

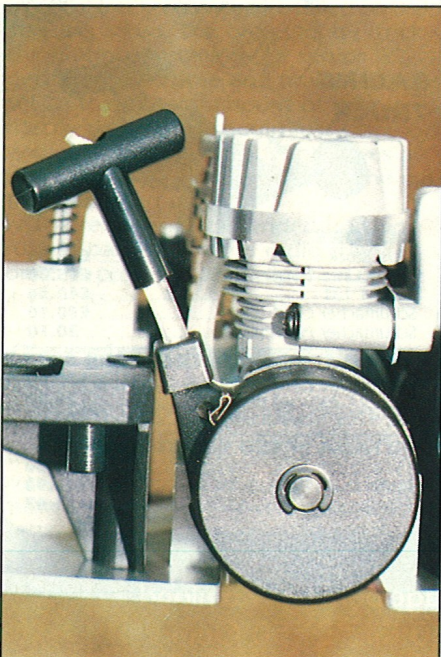
# Serpent

# Impact 10

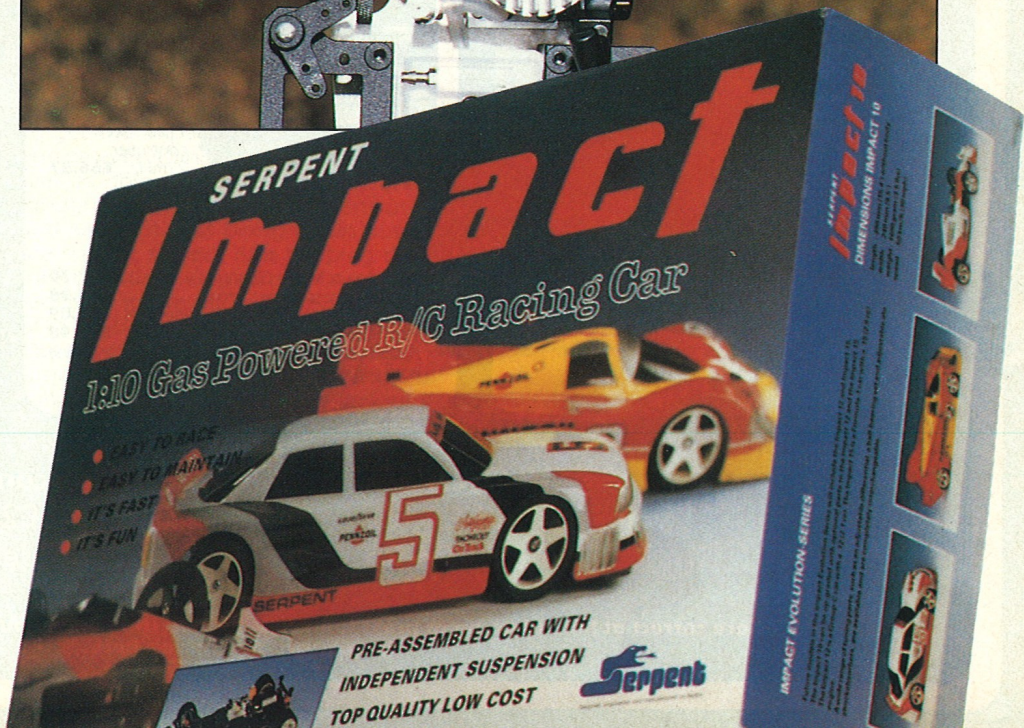
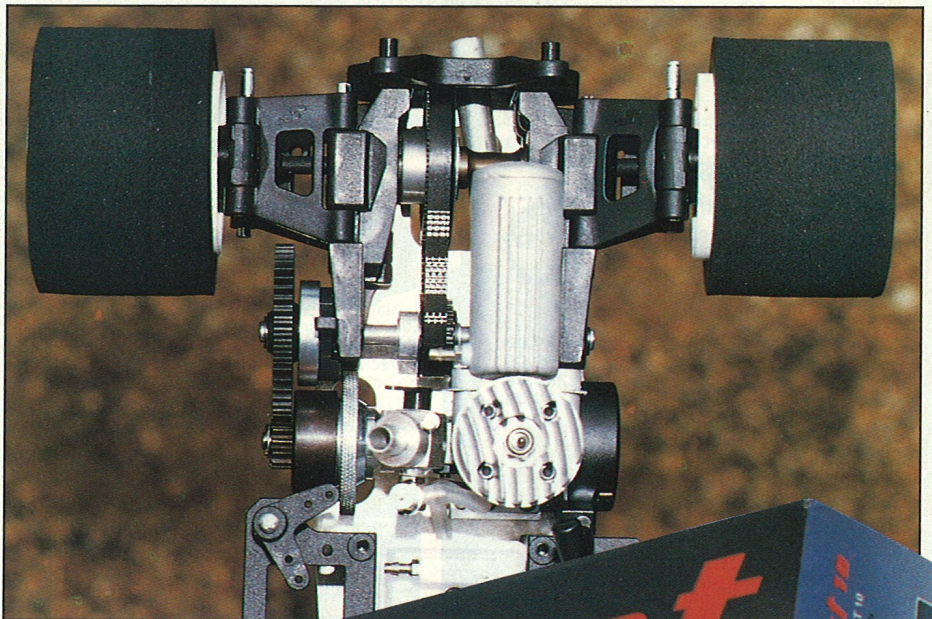
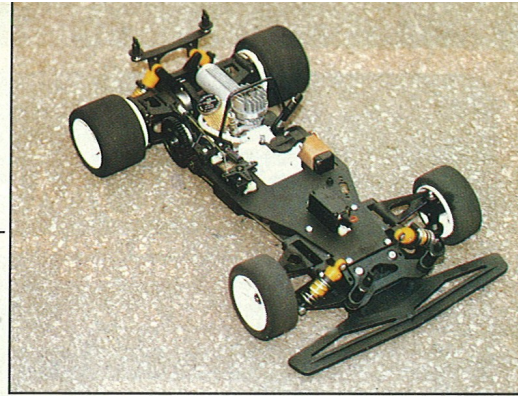
**Another formula of R/C model cars hits the scene. Mike Haswell reviews the latest kit from Dutch manufacturers, Serpent.**

