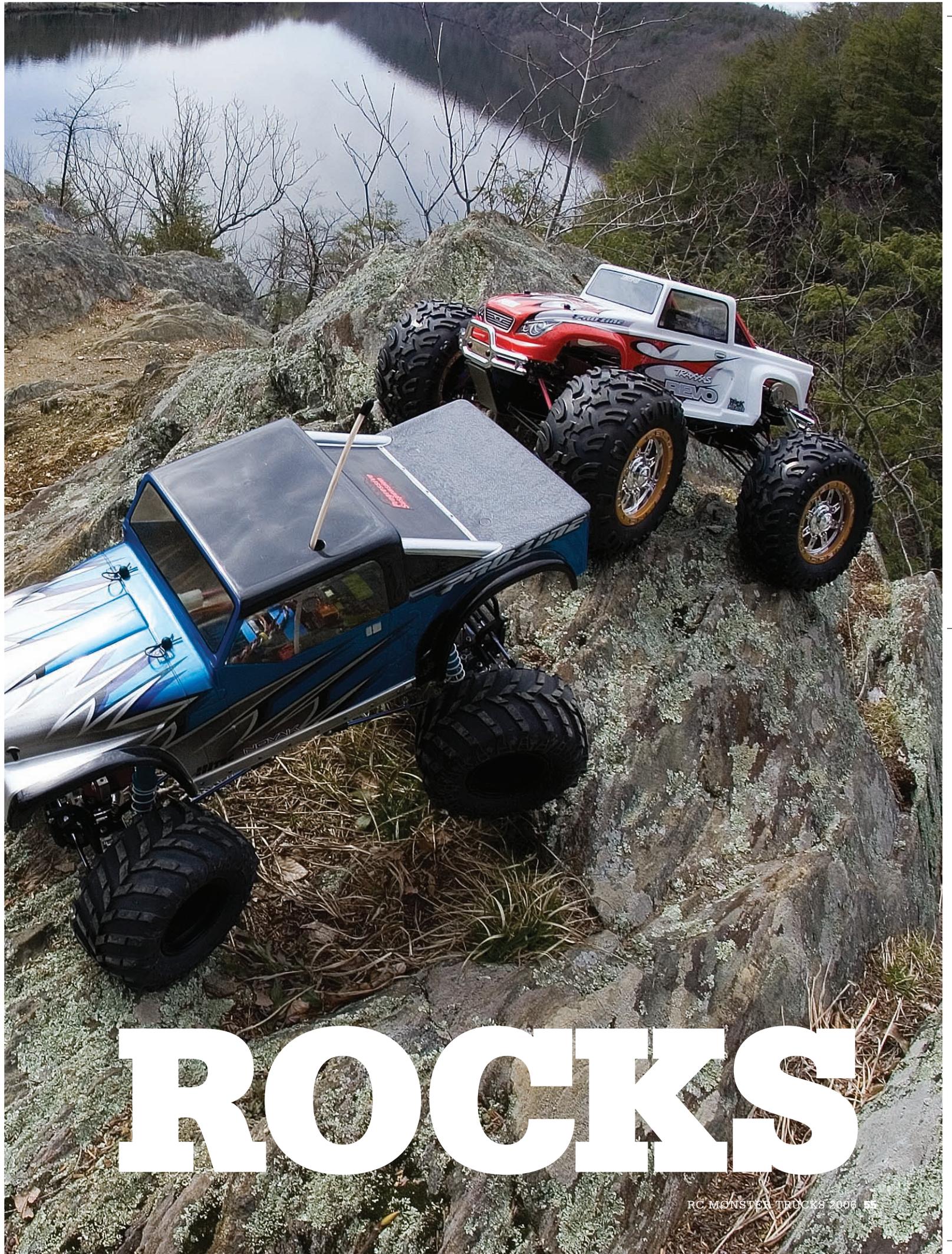


# Taking monster trucks to new extremes

by *RC Monster Trucks Team* PHOTOS BY DERON NEBLETT

**H**ey, hotshot, think you've seen and done it all when it comes to RC? Well, maybe you should check out one of the fastest-growing segments in this hobby—RC rock-crawling. Not only is rock-crawling out of the ordinary, but it's also challenging and, just like the real thing, there's something for everyone. There are scale rigs running 2.2-inch tires, custom tube-chassis creations, purpose-built competition trucks and even a few nitro heads giving it a shot. In an effort to bring crawlin' to everyone, we assembled four of our own machines to show off in this issue of *RC Monster Trucks*. First, we have George Gonzalez' scale Tamiya TLT-based machine that looks just like a jacked-up Jeep. Kevin Hetmanski went against the norm and transformed a nitro-powered Traxxas Revo while Paul Onorato and Matt Higgins built competition-ready Tamiya Clod Buster-based crawlers. Read on and see what makes these trucks tick, and check out some sick rock-crawler action.

