

### 3A COMMUNICATION SYSTEM (HOSPITAL INTERPHONE) PATIENT TELEPHONE SET INSTALLATION, CONNECTIONS, AND MAINTENANCE

#### 1. GENERAL

1.01 This section is reissued to:

- Incorporate Addendum, Issue 1.
- Include 2220B hand telephone set
- Add read to replace M2ER Nurse Call Cord

#### 2. INSTALLATION

##### 2.01 Planning

- Telephone set should be installed in a location accessible to the patient such as on a bedside

table. AE2 base should be placed so that message waiting lamp can be seen easily by patient.

**Caution:** ♦The customer should be advised that no part of the telephone instrument, handset, base, or Nurse Call Cord should be placed or used within an oxygen tent.♦

- Maximum station loop resistance is limited to 50 ohms to maintain a minimum of 7 volts at the station lamps.

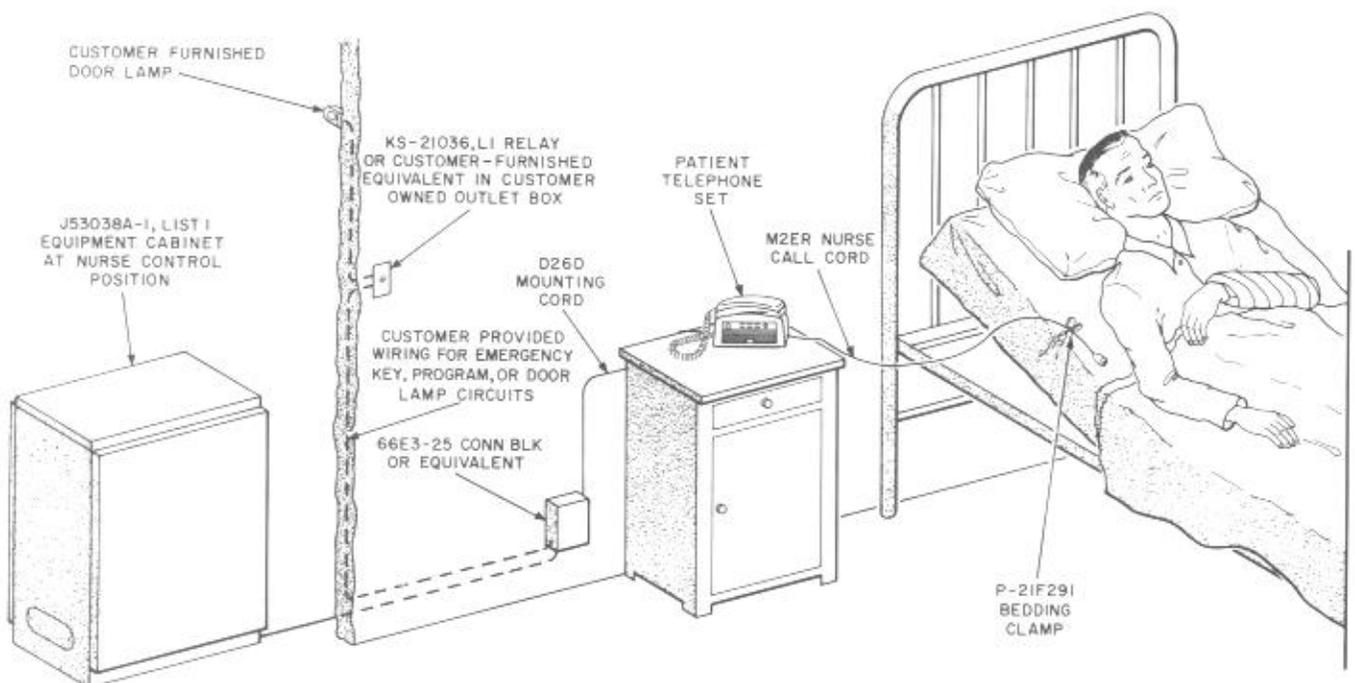


Fig. 1—Typical Patient Telephone Set Installation

2.02 *Installing*

*A 53A lamp is shipped loose with each AE1 and AE2 base and must be used to replace the 53B lamp normally used in the 220A, 1220A, or 2220B hand telephone set for dial illumination. This is necessary to prevent overloading the lamp power supply. See instructions under Part 4 for replacement procedures.*

- (a) The patient telephone set is installed similarly to the TRIMLINE® style sets in accordance with standard practices.
- (b) If data transmission option is to be provided, install D-180032 Kit of Parts (ordered separately) as follows:
  - (1) Remove housing by loosening two screws through access holes in bottom of set.
  - (2) Mount data jack on same bracket as left-hand nurse call jack using screw provided with kit of parts.
  - (3) Connect data jack leads to telephone set. See Table A for connections.
  - (4) The housing has a "break-out area" to provide clearance for the data jack. Carefully remove this area before replacing housing.
- (c) Set the loudspeaker volume to a satisfactory level at time of installing patient set by

adjusting the volume control through the access hole in base of set.

