RC10 L3 TOURING

TEAM ASSOCIATED

INSTRUCTION MANUAL
FOR KITS #8030, 8035

SAVE THIS MANUAL!
Use with current catalog for future, hassle-free re-ordering of parts.

EACH KIT INCLUDES

Precision-machined lightened right hub and new clamping left hub.

Featherwieght, energy-absorbing foam bumper protects front end and body from high-impact crashes.

Factory Team blue aluminum ball stubs.

Race-proven front suspension with fully-adjustable caster, camber and toe-in, and offset steering blocks.

SPORT KIT

#8030 RC10L3 TOURING
Chassis: Composite.

Shocks: VCS Macro shock.

Tires and Wheels: Associated wheels and tires.

Rear Axle: Composite rear axle.

Turnbuckles: Associated steel turnbuckles

Also includes: bushings.

TEAM KIT

#8035 RC10L3 TOURING
Chassis: Graphite.

Shocks: All-new three-shock design with VCS Macro shock and VCS Micro shocks.

Tires and Wheels: Select compound Jaco.

Rear Axle: Graphite-through construction.

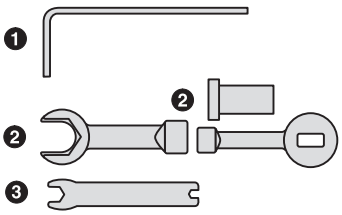
Turnbuckles: Factory Blue titanium turnbuckles.

Also includes: sealed ball bearings.

TOOLS

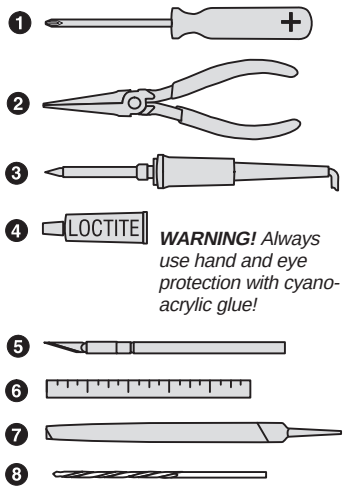
KIT TOOLS SUPPLIED

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

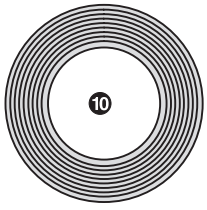


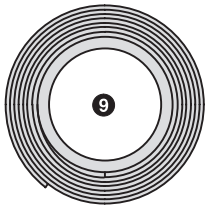
EXTRA STUFF NEEDED

1. Phillips screwdriver #2
2. needlenose pliers
3. soldering iron (40-50 watts) and a small amount of Rosin core solder. Pencil-type soldering iron is better than the gun type. ***DANGER! Tip is HOT!***
4. Thread locking compound (#242 Blue Loctite© or equivalent)
5. hobby knife ***WARNING!*** *This knife cuts plastic and fingers with equal ease, so be careful.*
6. precision ruler
7. file
8. hand drill with 3/32" (or #43) drill bit
9. electrician's tape
10. strapping tape



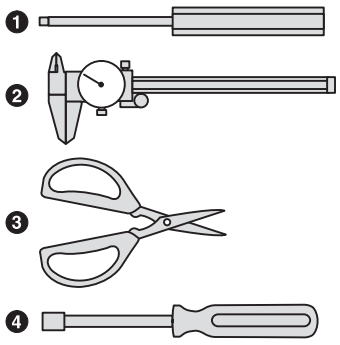
WARNING! *Always use hand and eye protection with cyano-acrylic glue!*





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
   - #6960 3/32" Allen wrench
   - #6961 2.5mm Allen wrench
2. Vernier calipers
3. Hobby scissors
4. 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 COMPLETE YOUR CAR

1 R/C two channel surface frequency radio system.
**2 ***Battery pack (6 cell).
3 Battery charger (we recommend a peak detection charger).
**4 ***Electronic speed control.
**5 ***R/C electric motor.
6 ***Pinion gear, size to be determined by type and wind of motor you **will be using.
7 1:10 scale, 190mm wide Lexan body.

*Available from Team Associated. See your catalogs.

REACHING US

CUSTOMER SUPPORT
(714) 850-9342
FAX (714) 850-1744
web site: http://www.rc10.com

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

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 using a partitioned paper plate for spreading out the parts so they will be easier to find.

MANUAL FORMAT

The following explains the format of these instructions.
The beginning of each section indicates:
1 Which bag to open **("BAG A")** and which kit uses those parts, whether **Sport** or **Team.**
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 tools you should have handy for that section.
4 In some drawings, the word **"REAR"** with an arrow indicates which direction is the rear of the car to help keep you oriented.
5 The instructions in each step are ordered in the order you complete them, so read the words AND follow the pictures. The numbers in circles are also in the drawing to help you locate them faster.
6 When we refer to left and right sides of the car, we are referring to the driver's point of view inside the car.

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.

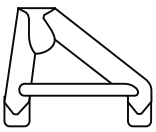
Now clear off your workbench, line up some paper plates, grab your 50-cent soda, 39-cent cheeseburger, $12.99 music CD, and let's begin!

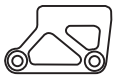
BAG A

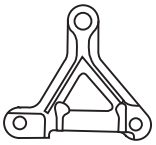
REMOVE THESE PARTS FOR:

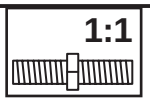
SPORT: step 1

TEAM: step 1

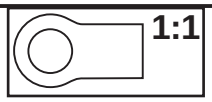

8405, qty 2 upper suspension arm


8407, qty 2 0° upper suspension arm mount

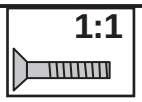

8419, qty 2 lower suspension arm



8415, qty 2 upper suspension arm turnbuckle



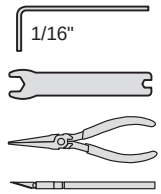
8411, qty 2 upper suspension arm eyelet



8409, qty 4 4-40 x 1/2" shoulder screw, blue aluminum

8417, qty 4 pivot ball

TOOLS USED



step 1 LEFT SIDE

ASSEMBLE UPPER SUSPENSION ARM

❶ Assemble parts #8405, 8415, and 8411.

ATTACH UPPER ARM MOUNT TO LOWER ARM

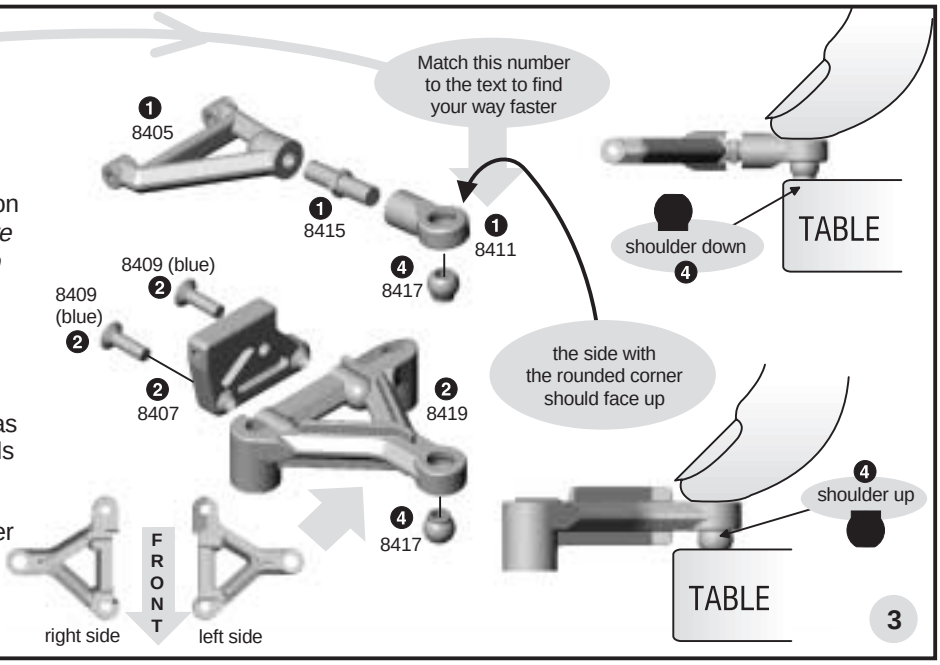
❷ Attach #8407 0° mount to the #8419 lower suspension arm using two #8409 screws. ***WARNING!*** *Screws are difficult to screw in. Turn carefully so you do not strip out the head.*

INSTALLING UPPER AND LOWER PIVOT BALLS

3 Before popping in the #8417 pivot balls, make sure there are no burrs inside the pivot ball holes.

❹ Pop the #8417 pivot balls into the suspension arms as shown. Make sure that the shoulders of the pivot balls in the lower suspension arms are facing upward and the pivot balls in the upper arm are facing downward as shown. Orient ball to the rounded side of the upper arm as shown.

5 Now assemble the right side.

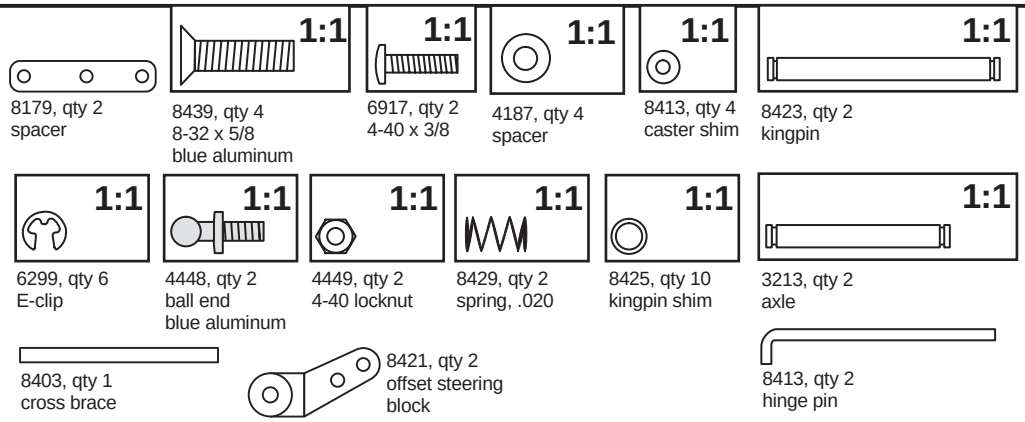


BAG A

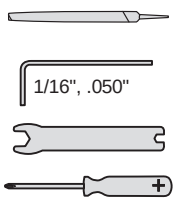
REMOVE THESE PARTS FOR:

SPORT: steps 2-3

TEAM: steps 2-3



TOOLS USED



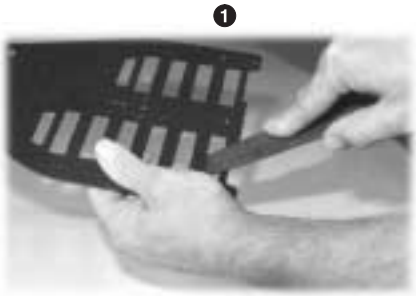
step 2

FILE THE CHASSIS

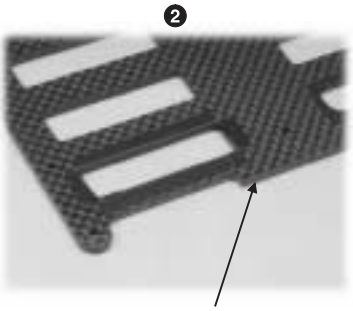
❶ Use your file to bevel the slots on the top of the chassis so the edges won't cut through the battery cell wrap. ***WARNING!*** **Graphite dust can be harmful to your health. File in a well ventilated area. Then wash the chassis with running water and dry with paper towels. Wash your hands afterward with cold water and soap. Deposit graphite filings in trash.**

TAPE THE CHASSIS

❷ Insulate the battery slots by wrapping the slots with electrical tape.



NOTE: The bottom of the chassis has the screw holes countersunk.



SPORT ONLY: #8480.
TEAM ONLY: #8474.

step 3
LEFT SIDE

SUSPENSION ARMS TO CHASSIS

❶ Slip the #8179 spacer between the suspension arm and the chassis, then bolt on with two #8439 blue aluminum screws from underneath the chassis. Do the other side.

MOUNT THE CROSS BRACE

❷ Mount the #8403 cross brace to the front suspension using two #6917 button head screws.

UPPER ARM TO THE SUSPENSION MOUNT

❸ Assemble the upper arm assembly to the suspension mount as shown, using the #8413 hinge pin and #8413 shims.

FINAL FRONT SUSPENSION ASSEMBLY

❹ Assemble the #8421 steering block as shown using parts #3213, 6299, 4448, 4187, and 4449. Install the ball end into the rear hole.

