

COMING TO

R/C is more than just racing to me, and someone recently told me, although every week (and weekend) there are thousands of people driving to club meets, Nationals and Internationals, racers only make up about a third of the people in the R/C car scene. The majority of users do it for fun, and thinking along those lines you can see why this is such a global industry. For me the most frequent question I've been asked since writing for RRCi is 'what should be my son/daughter/nephew/niece/aunt/uncle/brother's first car be?' It's a difficult one to answer too, as if I was being asked at a club then the question is a little easier because they've made the first step down a path and they're interested in racing. Recently I was asked the question by a dad who saw me reading RRCi in a waiting room. I wasn't sure what to say so I went with what I would have wanted from my first R/C car many moons ago. "Well it's going to have to be tough" I blurted out (stop laughing Pete, its not like I damage EVERY review car I run... well not straight away!) I continued, sighting that it would need to be simple to fix, cheap to replace broken bits, well supported by the trade as a whole, from a trusted brand, not dangerously quick, but not slow enough to grow out of immediately. It must be able to attack the dirt as well as tarmac, and last of all – it's gotta look good!

OK, IT'S A GRAVEDIGGER, BUT NOT A SCARY ONE...

The weird thing was that the same week I received a parcel in the post from Traxxas, it was to review and as part of the process also to demo at our track at Gadget Show Live. Opening the box what sat in front of me seemed to tick all of those boxes above – it was the newly licensed and released Monster Jam, Traxxas Grave Digger!

I remember the Grave Digger from when I was a mere lad; watching it take on the other monster trucks like Bigfoot, back when it was first on TV. Since then I've always had a soft spot for the black and lime green and retro styling of the Grave Digger. This being an officially licensed replica the colours and details are every bit as vivid as you could imagine, down to the wheels looking like the giant alloy split rims used by the 1:1 scale original. This is squarely aimed at the first time R/C owner or someone just wanting a little R/C distraction that's loaded with that 'F' word again... 'FUN'.

Being a Traxxas, it's a RTR, so you just drag it out of its box and breathe in the realistic Monster Truck looks. After about 15 minutes of staring at it from every angle you'll finally cotton on to the person who's been trying in vain to grab your attention, trying to ask you if you're going to drive it or just keep looking at it on a shelf!

WHAT! NO 2.4?

Now that was a surprise to me as most of the Traxxas range now roll with the newer 2.4 GHz TQ systems fitted as standard. Talking to the guys at Logic it's 27 MHz for two good reasons, 1: it keeps the overall cost down and makes the trucks far more accessible to those getting into the hobby. And 2: it's never going to be raced, just bashed for fun. Having a handful of frequencies to choose from still means that if your family fancy owning more than one of the trucks, you can run all the available models together if you wanted by ensuring they are on different crystals.

In the box there is the now classic Traxxas 27 MHz TQ controller. □

GET YOUR!

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QUICK SPEC

Manufacturer **Traxxas USA**
Type 1/10th 2WD Monster Truck
Price **£249.99**
www.logicrc.com

Length 413 mm
Front Track 324 mm
Rear Track 324 mm
Weight **1.85 kg**
Max Height 222 mm
Wheelbase 270 mm
Gear Ratio **2.72**



Above: Ever wanted a Grave Digger of your own? Now you can!

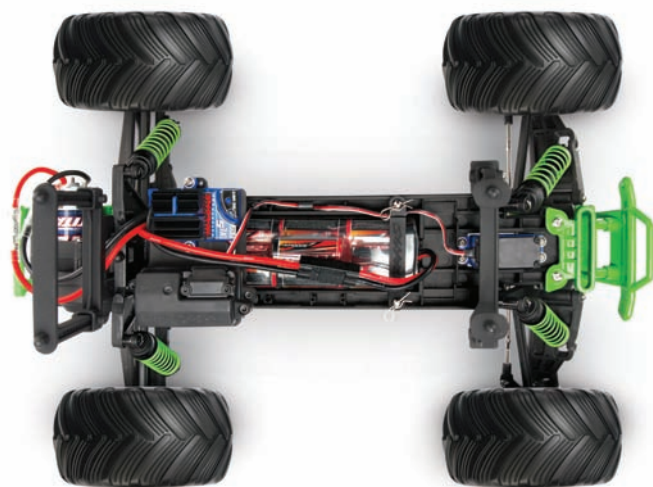
wall charger and a hump NiMH pack – everything that's needed to get this thing rolling. The battery that's included is not your standard fare 7.2 V NiMH. Traxxas have gone a very robust route when it comes to adding bang for your buck. Rather than adding a LiPo, they've simply added a seventh sub-C cell on the top knocking the voltage up to 8.4 V for that extra pop!

