

O'DONNELL

Z01-B

There was a buzz, there is a buzz, and after you've seen the 1/8 off-road nitro machine on these pages, I'm sure you'll agree that there will be a buzz for some time. The buggy that had people talking so much for so long is O'Donnell's Z01-B racing buggy. It was developed over a few years by engine pro Steve O'Donnell and tested and tweaked by racing champion Jared Tebo. Did the strict attention to detail of these two industry heavyweights result in a buggy that will capture the eyes of racers who will pilot it through the crowded buggy market? We built the Z01-B and hit our test track with a gallon of O'Donnell fuel to find out.

THE QUEST FOR PERFECTION IS FINISHED

KIT RTR

1/8 OFF-ROAD BUGGY

AT A GLANCE

WHO MAKES IT

O'Donnell

WHO IT'S FOR

Intermediate to advanced racers

HOW FAST 44.79mph

HOW MUCH \$650

WHAT WE LIKED

- Outstanding quality and finish of the machined-aluminum pieces
- Excellent jumping capability
- Tons of turn-in speed
- Comes with three setup sheets for different tracks plus three sets of springs and swaybars

WHAT COULD BE IMPROVED

- Missing a few small pieces, but customer service was fantastic and soon sent replacements
- Where are the machined knuckles and the fuel line?

THE BOTTOM LINE

The Z01-B is well worth waiting for. The quality is outstanding and is backed by excellent handling.



WHAT YOU NEED TO KNOW

■ There's a slew of machined-aluminum components. Starting with the chassis, areas have been strategically milled out to reduce weight. The shock towers are noticeably lighter, and even the four hinge-pin mounts have relieved areas to lighten them.

■ The buggy uses a variety of racing materials and includes carbon-fiber parts. The radio plate, front upper brace and center diff plate are all cut out of this strong, light material.

■ Light aluminum driveshafts in the center of the buggy set the tone of the drivetrain. It has been designed to have a low rotating mass and high efficiency. The spur gear and all of the low-wear nickel-plated outride cups have been lightened. There are the standard six internal gear diffs, sealed and capped with helical-cut ring gears. The drive rides on rubber-sealed bearings and nickel-plated universal axles.

■ Threaded-aluminum shocks take care of the buggy's suspension. They feature a dual-cap setup: the aluminum shock cartridge with dual O-rings screws into the bottom and a diaphragm with an aluminum cap seals the top. Rubber boots protect the 4mm shock shafts from the elements. An assortment of springs is included for tuning.

■ To slow the buggy, O'Donnell fitted the drivetrain with a large front brake disc and a smaller rear disc. They are clamped between two thick steel plates by ball-bearing-supported cams.

■ Thick suspension arms are attached with screw-style hinge-pins at the inner pivots and captured pins on the outside. The nickel-plated steel upper adjustable tie-rods thread into bulky rod ends for maximum durability. The front C-hubs have two holes to alter the upper rod's roll-center location, so tuning is easy. Droop screws in the arm limit downtravel.

■ The composite front and rear link-type-rod chassis braces have pivot balls at either end. The ends are secured in machined-aluminum bosses that are attached to the chassis and front plate and to the bulkhead in the upper rear.

■ The O-Buggy has lots of little details that make it stand out, e.g., cap-style wheel nuts that keep dirt out of the setscrews in the end of the driveshafts. A fuel splashguard is molded into the tank. The two-piece engine mounts have nuts to hold the plate part, and that can be removed to pull the engine out without losing your gear-mesh setting. A composite personal transponder mount slips in under the throttle servo. Narrow mudguards keep dirt out of the chassis.



The classic radio-tray layout houses the electronics for the Z01-B. A nice feature is that the steering servo's horn faces the center of the chassis and its wire is routed away from the spur gear. The box is roomy enough for standard electronics.

A double-wishbone suspension system makes up the front end. The hub carriers have a dirt shield to keep debris out of the universals.

