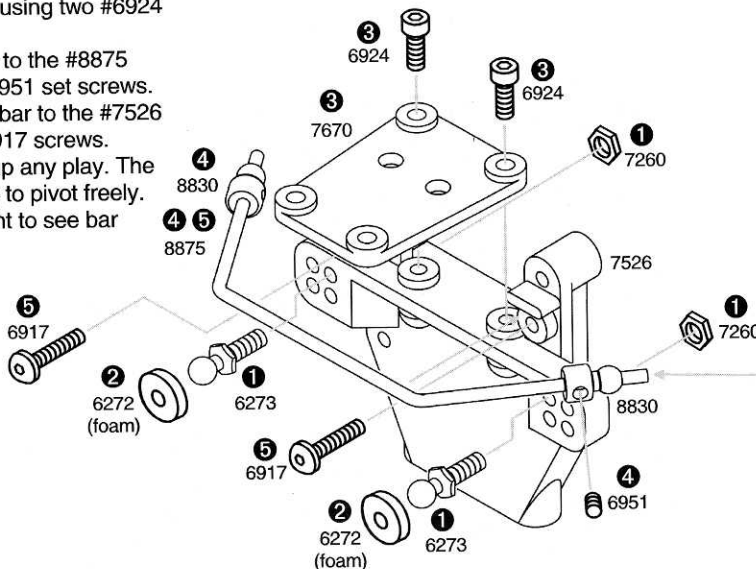
REAR ANTIROLL BAR LINKS

6 Thread one #8828 open cup and closed cup onto each #6235 threaded rod. Adjust the length of these ball cup links as shown.

7 Attach the open cups to the #8830 pivot balls on the rear antiroll bar. Let them hang down for now.



ANTIROLL BAR INSTALLED



REAR

Insert so that cup opening faces front

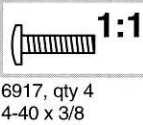


BAG E

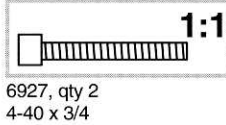
REMOVE THESE PARTS FOR:

Racer: steps 2-3

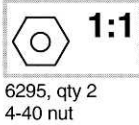
Sport: steps 2-3



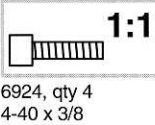
6917, qty 4
4-40 x 3/8



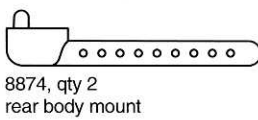
6927, qty 2
4-40 x 3/4



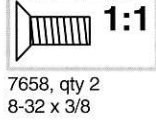
6295, qty 2
4-40 nut



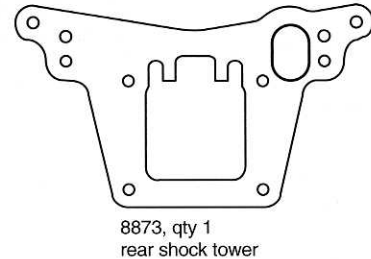
6924, qty 4
4-40 x 3/8



8874, qty 2
rear body mount

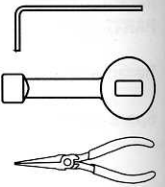


7658, qty 2
8-32 x 3/8



8873, qty 1
rear shock tower

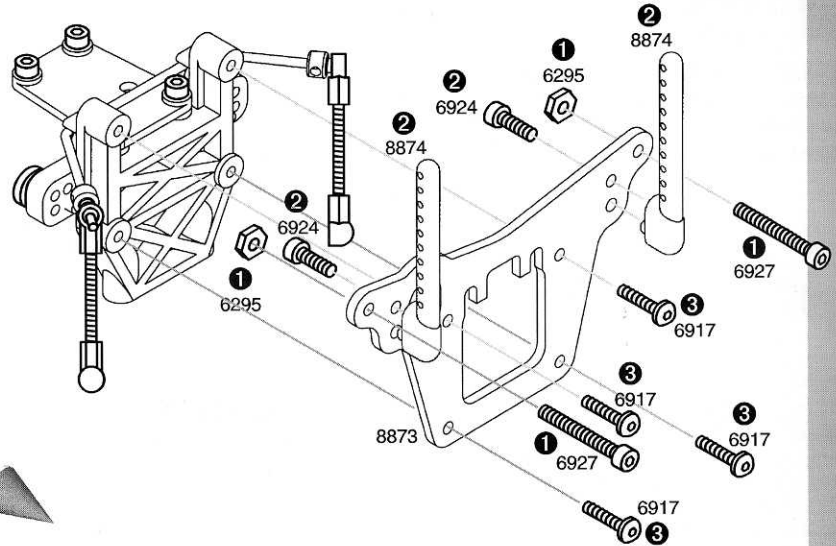
TOOLS USED



STEP 2

REAR SHOCK TOWER & BODY MOUNTS

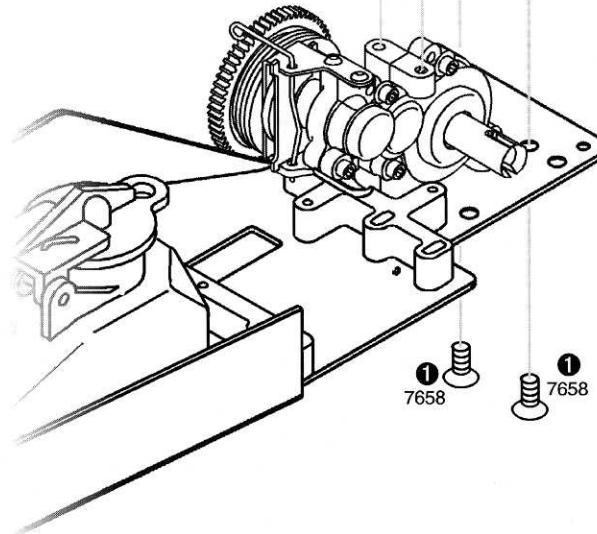
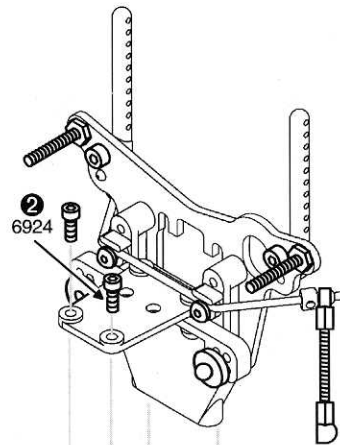
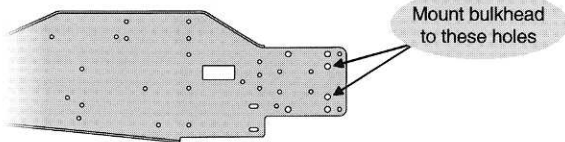
- 1 Install two #6927 screws into the top mounting holes of the #8873 shock tower and secure them with two #6295 nuts. The threaded end of the screws will be on the front of the shock tower.
- 2 Fasten the #8874 rear body mounts to the rear of the shock tower with two #6924 screws. The screws install from the front of the shock tower.
- 3 Mount the #8873 rear shock tower to the #7526 rear bulkhead using four #6917 screws, the large hole in the shock tower on the left side.



STEP 3

BULKHEAD TO CHASSIS

- 1 Mount the #7526 rear bulkhead to the chassis using two #7658 screws where shown.
- 2 Secure the transmission brace to the Stealth transmission with two #6924 screws.

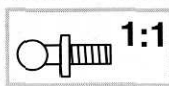


BAG F

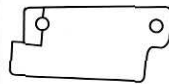
REMOVE THESE PARTS FOR:

Racer: steps 1-2

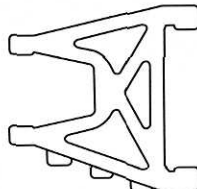
Sport: steps 1-2



6270, qty 2
ball end



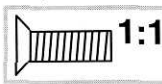
7651, qty pr
suspension arm mount



8860, qty pr
rear suspension arm



6299, qty 4
E-clip

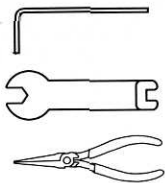


6280, qty 4
8-32 x 1/2



8862, qty 2
rear inner hinge pin

TOOLS USED



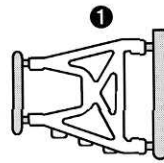
STEP 1 LEFT SIDE

TRIM SUSPENSION ARMS

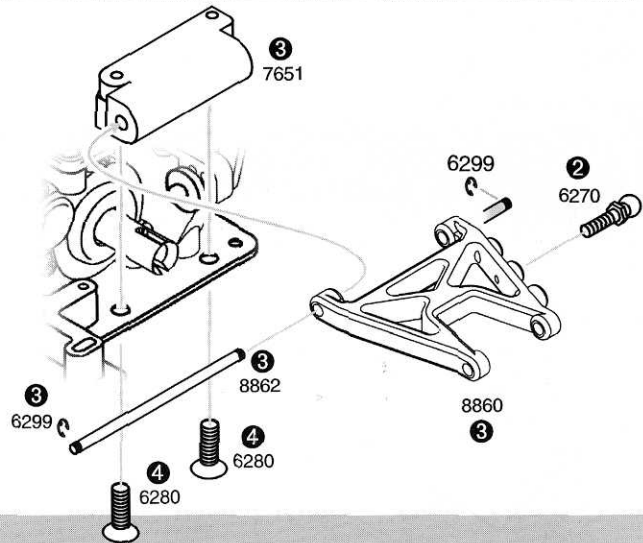
- 1 Twist the #8860 rear suspension arms from the mold runners (shown in gray) with your pliers, and trim away the remaining molding with your hobby knife.
- 2 Install a #6270 ball end into the middle mounting hole on each rear suspension arm.

