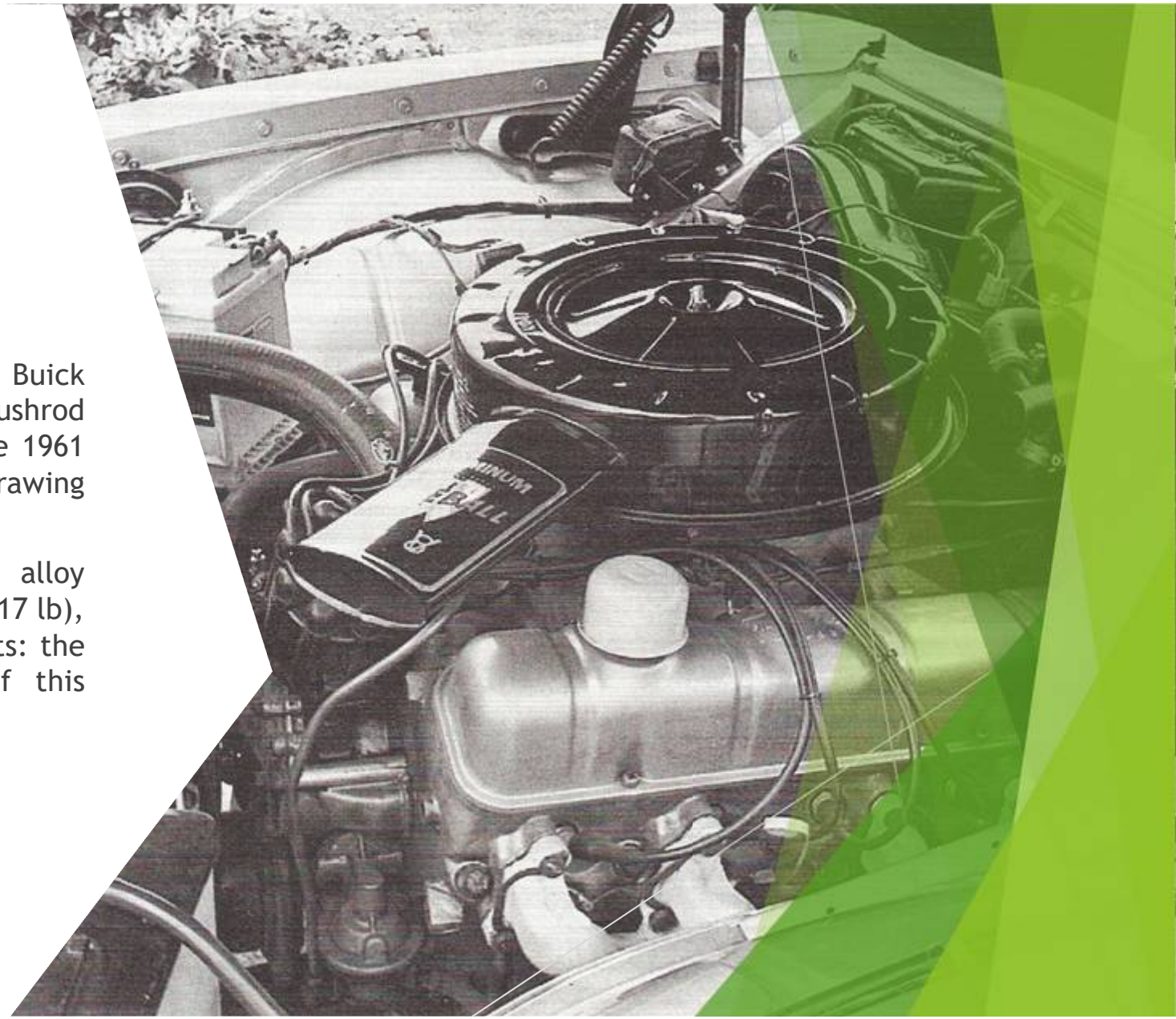
V8

The Rover V8 Engine

By Brian Terry

Rover V8 Engine history

- **1961 Buick Special 215 cu. in.**
  - The Rover V8 began life as the Buick 215, an all-aluminium OHV pushrod engine introduced in 1960 for the 1961 US model year (it was on their drawing boards in the late 1950s).
  - The compact, all aluminium alloy engine was light, at just 144 kg (317 lb), and capable of high power outputs: the most powerful Buick version of this engine rated 200 hp (149 kW)

