

MINIATURE BRIDGED JACKS
PHASES 1 THROUGH 6
DESCRIPTION

1. GENERAL

1.01 This section provides descriptive and installation information for the Federal Communications Commission (FCC) approved miniature bridged jacks (GTE AE Phases 1 through 6) used to connect registered terminal equipment to the telephone communication network. Some examples of this equipment are telephone sets, alarm systems (fire alarms, equipment failure alarms), telephone answering sets, conferencing devices, call diverters, automatic dialers, traffic measuring equipment, recorders, call restricters, and permissive data sets. This section also provides a description of the various design changes made by GTE AE since the introduction of its miniature plug and jack hardware.

1.02 For specific connections for miniature Universal Service Order Code (USOC) bridged jacks, refer to Section 491-300-111.

1.03 This section should be retained for general information purposes. Although the majority of the hardware described herein has been manufacture-discontinued, there are existing installations where this hardware is still used. Wherever possible and practical, the older-type jacks should be removed from service and replaced with Phase 7 hardware (refer to Section 491-300-112).

1.04 This section is reissued to incorporate updated information on GTE AE Phase 1 through 6 miniature bridged jacks. Due to the extensive changes involved, marginal indicators are omitted. Remove the previous issue of this section from the binder or microfiche file and replace it with this issue.

2. HISTORY

2.01 The original miniature plugs and jacks manufactured by GTE AE were designed to be incompatible with those manufactured by the Bell System. When Part 68 of the FCC Rules and Regulations was formulated (see the Federal Register of July 12, 1976, Docket 20774), it became necessary for GTE AE to discontinue its line of incompatible hardware.

2.02 Initially, the GTE AE hardware was developed in response to the introduction of the Phone Mart concept within the General Telephone System. Following introduction of the miniaturized hardware for Phone Mart usage, various design changes were made; some were the result of product improvement, while others were due to the FCC mandate requiring all miniature jack hardware to be fully compatible with that designed and manufactured by Western Electric Company (WECO). The various hardware items that make up the GTE AE line of miniature modular plugs and jacks

are not marked with their respective part numbers. For this reason, field identification of the phase of manufacture of a given part, to determine its compliance with FCC rules (or lack thereof), requires knowledge of the various jack wiring, marking, and related changes by installation personnel. The following descriptive material, in conjunction with the information listed in Tables 1, 2, and 3, will permit installation and maintenance personnel to identify compatibility aspects of all Phase 1 through 6 hardware currently in the field:

- (a) Phase 1. The miniature plugs and jacks developed in this phase were never installed in the field.
- (b) Phases 2 and 3. The miniature plugs and jacks developed in these phases are installed in the field but do not meet FCC mechanical or wiring regulations. For example, miniature plugs manufactured by WECO will plug into GTE AE's Phase 2 and 3 jacks, but will not lock into place. Thus, any movement of the line cord could cause the inadvertent loss of connection to the CO line. When encountered during customer visits to a customer's premises, this hardware should be removed and replaced with Phase 7 (or later) hardware (refer to Section 491-300-112).
- (c) Phase 4. Phase 4 hardware is exactly the same as Phase 3 hardware in appearance, except for the lettering that is molded into the plastic parts. Phase 3 hardware is identified by the statement "GTE - Not For Sale," and Phase 4 hardware is marked "GTE Automatic Electric." The Phase 4 jack is mechanically, but not electrically, compatible with FCC requirements. When a Phase 4 jack is rewired in the field to meet FCC requirements, an adhesive black dot is affixed by the installer and the jack is then equivalent to Phase 5 production as noted in (d) below. The black dots are also used to identify the plugs of those sets that have been wired in the field to conform to the FCC requirements. These dots are stocked under Material Code No. 432475, part No. HZ-1368-1.
- (d) Phases 5 and 6. The GTE AE Phase 5 and 6 hardware is fully compatible with WECO-manufactured hardware and FCC requirements. Phase 5 hardware resulted from rewiring Phase 4 jacks to conform with the FCC standards. After rewiring in the factory, each Phase 5 jack was marked with a black dot to provide a means of field identification; Phase 6 incorporated a molded dot for identification.

2.03 The following tables are provided for reference purposes:

- (a) Table 1. GTE AE Hardware Production Intervals.