



[ **PROTOTYPE RC10 Book** ]

PHOTO CAPTIONS BY CURTIS HUSTING

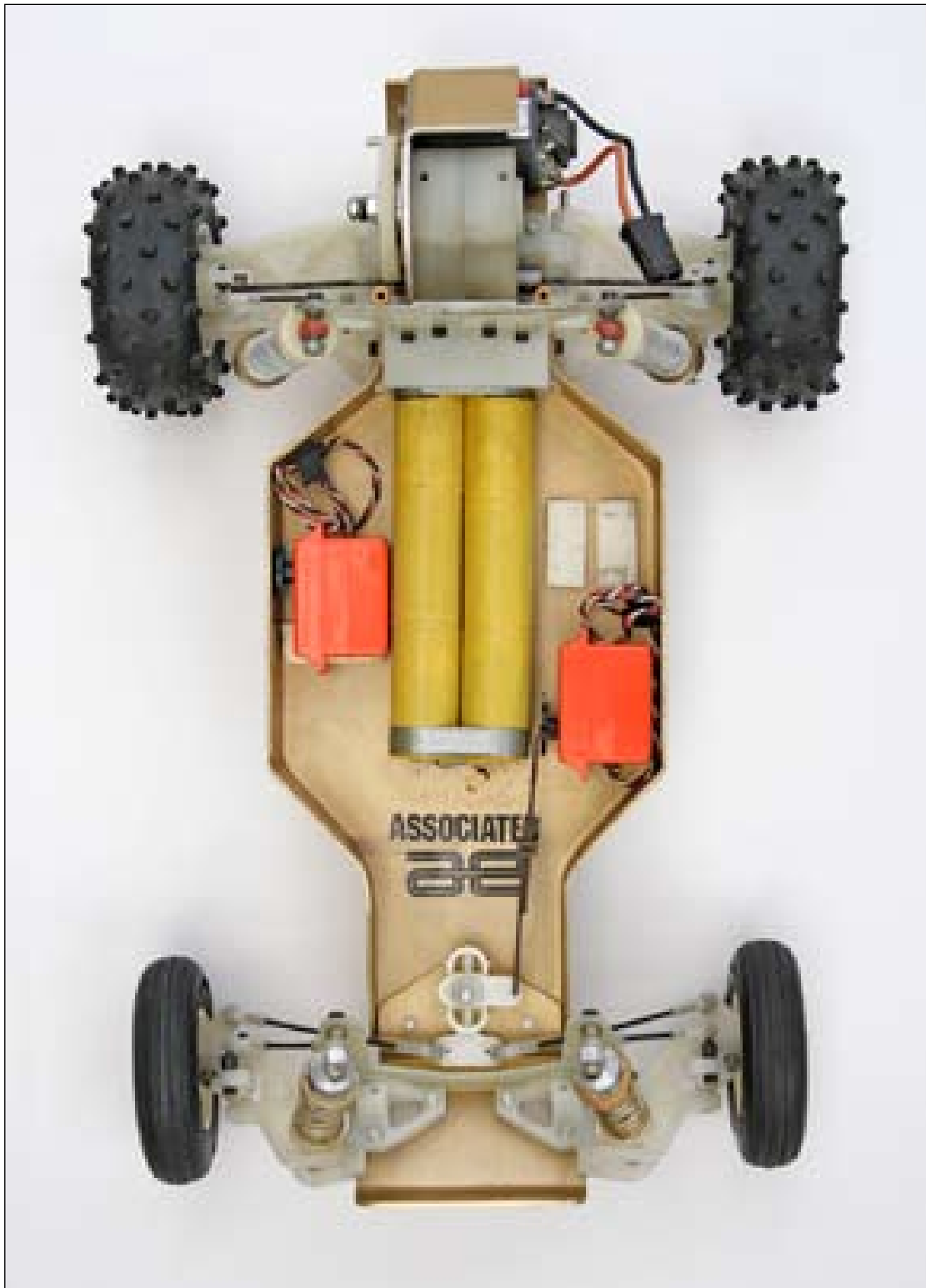
ARTICLE BY GENE HUSTING

OTHER TEXT BY STEVE HUSTING

ALL PHOTOS WERE SHOT IN  
EARLY 2008 OF CARS  
IN THE POSSESSION OF  
GENE HUSTING, WITH HIS  
GRACIOUS PERMISSION.







## How the RC10 Got Started

Gene Husting

While the majority of RC racers were still racing 1:8 gas cars on asphalt, or 1:12 electric cars on asphalt and carpet, a friend of mine said, “Gene, you should go and see these guys racing RC cars out on the dirt.”



I thought, “Why in the world would anyone want to be racing in the dirt?” At first I thought he was kidding, but he told me to go check it out.

So I did, and sure enough, there were about ten guys running RC cars in the dirt. It didn’t impress me. But, two weeks later, there were more guys running. And the next time, there were about thirty guys running.

So I told Roger that he should start designing a 1:10 scale RC car.

He said, “Why don’t you do it?”

I said, “I’m still working on the new RC500 4WD car.”

He said, “But I don’t know anything about racing on the dirt.”

I told him, “Real cars, like VWs and Porsches, are racing in the dirt.”

I also told him that there would be an off road show that week at the Anaheim Convention Center, and we could both go there and learn more about it. He agreed to go with me.



By looking at the VWs and Porsches, we figured out that they wanted the engine weight in the rear to get more rear wheel traction. That made sense to us. But we didn't want to build a car that short.

