

Evolution of Work Vehicles

The two vehicles pictured on the opposite page present a striking contrast of the transportation available to the telephone installation craftsmen of yesterday and today.

The modern compact van shown at the bottom does for the telephone craftsman what it does equally well for many other service industries. It provides shelter and mobility for many kinds of goods and equipment. A telephone craftsman utilizes the facilities inside this vehicle for storing the myriad related items of hardware and wire required to meet the communications needs of today's telephone customer.

The word "shelter" marks the most significant difference—and improvement—over the vehicles used for telephone installation in the past. A look at the vehicle at the top easily shows why yesterday's craftsman was always "on the outside, looking and reaching in." His tools, materials, and apparatus were exposed to inclement weather and were not too secure against pilferage when the vehicle was left unattended while a customer's service was being connected. Today's compact van affords protection, comfort, and security to a degree never reached by its predecessors.

Fundamental changes in automotive design have made it possible to produce the compact van at a relatively slight increase in cost over the type of vehicle previously used for telephone installation and cable work. The van body and frame are constructed as a single high-strength assembly which is inherently rigid and rattle-free. Construction of the van's underbody makes it difficult for mud, moisture, salt and other substances to collect underneath. Further, corrosion is inhibited by the use of underbody coatings such as galvanizing, petroleum-based coatings, and zinc-rich and vinyl-based primers.

In 1927, the first concerted effort was made in

the Bell System to provide the telephone company craftsman with standardized transportation for himself and his telephone sets, wire, tools, and hardware. Before then, he walked, cycled, hired a livery stable horse and buggy, or if lucky, was provided with a primitive automobile by his company.

The ½ ton rated vehicles, predecessors of the compact van, evolved from these first runabouts of the 1920's and carried steel boxes of Bell System design behind a cab where the driver sat. In the 1950's, this type of telephone truck represented about 50,000 units of the Bell System fleet. The type was also extensively used by independent telephone companies.

The box-body type underwent numerous improvements relative to storage facilities for tools, hardware, wire, and telephone apparatus. Its appearance also improved as the impact of industrial styling made its effect on the automotive industry.

The increasing requirements for storage space for more and more items to furnish telephone service underscored the need for a compact body concept.

The compact van, with a capacity to carry loads up to 2000 pounds, has been in increasing use since it was first introduced in 1959. In the Bell System, for example, it is replacing the familiar box-bodied vehicle at the rate of about 10 per cent, or 5000 units per year. Independent telephone companies also are purchasing these units in increasing numbers.

There are now more than 15,000 compact vans in Bell System service, with more being added daily. The van is presently being adapted to other requirements of telephone service; messenger service, personnel transport, and public telephone coin collection.

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Bell Laboratories Record



This was the transportation available (sometimes) to the telephone installation craftsman of yesterday. The photograph was taken about 1916. Note the Bell System seal on the side panel of this MODEL T runabout.



There are more than 15,000 of these compact vans in Bell System service today. The ladder brackets on the top of the van and much of the interior compartmentation were designed specifically by Bell Laboratories.