

**DATA SET 208BR-L1C**  
**TRANSMITTER-RECEIVER**  
**INSTALLATION AND CONNECTIONS**

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**1. GENERAL**

**1.01** This section contains information concerning installation and connection of data set (DS) 208BR-L1C. The "R" in the data set designation indicates that the data set is for use in data set arrangements registered with the FCC. The registration number for DS 208BR-L1C is AS593M-62936-MD-E. DS 208BR-L1C is a synchronous, binary, serial 4800-bps data set for use on the 2-wire switched telecommunications network. The data set should be installed in conformance with existing installation practices. Refer to the section entitled Data Sets and Data Access Arrangements—General Installation and Connection Information (590-010-200). A 565HKM or 2565HKM telephone set is recommended for use with the data set to provide manual call origination and voice/data transfer on the switched network. The telephone set must be ordered separately. If automatic call origination is required, a Bell System data auxiliary set (DAS) 801CR-L1/2 automatic calling unit (ACU) is required and must be ordered separately. Station components required for an installation using an ACU are shown in Fig. 1.

**1.02** When this section is reissued, the reason for reissue will be presented in this paragraph.

**1.03** It is preferred that the data set be installed on a desk, table, stand, or in a Bell System-provided equipment cabinet. The data set will operate in an ambient temperature range of 40 to 120°F and a relative humidity of 20 to 95 percent.

**1.04** DS 208BR-L1C should be located near the business machine because the interface cord supplied by the customer should not exceed 50 feet in length [to reduce stray capacitance and to conform to Electronic Industries Association (EIA) standards]. To minimize inductive interference to data signals on the telephone (data) line, the line should not be carried in the same run as cable between the data set and business machine or lines connected to teletypewriter services. If this condition cannot be met, it will be necessary to run the telephone line in type SK (shielded) station wire between the data set and the cable distribution terminal or building entrance. Ground the shield at one end only, preferably at the distribution terminal end.

**1.05** DS 208BR-L1C requires a 117 Vac 60 Hz outlet to accept the 3-prong plug on the KS-14532-L24 power cord. To prevent the data set from being turned off accidentally, the outlet should not be under control of a switch.

**1.06** The customer interface connector is a 25-pin KS-19087-L2 connector located at the rear of the data set. This connector is designed to mate with a customer-provided Cinch or Cannon DB-19604-432 plug equipped with a DB-51226-1 hood. Pin assignments for the customer interface connector are given in Table A.

**1.07** DS 208BR-L1C requires a type III DATAPHONE® loop. Verify that the loop has been installed and meets requirements specified in Section 314-205-501.

**NOTICE**

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

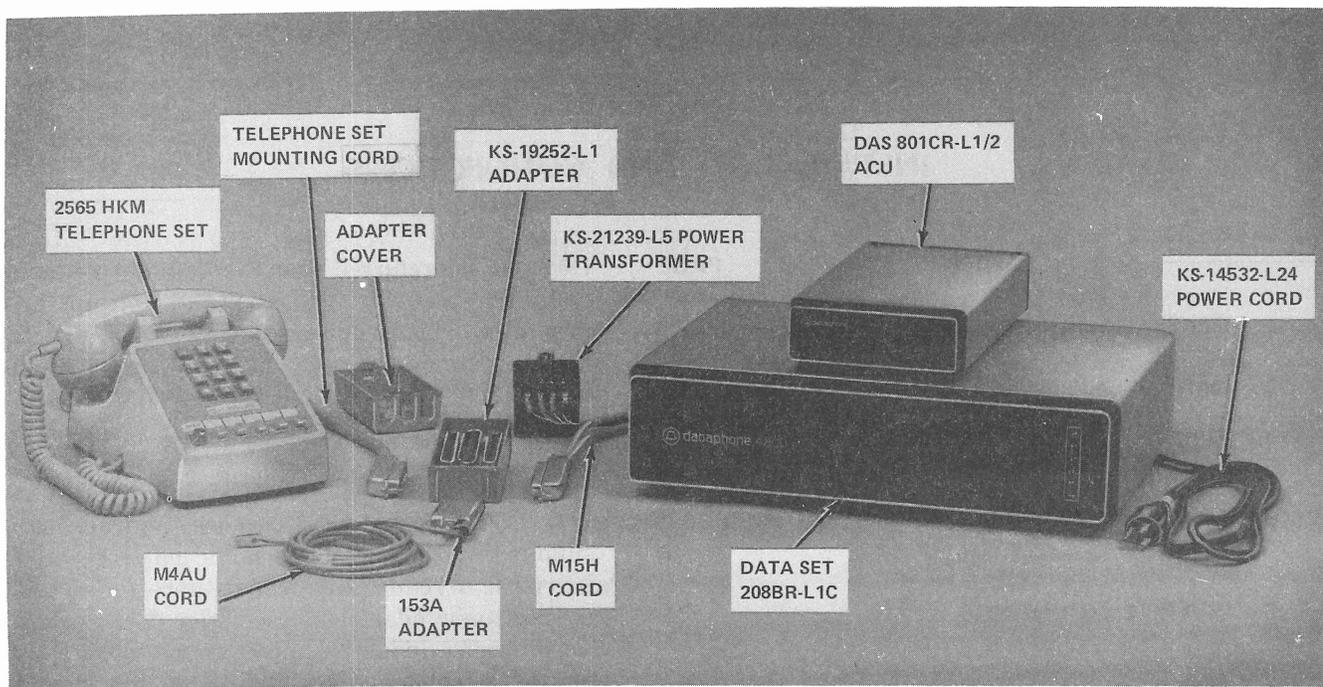


Fig. 1—Single Data Set 208BR-L1C With ACU—Station Components

1.08 The following rules apply to the registration program.

- Data sets designed for use in registered arrangements have an “R” in the data set code.
- Bell System switched network data sets not having an “R” in the data set code are “grandfathered.”
- “Grandfathered” DS 208B-type may be connected in registered arrangements provided the transmit line signal level is set to -4 dBm and the interface with the switched network is made with the proper jack and cord as shown in the connection diagrams in this section.
- DS 208BR-L1C may be connected in “grandfathered” arrangements provided the transmit line signal level is adjusted so that the level of the signal reaching the serving central office does not exceed -12 dBm.
- Connection to the telephone line in registered arrangements must be made via the proper

cord to the proper jack as shown in the connection diagrams in this section.

- In arrangements of one to five data sets, a mixture of “new-family” data sets may be used. “New-family” data sets are defined as 103JR, 113CR, 113DR, 201CR, 202SR, 208BR, and 212AR.

## 2. OPTIONS

2.01 DS 208BR-L1C is provided with a number of options which must be installed prior to placing the data set in service. To gain access to the option switch panel and to the circuit packs, remove the front cover (Fig. 2) by gently squeezing it on top and bottom and pulling forward. To replace the cover, position it properly, gently squeeze it at top and bottom, and push it into place. The options should be installed as specified on the service order or circuit layout record card (CLRC) in accordance with Fig. 3 and Tables B, and C, or the option label (form E-6696).

TABLE A  
CUSTOMER INTERFACE CONNECTOR PIN ASSIGNMENTS

PIN NO.	NOTE 1	FUNCTION	DATA SET MNEMONIC	EIA DESIGNATION (RS-232-C)
2	T	Send Data	SD	BA
3	D	Receive Data	RD	BB
4	T	Request to Send	RS	CA
5	D	Clear to Send	CS	CB
6	D	Data Set Ready	DSR	CC
7	—	Signal Ground	SG	AB
8	D	Carrier On	COD	CF
9	—	+12V	CI9 (+12V)	Reserved for Data Set Testing
10	—	-12V	CI10 (-12V)	Reserved for Data Set Testing
15	D	Serial Clock Transmitter	SCT	DB
16	D	Divided Clock Transmitter (Note 2)	DCT	SBB (Note 3)
17	D	Serial Clock Receiver	SCR	DD
18	D	Divided Clock Receiver (Note 2)	DCR	Unassigned
20	T	Data Terminal Ready	DTR	CD
22	D	Ring Indicator	RI	CE
24	T	Serial Clock Transmitter External	SCTE	DA
25	—	+5V (Note 2)	CI25 (+5V)	Unassigned

*Note 1:* T = terminator; D = driver.

*Note 2:* Functions not defined by EIA Standard RS-232-C.

*Note 3:* DS 208BR-L1C uses pin 16 for a different function than that specified by EIA Standard RS-232-C.

**2.02** The options and their functions are as follows:

- (a) **Compromise Equalizer IN:** This is a filter used to provide nominal equalization

to compensate for distortion present on the telephone channel. There are two compromise equalizer IN options. One provides a 4-dB slope (WU) and the other provides an 8-dB slope (ZS). One of these options must always be installed

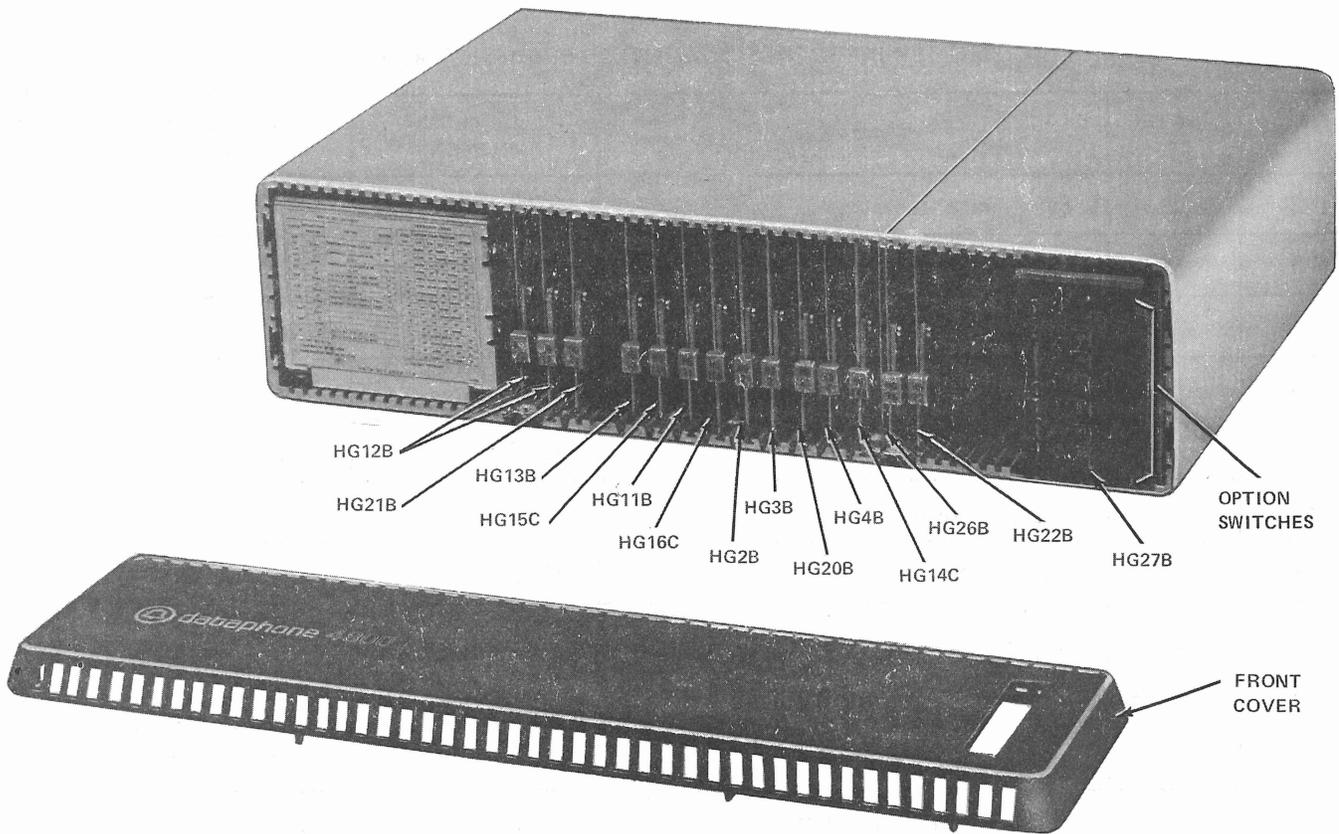


Fig. 2—Data Set 208BR-L1C—Front View With Cover Removed

except during test. The equalizer slope to be used is dependent on channel conditions and the proper option must be selected by telephone company personnel in accordance with tests described in Section 592-038-500. The 4-dB slope option is preferred for initial installation when tests cannot be made.