Then, in the last section of the building, there was a special car with the engine in the rear and the driver up front, but the chassis extended further up front, which placed even more weight on the rear, which we both liked. So I took a lot of pictures of this car, and we left.

It took Roger seven months to complete the drawings on the car, but they looked great. Meanwhile, I had finished the RC500 4WD 1:8 scale on road nitro car, and we were racing and winning races with it, and shipping them.

As soon as Roger finished a blueprint, my son Curtis took the blueprint and made the parts by hand.

These are pictures of the very first RC10 car ever. This particular car has never been raced. Curtis made everything except the front wheels, tires, batteries, motor, and Novak speed control.

As soon as he finished a particular part, such as the chassis, I

looked for a company that could make the parts for us. I had a few connections, so it was easier to do than I thought.

The person I found said that the chassis would have to be formed in the soft state so that they could punch it in the design shape that we wanted, and then we could get them hardened and anodized. I said, "Great, let's do it."

About the time I had all the necessary parts manufacturers lined up and starting to make parts, I heard about the first ever ROAR 1:10 scale Nationals. However, we wouldn't be able to get manufactured parts in time to be able to race there.

So I asked Curtis if he could hand make five more cars for the race. He said, "I'll try," and he did it! Even I got to race off road, too. It was a lot of fun!

There, Jamin' J. Halsey won the first ROAR Off Road Nationals, in Vineland, New Jersey, in 1984, with his RC10 car. Wow! What a way to start!





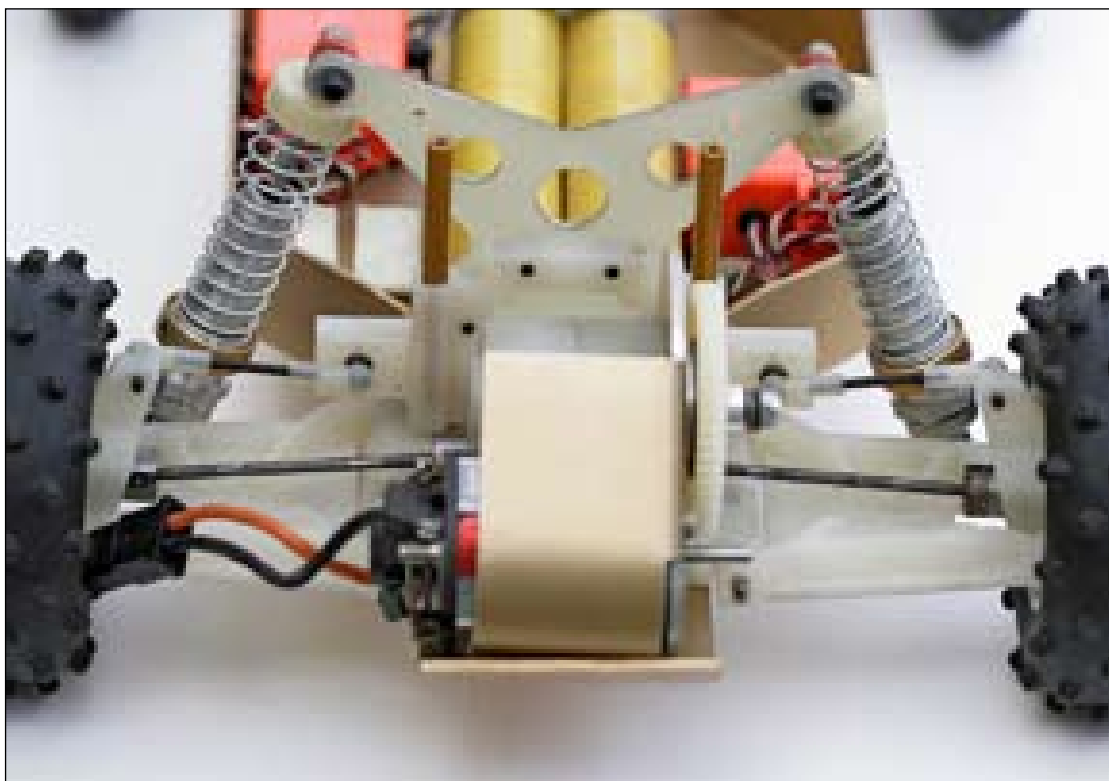
The batteries could be run vertical in this direction, or turned 90 degrees in the horizontal direction.

This was the last prototype car made before mass production started. About 95% of this car was handmade. The spur gear and servo saver is molded.





Almost everything from the kickup, chassis, transmission, and suspension was machined by hand. CNC mills were not around at that time.





