

A new car on the horizon to compete with the likes of Parma and Associated is the Agitator a 1/10th scale circuit car. The car was designed by Mr. Lucas Garneau, considered by many to be the top designer of Radio Controlled cars in the U.S.A. and manufactured by Advanced Racing Technologies of California.

The car is available in four basic forms.

1. The Agitator Basic.
2. The Agitator J.R.
3. The Agitator X.
4. The Agitator X Pro.

Kits 1 and 2 have single shock suspension whereas kits 3 and 4 have triple shock suspension. Kits are available to upgrade each car to the next stage or up to the ultimate pro. All the kits come fully ballraced but without spur gears, electrics, wheels, tyres, wing and body. To those of you who are not familiar with the Agitator it does have a smaller brother in that also available is the Agitator XII 1/12th scale racer which recently won the 1989 R.O.A.R. National

# Agitator!

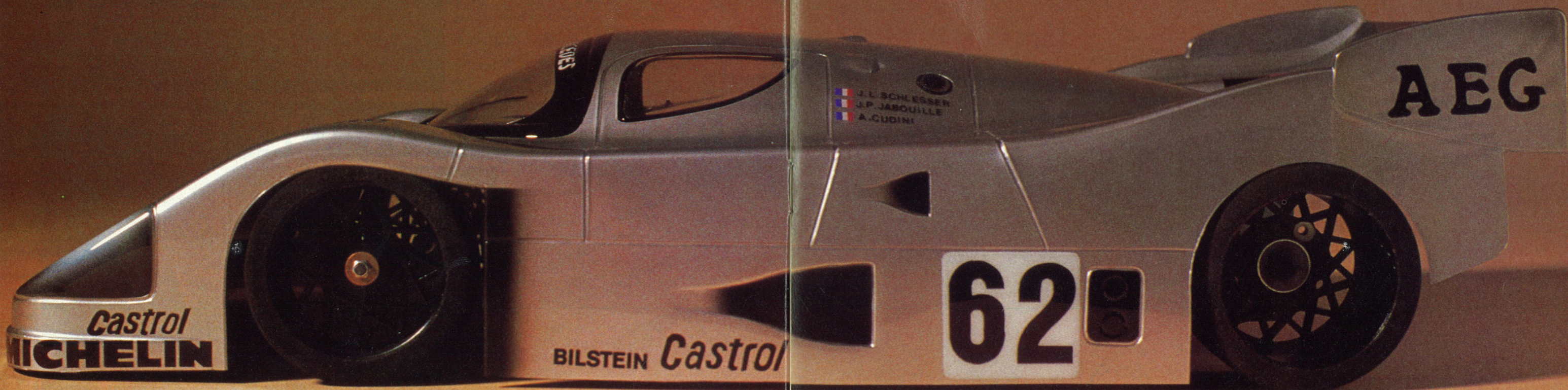
**John Stringfellow builds the Lucas Agitator**

Championships on its debut in the U.S.A. Together with the Agitator cars come a wide range of new and innovative Radio Controlled products all from Advanced Racing Technologies.

The car to be reviewed in this article is The Agitator X, featuring a pivot saddle block dual supported four

bearing front end, fully articulated dual axis three point tri shock rear suspension with the Lucas bridge, five bearing graphite modular differential, fibreglass saddle pack chassis glass composite and Delrin components, and including a front bumper four body

posts and collars. The first thing that hits you is the very plain packaging the car comes in, not what you would expect from the States no razzmatazz. Inside the box a couple plastic bags complete with all the required parts inside these two bags are further smaller



well defined plastic bags marked in a way to tie in with the assembly instructions, completing the contents of the box is a small booklet which contains all the assembly instructions. Although the instructions were very precise and well written I found it a real pain to keep turning to the back of the booklet all the time to find the illustrations, which in my opinion were not the best I have ever seen. The sketches were fine it was very difficult to make out the details in the photographs.

