

# KISS— PROOFING for phones

**LIPSTICK TEST**—Karen Beard of W. E.'s Indianapolis plant demonstrates a cosmetics test with a telephone handset. Stained areas can be easily wiped free of lipstick by using mild soaps, with a little water. Plastic from which phones are now molded does not absorb cosmetic dyes. F-227c



Beauty is not only skin deep; it also rubs off. And when women put their ruby lips to a pastel-colored phone, they often leave lipstick and other cosmetic stains.

Formerly these types of stains couldn't be removed. And Western Electric, which makes millions of phones a year for the Bell System, found to its dismay that the colorful thermo-plastic from which the first pastel phones were molded was bright to the eye, pleasant to the touch and tough in withstanding hard usage—but no match for an inadvertent kiss. In fact, lipstick and other cosmetic stains, accidentally applied, couldn't be removed.

The problem was turned over to Bell Telephone Laboratories, whose chemists discovered that cellulose-type plastics used in the telephone contained liquid additives called plasticizers, which dissolved red dyes in cosmetics and pulled them into the plastic. Once the dyes were absorbed, no washing could remove them.

The scientists solved the problem by using an entirely new kind of plastic, acrylonitrile-butadiene-styrene, which soon was being called ABS. This material is a modified and toughened form of the ordinary polystyrene used in food containers. And because it contains no liquid plasticizers, it resists staining by cosmetic dyes beautifully.

Last year, W.E.'s Indianapolis Works turned out more than 5,000,000 brightly-colored phones made from some 7,000,000 pounds of ABS. Because cosmetics can't penetrate the surface, the phones can be kept clean with a damp cloth and mild soap. Women can look their best while using the phone, and phones can look their best while women are using them.

—MARJORY A. YOUNG