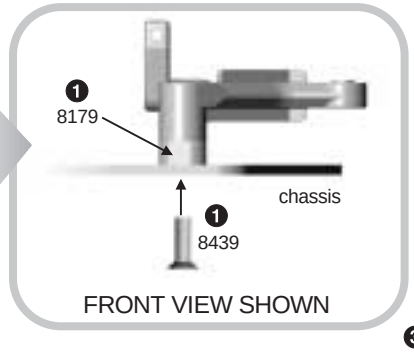
❺ Place one #6299 E-clip on the bottom of the #8423 kingpin then slide the #8429 spring over.

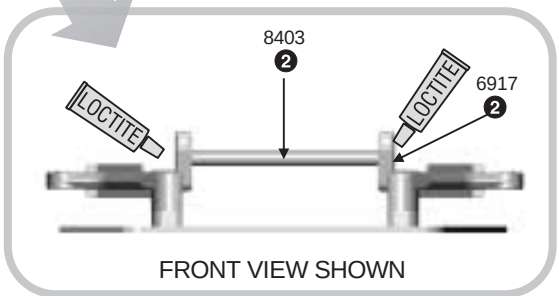
❻ Slide the #8423 kingpin completely through the bottom of the suspension arm and up through the steering block.

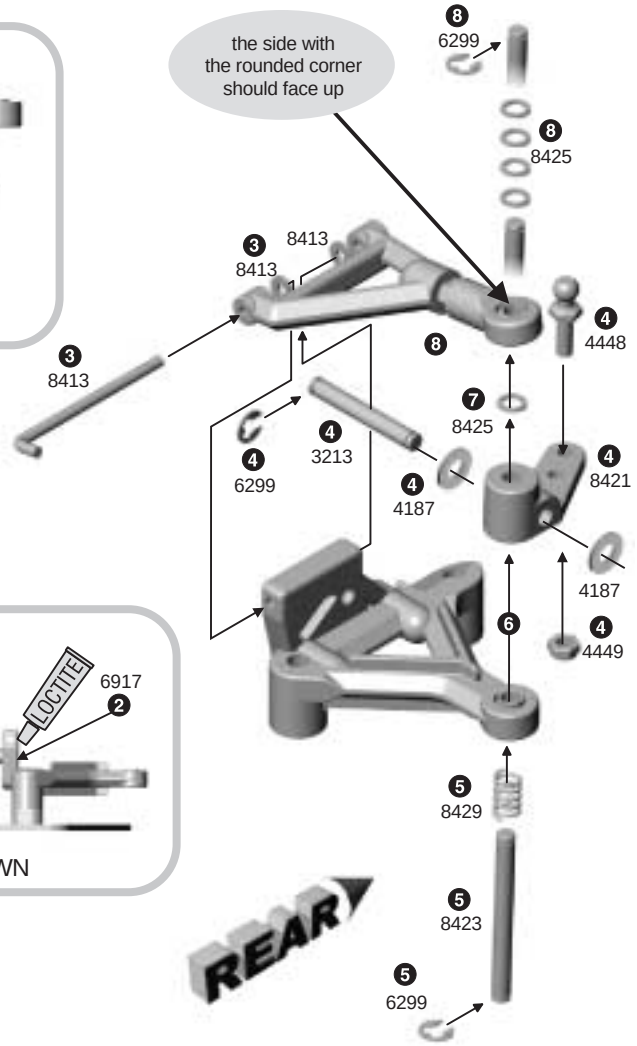
❼ Place one #8425 shim on top of the #8421 steering block.

❽ Now push the upper arm over the kingpin. Place four #8425 shims over the kingpin and secure with a #6299 E-clip.

9 Do the other side.





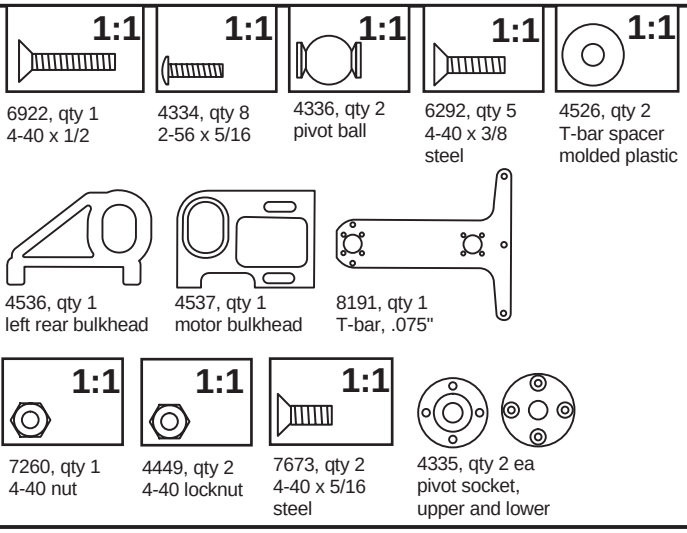


BAG B

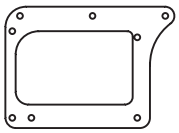
REMOVE THESE PARTS FOR:

SPORT: steps 1-3

TEAM: steps 1-3

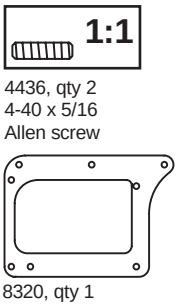


TEAM ONLY

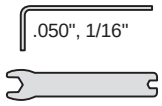


8475, qty 1
lower pod plate

SPORT ONLY



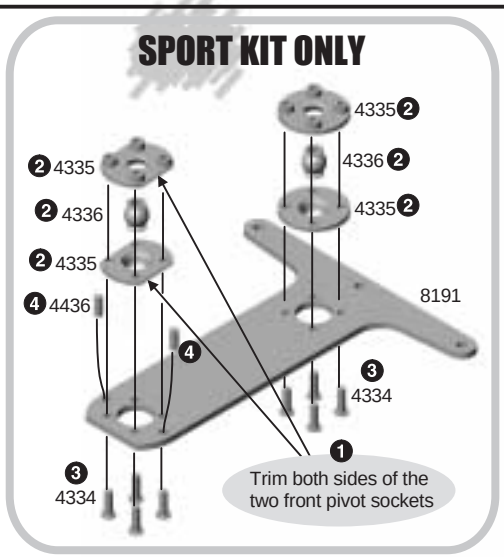
TOOLS USED

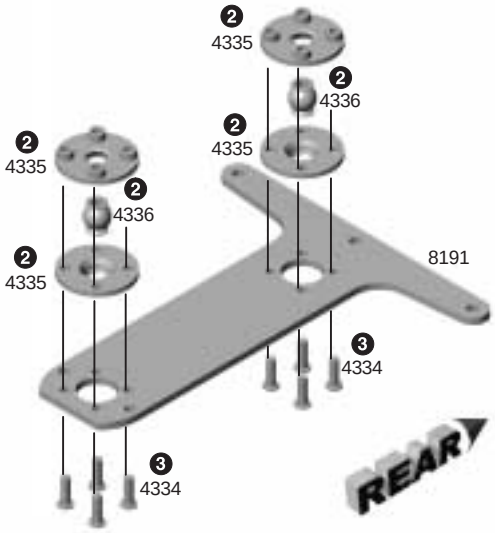


step 1
LEFT SIDE

T-BAR ASSEMBLY

1. **SPORT ONLY:** Trim the sides on the #4335 front pivot sockets in order to make room for the T-bar tweak screws. The back rear pivot stays the same.
2. **SPORT & TEAM:** Assemble the #4335 T-bar sockets and #4336 pivot balls.
3. Secure the T-bar pivot assemblies to the #8191 T-bar using eight #4334 screws as shown, installing both on the same side of the T-bar. (The side of the T-bar with the screw heads showing will be the bottom when finished.)
4. **SPORT ONLY:** Install the two #4436 tweak screws as shown. Do not overtighten the screws.

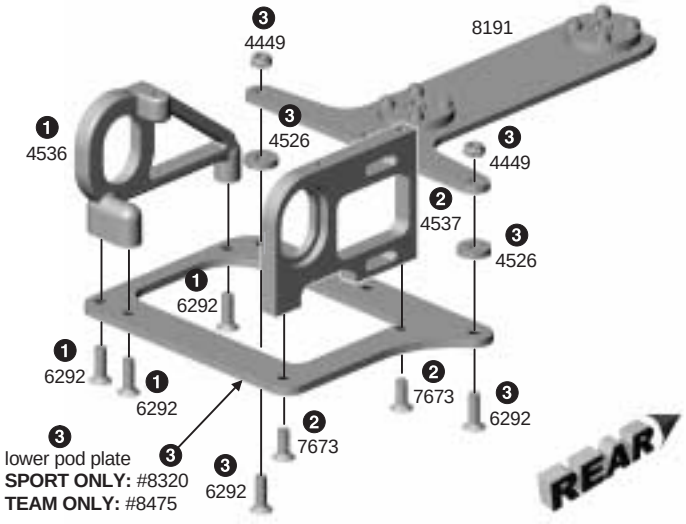




step 2
RIGHT SIDE

REAR POD ASSEMBLY

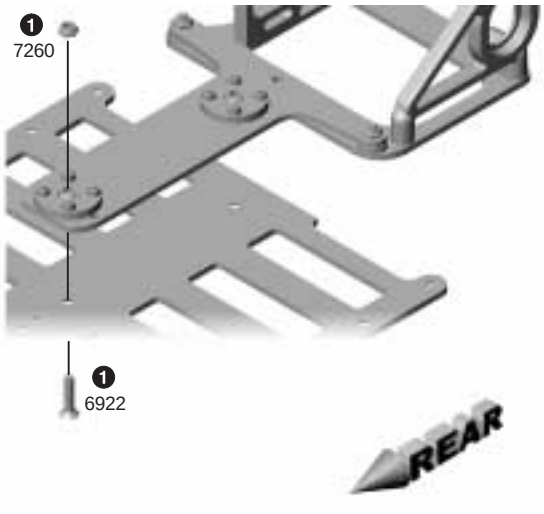
1. Bolt the lower pod plate to the black #4536 left bulkhead with three #6292 screws.
2. Bolt the aluminum #4537 motor bulkhead with two #7673 screws.
3. Attach the lower pod plate to the T-bar with two #4526 spacers, two #6292 screws, and two #4449 locknuts. The spacer goes between the T-bar and the pod plate. The T-bar is on top.



step 3
LEFT SIDE

T-BAR TO CHASSIS

1. Insert the #6922 screw through the chassis hole shown and into the T-bar, and secure with a #7260 plain nut.



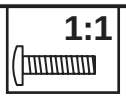
BAG B

REMOVE THESE PARTS FOR:

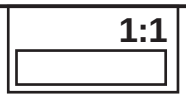
SPORT: steps 4-5

TEAM: steps 4-5

6919, qty 3
4-40 x 5/16



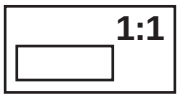
6917, qty 3
4-40 x 3/8



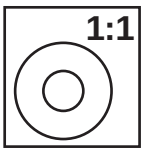
4442, qty 2
dampener brace standoff


8186, qty 2
rear body mount, 5"


8185, qty 2
rear body mount, 3"

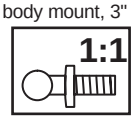


4441, qty 1
dampener center post



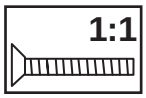
4338, qty 2
body post collar

6951, qty 2
set screw



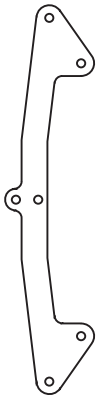
6270, qty 2
4-40 ball end steel

7673, qty 2
4-40 x 5/16

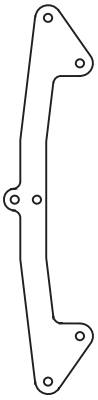


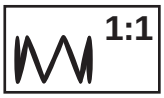
6915, qty 1
4-40 x 5/8

TEAM ONLY


8478, qty 1
rear chassis brace

SPORT ONLY

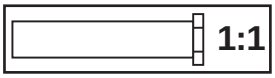

8482, qty 1
rear chassis brace



4517, qty 1
dampener spring

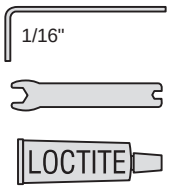
8330, qty 1
dampener O-ring black


4340, qty 1
dampener washer



4516, qty 1
dampener post

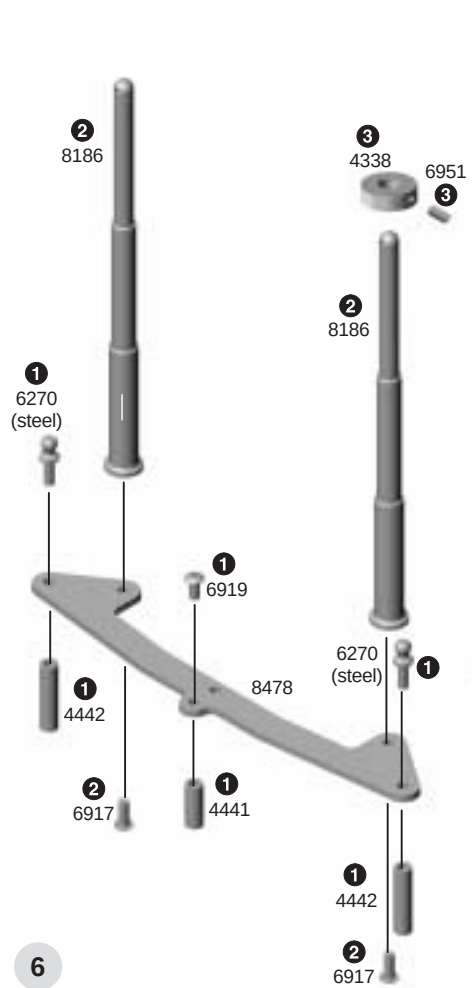
TOOLS USED



step 4 TEAM KIT ONLY

REAR CHASSIS BRACE ASSEMBLY

1. Mount the aluminum #4442 and #4441 standoffs to the #8478 rear chassis brace with two #6270 steel ball ends and one #6919 screw where shown.
2. Mount the #8186 rear body mounts to the rear chassis brace in the holes shown and secure the mounts using two #6917 screws. (For low profile bodies, use the #8185 posts.)
   Tighten the #4338 collars to the posts with the #6951 set screws.