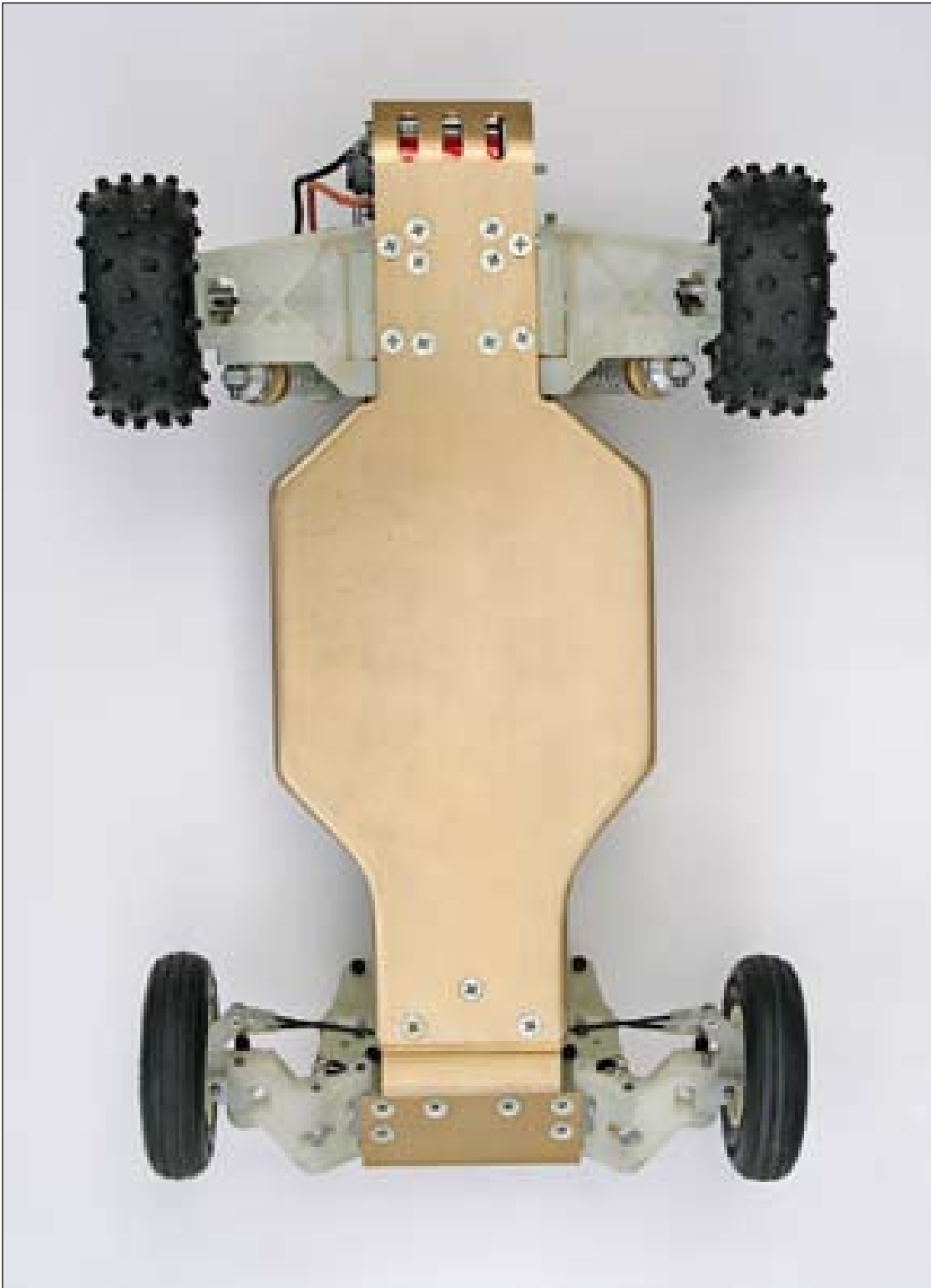


The chassis was bent into shape using rubber mallets. Fewer than ten chassis were ever made by hand. This took many hours of work per chassis.

We tried many different servo configurations.

## **Tub Chassis Manufacturing**

1. The chassis was first formed by a stamping die.
2. We trimmed off the excess flash and deburred it.
3. We sent it out for heat treatment. The first process was to heat it up and quench it in a glycol bath. It was still soft at this point and it was shipped back to us on dry ice to keep it from getting hard.
4. We would hammer it flat while it was still soft.
5. We would send it back to be heat treated to finish hardening it. It took eight hours in an oven heated to 350 degrees to complete the process. This is called aging.
6. We would then countersink the holes in the chassis and send it out for gold anodizing.



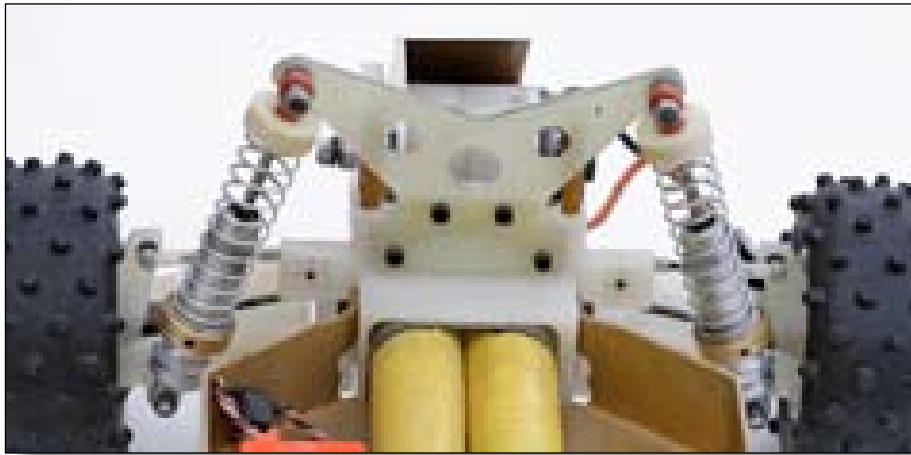
This hand-made chassis did not have any holes made for the batteries or servos.



Notice the handmade transmission cases. There are six gears inside the gearbox. Arm mounts came with 3 degrees anti-squat and 3 degrees toe-in.

We ran dogbones. Universals were not around back then.





The bulkhead gave the driver many adjustments to tune the car. Other cars at the time did not have many tuning features. We tested using Dubro ball ends.

We ran the shocks upside down so the oil would not leak out so fast. For production we had better O-rings that did not leak.





Notice the knockoffs (wing nuts). The original kits included them. We also had three-piece wheels for the front and rear. You could use the same wheels and mount new tires when they wore out.

