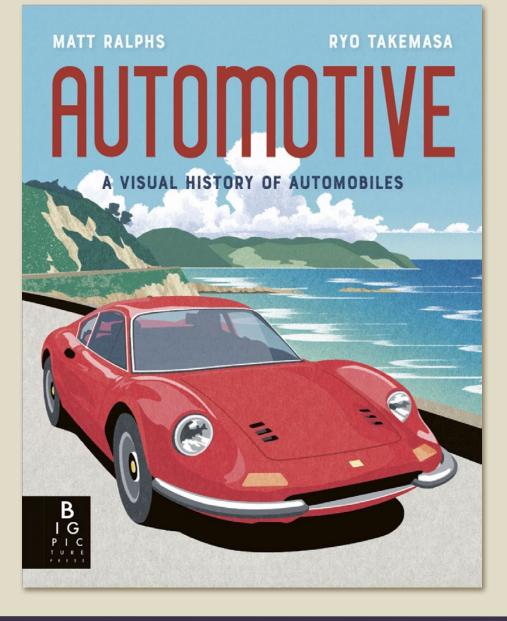
## **Automotive**

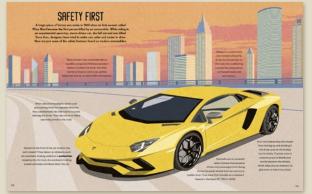


Automotive celebrates the ingenuity and usability of cars, trucks and motorbikes past, present and future.

- Sample contents: Steam and Electric Automobiles, Early Engines, Monte Carlo Rally, Mass Production, Motorways, Motorbikes, Isle of Man TT, Daytona 500, Concept Cars, History of Formula One, Iconic Bridges, Trucks and Road Trains, Monster Truck Races, Hot Rods, Drag Races, Special Cars, Cars in War, The Future of the Automobile
- The follow-up title to the stunning Locomotive
- Perfect for car lovers of all ages
- Super cool artwork by award-winning artist Ryo Takemasa

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## **Automotive**







## STEAM AND ELECTRIC AUTOMOBILES

Since their invention in the early 1800s, steam locomotives revolutionised the way people and freight were transported. However, some travellars wanted a more convenient vehicle that they didn't have to shore and could use whenever they wanted. Some engineers created small, steam-powered road vehicles, while others docided to try electric battery automobiles. Many designs were created, but by the early 20th century it was clear that the internal combustion engine was going to be king of the road.

The first steam-powered read vehicle was designed by English investor Richard Travitistic, Using a high-presenter bodier for more power, his Puffing David set off with aix passengers in 1601 at a speed described by one witness at Yater than Lood walk (about Skm/h). Unfortunately, only a few days after this historic journay, the bodier caught fire and Puffing Devi was storayed.

Electric cars were very popular in Europe and the USA from the late 1800s to the early 1900s. They were quieter and smoother, dich's produce smoke and were easier to use than steampowered automobile. Now of the first successful models was the Flockin Elektrowagen. Designed in Germany in 1888, its The electric motor drives the back wheek and could main around 15km/h.

One of the last and most advanced steam automobiles was the Doble steam car Designed in 1924, the Doble Model E only required 30 seconds to boil the water needed to drive the engine, was seavy to control and could reach speeds as high as 120km/h.



The age of the automobile really began with the invention of the internal combustion angine. When fuels such as petrol, diesel or kerosene are burned (or 'combusted') inside the engine (using an availter such as ain), the y produce kinetic energy, which makes the vehicle move. Internal combustion engines are more fuel-efficient than steam engines, and proved for easier and more convenient to start-up, operate and maintain.

German inventor Karl Benz developed the first automobile powered by an internal combustion engine in 1885. His revolutionary Motorwagen had a 3hp petrol engine, three-poked wheeles with solid rubber tyres and one forward gear. Its top speed was around 16km/h.

The first mas-produced car was the Cidsmobile Model R Curved Dask; 19,000 wore built become 1001 and 1007. It was more affordable than most other cars at the time, had a 5kp engine, 2 forward and 1 rowers gearand care as either 2 -seater 'runabout' or a 4-seater family car.

Created in 1901 by German engineers Paul Daimter and Wilhelm Maybach as a racing car, the Mercodes S5 HP was a huge stop forward in automobile design. It had a powerful petrol engine mounted at the front that drove the back wheels, a hand brake and a foot brake, 4 forward gaars and 1 reverse gaar.



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