LEFT SUSPENSION ARM MOUNTED

- 3 Attach the rear arm to the #7651 left mount with the #8862 hinge pin and #6299 E-clips.
- 4 Attach the left mount to the chassis using two #6280 screws as shown.



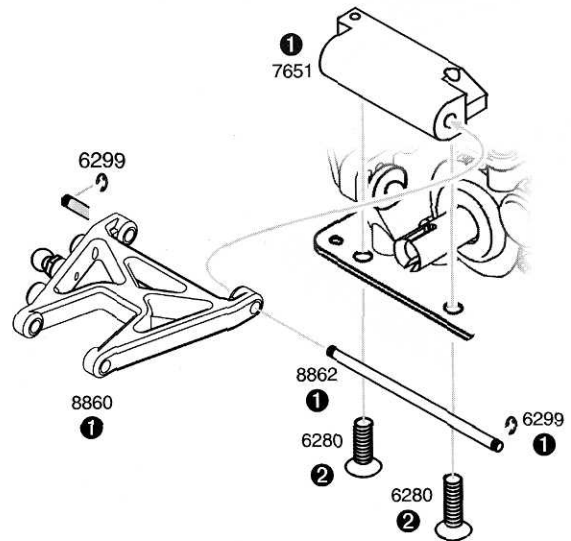
LEFT
TOP VIEW



STEP 2 RIGHT SIDE

RIGHT SUSPENSION ARM MOUNTED

- 1 Attach the rear arm to the #7651 right mount with the #8862 hinge pin and #6299 E-clips.
- 2 Attach the right mount to the chassis using one #6280 screw through rear hole and one #6280 screw through the front hole as shown.

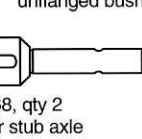
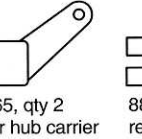
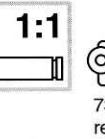
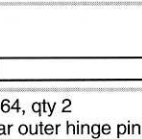
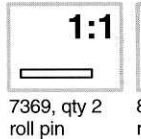
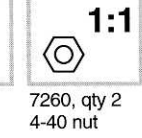
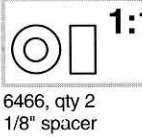


SPORT KIT ONLY

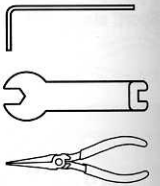
BAG F

REMOVE THESE PARTS FOR:

Sport: step 3

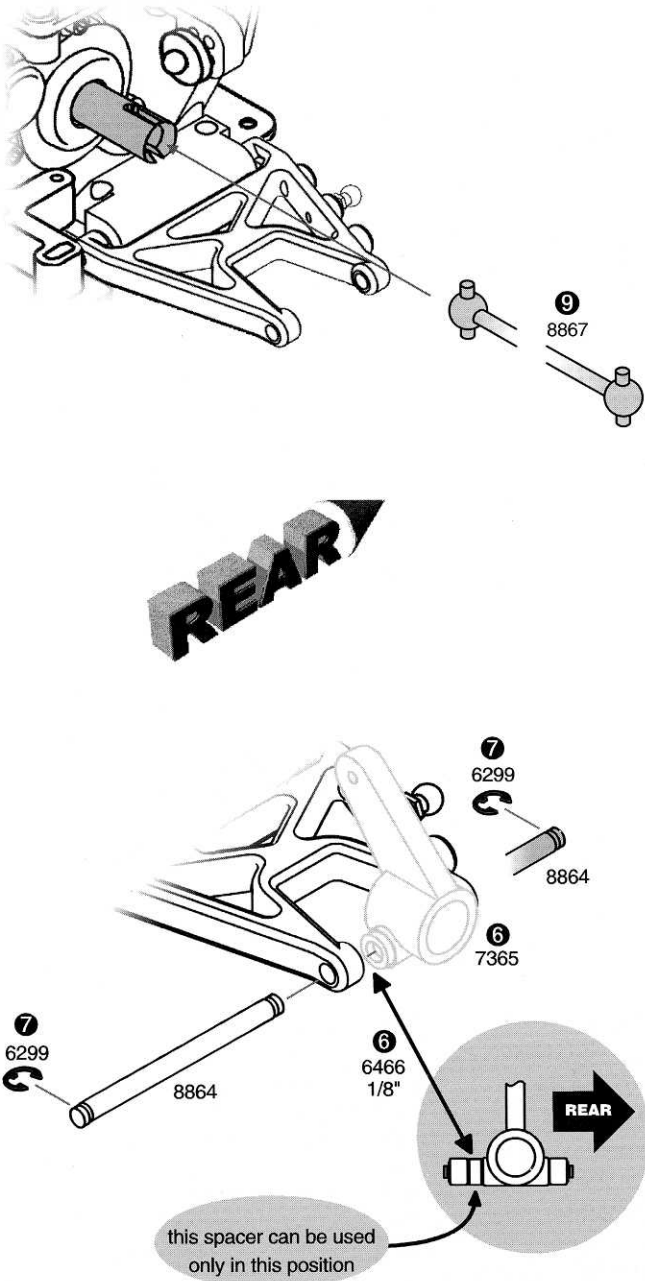


TOOLS USED



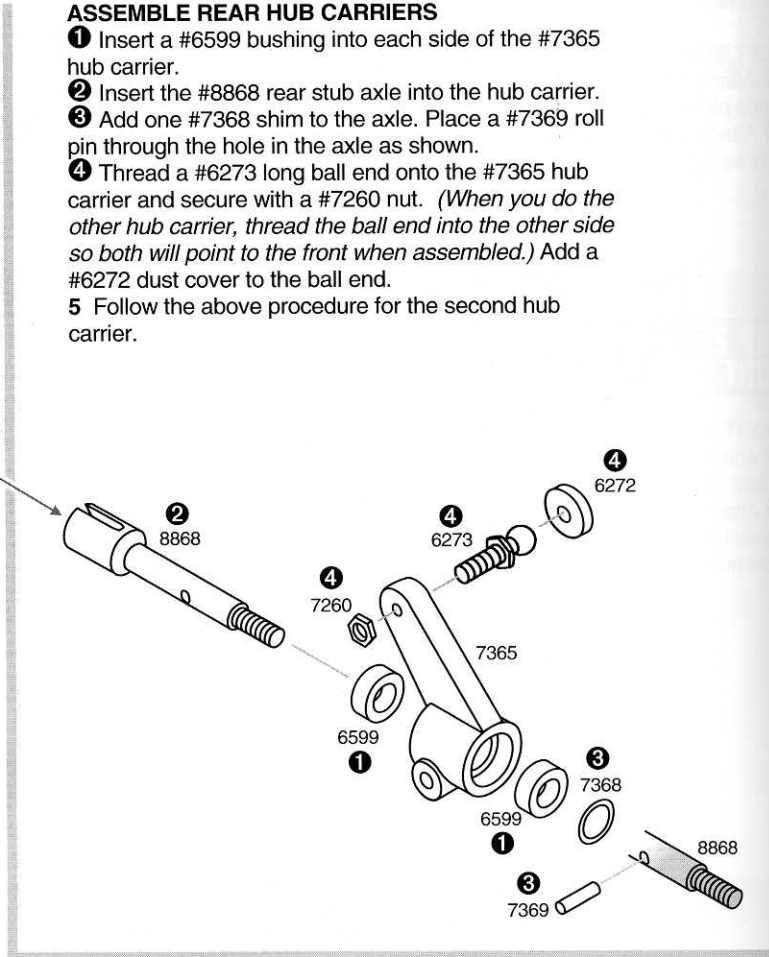
STEP 3

SPORT KIT ONLY



ASSEMBLE REAR HUB CARRIERS

- 1 Insert a #6599 bushing into each side of the #7365 hub carrier.
- 2 Insert the #8868 rear stub axle into the hub carrier.
- 3 Add one #7368 shim to the axle. Place a #7369 roll pin through the hole in the axle as shown.
- 4 Thread a #6273 long ball end onto the #7365 hub carrier and secure with a #7260 nut. (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.
- 5 Follow the above procedure for the second hub carrier.



HUB CARRIERS TO REAR ARMS

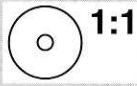
- 6 Line up the hub carrier with the rear suspension arm. There will be a gap. Move the hub carrier toward the back of the arm and place a #6466 1/8" spacer next to the hub carrier toward the front of the car as shown.
- 7 Place a #6299 E-clip on the end of the #8864 hinge pin, then insert the pin through the arm, spacer and hub carrier. Place a #6299 E-clip on the other end.
- 8 Install the axle assembly for the other side.
- 9 Place the #8867 dog bone between the axle and transmission outdrive.

RACER KIT ONLY

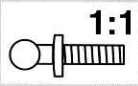
BAG F

REMOVE THESE PARTS FOR:

Racer: step 3



6272, qty 2
dust cover



6273, qty 2
ball end



6299, qty 4
E-clip



6466, qty 2
1/8" spacer



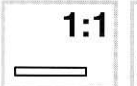
7260, qty 2
4-40 nut



7368, qty 12
rear axle shim



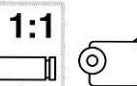
6906, qty 4
3/16 x 3/8
unflanged bearing



