

Aggressive looks with the performance to back it up

I SHRUNK THE HONEY, MGT

ASSOCIATED MINI MGT 3.0
BY IAN PECKETT

The MGT monster truck platform has without doubt been a firm favourite with monster truck fans. Team Associated has now taken this winning package and shrunk it to 1/10th scale. The question is, has Team Associated managed to cram all the features of its big brother into this compact 1/10th scale package? Let's have a look!

CHASSIS

As with its MGT 4.6 big brother the Mini MGT 3.0 has a rigid extruded aluminium chassis backbone, which runs the entire length of the truck. The chassis has been finished in bright silver anodising and has a three-part plastic skid guard mounted to the underside to protect the centre gearbox and driveshafts. The layout is very similar to the MGT 4.6; the engine is rear mounted and runs across the chassis from left to right. A large capacity 110 cc fuel tank is mounted down the left hand side. A fuel tank splashguard has been fitted to stop fuel getting on to the twin brake discs. The quick fill cap is heavily sprung and should help to stop leaks when running the Mini MGT 3.0 on rough ground.

The external two-speed gearbox sits on the other side of the chassis, protected from the elements by a lexan cover that completely encloses the gears and a plastic cap allows easy access to the slipper adjustment nut.

The large radio box has been moulded in one piece making it possible to get to both the receiver and the battery by opening only one lid, held closed by two body clips.

The steering servo is mounted upside-down under the chassis and has a servo saver fitted directly to its output shaft, operating a conventional dual-bell crank steering system. The throttle/brake servo has the normal spring override linkage set-up and a bell crank servo linkage to accommodate the barrel carb. A forward/reverse servo is mounted on its side in the centre of the chassis. Overall the layout of the chassis makes it easy to work on and allows quick access to radio batteries etc.

Robust bumpers have been fitted at the front and rear, with an oval plastic 'spring' to absorb impacts and minimise damage to the chassis. Lastly a roll over cage that doubles as a carrying handle protects the Mini MGT's vital organs in the event of an inverted landing.

TRANSMISSION

Power is transferred from the engine via a 3-shoe composite clutch, which engages a 13/17-tooth two-speed clutch bell that in turn drives the 64/60-toothed slipper spur gear. This gives a first gear ratio of 22.32:1 and a second gear ratio of 16:1 and should give a good mix of acceleration and top speed. Optional gearing allows a first gear of 12.8:1 and a second gear of 9.5:1; this would give a significant improvement in top speed but at the cost of reduced acceleration.

Hardened steel gears and ball races are the main features of the centre gearbox. The casing is attached to the chassis by six screws and is easy to remove and service.

Twin steel cross drilled brake discs have been installed on the front output shaft of the centre tranny, and four brake shoes are used to generate the forces needed to slow this monster down.

Front and rear differentials are the same, with straight cut hardened steel ring gears mounted within sealed cases, and the entire driveline is fully ball raced for an efficient power delivery. A total of 28 precision ball races gives the Mini MGT 3.0 a very smooth transmission that will, I am sure be maintenance free and reliable for a long time.

Directing the power to the four wheels, Associated have used CVD's (constant velocity driveshafts) constructed from a combination of plastic output drive cups and steel drive bones. Finally, the power finds its way to the ground via 14 mm steel drive hexes that rotate on hardened stub axles.

SUSPENSION

Thick plastic upper and lower arms are used at both the front and rear and all four lower arms have two optional shock absorber mounting points to allow you to tune the suspension as you wish.

Team Associated has employed pivot ball type suspension, within chunky plastic steering hubs. Camber adjustments can be made without removing the wheels by accessing the hex socket adjusters through the spoked wheels.

