



DCS COMPACT

DIGITAL COMMUNICATION SYSTEM

INSTALLATION MANUAL



CONTENTS

1	SITE REQUIREMENTS
2	INSTALLING BASIC KSU AND EXPANSION KIT
3	INSTALLING PRINTED CIRCUIT CARDS
4	POWER UP PROCEDURES
5	CONNECTING TELCO CIRCUITS
6	CONNECTING STATION EQUIPMENT
7	CONNECTING OPTIONAL EQUIPMENT
8	INSTALLING KEYSET DAUGHTER BOARD
9	CHANGING SOFTWARE

TABLE OF CONTENTS

PART	DESCRIPTION	PAGE
1	SITE REQUIREMENTS	1-1
2	INSTALLATION OF BASIC KSU AND EXPANSION KIT	
2.1	UNPACKING AND INSPECTION	2-1
2.2	KEY SERVICE UNIT INSTALLATION	2-1
2.3	EXPANSION KIT INSTALLATION	2-1
2.4	GROUNDING	2-2
2.5	MDF CABLING	2-3
3	INSTALLING PRINTED CIRCUIT CARDS	
3.1	RAM PACK	3-1
3.2	4 CO PROTECTION CARD	3-1
3.3	2 SLI CARD	3-1
3.4	MISC CARD.....	3-1
3.5	4 TRK CARD.....	3-1
3.6	6 DLI CARD	3-1
3.7	6 SLI CARD.....	3-2
3.8	AA CARD	3-2
3.9	VDIAL CARD	3-2
3.10	AC15 CARD	3-2
3.11	BRI CARD.....	3-2
3.12	2BRI CARD.....	3-2
4	POWER UP PROCEDURES	
4.1	CONNECT POWER TO THE SYSTEM	4-1
4.2	ROM CARD INDICATIONS	4-1
4.3	PCB VERIFICATION	4-1
4.4	DEFAULT TRUNK AND STATION NUMBERING	4-1

5	CONNECTING TELCO CIRCUITS	
5.1	SAFETY PRECAUTIONS	5-1
5.2	LOOP START LINES	5-1
5.3	OFF PREMISE EXTENSIONS (OPX)	5-1
6	CONNECTING STATION EQUIPMENT	
6.1	SAFETY PRECAUTIONS	6-1
6.2	DCS COMPACT KEYSET	6-1
6.3	ADD-ON MODULE	6-1
6.4	SINGLE LINE TELEPHONE	6-1
6.5	DOOR PHONE AND DOOR LOCK RELEASE	6-2
6.6	SIM (RS232C)	6-2
7	CONNECTING OPTIONAL EQUIPMENT	
7.1	MUSIC ON HOLD/BACK GROUND MUSIC	7-1
7.2	EXTERNAL PAGING	7-1
7.3	COMMON BELL	7-2
7.4	RING OVER PAGE	7-2
7.5	STATION MESSAGE DETAIL RECORDING (SMDR)	7-2
7.6	PC PROGRAMMING	7-2
7.7	REMOTE PROGRAMMING	7-3
7.8	POWER FAILURE TRANSFER (PFT)	7-3
7.9	VOICE MAIL/AUTO ATTENDANT	7-4
8	INSTALLING KEYSET DAUGHTERBOARDS	
8.1	KDB SLI	8-1
8.2	KDB DLI	8-1
8.3	CONNECTING TO THE KDB-S & KDB-D	8-1
9	CHANGING SOFTWARE	
9.1	ACCESSING THE EPROMS	9-1
9.2	REPLACING THE EPROMS	9-1

PART 1. SITE REQUIREMENTS

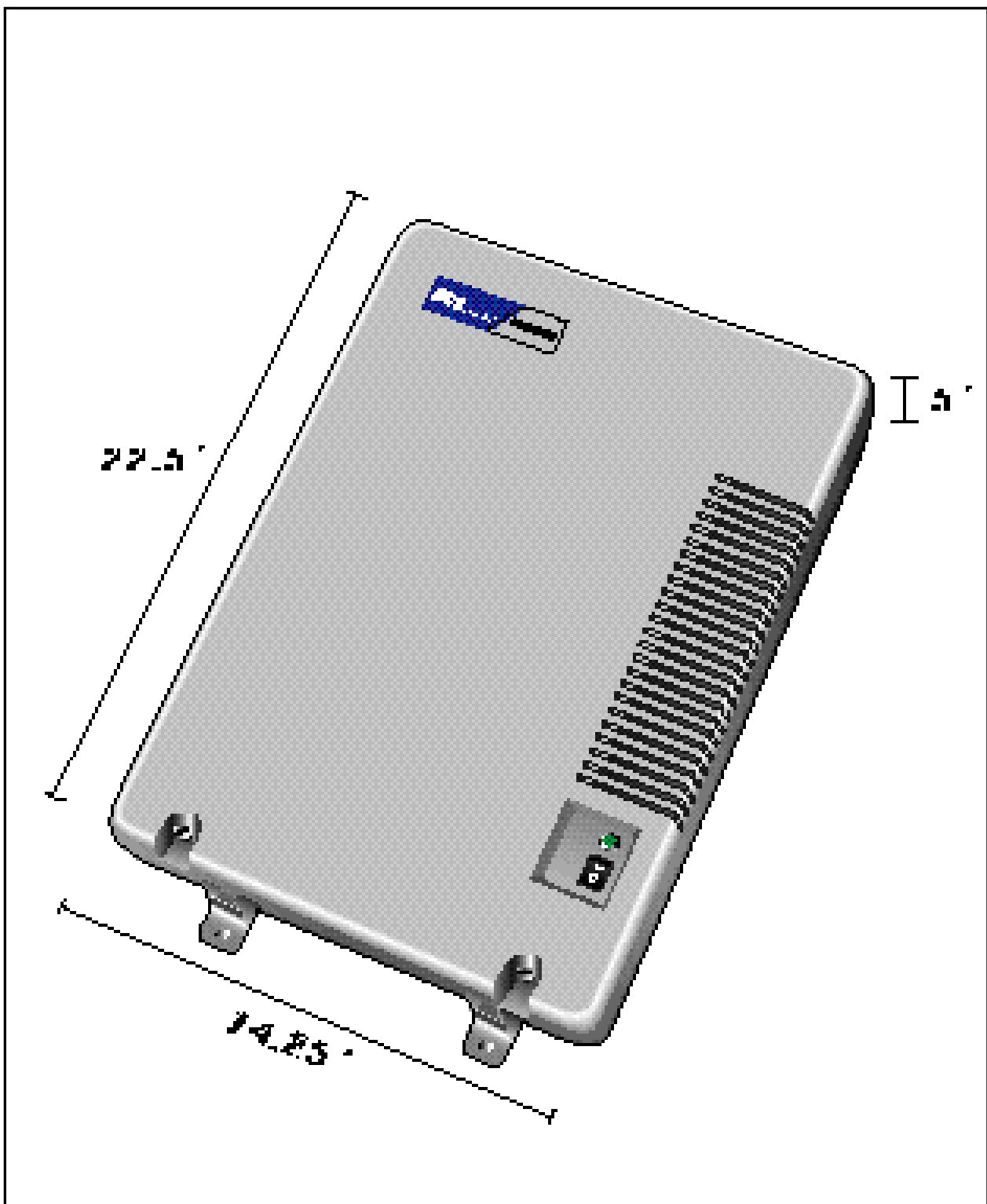
When planning the installation of the DCS COMPACT, choose a site that meets the following requirements:

- ✦ Select a location for the key service unit (KSU) that has enough space for easy installation and has adequate lighting (see Figure 1–1).
- ✦ Select a location that will minimize cable lengths. See the Cable Requirements table below.
- ✦ The equipment should not be exposed to direct sunlight, corrosive fumes, dust, constant vibration or strong magnetic fields such as those generated by motors and copy machines.
- ✦ A direct commercial AC power outlet is required. Do not use extension cords. Preferably, a dedicated circuit should be used to minimize the risk of other electrical equipment being connected that could adversely affect system operation.
- ✦ Ensure that all wires and cable going to and coming from the KSU are properly routed. Do not cross fluorescent lights or run parallel with AC wires.
- ✦ The equipment must be located in an environment that will maintain a temperature range of 32°–100°F (0°–40°C) and a humidity range of 10%–90% non-condensing.
- ✦ Allow at least 6" clearance on both sides and 6" clearance on top of the KSU to ensure proper ventilation.
- ✦ Do not install in close proximity to a fire sprinkler head or other sources of water.

Meeting these requirements will help to ensure proper performance and greater life expectancy of the system.

CABLE REQUIREMENTS				
EQUIPMENT	CABLE	AWG	MAX FEET	MAX METERS
DIGITAL KEYSETS	1PR. TWISTED	24	1300	400
ADD-ON MODULES	1PR. TWISTED	24	1300	400
SINGLE LINE STATION	1PR. TWISTED	24	3000	1 KM
DOOR PHONE	2PR. TWISTED	24	330*	100
SIM	1PR TWISTED	24	1300	400

* This is the maximum distance a door phone can be from the DPIM. The DPIM can be a maximum of 900 cable feet from the KSU.



KEY SERVICE UNIT DIMENSIONS

FIGURE 1-1

PART 2. INSTALLING OF BASIC KSU AND EXPANSION KIT

2.1 UNPACKING AND INSPECTION

After unpacking the KSU, inspect for signs of physical damage. If any damage is detected, do not attempt to install. Contact Samsung Technical Support Department.

Check to see that the KSU carton includes the following items:

- Key service unit
- 4 Central Office Protection (4 COP) card
- Wall-mount kit consisting of three screws
- RAM pack

Check to see that the EXPANSION KIT carton includes the following:

- Expansion backplane
- Plastic card rack
- Vinyl bag with screws and cables

2.2 KEY SERVICE UNIT INSTALLATION

The Key Service Unit (KSU) must be wall-mounted. The KSU should be mounted on a polywood backboard at least 5/8" thick. Attach a mounting screw to the backboard. Next hang the KSU on the screws and secure it to the backboard with the remaining two screws (see Figure 2-1).

2.3 EXPANSION KIT INSTALLATION

1. Mount the expansion backplane in the basic KSU and attach it securely with the five screws supplied. Take care not to over-tighten the screws and damage the PCB (see Figure 2-2).
2. Connect the expansion backplane to the basic KSU by plugging one end of the ribbon cable into the socket on the KSU motherboard and the other end into the expansion backplane.

NOTE: It is recommended that the ribbon cable be attached to the expansion baseboard before it is installed in the KSU.

3. Connect the ground wires from the expansion backplane to the connectors on the KSU motherboard.
4. Fit the plastic card rack to the basic KSU and secure with the three screws that are supplied. Take care not to over-tighten the screws and strip the threads (see Figure 2-3).

2.4 GROUNDING

The DCS COMPACT comes equipped ready to use with a third wire AC ground provided through the power cord. This third wire ground will be adequate for most applications. However, if it is suspected that there is a problem with the ground provided at the AC outlet or local codes require a solid earth ground to be connected to the KSU, the existing third wire ground *must* be disconnected before power is applied. The existing third wire ground is disconnected by removing the holding screw and taping and storing the wire (see Figure 2–4). After this wire has been disconnected, the grounding lug on the PSU must be connected to a ground rod or metal cold water pipe using #10 AWG solid copper wire.

Failure to provide an adequate ground may cause confusing trouble symptoms or even circuit card failure.

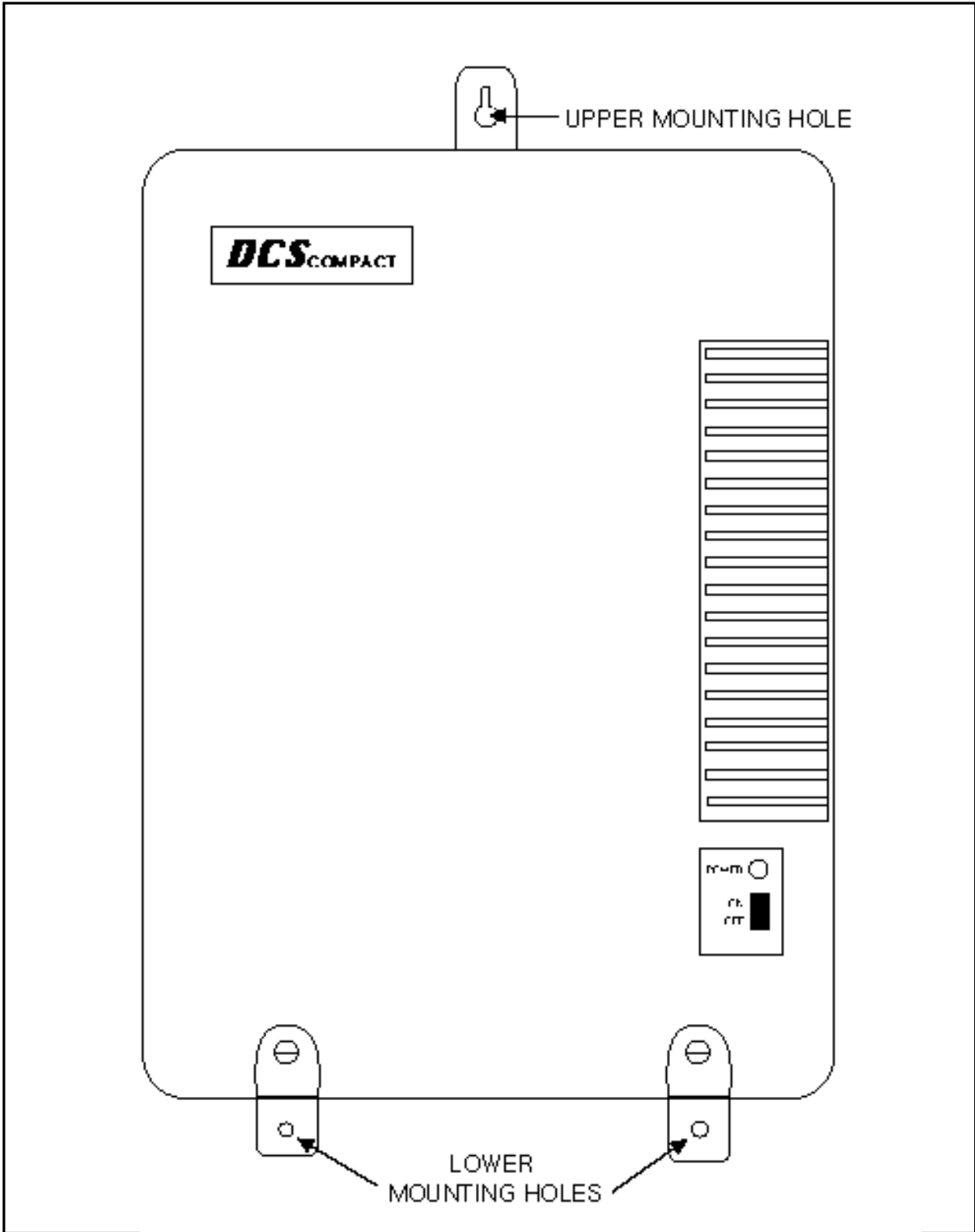
WARNING: Unplug the power cord from the AC outlet before attempting to connect the ground. Hazardous voltage may cause death or injury. Observe extreme caution when working with AC power.

2.5 MDF CABLING

All connections to the DCS COMPACT system are made by way of a customer-provided main distribution frame (MDF). The KSU and expansion kit are each connected to the MDF using a 25 pair female amphenol-type cable. These cables can be routed into the KSU cabinet from below.

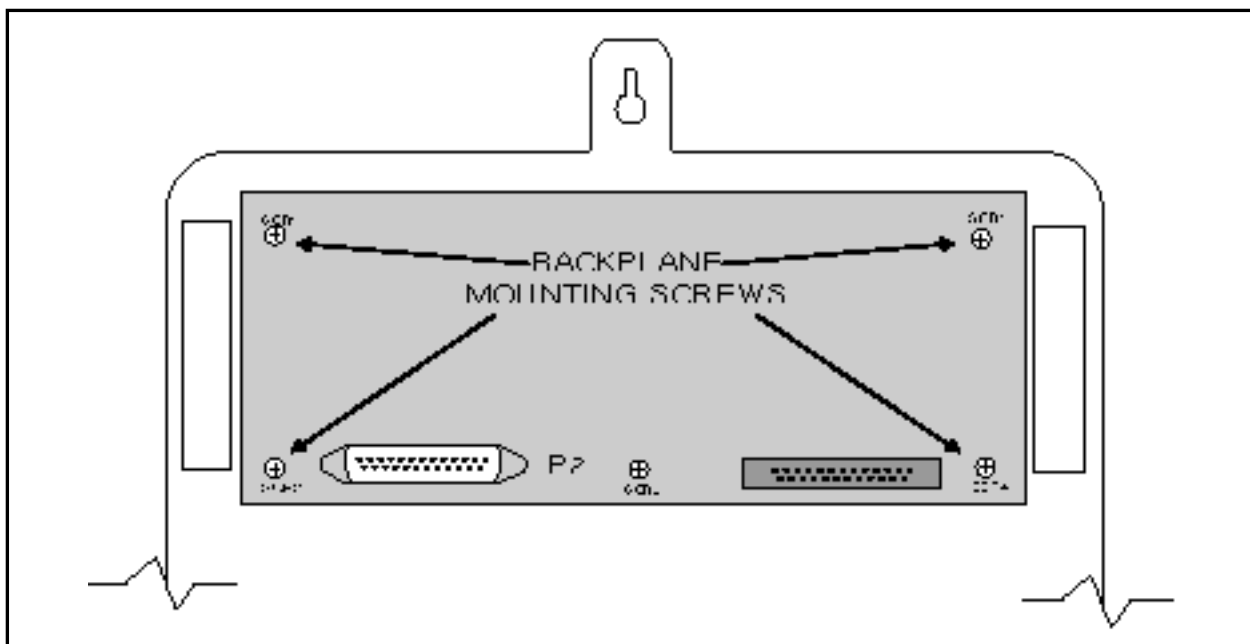
Label each cable to correspond with the connector numbers (see Figure 2–4). Label each 66 terminating block with the same connector number with which the cable is labeled.

Use one pair twisted wire to cross-connect stations or lines to their associated port.



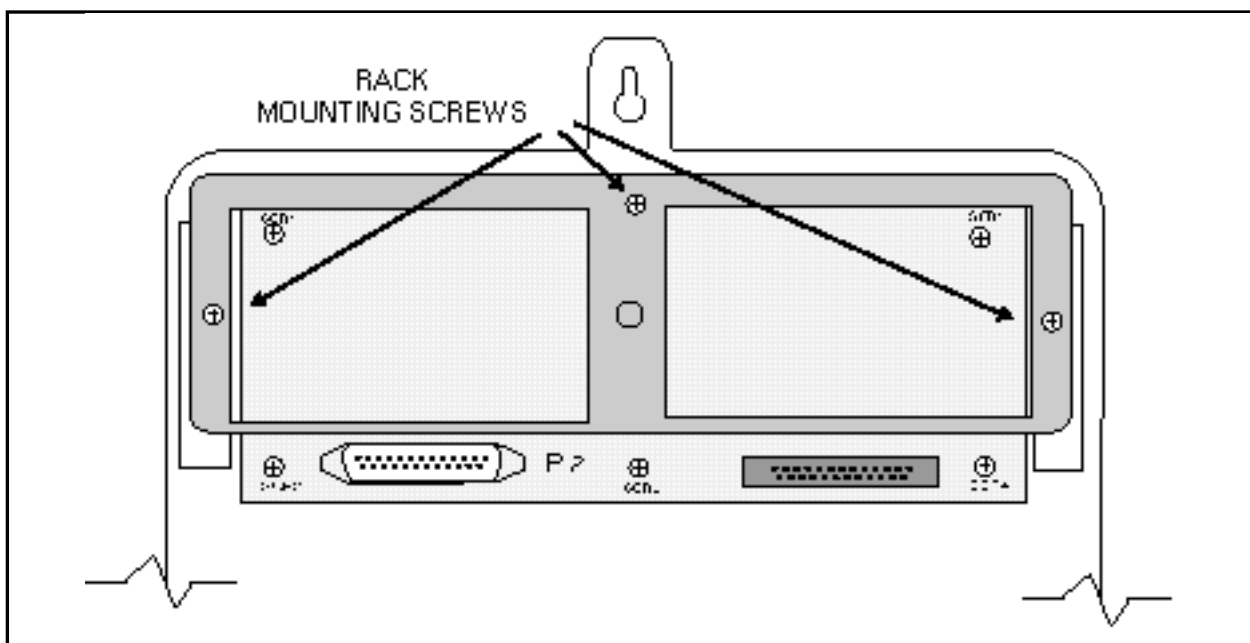
KSU MOUNTING HOLES

FIGURE 2-1



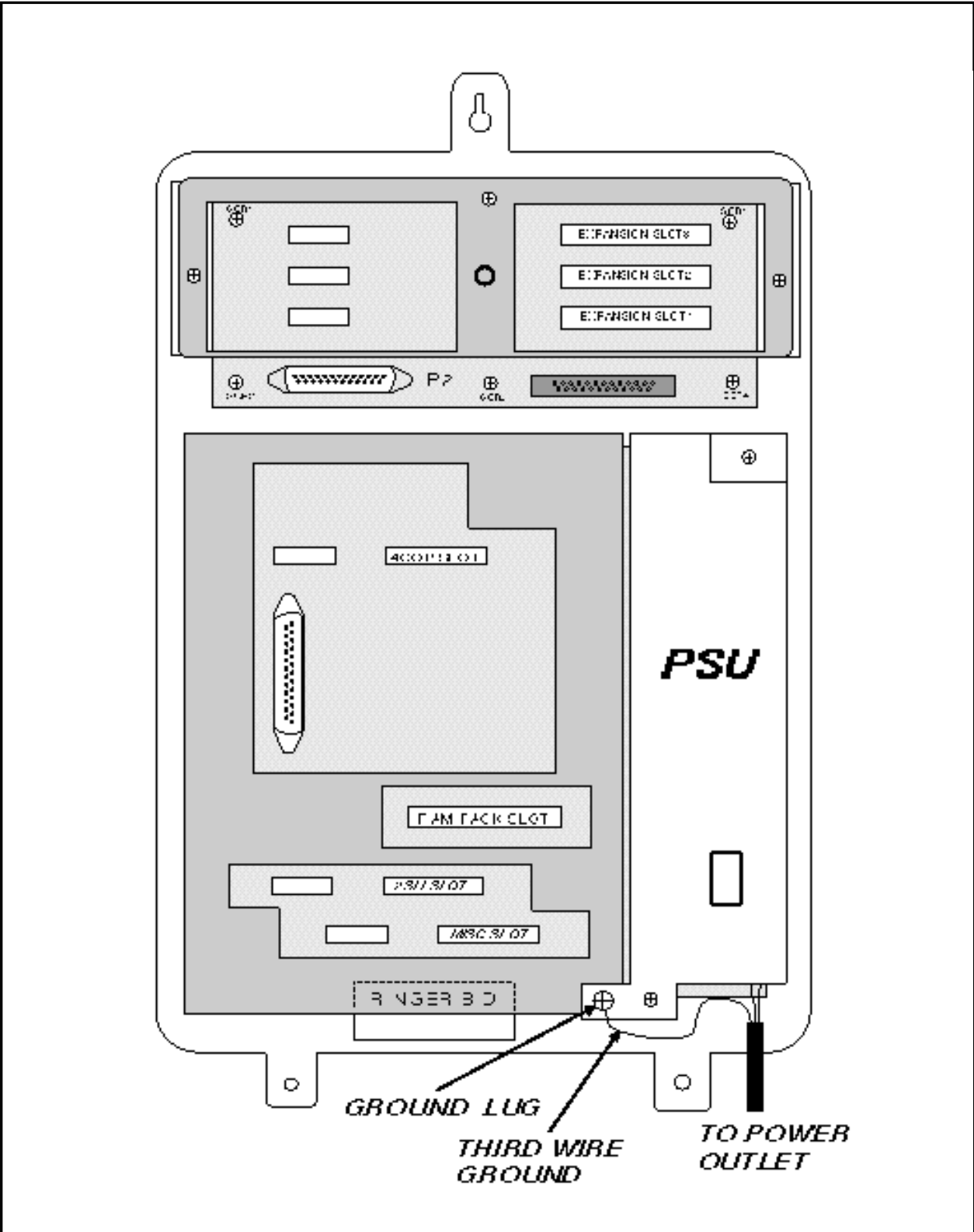
LOCATION OF BACKPLANE
MOUNTING SCREWS

FIGURE 2-2



LOCATION OF RACK
MOUNTING SCREWS

FIGURE 2-3



KEY SERVICE UNIT GROUNDING

FIGURE 2-4

PART 3. INSTALLING PRINTED CIRCUIT CARDS

Unpack and inspect each card before installing. Check for signs of physical damage. If any damage is detected, do not attempt to install. Contact Samsung Technical Support immediately.

3.1 RAM PACK (Figure 3–2)

Select the appropriate type of RAM pack for the system. Make sure that the BACK UP switch is in the OFF position. Insert the RAM card in the KSU slot labeled RAM (see Figure 3–1). Push firmly in the middle of the RAM pack to ensure that it is fully inserted into the back plane connector.