The chassis and assembly of the truck itself is probably the most basic of Traxxas' current range and I mean no disrespect by that, in fact I see it as a logical and well thought out choice. The chassis itself is from Traxxas' 2WD mainstay the Stampede, which is a cracking bit of kit. Throw in a tried and tested waterproof and LiPo compatible ESC that pushes to current to a 12 turn 550 can brushed motor (normally fitted to the Slash 2WD) which has more than enough torque for the first timer without being too scary.

'BETTER THE DEVIL YOU KNOW'

By using tried and trusted parts, and many components that are used across a wide range of vehicles, Traxxas know that this truck is perfect for a first timer. It means there are already parts out there so if you are talented enough to break something the chances are your local hobby shop might have some stock. It also means that there is a range of hop-ups that can be bolted on if and when your (or your parents') wallet allows.

To be honest they could have used the new 4WD stampede model as a base for this car and it may have made it a bit surer footed, but way too much of a handful for the beginner, and expensive in comparison.



Above: The Stampede gets a Monster Jam makeover

LOOSEN THAT SLIPPER...

As I mentioned before it's a Stampede under the highly detailed and fully licensed Grave Digger body, which is part of Traxxas' tie-in with the AHRA Monster Jam scene, which is the US Monster Truck which is a huge Arena series stateside. Powering this brute is a 12 turn 'Titan 550' silver can motor mounted out the back of the chassis feeding the beans through a triple pad slipper clutch that wouldn't look out of place on a road car!

It's another good idea from Traxxas to save the transmission internals on heavy 'power on' newbie landings! Just make sure you back the slipper off about a turn or so as I've noticed that ours came very tight and wasn't actually slipping much under load. I guess it was new and needed bedding in, but have a read of the comprehensive instructions and this process will become very clear and can be done in a matter of seconds. All the main gears in the transmission are brushless ready metal anyway which should just about make it strong enough for the most abusive of owners... But don't say you weren't warned!



Above: The shell is a work of art, and true to the original truck



Above: Waterproof and LiPo compatible, perfect for bashing!

including seeing how far I can wheelie it down a deserted car park and full-bore jumps over older review cars it stayed in one piece, and that's more than I can say of the diff's of other R/C vehicles in my collection if I did the same!

TELE-TIME

One plastic element in the drive train is the Traxxas staple – telescopic driveshafts. Used on pretty much every model of theirs I can think of, half of these little beauties are secured to the diff out drives, and the other half is secured to the hub at the other end. In the middle each part meets, with male and female 'X' shapes which interlock. It's an old school method, but one that has and will always work for Traxxas. Allowing for the power to be seamlessly fed to the wheels from full extension to full compression without the slight hint of dog-bone rattle you get on other models.

The seven-cell lump pack fits just in front of the rear shock tower with the receiver and ESC mounted on top. This instantly drew my attention as it means there is a lot of weight packed around the rear axle line. Great for traction yes, but it can also lead to there being very little weight over the front end so I wasn't expecting lightning sharp turn in! The other quirk of the chassis is the 4" of ground clearance at the highest point of the chassis. For those of us not in the Continental US or born after 1971 that will be 10 cm (roughly!). This allows the Digger to bound effortlessly through long grass or it can clear the roof line of most car shells when you try a bit of Monster Truck action!



Above: OK, so it's not 2.4 GHz, but it works perfectly

STAIRS? WHAT STAIRS?

The most impressive (but my fiancée's least favorite trick) that the Digger can pull off, is the fact that it can be driven down the stairs in my house. Kids (especially mine!), don't try this at home. But if you really have to, best ask your Dad's permission first (your Mum will never go along with it!).

