**RJ SPEED** 





time ago, my buddy and I actually owned a pair of Diggers. They were fun cars that we beat up daily trying to set crazy speed records down our street and seeing who could do the longest wheelie. When we found the local track, our little

nen I started playing with RC cars back in, um, well, a long

adult supervision, of course.

Diggers disappeared into the garage, never to be seen again. I do remember, however, how much fun they were.

Many years have gone by, and the Digger has reappeared under a new company name—that of RJ Speed. This little gem is almost the same as it was back in the day, but it has a few new little tweaks. I was excited to get the new Digger up and running. As a twist to my review, I thought how cool it would be to let someone who has never built or driven an RC car to enjoy the Digger as I did many years ago. I enlisted my girlfriend, Danna, to open the box and build and paint the Digger however she wanted—with my

WHO MAKES IT RJ Speed

WHO IT'S FOR Everyone

HOW FAST 22.29mph

**HOW MUCH \$105** 

**PART NO.** 2015

## WHAT WE LIKED Simple design

- Accepts almost all levels of electronics
- High-grip foam tires
- Extremely durable
- Inexpensive
- Looks cool!
- Great for beginners

Instructions are a little vague for builders

### BOTTOM

The Digger is one of those cars that makes you smile no matter what you do with it.

Big fun, small package

#### **■ DRIVEN REVIEW RJ SPEED DIGGER**

# WHAT YOU NEED TO KNOW

- The Digger does not have any suspension other than that provided by its foam tires—and that's not much. The front has a steering block on a steel pin with an adjustable metal link for front toe. The rear has a bushing-supported solid axle (no differential) and comes with a 54-tooth, 32-pitch nylon spur gear. Cost and complexity are exchanged for an easy-to-build, low-parts-count vehicle that every newcomer to RC will appreciate.
- The chassis is quite different from what most of you might be used to. The Digger chassis is two fiberglass plates held together vertically by aluminum and plastic posts. The fiberglass front axle plate is not only keyed into the chassis plates to secure it, but it is also used to mount the servo and front body mounts. Two additional body mounts are attached to the chassis plates and exit at the side of the very cool-looking VW Bug body.
- The motor mount is pretty standard, but I did have to modify it slightly to accept the 540 Mabuchi silver-can motor. Any current brushed or brushless motor will fit without a problem, but since Danna had never driven an RC car before, I figured that the Mabuchi motor would be more than enough power to get the front wheels into the air. Speaking of which, the wheelie bar is pretty slick and did get a lot of use during our tests. Danna enjoyed doing wheelies.
- The battery is held between the chassis plates by two large, rubber O-rings. Once it's installed, there is no need to remove it to charge it. If you do have to replace the battery, just slide the O-rings off and the battery drops out. Pretty simple.
- There's a ton of space for electronics, so feel free to drop in any of your older, monster-size units. If you don't have any extra electronics lying around, you certainly don't need to buy any high-end thing for this car. I chose the DuraTrax Intellispeed 8-turn for its size and because if Danna becomes a speed freak, we can drop in any brushed motor up to 8 turns.
- The VW Bug body really looks cool. Danna kept it simple and chose Pactra's Racing Red. Mounting is a little tricky, since you have to mount the rear body posts through the side of the body, so I suggest that you mark the positions of the post holes before you paint. When you have finished painting, don't remove the overspray film until you've made the bodymount holes.

### NEEDED TO COMPLETE

■ Transmitter, receiver, steering servo, ESC, battery pack, paint for body

#### **WHAT WE USED**

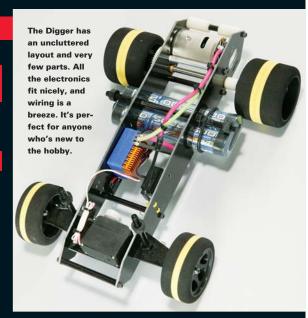
- Futaba 4PK transmitter w/R603FS receiver—Item no. FUTK4900, \$499
- Futaba S3003 steering servo— FUTM0031, \$11
- DuraTrax Intellispeed 8-turn— DTXM1080, \$58
- Tamiya Mabuchi 540 motor— TAM53689, \$16
- Max Amps 5000mAh battery—MA-5000-6-cell Shotgun, \$68
- Kimbrough servo-saver—114, \$5

