

**SERVICE**  
**500E/F AND 500FM TELEPHONE SETS**  
**CONNECTIONS**

**1. GENERAL**

**1.01** This section contains information on the 500E/F (MD) and 500FM telephone set (Table A and Fig. 1, 2).

**1.02** Reissued to:

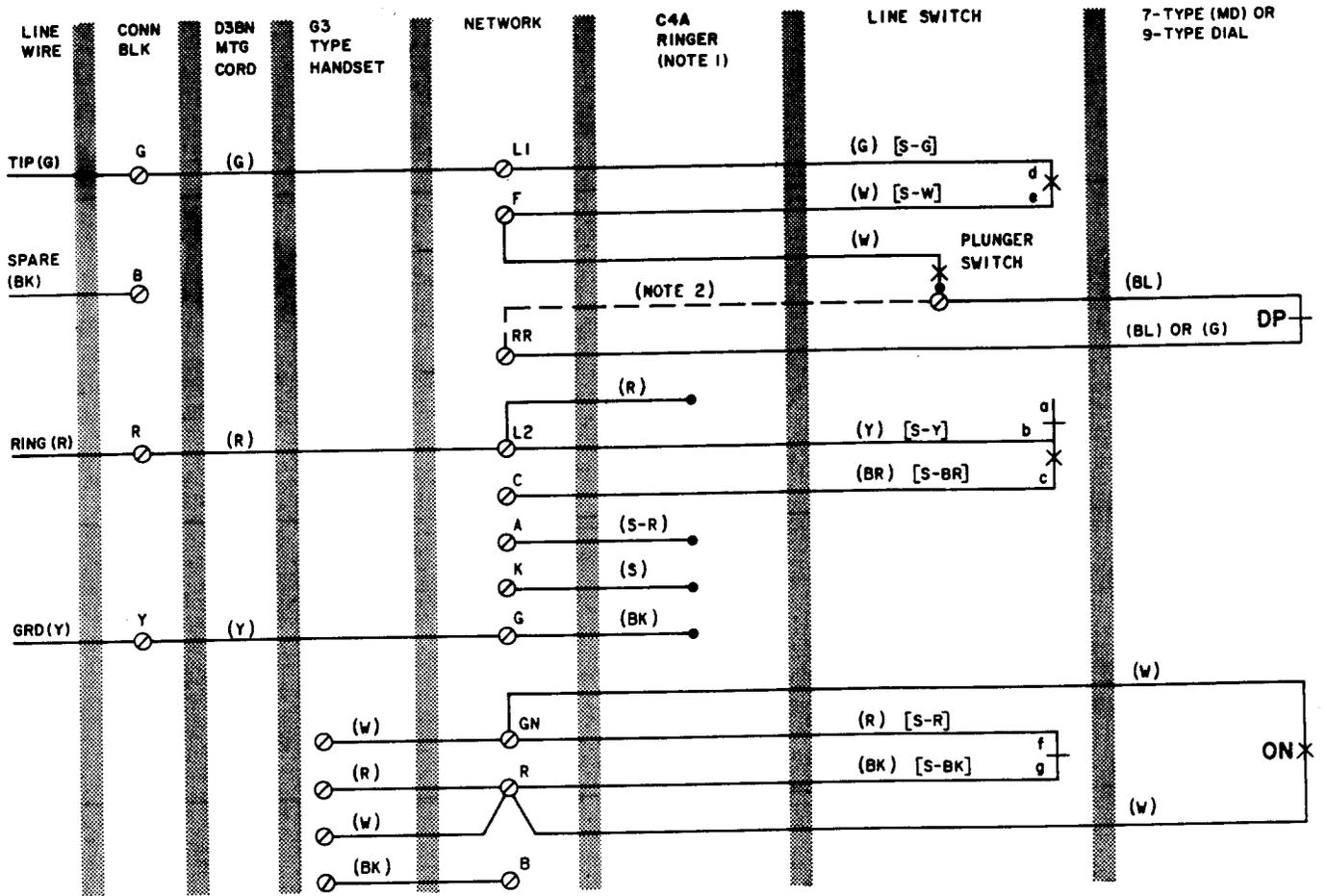
- Update connections on 500FM set, Fig. 2

- Add line and ringer connections, Table A
- Revise method of converting sets to manual service, Fig. 1 and 2
- Delete information on 500EM telephone set (never manufactured).

