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SPORTS & EXOTIC WORKSHOP

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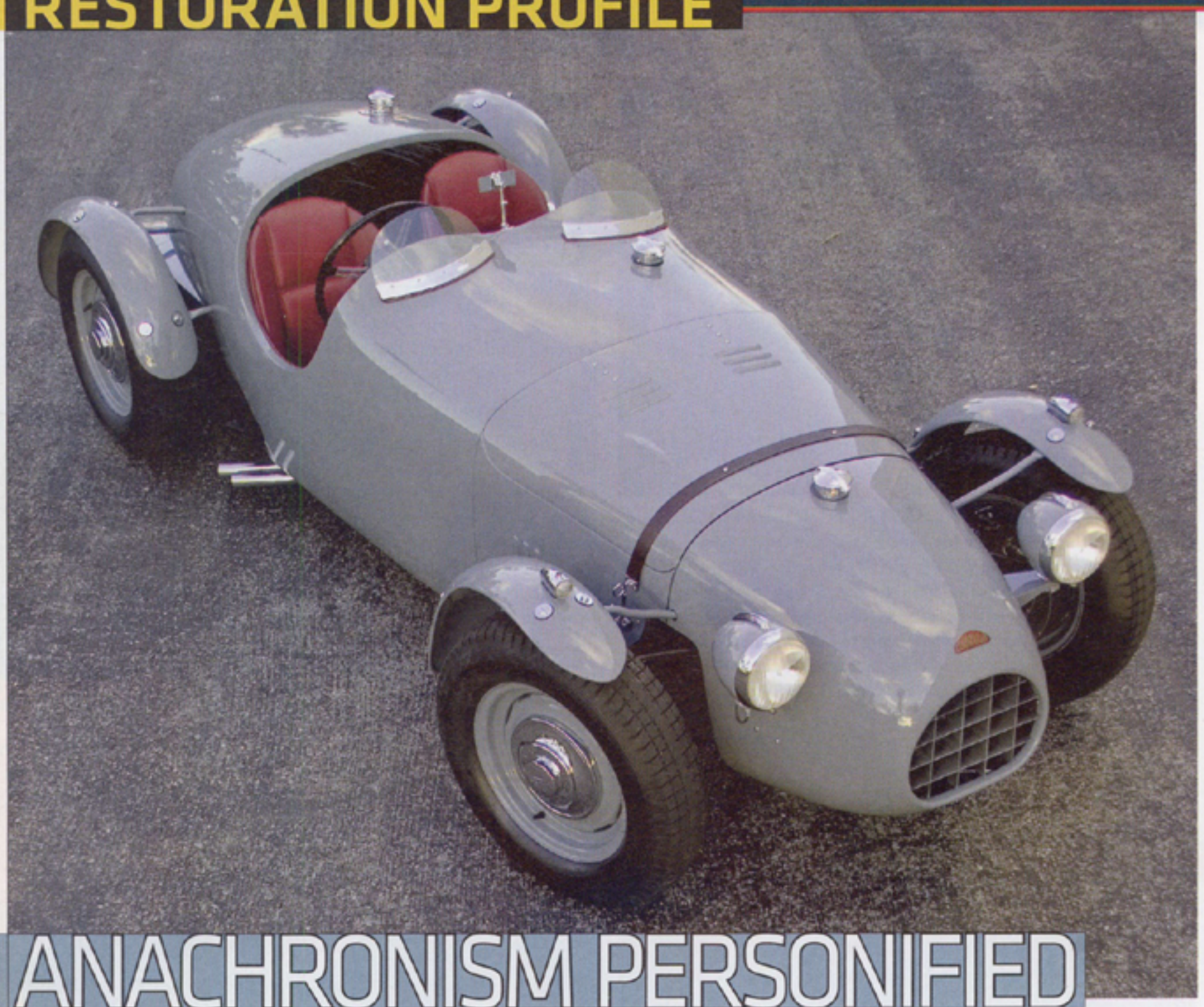

ANACHRONISM PERSONIFIED

The 1951 Connaught L3/SR was a car behind its time

WORDS AND PHOTOGRAPHY BY CRAIG FITZGERALD

For some baseball cards, signed first editions and cars, there seems to be a period of awakening when something old, discarded and forgotten is suddenly and inexplicably deemed more valuable than many of the more expensive, better known things that were its main competition. For years, only the most discerning automotive enthusiasts had ever heard of Connaught.

