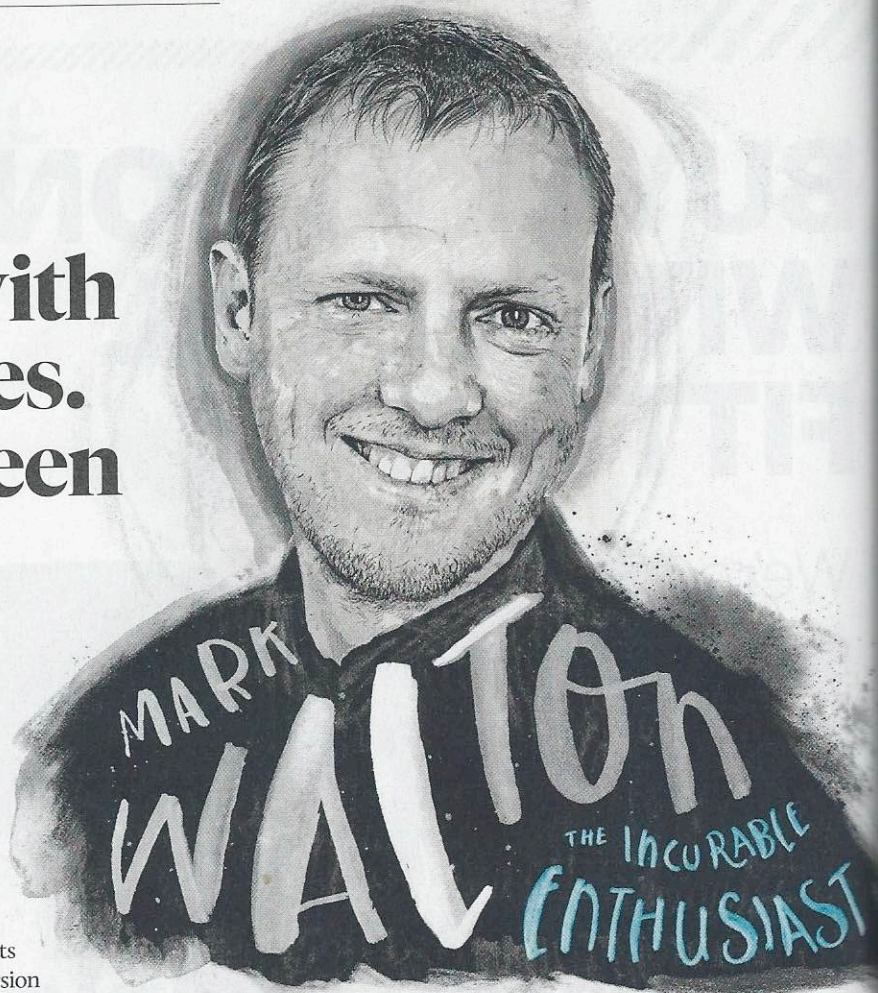


'As a Land Rover owner I'm obsessed with parts catalogues. And now I've seen the 3D future'



You'd think over-familiarity with a parts catalogue would be a bad sign. If the book is well-thumbed and by your bed, it means you're either (a) bogged down in the middle of a major restoration, or (b) a TVR owner.

But there's something about parts catalogues. They're like a grown-up version of those *Eagle* Annual cutaway drawings: all

those exploded views appeal to our desire to know how things work, how things are assembled. And if you're the sort of person who wants things indexed, it's like a zoologist wandering through the archives of the Natural History Museum: classification heaven.

As a Land Rover owner I'm obsessed with parts catalogues. The first was called the Spare Parts List and it was issued with the Series 1 in 1948: every sub-assembly broken down, every single nut, bolt, split pin and rivet exquisitely hand-drawn and numbered, all bound up in a brown card cover. 'Joint Washer for Thermostat Housing, Part No 213811'; 'Horn Button and Dipper Switch, Part No 272094'... Even the parts catalogue had a part number: TP/III/A.

By the '70s, it had reached new levels of complexity: the Series 3 catalogue is over 750 pages, covering petrol engines, diesels, 88-inch models, 109 Station Wagons... Imagine all the bearings, valves, gaskets and flanges, all the bolts and washers and screws, all hand-drawn and labelled.

But now I've seen the future and I'd like to share it with you. I've had an exclusive preview of the forthcoming parts catalogue for the Ineos Grenadier, and: woah! My evenings for the foreseeable future are now spoken for.

As you'll know, the Grenadier – due out next summer – was conceived as the spiritual successor to the old Defender: ladder chassis, solid axles, a rugged, go-anywhere 4x4. The CEO of Ineos, British billionaire Sir Jim Ratcliffe, wanted an old-school off-roader that would be easy to fix in the field, anywhere in the world. So the Ineos approach to parts is inspired by Land Rover, only this time delivered in gorgeous animated 3D.

It's been developed in conjunction with Bosch as part of the Grenadier's global aftersales programme, Ineos tells us. 'We believe it's the first time a whole vehicle's technical manual has been presented in such detail in a 3D interactive technical manual. Every mechanical component, assembly and sub-assembly can be isolated and broken down on-screen, and the user can rotate and zoom in or out in real-time.'

It's absolutely mind-blowing: at the click of a button you can go from a conventional black-and-white line drawing to a fully colourised, 3D cad-cam model. Click 'View Explosion 1' and the assembly will burst apart on screen, showing its individual components. Hover the mouse over a part and it'll highlight it, along with the corresponding line in the parts list: 'Part No EI-0000010756, Bevel Ring Gear'. Then you can click 'Order' and have it delivered.

Not only that, the parts are linked to a 3D Repair Manual – geek overload! In the same precise style, each repair is illustrated with an animated step-by-step procedure. It's like some kind of crazy workshop video game.

The technical complexity of this opus is impressive enough, but I'm amazed that Ineos is actually happy for owners to tackle these jobs themselves. Ineos says the 3D manual will be 'made available to workshops, technicians and even to enthusiasts'. I ask Gary Pearson, UK head of sales and marketing at Ineos Automotive: aren't you wanting to get customers signed up to some expensive dealership care package?

Pearson insists it's an example of how Ineos wants to do things differently. 'There are some markets – the US for example – where you have to share certain manuals with the independent workshop sector,' he says. 'A lot of manufacturers don't like doing it – they do it grudgingly. We want to be more open-source. We want customers to be a full part of the experience – and for some, that includes working on the car themselves.'

Okay, I'm rolling up my sleeves. I don't care if I never have to fix a Grenadier gearbox in the Gobi Desert, I'm going to spend hours exploring every mechanical nook and cranny.

Among many fine Land Rover-related stories by Mark Walton, perhaps the very best is his look at the 1948 Amsterdam show car in our May 2018 issue