

F-56659 AND F-56660
TELEPHONE SET COMPONENTS
FOR INSTALLATION IN
CUSTOMER-OWNED HOUSINGS
IDENTIFICATION, INSTALLATION, CONNECTIONS, AND MAINTENANCE

1. GENERAL

1.01 This section is reissued to:

- Update telephone set components
- Include installation and connection information on mounting and handset cords
- Include modification of telephone set wiring for use with 1A1 or 1A2 KTS and 3-type speakerphone
- Include list of D-Kit of Parts for distributing house modifications when customer-owned housings and components require converting.

Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

1.02 Refer to Section 501-185-100 for a list of D-Kit of Parts for distributing house modifications when customer-owned housings and components require converting.

2. IDENTIFICATION

PURPOSE

To provide a group of standard components for use in assembling and wiring an operative telephone set in an accepted conforming customer-owned antique-decorator telephone set housing. See 1.02 and Part 3 for other housings.

ORDERING GUIDE

Set, Telephone, F-56659 (chrome dial)

Set, Telephone, F-56660 (gold dial)

(a) ***Replaceable Common Components***

- Components listed in legend for Fig. 1, except network and line switch.

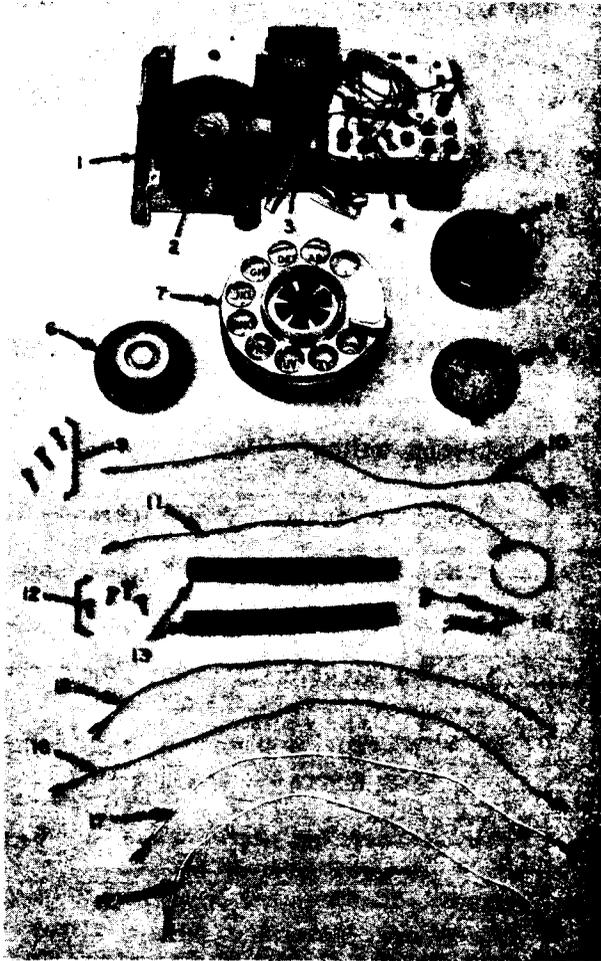
(b) ***Associated Apparatus or Equipment (ordered separately)***

- Cord, Mounting, D3BN-*, 5 feet, 6 inches
- Cord, Mounting, D4BJ-*, 5 feet, 6 inches (when set is used with 1A1 or 1A2 KTS)
- Cord, Mounting, D10R-*, 5 feet, 6 inches (when set is used with 1A1 or 1A2 KTS and 3-type speakerphone)
- Cord, Handset, H4CJ-*, 4 feet

*Add appropriate color suffix from Section 500-120-100.

