

This is a follow up article to the original review of the Tomy Adonis. In a way reviewing the Adonis before the Intruder is really doing things backwards, as the vehicles were launched in the reverse order.

The Intruder was the first Tomy car to appear in the U.K. and has the higher specification. The Adonis

appeared some months later as a cost reduced version. However the basic design of the two cars is the same. The Intruder differs in the chassis materials, body style, transmission configurations and the car comes fully ballraced. Writing it all down like that makes it sound as though the two cars come from a different manufacturer, but not so. The Intruder with

its top flight equipment is indeed a car able to meet head to head the specification of racers like the Lazer ZX-R, Schumacher Procat and possibly the Yokomo.

Outings of the car so far in the hands of Matthew Hodgson have shown it to be of race winning potential. In the Far East the car has become very popular indeed.

There are Tomy only races organised. Of course this may be a fairly underhand way of ensuring that a Tomy does finish on the leader board, a ploy I would have thought unnecessary.

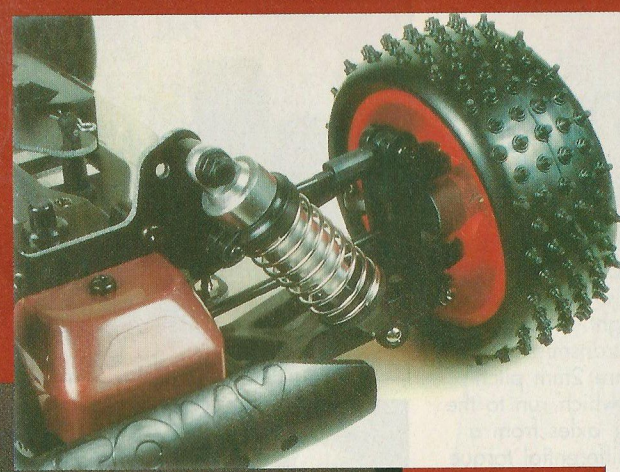
I must accept that some new readers may not have read the original Adonis review in an earlier issue. To save regular readers expiring from terminal boredom I do

# Serious Contender?

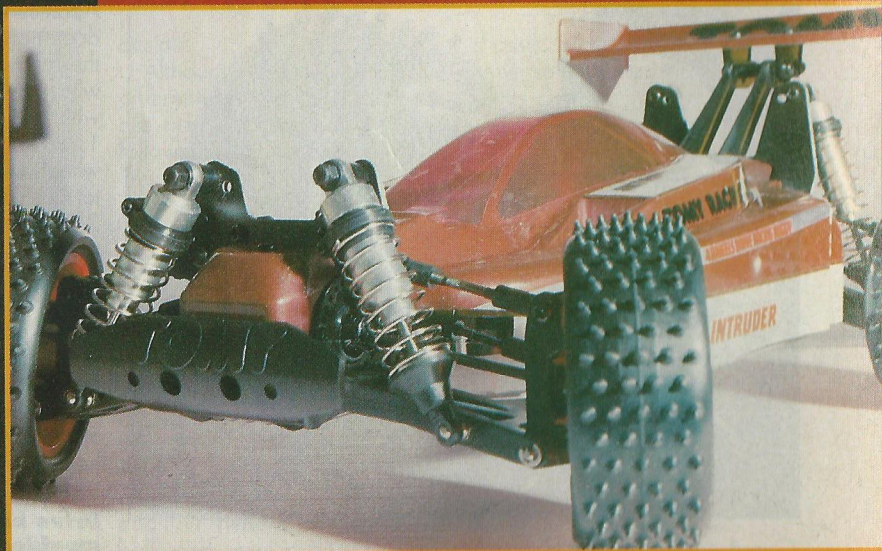
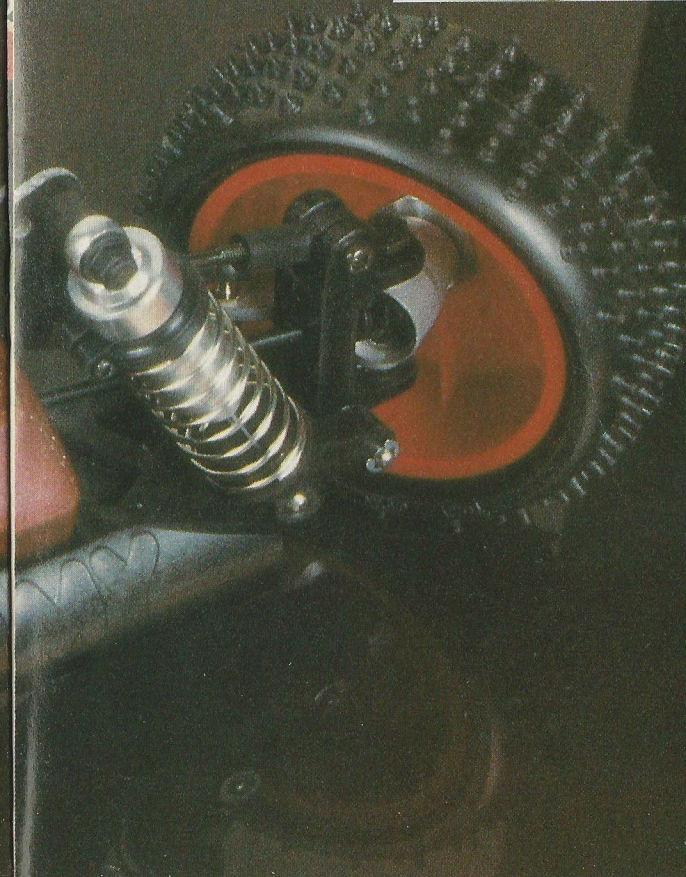