To prevent accidental damage to the RAM card, the RAM connector on the back plane is positioned to mate only with the RAM card. Other interface cards will not mate with this connector and the RAM card will not mate with any other connector.

3.2 4 CO PROTECTION CARD (Figure 3–3)

This card has no selectable options. Insert the 4 CO protection card into the appropriate slot (see Figure 3–1). Push firmly in the middle of both card ejectors to ensure that it is fully inserted into the back plane connector.

3.3 2 SLI CARD (Figure 3–4)

This card has no selectable options. Insert the 2 SLI card into the appropriate slot (see Figure 3–1). Push firmly in the middle of both card ejectors to ensure that it is fully inserted into the back plane connector.

3.4 MISC CARD (Figure 3–5)

There are no options to select on this card. Insert the MISC card into the appropriate slot (see Figure 3–1). Push firmly in the middle of both card ejectors on each card to ensure that it is fully inserted into the back plane connector.

NOTE: Only one MISC card can be installed in a system.

3.5 4 TRK CARD (Figure 3–7)

There are no options to select on this card. Insert the 4 TRK card into any slot on the expansion back plane (see Figure 3–6). Push firmly in the middle of both card ejectors on each card to ensure that it is fully inserted into the back plane connector.

3.6 6 DLI CARD (Figure 3–7)

There are no options to select on this card. Insert the 6 DLI card into any slot on the expansion back plane (see Figure 3–6). Push firmly in the middle of both card ejectors on each card to ensure that it is fully inserted into the back plane connector.

3.7 6 SLI CARD (Figure 3–8)

There are no options to select on this card. Insert the 6 SLI card into any slot on the expansion back plane (see Figure 3–6). Push firmly in the middle of both card ejectors on each card to ensure that it is fully inserted into the back plane connector.

3.8 AA CARD (Figure 3–8)

There are no options to select on this card. Insert the AA card into any slot on the expansion back plane (see Figure 3–6). Push firmly in the middle of both card ejectors on each card to ensure that it is fully inserted into the back plane connector.

3.9 AC 15 CARD (Figure 3–9) (✕U.K. only)

There are no options to select on this card. Insert the AC15 card into any slot on the expansion back plane (see Figure 3–6). Push firmly in the middle of both card ejectors on each card to ensure that it is fully inserted into the back plane connector.

3.10 BRI CARD (Figure 3–9)

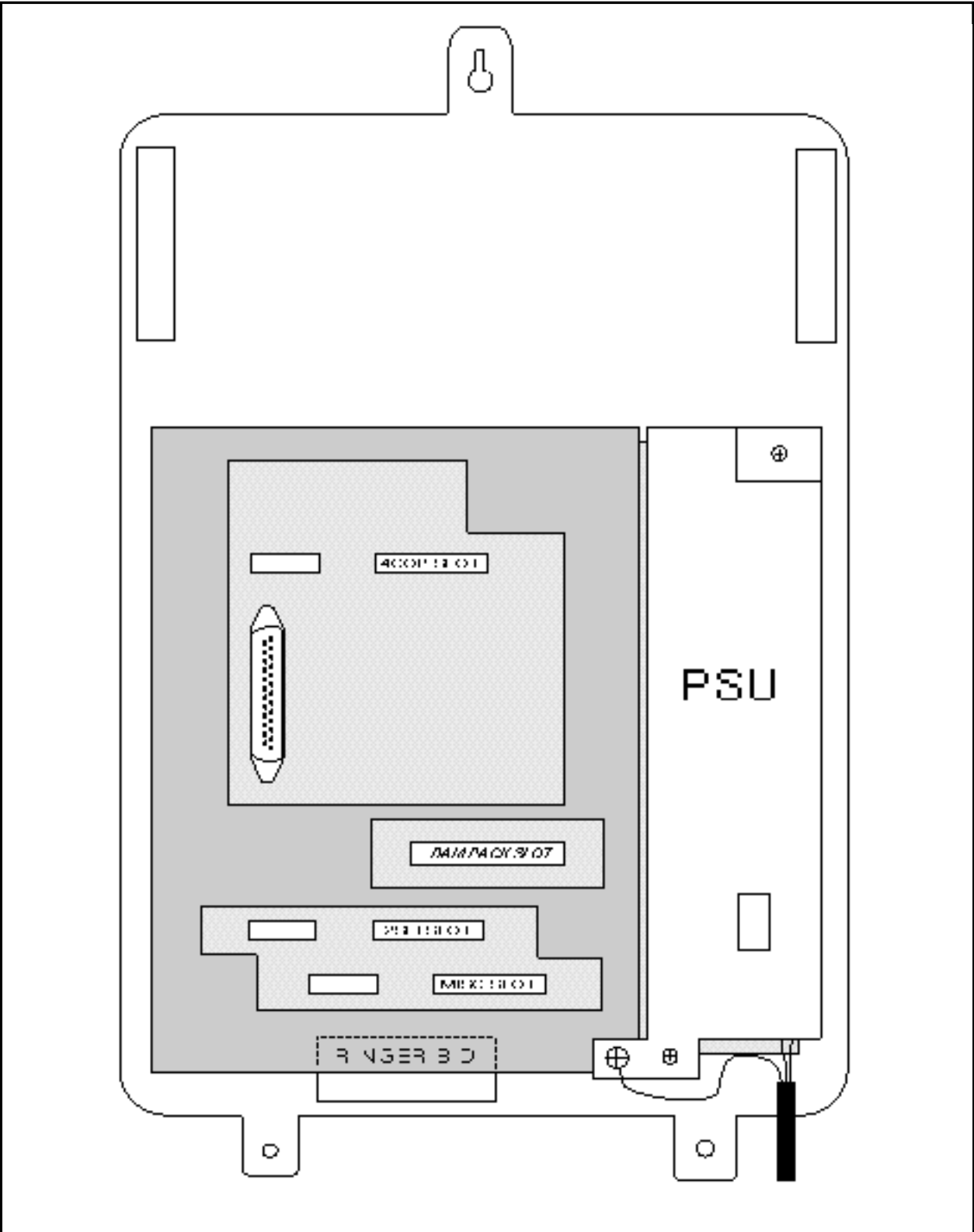
There are no options to select on this card. Insert the BRI card into any slot on the expansion back plane (see Figure 3–6). Push firmly in the middle of both card ejectors on each card to ensure that it is fully inserted into the back plane connector.

3.11 2 BRI CARD (Figure 3–10)

There are no options to select on this card. Insert the 2 BRI card into any slot on the expansion back plane (see Figure 3–6). Push firmly in the middle of both card ejectors on each card to ensure that it is fully inserted into the back plane connector.

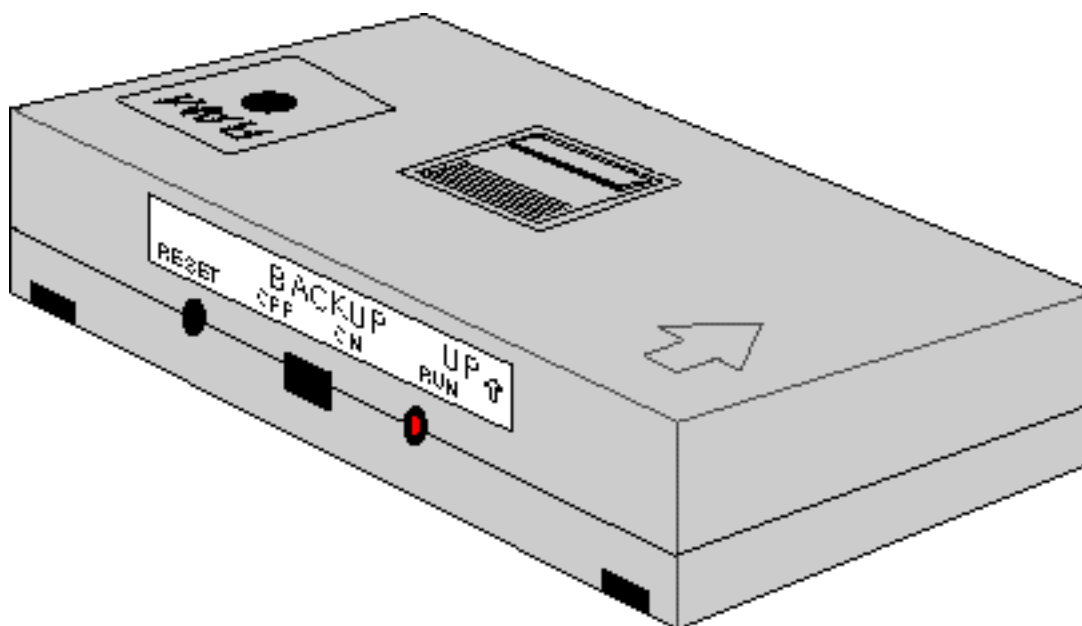
3.12 VDIAL CARD (Figure 3–10)

There are no options to select on this card. Insert the VDIAL card into any slot on the expansion back plane (see Figure 3–6). Push firmly in the middle of both card ejectors on each card to ensure that it is fully inserted into the back plane connector.