(c) ***Optional Apparatus or Equipment (ordered separately)***

- Loudspeaker, 760A
 - Transformer, 2012B
 - Transmitter, 666-type
 - Unit, Control, 55-type
- } Speakerphone



LEGEND

- 1 — CHASSIS ASSEMBLY
- 2 — P1A RINGER
- 3 — LINE SWITCH
- 4 — 4010B NETWORK
- 5 — U3 OR U1 (MD) RECEIVER UNIT
- 6 — T1 TRANSMITTER UNIT
- 7 — F-56661 DIAL (CHROME) —
F-56659 TELEPHONE SET
F-56662 DIAL (GOLD) —
F-56660 TELEPHONE SET
- 8 — P-298106 CARD HOLDER ASSEMBLY
- 9 — P-121457 SCREW (3)
- 10 — P-22F047 SPIDER AND LEAD ASSEMBLY
- 11 — P-22F046 CONNECTOR TERMINAL
AND LEAD ASSEMBLY
- 12 — P-43A392 SCREW (4)
- 13 — P-483192 SLEEVING (2)
- 14 — P-121932 CONNECTOR ASSEMBLY (2)
- 15 — P-46J534 LEAD ASSEMBLY (RED)
- 16 — P-46J532 LEAD ASSEMBLY (BLACK)
- 17 — P-46J245 LEAD ASSEMBLY (WHITE) (2)

Fig. 1—F-56659 or F-56660 Telephone Set

FEATURES

- Standard components which provide an operative telephone circuit when properly assembled within an appropriate housing
- Components provide a single line, rotary dial telephone set
- Adjustable ringer volume control
- May be modified for use in 1A1 or 1A2 key telephone and 3-type speakerphone systems

3. INSTALLATION

(a) *Planning*

- Safety for yourself, customer, and maintenance personnel

- Location - desk, table, etc.
- Space requirements
- Distance between associated equipment and apparatus
- General appearance of installation

(b) *Installing telephone set components in customer-owned telephone set housings*

Conforming Telephone Set Housings

When a customer requests the installation of telephone set components in an antique decorator

telephone set housing, determine if the customer's housing is an accepted conforming housing. These housings carry a stamp of conformance on the bottom which read "This Enclosure Conforms To Drawing B-696501, F-56659 (Chrome) ___*___ Telephone Company No. ___*___" or "This Enclosure Conforms To Drawing B-696501, F-56660 (Gold) ___*___ Telephone Company No. ___*___"

*Name of reviewing telephone company and number assigned by that telephone company should be inserted.

Nonconforming Housings

Housings which do not carry the above stamp of conformance on the bottom must be modified by the local Western Electric Service Center to accept standard Bell System Components. Components and wiring removed by the Western Electric Service Center should be returned to the customer.

Customer-Owned and Maintained Components

- Housing or shell, including base (pan)
- Handset housing, handset cradle, and transmitter and receiver caps
- Actuator or plungers

Note: Inspect the customer's telephone set components before accepting them for service. Be sure he is aware of any missing or defective components found.

Chassis Assembly

- (1) Remove upper housing from base of customer-owned shell.
- (2) Obtain chassis assembly from group of components.
- (3) Position chassis on base of shell and ensure that the ringer volume control is accessible through opening on underside of base.
- (4) Secure chassis to base using four P-43A392 screws.

Dial and Dial Leads

- (1) Obtain dial and four lead assemblies from group of components.
- (2) Connect Lead assemblies in accordance with Table A.

**TABLE A
DIAL LEAD INSTALLATION**

LEAD COLOR	CONNECT BETWEEN	
	DIAL	NETWORK
(W)	R	GN
(W)	BK	R
(R)	G	RR
(BK)	BL	F

Mounting Cord (ordered separately)

- (1) Install set end of appropriate mounting cord, refer to ordering guide, route through cord bracket and secure cord stay to base (Fig 2).
- (2) Connect leads of D3BN mounting cord to appropriate network terminals or modify set wiring and connect leads of D4BJ or D10R mounting cord in accordance with Table C.

Note: A 4-conductor D4BJ mounting cord is required when set is modified to provide A lead control for use with 1A1 or 1A2 KTS and a 10-conductor D10R mounting cord when used with 1A1 or 1A2 KTS and 3-type speakerphone.