(b) **Compromise Equalizer OUT (Option ZT):** This option should only be installed for test purposes. It removes the compromise equalizer from the data set transmit circuit.

(c) **CC ON in AL Mode (Option YM):** This option provides an *on* indication on the CC interface lead when the data set is in AL test mode. This allows a customer to loop back signals through the data set for testing with terminal equipment.

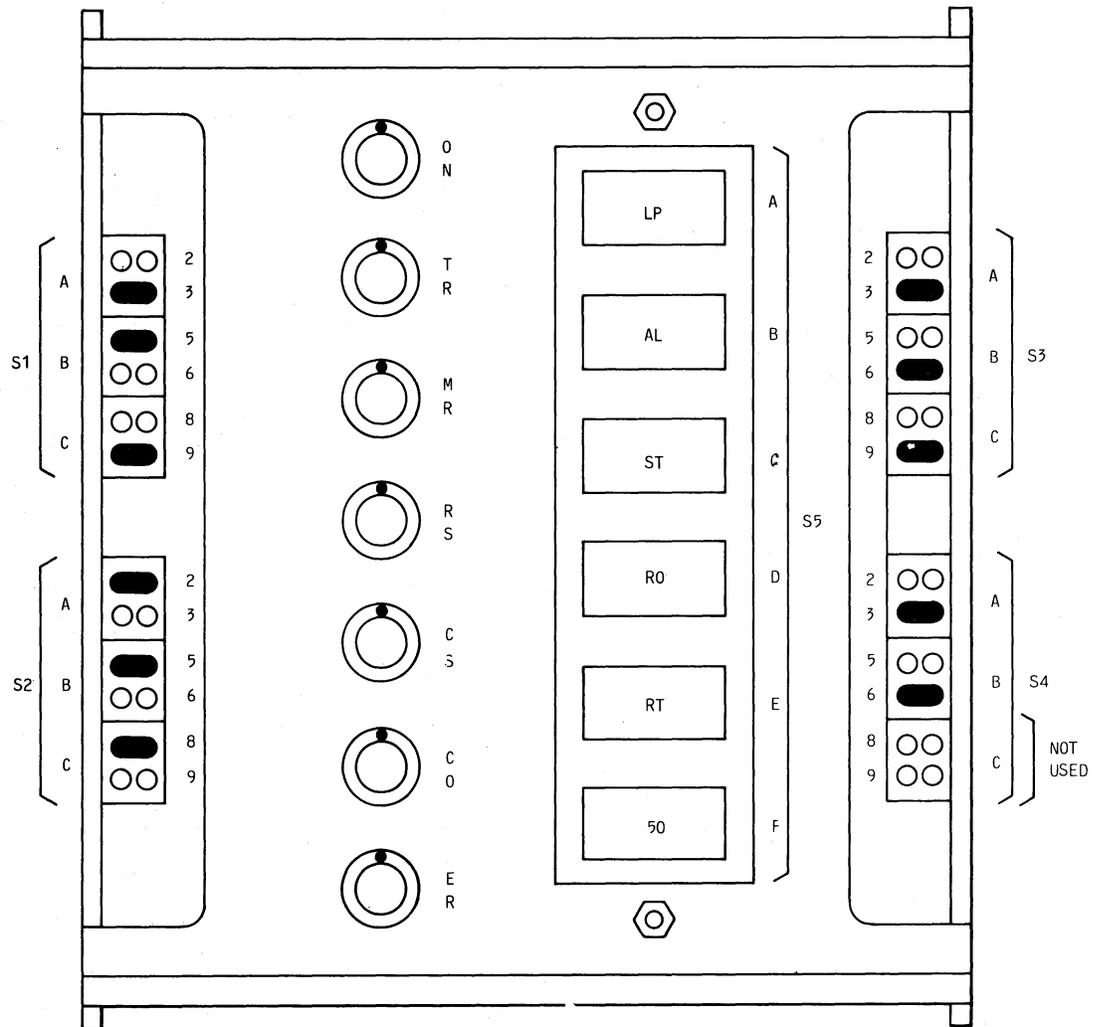
(d) **CC OFF in AL Mode (Option YN):** This option provides an *off* indication on

the CC interface lead when the data set is in AL test mode. With this option installed, loopback tests of the data set with terminal equipment may not be possible.

(e) **Manual Answer (Option YO):** With this option installed, all incoming calls *must* be answered manually.

(f) **Automatic Answer (Option YP):** This option allows the data set to answer incoming calls automatically and enter the data mode under control of the CD interface lead.

(g) **Transmitter Externally Timed (Option YD):** With this option installed, the customer *must* provide serial clock to the data set on the DA interface lead. The DB clock signal is present and is phase-locked to the signal on the DA lead.



## NOTES:

1. OPTIONS ON THE CAMBION SWITCHES OF CP HG27B ARE SELECTED BY PLACING SHORTING PLUGS ACROSS THE DESIRED PAIRS OF TERMINALS AS SHOWN. EACH SWITCH SECTION A, B AND C CONSISTS OF AN UPPER AND LOWER PAIR (EG 2 AND 3) OF TERMINALS DESIGNATED UP AND DOWN, RESPECTIVELY. SHORTING PLUGS ARE SHOWN THUSLY  IN FACTORY-INSTALLED POSITIONS. BE CAREFUL TO ALWAYS PLACE STRAPS IN HORIZONTAL POSITION TO IMPLEMENT DESIRED OPTION. (SEE OPTION LABEL).
2. LEDES ARE POLARIZED. INSTALL REPLACEMENT LEDES WITH RED DOT ADJACENT TO DOT SHOWN IN CONCENTRIC CIRCLES REPRESENTING LEDES.

Fig. 3—Data Set 208BR-L1C Option Switches

(h) **Transmitter Internally Timed (Option YC):** With this option installed, the **data set** provides serial clock to the customer on the DB interface lead.

(i) **CA-CB Interval 50 ms ("50" Button Depressed):** This option causes the CB lead to remain **off** for approximately 50 ms after

the CA lead is turned **on**. Unless otherwise specified on the service order or CLRC, this option should always be provided.

(j) **CA-CB Interval 150 ms ("50" Button Released):** This option causes the CB lead to remain **off** for approximately 150 ms after the CA lead is turned **on**. Unless specified

TABLE B

## DS 208BR-L1C OPTIONS (CP HG27)

SWITCH	OPTION STRAP POSITION	OPTION FEATURE	OPTION DESIGNATION
S2B	†	Compromise Equalizer Out	ZT
S2C	Down		
S2B	Up	Compromise Equalizer (4-dB Slope)	WU*
S2C	Up		
S2B	Down	Compromise Equalizer (8-dB Slope)	ZS
S2C	Up		
S3A	Up	DSR <i>on</i> in Analog Loop Mode	YM
	Down	DSR <i>off</i> in Analog Loop Mode	YN*
S3B	Up	Manual Answer	YO
	Down	Automatic Answer	YP*
S3C	Up	Transmitter Externally Timed	YD
	Down	Transmitter Internally Timed	YC*
S4A ‡	Up		
	Down*		
S4B ‡	Up		
	Down*		
"50"	In	RS-CS Interval of 50 ms	(Customer Switch)
	Out	RS-CS Interval of 150 ms	

\* Factory installed.

† Strap may be up or down.

‡ Down position must be selected.

on the service order or CLRC, this option is never provided.

(k) **Transmit Line Signal Level (Option ZE):** This option allows for adjustment of the data set to -4 dBm, as required for fixed loss loop (FLL) data sets (Table C).

**2.03** All of the option switches are located on CP HG27B. The request-to-send/clear-to-send (CA-CB) timer option switch is activated by depressing or releasing the locking pushbutton labeled "50". All other options are located on switches S1, S2, S3, and S4. Each switch is divided

into three sections: A, B, and C. Each switch section is individually adjusted to one of two positions, by using long nose pliers to position the straps to the up or down position.

**Caution: Always place straps horizontally, eg, 3 to 3.**

**2.04** Switch sections are referred to by adding the letter designation (either A, B, or C) to the switch number. Thus, S2B refers to switch S2, section B.

TABLE C

## TRANSMIT LEVEL (TELCO) OPTIONS FOR DS 208BR-L1C

TRANSMIT LEVEL (dBm)	OPTION DESIGNATION	SWITCH			
		S1A	S1B	S1C	S2A
-4*	ZE	DOWN	UP	DOWN	UP
-5	ZF	DOWN	UP	DOWN	DOWN
-6	ZG	DOWN	UP	UP	UP
-7	ZH	DOWN	UP	UP	DOWN
-8	ZI	DOWN	DOWN	DOWN	UP
-9	ZJ	DOWN	DOWN	DOWN	DOWN
-10	ZK	DOWN	DOWN	UP	UP
-11	ZL	DOWN	DOWN	UP	DOWN
-12	ZM	UP	UP	DOWN	UP
-13	ZN	UP	UP	DOWN	DOWN
-14	ZO	UP	UP	UP	UP
-15	ZP	UP	UP	UP	DOWN

\* Use option ZE for all data sets in registered installations. For "grandfathered" installations, select the appropriate level so that the signal reaching the serving central office does not exceed -12 dBm.

**2.05** If it becomes necessary to remove CP HG27B, first remove the locking bar. Remove the CP by grasping the black plastic block and gently pulling forward. To replace the CP, align it in the proper slot and push gently into place. Replace locking bar.

**2.06** The data set is supplied from the factory with a strap at the power supply terminal strip to connect frame ground to signal ground (Fig. 4). This strap can be disconnected if the customer specifies a different grounding arrangement. This should be determined at installation. To disconnect the strap, loosen the screws, pull back

on the strap until the connection is broken, then tighten the strap under the frame ground screw.

### 3. INSTALLATION

**3.01** Install the DS 208BR-L1C as follows:

- (1) Unpack data set and remove protective covering.
- (2) Install options as specified on service order or CLRC in accordance with Fig. 3 and Tables B and C.