# ON THE



# ROCKS

## ON THE ROCKS



# George's Tamiya TLT-1

Based on the 1/18-scale Tamiya TLT-1 chassis, Max Climbers and Rock Busters are cool little trucks in stock trim, but any self-proclaimed gearhead (like me) loves the TLT-1's hop-up potential. I wanted to improve the truck's rock-crawling abilities and stretch its wheelbase and width to make it compatible with many 1/10-scale bodies and tires that are available. While I had the truck torn apart, I installed a bunch of hop-ups to make it lighter and stronger and to increase its wow factor.

## The Gear

### BASE KIT

**Tamiya**  
>TLT-1 Rock Buster—47201; \$140

### CHASSIS

**Tamiya**  
>TLT-1 Carbon frame—OP-729/53729; \$52

### DRIVETRAIN

**CEN Racing**  
>Dogbone shafts for MT2—FF045; \$13

### Tamiya

>2 TG10 long wheel axles—SP-808/50808; \$5/set of 2

>TL-01 toe-in rear upright set—OP-345; \$10

>TA04 aluminum center pulley—53474; \$15

>TA04 aluminum diff pulley—53462; \$25

>Aluminum gear-case set—OP-777/53777; \$68

>TLT-1 ball-bearing set—OP-692/53692; \$30

>2 plated differential cases—OP-693/53693; \$33 each

>Aluminum wheel spacers (red)—53647; \$7

### SUSPENSION & STEERING

#### Lunsford

>2 long, 1/10-scale titanium ball-stud sets—7104; \$14 each

#### Team Integy

>2 MSR4 threaded shocks for T/E-Maxx—T3849; \$23/pair

#### RPM

>Super-duty rod ends—73360; \$5

#### Team Associated

>2 MGT blue titanium turnbuckle sets—25383; \$45 each

#### Tamiya

>2 high-torque servo-savers—SP-473/50473; \$11

>2 short aluminum servo stays—OP-596/53596; \$9/pair

### ELECTRONICS

#### Hitec

>CRX Aggressor radio system—127271; \$207

#### Novak

>XRS Sport reverse speed control—1830; \$49

### Multiplex

>2 Profi 3 BB FET servos—PROF13; \$70 each

### Tamiya

>TLT-1 1700DP battery pack—90492; \$45

### Trinity

>Chameleon 2 19-turn motors—RC2122; \$38 each

### Team Associated

>TC3 radial clip-on motor heat sink (short)—3927; \$11

### BODY, WHEELS & TIRES

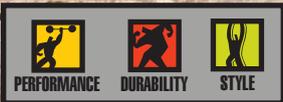
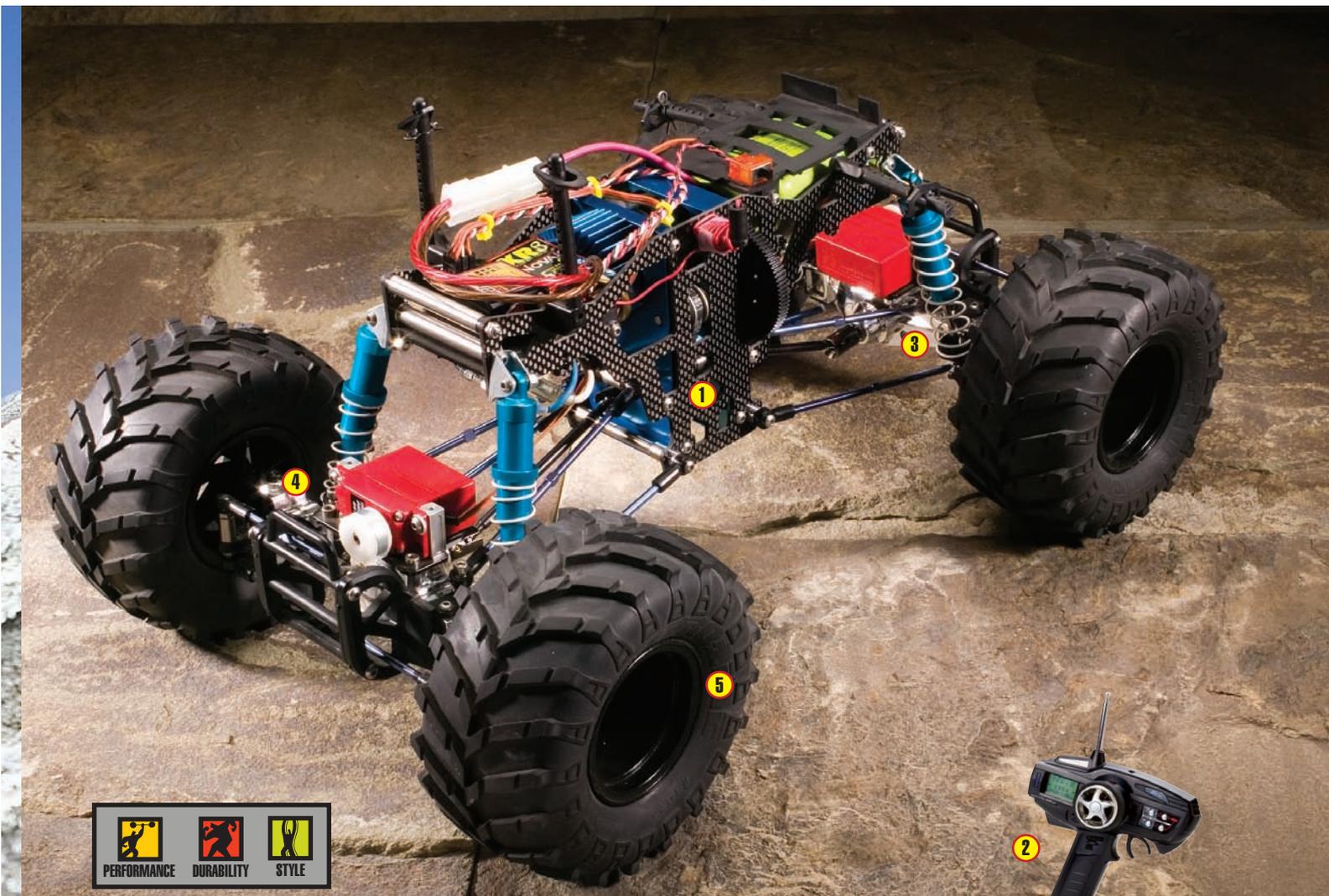
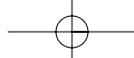
#### Pro-Line