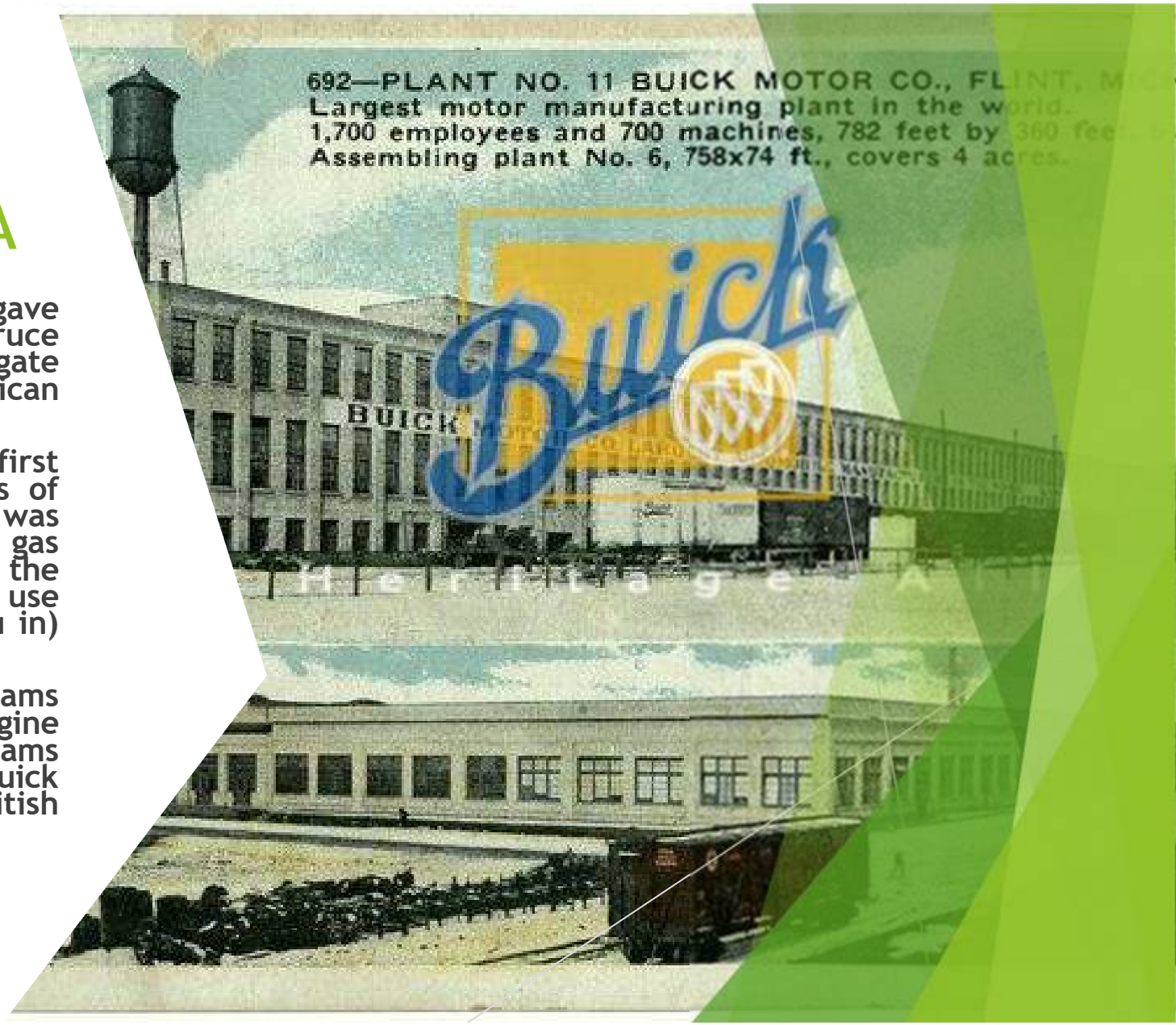


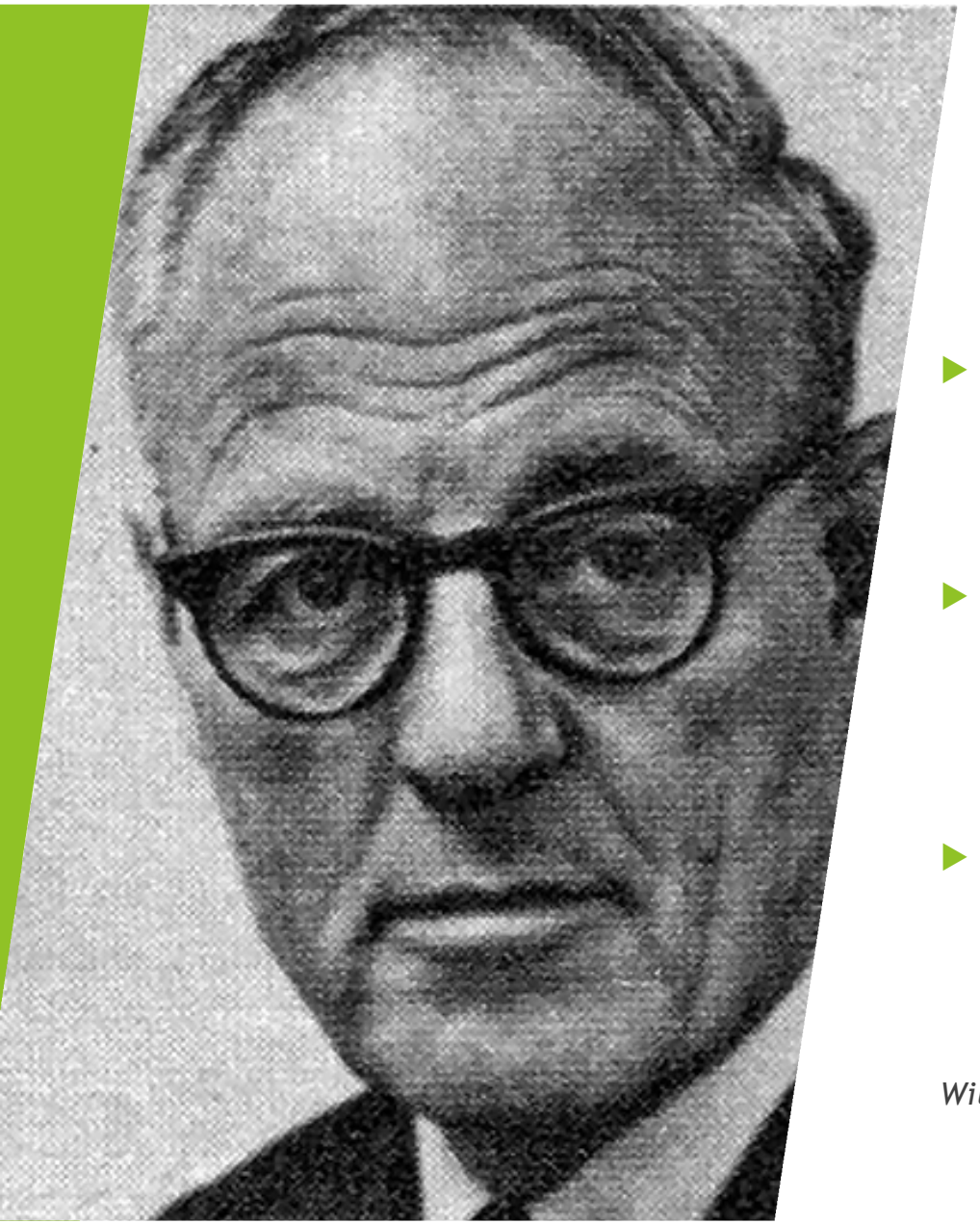
Rover V8 Engine history

- Buick produced 376,799 cars with this engine in just three years. A comparable number of Oldsmobile 215 engines were produced.
- In addition, some Pontiac models were fitted with the Buick 215, leading to the nickname "BOP 215" for the engine (BOP standing for Buick/Oldsmobile/Pontiac).
- The aluminium engine was relatively expensive to produce, however, and it suffered problems with oil and coolant sealing, as well as with radiator clogging from use of antifreeze incompatible with aluminium.

Rover seeks engine in the USA