Jaguars and Aston Martins of the early post-war period had been apt restoration candidates throughout the early 1970s and 1980s. Little-known Connaught, founded by two RAF pilots and run out of a garage, had only built 32 cars in its entire history. And those cars had been an anachronism from the get-go.

"If you were going to build a race car and expect to be competitive," posits Creative Workshop's principal, Jason Wenig, "you'd start with the most technologically advanced components you could. Connaught started with the Lea-Francis HP 14 Sport and brought it to contemporary racing specifications." Under the svelte aluminum skin was an ash frame. Cycle fenders enclosed the wheels. The front brakes were hydraulic, but the rears were not. This was a 1930s-era car dressed in post-war clothing.

You begin to understand how the Connaught that Wenig restored for a client in his Dania Beach, Florida, facility had fallen into disrepair. "It was found in someone's backyard serving as a play toy for their children. Like Chitty-Chitty-Bang-Bang," he says.

Connaught Engineering was founded by two former RAF pilots, Rodney Clarke and Mike Oliver. Kenneth McAlpine, a wealthy customer who had an interest in racing, planted the seed and ultimately funded their efforts to build race cars of their own construction. The company they formed to build these cars—Connaught Engineering—ultimately built an estimated 32 cars. Its most noteworthy accom-

1951 CONNAUGHT L3/SR

Sent to the U.S. as a sales tool in 1951, the one-of-three L3/SR won its first race at Watkins Glen that year. From there, its history was less illustrious, until it ended up as an outdoor playground.

From 1/4 to 3/8 inches of fiberglass, body filler and epoxy covered the delicate aluminum skin. In early stages, it was removed with a chisel.

So much of the car's body had been obscured that the passenger door was glassed over. Creative Workshop found it as they removed material from the body.

plishment was an outright victory in the 1955 Syracuse Grand Prix, making the Connaught the first all-British constructed car to win a Formula I race.

Rodney Clarke's original vision for the L3/SR race car was to have a lightweight body with cycle fenders and a tubular steel frame with aluminum body panels removable by Dzus-style fasteners. This changed, however, when Abbotts of Farnham, the body builder, refused to use a tubular steel frame—opting to use ash, the company's preferred method of construction.

Connaught ultimately built only three L3/SR's, this example being the only one to be imported into the United States. Upon arrival here, the car's first race was the 1951 Watkins Glen Grand Prix, where it secured a class win. It was driven by Harry Gray, who later teamed with Larry Kulok to win the 1952 12 hours of Sebring. It also raced at Bridgehampton in the 1952 Hayground Corporation races, resulting in a ninth overall finish.

From there, the car disappeared. At some point during this ignominious era, the car had been discovered and put through what Wenig refers to as "a nickel and dime" restoration. "The car was in an absolutely horrid state of affairs. The grille had been replaced—literally—with chicken wire," says Wenig. The dash panel had been replaced with something that would've been more at home in your kitchen cabinets, and the gauges held within had gone from the stunningly beautiful Jaeger clocks in the car now, to a mix-and-match set sourced from Stewart-Warner and Autometer. The steering wheel was from Casa de Pep Boys, and was festooned with a circular hunk of granite. Given the wood dash, perhaps the restorer had been more familiar with bathroom fixtures than he had been with cars.