#### Under way

The first section of the instructions covered the tools required to build the kit, I found this useful in that I laid all the tools out prior to assembly and didn't have to go searching for them once underway. I really cannot understand when people pay large sums of



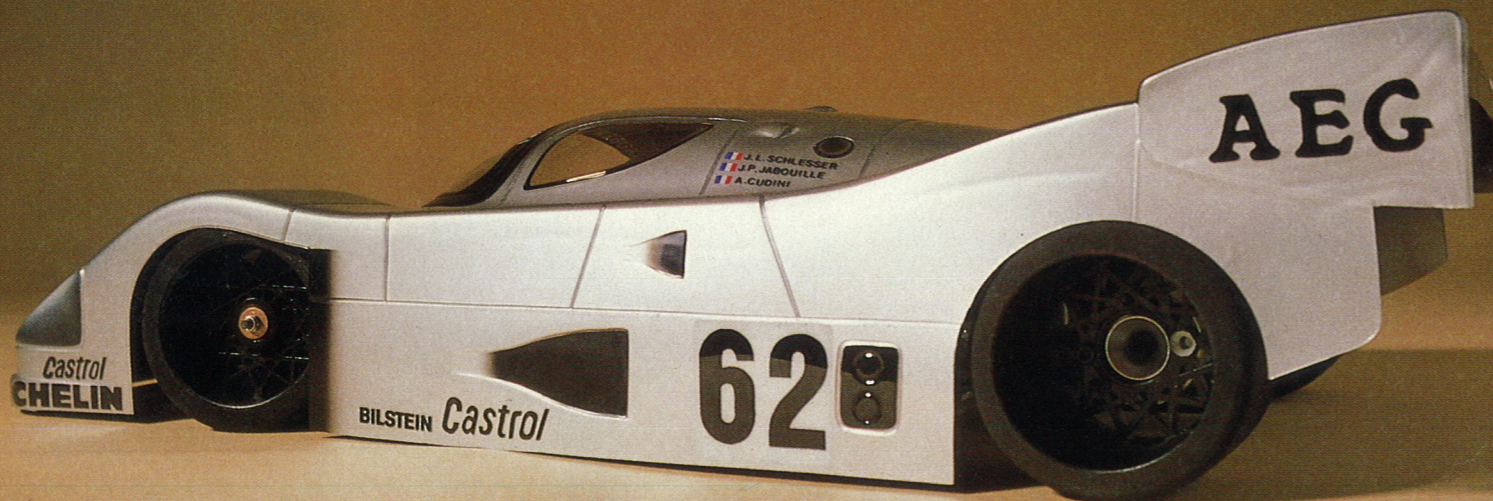
money for kits the first job you have to do is to file the top of each battery slot and additional rough spots around the edges of the pan, there is obviously a good reason why this work is not completed in the

factory but I for one cannot think of it. The other major gripe at this point is that other than strapping tape there is no way of securing the nicads into position, surely it would be easy enough to provide four

small posts and a couple of straps to secure the nicads, I have seen races lost in the past as a result of using strapping tape.

The king pin bushing assemblies are secured in position by means of rubber

*Agitator!*

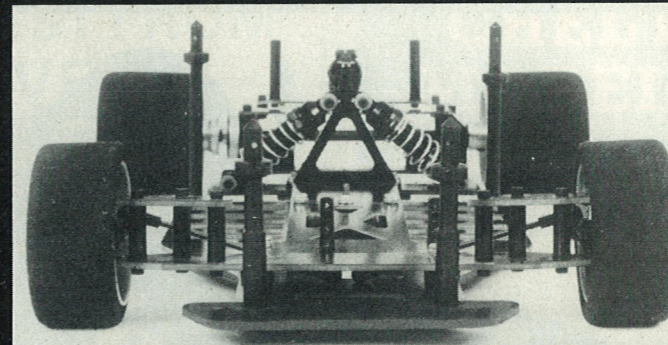


O-rings slipping into pre-cut grooves, not really a good idea I believe E-clips would have done a better job. This apart the front axle went together very well. Fronted adjustment is relatively simple. Toe in adjustment can be made by turning the rod ball joints (I would have preferred to have used the types secured by nuts and bolts not the pop on and off type). An interesting idea for altering the front end caster is the use of pivot blocks that allow for simple adjustment to either increase or decrease castor full marks for this idea adjustment is very easy and quick. Staying with the front axle I was disappointed with the E-clips used to secure the front wheel in place I would much prefer to see a lock nut used it may be me when outside in the cold E-clips always seem to disappear at the worst times.

