

2520B TELEPHONE SET EXPLOSIVE ATMOSPHERES IDENTIFICATION, INSTALLATION, CONNECTIONS, AND MAINTENANCE

1. GENERAL

1.01 This section contains information on the 2520B telephone set at locations containing an explosive atmosphere.



Before performing any work on the 2520B telephone set, the craftsman must refer to Section 502-415-100.

Warning: Telephone apparatus or wiring shall not be installed in a location where acetylene gas may become present in the atmosphere.

1.02 The reasons for reissuing this section are listed below. Revision arrows are used to emphasize the more significant changes.

- Add setscrew which replaces 23A lock
- Revise Fig. 1 and 2 to update information
- Revise Table A.

1.03 The 2520B telephone set is equipped with a 35-type TOUCH-TONE® dial and is intended for use in hazardous (explosive atmosphere) locations. The set is designed to provide security against ignition of the surrounding atmosphere. All parts of the telephone set which might produce an electrical spark are completely enclosed and any spark or flame which might be created in the set will be extinguished before reaching the outside atmosphere.

2. IDENTIFICATION

2.01 The 2520B telephone set (Fig. 1) consists primarily of two major components: an apparatus unit and a base. These parts are made of high



Fig. 1—2520B Telephone Set

tensile strength aluminum alloy to withstand any explosion within the telephone set.

Ordering Guide

2.02 Set, Telephone, 2520B black (-03) only:

- Includes:

Unit, Apparatus, 15C

Set, Hand, G11A (refer to paragraph 2.06)

814459574 (P-44E957) Base.

NOTICE

Not for use or disclosure outside the
Bell System except under written agreement



Fig. 2—2520B Telephone Set, Cover Removed

2.03 The apparatus unit (Fig. 2) consist primarily of a cover, 35Y3A TOUCH-TONE dial, 4228G, 4228L, or 4010D network, ringer motor assembly, two 29C gongs, line switch assembly, and a G11A-type handset.

2.04 The base (Fig. 3) provides an external projection to engage corresponding threads in the apparatus unit. It also provides spring-type contact terminals for line and ground conductors.

Note: A 15C apparatus unit may be mounted on base [814459574 (P-44E957) or 811056654 (P-10E665)] previously installed for use with 9-type apparatus units.

2.05 The 15C apparatus unit, which screws onto the base, contains the telephone set components. Three projecting studs located on the back of the apparatus unit make contact with the three spring terminals in the base, thus carrying line and ground connections into the unit. The early version of the apparatus unit is equipped with a 23A lock (Fig. 2) and two keys; keys are interchangeable with all 320-, 520-, and 2520-type telephone sets. The current version of the apparatus unit is equipped with a No. 8-32

Allen setscrew (Fig. 1) which performs the same function as the 23A lock by engaging the locking pin, which then allows the cover to be secured. The early and current version sets cannot be locked in place unless the locking pin is engaged in the locking hole in base of set.

2.06 The 2520B telephone set is equipped with a G11A-type handset. The G11A4 handset has a H4DT (4-foot length) cord. The G11A-type handset has a H4DT (9-foot length) cord. The G11A4 is shipped with all telephone sets unless the order specifies a G11A9 handset.

2.07 The G11C4 and G11C9 are optional handsets for use in long loop service.

2.08 The G11C-type handset is the same as the G11A-type except it contains a different receiver unit and can be identified by the letters **LB2** stamped on the face of the receiver cap.

2.09 The 2520B telephone set is designed for wall or pedestal mounting. The 166A backboard is used for wall installations. The 5A pedestal is used for floor installations (Fig. 4).

3. INSTALLATION AND CONNECTIONS

3.01 Installation of the 2520B telephone set must follow the requirements and precautions outlined in Section 502-415-100 and any local regulations pertaining to hazardous locations.

3.02 It is recommended that all associated apparatus (conduit, junctions, unions, etc.) be assembled and installed prior to the installation of the telephone set.

Note: Base assembly may be installed at this time.



Antiseize compound RM-642708 (furnished with set) must be applied to threaded areas of both apparatus unit and base to prevent galling and freezing of threads when the two are assembled. THERE SHALL BE NO SUBSTITUTE FOR THE SPECIFIED ANTISEIZE COMPOUND.