**NOTICE**

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

SECTION 502-580-402



NOTES:

1. SET FACTORY-WIRED FOR RING PARTY SERVICE.
2. FOR MANUAL SERVICE, PLACE STRAP BETWEEN PLUNGER SWITCH TERMINAL AND TERMINAL RR OF NETWORK.

- DP - DIAL PULSE CONTACT  
 ON - DIAL OFF-NORMAL CONTACT  
 ( ) - CURRENT COLOR CODE  
 [ ] - EARLIER COLOR CODE

Fig. 1—500E/F (MD) Telephone Set, Connections

◆TABLE A◆

LINE AND RINGER CONNECTIONS FOR 500E/F, AND 500FM TELEPHONE SETS (NOTE 1)

TEL SET	WIRE OR LEAD		COLOR	INDIV OR BRIDGED	RING PARTY (NOTE 2)	TIP PARTY NO INDENT GRD (NOTE 3)	TIP PARTY IDENT GROUND				NEGATIVE (-) PARTIES (NOTE 4)		POSITIVE (+) PARTIES (NOTE 4)	
							NORMAL CONNECTIONS		WHEN CONN TO L. L. EQUIP (NOTE 3)		RING (1-5)	TIP (2-6)	RING (3-7)	TIP (4-8)
							1000Ω	2650Ω	1000Ω	2650Ω				
500 E/F AND FM	Line Wire at Conn Block	Ring Tip Grd Spare	R G Y BK	R G Y B	R G Y B	R G Y B	R G Y B	R G Y B	R G Y B					
		Mtg Cord at Conn Block	R G Y	R G G	R G Y	G R Y	G R Y	G R Y	G R Y	G R Y				
		Mtg Cord in Set	R G Y	L2 L1 G	L2 L1 G	L2 L1 G	L2 L1 G	L2 L1 G	L2 L1 G	L2 L1 G				
	Line Switch Lead	Y	L2	L2	L2	A	A	A	A					
500 FM	623D3 Jack Leads in Set		R G Y	L2 L1 G	L2 L1 G	L1 L2 G	L1 L2 G	L1 L2 G	L1 L2 G	L1 L2 G				
	C4A Ringer Leads		R BK S S-R	L2 L1 K A	L2 G K A	L2 G K A	L2 G K A	K G B B	B B K G	B K G K	G G A K	G G A K	L2 L2 A K	L2 L2 A K
	426A Tube * (3-element)		R BK Y								G K L2	G K L2	L2 K G	L2 K G

Note 1: To silence ringer for all classes of services, refer to Section 501-250-303.