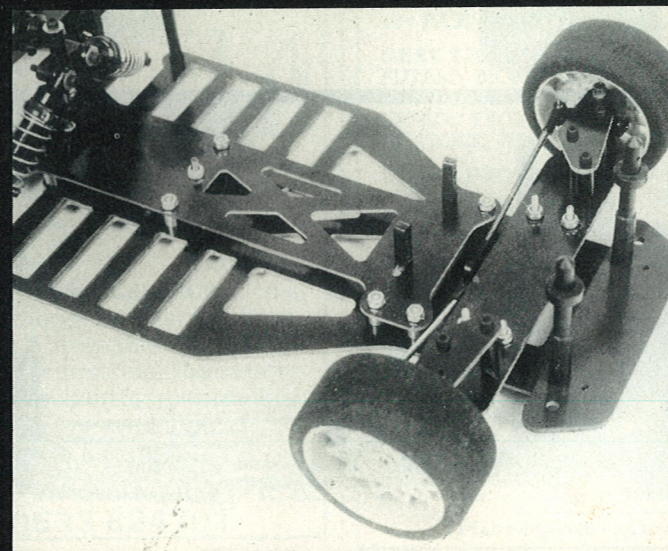
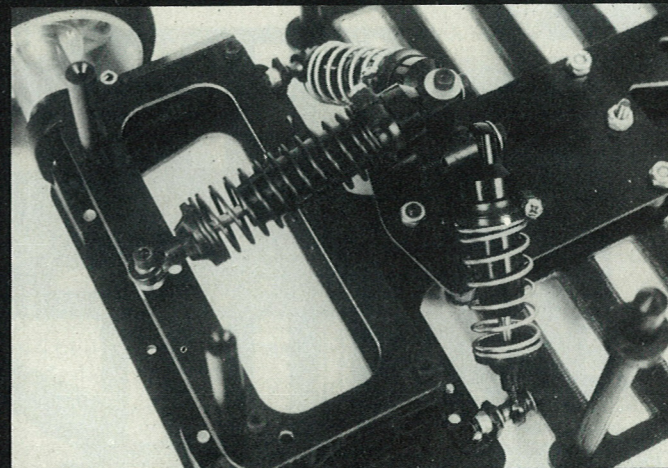
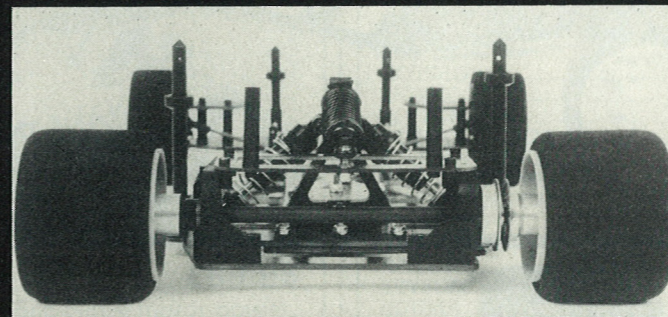
The rear T-bar is mounted by means of two pivot ball assemblies that provide both a secure method of fastening the rear axle to the chassis and a very flexible means by which the rear suspension can operate. A further addition to the car is the use of a radio tray it provides excellent mounting for the steering servo, the speed controller and the receiver. The radio tray also provides the base mounting point for the shock bridge and the radio antenna mount. As stated the servo fits very neatly onto the front end of the radio tray providing a very secure mounting point.

