

DATA SETS—REGISTERED ARRANGEMENTS FOR DATA SETS IN 40A3 DATA MOUNTINGS

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1. GENERAL

1.01 This section contains installation and connection procedures to be followed when installing registered data sets or automatic calling units (ACUs) in a 40A3 data mounting (Fig. 1).

1.02 Whenever this section is reissued, the reason for reissue will be contained in this paragraph.

1.03 The 40A3 data mounting (Fig. 1) consists of a metal framework and a power unit. The mounting measures approximately 7 inches high, 13 inches deep, and either 19 or 23 inches wide (including mounting brackets). The mounting weighs approximately 21 pounds without data sets. The 40A3 data mounting has the designation DATAPHONE® 300/1200 on the front. Also on the front are 16 switches for make-busy and service line features.

1.04 The 40A3 data mounting accomodates up to eight data sets (DSs) of the following codes (as these registered codes become available): 103JR, 113CR, 113DR, 202SR, and 212AR. The mounting will also accomodate up to eight data auxiliary sets (DASs) 801CR ACUs.

1.05 The information in this section covers installation and connections for the following station arrangements:

(a) **Up to Eight Data Sets Without ACUs:** These arrangements are for a maximum of eight data sets in a single 40A3 data mounting. An 830CM or 2830CM telephone set is used with these arrangements when required.

(b) **Up to Four Data Sets Each Equipped with ACUs:** These arrangements are for a maximum of four data sets and four associated ACUs in a single 40A3 data mounting. A 565HKM, 2565HKM, or 2662A1M telephone set is used with these arrangements when required.

(c) **Up to Eight Data Sets Each Equipped with ACUs:** These arrangements are for a maximum of eight data sets in one 40A3 data mounting and a maximum of eight ACUs in a

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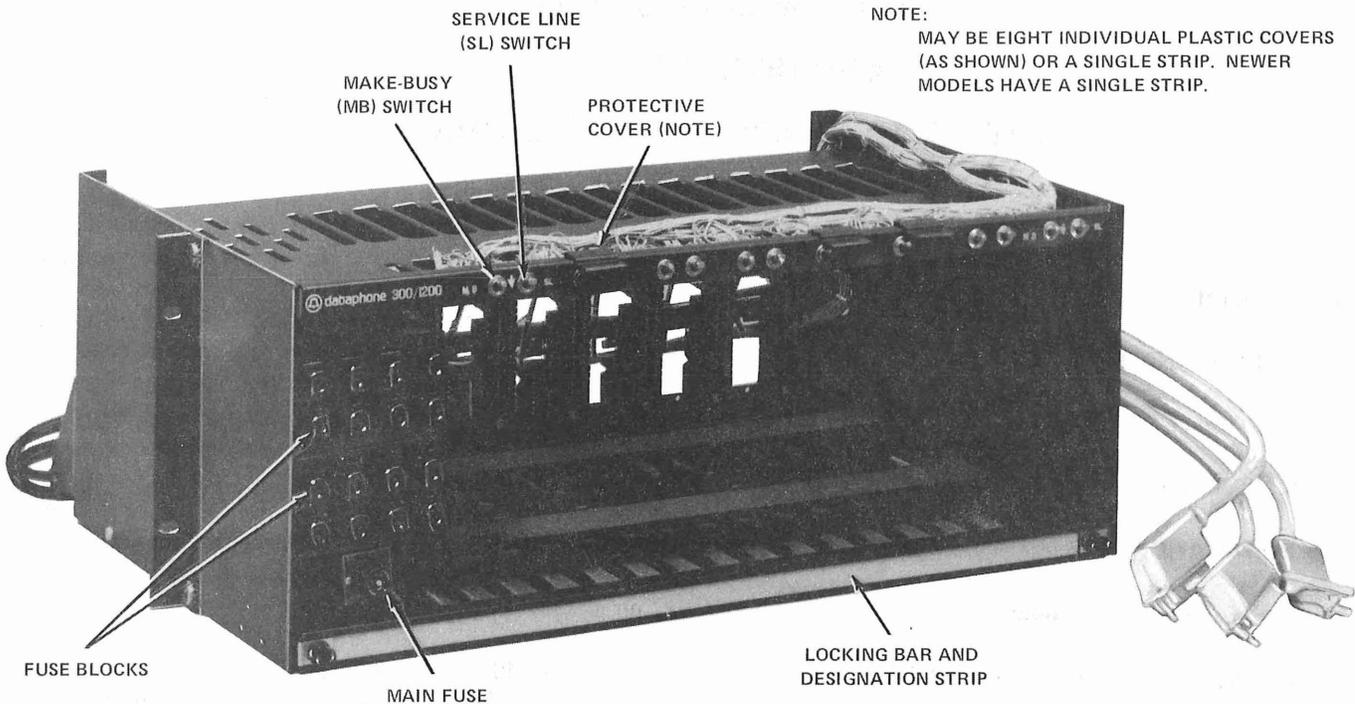


Fig. 1—40A Data Mounting

separate data mounting. An 830CM or 2830CM telephone set is used with these arrangements when required.

(d) **9 to 16 Data Sets Without ACUs:**

These arrangements are for a maximum of 16 data sets in two 40A3 data mountings. An 831CM or 2831CM telephone set is used with these arrangements when required.

(e) **9 to 16 Data Sets Each Equipped With ACUs:** These arrangements are for a maximum of 16 data sets in two 40A3 data mountings and a maximum of 16 ACUs in two 40A3 data mountings. An 831CM or 2831CM telephone set is used with these arrangements when required.

(f) For installations requiring more than 16 data sets, combinations of the above arrangements should be used.

1.06 Telephone sets are not required at installations equipped for automatic calling and/or automatic answering if manual operation or voice communication is not required. In this case, the adapters to

interconnect the telephone set with the 40A3 data mounting are not needed. If a service line is provided an E1CM ringer is also provided and a nonkey telephone set is optional.

1.07 The 40A3 data mounting requires a standard 3-wire ground-type ac power receptacle. The power supplied must be 105 to 129 volts at 57 to 63 Hz.

1.08 The power supplies in the 40A3 data mounting use one 70A input fuse (1-1/3 amp—white) and sixteen 70H output fuses (3/4-amp—brown) which can be easily replaced from the front. A blown fuse can be recognized by a protruding colored pin in the center of the fuse holder. Remove the fuses by rotating them counterclockwise and pulling out. Spare fuses are stored beneath the main power unit of the 40A3 data mounting.



Each data set uses two 70H fuses. If only one fuse is blown, the data set continues to function, but with degraded performance. It is therefore important to check carefully for blown fuses.

1.09 In order to minimize the possibility of data errors due to potential differences between the data terminal ground and the data set ground, the receptacle supplying power to the data station should be served by the same distribution panel as the receptacle(s) powering the data terminal(s). If this arrangement is not possible, use a 6-type impulse counter to determine if excessive noise is present. The procedures for this test are given in Section 592-860-500. If the test requirements are not met, bond the data station frame ground and the terminal equipment frame ground together.



The method of providing the bond should be in accordance with local engineering instructions.

In addition, noise problems are often reduced by connecting frame ground to signal ground in the data mounting.

Verify with the plant service center that the overall facilities meet the applicable requirements given in Section 314-205-501 for a DATAPHONE loop.

Verify that the location selected by the customer for the data station has adequate space for access to the front and rear of the cabinet. The data station should be located near the customer-provided equipment (CPE), since the customer-provided interface cord should not exceed 50 feet in length (as recommended by Electronics Industries Association [EIA] standards). In order to minimize interference with data signals, the telephone lines should not be carried in the same cable run as high voltage dc lines connected to telegraph services. If this condition cannot be met, the telephone lines should be run in type SK (shielded) station wire from the building entrance. The shield should be grounded at one end only, preferably the distribution terminal end.

1.10 These data stations (DS 103JR, 113CR, 113DR, 202SR, 212AR, and DAS 801CR) operate in an ambient temperature between 40 and 120°F. The relative humidity should be 20 to 95 percent at 70°F or 20 to 40 percent at 120°F.

Note: These environmental working limits apply only under the condition that no condensation occurs.

1.11 Table A lists some typical arrangements of 40A3 data mountings in KS-20018-type cabinets.

1.12 If the ambient temperature is expected to exceed 100°F, remove the rear panel of the KS-20018-L7 cabinet.

2. OPTION AND FEATURES

A. Option

2.01 The 40A3 data mounting has only one option. A strap arranges it to operate either with frame ground connected to signal ground (option ZI) or with floating signal ground (option ZJ).

2.02 The 40A3 data mounting is shipped from the factory with frame ground connected to signal ground (option ZI), affecting all data sets in the mounting. Frame ground of the 40A3 data mounting may be disconnected from signal ground (option ZJ) by removing the strap from the screw terminals of TS2 located on the rear of the power unit. It may be necessary to loosen the EIA interface connector bracket (if mounted on the back) and remove the power cord to access this option strap. Mountings which share the same telephone set must use the same grounding options, and signal grounds must be connected together as directed in the note of the affected figures.

B. Features

2.03 The 40A3 data mounting has three features:

- Make-busy feature
- Service line feature
- Mounting feature.

2.04 Two toggle switches are associated with each data set position, MB (make-busy) and SL (service line). If the make-busy feature is not installed for a data set position, then the two switches for that position should not be operated (up position). A protective cover prevents accidental operation.

Make-Busy Feature

2.05 With the make-busy feature installed, operating the MB switch makes the associated data set line busy. Any number of MB switches may

TABLE A

SOME TYPICAL ARRANGEMENTS FOR 40A3 DATA MOUNTING

QTY OF DATA SETS	QTY OF DATA MTGS	SMALLEST KS-20018 CABINET WHEN EIA CONNECTOR IS ARRANGED FOR:		TELEPHONE SET CODE		TELEPHONE SET QUANTITY
		REAR ACCESS	FRONT ACCESS	DIAL		
				ROTARY	TOUCH-TONE	
Up to 5	1	L12A	L1 (Note 1)	565HKM	2565HKM	1
Up to 8	1	L12A	L1 (Note 2)	830CM	2830CM	1
Up to 16	2	L12A	L3 (Note 2)	831CM	2831CM	1
Up to 24	3	L7 (Note 3)	—	830CM 831CM	2830CM 2831CM	1 1
Up to 72	9	L15A	—	830CM 831CM	2830CM 2831CM	1 4
Up to 112	14	—	L15C (Mounted Back-to-Back) (Note 4)	831CM	2831CM	7

Note 1: If a transparent door is required to permit viewing of data set indicators, substitute a KS-20018-L2 cabinet with a KS-20018-L13A door.

Note 2: If a transparent door is required to permit viewing of data set indicators, substitute a KS-20018-L4 cabinet with a KS-20018-L13B door.

Note 3: If a transparent door is required to permit viewing of data set indicators, add a KS-20018-L13B door to this cabinet.

Note 4: Requires two additional uprights (order L163527).

be operated at the same time. Tip-ring make-busy is the only make-busy feature offered.

Service Line Feature

2.06 With the service line feature installed in addition to the make-busy feature, the MB switch is used as above. Operating both the MB and SL switches makes the data line busy and transfers the data set to the service line. (The data set will not transfer to the service line if any other SL switch to the left in that mounting or on a preceding mounting in that series string of service line connections is operated.)

2.07 With this feature, operating the data set DL or RT switch does not cause a transfer

of that set to the service line. This makes it possible to conduct a digital loopback or remote test on the normal line. The independent action of the SL switch permits transmission of data or the performance of an end-to-end self test on the service line.

