

NEW! with
STEALTH transmission
and new shocks

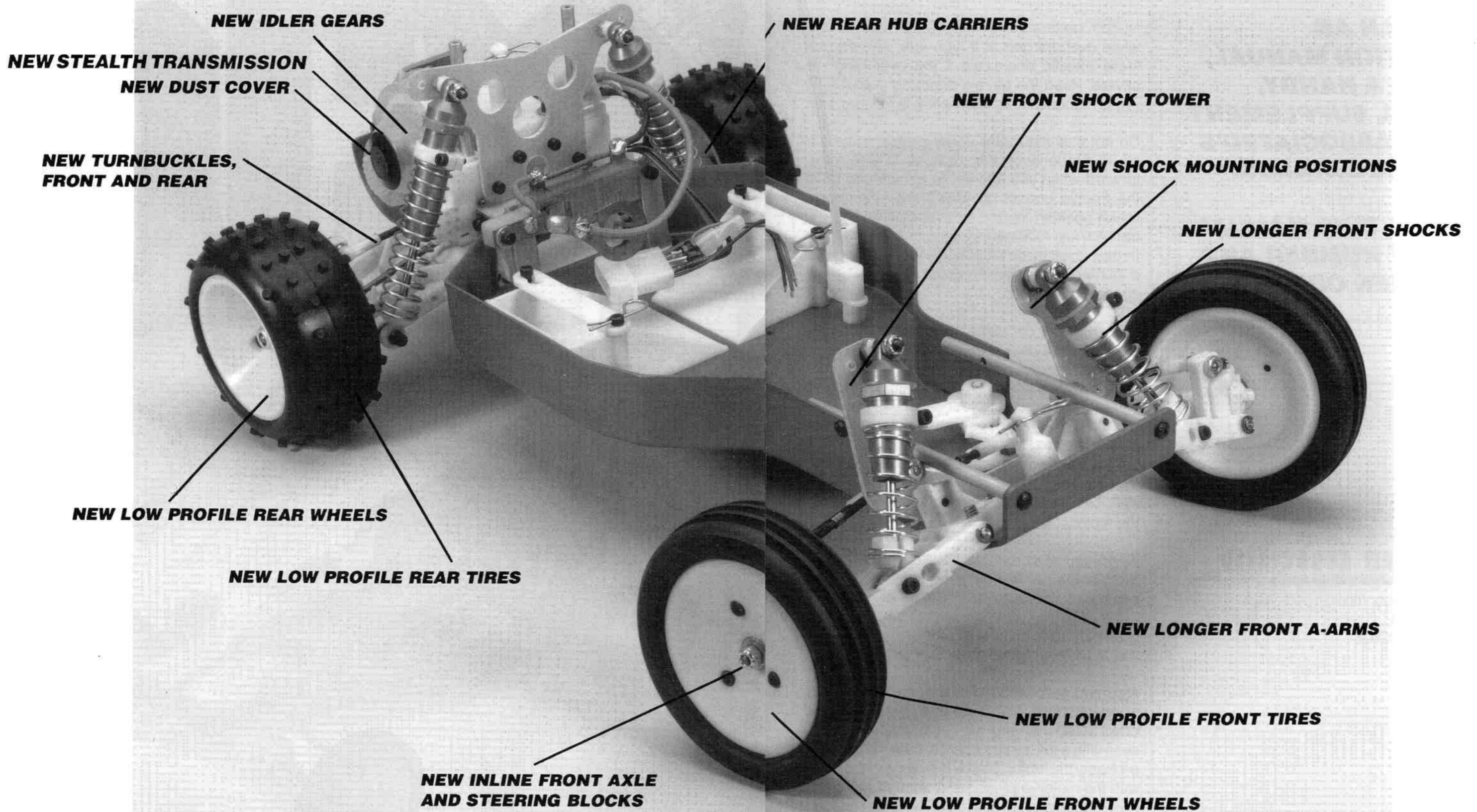
CHAMPIONSHIP EDITION

RC10



INSTRUCTION MANUAL

The New RC10's Latest Technology



Advanced, Competition Version of the RC10

SAVE THIS BOOKLET!

**MORE THAN AN
INSTRUCTION MANUAL,
IT'S ALSO A HANDY,
PICTORIAL SUPPLEMENT
TO TEAM ASSOCIATED'S
1:10 SCALE CATALOG.**

**REFER TO THIS MANUAL
FOR PART NUMBER AND
NAME WHEN ORDERING.**



Associated Electrics, Inc.
3585 Cadillac Ave.
Costa Mesa, Ca 92626

CAUTION

Ni-cad batteries are susceptible to damage when overcharged at a high rate, and can release caustic chemicals if the overcharge is severe. Read the battery charging instructions in this manual before attempting to run your car.

Do not stall the motor under power. If the car stops suddenly on the track, or fails to move forward when you attempt to accelerate, push the throttle control on your transmitter to the brake position immediately and attend to the car. A small rock can stall the gears, and if the throttle is left in the on position the result can be a burned out motor or resistor (or electronic speed control unit).

If you run your car to the point where more than one cell in the pack is completely discharged, it is possible to lose radio control of the car before the drive motor stops completely. For this reason you should not operate your car in an area where it could be harmed or cause harm, such as near a busy roadway or a pool of water. Usually radio control will be regained as soon as you pick up the car and the motor is allowed to free-run. If you still don't have control, then you should unplug the motor.

When you stop running your car, turn off the radio at the car first (with the resistor in the off position) before turning off the transmitter.

Be sure that the resistor is in the off position while you are charging the battery.

A burned-out or shorted motor can make the car appear to have radio problems. If the car slows down suddenly and the radio acts erratically even with a full battery charge, then the cause is probably the motor. Check the range of the radio with the motor unplugged. A shorted motor will draw extremely high current even under no-load conditions.

FIRST, A WORD

Our original RC10 car has won more IFMAR World Championships and ROAR Nationals combined than all the other 2WD off-road winning cars put together. It is by far the most popular 2WD off-road RACE car in the world. The READERS of RC CAR ACTION magazine voted the RC10 as CAR OF THE YEAR by a 6 to 1 margin over the 2nd place car! The racers know which car is best.

As great as the original RC10 is, we wanted something better, and we know you did too, so we've brought out the new RC10. At first glance it looks like a regular RC10. But it's much more than that. It has the NEW Stealth Transmission, NEW longer front A-arms with two shock mounting positions. NEW inline front axle and steering blocks which greatly improve the steering. NEW front shock towers which give more ideal shock mounting positions. NEW rear hub carriers with more toe-in for greater stability. NEW turnbuckles for easier adjustments. NEW low profile front and rear wheels and tires, giving more steering in the front end and more traction in the rear end. Which all adds up to give you the best 2WD car in the world.

You'll find the photos in the instructions so easy to follow that you may be tempted to put the car together from the photos alone. However, although you have the best car kit, if you want the best COMPLETED model race car, then you will want to put it together correctly--by following these instructions. All that's required is to read the few lines of text near each photo.

DON'T OPEN ANY OF THE PARTS BAGS UNTIL THESE INSTRUCTIONS TELL YOU, otherwise you'll get the parts mixed up and then you will have trouble assembling your car.