>Jeep CJ8 body—3117-00; \$25

>2 Masher 2000 tires—1074-00; \$20/pair

### Tamiya

>2 Wild Dagger wheels—0445720; \$7/pair



## 1

### Wheelbase stretch & low-CG battery mounting

I extended the wheelbase by more than 3 inches by using longer suspension links and center dogbones. I ditched the short upper and lower suspension links and replaced them with Factory Team Monster GT blue titanium turnbuckles. I had some CEN MT2 dogbones lying around, and they fit perfectly between the diff outdrive cups. I installed three O-rings in each center diff outdrive cup to properly space the dogbones.

The original TLT-1 Rock Buster requires a 6-cell hump pack, but the latest TLT-1 Max Climber uses a flat 6-cell stick pack. I like the convenience of being able to use regular stick packs, but the battery pack is positioned high on the chassis, and that makes the truck a little "tipsy." I decided to use the original 6-cell hump pack, but I mounted it under the battery-mounting platform to lower the CG. Two zip-ties secure the battery in place.

## 2

### Channel-mixing radio

I wanted to be able to switch between 2- and 4-wheel steering and to give

the truck the ability to "crab-walk" (drive sideways) by pressing one button, so I needed front and rear steering servos and a radio with channel-mixing capabilities. The Hitec CRX is the most affordable radio system with channel mixing, and it also has steering endpoint and servo-centering functions to set up a 4-wheel-steering system precisely.

## 3

### Locked differentials

Most rock-climbing rigs have locked differentials to provide equal power transfer to all four tires and to prevent the diffs from unloading if one of the tires loses traction. I locked up the front and rear diffs by applying hot glue to the internal bevel gears. I left the center ball diff in place, but I cranked down the adjustment screw to provide limited differential action.

## 4

### Ball bearings

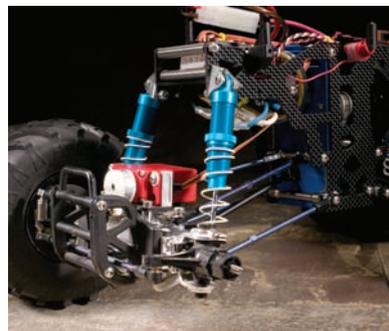
The TLT-1 includes some ball bearings, but most of the drivetrain spins on plastic and bronze bushings. The TLT drivetrain has a lot of moving parts that will benefit from spinning on bearings. Fortunately, I installed a complete bearing set when

I first built the truck. Tamiya's rubber-sealed ball bearings provide smooth, maintenance-free performance.

## 5

### Wide-offset wheels

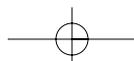
I used Tamiya Wild Dagger wheels because they add more than a 1/2 inch to the truck's width. They also accept most 2.2-inch truck tires, and that broadens the range of the tire choices dramatically. I installed TG10 long-wheel axles and extra-wide hex adapters to add a few more millimeters to the front and rear widths. Unfortunately, the long axles and hex adapters are discontinued items, so they might be hard to find. I painted the rims black and installed a complete set of Pro-Line Masher 2000 monster truck tires.



### SOURCES

**CEN Racing;**  
cenracing.com  
**Hitec RCD Inc.;** hitecrd.com  
**Lunsford Racing;**  
lunsfordracing.com  
**Multiplex USA;** multiplexrc.com  
**Novak Electronics Inc.;**  
teamnovak.com  
**Pro-Line;** pro-lineracing.com  
**RPM R/C Products;**  
rpmrcproducts.com  
**Tamiya America Inc.;**  
tamiyausa.com  
**Team Associated;**  
teamassociated.com; rc10.com  
**Team Integy;** integy.com  
**Trinity Products Inc.;**  
teamtrinity.com

The Tamiya plated differential cases look like aluminum, but they're lightweight ABS plastic. A Multiplex Profi 3 servo is mounted on top of each diff case to provide 4-wheel steering. The high-torque, metal-gear servos are mounted on aluminum mounts, and heavy-duty servo-savers keep the tires pointing in the direction they need to go.



