



Rubber Handset for Linemen

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IN DIAL-telephone areas installers have been using a dial-type handset with a metal handle. A new piece of equipment has now been developed which has several advantages. It is lighter, more compact and has improved transmission which arises from its utilization of the same units for transmitter and receiver as the F-type station handset. It has a rubber handle which renders it more resistant to damage from impact and handling than its predecessor.

The handle, molded in one piece of resilient rubber, retains the instruments and protective grids over the transmitter and receiver without threaded caps. Each end of the handle is split to allow the insertion of the instruments and other components; the split ends are held together by small bolts whose heads and nuts are imbedded below the surface of the handle. Conductors pass through the hollow handle, which also contains a condenser and a toggle switch.

In reducing its size and weight, a small light-weight dial was developed, which is approximately two inches in

diameter compared with three inches for the standard. It weighs about five ounces less than that of the previous handset. Care was taken to provide letters and numerals easily legible notwithstanding their small size. For pencil dialing there are recessions opposite the numbers and for finger dialing projecting prongs directly adjacent to each recess. In manual areas the dial is replaced by an apparatus blank of phenol plastic material.

Over the transmitter unit there is a convex disk, .040 inch thick, which serves as a protective grid. It is made of layers of phenol fabric sheets cured in a mold while held to a specified contour and thickness. Unusually high resistance to fracture is thus obtained. The receiver cap is molded of a phenolic resin with wood-flour filler and reinforced with cotton fibers.

For some tests there is a one-tenth microfarad condenser in series with the transmitter; when signaling or talking this is shorted out by a spring-actuated toggle switch.

A cadmium-plated clip of very rugged design is available for both types of the new handset. It assures positive locking to a loop in the linemen's belt and it is easily released by depressing its thumb piece.

Experience with the new handsets has shown that their light weight and protection against mechanical shock are distinct advantages and that their improved transmission characteristics make them more satisfactory.