An equally heavy hand was tackling the bodywork. "In our research, we were surprised to find that the L3/SR had a door. There was no evidence of it on the car we had in front of us," said Wenig. No evidence, that is, until they started chipping away at the 1/4 to 3/8 inches of fiberglass, bondo and epoxy used to "restore" the car. "Aircraft stripper wouldn't touch it. We finally just sliced into it and peeled the

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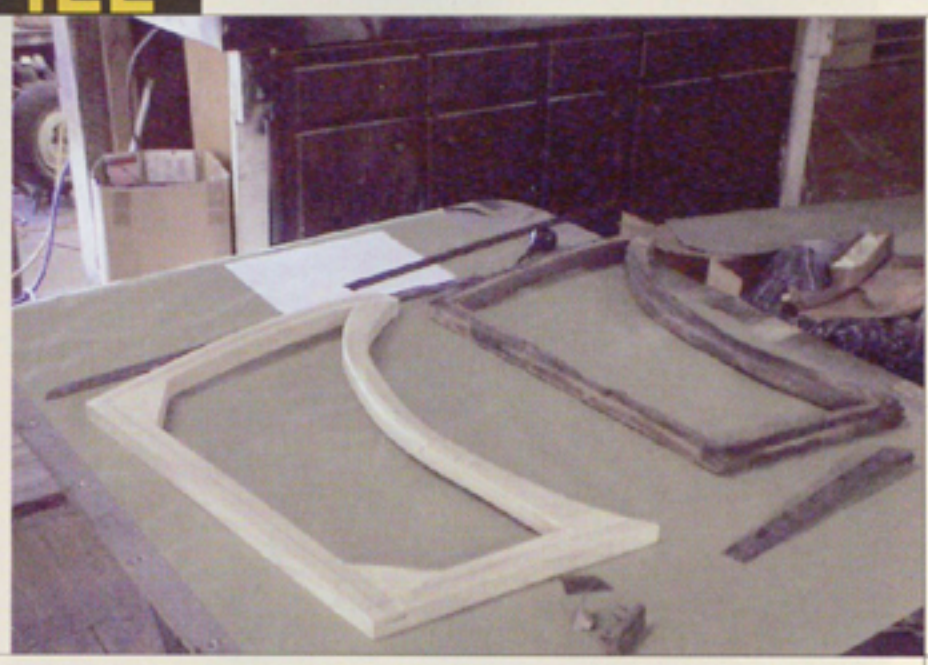
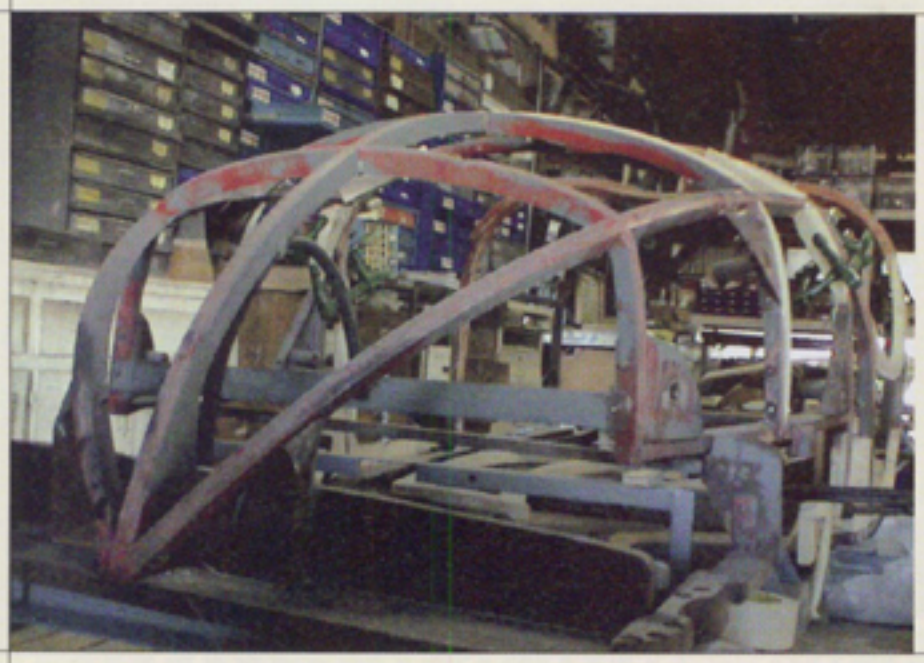
Aluminum is as prone to oxidation as steel. As much as four inches of material from every edge on the car was brittle and cracked, and needed replacement.