Mounting Features

2.08 The EIA connector panel of the 40A3 data mounting may be arranged for either front or rear access (Fig. 2).

2.09 With the EIA connector panel arranged for rear access, the 40A3 data mounting measures 6.9 inches high by 13.2 inches deep by 18.9 inches long. When the right-hand mounting bracket is

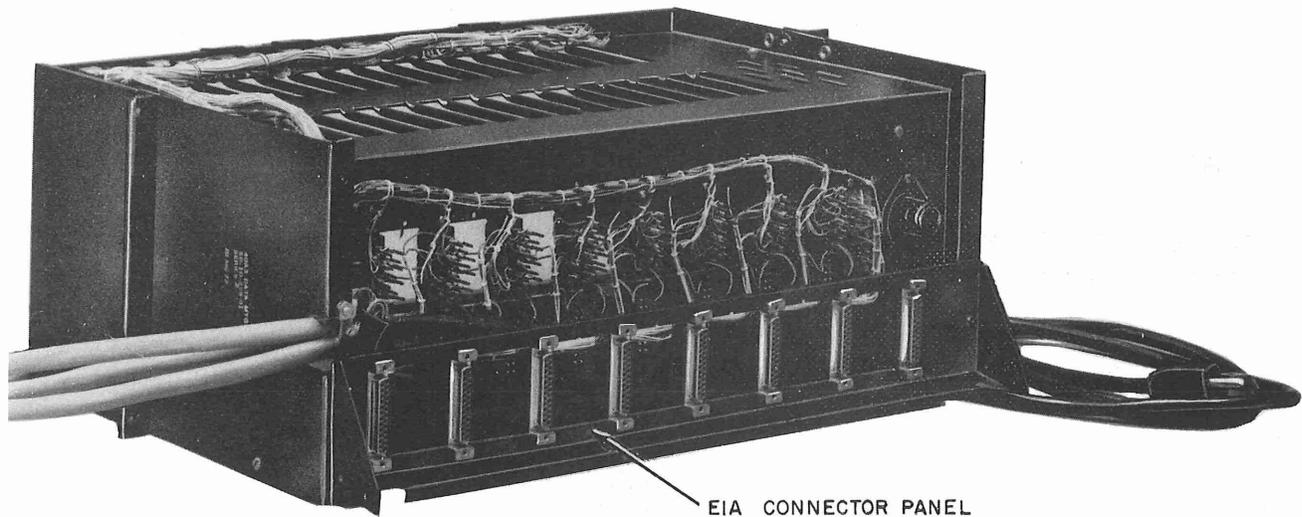


Fig. 2—40A3 Data Mounting Rear View With EIA Connector Panel Arranged for Rear Access

rotated to permit mounting on 23-inch frameworks, the length increases by four inches. It occupies a 7 by 19- or 23-inch mounting plate space. The panel holding the eight EIA connectors can be swung around from the rear to the front of the mounting, allowing front access for the customer's EIA plugs. In this arrangement, the mounting measures 9 inches high by 11.5 inches deep by 18.9 (or 22.9) inches long.

2.10 When mounted in a cabinet with EIA connectors in the rear, a 5-inch clearance is required in front of and 8.2-inch clearance behind the mounting surface. When mounted in a cabinet with EIA front connections, 5-inch clearance is required in front of and 6.5-inch clearance behind the mounting surface.

2.11 When the mounting is arranged for 23-inch frameworks, holes on the right-hand bracket can be used to attach a KS-19252-L5 adapter, if required.

2.12 The 40A3 data mounting can be mounted back-to-back in a KS-20018-L15 cabinet (Fig. 3). In this configuration, the EIA connector panel must be arranged for front access. In this configuration an additional two L-163527 uprights (ordered separately) are required. Because of restricted access, it is recommended that the power cord of each 40A3 be plugged into the outlet strip as the 40A3 is installed in the cabinet.

3. INSTALLATION

A. Common Equipment

3.01 This part gives general installation procedures for the equipment that may be used in an installation. Detailed procedures for installing the various configurations are given in paragraphs 3B through 3F.

3.02 *KS-20018 Cabinet:* Position the cabinet in its permanent location and adjust the four leveling bolts until the cabinet is level, then tighten the locking nuts on the bolts. The approximate outside dimensions of the cabinets are as follows:

- KS-20018-L1: 12 inches high, 24 inches wide, and 12 inches deep
- KS-20018-L3: 24 inches high, 24 inches wide, and 12 inches deep
- KS-20018-L7: 30 inches high, 24 inches wide, and 17 inches deep
- KS-20018-L11A: 30 inches high, 24 inches wide, and 19 inches deep
- KS-20018-L12A: 17 inches high, 24 inches wide, and 19 inches deep

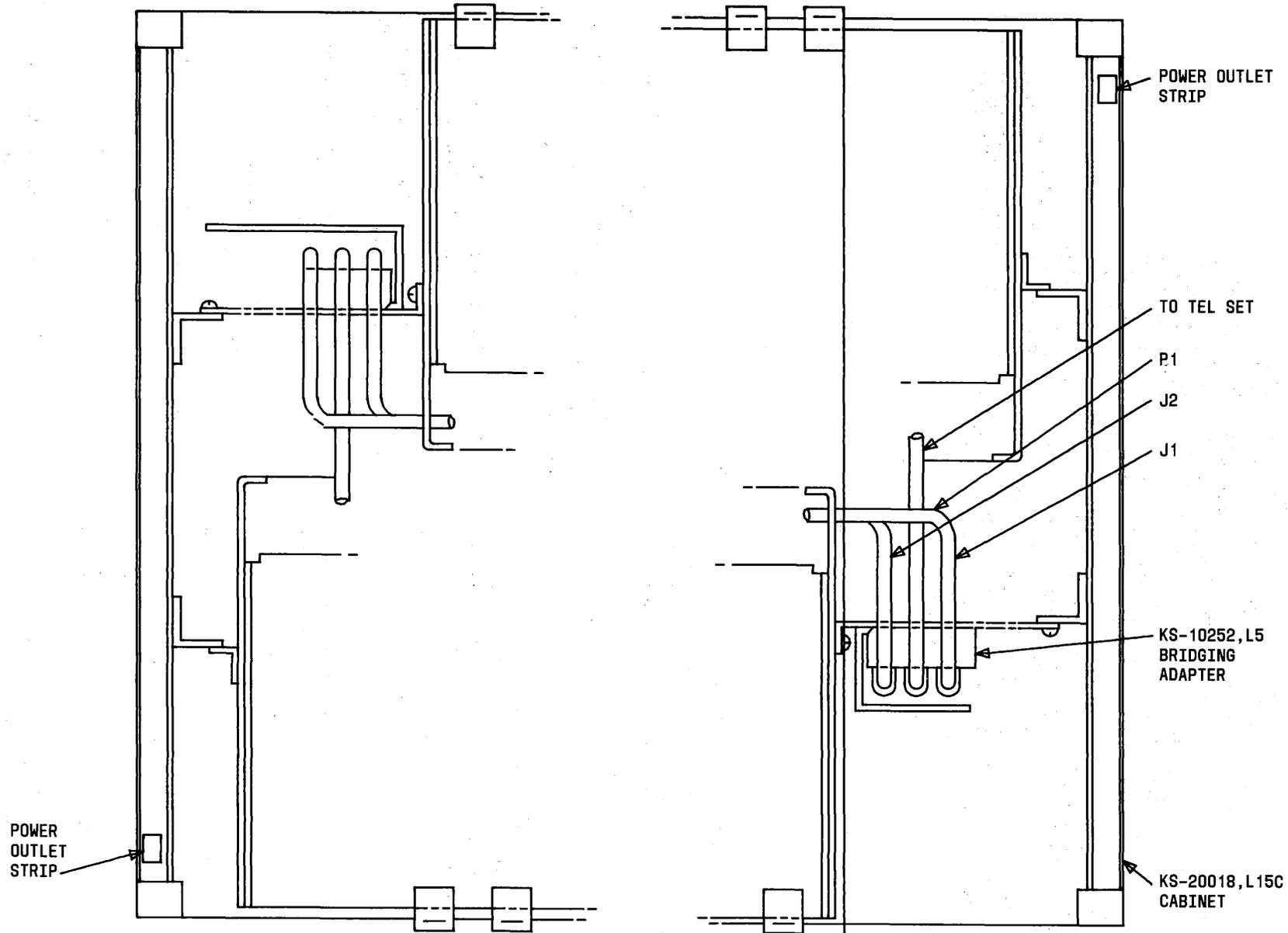


Fig. 3—Top View of KS-20018-L15C Cabinet Equipped with Back-to-Back Mounted 40A3 Data Mountings

- KS-20018-L15A or C: 72 inches high, 29 inches wide, and 26 inches deep.

For more information on the KS-20018 cabinets, refer to Section 590-010-201, entitled Data Sets, Multiple Installation Information.

3.03 If the cabinet must be secured to the floor, remove the leveling bolts. Insert four 1/4-inch appropriate bolts or screws through the leveling holes and into the floor.

3.04 40A3 Data Mounting: Rotate the right-hand mounting flange of the data mounting for 23-inch mounting if this has not been done. Secure the data mounting to the front flange of both uprights with four 12-24 by 1/2-inch screws (supplied with the data mounting). A long screw starter will facilitate the installation of the mounting in the cabinet.

3.05 Data Set: Before inserting the data set into the mounting, install options specified on the service order. To insert the data set into the mounting, first release the designation/retainer strip from the 40A3 data mounting. Release the strip by pulling out on the black knob at each end. After the strip is moved out of the way, insert the data set into the appropriate slot and press firmly into place. Replace the designation/retainer strip.

Note: The data set positions are numbered from left to right from the front, that is, position 1 is nearest to the power unit.

3.06 KS-19252-L2 Adapter(s): Fasten to desired mounting point using two 8 × 1/2-inch round-head screws.

3.07 KS-19252-L5 Adapter(s): Fasten the adapter(s) on the right-hand bracket (23-inch mounting) with two 8 × 1/2-inch round-head screws.

3.08 565HKM or 2565HKM Telephone Set: Insert the telephone set plug into the jack (female end) of the M23C cord using a B25A cable if necessary. Insert the two plugs of the M23C cord into J1 and J2 of the 40A3 data mounting.

3.09 830CM or 2830CM Telephone Set: Depending on the type of installation the telephone set will plug into either the jack end of an M100G cord or into J1 of a KS-19252-L5 adapter using a

B25A cable if required. In either case B25A cables can be used to extend telephone set if required. If the M100G cord is used insert the four plugs into J1 and J2 of the 40A3 data mountings. In applications using the KS-19252-L5 adapter, connect J1 and J2 of the 40A3 data mounting to P1 and P2 of the adapter.

3.10 831CM or 2831CM Telephone Set: When an 831CM or 2831CM telephone set is used, insert plug number 2 of the telephone set into the J1 connector of the KS-19252-L5 adapter of the **first** 40A3 data mounting (for data sets 1 through 8) using B25A cables as required. Insert plug number 1 of the telephone set into the J1 connector of the KS-19252-L5 adapter of the **second** 40A3 data mounting (for data sets 9 through 16). Block positions on the telephone set as indicated in the appropriate figure and remove the lamps. If the M100G cords are used, connections between the telephone set and M100G cord may be extended with B25A cable.

3.11 Automatic Calling Units: DAS 801CR-11 plugs into the 40A3 data mounting but requires an M14G cord (ordered separately) to connect to the customer interface leads for an RS-366 interface. Install the proper options in the ACU before inserting it into the data mounting. To insert the ACUs into the data mounting, first release the retainer/designation strip from the 40A3 data mounting. Release the strip by pulling out the black knob at each end. After the strip is moved out of the way, insert the ACU into its appropriate slot and press firmly into place. Replace the retainer/designation strip.

Note: The ACU positions are numbered from left to right from the front; that is, position 1 is nearest the power unit.

3.12 Nonkey Telephone Set (Optional In Arrangements Where a Service Line is Provided): This optional telephone set equipped with modular mounting cord may be any one of the following:

- 500DM or 2500DM telephone set
- 554BMP or 2554 BMP telephone set
- 220-type or 2220-type hand telephone set with AD-type telephone base

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- 220-type or 2220-type hand telephone set with AC-type telephone base.

Plug the optional telephone set into the 625A connecting block using the mounting cord recommended in the appropriate BSP.

3.13 E1CM Ringer: This ringer is always provided in those arrangements where a service line is provided. Wire the spade-tipped G and R leads of a M4AS cord to terminals G and R, respectively, of the 625A connecting block and plug the other end of the M4AS cord into the E1CM ringer LINE jack.

B. Up to Eight Data Sets Without ACUs

3.14 The following equipment is required for this arrangement:

- One KS-20018-type cabinet (per Table A)
- One 40A3 data mounting
- One M16E, M16F, or M16L cord (Refer to Note 2 of appropriate figure)
- B25A cables as required
- One 830CM or 2830CM telephone set (optional)
- One KS-19252-L5 adapter (required if optional telephone set is used)

The following equipment is used if the make-busy feature is provided:

- One KS-19252-L2 adapter
- One M4AW cord
- B25A cable as required

The following equipment is used if a service line is provided:

- Two M4AS cords or one M4AS and one M4AU cord (Refer to Note 2 of appropriate figure)
- One E1CM ringer
- One 625A connecting block

- One nonkey telephone set (Refer to paragraph 3.12)

These arrangements are interconnected as shown in Fig. 4 through 9.