## ON THE ROCKS



# Kevin's Traxxas Revo

When I decided to build a rock-crawler for this article, I knew right away which truck I wanted to use—the Traxxas Revo. I know it isn't the standard solid-axle electric monster truck that everyone uses, but I wanted to be different and show that a truck with an independent suspension that's set up properly can be just as good at crawling as most solid-axle trucks. The Revo's suspension is unbelievably versatile. The truck also has reverse, dual steering servos and optional diff spools, so not only will it have plenty of suspension travel, but I'll also have no trouble in the steering department, I'll be able to back out of trouble, and I'll have plenty of traction from all tires.

## The Gear

### BASE KIT

**Traxxas**  
>Revo—5310; \$475

### CHASSIS

**Golden Horizons**  
>Aluminum servo guard—02280; \$18

### Hardcore Racing

>Skidplate—HCR-05024; \$82

### RPM

>Tubular front bumper—80453; \$10  
>Tubular rear bumper—80483; \$10

### DRIVETRAIN

**Traxxas**  
>2 Diff spools—5381X; \$11  
>66-tooth spur gear—3957; \$3  
>16-tooth clutch bell—4116; \$11  
>5x8 bearing—5114; \$4/pair

### SUSPENSION & STEERING

#### Hardcore Racing

>Titanium rear cantilever—HCR-05144; \$60  
>Titanium front cantilever—HCR-05104; \$60

#### Traxxas

>Aluminum pushrod—5318X; \$9/pair  
>2 aluminum toe links—5338R; \$22/pair  
>Heavy-duty servo-saver spring—5344X; \$2  
>GTR shock set—5460X; \$67

#### Trinity

>Aluminum rear shock mount—TRI35028; \$19  
>Aluminum front shock mount—TRI35027; \$19

### ENGINE & ACCESSORIES

#### Robinson Racing

>Aluminum flywheel—8052; \$22

#### Traxxas

>TRX 3.3 engine—5404; \$153

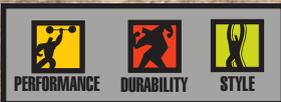
### BODY, WHEELS & TIRES

#### Great Planes

>6 oz. lead weights—GPMQ4485; \$3

#### Pro-Line

>Rock Pleazer body—3198-00; \$32  
>2 Moab 40 Series tires—1117-00; \$38/pair  
>Commando bead-lock wheels—2680-01; \$46/pair  
>2 23mm aluminum hexes—6034-00; \$19/pair



## 1

### Traxxas 3.3 engine

Power is good for any truck in any situation. My truck started out with a TRX 2.5 onboard, but the second I heard that Traxxas was introducing the TRX 3.3, I picked up the phone and ordered one. Now my truck has more than enough power to scale the tallest of rock piles, and since the 3.3 has the same footprint as the 2.5, I was able to bolt it right into the stock mount.

## 2

### Titanium suspension arms

The stock plastic arms would have been fine for rock-crawling, but I wanted something stronger because I planned to give this truck a workout. For that job, I went with Hardcore Racing's titanium and aluminum arms. They're made of titanium plate and billet aluminum to make them as strong as possible without adding too much weight. They're available in several colors, and there's no way you'll pull a pivot ball out of the end or bend them.

## 3

### Heavy-duty servo-saver spring

To protect the steering servos' drivetrains from sudden tweaks during backyard bashing, the stock spring has a lot of give. That won't cut it in the rock-crawling world. For rock-crawling, steering has to be as precise as you can get it, and that's why I replaced the stock spring with Traxxas' heavy-duty one. Traxxas recommends that you use this spring with metal-gear servos, but since this truck will move slowly, the servos won't see very high loads; therefore, the servos' drivetrains should hold up fine.

## 4

### Rock-crawler body

You can't have a rock-crawler that doesn't look like a rock-crawler. Some bodies are specifically designed for rock-crawling. Their sides are narrow so that the tires will clear them when at extreme angles. Pro-Line has a few truck bodies in its lineup, and I chose their Rock Pleazer. This Jeep-like body looks great and is very rugged, thanks to the thick Lexan that it's molded in. I sent it off to Zegers R/C Grafixx for paint.

## 5

### Gearing

Rock-crawling requires torque, so you have to gear down to get the job done. One of the downsides of nitro power is that it isn't easy to get the gearing really low. The only things you can change are the pinion and spur; on an electric truck, you can add gear reductions. I swapped out the stock spur gear, replaced it with a 66-tooth unit and mated it with a 16-tooth pinion gear to gear the tranny as low as I could.



These Hardcore Racing titanium suspension arms are good-looking and super-strong. They'll rub against the rocks all day and come back for more. The suspension links are connected to Hardcore's titanium P3 rockers and provide the suspension with a lot of travel to get over obstacles.