Symmetry must've been on the mind of the original "restorer." There is only a door on the passenger side to allow easier entry for an on-board mechanic.



The frame beneath the aluminum skin is constructed of ash. Dry-rot had taken its toll, along with some evidence of fire damage, likely from the slapdash wiring.

Creative Workshop has experience in steam-bending, but this was one of the first wood-framed race cars the shop had undertaken. Roughly 25 percent was replaced.

car like an orange. Lo and behold, they'd fiberglassed right over the door." To add insult to injury, the wiring harness was all one color.

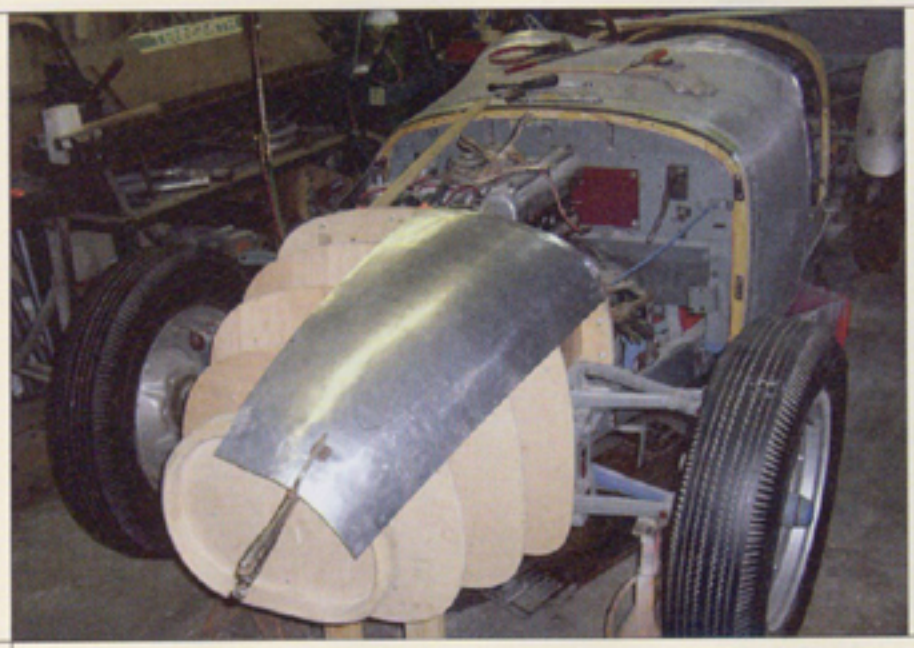
Once the bastardized bodywork had been taken back to near aluminum, the staff went at the car with aircraft stripper, which is a mandatory step for aluminum bodies. Soda blasting removes paint, old stripper and corrosion in the nooks and crannies, without deforming the surface, or embedding itself in the aluminum, like more aggressive media would. The rest of the bits were brought to bare surfaces using sandpaper and Scotchbrite pads.

Crash damage was minimal, though, as Wenig puts it, "It looked like a fourth-place car." Nevertheless, the aluminum skin was in tough shape. "Aluminum corrodes just like steel does. It turns white and powdery, and it gets incredibly brittle. Four inches from every edge of this car, you could snap the aluminum skin like a potato chip," he remembers. The ash frame, which was in much better shape than may have been indicated by the rest of the car, still had to be completely restored. Twenty-five percent of its structure had to be replaced due to dry rot and some evidence of fire damage, likely due to the ugly wiring.