The Intruder with its top flight equipment is indeed a car able to meet head to head the specification of racers like the Lazer ZX-R,

Right; Limited positions for the shock mounts at the front. Moulded rear wing mount sets the wing high in the sky. Large wheel nuts come with special spanner.



The Intruder heads the line-up for Tomy's challenge for the off-road title





# Serious Contender?

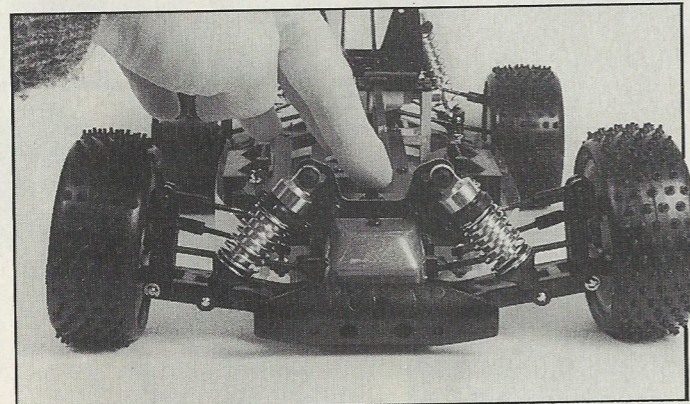
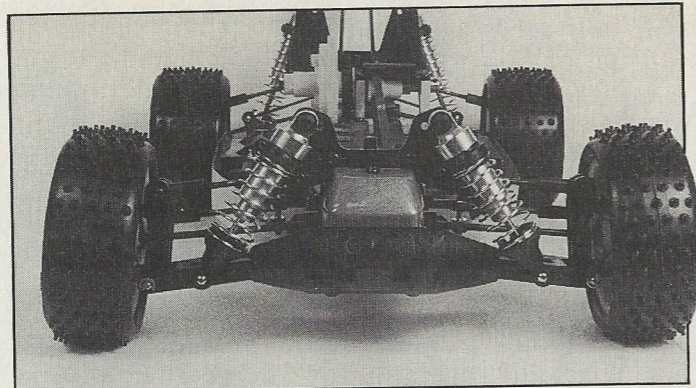
not propose to repeat the original words. Just a few sentences for first time readers to say that the Intruder chassis layout is a Fibre Reinforced Plastic (FRP) machined plate which holds all the transmission parts. An upper FRP deck provides the stiffening and a handy place to park the electronics. The chassis plates are the same shape and drilling as the aluminium chassis of the Adonis.

## Keep Independent

The independent suspension is supported on alloy dampers compared to the plastic of the Adonis, with coil over springs. In addition the higher spec car comes with an anti-roll bar for the rear. This is supported on the

rear transmission housing and fitted to links on the lower suspension arms. All shock towers are machined from FRP ensuring strength and minimum weight.

The major transmission components are 2mm pitch toothed belts which run to the front and rear axles from a centre gear differential torque splitter. At this point I will mention that I thought the material that the main drive gear is moulded from, looked like the sort of plastic used on the trinkets in cheap Christmas crackers. That may be a bit uncomplimentary but it somehow looked and felt brittle and as though it would not last for a single race. Well, it just goes to show how wrong I can be. The



**Front of the car uses short shocks, this trend is now less popular with longer shocks on most competitors.**

earlier tested Adonis is still performing without problems and the track successes do not appear to have suffered. So, Tomy have it right and I have it wrong.