While you are building the car you will sometimes be working with several parts bags at the same time. These bags are referred to by number in the instructions, and you will find a number label on each of the main parts bags. There are also more bags inside the main parts bags; these are not numbered and belong to the bag they came out of. See pages 54-56 for the list of parts and bags in your kit.

Bags and parts will start multiplying like rabbits as you build, so try to keep the bags separate. One good way is to use large paper plates (picnic plates with partitions are best). Mark the plates with bag numbers and dump the parts into them. When the parts are used up, relabel the plate for another bag. It's much easier to find the part you need if it's spread out where you can see it.

TOOLS. The kit contains the shock wrench and all the Allen wrenches you'll need, but you will have to supply the following:

- #2 Phillips screwdriver (Associated #SP76)
- A needle-nose pliers
- A hobby knife, such as an X-acto with a pointed blade.
- A soldering iron (40 to 50 watts), and a small amount of ROSIN (not acid) core 60/40 solder.

The kit can be assembled even easier if you have the following:

- 3/32" straight Allen wrench with handle. Will make installing the Allen screws much faster and easier (Associated #SP73)
- A ruler with decimal inches or metric measure
- A 3/16" nut driver will make installing the ball ends easier (Associated #SP86)
- A 1/4" nut driver will speed up installing the 1/4" nuts (#SP85)
- Socket or open-end wrench
- Small screwdriver
- Thread-locking compound
- ZAP or Hot Stuff (cyanoacrylate adhesive)
- Vise
- File
- Drill with #43 (2.3MM) bit
- WARNING!** Do not use a power screwdriver. They spin too fast, causing screws to heat up when being driven into plastic and will strip out.

Take your time assembling the car. It's not a race to see how fast you put the car together; it's how well you put it together that determines how fast you'll be able to race.

A box is provided at each step so you can check it off after each step is completed. If you stop during assembly time, you'll be able to come back where you left off.

To help you identify certain hardware, an outline drawing occasionally will accompany the step. Just place your part atop the actual-size drawing to be sure it's the one referred to.

One final note for you experienced, new builders and racers: **please build the car our way first!!** The RC10 is a remarkably fast car right out of the box. There's a reason for everything on the car, and very few compromises were made in its design. Work with the car first and see what it can do before you experiment or make changes.

Clear off your workbench, line up some paper plates, grab a sandwich, and let's begin...

□ **Fig. 1** We'll start with Fig. 1. Only take the parts out of the bag that we tell you, and no others. Look for bag #6-4 and take the #6310 gold anodized nose piece out of the bag, as shown in the photo and the #6931 8/32 x 1/4" Phillips flat head screw, as shown. Now take the two #6281 8/32 x 7/8" Phillips screws out of bag #6-2. DO NOT take anything else out of the bag.

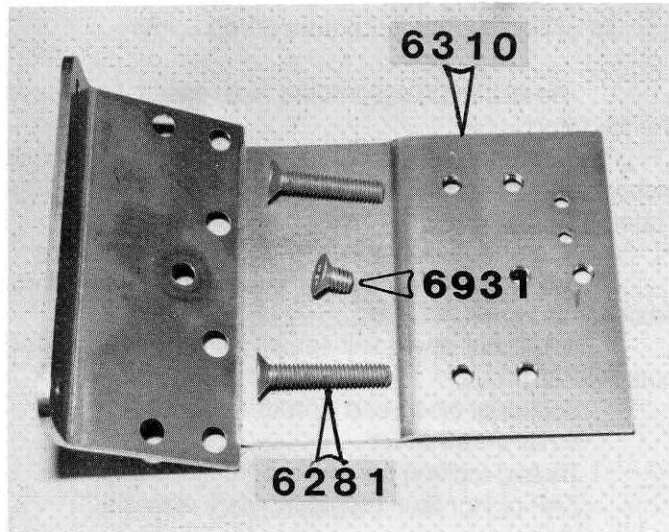


Fig. 1

□ **Fig. 2** Take the #6300 gold aluminum chassis and install the nose piece as shown, using the two 8/32 x 7/8" FHMS and the 8/32 x 1/4" FHMS. **NOTE:** All of the gold screws are aluminum and can be damaged by a worn screwdriver.

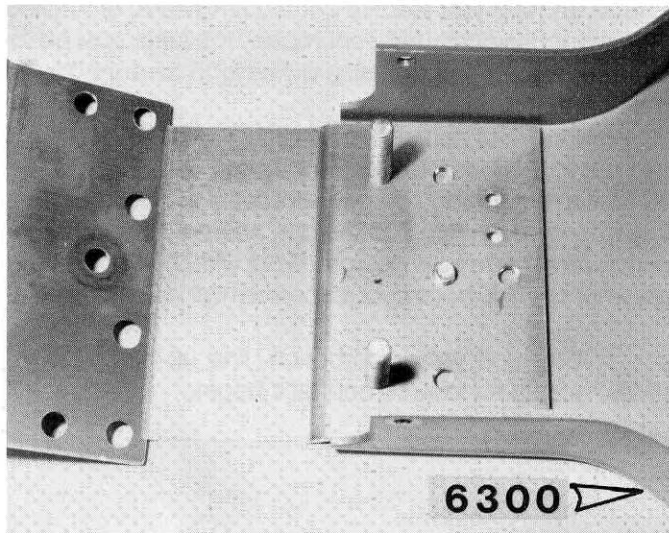


Fig. 2

□ **Fig. 3** From bag #6-5, take one #6330 body mount, two #3323 (#8) aluminum washers and one short #6280 8/32 x 1/2" FHMS screw. (The long screw is used to extend the body mounts for other body styles.)

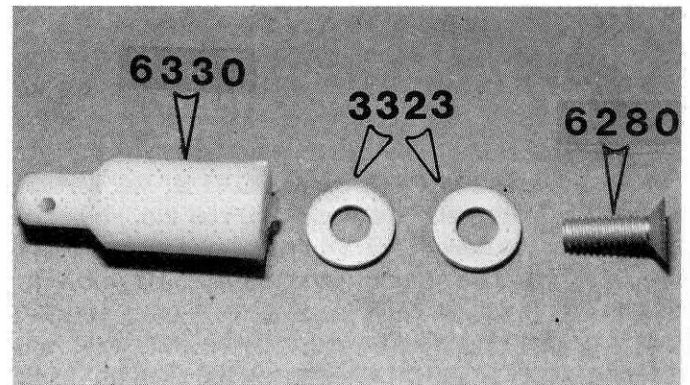
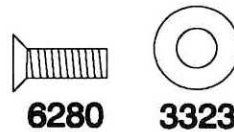


Fig. 3



□ **Fig. 4** Install the #6330 body mount as shown with body clip hole going left to right.

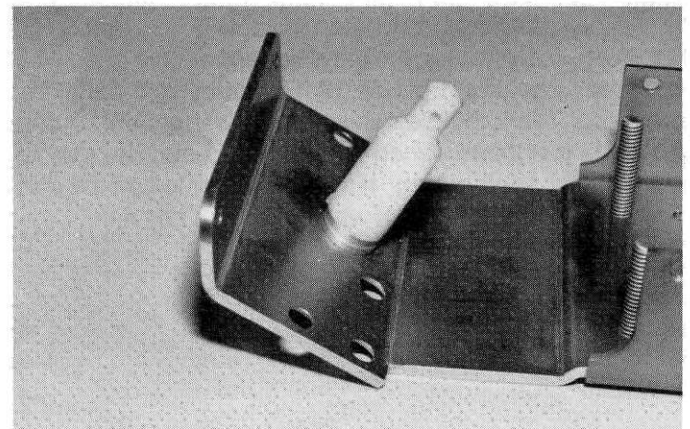


Fig. 4

□ **Fig. 5** From bag #6-1, take out the left hand front suspension mount #6207. This mount will have the letter L on the bottom. The left or right hand side of the car is determined by the driver as he sits in the car. His left hand will be the left side of the car and his right hand the right side.

