

Roy Doring's 1959 Ford Prefect and the Museum's other electric cars.

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Roy Doring's 1959 Ford Prefect electric car with a body of pressed steel panels and spot-welded and brazed chassis. MAAS collection B2522. Image: Kate Pollard, Museum of Applied Arts and Sciences.

This unassuming 1959 Model 100E Ford Prefect, made by the Ford Motor Co. of Australia at Geelong, Victoria, is unusual because it was converted to run on electricity by the Sydney auto electrician, Roy Doring, in the 1960s. The car will be publicly exhibited for the first time at the 2018 Australia Day CARnival display of classic cars to be held at Parramatta Park in Western Sydney on Friday 26 January 2018.



The side of the car has the wording: Roy Doring Electric Car.
Image: Kate Pollard, Museum of Applied Arts and Sciences.

Roy Doring had a lifetime interest in electric cars which began in 1917 when he drove one owned by Sydney's fire department. He built his own electric car in 1941 and in 1948 purchased a pair of Detroit Electric broughams made in 1908 and 1915 by the Anderson Electric Co. of Detroit, USA, which he restored and drove. It was well-known in the Southern suburbs of Sydney as his "grandma duck" car. These Detroit Electrics had been owned by the prominent Sydney solicitor, Arthur Allen, who at one time owned five of these electric cars, one of which is in the Museum's collection.



Detroit electric car with brougham body, 80 volt, 10 hp, Class G, Size 80, motor No.16770, made by Anderson Electric Car Co., Detroit, Michigan, USA, 1917, used by Arthur and Denis Allen, Sydney, 1917-1947. MAAS collection B1057.
Image: Sotha Bourn, Museum of Applied Arts and Sciences.

During the Second World War, when petrol rationing forced most cars off the road, Roy did a lucrative trade converting about 40 petrol cars to run on electric power. At 165 pounds a car, it was quite an expensive undertaking. However, he had many prominent Sydneysiders among his clients and supporters including Nancy Bird Walton whose 1943 Hillman was converted, together with cars owned by Harold Hastings Deering, whose company, Hastings Deering Pty Ltd, were ironically the sole metropolitan distributor for the Ford Motor Co., and Samuel Hordern from the famous Sydney retailing family. Roy also worked in collaboration with Sir Roland Wilson, a senior Canberra public servant, whose own homemade electric car is also part of the museum's collection. During the war Wilson and Doring worked on a motorised electric transporter to rescue crashed airmen in the water and a gas-powered machine gun.



The quirky little home-made electric car made in Canberra in 1943 by Sir Roland Wilson at the height of WWII petrol rationing. After Sir Roland became chairman of QANTAS in 1966 the car was given to the apprentice training school where in 1974 it was overhauled and received its present QANTAS livery. MAAS collection B2339.

Image: Sotha Bourn, Museum of Applied Arts and Sciences.

Roy's Ford Prefect was claimed to have been Australia's first post-World War II electric-powered sedan and the last of 51 vehicles Roy converted to electric power plus the one he drove himself. A total of 100,554 Ford Prefects had been made between 1953 and 1959 assembled in England, Australia and New Zealand. The car was originally fitted with a 1172 cc Ford straight 4-cylinder petrol engine and a three-speed gearbox. Roy converted it into electric operation by removing and selling the car's nearly new petrol engine, which to outside observers was probably unfathomable. In its place he put an early 3-kW electric car engine directly to the original three-speed gearbox through a flexible joint. The electric motor spun at 2,500 rpm and could draw up to 220 amps during acceleration. Once the car reached a steady speed, the amperage dropped to around 50. Electric power for the engine was stored in thirteen, 6-volt Exide batteries divided amongst the boot and under the bonnet to balance the car's weight. The switch gear and battery racks were designed by Roy and the

car was recharged by just plugging it into a domestic 240-volt power point via the car's petrol filler cap which took between 4 and 8 hours. Roy's electric car had a range of 70 km and a top speed of 60 km/h, which made it ideal for city driving at the time, especially with no emissions and no energy expenditure while sitting in traffic gridlock.



Roy Doring at the wheel of his electric Ford Prefect motoring along Sydney's Parramatta Road in the late 1960s.

Image: courtesy of the Doring family.

To drive the car was very simple. It had no clutch to push nor gears to change. The original Ford Prefect gearbox was retained to provide reverse gear. The accelerator pedal was used to drive the car forward and the normal brake to stop. When the car was parked the batteries were disconnected with a large, 'steam punk' style master switch on the dashboard.



The Ford Prefect's dashboard was altered for electric operation with a knife switch to connect and disconnect the power, a voltmeter in the form of a dial and a switch for selecting forward and reverse gears.

Image: Kate Pollard, Museum of Applied Arts and Sciences.



Roy Doring in the late 1960s demonstrating operation of his 1959 electric car's Trumbull, 60 amp, 125 volt master switch made by the Trumbull Department, General Electric Co, Plainville, Connecticut, USA.

Image: courtesy of the Doring family.

It's not generally known that during the early 1900s electric cars were a real threat to petrol driven ones. They were so popular in Sydney as town cars that the city council even established a charging station for them in 1914. However, development of electric cars virtually ceased during the 1930s because they could no longer compete. A century after their initial halcyon days, electric cars finally became accepted again with production by large car companies of hybrids and electric cars.



Honda Insight 3-door hatch petrol-electric hybrid car, designed and made by Honda Motor Co Ltd, Japan, 2001. MAAS collection 2008/226/1.

Image: Nitsa Yioupros, Museum of Applied Arts and Sciences.

In the late 1960s Roy was ahead of his time being convinced that the electric car was about to make a comeback with the imminent development of storage batteries to reduce their weight and increase capacity. He recognised the benefits of operating an electric car which included its very low operating and maintenance costs, extreme reliability, no pollution, fast acceleration and quiet operation. During the 1950s and 1960s petrol cars were not as reliable as today, engines needed servicing more often incurring extra expense, and regularly broke down.

Roy Doring died in 1971 without seeing his vision of a return to electric car popularity and widespread acceptance. His son, Bill Doring, continued to use the Ford Prefect for the family's auto electrician business. In 1983 Bill donated the car to the Museum as an example of a local enthusiast's work in the

development and promotion of electric-powered cars in Australia. The car's story will ensure Roy's work and vision will be perpetuated and it will be a quirky but fascinating addition to the CARnivale display at Parramatta on 26 January (2018).

Written by Margaret Simpson, Curator, January 2018

References:

Davis, Pedr, 'Roy Sparks a New Motoring Interest You Just Plug in for Power' in "Pix", 20 April 1968.
Information provided by the Doring family.

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