C. Up to Four Data Sets With One ACU Per Data Set in a Single Mounting:

3.15 The following equipment is required for this arrangement:

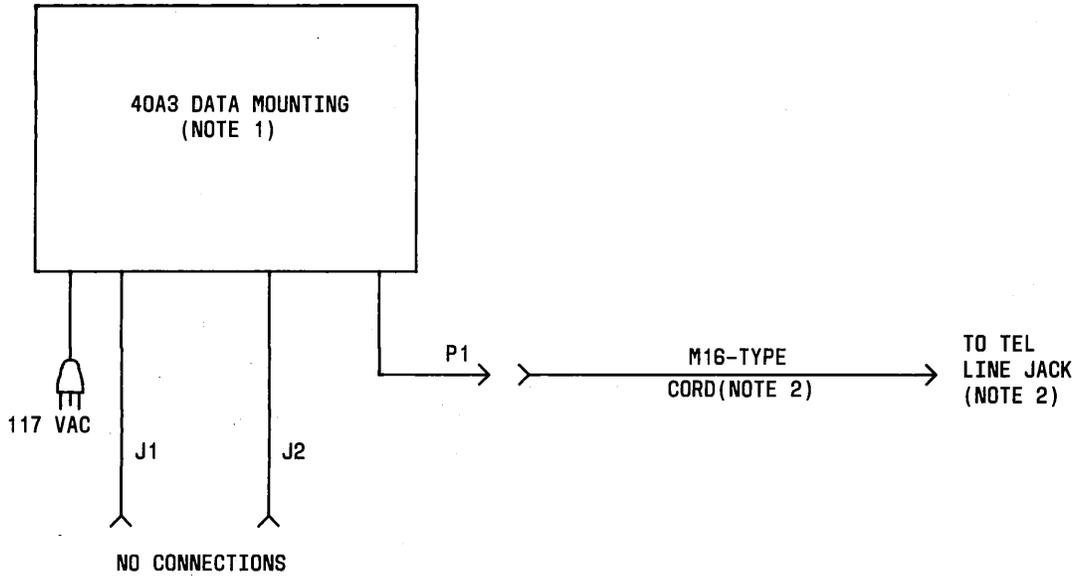
- One KS-20018-type cabinet (per Table A)
- One 40A3 data mounting
- One M16E, M16F, or M16L cord (Refer to Note 2 of Fig. 10)
- One M23C cord
- One M14G cord per ACU
- B25A cables as required
- One 565HKM, 2565HKM, or 2662A1M telephone set (optional)

This arrangement is interconnected as shown in Fig. 10.

D. Up to Eight Data Sets With One ACU Per Data Set

3.16 The following equipment is required for this arrangement:

- One KS-20018-type cabinet (per Table A)
- Two 40A3 data mountings
- One M16E, M16F, or M16L cord (Refer to Note 2 of appropriate figure)
- One M100G cord
- One M14G cord per ACU
- B25A as required
- One M4AW cord (if make-busy feature is provided)
- One 830CM or 2830CM telephone set (optional)



NOTES:

1. THIS DATA MOUNTING MAY BE EQUIPPED WITH UP TO EIGHT DATA SETS OF THE FOLLOWING CODES: 113DR, 103JR, 202SR, OR 212AR.
2. SET TABLE FOR PROPER M16-TYPE CORD:

DATA SET	TELEPHONE LINE	
	VOICE JACK (USOC-RJ21X)	DATA JACK (USOC-RJ26X)
100 SERIES	M16L	M16F
200 SERIES	NOT PERMITTED	M16E
MIXED 100 AND 200 SERIES	NOT PERMITTED	M16E

Fig. 4—40A3 Data Mounting Equipped With Up to Eight Data Sets

The following equipment is used if a service line is provided:

- Two M4AS cords (or one M4AS and one M4AU cord)
- One E1CM ringer
- One 625A connecting block
- One nonkey telephone set (Refer to paragraph 3.12).

These arrangements are interconnected as shown in Fig. 11 and 12.

E. 9 to 16 Data Sets Without ACUs

3.17 The following equipment is required for this arrangement:

- One KS-20018-type cabinet (per Table A)
- Two 40A3 data mountings
- Two M16E, M16F, or M16L cords (Refer to Note 2 of appropriate figure)
- Two KS-19252-L5 adapters
- B25A cables as required

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- One 831CM or 2831CM telephone set (optional).

The following equipment is used if the make-busy feature is provided:

- Two KS-19252-L2 adapters
- Two M4AW cords.

The following equipment is used if a service line is provided:

- Three M4AS cords (or one M4AU and two M4AS cords)
- One E1CM ringer
- Two 625A connecting blocks
- One monkey telephone set (Refer to paragraph 3.12)

These arrangements are interconnected as shown in Fig. 13 through 16.

F. 9 to 16 Data Sets With 1 ACU Per Data Set

3.18 The following equipment is required for this arrangement:

- KS-20018-type cabinet(s) per Table A
- Four 40A3 data mountings
- Two M16E, M16F, or M16L cords (Refer to Note 2 of appropriate figure)
- Two M100G cords
- One M14G cord per ACU
- B25A cables as required
- Two M4AW cords (if make-busy feature is provided)
- One 831CM or 2831CM telephone set.

Note: This telephone set is optional if a service line is provided (see below).

The following equipment is used if a service line is provided:

- Three M4AS cords (or one M4AU and two M4AS cords)
- One E1CM ringer
- Two 625A connecting blocks
- One monkey telephone set (Refer to paragraph 3.12)

These arrangements are interconnected as shown in Fig. 17 and 18.

G. Interconnection for Shared Service Line for Installations Involving Multiple Data Mountings

3.19 These arrangements are shown in Fig. 19.

4. REFERENCES

4.01 The following Bell System Practices provide information pertaining to installation of ACUs, data sets, and telephone sets:

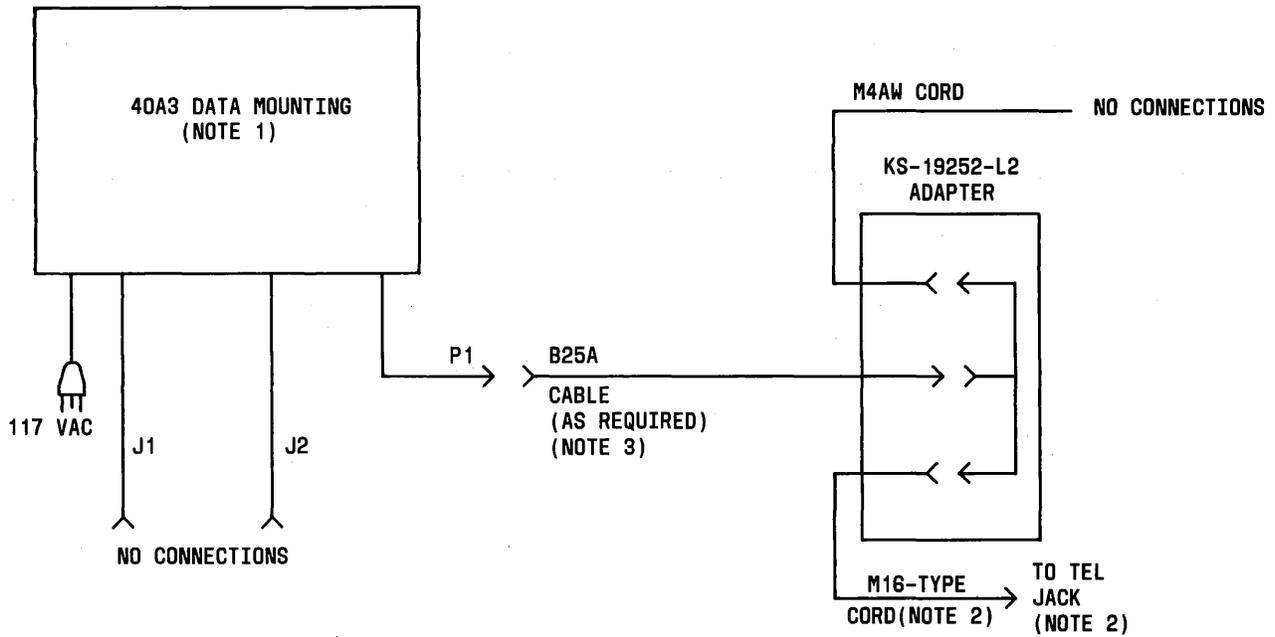
SECTION	TITLE
502-303-101	AC- and AD-Type Telephone Bases With 220-, 226-, 2220-, and 2226-Type Hand Telephone Sets
502-501-101	500DM and 554BMP Telephone Sets
502-503-101	2500DM and 2554BMP Telephone Sets
502-541-415	565HKM Telephone Set
502-543-405	2565HKM Telephone Set
502-603-130	2662-Type Telephone Set
503-701-101	830CM and 2830CM Telephone Sets
503-702-101	831CM and 2831CM Telephone Sets
590-010-201	Data Sets—Multiple Installation Information

SECTION	TITLE
591-044-200	Data Set 103JR Transmitter-Receiver— Installation and Connections
491-046-200	Data Set 113CR Transmitter-Receiver— Installation and Connections
591-047-200	Data Set 113DR Transmitter-Receiver— Installation and Connections
592-037-200	Data Set 202SR Transmitter-Receiver— Installation and Connections

SECTION	TITLE
592-039-200	Data Set 212AR Transmitter-Receiver— Installation and Connections
598-088-202	Data Auxiliary Set 801CR List-Type Installation and Connections

4.02 The following schematic drawing (SD) and circuit description (CD) contain information on the 40A3 data mounting:

NUMBER	TITLE
SD-&CD-1D269-02	40A3 Data Mounting



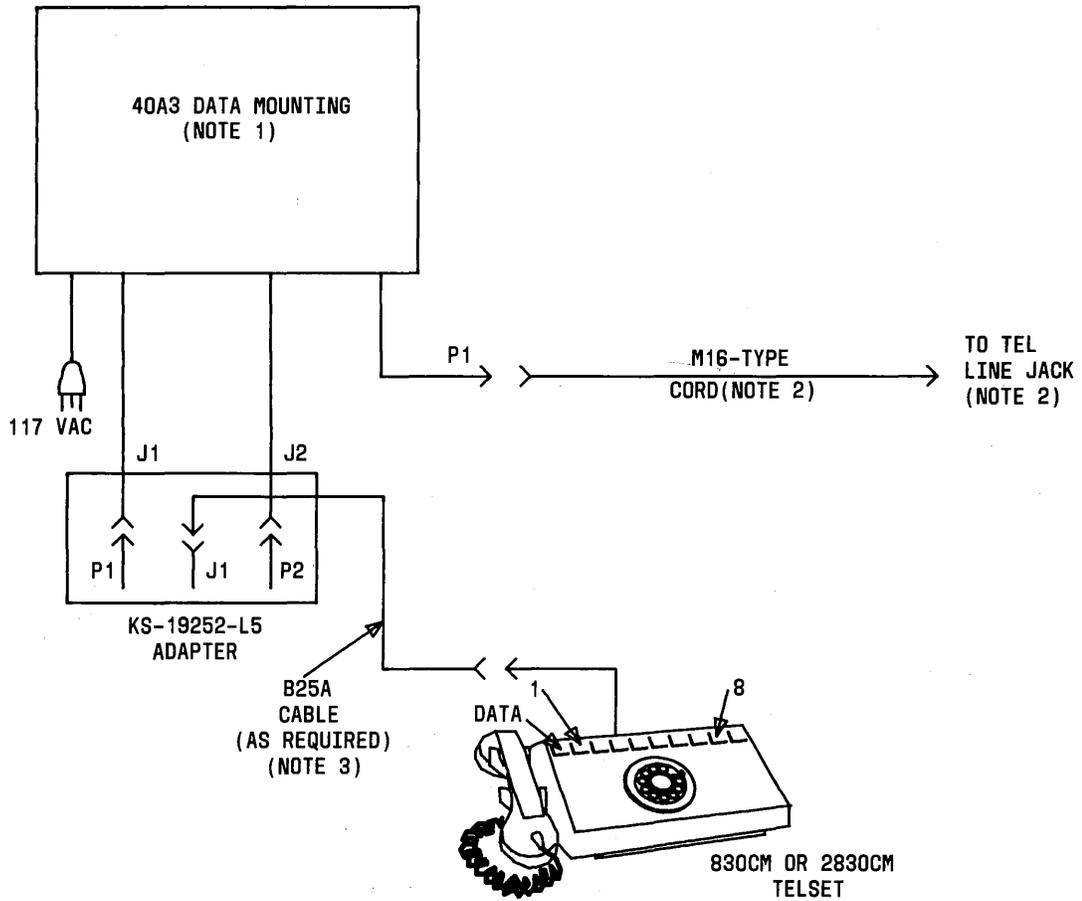
NOTES:

1. THIS DATA MOUNTING MAY BE EQUIPPED WITH UP TO EIGHT DATA SETS OF THE FOLLOWING CODES: 113DR, 103JR, 202SR, OR 212AR.
2. SET TABLE FOR PROPER M16-TYPE CORD:

DATA SET	TELEPHONE LINE	
	VOICE JACK (USOC-RJ21X)	DATA JACK (USOC-RJ26X)
100 SERIES	M16L	M16F
200 SERIES	NOT PERMITTED	M16E
MIXED 100 AND 200 SERIES	NOT PERMITTED	M16E

3. MAXIMUM LENGTH 15 FEET.

Fig. 5—40A3 Data Mounting Equipped With Up to Eight Data Sets (With Make-Busy Feature)



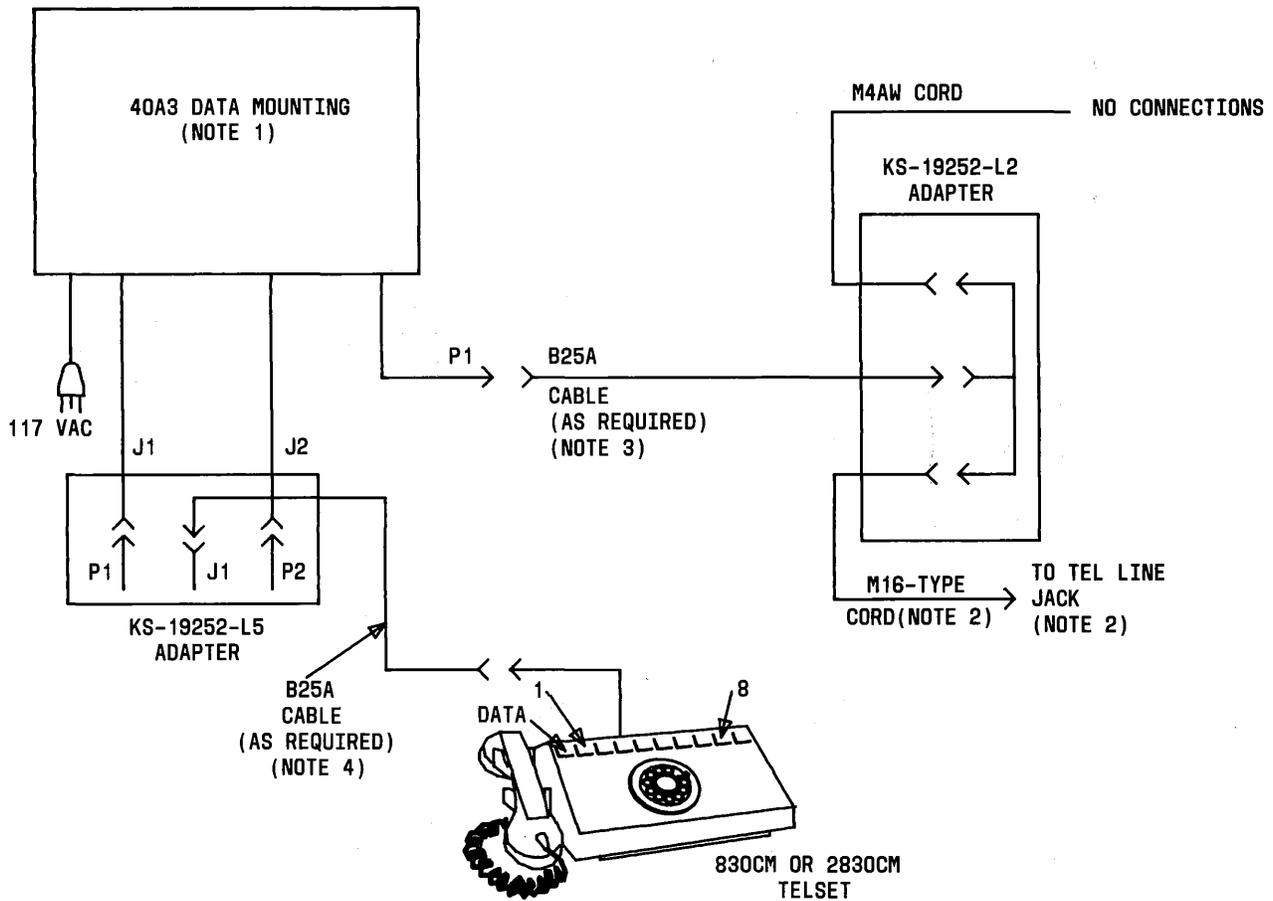
NOTES:

1. THIS DATA MOUNTING MAY BE EQUIPPED WITH UP TO EIGHT DATA SETS OF THE FOLLOWING CODES: 113CR, 113DR, 103JR, 202SR, OR 212AR.
2. SET TABLE FOR PROPER M16-TYPE CORD:

DATA SET	TELEPHONE LINE	
	VOICE JACK 60 (USOC-RJ21X)	DATA JACK (USOC-RJ26X)
100 SERIES	M16L	M16F
200 SERIES	NOT PERMITTED	M16E
MIXED 100 AND 200 SERIES	NOT PERMITTED	M16E

3. MAXIMUM LENGTH 60 FEET.

Fig. 6—40A3 Data Mounting Equipped With Up to Eight Data Sets (With Telephone Set)



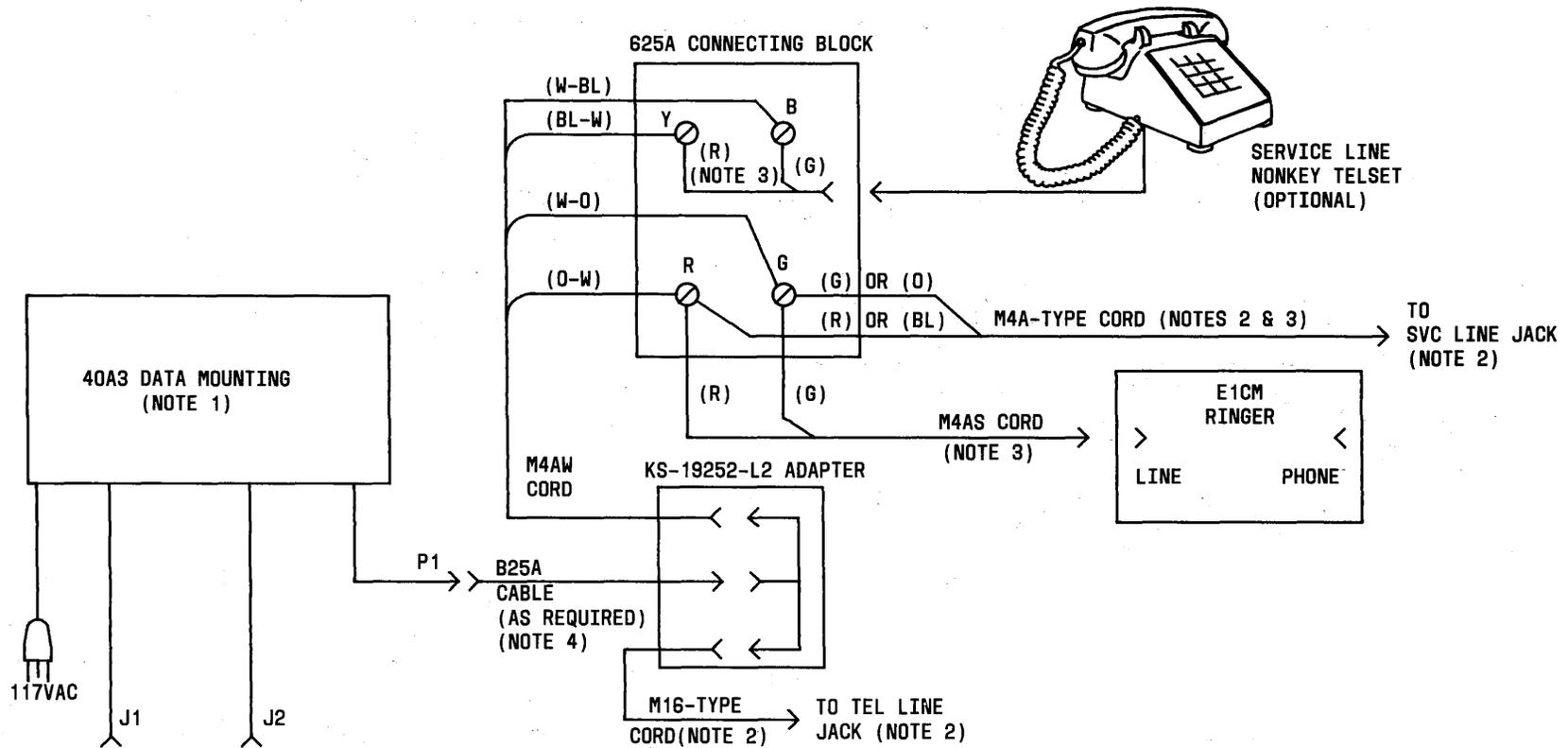
NOTES:

1. THIS DATA MOUNTING MAY BE EQUIPPED WITH UP TO EIGHT DATA SETS OF THE FOLLOWING CODES: 113CR, 113DR, 103JR, 202SR, OR 212AR.
2. SET TABLE FOR PROPER M16-TYPE CORD:

DATA SET	TELEPHONE LINE	
	VOICE JACK (USOC-RJ21X)	DATA JACK (USOC-RJ26X)
100 SERIES	M16L	M16F
200 SERIES	NOT PERMITTED	M16E
MIXED 100 AND 200 SERIES	NOT PERMITTED	M16E

3. MAXIMUM LENGTH 15 FEET.
4. MAXIMUM LENGTH 60 FEET.

Fig. 7—40A3 Data Mounting Equipped With Up to Eight Data Sets (With Telephone Set and Make-Busy Feature)



NOTES:

1. THIS DATA MOUNTING MAY BE EQUIPPED WITH UP TO EIGHT DATA SETS OF THE FOLLOWING CODES: 113DR, 103JR, 202SR, OR 212AR.
2. SEE TABLE FOR PROPER M16-TYPE OR M4A-TYPE CORD:
3. THE UNUSED CONDUCTORS IN THIS CORD SHOULD BE INSULATED AND STORED.
4. MAXIMUM LENGTH 15 FEET.

DATA SET	TELEPHONE LINE		SERVICE LINE	
	VOICE JACK (USOC-RJ21X)	DATA JACK (USOC-RJ26X)	VOICE JACK (USOC-RJ11C)	DATA JACK (USOC-RJ41S)
100 SERIES	M16L	M16F	M4AS	M4AS
200 SERIES	NOT PERMITTED	M16E	NOT PERMITTED	M4AU
MIXED 100 AND 200 SERIES	NOT PERMITTED	M16E	NOT PERMITTED	M4AU

Fig. 8—40A3 Data Mounting Equipped With Up to Eight Data Sets (With Service Line and Make-Busy Features)