The rear wing stand-off is very narrow and has aluminum bracing posts. The mini rear bumper is a neat addition, but the big news here is the short arm setup that reduces the negative effects of chassis roll and allows the use of softer spring rates.



Behind the front bumper, the aluminum suspension arm pivot has setscrews to hold the pins in place. The screw pins have hex heads on one side and locknuts on the other.



Opens the kit box, and you see a felt-lined parts tray with all of the buggy's masterfully machined components safely displayed.



O'Donnell stepped up the style points with this new wheel design. The center dish wheel and spokes looks pretty cool; it's also strong and light.

NEEDED TO COMPLETE

- 2-channel radio and receiver, 2 high-torque/high-speed servos, .21 nitro engine & tuned pipe, starter box, receiver battery, tires, fuel line, paint, oils

WHAT WE USED

FUTABA

- BLS352 servo—FUTM0554, \$160
- BLS351 servo—BLS351, \$150
- 3PKS 2.4GHz—FUTK2015, \$400

O.S. ENGINES

- 21VZ-B V-Spec—13895, \$300
- 2060SC pipe—72106135, \$170

DURATRAX

- 1400mAh receiver pack—DTXM2011, \$25
- Air-filter oil—DTXC2465, \$5

OFNA

- Truggy starter box—10244, \$100



Like the buggy's other components, high performance materials were used for the clutch, hard-anodized aluminum clutch

shoes and flywheel. The shoes are paired with 1.0 springs that are preferred for racing buggies.



The helical-cut ring gear is hardened steel. Steel bevel gears sit inside the oil-filled diff cases. The outrides have been machined to reduce rotating mass.



A dual-bellcrank steering system with servo-saver is supported by bearings. In this view, the aluminum

front driveshaft that's mated to a lightened outride is visible.

The two large in-line fuel filters not only screen out debris that may be in the fuel, but they also help out in the fuel-capacity department.



■ DRIVEN REVIEW O'DONNELL Z01-B

DIMENSIONS

LENGTH 20 in.
(510mm)

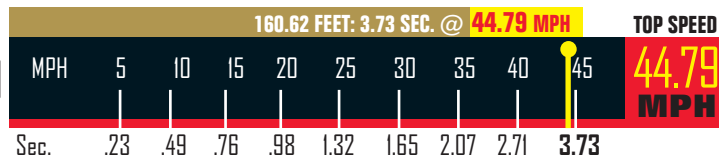
WIDTH 12 in.
(305mm)

WHEELBASE 13 in.
(330mm)

WEIGHT 8 lb. (3,629 kg)

RADAR DATA

ACCELERATION



PERFORMANCE SCORECARD

TEST VENUE Wolcott Hobby & Raceway, Wolcott, CT

CONDITIONS Off-road dirt track, calcium chloride treated dirt

STEERING

Understeer **Neutral** Oversteer

The Z01-B's handling displays incredible turn-in ability. At low to mid speeds, the buggy dives hard into all types of corner. On power, there is a slight push, but it leaves you with a comfort zone that lets you keep on the throttle through sweeping corners. When the buggy is cornering, you can see the inside wheel kick out, dig into the dirt and pull it through every time. Be sure to take the time to tweak the servo-saver. A setting that's too light will case the wheels to flutter visibly as rough surfaces activate the saver.

BRAKING

Poor Fair Good **Excellent**

On the bench, the brakes got big props for the large front disc and smaller rear, but more important is that these thick pads won't bend over time. On the track, the bench-testing proved itself with awesome braking. It seems as if the brakes bring the entire drivetrain to an immediate halt that's transferred to the ground, but the chassis didn't get the memo. If you slam hard brakes hard and let go immediately, you'll see the car come to stop and the momentum of the chassis lurches it forwards; the brakes are that good and, most important, consistent over long runs.

