

INSTRUCTION MANUAL FOR THE RC10B3 BUGGY KITS #9003, 9013, 9032 & 9043

ASSOCIATED'S RC10B3--6 TIMES IFMAR WORLD CHAMPION!



Masami Hirosaka's RC10B3 won the `99 IFMAR World Championships!

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All kit versions include:

2.40:1 transmission for effortless power handling.Molded composite chassis for better rigidity and Lexan B3 racing body.Quadra-symmetric suspension for greater stability and handling.Optimized front end geometry improves steerging and increases rigidity.Adjustable battery placement for fine tuning of traction or steering.2.2" one-piece front and rear wheels.

Pro-Line 4 Rib M2 front tires and Pro-Line "Holeshot" M2 rear tires.

FACTORY TEAM

Shocks: Hard anodized, PTFEcoated gray. Rear Axles: MIP CVD's. Also includes: Factory Team parts, ball bearings throughout.

TEAM KIT

Shocks: Hard anodized, PTFEcoated gray. Rear Axles: MIP CVD's. Also includes: Ball bearings throughout.



Shocks: Gold shocks. Rear Axles: Associated dogbones & stub axles.

Also includes: Mechanical speed control and motor. Bushings throughout.



Shocks: Gold shocks. Rear Axles: Associated dogbones & stub axles. Also includes: Bushings

throughout.

REQUIRED EQUIPMENT TO RUN YOUR KIT

for the Factory Team kit #9043

R/C two channel surface frequency radio system with one servo. Battery pack (6 cell). Battery charger (we recommend a peak detection charger). Electronic speed control. R/C electric motor. Pinion gear, 48 ptich. Teeth to be determined by type and wind of motor.

YOU WILL NEED THESE TOOLS TO ASSEMBLE YOUR KIT

- 1 Phillips screwdriver #2.
- 2 1/8" flat head screwdriver.
- 3 5/16" driver or glow plug wrench.
- Needlenose pliers.
- **5** Super glue (cyanoacrylic glue).
- Hobby knife *WARNING!* This knife cuts plastic and fingers with equal ease, so be careful.
- Precision ruler.

for the B3 Team kit #9032

R/C two channel surface frequency radio system with one servo. Battery pack (6 cell). Battery charger (we recommend a peak detection charger). Electronic speed control. R/C electric motor. Pinion gear, 48 ptich. Teeth to be determined by type and wind of motor.



R/C two channel surface frequency radio system with two servos. Battery pack (6 cell). Battery charger (we recommend a peak detection charger).

for the B3 Basic+ kit #9003

R/C two channel surface frequency radio system with one servo. Battery pack (6 cell). Battery charger (we recommend a peak detection charger). Electronic speed control. Pinion gear, 48 ptich. Teeth to be determined by type and wind of motor.

TOOLS SUPPLIED Allen wrenches, .050",

1/16", 3/32", 5/64".



Molded tools (#6956):



HELPFUL TOOLS (NOT REQUIRED)

 Allen drivers (straight Allen wrenches with hex shaped handles) such as the following made by Associated:

#6957 .050" Allen wrench #6958 1/16" Allen wrench

#6959 5/64" Allen wrench #6960 3/32" Allen wrench

#6961 2.5mm Allen wrench

• Hand drill with 1/8" & 1/4" bits

- Vernier calipers
- Hobby scissors
- Liquid dish soap
- 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

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 the molded parts or strip the threads during installation.

REACHING US

CUSTOMER SUPPORT (714) 850-9342 Fax (714) 850-1744 http://www.rc10.com/help http://www.rc10.com/kits



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READ THIS BEFORE BUILDING

READ THE MANUAL!

This manual is for four different B3 kits and will help you assemble and set up each one. Read the manual before starting your kit and before contacting us for help. *"Hello, Associated, I need some help." "Did you read the manual?"*

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.

SUPPLEMENTAL SHEETS

We are constantly updating 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.

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 steps you'll be using those parts for ("FOR STEPS 1-3").

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 An asterix (*) next to a part number indicates the part used in the Factory Team B3 kit. (You can use those numbers to upgrade your B3 kits to Factory Team specs.)

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 buggy, we are referring to the driver's point of view inside the car.





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





PROFILE

IFMAR 2WD World Champion Masami has a long string of wins for Associated 2WD and Yokomo 4WD cars. Masami drove the fastest car at the '97 World's with his RC10B3 buggy, and took top honors in the 4WD category.

At the '99 Worlds in Finland Mark Pavidis (left) TQ'd with his RC10B3 and Masami (right) was crowned as World Champion driving his B3.