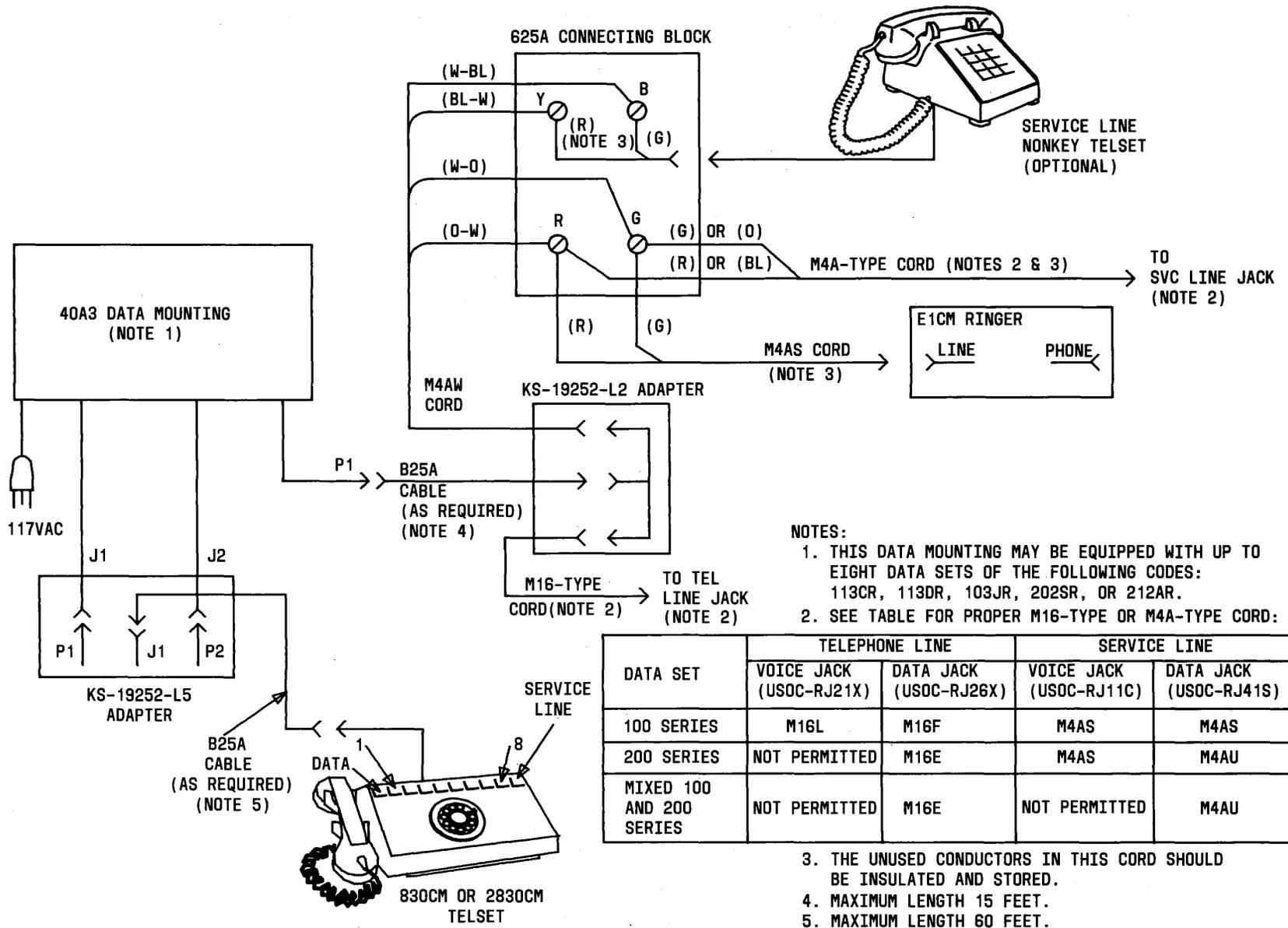
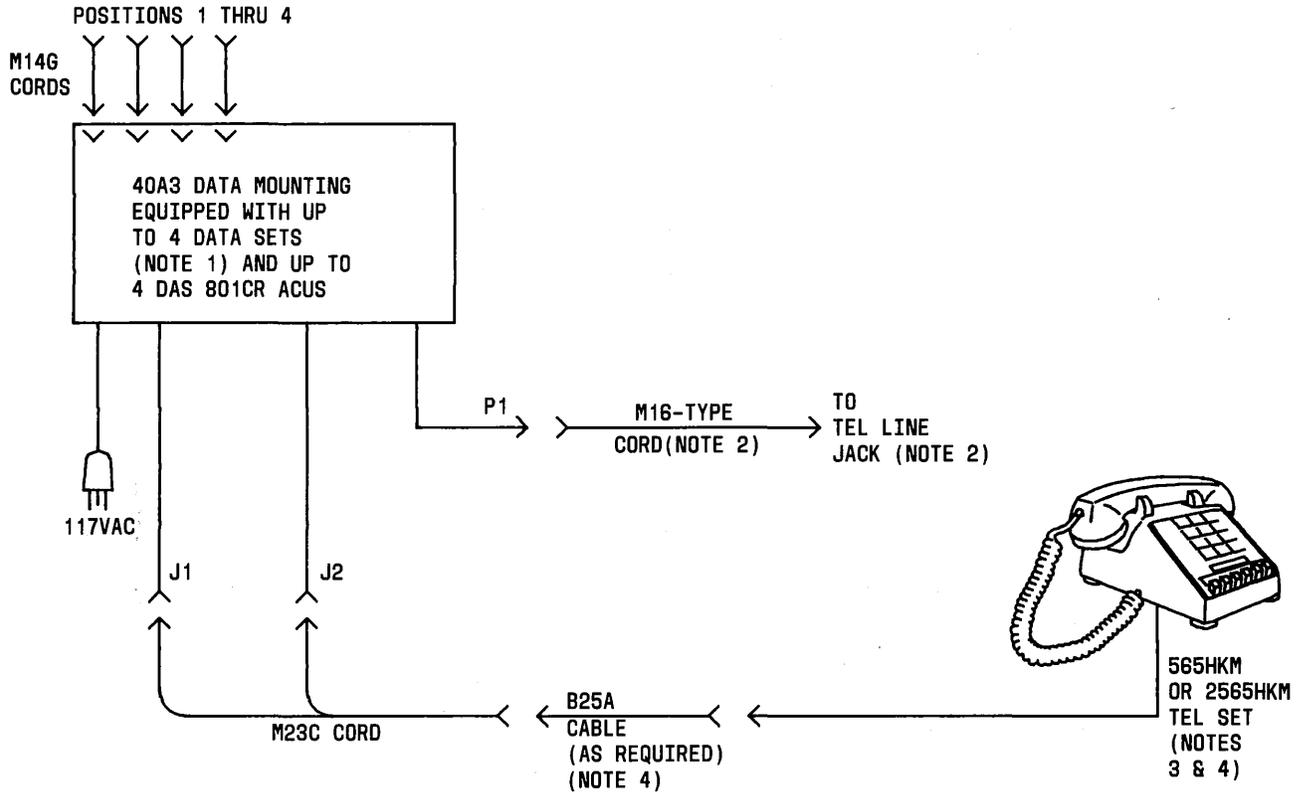


Fig. 9—40A3 Data Mounting Equipped With Up to Eight Data Sets (With Service Line and Make-Busy Features and Telephone Set)



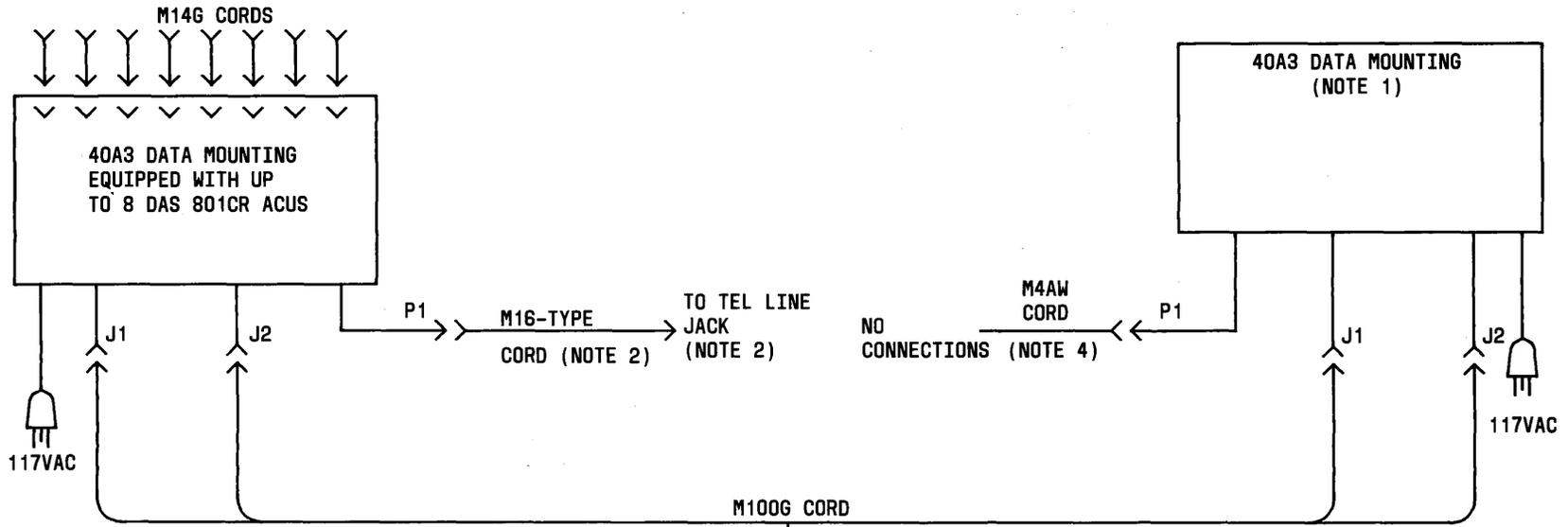
NOTES:

1. THIS DATA MOUNTING MAY BE EQUIPPED WITH UP TO FOUR DATA SETS OF THE FOLLOWING CODES: 113CR, 103JR, 202SR, OR 212AR.
2. SET TABLE FOR PROPER M16-TYPE CORD:

DATA SET	TELEPHONE LINE	
	VOICE JACK (USOC-RJ21X)	DATA JACK (USOC-RJ26X)
100 SERIES	M16L	M16F
200 SERIES	NOT PERMITTED	M16E
MIXED 100 AND 200 SERIES	NOT PERMITTED	M16E

3. A 2662A1M TELEPHONE SET MAY BE USED.
4. THE TELEPHONE SET IS OPTIONAL.
5. MAXIMUM LENGTH 60 FEET.

Fig. 10—40A3 Data Mounting Equipped With Up to Four Data Sets With One ACU per Data Set in a Single Mounting



NOTES:

1. THIS DATA MOUNTING MAY BE EQUIPPED WITH UP TO EIGHT DATA SETS OF THE FOLLOWING CODES: 113CR, 113DR, 103JR, 202SR, OR 212AR.
2. SEE TABLE FOR PROPER M16-TYPE CORD:

DATA SET	TELEPHONE LINE	
	VOICE JACK (USOC-RJ21X)	DATA JACK (USOC-RJ26X)
100 SERIES	M16L	M16F
200 SERIES	NOT PERMITTED	M16E
MIXED 100 AND 200 SERIES	NOT PERMITTED	M16E

3. MAXIMUM LENGTH 60 FEET.
4. M4AW CORD IS USED ONLY IF MAKE-BUSY IS PROVIDED.

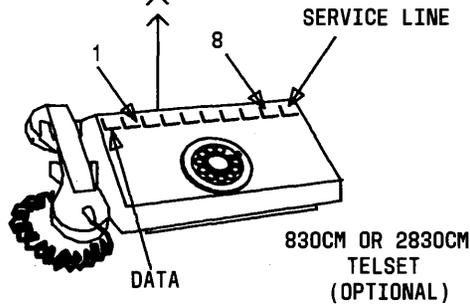
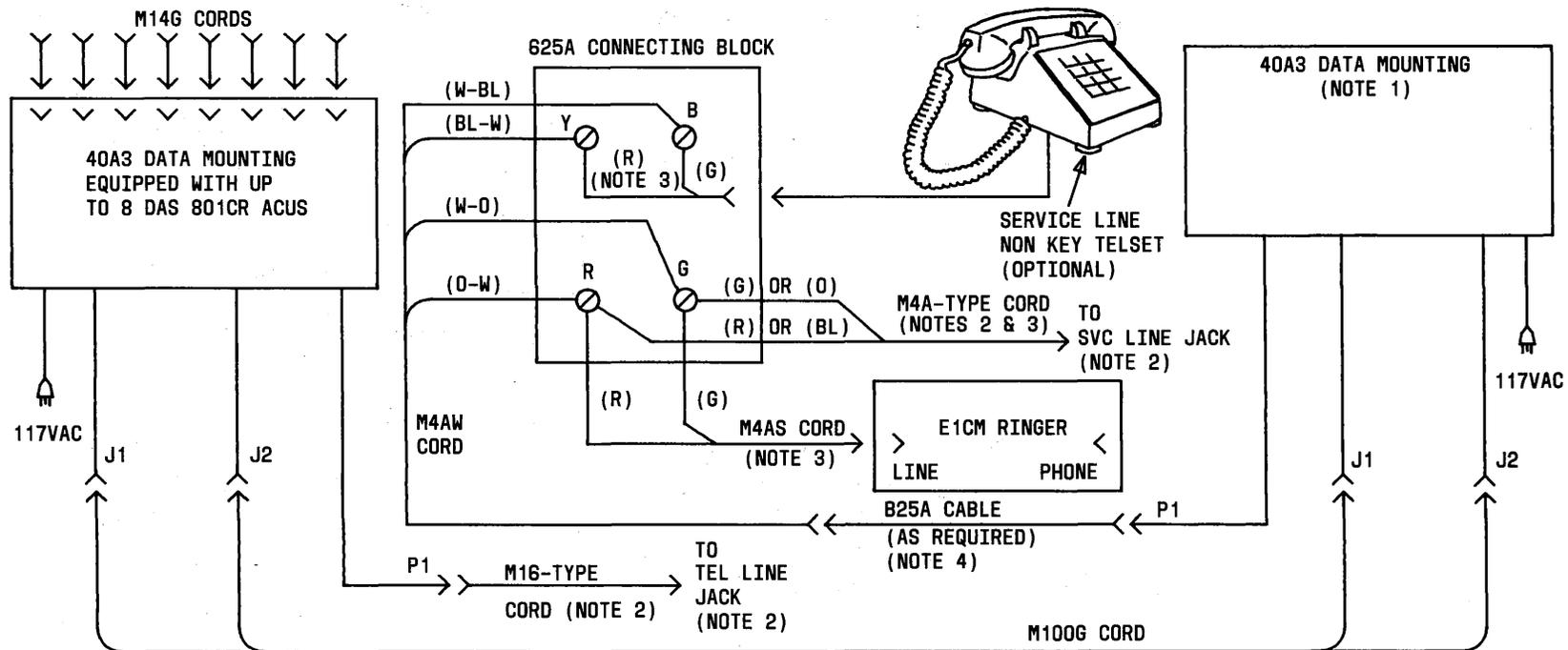