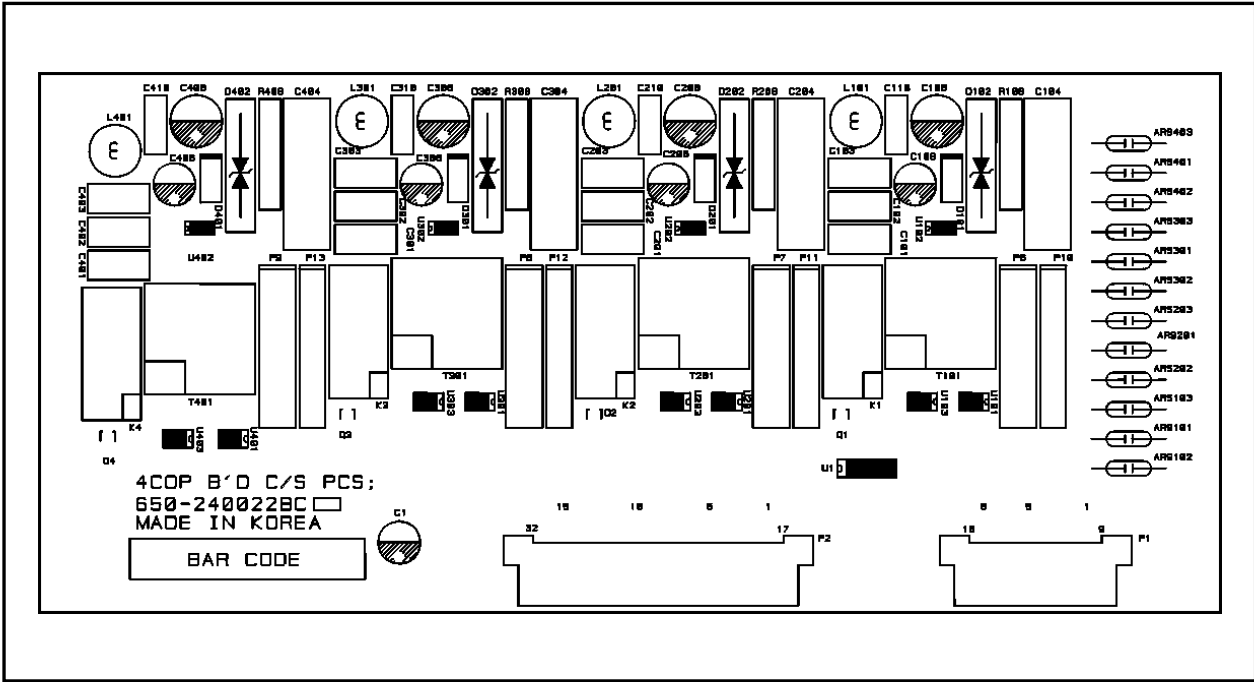
408 KSU SLOT POSITIONS

FIGURE 3-1



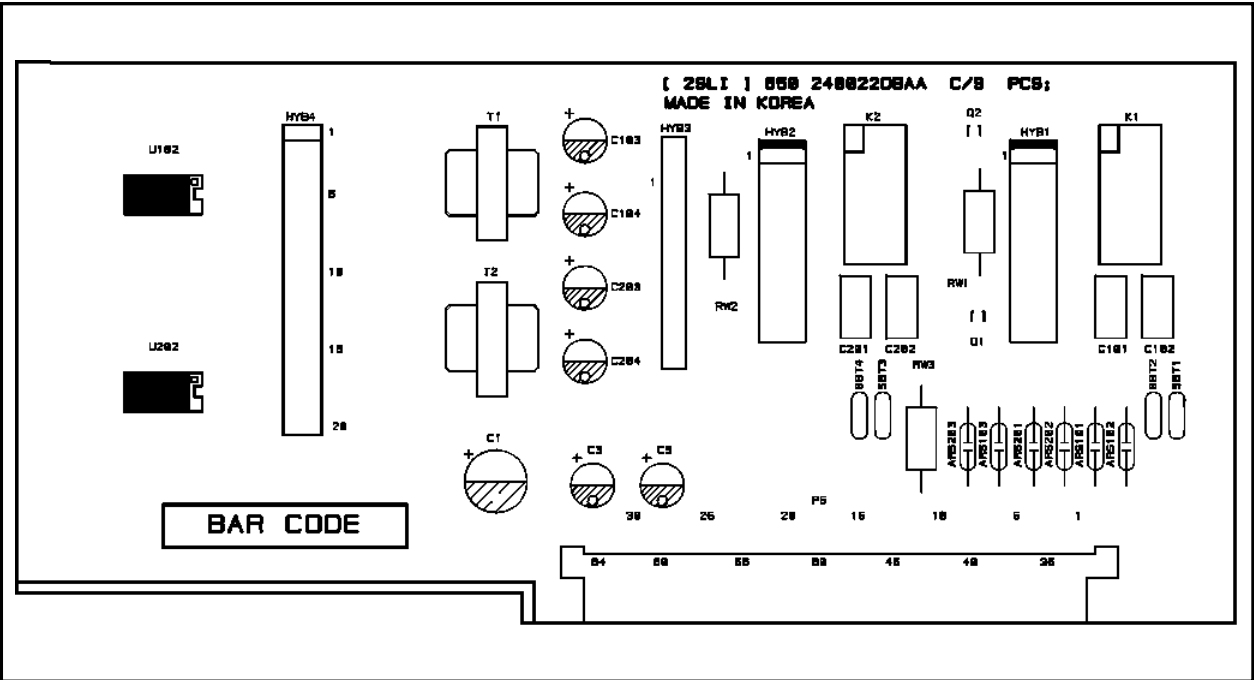
DCS COMPACT RAM PACK

FIGURE 3-2



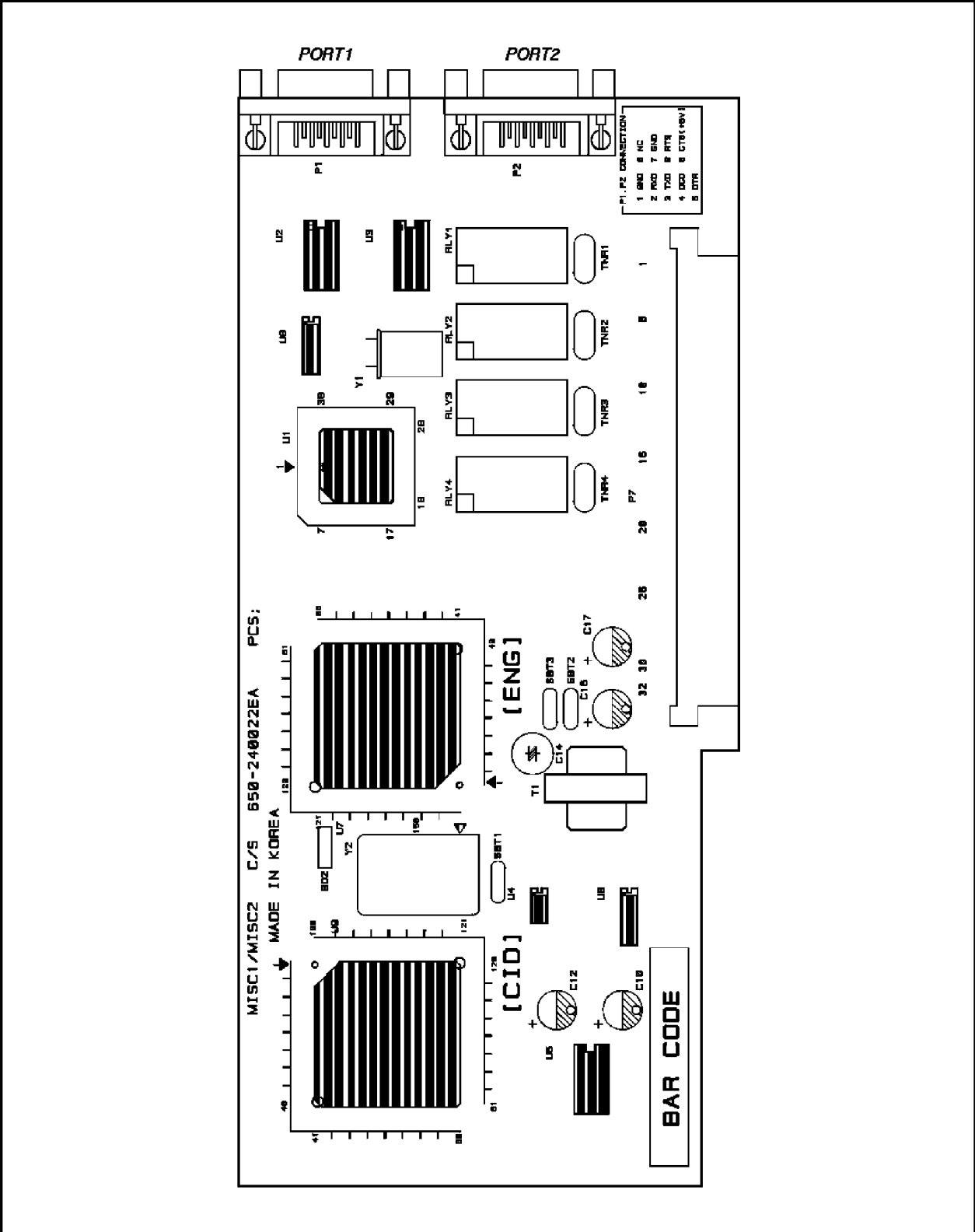
4 CO PROTECTION CARD

FIGURE 3-3



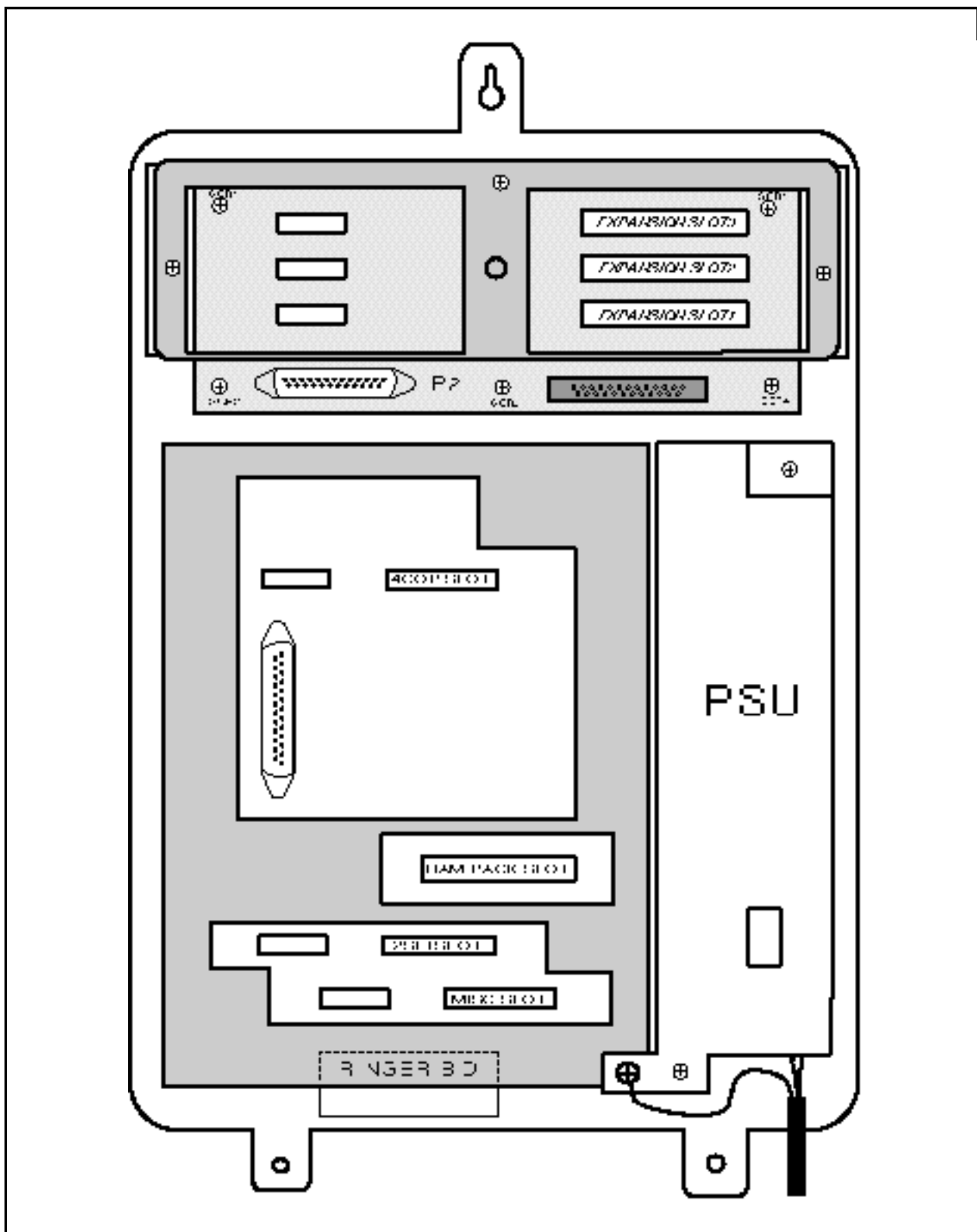
2 SLI CARD

FIGURE 3-4



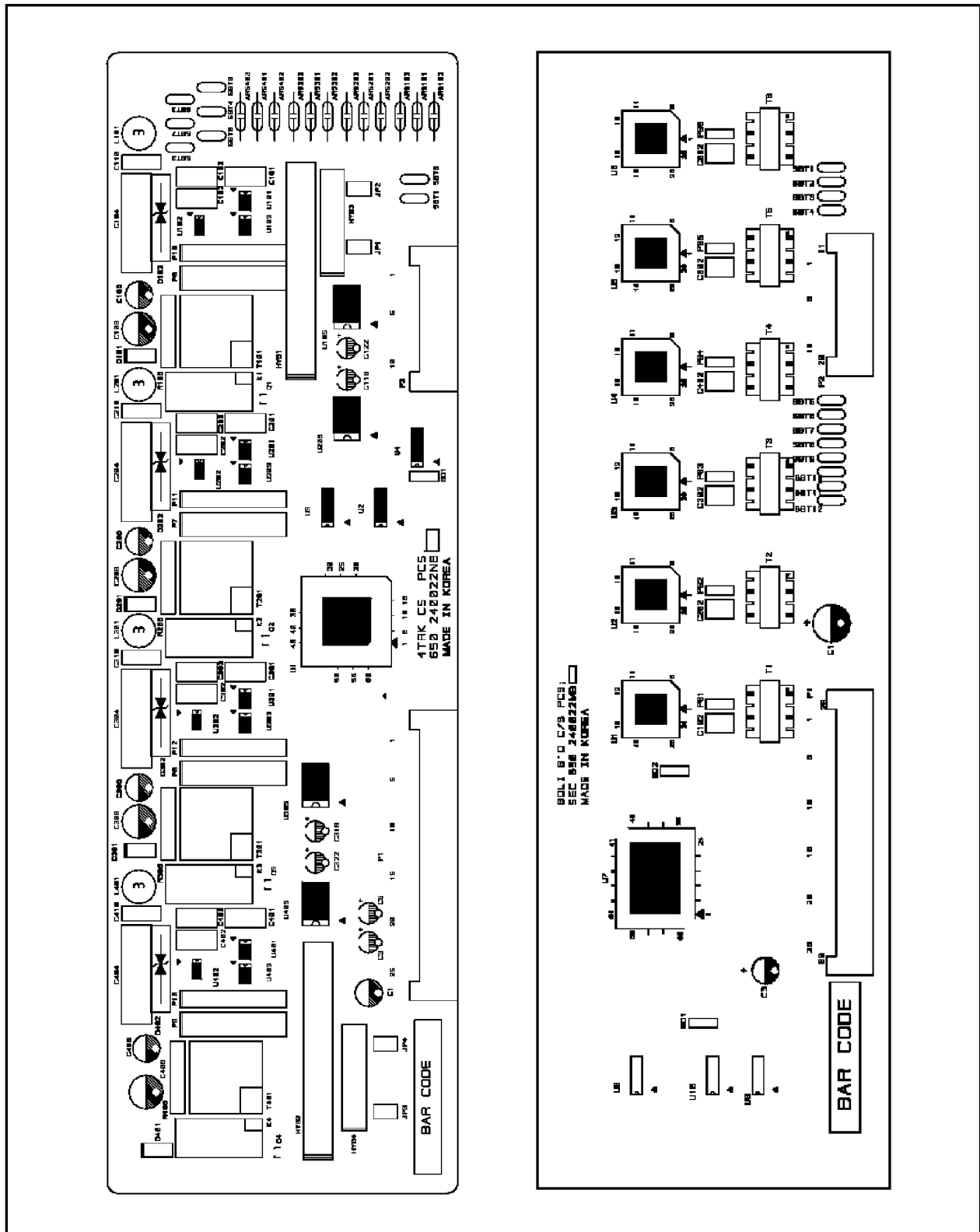
MISC CARD

FIGURE 3-5



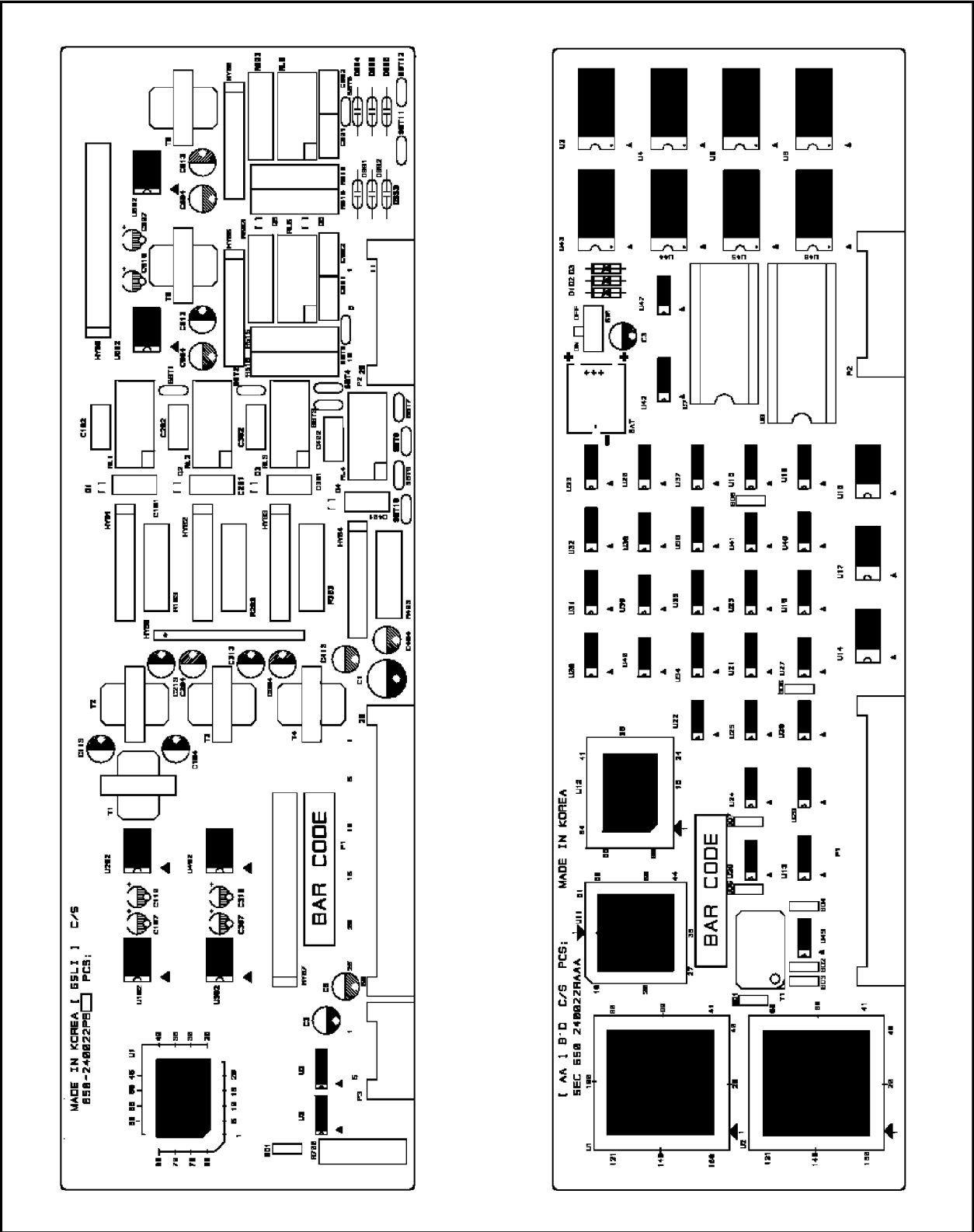
EXPANSION KIT INSTALLED
IN KSU

FIGURE 3-6



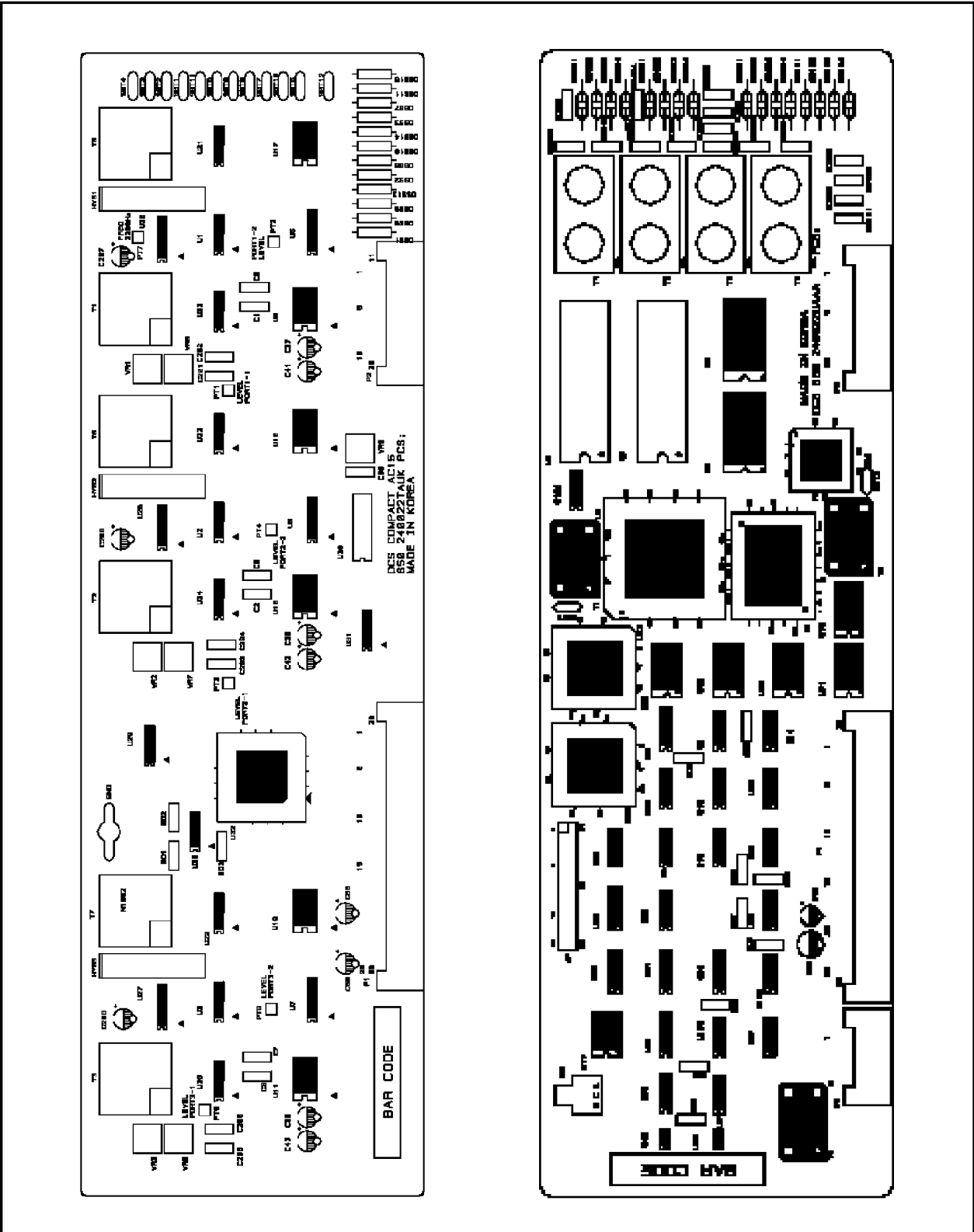
4 TRK CARD AND 6 DLI CARD

FIGURE 3-7



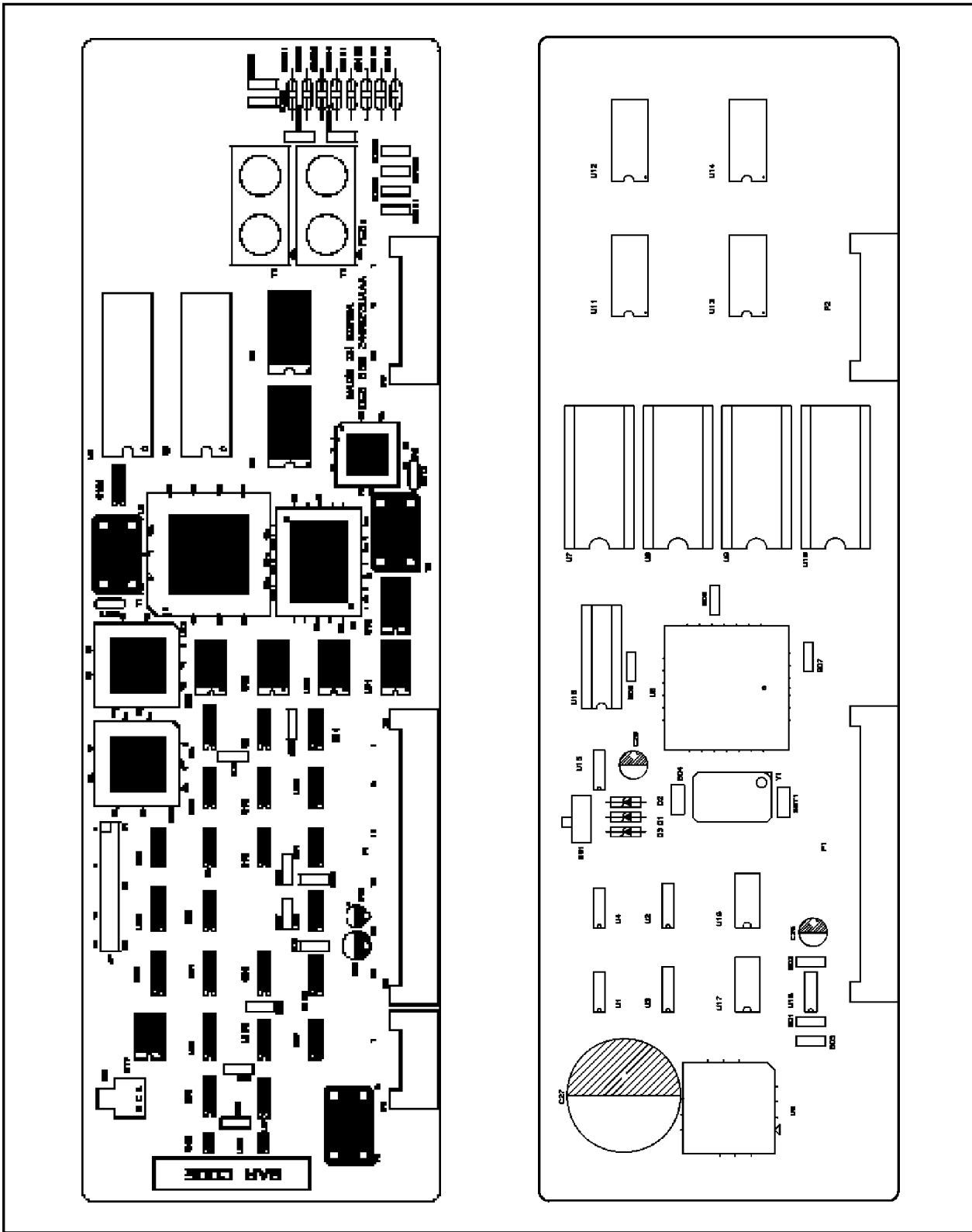
6 SLI CARD AND AA CARD

FIGURE 3-8



AC 15 AND BRI CARD

FIGURE 3—9



2 BRI AND VDIAL CARD

FIGURE 3-10

PART 4. POWER UP PROCEDURES

4.1 CONNECT POWER TO THE SYSTEM

During the initial installation, it is best to verify proper system operation before plugging in any amphenol-type cables to the MDF. If you have already plugged the cables in, unplug them.

Verify that the AC voltage at the dedicated electric outlet is in the range of 220VAC. Make sure the AC power switch is in the OFF position and that the RAM pack battery switch is OFF. Plug the KSU power cord into the dedicated polarized AC outlet. Turn the AC power switch to the ON position. The LED on the power supply will light steady to confirm the presence of power. If the PSU LED fails to illuminate, unplug the system, remove the power supply and check the AC fuse located on the bottom.

If the fuse is good but the LED does not illuminate, you must correct the problem before continuing. Turn off the power switch. Unplug all cards using the card ejectors. Turn the system on. Check the LED again. If the problem is corrected, you have a defective card. Test and remove the faulty card before continuing. If the LED still does not light, unplug the KSU and change power supplies. This in all probability will solve the problem. If it does not, contact Samsung Technical Support.

4.2 RAM CARD INDICATIONS

Having verified proper operation of the power supply, visually check the RAM card indications. The LED should flicker rapidly indicating the main processor is functioning. The battery switch should now be turned ON.

The system is equipped with a halt program. When this program is running, the LED is ON steady. The system must be reset to release the halt program and restore the system to normal operation. See MMC 810 for operation of the halt program.

4.3 PCB VERIFICATION

Before connecting all MDF cabling, plug in a test cable to the first DLI port. Connect a digital Telephone set and verify that it is working. Use maintenance program MMC 805 to verify the system version, software version and that all cards are recognized by the CPU. Remove the test cable and plug in all amphenol-type cables to the MDF. Proceed with the rest of the installation.

4.4 DEFAULT TRUNK AND STATION NUMBERING

Upon initial power up, the CPU reads each slot for the existence of a card and identifies the type of card. It stores this as the default configuration.

The system assigns trunk numbers beginning with 701 and continues to 704 for a basic KSU or to 710 for a fully equipped KSU.

Station numbers are assigned in the same manner. The lowest station is assigned station number 201 and continues to 208 for a basic KSU or to 222 for a fully equipped KSU. Keyset daughter boards

are assigned numbers beginning with 301 and continue to 310. Default data assigns the 24 button keyset in the lowest port to the operator group and all trunks ring that station until default is changed. It is recommended that a DLI card be used as the first station card so that the operator station will default to a 24 button keyset as extension 201.

Station and trunk numbers can be changed, rearranged and reassigned as needed using MMC 724.

PART5. CONNECTING TELCO CIRCUITS

5.1 SAFETY PRECAUTIONS

To limit the risk of personal injury, always follow these precautions before connecting TELCO circuits:

- a. Never install telephone wiring during a lightning storm.
- b. Never install telephone jacks in a wet location unless the jack is specifically designed for wet locations.
- c. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- d. Use caution when installing or modifying telephone lines.

5.2 LOOP START LINES

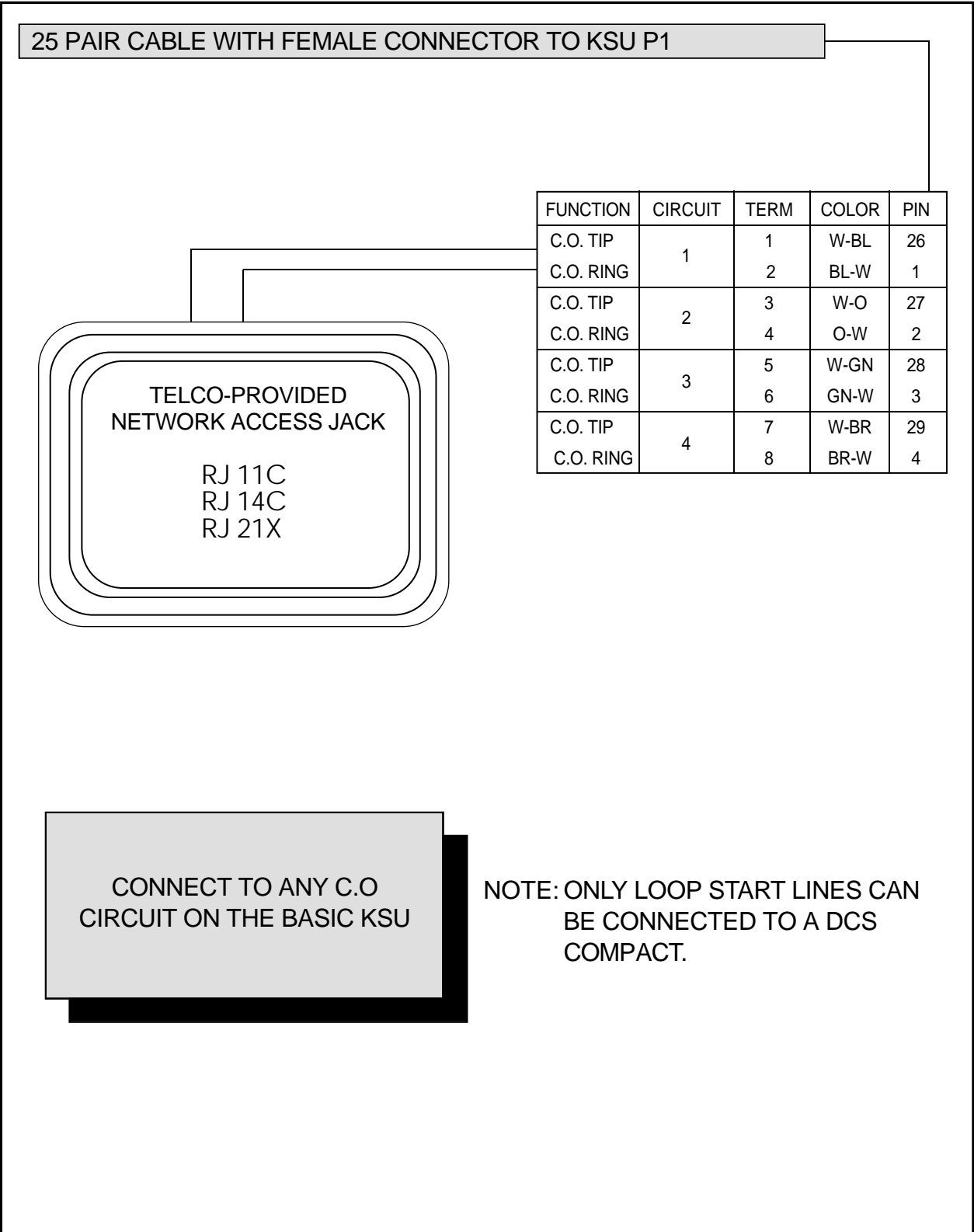
Using one pair twisted #24 AWG or #26 AWG wire, cross-connect each loop start C.O line to the trunk port of your choice (see Figures 5-1 and 5-2).

5.3 OFF PREMISE EXTENSIONS (OPX)

Using one pair twisted #24 AWG or #26 AWG wire, cross-connect any 2 SLI port to telephone company OPX circuits (see Figure 5-5).

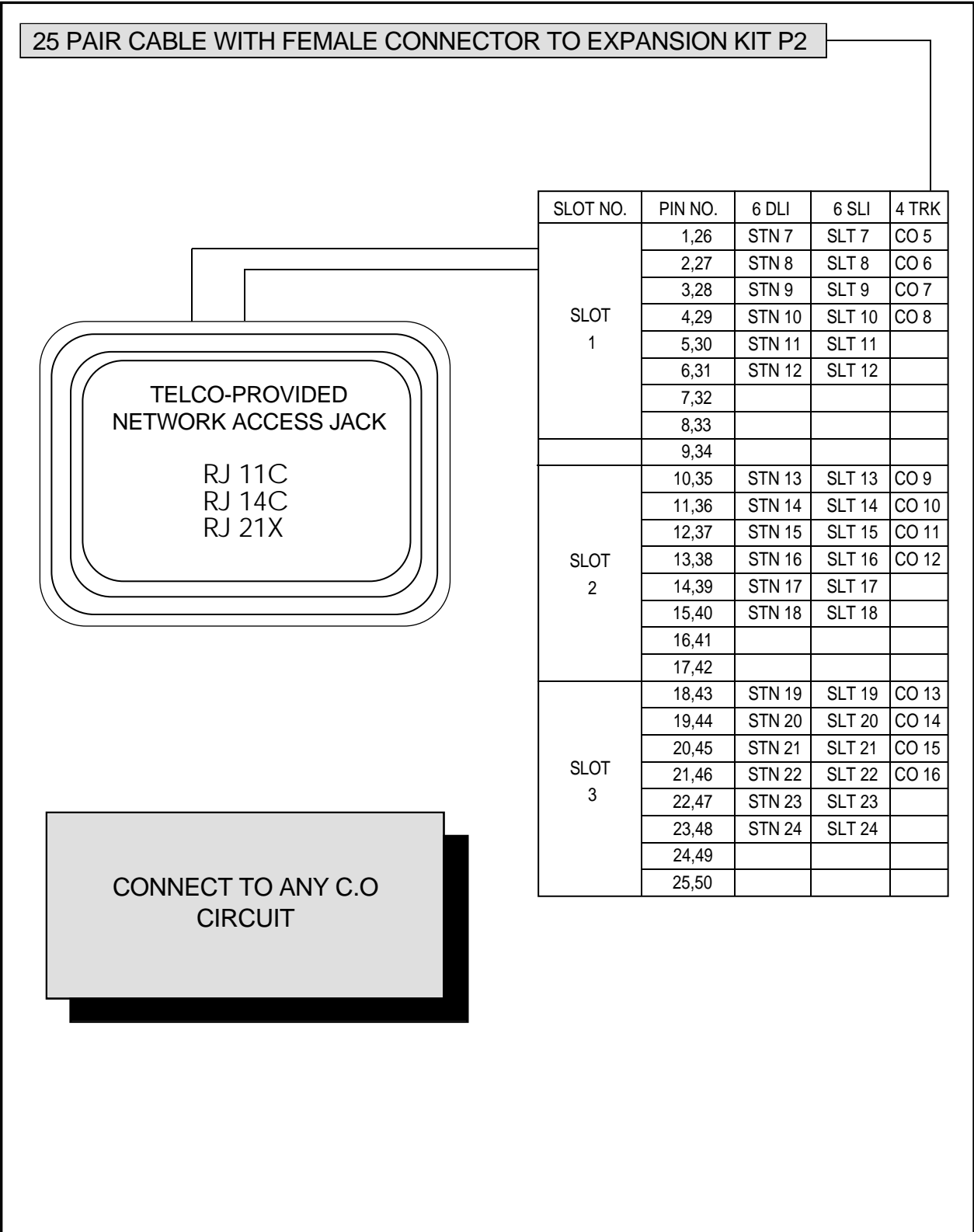
Circuits on the 2 SLI card are specifically designed to meet TELCO requirements for OPX use. These circuits are provided with the same over voltage and over current protection as C.O. line circuits. Using single line stations on a EXP SLI or KDB SLI may cause damage to your equipment.

There is no special programming required for OPX use; however, it is suggested that the OPX ports be set for data ports in MMC 208. The telephone company service facility interface code for OPX circuits is OL13C.



