

## A Porsche in puzzle pieces

**12/09/2018** The toy manufacturer Ravensburger has collaborated with Porsche to develop a 3D puzzle of the 911 R.

When it was first built over 50 years ago, the 911 R represented a milestone in Porsche's history. In 2016, the sports car manufacturer decided to build a second generation of this classic car. This new generation will now be reissued – in miniature. In collaboration with Porsche, the toy manufacturer Ravensburger is launching a 3D puzzle version of the 911 R.

"We were excited to be involved in such a project, working together with our partner Ravensburger to recreate one of our iconic sports cars—no other than the 911 R—in the form of a 3D puzzle", says Oliver Eidam, Head of Brand Partnerships and Sponsoring at Porsche.

The engineers from Ravensburg were just as meticulous in their work as their colleagues in Weissach: The very first step in the development process of a 3D puzzle is a feasibility study using a rough model. This is followed by an initial prototype. Based on this prototype, the technical product development department divides the vehicle into individual puzzle pieces. The next step is to create a detailed design – the second prototype.

## newsroom



All 3D puzzles are manufactured using a patented process that involves injection moulding the pieces, laser-marking the inner side with ID numbers and printing the design on the outer side.

The design and manufacturing process needs to ensure that movement of the pieces during spraying is minimised — especially when curved and bendable puzzle pieces are involved. Keeping the pieces still is essential in order to produce a precisely printed surface and avoid the colour seeping onto the edges of the puzzle pieces. This stage in the puzzle manufacturing process resembles the wind tunnel tests that take place during the development of the real sports car in Weissach.

Tools for series production are then manufactured. Following this the packaging is designed, before finally ramping up to series production.

"It was a challenge to recreate the iconic shape of the Porsche 911 R as accurately and in as much detail as possible", says Martin Fischer, a development engineer at Ravensburger. "That and dividing up the puzzle segments were the most complex steps from a technical point of view."

The 3D puzzle of the 911 R is just the starting point for an extensive collaboration between Porsche and Ravensburger in the coming years. The two long-established companies share a similar ethos in terms of their dedication to their products, their skilful engineering and their exceptionally high quality standards.

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