

THE AYK BUFFALO 1/10 OFFROAD RACER

BY BILL NORTHROP

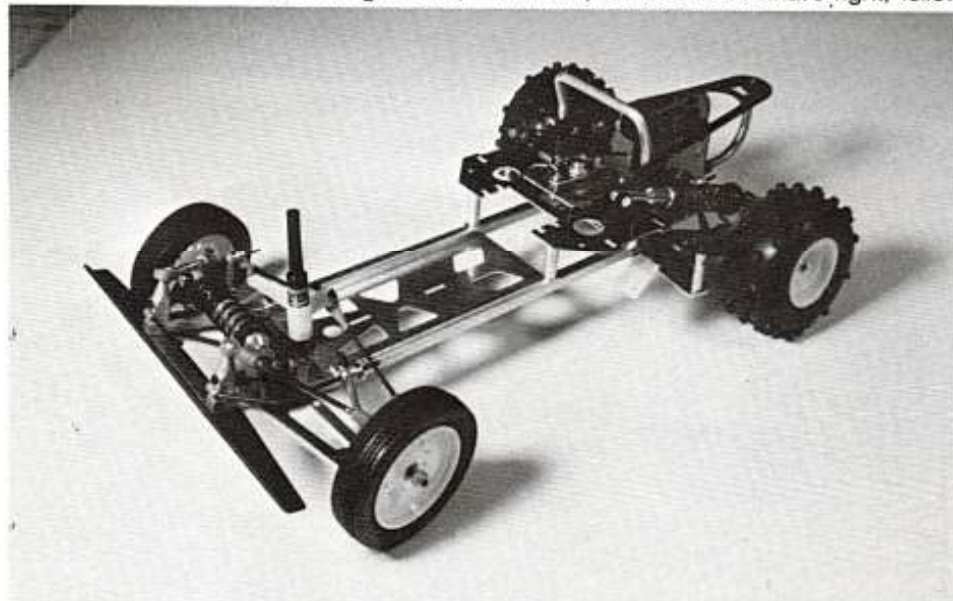
The AYK Buffalo 1/10-scale offroad racer is imported to the U.S. by AYK Racing, U.S.A. (Condor Trading International), P.O. Box 3479, Mission Viejo, California 92690-1479, phone (714) 582-3087, and is available through R/C Race Prep, 20825½ Roscoe Blvd., Canoga Park,

California 91306, phone (818) 709-6800. The price is currently set at \$149.95. The car is also available through Charlie's R/C Goodies, 13400-30 Saticoy St., North Hollywood, CA 91605, phone (818) 764-1490, and Sig Manufacturing Co., Inc., Montezuma, Iowa 50171...that's right, fellow

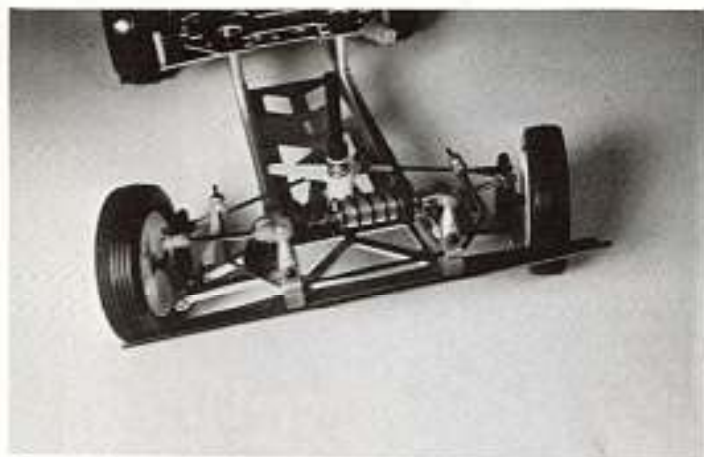
car and airplane buffs... Sig Mfg. Co. has joined the rapidly growing R/C car distributor network.

The AYK Buffalo is not exactly what you'd call an R/C offroad car *kit*. When you remove the lid of the box, the completely assembled chassis, with assembled wheels and tires mounted to the axles, appears ready to leap right out and go racing! And it's really not far from it. As a matter of fact, AYK Racing's Alberto Dona warns buyers to please note that the Buffalo can be deceiving... although the basic assembly is complete, many of the nuts and bolts have to be tightened and/or adjusted, and you really must disassemble the shocks, fill them with oil, and reassemble. Some modelers have simply dropped in their radio and immediately started driving the car, only to have it fall apart as the loosely-fitted connections let go. Come on ladies and gentlemen... a little more patience, please!

