CUSTOMER-OWNED ANTIQUE DECORATOR TELEPHONE SET HOUSINGS ENGINEERING REQUIREMENTS STATION SYSTEMS

1. GENERAL

SCOPE

1.01 This specification is intended for distribution to Bell System personnel only.

1.02 This specification describes the engineering requirements for customer-owned antique decorator telephone set housings. All critical dimensions required for conformance with Bell System components are given on the reference drawings.

1.03 The assembled telephone set shall meet all applicable safety standards.

DESCRIPTION

1.04 The housing must include a base (pan), base housing, handset cradle, handset housing, and transmitter and receiver caps. It must accept the F-56659 or F-56660 telephone set components which are necessary to make an operative telephone set. The components are shown in Fig. 1. The F-56660 set has an F-56662 dial (gold finish), while the F-56659 set has an F-56661 dial (chrome finish).

2. SPECIFICATIONS

A. Housing

2.01 The housing is to be constructed using reasonable standards of quality and workmanship. Factors that should be considered are:

- Precision and smoothness of operation of moving parts.
- The construction of the base pan should allow the set to be steady when placed on a flat surface and also prevent the set from slipping when it is dialed.
- Lubrication points, if provided, should be located so that excess lubricant will not damage any Bell System components.
- No customer-owned wiring or circuitry is permitted in or on the housing.

B. References

2.02 The dimensions and features of the housing must conform to the latest issue of drawings B-696501, B-696901, and B-696902. This requires accurate measurement of all critical dimensions of the housing to ensure that it agrees with these drawings.

3. INSTALLATION

3.01 For ordering information and installation of F-56659 or F-56660 telephone set components, refer to Bell System Practices, Plant Series, Section 501-410-101. It will be necessary to install these components in an actual housing to insure that a particular type housing is acceptable.

4. REQUIREMENTS

A. Assembly

4.01 All parts intended to be held together shall be securely fastened.

4.02 The telephone set housing shall be free of foreign materials and shall provide reasonable access for installation and maintenance purposes.

4.03 This housing must be capable of providing reasonable protection to telephone company components and shall be tight enough to prevent the entry of foreign materials.

4.04 It must be possible to mount the chassis, without disassembling it, to the base pan. The four screws provided are to be used to secure the chassis to the base pan, and should have a minimum of two threads in metal and four threads

in plastic. Sufficient clearance should be provided so the mounting screw ends will not protrude through the base pan and scratch or mar the surface on which the housing is placed.

4.05 The base pan must have an acoustical opening directly below the ringer. If the sound output is insufficient, the ringer opening must be enlarged. The base design will have to be corrected by the manufacturer.

4.06 The ringer volume adjustment opening must be marked "LOUD" at the proper end and permit a full range of adjustment of the ringer volume control.

4.07 The cradle must be secured to the housing in such a way that it will not rotate, twist, or bend when the handset is resting in the on-hook position. The handset must rest on the cradle supporting surfaces and not on the line switch actuator. The handset cord must be positioned so it will not fall under the cradle and cause an accidental off-hook condition.

4.08 The transmitter unit must be clamped firmly to the smooth surface of the handset transmitter cap. The receiver unit should be mounted in a similar manner. The transmitter unit shall not be in contact with any conducting surface. The wire entrance should be sealed with an acoustic plug provided by the manufacturer.

4.09 The handset and mounting cords shall be positioned so that they make no sharp bends or cross sharp edges at either the handset or mounting cord entrances. If sharp edges are present, a grommet must be provided by the manufacturer. Devices used to secure either cord must not damage the cord.

4.10 The dial must be secured to the housing with a minimum of three screws and shall be located not more than 4 inches from the network. The dial should be mounted in a position for convenient dialing.

4.11 When a medallion or ornament is provided in place of the number cardholder on the rotary dial, another holder and transparent plastic cover must be provided by the manufacturer in a location where the number can be easily read. This number cardholder must be the same size as a P-25E803 card retainer and must accept a standard TOUCH-TONE® number card.

B. Mechanical

4.12 The handset shall operate the line switch actuator in the on-hook position. When the handset is removed, the actuator shall move up freely until the line switch arm of the chassis rests against its upper stop.

4.13 The handset cord and mounting cord entrances must be located where the cords will not interfere with the operation of the actuator.

4.14 The actuator linkage in the housing must support its own weight and be constructed so that it cannot bypass the line switch arm. It must operate smoothly without sticking in any position. If a double plunger is used, the actuator must work smoothly when only one plunger is depressed at a time. In the on-hook position the plunger must rest on the lower actuator stop of the housing and not on the lower stop of the line switch arm.

C. Electrical

4.15 The clearance between metal work and current carrying components and terminals shall not be less than 0.040 inch.

4.16 Clamping surfaces in contact with the transmitter unit shall be made of insulating material such as plastic or rubber. Lacquer or paint shall not be used to provide insulation.

4.17 The electrical insulation between all metal parts and the telephone circuit wiring must withstand a 500-volt RMS, 60 Hz ac test voltage for one minute. This test is made by applying the test voltage between one line conductor (in the mounting cord) and each metal part in the housing. The test is made first with the handset on-hook, and then with the handset off-hook. The test must then be repeated by applying the test voltage between each line conductor, in turn, and the metal parts in or on the housing.

Caution: The test potential must not be applied between the line conductors of the mounting cord.

