Introduction
Following the initial electrification of its Sydney metropolitan network, the Australian New South Wales Government Railways (NSWGR) began operating electric, multiple unit, single deck, passenger sets in 1926 for commuter traffic. Around three years later, electric parcel vans were introduced on the same network for parcel pick-up and delivery business.

The first three, purpose built, electrically powered NSWGR parcel vans, with fleet numbers C3901-C3903, were readied for service in November 1928 and although they were equipped with driving controls at both ends to enable by-directional operation these vans were based on existing Sydney Suburban ‘Standard type’ electric passenger cars with a very similar exterior profile including double sliding doors on each side in the same positions as the access doors on the Standard type passenger cars. Shortly after their introduction, an existing Bradfield type Sydney Suburban electric passenger car was converted into a motored parcel van and given fleet number C3904. Each motored parcel van had a carrying capacity of 12 tons and originally operated as individual units, servicing station parcel offices or, in some instances, electrified parcel depot sidings, adjacent to major stations.
Presumably due to the high volume of parcel freight being carried, the first of two unpowered ‘driving control trailer cars’, with a single driver’s cabin and driving controls at one end, entered service during 1935. The two parcel van trailer cars (D4000 and D4001) were substantially different in appearance to the motored vans with a reduced carrying capacity of 8 tons, giving a total consist (motor car and trailer car) capacity of 20 tons. Generally, a single trailer parcel van was coupled to a motored van on a few pick-up and delivery runs, although instances occasionally occurred where three parcel vans (two motor cars and one trailer) ran as a coupled unit.


During the many years that they were in service, the NSWGR FAST ELECTRIC PARCEL VANS, as they became known, were painted in a wide variety of liveries. The last NSWGR electric parcel van service ran on 25 August 1989.

**Background**
Ferris Bros Pty Ltd diversified its product range to include O-gauge ready-to-run electric toy trains in 1948 after 14 years experience in the successful design and manufacture of car radios. The first Ferris model railway product was an electrically operated representation of a NSW Sydney suburban EMU single deck passenger set based on a 1939 vintage ‘Tulloch’ built electric multiple unit NSWGR Sydney Suburban passenger train. Unlike the original prototypes that operated in combinations of four, six or eight cars, the Ferris Sydney Suburban passenger train sets comprised three cars; a power car with a dummy pantograph and two trailer cars, although additional cars could be purchased and added to the consist.

Ferris Sydney suburban trains sets initially proved to be very popular and, buoyed by their success, additional models were developed to meet customer demand. The first new products, a self-propelled express parcel van and accompanying trailer, appeared in 1950.
The decision to model the NSWGR Fast Electric Parcel Van made good business and manufacturing sense because, and as mentioned previously, the actual prototype on which it was based was a derivative of a Sydney Suburban passenger car. As a consequence, numerous components for the new model were able to be sourced from the existing Ferris Sydney Suburban parts bin, including the roof as well as the complete chassis assembly with the only difference being the central body section, and even this would have been manufactured using much of the existing press tooling that had been previously funded and developed for the Sydney Suburban models. In addition to sharing components, the new models were designed to be integrated into an existing Ferris ‘Sydney Suburban’ layout to make them attractive to existing owners.

Whilst the existing Ferris Sydney Suburban train sets were marketed for their play value it is interesting to read the early advertisements for the F49 Fast Electric Parcel Van and the extravagant claims about the product as an educational hobby, or even being heralded as a mind stimulating character builder for the young operator. “Model F49 – Electric Parcel Van: Streamlined, smooth running…… Just like the real parcel vans in every detail. Your boy can have hours of pleasure loading up his parcel van, working out timetables and freight charges. This is the kind of toy that encourages a child to think for himself…… helps to develop his mind along the right line.”

Construction
Ferris F49 Fast Electric Parcel Vans consist of three separate sub-assemblies held together by two domed, nickel plated brass retaining nuts that were hand fitted onto threaded studs mounted on sheet steel brackets riveted to the chassis with the central body section simply sandwiched in the middle.