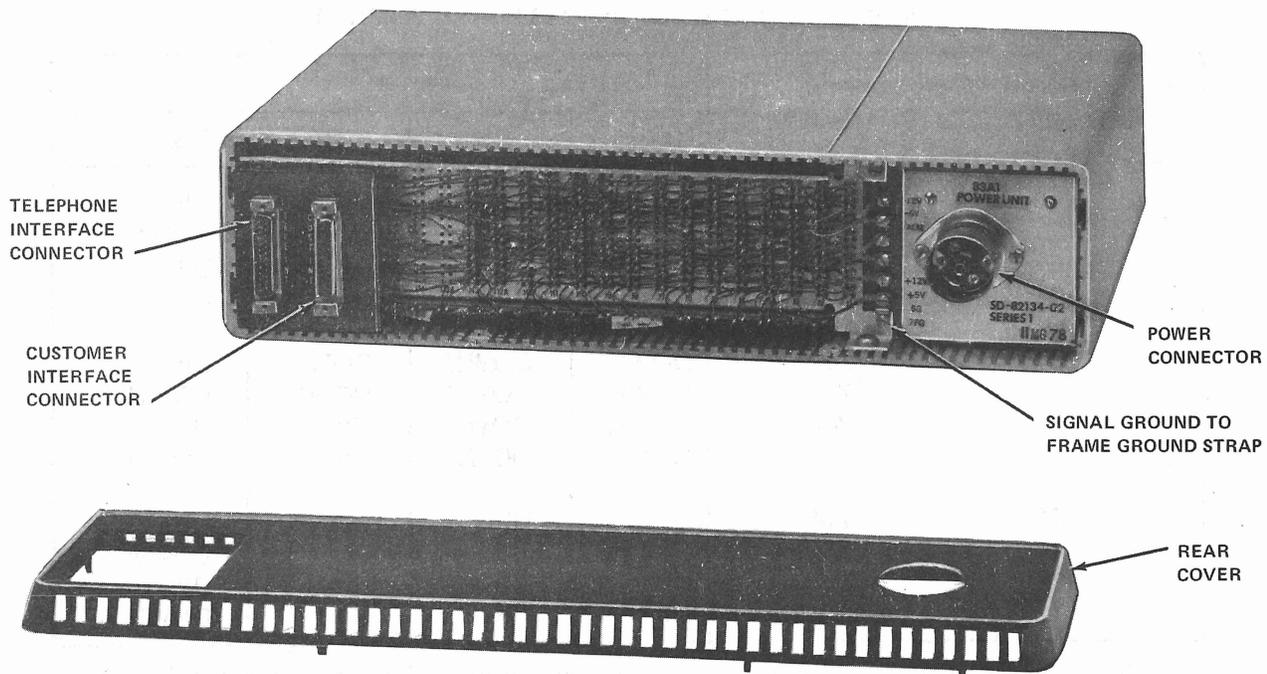


Fig. 4—Data Set 208BR-L1C—Rear View With Cover Removed

(3) If data auxiliary set 801CR-L1/2 (ACU) is required, install options as specified on service order or CLRC in accordance with Table D.

(4) Make all connections to data set and auxiliary apparatus as shown on appropriate connection diagrams.

(5) Perform installation tests as described in Section 592-038-500.

#### 4. CONNECTIONS AND COMPONENTS REQUIRED

**4.01** Station arrangements in paragraphs 4.02 through 4.11 comply with the FCC registration program. A connection diagram (Fig. 5 through 14) and a list of components required are provided for each arrangement. It is recommended that in each case the power connection(s) be made last. Figures 15 through 19 are provided to aid troubleshooting of the arrangements.

**4.02 Single Data Set:** The connection diagram for this arrangement is Fig. 5.

The following components are required:

- Data set 208BR-L1C
- KS-14532-L24 cord—supplied with data set
- M13F cord—supplied with data set
- M4AU cord—supplied with data set

**Note:** A 7-foot cord is supplied. If needed, a longer cord (25 feet maximum) may be used.

- B25A cable (as needed up to length shown in connection diagram)
- 153A adapter

TABLE D

## DATA AUXILIARY SET 801CR-L1/2 (ACU) OPTIONS

OPTION		SWITCH SETTINGS ON CP1	
DESCRIPTION	DESIG	CLOSED	OPEN
Ground Start	V*	S1-2, S2-1	S2-4, S4-1
Loop Start	Y	S2-4, S4-1	S1-2, S2-1
Detect End of Answer Tone	W	S3-3	—
Detect Beginning of Answer Tone	X	—	S3-3
Detect 2025-Hz Answer Tone	S	S2-3	S2-2
Detect 2225-Hz Answer Tone	T	S2-2	S2-3
Data Set to Data Mode by Contact to DT	Q	S1-3	S1-1
Data Set to Data Mode by Grounded Contact	ZG	S1-1	S1-3
Clear Signal to Data Set	ZP	S1-4	—
No Clear Signal; No TK Contact	ZN	—	S1-4
Terminate Call Via Data Set After DDS <i>on</i>	G	S4-2	—
Terminate Call Via ACU After DSS <i>on</i>	Z	—	S4-2
Stop ACR Timer When DSS Goes <i>on</i>	R	S3-1, S3-2	—
Do Not Stop ACR Timer When DSS Goes <i>on</i>	H	—	S3-1, S3-2
ACR Timing Interval 7 Sec	ZQ	S3-5	S3-4
ACR Timing Interval 14 Sec	ZR	S3-4, S3-5	—
ACR Timing Interval 28 Sec	ZS	—	S3-4, S3-5
ACR Timing Interval 56 Sec	ZT	S3-4	S3-5
Signal Grd Connected to Frame Grd	ZU	Close Screw Switch on 52A2 Data Mounting.	
Signal Grd Not Connected to Frame Grd	ZV	Open Screw Switch on 52A2 Data Mounting.	

\* Also install option ZU.

#### 4.03 Single Data Set With Telephone Set:

The connection diagram for this arrangement is Fig. 6.

The following components are required:

- Data set 208BR-L1C
- KS-14532-L24 cord—supplied with data set
- M13F cord—supplied with data set
- M4AU cord—supplied with data set

**Note:** A 7-foot cord is supplied. If needed, a longer cord (25 feet maximum) may be used.

- B25A cable (as needed up to length shown in connection diagram)
- 565HKM or 2565HKM telephone set

#### 4.04 Single Data Set With Telephone Set (Alternate Method):

The connection diagram for this arrangement is Fig. 7.

The following components are required:

- Data set 208BR-L1C

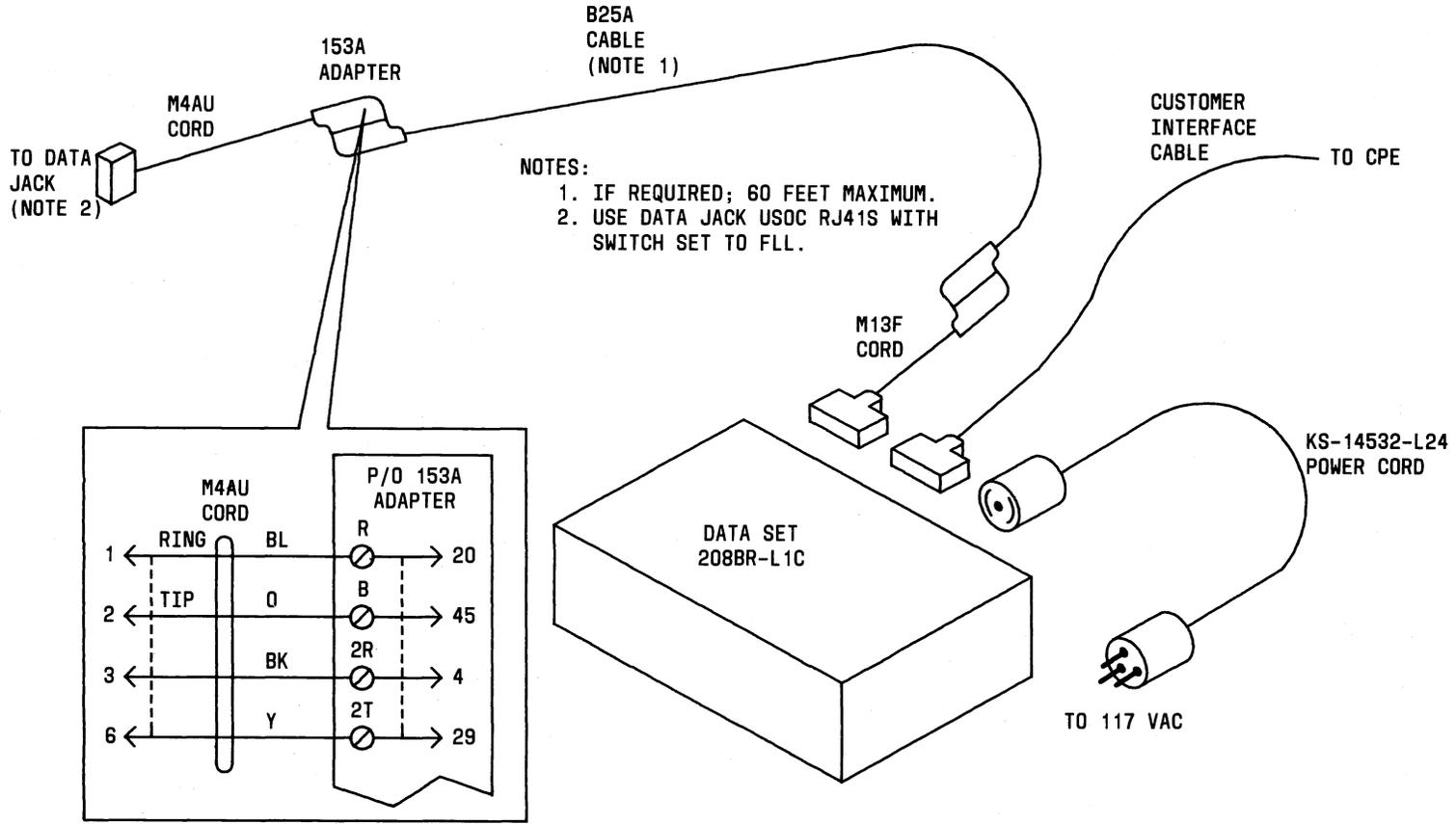


Fig. 5—Single Data Set Connection Diagram

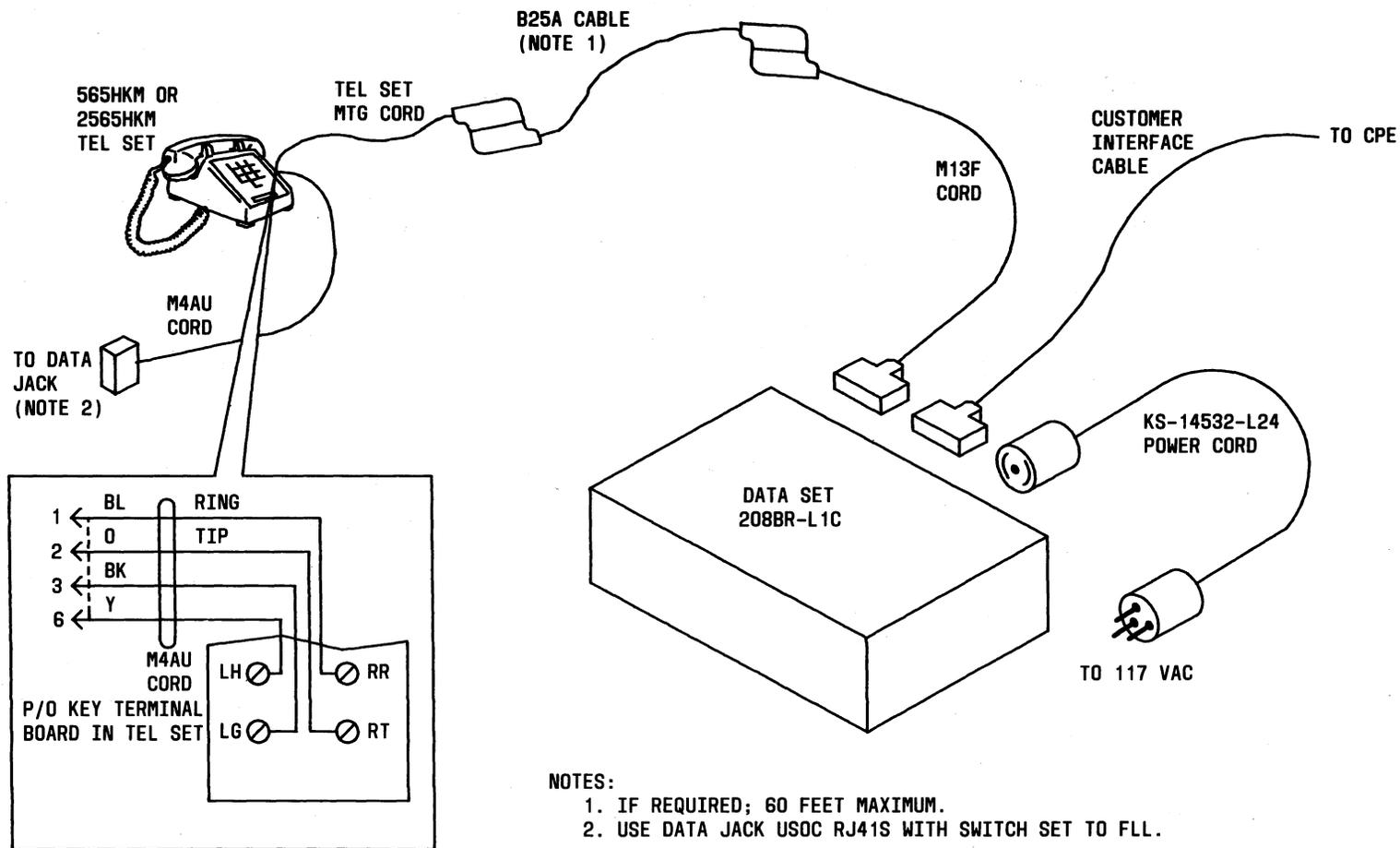


Fig. 6—Single Data Set With Telephone Set—Connection Diagram

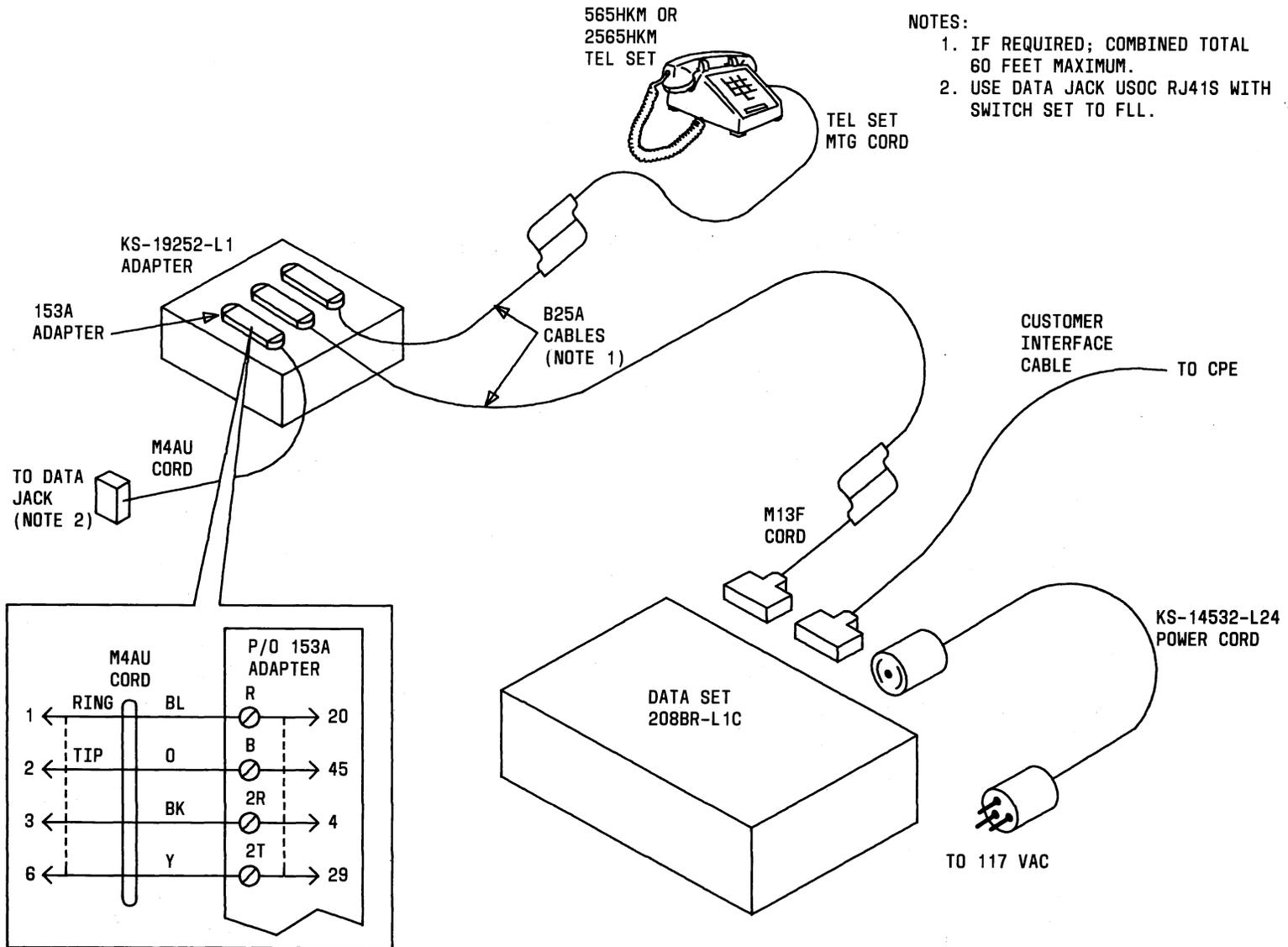


Fig. 7—Single Data Set With Telephone Set (Alternate Method)—Connection Diagram

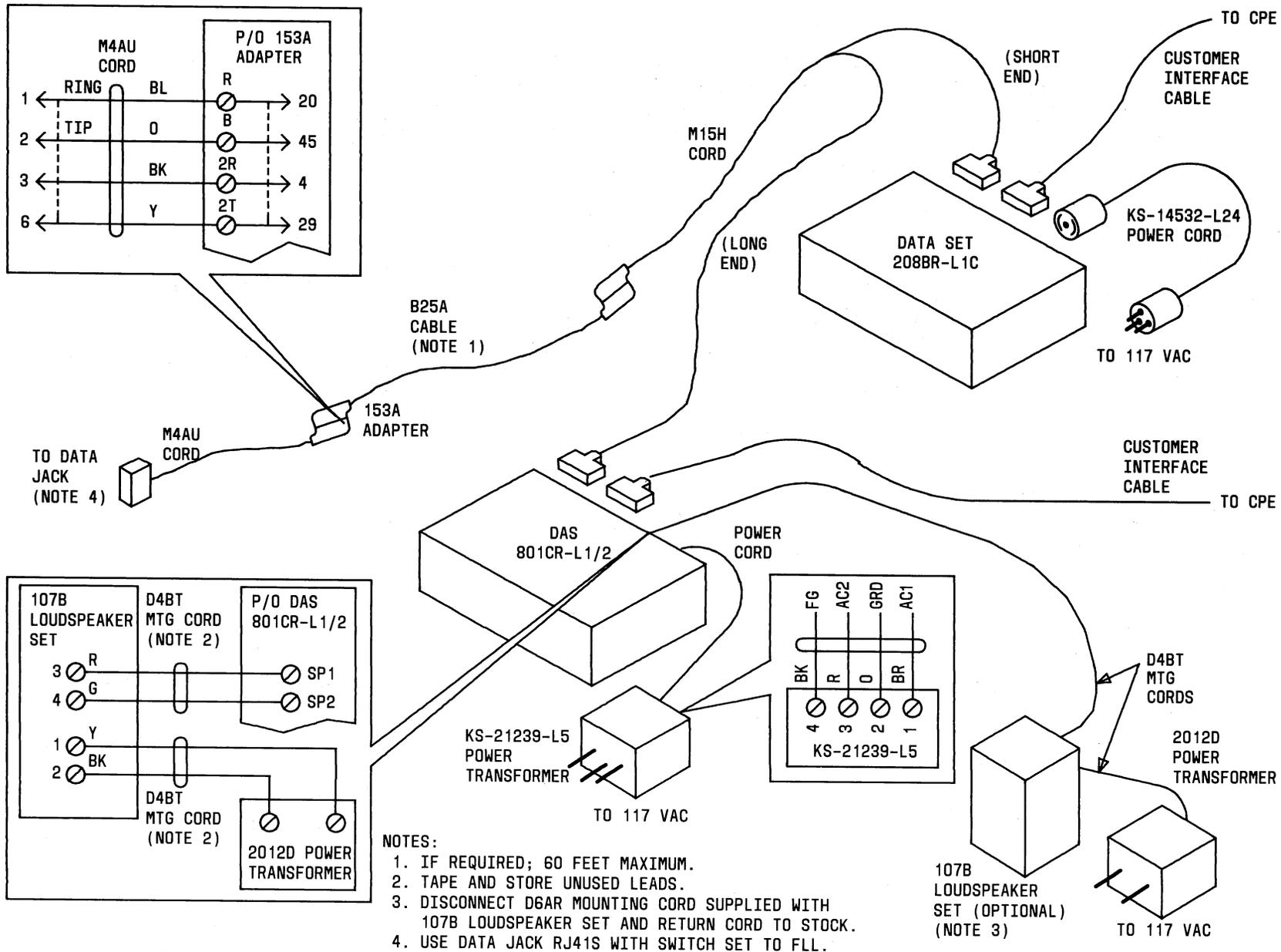


Fig. 8—Single Data Set With ACU—Connection Diagram

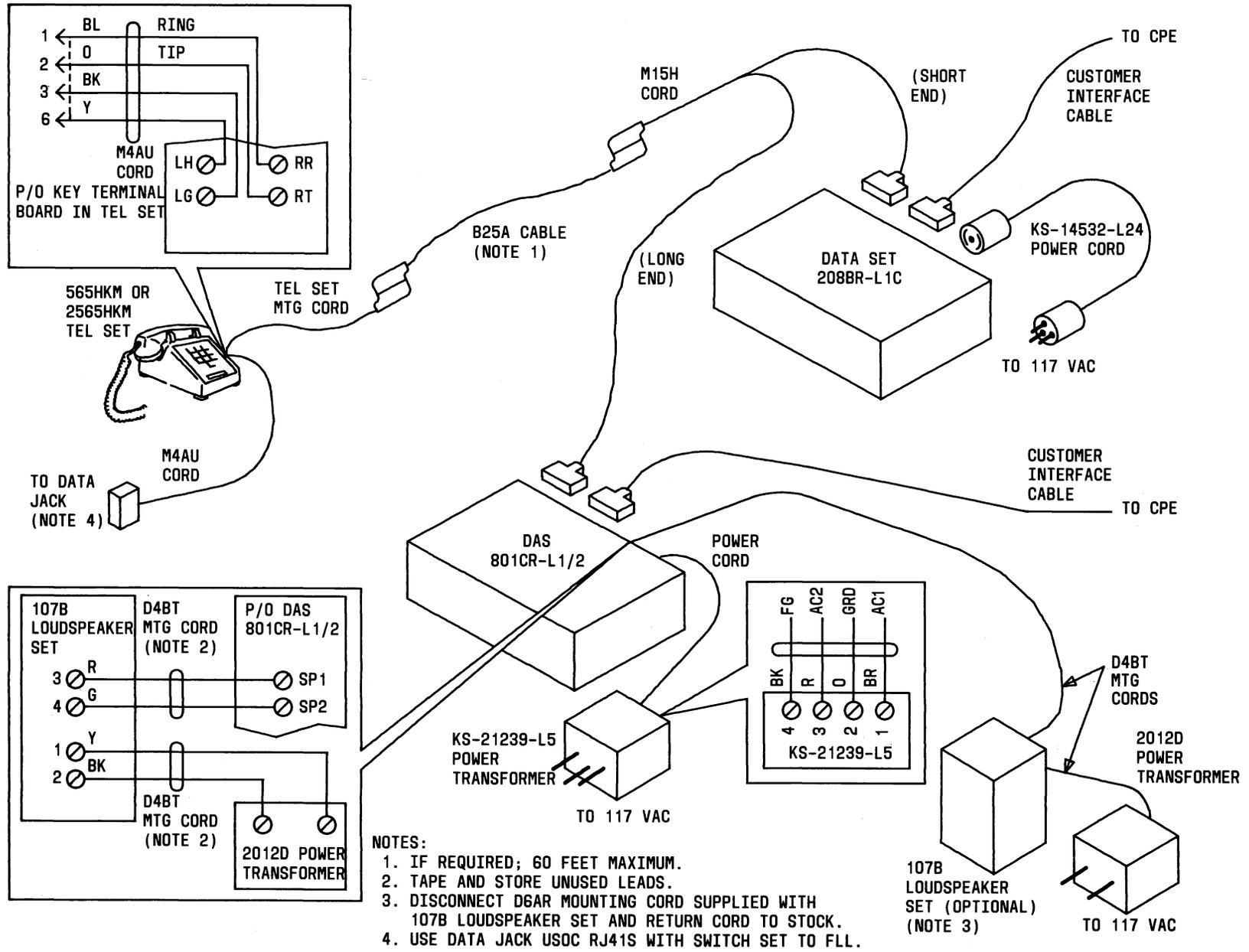


Fig. 9—Single Data Set With ACU and Telephone Set—Connection Diagram

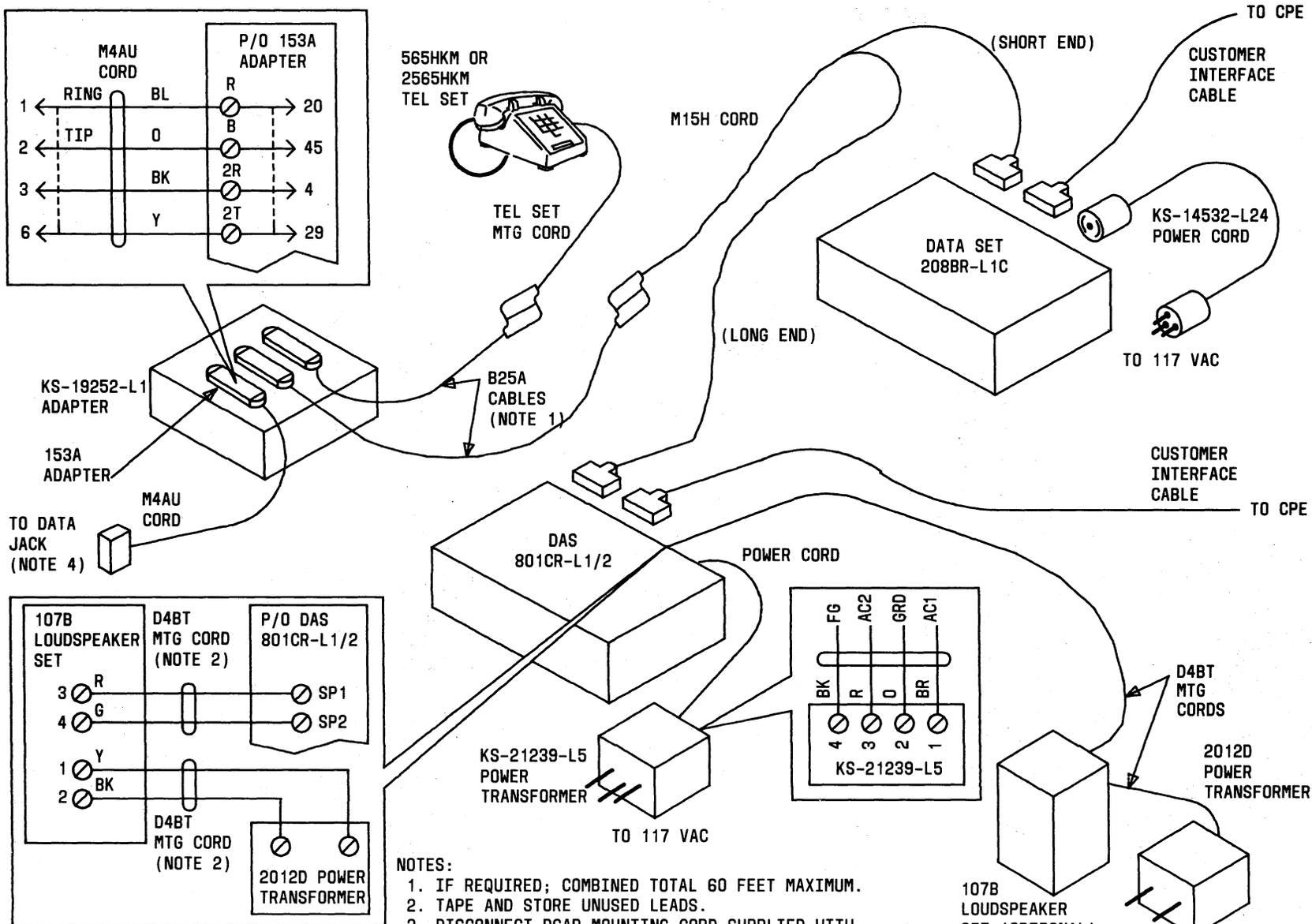