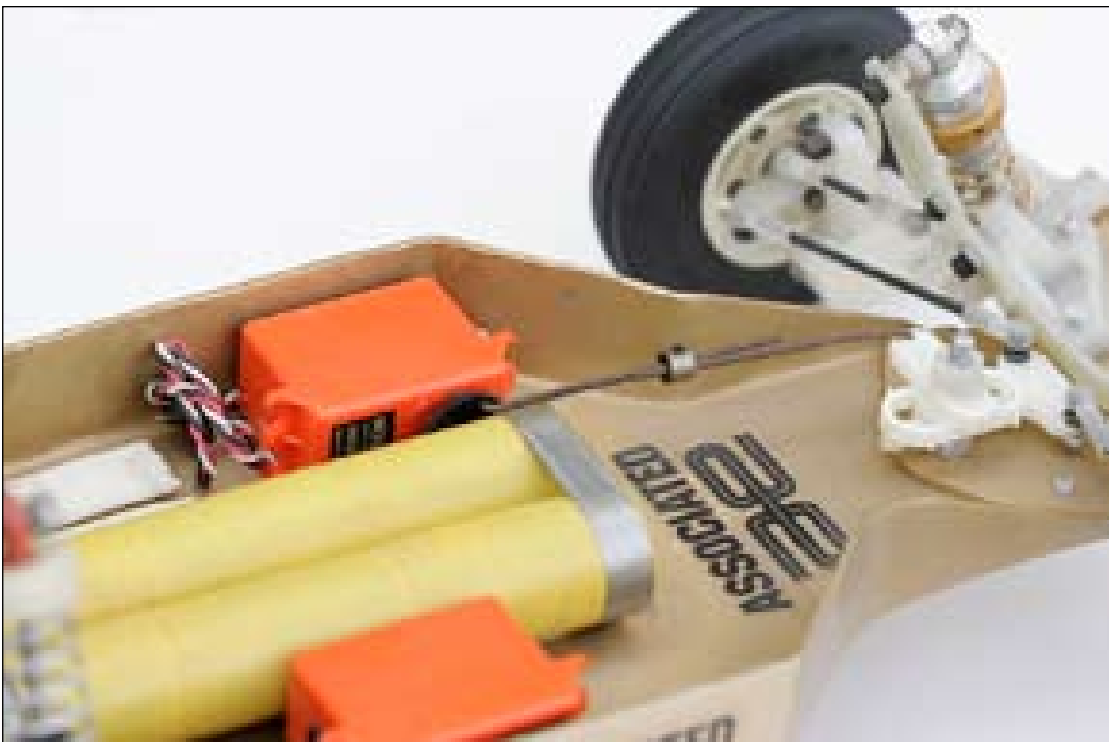
We didn't have our front wheel and tire molds finished yet. These were cool tires back then.





The prototype had only one servo saver.

For production, we changed the shape of the chassis and added nose tubes.





The diff balls were located in the spur gear. Adjusting your diff was very easy at that time. There were no slippers at that time.

Hub carriers came with 0 degrees of toe-in.