ACCELERATION

Poor Fair Good **Excellent**

The Z01-B will treat you to a face-full of forward bite. The wheels dig in, straighten the buggy out and launch it forwards with little effort in the spool-up department. It gripped well on the outside loamy sections and even on the dust-free blue-groove areas.

HANDLING

Poor Fair **Good** Excellent

Small jumps and whoop sections weren't a prob-

lem, but rutted areas upset the rear end with the kit's included "Long Track" setup. The rear got kicked up or tossed from side to side. I hit the workbench for some tweaking and moved the tie-rod on the rear hub all the way out; I moved the outer arm pin to the upper hole in the hub and changed tires. I used a Bow-Fighter setup and switched to all Crimes with 45-degree cuts on the outside rows of the front tires and full spikes on the rears. Back on the track, the buggy felt much more planted. The longer droop allowed it to float over bumps instead of getting kicked up, and the long link and better traction didn't allow the Z01-B to get kicked around.

JUMPING

Poor Fair Good **Excellent**

This buggy gets the gold in the flat jump competition. As it leaves the ground, the chassis instantly becomes parallel with the track as it sails through the air. From the track's smallest double jumps to the 4-foot dirt mound that launches machines 10 feet into the air, the Z flew flat and effortlessly to the landers. Just before landing, a quick tap of the brakes will always drop the nose and land the buggy perfectly and planted in the dirt.

DURABILITY

Poor Fair Good **Excellent**

The big double jump on our test track tends to be the hobby shop's money-maker; it claims lots of arms, axles and wing mounts during race days. It One rough landing took out the Z01-B's fuel tank, and since it's so new, there weren't any parts for it on the wall. We were able to slip a Mugen tank in to finish our test runs. Within a few days, we had a factory replacement tank, since the distributor is fully stocked with parts.

THE LAST WORD

The Z01-B has been in development for years, and lots of us were eager to see it in action. Well, it was well worth the wait and all the stalking I did before its release. Its quality is outstanding, and the attention to detail is immeasurable. These attributes transfer to the track, as the buggy lets you put it anywhere with precision, it accelerates with force, and it jumps with ease. ©

LINKS

DuraTrax, distributed by Great Planes Model Distributors, duratrax.com (800) 682-8948

Futaba, distributed exclusively by Great Planes Model Distributors, futaba-rc.com, (800) 682-8948

O'Donnell, z01b.com

O.S. Engines, distributed by Great Planes Model Distributors, greatplanes.com, osengines.com (800) 682-8948

For more information, please see our source guide on page 177.

TUNING OPTIONS

SUSPENSION

- Shock position (F/R)—3 holes on F&R towers, 2 on lower arms
- Camber—front, rear
- Anti-squat—plate
- Front kick-up—suspension block
- Toe—front turnbuckles, rear suspension block
- Wheelbase—rear hubs can be spaced
- Roll center (F/R arms)—inserts in tower, 2 in carrier, 6 holes in tower, 2 in carrier
- Steering Ackerman—3 holes in bellcranks
- F&R swaybar thickness and tension
- Droop—setscrews in lower arms
- Gear ratio—clutch bell
- Differential stiffness—silicone fluids

MISCELLANEOUS

- Wing angle

TOOLS

TOOLS NEEDED

Curved Lexan scissors, DuraTrax clutch tool; 1.5, 2 and 2.5mm hex drivers, 4-way wrench, side cutters, hobby knife

HARDWARE TYPE

Metric hex

TIPS

- Use thread-lock such as blue on screws that go into metal or aluminum. Use red to secure the nuts on the steering knuckles; these nuts can work their way off.

- If the clutch shoes are a tight fit on the clutch pins, drill the clutch-shoe holes with a drill that's the same size as the pins.

COMPETITORS

- Team Losi 8ight, Team Associated RC8, Mugen MBX5R, TQ Racing SX8, Jammin' X1x, Kyosho MP777

RECOMMENDED ACCESSORIES

- Du-Bro Nitro Line—2235
- Pro-Line Hole-Shot tires—9026