Handset Cord (ordered separately)

- (1) Install set end of H4CJ handset cord through cord bracket, lay on top of mounting cord (Fig. 2). Secure cord stay to base.
- (2) Connect leads of handset cord to network of set.

- (3) Remove receiver and transmitter caps from customer-owned handset. Insert handset leads of cord through opening in handset, guide two *white* leads through handset handle, fasten to screws of U3 or U1 (MD) receiver unit obtained from group of components.
- (4) Place receiver unit in handset cavity and replace receiver cap.



The transmitter unit shall not be in contact with any conducting surface. Transmitter cap and transmitter 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.

- (5) Obtain T1 transmitter unit, P-22F047 spider and lead assembly, and P-22F046 connector terminal and lead assembly from group of components listed with Fig. 1.
- (6) Position ringed portion of connector terminal and lead assembly on transmitter unit (Fig. 3).
- (7) Snap spider and lead assembly onto center button of transmitter unit (Fig. 3).
- (8) Obtain two pieces of P-483192 sleeving and two P-121932 connector assemblies from group of components.
- (9) Cut sleeving sufficiently in length to completely insulate the connectors and place sleeving on each lead extending from transmitter unit.
- (10) Pull the *red* and *black* leads of handset cord through transmitter opening of handset, using the connectors, connect the *red* and *black* transmitter leads, respectively. Insulate each connector with sleeving placed on transmitter unit leads.
- (11) Place transmitter unit in handset cavity and replace transmitter cap.
- (12) Fig. 3 is a typical installation of a group of components installed in a customer-owned antique telephone set housing.

Line and Ringer

- (1) These sets are furnished wired for individual or bridged, ring, and tip party service. With minor wiring changes, set can be used for tip-party identification. Connections should be made at a suitable connecting block. Table D shows line and ringer connections.
- (2) The ringer volume control is blocked from OFF position by a factory placed stopscrew. To enable ringer cut-off feature, remove screw through access hole in top of ringer gong. Tape screw to chassis assembly or inside set housing.
- (3) To permanently silence ringer for all classes of service, remove and move volume control to OFF position. Replace screw in normal position and tighten just enough to prevent volume control movement.

Disconnection of Customer-Owned Telephone Set Housings

- (1) Disconnected Customer-owned telephone set housings should be disabled by the removal of the F-56659 or F-56660 telephone set chassis.

4. CONNECTION INDEX

Table B—1A1 or 1A2 KTS and 3-Type Speakerphone Conversion

Table C—Line and Ringer Connections

Fig. 4—F-56659 and F-56660 Telephone Set, Connections

Fig. 5—F-56659 and F-56660 Telephone Set, Wired For 1A1 or 1A2 KTS and 3-Type Speakerphone

Fig. 6—F-56659 and F-56660 Telephone Set - Speakerphone Connections

5. MAINTENANCE

- (a) Maintenance is limited to those components installed as part of the telephone set group. Maintenance of housing, finish, and other customer-owned parts is the responsibility of the customer.

(b) The line switch and network are riveted to the chassis assembly and should not be removed. If maintenance is required, replace chassis assembly.

(c) Maintenance of the dials is the same as for 6-type rotary dials. Refer to Section 501-162-100.

(d) Refer to Section 501-259-101 for maintenance of P1A ringer and Section 512-620-200 for optional speakerphone components.

(e) Refer to connection figures as an aid in locating and clearing trouble.

TABLE B
1A1 OR 1A2 KTS AND 3-TYPE SPEAKERPHONE
CONVERSION (SEE NOTE)

WIRE OR LEAD	COLOR	REMOVE FROM NET. TERM.	CONNECT TO NET. TERM.	
			1A1 OR 1A2 KTS	SPEAKERPHONE WITH 1A1 OR 1A2 KTS
Line Switch*	(BR)	C	G	G
	(W)	F	C	C
	(S)	A	L2	†
Ringer	(R)	K	A	A
	(BK)	G	F	F
M1W Cord or Equiv.			K	L1

Note: For 1A1 or 1A2 KTS only, use D4BJ mtg. cord. For 1A1 or 1A2 KTS with speakerphone use D10R mtg. cord, connect as shown in Fig. 5.