NOTE: The left and right front suspension mounts are attached together by a thin "runner" that must be removed with scissors or a knife.

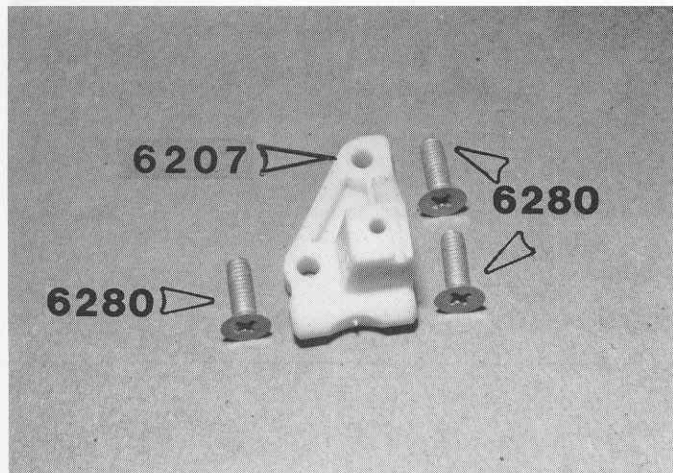


Fig. 5



□ **Fig. 6** Install the L.H. suspension mount, as shown, with the three #6280 8/32 x 1/2" FHMS Phillips screws. Now, install the right hand mount with the same type of screws.

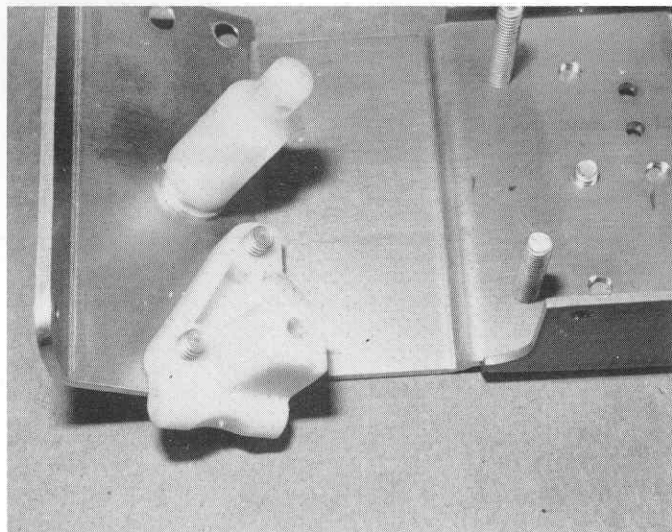


Fig. 6

□ **Fig. 7** From bag 6-1, take out one of the #6206 front A-arms, the #6226 inner pin and the package of "E" clips, as shown.

NOTE: The package of "E" clips is in the form of a "stack" or short roll with white paper glued around the outside (see Fig. 7a). There is a roll of "E" clips in three different bags. You will have more than enough to complete your car. To do the L.H. A-Arm lay it on the table as shown. Slip the pin into each end of the front A-arm #6206 to check the pin fit. The A-arm should be able to swing freely on the pin. Most racers keep a .126" and a .128" reamer in their toolbox to free up A-arms and to clean them after racing. We want the pin to fit tight in the mount #6207.

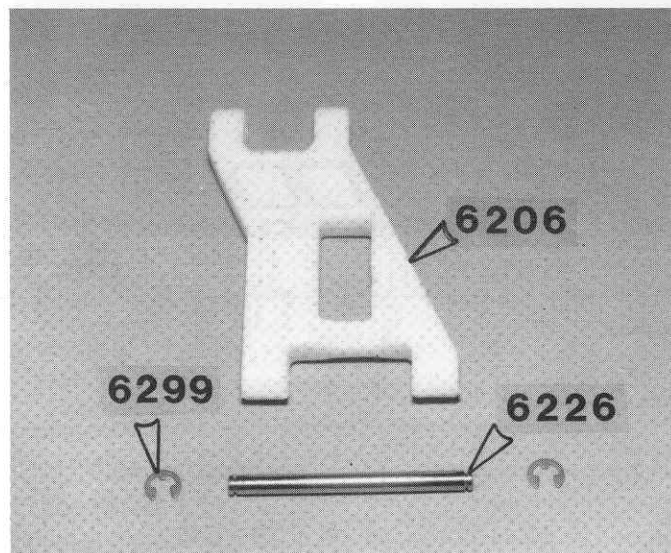


Fig. 7

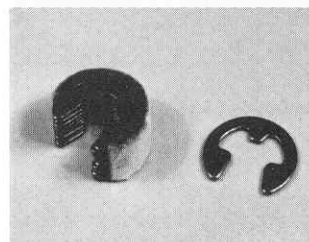
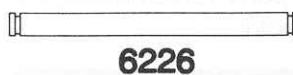


Fig. 7a

□ **Fig. 8** Line up the A-arm with the mount and push the pin through. Using a small screwdriver, install an "E" clip on each end of the pin. Now, install the R.H. side.

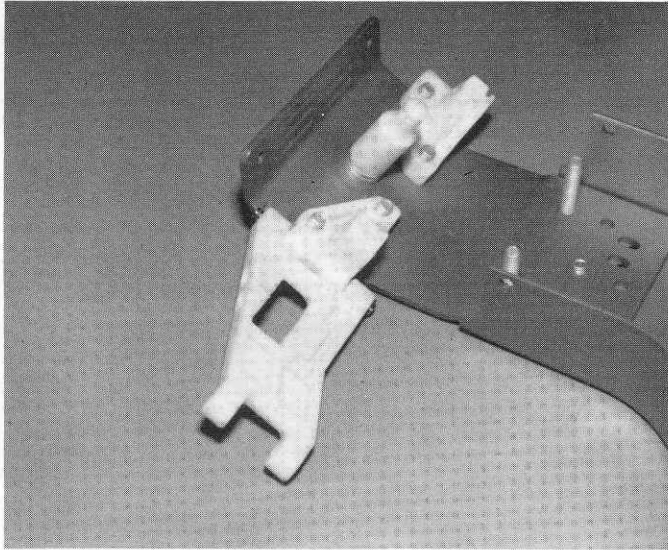


Fig. 8

□ **Fig. 9** From bag #6-14 screw one of the #6273 long ball ends into the #6213 left hand front block carrier #6213 (from bag #6-1). Screw on the #6295 4/40 plain nut and tighten. Assemble the right hand parts, remembering the parts will be the reverse of the photo..