The domed roof is pressed out of light gauge bright sheet steel and has a pale brown (in varying shades) gloss enamel spray finish. The roof on the motorised power car carries a sheet metal dummy, non-collapsible, one-piece, pantograph attached to the trailing end (above the motor bogie) by three tabs that are inserted through punched slots in the roof and then twisted. The pantograph, with an oiling hole in its base to facilitate the lubrication of the top armature pinion spindle bush without having to remove the roof, is either sprayed separately (and prior to attachment to the roof) with a black, wrinkle finish enamel or, alternatively, “blued”, similar to gun, or rifle, components.
Except for the manually operated single sliding doors on each side; two additional plastic marker lamps and an internal cross-piece, the Fast Electric Parcel Van body is the same size and shape as the bodies that were fitted on the F48 Sydney Suburban models and is made from two, pre-formed, and pre-painted tinplate panels, each of which comprise a side and a cabin end, that are attached at diagonally opposite corners with overlapping joints by means of tabbed connections that are concealed inside the body. To improve their rigidity, each panel has a 6mm wide 90-degree return along the top and bottom straight sides. A U-shaped, tinplate crosspiece, attached to the side panels by spot welding, or by very small eyelets, serves as guide and runner for the two internal sliding doors and also provides a physical barrier between the storage compartment and the electric motor and reversing switch. The only other finishing detail applied to the body was the installation of four 5.5 mm diameter, semi-translucent, plastic bulls-eye marker lamps with stubs that are fitted through small holes at both ends close to the roof line. Two white lamps were fitted at the leading end and two red lamps, representing tail lamps, at the opposite end of the body. Some of these marker lamps are secured by means of the stub being heated and partially melted, whereas others are retained by means of a small clip that is slid into a groove on the stub. Curiously, examples have been observed with the leading end white marker lamps secured by melting of the stubs and the two red lamps at the opposite end retained by clips.

Although the original prototype had two pairs of opposed sliding doors on each side to gain access to the parcel storage area, Ferris Fast Electric Parcel Van bodies only have a single sliding door on each side. All other doors on the model are represented by printed detail and, aside from the extra cost, the main reason why it did not feature two opening doors on each side was to prevent easy access to the electric motor on the powered version and, even though Ferris advertisements encouraged the young operator to ‘load up his parcel van’, the designers had identified that it wasn’t a good idea to place foreign objects into the compartment where the electric motor and reversing switch on the model were located.
First Version (circa 1950 – 1954)
The body on the first version was painted by way of screen-printing with the predominant colour being Tuscan red. In total, five colours were progressively applied via screens to add further detail, including lining, windows, rivet detail, etc. For some unknown reason, the printed detail for the non-opening access doors are different on each side of the body. The crescent shaped window shading applied over the silver painted windows on the first version bodies appears in various hues from a light sky-blue to a greenish-grey and has led some observers to conclude that these colour changes represent different production variants rather than the result of pigment variations in paint batches. The bodies on the first version carry fleet number ‘C3904’ on each side and the only brand identification is two small soft aluminium badges, with the single word ‘Ferris’ in red letters, centrally clipped to each body side panel through two vertical slots.
Second Version (circ. 1955 – 1958)
The bodies on the second version were constructed from the same material, and in the same manner, as the first type, however, the paint finish was revised and applied by means of lithographic tinprinting, rather than screen-printing and only three colours were applied, instead of the five that had been used previously. The reason Ferris adopted this change has not been ascertained, however, it was most likely the result of the previous silk screens being no longer serviceable or as a production costing saving measure, rather than the updating of the model in order to stimulate sales. It is not known when the second version was released, however, because most power car examples are equipped with the final type drive bogies (with detachable side frames) that were introduced in late 1955 (when the F53 diesel was released) it is thought that the second version of the Fast Electric Parcel Van was also introduced around this time. The tinprinted bodies on the second version have window representations that are, in the main, raw tinplate, with fine black dots, rather than the silver painted (with shading) windows on the first version and, as such, are prone to oxidation and dulling. The fleet number carried on the sides of the body was altered from C3904 to C3903. In addition, the printed detail for the access doors on the sides of the body was also revised to a symmetrical design with the opening and dummy sliding access doors now carrying an identical pattern. Extra printed detail, to represent driver’s doors, instead of just windows, was also added on both sides and instead of the small aluminium tags clipped to the sides of the body, the second version has ‘Ferris’ painted (in yellow).