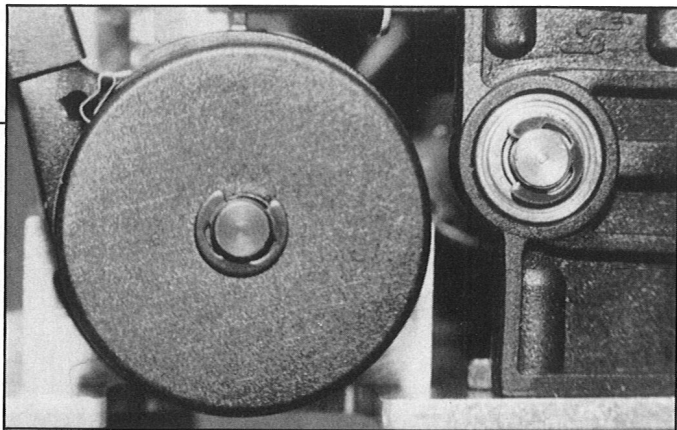
Serpent are renowned for their 1/8 scale circuit cars which have won World, European and numerous national titles over the years. Their cars still appear to have the largest number of drives at national level as well.

Recently they released the Tenforce (RRC, March '91), a fully independent suspension 1/10 scale electric racing car. Following the same lines but powered by a 1.7cc two-stroke engine, the Impact is yet another new concept in R/C car racing and could well prove to be very popular amongst circuit racing enthusiasts.

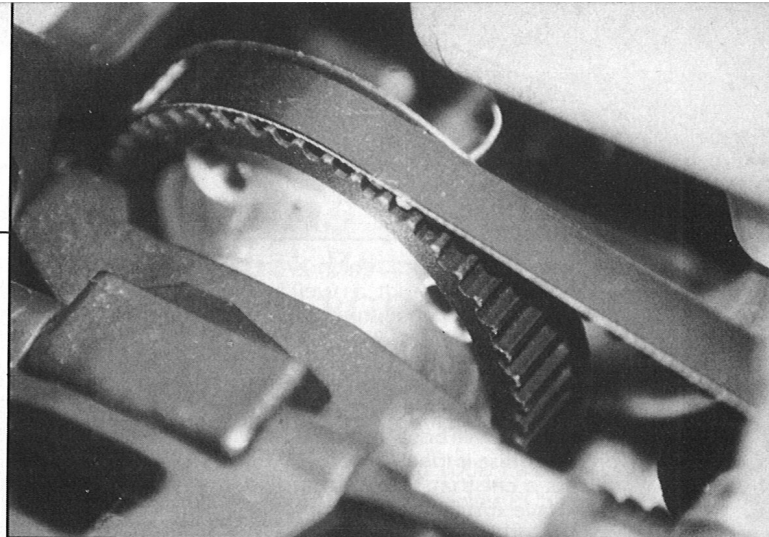


○ Pull-cord makes starting the engine very easy.