### COMPETITORS INCLUDE

Tamiya Mini, HPI Cup Racer

#### **TUNING OPTIONS**

Front toe—via adjustable metal rods Gearing—via replaceable pinion & spur gears



#### DIMENSIONS

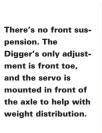
- **LENGTH** 12 in. (305mm)
- **WIDTH** 8.25 in. (209.5mm)
- WHEELBASE 8 in. (203mm)

#### **TOOLS**

**INCLUDED** None

**NEEDED** Hex drivers, needle-nose pliers, side cutters, hobby knife, plastic-body reamer

**HARDWARE TYPE** Metric hex





The foam tires have a softer, yellow patch molded into them for awesome wheelie traction. The wheels may look familiar to carpet racers, so there are plenty of optional tire compounds available for the Digger.

the Digger. The battery is held firmly by

O-rings, and as you

can see, there's plenty

of room for any type

of powerplant. The two white tubes are

the simple, yet effec-

tive, wheelie bar, Big

neaty foams ensure

that you'll be up on

the wheelie bar a lot.





### PERFORMANCE SCORECARD

**TEST VENUE** School across street from my house in sunny Southern California **CONDITIONS** Paved parking lot

#### **STEERING**

Understeer Neutral Oversteer

The Digger doesn't have any suspension, so it relies completely on its foam tires for steering and acceleration. That being said, I was surprised to find that the Digger actually understeered slightly while cornering. I attribute this to the fact that this is basically a wheelie machine, so any throttle input tends to lift the front wheels off the ground and effectively removes any steering. As a precaution, be sure to install some sort of servosaver to help protect the servo gears. We installed a Kimbrough Racing Products servo-saver on my Futaba servo during the build

#### **BRAKING**

Poor Fair Good Excellent

The DuraTrax ESC gives a nice, smooth braking feel with the Tamiya Mabuchi motor. And there's extra fun hiding in the braking process—front flips! Accelerate hard enough to get the front end off the ground, keep the Digger in a straight line and mash the brakes! Get it right and you'll get some pretty comical front rollovers (Danna called them "front flippies"). It should roll back over onto its wheels and be good to go again.

#### **ACCELERATION**

Poor Fair Good Excellent

The Mabuchi motor and Max Amps battery provided more than enough power for fun, and anything stronger would result in tons of wheelspin. With a 5000mAh battery, the Digger easily ran for more than 40 minutes per pack. Thanks to the adjustable gearing, we were able to go up one tooth on the pinion for more speed (more speed? See? It's already happening!). Danna did well with light throttle inputs to get the Digger in a straight line before blasting it past me in a full wheelie-stand!

#### **SUSPENSION**

Nor

This is the toughest review category because the Digger doesn't have any suspension. Could I rate it? It seems to me that the real fun comes from its *not* having any suspension. If it did have some sort of suspension, it would be in the same category as a lot of other vehicles, but at a lower price. The Digger's fun-factor comes from what it can do because it *doesn't* have suspension—wheelies, cartwheels and "flippies."

#### **DURABILITY**

Poor Fair Good Excellent

This is the easiest category for me to rate, and I didn't even get to drive the Speed Digger much!
Danna put the Digger though a very rigorous workout with flips, rollovers, wheelies and crashes. A few small chunks came out of the tires, and the body showed some serious road rash, but everything under the VW shell was in perfect condition. The Digger's simple design means fewer parts to break.

### THE LAST WORD

While Danna was putting on a show for a few local kids, I had time to sit

back, watch and relive the time when I had my first Digger. Seeing Danna smile and all the kids laughing and having a good time reminded me that RC is supposed to be fun and not all about racing and prizes. We drove the Digger for two battery packs (OK; she drove one full pack and 0.75 percent of the other one) doing wheelies, backflips, front flips and just generally bashing. Danna had a great time and thought that it was the perfect learner's car for her. In the end, that's what the Digger is meant for! And I think it hits the mark perfectly. "Danna, can I drive now?"

#### LINKS

DuraTrax, duratrax.com
Futaba, futaba.com

Kimbrough Racing

**Products,** kimbroughracing-products.com

MaxAmps, maxamps.com

**RJ Speed,** rjspeed.com

For more information, please see our source guide on page 153.



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