- (d) If nurse call cord (M2ER cord) is to be connected at time of installation, insert cord in jack (on either end of base) and set appropriate switch on underside of base to the "PLUG-IN" position.



**♦The M2ER Nurse Call Cord manufactured prior to 11 1968 should be replaced.♦**

**Note:** Switches on underside of base should be placed in "PLUG-OUT" position when nurse call cords are not inserted in jacks.

- (e) The system is factory-wired for operation of a door lamp relay per interphone station. The relay and door lamps should be customer-owned, installed, powered, and maintained.

**Note:** The relay selected by the customer's electrician should have a dc winding resistance of not less than 500 ohms and must operate on a minimum of 16 volts dc. The current carrying capacity and the insulation resistance of the contacts should be suitable to switch the customer's power to the customer's door lamp.

- (f) Should the customer request that the telephone company provide switching for 120 volt - 60Hz door lamps, a KS-20136, List 1 relay is available. This relay should be used as a

**TABLE A  
DATA JACK CONNECTIONS**

LEAD		WITHOUT DATA JACK	WITH DATA JACK
Mounting Cord	W-BL	1	11
	BL-R	7	12
	BL-W	8	13
Data Jack	W-BL		11
	BL-W		13
	BL-R		12
	G		1
	W		8
	S		7

replacement for the KS-19603 door lamp relay used in some installations.



**Do not connect door lamp directly to the D and DG leads. Use relay for switching.**

### 3. CONNECTIONS

- The patient telephone set is furnished factory-wired for all features except the data jack option. Data jack connections are shown in Table A.
- Connections between telephone set and other system components are shown in Section 512-535-200.
- See SD-69500-01 for schematic diagram of patient telephone set.

### 4. MAINTENANCE

(a) Refer to Section 502-320-100 for maintenance of the 220A, 1220A, or 2220B hand telephone set used as a component of the patient telephone set. If hand telephone set is replaced, it will be necessary to remove the 53B lamp furnished as a dial light and install a 53A lamp.

(b) **Replaceable Apparatus** (refer to Section 502-320-100 and to ordering guide in Section 512-535-100 for ordering nomenclature and color).

- 220A, 1220A, or 2220B hand telephone set
- Housing
- D26D mounting cord
- Faceplate assembly
- AC1 transmitter (component of faceplate assembly)
- 51A lamp (for NURSE pushbutton)
- 53A lamp (used to replace 53B lamp in hand telephone set)
- KS-16893 lamp (AE2 base only, message waiting lamp)

(c) To remove housing and faceplate:

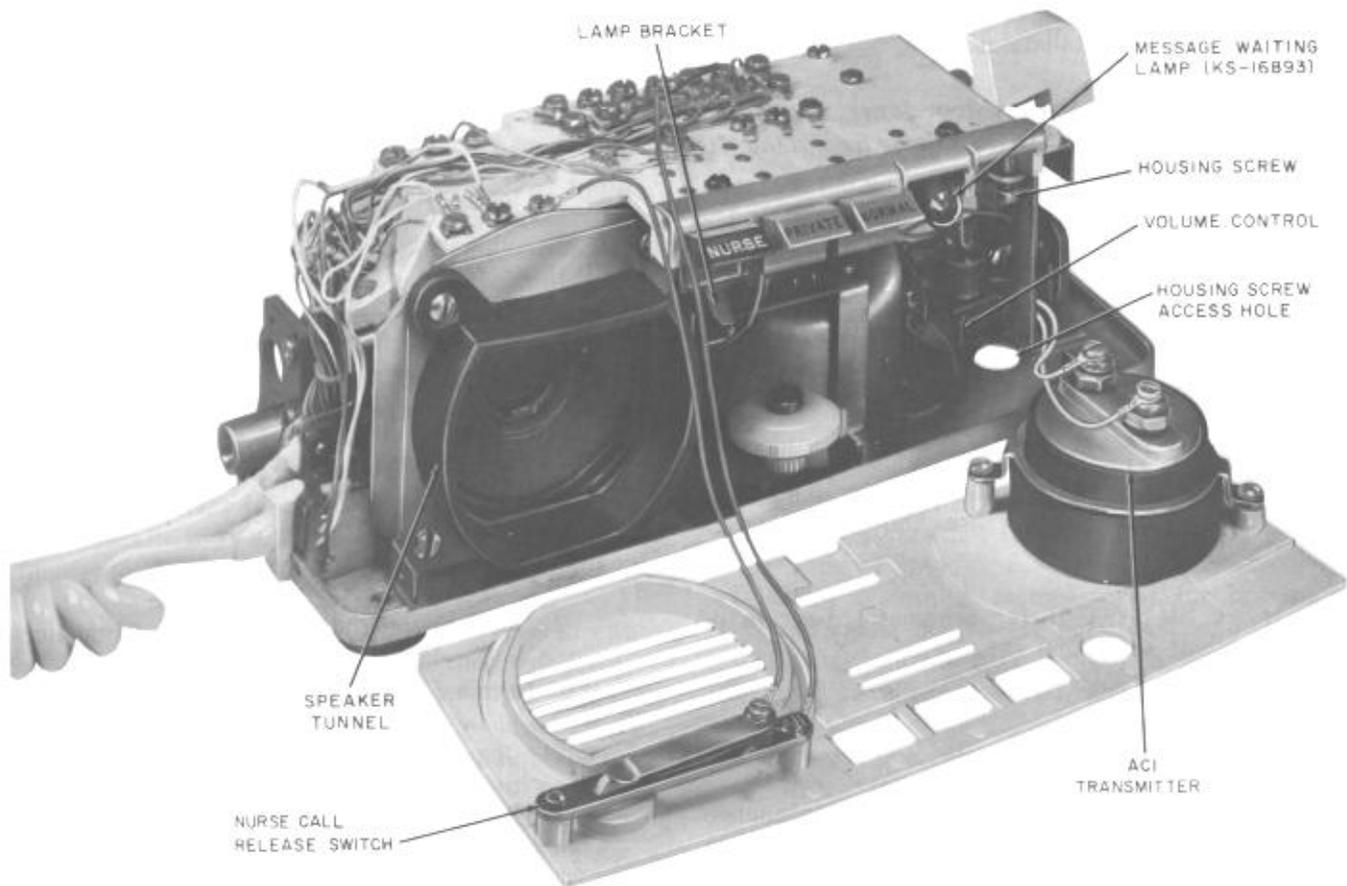
- (1) Loosen two captive screws through access holes in bottom of the base and lift off housing.
- (2) Tilt top of faceplate forward to clear ringer volume wheel and speaker tunnel (Fig. 2).
- (3) Loosen screws on rear of AC1 transmitter unit to remove spade-tipped leads.
- (4) Remove (V-BL) and (W-BR) leads (from nurse call release switch) from terminals 6 and 22, respectively, of terminal board.

(d) To install faceplate and housing:

- (1) Connect spade-tipped leads from nurse call release switch to terminals 6 and 22 of terminal board.
- (2) Connect (V-O) lead (from terminal board) to terminal nearest red dot of AC1 transmitter unit. Connect (R) and (R-O) leads to other terminal.
- (3) Place groove in bottom of faceplate over lip on base of set and tilt top of faceplate toward set so that volume control wheel enters slot and flange on rear of faceplate is *inside* speaker tunnel.
- (4) Secure housing by tightening the two captive screws.

(e) To replace nurse call button lamp:

- (1) Remove housing and faceplate. Do not disconnect switch or transmitter leads.
- (2) Remove lamp bracket.
- (3) Remove 51A lamp using KS-6320 orange stick.
- (4) Place new lamp in socket and replace lamp bracket.
- (5) Install faceplate and housing.



**Fig. 2—Patient Telephone Set Base (AE2), Interior View**

(f) To replace message waiting lamp (AE2 base only):

- (1) Remove housing and faceplate.
- (2) Remove KS-16893 lamp by turning bulb counterclockwise.
- (3) Install new bulb, housing, and faceplate.

(g) To replace D26D mounting cord:

- (1) Remove housing and faceplate.
- (2) Disconnect spade-tipped leads and unhook cord stayband.

(3) Install new cord by hooking cord stayband in base and connecting spade-tipped leads as shown in SD-69500-01.

(4) Install housing and faceplate.

(h) The handset cord can be replaced without removing the housing by inserting a KS-16750 type releaser or equivalent in the space provided and releasing the spring catch. Insert plug of new cord into jack until catch engages.

(i) Maintenance of the customer-owned door lamp, relay, and emergency key is the responsibility of the customer.