- In January 1964 Rover gave American operations head J. Bruce McWilliams permission to investigate the possible purchase of an American V8 engine for Rover cars.
- History relates that McWilliams first saw the Buick V8 at the works of Mercury Marine, where he was discussing the sale of Rover gas turbines and diesel engines to the company (Mercury did indeed use the Land Rover 2.25 L (137.3 cu in) diesel engine in marinised form).
- However, it is likely that McWilliams was aware of the Buick engine before this. In any case, McWilliams realised that the lightweight Buick V8 would be ideal for smaller British cars



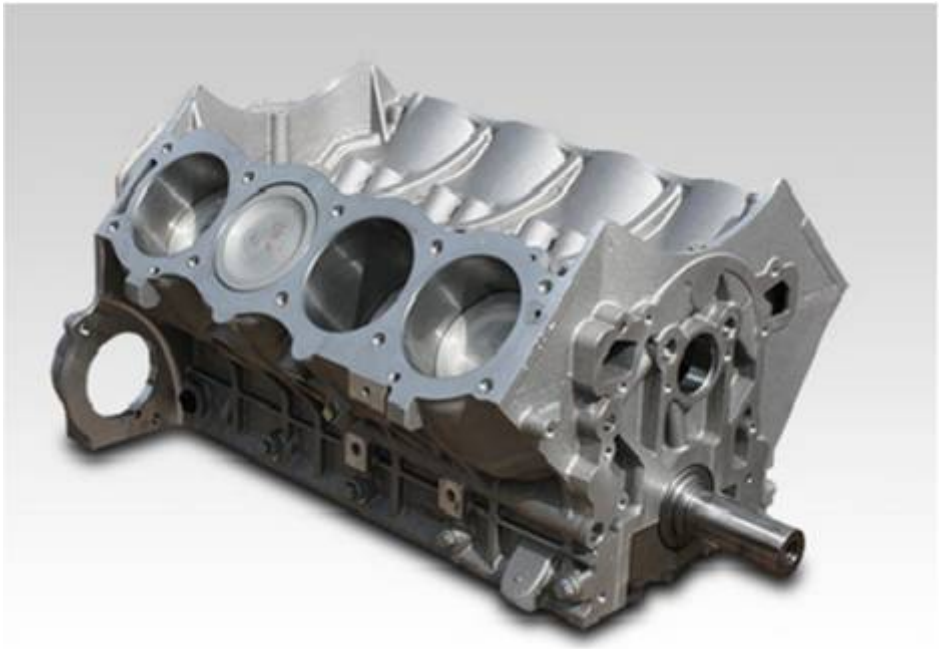


Looking for Marine Engines, negotiations start for the Buick V8 tooling

- McWilliams and William Martin-Hurst began an aggressive campaign to convince GM to sell the tooling, which they finally agreed to do in January 1965. Retiring Buick engineer Joe Turlay moved to the UK to act as a consultant.
- The Rover V8 has long been a relatively common engine for kit car use in Britain, much as the Chevrolet small-block V8 is for American hot rod builders (though many British hot rods have traditionally used four cylinder engines, like the Ford Pinto and Crossflow units).
- Even in the US there is a strong contingent of builders who select the Buick or Rover aluminium V8 engine for use in small sporty cars like the MGB and the Chevy Vega.