Eight identical plastic bodied 105 mm shock absorbers have been installed on the Mini MGT, two per wheel in true monster truck style, with shock preloading spacers to set the ride height. They feature 3 mm

Centre drive-shafts are protected by a full length plastic guard

All you need is fuel and radio batteries



Associated Pro 18 (3.0 cc) powerhouse sits on the chassis plate and should ensure great performance

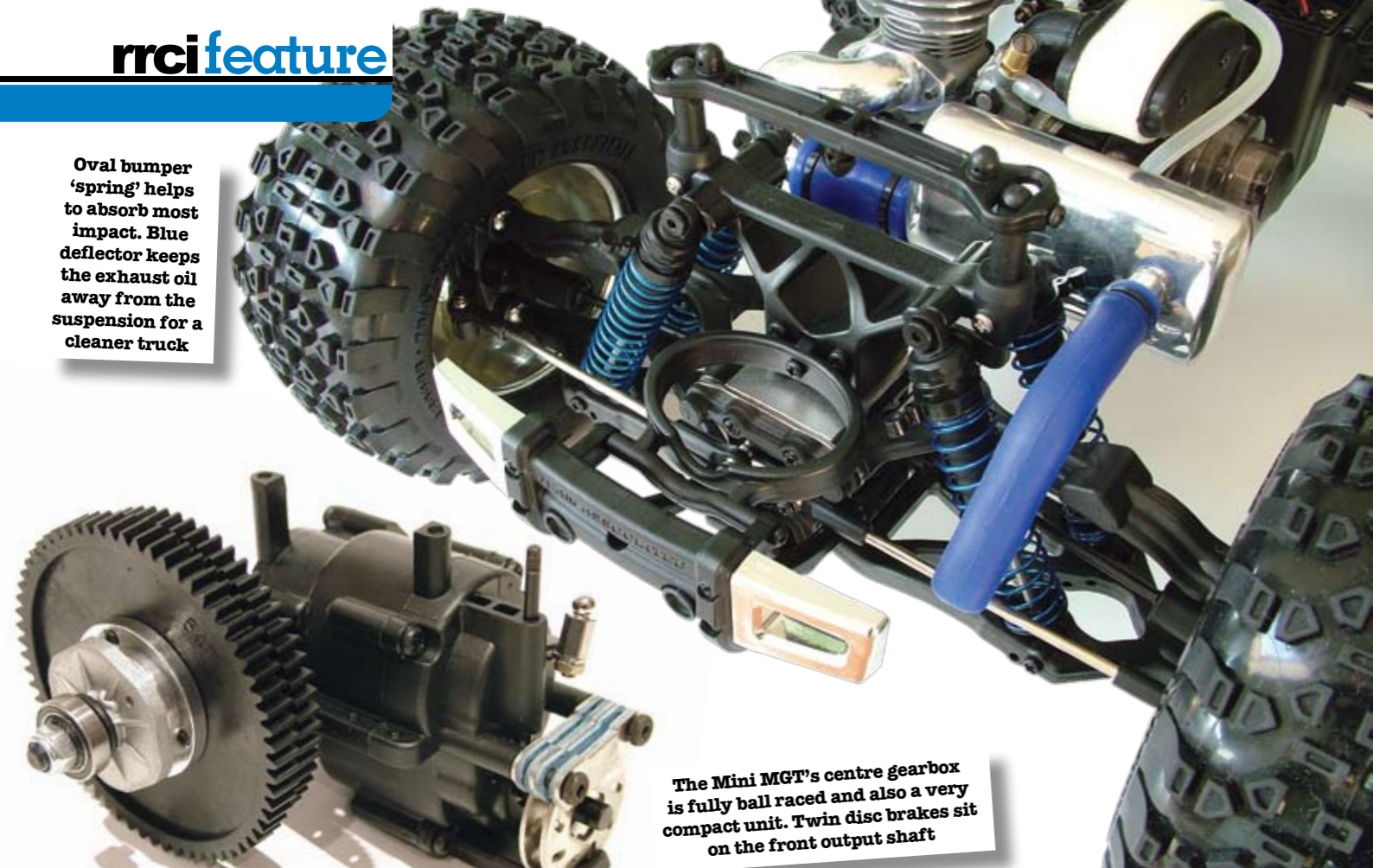
shafts, rubber bladders and blue springs rated at 2.70 lb/in but there is a full set of optional tuning springs are available from Associated. To keep the parts count down Associated has used the same plastic shock towers on the front and rear, with two shock mounting points per side. Adjustable body mounts are installed on the towers to allow fitment of most bodyshells.