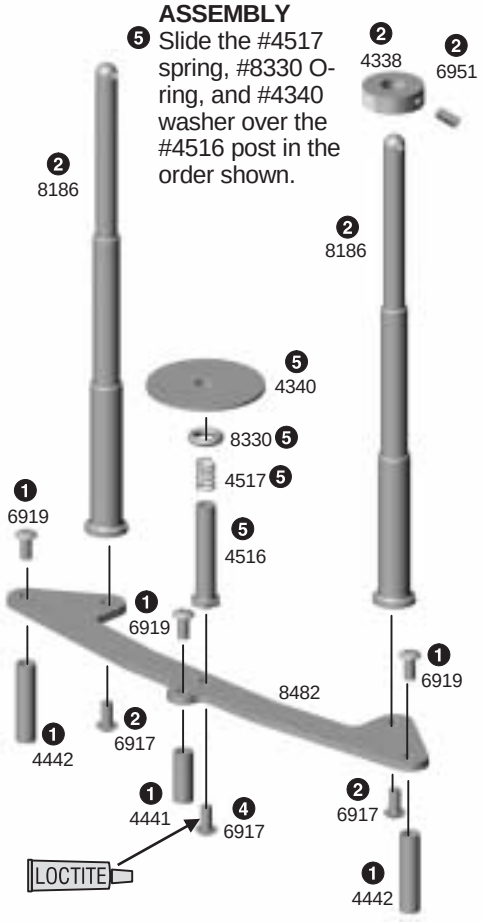
step 4 SPORT KIT ONLY

REAR CHASSIS BRACE ASSEMBLY

1. Mount the aluminum #4442 and #4441 standoffs to the #8478 rear chassis brace with three #6919 screws.
2. Mount the #8186 rear body mounts to the rear chassis brace in the holes shown and secure the mounts using two #6917 screws. (For low profile bodies, use the #8185 posts.)
3. Tighten the #4338 collars to the posts with the #6951 set screws.
4. Place a small amount of Locktite on the tip of a #6917 screw. Mount the #4516 dampener post to the rear chassis brace with the #6917 screw.

DAMPENER ASSEMBLY

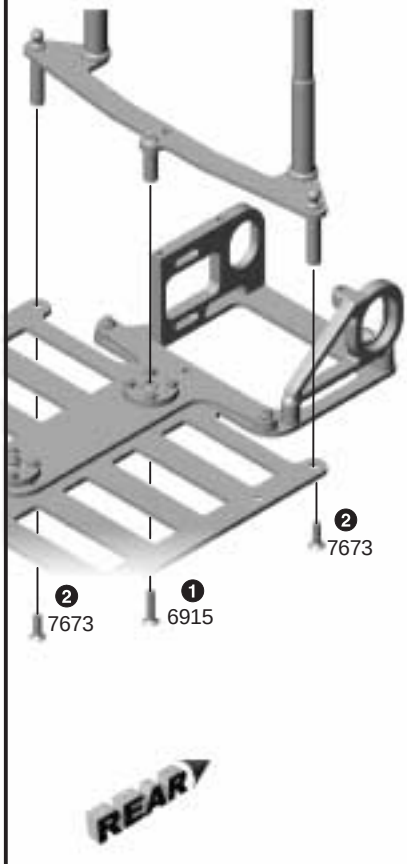
5. Slide the #4517 spring, #8330 O-ring, and #4340 washer over the #4516 post in the order shown.



step 5 BOTH KITS

CHASSIS BRACE MOUNTING

1. Insert the #6915 screw up through the chassis then into the rear pivot part of the T-bar, and screw it into the center chassis brace standoff tube.
2. Secure the outside aluminum standoffs to the chassis with two #7673 screws.



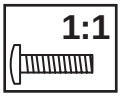
BAG B

REMOVE THESE PARTS FOR:

SPORT: step 6

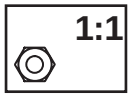
TEAM: step 6

6919, qty 2
4-40 x 5/16



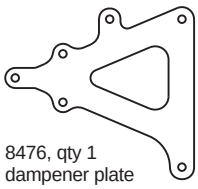
6917, qty 1
4-40 x 3/8

TEAM ONLY



4449, qty 3
4-40 locknut

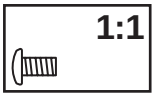
4448, qty 3
4-40 ball end
blue aluminum



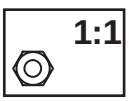
8476, qty 1
dampener plate

SPORT ONLY

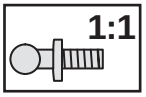
8330, qty 1
dampener O-ring
black



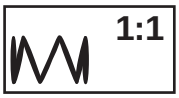
6920, qty 1
4-40 x 3/16



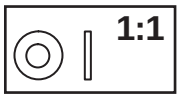
4449, qty 1
4-40 locknut



4448, qty 1
4-40 ball end
blue aluminum

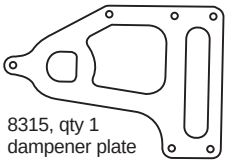


4517, qty 1
dampener spring



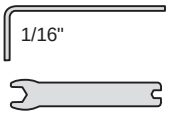
6466, qty 1
spacer, 1/32"

4340, qty 1
dampener washer



8315, qty 1
dampener plate

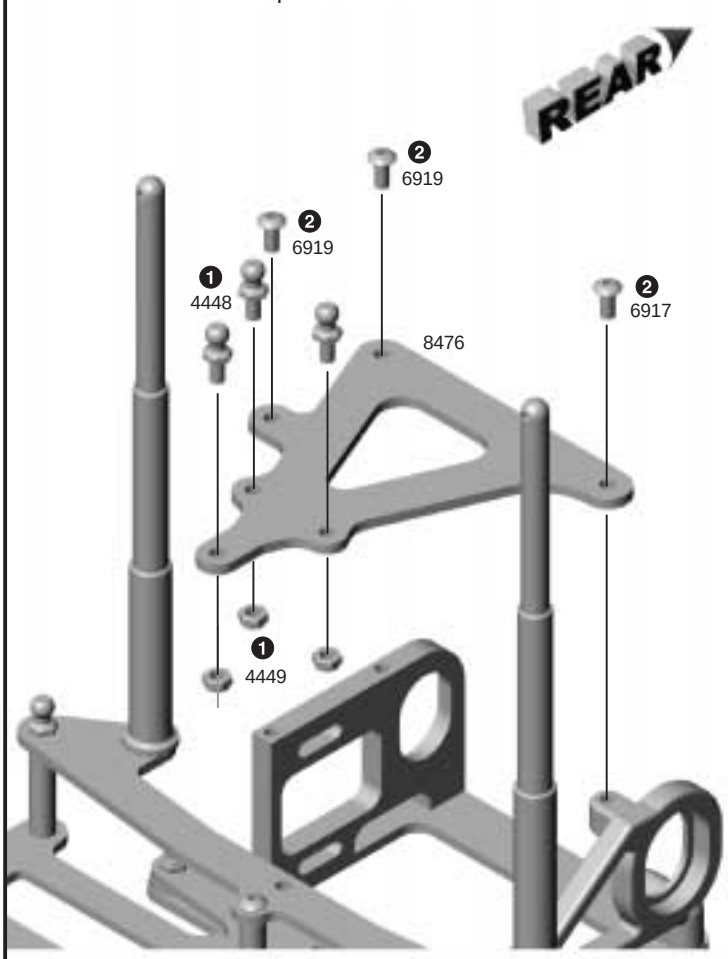
TOOLS USED



step 6 LEFT SIDE — TEAM KIT ONLY

DAMPENER PLATE ASSEMBLY

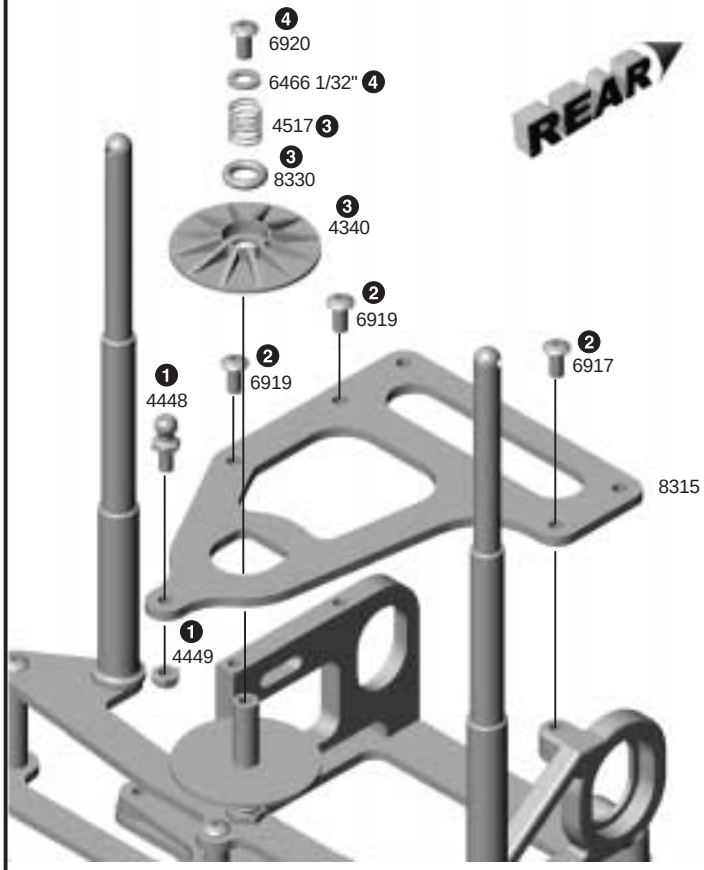
1. Install the three #4448 ball ends and three #4449 locknuts where shown.
2. Install the #8476 dampener plate to the rear pod using two #6919 screws into the aluminum bulkhead and the longer #6917 screw into the plastic bulkhead.



step 6 LEFT SIDE — SPORT KIT ONLY

DAMPENER PLATE ASSEMBLY

1. Install the #4448 ball end and #4449 locknut where shown.
2. Install the #8316 dampener plate using two #6919 screws into the aluminum bulkhead and the longer #6917 screw into the plastic bulkhead.
3. Slide the #4340 dampener washer, #8330 O-ring, and the #4517 spring over the dampener post as shown.
4. Secure the dampener assembly using a #6466 1/32" spacer and #6920 screw.