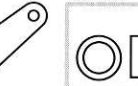
7369, qty 2
roll pin



8864, qty 2
rear outer hinge pin



7365, qty 2
rear hub carrier

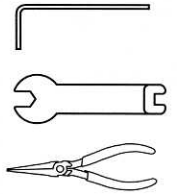


7377, qty 2
rear axle
bearing spacer



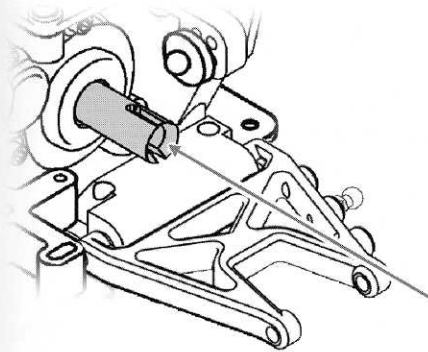
8869, qty 2
universal dog bone

TOOLS USED



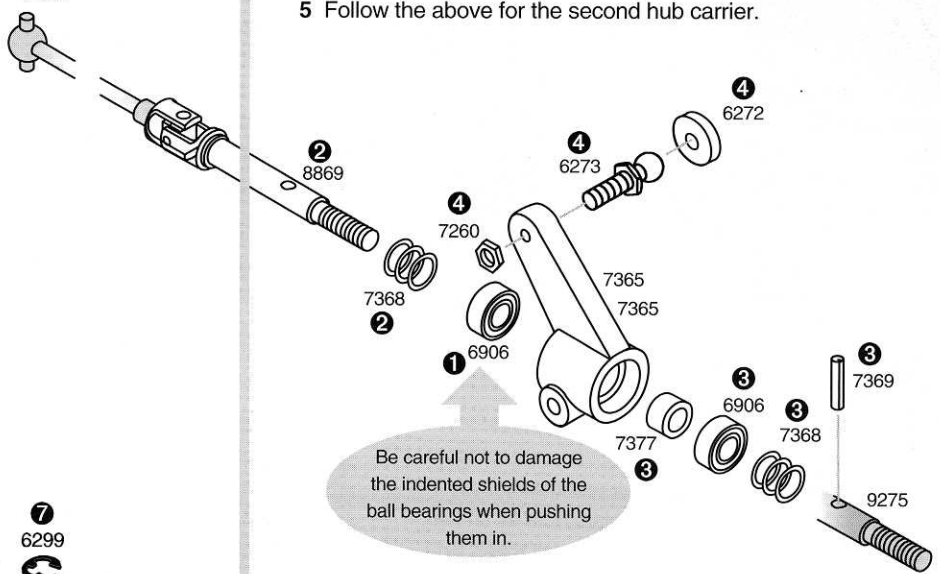
STEP 3

RACER KIT ONLY



REAR

9
8869



ASSEMBLE REAR HUB CARRIERS

- 1 Insert a #6906 bearing into the rear of the #7365 hub carrier.
- 2 Add three #7368 shims to the #8869 universal axle as shown. Insert axle into hub carrier.
- 3 Insert one #7377 spacer and one #6906 bearing into hub carrier. Slide three #7368 shims onto axle. Add #7369 roll pin to axle.
- 4 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.
- 5 Follow the above for the second hub carrier.

Be careful not to damage the indented shields of the ball bearings when pushing them in.

7
6299

8864

6
7365

7
6299

8864

6
6466
1/8"

REAR

this spacer can be used only in this position

HUB CARRIERS TO REAR ARMS

- 6 Line up the #7365 hub carrier with the rear suspension arm. There will be a gap. Move the hub carrier toward the back of the arm and place a #6466 1/8" spacer next to the hub carrier toward the front of the car as shown.
- 7 Place a #6299 E-clip on the end of the #8864 hinge pin, then insert the pin through the arm, spacer and hub carrier. Place a #6299 E-clip on the other end.
- 8 Install the axle assembly for the other side.
- 9 Place the #8869 dog bone into the transmission outdrive.

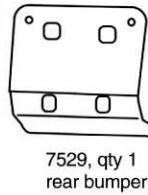
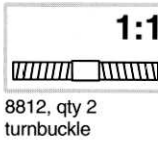
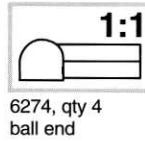
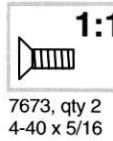
SPORT & RACER KITS

BAG F

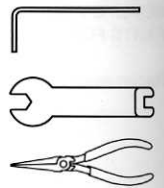
REMOVE THESE PARTS FOR:

Sport: steps 4-5

Racer: steps 4-5



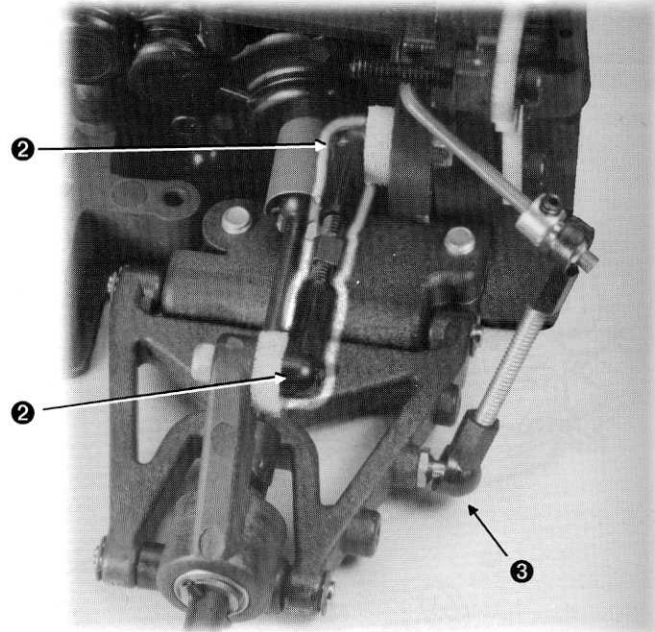
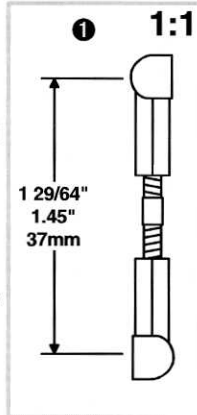
TOOLS USED