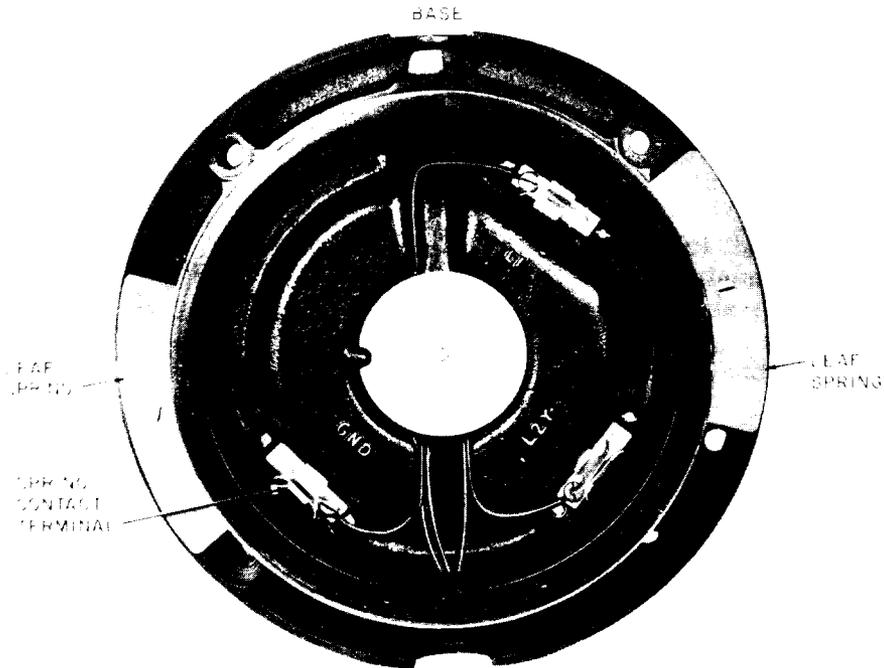


Fig. 3—Local Wiring in Base

3.03 Connect local wiring to terminals in base of set (Fig. 3). Check unused pipe plug to insure that a minimum of five threads are engaged to permit installation of special cap fitting. Slide cap fitting into place over pipe plug. This cap must be assembled to base prior to assembly of the apparatus unit to the base.

▶A. 2520B (Early Version)◀

3.04 Secure apparatus unit to base as follows.

- (a) Insert key in 23A lock and actuate lock to permit release of locking pin (key will not withdraw from lock).
- (b) Screw apparatus unit to antiseize coated threads of base a minimum of eight turns until leaf-springs of base make contact with apparatus unit (there will be approximately 1/8-inch clearance between apparatus unit and base).
- (c) Align apparatus unit with base to permit depression of locking pin into hole in base. Depress locking pin and actuate 23A lock. Remove key.

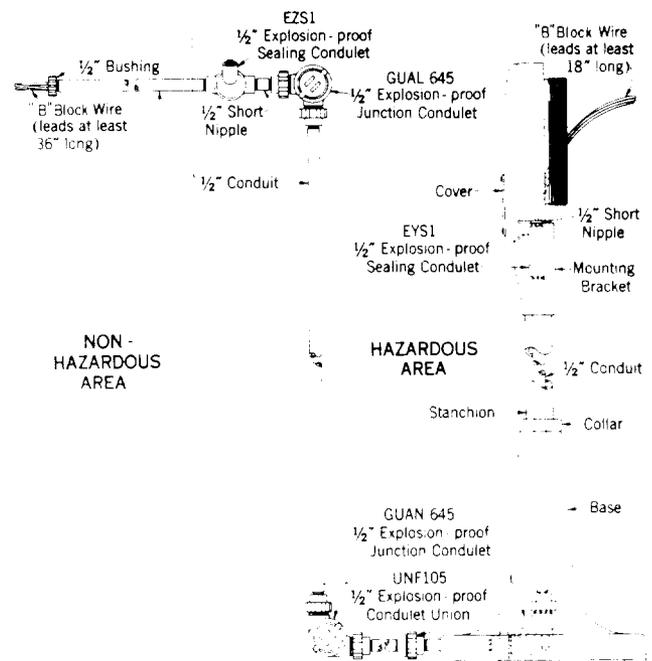


Fig. 4—Floor Installation Using 5A Pedestal

♦B. 2520B (Current Version)

3.05 Secure apparatus unit to base as follows:

- (a) Loosen No. 8-32 Allen setscrew (Fig. 1) to permit release of locking pin.
- (b) Screw apparatus unit to antiseize coated threads of base a minimum of eight turns until leaf-springs of base make contact with apparatus unit (there will be approximately 1/8 inch clearance between apparatus unit and base).
- (c) Align apparatus unit with base to permit depression of locking pin into hole in base. Depress locking pin and tighten No. 8-32 Allen setscrew.♦

3.06 Connections for the 2520B telephone set are shown in Fig. 5. Where grounded ringing is employed, the line and ringer connections shown in Table A should be used.

4. MAINTENANCE

Warning: Before removing apparatus unit for any reason, be sure line wires are disconnected at protector. Defects due to any cause, even though seemingly slight, shall be corrected without delay.

4.01 Sets requiring repairs should be removed from service and returned to a Western Electric Service Center.

4.02 ♦To remove apparatus unit from service: on earlier versions turn key in lock to release locking pin and on current versions remove cover and loosen Allen setscrew until locking pin pops out.♦ Apparatus unit may now be screwed off of base.

