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Thrash Tests

TRINITY BLACK WIDOW,
THUNDER TIGER TS-4N PRO
V2, HPI SPRINT 2 RTR

THRASH TEST

Nitro Comes to the Smallest of Scales

At first, many thought that the first pictures of the NT18 was simply a publicity stunt by Xray. If enough interest was shown, then maybe they would make it. But the truth was that the car existed and we have one here to test...

The 1:18 scale class of RC cars still seems quite new even though HPI started it a few years ago. Since the release of the HPI car only Xray have really produced anything to rival it with the M18 and indeed Xray have made a fantastic car with a lot of very high quality option parts available. When fully specced, the M18 is the rival of many larger scale cars and is a work of (small) art!

So once you have exhausted the possibilities of the electric powered M18 in on road and off-road guises where do you go next? Well a lot more power and noise seems a great idea and Xray have somehow managed to cram a nitro engine into a car utilizing the same basic drive train components as their electric 1:18 scale cars! Can it actually work? A car of this size with an engine, well read on and find out as we have a pair of them to put them through their paces.

INEXPERIENCED? DON'T WORRY...

Upon receiving the box Xray's typical 'luxury' approach is apparent. A glossy cover over a usefully reusable box, which upon opening reveals a well-packed and very well documented kit. Opening the manuals package reveals a clear instruction booklet based mainly on diagrams, so perfectly suitable for slightly younger modellers and a further package of information. This contains a full manual on running in and setting up a nitro engine, a certificate of authenticity, Hudy brochure, special starter box info, exploded parts diagram and a body painting guide! Xray seem to lavish every one of their kits with this level of info! The kit also includes a high quality screwdriver that is a perfect fit in the kits screws and a basic set of tools. The manual explains what further parts

are required to complete and operate the car. We chose to use the Xray electronics pack as well which includes two high quality micro servos, battery pack and a switch, the receiver is up to you but as you can see we even used an Xray receiver in one of our cars (a four-channel 27MHz one no less!) We would highly recommend using this package as all of the components are high quality, good value and you know that they will fit!

HOW DOES IT GO TOGETHER?

The build of the car is typical Xray – faultless, just this time it is on a smaller scale! The first item to be built is the front differential, take care when de-burring all of the small parts as

Racer built up two examples of the little nitro-powered racer so the Editors can do battle on the track in a forthcoming issue





"...something new, something revolutionary, something avant-garde – a nitro powered 1:18 car. I have now made my dream come true."

- Juraj Hudy



By holding the 1:18 kit in the palm of your hand, you get a better idea of its scale design and how small it is. Remember that this Xray though is nitro-powered...

THRASH TEST

XRAY NT18 - UP CLOSE AND PERSONAL



During build up, the car is constructed in modules - here you can see the rear end attached to the chassis



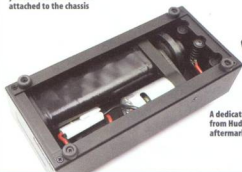
The wheels slide into place onto these grooved hubs



The moulded shocks are of a friction design



Gearbox left and suspension unit right



A dedicated starter box from Hudy is offered as an aftermarket item



"Look out for an update on this review soon when we put the Xray NT18 through its paces to see how it performs on the track."

it helps to get a smoothly operating diff. The tiny planetary gears are hard to de-burr but do need it as did the outrigger saver rings. The saver rings both retain the bearings and help reduce dirt ingress to the diff housings. All of the moving parts on this car are ball raced which is amazing on such a tiny vehicle. Next up is the rear diff, which is essentially the same as the front differing only with the input shaft. The next step is to assemble the tiny drive shafts and this is left wholly up to you. You have to insert the metal pins into the plastic drive shaft and the clip the stub axle and drive shaft onto the star shaped universal drive coupler. It is actually easier than it appears, just take your time and try not to send the tiny parts into orbit! The next step involves pressing the hinge balls into the wishbones. This car doesn't have a typical hinge pin type setup it uses two ball joints at the inboard end of both the upper and lower suspension arms and one ball at the outboard end, it does mean adjustment of for

example, roll centre is hard but since the car seems to handle well that is not an issue. You have to take great care to use the correct balls in the different holes in the wishbones as they have different amounts of offset and this would create the wrong geometry, the manual is pretty clear about this. Also remember not to over tighten any of the screws that screw into the plastic parts as the plastic will stretch and then the screws will become loose or the threads may even strip. Small top hat spacers are pushed into the wishbones to limit the up travel and the racers tip is to replace these with grub screws, which makes the droop adjustable. Next up is fitting the inner wheels onto the hubs and screwing in to the end of the driveshafts. This is pretty much impossible to do fitted to the car, so do it when the instruction tell you! The wheels are supported on large ball races, well large for a car of this size! The whole assembly then wraps around the gearboxes and this assembly is then screwed to the chassis,

the screws passing through the chassis and then through the suspension balls and into the gearboxes... you could actually do with an extra set of hands for this job. The front end is then assembled in the same way except that the front top arms have their outer ball position further back to provide the car with its caster. Before the front assembly is fitted to the chassis the drive shaft has to be fitted, and more interestingly the brace that controls the chassis flex. The brace basically crosses the car and also crosses two slots up the chassis that effectively place the front gearbox out front on a long strip of flexible chassis. The brace has a screw up into it from this strip, which also passes through an O-ring between the brace and chassis. As the screw is tightened the front of the chassis gets much stiffer and this changes the balance of the grip between the front and rear of the car. Once the transmission is all attached to the chassis you can see just how easily it spins!

SHOCK FREE

Next up is the attachment of the spring guides, these are not shock absorbers at all and shocks would actually be a great addition to this car! There is a pre load spacer for the front guides to slightly stiffen up the front end to make it handle well. The bottoms of these can be moved in and out easily and this changes the way the suspension reacts. Nice adjustable body post go on next and then it's on to the power supply....

TINY POWER

The engine is like a little jewel, 0.8cc of power, and it is powerful.... We stripped it to have a look inside and were impressed by the workmanship, typical Xray! The engine is also supplied with a slide type carburettor which is superior to a barrel type, it all points to a fast motor! The clutch shoes that are supplied are tiny and require tiny springs to get the bite point at low enough rpm. The clutch bell spins very freely on two large