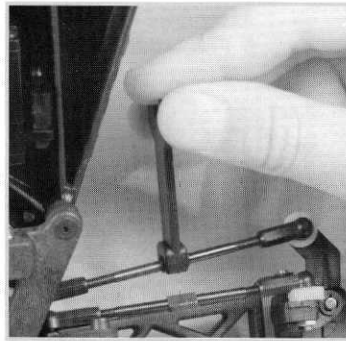
STEP 4

ADDING THE REAR TURNBUCKLES

- 1 Thread the #6274 ball cups onto the #8812 turnbuckle until you get the dimension shown. **Ball cups will face in opposite directions.**
- 2 Snap the turnbuckle ball cups onto the ball ends as shown with your needle-nose pliers. Assemble both right and left sides.
- 3 Attach the threaded antiroll bar links to the #6270 ball ends on the rear arms.



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

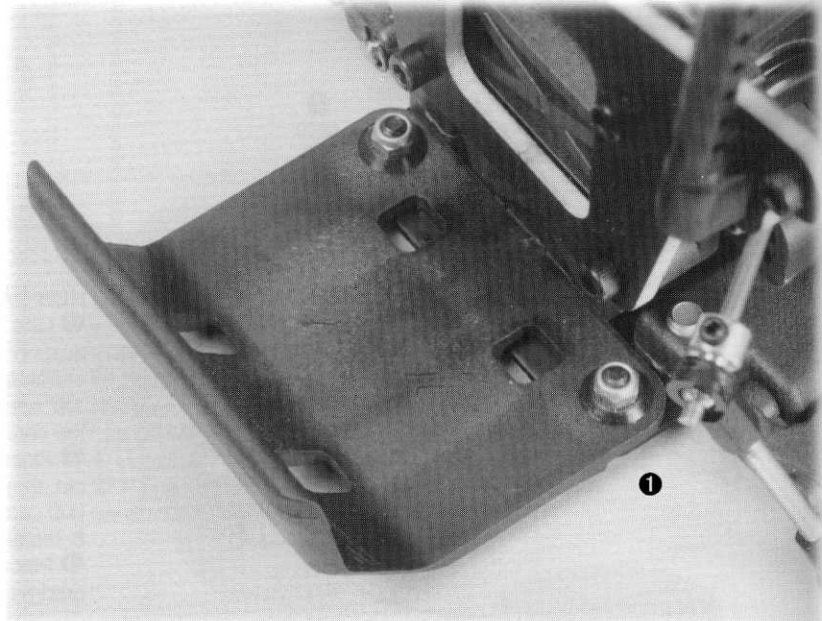


HOW TO USE THE WRENCH TO TURN YOUR TURNBUCKLES

STEP 5

MOUNTING THE REAR BUMPER

- 1 Attach the #7529 rear bumper to the top of the chassis using two #7673 screws and two #7260 plain nuts as shown.



BAG G

REMOVE THESE PARTS FOR:

Sport: steps 1-4

Racer: steps 1-4



5407, qty 8 red O-ring



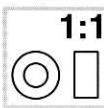
6299, qty 8 E-clip



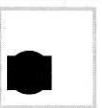
6440, qty 4 split locking washer



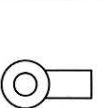
6440, qty 8 small washer



6440, qty 4 large spacer



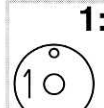
7217, qty 4 pivot ball plastic



7217, qty 4 eyelet nylon



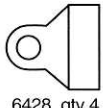
6429, qty 1 shock assembly tool



6465, qty 4 shock piston #1

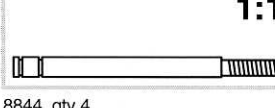


6469, qty 4 large O-ring

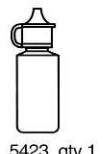


6428, qty 4 shock cap

SPORT ONLY
6427, qty 4 shock body
RACER ONLY
6434, qty 4 shock body

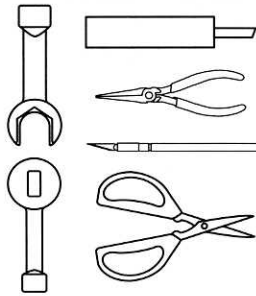


8844, qty 4 shock shaft



5423, qty 1 40 wt silicone oil

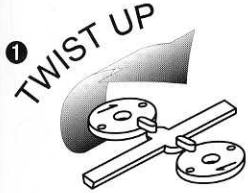
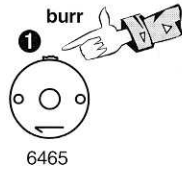
TOOLS USED