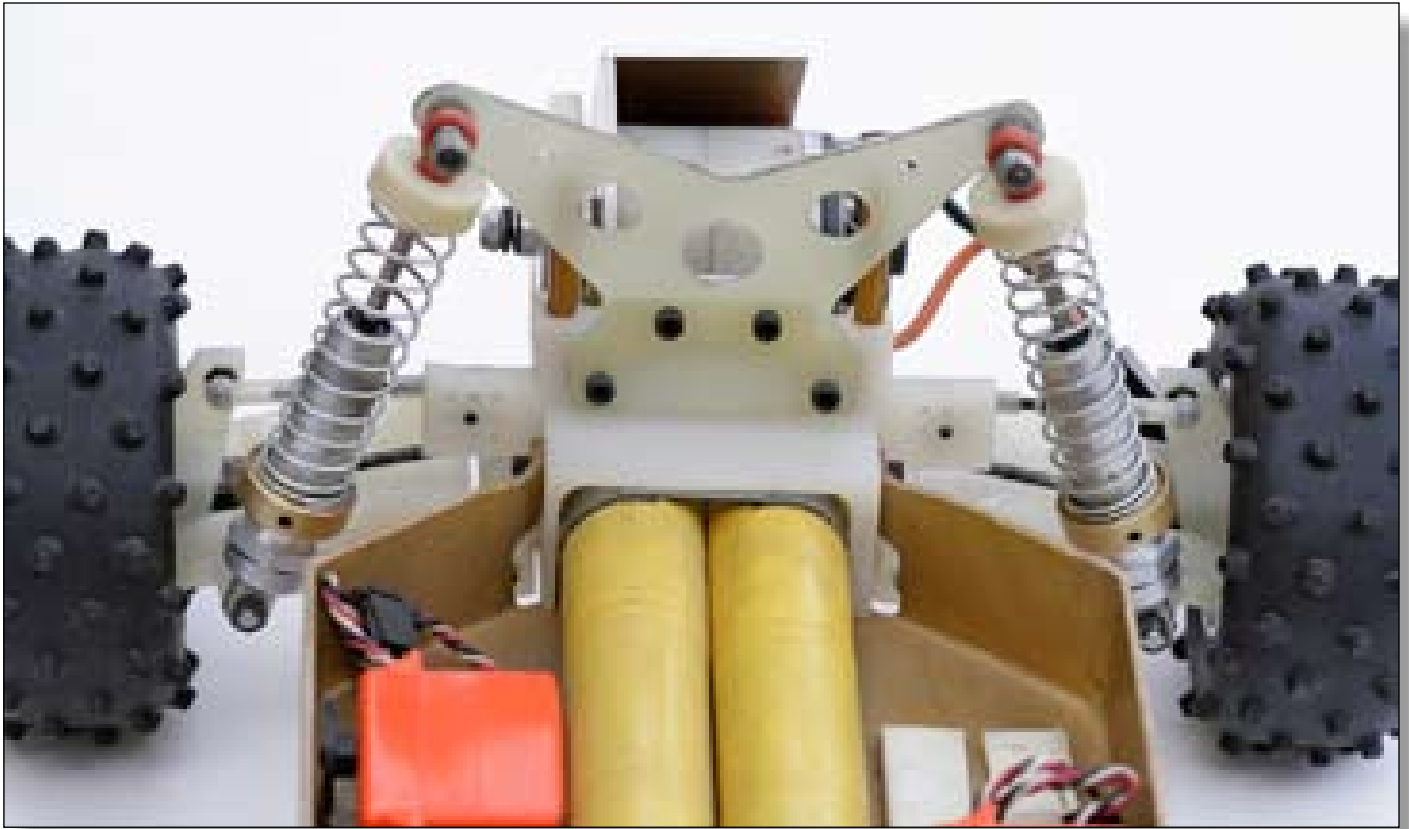




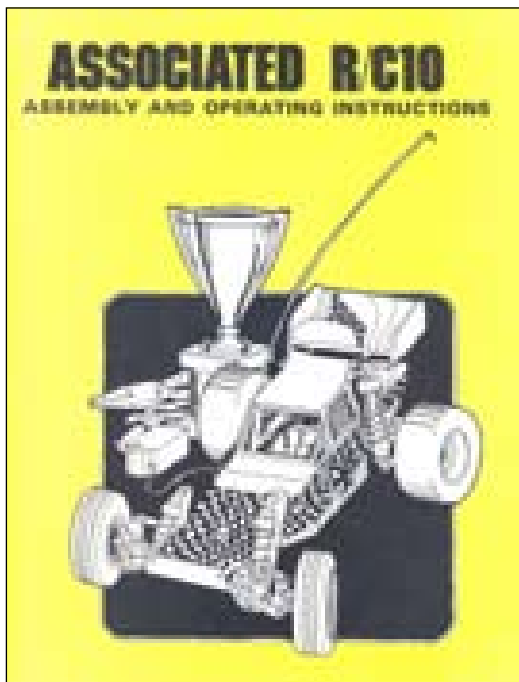
The AE logo was stamped into the production kickups.

The original car had 30-degree castor blocks.



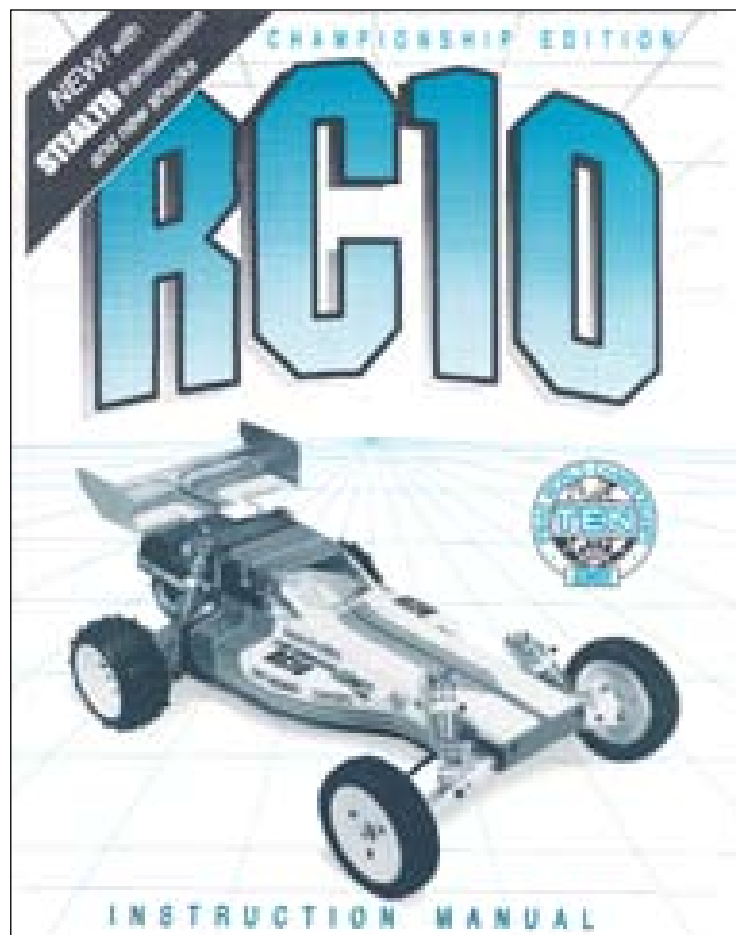


The batteries were mounted as far back as possible.