Fig. 11—40A3 Data Mounting Equipped With Up to Eight Data Sets With One ACU per Data Set



NOTES:

1. THIS DATA MOUNTING MAY BE EQUIPPED WITH UP TO EIGHT DATA SETS OF THE FOLLOWING CODES: 113CR, 113DR, 103JR, 202SR, OR 212AR.
2. SEE TABLE FOR PROPER M16-TYPE OR M4A-TYPE CORD:

DATA SET	TELEPHONE LINE		SERVICE LINE	
	VOICE JACK (USOC-RJ21X)	DATA JACK (USOC-RJ26X)	VOICE JACK (USOC-RJ11C)	DATA JACK (USOC-RJ41S)
100 SERIES	M16L	M16F	M4AS	M4AS
200 SERIES	NOT PERMITTED	M16E	M4AS	M4AU
MIXED 100 AND 200 SERIES	NOT PERMITTED	M16E	NOT PERMITTED	M4AU

3. THE UNUSED CONDUCTORS IN THIS CORD SHOULD BE INSULATED AND STORED.
4. MAXIMUM LENGTH 15 FEET.
5. MAXIMUM LENGTH 60 FEET.

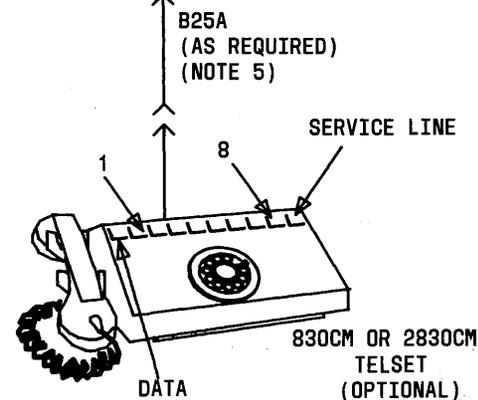
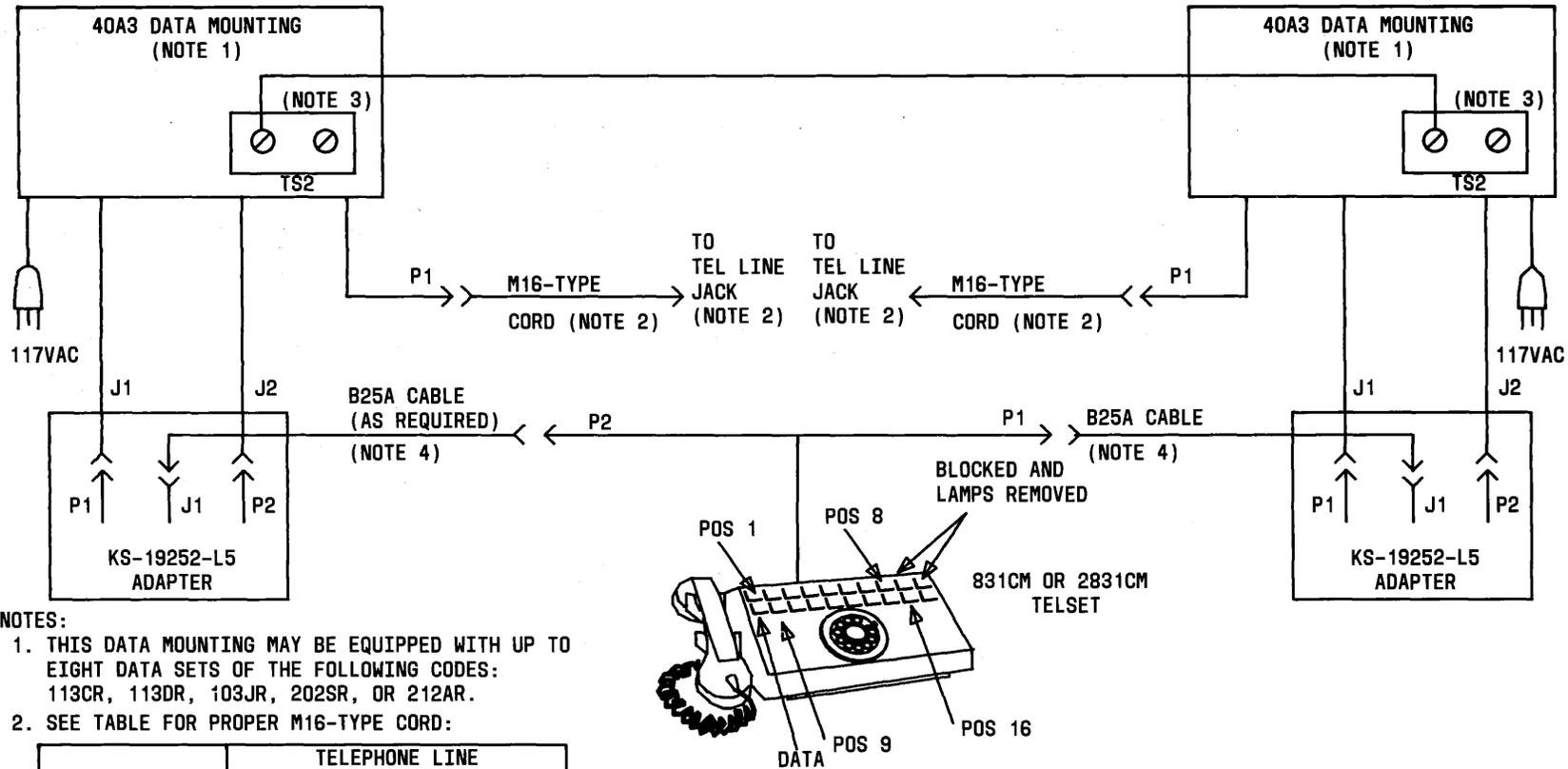


Fig. 12—40A3 Data Mounting Equipped With Up to Eight Data Sets With One ACU per Data Set (With Service Line Feature)

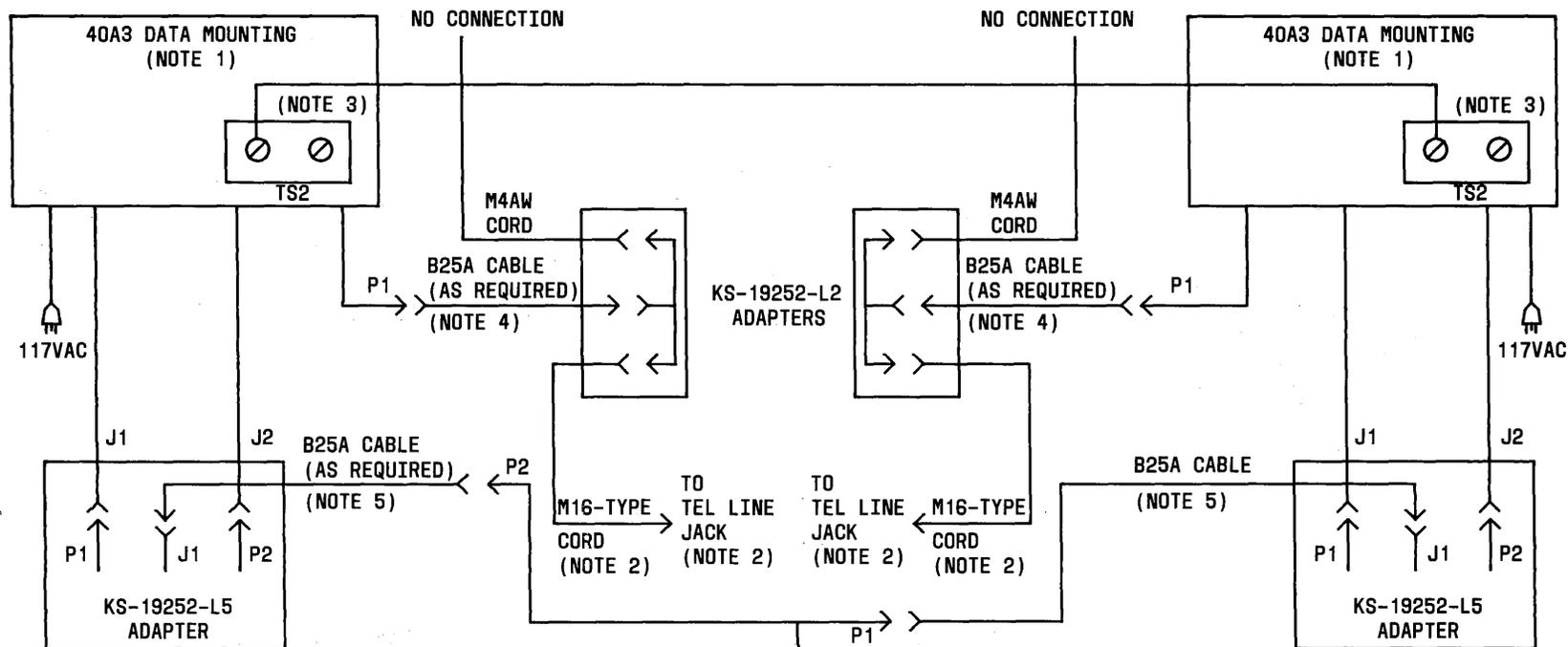


- NOTES:
1. THIS DATA MOUNTING MAY BE EQUIPPED WITH UP TO EIGHT DATA SETS OF THE FOLLOWING CODES: 113CR, 113DR, 103JR, 202SR, OR 212AR.
 2. SEE TABLE FOR PROPER M16-TYPE CORD:

DATA SET	TELEPHONE LINE	
	VOICE JACK (USOC-RJ21X)	DATA JACK (USOC-RJ26X)
100 SERIES	M16L	M16F
200 SERIES	NOT PERMITTED	M16E
MIXED 100 AND 200 SERIES	NOT PERMITTED	M16E

3. IF SIGNAL GROUND IS DISCONNECTED FROM FRAME GROUND (OPTION ZJ) THIS SIGNAL GROUND CONNECTION MUST BE MADE FROM MOUNTING TO MOUNTING. (SIGNAL GROUND IS THE SCREW TERMINAL CLOSEST TO THE CENTER OF THE MOUNTING.)
4. MAXIMUM LENGTH 60 FEET.

Fig. 13—40A3 Data Mounting Equipped With 9 to 16 Data Sets



NOTES:

1. THIS DATA MOUNTING MAY BE EQUIPPED WITH UP TO EIGHT DATA SETS OF THE FOLLOWING CODES: 113CR, 113DR, 103JR, 202SR, OR 212AR.
2. SEE TABLE FOR PROPER M16-TYPE CORD:

DATA SET	TELEPHONE LINE	
	VOICE JACK (USOC-RJ21X)	DATA JACK (USOC-RJ26X)
100 SERIES	M16L	M16F
200 SERIES	NOT PERMITTED	M16E
MIXED 100 AND 200 SERIES	NOT PERMITTED	M16E

3. IF SIGNAL GROUND IS DISCONNECTED FROM FRAME GROUND (OPTION ZJ) THIS SIGNAL GROUND CONNECTION MUST BE MADE FROM MOUNTING TO MOUNTING. (SIGNAL GROUND IS THE SCREW TERMINAL CLOSEST TO THE CENTER OF THE MOUNTING.)
4. MAXIMUM LENGTH 15 FEET.
5. MAXIMUM LENGTH 60 FEET.

