

# THE MAKING OF A CLASSIC SUPERCAR

A fortnight before the official unveiling of Frontline Development's first new LE50, we went fly-on-the-wall for a glimpse of the build in action.

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Last month, we exclusively revealed the first hand-prepared and freshly painted LE50 bodyshell. Within hours of us leaving Frontline's Abingdon premises, their highly motivated team were back working on the car, the deadline being the NEC Classic Motor Show and the car's first public viewing. Although we've been in almost daily contact with Frontline, we were keen to see for ourselves the rapid and high-intensity progress being made.

The freshly painted shell was first internally cloaked in Dynamat Extreme to help eliminate road noise and shell rumbles created by frequencies inherent with all monocoque bodysells, not just a 50-year-old design. In addition, the foil backing provides heat reduction from engine and exhaust components.

First, though, templates were made for each piece of Dynamat to enable subsequent LE50s to be built efficiently. In all, 10.5 square metres of Dynamat were used ▶



Poised handling and scrubbing off 150mph plus is easy with the correct set-up.

George getting to grips with the Mazda engine fitting.

No grumbles about the rumbles. Dynamat used wall to wall, door to floor.

Stretch out and feel the Alcantara headlining.

Devilish attention to detail ensures what is seen is meant to be seen such as the leather covered diff bulge in the floor pressing.

Bill inches in the low-frequency audio box next to the resited battery under the rear luggage deck.

**LE50 in numbers**

**Man Hours**

- Bodyshell: Over 100 hours from sheet steel to the finished article.
- Paint: 148
- Wiring: 246
- Trim: 122
- Final assembly: 154
- Engine mapping: 50

**Electrical data**

- 169 individual wires
- 260 metres of wire
- 32 fuses
- 8 relays
- 15 switches
- 2 solenoids

on the floors, bulkhead, transmission tunnel and roof.

The fitted Dynamat paved the way for the extensive wiring. Modern creature comforts such as electric windows, heated glass and seats require a loom capable of reliability with inherent safety. So how does eight relays, 32 fuses, 15 switches, and two solenoids sound?

It's fair to say the standard Lucas glass-fuse four-terminal fuse box wasn't really fit for purpose. Instead, there's a hub of electrics sited on the inner panel of the left footwell. There are 169 individual wires in an LE50, totalling some 260 metres in length. The bespoke loom was devised at Frontline by cutting individual wires to length having routed them in situ. They were then mounted on a peg board in the workshop. The prototype loom was then checked and sent off to be made professionally.

The wiring alone has consumed 246 man-hours. That's not all. 100 hours go into a new bodyshell at British Motor Heritage and a further 148 to prep and paint the shell to Frontline's standards. All LE50s will be available with trim options, and this first of the limited run of 50 beautifully highlights Alcantara as a luxury covering. Its use, with contrasting 'French stitch' seams, on the headlining, dash top and centre console simply invites touching and

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feeling. Red Connolly leather on the door cards and inner panels contrast with Charcoal Alcantara.

The hand formed alloy seat shells hadn't been trimmed so we'll have to wait until the NEC to see them. Just starting to be fitted when we visited was the first of 12 metres of Wilton carpet, individually cut and bound. The Wilton will sit on a bed of six square metres of Dynaliner acoustic sound insulation.

All this is proof, if any were needed, of Frontline's exacting standards for the LE50. I've been quizzed on my perspective of the LE50 by a number of readers. My reply has been to focus enthusiasts

along the lines of pushing what's possible with classic cars without ruining their innate character and charm. I call that Engenius.

As an enthusiast who delights in excellent solutions and brilliantly executed engineering, I'm inspired by Tim, Ed, George, Bill, Andy and Dave at Frontline. They represent all that's excellent about small-volume manufacturing in the UK and I'm sure the LE50 will inspire enthusiasts worldwide. We'll cover the numerous remaining details in our exclusive first drive next month, when we'll sample the LE50's combination of new Mazda 2012 engine and six-speed gearbox. 

260 metres of wiring, individually cut to length, goes into the loom.



Director Tim Fenna and Bill discuss elements of the engine ancillaries being fitted.

Not a Lucas glass fuse in sight. All circuits are individually protected.

Dave puts finishing touches to the fitting of his handmade Alcantara dash covering.

Fitting the bespoke Wilton carpet begins with the inner sills.