ⓐ **Ballraced layshaft can be seen here.**



**Belt and gear drive is utilised in the Impact.**

## Build/Construction

The Impact 10 comes virtually fully assembled. This only leaves the proud new owner to glue and true the sponge tyres onto the attractive five-spoked plastic wheels. The radio gear must also be installed to obviously control the steering and throttle.

The kit comes with pre-assembled oil-filled shock absorbers(!) and these need fitting to the chassis which is easily done via eight self-tapping screws. Finally the owner has to fit the front and rear plastic body mounts, again an easy job, and spray and cut out the supplied polycarbonate bodyshell. For maximum realism our body was yet again sprayed by John Rogers who, as you can see, did a magnificent job.

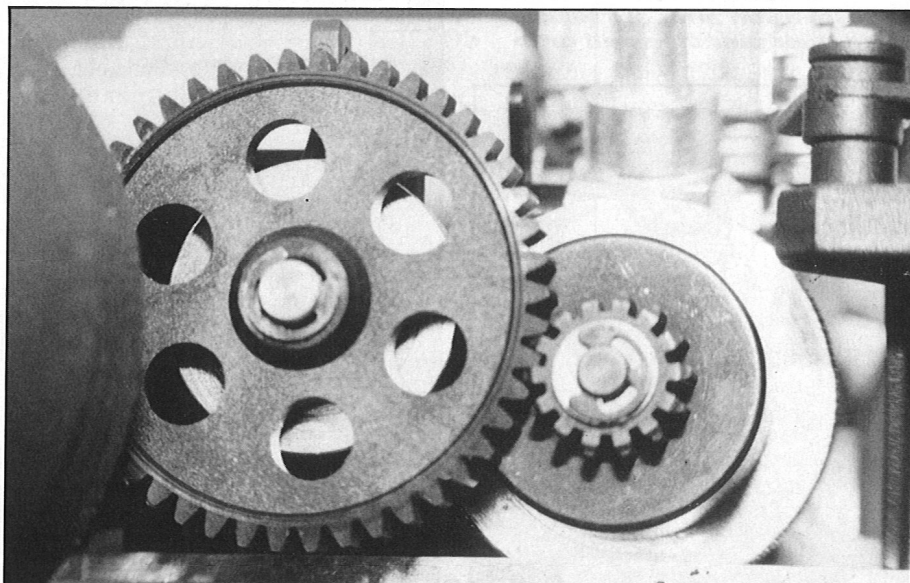
The radio tray has been specifically designed to house most of the popular type of standard size servos, ie fairly large ones. Bearing this in mind I fitted a JR4031 servo for the steering and a Futaba S148 (which incidentally are fantastic value for money as they can be obtained for around £10-16) for the throttle. Both fitted perfectly. As with the Tenforce, a servo saver with adaptors for different makes of servo is supplied with the kit and together with a pair of trackrods were installed on the steering servo. The only slightly 'tricky' thing about installing the servos is getting the throttle and brake linkages set to the correct amount of throw. Ideally the brakes should just come on with the throttle closed. This gives a drag-brake effect and prevents the car from 'running on'.

The receiver is suspended by two rubber bands from the radio tray in order to protect it from vibration or any accidents.

## Getting Started

To get the Impact started you will need some fuel. 10% nitro is recommended by the manufacturers and will cost around £4 for a litre, which I thought was quite reasonable and should last quite a long time. You will also need a battery for the glow plug driver. If you use more than one cell it will blow the glow plug — be warned!

As I know very little about I.C. engines, as will most people who are likely to buy the Impact, getting the car started was going to be interesting, particularly as the engine does not come



pre-set. After half-an-hour trying to get it started, I decided to wait and get someone with a bit more experience to help me.