#### Up the back

The rear bulkhead went together easily and provided the car with a very sturdy rear axle support. The three shocks were assembled with ease and although I spent quite some time cleaning the 'flash' from the plastic parts it provided to be well worth it as when the shocks were complete they worked very smoothly. The addition of a rubber blader to the shock top cap ensures not only the smooth operation of the shocks but prevents any



*The Agitator's neat and simple lines include the slots to hold the batteries in place.*

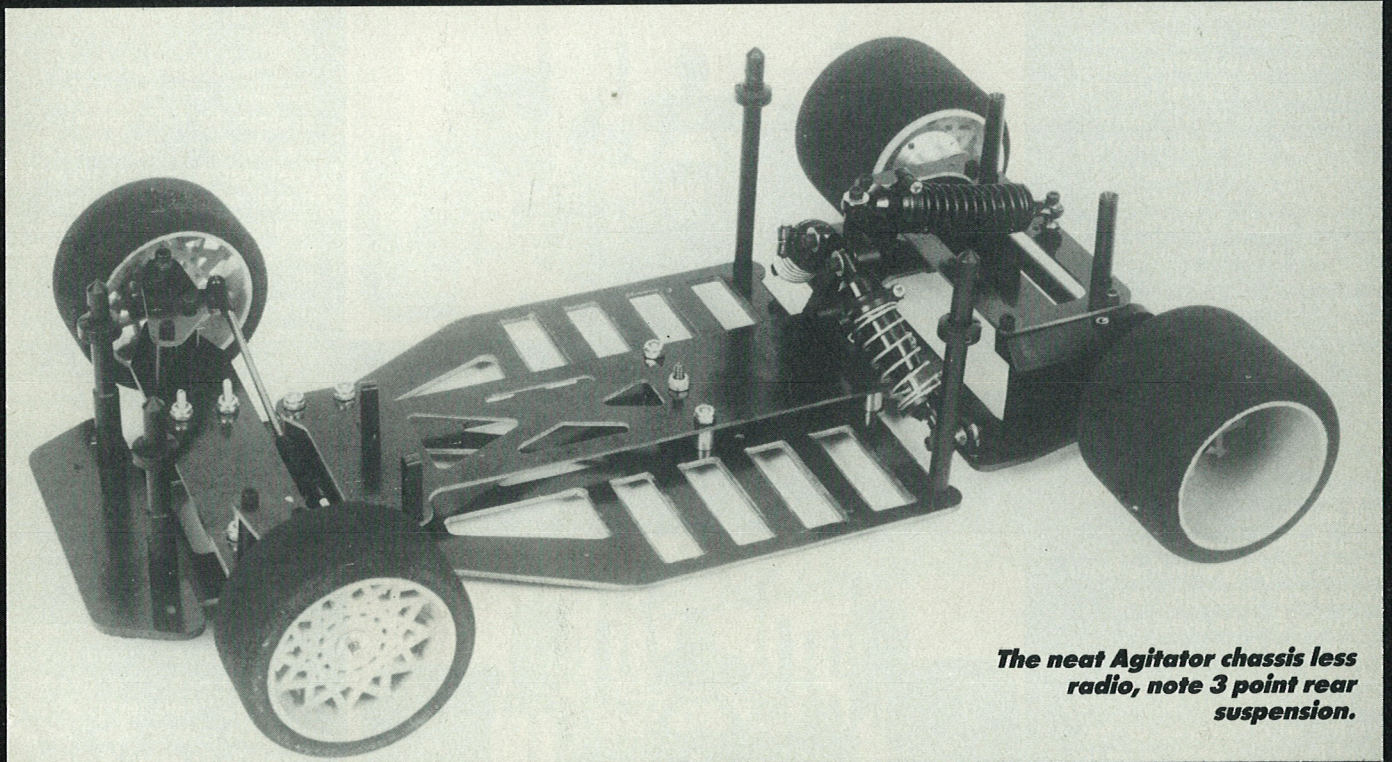


build up of air within the shocks.