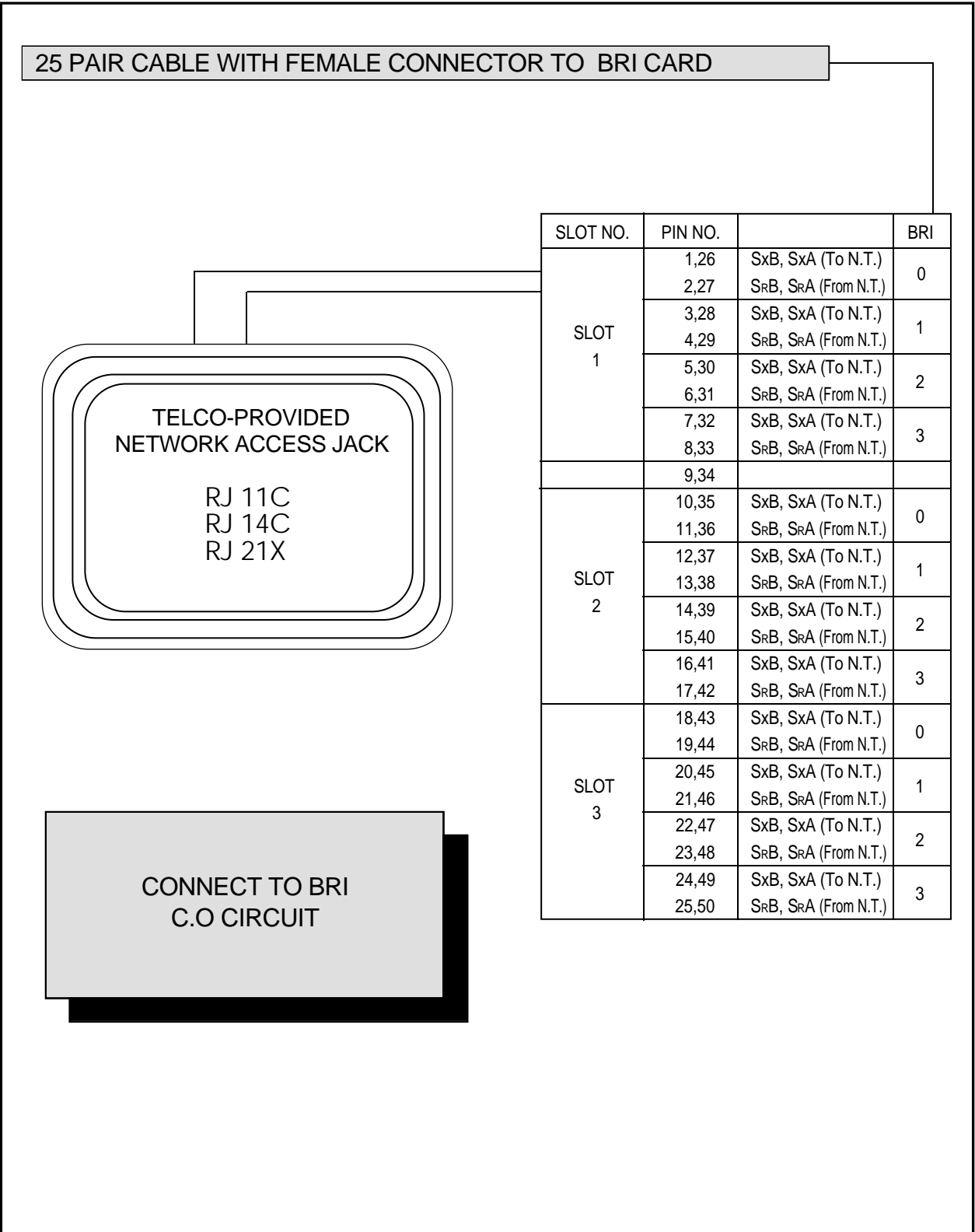
MDF CONNECTIONS
LOOP START LINE TO BASIC KSU

FIGURE 5-1



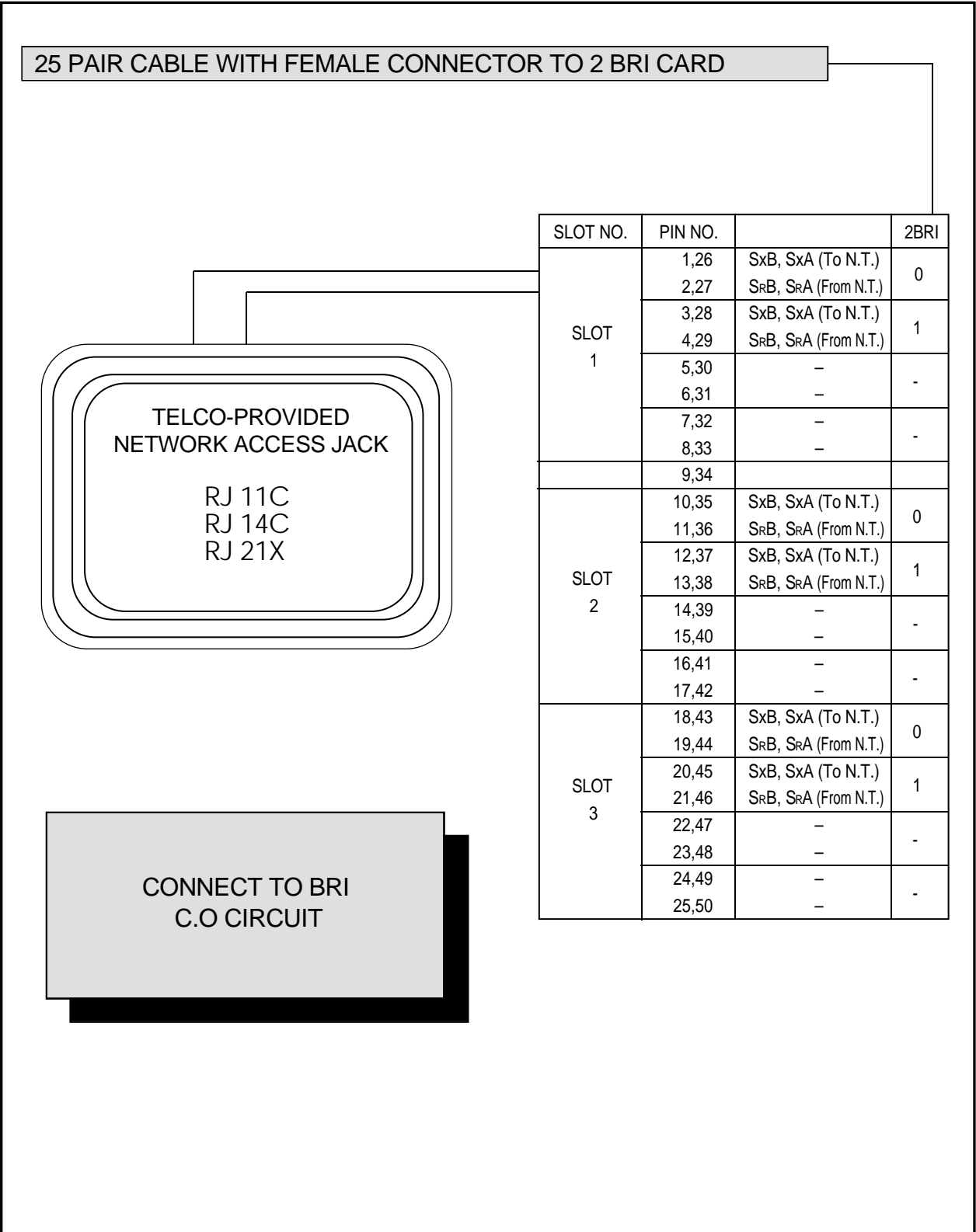
MDF CONNECTIONS
LOOP START LINE TO EXPANSION CARD

FIGURE 5-2



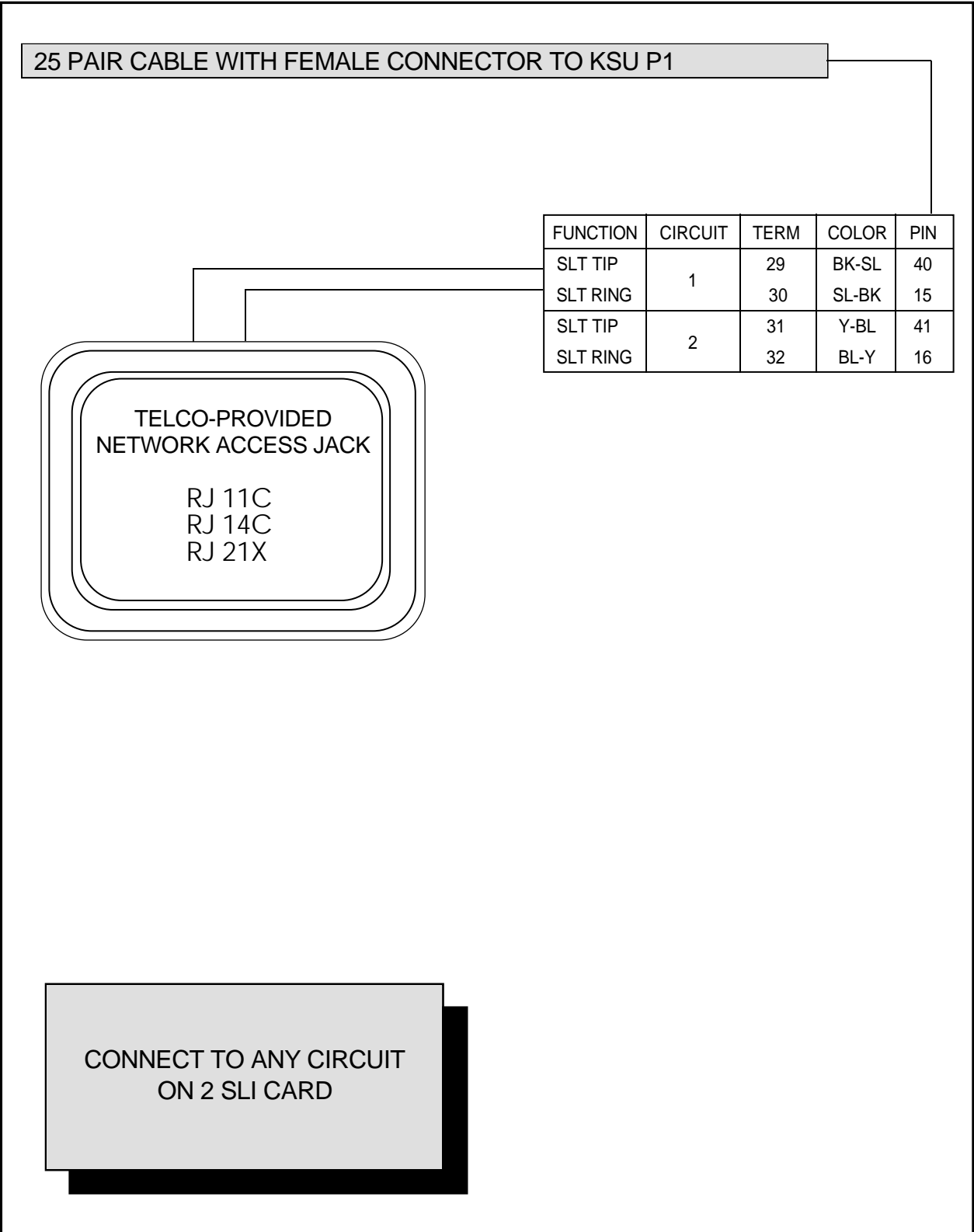
MDF CONNECTIONS
BRI TO EXPANSION CARD

FIGURE 5-3



MDF CONNECTIONS
2 BRI TO EXPANSION CARD

FIGURE 5-4



MDF CONNECTIONS
OFF PREMISE EXTENSION
FROM 2 SLI CARD

FIGURE 5-5

PART6. CONNECTING STATION EQUIPMENT

6.1 SAFETY PRECAUTIONS

To limit the risk of personal injury, always follow these precautions before connecting telephone circuits:

- a. Never install telephone wiring during a lightning storm.
- b. Never install telephone jacks in a wet location unless the jack is specifically designed for wet locations.
- c. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- d. Use caution when installing or modifying telephone lines.

6.2 DCS COMPACT KEYSET

Using one pair twisted #24 AWG or #26 AWG wire, cross-connect each keyset to the DLI port of your choice (see Figures 6-1 and 6-2).

NOTE: Because the DCS COMPACT is a self-configuring system, if you connect a 12 button keyset to a DLI port that previously had a 24 button keyset installed, the existing data will be rewritten with 12 button keyset default data (see MMC 723).

6.3 ADD-ON MODULE

Using one pair twisted #24 AWG or #26 AWG wire, cross-connect each add-on module (AOM) to the DLI port of your choice (see Figures 6-3 and 6-4).

If an AOM is to operate as a stand-alone unit, there is nothing else required other than assigning keys. When an AOM is to be used with a station, it must be assigned in MMC 309. Add-on modules can be assigned to any keyset.

6.4 SINGLE LINE TELEPHONE

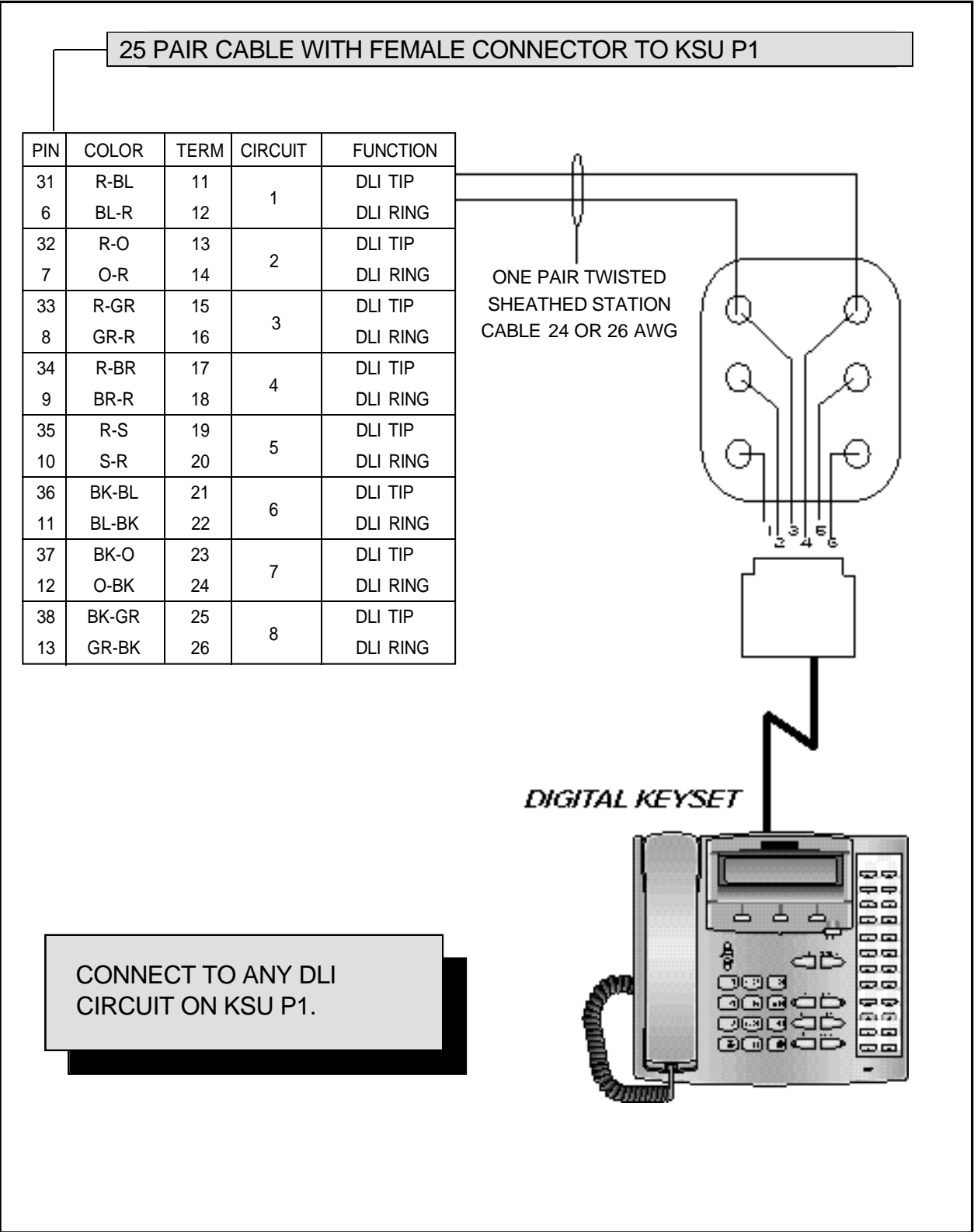
Using one pair twisted #24 AWG or #26 AWG wire, cross-connect each single line telephone to the SLI port of your choice (see Figures 6-5 and 6-6).

6.5 DOOR PHONE AND DOOR LOCK RELEASE

Using one pair twisted #24 AWG or #26 AWG wire, cross-connect each DPIM to the DLI port of your choice (see Figures 6-7 and 6-8). Next, connect the DPIM to the door phone using #24 AWG or #26 AWG twisted pair wire.

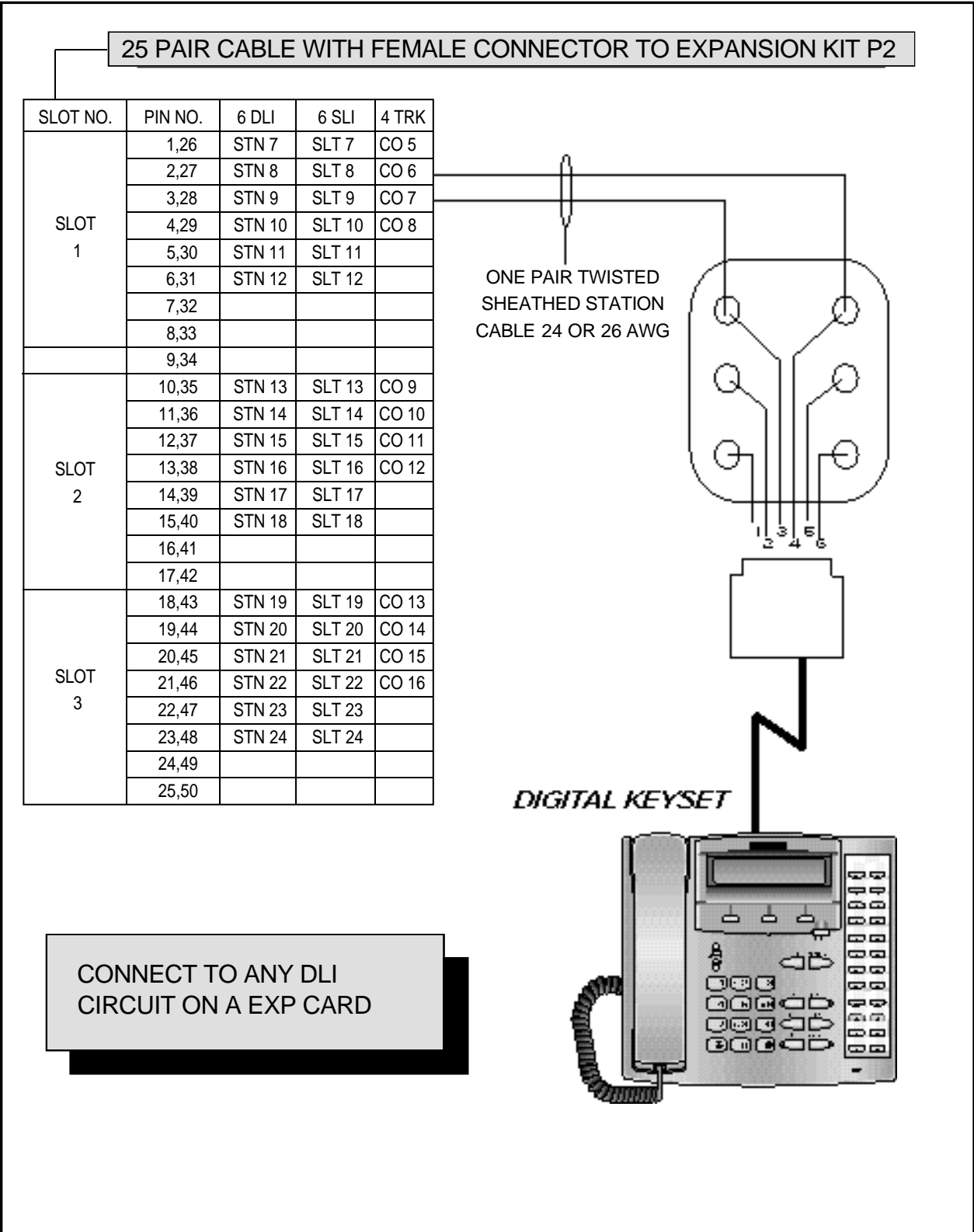
When a customer-provided electric door release is installed, cross-connect the corresponding door release contacts on the DPIM to the door lock-mechanism (see Figures 6-7 and 6-8). Use MMC 501 to program the duration of the contact closure as required. See the user guides for door lock release operation. The door release contacts on the DPIM are to be used for low voltage relay control only. The contacts are rated at 24 VDC-1 amp.

WARNING: Do not attempt to connect commercial AC power to these contacts.
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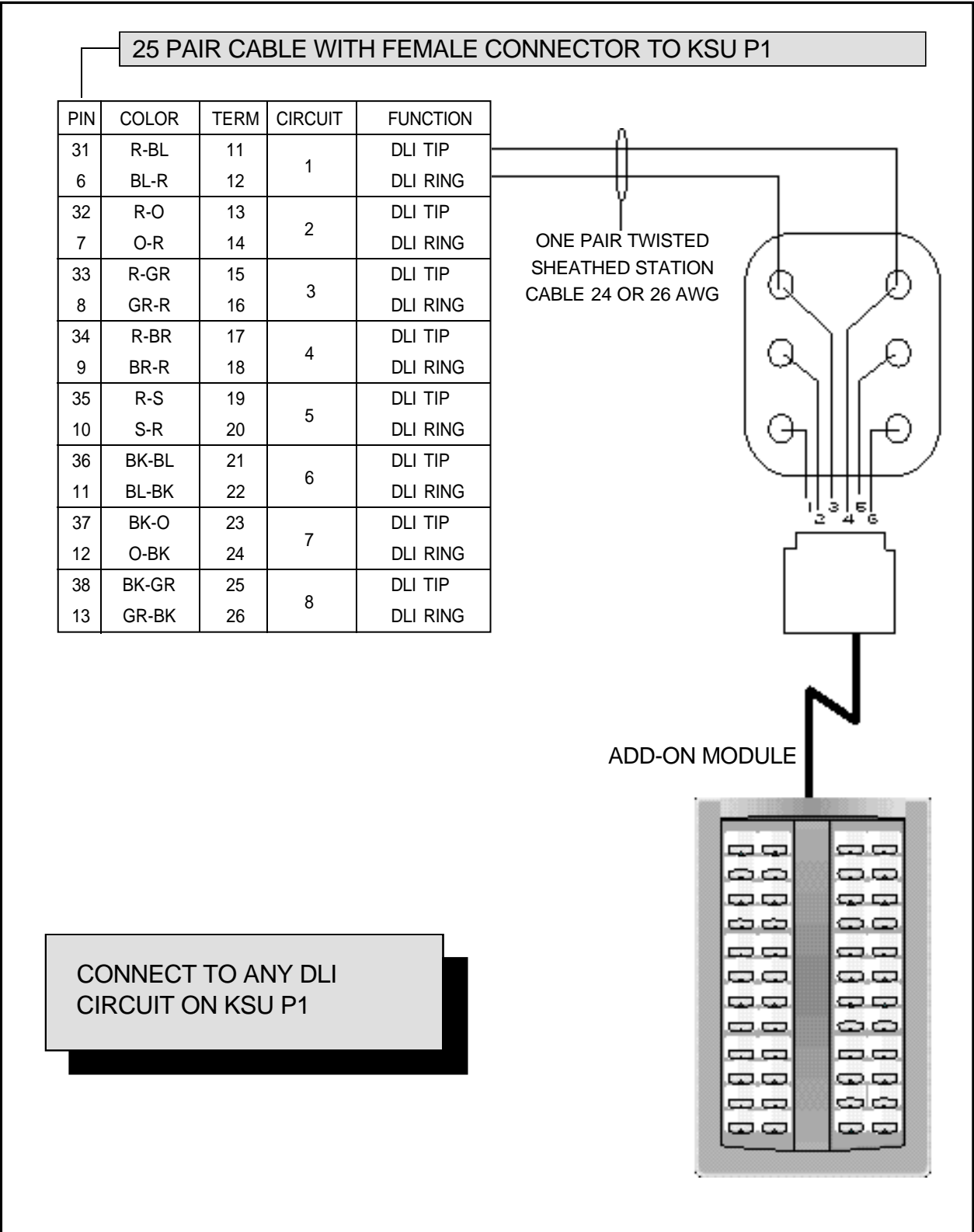
MDF CONNECTIONS
DIGITAL KEYSET TO KSU P1