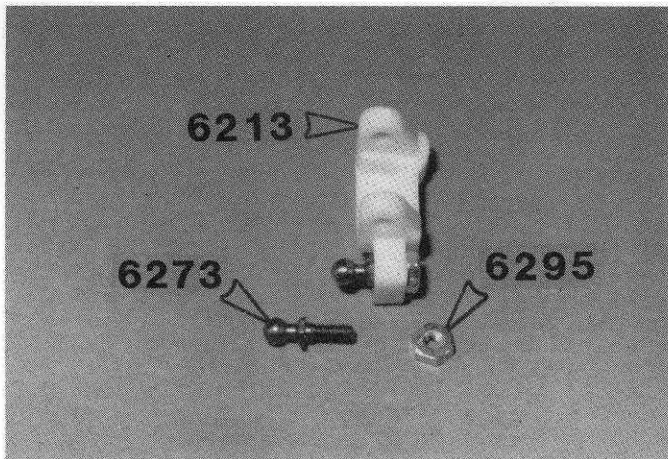
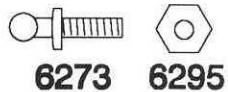


Fig. 9



□ **Fig. 10** Screw the short ball end #6270 (from bag #6-14) into the #6217 steering block (bag #6-1) and secure it with the #6295 4/40 plain nut as shown. Assemble the right hand side, which will be inserted into the opposite side shown in Fig. 10.

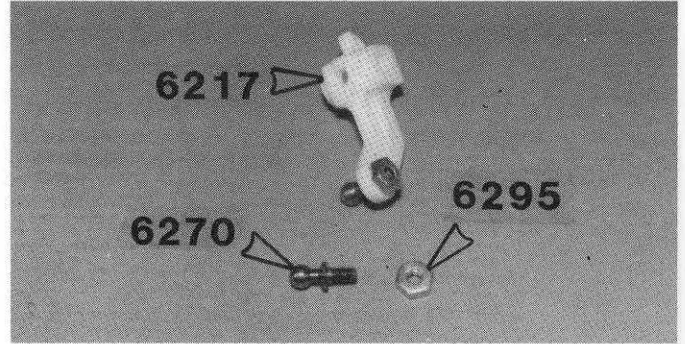
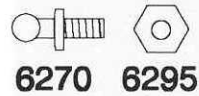


Fig. 10



□ **Fig. 11** From bag #6-1 push the front axle #6218 into the steering block #6217 as shown so the hole in the axle lines up with the hole in the steering block. It may push together with your fingers. If not, LIGHTLY tap it into the hole. Assemble the right hand side in the same way.

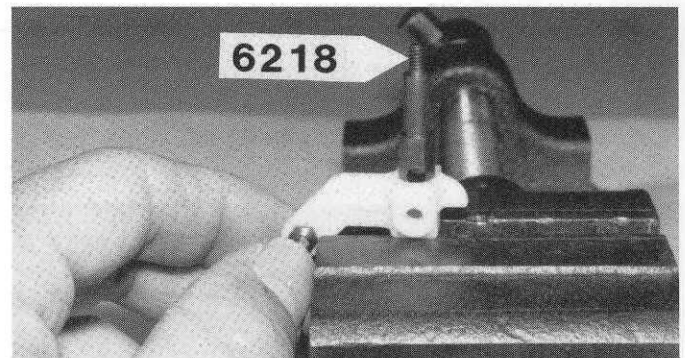


Fig. 11

□ **Fig. 11a** You'll notice that the hex part of the axle does not go all the way into the steering block. That's O.K. Just make sure the hole in the axle is lined up with the hole in the steering block.

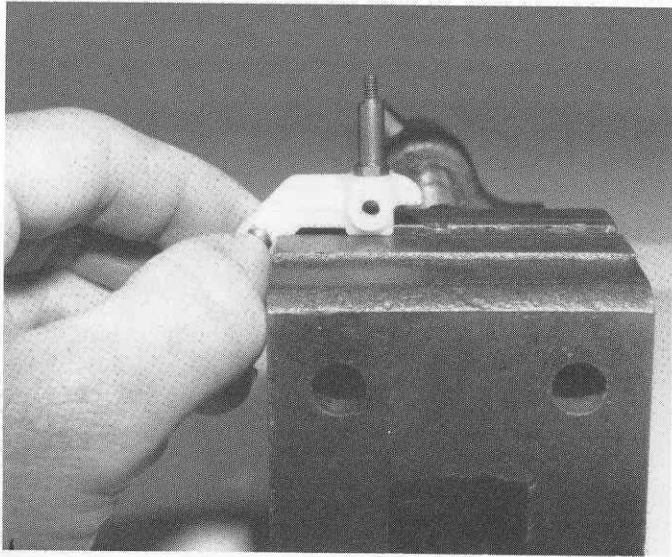
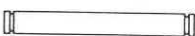


Fig. 11a

□ **Fig. 12 & 12a** Line up the steering block in the block carrier, as shown, and push the #6223 king pin (from bag #6-1) through. Now, install "E" clips on the top and bottom ends of the pin. If you run out of "E" clips, there are extras in the shock bags. Install the R.H. steering block.

The pin will be loose in the block carrier but will be snug in the steering block, so you might have to lightly tap it in.



6223

Fig. 12

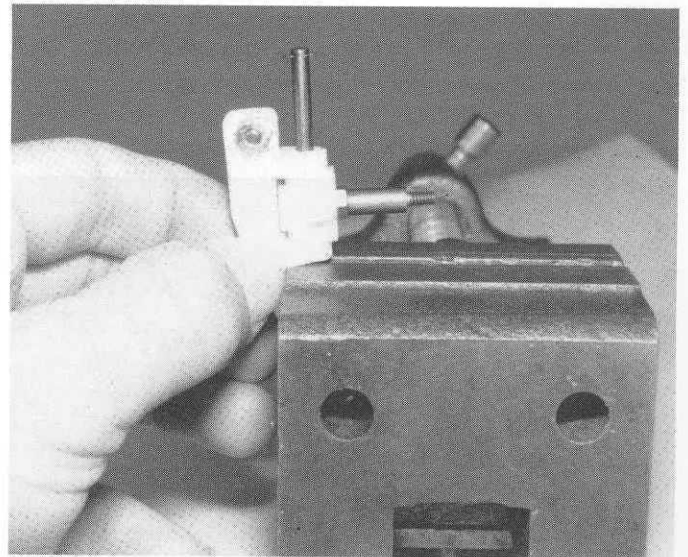
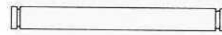
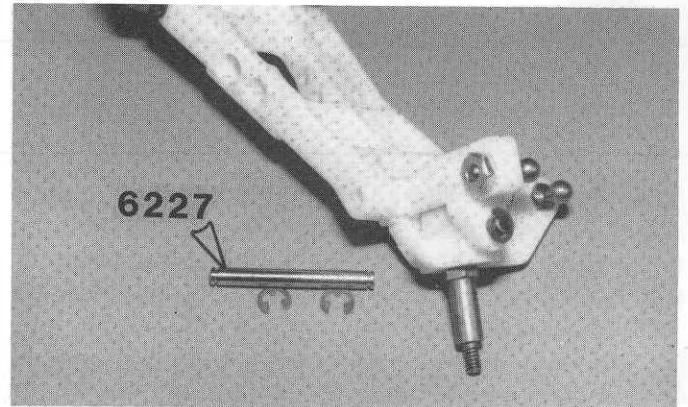


Fig. 12a

□ **Fig. 13 & 13a** Line up the holes in the block carrier with the holes in the A-arm and push the #6227 outer hinge pin (from bag #6-1) into the arm. Install the "E" clips. Do the R.H. side.