The most obvious differences on the Grave Digger to its Stampede sibling is the vivid green colouring to the exposed plastic to mimic the full size truck, it's just a little detail but I love it. Damping is handled by four long throw shocks wrapped in the same striking green coloured springs. All the geometry is fixed



Above: Double the torque of a 540 can and 12T to boot... the Titan!

At the bottom of the gearbox is the satellite/planetary geared diff. On some US forums there have been stories of the diffs being damaged when the slipper is run too tight (like for doing wheelies? ED). To be honest, with a 12t turn 550-size motor and 8.4 V all being fed through a metal-gearred transmission, especially on a car that's built for bashing, it's going to hone in on any weak link in the chain.

I personally never had a problem with mine, and that includes it being royally abused for a week at the Gadget Show Live. During my testing,



Above: No inserts required! Makes for a more realistic MT experience

with solid top links, and single positions for everything except the shocks. To be honest it's not an issue as it's the first car you own so you're going to be spending most of your time figuring out how to maintain that wheelie, plus being a monster it's not exactly like you'll be trying to improve your lap time!

The solid top links and lower arms are made from chunky black plastic. Strong enough to keep everything pointing in the right direction and yet with enough flexibility and give at the heavy impact end of the strength scale to allow the Digger to brush off the odd kerb-strike or mistimed landing.



Above: Three shoes on my slipper... back it off about a turn to protect the diff and driveline!

ON A TOUGHNESS SCALE OF 1-10...

Now, on a previous review of a Monster Truck my four-year-old daughter accidentally (well she tells me it was an accident!) found a great test of a basher's damping. Basically you drop your model of choice from said four-year-old's chest height as if she was carrying it and then decided not to bother anymore. If the car bottoms out you're in the 1-5 score range depending on how hard it belly slaps the floor. Touring cars and 12th pan cars get a 0 by the way. If the car doesn't bottom out, but because it runs out of travel in the suspension, then it's a 6-8 and you guessed it, if it manages a controlled descent and doesn't bounce it's a 9-10 score. In this impromptu test the Digger gets a solid 8. It does have a nice controlled squish on landing but it cheats by taking most of the hit through those balloon tyres.

I've made a reference to the fact that all of the weight is over the rear of the car and it is, except for the servo that is mounted vertically down through the chassis. It's in-between the vertical pieces of the front shock tower with the servo saver fitting directly onto the servo and integral to the steering assembly. So there is no complicated bell crank system that can either break or become sloppy over time. I love the simplicity of this thing!

Breaking it down was as simple as Lego! The front suspension comes off after you've undone just four screws and another two for the tie-rods. Eight and the rear-end slips off. The gearbox itself is simple too, just in case you break anything, two screws lets you have access to the slipper assembly and gear mesh, a few more and you can split the case and pick out whatever needs lubing or replacing. The slipper is adjustable through a cap on the dust shield so that



Above: All metal, the transmission is VXL ready when you are!



Above: Not 100% sealed, but pack it with grease not oil and you're onto a winner



Above: Steering components are simple but sturdy in nature

the 1:1 scale driver in Monster Jam and did my turning at low speed when lining up a jump and when I was straight I nailed the throttle.

When it comes to speed the Traxxas is quite quick thanks to the hump pack, point it towards the horizon and it does pick itself up and charge, a bit like a rhino. Similarly, like a rhino it doesn't really like turning at full pelt. It does turn don't get me wrong, but you have to come off the

you can tune out the amount of wheelie as you go! Perfect if you're at the park and it's too long a walk back home to fiddle with anything more serious or complicated.