Fig. 10—Single Data Set With ACU and Telephone Set (Alternate Method)—Connection Diagram

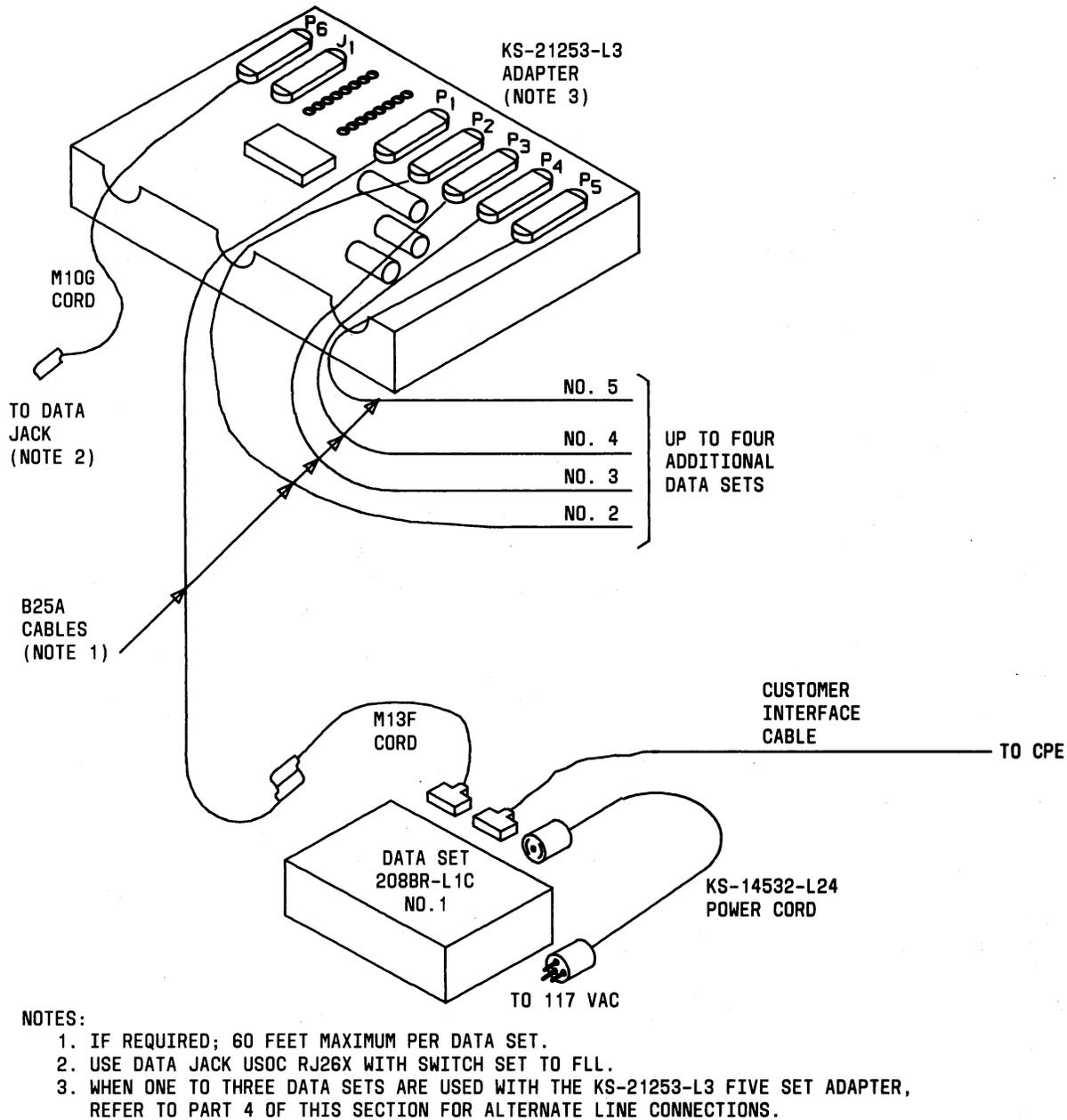


Fig. 11—One to Five Data Sets—Connection Diagram

- KS-14532-L24 cord—supplied with data set
  - M13F cord—supplied with data set
  - M4AU cord—supplied with data set
  - 565HKM or 2565HKM telephone set
  - 153A adapter
  - KS-19252-L1 adapter
- Note:** A 7-foot cord is supplied. If needed, a longer cord (25 feet maximum) may be used.
- B25A cables (as needed up to length shown in connection diagram)

4.05 **Single Data Set With ACU:** The connection diagram for this arrangement is Fig. 8.