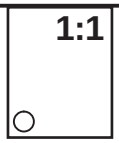


BAG C

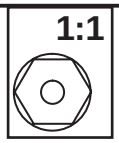
REMOVE THESE PARTS FOR:

SPORT: steps 1-4

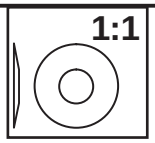
TEAM: steps 1-4



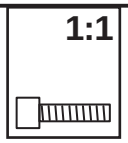
6626, qty 8
1/8" diff ball



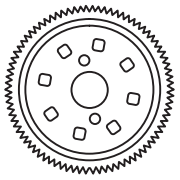
4185, qty 1
8-32 locknut

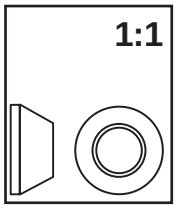


8213, qty 3
Belleville washer

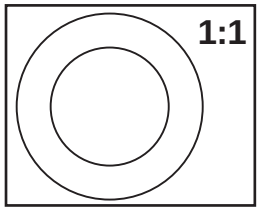


6924, qty 1
4-40 x 3/8


8282, qty 1
diff gear
81 tooth

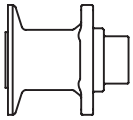


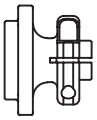
8213, qty 1
diff thrust cone

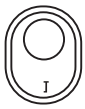


6625, qty 2
diff drive ring

6636, qty 1
silicone grease

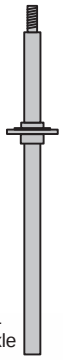

8477, qty 1
right wheel hub


8465, qty 1
left wheel hub


4349, qty 2
ride height
adjuster, #1 UP

TEAM ONLY

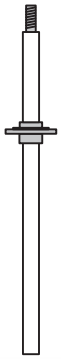
897, qty 4
1/4 x 3/8
flanged bearing


4355, qty 1
graphite axle

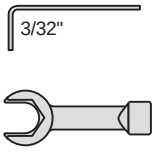
SPORT ONLY

8208, qty 3
1/4 x 3/8
flanged bushing

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


8209, qty 1
composite axle

TOOLS USED

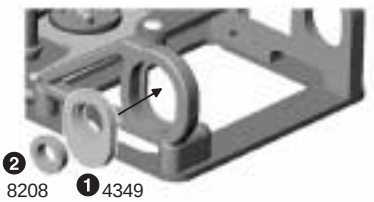


step 1
LEFT SIDE

DIFFERENTIAL ASSEMBLY

1. Find the #4349 adjusters that have a small #1 on them, and insert them into the rear pod, hole at top. (The tuning tips section has more info on these.)
2. **TEAM KIT ONLY:** Insert two #897 flanged ball bearings into the ride height adjusters as shown.
   SPORT KIT ONLY: Insert two #8208 metal flanged bushings into the ride height adjusters as shown.

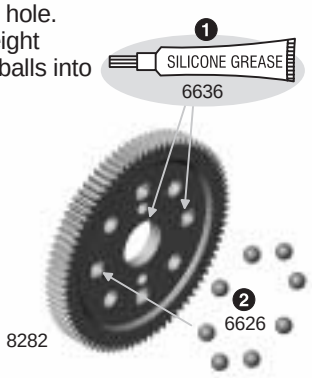
SPORT KIT ONLY



step 2

DIFF GEAR

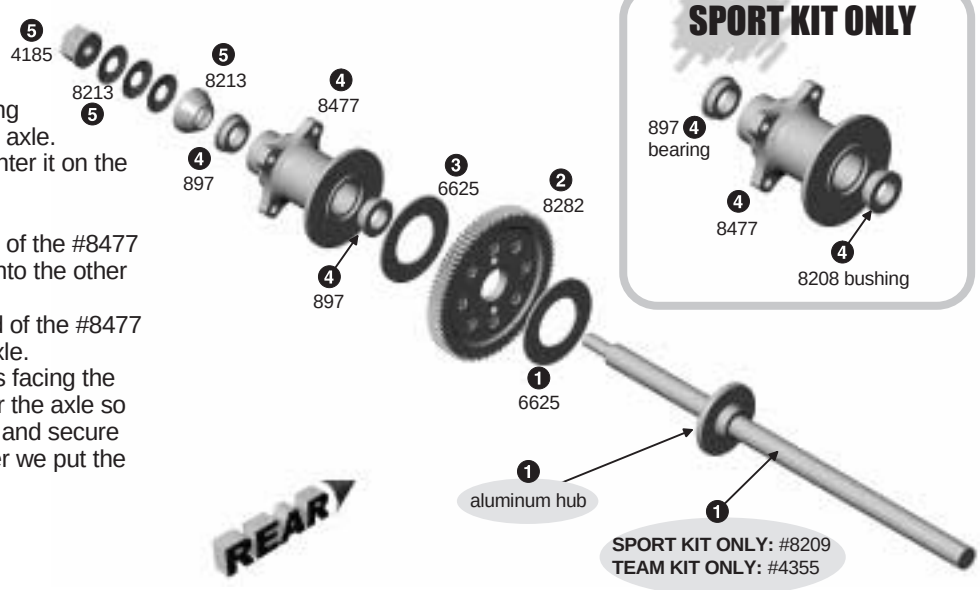
1. Add #6636 silicone grease to the #8282 diff gear ball holes and center hole.
2. Push the eight #6626 diff balls into the holes.



step 3

FINAL DIFF ASSEMBLY

1. Hold the axle upright and slide the #6625 diff ring over the axle and onto the aluminum hub of the axle.
2. Slide the #8282 spur gear over the axle and center it on the hub.
3. Install the second #6625 diff ring as shown.
4. **SPORT KIT:** Insert a #897 bearing into the end of the #8477 wheel hub shown, an #8208 flanged **bushing** into the other side, then slide the wheel hub over the axle.
   TEAM KIT: Insert a #897 bearing into each end of the #8477 wheel hub, then slide the wheel hub over the axle.
5. Install the #8213 cone so that the smaller end is facing the wheel hub. Place the three #8213 washers over the axle so that the smaller end faces away from the cone, and secure with a #4185 locknut. We will adjust the diff after we put the wheels on.



SPORT KIT ONLY

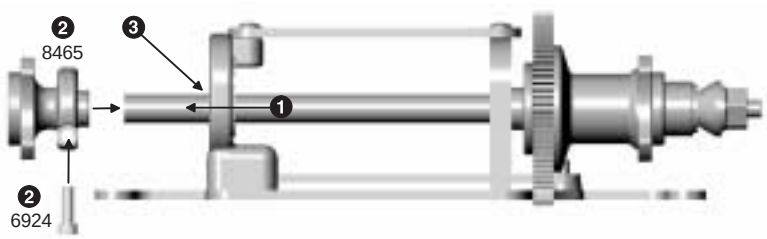
step 4

INSTALLING DIFF ASSEMBLY

1. Slide the complete rear axle assembly through the motor bulkhead until it extends through the plastic bulkhead on the other side. Install the #8465 left wheel hub onto the rear axle. Thread
2. the #6924 screw into the hub to tighten it to the axle.

SETTING THE AXLE END PLAY

Make sure there is a slight (less than 1/64" or .015" or .4mm)
3. amount of axle end play when tightening the left hub clamping screw.



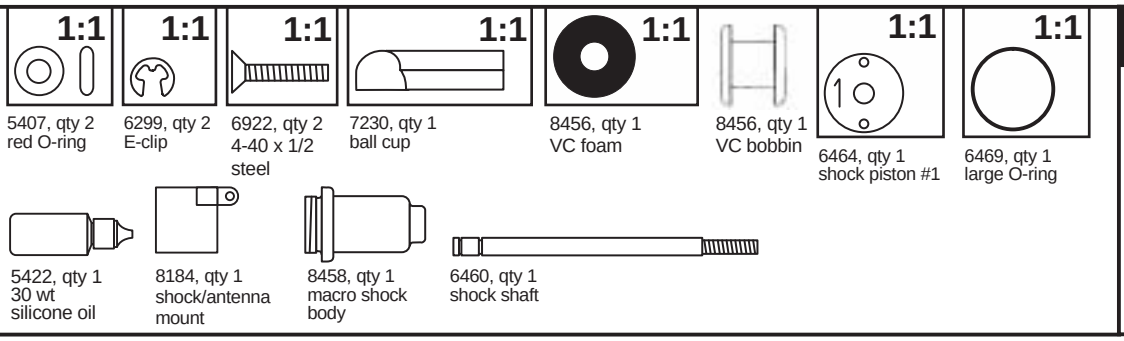
REAR VIEW SHOWN

BAG D

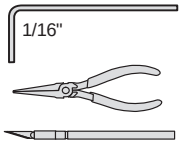
REMOVE THESE PARTS FOR:

SPORT: steps 1-4

TEAM: steps 1-4



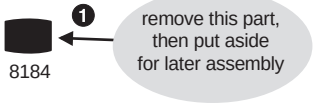
TOOLS USED

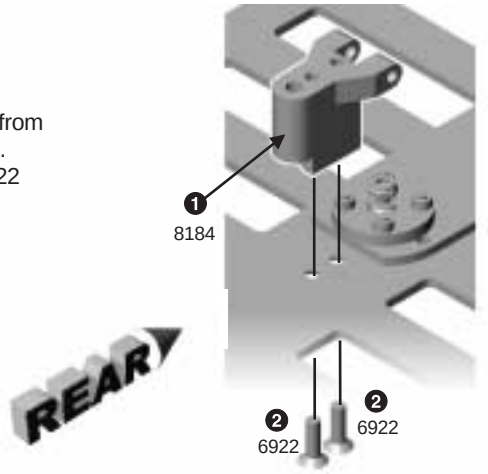


step 1

SHOCK/ANTENNA MOUNT

1. Remove the shock cap bushing from the #8184 shock antenna mount.
2. Install the mount using two #6922 aluminum screws.

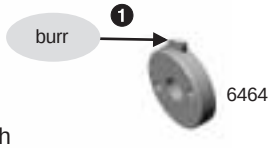


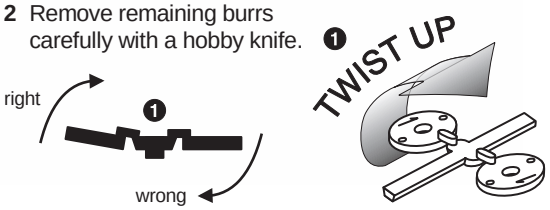


step 2

TRIM SHOCK PISTON

1. Burrs on the #6464 shock piston interfere with smooth shock action within the shock body. To remove from tree without creating burrs, twist up, not down. Remove one #1 shock piston.
2. Remove remaining burrs carefully with a hobby knife.





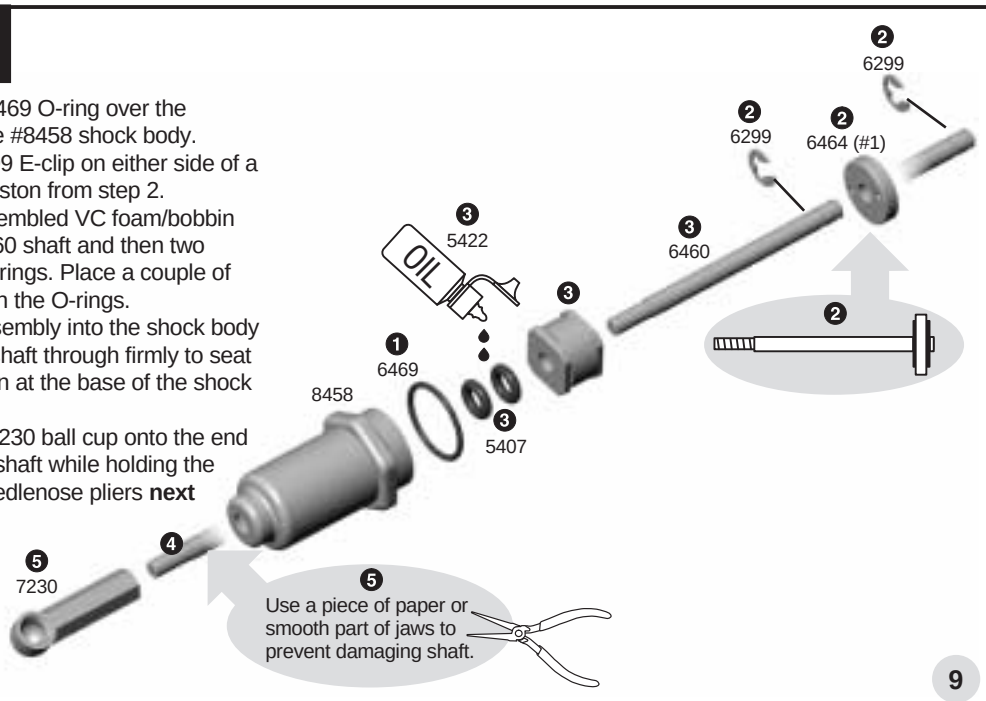
step 3

VC FOAM AND PISTON

Soak the #8456 VC foam with #5422 shock oil and install it onto the #8456 VC bobbin.

step 4

1. Install the #6469 O-ring over the threads of the #8458 shock body.
2. Install a #6299 E-clip on either side of a #6464 (#1) piston from step 2.
3. Slide the assembled VC foam/bobbin over the #6460 shaft and then two #5407 red O-rings. Place a couple of drops of oil on the O-rings.
4. Insert the assembly into the shock body and pull the shaft through firmly to seat the VC bobbin at the base of the shock bore.
5. Screw the #7230 ball cup onto the end of the shock shaft while holding the shaft with needlenose pliers **next to threads.**



BAG D

REMOVE THESE PARTS FOR:

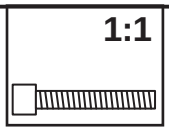
SPORT: steps 5-7

TEAM: steps 5-7

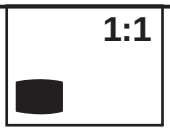

6475 or 8846, qty 1 ea. spring preload spacers, 1/4, 1/16


6475, qty 1 spring collar


6475, qty 1 spring cup



6926, qty 1 4-40 x 5/8



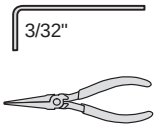
8184, qty 1 shock cap bushing


5422, qty 1 30 wt silicone oil


6496, qty 1 spring, silver


6428, qty 1 shock cap

TOOLS USED

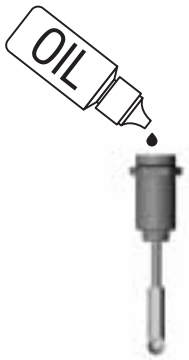


step 5

❶ Holding the shock upright, fill with oil to the top of the body.