Wenig and his team utilized digital photographs, blown up and overlaid with a grid, to build a wooden body buck, which would be used to rebuild the aluminum skin. Large sections of the aluminum were replaced, and recurved using an English wheel, hammer and sandbag. Once the car's skin was roughly in the right shape, the restorers went over the entire car with a rasp file to bring out high and low spots in the finished body. Any aberration more than 1/16th of an inch was marked, then corrected with a hammer and dolly. Once hammer and dolly work was finished, the skin was sanded with 120-grade paper. Finally, the entire skin was chemically prepped to remove any surface contaminants. Wenig's craftsmen are particularly concerned about stray sparks in the shop, which can adhere to the aluminum. Chemical prep helps prevent this, as do several coats of PPG epoxy primer.

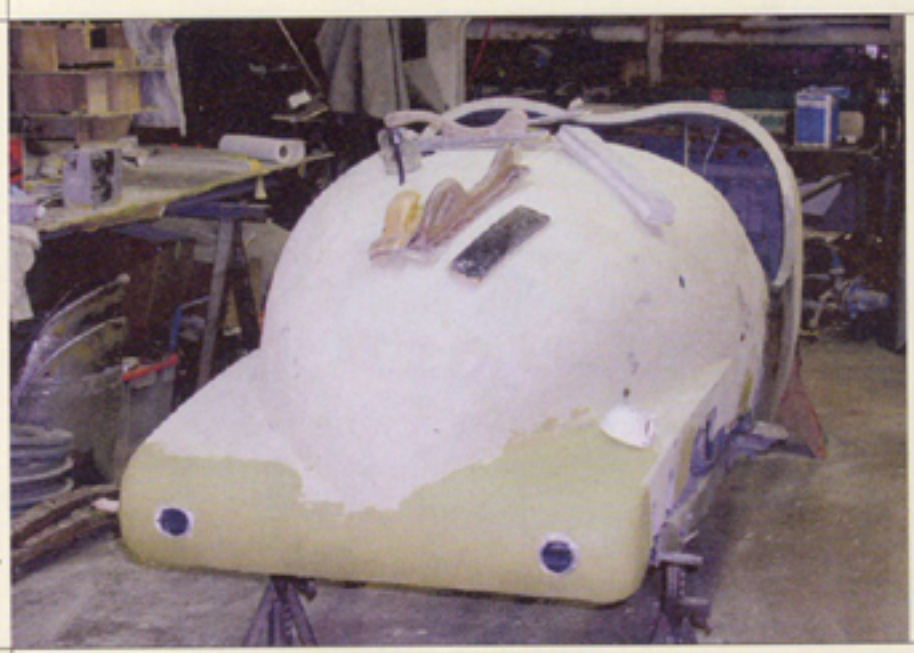
Further imperfections in the body were worked out at the epoxy primer stage, until

1951 CONNAUGHT L3/SR



After scanning original period photographs of the car, the restoration team overlaid a grid that helped to construct a plywood buck to create the Connaught's nose.

The finished nose is at the back of the bench, following weeks of metalwork. Note also the newly constructed cycle fenders, hood panel and engine side panels.



The entire surface is roughed with a rasp file to expose any low or high spots. Once these are corrected, the entire car gets a micro-thin surface of fillers and primer.

One of the benefits of having a restoration shop in Florida is that your outdoor paint booth rises to an internal temperature of 95 to 110 degrees naturally.

the car was near perfect. The body then gets two to four coats of high-build, sandable primer, and between each coat, the body is guide-coated, then block-sanded. Between coats, the car was left to cure for a week each time. By the final coat of primer, the car is deemed ready for paint.