MONSTER DRIVING

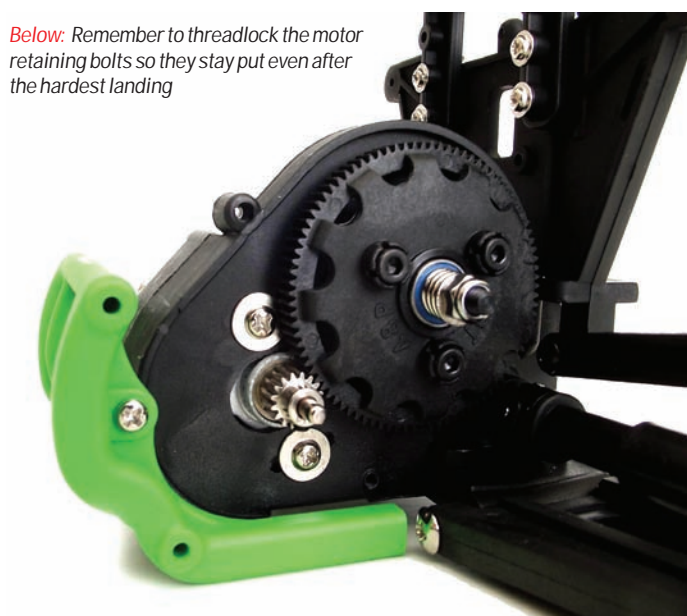
Cutting to the chase and how this thing drives. It's hilarious! If you're after a pinpoint accurate 4x4 truck or light speed circuit racer, please look away now. This is simple honest fun. Being designed as a first car and one designed for the more fun element of our hobby, I'm not looking for consistency or hyper-accuracy. Just a truck that will go in the direction you point it and not randomly head off in another without warning because there is so much play in the steering.

As I mentioned earlier, the steering is direct to the servo so that eliminates that worry almost instantly. The bigger balloon-like tyres do make it a bit of a skill to judge your line up to a jump if you're carrying some pace, as they tend to fold over a bit at speed. I just took a lesson from

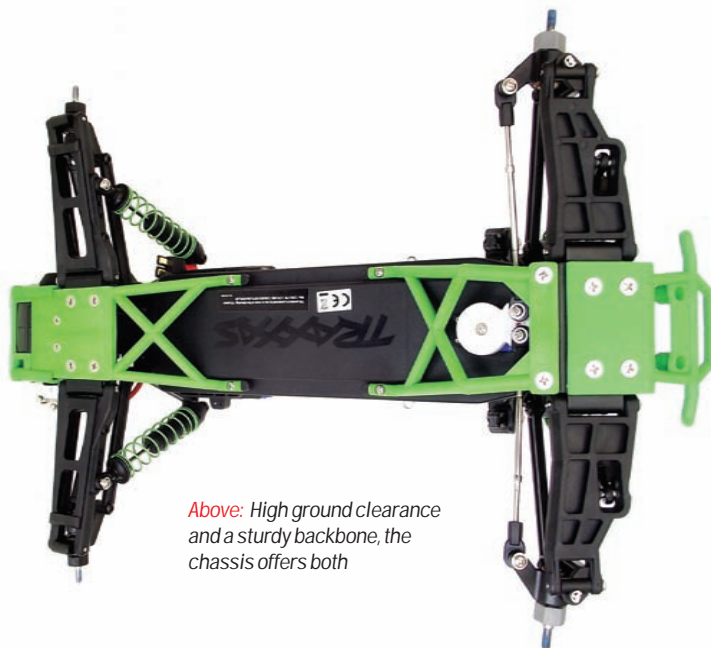
"It's an old school method, but one that has and will always work for Traxxas. Allowing for the power to be seamlessly fed to the wheels from full extension to full compression without the slight hint of dog-bone rattle you get on other models"



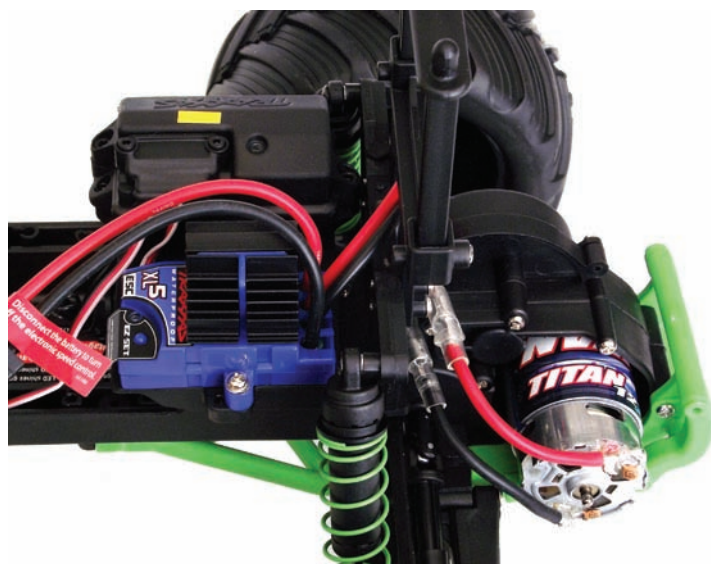
Above: The front end removed from the chassis, again simple, but effective