The RC10B3 TQ'd and won the 1999 IFMAR World Championship



4 7673,

6933*

7673.

6933

6

over kickup



Ranch Pit Shop

The RC10B3 TQ'd as the fastest car in the World's on this track in Pomona, California, site of the 1997 IFMAR Off Road World Championships. The B3 was driven by Masami Hirosaka, multi-World Champion from Japan.

The B3 was later to come back to TQ and win at the very next '99 World's at Finland!







RIGHT OUTDRIVE HUB

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

ASSEMBLE THE HUBS

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

CHECK ALIGNMENT OF HUBS

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



ADJUST THE DIFFERENTIAL

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

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



3976, qty 2

3/8 x 5/8

6598, qty 2

3/8 x 5/8



step 7

INSIDE THE TRANNY

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

OUTSIDE THE TRANNY

- **5** Screw the halves together with one #6292 (6934*) bolt.
- 6 Insert the #6572 roll pin into the shaft hole with your needlenose pliers.
- **7** Push the three #6928 (6935*) bolts through, each with its own #7337 washer.

center pin about shaft





BASIC & SPORT KITS ONLY





TEAM & FACTORY TEAM KITS ONLY



9 Now install the axle assembly for the right side.

ALL KITS



step 2 LEFT SIDE

MOUNT THE REAR SHOCK TOWER

- Orient the tower outward as shown and mount to bulkhead with #6292 (6934*) screws.
- Pasten the tower to the transmission brace with the #6915 screws.
- Add two #7413 screws in the middle holes at top, then thread on #7260 nuts.









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TRIM SHOCK WASHERS & SPACERS

③ For best shock performance, trim each part from the parts tree so no part of the two molding runners remain. It is safer to remove a tiny amount of the part than to risk the chance of a burr remaining. Short blade scissors or a hobby knife will work fine, as shown at right. Run your finger over the edges to feel for burrs vou cannot see. Remove the ones you find. Burrs can keep the parts from snapping in correctly, and can cause the shock to leak or the shaft to jam.



step 2

SHOCK SEAL PARTS

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



after snap



wrong



FINAL INTERNAL SHOCK ASSEMBLY

- 1 Add #6469 O-ring over threads of shock body.
- For the #6460 (6418*) front shock shafts, install a #6299 Eclip on either side of a #6465 (#2) piston.
 For the #6459 (6417*) rear shock shafts, install a #6299 Eclip on either side of a #6465 (#1) piston.
- Place a couple drops of #5428 oil on threaded part of shaft and insert into shock body.
- Push the #7217 pivot ball and eyelet together, then screw the eyelets onto the end of the shock shaft. Hold shaft with rag and needlenose pliers next to threads.



step 4

FILLING THE SHOCKS

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

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

• Refill with oil to the top of the shock body.

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

• Install the #6428 shock cap and tighten. There should be no gap between the cap and the hex portion of the shock body when tight.

SETTING THE REBOUND

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



Then the shaft should push itself out approximately 1/4" to 3/8" (6.3mm - 9.5mm").

3 If the shocks do not push out this far, there is not enough oil in them. Add just a little oil and try steps 6-7 again.

If the shocks push out farther than the distance in step seven, or you cannot push the shaft in until the eyelet hits the body, there is too much oil. Loosen the cap a half turn (with the shaft extended) and pump out a small amount of oil by pushing the shaft in. Retighten the cap and try steps 6-7 again.



BAG F

REMOVE THESE PARTS FOR:

Step 5

6474, qty 4 spring collar silver

6494, qty 2 front spring green

step 5

FINAL SHOCK ASSEMBLY

- Install one #6474 spring collar onto the shock body.
- 2 Install the correct spring for front and back shocks.
- Pull the shock shaft out as far as it will go, compress the spring, then insert the #6474 spring cup over the #7217 eyelet.
- Twist two 1/4" thick #8846 preload spacers from the tree. For the front shocks, slide a preload spacer between the spring collar and shock body hex.
- Twist two 1/16" and 1/8" thick preload spacers off the tree. Slide them onto the rear shocks between the spring collar and shock body hex.



8846, qty 6

preload spacer



ASSEMBLE THE SERVO

- Find the approporiate #9180 servo horn for your servo, marked "A" for Airtronics, "F" for Futaba, "J" for JRPropo, and "H" for Hitec. Remove the servo horn from your servo and replace with the #9180 horn, then fasten with the stock mounting screw.
- Install the #6270 ball end into the servo horn. Add the #6272 dust cover.
- Attach the #7336 mounts with the #6917 (6860*) screws and #7337 washers. Add the #7336 spacers if you have an Airtronics servo.