6227

Fig. 13

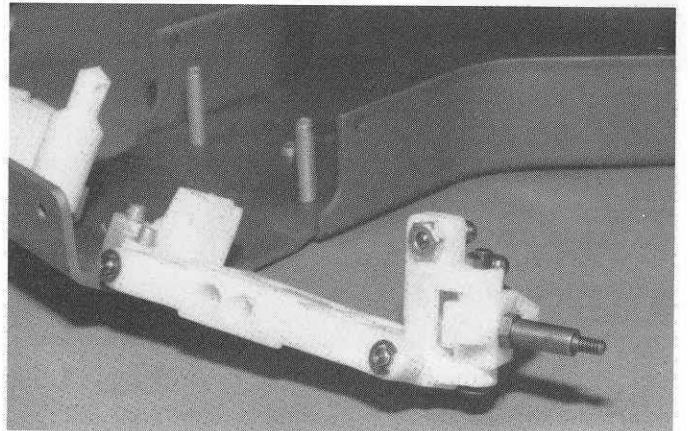


Fig. 13a

□ **Fig. 14** Take the #6231 front shock strut out of the same bag. In bag #6-10 take out two #6927 4/40x 3/4" SHCS screws and install them in the shock strut in the locations shown. **NOTE:** Your shock strut may have six holes, if so, use center hole on top row.

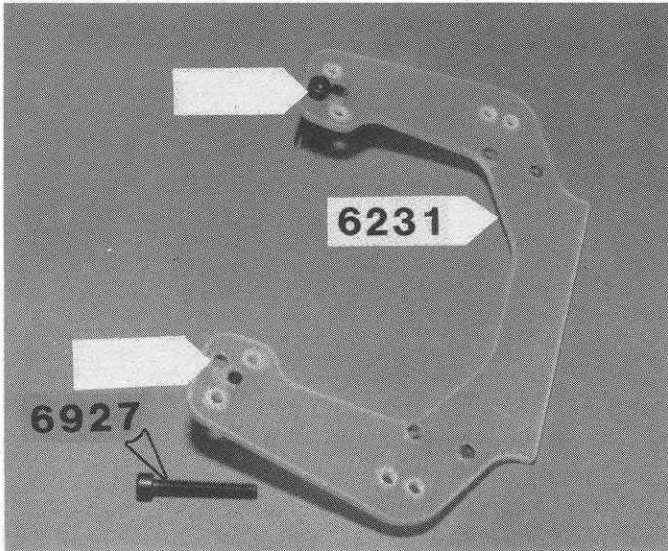


Fig. 14



□ **Fig. 15** From bag 6-1 take the two #6925 4/40 x 1/2" SHCS and mount the shock strut onto the two front suspension mounts. If the holes don't line up, loosen the aluminum screws holding the suspension mounts to the chassis, align the mounting holes and retighten all the screws.

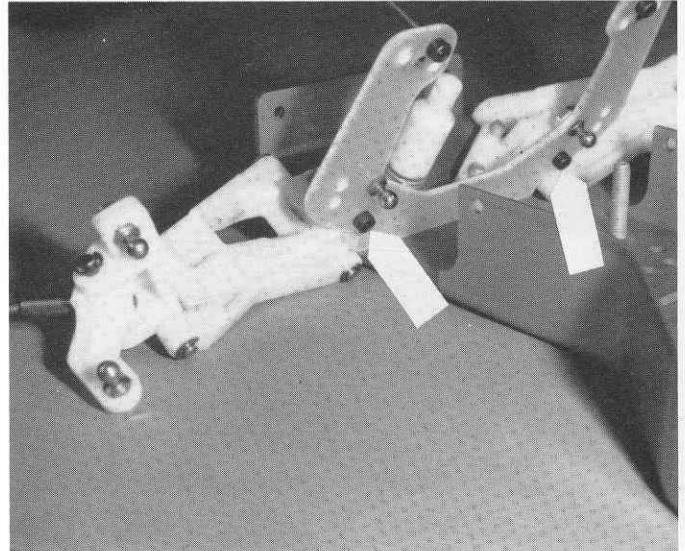
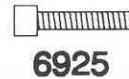


Fig. 15



□ **Fig. 14a** Again from bag #6-14, take two short #6270 ball ends and install them in the shock strut in the locations shown. Then install the two #6295 4/40 plain nuts on the other side. **NOTE:** The balls will be on the same side as the screw heads.

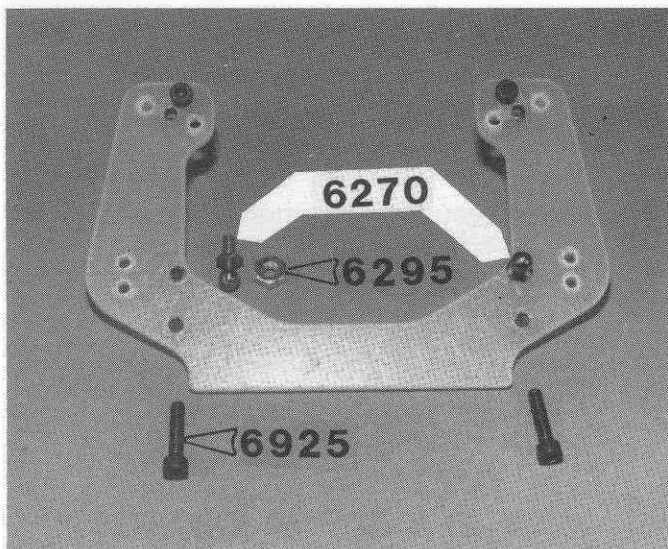
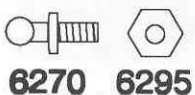


Fig. 14a



□ **Fig. 16** From bag #6-1 take out the two #6262 threaded turnbuckles, and from bag #6-14 take out the #6274 plastic ball cups, as shown. Twist the ball cups and take four of them off. **NOTE:** #6259 is a complete set of replacement turnbuckles and plastic cups for the car.

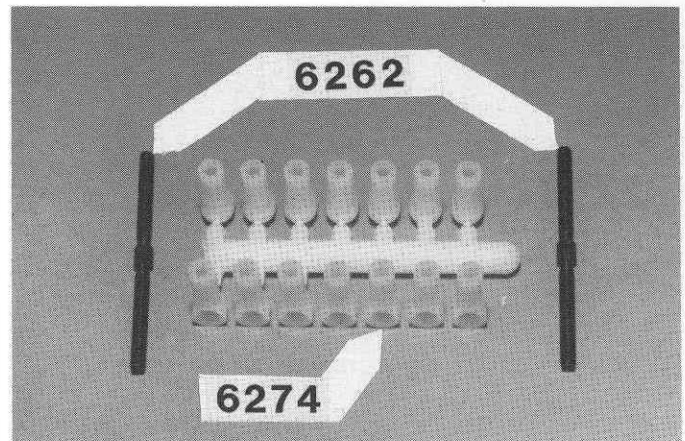


Fig. 16



Fig. 17 Screw the plastic ball cups onto the rods, as shown. The rods have a LH thread on one end and a RH thread on the other end, so they will screw on in different directions. Screw them on evenly to the dimension shown, which is measured from the center of the ball cup. Ball sockets on both ends face the same direction.