FIGURE 6-1



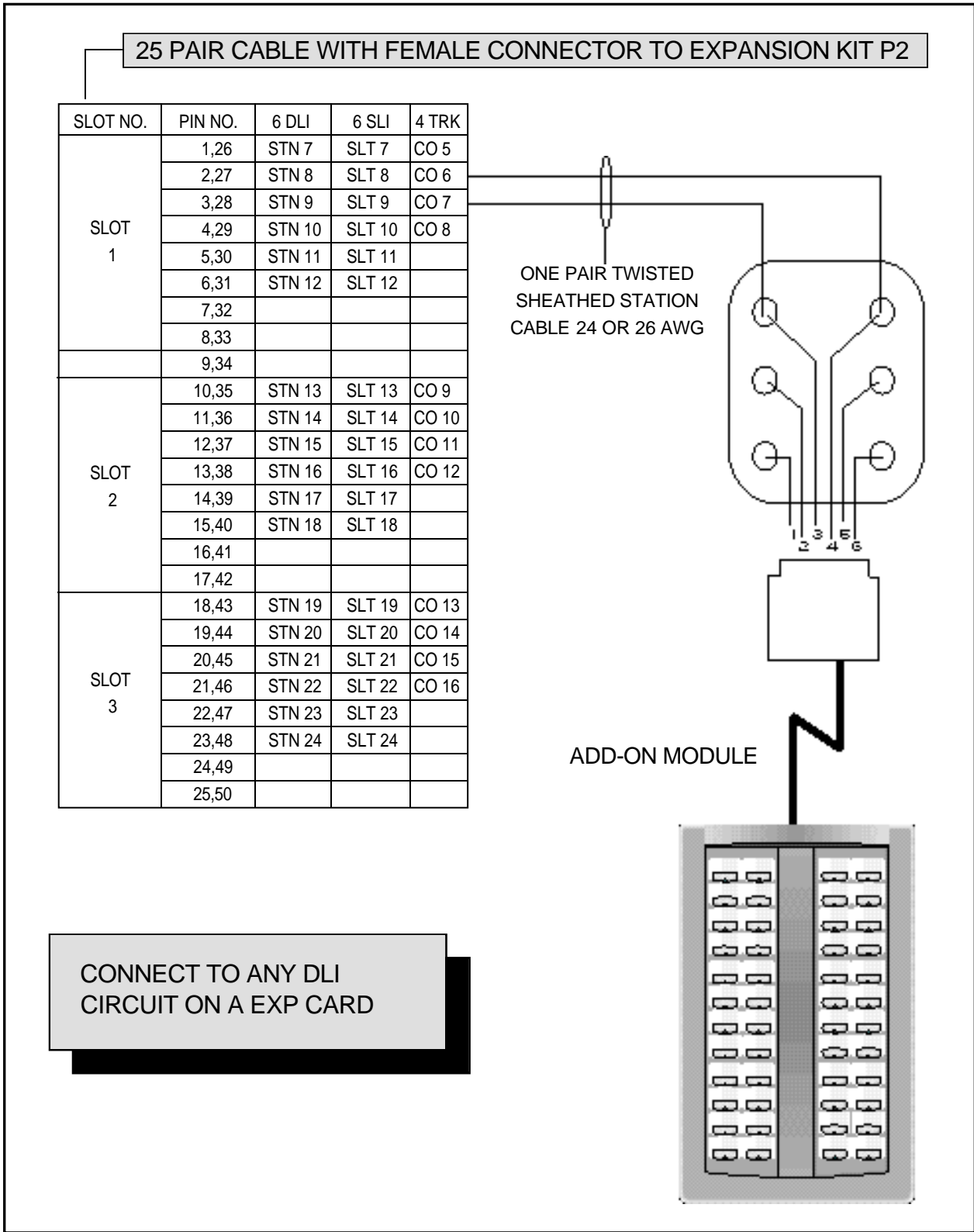
MDF CONNECTIONS
DIGITAL KEYSET TO EXPANSION CARD

FIGURE 6-2



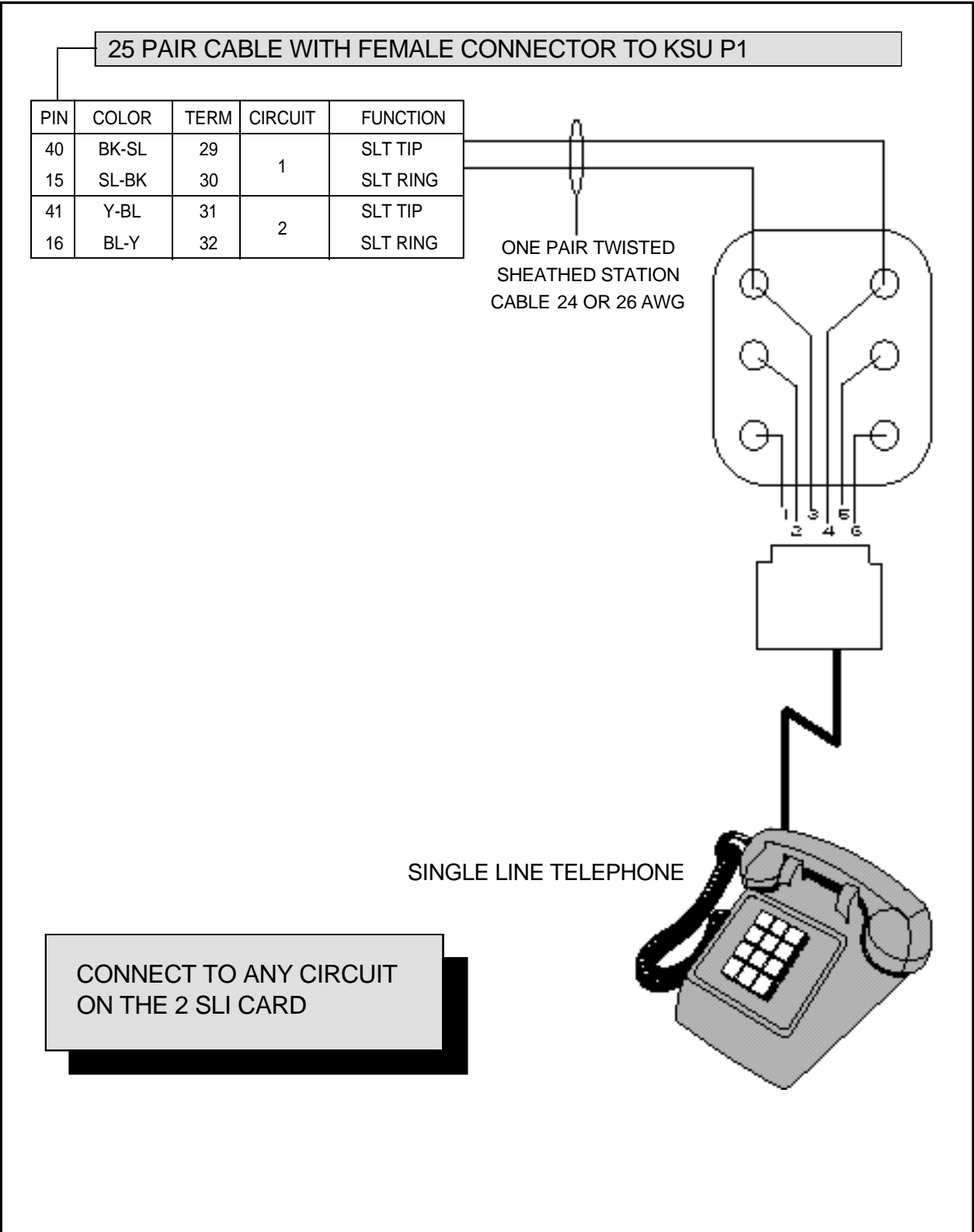
MDF CONNECTIONS
AOM TO KSU P1

FIGURE 6-3



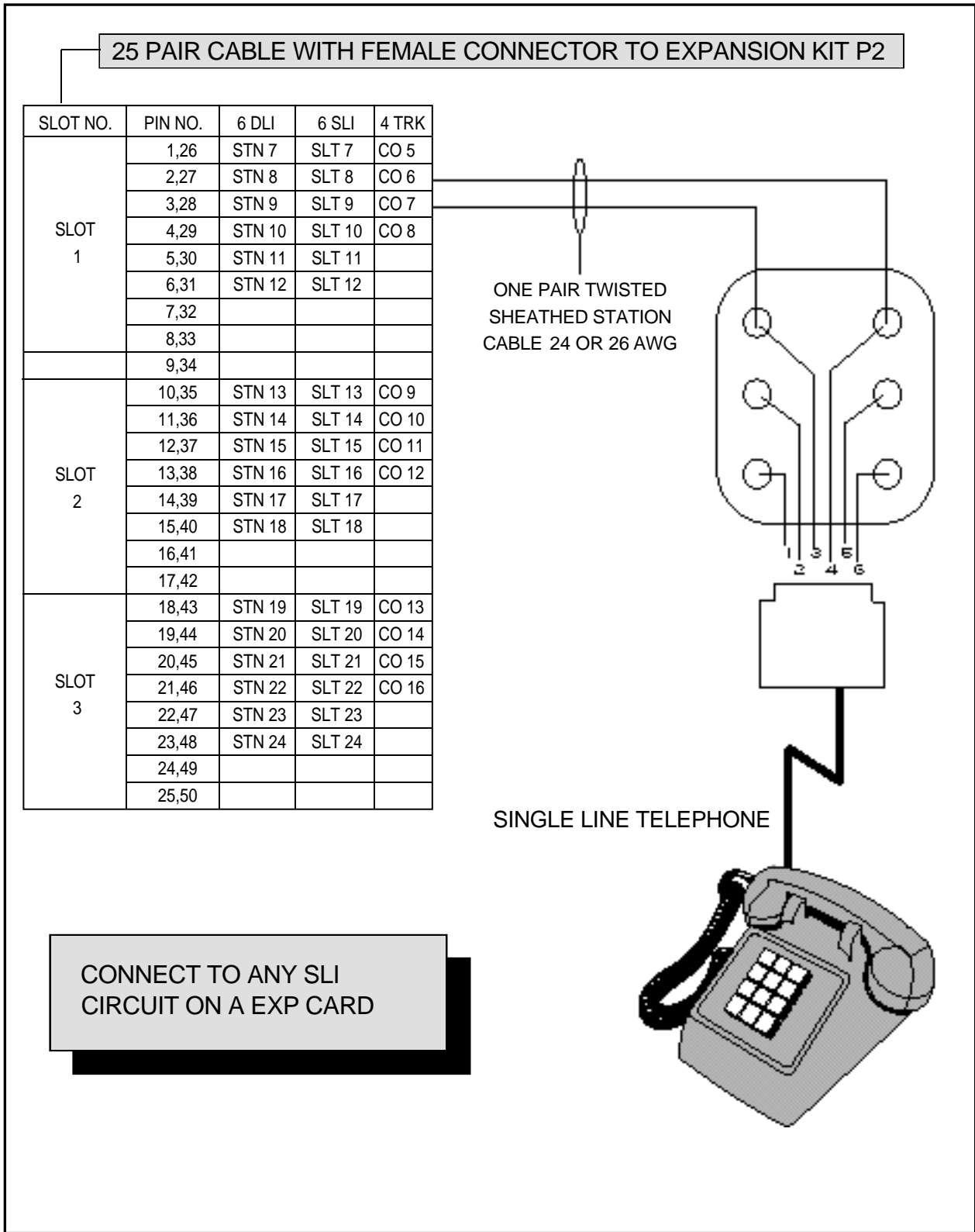
MDF CONNECTIONS
AOM TO EXPANSION CARD

FIGURE 6-4



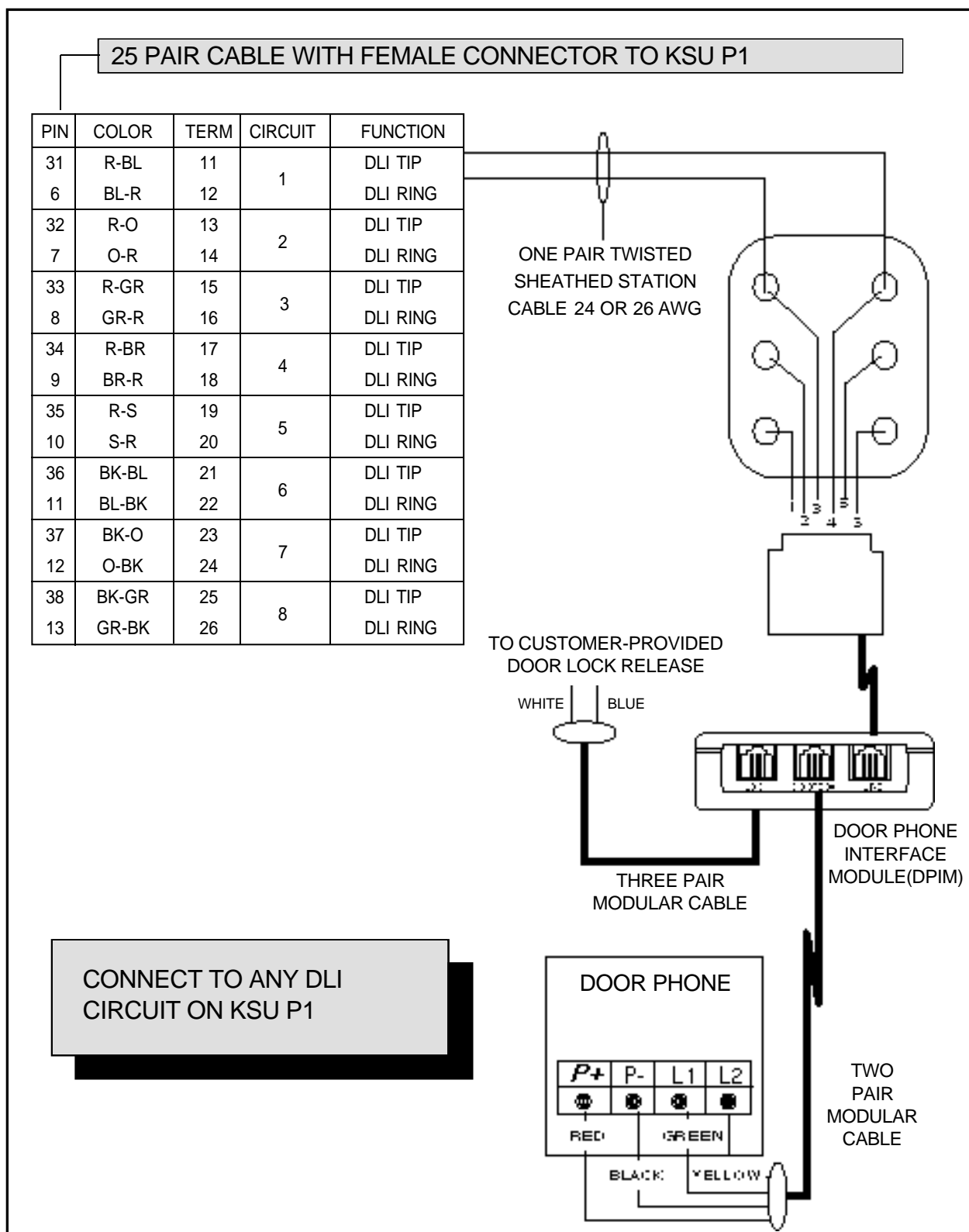
MDF CONNECTIONS SINGLE
LINE TELEPHONE TO 2 SLI CARD

FIGURE 6-5



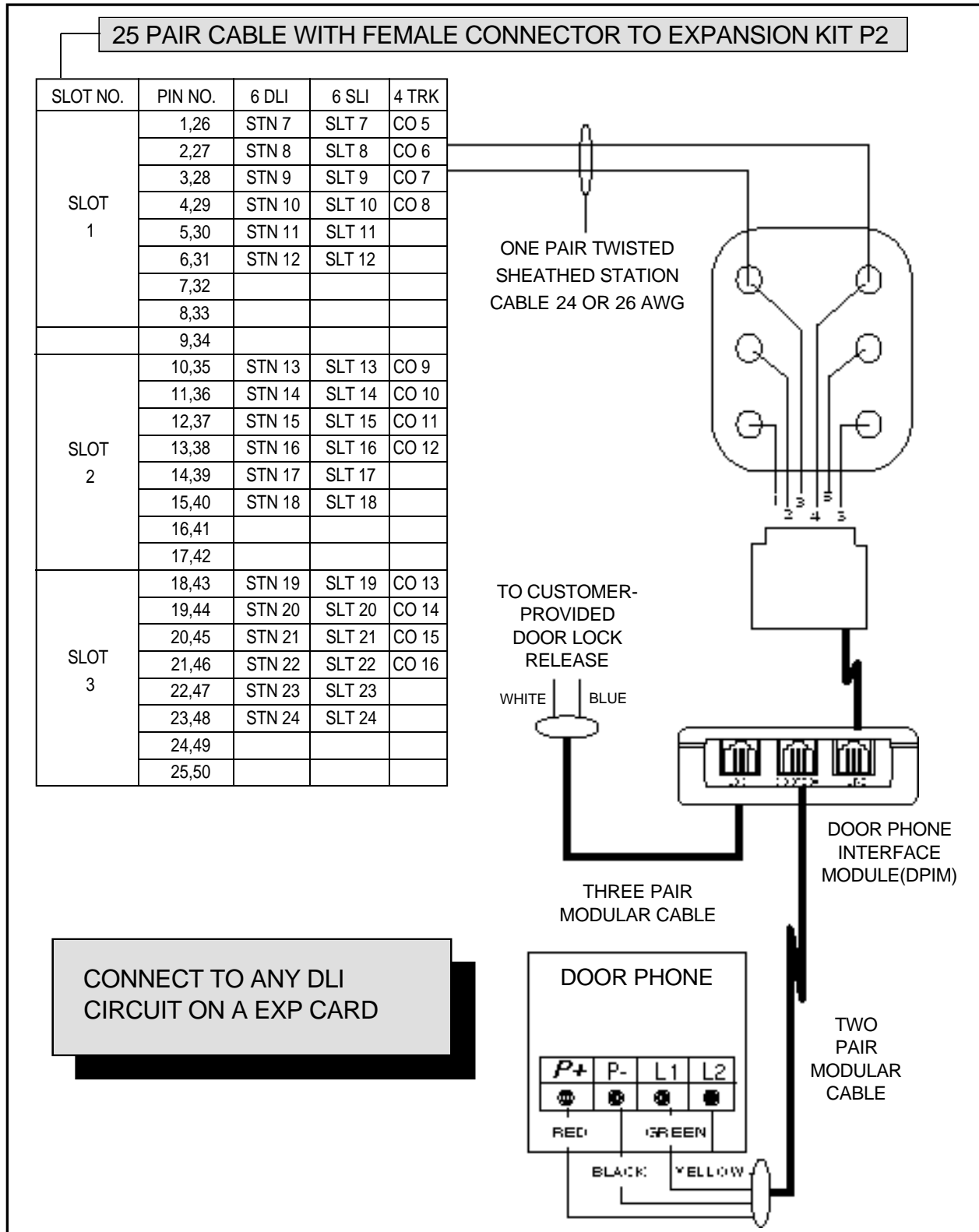
MDF CONNECTIONS SLT TO
EXPANSION CARD

FIGURE 6-6



MDF CONNECTIONS
DOOR PHONE TO KSU P1

FIGURE 6-7



MDF CONNECTIONS
DOOR PHONE TO EXPANSION CARD

FIGURE 6-8

PART 7. CONNECTING OPTIONAL EQUIPMENT

7.1 MUSIC ON HOLD/BACK GROUND MUSIC

Connect each customer-provided music source to the music input on the KSU connecting block (see Figure 7-1). The music input on the Trunk A card has internal automatic gain compensation features.

Each C.O. line (trunk) can be programmed to receive a music source, system generated TONE or NO MUSIC when it is put on hold. See MMC 408. Each keyset can receive a music source or NO MUSIC for background music. See programming manual for instructions (see MMC 308).

7.2 EXTERNAL PAGING

The KSU provides a voice pair to be used with customer-provided paging equipment. Connect the customer provided paging equipment to the page output pins of the KSU connecting block (see Figure 7-2). The page voice pair is 600 ohm impedance. When the amplifier page input is not 600 ohm, an impedance matching transformer must be used.

If installed, the MISC card provides four zone control relays (see Figure 7-3). These paging contact pairs are for control of low voltage circuits or amplifier output. The contacts are rated at 24 VDC-1 amp.

WARNING: Do not attempt to connect commercial AC power to these contacts.

7.3 COMMON BELL

A customer-provided loud ringing device can be controlled using the dry contact pair on the KSU. See Figure 7-4.

Programming allows for INTERRUPTED or CONTINUOUS operation of the contacts using MMC 204. The interrupted selection follows the C.O. ring cadence - one second ON/two seconds OFF.

After connecting a common bell, you must assign it to a group in MMC 601 as a ring destination by using the code for Common Bell.

The basic steps for common bell operation are the following:

- a. Wire the loud ringing device to the common bell control contact pair.
- b. Program the contacts for continuous or steady operation.
- c. Program the hunt group to include the common bell.
- d. Assign the trunk to ring the hunt group containing the common bell.

Common bell control can be used with station hunt groups, individual stations and Universal Answer. Contacts are rated at 24 VDC-1 amp.

WARNING: Do not attempt to connect commercial AC power to these contacts.

7.4 RING OVER PAGE

When a customer-provided paging system is installed, incoming calls can be assigned to ring over page. Program the line or lines to ring a hunt group. Using MMC 601, assign ROP as a destination in this hunt group. Ring over page can be used for day or night operation or both.

7.5 STATION MESSAGE DETAIL RECORDING (SMDR)

To receive an SMDR printout, connect a customer-provided printer to one of the serial interface connectors on a MISC card (see Figure 7-5). SI/O 2 defaults as SMDR.

Use a pin to pin RS232C cable. Only pins 2, 3, 4 and 5 are required (see Figure 7-6).

When the printer or optional call accounting device needs to be more than 15 feet away from the KSU, use shielded computer cable. Attach a male DB9 connector to the MISC end and then attach one that matches the requirements of the call accounting device or printer to the other end. This cable must not exceed 300 feet.

Use MMC 725 to set SMDR print options and MMC 804 to set the transmission parameters and the MISC port.

7.6 PC PROGRAMMING

To program the system via a personal computer (PC), connect a PC equipped with PCMMC to a serial interface connector on a MISC card (see Figure 7-5). SI/O 1 defaults as PCMMC.

Use an RS232C cable with connections as shown in Figure 7-7. When the PC needs to be more than 15 feet away from the KSU, use shielded computer cable. Attach a male DB9 connector to the MISC end and then attach one that matches the requirements of the PC to the other end. This cable must not exceed 300 feet.

Use MMC 804 to set the transmission parameters and the MISC port.

7.7 REMOTE PROGRAMMING

To remotely program a system, connect a customer-provided modem to a serial interface connector on a MISC card (see Figure 7-5).

Use an RS232C cable as shown in Figure 7-8. When the modem needs to be more than 15 feet away from the KSU, use shielded computer cable. Attach a male DB9 connector to the MISC end and then attach one that matches the requirements of the modem to the other end. This cable must not exceed 300 feet.

Use MMC 804 to set the transmission parameters and the MISC port to be used.

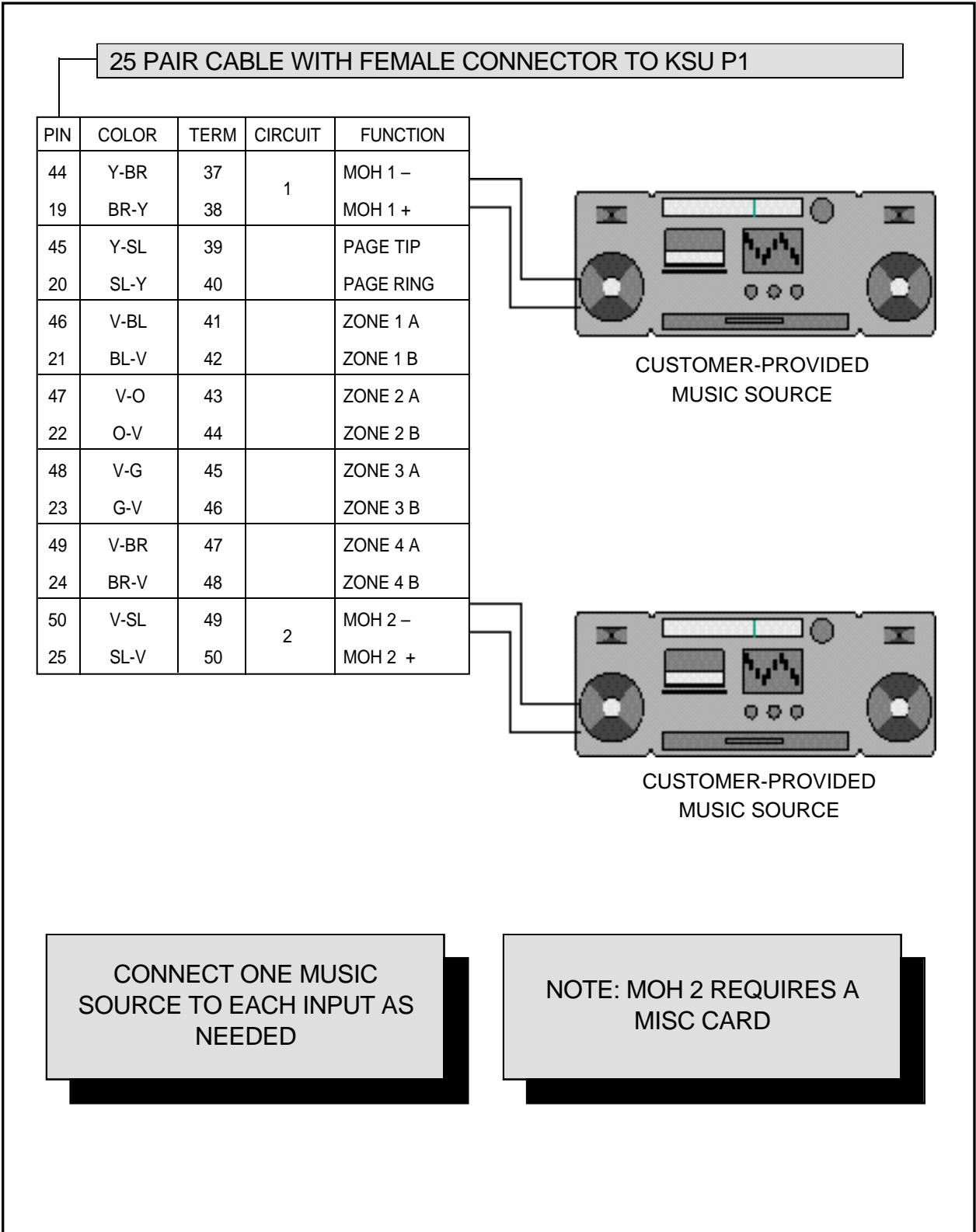
7.8 POWER FAILURE TRANSFER (PFT)

When the system loses AC power, the first two loop start lines in the KSU are automatically switched to the PFT jack (Figure 7-9). Cross-connect these outputs as shown in Figure 7-10 to the TIP and RING pairs of the single line phones that are to have power failure operation.