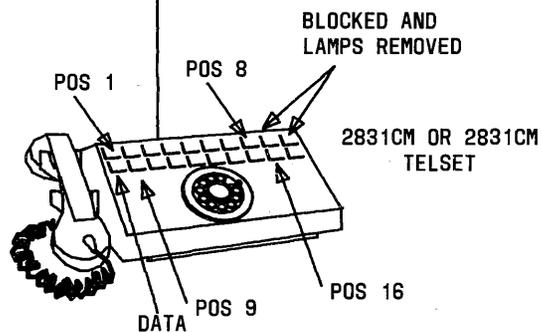
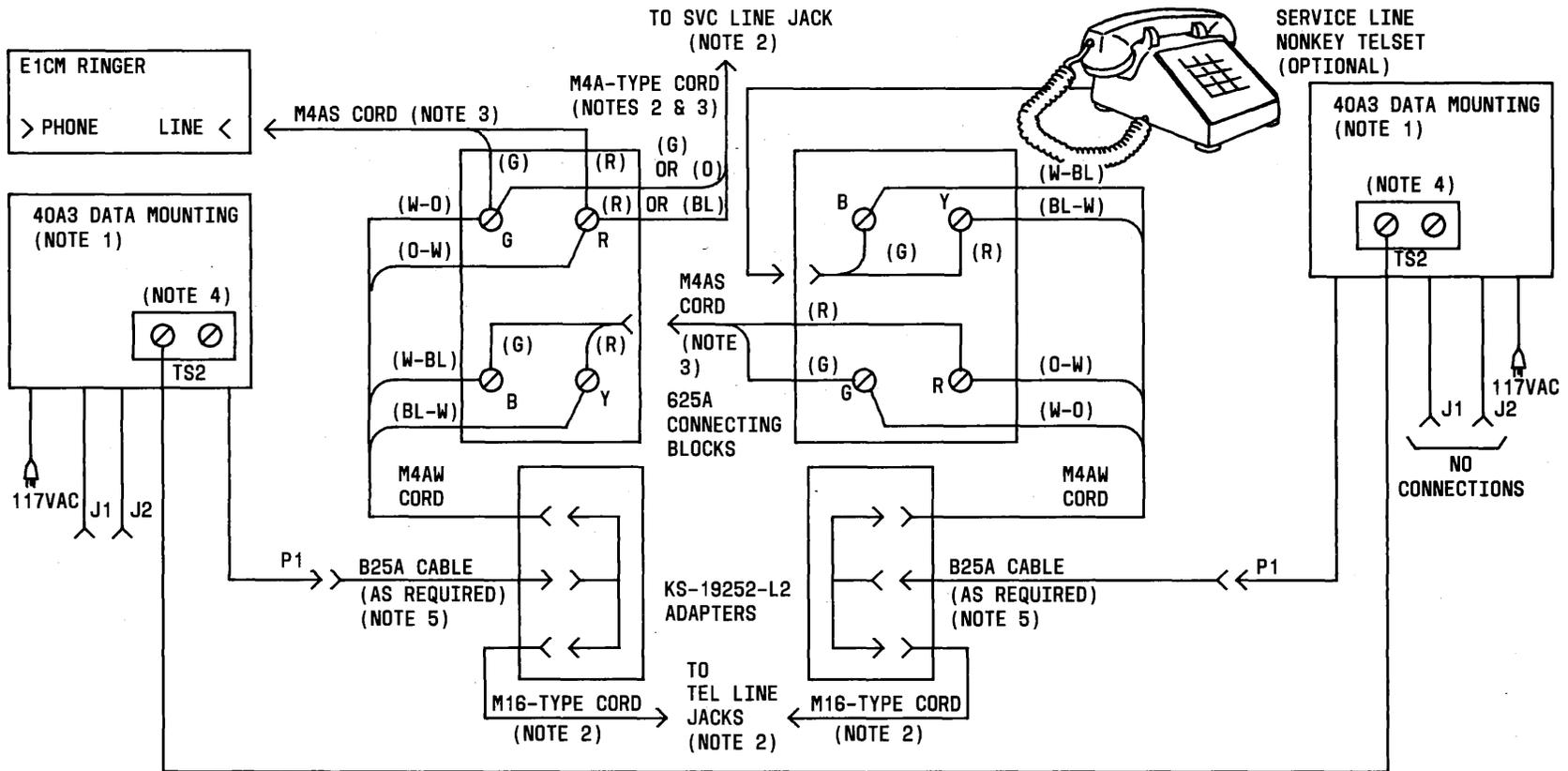


Fig. 14—40A3 Data Mounting Equipped With 9 to 16 Data Sets (With Make-Busy Feature)



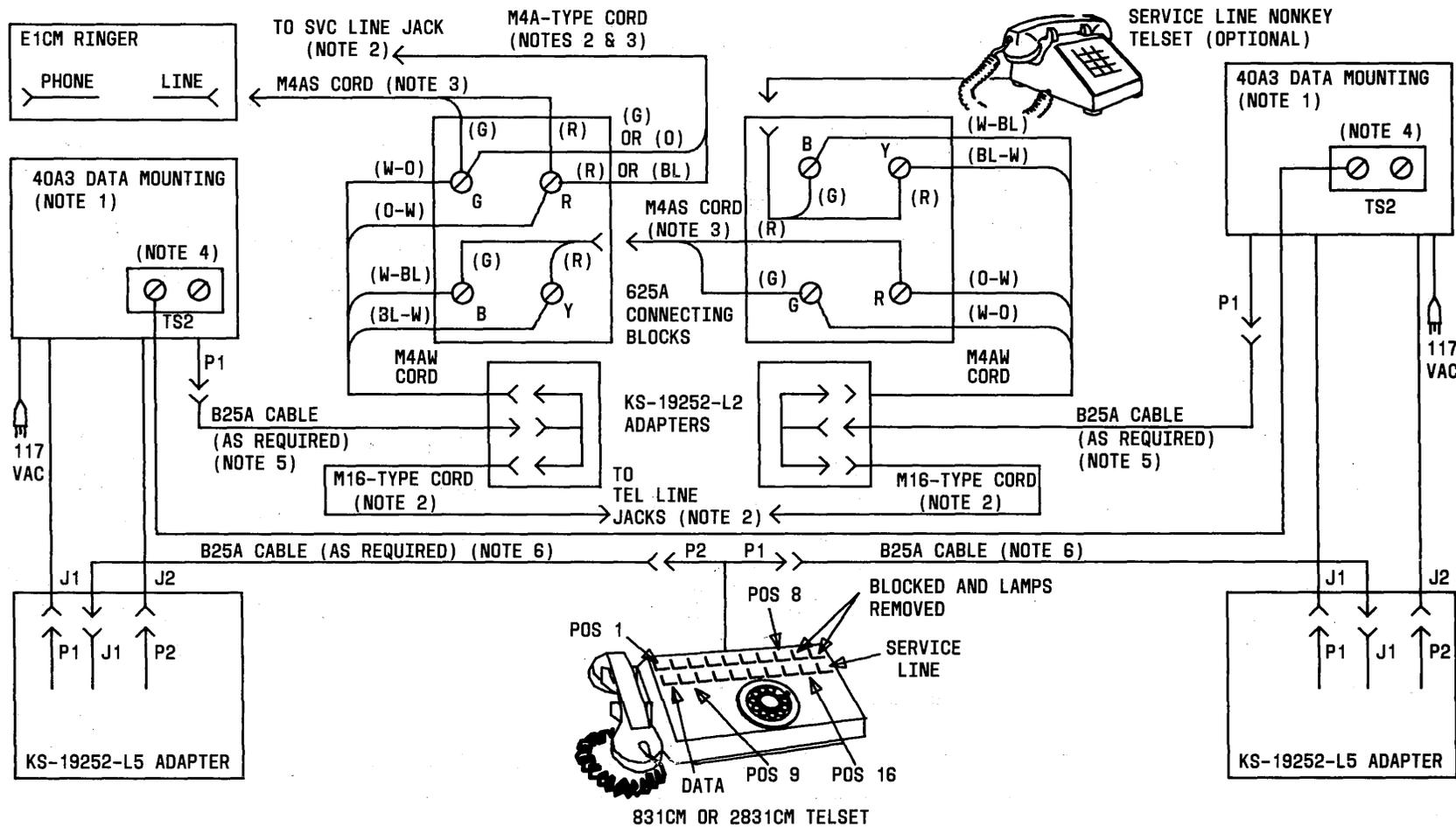
NOTES:

1. THIS DATA MOUNTING MAY BE EQUIPPED WITH UP TO EIGHT DATA SETS OF THE FOLLOWING CODES: 113DR, 103JR, 202SR, OR 212AR.
2. SEE TABLE FOR PROPER M16-TYPE OR M4A-TYPE CORD:

DATA SET	TELEPHONE LINE		SERVICE LINE	
	VOICE JACK (USOC-RJ21X)	DATA JACK (USOC-RJ26X)	VOICE JACK (USOC-RJ11C)	DATA JACK (USOC-RJ41S)
100 SERIES	M16L	M16F	M4AS	M4AS
200 SERIES	NOT PERMITTED	M16E	NOT PERMITTED	M4AU
MIXED 100 AND 200 SERIES	NOT PERMITTED	M16E	NOT PERMITTED	M4AU

3. THE UNUSED CONDUCTORS IN THIS CORD SHOULD BE INSULATED AND STORED.
4. IF SIGNAL GROUND IS DISCONNECTED FROM FRAME GROUND (OPTION ZJ) THIS SIGNAL GROUND CONNECTION MUST BE MADE FROM MOUNTING TO MOUNTING. (SIGNAL GROUND IS THE SCREW TERMINAL CLOSEST TO THE CENTER OF THE MOUNTING.)
5. MAXIMUM LENGTH 15 FEET.

Fig. 15—40A3 Data Mounting Equipped With 9 to 16 Data Sets (With Service Line)

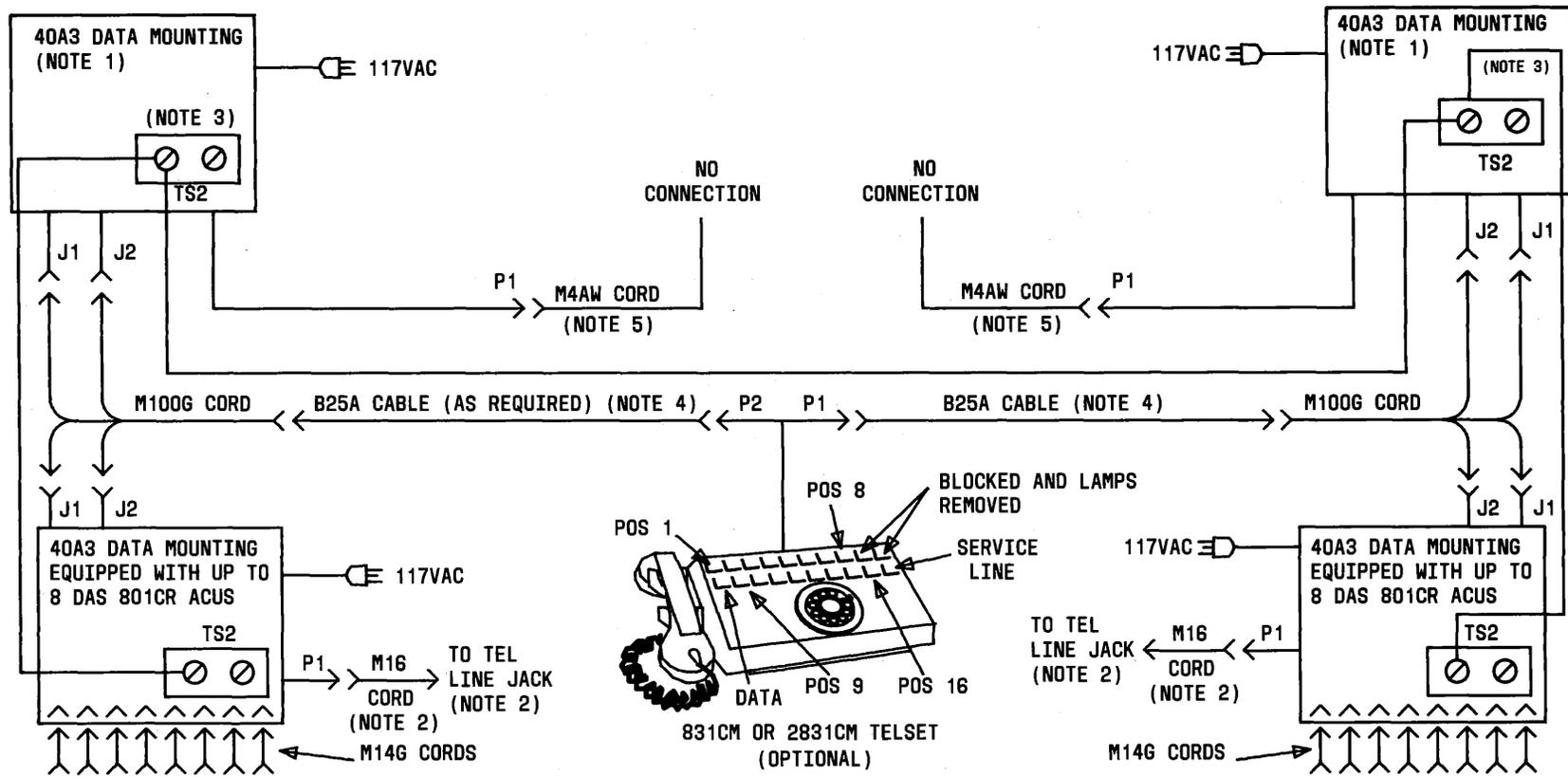


DATA SET	TELEPHONE LINE		SERVICE LINE	
	VOICE JACK (USOC-RJ21X)	DATA JACK (USOC-RJ26X)	VOICE JACK (USOC-RJ11C)	DATA JACK (USOC-RJ41S)
100 SERIES	M16L	M16F	M4AS	M4AS
200 SERIES	NOT PERMITTED	M16E	M4AS	M4AU
MIXED 100 AND 200 SERIES	NOT PERMITTED	M16E	NOT PERMITTED	M4AU