The great thing about having identical parts at the front and rear is that the owner will only need to carry a few spare parts in stock to keep their truck running.

ENGINE

A Team Associated Pro 18 pull-start engine has been installed, fitted with a 2-needle rotating barrel carburettor which allows the owner to set up the bottom and top end mixtures. The exhaust fumes exit via an

Oval bumper 'spring' helps to absorb most impact. Blue deflector keeps the exhaust oil away from the suspension for a cleaner truck



The Mini MGT's centre gearbox is fully ball raced and also a very compact unit. Twin disc brakes sit on the front output shaft

aluminium header that directs the gasses into the matching polished aluminium tuned-pipe. A blue silicon exhaust coupling connects the header and pipe together, and like its big brother the Mini MGT has a rubber deflector to direct the fumes and oil out of the rear, to keep the truck clean.

An oval 2-stage foam air filter is supplied with a 90-degree rubber tube that is tie wrapped on to the carburettor. It is recommended that the filter is cleaned and re oiled after every 5 tanks of fuel. The engine is secured to the chassis by a cast aluminium mount, which combined with the finned alloy head should help keep the engine within its optimal operating temperature range.

All steel drive line in the reversing gearbox for extra strength

RADIO EQUIPMENT

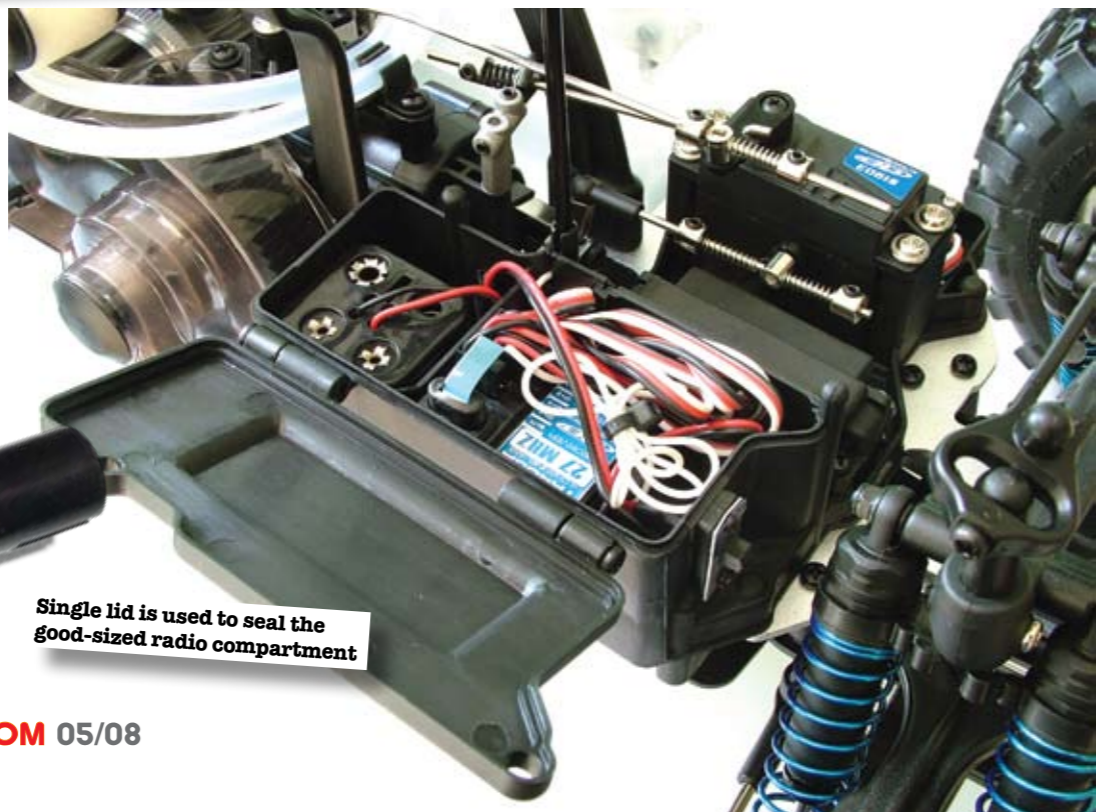
Team Associated have manufactured the radio equipment supplied with the Mini MGT. The XP3 27 MHz AM transmitter is a wheel and trigger configuration and features trim adjustment on both steering and throttle. A big plus is the inclusion of dual rate steering, this giving the owner the option to tone down the total steering, making the Mini MGT more controllable for the less experienced driver.