* The telephone set may be dialed in the on-hook condition with speakerphone option.

† Use D-161488 connector to connect (S) line switch lead to LK lead of transmitter.

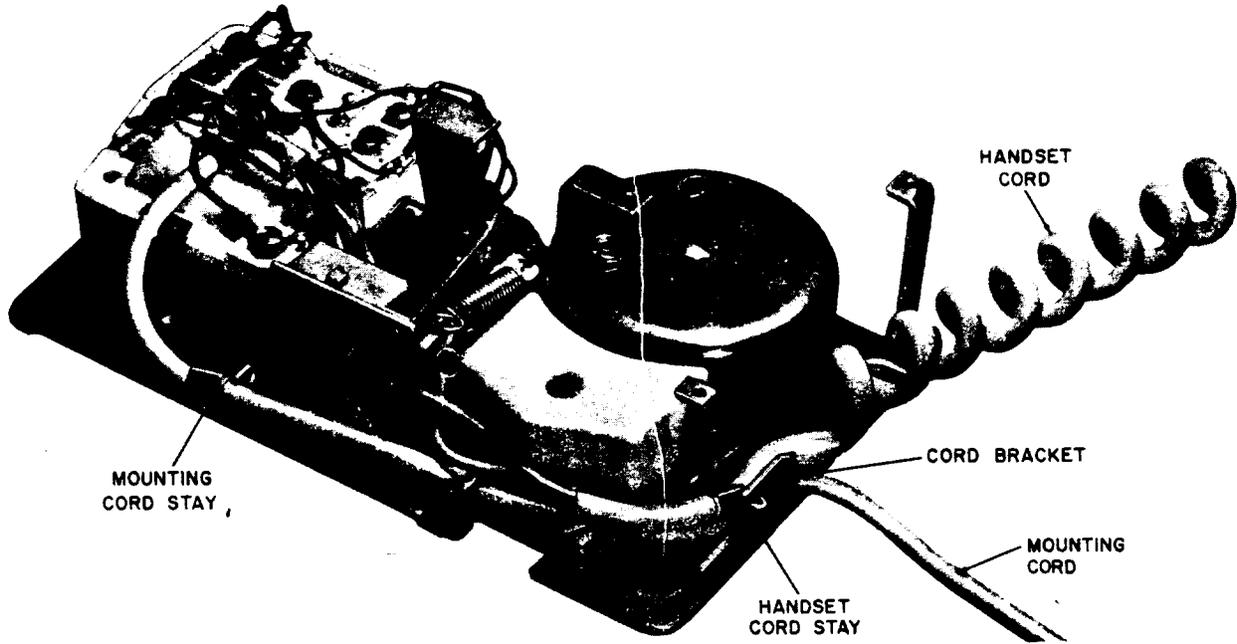


Fig. 2—Installation of Mounting and Handset Cords

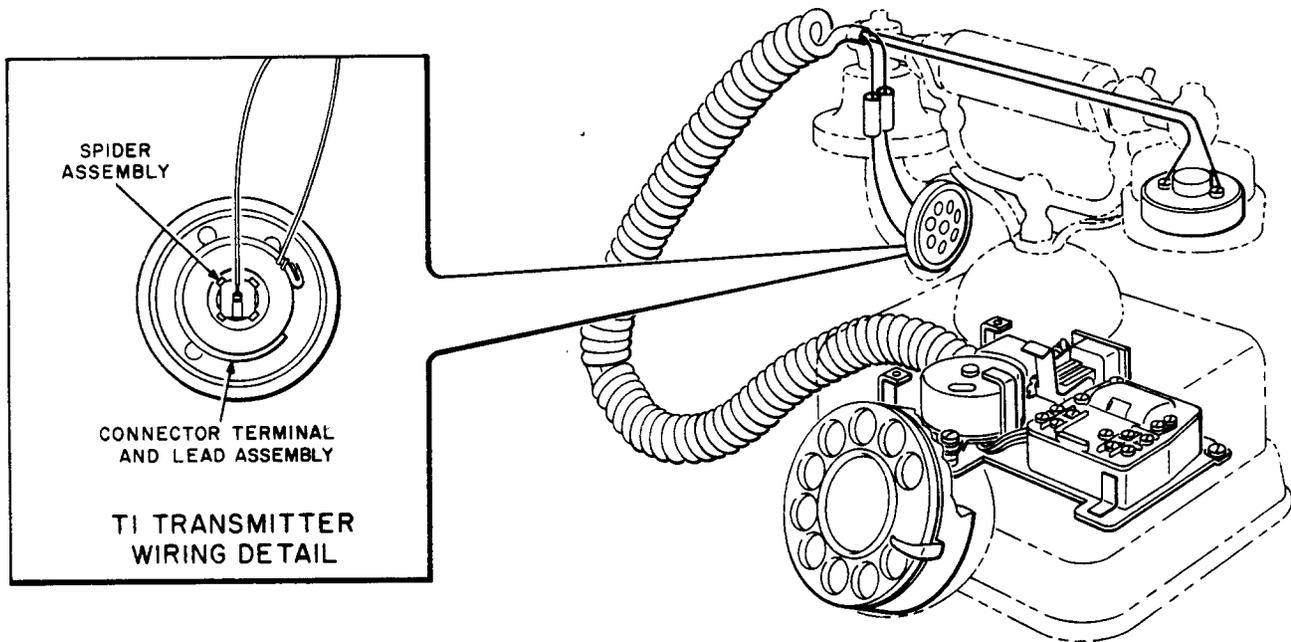
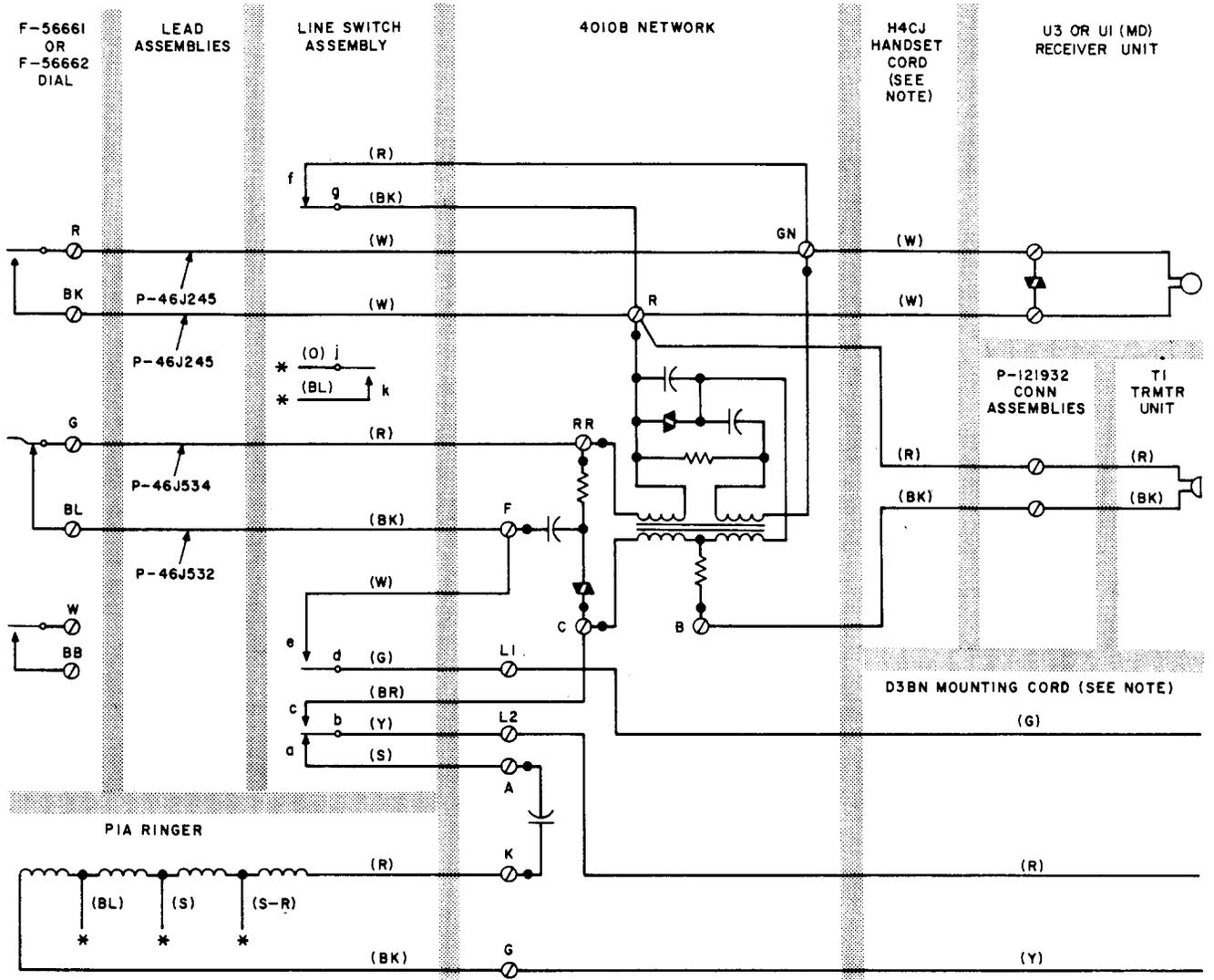