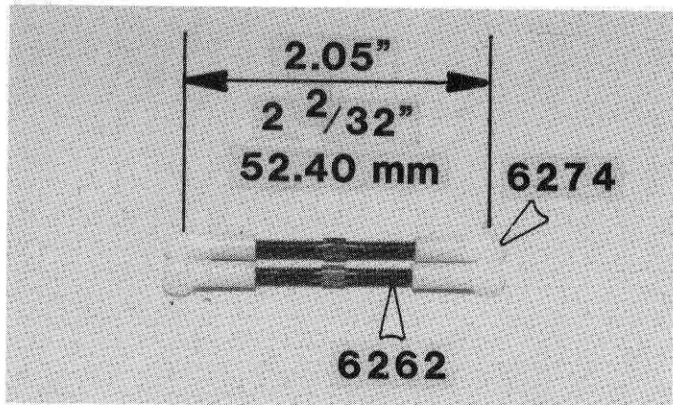


Fig. 17

Fig. 18a The rod ends can be removed quite easily from the balls by holding the rod end with a pliers, as shown, and twisting the rod end off the ball, as shown.

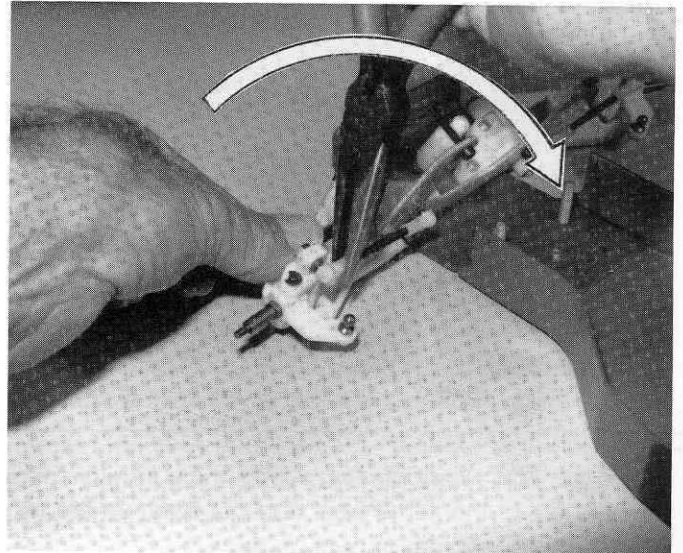


Fig. 18a

Fig. 18 Carefully snap the rods on the metal balls, as shown. You'll probably have to use pliers. Do the R.H. side.

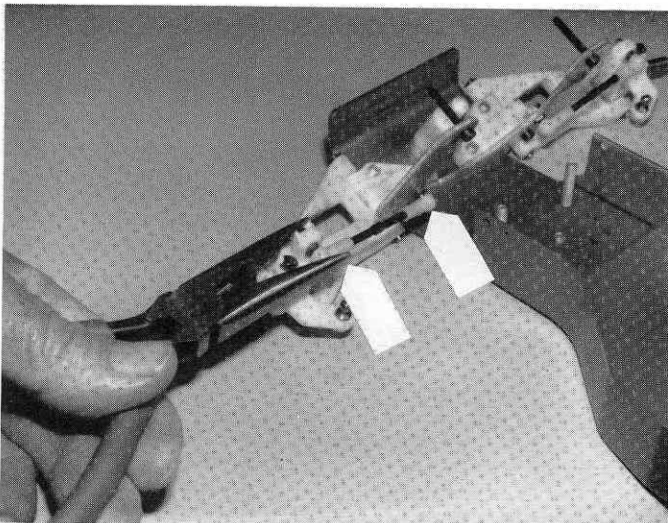


Fig. 18

Fig. 19 In bag #6-2, take the #6255 servo saver parts out, and install four short #6270 ball ends from bag 6-14, as shown. No nuts are needed on these.

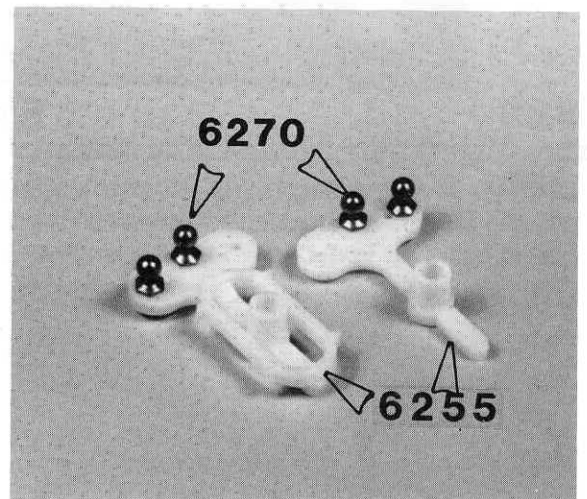


Fig. 19



6270

Fig. 20 Take the servo saver arm from bag #6-2

Fig. 21 And install it to the servo saver, as shown.

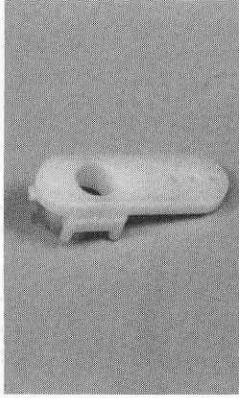


Fig. 20

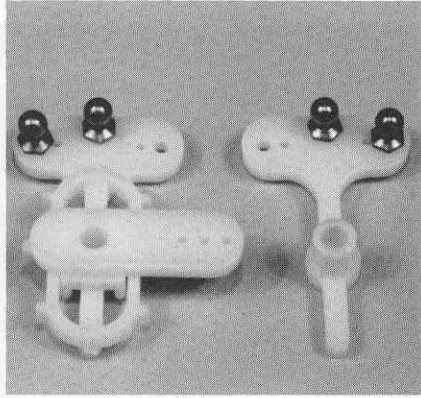
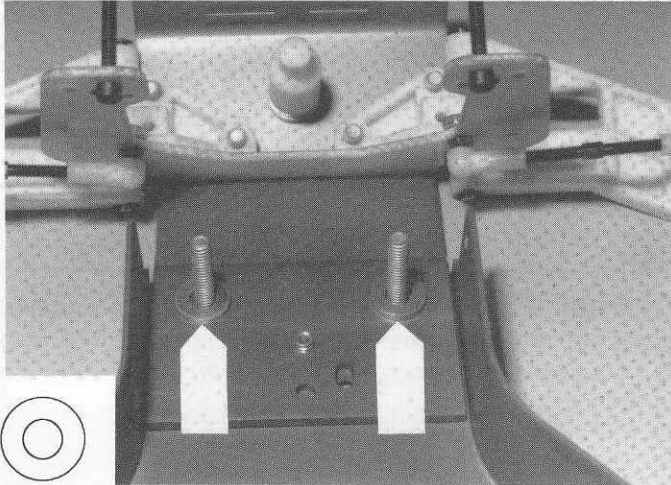


Fig. 21

Fig. 22 Take the two #3323 thick #8 aluminum washers out of the same bag, and put them on the two screws, as shown.



3323

Fig. 22

Fig. 23 From bag #6-2 take the two long #6263 and one short #6260 turnbuckles and screw on the six #6274 plastic ball cups from bag 6-14 to the lengths shown.