William Martin-Hurst

The deal done – Production starts

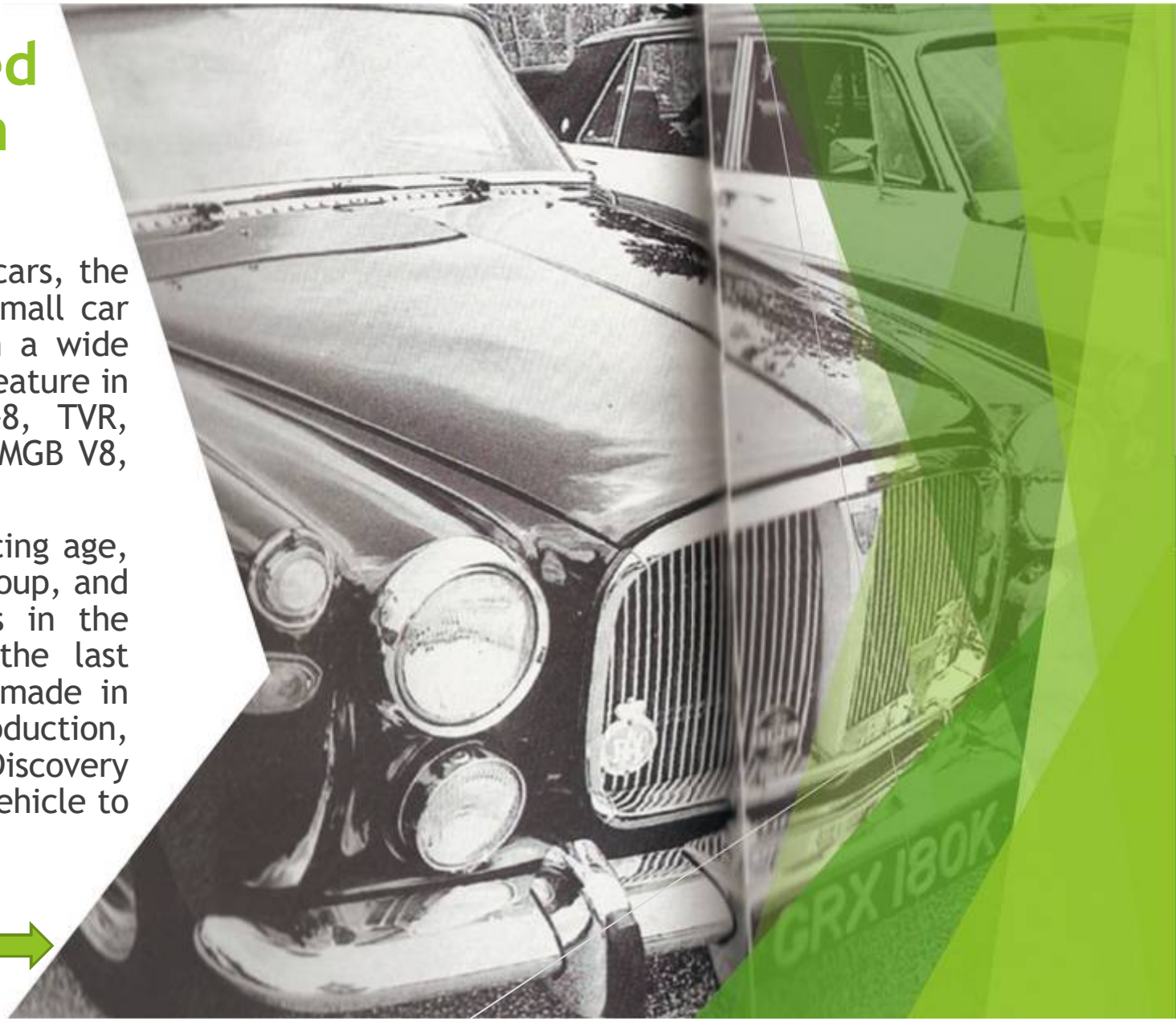


- The British made engines were run on two SU carburettors, initially HS6 then HIF6 and HIF44 variants (14 years), then two CD175 Stromberg carburettors (2–3 years), Bosch L-Jetronic (7–8 years, aka Lucas 4CU Flapper)
- Then Hitachi Hotwire (5 years, aka Lucas 14CUX), then the GEMS system (many years) and finally Bosch Motronics for 2 years.
- The engine is still was cast until 2011, in an improved version, by Coscast in Birmingham, UK.

The Engine is installed into Rover cars from 1965 to 2004