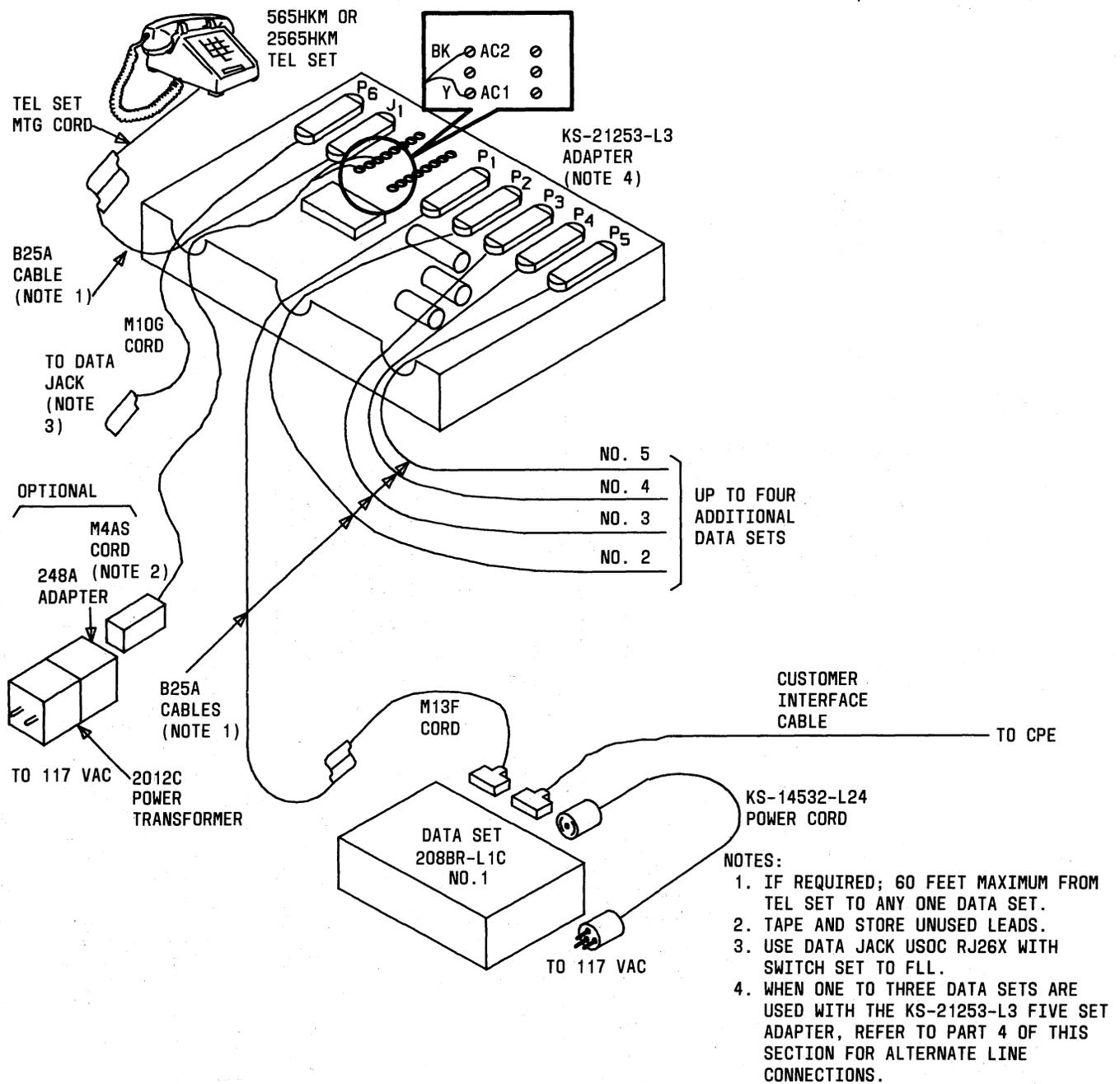


Fig. 12—One to Five Data Sets With Shared Telephone Set—Connection Diagram

The following components are required:

- Data set 208BR-L1C
- KS-14532-L24 cord—supplied with data set
- M13F cord—supplied with data set (not used; return to stock)
- M4AU cord—supplied with data set

**Note:** A 7-foot cord is supplied. If needed, a longer cord (25 feet maximum) may be used.

- B25A cable (as needed up to length shown in connection diagram)
- 153A adapter
- DAS 801CR-L1/2 ACU
- M15H cord—supplied with ACU

