

General Project 16—Award Winning Model Cars/Mark Jones



Here is Mark's award winning super-detailed Caterham Super 7. Details of the car can be seen below.

I purchased a Sherline lathe and mill and several accessories a few years back. I had no real prior machining experience, but have taught myself how to use them partially thanks to ease of use of the Sherline products. I have raised the bar for my own level of modeling and was pleased to win a first place award at the GSL model automotive show in Salt Lake City in 2001 as well winning the TamiyaCon that same year with a model I made many machined parts for. The machined parts were the most commented on aspect of the model. I have since refined my skills further and would like to share some photos of one my latest projects in your "Sherline Workshop". I have digital pictures and here is link to an online photo album of it's progress.

<http://photobucket.com/albums/v92/Scale-Master/Blue%20Seven/>

To log in enter the password: Camaro

Then click on "Blue Seven" to see photos of the latest project.

Thank you for making a wonderful product and providing great customer service, it has given me much pleasure over the years and happily I look forward to many new projects.

Regards, Mark D. Jones

About the real Caterham

Arguably the most desirable Super Seven ever produced by Caterham Cars, (pronounced kay-ter-hm), the JPE (Jonathan Palmer Evolution) is the culmination of 36 years of Seven advancements. Named for Formula One Grand Prix champion Jonathan Palmer who was the production advisor for it, a lightweight high-powered version of the already successful sports car, the JPE is the flagship of the Caterham line.

The original Lotus Seven was created by Colin Chapman and debuted at the London Motor Show in 1957. Colin Chapman took advantage of an English tax law by making the Seven available as a kit. Heavy taxes were being levied on new cars, however an automobile kit was not subject to such high fines. Easily assembled, with no special tools required, enthusiasts could acquire a competitive high performance sports/race car at a very affordable price. Factory built Sevens were also available. The design was improved over the years with the Series-2, Series-3 and Series-4 cars. The refined Cosworth engined Series-4 Seven became known as Super Seven.

In 1973 Lotus stopped producing the Seven due to their deep involvement in Formula One racing. The small company of Caterham Cars was able to pick up the manufacturing and sales rights from Lotus and continue production of the Super Seven, keeping it alive and fine tuning it to this day.

In 1993 the JPE Super Seven was released. It set the world record for acceleration from 0 to 60 MPH by a production built car. Weighing only 1168 lbs. and making 250 HP, (compared to 1323 lbs. and 180 HP for a BDR Super Seven), the JPE has a power to weight ratio better than many high performance motorcycles.

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More photos of Mark's Caterham plus a shot of a neat Mini-Cooper and the 2007 award winning "Superb 7"

See the link in Mark's commentary for more photos of the parts and pieces of this model



The Caterham Super 7 evolved from the Colin Chapman's Lotus Super 7, which was designed to provide a bare bones, affordable, fast sports car. This is the model that won the awards mentioned above.



Here's a closer view of the engine in the second, red version Mark is making. Mark replaced many of the stock plastic parts with custom machined metal parts, which was one of the things that made his yellow model a winner over the others. Mark feels the red car will be even better than the yellow one.



The interior features a carbon fiber dash inset with detailed instruments turned up from aluminum. The steering wheel was also custom made from aluminum. The wood grain look is achieved with paint.



There's nothing like the look of real metal. The brake rotors are fairly exposed in this car, so they add a real sense of strength and authenticity being turned from metal.

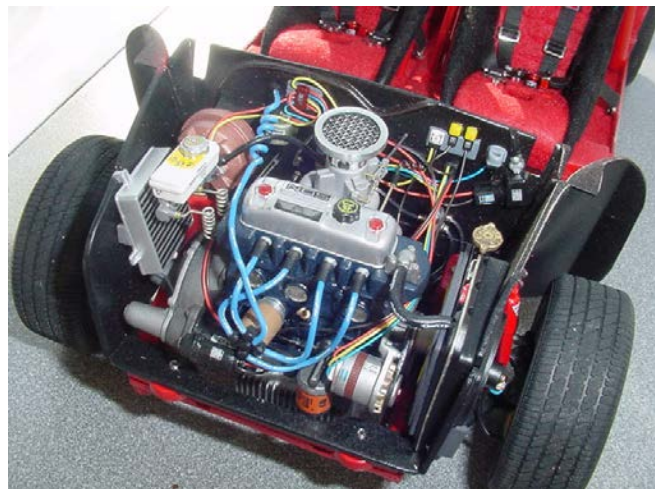
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Mark turned this oil sump tank from aluminum. It is complete with fittings and anodized end cap. This is the kind of detail that separates a modeler from a kit assembler.