7.9 VOICE MAIL/AUTO ATTENDANT

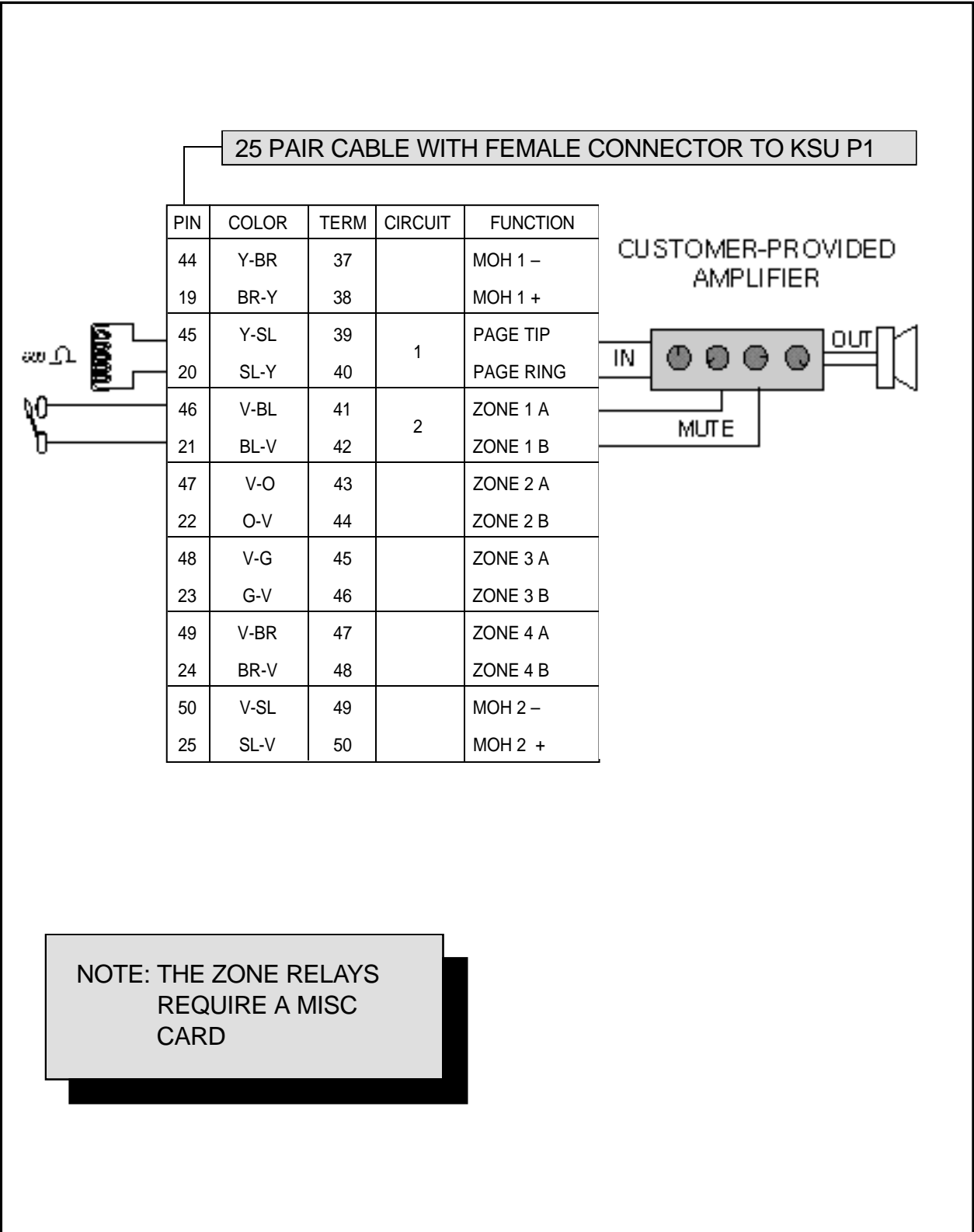
System operation provides special programming and hardware for use with a customer-provided voice mail/auto attendant system. Both single line stations on the 2 SLI card provide a disconnect signal required for VM/AA operation. Use one pair twisted #24 AWG or #26 AWG wire to cross-connect these SLI circuits to the VM/AA system (see Figure 7-11).

Program these ports for VM/AA use in MMC 207 and set VM/AA options in MMC 726. See the *Standard Telephone User Guide* for feature codes and instructions. Some voice mail manufacturers may require you to set these stations for data security (see MMC 208) to stop call waiting and intrusion tone.