A matching 27 MHz AM four-channel TR405A receiver collects the radio signal and controls the steering duties via a single high-powered Associated S2008MG servo.

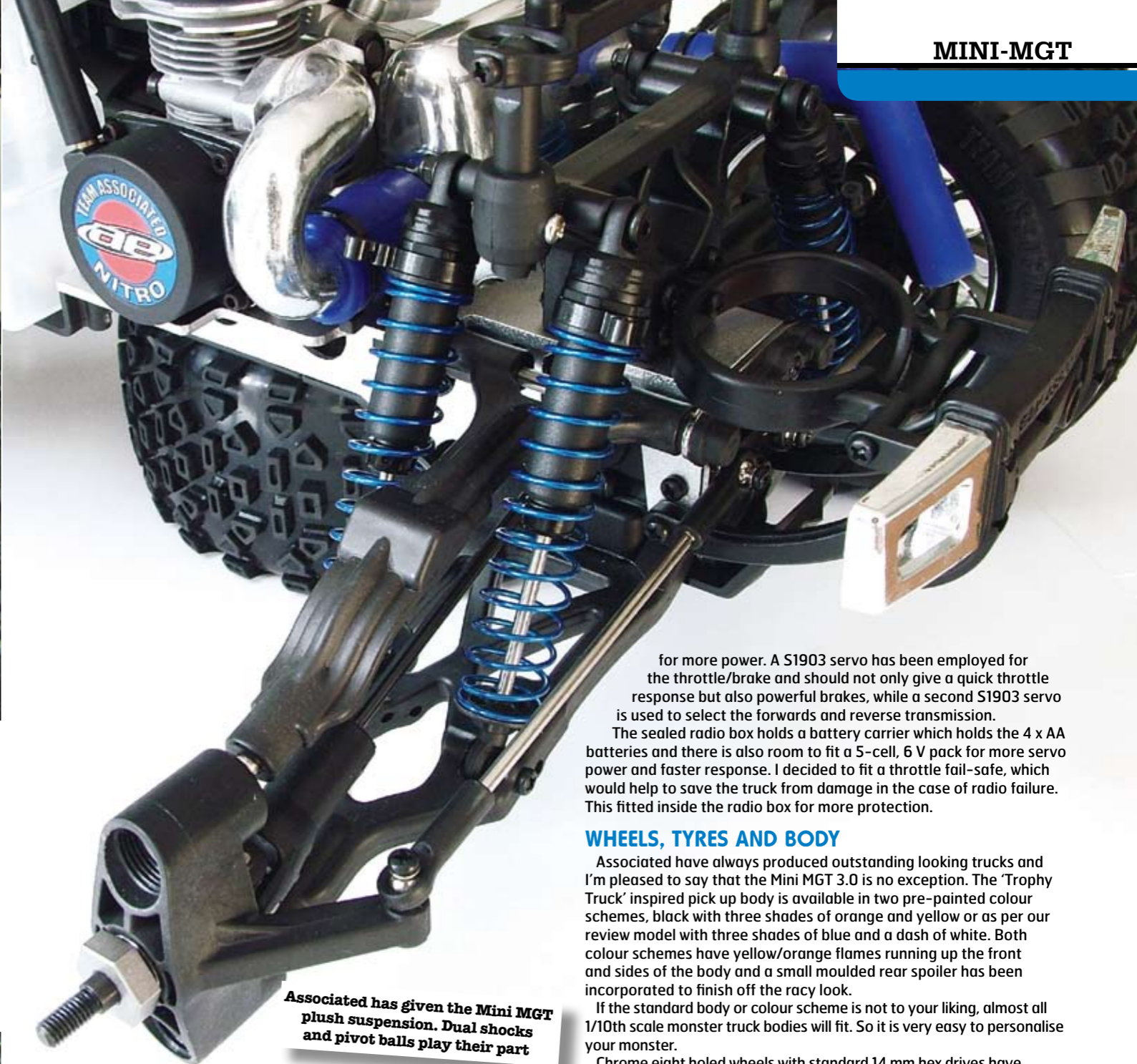
This metal-gearred beauty has 8 kg of pull and extremely good holding power. The under-side of the chassis reveals an optional mounting place for a second steering servo should the need arise