6681

6951

0

6515

6936

step 3 RIGHT SIDE

INSTALL THE MOTOR

- Attach three capacitors to your motor according to the instructions that came with your motor, if they are not on already. For the **Sport kit**, solder the colored plug wire to a positive tab on the motor and the black wire to a negative tab. For the **Basic**, **Team & Factory Team kits**, you must buy your own motor, then follow this step.
- Install the #6681 gear with the #6951 set screw going to the flat side of the shaft. For the Basic, Team & Factory Team kits, you must buy your own pinion gear. If you use an electonic speed control, see its directions for installing motor capacitors.
- Use two #6515 screws and two #6936 washers to mount the motor as shown so the gears mesh.

SET THE GEAR MESH

You should be able to rock the spur gear back and forth in the teeth of the pinion gear without making the pinion gear move. If the plastic gear is tight, then loosen the #6515 screws and move the motor away, then try again. A gear mesh that is too tight or too loose will reduce power and damage the gear

SPORT KIT ONLY



step 4

MOUNTS TO SERVO

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

1 6932 **RESISTOR TO SERVO** €932 **(**) 2 Push the #8850 brackets **1** 6936 into the #6711 resistor. ିର **6936** 3 Attach the brackets to the 6932 mounts with two #6932 Į 6932 1 screws and two #6936 **1** 6936 washers. 0 6936 🛈 0 0 7527 8850 0 0 3 6936 7527 O, <u>Ó</u>mm **3** 6932 0 6711 G 0 3 6936 8850 **3** 6932 The

step 6

FINAL RESISTOR/ SERVO ASSEMBLY

- Attach the #6712 arm to the horn with the #3721 screw and #2 washer.
 Mount the arm and horn
- to the servo with the screw from your servo. 6714
 Trim the #3721 screw tip if it contacts the servo body.
- Add the #6714 mount using #6925 screw and #6242 locknut.
- Add the #6714 bypass tab to the #6714 mount with a #6924 screw and #6936 washer.



step 5

MODIFY THE SERVO HORN

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





ASSEMBLED THROTTLE ARM AND RESISTOR

SPORT KIT ONLY



ALL KITS

step 9 LEFT SIDE

RADIO RECEIVER TO CHASSIS

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







GEAR COVER

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





BAG H REMOVE THESE PARTS FOR: Step 3	trools use trools use aty 1 servo tape) f
 RADIO AND F Install your bat assemble the I Cut a piece of ESC and swite Cut a piece of receiver where Connect the E according to yo connect the m 	RECEIVER INSTALLATION ttery pack as shown. If you need to battery, see step 1 #5 on page 21. servo tape and use it to attach your ch where shown. servo tape and use it to attach your e shown. SSC and steering servo to your receiver our radio or ESC instructions, then iotor to your ESC.	
BAG H REMOVE THESE PARTS FOR: Step 4	6338, qty 1 antenna tube cap antenna tube	
Step 4 MOUNT THE Push your red Thread the w firmly into the Add the #633	E ANTENNA ciever wire through the built-in antenna mount hole. irire through the #6338 antenna and push the antenna e chassis' antenna mount hole. 38 cap to the other end of the antenna tube. 38 cap to the other end of the antenna tube.	





REAR WHEELS AND TIRES

- Make a 1/8" hole in the wheel. Make sure foam insert is centered in tire.
- Install the #6825 tire to the #9490Y or #9491 wheel.
- Glue the tire to the wheel with super glue (cyanoacrylic glue) in four spots around the tire on both sides. WARNING! Follow the adhesive manufacturer's instructions for proper use and safety. Wear eye and hand protection.
- Install wheel onto axle, lining up roll pin with slot in the wheel. Thread on the #3438 locknut. Finish second rear wheel and tire.





step 2

FRONT WHEELS AND TIRES

- Make a 1/8" hole in the wheel.
- Install the #6878 tire to the #9480Y or #9482 wheel.
- Glue the tire to the wheel with super glue (cyanoacrylic glue) in four spots around the tire on both sides. WARNING! Follow the adhesive manufacturer's instructions for proper use and safety. Wear eye and hand protection.
- Insert the #6599 bushings or #3799 bearings into both sides of the front wheel.
- Install wheel onto axle. Thread on #6222 locknut. Finish second front wheel and tire.









See page 2 for complete specs on what is included in each kit. Factory Team Kit shown. Radio and electronics are not included in kits.



PACTORY

Factory Team performance parts

TEAM ASSOCIATED RECOMMENDS



Reedy Modifieds motors & batteries