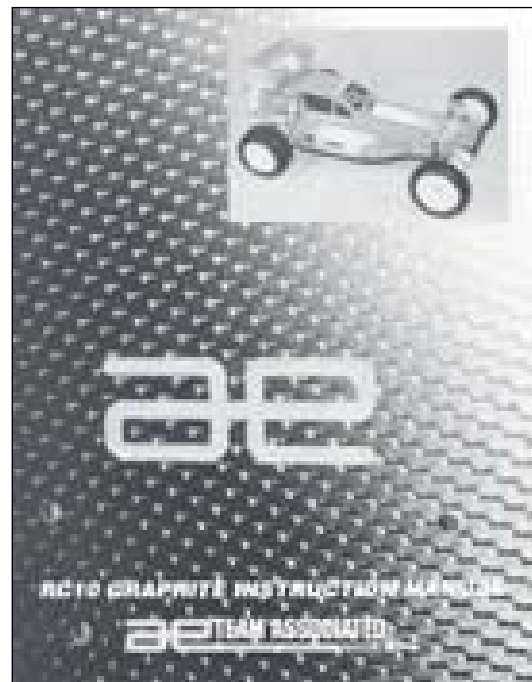


Front cover of the 1984 RC10 manual. Earlier covers were black and white.

Front cover of the 1992 RC10 Championship Edition (C.E.) manual. The buggy introduced an improvement over the earlier 6-gear transmission.

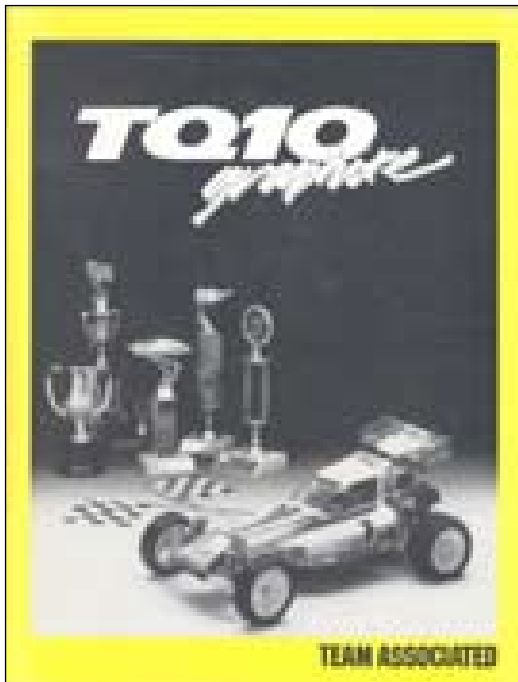


Front cover of the 1989  
RC10 Graphite manual.



Front cover of the 1990  
RC10 Team Car manual.

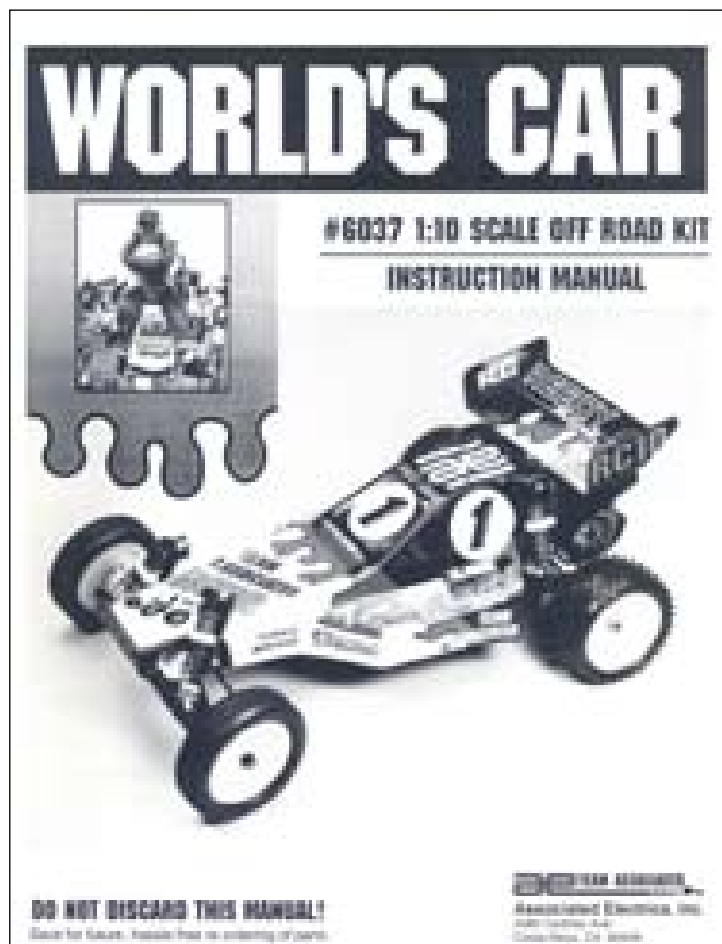




Front cover of the TQ10 Graphite manual, a version of the RC10 sold only through Horizon Hobbies for a short time.

Manual is undated.