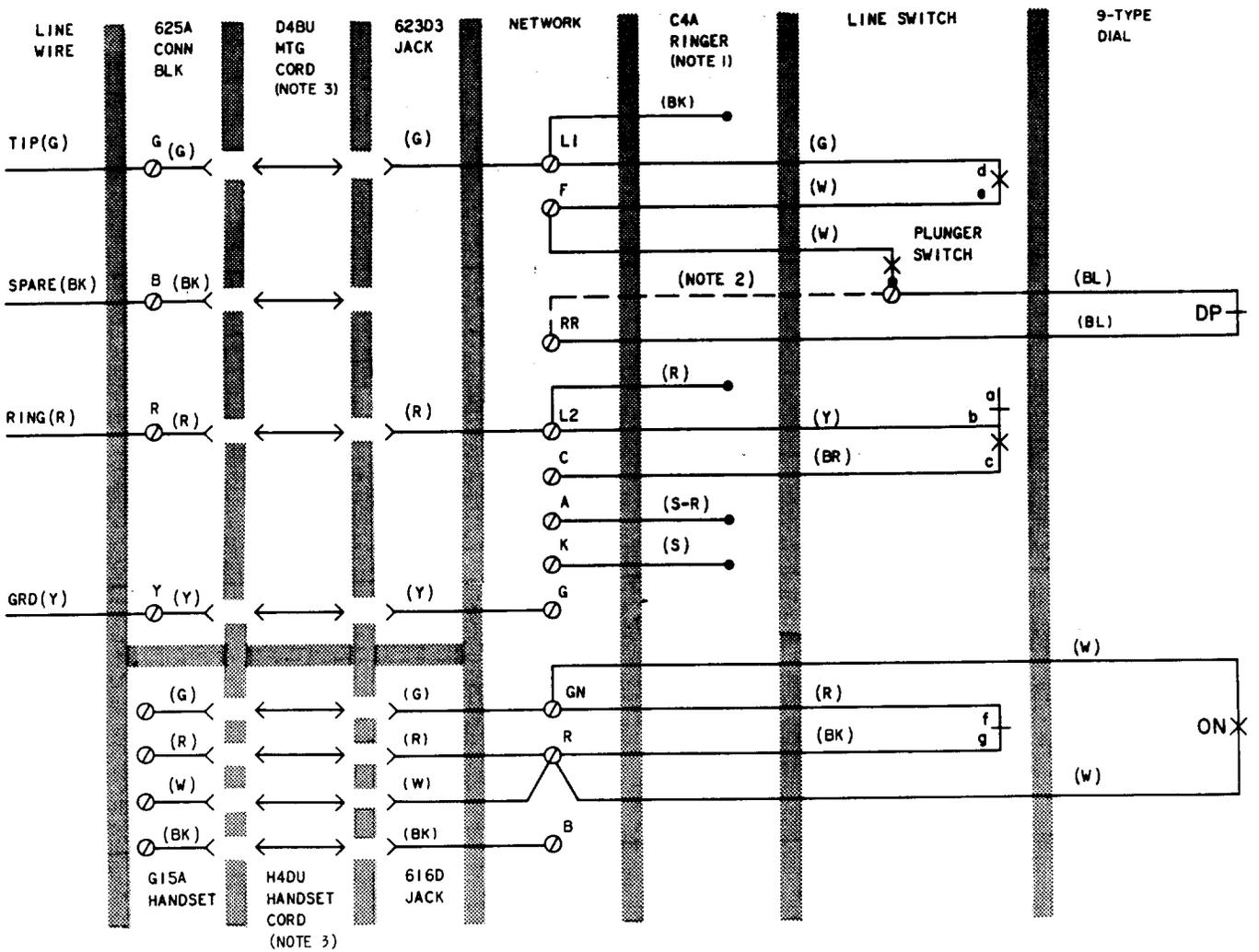
Note 2: When grounded ringer arrangements are used on 96-volt long line circuits, a D-180036 ringer isolator must be used.

Note 3: If bell taps on stations connected to long line equipment, use these connections to retain the party ground identification.

Note 4: This type of ringing is possible with 500FM equipped with field-installed 426A tube only. Refer to Section 501-320-100 for additional information on 426A tube.

\* Ordered separately.

SECTION 502-580-402



NOTES:

1. SET FACTORY-WIRED FOR INDIVIDUAL SERVICE.
2. FOR MANUAL SERVICE, PLACE STRAP BETWEEN PLUNGER SWITCH TERMINAL AND TERMINAL RR OF NETWORK.
3. ORDERED SEPARATELY.

DP - DIAL PULSE CONTACT  
 ON - DIAL OFF-NORMAL CONTACT

Fig. 2—500FM Telephone Set, Connections