❷ Slowly move the shaft up and down several times to allow air bubbles to escape to the top.

❸ Refill with oil to the top of the body.



❹ Push the shaft up until the piston is level with the top of the body. The oil will bulge up above the shock body.

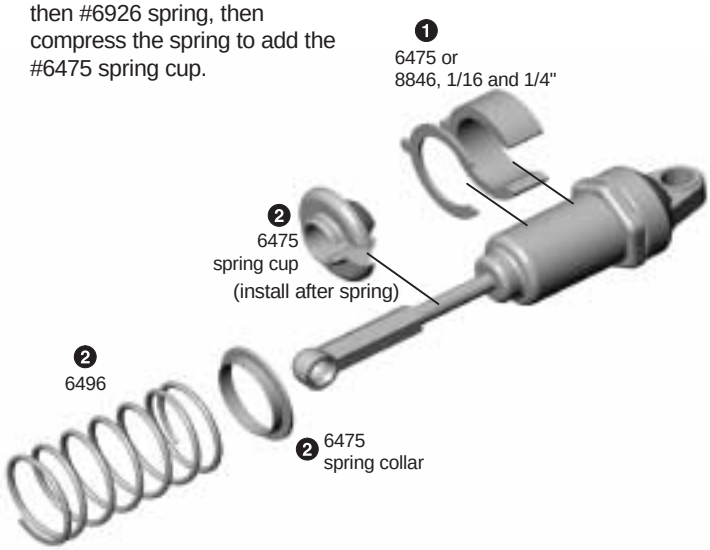
❺ Fill The #6828 shock cap about halfway with oil and install onto the body. Try to retain as much oil as possible during assembly. The shaft will extend out as you tighten the cap down.

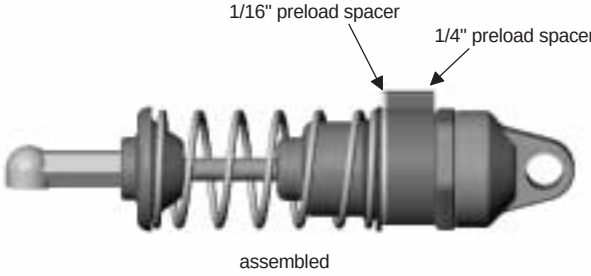
step 6

FINAL SHOCK ASSEMBLY

❶ Slide the 1/16 and 1/4 #8846 preload spacers onto the body.

❷ Slide on the #6475 spring collar, then #6926 spring, then compress the spring to add the #6475 spring cup.





assembled

step 7

MOUNT THE SHOCK

❶ Pick up the small #8184 bushing you had removed from the antenna/shock mount and insert it into the shock cap.

❷ Install the shock cap and bushing into the antenna mount and secure using a #6926 screw.

❸ Snap the rear of the shock onto the ball end as shown.

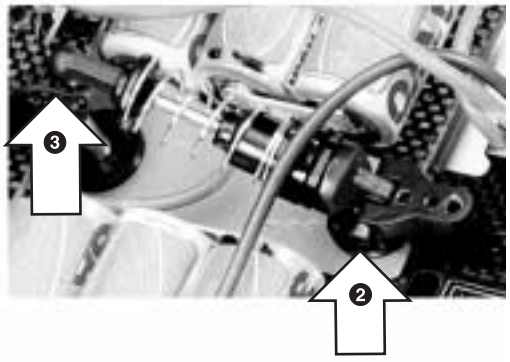


PHOTO DEPICTS FULLY-ASSEMBLED KIT

DISASSEMBLY

X-RAY VIEW SHOWN

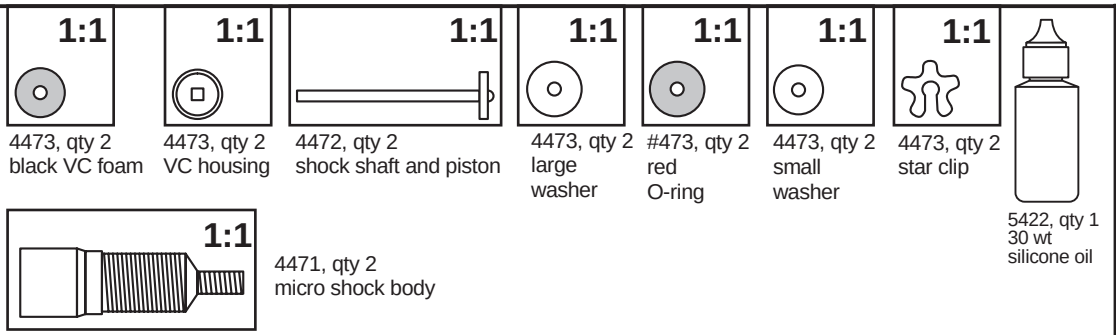
1 To take out the VC foam/bobbin, unscrew the ball cup and shock cap, and push the shock shaft out.

❷ Push your Allen wrench tip into the shock bottom and push the bobbin out, as shown. The O-rings should just fall out by themselves.

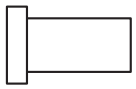
BAG D

REMOVE THESE PARTS FOR:

TEAM: steps 8-11



TOOLS USED



#4473, qty 1 assembly tool

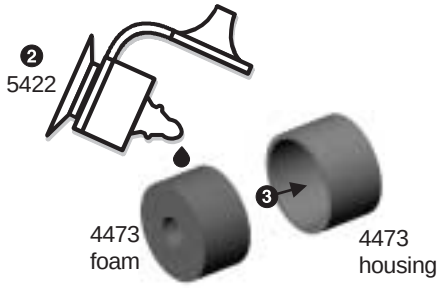
VCS MICRO SHOCK

Team Associated's VCS™ (Volume Compensating System) Micro Shock was developed as a higher-volume, lightweight, constant-travel shock to fit on most road/oval 1:10 and 1:12 cars, and provides consistently smooth, superior dampening without the need for frequent rebuilds.

The VCS™ Micro Shock body is precision-machined from aircraft-quality aluminum, and is externally threaded for convenient spring pre-load adjustments. Internally, the shock utilizes Associated's exclusive VCS™ volume compensating system, 7075 aluminum shock piston, molded PTFE components, and a precision-ground, case-hardened steel shock shaft which is extremely resistant to bending.

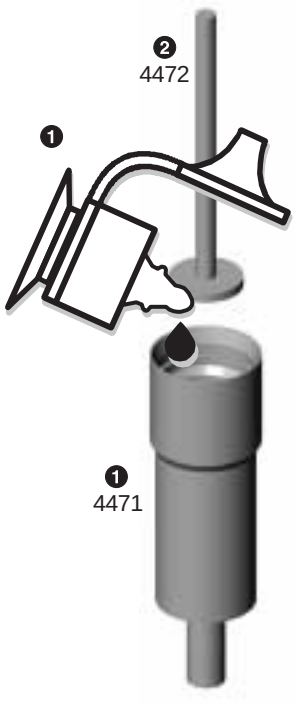
step 8

1 Remove the plastic #4473 VC housing from the parts tree.
❷ Soak the #4473 VC foam with your #5422 shock oil.
❸ Push the foam into the housing.



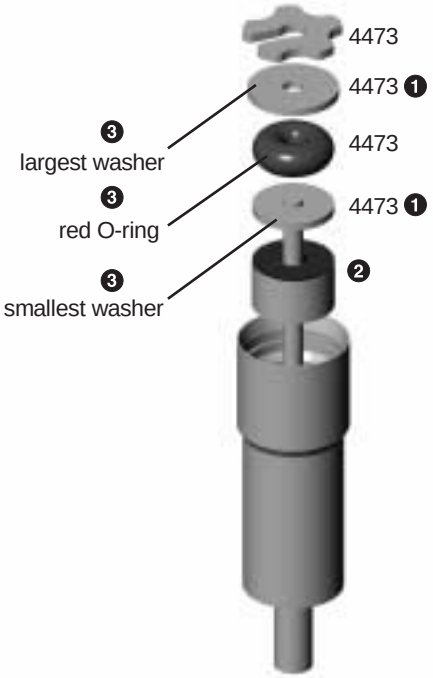
step 9

❶ Fill #4471 shock body with oil up to the upper groove.
❷ Insert #4472 shaft/ piston all the way to the bottom



step 10

❶ Remove the small and large #4473 washers from the parts tree. Remove any flash from the washers.
❷ Slide the VC housing with foam onto the shaft, housing first (so foam is still seen through the body opening).
❸ Slide on the following in this order: smaller washer, red O-ring, larger washer, then the star-shaped clip.



step 11

Use the assembly tool to push all the parts down into the body until the clip snaps into the groove. When you remove the tool, the shaft will push out somewhat if everything snapped into place correctly. **Make sure the clip snaps into the groove completely.**

BAG D

REMOVE THESE PARTS FOR:

TEAM: steps 12-14

#6274, qty 4 ball cup

#4473, qty 2 spring adjusting nut

#4474, qty 2 shock shaft end

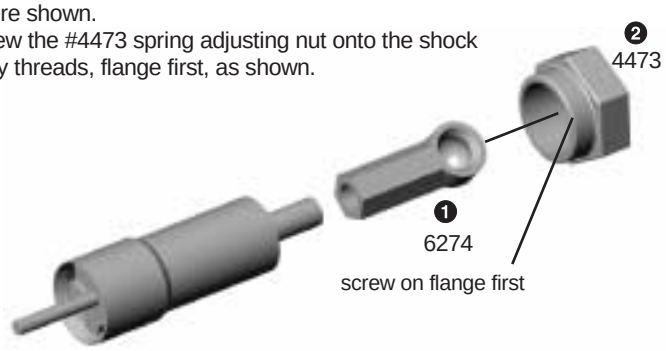
#6951, qty 2 set screw

#8451, qty 2 silver spring

TOOLS USED

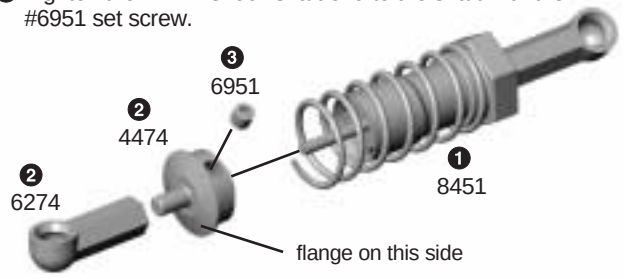
step 12

❶ Remove the assembly tool and screw on the #6274 ball cup where shown.
❷ Screw the #4473 spring adjusting nut onto the shock body threads, flange first, as shown.



step 13

❶ Slide the #8451 spring over the body and up against the #4473 adjusting nut.
❷ Screw the #6274 ball cup onto the #4474 shock shaft end.
❸ Tighten the #4474 shock shaft end to the shaft with the #6951 set screw.



step 14

❶ Pop the #6274 ball cups on the ball ends of your kit.
❷ Turn the spring adjusting nut to adjust spring tension.