Choosing a color for a one-of-three car like the L3/SR is a daunting process. Get it right and the world sings your praises. Get it wrong and you're left with a car that's as flat and wooden as a Kevin Costner acting performance. "Gray is a tough color," says Wenig. "It can turn very blue under certain lighting conditions, and we didn't want that. Alternately, it can turn to mud. We worked hard to come up with a color that was authentic and vibrant." The color came from the very last level of paint that was left on the car. Creative Workshop worked with its paint specialist to come up with the correct color and, after dozens of sprayouts, finally made a decision.

Just before paint, the car got a seal coat of epoxy primer. Then, the painters applied "a number" of PPG urethane enamel color coats and clear coats. "We probably put on just as many coats as anyone else, but we have a proprietary process during the application," says Wenig. The paint booth is outside the main shop, and in the Florida sun, the interior temperature regularly reaches 95 to 100 degrees. "You're essentially gently baking the surface," says Wenig.

Given sufficient curing time, the car's surface is color sanded with increasing abrasive grades, from 1000 to 2500, followed by an initial buff. At this point, Creative Workshop tends to leave the car in this stage, and moves on to other parts of the project. The car continues to cure during the rest of the restoration, for up to six months. The final buff occurs just before the car is due to be shown or delivered, for an "exceptionally flat and deep" final finish.

The instrument panel itself was re-created out of a single sheet of aluminum, to match the rest of the car's stunningly seductive skin. The design and layout of the dashboard came courtesy of a period photograph of the car's interior, which showed the proper location of all