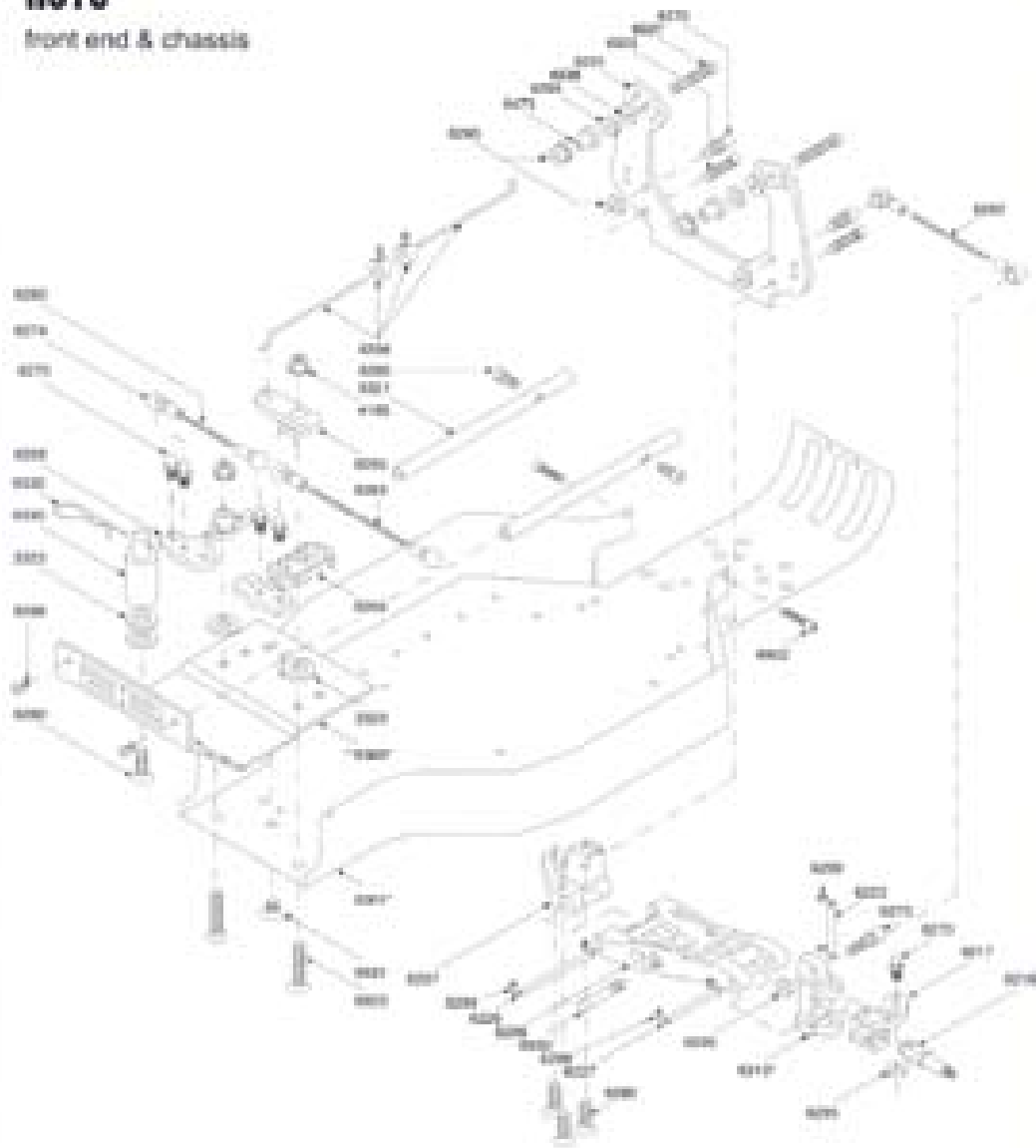
Front cover of the 1994 RC10 World's Car manual.