NOTES:

1. THIS DATA MOUNTING MAY BE EQUIPPED WITH UP TO EIGHT DATA SETS OF THE FOLLOWING CODES: 113CR, 113DR, 103JR, 202SR, OR 212AR.
2. SEE TABLE AT LEFT FOR PROPER M16-TYPE OR M4A-TYPE CORD.
3. THE UNUSED CONDUCTORS IN THIS CARD SHOULD BE INSULATED AND STORED.
4. IF SIGNAL GROUND IS DISCONNECTED FROM FRAME GROUND (OPTION ZJ) THIS SIGNAL GROUND CONNECTION MUST BE MADE FROM MOUNTING TO MOUNTING. (SIGNAL GROUND IS THE SCREW TERMINAL CLOSEST TO THE CENTER OF THE MOUNTING.)
5. MAXIMUM LENGTH 15 FEET.
6. MAXIMUM LENGTH 60 FEET.

Fig. 16—40A3 Data Mounting Equipped With 9 to 16 Data Sets (With Service Line and Make-Busy Features and Telephone Set)

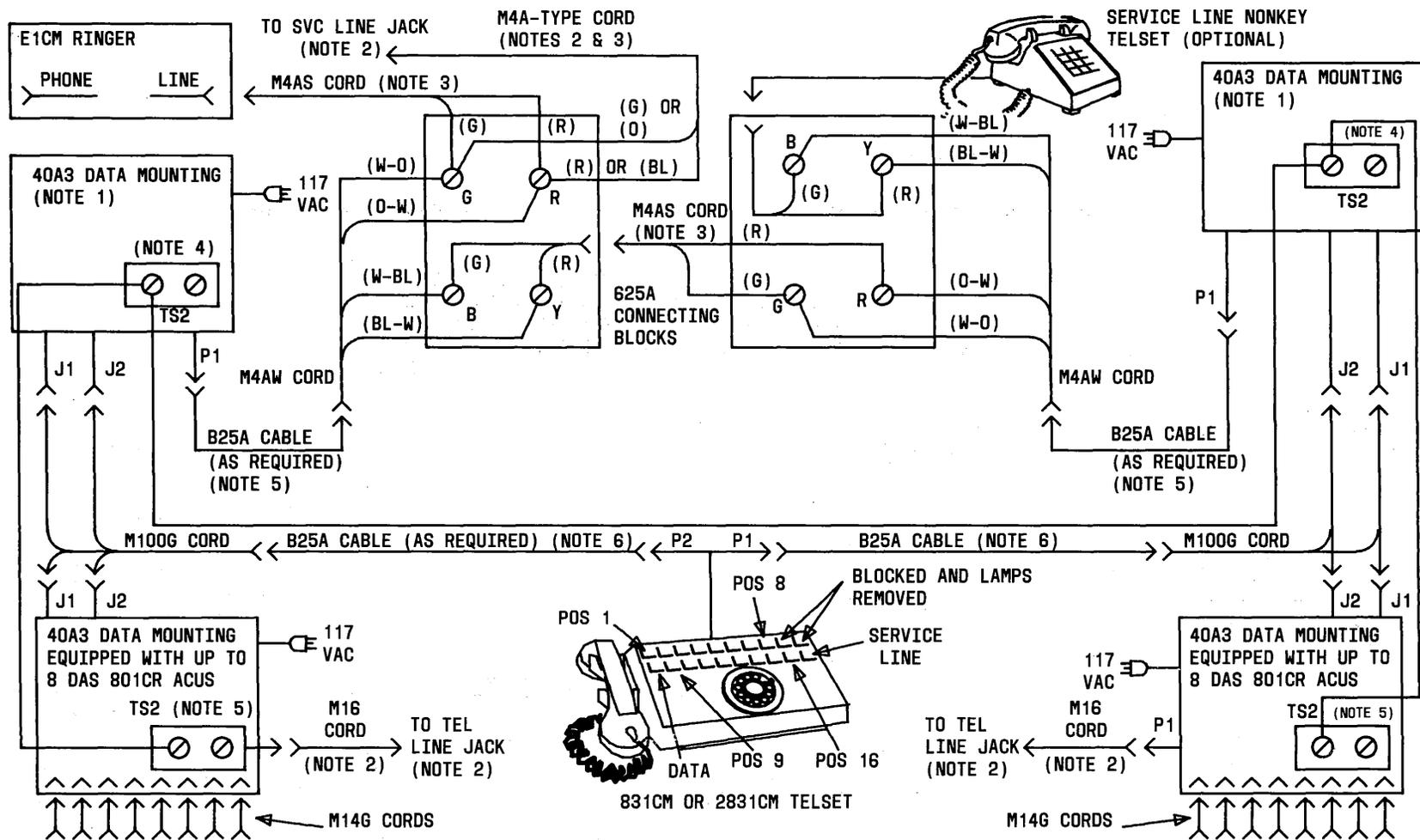


DATA SET	TELEPHONE LINE	
	VOICE JACK (USOC-RJ1X)	DATA JACK (USOC-RJ26X)
100 SERIES	M16L	M16F
200 SERIES	NOT PERMITTED	M16E
MIXED 100 AND 200 SERIES	NOT PERMITTED	M16E

NOTES:

1. THIS DATA MOUNTING MAY BE EQUIPPED WITH UP TO EIGHT DATA SETS OF THE FOLLOWING CODES: 113CR, 103JR, 202SR, OR 212AR.
2. SEE TABLE AT LEFT FOR PROPER M16-TYPE CORD.
3. IF SIGNAL GROUND IS DISCONNECTED FROM FRAME GROUND (OPTION ZJ) THIS SIGNAL GROUND CONNECTION MUST BE MADE FROM MOUNTING TO MOUNTING. (SIGNAL GROUND IS THE SCREW TERMINAL CLOSEST TO THE CENTER OF THE MOUNTING.)
4. MAXIMUM LENGTH 60 FEET.
5. M4AW CORD IS USED ONLY IF MAKE-BUSY IS PROVIDED.

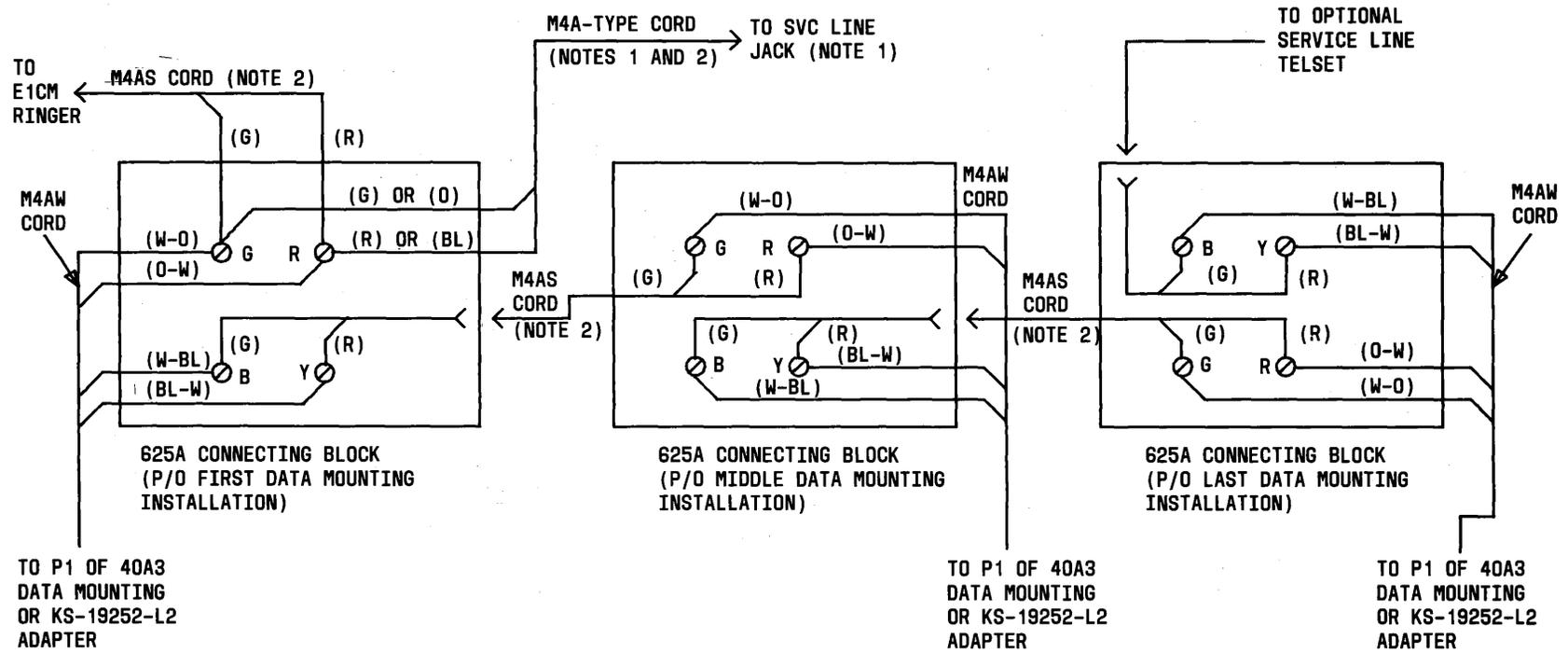
Fig. 17—40A3 Data Mounting Equipped With 9 to 16 Data Sets With One ACU per Data Set



DATA SET	TELEPHONE LINE		SERVICE LINE	
	VOICE JACK (USOC-RJ21X)	DATA JACK (USOC-RJ26X)	VOICE JACK (USOC-RJ11C)	DATA JACK (USOC-RJ41S)
100 SERIES	M16L	M16F	M4AS	M4AS
200 SERIES	NOT PERMITTED	M16F	M4AS	M4AU
MIXED 100 AND 200 SERIES	NOT PERMITTED	M16E	NOT PERMITTED	M4AU

- NOTES:
1. THIS DATA MOUNTING MAY BE EQUIPPED WITH UP TO EIGHT DATA SETS OF THE FOLLOWING CODES: 113CR, 113DR, 103JR, 202SR, OR 212AR.
 2. SEE TABLE AT LEFT FOR PROPER M16-TYPE OR M4A-TYPE CORD.
 3. THE UNUSED CONDUCTORS IN THIS CARD SHOULD BE INSULATED AND STORED.
 4. IF SIGNAL GROUND IS DISCONNECTED FROM FRAME GROUND (OPTION ZJ) THIS SIGNAL GROUND CONNECTION MUST BE MADE FROM MOUNTING TO MOUNTING. (SIGNAL GROUND IS THE SCREW TERMINAL CLOSEST TO THE CENTER OF THE MOUNTING.)
 5. MAXIMUM LENGTH 15 FEET.
 6. MAXIMUM LENGTH 60 FEET.

Fig. 18—40A3 Data Mounting Equipped With 9 to 16 Data Sets With One ACU per Data Set (With Service Line)



NOTES:

1. REFER TO FIGURES SHOWING 40A3 DATA MOUNTING EQUIPPED WITH SERVICE LINE FOR PROPER M4A-TYPE CORD.
2. THE UNUSED CONDUCTORS IN THIS CORD SHOULD BE INSULATED AND STORED.

Fig. 19—Interconnection for Shared Service Line for Installations Involving Multiple Data Mountings