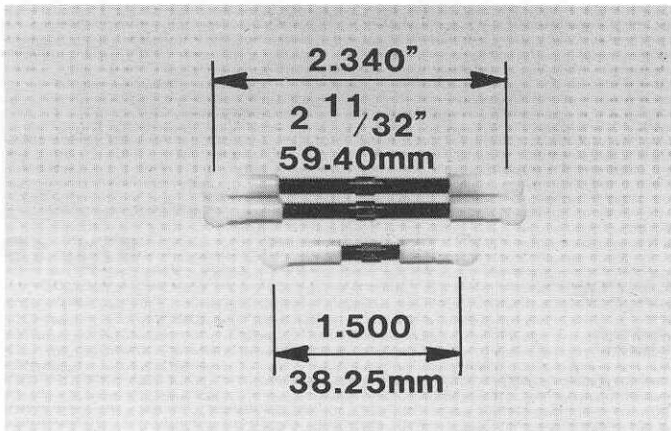


Fig. 23

Fig. 24 Take the short turnbuckle and pop it on the servo saver with a pliers, as shown.

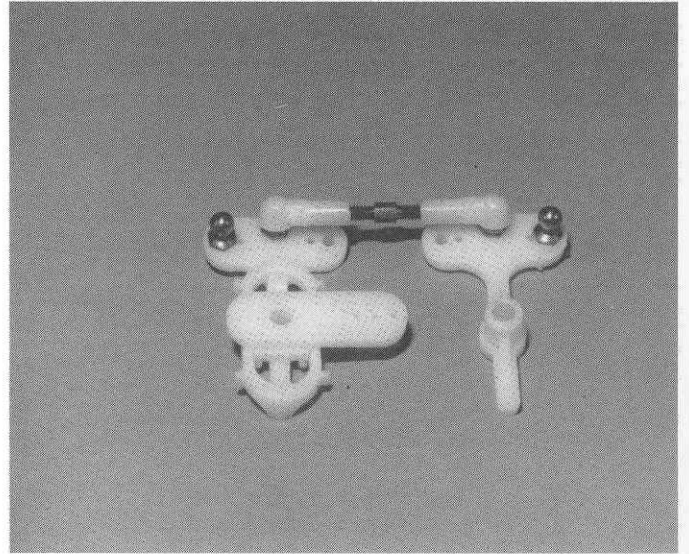


Fig. 24

Fig. 25 Place the servo saver onto the 2 screws, as shown. Take the two #6296 nylon nuts from bag #6-2 and screw them down until the servo saver starts to tighten, then back the nuts off about 1/2 turn until the servo saver arms pivot freely.

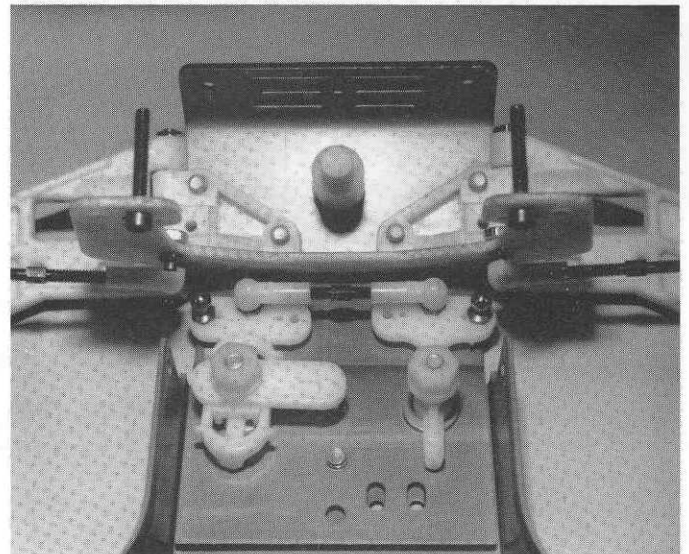


Fig. 25

□ **Fig. 26** Snap the L.H. and R.H. tie rods on, as shown.

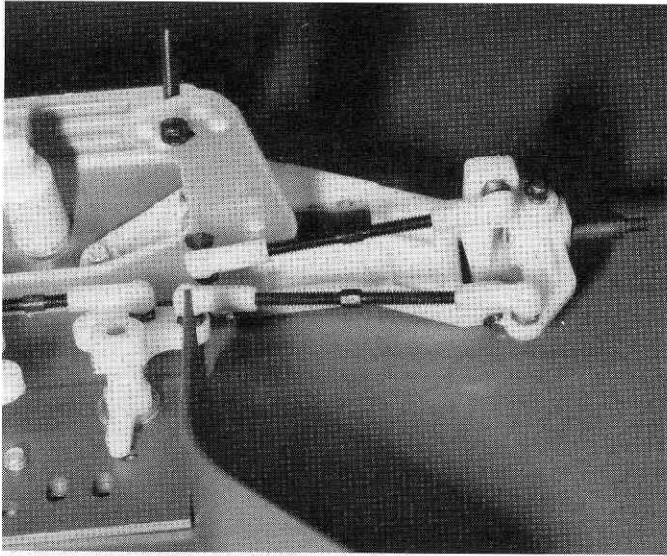


Fig. 26

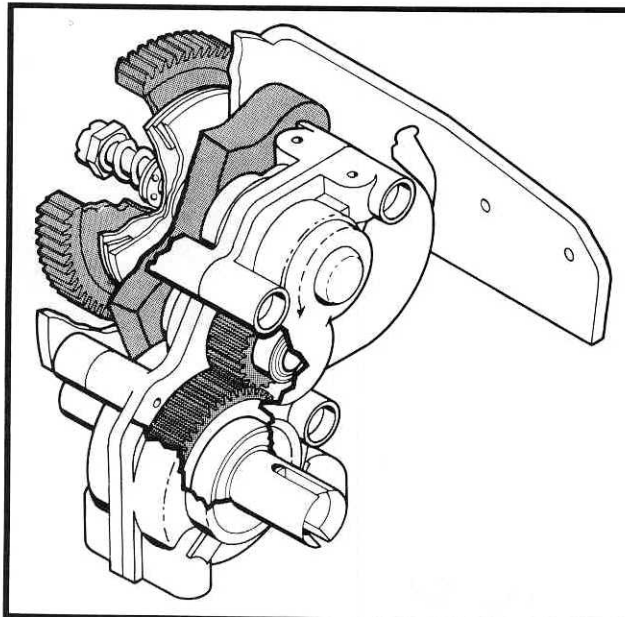
TEAM ASSOCIATED
STEALTH
A T C TRANSMISSION

Transmission
for the **RC10**

INSTRUCTIONS

Featuring:

- Quick-change spur gear
- Case-to-motor plate dirt-proof seal
- Lightweight design
- Long-life clutch friction plate
- Large area/high torque clutch plates
- Low inertia drive train



- Precision-molded 48 pitch gears with extra low 2.25 final drive ratio
- Reversible motor mounting
- Gold anodized mounting plate
- Tungsten carbide differential balls
- Bronze bushings
- High torque ball differential

STEALTH TRANSMISSION

We feel this transmission is the best in the world. It has enabled Team Associated to finish 1st, 2nd and 3rd at the World Championships in Australia and 1st, 2nd and 3rd at the ROAR Nationals in Northern California with our RC10 car. With this transmission your RC10 will be much easier to drive, enabling you to cut your lap times by a considerable amount. But it all depends, of course, on how well you assemble and maintain your transmission. So take your time and do it to the best of your ability.