Very few of the second versions, in either motorised or trailer form, were made. The example illustrated in this article is a trailer car but features a roof with a pantograph which is normally a characteristic of a power car. It is not known if this van was supplied from the factory in this configuration, or its roof was a later day fitment.
The Models

Motor Cars
As mentioned previously, full size NSWGR Fast Electric Parcel Vans were produced in ‘Standard’ and ‘Bradfield’ types and finished in a wide variety of liveries over the many years they were in service. The printed detail on the body of the Ferris Fast Electric Parcel Van was based on the appearance and livery of a ‘Standard’ type, steel bodied, double ended, motor parcel van with driving controls at each end that would have been in service around the time (circ. 1949-50) that the Ferris model was developed. Even though it is significantly under scale length, the screen printed, and later tinprinted, detail on the body provides a clearly recognizable representation of such a prototype. Interestingly, the revised door details and fleet number C3903 on the later tinprinted bodies helped to make them appear more prototypically accurate than the first version. It is a minor point, but the C3904 fleet number painted on the first version was carried on a ‘Bradfield’ type Fast Electric Parcel Van rather than a ‘Standard’ type upon which the design for the printed body detail on the model was based.

The chassis assemblies that were used on the Ferris Fast Electric Parcel Vans are identical to those that were fitted on similar chronology F48 Sydney suburban power cars and consist of a 265mm long one-piece tinplate pressing upon which all the various sub-assemblies are attached, including the central (underside) battery box, bogie assemblies, roof retaining brackets, couplings, electric motor assembly, bulb holders, etc.

The main chassis pressing has a 90 degree 6mm downward return around the perimeter which features curved semi-circular buffer beams that match the profiles of the body assembly as well as making the chassis substantially more rigid. A series of upward projections, or nibs, are formed in the chassis pressing to facilitate the correct alignment of the body when it is placed on the chassis. The chassis pressing (including the clipped-on tinplate battery box and spring mounted non-driven bogie frames) is spray painted in wrinkle black enamel, a process that requires several coats of a special type of paint being applied progressively before each coat has fully cured to obtain the wrinkle type finish.

As mentioned previously, very few of the chassis components were sourced externally, the notable exception being the four press-fitted 20mm diecast alloy wheels supplied by R.H. Lawrenson Pty Ltd. Quite large, uniquely designed T-shaped, loop style cadmium plated steel couplings are attached to the underside of the chassis floor and protrude through narrow slots in the ends of the rounded buffer beams.

The U-shaped sheet steel drive bogie is fitted over the drive motor’s lower spindle bush and retained via a small wire circlip on the spindle shaft. The drive bogie frame on the second version has detachable sides to facilitate the easy removal and refitment of the wheel/axle assemblies. An oiling hole is provided on the underside of the chassis for lubricating the lower armature spindle bush via a felt pad sandwiched between the motor and the chassis floor. The U-shaped, one-piece, sheet steel, non-driven bogie frame at the opposite end of the chassis is attached by means of a central spring mounted post. Both drive and non-drive bogies have external clip-on axle boxes.
The motorised version of the F49 Fast Electric Parcel Van has an in-house designed and produced electric motor that is mounted on the top of the chassis pressing. It is an AC type with a laminated stator and armature and operates on a nominal 6-10 volts drawing approximately 1.8-2.0 amps when hauling a single F49 trailer car. Electric current is collected from 3-rail tinplate track via roller type pickups attached to the front and rear bogie frames by means of thin, flexible stainless steel strips mounted on insulated blocks. The electric motor is mounted vertically above the trailing bogie assembly, with the spindle shaft driving one of the bogie axles through worm gears and also serving as a pivot for the bogie frame. The second wheel set is driven via an intermediate shaft mounted spur gear. Most drive bogies have wheels with square grooved running faces that are fitted with rubber traction tyres to improve adhesion, although some of the later versions have plain faced driving wheels.

Automatic reversing versions of the motorised F49 Fast Electric Parcel Vans were equipped with a solenoid type impulse reversing switch that is attached centrally to the chassis floor behind the electric motor. Manual reversing versions feature a reversing switch that is controlled by means of a hand operated lever protruding through a slot in the underside battery box.

On the motorised parcel van the white marker lamps at the leading end are lit from behind by two tubular type 12-volt Miniature Edison Screw (MES) light bulbs fitted in holders on the top of the chassis assembly.
The unpowered Ferris Fast Electric Parcel Van trailer car is, in many respects, very similar to the motorised version, except for the omission of the electric drive motor and drive bogie, reversing solenoid and pantograph. Instead of two roller pickups, only one is fitted on the trailer cars to collect current for lighting the two red tail lights from the track supply.