Another of Mark's models is a '95 Rover Mini Cooper S called the "Super Cooper" with removable top so you can see the interior detail. The basic Mini was first designed for economical transportation, but when Formula One ace designer John Cooper transformed it, it became a car of amazing performance potential for its size and price. Those who have driven them (Including Mark) describe them as a "go-kart with a roof." BMW now owns the Mini name and has just introduced a modern version of this car.



With the front end of the car removed, details of the 1300 cc fuel-injected engine can be seen. (This owner has boosted this already potent package with the addition of an aftermarket Nitrous Oxide system.) The Mini was the first car to place the engine sideways and use front wheel drive in order to maximize interior space; the layout now used in most modern cars. If you like old Mini's, buy or rent an old movie called "The Italian Job" starring Michael Caine. The cars are the real stars.



The fully plumbed and wired engine compartment in the finished model is shown with the dipstick partially removed.

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Pull the dipstick out all the way and you get an extra bit of realism—the oil level reads on the dipstick with real oil. To add to the realism, the oil is not quite perfectly clean, but “slightly used” so it looks like the engine has been run. This is the kind of detail that separates a winner from second place.



With the roof removed, interior detail can be seen. The steering wheel is machined from aluminum like the one on the Lotus above. The wood grain effect is achieved with paint. The kick plate on the passenger side floor was to help the passenger brace himself into his seat during “spirited” handling. The kit is offered only in right-hand drive, so Mark converted this one himself to left-hand drive for those of us in America who drive on the “wrong” side of the road.

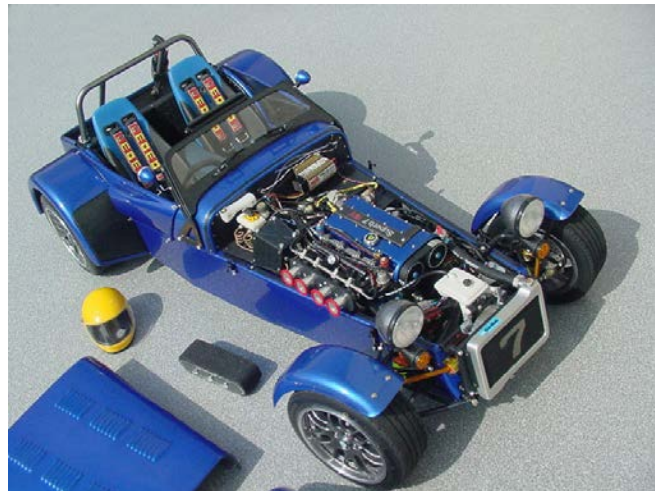


Here is a picture of Mark’s entries and their respective awards from the IMPS National Convention in Oklahoma City in July, 2003. Nine entries, thirteen awards including the George Lee Judges Grand Award Best Of Show. Quite a haul!



Mark is now working on a seventh model of the Lotus 7. It will include more detail and custom made metal parts than any car he has made in the past. In honor of the seventh seven, notice the custom seven-spoke aluminum wheels he has machined. They include valve stems with separate cores that move within the stem just like the real thing.

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Here is the finished “Superb7” version of the Caterham. It won “Best in class,” “Best Detail,” “Best Interior,” “Best of Show” and “Modeler’s Choice” at the 2007 Greater Salt Lake model contest—the nation’s premier annual plastic car model show. Talk about a sweep! This is a truly remarkable accomplishment. Look closely at the detail in the model and you will see why. And calling this a “plastic model” is a bit of a misnomer with the abundance of custom machined metal parts it contains, but that kind of detail is what it takes to win contests these days.

The scale nitrous bottle is accurate down to a totally detailed, multi-part valve assembly. Mark makes the decals too. Notice the on/off handle has the same seven-flat pattern that is the theme of the seventh seven.

This completed car will include the removable dipstick that shows an actual oil level as was used on the Mini Cooper S above.