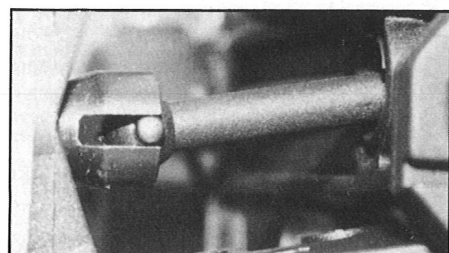
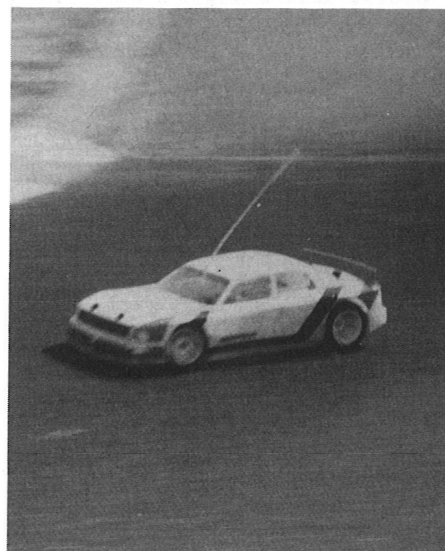
I took the Impact with me to Mendip, to track test it and get some action photo's and most people were quite interested to see how it went. Aided and abetted by Rob Roy the engine was soon up and running. Rob found the best setting to be just a shade under a full turn out, from fully closed, on the main needle. If you have the needle too far open, the engine will flood and lock. When this happens the recoil starter will become stiff and will not pull, to cure this all you have to do is to take the glow-plug out and pull the starter a couple of times to clear the fuel.

We ran around the pits to start with to get the Impact trimmed-up and to ensure everything was working fully, as well as doing a few 'burn-outs' and 'doughnuts'. The body was then put on and just as it was being taken out to the track it stalled. Not blipping the throttle was the apparent cause, so it was back to the pits. It started up again with no problems on the second pull. Out on the track the car went fine, although it did tend to be a bit tail happy, no doubt due to the lack of a differential. The major disappointment was the lack of speed, the car was basically flat-out by the time it got onto the straight at Mendip. I would expect that the bigger engine version of the

ⓐ **Dogbone driveshafts transmit power to the rear wheels.**

Impact 10 will improve on this aspect, unless Serpent do different gear ratios for the car.