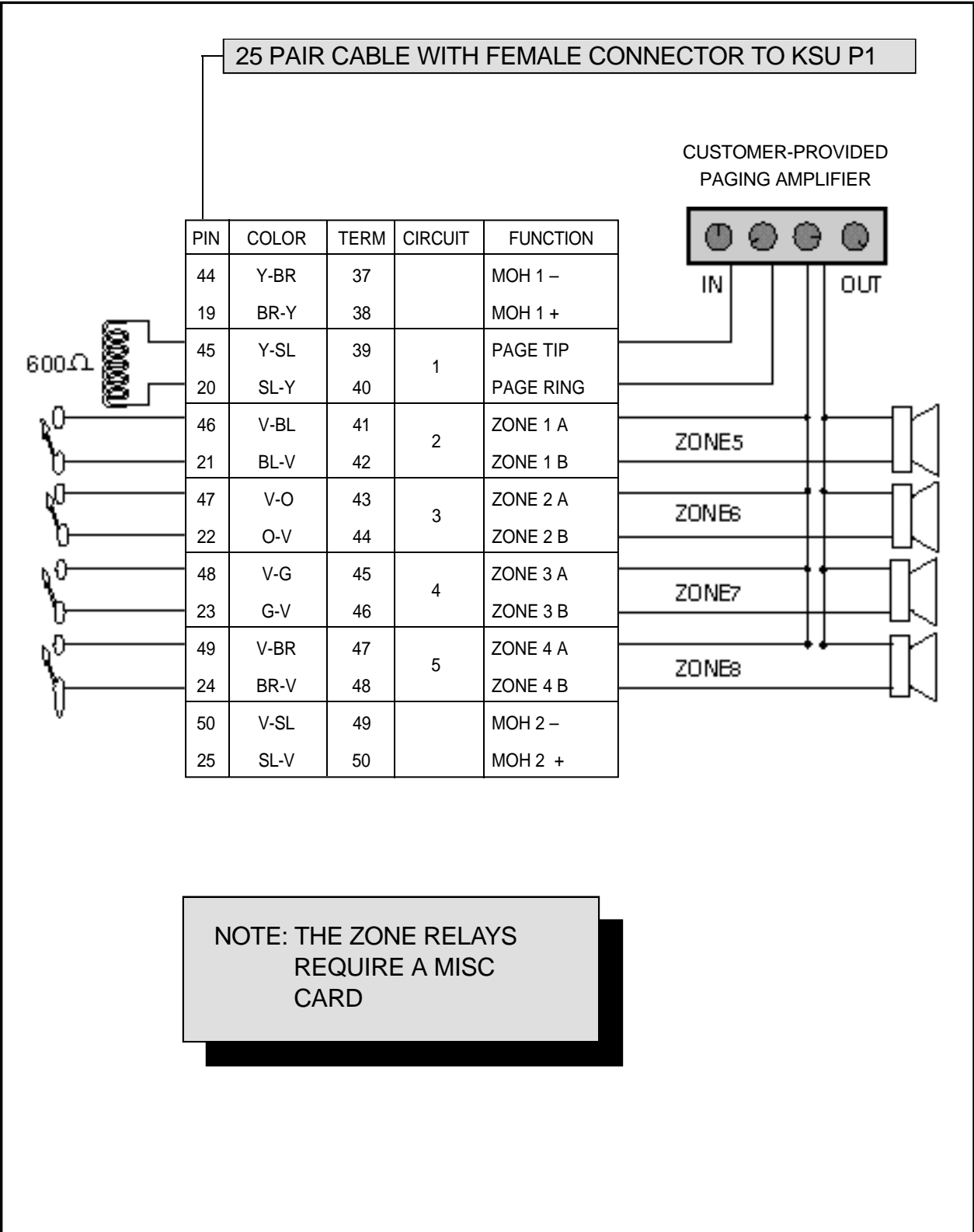
MDF CONNECTIONS
CONNECTING MOH SOURCE TO KSU

FIGURE 7-1



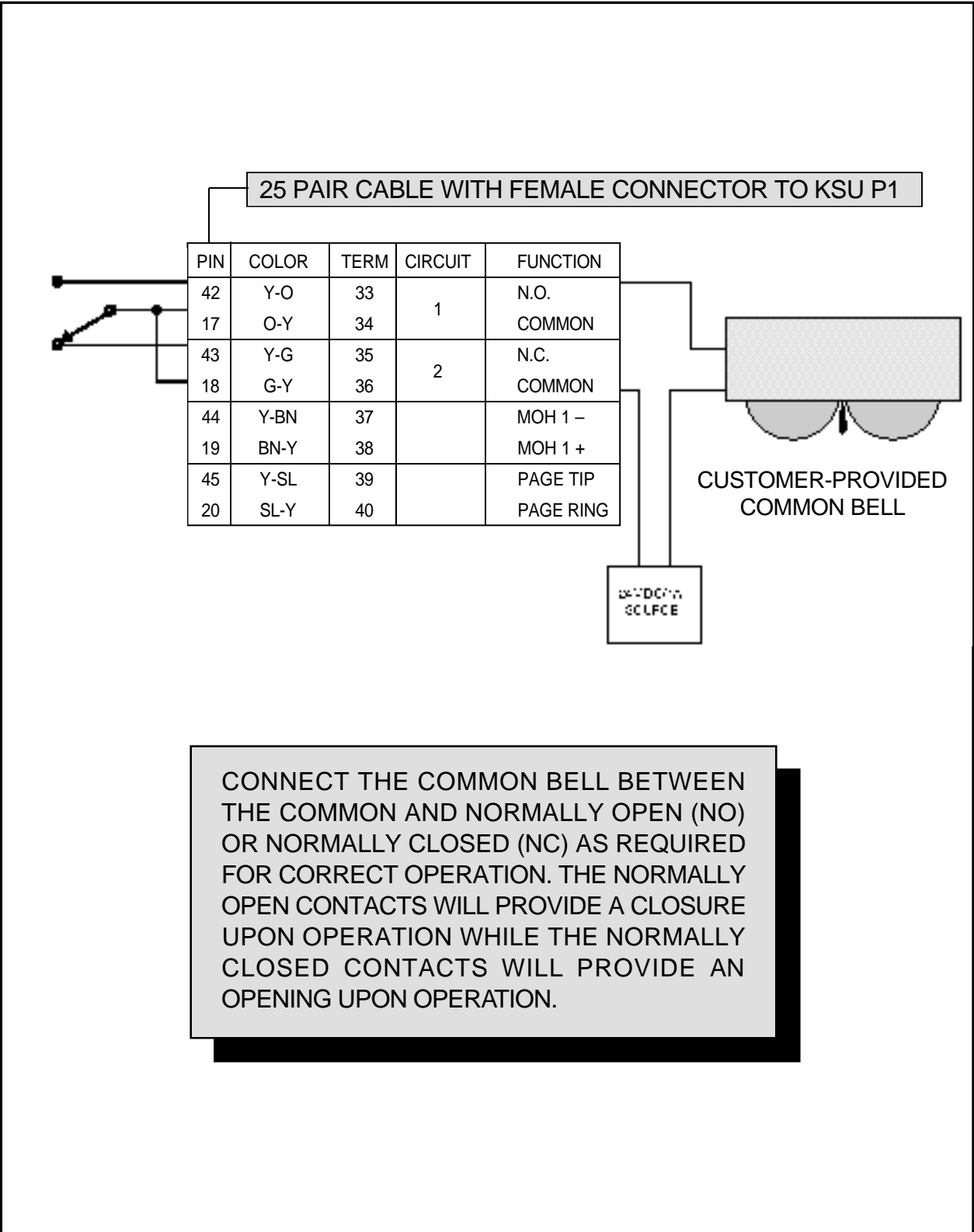
MDF CONNECTIONS
CONNECTING PAGE AMPLIFIER
TO KSU

FIGURE 7-2



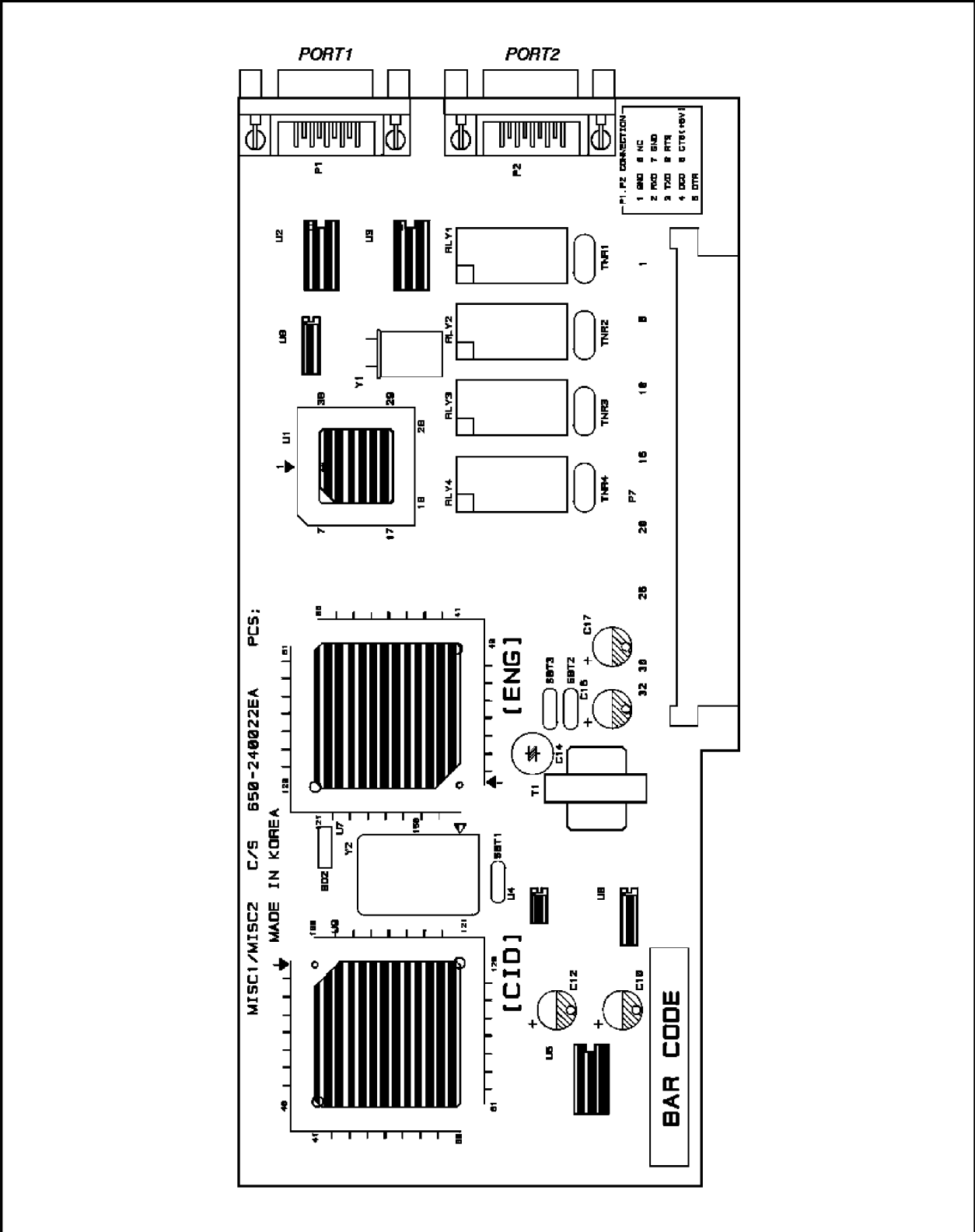
MDF CONNECTIONS
CONNECTING PAGE AMPLIFIER
TO KSU

FIGURE 7-3



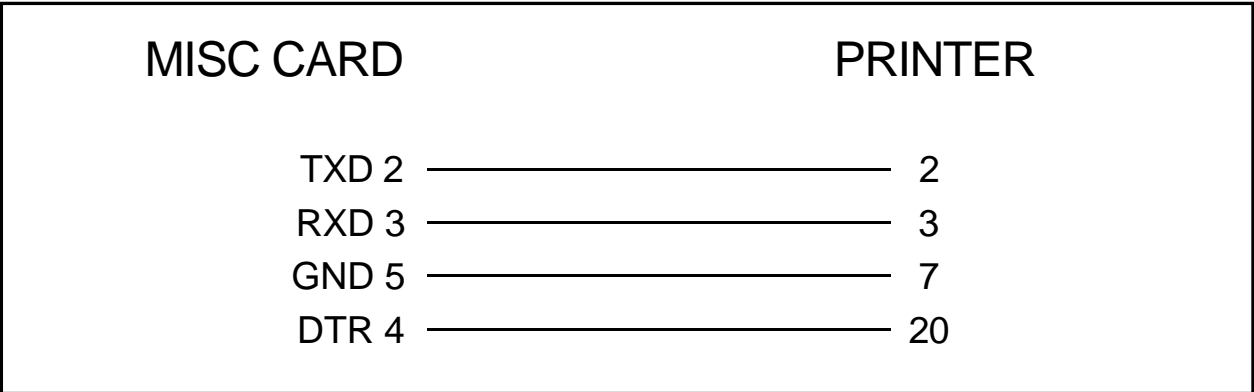
MDF CONNECTIONS
COMMON BELL CONTACTS

FIGURE 7-4



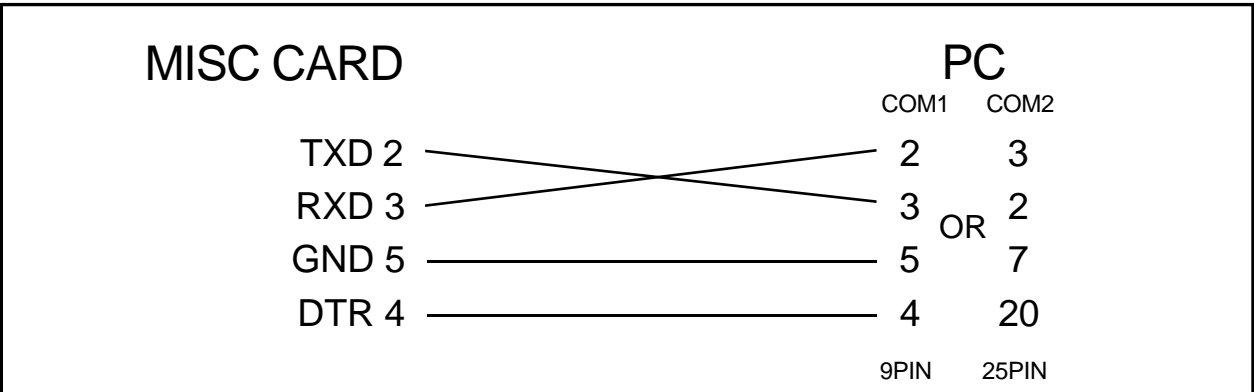
MISC CARD

FIGURE 7-5



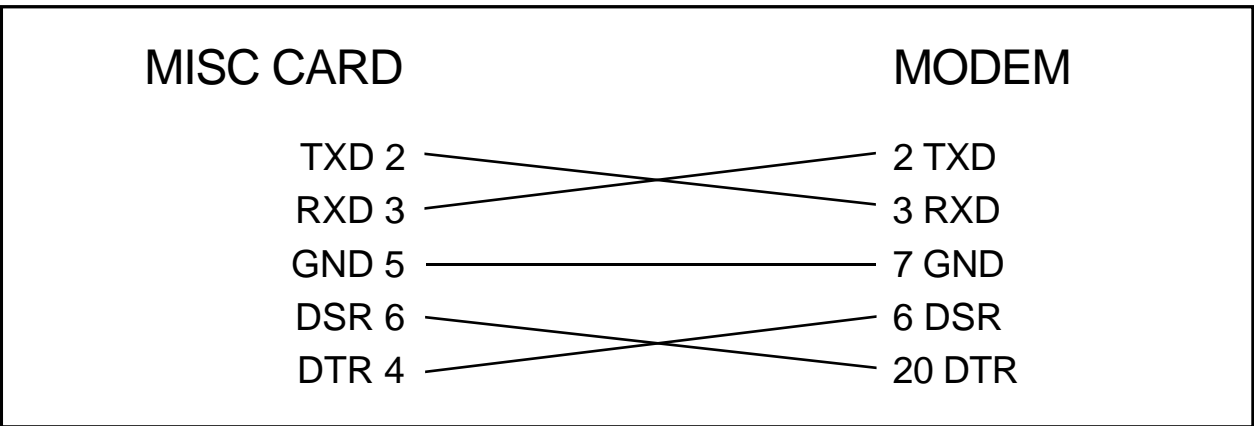
PIN CONNECTIONS FOR MISC CARD TO PRINTER

FIGURE 7-6



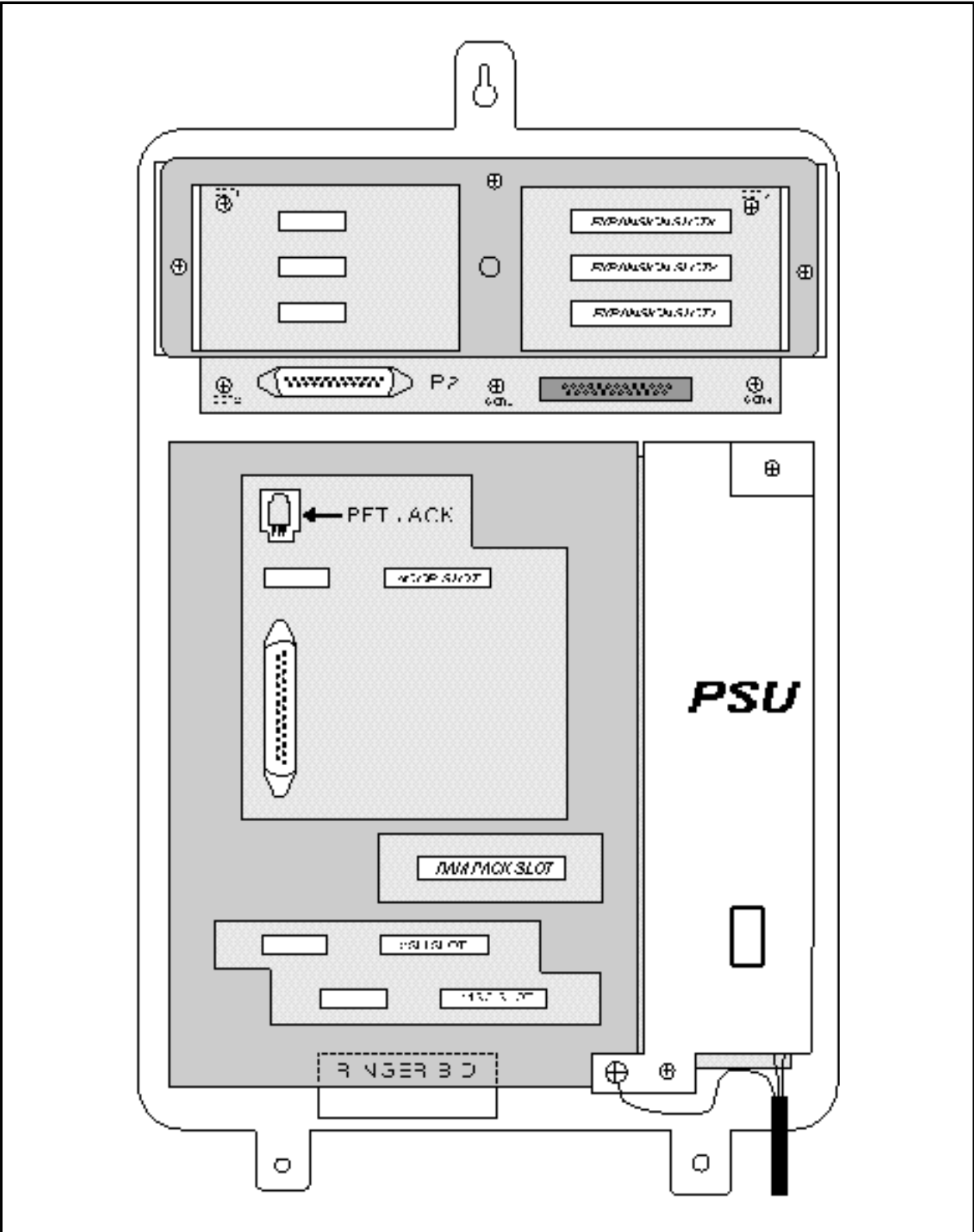
PIN CONNECTIONS FOR MISC CARD TO PERSONAL COMPUTER

FIGURE 7-7



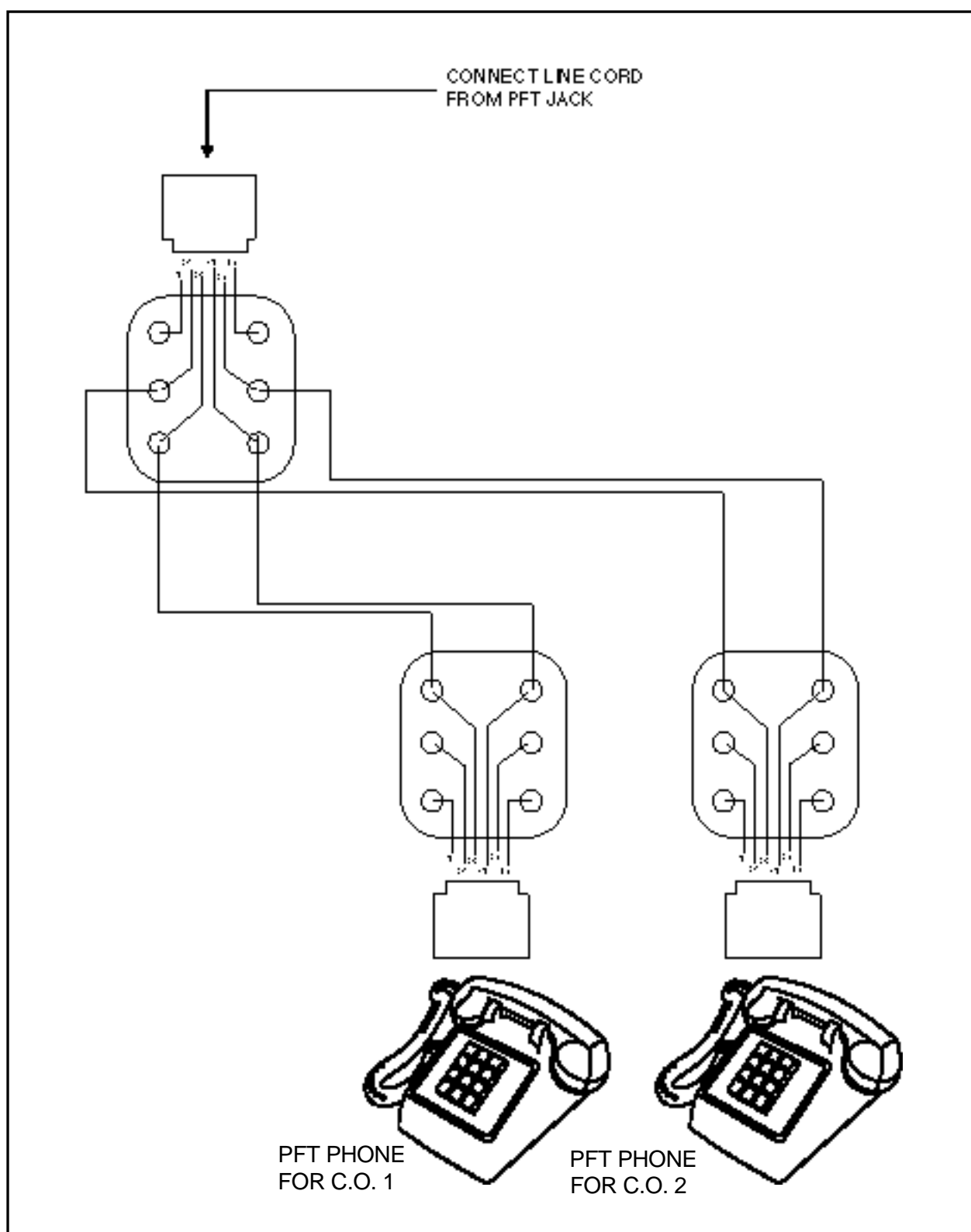
PIN CONNECTIONS FOR MISC CARD TO MODEM

FIGURE 7-8



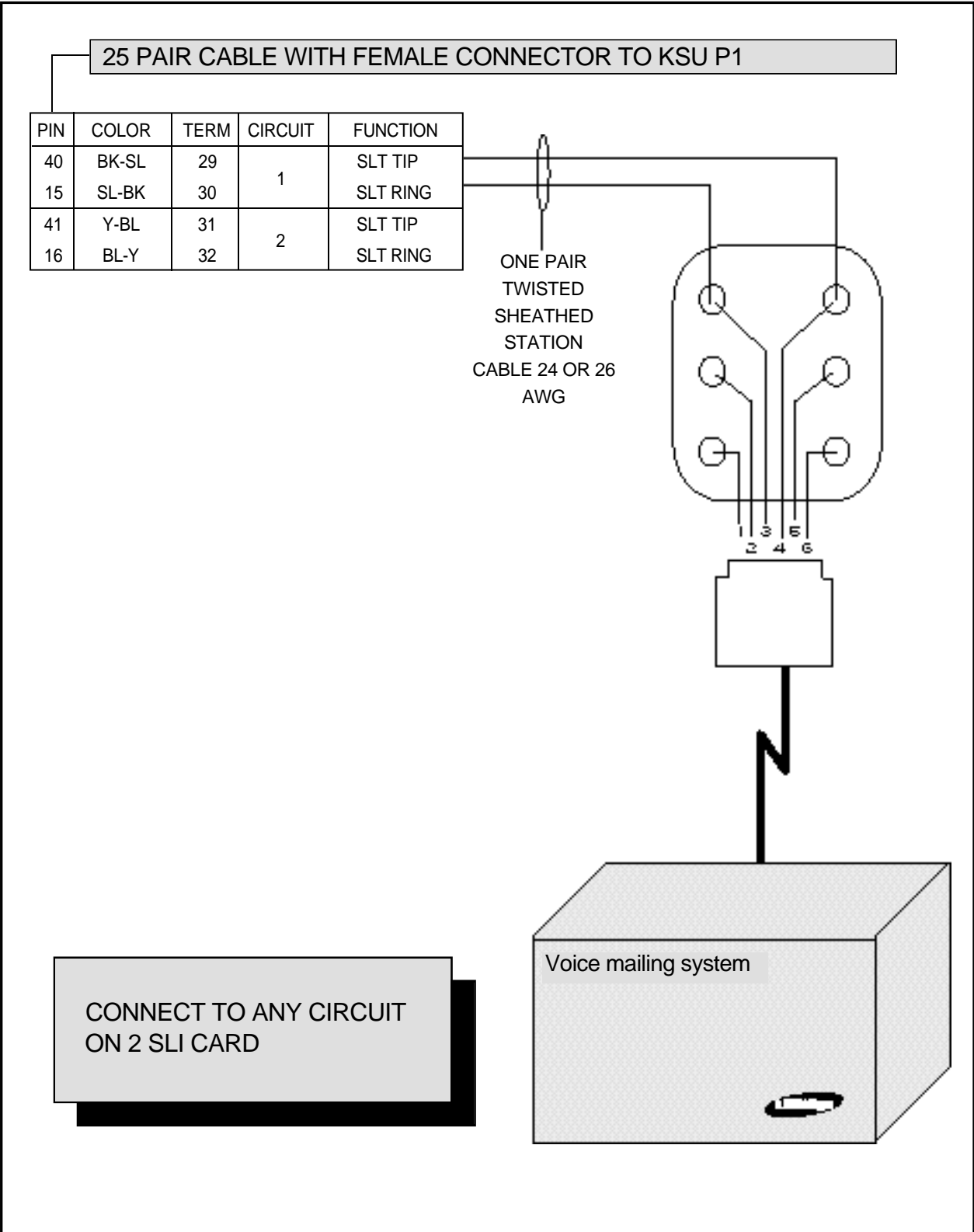
LOCATION OF PFT JACK

FIGURE 7-9



CONNECTING SLTS TO PFT JACK

FIGURE 7-10



MDF CONNECTIONS
VOICE MAIL TO SLI CARD

FIGURE 7-11

PART 8. INSTALLING KEYSET DAUGHTERBOARDS

8.1 KDB–SLI

- 1) Unplug line code of the phone before performing this procedure. (Figure 8–1)
- 2) Remove with a driver molding substances of expansion module of base housing. (Figure 8–3)
- 3) Remove extra molding substances by the same method as no.2. (Figure 8–2)
- 4) Mount module KDB – SLI. (Figure 8–4)
- 5) Tighten two (2) screws of KDB –SLI. (Figure 8–5)
- 6) Connect modular jack of phone line with DLI line of basic system. (Figure 8–6)
- 7) Connect extra modular jack with a general phone. (Figure 8–7 & 8–9)

8.2 KDB–DLI

- 1) Unplug line code of the phone before performing this procedure. (Figure 8–1)
- 2) Remove with a driver molding substances of expansion module of base housing. (Figure 8–3)
- 3) Remove extra molding substances by the same method as no.2. (Figure 8–2)
- 4) Mount module KDB –DLI. (Figure 8–4)
- 5) Tighten two (2) screws of KDB – DLI. (Figure 8–5)
- 6) Connect modular jack of phone line with DLI line of basic system. (Figure 8–6)
- 7) Connect extra modular jack with a key phone. (Figure 8–7 & 8–8)

8.3 CONNECTING TO THE KDB–D & KDB–S

See Figure 8–7, 8–8 and 8–9.