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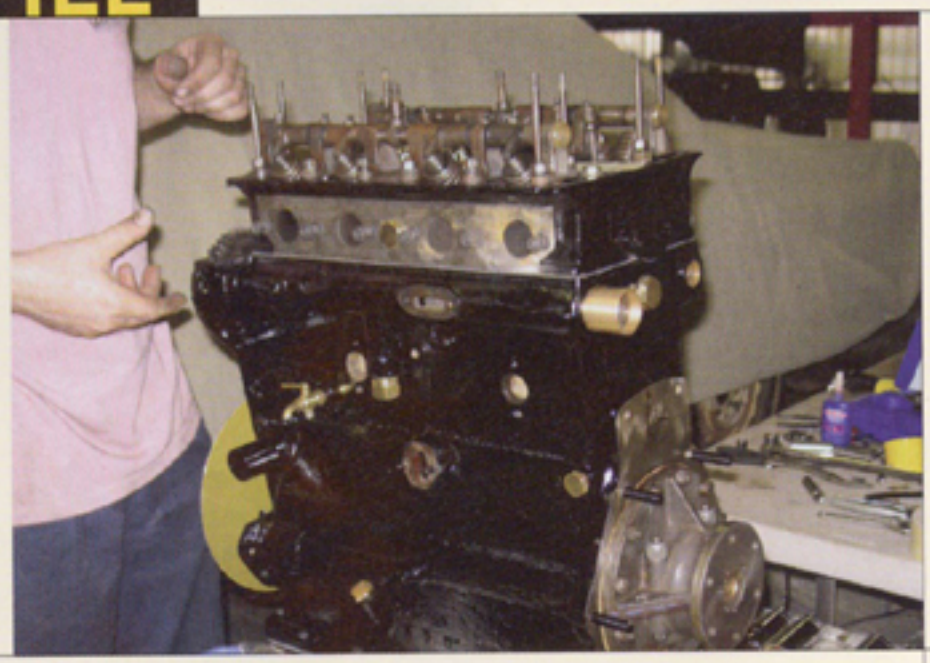
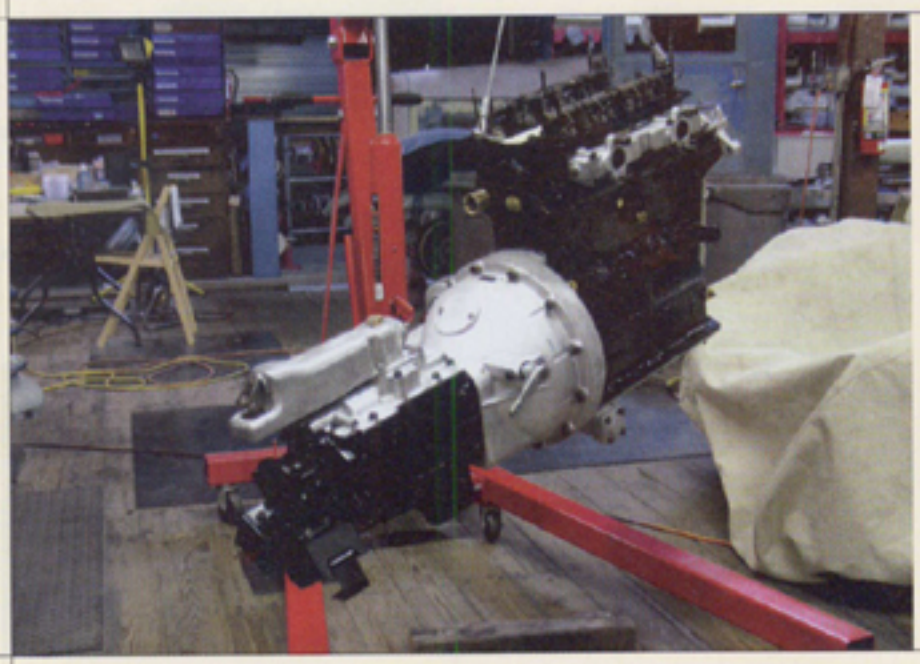
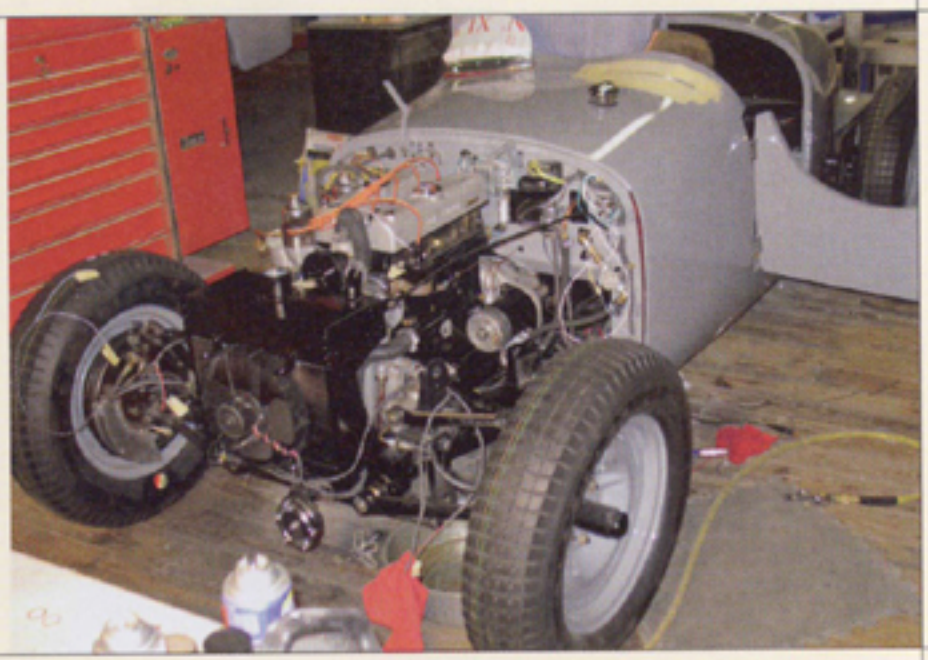
At some point in its history, the main journal bearing surfaces had been machined past tolerances, requiring babbitt bearings to be poured in the original bearings' place.



Engine timing was another challenge: Five gears time the valvetrain, with no markings on any of the gears. Timing it correctly entails watching the valves open and close for days.