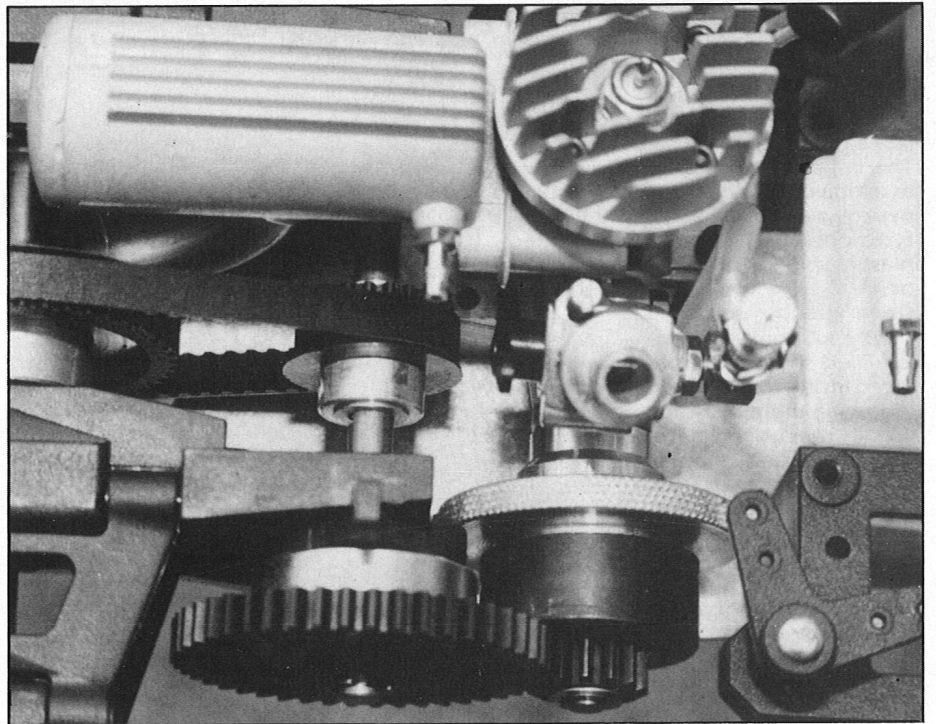
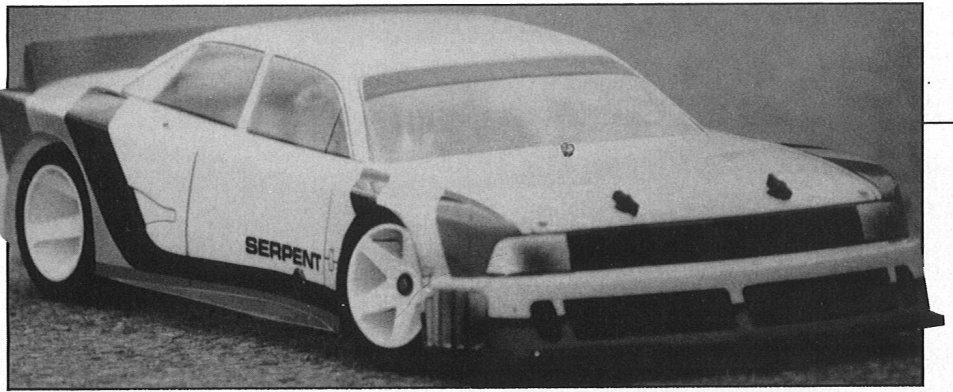
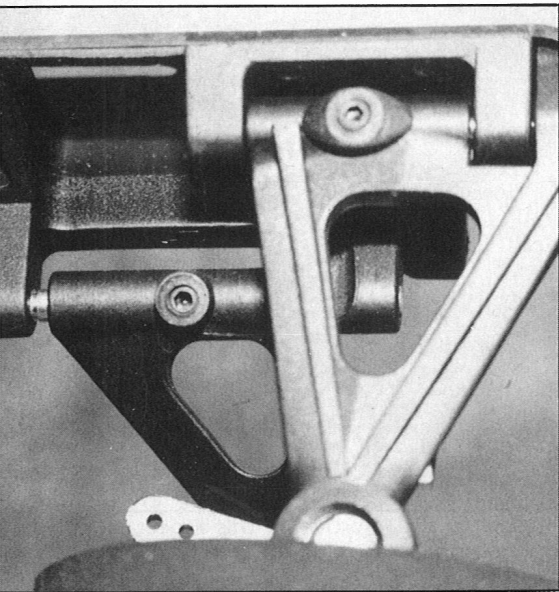
At the moment, Serpent offer a ballraced kit (recommended), anti-roll



bars and steel driveshafts which were included with the review kit, as well as different springs, shock oil, metal shock absorbers and a differential as optional tune-up parts.

There are no organised races for this car yet, but if it proves popular enough, no doubt there will be. The Impact 10 in its present guise is ideal for someone who wants a car that sounds real and wants to have fun without having to wait for batteries to charge. ●

⚙️ **Suspension arms are secured onto their pins via small grub screws.**



⚙️ **Transmission detail.**

## **SERPENT IMPACT 10**

Type: On-road 2WD

Scale: 1/10

### **DIMENSIONS**

Overall Length: 390mm (without bodyshell)

Width: 240mm

Wheelbase: 267mm

Front Track: 235mm

Rear Track: 240mm

Weight: 1600 grms (excluding fuel and battery)

### **BODY**

Type: Audi Quattro (saloon)

Material: Polycarbonate

### **CHASSIS**

Type: Flat pan

Material: Aluminium alloy T-6

### **DRIVE TRAIN**

Primary: Centrifugal clutch with gears

Transmission: Belt

Differential: None, solid axle

Bearings/Bushings: Plastic bushes in front wheels and rear hub carriers. Layshaft and drive train is ballraced

### **SUSPENSION**

Type (F/R): Double wishbone

Damping (F/R): Oil-filled shock absorbers with coil-over springs

Wheels: One-piece plastic

Tyres: Foam

### **MOTOR**

Type: Magnum GP10—1.7cc two-stroke internal combustion engine with recoil starter

Fuel Tank Capacity: Approx. 50cc

Exhaust: Rear facing with silencer (75db)