Fig. 3—Typical Installation of F-56659 or F-56660 Telephone Set in Antique Housing



NOTE:
 MOUNTING AND HANDSET CORDS ARE
 NOT FURNISHED WITH TEL SETS AND
 MUST BE ORDERED SEPARATELY.

* INSULATED AND STORED

Fig. 4—F-56659 and F-56660 Telephone Set, Connections

SECTION 501-410-101

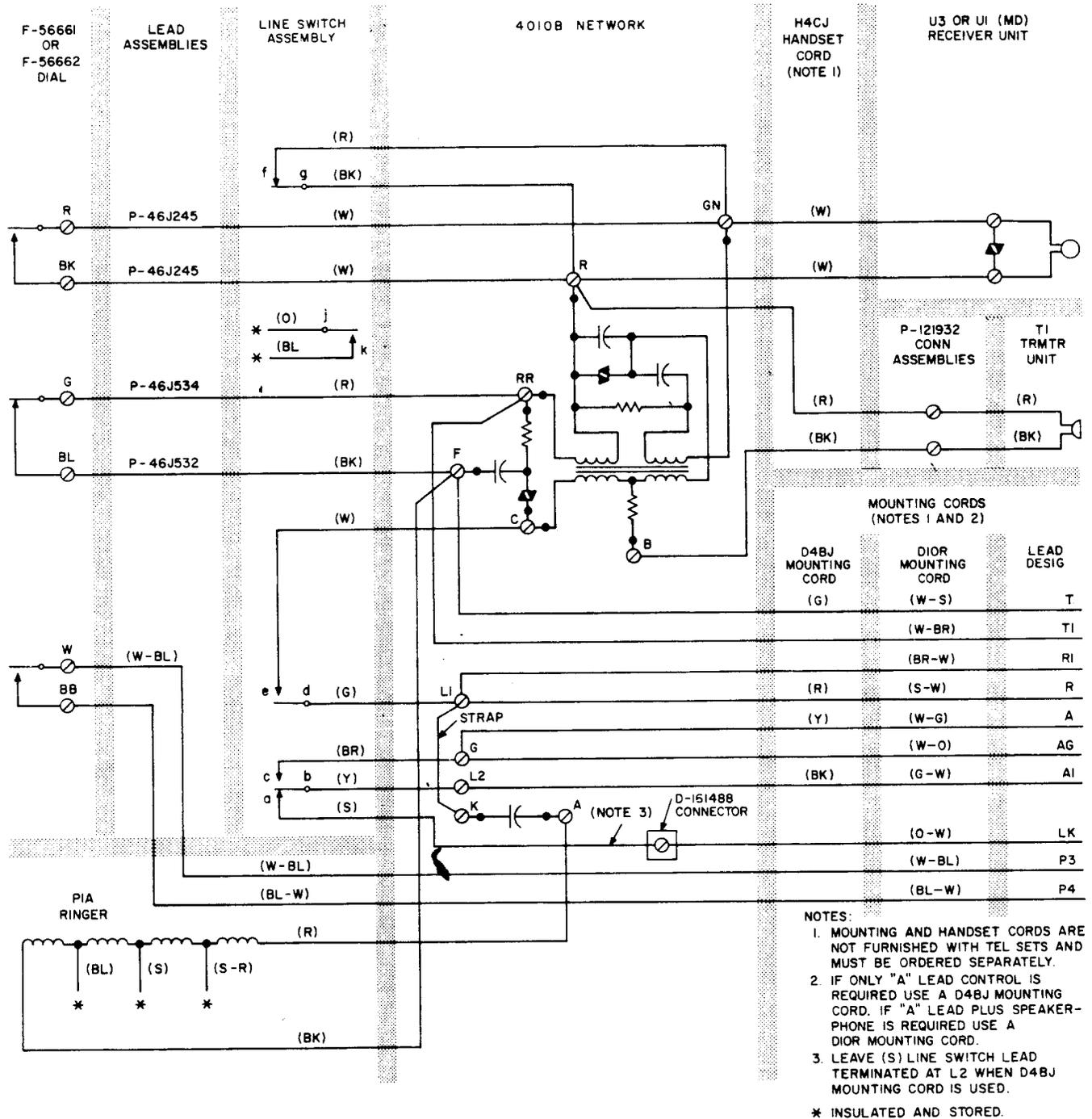
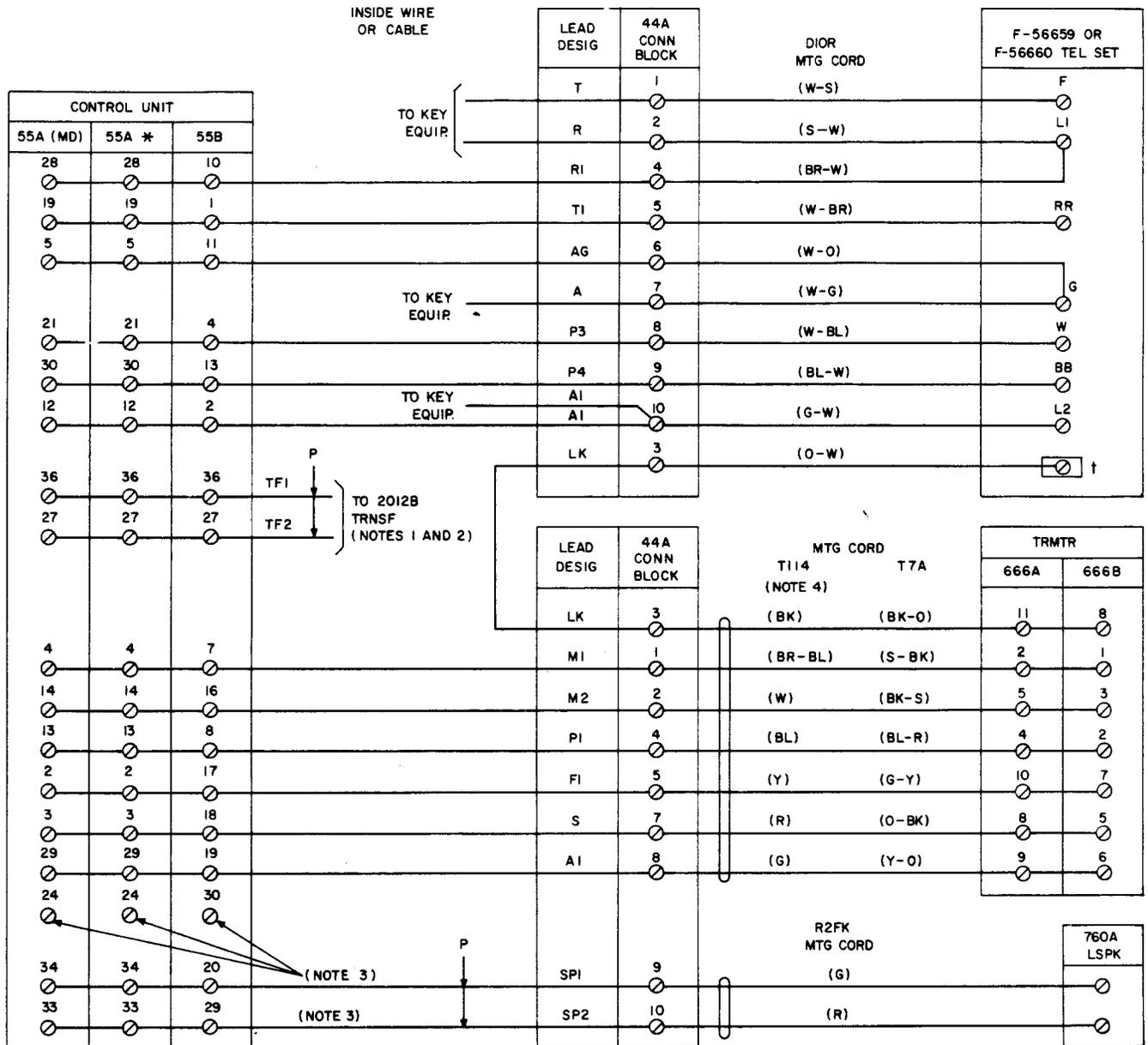