As stated previously, a common body produced in two screen painted and tinprinted variants, was used for both the motorised and trailer versions of the Ferris Fast Electric Parcel Van. As a consequence, the detail on the sides of the trailer car (in either the first or second versions) is a much less accurate representation of the original prototype in comparison with the motorised model. NSWGR Fast Electric Parcel Van trailer car prototypes differed significantly in appearance with the motorised cars having only a single driving compartment at one end and substantially different side access door configuration. In addition, if they were to be more prototypically representative, Ferris Fast Electric Parcel Van trailer cars should also have carried a ‘driving trailer car’ fleet number; either D4000 or D4001 instead of C3903 or C3904 on the sides of the body. However, to be fair, the product was, after all, only a toy train, and there would not have been commercial justification to produce unique bodies for the motor and trailer versions with different printed body details on the respective models. In any case, it is very doubtful if any young operator would have noticed the body detail discrepancies in spite of the Ferris advertising claims of ‘Just like the real parcel vans in every detail’.
Packaging and Pricing
It is a little surprising that three car Ferris Fast Electric Parcel Van train sets were never marketed to sell alongside the three car Sydney Suburban train sets because the same train set packaging could have been used. In any case, Ferris F49 Fast Electric Parcel Van models were only available by way of supplementary purchase and individually packaged in cardboard boxes with tuck-in end flaps at each end. It appears, from the few surviving examples, that the box for the F49 Fast Electric Parcel Van motorised power cars was identical to that used for the F48 Sydney Suburban power cars (when the F48 models were sold individually packaged, and not in sets) except for the F49 PARCEL VAN model identifiers that were rubber stamped on the box side and end flaps to denote the different contents. The illustration on the side of the box is a pre-production Ferris Sydney suburban power car, not a Fast Electric Parcel Van.

Although one has yet to be discovered, it is anticipated that the boxes used to package the trailer car versions were F48 Sydney Suburban trailer car boxes with rubber stamped F49 PARCEL VAN model identifiers.

The motorised version of the F49 Fast Electric Parcel Van model, with automatic reversing, retailed at £7/19/9 versus £7/11/- for the F48 Sydney Suburban power car. The additional 8/9 was primarily attributable to the extra cost in the production of the body to incorporate the two manually operated, opening sliding doors that were fitted on each side of the body. Unlike the F48 Sydney Suburban power cars, manual reversing versions of the F49 Fast Electric Parcel Van power cars were not a catalogued item but only available by way of special order at a Ferris stockist.

F49 Fast Electric Parcel Van trailer cars retailed at £2/14/- each, some 9/- more than a comparable F48 Sydney suburban trailer car with lights.
Ferris F49 Fast Electric Parcel Vans were covered by a 90-day manufacturer’s warranty from the date of sale.

![Original Warranty Card for F49 Fast Electric Parcel Van](image)

**Conclusion**

Some modern day observers have formed the opinion that because few Ferris Fast Electric Parcel Vans have survived in comparison with the far more numerous Ferris Sydney Suburban models they must have been a commercial failure. Even though there can be no disputing that only a small number of Ferris Fast Electric Parcel Vans were made, in either motorised or trailer form, they remained in production until the manufacture of all Ferris model railway products was discontinued in 1958 and if they weren’t commercially viable it is very doubtful that they would have remained in production for so long, let alone be subject of a major revision along the way. In addition, to assess whether a consumer product was successful one should look beyond the total number that were produced, including the return on each unit and also consider whether the production was to satisfy a particular marketing aim. In the case of the Ferris Fast Electric Parcel Van the cost of development was relatively modest because the only new component required was the central body section with both the roof and chassis assembly simply drawn from existing Sydney Suburban parts holdings. As a result, the previous product range that had consisted of three Sydney Suburban passenger car models (a motorised power car, trailer car and trailer car with lights) had been expanded to five with the introduction of the Fast Electric Parcel Van motor and trailer cars and, from a marketing perspective, their introduction gave existing Ferris Sydney Suburban train set owners the opportunity buy additional complementary models as well as give confidence that further Ferris model railway products were under development.

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