Lacquer or paint on the metal parts must be penetrated by the test probe at the point of contact. The required test apparatus is a B-682085 test set, or equivalent. If this type of test set is not available, arrangements may be made with a Western Electric Distributing House to perform the test. If an equivalent test set is used, it must be capable of delivering 500 volts RMS, 60 Hz, sinewave, open circuit; and its short circuit current must be limited to 1/5 ampere. It should be adequately protected by a primary line circuit breaker and fuses in the secondary circuit. An alarm buzzer and a lamp must also be included in the test set to indicate the failure of the insulation under test. The failure indicating circuit should also de-energize the test leads.

The insulation test set must be installed according to existing Safety Codes and must be arranged so that its operation does not create a hazard.

4.18 An operational check must be made with the assembled telephone connected to the switching network. This consists of originating and terminating a call. The following functions should be checked:

- Dialing
- Quality and level of voice transmission.
- Quality and level of voice reception.
- Ability to adjust the loudness of the ringer.
- Maximum loudness of the ringer.

D. Acoustical

4.19 If all of the dimensional requirements shown on drawings B-696901 and B-696902 are met, the acoustical performance will be satisfactory.

5. MAINTENANCE

5.01 Maintenance is limited to the components installed as part of the telephone set group. Maintenance of the housing, finish, and other non-Bell System parts is not a responsibility of the telephone company.

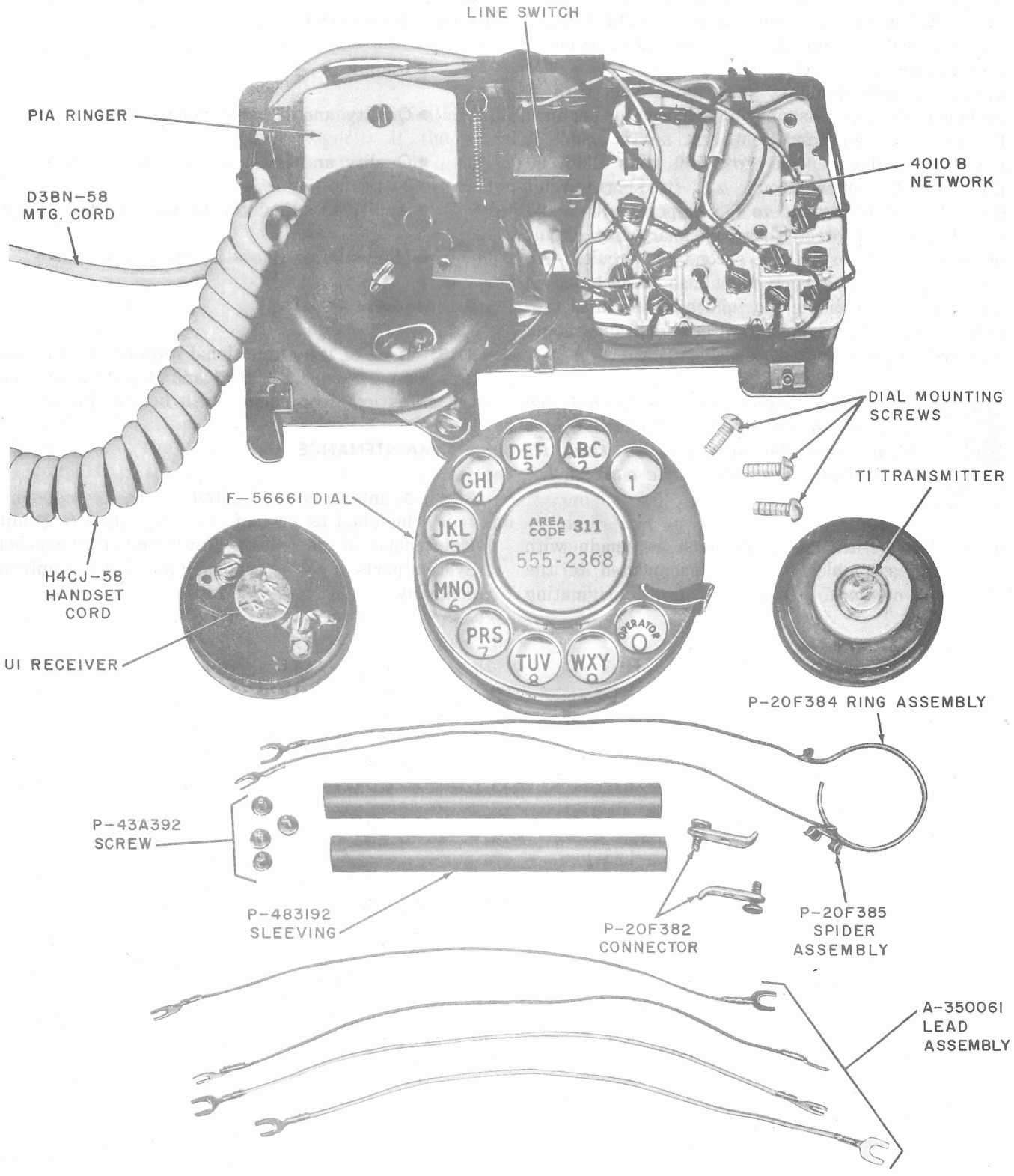

Fig. 1—F-56659 Telephone Set