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## RC10

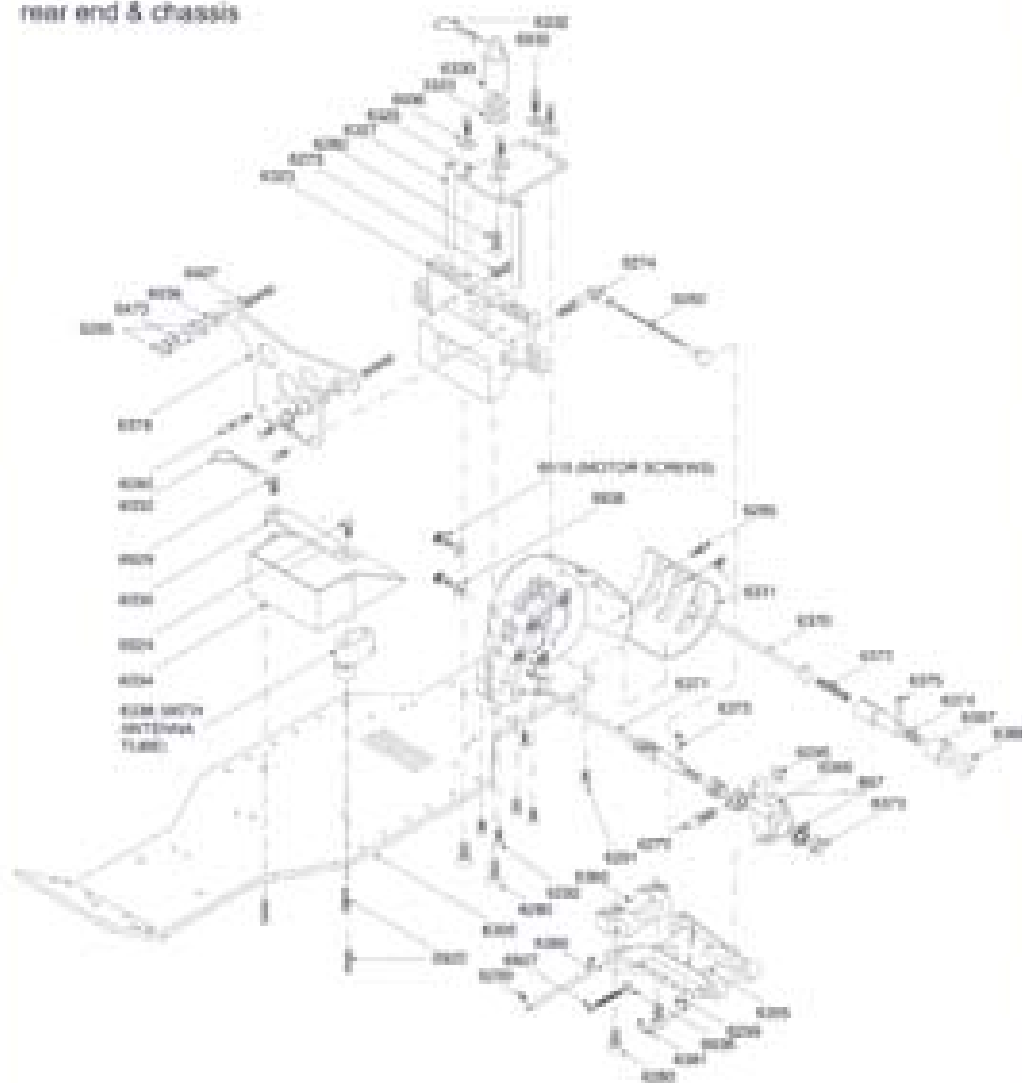
front end & chassis



\*OTHER SPECIFICATIONS ARE AVAILABLE. SEE CATALOG.

## RC10

rear end & chassis





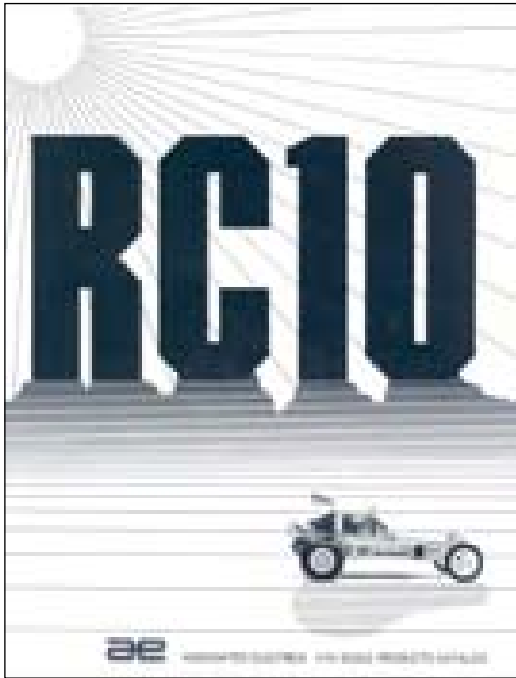
## front and rear shocks



front and rear wheels & tires

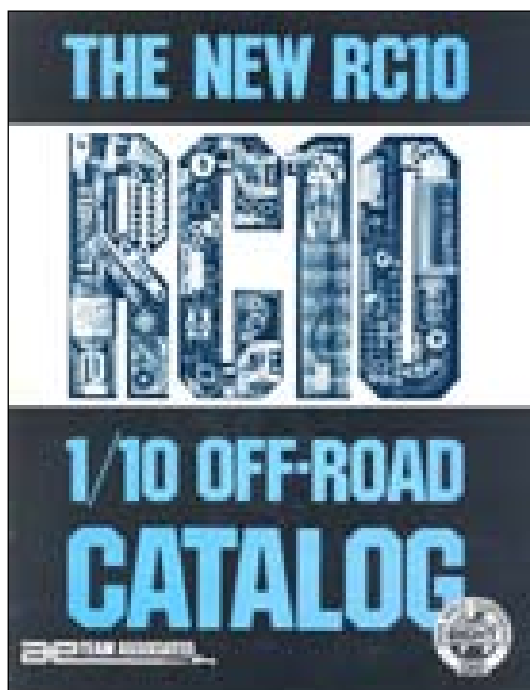


Front cover of one of the  
earliest RC10 catalogs.

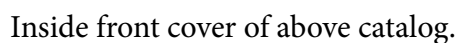


Inside front cover of above catalog.

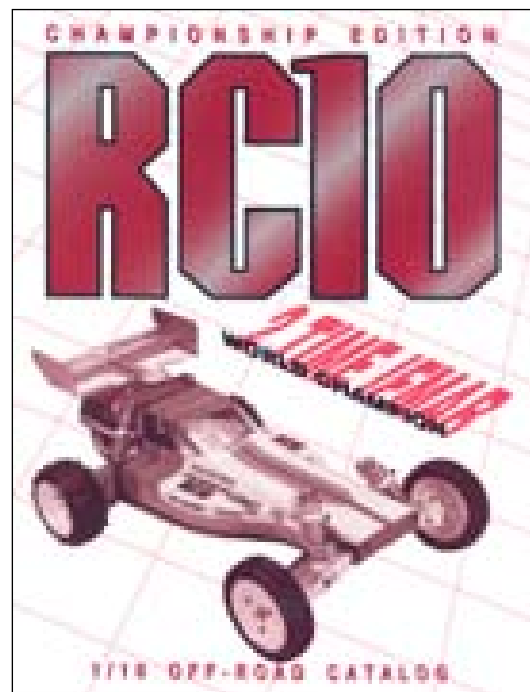




Short-lived front cover of the 1990 RC10 catalog.



Front cover of the 1991 RC10  
Championship Edition catalog.



Inside front cover of above catalog.



Curtis still has the original body used on the early RC10 box artwork, minus the wing.



Use the photos on the next few pages to reconstruct your own faithful replica of this classic.





The Reedy motor department focused on modified motors back then. Now, with so many other products in its line, 'Modifieds' has been dropped. Notice the old style AE logo.

Chris "Chan" designed several early box art and other early AE print advertising.





ROAR's early circular logo has been changed since then. The acronym, which stood for "Radio Operated Auto Racing," now stands for "Remotely Operated Auto Racers."





“Roger Curtis” was the  
buggy’s designer. Notice  
the details of the screen.