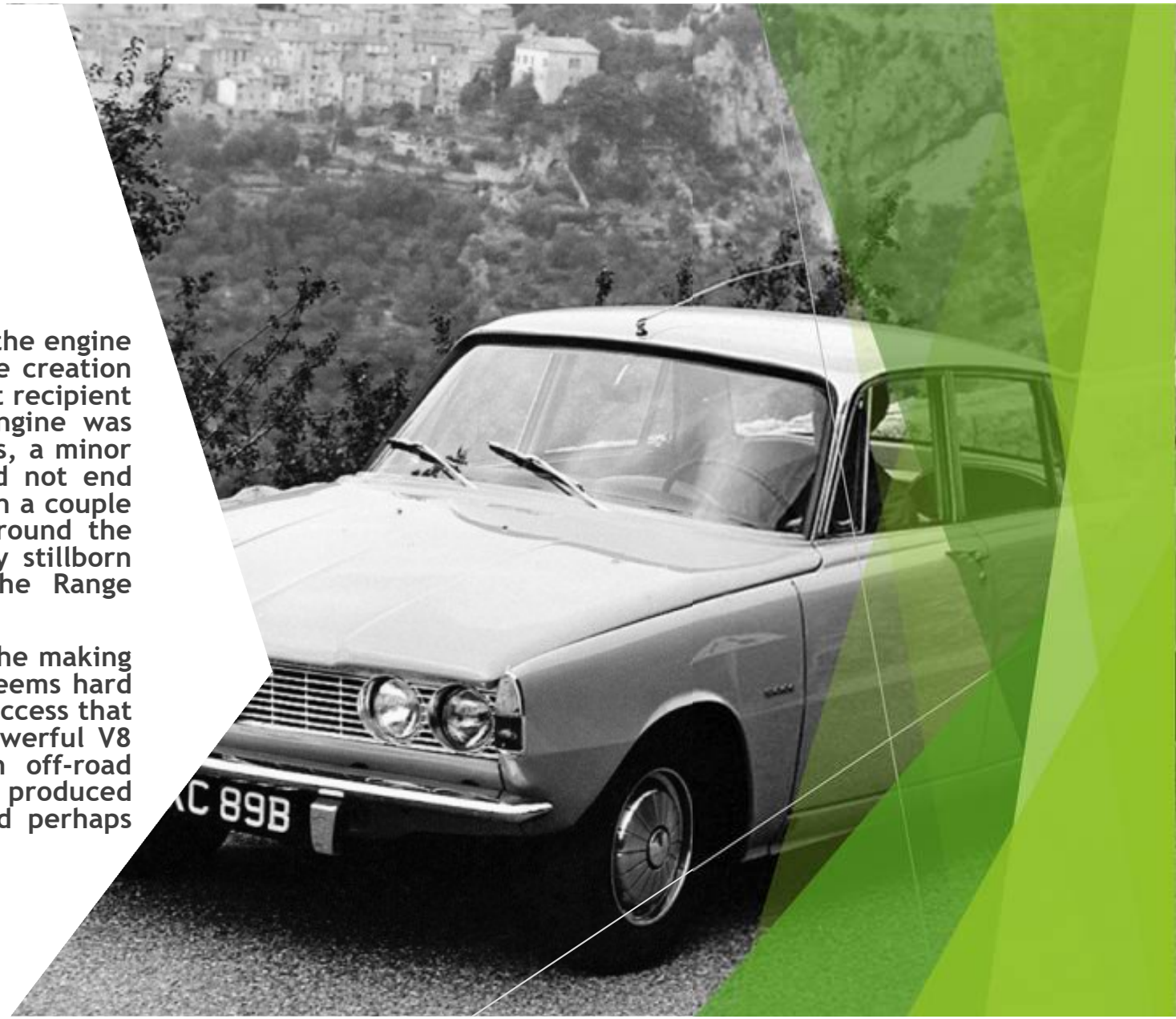
- As well as appearing in Rover cars, the engine was sold by Rover to small car builders, and has appeared in a wide variety of vehicles. Rover V8s feature in some models from Morgan +8, TVR, Triumph TR8, Land Rover and MGB V8, among many others.
- Because of the engine's advancing age, the demise of the MG Rover Group, and the switch to Jaguar engines in the 2005 Land Rover Discovery, the last mass-produced Rover V8 was made in May 2004, after 37 years of production, with the 2004 Land Rover Discovery being the last mass-produced vehicle to use it.