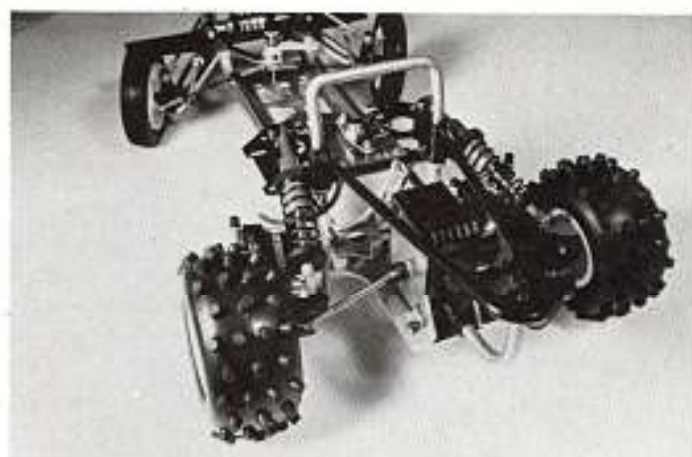
The Buffalo features full independent suspension; double wishbone plus transverse mono-shock and anti-roll bar up front; semi trailing arms, anti-roll stabilizer, and laid down mounted shocks on the rear. A sturdy ladder frame consisting of square aluminum bar stock rails joined by stamped and punched sheet aluminum pans carries



The AYK Buffalo as it comes out of the box. All the suspension and running gear is assembled, although loosely connected. Tighten and add thread-lock as needed.



Completely assembled front-end, out of the box. Note servo saver and front body mounting post. Excess material is to be cut off.



Fully assembled rear, throttle wiper assembly, and laid-down shocks. Very basic and simple design, but strong.



Underside view of assembled chassis as it comes from manufacturer. Side rails are aluminum bar stock.



Challenger receiver is a little too wide to fit between rails, must be tilted as shown to clear throttle arm.

the suspension, motor, gear case, roll over bar, and the fiberglass throttle servo and speed control plates. Only needlenose pliers, Phillips head screwdriver, and a 4 mm nutdriver are required for assembly. Allen wrenches are supplied with the kit, as are the few nuts, bolts, and washers required to complete the construction. Shock oil and stick on spikes to add to the studded rear tires for extra traction in soft dirt are also supplied. Optional parts include ball bearings for the front wheel, rear trailing arms, and gear case, plus "inequal space" spring sets for the shocks.

The test car we...er...I guess completed is the best word...has been equipped with the Challenger radio, featuring a staple-gun-style transmitter. This radio is imported to the US by Polk's Model Craft Hobbies, 346 Bergen Ave., Jersey City, N.J. 07304, phone 201-332-8100 (orders only; 800-225-POLK, 9 a.m.-5:30 p.m. EST), and is also available from Charlie's R/C Goodies in North Hollywood, California. At \$56.95 with two servos and dry cell operation, it is the least expensive radio of this type available.

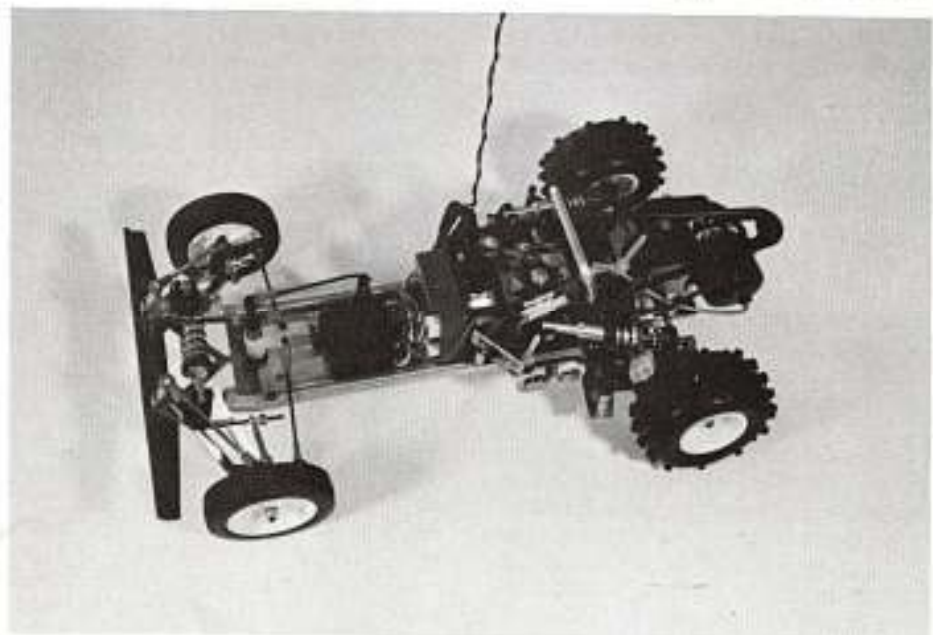
By happy coincidence, the Challenger servos are a drop-in fit for the speed control servo cut-out in the glass fiber mechanical plate. If you don't happen to use the right size servo, you're on your own in making it fit, as there are no instructions for mounting larger or smaller servos. Actually, it should only take a little ingenuity to cut away a little material to fit a larger servo, or