Fully ball raced diffs also feature hardened steel ring gears



Single lid is used to seal the good-sized radio compartment



for more power. A S1903 servo has been employed for the throttle/brake and should not only give a quick throttle response but also powerful brakes, while a second S1903 servo is used to select the forwards and reverse transmission. The sealed radio box holds a battery carrier which holds the 4 x AA batteries and there is also room to fit a 5-cell, 6 V pack for more servo power and faster response. I decided to fit a throttle fail-safe, which would help to save the truck from damage in the case of radio failure. This fitted inside the radio box for more protection.

WHEELS, TYRES AND BODY

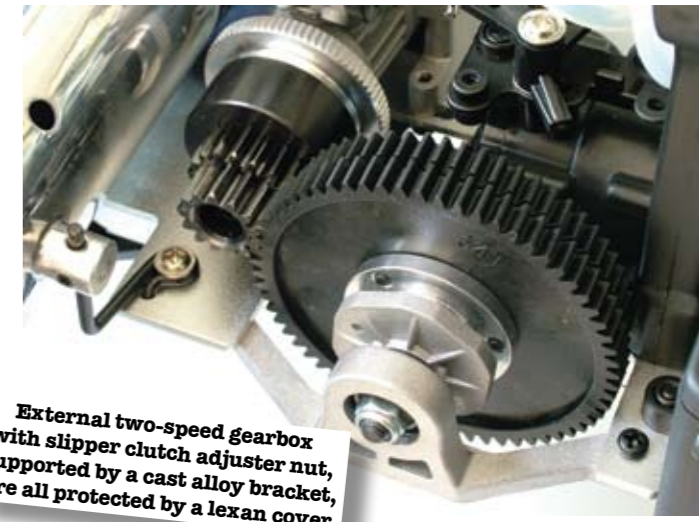
Associated have always produced outstanding looking trucks and I'm pleased to say that the Mini MGT 3.0 is no exception. The 'Trophy Truck' inspired pick up body is available in two pre-painted colour schemes, black with three shades of orange and yellow or as per our review model with three shades of blue and a dash of white. Both colour schemes have yellow/orange flames running up the front and sides of the body and a small moulded rear spoiler has been incorporated to finish off the racy look.

If the standard body or colour scheme is not to your liking, almost all 1/10th scale monster truck bodies will fit. So it is very easy to personalise your monster.

Chrome eight holed wheels with standard 14 mm hex drives have been supplied with the Mini MGT 3.0. Pre-glued onto these are 150 mm diameter, 80 mm wide Associated MT88 monster truck tyres with foam

Associated has given the Mini MGT plush suspension. Dual shocks and pivot balls play their part

Roll bar doubles up as a carrying handle. Note the fuel tank splashguard to protect the brake discs



External two-speed gearbox with slipper clutch adjuster nut, supported by a cast alloy bracket, are all protected by a lexan cover

inserts to keep the soft carcasses supported in an off road environment. A large selection of MT wheels and tyres are also available including Pro-Line racing 23 mm heavy-duty hex drives that fit straight on.