### SOURCES

**Golden Horizons;** ghobby.com  
**Great Planes Model Distributors;** greatplanes.com  
**Hardcore Racing;** hcracing.com  
**Pro-Line;** pro-lineracing.com  
**Robinson Racing Products;** robinsonracing.com  
**RPM;** rpmrcproducts.com  
**Traxxas;** traxxas.com  
**Trinity;** teamtrinity.com  
**Zegers R/C Grafixx;** zegersrograffixx.com

## ON THE ROCKS



## Paul's RCGuy Gecko Pro Kit

Matt Higgins and I both wanted to build true competition rock-crawlers. I quickly jumped at the chance to build the Gecko Pro Kit from RCGUY. I picked the Gecko because its realistic-looking chassis with superbly machined aluminum parts and performance-driven 60/40, 4-link-suspension design caught my eye. The original Gecko chassis had great articulation for climbing over obstacles, so I figured the Pro kit would be over the top—and it is. This kit also comes with a steering-link and a servo-mounting kit for precise maneuverability and an adjustable motor mount with 8-tooth pinions so that the truck can be geared down for unbelievable power and torque. All of these chassis features combined with high-end electronics such as a powerful Novak Super Duty XR speed control, two Team Integy Matrix 55-turn lathe motors, an SMC IB3600 battery pack, an Airtronics 4-channel radio and high-torque Hitec HS-654MG servos make this truck unstoppable.

### The Gear

#### BASE KIT

##### RCGUY

>Gecko Pro kit—012; \$285

#### DRIVETRAIN

##### RCGUY

>Maxx wheel adapters—015; \$30/set of 4

#### ThunderTech Racing

>Clod Buster gearboxes—TAM-101; \$140/pair

#### APS Racing

>Rubber-sealed ball bearings  
4, 5x8x2.5—APS58RS; \$3/pair  
20, 6x12x4—APS612RS; \$3/pair

#### RC4WD

>2 TracGear III aluminum diff lockers—X-0001; \$35 each

#### SUSPENSION & STEERING

##### Team

##### Associated

>Factory Team T-Maxx shock set—1600; \$59

#### MOTORS & ACCESSORIES

##### Team Integy

>2 Matrix Pro lathe motors, 55T single—SCM5501; \$20 each

#### ELECTRONICS

##### Airtronics

>VG400 4-channel FM radio system—90400; \$125

##### Hitec

>2 HS-645MG high-torque servos—32645S; \$3 each

##### Novak

>Super-Duty XR speed control—1865; \$140

##### SMC

>IB3600 stick pack—3600SP; \$30

#### W.S. Deans

>2 Ultra Plugs—1300; \$3/pair  
>Silicone wire, 12-gauge, red/black—1400; \$6

#### BODY, WHEELS & TIRES

##### Team Losi

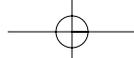
>2 Claw MT tires/LST—LOSB7201; \$29/pair

##### Maximizer

>2 X-75 bead-lock wheels—1301; \$35/pair

##### Pro-Line

>Ford F-350 Super Duty Extended—3141-00; \$25



### WHAT YA GET WITH THE GECKO PRO KIT

- ⊙ Gecko Pro aluminum chassis
- ⊙ Steering-link and servo-mount kit
- ⊙ Adjustable motor mount kit
- ⊙ 2, 8-tooth pinions
- ⊙ Aluminum C-hub braces
- ⊙ Team Associated battery cups
- ⊙ All rod ends and required bolts and locknuts
- ⊙ Hex wrenches



## 1

### Chassis

The RCGUY Gecko Pro chassis is what makes this truck the rock star that it is. Its 4-link suspension setup gives my truck so much articulation that the front axle can easily be twisted to a 90-degree angle to the rear axle. The 60/40 chassis setup not only stretches the wheelbase to 15.5 inches but also moves the center section of the chassis closer to the front; that moves the truck's weight forward to aid in climbing. All of the aluminum parts are beautifully machined, and its design makes it one of the most realistic-looking RC crawlers out there.

## 2

### High-torque servos

Rock-crawlers need high-torque servos to move the steering rods when the chassis twists and places a severe load on the tires. I installed Hitec HS-645MG high-torque servos that produce 133 oz.-in. of torque. These metal-gear servos are built tough to handle off-roading and create plenty of torque at an economical price—only \$37 apiece. If money is no object, pick up Hitec's HS-5955 titanium-gear

servos; they produce an incredible 333 oz.-in. of torque but cost twice as much as the HS-645MGs.

## 3

### Motor mount & pinion gear

You have to gear your truck down to slow it down and create massive amounts of torque for powering up and over sick obstacles. The Gecko Pro kit comes with adjustable aluminum motor mounts so you can use 8- to 14-tooth pinions with the Clod Buster axles. I wanted my truck to have major torque, and luckily, the Gecko Pro kit comes with two 8-tooth pinions. These pinions are extra long to allow plenty of contact area with the counter gear.

## 4

### Locked diffs

Diffs aren't welcome on a rock-crawler. One wheel usually supports more weight than the other, and if there is a diff, all the power unloads onto the opposite wheel and causes it to spin; your truck would be stuck. I added RC4WD TracGear III diff lockers that delivers all of the motor's torque and power to all wheels. This diff locker's sturdy aluminum construction ensures its durability.