Guess who's Rover P5 Coupe?



New Rover models utilise the power

- Within months, the production of the engine was transferred to Solihull and the creation of the P5B soon followed. The next recipient for the compact and powerful engine was the Rover P6 - and, in the process, a minor British legend was created. It did not end there though; Spen King worked on a couple of projects, which were based around the new engine - one being the sadly stillborn Rover P6BS, the other being the Range Rover.
- Like the P5B, the V8 engine was the making of the Range Rover; somehow it seems hard to imagine that car enjoying the success that it did without the smooth and powerful V8 engine under the bonnet. In an off-road vehicle, the stump-pulling torque produced by the ex-Buick engine had found perhaps its perfect role in life.



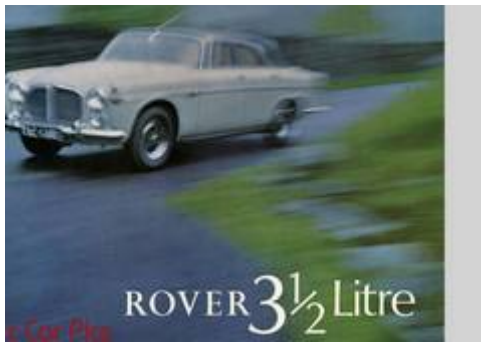
There were some issues

- BL had attempted to make proper use of the engine themselves, slotting it into the MGB GT V8 and Triumph TR8. However, in both cases and for different reasons, the two models failed to live up to the promise that they had initially shown.
- Were there any downsides to the Rover V8? Yes: only that no one within Leyland was forceful enough to make sure that it was used in the Triumph Stag.
- With it, the Stag would have undoubtedly caused its maker a whole lot less grief and, therefore, remained in production for a lot longer. That, though, is no fault of the engine – only the company's shortsighted and partisan management.

Rover V8 Engine develops from 3.5L
to 4.2, 4.3, 4.4, 4.5, 4.6 & 5.0L

- The Rover version of this engine was extensively developed and used for rallying, especially in Triumph TR8 sports cars.

Some of the Cars this great engine has powered



Can you name them all?

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