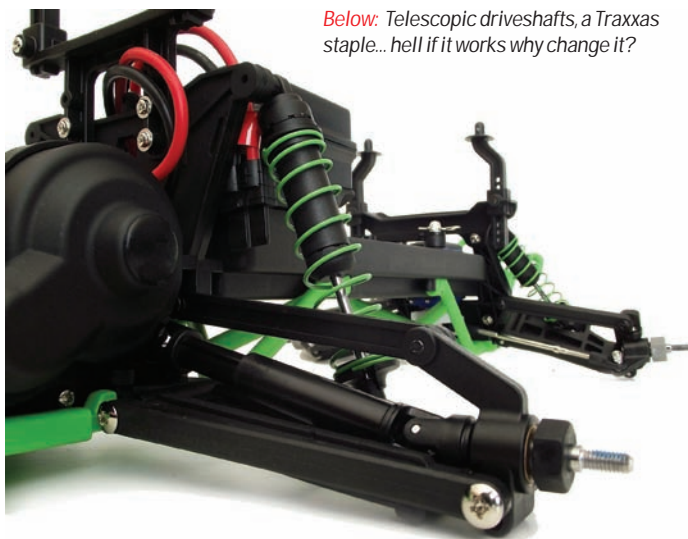
Below: Remember to threadlock the motor retaining bolts so they stay put even after the hardest landing



Above: High ground clearance and a sturdy backbone, the chassis offers both



Above: Weight is naturally rear-biased, this offers traction at the rear, but can make the front a little light



Below: Telescopic driveshafts, a Traxxas staple... hell if it works why change it?



Below: Lower wishbones and fixed upper linkages keep everything tough and uncomplicated

"Breaking it down was as simple as Lego!"



Below: What's that coming over the hill? (Couldn't resist that!)

throttle which to be honest isn't the end of the world. Applying the brakes at speed does allow you to do pretty controlled handbrake turns too!

NOT UNDER-STEER... ZERO-STEER!

Off the line or under major acceleration the Digger goes beyond the mere under-steer range and heads into full on 'zero-steer' territory. It's the front tyres leaving the ground as that rear biased weight makes everything pivot round the back axle, that is unless you really back off the slipper clutch but then you start to lose the acceleration from that mighty 550 silver can.

TOP TIP

My advice? Either add a bit of stick on weight over the front end to get more steering or do as I did and embrace the madness! Add a bit of slip to the clutch so that the wheels can get light but you still retain most of the acceleration. Then, just bury the trigger and charge full pelt to whatever you're planning to jump!

On wet tarmac the rear balance comes into its own with a genuine sense of drifting balance! Even on dry tarmac there isn't all that much grip as the Grave Digger will kick and squirm around as you push it on tarmac and even some thicker types of mud. It does show off another party trick of the Digger. Front-wheel-waving.

With most off road racers you can go into a corner still carrying some brake and all the weight goes to the front and the inside rear wheel dangle in mid air at the limit of its droop. With the Grave Digger the opposite is true, give it a prod on the throttle coming out of a corner, the weight shuffles back, the nose rises along with the natural lean of going round a corner and the inside front wheel is left dangling helpless in the air. Squeeze the trigger harder and the other wheel will join it in the clouds and you're back to zero-steer and heading towards a kerb/rockery/sofa/friend's leg at an increasing rate of knots!