## 5

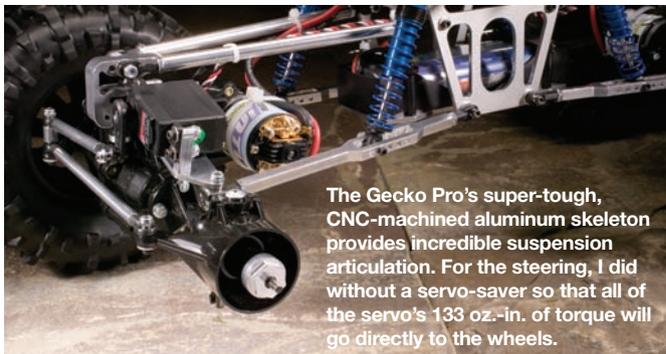
### Steering-link & servo-mounting kit

Rock-crawlers face some formidable obstacles, and without 4-wheel steering, you're sunk. The Gecko Pro kit comes with a steering link and servo-mounting kit that allows 4-wheel steering and positions a servo on each axle. I run my truck with a 4-channel radio so I can steer just the front wheels or the rear wheels or the front and rear at the same time.

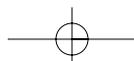
### SOURCES

**Airtronics;** airtronics.net  
**APS Racing,** distributed by Magma Intl.; magmarc.com

**Hitec RCD Inc.;** hitecrod.com  
**Maximizer;** maximizerproducts.com  
**Novak Electronics Inc.;** teamnovak.com  
**Pro-Line;** pro-lineracing.com  
**RC4WD** rc4wd.com  
**RCGUY,** a division of Mico Engineering; micoeng.com  
**SMC;** smc-racing.com  
**Team Associated;** teamassociated.com; rc10.com  
**Team Integy;** integy.com  
**Team Losi,** distributed by Horizon Hobby Inc.; teamlosi.com; horizonhobby.com  
**ThunderTech Racing;** thundertechracing.com  
**W.S. Deans Co.;** wsdeans.com



The Gecko Pro's super-tough, CNC-machined aluminum skeleton provides incredible suspension articulation. For the steering, I did without a servo-saver so that all of the servo's 133 oz.-in. of torque will go directly to the wheels.



## ON THE ROCKS



# Matt's TheCrawlerStore Carbon Fiber NN

I admit it: I'm competitive by nature. If you ask any of my friends, they would probably say there should be a "very" or an "overly" somewhere in there. So, to no one's surprise, for my rock-crawler project, I went all out and built a full-on competition crawler. I chose the popular Clod Buster as my base, but other than the axles, my machine has nothing in common with the lumbering Tamiya giant. I didn't even give the plastic chassis a chance; I went with the purpose-built Carbon Fiber NN (CFNN) chassis kit from TheCrawlerStore. In fact, TheCrawlerStore was my one-stop, go-to source for the chassis, drivetrain and suspension parts I installed on my crawler. Even if it isn't one of their parts, odds are, if it goes on a rock-crawler, TheCrawlerStore will have it for you.

## The Gear

### BASE KIT

**TheCrawlerStore**  
>Carbon Fiber NN kit—TCSCFN; \$200

### DRIVETRAIN

**RC4WD**  
>2 TracGear III aluminum diff lockers—X-0001; \$35 each  
>2 8-tooth pinions—X-012; \$10 each

### ThunderTech Racing

>2 adjustable motor mount kit—ALU-CB30; \$30 each  
>Clod Buster gearboxes—TAM-101; \$140/pair

### TheCrawlerStore

>Rubber-sealed, Clod Buster bearings—CLDBRG; \$20

### SUSPENSION & STEERING

**RPM**  
>Lower spring cups—73155; \$3

### Traxxas

>2 T-Maxx Ultra-Shocks—3762; \$18/pair

### MOTORS

**Team Integy**  
>2 Matrix Pro lathe motors, 55T Single—SCM5501; \$20 each

### ELECTRONICS

**TheCrawlerStore**  
>TQ-3 rear steer installation kit—TQ3KIT; \$9

### Reedy

>Reedy 6-cell GP3300 assembled sport battery pack—700; \$40

### Traxxas

>TQ-3 transmitter—2225; \$50  
>3-channel receiver—2215; \$23

### Tekin

>Rebel 2 speed control—TT1020; \$80

### Hitec

>HS-5955TG digital Titanium multipurpose servo—35955; \$110  
>HS-5645MG digital high-torque servo—35645; \$50

### BODY, WHEELS & TIRES

**Great Planes**  
>3 6-oz. lead weights—GPMQ4485; \$3

### Pro-Line

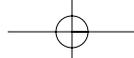
>1976 Ford Currier body—3197-00; \$25

>2 Moab XL 40 Series tires—1119-00; \$25/pair

>2 Weld Cheyenne Beadlock-Gold 40 Series narrow chrome wheels—2683-01; \$35/pair

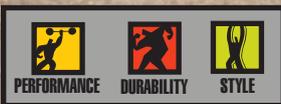
### ThunderTech Racing

>Clod Buster/Juggernaut wheel adapter kit—DEL-CB03; \$45/set of 4  
>2 14mm to 23mm hex adapter kits—CF-CB03; \$15/pair