STEP 1

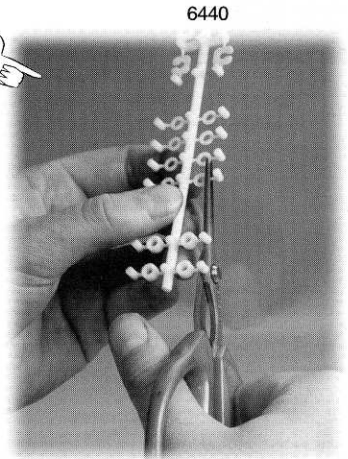
TRIM SHOCK PISTONS

- 1 Burrs interfere with smooth shock action within the shock body. To remove from tree without creating burrs, twist up, not down. Remove four #6465 (#1) shock pistons.
- 2 Remove remaining burrs carefully with hobby knife.



TRIM SHOCK WASHERS & SPACERS

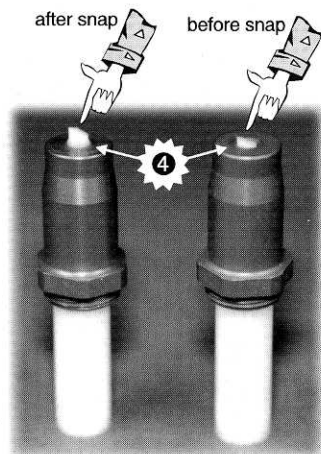
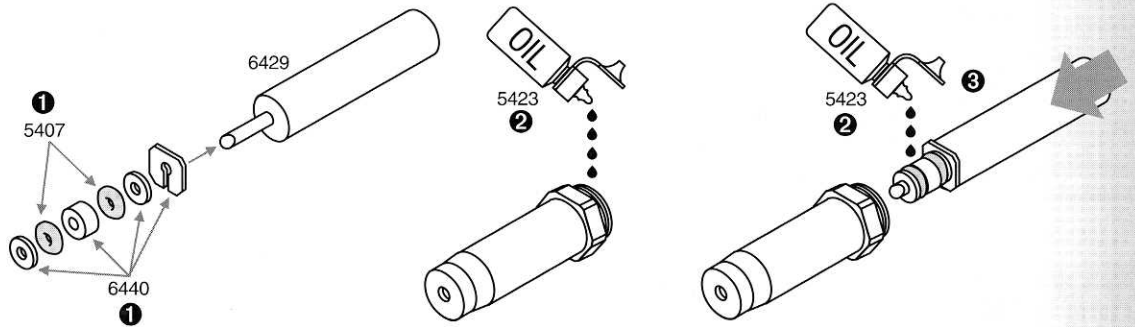
For best shock performance, trim each part from the #6440 parts tree so no part of the two molding runners remain. It is safer to remove a tiny amount of the part than to risk the chance of a burr remaining. Short blade scissors or a hobby knife will work fine, as shown at right. Run your finger over 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

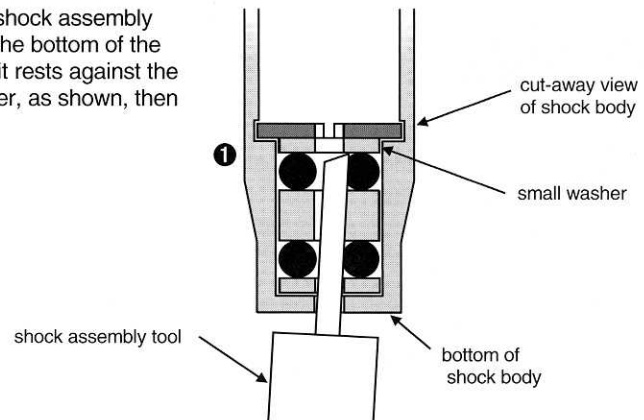
SHOCK SEAL PARTS

- 1 Install the #5407 and #6440 parts shown onto the #6429 tool tip.
- 2 Add 3-4 drops of #5423 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 way.