add some sort of a tab to mount a smaller one.

We're still a firm believer in shock mounting servos if at all possible. As the Challenger servos are quite tall, adding the rubber grommets to the mounting lugs not only provides shock mounting, but also raises the servo enough that the bottom clears the chassis tray. To use the grommets on the steering servo, it was necessary to

use longer screws than the 8 mm ones provided. Washers also had to be added, as none came with the radio or with the car.

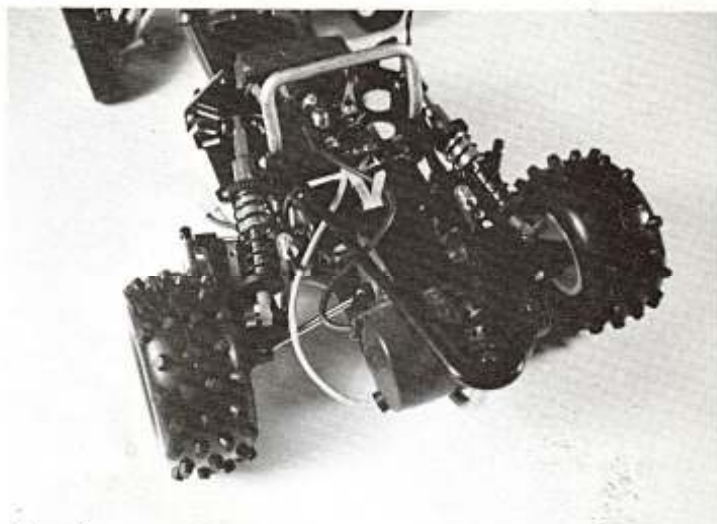
The directions show the speed control servo output arm pointing to the left (lefts and rights on a car should be as seen from the driver's seat). However, in this position, we found the pushrod would bind against the nut on the negative pole on the control wiper when moving toward the "reverse"



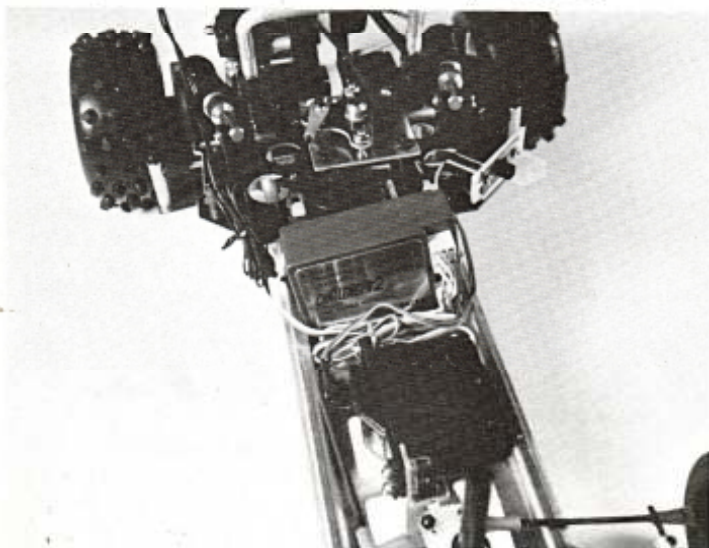
Completed car less body. Basically, assembly consists of installing the radio and motor. Prepping and painting the body is the most time-consuming part of the whole job!