### WHAT YA GET WITH THE CARBON FIBER NN KIT

- ⊙ 2 Carbon-fiber side plates
- ⊙ Aluminum center chassis plate
- ⊙ Aluminum ESC mount
- ⊙ 5 cable clamps for lower shock mounts
- ⊙ 8, 6-inch aluminum axle links
- ⊙ 24 rod ends
- ⊙ 4 aluminum steering links
- ⊙ 2 servo mounts
- ⊙ 2 GMade Upper link mounts
- ⊙ All necessary hardware



## 1

### Chassis

TheCrawlerStore's CFNN features a 4-link suspension, and unlike most other chassis kits, it includes all the steering links and assorted steering pieces you need to complete the kit with 4-wheel steering. You do have to supply your own shocks, and I chose stock T-Maxx shocks. The CFNN is a simple but efficient design: a stamped-aluminum bottom plate and two carbon-fiber side plates. As a bonus, the carbon fiber looks cool. The battery is placed low for a stable CG, and it is centered front to rear; that helps when you're negotiating vertical and nearly vertical climbs. The links are 6mm clearcoated aluminum and can be adjusted for 14- to 17-inch (in ½-inch increments) wheelbases. The CFNN can also be configured in 50/50 or 60/40 setups. GMade upper-link mounts are included. These pieces lock securely into place and are extremely durable.

## 2

### High-torque motors

Many motors can be used for rock-crawling, but the Team Integy Matrix lathe motors are by far the most popular and effective. Other than having an ungodly 55 turns, these motors are essentially the same as their performance counterparts. Timing is adjustable but comes set at zero and should stay there. The motors feature an open-endshell

design, and as a result, they are completely rebuildable. With tons of torque, these inexpensive mills will drag the heaviest truck up and over seemingly insurmountable obstacles.

## 3

### Electronics

A heavy, slow-moving truck with big tires traversing even bigger rocks requires high-torque servos, so I bolted in a Hitec HS-5955TG for the front steering and a Hitec HS-5645MG for the rear. They put out 333 oz.-in. and 168 oz.-in. of torque, respectively—enough said. To control my 4-wheel steering setup, I used a Traxxas TQ3 radio with a TheCrawlerStore TQ-3 Rear Steer installation kit. This conversion takes about 10 minutes, and the result is an easy-to-use 3-channel radio suitable for 4-wheel steering. I bolted a Tekin Rebel 2 ESC to the top of the rear axle. This heavy-duty speed control is one of the best choices for rock-crawlers.

## 4

### Rock-crawler meats

If you're building a competition-quality rock-crawler, you might as well go with the best tires—the Pro-Line 40 Series Moab XL tires and matching bead-lock rims. These narrow, 7-inch-tall, tires offer tons of grip. Some people narrow the rims further, but instead, I chose to carve the foam insert. I hacked away at least 75 percent of the material and left just

enough to bolster the sidewall. The rims are officially licensed Weld Cheyenne models, and they are the only option for the Moab XLs. I used every other screw to retain the bead lock, and I have never had a tire slip on the rim. To increase traction and to help the front end stay planted on steep climbs, I added 9 ounces of self-adhesive lead weight to the inside of each front rim, but I might add 2 ounces more to each wheel or remove all of it depending on the terrain I hit.

## 5

### Wheel adapters

Pro-Line 40 Series rims are designed to work with Pro-Line's 23mm HD hexes, so you need adapters to mount them on a Clod Buster axle setup. TheCrawlerStore hooked me up with ThunderTech Racing adapter sets that allow the Pro-Line rims to fit

seamlessly. One set converts Clod axles to work with a T-Maxx 14mm hex, and a separate adapter piece converts the 14mm hex to 23mm.

### SOURCES

**Great Planes Model Distributors;** [greatplanes.com](http://greatplanes.com)

**Hitec;** [hitecrod.com](http://hitecrod.com)

**Pro-Line;** [pro-lineracing.com](http://pro-lineracing.com)

**RC4WD;** [rc4wd.com](http://rc4wd.com)

**Reedy,** a division of Team Associated; [teamassociated.com](http://teamassociated.com)

**RPM;** [rpmrcproducts.com](http://rpmrcproducts.com)

**TheCrawlerStore;** [thecrawlerstore.com](http://thecrawlerstore.com)

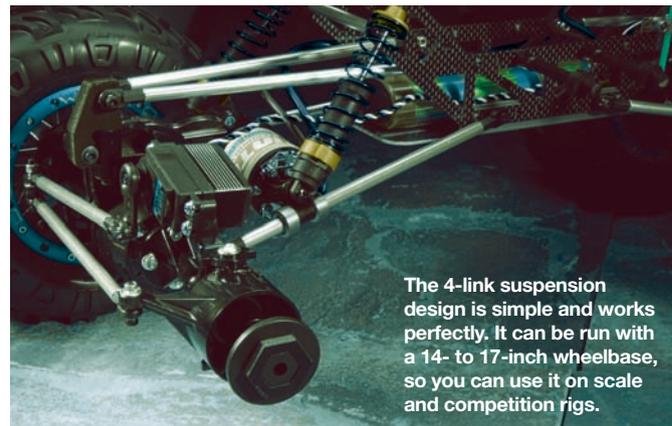
**Tamiya;** [tamiyausa.com](http://tamiyausa.com)

**Team Integy;** [integy.com](http://integy.com)

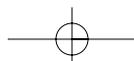
**Tekin;** [teamtekin.com](http://teamtekin.com)

**ThunderTech Racing;** [thundertechracing.com](http://thundertechracing.com)

**Traxxas;** [traxxas.com](http://traxxas.com)



The 4-link suspension design is simple and works perfectly. It can be run with a 14- to 17-inch wheelbase, so you can use it on scale and competition rigs.