DISMANTLING THE SHOCKS WHEN IT'S REBUILD TIME

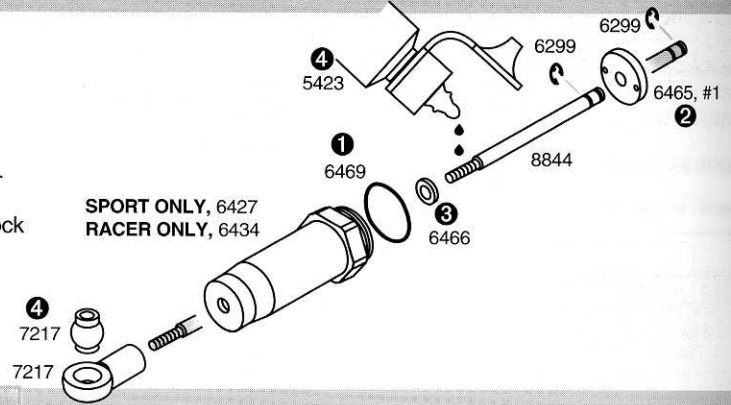
- 1 Put the shock assembly tooltip into the bottom of the shock until it rests against the small washer, as shown, then push.



STEP 3

FINAL INTERNAL SHOCK ASSEMBLY

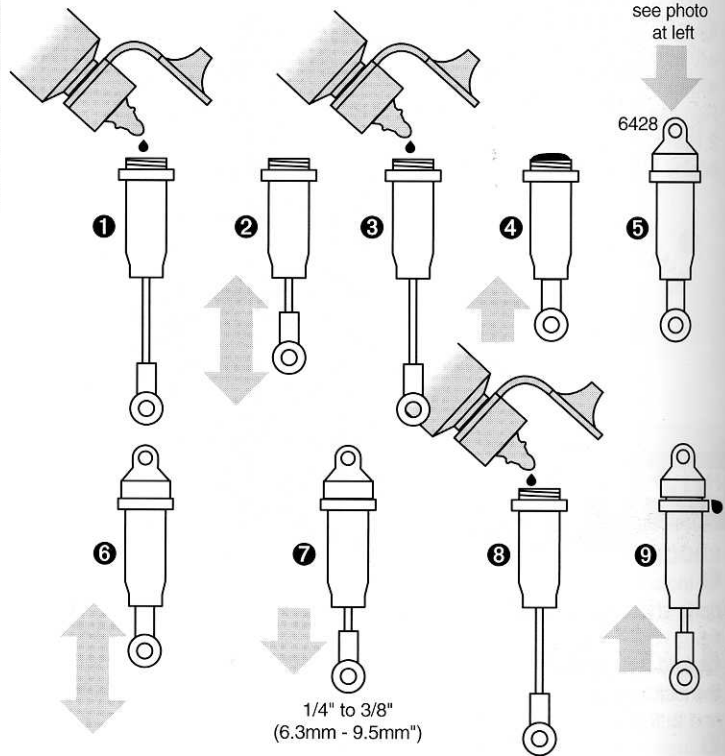
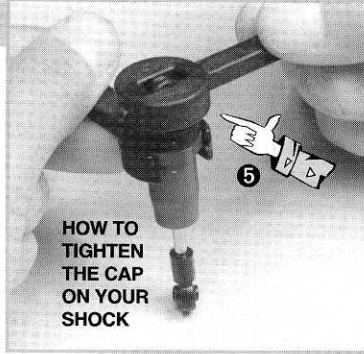
- 1 Add #6469 O-ring over threads of shock body.
- 2 Add #6299 E-clips to the #8844 shaft on either side of a #6465 #1 piston.
- 3 Add a #6466 1/32" spacer (shock travel limiter) onto the shock shaft.
- 4 Place two drops of #5423 oil on threaded part of shaft and insert into shock body. Push the #7217 pivot ball and eyelet together, then screw the eyelet onto the end of the shock shaft. Hold shaft with rag and needlenose pliers next to threads to screw them on safely.



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 all the way up into the shock body. The oil will slightly bulge up above the shock body.
- 5 Install the #6428 shock cap and tighten down with your fingers. Be careful not to cross thread the cap. Then do the final tightening with the shock wrenches supplied. Do not overtighten. 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.

BAG G

REMOVE THESE PARTS FOR:

Sport: step 5

Racer: step 5



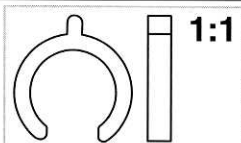
6474, qty 4
spring collar



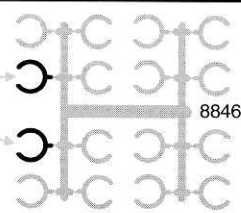
6474, qty 4
spring cup



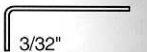
6496, qty 4
shock spring
silver



8846, qty 2
preload spacer
1/8" (3.2mm) thick (rear shocks only)



TOOLS USED



3/32"

STEP 5

FINAL SHOCK ASSEMBLY

- 1 Install one #6474 spring collar onto the shock body.
- 2 Install the #6496 spring.
- 3 Pull the shock shaft out as far as it will go, compress the spring, then insert the #6474 spring cup over the #7217 eyelet.
- 4 Twist two 1/8" thick #8846 preload spacers from the tree. Assemble all four shocks at the same time. Slide a 1/8" preload spacer between the spring collar and shock body hex on the rear shocks only. **Note:** All four shocks are assembled in the same way until the preload spacers are installed. The front shocks do not need any preload spacers.