Three different cams are supplied with the kit to enable the ride height of the car to be adjusted. This is obviously necessary when the diameter of the tyres change. It was quite difficult to install the bearings into the rear axle cams and great care had to be taken not to damage the bearing, however by means of a small socket pushing on the outer case of the bearing I managed to seat it correctly. The one axle cam and the differential centre hub are secured to the graphite axle by means of a sturdy grub screw locking onto flats on the axle. Before the final assembly of the rear axle I found it useful to screw the locknut onto the threaded part of the axle plastic side first and carefully working a thread into the plastic before turning the locknut round and fitting it the correct way, I have found that with other axles if this is not completed first then damage to the axle can occur. The rear axle and differential went together very easily and with the addition of the thrust bearings provides a very smooth differential action, a further advantage is the installation of a bearing in the spur gear to ensure the spur gear runs true on the axle.

TRC, Bolink and T.M. rims all fit the car and as already stated do not come with the kit. The installation of the body posts, bumper and antenna mount completes the construction of the kit. The wheelbase of the rear axle is extremely wide at 24mm compared to the more conventional 22mm and I found the rear wheels protruding outside of the body by 1mm each side. With the addition of the radio tray and the three shocks the car was quite heavy weighing in at 125 grammes (approx 4 ounces) heavier than our Parma car.

All in all taking my time, the kit took five hours from start to finish which when you consider I had to take the photos as well was not too bad, it would be nice to

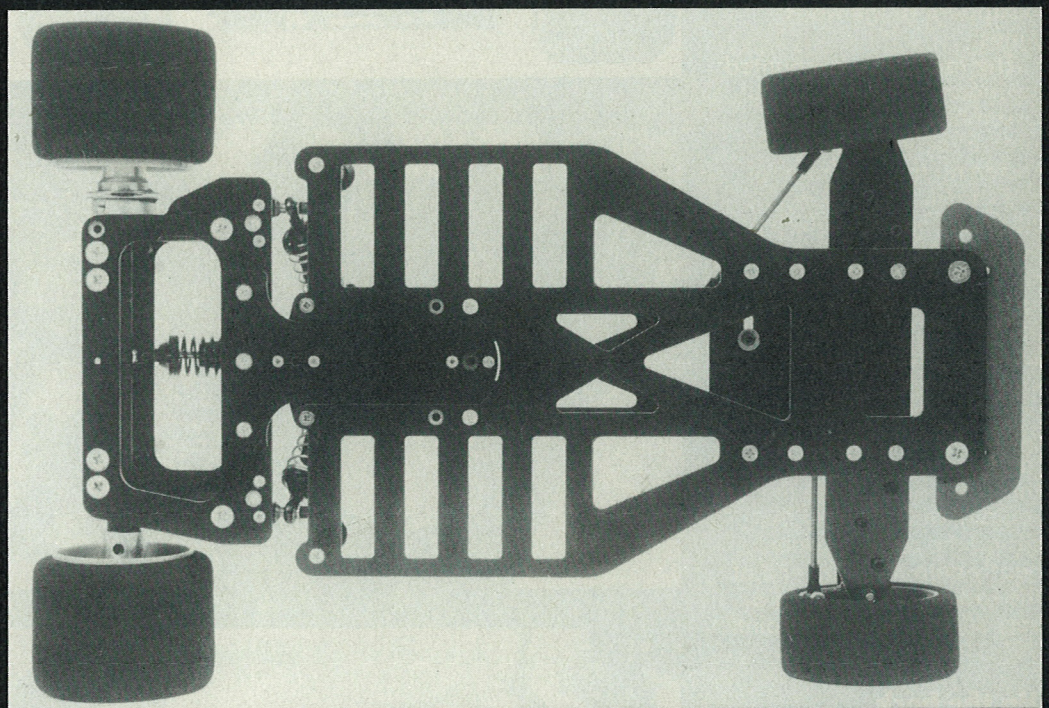


**The neat Agitator chassis less radio, note 3 point rear suspension.**

# *Agitator!*

see some improvement in the illustrations but all in all the parts fitted together well and I can't wait to take it to the track and check out it's performance. Maybe the editor will give me some space in next months magazine and I will have the car put through its paces.

**Right: Chassis allows for 6-8 cell location.**



**Agitator fitted with Parma BBS wheels. Also in colour shots with the latest Mercedes body from Parma.**