About the easiest part of the restoration was the gearbox, which is a straightforward, non-synchro four-speed. It was stuck tight, but that's not uncommon.



During the teardown it was discovered that during the original restoration, all the wiring was made the same color. Suffice it to say that's not the way it is now.

the gauges.

Contrary to most racing car dash layouts, the massive tachometer isn't front and center in the driver's line of sight. Symmetry seems to have been the most important directive in the way the gauges were laid out. The tachometer is mirrored by a speedometer, which could probably only be read by the passenger. The two big gauges flank a full arsenal of ancillary meters that measure (clockwise) oil pressure, water temperature, amps and fuel. Nestled securely in this cluster is the start button. Straight in front of the driver is an oil temperature gauge, as well as a red light indicating generator charge/no charge.

In addition to the gauges, the instrument panel is augmented by a full array of chromed switches, which Jason Wenig notes were nearly impossible to find. "The correct switches ended up being WWII-era Spitfire surplus switches," he says. "Even more difficult was that there were two identical styles—one made for the Canadian Air Force, the other for the RAF... we needed the British version with the small Crown insignia in the Bakelite. We found out about the Canada/British thing after we actually sourced a set, and the insignia was Canadian. And remember, there are two pods; we had to find two matching British, WWII airplane surplus switch pods in excellent shape. It was not easy."

The Lea-Francis engine, a 1,760cc four-cylinder, looked to be fairly complete when the project was started, so it was put aside for more pressing tasks. In retrospect, that probably wasn't such a great idea. "The engine was supposed to have three main bearings," says Wenig, "but when we went to disassemble it, we realized that during the earlier restoration, the bearing surfaces had been bored out to beyond tolerances. Then, someone had poured babbitt. So now, in Dania Beach, Florida, a month before the car was to be shown at Amelia Island, Wenig needed an expert who could pour a proper babbitt bearing.

The Connaught's offset, semi-overhead camshaft is controlled by a set of timing gears. Five timing gears, to be exact, none of which features any markings. Over the next five weeks, Wenig and one of his

1951 CONNAUGHT L3/SR

A custom stainless exhaust is now routed correctly down the left side of the body, under the chassis, and exiting behind the driver, just in front of the rear wheel.

Fitted with a mix of Stewart-Warner and Autometer gauges, the restoration entailed sourcing correct clocks. Switches courtesy of the RAF, but not the Canadian branch.

Butter-soft leather covers the seats, and encircles the passenger cabin. It's a surprisingly luxurious touch for such an elemental throwback to the pre-war era.

Work was finished just hours before the truck picked the car up for its maiden exhibition at the Amelia Island Concours d'Elegance, where it placed 2nd in class.

technicians would assemble and disassemble the engine four times to get the engine right. The fifth time, the engine went in the car, and it arrived at the Amelia Island Concours d'Elegance.

With such a rare item—only three L3/SRs exist, and two are in the U.K.—you're very much on your own as far as restoration parts are concerned. Take the door latch, for example: It had to be custom cast from a computer rendering of a manipulated side picture of the Connaught from 1953. Yet, there is a community surrounding these cars. Wenig credits Barrie Price as the source of many of the hard-to-find pieces in the restoration. Barrie owns the Lea-Francis Spares company in the U.K. LF wheel covers, the steering wheel, and the proper gauges were all sourced through Price's establishment. Duncan Rabagliati in the U.K. also provided a wealth of research material.

By the time of the Concours, Creative Workshop started the car for the very first time two weeks before the event, hand drove it around the shop for the first time one week before the event, and finished the last item (the bonnet strap) at 11 p.m. the night before the customer was to pick the car up to trailer to the show. In one year, the car went from a basket case to a completed restoration. It may not have the emotional cachet of a Jaguar or an Aston Martin, but this one-off racer has undergone a restoration that would do those marques proud.