Transmission is all ballraced (16 in total) with ball diffs. front and rear, and a centre differential unit which employs a sun and planet system of gears which gives the Intruder the 40%/60% front/rear torque split. Alternatively a single non diff gear is also supplied, providing the option of a 50:50 torque split. The same options are provided on the Adonis. What the Adonis does not have as standard is the following extra goody which provides the Intruder with:

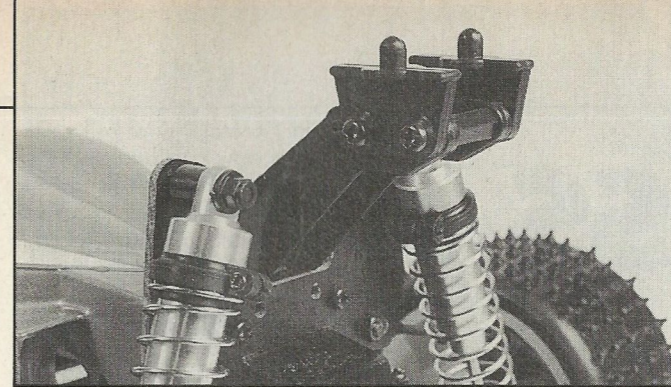
1. Direct drive to the rear wheels and a one way clutch to the front wheels or,
2. A torque split of 60% to the rear 40% to the front with a one way clutch to the front wheels.

This apparent confusing range of transmission options provides the Intruder with a set of choices that will have many drivers scratching their head as to which option to

choose. Quite honestly I can offer little advice at this stage as to what would be best. It is worth remembering that the use of centre diffs of any kind in electric buggies do not have a particularly successful history. Furthermore without a one way clutch driving the front wheels, there is a strong tendency for the car to understeer into corners. However on a slippery track the permanent drive to four wheels could ensure that traction is maintained. The same argument could be applied to the 60/40 torque split feature, but once again under suitable track conditions, i.e. with plenty of grip, the use of the torque split with a one way clutch could give good car control whilst making best use of the available power to give the best traction. All of this is a bit theoretical, and I can only suggest that trying all drive options under all conditions is the only way. The snag being that you will have to be prepared to take bits off and put bits on under what might be non ideal conditions.

I think that the kit instructions could well do with

**Drive belt on the Intruder is fine pitch. Main gear is moulded in red plastic.**



**Rear wing mount is a plastic moulding and uses two small posts and pins to secure the lexan wing.**

a section with more information detailing the pros and cons of using the various transmission options, especially as the Tomy is the only kit (I know of) to come with all of these features as standard.

It is true to say that the instructions contain some information on the various transmission configurations, but it is a little superficial. Similarly there are a few lines about setting up the suspension, which in itself is useful, but tends to pose more questions that it answers. I suppose in a few words I would describe the instructions as more adequate

