

MERCEDES-BENZ PRESS RELEASE:

A SMARTER WAY TO GET FROM A TO B: THE SMART FORRAIL

Note: Do not try this at home...

The new smart forfour is a pretty effective point-to-point machine.

It can drive from London to Aberdeen non-stop for as little as £39. Its four occupants will be comfy on the 540-mile journey too, even if they're significantly taller than the car is wide. The smart forfour is tiny on the outside, yet clever engineering means its interior is vast and is packed with technology to help make the journey fun, relaxing and safe. It stands a good chance of being the ultimate commuting machine, were it not for one obvious rival.

The forfour is reliant on roads, meaning the humble train has an obvious advantage in that it can get from point-to-point through a more direct route. When it comes to outright speed and ruthless efficiency, it's one-nil to the train.

Not all is lost, though. A light-hearted, one-off experiment by smart may have redressed the balance – the aim being to see if the two could be combined.

Nicknamed the smart 'forrail', it might appear like a lightly modified smart forfour but it's, in fact, a fully certified, mini-train.

The smart's tridion safety cell allows it immense strength, which underpins the forrail. No matter how simple Roger Moore made it look in his Mercedes-Benz 250 SE, removing the tyres and placing it on tracks isn't really possible in real life – the car would fall off almost immediately.

Six months of engineering work and sophisticated CAD modelling later, the smart forrail is equipped with unique, solid steel wheels each measuring 22-inches in diameter and weighing 80 kg, allowing it the traction it needs on rails.

Designed by Interfleet, a specialised British train engineering business based in Derby, the team – who usually work on 16-litre, 70-tonne diesel locomotives, had to employ a new approach to the challenge presented by a 999 cc, one-tonne smart.

The agile steering, which in road use allows the smart forfour to handle as if it's on rails, was disconnected by engineers, to allow it to handle being driven on rails. To avoid any steering movement, aluminum supports were welded between the axles meaning the wheels are locked in position.

Under close supervision, the smart forrail tentatively took to the tracks at the weekend on the privately operated Bluebell Railway – providing a few, bemused commuters the chance to avoid the congested roads without having to leave the comfort of the compact four-seater. The 10-mile stretch of railway, cutting a direct route through Sussex, represented a significant challenge for the smart forrail, and yet the smallest train on the tracks took the trip in its stride, and the regular enthusiasts (present for a model railway exhibition) somewhat by surprise.

Despite challenging engineering obstacles, the experiment steadfastly refused to come off the rails. The best of both worlds were combined – albeit briefly – to create arguably the

most efficient, and fun, commuting machine in the world. Shortly after, the forrail reverted back to its forfour, road-going alter ego – content with being spectacularly efficient, fun and ideal for commuting

Safety

The forrail project met and exceeded the safety standards expected of it by the operators of the Bluebell Railway. It was supervised by trained staff from the railway at all times, with a licensed train driver in the car throughout. Each of its runs took place at low speed. The conversion from a car to a train took six months, and involved smart and Interfleet specialist engineers to design and create the wheels for the car. Smart and Mercedes-Benz do not encourage any individual to carry out similar modifications. It's incredibly difficult. In line with expectations, the smart forrail did indeed handle as if on rails.

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BACKGROUND INFORMATION on THE FESTIVAL of SPEED:

- The first Goodwood Festival of Speed was held in 1993, attracting around 25,000 people. Since then, the event's popularity has soared, and now welcomes 150,000 each year. The event starts with the Moving Motor Show (MMS) on the Thursday, in which all exhibits and paddocks are open, but the Hillclimb is used solely for MMS, with invited guests and customers either driving or being driven up the hill and on a unique course in production cars.
- The Festival of Speed begins in earnest on the Friday, with gates opening at 7am.
- The Festival of Speed Hillclimb record was set in 1999 by then-Formula 1 driver Nick Heidfeld in a Mercedes-Benz-engined McLaren MP4/13, who completed the 1.16-mile course in 41.6 seconds, averaging 100.385mph (161.554km/h). Heidfeld was aged 22 at the time, and is now a Formula E driver.
- Mercedes-Benz has been the featured marque at the Festival of Speed in 2001 and last year in 2014. Every central feature since 1997 has been designed by sculptor Gerry Judah. In 2001, the sculpture celebrated Mercedes-Benz's 100th anniversary with a 300SL, and last year celebrated the marque's 120th year in motorsport (since the 1894 Benz Velo) with a Mercedes-Benz W25 and a Mercedes AMG W04 arching right over Goodwood House