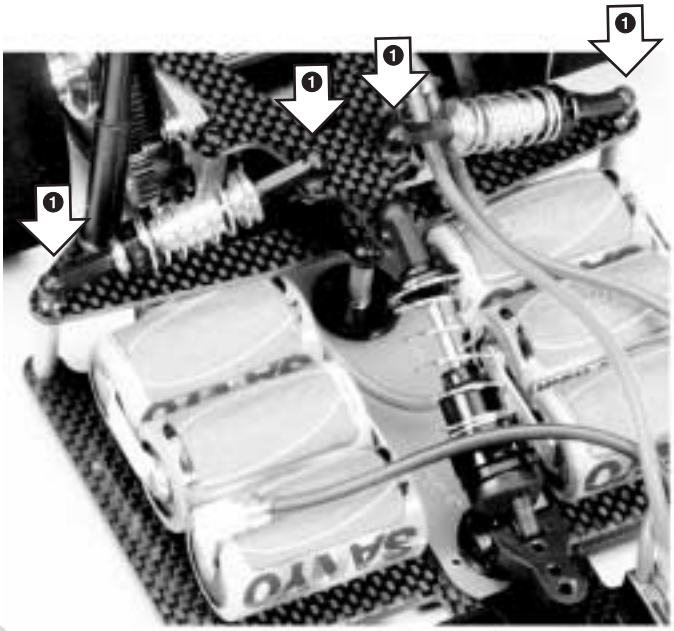
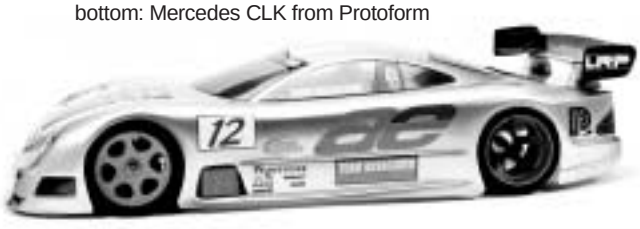


PHOTO DEPICTS FULLY-ASSEMBLED KIT

DISASSEMBLY

1 To remove the parts from inside the shock, first loosen the #6951 set screw of the #4474 shock shaft end (step 13), then slide off the shaft end and spring.
❷ Now carefully insert your disassembly rod into one of the rounded grooves of the star clip and pop it out.

body painting suggestions (body not included in kits)
top: Nissan Primera from Protoform
bottom: Mercedes CLK from Protoform

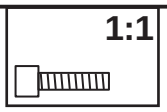


BOX

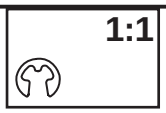
REMOVE THESE PARTS FOR:

SPORT: steps 1-2

TEAM: steps 1-2

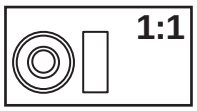


6924, qty 8
4-40 x 3/8

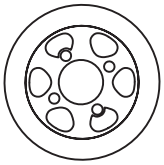


6299, qty 2
e-clip

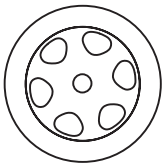
TEAM ONLY



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

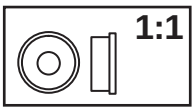


#8166, qty 2
rear wheel/tire

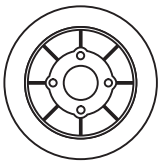


#8146, qty 2
front wheel/tire

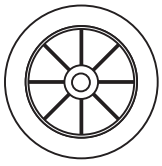
SPORT ONLY



3658, qty 4
1/8 x 5/16
flanged bushing

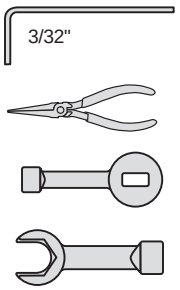


#8165, qty 2
rear wheel/tire



#8141, qty 2
front wheel/tire

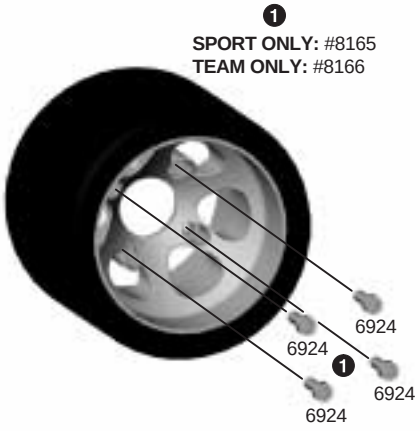
TOOLS USED



step 1 LEFT SIDE

MOUNTING REAR TIRES

❶ Install both rear tires to the hubs with four #6924 screws into each wheel hub.

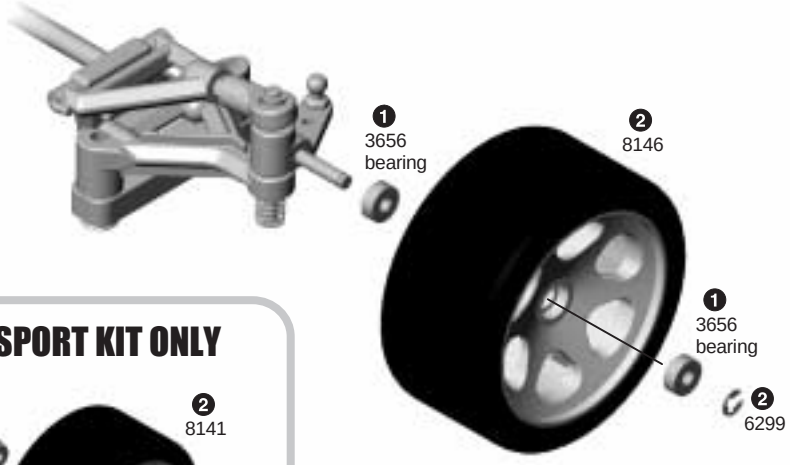


step 2 LEFT SIDE

MOUNTING FRONT TIRES

❶ Put an unflanged bearing or flanged bushing into each side of the front wheels.

❷ Slide the wheel on and finish off with a #6299 E-clip. Do the other side.



SPORT KIT ONLY

step 2

DIFFERENTIAL ADJUSTMENT

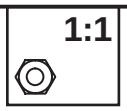
❶ While holding both rear wheels with your hands as shown, use your right thumb and index finger to try and rotate the spur gear. The spur gear should be very difficult to rotate. If you can rotate it easily, then tighten the #4185 11/32" nut at the end of the axle, **a little at a time,** until the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

BAG E

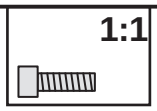
REMOVE THESE PARTS FOR:

SPORT: steps 1-2

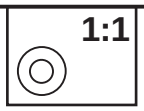
TEAM: steps 1-2



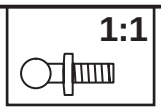
7260, qty 2
4-40 nut



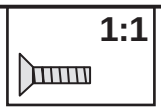
4145, qty 4
4-40 x 5/16
blue aluminum



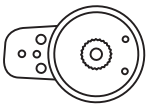
6936, qty 4
#4 washer



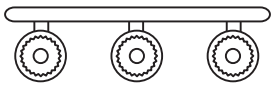
4448, qty 2
ball end

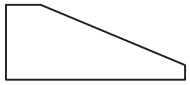


6934, qty 2
4-40 x 3/8
blue aluminum

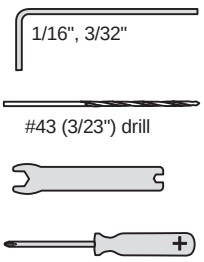

8445, qty 1
servo saver


8445, qty 1
servo saver
screw


8445, qty 1
servo saver
adapter


8435, qty 2
servo mounting block

TOOLS USED



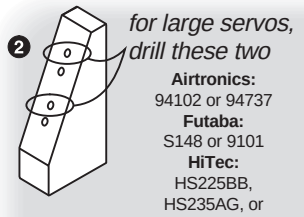
step 1

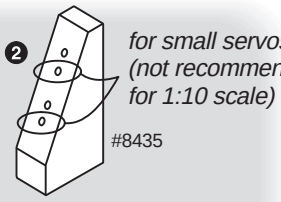
DRILLING STEERING SERVO BLOCKS

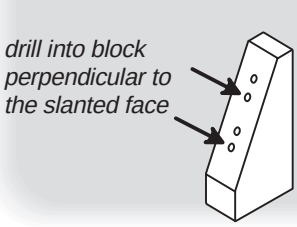
1 For the 1:10 scale cars we recommend you use a larger, more standard size servo. This would be:

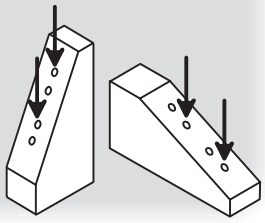
Airtronics:
94102 or 94737
Futaba:
S148 or 9101
HiTec:
HS225BB, HS235AG, or HS525AG.

❷ Drill two holes with a #43 (or 3/32") drill into the #8435 servo blocks where shown for your servo size. **DO NOT drill at an angle to the slanted face!**





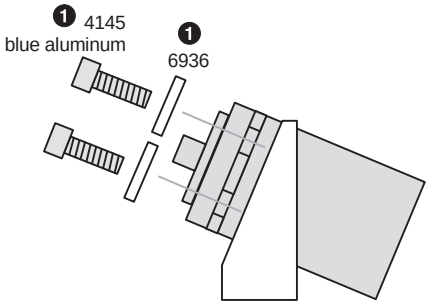



NO! Don't drill into the block at an angle to the slanted face

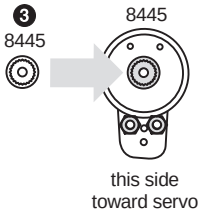
step 2

MOUNTING THE SERVO

❶ Secure the servo to the blocks with four #4145 blue aluminum screws and four #6936 #4 washers.

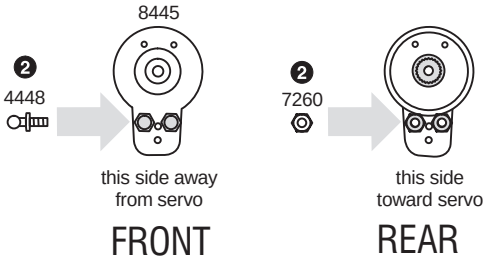


❸ Try the three #8445 adapters on the servo until you find one that fits. Push that adapter into the servo saver.



ASSEMBLING THE SERVO SAVER

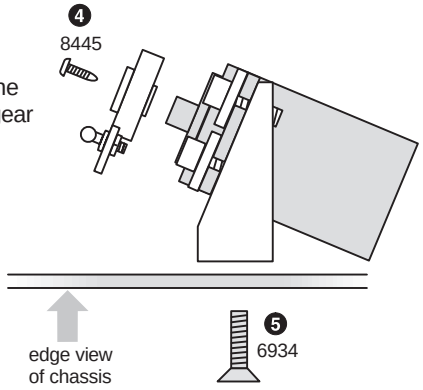
❷ Thread two #4448 ball ends into the front side of the #8445 servo saver. Secure the ball ends with the #7260 locknuts.



MOUNTING THE SERVO ASSEMBLY

❹ Mount the servo saver to the servo with the #8445 screw. **Note:** If you have a metal gear servo, use the stock mounting screw.

❺ Mount the servo mounting blocks to the chassis with two #6934 screws.

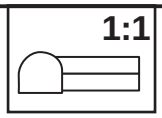


BAG E

REMOVE THESE PARTS FOR:

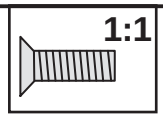
SPORT: steps 3-4

TEAM: steps 3-4

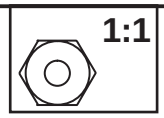


6274, qty 4
ball cup

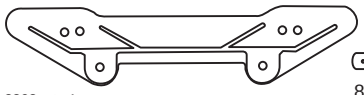
6332, qty 4
body clip

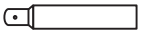


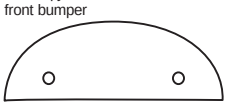
6942, qty 4
8-32 x 1/2
blue aluminum



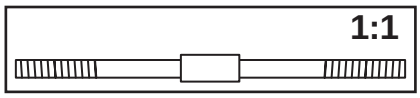
3438, qty 2
8-32 locknut


8303, qty 1
front bumper


8304, qty 2
front body post

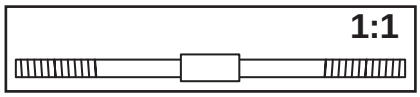

8305, qty 1
foam bumper

SPORT ONLY



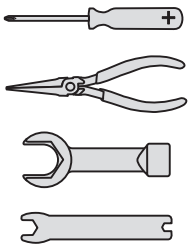
8438, qty 2
steel steering turnbuckle

TEAM ONLY



1405, qty 2
blue titanium steering turnbuckle

TOOLS USED

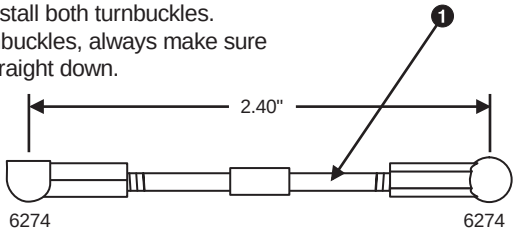


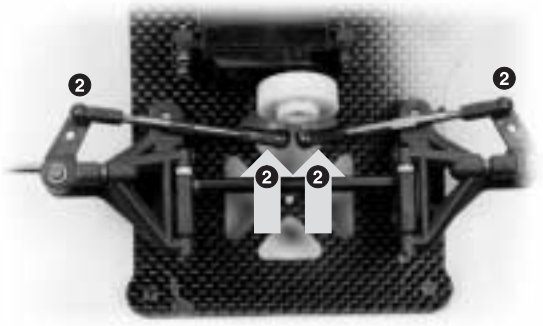
step 3

STEERING LINKAGE

1. Install the plastic #6274 ball cups onto the #1405 titanium steering turnbuckles. Match the length of the turnbuckles to the actual size picture below.
2. Snap one ball cup onto the ball end on the servo saver. Snap the opposite end on as shown. Install both turnbuckles. When you are adjusting your turnbuckles, always make sure that the servo saver is pointing straight down.