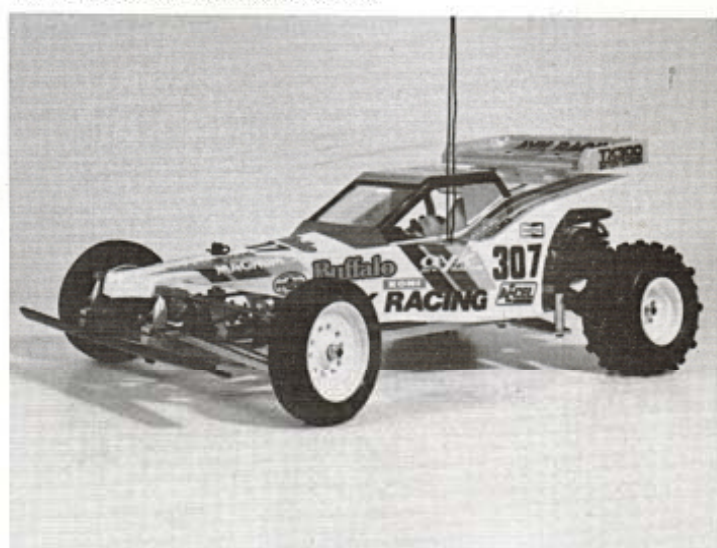
Completed installation of throttle control. Separate receiver battery pack is required. Note receiver is double-stick taped to servo.



Motor is protected by bumper and sealed in rubber cup to prevent dirt from getting into brush contacts.



Another view of receiver installation. Must be tilted this way to clear movement of throttle servo output arm.



Finished car. On-off switch and antenna positions can be switched if necessary. Wing angle can be adjusted with shims.

position. No problem occurred when the output arm was mounted so it pointed to the *right* in the "off" position.

Finally, as Fats Waller used to sing, "Yo receiver's too big!" (showing my age, right?) The challenger receiver is longer than the space between the chassis rails, and also too wide to fit between the side of the speed control servo and the rear bracket position of the steering servo. We therefore had to turn the receiver up on edge, tilt it to sit on top of the left rail (again so it clears the throttle arm), and double-stick its backside to the throttle servo. Hopefully the photo we took of this setup will be useable. Actually, it would be better to protect the receiver in a plastic bag, which can't be done if you want to double-stick it into place. We'll take the fifth amendment, and suggest that you use your own discretion in this matter!

The steering servo mounts on slotted brackets, which in turn mount in slotted holes in the pan or under guard, so adapting to any size servo is relatively easy. Again, however, the instructions are vague about proper servo direction, saying only, "Make sure steering servo is placed in a proper direction." Fortunately, the Challenger radio, as inexpensive as it is features servo reversing by way of switches on

the transmitter, so obtaining proper servo direction is of no great concern. All push rods, tie rods, and ball joint connectors are supplied with the Buffalo, and are easily and quickly hooked up and adjusted.

Mounting the Magnum 600S motor takes only moments, and a rubber cap slips over the power cables and covers the brushes and contacts, protecting them from dirt.

The receiver and motor power batteries (not included in kit) are installed next. Both are held in place with ratcheted nylon straps equipped with releases so they can be used over and over without having to be cut and replaced when changing batteries. The power battery should be the "stick" type; two rows of three 1,200 Ah cells for a 7.2 volt pack.

Final steps in preparing the car to run include adding oil to the shocks, gluing the tires to the wheels with a little thin cyanoacrylate, and remounting wheels on axles.

The longest job, as with most cars, is cutting and painting the molded body shell. We refer you to the article by Gary Kyes in the first issue of *R/C Model Cars* for help in painting the body. Whether or not this is your first car assembly experience, Gary's article contains some useful ideas. The

body mounting provides for quick removal and replacement, with only one post clip up front to try to avoid losing. The rear of the body snaps onto the roll bar by way of a couple of molded plastic spring clips which fasten to the inside of the roof. The wing is part of the one-piece body mold and is cut away during removal of the excess material while trimming the body.

Rating performance of various cars, as built, unmodified, directly from the kit, is a nebulous sort of thing. An amateur driver could not make a fair comparison of one car to another, and a seasoned veteran probably wouldn't even run the car once without going through a whole bunch of modification steps. All we can say is that for the person who wants to spend as short a time as possible from first opening a kit box to running a completed car, the new Monogram "Lightning" is about the only thing quicker than the AYK Buffalo, and that's mainly because the Lightning body comes trimmed, painted, and mounted! We would rate the Buffalo highly for being a rugged offroad, full suspension car with no apparent weak spots in its structure. The basic design is uncomplicated but thorough, and operation should be trouble-free. ●