

## Murray Rainey's Cooper Mk9

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1960 was the year my father, Murray Rainey, sold his unusual supercharged Mark 9 Cooper Norton, the racing car that propelled him to a number of spectacular victories in Australia in the late 50's.

And now forty-two years later, purchased by Mark Palmer and brought to England, the Cooper was recently re-united with its first owner at Shelsley Walsh. It was rather an emotional reunion.

I was just a kid when the brand new Cooper Mk 9 arrived in Australia from the Cooper Car Company in 1955. But when I sat behind the steering wheel at Shelsley and watched my father inspect all his engineering handiwork of the independent front suspension and the supercharger, after all those years, the childhood memories came flooding back. I realised then, that this racing car must be a contributory factor to my lifetime addiction to motor-sport.

Before the new, blue Cooper Mk 9 arrived from the Cooper Car Company in England, my father managed to find a crashed Norton motorcycle and remove the engine. It was rebuilt and ready to fit into the Cooper just after the car's arrival.

Dad had entered the Cooper for the 1955 Australian Grand Prix, to be held at Port Wakefield, South Australia but the joy of acquiring a new Cooper rapidly turned to dismay. The gearbox fitted to the car was decidedly secondhand and had to be rebuilt. Most days and evenings were spent in sorting out the car and fitting the Manx Norton engine, so little time was left for testing before the first race. The owner was pleased with the handling of his new car but suddenly while lying in twelfth place in the Grand Prix one of the rear drive shafts broke. Later, when the rear suspension was stripped, both the drive shafts were found to be secondhand. Apparently the Cooper Car Company didn't seem to be too bothered about the state of the cars sent out to 'the colonies'.

Several years later, on his first visit to England, Dad became good friends with Charles Cooper, the founder of the company. 'We often put second hand parts in new cars', said Charles when Dad complained about the driveshaft incident. 'Go and get some new shafts out of the stores if you want, boy', 'No thanks', said Dad, 'I won't bother. I've modified the car since then. Anyway that was four years ago!'. On many weekends the Mk 9 Cooper was campaigned successfully by Dad. He was unbeatable in the Formula Three class breaking class records at all the hill-climb venues and circuits in Victoria. Phillip Island circuit was the favourite venue for the whole family.

From our fully enclosed pit we could see the racing directly in front of us, and by looking out of the rear door we could see most of the back part of the circuit, which was very demanding with fast sweeping and slow corners, long and short straights. My father excelled here and very rarely left without a trophy.

Often the Formula 3 race was combined with 1500cc and Formula Libre cars, when Dad would provide Phillip Island spectators with plenty of excitement as he usually finished ahead of cars with engines three or four times the size of his Cooper.

From a distance his Cooper always looked as if it were flying, but down the main straight in front of the pits, the single beat of the Norton engine always gave a false impression and made the car appear slow compared to the roar of the Climax fours. But we soon got used to that as we watched Dad overtake bigger cars.

During the latter part of 1957 Dad decided he needed a new challenge. Formula 3 fields were diminishing, many competitors having fitted twin cylinder engines to double the capacity and put them in another class. But instead of following suit, he had other plans. The single-cylinder Manx Norton was to be supercharged. Many attempts had been made worldwide to fit a supercharger to a single cylinder engine, but none had been completely successful. Experts like Phil Irving, who was later involved with the design of the Repco engine that propelled Jack Brabham's cars to two World Championships, told Dad he was crazy to waste his time on an engineering impossibility. But supercharge the single-cylinder he did, and very successfully.

The main problem in fitting a supercharger to a single-cylinder engine is the time lag between strokes. Dad was able to overcome this to a certain extent. The induction pipe from the supercharger must necessarily be big and he decided to fit a pipe with a capacity of at least two and a half litres. This presented another problem. When approaching a corner and easing the throttle, the pipe would still be full of fuel for about five strokes of the engine, so in theory the corner would still be taken at full power. Then on leaving the corner a good stab on the throttle would not produce the desired effect until the pipe had filled again. To overcome this problem Dad designed a butterfly arrangement inside the induction pipe to control the flow of fuel. It worked in conjunction with a blow-off valve as a safety measure.

When the engine was run in the Cooper for the first time its characteristics were amazing. It would idle at 300rpm and then produce so much power that even with the highest sprocket in the box it would reach 6000 rpm in an incredibly short distance.