## ON THE ROCKS



## BEHIND THE WHEEL

### Tamiya TLT-1

The longer wheelbase increases suspension articulation, and the larger-diameter tires increase ground clearance. The longer, higher truck has more body roll, and that makes it a handful to drive on high-traction surfaces at high speeds, but that's not what I built it for anyway. This truck is for driving slowly around dirt trails, climbing steep hills and, of course, crawling over rocks. The locked differentials, lower battery-mounting position and increased traction contribute greatly to the truck's hill climbing and rock-crawling ability. The upright-mounted shocks limit some suspension articulation, but they provide a good blend of driving stability and rock-crawling ability. I typically drive the truck in a dry riverbed, and it has fewer rollovers with the upright shocks. If I entered a rock-crawling contest, however, I'd go back to the stock cantilevered setup. The truck climbs higher and steeper when driving in reverse. The rearward battery mounting places most of the chassis weight on the rear tires, which become the front tires when driving in reverse. Because of the 4-wheel-steering, the truck drives equally well in reverse. It also crawls over rocks, branches and other natural obstacles with relative ease.

—George M. Gonzalez

### Traxxas Revo

Driving my Revo over the rocks was completely different from driving the other trucks in this article, and that's exactly what I wanted. I was a little worried that the clutch might slip when the truck crawled at low speeds because once it starts to slip, it will continue to do so, but it didn't slip at all. I was very surprised by how well the truck climbed over the rocks. I knew it wouldn't climb as well as the other trucks, but it wasn't too far off the mark. The truck went over small rocks easily, but the larger ones required more throttle to get my Revo over them. The dual servos and stiffer servo-saver spring controlled the tires well by keeping them straight in all extreme situations, but at times, I was a little limited by having only 2-wheel steering. If you're serious about rock-crawling, 4-wheel-steering is a must; you need it to get your truck out of tight spots. Unfortunately, there isn't an easy way to set the Revo up for that. It's OK; this truck is meant for fun not rock-crawling competitions.

—Kevin Hetmanski



## ON THE ROCKS



## BEHIND THE WHEEL

### RCGuy Gecko Pro Kit

As soon as my Gecko Pro kit was assembled, I had to try it out in my workshop. I was amazed by the degree to which the suspension articulates. The truck was able to approach an obstacle (my pit box) from the side with only one wheel making contact with it; it powered forward and caused the front axle to twist 90 degrees while the rear axle kept its tires planted on the ground. The Gecko's dialed steering setup not only allowed me to control the front and rear servos independently but also simultaneously. The key is to use a 4-channel stick radio such as Airtronics' VG400; the left stick is designated for throttle only, and the right stick operates all the steering duties. Left and right inputs control the front wheels, and up and down inputs control the rear wheels. So diagonal movement on the stick could make the truck either crab or turn the front and rear wheels in unison to make tighter turns. The Gecko Pro conquered obstacles that I initially thought impossible to climb. Its crawling prowess can't be credited only to the incredible suspension, geared-down trannies and powerful lathe motors. I also glued 11 ounces of wheel weights to the inside of each of the front wheels to help them to pull the rest of the truck over obstacles. The RCGUY Gecko Pro Kit is an awesome rock-crawler. —Paul Onorato

### TheCrawlerStore Carbon Fiber NN

Simply amazing. That's the best way to describe how the CFNN handles the rocks. Running on only 6 cells, my rock-crawler probably doesn't break 10mph, but it has incredible torque. With the grip that the Pro-Line Moab tires provide and the power of the dual-lathe motors, the CFNN can climb over huge obstacles—even short vertical rock faces. If you can get the front tires up and over, it's mission accomplished, and the rest of the truck will be pulled right up. The Moab XLs stick like glue to even the smoothest rocks. The CFNN isn't Spiderman; it will flip over backwards when gravity gets the better of it on extremely long, steep climbs. It can take a beating, and although I've long since lost count of all the rolls and tumbles, it never skipped a beat. I recommend that you take along a wheel wrench and occasionally check the wheels because they loosen if you use reverse a lot. If you crank the bolts down tightly, you should be good for the day. With 4-wheel steering, maneuverability is good; it's not great, but the CFNN does go where you point it. The Hitec titanium-gear servo I used up front works fantastically well. It has more than enough power to swing the tires, even when the truck is stationary. This is extremely important because being able to take a line and keep it is often the key to success in rock crawling. —Matt Higgins ☘