Figs. 27 & 27a Open the Stealth transmission bag. Then start with Bag A, the differential. Take out the #6580 diff gear and the bag with the 12 large #6581 3/32" carbide diff balls. These carbide diff balls are the best there is. They will outlast the diff washers at least 10 times. NEVER replace these balls with any other balls except our #6581 carbide diff balls.

WARNING! Due to precision packaging, when replacing lost or worn 3/32" diff balls, you must replace all 3/32" balls with new balls from same package.

Now take out the #6591 Stealth white silicone diff lube. Another word of caution. DO NOT substitute any other type of diff lube on the balls. It took us countless hours of testing to find the correct silicone diff lube to make the diff work correctly. Do yourself a favor: use what comes in this kit!

Trim any excess flash off the inside of the gear.

Fill the holes in the gear with the silicone diff lube and then push the 12 carbide balls into the holes. Wipe the excess lube back into the ball holes with your finger.

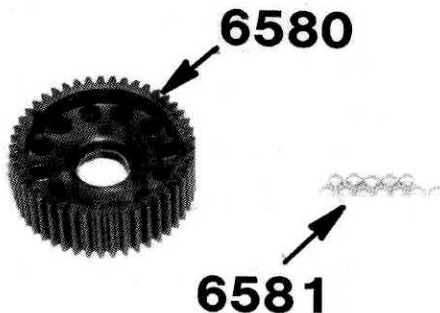


Fig. 27



Fig. 27a

Fig. 28 Your gear.

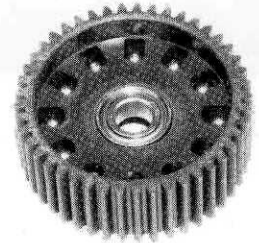


Fig. 28

Fig. 29 Clean all the silicone grease off your hands and push one of the #6597 5/32 x 5/16 bushings from bag B into the center of the #6580 gear. **CAUTION:** there are three bushings that have the same outside diameter, but different hole sizes. Make sure you use the #6597 bushing that fits onto the left hand hub, as shown.

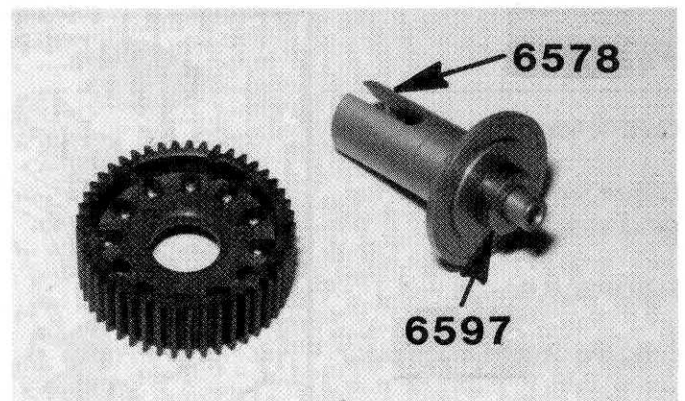


Fig. 29



Fig. 30 Your completed gear.

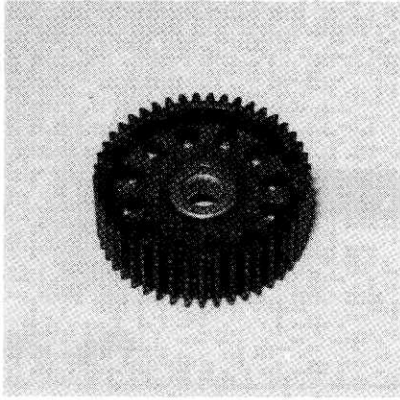


Fig. 30

Fig. 33 Take an Exacto knife and trim off any of the plastic T-nut that extends outside of the slot, as shown.

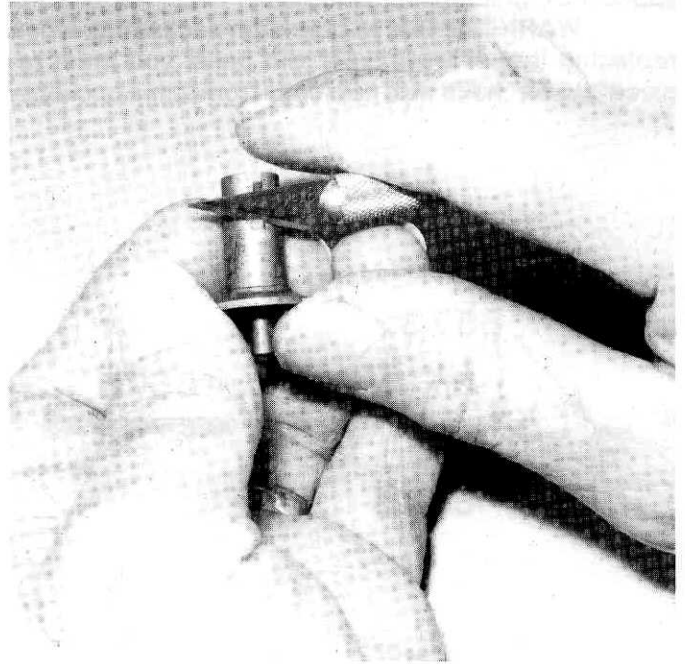


Fig. 33

Figs. 31 & 32 From bag A take out the #6578 left hand diff outdrive hub and **make sure it's clean and free from all burrs**. Push the #6582 diff thrust spring into the hub and then align the plastic T-nut with the slots in the hub and push the T-nut all the way in against the spring.

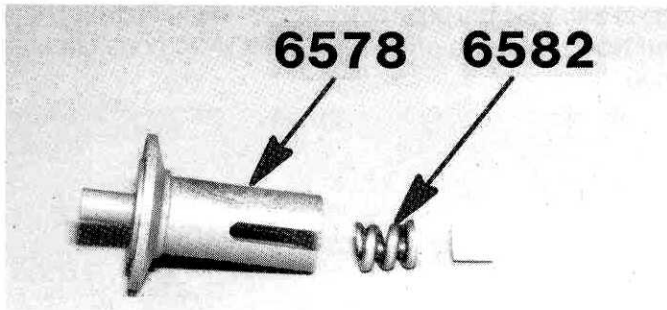


Fig. 31

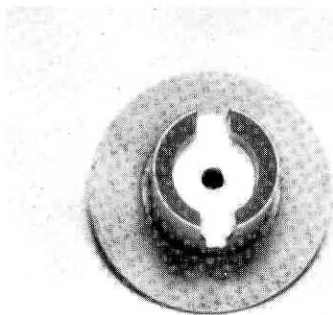


Fig. 32

Fig. 34 There should now be approximately a $3/32$ " or $.100$ " gap where shown.

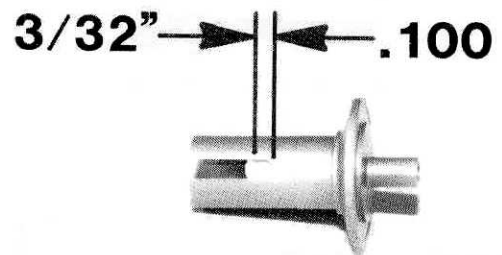


Fig. 34