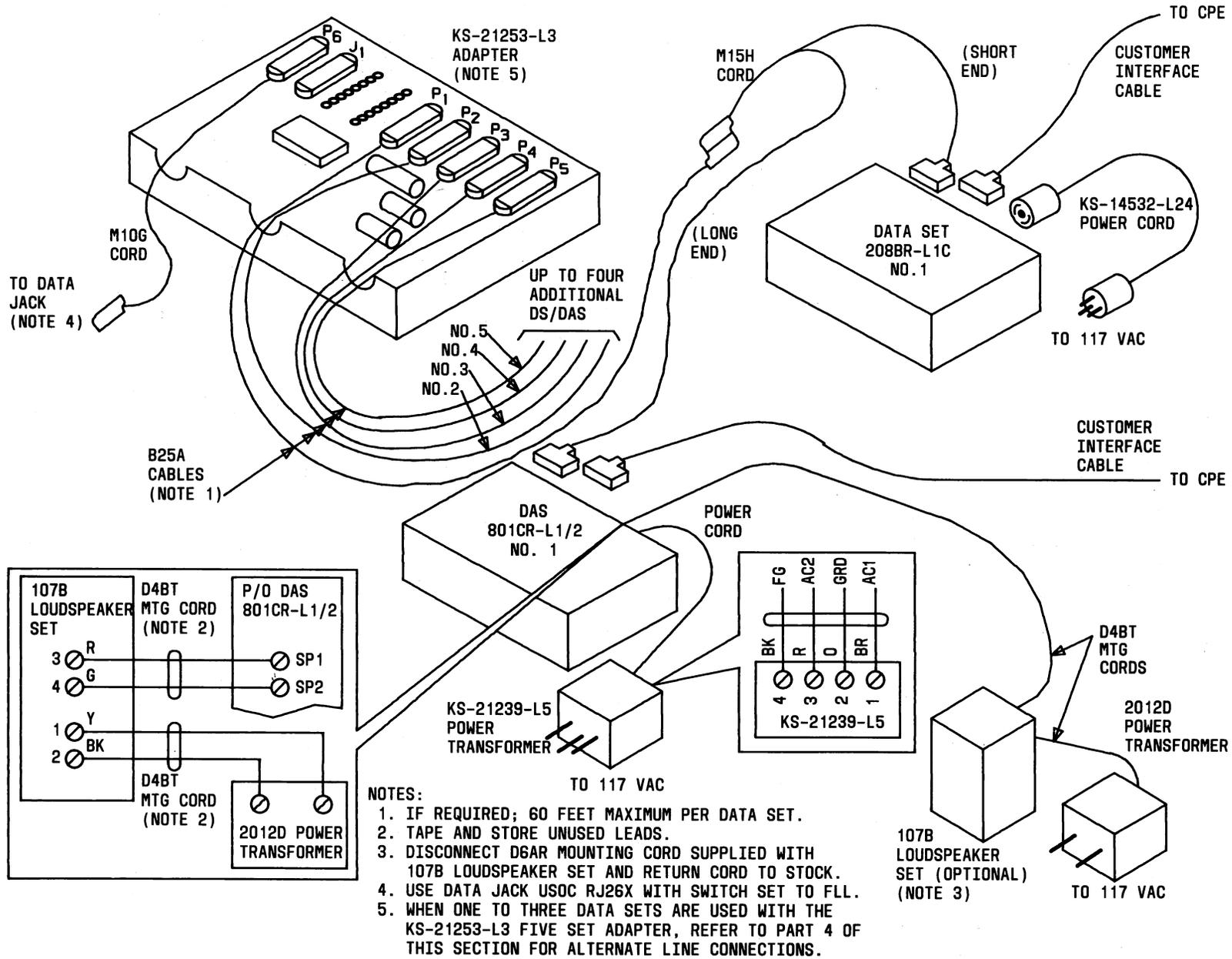


Fig. 13—One to Five Data Sets With ACUs—Connection Diagram



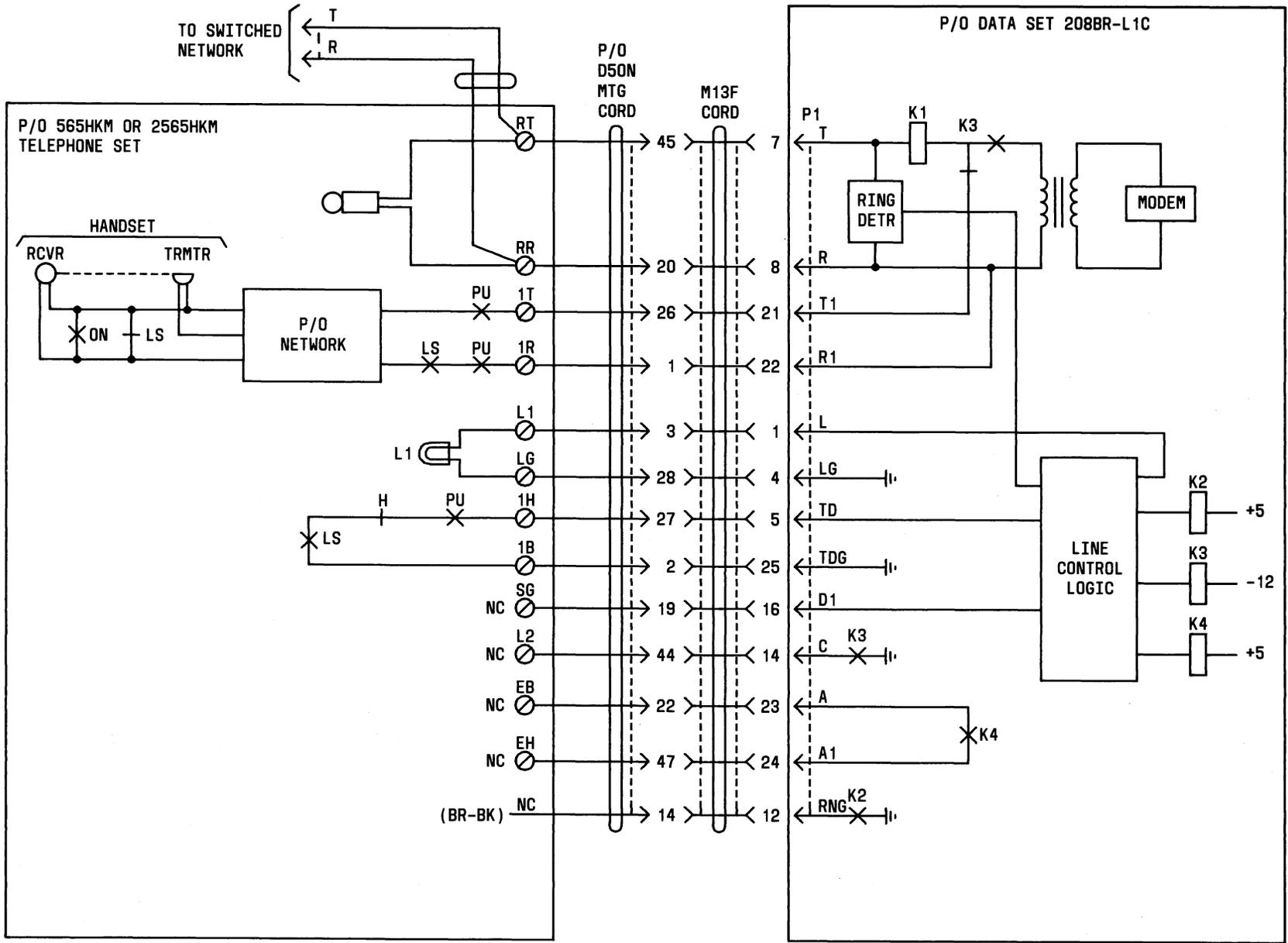


Fig. 15—Data Set 208BR-L1C With Telephone Set—Interface Diagram

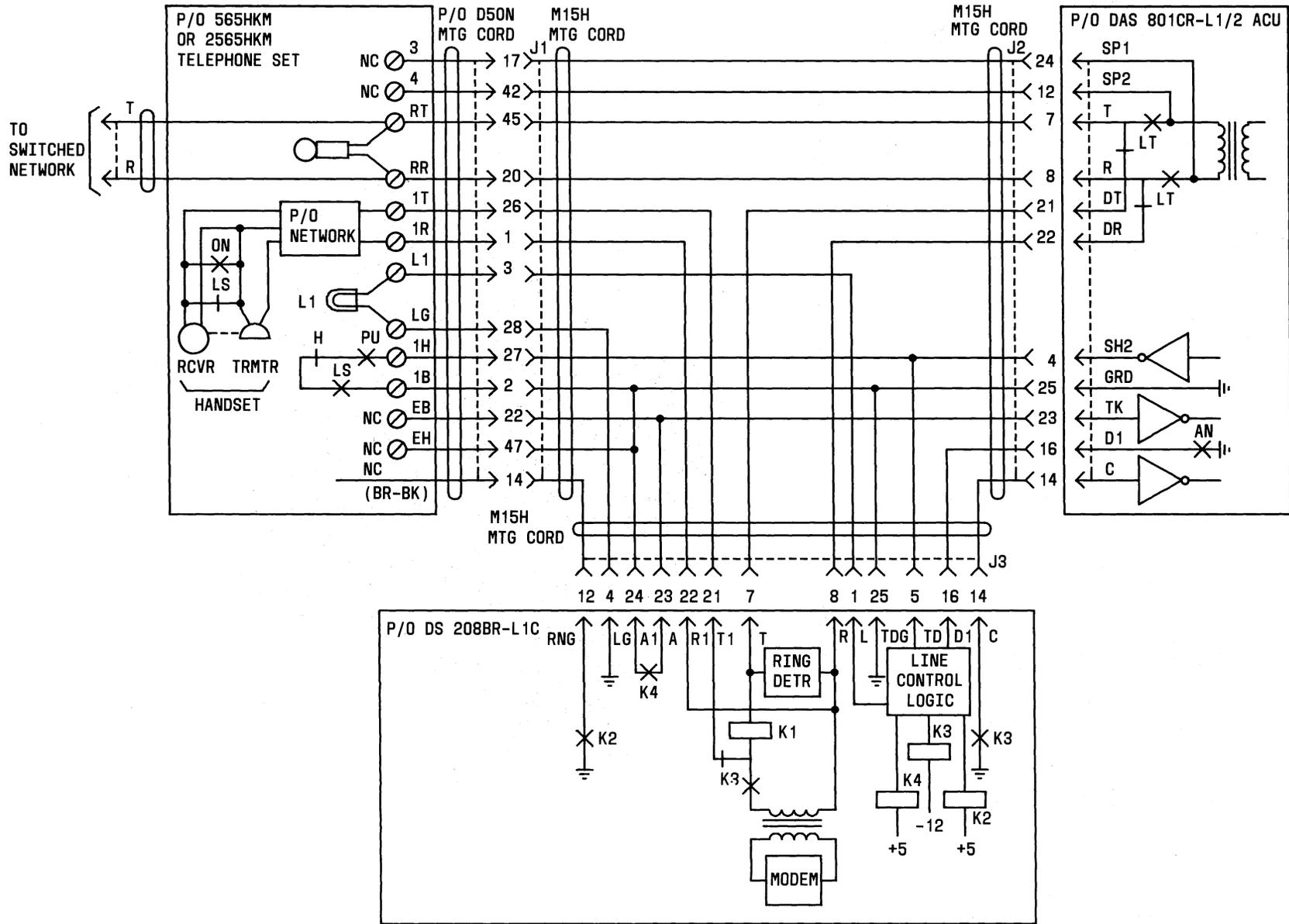


Fig. 16—Data Set 208BR-L1C, Telephone Set, and ACU—Interface Diagram

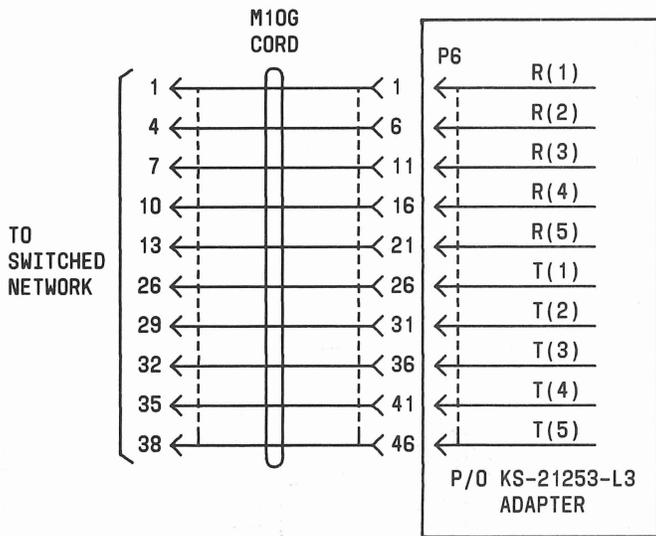


Fig. 17—M10G Cord Connections

- 107B loudspeaker set—optional
- D4BT cord (2)—optional
- 2012D transformer—optional

**4.06 Single Data Set With ACU and Telephone Set:** The connection diagram for this arrangement is Fig. 9.

The following components are required:

- Data set 208BR-L1C
- KS-14532-L24 cord—supplied with data set
- M13F cord—supplied with data set (not used; return to stock)
- M4AU cord—supplied with data set

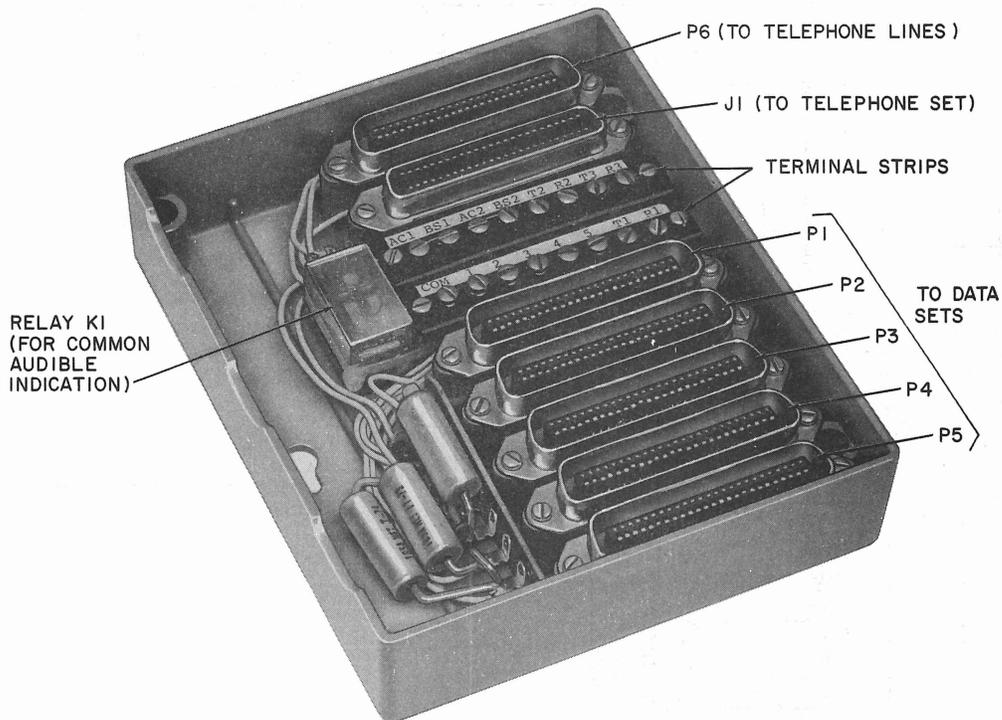


Fig. 18—KS-21253-L3 Adapter With Cover Removed

**Note:** A 7-foot cord is supplied. If needed, a longer cord (25 feet maximum) may be used.

- B25A cable (as needed up to length shown in connection diagram)
- 565HKM or 2565HKM telephone set
- DAS 801CR-L1/2 ACU
- M15H cord—supplied with ACU
- 107B loudspeaker set—optional
- D4BT cord (2)—optional
- 2012D transformer—optional

**4.07 Single Data Set With ACU and Telephone Set (Alternate Method):**

The connection diagram for this arrangement is Fig. 10.

The following components are required:

- Data set 208BR-L1C
- KS-14532-L24 cord—supplied with data set
- M13F cord—supplied with data set (not used; return to stock)
- M4AU cord—supplied with data set

**Note:** A 7-foot cord is supplied. If needed, a longer cord (25 feet maximum) may be used.

- B25A cables (as needed up to length shown in connection diagram)
- 565HKM or 2565HKM telephone set
- 153A adapter
- KS-19252-L1 adapter
- DAS 801CR-L1/2 ACU
- M15H cord—supplied with ACU
- 107B loudspeaker set—optional
- D4BT cord (2)—optional

- 2012D transformer—optional

**4.08 One to Five Data Sets:** The connection diagram for this arrangement is Fig. 11.

The following components are required:

- Data set 208BR-L1C (1 to 5)
- KS-14532-L24 cord—supplied with each data set
- M13F cord—supplied with each data set
- M4AU cord—supplied with each data set (not used; return to stock)
- M10G cord (1)
- B25A cables (as needed up to length shown in connection diagram)
- KS-21253-L3 adapter (1)

**4.09 One to Five Data Sets With Shared Telephone Set:** The connection diagram for this arrangement is Fig. 12.

The following components are required:

- Data set 208BR-L1C (1 to 5)
- KS-14532-L24 cord—supplied with each data set
- M13F cord—supplied with each data set
- M4AU cord—supplied with each data set (not used; return to stock)
- M10G cord (1)
- B25A cables (as needed up to length shown in connection diagram)
- KS-21253-L3 adapter (1)
- 565HKM or 2565HKM telephone set (1)
- M4AS cord (1)—optional (used for common ringer)
- 248A adapter (1)—optional (used for common ringer)

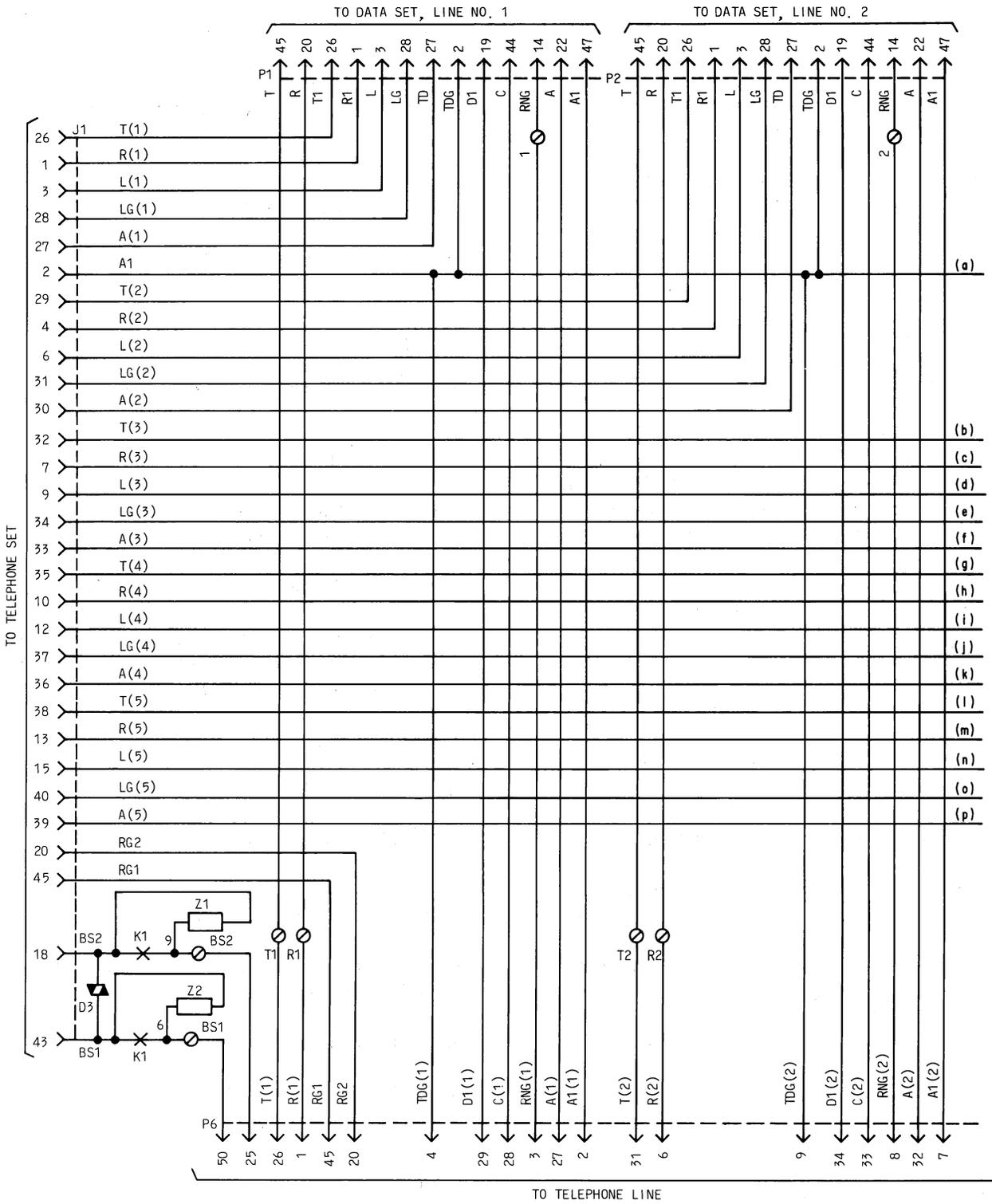


Fig. 19—KS-21253-L3 Adapter—Wiring Diagram (Sheet 1 of 2)