BIG BOOTS TO FILL

All that rear end grip is generated by the tractor tread tyres that are supplied with the Digger, weird thing being that with my previous monsters they come with inserts in the tyres. The Digger doesn't. Whether that's to give the car more of a scale 'squish' on landing or if it's another case of the simplified thinking behind the Digger, I think

it works. After all it simply wouldn't be half as entertaining to drive! On a practical point if they put inserts in then it might get too much grip and you'd be constantly turning the thing upright after it topples over every time you went near the steer wheel at more than walking pace.

As I mentioned earlier, the Digger was going to be one of the cars I was demonstrating at this year's Gadget Show Live at the NEC in Birmingham. Normally each one of the cars that I review gets a night at the local R/C club pitted against something fairly similar as a bit of a reference and the racing is normally pretty hard. GSL was a totally different kettle of fish.

While the course was relatively simple, there were three big whoops, two sets of ramp-to-ramp airtime, a spine and Pete's favourite... the loop the loop. Honestly, what kind of twisted mind does he have? (You just wait until next year! ED). Add to this, the fact that I don't think there could ever be more scrutiny of either my skill behind a transmitter, or a truck's ability to take day after day of abuse than when it's done in public. Especially with a healthy crowd of people three deep at the barriers fixated on the truck's every move!

This was going to be a HUGE ask and not helped by the word of advice I got just before going out in the Live Arena for the first time from the ED, "Hey Rob, decent crowd, if you break it at least you'll get a good round of applause!" Thanks... That really didn't help (I aim to please!). Although my confidence was increased in the knowledge that most of my industry insider buddies all seem to think that Traxxas cars are slightly over engineered and therefore can take a kicking and still come back for more. Perfect for first timers and nervous, almost ham fisted magazine scribblers at live shows!

Over the course of the show the Grave Digger loyally put up with the abuse that me and everyone else who drove it dished out. There were mistimed ramp attempts, high-speed collisions with other trucks, obstacles and people. Between demo's there was almost no time at all to look over it and check if anything need adjusting or tightened, just about enough to throw on one set of cells on charge and strap in another – just like an excited kid. I know they won't admit to it but I'm sure a few of the people I lent it to on my final day at the show were actually TRYING to break it... (me, never ED!) But the Digger just kept on going! The only thing it needed was on the second day I took out the screws holding the motor in place and threadlocked them as other rear engine cars had been suffering from rear-heavy landings over the big gap jump in the middle of the course.

I REALLY DIG THIS TRUCK!

If you're after a great looking, rugged, simple basher that's easy to drive and learn the basic of R/C without the fear of breaking something on the first glancing knock against a plant pot or garden fence then the Traxxas has the game sewn up. Traxxas is now probably the world's biggest fun and bashing brands, especially when it comes to designs like this. You'll never have to worry about having to hunt too hard to find someone to supply parts if you do manage to break a component or even if you just want to upgrade and want to go a little VXL faster!

The Digger takes a very solid approach to its audience; there is no carbon fibre to snap or composite plastics to break. One thing I've not mentioned here yet is the waterproof electronics, meaning that the odd UK summer puddle or brief shower doesn't have to stop play. In short it's a pretty damn fine example of what a first car should be. Yes when you give it full power it does get a bit of a wheelie-tastic handful but that is part of the outrageous character that comes with any Monster Truck. Put simply, the Monster Jam trucks were one of the biggest draws of the Gadget Show Live test track. They kept running constantly with only minor maintenance and that was more to do with the fact that they were run for most of the day sometimes even on back to back sessions over HUGE jumps. No parts wore out, no tyres needed replacing. The Grave Digger or 'Dave Grigger' as my kids call it is now part of my Display Arsenal and dare I say it family! **RRCi**

TECHNICAL SPEC

REQUIRED TO COMPLETE

8x AA cells for the transmitter

LIKES

It's Traxxas, designed to be tough
Licensed Monster Jam product
Waterproof electronics
12t 550 can torque
7-cell NiMH Pack

DISLIKES

Slipper too tight out of the box
No 2.4 GHz as standard

CONTACT

www.logicrc.com

"Over the course of the show the Grave Digger loyally put up with the abuse that me and everyone else who drove it dished out"

Below: Backyard bashing at its best...