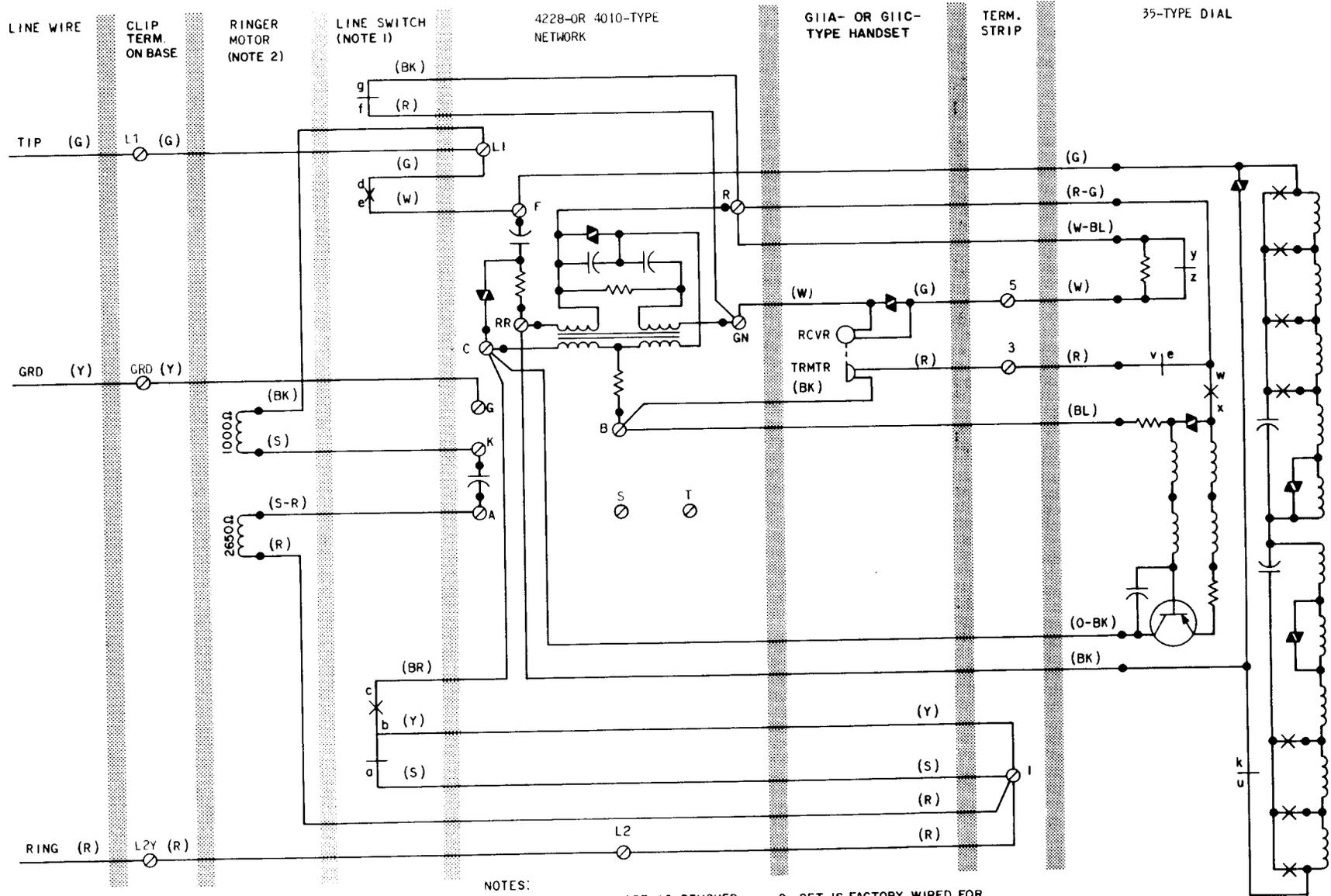
4.03 To replace apparatus unit, remove all dirt and grit from threads of base and apparatus unit. apply antiseize compound to threads, and screw unit to base. To secure apparatus unit to base, refer to paragraphs 3.03 and 3.04.

♦TABLE A♦

2520B TELEPHONE SET – LINE AND RINGER CONNECTIONS

LEAD	COLOR	INDIV OR BRIDGED	RING PARTY	TIP PARTY
Line Wire (Conn to Terms. on Base)	R	L2Y	L2Y	L2Y
	G	L1	L1	L1
	Y	Grd	Grd	Grd
Ringer Motor (Conn to Terms. on Net. and Term. Strip)	R	1	1	G
	BK	L1	G	L1
	S	K	K	K
	S-R	A	A	A
Line Switch (Conn to Terms. on Net.)	BR	C	C	F
	W	F	F	C

Note: To silence ringer, disconnect (R) ringer motor lead insulate and store.



- NOTES:
1. WHEN THE HANDSET IS REMOVED, CONTACTS gf BREAK LAST.
 2. SET IS FACTORY WIRED FOR BRIDGED RINGING. REFER TO TABLE A FOR ALL CLASSES OF SERVICE.

Fig. 5—2520B Telephone Set, Connections