Phillip Island's April 1958 meeting was looming fast, but there was little time for a proper road test beforehand.

Dad decided to go ahead and use the event as a test session. The supercharger was not working at maximum efficiency and he could only get off the line slowly. He caught the 1500 front runners in half a lap and lowered his best lap time to 2m 22s that day, a whole six seconds quicker than his previous best and just five seconds away from Lex Davison's outright lap record in his 3-litre Ferrari single seater.

Then in June, Phillip Island and the supercharged Cooper-Norton were to give my father the most outstanding race of his career. He started from the second row of the grid, behind Doug Whiteford's ex-Jean Behra 300S Maserati and Ron Phillips' D-Type engined Cooper-Jaguar. On lap two Dad homed in on the two big sports cars. As we watched from the rear of the pits we just could not believe our eyes. Dad's Cooper had actually got past into the lead. Down the straight the big power chimed in and both sports cars surged past again. On the tighter sections Dad got past once more and finally managed to leave Phillips behind by an amazing 24 seconds. But Whiteford's Maserati finally elbowed past the Cooper, cutting a corner tight and showering the car with stones. My father, who always rested one arm on the outside of the bodywork when cornering, suffered so much pain that he had difficulty changing gear for the rest of the race.

The crowds cheered enthusiastically at Dad's giant-killing efforts. He had finished second, but with the acclaim he received it was just as if he had won the race.

Then, during 1958, it was decided to take the Cooper to Europe for a season of racing. Just before our departure, the racing plans were hit by a bombshell when it was announced that Formula 3 Cars were required to run on pump petrol for the 1959 season in Great Britain. This was quite a blow as both the Norton engines for the Cooper ran on methanol. The engineering changes required to convert to petrol use were major, but in a short time Dad managed to produce a petrol engine capable of high revs but there was no time for testing before shipping the car to England.

At a Crystal Palace race meeting my father was on the reserve list. At the last minute permission was granted to race at the South London circuit, but he was required to start at the back of the field even though he'd run fourth fastest in practice. It was a hot day and the tarmac on parts of the track was melting. The driver was carving well through the field, but while he was trying to overtake two cars he hit some melting tarmac, losing control of the Cooper and ending up in a pile of straw bales. Damage to the front end of the car quite was major.

It was my father's first racing accident. At least he was not injured, but we were all in a state of shock when we saw the damage. The chassis was bent, requiring straightening on the jig at the Cooper factory.

First thing the next morning, Dad arrived at the Cooper works in Surbiton with the damaged car to be told by Charles Cooper that they were too busy with the Formula 1 programme and could not possibly fit the job in. "Well, the Formula 3 Cooper jig isn't in use," said my father. "Perhaps we could do the work ourselves if you'd let us use it". A couple of the Cooper mechanics agreed that the job could be fitted in. "No, boy," said the hard-nosed Charles. "Not possible. Got to go, I'm very busy". Outside the Cooper workshop, Dad reluctantly started to leave. Then out came a mechanic. "Charlie's going away to the Dutch Grand Prix in a couple of days' time for about a week. Bring it over then and we'll repair it".

Sure enough, with Charles out of the way the job was started. Then it was discovered that the transverse leaf springs required were not available in the stores. Dad had a look round and found some wishbones that would fit, so a decision was made to rebuild the front suspension with coil springs, like the Formula 1 Coopers. The Cooper mechanics were quite enthusiastic about this new project, but before it was finished Charles arrived back early from his trip. Dad was ordered to take his car and leave, although he was allowed a couple of hours for finishing. During that time Charles brought several visitors to view the project, and soon became so enthusiastic that he eventually told Dad to take his time and finish the car properly.

At Mallory Park not long after the alterations, my father had scratched from the race due to an engine problem. As we were watching the race from the start a nasty accident occurred right in front of us and one of the drivers was killed. "That's it", said my father. He never raced the Cooper again.

On returning to Australia the Cooper was advertised and sold and has not covered many miles since.

And how did Murray react when he first saw his ex-Cooper after 42 years?

"I'm pleased that it looks more or less as it was in the fifties except the induction pipe has been shortened. I hope it runs as well as it did in 1958 in supercharged form."

We all look forward to the Cooper's new owner, Mark Palmer, adding to its past successes.