Fig. 5—F-56659 and F-56660 Telephone Set, Wired For 1A1 or 1A2 KTS and 3-Type Speakerphone



- NOTES:
1. DUE TO LOWER VOLTAGE RATING 2012A TRNSF SHOULD NOT BE USED TO POWER 55-TYPE CONTROL UNIT.
 2. DO NOT USE ANY GROUNDED POWER SUPPLY, SUCH AS THE 18V AC TAP ON THE 101-TYPE POWER SUPPLY, TO POWER 55-TYPE CONTROL UNIT. USE OF GROUNDED POWER SUPPLY WILL AFFECT OPERATION OF UNIT.
 3. IF REDUCED LOUDSPEAKER VOLUME IS DESIRED, CONNECT SP2 LEAD TO TERMINAL 24(55A) OR 30(55B).
 4. INSULATE AND STORE UNUSED LEADS OF T11A CORD.
- * 55A CONTROL UNIT MODIFIED BY WESTERN ELECTRIC COMPANY.
 † D-161488 CONNECTOR.

Fig. 6—F-56659 and F-56660 Telephone Set, Speakerphone Connections

TABLE C
LINE AND RINGER CONNECTIONS

WIRE OR LEAD	COLOR	INDIVIDUAL OR BRIDGED	RING PARTY	TIP PARTY NO IDENT GROUND	TIP PARTY IDENT GRD	
					1000Ω	2650Ω
Line Wire at Connecting Block	R	R	R	R	R	R
	G	G*	G*	G*	G*	G*
	Y	Y	Y	Y	Y	Y
Mounting Cord at Connecting Block	R	R	R	G*	G*	G*
	G	G*	G*	R	R	R
	Y	G*	Y	Y	Y	Y
Ringer Lead at 4010B Network	R	K	K	K	K	K
	S-R	†	†	†	†	B
	S	†	†	†	B	†
	BK	G‡	G‡	G‡	G‡	G‡

* Connecting block terminal.

† Insulated and stored.

‡ Network terminal.