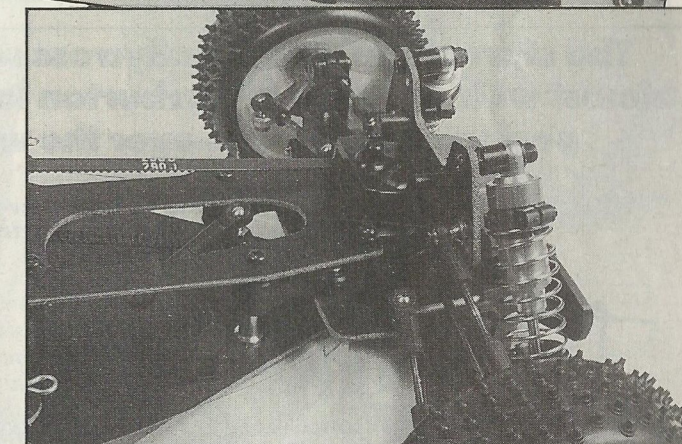
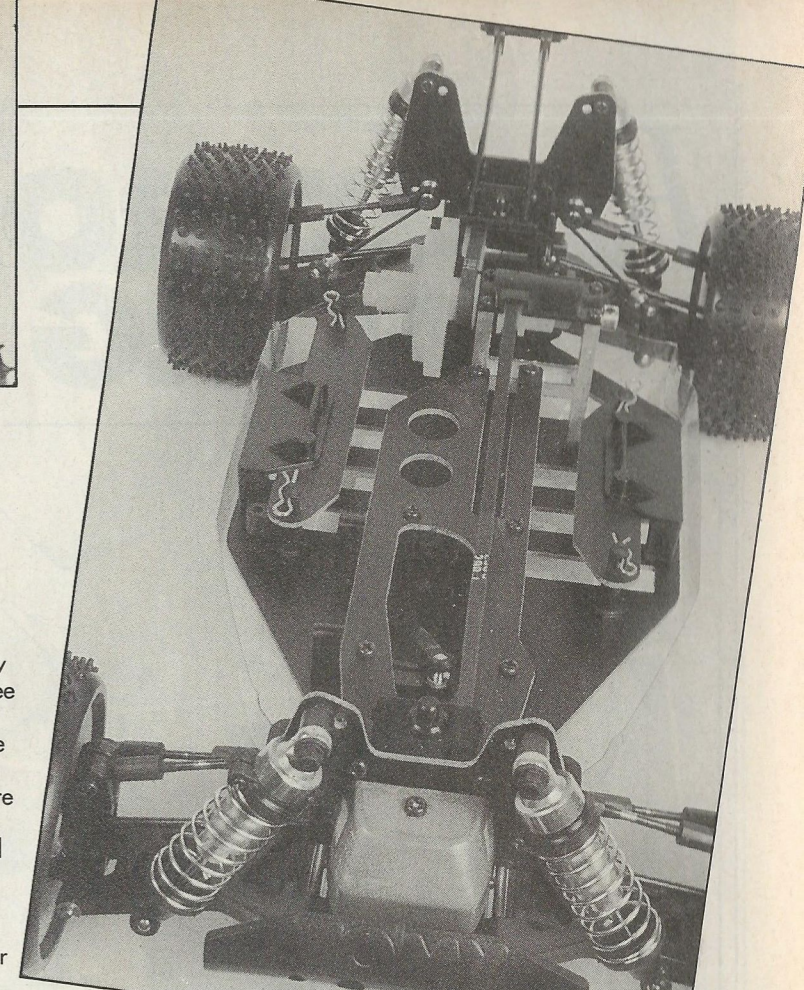
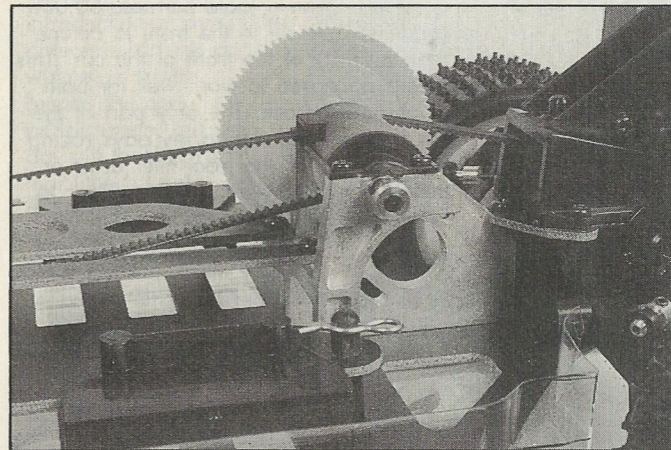
than outstanding.

## Upgrade

The upgrade from the Adonis to the Intruder does include, as well as transmission options some really nice features. The alloy shocks are supplied with three versions of piston allowing different damping rates to be selected plus volume compensating diaphragms are fitted under the damper cap.

The main chassis plate will accommodate the battery pack in either separate saddles or a single longitudinal pack. This further increases the choices on a very neat and complete

**Alloy motor mount and top shaft holder.**



**Glass fibre chassis is neatly shaped and finished.**

design.

Although the body style is different to the Adonis there are similarities and as such follows traditional buggy lines. The wing and mount are the same as the Adonis which has a good range of angle adjustment.

So in a few short sentences that is the Intruder. I must say I feel a little guilty about cutting the review of such a promising car so short. However the Intruder has all the best features of the Adonis plus the additional transmission options. In addition there is the fully ballraced specification, FRP

chassis, alloy shocks and universally jointed drive shafts.

Building the car will give few problems as long as you use common sense. Do not depend too heavily on the instructions. Make sure you carefully identify all the correct small parts and screws.

The kit quality is fine and the car has already established itself on numerous tracks around the country with some first class wins. Make no mistake, Tomy may be a toy company, but this is a top line racing buggy designed to take on the best.

