FUEL INJECTION ROVER P6

There are still some unresolved questions about the fuel-injected P6s, but the story has become a little clearer. Development seems to have begun some time around 1966, using a 2000TC engine rather than the basic SC type because of its different cylinder head and better breathing.
At this stage, Lucas were working on a mechanical system (which later appeared on the Triumph 2.5 PI) and Brico were working on an electronic system.
Although the Lucas system had been around in racing since the 1950s, the Brico system was very much advanced technology for the time. Brico were better known at the time as the makers of pistons, rings, valves and other components.

Rover experimented with both types of system, but by the end of the year had discontinued work with the Lucas injection. Nevertheless, examples of both Lucas and Brico injected cars were available to be driven against a standard 2000TC at the annual 1967 SMMT test day, which is when all the major manufacturers and importers made examples of their latest models available for invited members of the press to drive. This event was held at the Goodwood racing circuit. The two injected cars proved to be much more tractable than the TC at low rpm but not significantly quicker.

A report in the Australian magazine Modern Motor suggests that examples of the injected four-cylinder cars were still under development as late as January 1968, and workshop manuals were supplied to Rover in January 1969.
However, at Rover the focus of fuel injection development seems to have switched to the V8 engines. The key reason was probably that fuel injection offered an effective way of metering fuel more accurately and so enabling engines to meet the new US exhaust emissions regulations, which were only likely to get tighter in the future.
By 1970, the V8 seemed to be the way forward for the US market, where four-cylinder engines were something of a rarity, and it looks as if Rover decided to put their development resources behind the V8 with a Brico system, and abandoned work on the Lucas type.

There must have been several test cars, some of them in the special 999-prefix series that was used for experimental vehicles at the end of the 1960s. At least one of these was used as a transmission test car for the injected engine, which was developing considerably more power and torque than the carburettor versions.
At least one Brico injection system, plus some additional parts, also found its way to Morgan, where a Rover engineer was assisting with the engine installation of the Plus 8 model that was to use a Rover V8 engine. That system has survived to be recommissioned in a P6B in New Zealand.

It is likely that Rover imagined the combination of injected V8 and automatic gearbox would make an ideal model for the USA, possibly for introduction around 1971. Other markets, meanwhile, would probably have been able to buy an injected car with the five-speed ZF gearbox that was under consideration at the time.

One of the test cars achieved 135mph at MIRA, where it also burst a tyre on the high-speed banking and demolished 24 fence-posts and their railings ñ a feat which was a record at the time!
Fortunately, nobody was hurt, but the car (probably PXC 975J, with commission number 999-00035M) seems to have been written off. A rough estimate suggests that the engine would have been developing 175-180bhp to achieve that sort of speed in a P6B; standard cars had 152bhp. It is not clear which gearbox was in use at the time.

John Carter, who worked in Rover engine development at the time, remembers that the injected V8 cars had bonnets with three air scoops, like the NADA 3500S cars. However, pictures of a crash-test example show a single, different air scoop on a Series II-type bonnet. John Carter remembers six injected cars, of which some were lent to senior Rover managers for assessment. Records exist of six cars which were almost certainly these.
They were numbered as 7035.PI.01A to 7035.PI.06 (the last four are recorded without a suffix letter), and all were registered in 1970. The prefix code suggests "1970, 3.5-litre, petrol injection", and it seems likely that this was a small fleet of management assessment cars built as a pilot to production of the 3500EI.

Meanwhile, the Brico injection system had appeared on the 1969-model Aston Martin DB6 MkII, and was also being evaluated by Jaguar and Ferrari. The DB6 cars proved troublesome, and Brico, concerned at both this and the long lead-times and associated expense of developing their system, decided to abandon petrol injection. Their work was bought up by Lucas, who continued to develop it.
Despite this hiccup, Rover continued to anticipate an injected V8, and in the early 1990s a derelict car was found with badges marked "3500S Lucas Injection".
The story attached to the car is that it was stolen from the Rover works, abandoned in a field, and never returned. This all suggests that the plan was to continue with the Lucas-developed Brico system.

However, no injected car went into production. The probable reason is that Rover sales in the main target market of the USA had more or less collapsed.
It seems likely that development work on a fuel-injected P6B was abandoned when the decision was taken to pull Rover out of North America in 1971.

One of the management assessment cars survives. 7035.PI.06 (MXC 999H) was sold to Cross Manufacturing in Bristol in 1972 and is still there, although all trace of its injection equipment has been removed. It was also rebuilt into a new base-unit by Rover in 1972.

James Taylor