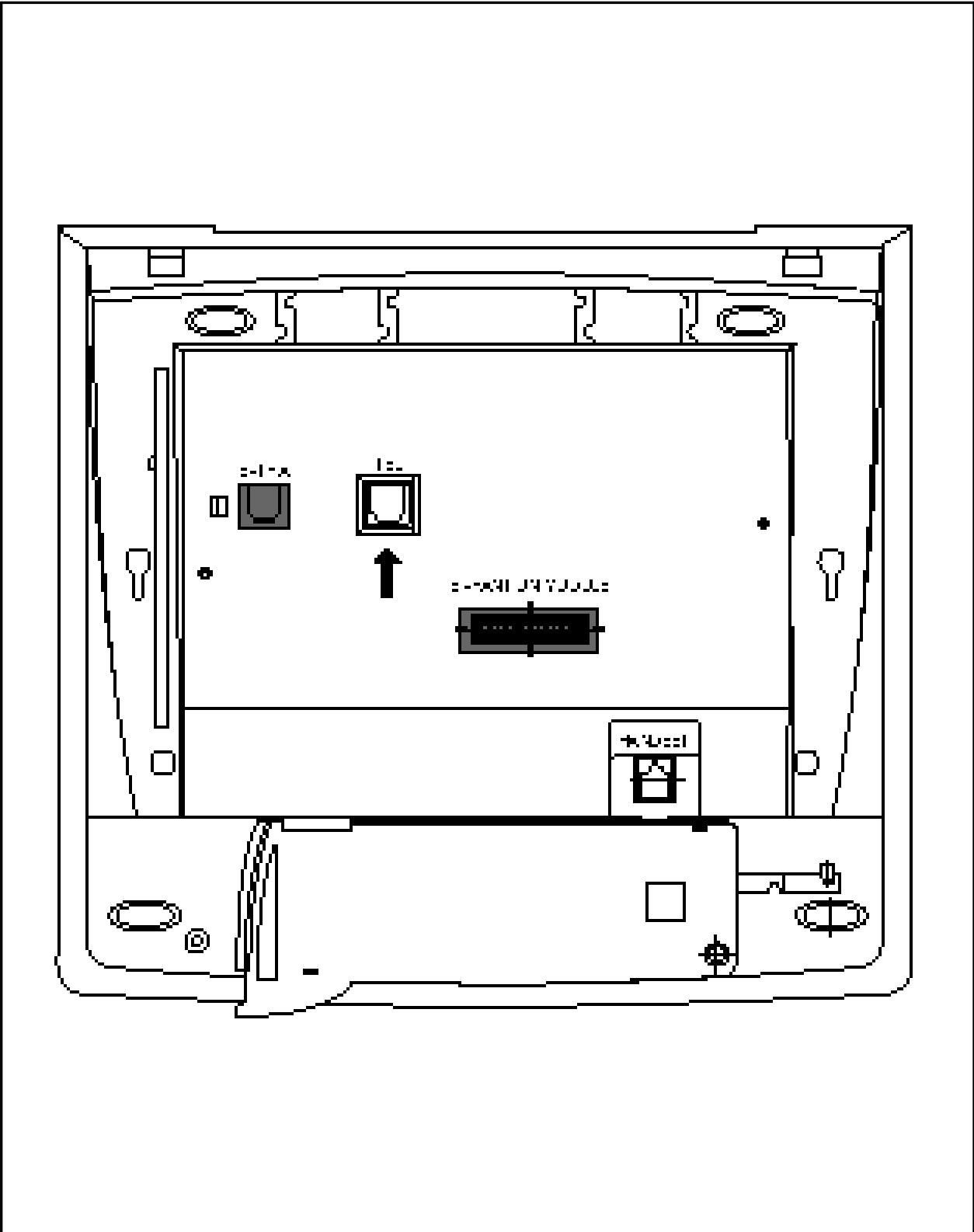


FIGURE 8-1

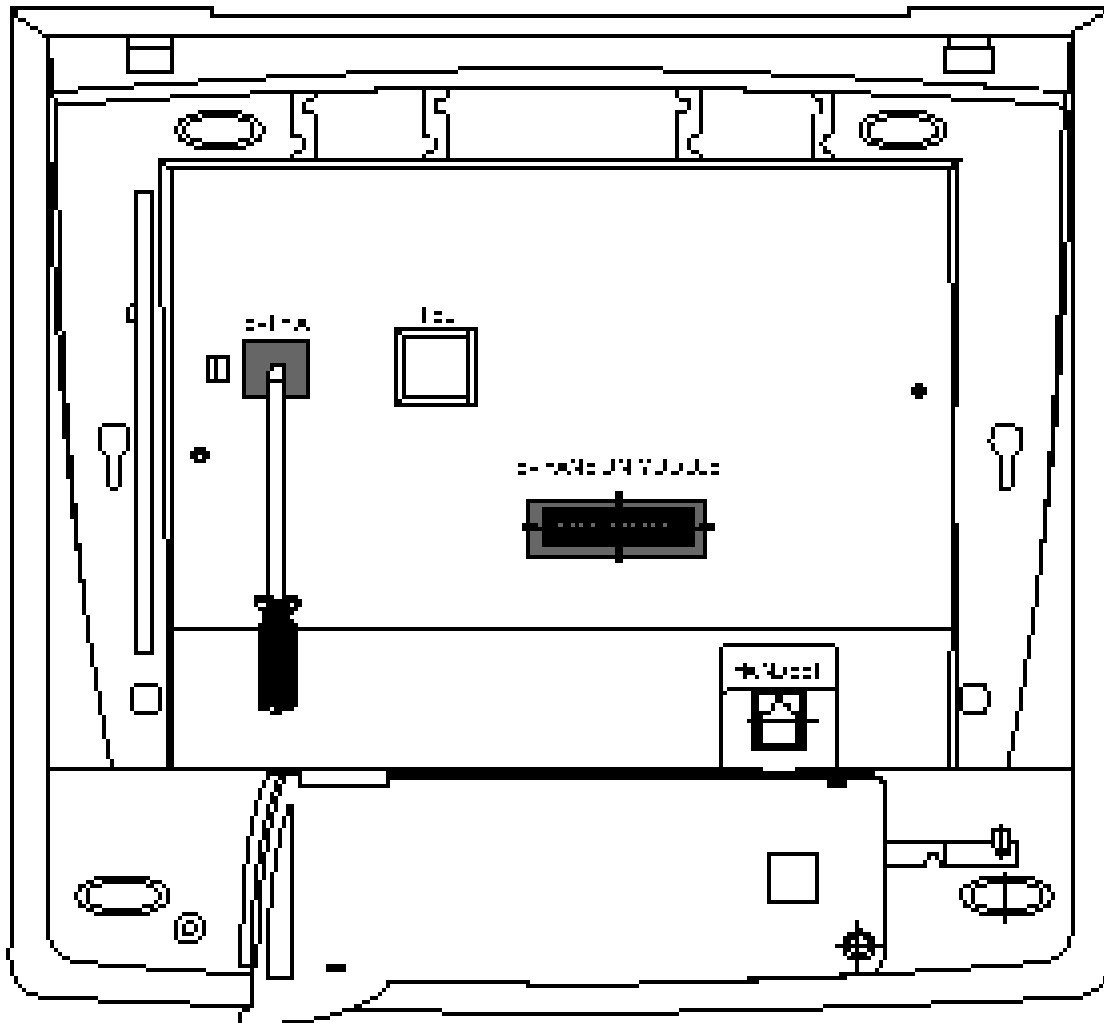


FIGURE 8-2

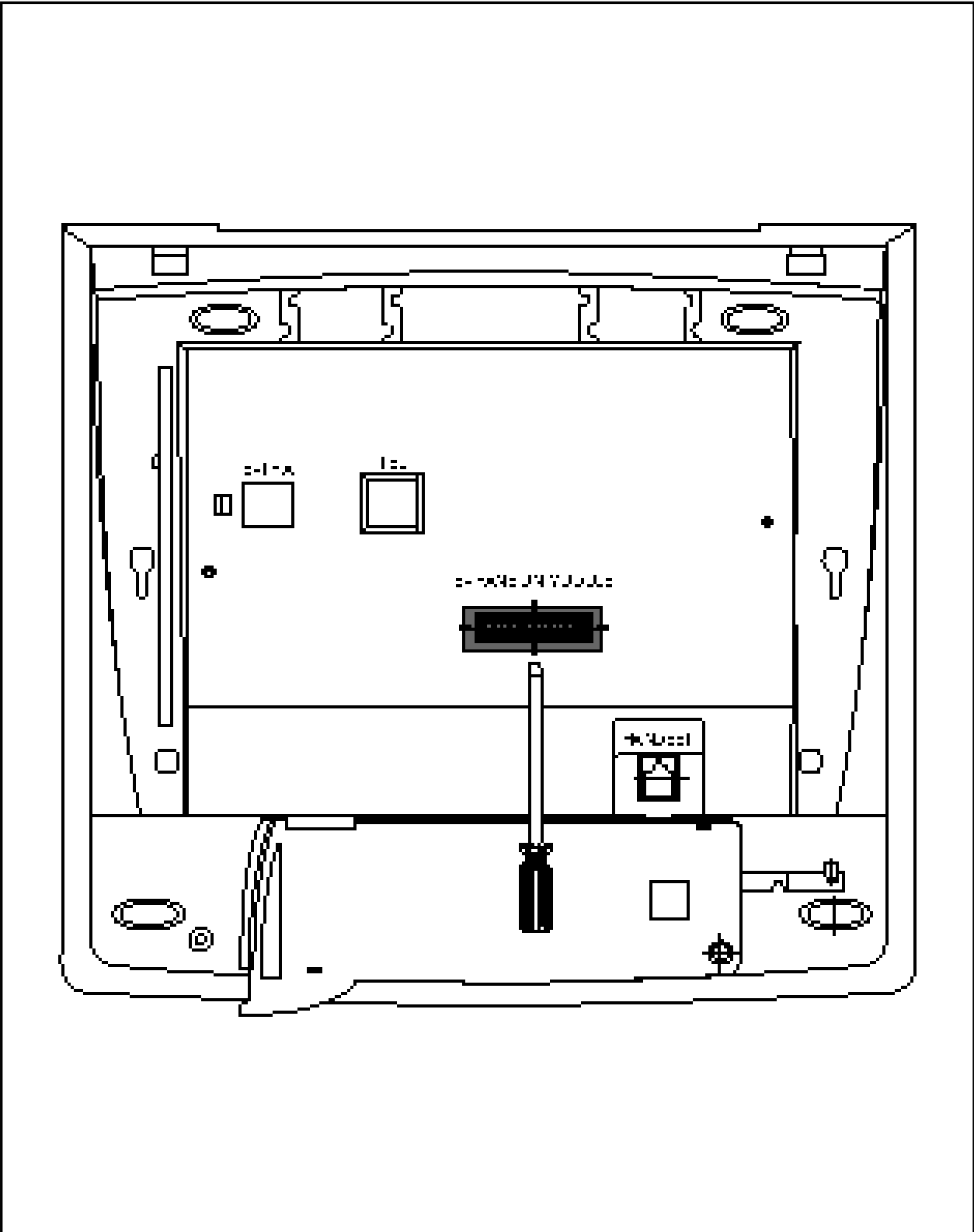


FIGURE 8-3

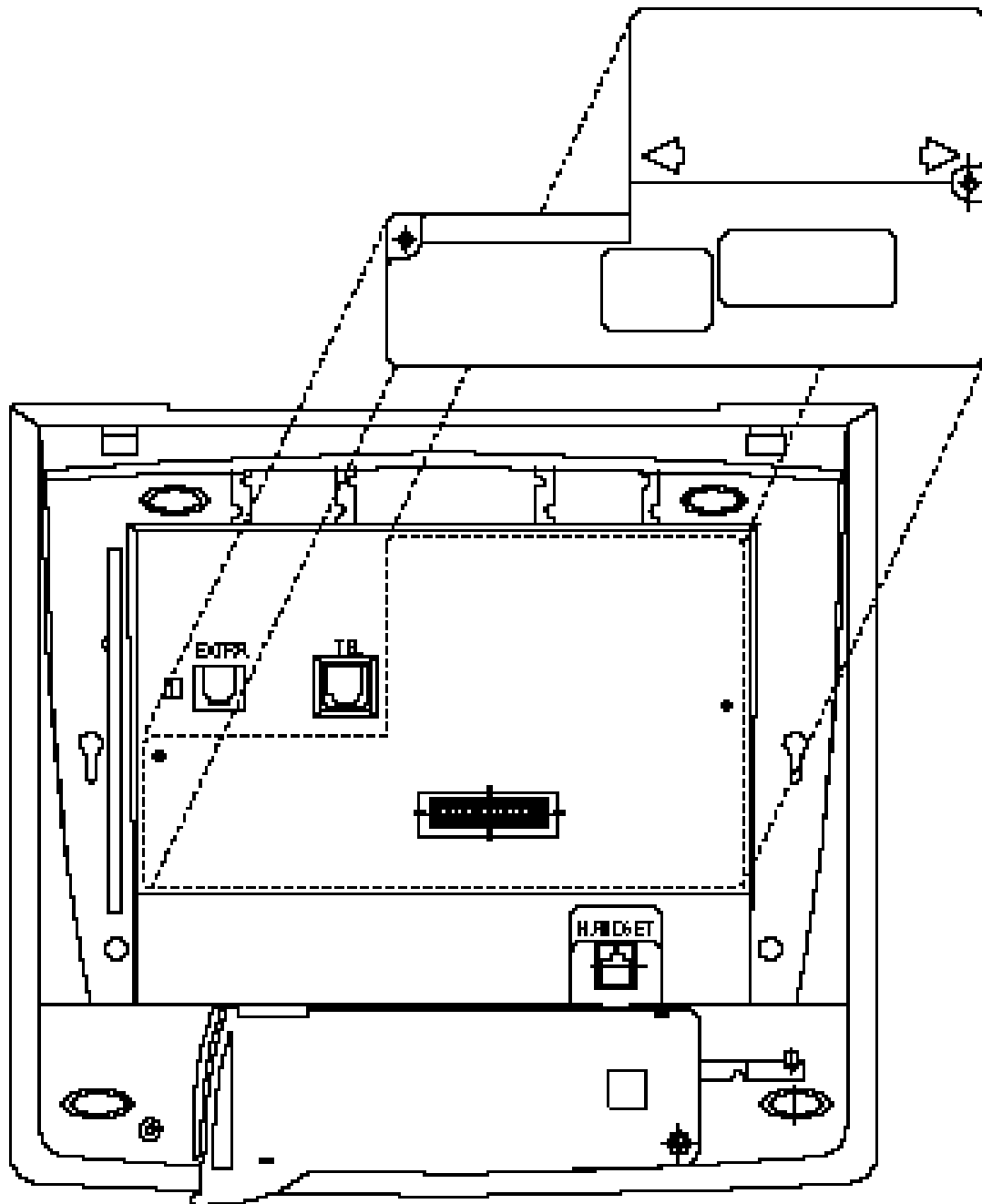


FIGURE 8-4

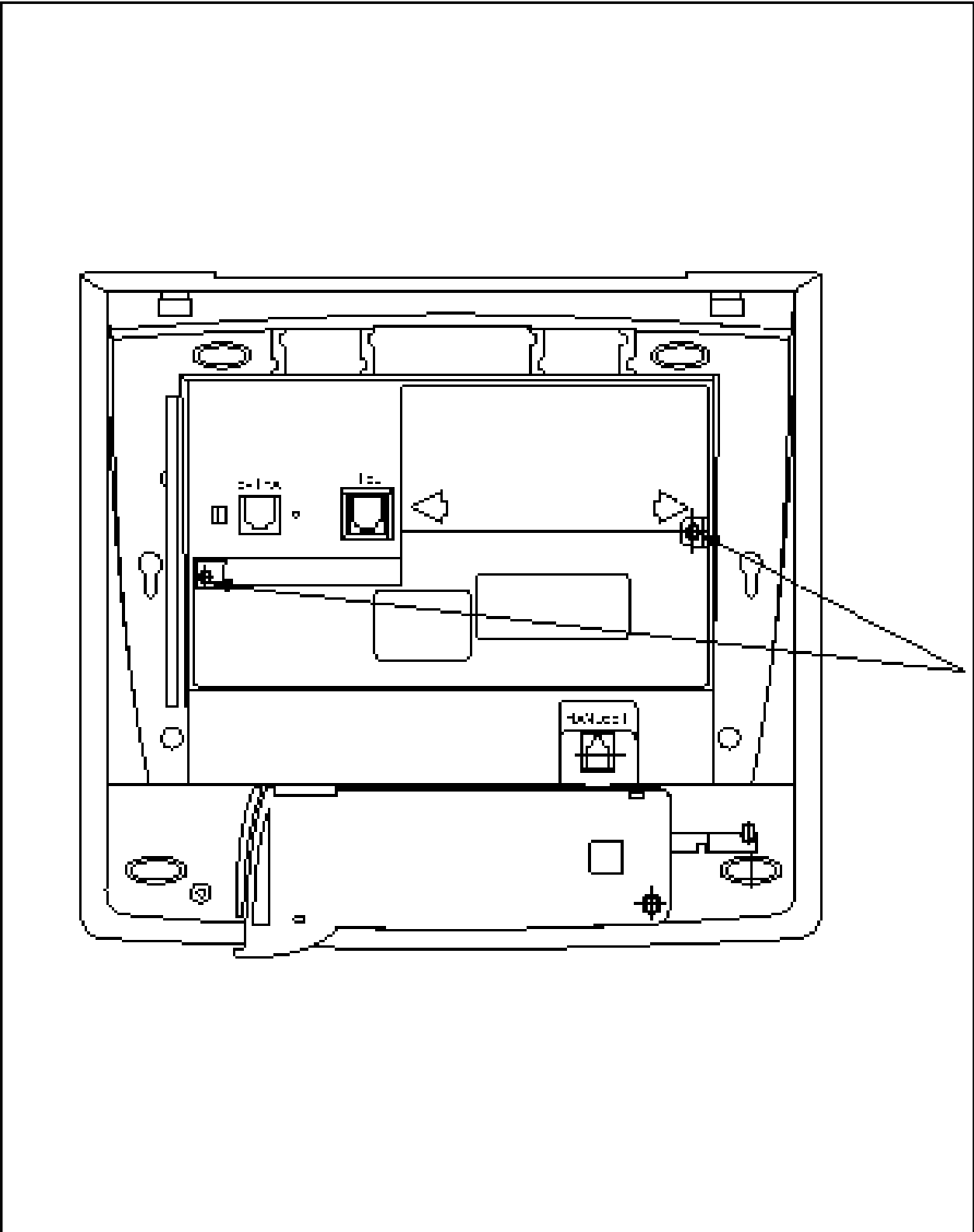


FIGURE 8-5

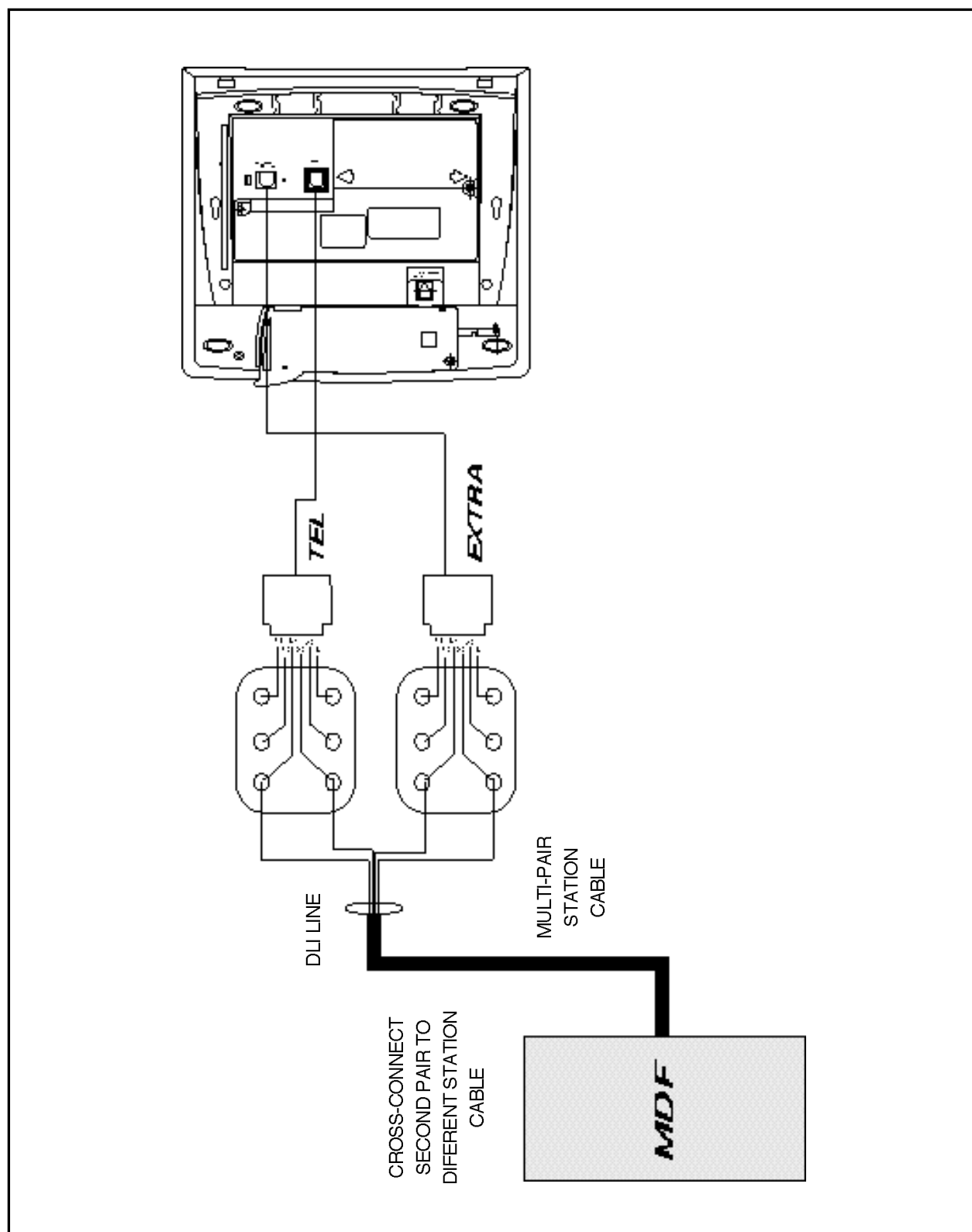


FIGURE 8-6

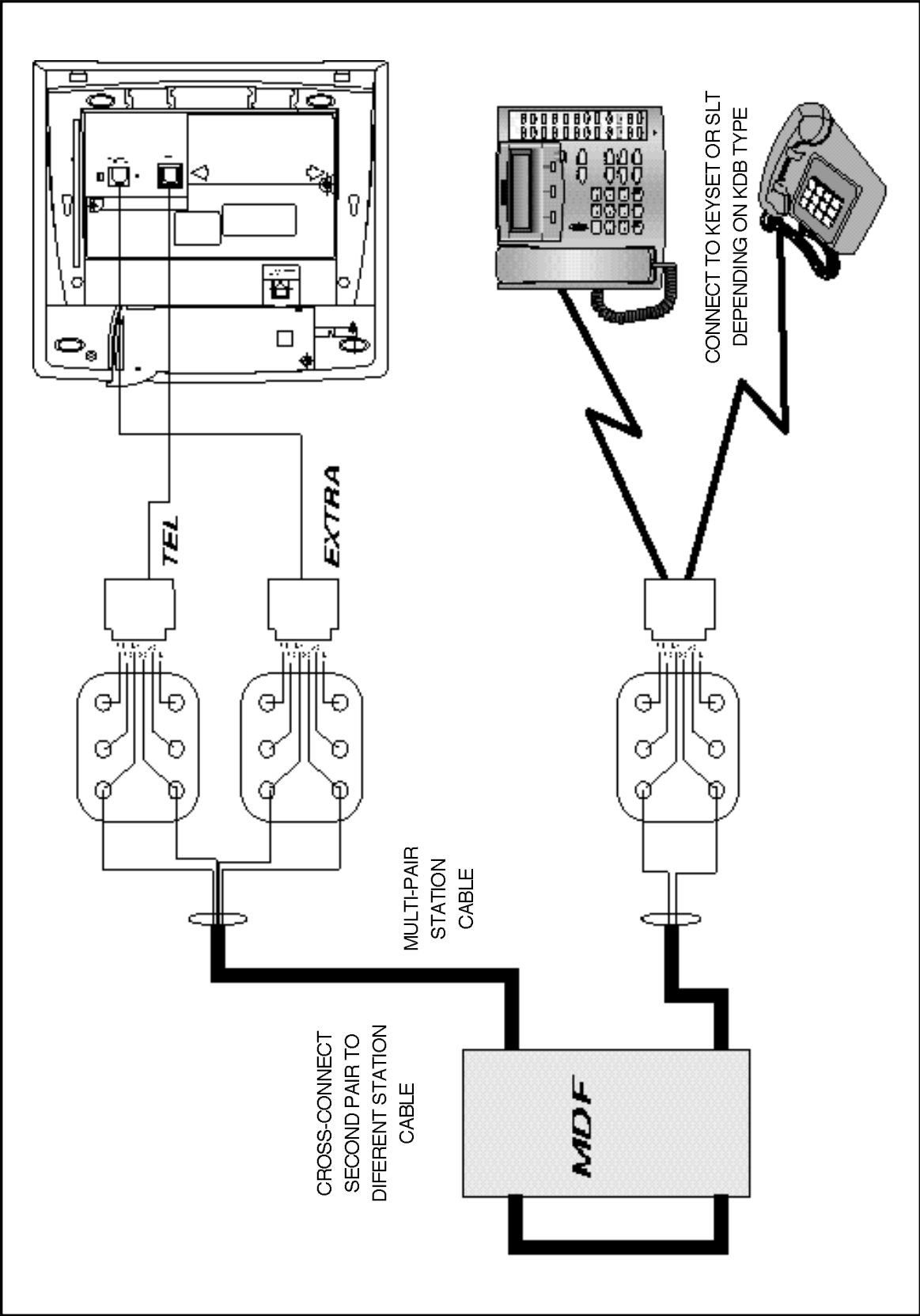
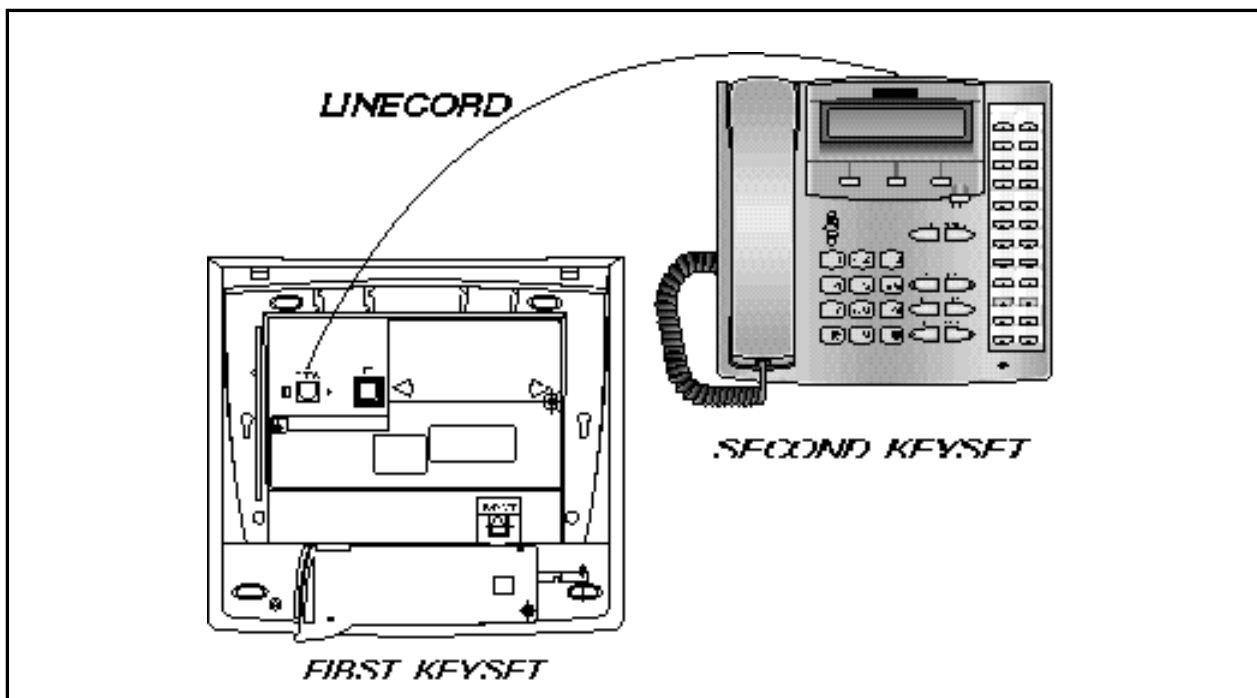


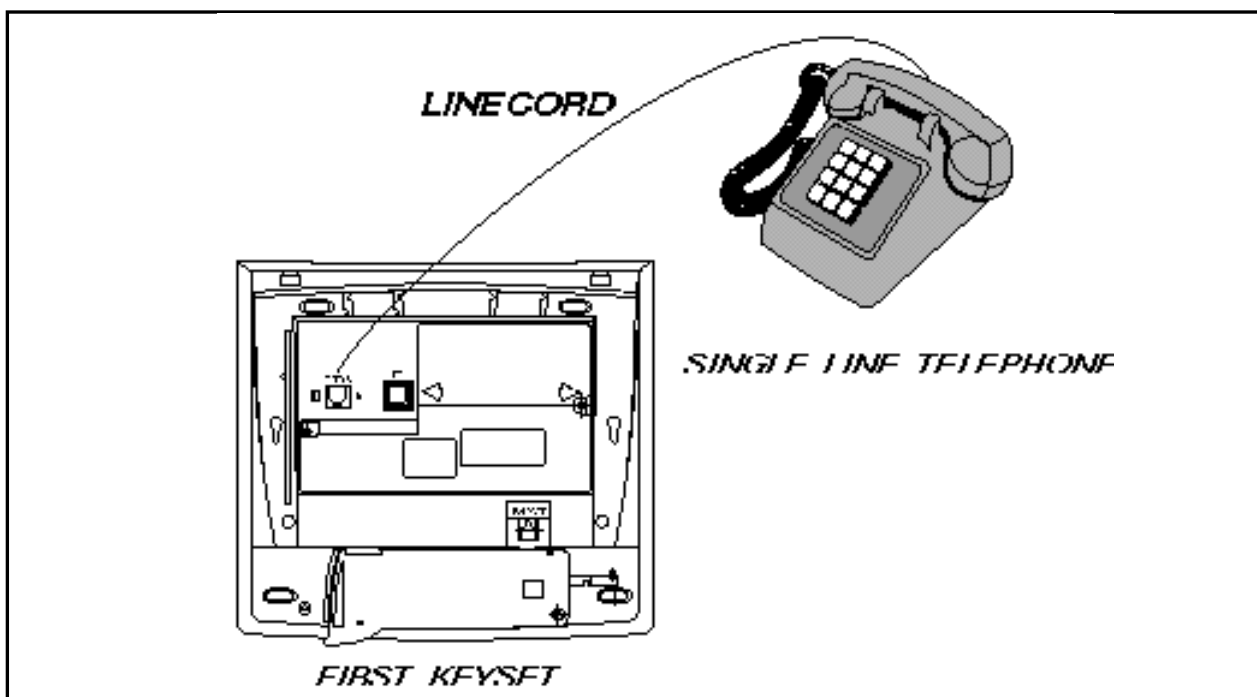
FIGURE 8-7

CONNECTING A STATION DEVICE TO A
KDB VIA THE MAIN DISTRIBUTION FRAME



CONNECTING A KEYSET
TO A KDB-DLI

FIGURE 8-8



CONNECTING A SINGLELINE
TELEPHONE TO A KDB-SLI

FIGURE 8-9

PART 9. CHANGING SOFTWARE

9.1 ACCESSING THE EPROMS

In order to easily replace the system software, it may be necessary to partially disassemble the KSU. This procedure should be performed in the following sequence while referring to Figure 9–1.

1. Check the battery switch on the RAM pack and make sure it is on.

NOTE: If the documentation with the new software indicates that reprogramming will be necessary you may wish to switch the battery off at this stage to ensure the system is properly defaulted.

2. Switch off the KSU. Do not unplug the KSU.
3. Remove the 25 pair cable(s).
4. Remove the 4 COP card and RAM pack and carefully set aside.
5. Remove the MISC card and 2 SLI card if equipped.
6. Remove the four holding screws as shown in Figure 9–1.
7. Remove the plastic card support frame.

9.2 REPLACING THE EPROMS

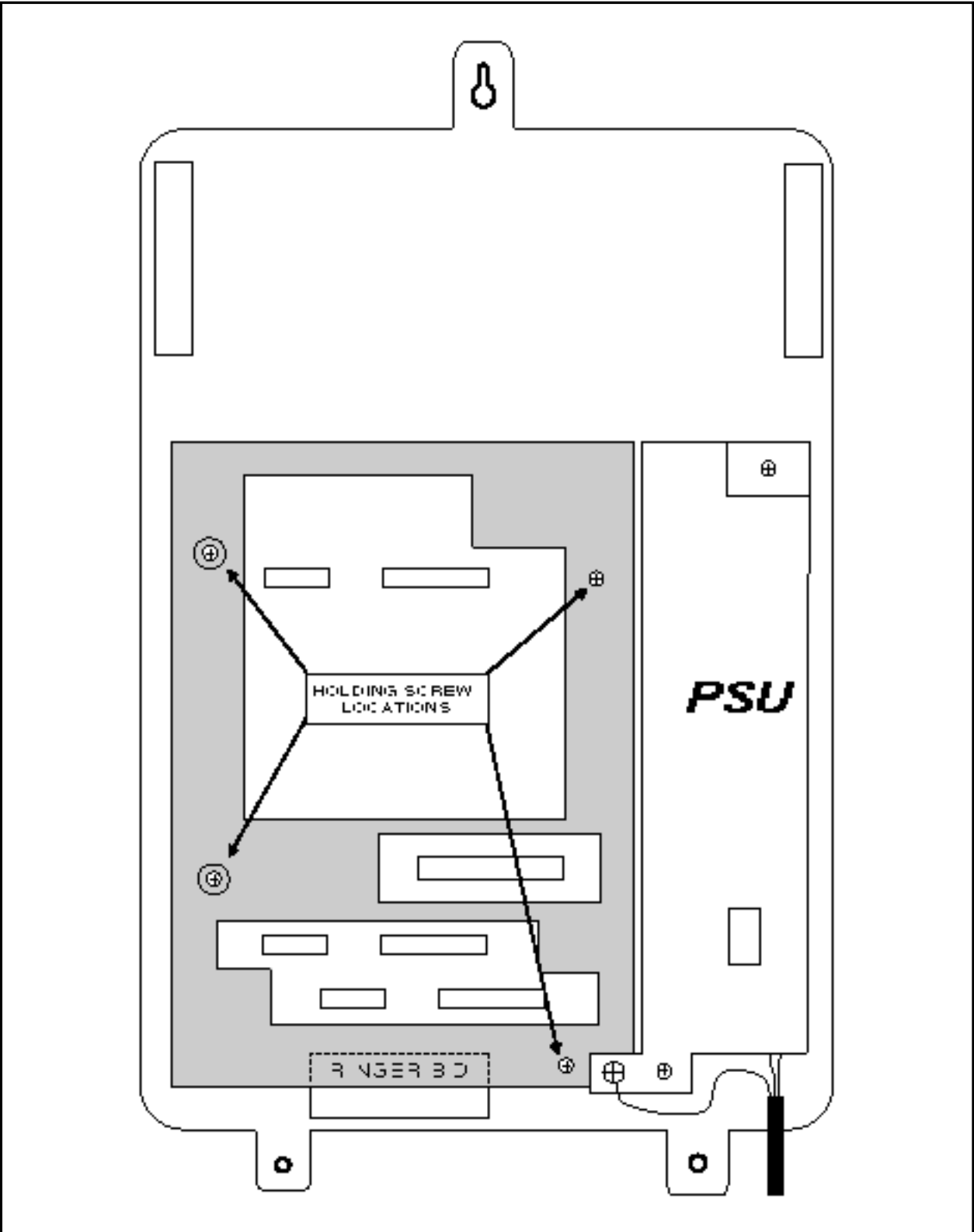
Gently remove the two or four EPROMS (the quantity is dependent on the software package) using a chip extraction tool or by gently prying with a small flat bladed screwdriver. Set the removed EPROMS aside carefully in case they need to be reinstalled. See Figure 9–2.

Remove the new EPROMS from their protective packaging and confirm that the legs on the EPROMS are straight. If the legs are not straight, contact EURO Tech team. Carefully insert the new EPROMS in their designated sockets, inserting the pair closest to the power supply first.

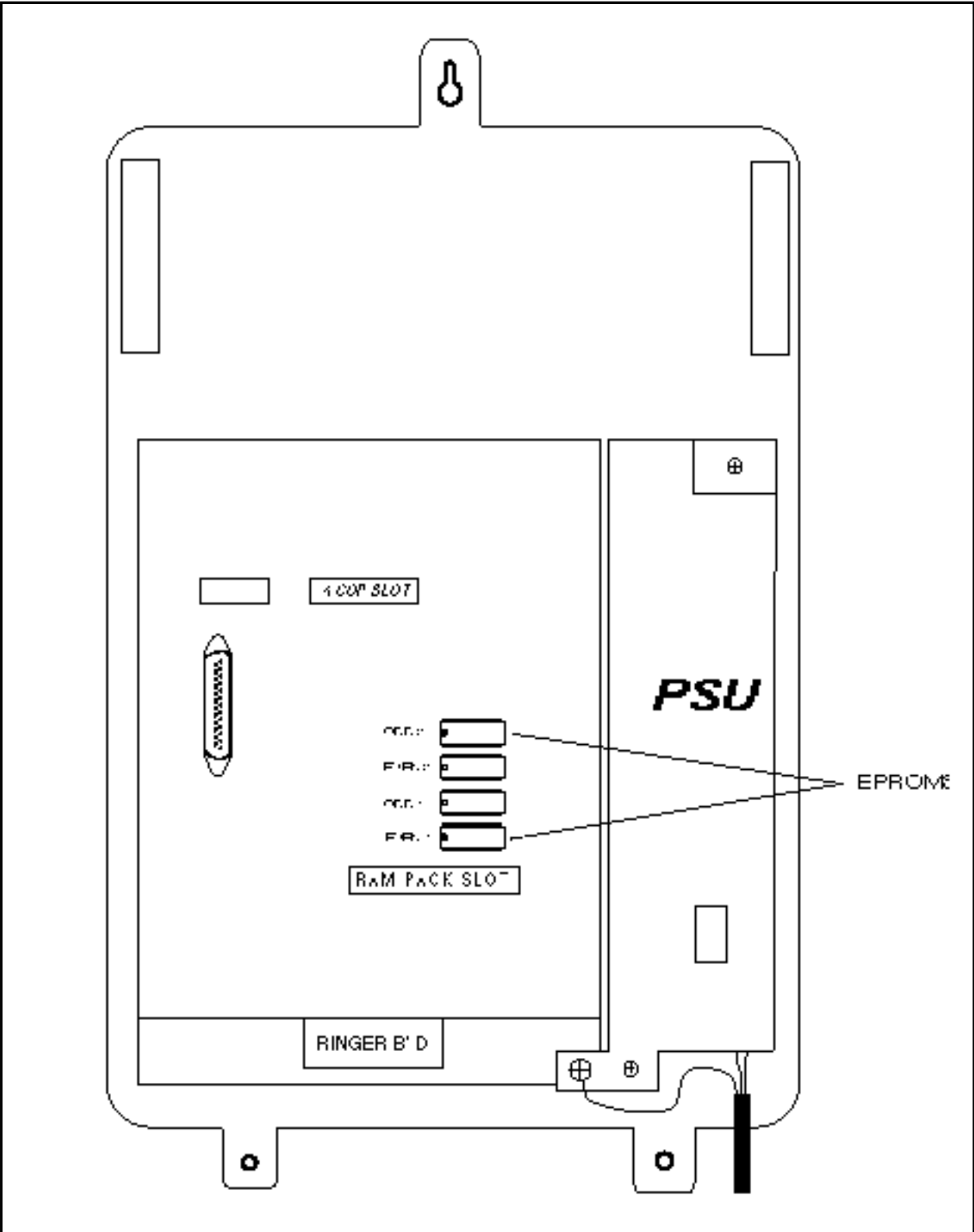
With the plastic support rack still removed install the RAM pack and plug in the 25 pair cable for the 4 ° 8 motherboard.

Switch on the KSU and verify that it is operating. If the KSU does not operate, remove the new EPROMS and reinstall the old EPROMS and test again. If the system still fails to operate, contact Samsung Technical Support.

When the system is operating satisfactorily, switch it off and remove the RAM pack and 25 pair cable. The KSU can now be reassembled in the reverse order in which it was disassembled.



LOCATION OF HOLDING SCREWS **FIGURE 9-1**



LOCATION OF EPROMS

FIGURE 9-2