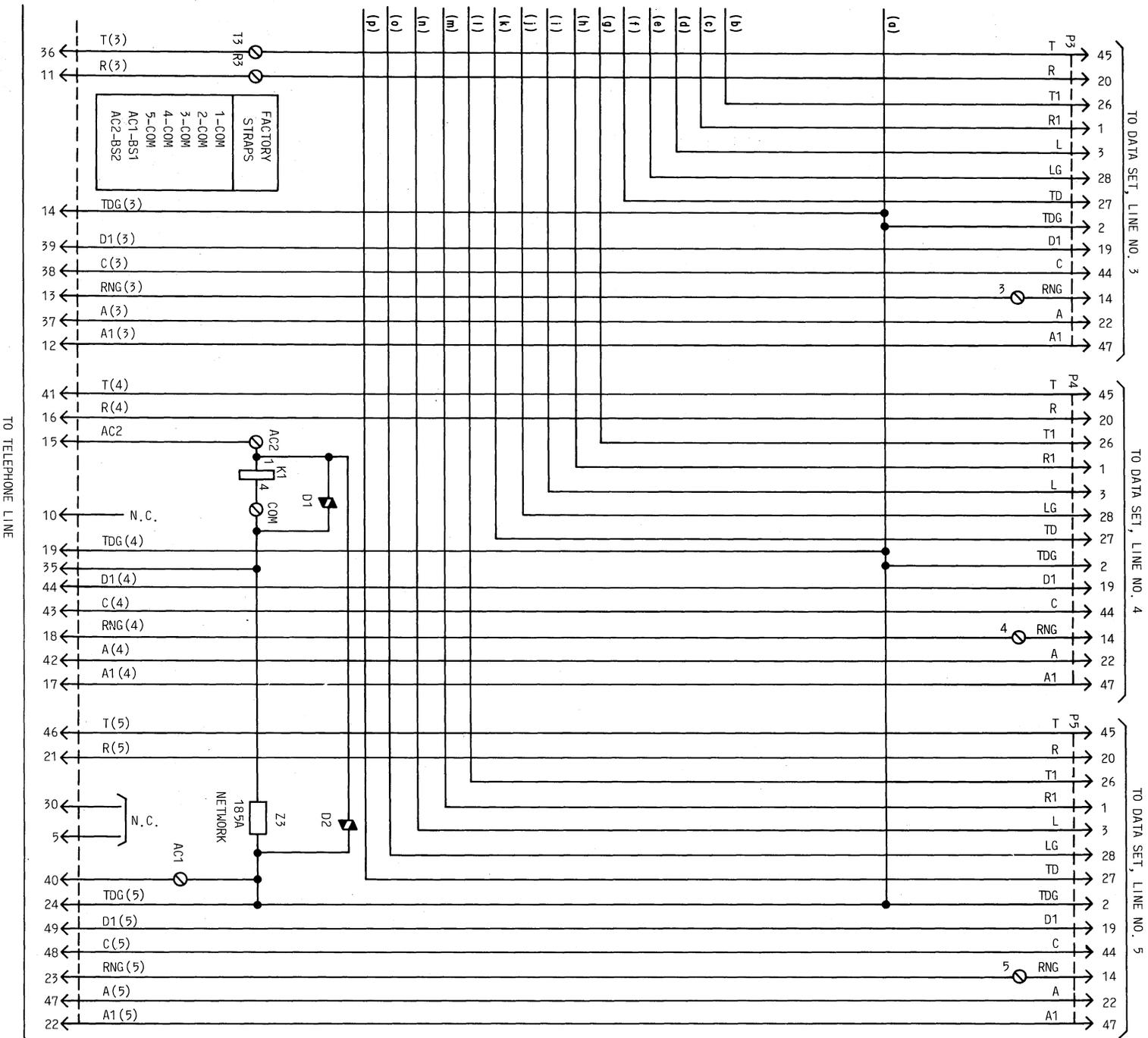


Fig. 19—KS-21253-L3 Adapter—Wiring Diagram (Sheet 2 of 2)

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- 2012C transformer (1)—optional (used for common ringer)

### 4.10 *One to Five Data Sets With ACUs:*

The connection diagram for this arrangement is Fig. 13.

The following components are required:

- Data set 208BR-L1C (1 to 5)
- KS-14532-L24 cord—supplied with each data set
- M13F cord—supplied with each data set (not used; return to stock)
- M4AU cord—supplied with each data set (not used; return to stock)
- M10G cord (1)
- B25A cables (as needed up to length shown in connection diagram)
- KS-21253-L3 adapter (1)
- DAS 801CR-L1/2 ACU (1 per data set requiring an ACU)
- M15H cord—supplied with each ACU
- 107B loudspeaker set (1 per ACU)—optional
- D4BT cord (2 per ACU)—optional
- 2012D transformer (1 per ACU)—optional

### 4.11 *One to Five Data Sets With ACUs and Shared Telephone Set:*

The connection diagram for this arrangement is Fig. 14.

The following components are required:

- Data set 208BR-L1C (1 to 5)
- KS-14532-L24 cord—supplied with each data set
- M13F cord—supplied with each data set (not used; return to stock)

- M4AU cord—supplied with each data set (not used; return to stock)

- M10G cord (1)

- B25A cables (as needed up to length shown in connection diagram)

- KS-21253-L3 adapter (1)

- 565HKM or 2565HKM telephone set (1)

- M4AS cord (1)—optional (used for common ringer)

- 248A adapter (1)—optional (used for common ringer)

- 2012C transformer (1)—optional (used for common ringer)

- DAS 801CR-L1/2 ACU (1 per data set requiring an ACU)

- M15H cord—supplied with each ACU

- 107B loudspeaker set (1 per ACU)—optional

- D4BT cord (2 per ACU)—optional

- 2012D transformer (1 per ACU)—optional

**4.12 *Multiple Power Outlets:*** To eliminate the need for several 110 Vac outlets, the individual KS-21239-L5, 2012C, and 2012D transformers can be plugged into a multiple power outlet strip. A 602-15 Waber Electric power outlet strip accommodates three transformers. A 1A2 power panel accommodates eight transformers. If there is interference, the spade lugs must be bent upward. A KS-14532-L20 or equivalent cord is required with the 1A2 power panel.

### 4.13 *KS-21253-L3 Five Set Adapter—Alternate Line Connections:*

When one to three data sets are used with the KS-21253-L3 five set adapter, the following line connections may be used in place of the M10-type cord. Connect the appropriate M4A-type cord to one of the terminal pairs T1-R1, T2-R2, or T3-R3 of the adapter, as described below.

**Connections for 100-Type Data Sets**

Connect the green and red leads of an M4AS cord to the T and R terminals, respectively, of one terminal pair. Plug the cord into a voice jack USOC RJ11C, a data jack USOC RJ41S, with the switch set to the PROG position, or a data jack USOC RJ45S. Tape and store the unused leads of the cord.

**Connections for 200-Type Data Sets**

Connect the orange and blue leads of an M4AU cord to the T and R terminals, respectively, of one terminal pair. Plug the cord into a data jack USOC RJ41S, with the switch set to the FLL position. Tape and store the unused leads of the cord.

**5. MULTIPLE MOUNTINGS**

**5.01** There are three ways in which DS 208BR-L1C can be installed for multiple arrangements. They are:

- (a) Up to three data sets can be stacked on top of each other.

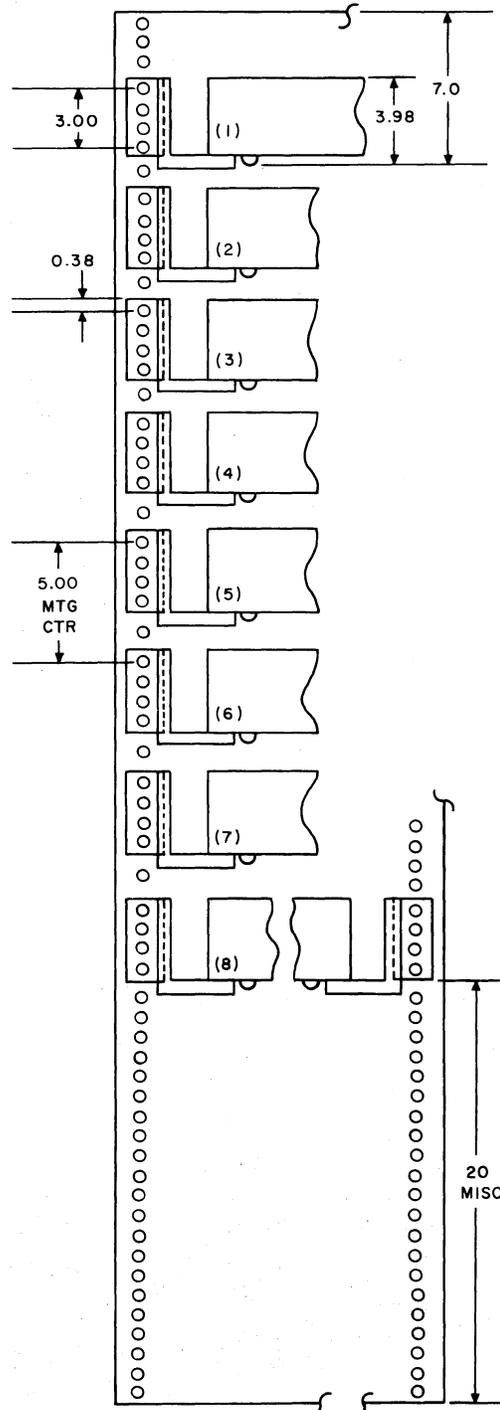
- (b) By use of the D-180467 mounting bracket, they can be mounted (including complete housing) on a 19- or 23-inch rack mounting (Fig. 20).

- (c) By use of the D-180467 or D-180556 mounting brackets, they can be mounted (including complete housing) in a KS-20018-L15 or -L17 cabinet.

**5.02** KS-20018-L15 and -L17 cabinets will accommodate up to 12 DSs 208BR-L1C. However, because of temperature limitations, no more than eight DSs 208BR-L1C shall be mounted in one KS-20018-L15 or -L17 cabinet. Figure 21 gives a typical arrangement for DS 208BR-L1C mounted in a KS-20018-L15 or -L17 cabinet. For KS-20018-L15 and -L17 cabinet installation procedures, refer to the section entitled Data Sets—Multiple Installation Information (590-010-201).



**Fig. 20—Data Set 208BR-L1C With D-180467 Mounting Brackets Installed—Front View**



NOTE: DIMENSIONS SHOWN IN INCHES

Fig. 21—Eight Data Sets 208BR-L1C Mounted in KS-20018-L15 or -L17 Cabinet