PERFORMANCE

After a good look over the truck and a final check of the radio set-up, I filled the tank with Byron 16% nitro Race fuel. I have to say that I'm not a fan of pull starts, but the Pro 18 fired into life on the third pull. I ran in the Pro 18 engine, as per the manufacturer's recommendations before I started to lean out the main needle, when it very quickly became obvious that the Mini MGT 3.0 was going to be a fast 'little' truck. Next I turned my attention to the bottom end needle settings. As I leaned the mixture out the Mini MGT 3.0 started to show very good bottom end power, which is not only down to the engine but also to a good choice of gear ratios.

The carburettor responds well to adjustments and from the point I tuned the engine the carburettor was not touched again throughout the test and the temperature never got above 235°F. The main needle ended up 3.5 turns out from fully closed and the bottom end needle was set at 2 turns from fully closed.

The Mini MGT feels agile and with its responsive steering it can be driven hard. With its soft and plentiful suspension the Mini MGT easily keeps its composure over rough ground and the kit tyres performed very well on most surfaces. When driving the Mini MGT, I really got the feeling that I was driving its MGT 4.6 big brother.

Jumping the Mini MGT 3.0 is an absolute pleasure and it is extremely stable in the air. If pushed at a jump with the sole purpose of getting big air the Mini MGT 3.0 will respond with some very impressive results. The Mini MGT 3.0 will jump high and will almost hang in the air. I made over 20, 1-metre high jumps in succession with only two bail outs but there was no damage sustained and the fun just kept coming.

In flight balance was predictable and easy to correct with a dab of throttle or brake.

The Mini MGT 3.0 did bottom out after bigger jumps so I raised the ride height by placing some shock pre load spacers on all eight shocks. The added ground clearance made all the difference and stopped the chassis slapping the dirt on landing.

I took the Mini MGT onto a gravel car park for a bit of drifting action, power sliding around on the gravel was very satisfying; I could get this little monster to four wheel drift with the tyres spitting stones all over the place as I laid down the power.

The Mini MGT is so easy to control; it can make even a novice driver look like a Pro!!

The forward and reverse transmission worked perfectly, I had great fun trying to get the truck up to full speed in reverse. It was a real handful but very good fun!

The dual disc brake set-up worked well, slowing the truck from warp speed in a very short distance indeed. Under heavy breaking the rear tyres could be seen 'dancing' around as if they were going to summersault over the top. After several hours of testing time not so much as one screw came loose. All in all a great truck!!

TOP TIPS

Cut a hole in the front window to allow cool air to get to the engine cylinder head

Cut out the side window so the truck can be refuelled without removing the body

Fit a 6 V, 5-cell receiver battery, for quicker servo response and power

Fit a tie rap on the fuel tank lid and feed it through the rear window, to help top up the fuel tank

MINI MONSTER FAN

Team Associated have nailed the Mini MGT 3.0, it is a great truck for a first time nitro monster truck user, but having said that it is also more than capable of keeping a seasoned Monster fan happy. Out of the box the Mini MGT 3.0 has the top notch spec that we have come to expect from one of the worlds biggest names in model cars. Associated gives it all, good looks, great performance and above all excellent value for money. **RRCI**

Jumping for joy, and tough enough to handle your mistakes



Kit tyres tackle any terrain with confidence

QUICK SPEC

Class: 1/10th 4WD Monster Truck

Type: RTR Nitro

Manufacturer: Associated

Price: £275.00 RRP

REQUIRED

12 x AA radio Batteries

Fuel – Byron 16%

DISLIKES

No turnbuckles

No Roto start

Exposed radio switch

LIKES

Strength, Speed, Style

Ready to run set-up

Fuel bottle and glow included

Performance

Value for money

CONTACT

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