SPORT ONLY: #8438 steel
TEAM ONLY: #1405 titanium





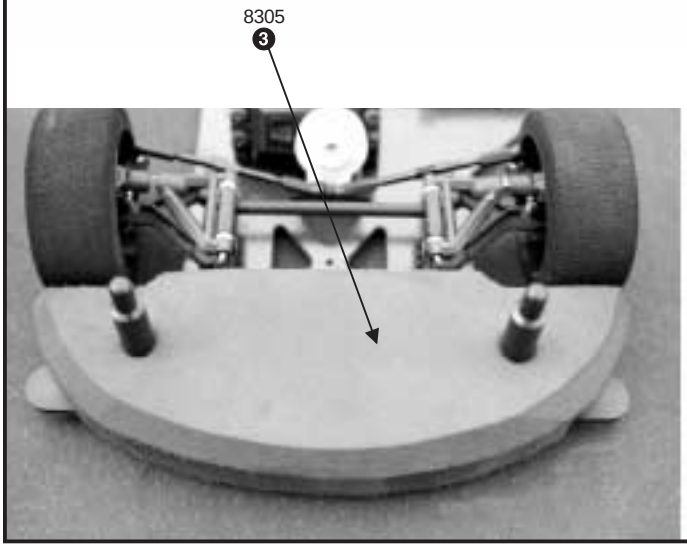
step 4

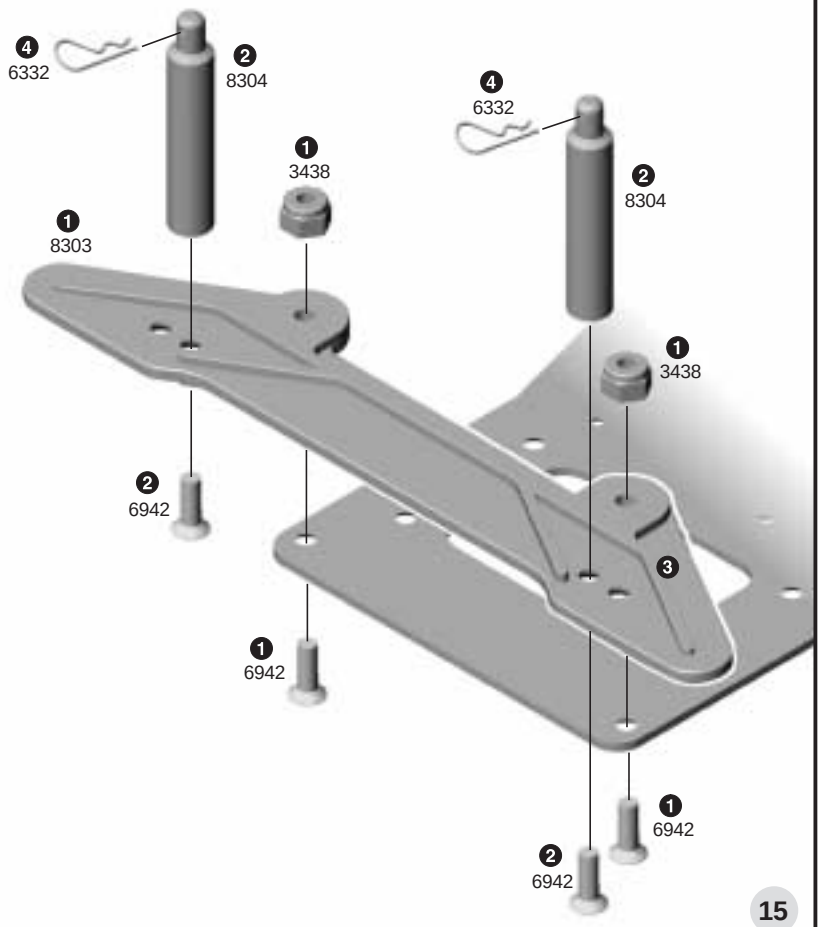
FRONT BUMPER

1. Bolt the #8303 front bumper to the front of the chassis with two #6942 blue screws from underneath and two #3438 locknuts on top.

FRONT BODY MOUNT POSTS

2. Tighten the #8304 body posts to the bumper with two #6942 blue screws from underneath.
3. Cut and trim the #8305 foam bumper with a sanding block to fit the body of your choice and slide it over the two body mounts.
4. Add #6332 body clips to the front posts and the rear.



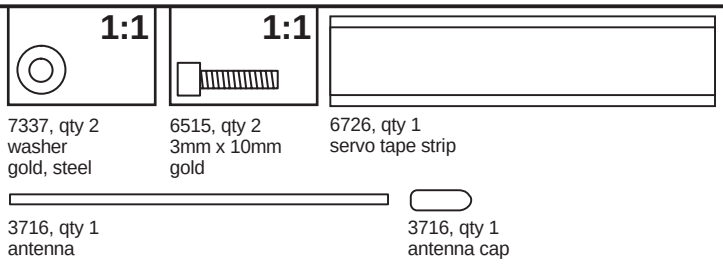


BAG E

REMOVE THESE PARTS FOR:

SPORT: steps 5-6

TEAM: steps 5-6



7337, qty 2
washer
gold, steel

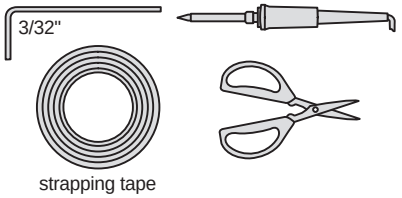
6515, qty 2
3mm x 10mm
gold

6726, qty 1
servo tape strip

3716, qty 1
antenna

3716, qty 1
antenna cap

TOOLS USED



strapping tape

step 5

PINION GEAR INSTALLATION

1 Slide the pinion gear onto the motor shaft so that the gear is 1/16" away from the motor can. Tighten the set screw to hold it in place. Teeth side should be farthest from can. Motor gearing is explained later in the manual.

MOTOR INSTALLATION

❷ Insert the motor into the rear pod assembly as shown, the pinion gear coming through the right side motor bulkhead.

❸ Tighten the motor to the bulkhead with two #6515 screws and two #7337 gold washers.

❹ Set the gear mesh so that there is very little play between the spur and pinion gear. **Note:** If the gear mesh is too tight, you can lose significant power.

❷

6515,
7337

MOTOR AND PINION GEAR ARE NOT INCLUDED IN KIT

step 6

ELECTRICAL INSTALLATION

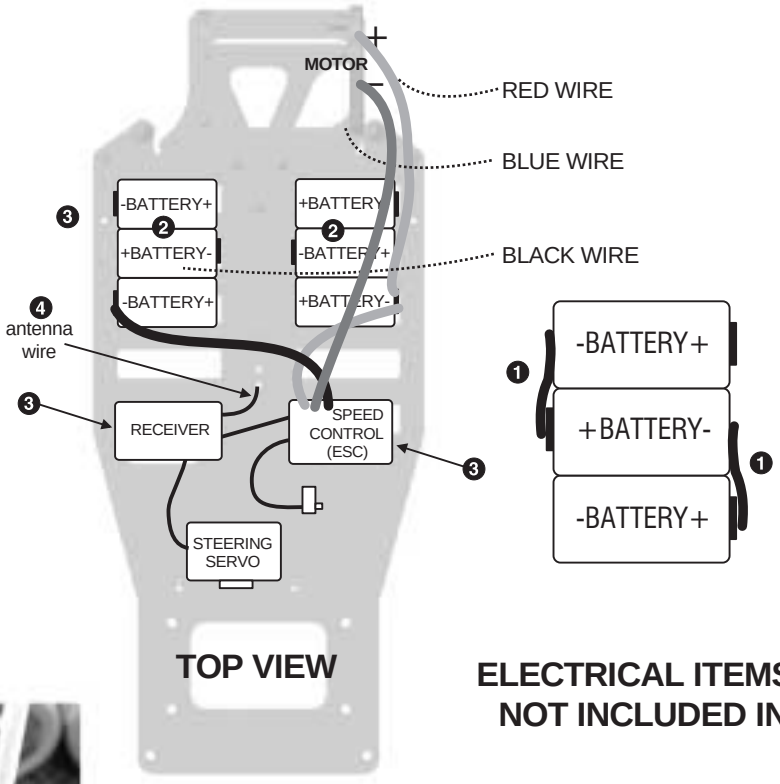
❶ Solder your single cell batteries together with battery braid or battery bars. Solder plus (+) to minus (-).

2 Strap the batteries to the chassis with strapping tape. Wrap the tape over the batteries, through the chassis slot, underneath the chassis, and up again through another slot, several times.

❸ Cut the #6726 servo tape to fit the bottom of the speed control and receiver. Peel the backing from the servo tape and place them where shown in the drawing.

❹ Insert the #3716 antenna into the antenna mount. Slide your receiver antenna wire through the antenna and secure the wire with the antenna cap.

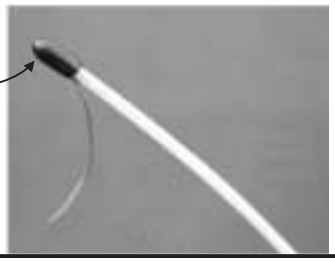
❺ Now connect the electronic speed control and steering servo to your receiver **according to your radio or ESC instructions,** then connect the motor to the ESC and battery.



TOP VIEW

ELECTRICAL ITEMS ARE NOT INCLUDED IN KIT

❹ Insert antenna tube, run wire through tube, then add cap.



SETTING THE TWEAK

We set the "tweak" after everything except the body is installed on the car, including batteries, motor, speed control, and all the radio equipment.

WHAT IS TWEAK? Ideally, the left wheel should be pushing down on the ground with exactly the same force as the right wheel. If this is not happening, the car is TWEAKED (or twisted). This can cause the car to spin out easily under acceleration. It will also cause the car to oversteer in one direction and understeer in the opposite direction.

CHECKING THE TWEAK.

1 Measure the front chassis width. Use half of this measurement to find the centerline of the chassis.
2 Scratch a mark at the centerline at the front of the chassis with your hobby knife as in photo.
3 To tweak the car, place the tip of a hobby knife on the center mark as shown.
4 Lift the front of the car slowly. For a neutral handling car, we want both front tires to leave the ground at the same time. If one tire leaves the ground before the other one, the car is tweaked.

ADJUSTING THE TWEAK, TEAM KIT. After checking the tweak, tighten the spring adjusting nut (page 12, step 14) 1/2 turn on the tire side that left the ground first. Now loosen the opposite shock spring adjusting nut the same amount. Now recheck the tweak. Continue to make these adjustments until you achieve the amount of tweak desired.

ADJUSTING THE TWEAK, SPORT KIT. After checking the tweak, loosen the T-bar tweak screw (page 5, step 1) 1/8 of a turn on the tire side that left the ground first. Now tighten the opposite tweak screw (the one that left the ground last) the same amount. Now recheck the tweak. Continue to make these adjustments until you achieve the amount of tweak desired.

Here are some guidelines to optimize tweak:

- Both tires leave the ground at the same time: neutral, easy-to-drive steering.
- Left front tire leaves the ground first: less steering (understeer).
- Right front tire leaves the ground first: more steering (oversteer).

RADIO ADJUSTMENTS

Charge the transmitter batteries if they are NiCads. (See your radio manual for instructions.) Next charge your battery pack according to the instructions included with your battery charger or battery pack. Make sure all the ESC connections are according to the appropriate manuals. Now use the following steps to make the final adjustments on your car.

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 car switch to the ON position. (This is normally attached to the ESC.)
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 down? 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 in relation to the wheels. 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 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 car ON/OFF switch OFF.
9 Plug in or solder in your motor. Place your car on a block or car stand so that the rear wheels cannot touch anything. Turn the car switch back ON. Check the ESC operation and settings. After you have set and checked the speed control, turn the car switch OFF.
10 The transmitter switch must always be the ***FIRST SWITCH TURNED ON*** *and* ***THE LAST SWITCH TURNED OFF.***

CONGRATULATIONS! YOUR CAR IS NOW READY TO RUN!

PAINTING THE BODY

1 While the body is still clear, mark and cut out the holes for the body mounts and antenna tube.
2 Clean the body and wing 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 and wing, applying the paint in thin coats and letting it dry between coats. We recommend Pactra paints.

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
24° ROAR stock motor	26	81
DS Spec motor	25	81
36° stock motor	24	81
14 turn modified motor	21	84
13 turn modified motor	20	84
12 turn modified motor	19	84
11 turn motor	18	84

TIRE DIAMETER ADJUSTMENT

If you change tire diameter you can affect your gearing. You can calculate any gearing adjustments by using the following formulas.

Old Tire Dia.		*New Tire Dia.*		*Factor*
(2.1"	**÷**	**1.9")**	**=**	**1.105**

Old Pinion Gear		*Factor*		*Results*		*New Pinion Gear*
18	**X**	**1.105**	**=**	**19.89**	**=**	**20** *(round to nearest whole number)*

BATTERY CHARGING & DISCHARGING

The battery packs used for R/C cars 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 discharges 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.

MAINTENANCE

FOLLOW THESE STEPS TO KEEP YOUR CAR IN SHAPE FOR RACING

You should periodically check all the moving parts: front and rear end, suspension arms, steering blocks, steering linkage, shocks, and so on. If any of these should get dirty or bind, then your car's performance will suffer.

MOTOR MAINTENANCE

Between runs, inspect the brushes to 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 buildup 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 runoff is clear and clean. If the runoff is still dirty, repeat the spraying action until clean. After completing the cleaning, apply a small amount of lightweight oil to each bushing or bearing for lubrication. Be careful not to apply too much oil, for this will pick up dirt and contaminate the commutator and brushes.

DIFFERENTIAL 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. Normally, as the parts seat, the diff will get smoother. If, after carefully cleaning and relubing the diff parts, the diff still feels gritty, the 1/8" balls and drive rings should be checked and possibly replaced. Refer to the diff section to correctly assemble the diff.

CLEANING YOUR CAR

You can clean your car 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 car 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 car (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.* (Reedy Car Wash is Lexan safe.) The best way to clean your Lexan body is with warm water and a mild dish soap.

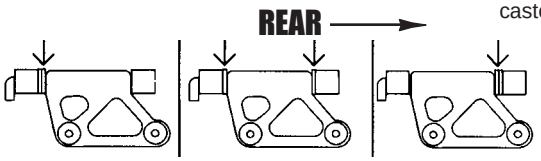
TUNING & SETUP TIPS

THESE STEPS PREPARE YOUR CAR FOR MAXIMUM PERFORMANCE

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

CASTER describes the angle of the kingpin, in relation to the vertical plane, when looked at from the side of the car. As an example, 0° of caster puts the kingpin in a vertical line. Positive caster means the kingpin leans rearward at the top. Increasing the positive caster on your car will slightly increase the steering turning into a corner and slightly decrease steering coming out of the corner. Reducing the positive caster will decrease the amount of steering you have going into a corner and increase the amount of steering you have in the middle of the corner and exiting the same corner.

Your car has adjustable caster in increments of 2°. With the 0° upper arm mounts you can have settings of 0°, 2°, and 4° of positive caster as shown. You change the caster by placement of the PTFE caster shims on either side of the upper arm mount.



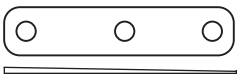
0° mount, 0° caster 2 shims forward

0° mount, 2° caster 1 shim each side

0° mount, 4° caster 2 shims to rear

The three drawings below show the locations of the caster shims and what the resulting caster settings will be.

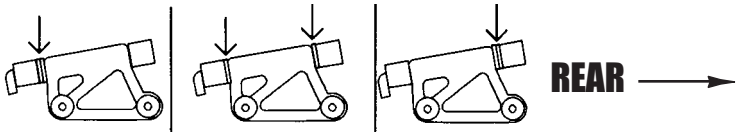
For greater amount of caster than moving the upper arm caster shims, you can add the #4127 caster spacers under the suspension arms. They come in 2° increments. Be aware that adding these caster shim spacers will change your ride height.



#4127 shims

CASTER CHANGE

The 0° mount is level with the chassis when mounted. The 10° mount is angled 10° in relation to the chassis or lower suspension arm. This angle provides a change in caster during suspension movement. The caster angle will change two degrees during full suspension travel. Your car will steer more aggressively when using this option. The starting or static caster setting is changed in the same manner using the PTFE caster shims. Static caster starts at either 2°, 4°, or 6°. A more detailed example would be a starting caster of 2° will have 0° caster at full suspension travel and a starting caster of 6° will be only 4° at full suspension travel.



10° mount, 2°-0° caster 2 shims forward

10° mount, 4°-2° caster 1 shim each side

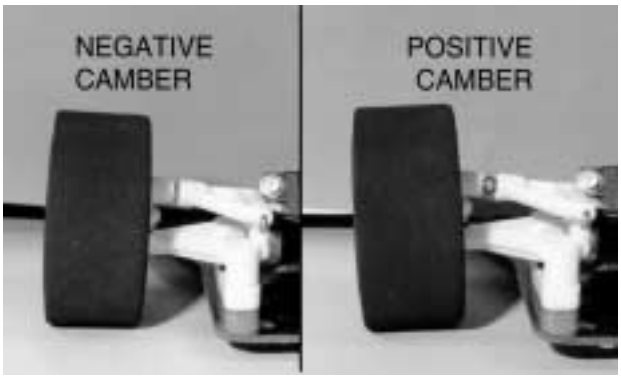
10° mount, 6°-4° caster 2 shims to rear

This setup is recommended for road racing applications, giving you the most aggressive steering possible.

CAMBER

CAMBER is a word describing the angle at which the tire and wheel rides relative to the ground when looked at from the front or back. This is one of the most important adjustments on the car. Negative camber means that the tire leans inward at the top, putting it closer to the centerline of the car than the bottom of the tire. Positive camber means just the opposite, the top of the tire is further away from the centerline of the car than the bottom of the tire.

Excessive negative camber will decrease traction but increase stability. Positive camber will do the same. We suggest a starting setting of 2° of negative camber. Try to use at least 1 to 2° negative camber at all times and make adjustments to keep your tires wearing flat. This can be adjusted by turning the upper arm turnbuckles in the appropriate direction.



TOE-IN AND TOE-OUT

TOE-IN AND TOE-OUT is a beneficial adjustment and has a fairly significant effect on the car. Toe-in will help stabilize your car and it also removes a small amount of turn in steering. Toe-out will allow the car to turn in to a corner quicker but will reduce stability exiting the corner. Both toe-in and toe-out will scrub speed so try to use as little, of either, as possible. You adjust the toe-in or toe-out by adjusting the length of the steering tie-rod turnbuckles.

FRONT SUSPENSION SPRINGS

are available in various wire sizes as listed below. Changing springs will increase or decrease steering. In general a softer spring (smaller wire diameter) will add steering and a harder spring (larger wire diameter) will decrease steering. Oval racing will normally require a harder spring than road course racing. The #8015 L2 kit includes #8427 springs. The #8416 L2O kit includes #8429 springs.

Part Number	Wire Size	
#8433	(.024")	*Harder (less steering)*
#8431	(.022")	
#8429 (kit std.)	(.020")	
#8427	(.018")	*Softer (more steering)*

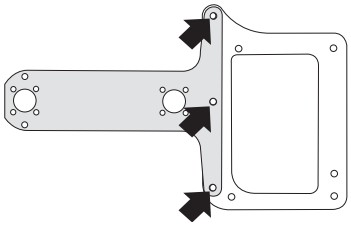
REAR AXLE HEIGHT ADJUSTERS

Your car comes with four sets of rear axle height adjuster inserts. These inserts allow you to raise or lower the height of the back of the car without changing tire diameters. Even though there are only four offsets, three can be rotated 180° for a total of seven different axle heights as shown.

The #4-up position allows you to use the maximum diameter tire and the #4-down position requires you to use the minimum tire diameter. This adjustment allows you to get more useful life from a set of tires by adjusting axle height as tire diameter decreases. You can also adjust the overall height of your car for high or low traction conditions.

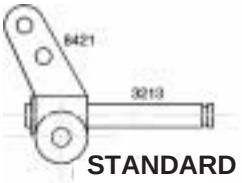
T-BAR FLEX

Look at the back end of the of the T-bar at the "T" shaped section. You will see there are three holes which can be used to attach the T-bar to the lower rear pod plate. You have assembled your car using only the two outermost holes. This setup will make the rear suspension very active (soft) front-to-rear. Your car will have more rear traction and will accelerate through bumps better than if you were using all three attachment holes. Try using all three attachment holes only when racing on smooth, high traction conditions.

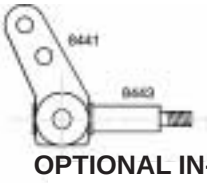


MORE AGGRESSIVE STEERING

If the steering of your car is not aggressive enough for you, replace the standard steering block and axle with the optional #8441 steering block and #8443 axle. The #8443 axle requires #6902 bearings.



STANDARD



OPTIONAL IN-LINE

SAVE THIS BOOKLET!

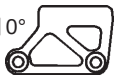
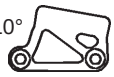
More than an instruction manual, its also a handy pictorial supplement to Team Associated's RC10L catalog.

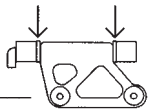
Refer to this manual for part numbers and description when ordering parts or explaining problems for customer service calls.

SETUP SHEET
FOR THE RC10L3 Touring KIT
TEAM ASSOCIATED

DATE: _____
DRIVER: _____
TRACK LOCATION: _____
EVENT: _____

FRONT SUSPENSION

UPPER ARM MOUNT: ☐ 0°  ☐ 10° 

CASTER SHIM POSITION:
☐ rear ☐ centered ☐ front ☐ other _____ 

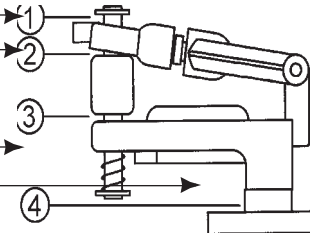
STEERING BLOCK: ☐ inline  ☐ trailing 

CAMBER, left _____ right _____
TOE-IN: _____° TOE-OUT: _____°

FRONT SPRINGS

SPRINGS: ☐ .018 ☐ .020 ☐ .022 ☐ .024 ☐ other _____
KINGPIN: ☐ STD ☐ other _____

1) shim qty, thickness: _____
2) shim qty, thickness: _____
3) shim qty, thickness: _____
4) front ride height spacers: _____



REAR SUSPENSION

AXLE HEIGHT ADJUSTER:
☐ 4-up ☐ 1-up ☐ 2-up ☐ #3 ☐ 2-down ☐ 1-down ☐ 4-down

T-BAR THICKNESS: ☐ STD ☐ other _____

SHOCKS

CENTER SHOCK: ☐ STD VCS ☐ other _____
OIL: _____WT
SPRING: _____ PISTON: ☐ #1 ☐ #2 ☐ #3
PRELOAD SPACERS: _____
SIDE SHOCKS: ☐ STD VCS ☐ other _____
Left OIL: _____WT Right OIL: _____WT
Left SPRING: _____ Right SPRING: _____

WHEELS & TIRES

WHEELS & TIRES	FRONT	REAR
TIRE TYPE		
WHEELS		
TIRE DIA		
STAGGER		
CAR WIDTH		

TWEAK SETTINGS:
____ oz. ☐ ☐ ____ oz. (front)
____ oz. ☐ ☐ ____ oz. (rear)

SHADE IN AMOUNT OF TIRE TREATMENT

TIRE TREATMENT TYPE: _____
REAR AXLE: ☐ STD ☐ other _____

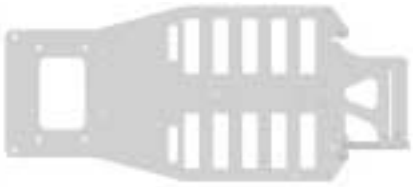
OTHER

CHASSIS: ☐ STD ☐ other _____
CAR BODY: _____ WING/SPOILER: _____

MOTOR: _____ PINION: _____ SPUR GEAR: _____

BATTERIES: _____

INDICATE BATTERY PACK PLACEMENT:



OVERALL WEIGHT: _____

GENERAL

TRACK CONDITIONS:
☐ carpet ☐ asphalt ☐ concrete
track length: _____
☐ high traction ☐ med. traction ☐ low traction
☐ artificial (describe): _____
☐ other: _____

_____
_____
_____

RACE COMMENTS/FINISH:

_____
_____
_____

CAR COMMENTS/HANDLING:

_____
_____
_____
_____